

PARTS MANUAL

**FORTENS®
H2.0FT-H3.5FT
(L177)**

CUSTOMER EDITION

HYSTER

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ABBREVIATIONS QUICK REFERENCE SHEET

Listed below are abbreviations used in parts manuals to denote the following expressions:

TERM	DEFINITION	TERM	DEFINITION
Amp	Amperes	FRE	Freezer Environment
AR	As Required	in.	inches
BDI	Battery Discharge Indicators	LPG	Liquefied Petroleum Gas
BWI	Brush Wear Indicator	MAP	Manifold Absolute Pressure
CE	Communicator End	mm	millimeters
CRE	Corrosive Environment	MSTS	Microprocessor Spark Timing System
D/B	Date Break	NPT	National Pipe Threads
dbA	Decibel "A" Scale	O/S	Oversize
DE	Drive End	PTO	Power Take Off
ECH	Empty Container Handler	RPM	Revolutions per Minute
ECH-3	Empty Container Handler - 3 High Stacking	S/N	Serial Number
ECH-4	Empty Container Handler - 4 High Stacking	TMM	Truck Management Module
ECH-5	Empty Container Handler - 5 High Stacking	UL Type D	Diesel-Powered Safety Rating
ECH-6	Empty Container Handler - 6 High Stacking	UL Type DS	Diesel-Powered Safety Rating
ECH-7	Empty Container Handler - 7 High Stacking	UL Type E	Battery-Powered Safety Rating
ECM	Electronic Control Module	UL Type EE	Battery-Powered Safety Rating
ECN	Engineering Change Notice	UL Type ES	Battery-Powered Safety Rating
EEPROM	Electrically Erasable Programmable Read Only Memory	UL Type G	Gasoline-Powered Safety Rating
EPA	US Environmental Protection Agency	UL Type GS	Gasoline-Powered Safety Rating
EPROM	Electrically Programmable Read Only Memory	UL Type LP	Gas-Powered Safety Rating
		UL Type LPS	LP Gas-Powered Safety Rating
		U/S	Undersize
		UL	Underwriters Laboratory
		V	Volts

HOW TO FIND THE DESIRED PART NUMBER

WHEN THE PART NUMBER AND THE NEXT HIGHER ASSEMBLY IS NOT KNOWN:

1. Determine the function and application of the part required. Turn to the Sections Page. Choose the general area of reference most likely to include the part.
2. Turn to the section you chose. Use the Section Table of Contents to determine the assembly which would normally contain the part required. Then locate the part on the assembly breakdown page.

WHEN THE PART NUMBER IS NOT KNOWN AND THE NEXT HIGHER ASSEMBLY IS KNOWN:

3. Determine the assembly the required part is used on. Turn to the Table of Contents (Page i).
4. Locate the assembly the required part is used on and turn to the page indicated for that assembly. Then locate the part on the assembly breakdown page.

WHEN THE PART NUMBER IS KNOWN:

5. Use the Numerical Index (Page 17-1) to find the part number. Turn to the page listed and locate the part as indicated by the item number.

GENERAL:

The assembly breakdowns include part numbers, descriptions, quantities required, keys and footnotes to help in selecting correct parts.

6. Parts Supersession Information. Part numbers that have this history will be displayed in the parts list in the order that they were superseded (from oldest to newest). The superseded part numbers will be shown with a line through them.

Five periods in the PART NO. column (.) indicate that the part is either *Not Serviced Separately* or there is a reference to another figure. A figure reference is denoted by a pointing hand followed by a figure number in the DESCRIPTION column (☞ Figure 10)

7. Keys are used to show two or more similar assemblies, RH and LH assembly parts, etc. Select the appropriate key, "A", "B", "C", "D", or "E" and the corresponding quantity column to find the required parts. Two periods in the QTY column (..) indicate that the part is not used for that assembly.
8. Indented descriptions under the DESCRIPTION column are used to indicate assemblies and

subparts of assemblies. In the example on the previous page, *BEARING CAP* (Item 2) is a subpart of the major assembly *CASE*.

9. Quantities shown are for one assembly. The quantities of the subpart *BEARING CAP* are indicated as two and two. This means two per *CASE* assembly.
10. Serial number breaks identify the most current parts information and are shown as follows:
 - **S/N D001H2628**
Indicates last serial number affected.
 - S/N D001H2629** →
Indicates the first serial number affected.
 - S/N D001H1553** ↔ **S/N D001H3291**
Indicates a range of serial numbers affected.

ECN numbers for pending serial numbers are shown to allow for the inclusion of the most current parts information and are identified as follows:

→ **S/N Pending Per ECN 63243**

Indicates a pending serial number for last unit affected.

S/N Pending Per ECN 63243 →

Indicates a pending serial number for first unit affected.

Date breaks are used to indicate when a change occurred but a subsequent serial number break was not recorded. This is an arbitrary date usually based on the ECN release and are identified as follows:

→ **D/B 3/00**

Indicates that a change occurred sometime within that month for the item affected.

D/B 3/00 →

Indicates that a change occurred sometime within that month for the item affected.

D/B 3/00 ↔ **D/B 4/00**

Indicates a range of production dates of the item affected.

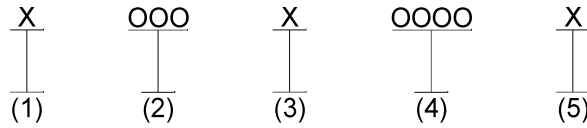
Contact your local dealer for Hyster lift trucks for serial number information for items with a ECN or a date break.

ORDERING PARTS:

When ordering replacement parts, give the unit serial number, part number, name of part and quantity required.

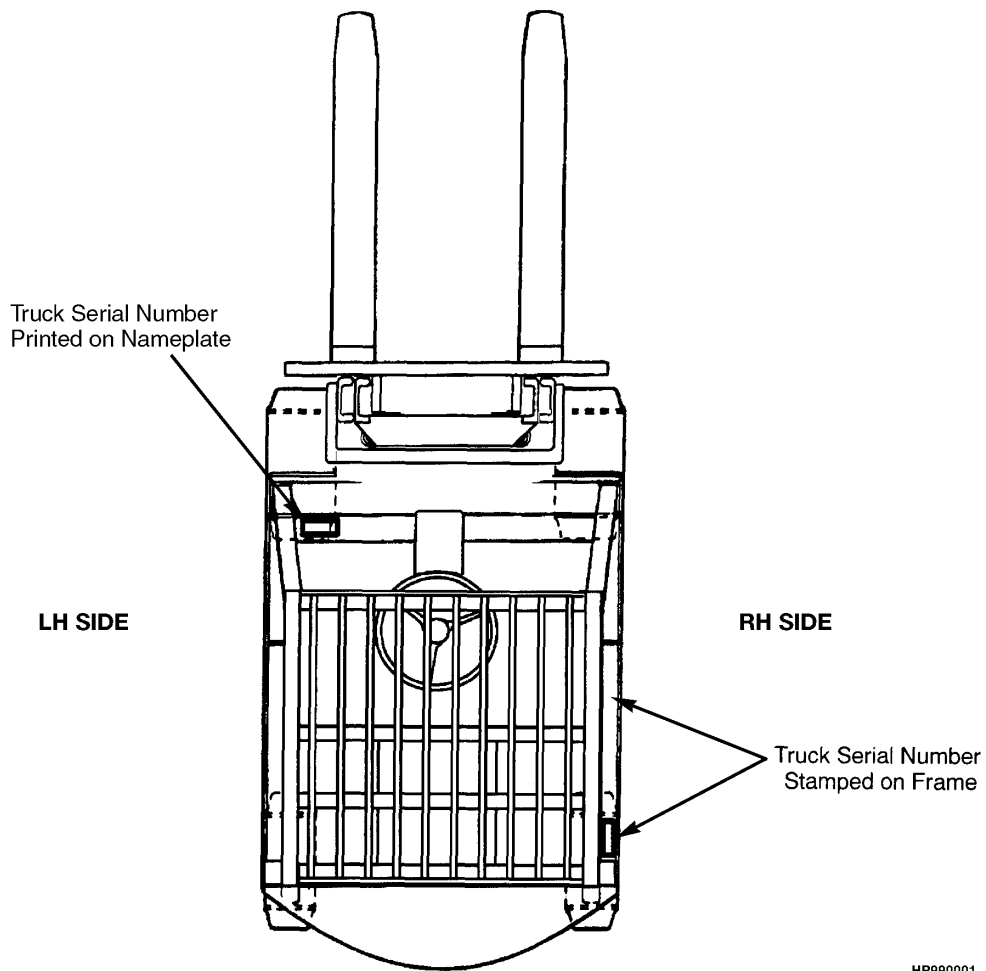
For any further information on parts, service, or ordering, consult your local dealer for Hyster lift trucks.

IDENTIFICATION OF TRUCK SERIAL NUMBERS



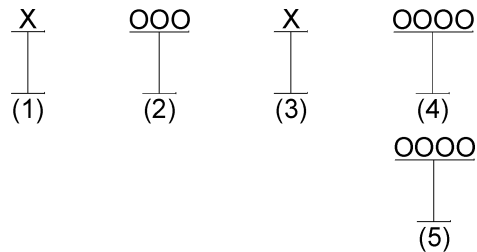
- (1) and (2) The first letter and three numbers indicate the truck unit code.
- (3) The second letter indicates the plant of manufacture.
- (4) The four or five digit number indicates the production sequence number of the truck.
- (5) The final letter indicates the year of manufacture starting with "A" in 1957, 1980, and 2003.
The letters "I", "O", and "Q" will not be used.

For pending serial numbers contact your local dealer for Hyster lift trucks.



HP990001

Parts referred to in this book as right or left hand parts are in accordance with the illustration above.

IDENTIFICATION OF MAST SERIAL NUMBERS

- (1) and (2) The first letter and number indicates the mast unit code.
- (3) The second letter indicates the plant of manufacture.
- (4) The four or five digit number indicates the production sequence number of the mast.
- (5) Carriage travel in millimeters stamped just below the serial number.

Mast Group identification consists of mast unit code (1) and (2) plus carriage travel (5).

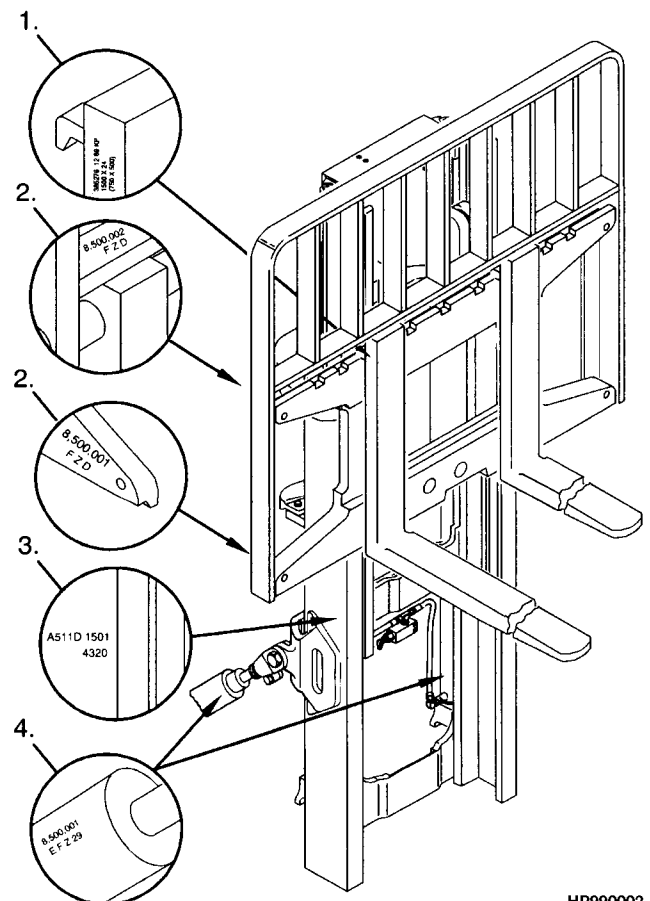
For pending production sequence numbers contact your local dealer for Hyster lift trucks.

LIFT EQUIPMENT IDENTIFICATION

1. Fork part number, capacity rating, plant code letter, and date of manufacture are stamped approximately six inches below the top of most forks.
2. The carriage group number is stamped on the right hand side of the top crossmember (pin type) or on the back of the right hand end of the bottom crossmember (hook type). A date code has two letters in line with or below the carriage group number.
3. The mast identification number has a unit code, a letter indicating the plant of manufacture, and a serial number. Underneath the production sequence number is a four digit number that indicates the carriage travel in millimeters.
4. Tilt and lift cylinder group numbers are stamped on the cylinder shell.

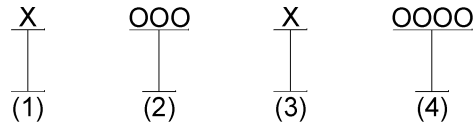
Always refer to the group, serial, or part number when ordering service parts.

Modification of masts and carriages by SPED (Special Products Engineering Department) are identified by a model prefix code beginning with the letter "S". contact your dealer for Hyster lift trucks for information on these assemblies.



HP990002

IDENTIFICATION OF ATTACHMENT AND SIDE-SHIFT CARRIAGE SERIAL NUMBERS

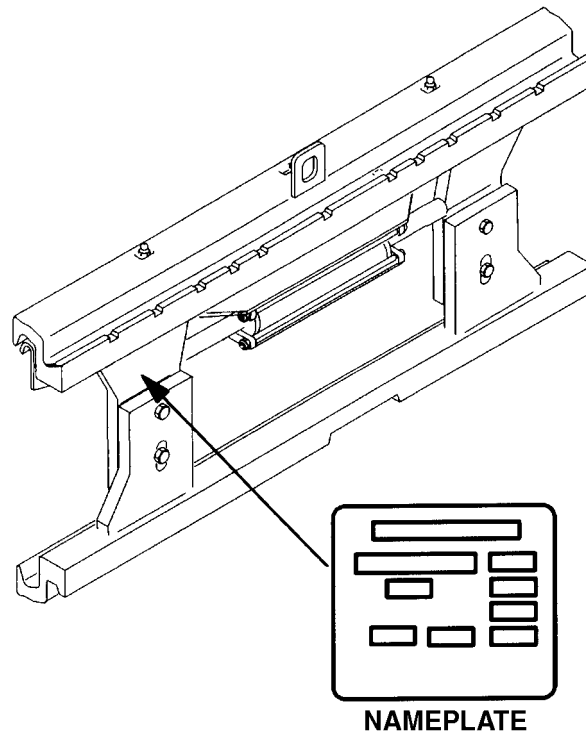


(1) and (2) The first letter and three numbers indicate the attachment unit code.

(3) The second letter indicates the plant of manufacture.

(4) The four or five digit number indicates the production sequence number.

For pending production sequence numbers contact your local dealer for Hyster lift trucks.



HP990003

Side-shift carriages and attachments have nameplates. Use the serial number found on the nameplate to identify the attachment.

Always refer to the group, serial, or part number when ordering service parts.

Modifications of attachments and side-shift carriages by SPED (Special Products Engineering Department) are identified by a model prefix code beginning with the letter "S". Contact your dealer for Hyster lift trucks for information on these assemblies.

PUBLICATIONS

Every new lift truck is provided with an OPERATING MANUAL. This manual has information that the operator must know for inspection and operation of the lift truck.

SERVICE MAINTENANCE MANUALS, which provide service and overhaul procedures, and PARTS

MANUALS with complete replacement part identification, are available at a nominal fee from your Hyster dealer to assist users in effectively maintaining Hyster lift trucks in a safe, useful condition. See the list below for information on ordering specific publications for this model lift truck.

PUBLICATION	HYSTER PART NUMBER
Operating Manual.....	1599944
Service Manual (Complete).....	1599956
Parts Manual.....	1599951

1

FRAME

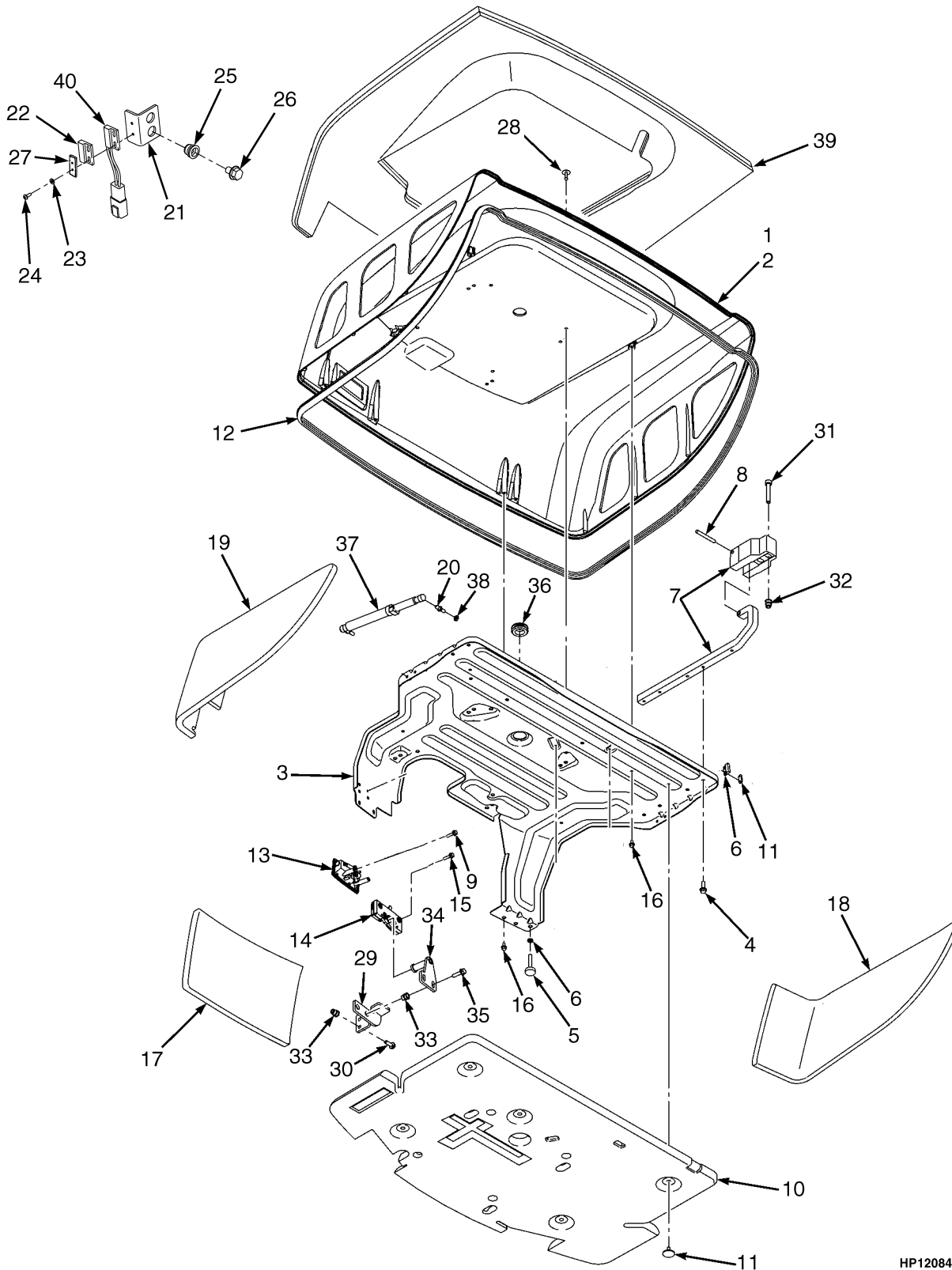
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HOOD ASSEMBLY (FIGURE 1-1) (→ S/N L177B19391E)



HP120845

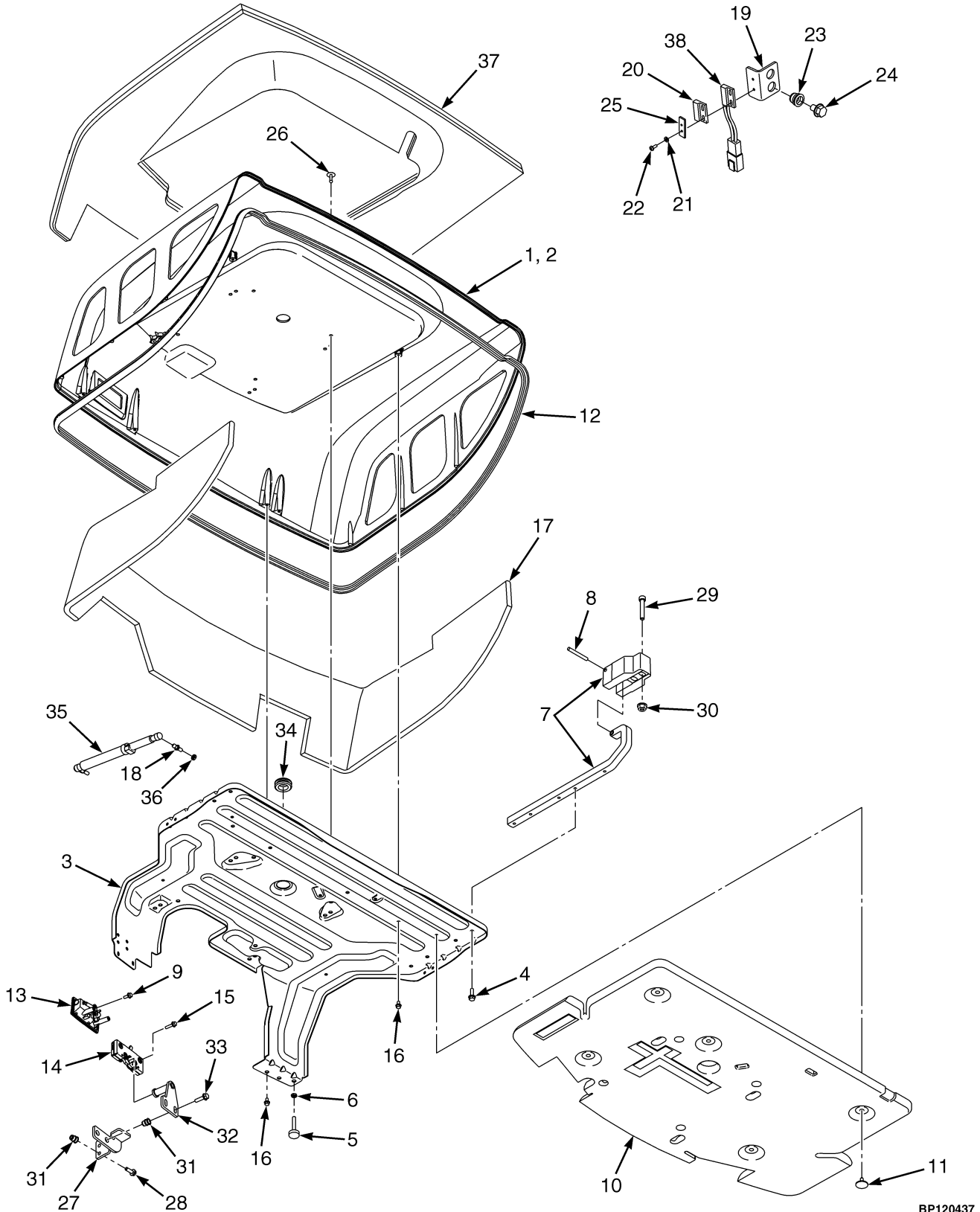
HOOD ASSEMBLY
(→ S/N L177B19391E)

ITEM	PART NO.	DESCRIPTION	QTY
1	b 1616772	Hood (Low Noise)	1
1	c 1616774	Hood (Standard)	1
2	b 1616770	Hood (Low Noise With Dampening)	1
2	c 1616764	Hood	1
3	1544846	Hood Reinforcement	1
4	1510113	Capscrew	10
5	1585581	Bumper (Hood)	2
6	329069	Nut	4
7	1548618	Hinge	2
8	302380	Dowel	2
9	1527876	Capscrew	2
10	1624018	Hood Liner	1
11	1304971	Fastener	4
12	1580652	Seal	1
13	1582287	Handle	1
14	1582286	Latch	1
15	1527878	Capscrew	4
16	1534417	Capscrew	6
17	b 1552010	Hood Liner (Front Panel)	1
18	b 1552011	Hood Liner (LH Panel)	1
19	b 1552012	Hood Liner (RH Panel)	1
20	c 1563369	Ball Stud	4
20	b 1563369	Ball Stud	3
20	b 1606659	Ball Stud	1
21	1527228	Bracket (Hood Switch)	1
22	1565545	Magnet (Reed Switch)	1
23	320152	Washer	4
24	302010	Screw (M3 x .05 x 12)	4
25	1531557	Insert	2
26	1583611	Capscrew	2
27	1585765	Nut	1
28	1347045	Fastener	8
29	1623905	Bracket	1
30	1583611	Capscrew	2
31	296032	Capscrew	4
32	1460477	Nut	4
33	1530243	Insert	4
34	1584617	Striker Bolt	1
35	1527881	Capscrew	2
36	1561015	Grommet	1
37	c 1563497	Gas Spring	2
37	b 1610854	Gas Spring (Locking) (Left Hand)	1
37	b 1610853	Gas Spring (Right Hand)	1
38	329069	Nut	2
39	1595232	Sound Liner	1
40	1627835	Switch	1
40	1572588	Switch	1
	a 1585592	Plug (Not Illustrated)	1

FOOTNOTES:

- a** Use With Swivel Seat
- b** With Cab
- c** With Overhead Guard

HOOD ASSEMBLY (FIGURE 1-2) (S/N L177B19392E ↔ S/N L177B29944G)



BP120437

HOOD ASSEMBLY
(S/N L177B19392E ↔ S/N L177B29944G)

ITEM	PART NO.	DESCRIPTION	QTY
1	a 1616772	Hood (Low Noise)	1
1	b 1616774	Hood	1
2	a 1616770	Hood (Low Noise)	1
2	a 1616764	Hood (Alternate Part)	1
2	b 1616764	Hood	1
3	1544846	Hood Reinforcement	1
4	1527880	Capscrew	10
5	1585581	Bumper (Hood)	2
6	329069	Nut	4
7	1548618	Hinge	2
8	302380	Dowel	2
9	1527876	Capscrew	2
10	1624018	Hood Liner	1
11	1304971	Fastener	4
12	1580652	Seal	1
13	1582287	Handle	1
14	1582286	Latch	1
15	1527878	Capscrew	4
16	1534417	Capscrew	6
17	a 1676836	Hood Liner	1
18	b 1563369	Ball Stud	4
18	a 1563369	Ball Stud	3
18	a 1606659	Ball Stud	1
19	1527228	Bracket (Hood Switch)	1
20	1565545	Magnet (Reed Switch)	1
21	320152	Washer	4
22	302010	Screw (M3 x .05 x 12)	4
23	1531557	Insert	2
24	1583611	Capscrew	2
25	1585765	Nut	1
26	1347045	Fastener	8
27	1623905	Bracket	1
28	1583611	Capscrew	2
29	296032	Capscrew	4
30	1530244	Insert	4
31	1460477	Nut	4
32	1584617	Striker Bolt	1
33	1527881	Capscrew	2
34	1561015	Grommet	1
35	b 1563497	Gas Spring	2
35	a 1610854	Gas Spring (Locking) (Left Hand)	1
35	a 1610853	Gas Spring (Right Hand)	1
36	329069	Nut	2
37	1595232	Sound Liner (Blanket)	1
37	1707793	Blanket (Low Noise Option)	1
38	1627835	Switch	1
	1585592	Plug (Not Illustrated)	1

FOOTNOTES:

- a** With Cab
- b** With Overhead Guard

HOOD ASSEMBLY
(S/N L177B29945G →)

ITEM	PART NO.	DESCRIPTION	QTY
	c 4007715	Hood	1
	d 4016188	Hood	1
	c 4007711	Hood (Low Noise)	1
	ad 4016184	Hood (Low Noise)	1
1	c 4007549	Hood	1
1	d 4015888	Hood	1
2	1666732	Boot	1
3	1580652	Seal	1
4	1616379	Plug (Yellow)	2
5	1548618	Hinge	2
6	1527880	Capscrew	10
7	1304971	Fastener	4
8	1534417	Capscrew	6
9	1624018	Hood Liner	1
10	1585581	Bumper (Hood)	2
11	329069	Nut	2
12	1387170	Latch	1
13	1676406	Seat Pan	1
13	a 4025274	Hood Reinforcement (Alternate Part)	1
14	1608876	Reinforcement	1
15	1608877	Bracket	2
16	364868	Nut	8
17	1608879	Capscrew	6
18	1585590	Bracket	1
19	1582370	Bracket	1
20	1672560	Plate	1
21	1527876	Capscrew	4
22	1324360	Nut	4
23	1563497	Gas Spring (RH)	1
23	b 1610853	Gas Spring (RH)	1
24	1563369	Ball Stud (RH)	2
24	b 1606659	Ball Stud (RH) (Alternate Part)	1
25	329069	Nut	1
26	1563497	Gas Spring (LH)	1
26	b 1610854	Gas Spring (Locking) (LH)	1
26	b 4011435	Gas Spring (LH) (Alternate Part)	1
27	1563369	Ball Stud	2
27	b 4011397	Ball Stud	2
28	296032	Capscrew	4
29	1460477	Nut	4
30	1674131	Striker Bolt	1
31	1527881	Capscrew	2
32	1530243	Insert	2
33	1674030	Hood Support	1
34	1583611	Capscrew	2
35	1347045	Fastener	8
36	1561015	Grommet	1
36	4031944	Grommet (Alternate Part)	1
37	1585592	Plug	1
38	4009731	Blanket	1

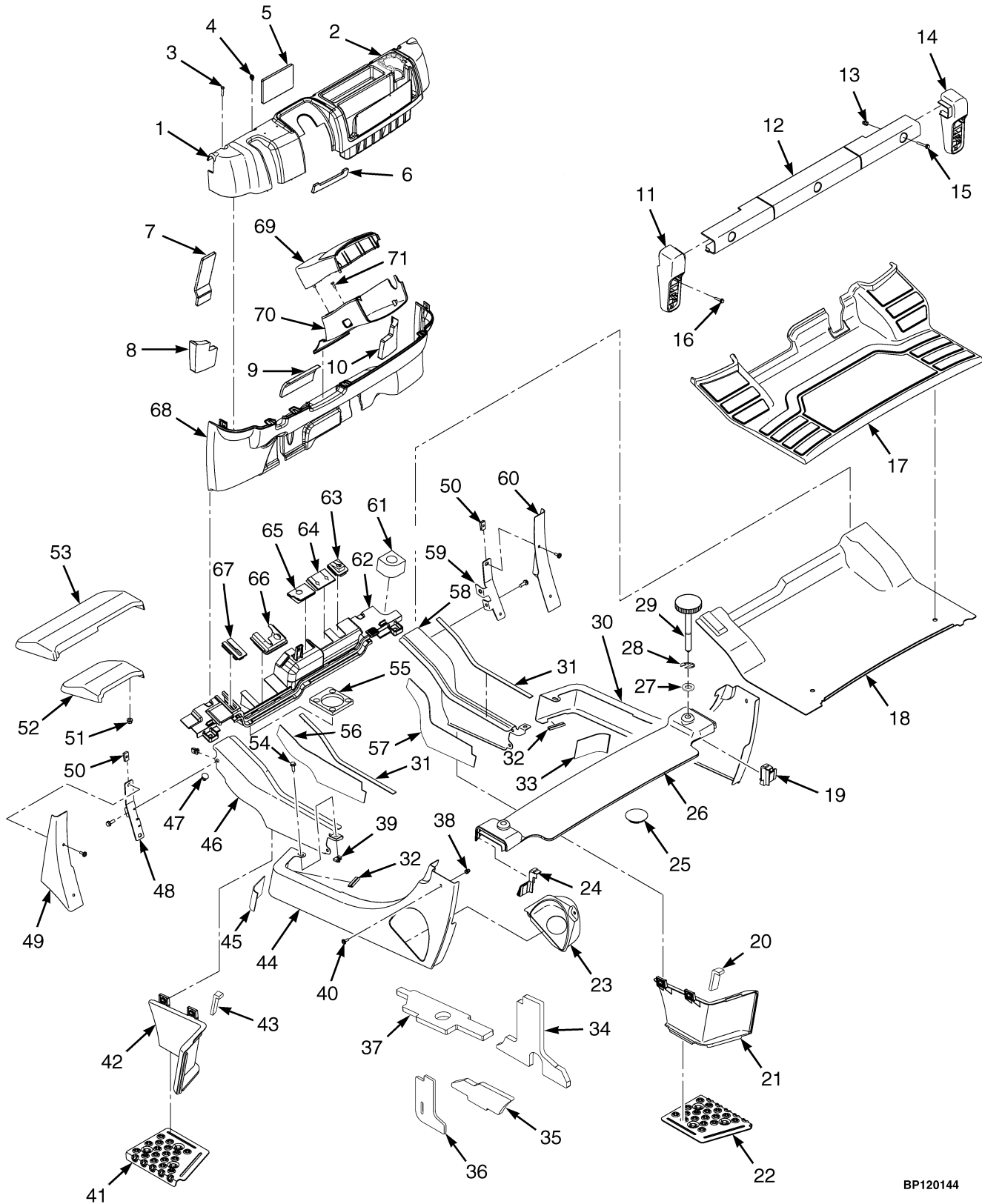
HOOD ASSEMBLY (S/N L177B29945G →)

ITEM	PART NO.	DESCRIPTION	QTY
38	4009733	Blanket (Low Noise Hood)	1

FOOTNOTES:

- | | | | |
|----------|--------------------------------------|----------|----------|
| a | Used With Variable Displacement Pump | c | → 8/2010 |
| b | With lift and latch option | d | 8/2010 → |

FLOORPLATES AND COVERS (FIGURE 1-4) (→ S/N L177B22303F)



BP120144

FLOORPLATES AND COVERS

(→ S/N L177B22303F)

KEY:**A: With Cab****B: With Overhead Guard**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1517420	Dash Panel (Manual Valve)	1	1
1	1517421	Dash Panel (Electronic Valve)	1	1
2	2070975	Cup Holder	1	1
3	2071261	Capscrew	5	5
4	2065667	Clip	6	6
5	1616484	Sound Liner	1	..
6	1616483	Sound Liner	1	..
7	1616485	Sound Liner	1	..
8	1616480	Sound Liner	1	..
9	1616482	Sound Liner (Foam)	1	..
10	1616481	Sound Liner	1	..
11	2056822	Tail Light Base (LH)	1	1
12	2069203	Cover (Rear) .....	..	1
13	1531001	Insert .....	..	8
13	1531001	Insert	5	..
14	2056823	Tail Light Base (RH)	1	1
15	1540643	Capscrew	3	3
16	1586495	Capscrew	4	4
17	2071262	Floormat	1	1
18	1573774	Floorplate	1	1
19	2071198	Seal (RH)	1	1
20	1596624	Seal (RH)	1	1
21	1574277	Panel (RH)	1	1
22	1544415	Plate (RH)	1	1
23	1517656	Shield (Diesel)	1	1
24	2071197	Seal (LH)	1	1
25	2021395	Cap (LPG)	1	1
26	1547466	Cover .....	..	1
26	1547467	Seal (LH) .....	..	1
26	1547468	Seal (RH) .....	..	1
27	320157	Washer .....	..	2
28	353206	Retaining Ring .....	..	2
29	1588247	Screw .....	..	2
30	1527946	Panel (RH)	1	1
31	1564529	Seal	2	2
32	1582072	Trim Seal	2	2
33	1597058	Damping Sheet (RH Rear Panel)	1	1
34	1609707	Sound Liner	1	..
35	1609709	Sound Liner	1	..
36	1609708	Sound Liner	1	..
37	1609706	Sound Liner (Diesel)	1	..
38	1531558	Insert	6	6
39	1480237	Nut (Diesel)	23	23
39	1480237	Nut (LPG)	21	21
40	1530019	Screw	6	6

FLOORPLATES AND COVERS

(→ S/N L177B22303F)

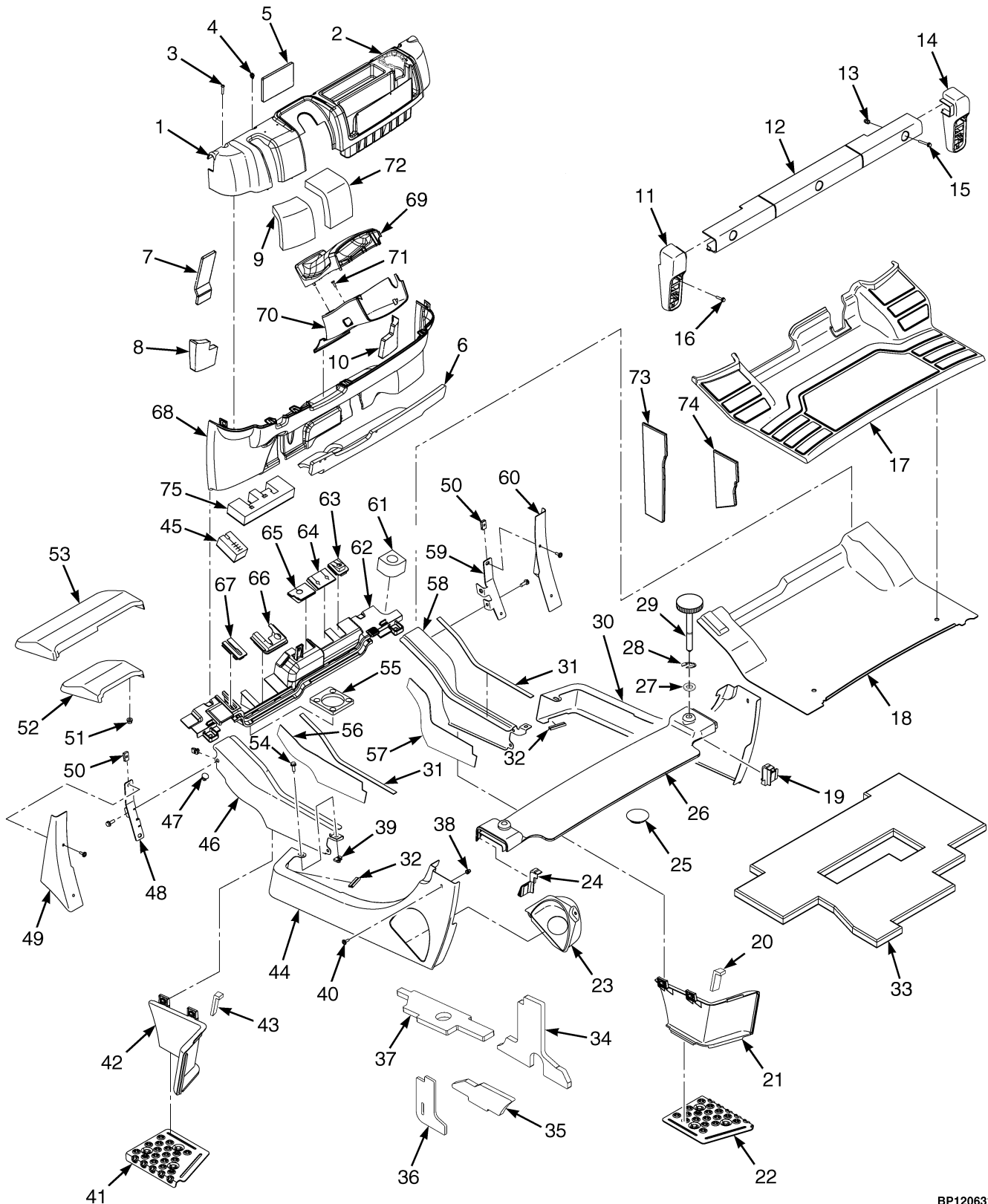
KEY:

A: With Cab

B: With Overhead Guard

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
41	1544413	Plate (LH)	1	1
42	1574275	Panel (LH)	1	1
43	1596625	Seal (LH) (LH)	1	1
44	1527939	Panel (Rear) (LH, Diesel)	1	1
44	1527940	Panel (Rear) (LH, LPG)	1	1
45	1597052	Damping Sheet (LH Rear Panel)	1	1
46	1540860	Panel (LH)	1	1
47	1581079	Plug	4	4
48	1590145	Bracket (LH) (Fender Cover)	1	1
49	1563881	Cover (LH) (Fender)	1	1
50	1350215	Nut	4	4
51	1544153	Locknut (Standard Tread, Wide Tread)	4	4
51	1544153	Locknut (Dual Tread)	6	6
52	2069008	Mud Flap (Standard Tread)	2	2
53	2069544	Mud Flap (LH, Wide Tread)	1	1
53	2069545	Mud Flap (RH, Wide Tread)	1	1
53	2069550	Mud Flap (LH, Dual Tread)	1	1
53	2069954	Mud Flap (RH, Dual Tread)	1	1
54	1583611	Capscrew (Diesel)	23	23
54	1583611	Capscrew (LPG)	21	21
55	1579837	Seal (Wet Brake)	1	1
55	1580093	Seal (Dry Brake)	1	1
56	1597051	Damping Sheet (LH Front Panel)	1	1
57	1597070	Damping Sheet (RH Front Panel)	1	1
58	1540870	Panel (RH)	1	1
59	1590147	Bracket (RH) (Fender Cover)	1	1
60	1563883	Cover (RH) (Fender)	1	1
61	1530135	Grommet (RH)	1	1
62	1618992	Plate	1	1
62	1529427	Seal	1	1
63	2069464	Seal	1	..
64	2065799	Seal (Manual Valve) (Manual Valve)	1	..
64	2065826	Seal (Electronic Valve)	1	..
65	2065798	Seal (Manual Valve)	1	..
65	2065827	Seal (Electronic Valve)	1	..
66	2065797	Seal	1	..
67	2065796	Seal	1	..
68	2071595	Panel (Single Brake Pedal)	1	1
68	2071596	Panel (Dual Brake Pedal)	1	1
69	2065668	Cover (Steering Column) (Upper)	1	1
70	2065666	Cover (Steering Column Lower) (Lower)	1	1
71	2027655	Screw	2	2

FLOORPLATES AND COVERS (FIGURE 1-5) (S/N L177B22304F →)



BP120631

FLOORPLATES AND COVERS
(S/N L177B22304F →)**KEY:****A: With Cab****B: With Overhead Guard**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1517420	Dash Panel (Manual Valve)	1	1
1	1517421	Dash Panel (Electronic Valve)	1	1
2	2070975	Cup Holder	1	1
3	2071261	Capscrew	5	5
4	2065667	Clip	6	6
5	1616484	Sound Liner	1	..
6	1672722	Sound Liner	1	..
7	1616485	Sound Liner	1	..
8	1616480	Sound Liner	1	..
9	1672723	Sound Liner	1	..
10	1616481	Sound Liner	1	..
11	b 2056822	Tail Light Base (LH)	1	1
11	f 2107958	Tail Light Base (LH)	1	1
12	2069203	Cover (Rear) .....	..	1
13	1531001	Insert .....	..	8
13	1531001	Insert	5	..
14	c 2056823	Tail Light Base (RH)	1	1
14	f 2107957	Tail Light Base (RH)	1	1
15	1540643	Capscrew	3	3
16	1586495	Capscrew	4	4
17	2071262	Floormat	1	1
18	1573774	Floorplate	1	1
19	2071198	Seal (RH)	1	1
20	1596624	Seal (RH)	1	1
21	d 1574277	Panel (RH)	1	1
21	g 2102559	Step Panel (RH)	1	1
22	1544415	Plate (RH)	1	1
22	1393879	Nut	3	3
23	1517656	Shield (Diesel)	1	1
24	2071197	Seal (LH)	1	1
25	2021395	Cap (LPG)	1	1
26	1547466	Cover .....	..	1
26	1547467	Seal (LH) .....	..	1
26	1547468	Seal (RH) .....	..	1
27	320157	Washer .....	..	2
28	353206	Retaining Ring .....	..	2
29	1588247	Screw .....	..	2
30	1527946	Panel (RH)	1	1
31	1564529	Seal	2	2
32	1582072	Trim Seal	2	2
33	a 1707678	Liner	1	..
34	1609707	Sound Liner	1	..
35	1609709	Sound Liner	1	..
36	1609708	Sound Liner	1	..
37	1609706	Sound Liner (Diesel)	1	..

FLOORPLATES AND COVERS (S/N L177B22304F →)

KEY:

A: With Cab

B: With Overhead Guard

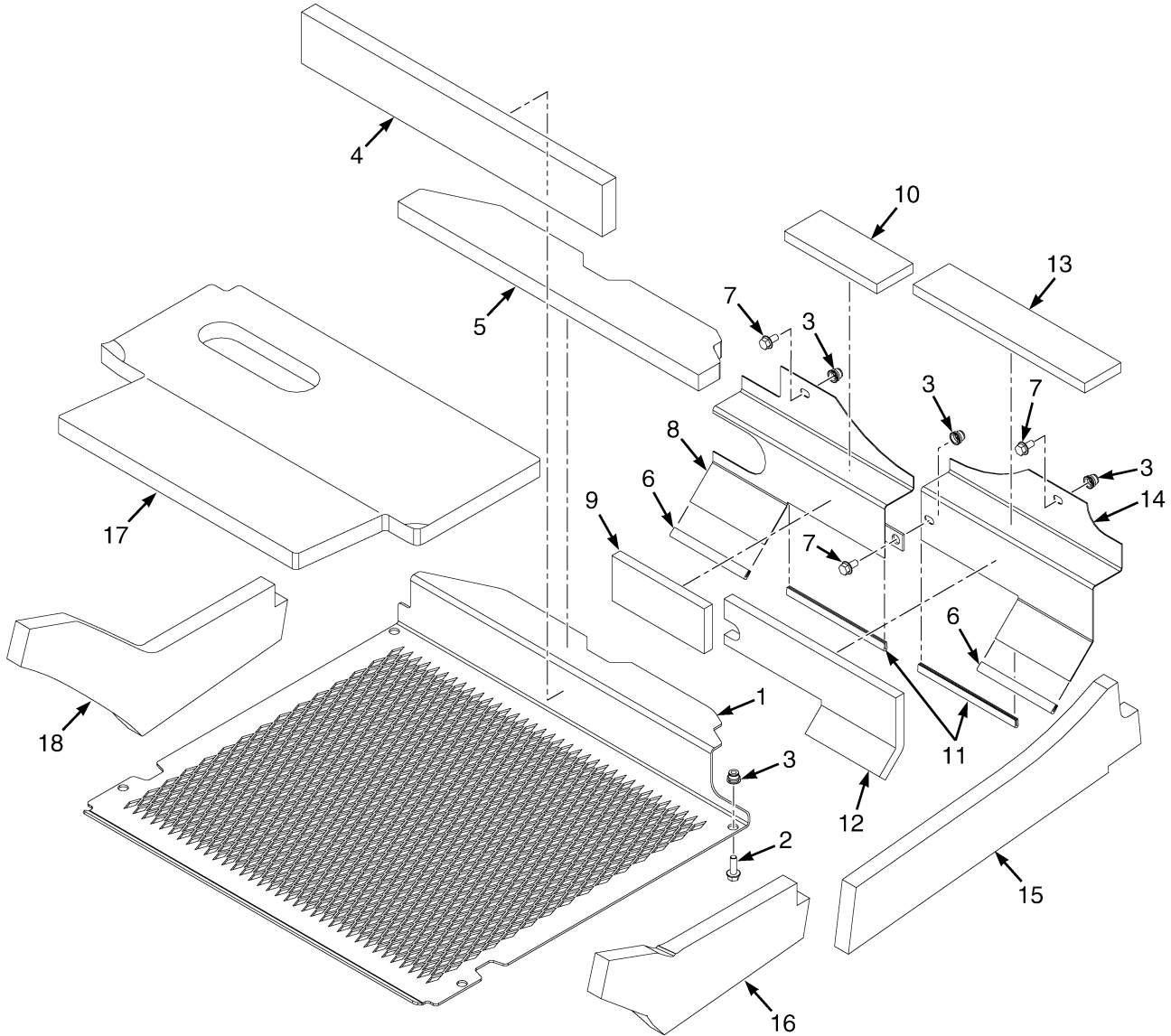
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
38	1531558	Insert	6	6
39	1480237	Nut (Diesel)	23	23
39	1480237	Nut (LPG)	21	21
40	1530019	Screw	6	6
41	1544413	Plate (LH)	1	1
41	1393879	Nut	3	3
42	d 1574275	Panel (LH)	1	1
42	g 2102558	Step Panel (LH)	1	1
43	1596625	Seal (LH) (LH)	1	1
44	1527939	Panel (Rear) (LH, Diesel)	1	1
44	1527940	Panel (Rear) (LH, LPG)	1	1
45	1705878	Liner	1	..
46	1540860	Panel (LH)	1	1
47	1581079	Plug	4	4
48	1590145	Bracket (LH) (Fender Cover)	1	1
49	1563881	Cover (LH) (Fender)	1	1
50	1350215	Nut	4	4
51	1544153	Locknut (Standard Tread, Wide Tread)	4	4
51	1544153	Locknut (Dual Tread)	6	6
52	2069008	Mud Flap (Standard Tread)	2	2
53	2069544	Mud Flap (LH, Wide Tread)	1	1
53	2069545	Mud Flap (RH, Wide Tread)	1	1
53	2069550	Mud Flap (LH, Dual Tread)	1	1
53	2069954	Mud Flap (RH, Dual Tread)	1	1
54	1583611	Capscrew (Diesel)	23	23
54	1583611	Capscrew (LPG)	21	21
55	1579837	Seal (Wet Brake)	1	1
55	1580093	Seal (Dry Brake)	1	1
56	1597051	Damping Sheet (LH Front Panel)	1	1
57	1597070	Damping Sheet (RH Front Panel)	1	1
58	1540870	Panel (RH)	1	1
59	1590147	Bracket (RH) (Fender Cover)	1	1
60	1563883	Cover (RH) (Fender)	1	1
61	1530135	Grommet (RH)	1	1
62	1618992	Plate	1	1
62	1529427	Seal	1	1
63	2069464	Seal	1	..
64	e 2065799	Seal (Manual Valve) (without Operator Presence Lockout)	1	..
64	e 2096903	Seal (Manual Valve) (with Operator Presence Lockout)	1	..
64	2065826	Seal (Electronic Valve)	1	..
65	b 2065798	Seal (Manual Valve) (without Operator Presence Lockout)	1	..
65	e 2096902	Seal (Manual Valve) (with Operator Presence Lockout)	1	..
65	2065827	Seal (Electronic Valve)	1	..
66	2065797	Seal	1	..
67	2065796	Seal	1	..

FLOORPLATES AND COVERS
(S/N L177B22304F →)**KEY:****A: With Cab****B: With Overhead Guard**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
68	2071595	Panel (Single Brake Pedal)	1	1
68	2071596	Panel (Dual Brake Pedal)	1	1
69	2098330	Cover (Steering Column Upper)	1	1
70	2065666	Cover (Steering Column Lower)	1	1
71	2027655	Screw	2	2
72	a 1672724	Sound Liner	1	..
73	a 1708834	Liner	1	..
74	1708835	Liner	1	..
75	1705891	Liner	1	..
75	1705892	Liner	1	..

FOOTNOTES:**a** With DLX option only.**b** → 1/2009**c** → 4/2009**d** → S/N L177B27072F**e** 1/2009 →**f** 4/2009 →**g** S/N L177B27073F →

SOUND ABATEMENT (FIGURE 1-6) WITHOUT CAB



BP120811

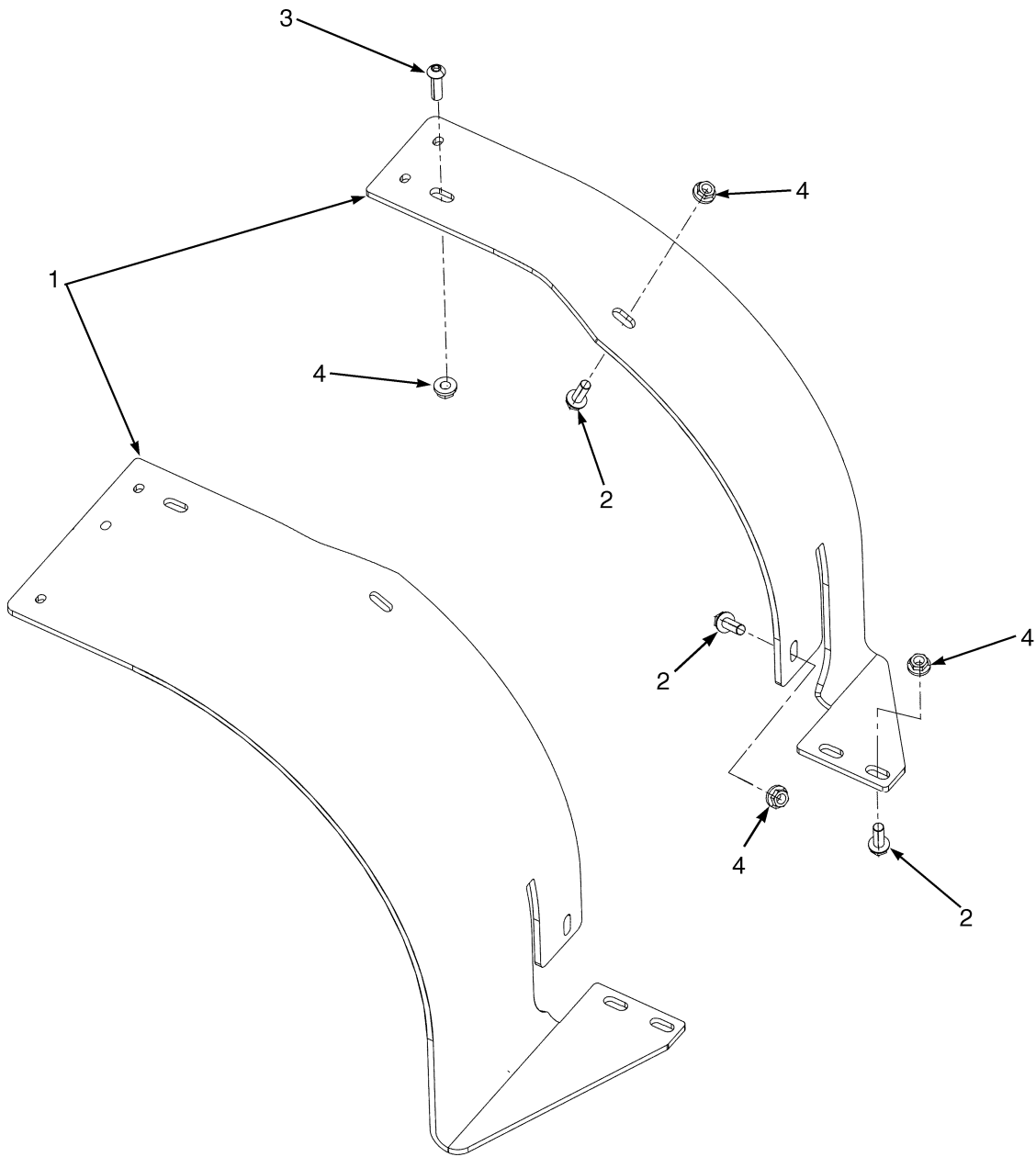
**SOUND ABATEMENT
WITHOUT CAB**

ITEM	PART NO.	DESCRIPTION	QTY
1	2087209	Undercarriage	1
2	1510113	Capscrew	4
3	1531557	Insert	7
4	4009083	Liner	1
5	4009084	Liner	1
6	4011601	Trim	2
7	1527879	Capscrew	3
8	4009461	Plate Wldmt	1
9	4009683	Liner	1
10	4009684	Liner	1
11	4011602	Trim	2
12	4009681	Liner	1
13	4009682	Liner	1
14	4009085	Plate	1
15	4009988	Liner (Rear Panel-LH)	1
16	4009989	Liner (Front Panel-LH)	1
17	a 4021015	Foam Lining	1
18	4009990	Liner (Front Panel-RH)	1

FOOTNOTES:

- a** Used With Variable Displacement Pump

FENDER EXTENSIONS (FIGURE 1-7)

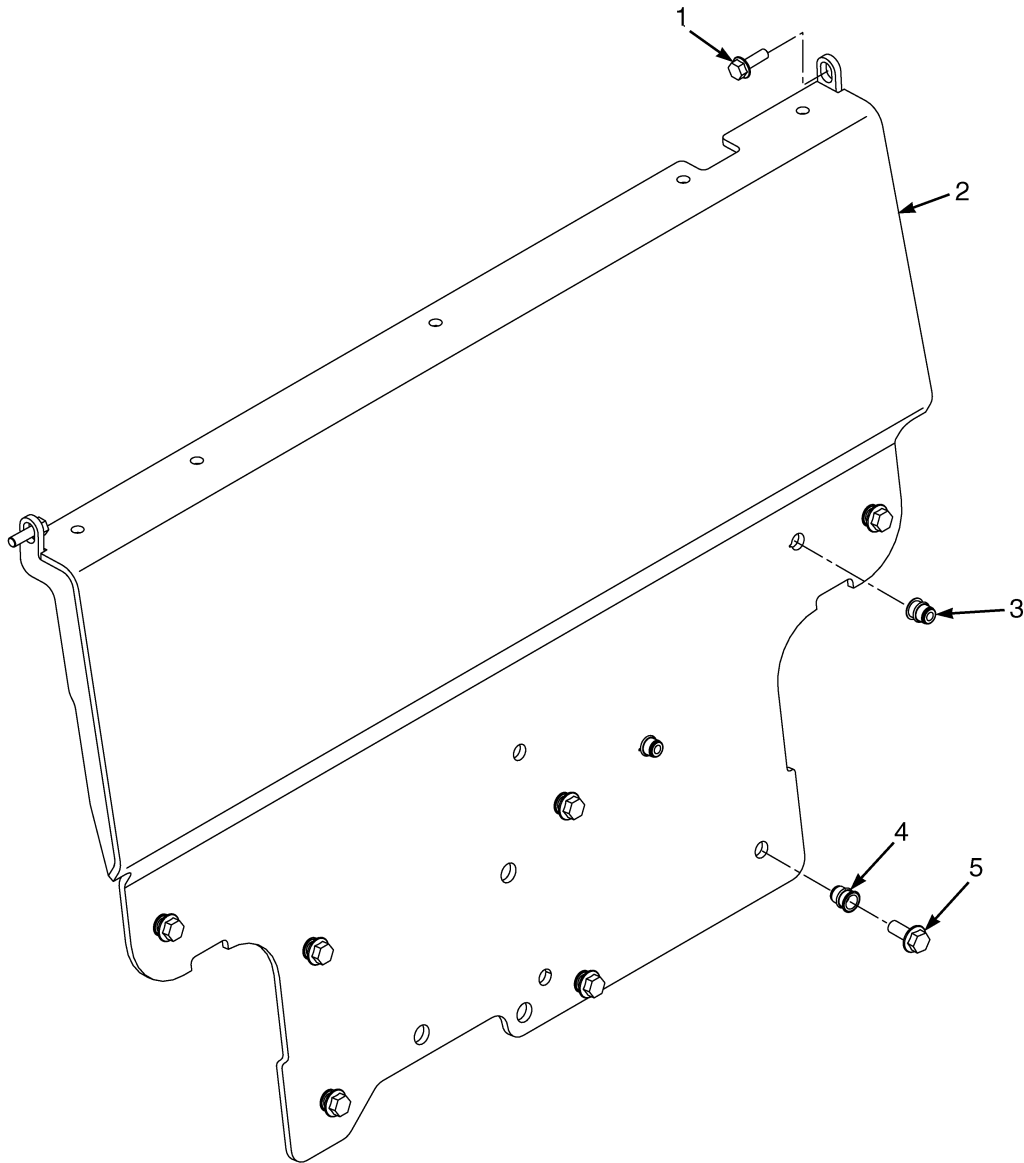


HP120835

FENDER EXTENSIONS

ITEM	PART NO.	DESCRIPTION	QTY
1	1562359	Fender (Wide Width) (LH)	1
1	1562361	Fender (Dual) (LH)	1
1	1562360	Fender (Wide Width) (RH)	1
1	1562362	Fender (Dual) (RH)	1
2	1586630	Capscrew	8
3	2076289	Capscrew	2
4	1586432	Nut	10

COWL MOUNT (FIGURE 1-8)



HP120730

COWL MOUNT

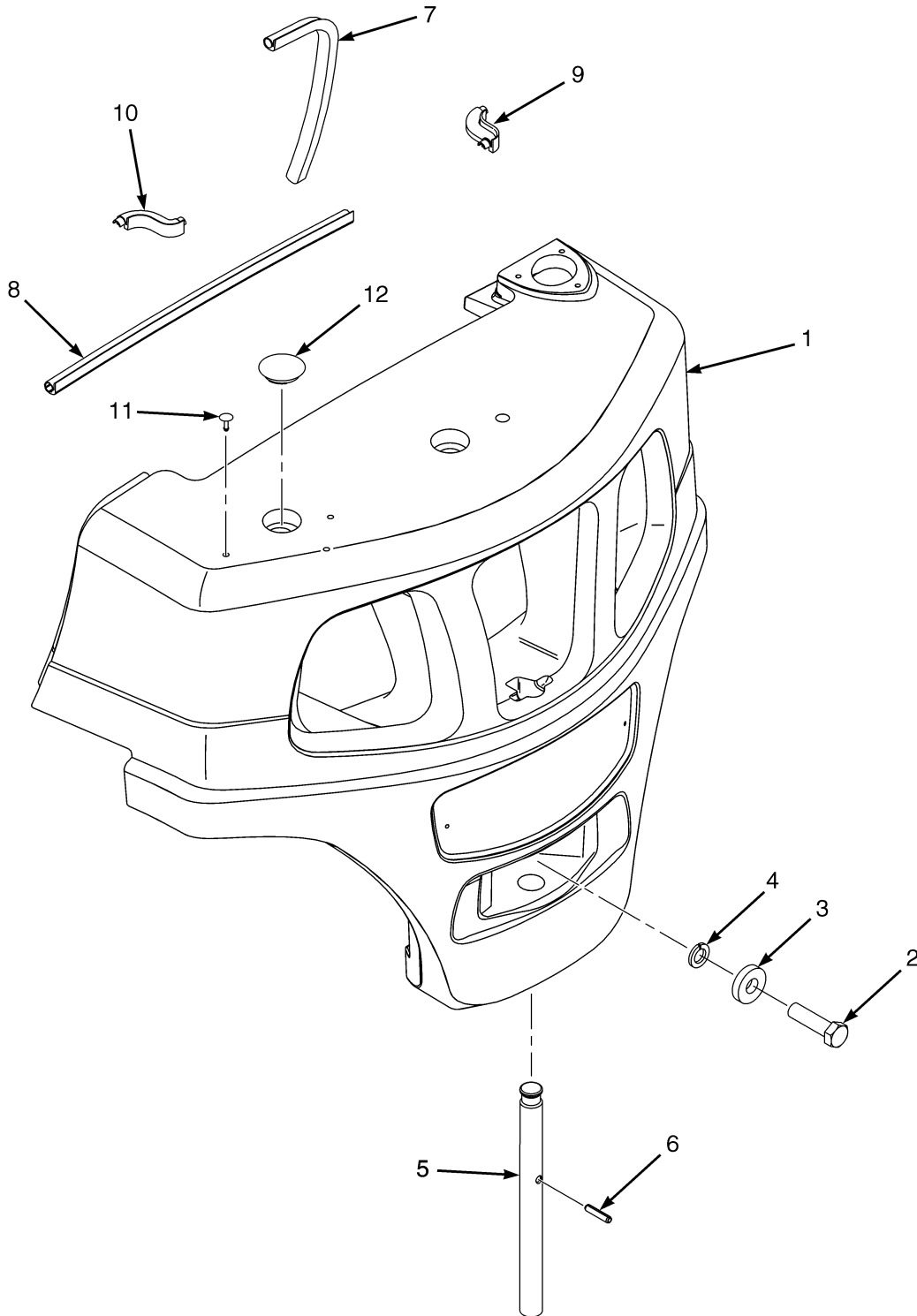
ITEM	PART NO.	DESCRIPTION	QTY
1	1583611	Capscrew	2
1	1510113	Capscrew	2
2	a 1586815	Cowl	1
2	bd 1686711	Cowl	1
2	ce 1699988	Cowl	1
2	f 4014340	Cowl	1
3	1530243	Insert	2
4	1640776	Insert	7
4	1581567	Nut (Optional)	7
4	320160	Washer (Optional)	7
5	1605990	Capscrew	7

FOOTNOTES:

a → S/N L177B26273F
b → S/N L177B30739H
c → S/N L177B33209J

d S/N L177B26274F →
e S/N L177B30740H →
f S/N L177B33210J →

COUNTERWEIGHTS (FIGURE 1-9) (→ 4/2007)



HP120833

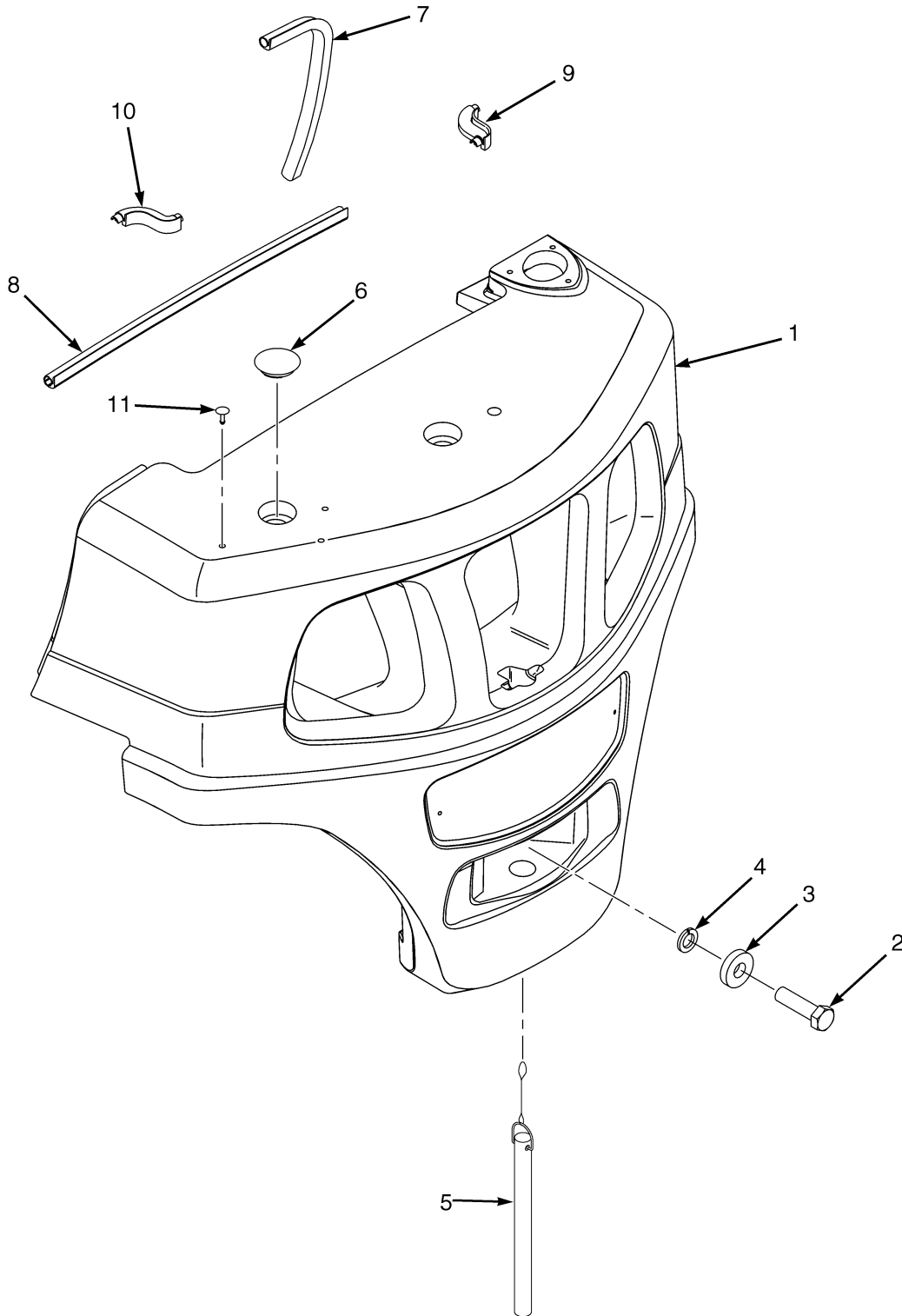
COUNTERWEIGHTS

(→ 4/2007)

ITEM	PART NO.	DESCRIPTION	QTY
1	1533597	Counterweight (H2.0FT)	1
1	1533598	Counterweight (H2.5FT)	1
1	1533599	Counterweight (H3.0FT)	1
1	1533601	Counterweight (H3.5FT)	1
2	a 292608	Capscrew	1
2	b 292613	Capscrew (152,4 mm)	1
3	1375214	Washer	1
4	292689	Washer	1
5	1533596	Tow Pin	1
6	302492	Roll Pin	1
7	1590279	Seal (Counterweight)	1
8	1590280	Seal (Counterweight) (Top)	1
9	1590152	Seal (RH)	1
10	1590153	Seal (LH)	1
11	1347045	Fastener	4
12	2021395	Cap	2

FOOTNOTES:**a** H2.0FT**b** H2.5-3.5FT

COUNTERWEIGHT (FIGURE 1-10) (4/2007 →)

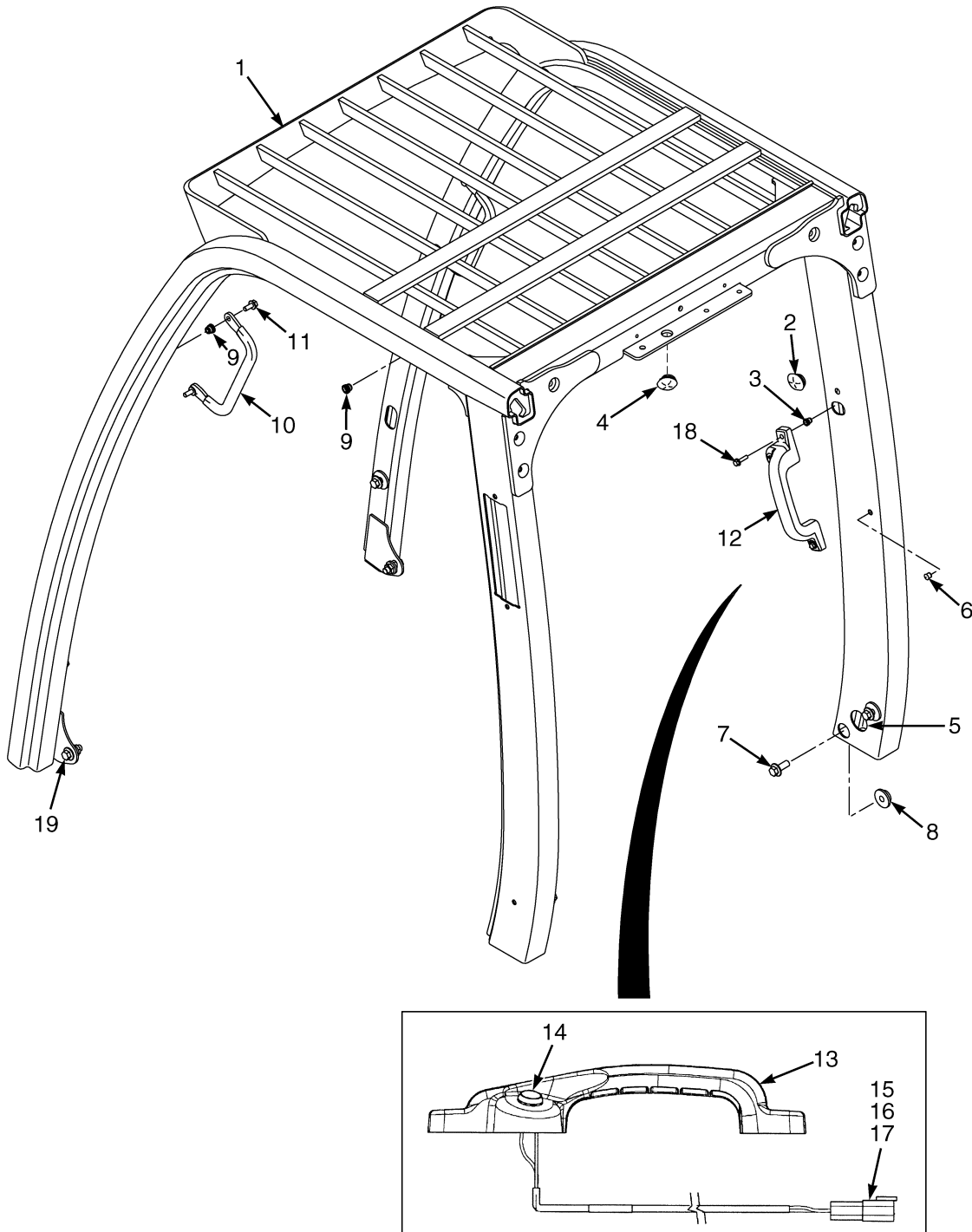


BP120354

COUNTERWEIGHT
(4/2007 →)

ITEM	PART NO.	DESCRIPTION	QTY
1	1649733	Counterweight (H2.0FT)	1
1	1649734	Counterweight (H2.5FT)	1
1	1649735	Counterweight (H3.0FT)	1
1	1649736	Counterweight (H3.5FT)	1
2	292608	Capscrew (H2.0FT)	1
2	292613	Capscrew (152,4 mm) (H2.5-3.5FT)	1
3	1375214	Washer	1
4	292689	Washer	1
5	1643947	Tow Pin	1
6	2021395	Cap	1
7	1590279	Seal (Counterweight)	1
8	1590280	Seal (Counterweight)	1
9	1590152	Seal (RH)	1
10	1590153	Seal (LH)	1
11	2098153	Fastener	1

OVERHEAD GUARD (FIGURE 1-11)

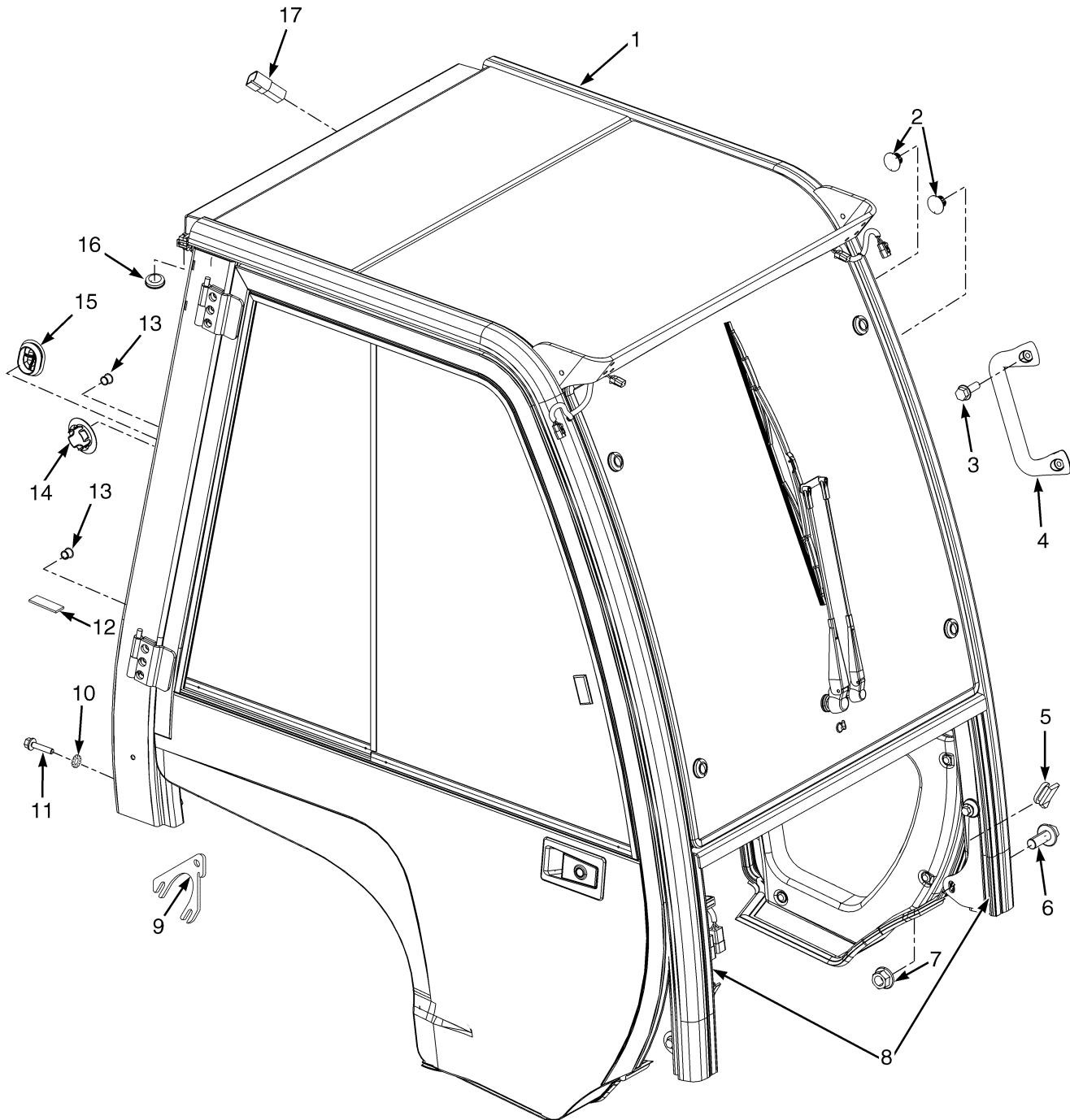


HP120756

OVERHEAD GUARD

ITEM	PART NO.	DESCRIPTION	QTY
1	1599204	Overhead Guard (Tall) (2149 mm) (High)	1
1	1599210	Overhead Guard (Short) (2082 mm) (Low)	1
2	1558219	Grommet	3
3	1531558	Insert	2
4	1560671	Grommet	1
5	1527395	Grommet	1
6	1494888	Plug	2
7	1527888	Capscrew (M12 x 1.75 x 35)	6
7	1566853	Capscrew (M12 x 1.75 x 40 Optional)	6
8	1528888	Nut (Shoulder)	2
9	1531557	Insert	4
10	1536813	Handle (Grab)	1
11	1583611	Capscrew	2
12	2070223	Handle Assembly (RH, Rear)	1
13	2069454	Handle	1
14	1566726	Push Button Switch (Horn)	1
15	1493465	Connector	1
16	1330414	Connector (Secondary Lock)	1
17	1330437	Terminal (Pin)	2
18	1586495	Capscrew	2
19	4035130	Capscrew	2
	2067476	Grill (Not Illustrated)	1

CAB (FIGURE 1-12)



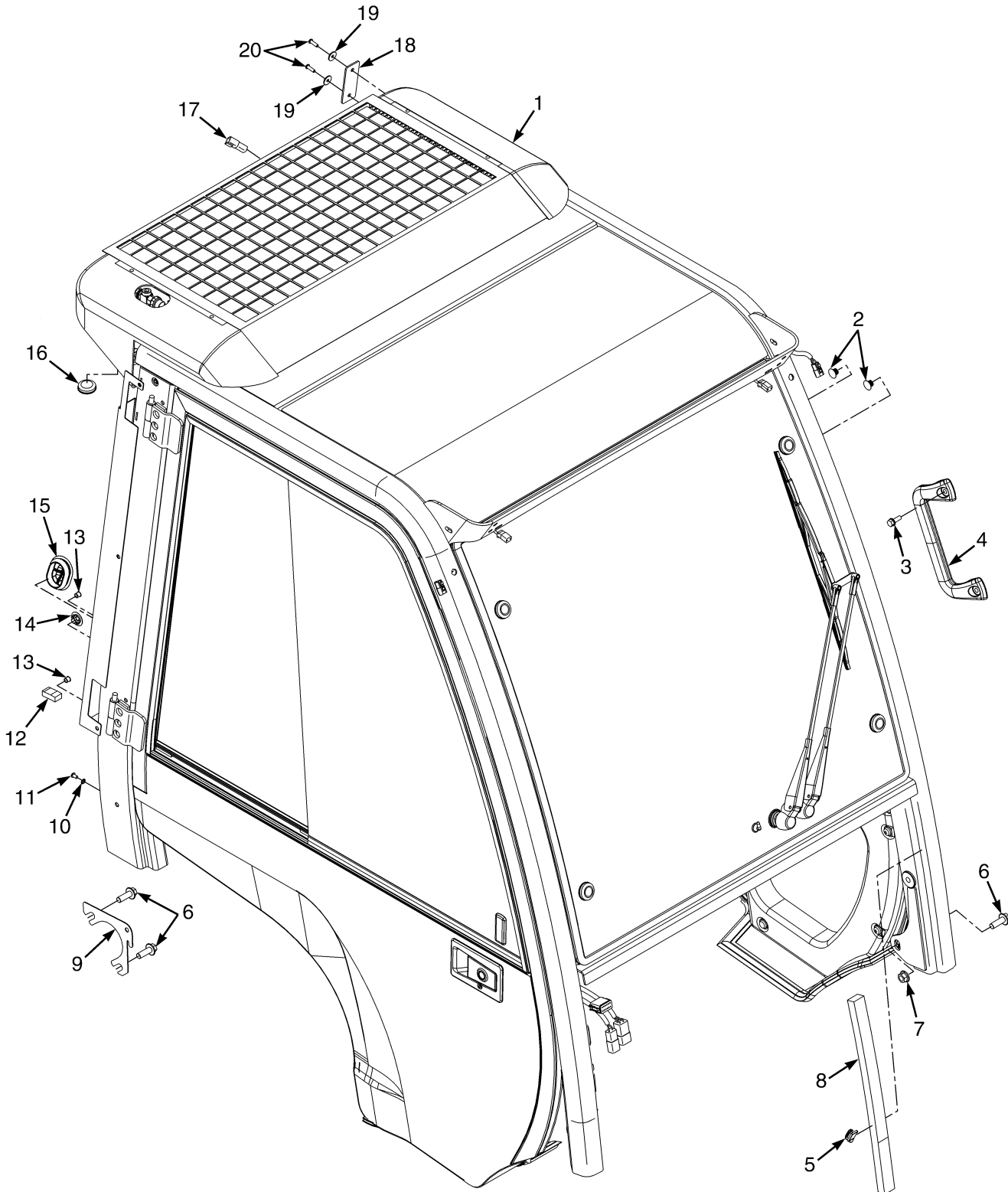
BP120157

CAB**KEY:****A: With Steel Doors****B: With PVC Doors**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	a 1519232	Cab	1	..
1	b 1641493	Cab	1	..
1	c 1652722	Cab	1	..
1	1641660	Cab .....	..	1
1	1683428	Cab (With A/C)	1	..
2	1561847	Plug	6	8
3	1583611	Capscrew	4	4
4	1536813	Handle (Grab)	1	1
5	1589787	Seal	2	2
6	1527888	Capscrew	8	8
7	1528888	Nut (Shoulder)	2	2
8	1613743	Seal	1	2
9	1636853	Shim	AR	AR
10	296359	Washer	6	6
11	296157	Capscrew	6	6
12	1614926	Strip Seal (LH)	1	1
12	1614687	Strip Seal (RH)	1	1
13	1494888	Plug	4	2
14	1599415	Plug	1	1
15	1558219	Grommet	1	1
16	1560671	Grommet	1	1
17	1351681	Connector	1	1
	2070996	Grommet	1	1
	1636647	Shim	AR	AR

FOOTNOTES:**a** → S/N L177B11272D**c** S/N L177B16120E →**b** S/N L177B11273D ↔ S/N L177B16119E

CAB (FIGURE 1-13) WITH A/C

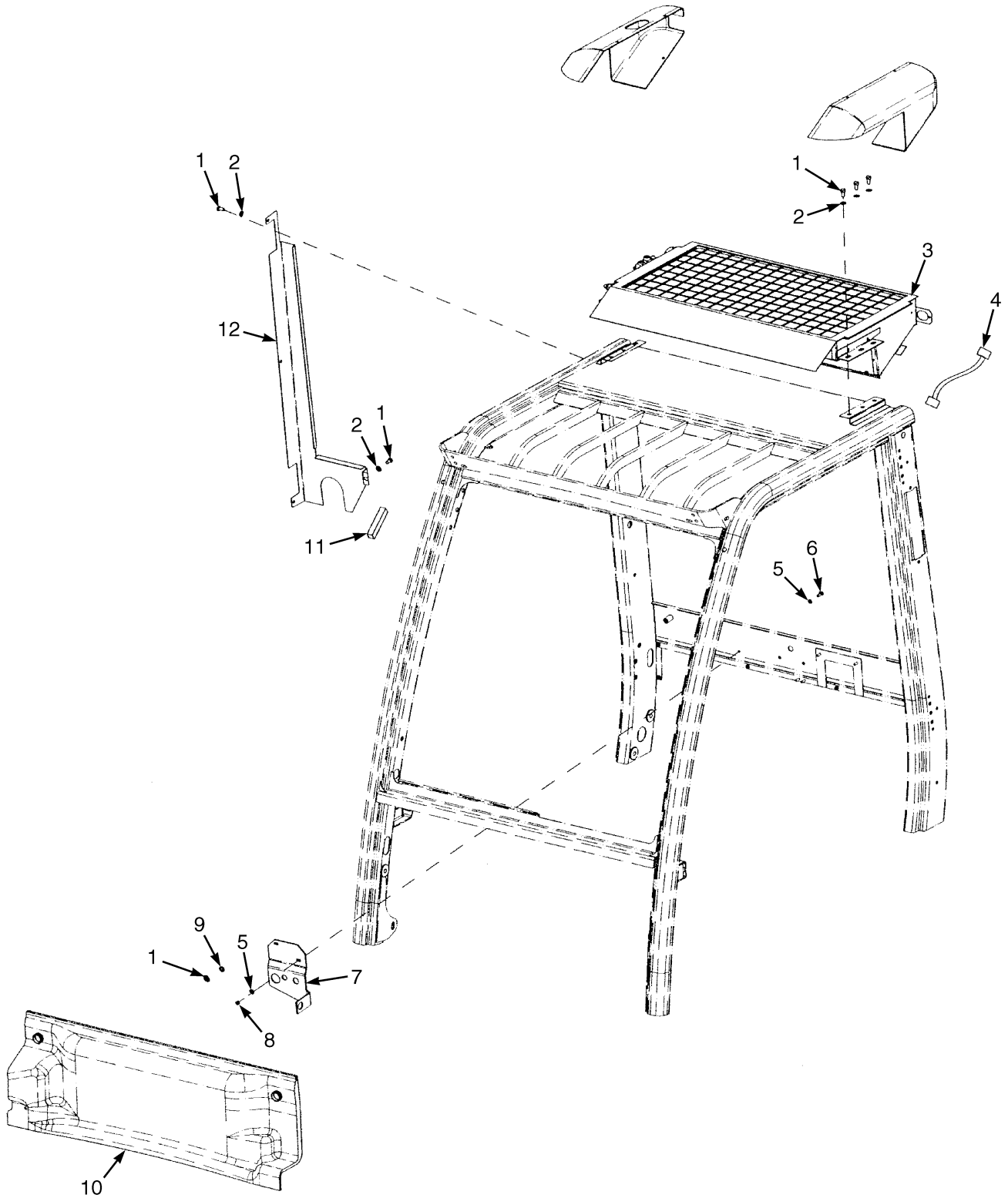


BP120157

**CAB
WITH A/C**

ITEM	PART NO.	DESCRIPTION	QTY
1	1683428	Cab	1
2	1561847	Plug	8
3	1583611	Capscrew	4
4	1536813	Handle (Grab)	1
5	1589787	Seal	2
6	1527888	Capscrew	8
7	1528888	Nut (Shoulder)	2
8	1613743	Seal	2
9	1636853	Shim	AR
10	296359	Washer	6
11	296157	Capscrew	6
12	1614926	Strip Seal (LH)	1
12	1614687	Strip Seal (RH)	1
13	1494888	Plug	2
14	1599415	Plug	1
15	1558219	Grommet	1
16	1560671	Grommet	1
17	1351681	Connector	1
18	1690075	Plate	2
19	1709980	Washer	4
20	1710006	Capscrew	4
	2070996	Grommet	1
	1636647	Shim	AR

CAB ATTACHING PARTS (FIGURE 1-14) WITH A/C

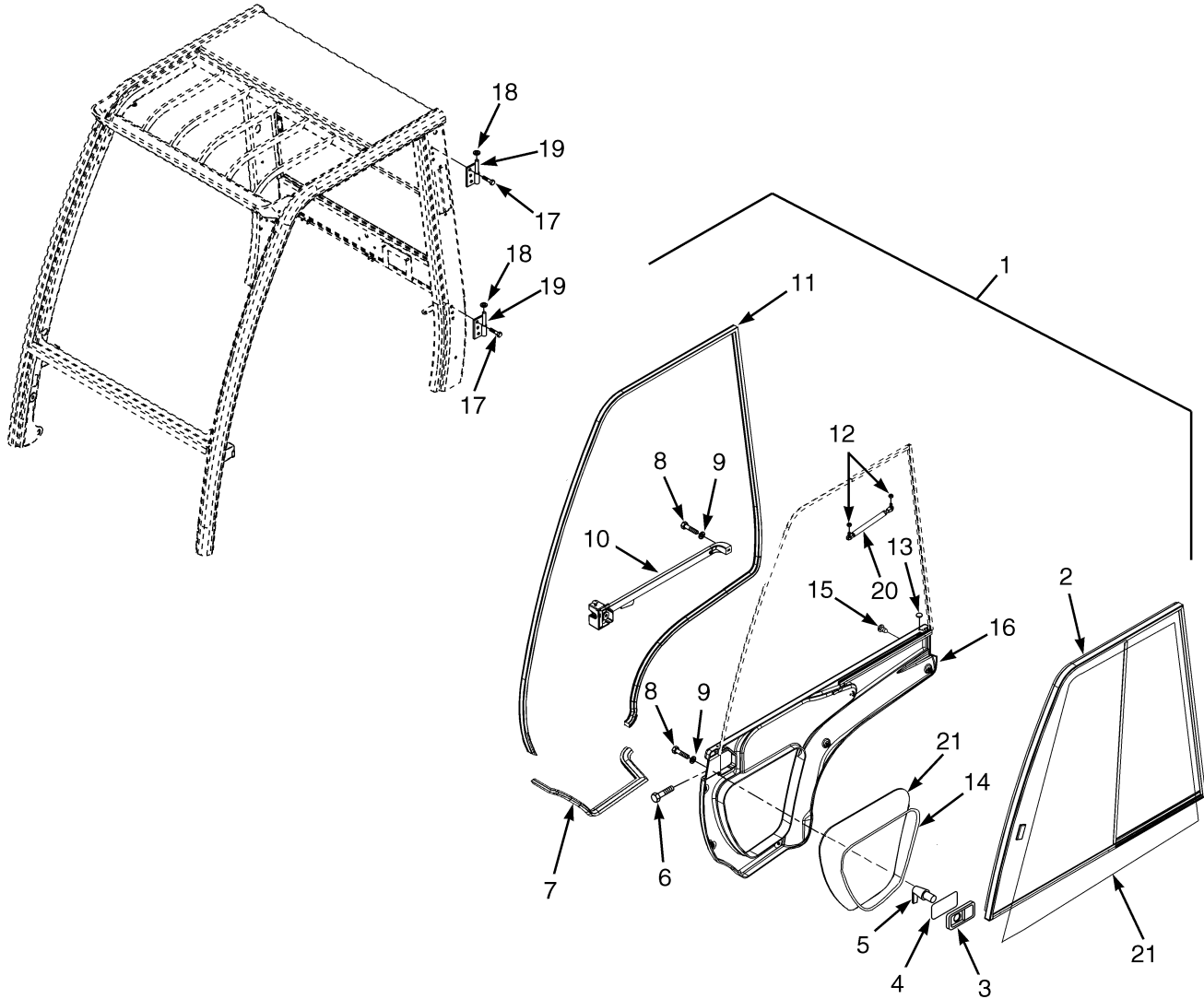


BP120640

**CAB ATTACHING PARTS
WITH A/C**

ITEM	PART NO.	DESCRIPTION	QTY
	1683428	Cab	1
1	287851	Capscrew	9
2	320158	Washer	10
3	4007135	Condenser (☞ Figure 1-19).....	1
4	1701960	Wire Harness	2
5	320156	Washer	4
6	292501	Capscrew	2
7	1701959	Grommet	1
8	136687	Nut	2
9	239503	Nut	1
10	1688200	Cover	1
11	1498336	Edge Protector	1
12	1701958	Cover	1

CAB (FIGURE 1-15) LH DOOR



HP120861

**CAB
LH DOOR****KEY:****A: Standard Cab****B: Cab with A/C**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	b 1519232	Cab (With Steel Doors)	1	..
	d 1641493	Cab (With Steel Doors)	1	..
	e 1652722	Cab (With Steel Doors)	1	..
	1683428	Cab (With A/C) .....	..	1
1	1598417	Door (LH)	1	1
1	1651814	Door (LH) .....	..	1
2	c 1598396	Sliding Window	1	..
2	c 1483226	Latch (Sliding Window)	1	..
2	e 1653967	Sliding Window	1	1
2	e 1653969			
	4013559	Latch (Mounted from inside)	1	1
2	e 4025617	Window (Front)	1	..
2	e 4013558	Latch (Mounted From Outside)	1	1
2	e 1644804			
	4009782	Guide	4	4
2	e 4025618	Window (Rear)	1	..
3	e 1598393	Grip (Without Key)	1	1
4	1598394	Shim	1	1
5	1598392	Lever	1	1
6	296229	Capscrew	2	2
7	1393539	Seal	AR	..
7	1623391	Seal .....	..	AR
8	302047	Screw	5	3
8	1623393	Capscrew .....	..	2
9	320156	Washer	5	3
9	1651739	Rivet .....	..	2
10	1393479	Door Handle	1	..
11	1515337	Seal	AR	..
11	1393463	Seal .....	..	AR
12	316835	Nut	2	1
12	302400	Nut (Alternate Part)	2	2
12	1393472	Ball Stud .....	..	1
12	4009902	Ball Stud (Alternate Part)	2	2
13	1598390	Plug	2	..
13	1558034	Button .....	..	2
14	1598395	Window (Door, Lower, LH)	1	1
15	1598389	Fastener	5	3
15	1651739	Rivet .....	..	2
16	c 1598391	Cover (Door, LH)	1	..
16	e 1653973	Cover (Door, LH)	1	1
17	1493308	Bolt	12	..
17	1674103	Screw .....	..	12
18	1468312	Washer	2	..
19	1503958	Hinge (LH)	2	..
20	1598397	Gas Spring	1	1

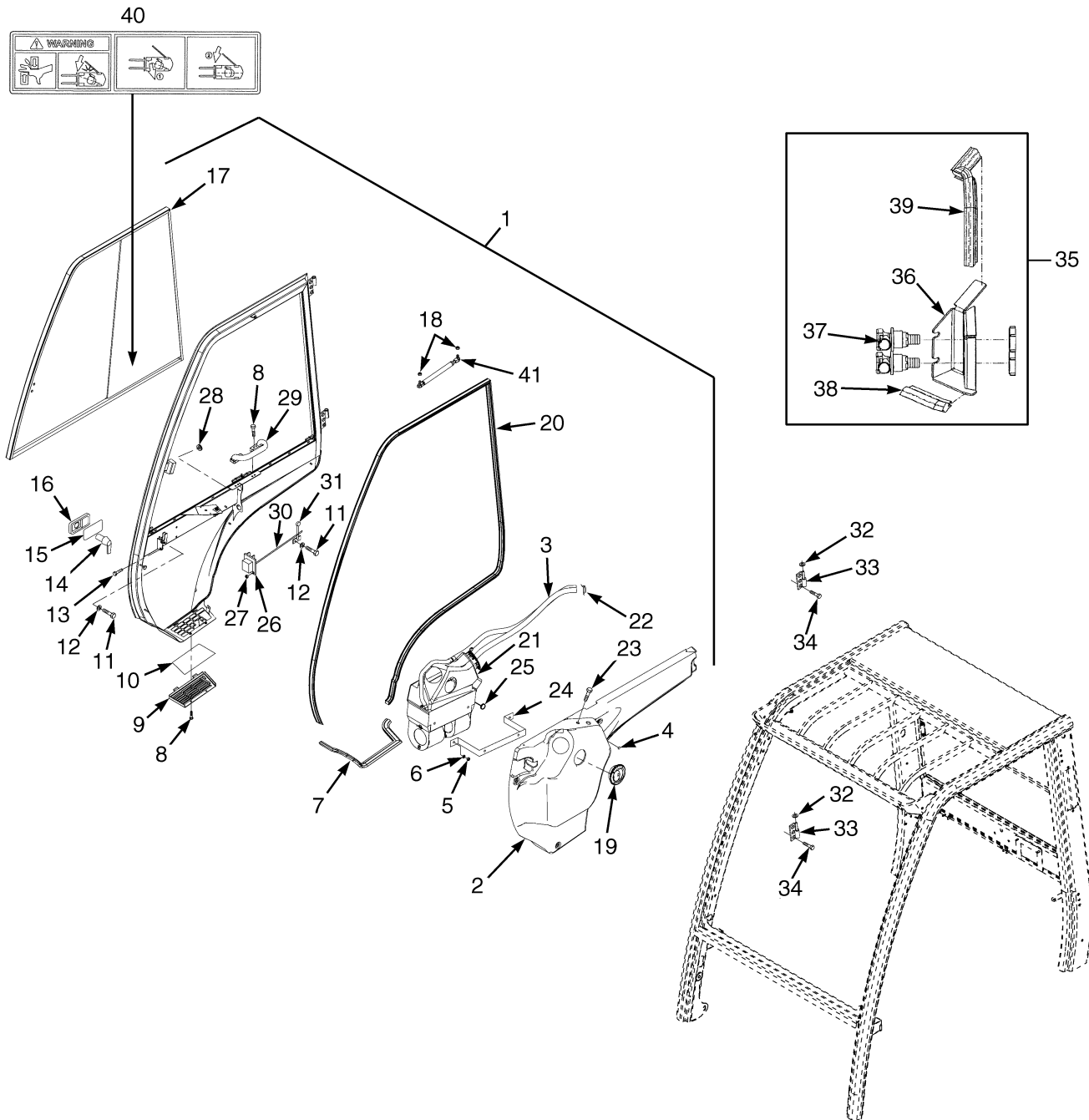
CAB LH DOOR

KEY:**A:** Standard Cab**B:** Cab with A/C

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
21	1558294	Seal	AR	..
	a 1598390	Plug	5	..
	1593629	Key (For Cab Door Grip)	2	1
	a 1506825	Strap Clamp .....	..	1

FOOTNOTES:**a** Not Illustrated**b** → S/N L177B12272B**c** → S/N L177B16119E**d** S/N L177B12273D ↔ S/N L177B16119E**e** S/N L177B16120E →

CAB (FIGURE 1-16) RH DOOR AND HEATER ASSEMBLY



BP120154

CAB
RH DOOR AND HEATER ASSEMBLY**KEY:****A: Standard Cab****B: Cab With A/C**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	c 1519232	Cab (With Steel Doors)	1	..
	e 1641493	Cab (With Steel Doors)	1	..
	f 1652722	Cab (With Steel Doors)	1	..
	1683428	Cab (With A/C) .....	..	1
1	1598416	Door (RH)	1	..
1	1652426	Door (RH) (Weldment)	1	..
1	1701961	Door Assembly with Air Conditioner (RH) .....	..	1
2	d 1598407	Cover (Door, RH)	1	..
2	f 1653972	Cover (Door, RH)	1	..
2	1701964	Cover .....	..	1
3	1623400	Hose	AR	AR
4	1598389	Fastener	6	3
5	239503	Nut	2	2
6	320158	Washer	2	4
7	1393539	Seal	AR	..
7	1623391	Seal .....	..	AR
8	1598399	Screw	6	2
8	1701962	Screw .....	..	4
9	1598401	Bracket	1	1
10	1598400	Filter	1	1
11	302047	Screw	6	4
11	1623393	Capscrew .....	..	2
12	320156	Washer	6	6
13	296229	Capscrew	2	2
14	1598411	Lever	1	1
15	1598394	Shim	1	1
16	1598393	Grip (Without Key)	1	1
17	d 1598413	Sliding Window	1	..
17	d 1483226	Latch (Sliding Window)	1	..
17	f 1653970	Sliding Window	1	1
17	f 1653969			
	4013559	Latch (Mounted from inside)	1	1
17	f 4013558	Latch (Mounted from Outside)	1	1
17	f 1644804			
	4009782	Guide	4	4
17	f 4024323	Front Window	1	1
17	f	Rear Window	1	..
18	316835	Nut	2	2
18	302400	Nut (Alternate Part)	2	2
19	1598398	Louver (Air)	3	3
20	1515337	Seal	AR	..
20	1393463	Seal .....	..	AR
21	1598404	Heater Assembly	1	1
21	1598675	Heater	1	1
21	1598674	Hose (.310 mm)	1	1

CAB RH DOOR AND HEATER ASSEMBLY

KEY:

A: Standard Cab

B: Cab With A/C

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
21	1598673	Switch (Blower)	1	1
21	1640800	Knob (Heater)	1	1
21	1598672	Valve (Water)	1	1
21	1598671	Wire Harness	1	1
21	1623402	Clip (Hose Clamp)	2	2
22	1393499	Clamp	1	1
22	1674073	Clamp .....	..	4
23	1468318	Screw	4	4
24	1598669	Bracket	1	..
24	1701965	Bracket .....	..	1
25	1598390	Plug	5	..
26	1598412	Latch (RH)	1	1
27	1598408	Nut	2	2
28	1579116	Grommet	2	..
28	1646729	Grommet .....	..	2
29	1598406	Handle	1	1
30	1598409	Bar	1	1
31	1598410	Lever	1	1
32	1468312	Washer	2	2
33	1503959	Hinge (RH)	2	2
34	1493308	Bolt	12	12
35	1641494	Bulkhead	1	1
36	1643584	Bracket	1	1
37	1670529			
	1598327	Connector (Female)	2	2
38	1393539	Seal	AR	AR
39	1515337	Seal	AR	AR
40	a 2081868	Label (Electronic Hydraulics)	1	1
41	1598414	Gas Spring	1	1
42	1393472	Ball Stud .....	..	1
42	4009902	Ball Stud (Alternate Part)	2	2
43	1558294	Seal .....	..	AR
	b 1593629	Key (For Cab Door Grip)	2	2
	b 1654298	Knob (Water Valve) (For use with p/n 1598672)	1	1
	b 1674109	Kit-Repair (Glue)	1	..
	b 1506825	Strap Clamp .....	..	1
	b 1598670	Fitting (Male)	2	2

FOOTNOTES:

a Electronic Hydraulics Only

b Not Illustrated

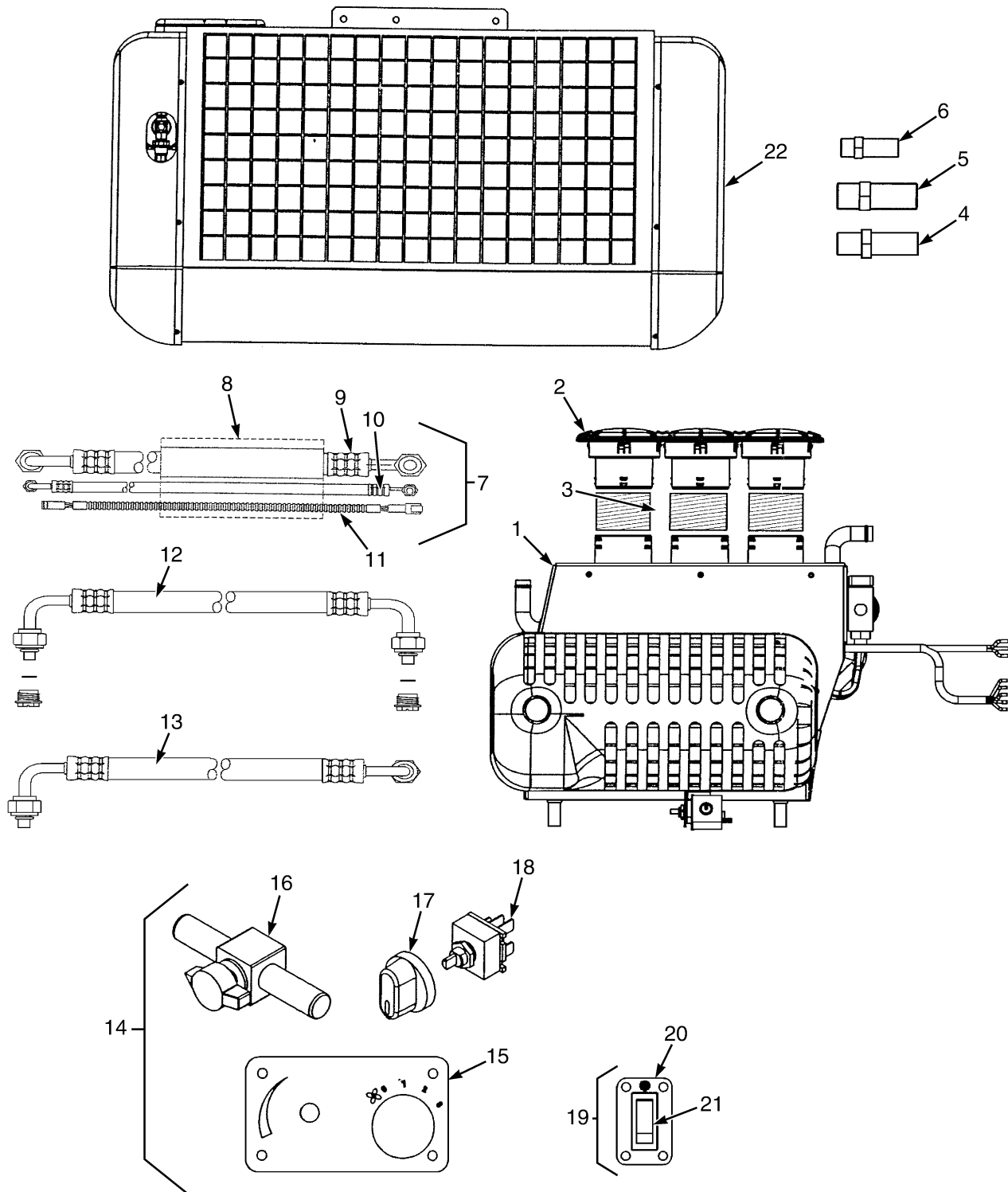
c → S/N L177B12272D

d → S/N L177B16119E

e S/N L177B12273B ↔ S/N L177B16119E

f S/N L177B16120E →

CAB (FIGURE 1-17) AIR CONDITIONER — CAB WITH A/C

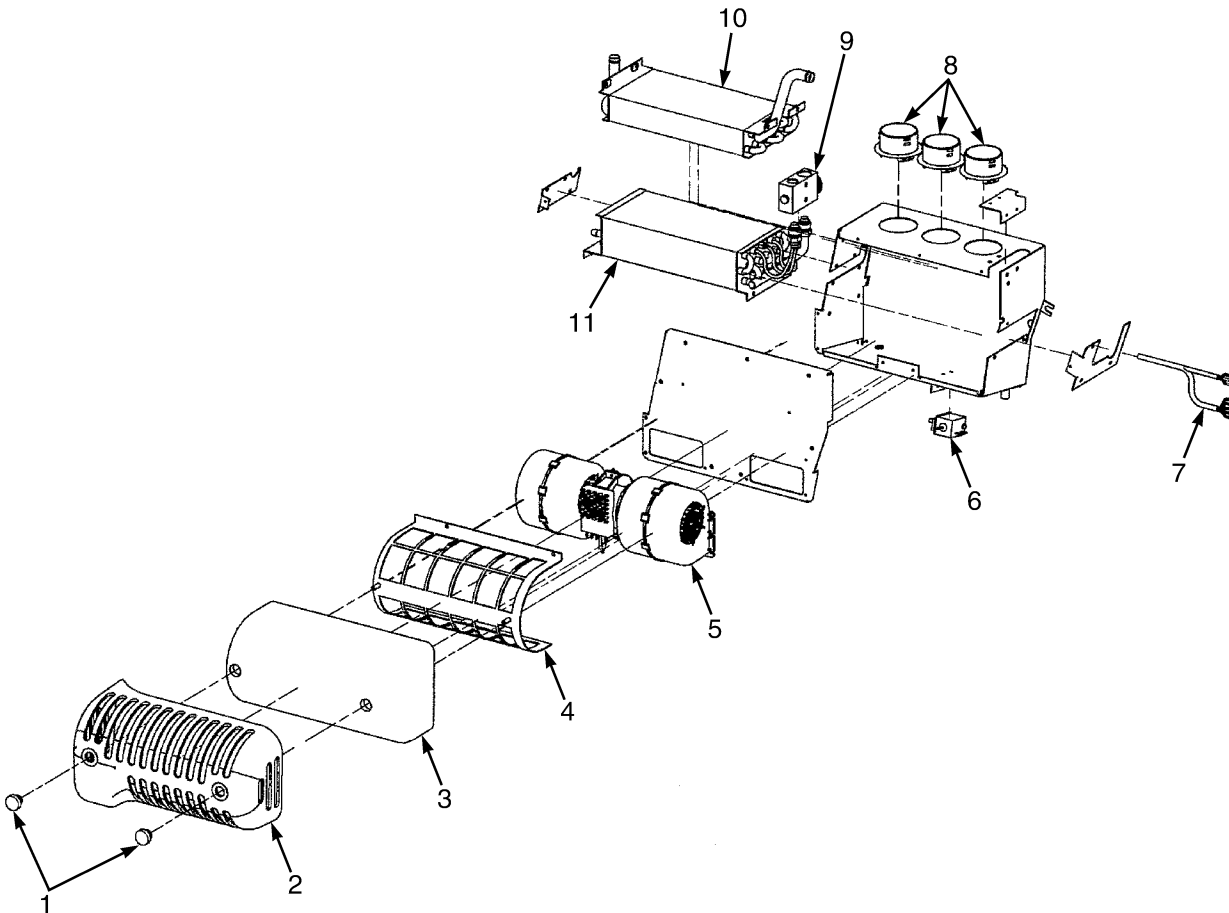


BP120634

CAB
AIR CONDITIONER – CAB WITH A/C

ITEM	PART NO.	DESCRIPTION	QTY
	1701967	Air Conditioner	1
1	4004149	Heater (☞Figure 1-18).....	1
2	4004150	Louver	3
3	4004154	Hose	3
4	4004153	Fitting	1
5	4004152	Fitting	1
6	4004151	Fitting	1
7	4004155	Hose	1
8	4004157	Wrap	1
9	4004158	Hose Assy	1
10	4004159	Hose Assy	1
11	4004156	Wire Harness	1
12	4004160	Hose Assy	1
13	4004161	Hose Assy	1
14	4004162	Control Panel	1
15	4004163	Panel	1
16	4004164	Valve	1
17	1487957	Knob	1
18	1487956	Switch , Blower (with Nut)	1
19	4004166	Control Panel	1
20	4004167	Panel	1
21	4004168	Switch	1
22	4004165	Condenser (☞Figure 1-19).....	1

CAB (FIGURE 1-18) HEATER — CAB WITH A/C

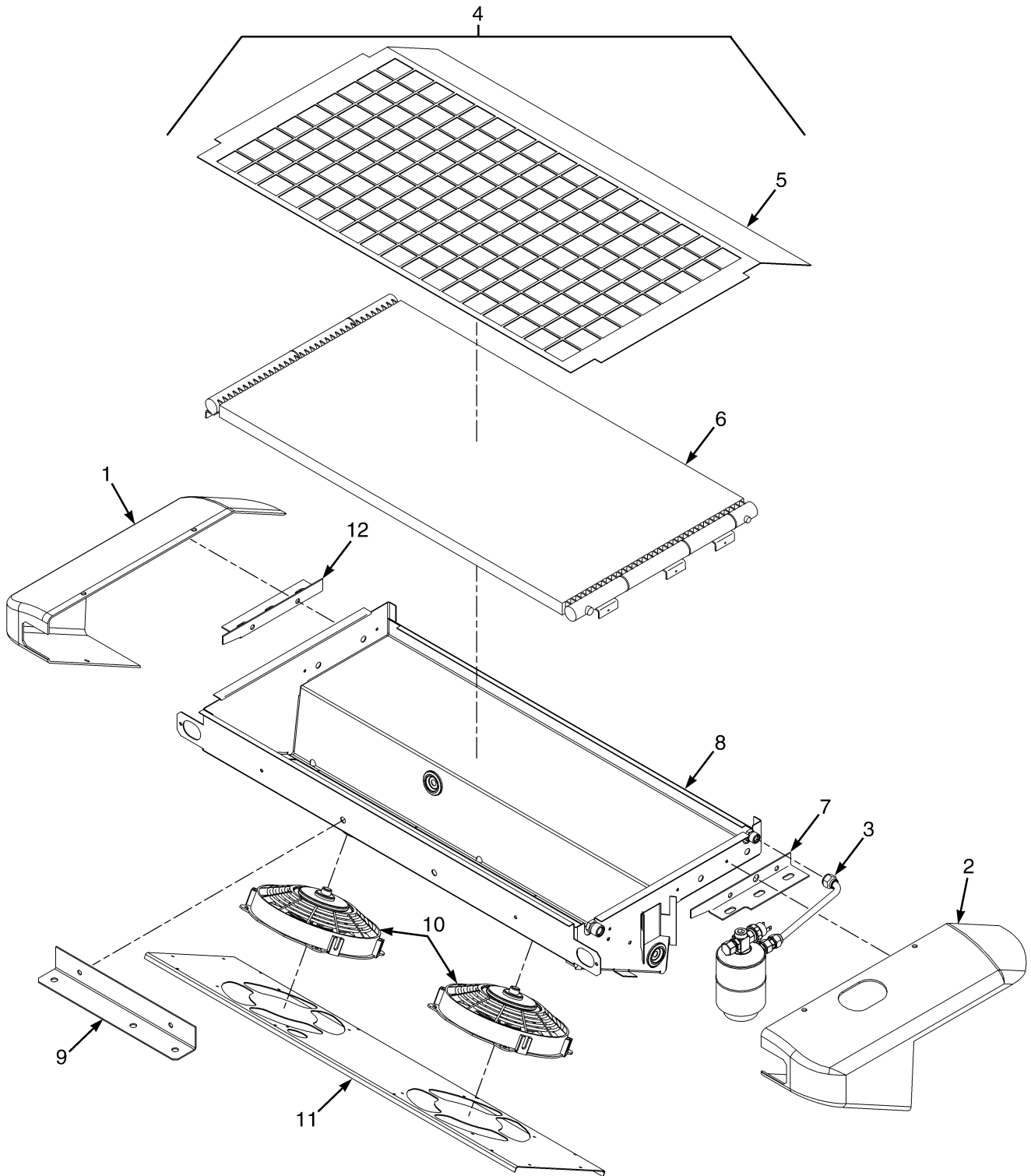


BP120633

CAB
HEATER – CAB WITH A/C

ITEM	PART NO.	DESCRIPTION	QTY
	4004149	Heater	1
1	4004065	Knob	2
2	4004045	Cover	1
3	4004060	Filter	1
4	4004059	Filter	1
5	1661971	Heater (Blower)	1
6	4003082	Thermostat	1
7	4004061	Wire Harness	1
8	4004066	Hose Adapter	3
9	1487945	Valve (Block)	1
10	4004062	Heater	1
11	4004063	Evaporator	1

**CAB (FIGURE 1-19)
CONDENSER ASSEMBLY — CAB (WITH A/C)**



BP120637

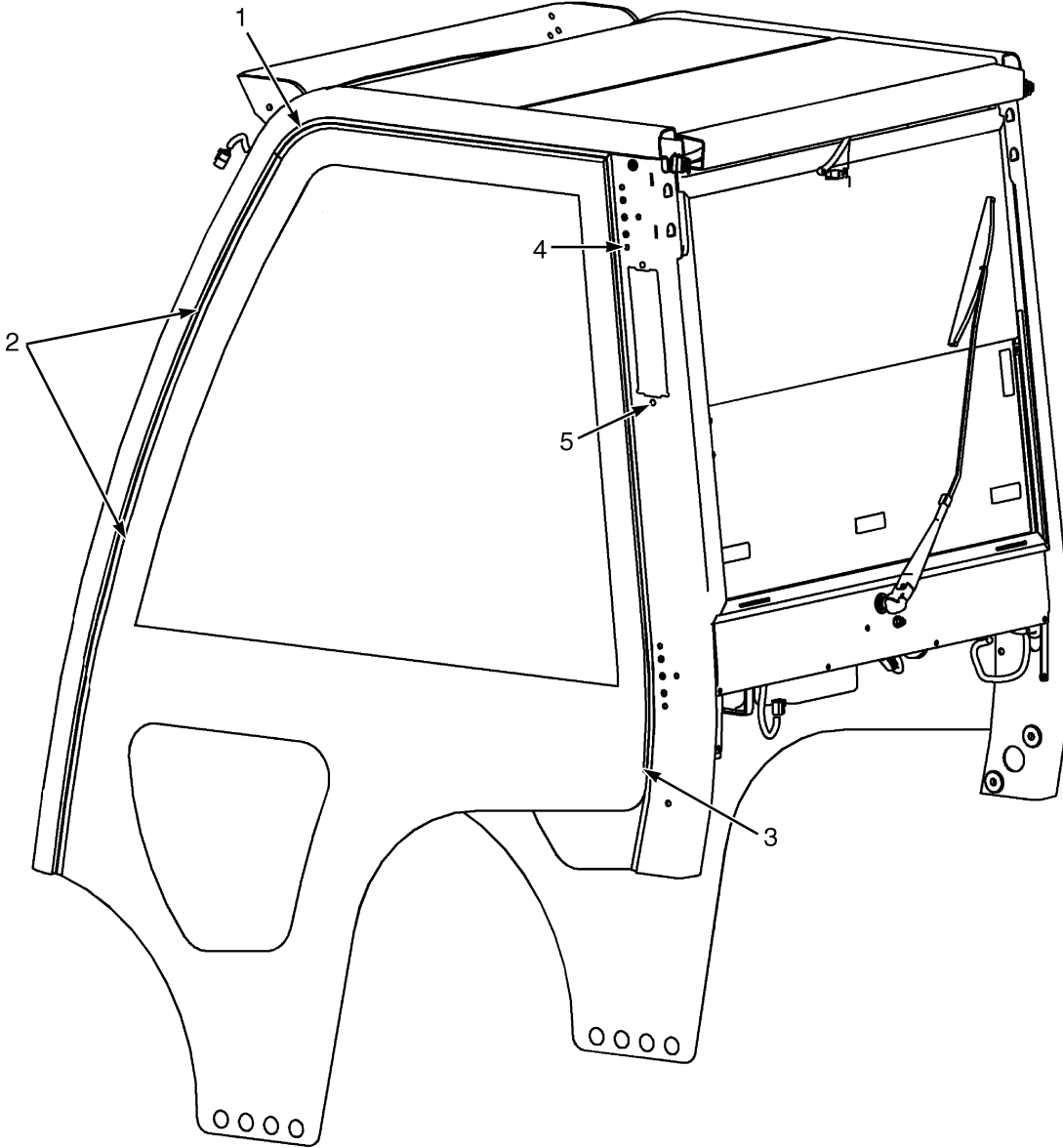
CAB
CONDENSER ASSEMBLY – CAB (WITH A/C)

ITEM	PART NO.	DESCRIPTION	QTY
1	4007133	Cover	1
2	4007132	Cover	1
3	4007134	Air Dryer	1
4	4007135	Condenser (Assembly)	1
5	4007145	Cover	1
6	4003079	Condenser	1
7	4007141	Bracket	1
8	4007139	Case	1
9	4007140	Bracket	1
10	4007138	Fan	2
11	4007143	Plate	1
12	4007144	Bracket	1
	a 4007142	Relay	1
	a 4002509	Cap	1
	a 4007147	Clip	1
	a 4002504	Clamp	1
	a 4007209	Wire Harness	1
	a 4007210	Wire Harness	1
	a 4007211	Wire Harness	1
	a 4007212	Filter	1
	a 4007213	Fuse	1

FOOTNOTES:

a Not Illustrated

CAB DOORS (FIGURE 1-20) PVC

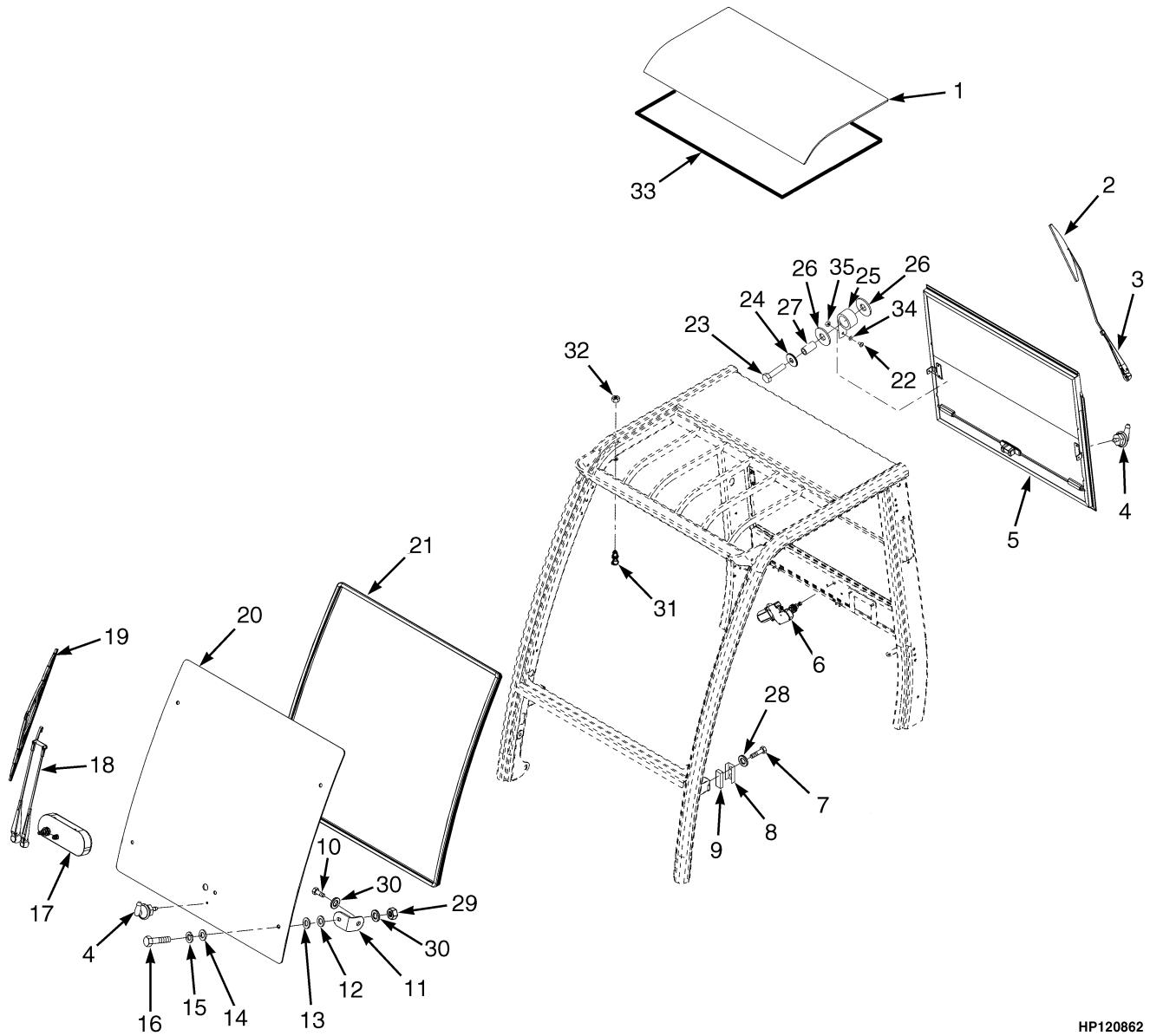


BP120196

**CAB DOORS
PVC****KEY:****A: Right Hand****B: Left Hand**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1617050	Cab	1	1
	1627180	Door Pvc	1	..
	1627176	Door Pvc .....	..	1
1	1627178	Molding (Top) (RH)	1	..
1	1627174	Molding (Top) (LH) .....	..	1
2	1627179	Molding (Front) (RH)	1	..
2	1627175	Molding (Front) (LH) .....	..	1
3	1627177	Molding (Back) (RH)	1	..
3	1627173	Molding (Back) (LH) .....	..	1
4	1363916	Plug	12	12
5	1599415	Plug	1	1
	1627172	Screw (Not Illustrated)	10	10

CAB (FIGURE 1-21) WINDOWS AND WINDOW WIPER SYSTEM



HP120862

CAB
WINDOWS AND WINDOW WIPER SYSTEM

ITEM	PART NO.	DESCRIPTION	QTY
	d 1519232	Cab (With Steel Doors)	1
	e 1641493	Cab (With Steel Doors)	1
	f 1652722	Cab (With Steel Doors)	1
	1641660	Cab (With PVC Doors)	1
	1683428	Cab (With A/C)	1
1	1598293	Window (Roof)	1
2	1598297	Wiper Blade (Rear)	1
3	1598296	Wiper Arm (Rear)	1
4	1493336	Connector (Spray Nozzle)	2
5	1598290	Sliding Window (Rear)	1
5	1615998	Latch (Contains one center, two end latches and springs)	1
5	1615999	Spring	2
5	1615813	Bar	1
6	1598295	Wiper Motor (Rear)	1
6	1645316	Kit-Wiper Motor	1
6	1645317	Kit-Wiper Motor	1
7	1639003	Striker Bolt	2
7	a 1653630	Striker Bolt	1
8	1393541	Guard	2
8	a 1674101	Spacer	2
9	1504953	Block (Tapped)	2
10	1623364	Capscrew	4
11	1598210	Bracket	4
12	1598211	Washer	4
13	1468317	Washer	4
14	1468316	Washer	4
15	1468315	Washer	4
16	1468314	Screw	4
17	b 1598294	Wiper Motor (Front)	1
17	b 1645315	Kit-Front Wiper Motor Mounting	1
17	c 1669224	Wiper Motor (Front)	1
18	b 1598298	Wiper Arm (Front)	1
18	c 1690933	Wiper Arm (Front)	1
19	b 1598299	Wiper Blade (Front)	1
19	c 1690934	Wiper Blade	1
20	b 1598209	Front Window	1
20	c 1667630	Front Window	1
21	1495441	Seal	AR
22	302019	Screw	2
23	1598291	Capscrew	2
24	1558052	Washer	2
25	1598302	Spring	2
26	1598301	Bushing	4
27	1623366	Sleeve	2
28	1571029	Washer	2
29	239503	Nut	4
30	320158	Washer	4
31	1393472	Ball Stud	2
32	316835	Nut	2
33	1623377	Seal	AR

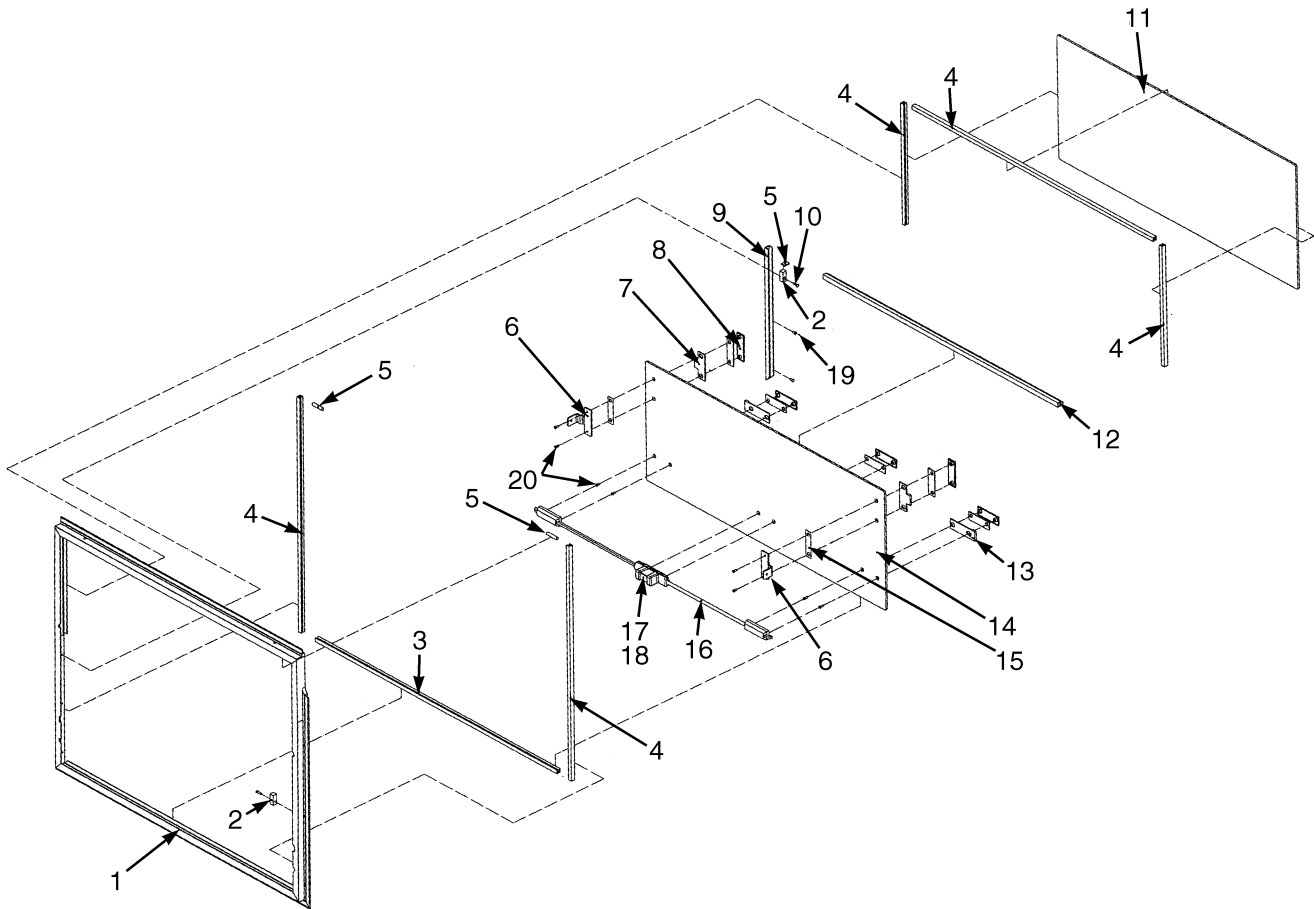
CAB WINDOWS AND WINDOW WIPER SYSTEM

ITEM	PART NO.	DESCRIPTION	QTY
33	a 1674088	Seal	AR
34	296415	Washer	2
35	292667	Nut	2
	1393475	Adhesive	1

FOOTNOTES:

- | | | | |
|----------|------------------------------------|----------|-----------------------------------|
| a | Cab with A/C only | d | → S/N L177B12272D |
| b | Center mounted wiper motor use | e | S/N L177B12273D ↔ S/N L177B16119E |
| c | Off Center mounter wiper motor use | f | S/N L177B16120E → |

CAB (FIGURE 1-22) SLIDING REAR WINDOW

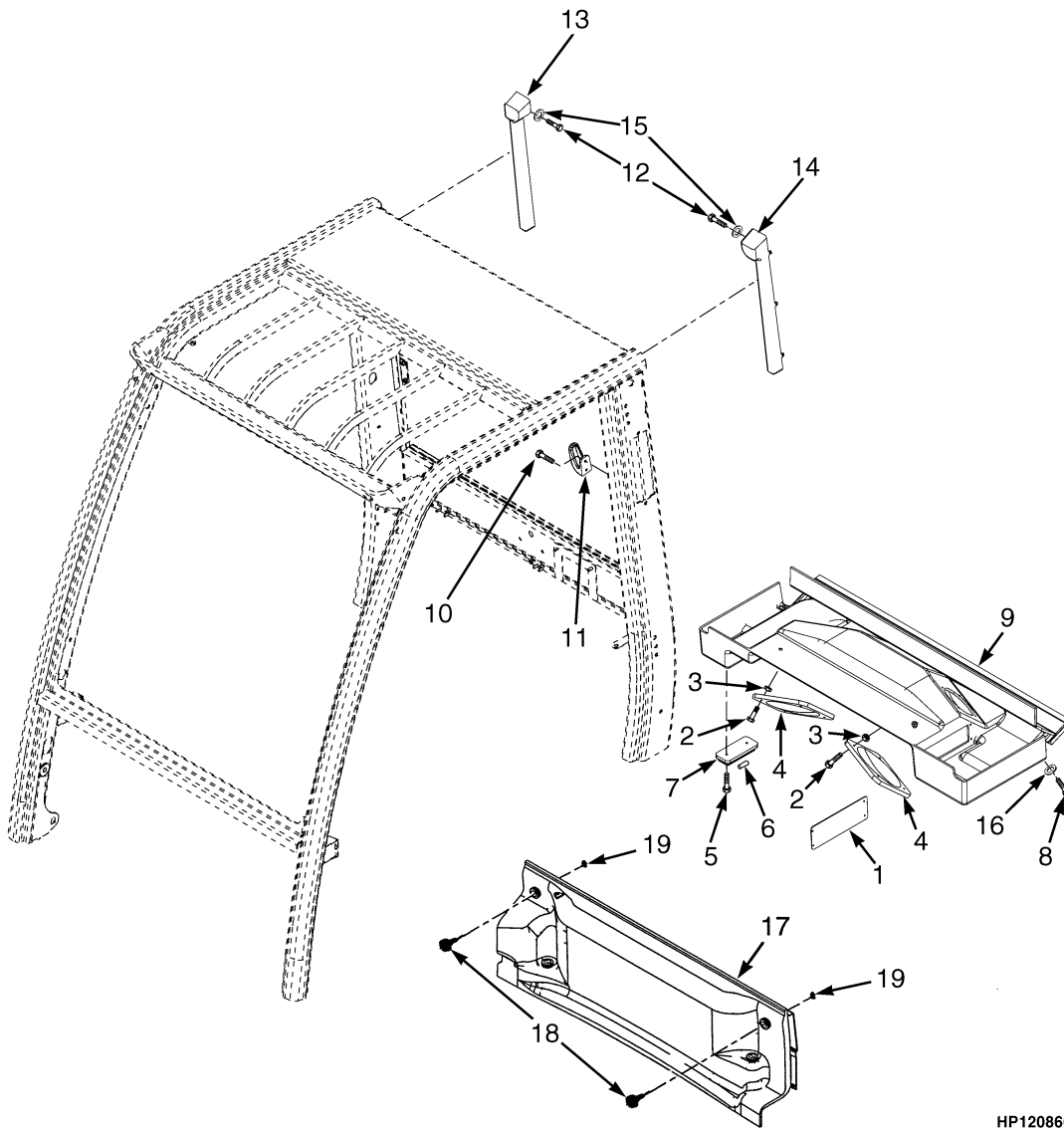


BP120365

**CAB
SLIDING REAR WINDOW**

ITEM	PART NO.	DESCRIPTION	QTY
	1598290	Sliding Window	1
1	1670441	Frame	1
2	1670443	Bushing	2
3	1670424	Guide	1
4	1641637	Seal	AR
5	1641640	Strip Seal	AR
6	1670427	Stop	2
7	1670428	Pad	2
8	1670429	Plate	2
9	1670442	Rail	1
10	1670421	Screw	2
11	1670425	Glass (Rear Glass)	1
12	1670444	Seal	1
13	1670423	Pad	2
14	1670426	Glass (Sliding Glass)	1
15	1670440	Pad	2
16	1615813	Bar	2
17	1615998	Latch (Contains one center, two end latches and springs)	1
18	1615999	Spring	2
19	1670422	Screw	2
20	1670430	Screw	8

CAB (FIGURE 1-23) INTERIOR PANELS



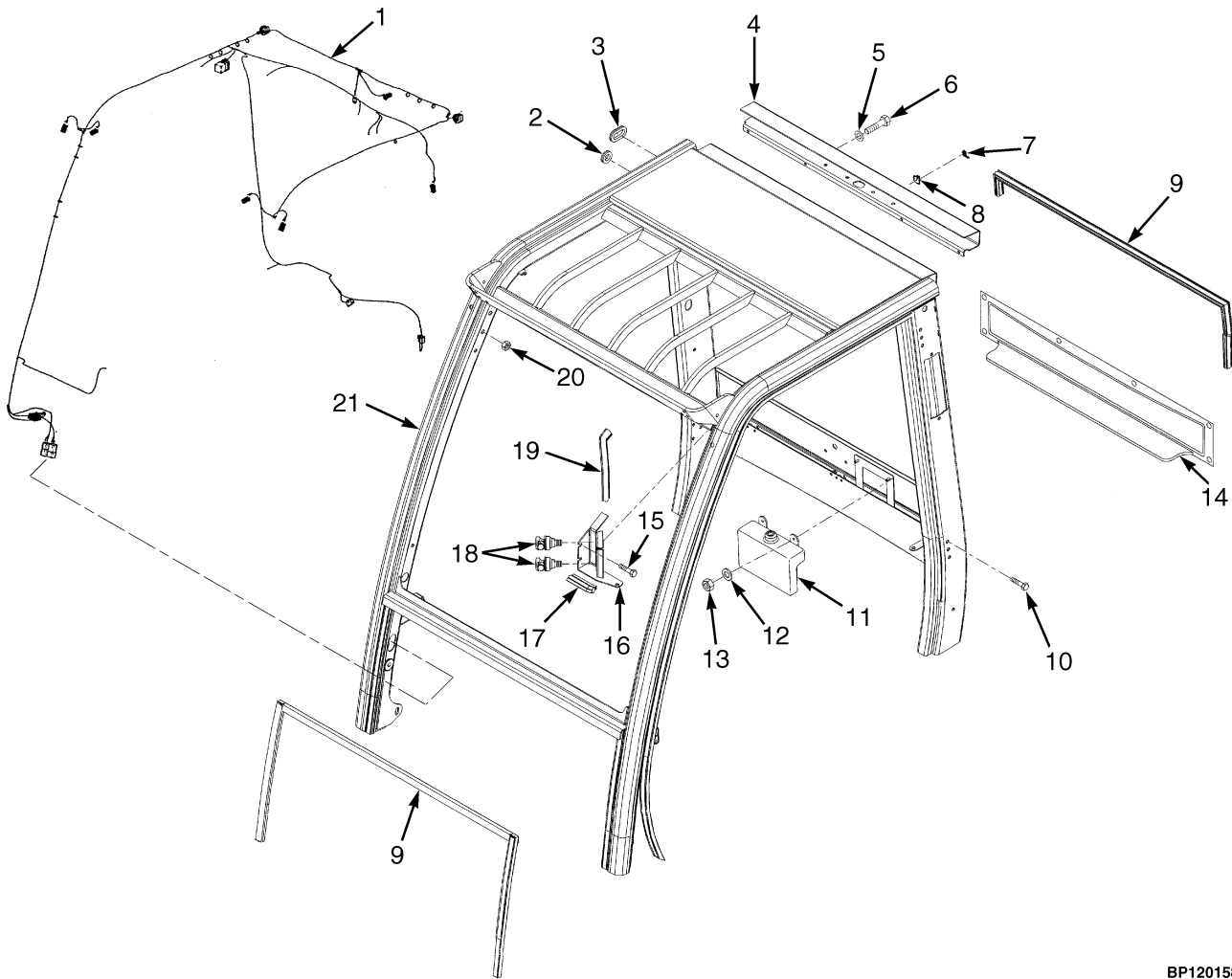
HP120860

**CAB
INTERIOR PANELS**

ITEM	PART NO.	DESCRIPTION	QTY
	a 1519232	Cab (With Steel Doors)	1
	b 1641493	Cab (With Steel Doors)	1
	c 1652722	Cab (With Steel Doors)	1
	1641660	Cab (With PVC Doors)	1
	1683428	Cab (With A/C)	1
1	1571628	Cover (Radio)	1
2	1468320	Screw	8
3	1598420	Nut	8
4	1598421	Cover (Speaker) (Speakers)	2
5	1468319	Screw	2
6	1393527	Bulb	1
7	1393528	Dome Light	1
8	1623364	Capscrew	4
9	1598422	Headliner	1
10	1623370	Screw	2
11	1393458	Hanger	1
12	1468319	Screw	6
13	1598424	Support (RH)	1
14	1598425	Support (LH)	1
15	296415	Washer	6
16	296419	Washer	4
17	1641054	Cover	1
18	1598427	Capscrew	2
18	4009578	Screw (Alternate Part)	2
19	1623396	Fastener	2
19	1651739	Rivet (Alternate Part)	2

FOOTNOTES:**a** → S/N L177B12272D**c** S/N L177B16120E →**b** S/N L177B12273D ↔ S/N L177B16120E

CAB (FIGURE 1-24) FRAME AND ATTACHING PARTS



BP120158

CAB
FRAME AND ATTACHING PARTS

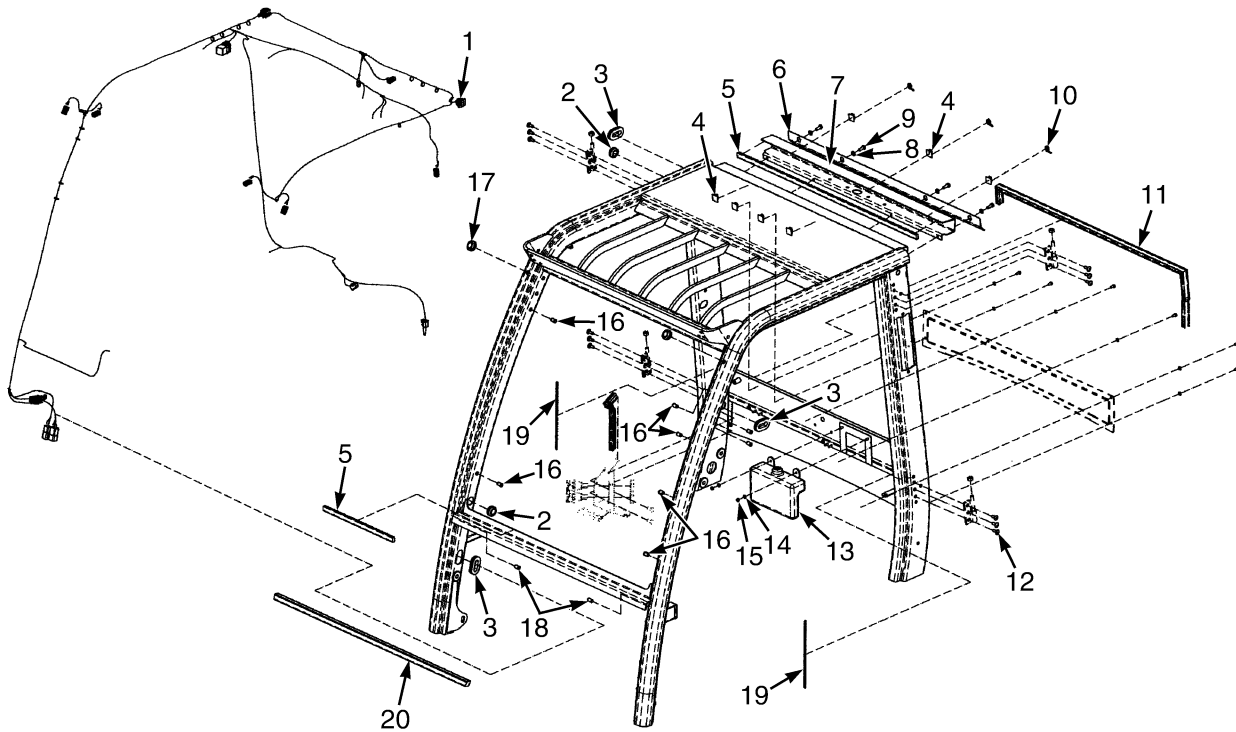
ITEM	PART NO.	DESCRIPTION	QTY
	b 1519232	Cab (With Steel Doors)	1
	c 1641493	Cab (With Steel Doors)	1
	d 1652722	Cab (With Steel Doors)	1
	1641660	Cab (With PVC Doors)	1
1	1598333	Wire Harness	1
1	2044712	Relay (30 Amp)	1
2	1579116	Grommet	2
3	1598332	Grommet	3
4	1639004	Cover (Cable)	1
5	320158	Washer	4
6	136681	Capscrew	4
7	1558036	Clip	3
8	1393499	Clamp	3
9	1515337	Seal	AR
10	1493308	Bolt	12
11	1598329	Reservoir (Washer Bottle with Pump)	1
12	320156	Washer	7
13	136687	Nut	2
14	1598668	Cover (Rear)	1
15	a 1583611	Capscrew	2
16	a	Heater Hose Bulkhead	1
16	a 1643584	Bracket	1
16	a 1393539	Seal	AR
17	1515337	Seal	AR
18	1670529		
	1598327	Connector (Female)	2
19	1614926	Strip Seal	1
20	1468308	Nut	6
21	1691062	Frame (With Steel Doors)	1

FOOTNOTES:

a With PVC Doors
b → S/N L177B12272

c S/N L177B12273 ↔ S/N L177B16119
d S/N L177B16120 →

CAB (FIGURE 1-25) FRAME AND LIGHT HARNESS — CAB WITH A/C

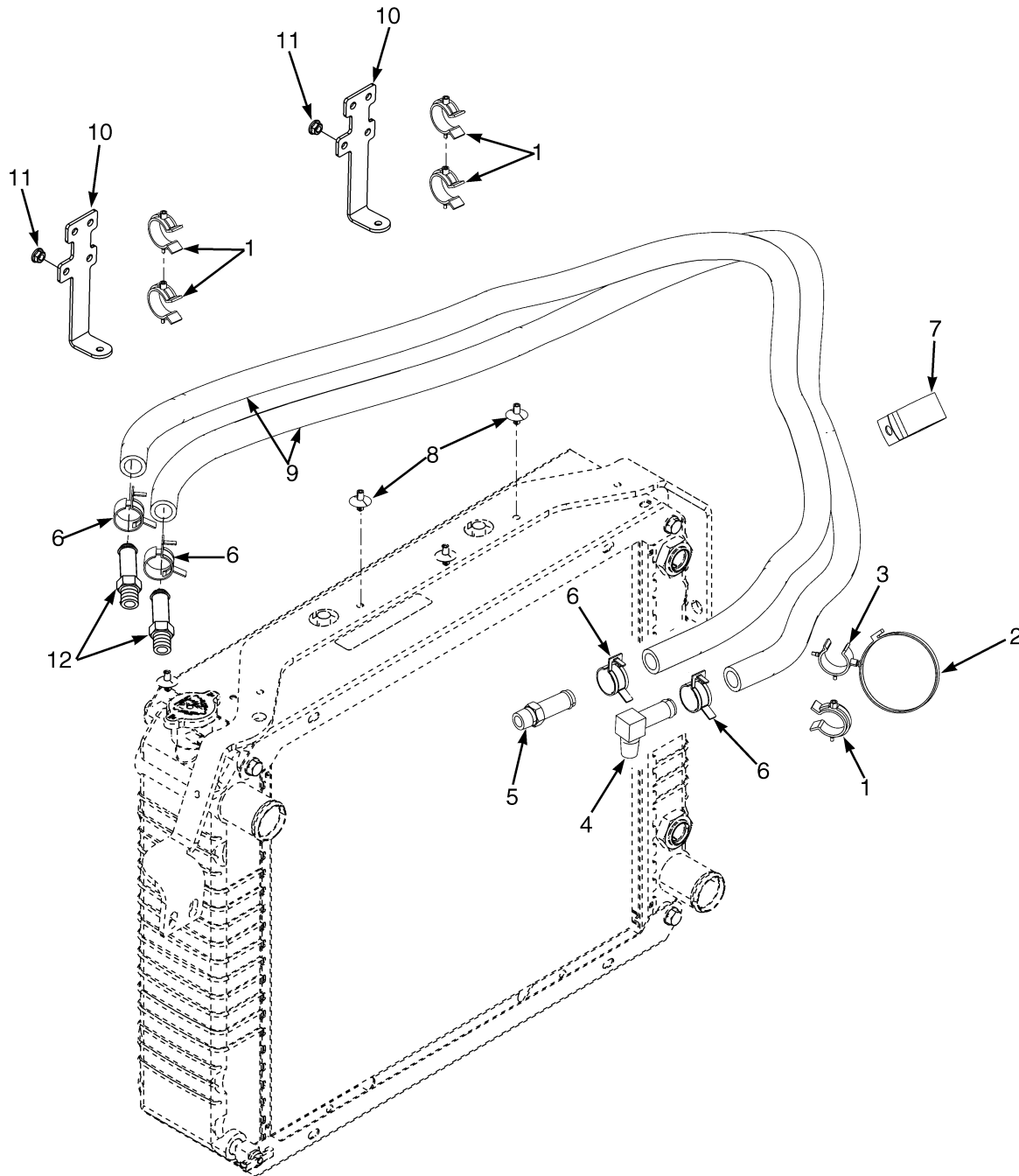


BP120635

CAB
FRAME AND LIGHT HARNESS – CAB WITH A/C

ITEM	PART NO.	DESCRIPTION	QTY
	1598415	Cab	1
1	1598333	Wire Harness	1
2	1646729	Grommet	2
3	1598332	Grommet	3
4	1558036	Clip	7
5	1646726	Seal	AR
6	1690936	Cover	1
7	1639004	Cover	1
8	.....	Washer	4
9	136681	Capscrew	4
10	1393499	Clamp	3
11	1515337	Seal	AR
12	1674103	Screw	12
13	1598329	Reservoir (Washer Bottle with Pump)	1
13	1705156	Pump (Windshield Washer, 12V)	1
14	320156	Washer	2
15	136687	Nut	2
16	1674102	Rivet	9
17	1646728	Sleeve	2
18	.....	Nut	1
19	1692589	Adhesive	AR
20	1674106	Seal	AR

HEATER HOSE ARRANGEMENT (FIGURE 1-26) LPG AND DIESEL

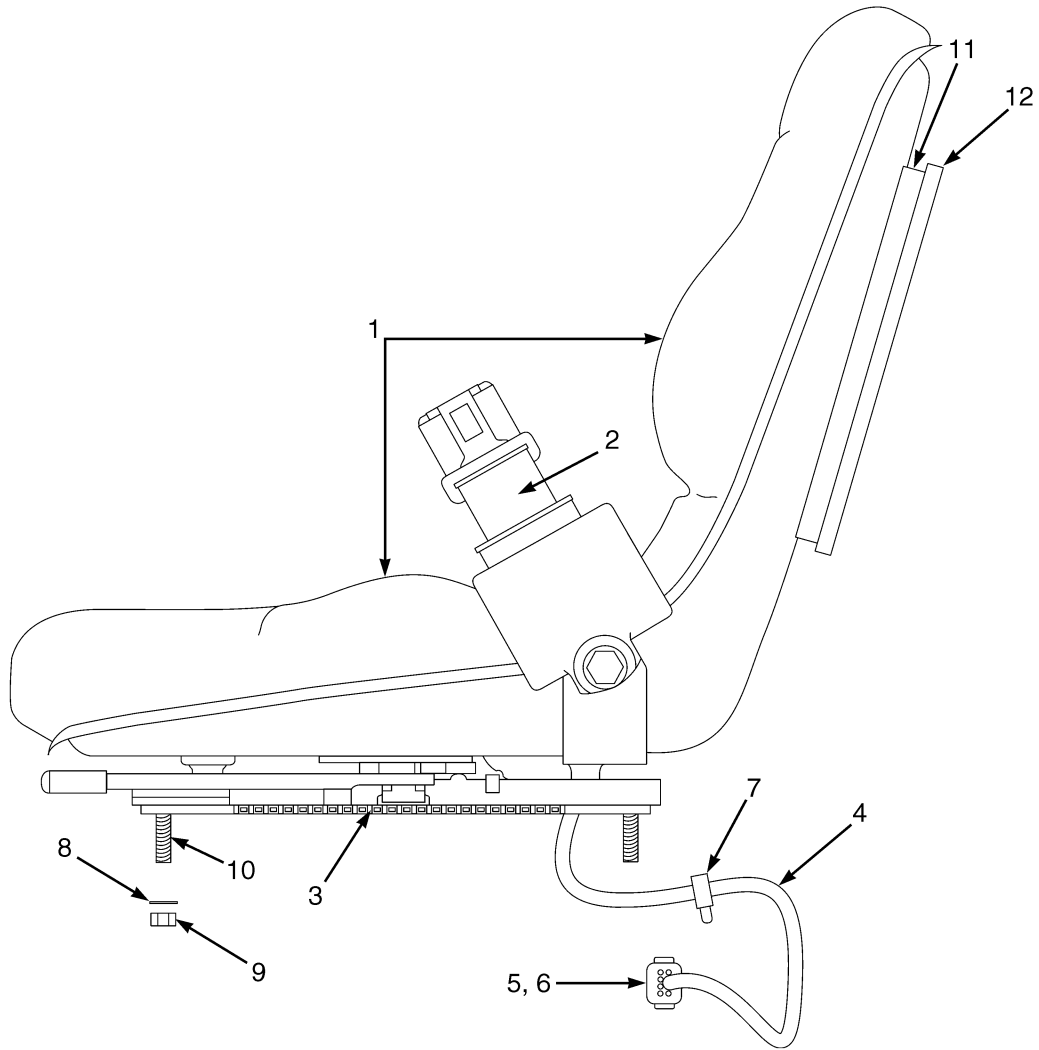


BP000299

**HEATER HOSE ARRANGEMENT
LPG AND DIESEL****KEY:****A: Mazda LPG Engines****B: GM LPG Engines****C: Yanmar Diesel Engines**

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
1	1569465	Clamp	5	5	5
2	1502061	Clamp	1	1	1
3	1612617	Clamp	1	1	1
4	125305	Fitting .....	..	..	1
4	.....	Fitting	1	1	..
5	138710	Fitting .....	..	..	1
5	.....	Fitting	1	1	..
6	130845	Clamp	4	4	4
7	1562648	Clip	1	1	1
8	1543842	Clamp	2	2	2
9	2071300	Hose	1	..	..
9	2071300	Hose (Alternate Part) .....	..	..	..
9	2070769	Hose	1	..	2
9	2070769	Hose (Alternate Part)	2	..	..
9	2070783	Hose .....	..	2	..
10	1588833	Bracket	2	2	2
11	1514429	Nut	4	4	4
12	1598670	Fitting (Male) (To Cab) (☞ Figure 1-16).....	2	2	2

**NON-SUSPENSION SEAT (FIGURE 1-27)
WITHOUT ELECTRONIC CONTROLS**



HP120851

**NON-SUSPENSION SEAT
WITHOUT ELECTRONIC CONTROLS**

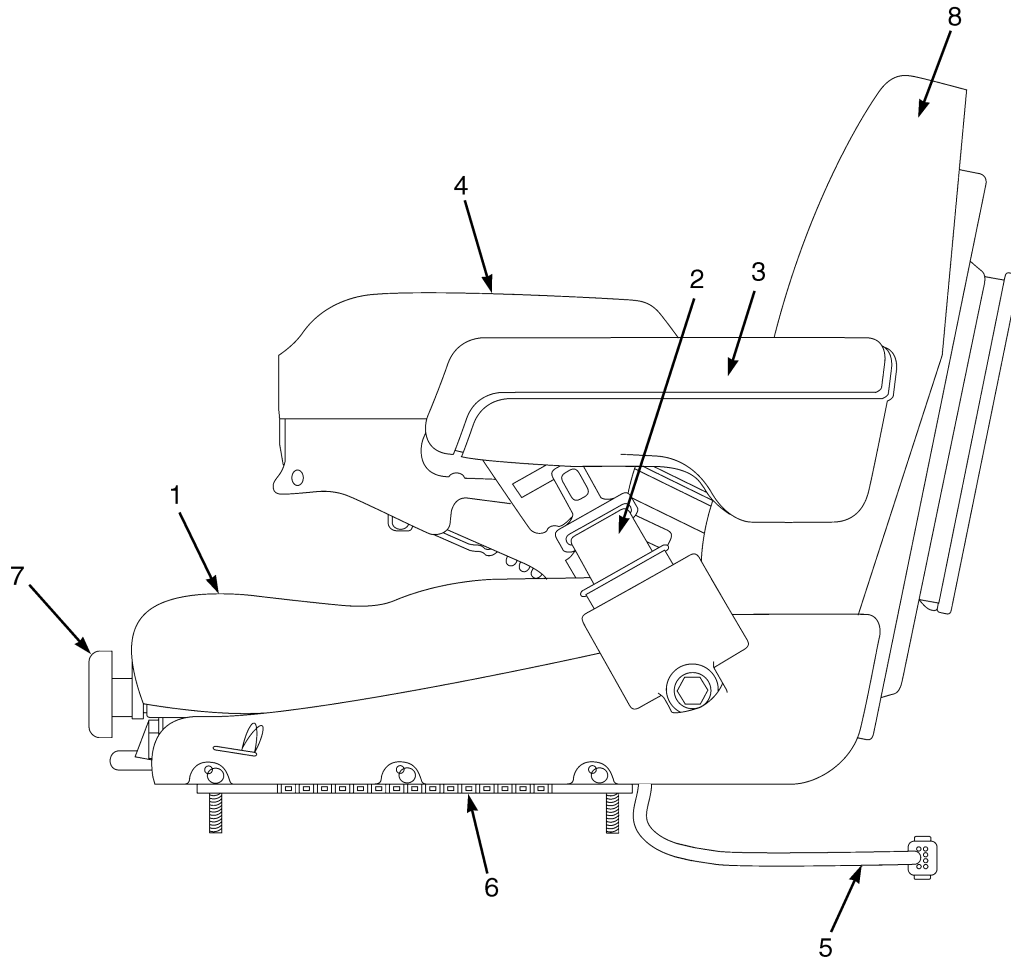
ITEM	PART NO.	DESCRIPTION	QTY
	b 1593409	Seat-Non Suspension (Vinyl)	1
	d 2102130	Seat-Non Suspension (Vinyl)	1
	f 2103362	Seat-Non Suspension (Vinyl)	1
	b 1593410	Seat-Non Suspension (Cloth)	1
	d 2102131	Seat-Non Suspension (Cloth)	1
	f 2103363	Seat-Non Suspension (Cloth)	1
1	1563351	Kit-Seat Cushion (Vinyl)	1
1	1563222	Kit-Seat Cushion (Cloth)	1
2	1598504	Kit-Seat Belt (Black)	1
2	1636120	Kit-Red Seat Belt	1
3	1690996	Kit-Seat Rail	1
4	1591652	Wire Harness	1
5	1582464	Fastener	1
6	1500912	Clip	1
7	1500901	Clip	1
8	320158	Washer	4
9	b 313828	Nut	4
10	e 1677286	Stud	4
11	335988	Information Case	1
12	335991	Cover (Information Case)	1
	ac 1563215	Sensor (Operator Presence)	1
	af 1709876	Sensor (Operator Presence)	1
	a 4002682	Bracket (Operator Presence Sensor)	1

FOOTNOTES:

a Not Illustrated
b → S/N L177B25004F
c → S/N L177B29781G

d S/N L177B25005F ↔ S/N L177B29781G
e S/N L177B25005F →
f S/N L177B29782G →

**SEMI-SUSPENSION SEAT (FIGURE 1-28)
WITH AND WITHOUT ELECTRONIC CONTROLS (S/N L177B01501 ↔ 7/2006)**



HP120890

SEMI-SUSPENSION SEAT
WITH AND WITHOUT ELECTRONIC CONTROLS (S/N L177B01501 ↔ 7/2006)

KEY:

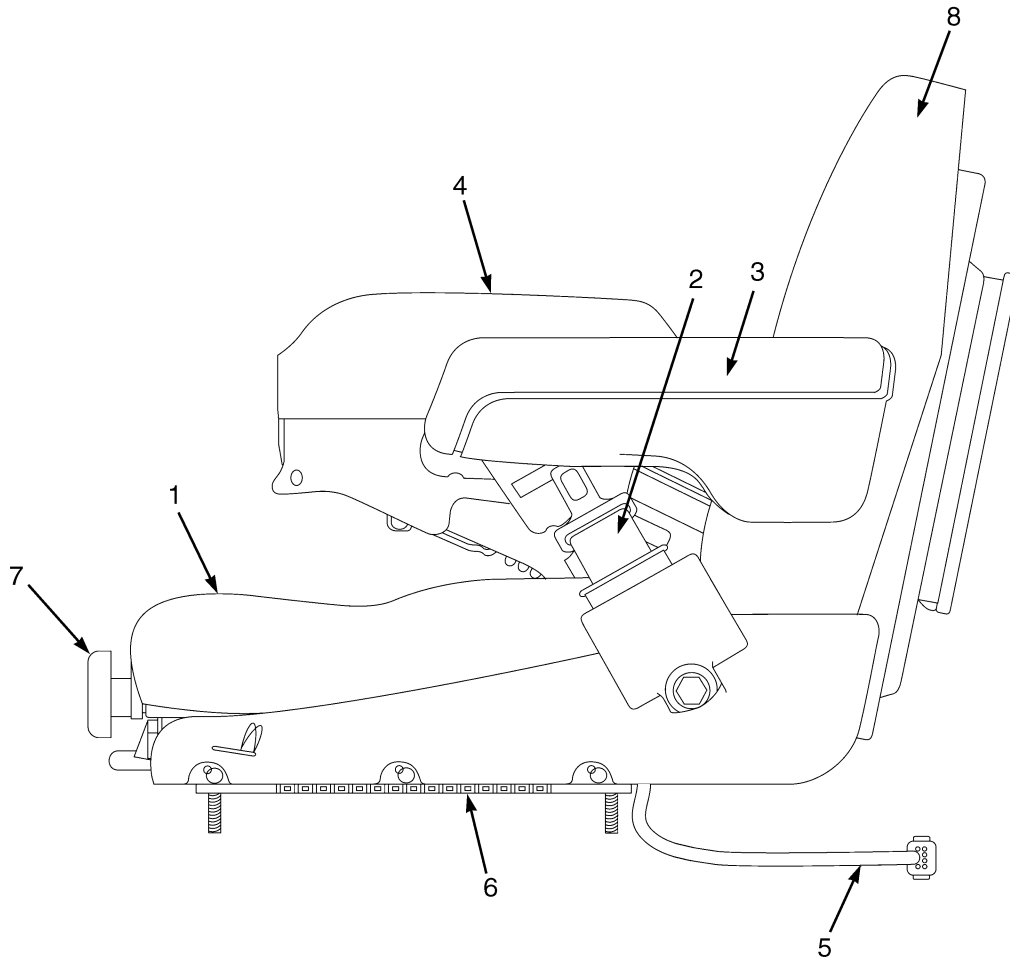
- A:** Semi-Suspension (Vinyl)
B: Semi-Suspension (Cloth)
C: Semi-Suspension (Vinyl with Electronic Control Arm)
D: Semi-Suspension (Cloth with Electronic Control Arm)

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
	1593411	Seat-Semi Suspension (Vinyl)	1	..	..	..
	1593412	Seat-Semi Suspension (Cloth) .....	..	1	..	..
	1593415	Seat-Semi Suspension (Vinyl) .....	..	..	1	..
	1593416	Seat-Semi Suspension (Cloth) .....	..	..	..	1
1	1382112	Seat Cushion (Vinyl)	1	..	1	..
1	1382114	Seat Cushion (Cloth) .....	..	1	..	1
2	1598504	Kit-Seat Belt (Black)	1	1	1	1
2	1636120	Kit-Red Seat Belt	1	1	1	1
3	1453882	Armrest (LH)	1	1	1	1
4	1453883	Armrest (RH)	1	1	..	..
5	1591652	Wire Harness	1	1	..	..
5	1591651	Wire Harness .....	..	..	1	1
6	1459173	Kit-Seat Rail	1	1	1	1
7	1563227	Knob	1	1	1	1
8	1382111	Seat Cushion (Back Cushion) (Vinyl)	1	..	1	..
8	1382113	Seat Cushion (Back Cushion) (Cloth) .....	..	1	..	1
	a 1563215	Sensor (Operator Presence)	1	1	1	1
	a 1362049	Kit-Shock Absorber	1	1	1	1
	a 1563210	Cap (Electronic Control Arm) .....	..	..	1	1
	a 1563211	Knob (Electronic Control Arm) .....	..	..	1	1

FOOTNOTES:

- a** Not Illustrated

SEMI-SUSPENSION SEAT (FIGURE 1-29) WITH AND WITHOUT ELECTRONIC CONTROLS (7/2006 ↔ S/N L177B30380H)



HP120890

SEMI-SUSPENSION SEAT
WITH AND WITHOUT ELECTRONIC CONTROLS (7/2006 ↔ S/N L177B30380H)

KEY:

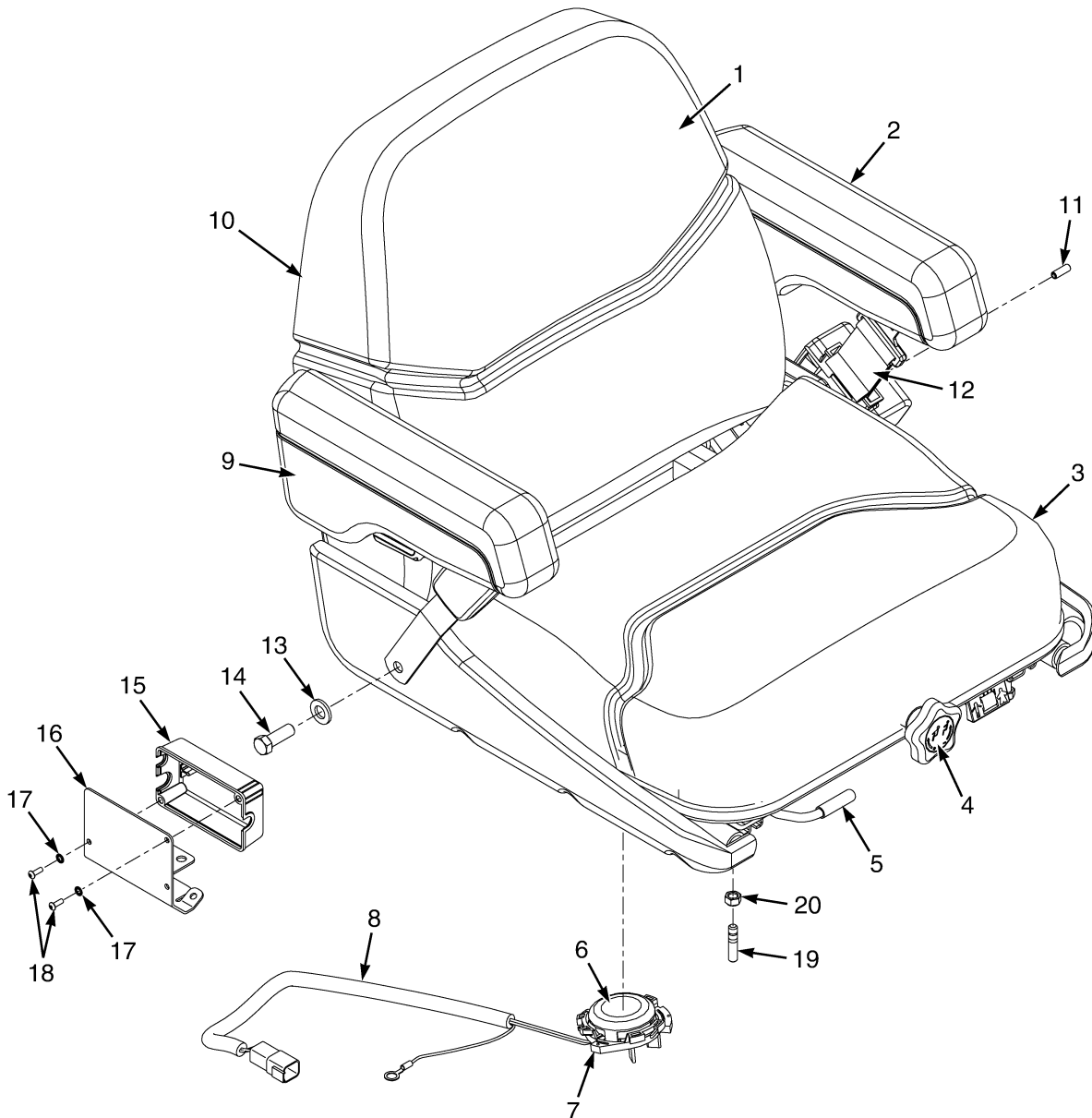
- A:** Semi-Suspension (Vinyl)
B: Semi-Suspension (Cloth)
C: Semi-Suspension (Vinyl with Electronic Control Arm)
D: Semi-Suspension (Cloth with Electronic Control Arm)

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
	1593411	Seat-Semi Suspension (Vinyl)	1	..	..	..
	1593412	Seat-Semi Suspension (Cloth) .....	..	1	..	..
	b 2085195	Seat-Semi Suspension (Vinyl) .....	..	..	1	..
	d 2102134	Seat-Semi Suspension (Vinyl) .....	..	..	1	..
	e 2103370	Seat-Semi Suspension (Vinyl) .....	..	..	1	..
	b 2085196	Seat-Semi Suspension (Cloth) .....	..	..	..	1
	d 2102135	Seat-Semi Suspension (Cloth) .....	..	..	..	1
	e 2103371	Seat-Semi Suspension (Cloth) .....	..	..	..	1
1	1382112	Seat Cushion (Vinyl)	1	..	..	..
1	1382114	Seat Cushion (Cloth) .....	..	1	..	..
2	1598504	Kit-Seat Belt (Black)	1	1	..	..
2	1636120	Kit-Red Seat Belt	1	1	1	1
3	1453882	Armrest (LH)	1	1	..	..
4	1453883	Armrest (RH)	1	1	..	..
5	1591652	Wire Harness	1	1	..	..
6	1459173	Kit-Seat Rail	1	1	..	..
7	1563227	Knob	1	1	..	..
8	1382111	Seat Cushion (Back Cushion) (Vinyl)	1	..	..	..
8	1382113	Seat Cushion (Back Cushion) (Cloth) .....	..	1	..	..
	ac 1563215	Sensor (Operator Presence)	1	1	1	1
	e 1709876	Sensor (Operator Presence)	1	1	1	1
	a 4002682	Bracket (Operator Presence Sensor)	1	1	1	1
	a 1362049	Kit-Shock Absorber	1	1	..	..
	a 302400	Nut	4	4	4	4
	a 1677286	Stud	4	4	4	4

FOOTNOTES:

- a** Not Illustrated
b → S/N L177B25107F
c → S/N L177B29781G
d S/N L177B25108F ↔ S/N L177B29781G
e S/N L177B29782G →

SEMI-SUSPENSION SEAT (FIGURE 1-30) WITH AND WITHOUT ELECTRONIC CONTROLS (S/N L177B30381H →)



BP120692

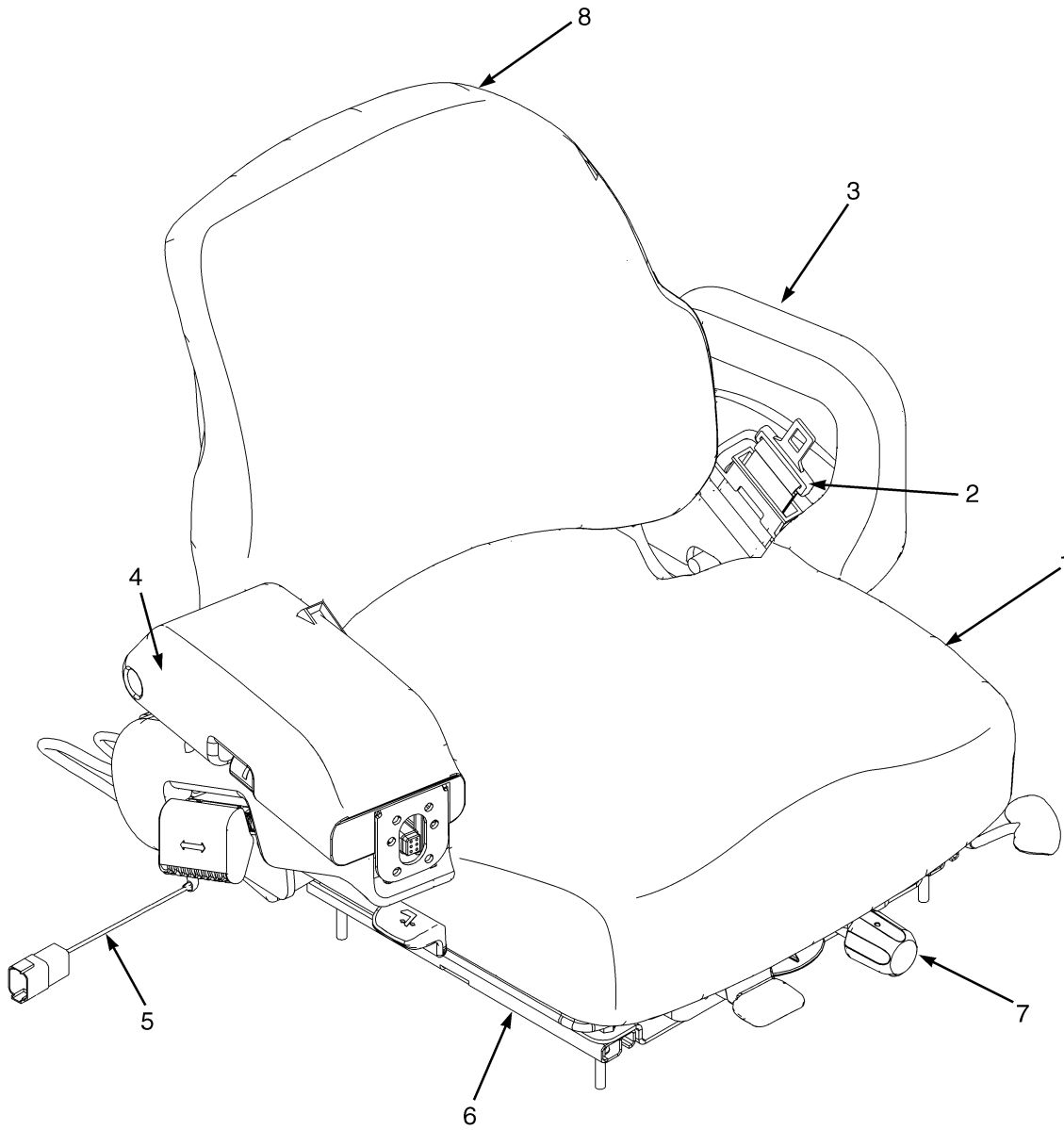
SEMI-SUSPENSION SEAT
WITH AND WITHOUT ELECTRONIC CONTROLS (S/N L177B30381H →)

KEY:**A: Without Electronic Control Arm****B: With Electronic Control Arm**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4009664	Seat-Semi Suspension (Vinyl)	1	..
	4009667	Seat-Semi Suspension (Cloth) .....	..	1
1	1382111	Seat Cushion (Back Cushion) (Vinyl)	1	1
2	1453882	Armrest (LH)	1	1
3	1382112	Seat Cushion (Vinyl)	1	1
4	1563227	Knob	1	1
5	1690995	Kit-Seat Rail	1	1
6	1709876	Sensor (Operator Presence)	1	1
7	4002682	Bracket (Operator Presence Sensor)	1	1
8	4013095	Wire Harness	1	1
9	1453883	Armrest (RH)	1	..
9	4005010	Armrest (Slider with Mini Lever) (☞Figure 1-37).....	..	1
10	1453887	Holder	1	1
11	19901	Roll Pin	1	1
12	1598504	Kit-Seat Belt (Black)	1	1
12	1636120	Kit-Red Seat Belt	1	1
13	1581852	Washer	4	4
14	221533	Capscrew	2	2
15	2107969	Cover (Seat Side Electrical)	1	1
16	4008420	Cover Plate	1	1
17	296357	Washer	2	2
18	1694830	Capscrew	2	2
19	1677286	Stud	4	4
20	313828	Nut	4	4
	a 221530	Capscrew .....	..	1
	a 221353	Locknut .....	..	1
	a 1362049	Kit-Shock Absorber	1	1

FOOTNOTES:**a** Not Illustrated

FULL SUSPENSION SEAT (FIGURE 1-31) WITH AND WITHOUT ELECTRONIC CONTROLS (→ 7/2006)



HP120887

FULL SUSPENSION SEAT
WITH AND WITHOUT ELECTRONIC CONTROLS (→ 7/2006)

KEY:

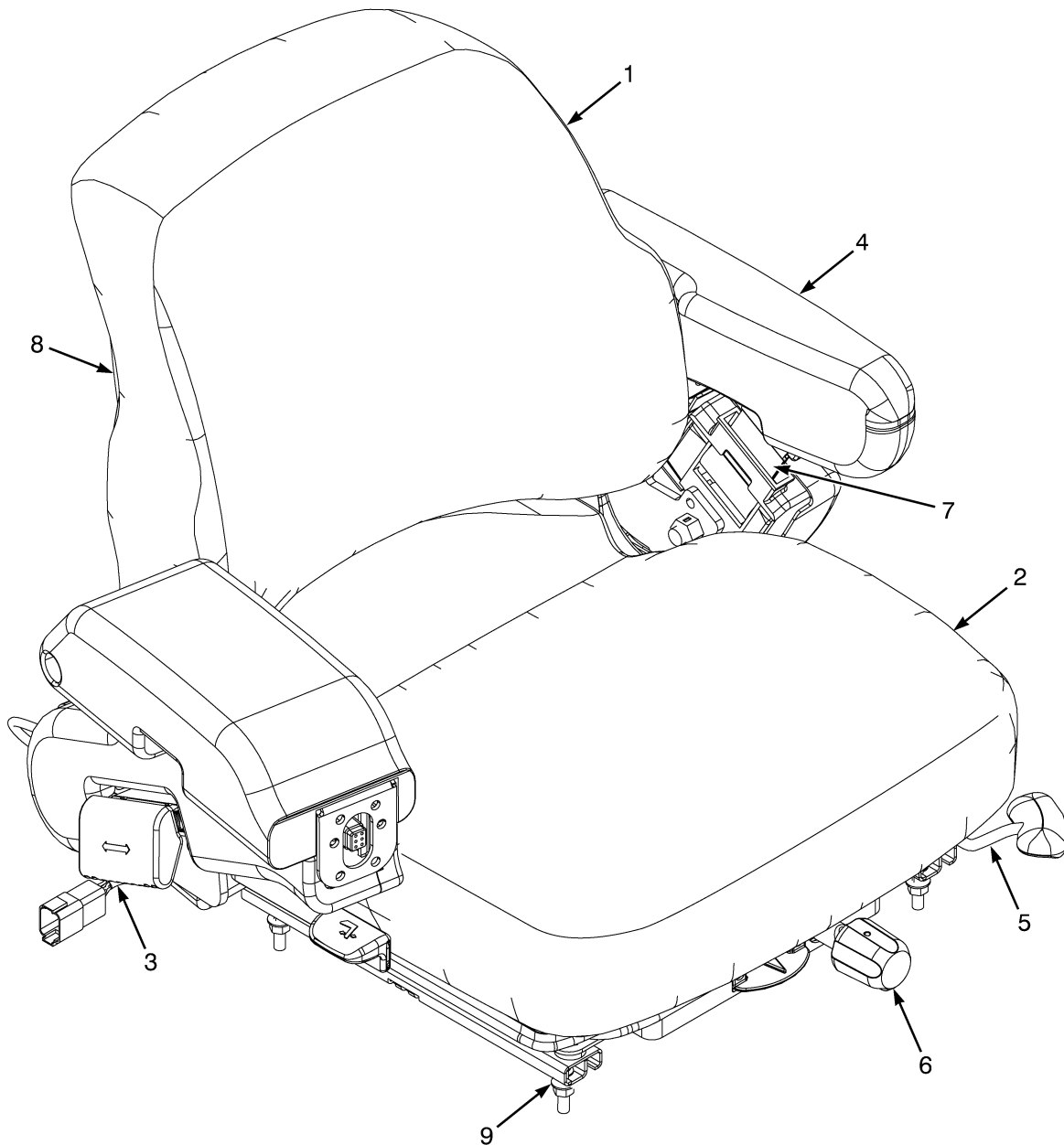
- A:** Full Suspension (Vinyl)
B: Full Suspension (Cloth)
C: Full Suspension (Vinyl with Electronic Control Arm)
D: Full Suspension (Cloth with Electronic Control Arm)

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
	1593413	Seat-Full Suspension (Vinyl)	1	..	..	..
	1593414	Seat-Full Suspension (Cloth) .....	..	1	..	..
	1593417	Seat-Full Suspension (Vinyl) .....	..	..	1	..
	1593418	Seat-Full Suspension (Cloth) .....	..	..	..	1
1	1563207	Seat Cushion (Vinyl)	1	..	1	..
1	1566453	Seat Cushion (Cloth) .....	..	1	..	1
2	1598504	Kit-Seat Belt (Black)	1	1	1	1
2	1636120	Kit-Red Seat Belt	1	1	1	1
3	1563230	Cushion (LH Armrest)	1	1	1	1
4	1563231	Cushion (RH)	1	1	..	..
5	1591652	Wire Harness	1	1	..	..
5	1591651	Wire Harness .....	..	..	1	1
6	1470161	Kit-Seat Rail	1	1	1	1
7	1470163	Kit-Weight Adjuster	1	1	1	1
7	1584631	Knob	1	1	1	1
7	1600126	Handle	1	1	1	1
8	1470152	Seat Cushion (Back Cushion) (Vinyl)	1	..	1	..
8	1470153	Seat Cushion (Back Cushion) (Cloth) .....	..	1	..	1
	a 1563208	Sensor (Operator Presence)	1	1	1	1
	a 1483828	Kit-Gas Spring (Mounted to the rear of the seat)	1	1	1	1
	a 1563210	Cap (Electronic Control Arm) .....	..	..	1	1
	a 1563211	Knob (Electronic Control Arm) .....	..	..	1	1
	a 1467529	Kit-Spring	1	1	1	1
	a 1627639	Weight Adjust Rack	1	1	1	1
	a 1467525	Kit-Bumper	1	1	1	1
	a 1467523	Kit-Boot	1	1	1	1
	a 1467526	Kit-Shaft and Bearing	1	1	1	1
	a 1467524	Kit-Bearing	1	1	1	1
	a 1467527	Kit-Weight Adjuster Indicator	1	1	1	1
	a 1470155	Information Case (Kit)	1	1	..	..

FOOTNOTES:

- a** Not Illustrated

FULL SUSPENSION SEAT (FIGURE 1-32) WITH AND WITHOUT ELECTRONIC CONTROLS (7/2006 ↔ S/N L177B30380H)



BP120561

FULL SUSPENSION SEAT
WITH AND WITHOUT ELECTRONIC CONTROLS (7/2006 ↔ S/N L177B30380H)

KEY:

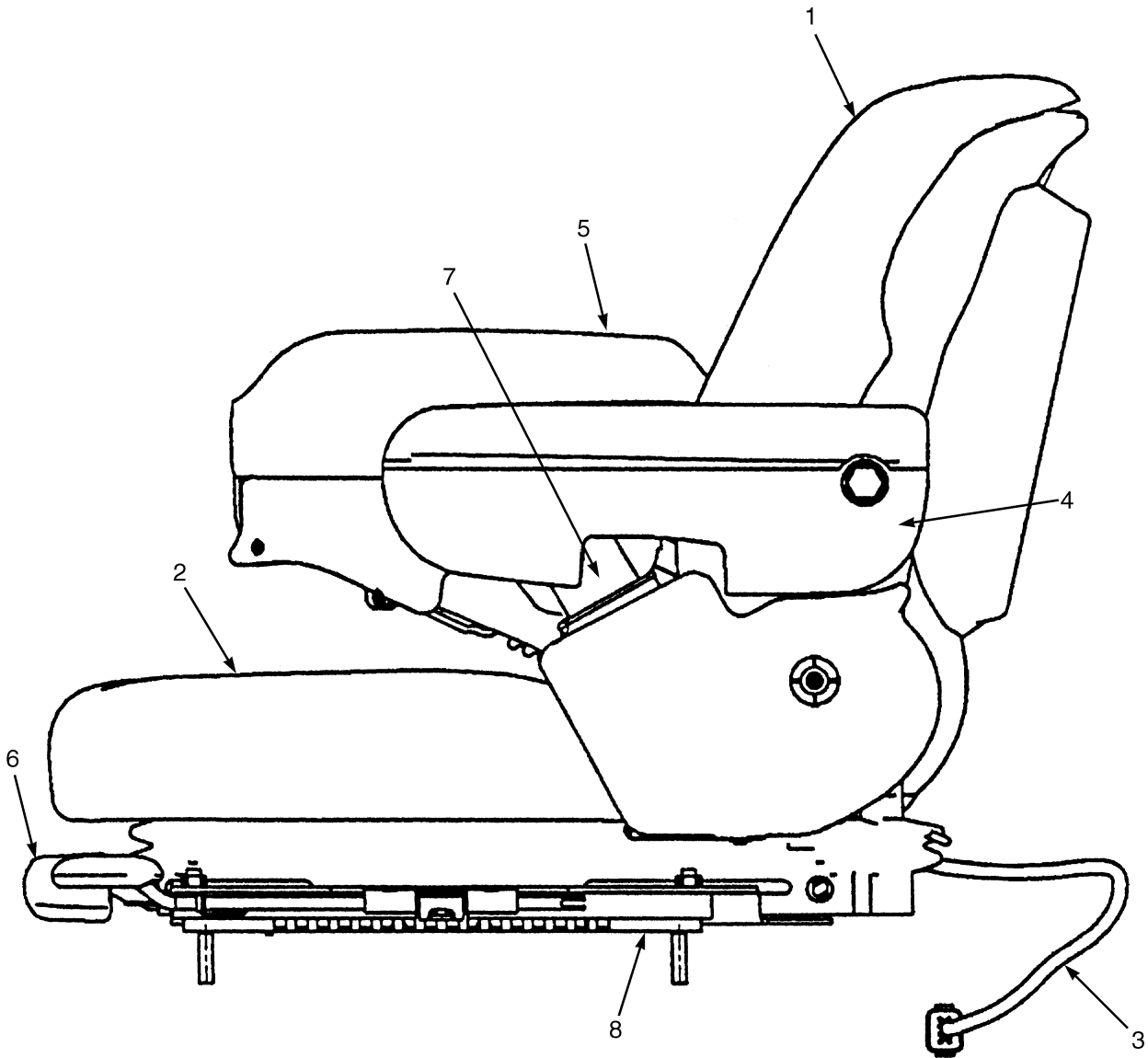
- A:** Full Suspension (Vinyl)
B: Full Suspension (Cloth)
C: Full Suspension (Vinyl with Electronic Control Arm)
D: Full Suspension (Cloth with Electronic Control Arm)

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
	1593413	Seat-Full Suspension (Vinyl)	1	..	..	..
	1593414	Seat-Full Suspension (Cloth) .....	..	1	..	..
	2084979	Seat-Full Suspension (Vinyl) .....	..	..	1	..
	2084980	Seat-Full Suspension (Cloth) .....	..	..	..	1
1	1470152	Seat Cushion (Back Cushion) (Vinyl)	1	..	1	..
1	1470153	Seat Cushion (Back Cushion) (Cloth) .....	..	1	..	1
2	1563207	Seat Cushion (Vinyl)	1	..	1	..
2	1566453	Seat Cushion (Cloth) .....	..	1	..	1
3	1591652	Wire Harness	1	1	..	..
3	1654891	Wire Harness .....	..	..	1	1
4	1563230	Cushion (LH Armrest)	1	1	1	1
4	1704464	Armrest (LH) (Alternate Part)	1	1	1	1
4	1563231	Cushion (RH)	1	1	..	..
4	1704465	Armrest (RH) (Alternate Part)	1	1	..	..
5	1470161	Kit-Seat Rail	1	1	1	1
6	1470163	Kit-Weight Adjuster	1	1	1	1
6	1584631	Knob	1	1	1	1
6	1600126	Handle	1	1	1	1
7	1598504	Kit-Seat Belt (Black)	1	1	1	1
7	1636120	Kit-Red Seat Belt	1	1	1	1
8	1470155	Information Case (Kit)	1	1	1	1
9	191941	Nut	4	4	4	4
a	1483828	Kit-Gas Spring (Mounted to the rear of the seat)	1	1	1	1
a	1563208	Sensor (Operator Presence)	1	1	1	1
a	1647532	Foam .....	..	..	1	1
a	1563211	Knob (Electronic Control Arm) .....	..	..	1	1
a	1467529	Kit-Spring	1	1	1	1
a	1627639	Weight Adjust Rack	1	1	1	1
a	1467525	Kit-Bumper	1	1	1	1
a	1467523	Kit-Boot	1	1	1	1
a	1467526	Kit-Shaft and Bearing	1	1	1	1
a	1467524	Kit-Bearing	1	1	1	1
a	1467527	Kit-Weight Adjuster Indicator	1	1	1	1

FOOTNOTES:

- a** Not Illustrated

FULL SUSPENSION SWIVEL SEAT (FIGURE 1-33) WITH AND WITHOUT ELECTRONIC CONTROLS (→ 7/2006)



HP120891

**FULL SUSPENSION SWIVEL SEAT
WITH AND WITHOUT ELECTRONIC CONTROLS (→ 7/2006)**

KEY:

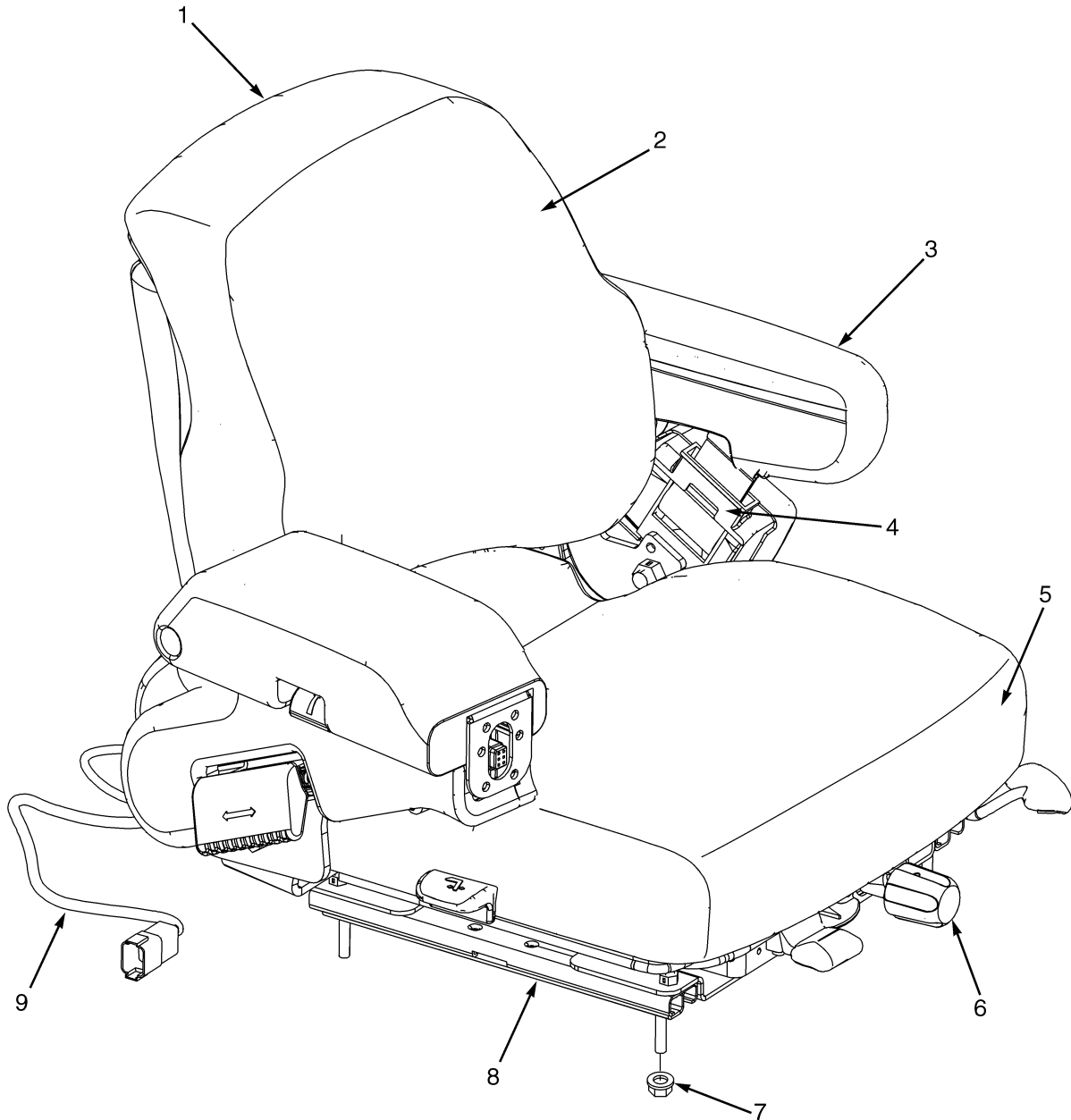
- A: Full Suspension (Vinyl)**
B: Full Suspension (Cloth)
C: Full Suspension (Vinyl with Electronic Control Arm)
D: Full Suspension (Cloth with Electronic Control Arm)

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
	1593421	Seat-Full Suspension (Vinyl)	1	..	..	..
	1593422	Seat-Full Suspension (Cloth) .....	..	1	..	..
	1593423	Seat-Full Suspension (Vinyl) .....	..	..	1	..
	1593424	Seat-Full Suspension (Cloth) .....	..	..	..	1
1	1470152	Seat Cushion (Back Cushion) (Vinyl)	1	..	1	..
1	1470153	Seat Cushion (Back Cushion) (Cloth) .....	..	1	..	1
2	1563207	Seat Cushion (Vinyl)	1	..	1	..
2	1566453	Seat Cushion (Cloth) .....	..	1	..	1
3	1591651	Wire Harness .....	..	..	1	1
3	1591652	Wire Harness	1	1	..	..
4	1563230	Cushion (LH Armrest)	1	1	1	1
5	1563231	Cushion (RH)	1	1	..	..
6	1470163	Kit-Weight Adjuster	1	1	1	1
6	1584631	Knob	1	1	1	1
6	1600126	Handle	1	1	1	1
7	1598504	Kit-Seat Belt (Black)	1	1	1	1
7	1636120	Kit-Red Seat Belt	1	1	1	1
8	1470161	Kit-Seat Rail	1	1	1	1
a	1483828	Kit-Gas Spring (Mounted to the rear of the seat)	1	1	1	1
a	1563210	Cap (Electronic Control Arm) .....	..	..	1	1
a	1563211	Knob (Electronic Control Arm) .....	..	..	1	1
a	1563208	Sensor (Operator Presence)	1	1	1	1
a	1537551	Nut	1	1	1	1
a	296149	Capscrew	1	1	1	1
a	1467529	Kit-Spring	1	1	1	1
a	1627639	Weight Adjust Rack	1	1	1	1
a	1467525	Kit-Bumper	1	1	1	1
a	1467523	Kit-Boot	1	1	1	1
a	1467526	Kit-Shaft and Bearing	1	1	1	1
a	1467524	Kit-Bearing	1	1	1	1
a	1467527	Kit-Weight Adjuster Indicator	1	1	1	1
a	1470155	Information Case (Kit)	1	1	..	..

FOOTNOTES:

- a** Not Illustrated

FULL SUSPENSION SWIVEL SEAT (FIGURE 1-34) WITH AND WITHOUT ELECTRONIC CONTROLS (7/2006 ↔ S/N L177B30380H)



BP120119

FULL SUSPENSION SWIVEL SEAT
WITH AND WITHOUT ELECTRONIC CONTROLS (7/2006 ↔ S/N L177B30380H)

KEY:

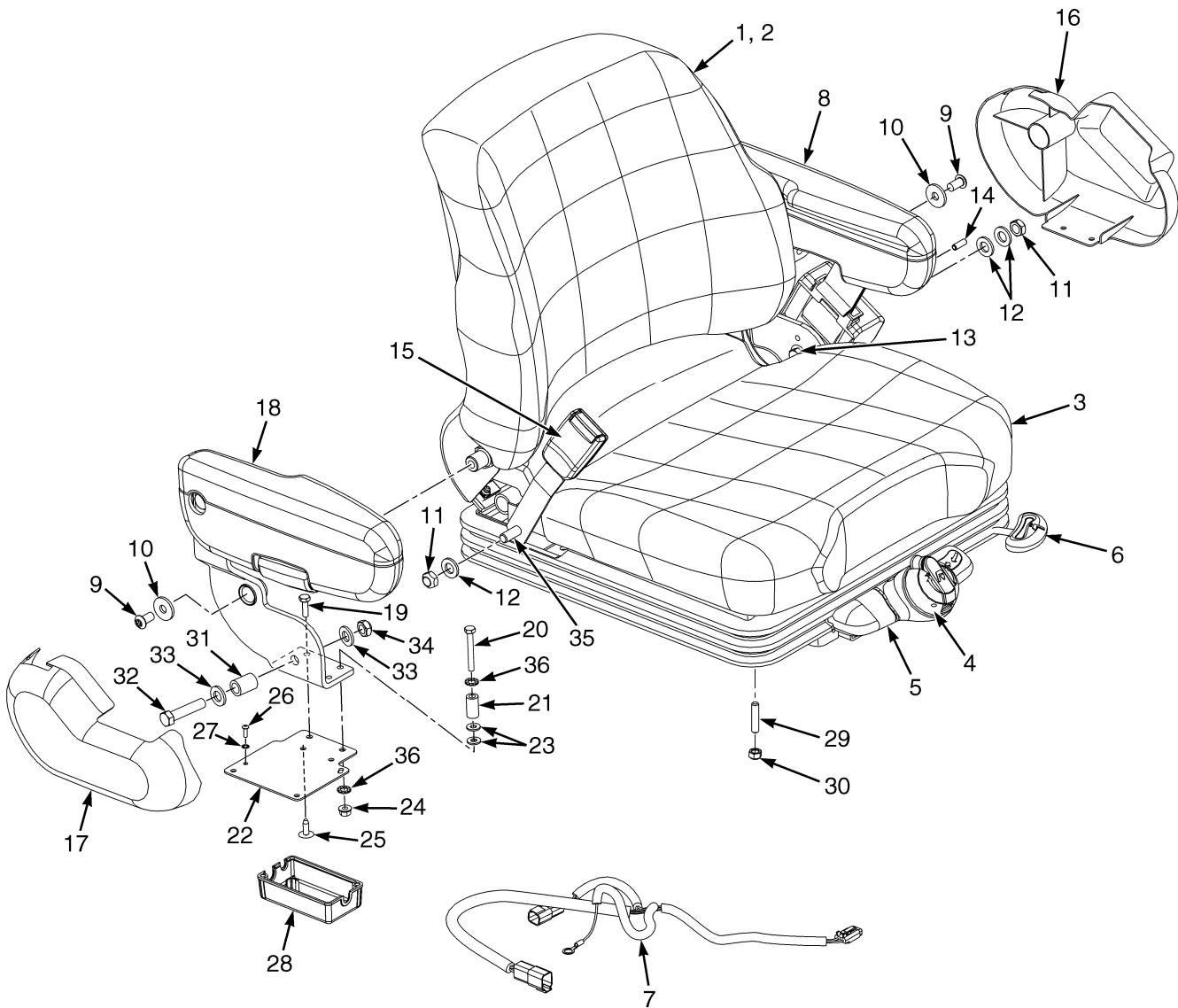
- A: Full Suspension Swivel Seat (Vinyl)**
B: Full Suspension Swivel Seat (Cloth)
C: Full Suspension Swivel Seat (Vinyl with Electronic Controls)
D: Full Suspension (Cloth with Electronic Controls)

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1593421	Seat-Full Suspension (Vinyl)	1	..	..	..
1	1593422	Seat-Full Suspension (Cloth) .....	..	1	..	..
1	2085191	Seat-Full Suspension (Vinyl) .....	..	..	1	..
1	2085192	Seat-Full Suspension (Cloth) .....	..	..	..	1
2	1470152	Seat Cushion (Back Cushion) (Vinyl)	1	..	1	..
2	1470153	Seat Cushion (Back Cushion) (Cloth) .....	..	1	..	1
3	1563230	Cushion (LH Armrest)	1	1	1	1
4	1598504	Kit-Seat Belt (Black)	1	1	1	1
4	1636120	Kit-Red Seat Belt	1	1	1	1
5	1563207	Seat Cushion (Vinyl)	1	..	1	..
5	1566453	Seat Cushion (Cloth) .....	..	1	..	1
6	1470163	Kit-Weight Adjuster	1	1	1	1
6	1584631	Knob	1	1	1	1
6	1600126	Handle	1	1	1	1
7	191941	Nut	4	4	4	4
8	1470161	Kit-Seat Rail	1	1	1	1
9	1591652	Wire Harness (Without Electronic Controls)	1	1	..	..
9	1654891	Wire Harness .....	..	..	1	1
	a 1563231	Cushion (RH) (Without Electronic Controls)	1	1	..	..
	a 1483828	Kit-Gas Spring (Mounted to the rear of the seat)	1	1	1	1
	a 1563208	Sensor (Operator Presence)	1	1	1	1
	a 1647532	Foam .....	..	..	1	1
	a 1563211	Knob (Electronic Control Arm) .....	..	..	1	1
	a 1470155	Information Case (Kit)	1	1	1	1
	a 1467529	Kit-Spring	1	1	1	1
	a 1684395	Kit-Swivel Seat Full Susp	1	1	1	1
	a 1627639	Weight Adjust Rack	1	1	1	1
	a 1467523	Kit-Boot	1	1	1	1
	a 1467527	Kit-Weight Adjuster Indicator	1	1	1	1
	a 1467526	Kit-Shaft and Bearing	1	1	1	1
	a 1467524	Kit-Bearing	1	1	1	1
	a 1467525	Kit-Bumper	1	1	1	1

FOOTNOTES:

- a** Not Illustrated

FULL SUSPENSION SEAT (FIGURE 1-35) MANUAL AND ELECTRO-HYDRAULIC — SWIVEL AND NON-SWIVEL (S/N L177B30381H →)



BP120828

FULL SUSPENSION SEAT
MANUAL AND ELECTRO-HYDRAULIC – SWIVEL AND NON-SWIVEL (S/N L177B30381H →)

KEY:**A: w/o Electronic Control Arm****B: w/ Electronic Control Arm**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a 4603382	Seat-Full Suspension (Vinyl) (Non-Swivel)	1	1
	a 4603383	Seat-Full Suspension (Cloth) (Non-Swivel)	1	1
	a 2101604			
	4603384	Seat-Full Suspension (Vinyl With Swivel) (Vinyl) (Swivel)	1	1
	2101605			
	4603385	Seat-Full Suspension (Cloth With Swivel) (Cloth) (Swivel)	1	1
1	1703900	Kit-Cushion (Seat and Back, Cloth)	1	1
1	1703903	Kit-Cushion (Seat and Back, Vinyl)	1	1
2	1703901	Kit-Cushion (Back Cushion, Vinyl)	1	1
2	1703898	Kit-Cushion (Back Cushion, Cloth)	1	1
2	.....	Back Cushion	1	1
2	.....	Screw	2	2
3	1703902	Kit-Seat Cushion (Vinyl)	1	1
3	1703899	Kit-Seat Cushion (Cloth)	1	1
3	.....	Seat Cushion	1	1
3	.....	Spring	2	2
3	.....	Cotter Pin	2	2
4	1703892	Kit-Weight Adjuster	1	1
4	.....	Knob	1	1
4	.....	Bushing	1	1
4	.....	Washer	1	1
4	.....	Pin	1	1
4	.....	U-Joint	1	1
5	1703893	Kit-Service (Front Panel) (Non Swivel)	1	1
5	.....	Front Panel	1	1
5	.....	Socket Head Capscrew	2	2
5	.....	Roll Pin	1	1
5	1703894	Kit-Service (Front Panel) (With Swivel)	1	1
5	.....	Front Panel	1	1
5	.....	Knob	1	1
5	.....	Socket Head Capscrew	1	1
5	.....	Roll Pin	2	2
6	1703904	Kit-Seat Rail	1	1
6	.....	Locking Rail	1	1
6	.....	Slave Rail	1	1
6	.....	Bolt	4	4
6	.....	Nut	4	4
7	4013095	Wire Harness	1	1
7	1563208	Sensor (Operator Presence)	1	1
8	2099947	Armrest (LH)	1	1
8	1563230	Cushion (LH Armrest)	1	1
9	18735	Screw	2	1
9	18738	Capscrew .....	..	1
10	1512536	Washer	2	1
10	4007319	Spacer .....	..	1

FULL SUSPENSION SEAT MANUAL AND ELECTRO-HYDRAULIC – SWIVEL AND NON-SWIVEL (S/N L177B30381H →)

KEY:

A: w/o Electronic Control Arm

B: w/ Electronic Control Arm

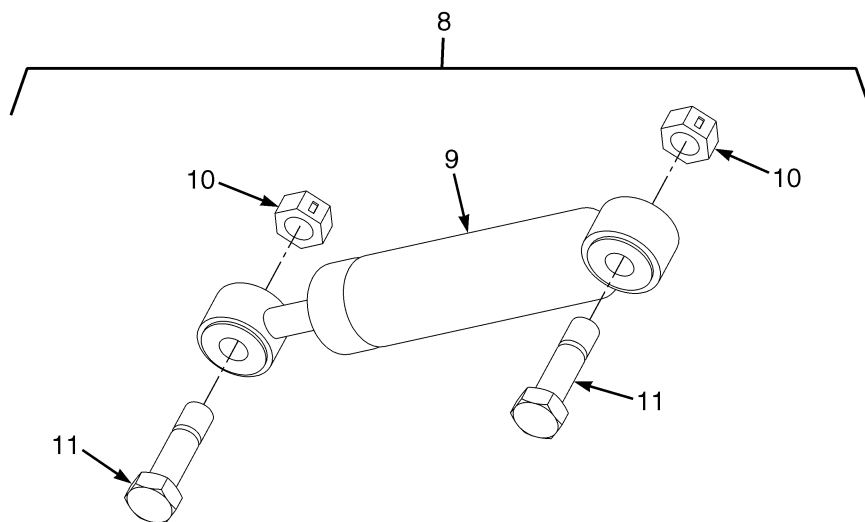
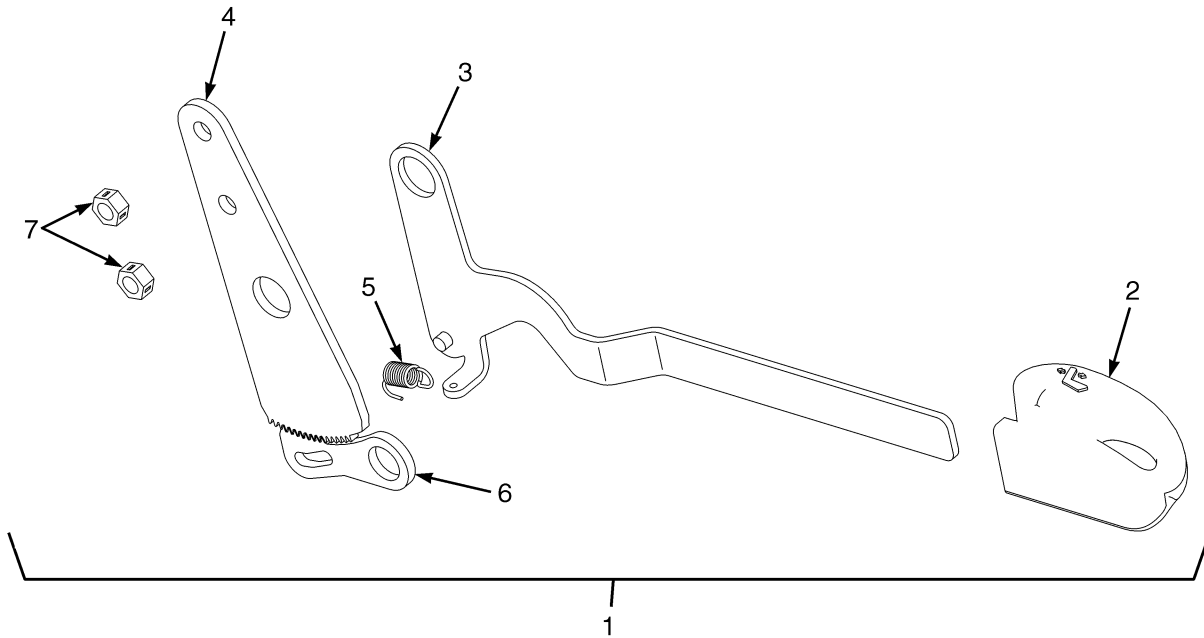
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
11	221353	Locknut	2	2
12	1581852	Washer	6	6
13	221536	Capscrew	2	1
14	19901	Roll Pin	1	1
15	1598504	Kit-Seat Belt (Black)	1	1
15	1636120	Kit-Red Seat Belt	1	1
16	.....	Cover	1	1
17	2099950	Seat Cover (Right-Hand Side)	1	..
18	2099949	Armrest (RH)	1	..
18	1563231	Cushion (RH)	1	..
18	.....	Armrest (Electro-Hydraulic-MLM) .....	..	1
18	4005010	Armrest (Slider with Mini Lever) (☞Figure 1-38).....	..	1
18	.....	Mini-Lever Module (☞Figure 6-23, ☞Figure 6-24).....	..	1
18	.....	Armrest (Electro-Hydraulic-Joystick) (☞Figure 1-41).....	..	1
19	18462	Capscrew	2	2
20	18471	Capscrew	2	2
21	4007318	Spacer	2	2
22	4004776	Cover Plate	1	1
23	15127	Washer	4	4
24	169874	Nut	4	4
25	1379945	Fastener	4	4
26	1694830	Capscrew	2	2
27	296357	Washer	2	2
28	2107969	Cover (Seat Side Electrical)	1	1
29	1677286	Stud	4	4
30	313828	Nut	4	4
31	c 1694700	Spacer .....	..	1
32	c 221542	Capscrew .....	..	1
33	c 1581852	Washer .....	..	2
34	c 221353	Locknut .....	..	2
35	221530	Capscrew	1	1
36	296379	Washer	2	..
	b 114312	Strap Clamp	1	1
	b 4601500	Wire Harness (Seat Adapter) (☞Figure 6-45).....	1	1
	b 1470155	Information Case (Kit)	1	1
	b 4027341	Bracket (Angle Controller)	1	1
	1703895	Kit-Service Internal Tether-80 MM Travel	1	1
	1703896	Kit-Service Internal Tether-56 MM Travel	1	1
	1703897	Kit-Service Internal Tether-40 MM Travel	1	1

FOOTNOTES:

- a** Includes items 1-7
- b** Not Illustrated

- c** Used with lower seat belt mounting.

FULL SUSPENSION SEAT (FIGURE 1-36) SHEET 2 OF 2 (S/N L177B30381H →)

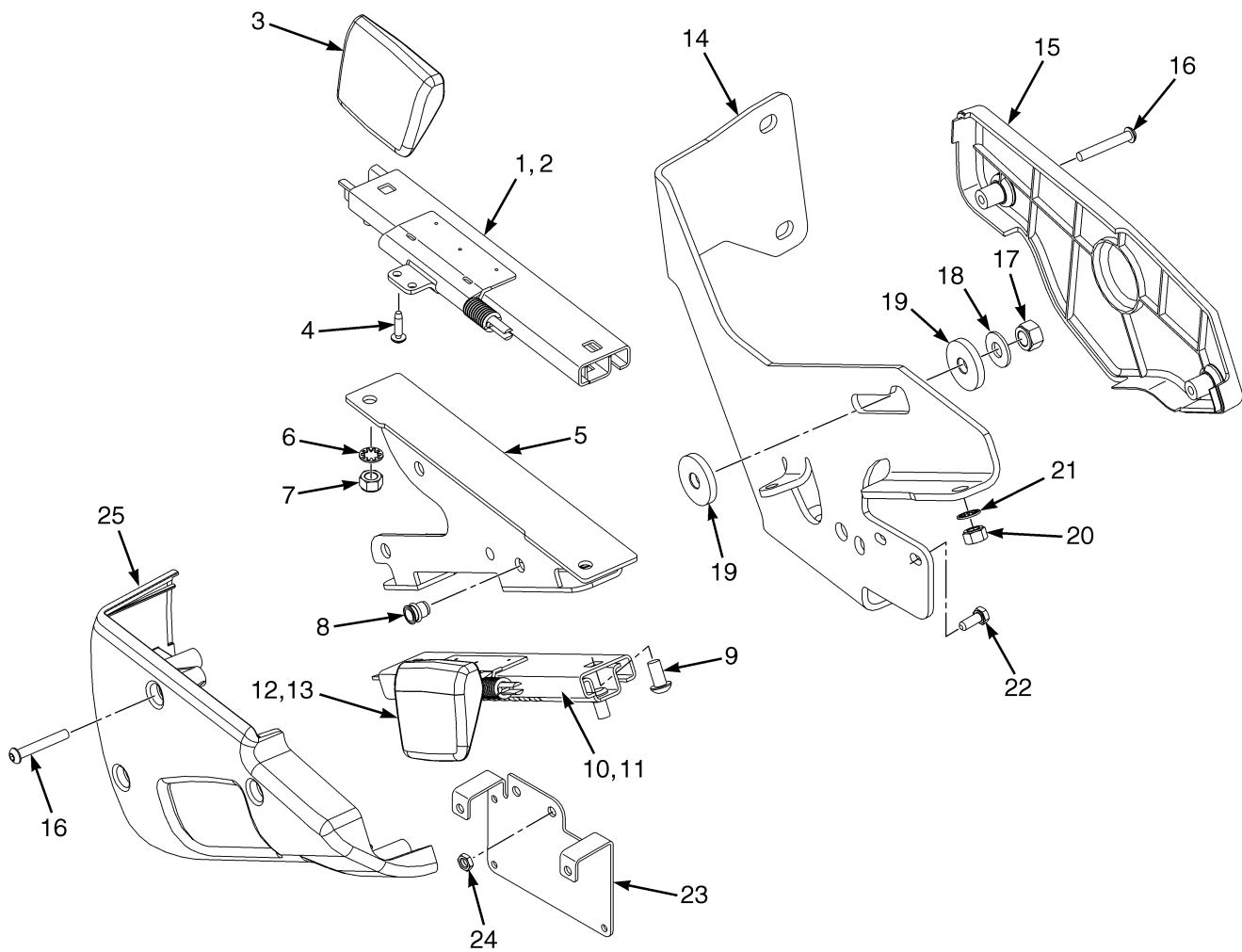


BP120646

FULL SUSPENSION SEAT
SHEET 2 OF 2 (S/N L177B30381H →)

ITEM	PART NO.	DESCRIPTION	QTY
1	1703891	Kit-Recliner (Back Seat Adjustment)	1
2	.....	Knob	1
3	.....	Lever	1
4	1482905	Plate	1
5	.....	Spring	1
6	1482906	Latch	1
7	1367150	Nut	2
8	1703890	Kit-Damper Service	1
9	1584632	Damper	1
10	1367150	Nut	2
11	1584638	Bolt	2

ARMREST ASSEMBLY (FIGURE 1-37) MINI-LEVER MODULES — SEMI-SUSPENSION SEAT

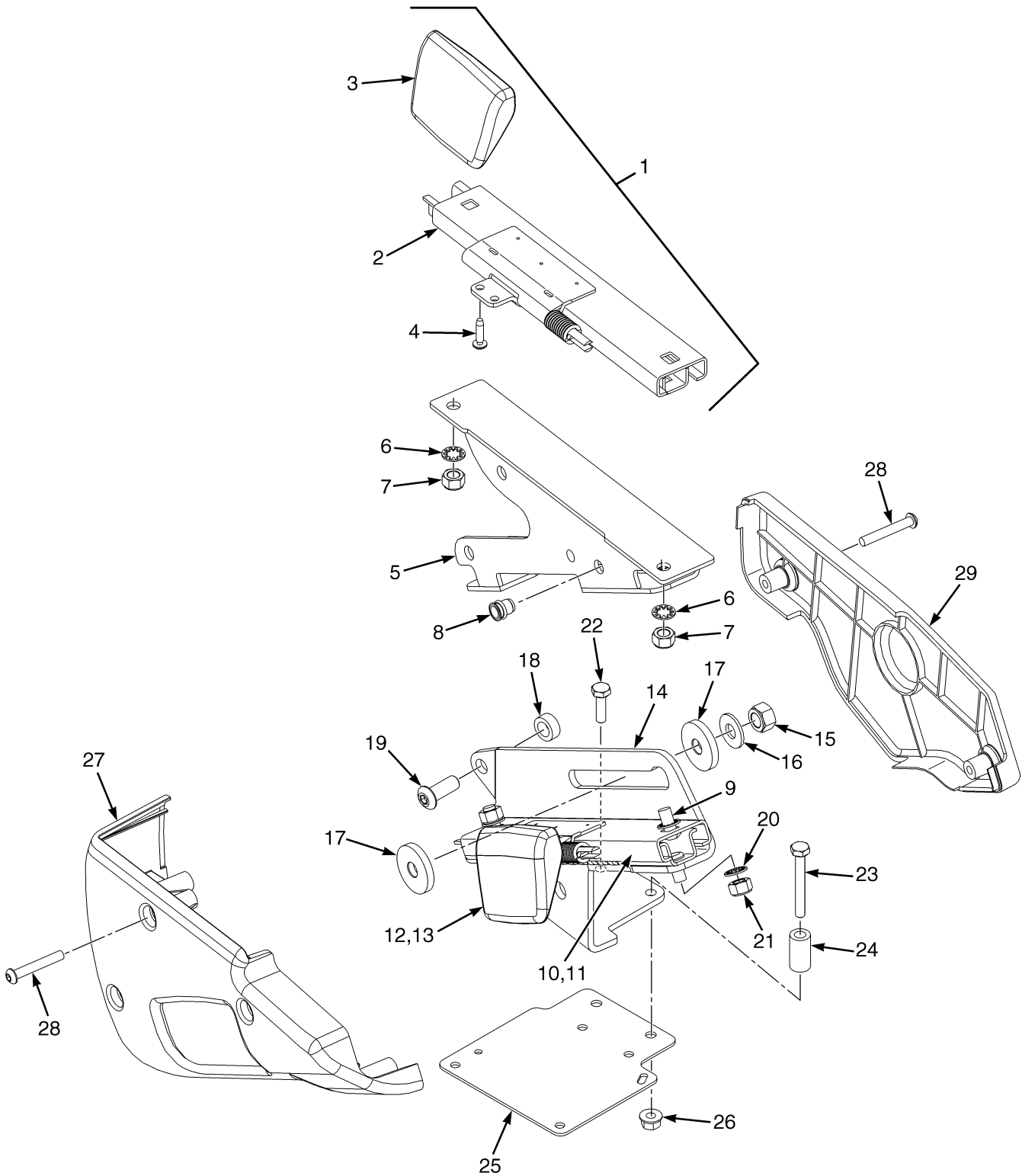


BP120702

ARMREST ASSEMBLY
MINI-LEVER MODULES – SEMI-SUSPENSION SEAT

ITEM	PART NO.	DESCRIPTION	QTY
	4005010	Armrest (Slider with Mini Lever)	1
1	.....	Slider Assembly	1
2	1661511	Armrest (Slider)	1
3	1655865	Handle (Slider)	1
4	227157	Screw	2
5	4007052	Bracket Wldmt	1
6	296360	Washer	4
7	313828	Nut	4
8	1531558	Insert	3
9	296165	Capscrew	2
10	.....	Slider Assembly	1
11	1661511	Armrest (Slider)	1
12	1655865	Handle (Slider)	1
13	227157	Screw	2
14	4004775	Bracket	1
15	4603493	Cover	1
16	2062875	Capscrew	5
17	316826	Nut	1
18	320160	Washer	1
19	1650640	Washer	2
20	313828	Nut	2
21	296360	Washer	2
22	292500	Capscrew	2
23	4005805	Cover Plate	1
24	1593334	Nut	2
25	4603492	Cover	1

ARMREST ASSEMBLY (FIGURE 1-38) MINI-LEVER MODULES

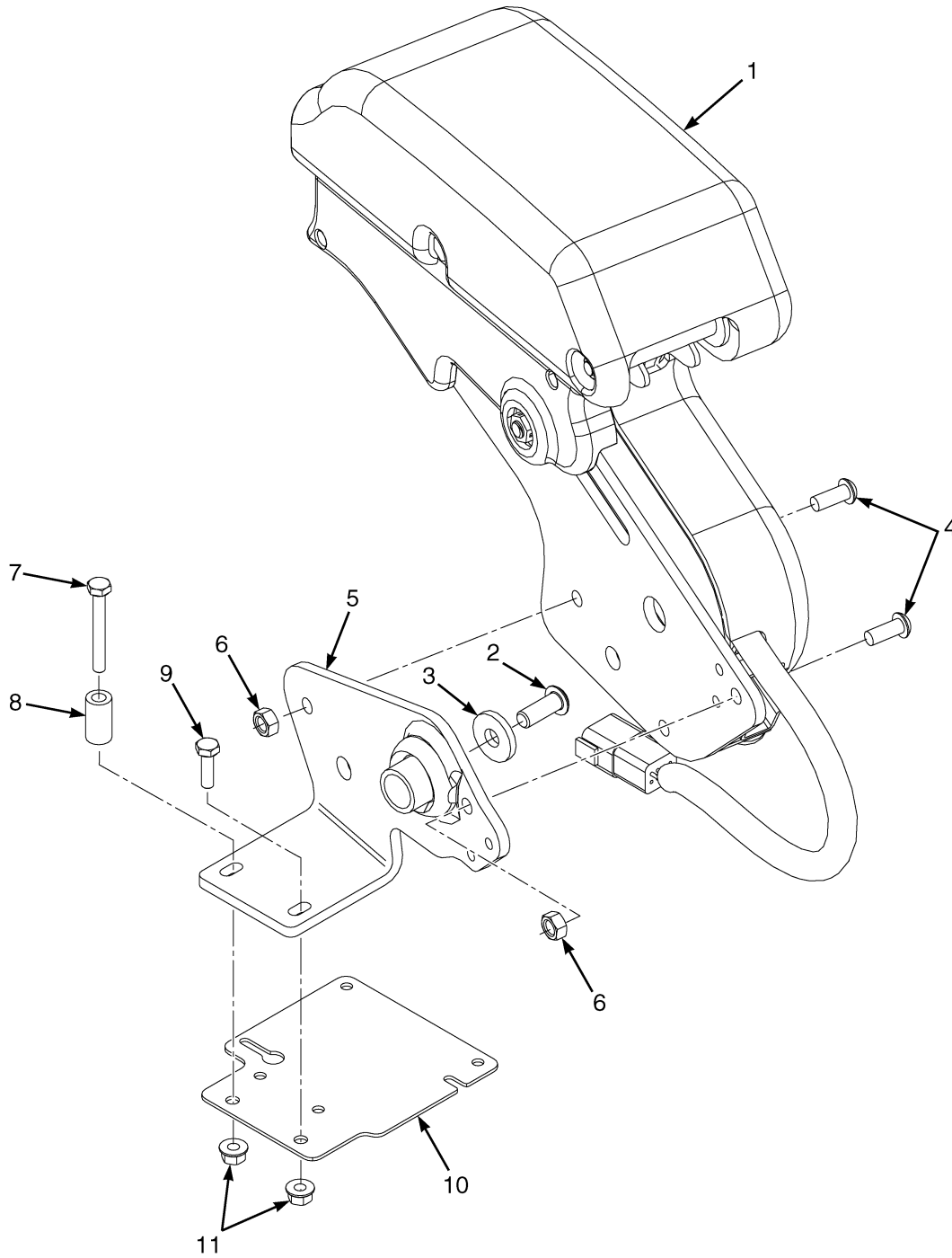


BP120701

**ARMREST ASSEMBLY
MINI-LEVER MODULES**

ITEM	PART NO.	DESCRIPTION	QTY
	4005010	Armrest (Slider with Mini Lever)	1
1	.....	Slider Assembly	1
2	1661511	Armrest (Slider)	1
3	1655865	Handle (Slider)	1
4	227157	Screw	2
5	4007052	Bracket Wldmt	1
6	296360	Washer	4
7	313828	Nut	4
8	1531558	Insert	3
9	296165	Capscrew	2
10	.....	Slider Assembly	1
11	1661511	Armrest (Slider)	1
12	1655865	Handle (Slider)	1
13	227157	Screw	2
14	4004775	Bracket	1
15	316826	Nut	1
16	320160	Washer	1
17	1650640	Washer	2
18	4007319	Spacer	1
19	18738	Capscrew	1
20	296360	Washer	2
21	313828	Nut	2
22	18462	Capscrew	1
23	18471	Capscrew	1
24	4007318	Spacer	1
25	4004776	Cover Plate	1
26	169874	Nut	2
27	4603492	Cover	1
28	2062875	Capscrew	5
29	4603493	Cover	1

ARMREST ASSEMBLY (FIGURE 1-39) JOYSTICK

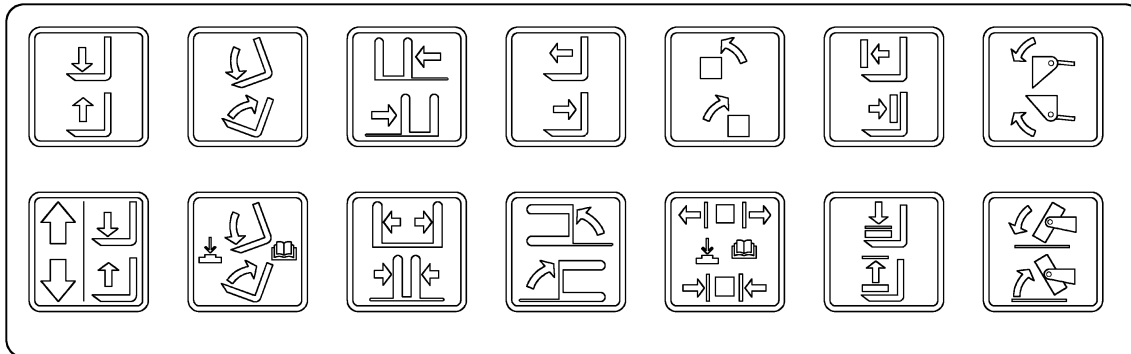
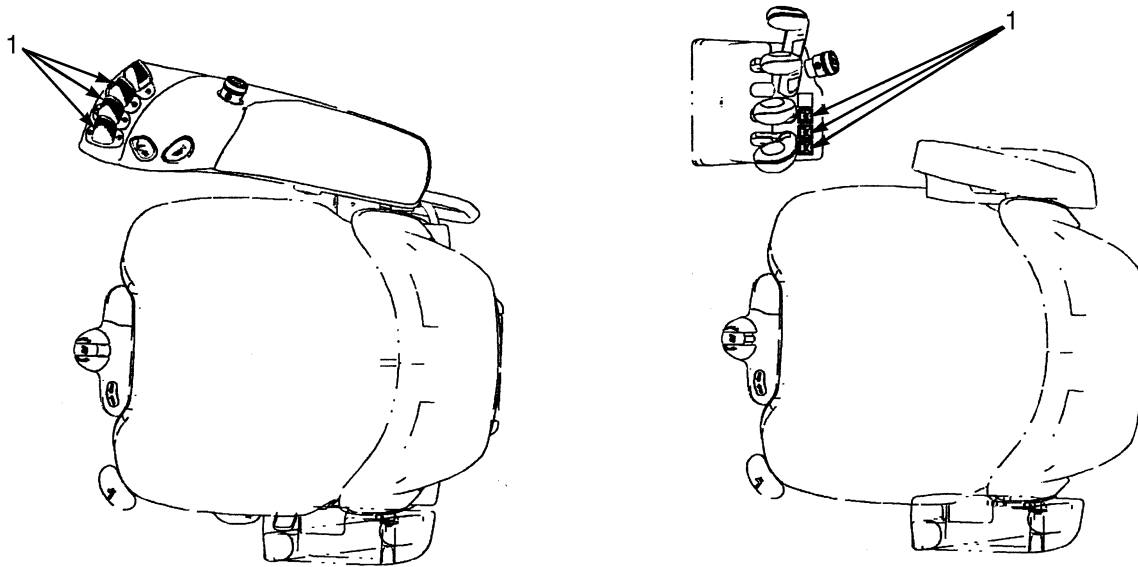


BP120726

**ARMREST ASSEMBLY
JOYSTICK**

ITEM	PART NO.	DESCRIPTION	QTY
1	4602207	Armrest (Joy Stick Slider Assembly) (☞Figure 1-41).....	1
2	18738	Capscrew	1
3	1572889	Washer	1
4	369242	Capscrew	2
5	4010187	Bracket Wldmt Joystick Armrest Slider Assembly	1
6	1596421	Nut	2
7	18471	Capscrew	1
8	4007318	Spacer	1
9	18462	Capscrew	1
10	4004776	Cover Plate	1
11	169874	Nut	2

MINI LEVER MODULE LABELS (FIGURE 1-40) HYDRAULIC CONTROL FUNCTIONS

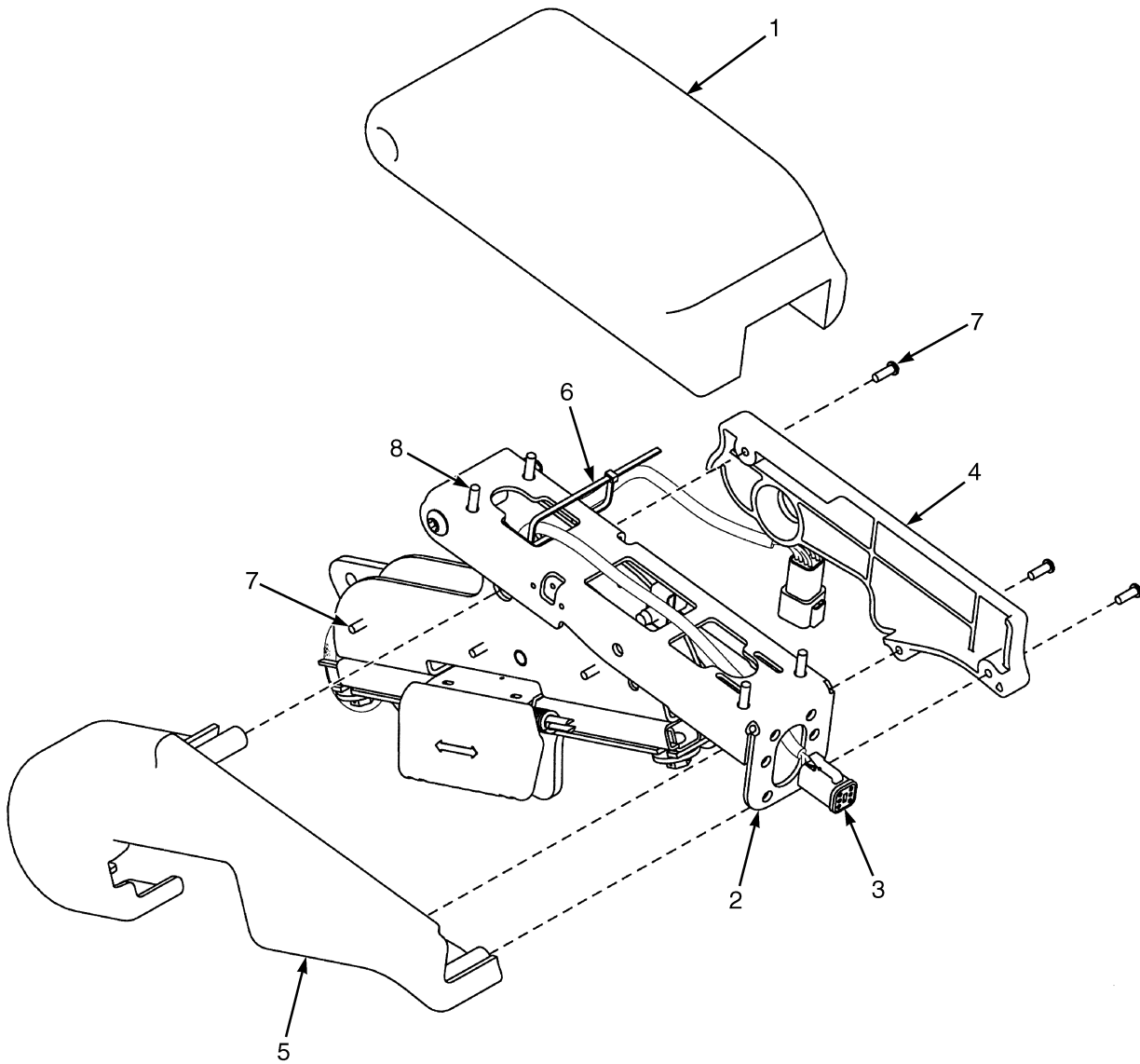


BP120427

**MINI LEVER MODULE LABELS
HYDRAULIC CONTROL FUNCTIONS**

ITEM	PART NO.	DESCRIPTION	QTY
1	2102640	Label	1

JOYSTICK SLIDER ASSEMBLY (FIGURE 1-41)

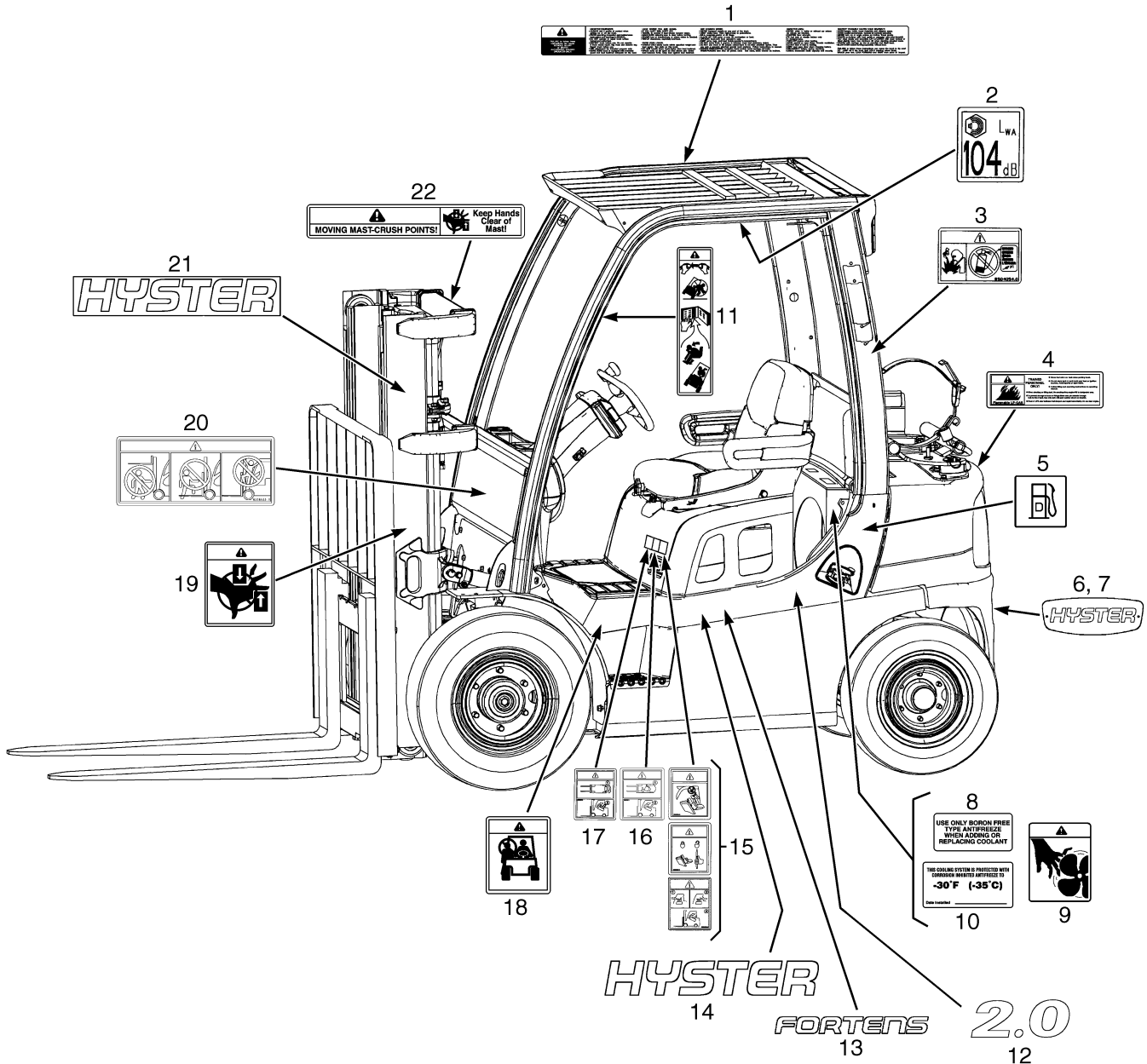


BP120690

JOYSTICK SLIDER ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QTY
	4602207	Armrest (Joy Stick Slider Assembly)	1
1	.....	Armrest	1
2	1693444	Armrest (Module)	1
3	4013915	Wire Harness	1
4	1584634	Cover (Inner RH)	1
5	1584635	Cover (Outer RH)	1
6	1482953	Strap Clamp	1
7	1584644	Screw	6
8	1584645	Screw	4

LABELS (FIGURE 1-42) EXTERIOR



HP120885

**LABELS
EXTERIOR**

ITEM	PART NO.	DESCRIPTION	QTY
1	2073198	Label (Operator Warning)	1
2	e 1503877	Label (Noise Level)	1
2	a 1503878	Label (Noise Level)	1
2	c 1503879	Label (Noise Level)	1
3	a 2034460	Label (Ether Warning)	1
4	1354172	Label (Flammable LPG)	1
5	2074256	Label (Fuel Fill)	1
6	f 1583609	Plate (Hyster Logo)	1
6	g 1677428	Label (Hyster Logo)	1
7	f 1566951	Fastener	2
8	1375676	Label (Boron-Free Antifreeze)	1
9	1300094	Label (Fan Warning)	2
9	1345926	Label (Fan Warning)	1
10	1354165	Label (Antifreeze)	2
11	1359588	Label (Operator Restraint)	2
12	1598305	Label (Model 2.0)	2
12	1598322	Label (Model 2.5)	2
12	1598324	Label (Model 3.0)	2
12	1598326	Label (Model 3.5)	2
13	1601748	Label (Fortens)	2
14	1586440	Label (Hyster)	2
15	2074740	Label (Joystick Caution)	1
15	2075417	Label (Locking Gas Spring)	1
15	2082679	Label (Electronic Arm Caution)	1
16	d 2075614	Label (Hood Opening Warning)	1
17	b 2076171	Label (Swivel Seat Caution)	1
18	1339828	Label (No Riders)	2
19	1339832	Label (Pinch Point)	2
20	2075655	Label (Mast Warning)	2
21	1562353	Label (Hyster)	2
22	1343276	Label (Mast Warning)	1

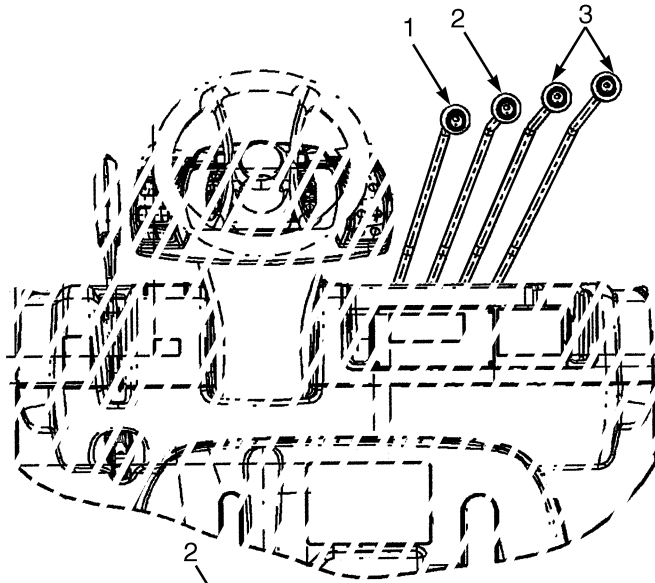
FOOTNOTES:**a** Diesel Only**b** For Use With Swivel Seats Only**c** GM Only**d** LPG Only**e** Mazda Only**f** → S/N L177B23835F**g** S/N L177B23836F →

**LABELS
INTERIOR**

ITEM	PART NO.	DESCRIPTION	QTY
1	b	Nameplate	1
1	170658	Rivet	4
2	389688	Nameplate Cover	1
3	2038100	Label (Drive Train Protection)	1
4	a 1589377	Label (Basic Powershift Transmission)	1
5	c 1589397	Label (DuraMatch Transmission)	1
6	1589437	Label (DuraMatch Plus2 Transmission)	1
7	1534660	Label (Patents and Trademarks)	1
8	1374549 4612320	Label Radial Tire Warning	1
9	1365830	Label (Caution Soot Trap)	1
10	2074210	Label (Park Brake Warning)	1

FOOTNOTES:**a** Basic Transmission**c** Electric Transmission**b** Contact Your Local Hyster Dealer

CONTROL LEVER LABELS (FIGURE 1-44)



<p>2070296</p>	<p>2070297</p>	<p>2070298</p>	<p>2070299</p>
<p>2070300</p>	<p>2070301</p>	<p>2070302</p>	<p>2070303</p>
<p>2070304</p>	<p>2070305</p>	<p>2070306</p>	<p>2070307</p>

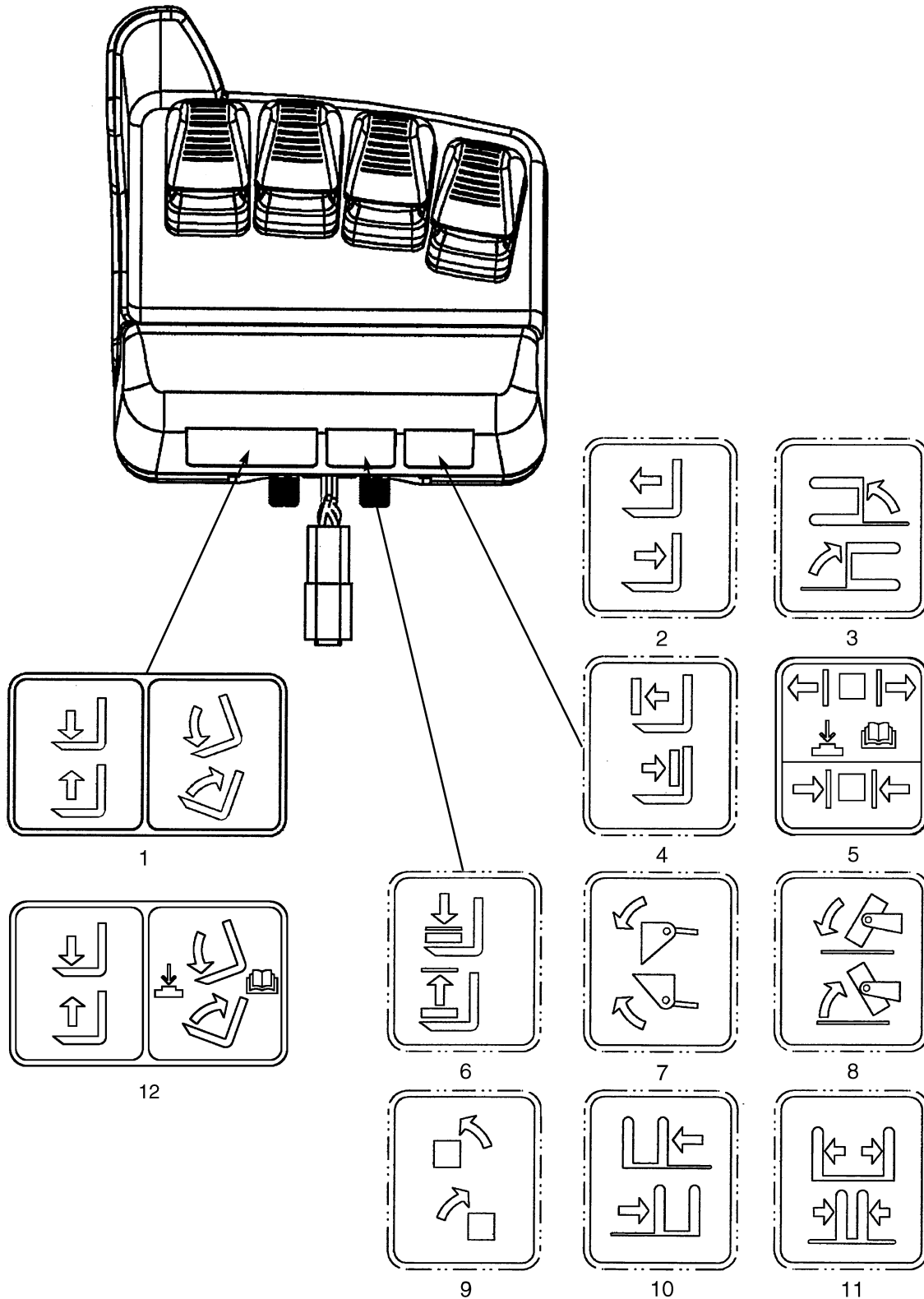
HP120829

CONTROL LEVER LABELS

ITEM	PART NO.	DESCRIPTION	QTY
1	b 2070296	Lens (Lift)	1
2	b 2070297	Lens (Tilt)	1
3	a 2070298	Lens (Reach)	1
3	a 2070299	Lens (Swing)	1
3	a 2070300	Lens (Load Stabilizer)	1
3	a 2070301	Lens (Scoop)	1
3	a 2070302	Lens (Upender)	1
3	a 2070303	Lens (Push/Pull)	1
3	a 2070304	Lens (Clamp)	1
3	a 2070305	Lens (Rotate)	1
3	a 2070306	Lens (Side-Shift)	1
3	a 2070307	Lens (Fork Spread)	1

FOOTNOTES:**a** Optional Function**b** Standard Function

ELECTRONIC LEVER LABELS (FIGURE 1-45) AUXILIARY SINGLE FUNCTION

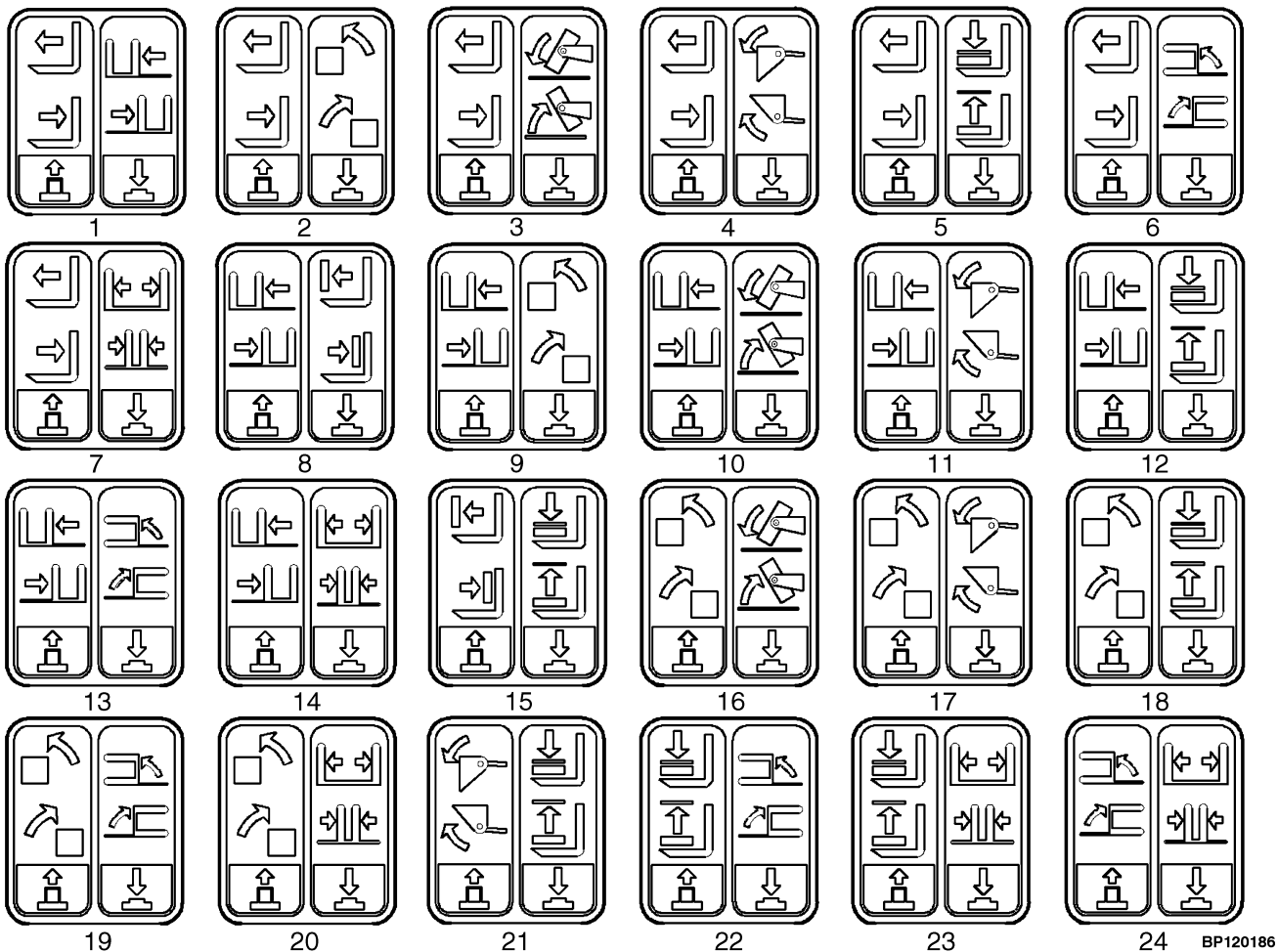
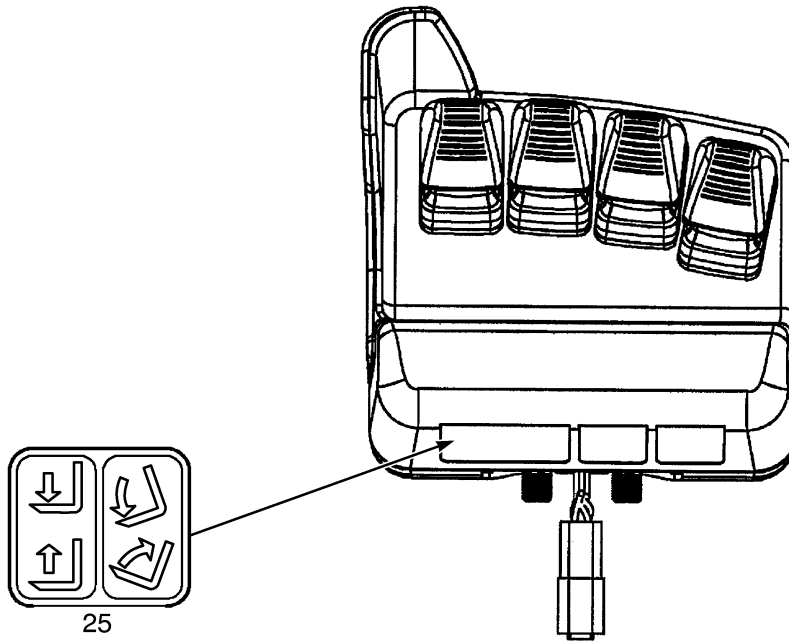


BP120199

**ELECTRONIC LEVER LABELS
AUXILIARY SINGLE FUNCTION**

ITEM	PART NO.	DESCRIPTION	QTY
1	1581055	Label (Hoist and Tilt)	1
2	2073115	Label (Reach)	1
3	2073114	Label (Swing)	1
4	2073118	Label (Push/Pull)	1
5	2085877	Label (Clamp)	1
6	2073116	Label (Load Stabilizer)	1
7	2073117	Label (Scoop)	1
8	2073119	Label (Upeuder)	1
9	2073121	Label (Rotate)	1
10	2073122	Label (Side-Shift)	1
11	2073123	Label (Fork Spread)	1
12	2085875	Label (Hoist and Tilt with Return to Set Tilt)	1

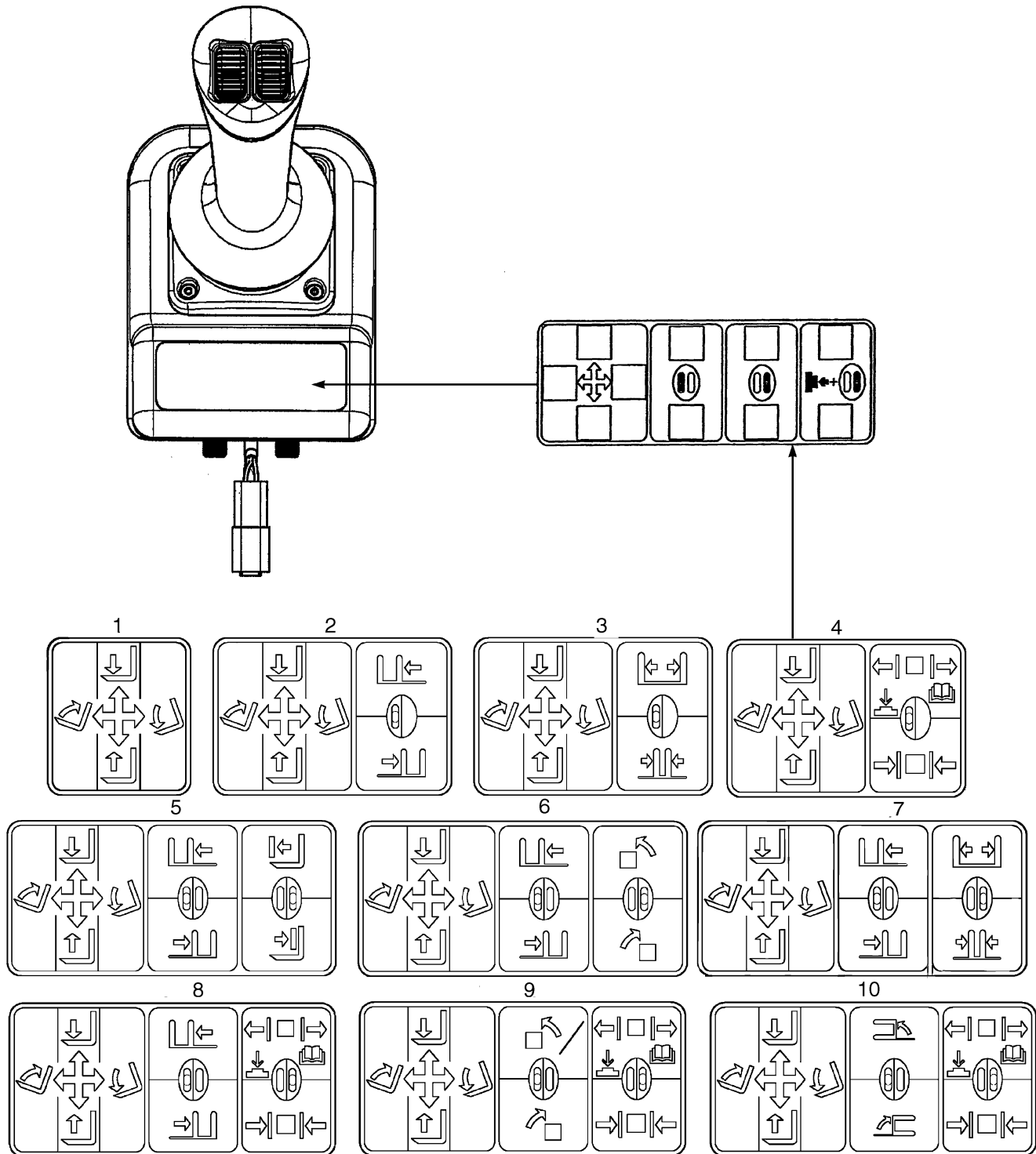
ELECTRONIC LEVER LABELS (FIGURE 1-46) AUXILIARY DUAL FUNCTION



**ELECTRONIC LEVER LABELS
AUXILIARY DUAL FUNCTION**

ITEM	PART NO.	DESCRIPTION	QTY
1	2081229	Label (Reach/Side-Shift)	1
2	2081230	Label (Reach/Rotate)	1
3	2081231	Label (Reach/Upender)	1
4	2081232	Label (Reach/Scoop)	1
5	2081233	Label (Reach/Load Stabilizer)	1
6	2081234	Label (Reach/Swing)	1
7	2081235	Label (Reach/Fork Spread)	1
8	2081236	Label (Side-Shift/Push or Pull)	1
9	2081237	Label (Side-Shift/Rotate)	1
10	2081238	Label (Side-Shift/Upender)	1
11	2081239	Label (Side-Shift/Scoop)	1
12	2081240	Label (Side-Shift/Load)	1
13	2081241	Label (Side-Shift/Swing)	1
14	2081242	Label (Side-Shift/Fork Spread)	1
15	2081243	Label (Push or Pull/Load)	1
16	2081244	Label (Rotate/Upender)	1
17	2081245	Label (Rotate/Scoop)	1
18	2081246	Label (Rotate/Load Stabilizer)	1
19	2081247	Label (Rotate/Swing)	1
20	2081248	Label (Rotate/Fork Spreader)	1
21	2081249	Label (Scoop/Load Stabilizer)	1
22	2081250	Label (Load Stabilizer/Swing)	1
23	2081251	Label (Load Stabilizer/Fork Spread)	1
24	2081252	Label (Swing/Fork Spread)	1

JOYSTICK LABELS (FIGURE 1-47)

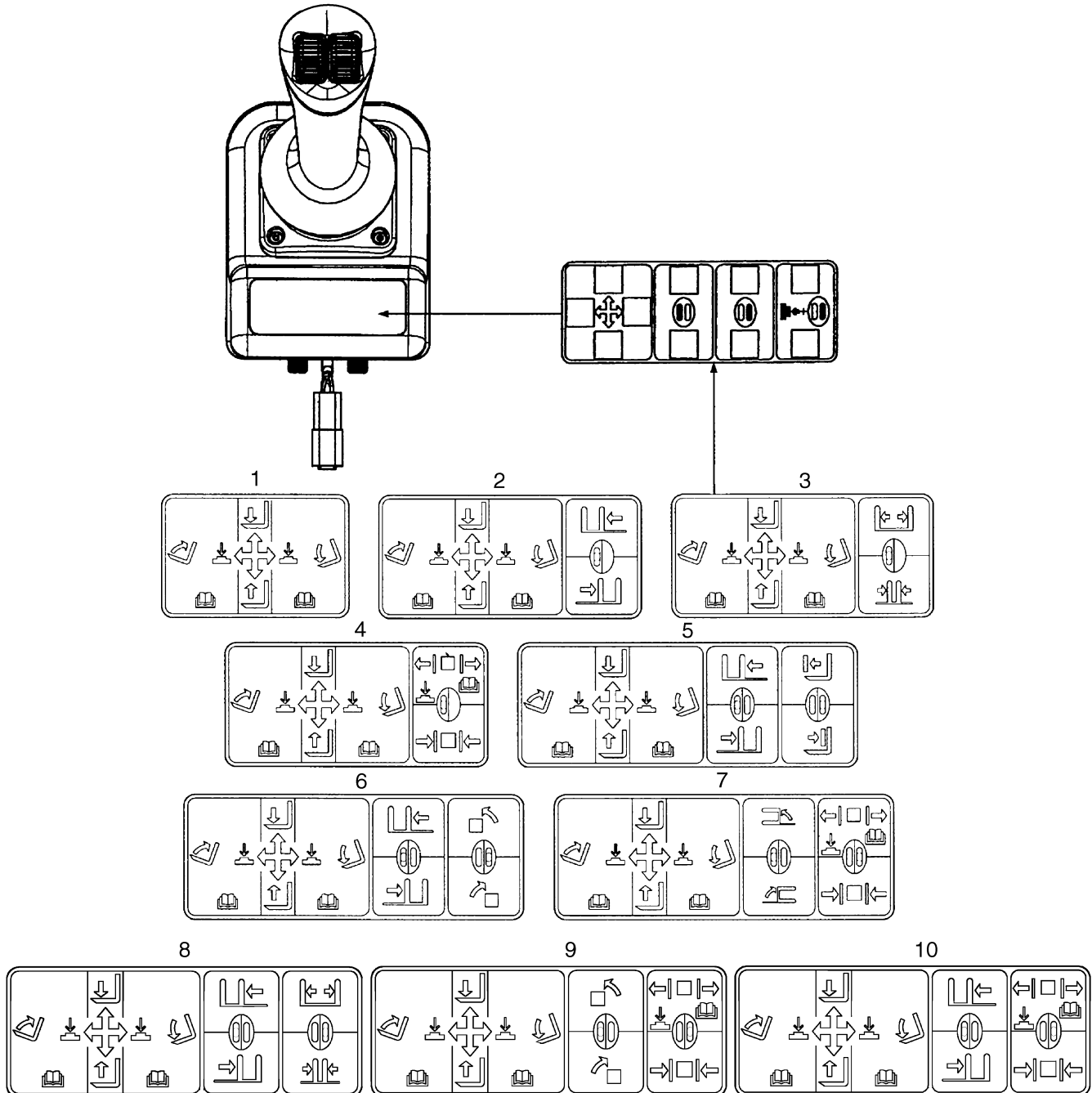


BP120197

JOYSTICK LABELS

ITEM	PART NO.	DESCRIPTION	QTY
1	2086556	Label (Hoist and Tilt)	1
2	2086557	Label (Hoist and Tilt, Side-Shift)	1
3	2086558	Label (Hoist and Tilt, Fork Spread)	1
4	2085878	Label (Hoist and Tilt, Clamp)	1
5	2086560	Label (Hoist and Tilt, Side-Shift, Push/Pull)	1
6	2086561	Label (Hoist and Tilt, Side-Shift, Rotate)	1
7	2086559	Label (Hoist and Tilt, Side-Shift, Fork Spread)	1
8	2085879	Label (Hoist and Tilt, Side-Shift, Clamp)	1
9	2085880	Label (Hoist and Tilt, Rotate, Clamp)	1
10	2085881	Label (Hoist and Tilt, Swing, Clamp)	1

JOYSTICK LABELS (FIGURE 1-48) WITH RETURN TO SET TILT

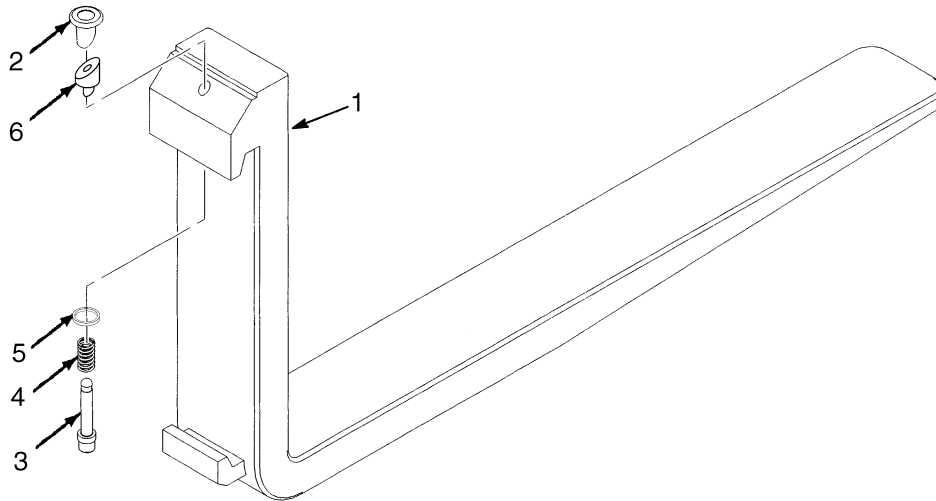


BP120198

**JOYSTICK LABELS
WITH RETURN TO SET TILT**

ITEM	PART NO.	DESCRIPTION	QTY
1	2085882	Label (Hoist and Tilt)	1
2	2085885	Label (Hoist and Tilt, Side-Shift)	1
3	2085886	Label (Hoist and Tilt, Fork Spread)	1
4	2085889	Label (Hoist and Tilt, Clamp)	1
5	2085888	Label (Hoist and Tilt, Side-Shift, Push/Pull)	1
6	2085891	Label (Hoist and Tilt, Side-Shift, Rotate)	1
7	2085893	Label (Hoist and Tilt, Swing, Clamp)	1
8	2085887	Label (Hoist and Tilt, Side-Shift, Fork Spread)	1
9	2085892	Label (Hoist and Tilt, Rotate, Clamp)	1
10	2085890	Label (Hoist and Tilt, Side-Shift, Clamp)	1

FORKS (FIGURE 1-49)



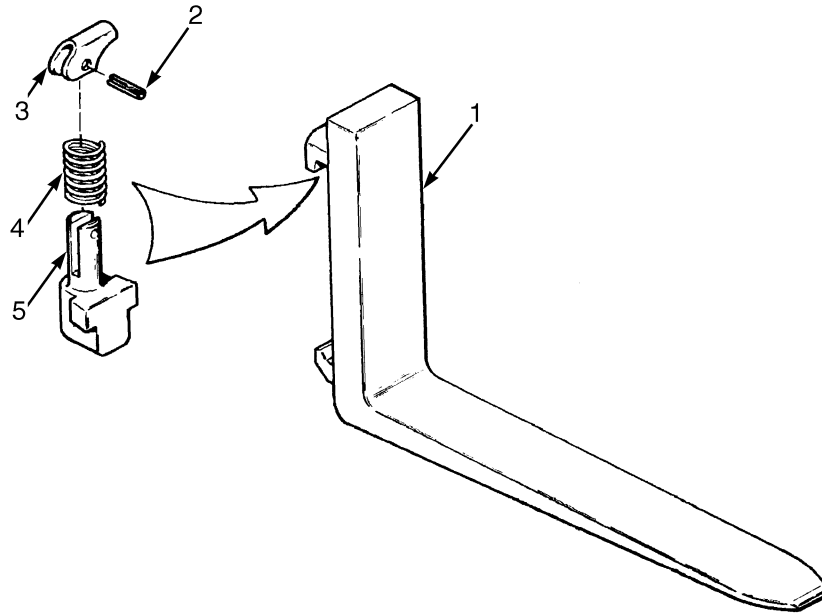
BP290003

FORKS**KEY:****A: Class II (100 mm x 40 mm)****B: Class III (125 mm x 50 mm)**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1333043	Fork (1000 mm)	2	..
1	1333044	Fork (1100 mm)	2	..
1	1333045	Fork (1200 mm)	2	..
1	1338140	Fork (1000 mm) .....	..	2
1	1338142	Fork (1100 mm) .....	..	2
1	1338144	Fork (1200 mm) .....	..	2
2	1523732	Knob	1	1
3	1523733	Pin	1	..
3	1523737	Pin .....	..	1
4	1500782	Spring	1	..
4	1500784	Spring .....	..	1
5	a 1477166	Washer	1	1
6	a 1477167	Wedge Band	1	..
6	1477237	Wedge Band .....	..	1
7	1523734	Pin (Not Illustrated)	1	1
	1523735	Kit-Latch	2	..
	1523739	Kit-Latch (Class III) .....	..	2

FOOTNOTES:**a** Refer to Latch Kit Installation Instructions

FORKS (FIGURE 1-50) OPTIONAL



HP120793

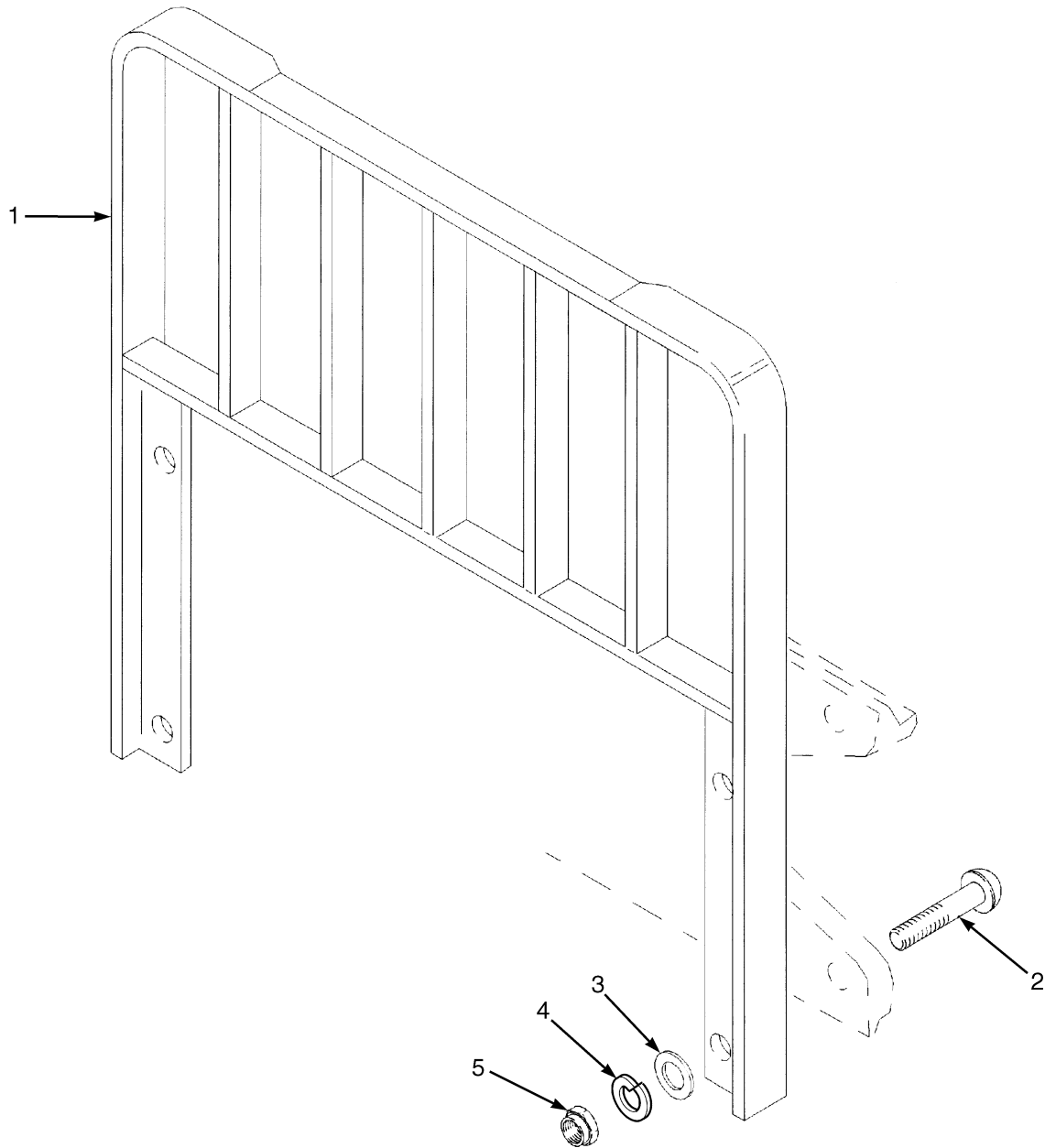
KEY:

A: 100 mm x 40 mm (4 in. x 1.5 in.) (H2.0-2.5FT)

B: 125 mm x 50 mm (5 in. x 2 in.) (H3.0-3.5FT)

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1378787	Fork (1016 mm)	2	..
1	1378796	Fork (1200 mm)	2	..
1	1378791	Fork (1524 mm)	2	..
1	1378793	Fork (1000 mm)	2	..
1	1378794	Fork (1100 mm)	2	..
1	1378726	Fork (1000 mm) .....	..	2
1	1378727	Fork (1100 mm) .....	..	2
1	1378728	Fork (1200 mm) .....	..	2
2	302450	Roll Pin	1	1
3	1378763	Latch	1	1
4	1378762	Spring	1	1
5	1378760	Pin	1	..
5	1378761	Fork (Pin) .....	..	1
	1378765	Kit-Latch (Class II)	1	..
	1378766	Kit-Latch (Class III And IV) .....	..	1

LOAD BACK REST EXTENSION (FIGURE 1-51)



HP120836

LOAD BACK REST EXTENSION

KEY:

A: For Use With Standard Carriage Only

B: For Use With Integral Side-Shift Carriage Only

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1663467	Load Backrest (1219 mm) (Class III)	1	1
1	1663460	Load Backrest (1067 mm) (Class III)	1	1
1	1663443	Load Backrest (1067 mm) (Class II)	1	..
1	1663450	Load Backrest (1219 mm) (Class II)	1	..
1	1663443	Load Backrest (1067 mm) (Class II) .....	..	1
1	1663450	Load Backrest (1219 mm) (Class II) .....	..	1
2	2034347	Capscrew .....	..	4
2	1343990	Capscrew	4	4
2	1354923	Capscrew	4	4
3	296423	Washer	4	4
4	221771	Washer	4	4
5	300937	Nut	4	4

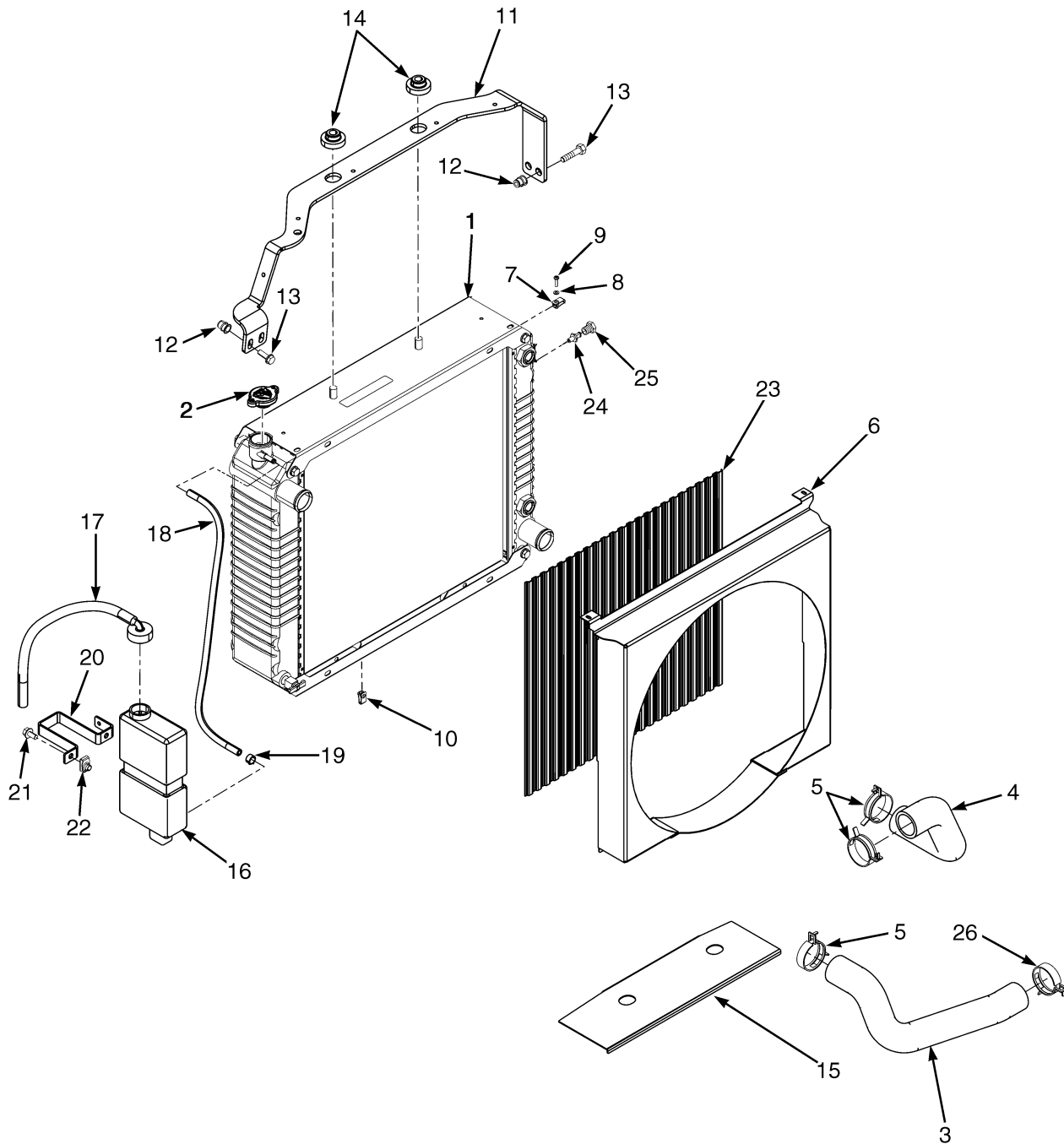
2

ENGINE ASSEMBLY - GM

SECTION 2 ENGINE ASSEMBLY - GM

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COOLING SYSTEM (FIGURE 2-1) GM 2.4L, GASOLINE AND LPG, SQUARE WAVE RADIATOR — WITH INTERNAL OIL COOLER (→ S/N L177B14568E)



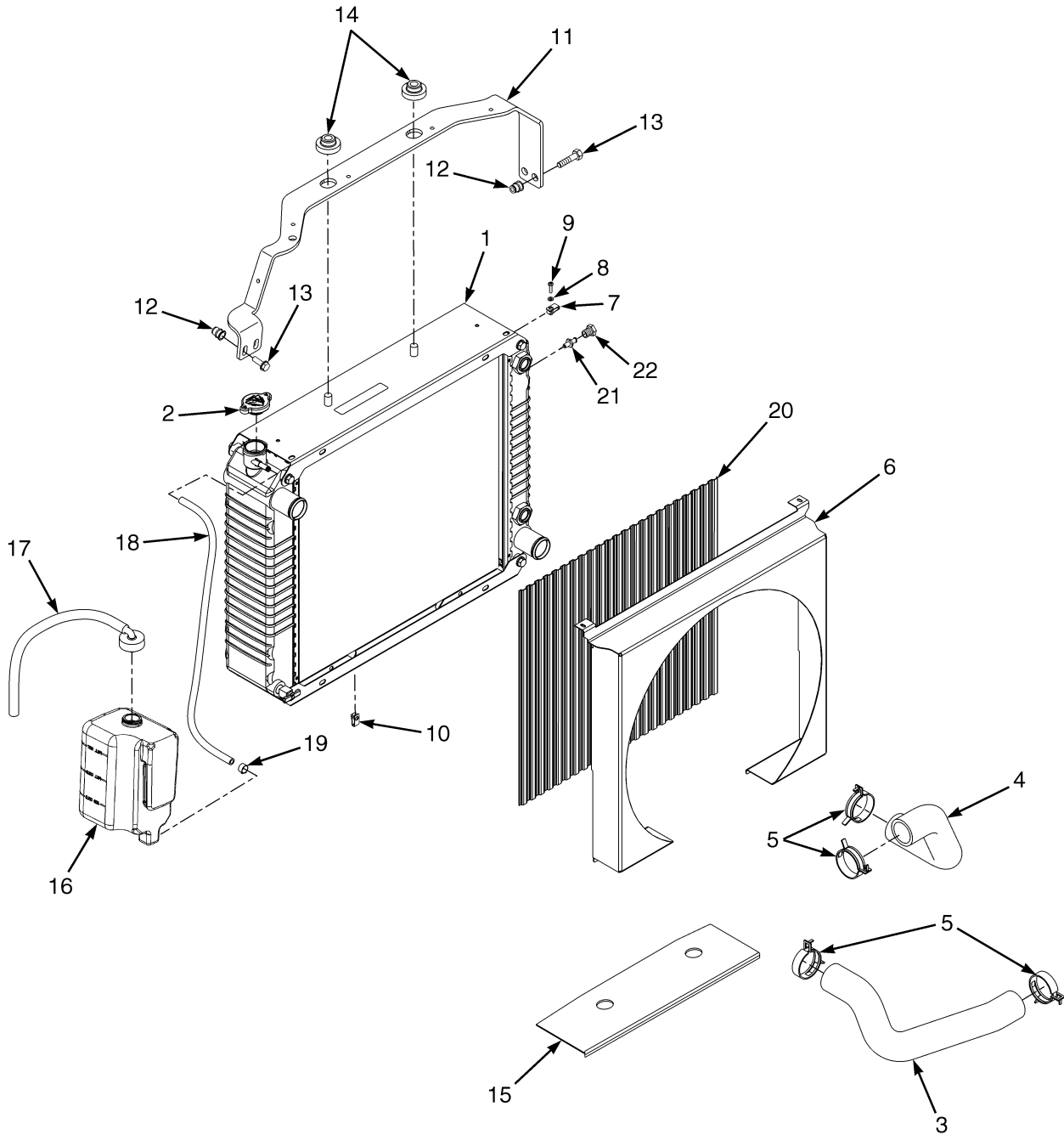
COOLING SYSTEM
GM 2.4L, GASOLINE AND LPG, SQUARE WAVE RADIATOR – WITH INTERNAL OIL COOLER
 (→ S/N L177B14568E)

ITEM	PART NO.	DESCRIPTION	QTY
1	2069552	Radiator	1
1	1569079	Drain Valve (w/Thread Wrap)	1
2	1352140	Radiator Cap	1
3	2087370	Hose (Lower)	1
4	2085103	Radiator Hose (Upper)	1
5	1502001	Hose Clamp	3
6	1626129	Shroud	1
7	320154	Washer	2
8	1535257	Nut	2
9	302023	Screw	2
10	1329271	Clip	2
11	1611852	Bracket	1
12	1530243	Insert	4
13	1583611	Capscrew	4
14	1529787	Isolator	4
15	1565692	Exhaust Shield	1
16	1347026	Reservoir	1
17	345455	Outlet Assembly	1
17	336550	Bushing	1
17	345453	Outlet (Reservoir)	1
17	345454	Cap	1
17	339735	Hose	1
18	1567674	Hose	1
19	369815	Clamp	2
20	1531167	Bracket	1
21	1527879	Capscrew	2
22	1480237	Nut	2
23	1582078	Screen	1
24	1531404	Sensor (Low Coolant Level)	1
25	a 14385	Fitting	1
26	1527982	Hose Clamp	2

FOOTNOTES:

a Without Low Coolant Level Sensor

COOLING SYSTEM (FIGURE 2-2) GM 2.4L, GASOLINE AND LPG, SQUARE WAVE RADIATOR — WITH INTERNAL OIL COOLER (S/N L177B14569E →)



BP060048

COOLING SYSTEM
GM 2.4L, GASOLINE AND LPG, SQUARE WAVE RADIATOR – WITH INTERNAL OIL COOLER
(S/N L177B14569E →)

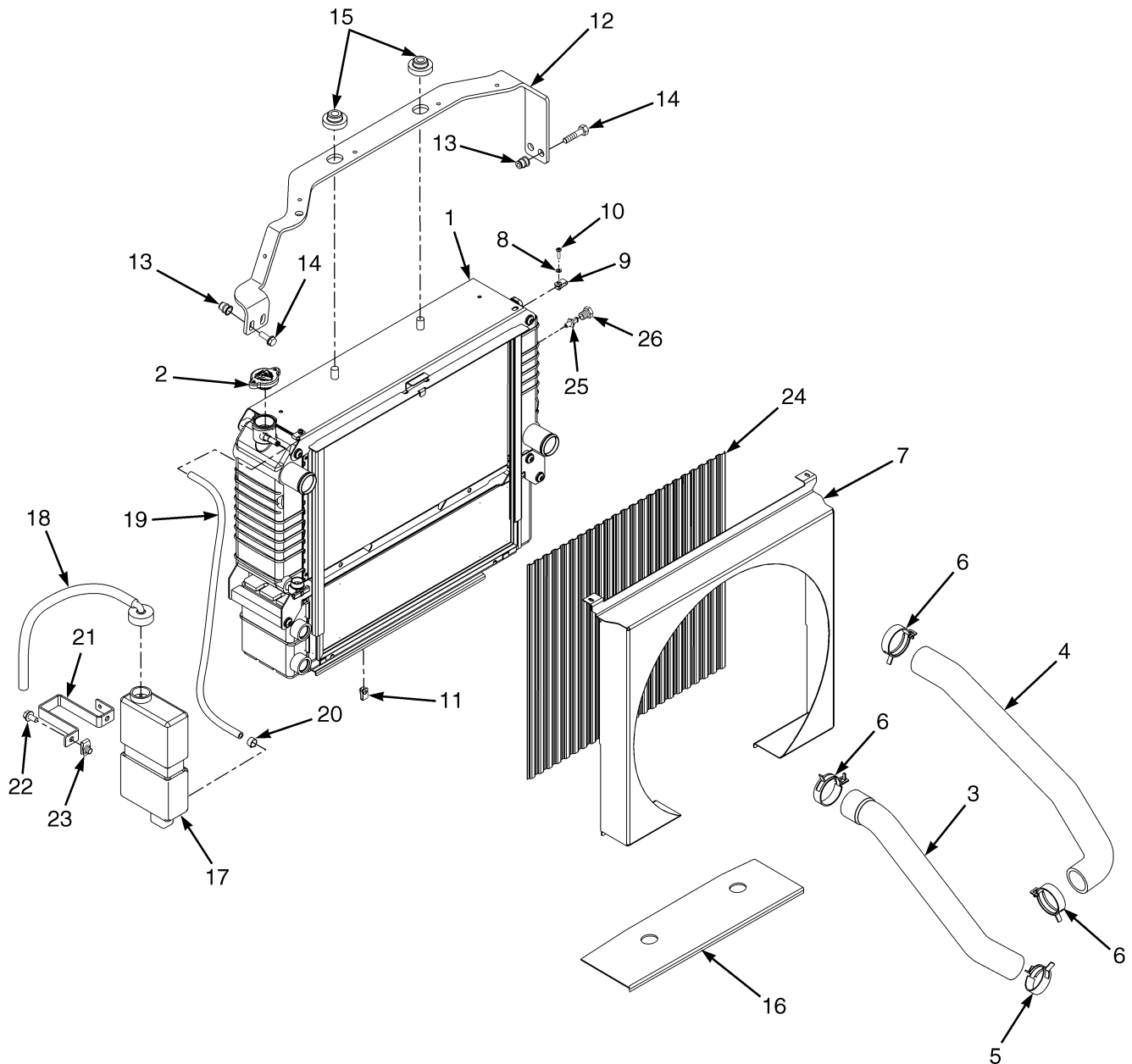
ITEM	PART NO.	DESCRIPTION	QTY
1	b 2069552	Radiator	1
1	b 1569079	Drain Valve (w/Thread Wrap)	1
1	c 4603552	Radiator (Assembly)	1
1	c 4038260	Radiator	1
1	c 4038264	Drain Valve	1
1	c 4038265	Nut	2
1	c 4038266	Bolt	8
2	1352140	Radiator Cap	1
3	2087370	Hose (Lower)	1
4	2085103	Radiator Hose (Upper)	1
5	369804	Clamp	4
6	1582076	Shroud	1
7	1535257	Nut	2
8	320154	Washer	2
9	302023	Screw	2
10	1329271	Clip	2
11	1611852	Bracket	1
12	1530243	Insert	4
13	1583611	Capscrew	4
14	1529787	Isolator	4
15	1565692	Exhaust Shield	1
16	1633307	Reservoir	1
17	345455	Outlet Assembly	1
17	336550	Bushing	1
17	345453	Outlet (Reservoir)	1
17	345454	Cap	1
17	339735	Hose	1
18	1567674	Hose	1
19	369815	Clamp	2
20	1582078	Screen	1
21	1531404	Sensor (Low Coolant Level)	1
22	a 14385	Fitting	1

FOOTNOTES:

a Without Low Coolant Level Sensor
b → PENDING PER ECN 134252

c PENDING PER ECN 134252 →

COOLING SYSTEM (FIGURE 2-3) GM 2.4L, GASOLINE AND LPG, SQUARE WAVE RADIATOR — WITH EXTERNAL OIL COOLER (→ S/N L177B14568E)



HP060042

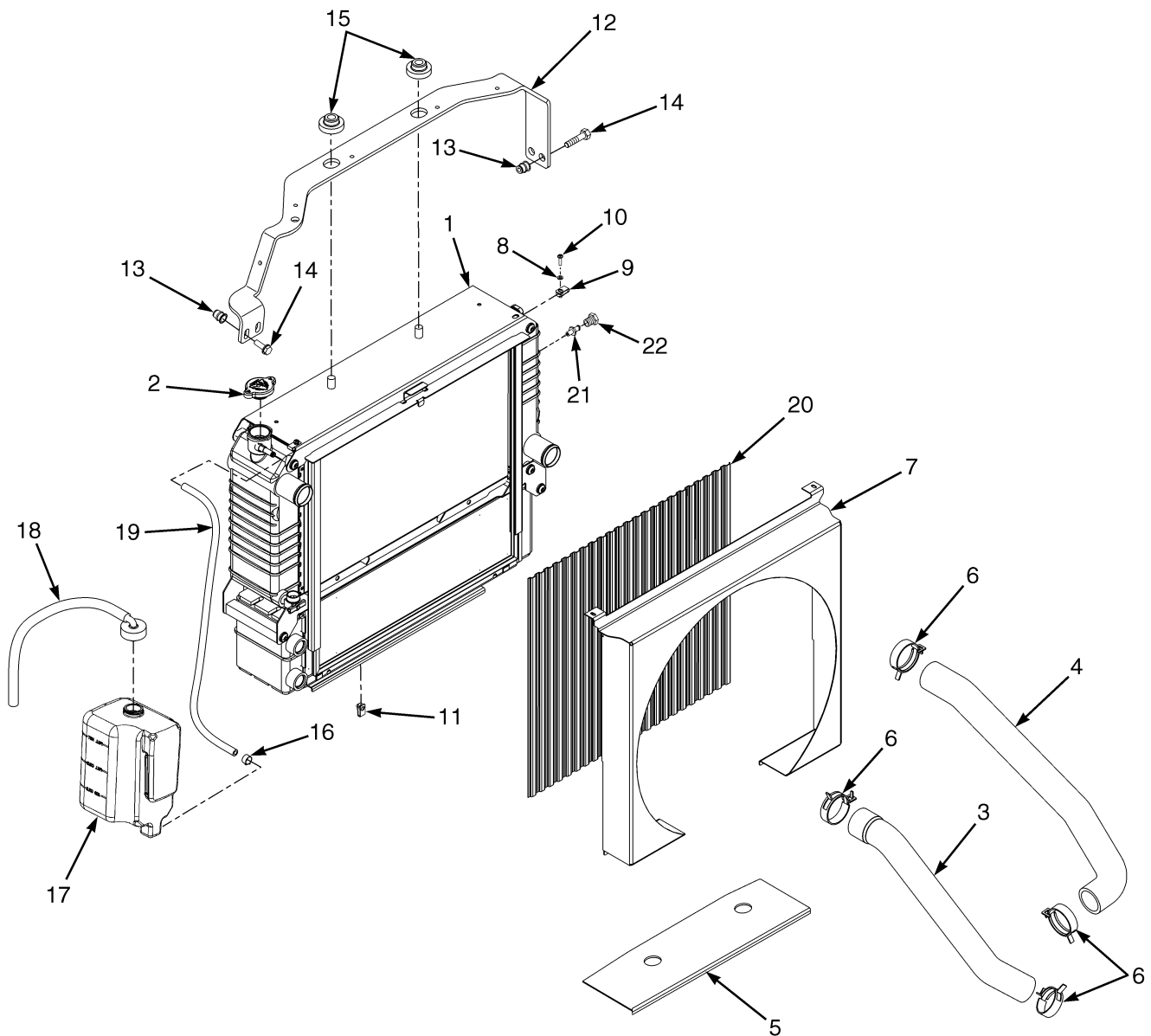
COOLING SYSTEM
GM 2.4L, GASOLINE AND LPG, SQUARE WAVE RADIATOR – WITH EXTERNAL OIL COOLER
 (→ S/N L177B14568E)

ITEM	PART NO.	DESCRIPTION	QTY
1	2074790	Radiator Assembly (Includes Oil Cooler)	1
1	1569079	Drain Valve (w/Thread Wrap)	1
1	1590972	Radiator	1
1	1590918	Oil Cooler	1
1	1597765	Washer	4
1	1597766	Screw	4
1	1597763	Drain Valve (Optional)	1
2	1352140	Radiator Cap	1
3	2085268	Radiator Hose (Lower)	1
4	2085103	Radiator Hose (Upper)	1
5	1527982	Hose Clamp	1
6	1502001	Hose Clamp	3
7	1582076	Shroud	1
8	320154	Washer	2
9	1535257	Nut	2
10	302023	Screw	2
11	1551663	Clip	2
12	1611852	Bracket	1
13	1530243	Insert	4
14	1583611	Capscrew	4
15	1529787	Isolator	4
16	1565692	Exhaust Shield	1
17	1347026	Reservoir	1
18	345455	Outlet Assembly	1
18	336550	Bushing	1
18	345453	Outlet (Reservoir)	1
18	345454	Cap	1
18	339735	Hose	1
19	1567674	Hose	1
20	369815	Clamp	2
21	1531167	Bracket	1
22	1527879	Capscrew	2
23	1480237	Nut	2
24	1582078	Screen	1
25	1531404	Sensor (Low Coolant Level)	1
26	a 14385	Fitting	1

FOOTNOTES:

a Without Low Coolant Level Sensor

COOLING SYSTEM (FIGURE 2-4) GM 2.4L, GASOLINE AND LPG, SQUARE WAVE RADIATOR — WITH EXTERNAL OIL COOLER (S/N L177B14569E →)



BP060049

COOLING SYSTEM
GM 2.4L, GASOLINE AND LPG, SQUARE WAVE RADIATOR – WITH EXTERNAL OIL COOLER
(S/N L177B14569E →)

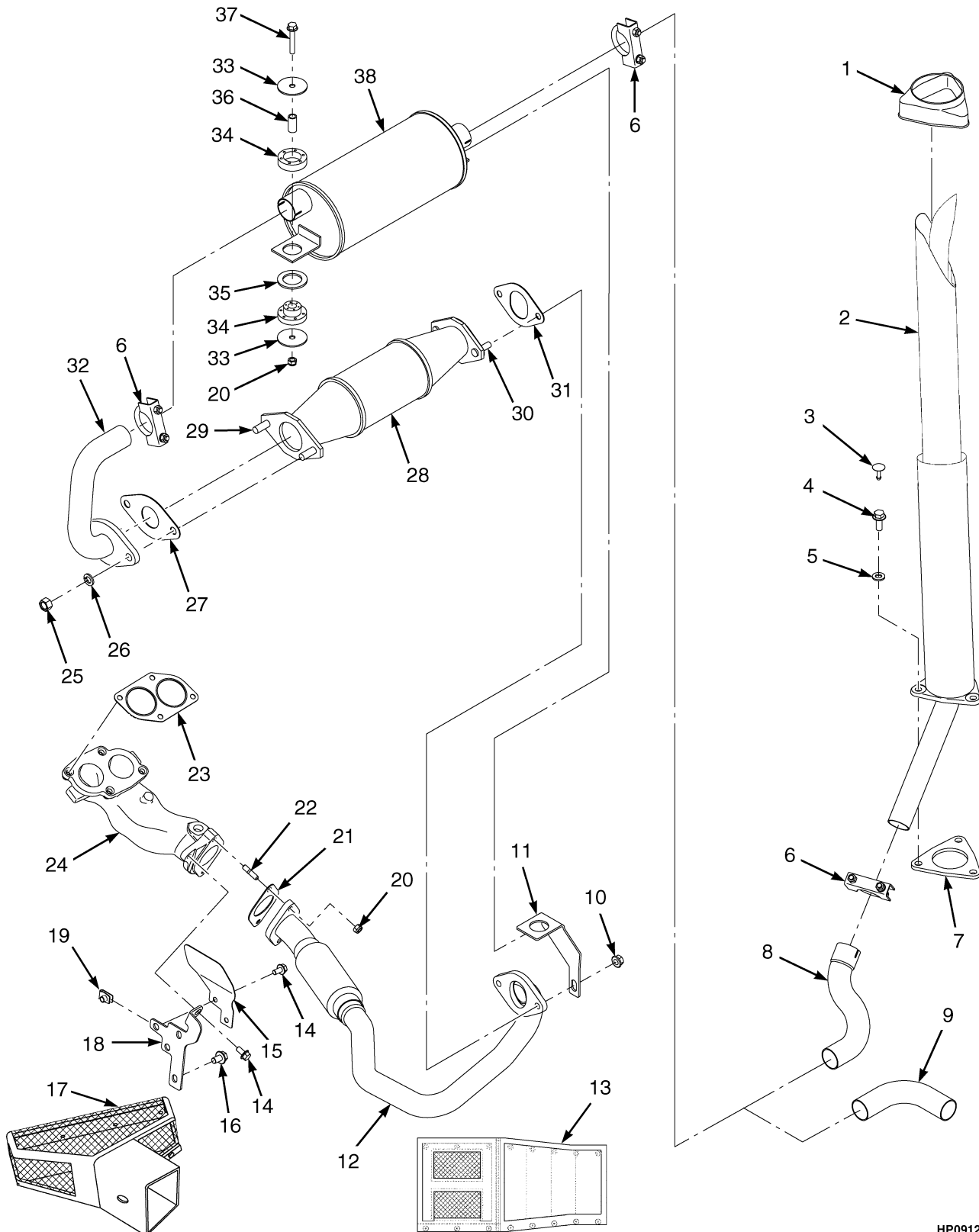
ITEM	PART NO.	DESCRIPTION	QTY
1	b 2074790	Radiator Assembly (Includes Oil Cooler)	1
1	b 1569079	Drain Valve (w/Thread Wrap)	1
1	b 1590972	Radiator	1
1	b 1590918	Oil Cooler	1
1	b 1597765	Washer	4
1	b 1597766	Screw	4
1	b 1597763	Drain Valve (Optional)	1
1	c 4603554	Radiator (Assembly)	1
1	c 4038258	Radiator	1
1	c 4038263	Oil Cooler	1
1	c 4038264	Drain Valve	1
1	c 4038265	Nut	2
1	c 4038266	Bolt	8
1	c 4038267	Bolt	4
2	1352140	Radiator Cap	1
3	2085268	Radiator Hose (Lower)	1
4	2085103	Radiator Hose (Upper)	1
5	1565692	Exhaust Shield	1
6	369804	Clamp	4
7	1582076	Shroud	1
8	320154	Washer	2
9	1535257	Nut	2
10	302023	Screw	2
11	1551663	Clip	2
12	1611852	Bracket	1
13	1530243	Insert	4
14	1583611	Capscrew	4
15	1529787	Isolator	4
16	369815	Clamp	2
17	1633307	Reservoir	1
18	345455	Outlet Assembly	1
18	336550	Bushing	1
18	345453	Outlet (Reservoir)	1
18	345454	Cap	1
18	339735	Hose	1
19	1567674	Hose	1
20	1582078	Screen	1
21	1531404	Sensor (Low Coolant Level)	1
22	a 14385	Fitting	1

FOOTNOTES:

a Without Low Coolant Level Sensor
b → PENDING PER ECN 13424401

c PENDING PER ECN 13424401 →

EXHAUST SYSTEM (FIGURE 2-5) GM 2.4L, LPG — WITH CATALYTIC CONVERTER OR SINGLE MUFFLER



HP091225

EXHAUST SYSTEM

GM 2.4L, LPG – WITH CATALYTIC CONVERTER OR SINGLE MUFFLER

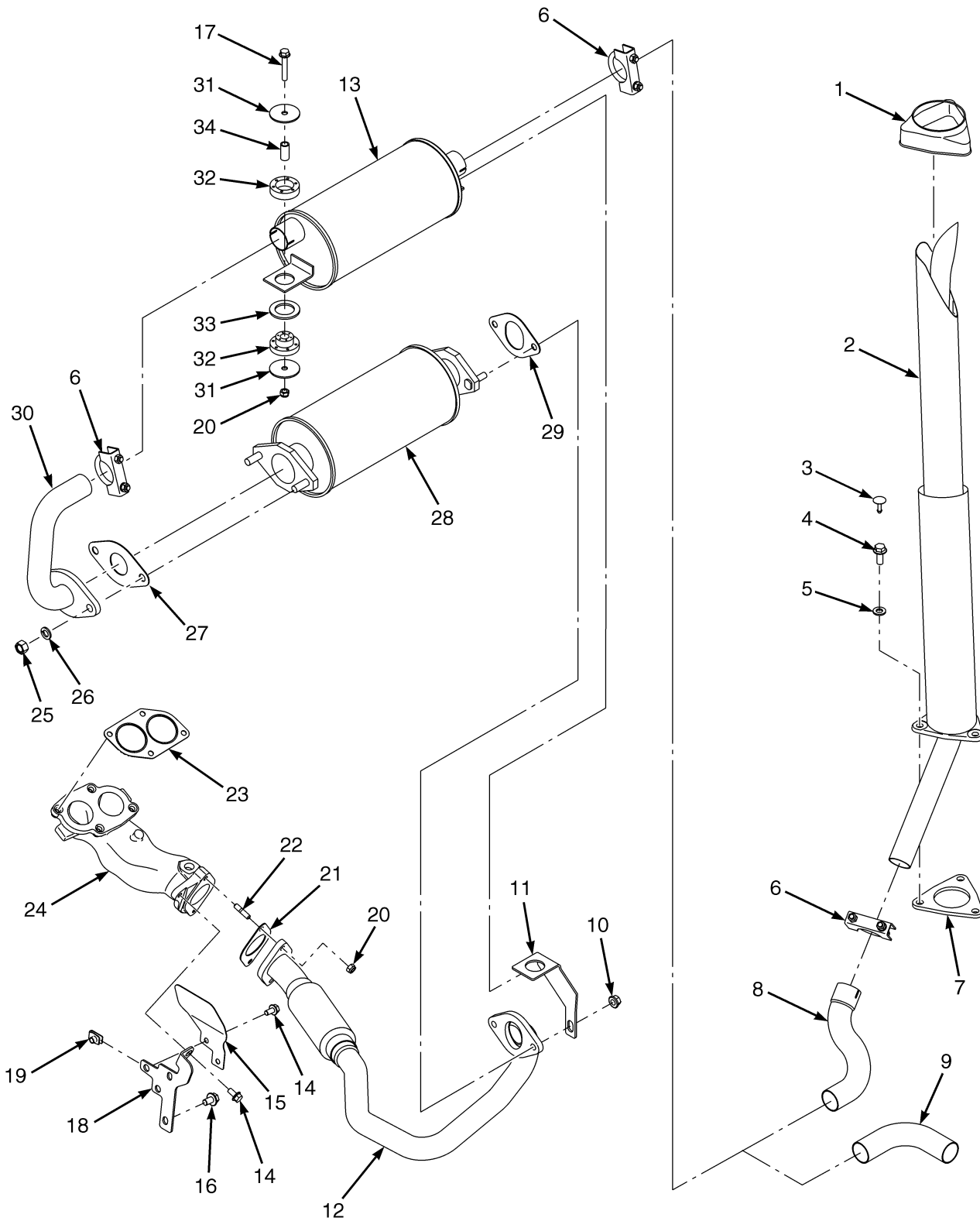
KEY:**A: With Catalytic Converter****B: Without Catalytic Converter**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2021394	Cover	1	1
2	1646827	Tail Pipe	1	1
3	1347045	Fastener	1	1
4	1510117	Capscrew	1	1
5	320159	Washer	1	1
6	c 68968	Clamp	3	3
6	d 63117	Clamp	3	3
7	1533639	Cover	1	1
8	1533863	Exhaust Pipe (Overhead)	1	1
9	1589312	Exhaust Pipe (Counterweight)	1	1
10	1460477	Nut	2	..
11	1532523	Bracket	1	..
12	1546731	Exhaust Pipe	1	1
12	1566522	Exhaust Pipe (Alternate Part)	1	1
13	b 2084004	Wrap	1	1
14	1527879	Capscrew	1	1
15	1587069	Exhaust Shield	1	1
16	1528778	Capscrew	1	1
17	b 1569982	Wrap (Manifold)	1	1
18	1587068	Bracket	1	1
19	1480237	Nut	1	1
20	1582222	Locknut	4	4
21	1566528	Gasket	1	1
21	4018959	Gasket (Alternate Part)	1	1
22	1567831	Stud (Exhaust)	2	2
23	1582139	Gasket	1	1
24	1583713	Adapter	1	1
25	1469405	Nut	2	..
26	292683	Lockwasher	2	..
27	1469379	Gasket	1	..
28	2059689	Catalytic Converter	1	..
29	1495501	Bolt	2	..
30	1495502	Bolt	2	..
31	1547712	Gasket	1	..
32	1534174	Exhaust Pipe	1	..
33	1528938	Washer	4	4
34	1528930	Mount	2	2
35	1532585	Washer	2	2
36	1528934	Spacer	2	2
37	1510115	Capscrew	2	2
38	2060957	Muffler	1	1
	a 4006802	Sensor (Oxygen) (2010 Series)	1	..
	a 1557546	Oxygen Sensor (With Wire Harness) (2010 Series)	1	1

FOOTNOTES:

- | | | | |
|----------|-----------------------------|----------|-------------------|
| a | Not Illustrated | c | → S/N L177B30004H |
| b | Paper Industry Applications | d | S/N L177B30005H → |

EXHAUST SYSTEM (FIGURE 2-6) GM 2.4L, LPG — WITH TWIN MUFFLERS (S/N L177B14599E →)



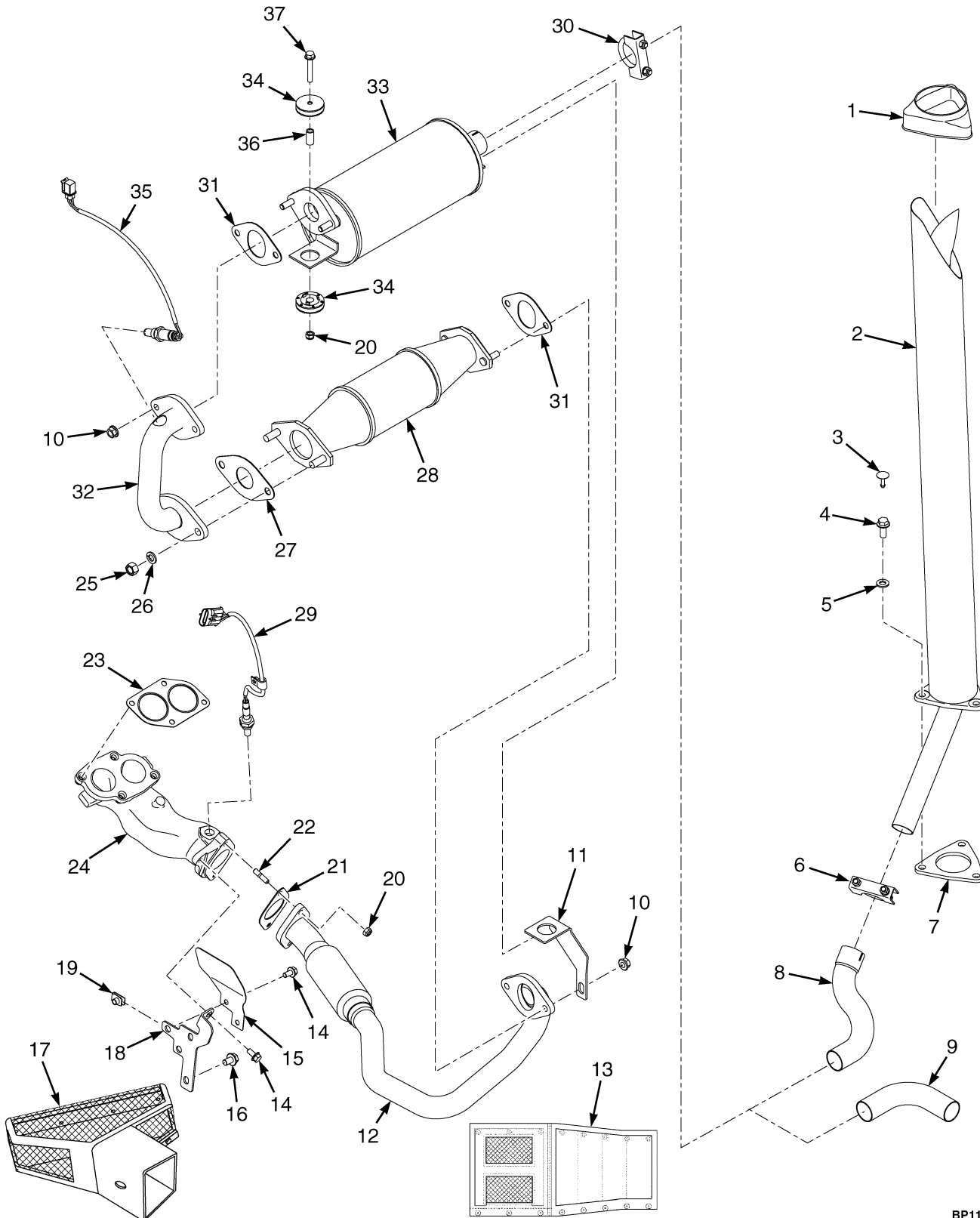
BP110049

EXHAUST SYSTEM
GM 2.4L, LPG – WITH TWIN MUFFLERS (S/N L177B14599E →)

ITEM	PART NO.	DESCRIPTION	QTY
1	2021394	Cover	1
2	1646827	Tail Pipe	1
3	1347045	Fastener	1
4	1510117	Capscrew	1
5	320159	Washer	1
6	b 68968	Clamp	3
6	c 63117	Clamp	3
7	1533639	Cover	1
8	1533863	Exhaust Pipe (Overhead)	1
9	1589312	Exhaust Pipe (Counterweight)	1
10	1460477	Nut	2
11	1532523	Bracket	1
12	1546731	Exhaust Pipe	1
13	2060957	Muffler	1
14	1527879	Capscrew	1
15	1587069	Exhaust Shield	1
16	1528778	Capscrew	1
17	1510115	Capscrew	2
18	1587068	Bracket	1
19	1480237	Nut	1
20	1582222	Locknut	4
21	1566528	Gasket	1
22	1567831	Stud (Exhaust)	2
23	1582139	Gasket	1
24	1583713	Adapter	1
25	1469405	Nut	2
26	292683	Lockwasher	2
27	1469379	Gasket	1
28	2092338	Muffler	1
29	1547712	Gasket	1
30	1534174	Exhaust Pipe	1
31	1528938	Washer	4
32	1528930	Mount	2
33	1532585	Washer	2
34	1649471	Spacer	2
	a 4006802	Sensor (Oxygen)	1

FOOTNOTES:**a** Not Illustrated**c** S/N L177B30005H →**b** → S/N L177B30004H

EXHAUST SYSTEM (GM 2.4L, LPG) (FIGURE 2-7) W/ CATALYTIC CONVERTER — 2010 SERIES



BP110068

**EXHAUST SYSTEM (GM 2.4L, LPG)
W/ CATALYTIC CONVERTER – 2010 SERIES**

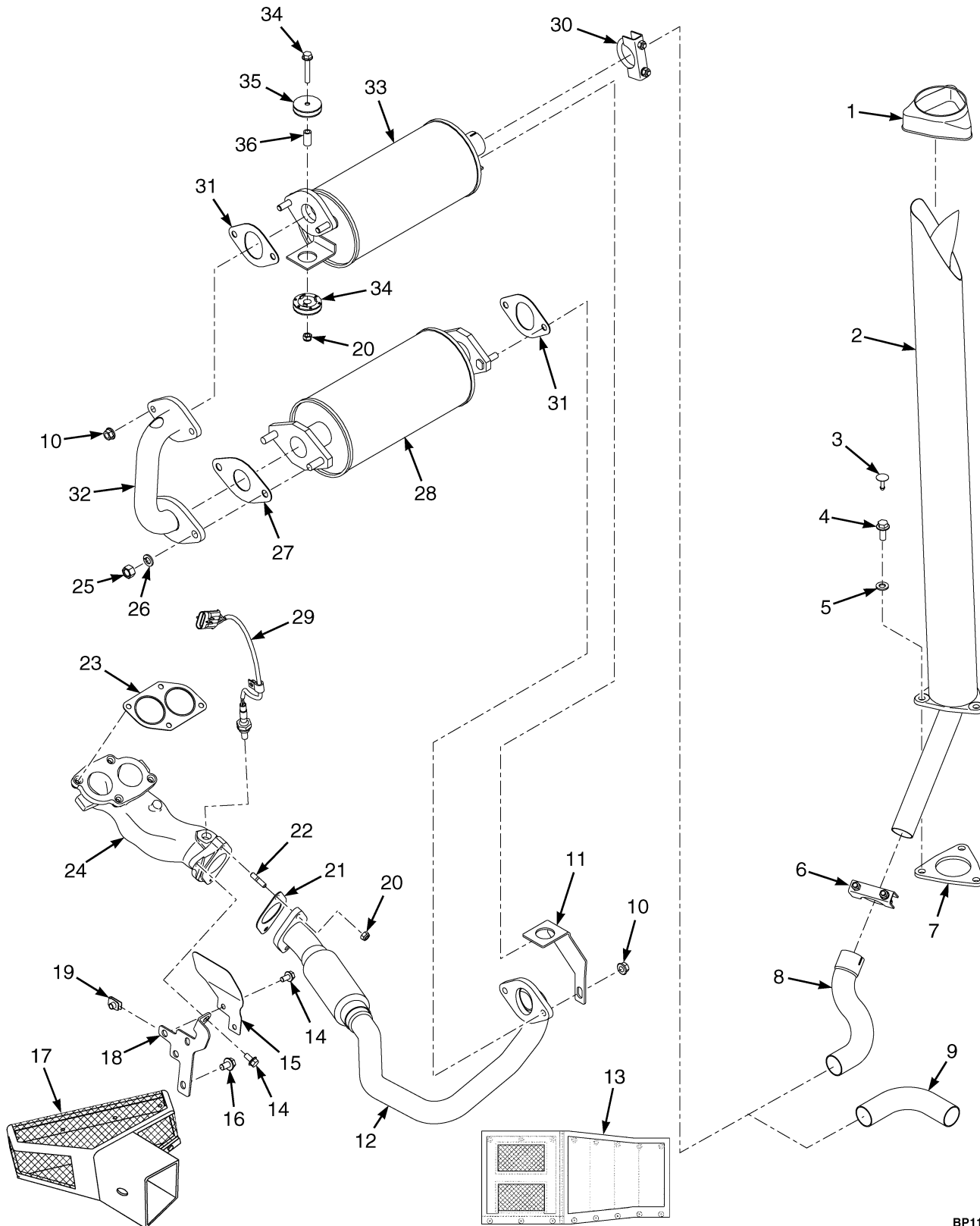
ITEM	PART NO.	DESCRIPTION	QTY
1	2021394	Cover	1
2	4008736	Tail Pipe	1
3	1347045	Fastener	3
4	1510117	Capscrew	3
5	320159	Washer	3
6	b 68968	Clamp	2
6	c 63117	Clamp	2
7	1533639	Cover	1
8	1533863	Exhaust Pipe (Overhead)	1
9	1589312	Exhaust Pipe (Counterweight)	1
10	1460477	Nut	4
11	1532523	Bracket	1
12	1546731	Exhaust Pipe	1
13	a 2084004	Wrap	1
14	1527879	Capscrew	3
15	1587069	Exhaust Shield	1
16	1528778	Capscrew	2
17	a 1569982	Wrap (Manifold)	1
18	1587068	Bracket	2
19	1480237	Nut	1
20	1582222	Locknut	8
21	4018959	Gasket	1
22	1567831	Stud (Exhaust)	2
23	1582139	Gasket	1
24	1583713	Adapter	1
25	1469405	Nut	2
26	292683	Lockwasher	2
27	1469379	Gasket	1
28	4601151	Catalytic Converter	1
29	1557546	Oxygen Sensor (With Wire Harness)	1
30	68968	Clamp	1
31	1547712	Gasket	2
32	1636409	Exhaust Pipe	1
33	2089894	Muffler (Welded)	1
33	2089895	Muffler (Crimped) (Optional)	1
34	1709996	Isolator	4
35	4006802	Sensor (Oxygen)	1
36	1708371	Spacer	2
37	1510115	Capscrew	2

FOOTNOTES:

a Paper Industry Applications
b → S/N L177B30004H

c S/N L177B30005H →

EXHAUST SYSTEM (GM 2.4L, LPG) (FIGURE 2-8) W/O CATALYTIC CONVERTER — 2010 SERIES



BP110069

**EXHAUST SYSTEM (GM 2.4L, LPG)
W/O CATALYTIC CONVERTER – 2010 SERIES**

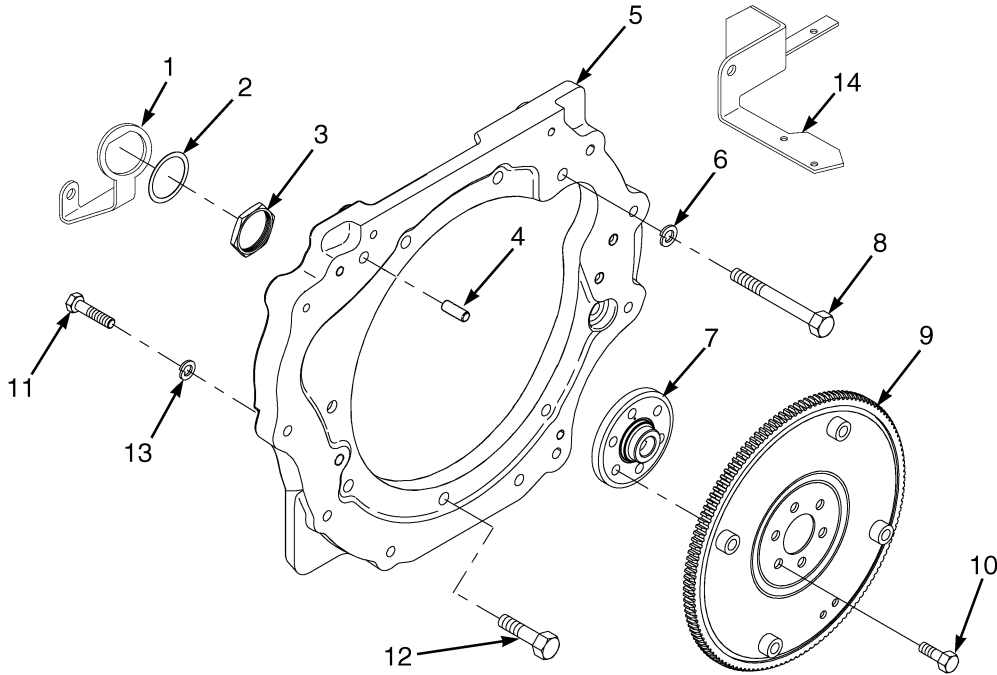
ITEM	PART NO.	DESCRIPTION	QTY
1	2021394	Cover	1
2	4008736	Tail Pipe	1
3	1347045	Fastener	3
4	1510117	Capscrew	3
5	320159	Washer	3
6	b 68968	Clamp	2
6	c 63117	Clamp	2
7	1533639	Cover	1
8	1533863	Exhaust Pipe (Overhead)	1
9	1589312	Exhaust Pipe (Counterweight)	1
10	1460477	Nut	4
11	1532523	Bracket	1
12	1546731	Exhaust Pipe	1
13	a 2084004	Wrap	1
14	1527879	Capscrew	3
15	1587069	Exhaust Shield	1
16	1528778	Capscrew	2
17	a 1569982	Wrap (Manifold)	1
18	1587068	Bracket	2
19	1480237	Nut	1
20	1582222	Locknut	8
21	4018959	Gasket	1
22	1567831	Stud (Exhaust)	2
23	1582139	Gasket	1
24	1583713	Adapter	1
25	1469405	Nut	2
26	292683	Lockwasher	2
27	1469379	Gasket	1
28	2092338	Muffler	1
29	1557546	Oxygen Sensor (With Wire Harness)	1
30	68968	Clamp	1
31	1547712	Gasket	2
32	4011286	Exhaust Pipe	1
33	2089894	Muffler (Welded)	1
33	2089895	Muffler (Crimped) (Optional)	1
34	1510115	Capscrew	2
35	1709996	Isolator	4
36	1708371	Spacer	2

FOOTNOTES:

a Paper Industry Applications
b → S/N L177B30004H

c S/N L177B30005H →

FLYWHEEL AND HOUSING (FIGURE 2-9) GM 2.4L, LPG (→ 9/2009)



HP091237

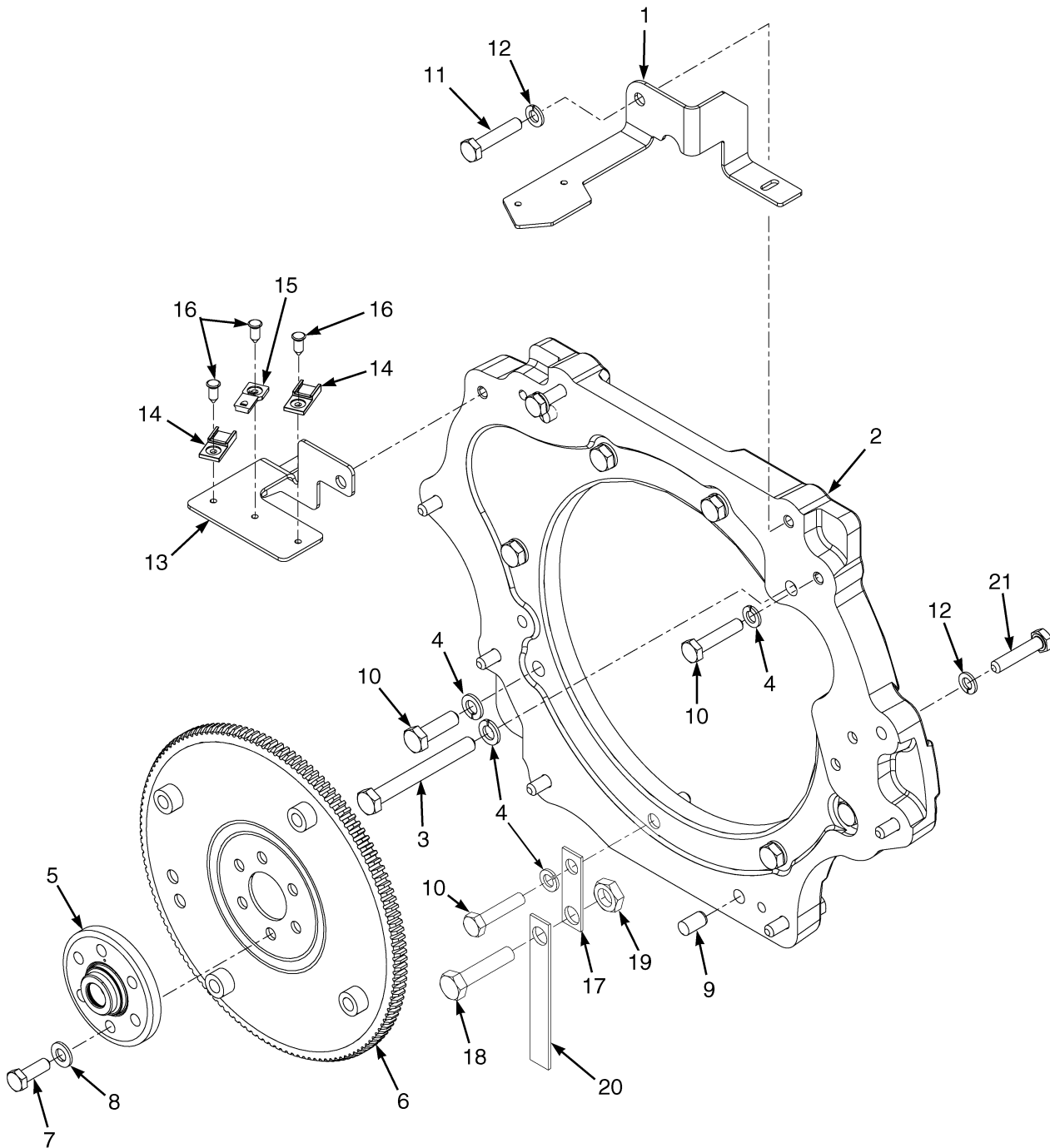
ITEM	PART NO.	DESCRIPTION	QTY
1	a 1624204	Bracket (Electrical Connector)	1
1	b 1654415	Bracket (Electrical Connector)	1
2	1539086	Lockwasher	1
3	1539085	Locknut	1
4	303150	Dowel	2
5	1553267	Flywheel Housing	1
6	292683	Lockwasher	11
7	1588963	Adapter	1
8	292539	Capscrew	1
9	1605988	Flywheel	1
10	309740	Capscrew	6
11	292517	Capscrew	6
12	246001	Capscrew	10
13	388049	Lockwasher	6
14	a 1622886	Bracket	1
14	b 1653569	Bracket	1
	b 1512403	Capscrew	4

FOOTNOTES:

a → S/N L177B15745E EXC. 05792

b S/N L177B15746E → INC. 05792

FLYWHEEL AND HOUSING (FIGURE 2-10) GM 2.4L, LPG (9/2009 →)

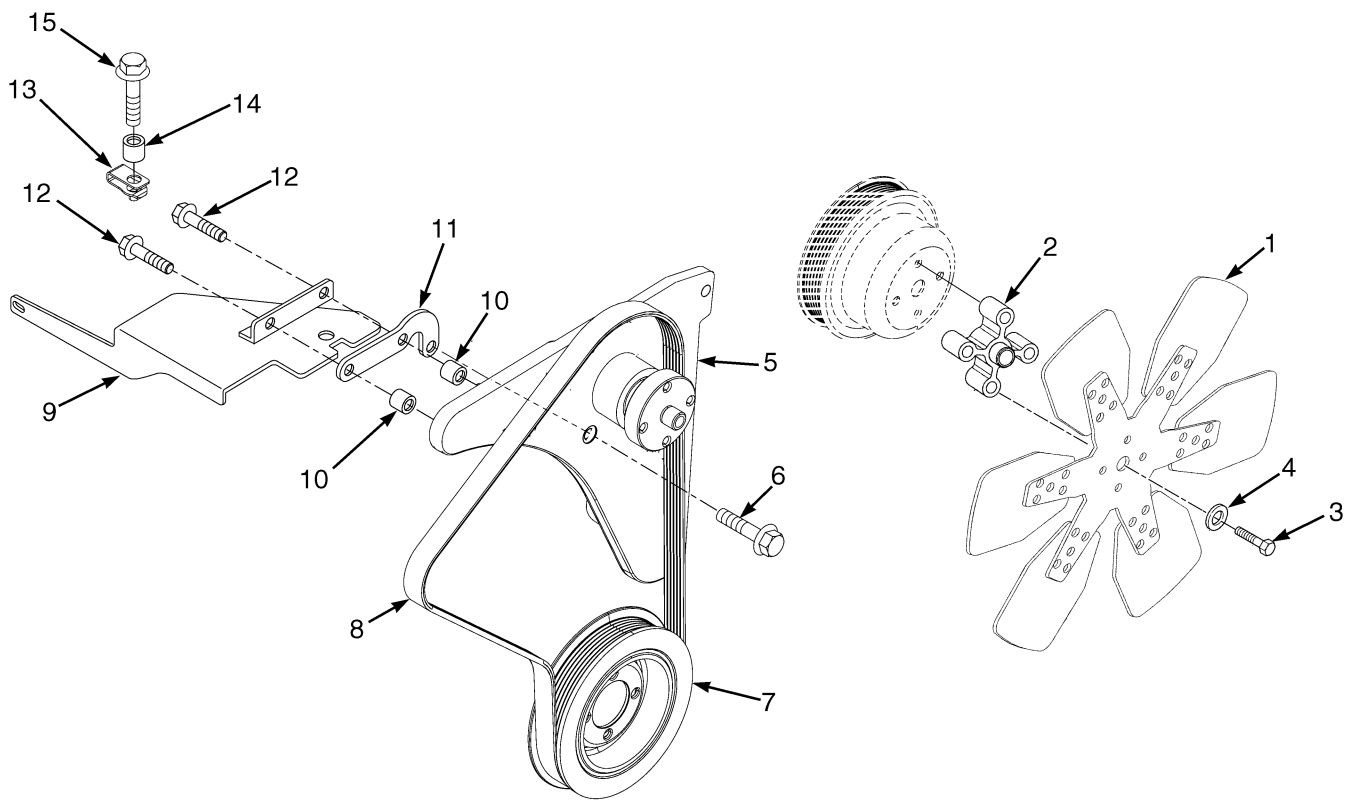


BP090390

FLYWHEEL AND HOUSING
GM 2.4L, LPG (9/2009 →)

ITEM	PART NO.	DESCRIPTION	QTY
1	1653569	Bracket	1
2	1696276	Flywheel Housing	1
3	292539	Capscrew	1
4	292683	Lockwasher	11
5	1588963	Adapter	1
6	1605988	Flywheel	1
7	309740	Capscrew	6
8	296420	Washer	6
9	352406	Dowel	2
10	246001	Capscrew	10
11	292517	Capscrew	4
12	388049 292682	Lockwasher	10
13	1623093	Bracket	1
14	1500912	Clip	2
15	1531480	Clip	1
16	1582464	Fastener	3
17	1565832	Bracket	1
18	1586013	Capscrew	1
19	1460477	Nut	1
20	240072	Static Strap	1
21	292517	Capscrew	6

FAN ASSEMBLY (FIGURE 2-11) GM 2.4L ENGINE, LPG



BP090216

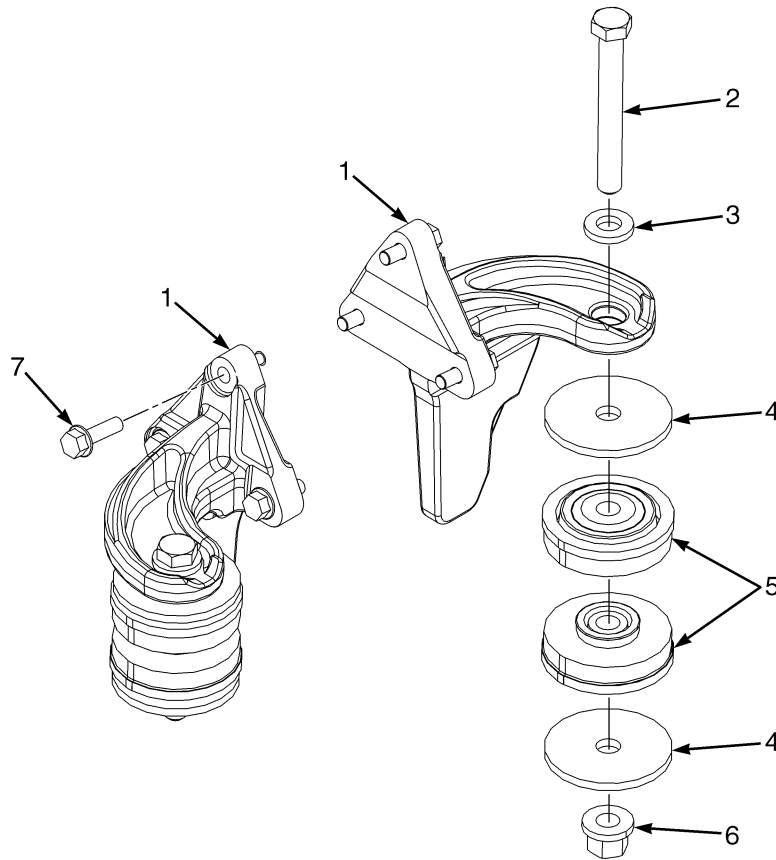
FAN ASSEMBLY
GM 2.4L ENGINE, LPG

ITEM	PART NO.	DESCRIPTION	QTY
1	1375642	Fan	1
2	ab 1616049	Spacer	1
2	cd 1539154	Spacer	1
3	ab 1566505	Capscrew	4
3	cd 293623	Capscrew	4
4	296418	Washer	4
5	ab 1618408	Fan Mount	1
5	cd 1616288	Fan Mount	1
5	ab 2029116	Shaft Bearing (Fan)	1
5	cd	Hub	1
6	1527880	Capscrew	1
7	1580793	Crankshaft Pulley	1
8	2070039	V-Belt (Micro V)	1
9	ab 2084600	Spacer	2
10	ab 2084599	Bracket	1
10	4011406	Bracket Wldmt (2010 Series)	1
11	1510116	Capscrew	2

FOOTNOTES:

- | | | | |
|----------|---|----------|---|
| a | → S/N L177B12304D (Without Catalytic Converter) | c | S/N L177B12305D → (Without Catalytic Converter) |
| b | → S/N L177B12346D (With Catalytic Converter) | d | S/N L177B12347D → (With Catalytic Converter) |

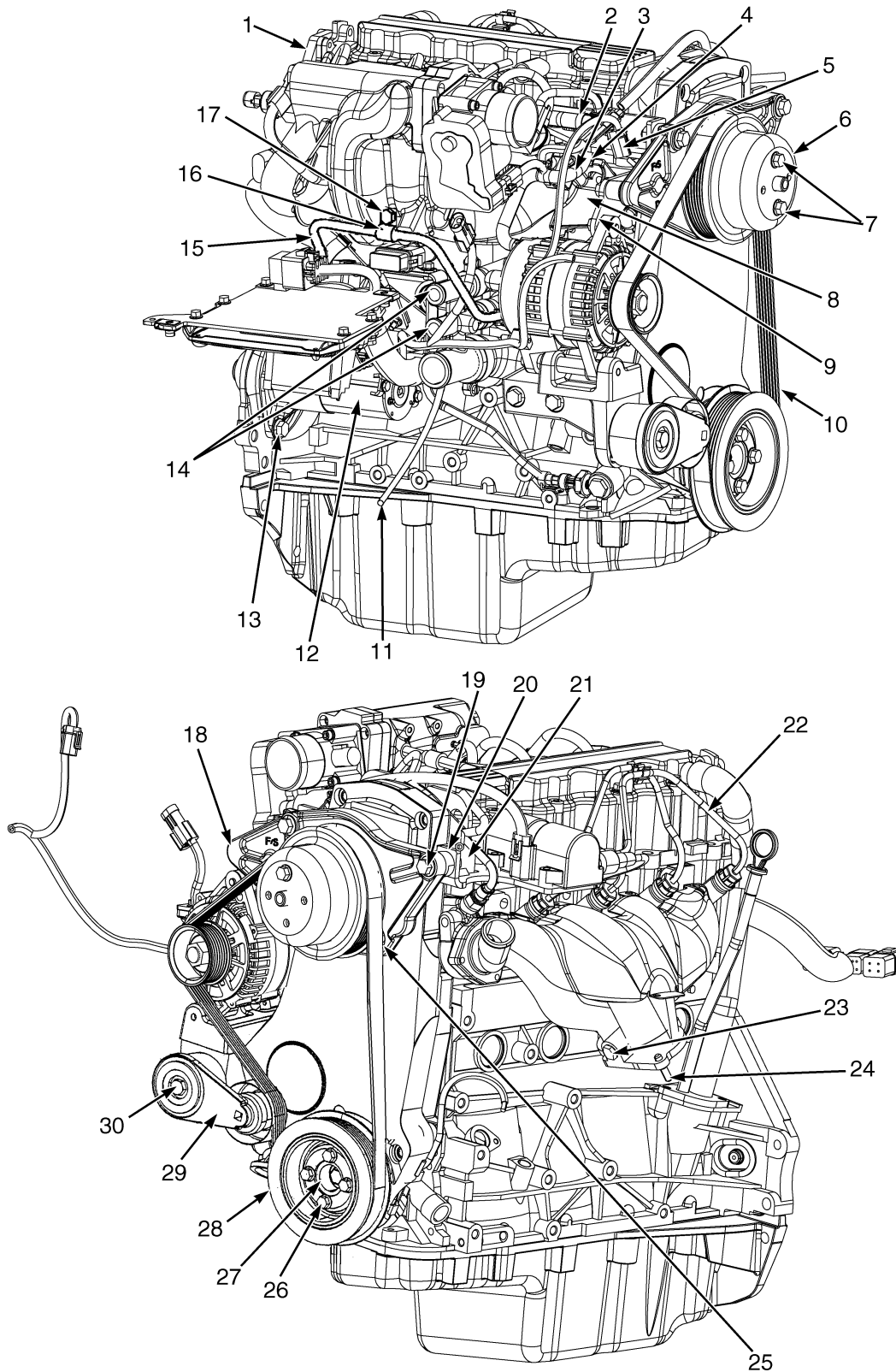
ENGINE MOUNTING (FIGURE 2-12) GM 2.4L ENGINE



BP090420

ITEM	PART NO.	DESCRIPTION	QTY
1	1558184	Mount (LH)	1
1	1558186	Mount (RH)	1
2	293698	Capscrew	2
3	1504075	Washer	2
4	1557737	Washer	4
5	2069951	Isolator	4
6	1565453	Nut (Flange)	2
7	1565195	Capscrew	6

ASSEMBLED ENGINE (FIGURE 2-13) GM 2.4L, LPG — SHEET 1 OF 4



BP090369

ASSEMBLED ENGINE
GM 2.4L, LPG – SHEET 1 OF 4

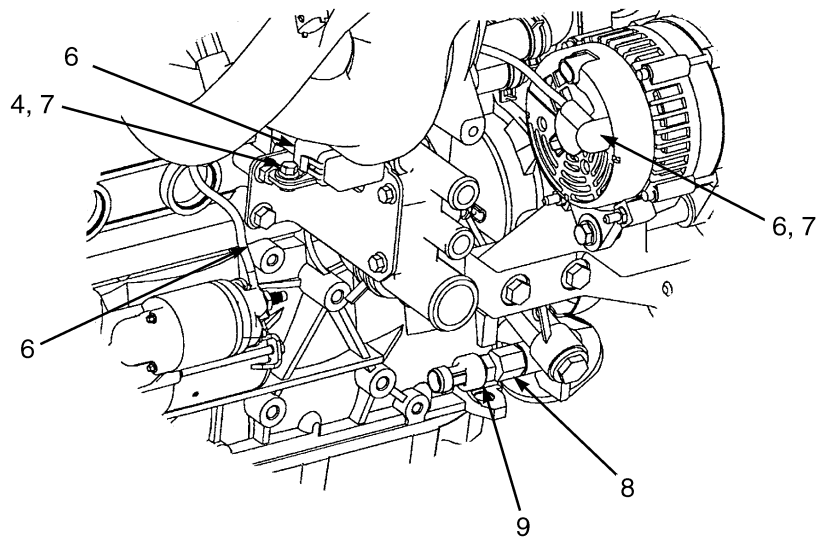
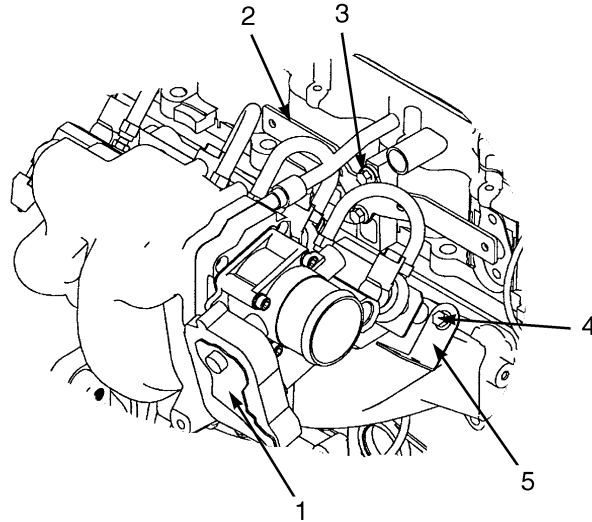
ITEM	PART NO.	DESCRIPTION	QTY
1	c 1501695	Engine Assy-Lpg (GM 2.4L) (2005)	1
1	f 1603004	Long Block (GM 2.4L) (2006)	1
1	e 1649486	Engine Assy (GM 2.4L) (2007)(2008)	1
1	4006369	Engine Assy (GM 2.4L) (2009)	1
1	4006383	Engine Assy (GM 2.4L) (2010 Series)	1
2	a 1543933	Fitting .....	..
3	a 168718	Clamp .....	..
4	a 1543900	Hose .....	..
5	a 1376727	Clamp (Insulated) .....	..
6	d 2085256	Fan Pulley (Fan)	1
6	g 2083821	Fan Pulley	1
7	293625	Capscrew	4
7	b 296418	Washer	4
8	a 2067504	Bracket .....	..
9	1547984	Plate	1
10	2070039	V-Belt (Micro V)	1
11	a 1589520	Tube .....	..
12	1548620	Starter	1
12	1551845	Solenoid	1
12	1551846	Bolt	2
13	1510117	Capscrew	2
14	1532513	Cap	2
15	a 1589366	Tube .....	..
16	130845	Clamp	2
17	1529366	Capscrew	1
18	b 1618408	Fan Mount	1
18	e 1616288	Fan Mount	1
19	1527886	Capscrew	3
20	1625323	Bracket Wldmt	1
21	1460477	Nut	2
22	b 2067623	Kit-Ignition Cable (Spark Plug)	1
22	e 2089846	Kit-Ignition Cable (Spark Plug)	1
23	1396518	Plug	1
23	1509103	Ring (Copper)	1
23	1509104	Plug	1
24	1567831	Stud (Exhaust)	4
25	1527885	Capscrew	2
26	1527881	Capscrew	4
27	1531254	Spacer (Pulley)	1
28	1580793	Crankshaft Pulley	1
29	2090303	Belt Tensioner	1
30	292521	Capscrew	1

FOOTNOTES:

a Not Used on LPG Engines
b → 1/2007
c → S/N L177B05906
d → S/N L177B12346

e 1/2007 →
f S/N L177B05907 →
g S/N L177B12347 →

ASSEMBLED ENGINE (FIGURE 2-14) GM 2.4L, LPG — SHEET 2 OF 4



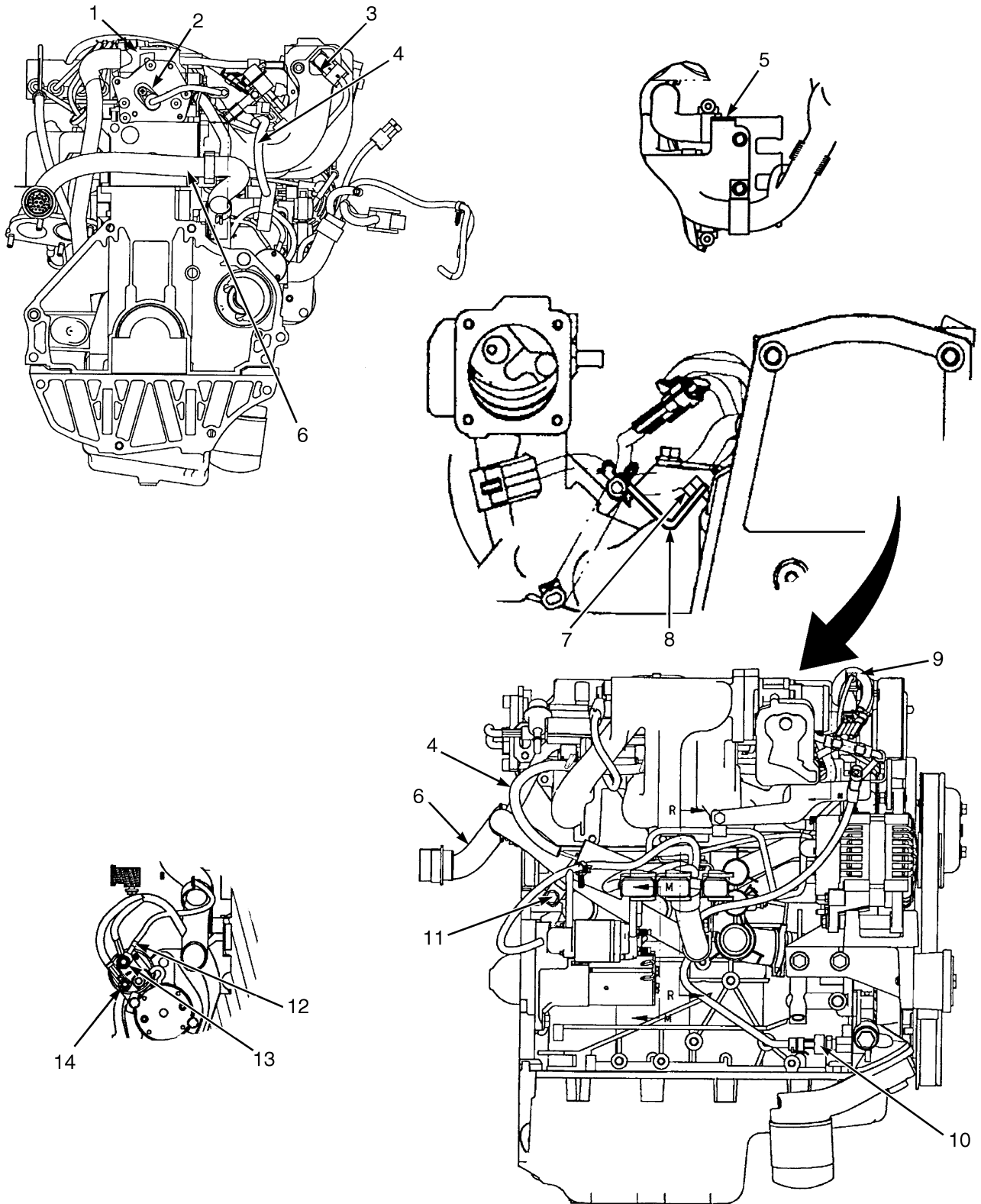
HP091258

ASSEMBLED ENGINE
GM 2.4L, LPG – SHEET 2 OF 4

ITEM	PART NO.	DESCRIPTION	QTY
	a 1501695	Engine Assy-Lpg (GM 2.4L) (2005)	1
	b 1603004	Long Block (GM 2.4L) (2006)	1
	c 1649486	Engine Assy (GM 2.4L) (2007-2008)	1
	4006369	Engine Assy (GM 2.4L) (2009)	1
	4006383	Engine Assy (GM 2.4L) (2010 Series)	1
1	1557547	Throttle Body (☞ Figure 5-12).....	1
2	2056355	Bracket	1
3	1527876	Capscrew	2
4	1534417	Capscrew	3
5	1569776	Bracket	1
6	2057865	Wire Harness (Alternator, Starter)	1
6	1454829	Fuse (60 Amp)	1
6	1454862	Cover (With Seal)	1
6	148614	E-Ring	1
6	148615	E-Ring	1
6	1520543	Terminal	2
6	1543553	Fuse Holder	1
6	1566146	Boot	1
6	1454827	Seal	2
7	1514429	Nut	5
8	1585083	Adapter	1
8	1585084	O-Ring	1
8	1585085	Retaining Ring	1
9	1566654	Pressure Transducer Sensor (Oil Pressure)	1

FOOTNOTES:**a** → S/N L177B05906D**c** 1/2007 →**b** S/N L177B05907D ↔ 1/2007

ASSEMBLED ENGINE (FIGURE 2-15) GM 2.4L, LPG — SHEET 3 OF 4



BP090366

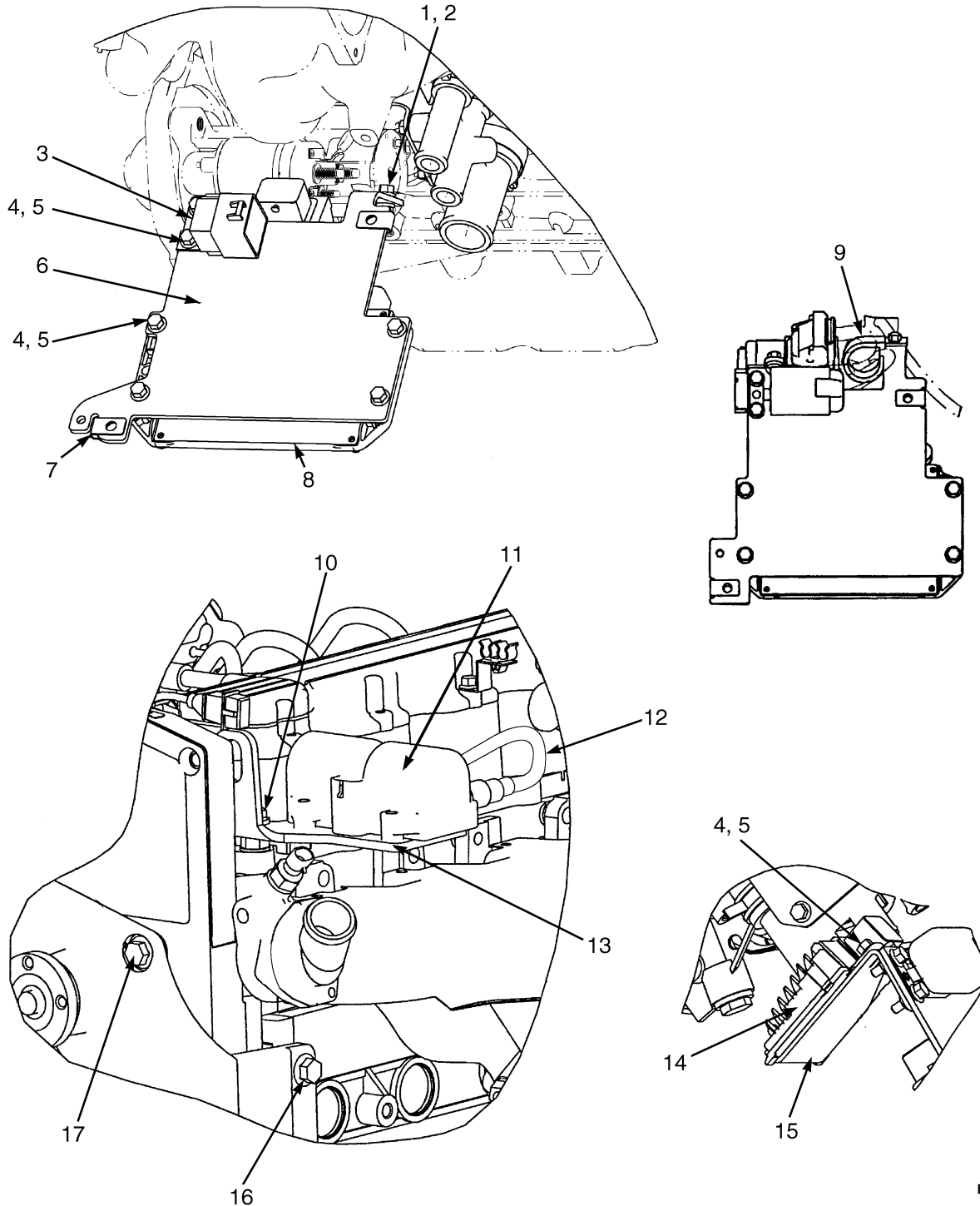
ASSEMBLED ENGINE
GM 2.4L, LPG – SHEET 3 OF 4

ITEM	PART NO.	DESCRIPTION	QTY
1	a 1501695	Engine Assy-Lpg (GM 2.4L) (2005)	1
1	c 1603004	Long Block (GM 2.4L) (2006)	1
1	i 1649486	Engine Assy (GM 2.4L) (2007-2008)	1
1	4006369	Engine Assy (GM 2.4L) (2009)	1
1	4006383	Engine Assy (GM 2.4L) (2010 Series)	1
2	1564587	Sensor (Camshaft Position) (2009)	1
2	4031346	Camshaft Position Sensor (2010 Series)	1
3	1584472	Sensor (MAP)	1
4	1554838	Wire Harness (Injector)	1
5	2055232	Bracket	1
6	b 2053099	Wire Harness (Engine, GM 2.4L, LPG) (☞Figure 6-49).....	1
6	d 2098313	Wire Harness (Engine, GM 2.4L, LPG) (without Catalytic Converter) (☞Figure 6-51).....	1
6	d 2089064	Wire Harness (Engine, GM 2.4L, LPG) (with Catalytic Converter) (☞Figure 6-50).....	1
6	f 4601528	Wire Harness (Engine, GM 2.4L, LPG) (without Catalytic Converter) (☞Figure 6-53).....	1
6	e 4601529	Wire Harness (Engine, GM 2.4L, LPG) (with Catalytic Converter) (☞Figure 6-52).....	1
6	g 4601157	Wire Harness (Engine, GM 2.4L, LPG) (with Catalytic Converter) (☞Figure 6-54).....	1
6	h 4601158	Wire Harness (Engine, GM 2.4L, LPG) (without Catalytic Converter) (☞Figure 6-55).....	1
7	1534417	Capscrew	3
8	1569776	Bracket	1
9	2068357	Wire Harness (Ignition Coil)	1
10	1566654	Pressure Transducer Sensor (Oil Pressure)	1
11	1527879	Capscrew	2
12	2057865	Wire Harness (Alternator, Starter)	1
13	1514429	Nut	5
14	1593335	Nut	1

FOOTNOTES:

a	→ S/N L177B05907D	f	S/N L177B23561F ↔ S/N L177B31697H
b	→ S/N L177B14822E	g	S/N L177B31118H →
c	S/N L177B05907D ↔ 1/2007	h	S/N L177B31697H →
d	S/N L177B14823E ↔ S/N L177B23560F	i	1/2007 →
e	S/N L177B23561F ↔ S/N L177B31118H		

ASSEMBLED ENGINE (FIGURE 2-16) GM 2.4L, LPG — SHEET 4 OF 4



BP090367

ASSEMBLED ENGINE
GM 2.4L, LPG – SHEET 4 OF 4

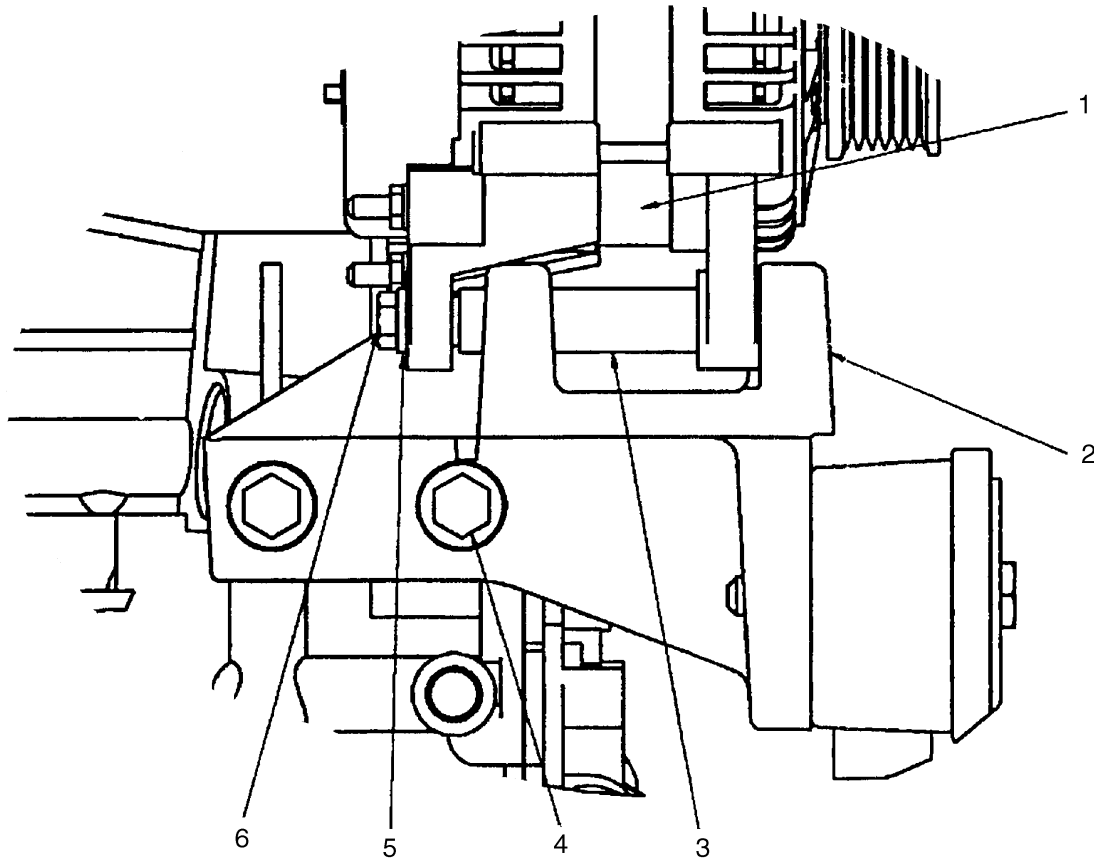
ITEM	PART NO.	DESCRIPTION	QTY
	f 1501695	Engine Assy-Lpg (GM 2.4L) (2005)	1
	h 1603004	Long Block (GM 2.4L) (2006)	1
	j 1649486	Engine Assy (GM 2.4L) (2007-2008)	1
	4006369	Engine Assy (GM 2.4L) (2009)	1
	4006383	Engine Assy (GM 2.4L) (2010 Series)	1
1	1527877	Capscrew	1
2	1514429	Nut	1
3	a 1330301	Relay (Power Latch)	1
3	b 1461743	Relay	1
4	1527877	Capscrew	7
5	1514429	Nut	6
6	1582162	Plate	1
7	1480237	Nut	2
8	f 2077554	Engine Control Module	1
8	h 2087196	Engine Control Module	1
8	j 2087197	Engine Control Module	1
8	c 4603961	Engine Control Module (2010 Series)	1
8	d 4603962	Engine Control Module (2010 Series)	1
9	.....	Clamp (Supplied With Engine)	1
10	1460477	Nut	2
11	1584523	Ignition Coil	1
12	e 2067623	Kit-Ignition Cable (Spark Plug)	1
12	j 2089846	Kit-Ignition Cable (Spark Plug)	1
13	1536719	Bracket (Coil)	1
14	g 2059248	Module (Injector Drive)	1
14	i 2082657	Module (Injector Driver)	1
15	1582163	Bracket	1
16	1510117	Capscrew	2
16	4014812	Bolt (2010 Series)	2
17	1527885	Capscrew	1

FOOTNOTES:

a Used on Engine Up to 2007
b Used on Engines 2007 and Up
c With Catalytic Converter
d Without Catalytic Converter.
e → 1/2007

f → S/N L177B06312D
g → S/N L177B14822E
h S/N L177B06312D ↔ 1/2007
i S/N L177B14823E →
j 1/2007 →

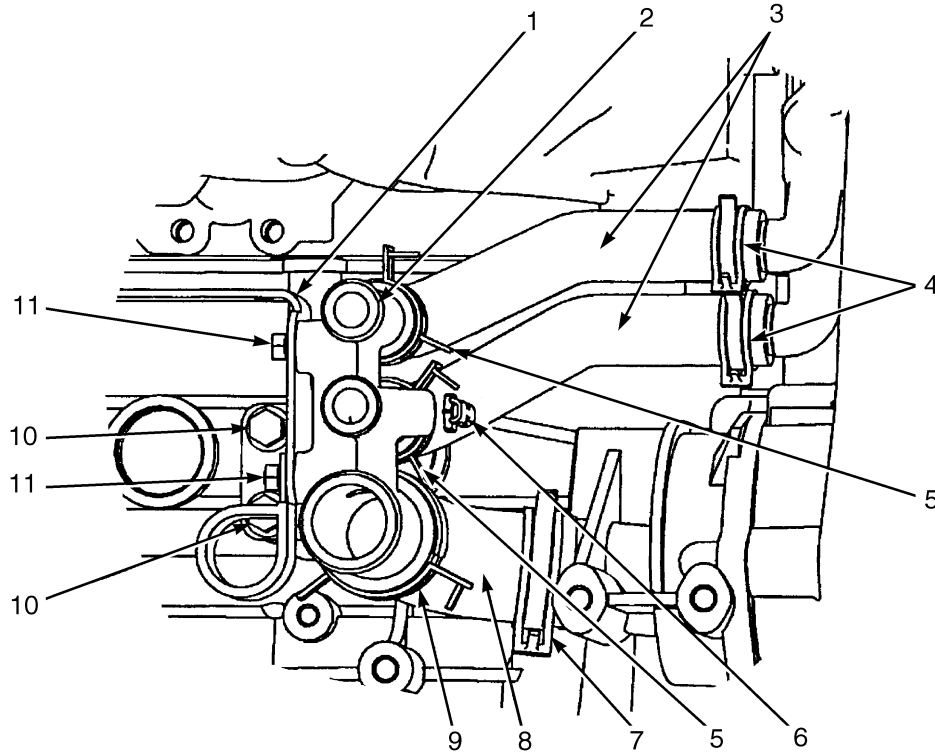
ALTERNATOR AND MOUNTING (FIGURE 2-17) GM 2.4L — LPG



BP090151

ITEM	PART NO.	DESCRIPTION	QTY
1	1534017	Alternator	1
2	1554816	Bracket	1
2	4011403	Bracket (Alternator) (2010 Series)	1
3	1554814	Spacer	1
4	1527892	Capscrew	4
5	320157	Washer	1
6	1307994	Capscrew	1

**COOLING MANIFOLD AND ATTACHING PARTS (FIGURE 2-18)
GM 2.4L — LPG**



HP091295

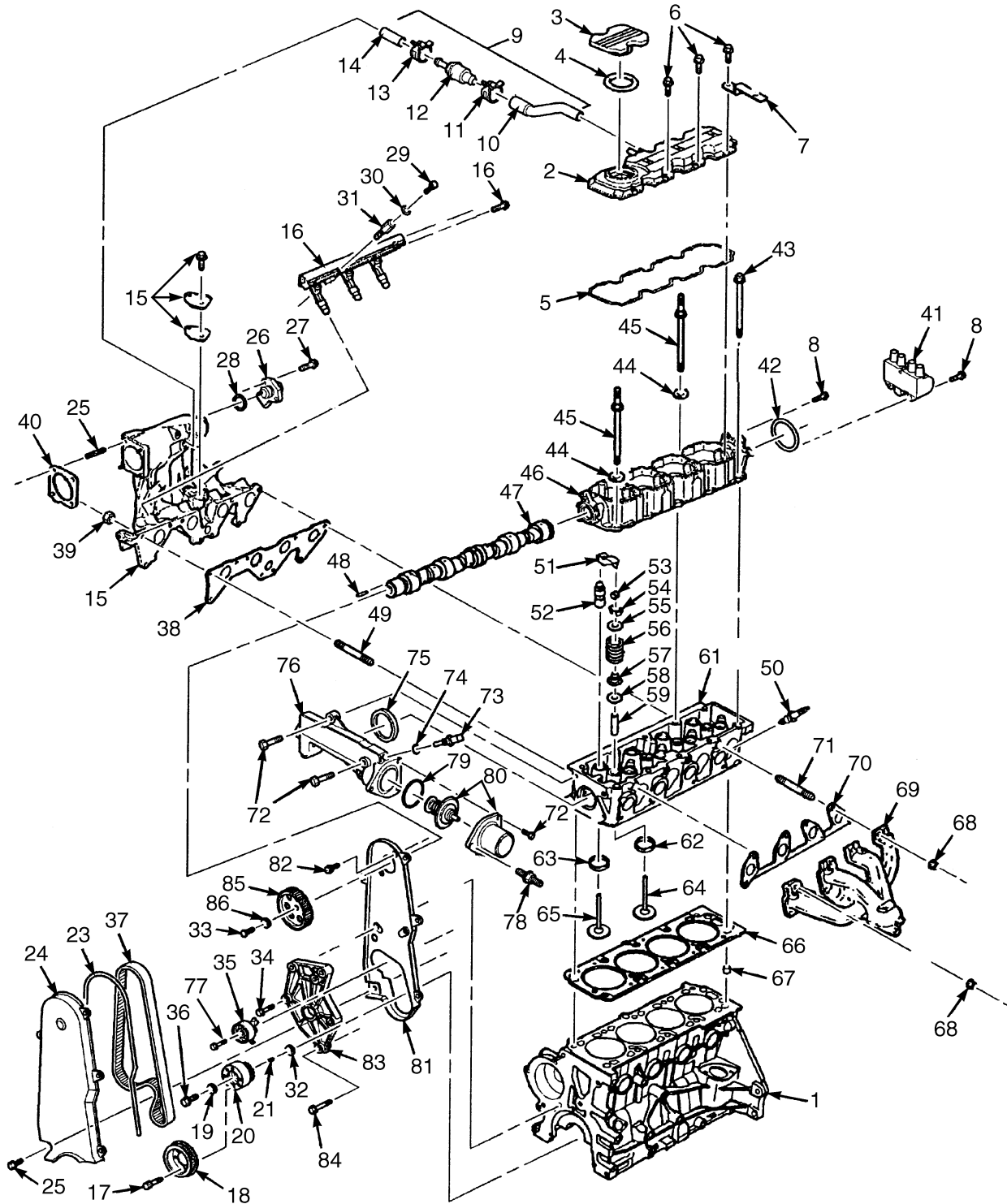
ITEM	PART NO.	DESCRIPTION	QTY
	b 1501695	Engine Assy-Lpg (GM 2.4L) (2005)	1
	1603004	Long Block (GM 2.4L) (2006)	1
	1649486	Engine Assy (GM 2.4L) (2007-2008)	1
	4006369	Engine Assy (GM 2.4L) (2009)	1
	4006383	Engine Assy (GM 2.4L) (2010 Series)	1
1	2055232	Bracket	1
2	a 1554921	Manifold (Coolant)	1
2	c 1638705	Manifold (Coolant)	1
3	2056732	Hose (Heater)	2
4	a 1502009	Hose Clamp	2
4	c 130845	Clamp	4
5	a 1501997	Hose Clamp	2
5	c 369804	Clamp	2
6	a 15329	Drain Valve (Drain)	1
7	a 1527982	Hose Clamp	1
8	2055298	Radiator Hose (Radiator)	1
9	a 1502001	Hose Clamp	1
10	1527879	Capscrew	2
11	1534417	Capscrew	2

FOOTNOTES:

a → 1/2007
b → S/N L177B05906

c 1/2007 →

CAMSHAFT, CYLINDER HEAD AND MANIFOLDS (FIGURE 2-19) GM 2.4L, LPG (→ S/N L177B06311D (WITHOUT CATALYTIC CONVERTER)) (→ S/N L177B05989D (WITH CATALYTIC CONVERTER))



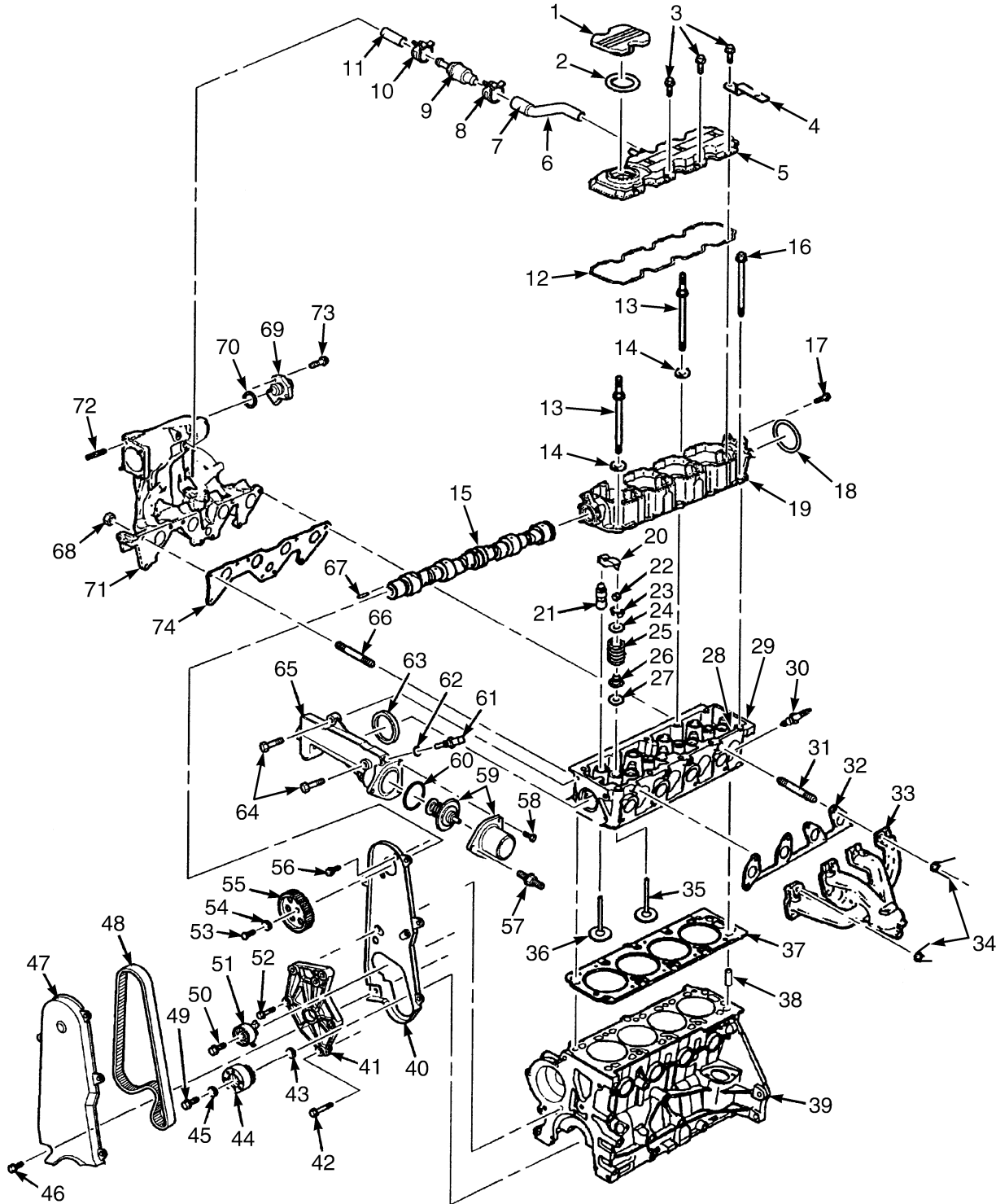
CAMSHAFT, CYLINDER HEAD AND MANIFOLDS
GM 2.4L, LPG (→ S/N L177B06311D (WITHOUT CATALYTIC CONVERTER))
(→ S/N L177B05989D (WITH CATALYTIC CONVERTER))

ITEM	PART NO.	DESCRIPTION	QTY
1	1501695	Engine Assy-Lpg (GM 2.4L) (2005)	1
2	1584492	Cover	1
3	1584493	Cap	1
4	1584495	Seal	1
5	1584497	Gasket	1
6	1593665	Bolt	8
7	1584532	Bracket	1
8	1584490	Screw	8
9	1584266	Hose Assy (PCV)	1
10	1584445	Hose	1
11	1584451	Clamp (RH)	1
12	1584442	Pcv Valve	1
13	1584444	Clamp (LH)	1
14	1584267	Hose	1
15	1584465	Intake Manifold	1
15	.....	Screw	2
15	.....	Cover	1
15	.....	Gasket	1
16	1581795	Fuel Rail (LPG)	1
16	.....	Bolt	1
17	1584520	Screw	4
18	1580793	Crankshaft Pulley	1
19	1584506	Washer	1
20	1584502	Sprocket	1
21	1584504	Key	1
22	.....	Stud	4
23	.....	Seal	1
24	1584458	Cover (Timing Belt)	1
25	1584452		
	4014813	Bolt	5
26	1584472	Sensor (MAP)	1
27	.....	Bolt	2
28	.....	Seal	1
29	.....	Bolt	4
30	.....	Washer	4
31	1548394	Extension (Fuel Rail)	4
32	1584505	Spacer	2
33	1584498	Screw	1
34	1584522	Screw	1
35	1584509	Belt Tensioner	1
36	1584503	Screw	1
37	1584507	Timing Belt	1
38	1584464	Gasket	1
39	.....	Nut	4
40	.....	Gasket	1
41	1584523	Ignition Coil	1
42	1584488	Seal	1
43	1584206	Bolt	6
44	1584208	Washer	4

CAMSHAFT, CYLINDER HEAD AND MANIFOLDS
GM 2.4L, LPG (→ S/N L177B06311D (WITHOUT CATALYTIC CONVERTER))
(→ S/N L177B05989D (WITH CATALYTIC CONVERTER))

ITEM	PART NO.	DESCRIPTION	QTY
45	1584207	Stud	4
46	1584479	Housing Assembly-Cam Shaft	1
46	1584696	Seal (Camshaft)	1
47	1584480	Camshaft	1
48	1584481	Pin	1
49	1584203	Stud	9
50	1584123	Spark Plug	4
51	1584519	Rocker Arm	8
52	1584508	Valve Lifter	8
53	1584511	Valve Seat	8
54	1584202	Valve Stop	16
55	1584201	Retainer	8
56	1584200	Spring	8
57	1584199	Seal	8
58	1584197	Valve Seat	8
59	1584193	Guide	8
60	1593654	Guide (0.25 O/S)	8
61	1584188	Cylinder Head	1
62	.....	Exhaust Valve Seat	4
63	.....	Intake Valve Seat	4
64	1584196	Exhaust Valve	4
65	1584195	Inlet Valve (Intake)	4
66	1584141	Cylinder Head Gasket	1
67	1584182	Pin	4
68	1584474	Nut	8
69	1584478	Exhaust Manifold	1
70	1584475	Gasket	1
71	1584204	Stud	8
72	1584462	Screw	4
73	1584140	Sensor (Engine Coolant)	1
74	.....	Seal	1
75	1584463	Seal	1
76	1584459	Housing	1
77	1584510	Screw	1
78	1584460	Stud	1
79	1584122	Seal	1
80	1584121	Thermostat	1
81	1584453	Cover	1
82	302047	Screw	4
83	1584521	Adapter	1
84	1584243	Bolt	2
85	1584491	Sprocket	1
86	1593662	Washer	2

CAMSHAFT, CYLINDER HEAD AND MANIFOLDS (FIGURE 2-20) GM 2.4L ENGINE (S/N L177B05990D → (WITH CATALYTIC CONVERTER)) (S/N L177B06312D → (WITHOUT CATALYTIC CONVERTER))



BP090362

CAMSHAFT, CYLINDER HEAD AND MANIFOLDS
GM 2.4L ENGINE (S/N L177B05990D → (WITH CATALYTIC CONVERTER))
(S/N L177B06312D → (WITHOUT CATALYTIC CONVERTER))

ITEM	PART NO.	DESCRIPTION	QTY
	b 1603004	Long Block (GM 2.4L) (2006)	1
	c 1649486	Engine Assy (GM 2.4L) (2007-2008)	1
	4006369	Engine Assy (GM 2.4L) (2009)	1
	4006383	Engine Assy (GM 2.4L) (2010 Series)	1
1	1584493	Cap	1
2	1584495	Seal	1
3	1593665	Bolt	8
3	4014811	Bolt (Alternate Part)	6
4	1584532	Bracket	1
5	1584492	Cover	1
6	1584266	Hose Assy (PCV)	1
7	1584445	Hose	1
8	1584451	Clamp (RH)	1
9	1584442	Pcv Valve	1
10	1584444	Clamp (LH)	1
11	1584267	Hose	1
12	1584497	Gasket	1
13	1584207	Stud	4
14	1584208	Washer	4
15	1584480	Camshaft	1
15	4014817	Camshaft (2010 Series)	1
16	1584206	Bolt	6
17	1584490	Screw	4
18	1584488	Seal	1
19	1584479	Housing Assembly-Cam Shaft	1
19	1584696	Seal (Camshaft)	1
19	4014810	Housing (Camshaft) (2010 Series)	1
20	1584519	Rocker Arm	8
21	1584508	Valve Lifter	8
22	1584511	Valve Seat	8
23	1584202	Valve Stop	16
24	1584201	Retainer	8
25	1584200	Spring	25
26	1584199	Seal	8
27	1584197	Valve Seat (Intake)	8
27	1584198	Rotator (Exhaust)	4
28	1584256	Valve (Oil Filter Bypass)	1
29	1584188	Cylinder Head	1
30	1584123	Spark Plug	4
31	1584204	Stud	8
32	1584475	Gasket	1
33	1584478	Exhaust Manifold	1
34	1584474	Nut	8
35	1584196	Exhaust Valve	4
35	1702642	Exhaust Valve (Alternate Part)	4
36	1584195	Inlet Valve (Intake)	4
37	1584141	Cylinder Head Gasket	1
38	1584182	Pin	1
39	.....	Cylinder Block	1

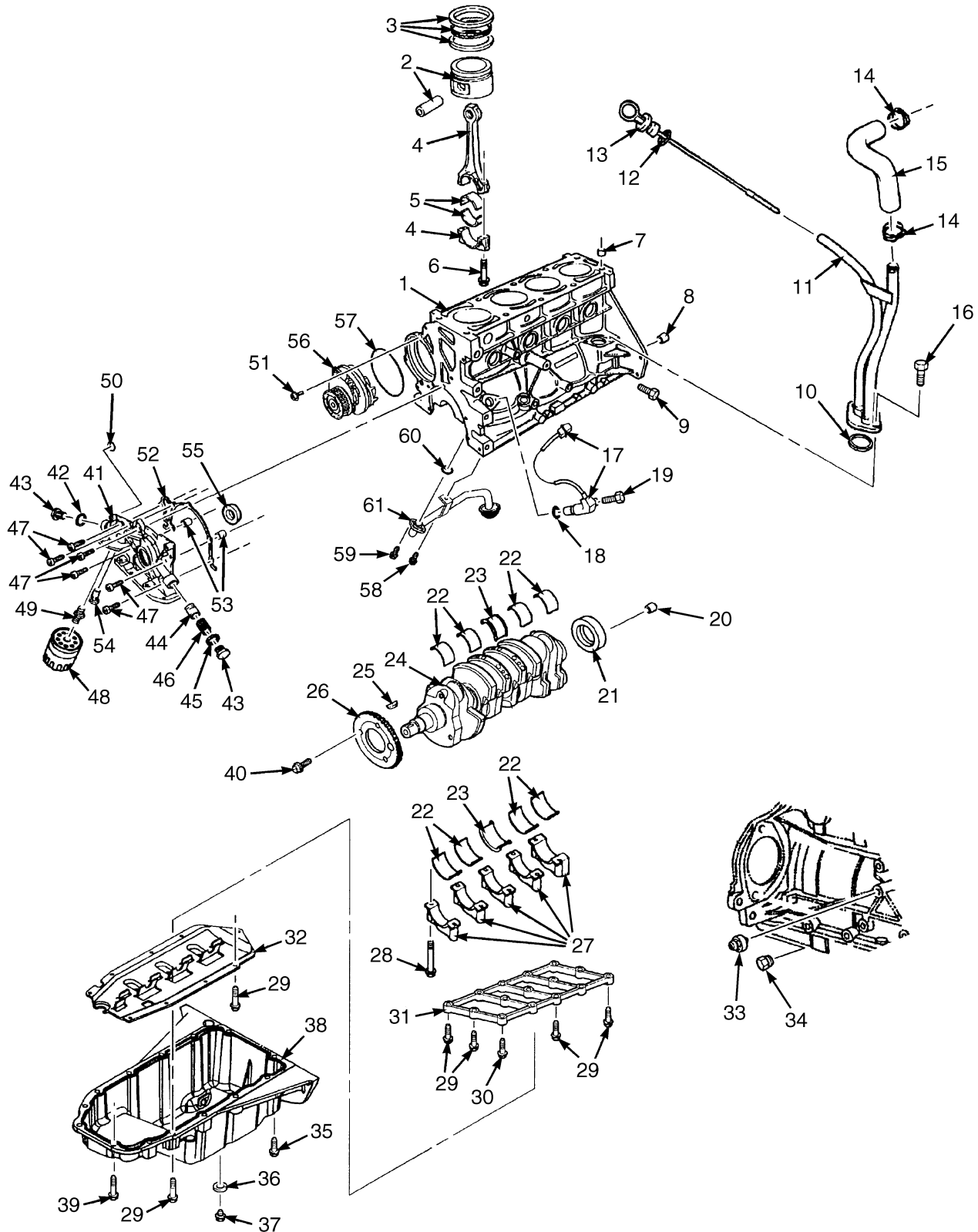
CAMSHAFT, CYLINDER HEAD AND MANIFOLDS
GM 2.4L ENGINE (S/N L177B05990D → (WITH CATALYTIC CONVERTER))
(S/N L177B06312D → (WITHOUT CATALYTIC CONVERTER))

ITEM	PART NO.	DESCRIPTION	QTY
39	1584175	Plug	1
40	1584453	Cover	1
41	1584521	Adapter	1
42	1584244	Bolt	2
43	1584505	Spacer	2
44	1584502	Sprocket	1
45	1584506	Washer	1
46	1584452		
	4014813	Bolt	5
46	1584452		
	4014813	Bolt (2010 Series)	5
47	1584458	Cover (Timing Belt)	1
48	1584507	Timing Belt	1
49	1584503	Screw	1
50	1584510	Screw	1
51	1584509	Belt Tensioner	1
52	1584522	Screw	1
53	1584498	Screw	1
53	4014814	Bolt (2010 Series)	1
54	1593662	Washer	2
55	1584491	Sprocket	1
56	302047	Screw	4
57	1584460	Stud	1
58	1584462	Screw	2
59	1584121	Thermostat	1
60	1584122	Seal	1
61	1584140	Sensor (Engine Coolant)	1
62	.....	Seal	1
63	1584463	Seal	1
64	1584462	Screw	2
66	1584459	Housing	1
66	1584203	Stud	9
67	1584481	Pin	1
68	1584474	Nut	9
69	1584472	Sensor (MAP)	1
70	.....	Seal	1
71	1584465	Intake Manifold	1
72	.....	Stud	4
73	.....	Bolt	2
74	1584464	Gasket	1
	1661438	Short Block (GM 2.4L)	1
	1659839	Cylinder Head (Complete)	1
	1702643	Cylinder Head (Complete) (Alternate Part)	1
a	1584477	Screw	5
a	1584476	Heat Shield (Exhaust Manifold)	1

FOOTNOTES:

- a** Not Illustrated
- b** → 1/2007
- c** 1/2007 →

CRANKSHAFT, PISTONS AND OIL PAN (FIGURE 2-21) GM 2.4L — LPG



BP090164

CRANKSHAFT, PISTONS AND OIL PAN
GM 2.4L – LPG

ITEM	PART NO.	DESCRIPTION	QTY
1	bc 1501695	Engine Assy-Lpg (GM 2.4L) (2005)	1
1	de 1603004	Long Block (GM 2.4L) (2006)	1
1	h 1649486	Engine Assy (GM 2.4L) (2007-2008)	1
1	4006369	Engine Assy (GM 2.4L) (2009)	1
1	4006383	Engine Assy (GM 2.4L) (2010 Series)	1
2	1593657	Piston and Pin (Standard)	4
3	1593658	Kit-Piston Ring	1
4	1584232	Piston Rod	4
4	1584239	Bolt	2
5	1584248	Piston Rod Bearing (Standard)	4
5	1584662	Kit-Bearing (0.25 O/S)	4
6	1584239	Bolt	8
7	1584182	Pin	4
8	1584183	Pin	2
9	.....	Plug	1
10	1584447	Gasket	1
11	bc 1584446	Tube	1
11	gf 1632225	Tube	1
12	.....	Seal	1
13	bc 1584265	Dipstick	1
13	gf 1632226	Indicator	1
14	1584451	Clamp (RH)	2
15	1584450	Hose	1
16	1584449	Screw	2
17	1584514	Sensor (Crankshaft Position)	1
18	.....	Seal	1
19	1584227	Bolt	4
20	.....	Bearing	1
21	1584533	Seal (CR/SHF RR OIL)	1
21	4014809	Oil Seal (2010 Series)	1
22	.....	Crankshaft Bearing	8
23	.....	Thrust Bearing	2
24	1584209	Crankshaft	1
25	1584504	Key	1
26	1584222	Gear	1
27	.....	Cap	4
28	1584178	Screw	10
29	1584243	Bolt	24
30	1593653	Bolt	1
31	1584185	Plate	1
32	1584241	Baffle	1
33	1593661	Sensor (Knock)	1
34	1358026	Plug	1
35	1584242	Bolt	2
36	1597697	Oil Seal	1
37	1597698	Drain Plug	1
38	1584240	Oil Pan	1
39	1584244	Bolt	4
40	1584227	Bolt	4
41	1584247	Oil Pump	1

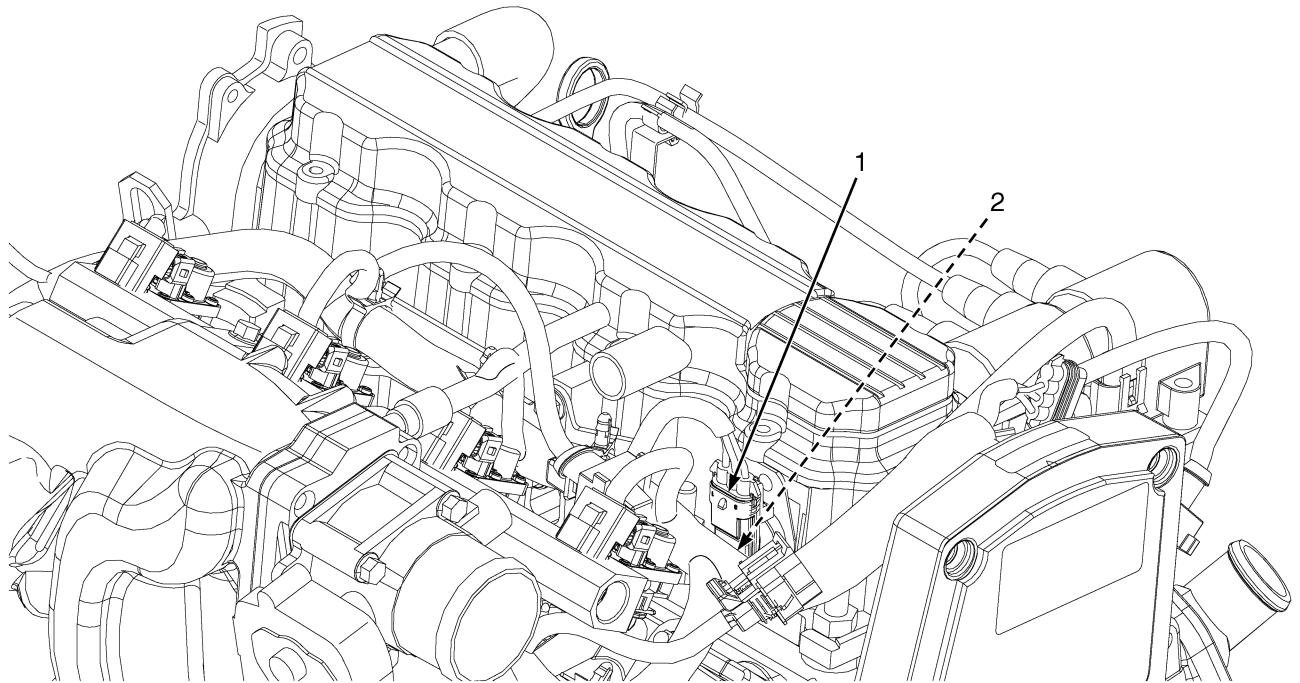
CRANKSHAFT, PISTONS AND OIL PAN GM 2.4L – LPG

ITEM	PART NO.	DESCRIPTION	QTY
42	1584262	Seal	1
43	1584257	Bolt	2
44	1584254	Valve	1
45	1584261	Gasket	1
46	1584255	Spring	1
47	1584245	Bolt	6
48	1584120	Oil Filter	1
49	1584252	Fitting	1
50	1584187	Washer	1
50	4014816	Seal (2010 Series)	1
51	1584455	Screw	3
52	1584246	Gasket	2
53	1584184	Pin	1
54	1584256	Valve (Oil Filter Bypass)	1
55	1584260	Seal (CR/SHF FRT OIL)	1
56	1584456	Water Pump	1
57	1584457	Seal	1
58	1584243	Bolt	1
59	1593660	Bolt	2
60	1584263	Seal	3
61	1584264	Pipe (Oil Pump Suction)	1
	agf 1584251	Cover (Oil Pump)	1
	agf 1584253	Bolt (Oil Pump Cover)	5
	1661438	Short Block (GM 2.4L)	1
	a 1584477	Screw	5
	a 1584476	Heat Shield (Exhaust Manifold)	1
66	1593655		
	1584618	Kit-Crankshaft Bearing (Standard)	1
67	1593656		
	1584619	Kit-Bearing (0.25 O/S)	1

FOOTNOTES:

- | | | | |
|----------|---|----------|--|
| a | Not Illustrated | e | S/N L177B06312D ↔ 1/2007 Without Catalytic Converter |
| b | → S/N L177B05989D With Catalytic Converter | f | S/N L177B06542D → (Without Catalytic Converter) |
| c | → S/N L177B06311D (Without Catalytic Converter) | g | S/N L177B05990D → With Catalytic Converter |
| d | S/N L177B05990D ↔ 1/2007 With Catalytic Converter | h | 1/2007 → |

**CAM POSITION SENSOR (FIGURE 2-22)
GM 2.4L GASOLINE AND LPG — 2010 SERIES**



BP090456

ITEM	PART NO.	DESCRIPTION	QTY
1	4031346	Camshaft Position Sensor	1
2	1584452		
	4014813	Bolt	2

3

ENGINE ASSEMBLY - MAZDA

**SECTION 3
ENGINE ASSEMBLY - MAZDA**

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COOLING SYSTEM
MAZDA 2.0L AND 2.2L, LPG, SERPENTINE RADIATOR – BASIC POWERSHIFT TRANSMISSION
 (→ S/N L177B10031D)

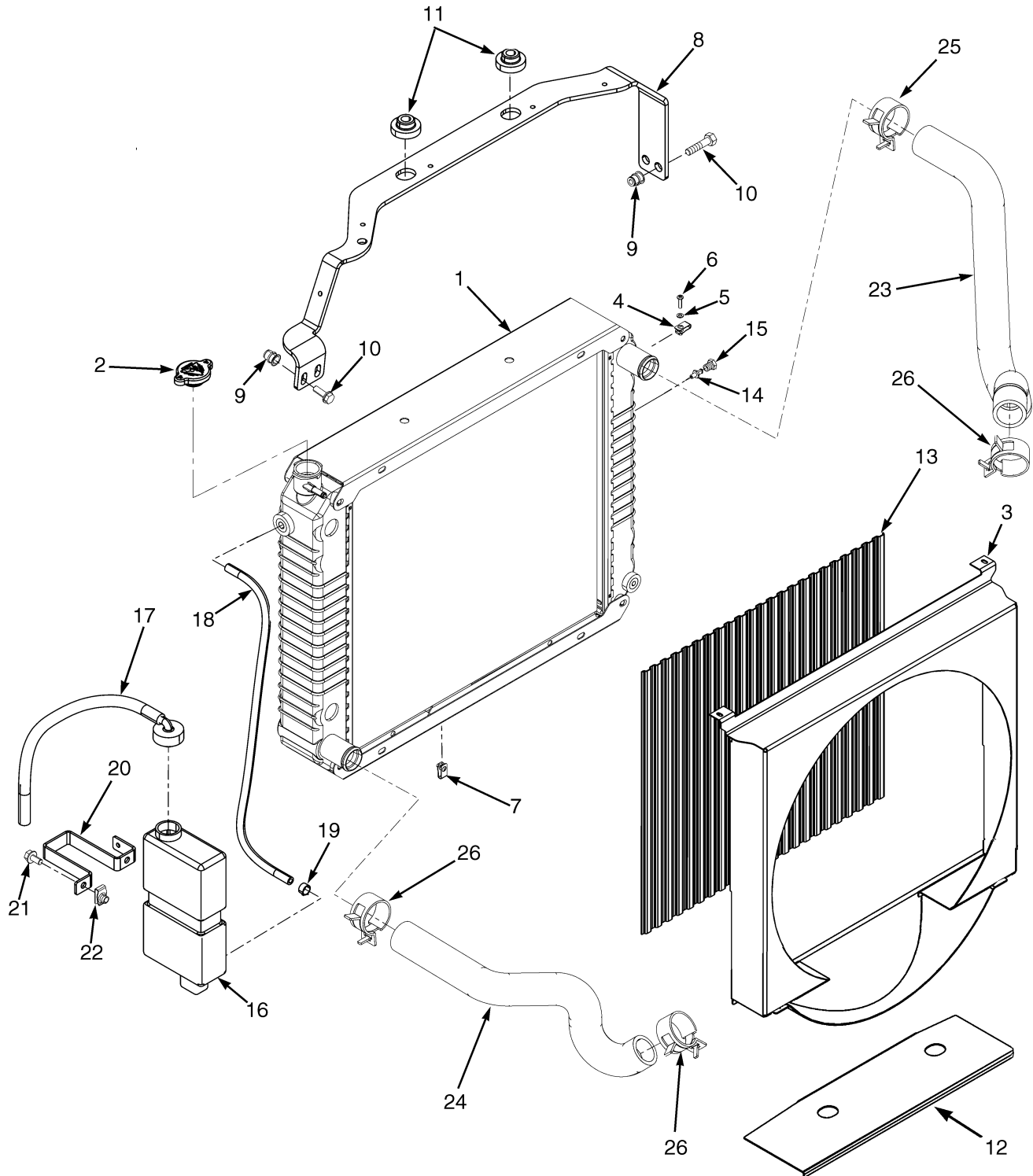
ITEM	PART NO.	DESCRIPTION	QTY
1	2054879	Radiator	1
2	1528495	Drain Plug	1
3	1352140	Radiator Cap	1
4	1593356	Shroud	1
5	1535257	Nut	2
6	320154	Washer	2
7	302023	Screw	2
8	1329271	Clip	2
9	1588508	Bracket (Radiator)	1
10	1530243	Insert	4
11	1583611	Capscrew	4
12	1529787	Isolator	4
13	1565691	Exhaust Shield	1
14	2069698	Radiator Hose (Lower)	1
15	2085041	Radiator Hose (Upper)	1
16	1501999	Hose Clamp	1
17	1527982	Hose Clamp	3
18	1548497	Screen	1
19	1347026	Reservoir	1
20	345455	Outlet Assembly	1
20	336550	Bushing	1
20	345453	Outlet (Reservoir)	1
20	345454	Cap	1
20	339735	Hose	1
21	1567674	Hose	1
22	369815	Clamp	2
23	1531167	Bracket	1
24	1527879	Capscrew	2
25	1480237	Nut	2
26	1531404	Sensor (Low Coolant Level)	1
27	a 14385	Fitting	1

FOOTNOTES:

a Without Low Coolant Level Sensor

COOLING SYSTEM (FIGURE 3-2)

MAZDA 2.0L AND 2.2L, LPG, SQUARE WAVE RADIATOR — BASIC POWERSHIFT TRANSMISSION, WITH INTERNAL AIR OIL COOLER (→ S/N L177B10031D)



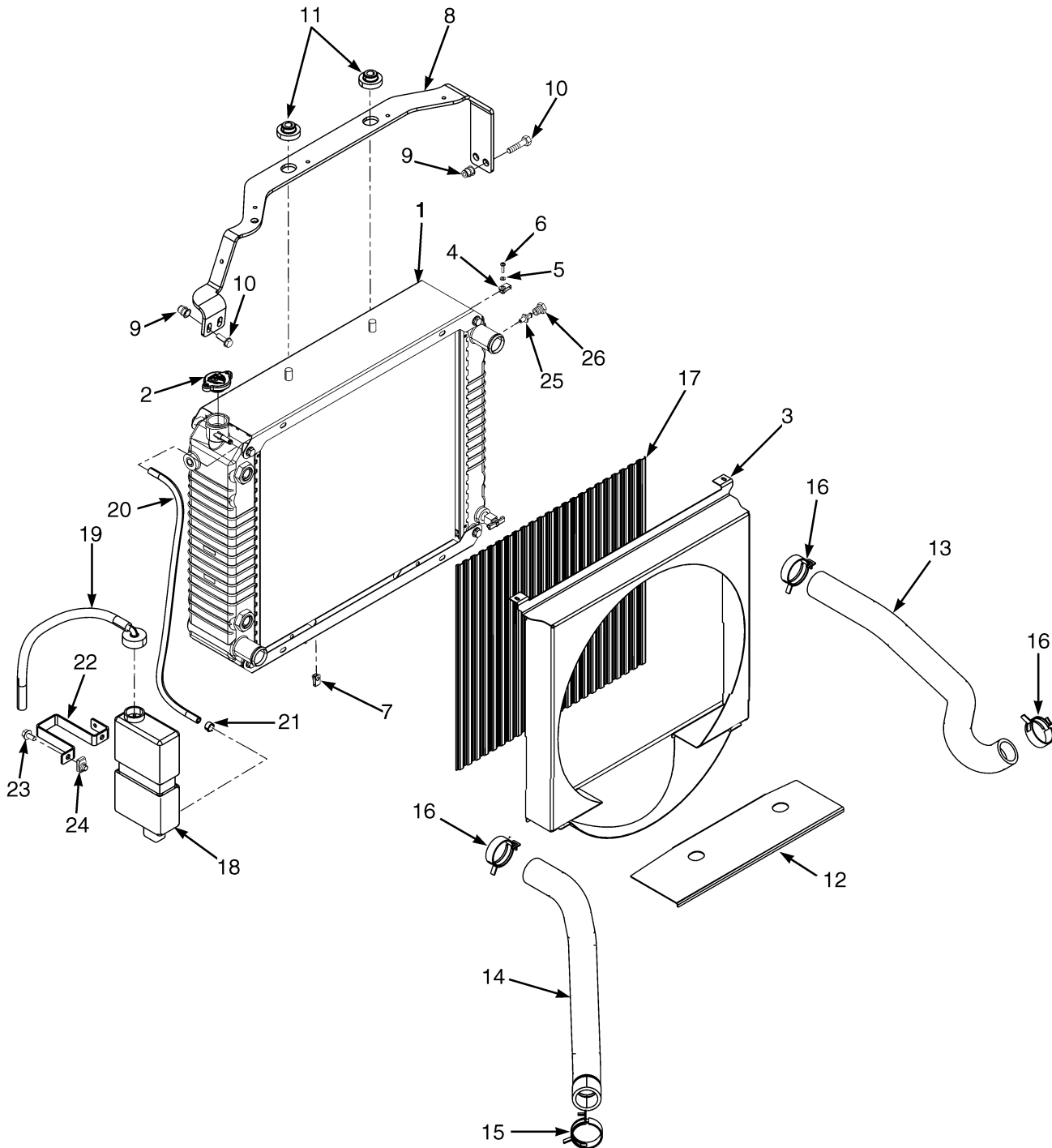
HP060037

COOLING SYSTEM**MAZDA 2.0L AND 2.2L, LPG, SQUARE WAVE RADIATOR – BASIC POWERSHIFT TRANSMISSION, WITH
INTERNAL AIR OIL COOLER (→ S/N L177B10031D)**

ITEM	PART NO.	DESCRIPTION	QTY
1	2056870	Radiator	1
1	1569079	Drain Valve (w/Thread Wrap)	1
2	1352140	Radiator Cap	1
3	1565391	Shroud	1
4	1535257	Nut	2
5	320154	Washer	2
6	302023	Screw	2
7	1329271	Clip	2
8	1588507	Bracket (Radiator)	1
9	1530243	Insert	4
10	1583611	Capscrew	4
11	1529787	Isolator	4
12	1565691	Exhaust Shield	1
13	1548497	Screen	1
14	1531404	Sensor (Low Coolant Level)	1
15	a 14385	Fitting	1
16	1347026	Reservoir	1
17	345455	Outlet Assembly	1
17	345453	Outlet (Reservoir)	1
17	345454	Cap	1
17	336550	Bushing	1
17	339735	Hose	1
18	1567674	Hose	1
19	369815	Clamp	2
20	1531167	Bracket	1
21	1527879	Capscrew	2
22	1480237	Nut	2
23	2085041	Radiator Hose (Upper)	1
24	2069698	Radiator Hose (Lower)	1
25	1501999	Hose Clamp	1
26	1527982	Hose Clamp	3

FOOTNOTES:**a** Without Low Coolant Level Sensor

COOLING SYSTEM (FIGURE 3-3) MAZDA 2.0L AND 2.2L, LPG, SQUARE WAVE RADIATOR — ELECTRONIC CONTROL TRANSMISSION, WITH INTERNAL OIL COOLER (→ S/N L177B10031D)



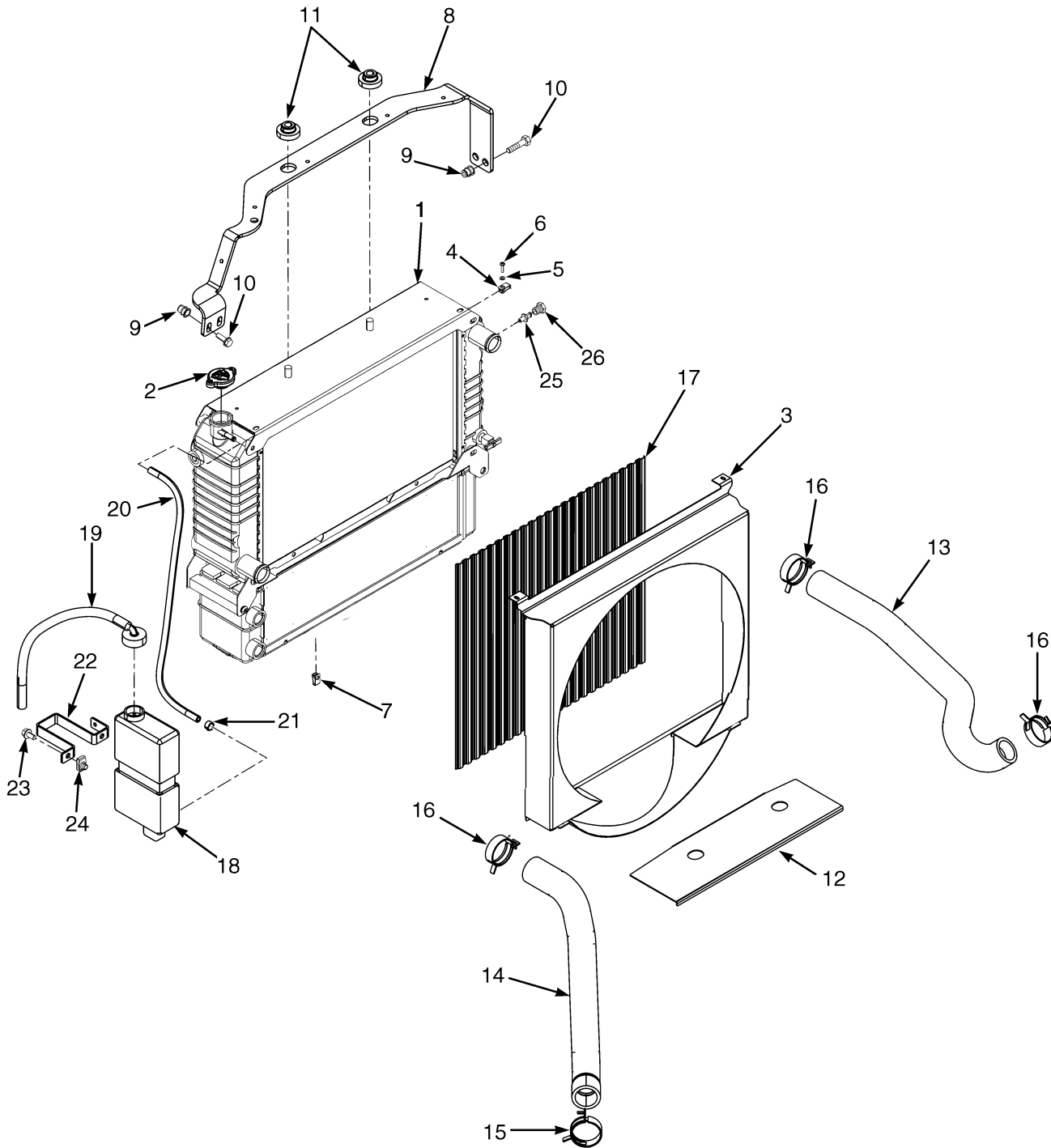
HP060046

COOLING SYSTEM**MAZDA 2.0L AND 2.2L, LPG, SQUARE WAVE RADIATOR – ELECTRONIC CONTROL TRANSMISSION, WITH
INTERNAL OIL COOLER (→ S/N L177B10031D)**

ITEM	PART NO.	DESCRIPTION	QTY
1	2071615	Radiator	1
1	1569079	Drain Valve (w/Thread Wrap)	1
1	.....	Capscrew	8
2	1352140	Radiator Cap	1
3	1594057	Shroud	1
4	1535257	Nut	2
5	320154	Washer	2
6	302023	Screw	2
7	1551663	Clip	2
8	1585317	Bracket (Radiator)	1
9	1530243	Insert	4
10	1583611	Capscrew	4
11	1529787	Isolator	4
12	1565692	Exhaust Shield	1
13	2069704		
	2085042	Radiator Hose (Upper)	1
14	2069698	Radiator Hose (Lower)	1
15	1501999	Hose Clamp	1
16	1527982	Hose Clamp	3
17	1582078	Screen	1
18	1347026	Reservoir	1
19	345455	Outlet Assembly	1
19	336550	Bushing	1
19	345453	Outlet (Reservoir)	1
19	345454	Cap	1
19	339735	Hose	1
20	1567674	Hose	1
21	369815	Clamp	2
22	1531167	Bracket	1
23	1527879	Capscrew	2
24	1480237	Nut	2
25	1531404	Sensor (Low Coolant Level)	1
26	a 14385	Fitting	1

FOOTNOTES:**a** Without Low Coolant Level Sensor

COOLING SYSTEM (FIGURE 3-4) MAZDA 2.0L AND 2.2L, SQUARE WAVE RADIATOR — ELECTRONIC CONTROL TRANSMISSION, WITH EXTERNAL OIL COOLER (→ S/N L177B10031D)



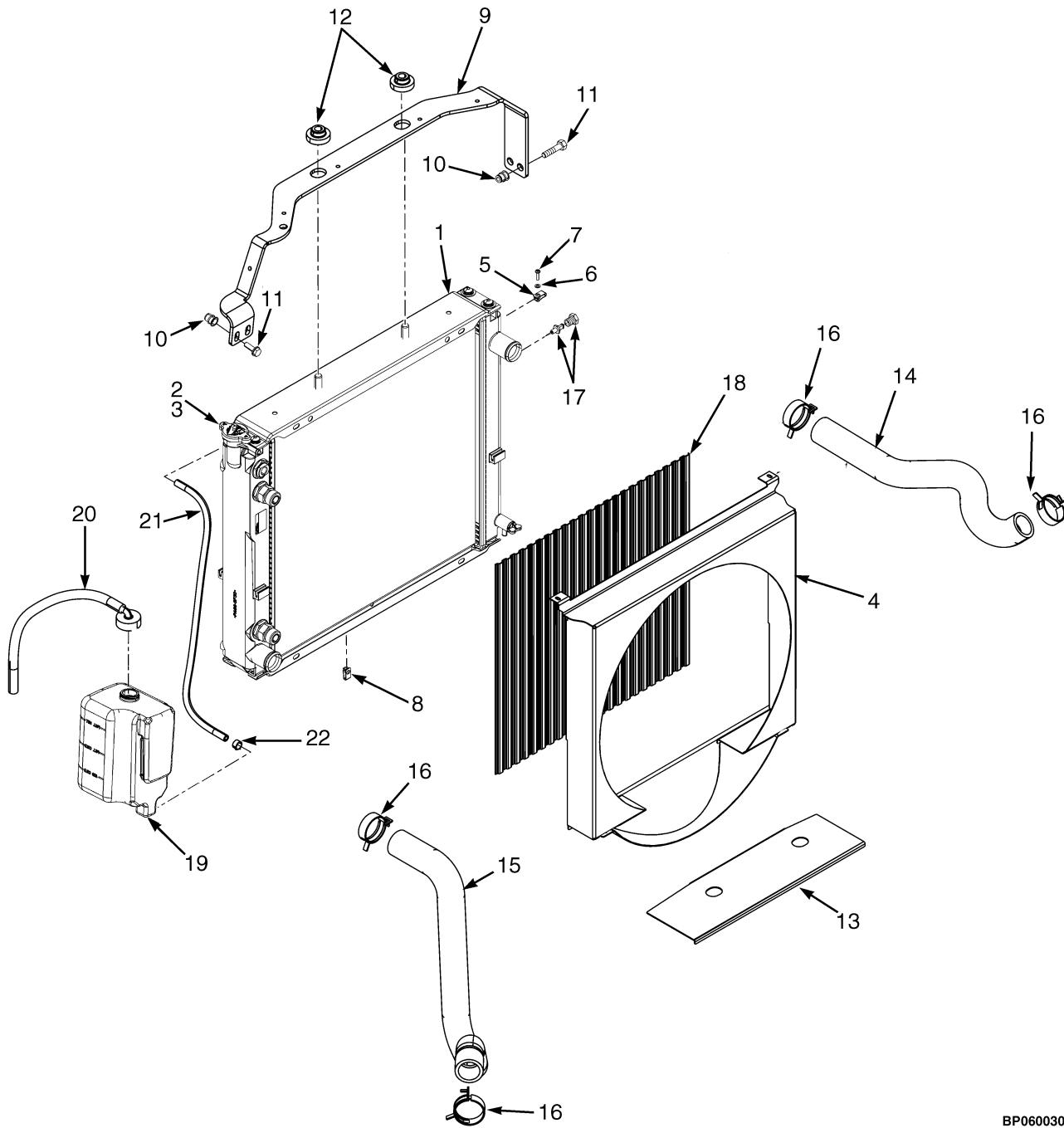
COOLING SYSTEM**MAZDA 2.0L AND 2.2L, SQUARE WAVE RADIATOR – ELECTRONIC CONTROL TRANSMISSION, WITH EXTERNAL OIL COOLER (→ S/N L177B10031D)**

ITEM	PART NO.	DESCRIPTION	QTY
1	2074789	Radiator	1
1	1590917	Radiator	1
1	1590918	Oil Cooler	1
1	1597765	Washer	4
1	1597766	Screw	4
2	1352140	Radiator Cap	1
3	1582074	Shroud	1
4	1535257	Nut	2
5	320154	Washer	2
6	302023	Screw	2
7	1551663	Clip	2
8	1585317	Bracket (Radiator)	1
9	1530243	Insert	4
10	1583611	Capscrew	4
11	1529787	Isolator	4
12	1565692	Exhaust Shield	1
13	2069704		
	2085042	Radiator Hose (Upper)	1
14	2069702	Radiator Hose (Lower)	1
15	1501999	Hose Clamp	1
16	1527982	Hose Clamp	3
17	1582078	Screen	1
18	1347026	Reservoir	1
19	345455	Outlet Assembly	1
19	336550	Bushing	1
19	345453	Outlet (Reservoir)	1
19	345454	Cap	1
19	339735	Hose	1
20	1567674	Hose	1
21	369815	Clamp	2
22	1531167	Bracket	1
23	1527879	Capscrew	2
24	1480237	Nut	2
25	1531404	Sensor (Low Coolant Level)	1
26	a 14385	Fitting	1

FOOTNOTES:

a Without Low Coolant Sensor

COOLING SYSTEM (FIGURE 3-5) MAZDA 2.0L AND 2.2L, SERPENTINE RADIATOR — BASIC POWERSHIFT TRANSMISSION (S/N L177B10032D →)



BP060030

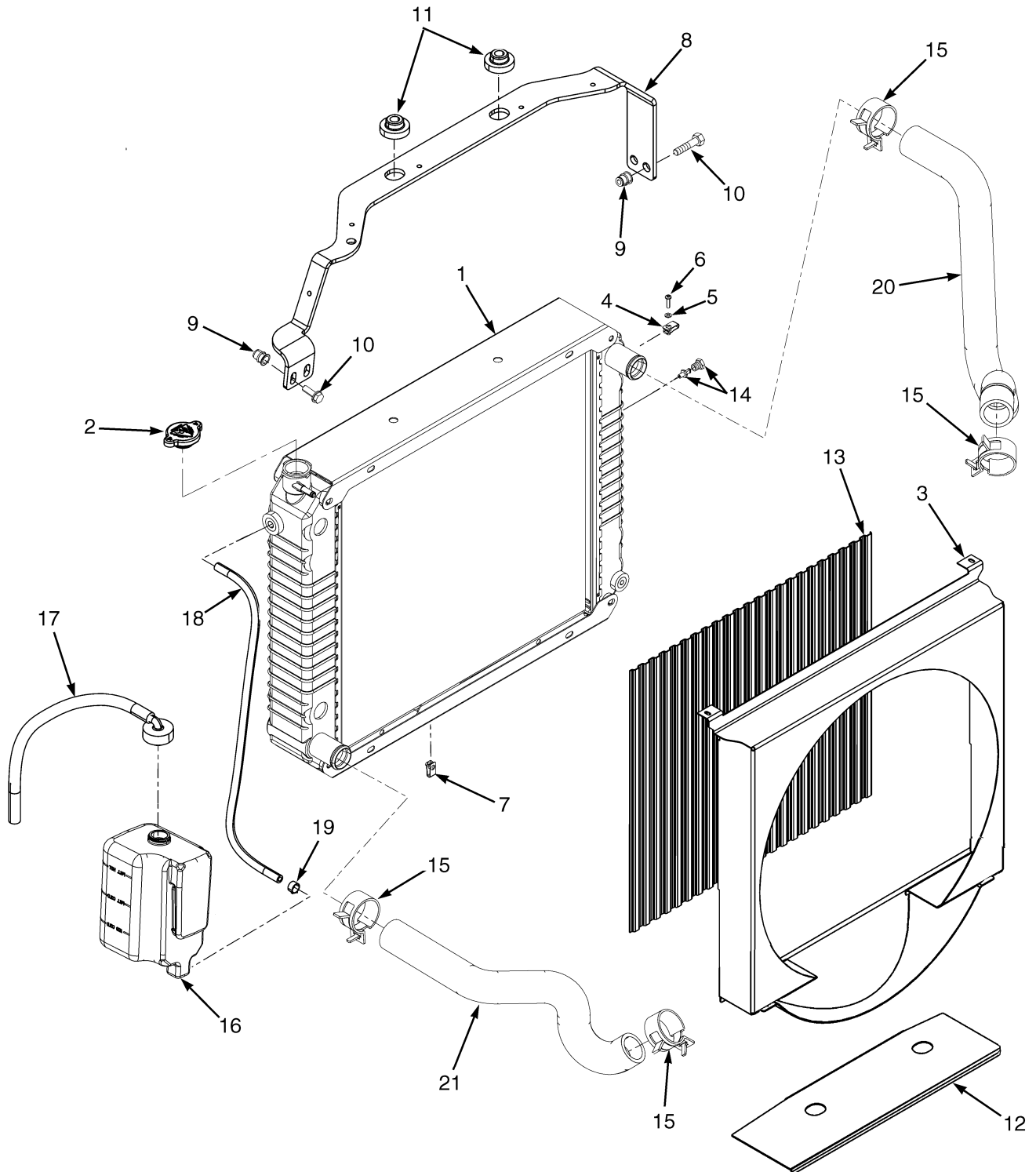
COOLING SYSTEM
MAZDA 2.0L AND 2.2L, SERPENTINE RADIATOR – BASIC POWERSHIFT TRANSMISSION
(S/N L177B10032D →)

ITEM	PART NO.	DESCRIPTION	QTY
1	2054879	Radiator	1
2	1528495	Drain Plug	1
3	1352140	Radiator Cap	1
4	1593356	Shroud	1
5	1535257	Nut	2
6	320154	Washer	2
7	302023	Screw	2
8	1329271	Clip	2
9	1588508	Bracket (Radiator)	1
10	1530243	Insert	4
11	1583611	Capscrew	4
12	1529787	Isolator	4
13	1565691	Exhaust Shield	1
14	2085041	Radiator Hose (Upper)	1
15	2088675	Radiator Hose (Lower)	1
16	369804	Clamp	4
17	1531404	Sensor (Low Coolant Level)	1
17	a 14385	Fitting	1
17	246108	Sealant	AR
18	1548497	Screen	1
19	1633307	Reservoir	1
20	345455	Outlet Assembly	1
20	336550	Bushing	1
20	345453	Outlet (Reservoir)	1
20	345454	Cap	1
20	339735	Hose	1
21	1567674	Hose	1
22	369815	Clamp	2

FOOTNOTES:

- a** Without Low Coolant Level Sensor

COOLING SYSTEM (FIGURE 3-6) MAZDA 2.0L AND 2.2L, SQUARE WAVE RADIATOR — BASIC POWERSHIFT TRANSMISSION (S/N L177B10032D →)



BP060031

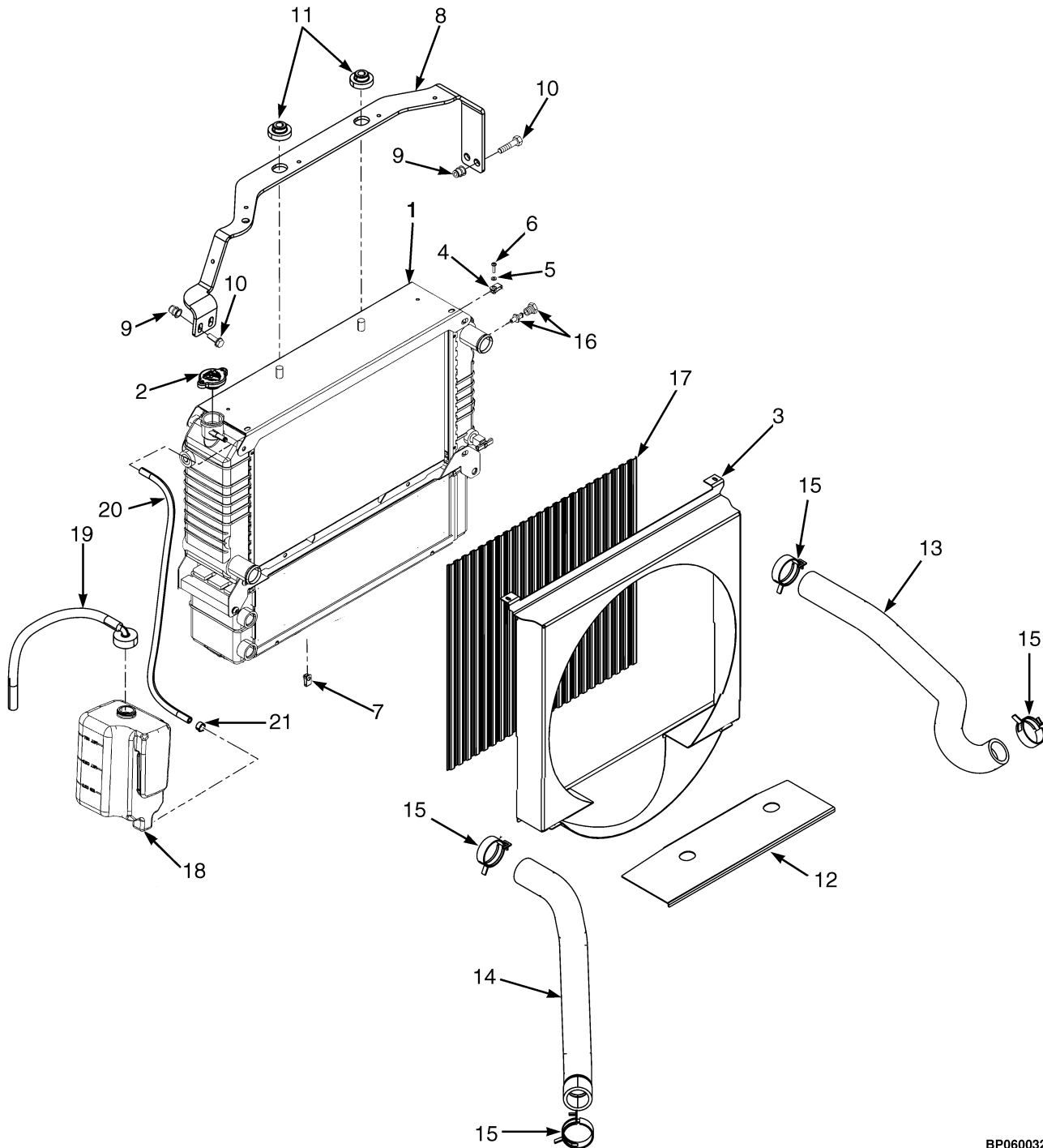
COOLING SYSTEM
MAZDA 2.0L AND 2.2L, SQUARE WAVE RADIATOR – BASIC POWERSHIFT TRANSMISSION
(S/N L177B10032D →)

ITEM	PART NO.	DESCRIPTION	QTY
1	2056870	Radiator	1
1	1569079	Drain Valve (w/Thread Wrap)	1
2	1352140	Radiator Cap	1
3	1565391	Shroud	1
4	1535257	Nut	2
5	320154	Washer	2
6	302023	Screw	2
7	1329271	Clip	2
8	1588507	Bracket (Radiator)	1
9	1530243	Insert	4
10	1583611	Capscrew	4
11	1529787	Isolator	4
12	1565691	Exhaust Shield	1
13	1548497	Screen	1
14	1531404	Sensor (Low Coolant Level)	1
14	a 14385	Fitting	1
14	246108	Sealant	AR
15	369804	Clamp	4
16	1633307	Reservoir	1
17	345455	Outlet Assembly	1
17	345453	Outlet (Reservoir)	1
17	345454	Cap	1
17	336550	Bushing	1
17	339735	Hose	1
18	1567674	Hose	1
19	369815	Clamp	2
20	2085041	Radiator Hose (Upper)	1
21	2088675	Radiator Hose (Lower)	1

FOOTNOTES:

a Without Low Coolant Level Sensor

COOLING SYSTEM (FIGURE 3-7) MAZDA 2.0L AND 2.2L, SQUARE WAVE RADIATOR — ELECTRONIC TRANSMISSION, EXTERNAL OIL COOLER, OR WET BRAKE (S/N L177B10032D →)



BP060032

COOLING SYSTEM**MAZDA 2.0L AND 2.2L, SQUARE WAVE RADIATOR – ELECTRONIC TRANSMISSION, EXTERNAL OIL COOLER, OR WET BRAKE (S/N L177B10032D →)**

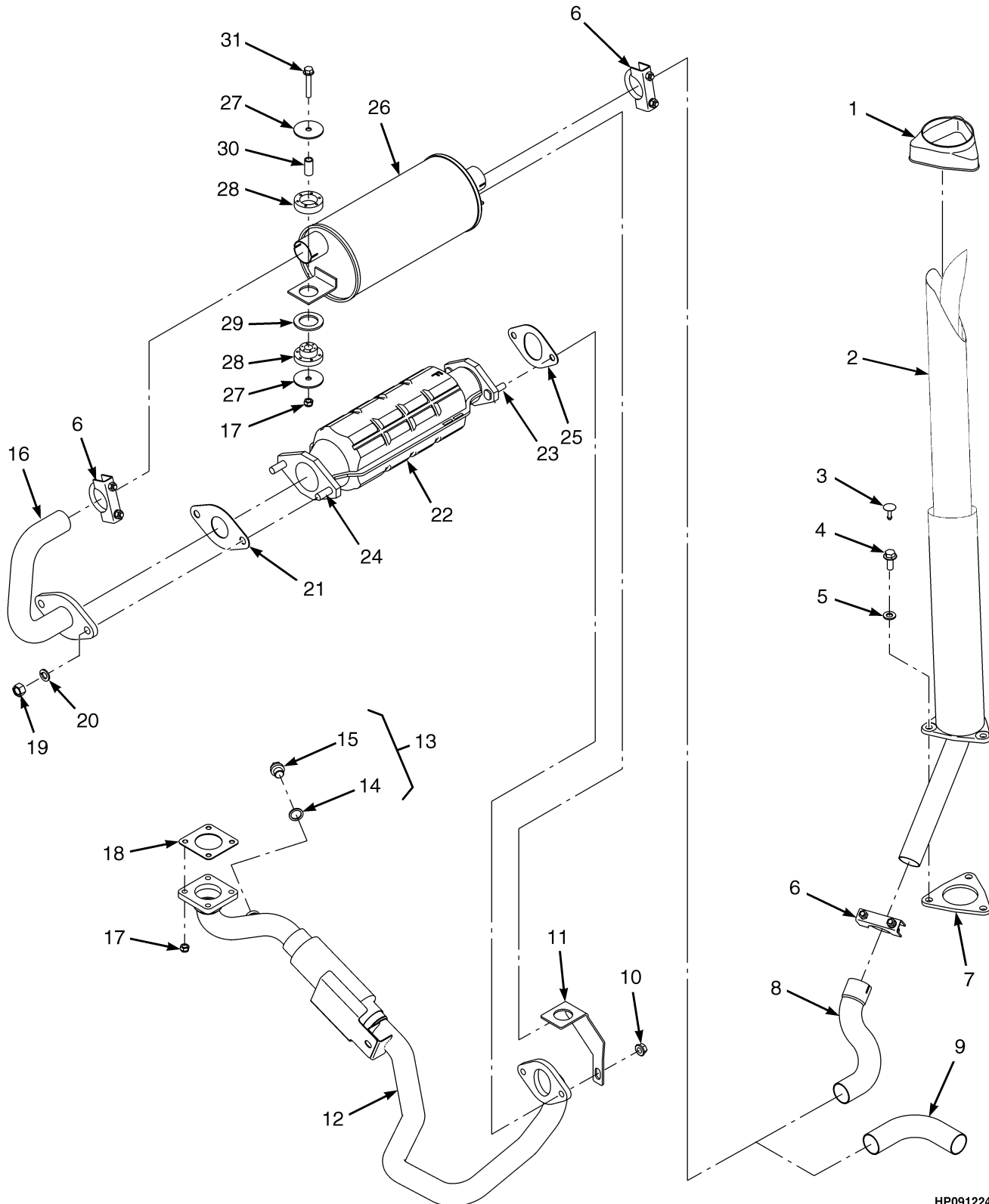
ITEM	PART NO.	DESCRIPTION	QTY
1	b 2074789	Radiator	1
1	b 1590917	Radiator	1
1	b 1590918	Oil Cooler	1
1	b 1597765	Washer	4
1	b 1597766	Screw	4
1	c 4603553	Radiator (Assembly)	1
1	c 4038259	Radiator	1
1	c 4038263	Oil Cooler	1
1	c 4038264	Drain Valve	1
1	c 4038265	Nut	2
1	c 4038266	Bolt	8
1	c 4038267	Bolt	4
2	1352140	Radiator Cap	1
3	1594057	Shroud	1
4	1535257	Nut	2
5	320154	Washer	2
6	302023	Screw	2
7	1551663	Clip	2
8	1588507	Bracket (Radiator)	1
9	1530243	Insert	4
10	1583611	Capscrew	4
11	1529787	Isolator	4
12	1565691	Exhaust Shield	1
13	2069704		
	2085042	Radiator Hose (Upper)	1
14	2088676	Radiator Hose (Lower)	1
15	369804	Clamp	4
16	1531404	Sensor (Low Coolant Level)	1
16	a 14385	Fitting	1
16	246108	Sealant	AR
17	1582078	Screen	1
18	1633307	Reservoir	1
19	345455	Outlet Assembly	1
19	336550	Bushing	1
19	345453	Outlet (Reservoir)	1
19	345454	Cap	1
19	339735	Hose	1
20	1567674	Hose	1
21	369815	Clamp	2

FOOTNOTES:

a Without Low Coolant Sensor
b → PENDING PER ECN 134244

c PENDING PER ECN 134244 →

EXHAUST SYSTEM (FIGURE 3-8) MAZDA 2.0L AND 2.2L LPG — WITH AND WITHOUT CATALYTIC CONVERTER (→ S/N L177B05188D (WITHOUT CATALYTIC CONVERTER))



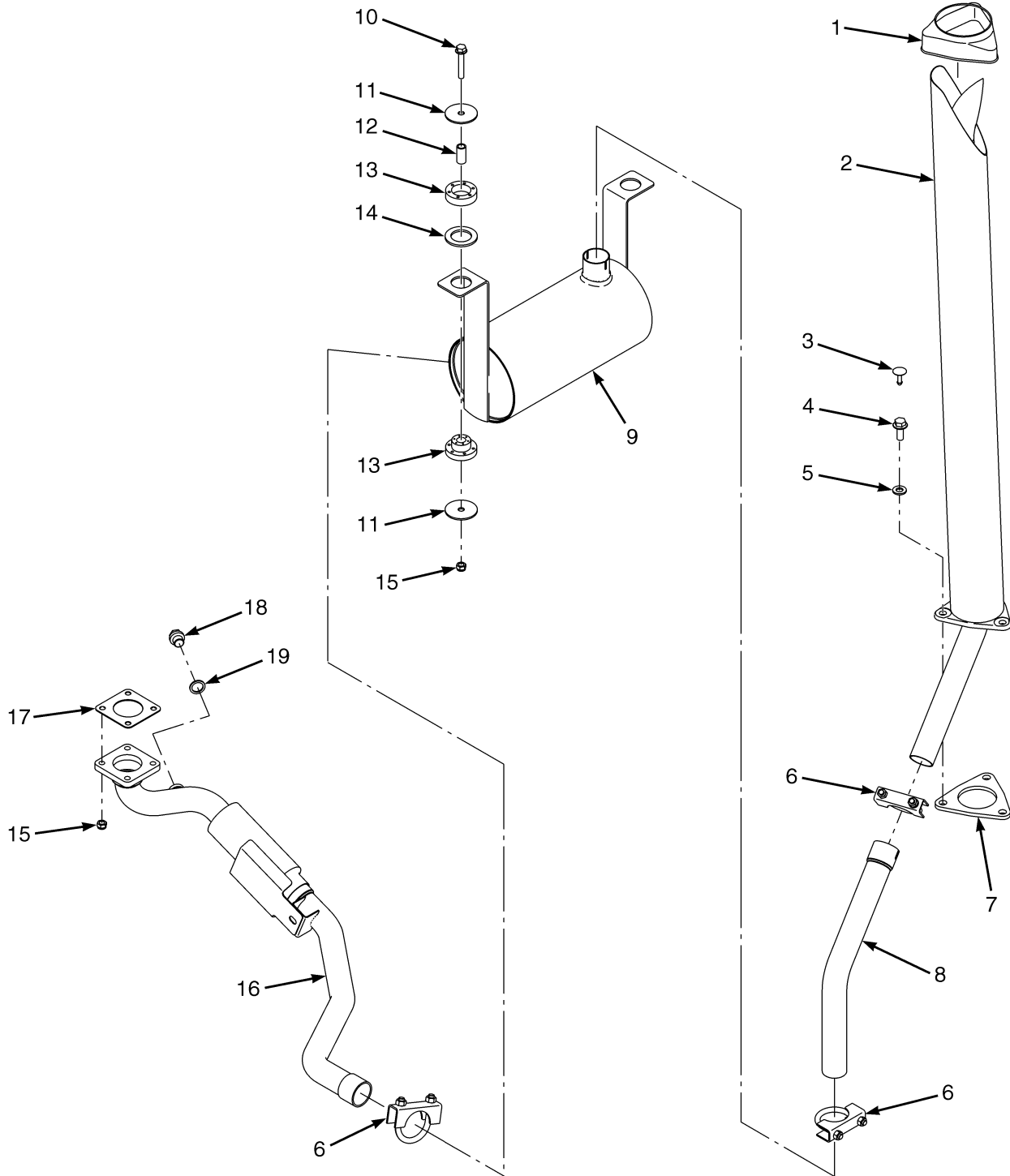
HP091224

EXHAUST SYSTEM
MAZDA 2.0L AND 2.2L LPG – WITH AND WITHOUT CATALYTIC CONVERTER
 (→ S/N L177B05188D (WITHOUT CATALYTIC CONVERTER))

KEY:**A: With Catalytic Converter****B: Without Catalytic Converter**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2021394	Cover	1	1
2	1646827	Tail Pipe	1	1
3	1347045	Fastener	1	1
4	1510117	Capscrew	1	1
5	320159	Washer	1	1
6	68968	Clamp	2	2
7	1533639	Cover	1	1
8	1533863	Exhaust Pipe (Overhead)	1	1
9	1589312	Exhaust Pipe (Counterweight)	1	1
10	1460477	Nut	2	..
11	1532523	Bracket	1	..
12	1542670	Exhaust Pipe	1	..
12	1566515	Exhaust Pipe .....	..	1
13	1396518	Plug	1	1
14	1509103	Ring (Copper)	1	1
15	1509104	Plug	1	1
16	1534174	Exhaust Pipe	1	..
17	1582222	Locknut	4	4
18	1528937	Gasket	1	1
18	1338308	Gasket (Alternate Part)	1	1
19	1469405	Nut	2	..
20	292683	Lockwasher	2	..
21	1469379	Gasket	1	..
22	1560278	Catalytic Converter	1	..
23	1495501	Bolt	2	..
23	1495502	Bolt	2	..
25	1547712	Gasket	1	..
26	2060957	Muffler	1	1
27	1528938	Washer	4	4
28	1528930	Mount	2	2
29	1532585	Washer	1	1
30	1528934	Spacer	2	2
31	1510115	Capscrew	2	2

EXHAUST SYSTEM (FIGURE 3-9) MAZDA 2.0L AND 2.2L LPG — WITHOUT CATALYTIC CONVERTER (S/N L177B05189D ↔ S/N L177B12224D)

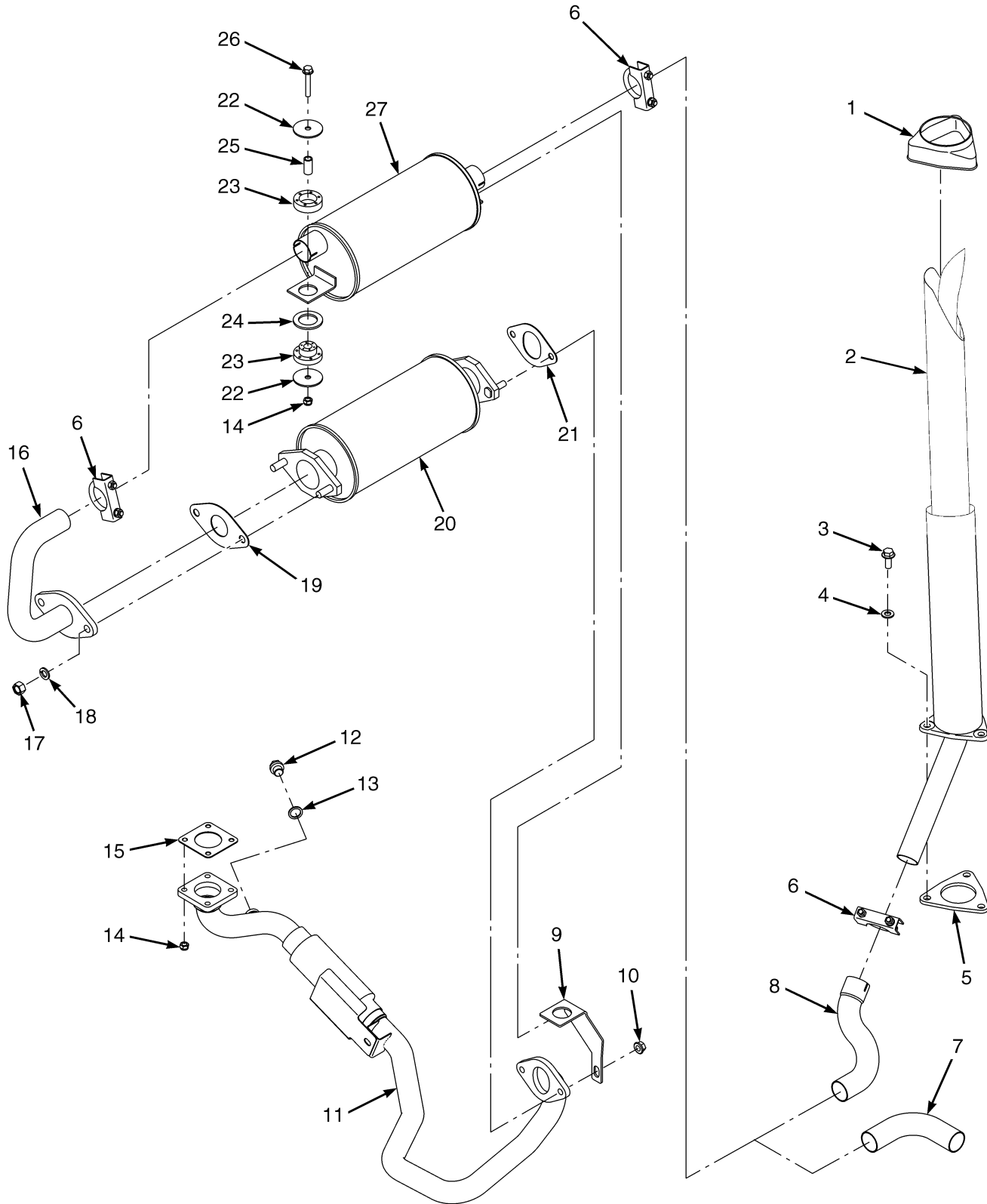


BP110043

EXHAUST SYSTEM
MAZDA 2.0L AND 2.2L LPG – WITHOUT CATALYTIC CONVERTER
(S/N L177B05189D ↔ S/N L177B12224D)

ITEM	PART NO.	DESCRIPTION	QTY
1	2021394	Cover	1
2	1646827	Tail Pipe	1
3	1347045	Fastener	1
4	1510117	Capscrew	1
5	320159	Washer	1
6	68968	Clamp	3
7	1533639	Cover	1
8	1567020	Exhaust Pipe	1
9	2075554	Muffler (Exhaust)	1
10	1510115	Capscrew	2
11	1528938	Washer	4
12	1528934	Spacer	2
13	1528930	Mount	2
14	1532585	Washer	2
15	1582222	Locknut	8
16	1625174	Exhaust Pipe	1
17	1528937	Gasket	1
17	1338308	Gasket (Alternate Part)	1
18	1396518	Plug	1
18	1509104	Plug	1
19	1509103	Ring (Copper)	1

EXHAUST SYSTEM (FIGURE 3-10) MAZDA 2.0L AND 2.2L LPG — WITHOUT CATALYTIC CONVERTER (S/N L177B12225D →)



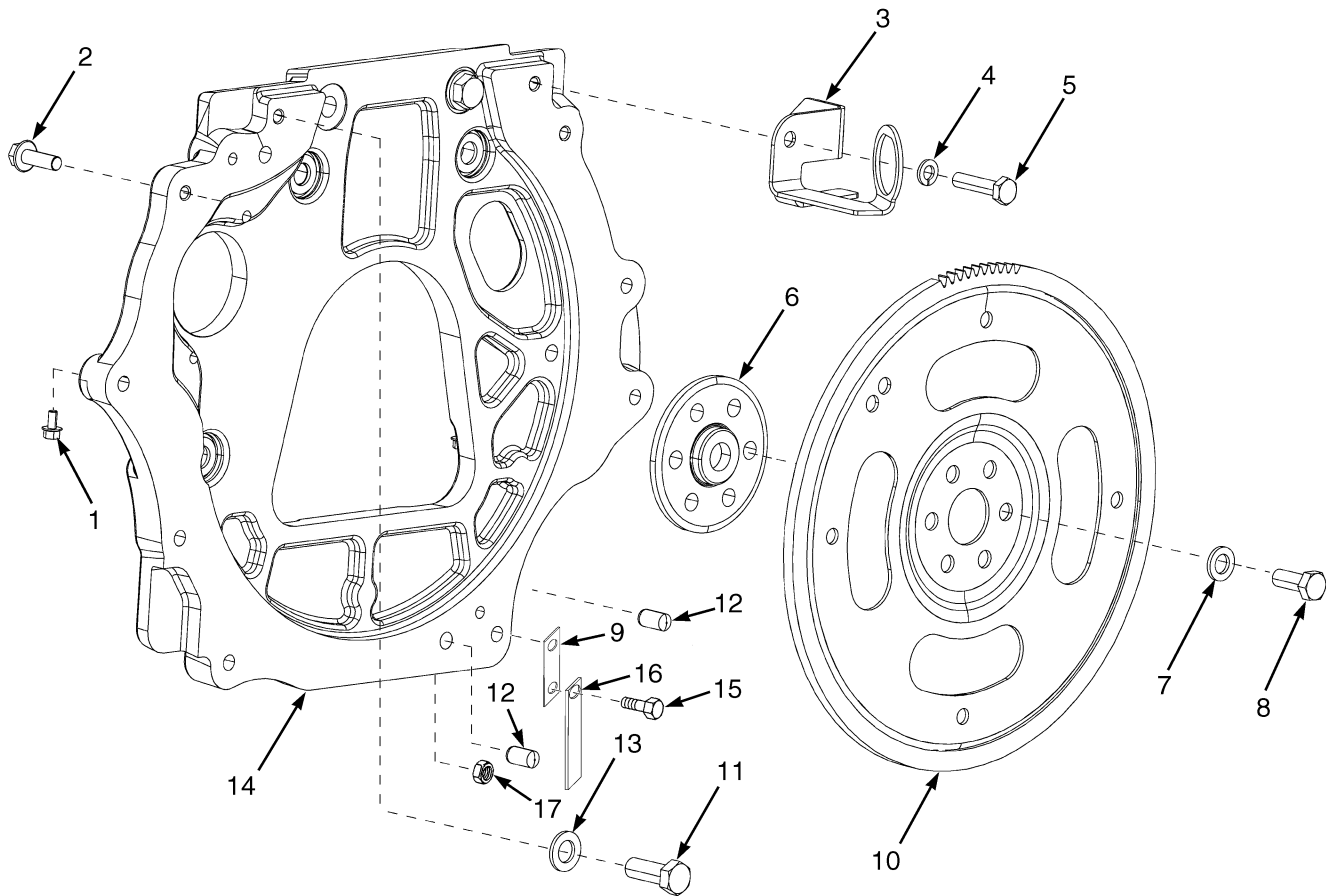
BP110044

EXHAUST SYSTEM**MAZDA 2.0L AND 2.2L LPG – WITHOUT CATALYTIC CONVERTER (S/N L177B12225D →)**

ITEM	PART NO.	DESCRIPTION	QTY
1	2021394	Cover	1
2	1646827	Tail Pipe	1
2	4008736	Tail Pipe (Alternate Part)	1
3	1510117	Capscrew	3
4	320159	Washer	3
5	1533639	Cover	1
6	b 68968	Clamp	3
6	h 63117	Clamp	3
7	1589312	Exhaust Pipe (Counterweight)	1
8	1533863	Exhaust Pipe (Overhead)	1
9	1532523	Bracket	1
10	1460477	Nut	2
11	a 1542670	Exhaust Pipe	1
11	d 1650664	Exhaust Pipe	1
11	e 1687707	Exhaust Pipe	1
	4020976	Exhaust Pipe	1
11	g 4610657	Exhaust Pipe	1
11	1650662	Exhaust Shield	1
11	1566420	Nut	2
11	1534417	Capscrew	2
12	1396518	Plug	1
12	1509104	Plug	1
13	1509103	Ring (Copper)	1
14	1582222	Locknut	4
15	1528937	Gasket	1
15	1338308	Gasket (Alternate Part)	1
16	1534174	Exhaust Pipe	1
17	1469405	Nut	2
18	292683	Lockwasher	2
19	1469379	Gasket	1
19	1677491	Gasket (Alternate Part)	1
20	2092338	Muffler	1
21	1547712	Gasket	1
21	1677490	Gasket (Alternate Part)	1
22	1528938	Washer	4
23	1528930	Mount	2
24	1532585	Washer	1
25	1649471	Spacer	2
26	1510115	Capscrew	2
27	c 2060957	Muffler	1
27	f	4610346	1
27	i 4613003	Muffler	1

FOOTNOTES:**a** → S/N L177B11460D**b** → S/N L177B30004H**c** → S/N L177B32497J**d** S/N L177B11461D ↔ S/N L177B28224G**e** S/N L177B28224G ↔ S/N L177B32497J**f** S/N L177B32498J ↔ PENDING PER ECN 12025305**g** S/N L177B32498J →**h** S/N L177B30005H →**i** PENDING PER ECN 12025305 →

FLYWHEEL AND HOUSING (FIGURE 3-11) MAZDA 2.0L AND 2.2L — LPG (→ S/N L177B11117D)

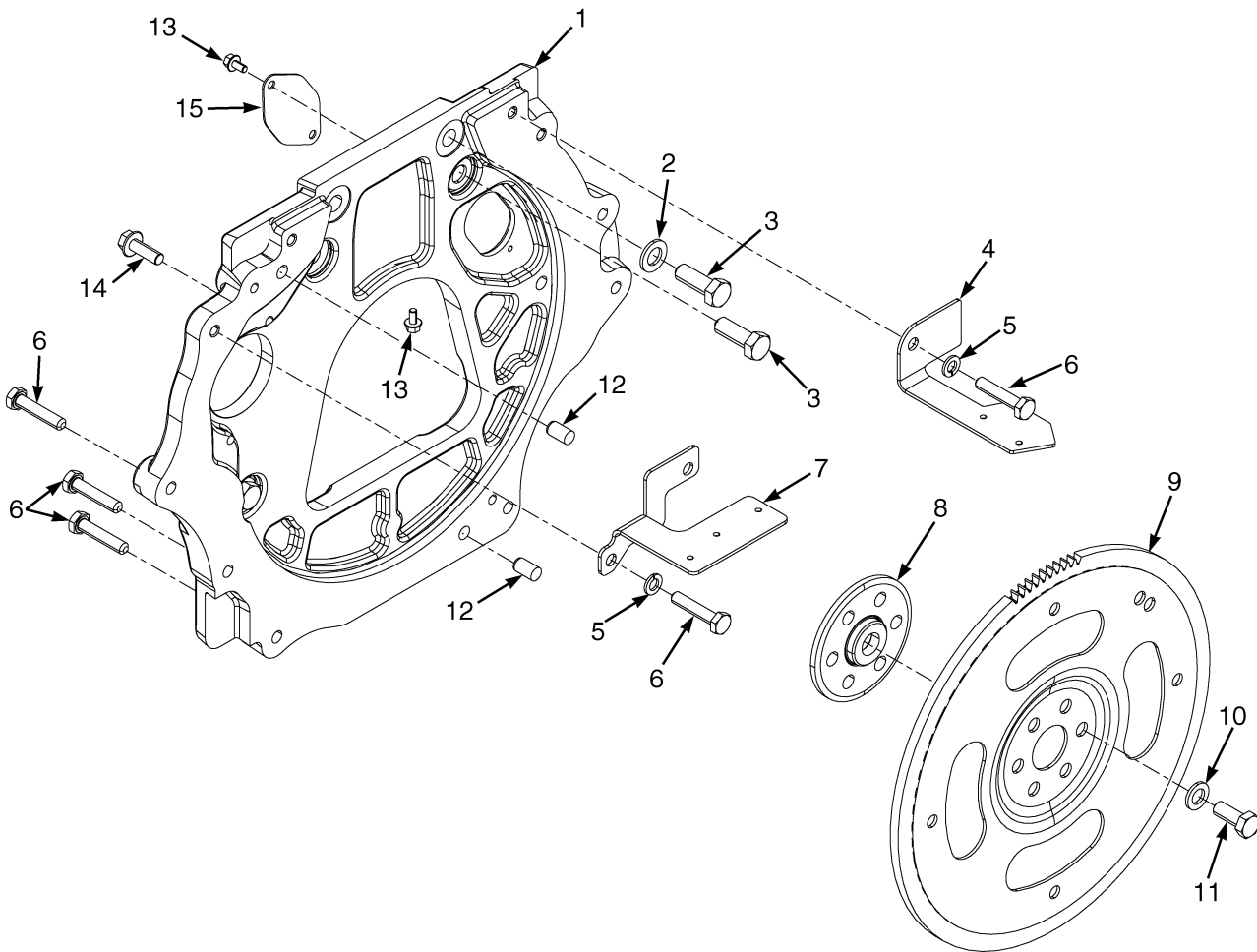


HP091268

FLYWHEEL AND HOUSING
MAZDA 2.0L AND 2.2L – LPG (→ S/N L177B11117D)

ITEM	PART NO.	DESCRIPTION	QTY
1	1534417	Capscrew	3
2	1527884	Capscrew	2
3	1551608	Bracket	1
4	388049 292682	Lockwasher	10
5	292517	Capscrew	10
6	1506572	Hub Adapter	1
7	296422	Washer	6
8	1528415	Capscrew	6
9	1565832	Bracket	1
10	1605467	Flywheel (With Ring Gear)	1
11	2072918	Capscrew	6
12	303150	Dowel	2
13	296424	Washer	6
14	1553266	Flywheel Housing	1
15	1586013	Capscrew	1
16	216895	Static Strap	1
17	1460477	Nut	1

FLYWHEEL AND HOUSING (FIGURE 3-12) MAZDA 2.0 L AND 2.2 L — LPG (S/N L177B11118D →)

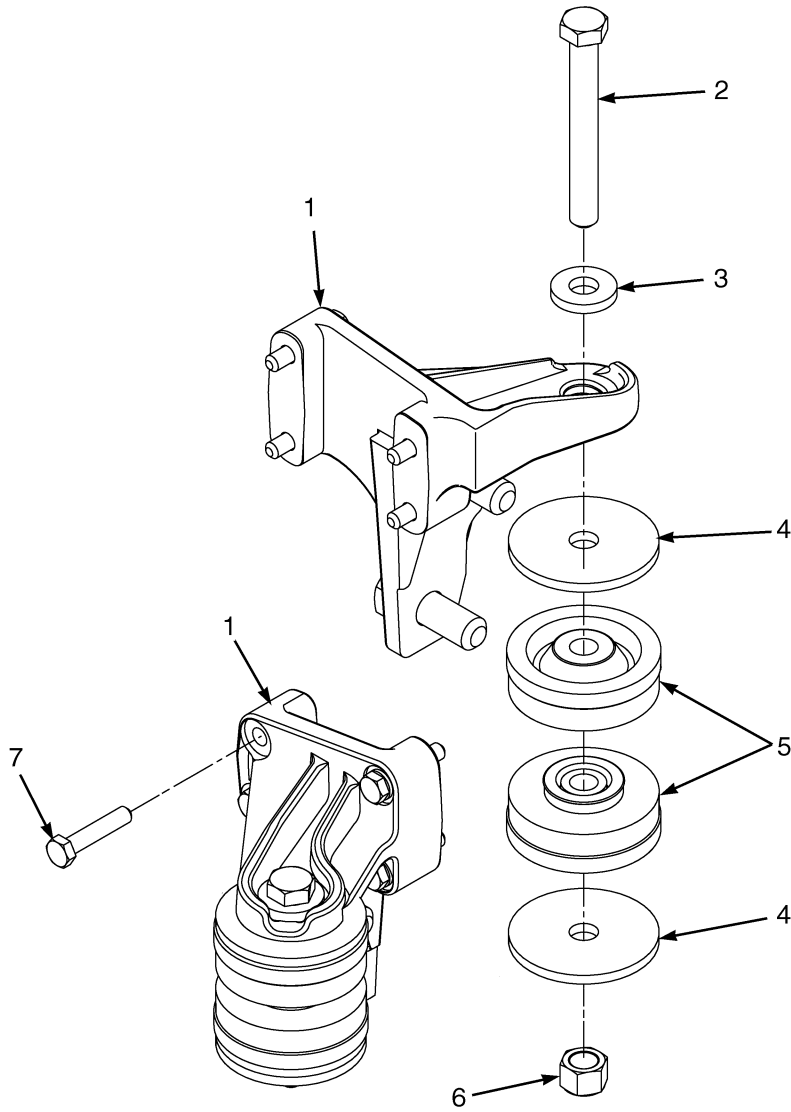


BP090343

FLYWHEEL AND HOUSING
MAZDA 2.0 L AND 2.2 L – LPG (S/N L177B11118D →)

ITEM	PART NO.	DESCRIPTION	QTY
1	1553266	Flywheel Housing	1
2	296424	Washer	6
3	2072918	Capscrew	6
4	1624727	Bracket	1
5	388049 292682	Lockwasher	10
6	292517	Capscrew	10
7	1623093	Bracket	1
8	1506572	Hub Adapter	1
9	1605467	Flywheel (With Ring Gear)	1
10	296422	Washer	6
11	1528415	Capscrew	6
12	303150	Dowel	2
13	1534417	Capscrew	5
14	1527884	Capscrew	2
15	1625999	Dust Cover	1

ENGINE MOUNTING (FIGURE 3-13)

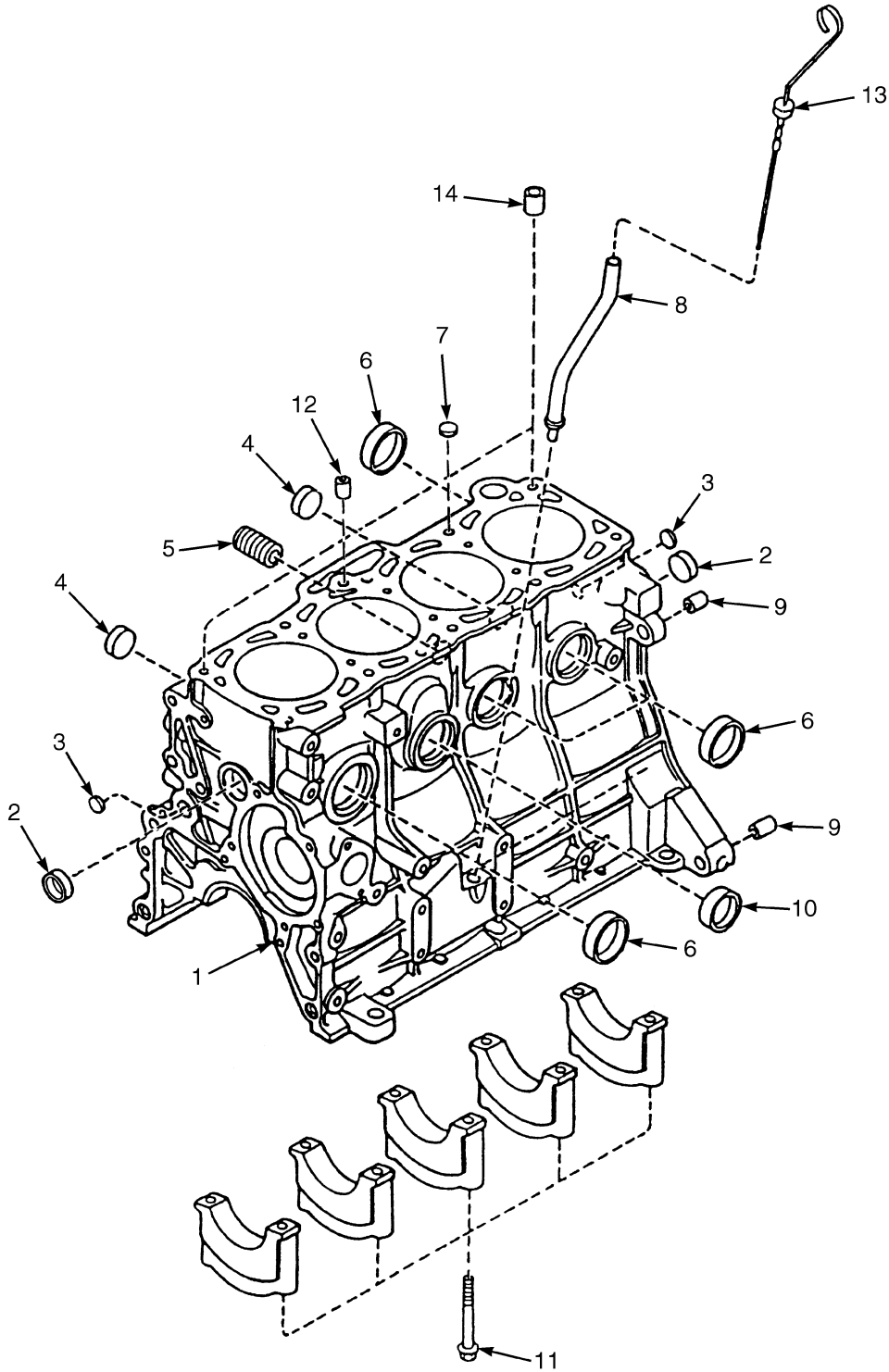


BP090163

ENGINE MOUNTING

ITEM	PART NO.	DESCRIPTION	QTY
1	1557478	Mount (RH)	1
1	1557479	Mount (LH)	1
2	293698	Capscrew	2
3	1504075	Washer	2
4	1557737	Washer	4
5	2069951	Isolator	4
6	1565453	Nut (Flange)	2
7	1565150	Bolt (Flange)	8

CYLINDER BLOCK (FIGURE 3-14) MAZDA 2.0L AND 2.2L — LPG

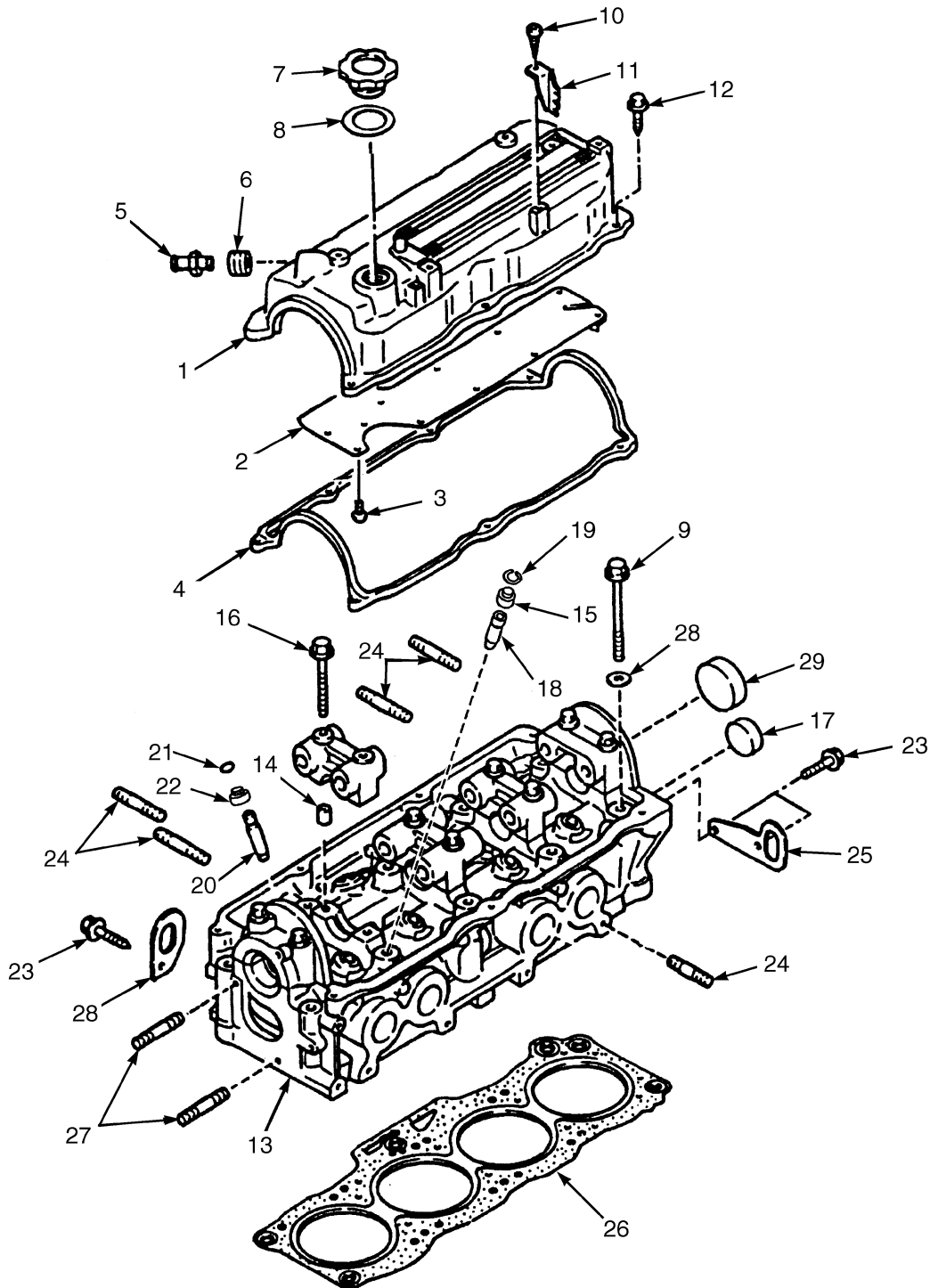


HP091247

**CYLINDER BLOCK
MAZDA 2.0L AND 2.2L – LPG**

ITEM	PART NO.	DESCRIPTION	QTY
	1587843	Long Block (2.0L, LPG)	1
	1587845	Long Block (2.2L, LPG)	1
	1572387	Short Block (2.0L, LPG)	1
	1572388	Short Block (2.2L, LPG)	1
1	1553710	Cylinder Block (2.0L)	1
1	1370744	Cylinder Block (2.2L)	1
2	1362009	Plug	2
3	1361675	Plug	2
4	1362005	Plug	2
5	1360898	Joint Fitting	1
6	1362003	Plug	4
7	2028927	Plug	1
8	1360899	Tube Assy	1
9	1362008	Pin	2
10	1362007	Plug	2
11	1361676	Bolt	10
12	2029081	Plug	1
13	1361677	Dipstick	1
14	1360896	Pin	2

CYLINDER HEAD (FIGURE 3-15) MAZDA 2.0L AND 2.2L — LPG

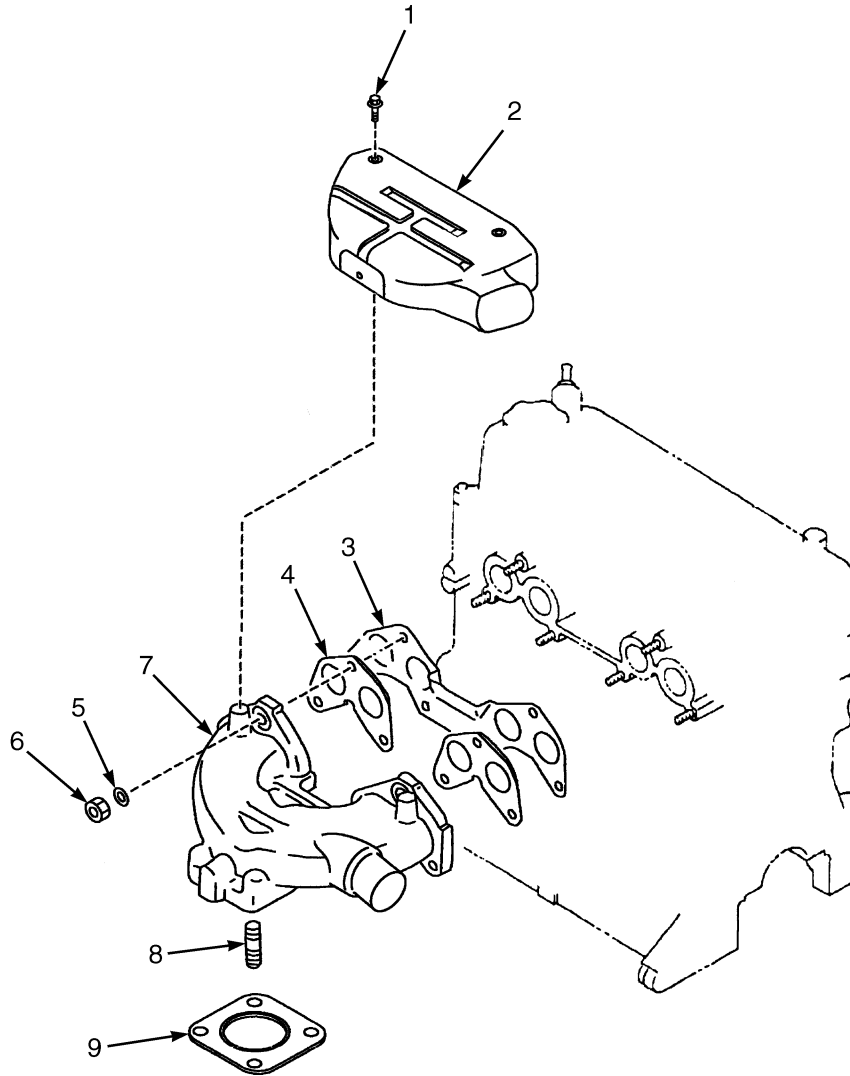


HP000902

**CYLINDER HEAD
MAZDA 2.0L AND 2.2L – LPG**

ITEM	PART NO.	DESCRIPTION	QTY
	1587843	Long Block (2.0L, LPG)	1
	1587845	Long Block (2.2L, LPG)	1
1	1360883	Engine Cover (LPG)	1
2	1360884	Plate	1
3	2022655	Screw	10
4	1360886	Gasket	1
5	1553692	PCV Valve (LPG)	1
6	1360892	Seal	1
7	1360887	Cap	1
8	1360888	Gasket	1
9	1360880	Bolt	10
10	1362000	Screw	2
11	1360885	Bracket	2
12	1362001	Bolt	7
13	1360878	Cylinder Head	1
14	1362002	Pin	10
15	1361719	Seal (Exhaust Valve)	4
16	1361894	Bolt	10
17	1362003	Plug	1
18	1360895	Guide	4
19	1360879	Clip	1
20	1360895	Guide	4
21	1360879	Clip	4
22	1361718	Seal (Inlet Valve)	4
23	1361898	Bolt	2
24	1361897	Stud	20
25	2314973	Hanger	1
26	2045321	Gasket (Cylinder Head)	1
27	1361899	Stud	2
28	1360881	Washer	10
29	1360882	Cap	1

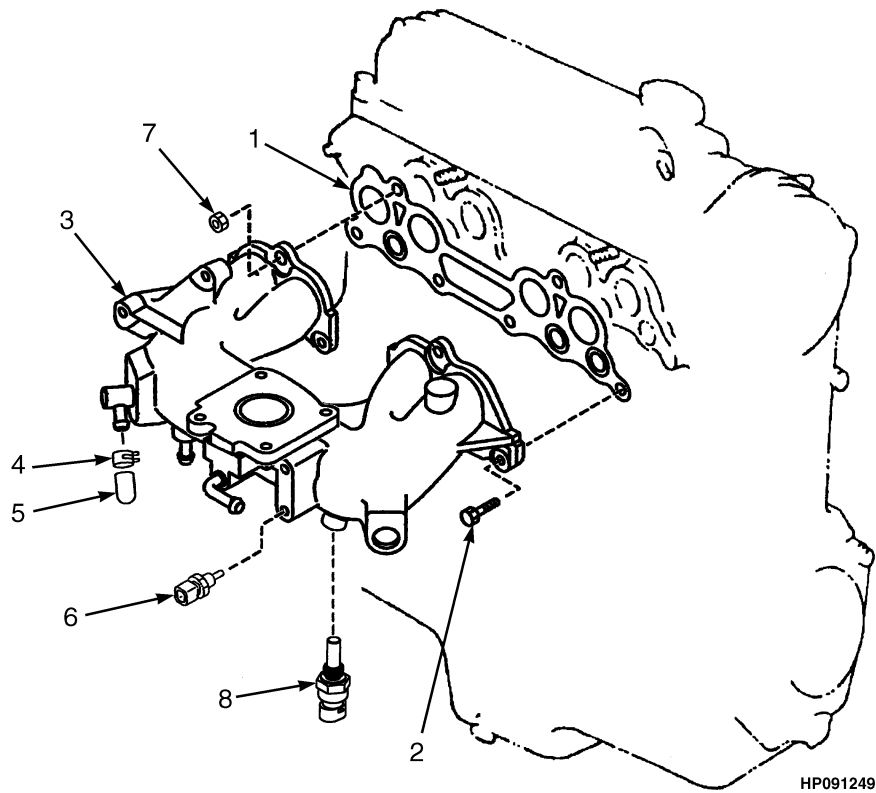
EXHAUST MANIFOLD (FIGURE 3-16) MAZDA 2.0L AND 2.2L — LPG



HP091248

ITEM	PART NO.	DESCRIPTION	QTY
1	1361898	Bolt	3
2	1370691	Cover	1
3	1361747	Gasket	1
4	1370689	Gasket	2
5	1370690	Washer	6
6	1361746	Nut	6
7	1370688	Exhaust Manifold	1
8	1361745	Stud	4
9	1338308	Gasket	1

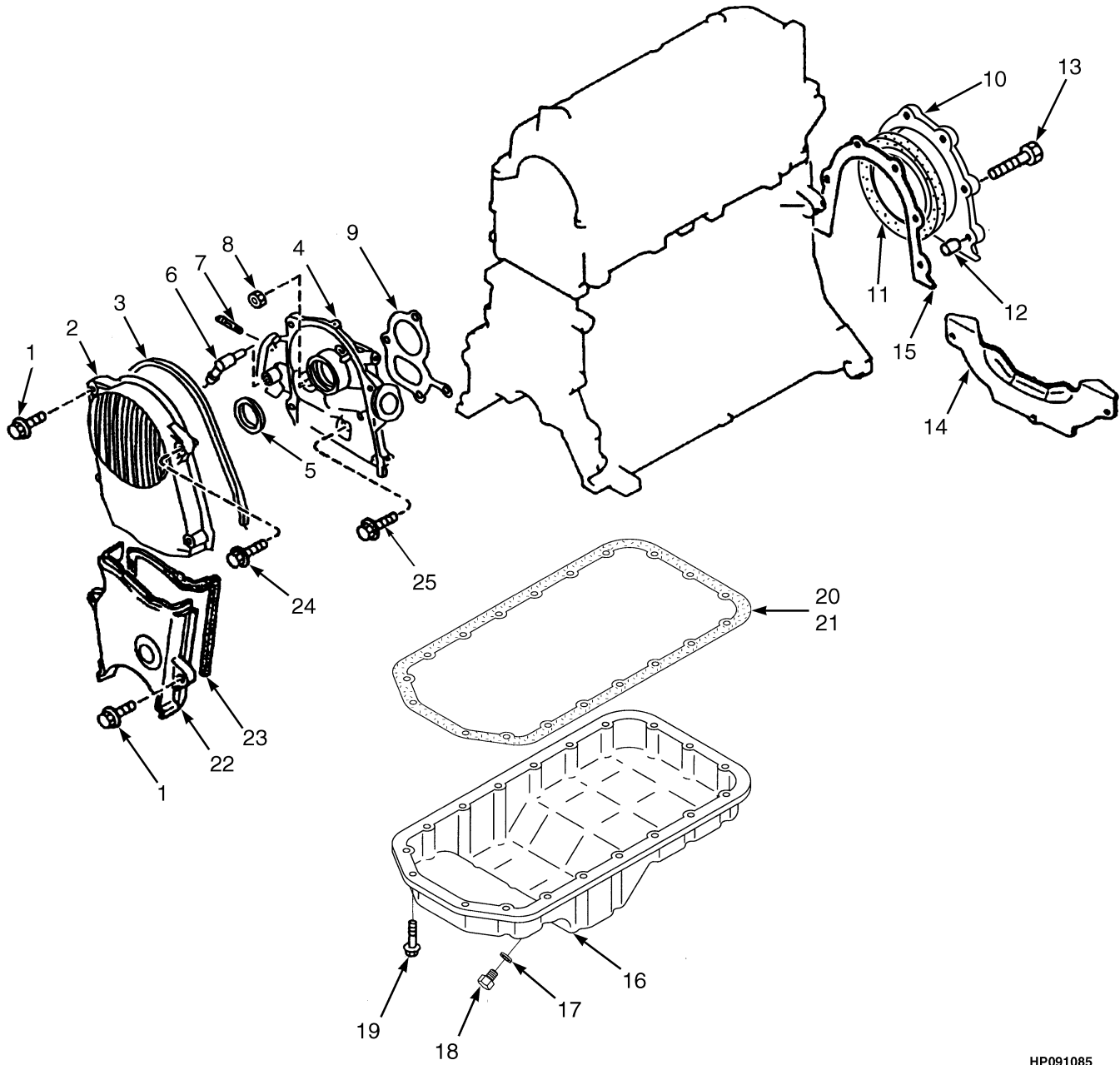
INTAKE MANIFOLD (FIGURE 3-17) MAZDA 2.0L AND 2.2L — LPG



**INTAKE MANIFOLD
MAZDA 2.0L AND 2.2L – LPG**

ITEM	PART NO.	DESCRIPTION	QTY
1	1553776	Gasket	1
2	1361885	Bolt	2
3	1573015	Intake Manifold	1
4	1361873	Clamp	1
5	1361741	Cap	1
6	1368743	Seal	1
6	1539962	Sensor (Air Temperature)	1
7	1366902	Bolt	1
7	326504	Nut	4
8	1515654	Temperature Sensor	1

TIMING GEAR COVER AND OIL PAN (FIGURE 3-18) MAZDA 2.0L AND 2.2L — LPG

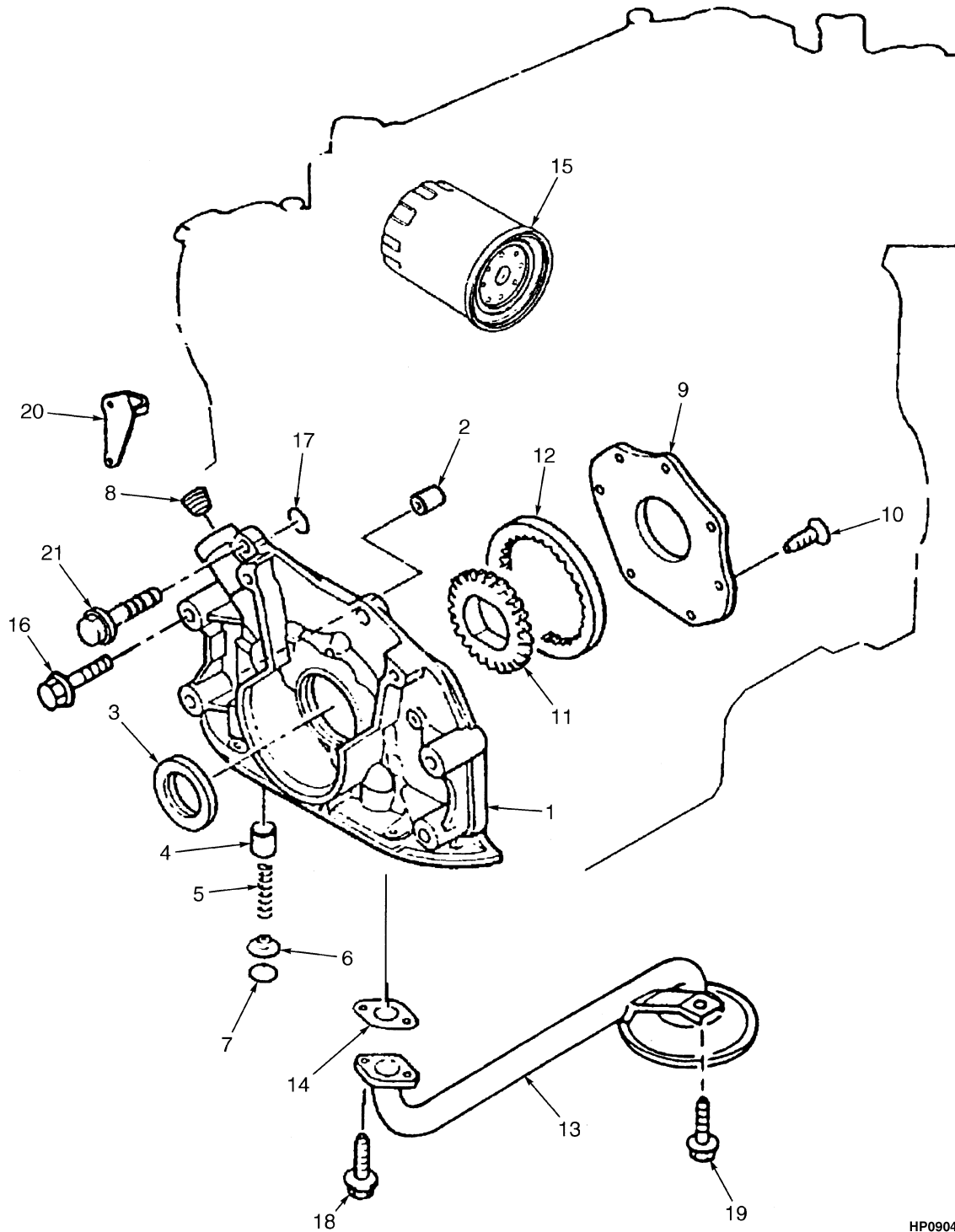


HP091085

**TIMING GEAR COVER AND OIL PAN
MAZDA 2.0L AND 2.2L – LPG**

ITEM	PART NO.	DESCRIPTION	QTY
	1587843	Long Block (2.0L, LPG)	1
	1587845	Long Block (2.2L, LPG)	1
1	1362001	Bolt	5
2	1553716	Cover (Upper Timing Belt) (2.0L)	1
2	2029084	Cover (Upper Timing Belt) (2.2L)	1
3	1553717	Gasket (2.0L)	1
3	2028854	Gasket (2.2L)	1
4	2051129	Housing (2.2L)	1
4	1553715	Housing (2.0L)	1
5	1361688	Oil Seal	1
6	1361692	Connector	1
7	1362012	Stud	2
8	326504	Nut	2
9	1361679	Gasket	1
10	1361689	Cover	1
11	1361691	Oil Seal (Rear)	1
12	1362010	Pin	2
13	1362011	Bolt	6
14	1371652	Cover	1
15	1361690	Gasket	1
16	1361680	Oil Pan (2.0L)	1
16	2029082	Oil Pan (2.2L)	1
17	1362015	Gasket	1
18	1361681	Drain Plug	1
19	1370736	Capscrew	19
20	1361682	Gasket (Oil Pan)	1
21	1370737	Silicon	AR
22	2051128	Cover	1
23	2028853	Gasket	1
24	2029086	Bolt	1
25	1369993	Bolt	2
	2045036	Kit-Gasket	1

OIL PUMP AND FILTER (FIGURE 3-19) MAZDA 2.0L AND 2.2L — LPG

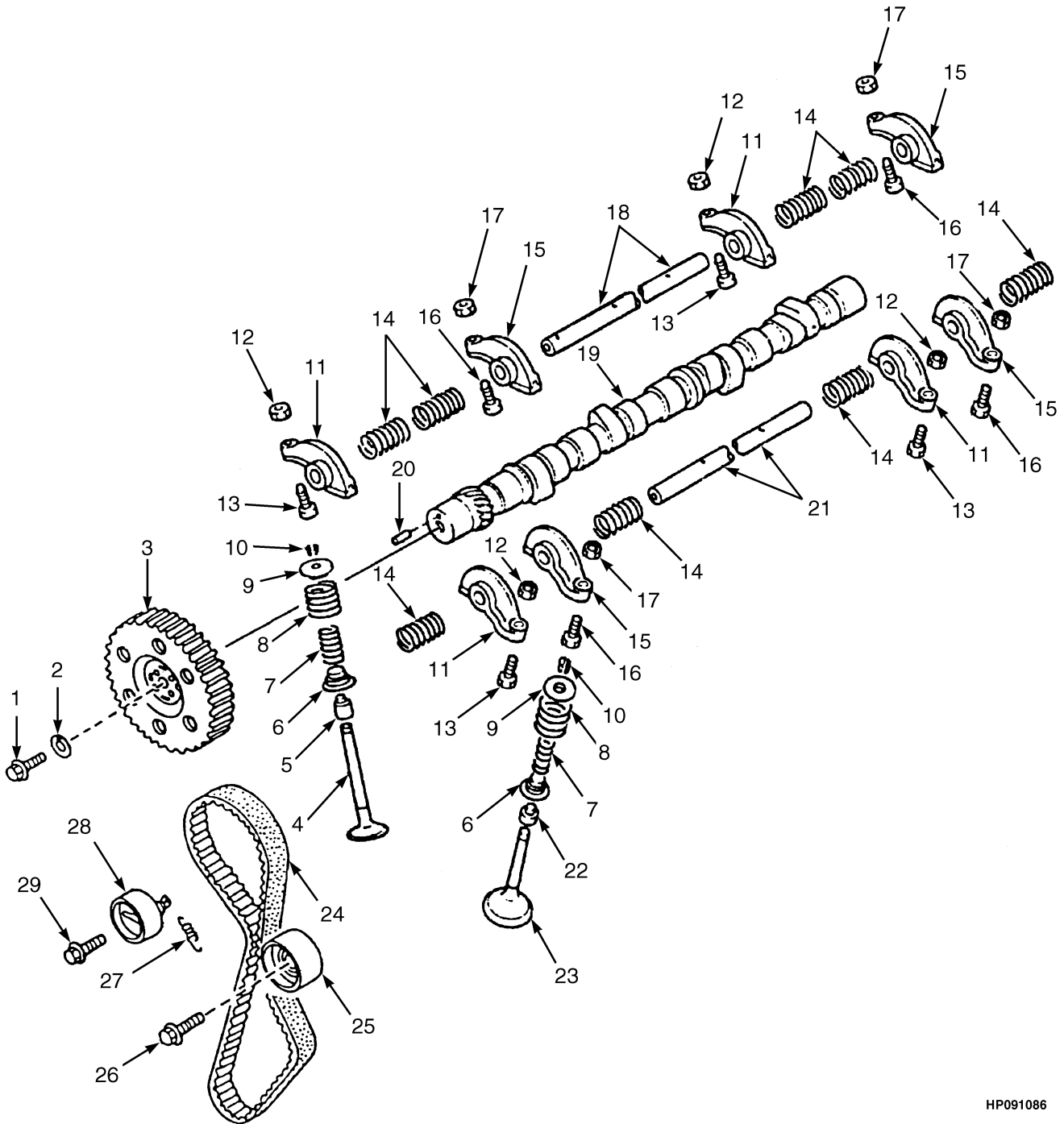


HP090491

**OIL PUMP AND FILTER
MAZDA 2.0L AND 2.2L – LPG**

ITEM	PART NO.	DESCRIPTION	QTY
	1587843	Long Block (2.0L, LPG)	1
	1587845	Long Block (2.2L, LPG)	1
1	1455676	Engine Oil Pump	1
2	1361798	Pin (Timing Indicator)	2
3	1361688	Oil Seal	1
4	1455674	Plunger	1
5	326748	Spring	1
6	326749	Spring Seat	1
7	1361879	Snap Ring	1
8	1495426	Plug	1
9	2029100	Cover	1
10	1455677	Screw	7
11	2029101	Gear	1
12	2029102	Gear	1
13	1361806	Strainer	1
14	1361807	Gasket	1
15	324692	Oil Filter	1
16	1553878	Bolt	2
17	1361801	O-Ring	1
18	1361878	Screw	2
19	1361868	Screw	1
20	1495427	Pin (Top Indicator) (Top Indicator)	1
21	2029103	Bolt	6

CAMSHAFT AND VALVES (FIGURE 3-20) MAZDA 2.0L AND 2.2L — LPG

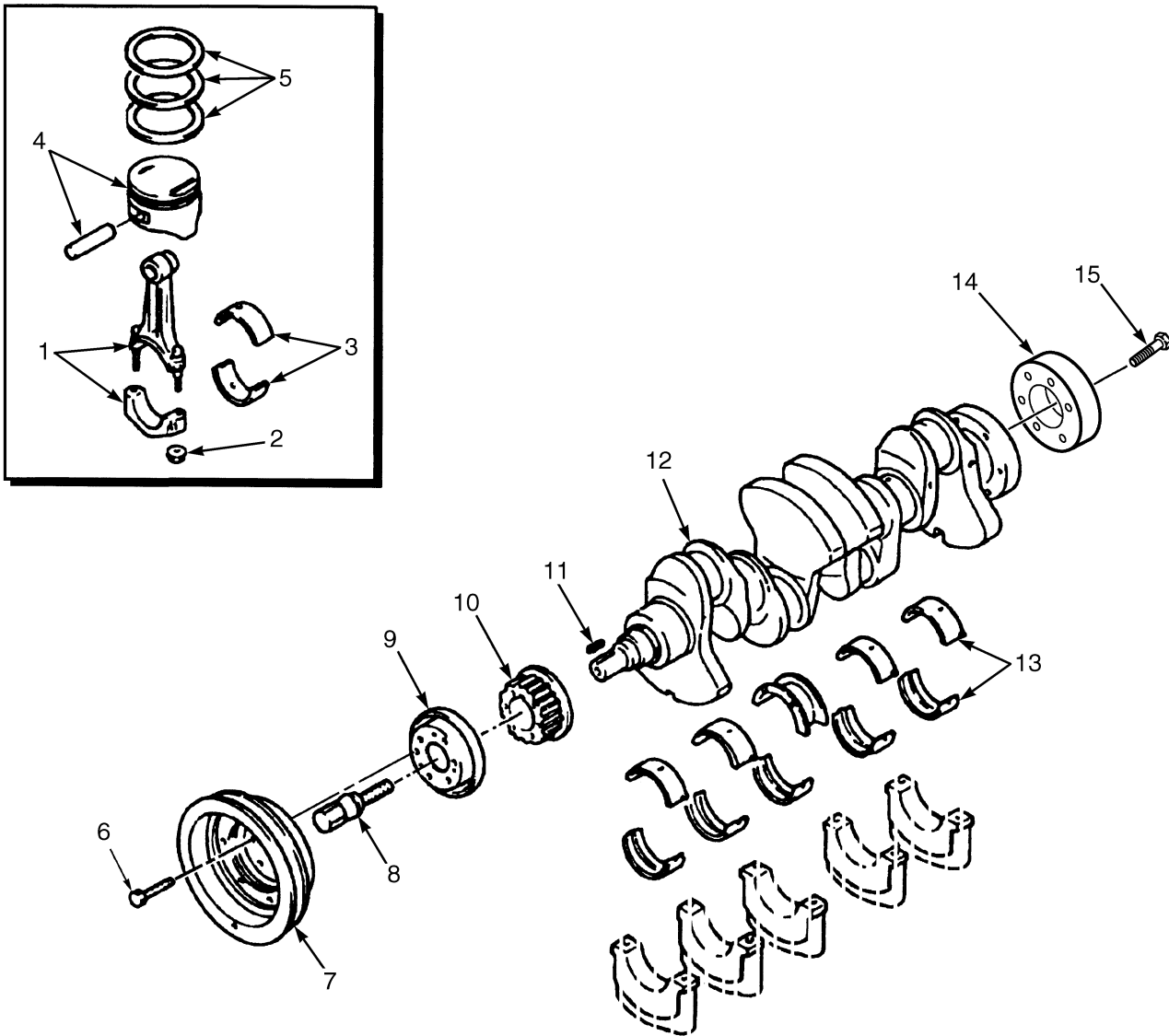


HP091086

**CAMSHAFT AND VALVES
MAZDA 2.0L AND 2.2L – LPG**

ITEM	PART NO.	DESCRIPTION	QTY
	1587843	Long Block (2.0L, LPG)	1
	1587845	Long Block (2.2L, LPG)	1
1	1361736	Bolt	1
2	1361737	Washer	1
3	2029095	Pulley (Camshaft)	1
4	1361720	Inlet Valve (Intake)	4
5	1361718	Seal	4
6	1361724	Valve Seat	8
7	1361723	Spring (Intake Valve)	8
8	1361722	Spring (Exhaust Valve)	8
9	1361721	Valve Seat	8
10	326612	Keeper	16
11	1361726	Rocker Arm	4
12	1361728	Nut	4
13	1361727	Screw	4
14	1361731	Spring	8
15	1361729	Rocker Arm	4
16	1361727	Screw	4
17	1361728	Nut	4
18	1361730	Shaft	1
19	1361734	Camshaft	1
20	1361717	Pin	1
21	1361732	Shaft	1
22	1361719	Seal	4
23	1361725	Exhaust Valve	4
24	1553762	Timing Belt (2.0L)	1
24	2028852	Timing Belt (2.2L)	1
25	2029098	Idler Pulley	1
26	1361884	Bolt	1
27	1553763	Spring (2.0L)	1
27	2029096	Spring (2.2L)	1
28	2029097	Belt Tensioner	1
29	1362016	Bolt	1

CRANKSHAFT AND PISTONS (FIGURE 3-21) MAZDA 2.0L AND 2.2L — LPG

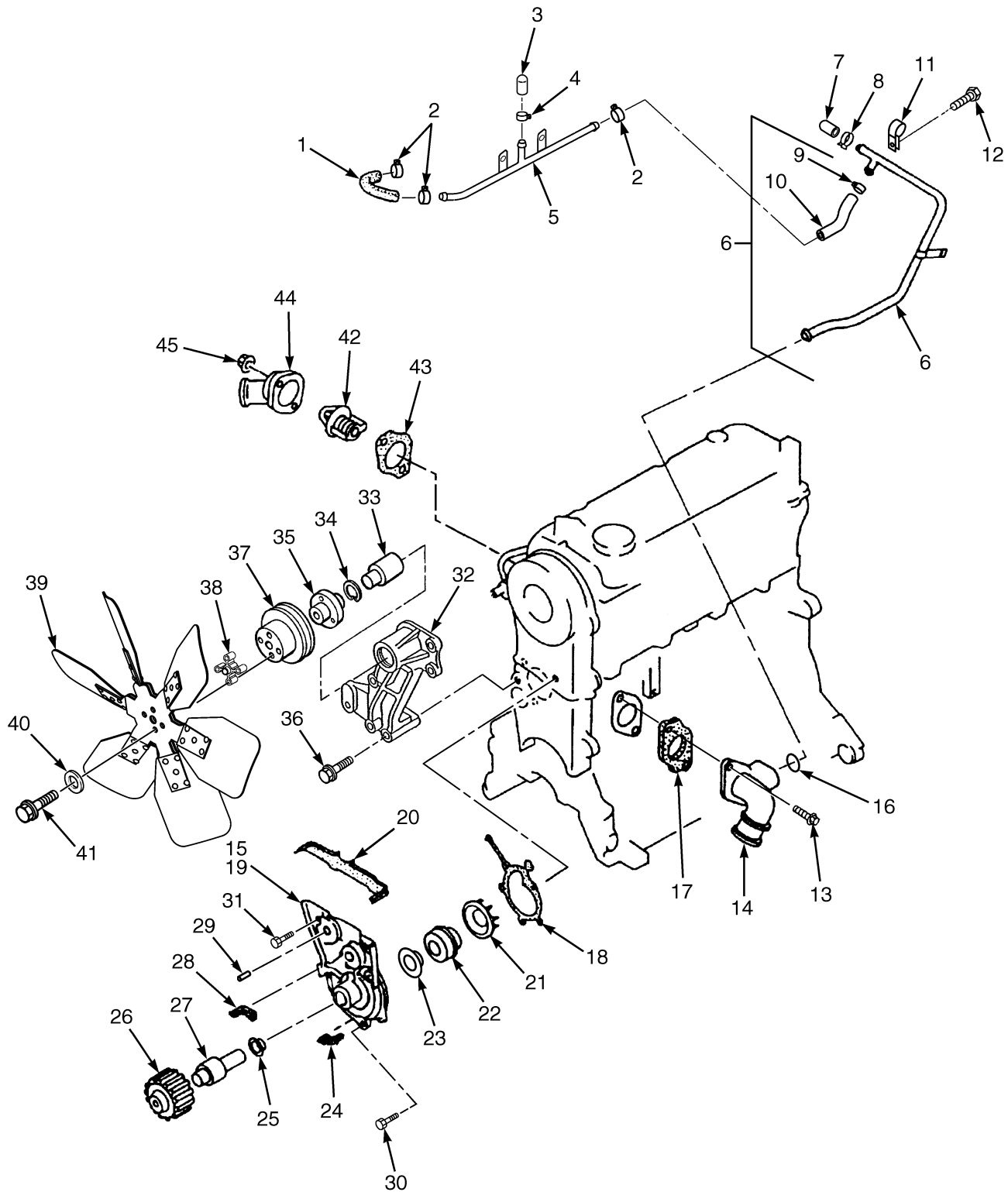


HP090487

CRANKSHAFT AND PISTONS
MAZDA 2.0L AND 2.2L – LPG**KEY:****A: Mazda 2.0L LPG Engine****B: Mazda 2.2L LPG Engine**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1587843	Long Block (2.0L, LPG)	1	..
	1587845	Long Block (2.2L, LPG) .....	..	1
1	1361694	Rod Assy	4	..
1	1370746	Rod Assy .....	..	4
2	1361695	Nut	2	2
3	1361703	Piston Rod Bearing (Standard)	1	1
3	1361704	Piston Rod Bearing (0.25 mm)	1	1
3	1361705	Piston Rod Bearing (0.50 mm)	1	1
3	1361706	Piston Rod Bearing (0.75 mm)	1	1
4	1572593	Piston and Rod (Standard)	4	..
4	1572597	Piston (0.25 mm)	4	..
4	1572595	Piston (0.50 mm)	4	..
4	1572594	Piston and Rod (Standard) .....	..	4
4	1572596	Piston (0.50 mm) .....	..	4
4	1572598	Piston (0.25 mm) .....	..	4
5	1495473	Kit-Piston Ring (Standard)	4	4
5	1495475	Kit-Piston Ring (0.25 mm)	4	4
5	1495474	Kit-Piston Ring (0.50 mm)	4	4
6	1361700	Bolt	6	6
7	1495472	Pulley	1	1
8	1361701	Bolt	1	1
9	2045033	Plate	1	1
10	2045030	Pulley	1	1
11	1361697	Key	1	1
12	1361696	Crankshaft	1	..
12	2045029	Crankshaft .....	..	1
13	1361710	Kit-Crankshaft Bearing (Standard)	1	1
13	1361713	Crankshaft Bearing (0.25 mm)	1	1
13	1361711	Crankshaft Bearing (0.50 mm)	1	1
13	1361712	Crankshaft Bearing (0.75 mm)	1	1
14	2021442	Plate	1	1
15	2021438	Bolt	1	1

ENGINE COOLING (FIGURE 3-22) MAZDA 2.0L AND 2.2L — LPG



BP090378

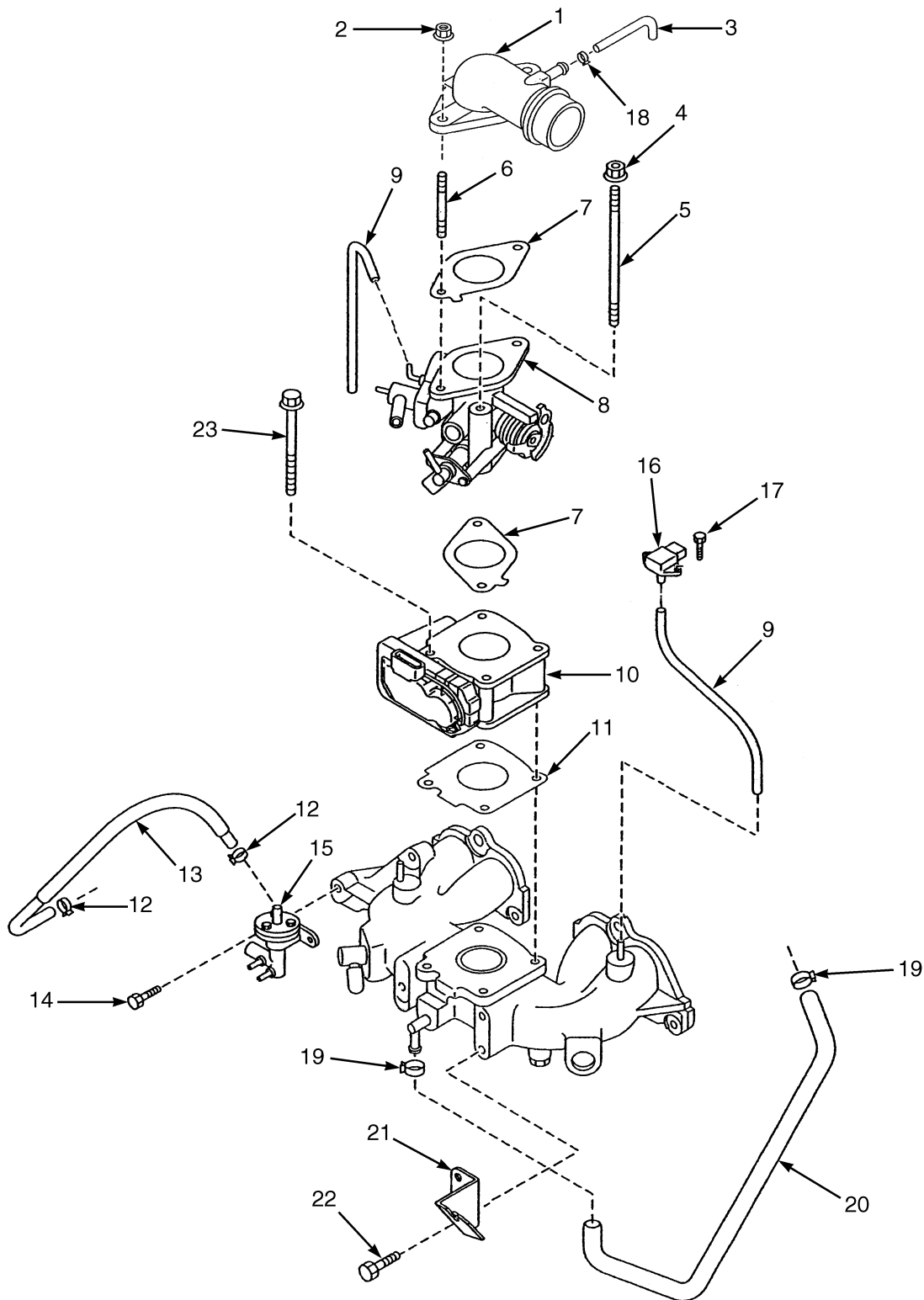
ENGINE COOLING
MAZDA 2.0L AND 2.2L – LPG

ITEM	PART NO.	DESCRIPTION	QTY
	1587843	Long Block (2.0L, LPG)	1
	1587845	Long Block (2.2L, LPG)	1
1	1361825	Radiator Hose (LPG)	1
2	1361873	Clamp	3
3	1361790	Cap	1
4	1495429	Hose Clamp	1
5	1361823	Pipe (Water Bypass)	1
6	1553943	Pipe (2.0L)	1
6	2045024	Pipe (2.2L)	1
7	1361836	Cap	1
8	1361886	Clamp	1
9	1361873	Clamp	1
10	2029108	Radiator Hose	1
11	1361826	Clip	1
12	1361898	Bolt	1
13	1361875	Screw	2
14	2029112	Adapter (Intake)	1
15	2028644	Water Pump	1
16	1361827	O-Ring	1
17	2029120	Gasket (Inlet)	1
18	2028645	Gasket	1
19	2078488	Water Pump	1
20	2029107	Seal (Upper)	1
21	.....	Impeller	1
22	1361814	Seal	1
23	2045319	Baffle	1
24	2029106	Seal	1
25	.....	Baffle	1
26	.....	Pully	1
27	.....	Shaft	1
28	2029105	Seal (Lower)	1
29	1361880	Stud	1
30	1369914	Bolt	5
31	326608	Bolt	2
32	1573176	Bracket	1
33	2029116	Shaft Bearing (Fan)	1
34	2045025	Clip	1
35	.....	Hub	1
36	2045026	Screw	3
37	1573179	Fan Pulley	1
38	1528140	Spacer	1
39	1375642	Fan	1
40	296418	Washer	4
41	293619	Capscrew	4
42	1495428	Thermostat	1
42	2082929	Thermostat	1
43	1367191	Gasket	1
44	1361821	Cover (Thermostat)	1
45	326504	Nut	2

ENGINE COOLING
MAZDA 2.0L AND 2.2L – LPG

ITEM	PART NO.	DESCRIPTION	QTY
	2045036	Kit-Gasket	1

EMISSIONS LINES (FIGURE 3-23) MAZDA 2.0L AND 2.2L — LPG



HP000900

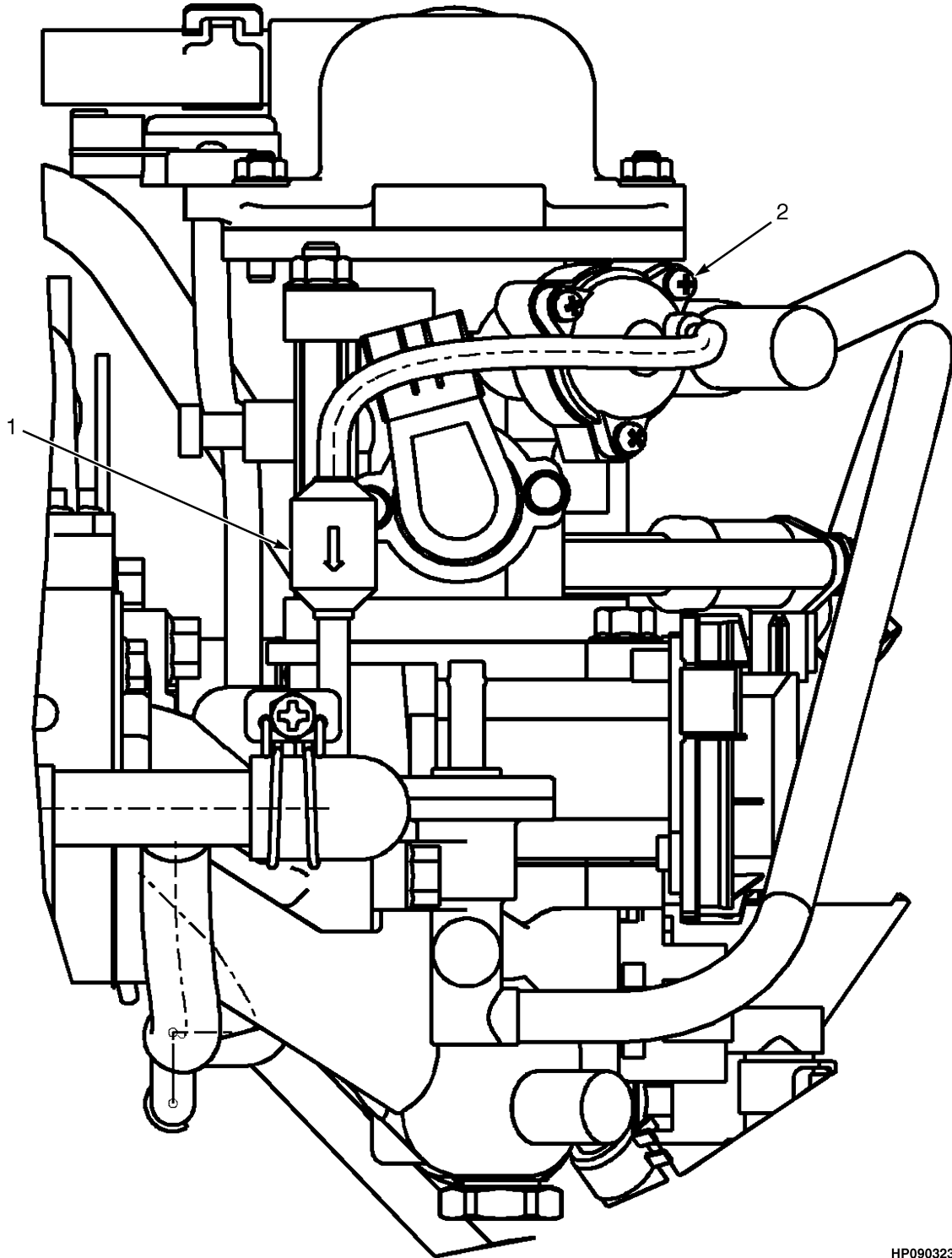
EMISSIONS LINES
MAZDA 2.0L AND 2.2L – LPG

ITEM	PART NO.	DESCRIPTION	QTY
1	1573118	Air Duct	1
2	2066629	Nut	2
3	1573562	Hose (Ventilation)	1
4	326504	Nut	2
5	1582323	Stud	2
6	1553774	Stud	2
7	1573117	Gasket	2
8	1573119	Carburetor	1
8	1616236	Setscrew	1
8	1620009	Injector	1
9	1495413	Hose	1
10	1553838	Governor	1
11	1553832	Gasket	1
12	1553799	Clamp	2
13	1573120	Hose (Fuel)	1
14	1361878	Screw	2
15	1581048	Fuel Filter (LPG Vapor)	1
15	1583593	Kit-Cover	1
15	1581051	Setscrew	1
15	1581050	Screw	3
15	1581052	Fuel Filter (With O-Ring)	1
15	1581049	Spring	1
16	1548352	Sensor (Boost, M.A.P.)	1
17	1582324	Screw	2
18	1361871	Clamp	1
19	1366933	Clamp	2
20	1573564	Hose (PCV)	1
21	1573021	Bracket (Throttle)	1
22	1361898	Bolt	2
23	1582321	Bolt	2
	1374788	Valve (Delay) (Not illustrated)	1

CARBURETOR
LPG – MAZDA 2.0L AND 2.2L

ITEM	PART NO.	DESCRIPTION	QTY
	1573119	Carburetor (LPG)	1
1	1652216	Screw (Sensor)	2
2	1639791	Sensor (Throttle Position)	1
3	.....	Body	1
4	2051839	Lever (Throttle)	1
5	1652217	Nut	1
6	1616236	Setscrew	1
7	1620009	Injector	1
8	2051836	Cover (Power Valve)	1
9	1652215	Screw (Diaphragm)	3
10	2051834	Diaphragm (Power)	1
11	2051835	Spring (Power)	1

DELAY VALVE (FIGURE 3-25)
MAZDA 2.0L AND 2.2L — LPG



HP090323

DELAY VALVE
MAZDA 2.0L AND 2.2L – LPG

ITEM	PART NO.	DESCRIPTION	QTY
1	1654015	Valve	1
2	1573119	Carburetor	1

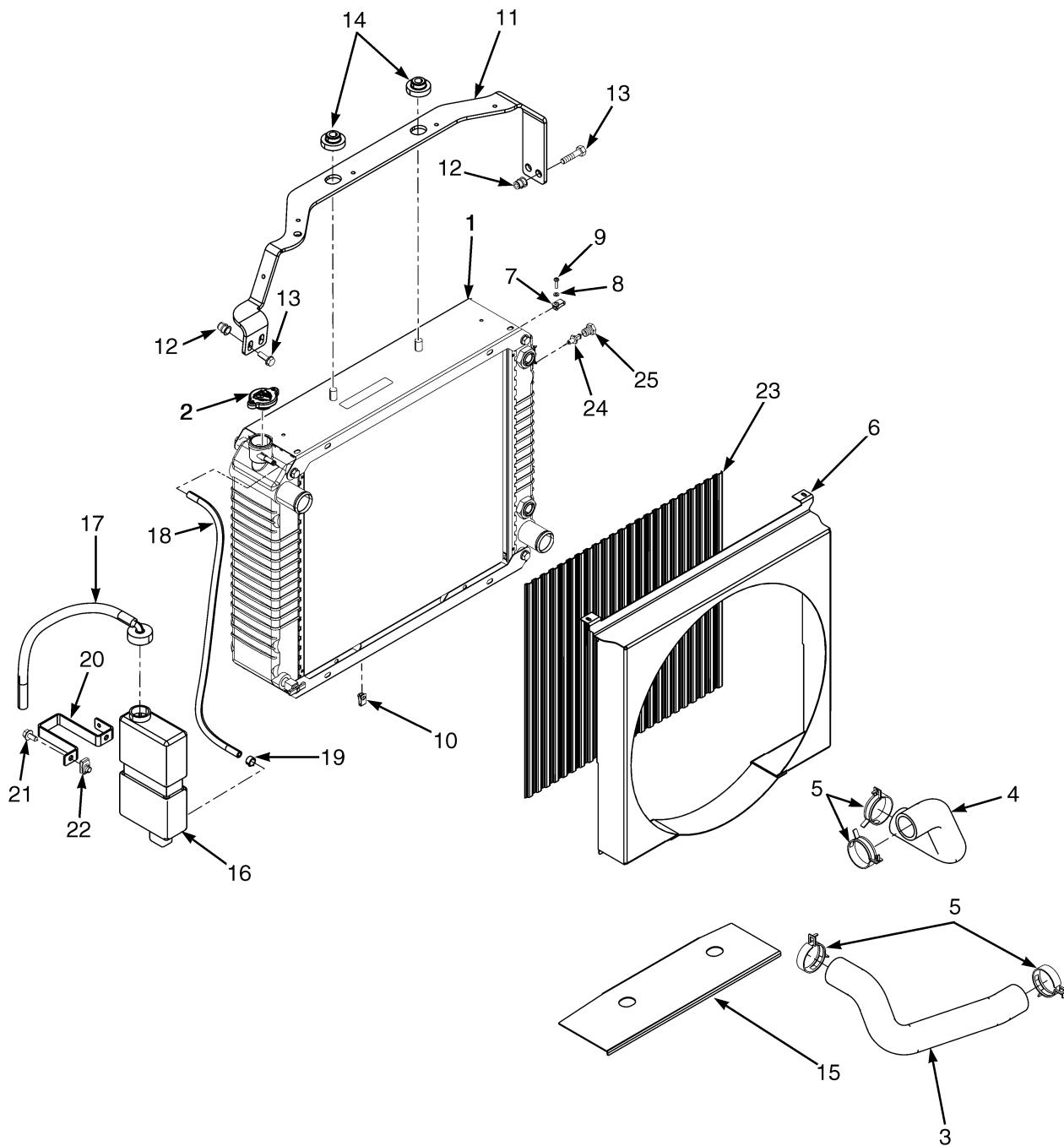
4

ENGINE ASSEMBLY - YANMAR

SECTION 4 ENGINE ASSEMBLY - YANMAR

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OIL PAN	
YANMAR 2.6L AND 3.3L - DIESEL	4-18

COOLING SYSTEM (FIGURE 4-1) YANMAR 2.6L AND 3.3L, DIESEL, SQUARE WAVE RADIATOR — WITH INTERNAL OIL COOLER (→ S/N L177B14568E)



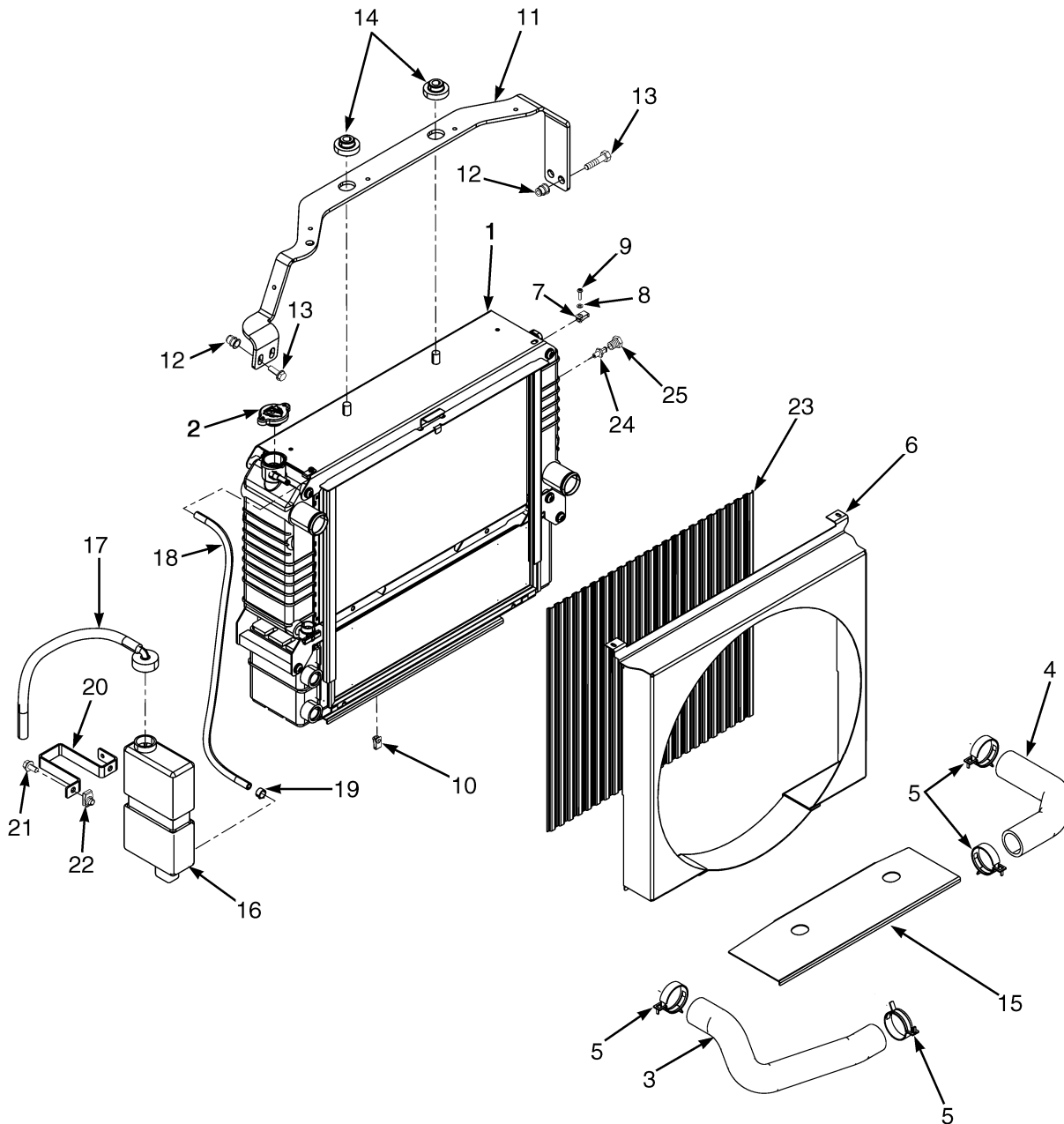
HP060040

COOLING SYSTEM
YANMAR 2.6L AND 3.3L, DIESEL, SQUARE WAVE RADIATOR – WITH INTERNAL OIL COOLER
 (→ S/N L177B14568E)

ITEM	PART NO.	DESCRIPTION	QTY
1	2069552	Radiator (3.3L With Basic or Electronic Transmission)	1
1	1569079	Drain Valve (w/Thread Wrap)	1
2	1352140	Radiator Cap	1
3	2085104	Radiator Hose (Upper) (3.3L With Basic or Electronic Transmission)	1
4	2070072	Radiator Hose (Lower) (3.3L With Basic or Electronic Transmission)	1
5	369804	Clamp	4
6	1625760	Shroud (2.6L With Basic Transmission)	1
6	1622236	Shroud (3.3L With Basic or Electronic Transmission)	1
7	1535257	Nut	2
8	320154	Washer	2
9	302023	Screw	2
10	1329271	Clip	2
11	1588507	Bracket (Radiator) (2.6L With Basic Transmission)	1
11	1611852	Bracket (3.3L With Basic or Electronic Transmission)	1
12	1530243	Insert	4
13	1583611	Capscrew	4
14	1529787	Isolator	4
15	1565691	Exhaust Shield (2.6L With Basic Transmission)	1
15	1565692	Exhaust Shield (3.3L With Basic or Electronic Transmission)	1
16	1347026	Reservoir	1
17	345455	Outlet Assembly	1
17	336550	Bushing	1
17	345453	Outlet (Reservoir)	1
17	345454	Cap	1
17	339735	Hose	1
18	1567674	Hose	1
19	369815	Clamp	2
20	1531167	Bracket	1
21	1527879	Capscrew	2
22	1480237	Nut	2
23	c 1582078	Screen	1
23	b 1548497	Screen	1
23	a 1623471	Screen	1
24	1531404	Sensor (Low Coolant Level)	1
25	d 14385	Fitting	1

FOOTNOTES:**a** 2.6L and 3.3L**b** 2.6L with Basic Transmission**c** 3.3L with Basic Transmission**d** Without Low Coolant Level Sensor

COOLING SYSTEM (FIGURE 4-2) YANMAR 2.6L AND 3.3L, DIESEL, SQUARE WAVE RADIATOR — WITH EXTERNAL OIL COOLER (→ S/N L177B14568E)



HP060041

COOLING SYSTEM
YANMAR 2.6L AND 3.3L, DIESEL, SQUARE WAVE RADIATOR – WITH EXTERNAL OIL COOLER
 (→ S/N L177B14568E)

ITEM	PART NO.	DESCRIPTION	QTY
1	2074790	Radiator Assembly (Includes Oil Cooler)	1
1	1590972	Radiator	1
1	1569079	Drain Valve (w/Thread Wrap) (3 Wave)	1
1	1590918	Oil Cooler	1
1	1597765	Washer	4
1	1597766	Screw	4
1	1597763	Drain Valve (Optional)	1
2	1352140	Radiator Cap	1
3	2085104	Radiator Hose (Upper)	1
4	2069688	Radiator Hose (Lower)	1
5	369804	Clamp	4
6	e 1610900	Shroud	1
6	f 1622272	Shroud	1
7	1535257	Nut	2
8	320154	Washer	2
9	302023	Screw	2
10	1551663	Clip	2
11	1611852	Bracket	1
12	1530243	Insert	4
13	1583611	Capscrew	4
14	1529787	Isolator	4
15	1565692	Exhaust Shield	1
16	1347026	Reservoir	1
17	345455	Outlet Assembly	1
17	336550	Bushing	1
17	345453	Outlet (Reservoir)	1
17	345454	Cap	1
17	339735	Hose	1
18	1567674	Hose	1
19	369815	Clamp	2
20	1531167	Bracket	1
21	1527879	Capscrew	2
22	1480237	Nut	2
23	c 1582078	Screen	1
23	b 1548497	Screen	1
23	af 1623471	Screen	1
24	1531404	Sensor (Low Coolant Level)	1
25	d 14385	Fitting	1

FOOTNOTES:

- | | |
|---------------------------------------|---|
| a 2.6L and 3.3L | d Without Low Coolant Level Sensor |
| b 2.6L with Basic Transmission | e → S/N L177B006744D |
| c 3.3L with Basic Transmission | f S/N L177B006745D → |

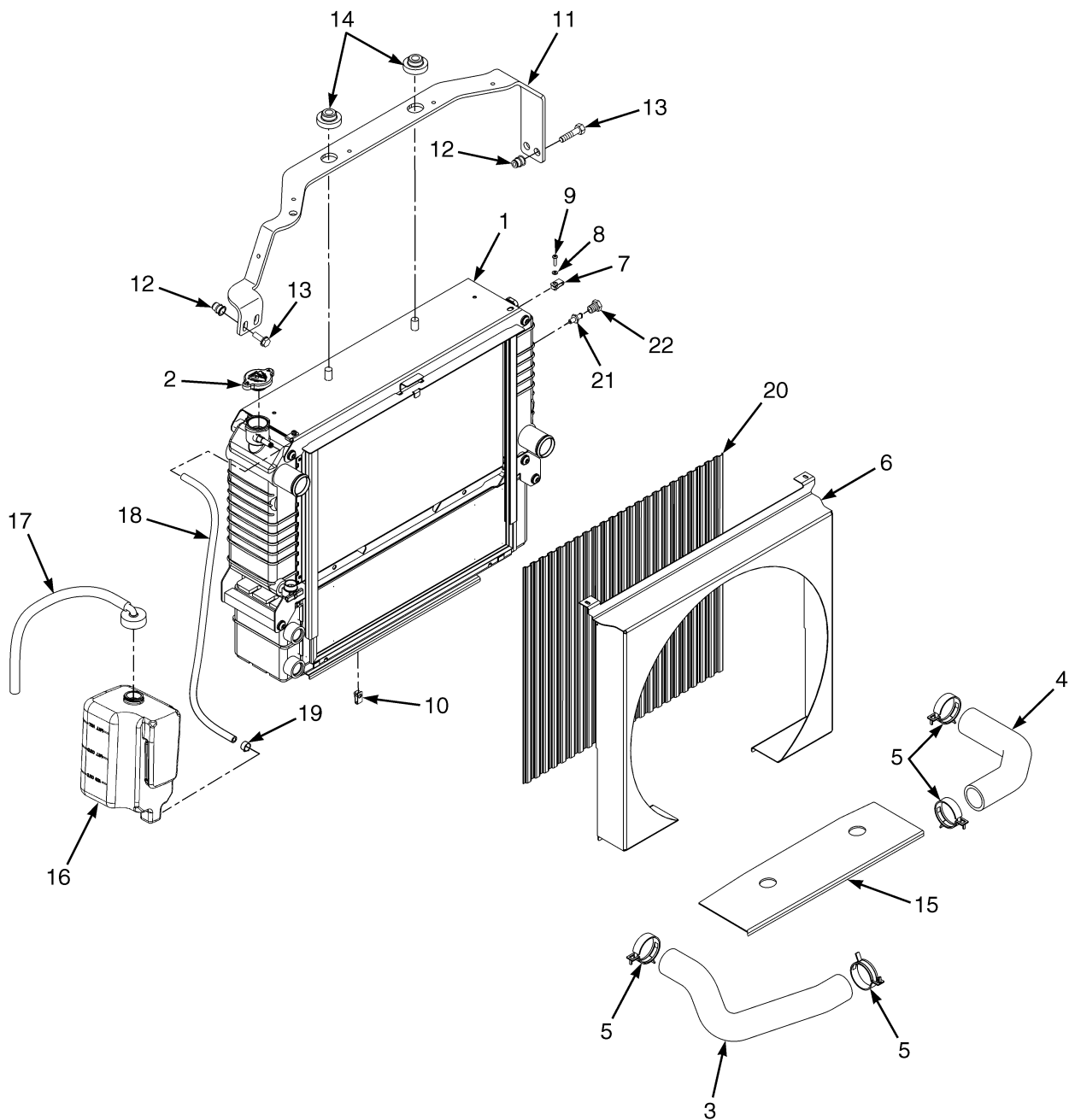
COOLING SYSTEM
YANMAR 2.6L AND 3.3L, DIESEL, SQUARE WAVE RADIATOR – WITH INTERNAL OIL COOLER
(S/N L177B14569E →)

ITEM	PART NO.	DESCRIPTION	QTY
1	ce 2069552	Radiator	1
1	be 2089141	Radiator	1
1	e 1569079	Drain Valve (w/Thread Wrap)	1
1	f 4603552	Radiator (Assembly)	1
1	f 4038260	Radiator	1
1	f 4038264	Drain Valve	1
1	f 4038265	Nut	2
1	f 4038266	Bolt	8
2	1352140	Radiator Cap	1
3	c 2085104	Radiator Hose (Upper)	1
3	b 2087215	Radiator Hose (Upper)	1
4	c 2070072	Radiator Hose (Lower)	1
4	b 2087216	Radiator Hose (Lower)	1
5	b 369804	Clamp	4
5	c 1502001	Hose Clamp	4
6	b 1625760	Shroud	1
6	c 1622236	Shroud	1
7	1535257	Nut	2
8	320154	Washer	2
9	302023	Screw	2
10	1329271	Clip	2
11	b 1588507	Bracket (Radiator)	1
11	c 1611852	Bracket	1
12	1530243	Insert	4
13	1583611	Capscrew	4
14	1529787	Isolator	4
15	c 1565692	Exhaust Shield	1
15	b 1565691	Exhaust Shield	1
16	1633307	Reservoir	1
17	345455	Outlet Assembly	1
17	336550	Bushing	1
17	345453	Outlet (Reservoir)	1
17	345454	Cap	1
17	1663877	Hose	1
18	1567674	Hose	1
19	369815	Clamp	2
20	c 1582078	Screen	1
20	b 1548497	Screen	1
20	a 1623471	Screen	1
21	1531404	Sensor (Low Coolant Level)	1
22	d 14385	Fitting	1

FOOTNOTES:

a	2.6L and 3.3L	d	Without Low Coolant Level Sensor
b	2.6L with Basic Transmission	e	→ PENDING PER ECN 134252
c	3.3L with Basic Transmission	f	PENDING PER ECN 134252 →

COOLING SYSTEM (FIGURE 4-4) YANMAR 2.6L AND 3.3L, DIESEL, SQUARE WAVE RADIATOR — WITH EXTERNAL OIL COOLER (S/N L177B14569E →)



BP060047

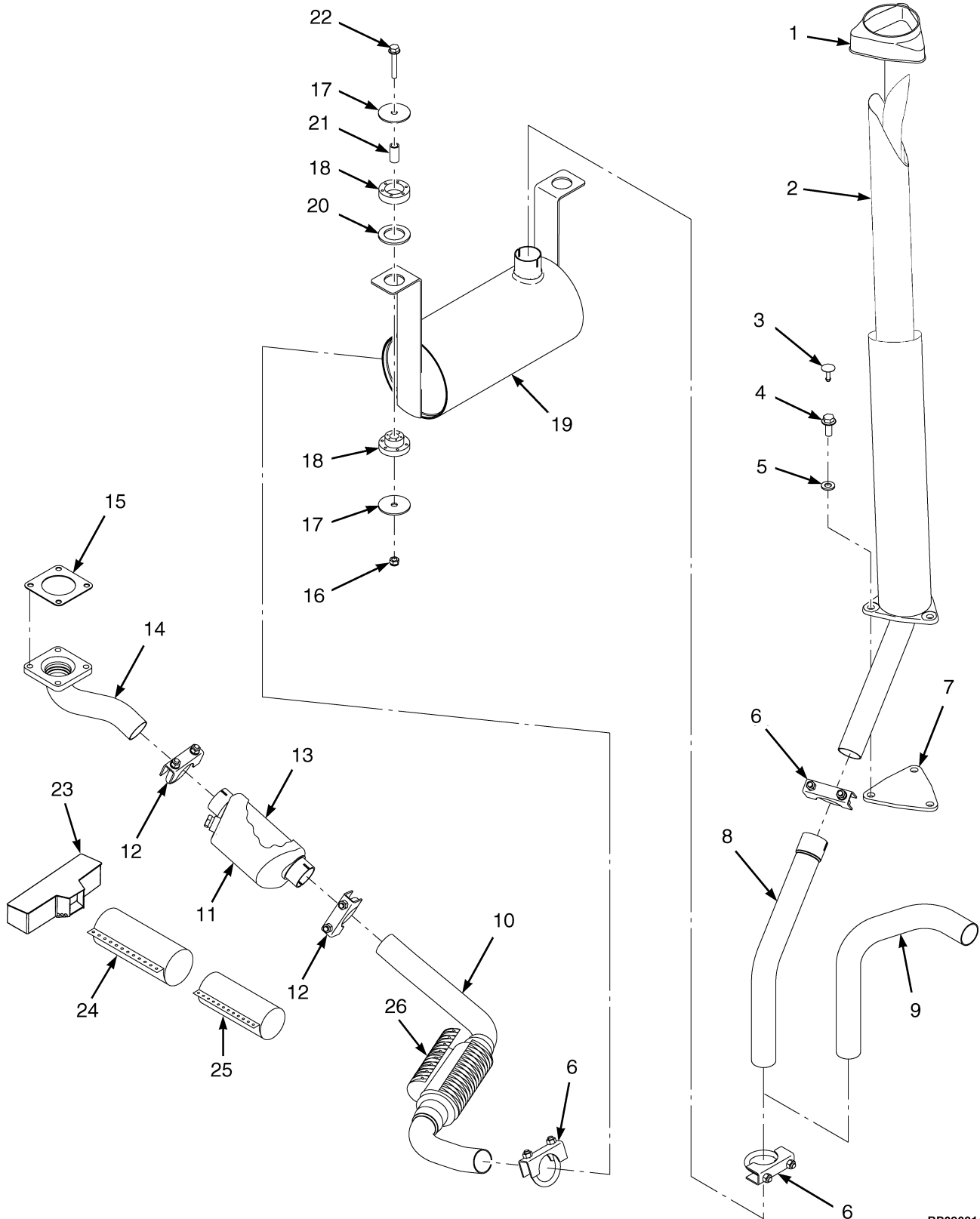
COOLING SYSTEM
YANMAR 2.6L AND 3.3L, DIESEL, SQUARE WAVE RADIATOR – WITH EXTERNAL OIL COOLER
(S/N L177B14569E →)

ITEM	PART NO.	DESCRIPTION	QTY
1	e 2074790	Radiator Assembly (Includes Oil Cooler)	1
1	e 1569079	Drain Valve (w/Thread Wrap)	1
1	e 1590918	Oil Cooler	1
1	e 1597765	Washer	4
1	e 1597766	Screw	4
1	e 1597763	Drain Valve	1
1	f 4603554	Radiator (Assembly)	1
1	f 4038258	Radiator	1
1	f 4038263	Oil Cooler	1
1	f 4038264	Drain Valve	1
1	f 4038265	Nut	2
1	f 4038266	Bolt	8
1	f 4038267	Bolt	4
2	1352140	Radiator Cap	1
3	2085104	Radiator Hose (Upper)	1
4	2069688	Radiator Hose (Lower)	1
5	369804	Clamp	4
6	1622272	Shroud	1
7	1535257	Nut	2
8	320154	Washer	2
9	302023	Screw	2
10	1551663	Clip	2
11	1611852	Bracket	1
12	1530243	Insert	4
13	1583611	Capscrew	4
14	1529787	Isolator	4
15	1565692	Exhaust Shield	1
16	1633307	Reservoir	1
17	345455	Outlet Assembly	1
17	336550	Bushing	1
17	345453	Outlet (Reservoir)	1
17	345454	Cap	1
17	1663877	Hose	1
18	1567674	Hose	1
19	369815	Clamp	2
20	c 1582078	Screen	1
20	b 1548497	Screen	1
20	a 1623471	Screen	1
21	1531404	Sensor (Low Coolant Level)	1
22	d 14385	Fitting	1

FOOTNOTES:

a	2.6L and 3.3L	d	Without Low Coolant Level Sensor
b	2.6L with Basic Transmission	e	→ PENDING PER ECN 13424401
c	3.3L with Basic Transmission	f	PENDING PER ECN 13424401 →

EXHAUST SYSTEM (FIGURE 4-5) YANMAR 2.6L AND 3.3L DIESEL



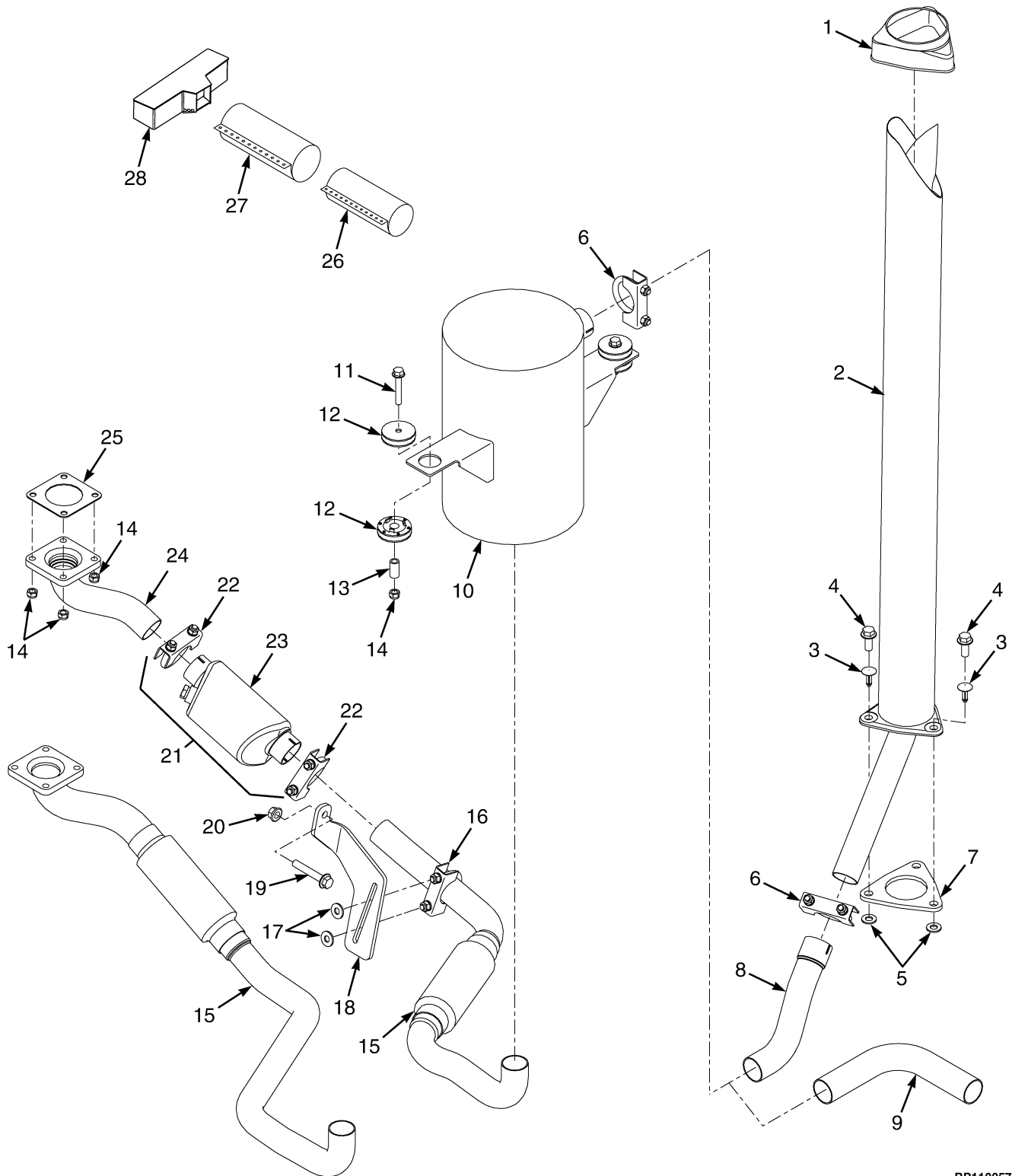
BP090214

EXHAUST SYSTEM
YANMAR 2.6L AND 3.3L DIESEL**KEY:****A: With Catalytic Converter****B: Without Catalytic Converter**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2021394	Cover	1	1
2	b 1609626	Tail Pipe	1	1
2	d 1646827	Tail Pipe	1	1
3	1347045	Fastener	3	3
4	1586013	Capscrew	3	3
5	320159	Washer	3	3
6	c 68968	Clamp	3	3
6	f 63117	Clamp	3	3
7	1533639	Cover	1	1
8	1567020	Exhaust Pipe (Overhead)	1	1
9	1586967	Exhaust Pipe (Counterweight)	1	1
10	1589629	Exhaust Pipe	1	..
10	1589630	Exhaust Pipe (Not Illustrated) .....	..	1
11	878258	Diesel Exhaust Purifier (Exhaust)	1	..
12	1391757	Clamp	2	..
13	1391758	Sock (Fiberglass)	1	..
14	1589635	Exhaust Pipe	1	..
15	1532363	Gasket	1	1
16	1582222	Locknut	4	4
17	1528938	Washer	4	4
18	1528930	Mount	2	2
19	2075554	Muffler (Exhaust)	1	1
20	1532585	Washer	2	2
21	1528934	Spacer	2	2
22	1510115	Capscrew	2	2
23	a 2084000	Exhaust Wrap	1	1
24	a 2084002	Wrap	1	1
25	a 2084001	Wrap	1	1
26	a 2073024	Wrap (Flex Joint)	1	1
27	e 2109163	Bracket	1	1
28	e 195769	Clamp	1	..
28	68968	Clamp (Alternate Part)	1	..
29	e 15175	Lockwasher	2	..
30	e 1527887	Capscrew	1	..
31	e 1460477	Nut	1	..

FOOTNOTES:**a** For Paper Industry Applications**b** → S/N L177B12956E**c** → S/N L177B30004H**d** S/N L177B12957E →**e** S/N L177B28656G →**f** S/N L177B30005H →

EXHAUST SYSTEM (FIGURE 4-6) YANMAR 2.6L AND 3.3L, DIESEL — ALTERNATE SYSTEM



BP110057

EXHAUST SYSTEM

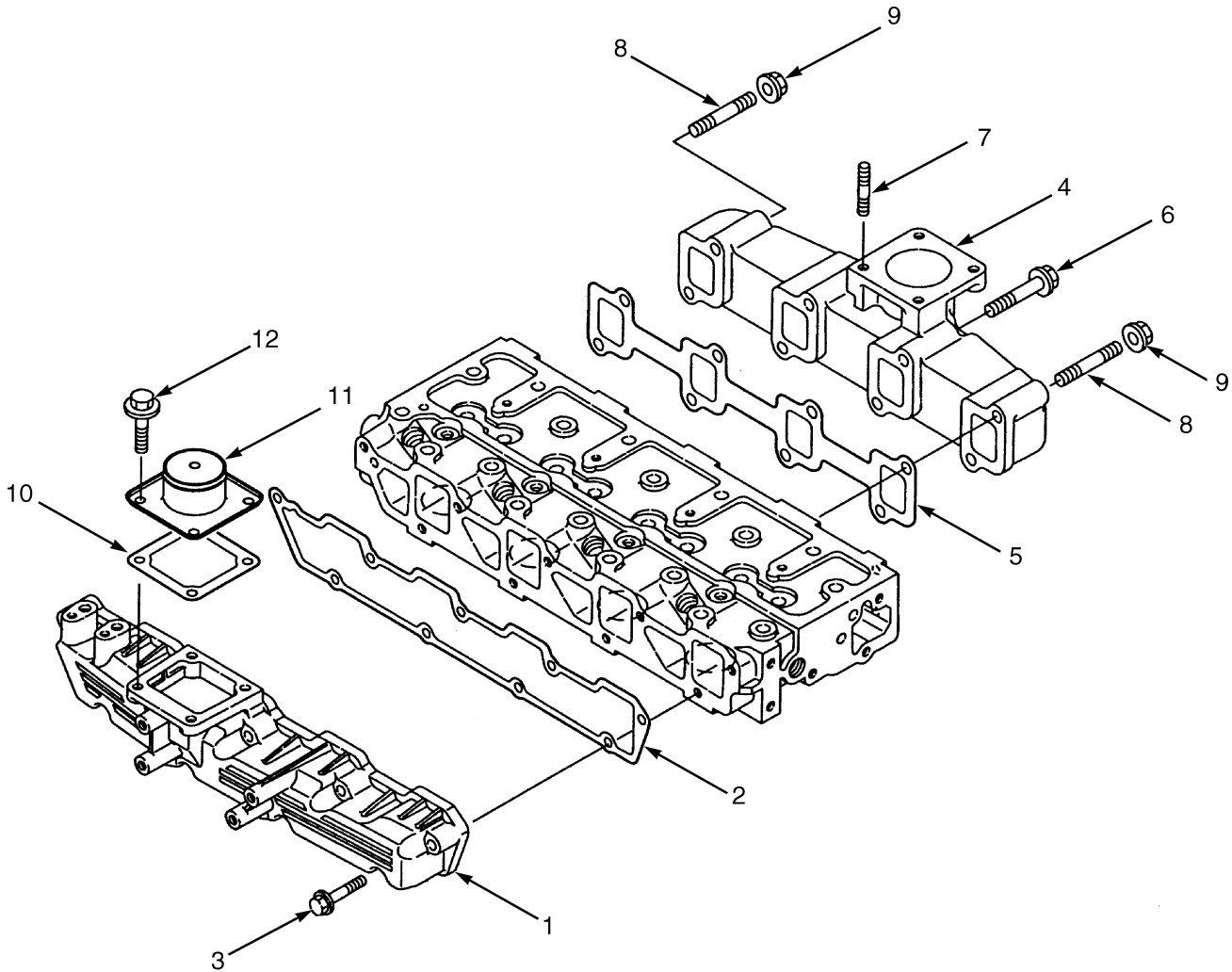
YANMAR 2.6L AND 3.3L, DIESEL – ALTERNATE SYSTEM

KEY:**A: With Catalytic Converter****B: Without Catalytic Converter**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2021394	Cover	1	1
2	4008736	Tail Pipe	1	1
3	1347045	Fastener	3	3
4	1510117	Capscrew	3	3
5	320159	Washer	3	3
6	d 68968	Clamp	3	3
6	f 63117	Clamp	3	3
7	1533639	Cover	1	1
8	c 4604616	Exhaust Pipe (Overhead)	1	1
8	e 4612595	Exhaust Pipe (Overhead)	1	1
9	1585212	Exhaust Pipe (Counterweight)	1	1
10	c 4602928	Muffler	1	1
10	e 4613004	Muffler	1	1
11	1510115	Capscrew	3	3
12	1709996	Isolator	4	4
13	1708371	Spacer	2	2
14	1582222	Locknut	6	6
15	b 4604617	Exhaust Pipe .....	..	1
15	4010287	Exhaust Pipe	1	..
16	68968	Clamp	1	..
17	15175	Lockwasher	2	..
18	2109163	Bracket	1	..
19	1527887	Capscrew	1	..
20	1460477	Nut	1	..
21	878258	Diesel Exhaust Purifier (Exhaust)	1	..
22	1391757	Clamp	2	..
23	1391758	Sock (Fiberglass)	2	..
24	1589635	Exhaust Pipe	1	..
25	1532363	Gasket	1	1
26	a 2084000	Exhaust Wrap	1	1
27	a 2084002	Wrap	1	1
28	a 2084001	Wrap	1	1
	ab 2073024	Wrap (Flex Joint)	1	1

FOOTNOTES:**a** For Paper Industry Applications**b** Not Illustrated**c** → PENDING PER ECN 12025305**d** → S/N L177B30004H**e** PENDING PER ECN 12025305 →**f** S/N L177B30005H →

INTAKE AND EXHAUST MANIFOLD (FIGURE 4-7) YANMAR 2.6L AND 3.3L — DIESEL



BP090185

**INTAKE AND EXHAUST MANIFOLD
YANMAR 2.6L AND 3.3L – DIESEL**

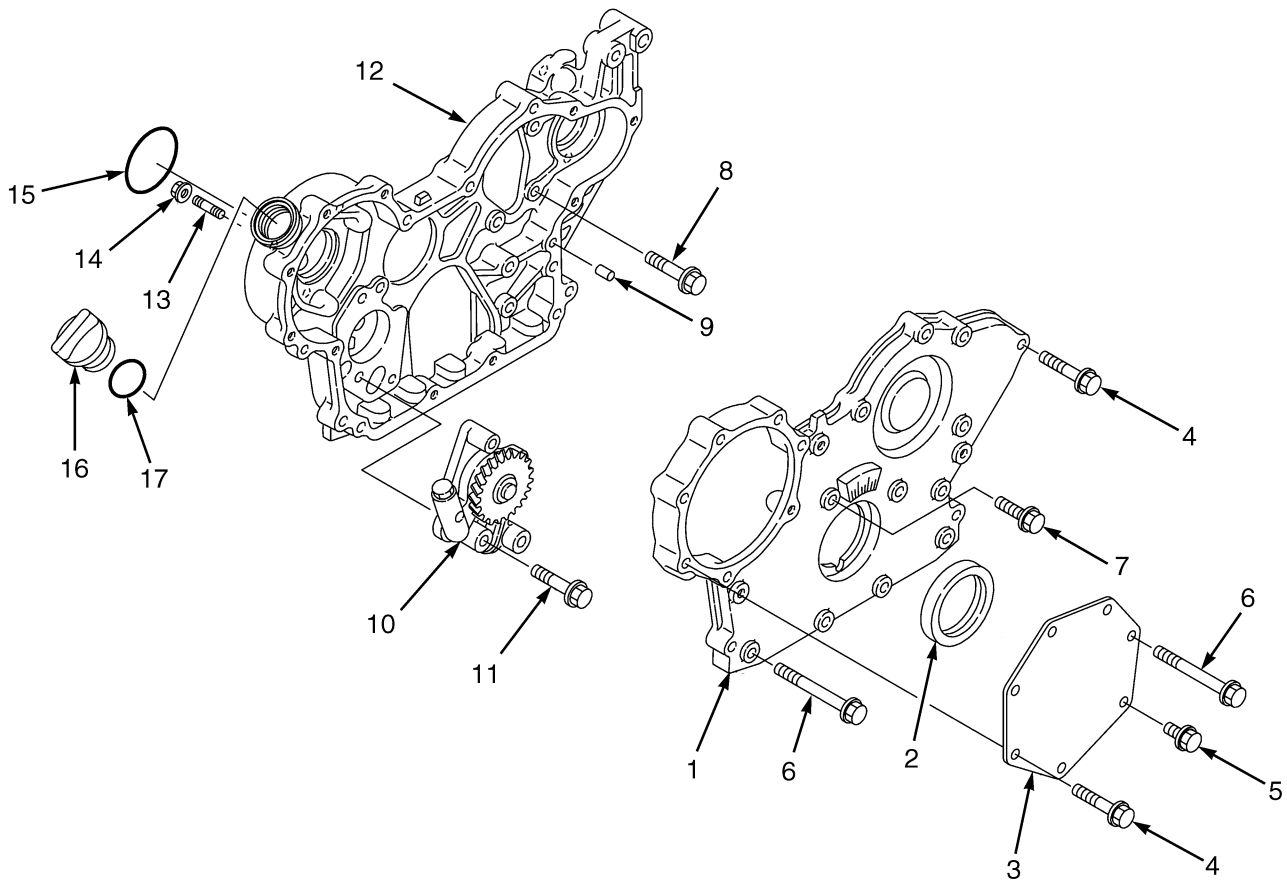
ITEM	PART NO.	DESCRIPTION	QTY
	a 1501687	Engine Assy-Diesel (Yanmar 2.6L)	1
	c 1688273	Engine Assy-Diesel (Yanmar 2.6L)	1
	b 1501690	Engine Assy-Diesel (Yanmar 3.3L)	1
	d 1676883	Engine Assy-Diesel (Yanmar 3.3L)	1
1	1599556	Intake Manifold	1
2	1599543	Gasket	1
3	1599475	Bolt	9
4	1599559	Exhaust Manifold	1
5	1599560	Gasket	1
6	1599561	Bolt	9
7	1599562	Stud	4
8	1599563	Stud	2
9	2068378	Nut	2
10	1599565	Gasket	1
11	1599567	Adapter	1
12	1599568	Bolt	4
	1599898	Kit-Gasket (2.6L Engine Complete)	1
	b 1600085	Kit-Gasket (Complete Engine) (3.3L)	1
	d 1689744	Kit-Gasket (Complete Engine) (3.3L)	1

FOOTNOTES:

a → S/N L177B24071F
b → S/N L177B24239F

c S/N L177B24072F →
d S/N L177B24240F →

GEAR HOUSING (FIGURE 4-8) YANMAR 2.6L AND 3.3L — DIESEL



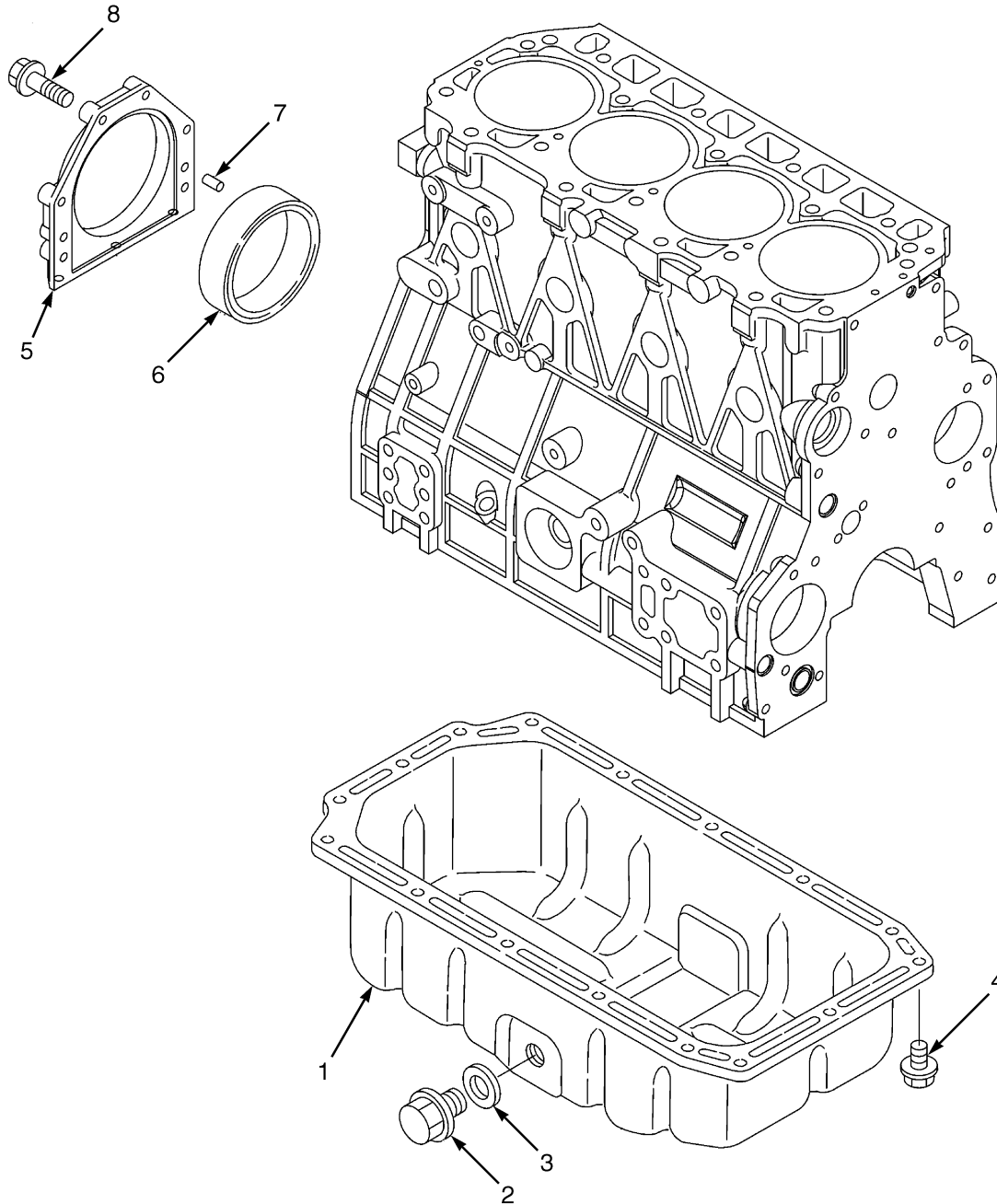
BP090182

GEAR HOUSING
YANMAR 2.6L AND 3.3L – DIESEL

ITEM	PART NO.	DESCRIPTION	QTY
	a 1501687	Engine Assy-Diesel (Yanmar 2.6L)	1
	d 1688273	Engine Assy-Diesel (Yanmar 2.6L)	1
	b 1501690	Engine Assy-Diesel (Yanmar 3.3L)	1
	f 1676883	Engine Assy-Diesel (Yanmar 3.3L)	1
1	ab 1599459	Cover	1
1	df 2101708	Gear Cover Assembly	1
2	ab 1599460	Oil Seal	1
2	df 2100927	Oil Seal	1
3	1599461	Cover	1
4	1599473	Bolt	10
5	1599470	Bolt	1
6	1599476	Bolt	7
7	1599472	Bolt	1
8	1599471	Bolt	3
9	1599458	Pin	4
10	1599466	Engine Oil Pump	1
11	1599475	Bolt	1
12	1599465	Cover	1
13	1599467	Stud	3
14	2068378	Nut	3
15	1599462	O-Ring	1
16	1599463	Cap (Oil Fill)	1
17	1599464	O-Ring	1
	ab 1599478	Gasket (Liquid)	AR
18	df 2084312	Gasket (Liquid)	1
	b 1600085	Kit-Gasket (Complete Engine) (3.3L)	1
	f 1689744	Kit-Gasket (Complete Engine) (3.3L)	1
	1599898	Kit-Gasket (2.6L Engine Complete)	1

FOOTNOTES:**a** → S/N L177B24071F (2.6L)**b** → S/N L177B24239F**c** → S/N L177B24239F (3.3L)**d** S/N L177B24072F →**e** S/N L177B24072F → (2.6L)**f** S/N L177B24240F →**g** S/N L177B24240F → (3.3L)

OIL PAN (FIGURE 4-9) YANMAR 2.6L AND 3.3L — DIESEL



BP090183

OIL PAN
YANMAR 2.6L AND 3.3L – DIESEL

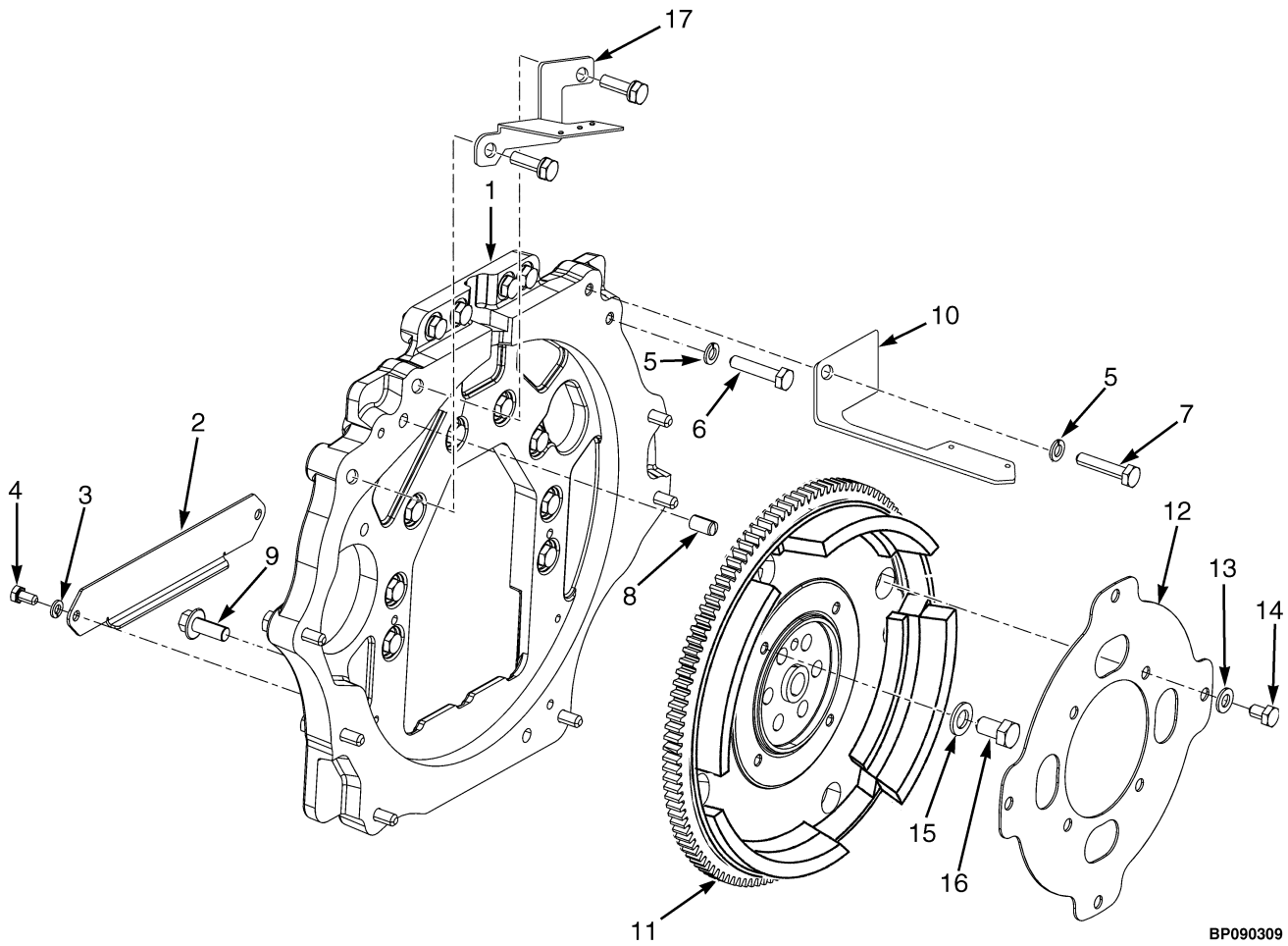
ITEM	PART NO.	DESCRIPTION	QTY
	a 1501687	Engine Assy-Diesel (Yanmar 2.6L)	1
	c 1688273	Engine Assy-Diesel (Yanmar 2.6L)	1
	b 1501690	Engine Assy-Diesel (Yanmar 3.3L)	1
	d 1676883	Engine Assy-Diesel (Yanmar 3.3L)	1
1	1599479	Oil Pan	1
2	1599480	Drain Plug	1
3	1599481	Oil Seal	1
4	1599448	Bolt	16
5	1599483	Case	1
6	1599484 1707826	Seal	1
7	1599458	Pin	2
8	1599485	Bolt	6
	1599478	Gasket (Liquid) (Not Illustrated)	AR
	b 1600085	Kit-Gasket (Complete Engine) (3.3L)	1
	d 1689744	Kit-Gasket (Complete Engine) (3.3L)	1
	1599898	Kit-Gasket (2.6L Engine Complete)	1

FOOTNOTES:

a → S/N L177B24071F
b → S/N L177B24239F

c S/N L177B24072F →
d S/N L177B24240F →

FLYWHEEL AND HOUSING (FIGURE 4-10) YANMAR 2.6L AND 3.3L — DIESEL



BP090309

**FLYWHEEL AND HOUSING
YANMAR 2.6L AND 3.3L – DIESEL**

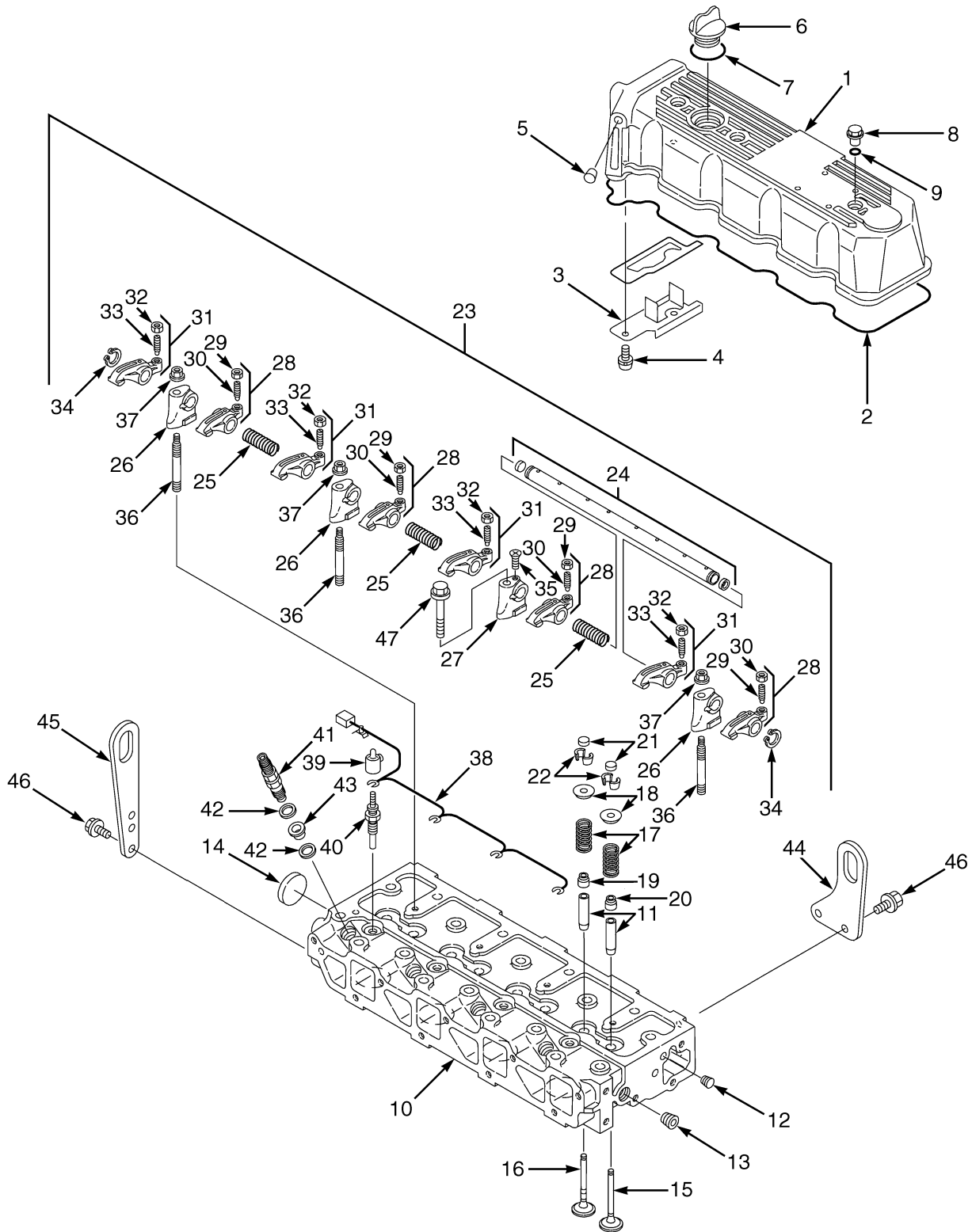
ITEM	PART NO.	DESCRIPTION	QTY
1	1553265	Housing	1
2	1522363	Cover	1
3	292681	Lockwasher	2
4	287851	Capscrew	2
5	388049		
	292682	Lockwasher	22
6	136985	Capscrew	12
7	292517	Capscrew	10
8	303150	Dowel	2
9	1528889	Capscrew	2
10	ab 1622886	Bracket	1
10	de 1653569	Bracket	1
11	c 1615800	Flywheel	1
11	f 1707341	Flywheel	1
12	1531806	Flex Plate	1
13	296420	Washer	4
14	293626	Capscrew	4
15	296424	Washer	6
16	1550747	Capscrew	6
17	1623093	Bracket	1

FOOTNOTES:

a → S/N L177B15745E (Wet Brake)
b → S/N L177B15791E (Dry Brake)
c → S/N L177B29534G

d S/N L177B15746E → (Wet Brake)
e S/N L177B15792E → (Dry Brake)
f S/N L177B29535G →

CYLINDER HEAD (FIGURE 4-11) YANMAR 2.6L AND 3.3L — DIESEL



BP090184

**CYLINDER HEAD
YANMAR 2.6L AND 3.3L – DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	a 1501687	Engine Assy-Diesel (Yanmar 2.6L)	1
	c 1688273	Engine Assy-Diesel (Yanmar 2.6L)	1
	b 1501690	Engine Assy-Diesel (Yanmar 3.3L)	1
	d 1676883	Engine Assy-Diesel (Yanmar 3.3L)	1
1	1599545	Engine Cover	1
2	1599546	Gasket	1
3	1599547	Plate	1
4	1599548	Screw	2
5	1599549	Plug	1
6	1599463	Cap (Oil Fill)	1
7	1599464	O-Ring	1
8	1599544	Plug	3
9	1599550	O-Ring	3
10	1599488	Cylinder Head Assembly (2.6L)	1
10	1600273	Cylinder Head (3.3L)	1
10	1599524	Cylinder Head (2.6L)	1
10	1600274	Cylinder Head (3.3L)	1
11	1599525	Guide	8
12	1599526	Plug	1
13	1599441	Plug	1
14	1599528	Plug	1
15	1599489	Inlet Valve	4
16	1599516	Exhaust Valve	4
17	1599517	Spring	8
18	1599518	Retainer	8
19	1599519	Seal (Exhaust Valve)	4
20	1599520	Seal (Intake Valve)	4
21	1599521	Cap	8
22	1599529	Retainer	8
23	1599530	Support Assembly (Rocker Arm)	1
24	1599531	Shaft	1
25	1599532	Spring	3
26	1599533	Support	3
27	1599534	Support	1
28	1599535	Kit-Rocker Arm	4
29	1599536	Screw	1
30	1599537	Nut	1
31	1599538	Kit-Rocker Arm	4
32	1599536	Screw	1
33	1599537	Nut	1
34	1599539	Retaining Ring	2
35	1599540	Screw	1
36	1599541	Stud	3
37	1599542	Nut	3
38	1599553	Connector (Glow Plug)	1
39	1599557	Cover	4
40	1599552	Glow Plug	4
41	1599819	Nozzle	1
42	1599523	Gasket	8
43	1599522	Protector	4

CYLINDER HEAD YANMAR 2.6L AND 3.3L – DIESEL

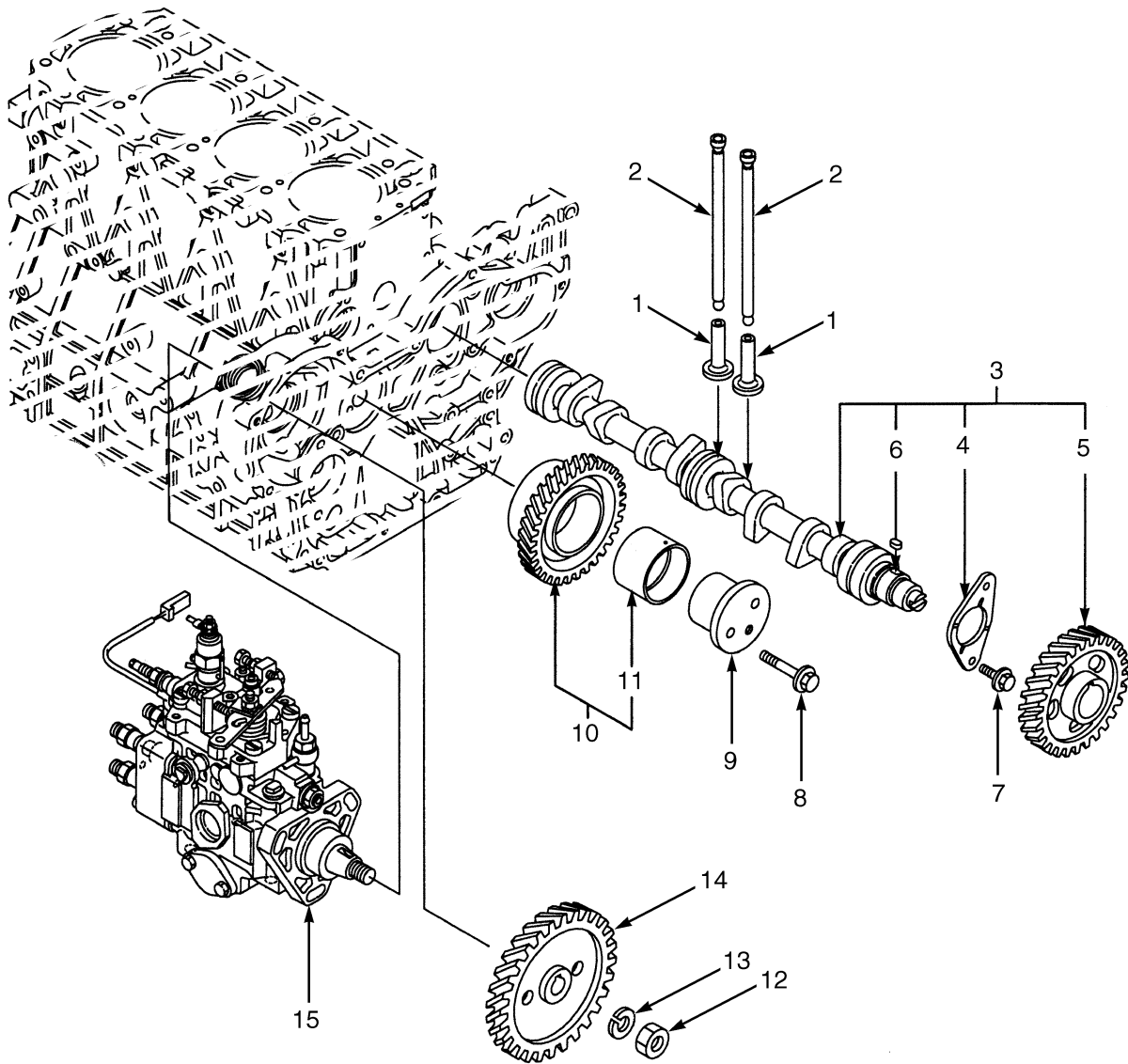
ITEM	PART NO.	DESCRIPTION	QTY
44	1599487	Lifting Eye	1
45	1599486	Lifting Eye	1
46	1599470	Bolt	4
47	1599555	Bolt	1
	b 1600085	Kit-Gasket (Complete Engine) (3.3L)	1
48	d 1689744	Kit-Gasket (Complete Engine) (3.3L)	1
	1599898	Kit-Gasket (2.6L Engine Complete) (2.6L)	1

FOOTNOTES:

a → S/N L177B24071F
b → S/N L177B24239F

c S/N L177B24072F →
d S/N L177B24240F →

CAMSHAFT AND DRIVE GEAR (FIGURE 4-12) YANMAR 2.6L AND 3.3L — DIESEL



BP090186

**CAMSHAFT AND DRIVE GEAR
YANMAR 2.6L AND 3.3L – DIESEL**

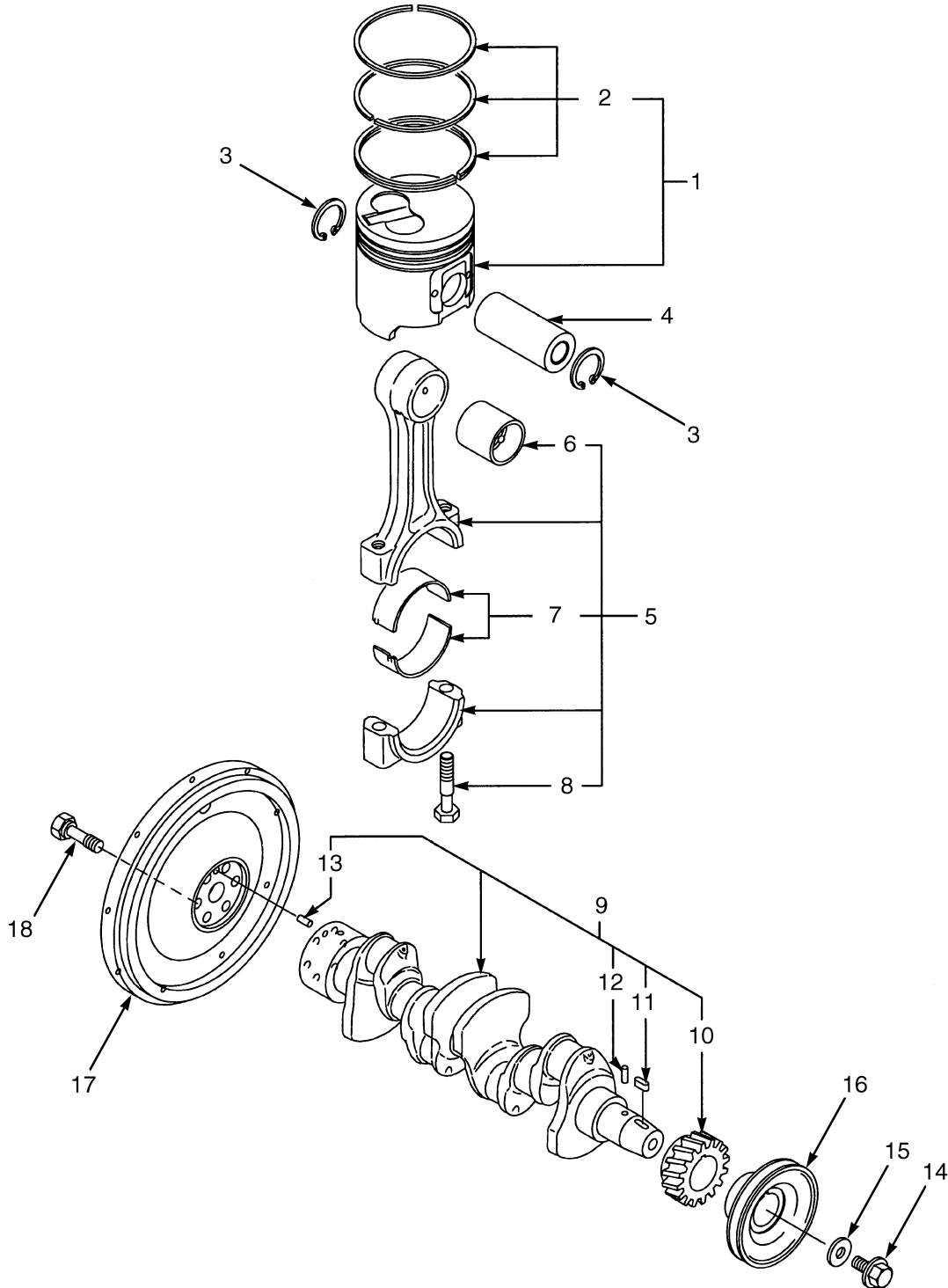
ITEM	PART NO.	DESCRIPTION	QTY
	a 1501687	Engine Assy-Diesel (Yanmar 2.6L)	1
	c 1688273	Engine Assy-Diesel (Yanmar 2.6L)	1
	b 1501690	Engine Assy-Diesel (Yanmar 3.3L)	1
	d 1676883	Engine Assy-Diesel (Yanmar 3.3L)	1
1	1599569	Tappet	8
2	1599570	Push Rod	8
3	1599571	Camshaft	1
4	1599572	Retainer	1
5	1599573	Gear	1
6	1599574	Key	1
7	1599470	Bolt	2
8	1599579	Bolt	2
9	1599576	Shaft	1
10	1599577 4021292	Idler Gear	1
11	1599578	Bushing	1
12	1599582	Locknut	1
13	1599581	Spring Washer	1
14	1599580	Gear	1
15	1599901	Injection Pump (2.6L) (☞ Figure 5-28).....	1
15	1708457	Fuel Pump Assembly (Injection 2.6L) (Alternate Part)	1
15	b 1600084	Injection Pump (3.3L) (☞ Figure 5-28).....	1
15	d 1689747	Fuel Pump (3.3L)	1

FOOTNOTES:

a → S/N L177B24071F
b → S/N L177B24239F

c S/N L177B24072F →
d S/N L177B24240F →

CRANKSHAFT AND PISTONS (FIGURE 4-13) YANMAR 2.6L AND 3.3L — DIESEL



BP090187

**CRANKSHAFT AND PISTONS
YANMAR 2.6L AND 3.3L – DIESEL**

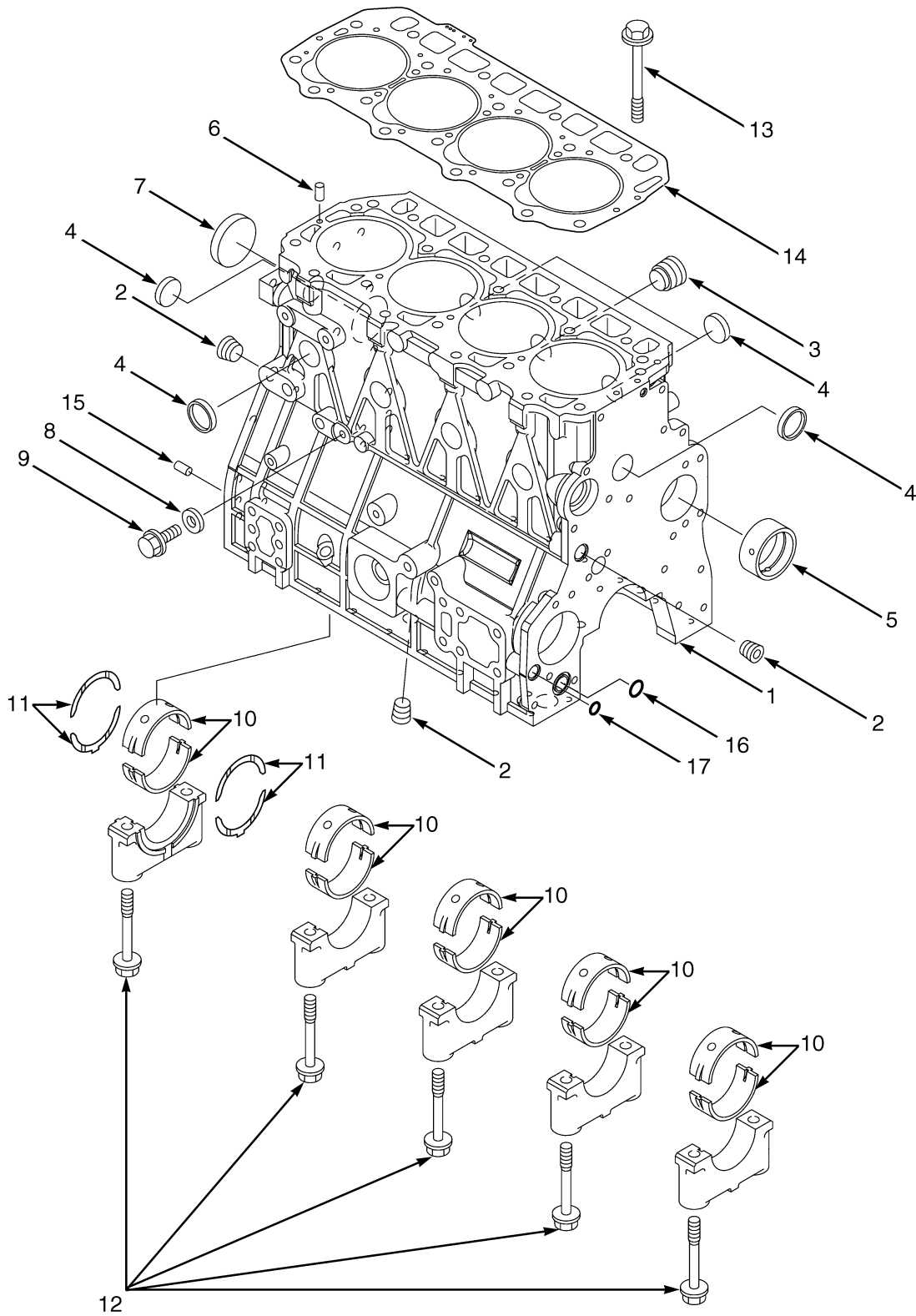
ITEM	PART NO.	DESCRIPTION	QTY
	a 1501687	Engine Assy-Diesel (Yanmar 2.6L)	1
	d 1688273	Engine Assy-Diesel (Yanmar 2.6L)	1
	b 1501690	Engine Assy-Diesel (Yanmar 3.3L)	1
	e 1676883	Engine Assy-Diesel (Yanmar 3.3L)	1
1	1599592	Piston (With Standard Rings) (2.6L)	4
1	1600276	Piston (With Standard Rings) (3.3L)	4
1	1599600	Kit-Piston (O/S 0.25 with Rings) (2.6L)	4
1	1600278	Piston (O/S 0.25 with Rings) (3.3L)	4
2	1599593	Kit-Piston Ring (Standard) (2.6L)	1
2	1600277	Kit-Piston Ring (Standard) (3.3L)	1
2	1599601	Kit-Piston Ring (O/S 0.25) (2.6L)	1
2	1600279	Kit-Piston Ring (O/S 0.25) (3.3L)	1
3	1599595	Snap Ring	8
4	1599594	Pin	4
5	1599596	Piston Rod	4
6	1599597	Bushing	1
7	2092550	Piston Rod Bearing (Standard)	1
7	2092551	Bearing (U/S 0.25)	4
8	1599598	Bolt	2
9	1599583	Crankshaft (2.6L)	1
9	1600275	Crankshaft (3.3L)	1
10	1599584	Gear	1
11	1599574	Key	1
12	1599585	Pin	1
13	1599586	Pin	1
14	1599590	Bolt	1
15	1599589	Washer	1
16	1599588	Pulley	1
17	c 1615800	Flywheel	1
17	f 1707341	Flywheel	1
18	1599591	Bolt	6

FOOTNOTES:

a → S/N L177B24071F
b → S/N L177B24239F
c → S/N L177B29534G

d S/N L177B24072F →
e S/N L177B24240F →
f S/N L177B29535G →

CYLINDER BLOCK (FIGURE 4-14) YANMAR 2.6L AND 3.3L — DIESEL



BP090181

CYLINDER BLOCK
YANMAR 2.6L AND 3.3L – DIESEL

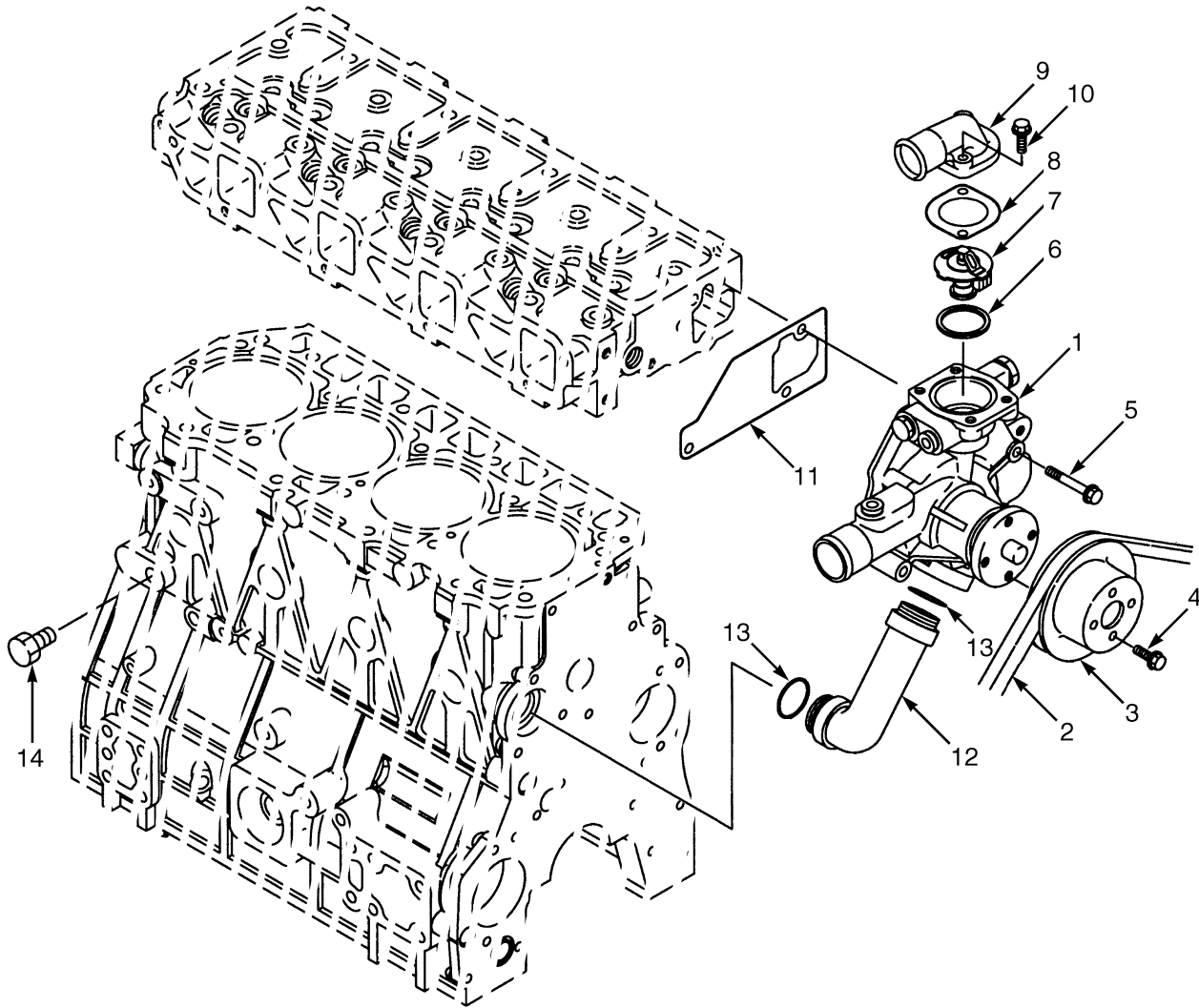
ITEM	PART NO.	DESCRIPTION	QTY
	a 1501687	Engine Assy-Diesel (Yanmar 2.6L)	1
	c 1688273	Engine Assy-Diesel (Yanmar 2.6L)	1
	b 1501690	Engine Assy-Diesel (Yanmar 3.3L)	1
	d 1676883	Engine Assy-Diesel (Yanmar 3.3L)	1
1	1599440	Cylinder Block (2.6L)	1
1	b 1599904	Cylinder Block (3.3L)	1
1	d 1689742	Cylinder Block (3.3L)	1
2	1599441	Plug	3
3	1599442	Plug	1
4	1599451	Plug	8
5	1599444	Bushing	1
6	1599446	Cotter Pin	2
7	1599449	Plug	1
8	1599445	Washer	1
9	1599448	Bolt	1
10	2092548	Kit-Crankshaft Bearing (Standard)	5
10	2092549	Kit-Bearing (U/S 0.25)	5
11	2092552	Kit-Thrust Bearing (Standard)	2
11	2092553	Kit-Thrust Bearing (U/S 0.25)	2
12	1599443	Bolt	10
13	1599454	Bolt	18
14	1599455	Cylinder Head Gasket (2.6L)	1
14	1599905	Cylinder Head Gasket (3.3L)	1
15	1599458	Pin	2
16	1599468	O-Ring	1
17	1599469	O-Ring	1
	b 1600085	Kit-Gasket (Complete Engine) (3.3L)	1
	d 1689744	Kit-Gasket (Complete Engine) (3.3L)	1
	1599898	Kit-Gasket (2.6L Engine Complete)	1

FOOTNOTES:

a → S/N L177B24071F
b → S/N L177B24239F

c S/N L177B24072F →
d S/N L177B24240F →

ENGINE COOLING (FIGURE 4-15) YANMAR 2.6L AND 3.3L — DIESEL



BP090193

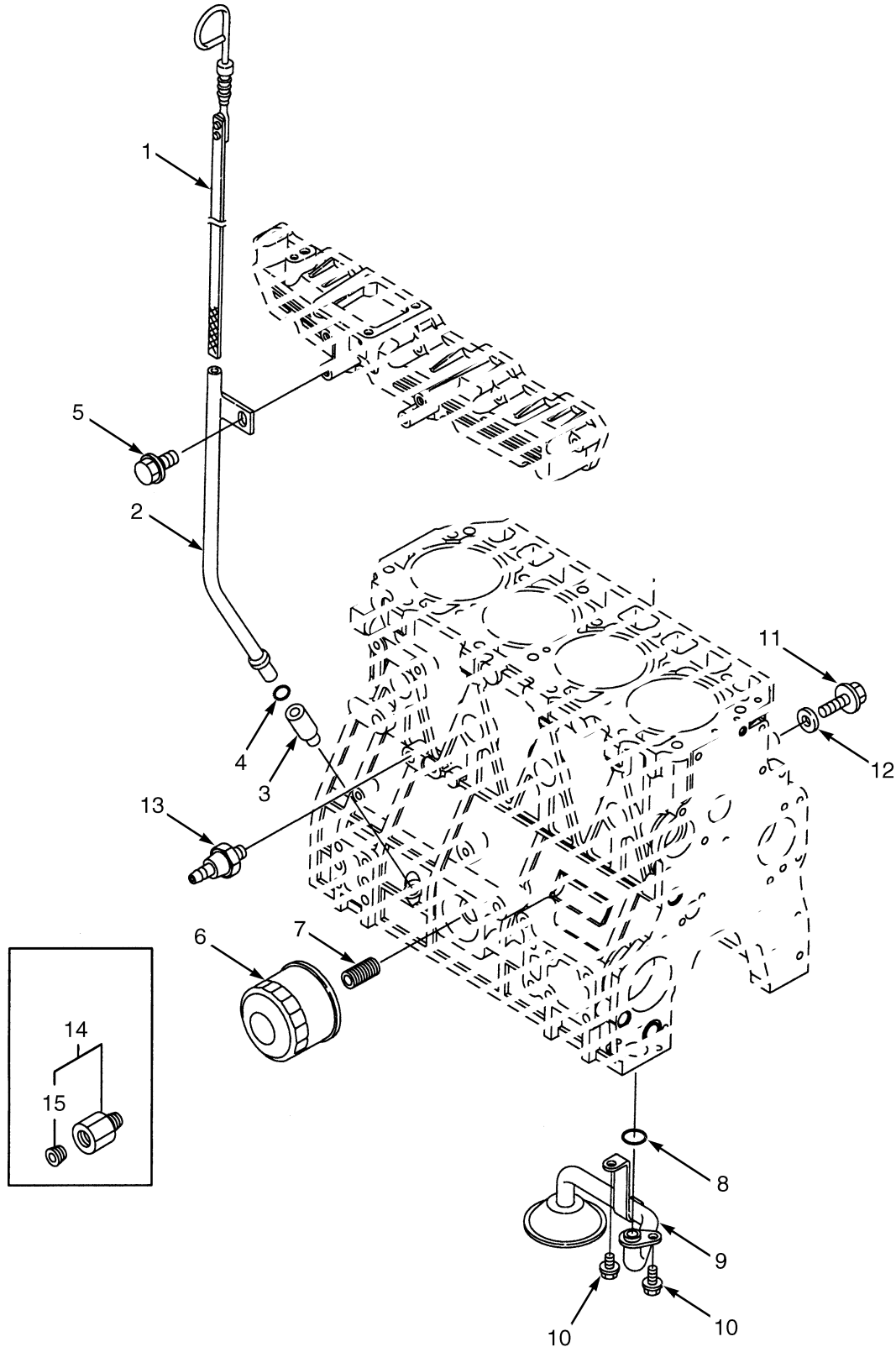
ENGINE COOLING
YANMAR 2.6L AND 3.3L – DIESEL

ITEM	PART NO.	DESCRIPTION	QTY
	b 1501687	Engine Assy-Diesel (Yanmar 2.6L)	1
	f 1688273	Engine Assy-Diesel (Yanmar 2.6L)	1
	d 1501690	Engine Assy-Diesel (Yanmar 3.3L)	1
	h 1676883	Engine Assy-Diesel (Yanmar 3.3L)	1
1	1599804	Water Pump	1
1	abd 1599815	Gasket	1
1	afh 1600086	Seal	1
2	1581441	V-Belt	1
3	1616427	Water Pump Pulley	1
4	1599448	Bolt	4
5	1599579	Bolt	3
6	1597709	Gasket	1
7	1599800	Thermostat	1
8	1597710	Gasket	1
9	1599798	Cover	1
10	1599801	Bolt	1
11	1599803	Gasket	1
12	1599797	Pipe	1
13	1599807	O-Ring	2
14	1599802	Drain Plug	2
	1599898	Kit-Gasket (2.6L Engine Complete)	1
	d 1600085	Kit-Gasket (Complete Engine) (3.3L)	1
	h 1689744	Kit-Gasket (Complete Engine) (3.3L)	1

FOOTNOTES:

a	Not Illustrated	f	S/N L177B24072F →
b	→ S/N L177B24071F	g	S/N L177B24072F → (2.6L)
c	→ S/N L177B24071F (2.6L)	h	S/N L177B24240F →
d	→ S/N L177B24239F	i	S/N L177B24240F → (3.3L)
e	→ S/N L177B24239F (3.3L)		

LUBRICATION SYSTEM (FIGURE 4-16) YANMAR 2.6L AND 3.3L — DIESEL



BP090188

LUBRICATION SYSTEM
YANMAR 2.6L AND 3.3L – DIESEL

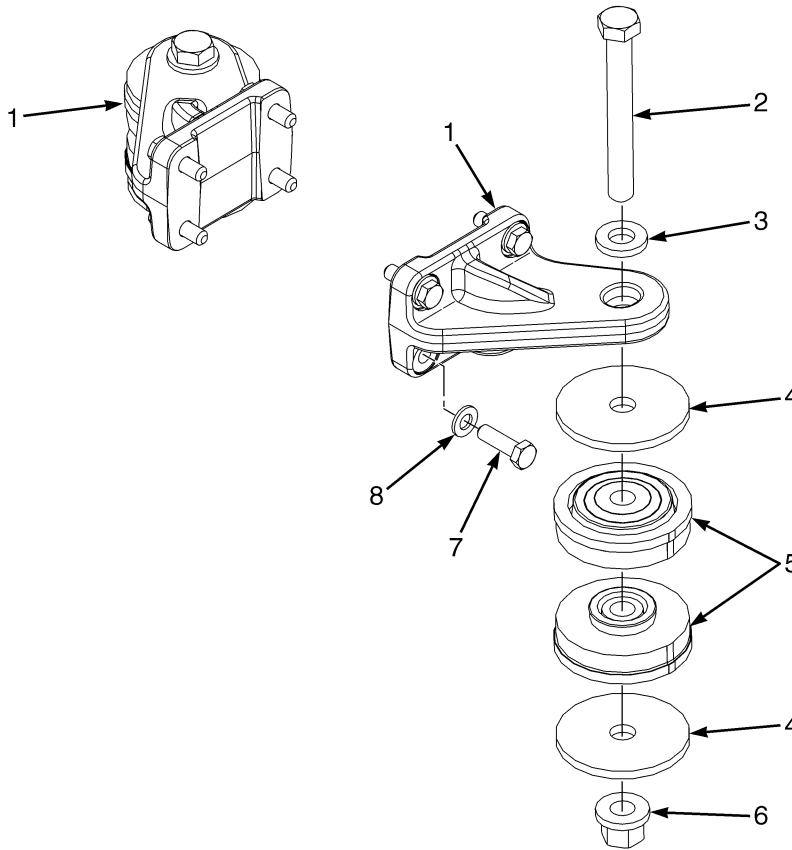
ITEM	PART NO.	DESCRIPTION	QTY
	a 1501687	Engine Assy-Diesel (Yanmar 2.6L)	1
	c 1688273	Engine Assy-Diesel (Yanmar 2.6L)	1
	b 1501690	Engine Assy-Diesel (Yanmar 3.3L)	1
	d 1676883	Engine Assy-Diesel (Yanmar 3.3L)	1
1	1599604	Dipstick	1
2	1599606	Dipstick Tube	1
3	1599605	Guide	1
4	1599607	O-Ring	1
5	1599470	Bolt	1
6	2077983	Oil Filter	1
7	1599610	Stud	1
8	1599468	O-Ring	1
9	1599611	Pipe	1
10	1599612	Bolt	2
11	1599448	Bolt	1
12	1599445	Washer	1
13	1566654	Pressure Transducer Sensor (Oil Pressure)	1
14	1599616	Plug (Oil Pressure Sensor)	1
15	1599793	Plug	1
	1599898	Kit-Gasket (2.6L Engine Complete)	1
	b 1600085	Kit-Gasket (Complete Engine) (3.3L)	1
17	d 1689744	Kit-Gasket (Complete Engine) (3.3L)	1

FOOTNOTES:

a → S/N L177B24071F
b → S/N L177B24239F

c S/N L177B24072F →
d S/N L177B24240F →

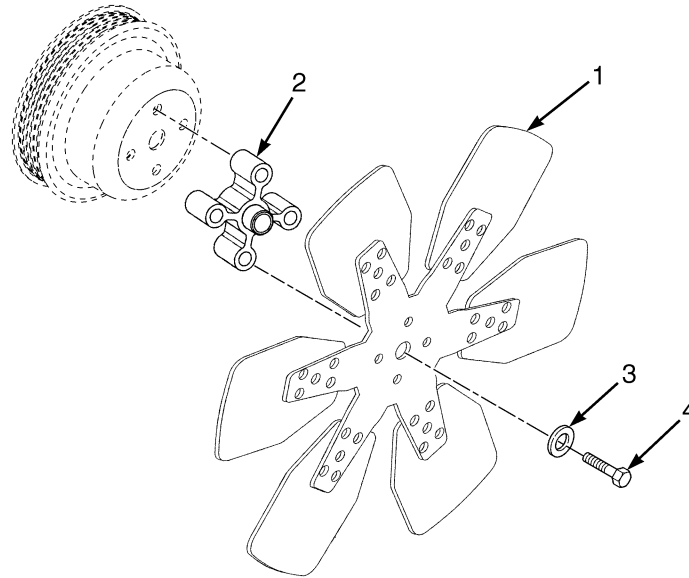
ENGINE MOUNTING (FIGURE 4-17) YANMAR 2.6 AND 3.3L



BP090419

ITEM	PART NO.	DESCRIPTION	QTY
1	1557767	Mount	2
2	293698	Capscrew	2
3	1504075	Washer	2
4	1557737	Washer	4
5	2069951	Isolator	4
6	1565453	Nut (Flange)	2
7	293630	Capscrew	8
8	296420	Washer	8

**FAN ASSEMBLY (FIGURE 4-18)
YANMAR 2.6 AND 3.3L**



BP090418

ITEM	PART NO.	DESCRIPTION	QTY
1	a 2081311	Fan (Pusher)	1
1	b 2085570	Fan (Pusher)	1
2	1539154	Spacer	1
3	293623	Capscrew	4
4	296418	Washer	4

FOOTNOTES:

a → S/N L177B12346D

b S/N L177B12374D →

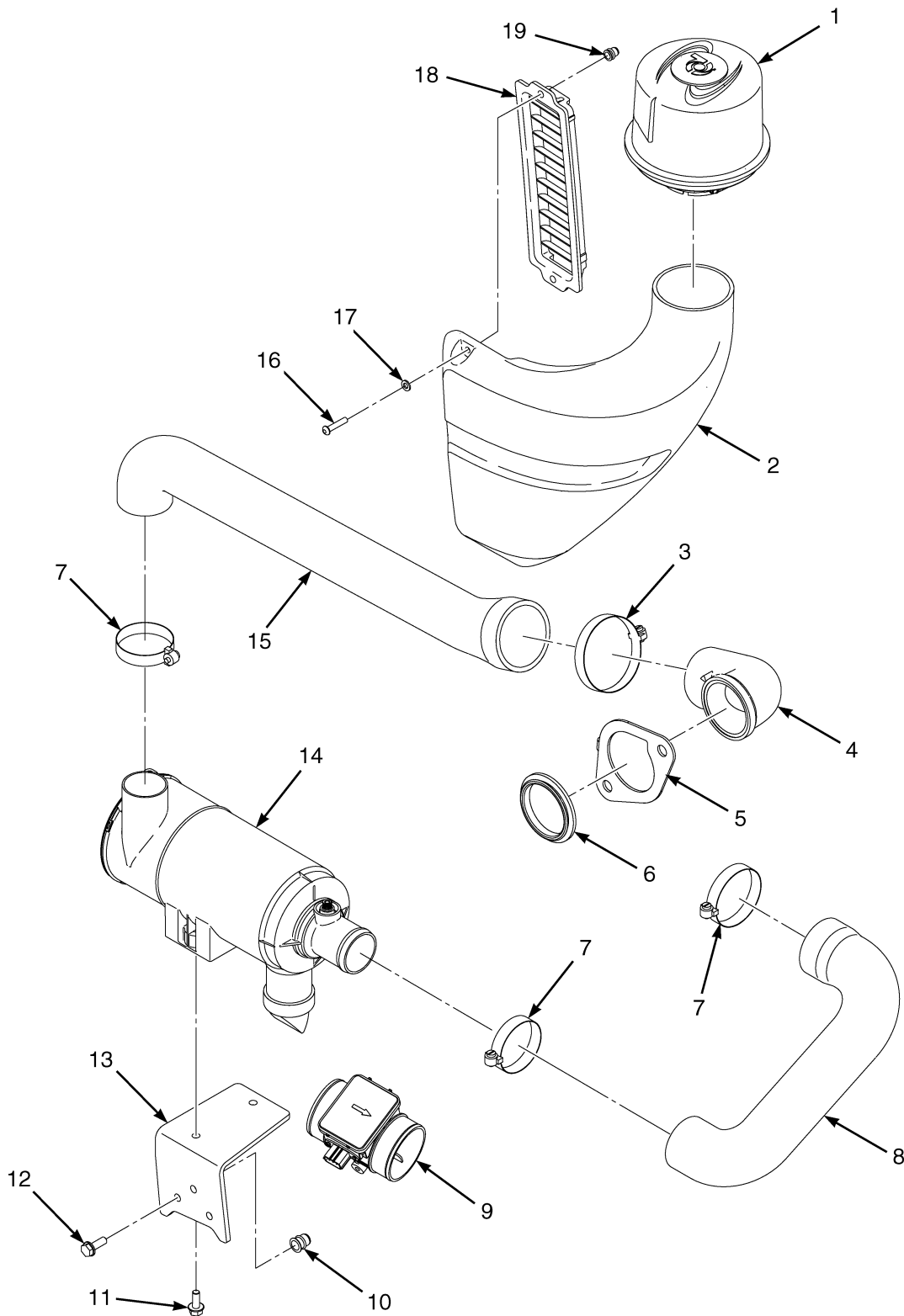
5

FUEL SYSTEM

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FUEL SYSTEM**

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AIR INTAKE AND FILTER SYSTEM (FIGURE 5-1) MAZDA 2.0L AND 2.2L — LPG



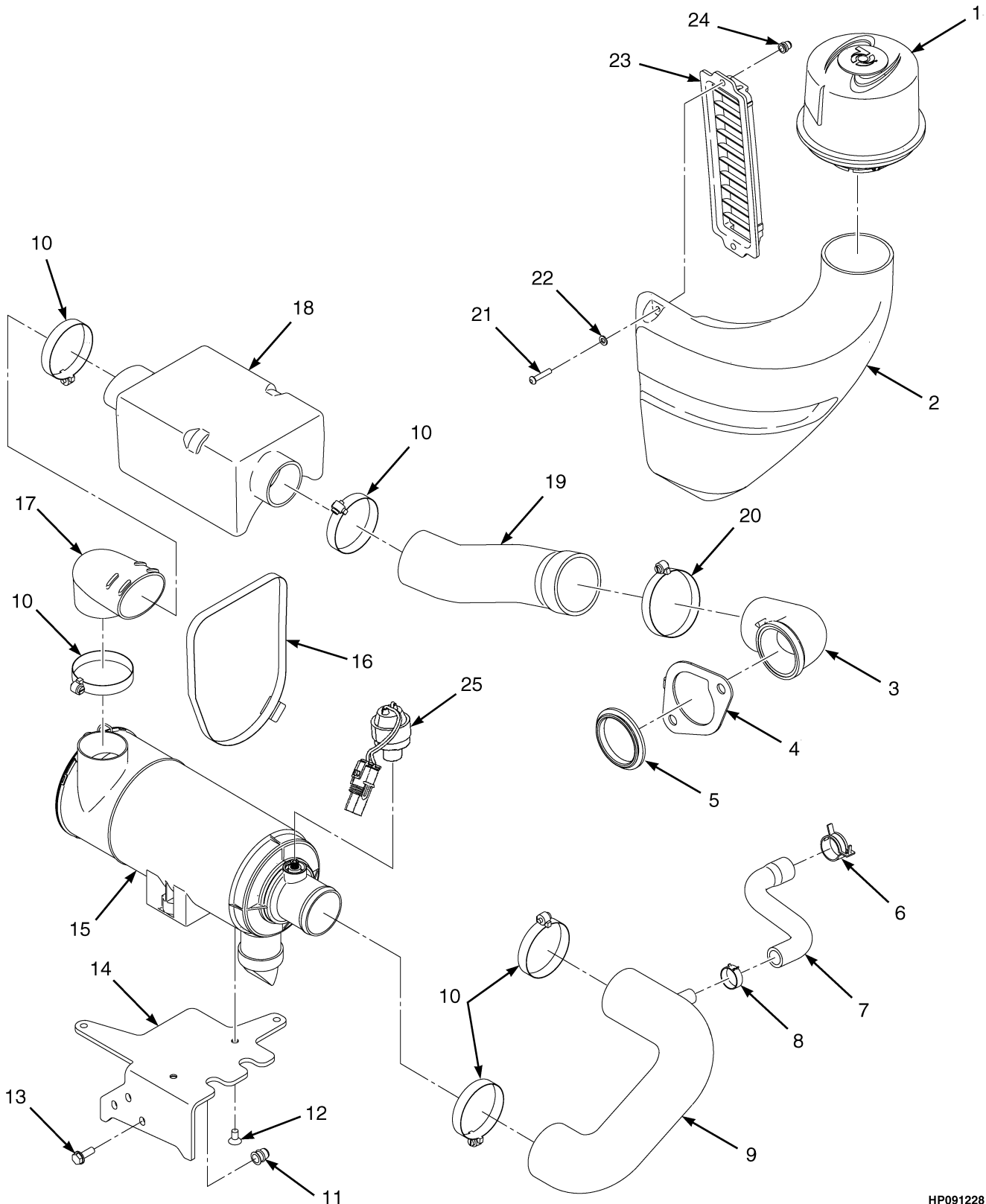
HP091231

**AIR INTAKE AND FILTER SYSTEM
MAZDA 2.0L AND 2.2L – LPG**

ITEM	PART NO.	DESCRIPTION	QTY
1	1501888	Pre-Cleaner	1
2	b 1565201	Air Duct	1
2	d 1677793	Air Duct	1
3	1394008	Hose Clamp	1
4	1581438	Elbow	1
5	1581439	Retainer (Elbow)	1
6	1502079	Grommet	1
7	112989	Hose Clamp	3
8	1501835	Hose	1
9	1501629	Sensor (Airflow)	1
10	1530243	Insert	3
11	1527879	Capscrew	2
12	1583611	Capscrew	3
13	1501848	Bracket	1
14	a 2055193	Air Filter (☞ Figure 5-7).....	1
14	c 4611248	Air Filter (☞ Figure 5-7).....	1
15	1502034	Hose	1
16	2071261	Capscrew	2
17	1506738	Washer	2
18	2067476	Grill	1
19	1531558	Insert	2
20	1677833	Screw (Pre-Cleaner Mounting)	3

FOOTNOTES:**a** → 10/2010**b** → S/N L177B28742G**c** 10/2010 →**d** S/N L177B28743G →

AIR INTAKE AND FILTER SYSTEM (FIGURE 5-2) GM 2.4L, LPG (→ S/N L177B19203E)

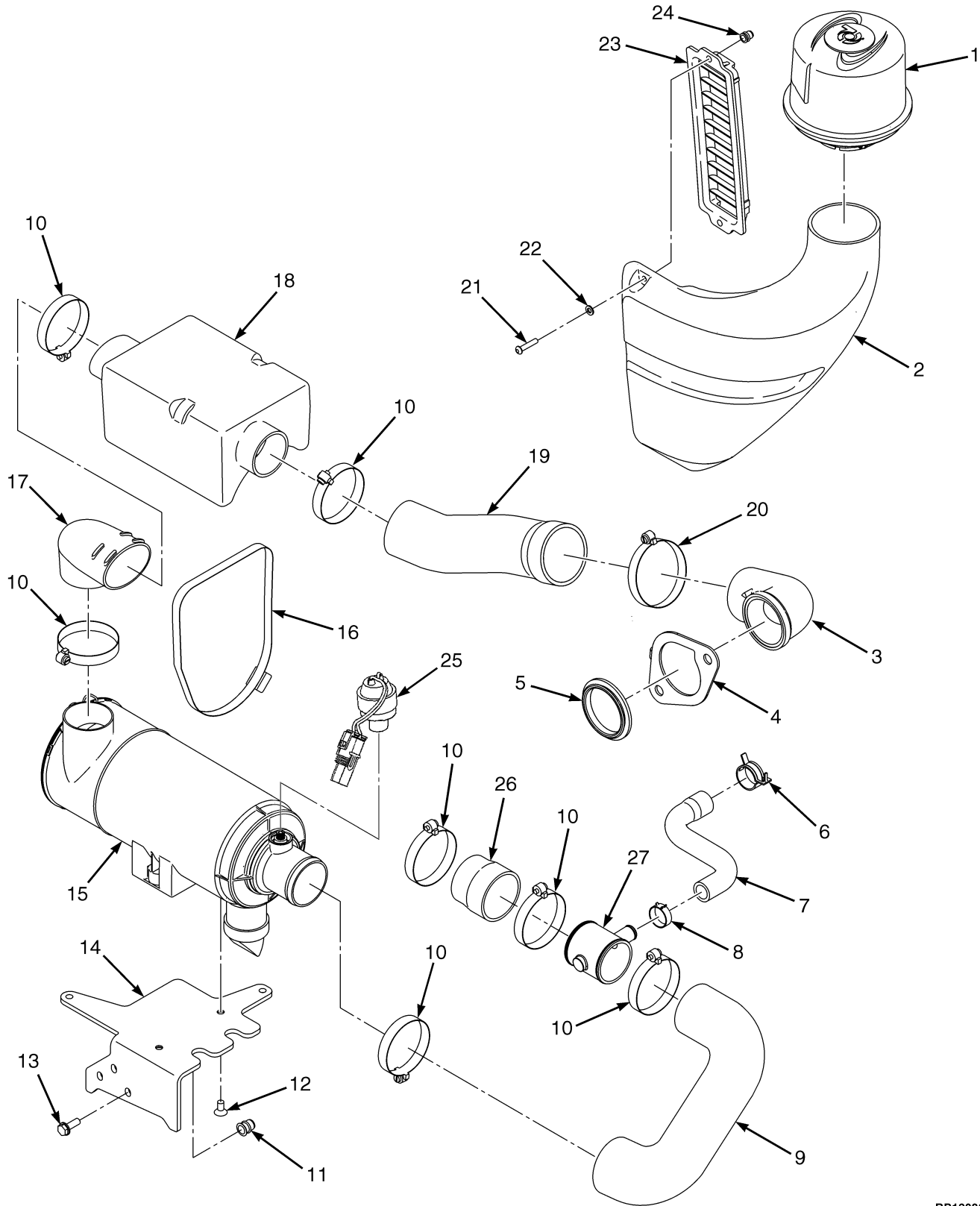


HP091228

AIR INTAKE AND FILTER SYSTEM
GM 2.4L, LPG (→ S/N L177B19203E)

ITEM	PART NO.	DESCRIPTION	QTY
1	1501888	Pre-Cleaner	1
2	1565201	Air Duct	1
3	1581438	Elbow	1
4	1581439	Retainer	1
5	1502079	Grommet	1
6	1501997	Hose Clamp	1
7	1501887	Hose	1
8	353199	Clamp	1
9	1501837	Hose	1
10	112989	Hose Clamp	5
11	1530243	Insert	3
12	296481	Screw	2
13	1583611	Capscrew	3
14	1582159	Bracket	1
15	1501855	Air Filter (☞ Figure 5-7).....	1
16	1580068	Strap	1
17	1565199	Elbow	1
18	1565200	Silencer	1
19	1565212	Hose	1
20	1394008	Hose Clamp	1
21	2071261	Capscrew	2
22	1506738	Washer	2
23	2067476	Grill	1
24	1531558	Insert	2
25	1529257	Sensor (Air Flow Restriction)	1

AIR INTAKE AND FILTER SYSTEM (FIGURE 5-3) GM 2.4L, LPG (S/N L177B19203E →)



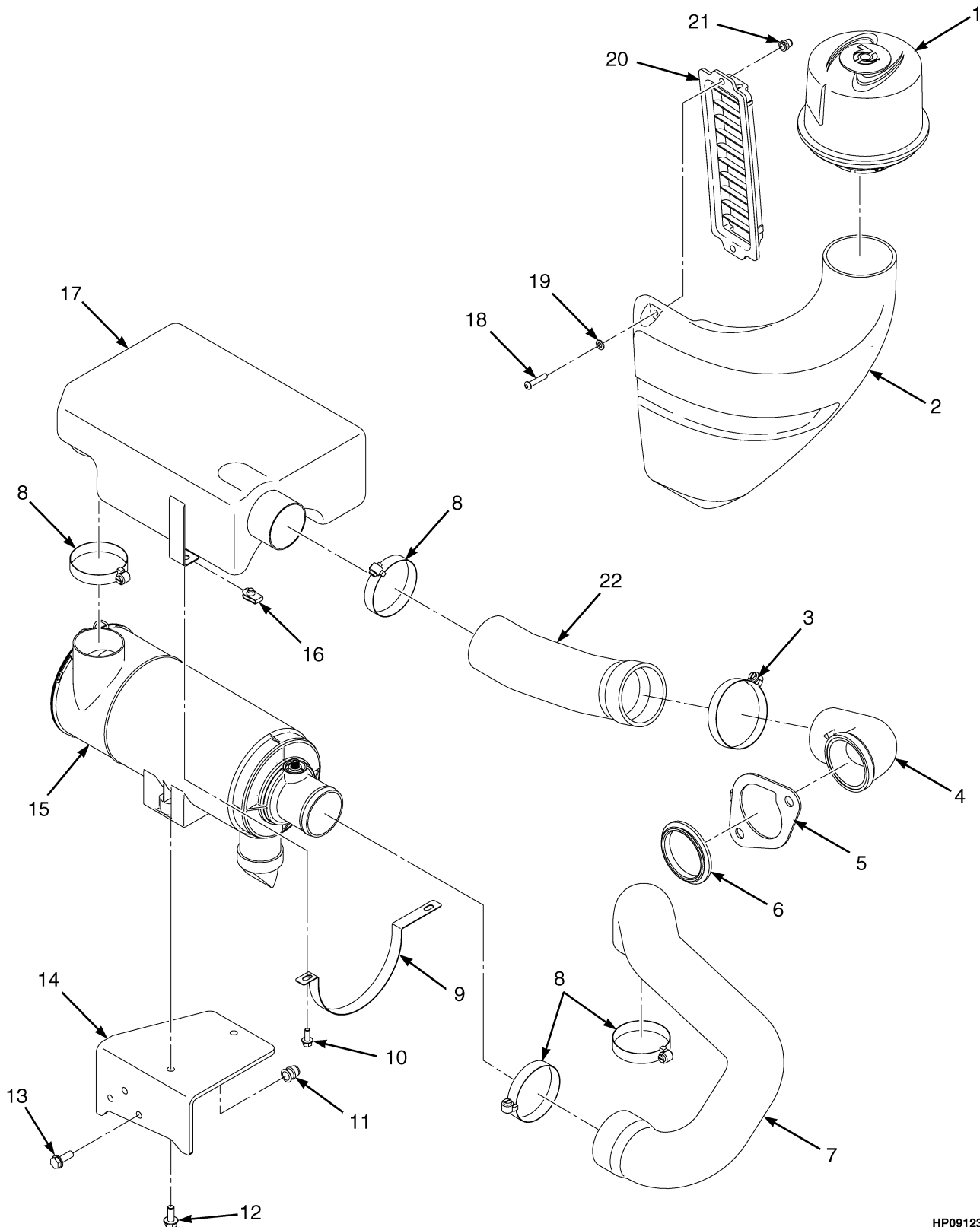
BP130287

AIR INTAKE AND FILTER SYSTEM
GM 2.4L, LPG (S/N L177B19203E →)

ITEM	PART NO.	DESCRIPTION	QTY
1	1501888	Pre-Cleaner	1
2	b 1565201	Air Duct	1
2	d 1677793	Air Duct	1
3	1581438	Elbow	1
4	1581439	Retainer	1
5	1502079	Grommet	1
6	1501997	Hose Clamp	1
7	1501887	Hose	1
8	353199	Clamp	1
9	2098965	Hose (Clean Air)	1
10	112989	Hose Clamp	7
11	1530243	Insert	3
12	296481	Screw	2
13	1583611	Capscrew	3
14	1582159	Bracket	1
15	a 1501855	Air Filter (GM 2.4L) (☞Figure 5-7).....	1
15	c 2105338	Air Filter (☞Figure 5-7).....	1
15	e 4612945	Air Filter (☞Figure 5-7).....	1
16	1580068	Strap	1
17	1565199	Elbow	1
18	1565200	Silencer	1
19	1565212	Hose	1
20	1394008	Hose Clamp	1
21	2071261	Capscrew	2
22	1506738	Washer	2
23	2067476	Grill	1
24	1531558	Insert	2
25	1529257	Sensor (Air Flow Restriction)	1
26	2098964	Hose (Air Intake)	1
26	2102913	Hose (Air Intake) (Alternate Part)	1
27	1661665	Coupler (PCV)	1
28	1677833	Screw (Pre-Cleaner Mounting)	3

FOOTNOTES:**a** → S/N L177B22489F**b** → S/N L177B28742G**c** S/N L177B22490F ↔ S/N L177B32585J**d** S/N L177B28743G →**e** S/N L177B32586J →

AIR INTAKE AND FILTER SYSTEM (FIGURE 5-4) YANMAR 2.6L AND 3.3L — DIESEL (→ S/N L177B14427E)



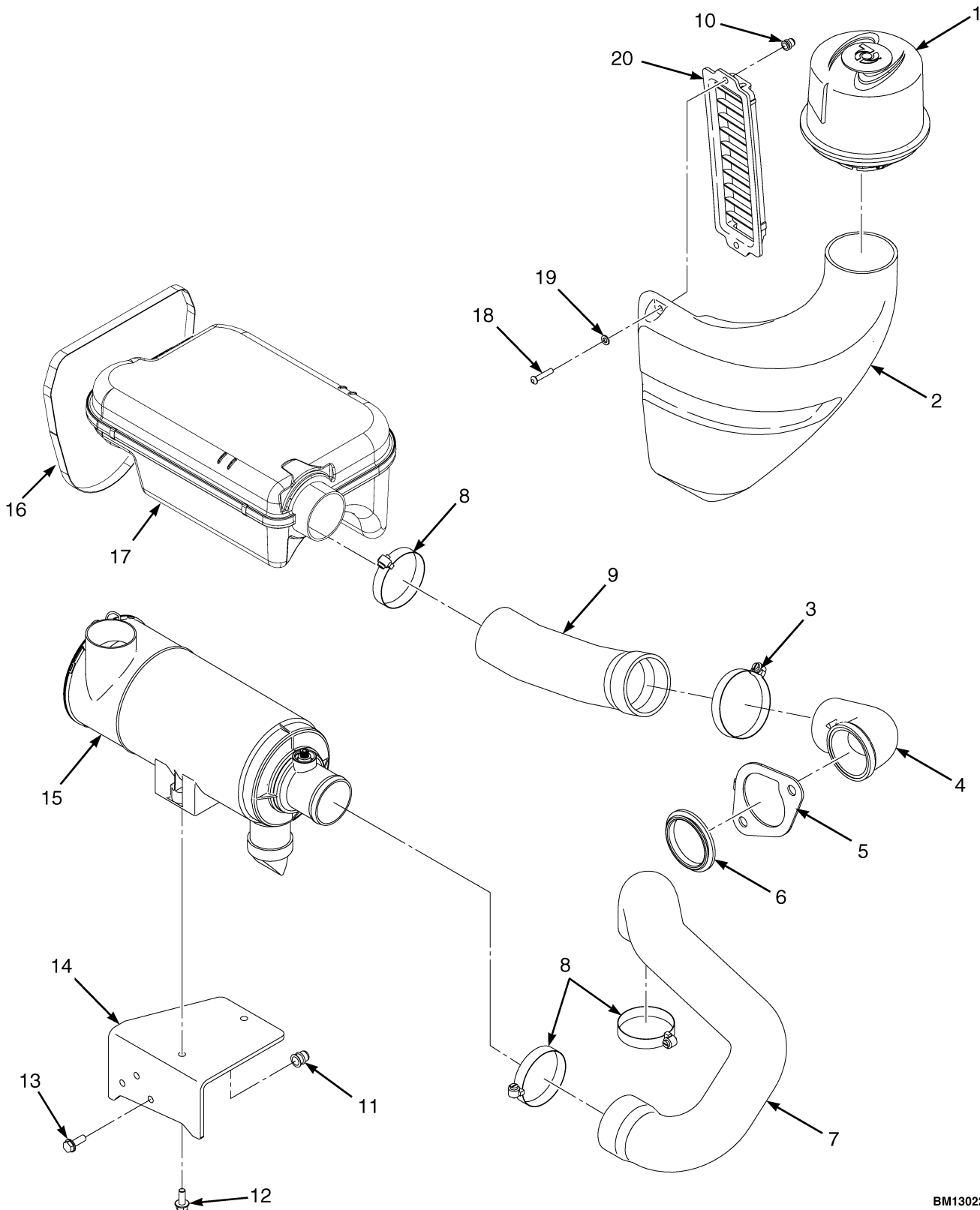
HP091232

AIR INTAKE AND FILTER SYSTEM
YANMAR 2.6L AND 3.3L – DIESEL (→ S/N L177B14427E)

ITEM	PART NO.	DESCRIPTION	QTY
1	1501888	Pre-Cleaner	1
2	1565201	Air Duct	1
3	1394008	Hose Clamp	1
4	1581438	Elbow	1
5	1581439	Retainer (Elbow)	1
6	1502079	Grommet	1
7	2075783	Hose	1
8	112989	Hose Clamp	4
9	1589542	Strap	1
10	1527876	Capscrew	2
11	1530243	Insert	3
12	1527880	Capscrew	2
13	1583611	Capscrew	3
14	1501849	Bracket	1
14	4034386	Bracket (Alternate Part)	1
15	1501855	Air Filter (☞ Figure 5-7).....	1
16	1566420	Nut	2
17	a 2078092	Silencer	1
17	b 2086133	Silencer	1
18	2071261	Capscrew	2
19	1506738	Washer	2
20	2067476	Grill	1
21	1531558	Insert	2
22	1565212	Hose	1

FOOTNOTES:**a** → S/N L177B06881D**b** S/N L177B06882D →

AIR INTAKE AND FILTER SYSTEM (FIGURE 5-5) YANMAR 2.6L AND 3.3L DIESEL (S/N L177B14428E →)



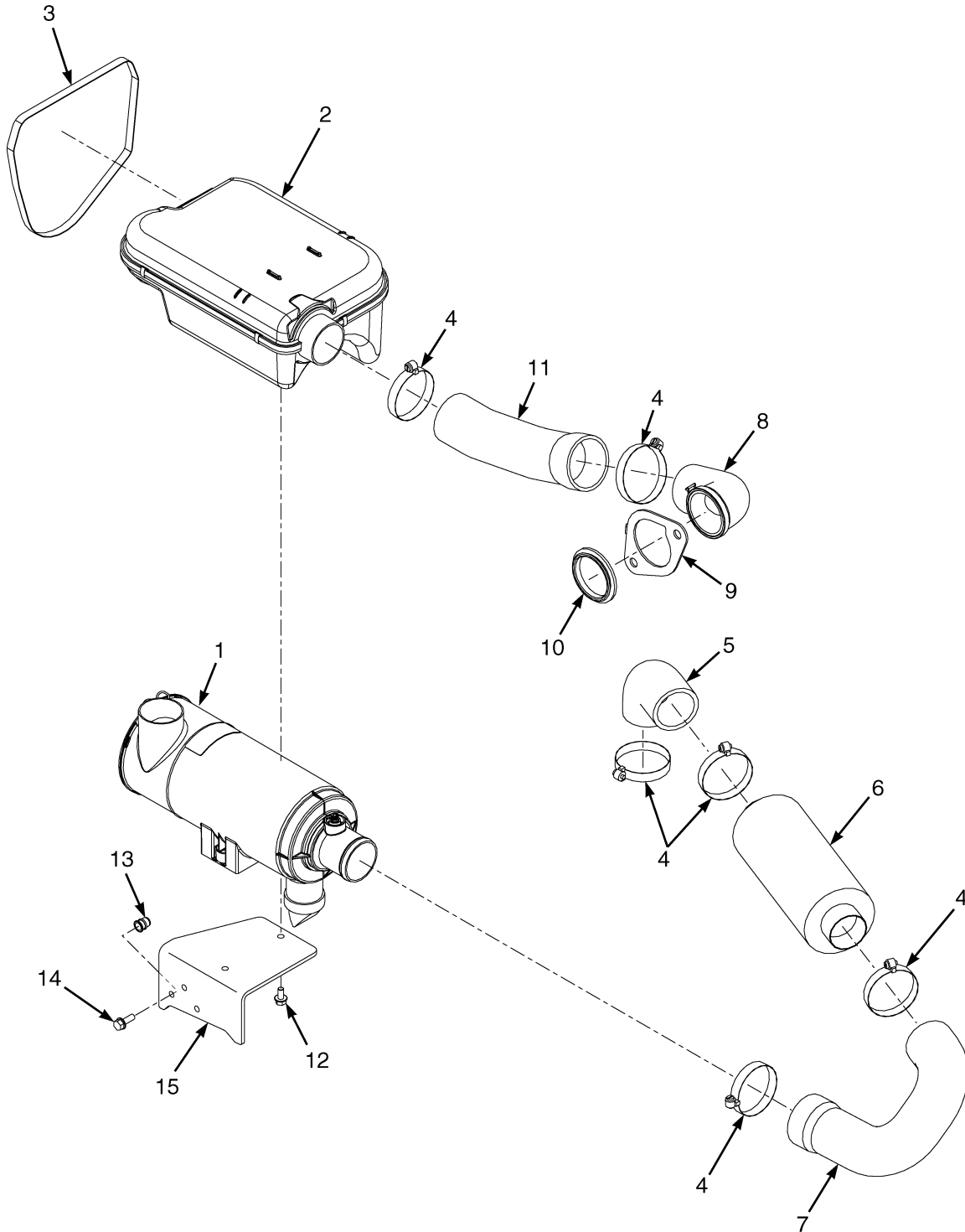
BM130224

AIR INTAKE AND FILTER SYSTEM
YANMAR 2.6L AND 3.3L DIESEL (S/N L177B14428E →)

ITEM	PART NO.	DESCRIPTION	QTY
1	1501888	Pre-Cleaner	1
2	b 1565201	Air Duct	1
2	d 1677793	Air Duct	1
3	1394008	Hose Clamp	2
4	1581438	Elbow	1
5	1581439	Retainer (Elbow)	1
6	1502079	Grommet	1
7	2075783	Hose (Clean Air)	1
8	112989	Hose Clamp	3
9	1565212	Hose (Dirty Air)	1
10	1531558	Insert	2
11	1530243	Insert	3
12	1527879	Capscrew	2
13	1583611	Capscrew	3
14	1501849	Bracket	1
14	4034386	Bracket (Alternate Part)	1
15	1501855	Air Filter (☞ Figure 5-7).....	1
16	1636797	Strap	1
17	a 2090086	Silencer	1
17	c 2102226	Silencer	1
17	2092848	Clip	6
17	15871	O-Ring	1
18	2071261	Capscrew	2
19	1506738	Washer	2
20	2067476	Grill	1
21	1677833	Screw (Pre-Cleaner Mounting)	1

FOOTNOTES:**a** → S/N L177B27724F**b** → S/N L177B28742G**c** S/N L177B27725F →**d** S/N L177B28743G →

AIR INTAKE AND FILTER SYSTEM (FIGURE 5-6) YANMAR 2.6L AND 3.3L DIESEL — W/ AUXILIARY INTAKE SILENCER



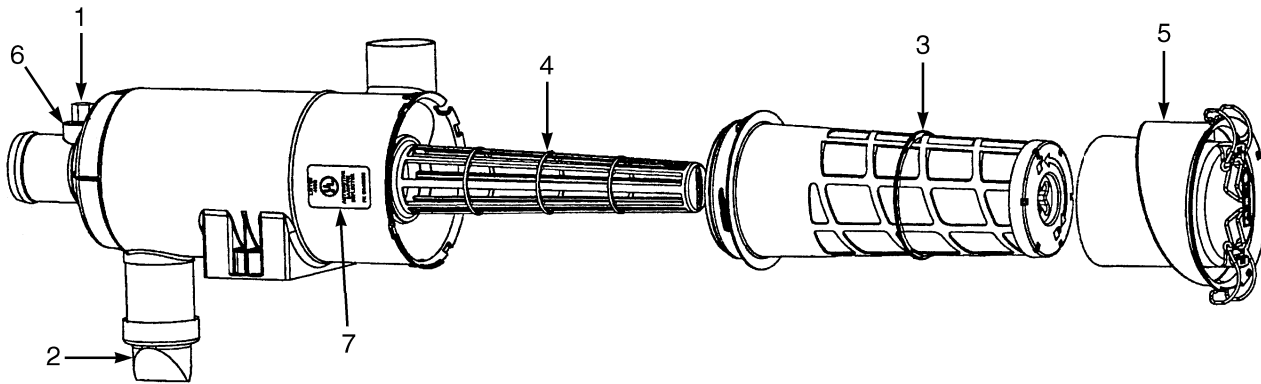
BP130311

AIR INTAKE AND FILTER SYSTEM
YANMAR 2.6L AND 3.3L DIESEL – W/ AUXILIARY INTAKE SILENCER

ITEM	PART NO.	DESCRIPTION	QTY
1	a 2105338	Air Filter (☞ Figure 5-7).....	1
1	b 4612945	Air Filter (☞ Figure 5-7).....	1
2	2102226	Silencer	1
3	1636797	Strap	1
4	1394008	Hose Clamp	6
5	4603923 4607510	Hose (Clean Air)	1
6	4603922 4607291	Air Inlet (Silencer)	1
7	4603924 4607511	Hose (Clean Air)	1
8	1581438	Elbow	1
9	1581439	Retainer	1
10	1502079	Grommet	1
11	1565212	Hose	1
12	1527879	Capscrew	2
13	1530243	Insert	3
14	1583611	Capscrew	3
15	1501849	Bracket	1
15	4034386	Bracket (Alternate Part)	1

FOOTNOTES:**a** → S/N L177B32585J**b** S/N L177B32586J →

AIR CLEANER ASSEMBLY (FIGURE 5-7)



HP091227

KEY:

A: Yanmar Diesel and GM LPG Engines

B: Mazda LPG Engines

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a 2055193	Air Filter .....	..	1
	f 4611248	Air Filter .....	..	1
	b 1501855	Air Filter	1	..
	c 2105338	Air Filter	1	..
	e 4612945	Air Filter	1	..
1	141331	Cap	1	1
2	374923	Valve	1	1
3	1559418	Filter Element .....	..	1
3	1574111	Filter Element	1	..
4	1559419	Guide (With O-Ring) .....	..	1
4	1574260	Liner (With O-Ring)	1	..
5	1559420	Cover .....	..	1
5	b 1574131	Cover	1	..
5	d 1687933	Cover	1	..
6	e 4030497	Connector (Pipe Nipple)	1	1
	2095890	Label (Air Filter Installation) (Not Illustrated)	1	1

FOOTNOTES:

a → 10/2010

b → S/N L177B22489F

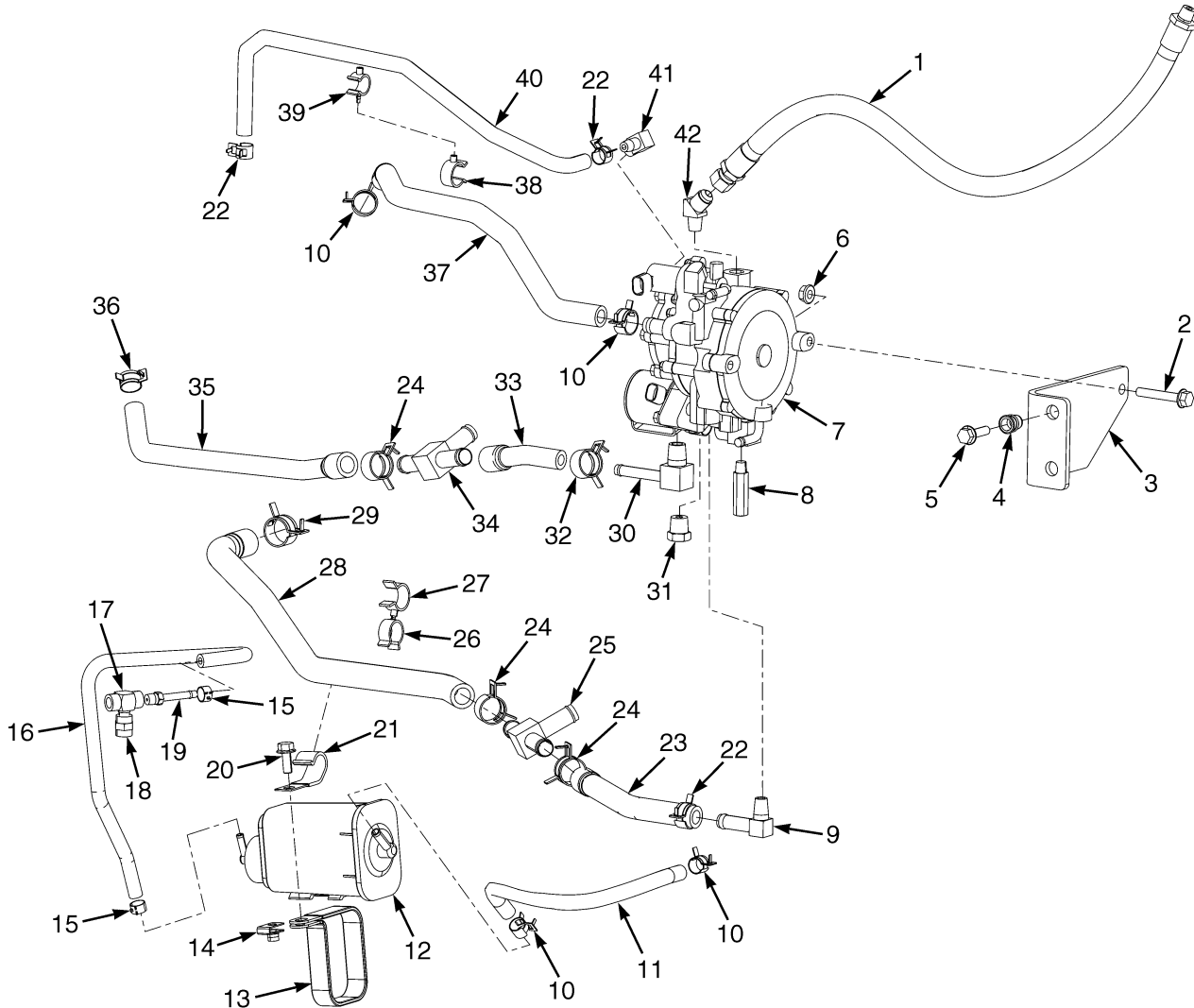
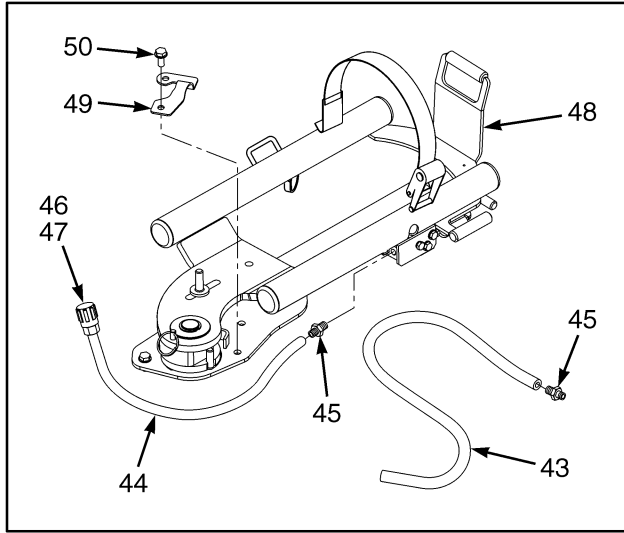
c S/N L177B22490F ↔ S/N L177B32585J

d S/N L177B22490F →

e S/N L177B32586J →

f 10/2010 →

FUEL SYSTEM (FIGURE 5-8) MAZDA 2.0L AND 2.2L — LPG (→ S/N L177B28987G)



BP130277

FUEL SYSTEM

MAZDA 2.0L AND 2.2L – LPG (→ S/N L177B28987G)

KEY:**A: With Cab and Steel Door****B: With Overhead Guard or Cab with PVC Door**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2072300	Hose Assy	1	1
2	1510115	Capscrew	2	2
3	1502069	Bracket (Regulator)	1	1
4	1530243	Insert	2	2
5	1527881	Capscrew	2	2
6	1502543	Nut (Flange)	2	2
7	1594144	LPG Regulator	1	1
7	1578553	Setscrew	1	1
7	1616232	Filter	1	1
7	1479531	Kit-Diaphragm	1	1
7	1479530	Kit-Repair Valve	1	1
8	1502058	Fitting	1	1
9	17353	Fitting	1	1
10	1502003	Hose Clamp	4	4
11	260878	Hose	1	1
12	1471694	Resonator	1	1
13	1475409	Clamp	1	1
14	1480237	Nut	1	1
15	369815	Clamp	2	2
16	1502085	Hose	1	1
17	16199	Fitting	1	1
18	16168	Fitting	1	1
19	1502027	Fitting	1	1
20	1527880	Capscrew	1	1
21	1339452	Clamp	1	1
22	1502005	Hose Clamp	3	3
23	2071303	Radiator Hose	1	..
24	130845	Clamp	2	..
25	1608989	Fitting	1	..
26	1502066	Clamp	1	1
27	1502054	Clamp	1	1
28	1625311	Radiator Hose .....	..	1
28	2070784	Radiator Hose	1	..
29	1502007	Hose Clamp	1	1
30	16788	Fitting	1	1
31	63108	Fitting	2	2
32	1502005	Hose Clamp	4	2
33	2086921	Hose	1	..
34	366000	Fitting	1	..
35	1502083	Radiator Hose .....	..	1
35	2071302	Radiator Hose	1	..
36	1501995	Hose Clamp	1	1
37	1502081	Hose	1	1
38	1502053	Clamp (Swivel)	1	1
39	1543691	Clamp (Swivel)	1	1

FUEL SYSTEM

MAZDA 2.0L AND 2.2L – LPG (→ S/N L177B28987G)

KEY:

A: With Cab and Steel Door

B: With Overhead Guard or Cab with PVC Door

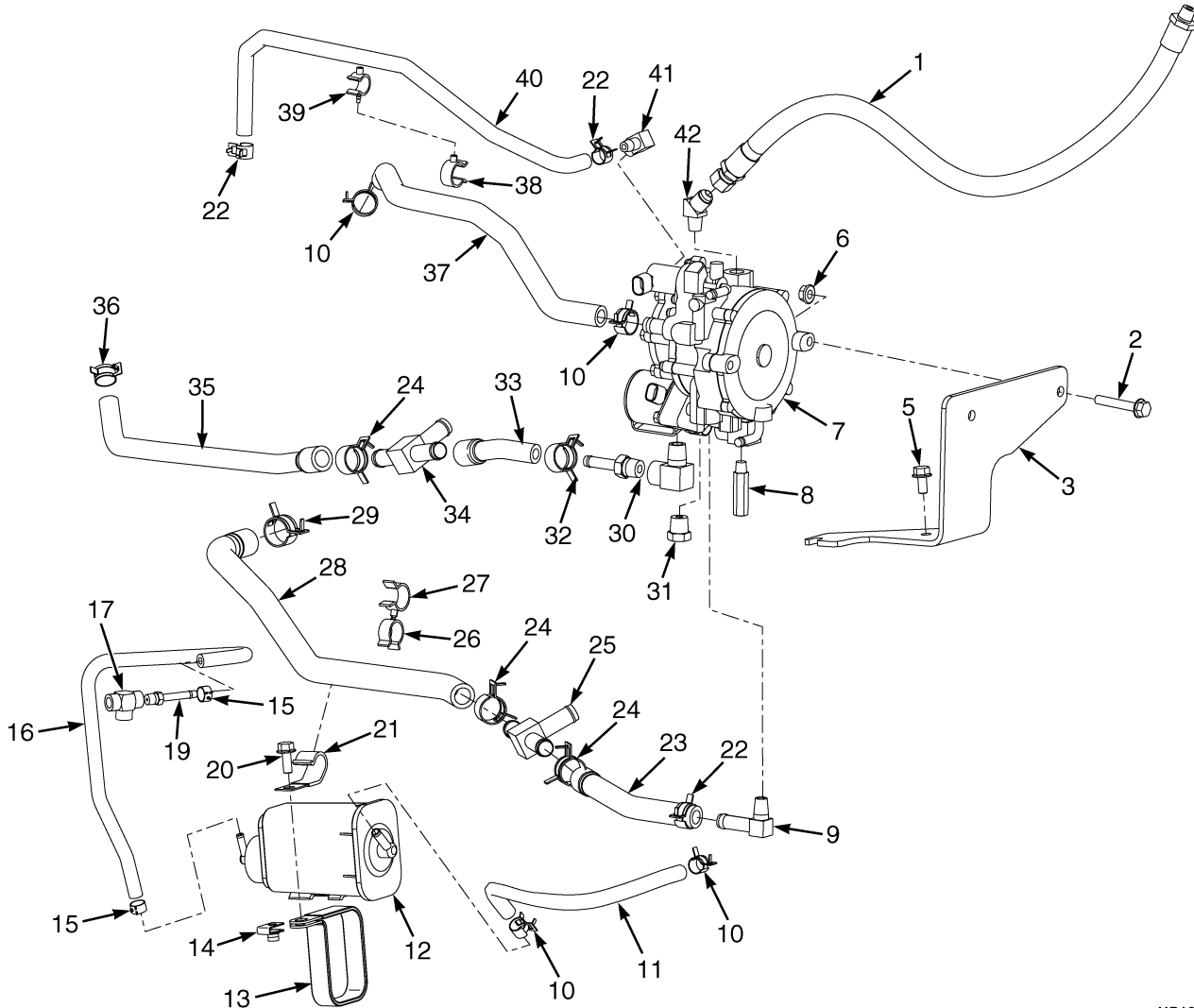
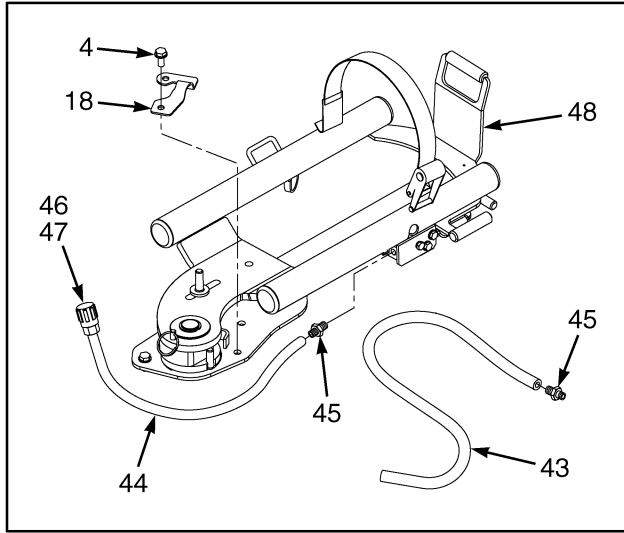
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
40	1502084	Hose	1	1
41	15971	Fitting	1	1
42	16863	Fitting	1	1
43	2072298	Hose Assy	1	1
44	2058426	Hose Assy	1	1
45	16134	Fitting	2	2
46	2071517	Sleeve	1	1
47	97999	Fitting	1	1
48	b 1568837	Lpg Tank Bracket (Swing Out) (☞Figure 5-20).....	1	1
48	d 1582412	Lpg Tank Bracket (Swing Out) (☞Figure 5-20).....	1	1
48	f 1640249	Lpg Tank Bracket (Swing Out) (☞Figure 5-21).....	1	1
48	g 1652210	Lpg Tank Bracket (Swing Out) (☞Figure 5-22).....	1	1
48	c 1584269	Lpg Tank Bracket (EZXchange) (☞Figure 5-23).....	1	1
48	e 1640406	Lpg Tank Bracket (EZXchange) (☞Figure 5-24).....	1	1
48	g 1652209	Lpg Tank Bracket (EZXchange) (☞Figure 5-25).....	1	1
49	a 1564061	Bracket	1	1
50	1586013	Capscrew	4	4

FOOTNOTES:

- a** For Use With Swing Out Bracket Only
- b** → 8/2004
- c** → S/N L177B10469D
- d** 8/2004 ↔ S/N L177B10506D

- e** S/N L177B10470D ↔ 9/2006
- f** S/N L177B10507D ↔ 9/2006
- g** 9/2006 →

FUEL SYSTEM (FIGURE 5-9) MAZDA 2.0L AND 2.2L — LPG (S/N L177B28988G →)



HP130430

FUEL SYSTEM

MAZDA 2.0L AND 2.2L – LPG (S/N L177B28988G →)

KEY:**A: With Cab and Steel Door****B: With Overhead Guard or Cab with PVC Door**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2072300	Hose Assy	1	1
2	1510115	Capscrew	2	2
3	4000467	Bracket	1	1
4	1586013	Capscrew	4	4
5	1527879	Capscrew	2	2
5	1529366	Capscrew (Alternate Part)	2	2
6	1502543	Nut (Flange)	2	2
7	1594144	LPG Regulator	1	1
7	1578553	Setscrew	1	1
7	1616232	Filter	1	1
7	1479531	Kit-Diaphragm	1	1
7	1479530	Kit-Repair Valve	1	1
8	1502058	Fitting	1	1
9	17353	Fitting	1	1
10	1502003	Hose Clamp	4	4
11	260878	Hose	1	1
12	1471694	Resonator	1	1
13	1475409	Clamp	1	1
14	1480237	Nut	1	1
15	369815	Clamp	2	2
16	1502085	Hose (Balance Line)	1	1
17	12838	Fitting	1	1
18	a 1564061	Bracket	1	1
19	1502027	Fitting	1	1
20	1527880	Capscrew	1	1
21	1339452	Clamp	1	1
22	1502005	Hose Clamp	3	3
23	2071303	Radiator Hose	1	..
24	130845	Clamp	2	..
25	1608989	Fitting	1	..
26	1502066	Clamp	1	1
27	1502054	Clamp	1	1
28	1625311	Radiator Hose .....	..	1
28	2070784	Radiator Hose	1	..
29	1502007	Hose Clamp	1	1
30	16788	Fitting	1	1
31	63108	Fitting	2	2
32	1502005	Hose Clamp	4	2
33	2086921	Hose	1	..
34	366000	Fitting	1	..
35	1502083	Radiator Hose .....	..	1
35	2071302	Radiator Hose	1	..
36	1501995	Hose Clamp	1	1
37	1502081	Hose (Fuel Vapor)	1	1
38	1502053	Clamp (Swivel)	1	1

FUEL SYSTEM

MAZDA 2.0L AND 2.2L – LPG (S/N L177B28988G →)

KEY:

A: With Cab and Steel Door

B: With Overhead Guard or Cab with PVC Door

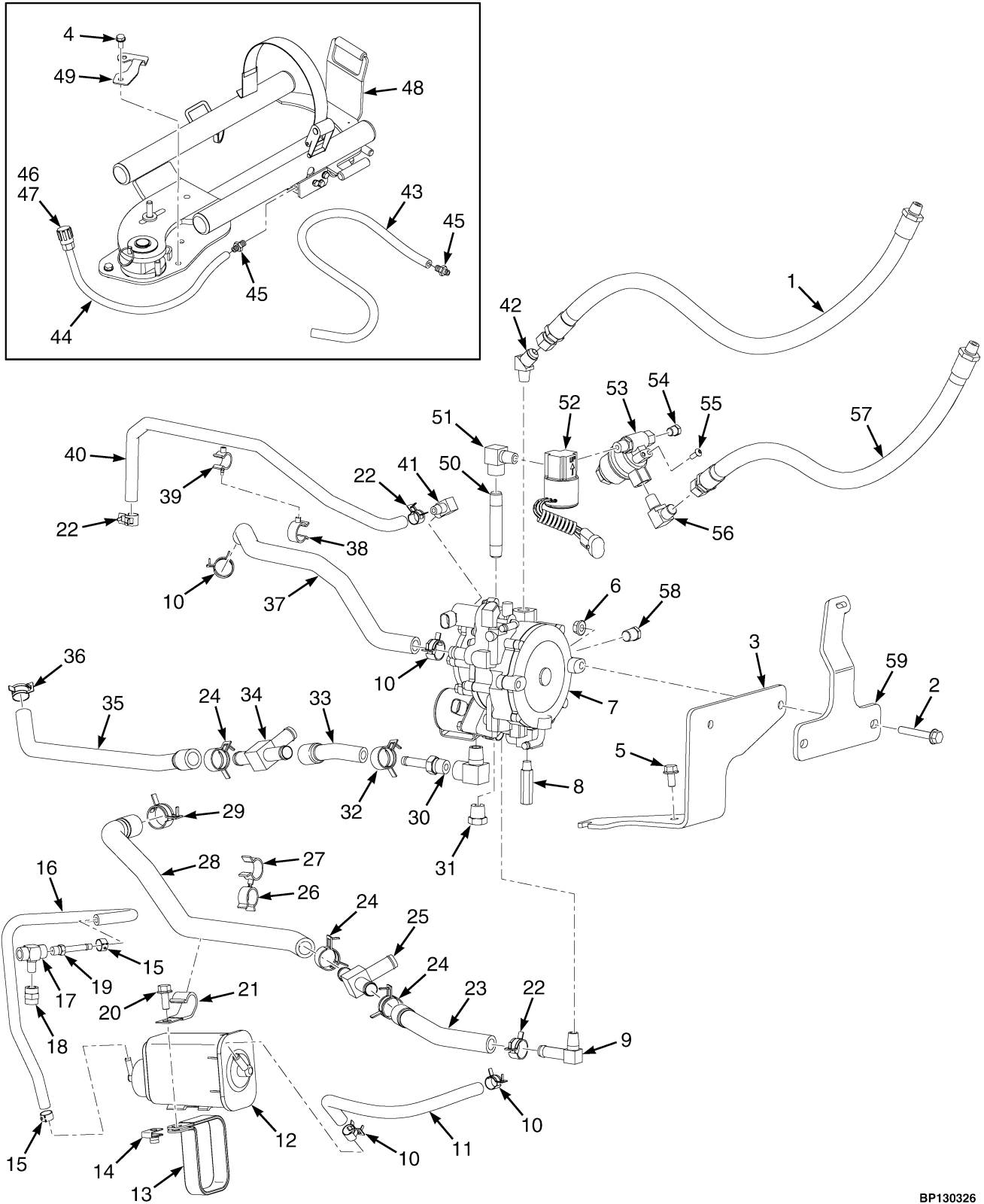
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
39	1543691	Clamp (Swivel)	1	1
40	1502084	Hose (Fuel Vapor)	1	1
41	15971	Fitting	1	1
42	16863	Fitting	1	1
43	2072298	Hose Assy	1	1
44	2058426	Hose Assy	1	1
45	16134	Fitting	2	2
46	2071517	Sleeve	1	1
47	97999	Fitting	1	1
48	b 1652210	Lpg Tank Bracket (Swing Out) (☞Figure 5-22).....	1	1
48	b 1652209	Lpg Tank Bracket (EZXchange) (☞Figure 5-25).....	1	1

FOOTNOTES:

a For Use With Swing Out Bracket Only

b 9/2006 →

FUEL SYSTEM (FIGURE 5-10) MAZDA 2.0L AND 2.2L LPG — 2010 SERIES



BP130326

FUEL SYSTEM
MAZDA 2.0L AND 2.2L LPG – 2010 SERIES**KEY:****A: With Cab and Steel Door****B: With Overhead Guard or Cab with PVC Door**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2072300	Hose Assy	1	1
2	1510115	Capscrew	2	2
3	4000467	Bracket	1	1
4	1586013	Capscrew	4	4
5	1527879	Capscrew	2	2
5	1529366	Capscrew (Alternate Part)	2	2
6	1502543	Nut (Flange)	2	2
7	1594144	LPG Regulator	1	1
7	1578553	Setscrew	1	1
7	1616232	Filter	1	1
7	1479531	Kit-Diaphragm	1	1
7	1479530	Kit-Repair Valve	1	1
8	1502058	Fitting	1	1
9	17353	Fitting	1	1
10	1502003	Hose Clamp	4	4
11	260878	Hose	1	1
12	1471694	Resonator	1	1
13	1475409	Clamp	1	1
14	1480237	Nut	1	1
15	369815	Clamp	2	2
16	1502085	Hose (Balance Line)	1	1
17	12838	Fitting	1	1
18	a 1564061	Bracket	1	1
19	1502027	Fitting	1	1
20	1527880	Capscrew	1	1
21	1339452	Clamp	1	1
22	1502005	Hose Clamp	3	3
23	2071303	Radiator Hose	1	..
24	130845	Clamp	2	..
25	1608989	Fitting	1	..
26	1502066	Clamp	1	1
27	1502054	Clamp	1	1
28	1625311	Radiator Hose .....	..	1
28	2070784	Radiator Hose	1	..
29	1502007	Hose Clamp	1	1
30	16788	Fitting	1	1
31	63108	Fitting	2	2
32	1502005	Hose Clamp	4	2
33	2086921	Hose	1	..
34	366000	Fitting	1	..
35	1502083	Radiator Hose .....	..	1
35	2071302	Radiator Hose	1	..
36	1501995	Hose Clamp	1	1
37	1502081	Hose (Fuel Vapor)	1	1
38	1502053	Clamp (Swivel)	1	1

FUEL SYSTEM MAZDA 2.0L AND 2.2L LPG – 2010 SERIES

KEY:

A: With Cab and Steel Door

B: With Overhead Guard or Cab with PVC Door

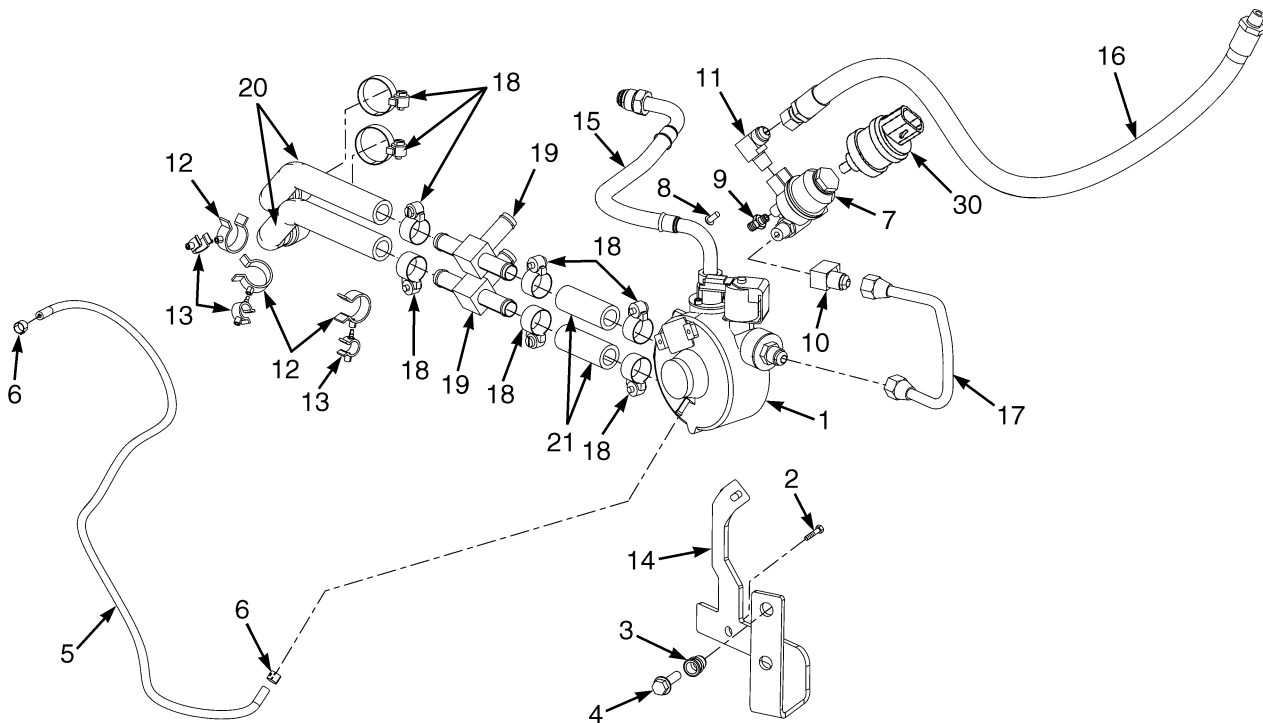
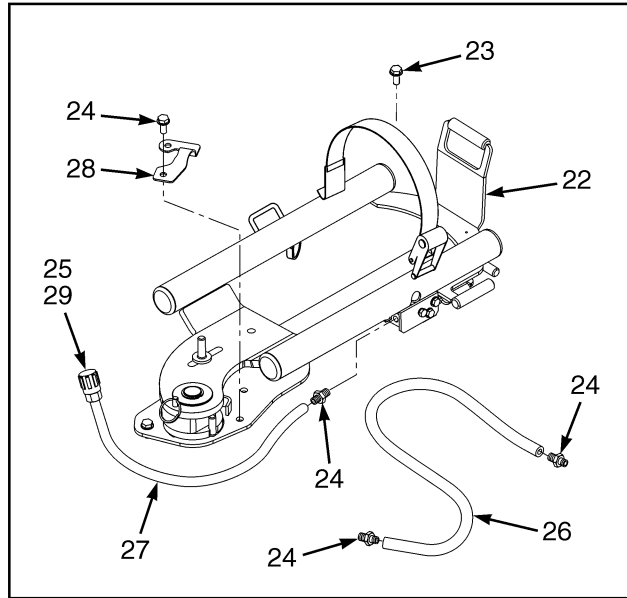
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
39	1543691	Clamp (Swivel)	1	1
40	1502084	Hose (Fuel Vapor)	1	1
41	15971	Fitting	1	1
42	16863	Fitting	1	1
43	2072298	Hose Assy	1	1
44	2058426	Hose Assy	1	1
45	16134	Fitting	2	2
46	2071517	Sleeve	1	1
47	97999	Fitting	1	1
48	1652210	Lpg Tank Bracket (Swing Out) (☞Figure 5-22).....	1	1
48	1652209	Lpg Tank Bracket (EZXchange) (☞Figure 5-25).....	1	1
49	1656903	Bracket	1	1
50	b 1557325	Fitting	1	1
51	b 17314	Fitting	1	1
52	b 1662253	Sensor	1	1
53	b 2105803	Fuel Filter (LPG)	1	1
54	b 14349	Fitting (Pipe Plug)	1	1
55	b 296152	Capscrew	2	2
56	b 14358	Fitting	1	1
57	b 2072300	Hose Assy	1	1
58	b 14385	Fitting	1	1
59	b 4029915	Bracket	1	1

FOOTNOTES:

a For Use With Swing Out Bracket Only

b With Premium Low Fuel Sensor

FUEL SYSTEM (FIGURE 5-11) GM 2.4L — LPG (→ S/N L177B23145F)



BP130279

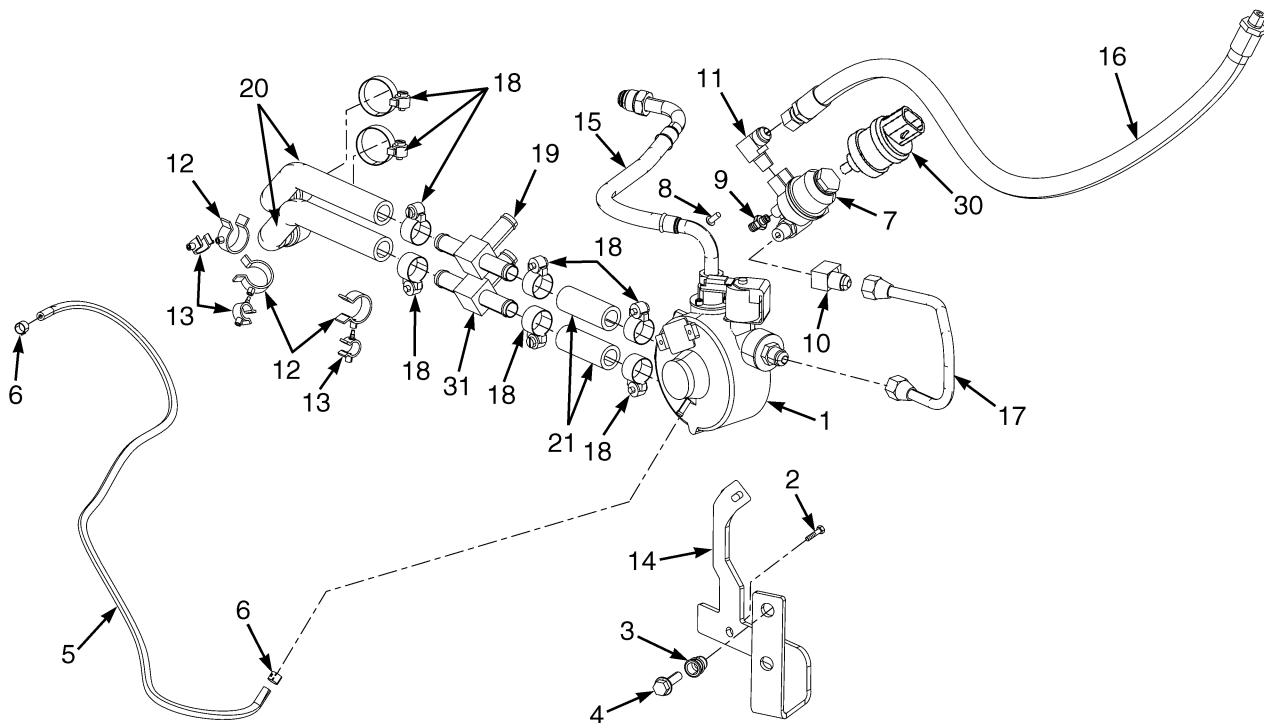
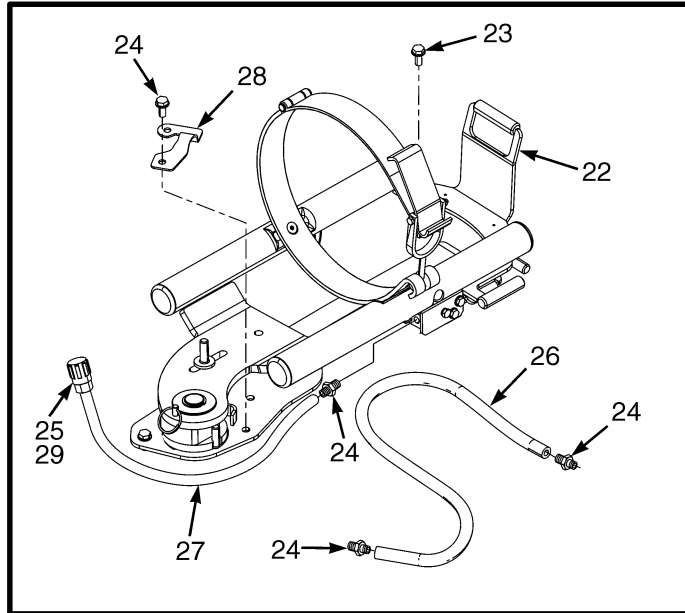
FUEL SYSTEM
GM 2.4L – LPG (→ S/N L177B23145F)

ITEM	PART NO.	DESCRIPTION	QTY
1	2056762		
	4602051	LPG Converter (☞ Figure 5-19).....	1
2	1529366	Capscrew	1
3	1530243	Insert	2
4	1527881	Capscrew	2
5	1347166	Hose	1
6	366473	Clamp	2
7	2105803	Fuel Filter (LPG)	1
7	1689544	Kit-Filter Element	1
8	296152	Capscrew	2
9	16151	Fitting	1
10	14372	Fitting	1
11	14358	Fitting	1
12	1542436	Clamp	3
13	1542439	Clamp (Swivel)	3
14	1578965	Bracket	1
15	2064431	Hose	1
15	1698684	Kit-O-Ring	1
16	2072300	Hose Assy	1
17	2072299	Tube	1
18	a 130845	Clamp	8
18	b 130845	Clamp	4
19	a 366000	Fitting	2
20	a 2072894	Radiator Hose	2
20	b 2072895	Radiator Hose	2
21	a 2070782	Radiator Hose	2
22	e 1568837	Lpg Tank Bracket (Swing Out) (☞ Figure 5-20).....	1
22	g 1582412	Lpg Tank Bracket (Swing Out) (☞ Figure 5-20).....	1
22	i 1640249	Lpg Tank Bracket (Swing Out) (☞ Figure 5-21).....	1
22	j 1652210	Lpg Tank Bracket (Swing Out) (☞ Figure 5-22).....	1
22	f 1584269	Lpg Tank Bracket (EZXchange) (☞ Figure 5-24).....	1
22	h 1640406	Lpg Tank Bracket (EZXchange) (☞ Figure 5-24).....	1
22	j 1652209	Lpg Tank Bracket (EZXchange) (☞ Figure 5-25).....	1
23	1586013	Capscrew	4
24	16134	Fitting	2
25	97999	Fitting	1
25	d 878758	Fitting	1
26	2072298	Hose Assy	1
27	2058426	Hose Assy	1
28	c 1564061	Bracket	1
29	2071517	Sleeve	1
29	d 895603	Fitting	1
30	1501970	Pressure Switch (Low Fuel)	1

FOOTNOTES:

- a** For Vehicles With Cab
- b** For Vehicles With Overhead Guard
- c** For Vehicles With Swing Out Bracket
- d** German Market
- e** → 8/2004
- f** → S/N L177B10469D
- g** 8/2004 ↔ S/N L177B10506D
- h** S/N L177B10470D ↔ 9/2006
- i** S/N L177B10507D ↔ 8/2006
- j** 9/2006 →

FUEL SYSTEM (FIGURE 5-12) GM 2.4L — LPG (S/N L177B23146F ↔ S/N L177B28987G)



BP130292

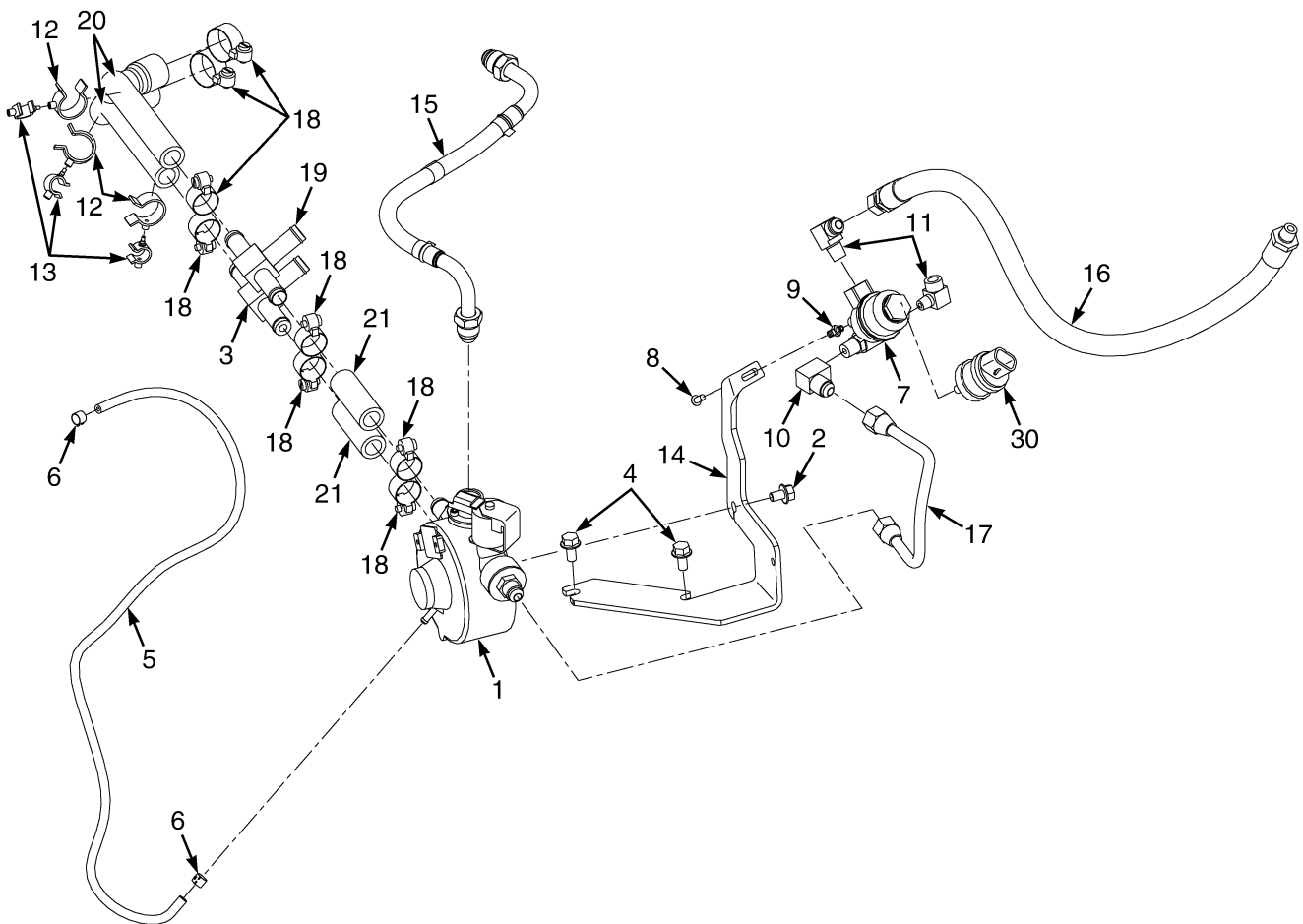
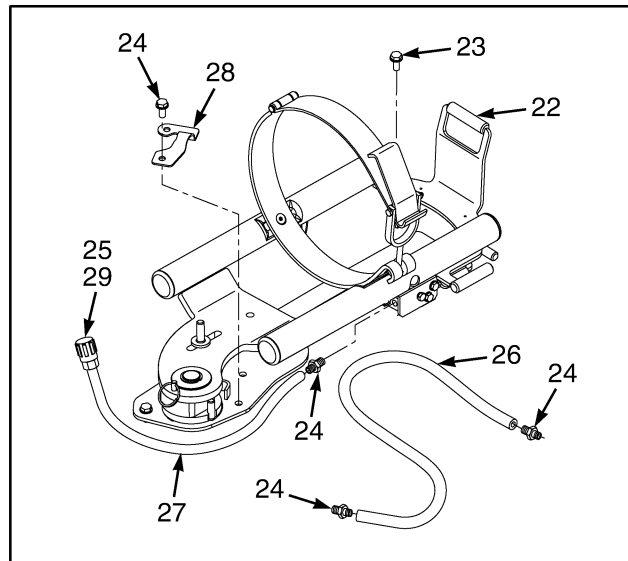
FUEL SYSTEM
GM 2.4L – LPG (S/N L177B23146F ↔ S/N L177B28987G)

ITEM	PART NO.	DESCRIPTION	QTY
1	2056762		
	4602051	LPG Converter (☞Figure 5-19).....	1
2	1529366	Capscrew	1
3	1530243	Insert	2
4	1527881	Capscrew	2
5	1347166	Hose	1
6	366473	Clamp	2
7	2105803	Fuel Filter (LPG)	1
7	1689544	Kit-Filter Element	1
8	296152	Capscrew	2
9	16151	Fitting	1
10	14372	Fitting	1
11	14358	Fitting	1
12	1542436	Clamp	3
13	1542439	Clamp (Swivel)	3
14	1578965	Bracket	1
15	2064431	Hose	1
15	1698684	Kit-O-Ring	1
16	2072300	Hose Assy	1
17	2072299	Tube	1
18	a 130845	Clamp	8
18	b 130845	Clamp	4
19	a 366000	Fitting	1
20	a 2072894	Radiator Hose	2
20	b 2072895	Radiator Hose	2
21	a 2070782	Radiator Hose	2
22	e 1568837	Lpg Tank Bracket (Swing Out) (☞Figure 5-20).....	1
22	g 1582412	Lpg Tank Bracket (Swing Out) (☞Figure 5-20).....	1
22	i 1640249	Lpg Tank Bracket (Swing Out) (☞Figure 5-21).....	1
22	j 1652210	Lpg Tank Bracket (Swing Out) (☞Figure 5-22).....	1
22	f 1584269	Lpg Tank Bracket (EZXchange) (☞Figure 5-24).....	1
22	h 1640406	Lpg Tank Bracket (EZXchange) (☞Figure 5-24).....	1
22	j 1652209	Lpg Tank Bracket (EZXchange) (☞Figure 5-25).....	1
23	1586013	Capscrew	4
24	16134	Fitting	2
25	97999	Fitting	1
25	d 878758	Fitting	1
26	2072298	Hose Assy	1
27	2058426	Hose Assy	1
28	c 1564061	Bracket	1
29	2071517	Sleeve	1
29	d 895603	Fitting	1
30	1501970	Pressure Switch (Low Fuel)	1
31	1683422	Fitting	1

FOOTNOTES:

- a** For Vehicles With Cab
- b** For Vehicles With Overhead Guard
- c** For Vehicles With Swing Out Bracket
- d** German Market
- e** → 8/2004
- f** → S/N L177B10469D
- g** 8/2004 ↔ S/N L177B10506D
- h** S/N L177B10470D ↔ 9/2006
- i** S/N L177B10507D ↔ 8/2006
- j** 9/2006 →

FUEL SYSTEM (FIGURE 5-13) GM 2.4L — LPG (S/N L177B28988G →)



HP130418

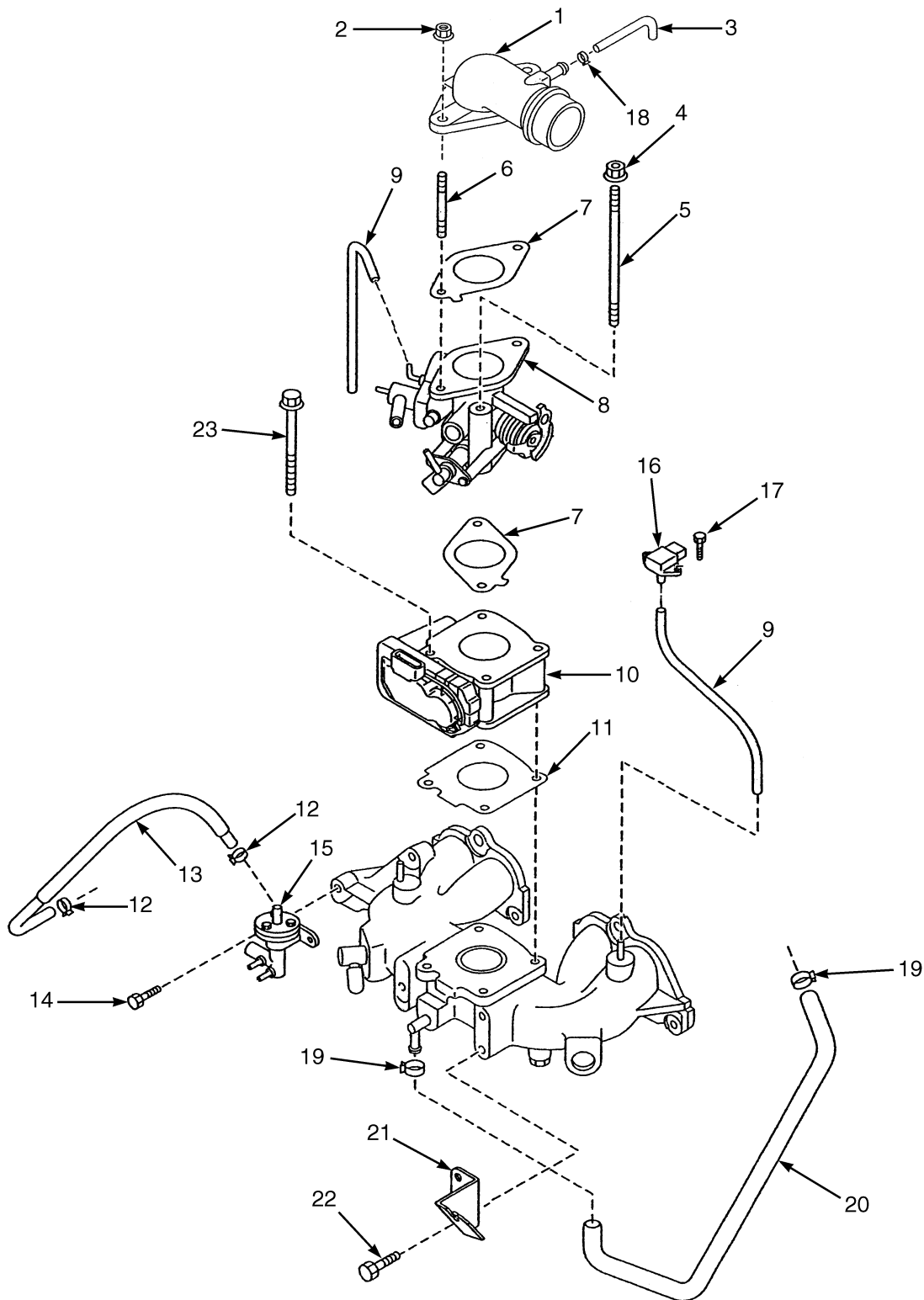
FUEL SYSTEM
GM 2.4L – LPG (S/N L177B28988G →)

ITEM	PART NO.	DESCRIPTION	QTY
1	g 2056762 4602051	LPG Converter (☞Figure 5-19).....	1
1	h 2056762 4602051	LPG Converter (☞Figure 5-19).....	1
2	1529366	Capscrew	1
3	1683422	Fitting	1
4	1529366	Capscrew	2
5	1347166	Hose	1
6	366473	Clamp	2
7	2105803	Fuel Filter (LPG)	1
7	1689544	Kit-Filter Element	1
8	296152	Capscrew	2
9	b 16151	Fitting	1
9	a 14349	Fitting (Pipe Plug) (Not Shown)	1
10	b 14372	Fitting	1
10	a 16134	Fitting (Not Shown)	1
10	16863	Fitting (Not Shown)(Alternate Part)	1
11	14358	Fitting	1
12	1542436	Clamp	3
13	1542439	Clamp (Swivel)	3
14	4000330	Bracket	1
15	2064431	Hose	1
15	1698684	Kit-O-Ring	1
16	2072300	Hose Assy	1
17	b 2072299	Tube	1
17	a 2107842	Tube Assy	1
18	c 130845	Clamp	8
18	d 130845	Clamp	4
19	c 366000	Fitting	1
20	c 2072894	Radiator Hose	2
20	d 2072895	Radiator Hose	2
21	c 2070782	Radiator Hose	2
22	1652210	Lpg Tank Bracket (☞Figure 5-25).....	1
22	1652209	Lpg Tank Bracket (☞Figure 5-22).....	1
23	1586013	Capscrew	4
24	16134	Fitting	2
25	97999	Fitting	1
26	2072298	Hose Assy	1
27	2058426	Hose Assy	1
28	e 1564061	Bracket	1
29	895603	Fitting	1
30	1501970	Pressure Switch (Low Fuel)	1
30	4602843	Wire Harness (Adapter, Low Fuel Pressure Switch) (Not Shown) (☞Figure 6-56).....	1
	af 1662253	Sensor (Vapor)	1
	af 12855	Fitting	2

FOOTNOTES:

- | | | | |
|----------|---|----------|-------------------------------------|
| a | For use only with premium low fuel sensor. | e | For Vehicles With Swing Out Bracket |
| b | For use only without premium low fuel sensor. | f | Not Illustrated |
| c | For Vehicles With Cab | g | → S/N L177B29824G |
| d | For Vehicles With Overhead Guard | h | S/N L177B01771G → |

EMISSIONS LINES (FIGURE 5-14) MAZDA 2.0L AND 2.2L — LPG

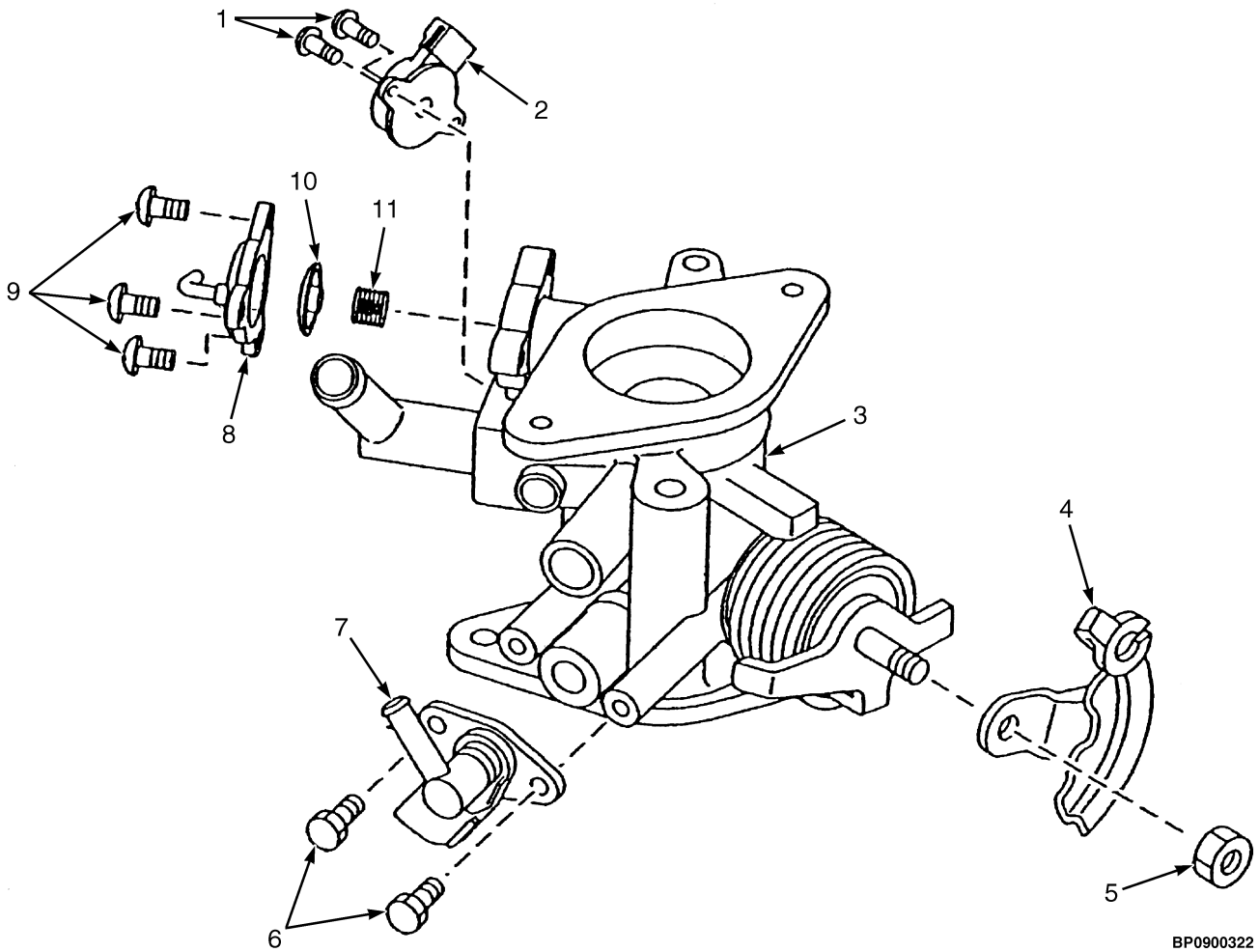


HP000900

EMISSIONS LINES
MAZDA 2.0L AND 2.2L – LPG

ITEM	PART NO.	DESCRIPTION	QTY
1	1573118	Air Duct	1
2	2066629	Nut	2
3	1573562	Hose (Ventilation)	1
4	326504	Nut	2
5	1582323	Stud	2
6	1553774	Stud	2
7	1573117	Gasket	2
8	1573119	Carburetor	1
8	1616236	Setscrew	1
8	1620009	Injector	1
9	1495413	Hose	1
10	1553838	Governor	1
11	1553832	Gasket	1
12	1553799	Clamp	2
13	1573120	Hose (Fuel)	1
14	1361878	Screw	2
15	1581048	Fuel Filter (LPG Vapor)	1
15	1583593	Kit-Cover	1
15	1581051	Setscrew	1
15	1581050	Screw	3
15	1581052	Fuel Filter (With O-Ring)	1
15	1581049	Spring	1
16	1548352	Sensor (Boost, M.A.P.)	1
17	1582324	Screw	2
18	1361871	Clamp	1
19	1366933	Clamp	2
20	1573564	Hose (PCV)	1
21	1573021	Bracket (Throttle)	1
22	1361898	Bolt	2
23	1582321	Bolt	2
	1374788	Valve (Delay) (Not illustrated)	1

CARBURETOR (FIGURE 5-15) LPG — MAZDA 2.0L AND 2.2L

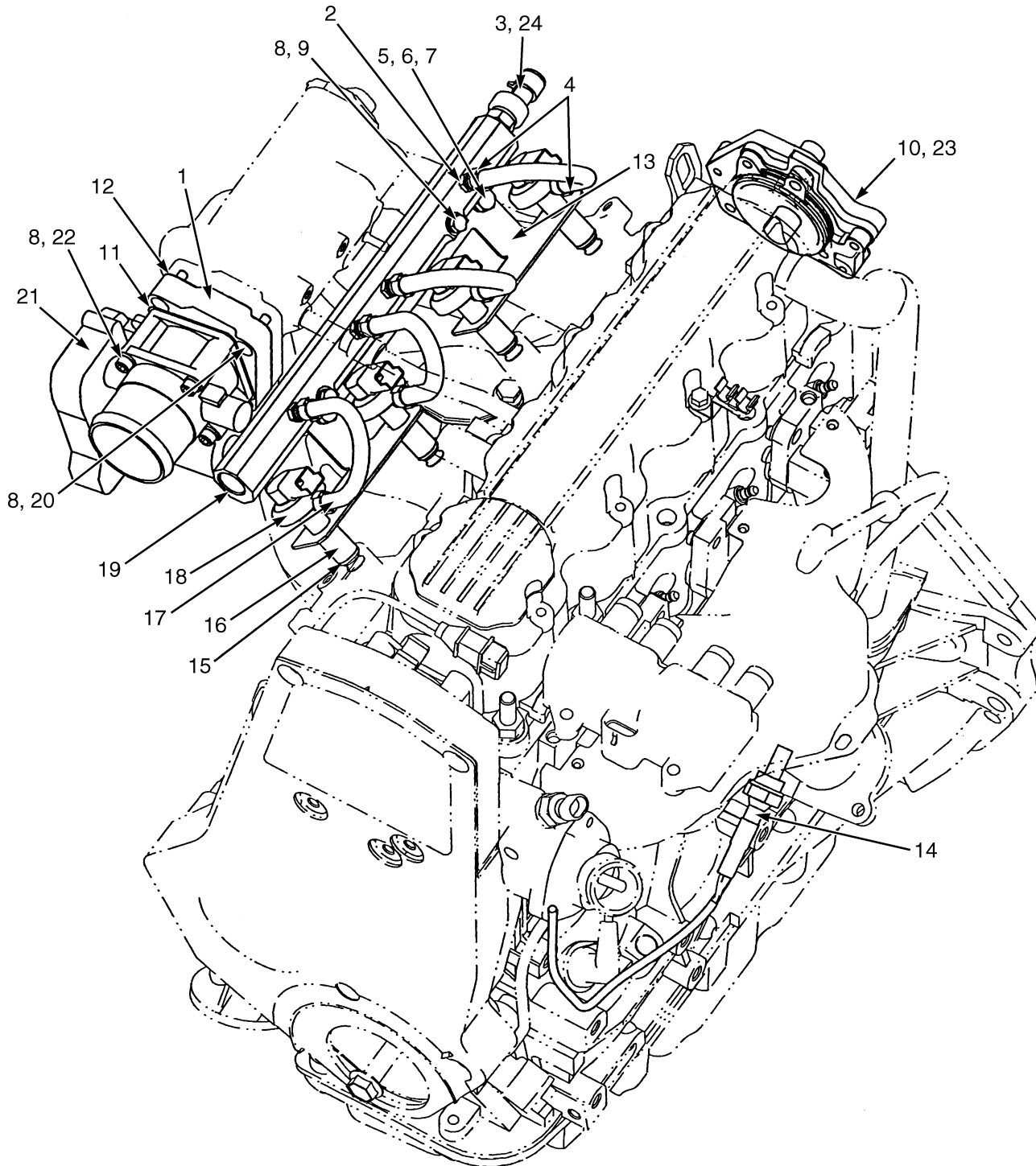


BP0900322

CARBURETOR
LPG – MAZDA 2.0L AND 2.2L

ITEM	PART NO.	DESCRIPTION	QTY
	1573119	Carburetor (LPG)	1
1	1652216	Screw (Sensor)	2
2	1639791	Sensor (Throttle Position)	1
3	.....	Body	1
4	2051839	Lever (Throttle)	1
5	1652217	Nut	1
6	1616236	Setscrew	1
7	1620009	Injector	1
8	2051836	Cover (Power Valve)	1
9	1652215	Screw (Diaphragm)	3
10	2051834	Diaphragm (Power)	1
11	2051835	Spring (Power)	1

THROTTLE BODY AND ATTACHING PARTS (FIGURE 5-16) GM 2.4L — LPG



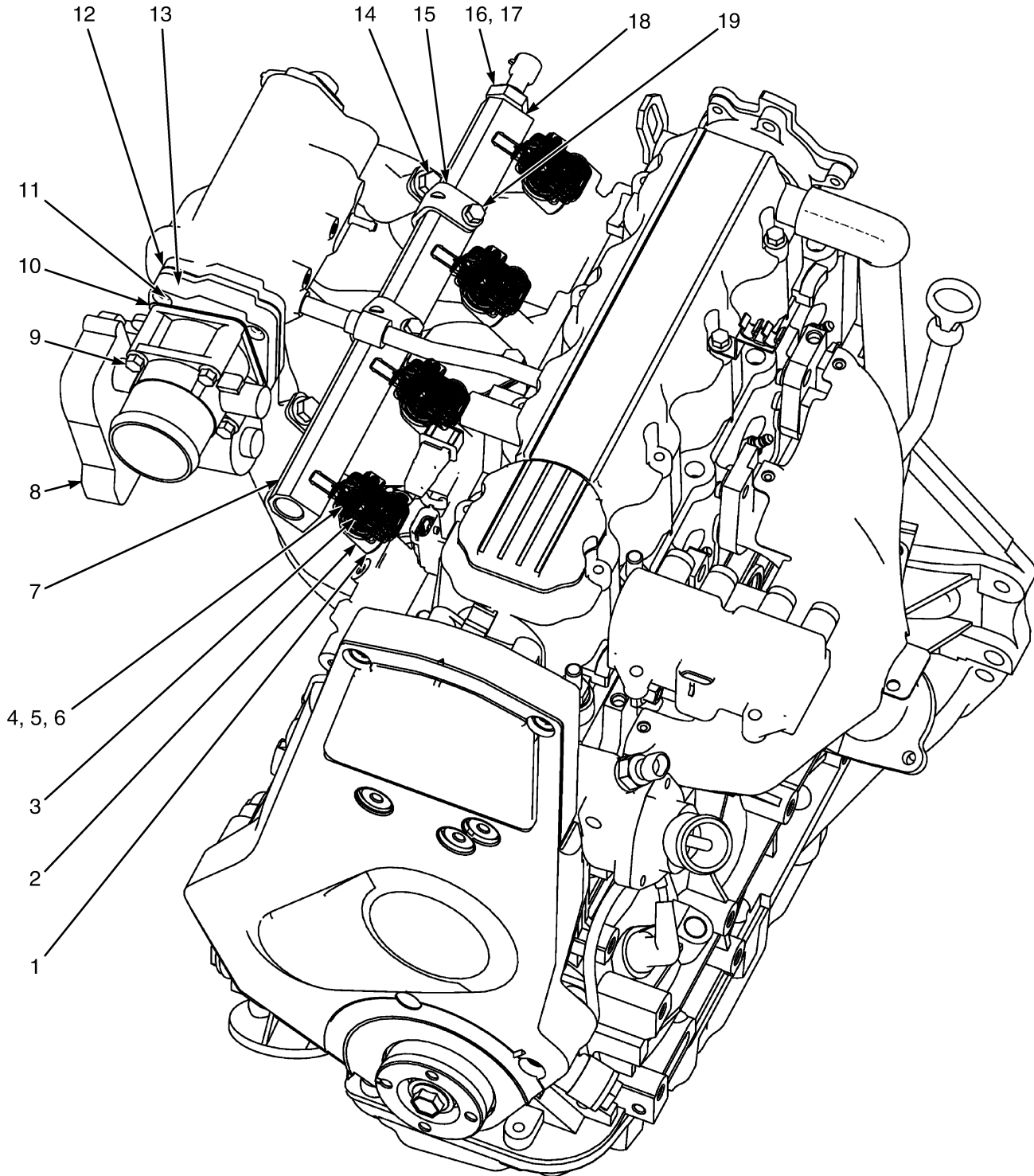
HP130378

THROTTLE BODY AND ATTACHING PARTS
GM 2.4L – LPG

ITEM	PART NO.	DESCRIPTION	QTY
1	1557553	Plate (Throttle Adapter)	1
2	.....	Fitting	4
3	.....	Plug	1
4	1557566	Hose Clamp	8
5	b 1557558	Lockwasher	2
6	1557559	Capscrew	2
7	1557561	Spacer	2
8	b 1557550	Lockwasher	10
9	1557554	Capscrew	2
10	1581796	Kit-Sensor	1
10	1564589	Screw	1
10	1534417	Capscrew	1
10	1564588	O-Ring	1
10	1564587	Sensor (Camshaft Position)	1
10	1600125	Clamp	1
10	1557550	Lockwasher	1
11	1557551	Gasket (Throttle Body)	1
12	1557552	Gasket (Throttle Plate)	1
13	1557564	Bracket	1
14	a 1557546	Oxygen Sensor (With Wire Harness)	1
15	1557565	O-Ring	4
16	1557563	Adapter (Injector)	4
17	1557562	Hose (LPG Vapor)	4
18	1557560	Injector (LPG)	4
19	1581795	Fuel Rail (LPG)	1
20	1557549	Capscrew	4
21	1557547	Throttle Body	1
22	1557548	Capscrew	4
23	1564586	Plate (Coil Support)	1
24	1632300	Sensor (Fuel Pressure)	1

FOOTNOTES:**a** Located in exhaust system**b** → S/N L177B14823E

THROTTLE BODY AND ATTACHING PARTS (FIGURE 5-17) GM 2.4L, LPG — 2010 SERIES

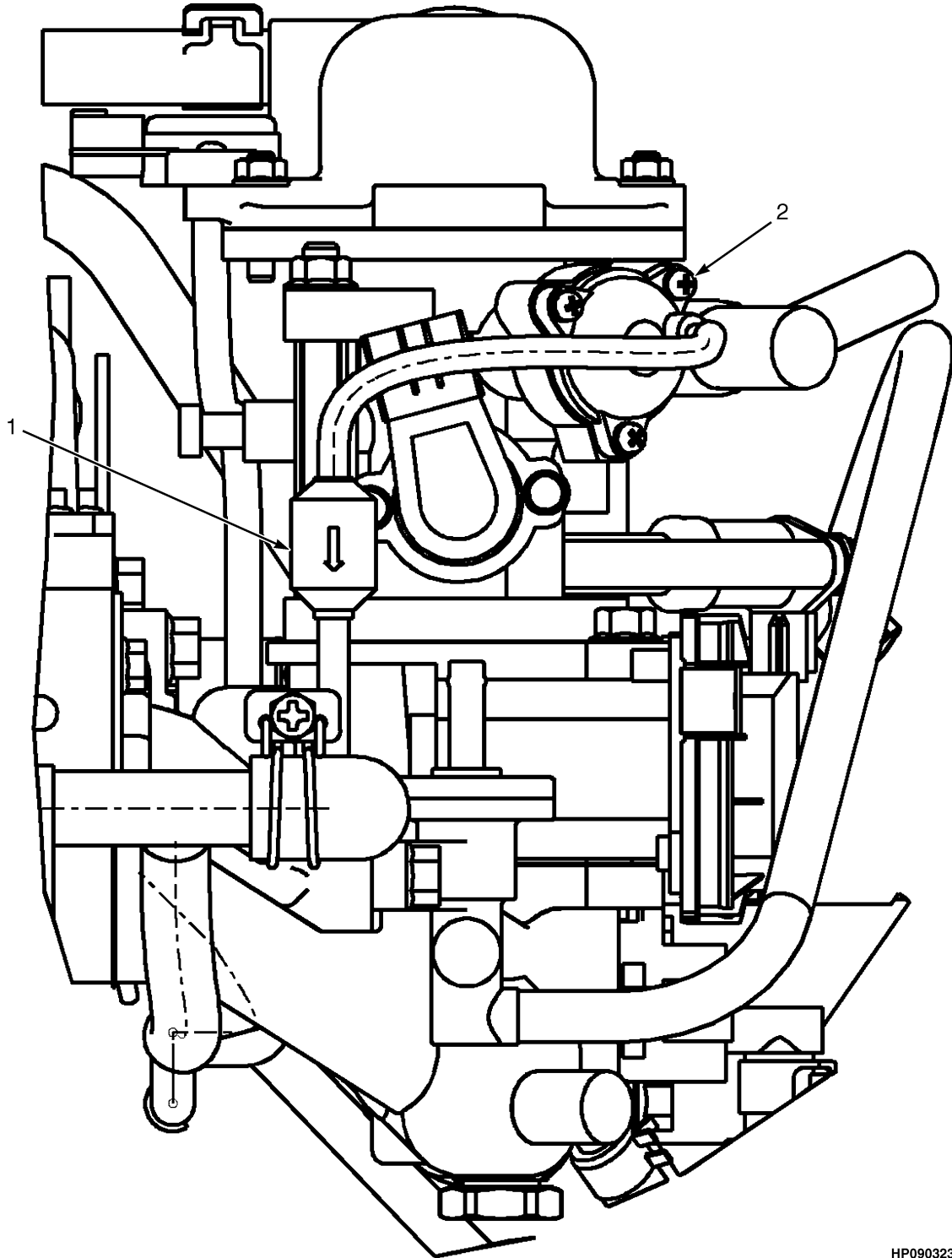


BP130309

THROTTLE BODY AND ATTACHING PARTS
GM 2.4L, LPG – 2010 SERIES

ITEM	PART NO.	DESCRIPTION	QTY
1	1557565	O-Ring (Injector Adaptor)	4
2	4013304	Adapter (Injector)	4
3	4013299	O-Ring (Adaptor)	4
4	4013301	Injector	4
5	4013302	O-Ring (Spacer)	4
6	4013303	O-Ring (Inlet)	4
7	4013300	Fuel Rail	1
8	1557547	Throttle Body	1
9	1540643	Capscrew	4
10	1557551	Gasket (Throttle Body)	1
11	1534417	Capscrew	4
12	1557552	Gasket (Throttle Plate)	1
13	1557553	Plate (Throttle Adapter)	1
14	1527879	Capscrew	2
15	4013305	Bracket (Fuel Rail Mounting)	1
16	.....	Fitting	1
17	1632300	Sensor (Fuel Pressure)	1
18	246108	Sealant	AR
19	1527876	Capscrew	2

DELAY VALVE (FIGURE 5-18)
MAZDA 2.0L AND 2.2L — LPG

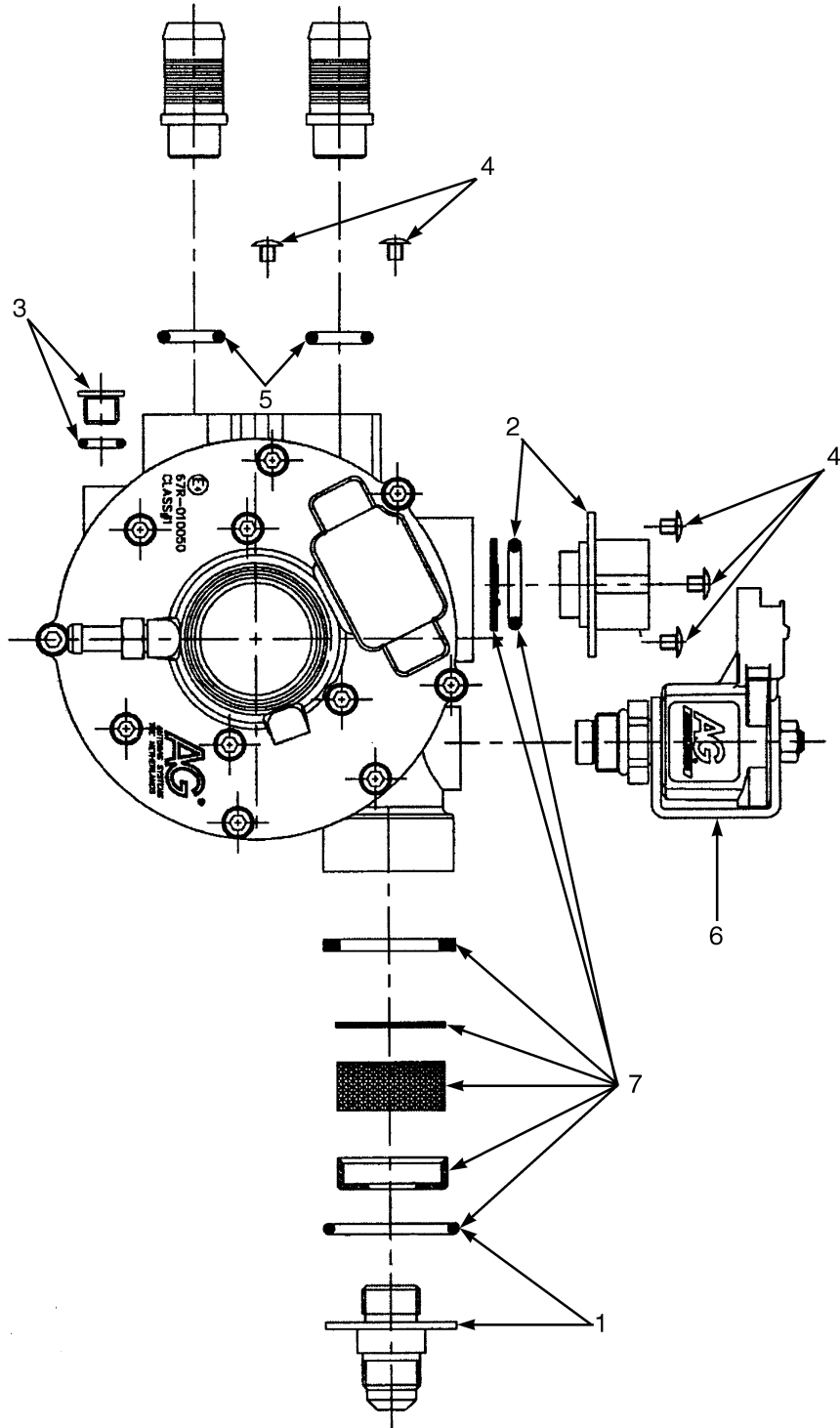


HP090323

DELAY VALVE
MAZDA 2.0L AND 2.2L – LPG

ITEM	PART NO.	DESCRIPTION	QTY
1	1374788	Valve (Delay)	1
2	1573119	Carburetor	1

**LPG REGULATOR (FIGURE 5-19)
GM 2.4L**

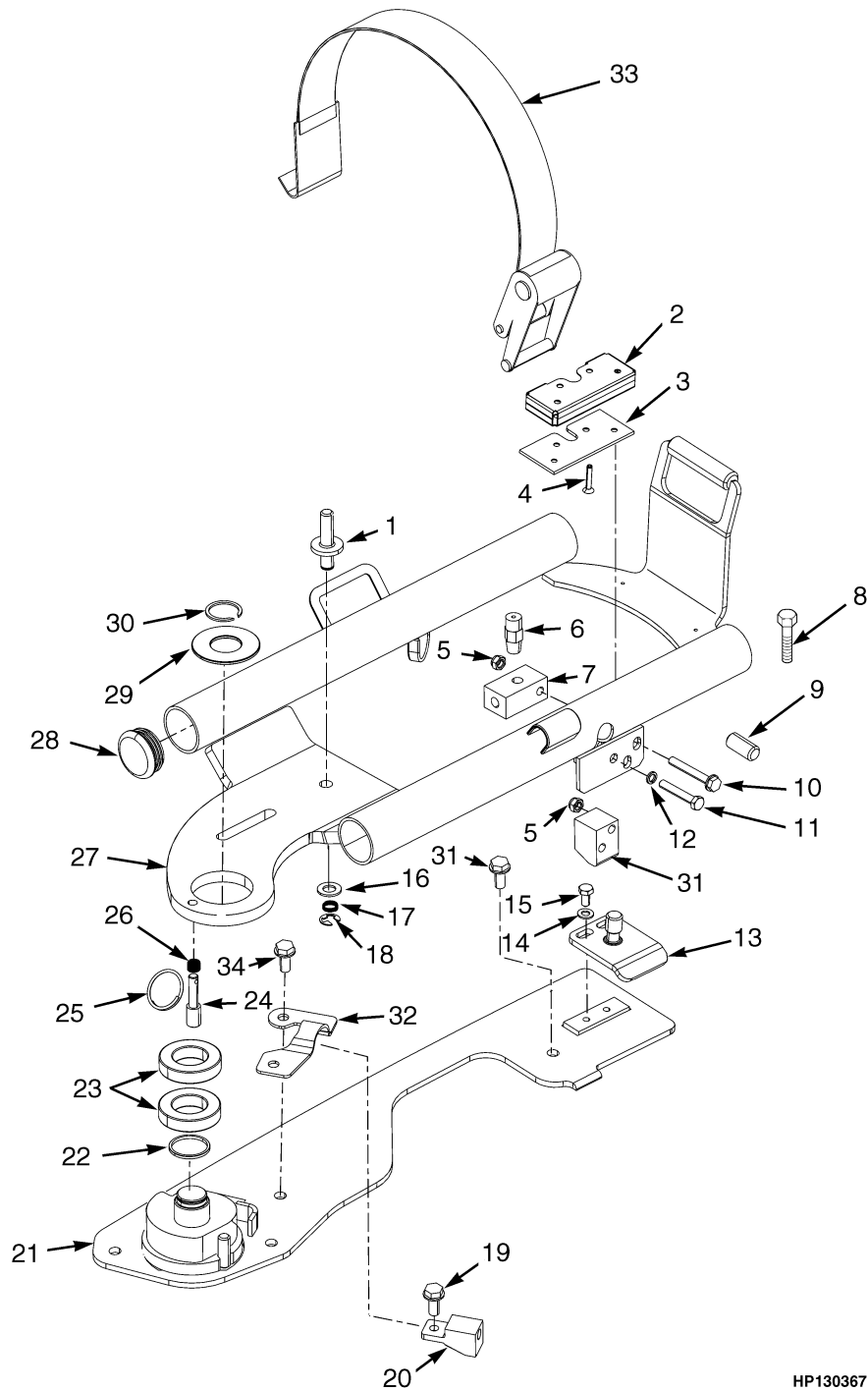


HP130352

**LPG REGULATOR
GM 2.4L**

ITEM	PART NO.	DESCRIPTION	QTY
	2056762		
	4602051	LPG Converter	1
1	1581762	Fitting (Inlet Fitting With O-Ring)	1
2	1581763	Fitting (Outlet Fitting With O-Ring)	1
3	1581764	Drain Plug (With O-Ring)	1
4	1585751	Kit-Screw (Includes 5 Connector Screws)	1
5	1585748	Kit-O-Ring (Includes 2 Coolant Fitting O-Rings)	1
6	1585747	LPG Lock-Off	1
7	1581761	Kit-Filter	1
7	.....	O-Ring	1
7	.....	Plastic Cap	1
7	.....	Foam Filter	1
7	.....	Paper Filter	1
7	.....	Rubber Washer	1
7	.....	Screen	1
	1692176	Kit-Repair LPG Converter	1
	.....	Diaphragm	1
	.....	Barrier, Lower	1
	.....	Barrier, Upper	1
	.....	Rubber Seal, High Pressure	1
	.....	Support (For Rubber Seal)	1
	.....	Pivot Pin	1
	.....	Screw (For Pivot Pin)	1
	.....	Washer	1
	.....	Washer, Anti-Friction	1
	4600754	Fitting	1

LPG TANK BRACKET (FIGURE 5-20) SWING OUT WITH FABRIC STRAP (→ S/N L177B10506D)



HP130367

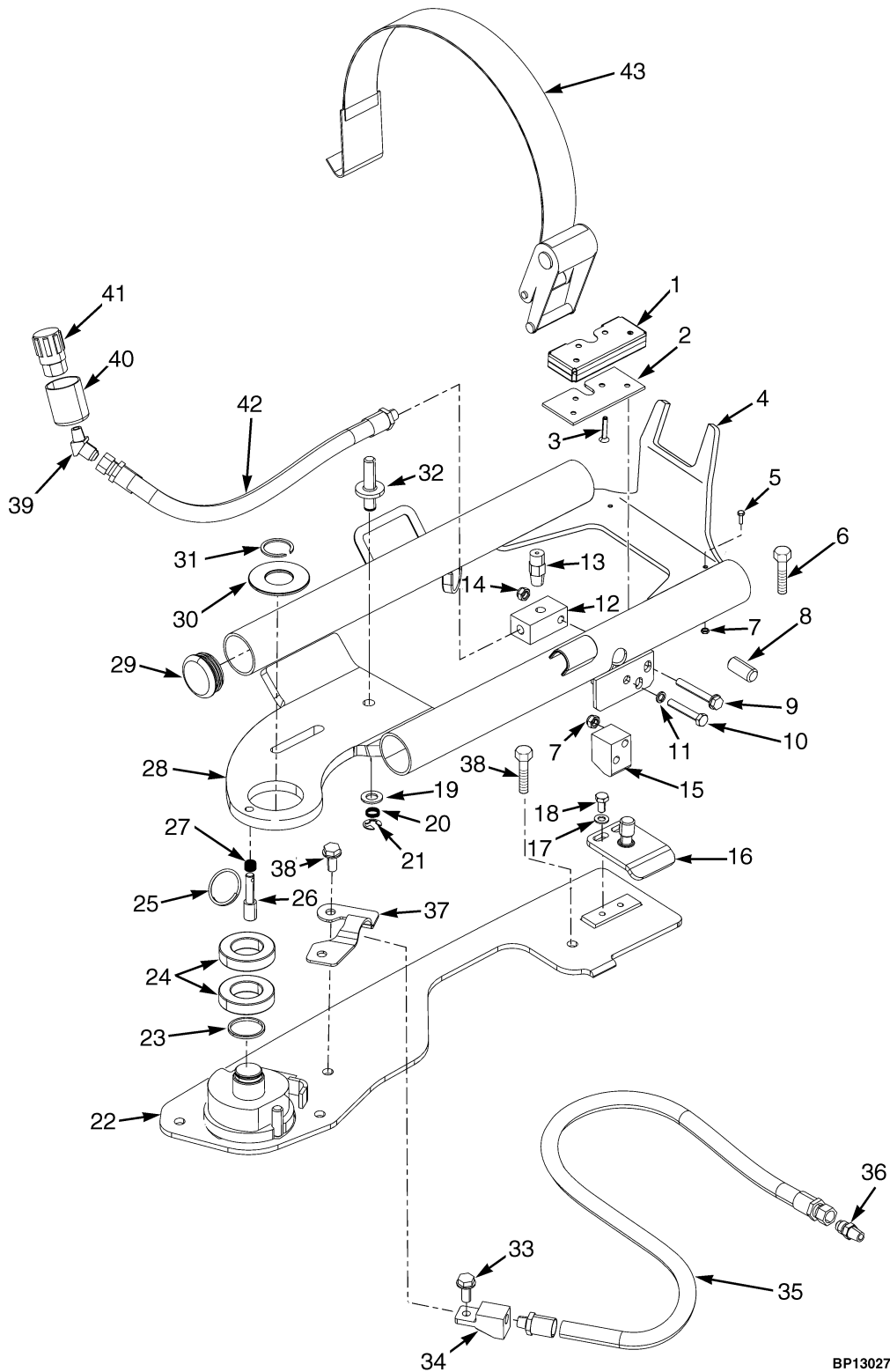
LPG TANK BRACKET
SWING OUT WITH FABRIC STRAP (→ S/N L177B10506D)

ITEM	PART NO.	DESCRIPTION	QTY
	a 1568837	Lpg Tank Bracket	1
	1582412	Lpg Tank Bracket	1
1	1651119		
	4032607	Pin	1
2	1517405	Latch	1
3	1534674	Plate	1
4	1581899	Capscrew	4
5	1581739	Nut	2
6	101809	Relief Valve	1
7	1534679	Block	1
8	1581740	Capscrew	1
9	1534677	Pin	1
10	1585835	Capscrew	2
11	1581583	Capscrew	1
12	1581898	Washer	1
13	1534649	Pin	1
14	1581556	Washer	2
15	1581885	Capscrew	2
16	1581559	Washer	1
17	1528899	Spring	1
18	182118	Retaining Ring	1
19	1581579	Capscrew	1
20	1525451	Fitting	1
21	1568844	Base Weldment	1
22	1568853	Thrust Washer	1
23	184451	Ball Bearing	2
24	1534671	Pin	1
25	1534672	Ring	1
26	1528903	Spring	1
27	1582413	Support	1
28	1398099	Plug	4
29	1568839	Washer (Pivot)	1
30	34507	Snap Ring	1
31	1534679	Block (Anti Rattle)	1
32	1564061	Bracket	1
33	1379455	Strap	1
34	1586013	Capscrew	1

FOOTNOTES:

a Service with LPG Bracket 1582412

LPG TANK BRACKET (FIGURE 5-21) SWING OUT WITH FABRIC STRAP (S/N L177B10507D ↔ 9/2006)

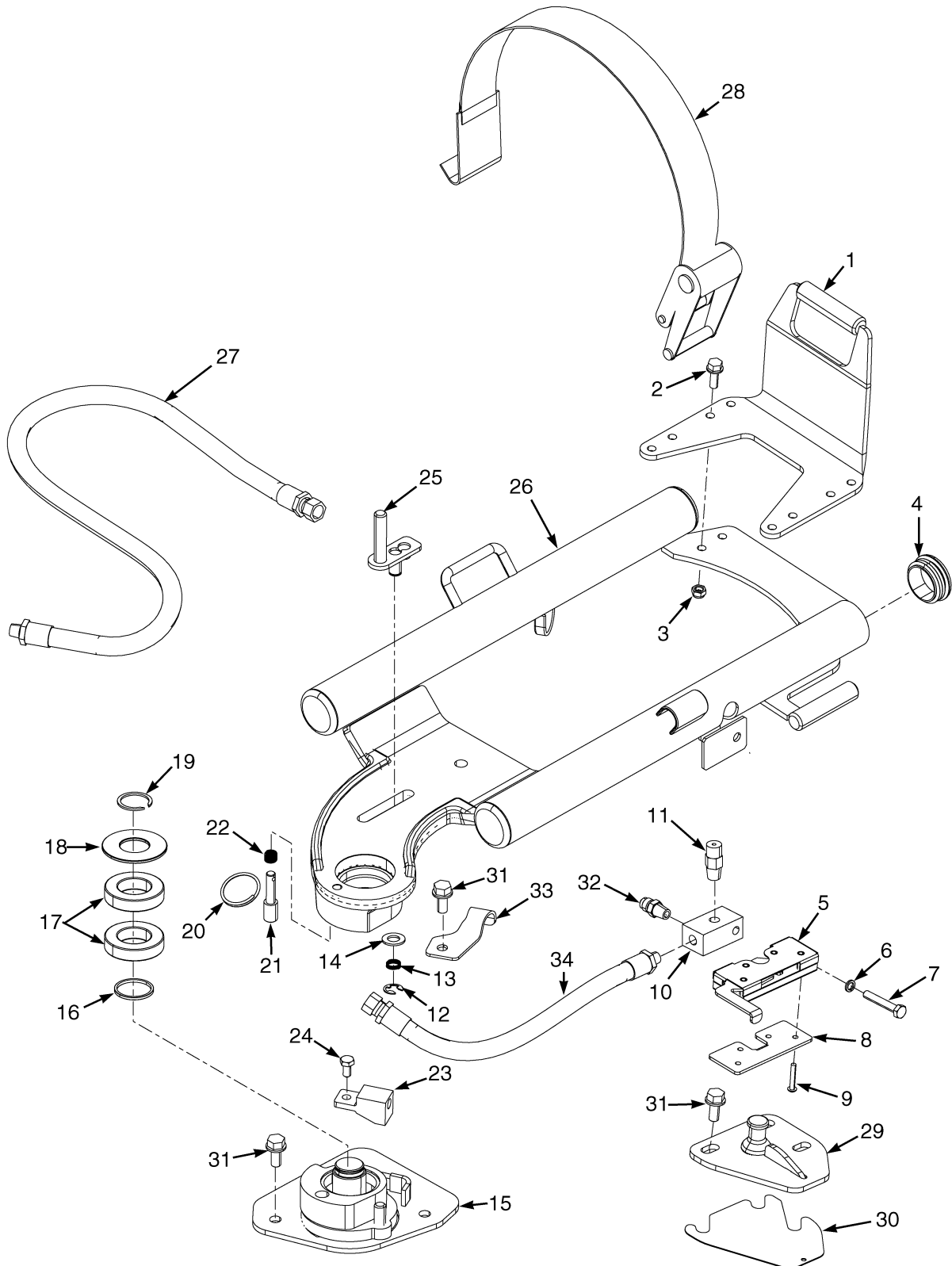


BP130274

LPG TANK BRACKET
SWING OUT WITH FABRIC STRAP (S/N L177B10507D ↔ 9/2006)

ITEM	PART NO.	DESCRIPTION	QTY
	1640249	Lpg Tank Bracket	1
1	1517405	Latch	1
2	1534674	Plate	1
3	1581899	Capscrew	4
4	1637661	Bracket	1
5	1583611	Capscrew	4
6	1581740	Capscrew	1
7	1581739	Nut	6
8	1534677	Pin	1
9	1585835	Capscrew	2
10	1581583	Capscrew	1
11	1581898	Washer	1
12	1534675	Fitting	1
13	101809	Relief Valve	1
14	1581739	Nut	1
15	1534679	Block	1
16	1534649	Pin	1
17	1581556	Washer	2
18	1581885	Capscrew	2
19	1581559	Washer	1
20	1528899	Spring	1
21	182118	Retaining Ring	1
22	1568844	Base Weldment	1
23	1568853	Thrust Washer	1
24	184451	Ball Bearing	2
25	1534672	Ring	1
26	1534671	Pin	1
27	1528903	Spring	1
28	1640179	Support	1
29	1398099	Plug	4
30	1568839	Washer (Pivot)	1
31	34507	Snap Ring	1
32	1651119		
	4032607	Pin	1
33	1581579	Capscrew	1
34	1525451	Fitting	1
35	2072298	Hose Assy	1
36	16134	Fitting	1
37	1564061	Bracket	1
38	1586013	Capscrew	4
39	16863	Fitting	1
40	2071517	Sleeve	1
41	97999	Fitting	1
42	2085908	Hose Assy	1
43	1379455	Strap	1

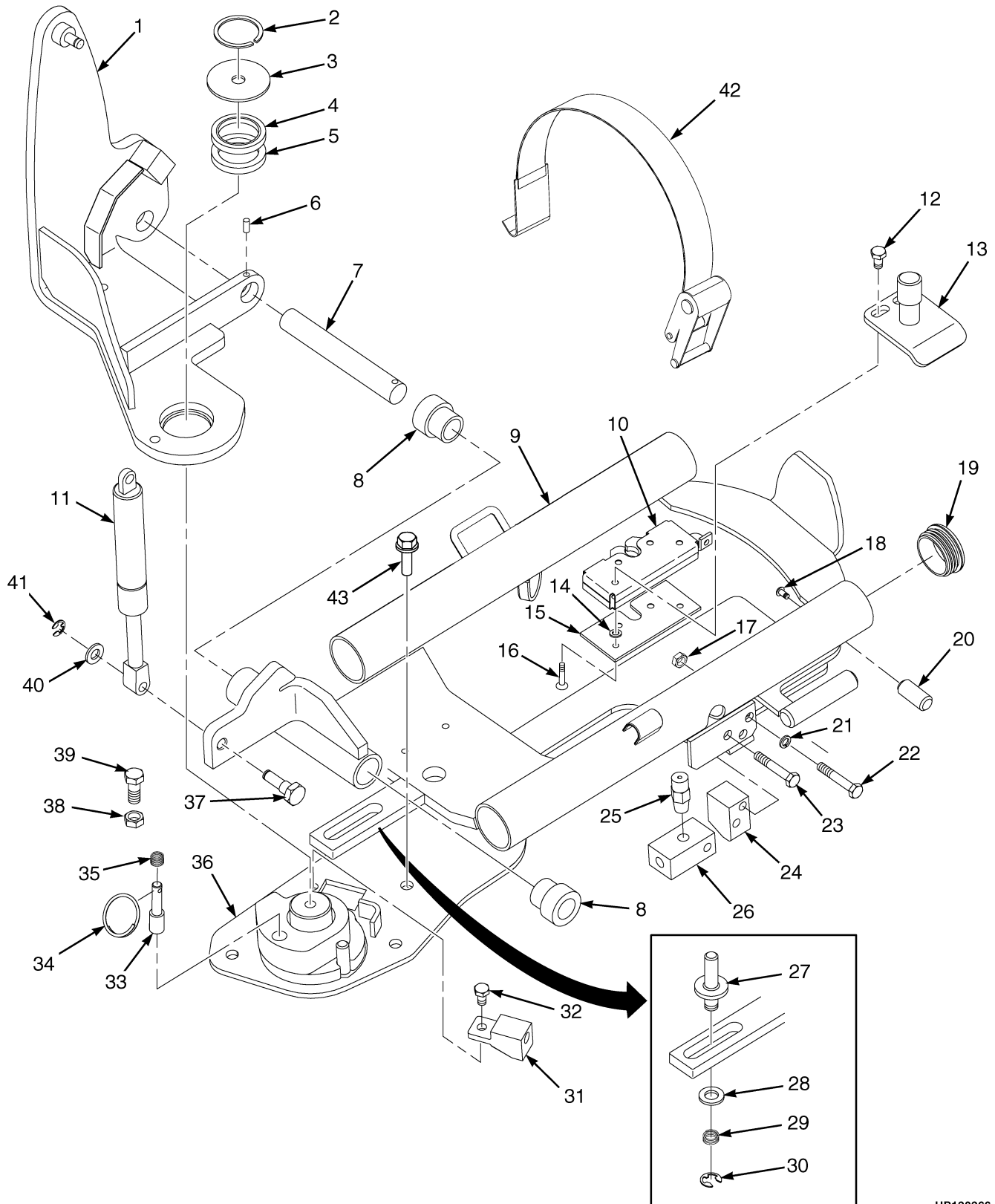
LPG TANK BRACKET (FIGURE 5-22) SWING OUT WITH FABRIC STRAP (9/2006 →)



LPG TANK BRACKET
SWING OUT WITH FABRIC STRAP (9/2006 →)

ITEM	PART NO.	DESCRIPTION	QTY
	1652210	Lpg Tank Bracket	1
1	1637661	Bracket	1
1	1689551	Plate (Alternate Part)	1
2	1583611	Capscrew	4
3	1581739	Nut	4
4	.....	Plug	2
5	1656325	Latch	1
6	1581898	Washer	1
7	1581583	Capscrew	1
8	1649565	Plate	1
9	296156	Capscrew	4
10	1534675	Fitting	1
11	101809	Relief Valve	1
12	182118	Retaining Ring	1
13	1581559	Washer	1
14	1528899	Spring	1
15	1656901	Base Plate	1
16	1568853	Thrust Washer	1
17	184451	Ball Bearing	2
18	1568839	Washer (Pivot)	1
19	34507	Snap Ring	1
20	1534672	Ring	1
21	1534671	Pin	1
21	1615956	Pin (Alternate Part)	1
22	1528903	Spring	1
23	1525451	Fitting	1
24	1581579	Capscrew	1
25	1651119		
	4032607	Pin	1
26	1652238	Lpg Tank Bracket	1
27	2072298	Hose Assy	1
28	1379455	Strap	1
29	1655300	Striker	1
29	1682758	Striker (Alternate Part)	1
30	1655328	Shim	1
31	1586013	Capscrew	6
32	16134	Fitting	1
33	1656903	Bracket	1
34	2085908	Hose Assy	1
35	246108	Sealant	1
35	1687376	Sealant (Alternate Part)	1
35	1687377	Activator (Alternate Part)	1

LPG TANK BRACKET (FIGURE 5-23) EZEXCHANGE WITH FABRIC STRAP (→ S/N L177B10469D)



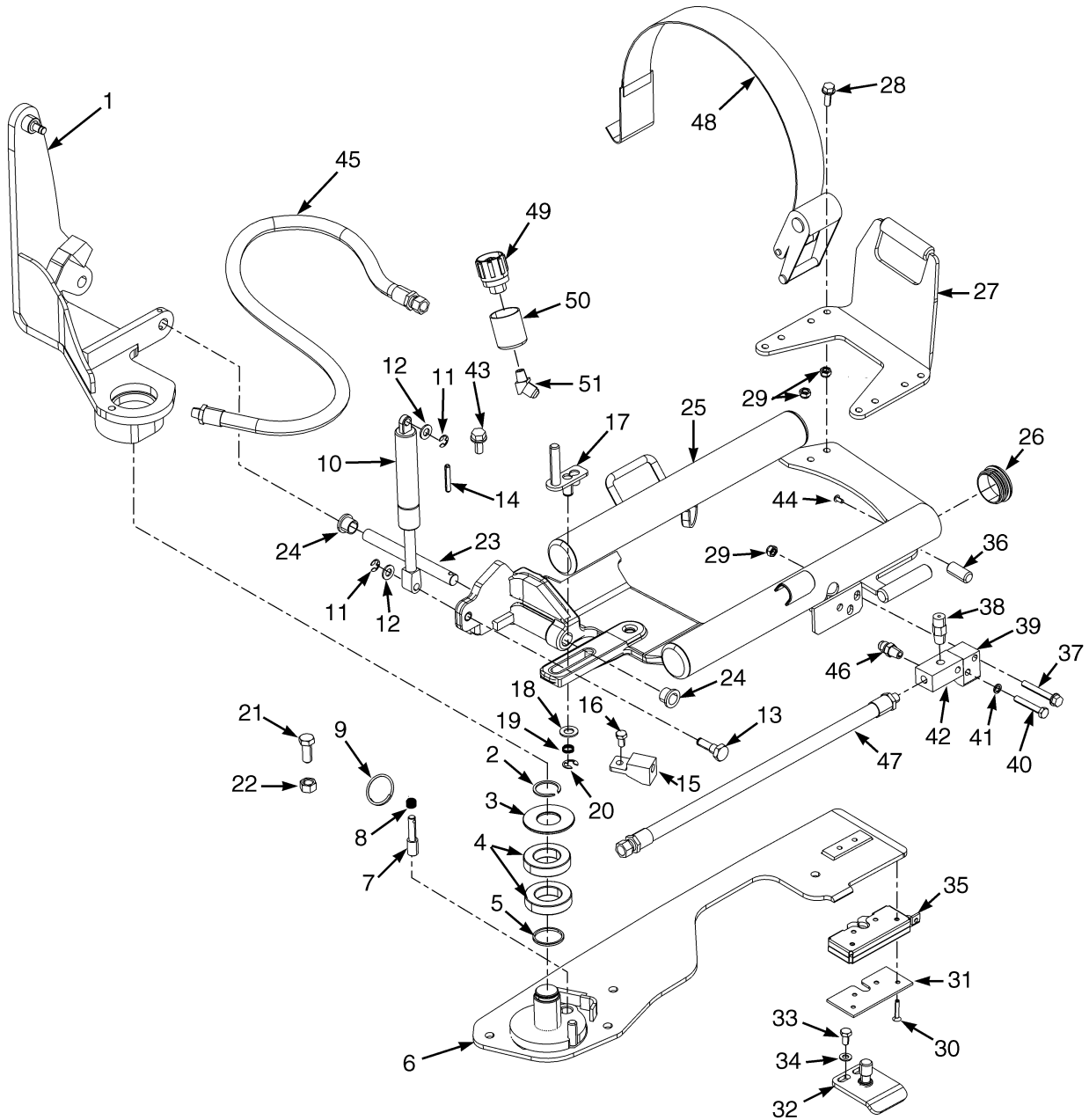
HP130366

LPG TANK BRACKET
EZXCHANGE WITH FABRIC STRAP (→ S/N L177B10469D)

ITEM	PART NO.	DESCRIPTION	QTY
	1584269	Lpg Tank Bracket	1
1	1517437	Pivot (Intermediate)	1
1	1615671	Pivot (Intermediate)	1
2	34507	Snap Ring	1
3	1568839	Washer (Pivot)	1
4	184451	Ball Bearing	2
5	1568853	Thrust Washer (Thrust)	1
6	302363	Dowel	1
7	1581887	Shaft	1
8	1581888	Bushing	2
9	1584270	Support	1
10	1517405	Latch	1
11	1402414	Gas Spring	1
12	1581885	Capscrew	2
13	1534649	Pin	1
14	1581556	Washer	4
15	1534674	Plate	1
16	1581899	Capscrew	4
17	1581739	Nut	4
18	1581740	Capscrew	1
19	1398099	Plug	4
20	1534677	Pin	1
21	1581898	Washer	1
22	1585835	Capscrew	2
23	1581583	Capscrew	1
24	1534679	Block (Anti-Rattle)	1
25	101809	Relief Valve	1
26	1534675	Fitting	1
27	4651119		
	4032607	Pin	1
28	1581559	Washer	1
29	1528899	Spring	1
30	182118	Retaining Ring	1
31	1525451	Fitting	1
32	1581579	Capscrew	1
33	1534671	Pin	1
34	1534672	Ring	1
35	1528903	Spring	1
36	1568844	Base Weldment	1
37	1525478	Pin	1
38	1581848	Nut	1
39	1586022	Capscrew	1
40	1581557	Washer	2
41	1525442	E-Ring	2
42	1379455	Strap	1
	a 1586013	Capscrew	4

FOOTNOTES:**a** Not Illustrated

LPG TANK BRACKET (FIGURE 5-24) EZXCANGE WITH FABRIC STRAP (S/N L177B10470D ↔ 9/2006)



BP130221

LPG TANK BRACKET
EZXCHANGE WITH FABRIC STRAP (S/N L177B10470D ↔ 9/2006)

ITEM	PART NO.	DESCRIPTION	QTY
	1640406	Lpg Tank Bracket	1
1	1615671	Pivot	1
2	34507	Snap Ring	1
3	1568839	Washer (Pivot)	1
4	184451	Ball Bearing	2
5	1568853	Thrust Washer	1
6	1568844	Base Weldment	1
7	1534671	Pin	1
8	1528903	Spring	1
9	1534672	Ring	1
10	1402414	Gas Spring	1
11	1525442	E-Ring	2
12	1581557	Washer	2
13	1525478	Pin	1
14	302468	Roll Pin	1
15	1525451	Fitting	1
16	1581579	Capscrew	1
17	1651119		
	4032607	Pin	1
18	1581559	Washer	1
19	1528899	Spring	1
20	182118	Retaining Ring	1
21	1586022	Capscrew	1
22	1581848	Nut	1
23	1581887	Shaft	1
24	1581888	Bushing	2
25	1640178	Support	1
26	1398099	Plug	4
27	1637661	Bracket	1
28	1583611	Capscrew	4
29	1581739	Nut	6
30	1581740	Capscrew	1
31	1534674	Plate	1
32	1534649	Pin	1
33	1581885	Capscrew	2
34	1581556	Washer	2
35	1517405	Latch	1
36	1534677	Pin	1
37	101809	Relief Valve	1
38	1585835	Capscrew	1
39	1534679	Block	1
40	1581593	Capscrew	1
41	1581898	Washer	1
42	1534675	Fitting	1
43	1581899	Capscrew	4
44	1586013	Capscrew	4
45	2072298	Hose Assy	1
46	16134	Fitting	1
47	2085908	Hose Assy	1
48	1379455	Strap	1

LPG TANK BRACKET

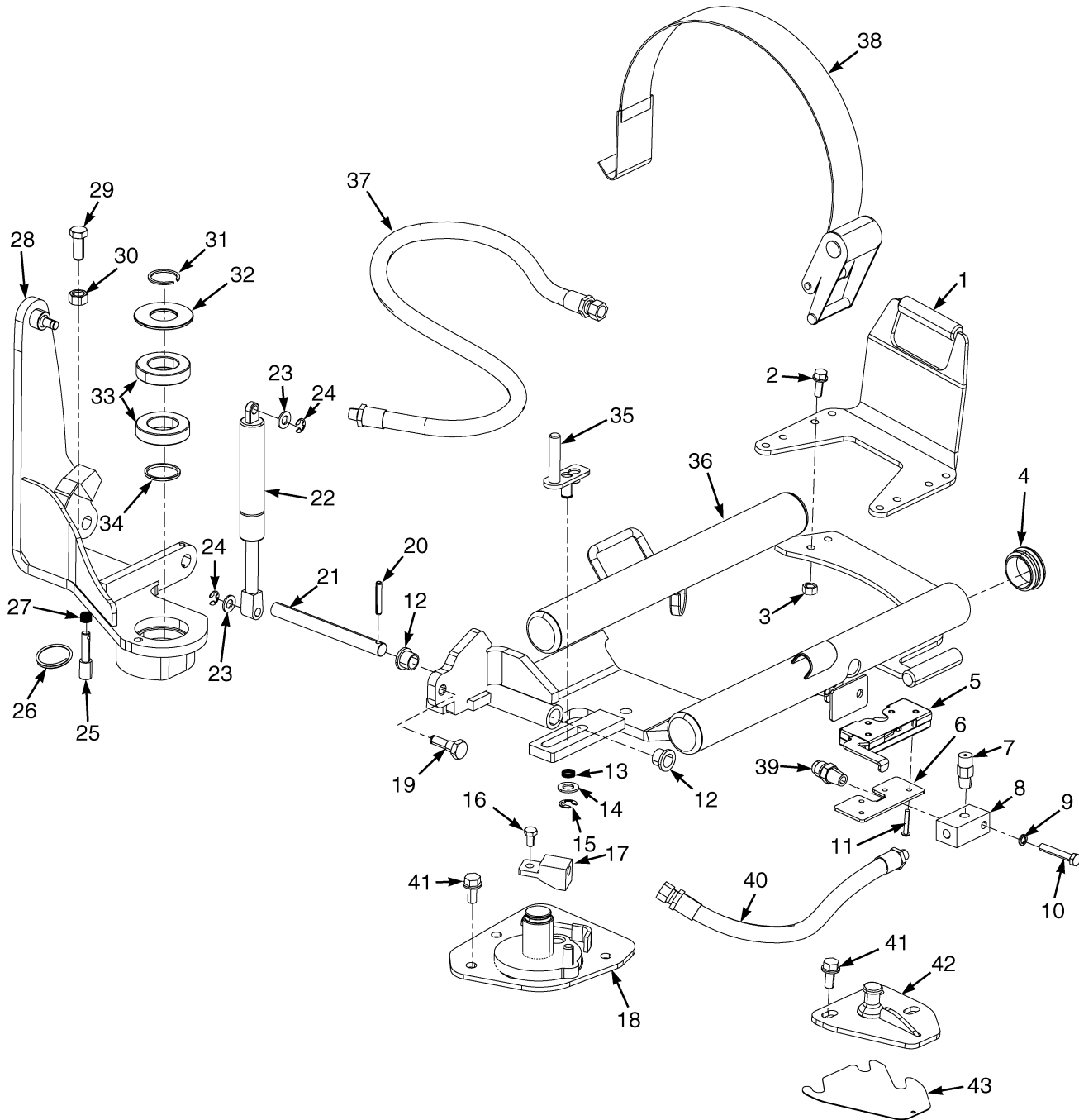
EZXCHANGE WITH FABRIC STRAP (S/N L177B10470D ↔ 9/2006)

ITEM	PART NO.	DESCRIPTION	QTY
49	97999	Fitting	1
49	a 878758	Fitting	1
50	2071517	Sleeve	1
50	a 895603	Fitting	1
51	16863	Fitting	1
51	a 16134	Fitting	1

FOOTNOTES:

a For Germany Market, Not illustrated.

LPG TANK BRACKET (FIGURE 5-25) EZEXCHANGE WITH FABRIC STRAP (9/2006 →)



BP130263

LPG TANK BRACKET
EZXCHANGE WITH FABRIC STRAP (9/2006 →)

ITEM	PART NO.	DESCRIPTION	QTY
	1652209	Lpg Tank Bracket	1
1	1637661	Bracket	1
1	1689551	Plate (Alternate Part)	1
2	1583611	Capscrew	4
3	1581739	Nut	4
4	.....	Plug	4
5	1656325	Latch	1
6	1649565	Plate	1
7	101809	Relief Valve	1
8	1534675	Fitting	1
9	1581898	Washer	1
10	1581583	Capscrew	1
11	296156	Capscrew	4
12	1581888	Bushing	2
13	1528899	Spring	1
14	1581559	Washer	1
15	182118	Retaining Ring	1
16	1581579	Capscrew	1
17	1525451	Fitting	1
18	1656901	Base Plate	1
19	1525478	Pin	1
20	302468	Roll Pin	1
21	1581887	Shaft	1
22	1402414	Gas Spring	1
23	1581557	Washer	2
24	1525442	E-Ring	1
25	1534671	Pin	1
26	1534672	Ring	1
27	1528903	Spring	1
28	1615671	Pivot	1
29	1586022	Capscrew	1
30	1581848	Nut	1
31	34507	Snap Ring	1
32	1568839	Washer (Pivot)	1
33	184451	Ball Bearing	2
34	1568853	Thrust Washer	1
35	1651119		
	4032607	Pin	1
36	1652340	Lpg Tank Bracket	1
37	2072298	Hose Assy	1
38	1379455	Strap	1
39	16134	Fitting	1
40	2085908	Hose Assy	1
41	1586013	Capscrew	6
42	1655300	Striker	1
42	1682758	Striker (Alternate Part)	1
43	1655328	Shim	1
	a 246108	Sealant	1
	a 1687376	Sealant (Alternate Part)	1
	a 1687377	Activator (Alternate Part)	1

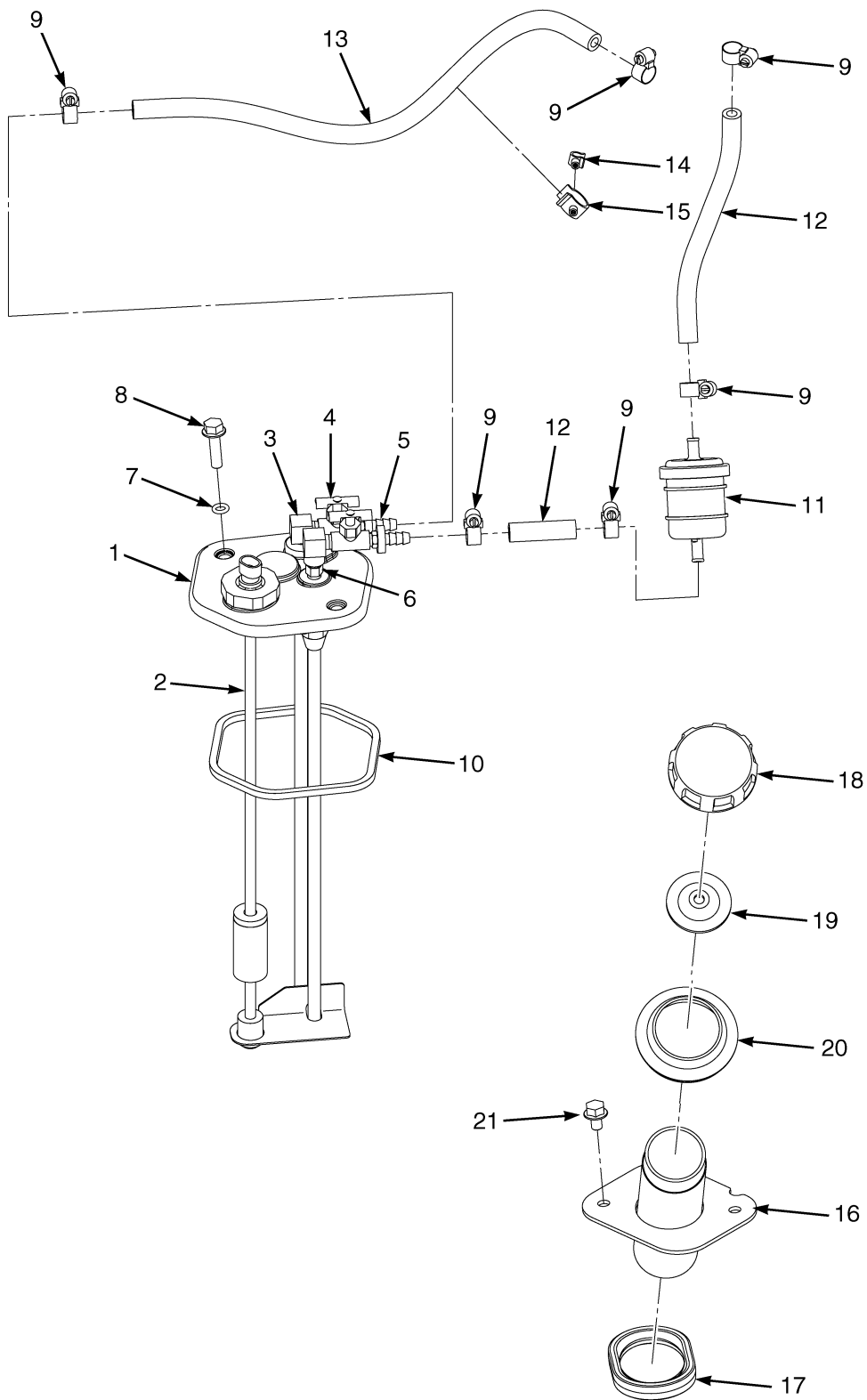
LPG TANK BRACKET
EZXCHANGE WITH FABRIC STRAP (9/2006 →)

ITEM	PART NO.	DESCRIPTION	QTY
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FOOTNOTES:

- a Not Illustrated

FUEL SYSTEM (FIGURE 5-26) YANMAR 2.6L AND 3.3L — DIESEL

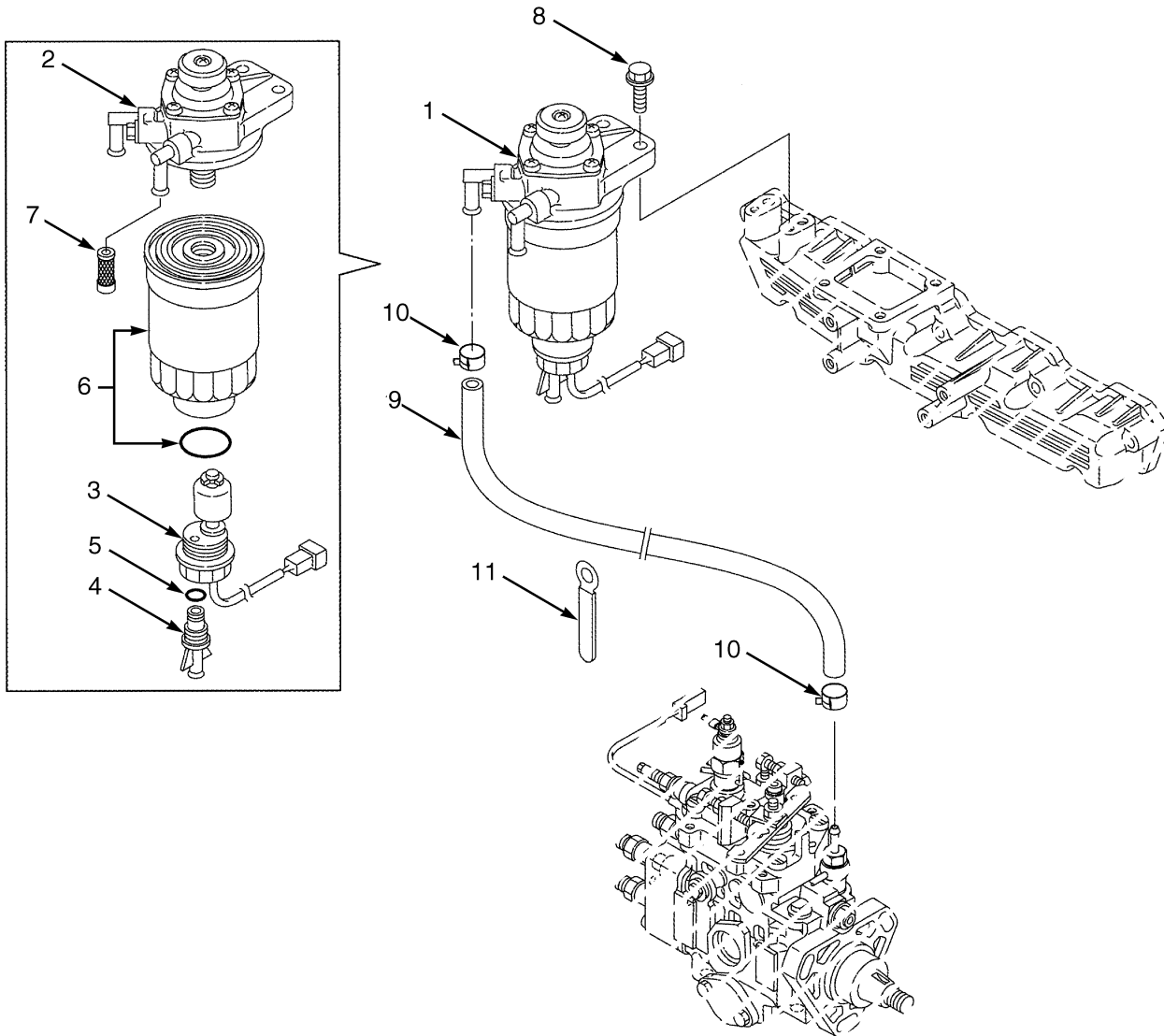


HP130381

FUEL SYSTEM
YANMAR 2.6L AND 3.3L – DIESEL

ITEM	PART NO.	DESCRIPTION	QTY
1	1532532	Fuel Sender Assembly	1
2	1501811	Fuel Sender	1
3	17650	Fitting	1
4	87446	Drain Valve (Shut-Off)	2
5	309651	Fitting	2
6	16151	Fitting	1
7	353000	O-Ring	2
8	1527881	Capscrew	2
9	168718	Clamp	6
10	1528893	Quad Ring	1
11	1304950	Fuel Filter	1
12	1610852	Hose	2
13	260878	Hose	1
14	1542440	Clamp (Swivel)	1
15	1543691	Clamp (Swivel)	1
16	1564392	Pipe (Fill)	1
17	1528314 1593391	Seal	1
18	2081840	Fuel Cap	1
18	1579677	Fuel Cap (Optional - Lockable)	1
19	2021683	Gasket	1
19	2021685	Gasket (Optional - Lockable)	1
20	1528608	Grommet	1
21	1529366	Capscrew	2

FUEL FILTER AND WATER SEPARATOR (FIGURE 5-27) YANMAR 2.6L AND 3.3L — DIESEL



BP090212

**FUEL FILTER AND WATER SEPARATOR
YANMAR 2.6L AND 3.3L – DIESEL**

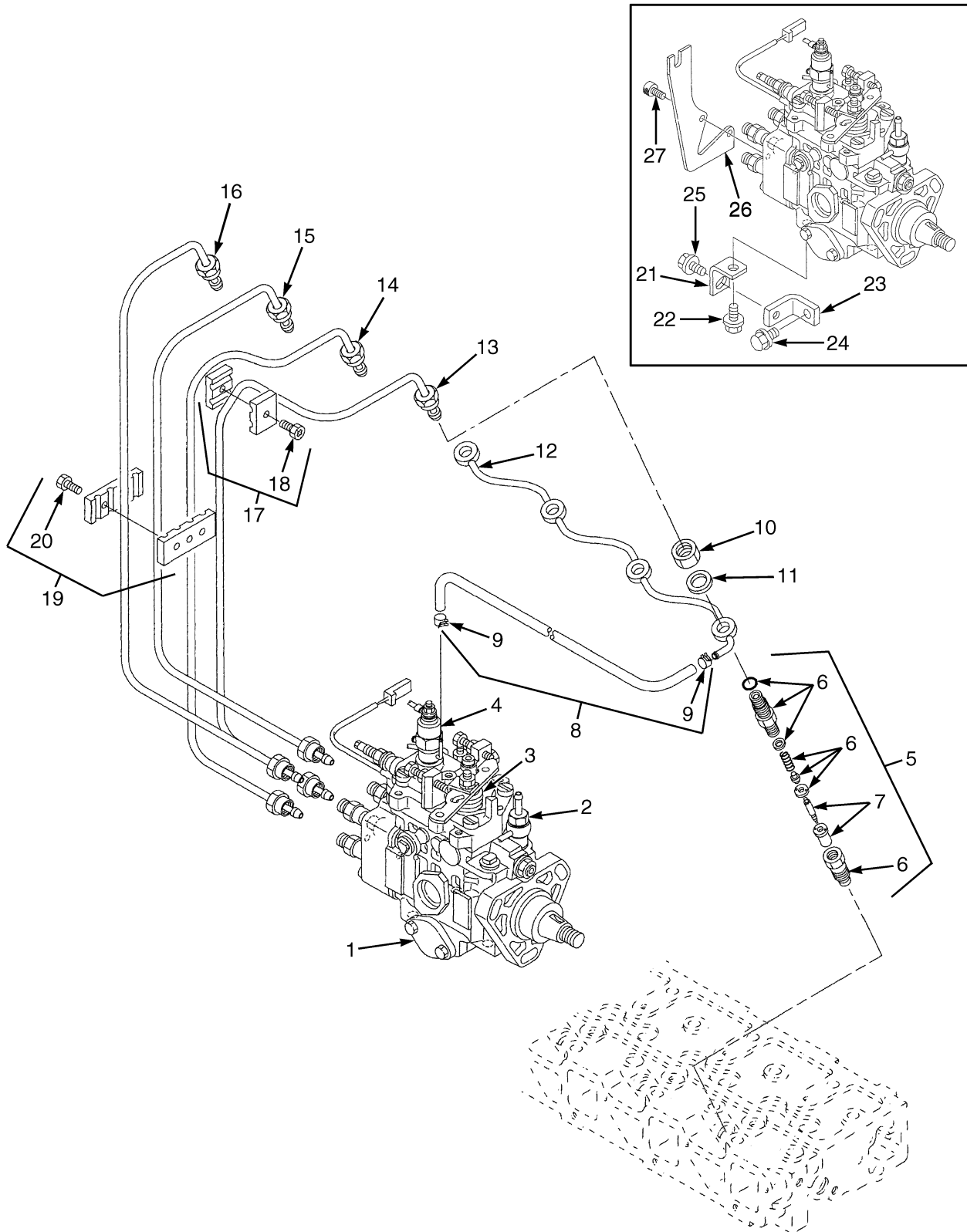
ITEM	PART NO.	DESCRIPTION	QTY
	a 1501687	Engine Assy-Diesel (Yanmar 2.6L)	1
	c 1688273	Engine Assy-Diesel (Yanmar 2.6L)	1
	b 1501690	Engine Assy-Diesel (Yanmar 3.3L)	1
	d 1676883	Engine Assy-Diesel (Yanmar 3.3L)	1
1	1599833	Fuel Filter (2.6L)	1
1	2084448	Fuel Filter (3.3L)	1
2	1599834	Body (2.6L)	1
2	2084449	Filter Head (3.3L)	1
3	1599835	Sensor (2.6L)	1
3	2084450	Sensor (3.3L)	1
4	1599836	Drain Plug (2.6L)	1
4	2084451	Plug (3.3L)	1
5	1599837	O-Ring (2.6L)	1
5	2084452	O-Ring (3.3L)	1
6	1330033	Fuel Filter (Cartridge 10 micron) (2.6L)	1
6	2084453	Element Assy	1
7	1599839	Filter (2.6L)	1
8	1599801	Bolt	2
9	1599841	Tube Assy	1
10	1599842	Clamp	2
11	1599843	Clamp	2

FOOTNOTES:

a → S/N L177B24071F
b → S/N L177B24239F

c S/N L177B24072F →
d S/N L177B24240F →

FUEL INJECTION SYSTEM (FIGURE 5-28) YANMAR 2.6L AND 3.3L — DIESEL



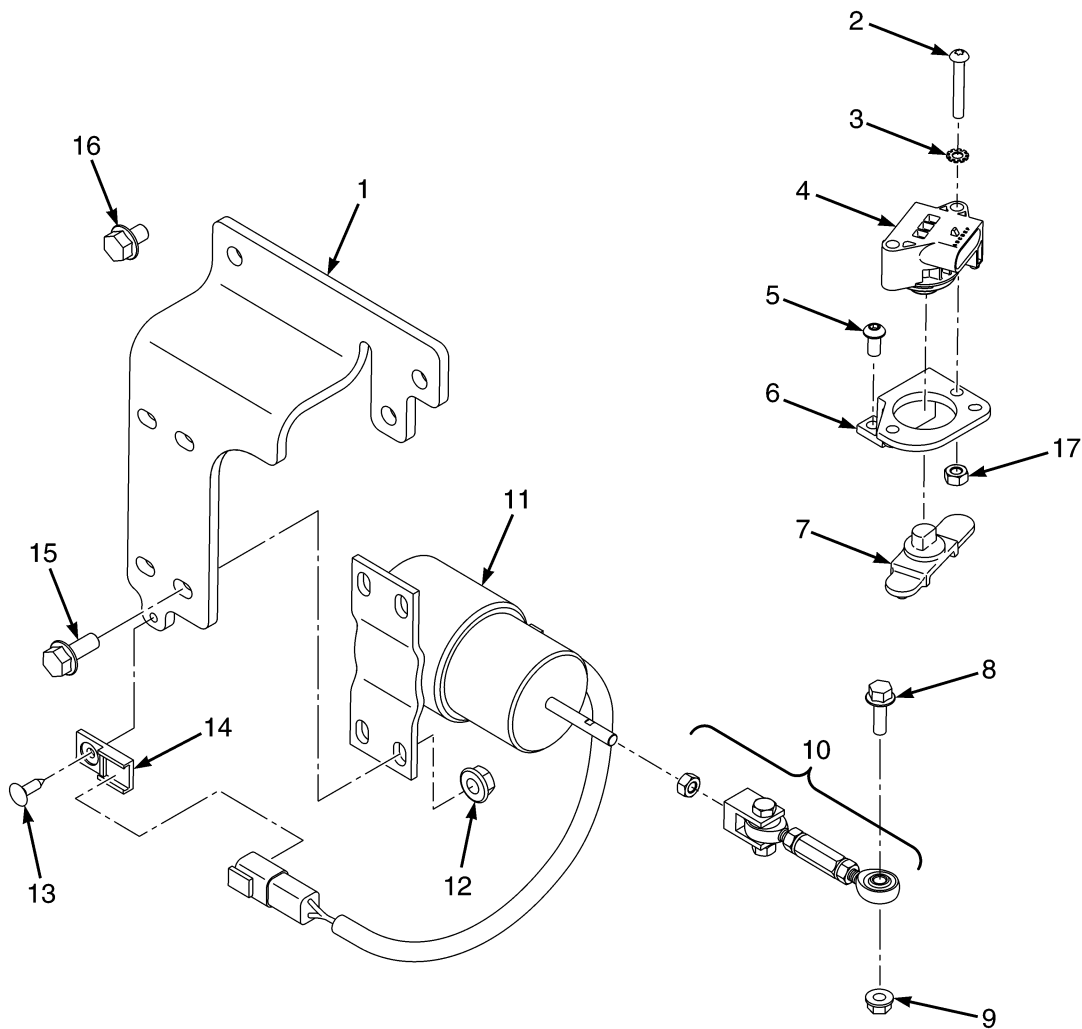
BP090190

**FUEL INJECTION SYSTEM
YANMAR 2.6L AND 3.3L – DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	1501687	Engine Assy-Diesel (Yanmar 2.6L)	1
	1501690	Engine Assy-Diesel (Yanmar 3.3L) (3.3L)	1
1	1599901	Injection Pump (2.6L)	1
1	1708457	Fuel Pump Assembly (Injection 2.6L) (Alternate Part)	1
1	a 1600084	Injection Pump (3.3L)	1
1	b 1689747	Fuel Pump (3.3L)	1
2	1608616	Solenoid (Fuel Shut-Off)	1
2	1608617	O-Ring	1
3	4021384	Spring (Yanmar 2.6L) (Alternate Part)	1
4	1597644	Solenoid Valve (Cold Start)	1
4	1600093	O-Ring	1
5	1599818	Injector	4
6	1599820	Retainer	1
7	1599819	Nozzle	1
8	1599828	Tube Assy	1
9	1599829	Clamp	2
10	1599832	Nut	4
11	1599831	Gasket	4
12	1599830	Tube Assy (Fuel Return)	1
13	1599827	Tube Assy (#4)	1
14	1599826	Tube Assy (#3)	1
15	1599825	Tube Assy (#2)	1
16	1599824	Tube Assy (#1)	1
17	1599821	Retainer	2
18	1599822	Bolt	1
19	1599823	Retainer	1
20	1599822	Bolt	2
21	1599909	Retainer	1
22	1599911	Bolt	1
23	1599910	Bracket	1
24	1599913	Bolt	1
25	1599912	Bolt	1
26	1599907	Bracket	1
27	1599908	Bolt	2
	1599898	Kit-Gasket (2.6L Engine Complete)	1
	a 1600085	Kit-Gasket (Complete Engine) (3.3L)	1
	b 1689744	Kit-Gasket (Complete Engine) (3.3L)	1

FOOTNOTES:**a** → S/N L177B24239F**b** S/N L177B24240F →

THROTTLE POSITION SENSOR AND ATTACHING PARTS (FIGURE 5-29) YANMAR 2.6L AND 3.3L DIESEL (→ S/N L177B31945H)



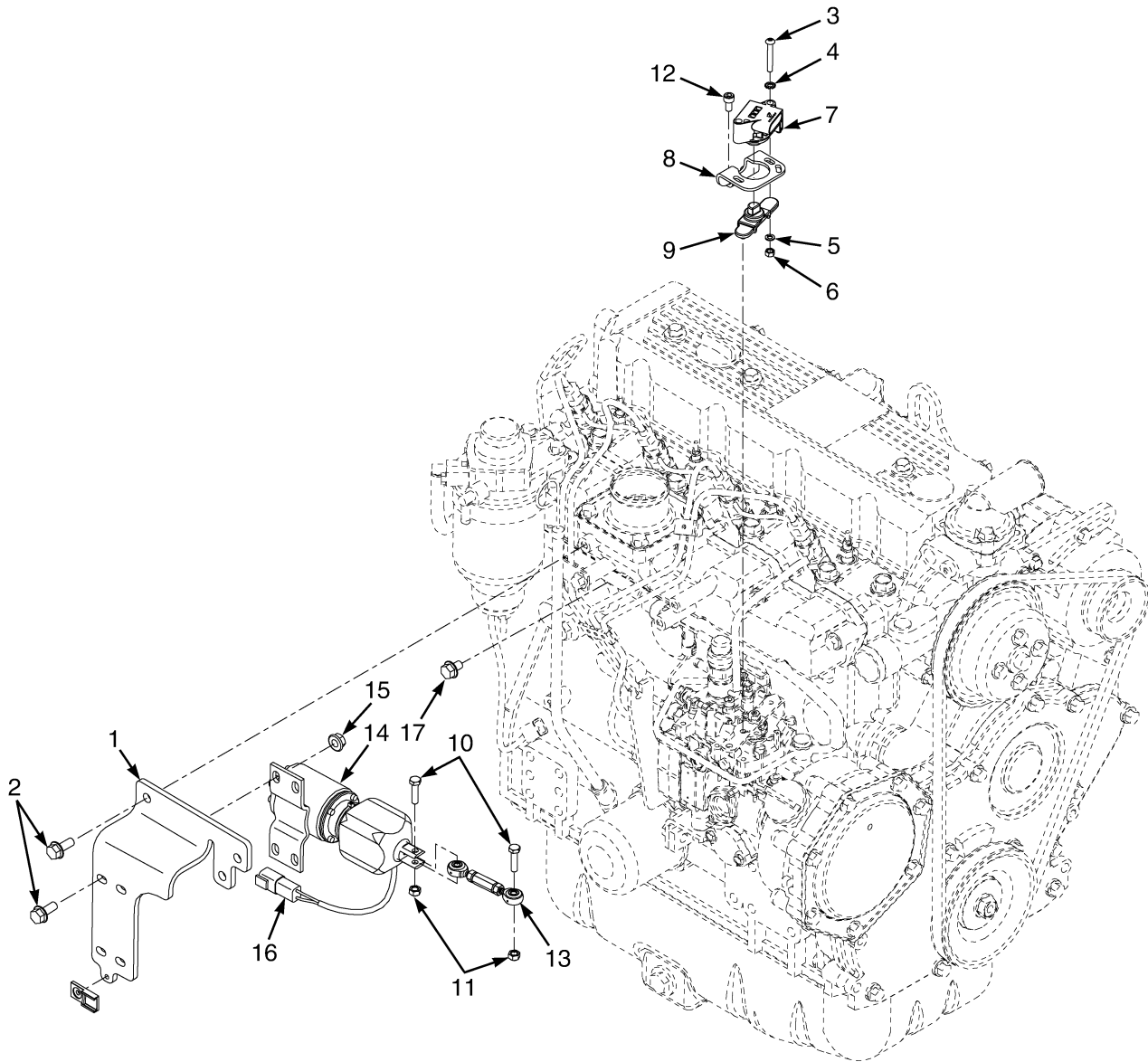
BP130182

THROTTLE POSITION SENSOR AND ATTACHING PARTS
YANMAR 2.6L AND 3.3L DIESEL (→ S/N L177B31945H)

ITEM	PART NO.	DESCRIPTION	QTY
1	1547550	Bracket (Actuator)	1
2	1553897	Capscrew	2
3	296378	Washer	2
4	2080376	Sensor (Hall Throttle Postion)	1
5	293774	Capscrew	2
6	1616491	Bracket	1
7	2078335	Rotor	1
8	1527877	Capscrew	1
9	313805	Nut	1
10	a 1542773	Linkage	1
10	b 1690182	Linkage	1
11	1542772	Actuator (Pull)	1
12	1502543	Nut (Flange)	4
13	1344124	Fastener	1
14	1500912	Clip	1
15	1527880	Capscrew	7
16	1529366	Capscrew	2
17	292668	Nut	2

FOOTNOTES:**a** → 1/2009**b** 1/2009 →

THROTTLE POSITION SENSOR AND ATTACHING PARTS (FIGURE 5-30) YANMAR 2.6L AND 3.3L DIESEL (S/N L177B31946H →)

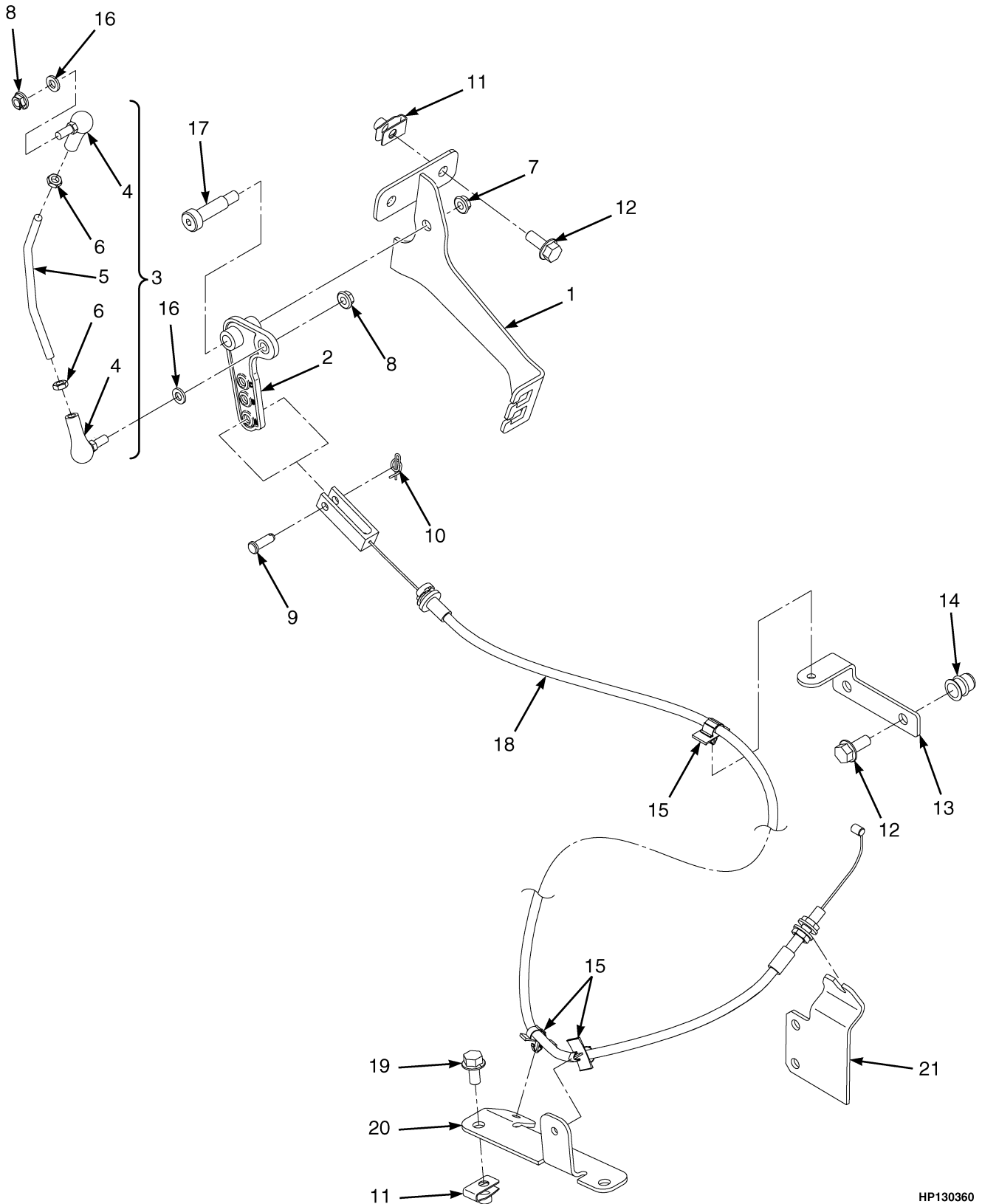


BP130308

THROTTLE POSITION SENSOR AND ATTACHING PARTS
YANMAR 2.6L AND 3.3L DIESEL (S/N L177B31946H →)

ITEM	PART NO.	DESCRIPTION	QTY
1	1709997	Bracket	1
2	1527880	Capscrew	7
3	1553897	Capscrew	2
4	296378	Washer	2
5	292679	Washer	2
6	292668	Nut	2
7	2080376	Sensor (Hall Throttle Postion)	1
8	1616491	Bracket	1
9	2078335	Rotor	1
10	287816	Capscrew	2
11	302399	Nut	2
12	293762	Capscrew	2
13	1695108	Linkage	1
14	2107187	Actuator	1
15	1502543	Nut (Flange)	4
16	1500912	Clip	1
16	1344124	Fastener	1
17	1529366	Capscrew	2

THROTTLE CABLE ASSEMBLY (FIGURE 5-31) MAZDA 2.0L AND 2.2L — LPG

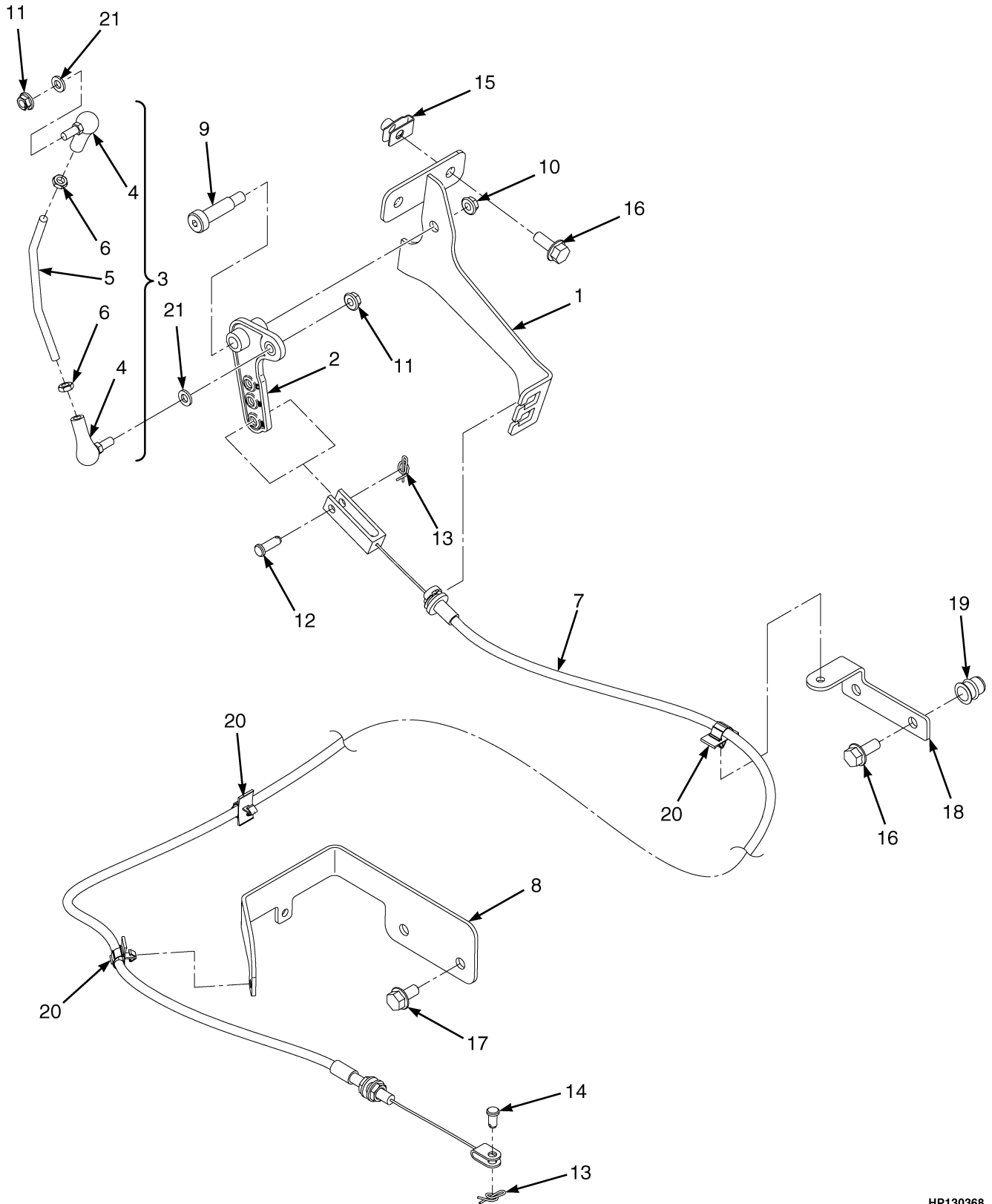


HP130360

THROTTLE CABLE ASSEMBLY
MAZDA 2.0L AND 2.2L – LPG

ITEM	PART NO.	DESCRIPTION	QTY
1	1609374	Bracket (Throttle Cable)	1
2	1538162	Bellcrank	1
3	1538782	Push Rod	1
4	2027949	Ball Joint	2
5	1538490	Push Rod	1
6	2308541	Nut	2
7	302400	Nut	1
8	1514429	Nut	2
9	126	Pin	1
10	1517361	Locking Ring Cotter Pin	1
11	1480237	Nut	4
12	1527880	Capscrew	2
13	1542082	Bracket	1
14	1530243	Insert	2
15	1562088	Clip	3
16	320156	Washer	2
17	1399802	Bolt	1
18	2067395	Throttle Cable	1
19	1527879	Capscrew	4
20	1542555	Bracket	1
21	1535136	Bracket (Throttle Cable)	1

THROTTLE CABLE ASSEMBLY (FIGURE 5-32) YANMAR 2.6L AND 3.3L — DIESEL

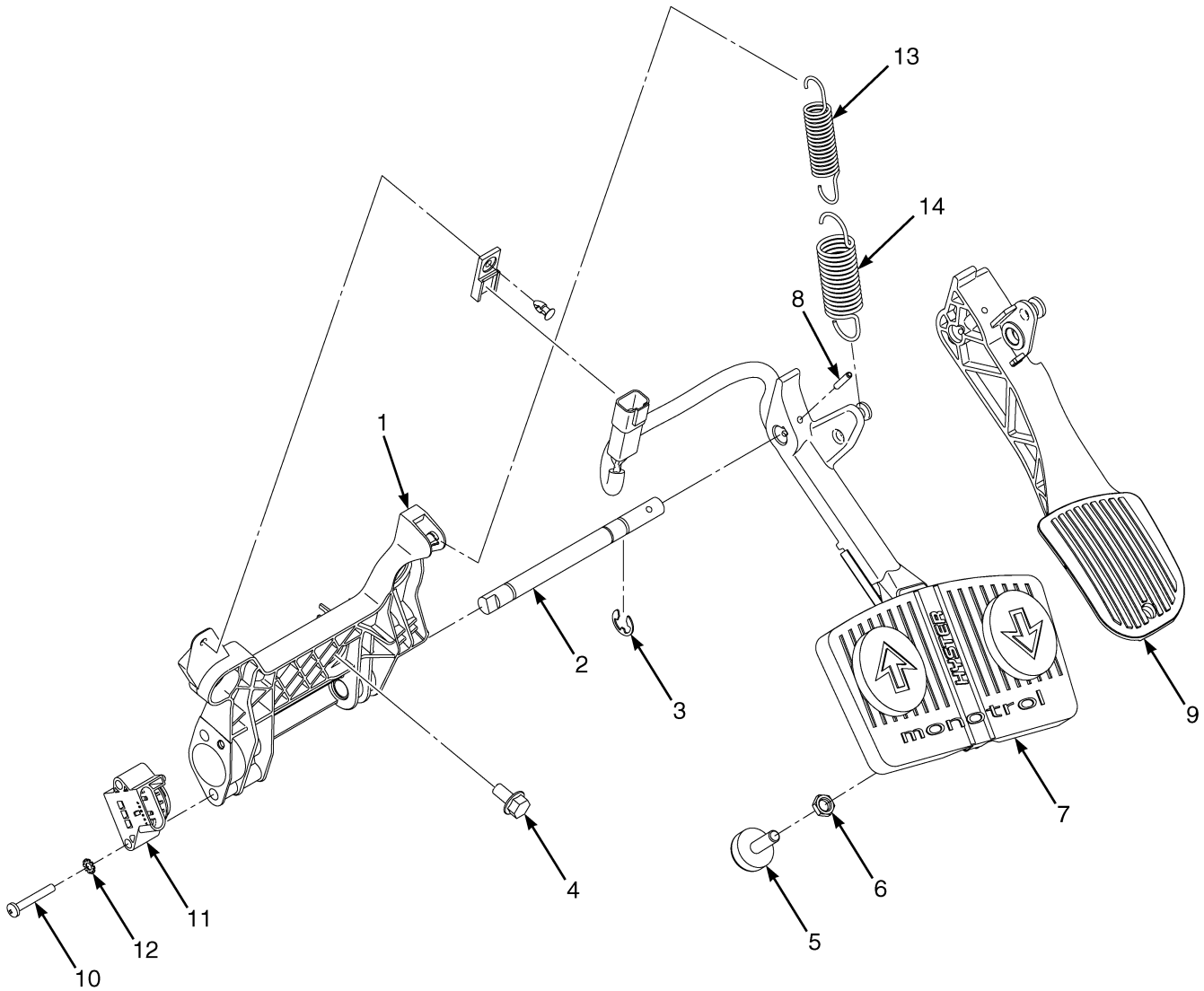


HP130368

**THROTTLE CABLE ASSEMBLY
YANMAR 2.6L AND 3.3L – DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
1	1539298	Bracket (Throttle Cable)	1
2	1538162	Bellcrank	1
3	1538782	Push Rod	1
4	2027949	Ball Joint	2
5	1538490	Push Rod	1
6	2308541	Nut	2
7	2067396	Throttle Cable	1
8	1542500	Bracket	1
9	1399802	Bolt	1
10	302400	Nut	1
11	1514429	Nut	2
12	126	Pin	1
13	1517361	Locking Ring Cotter Pin	2
14	128263	Pin	1
15	1480237	Nut	2
16	1527880	Capscrew	2
17	1527879	Capscrew	4
18	1542082	Bracket	1
19	1530243	Insert	2
20	1562088	Clip	3
21	320156	Washer	2

THROTTLE PEDAL AND ATTACHING PARTS (FIGURE 5-33)



HP130364

THROTTLE PEDAL AND ATTACHING PARTS

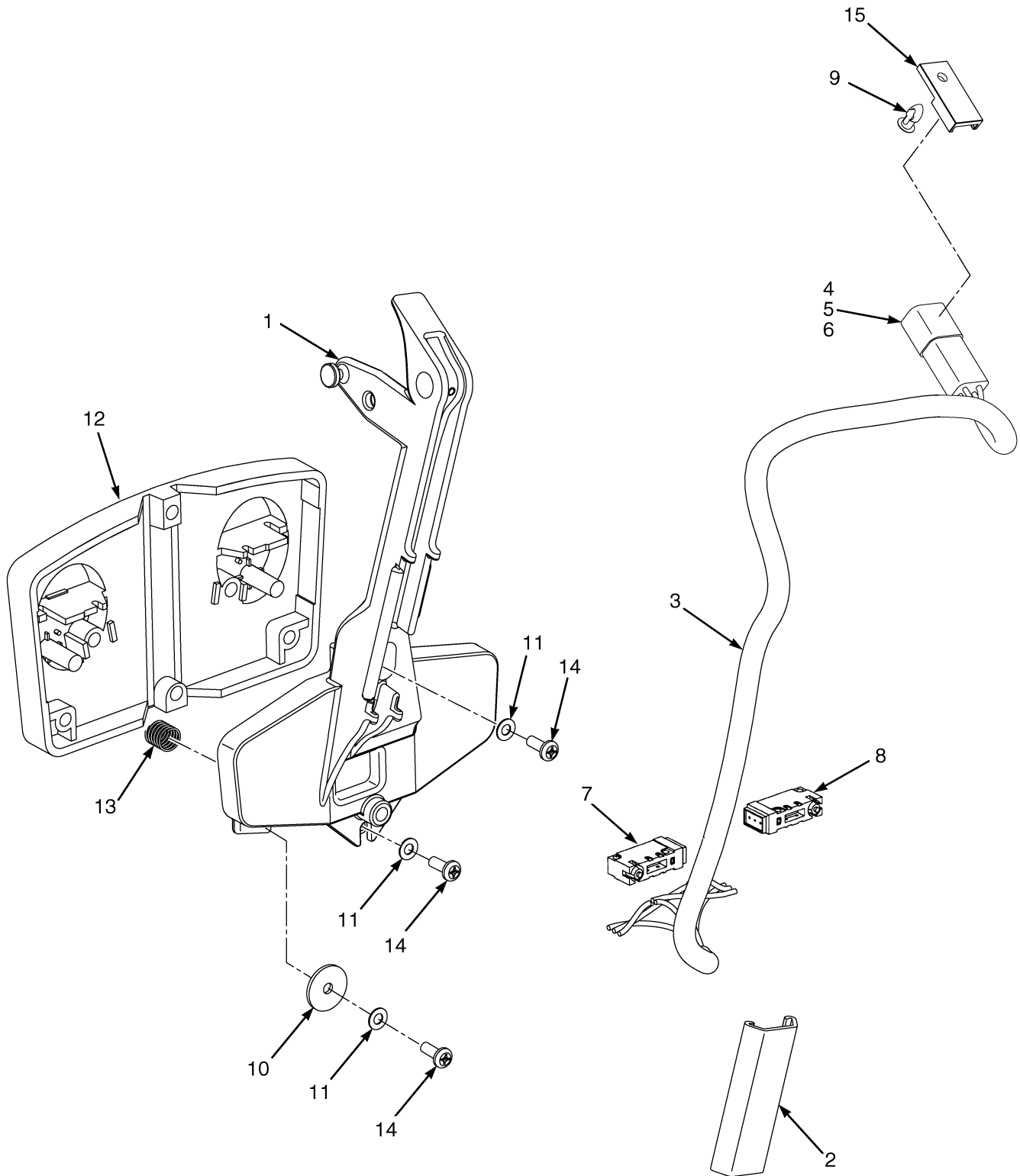
ITEM	PART NO.	DESCRIPTION	QTY
1	d 1538488	Throttle Plate	1
1	e 1654411	Throttle Plate	1
1	1524267	Bushing	1
2	d 1521005	Shaft	1
2	e 1654754	Shaft	1
3	1530971	E-Ring	1
4	1527879	Capscrew	3
5	1530311	Screw (Stop)	1
6	329069	Nut	1
7	1608412	Monotrol Pedal Assembly	1
8	b 302437	Roll Pin	1
8	c 302443	Roll Pin	1
9	2071181	Pedal (Standard)	1
10	1564752	Capscrew	2
11	2063842	Sensor (Half Throttle Position)	1
12	296378	Washer	2
13	1582301	Spring (Inner)	1
13	a 1582303	Spring (Inner)	1
14	1582300	Spring (Outer)	1
14	a 1582302	Spring (Outer)	1

FOOTNOTES:

- a** For Use With Mazda Engines Only
b For Use With Monotrol Pedal Only
c For Use With Standard Pedal Only

- d** → S/N L177B13612
e S/N L177B13613 →

MONOTROL PEDAL ASSEMBLY (FIGURE 5-34)



HP130365

MONOTROL PEDAL ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QTY
	1608412	Monotrol Pedal Assembly	1
1	2074702	Pedal	1
2	1539418	Clip	1
3	2072782	Wire Harness	1
4	1330416	Connector	1
5	1489655	Connector (4 Way)	1
6	1531312	Terminal	4
7	.....	Switch	1
8	.....	Switch	1
9	1564526	Clip (Key Hole)	1
10	362036	Washer	2
11	15931	Lockwasher	4
12	1340470	Pad	1
13	325699	Spring	2
14	16708	Screw	4
15	1500912	Clip	1

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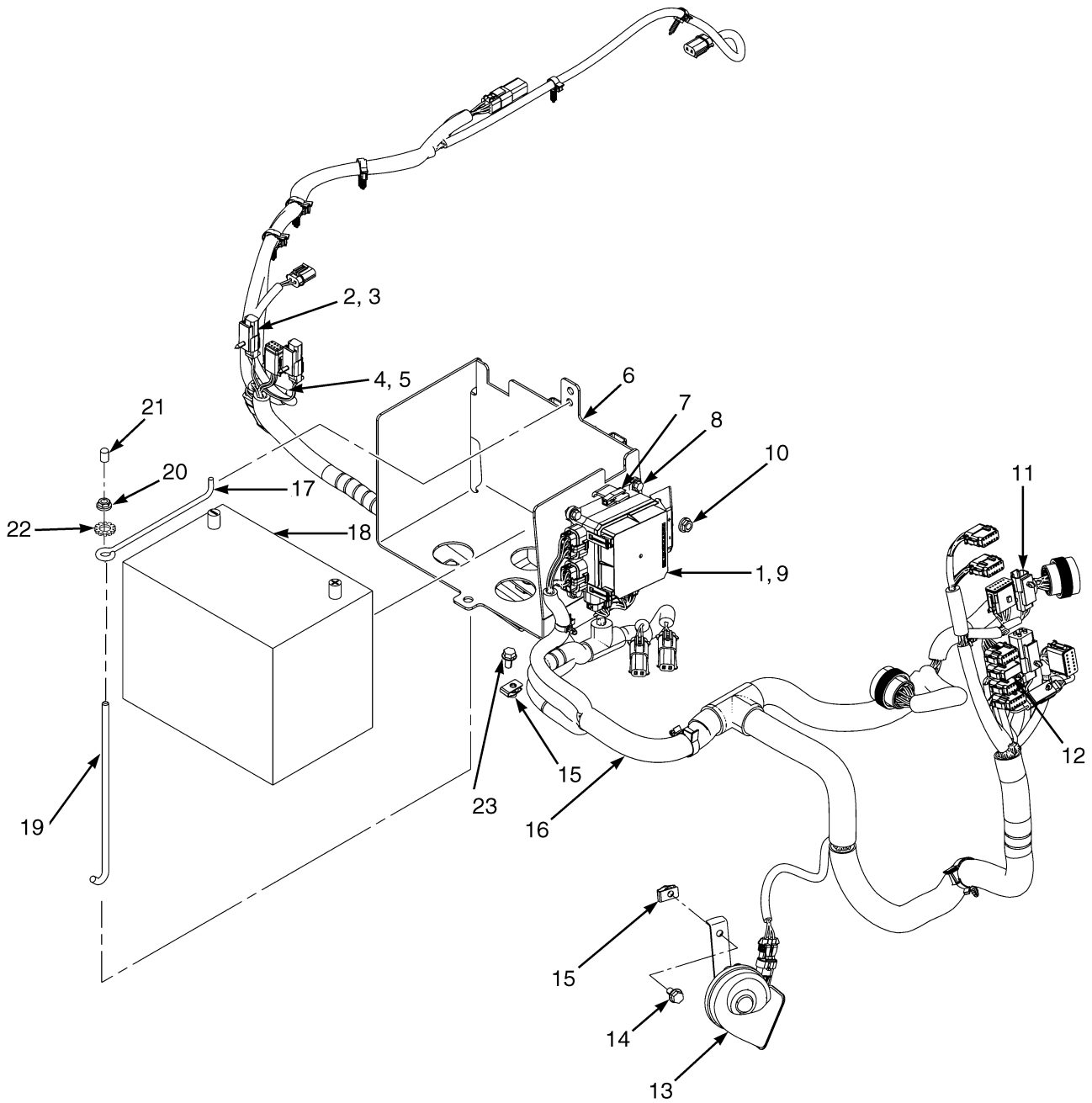
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ELECTRICAL SYSTEM (FIGURE 6-1) RH CHASSIS



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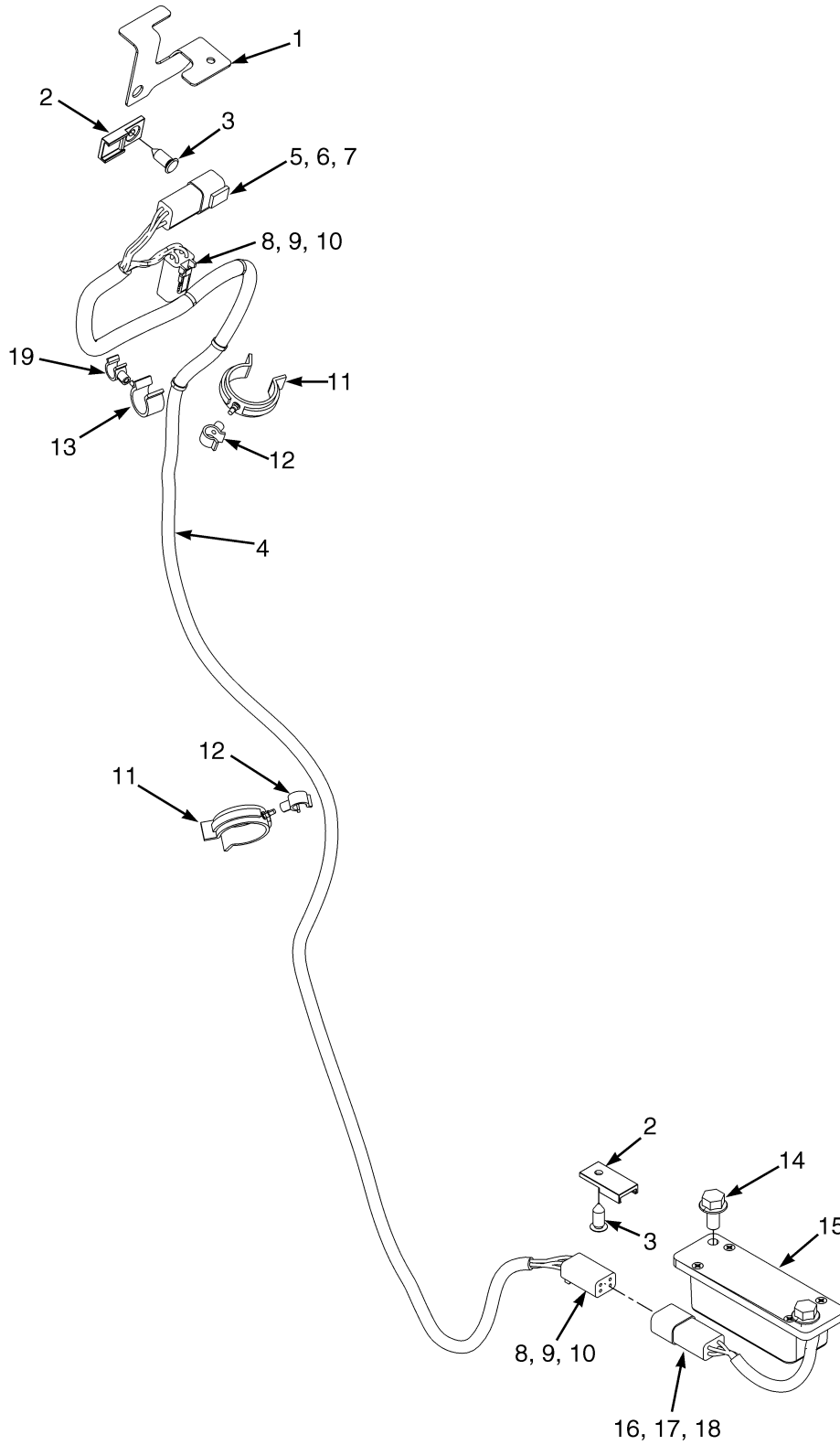
**ELECTRICAL SYSTEM
RH CHASSIS**

ITEM	PART NO.	DESCRIPTION	QTY
1	h 2063093	Module	1
1	w 2090613	Module	1
2	1582464	Fastener	6
3	1582442	Clip	1
4	1617080	Bracket (Hood Switch)	1
5	1529366	Capscrew	1
5	c 1529366	Capscrew	2
6	k 1616981	Battery Tray	1
6	p 1644560	Battery Tray	1
6	u 2090661	Battery Tray (Plastic)	1
7	1402883	Fuse Puller	1
8	1534417	Capscrew	4
9	1559928	Seal	1
10	1502543	Nut (Flange)	1
11	1500912	Clip	6
12	a 1593331	Connector	1
13	i 1527264	Horn	1
13	x 1618978	Horn	1
14	1527880	Capscrew	4
15	1480237	Nut	4
16	d 2075561	Wire Harness (RH Chassis) (☞Figure 6-40).....	1
16	j 2078879	Wire Harness (Chassis) (Mazda 2.0L and 2.2L) (☞Figure 6-41).....	1
16	qr 2085945	Wire Harness (Chassis) (Mazda 2.0L and 2.2L) (☞Figure 6-42).....	1
16	m 2108124	Wire Harness (Chassis) (Mazda 2.0L and 2.2L) (☞Figure 6-43).....	1
16	v 4604531	Wire Harness (Chassis) (Mazda 2.0L and 2.2L) (☞Figure 6-44).....	1
16	e 2075560	Wire Harness (RH Chassis) (GM 4.3L) (☞Figure 6-30).....	1
16	j 2078878	Wire Harness (Chassis) (GM 2.4L) (☞Figure 6-31).....	1
16	o 2085944	Wire Harness (Chassis) (GM 2.4L) (☞Figure 6-32).....	1
16	l 2089179	Wire Harness (Chassis) (GM 2.4L) (☞Figure 6-33).....	1
16	m 2108126	Wire Harness (Chassis) (GM 2.4L) (☞Figure 6-34).....	1
16	v 4604203	Wire Harness (Chassis) (GM 2.4L) (☞Figure 6-35).....	1
16	f 2075562	Wire Harness (RH Chassis) (Yanmar 2.6L and 3.3L Diesel) (☞Figure 6-36)....	1
16	j 2078880	Wire Harness (Chassis) (Yanmar 2.6L and 3.3L Diesel) (☞Figure 6-37).....	1
16	s 2085947	Wire Harness (Chassis) (Yanmar 2.6L and 3.3L Diesel) (☞Figure 6-38).....	1
16	v 4604204	Wire Harness (Chassis) (Yanmar 2.6L and 3.3L Diesel) (☞Figure 6-44, ☞Figure 6-39).....	1
17	g 1585529	Link (Battery Hold Down)	1
17	n 1638706	Link (Battery Hold Down)	1
17	t 1641368	Link (Battery Hold Down)	1
18	1383331	Start Battery Wet Gas and LPG	1
18	c 1643936	Start Battery Wet	1
19	2065745	Link (Battery Hold Down)	1
20	1502543	Nut (Flange)	1
21	1540805	Cap	1
22	k 296380	Washer	3
23	t 1527880	Capscrew	3
	b 4601500	Wire Harness (Seat Adapter) (☞Figure 6-45).....	1

FOOTNOTES:

a	For Use With GM And Mazda Engines Only	m	10/2008 ↔ S/N L177B31165H
b	Not Illustrated	n	8/2006 ↔ S/N L177B14568E
c	Yanmar 2.6L and 3.3L Diesel	o	S/N L177B11118D ↔ 1/2007
d	→ 1/2006	p	S/N L177B14569E ↔ S/N L177B17947E
e	→ 12/2005	q	S/N L177B11118 ↔ S/N L177B15511E (2.0L)
f	→ 2/2007	r	S/N L177B11118 ↔ S/N L177B16206E (2.2L)
g	→ 8/2006	s	S/N L177B11118 →
h	→ S/N L177B08959	t	S/N L177B14569E →
i	→ S/N L177B10274	u	S/N L177B17948E →
j	→ S/N L177B11117	v	S/N L177B31166H →
k	→ S/N L177B14568E	w	S/N L177B08960 →
l	1/2007 ↔ 10/2008	x	S/N L177B10275 →

IMPACT SENSOR (FIGURE 6-2)

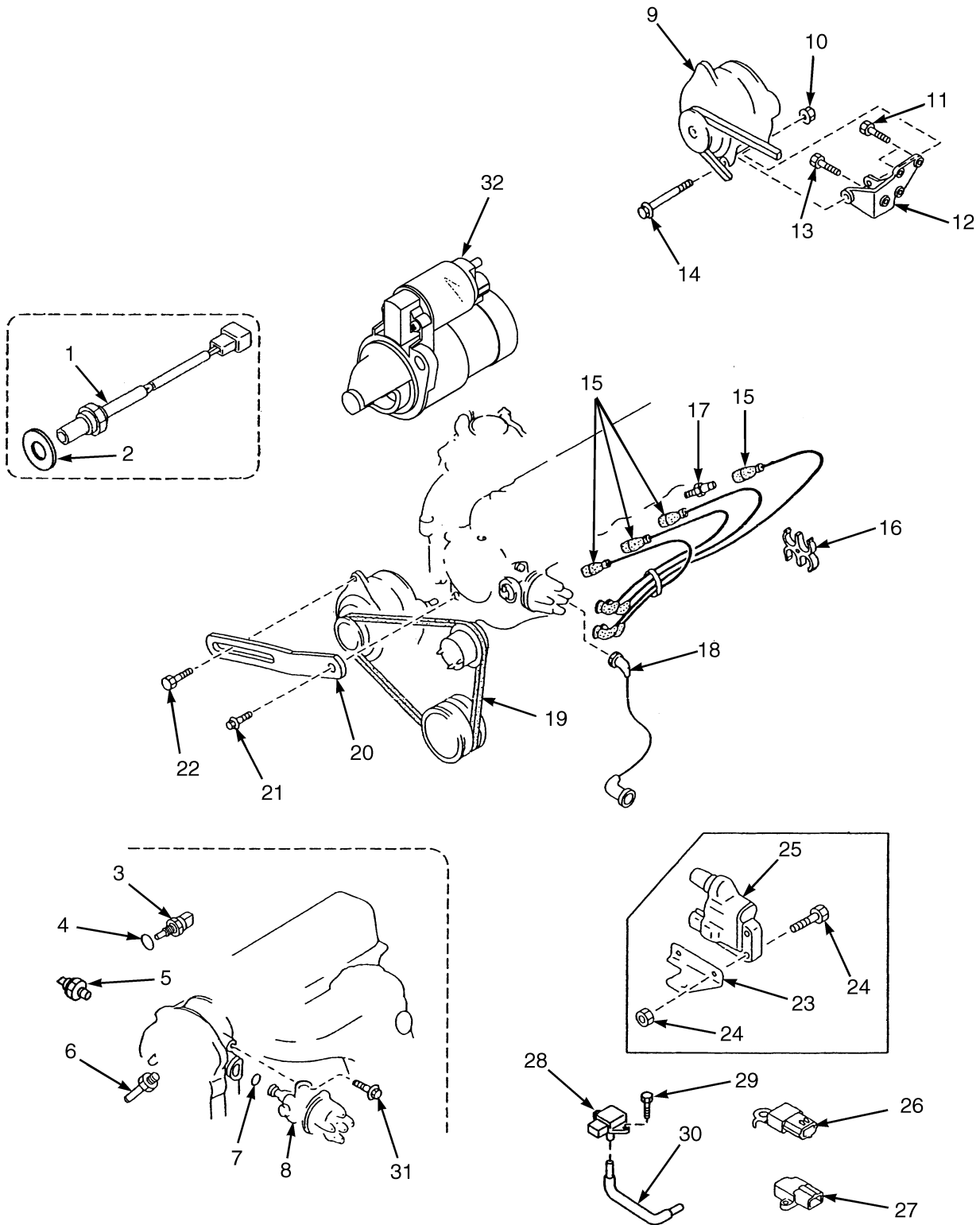


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IMPACT SENSOR

ITEM	PART NO.	DESCRIPTION	QTY
1	1535166	Bracket	1
2	1500912	Clip	2
3	1582464	Fastener	2
3	2100710	Fastener (Alternate Part)	1
4	2079281	Wire Harness (Impact Sensor)	1
5	1489655	Connector (4 Way)	1
6	1330416	Connector	1
7	1330437	Terminal (Pin)	4
8	1489656	Connector (4-Way)	2
9	1489657	Connector	2
10	1330438	Terminal (Socket)	8
11	1561759	Clamp (Swivel)	2
12	1542439	Clamp (Swivel)	2
13	1502055	Clamp (Swivel)	1
14	1527879	Capscrew	2
14	287851	Capscrew (Alternate Part)	2
14	320157	Washer (Alternate Part)	2
15	2079843	Sensor (Impact)	1
16	1489655	Connector (4 Way)	1
17	1330416	Connector	1
18	1330433	Terminal	4
19	1502053	Clamp (Swivel)	1

ENGINE ELECTRICAL COMPONENTS (FIGURE 6-3) MAZDA 2.0L AND 2.2L — LPG



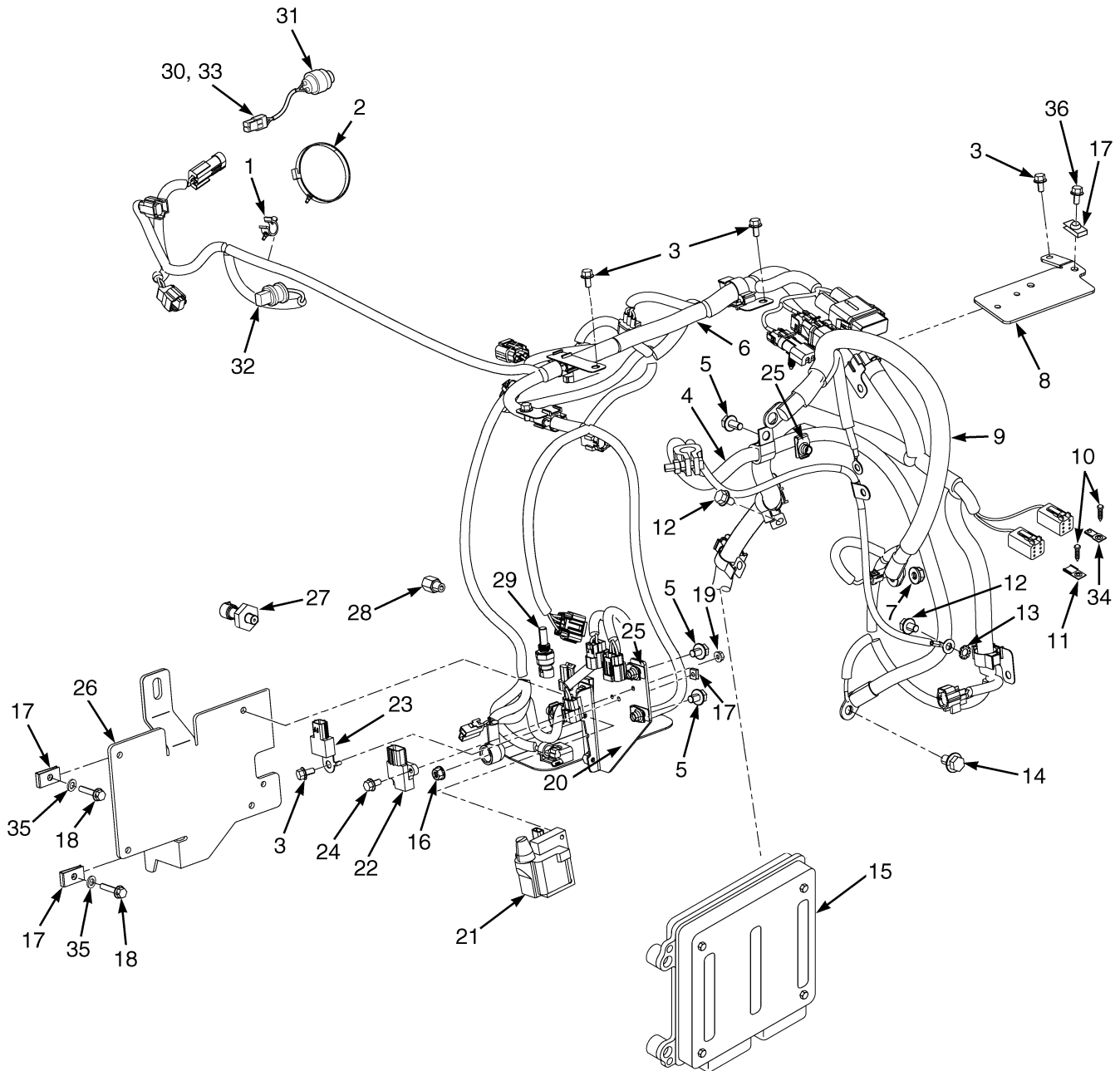
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**ENGINE ELECTRICAL COMPONENTS
MAZDA 2.0L AND 2.2L – LPG**

ITEM	PART NO.	DESCRIPTION	QTY
1	1556342	Sensor (Oxygen)	1
2	1368886	Washer	1
3	1539962	Sensor (Air Temperature)	1
4	1368743	Seal	1
5	2026608	Pressure Switch (Oil)	1
6	1361867	Temperature Sender	1
7	1553985	O-Ring	1
8	1554030	Distributor (☞Figure 6-5).....	1
9	1450928	Alternator	1
9	1361861	Pulley	1
10	1361890	Nut	1
11	1361891	Bolt	3
12	1361846	Bracket	1
13	1361888	Bolt	1
14	1368844	Bolt	1
15	1362113	Kit-Ignition Cable	1
15	1361840	Cable (Spark Plug)	1
15	1361841	Cable (Spark Plug)	1
15	1361842	Cable (Spark Plug)	1
15	1361843	Cable (Spark Plug)	1
16	1361838	Support	1
17	1361837	Spark Plug	4
18	1553984	Ignition Cable	1
19	1495412	V-Belt	1
20	1361845	Strap	1
21	1361881	Bolt	1
22	326898	Bolt	1
23	1553996	Bracket	1
24	1553997	Setscrew	1
25	1527571	Ignition Coil	1
26	1545443	Condenser	1
27	1545444	Igniter	1
28	1548352	Sensor (Boost, M.A.P.)	1
29	1582324	Screw	2
30	1495413	Hose	1
31	1361895	Bolt	1
32	1534424	Starter	1
	a 1527884	Capscrew (Starter Mounting)	1

FOOTNOTES:**a** Not Illustrated

ENGINE ELECTRICAL SYSTEM (FIGURE 6-4) MAZDA 2.0L AND 2.2L — LPG



HP081637

**ENGINE ELECTRICAL SYSTEM
MAZDA 2.0L AND 2.2L – LPG**

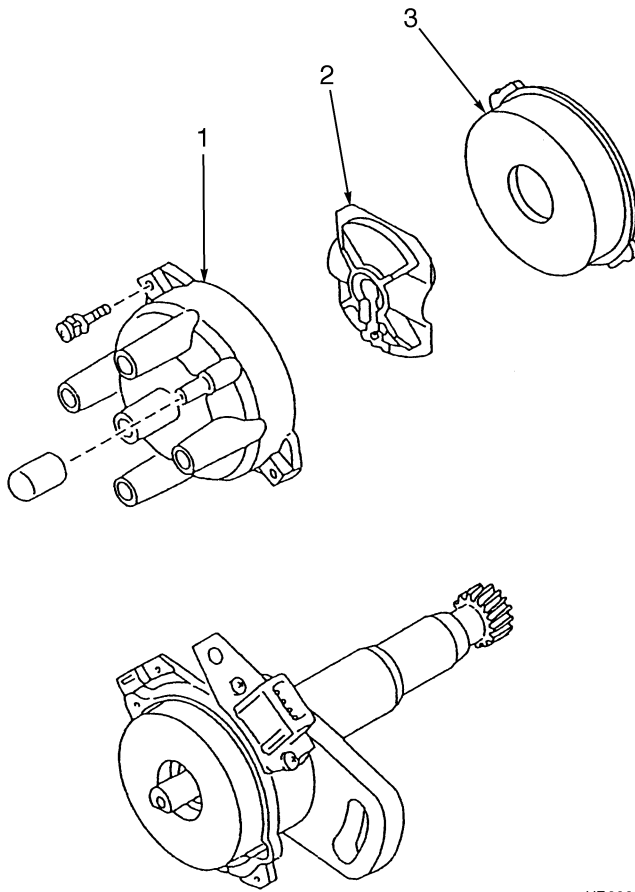
ITEM	PART NO.	DESCRIPTION	QTY
1	1542439	Clamp (Swivel)	1
2	1502061	Clamp	1
3	1534417	Capscrew	5
4	2069225	Battery Cable (Negative)	1
4	148789	Terminal	1
4	1616122	Terminal	1
4	1564044	E-Ring	1
4	128408	Clamp	1
4	806426	E-Ring	1
5	1527879	Capscrew	4
6	a 2065855	Wire Harness (LPG Mazda Engine) (☞ Figure 6-46).....	1
6	c 2087189	Wire Harness (LPG Mazda Engine) (☞ Figure 6-47).....	1
6	b 4604046	Wire Harness (LPG Mazda Engine) (☞ Figure 6-48).....	1
7	1502543	Nut (Flange)	1
8	1560121	Bracket	1
9	2061383	Battery Cable (Positive)	1
9	2107181	Battery Cable (Positive) (Alternate Part)	1
9	148792	Terminal	1
9	16079	Terminal	1
9	1590368	Terminal	1
9	806426	E-Ring	1
9	1536304	Boot	1
9	1560091	Boot	1
10	a 1539085	Locknut (Not Illustrated)	1
10	c 1500912	Clip	1
11	a 1539086	Lockwasher (Not Illustrated)	1
11	c 1582464	Fastener	2
12	1529366	Capscrew	2
13	296380	Washer	1
14	1556623	Bolt	1
15	2065857	Engine Control Module (2.0L)	1
15	2101552	Engine Control Module (2.0L)(Alternate Part)	1
15	2070685	Engine Control Module (2.2L)	1
15	2101551	Engine Control Module (2.2L) (Alternate Part)	1
16	1514429	Nut	1
17	325182	Nut	9
18	1581577	Capscrew	4
19	1549398	Nut	2
20	1556838	Plate	1
21	1527571	Ignition Coil	1
22	1545444	Igniter	1
23	1545443	Condenser	1
24	296150	Capscrew	2
25	1480237	Nut	4
26	1581526	Bracket	1
27	1566654	Pressure Transducer Sensor (Oil Pressure)	1
28	367224	Adapter	1
28	1682884	Adapter (Alternate Part)	1
29	1515654	Temperature Sensor	1
30	141259	Fitting	1

**ENGINE ELECTRICAL SYSTEM
MAZDA 2.0L AND 2.2L – LPG**

ITEM	PART NO.	DESCRIPTION	QTY
31	1529257	Sensor (Air Flow Restriction)	1
32	1501970	Pressure Switch (Low Fuel)	1
32	4602843	Wire Harness (Adapter, Low Fuel Pressure Switch) (Not Shown) (Figure 6-56).....	1
33	c 14349	Fitting (Pipe Plug)	1
34	1531480	Clip	1
35	320156	Washer	1
36	1527876	Capscrew	1

FOOTNOTES:**a** → 8/2006**c** 8/2006 →**b** 1/2010 →

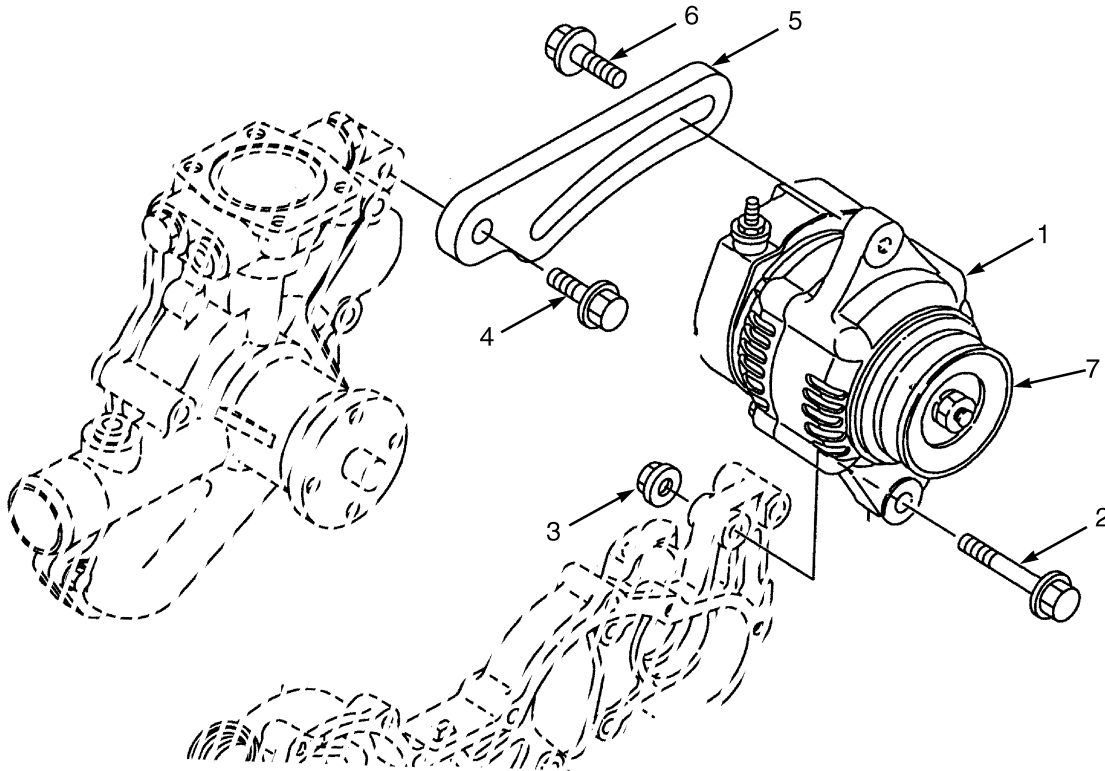
**DISTRIBUTOR (FIGURE 6-5)
MAZDA 2.0L AND 2.2L — LPG**



YP080539

ITEM	PART NO.	DESCRIPTION	QTY
	1554030	Distributor	1
1	1554033	Distributor Cap	1
2	1554034	Rotor	1
3	1554032	Cover	1

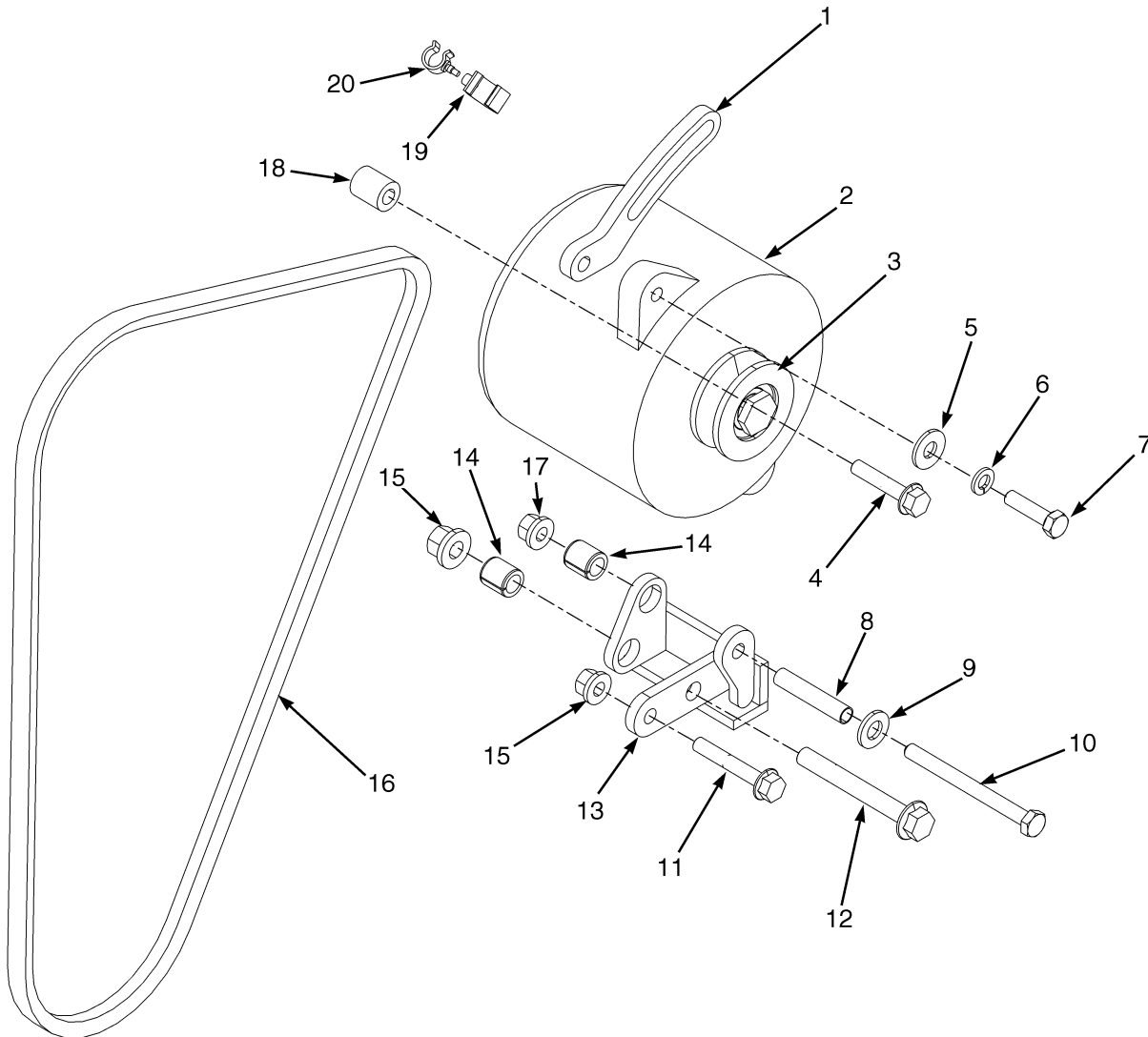
ALTERNATOR AND MOUNTING (FIGURE 6-6) YANMAR 2.6L AND 3.3L — DIESEL



BP080337

ITEM	PART NO.	DESCRIPTION	QTY
1	1599869	Alternator	1
1	1599873	Ball Bearing	1
1	1599874	Plate	1
1	1599875	Screw	4
1	1599876	Stud	2
1	1599878	Ball Bearing	1
1	1599879	Cover	1
2	1599893	Bolt	1
3	1599894	Nut	1
4	1599897	Bolt	1
5	1599895	Bracket	1
6	1599896	Bolt	1
7	1599870	Pulley	1

SEALED ALTERNATOR AND MOUNTING (FIGURE 6-7) YANMAR 2.6L AND 3.3L

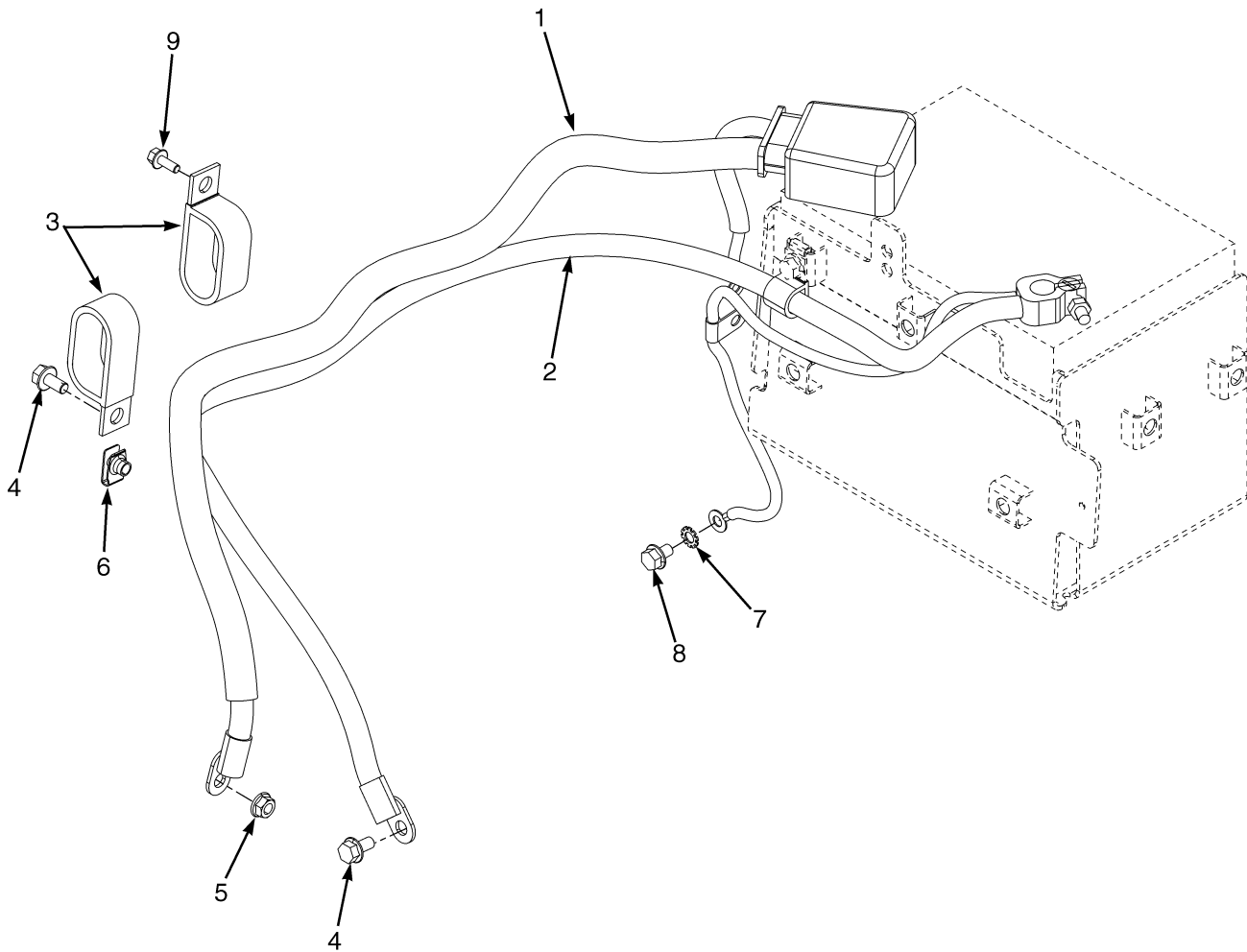


BP080422

**SEALED ALTERNATOR AND MOUNTING
YANMAR 2.6L AND 3.3L**

ITEM	PART NO.	DESCRIPTION	QTY
1	1608865	Strap (Alternator)	1
2	1598645	Alternator (Sealed)	1
3	1608928	Pulley	1
4	1510114	Capscrew	1
5	15175	Lockwasher	1
6	15155	Lockwasher	1
7	18498	Capscrew	1
8	1537422	Spacer	1
9	320159	Washer	1
10	346656	Capscrew	1
11	1510116	Capscrew	1
12	1617600	Capscrew	1
13	1617614	Bracket Wldmt	1
14	1345014	Sleeve	2
15	1544153	Locknut	2
16	2080581	V-Belt	1
17	1544154	Flange Locknut	1
18	1615860	Spacer	1
19	1606544	Clamp	1
20	1573549	Clamp	1

BATTERY CABLES (FIGURE 6-8) GM 2.4L — LPG (→ S/N L177B28140G)

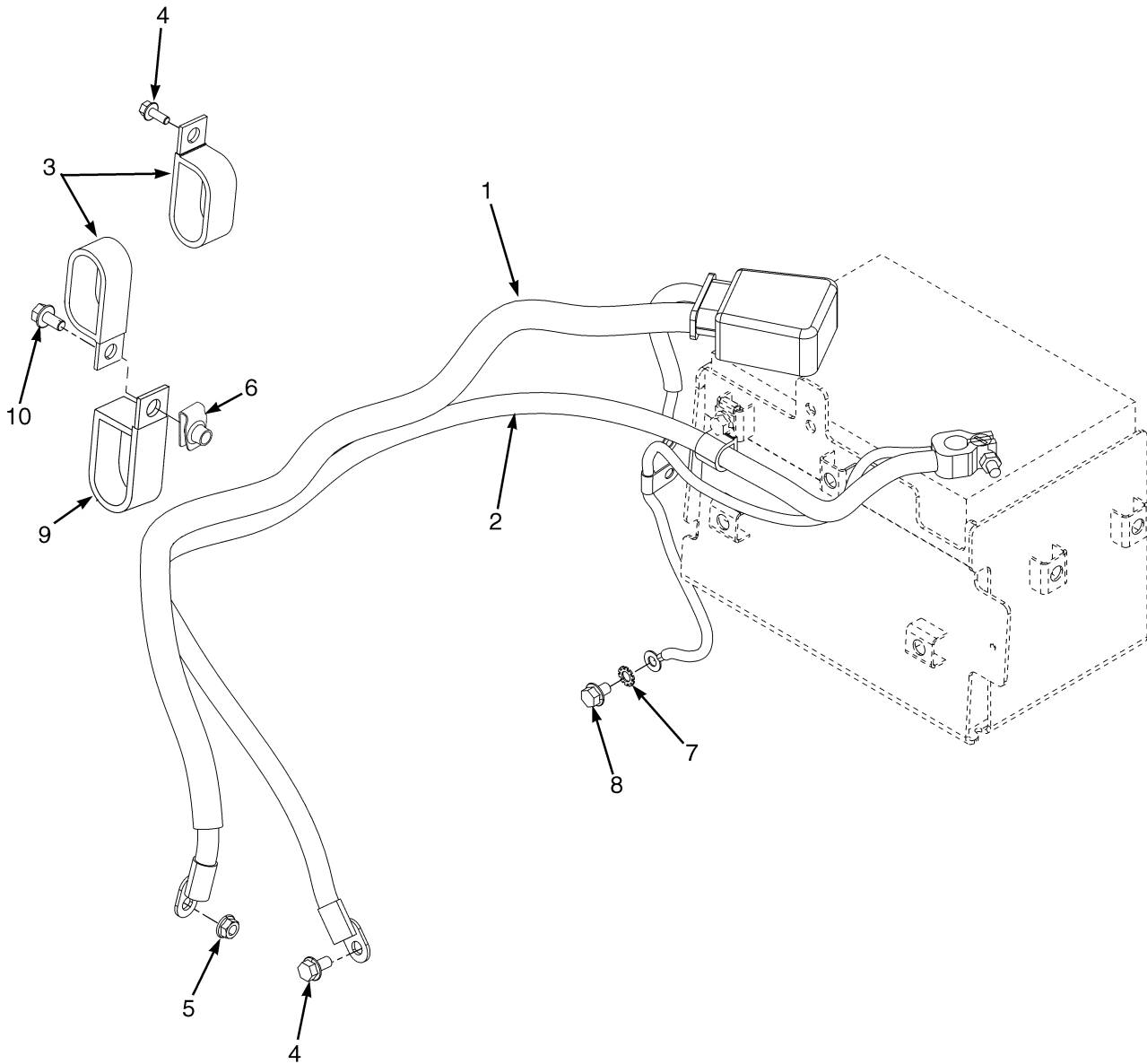


HP081655

BATTERY CABLES
GM 2.4L – LPG (→ S/N L177B28140G)

ITEM	PART NO.	DESCRIPTION	QTY
1	2061381	Battery Cable (Positive)	1
1	1536304	Boot	1
1	1560091	Boot	1
1	16079	Terminal	1
1	148792	Terminal	1
1	806426	E-Ring	1
2	2069224	Battery Cable (Negative)	1
2	148789	Terminal	1
2	1564044	E-Ring	1
2	16079	Terminal	1
2	128408	Clamp	1
2	806426	E-Ring	1
3	212786	Clamp	2
4	1527879	Capscrew	1
5	1502543	Nut (Flange)	1
6	1480237	Nut	1
7	296380	Washer	1
8	1529366	Capscrew	1
9	1527876	Capscrew	1

BATTERY CABLES (FIGURE 6-9) GM 2.4L — GASOLINE AND LPG (S/N L177B28141G →)

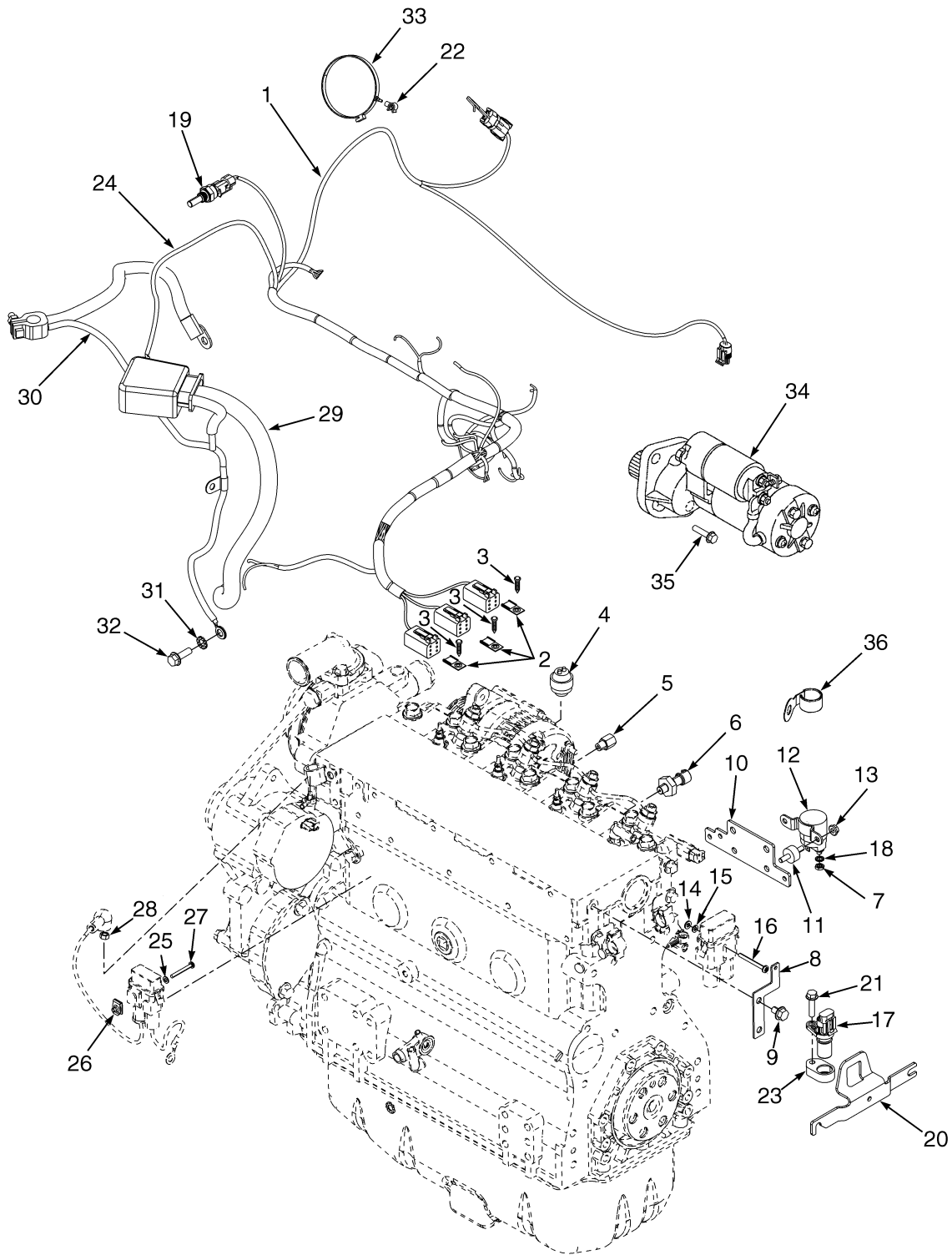


BP080383

BATTERY CABLES
GM 2.4L – GASOLINE AND LPG (S/N L177B28141G →)

ITEM	PART NO.	DESCRIPTION	QTY
1	2105556	Battery Cable (Positive)	1
2	2069224	Battery Cable (Negative)	1
2	148789	Terminal	1
2	1564044	E-Ring	1
2	16079	Terminal	1
2	128408	Clamp	1
2	806426	E-Ring	1
2	1616122	Terminal	1
3	251994	Clamp	2
4	1527879	Capscrew	3
5	1502543	Nut (Flange)	1
6	1480237	Nut	1
7	296380	Washer	2
8	1529366	Capscrew	1
9	136516	Clamp	1
10	1583611	Capscrew	1

ENGINE ELECTRICAL SYSTEM (FIGURE 6-10) YANMAR 2.6L AND 3.3L, DIESEL — WITH OVERHEAD GUARD



HP081653

ENGINE ELECTRICAL SYSTEM
YANMAR 2.6L AND 3.3L, DIESEL – WITH OVERHEAD GUARD

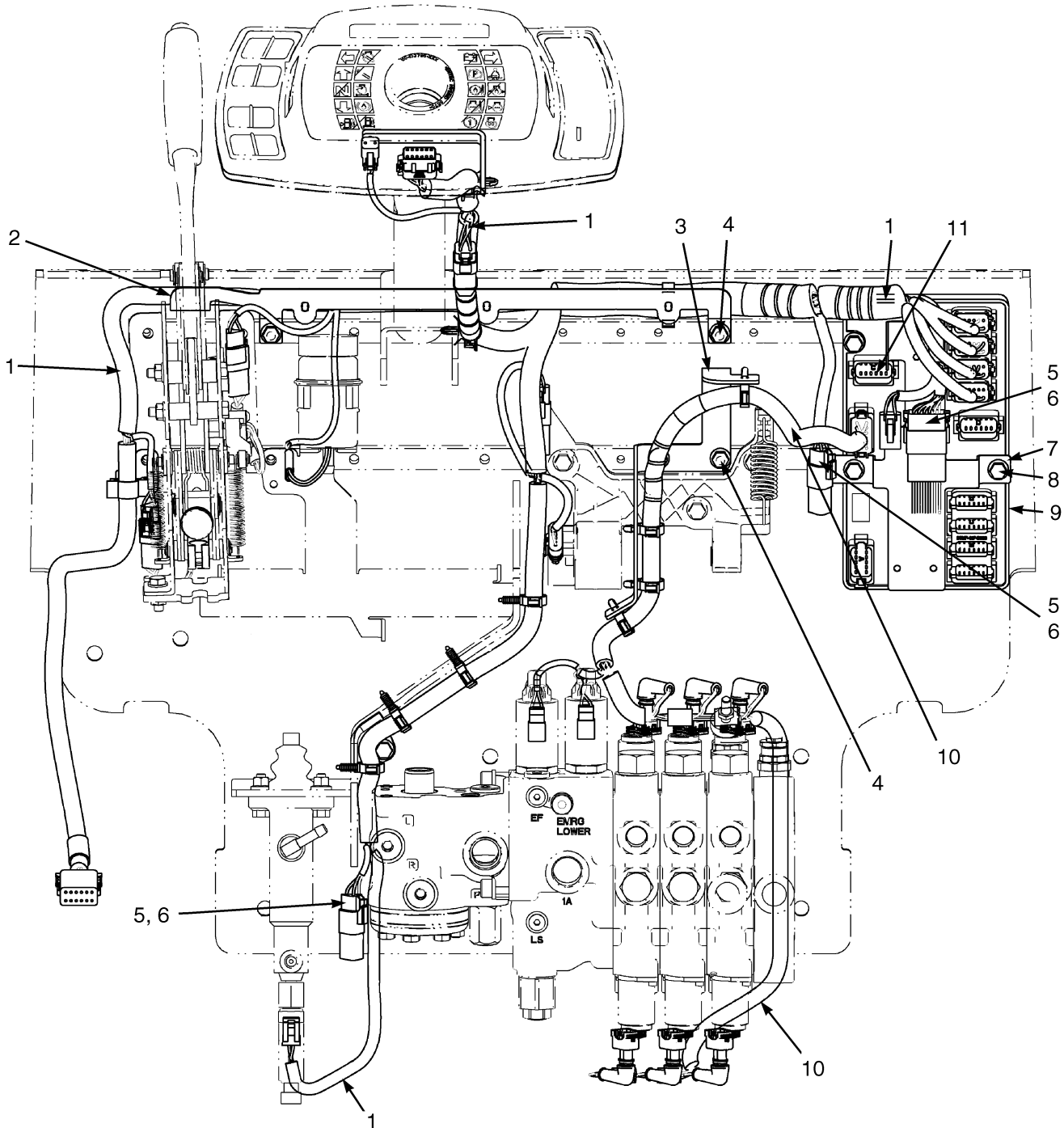
ITEM	PART NO.	DESCRIPTION	QTY
1	b 2060844	Wire Harness (Engine) (☞ Figure 6-57).....	1
1	d 2087191	Wire Harness (Engine) (☞ Figure 6-58).....	1
2	a 1539086	Lockwasher	1
2	c 1500912	Clip	3
3	a 1539085	Locknut	1
3	c 1582464	Fastener	3
4	1529257	Sensor (Air Flow Restriction)	1
5	367224	Adapter	1
6	1566654	Pressure Transducer Sensor (Oil Pressure)	1
7	1560678	Nut	2
8	1582150	Bracket	1
9	1529366	Capscrew	2
10	1582151	Bracket	1
11	1527562	Rubber Mount	2
12	1454967	Relay (Glow Plug)	1
13	1514429	Nut	2
14	320152	Washer	1
15	292676	Lockwasher	1
16	302015	Screw	1
17	1541231	Sensor (Input Speed, TISS) (Engine RPM)	1
18	296379	Washer	2
19	1515654	Temperature Sensor	1
20	1594055	Bracket	1
21	1527878	Capscrew	1
22	1542439	Clamp (Swivel)	1
23	1591454	Bracket	1
24	2065098	Wire Harness (Alternator)	1
24	1454860	Connector Body	1
24	1454829	Fuse (60 Amp)	1
24	1454862	Cover (With Seal)	1
24	1566146	Boot	1
24	1454827	Seal	2
24	1454828	Terminal	2
24	148615	E-Ring	1
25	320154	Washer	1
26	1537551	Nut	1
27	302027	Screw	1
28	136687	Nut	1
29	2066344	Battery Cable (Positive)	1
29	2107181	Battery Cable (Positive) (Alternate Part)	1
29	148792	Terminal	1
29	16079	Terminal	1
29	1590368	Terminal	1
29	806426	E-Ring	1
29	1560091	Boot	1
29	1536304	Boot	1
30	2069226	Battery Cable (Negative)	1
30	148789	Terminal	1
30	16079	Terminal	1
30	1616122	Terminal	1

**ENGINE ELECTRICAL SYSTEM
YANMAR 2.6L AND 3.3L, DIESEL – WITH OVERHEAD GUARD**

ITEM	PART NO.	DESCRIPTION	QTY
30	1564044	E-Ring	1
30	128408	Clamp	1
30	806426	E-Ring	1
31	296380	Washer	1
32	1529366	Capscrew	2
33	1502061	Clamp	1
34	1599845	Starter Assembly	1
34	1599847	Ball Bearing	1
34	1599848	Ball Bearing	1
34	1599850	Screw	4
34	1599851	Brush	2
34	1599853	Brush Spring	4
34	1599860	Pinion	1
34	1599867	Housing	1
35	1528889	Capscrew	1
36	1599843	Clamp	2

FOOTNOTES:**a** → 8/2006**b** → S/N L177B11117D**c** 8/2006 →**d** S/N L177B11118D →

COWL ELECTRICAL (FIGURE 6-11) ELECTRO-HYDRAULIC



HP081617

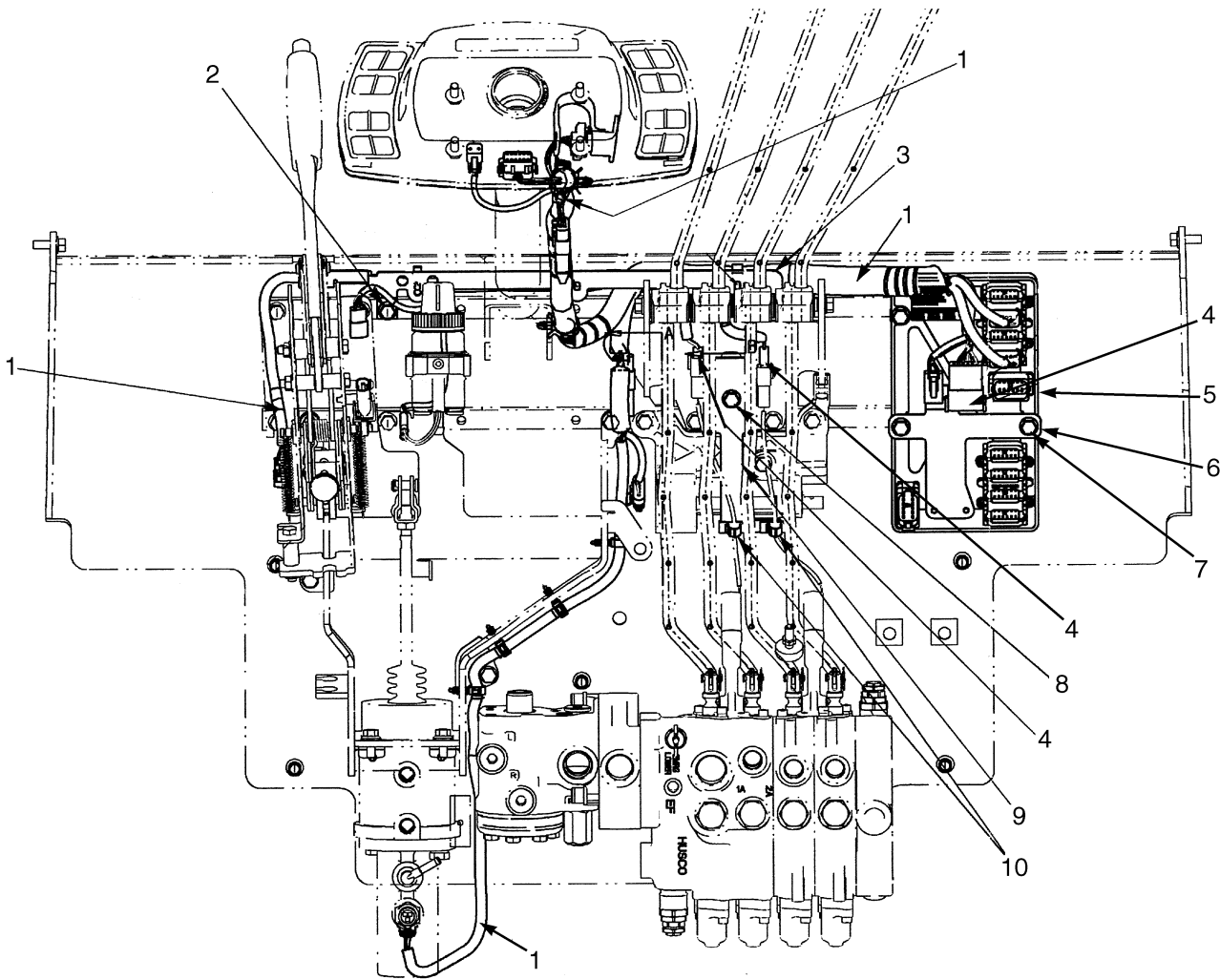
**COWL ELECTRICAL
ELECTRO-HYDRAULIC**

ITEM	PART NO.	DESCRIPTION	QTY
1	f 2070269	Wire Harness (Cowl with Monotrol)	1
1	gh 2098011	Wire Harness (☞Figure 6-64).....	1
1	i 4603283	Wire Harness (Cowl with Monotrol Pedal) (☞Figure 6-65).....	1
1	f 2084829	Wire Harness (Cowl with Forward/Reverse Lever)	1
1	gh 2098012	Wire Harness (Cowl with Forward/Reverse Lever) (☞Figure 6-66).....	1
1	i 4603280	Wire Harness (Cowl with Forward/Reverse Lever) (☞Figure 6-67).....	1
2	1600190	Bracket	1
2	2111004	Bracket (Left Hand) (Alternate Part)	1
2	2111005	Bracket (Right Hand) (Alternate Part)	1
3	1531975	Bracket	1
4	1529366	Capscrew	4
4	1529366	Capscrew (Alternate Part)	2
4	b 4011940	Capscrew	2
5	1500912	Clip	3
6	1582464	Fastener	3
7	1582465	Bracket	1
8	1510115	Capscrew	3
9	de 2068343	Vehicle System Manager (VSM)	1
9	cd 2068344	Vehicle System Manager (VSM)	1
10	2060198	Wire Harness (Electronic Control Valve) (Three Function) (☞Figure 6-60).....	1
10	2058909	Wire Harness (Electronic Control Valve) (Four Function) (☞Figure 6-62).....	1
10	b 4605072	Wire Harness (Electronic Control Valve) (Three Function) (☞Figure 6-61).....	1
10	b 4605073	Wire Harness (Electronic Control Valve) (Four Function) (☞Figure 6-63).....	1
11	1563841	Dust Cap	1
	a 1554902	Screw	2

FOOTNOTES:

a	Not Illustrated	f	→ 1/2009
b	Used With Variable Displacement Pump	g	→ S/N L177B31320H
c	With Cab	h	1/2009 →
d	With Electronic Hydraulics	i	S/N L177B31321H →
e	With Overhead Guard		

COWL ELECTRICAL (FIGURE 6-12) MANUAL HYDRAULIC (→ 1/2009)

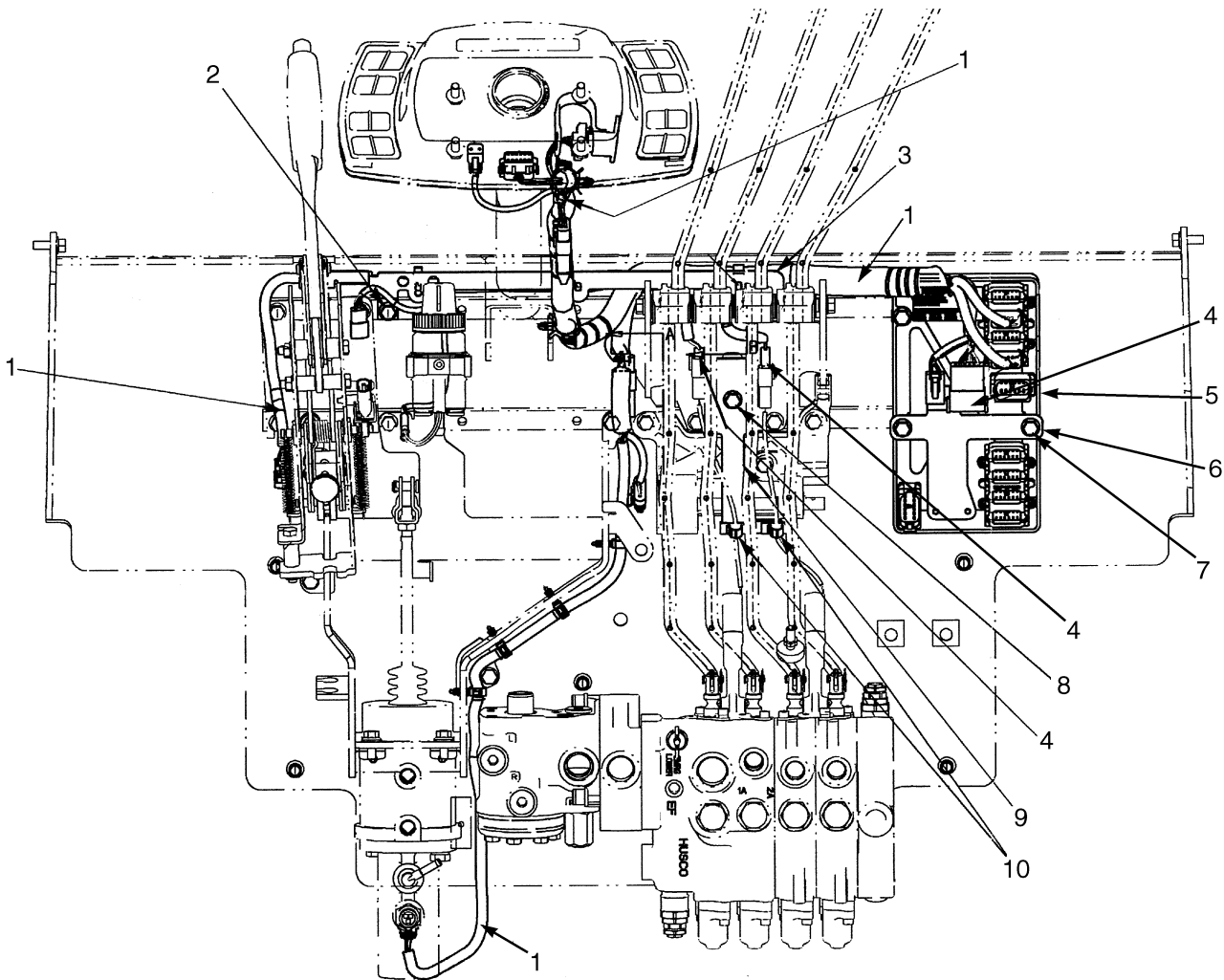


BP080709

**COWL ELECTRICAL
MANUAL HYDRAULIC (→ 1/2009)**

ITEM	PART NO.	DESCRIPTION	QTY
1	2070269	Wire Harness (☞ Figure 6-64).....	1
1	2084829	Wire Harness (Cowl with Forward/Reverse Lever) (☞ Figure 6-66).....	1
2	1529366	Capscrew	2
3	1600190	Bracket	1
4	1500912	Clip (With Monotrol)	4
4	1500912	Clip (Without Forward/Reverse Lever)	3
4	1582464	Fastener (With Monotrol)	4
4	1582464	Fastener (Without Forward/Reverse Lever)	3
5	2068342	Vehicle System Manager (VSM) -8525419	1
6	1582465	Bracket	1
7	1510115	Capscrew	3
8	1528482	Capscrew	1
8	1398062	Nut	1
9	1686719	Bracket	1
10	1562088	Clip	2

COWL ELECTRICAL (FIGURE 6-13) MANUAL HYDRAULIC — WITH OPERATOR PRESENCE SYSTEM (1/2009 →)



BP080709

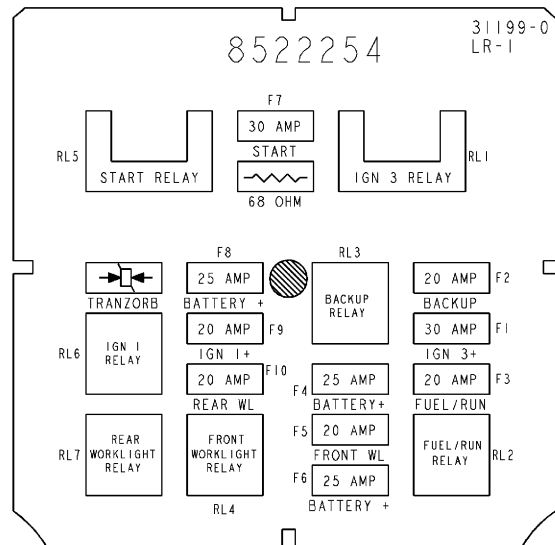
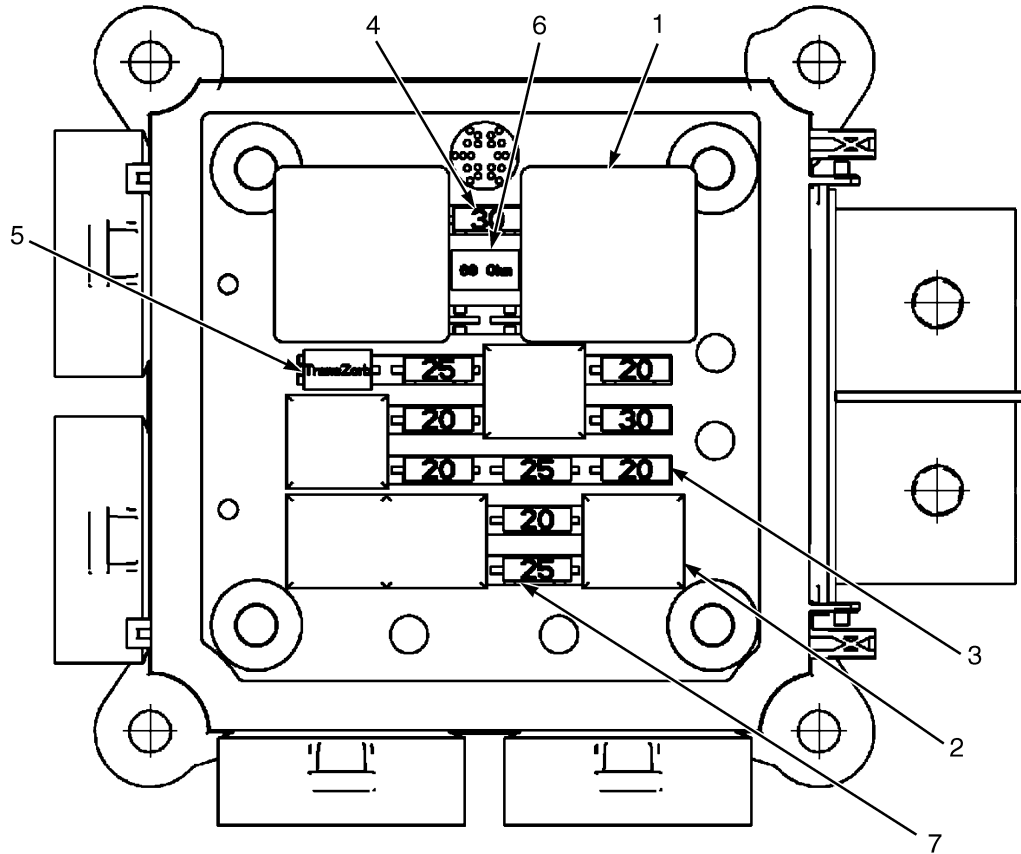
COWL ELECTRICAL
MANUAL HYDRAULIC – WITH OPERATOR PRESENCE SYSTEM (1/2009 →)

ITEM	PART NO.	DESCRIPTION	QTY
1	2104701	Wire Harness (Cowl with Monotrol) (☞ Figure 6-68).....	1
1	4603281	Wire Harness (Cowl with Monotrol Pedal) (☞ Figure 6-69).....	1
1	2104702	Wire Harness (Cowl with Forward/Reverse Lever) (☞ Figure 6-70).....	1
1	4603282	Wire Harness (Cowl with Forward/Reverse Lever) (☞ Figure 6-71).....	1
2	1529366	Capscrew	2
2	1529366	Capscrew (Alternate Part)	2
3	1600190	Bracket	1
3	2111004	Bracket (Left Hand) (Alternate Part)	1
3	2111005	Bracket (Right Hand) (Alternate Part)	1
4	1500912	Clip (With Monotrol)	4
4	1500912	Clip (Without Forward/Reverse Lever)	3
4	1582464	Fastener (With Monotrol)	4
4	1582464	Fastener (Without Forward/Reverse Lever)	3
5	a 2068342	Vehicle System Manager (VSM) -8525419	1
6	1582465	Bracket	1
7	1510115	Capscrew	3
8	1528482	Capscrew	1
8	1398062	Nut	1
9	1686719	Bracket	1
10	1562088	Clip	2

FOOTNOTES:

- a** Without Electronic Hydraulics

POWER DISTRIBUTION MODULE (FIGURE 6-14) (→ S/N L177B08959D)

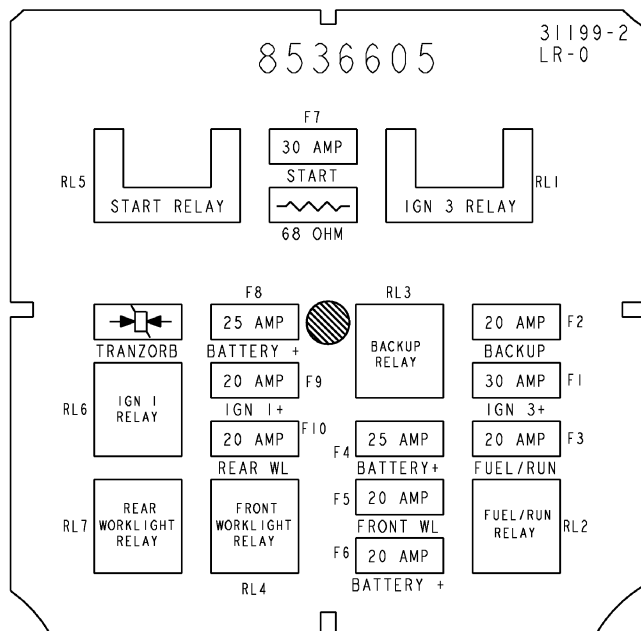
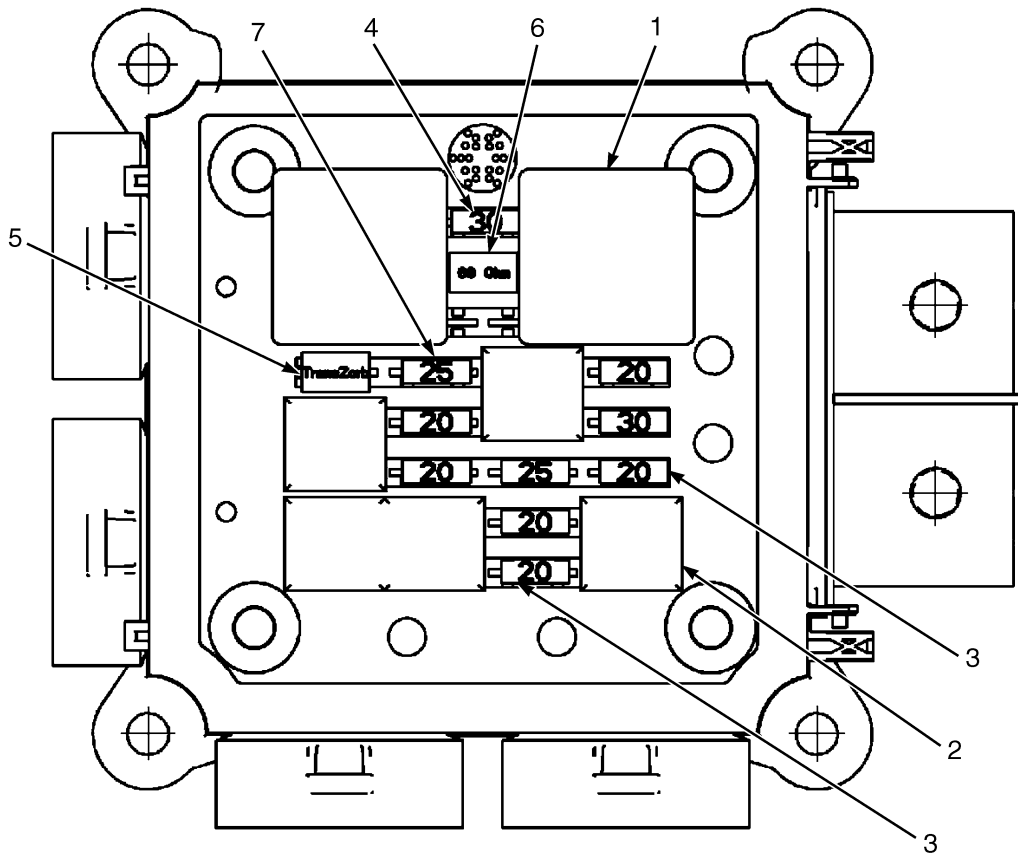


BP080278

POWER DISTRIBUTION MODULE
(→ S/N L177B08959D)

ITEM	PART NO.	DESCRIPTION	QTY
	2063093	Module	1
1	2044712	Relay (30 Amp)	2
2	1528315	Relay (20 Amp)	5
3	1528132	Fuse (20 Amp)	5
4	1528133	Fuse (30 Amp)	2
5	1528630	Semiconductor	1
6	1528631	Resistor (68 Ohm, 5 Watt)	1
7	1544255	Fuse (25 Amp)	3

POWER DISTRIBUTION MODULE (FIGURE 6-15) (S/N L177B08960D →)

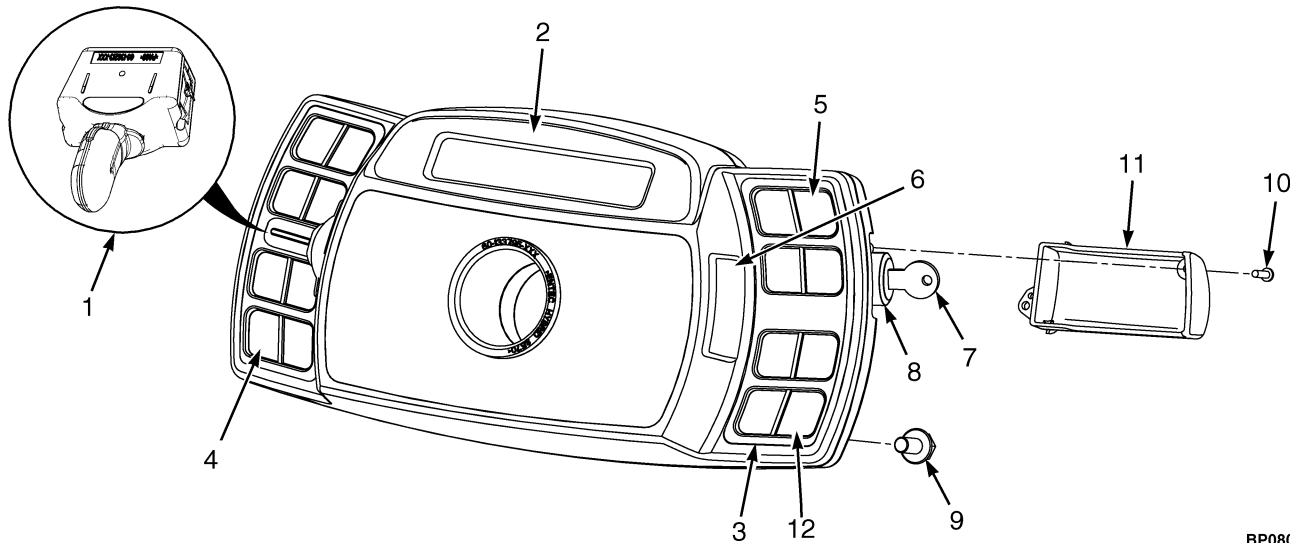


BP080485

POWER DISTRIBUTION MODULE
(S/N L177B08960D →)

ITEM	PART NO.	DESCRIPTION	QTY
	2090613	Module	1
1	2044712	Relay (30 Amp)	2
2	1528315	Relay (20 Amp)	5
3	1528132	Fuse (20 Amp)	6
4	1528133	Fuse (30 Amp)	2
5	1528630	Semiconductor	1
6	1528631	Resistor (68 Ohm, 5 Watt)	1
7	1544255	Fuse (25 Amp)	2

INSTRUMENT CLUSTER (FIGURE 6-16)



BP080816

KEY:

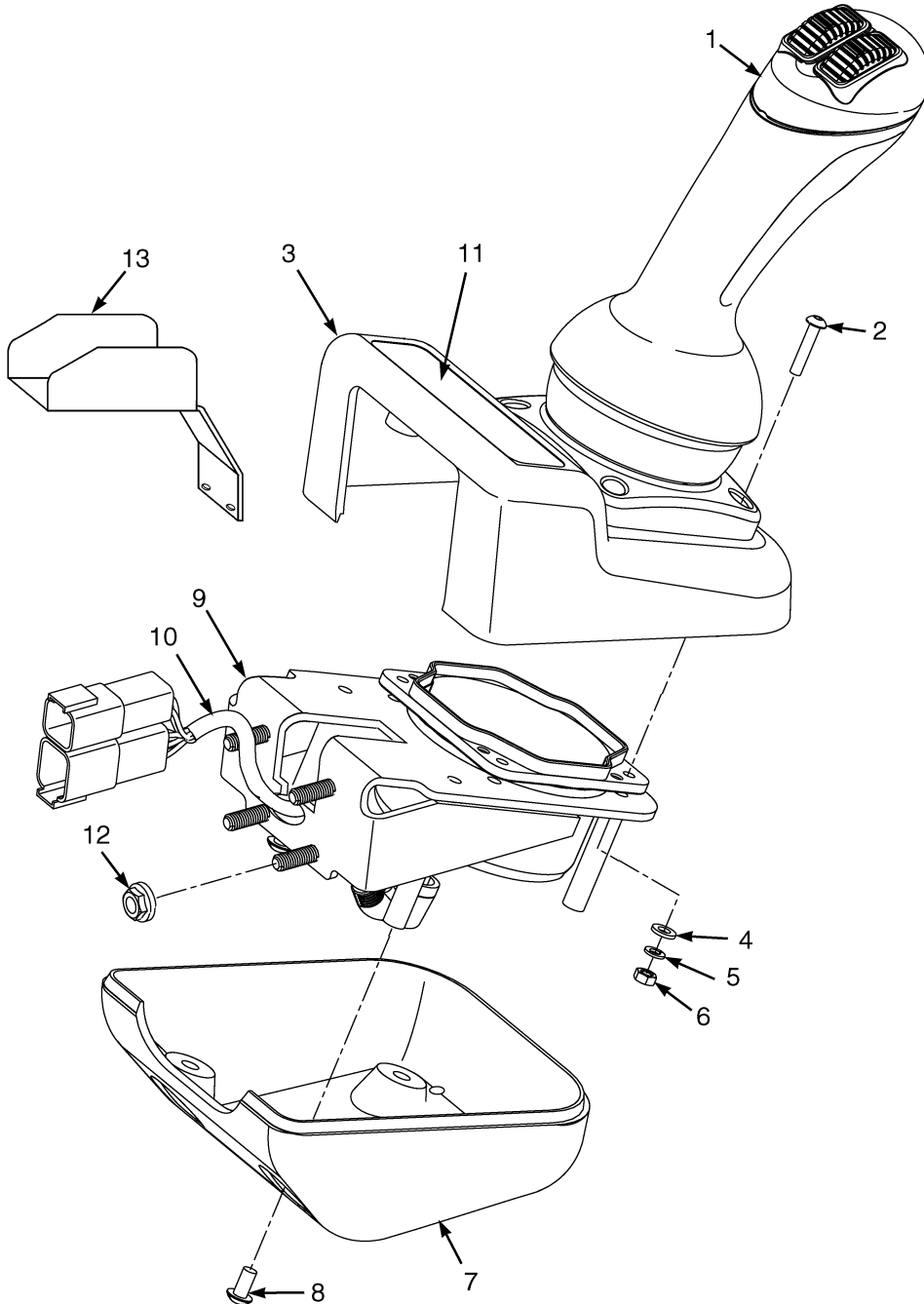
- A:** Standard Ignition Switch - With Cab
- B:** Standard Ignition Switch - With Overhead Guard

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	d 2060837	Lever (Detent Forward and Reverse)	1	1
1	f 2090110	Lever (Detent Forward and Reverse)	1	1
1	h 2102904	Lever (Detent Forward and Reverse)	1	1
1	i 4604594	Lever (Detent Forward and Reverse) (Detent Forward and Reverse)	1	1
2	2076695	Display .....	..	1
2	2076696	Display	1	..
3	2066485	Bezel	1	1
4	2069431	Label (Blank) (LH Instrument Cluster) .....	..	1
4	2066483	Label (LH Instrument Cluster)	1	..
5	a 2066482	Label (RH Display)	1	1
6	2060032	Cover (Display Lever)	1	1
6	e 2060838	Lever (Momentary) (Turn Signal Lever)	1	1
6	g 2090111	Lever (Momentary) (Turn Signal Lever)	1	1
6	h 2102906	Lever (Momentary)	1	1
6	i 4604595	Lever	1	1
7	b 1337197	Key Set	1	1
7	b 186304	Key	2	2
8	b 2057948	Ignition Switch (Without Keys)	1	1
8	c 254007	Ignition Switch (Key)	1	1
8	c 262798	Key Set	1	1
9	1527879	Capscrew	4	4
10	c 1554902	Screw	5	5
11	c 2060033	Cover	1	1
12	2066484	Label (RH Display, All Options)	1	1

FOOTNOTES:

- | | | | |
|----------|---|----------|-----------------------------------|
| a | Remove Panels From Overlay As Required For Truck Configuration. | f | S/N L177B11273D ↔ S/N L177B24875F |
| b | Start With Key Switch | g | S/N L177B11480D ↔ S/N L177B24875F |
| c | Start with Push Button and Remote Key Switch | h | S/N L177B24876E ↔ 12/2010 |
| d | → S/N L177B11272D | i | 12/2010 → |
| e | → S/N L177B11479D | | |

JOYSTICK (FIGURE 6-17)



BP150080

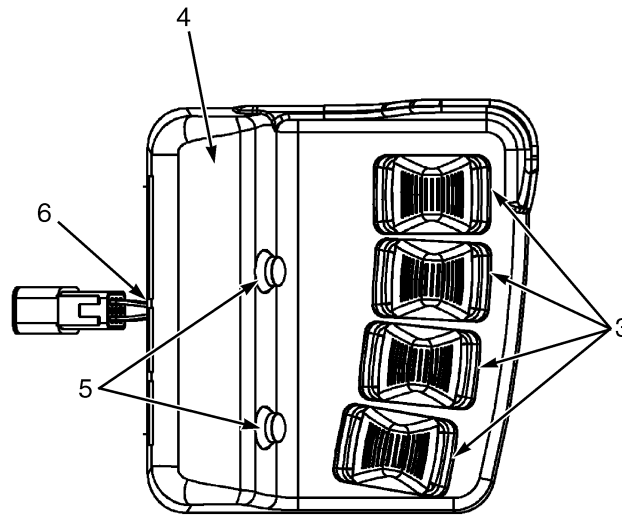
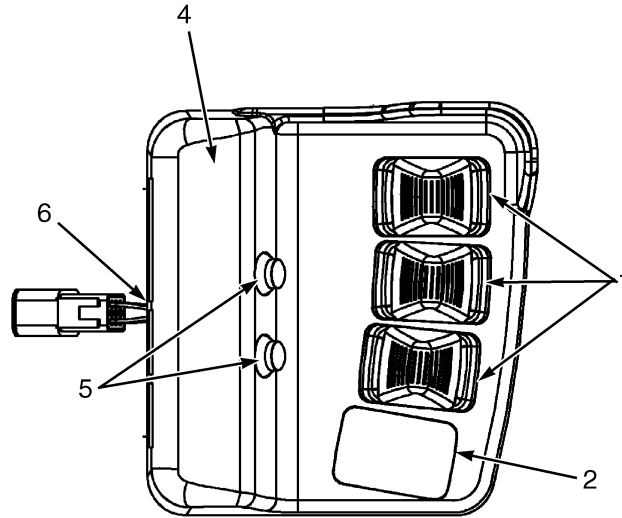
JOYSTICK**KEY:****A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	c 1585906	Joystick (Without Interlock)	1	..
	f 2085179	Joystick (Without Interlock)	1	..
	aj 2093801	Joystick (Three Function) (Without Interlock)	1	..
	m 4601794	Joystick (Three Function) (Without Interlock)	1	..
	b 1585907	Joystick (Without Interlock) .....	..	1
	g 2085180	Joystick (Without Interlock) .....	..	1
	ai 2093803	Joystick (Four Function) (Without Interlock) .....	..	1
	m 4601795	Joystick (Four Function) (Without Interlock) .....	..	1
	d 1585908	Joystick (With Interlock)	1	..
	ak 2093804	Joystick (Three Function) (With Interlock)	1	..
	m 4601796	Joystick (Three Function) (With Interlock)	1	..
	e 1585909	Joystick (With Interlock) .....	..	1
	al 2093805	Joystick (Four Function) (With Interlock) .....	..	1
	m 4601797	Joystick (Four Function) (With Interlock) .....	..	1
1	c 2075224	Joystick (Without Interlock)	1	..
1	f 2085175	Joystick (Without Interlock)	1	..
1	aj 2093806	Joystick (Three Function) (Without Interlock)	1	..
1	m 4601802	Joystick (Three Function) (Without Interlock)	1	..
1	b 2075225	Joystick (Without Interlock) .....	..	1
1	g 2085176	Joystick (Without Interlock) .....	..	1
1	ai 2093807	Joystick (Four Function) (Without Interlock) .....	..	1
1	m 4601803	Joystick (Four Function) (Without Interlock) .....	..	1
1	d 2075226	Joystick (With Interlock)	1	..
1	ak 2093808	Joystick (Three Function) (With Interlock)	1	..
1	m 4601804	Joystick (Three Function) (With Interlock)	1	..
1	d 2075227	Joystick (With Interlock) .....	..	1
1	al 2093809	Joystick (Four Function) (With Interlock) .....	..	1
1	m 4601805	Joystick (Four Function) (With Interlock) .....	..	1
2	1598283	Screw	4	4
3	1550647	Housing (Upper)	1	1
4	320154	Washer	4	4
5	292678	Lockwasher	4	4
6	292667	Nut	4	4
7	1550646	Housing (Lower)	1	1
8	2062718	Capscrew	6	6
9	1552107	Bracket	1	1
10	b 2062070	Wire Harness (Joystick)	1	1
10	h 2084703	Wire Harness (Joystick)	1	1
10	1530960	Connector	1	1
10	1530961	Connector (Secondary Lock)	1	1
10	1550495	Connector	1	1
10	1532904	Connector	1	1
10	1463193	Connector	1	1
11	.....	Label (☞ Figure 1-47, ☞ Figure 1-48).....	1	1
12	1514429	Nut	4	4
13	1579847	Bracket	1	1

FOOTNOTES:

- | | | | |
|----------|---------------------------------|----------|------------------|
| a | → 8/2009 | h | S/N L177B06339 → |
| b | → S/N L177B06338 | i | S/N L177B08974 → |
| c | → S/N L177B08892 | j | S/N L177B09180 → |
| d | → S/N L177B10048 | k | S/N L177B10049 → |
| e | → S/N L177B10948 | l | S/N L177B10949 → |
| f | S/N L177B08893 ↔ S/N L177B09179 | m | 8/2009 → |
| g | S/N L177B06339 ↔ S/N L177B08973 | | |

ELECTRONIC CONTROL LEVERS (FIGURE 6-18) MINI-LEVER MODULES — DATE CODE 0724

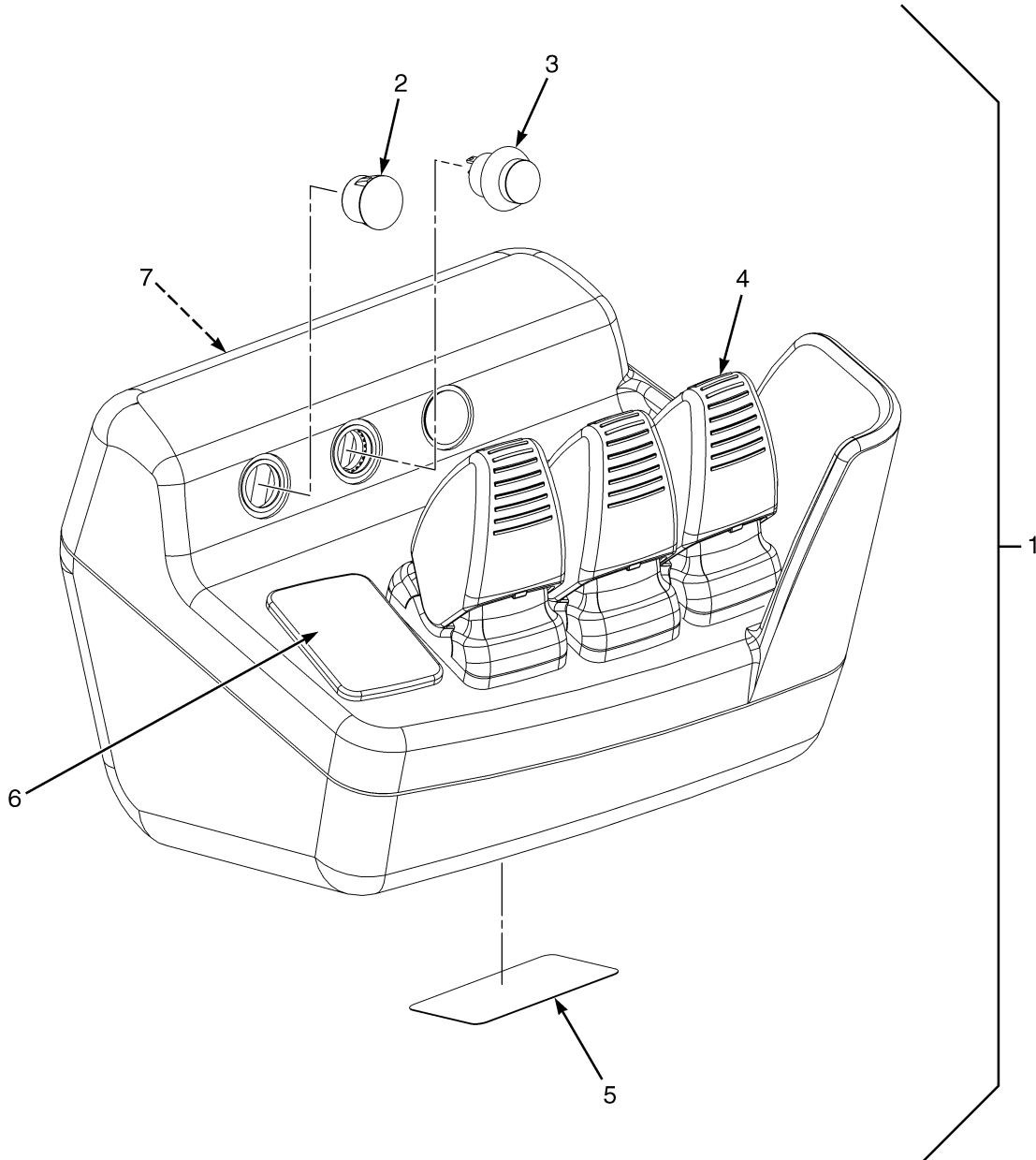


BP150206

**ELECTRONIC CONTROL LEVERS
MINI-LEVER MODULES – DATE CODE 0724****KEY:****A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2064790	Mini-Lever (Plain, 8522697) (Without Clamping)	1	..
1	2075911	Mini-Lever (Clamping, 8528542)	1	..
1	2075913	Mini-Lever (Return To Set Tilt, 8528544)	1	..
1	2075916	Mini-Lever (Clamping and Return To Set Tilt, 8528546)	1	..
1	1683379	Kit-Mini-Lever (Non-Clamping)	AR	..
1	1683398	Kit-Mini-Lever (Clamping)	AR	..
1	1658063	Handle (Mini-Lever)	1	1
2	1598222	Kit-Plug (Mini-Lever Plug)	1	..
3	2064807	Mini-Lever (Plain, 8522700) (Without Clamping) .....	..	1
3	2075912	Mini-Lever (Clamping, 8528543) .....	..	1
3	2075914	Mini-Lever (Return To Set Tilt, 8528545) .....	..	1
3	2075917	Mini-Lever (Clamping And Return To Set Tilt, 8528547) .....	..	1
3	1683379	Kit-Mini-Lever (Non-Clamping) .....	..	AR
3	1683398	Kit-Mini-Lever (Clamping) .....	..	AR
3	1658063	Handle (Mini-Lever)	1	1
4	.....	Label	1	1
5	1598221	Kit-Switch (Interlock Switch)	AR	AR
5	1591181	Switch-Momentary	1	1
5	1598223	Kit-Plug (Interlock Switch Plug)	AR	AR
6	1514429	Nut	4	4

ELECTRONIC CONTROL LEVERS (FIGURE 6-19) MINI-LEVER MODULES (THREE FUNCTION) — DATE CODE 0725 THRU 0743



BP150259

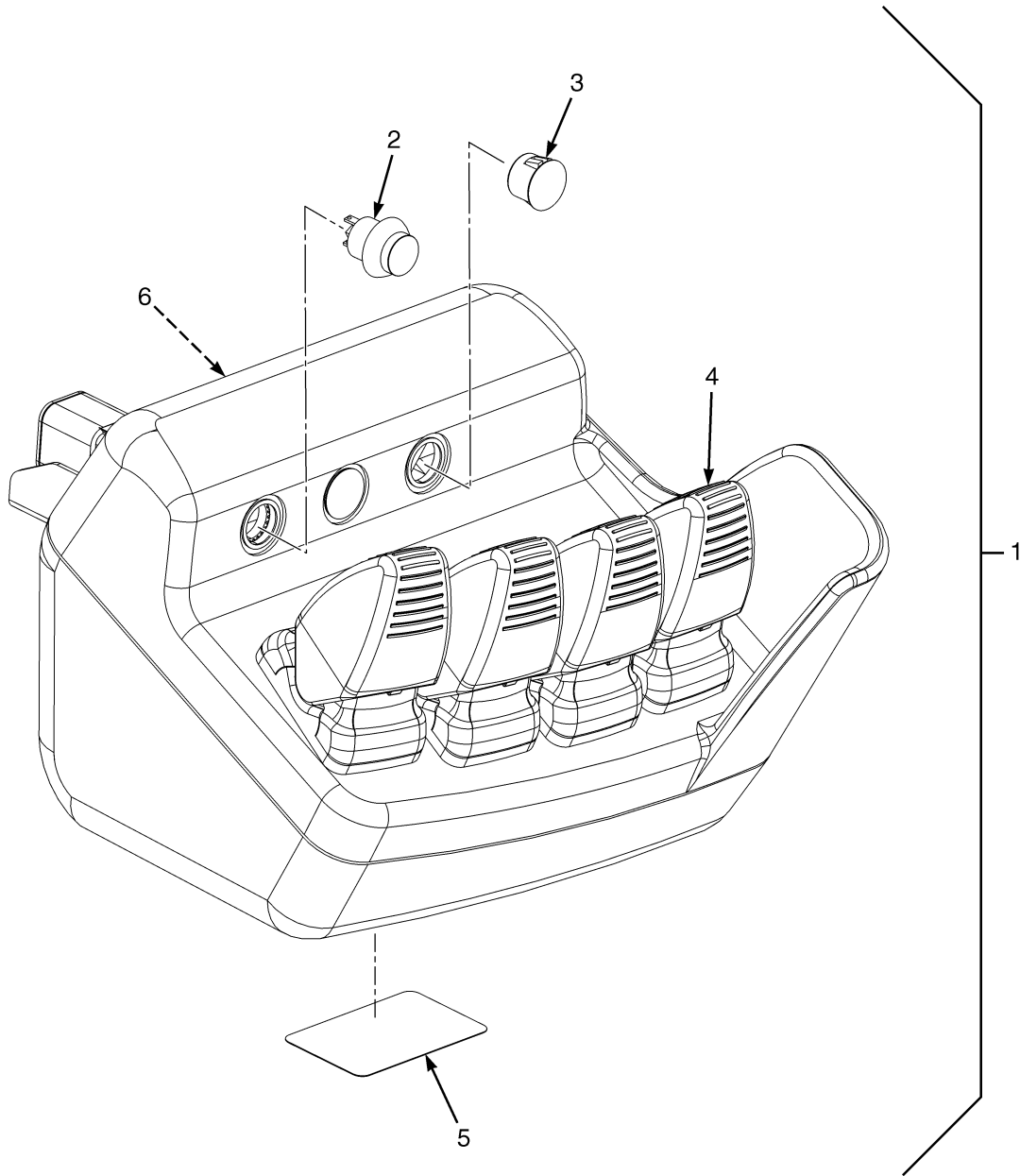
ELECTRONIC CONTROL LEVERS
MINI-LEVER MODULES (THREE FUNCTION) – DATE CODE 0725 THRU 0743

ITEM	PART NO.	DESCRIPTION	QTY
1	2099224	Mini-Lever (Plain, 8542298)	1
	b 1598222	Kit-Plug (Mini-Lever Plug)	1
	c 1598223	Kit-Plug (Interlock Switch Plug)	3
1	2099228	Mini-Lever (Clamping, 8542302)	1
	a 1683398	Kit-Mini-Lever (Clamping)	1
	d 1598221	Kit-Switch (Interlock Switch)	1
	b 1598222	Kit-Plug (Mini-Lever Plug)	1
	c 1598223	Kit-Plug (Interlock Switch Plug)	2
1	2099230	Mini-Lever (Return To Set Tilt, 8542304)	1
	a 1683398	Kit-Mini-Lever (Clamping)	1
	d 1598221	Kit-Switch (Interlock Switch)	1
	b 1598222	Kit-Plug (Mini-Lever Plug)	1
	c 1598223	Kit-Plug (Interlock Switch Plug)	2
1	2099233	Mini-Lever (Clamping and Return To Set Tilt, 8542307)	1
	a 1591185	Kit-Lever (Interlock Mini-Lever)	1
	d 1598221	Kit-Switch (Interlock Switch)	1
	b 1598224	Plug	1
	c 1598223	Kit-Plug (Interlock Switch Plug)	2
2	.....	Plug (Momentary Switch)	AR
3	1591181	Switch-Momentary	AR
4	.....	Mini-Lever	AR
4	1658063	Handle (Mini-Lever)	1
5	.....	Label (Shows Production Part Number)	1
6	1598224	Plug (Mini-Lever)	1
7	.....	Control Labels (☞ Figure 1-45, ☞ Figure 1-46).....	1

FOOTNOTES:

- | | |
|---|--|
| a Kit Includes: 1 Interlock Rocker (must be used in combination with a Momentary Interlock Switch), 1 Gasket, 4 Screws (parts are NSS) | c Kit Includes: 1 Momentary Interlock Switch Plug, 1 Gasket (parts are NSS) |
| b Kit Includes: 1 Mini-Lever Plug, 1 Gasket (parts are NSS) | d Kit Includes: 1 Momentary Switch, 1 Lockwasher, 1 Gasket, 1 Nut (parts are NSS) |

ELECTRONIC CONTROL LEVERS (FIGURE 6-20) MINI-LEVER MODULE (FOUR FUNCTION) — DATE CODE 0725 THRU 0743



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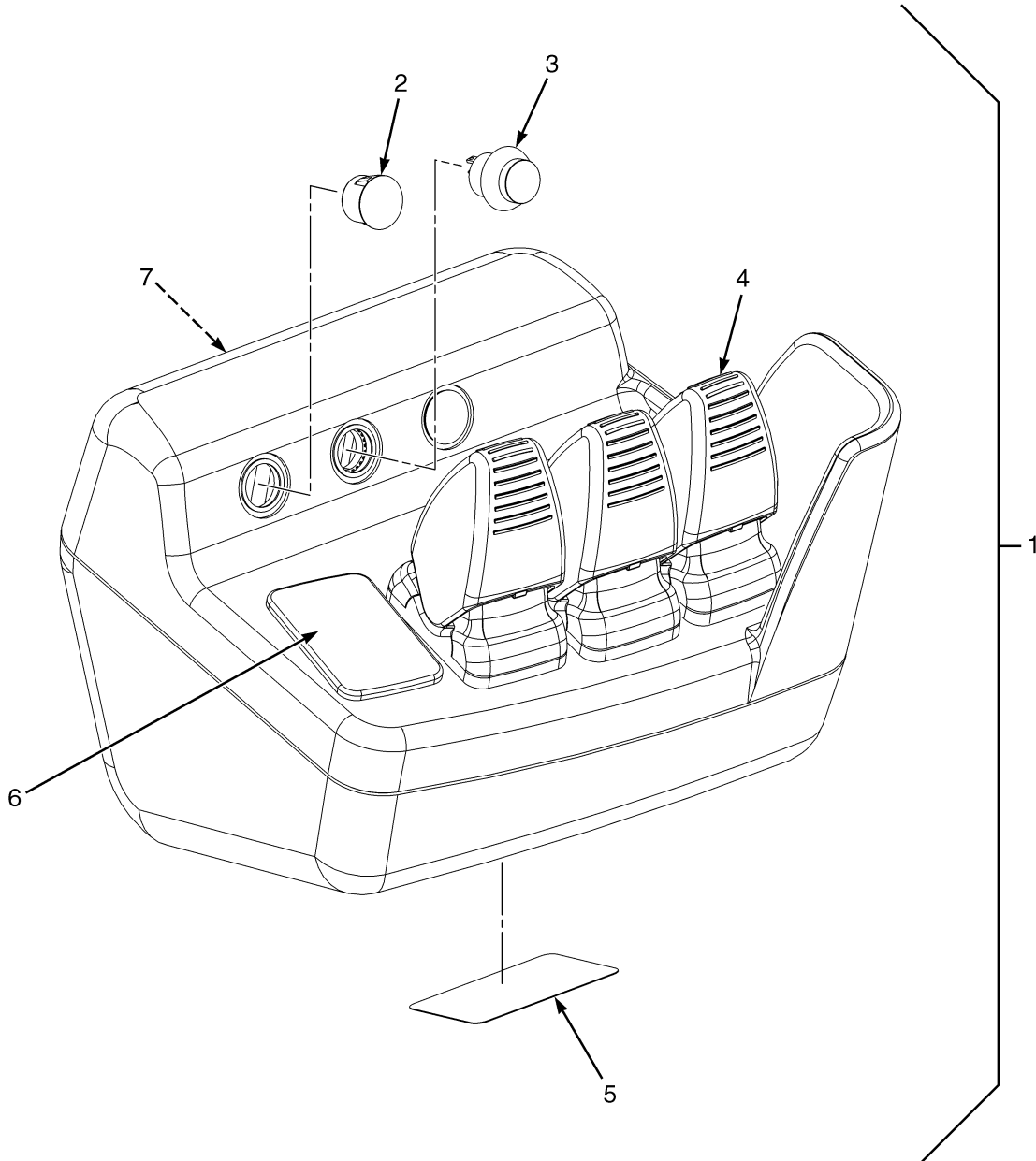
ELECTRONIC CONTROL LEVERS
MINI-LEVER MODULE (FOUR FUNCTION) – DATE CODE 0725 THRU 0743

ITEM	PART NO.	DESCRIPTION	QTY
1	2099225	Mini-Lever (Plain, 8542299)	1
	b 1598223	Kit-Plug (Interlock Switch Plug)	3
	d 1683379	Kit-Mini-Lever (Non-Clamping)	3
1	2099229	Mini-Lever (Clamping, 8542303)	1
1	1683379	Kit-Mini-Lever (Non-Clamping)	2
	c 1683398	Kit-Mini-Lever (Clamping)	1
	b 1598221	Kit-Switch (Interlock Switch)	1
1	1598223	Kit-Plug (Interlock Switch Plug)	2
1	2099231	Mini-Lever (Return To Set Tilt, 8542305)	1
	d 1683379	Kit-Mini-Lever (Non-Clamping)	2
1	1683398	Kit-Mini-Lever (Clamping)	1
	c 1598221	Kit-Switch (Interlock Switch)	1
	b 1598223	Kit-Plug (Interlock Switch Plug)	2
1	2099234	Mini-Lever (Clamping And Return To Set Tilt, 8542308)	1
	a 1683379	Kit-Mini-Lever (Non-Clamping)	2
	c 1598221	Kit-Switch (Interlock Switch)	1
	b 1598223	Kit-Plug (Interlock Switch Plug)	2
2	1591181	Switch-Momentary	AR
3	.....	Plug (Momentary Switch)	AR
4	.....	Mini-Lever	AR
4	1658063	Handle (Mini-Lever)	1
5	.....	Label	1
6	.....	Control Labels (☞Figure 1-45, ☞Figure 1-46).....	1

FOOTNOTES:

- | | |
|---|--|
| <p>a Kit Includes: 1 Interlock Mini-Lever (must be used in combination with a Momentary Interlock Switch), 1 Gasket, 4 Screws (parts are NSS)</p> <p>b Kit Includes: 1 Momentary Switch Hole Plug, 1 Gasket (parts are NSS)</p> | <p>c Kit Includes: 1 Momentary Switch, 1 Lockwasher, 1 Gasket, 1 Nut (parts are NSS)</p> <p>d Kit Includes: 1 Plain Mini-Lever, 1 Gasket, 4 Screws (parts are NSS)</p> |
|---|--|

**ELECTRONIC CONTROL LEVERS (FIGURE 6-21)
MINI-LEVER MODULES (THREE FUNCTION) — DATE CODE 0744**



BP150259

ELECTRONIC CONTROL LEVERS
MINI-LEVER MODULES (THREE FUNCTION) – DATE CODE 0744

ITEM	PART NO.	DESCRIPTION	QTY
1	2105372	Mini-Lever (8544613)	1
	1689455	Kit-Mini-Lever (Non-Clamping)	3
	b 1598224	Plug	1
	c 1598223	Kit-Plug (Interlock Switch Plug)	3
1	2105376	Mini-Lever (8544617) (With Clamping)	1
	a 1598223	Kit-Plug (Interlock Switch Plug)	1
	d 1598221	Kit-Switch (Interlock Switch)	1
	b 1598224	Plug	1
	c 1689455	Kit-Mini-Lever (Non-Clamping)	2
	1689460	Kit-Mini-Lever (Clamping)	1
1	2105378	Mini-Lever (8544619) (With Return To Set Tilt)	1
	a 1598223	Kit-Plug (Interlock Switch Plug)	2
	d 1598221	Kit-Switch (Interlock Switch)	1
	b 1598224	Plug	1
	c 1689455	Kit-Mini-Lever (Non-Clamping)	2
	1689460	Kit-Mini-Lever (Clamping)	1
1	2105380	Mini-Lever (8544621) (With Clamping and Return to set Tilt)	1
	d 1598221	Kit-Switch (Interlock Switch)	2
	b 1598224	Plug	2
	c 1598223	Kit-Plug (Interlock Switch Plug)	1
	1689455	Kit-Mini-Lever (Non-Clamping)	1
	1689460	Kit-Mini-Lever (Clamping)	2
1	2103849	Mini-Lever (8543799)	1
	1683379	Kit-Mini-Lever (Non-Clamping)	3
	c 1598223	Kit-Plug (Interlock Switch Plug)	3
1	1598224	Plug	1
1	2103853	Mini Lever (8543802) (With Clamping)	1
	1683379	Kit-Mini-Lever (Non-Clamping)	2
	1683398	Kit-Mini-Lever (Clamping)	1
1	d 1598221	Kit-Switch (Interlock Switch)	1
1	c 1598223	Kit-Plug (Interlock Switch Plug)	2
	1598224	Plug	1
1	2103857	Mini Lever (8543807) (Clamping With Return To Set Tilt)	1
	1683379	Kit-Mini-Lever (Non-Clamping)	1
	1683398	Kit-Mini-Lever (Clamping)	2
1	d 1598221	Kit-Switch (Interlock Switch)	2
1	c 1598223	Kit-Plug (Interlock Switch Plug)	1
1	1598224	Plug	2
1	2103855	Mini Lever (8543805) (With Return to Set Tilt)	1
	1683379	Kit-Mini-Lever (Non-Clamping)	2
	1683398	Kit-Mini-Lever (Clamping)	1
1	d 1598221	Kit-Switch (Interlock Switch)	1
1	c 1598223	Kit-Plug (Interlock Switch Plug)	2
1	1598224	Plug	1
2	.....	Plug (Momentary Switch)	AR
3	1591181	Switch-Momentary	AR
4	.....	Mini-Lever	AR
4	1658063	Handle (Mini-Lever)	1
5	.....	Label (Shows Production Part Number)	1
6	1598224	Plug (Mini-Lever)	1

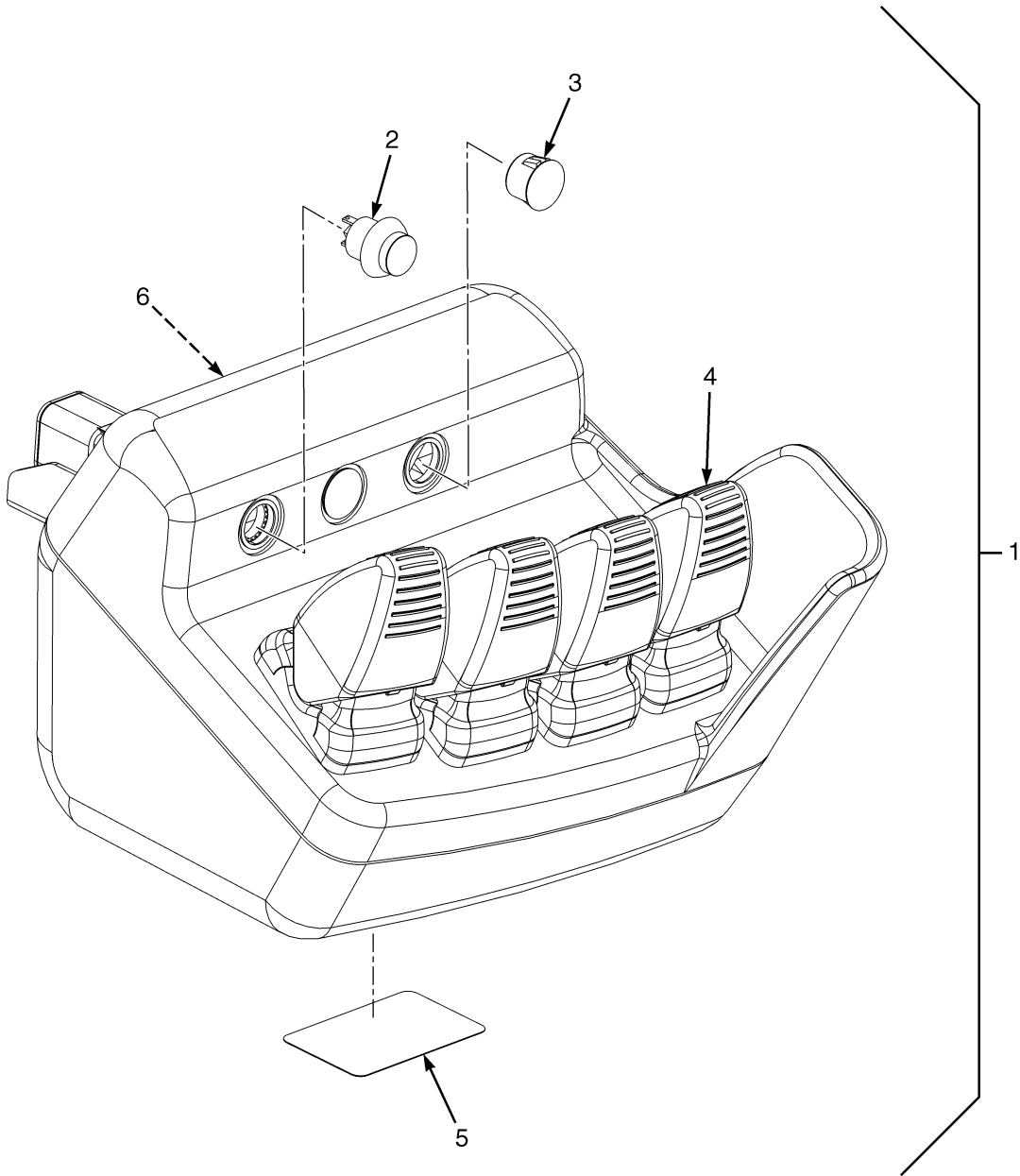
ELECTRONIC CONTROL LEVERS MINI-LEVER MODULES (THREE FUNCTION) – DATE CODE 0744

ITEM	PART NO.	DESCRIPTION	QTY
7	Control Labels (☞ Figure 1-45, ☞ Figure 1-46).....	1

FOOTNOTES:

- a** Kit Includes: 1 Interlock Rocker (must be used in combination with a Momentary Interlock Switch), 1 Gasket, 4 Screws (parts are NSS)
- b** Kit Includes: 1 Mini-Lever Plug, 1 Gasket (parts are NSS)
- c** Kit Includes: 1 Momentary Interlock Switch Plug, 1 Gasket (parts are NSS)
- d** Kit Includes: 1 Momentary Switch, 1 Lockwasher, 1 Gasket, 1 Nut (parts are NSS)

**ELECTRONIC CONTROL LEVERS (FIGURE 6-22)
MINI-LEVER MODULE (FOUR FUNCTION) — DATE CODE 0744**



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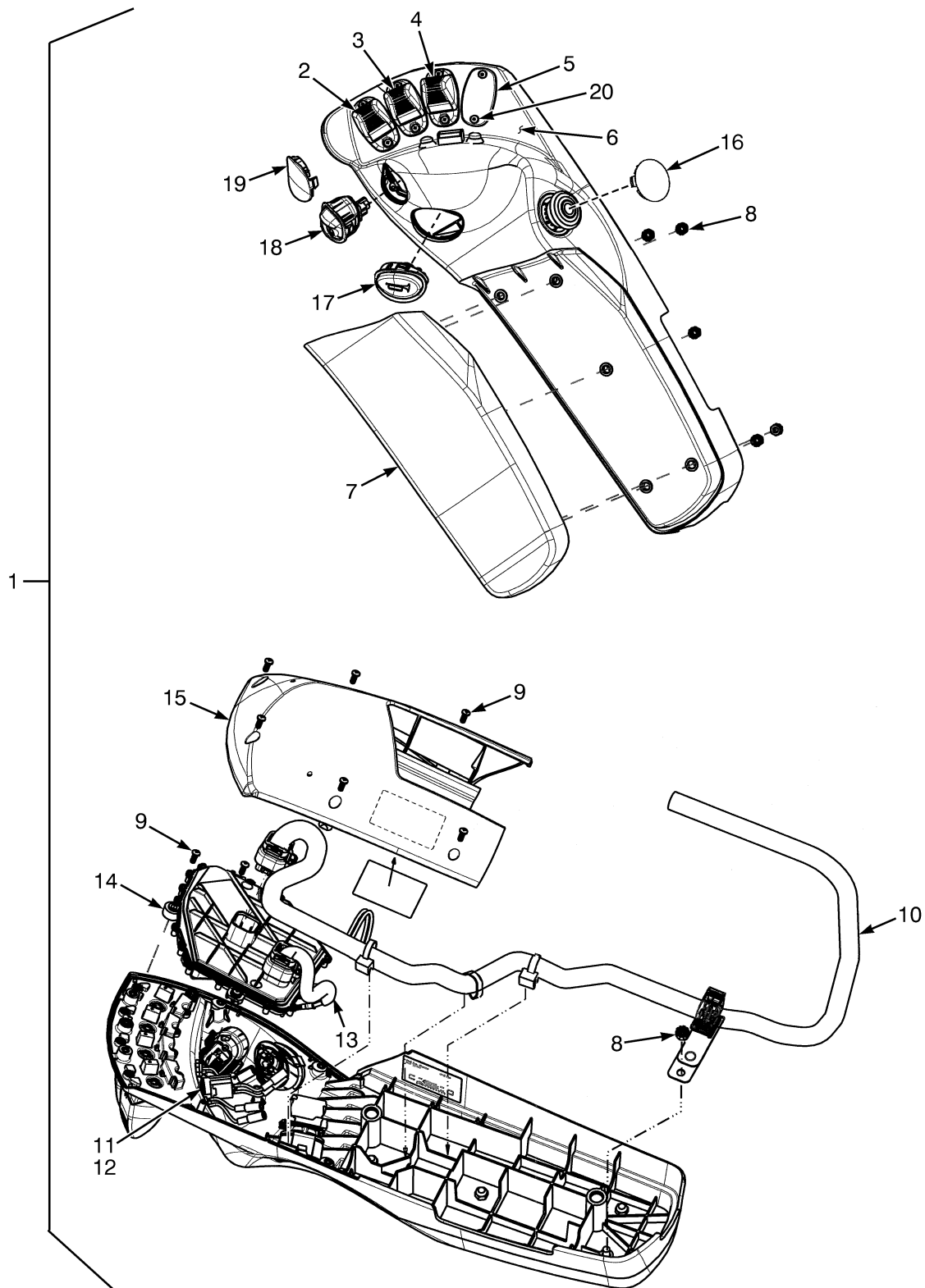
ELECTRONIC CONTROL LEVERS
MINI-LEVER MODULE (FOUR FUNCTION) – DATE CODE 0744

ITEM	PART NO.	DESCRIPTION	QTY
1	2105373	Mini-Lever (8544614)	1
	1689455	Kit-Mini-Lever (Non-Clamping)	4
	b 1598223	Kit-Plug (Interlock Switch Plug)	3
1	2105377	Mini-Lever (8544618) (With Clamping)	1
	1689455	Kit-Mini-Lever (Non-Clamping)	3
	1689460	Kit-Mini-Lever (Clamping)	1
	c 1598221	Kit-Switch (Interlock Switch)	1
	b 1598223	Kit-Plug (Interlock Switch Plug)	1
1	2105379	Mini-Lever (8544620) (With Return to Set Tilt)	1
	1689455	Kit-Mini-Lever (Non-Clamping)	3
	a 1689460	Kit-Mini-Lever (Clamping)	1
	c 1598221	Kit-Switch (Interlock Switch)	1
	b 1598223	Kit-Plug (Interlock Switch Plug)	2
1	2105381	Mini-Lever (8544622) (Clamping and Return to Set Tilt)	1
	1689455	Kit-Mini-Lever (Non-Clamping)	2
	c 1598221	Kit-Switch (Interlock Switch)	2
	b 1598223	Kit-Plug (Interlock Switch Plug)	1
1	1689460	Kit-Mini-Lever (Clamping)	2
1	2103850	Mini Lever (8543800)	1
1	1683379	Kit-Mini-Lever (Non-Clamping)	4
1	b 1598223	Kit-Plug (Interlock Switch Plug)	3
1	2103854	Mini Lever (8543804) (With Clamping)	1
	1683379	Kit-Mini-Lever (Non-Clamping)	3
	1683398	Kit-Mini-Lever (Clamping)	1
	c 1598221	Kit-Switch (Interlock Switch)	1
	b 1598223	Kit-Plug (Interlock Switch Plug)	2
1	2103856	Mini Lever (8543806) (With Return to Set Tilt)	1
	1683379	Kit-Mini-Lever (Non-Clamping)	3
	1683398	Kit-Mini-Lever (Clamping)	1
	c 1598221	Kit-Switch (Interlock Switch)	1
	b 1598223	Kit-Plug (Interlock Switch Plug)	2
1	2103858	Mini Lever (8543808) (Clamping with Return to Set Tilt)	1
	1683379	Kit-Mini-Lever (Non-Clamping)	2
	1683398	Kit-Mini-Lever (Clamping)	2
	c 1598221	Kit-Switch (Interlock Switch)	2
	b 1598223	Kit-Plug (Interlock Switch Plug)	1
2	1591181	Switch-Momentary	AR
3	.....	Plug (Momentary Switch)	AR
4	.....	Mini-Lever	AR
4	1658063	Handle (Mini-Lever)	1
5	.....	Label	1
6	.....	Control Labels (☞ Figure 1-45, ☞ Figure 1-46).....	1

FOOTNOTES:

- a** Kit Includes: 1 Interlock Mini-Lever (must be used in combination with a Momentary Interlock Switch), 1 Gasket, 4 Screws (parts are NSS)
- b** Kit Includes: 1 Momentary Switch Hole Plug, 1 Gasket (parts are NSS)
- c** Kit Includes: 1 Momentary Switch, 1 Lockwasher, 1 Gasket, 1 Nut (parts are NSS)

MINI-LEVER CONTROLS (FIGURE 6-23) WITH ARMREST — THREE FUNCTION (S/N L177B30381H →)



BP080959

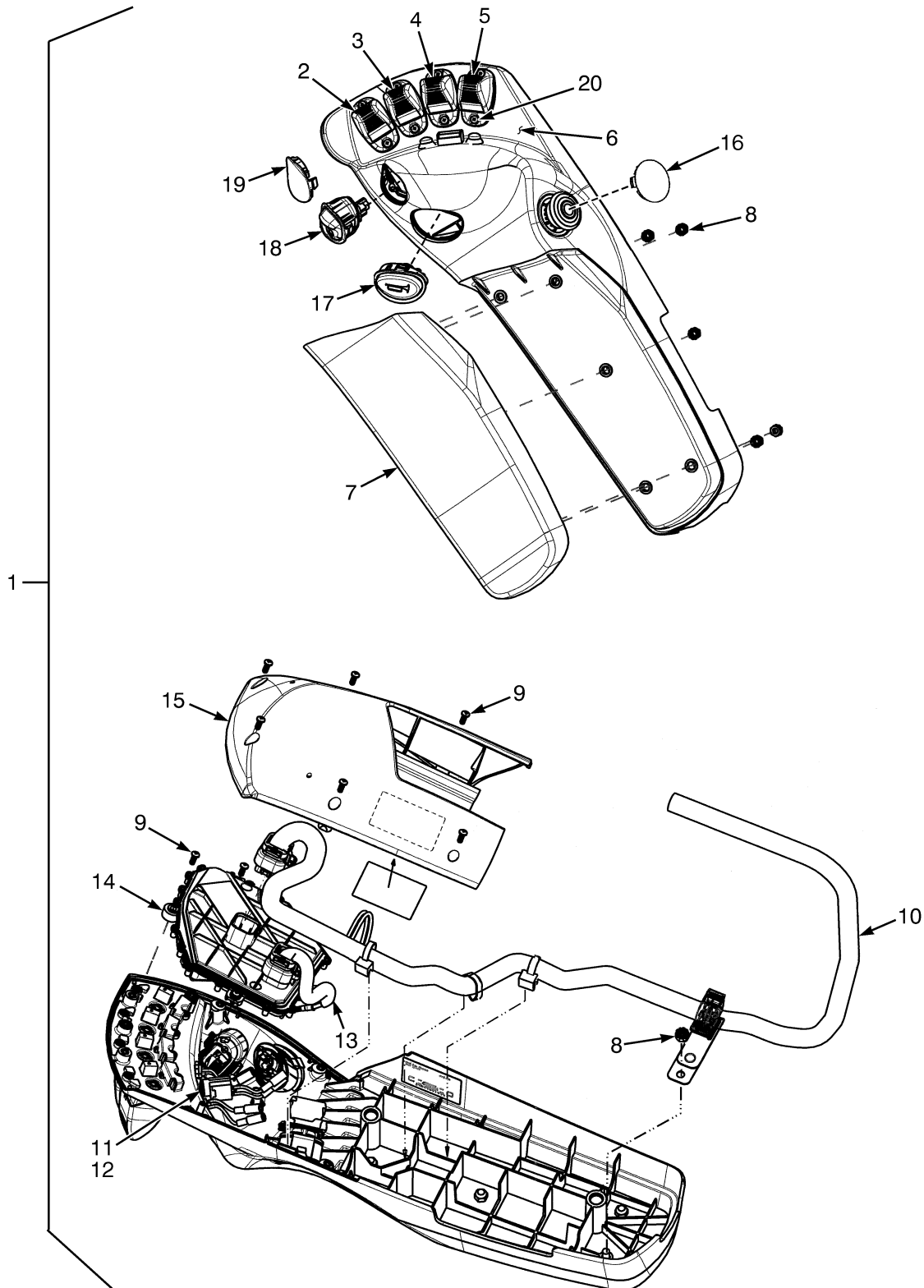
MINI-LEVER CONTROLS
WITH ARMREST – THREE FUNCTION (S/N L177B30381H →)

KEY:**A:** Without Directional Control Switch**B:** With Directional Control Switch

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4601093	Mini-Lever Assembly	1	..
1	c 4601265	Mini-Lever Assembly	1	..
1	a 4601097	Mini-Lever Assembly	1	..
1	b 4601099	Mini-Lever Assembly	1	..
1	4601101	Mini-Lever Assembly .....	..	1
1	c 4601103	Mini-Lever Assembly .....	..	1
1	a 4601105	Mini-Lever Assembly .....	..	1
1	b 4601107	Mini-Lever Assembly .....	..	1
2	.....	Lever Position 1	1	1
2	2110791	Lever (Single Function)	1	1
3	.....	Lever Position 2	1	1
3	2110791	Lever (Single Function)	1	1
3	a 2110793	Lever (With Override)	1	1
4	.....	Lever Position 3	1	1
4	2110791	Lever (Single Function)	1	1
4	c 2110792	Lever (Clamping)	1	1
5	2108249	Plug	1	1
6	2111799	Armrest (Without Holes)	1	1
6	ac 4603439	Armrest (With Holes)	1	1
7	2111769	Cushion (Armrest)	1	1
8	1709587	Nut	5	5
9	1698449	Capscrew	6	6
10	4605336	Wire Harness	1	1
11	c 1591181	Switch-Momentary	1	1
11	b 1591181	Switch-Momentary	2	2
12	c 1598225	Hole Plug	2	2
12	b 1598225	Hole Plug	1	1
13	1704529	Wire Harness (Push Buttons)	1	1
14	2111802			
	4605337	Printed Circuit Board	1	1
15	2111800	Cover (Bottom Armrest)	1	1
16	4601120	Plug	1	1
17	2111770	Horn Button	1	1
18	2110943	Switch (Directional Control) .....	..	1
19	2110942	Plug (Directional Control Switch)	1	..
20	1698449	Capscrew	8	8

FOOTNOTES:**a** Return to Set Tilt**c** With Clamping**b** Three Function Clamp with Return to Set Tilt

MINI-LEVER CONTROLS (FIGURE 6-24) WITH ARMREST — FOUR FUNCTION (S/N L177B30381H →)



BP080960

MINI-LEVER CONTROLS
WITH ARMREST – FOUR FUNCTION (S/N L177B30381H →)

KEY:

A: Without Directional Control Switch

B: With Directional Control Switch

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4601094	Mini-Lever Assembly	1	..
1	a 4601096	Mini-Lever Assembly	1	..
1	c 4601098	Mini-Lever Assembly	1	..
1	b 4601100	Mini-Lever Assembly	1	..
1	4601102	Mini-Lever Assembly .....	..	1
1	a 4601104	Mini-Lever Assembly .....	..	1
1	c 4601106	Mini-Lever Assembly .....	..	1
1	b 4601108	Mini-Lever Assembly .....	..	1
2	.....	Lever Position 1	1	1
2	2110791	Lever (Single Function)	1	1
3	.....	Lever Position 2	1	1
3	2110791	Lever (Single Function)	1	1
3	b 2110793	Lever (With Override)	1	1
4	.....	Lever Position 3	1	1
4	2110791	Lever (Single Function)	1	1
5	.....	Lever Position 4	1	1
5	2110791	Lever (Single Function)	1	1
5	ab 2110792	Lever (Clamping)	1	1
6	2111799	Armrest (Without Holes)	1	1
6	abc 4603439	Armrest (With Holes)	1	1
7	2111769	Cushion (Armrest)	1	1
8	1709587	Nut	5	5
9	1698449	Capscrew	6	6
10	4605336	Wire Harness	1	1
11	a 1591181	Switch-Momentary	1	1
11	b 1591181	Switch-Momentary	2	2
12	a 1598225	Hole Plug	2	2
12	b 1598225	Hole Plug	1	1
13	1704529	Wire Harness (Push Buttons)	1	1
14	2111802	.....	.....	.....
	4605337	Printed Circuit Board	1	1
15	2111800	Cover (Bottom Armrest)	1	1
16	4601120	Plug	1	1
17	2111770	Horn Button	1	1
18	2110943	Switch (Directional Control) .....	..	1
19	2110942	Plug (Directional Control Switch)	1	..
20	1698449	Capscrew	8	8

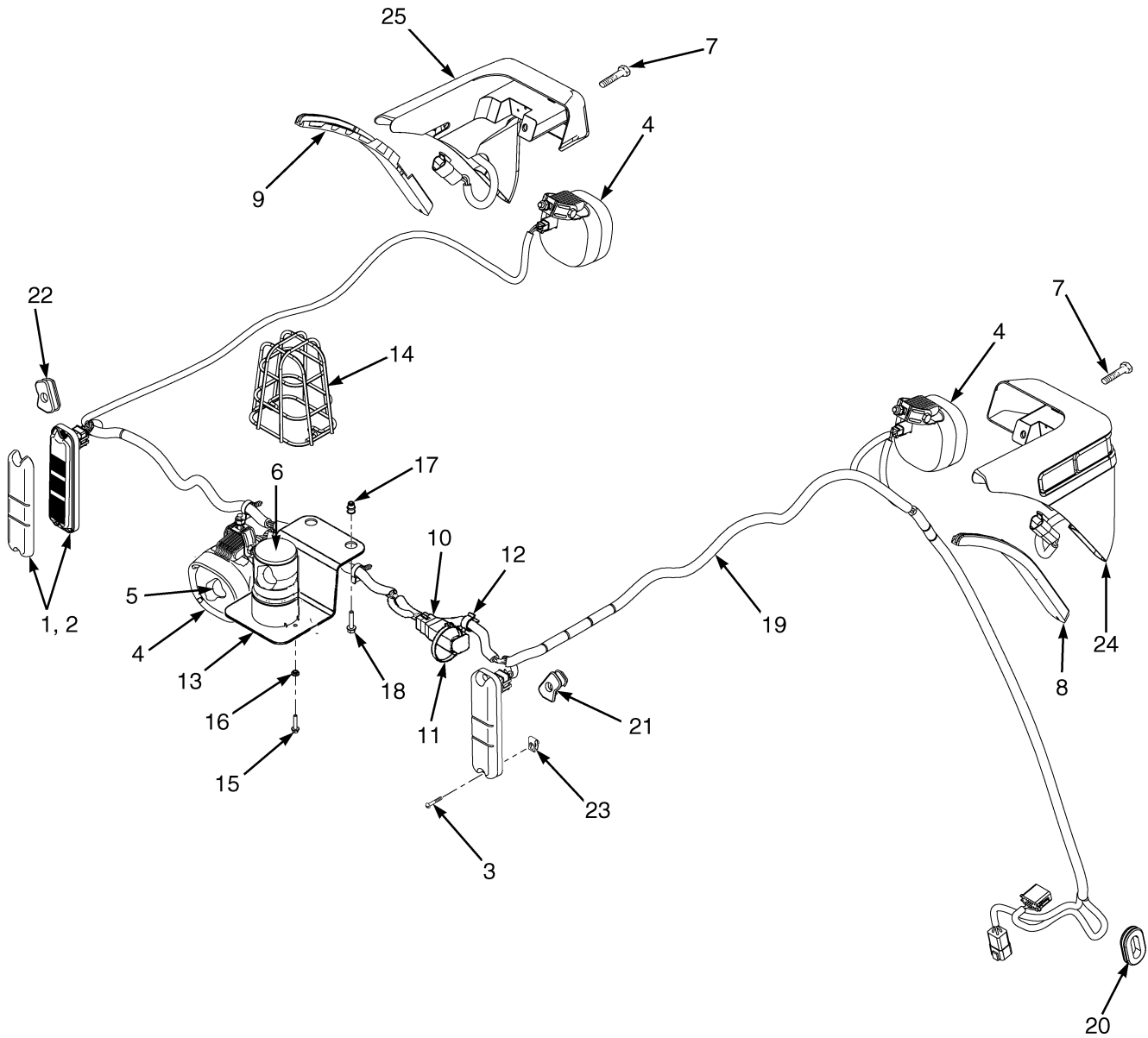
FOOTNOTES:

a With Clamping

c With Return to Set Tilt

b With Clamping and Return to Set Tilt

LIGHTS (FIGURE 6-25) BRAKE, TAIL, BACKUP, SIDE, TURN SIGNALS, WORK, STROBE — WITH OVERHEAD GUARD



BP080385

LIGHTS**BRAKE, TAIL, BACKUP, SIDE, TURN SIGNALS, WORK, STROBE – WITH OVERHEAD GUARD**

ITEM	PART NO.	DESCRIPTION	QTY
1	2056824	Brake/Backup Light (Stop, Turn, Tail, And Back-Up)	2
1	2056823	Tail Light Base (RH) (☞Figure 1-4).....	1
1	2056822	Tail Light Base (LH)	1
2	2056826	Reflector (Tail)	2
3	1565125	Screw	4
4	c 2064836	Work Light (Rear) (Halogen)	1
4	g 2098083	Work Light (Rear) (Halogen)	1
4	2107382	Head/Work Light (Rear) (LED)	1
4	c 2070553	Work Light (RH Front) (Halogen)	1
4	g 2098086	Work Light (RH Front) (Halogen)	1
4	2107385	Head/Work Light (RH Front) (LED)	1
4	c 2070554	Work Light (LH Front) (Halogen)	1
4	g 2098087	Work Light (LH Front) (Halogen)	1
4	2107386	Head/Work Light (LH Front) (LED)	1
5	2098082	Bulb (Halogen)	1
6	d 1581670	Strobe Light (☞Figure 15-1).....	1
6	h 1654013	Strobe Light Assembly (☞Figure 15-2).....	1
7	1608654	Capscrew	4
7	1613324	Capscrew (Alternate Part)	4
8	1608589	Trim (RH)	1
9	1608590	Trim (LH)	1
10	a 2095895	Wire Harness	1
10	1514597	Connector	1
10	1514598	Connector	1
10	1484709	Terminal (Pin)	4
10	1634047	Resistor	3
11	1606544	Clamp	1
12	1644398	Clamp	1
13	1565076	Bracket Wldmt	1
14	1302024	Guard	1
15	1586759	Capscrew	2
16	1586428	Nut	2
17	1531001	Insert	2
18	1586495	Capscrew	2
19	b 2074737	Wire Harness (Lights) (☞Figure 6-72).....	1
19	f 2090087	Wire Harness (Lights) (☞Figure 6-73).....	1
19	e 2098387	Wire Harness (Lights) (☞Figure 6-74).....	1
20	1539584	Grommet (Vehicle System Manager)	1
21	1560447	Grommet (RH Tail Light)	1
22	1560448	Grommet (LH Tail Light)	1
23	1537551	Nut	4
24	2070561	Turn Signal Light (RH Front)	1
24	2070563	Cap (Black Plastic)	2
24	1493466	Connector	1
24	1330415	Connector	1
24	1330437	Terminal (Pin)	3
25	2070562	Turn Signal Light (LH Front)	1
25	2070563	Cap (Black Plastic)	2
25	1493466	Connector	1
25	1330415	Connector	1

LIGHTS

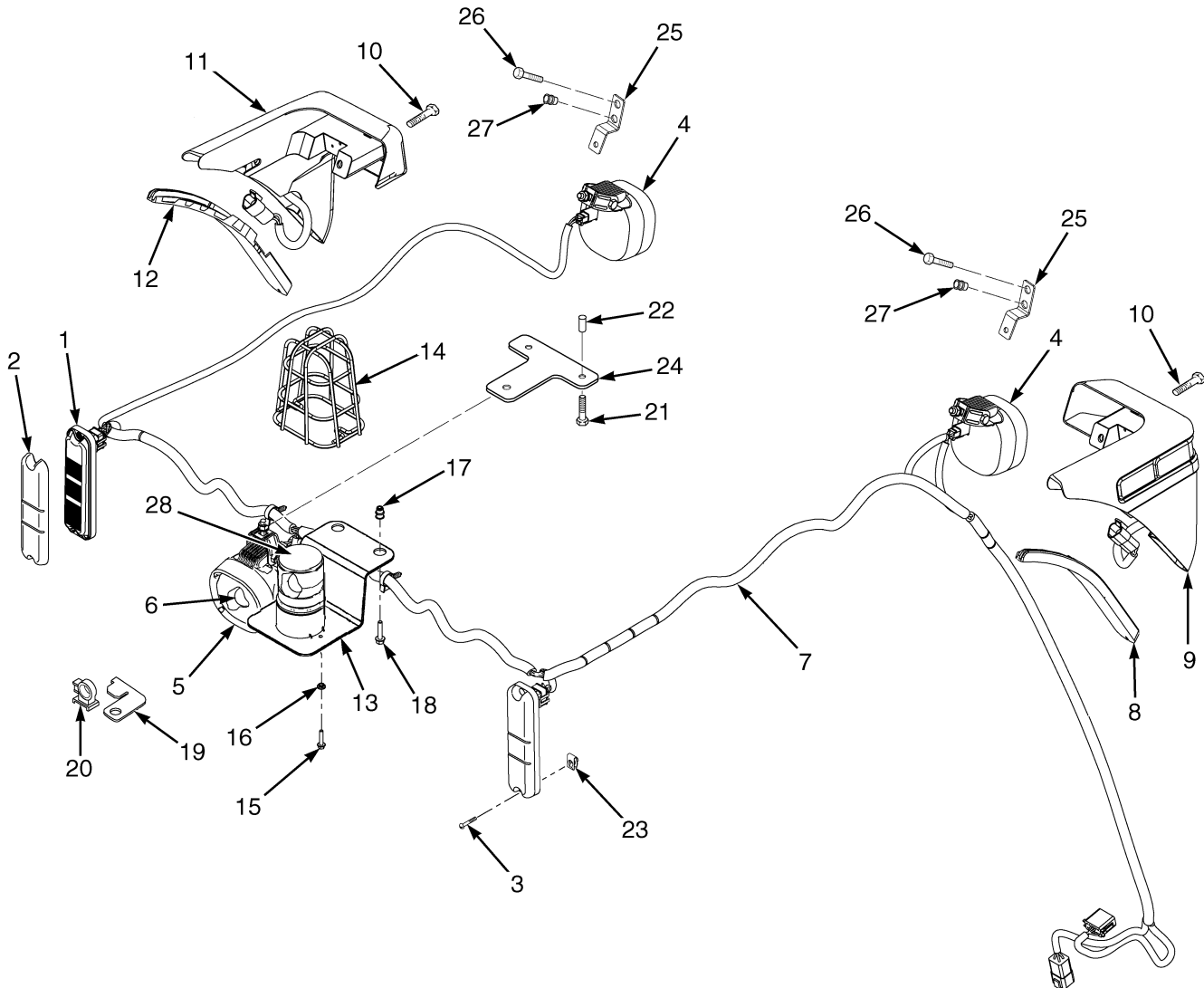
BRAKE, TAIL, BACKUP, SIDE, TURN SIGNALS, WORK, STROBE – WITH OVERHEAD GUARD

ITEM	PART NO.	DESCRIPTION	QTY
25	1330437	Terminal (Pin)	3

FOOTNOTES:

- | | |
|----------------------------|----------------------------|
| a → 6/2007 | e 6/2007 → |
| b → S/N L177B11696D | f S/N L177B11697D → |
| c → S/N L177B17969E | g S/N L177B17970E → |
| d → S/N L177B18988E | h S/N L177B18989E → |

LIGHTS (FIGURE 6-26) BRAKE, TAIL, BACKUP, SIDE, TURN SIGNALS, WORK, STROBE — WITH CAB



BP080386

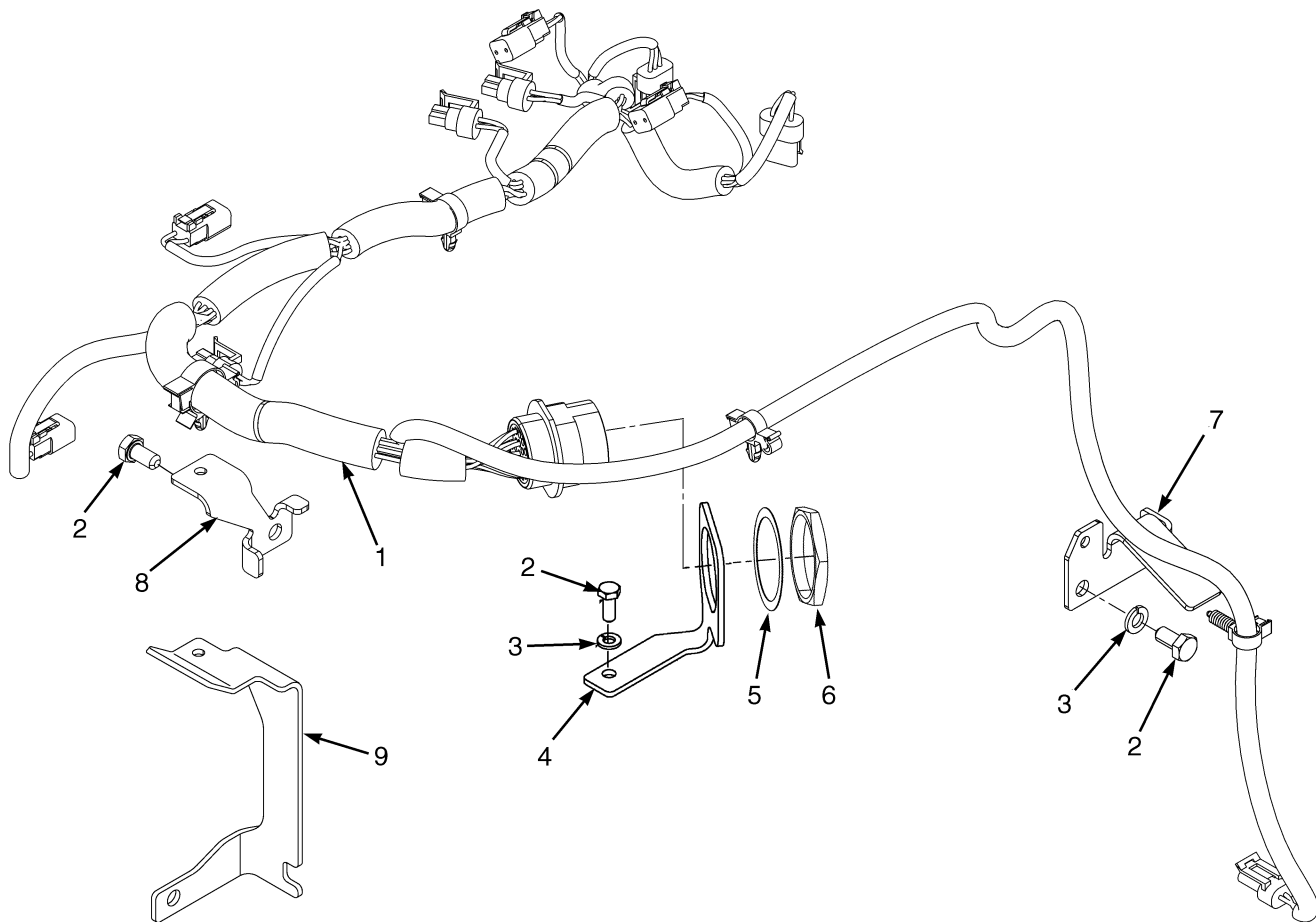
LIGHTS

BRAKE, TAIL, BACKUP, SIDE, TURN SIGNALS, WORK, STROBE – WITH CAB

ITEM	PART NO.	DESCRIPTION	QTY
1	2056824	Brake/Backup Light (Stop, Turn, Tail, And Back-Up)	2
1	2056822	Tail Light Base (LH) (Not Shown) (☞Figure 1-4).....	1
1	2056823	Tail Light Base (RH) (Not Shown)	1
2	2056826	Reflector (Tail)	2
3	1565125	Screw	4
4	a 2070553	Work Light (RH Front) (Halogen)	1
4	b 2098086	Work Light (RH Front) (Halogen)	1
4	2107385	Head/Work Light (RH Front) (LED)	1
4	a 2070554	Work Light (LH Front) (Halogen)	1
4	b 2098087	Work Light (LH Front) (Halogen)	1
4	2107386	Head/Work Light (LH Front) (LED)	1
5	a 2064836	Work Light (Rear) (Halogen)	1
5	b 2098083	Work Light (Rear) (Halogen)	1
5	2107382	Head/Work Light (Rear) (LED)	1
6	2098082	Bulb (Halogen)	1
7	1598333	Wire Harness	1
7	2044712	Relay (30 Amp)	1
8	1608591	Trim (RH)	1
9	2070561	Turn Signal Light (RH Front)	1
10	1608654	Capscrew	4
10	1613324	Capscrew (Alternate Part)	4
11	2070562	Turn Signal Light (LH Front)	1
12	1608592	Trim (LH)	1
13	1565076	Bracket Wldmt	1
14	1302024	Guard	1
15	1586759	Capscrew	2
16	1586428	Nut	2
17	1531558	Insert	2
18	1586495	Capscrew	2
19	1532759	Clip	1
20	1532775	Clip	1
21	1586495	Capscrew	2
22	1531558	Insert	2
23	1537551	Nut	4
24	1558771	Bracket	1
24	1698541	Bracket (Alternate Part)	1
25	1588583	Bracket	2
26	1583611	Capscrew	4
27	1531557	Insert	4
28	1581670	Strobe Light	1
28	1382130	Strobe Light	1
28	1673755	Lens	1
28	1673704	Lamp	1
28	1561559	Connector	1
28	1561755	Connector (Secondary Lock)	1
28	1463138	Terminal Pin	2

FOOTNOTES:**a** → S/N L177B17969E**b** S/N L177B17970E →

TRANSMISSION ELECTRICAL SYSTEM (FIGURE 6-27)



BP080410

TRANSMISSION ELECTRICAL SYSTEM

KEY:

A: Single Speed

B: Dual Speed

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	c 2082323	Wire Harness (Transmission) (☞ Figure 6-77).....	1	..
1	e 2085943	Wire Harness (Transmission) (☞ Figure 6-78).....	1	..
1	b 2075644	Wire Harness (Transmission) (☞ Figure 6-75).....	..	1
1	d 2082324	Wire Harness (Transmission) (☞ Figure 6-75).....	..	1
1	e 2085942	Wire Harness (Transmission) (☞ Figure 6-76).....	..	1
2	287851	Capscrew .....	..	2
3	292681	Lockwasher .....	..	2
4	a	Bracket	1	1
5	a 1539086	Lockwasher	1	1
6	a 1539085	Locknut	1	1
7	c 1531519	Bracket	1	1
7	e 1612223	Bracket .....	..	1
8	1612399	Bracket .....	..	1
9	1616222	Bracket	1	..

FOOTNOTES:

a → 8/2006

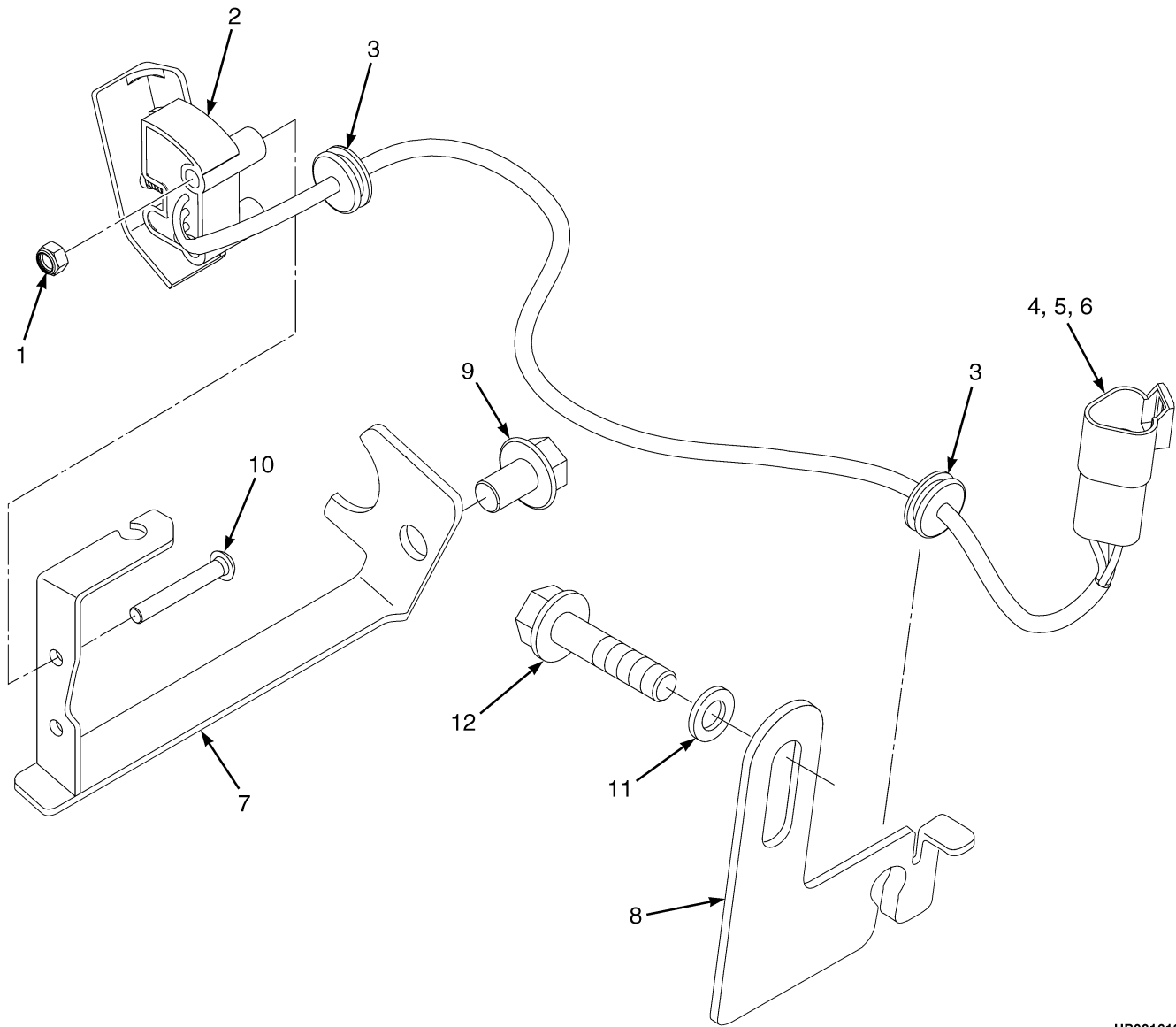
b → 9/2005

c → S/N L177B11117D

d 9/2005 ↔ S/N L177B11117D

e S/N L177B11118D →

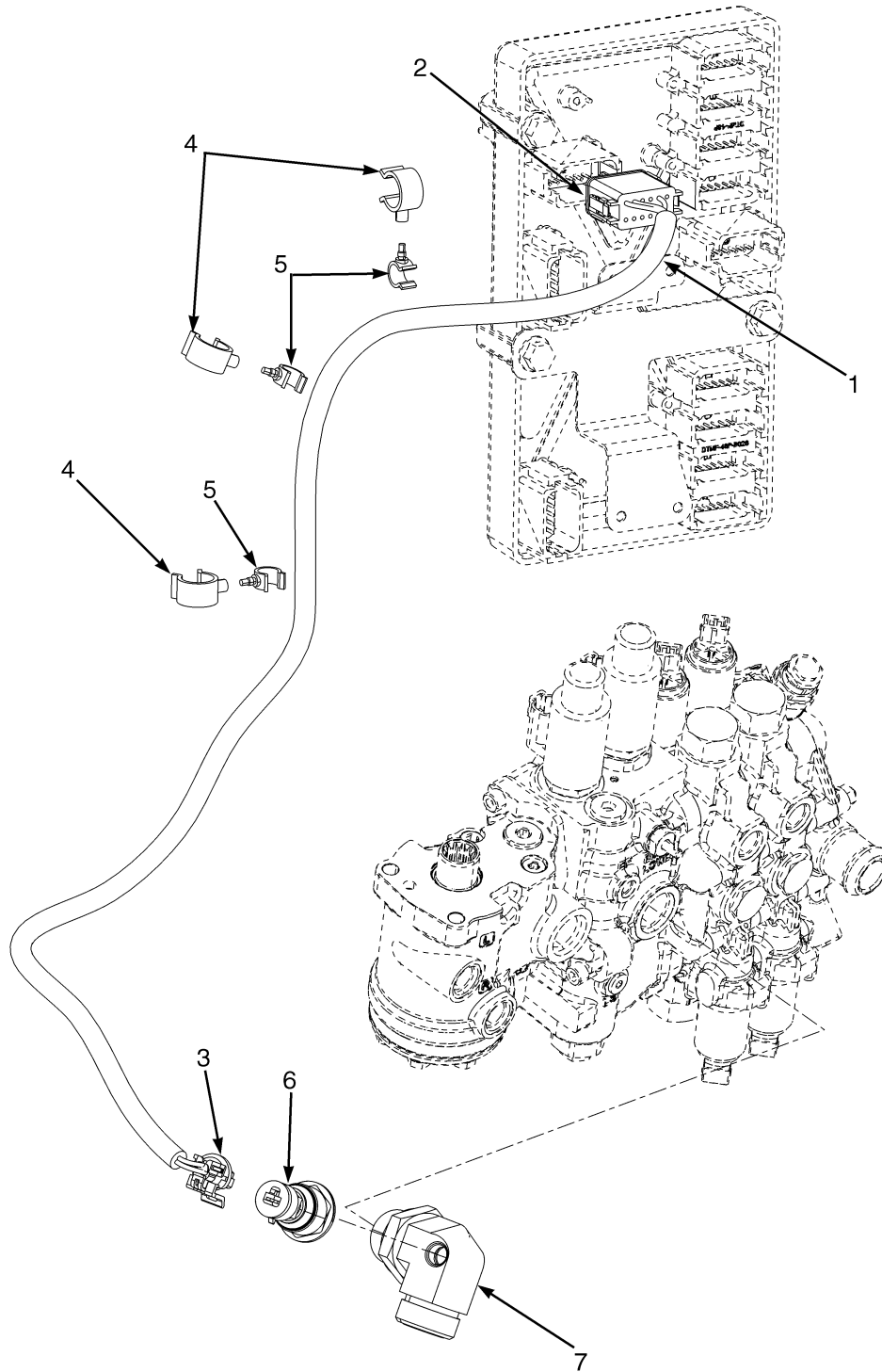
MAST ELECTRICAL (FIGURE 6-28)



HP081616

ITEM	PART NO.	DESCRIPTION	QTY
1	302398	Locknut	2
2	1589621	Sensor (Mast Position)	1
3	26284	Grommet	2
4	1493466	Connector	1
5	1330415	Connector	1
6	1330437	Terminal (Pin)	3
7	1592071	Bracket Wldmt	1
8	1595731	Bracket	1
9	1615163	Capscrew	1
10	1553897	Capscrew	2
11	1626478	Washer	1
12	1658075	Capscrew	1

LOAD WEIGH ELECTRICAL (FIGURE 6-29)

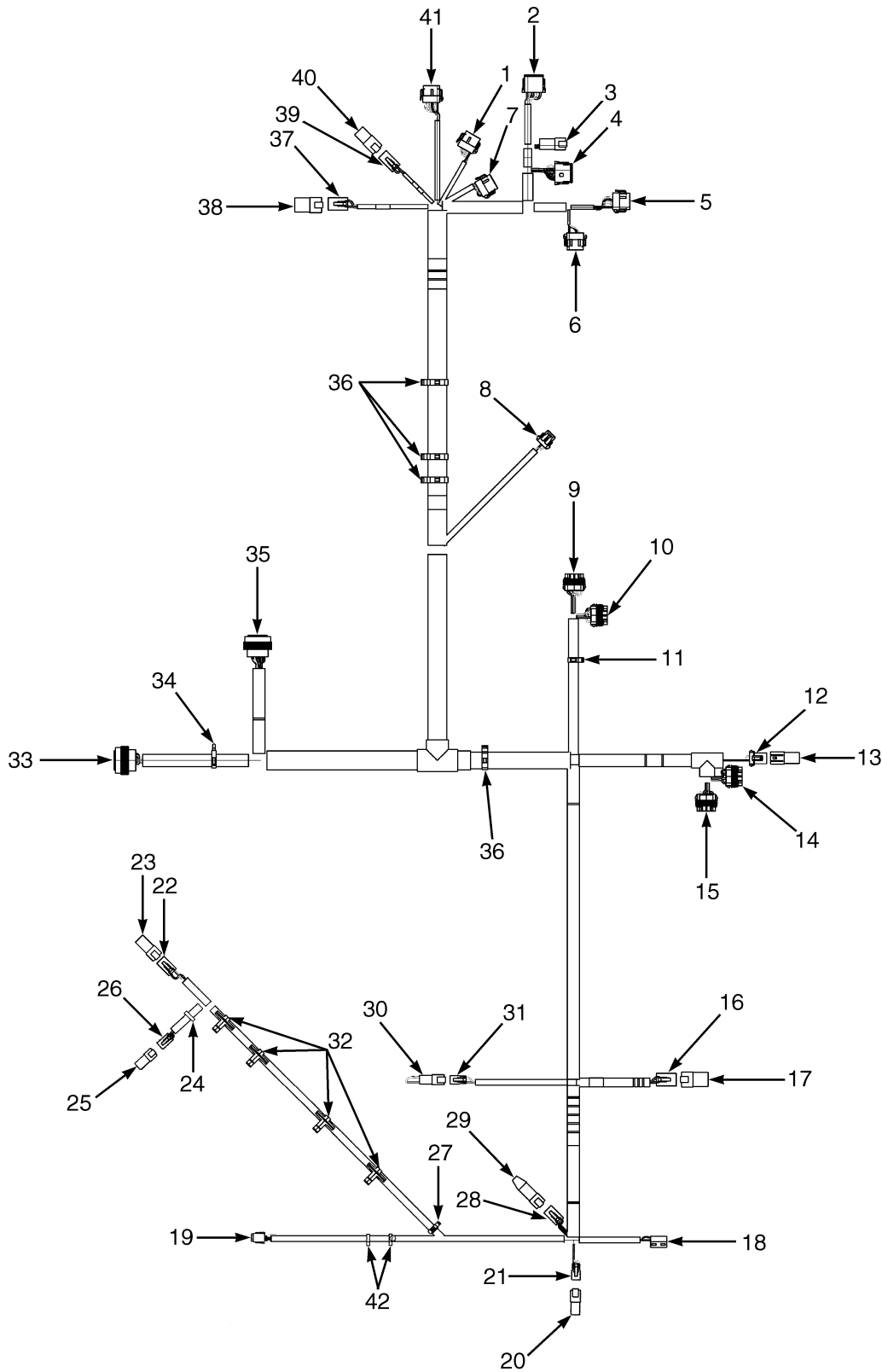


BP080413

LOAD WEIGH ELECTRICAL

ITEM	PART NO.	DESCRIPTION	QTY
1	2079326	Wire Harness (Load Weigh)	1
2	1525565	Connector	1
2	1500913	Connector	1
2	1330438	Terminal (Socket)	3
2	1484377	Plug	9
3	1603021	Connector	1
3	1603236	Connector (Secondary Lock)	1
3	1548517	Terminal (Socket)	3
3	1548519	Seal	3
4	1606544	Clamp	3
5	1573549	Clamp	3
6	1606735	Sensor (Load Sensing)	1
7	1605768	Fitting (Load Weigh Display)	1

WIRE HARNESS (FIGURE 6-30) RH CHASSIS — GM 2.4L (→ 12/2005)



HP081622

WIRE HARNESS
RH CHASSIS – GM 2.4L (→ 12/2005)

ITEM	PART NO.	DESCRIPTION	QTY
	2075560	Wire Harness (RH Chassis)	1
1	1525568	Connector (Vehicle System Manager)	1
1	1530037	Connector	1
1	1463139	Terminal	7
1	1484377	Plug	5
2	1525563	Connector (Vehicle System Manager)	1
2	1500913	Connector	1
2	1330438	Terminal (Socket)	8
2	1363886	Terminal (Socket)	4
3	1489655	Connector (4 Way) (To Cowl Harness)	1
3	1330416	Connector	1
3	1330437	Terminal (Pin)	4
4	1493428	Connector (12-Way) (To Cowl Harness)	1
4	1500913	Connector	1
4	1330438	Terminal (Socket)	9
4	1484377	Plug	3
5	1525567	Connector (Vehicle System Manager)	1
5	1529046	Connector	1
5	1463139	Terminal	6
5	1484377	Plug	6
6	1525569	Connector (Vehicle System Manager)	1
6	1529046	Connector	1
6	1463139	Terminal	3
6	1484377	Plug	9
7	1525567	Connector (Vehicle System Manager)	1
7	1530037	Connector	1
7	1463139	Terminal	9
7	1484377	Plug	3
8	1476064	Connector (Horn)	1
8	1476109	Connector Lock	1
8	1330355	Terminal	3
8	1330356	Seal	2
8	1476108	Wire Seal	1
9	1521184	Connector (Power Distribution Module)	1
9	1521188	Lock	1
9	1330281	Terminal	6
9	1521989	Terminal	1
9	1323579	Seal	5
9	1402888	Seal	2
9	1327164	Seal	1
10	1521183	Connector (Power Distribution Module)	1
10	1521188	Lock	1
10	1330281	Terminal	4
10	1521989	Terminal	3
10	1323579	Seal	7
10	1327164	Seal	1
11	1534828	Clip	1
12	1329152	Plug (Hydraulic Filter)	1
12	1329151	Terminal	1
12	1330281	Terminal	2

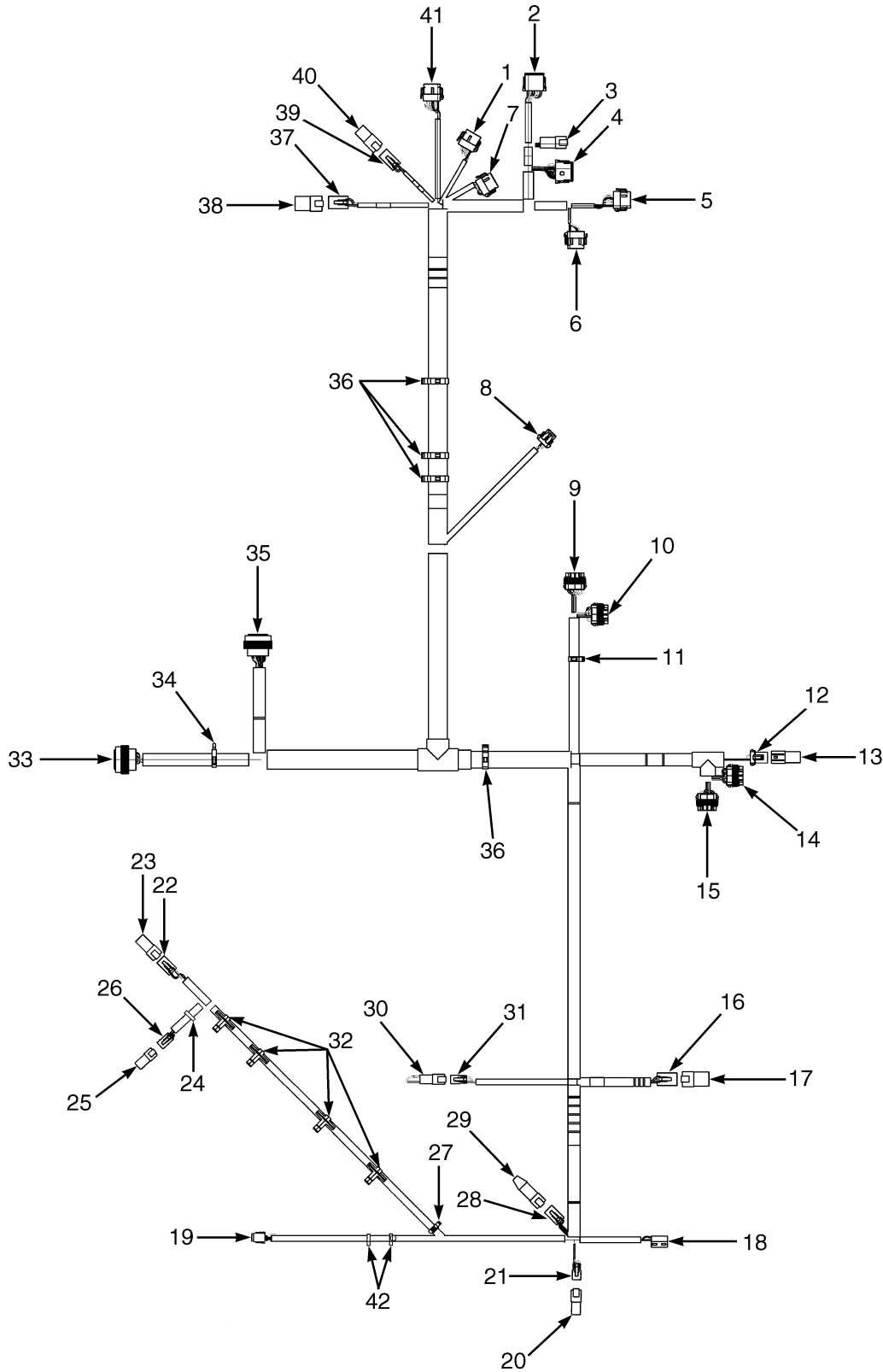
WIRE HARNESS RH CHASSIS – GM 2.4L (→ 12/2005)

ITEM	PART NO.	DESCRIPTION	QTY
12	1402888	Seal	2
13	1329150	Connector (End Cap)	1
13	1329151	Terminal	1
13	1327164	Seal	2
14	1521185	Connector (Power Distribution Module)	1
14	1521188	Lock	1
14	1330281	Terminal	5
14	1521989	Terminal	3
14	1323579	Seal	8
15	1521186	Connector (Power Distribution Module)	1
15	1521188	Lock	1
15	1521989	Terminal	7
15	1323579	Seal	7
15	1327164	Seal	1
16	1514602	Connector (Accessory 2)	1
16	1514603	Connector	1
16	1554359	Terminal	3
16	1330439	Plug	1
17	1514597	Connector (End Cap)	1
17	1330439	Plug	4
18	1572588	Switch (Hood Switch)	1
19	1541991	Connector (To Seat Harness)	1
19	1541992	Connector	1
19	1463139	Terminal	8
20	1351681	Connector (End Cap)	1
21	1490242	Connector (Socket)(Alternate Horn Button)	1
21	1490243	Connector (Socket)	1
21	1330438	Terminal (Socket)	2
22	1493430	Connector (To Back-Up Alarm Harness)	1
22	1529052	Connector	1
22	1330438	Terminal (Socket)	6
23	1351683	Connector (End Cap)	1
24	1509888	Clip	1
25	1329150	Connector (End Cap)	1
25	1329151	Terminal	1
25	1327164	Seal	2
26	1329152	Plug (Coolant Level)	1
26	1329151	Terminal	1
26	1330281	Terminal	2
26	1402888	Seal	2
27	1509890	Clip	1
28	1489656	Connector (4-Way) (Socket)(Bus Terminal 2)	1
28	1489657	Connector (Socket)	1
28	1330438	Terminal (Socket)	4
29	1525577	Connector (With Resistor) (End Cap)	1
30	1493465	Connector (Switch Key)	1
30	1330414	Connector (Secondary Lock)	1
30	1330437	Terminal (Pin)	2
31	1490242	Connector (Socket)(Key Switch)	1
31	1490243	Connector (Socket)	1

WIRE HARNESS
RH CHASSIS – GM 2.4L (→ 12/2005)

ITEM	PART NO.	DESCRIPTION	QTY
31	1330438	Terminal (Socket)	2
32	1587778	Clip	4
33	1502627	Connector (Socket) (To Transmission Harness)	1
33	1330438	Terminal (Socket)	17
33	1484377	Plug	6
34	1500899	Clip	1
35	1531501	Connector (To Engine Harness)	1
35	1330438	Terminal (Socket)	9
35	1463139	Terminal	6
35	1554359	Terminal	4
35	1484377	Plug	10
36	1534282	Clip	4
37	1514602	Connector (To Lights/Cab Harness)	1
37	1514603	Connector	1
37	1554359	Terminal	4
38	1514597	Connector (End Cap)	1
38	1330439	Plug	4
39	1545202	Connector (Accessory 1)	1
39	1546697	Connector	1
39	1554359	Terminal	2
40	1480187	Connector (End Cap)	1
40	1330439	Plug	2
41	1525570	Connector (Vehicle System Manager)	1
41	1530037	Connector	1
41	1463139	Terminal	8
41	1484377	Plug	4
42	1402815	Clip	2

WIRE HARNESS (FIGURE 6-31) RH CHASSIS — GM 2.4L (→ S/N L177B11117D)



HP081622

WIRE HARNESS
RH CHASSIS – GM 2.4L (→ S/N L177B11117D)

ITEM	PART NO.	DESCRIPTION	QTY
	2078878	Wire Harness (Chassis)	1
1	.....	Connector Assembly (Vehicle System Manager)	1
1	1525568	Connector	1
1	1530037	Connector	1
1	1463139	Terminal	7
1	1484377	Plug	5
2	.....	Connector Assembly (Vehicle System Manager)	1
2	1525563	Connector	1
2	1500913	Connector	1
2	1330438	Terminal (Socket)	8
2	1363886	Terminal (Socket)	4
3	.....	Connector Assembly (To Cowl Harness)	1
3	1489655	Connector (4 Way)	1
3	1330416	Connector	1
3	1330437	Terminal (Pin)	4
4	.....	Connector Assembly (To Cowl Harness)	1
4	1493428	Connector (12-Way)	1
4	1500913	Connector	1
4	1330438	Terminal (Socket)	9
4	1484377	Plug	3
5	.....	Connector Assembly (Vehicle System Manager)	1
5	1525567	Connector	1
5	1529046	Connector	1
5	1463139	Terminal	3
5	1484377	Plug	9
6	.....	Connector Assembly (Vehicle System Manager)	1
6	1525569	Connector	1
6	1529046	Connector	1
6	1463139	Terminal	3
6	1484377	Plug	9
7	.....	Connector Assembly (Vehicle System Manager)	1
7	1525567	Connector	1
7	1530037	Connector	1
7	1463139	Terminal	9
7	1484377	Plug	3
8	.....	Connector Assembly (Horn)	1
8	1476064	Connector	1
8	1476109	Connector Lock	1
8	1330355	Terminal	3
8	1330356	Seal	2
8	1476108	Wire Seal	1
9	.....	Connector Assembly (Power Distribution Module)	1
9	1521184	Connector	1
9	1521188	Lock	1
9	1330281	Terminal	6
9	1521989	Terminal	1
9	1323579	Seal	5
9	1402888	Seal	2
9	1327164	Seal	1
10	.....	Connector Assembly (Power Distribution Module)	1

WIRE HARNESS RH CHASSIS – GM 2.4L (→ S/N L177B11117D)

ITEM	PART NO.	DESCRIPTION	QTY
10	1521183	Connector	1
10	1521188	Lock	1
10	1330281	Terminal	4
10	1521989	Terminal	3
10	1323579	Seal	7
10	1327164	Seal	1
11	1534828	Clip	1
12	.....	Connector Assembly (Hydraulic Filter)	1
12	1329152	Plug	1
12	1329151	Terminal	1
12	1330281	Terminal	2
12	1402888	Seal	2
13	.....	Connector Assembly (End Cap)	1
13	1329150	Connector	1
13	1329151	Terminal	1
13	1327164	Seal	2
14	.....	Connector Assembly (Power Distribution Module)	1
14	1521185	Connector	1
14	1521188	Lock	1
14	1330281	Terminal	5
14	1521989	Terminal	3
14	1323579	Seal	8
15	.....	Connector Assembly (Power Distribution Module)	1
15	1521186	Connector	1
15	1521188	Lock	1
15	1521989	Terminal	7
15	1323579	Seal	7
15	1327164	Seal	1
16	.....	Connector Assembly (Accessory 2)	1
16	1514602	Connector	1
16	1514603	Connector	1
16	1554359	Terminal	3
16	1330439	Plug	1
17	.....	Connector Assembly (End Cap)	1
17	1514597	Connector	1
17	1330439	Plug	4
18	1572588	Switch	1
19	.....	Connector Assembly (To Seat Harness)	1
19	1541991	Connector	1
19	1541992	Connector	1
19	1463139	Terminal	8
20	1351681	Connector (End Cap)	1
21	.....	Connector Assembly (Alternate Horn Button)	1
21	1490242	Connector	1
21	1490243	Connector	1
21	1330438	Terminal (Socket)	2
22	.....	Connector Assembly (To Back-Up Alarm Harness)	1
22	1490242	Connector	1
22	1490243	Connector	1
22	1330438	Terminal (Socket)	2

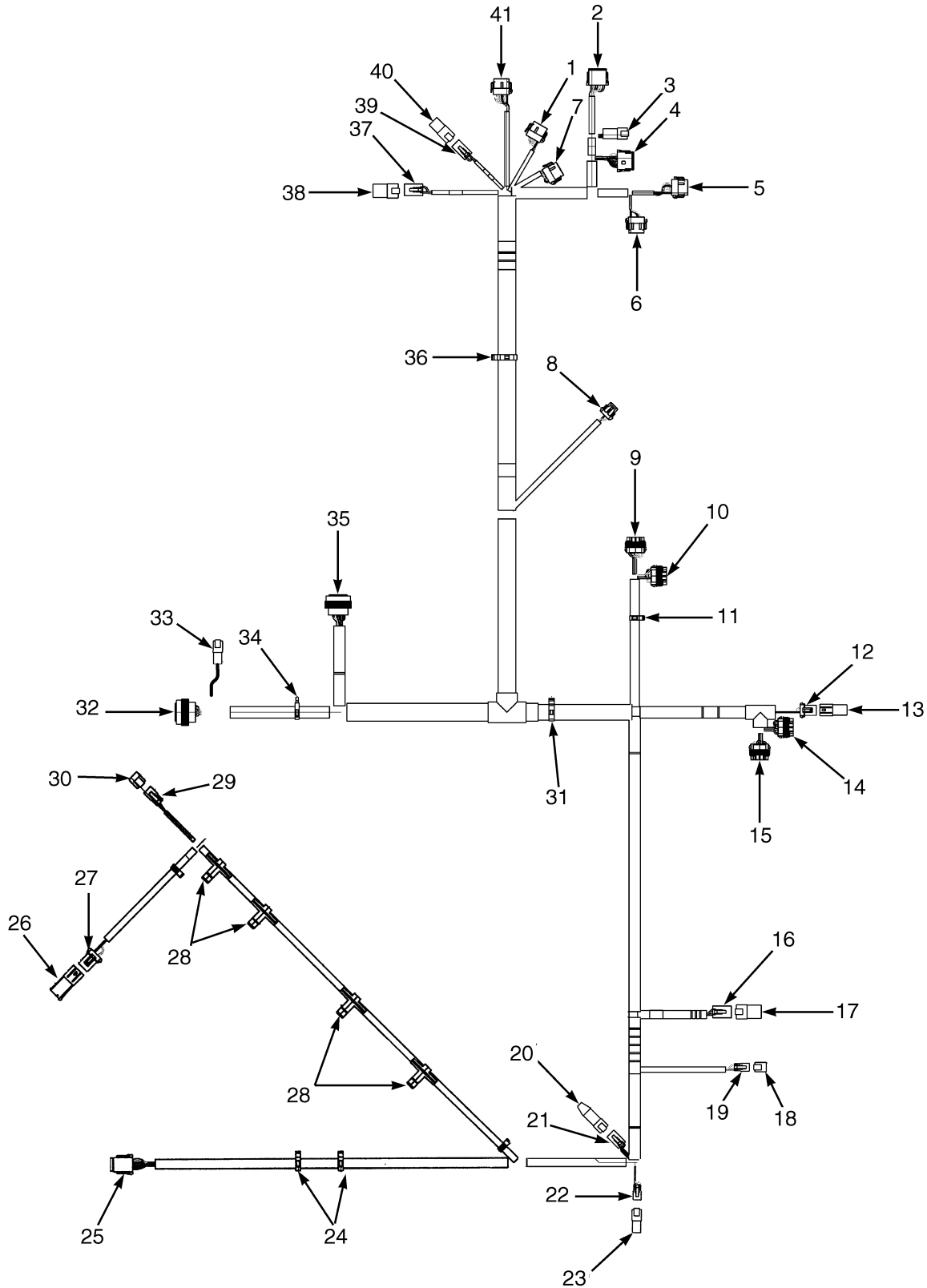
WIRE HARNESS
RH CHASSIS – GM 2.4L (→ S/N L177B11117D)

ITEM	PART NO.	DESCRIPTION	QTY
23	1351681	Connector (End Cap)	1
24	1509888	Clip	1
25	.....	Connector Assembly (End Cap)	1
25	1329150	Connector	1
25	1329151	Terminal	1
25	1327164	Seal	2
26	.....	Connector Assembly (Coolant Level)	1
26	1329152	Plug	1
26	1329151	Terminal	1
26	1330281	Terminal	2
26	1402888	Seal	2
27	1509888	Clip	1
28	.....	Connector Assembly (Bus Terminal 2)	1
28	1489656	Connector (4-Way)	1
28	1489657	Connector	1
28	1330438	Terminal (Socket)	4
29	1525577	Connector (With Resistor) (End Cap)	1
30	.....	Connector Assembly (Key Switch)	1
30	1493465	Connector	1
30	1330414	Connector (Secondary Lock)	1
30	1330437	Terminal (Pin)	2
31	.....	Connector Assembly (Key Switch)	1
31	1490242	Connector	1
31	1490243	Connector	1
31	1330438	Terminal (Socket)	2
32	1587778	Clip	4
33	.....	Connector Assembly (To Transmission Harness)	1
33	1502627	Connector (Socket)	1
33	1330438	Terminal (Socket)	17
33	1484377	Plug	6
34	1500899	Clip	1
35	.....	Connector Assembly (To Engine Harness)	1
35	1531501	Connector	1
35	1330438	Terminal (Socket)	9
35	1463139	Terminal	6
35	1554359	Terminal	4
35	1484377	Plug	10
36	1534282	Clip	4
37	.....	Connector Assembly (To Lights/Cab Harness)	1
37	1514602	Connector	1
37	1514603	Connector	1
37	1554359	Terminal	4
38	.....	Connector Assembly (End Cap)	1
38	1514597	Connector	1
38	1330439	Plug	4
39	.....	Connector Assembly (Accessory 1)	1
39	1545202	Connector	1
39	1546697	Connector	1
39	1554359	Terminal	2
40	.....	Connector Assembly (End Cap)	1

WIRE HARNESS
RH CHASSIS – GM 2.4L (→ S/N L177B11117D)

ITEM	PART NO.	DESCRIPTION	QTY
40	1480187	Connector	1
40	1330439	Plug	2
41	. . . . .	Connector Assembly (Vehicle System Manager)	1
41	1525570	Connector	1
41	1530037	Connector	1
41	1463139	Terminal	8
41	1484377	Plug	4
42	1402815	Clip	2

WIRE HARNESS (FIGURE 6-32) RH CHASSIS — GM 2.4L (S/N L177B11118D ↔ 1/2007)



BP080566

WIRE HARNESS
RH CHASSIS – GM 2.4L (S/N L177B11118D ↔ 1/2007)

ITEM	PART NO.	DESCRIPTION	QTY
	2085944	Wire Harness (Chassis)	1
1	.....	Connector Assembly (Vehicle System Manager)	1
1	1525568	Connector	1
1	1530037	Connector	1
1	1330438	Terminal (Socket)	9
1	1484377	Plug	3
2	.....	Connector Assembly (Vehicle System Manager)	1
2	1525563	Connector	1
2	1500913	Connector	1
2	1330438	Terminal (Socket)	8
2	1363886	Terminal (Socket)	4
3	.....	Connector Assembly (To Cowl Harness)	1
3	1489655	Connector (4 Way)	1
3	1330416	Connector	1
3	1330437	Terminal (Pin)	4
4	.....	Connector Assembly (To Cowl Harness)	1
4	1493428	Connector (12-Way)	1
4	1500913	Connector	1
4	1330439	Plug	3
4	1484377	Plug	3
4	1330438	Terminal (Socket)	9
5	.....	Connector Assembly (Vehicle System Manager)	1
5	1525567	Connector	1
5	1529046	Connector	1
5	1463139	Terminal	3
5	1484377	Plug	9
6	.....	Connector Assembly (Vehicle System Manager)	1
6	1525569	Connector	1
6	1529046	Connector	1
6	1463139	Terminal	3
6	1484377	Plug	9
7	.....	Connector Assembly (Vehicle System Manager)	1
7	1525567	Connector	1
7	1530037	Connector	1
7	1463139	Terminal	9
7	1484377	Plug	3
8	.....	Connector Assembly (Horn)	1
8	1476064	Connector	1
8	1476109	Connector Lock	1
8	1330356	Seal	2
8	1330355	Terminal	3
8	1476108	Wire Seal	1
9	.....	Connector Assembly (Power Distribution Module)	1
9	1521183	Connector	1
9	1521188	Lock	1
9	1323579	Seal	7
9	1327164	Seal	1
9	1330281	Terminal	4
9	1521989	Terminal	3
10	.....	Connector Assembly (Power Distribution Module)	1

WIRE HARNESS

RH CHASSIS – GM 2.4L (S/N L177B11118D ↔ 1/2007)

ITEM	PART NO.	DESCRIPTION	QTY
10	1521183	Connector	1
10	1521184	Connector	1
10	1521188	Lock	1
10	1323579	Seal	7
10	1327164	Seal	1
10	1330281	Terminal	4
10	1521989	Terminal	3
10	1402888	Seal	2
11	1534828	Clip	1
12	.....	Connector Assembly (Hydraulic Filter)	1
12	1329152	Plug	1
12	1329151	Terminal	1
12	1330281	Terminal	2
12	1402888	Seal	2
13	.....	Connector Assembly (End Cap)	1
13	1329150	Connector	1
13	1329151	Terminal	1
13	1327164	Seal	2
14	.....	Connector Assembly (Power Distribution Module)	1
14	1521185	Connector	1
14	1521188	Lock	1
14	1323579	Seal	8
14	1330281	Terminal	5
14	1521989	Terminal	3
15	.....	Connector Assembly (Power Distribution Module)	1
15	1521186	Connector	1
15	1521188	Lock	1
15	1323579	Seal	7
15	1327164	Seal	1
15	1521989	Terminal	7
16	.....	Connector Assembly (Accessory 2)	1
16	1514602	Connector	1
16	1514603	Connector	1
16	1330439	Plug	1
16	1554359	Terminal	3
17	.....	Connector Assembly (End Cap)	1
17	1514597	Connector	1
17	1330439	Plug	4
18	1626727	Connector (End Cap)	1
19	.....	Connector Assembly (Hood Switch)	1
19	1490242	Connector	1
19	1402813	Clip	1
19	1330438	Terminal (Socket)	2
20	1525577	Connector (With Resistor) (End Cap)	1
21	.....	Connector Assembly (Bus Terminal 2)	1
21	1489656	Connector (4-Way)	1
21	1489657	Connector	1
21	1330438	Terminal (Socket)	4
22	.....	Connector Assembly (Alternate Horn Button)	1
22	1490242	Connector	1

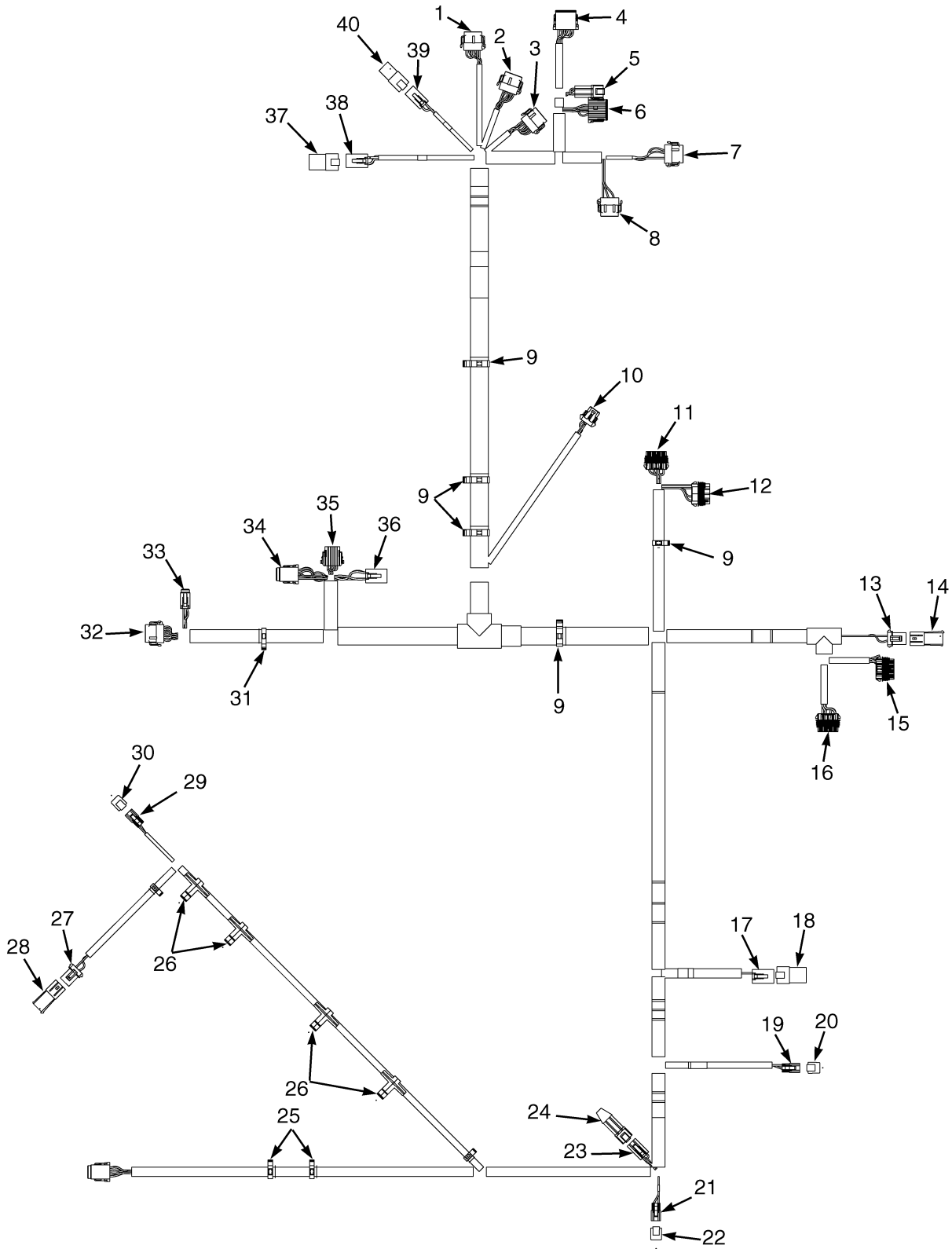
WIRE HARNESS
RH CHASSIS – GM 2.4L (S/N L177B11118D ↔ 1/2007)

ITEM	PART NO.	DESCRIPTION	QTY
22	1402813	Clip	1
22	1330438	Terminal (Socket)	2
23	1626727	Connector (End Cap)	1
24	1402815	Clip	2
25	.....	Connector Assembly (To Seat Harness)	1
25	1541991	Connector	1
25	1541992	Connector	1
25	1463139	Terminal	8
26	.....	Connector Assembly (End Cap)	1
26	1329150	Connector	1
26	1329151	Terminal	1
26	1327164	Seal	2
27	.....	Connector Assembly (Coolant Level)	1
27	1329152	Plug	1
27	1329151	Terminal	1
27	1330281	Terminal	2
27	1402888	Seal	2
28	1509888	Clip	4
29	.....	Connector Assembly (To Back-Up Alarm)	1
29	1490242	Connector	1
29	1402813	Clip	1
29	1330438	Terminal (Socket)	2
30	1626727	Connector (End Cap)	1
31	1534282	Clip	1
32	.....	Connector Assembly (To Transmission Harness)	1
32	1525567	Connector	1
32	1529046	Connector	11
32	1463139	Terminal	1
33	.....	Connector Assembly (To Transmission Harness)	1
33	1531973	Connector	1
33	1531974	Connector	1
33	1463139	Terminal	6
34	1540944	Clip	1
35	.....	Connector Assembly (To Engine Harness)	1
35	1531501	Connector	1
35	1330438	Terminal (Socket)	1
35	1330439	Plug	1
35	1484377	Plug	11
35	1463139	Terminal	1
36	1540944	Clip	3
37	.....	Connector Assembly (To Lights/Cab Harness)	1
37	1514602	Connector	1
37	1330439	Plug	4
37	1514603	Connector	1
37	1554359	Terminal	4
38	1514597	Connector (End Cap)	1
39	.....	Connector Assembly (Accessory 1)	1
39	1545202	Connector	1
39	1546697	Connector	1
39	1554359	Terminal	2

WIRE HARNESS
RH CHASSIS – GM 2.4L (S/N L177B11118D ↔ 1/2007)

ITEM	PART NO.	DESCRIPTION	QTY
40	1480187	Connector (End Cap)	1
40	1330439	Plug	2
41	.....	Connector Assembly (Vehicle System Manager)	1
41	1525570	Connector	1
41	1530037	Connector	1
41	1463139	Terminal	8
41	1484377	Plug	4

WIRE HARNESS (FIGURE 6-33) RH CHASSIS — GM 2.4L (1/2007 ↔ 10/2008)



BP080569

WIRE HARNESS
RH CHASSIS – GM 2.4L (1/2007 ↔ 10/2008)

ITEM	PART NO.	DESCRIPTION	QTY
	2089179	Wire Harness (Chassis)	1
1	.....	Connector Assembly (Vehicle System Manager, VSM)	1
1	1525570	Connector	1
1	1530037	Connector	1
1	1463139	Terminal	8
1	1484377	Plug	4
2	.....	Connector Assembly (Vehicle System Manager, VSM)	1
2	1525568	Connector	1
2	1530037	Connector	1
2	1463139	Terminal	7
2	1484377	Plug	5
3	.....	Connector Assembly (Vehicle System Manager, VSM)	1
3	1525567	Connector	1
3	1530037	Connector	1
3	1463139	Terminal	9
3	1484377	Plug	3
4	.....	Connector Assembly (Vehicle System Manager, VSM)	1
4	1525563	Connector	1
4	1500913	Connector	1
4	1330438	Terminal (Socket)	8
4	1363886	Terminal (Socket)	4
5	.....	Connector Assembly (Cowl Harness)	1
5	1489655	Connector (4 Way)	1
5	1330416	Connector	1
5	1330437	Terminal (Pin)	4
6	.....	Connector Assembly (Cowl Harness)	1
6	1493428	Connector (12-Way)	1
6	1500913	Connector	1
6	1330438	Terminal (Socket)	9
6	1330439	Plug	3
7	.....	Connector Assembly (Vehicle System Manager, VSM)	1
7	1525567	Connector	1
7	1529046	Connector	1
7	1463139	Terminal	3
7	1484377	Plug	9
8	.....	Connector Assembly (Vehicle System Manager, VSM)	1
8	1525569	Connector	1
8	1529046	Connector	1
8	1463139	Terminal	3
8	1484377	Plug	9
9	1534282	Clip	1
10	.....	Connector Assembly (Horn)	1
10	1476064	Connector	1
10	1476109	Connector Lock	1
10	1330356	Seal	2
10	1330355	Terminal	3
10	1476108	Wire Seal	1
11	.....	Connector Assembly (Power Distribution Module, PDM)	1
11	1521184	Connector	1
11	1521188	Lock	1

WIRE HARNESS RH CHASSIS – GM 2.4L (1/2007 ↔ 10/2008)

ITEM	PART NO.	DESCRIPTION	QTY
11	1323579	Seal	5
11	1327164	Seal	1
11	1330281	Terminal	6
11	1521989	Terminal	1
11	1402888	Seal	2
12	.....	Connector Assembly (Power Distribution Module, PDM)	1
12	1521183	Connector	1
12	1521188	Lock	1
12	1323579	Seal	7
12	1327164	Seal	1
12	1330281	Terminal	4
12	1521989	Terminal	3
13	.....	Connector Assembly (Hydraulic Filter)	1
13	1329152	Plug	1
13	1329151	Terminal	1
13	1330281	Terminal	2
13	1402888	Seal	2
14	.....	End Cap	1
14	1329150	Connector	1
14	1329151	Terminal	1
14	1327164	Seal	2
15	.....	Connector Assembly (Power Distribution Module, PDM)	1
15	1521185	Connector	1
15	1521188	Lock	1
15	1323579	Seal	8
15	1330281	Terminal	5
15	1521989	Terminal	3
16	.....	Connector Assembly (Power Distribution Module, PDM)	1
16	1521188	Lock	1
16	1323579	Seal	7
16	1327164	Seal	1
16	1521989	Terminal	7
17	.....	Connector Assembly (Accessory 2)	1
17	1514602	Connector	1
17	1514603	Connector	1
17	1330439	Plug	1
17	1554359	Terminal	3
18	.....	End Cap	1
18	1514597	Connector	1
18	1330439	Plug	4
19	.....	Connector Assembly (Hood And Key Switch)	1
19	1490242	Connector	1
19	1490243	Connector	1
19	1330438	Terminal (Socket)	2
20	1626727	Connector (End Cap)	1
21	.....	Connector Assembly (Alternate Horn Button)	1
21	1490242	Connector	1
21	1490243	Connector	1
21	1330438	Terminal (Socket)	1
22	1626727	Connector (End Cap)	1

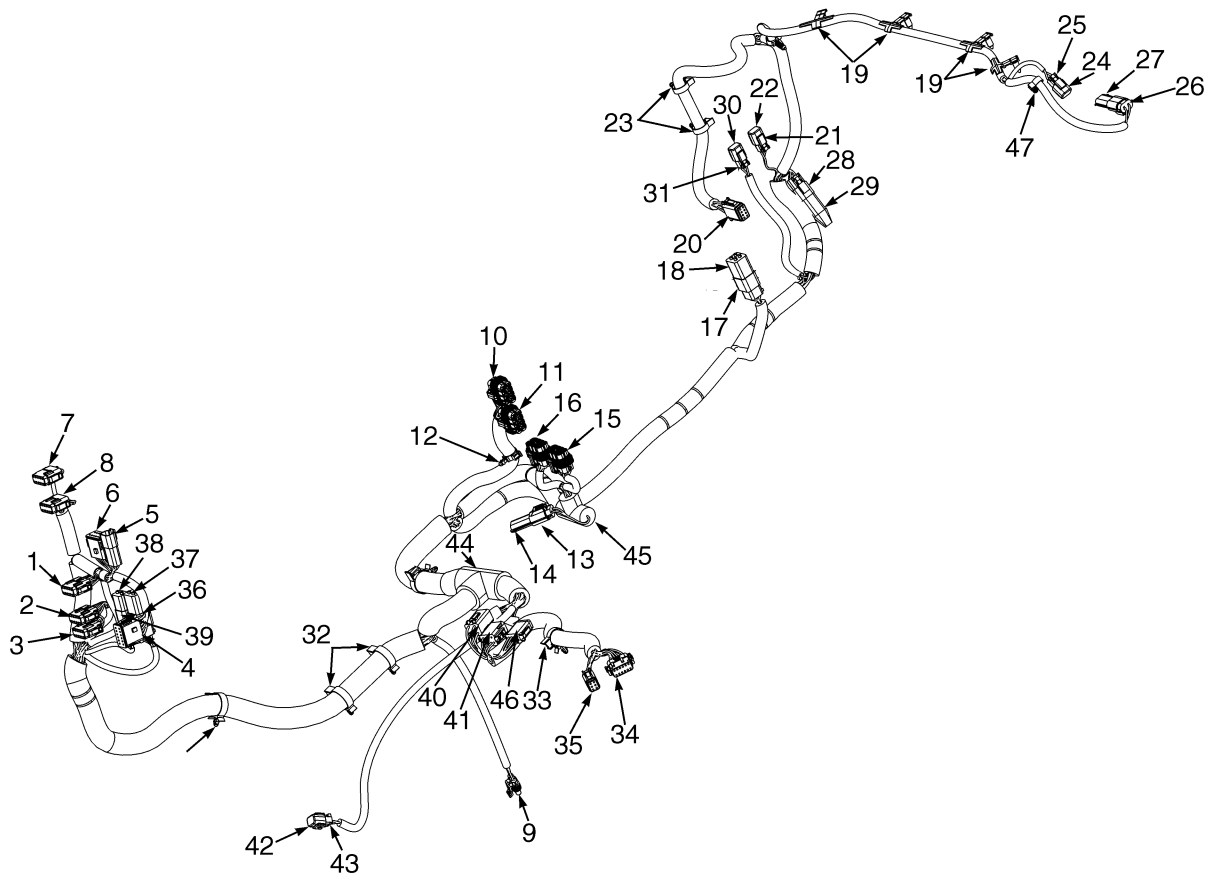
WIRE HARNESS
RH CHASSIS – GM 2.4L (1/2007 ↔ 10/2008)

ITEM	PART NO.	DESCRIPTION	QTY
23	.....	Connector Assembly (Bus Terminal 2)	1
23	1489655	Connector (4 Way)	1
23	1489657	Connector	1
23	1330438	Terminal (Socket)	1
24	1525577	Connector (With Resistor) (End Cap)	1
25	1402815	Clip	1
26	1587778	Clip	1
27	.....	Connector Assembly (Coolant Level)	1
27	1329152	Plug	1
27	1329151	Terminal	1
27	1330281	Terminal	2
27	1402888	Seal	2
28	.....	End Cap	1
28	1329150	Connector	1
28	1329151	Terminal	1
28	1327164	Seal	2
29	.....	Connector Assembly (Back-Up Alarm Harness)	1
29	1490242	Connector	1
29	1490243	Connector	1
29	1330437	Terminal (Pin)	2
30	1626727	Connector (End Cap)	1
31	1500899	Clip	1
32	.....	Connector Assembly (Transmission Harness)	1
32	1525567	Connector	1
32	1529046	Connector	1
32	1463139	Terminal	11
32	1484377	Plug	1
33	.....	Connector Assembly (Transmission Harness)	1
33	1493428	Connector (12-Way)	1
33	1531974	Connector	1
33	1463137	Terminal	6
34	.....	Connector Assembly (Engine Harness)	1
34	1541991	Connector	1
34	1541992	Connector	1
34	1463139	Terminal	8
35	.....	Connector Assembly (Engine Harness)	1
35	1502625	Connector	1
35	1502626	Connector	1
35	1330438	Terminal (Socket)	7
35	1484377	Plug	1
36	.....	Connector Assembly (Engine Harness)	1
36	1514602	Connector	1
36	1514603	Connector	1
36	1554359	Terminal	4
37	.....	End Cap	1
37	1514597	Connector	1
37	1330439	Plug	4
38	.....	Connector Assembly (Lights And Cab Harness)	1
38	1514602	Connector	1
38	1514603	Connector	1

WIRE HARNESS
RH CHASSIS – GM 2.4L (1/2007 ↔ 10/2008)

ITEM	PART NO.	DESCRIPTION	QTY
38	1554359	Terminal	4
39	.....	Connector Assembly (Accessories 1)	1
39	1545202	Connector	1
39	1546697	Connector	1
39	1554359	Terminal	2
40	.....	End Cap	1
40	1480187	Connector	1
40	1330439	Plug	2

WIRE HARNESS (FIGURE 6-34) RH CHASSIS — GM 2.4L (10/2008 ↔ S/N L177B31165H)



BP080821

WIRE HARNESS
RH CHASSIS – GM 2.4L (10/2008 ↔ S/N L177B31165H)

ITEM	PART NO.	DESCRIPTION	QTY
	2108126	Wire Harness (Chassis) (RH)	1
1	.....	Connector Assembly (Vehicle System Manager)	1
1	1525570	Connector	1
1	1463139	Terminal	8
1	1484377	Plug	4
1	1530037	Connector (Secondary Lock)	1
2	.....	Connector Assembly (Vehicle System Manager)	1
2	1525568	Connector	1
2	1463139	Terminal	1
2	1484377	Plug	5
2	1530037	Connector (Secondary Lock)	1
3	.....	Connector Assembly (Vehicle System Manager)	1
3	1525567	Connector	1
3	1463139	Terminal	9
3	1484377	Plug	3
3	1530037	Connector (Secondary Lock)	1
4	.....	Connector Assembly (Vehicle System Manager)	1
4	1525563	Connector	1
4	1363886	Terminal (Socket)	4
4	1330438	Terminal (Socket)	8
4	1500913	Connector (Secondary Lock)	1
5	.....	Connector Assembly (Cowl Harness)	1
5	1489655	Connector (4 Way)	1
5	1330437	Terminal (Pin)	4
5	1330416	Connector (Secondary Lock)	1
6	.....	Connector Assembly (Cowl Harness)	1
6	1493428	Connector (12-Way)	1
6	1330438	Terminal (Socket)	10
6	1484377	Plug	1
6	1500913	Connector (Secondary Lock)	1
7	.....	Connector Assembly (Vehicle System Manager)	1
7	1525567	Connector	1
7	1484377	Plug	9
7	1463139	Terminal	3
7	1529046	Connector (Secondary Lock)	1
8	.....	Connector Assembly (Vehicle System Manager)	1
8	1525569	Connector	1
8	1463139	Terminal	3
8	1484377	Plug	9
8	1529046	Connector (Secondary Lock)	1
9	.....	Connector Assembly (Horn)	1
9	1476064	Connector	1
9	1330355	Terminal	3
9	1330356	Seal	2
9	1476108	Wire Seal	1
9	1476109	Connector Lock (Secondary Lock)	1
10	.....	Connector Assembly (Power Distribution Module)	1
10	1521184	Connector	1
10	1327164	Seal	1
10	1330281	Terminal	6

WIRE HARNESS

RH CHASSIS – GM 2.4L (10/2008 ↔ S/N L177B31165H)

ITEM	PART NO.	DESCRIPTION	QTY
10	1521989	Terminal	1
10	1323579	Seal	5
10	1402888	Seal	2
10	1521188	Lock (Secondary Lock)	1
11	.....	Connector Assembly (Power Distribution Module)	1
11	1521183	Connector	1
11	1521989	Terminal	1
11	1330281	Terminal	4
11	1327164	Seal	1
11	1323579	Seal	7
11	1521188	Lock (Secondary Lock)	1
12	1534828	Clip	1
13	.....	Connector Assembly (Hydraulic Filter)	1
13	1329152	Plug	1
13	1330281	Terminal	2
13	1402888	Seal	2
13	1329151	Terminal (Secondary Lock)	1
14	.....	Connector Assembly (End Cap)	1
14	1329150	Connector	1
14	1327164	Seal	2
14	1329151	Terminal (Secondary Lock)	1
15	.....	Connector Assembly (Power Distribution Module)	1
15	1521185	Connector	1
15	1330281	Terminal	5
15	1521989	Terminal	3
15	1327164	Seal	1
15	1323579	Seal	8
15	1327164	Seal	1
15	1521188	Lock (Secondary Lock)	1
16	.....	Connector Assembly (Power Distribution Module)	1
16	1521186	Connector	1
16	1521989	Terminal	7
16	1327164	Seal	1
16	1323579	Seal	7
16	1521188	Lock (Secondary Lock)	1
17	.....	Connector Assembly (Accessory 2)	1
17	1514602	Connector	1
17	1554359	Terminal	3
17	1330439	Plug	1
17	1514603	Connector (Secondary Lock)	1
18	.....	Connector Assembly (End Cap)	1
18	1514597	Connector	1
18	1330439	Plug	4
19	1587778	Clip	4
20	.....	Connector Assembly (Seat Harness)	1
20	1541991	Connector	1
20	1463139	Terminal	8
20	1541992	Connector (Secondary Lock)	1
21	.....	Connector Assembly (Alternate Horn Button)	1
21	1490242	Connector	1

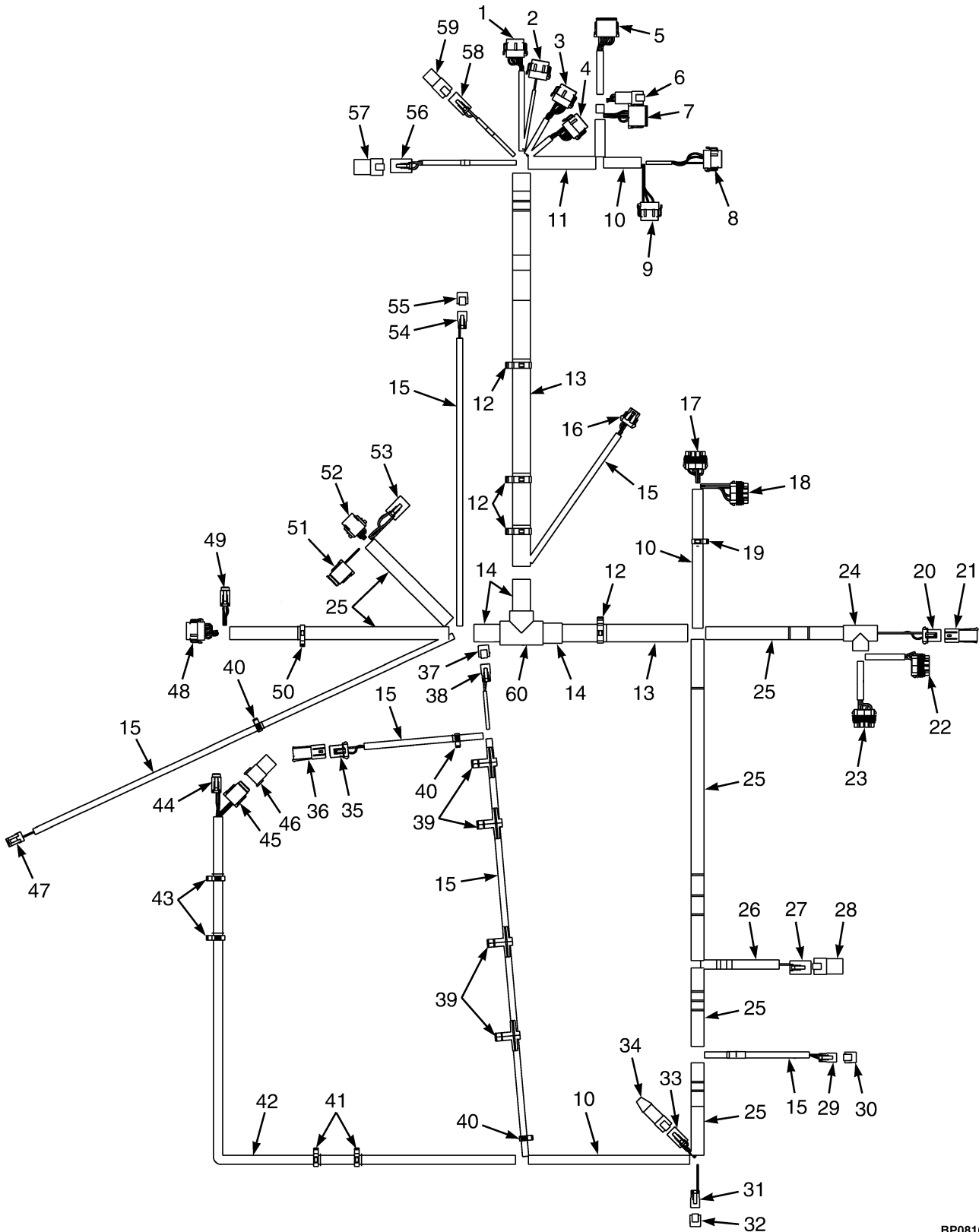
WIRE HARNESS
RH CHASSIS – GM 2.4L (10/2008 ↔ S/N L177B31165H)

ITEM	PART NO.	DESCRIPTION	QTY
21	1330438	Terminal (Socket)	2
21	1490243	Connector (Secondary Lock)	1
22	1626727	Connector (End Cap)	1
23	1509888	Clip	2
24	1626727	Connector (End Cap)	1
25	.....	Connector Assembly (Back-Up Alarm)	1
25	1490242	Connector	1
25	1330438	Terminal (Socket)	2
25	1490243	Connector (Secondary Lock)	1
26	.....	Connector Assembly (Coolant Level)	1
26	1329152	Plug	1
26	1330281	Terminal	2
26	1402888	Seal	2
26	1329151	Terminal (Secondary Lock)	1
27	.....	Connector Assembly (End Cap)	1
27	1493428	Connector (12-Way)	1
27	1327164	Seal	2
27	1329151	Terminal (Secondary Lock)	1
28	.....	Connector Assembly (Bus Terminal)	1
28	1489656	Connector (4-Way)	1
28	1330438	Terminal (Socket)	4
28	1489657	Connector (Secondary Lock)	1
29	1531973	Connector (End Cap)	1
30	1626727	Connector (End Cap)	1
31	.....	Connector Assembly (Hood Switch/Key Switch)	1
31	1490242	Connector	1
31	1330438	Terminal (Socket)	1
31	1490243	Connector (Secondary Lock)	1
32	1534282	Clip	4
33	1500899	Clip	1
34	.....	Connector Assembly (Transmission Harness)	1
34	1525567	Connector	1
34	1463139	Terminal	11
34	1484377	Plug	1
34	1529046	Connector (Secondary Lock)	1
35	.....	Connector Assembly (Transmission Harness)	1
35	1531973	Connector	1
35	1463139	Terminal	6
35	1531974	Connector (Secondary Lock)	1
36	.....	Connector Assembly (Lights/Cab Harness)	1
36	1514602	Connector	1
36	1554359	Terminal	4
36	1514603	Connector (Secondary Lock)	1
37	.....	Connector Assembly (End Cap)	1
37	1514597	Connector	1
37	1330439	Plug	4
38	.....	Connector Assembly (End Cap)	1
38	1480187	Connector	1
38	1330439	Plug	2
39	.....	Connector Assembly (Accessory 1)	1

WIRE HARNESS
RH CHASSIS – GM 2.4L (10/2008 ↔ S/N L177B31165H)

ITEM	PART NO.	DESCRIPTION	QTY
39	1545202	Connector	1
39	1554359	Terminal	2
39	1546697	Connector	1
40	.....	Connector Assembly (Engine Harness)	1
40	1514602	Connector	1
40	1554359	Terminal	4
40	1514603	Connector	1
41	.....	Connector Assembly (To Engine Harness)	1
41	1502625	Connector	1
41	1330438	Terminal (Socket)	7
41	1484377	Plug	1
41	1502626	Connector (Secondary Lock)	1
42	1626727	Connector (End Cap)	1
43	.....	Connector Assembly (Hydraulic Solenoid)	1
43	1490242	Connector	1
43	1330438	Terminal (Socket)	1
43	1490243	Connector	1
44	1531492	T-Fitting	1
45	1531490	Conduit	1
46	.....	Connector Assembly (To Engine Harness)	1
46	1541991	Connector	1
46	1463139	Terminal	8
46	1541992	Connector (Secondary Lock)	1
47	1509888	Clip	2

WIRE HARNESS (FIGURE 6-35) RH CHASSIS — GM 2.4L (S/N L177B31166H →)



BP081012

WIRE HARNESS
RH CHASSIS – GM 2.4L (S/N L177B31166H →)

ITEM	PART NO.	DESCRIPTION	QTY
	4604203	Wire Harness (Chassis)	1
1	.....	Connector Assembly (Vehicle System Manager)	1
1	1525570	Connector	1
1	1463139	Terminal	8
1	1484377	Plug	4
1	1530037	Connector (Secondary Lock)	1
2	.....	Connector Assembly (Vehicle System Manager)	1
2	1525569	Connector	1
2	1484377	Plug	10
2	1463139	Terminal	2
2	1530037	Connector (Secondary Lock)	1
3	.....	Connector Assembly (Vehicle System Manager)	1
3	1525568	Connector	1
3	1463139	Terminal	7
3	1484377	Plug	5
3	1530037	Connector (Secondary Lock)	1
4	.....	Connector Assembly (Vehicle System Manager)	1
4	1525567	Connector	1
4	1463139	Terminal	9
4	1484377	Plug	3
4	1530037	Connector (Secondary Lock)	1
5	.....	Connector Assembly (Vehicle System Manager)	1
5	1525563	Connector	1
5	1363886	Terminal (Socket)	4
5	1330438	Terminal (Socket)	8
5	1500913	Connector (Secondary Lock)	1
6	.....	Connector Assembly (Cowl Harness)	1
6	1489655	Connector (4 Way)	1
6	1330437	Terminal (Pin)	4
6	1330416	Connector (Secondary Lock)	1
7	.....	Connector Assembly (Cowl Harness)	1
7	1493428	Connector (12-Way)	1
7	1330438	Terminal (Socket)	10
7	1484377	Plug	2
7	1500913	Connector (Secondary Lock)	1
8	.....	Connector Assembly (Vehicle System Manager)	1
8	1525567	Connector	1
8	1484377	Plug	9
8	1463139	Terminal	3
8	1529046	Connector (Secondary Lock)	1
9	.....	Connector Assembly (Vehicle System Manager)	1
9	1525569	Connector	1
9	1463139	Terminal	3
9	1484377	Plug	9
9	1529046	Connector (Secondary Lock)	1
10	275496	Conduit	AR
11	275497	Conduit	AR
12	1534282	Clip	4
13	1540388	Conduit	AR
14	275499	Conduit	AR

WIRE HARNESS RH CHASSIS – GM 2.4L (S/N L177B31166H →)

ITEM	PART NO.	DESCRIPTION	QTY
15	275493	Conduit	AR
16	.....	Connector Assembly (Horn)	1
16	1476064	Connector	1
16	1330355	Terminal	3
16	1330356	Seal	2
16	1476108	Wire Seal	1
16	1476109	Connector Lock (Secondary Lock)	1
17	.....	Connector Assembly (Power Distribution Module)	1
17	1521184	Connector	1
17	1327164	Seal	1
17	1330281	Terminal	6
17	1521989	Terminal	1
17	1323579	Seal	5
17	1402888	Seal	2
17	1521188	Lock (Secondary Lock)	1
18	.....	Connector Assembly (Power Distribution Module)	1
18	1521183	Connector	1
18	1330281	Terminal	4
18	1327164	Seal	1
18	1323579	Seal	7
18	1521989	Terminal	3
18	1521188	Lock (Secondary Lock)	1
19	1534828	Clip	1
20	.....	Connector Assembly (Hydraulic Filter)	1
20	1329152	Plug	1
20	1330281	Terminal	2
20	1402888	Seal	2
20	1329151	Terminal (Secondary Lock)	1
21	.....	Connector Assembly (End Cap)	1
21	1329150	Connector	1
21	1327164	Seal	2
21	1329151	Terminal (Secondary Lock)	1
22	.....	Connector Assembly (Power Distribution Module)	1
22	1521185	Connector	1
22	1330281	Terminal	5
22	1521989	Terminal	3
22	1323579	Seal	8
22	1521188	Lock (Secondary Lock)	1
23	.....	Connector Assembly (Power Distribution Module)	1
23	1521186	Connector	1
23	1521989	Terminal	7
23	1323579	Seal	7
23	1327164	Seal	1
23	1521188	Lock (Secondary Lock)	1
24	1531490	Conduit	1
25	275497	Conduit	AR
26	275495	Conduit	AR
27	.....	Connector Assembly (Accessory 2)	1
27	1514602	Connector	1
27	1554359	Terminal	3

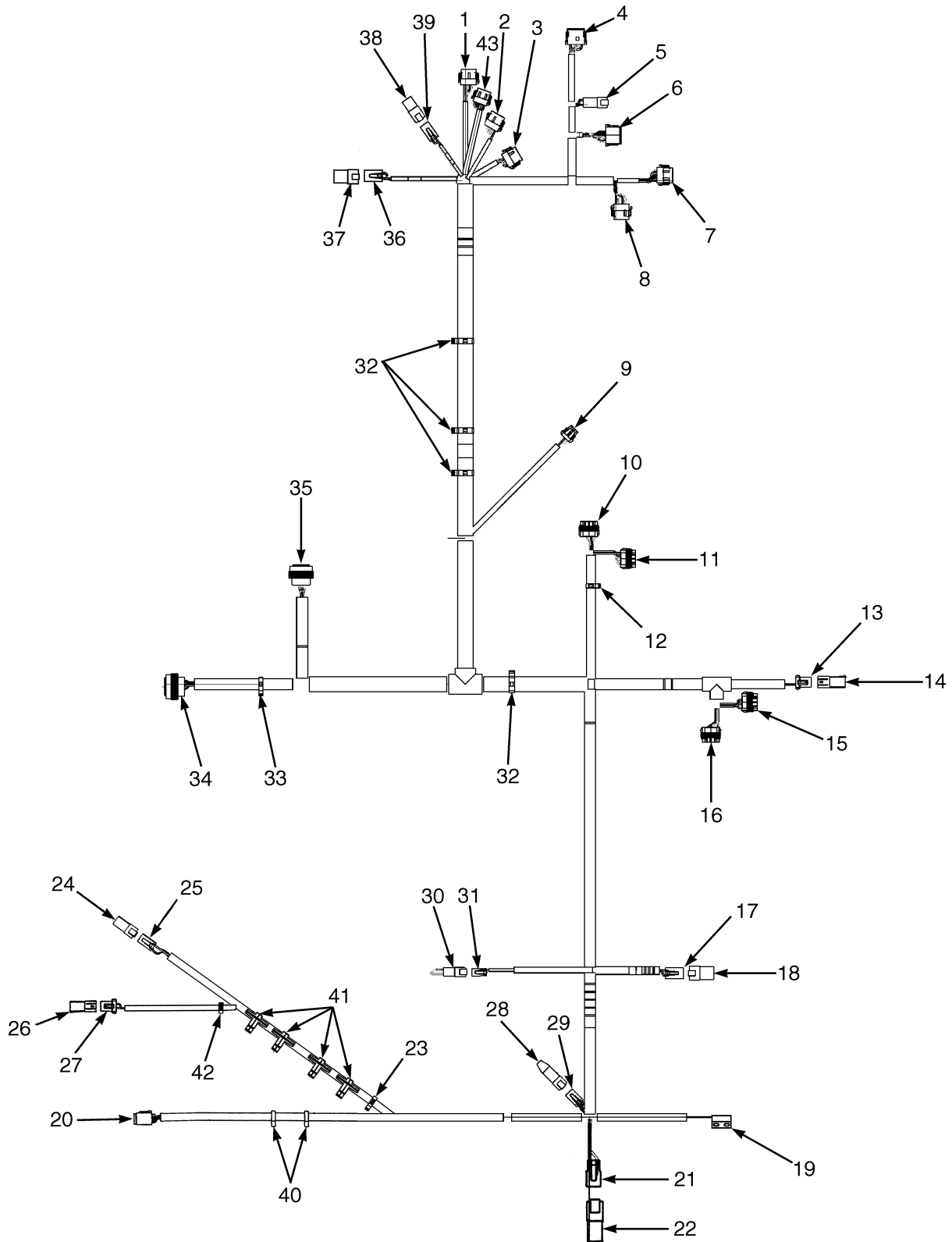
WIRE HARNESS
RH CHASSIS – GM 2.4L (S/N L177B31166H →)

ITEM	PART NO.	DESCRIPTION	QTY
27	1330439	Plug	1
27	1514603	Connector (Secondary Lock)	1
28	.....	Connector Assembly (End Cap)	1
28	1514597	Connector	1
28	1330439	Plug	4
29	.....	Connector Assembly (Hood Switch/Key Switch)	1
29	1490242	Connector	1
29	1330438	Terminal (Socket)	1
29	1490243	Connector (Secondary Lock)	1
30	1626727	Connector (End Cap)	1
31	.....	Connector Assembly (Alternate Horn Button)	1
31	1490242	Connector	1
31	1330438	Terminal (Socket)	2
31	1490243	Connector (Secondary Lock)	1
32	1626727	Connector (End Cap)	1
33	.....	Connector Assembly (Bus Terminal)	1
33	1489656	Connector (4-Way)	1
33	1330438	Terminal (Socket)	4
33	1489657	Connector (Secondary Lock)	1
34	1531973	Connector (End Cap)	1
35	.....	Connector Assembly (Coolant Level)	1
35	1329152	Plug	1
35	1330281	Terminal	2
35	1402888	Seal	2
35	1329151	Terminal (Secondary Lock)	1
36	.....	Connector Assembly (End Cap)	1
36	1493428	Connector (12-Way)	1
36	1327164	Seal	2
36	1329151	Terminal (Secondary Lock)	1
37	1626727	Connector (End Cap)	1
38	.....	Connector Assembly (Back-Up Alarm)	1
38	1490242	Connector	1
38	1330438	Terminal (Socket)	2
38	1490243	Connector (Secondary Lock)	1
39	1587778	Clip	4
40	1509888	Clip	2
41	1402815	Clip	2
42	1699754	Conduit	AR
43	1509890	Clip	2
44	.....	Connector Assembly (Seat Harness)	1
44	1531973	Connector	1
44	1463139	Terminal	4
44	1484377	Plug	2
44	1531974	Connector (Secondary Lock)	1
45	.....	Connector Assembly (MLM Harness)	1
45	1541991	Connector	1
45	1463139	Terminal	5
45	1484377	Plug	3
45	1541992	Connector (Secondary Lock)	1
46	.....	Connector Assembly (Endcap)	1

WIRE HARNESS RH CHASSIS – GM 2.4L (S/N L177B31166H →)

ITEM	PART NO.	DESCRIPTION	QTY
46	1541988	Connector	1
46	1484377	Plug	8
47	.....	Connector Assembly (Hydraulic Temp)	1
47	1402868	Connector	1
47	1323576	Terminal	2
48	.....	Connector Assembly (Transmission Harness)	1
48	1525567	Connector	1
48	1463139	Terminal	11
48	1484377	Plug	1
48	1529046	Connector (Secondary Lock)	1
49	.....	Connector Assembly (Transmission Harness)	1
49	1531973	Connector	1
49	1463139	Terminal	6
49	1531974	Connector (Secondary Lock)	1
50	1500899	Clip	1
51	.....	Connector Assembly (Engine Harness)	1
51	1541991	Connector	1
51	1463139	Terminal	8
51	1541992	Connector (Secondary Lock)	1
52	.....	Connector Assembly (Engine Harness)	1
52	1502625	Connector	1
52	1330438	Terminal (Socket)	8
52	1484377	Plug	1
52	1502626	Connector (Secondary Lock)	1
53	.....	Connector Assembly (Engine Harness)	1
53	1514602	Connector	1
53	1554359	Terminal	4
53	1514603	Connector (Secondary Lock)	1
54	.....	Connector Assembly (Hydraulic Solenoid)	1
54	1490242	Connector	1
54	1330438	Terminal (Socket)	2
54	1490243	Connector	1
55	1626727	Connector (End Cap)	1
56	.....	Connector Assembly (Lights/Cab Harness)	1
56	1514602	Connector	1
56	1554359	Terminal	4
56	1514603	Connector (Secondary Lock)	1
57	.....	Connector Assembly (End Cap)	1
57	1514597	Connector	1
57	1330439	Plug	4
58	.....	Connector Assembly (Accessory 1)	1
58	1545202	Connector	1
58	1554359	Terminal	2
58	1546697	Connector	1
59	.....	Connector Assembly (End Cap)	1
59	1480187	Connector	1
60	1531492	T-Fitting	1

WIRE HARNESS (FIGURE 6-36) RH CHASSIS — YANMAR 2.6L AND 3.3L, DIESEL (→ 2/2007)



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WIRE HARNESS
RH CHASSIS – YANMAR 2.6L AND 3.3L, DIESEL (→ 2/2007)

ITEM	PART NO.	DESCRIPTION	QTY
	2075562	Wire Harness (RH Chassis)	1
1	1525570	Connector (Vehicle System Manager)	1
1	1463139	Terminal	7
1	1484377	Plug	5
1	1530037	Connector	1
2	1525568	Connector (Vehicle System Manager)	1
2	1463139	Terminal	9
2	1484377	Plug	3
2	1530037	Connector	1
3	1525567	Connector (Vehicle System Manager)	1
3	1530037	Connector	1
3	1463139	Terminal	9
3	1484377	Plug	3
4	1525563	Connector (Vehicle System Manager)	1
4	1500913	Connector	1
4	1330438	Terminal (Socket)	8
4	1363886	Terminal (Socket)	4
5	1489655	Connector (4 Way) (To Cowl Harness)	1
5	1330416	Connector	1
5	1330437	Terminal (Pin)	4
6	1493428	Connector (12-Way) (To Cowl Harness)	1
6	1330438	Terminal (Socket)	9
6	1484377	Plug	3
6	1500913	Connector	1
7	1525567	Connector (Vehicle System Manager)	1
7	1529046	Connector	1
7	1463139	Terminal	6
7	1484377	Plug	6
8	1525569	Connector (Vehicle System Manager)	1
8	1529046	Connector	1
8	1463139	Terminal	9
8	1484377	Plug	3
9	1476064	Connector (Horn)	1
9	1476109	Connector Lock	1
9	1330356	Seal	2
9	1330355	Terminal	3
9	1476108	Wire Seal	1
10	1521184	Connector (Power Distribution Module)	1
10	1521188	Lock	1
10	1323579	Seal	5
10	1327164	Seal	2
10	1330281	Terminal	5
10	1521989	Terminal	1
10	1402888	Seal	1
11	1521183	Connector (Power Distribution Module)	1
11	1521188	Lock	1
11	1323579	Seal	7
11	1327164	Seal	1
11	1330281	Terminal	4
11	1521989	Terminal	3

WIRE HARNESS

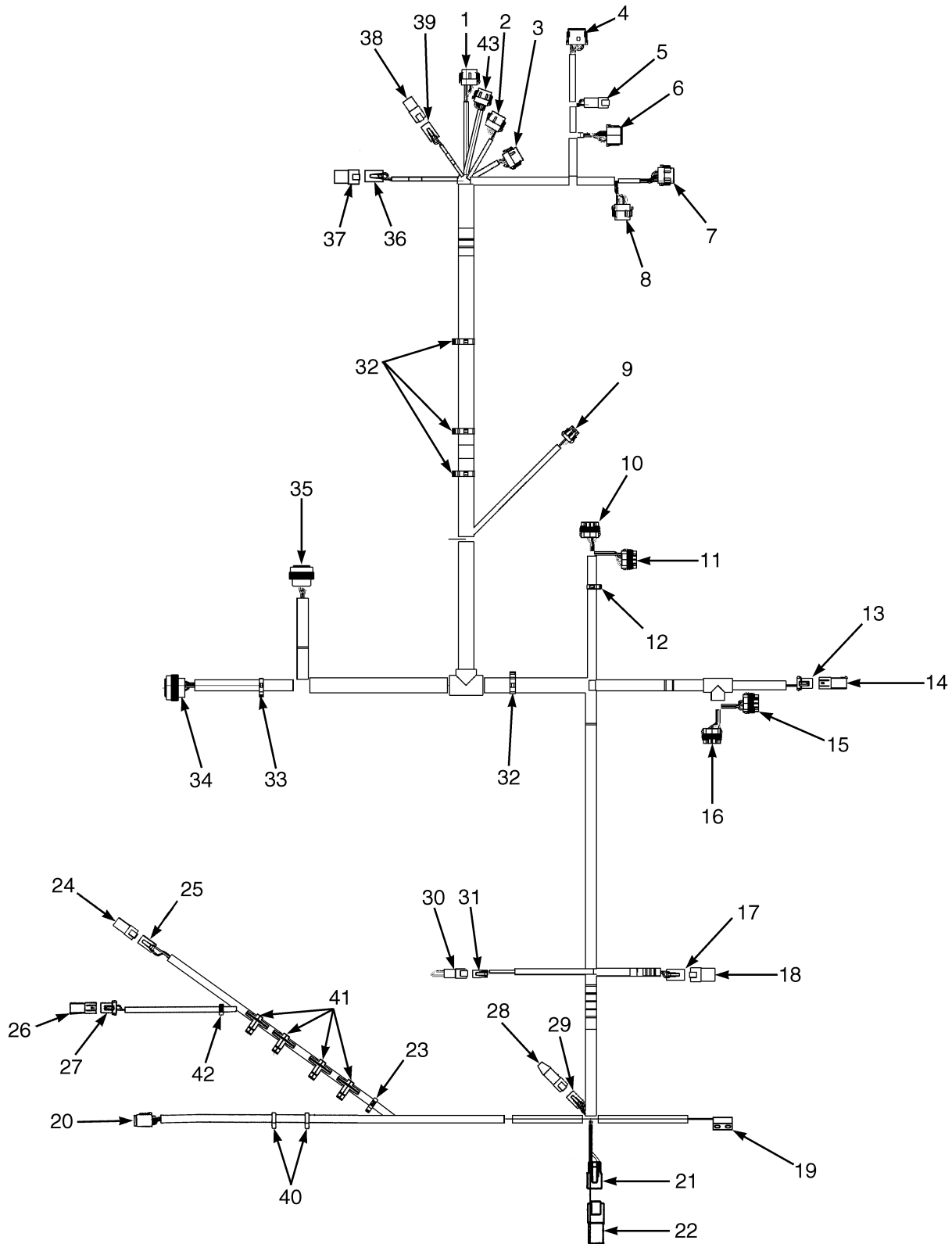
RH CHASSIS – YANMAR 2.6L AND 3.3L, DIESEL (→ 2/2007)

ITEM	PART NO.	DESCRIPTION	QTY
12	1534828	Clip	1
13	1329152	Plug (Hydraulic Filter)	1
13	1329151	Terminal	1
13	1330281	Terminal	2
13	1402888	Seal	2
14	1329150	Connector (End Cap)	1
14	1327164	Seal	2
14	1329151	Terminal	1
15	1521185	Connector (Power Distribution Module)	1
15	1521188	Lock	1
15	1323579	Seal	8
15	1521989	Terminal	2
15	1330281	Terminal	6
15	1521989	Terminal	2
16	1521186	Connector (Power Distribution Module)	1
16	1521188	Lock	1
16	1323579	Seal	7
16	1327164	Seal	1
16	1521989	Terminal	7
17	1514602	Connector (Accessory 2)	1
17	1514603	Connector	1
17	1330439	Plug	1
17	1554359	Terminal	3
18	1514597	Connector (End Cap)	1
18	1330439	Plug	4
19	1572588	Switch (Hood Switch)	1
20	1541991	Connector (To Seat Harness)	1
20	1541992	Connector	1
20	1463139	Terminal	8
21	1490242	Connector (Socket)(Alternate Horn Button)	1
21	1561519	Connector	1
21	1330438	Terminal (Socket)	2
22	1351681	Connector (End Cap)	1
23	1509890	Clip	1
24	1351683	Connector (End Cap)	1
25	1493430	Connector (To Back-Up Alarm)	1
25	1529052	Connector	1
25	1330438	Terminal (Socket)	6
26	1329150	Connector (End Cap)	1
26	1329151	Terminal	1
26	1327164	Seal	2
27	1329152	Plug	1
27	1329151	Terminal	1
27	1330281	Terminal	2
27	1402888	Seal	2
28	1525577	Connector (With Resistor) (End Cap)	1
29	1489656	Connector (4-Way) (Socket)(Bus Terminal)	1
29	1489657	Connector (Socket)	1
29	1330438	Terminal (Socket)	4
30	1493465	Connector (Key Switch)	1

WIRE HARNESS
RH CHASSIS – YANMAR 2.6L AND 3.3L, DIESEL (→ 2/2007)

ITEM	PART NO.	DESCRIPTION	QTY
30	1330414	Connector (Secondary Lock)	1
30	1330437	Terminal (Pin)	2
31	1490242	Connector (Socket)(Key Switch)	1
31	1490243	Connector (Socket)	1
31	1330438	Terminal (Socket)	2
32	1534282	Clip	4
33	1500899	Clip	1
34	1502627	Connector (Socket) (To Transmission Harness)	1
34	1330438	Terminal (Socket)	16
34	1484377	Plug	7
35	1531501	Connector (To Engine Harness)	1
35	1330438	Terminal (Socket)	13
35	1330439	Plug	1
35	1484377	Plug	6
35	1554359	Terminal	3
35	1463139	Terminal	6
36	1514602	Connector (To Lights/Cab Harness)	1
36	1514603	Connector	1
36	1554359	Terminal	4
37	.....	(End Cap) .....	..
37	1514597	Connector	1
37	1330439	Plug	4
38	.....	(End Cap) .....	..
38	1480187	Connector	1
38	1330439	Plug	2
39	1545202	Connector (Accessory 1)	1
39	1554359	Terminal	2
39	1546697	Connector	1
40	1402815	Clip	2
41	1587778	Clip	4
42	1509888	Clip	2
43	1525569	Connector (Vehicle System Manager)	1
43	1530037	Connector	1
43	1463139	Terminal	11
43	1484377	Plug	1

WIRE HARNESS (FIGURE 6-37) RH CHASSIS — YANMAR 2.6L AND 3.3L, DIESEL (→ S/N L177B11117D)



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WIRE HARNESS
RH CHASSIS – YANMAR 2.6L AND 3.3L, DIESEL (→ S/N L177B11117D)

ITEM	PART NO.	DESCRIPTION	QTY
	2078880	Wire Harness (Chassis)	1
1	.....	Connector Assembly (Vehicle System Manager)	1
1	1525570	Connector	1
1	1463139	Terminal	8
1	1484377	Plug	4
1	1530037	Connector	1
2	.....	Connector Assembly (Vehicle System Manager)	1
2	1525568	Connector	1
2	1463139	Terminal	9
2	1484377	Plug	3
2	1530037	Connector	1
3	.....	Connector Assembly (Vehicle System Manager)	1
3	1525567	Connector	1
3	1530037	Connector	1
3	1463139	Terminal	9
3	1484377	Plug	3
4	.....	Connector Assembly (Vehicle System Manager)	1
4	1525563	Connector	1
4	1500913	Connector	1
4	1330438	Terminal (Socket)	8
4	1363886	Terminal (Socket)	4
5	.....	Connector Assembly (To Cowl Harness)	1
5	1489655	Connector (4 Way)	1
5	1330416	Connector	1
5	1330437	Terminal (Pin)	4
6	.....	Connector Assembly (To Cowl Harness)	1
6	1493428	Connector (12-Way)	1
6	1330438	Terminal (Socket)	9
6	1484377	Plug	3
6	1500913	Connector	1
7	.....	Connector Assembly (Vehicle System Manager)	1
7	1525567	Connector	1
7	1529046	Connector	1
7	1463139	Terminal	3
7	1484377	Plug	9
8	.....	Connector Assembly (Vehicle System Manager)	1
8	1525569	Connector	1
8	1529046	Connector	1
8	1463139	Terminal	9
8	1484377	Plug	3
9	.....	Connector Assembly (Horn)	1
9	1476064	Connector	1
9	1476109	Connector Lock	1
9	1330356	Seal	2
9	1330355	Terminal	3
9	1476108	Wire Seal	1
10	.....	Connector Assembly (Power Distribution Module)	1
10	1521184	Connector	1
10	1521188	Lock	1
10	1323579	Seal	5

WIRE HARNESS

RH CHASSIS – YANMAR 2.6L AND 3.3L, DIESEL (→ S/N L177B11117D)

ITEM	PART NO.	DESCRIPTION	QTY
10	1327164	Seal	2
10	1330281	Terminal	5
10	1521989	Terminal	1
10	1402888	Seal	1
11	.....	Connector Assembly (Power Distribution Module)	1
11	1521183	Connector	1
11	1521188	Lock	1
11	1323579	Seal	7
11	1327164	Seal	1
11	1330281	Terminal	4
11	1521989	Terminal	3
12	1534828	Clip	1
13	.....	Connector Assembly (Hydraulic Filter)	1
13	1329152	Plug	1
13	1329151	Terminal	1
13	1330281	Terminal	2
13	1402888	Seal	2
14	.....	Connector Assembly (End Cap)	1
14	1329150	Connector	1
14	1327164	Seal	2
14	1329151	Terminal	1
15	.....	Connector Assembly (Power Distribution Module)	1
15	1521185	Connector	1
15	1521188	Lock	1
15	1323579	Seal	8
15	1521989	Terminal	2
15	1330281	Terminal	6
16	.....	Connector Assembly (Power Distribution Module)	1
16	1521186	Connector	1
16	1521188	Lock	1
16	1323579	Seal	7
16	1327164	Seal	1
16	1521989	Terminal	7
17	.....	Connector Assembly (Accessory 2)	1
17	1514602	Connector	1
17	1514603	Connector	1
17	1330439	Plug	1
17	1554359	Terminal	3
18	.....	Connector Assembly (End Cap)	1
18	1514597	Connector	1
18	1330439	Plug	4
19	1572588	Switch	1
20	.....	Connector Assembly (To Seat Harness)	1
20	1541991	Connector	1
20	1541992	Connector	1
20	1463139	Terminal	8
21	.....	Connector Assembly (Alternate Horn Button)	1
21	1490242	Connector	1
21	1490243	Connector	1
21	1330438	Terminal (Socket)	2

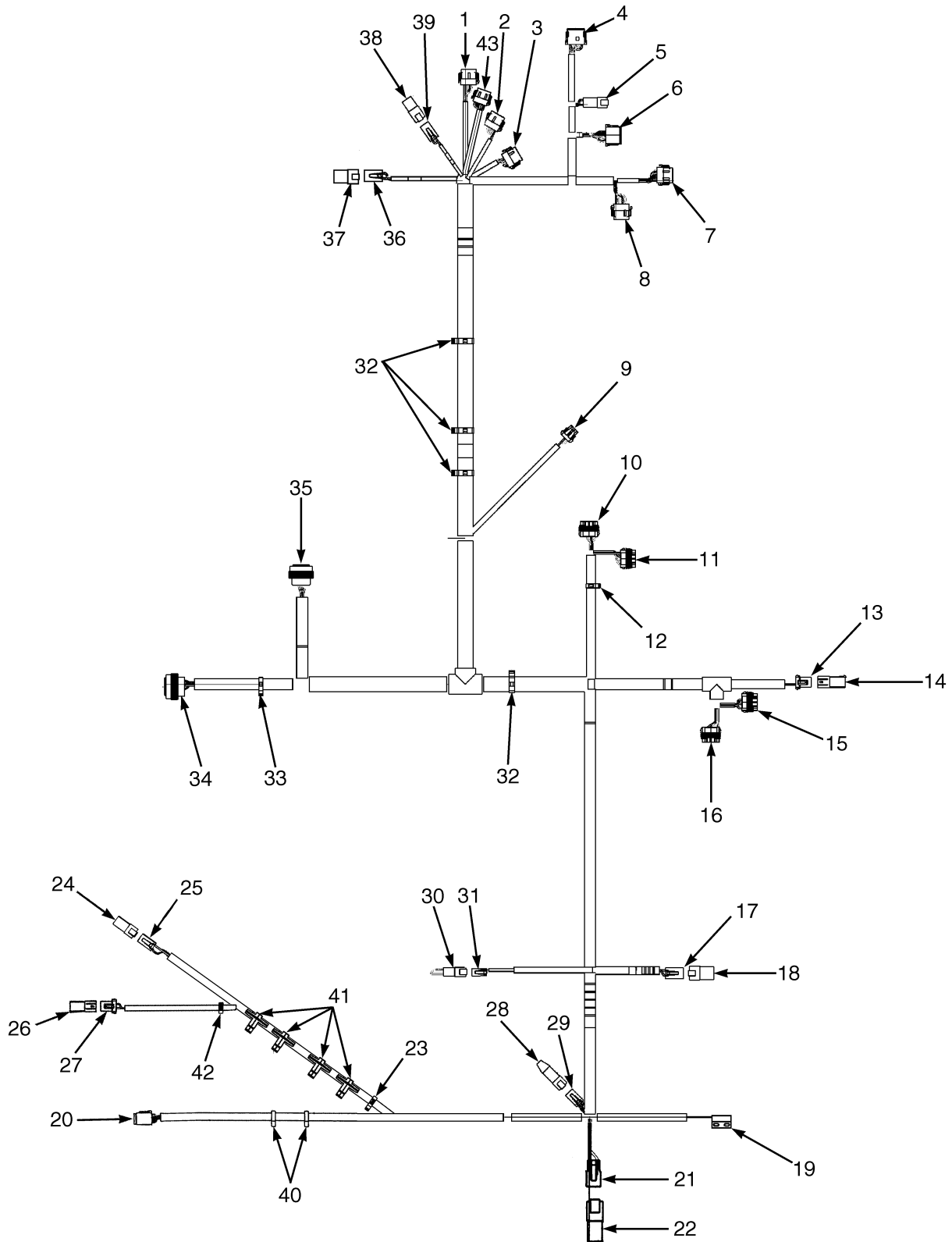
WIRE HARNESS
RH CHASSIS – YANMAR 2.6L AND 3.3L, DIESEL (→ S/N L177B11117D)

ITEM	PART NO.	DESCRIPTION	QTY
22	1351681	Connector (End Cap)	1
23	1509888	Clip	1
24	1351681	Connector (End Cap)	1
25	.....	Connector Assembly (To Back-Up Alarm)	1
25	1490242	Connector	1
25	1490243	Connector	1
25	1330438	Terminal (Socket)	2
26	.....	Connector Assembly (End Cap)	1
26	1329150	Connector	1
26	1329151	Terminal	1
26	1327164	Seal	2
27	.....	Connector Assembly (Coolant Level)	1
27	1329152	Plug	1
27	1329151	Terminal	1
27	1330281	Terminal	2
27	1402888	Seal	2
28	1525577	Connector (With Resistor) (End Cap)	1
29	.....	Connector Assembly (Bus Terminal)	1
29	1489656	Connector (4-Way)	1
29	1489657	Connector	1
29	1330438	Terminal (Socket)	4
30	.....	Connector Assembly (Key Switch)	1
30	1493465	Connector	1
30	1330414	Connector (Secondary Lock)	1
30	1330437	Terminal (Pin)	2
31	.....	Connector Assembly (Key Switch)	1
31	1490242	Connector	1
31	1490243	Connector	1
31	1330438	Terminal (Socket)	2
32	1534282	Clip	4
33	1500899	Clip	1
34	.....	Connector Assembly (To Transmission Harness)	1
34	1502627	Connector (Socket)	1
34	1330438	Terminal (Socket)	17
34	1484377	Plug	6
35	.....	Connector Assembly (To Engine Harness)	1
35	1531501	Connector	1
35	1330438	Terminal (Socket)	13
35	1330439	Plug	1
35	1484377	Plug	6
35	1554359	Terminal	3
35	1463139	Terminal	6
36	.....	Connector Assembly (To Lights/Cab Harness)	1
36	1514602	Connector	1
36	1514603	Connector	1
36	1554359	Terminal	4
37	.....	End Cap Assembly	1
37	1514597	Connector	1
37	1330439	Plug	4
38	.....	End Cap Assembly	1

WIRE HARNESS
RH CHASSIS – YANMAR 2.6L AND 3.3L, DIESEL (→ S/N L177B11117D)

ITEM	PART NO.	DESCRIPTION	QTY
38	1480187	Connector	1
38	1330439	Plug	2
39	.....	Connector Assembly (Accessory 1)	1
39	1545202	Connector	1
39	1554359	Terminal	2
39	1546697	Connector	1
40	1402815	Clip	2
41	1587778	Clip	4
42	1509888	Clip	2
43	.....	Connector Assembly (Vehicle System Manager)	1
43	1525569	Connector	1
43	1530037	Connector	1
43	1463139	Terminal	11
43	1484377	Plug	1

WIRE HARNESS (FIGURE 6-38) RH CHASSIS — YANMAR 2.6L AND 3.3L, DIESEL (S/N L177B11118D ↔ S/N L177B31165H)



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WIRE HARNESS**RH CHASSIS – YANMAR 2.6L AND 3.3L, DIESEL (S/N L177B11118D ↔ S/N L177B31165H)**

ITEM	PART NO.	DESCRIPTION	QTY
	2085947	Wire Harness (Chassis)	1
1	.....	Connector Assembly (Vehicle System Manager)	1
1	1525570	Connector	1
1	1463139	Terminal	8
1	1484377	Plug	4
1	1530037	Connector	1
2	.....	Connector Assembly (Vehicle System Manager)	1
2	1525568	Connector	1
2	1463139	Terminal	9
2	1484377	Plug	3
2	1530037	Connector	1
3	.....	Connector Assembly (Vehicle System Manager)	1
3	1525567	Connector	1
3	1529046	Connector	1
3	1463139	Terminal	9
3	1484377	Plug	3
4	.....	Connector Assembly (Vehicle System Manager)	1
4	1525563	Connector	1
4	1500913	Connector	1
4	1330438	Terminal (Socket)	8
4	1363886	Terminal (Socket)	4
5	.....	Connector Assembly (To Cowl Harness)	1
5	1489655	Connector (4 Way)	1
5	1330416	Connector	1
5	1330437	Terminal (Pin)	4
6	.....	Connector Assembly (To Cowl Harness)	1
6	1493428	Connector (12-Way)	1
6	1330438	Terminal (Socket)	9
6	1484377	Plug	3
6	1500913	Connector	1
7	.....	Connector Assembly (Vehicle System Manager)	1
7	1525567	Connector	1
7	1529046	Connector	1
7	1463139	Terminal	3
7	1484377	Plug	9
8	.....	Connector Assembly (Vehicle System Manager)	1
8	1525569	Connector	1
8	1529046	Connector	1
8	1463139	Terminal	9
8	1484377	Plug	3
9	.....	Connector Assembly (Horn)	1
9	1476064	Connector	1
9	1476109	Connector Lock	1
9	1330356	Seal	2
9	1330355	Terminal	3
9	1476108	Wire Seal	1
10	.....	Connector Assembly (Power Distribution Module)	1
10	1521184	Connector	1
10	1521188	Lock	1
10	1323579	Seal	5

WIRE HARNESS

RH CHASSIS – YANMAR 2.6L AND 3.3L, DIESEL (S/N L177B11118D ↔ S/N L177B31165H)

ITEM	PART NO.	DESCRIPTION	QTY
10	1327164	Seal	2
10	1330281	Terminal	5
10	1521989	Terminal	1
10	1402888	Seal	1
11	.....	Connector Assembly (Power Distribution Module)	1
11	1521183	Connector	1
11	1521188	Lock	1
11	1323579	Seal	7
11	1327164	Seal	1
11	1330281	Terminal	4
11	1521989	Terminal	3
12	1534828	Clip	1
13	.....	Connector Assembly (Hydraulic Filter)	1
13	1329152	Plug	1
13	1329151	Terminal	1
13	1330281	Terminal	2
13	1402888	Seal	2
14	.....	Connector Assembly (End Cap)	1
14	1329150	Connector	1
14	1327164	Seal	2
14	1329151	Terminal	1
15	.....	Connector Assembly (Power Distribution Module)	1
15	1521185	Connector	1
15	1521188	Lock	1
15	1323579	Seal	8
15	1521989	Terminal	2
15	1330281	Terminal	6
16	.....	Connector Assembly (Power Distribution Module)	1
16	1521186	Connector	1
16	1521188	Lock	1
16	1323579	Seal	7
16	1327164	Seal	1
16	1521989	Terminal	7
17	.....	Connector Assembly (Accessory 2)	1
17	1514602	Connector	1
17	1514603	Connector	1
17	1330439	Plug	1
17	1554359	Terminal	3
18	.....	Connector Assembly (End Cap)	1
18	1514597	Connector	1
18	1330439	Plug	4
19	1402815	Clip	2
20	.....	Connector Assembly (To Seat Harness)	1
20	1541991	Connector	1
20	1541992	Connector	1
20	1463139	Terminal	8
21	.....	Connector Assembly (Alternate Horn Button)	1
21	1490242	Connector	1
21	1490243	Connector	1
21	1330438	Terminal (Socket)	2

WIRE HARNESS**RH CHASSIS – YANMAR 2.6L AND 3.3L, DIESEL (S/N L177B11118D ↔ S/N L177B31165H)**

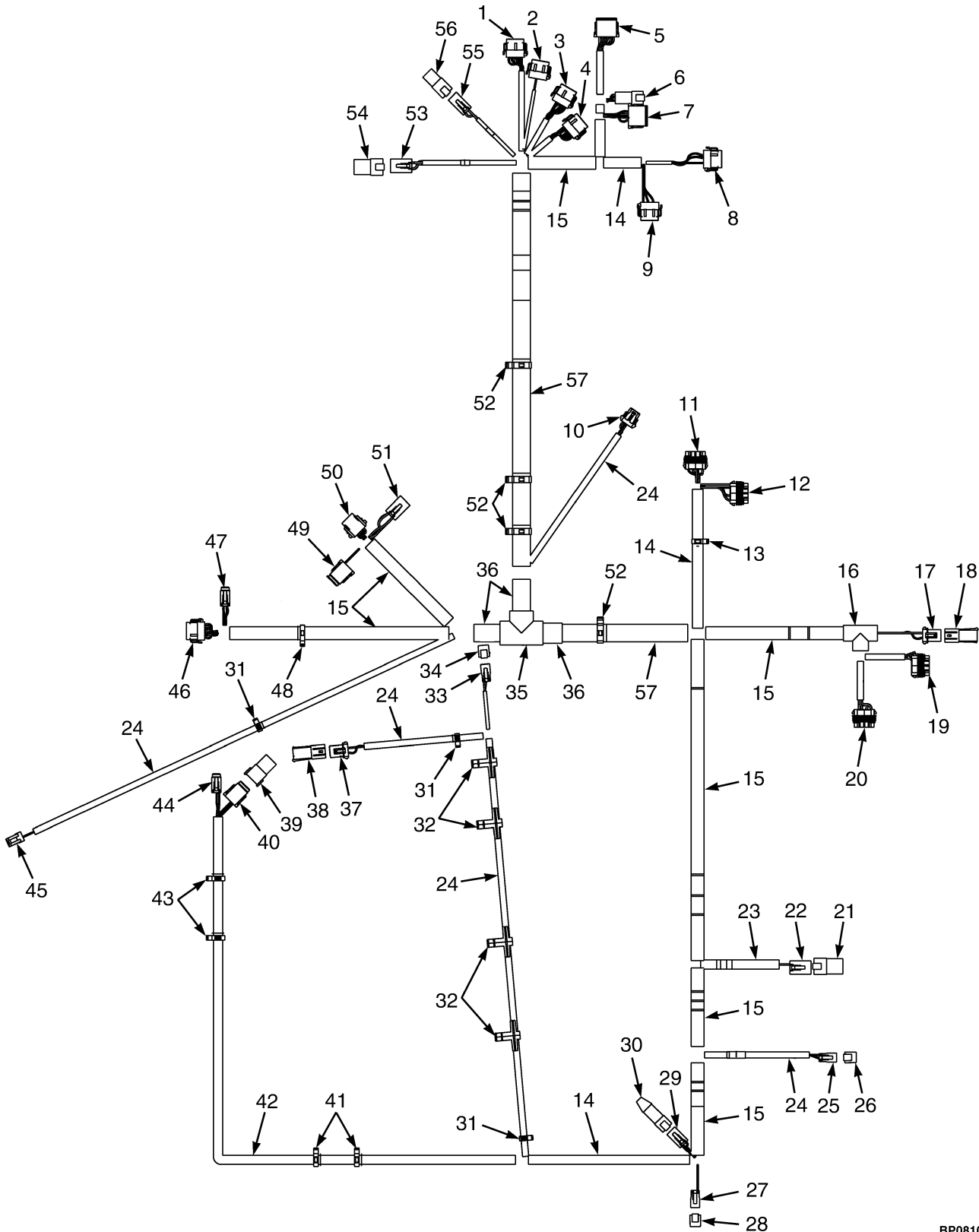
ITEM	PART NO.	DESCRIPTION	QTY
22	1626727	Connector (End Cap)	1
23	1509888	Clip	1
24	1626727	Connector (End Cap)	1
25	.....	Connector Assembly (To Back-Up Alarm)	1
25	1490242	Connector	1
25	1490243	Connector	1
25	1330438	Terminal (Socket)	2
26	.....	Connector Assembly (End Cap)	1
26	1329150	Connector	1
26	1329151	Terminal	1
26	1327164	Seal	2
27	.....	Connector Assembly (Coolant Level)	1
27	1329152	Plug	1
27	1329151	Terminal	1
27	1330281	Terminal	2
27	1402888	Seal	2
28	1525577	Connector (With Resistor) (End Cap)	1
29	.....	Connector Assembly (Bus Terminal)	1
29	1489656	Connector (4-Way)	1
29	1489657	Connector	1
29	1330438	Terminal (Socket)	4
30	1626727	Connector (End Cap)	1
31	.....	Connector Assembly (Key Switch)	1
31	1490242	Connector	1
31	1490243	Connector	1
31	1330438	Terminal (Socket)	2
32	1534282	Clip	4
33	1500899	Clip	1
34	.....	Connector Assembly (To Transmission Harness)	1
34	1525567	Connector	1
34	1529046	Connector	1
34	1463139	Terminal	11
34	1484377	Plug	1
35	.....	Connector Assembly (To Transmission Harness)	1
35	1531973	Connector	1
35	1531974	Connector	1
35	1463139	Terminal	6
36	.....	Connector Assembly (To Engine Harness)	1
36	1493428	Connector (12-Way)	1
36	1500913	Connector	1
36	1330438	Terminal (Socket)	11
36	1484377	Plug	1
37	.....	Connector Assembly (To Engine Harness)	1
37	1541991	Connector	1
37	1541992	Connector	1
37	1463139	Terminal	8
38	.....	Connector Assembly (To Engine Harness)	1
38	1514602	Connector	1
38	1514603	Connector	1
38	1330439	Plug	1

WIRE HARNESS

RH CHASSIS – YANMAR 2.6L AND 3.3L, DIESEL (S/N L177B11118D ↔ S/N L177B31165H)

ITEM	PART NO.	DESCRIPTION	QTY
38	1554359	Terminal	3
39	.....	Connector Assembly (To Lights/Cab Harness)	1
39	1514602	Connector	1
39	1514603	Connector	1
39	1554359	Terminal	4
40	1514597	Connector	1
40	1330439	Plug	4
41	1480187	Connector	1
41	1330439	Plug	2
42	.....	Connector Assembly (Accessory 1)	1
42	1545202	Connector	1
42	1554359	Terminal	2
42	1546697	Connector	1
43	.....	Connector Assembly (Vehicle System Manager)	1
43	1525569	Connector	1
43	1530037	Connector	1
43	1463139	Terminal	11
43	1484377	Plug	1
44	1587778	Clip	4
45	1509888	Clip	2

WIRE HARNESS (FIGURE 6-39) RH CHASSIS — YANMAR 2.6L AND 3.3L, DIESEL (S/N L177B31166H →)



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WIRE HARNESS
RH CHASSIS – YANMAR 2.6L AND 3.3L, DIESEL (S/N L177B31166H →)

ITEM	PART NO.	DESCRIPTION	QTY
	4604204	Wire Harness (Chassis)	1
1	.....	Connector Assembly (Vehicle System Manager)	1
1	1525570	Connector	1
1	1463139	Terminal	8
1	1484377	Plug	4
1	1530037	Connector (Secondary Lock)	1
2	.....	Connector Assembly (Vehicle System Manager)	1
2	1525569	Connector	1
2	1463139	Terminal	12
2	1530037	Connector (Secondary Lock)	1
3	.....	Connector Assembly (Vehicle System Manager)	1
3	1525568	Connector	1
3	1463139	Terminal	9
3	1484377	Plug	3
3	1530037	Connector (Secondary Lock)	1
4	.....	Connector Assembly (Vehicle System Manager)	1
4	1525567	Connector	1
4	1463139	Terminal	9
4	1484377	Plug	3
4	1530037	Connector (Secondary Lock)	1
5	.....	Connector Assembly (Vehicle System Manager)	1
5	1525563	Connector	1
5	1330438	Terminal (Socket)	8
5	1363886	Terminal (Socket)	4
5	1500913	Connector (Secondary Lock)	1
6	.....	Connector Assembly (To Cowl Harness)	1
6	1489655	Connector (4 Way)	1
6	1330437	Terminal (Pin)	4
6	1330416	Connector (Secondary Lock)	1
7	.....	Connector Assembly (To Cowl Harness)	1
7	1493428	Connector (12-Way)	1
7	1330438	Terminal (Socket)	9
7	1484377	Plug	3
7	1500913	Connector (Secondary Lock)	1
8	.....	Connector Assembly (Vehicle System Manager)	1
8	1525567	Connector	1
8	1463139	Terminal	3
8	1484377	Plug	9
8	1529046	Connector (Secondary Lock)	1
9	.....	Connector Assembly (Vehicle System Manager)	1
9	1525569	Connector	1
9	1463139	Terminal	9
9	1484377	Plug	3
9	1529046	Connector (Secondary Lock)	1
10	.....	Connector Assembly (Horn)	1
10	1476064	Connector	1
10	1476109	Connector Lock	1
10	1330356	Seal	2
10	1330355	Terminal	3
10	1476108	Wire Seal	1

WIRE HARNESS

RH CHASSIS – YANMAR 2.6L AND 3.3L, DIESEL (S/N L177B31166H →)

ITEM	PART NO.	DESCRIPTION	QTY
11	.....	Connector Assembly (Power Distribution Module)	1
11	1521184	Connector	1
11	1323579	Seal	5
11	1327164	Seal	2
11	1330281	Terminal	5
11	1521989	Terminal	1
11	1402888	Seal	1
11	1521188	Lock	1
12	.....	Connector Assembly (Power Distribution Module)	1
12	1521183	Connector	1
12	1323579	Seal	7
12	1327164	Seal	1
12	1330281	Terminal	4
12	1521989	Terminal	3
12	1521188	Lock	1
13	1534828	Clip	1
14	275496	Conduit	AR
15	275497	Conduit	AR
16	1531490	Conduit	1
17	.....	Connector Assembly (Hydraulic Filter)	1
17	1329152	Plug	1
17	1329151	Terminal	1
17	1330281	Terminal	2
17	1402888	Seal	2
18	.....	Connector Assembly (End Cap)	1
18	1329150	Connector	1
18	1327164	Seal	2
18	1329151	Terminal	1
19	.....	Connector Assembly (Power Distribution Module)	1
19	1521185	Connector	1
19	1521188	Lock	1
19	1323579	Seal	8
19	1521989	Terminal	2
19	1330281	Terminal	6
20	.....	Connector Assembly (Power Distribution Module)	1
20	1521186	Connector	1
20	1521188	Lock	1
20	1323579	Seal	7
20	1327164	Seal	1
20	1521989	Terminal	7
21	.....	Connector Assembly (End Cap)	1
21	1514597	Connector	1
21	1330439	Plug	4
22	.....	Connector Assembly (Accessory 2)	1
22	1514602	Connector	1
22	1514603	Connector	1
22	1330439	Plug	1
22	1554359	Terminal	3
23	275495	Conduit	AR
24	275493	Conduit	AR

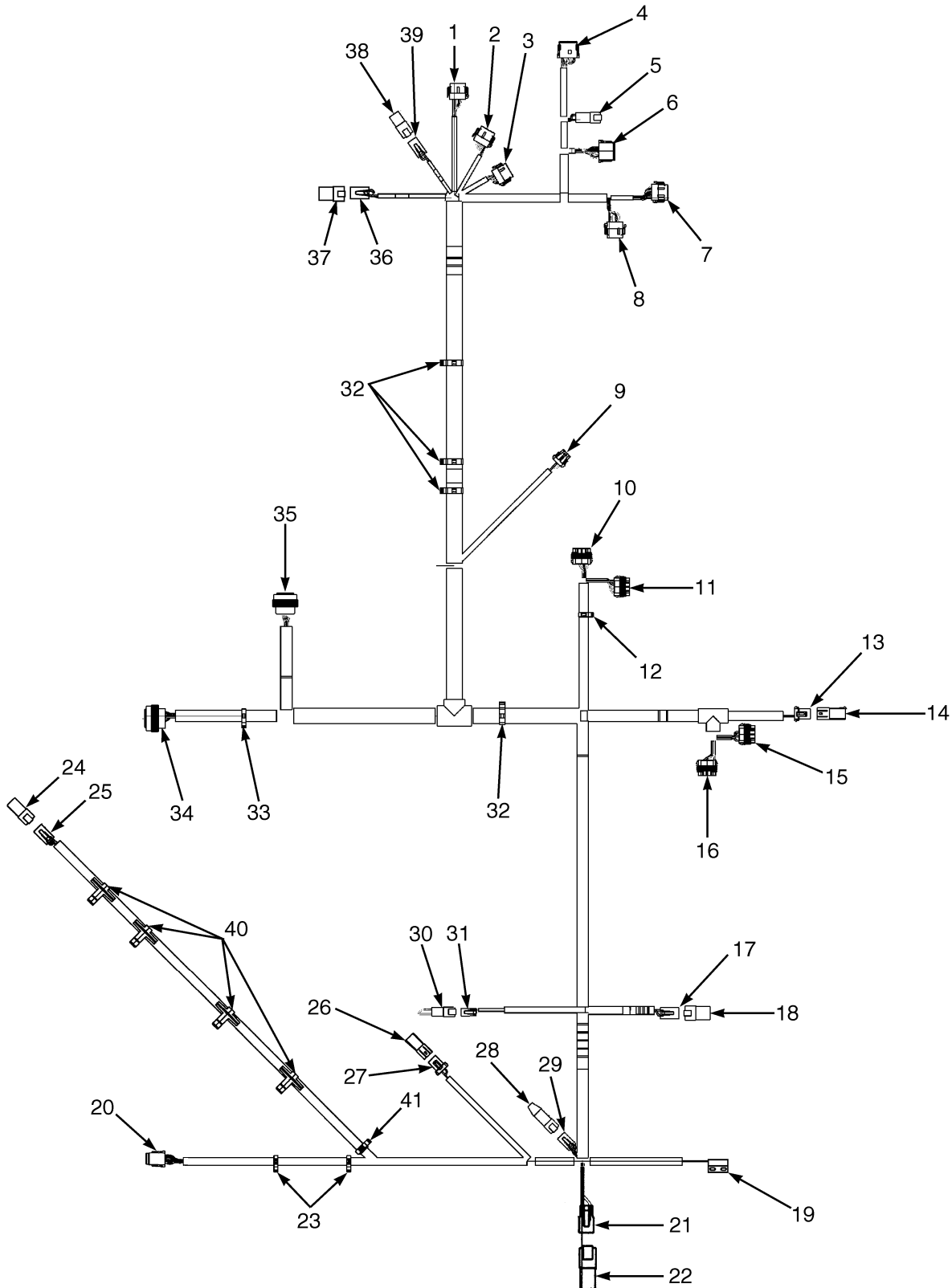
WIRE HARNESS
RH CHASSIS – YANMAR 2.6L AND 3.3L, DIESEL (S/N L177B31166H →)

ITEM	PART NO.	DESCRIPTION	QTY
25	.....	Connector Assembly (Key Switch)	1
25	1490242	Connector	1
25	1490243	Connector	1
25	1330438	Terminal (Socket)	2
26	1626727	Connector (End Cap)	1
27	.....	Connector Assembly (To Alternate Horn Button)	1
27	1490242	Connector	1
27	1490243	Connector	1
27	1330438	Terminal (Socket)	1
28	1626727	Connector (Endcap)	1
29	.....	Connector Assembly (To Bus Terminal 2)	1
29	1489656	Connector (4-Way)	1
29	1489657	Connector	1
29	1330438	Terminal (Socket)	4
30	1525577	Connector (With Resistor)	1
31	1509888	Clip	3
32	1587778	Clip	4
33	.....	Connector Assembly (To Back-Up Alarm Harness)	1
33	1490242	Connector	1
33	1490243	Connector	1
33	1330438	Terminal (Socket)	2
34	1626727	Connector (Endcap)	1
35	1531492	T-Fitting	1
36	275499	Conduit	AR
37	.....	Connector Assembly (Coolant Level)	1
37	1329152	Plug	1
37	1329151	Terminal	1
37	1330281	Terminal	2
37	1402888	Seal	2
38	.....	Connector Assembly (Endcap)	1
38	1329150	Connector	1
38	1329151	Terminal	1
38	1327164	Seal	2
39	.....	Connector Assembly (Endcap)	1
39	1541988	Connector	1
39	1484377	Plug	8
40	1514597	Connector	1
40	1330439	Plug	4
40	.....	Connector Assembly (To MLM Harness)	1
40	1541991	Connector	1
40	1541992	Connector	1
40	1463139	Terminal	5
40	1484377	Plug	3
41	1402815	Clip	2
42	1699754	Conduit	AR
43	1509890	Clip	1
44	1587778	Clip	4
44	.....	Connector Assembly (To Seat Harness)	1
44	1531973	Connector	1
44	1531974	Connector	1

WIRE HARNESS
RH CHASSIS – YANMAR 2.6L AND 3.3L, DIESEL (S/N L177B31166H →)

ITEM	PART NO.	DESCRIPTION	QTY
44	1463139	Terminal	4
44	1484377	Plug	2
45	.....	Connector Assembly (Hydraulic Temp)	1
45	1402868	Connector	1
45	1323576	Terminal	2
46	.....	Connector Assembly (To Transmission Harness)	1
46	1525567	Connector	1
46	1529046	Connector	1
46	1463139	Terminal	11
46	1484377	Plug	1
47	.....	Connector Assembly (To Transmission Harness)	1
47	1531973	Connector	1
47	1531974	Connector	1
47	1463139	Terminal	6
48	1500899	Clip	1
49	.....	Connector Assembly (To Engine Harness)	1
49	1493428	Connector (12-Way)	1
49	1330438	Terminal (Socket)	11
49	1484377	Plug	1
49	1500913	Connector (Secondary Lock)	1
50	.....	Connector Assembly (To Engine Harness)	1
50	1541991	Connector	1
50	1463139	Terminal	8
50	1541992	Connector (Secondary Lock)	1
51	.....	Connector Assembly (To Engine Harness)	1
51	1514602	Connector	1
51	1554359	Terminal	3
51	1330439	Plug	1
51	1514603	Connector (Secondary Lock)	1
52	1534282	Clip	4
53	.....	Connector Assembly (To Lights/Cab Harness)	1
53	1514602	Connector	1
53	1514603	Connector	1
53	1554359	Terminal	4
54	.....	Connector Assembly (Endcap)	1
54	1514597	Connector	1
54	1330439	Plug	4
55	.....	Connector Assembly (Acc 1)	1
55	1545202	Connector	1
55	1554359	Terminal	2
55	1546697	Connector (Secondary Lock)	1
56	.....	Connector Assembly	1
56	1480187	Connector	1
56	1330439	Plug	2
57	1540388	Conduit	AR

WIRE HARNESS (FIGURE 6-40) RH CHASSIS — MAZDA 2.0L AND 2.2L (→ 1/2006)



HP081621

WIRE HARNESS
RH CHASSIS – MAZDA 2.0L AND 2.2L (→ 1/2006)

ITEM	PART NO.	DESCRIPTION	QTY
	2075561	Wire Harness (RH Chassis)	1
1	1525570	Connector (Vehicle System Manager)	1
1	1530037	Connector	1
1	1463139	Terminal	9
1	1484377	Plug	4
2	1525568	Connector	1
2	1530037	Connector	1
2	1463139	Terminal	7
2	1484377	Plug	5
3	1525567	Connector (Vehicle System Manager)	1
3	1530037	Connector	1
3	1463139	Terminal	9
3	1484377	Plug	3
4	1525563	Connector (Vehicle System Manager)	1
4	1500913	Connector	1
4	1330438	Terminal (Socket)	8
4	1363886	Terminal (Socket)	4
5	1489655	Connector (4 Way) (To Cowl Harness)	1
5	1330416	Connector	1
5	1330437	Terminal (Pin)	4
6	1493428	Connector (12-Way) (To Cowl Harness)	1
6	1500913	Connector	1
6	1330438	Terminal (Socket)	9
6	1484377	Plug	3
7	1525567	Connector (Vehicle System Manager)	1
7	1529046	Connector	1
7	1463139	Terminal	6
7	1484377	Plug	6
8	1525569	Connector (Vehicle System Manager)	1
8	1529046	Connector	1
8	1463139	Terminal	9
8	1484377	Plug	3
9	1476064	Connector (Horn)	1
9	1476109	Connector Lock	1
9	1330355	Terminal	3
9	1330356	Seal	2
9	1476108	Wire Seal	1
10	1521184	Connector (Power Distribution Module)	1
10	1521188	Lock	1
10	1330281	Terminal	5
10	1521989	Terminal	1
10	1327164	Seal	2
10	1402888	Seal	1
10	1323579	Seal	5
11	1521183	Connector (Power Distribution Module)	1
11	1521188	Lock	1
11	1330281	Terminal	4
11	1521989	Terminal	3
11	1323579	Seal	7
11	1327164	Seal	1

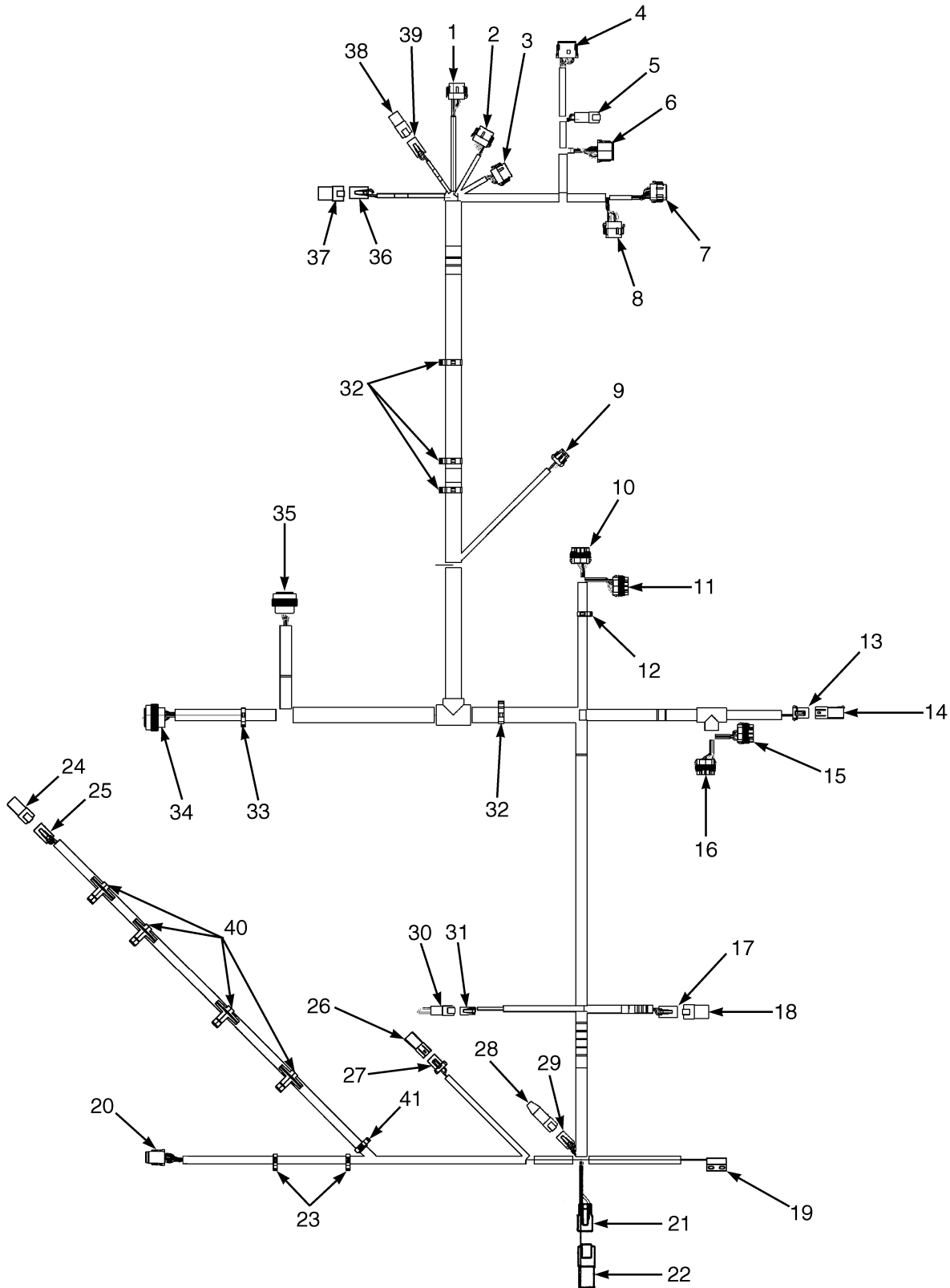
WIRE HARNESS RH CHASSIS – MAZDA 2.0L AND 2.2L (→ 1/2006)

ITEM	PART NO.	DESCRIPTION	QTY
12	1534828	Clip	1
13	1329152	Plug	1
13	1329151	Terminal	1
13	1330281	Terminal	2
13	1402888	Seal	2
14	1329150	Connector (End Cap)	1
14	1329151	Terminal	1
14	1327164	Seal	2
15	1521185	Connector (Power Distribution Module)	1
15	1521188	Lock	1
15	1330281	Terminal	5
15	1521989	Terminal	2
15	1323579	Seal	7
15	1327164	Seal	1
16	1521186	Connector (Power Distribution Module)	1
16	1521188	Lock	1
16	1521989	Terminal	7
16	1323579	Seal	7
16	1327164	Seal	1
17	1514602	Connector (Accessory 2)	1
17	1514603	Connector	1
17	1554359	Terminal	3
17	1330439	Plug	1
18	1514597	Connector (End Cap)	1
18	1330439	Plug	4
19	1572588	Switch (Hood Switch)	1
20	1541991	Connector (To Seat Harness)	1
20	1541992	Connector	1
20	1463139	Terminal	8
21	1490242	Connector (Socket)(Alternate Horn Button)	1
21	1490243	Connector (Socket)	1
21	1330438	Terminal (Socket)	2
22	1351681	Connector (End Cap)	1
23	1402815	Clip	2
24	1351683	Connector (End Cap)	1
25	1493430	Connector (To Back-Up Alarm)	1
25	1529052	Connector	1
25	1330438	Terminal (Socket)	6
26	1329150	Connector (End Cap)	1
26	1329151	Terminal	1
26	1327164	Seal	2
27	1329152	Plug (Coolant Level)	1
27	1329151	Terminal	1
27	1330281	Terminal	2
27	1402888	Seal	2
28	1525577	Connector (With Resistor) (End Cap)	1
29	1489656	Connector (4-Way) (Socket)(Bus Terminal)	1
29	1489657	Connector (Socket)	1
29	1330438	Terminal (Socket)	4
30	1493465	Connector (Key Switch)	1

WIRE HARNESS
RH CHASSIS – MAZDA 2.0L AND 2.2L (→ 1/2006)

ITEM	PART NO.	DESCRIPTION	QTY
30	1330414	Connector (Secondary Lock)	1
30	1330437	Terminal (Pin)	2
31	1490242	Connector (Socket)(Key Switch)	1
31	1490243	Connector (Socket)	1
31	1330438	Terminal (Socket)	2
32	1534282	Clip	4
33	1500899	Clip	1
34	1502627	Connector (Socket) (To Transmission Harness)	1
34	1330438	Terminal (Socket)	17
34	1484377	Plug	6
35	1531501	Connector (To Engine Harness)	1
35	1330438	Terminal (Socket)	8
35	1554359	Terminal	3
35	1484377	Plug	17
35	1330439	Plug	1
36	1514602	Connector (To Light/Cab Harness)	1
36	1514603	Connector	1
36	1554359	Terminal	4
37	.....	End Cap .....	..
37	1514597	Connector	1
37	1330439	Plug	4
38	.....	End Cap .....	..
38	1480187	Connector	1
38	1330439	Plug	2
39	1545202	Connector (Accessory 1)	1
39	1546697	Connector	1
39	1554359	Terminal	2
40	1587778	Clip	4
41	1509890	Clip	1

WIRE HARNESS (FIGURE 6-41) RH CHASSIS — MAZDA 2.0L AND 2.2L (→ S/N L177B11117D)



HP081621

WIRE HARNESS
RH CHASSIS – MAZDA 2.0L AND 2.2L (→ S/N L177B11117D)

ITEM	PART NO.	DESCRIPTION	QTY
	2078879	Wire Harness (Chassis)	1
1	.....	Connector Assembly (Vehicle System Manager)	1
1	1525570	Connector	1
1	1530037	Connector	1
1	1463139	Terminal	9
1	1484377	Plug	4
2	.....	Connector Assembly (Vehicle System Manager)	1
2	1525568	Connector	1
2	1530037	Connector	1
2	1463139	Terminal	7
2	1484377	Plug	5
3	.....	Connector Assembly (Vehicle System Manager)	1
3	1525567	Connector	1
3	1530037	Connector	1
3	1463139	Terminal	9
3	1484377	Plug	3
4	.....	Connector Assembly (Vehicle System Manager)	1
4	1525563	Connector	1
4	1500913	Connector	1
4	1330438	Terminal (Socket)	8
4	1363886	Terminal (Socket)	4
5	.....	Connector Assembly (To Cowl Harness)	1
5	1489655	Connector (4 Way)	1
5	1330416	Connector	1
5	1330437	Terminal (Pin)	4
6	.....	Connector Assembly (To Cowl Harness)	1
6	1493428	Connector (12-Way)	1
6	1500913	Connector	1
6	1330438	Terminal (Socket)	9
6	1484377	Plug	3
7	.....	Connector Assembly (Vehicle System Manager)	1
7	1525567	Connector	1
7	1529046	Connector	1
7	1463139	Terminal	3
7	1484377	Plug	9
8	.....	Connector Assembly (Vehicle System Manager)	1
8	1525569	Connector	1
8	1529046	Connector	1
8	1463139	Terminal	9
8	1484377	Plug	3
9	.....	Connector Assembly (Horn)	1
9	1476064	Connector	1
9	1476109	Connector Lock	1
9	1330355	Terminal	3
9	1330356	Seal	2
9	1476108	Wire Seal	1
10	.....	Connector Assembly (Power Distribution Module)	1
10	1521184	Connector	1
10	1521188	Lock	1
10	1330281	Terminal	5

WIRE HARNESS

RH CHASSIS – MAZDA 2.0L AND 2.2L (→ S/N L177B11117D)

ITEM	PART NO.	DESCRIPTION	QTY
10	1521989	Terminal	1
10	1327164	Seal	2
10	1402888	Seal	1
10	1323579	Seal	5
11	.....	Connector Assembly (Power Distribution Module)	1
11	1521183	Connector	1
11	1521188	Lock	1
11	1330281	Terminal	4
11	1521989	Terminal	3
11	1323579	Seal	7
11	1327164	Seal	1
12	1534828	Clip	1
13	.....	Connector Assembly (Hydraulic Filter)	1
13	1329152	Plug	1
13	1329151	Terminal	1
13	1330281	Terminal	2
13	1402888	Seal	2
14	.....	Connector Assembly (End Cap)	1
14	1329150	Connector	1
14	1329151	Terminal	1
14	1327164	Seal	2
15	.....	Connector Assembly (Power Distribution Module)	1
15	1521185	Connector	1
15	1521188	Lock	1
15	1330281	Terminal	5
15	1521989	Terminal	2
15	1323579	Seal	7
15	1327164	Seal	1
16	.....	Connector Assembly (Power Distribution Module)	1
16	1521186	Connector	1
16	1521188	Lock	1
16	1521989	Terminal	7
16	1323579	Seal	7
16	1327164	Seal	1
17	.....	Connector Assembly (Accessory 2)	1
17	1514602	Connector	1
17	1514603	Connector	1
17	1554359	Terminal	3
17	1330439	Plug	1
18	.....	Connector Assembly (End Cap)	1
18	1514597	Connector	1
18	1330439	Plug	4
19	1572588	Switch	1
20	.....	Connector Assembly (To Seat Harness)	1
20	1541991	Connector	1
20	1541992	Connector	1
20	1463139	Terminal	8
21	.....	Connector Assembly (Alternate Horn Button)	1
21	1490242	Connector	1
21	1490243	Connector	1

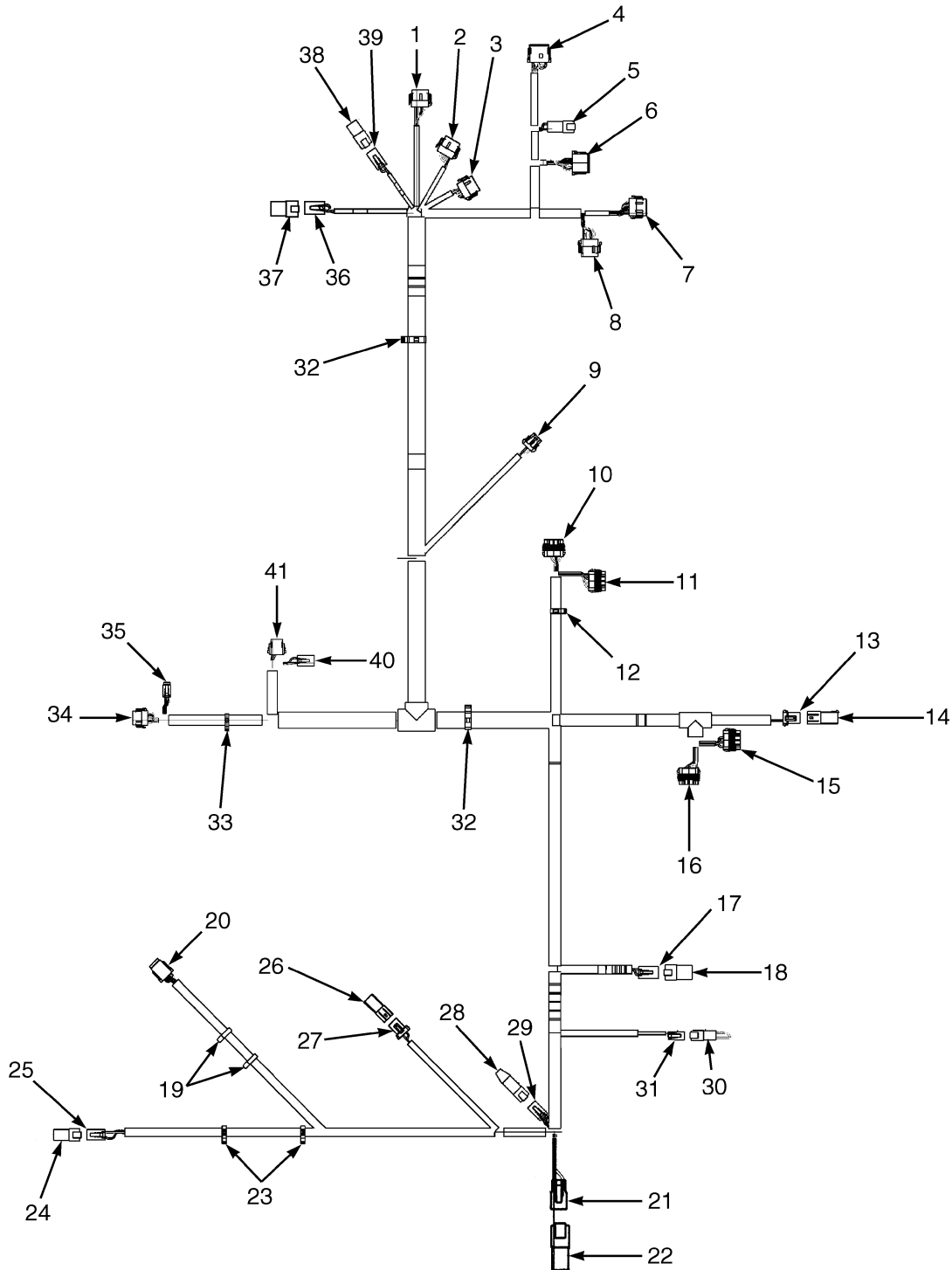
WIRE HARNESS
RH CHASSIS – MAZDA 2.0L AND 2.2L (→ S/N L177B11117D)

ITEM	PART NO.	DESCRIPTION	QTY
21	1330438	Terminal (Socket)	2
22	1351681	Connector (End Cap)	1
23	1402815	Clip	2
24	1351681	Connector (End Cap)	1
25	.....	Connector Assembly (To Back-Up Alarm)	1
25	1490242	Connector	1
25	1490243	Connector	1
25	1330438	Terminal (Socket)	2
26	.....	Connector Assembly (End Cap)	1
26	1329150	Connector	1
26	1329151	Terminal	1
26	1327164	Seal	2
27	.....	Connector Assembly (Coolant Level)	1
27	1329152	Plug	1
27	1329151	Terminal	1
27	1330281	Terminal	2
27	1402888	Seal	2
28	1525577	Connector (With Resistor) (End Cap)	1
29	.....	Connector Assembly (Bus Terminal)	1
29	1489656	Connector (4-Way)	1
29	1489657	Connector	1
29	1330438	Terminal (Socket)	4
30	.....	Connector Assembly (Key Switch)	1
30	1493465	Connector	1
30	1330414	Connector (Secondary Lock)	1
30	1330437	Terminal (Pin)	2
31	.....	Connector Assembly (Key Switch)	1
31	1490242	Connector	1
31	1490243	Connector	1
31	1330438	Terminal (Socket)	2
32	1534282	Clip	1
33	1500899	Clip	1
34	.....	Connector Assembly (To Transmission Harness)	1
34	1502627	Connector (Socket)	1
34	1330438	Terminal (Socket)	17
34	1484377	Plug	6
35	.....	Connector Assembly (To Engine Harness)	1
35	1531501	Connector	1
35	1330438	Terminal (Socket)	8
35	1554359	Terminal	3
35	1484377	Plug	17
35	1330439	Plug	1
36	.....	Connector Assembly (To Lights/Cab Harness)	1
36	1514602	Connector	1
36	1514603	Connector	1
36	1554359	Terminal	4
37	.....	End Cap Assembly	1
37	1514597	Connector	1
37	1330439	Plug	4
38	.....	End Cap Assembly	1

WIRE HARNESS
RH CHASSIS – MAZDA 2.0L AND 2.2L (→ S/N L177B11117D)

ITEM	PART NO.	DESCRIPTION	QTY
38	1480187	Connector	1
38	1330439	Plug	2
39	.....	Connector Assembly (Accessory 1)	1
39	1545202	Connector	1
39	1546697	Connector	1
39	1554359	Terminal	2
40	1587778	Clip	4
41	1509888	Clip	1

WIRE HARNESS (FIGURE 6-42) RH CHASSIS — MAZDA 2.0L AND 2.2L (S/N L177B11118D →)



BP080505

WIRE HARNESS
RH CHASSIS – MAZDA 2.0L AND 2.2L (S/N L177B11118D →)

ITEM	PART NO.	DESCRIPTION	QTY
	2085945	Wire Harness (Chassis)	1
1	.....	Connector Assembly (Vehicle System Manager)	1
1	1525570	Connector	1
1	1463139	Terminal	8
1	1484377	Plug	4
1	1530037	Connector	1
2	.....	Connector Assembly (Vehicle System Manager)	1
2	1525568	Connector	1
2	1463139	Terminal	7
2	1484377	Plug	5
2	1530037	Connector	1
3	.....	Connector Assembly (Vehicle System Manager)	1
3	1525567	Connector	1
3	1530037	Connector	1
3	1463139	Terminal	3
3	1484377	Plug	9
4	.....	Connector Assembly (Vehicle System Manager)	1
4	1525563	Connector	1
4	1500913	Connector	1
4	1330438	Terminal (Socket)	8
4	1363886	Terminal (Socket)	4
5	.....	Connector Assembly (Cowl Harness)	1
5	1489655	Connector (4 Way)	1
5	1330416	Connector	1
5	1330437	Terminal (Pin)	4
6	.....	Connector Assembly (Cowl Harness)	1
6	1493428	Connector (12-Way)	1
6	1330438	Terminal (Socket)	9
6	1484377	Plug	3
6	1500913	Connector	1
7	.....	Connector Assembly (Vehicle System Manager)	1
7	1525567	Connector	1
7	1529046	Connector	1
7	1463139	Terminal	9
7	1484377	Plug	3
8	.....	Connector Assembly (Vehicle System Manager)	1
8	1525569	Connector	1
8	1529046	Connector	1
8	1463139	Terminal	9
8	1484377	Plug	3
9	.....	Connector Assembly (Horn)	1
9	1476064	Connector	1
9	1476109	Connector Lock	1
9	1330356	Seal	2
9	1330355	Terminal	3
9	1476108	Wire Seal	1
10	.....	Connector Assembly (Power Distribution Module)	1
10	1521184	Connector	1
10	1521188	Lock	1
10	1323579	Seal	5

WIRE HARNESS

RH CHASSIS – MAZDA 2.0L AND 2.2L (S/N L177B11118D →)

ITEM	PART NO.	DESCRIPTION	QTY
10	1327164	Seal	2
10	1330281	Terminal	5
10	1521989	Terminal	1
10	1402888	Seal	1
11	.....	Connector Assembly (Power Distribution Module)	1
11	1521183	Connector	1
11	1521188	Lock	1
11	1323579	Seal	7
11	1327164	Seal	1
11	1330281	Terminal	4
11	1521989	Terminal	3
12	1534828	Clip	1
13	.....	Connector Assembly (Hydraulic Filter)	1
13	1329152	Plug	1
13	1329151	Terminal	1
13	1330281	Terminal	2
13	1402888	Seal	2
14	.....	Connector Assembly (End Cap)	1
14	1329150	Connector	1
14	1327164	Seal	2
14	1329151	Terminal	1
15	.....	Connector Assembly (Power Distribution Module)	1
15	1521185	Connector	1
15	1521188	Lock	1
15	1323579	Seal	7
15	1327164	Seal	1
15	1330281	Terminal	5
15	1521989	Terminal	2
16	.....	Connector Assembly (Power Distribution Module)	1
16	1521186	Connector	1
16	1521188	Lock	1
16	1323579	Seal	7
16	1327164	Seal	1
16	1521989	Terminal	7
17	.....	Connector Assembly (Accessory 2)	1
17	1514602	Connector	1
17	1514603	Connector	1
17	1554359	Terminal	4
18	.....	Connector Assembly (End Cap)	1
18	1514597	Connector	1
18	1330439	Plug	4
19	1402815	Clip	4
20	.....	Connector Assembly (Back-Up Alarm)	1
20	1490242	Connector	1
20	1402813	Clip	1
20	1330438	Terminal (Socket)	2
21	.....	Connector Assembly (Alternate Horn Button)	1
21	1490242	Connector	1
21	1402813	Clip	1
21	1330438	Terminal (Socket)	2

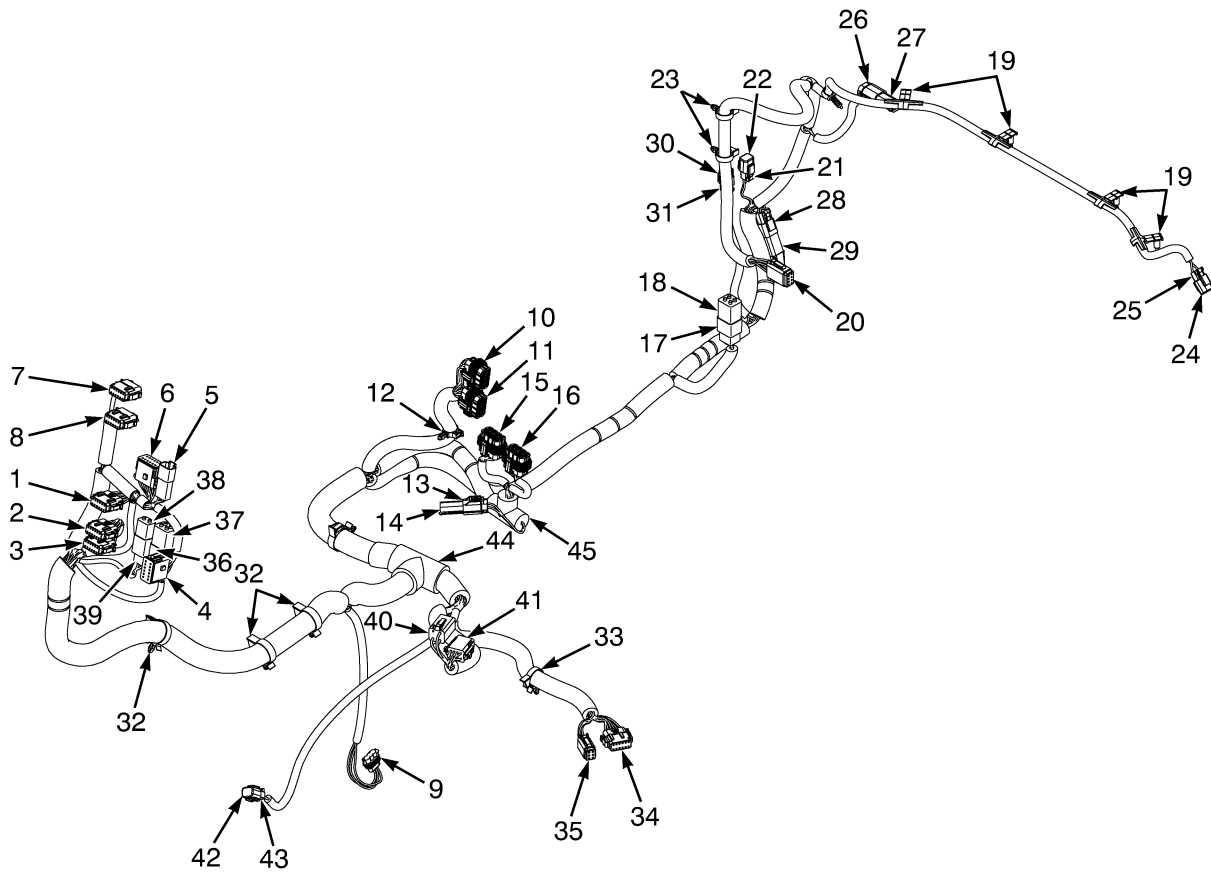
WIRE HARNESS
RH CHASSIS – MAZDA 2.0L AND 2.2L (S/N L177B11118D →)

ITEM	PART NO.	DESCRIPTION	QTY
22	1351681	Connector (End Cap)	1
23	1509888	Clip	2
24	1351681	Connector (End Cap)	1
25	.....	Connector Assembly (Seat Harness)	1
25	1541991	Connector	1
25	1541992	Connector	1
25	1463139	Terminal	8
26	.....	Connector (End Cap)	1
26	1329150	Connector	1
26	1329151	Terminal	1
26	1327164	Seal	2
27	.....	Connector (Coolant Level)	1
27	1329152	Plug	1
27	1329151	Terminal	1
27	1330281	Terminal	2
27	1402888	Seal	2
28	1525577	Connector (With Resistor) (End Cap)	1
29	.....	Connector Assembly (Bus Terminal)	1
29	1489656	Connector (4-Way)	1
29	1489657	Connector	1
29	1330438	Terminal (Socket)	4
30	.....	Connector Assembly (Keyswitch)	1
30	1490242	Connector (End Cap)	1
30	1402813	Clip	1
30	1330438	Terminal (Socket)	2
31	.....	Connector Assembly (Keyswitch)	1
31	1493465	Connector	1
31	1330414	Connector (Secondary Lock)	1
31	1330437	Terminal (Pin)	2
32	1534282	Clip	1
33	1500899	Clip	3
34	.....	Connector Assembly (Transmission Harness)	1
34	1525567	Connector	1
34	1529046	Connector	1
34	1484377	Plug	1
34	1463139	Terminal	11
35	.....	Connector Assembly (Transmission Harness)	1
35	1531973	Connector	1
35	1531974	Connector	1
35	1463139	Terminal	6
36	.....	Connector Assembly (Lights/Cab Harness)	1
36	1514602	Connector	1
36	1514603	Connector	1
36	1554359	Terminal	4
37	.....	Connector Assembly (End Cap)	1
37	1514597	Connector	1
37	1330439	Plug	4
38	.....	Connector Assembly (End Cap)	1
38	1480187	Connector	1
38	1330439	Plug	2

WIRE HARNESS
RH CHASSIS – MAZDA 2.0L AND 2.2L (S/N L177B11118D →)

ITEM	PART NO.	DESCRIPTION	QTY
39	.....	Connector Assembly (Accessory 1)	1
39	1545202	Connector	1
39	1554359	Terminal	2
39	1546697	Connector	1
40	.....	Connector Assembly (Engine Harness)	1
40	1514602	Connector	1
40	1514603	Connector	1
40	1330439	Plug	12
40	1554359	Terminal	12
41	.....	Connector Assembly (Engine Harness)	1
41	1502625	Connector	1
41	1502626	Connector	1
41	1330438	Terminal (Socket)	8

WIRE HARNESS (FIGURE 6-43) RH CHASSIS — MAZDA 2.0L AND 2.2L (10/2008 ↔ S/N L177B31165H)



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WIRE HARNESS
RH CHASSIS – MAZDA 2.0L AND 2.2L (10/2008 ↔ S/N L177B31165H)

ITEM	PART NO.	DESCRIPTION	QTY
	2108124	Wire Harness (Chassis)	1
1	.....	Connector Assembly (Vehicle System Manager)	1
1	1525570	Connector	1
1	1463139	Terminal	8
1	1484377	Plug	4
1	1530037	Connector (Secondary Lock)	1
2	.....	Connector Assembly (Vehicle System Manager)	1
2	1525568	Connector	1
2	1463139	Terminal	1
2	1484377	Plug	5
2	1530037	Connector (Secondary Lock)	1
3	.....	Connector Assembly (Vehicle System Manager)	1
3	1525567	Connector	1
3	1463139	Terminal	9
3	1484377	Plug	3
3	1530037	Connector (Secondary Lock)	1
4	.....	Connector Assembly (Vehicle System Manager)	1
4	1525563	Connector	1
4	1363886	Terminal (Socket)	4
4	1330438	Terminal (Socket)	8
4	1500913	Connector (Secondary Lock)	1
5	.....	Connector Assembly (Cowl Harness)	1
5	1489655	Connector (4 Way)	1
5	1330437	Terminal (Pin)	4
5	1330416	Connector (Secondary Lock)	1
6	.....	Connector Assembly (Cowl Harness)	1
6	1493428	Connector (12-Way)	1
6	1330438	Terminal (Socket)	10
6	1484377	Plug	1
6	1500913	Connector (Secondary Lock)	1
7	.....	Connector Assembly (Vehicle System Manager)	1
7	1525567	Connector	1
7	1484377	Plug	9
7	1463139	Terminal	3
7	1529046	Connector (Secondary Lock)	1
8	.....	Connector Assembly (Vehicle System Manager)	1
8	1525569	Connector	1
8	1463139	Terminal	3
8	1484377	Plug	9
8	1529046	Connector (Secondary Lock)	1
9	.....	Connector Assembly (Horn)	1
9	1476064	Connector	1
9	1330355	Terminal	3
9	1330356	Seal	2
9	1476108	Wire Seal	1
9	1476109	Connector Lock (Secondary Lock)	1
10	.....	Connector Assembly (Power Distribution Module)	1
10	1521184	Connector	1
10	1327164	Seal	1
10	1330281	Terminal	6

WIRE HARNESS

RH CHASSIS – MAZDA 2.0L AND 2.2L (10/2008 ↔ S/N L177B31165H)

ITEM	PART NO.	DESCRIPTION	QTY
10	1521989	Terminal	1
10	1323579	Seal	5
10	1402888	Seal	2
10	1521188	Lock (Secondary Lock)	1
11	.....	Connector Assembly (Power Distribution Module)	1
11	1521183	Connector	1
11	1521989	Terminal	1
11	1330281	Terminal	4
11	1327164	Seal	1
11	1323579	Seal	7
11	1521188	Lock (Secondary Lock)	1
12	1534828	Clip	1
13	.....	Connector Assembly (Hydraulic Filter)	1
13	1329152	Plug	1
13	1330281	Terminal	2
13	1402888	Seal	2
13	1329151	Terminal (Secondary Lock)	1
14	.....	Connector Assembly (End Cap)	1
14	1329150	Connector	1
14	1327164	Seal	2
14	1329151	Terminal (Secondary Lock)	1
15	.....	Connector Assembly (Power Distribution Module)	1
15	1521185	Connector	1
15	1330281	Terminal	5
15	1521989	Terminal	2
15	1327164	Seal	1
15	1323579	Seal	7
15	1327164	Seal	1
15	1521188	Lock (Secondary Lock)	1
16	.....	Connector Assembly (Power Distribution Module)	1
16	1521186	Connector	1
16	1521989	Terminal	7
16	1327164	Seal	1
16	1323579	Seal	7
16	1521188	Lock (Secondary Lock)	1
17	.....	Connector Assembly (Accessory 2)	1
17	1514602	Connector	1
17	1554359	Terminal	3
17	1330439	Plug	1
17	1514603	Connector (Secondary Lock)	1
18	.....	Connector Assembly (End Cap)	1
18	1514597	Connector	1
18	1330439	Plug	4
19	1587778	Clip	4
20	.....	Connector Assembly (Seat Harness)	1
20	1541991	Connector	1
20	1463139	Terminal	8
20	1541992	Connector (Secondary Lock)	1
21	.....	Connector Assembly (Alternate Horn Button)	1
21	1490242	Connector	1

WIRE HARNESS
RH CHASSIS – MAZDA 2.0L AND 2.2L (10/2008 ↔ S/N L177B31165H)

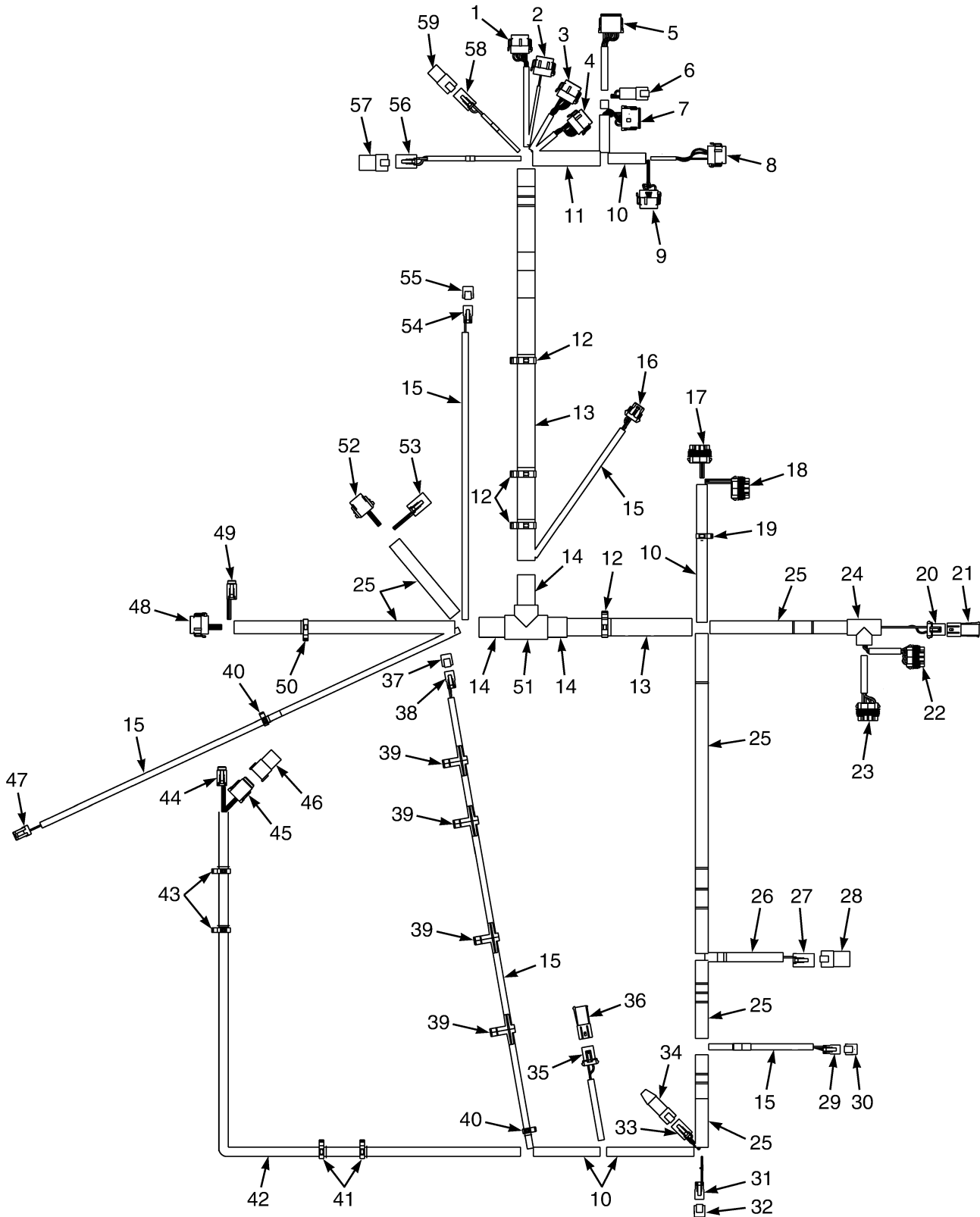
ITEM	PART NO.	DESCRIPTION	QTY
21	1330438	Terminal (Socket)	2
21	1490243	Connector (Secondary Lock)	1
22	1626727	Connector (End Cap)	1
23	1509888	Clip	2
24	1626727	Connector (End Cap)	1
25	.....	Connector Assembly (Back-Up Alarm)	1
25	1490242	Connector	1
25	1330438	Terminal (Socket)	2
25	1490243	Connector (Secondary Lock)	1
26	.....	Connector Assembly (Coolant Level)	1
26	1329152	Plug	1
26	1330281	Terminal	2
26	1402888	Seal	2
26	1329151	Terminal (Secondary Lock)	1
27	.....	Connector Assembly (End Cap)	1
27	1493428	Connector (12-Way)	1
27	1327164	Seal	2
27	1329151	Terminal (Secondary Lock)	1
28	.....	Connector Assembly (Bus Terminal)	1
28	1489656	Connector (4-Way)	1
28	1330438	Terminal (Socket)	4
28	1489657	Connector (Secondary Lock)	1
29	1531973	Connector (End Cap)	1
30	1626727	Connector (End Cap)	1
31	.....	Connector Assembly (Hood Switch/Key Switch)	1
31	1490242	Connector	1
31	1330438	Terminal (Socket)	1
31	1490243	Connector (Secondary Lock)	1
32	1534282	Clip	4
33	1500899	Clip	1
34	.....	Connector Assembly (Transmission Harness)	1
34	1525567	Connector	1
34	1463139	Terminal	11
34	1484377	Plug	1
34	1529046	Connector (Secondary Lock)	1
35	.....	Connector Assembly (Transmission Harness)	1
35	1531973	Connector	1
35	1463139	Terminal	6
35	1531974	Connector (Secondary Lock)	1
36	.....	Connector Assembly (Lights/Cab Harness)	1
36	1514602	Connector	1
36	1554359	Terminal	4
36	1514603	Connector (Secondary Lock)	1
37	.....	Connector Assembly (End Cap)	1
37	1514597	Connector	1
37	1330439	Plug	4
38	.....	Connector Assembly (End Cap)	1
38	1480187	Connector	1
38	1330439	Plug	2
39	.....	Connector Assembly (Accessory 1)	1

WIRE HARNESS

RH CHASSIS – MAZDA 2.0L AND 2.2L (10/2008 ↔ S/N L177B31165H)

ITEM	PART NO.	DESCRIPTION	QTY
39	1545202	Connector	1
39	1554359	Terminal	2
39	1546697	Connector	1
40	.....	Connector Assembly (Engine Harness)	1
40	1514602	Connector	1
40	1554359	Terminal	3
40	1330439	Plug	1
40	1514603	Connector (Secondary Lock)	1
41	.....	Connector Assembly (To Engine Harness)	1
41	1502625	Connector	1
41	1330438	Terminal (Socket)	8
41	1502626	Connector (Secondary Lock)	1
42	1626727	Connector (End Cap)	1
43	.....	Connector Assembly (Hydraulic Solenoid)	1
43	1490242	Connector	1
43	1330438	Terminal (Socket)	1
43	1490243	Connector	1
44	1531492	T-Fitting	1
45	1531490	Conduit	1
46	.....	Connector Assembly (To Engine Harness)	1
46	1541991	Connector	1
46	1463139	Terminal	8
46	1541992	Connector (Secondary Lock)	1
47	1509888	Clip	2

WIRE HARNESS (FIGURE 6-44)
RH CHASSIS — MAZDA 2.0L AND 2.2L (S/N L177B31166H →)



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WIRE HARNESS
RH CHASSIS – MAZDA 2.0L AND 2.2L (S/N L177B31166H →)

ITEM	PART NO.	DESCRIPTION	QTY
	4604531	Wire Harness (Chassis)	1
1	.....	Connector Assembly (Vehicle System Manager)	1
1	1525570	Connector	1
1	1463139	Terminal	8
1	1484377	Plug	4
1	1530037	Connector (Secondary Lock)	1
2	.....	Connector Assembly (Vehicle System Manager)	1
2	1525569	Connector	1
2	1484377	Plug	10
2	1463139	Terminal	2
2	1530037	Connector (Secondary Lock)	1
3	.....	Connector Assembly (Vehicle System Manager)	1
3	1525568	Connector	1
3	1463139	Terminal	7
3	1484377	Plug	5
3	1530037	Connector (Secondary Lock)	1
4	.....	Connector Assembly (Vehicle System Manager)	1
4	1525567	Connector	1
4	1463139	Terminal	9
4	1484377	Plug	3
4	1530037	Connector (Secondary Lock)	1
5	.....	Connector Assembly (Vehicle System Manager)	1
5	1525563	Connector	1
5	1363886	Terminal (Socket)	4
5	1330438	Terminal (Socket)	8
5	1500913	Connector (Secondary Lock)	1
6	.....	Connector Assembly (Cowl Harness)	1
6	1489655	Connector (4 Way)	1
6	1330437	Terminal (Pin)	4
6	1330416	Connector (Secondary Lock)	1
7	.....	Connector Assembly (Cowl Harness)	1
7	1493428	Connector (12-Way)	1
7	1330438	Terminal (Socket)	10
7	1484377	Plug	2
7	1500913	Connector (Secondary Lock)	1
8	1529046	Connector (Secondary Lock)	1
8	.....	Connector Assembly (Vehicle System Manager)	1
8	1525567	Connector	1
8	1484377	Plug	9
8	1463139	Terminal	3
8	1529046	Connector (Secondary Lock)	1
9	.....	Connector Assembly (Vehicle System Manager)	1
9	1525569	Connector	1
9	1463139	Terminal	3
9	1484377	Plug	9
9	1529046	Connector (Secondary Lock)	1
10	275496	Conduit	AR
11	275497	Conduit	AR
12	1534282	Clip	4
13	1540388	Conduit	AR

WIRE HARNESS

RH CHASSIS – MAZDA 2.0L AND 2.2L (S/N L177B31166H →)

ITEM	PART NO.	DESCRIPTION	QTY
14	275499	Conduit	AR
15	275493	Conduit	AR
16	.....	Connector Assembly (Horn)	1
16	1476064	Connector	1
16	1330355	Terminal	3
16	1330356	Seal	2
16	1476108	Wire Seal	1
16	1476109	Connector Lock (Secondary Lock)	1
17	.....	Connector Assembly (Power Distribution Module)	1
17	1521184	Connector	1
17	1327164	Seal	1
17	1330281	Terminal	6
17	1521989	Terminal	1
17	1323579	Seal	5
17	1402888	Seal	2
17	1521188	Lock (Secondary Lock)	1
18	.....	Connector Assembly (Power Distribution Module)	1
18	1521183	Connector	1
18	1330281	Terminal	4
18	1327164	Seal	1
18	1323579	Seal	7
18	1521989	Terminal	1
18	1521188	Lock (Secondary Lock)	1
19	1534828	Clip	1
20	.....	Connector Assembly (Hydraulic Filter)	1
20	1329152	Plug	1
20	1330281	Terminal	2
20	1402888	Seal	2
20	1329151	Terminal (Secondary Lock)	1
21	.....	Connector Assembly (End Cap)	1
21	1329150	Connector	1
21	1327164	Seal	2
21	1329151	Terminal (Secondary Lock)	1
22	.....	Connector Assembly (Power Distribution Module)	1
22	1521185	Connector	1
22	1330281	Terminal	5
22	1521989	Terminal	2
22	1327164	Seal	1
22	1323579	Seal	7
22	1521188	Lock (Secondary Lock)	1
23	.....	Connector Assembly (Power Distribution Module)	1
23	1521186	Connector	1
23	1521989	Terminal	7
23	1323579	Seal	7
23	1327164	Seal	1
23	1521188	Lock (Secondary Lock)	1
24	1531490	Conduit	1
25	275497	Conduit	AR
26	275495	Conduit	AR
27	.....	Connector Assembly (Accessory 2)	1

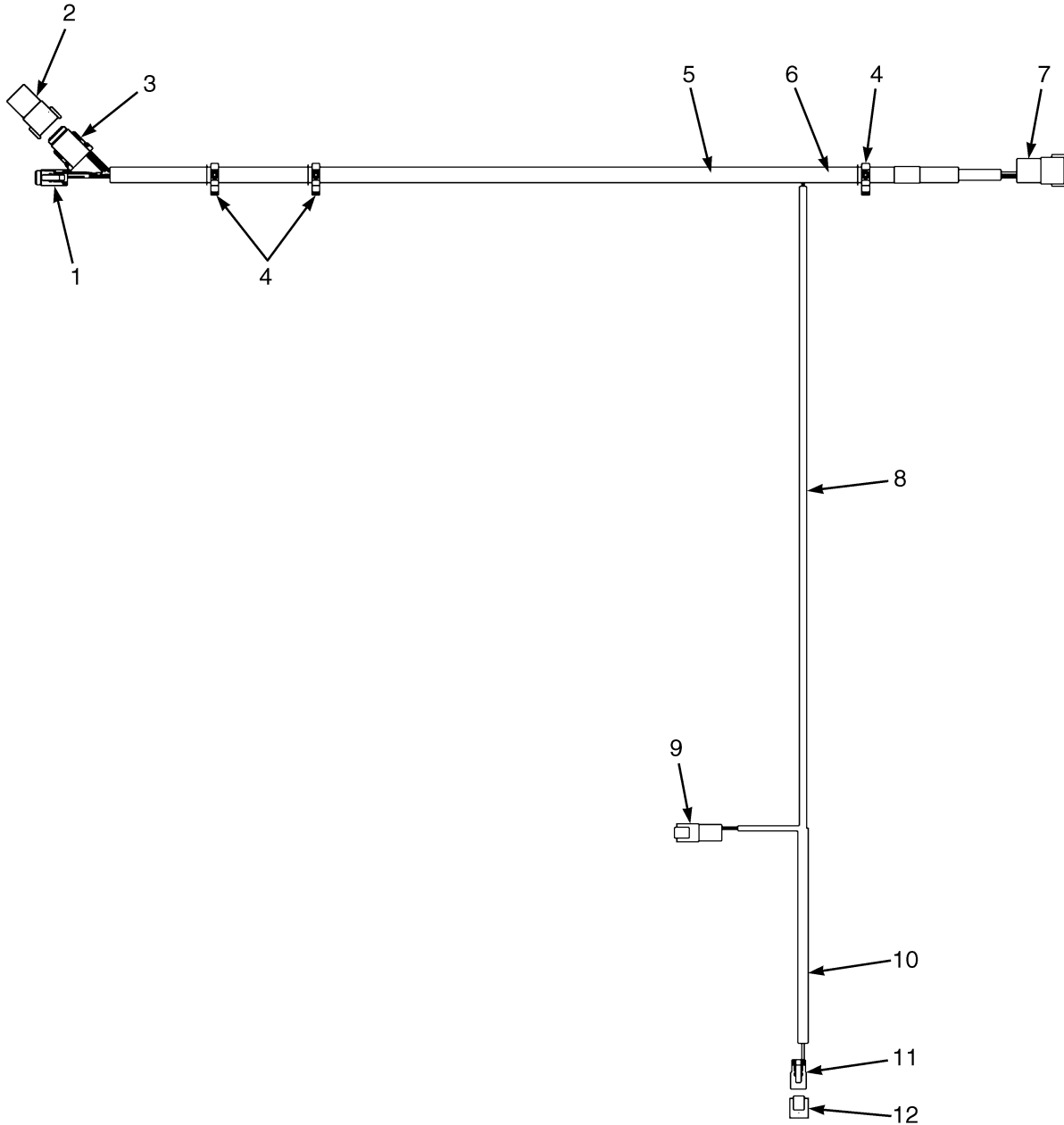
WIRE HARNESS
RH CHASSIS – MAZDA 2.0L AND 2.2L (S/N L177B31166H →)

ITEM	PART NO.	DESCRIPTION	QTY
27	1514602	Connector	1
27	1554359	Terminal	3
27	1330439	Plug	1
27	1514603	Connector (Secondary Lock)	1
28	.....	Connector Assembly (End Cap)	1
28	1514597	Connector	1
28	1330439	Plug	4
29	.....	Connector Assembly (Hood Switch/Key Switch)	1
29	1490242	Connector	1
29	1330438	Terminal (Socket)	1
29	1490243	Connector (Secondary Lock)	1
30	1626727	Connector (End Cap)	1
31	.....	Connector Assembly (Alternate Horn Button)	1
31	1490242	Connector	1
31	1330438	Terminal (Socket)	2
31	1490243	Connector (Secondary Lock)	1
32	1626727	Connector (End Cap)	1
33	.....	Connector Assembly (Bus Terminal)	1
33	1489656	Connector (4-Way)	1
33	1330438	Terminal (Socket)	4
33	1489657	Connector (Secondary Lock)	1
34	1531973	Connector (End Cap)	1
35	.....	Connector Assembly (Coolant Level)	1
35	1329152	Plug	1
35	1330281	Terminal	2
35	1402888	Seal	2
35	1329151	Terminal (Secondary Lock)	1
36	.....	Connector Assembly (End Cap)	1
36	1493428	Connector (12-Way)	1
36	1327164	Seal	2
36	1329151	Terminal (Secondary Lock)	1
37	1626727	Connector (End Cap)	1
38	.....	Connector Assembly (Back-Up Alarm)	1
38	1490242	Connector	1
38	1330438	Terminal (Socket)	2
38	1490243	Connector (Secondary Lock)	1
39	1587778	Clip	4
40	1509888	Clip	2
41	1402815	Clip	2
42	1699754	Conduit	AR
43	1509890	Clip	2
44	.....	Connector Assembly (Seat Harness)	1
44	1531973	Connector	1
44	1463139	Terminal	4
44	1484377	Plug	2
44	1531974	Connector (Secondary Lock)	1
45	.....	Connector Assembly (MLM Harness)	1
45	1541991	Connector	1
45	1463139	Terminal	5
45	1484377	Plug	3

WIRE HARNESS
RH CHASSIS – MAZDA 2.0L AND 2.2L (S/N L177B31166H →)

ITEM	PART NO.	DESCRIPTION	QTY
45	1541992	Connector (Secondary Lock)	1
46	.....	Connector Assembly (Endcap)	1
46	1541988	Connector	1
46	1484377	Plug	8
47	.....	Connector Assembly (Hydraulic Temp)	1
47	1402868	Connector	1
47	1323576	Terminal	2
48	.....	Connector Assembly (Transmission Harness)	1
48	1525567	Connector	1
48	1463139	Terminal	11
48	1484377	Plug	1
48	1529046	Connector (Secondary Lock)	1
49	.....	Connector Assembly (Transmission Harness)	1
49	1531973	Connector	1
49	1463139	Terminal	6
49	1531974	Connector (Secondary Lock)	1
50	1500899	Clip	1
51	1531492	T-Fitting	1
52	.....	Connector Assembly (Engine Harness)	1
52	1502625	Connector	1
52	1330438	Terminal (Socket)	8
52	1502626	Connector (Secondary Lock)	1
53	.....	Connector Assembly (Engine Harness)	1
53	1514602	Connector	1
53	1554359	Terminal	3
53	1330439	Plug	1
53	1514603	Connector (Secondary Lock)	1
54	.....	Connector Assembly (Hydraulic Solenoid)	1
54	1490242	Connector	1
54	1330438	Terminal (Socket)	2
54	1490243	Connector	1
55	1626727	Connector (End Cap)	1
56	.....	Connector Assembly (Lights/Cab Harness)	1
56	1514602	Connector	1
56	1554359	Terminal	4
56	1514603	Connector (Secondary Lock)	1
57	.....	Connector Assembly (End Cap)	1
57	1514597	Connector	1
57	1330439	Plug	4
58	.....	Connector Assembly (Accessory 1)	1
58	1545202	Connector	1
58	1554359	Terminal	2
58	1546697	Connector	1
59	.....	Connector Assembly (End Cap)	1
59	1480187	Connector	1

WIRE HARNESS (FIGURE 6-45) SEAT JUMPER (→ S/N L177B30380H)



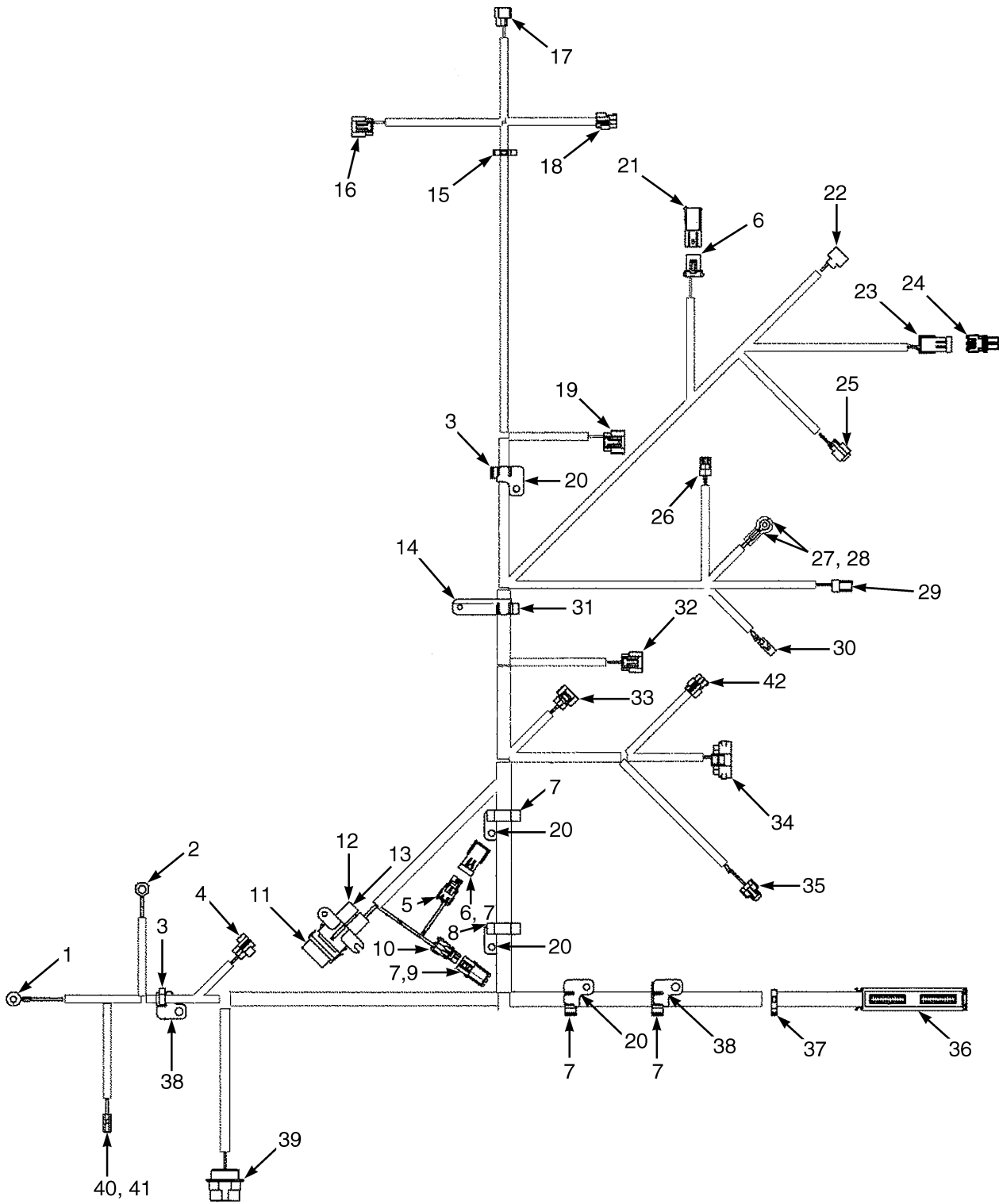
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WIRE HARNESS
SEAT JUMPER (→ S/N L177B30380H)

ITEM	PART NO.	DESCRIPTION	QTY
	4601500	Wire Harness	1
1	.....	Connector Assembly (Seat Harness)	1
1	1531973	Connector	1
1	1531974	Connector (Lock)	1
1	1463139	Terminal (Pin)	4
1	1484377	Plug	2
2	.....	Connector Assembly (MLM Harness)	1
2	1541991	Connector	1
2	1541992	Connector (Lock)	1
2	1463139	Terminal (Pin)	5
2	1484377	Plug	3
3	.....	End Cap	1
3	1541988	Connector	1
3	1484377	Plug	8
4	1509890	Clip	3
5	1699754	Conduit	AR
6	275495	Conduit	AR
7	.....	Connector Assembly (RH Chassis Harness)	1
7	1541988	Connector	1
7	1541989	Connector (Lock)	1
7	1463138	Terminal Pin (Pin)	8
8	1697181	Conduit	AR
9	.....	Connector Assembly (RH Chassis Harness)	1
9	1493465	Connector	1
9	1330414	Connector (Secondary Lock)	1
9	1330437	Terminal (Pin)	2
10	275493	Conduit	AR
11	.....	Connector Assembly (Alternate Horn Button)	1
11	1490242	Connector	1
11	1490243	Connector (Lock)	1
11	1330438	Terminal (Socket)	2
12	1626727	Connector (End Cap)	1

WIRE HARNESS (FIGURE 6-46)

LPG ENGINE — MAZDA 2.0L AND 2.2L (→ S/N L177B15511E 2.0L) (→ S/N L177B16206E 2.2L)

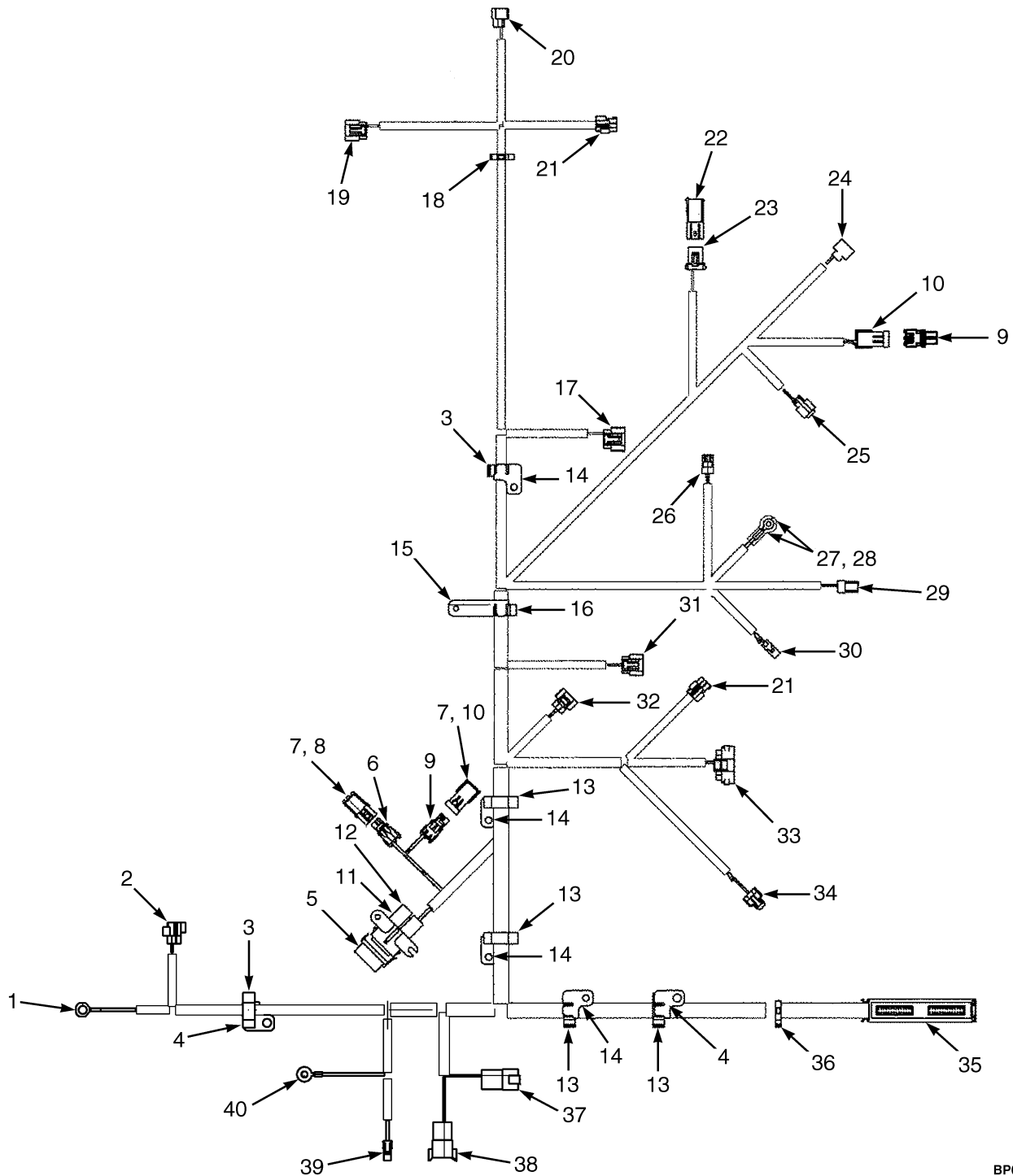


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WIRE HARNESS**LPG ENGINE – MAZDA 2.0L AND 2.2L (→ S/N L177B15511E 2.0L) (→ S/N L177B16206E 2.2L)**

ITEM	PART NO.	DESCRIPTION	QTY
	2065855	Wire Harness (LPG Mazda Engine)	1
1	1493458	E-Ring	1
2	1402890	Ring Terminal	1
3	1532775	Clip	2
4	1561518	Connector (Oxygen Sensor)	1
5	1465468	Connector	2
6	1547482	Connector	2
7	1567333	Clip	2
8	1532777	Clip	4
9	1547482	Connector	1
10	1378652	Connector	1
11	1454862	Cover (With Seal) (Alternator)	1
12	1378418	Fuse (50 Amp)	1
13	1543553	Fuse Holder	1
14	1558226	Clip	1
15	1402816	Clip	1
16	1531237	Connector Body (Igniter)	1
17	1531239	Connector Body (Coil)	1
18	1482651	Connector Body (Condenser)	1
19	1531240	Connector Body (Distributor)	1
20	1532761	Clip	4
21	1329150	Connector (LPG Low Pressure Switch)	1
22	1474764	Connector Body (Idle LPG Solenoid)	1
23	1465469	Connector (Air Filter Restriction)	1
24	1465468	Connector (Air Filter Restriction Sensor)	1
25	1474763	Connector Body (Main LPG Solenoid)	1
26	1327957	Connector (Oil Pressure Sensor)	1
27	1520864	Boot (Alternator)	1
28	129888	E-Ring	1
29	1323586	Connector (Coolant Temperature)	1
30	1308259	Connector Body (Alternator)	1
31	1532776	Clip	1
32	1560441	Connector Body (MAP Sensor)	1
33	1531991	Connector (Throttle Position Sensor)	1
34	1531231	Connector Body (Governor)	1
35	1482654	Connector Body (Injector)	1
36	1547479	Housing	1
37	1500899	Clip	1
38	1558228	Clip	2
39	1531502	Connector (Chassis Harness)	1
40	1581313	Connector (Starter)	1
41	1581315	Terminal	1
42	1482651	Connector Body (Intake Air Tempertor Sensor)	1

WIRE HARNESS (FIGURE 6-47) LPG ENGINE — MAZDA 2.0L AND 2.2L (S/N L177B15512E ↔ 1/2010 2.0L) (S/N L177B16207E ↔ 1/2010 2.2L)

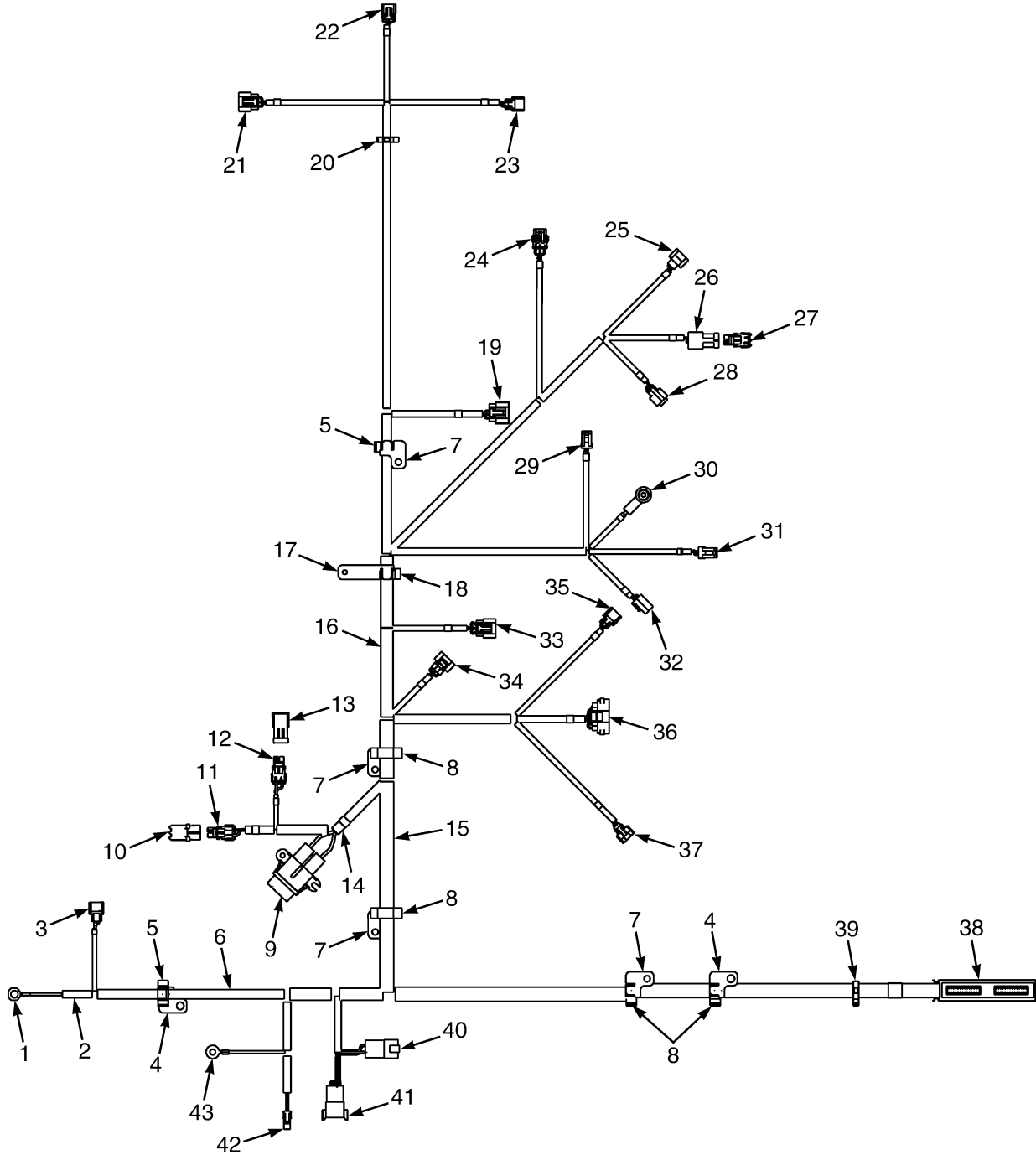


BP080503

WIRE HARNESS
LPG ENGINE – MAZDA 2.0L AND 2.2L (S/N L177B15512E ↔ 1/2010 2.0L)
(S/N L177B16207E ↔ 1/2010 2.2L)

ITEM	PART NO.	DESCRIPTION	QTY
	2087189	Wire Harness (LPG Mazda Engine)	1
1	1402890	Ring Terminal	1
2	1561518	Connector (Oxygen Sensor)	1
3	1532775	Clip	2
4	1558228	Clip	2
5	1454862	Cover (With Seal) (Alternator)	1
6	1378652	Connector	1
7	1567333	Clip	2
8	1547482	Connector	1
9	1465468	Connector (Air Filter Restriction Sensor)	2
10	1465469	Connector (Air Filter Restriction)	2
11	1378418	Fuse (50 Amp)	1
12	1543553	Fuse Holder	1
13	1532777	Clip	4
14	1532761	Clip	4
15	1558226	Clip	1
16	1532776	Clip	1
17	1531240	Connector Body (Distributor)	1
18	1402816	Clip	1
19	1531237	Connector Body (Igniter)	1
20	1531239	Connector Body (Coil)	1
21	1482651	Connector Body (Condenser)	2
22	1329150	Connector (LPG Low Pressure Switch)	1
23	1329152	Plug	1
24	1474764	Connector Body (Idle LPG Solenoid)	1
25	1474763	Connector Body (Main LPG Solenoid)	1
26	1327957	Connector (Oil Pressure Sensor)	1
27	1520864	Boot (Alternator)	1
28	129888	E-Ring	1
29	1323586	Connector (Coolant Temperature)	1
30	1308259	Connector Body (Alternator)	1
31	1560441	Connector Body (MAP Sensor)	1
32	1531991	Connector (Throttle Position Sensor)	1
33	1531231	Connector Body (Governor)	1
34	1482654	Connector Body (Injector)	1
35	1547479	Housing	1
36	1500899	Clip	1
37	1514597	Connector (Chassis Harness)	1
37	1514598	Connector	1
38	1330413	Connector (Chassis Harness)	1
38	1330418	Connector	1
39	1581313	Connector (Starter)	1
40	1493458	E-Ring	1

WIRE HARNESS (LPG ENGINE) (FIGURE 6-48) MAZDA 2.0L AND 2.2L — 2010 SERIES



BP080965

**WIRE HARNESS (LPG ENGINE)
MAZDA 2.0L AND 2.2L – 2010 SERIES**

ITEM	PART NO.	DESCRIPTION	QTY
	4604046	Wire Harness	1
1	1402890	Ring Terminal	1
2	275493	Conduit	AR
3	1561518	Connector (Oxygen Sensor)	1
4	1558228	Clip	2
5	1532775	Clip	2
6	275494	Conduit	AR
7	1532761	Clip	4
8	1532777	Clip	4
9	.....	Connector Assembly (Alternator)	1
9	1543553	Fuse Holder	1
9	1497235	Fuse Holder	1
9	1454829	Fuse (60 Amp)	1
9	1454827	Seal	2
9	1520543	Terminal	2
10	.....	Connector Assembly (ECU Interface)	1
10	1567333	Clip	1
10	1547482	Connector	1
11	1378652	Connector	1
12	1465468	Connector	1
13	.....	Connector Assembly (ECU Test Port)	1
13	1465469	Connector	1
13	1567333	Clip	1
14	275493	Conduit	AR
15	275497	Conduit	AR
16	275496	Conduit	AR
17	1558226	Clip	1
18	1532776	Clip	1
19	1531240	Connector Body (Distributor)	1
20	1402816	Clip	1
21	1531237	Connector Body (Igniter)	1
22	1531239	Connector Body (Coil)	1
23	1474763	Connector Body (Condenser)	1
24	.....	Connector Assembly (Optical LPG Low Fuel Sensor)	1
24	1547629	Connector	1
24	1508232	Terminal	3
24	2060555	Wire Seal	3
25	1474764	Connector Body (Idle LPG Solenoid)	1
26	1465469	Connector (Air Filter Restriction Sensor)	1
27	1465468	Connector	1
28	1474763	Connector Body (Main LPG Solenoid)	1
29	1327957	Connector (Oil Pressure Sensor)	1
30	.....	Connector Assembly (Alternator B+)	1
30	129888	E-Ring	1
30	1308259	Connector Body	1
31	1547482	Connector (Coolant Temp. Sensor)	1
32	1308259	Connector Body (Alternator)	1
33	1560441	Connector Body (Map Sensor)	1
34	1531991	Connector (TPS)	1
35	1482651	Connector Body (Air Temp. Sensor)	1

**WIRE HARNESS (LPG ENGINE)
MAZDA 2.0L AND 2.2L – 2010 SERIES**

ITEM	PART NO.	DESCRIPTION	QTY
36	1531231	Connector Body (Governor)	1
37	1482654	Connector Body (Injector)	1
38	1547479	Housing (ECU Connector)	1
39	1500899	Clip	1
40	.....	Connector Assembly (Chassis Harness)	1
40	1330439	Plug	1
40	1484709	Terminal (Pin)	1
40	1514597	Connector	1
40	1514598	Connector (Secondary Lock)	1
41	.....	Connector Assembly (Chassis Harness)	1
41	1330413	Connector	1
41	1330437	Terminal (Pin)	8
41	1330418	Connector (Secondary Lock)	1
42	1581313	Connector (Starter)	1
43	1493458	E-Ring (Starter B+)	1

WIRE HARNESS
GM 2.4L ENGINE, LPG (→ S/N L177B14822F)

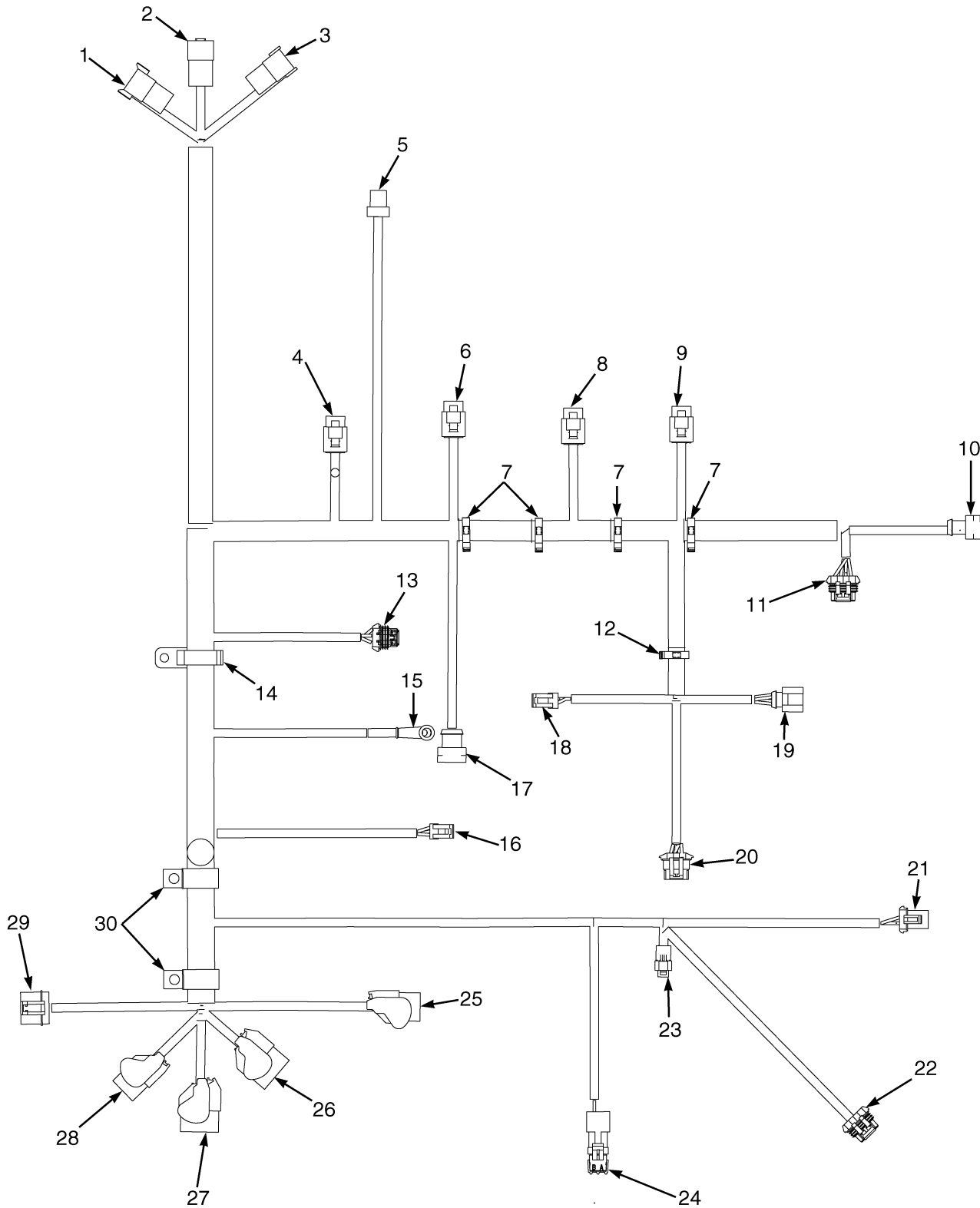
ITEM	PART NO.	DESCRIPTION	QTY
	2053099	Wire Harness (Engine, GM 2.4L, LPG)	1
1	.....	Peak and Hold Module	1
2	.....	Engine Control Unit	3
3	.....	Connector Assembly (Latch Relay)	1
3	1330302	Connector	1
3	1330281	Terminal	2
3	1330303	Lock	1
3	1330304	Terminal	2
3	1337391	Seal	1
4	166112	Clamp	2
5	1532758	Clip	1
6	.....	Connector Assembly (To Chassis Harness)	1
6	1531502	Connector	1
6	866401	Terminal	4
6	1330433	Terminal	9
6	1463136	Terminal	6
6	1330439	Plug	10
6	1484686	Washer (Spring)	1
6	1484685	Locknut	1
7	.....	Connector Assembly (Injector)	1
7	1607548	Connector	1
7	1607549	Terminal	2
7	1561147	Plug	2
8	.....	Connector Assembly (MAP Sensor)	1
8	1607839	Connector	1
8	1402814	Terminal	4
8	1562649	Seal	4
9	1500899	Clip	4
10	.....	Connector Assembly (Coolant Temperature Sensor)	1
10	1607837	Connector	1
10	1402814	Terminal	2
10	1562649	Seal	2
11	.....	(Connector Assembly) (Oxygen Sensor)	1
11	1330355	Terminal	4
11	1402887	Wire Seal	4
11	1482663	Connector	1
11	1482667	Connector Body	1
12	1500900	Clip	1
13	.....	Connector Assembly (Electronic Throttle)	1
13	1607743	Connector	1
13	1607744	Terminal	6
13	1607746	Seal	4
13	1607745	Seal	2
14	.....	Connector Assembly (Ignition Coil)	1
14	1531486	Connector	1
14	1330356	Seal	2
14	1402887	Wire Seal	3
14	1330355	Terminal	5
15	.....	Connector Assembly (Alternator)	1
15	1323586	Connector	1

WIRE HARNESS
GM 2.4L ENGINE, LPG (→ S/N L177B14822F)

ITEM	PART NO.	DESCRIPTION	QTY
15	1323576	Terminal	2
16	.....	Connector Assembly (Crankshaft Position Sensor)	1
16	1607958	Connector	1
16	1562649	Seal	3
16	1402814	Terminal	3
17	.....	Connector Assembly (Camshaft Sensor)	1
17	1476067	Connector	1
17	1476109	Connector Lock	1
17	1402887	Wire Seal	3
17	1330355	Terminal	3
18	1532779	Clip	1
19	.....	Terminal (Starter Solenoid)	1
19	129888	E-Ring	1
19	190383	Boot	1
20	.....	Connector Assembly (Oil Pressure Sensor)	1
20	1402613	Connector	1
20	1354237	Terminal	3
21	.....	Connector Assembly (LPG Pressure Switch)	1
21	1329152	Plug	1
21	1329151	Terminal	1
21	1330281	Terminal	2
21	1402888	Seal	2
22	.....	(Connector Assembly) (LPG Lockoff)	1
22	1599337	Connector	1
22	1561146	Terminal	2
23	.....	(Connector Assembly) (Air Restriction Switch)	1
23	1465469	Connector	1
23	1465468	Connector	1
23	1323578	Terminal	2
23	1402888	Seal	2

WIRE HARNESS (FIGURE 6-50)

GM 2.4L ENGINE, LPG — WITH CATALYTIC CONVERTER (S/N L177B14823E ↔ S/N L177B23560F)



BP0080571

WIRE HARNESS**GM 2.4L ENGINE, LPG – WITH CATALYTIC CONVERTER (S/N L177B14823E ↔ S/N L177B23560F)**

ITEM	PART NO.	DESCRIPTION	QTY
	2089064	Wire Harness (Engine, GM 2.4L, LPG)	1
1	.....	Connector Assembly (Chassis Harness)	1
1	1330413	Connector	1
1	1330437	Terminal (Pin)	1
1	1484377	Plug	1
2	.....	Connector Assembly (Chassis Harness)	1
2	866401	Terminal	4
2	1514597	Connector	1
3	.....	Connector Assembly (Chassis Harness)	1
3	1541988	Connector	1
3	1463138	Terminal Pin	8
4	.....	Connector Assembly (Injector 4)	1
4	1607548	Connector	1
4	1561147	Plug	2
4	1607549	Terminal	2
5	.....	Connector Assembly (NAT/MAP Sensor)	1
5	1607839	Connector	1
5	1402814	Terminal	4
5	1562649	Seal	4
6	.....	Connector Assembly (Injector 3)	1
6	1607548	Connector	2
6	1561147	Plug	2
6	1607549	Terminal	4
7	.....	Clip	1
8	.....	Connector Assembly (Injector 2)	1
8	1607548	Connector	1
8	1561147	Plug	2
8	1607549	Terminal	2
9	.....	Connector Assembly (Injector 1)	1
9	1607548	Connector	1
9	1561147	Plug	2
9	1607549	Terminal	2
10	.....	Connector Assembly (Coolant Temperature Sensor)	1
10	1402814	Terminal	2
10	1562649	Seal	2
10	1607837	Connector	1
11	.....	Connector Assembly (Oxygen Sensor, Pre-Catalytic)	1
11	1482667	Connector Body	1
11	1330355	Terminal	4
11	1402887	Wire Seal	4
11	1482663	Connector	1
12	1500900	Clip	1
13	.....	Connector Assembly (Camshaft Sensor)	1
13	1476067	Connector	1
13	1330355	Terminal	3
13	1402887	Wire Seal	3
13	1476109	Connector Lock	1
14	1532758	Clip	1
15	.....	Connector Assembly (Starter Solenoid)	1
15	129888	E-Ring	1

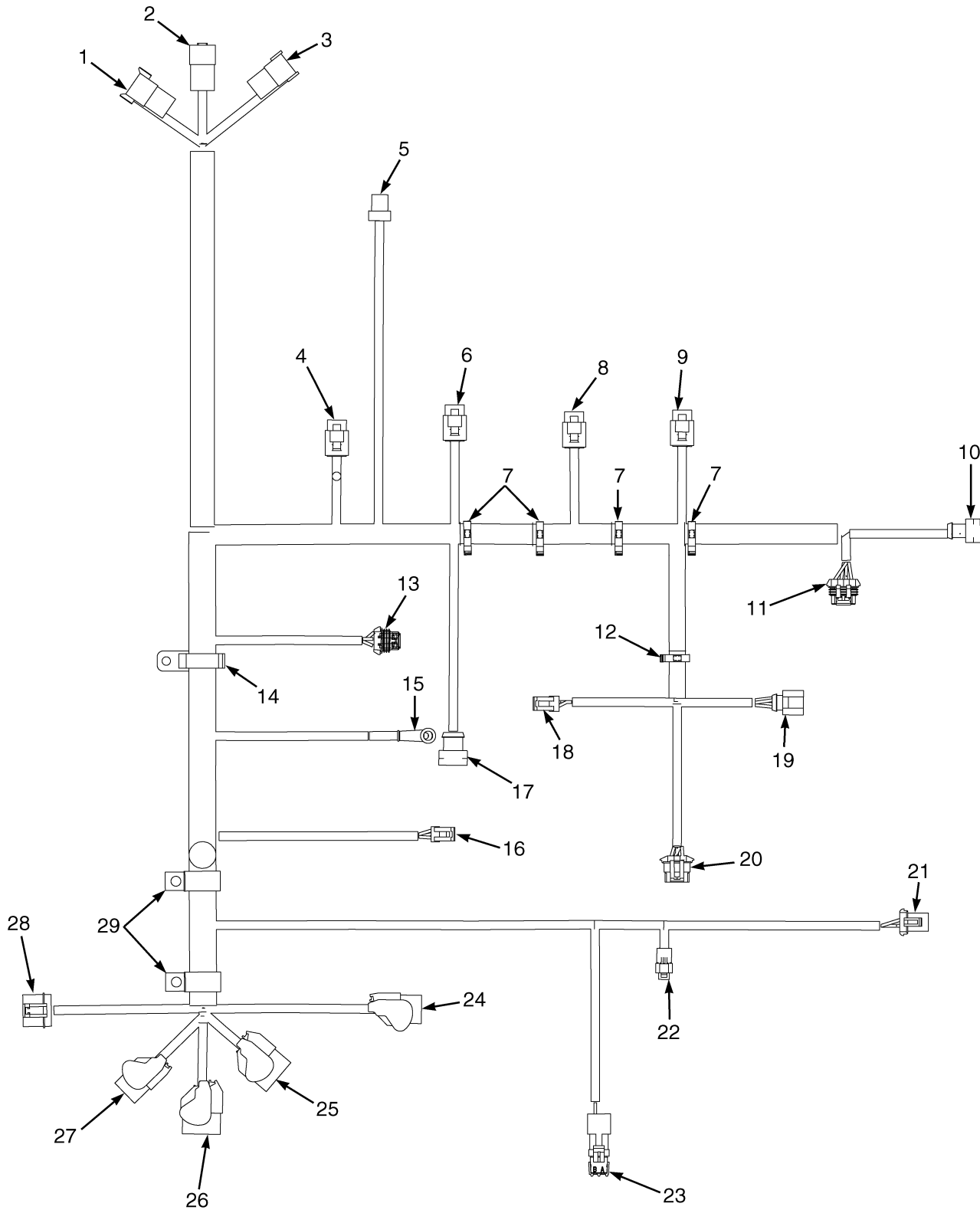
WIRE HARNESS

GM 2.4L ENGINE, LPG – WITH CATALYTIC CONVERTER (S/N L177B14823E ↔ S/N L177B23560F)

ITEM	PART NO.	DESCRIPTION	QTY
15	190383	Boot	1
16	.....	Connector Assembly (Oil Pressure Sensor)	1
16	1402613	Connector	1
16	1354237	Terminal	3
17	.....	Connector Assembly (Crankshaft Position sensor)	1
17	1402814	Terminal	3
17	1562649	Seal	3
17	1607958	Connector	1
18	.....	Connector Assembly (Alternator)	1
18	1323576	Terminal	2
18	1323586	Connector	1
19	.....	Connector Assembly (E-Throttle)	1
19	1607743	Connector	1
19	1607743	Connector	6
19	1607746	Seal	4
19	1607745	Seal	2
20	.....	Connector Assembly (Ignition Coil)	1
20	1402613	Connector	12
20	1531486	Connector	1
20	1330355	Terminal	5
20	1402887	Wire Seal	3
20	1330356	Seal	2
21	.....	Connector Assembly (LPG Pressure Switch)	1
21	1329152	Plug	1
21	1402888	Seal	2
21	1330281	Terminal	2
21	1329151	Terminal	1
22	.....	Connector Assembly (Oxygen Sensor, Post Catalytic)	1
22	1482667	Connector Body	1
22	1330355	Terminal	4
22	1402887	Wire Seal	4
22	1482663	Connector	1
23	.....	Connector Assembly (LPG Lockoff)	1
23	1599337	Connector	1
23	1561146	Terminal	2
24	.....	Connector Assembly (Air Restriction Sensor)	1
24	1465469	Connector	1
24	1465468	Connector	1
24	1323578	Terminal	2
24	1402888	Seal	2
25	.....	Connector Assembly (CPS "Peak And Hold")	1
26	.....	Connector Assembly (ECU "A")	1
27	.....	Connector Assembly (ECU "B")	1
28	.....	Connector Assembly (ECU "C")	1
29	.....	Connector Assembly (Latch Relay)	1
29	1461744	Connector Body	1
29	1402904	Terminal	2
29	1375797	Terminal	2
30	166112	Clamp	1
30	1323579	Seal	1

WIRE HARNESS (FIGURE 6-51)

GM 2.4L ENGINE, LPG — WITHOUT CATALYTIC CONVERTER (S/N L177B14823E ↔ S/N L177B23560F)



BP080574

WIRE HARNESS**GM 2.4L ENGINE, LPG – WITHOUT CATALYTIC CONVERTER (S/N L177B14823E ↔ S/N L177B23560F)**

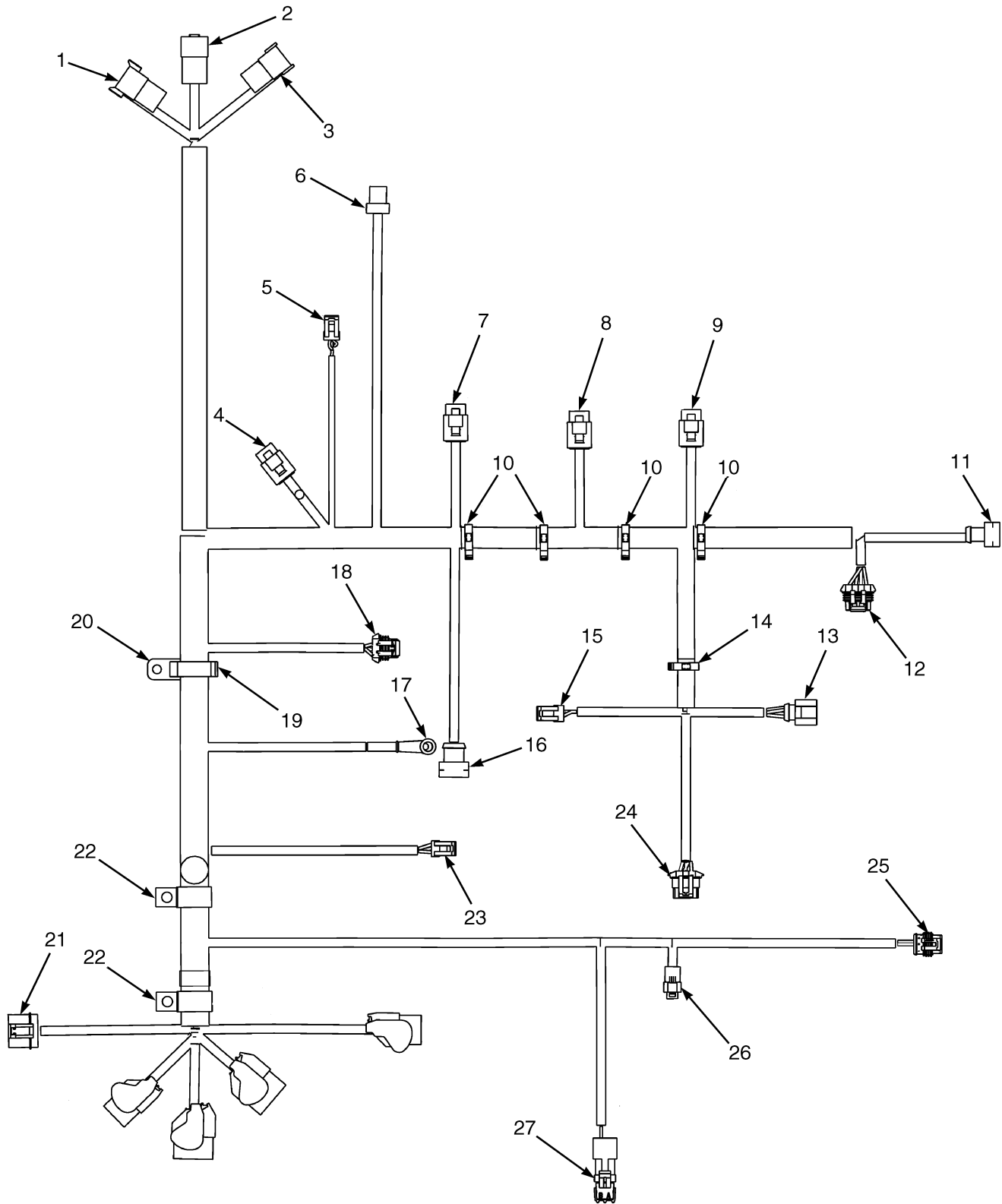
ITEM	PART NO.	DESCRIPTION	QTY
	2098313	Wire Harness (Engine, GM 2.4L, LPG)	1
1	.....	Connector Assembly (Chassis Harness)	1
1	1330413	Connector	1
1	1330437	Terminal (Pin)	1
1	1484377	Plug	1
2	.....	Connector Assembly (Chassis Harness)	1
2	866401	Terminal	4
2	1514597	Connector	1
3	.....	Connector Assembly (Chassis Harness)	1
3	1541988	Connector	1
3	1463138	Terminal Pin	8
4	.....	Connector Assembly (Injector 4)	1
4	1607548	Connector	1
4	1561147	Plug	2
4	1607549	Terminal	2
5	.....	Connector Assembly (NAT/MAP Sensor)	1
5	1607839	Connector	1
5	1402814	Terminal	4
5	1562649	Seal	4
6	.....	Connector Assembly (Injector 3)	1
6	1607548	Connector	2
6	1561147	Plug	2
6	1607549	Terminal	4
7	.....	Clip	1
8	.....	Connector Assembly (Injector 2)	1
8	1607548	Connector	1
8	1561147	Plug	2
8	1607549	Terminal	2
9	.....	Connector Assembly (Injector 1)	1
9	1607548	Connector	1
9	1561147	Plug	2
9	1607549	Terminal	2
10	.....	Connector Assembly (Coolant Temperature Sensor)	1
10	1402814	Terminal	2
10	1562649	Seal	2
10	1607837	Connector	1
11	.....	Connector Assembly (Oxygen Sensor, Pre-Catalytic)	1
11	1482667	Connector Body	1
11	1330355	Terminal	4
11	1402887	Wire Seal	4
11	1482663	Connector	1
12	1500900	Clip	1
13	.....	Connector Assembly (Camshaft Sensor)	1
13	1476067	Connector	1
13	1330355	Terminal	3
13	1402887	Wire Seal	3
13	1476109	Connector Lock	1
14	1532758	Clip	1
15	.....	Connector Assembly (Starter Solenoid)	1
15	129888	E-Ring	1

WIRE HARNESS

GM 2.4L ENGINE, LPG – WITHOUT CATALYTIC CONVERTER (S/N L177B14823E ↔ S/N L177B23560F)

ITEM	PART NO.	DESCRIPTION	QTY
15	190383	Boot	1
16	.....	Connector Assembly (Oil Pressure Sensor)	1
16	1402613	Connector	1
16	1354237	Terminal	3
17	.....	Connector Assembly (Crankshaft Position sensor)	1
17	1402814	Terminal	3
17	1562649	Seal	3
17	1607958	Connector	1
18	.....	Connector Assembly (Alternator)	1
18	1323576	Terminal	2
18	1323586	Connector	1
19	.....	Connector Assembly (E-Throttle)	1
19	1607743	Connector	1
19	1607744	Terminal	6
19	1607746	Seal	4
19	1607745	Seal	2
20	.....	Connector Assembly (Ignition Coil)	1
20	1402613	Connector	12
20	1531486	Connector	1
20	1330355	Terminal	5
20	1402887	Wire Seal	3
20	1330356	Seal	2
21	.....	Connector Assembly (LPG Pressure Switch)	1
21	1329152	Plug	1
21	1402888	Seal	2
21	1330281	Terminal	2
21	1329151	Terminal	1
22	.....	Connector Assembly (LPG Lockoff)	1
22	1599337	Connector	1
22	1561146	Terminal	2
23	.....	Connector Assembly (Air Restriction Sensor)	1
23	1465469	Connector	1
23	1465468	Connector	1
23	1323578	Terminal	2
23	1402888	Seal	2
24	.....	Connector Assembly (CPS "Peak And Hold")	1
25	.....	Connector Assembly (ECU "A")	1
26	.....	Connector Assembly (ECU "B")	1
27	.....	Connector Assembly (ECU "C")	1
28	.....	Connector Assembly (Latch Relay)	1
28	1461744	Connector Body	1
28	1402904	Terminal	2
28	1375797	Terminal	2
29	166112	Clamp	1
29	1323579	Seal	1

WIRE HARNESS (FIGURE 6-52) GM 2.4L ENGINE, LPG — WITH LOW FUEL SENSOR AND CATALYTIC CONVERTER (S/N L177B23561F ↔ S/N L177B31117H)



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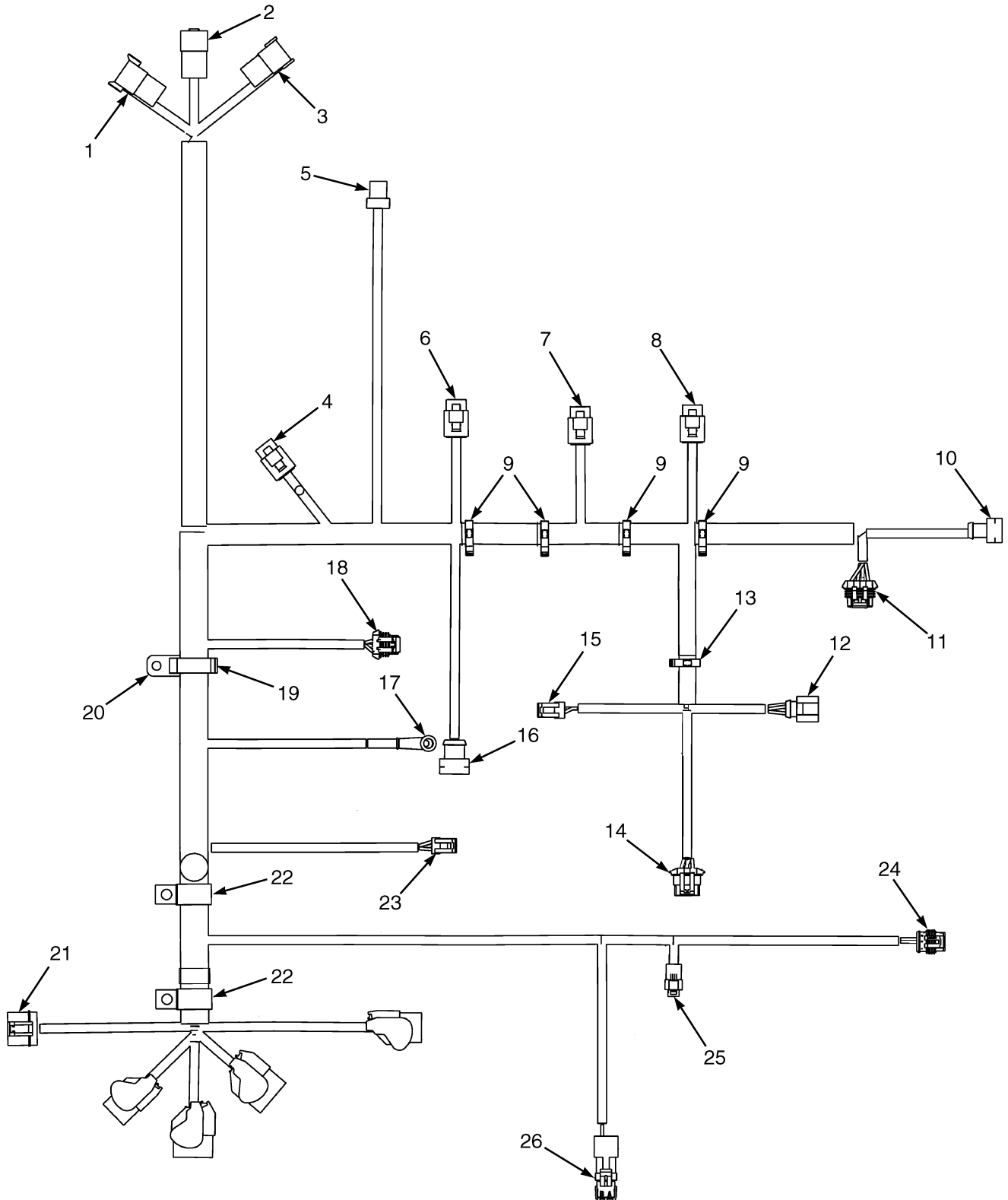
WIRE HARNESS
GM 2.4L ENGINE, LPG – WITH LOW FUEL SENSOR AND CATALYTIC CONVERTER
(S/N L177B23561F ↔ S/N L177B31117H)

ITEM	PART NO.	DESCRIPTION	QTY
	4601529	Wire Harness (Engine, GM 2.4L, LPG)	1
1	.....	Connector Assembly (CRP 55)	1
1	1330413	Connector	1
1	1330437	Terminal (Pin)	7
1	1484377	Plug	1
2	.....	Connector Assembly (CRP 160)	1
2	866401	Terminal	4
2	1514597	Connector	1
3	.....	Connector Assembly (CRP 83)	1
3	1541988	Connector	1
3	1463138	Terminal Pin	8
4	.....	Connector Assembly (Injector 4)	1
4	1607549	Terminal	2
4	1561147	Plug	2
4	1607548	Connector	1
5	.....	Connector Assembly (FAP Sensor)	1
5	1402613	Connector	1
5	1354237	Terminal	3
6	.....	Connector Assembly (MAP/MAT Sensor)	1
6	1607839	Connector	1
6	1402814	Terminal	4
6	1562649	Seal	4
7	.....	Connector Assembly (Injector 3)	1
7	1607549	Terminal	2
7	1561147	Plug	2
7	1607548	Connector	1
8	.....	Connector Assembly (Injector 2)	1
8	1607549	Terminal	2
8	1561147	Plug	2
8	1607548	Connector	1
9	.....	Connector Assembly (Injector 1)	1
9	1607549	Terminal	2
9	1561147	Plug	2
9	1607548	Connector	1
10	1500899	Clip	4
11	.....	Connector Assembly (Coolant Temperature Sensor)	1
11	1607837	Connector	1
11	1402814	Terminal	2
11	1562649	Seal	2
12	.....	Connector Assembly (Oxygen Sensor)	1
12	1482667	Connector Body	1
12	1330355	Terminal	4
12	1402887	Wire Seal	4
12	1482663	Connector	1
13	.....	Connector Assembly (E-Throttle)	1
13	1607745	Seal	2
13	1607746	Seal	4
13	1607744	Terminal	6
13	1607743	Connector	1

WIRE HARNESS
GM 2.4L ENGINE, LPG – WITH LOW FUEL SENSOR AND CATALYTIC CONVERTER
(S/N L177B23561F ↔ S/N L177B31117H)

ITEM	PART NO.	DESCRIPTION	QTY
14	1500900	Clip	1
15	.....	Connector Assembly (Alternator)	1
15	1323576	Terminal	2
15	1323586	Connector	1
16	.....	Connector Assembly (Crankshaft Position Sensor)	1
16	1562649	Seal	3
16	1402814	Terminal	3
16	1607958	Connector	1
17	.....	Connector Assembly (Starter Solenoid)	1
17	129888	E-Ring	1
17	190383	Boot	1
18	.....	Connector Assembly (Camshaft Sensor)	1
18	1476067	Connector	1
18	1330355	Terminal	3
18	1402887	Wire Seal	3
18	1476109	Connector Lock	1
19	1532779	Clip	1
20	1532758	Clip	1
21	.....	Connector Assembly (Latch Relay)	1
21	1323579	Seal	1
21	1375797	Terminal	2
21	1402904	Terminal	2
21	1461744	Connector Body	1
22	166112	Clamp	1
23	.....	Connector Assembly (Oil Pressure Sensor)	1
23	1402613	Connector	1
23	1354237	Terminal	3
24	.....	Connector Assembly (Ignition Coil)	1
24	1482668	Plug	1
24	1330356	Seal	2
24	1402887	Wire Seal	3
24	1330355	Terminal	5
24	1531486	Connector	1
25	.....	Connector Assembly (LPG Pressure Switch)	1
25	1508232	Terminal	3
25	2060555	Wire Seal	3
25	1547629	Connector	1
26	.....	Connector Assembly (LPG Lockoff)	1
26	1599337	Connector	1
26	1561146	Terminal	2
27	.....	Connector Assembly (Air Restriction Switch)	1
27	1465469	Connector	1
27	1465468	Connector	1
27	1323578	Terminal	2
27	1402888	Seal	2

WIRE HARNESS (FIGURE 6-53) GM 2.4L ENGINE, LPG — WITH LOW FUEL SENSOR, WITHOUT CATALYTIC CONVERTER (S/N L177B23561F ↔ S/N L177B31696H)



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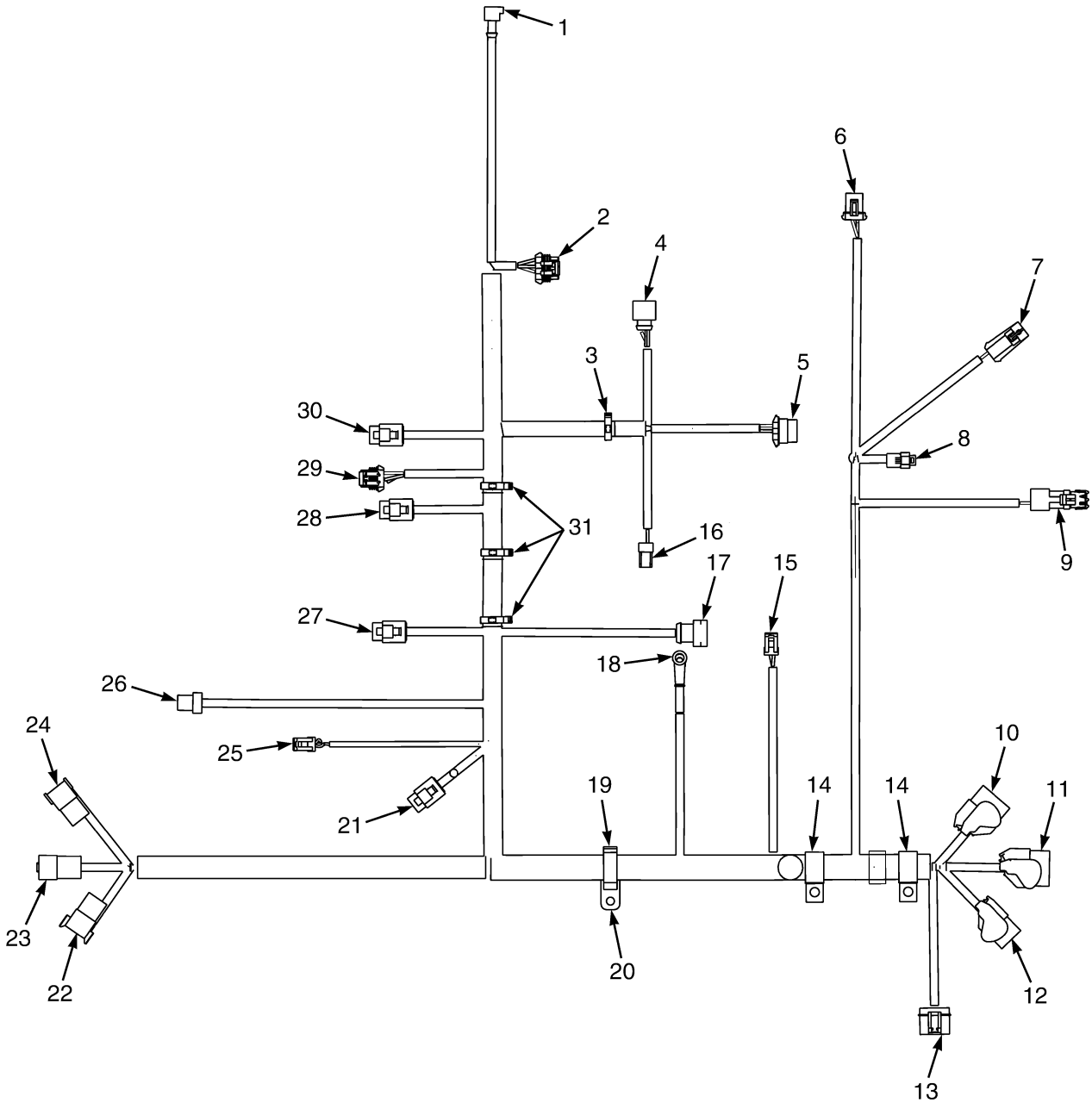
WIRE HARNESS
GM 2.4L ENGINE, LPG – WITH LOW FUEL SENSOR, WITHOUT CATALYTIC CONVERTER
(S/N L177B23561F ↔ S/N L177B31696H)

ITEM	PART NO.	DESCRIPTION	QTY
	4601528	Wire Harness (Engine, GM 2.4L, LPG)	1
1	.....	Connector Assembly (CRP 55)	1
1	1330413	Connector	1
1	1330437	Terminal (Pin)	7
1	1484377	Plug	1
2	.....	Connector Assembly (CRP 160)	1
2	866401	Terminal	4
3	.....	Connector Assembly (CRP 83)	1
3	1541988	Connector	1
3	1463138	Terminal Pin	8
4	.....	Connector Assembly (Injector 4)	1
4	1607549	Terminal	2
4	1561147	Plug	2
4	1607548	Connector	1
5	.....	Connector Assembly (MAP/MAT Sensor)	1
5	1607839	Connector	1
5	1402814	Terminal	4
5	1562649	Seal	4
6	.....	Connector Assembly (Injector 3)	1
6	1607549	Terminal	2
6	1561147	Plug	2
6	1607548	Connector	1
7	.....	Connector Assembly (Injector 2)	1
7	1607549	Terminal	2
7	1561147	Plug	2
7	1607548	Connector	1
8	.....	Connector Assembly (Injector 1)	1
8	1607549	Terminal	2
8	1561147	Plug	2
8	1607548	Connector	1
9	1500899	Clip	4
10	.....	Connector Assembly (Coolant Temperature Sensor)	1
10	1607837	Connector	1
10	1402814	Terminal	2
10	1562649	Seal	2
11	.....	Connector Assembly (Oxygen Sensor)	1
11	1482667	Connector Body	1
11	1330355	Terminal	4
11	1402887	Wire Seal	4
11	1482663	Connector	1
12	.....	Connector Assembly (E-Throttle)	1
12	1607745	Seal	2
12	1607746	Seal	4
12	1607744	Terminal	6
12	1607743	Connector	1
13	1500900	Clip	1
14	.....	Connector Assembly (Ignition Coil)	1
14	1482668	Plug	1
14	1330356	Seal	2

WIRE HARNESS
GM 2.4L ENGINE, LPG – WITH LOW FUEL SENSOR, WITHOUT CATALYTIC CONVERTER
(S/N L177B23561F ↔ S/N L177B31696H)

ITEM	PART NO.	DESCRIPTION	QTY
14	1402887	Wire Seal	3
14	1330355	Terminal	5
14	1531486	Connector	1
15	.....	Connector Assembly (Alternator)	1
15	1323576	Terminal	2
15	1323586	Connector	1
16	.....	Connector Assembly (Crankshaft Position Sensor)	1
16	1562649	Seal	3
16	1402814	Terminal	3
16	1607958	Connector	1
17	.....	Connector Assembly (Starter Solenoid)	1
17	129888	E-Ring	1
17	190383	Boot	1
18	.....	Connector Assembly (Camshaft Sensor)	1
18	1476067	Connector	1
18	1330355	Terminal	3
18	1402887	Wire Seal	3
18	1476109	Connector Lock	1
19	1532779	Clip	1
20	1532758	Clip	1
21	.....	Connector Assembly (Latch Relay)	1
21	1323579	Seal	1
21	1375797	Terminal	2
21	1402904	Terminal	2
21	1461744	Connector Body	1
22	166112	Clamp	1
23	.....	Connector Assembly (Oil Pressure Sensor)	1
23	1402613	Connector	1
23	1354237	Terminal	3
24	.....	Connector Assembly (LPG Pressure Switch)	1
24	1508232	Terminal	3
24	2060555	Wire Seal	3
24	1547629	Connector	1
25	.....	Connector Assembly (LPG Lockoff)	1
25	1599337	Connector	1
25	1561146	Terminal	2
26	.....	Connector Assembly (Air Restriction Switch)	1
26	1465469	Connector	1
26	1465468	Connector	1
26	1323578	Terminal	2
26	1402888	Seal	2

WIRE HARNESS (FIGURE 6-54) GM 2.4L ENGINE, LPG — WITH CATALYTIC CONVERTER (S/N L177B31118H →)



BP080946

WIRE HARNESS
GM 2.4L ENGINE, LPG – WITH CATALYTIC CONVERTER (S/N L177B31118H →)

ITEM	PART NO.	DESCRIPTION	QTY
	4601157	Wire Harness (Engine, GM 2.4L, LPG)	1
1	.....	Connector Assembly (Coolant Temperature Sensor)	1
1	1607837	Connector	1
1	1402814	Terminal	2
1	1562649	Seal	2
2	.....	Connector Assembly (Oxygen Sensor)	1
2	1482667	Connector Body	1
2	1330355	Terminal	4
2	1402887	Wire Seal	4
2	1482663	Connector	1
2	a 1502061	Clamp	1
2	a 1561871	Clamp (Swivel)	1
3	1500900	Clip	1
4	.....	Connector Assembly (E-Throttle)	1
4	1607743	Connector	1
4	1607744	Terminal	6
4	1607746	Seal	4
4	1607745	Seal	2
5	.....	Connector Assembly (Ignition Coil)	1
5	1482668	Plug	1
5	1330356	Seal	2
5	1402887	Wire Seal	3
5	1330355	Terminal	5
5	1531486	Connector	1
6	.....	Connector Assembly (LPG Pressure Switch)	1
6	1329151	Terminal	1
6	1508232	Terminal (Alternate Part)	3
6	1330281	Terminal	2
6	2060555	Wire Seal (Alternate Part)	3
6	1329152	Plug	1
6	1547629	Connector (Alternate Part)	1
7	.....	Connector Assembly (Rear Oxygen Sensor)	1
7	1498424	Housing	1
7	1482666	Connector Body (Male)	4
7	1476108	Wire Seal	4
7	1650797	Lock	1
7	1520513	Clip	1
8	.....	Connector Assembly (LPG Lockoff)	1
8	1599337	Connector	1
8	1561146	Terminal	2
9	.....	Connector Assembly (Air Restriction Switch)	1
9	1465469	Connector	1
9	1465468	Connector	1
9	1323578	Terminal	2
9	1402888	Seal	2
10	.....	Connector Assembly (ECU Connector A)	1
11	.....	Connector Assembly (ECU Connector B)	1
12	.....	Connector Assembly (ECU Connector C)	1
13	.....	Connector Assembly (Latch Relay)	1
13	1323579	Seal	1

WIRE HARNESS

GM 2.4L ENGINE, LPG – WITH CATALYTIC CONVERTER (S/N L177B31118H →)

ITEM	PART NO.	DESCRIPTION	QTY
13	1375797	Terminal	2
13	1402904	Terminal	2
13	1461744	Connector Body	1
14	166112	Clamp	2
15	.....	Connector Assembly (Oil Pressure Sensor)	1
15	1402613	Connector	1
15	1354237	Terminal	2
16	.....	Connector Assembly (Alternator)	1
16	1323576	Terminal	2
16	1323586	Connector	1
17	.....	Connector Assembly (Crankshaft Position Sensor)	1
17	1562649	Seal	3
17	1402814	Terminal	3
17	1607958	Connector	1
18	.....	Connector Assembly (Starter Solenoid)	1
18	129888	E-Ring	1
18	190383	Boot	1
19	1532779	Clip	1
20	1532758	Clip	1
21	.....	Connector Assembly (Injector #4)	1
21	1607549	Terminal	2
21	1561147	Plug	2
21	1607548	Connector	1
22	.....	Connector Assembly (Chassis Harness)	1
22	1330413	Connector	1
22	1330437	Terminal (Pin)	7
22	1484377	Plug	1
23	.....	Connector Assembly (Chassis Harness)	1
23	866401	Terminal	4
23	1514597	Connector	1
24	.....	Connector Assembly (Chassis Harness)	1
24	1541988	Connector	1
24	1463138	Terminal Pin	8
25	1402613	Connector	1
25	.....	Connector Assembly (FAP Sensor)	1
25	1354237	Terminal	3
26	.....	Connector Assembly (MAP/MAT Sensor)	1
26	1607839	Connector	1
26	1402814	Terminal	4
26	1562649	Seal	4
27	.....	Connector Assembly (Injector #3)	1
27	1607549	Terminal	2
27	1561147	Plug	2
27	1607548	Connector	1
28	.....	Connector Assembly (Injector #2)	1
28	1607549	Terminal	2
28	1561147	Plug	2
28	1607548	Connector	1
29	.....	Connector Assembly (Camshaft Sensor)	1
29	1476109	Connector Lock	1

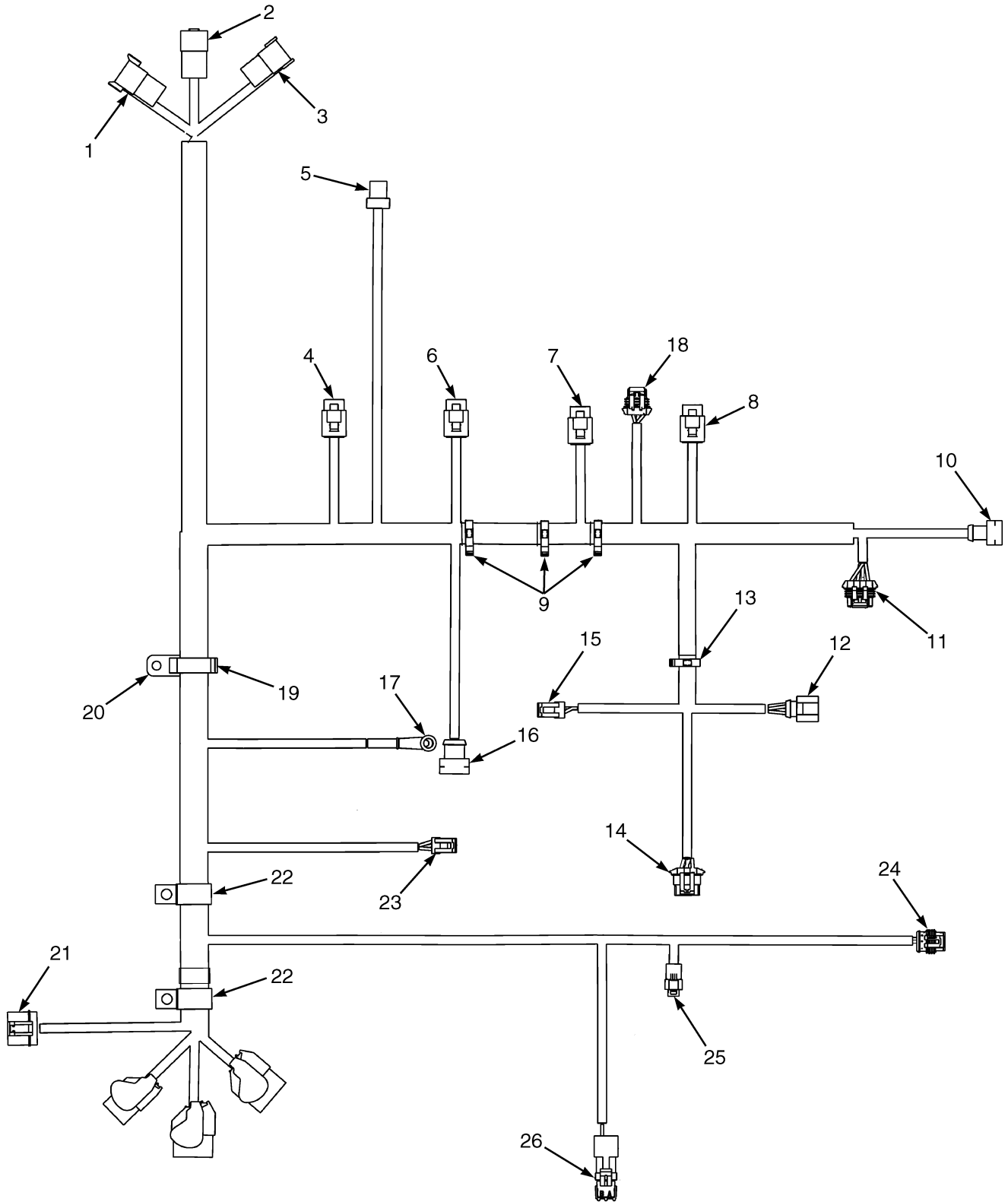
WIRE HARNESS
GM 2.4L ENGINE, LPG – WITH CATALYTIC CONVERTER (S/N L177B31118H →)

ITEM	PART NO.	DESCRIPTION	QTY
29	1402887	Wire Seal	3
29	1330355	Terminal	3
29	1476067	Connector	1
30	.....	Connector Assembly (Injector #1)	1
30	1607549	Terminal	2
30	1561147	Plug	2
30	1607548	Connector	1
31	1500899	Clip	3

FOOTNOTES:

- a** Not Illustrated

WIRE HARNESS (FIGURE 6-55) GM 2.4L ENGINE, LPG — WITHOUT CATALYTIC CONVERTER (S/N L177B31697H →)



BP081115

WIRE HARNESS**GM 2.4L ENGINE, LPG – WITHOUT CATALYTIC CONVERTER (S/N L177B31697H →)**

ITEM	PART NO.	DESCRIPTION	QTY
	4601158	Wire Harness (Engine, GM 2.4L, LPG)	1
1	.....	Connector Assembly (Chassis Harness)	1
1	1330413	Connector	1
1	1330437	Terminal (Pin)	7
1	1484377	Plug	1
2	.....	Connector Assembly (Chassis Harness)	1
2	1514597	Connector	1
2	866401	Terminal	4
3	.....	Connector Assembly (Chassis Harness)	1
3	1541988	Connector	1
3	1463138	Terminal Pin	8
4	.....	Connector Assembly (Injector 4)	1
4	1607549	Terminal	2
4	1561147	Plug	2
4	1607548	Connector	1
5	.....	Connector Assembly (MAP/MAT Sensor)	1
5	1607839	Connector	1
5	1402814	Terminal	4
5	1562649	Seal	4
6	.....	Connector Assembly (Injector 3)	1
6	1607549	Terminal	2
6	1561147	Plug	2
6	1607548	Connector	1
7	.....	Connector Assembly (Injector 2)	1
7	1607549	Terminal	2
7	1561147	Plug	2
7	1607548	Connector	1
8	.....	Connector Assembly (Injector 1)	1
8	1607549	Terminal	2
8	1561147	Plug	2
8	1607548	Connector	1
9	1500899	Clip	4
10	.....	Connector Assembly (Coolant Temperature Sensor)	1
10	1607837	Connector	1
10	1402814	Terminal	2
10	1562649	Seal	2
11	.....	Connector Assembly (Oxygen Sensor)	1
11	1482667	Connector Body	1
11	1330355	Terminal	4
11	1402887	Wire Seal	4
11	1482663	Connector	1
12	.....	Connector Assembly (E-Throttle)	1
12	1607745	Seal	2
12	1607746	Seal	4
12	1607744	Terminal	6
12	1607743	Connector	1
13	1500900	Clip	1
14	.....	Connector Assembly (Ignition Coil)	1
14	1482668	Plug	1
14	1330356	Seal	2

WIRE HARNESS

GM 2.4L ENGINE, LPG – WITHOUT CATALYTIC CONVERTER (S/N L177B31697H →)

ITEM	PART NO.	DESCRIPTION	QTY
14	1402887	Wire Seal	3
14	1330355	Terminal	5
14	1531486	Connector	1
15	.....	Connector Assembly (Alternator)	1
15	1323576	Terminal	2
15	1323586	Connector	1
16	.....	Connector Assembly (Crankshaft Position Sensor)	1
16	1562649	Seal	3
16	1607958	Connector	1
16	1402814	Terminal	3
17	.....	Connector Assembly (Starter Solenoid)	1
17	129888	E-Ring	1
17	190383	Boot	1
18	.....	Connector Assembly (Camshaft Sensor)	1
18	1476067	Connector	1
18	1330355	Terminal	3
18	1402887	Wire Seal	3
18	1476109	Connector Lock	1
19	1532779	Clip	1
20	1532758	Clip	1
21	.....	Connector Assembly (Latch Relay)	1
21	1323579	Seal	1
21	1375797	Terminal	2
21	1402904	Terminal	2
21	1461744	Connector Body	1
22	166112	Clamp	2
23	.....	Connector Assembly (Oil Pressure Sensor)	1
23	1402613	Connector	1
23	1354237	Terminal	3
24	.....	Connector Assembly (LPG Pressure Switch)	1
24	1508232	Terminal	3
24	2060555	Wire Seal	3
24	1547629	Connector	1
25	.....	Connector Assembly (LPG Lockoff)	1
25	1599337	Connector	1
25	1561146	Terminal	2
26	.....	Connector Assembly (Air Restriction Switch)	1
26	1465469	Connector	1
26	1465468	Connector	1
26	1323578	Terminal	2
26	1402888	Seal	2

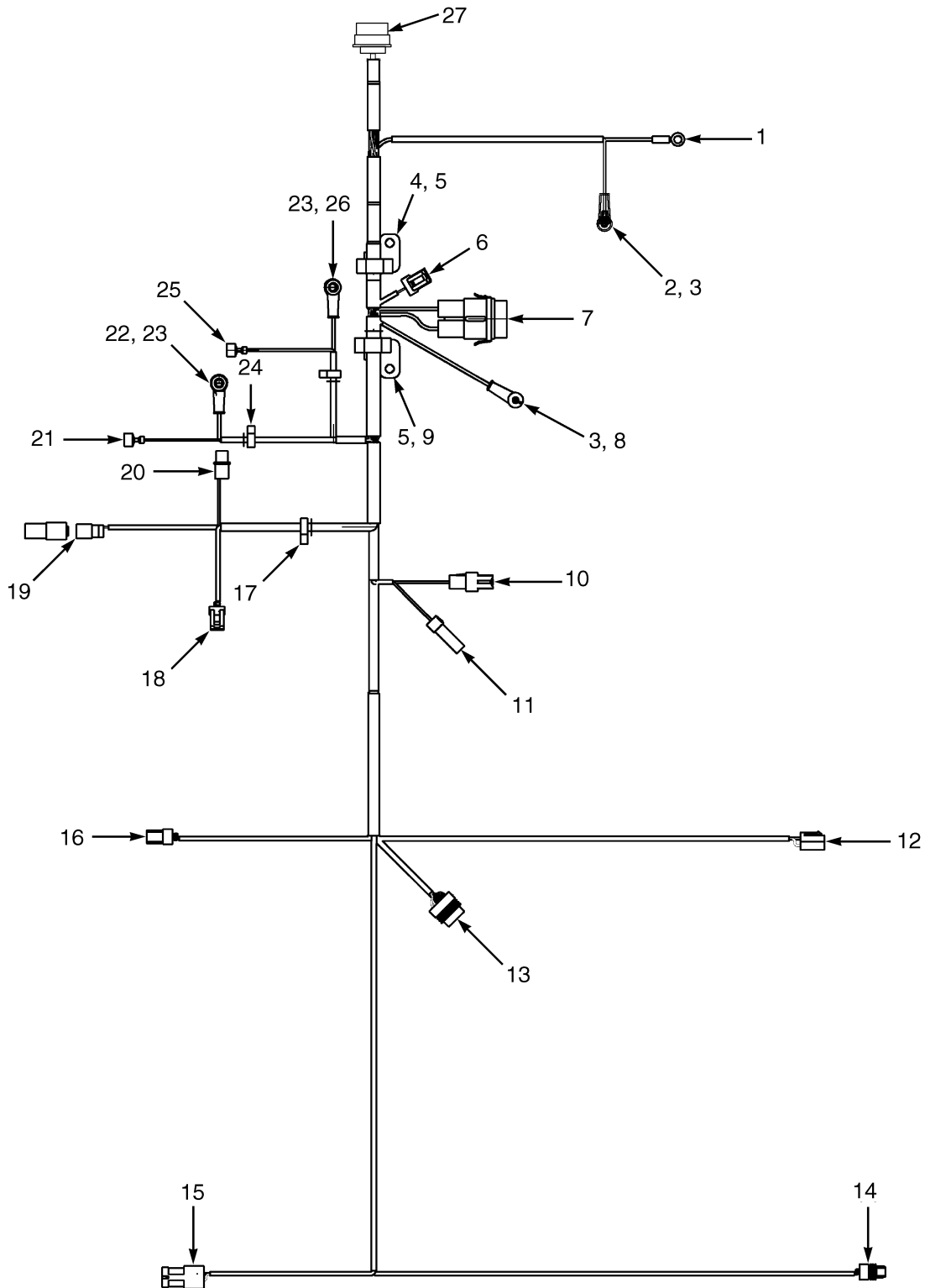
**WIRE HARNESS ADAPTER (FIGURE 6-56)
LOW FUEL PRESSURE**



HP082028

ITEM	PART NO.	DESCRIPTION	QTY
	4602843	Wire Harness	1
1	.....	Connector Assembly (To LH Chassis Harness)	1
1	2795583	Connector	1
1	2787350	Pin Terminal	2
1	2069381	Plug	1
1	2060555	Wire Seal	2
2	.....	Connector Assembly (Low LPG Switch)	1
2	1329152	Plug	1
2	1329151	Terminal	1
2	1330281	Terminal	2
2	1402888	Seal	2

WIRE HARNESS (FIGURE 6-57) ENGINE — YANMAR 2.6L AND 3.3L, DIESEL (→ S/N L177B11117E)



HP081650

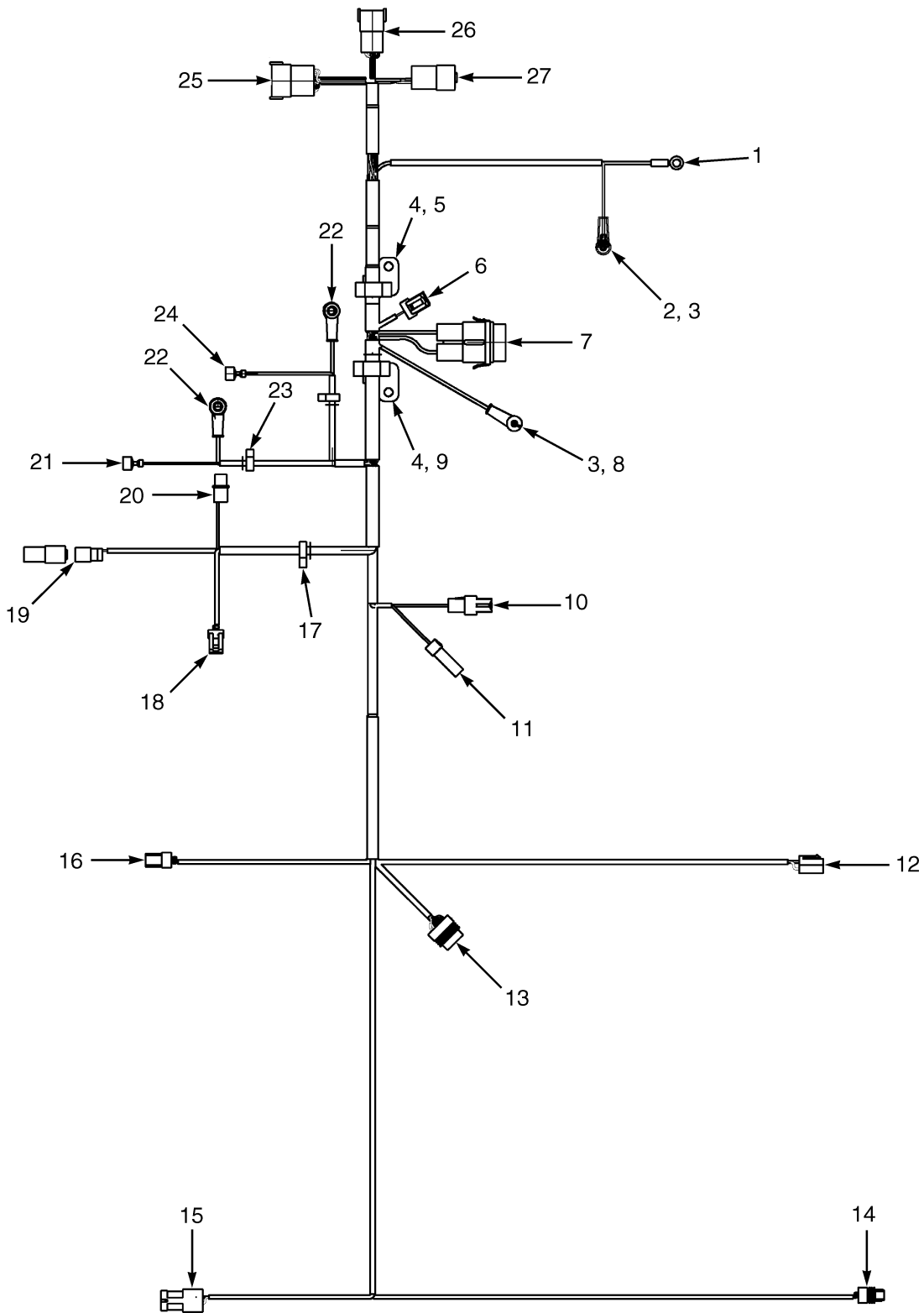
WIRE HARNESS
ENGINE – YANMAR 2.6L AND 3.3L, DIESEL (→ S/N L177B11117E)

ITEM	PART NO.	DESCRIPTION	QTY
	2060844	Wire Harness (Engine)	1
1	1559049	Ring Terminal (Glow Plug)	1
1	190382	Boot	1
2	.....	Connector Assembly (Fuse)	1
2	1454860	Connector Body	1
2	1382695	Fuse Connector	2
2	1382694	Fuse Connector	2
2	1454829	Fuse (60 Amp)	1
2	1454862	Cover (With Seal)	1
3	.....	Connector Assembly (Engine RPM Sensor)	1
3	1546673	Connector	1
3	1323576	Terminal	3
4	1559049	Ring Terminal (Starter Solenoid)	1
4	190382	Boot	1
5	148611	E-Ring (Starter Stud)	1
6	.....	Connector Assembly (Alternator)	1
6	1547368	Connector Body	1
6	1565098	Terminal	2
7	1582484	Connector (Fuel Shut-Off Solenoid)	1
8	1582486	Connector (Cold Start Aid)	1
9	1521328	Terminal (Relay Power To Glow Plugs)	1
9	190383	Boot	1
10	325789	Terminal (Relay Ground)	1
11	1521328	Terminal (Fused Power Positive)	1
11	190383	Boot	1
12	325789	Terminal (Relay Signal)	1
13	1547369	Connector Body (Fuel Filter/Water Separator)	1
14	.....	Connector Assembly (Fuel Level Sensor)	1
14	1476077	Connector	1
14	1323576	Terminal	2
15	.....	Connector Assembly (Throttle Position Sensor)	1
15	1525584	Connector	1
15	1532571	Terminal	6
16	.....	Connector Assembly (Water Temperature Sensor)	1
16	1323586	Connector	1
16	1323576	Terminal	2
17	1465469	Connector (Air Filter Sensor)	1
17	1323578	Terminal	2
17	1402888	Seal	2
17	1498416	Connector	2
18	.....	Connector Assembly (Low Engine Oil Pressure Switch)	1
18	1327957	Connector	1
18	1532571	Terminal	3
19	.....	Connector Assembly (Pull Actuator)	1
19	1330419	Connector	1
19	1330436	Terminal	2
19	1330424	Connector (Secondary Lock)	1
19	1351681	Connector	1
20	.....	Connector Assembly (Engine To Chassis)	1
20	1531502	Connector	1

WIRE HARNESS
ENGINE – YANMAR 2.6L AND 3.3L, DIESEL (→ S/N L177B11117E)

ITEM	PART NO.	DESCRIPTION	QTY
20	1484709	Terminal (Pin)	3
20	1330437	Terminal (Pin)	19
20	1330439	Plug	7
21	1500901	Clip	1
22	1509888	Clip	2
23	1532776	Clip	2
24	1532761	Clip	2

WIRE HARNESS (FIGURE 6-58) ENGINE — YANMAR 2.6L AND 3.3L, DIESEL (S/N L177B11118D →)



BP080672

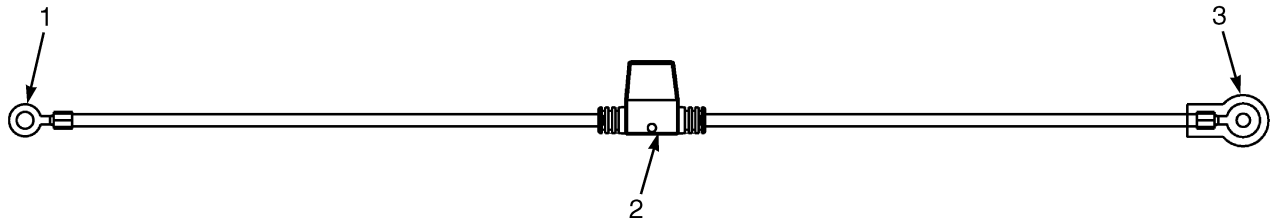
WIRE HARNESS
ENGINE – YANMAR 2.6L AND 3.3L, DIESEL (S/N L177B11118D →)

ITEM	PART NO.	DESCRIPTION	QTY
	2087191	Wire Harness	1
1	148611	E-Ring (Starter Stud)	1
2	1382695	Fuse Connector	2
2	1559049	Ring Terminal (Glow Plug)	1
3	190382	Boot	2
4	1559049	Ring Terminal (Starter Solenoid)	1
4	190382	Boot	1
4	1532776	Clip	2
5	1532761	Clip	1
6	1546673	Connector (Engine RPM Sensor)	1
6	1323576	Terminal	3
7	.....	Connector (Fuse 60 Amp)	1
7	1454860	Connector Body	1
7	1382695	Fuse Connector	2
7	1382694	Fuse Connector	2
7	1454829	Fuse (60 Amp)	1
7	1454862	Cover (With Seal)	1
8	148609	E-Ring (Glow Plug)	1
9	1532759	Clip	1
10	1582484	Connector (Fuel Shut-off Solenoid)	1
11	1582486	Connector (Cold Start Aid)	1
12	1547368	Connector Body (Alternator)	1
12	1565098	Terminal	1
13	.....	Throttle Position Sensor	1
13	1525584	Connector (Throttle Position Sensor)	1
13	1532571	Terminal	6
14	1476077	Connector (Fuel Level Sensor)	1
14	1323576	Terminal	2
15	.....	Connector (Air Filter Sensor)	1
15	1465469	Connector	1
15	1323578	Terminal	2
15	1402888	Seal	2
16	1323586	Connector (Water Temperature Sensor)	1
16	1323576	Terminal	2
17	1500901	Clip	1
18	1327957	Connector (Low Engine Oil Pressure Switch)	1
18	1532571	Terminal	3
19	1330419	Connector (Pull Actuator)	1
19	1330436	Terminal	2
19	1330424	Connector (Secondary Lock)	1
19	1351681	Connector	1
20	1547369	Connector Body (Fuel Filter Water Separator)	1
21	1402849	Connector Body (Relay Signal 86)	1
22	1560015	E-Ring	1
22	190383	Boot	1
23	1509888	Clip	2
24	325789	Terminal	2
25	.....	Engine to Chassis	1
25	1500925	Connector	1
25	1330437	Terminal (Pin)	11

WIRE HARNESS
ENGINE – YANMAR 2.6L AND 3.3L, DIESEL (S/N L177B11118D →)

ITEM	PART NO.	DESCRIPTION	QTY
25	1484377	Plug	1
25	1352603	Connector	1
26	.....	Engine to Chassis	1
26	1541988	Connector	1
26	1463138	Terminal Pin	8
26	1541989	Connector	1
27	.....	Engine to Chassis	1
27	1514598	Connector	1
27	1330439	Plug	1
27	1484709	Terminal (Pin)	3
27	1514597	Connector	1

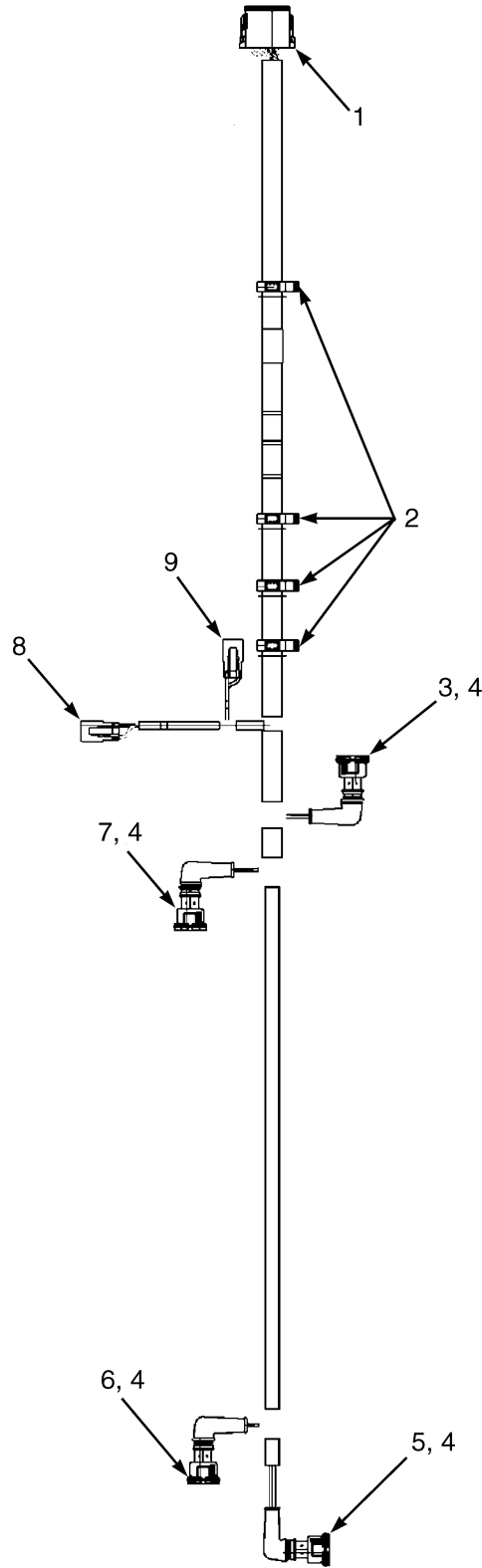
**WIRE HARNESS (FIGURE 6-59)
FUSED STARTER — GM 2.4L 2010 SERIES**



BP080941

ITEM	PART NO.	DESCRIPTION	QTY
	4603542	Wire Harness (Fused Starter)	1
1	.....	Connector Assembly (To Starter)	1
1	148615	E-Ring	1
2	.....	Connector Assembly (Inline Fuse)	1
2	4007984	Connector (Fuse Holder)	1
2	4008604	Fuse (60 AMP)	1
3	.....	Connector Assembly (To Alternator)	1
3	148614	E-Ring	1
3	1566146	Boot	1

WIRE HARNESS (FIGURE 6-60) ELECTRONIC CONTROL VALVE — THREE FUNCTION

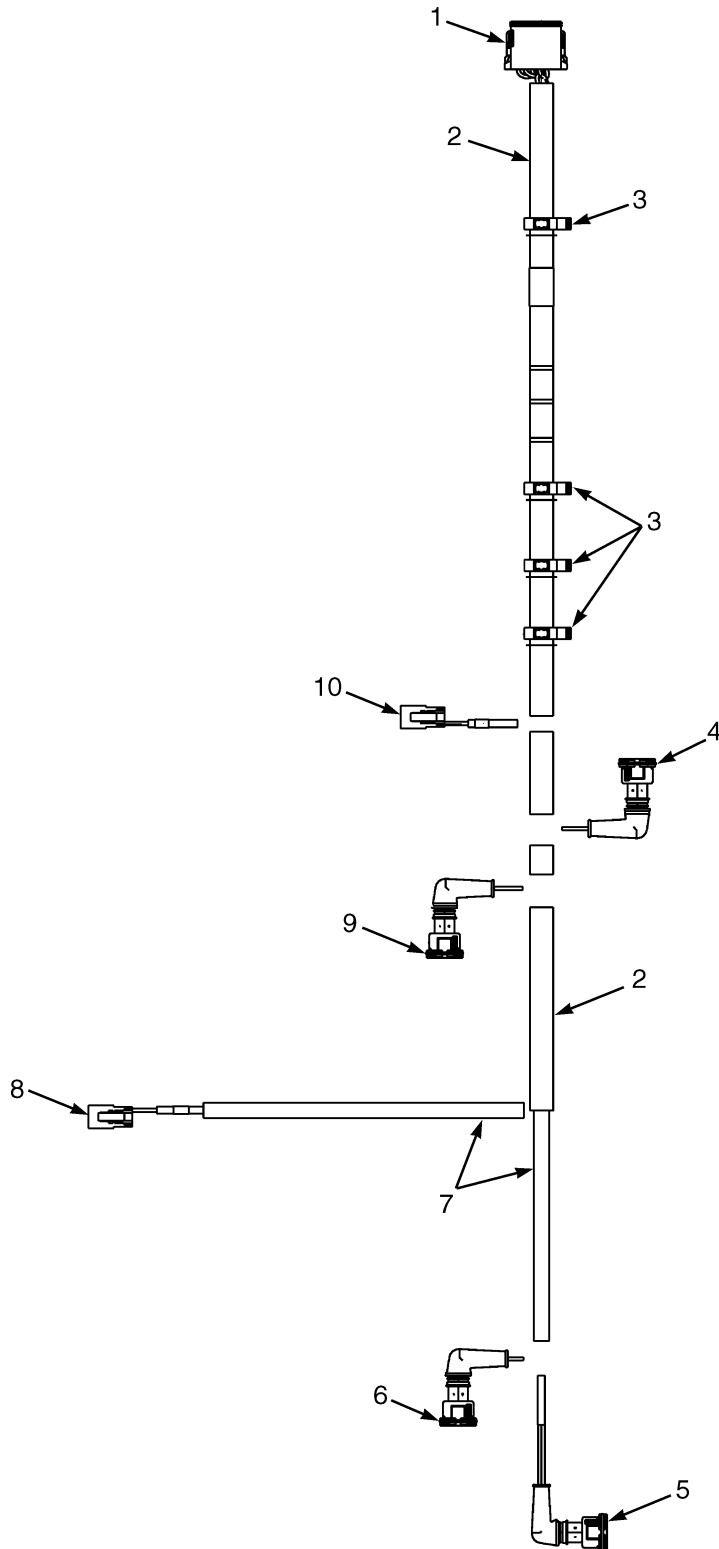


HP081569

**WIRE HARNESS
ELECTRONIC CONTROL VALVE – THREE FUNCTION**

ITEM	PART NO.	DESCRIPTION	QTY
	2060198	Wire Harness (Electronic Control Valve)	1
1	.....	Connector Assembly (Vehicle System Manager)	1
1	1525564	Connector	1
1	1330438	Terminal (Socket)	9
1	1330439	Plug	3
1	1525564	Connector	1
1	1500913	Connector	1
2	1402815	Clip	4
3	.....	Connector Assembly (2A Tilt)	1
3	1531162	Connector	1
3	1562649	Seal	2
3	1402814	Terminal	2
4	190383	Boot	4
5	.....	Connector Assembly (2B Tilt)	1
5	1531162	Connector	1
5	1562649	Seal	2
5	1402814	Terminal	2
6	.....	Connector Assembly (3B Auxiliary 1)	1
6	1493435	Connector (2-Way)	1
6	1562649	Seal	2
6	1402814	Terminal	2
7	.....	Connector Assembly (3A Auxiliary 1)	1
7	1493435	Connector (2-Way)	1
7	1562649	Seal	2
7	1402814	Terminal	2
8	.....	Connector Assembly (Lift)	1
8	1490242	Connector	1
8	1330438	Terminal (Socket)	2
8	1490243	Connector	1
9	.....	Connector Assembly (Lower)	1
9	1490242	Connector	1
9	1330438	Terminal (Socket)	2
9	1490243	Connector	1

WIRE HARNESS (FIGURE 6-61) ELECTRONIC CONTROL VALVE — THREE FUNCTION-WITH VARIABLE DISPLACEMENT PUMP

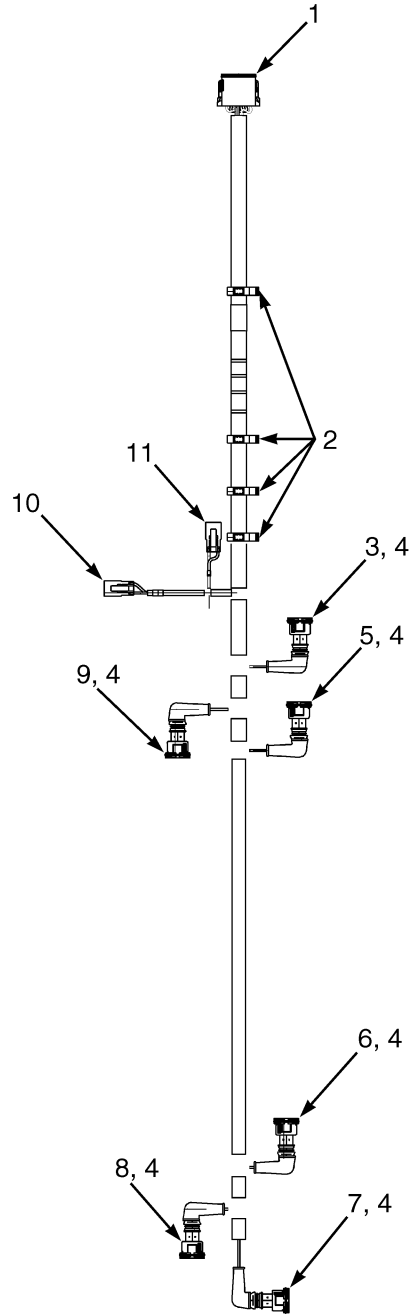


BP081116

WIRE HARNESS
ELECTRONIC CONTROL VALVE – THREE FUNCTION-WITH VARIABLE DISPLACEMENT PUMP

ITEM	PART NO.	DESCRIPTION	QTY
	4605072	Wire Harness (Electronic Control Valve)	1
1	.....	Connector Assembly (Vehicle System Manager)	1
1	1525564	Connector	1
1	1330438	Terminal (Socket)	9
1	1484377	Plug	3
1	1500913	Connector (Secondary Lock)	1
2	275495	Conduit	AR
3	1402815	Clip	4
4	.....	Connector Assembly (2A Tilt)	1
4	1531162	Connector	1
4	1402814	Terminal	2
4	1562649	Seal	2
5	.....	Connector Assembly (2B Tilt)	1
5	1531162	Connector	1
5	1402814	Terminal	2
5	1562649	Seal	2
6	.....	Connector Assembly (3B Aux. 1)	1
6	1493435	Connector (2-Way)	1
6	1402814	Terminal	2
6	1562649	Seal	2
7	275493	Conduit	AR
8	.....	Connector Assembly (1A Lift)	1
8	1490242	Connector	1
8	1330438	Terminal (Socket)	2
8	1490243	Connector (Secondary Lock)	1
9	.....	Connector Assembly (3A Aux.1)	1
9	1493435	Connector (2-Way)	1
9	1402814	Terminal	2
9	1562649	Seal	2
10	.....	Connector Assembly (1B Lower)	1
10	1490242	Connector	1
10	1330438	Terminal (Socket)	2
10	1490243	Connector (Secondary Lock)	1

**WIRE HARNESS (FIGURE 6-62)
ELECTRONIC CONTROL VALVE — FOUR FUNCTION**

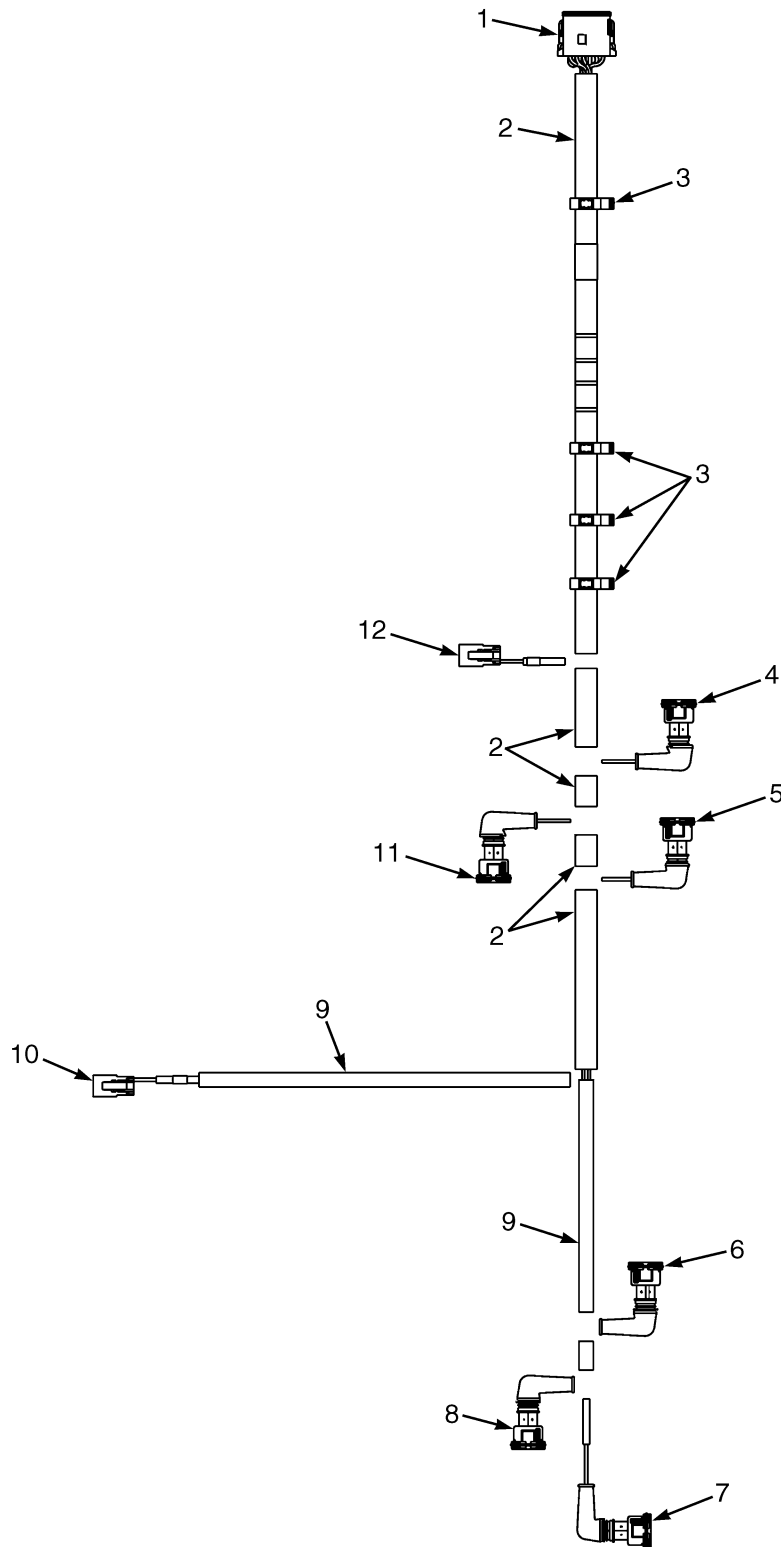


HP081568

**WIRE HARNESS
ELECTRONIC CONTROL VALVE – FOUR FUNCTION**

ITEM	PART NO.	DESCRIPTION	QTY
	2058909	Wire Harness (Electronic Control Valve)	1
1	.....	Connector Assembly (Vehicle System Manager)	1
1	1525564	Connector	1
1	1330438	Terminal (Socket)	12
1	1500913	Connector	1
2	1402815	Clip	4
3	.....	Connector Assembly (2A Tilt)	1
3	1531162	Connector	1
3	1562649	Seal	2
3	1402814	Terminal	2
4	190383	Boot	6
5	1493447	Connector (4A Auxiliary 2)	1
5	1562649	Seal	2
5	1402814	Terminal	2
6	1493447	Connector (4B Auxiliary 2)	1
6	1562649	Seal	2
6	1402814	Terminal	2
7	.....	Connector Assembly (2B Tilt)	1
7	1531162	Connector	1
7	1562649	Seal	2
7	1402814	Terminal	2
8	.....	Connector Assembly (3B Auxiliary 1)	1
8	1493435	Connector (2-Way)	1
8	1562649	Seal	2
8	1402814	Terminal	2
9	.....	Connector Assembly (3A Auxiliary 1)	1
9	1493435	Connector (2-Way)	1
9	1562649	Seal	2
9	1402814	Terminal	2
10	.....	Connector Assembly (Lift)	1
10	1490242	Connector	1
10	1330438	Terminal (Socket)	2
10	1490243	Connector	1
11	.....	Connector Assembly (Lower)	1
11	1490242	Connector	1
11	1330438	Terminal (Socket)	2
11	1490243	Connector	1

WIRE HARNESS (FIGURE 6-63) ELECTRONIC CONTROL VALVE — FOUR FUNCTION-WITH VARIABLE DISPLACEMENT PUMP

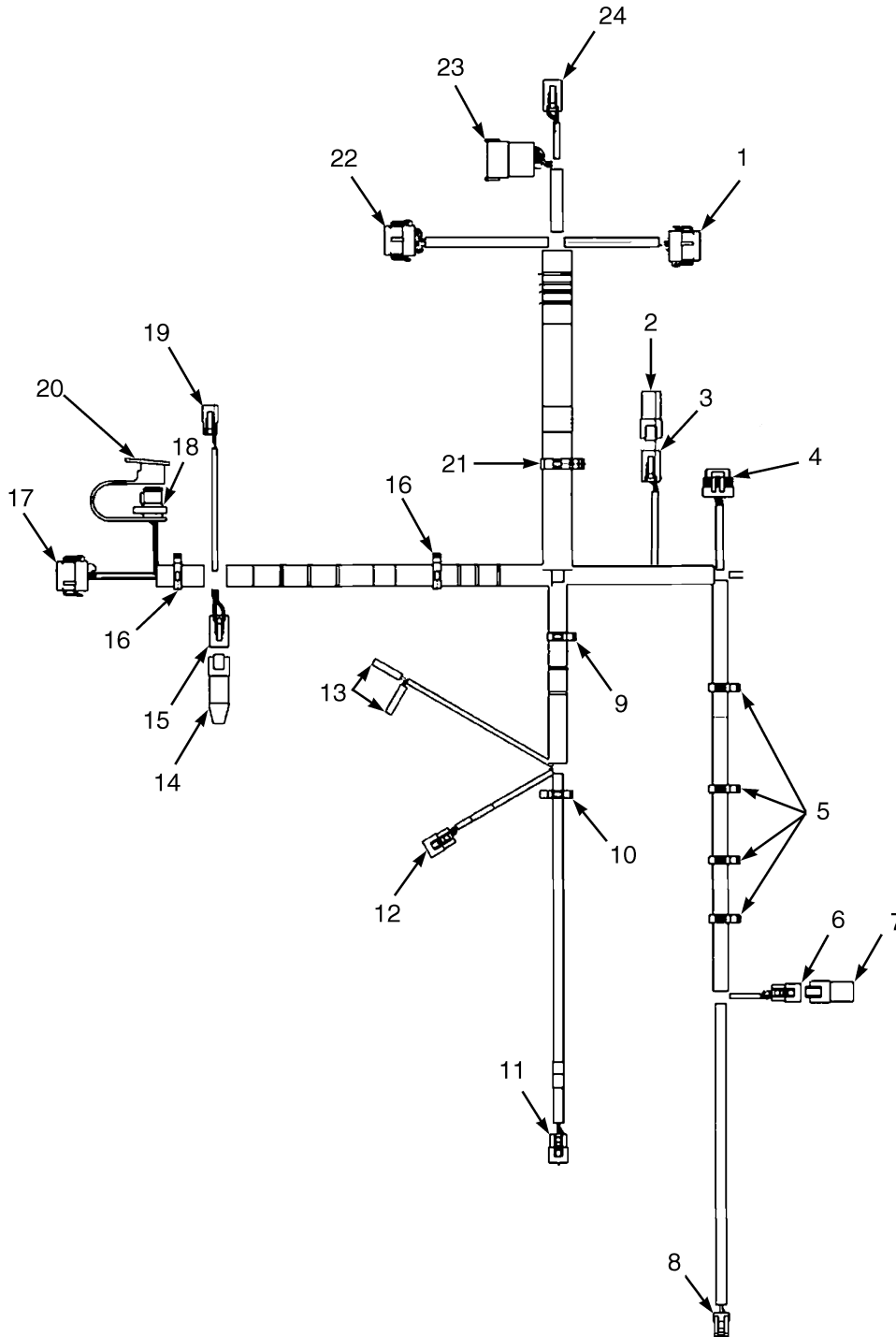


BP081117

WIRE HARNESS
ELECTRONIC CONTROL VALVE – FOUR FUNCTION-WITH VARIABLE DISPLACEMENT PUMP

ITEM	PART NO.	DESCRIPTION	QTY
	4605073	Wire Harness (Electronic Control Valve)	1
1	.....	Connector Assembly (Vehicle System Manager)	1
1	1525564	Connector	1
1	1330438	Terminal (Socket)	12
1	1500913	Connector (Secondary Lock)	1
2	275495	Conduit	AR
3	1402815	Clip	4
4	.....	Connector Assembly (2A Tilt)	1
4	1531162	Connector	1
4	1402814	Terminal	2
4	1562649	Seal	2
5	.....	Connector Assembly (4A Aux.2))	1
5	1493447	Connector	1
5	1402814	Terminal	2
5	1562649	Seal	2
6	.....	Connector Assembly (4B Aux. 2)	1
6	1493447	Connector	1
6	1402814	Terminal	2
6	1562649	Seal	2
7	.....	Connector Assembly (2B Tilt)	1
7	1531162	Connector	1
7	1402814	Terminal	2
7	1562649	Seal	2
8	.....	Connector Assembly (3B Aux. 1)	1
8	1493435	Connector (2-Way)	1
8	1402814	Terminal	2
8	1562649	Seal	2
9	275493	Conduit	AR
10	.....	Connector Assembly (1A Lift)	1
10	1490242	Connector	1
10	1330438	Terminal (Socket)	2
10	1490243	Connector (Secondary Lock)	1
11	.....	Connector Assembly (3A Aux.1)	1
11	1493435	Connector (2-Way)	1
11	1402814	Terminal	2
11	1562649	Seal	2
12	.....	Connector Assembly (1B Lower)	1
12	1490242	Connector	1
12	1330438	Terminal (Socket)	2
12	1490243	Connector (Secondary Lock)	1

WIRE HARNESS (FIGURE 6-64) COWL WITH MONOTROL PEDAL (→ S/N L177B31320H)



HP081702

WIRE HARNESS
COWL WITH MONOTROL PEDAL (→ S/N L177B31320H)

ITEM	PART NO.	DESCRIPTION	QTY
	a 2070269	Wire Harness	1
	b 2098011	Wire Harness (With E-Hydraulics)	1
1	.....	Connector Assembly (Vehicle System Manager)	1
1	1525568	Connector	1
1	1529046	Connector	1
1	1463139	Terminal	11
1	1484377	Plug	1
2	1525573	Connector	1
3	.....	Connector Assembly (To Monotrol Harness)	1
3	1489656	Connector (4-Way)	1
3	1489657	Connector	1
3	1330438	Terminal (Socket)	4
4	.....	Connector Assembly (Accelerator Pedal)	1
4	1525584	Connector	1
4	1532571	Terminal	6
5	1509890	Clip	4
6	.....	Connector Assembly (To Mast)	1
6	1484397	Connector (3-Way)	1
6	1463194	Connector	1
6	1330438	Terminal (Socket)	3
7	1351682	Connector (End Cap)	1
8	.....	Connector Assembly (Brake Pressure)	1
8	1603021	Connector	1
8	1603236	Connector (Secondary Lock)	1
8	1548517	Terminal (Socket)	3
8	1548519	Seal	3
9	1534828	Clip	1
10	1402816	Clip	1
11	.....	Connector Assembly (Brake Pedal)	1
11	1463194	Connector	1
11	1484397	Connector (3-Way)	1
11	1330438	Terminal (Socket)	3
12	.....	Connector Assembly (Park Brake)	1
12	1463194	Connector	1
12	1484397	Connector (3-Way)	1
12	1330438	Terminal (Socket)	3
13	.....	Connector Assembly (Brake Fluid Sensor)	2
13	1324309	Sleeve	1
13	1324310	Terminal	1
14	1525577	Connector (With Resistor) (End Cap)	1
15	.....	Connector Assembly (Bus Terminal 1)	1
15	1489656	Connector (4-Way)	1
15	1489657	Connector	1
15	1330438	Terminal (Socket)	4
16	1500899	Clip	2
17	.....	Connector Assembly (Display)	1
17	1525567	Connector	1
17	1529046	Connector	1
17	1463139	Terminal	5
17	1484377	Plug	7

WIRE HARNESS
COWL WITH MONOTROL PEDAL (→ S/N L177B31320H)

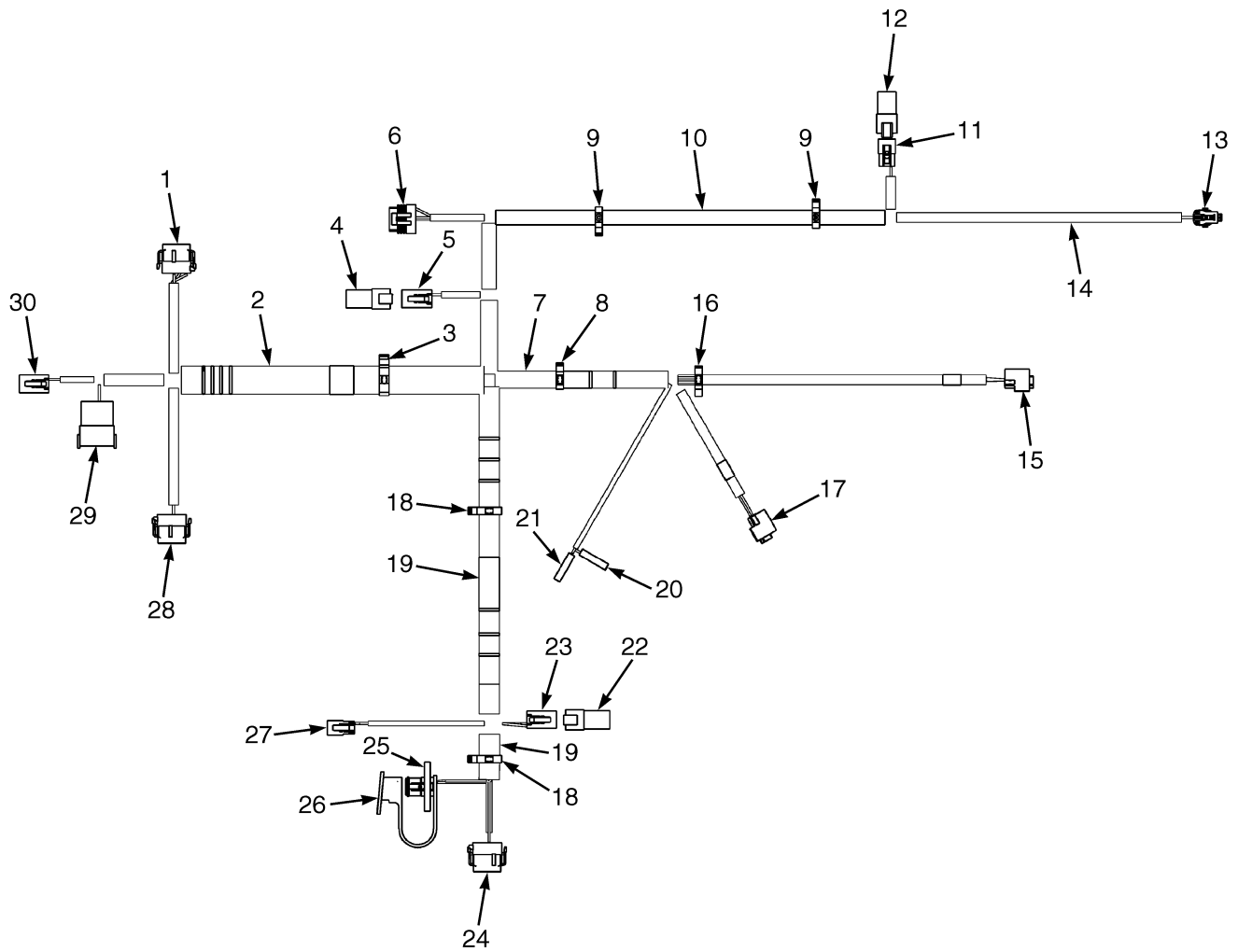
ITEM	PART NO.	DESCRIPTION	QTY
18	.....	Connector Assembly (J1939 Diagnostic)	1
18	1566116	Connector	1
18	1532664	Connector (Secondary Lock)	1
18	1330438	Terminal (Socket)	3
19	.....	Connector Assembly (To Horn)	1
19	1490242	Connector	1
19	1402813	Clip	1
19	1330438	Terminal (Socket)	2
20	1566117	Dust Cap	1
21	1534282	Clip	1
22	.....	Connector Assembly (Vehicle System Manager)	1
22	1525570	Connector	1
22	1529046	Connector	1
22	1463139	Terminal	7
22	1484377	Plug	5
23	.....	Connector Assembly (RH Chassis)	1
23	1500925	Connector	1
23	1352603	Connector	1
23	1330437	Terminal (Pin)	10
23	1484377	Plug	2
24	.....	Connector Assembly (RH Chassis)	1
24	1489656	Connector (4-Way)	1
24	1330438	Terminal (Socket)	4
24	1489657	Connector	1

FOOTNOTES:

a → S/N L177B30215H

b S/N L177B30216H →

WIRE HARNESS (FIGURE 6-65) COWL WITH MONOTROL PEDAL — WITH RETURN TO SET TILT (S/N L177B31321H →)



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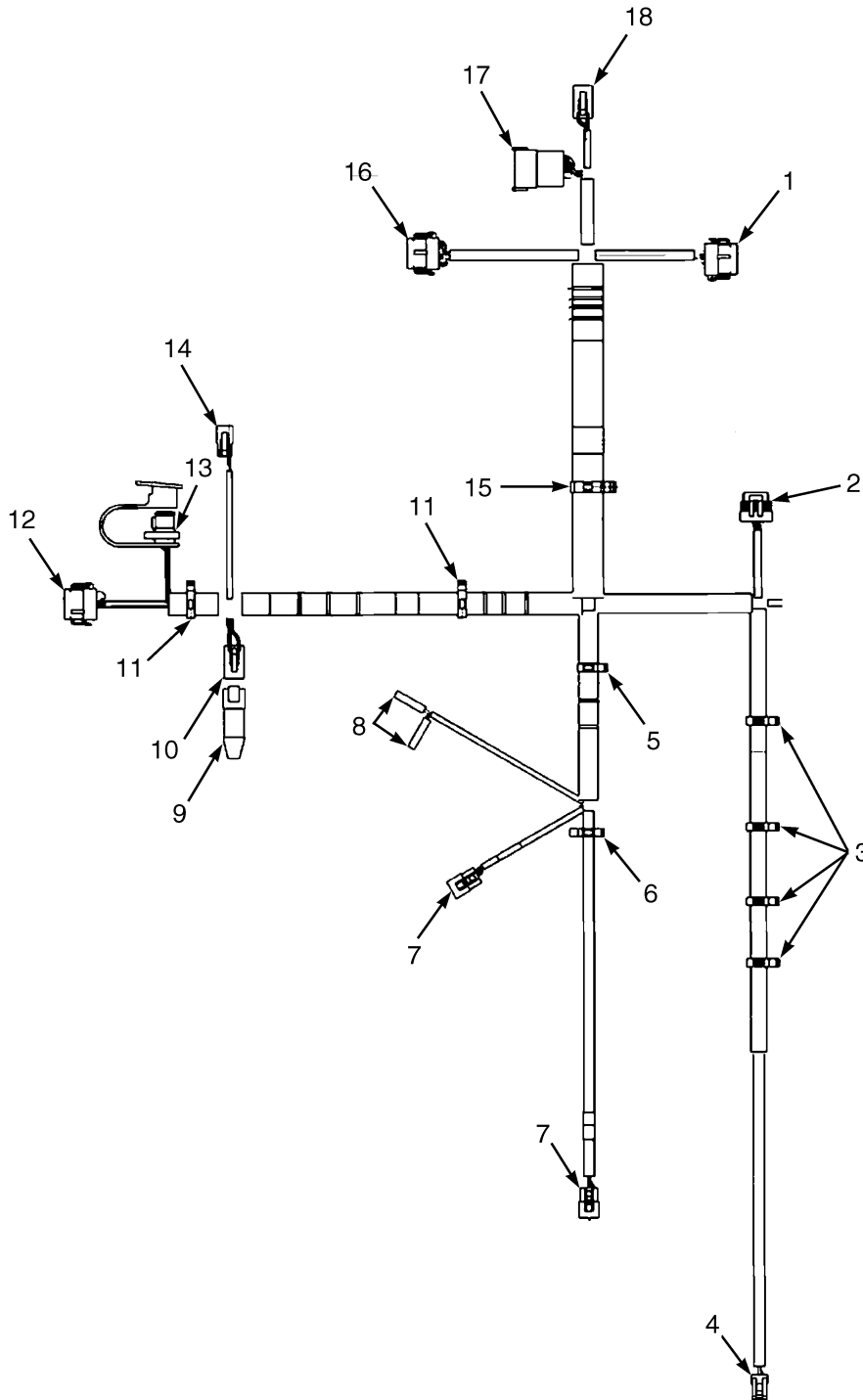
WIRE HARNESS
COWL WITH MONOTROL PEDAL – WITH RETURN TO SET TILT (S/N L177B31321H →)

ITEM	PART NO.	DESCRIPTION	QTY
	4603283	Wire Harness	1
1	.....	Connector Assembly (Vehicle System Manager)	1
1	1525568	Connector	1
1	1529046	Connector	1
1	1463139	Terminal	11
1	1484377	Plug	1
2	1540388	Conduit	AR
3	1534282	Clip	1
4	.....	Connector Assembly (Endcap)	1
4	1525573	Connector	1
5	.....	Connector Assembly (To Monotrol Pedal Harness)	1
5	1489656	Connector (4-Way)	1
5	1489657	Connector	1
5	1330438	Terminal (Socket)	4
6	.....	Connector Assembly (Accelerator Pedal Sensor)	1
6	1525584	Connector	1
6	1532571	Terminal	6
7	275496	Conduit	AR
8	1534828	Clip	1
9	1509890	Clip	2
10	275495	Conduit	AR
11	.....	Connector Assembly (To Mast Harness)	1
11	1330438	Terminal (Socket)	3
11	1463194	Connector	1
11	1484397	Connector (3-Way)	1
12	.....	Connector Assembly (Endcap)	1
12	1351682	Connector (End Cap)	1
13	.....	Connector Assembly (Brake Pressure)	1
13	1603021	Connector	1
13	1603236	Connector (Secondary Lock)	1
13	1548517	Terminal (Socket)	3
13	1548519	Seal	3
14	275493	Conduit	AR
15	.....	Connector Assembly (Brake Pedal)	1
15	1700460	Connector	1
15	1700461	Terminal	3
16	1402816	Clip	2
17	.....	Connector Assembly (Park Brake)	1
17	1700460	Connector	1
17	1700461	Terminal	3
18	1500899	Clip	2
19	275497	Conduit	AR
20	.....	Connector Assembly (Brake Fluid)	1
20	1566227	Terminal	1
20	1566076	Seal	1
21	.....	Connector Assembly (Brake Fluid)	1
21	1566227	Terminal	1
21	1566076	Seal	1
22	.....	Connector Assembly (Endcap w/ Resistor)	1
22	1525577	Connector (With Resistor)	1

WIRE HARNESS
COWL WITH MONOTROL PEDAL – WITH RETURN TO SET TILT (S/N L177B31321H →)

ITEM	PART NO.	DESCRIPTION	QTY
23	.....	Connector Assembly (Bus Terminal 1)	1
23	1489656	Connector (4-Way)	1
23	1489657	Connector	1
23	1330438	Terminal (Socket)	4
24	.....	Connector Assembly (Display)	1
24	1525567	Connector	1
24	1529046	Connector	1
24	1463139	Terminal	5
24	1484377	Plug	7
25	.....	Connector Assembly (J1939 Diagnostic)	1
25	1566116	Connector	1
25	1532664	Connector (Secondary Lock)	1
25	1330438	Terminal (Socket)	3
26	.....	Connector Assembly (Dust Cap)	1
26	1566117	Dust Cap	1
27	.....	Connector Assembly (Horn Button)	1
27	1490242	Connector	1
27	1490243	Connector	1
27	1330438	Terminal (Socket)	2
28	.....	Connector Assembly (Vehicle System Manager)	1
28	1525570	Connector	1
28	1529046	Connector	1
28	1463139	Terminal	7
28	1484377	Plug	5
29	.....	Connector Assembly (To Right Hand Chassis Harness)	1
29	1500925	Connector	1
29	1352603	Connector	1
29	1330437	Terminal (Pin)	10
29	1484377	Plug	2
30	.....	Connector Assembly	1
30	1489656	Connector (4-Way)	1
30	1489657	Connector	1
30	1330438	Terminal (Socket)	4

WIRE HARNESS (FIGURE 6-66) COWL WITH FORWARD/REVERSE LEVER (→ S/N L177B31320H)



BP080443

WIRE HARNESS
COWL WITH FORWARD/REVERSE LEVER (→ S/N L177B31320H)

ITEM	PART NO.	DESCRIPTION	QTY
	a 2084829	Wire Harness (Cowl with Forward/Reverse Lever)	1
	b 2098012	Wire Harness (Cowl with Forward/Reverse Lever) (With E-Hydraulics)	1
1	.....	Connector Assembly (Vehicle System Manager)	1
1	1525568	Connector	1
1	1463139	Terminal	7
1	1484377	Plug	5
1	1529046	Connector	1
2	.....	Connector Assembly (Accelerator Pedal Sensor)	1
2	1525584	Connector	1
2	1532571	Terminal	6
3	1509888	Clip	4
4	.....	Connector Assembly (Brake Pressure)	1
4	1603021	Connector	1
4	1603236	Connector (Secondary Lock)	1
4	1548517	Terminal (Socket)	3
4	1548519	Seal	3
5	1534828	Clip	1
6	1402816	Clip	1
7	.....	Connector Assembly (Park Brake)	2
7	1484397	Connector (3-Way)	1
7	1463194	Connector	1
7	1330438	Terminal (Socket)	3
8	.....	Connector Assembly (Brake Fluid)	2
8	1324309	Sleeve	1
8	1324310	Terminal	1
9	1525577	Connector (With Resistor) (End Cap)	1
10	.....	Connector Assembly	1
10	1489656	Connector (4-Way)	1
10	1489657	Connector	1
10	1330438	Terminal (Socket)	4
11	1500899	Clip	2
12	.....	Connector Assembly (Display)	1
12	1525567	Connector	1
12	1529046	Connector	1
12	1463139	Terminal	5
12	1484377	Plug	7
13	.....	Connector Assembly (J1939 Diagnostic)	1
13	1566116	Connector	1
13	1532664	Connector (Secondary Lock)	1
13	1330438	Terminal (Socket)	3
13	1566117	Dust Cap	1
14	.....	Connector Assembly (Horn Button)	1
14	1490242	Connector	1
14	1402813	Clip	1
14	1330438	Terminal (Socket)	2
15	1534282	Clip	1
16	.....	Connector Assembly (Vehicle System Manager)	1
16	1525570	Connector	1
16	1529046	Connector	1
16	1463139	Terminal	7

WIRE HARNESS COWL WITH FORWARD/REVERSE LEVER (→ S/N L177B31320H)

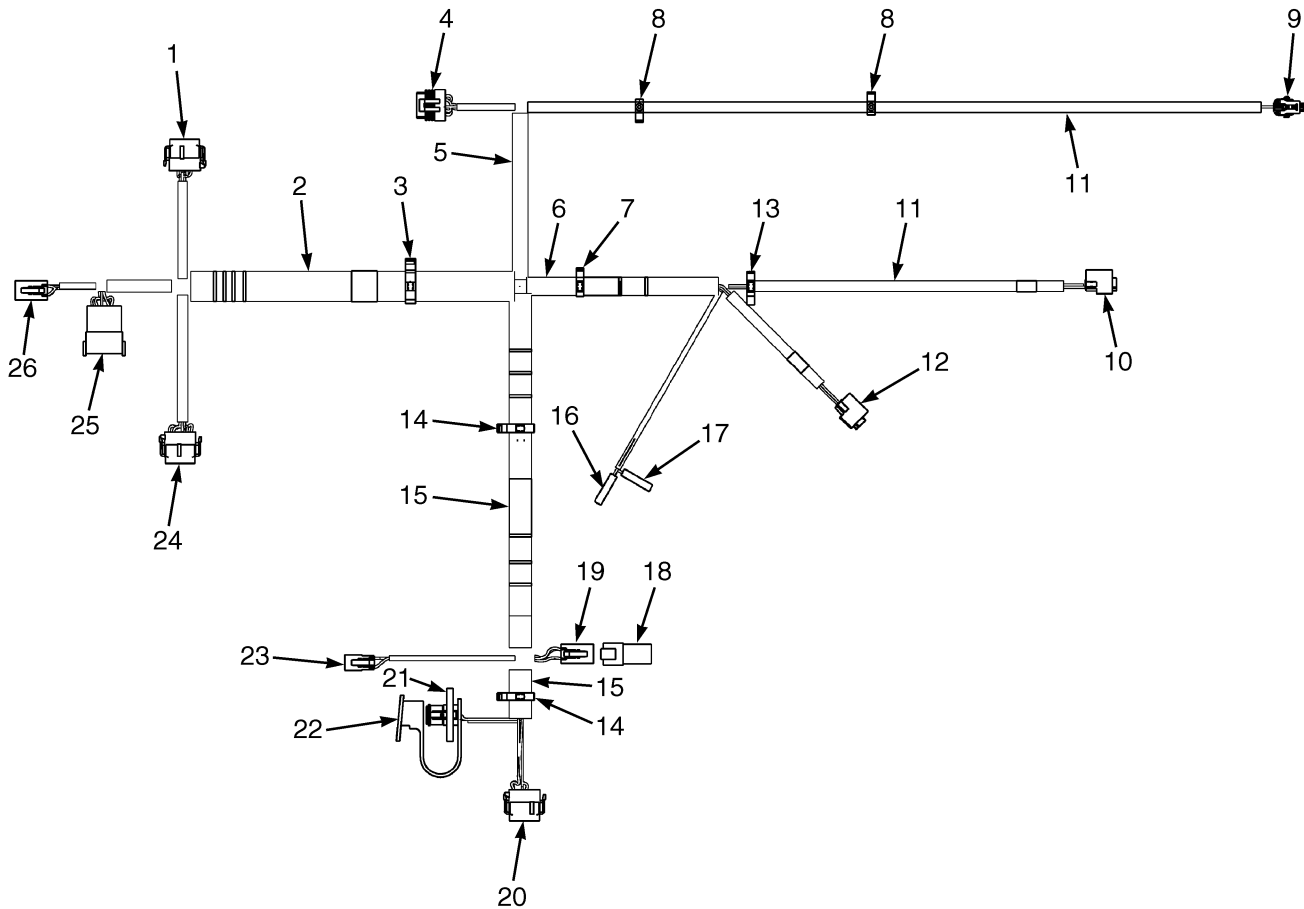
ITEM	PART NO.	DESCRIPTION	QTY
16	1484377	Plug	5
17	.....	Connector Assembly (To RH Chassis)	1
17	1500925	Connector	1
17	1352603	Connector	1
17	1330437	Terminal (Pin)	7
17	1484377	Plug	5
18	.....	Connector Assembly (To RH Chassis)	1
18	1489656	Connector (4-Way)	1
18	1489657	Connector	1
18	1330438	Terminal (Socket)	4

FOOTNOTES:

a → S/N L177B30966H

b S/N L177B30967H →

WIRE HARNESS (FIGURE 6-67) COWL WITH FORWARD/REVERSE LEVER — WITHOUT RETURN TO SET TILT (S/N L177B31321H →)



BP080917

WIRE HARNESS**COWL WITH FORWARD/REVERSE LEVER – WITHOUT RETURN TO SET TILT (S/N L177B31321H →)**

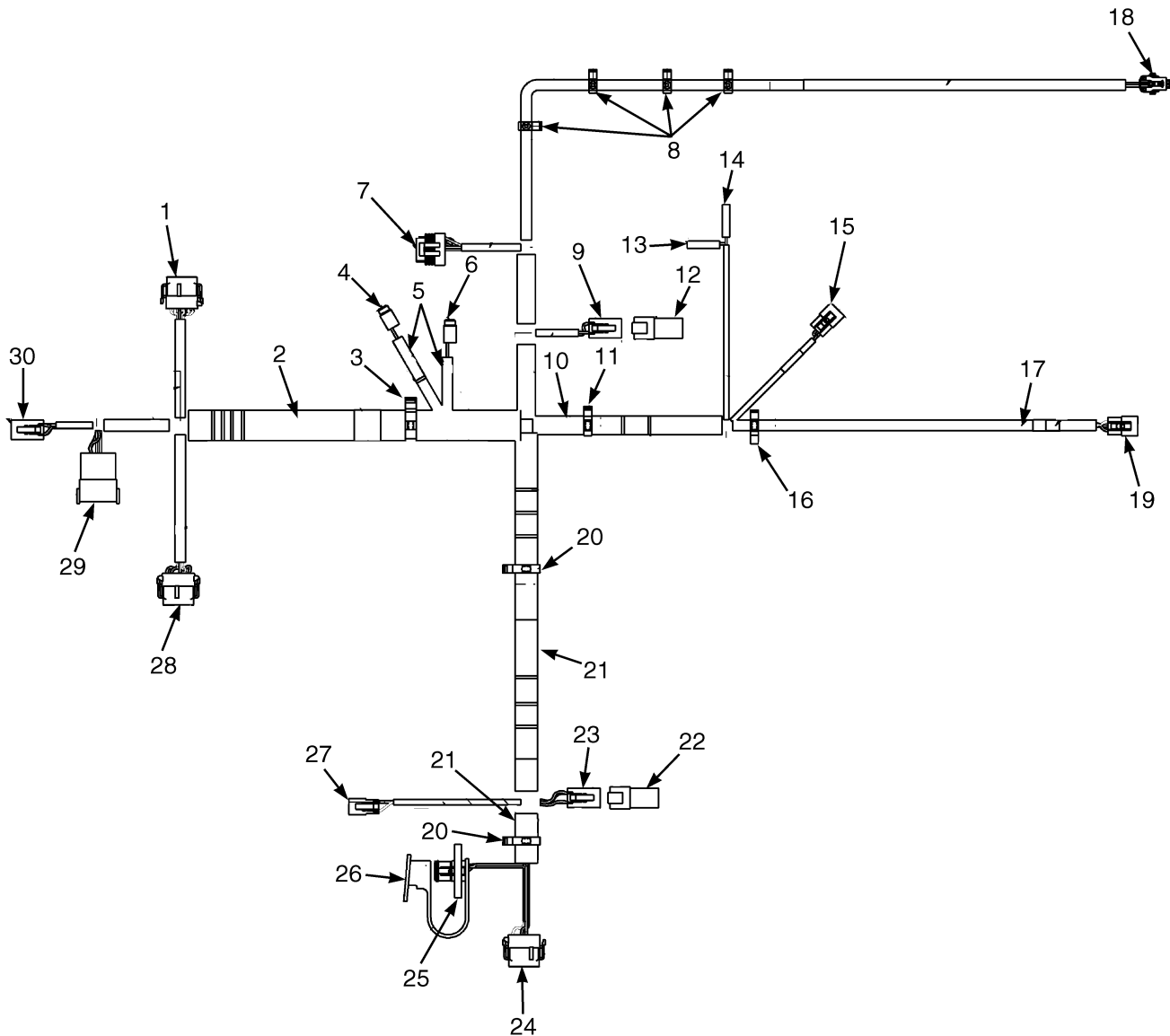
ITEM	PART NO.	DESCRIPTION	QTY
	4603280	Wire Harness (Cowl with Forward/Reverse Lever)	1
1	.....	Connector Assembly (Vehicle System Manager)	1
1	1525568	Connector	1
1	1529046	Connector	1
1	1463139	Terminal	7
1	1484377	Plug	5
2	1540388	Conduit	AR
3	1534282	Clip	1
4	.....	Connector Assembly (Accelerator Pedal Sensor)	1
4	1525584	Connector	1
4	1532571	Terminal	6
5	275495	Conduit	AR
6	275496	Conduit	AR
7	1534828	Clip	1
8	1509888	Clip	2
9	.....	Connector Assembly (Brake Pressure)	1
9	1603021	Connector	1
9	1603236	Connector (Secondary Lock)	1
9	1548517	Terminal (Socket)	3
9	1548519	Seal	3
10	.....	Connector Assembly (Brake Pedal)	1
10	1700460	Connector	1
10	1700461	Terminal	3
11	275493	Conduit	AR
12	.....	Connector Assembly (Park Brake)	1
12	1700460	Connector	1
12	1700461	Terminal	3
13	1402816	Clip	1
14	1500899	Clip	2
15	275497	Conduit	AR
16	.....	Connector Assembly (Brake Fluid)	1
16	1324310	Terminal	1
16	1324309	Sleeve	1
17	.....	Connector Assembly (Brake Fluid)	1
17	1324310	Terminal	1
17	1324309	Sleeve	1
18	.....	Connector Assembly (Endcap w/ Resistor)	1
18	1525577	Connector (With Resistor)	1
19	.....	Connector Assembly (Bus Terminal 1)	1
19	1489656	Connector (4-Way)	1
19	1489657	Connector	1
19	1330438	Terminal (Socket)	4
20	.....	Connector Assembly (Display)	1
20	1525567	Connector	1
20	1529046	Connector	1
20	1463139	Terminal	5
20	1484377	Plug	7
21	.....	Connector Assembly (J1939 Diagnostic)	1
21	1566116	Connector	1
21	1532664	Connector (Secondary Lock)	1

WIRE HARNESS

COWL WITH FORWARD/REVERSE LEVER – WITHOUT RETURN TO SET TILT (S/N L177B31321H →)

ITEM	PART NO.	DESCRIPTION	QTY
21	1330438	Terminal (Socket)	3
22	.....	Connector Assembly (Dust Cap)	1
22	1566117	Dust Cap	1
23	.....	Connector Assembly (Horn Button)	1
23	1490242	Connector	1
23	1490243	Connector	1
23	1330438	Terminal (Socket)	2
24	.....	Connector Assembly (Vehicle System Manager)	1
24	1525570	Connector	1
24	1529046	Connector	1
24	1463139	Terminal	7
24	1484377	Plug	5
25	.....	Connector Assembly (To Right Hand Chassis Harness)	1
25	1500925	Connector	1
25	1352603	Connector	1
25	1330437	Terminal (Pin)	7
25	1484377	Plug	5
26	.....	Connector Assembly (To Right Hand Chassis Harness)	1
26	1489657	Connector	1
26	1489656	Connector (4-Way)	1
26	1330438	Terminal (Socket)	4

WIRE HARNESS (FIGURE 6-68) COWL WITH MONOTROL PEDAL — WITH HYDRAULIC PUMP SOLENOID (S/N L177B28589G ↔ S/N L177B31320H)



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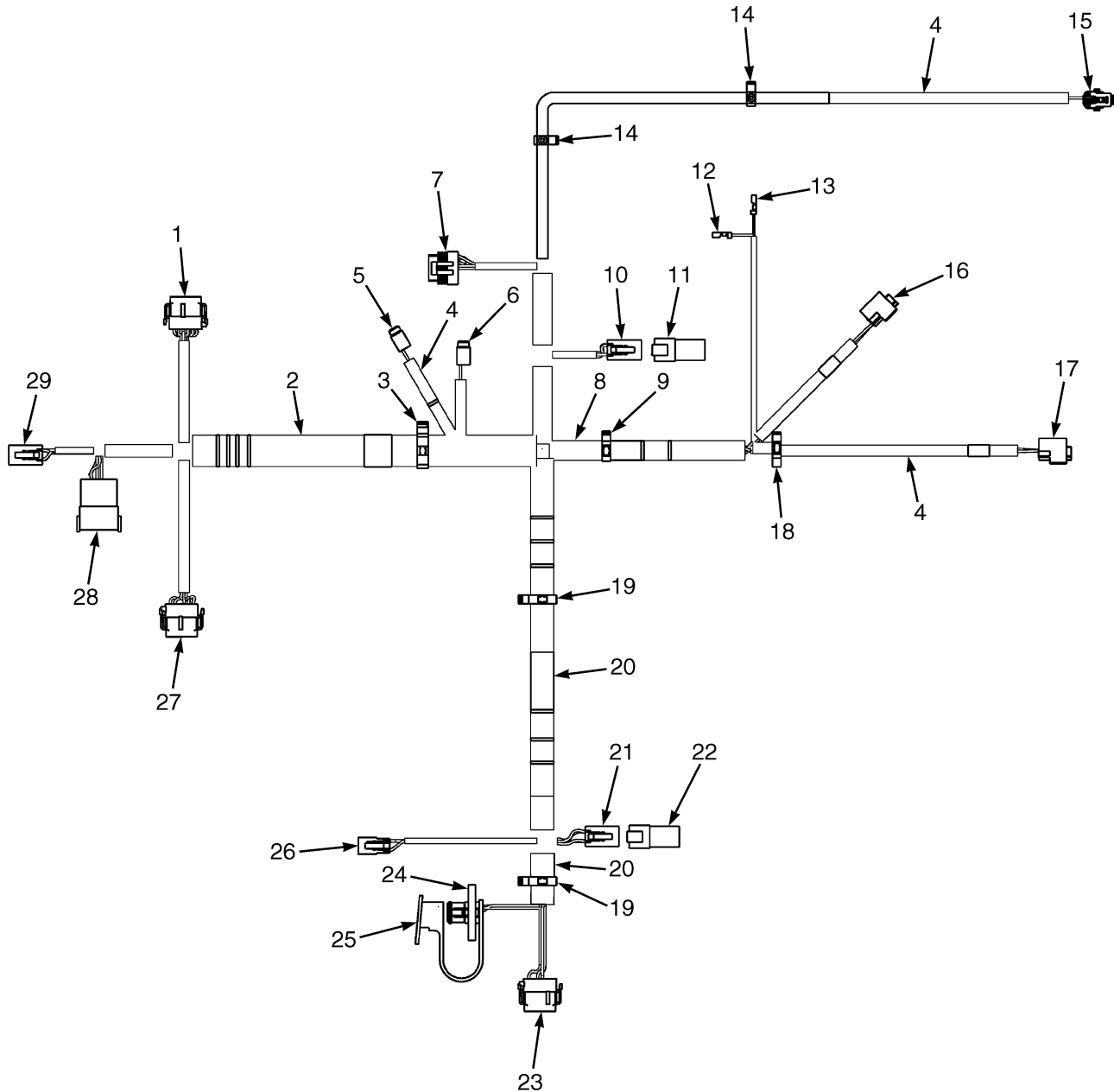
WIRE HARNESS
COWL WITH MONOTROL PEDAL – WITH HYDRAULIC PUMP SOLENOID
(S/N L177B28589G ↔ S/N L177B31320H)

ITEM	PART NO.	DESCRIPTION	QTY
	2104701	Wire Harness	1
1	.....	Connector Assembly (Vehicle System Manager)	1
1	1525568	Connector	1
1	1529046	Connector	1
1	1463139	Terminal	12
2	1540388	Conduit	AR
3	1534282	Clip	1
4	.....	Connector Assembly (Hydraulic Lockout Solenoid 2)	1
4	1484557	Connector	1
4	1484558	Connector	1
4	1463139	Terminal	2
5	275493	Conduit	AR
6	.....	Connector Assembly	1
6	1484557	Connector	1
6	1484558	Connector	1
6	1463139	Terminal	2
7	.....	Connector Assembly	1
7	1525584	Connector	1
7	1532571	Terminal	6
8	1509888	Clip	4
9	.....	Connector Assembly (To Monotrol Harness)	1
9	1489656	Connector (4-Way)	1
9	1489657	Connector	1
9	1330438	Terminal (Socket)	4
10	275496	Conduit	AR
11	1534828	Clip	1
12	.....	Connector Assembly (Endcap)	1
12	1525573	Connector	1
13	.....	Connector Assembly (Brake Fluid)	1
13	1324310	Terminal	1
13	1324309	Sleeve	1
14	.....	Connector Assembly (Brake Fluid)	1
14	1324310	Terminal	1
14	1324309	Sleeve	1
15	.....	Connector Assembly (Park Brake)	1
15	1484397	Connector (3-Way)	1
15	1463194	Connector	1
15	1330438	Terminal (Socket)	3
16	1402816	Clip	1
17	275493	Conduit	AR
18	.....	Connector Assembly (Brake Pressure)	1
18	1603021	Connector	1
18	1603236	Connector (Secondary Lock)	1
18	1548517	Terminal (Socket)	3
18	1548519	Seal	3
19	.....	Connector Assembly (Brake Pressure)	1
19	1484397	Connector (3-Way)	1
19	1463194	Connector	1
19	1330438	Terminal (Socket)	3

WIRE HARNESS
COWL WITH MONOTROL PEDAL – WITH HYDRAULIC PUMP SOLENOID
(S/N L177B28589G ↔ S/N L177B31320H)

ITEM	PART NO.	DESCRIPTION	QTY
20	1500899	Clip	2
21	275497	Conduit	AR
22	.....	Connector Assembly (Endcap with Resister)	1
22	1525577	Connector (With Resistor)	1
23	.....	Connector Assembly (Bus Terminal 1)	1
23	1489656	Connector (4-Way)	1
23	1489657	Connector	1
23	1330438	Terminal (Socket)	4
24	.....	Connector Assembly (Display)	1
24	1525567	Connector	1
24	1529046	Connector	1
24	1463139	Terminal	5
24	1484377	Plug	7
25	.....	Connector Assembly (J1939 Diagnostic)	1
25	1566116	Connector	1
25	1532664	Connector (Secondary Lock)	1
25	1330438	Terminal (Socket)	3
26	1566117	Dust Cap	1
27	.....	Connector Assembly (Horn Button)	1
27	1490242	Connector	1
27	1490243	Connector	1
27	1330438	Terminal (Socket)	2
28	.....	Connector Assembly (Vehicle System Manager)	1
28	1525570	Connector	1
28	1529046	Connector	1
28	1463139	Terminal	7
28	1484377	Plug	5
29	.....	Connector Assembly (To RH Chassis Harness)	1
29	1500925	Connector	1
29	1352603	Connector	1
29	1330437	Terminal (Pin)	7
29	1484377	Plug	5
30	.....	Connector Assembly (To RH Chassis Harness)	1
30	1489656	Connector (4-Way)	1
30	1489657	Connector	1
30	1330438	Terminal (Socket)	4

WIRE HARNESS (FIGURE 6-69) COWL WITH MONOTROL PEDAL — WITH HYDRAULIC PUMP SOLENOID (S/N L177B31321H →)



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WIRE HARNESS
COWL WITH MONOTROL PEDAL – WITH HYDRAULIC PUMP SOLENOID (S/N L177B31321H →)

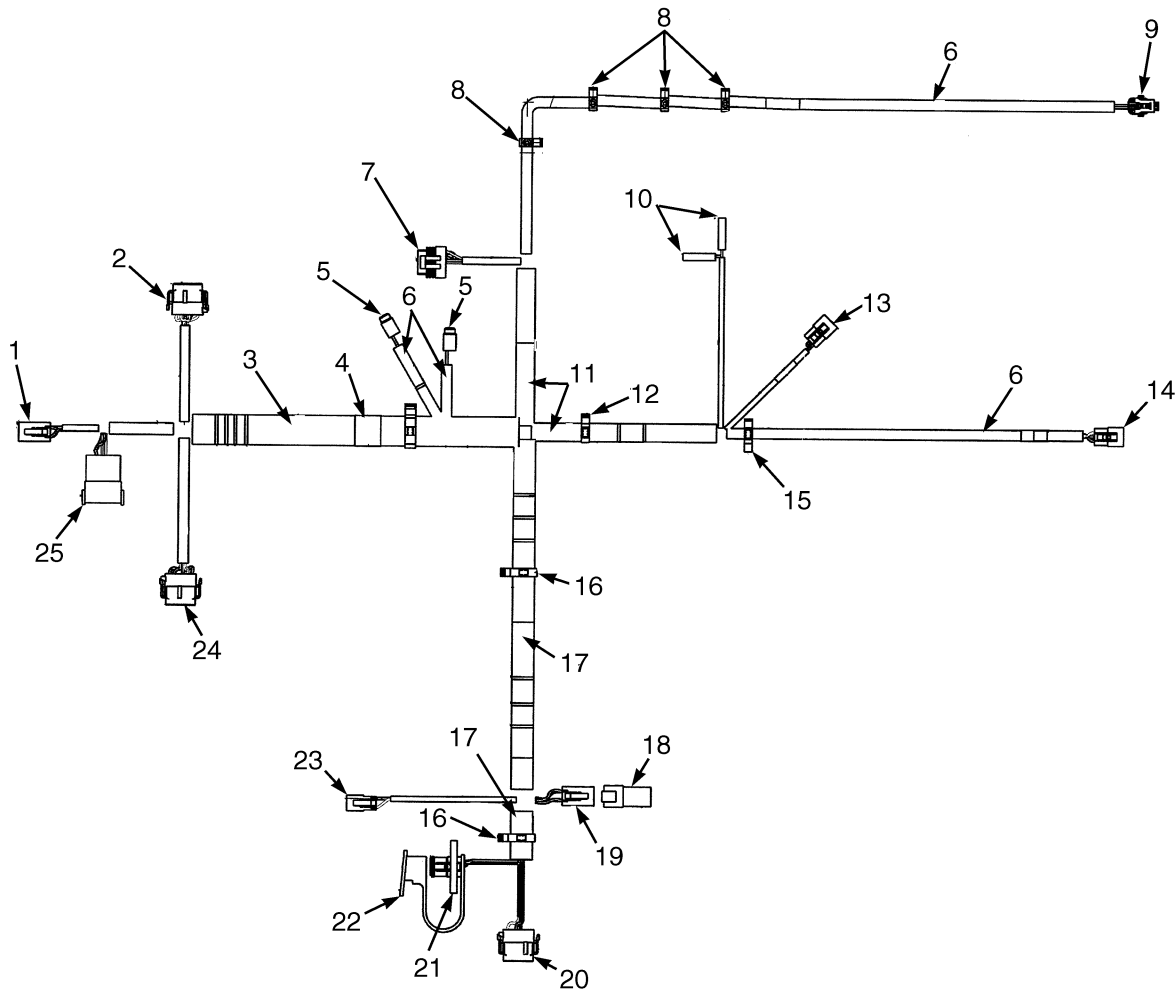
ITEM	PART NO.	DESCRIPTION	QTY
	4603281	Wire Harness	1
1	.....	Connector Assembly (Vehicle System Manager)	1
1	1525568	Connector	1
1	1529046	Connector	1
1	1463139	Terminal	12
2	1540388	Conduit	AR
3	1534282	Clip	1
4	275493	Conduit	AR
5	.....	Connector Assembly (Hydraulic Lockout Solenoid #2)	1
5	1484557	Connector	1
5	1484558	Connector	1
5	1463139	Terminal	1
6	.....	Connector Assembly (Hydraulic Lockout Solenoid 1)	1
6	1484557	Connector	1
6	1484558	Connector	1
6	1463139	Terminal	2
7	.....	Connector Assembly (Accelerator Pedal Sensor)	1
7	1525584	Connector	1
7	1532571	Terminal	6
8	275496	Conduit	AR
9	1534828	Clip	1
10	.....	Connector Assembly (To Monotrol Harness)	1
10	1489656	Connector (4-Way)	1
10	1489657	Connector	1
10	1330438	Terminal (Socket)	4
11	.....	Connector Assembly (Endcap)	1
11	1525573	Connector	1
12	.....	Connector Assembly (Brake Fluid)	1
12	1566227	Terminal	1
12	1324309	Sleeve	1
13	.....	Connector Assembly (Brake Fluid)	1
13	1566227	Terminal	1
13	1324309	Sleeve	1
14	1509888	Clip	2
15	.....	Connector Assembly (Brake Pressure)	1
15	1603021	Connector	1
15	1603236	Connector (Secondary Lock)	1
15	1548517	Terminal (Socket)	3
15	1548519	Seal	3
16	.....	Connector Assembly (Park Brake)	1
16	1700460	Connector	1
16	1700461	Terminal	3
17	.....	Connector Assembly (Brake Pedal)	1
17	1700460	Connector	1
17	1700461	Terminal	3
18	1402816	Clip	1
19	1500899	Clip	2
20	275497	Conduit	AR
21	.....	Connector Assembly (Bus Terminal 1)	1
21	1489656	Connector (4-Way)	1

WIRE HARNESS

COWL WITH MONOTROL PEDAL – WITH HYDRAULIC PUMP SOLENOID (S/N L177B31321H →)

ITEM	PART NO.	DESCRIPTION	QTY
21	1489657	Connector	1
21	1330438	Terminal (Socket)	4
22	.....	Connector Assembly (Endcap w/ Resistor)	1
22	1525577	Connector (With Resistor)	1
23	.....	Connector Assembly (Display)	1
23	1525567	Connector	1
23	1529046	Connector	1
23	1463139	Terminal	5
23	1484377	Plug	7
24	.....	Connector Assembly (J1939 Diagnostic)	1
24	1566116	Connector	1
24	1532664	Connector (Secondary Lock)	1
24	1330438	Terminal (Socket)	3
25	.....	Connector Assembly (Dustcap)	1
25	1566117	Dust Cap	1
26	.....	Connector Assembly (Horn Button)	1
26	1490242	Connector	1
26	1490243	Connector	1
26	1330438	Terminal (Socket)	2
27	.....	Connector Assembly (Vehicle System Manager)	1
27	1525570	Connector	1
27	1529046	Connector	1
27	1463139	Terminal	7
27	1484377	Plug	5
28	.....	Connector Assembly (To Right Hand Chassis Harness)	1
28	1500925	Connector	1
28	1352603	Connector	1
28	1330437	Terminal (Pin)	7
28	1484377	Plug	5
29	.....	Connector Assembly (To Right Hand Chassis Harness)	1
29	1489656	Connector (4-Way)	1
29	1489657	Connector	1
29	1330438	Terminal (Socket)	4

WIRE HARNESS (FIGURE 6-70) COWL WITH FORWARD/REVERSE — MANUAL WITH OPERATOR PRESENCE (S/N L177B28589G ↔ S/N L177B31320H)



BP080711

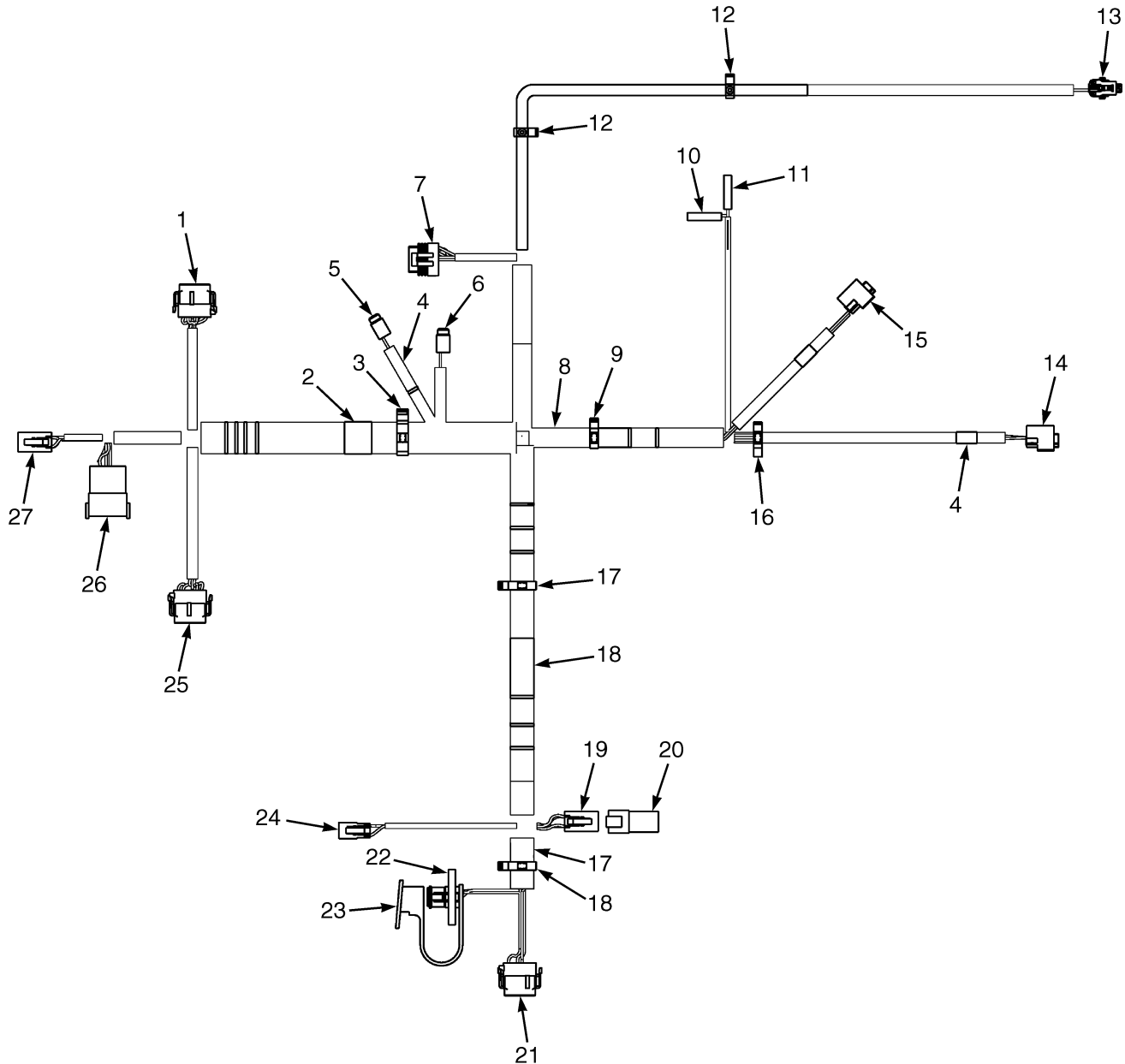
WIRE HARNESS
COWL WITH FORWARD/REVERSE – MANUAL WITH OPERATOR PRESENCE
(S/N L177B28589G ↔ S/N L177B31320H)

ITEM	PART NO.	DESCRIPTION	QTY
	2104702	Wire Harness	1
1	.....	To Right Hand Chassis Harness	1
1	1489656	Connector (4-Way)	1
1	1489657	Connector	1
1	1330438	Terminal (Socket)	4
2	.....	VSM	1
2	1525568	Connector	1
2	1529046	Connector	1
2	1463139	Terminal	8
2	1484377	Plug	4
3	1540388	Conduit	1
4	1534282	Clip	1
5	.....	Hydraulic Lockout Solenoid	2
5	1484557	Connector	1
5	1484558	Connector	1
5	1463139	Terminal	2
6	275493	Conduit	AR
7	.....	Accelerator Pedal Sensor	1
7	1525584	Connector	1
7	1532571	Terminal	6
8	1509888	Clip	4
9	.....	Brake Pressure	1
9	1603021	Connector	1
9	1603236	Connector (Secondary Lock)	1
9	1548517	Terminal (Socket)	3
9	1548519	Seal	3
10	.....	Brake Fluid	2
10	1324310	Terminal	1
10	1324309	Sleeve	1
11	275496	Conduit	AR
12	1534828	Clip	1
13	.....	Park Brake	1
13	1484397	Connector (3-Way)	1
13	1463194	Connector	1
13	1330438	Terminal (Socket)	3
14	.....	Brake Pedal	1
14	1484397	Connector (3-Way)	1
14	1463194	Connector	1
14	1330438	Terminal (Socket)	3
15	1402816	Clip	1
16	1500899	Clip	1
17	275497	Conduit	AR
18	1525577	Connector (With Resistor)	1
19	.....	Bus Terminal	1
19	1489656	Connector (4-Way)	1
19	1489657	Connector	1
19	1330438	Terminal (Socket)	1
20	.....	Display	1
20	1525567	Connector	1

WIRE HARNESS
COWL WITH FORWARD/REVERSE – MANUAL WITH OPERATOR PRESENCE
(S/N L177B28589G ↔ S/N L177B31320H)

ITEM	PART NO.	DESCRIPTION	QTY
20	1529046	Connector	1
20	1463139	Terminal	5
20	1484377	Plug	7
21	.....	Diagnostic	1
21	1566116	Connector	1
21	1532664	Connector (Secondary Lock)	1
21	1330438	Terminal (Socket)	3
22	1566117	Dust Cap	1
23	.....	Horn Button	1
23	1490242	Connector	1
23	1490243	Connector	1
23	1330438	Terminal (Socket)	2
24	.....	VSM	1
24	1525570	Connector	1
24	1529046	Connector	1
24	1463139	Terminal	7
24	1484377	Plug	5
25	.....	To Right Hand Chassis	1
25	1500925	Connector	1
25	1352603	Connector	1
25	1330437	Terminal (Pin)	7
25	1484377	Plug	5

WIRE HARNESS (FIGURE 6-71) COWL WITH FORWARD/REVERSE LEVER — WITH HYDRAULIC PUMP SOLENOID (S/N L177B31321H →)



BP080919

WIRE HARNESS

COWL WITH FORWARD/REVERSE LEVER – WITH HYDRAULIC PUMP SOLENOID (S/N L177B31321H →)

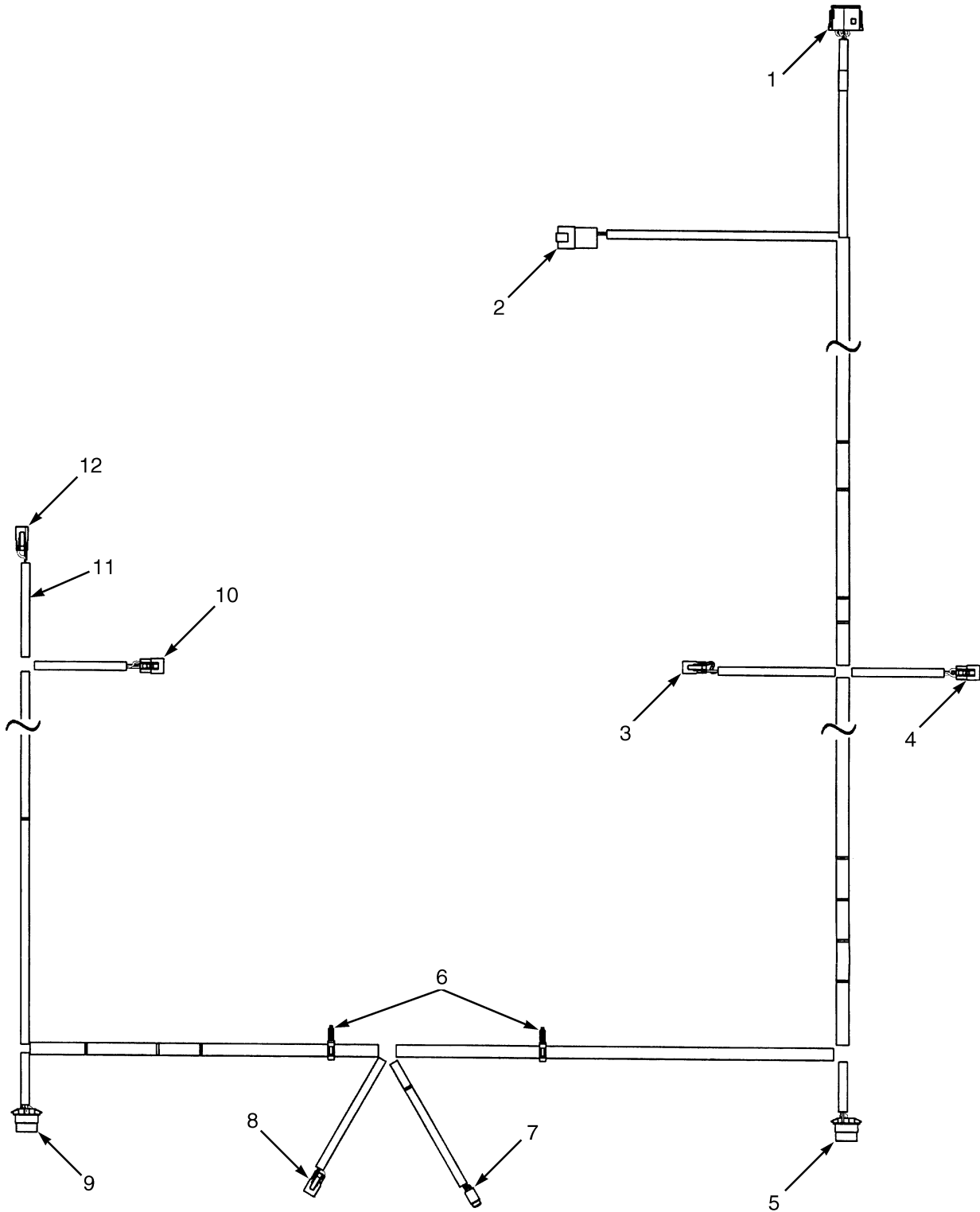
ITEM	PART NO.	DESCRIPTION	QTY
	4603282	Wire Harness	1
1	.....	Connector Assembly (Vehicle System Manager)	1
1	1525568	Connector	1
1	1529046	Connector	1
1	1463139	Terminal	8
1	1484377	Plug	4
2	1540388	Conduit	AR
3	1534282	Clip	1
4	275493	Conduit	AR
5	.....	Connector Assembly (Hydraulic Lockout Solenoid #2)	1
5	1484557	Connector	1
5	1484558	Connector	1
5	1463139	Terminal	2
6	.....	Connector Assembly (Hydraulic Lockout Solenoid #1)	1
6	1484557	Connector	1
6	1484558	Connector	1
6	1463139	Terminal	2
7	.....	Connector Assembly (Accelerator Pedal Sensor)	1
7	1525584	Connector	1
7	1532571	Terminal	6
8	275496	Conduit	AR
9	1534828	Clip	1
10	.....	Connector Assembly (Brake Fluid)	1
10	1324310	Terminal	1
10	1324309	Sleeve	1
11	.....	Connector Assembly (Brake Fluid)	1
11	1324310	Terminal	1
11	1324309	Sleeve	1
12	1509888	Clip	2
13	.....	Connector Assembly (Brake Pressure)	1
13	1603021	Connector	1
13	1603236	Connector (Secondary Lock)	1
13	1548517	Terminal (Socket)	3
13	1548519	Seal	3
14	.....	Connector Assembly (Brake Pedal)	1
14	1700460	Connector	1
14	1700461	Terminal	3
15	.....	Connector Assembly (Park Brake)	1
15	1700460	Connector	1
15	1700461	Terminal	3
16	1402816	Clip	1
17	1500899	Clip	2
18	275497	Conduit	AR
19	.....	Connector Assembly (Bus Terminal 1)	1
19	1489656	Connector (4-Way)	1
19	1489657	Connector	1
19	1330438	Terminal (Socket)	4
20	.....	Connector Assembly (Endcap w/ Resistor)	1
20	1525577	Connector (With Resistor)	1
21	.....	Connector Assembly (Display)	1

WIRE HARNESS

COWL WITH FORWARD/REVERSE LEVER – WITH HYDRAULIC PUMP SOLENOID (S/N L177B31321H →)

ITEM	PART NO.	DESCRIPTION	QTY
21	1525567	Connector	1
21	1529046	Connector	1
21	1463139	Terminal	5
21	1484377	Plug	7
22	.....	Connector Assembly (J1939 Diagnostic)	1
22	1566116	Connector	1
22	1532664	Connector (Secondary Lock)	1
22	1330438	Terminal (Socket)	3
23	.....	Connector Assembly (Dust Cap)	1
23	1566117	Dust Cap	1
24	.....	Connector Assembly (Horn Button)	1
24	1490242	Connector	1
24	1490243	Connector	1
24	1330438	Terminal (Socket)	1
25	.....	Connector Assembly (Vehicle System Manager)	1
25	1525570	Connector	1
25	1529046	Connector	1
25	1463139	Terminal	7
25	1484377	Plug	5
26	.....	Connector Assembly (To Right Hand Chassis Harness)	1
26	1500925	Connector	1
26	1352603	Connector	1
26	1330437	Terminal (Pin)	7
26	1484377	Plug	5
27	.....	Connector Assembly (To Right Hand Chassis Harness)	1
27	1489656	Connector (4-Way)	1
27	1489657	Connector	1
27	1330438	Terminal (Socket)	4

WIRE HARNESS (FIGURE 6-72) LIGHTS (→ S/N L177B11696D)

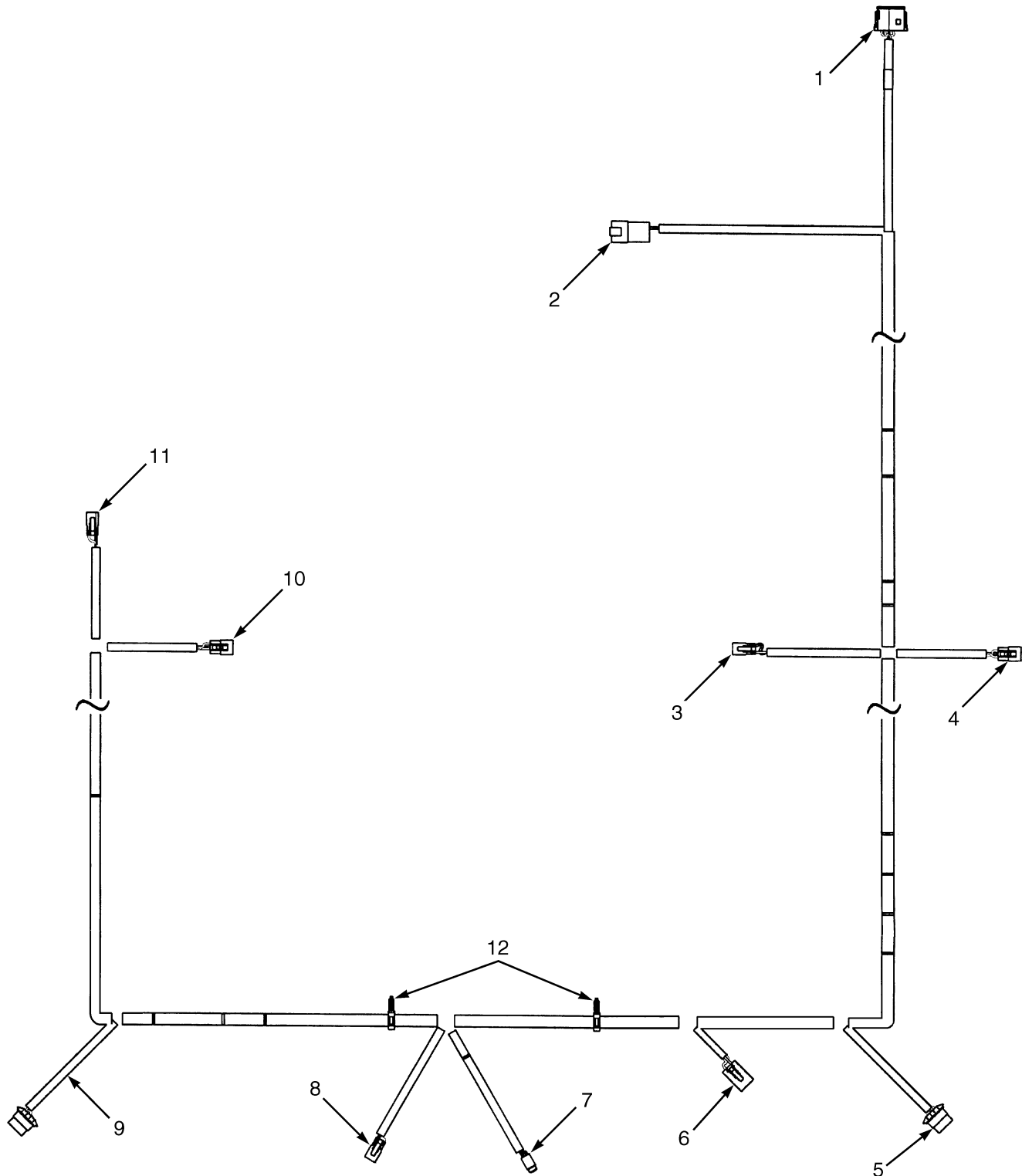


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**WIRE HARNESS
LIGHTS (→ S/N L177B11696D)**

ITEM	PART NO.	DESCRIPTION	QTY
	2074737	Wire Harness (Lights)	1
1	.....	Connector Assembly (Vehicle System Manager)	1
1	1525566	Connector	1
1	1330439	Plug	7
1	1330438	Terminal (Socket)	5
1	1500913	Connector	1
2	.....	Connector Assembly (Chassis Harness)	1
2	1514597	Connector	1
2	1484709	Terminal (Pin)	4
2	1514598	Connector	1
3	.....	Connector Assembly (RH Front Work Lights)	1
3	1490242	Connector	1
3	1363886	Terminal (Socket)	2
3	1490243	Connector	1
4	1484397	Connector (3-Way) (RH Front Signal)	1
4	1330438	Terminal (Socket)	3
4	1463194	Connector	1
5	.....	Connector Assembly (RH Rear Signal Lights)	1
5	1531486	Connector	1
5	1330355	Terminal	5
5	1330356	Seal	1
5	1482668	Plug	1
5	930591	Connector	1
5	1476108	Wire Seal	4
6	1509890	Clip	2
7	1484557	Connector (Strobe Lights)	1
7	1484558	Connector	1
7	1463139	Terminal	2
8	.....	Connector Assembly (Rear Work Lights)	1
8	1490242	Connector	1
8	1363886	Terminal (Socket)	2
8	1490243	Connector	1
9	.....	Connector Assembly (LH Rear Signal Lights)	1
9	1531486	Connector	1
9	1330355	Terminal	5
9	1330356	Seal	1
9	1482668	Plug	1
9	930591	Connector	1
9	1476108	Wire Seal	4
10	1484397	Connector (3-Way) (LH Front Signal)	1
10	1330438	Terminal (Socket)	3
10	1463194	Connector	1
11	175944	Heat Shrink	AR
12	.....	Connector Assembly (LH Front Work Lights)	1
12	1490242	Connector	1
12	1363886	Terminal (Socket)	2
12	1490243	Connector	1

WIRE HARNESS (LIGHTS) (FIGURE 6-73) (S/N L177B11697D ↔ S/N L177B17476E)



BP080521

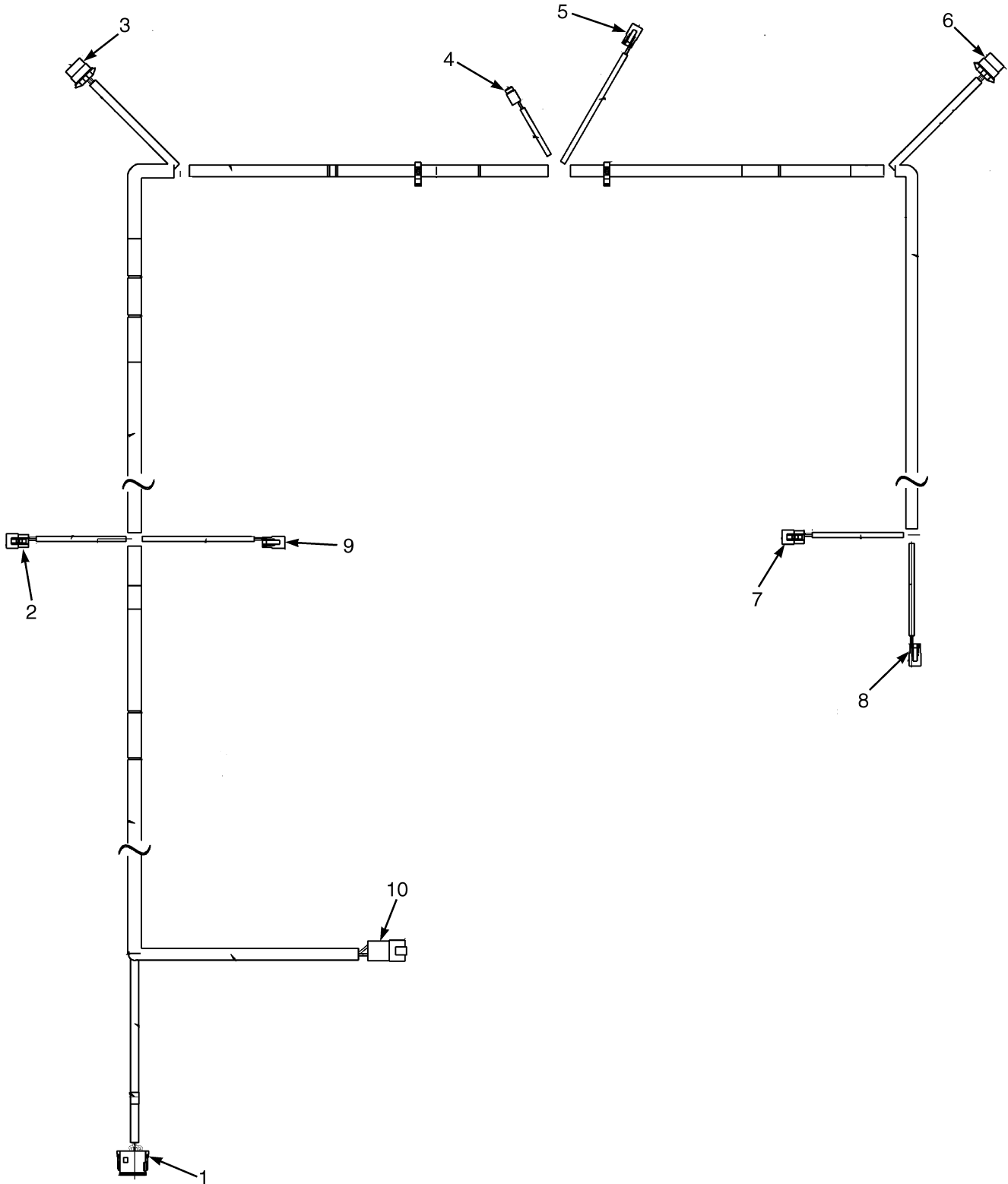
WIRE HARNESS (LIGHTS)
(S/N L177B11697D ↔ S/N L177B17476E)

ITEM	PART NO.	DESCRIPTION	QTY
	2090087	Wire Harness (Lights)	1
1	.....	Connector Assembly (Vehicle System Mangement)	1
1	1525566	Connector	1
1	1500913	Connector	1
1	1330438	Terminal (Socket)	5
1	1330439	Plug	7
2	.....	Connector Assembly (Chassis Harness)	1
2	1514597	Connector	1
2	1514598	Connector	1
2	1484709	Terminal (Pin)	4
3	.....	Connector Assembly (RH Front Work Light)	1
3	1490242	Connector	1
3	1402813	Clip	1
3	1363886	Terminal (Socket)	2
4	.....	Connector Assembly (RH Front Signal Light)	1
4	1484397	Connector (3-Way)	1
4	1463194	Connector	1
4	1330438	Terminal (Socket)	3
5	.....	Connector Assembly (RH Rear Signal)	1
5	1531486	Connector	1
5	930591	Connector	1
5	1330355	Terminal	5
5	1330356	Seal	1
5	1482668	Plug	1
5	1476108	Wire Seal	4
6	.....	Connector Assembly (Work Light Redistor)	1
6	1514602	Connector	1
6	1514603	Connector	1
6	1554359	Terminal	4
7	.....	Connector Assembly (Strobe Light)	1
7	1484557	Connector	1
7	1484558	Connector	1
7	1463139	Terminal	2
8	.....	Connector Assembly (Rear Work Light)	1
8	1490242	Connector	1
8	1402813	Clip	1
8	1363886	Terminal (Socket)	2
9	.....	Connector Assembly (LH Rear Signal Light)	1
9	1531486	Connector	1
9	930591	Connector	1
9	1330355	Terminal	5
9	1330356	Seal	1
9	1482668	Plug	1
9	1476108	Wire Seal	4
10	.....	Connector Assembly (LH Front Signal Light)	1
10	1484397	Connector (3-Way)	1
10	1463194	Connector	1
10	1330438	Terminal (Socket)	3
11	175944	Heat Shrink	AR
12	1509890	Clip	2

WIRE HARNESS (LIGHTS)
(S/N L177B11697D ↔ S/N L177B17476E)

ITEM	PART NO.	DESCRIPTION	QTY
12	.....	Connector Assembly (LH Front Work Light)	1
12	1490242	Connector	1
12	1402813	Clip	1
12	1363886	Terminal (Socket)	2

WIRE HARNESS (FIGURE 6-74) LIGHTS (S/N L177B17477E →)

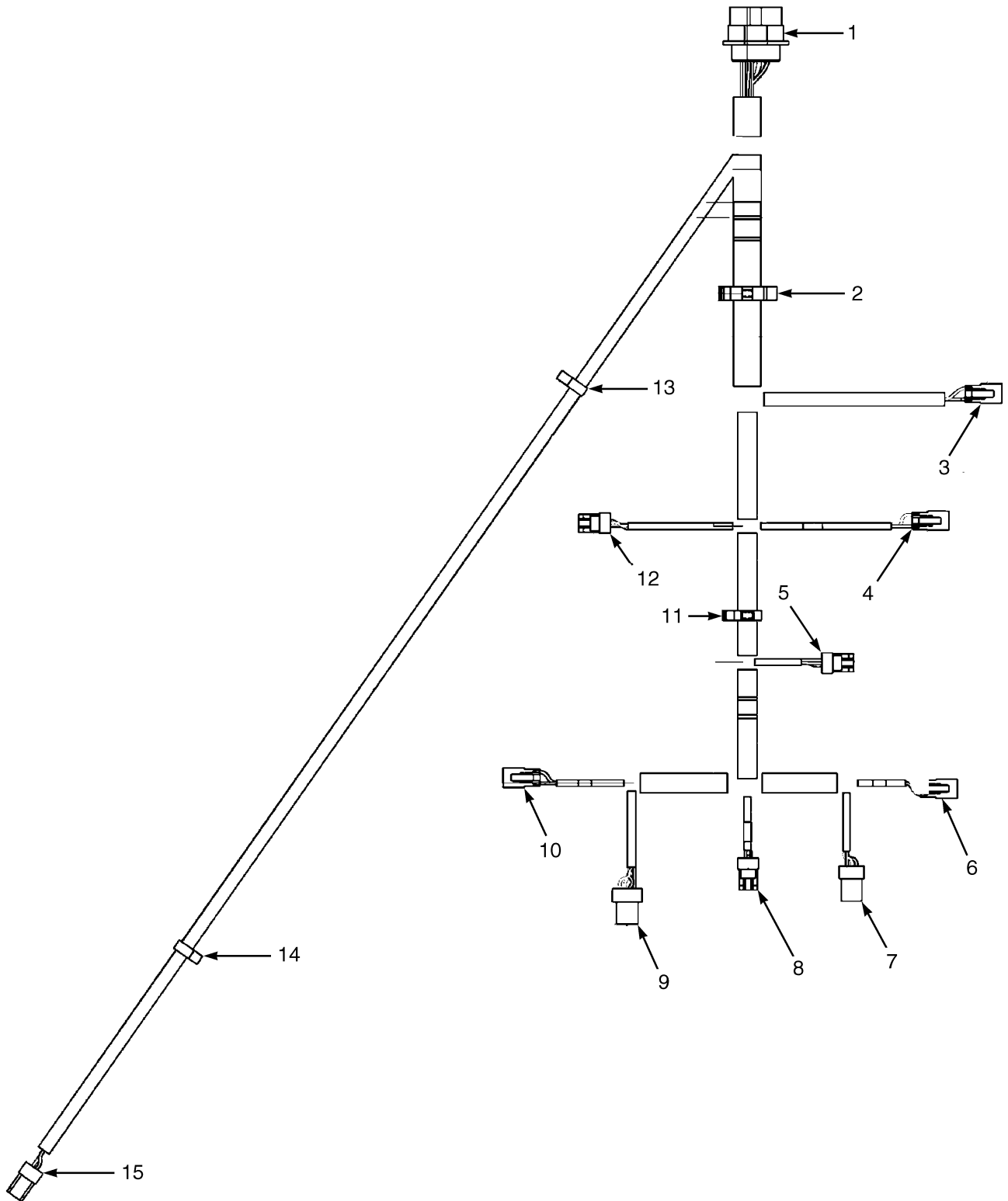


BP080631

**WIRE HARNESS
LIGHTS (S/N L177B17477E →)**

ITEM	PART NO.	DESCRIPTION	QTY
	2098387	Wire Harness (Lights)	1
1	.....	Connector Assembly (Vehical System Management)	1
1	1525566	Connector	1
1	1500913	Connector	1
1	1330438	Terminal (Socket)	5
1	1484377	Plug	7
2	.....	Connector Assembly (RH Front Signal)	1
2	1484397	Connector (3-Way)	1
2	1463194	Connector	1
2	1330438	Terminal (Socket)	3
3	.....	Connector Assembly (RH Rear Signal)	1
3	1531486	Connector	1
3	930591	Connector	1
3	1330355	Terminal	5
3	1330356	Seal	1
3	1482668	Plug	1
3	1476108	Wire Seal	4
4	.....	Connector Assembly (Strobe)	1
4	1484557	Connector	1
4	1484558	Connector	1
4	1463139	Terminal	2
5	.....	Connector Assembly (Rear Work Light)	1
5	1490242	Connector	1
5	1490243	Connector	1
5	1363886	Terminal (Socket)	2
6	.....	Connector Assembly (LH Rear Signal)	1
6	1531486	Connector	1
6	930591	Connector	1
6	1330355	Terminal	5
6	1330356	Seal	1
6	1482668	Plug	1
6	1476108	Wire Seal	4
7	.....	Connector Assembly (LH Front Signal)	1
7	1484397	Connector (3-Way)	1
7	1463194	Connector	1
7	1330438	Terminal (Socket)	3
8	.....	Connector Assembly (LH Front Work Light)	1
8	1490242	Connector	1
8	1490243	Connector	1
8	1363886	Terminal (Socket)	2
9	.....	Connector Assembly (RH Front Work Light)	1
9	1490242	Connector	1
9	1490243	Connector	1
9	1363886	Terminal (Socket)	2
10	.....	Connector Assembly (RH Chassis)	1
10	1514597	Connector	1
10	1514598	Connector	1
10	1484709	Terminal (Pin)	4

WIRE HARNESS (FIGURE 6-75) TRANSMISSION — DUAL SPEED (→ S/N L177B11117D)



HP081566

WIRE HARNESS
TRANSMISSION – DUAL SPEED (→ S/N L177B11117D)

ITEM	PART NO.	DESCRIPTION	QTY
	a 2075644	Wire Harness (Transmission)	1
	b 2082324	Wire Harness (Transmission)	1
1	.....	Connector Assembly (To Chassis Harness)	1
1	1500919	Connector	1
1	1330437	Terminal (Pin)	16
1	1330437	Terminal (Pin)	17
1	1330439	Plug	7
1	1484377	Plug	6
2	1402813	Clip	1
3	.....	Connector Assembly (Clutch Forward 2)	1
3	1490243	Connector	1
3	1490242	Connector	1
3	1330438	Terminal (Socket)	2
4	.....	Connector Assembly (Clutch Forward 1)	1
4	1490243	Connector	1
4	1490242	Connector	1
4	1330438	Terminal (Socket)	2
5	.....	Connector Assembly (Forward 1 Pressure)	1
5	1603021	Connector	1
5	1603236	Connector (Secondary Lock)	1
5	1548517	Terminal (Socket)	3
5	1548519	Seal	3
6	.....	Connector Assembly (Clutch Reverse 1)	1
6	1490242	Connector	1
6	1490243	Connector	1
6	1330438	Terminal (Socket)	2
7	.....	Connector Assembly (Turbine Shaft RPM)	1
7	1546673	Connector	1
7	1323576	Terminal	3
8	.....	Connector Assembly (Reverse 1 Pressure)	1
8	1603021	Connector	1
8	1603236	Connector (Secondary Lock)	1
8	1548517	Terminal (Socket)	3
8	1548519	Seal	3
9	.....	Connector Assembly (Tail Shaft RPM)	1
9	1558156	Connector	1
9	1323576	Terminal	4
10	.....	Connector Assembly (Transmission Check Valve)	1
10	1490243	Connector	1
10	1490242	Connector	1
10	1330438	Terminal (Socket)	2
11	1402815	Clip	1
11	1534828	Clip	1
11	1509890	Clip	1
12	.....	Connector Assembly (Forward 2 Pressure)	1
12	1603021	Connector	1
12	1603236	Connector (Secondary Lock)	1
12	1548517	Terminal (Socket)	3
12	1548519	Seal	3
13	1402816	Clip	1

WIRE HARNESS TRANSMISSION – DUAL SPEED (→ S/N L177B11117D)

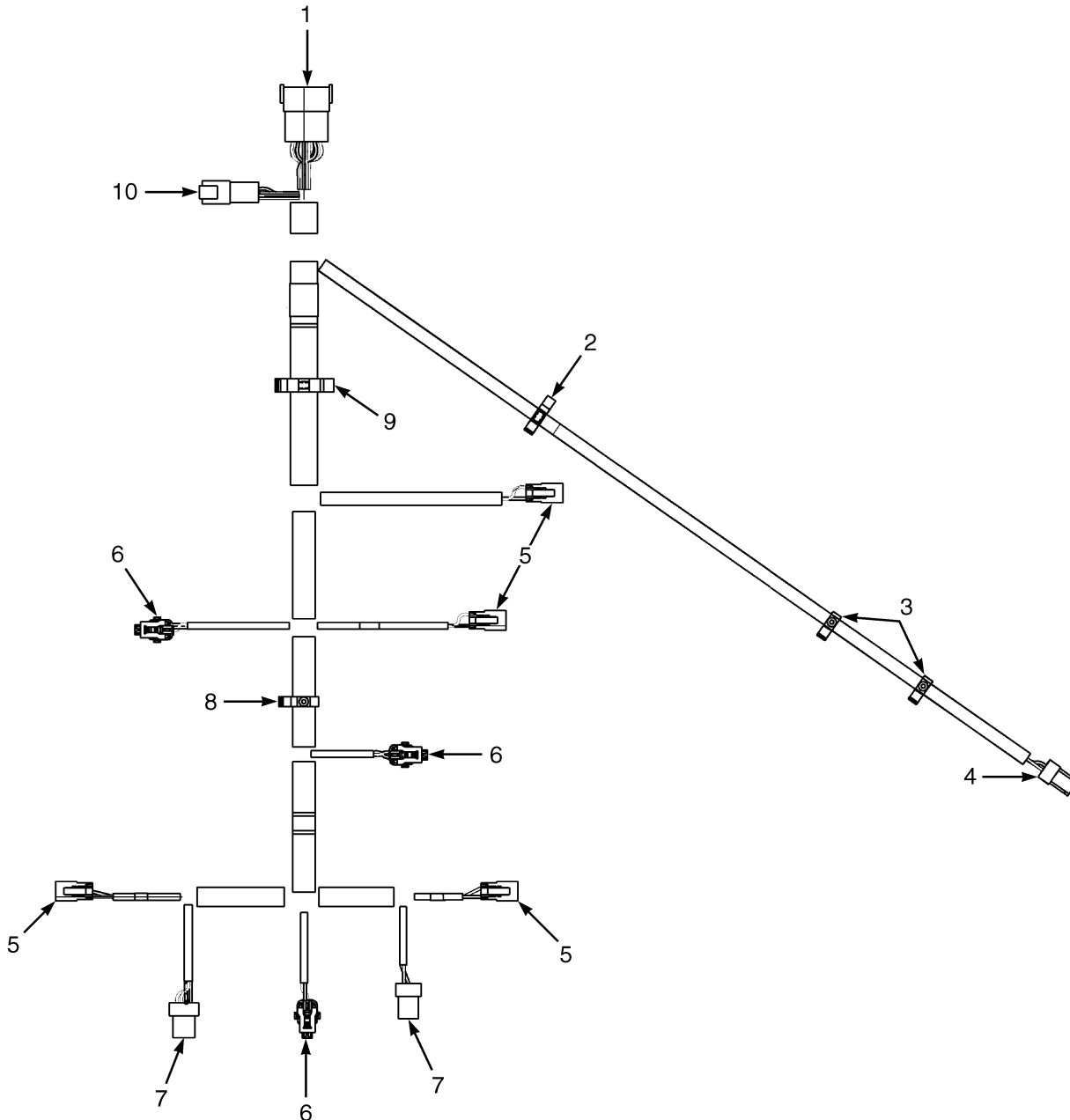
ITEM	PART NO.	DESCRIPTION	QTY
14	1509888	Clip	2
15	.....	Connector Assembly (Transmission Temperature)	1
15	1402868	Connector	1
15	1323576	Terminal	2

FOOTNOTES:

a → 9/2005

b 9/2005 →

WIRE HARNESS (FIGURE 6-76) TRANSMISSION — DUAL SPEED (S/N L177B11118D →)

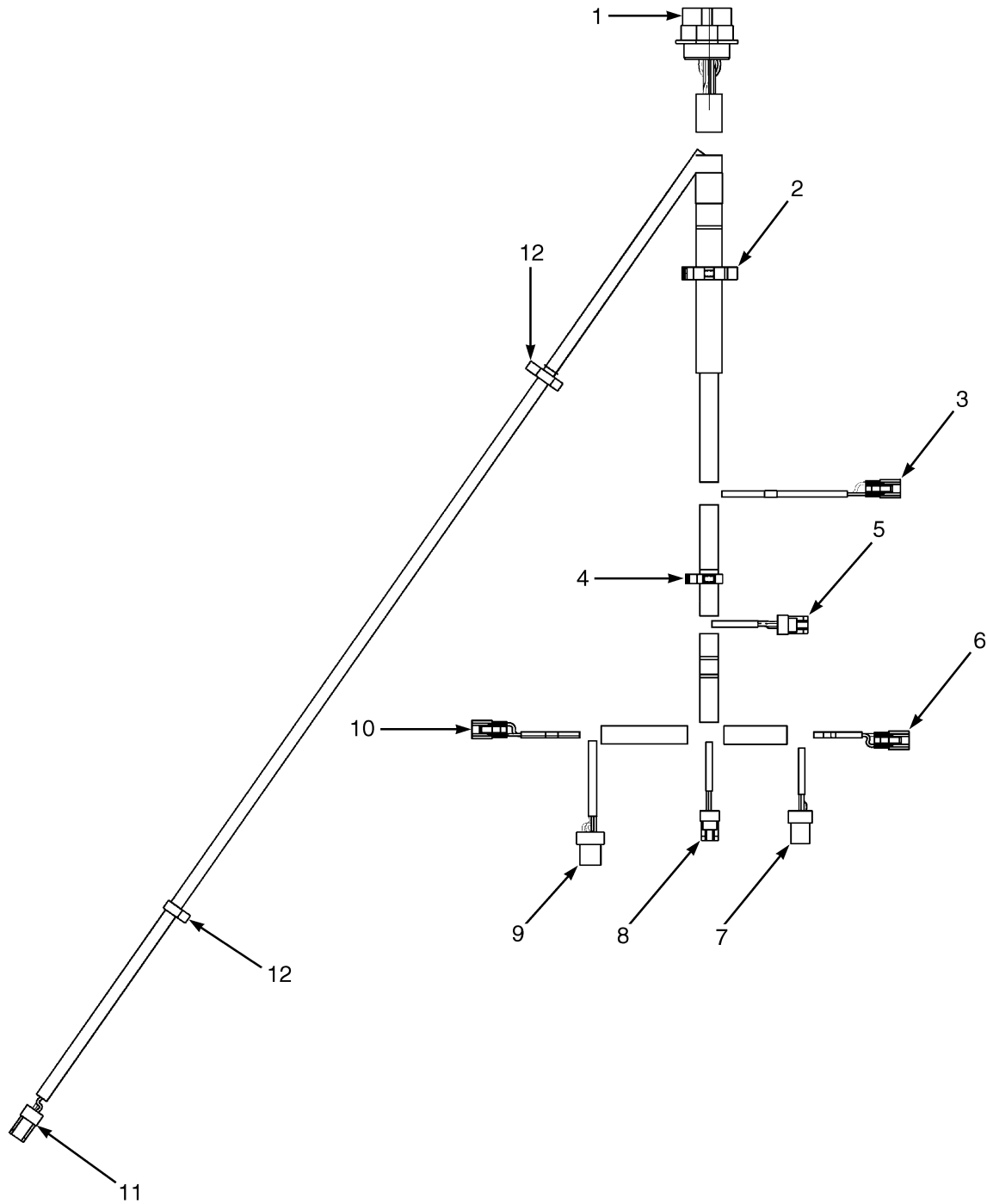


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WIRE HARNESS
TRANSMISSION – DUAL SPEED (S/N L177B11118D →)

ITEM	PART NO.	DESCRIPTION	QTY
	2085942	Wire Harness (Transmission)	1
1	.....	Connector Assembly (To RH Chassis Harness)	1
1	1623280	Connector	1
1	1623281	Connector	1
1	1463138	Terminal Pin	11
1	1484377	Plug	2
2	1402816	Clip	1
3	1509888	Clip	2
4	.....	Connector Assembly (Temperature)	1
4	1402868	Connector	1
4	1323576	Terminal	2
5	.....	Connector Assembly (Clutch Forward 1, and 2 Reverse 1)	1
5	1490242	Connector	1
5	1490243	Connector	1
5	1330438	Terminal (Socket)	2
6	.....	Connector Assembly (Forward/Reverse 1 Pressure)	1
6	1603021	Connector	1
6	1603236	Connector (Secondary Lock)	1
6	1548517	Terminal (Socket)	3
6	1548519	Seal	3
7	.....	Connector Assembly (Turbine/Tail Shaft RPM)	1
7	1546673	Connector	1
7	1323576	Terminal	3
8	1509890	Clip	1
9	1402813	Clip	1
10	.....	Connector Assembly (To RH Chassis Harness)	1
10	1530960	Connector	1
10	1530961	Connector (Secondary Lock)	1
10	1463138	Terminal Pin	6

WIRE HARNESS (FIGURE 6-77) TRANSMISSION — SINGLE SPEED (→ S/N L177B11117D)

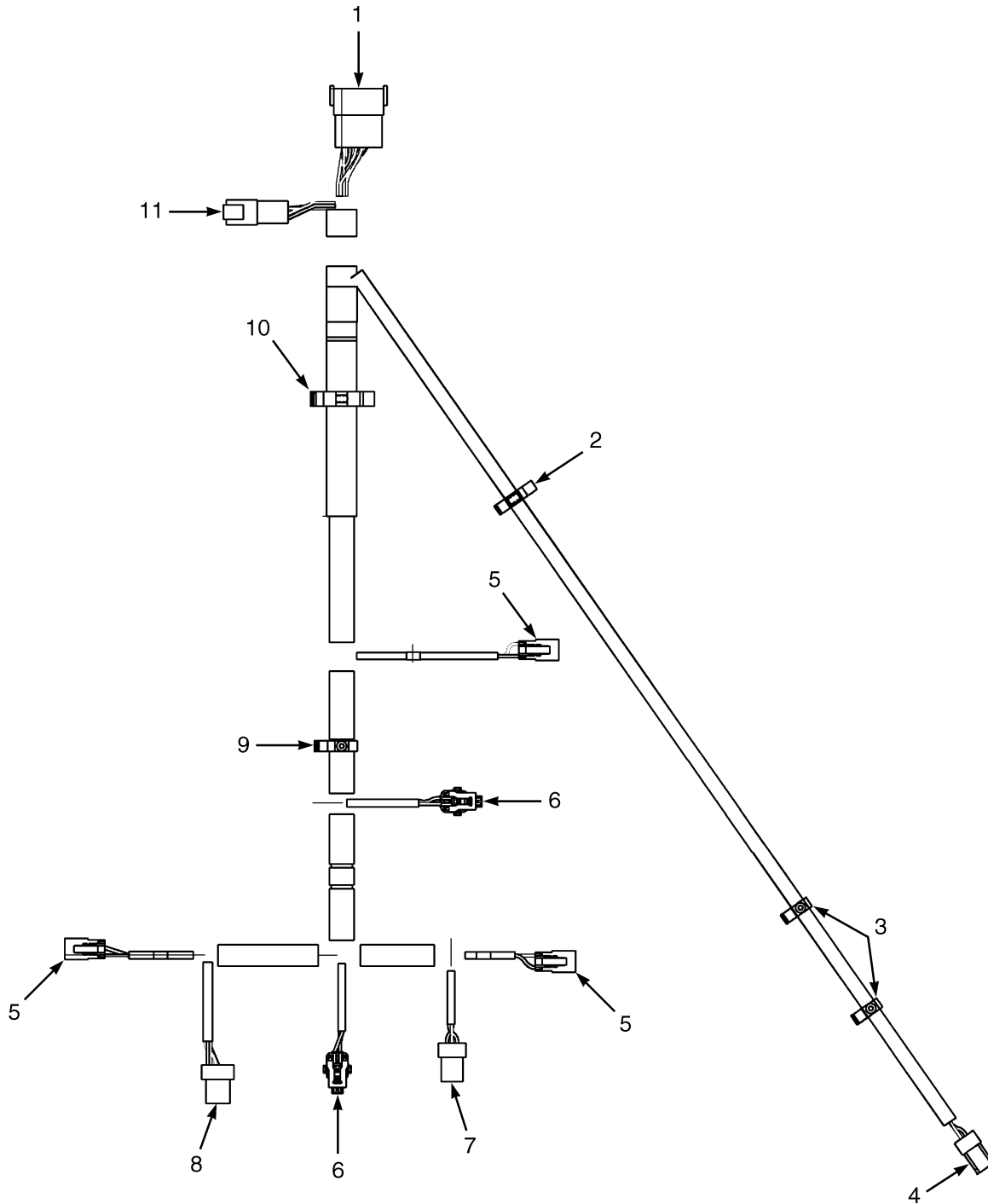


HP081570

WIRE HARNESS
TRANSMISSION – SINGLE SPEED (→ S/N L177B11117D)

ITEM	PART NO.	DESCRIPTION	QTY
	2082323	Wire Harness (Transmission)	1
1	1500919	Connector (To Chassis)	1
1	1330437	Terminal (Pin)	14
1	1484377	Plug	9
2	1509890	Clip	1
3	1603021	Connector (Forward Clutch 1)	1
3	1603236	Connector (Secondary Lock)	1
3	1548517	Terminal (Socket)	3
3	1548519	Seal	3
4	1402815	Clip	1
5	1327957	Connector (Forward Pressure 1)	1
5	1532571	Terminal	3
6	1490242	Connector (Reverse Clutch 1)	1
6	1330438	Terminal (Socket)	2
6	1490243	Connector	1
7	1546673	Connector (Shaft RPM)	1
7	1323576	Terminal	3
8	1603021	Connector (Reverse Pressure 1)	1
8	1603236	Connector (Secondary Lock)	1
9	1558156	Connector (Tail Shaft RPM)	1
9	1323576	Terminal	4
10	1490242	Connector (Transmission Check Valve)	1
10	1490243	Connector	1
10	1330438	Terminal (Socket)	2
11	1402868	Connector (Transmission Temperature)	1
11	1323576	Terminal	2
12	1509888	Clip	2

WIRE HARNESS (FIGURE 6-78) TRANSMISSION — SINGLE SPEED (S/N L177B11118D ↔ S/N L177B29534G)

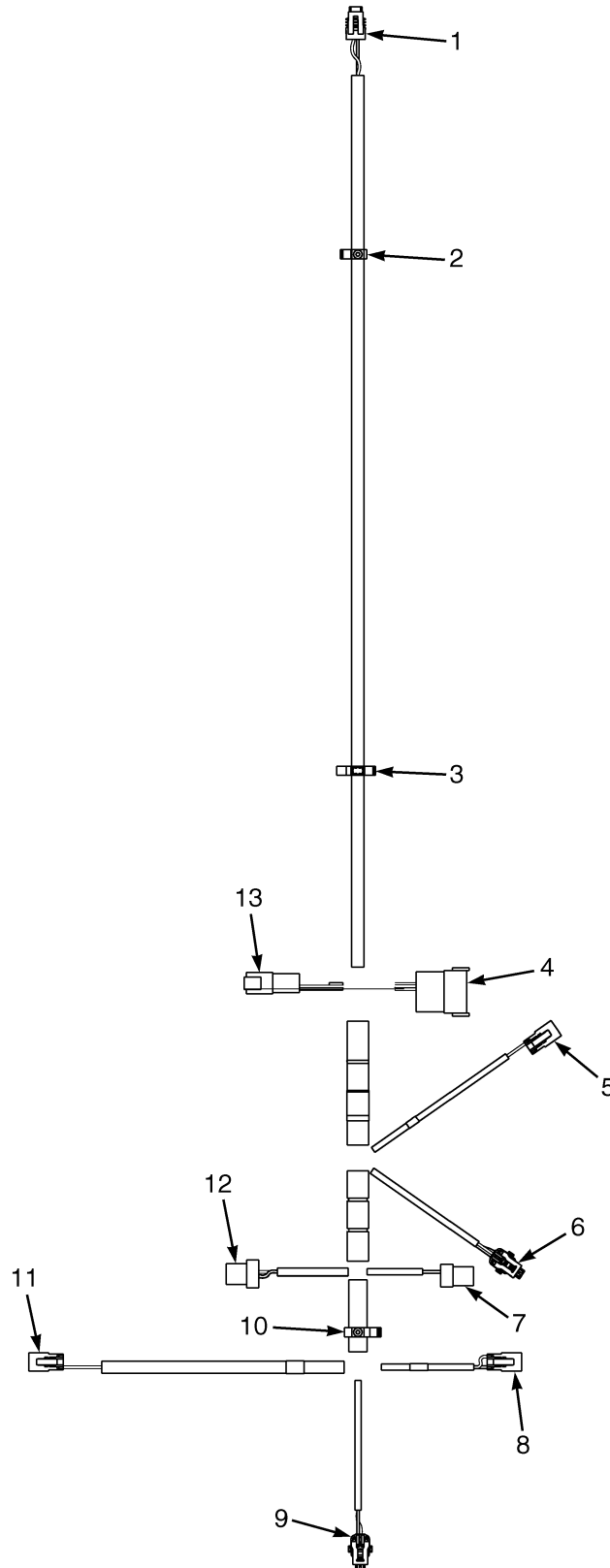


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WIRE HARNESS
TRANSMISSION – SINGLE SPEED (S/N L177B11118D ↔ S/N L177B29534G)

ITEM	PART NO.	DESCRIPTION	QTY
	2085943	Wire Harness (Transmission)	1
1	.....	Connector Assembly (To RH Chassis Harness)	1
1	1623280	Connector	1
1	1623281	Connector	1
1	1463138	Terminal Pin	10
1	1484377	Plug	2
2	1402816	Clip	1
3	1509888	Clip	2
4	.....	Connector Assembly (Temperature)	1
4	1402868	Connector	1
4	1323576	Terminal	2
5	.....	Connector Assembly (Clutch Forward/Reverse 1)	1
5	1490242	Connector	1
5	1490243	Connector	1
5	1330438	Terminal (Socket)	2
6	.....	Connector Assembly (Forward/Reverse 1 Pressure)	1
6	1603021	Connector	1
6	1603236	Connector (Secondary Lock)	1
6	1548517	Terminal (Socket)	3
6	1548519	Seal	3
7	.....	Connector Assembly (Turbine Shaft RPM)	1
7	1546673	Connector	1
7	1323576	Terminal	3
8	.....	Connector Assembly (Tail Shaft RPM)	1
8	1558156	Connector	1
8	1323576	Terminal	4
9	1509890	Clip	1
10	1402813	Clip	1
11	.....	Connector Assembly (To RH Chassis Harness)	1
11	1530960	Connector	1
11	1530961	Connector (Secondary Lock)	1
11	1463138	Terminal Pin	4
11	1484377	Plug	2

WIRE HARNESS (FIGURE 6-79) TRANSMISSION — SINGLE SPEED (S/N L177B29535G →)

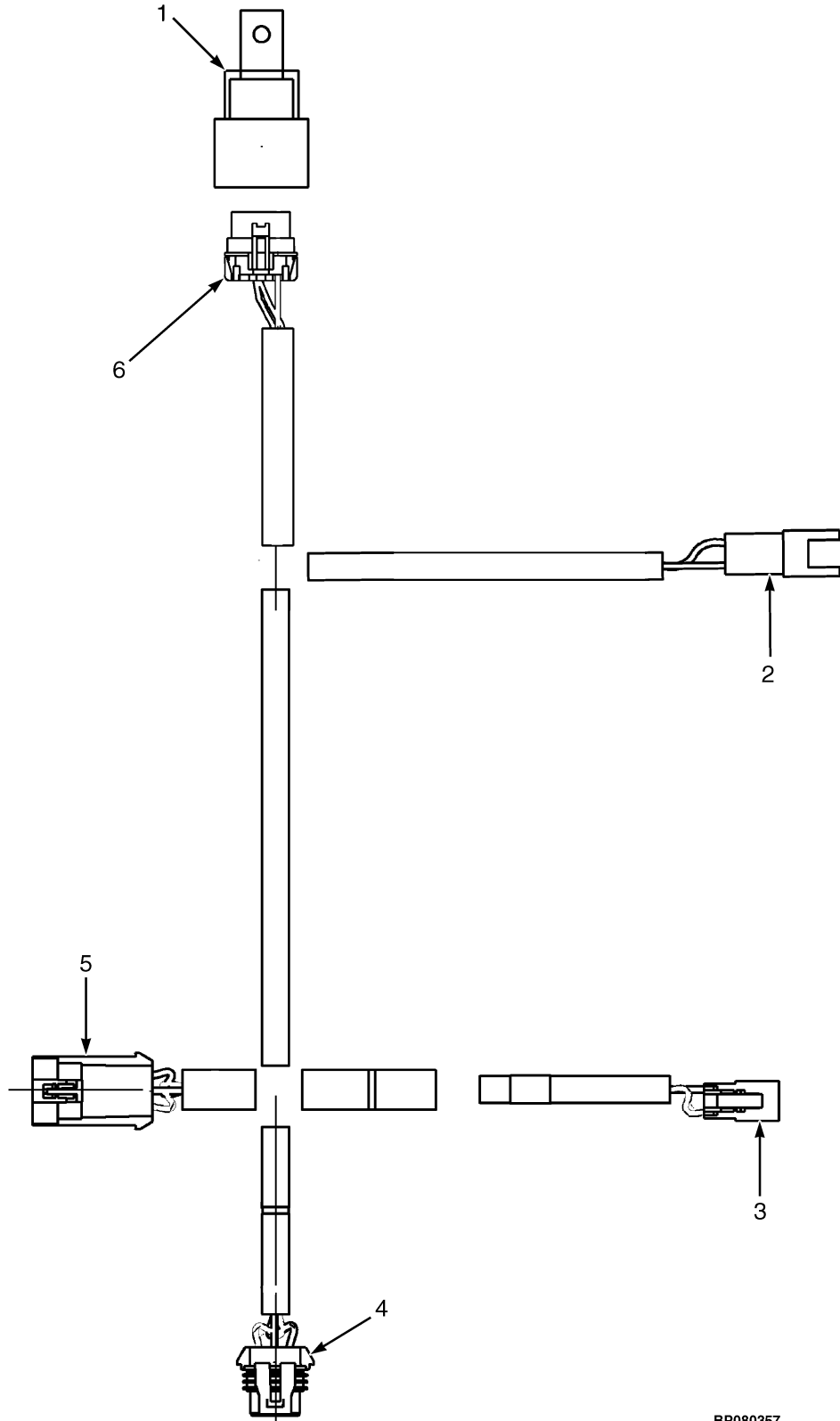


BP080894

WIRE HARNESS
TRANSMISSION – SINGLE SPEED (S/N L177B29535G →)

ITEM	PART NO.	DESCRIPTION	QTY
	2105959	Wire Harness (Transmission)	1
1	.....	Connector Assembly (Transmission Temperature)	1
1	4009253	Connector	1
1	1323576	Terminal	2
2	1509888	Clip	1
3	1402816	Clip	1
4	.....	Connector Assembly (To RH Chassis Harness)	1
4	1623280	Connector	1
4	1623281	Connector	1
4	1463138	Terminal Pin	10
4	1484377	Plug	2
5	.....	Connector Assembly (Clutch Forward 1)	1
5	1490242	Connector	1
5	1490243	Connector	1
5	1330438	Terminal (Socket)	2
6	.....	Connector Assembly (Forward 1 Pressure)	1
6	1603021	Connector	1
6	1603236	Connector (Secondary Lock)	1
6	1548517	Terminal (Socket)	3
6	1548519	Seal	3
7	.....	Connector Assembly (Turbine Shaft RPM)	1
7	1546673	Connector	1
7	1323576	Terminal	3
8	.....	Connector Assembly (Transmission Check Valve)	1
8	1490242	Connector	1
8	1490243	Connector	1
8	1330438	Terminal (Socket)	2
9	.....	Connector Assembly (Reverse 1 Pressure)	1
9	1603021	Connector	1
9	1603236	Connector (Secondary Lock)	1
9	1548517	Terminal (Socket)	3
9	1548519	Seal	3
10	1509890	Clip	1
11	.....	Connector Assembly (Clutch Reverse 1)	1
11	1490242	Connector	1
11	1490243	Connector	1
11	1330438	Terminal (Socket)	2
12	.....	Connector Assembly (Tail Shaft RPM - Toss)	1
12	1558156	Connector	1
12	1323576	Terminal	4
13	.....	Connector Assembly (To RH Chassis Harness)	1
13	1530960	Connector	1
13	1530961	Connector (Secondary Lock)	1
13	1463138	Terminal Pin	4
13	1484377	Plug	2

WIRE HARNESS (FIGURE 6-80) HYDRAULIC COOLER



BP080357

**WIRE HARNESS
HYDRAULIC COOLER**

ITEM	PART NO.	DESCRIPTION	QTY
	2090666	Wire Harness	1
1	.....	Hydraulic Oil Cooler Relay	1
1	1654578	Relay (Latch)	1
1	1654579	Clip (Relay)	1
2	.....	Connector Assembly (Hydraulic Cooler Fan)	1
2	1493465	Connector	1
2	1330414	Connector (Secondary Lock)	1
2	1330437	Terminal (Pin)	2
3	.....	Connector Assembly (Hydraulic Oil Cooler Temperature)	1
3	1490242	Connector	1
3	1490243	Connector	1
3	1330438	Terminal (Socket)	2
4	.....	Connector Assembly (Horn)	1
4	1476064	Connector	1
4	1476109	Connector Lock	1
4	1330355	Terminal	3
4	1330356	Seal	2
4	1476108	Wire Seal	1
5	.....	Connector Assembly (Chassis Harness)	1
5	1595554	Connector	1
5	1476109	Connector Lock	1
5	1482666	Connector Body (Male)	3
5	1330356	Seal	2
5	1476108	Wire Seal	1
6	.....	Connector Assembly (Hydraulic Oil Cooler Relay)	1
6	1461744	Connector Body	1
6	1503088	Lock	1
6	1402888	Seal	4
6	1323579	Seal	4
6	1327164	Seal	1

7

TRANSMISSION

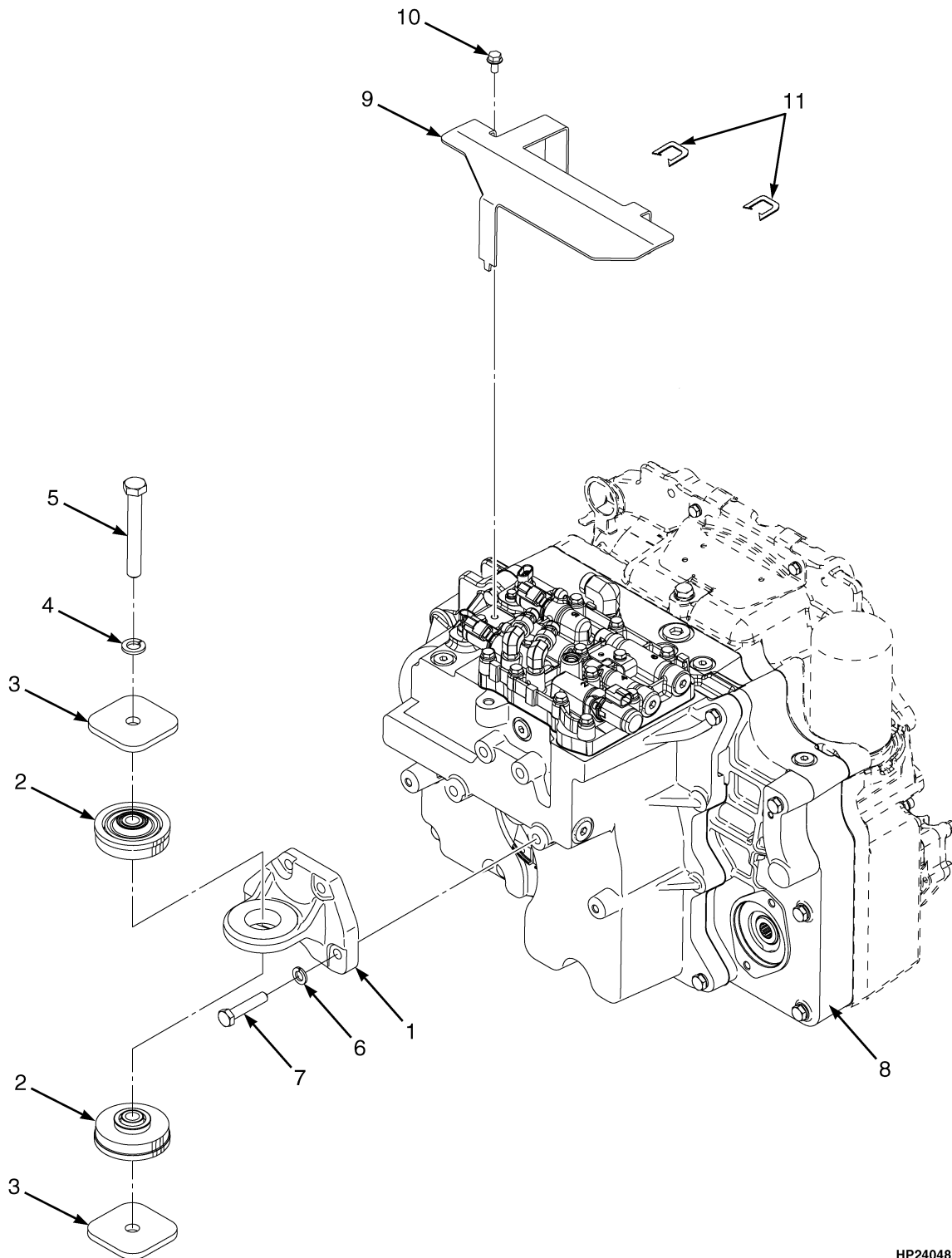
**SECTION 7
TRANSMISSION**

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CHARGE PUMP	7-60
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(→ S/N L177B19274E (LOW PRESSURE IDLE))	7-104
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S/N L177B19875E → (HIGH PRESSURE IDLE) S/N L177B19275E → (LOW PRESSURE IDLE)	7-106
COUNTER/REVERSE CLUTCH	
DUAL SPEED TRANSMISSION (→ S/N L177B13478E)	7-96
DUAL SPEED TRANSMISSION (S/N L177B13479E →)	7-98
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SINGLE SPEED TRANSMISSION (S/N L177B13246E ↔ S/N L177B29534G)	7-72
SINGLE SPEED TRANSMISSION (S/N L177B29535G →) (S/N T141M001501 →)	
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DUAL SPEED TRANSMISSION (S/N L177B13446E →)	7-92
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SINGLE SPEED TRANSMISSION (S/N L177B13421E ↔ S/N L177B29534G)	7-66
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DUAL SPEED TRANSMISSION (S/N L177B13442E →)	7-102
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SINGLE SPEED, WET AND DRY BRAKE - SHEET 1 OF 2 (S/N L177B15792E → (DRY BRAKE))	
(S/N 133M0001501 → (DRY BRAKE)) (S/N L177B15746E → (WET BRAKE))	
(S/N T134M0001501 → (WET BRAKE))	7-44
SINGLE SPEED, WET AND DRY BRAKE - SHEET 2 OF 2 (S/N L177B15792E → (DRY BRAKE))	
(S/N T133M0001501 → (DRY BRAKE)) (S/N L177B15746E → (WET BRAKE))	
(S/N T134M0001501 → (WET BRAKE))	7-46
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2 (→ S/N L177B10029D DRY BRAKE) (→ S/N L177B15745E WET BRAKE)	7-32
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TRANSMISSION COOLING	
MAZDA 2.0L AND 2.2L, LPG - SERPENTINE AND SQUARE WAVE WITHOUT AIR	
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**SECTION 7
TRANSMISSION**

DESCRIPTION	PAGE
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SINGLE SPEED, ALUMINUM CHAIN DRIVE - T148M001501 (S/N L177B32237J →)	7-10
SINGLE SPEED, TWO PIECE HOUSING - T133M AND T134M	7-6

TRANSMISSION MOUNT (FIGURE 7-1) SINGLE SPEED — THREE PIECE HOUSING



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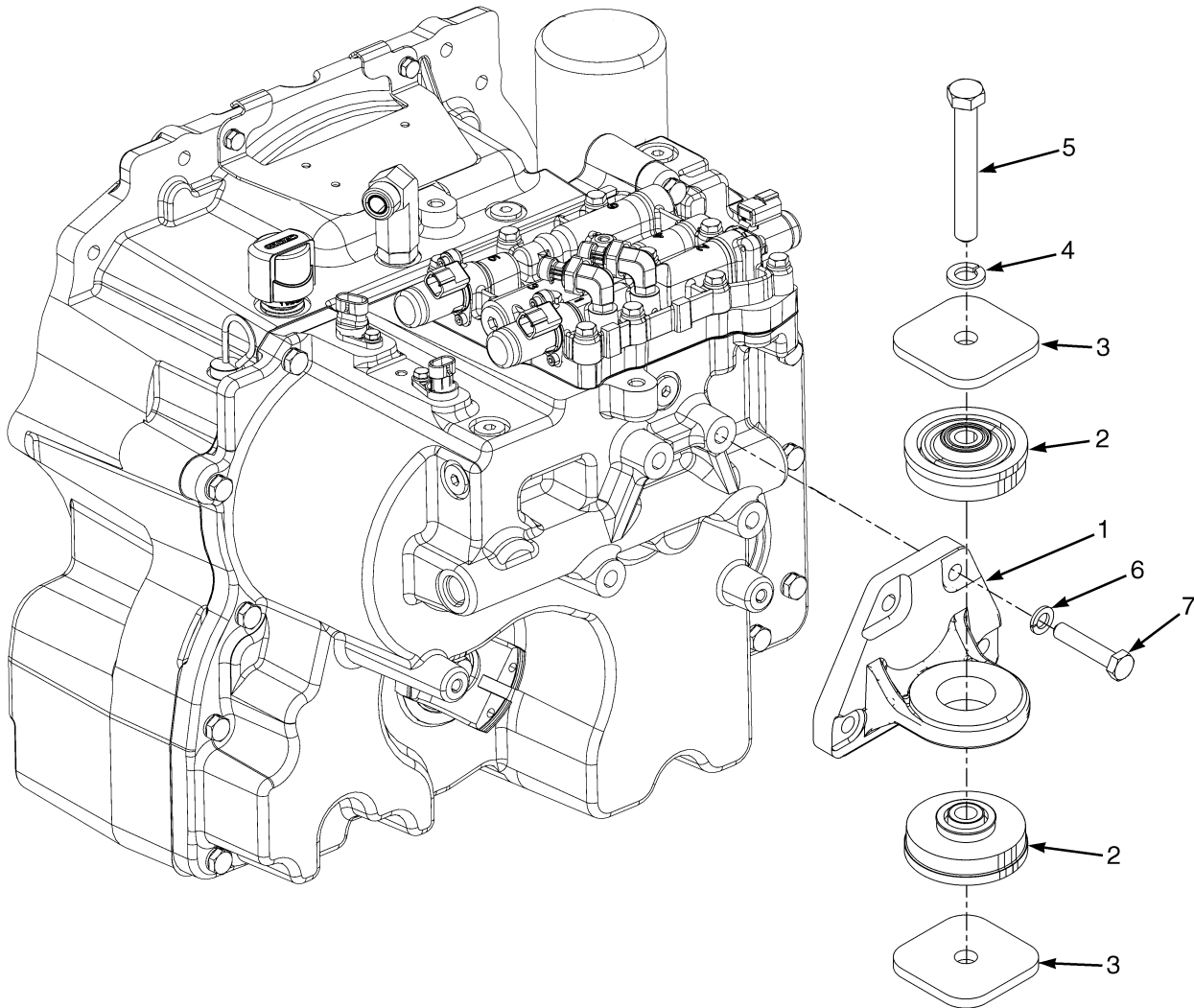
**TRANSMISSION MOUNT
SINGLE SPEED – THREE PIECE HOUSING**

ITEM	PART NO.	DESCRIPTION	QTY
1	1501274	Bracket	1
2	2070147	Isolator	2
3	1566329	Washer	2
4	292685	Lockwasher	1
4	320165	Washer (Alternate Part)	1
5	293697	Capscrew	1
6	292683	Lockwasher	4
7	292531	Capscrew	4
8	ac 1550565	Transmission Assy (Single Speed, Dry Brake) (☞ Figure 7-15).....	1
8	de 1632260	Transmission Assy (Single Speed Dry Brake) (☞ Figure 7-17).....	1
8	b 1616478	Transmission Assy (Single Speed Wet Brake) (☞ Figure 7-15).....	1
9	1569768	Shield	1
10	1527879	Capscrew	1
11	1380849	Edge Protector	2
11	4013363	Trim (Alternate Part)	2
	264134	Loctite	AR

FOOTNOTES:

- | | | | |
|----------|--------------------------|----------|---------------------------------|
| a | → S/N L177B10029 | d | S/N L177B10030 ↔ S/N L177B15791 |
| b | → S/N L177B15745 (T128M) | e | S/N T117M0016845 → |
| c | → S/N T117M0016844 | | |

TRANSMISSION MOUNT (FIGURE 7-2) SINGLE SPEED, TWO PIECE HOUSING — T133M AND T134M



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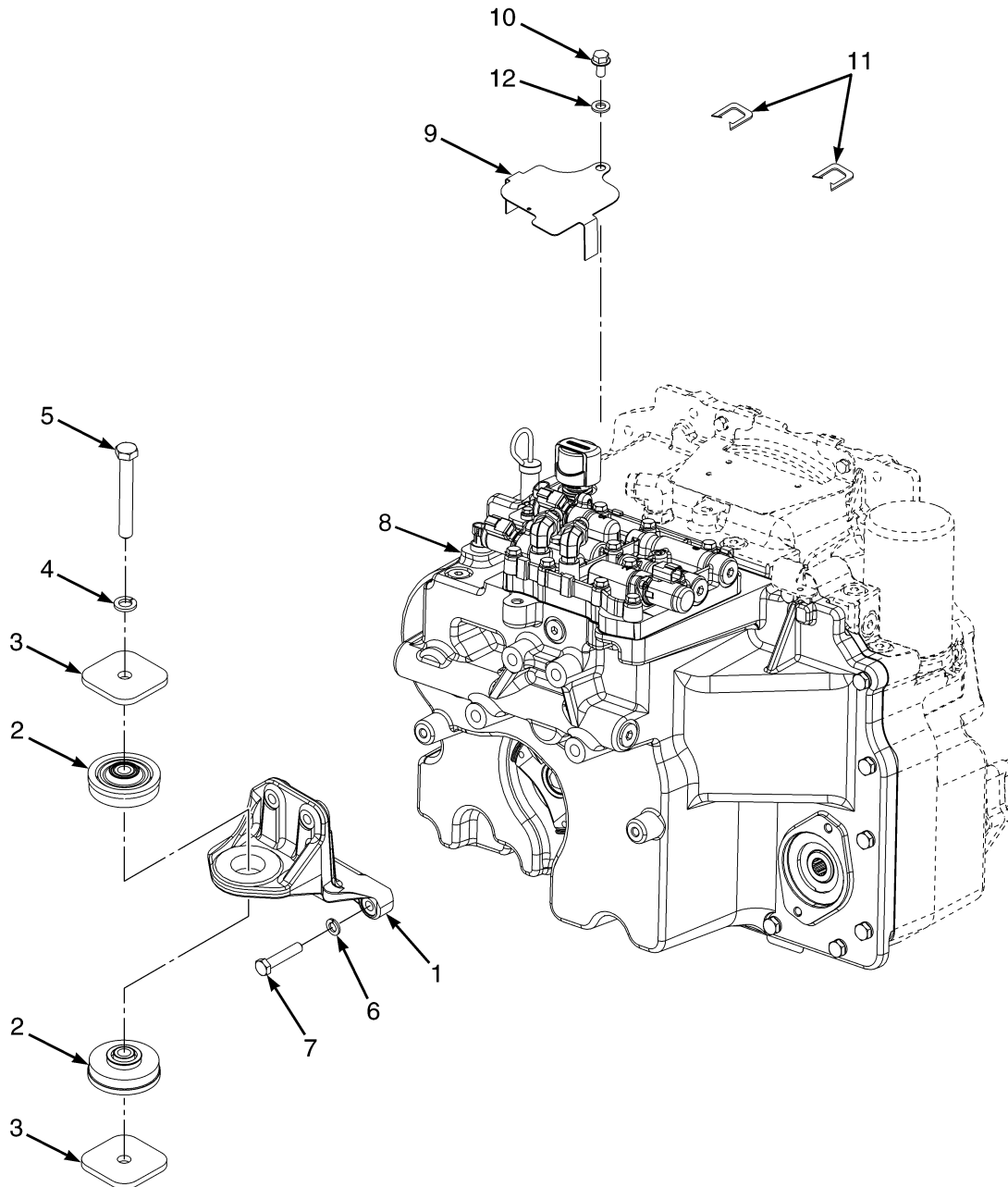
ITEM	PART NO.	DESCRIPTION	QTY
1	1501275	Bracket	1
2	2070147	Isolator	2
3	1566329	Washer	2
4	292685	Lockwasher	1
5	293697	Capscrew	1
6	292683	Lockwasher	4
7	292531	Capscrew	4
8	a 1646872	Transmission Assy (Single Speed Wet Brake) (☞Figure 7-19, ☞Figure 7-20).....	1
8	b 1646871	Transmission Assy (Single Speed Dry Brake) (☞Figure 7-19, ☞Figure 7-20).....	1
8	c 1703481	Transmission Assy (Single Speed Dry Brake) (☞Figure 7-19, ☞Figure 7-20).....	1

ITEM	PART NO.	DESCRIPTION	QTY
8	c 1703482	Transmission Assy (Single Speed)	1

FOOTNOTES:

- a** S/N L177B15746E ↔ S/N L177B29083G (T134M) **c** S/N L177B29084G → (T133M)
b S/N L177B15792E ↔ S/N L177B29083G (T133M) **d** S/N L177B29084G → (T134M)

TRANSMISSION MOUNT (FIGURE 7-3) SINGLE SPEED (S/N L177B29535G →) (S/N T141M001501 →)

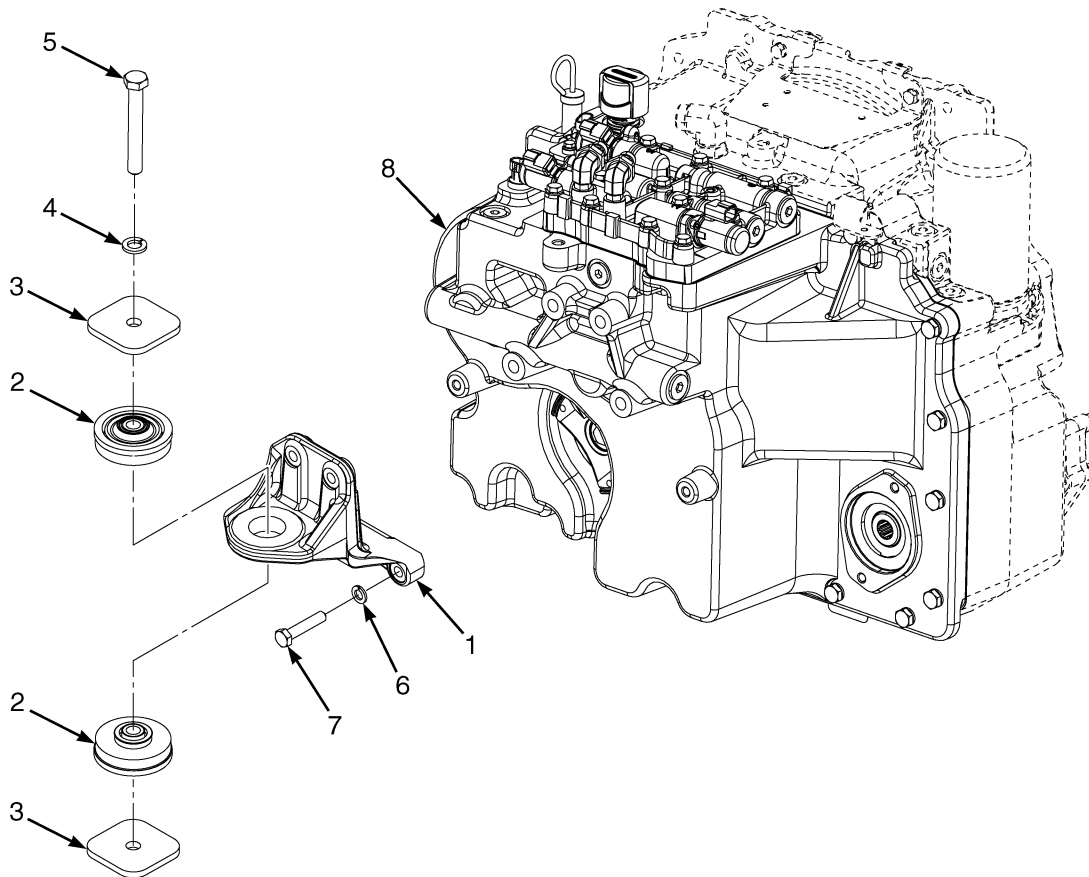


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TRANSMISSION MOUNT
SINGLE SPEED (S/N L177B29535G →) (S/N T141M001501 →)

ITEM	PART NO.	DESCRIPTION	QTY
1	1697665	Bracket	1
2	2070147	Isolator	2
3	1566329	Washer	2
4	292685	Lockwasher	1
4	320165	Washer (Alternate Part)	1
5	293697	Capscrew	1
6	292683	Lockwasher	4
7	292531	Capscrew	4
8	1675651	Transmission Assy	1
9	1703183	Shield	1
10	226458	Capscrew	1
11	1380849	Edge Protector	2
11	4013363	Trim (Alternate Part)	2
12	320165	Washer	1
	264134	Loctite	AR

TRANSMISSION MOUNT (FIGURE 7-4) SINGLE SPEED, ALUMINUM CHAIN DRIVE — T148M001501 (S/N L177B32237J →)



BP240180

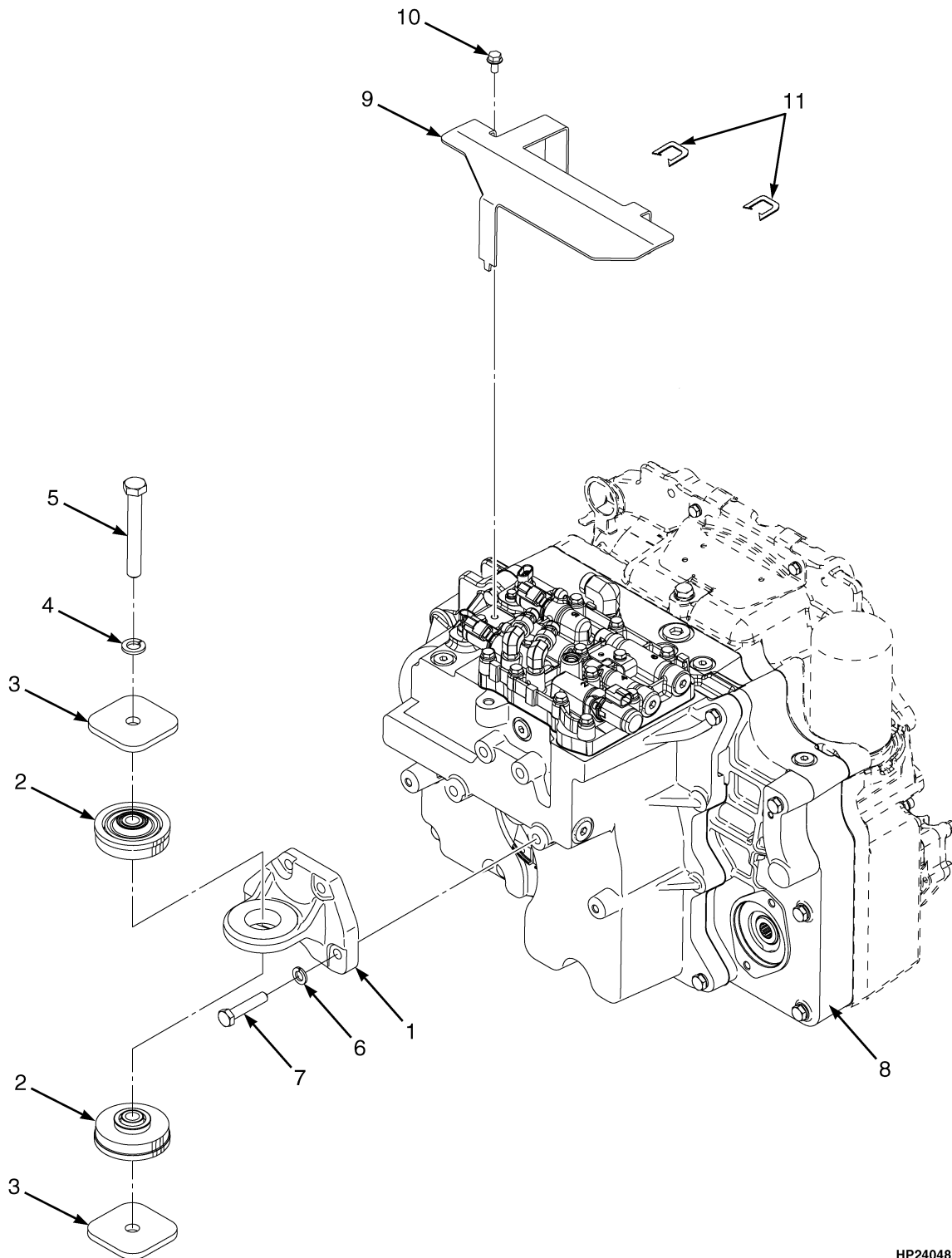
TRANSMISSION MOUNT
SINGLE SPEED, ALUMINUM CHAIN DRIVE – T148M001501 (S/N L177B32237J →)

ITEM	PART NO.	DESCRIPTION	QTY
1	1697672	Bracket	1
2	2070147	Isolator	2
3	1566329	Washer	2
4	320165	Washer	1
5	293697	Capscrew	1
6	292683	Lockwasher	4
7	292531	Capscrew	4
8	a 4020056	Transmission Assy (☞Figure 7-23, ☞Figure 7-24).....	1
	264134	Loctite	AR

FOOTNOTES:

- a** S/N L177B32237J → EXC. 32238-32242,
32245-32247, 32249, 32251, 32293-32294,
32305-32306, 32309, 32313, 32316, 32318-32319

TRANSMISSION MOUNT (FIGURE 7-5) DUAL SPEED — THREE PIECE HOUSING



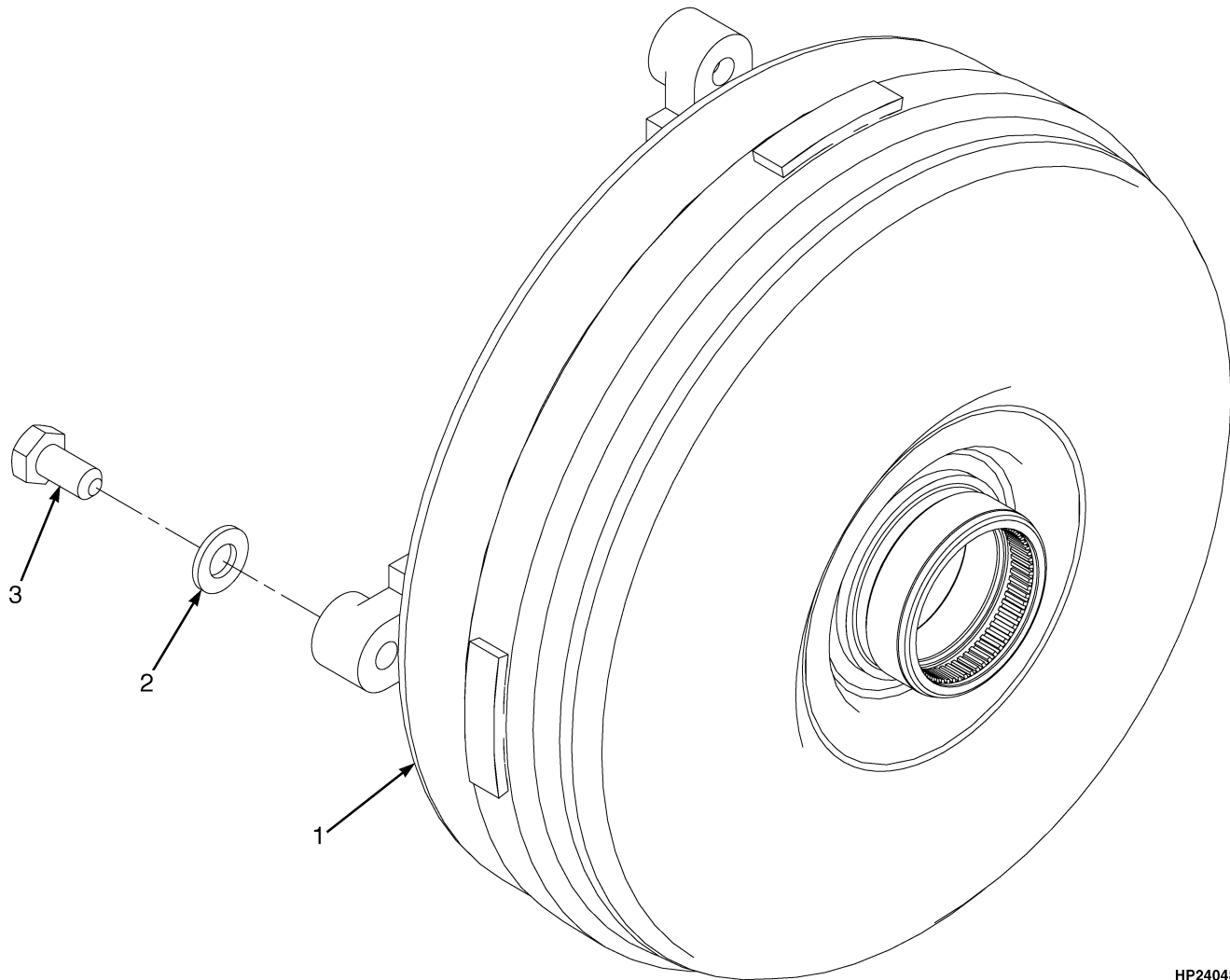
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**TRANSMISSION MOUNT
DUAL SPEED – THREE PIECE HOUSING**

ITEM	PART NO.	DESCRIPTION	QTY
1	1501274	Bracket	1
2	2070147	Isolator	2
3	1566329	Washer	2
4	292685	Lockwasher	1
4	320165	Washer (Alternate Part)	1
5	293697	Capscrew	1
6	292683	Lockwasher	4
7	292531	Capscrew	4
8	a 1646874	Transmission Assy (☞ Figure 7-35).....	1
8	b 1703476	Transmission Assy (☞ Figure 7-35).....	1
8	c 4010632	Transmission Assy (☞ Figure 7-35, ☞ Figure 7-36).....	1
8	d 4032049	Transmission Assy (☞ Figure 7-35, ☞ Figure 7-36).....	1
9	1569768	Shield	1
10	1527879	Capscrew	1
11	1380849	Edge Protector	2
11	4013363	Trim (Alternate Part)	2
	264134	Loctite	AR

FOOTNOTES:**a** → S/N L177B29083G**b** S/N L177B29085G ↔ PENDING PER ECN
10616304**c** PENDING PER ECN 10616304 →**d** PENDING PER ECN 154021 →

TORQUE CONVERTER (FIGURE 7-6)



HP240482

KEY:

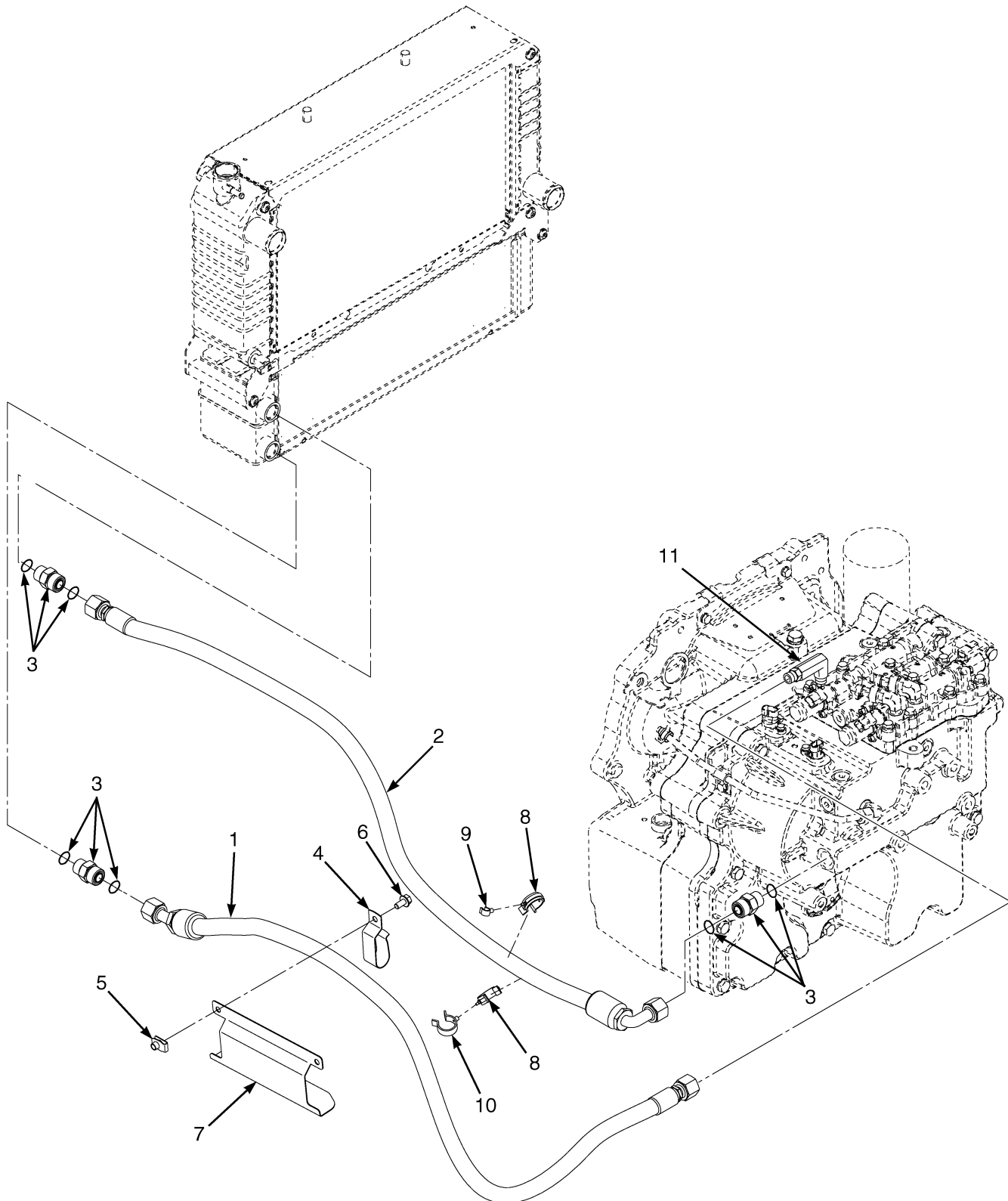
A: For Use With Mazda Engines

B: For Use With GM Engines

C: For Use With Yanmar Diesel Engines

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
1	1553122	Torque Converter	1	..	..
1	1553125	Torque Converter .....	..	1	..
1	1553123	Torque Converter .....	..	..	1
2	296420	Washer	4	4	4
3	1541921	Capscrew	4	..	4
3	309740	Capscrew .....	..	4	..

TRANSMISSION COOLING (FIGURE 7-7) MAZDA 2.0L AND 2.2L/GM 2.4L, LPG — SQUARE WAVE WITH EXTERNAL OIL COOLER (→ S/N L177B29083G)

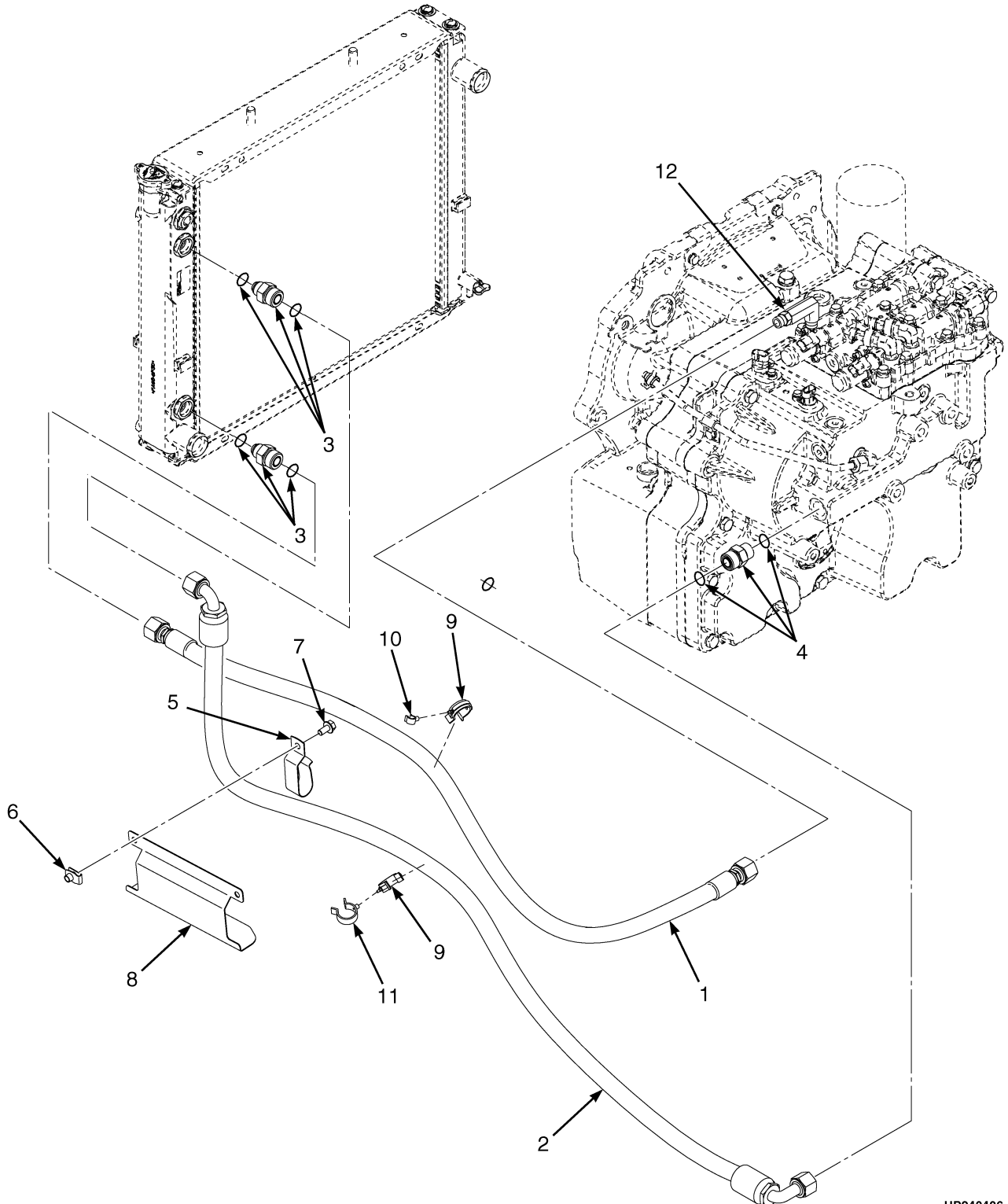


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TRANSMISSION COOLING
MAZDA 2.0L AND 2.2L/GM 2.4L, LPG – SQUARE WAVE WITH EXTERNAL OIL COOLER
 (→ S/N L177B29083G)

ITEM	PART NO.	DESCRIPTION	QTY
1	2095647	Hose Assy	1
2	2095652	Hose Assy	1
3	1486749	Fitting	3
3	16485	O-Ring	3
3	252729	O-Ring	3
4	1562648	Clip	1
5	1480237	Nut	1
6	1527879	Capscrew	1
7	1616979	Heat Shield	1
8	1569465	Clamp	2
9	1561871	Clamp (Swivel)	1
10	1542436	Clamp	1
11	1487067	Fitting	1
11	16485	O-Ring	1
11	252729	O-Ring	1

TRANSMISSION COOLING (FIGURE 7-8) MAZDA 2.0L AND 2.2L, LPG — SERPENTINE AND SQUARE WAVE WITHOUT AIR COOLER (→ S/N L177B29083G)



HP240486

TRANSMISSION COOLING
MAZDA 2.0L AND 2.2L, LPG – SERPENTINE AND SQUARE WAVE WITHOUT AIR COOLER
 (→ S/N L177B29083G)

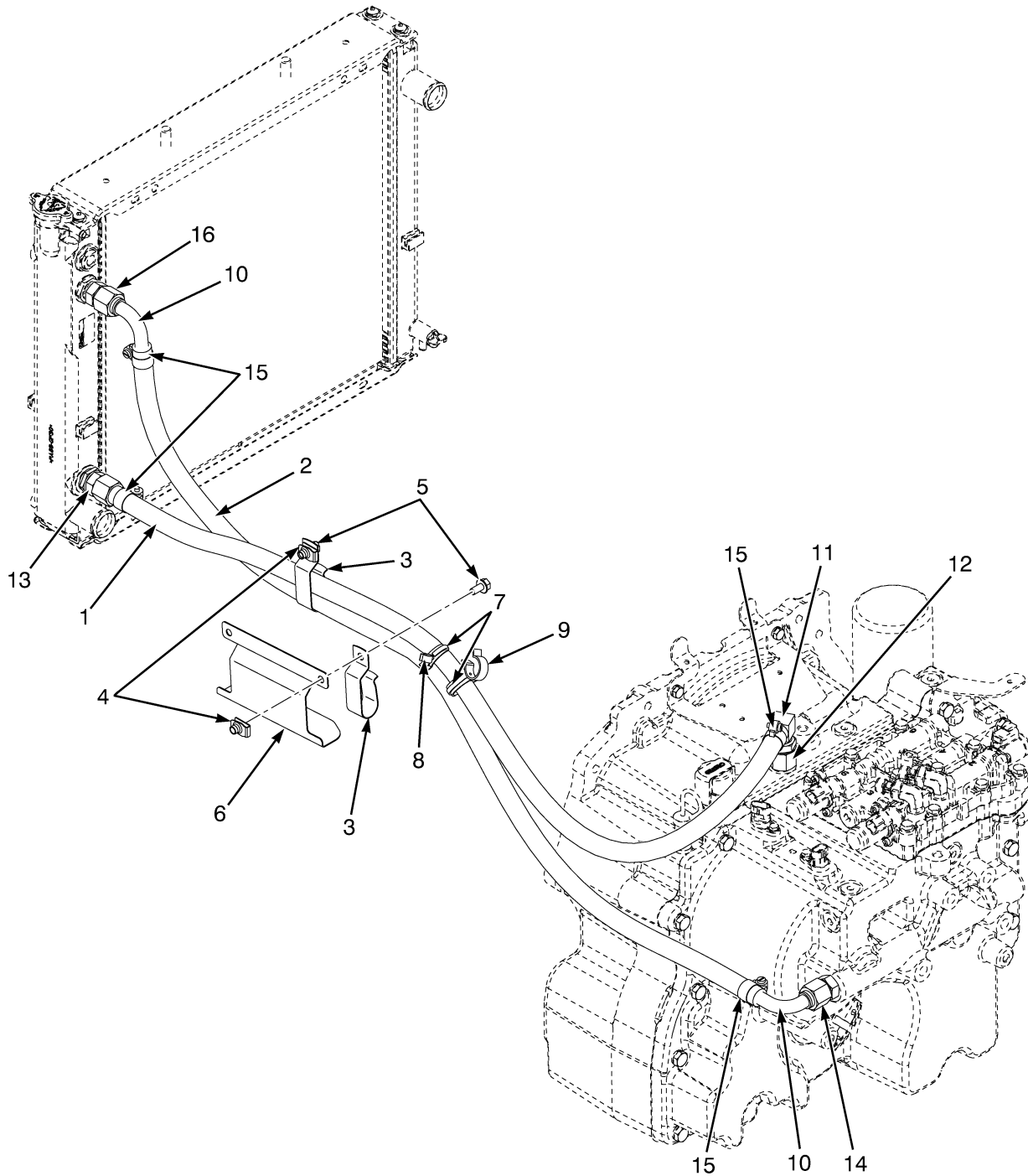
KEY:**A: With Serpentine Radiator****B: With Square Wave Radiator, Without Air Oil Cooler**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2095659	Hose Assy	1	1
2	2095658	Hose Assy	1	1
3	a 1565127	Fitting .....	..	2
3	16484	O-Ring .....	..	2
3	252729	O-Ring .....	..	2
4	1486749	Fitting	1	1
4	16485	O-Ring	1	1
4	252729	O-Ring	1	1
5	1562648	Clip	2	2
6	1480237	Nut	2	2
7	1527879	Capscrew	2	2
8	1616979	Heat Shield	1	1
9	1569465	Clamp	2	2
10	1561871	Clamp (Swivel)	1	1
11	1542436	Clamp	1	1
12	1487067	Fitting	1	1
12	16485	O-Ring	1	1
12	252729	O-Ring	1	1

FOOTNOTES:

- a** Fittings And O-Rings Supplied With Serpentine Radiator.

TRANSMISSION COOLING (FIGURE 7-9) MAZDA 2.0L AND 2.2L, LPG — SERPENTINE AND SQUARE WAVE (S/N L177B29084G →)



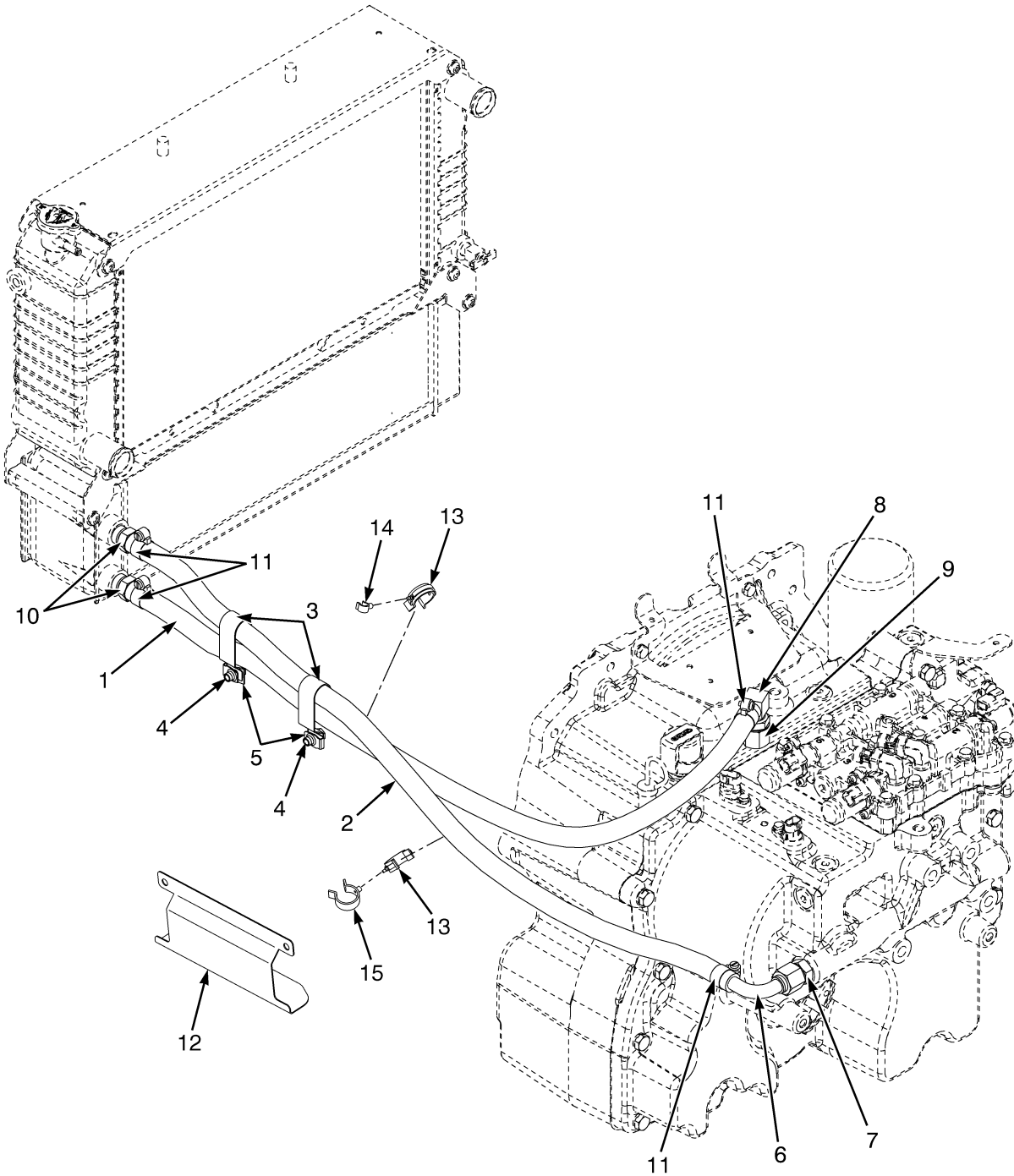
BP240165

TRANSMISSION COOLING**MAZDA 2.0L AND 2.2L, LPG – SERPENTINE AND SQUARE WAVE (S/N L177B29084G →)****KEY:****A: With square wave radiator****B: With serpentine radiator**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	a 2109871	Hose	1	1
1	b 2110024	Hose	1	1
2	a 2109870	Hose	1	1
2	b 2109869	Hose	1	..
2	b 2109870	Hose .....	..	1
3	1562648	Clip	2	2
4	1480237	Nut	2	2
5	1527879	Capscrew	2	2
6	1616979	Heat Shield	1	1
7	1569465	Clamp	2	2
8	1561871	Clamp (Swivel)	1	1
9	1542436	Clamp	1	1
10	2109875	Tube Assy	2	2
10	1487165	Fitting	1	1
11	222512	Fitting	1	1
11	16485	O-Ring	1	1
12	1691525	Adapter	1	1
13	1673198	Fitting	1	..
13	222493	Fitting	1	..
13	16484	O-Ring	1	..
13	1691916	Fitting .....	..	1
14	1486749	Fitting	1	1
15	130845	Clamp	4	4
16	1565127	Fitting	1	..

FOOTNOTES:**a** → S/N L177B29534G**b** S/N L177B29535G →

TRANSMISSION COOLING (FIGURE 7-10) MAZDA 2.0L AND 2.2L, LPG — WITH AIR COOLER

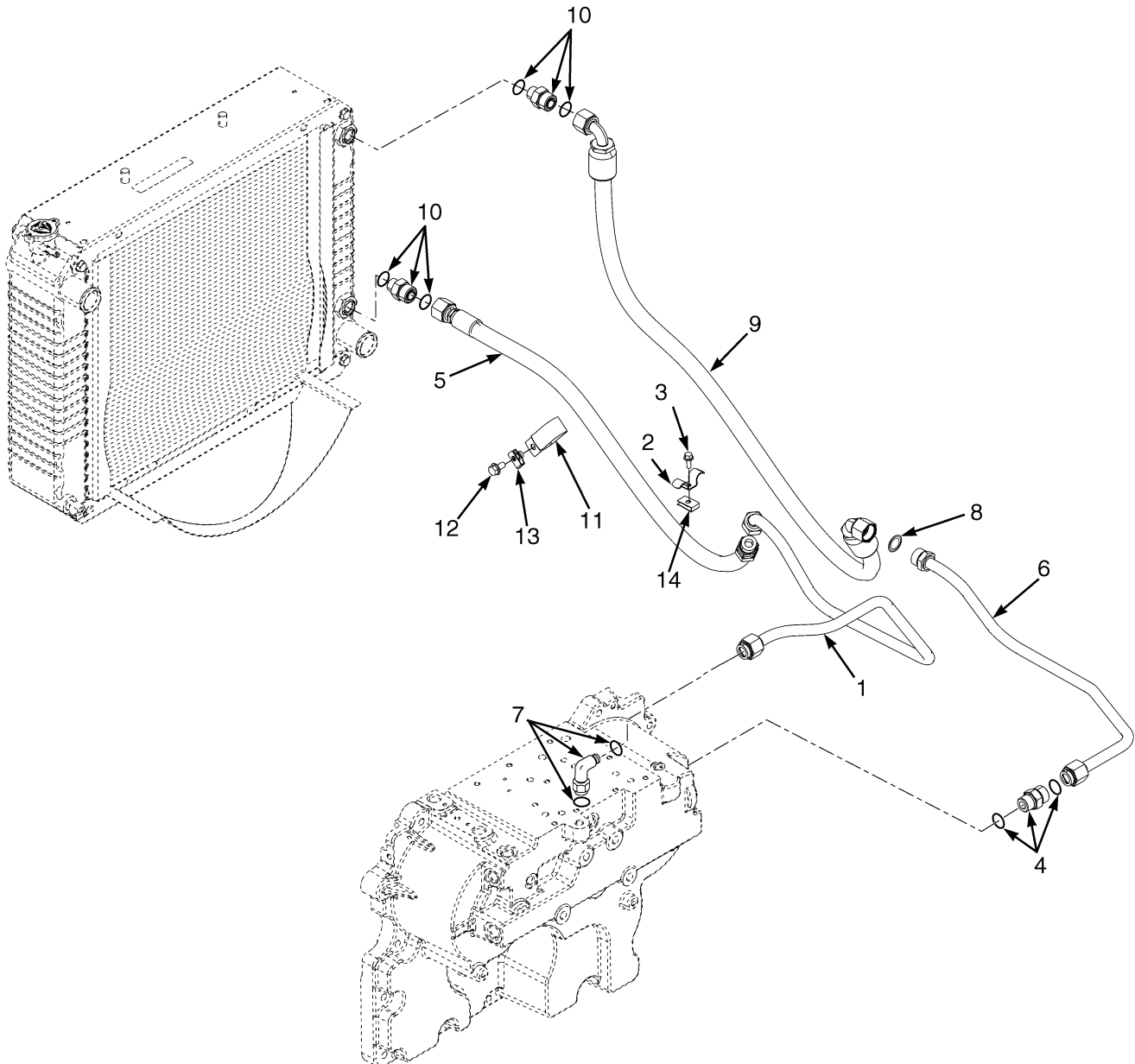


BP240176

TRANSMISSION COOLING
MAZDA 2.0L AND 2.2L, LPG – WITH AIR COOLER

ITEM	PART NO.	DESCRIPTION	QTY
1	2107524	Hose	1
2	2110024	Hose	1
3	1562648	Clip	2
4	1527879	Capscrew	2
5	1480237	Nut	2
6	2109875	Tube Assy	1
7	1486749	Fitting	1
8	222512	Fitting	1
9	1691525	Adapter	1
10	17223	Fitting	2
10	16485	O-Ring	1
11	130845	Clamp	4
12	1616979	Heat Shield	1
13	1569465	Clamp	2
14	1561871	Clamp (Swivel)	1
15	1542436	Clamp	1

TRANSMISSION COOLING (FIGURE 7-11) YANMAR 2.6L AND 3.3L DIESEL AND GM 2.4L LPG — SQUARE WAVE WITH INTERNAL OIL COOLER (→ S/N L177B29083G)

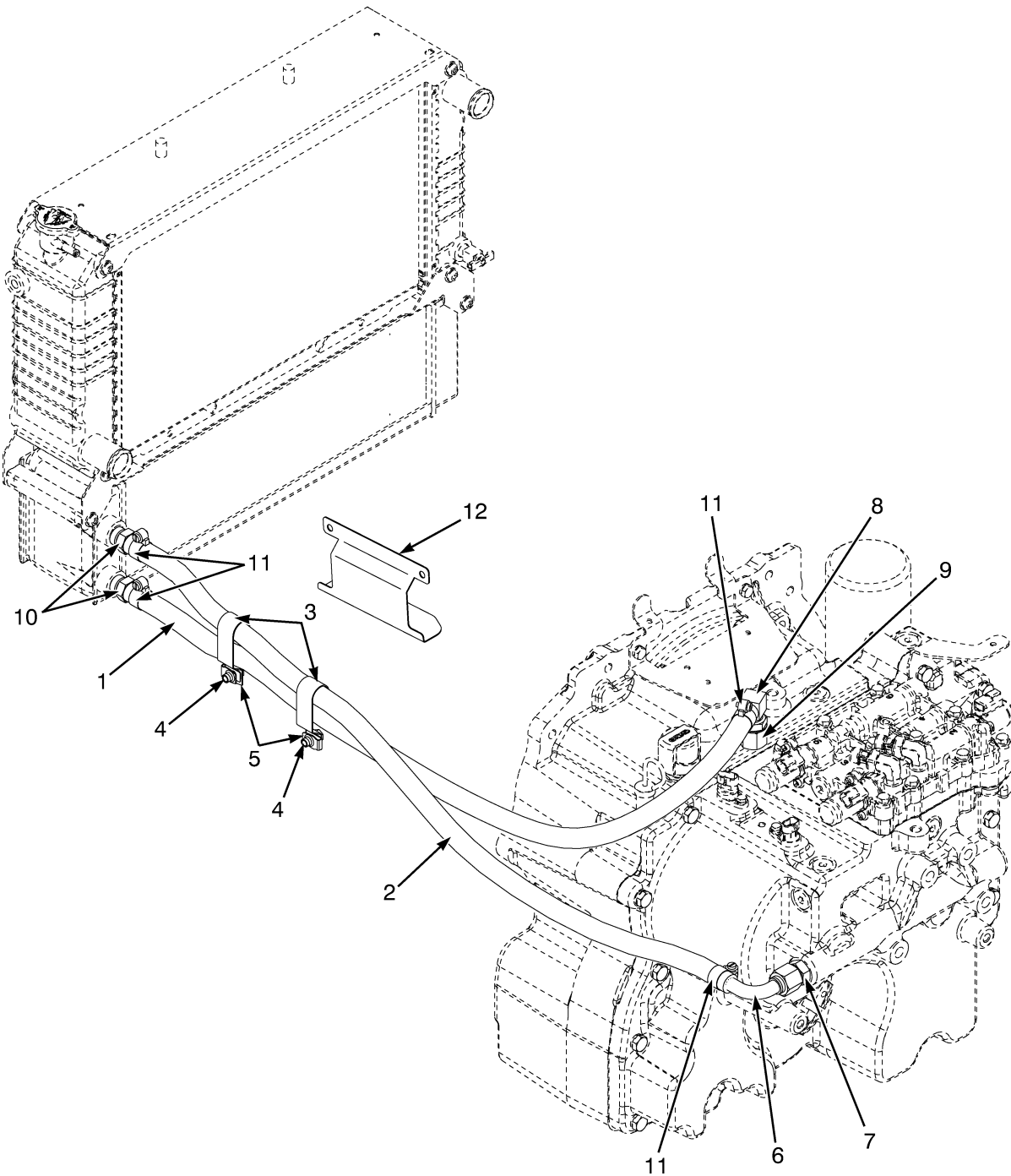


TRANSMISSION COOLING
YANMAR 2.6L AND 3.3L DIESEL AND GM 2.4L LPG – SQUARE WAVE WITH INTERNAL OIL COOLER
 (→ S/N L177B29083G)

ITEM	PART NO.	DESCRIPTION	QTY
1	bc 2067598	Tube Assy	1
1	ef 2095262	Tube	1
2	1561780	Clip	1
3	1527876	Capscrew	1
4	1486749	Fitting	1
4	16485	O-Ring	1
4	252729	O-Ring	1
5	a 2070228	Hose Assy	1
5	d 2095654	Hose Assy	1
5	2095649	Hose Assy (Alternate Part)	1
5	g 2109870	Hose	1
6	2067597	Tube	1
7	1487067	Fitting	1
7	252729	O-Ring	1
7	16485	O-Ring	1
8	1582449	Sealing Ring	1
9	a 2075551	Hose Assy	1
9	d 2095657	Hose Assy	1
9	2095653	Hose Assembly (Alternate Part)	1
9	g 2109871	Hose	1
10	1565127	Fitting	2
10	16484	O-Ring	2
10	252729	O-Ring	2
11	1562648	Clip	1
12	1527879	Capscrew	1
13	1480237	Nut	1
14	1350215	Nut	1

FOOTNOTES:**a** → 8/2006**b** → S/N L177B15745E (Dry Brake)**c** → S/N L177B15791E (Wet Brake)**d** 8/2006 →**e** S/N L177B15746E → (Dry Brake)**f** S/N L177B15792E → (Wet Brake)**g** S/N L177B29084G →

TRANSMISSION COOLING (FIGURE 7-12) YANMAR 2.6L AND 3.3L DIESEL AND GM 2.4L LPG — SQUARE WAVE WITH INTERNAL OIL COOLER (S/N L177B29084G →)

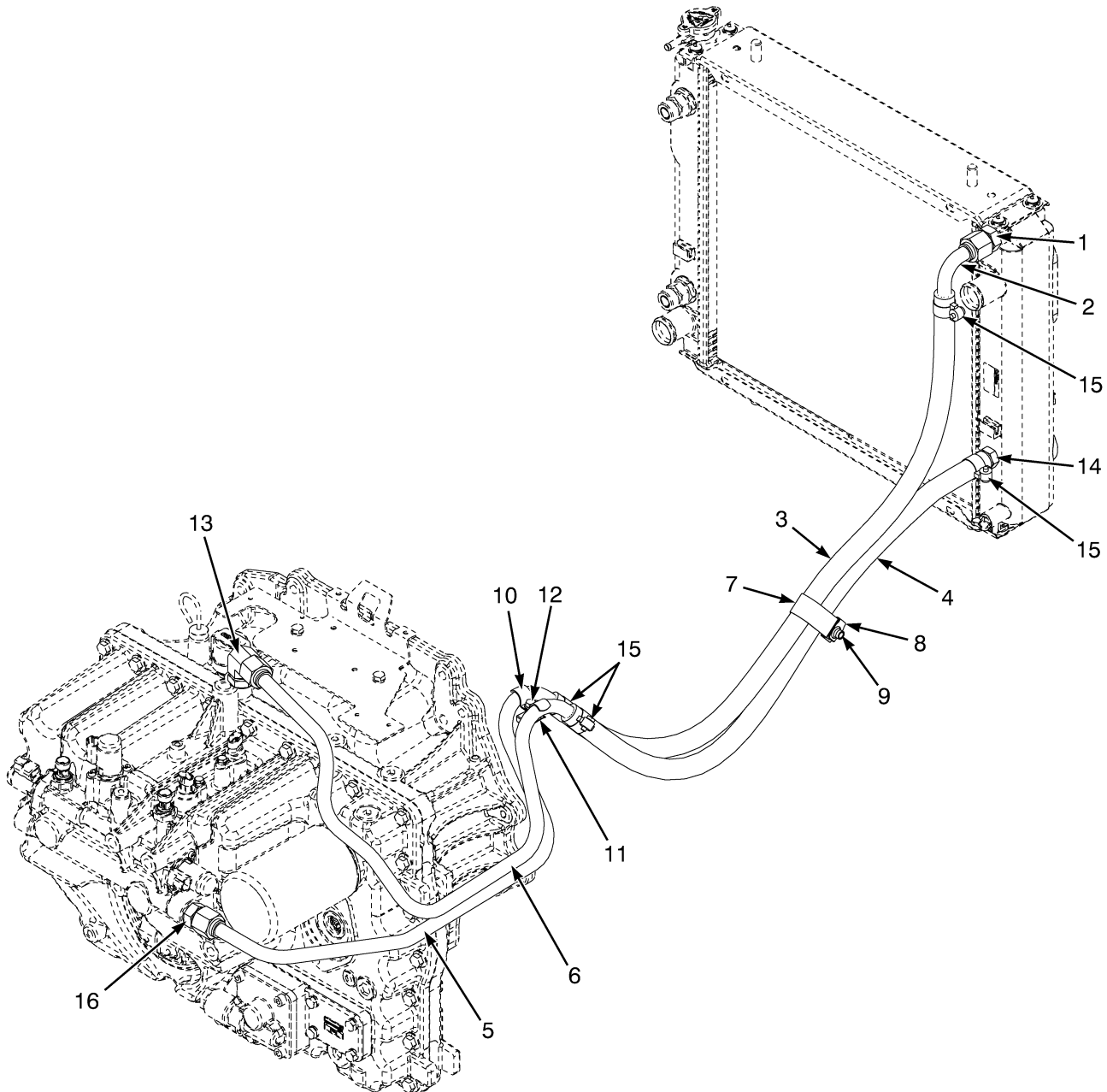


BP240164

TRANSMISSION COOLING
YANMAR 2.6L AND 3.3L DIESEL AND GM 2.4L LPG – SQUARE WAVE WITH INTERNAL OIL COOLER
(S/N L177B29084G →)

ITEM	PART NO.	DESCRIPTION	QTY
1	2109871	Hose	1
1	2109665	Hose Assy (Alternate Part)	1
2	2110024	Hose	1
3	1562648	Clip	2
4	1527879	Capscrew	2
5	1480237	Nut	2
6	2109875	Tube Assy	1
7	1486749	Fitting	1
8	222512	Fitting	1
8	16485	O-Ring	1
9	1691525	Adapter	1
10	17223	Fitting	2
10	16485	O-Ring	1
11	130845	Clamp	4
12	1616979	Heat Shield	1

TRANSMISSION COOLING (FIGURE 7-13) YANMAR 2.6L AND 3.3L DIESEL AND GM 2.4L LPG — SQUARE WAVE WITHOUT AIR COOLER (→ S/N L177B31603H)

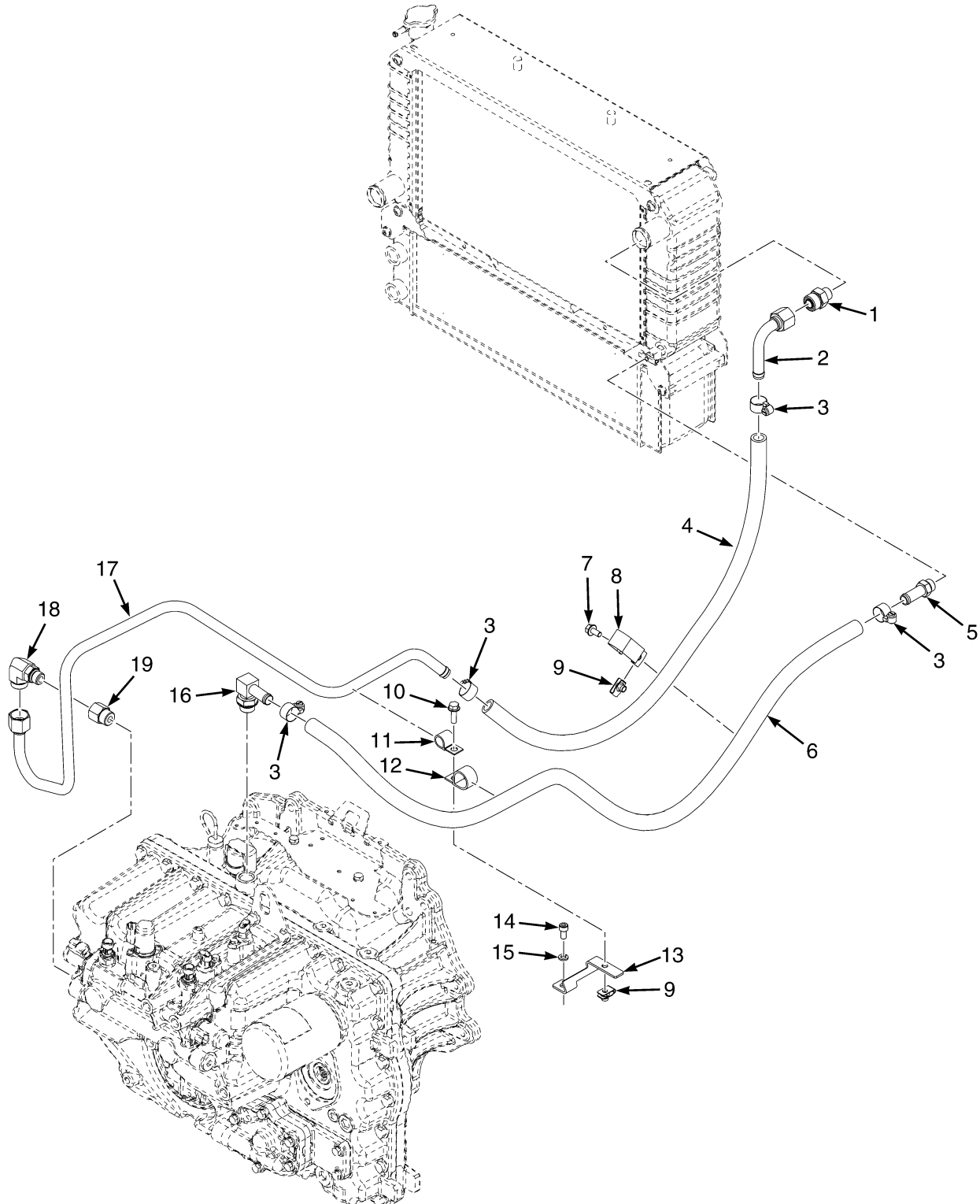


BP240162

TRANSMISSION COOLING
YANMAR 2.6L AND 3.3L DIESEL AND GM 2.4L LPG – SQUARE WAVE WITHOUT AIR COOLER
 (→ S/N L177B31603H)

ITEM	PART NO.	DESCRIPTION	QTY
1	1565127	Fitting	1
2	2109875	Tube Assy	1
3	2107727	Hose	1
4	2110027	Hose	1
5	2109494	Tube Assy	1
6	2109495	Tube Assy	1
7	1562648	Clip	1
8	1480237	Nut	1
9	1527879	Capscrew	1
10	1561780	Clip	1
11	1350215	Nut	1
12	1527877	Capscrew	1
13	1487067	Fitting	1
14	1673198	Fitting	1
14	222493	Fitting	1
14	16484	O-Ring	1
15	130845	Clamp	4
16	1486749	Fitting	1

TRANSMISSION COOLING (FIGURE 7-14) YANMAR 2.6L AND 3.3L DIESEL AND GM 2.4L LPG — SQUARE WAVE WITHOUT AIR COOLER (S/N L177B31604H →)



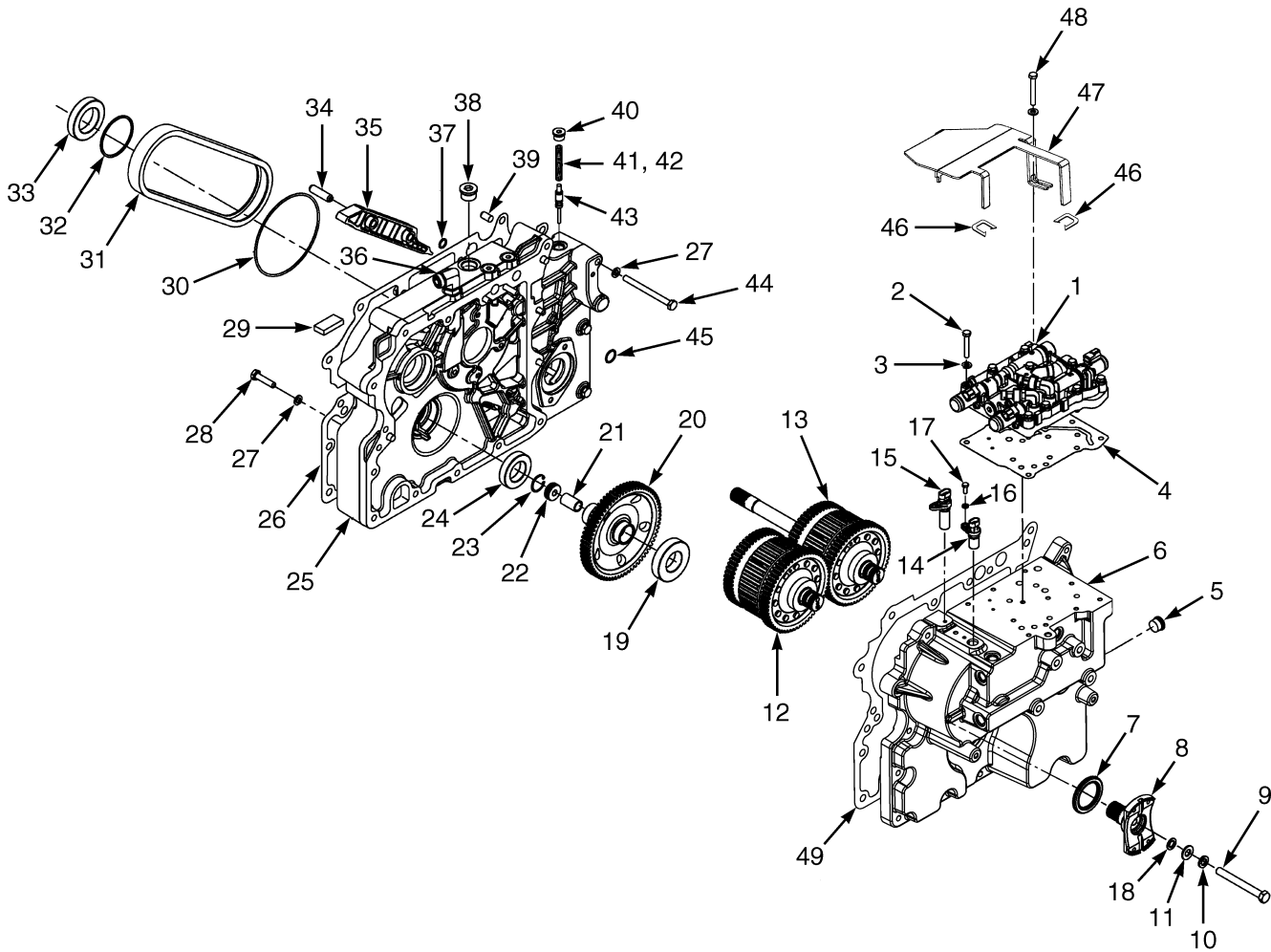
BP240170

TRANSMISSION COOLING
YANMAR 2.6L AND 3.3L DIESEL AND GM 2.4L LPG – SQUARE WAVE WITHOUT AIR COOLER
(S/N L177B31604H →)

ITEM	PART NO.	DESCRIPTION	QTY
1	1565127	Fitting	1
2	2109875	Tube Assy	1
3	130845	Clamp	4
4	2107727	Hose	1
5	1673198	Fitting	1
6	2109869	Hose	1
7	1527879	Capscrew	1
8	1562648	Clip	1
9	1480237	Nut	2
10	1510113	Capscrew	1
11	128408	Clamp	1
12	178119	Clamp	1
13	1694547	Bracket	1
14	296009	Capscrew	1
15	292681	Lockwasher	1
16	222512	Fitting	1
17	4612847	Tube Assy	1
18	1487068	Fitting	1
19	239222	Connector	1

TRANSMISSION (FIGURE 7-15)

SINGLE SPEED, WITH THREE PIECE HOUSING — SHEET 1 OF 2 (→ S/N L177B10029D DRY BRAKE)
(→ S/N L177B15745E WET BRAKE)



HP240493

TRANSMISSION

**SINGLE SPEED, WITH THREE PIECE HOUSING – SHEET 1 OF 2 (→ S/N L177B10029D DRY BRAKE)
(→ S/N L177B15745E WET BRAKE)**

ITEM	PART NO.	DESCRIPTION	QTY
	a 1550565	Transmission Assy (Single Speed, Dry Brake)	1
	c 1616478	Transmission Assy (Single Speed Wet Brake)	1
1	a 1613695	Hydraulic Control Valve (☞Figure 7-43).....	1
1	c 1611835	Hydraulic Control Valve (☞Figure 7-43).....	1
2	292509	Capscrew	11
3	320157	Washer	11
4	1570360	Gasket	1
5	233693	Fitting	1
5	16485	O-Ring	1
6	a 1624509	Transmission Housing	1
6	c 1624508	Transmission Housing	1
7	1547447	Oil Seal	1
8	1550578	Yoke (24 Tooth)	1
9	18595	Capscrew	1
10	15158	Washer	1
11	15135	Washer	1
12	1595421	Clutch Pack (Counter/Reverse) (☞Figure 7-30).....	1
13	1595420	Clutch Pack (Input/Forward) (☞Figure 7-27).....	1
14	1541231	Sensor (Input Speed, TISS)	1
15	1541232	Sensor (Output Speed, TOSS)	1
16	292680	Washer	2
17	292500	Capscrew	2
18	86229	Seal	1
19	43208	Ball Bearing	1
20	1585745	Gear (Output)	1
21	1516851	Spacer	1
22	1516849	Nut	1
23	58916	Snap Ring	1
24	44308	Ball Bearing	1
25	1550575	Housing	1
26	1550573	Gasket (Torque Converter Housing to Cover)	1
27	388049		
	292682	Lockwasher	24
28	292516	Capscrew	4
29	334560	Magnet	1
30	16682	O-Ring	1
31	1494750	Chain (Drive Pump)	1
32	1544218	Sealing Ring	1
33	44310	Ball Bearing	1
34	303100	Roll Pin	4
35	1553270	Snubber	2
36	1487067	Fitting	1
36	252729	O-Ring	1
36	16485	O-Ring	1
37	1553475	O-Ring	1
38	233683	Fitting	1
38	16487	O-Ring	1
39	303150	Dowel	4
40	235691	Fitting	7

TRANSMISSION

SINGLE SPEED, WITH THREE PIECE HOUSING – SHEET 1 OF 2 (→ S/N L177B10029D DRY BRAKE)
(→ S/N L177B15745E WET BRAKE)

ITEM	PART NO.	DESCRIPTION	QTY
41	a 1612918	Spring (Regulator)	1
42	c 1612917	Spring (Regulator)	1
43	1612916	Spool (Regulator)	1
44	1359458	Capscrew	16
45	1553403	O-Ring	4
46	1380849	Edge Protector	2
46	4013363	Trim (Alternate Part)	1
47	1569768	Shield	1
48	1527879	Capscrew	1
49	1550576	Gasket (Cover to Transmission Housing)	1
	b 1624414	Baffle	1

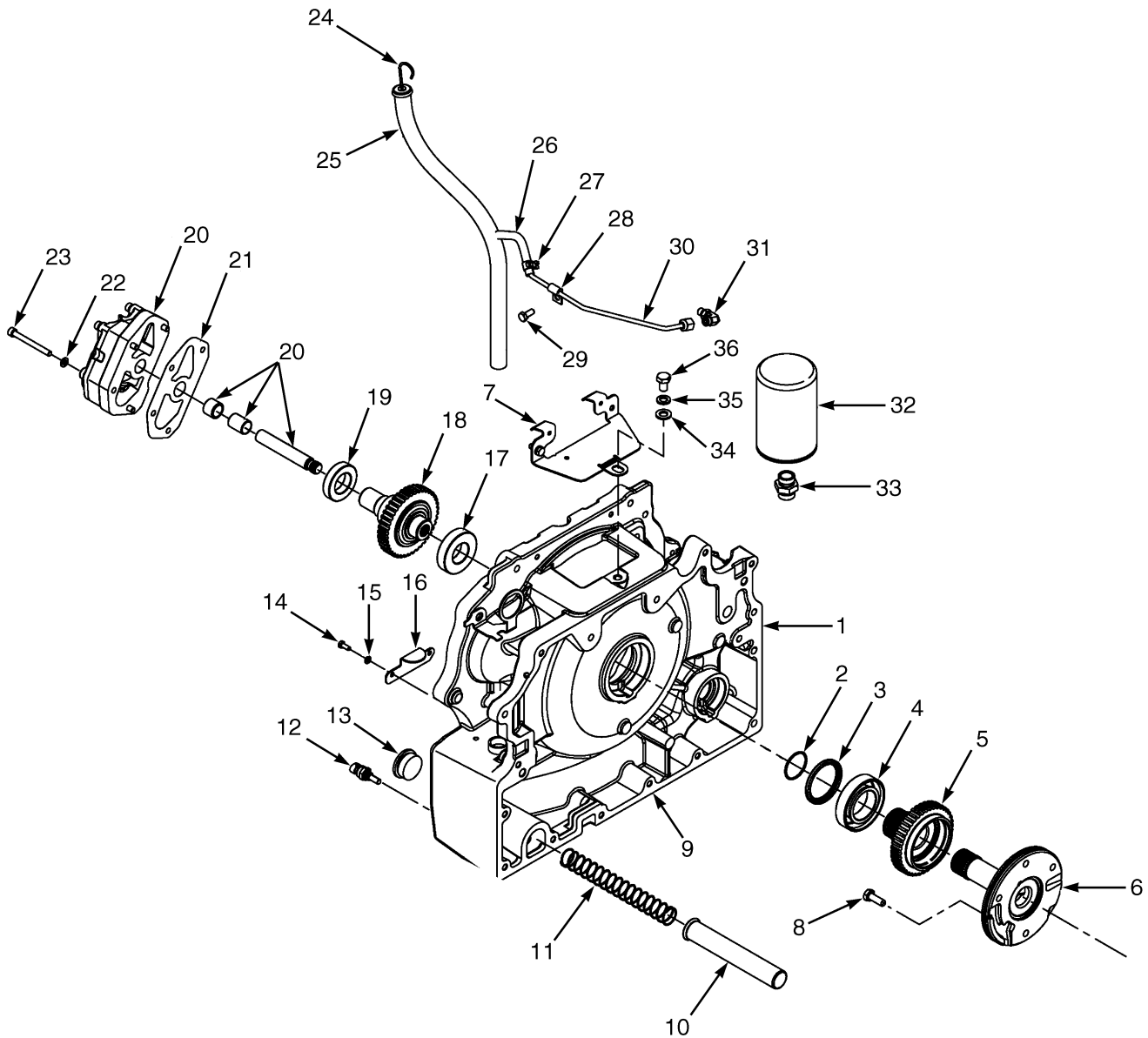
FOOTNOTES:

a Dry Brakes

c Wet Brakes

b Not Illustrated

TRANSMISSION (FIGURE 7-16) SINGLE SPEED, WITH THREE PIECE HOUSING — SHEET 2 OF 2 (→ S/N L177B10029D) (→ S/N L177B15745E (WET BRAKE))

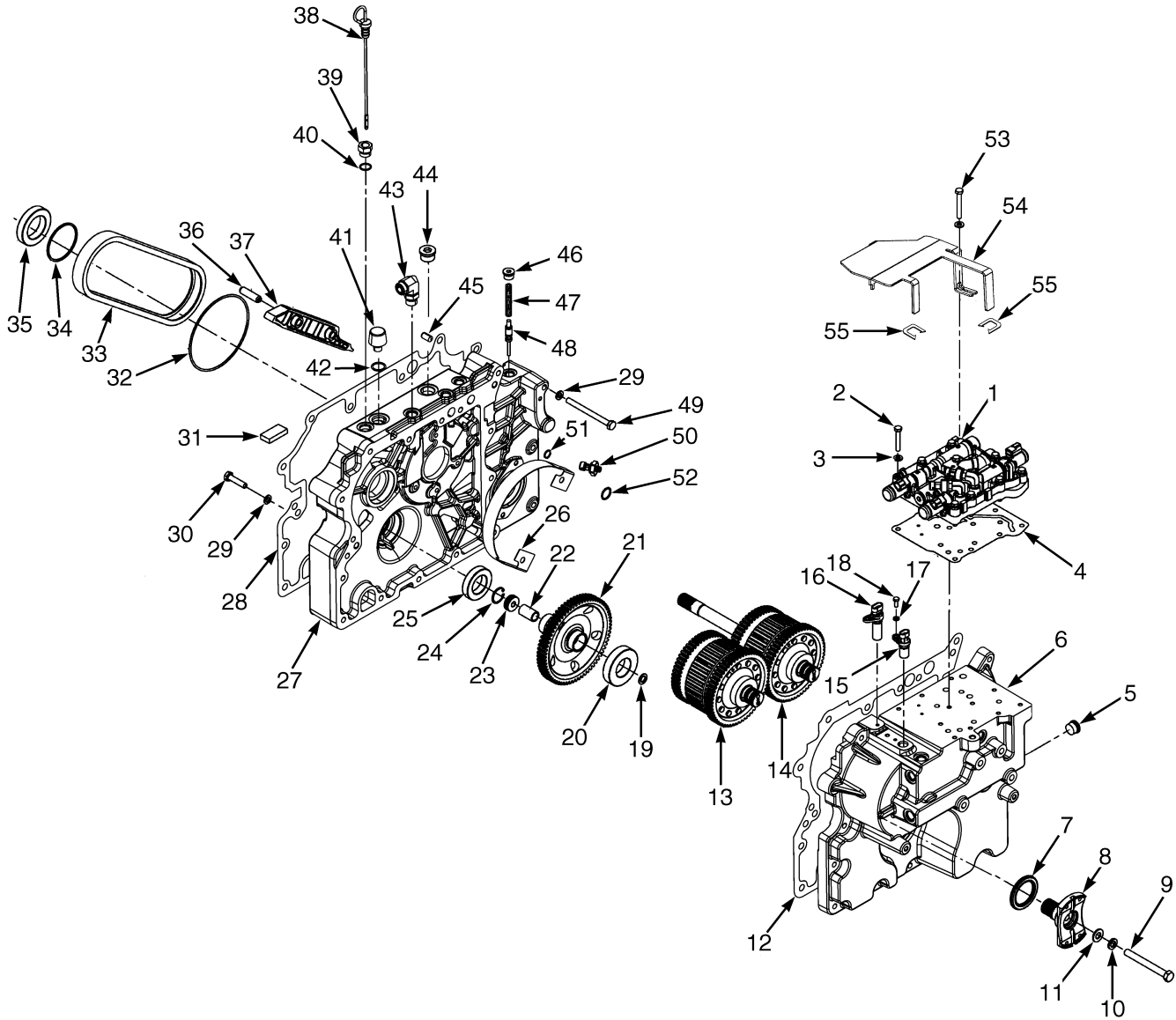


TRANSMISSION
SINGLE SPEED, WITH THREE PIECE HOUSING – SHEET 2 OF 2 (→ S/N L177B10029D)
(→ S/N L177B15745E (WET BRAKE))

ITEM	PART NO.	DESCRIPTION	QTY
	a 1550565	Transmission Assy (Single Speed, Dry Brake)	1
	b 1616478	Transmission Assy (Single Speed Wet Brake)	1
1	1550566	Converter Housing (Torque Converter)	1
2	145481	O-Ring	1
3	1544217	Oil Seal (Torque Converter)	1
4	1544216	Bearing	1
5	1541556	Sprocket	1
6	1550585	Stator	1
6	1516826	Bushing	1
7	1566169	Cover	1
8	136985	Capscrew	4
9	1550573	Gasket (Torque Converter Housing to Cover)	1
10	1550571	Screen (Suction)	1
11	1550572	Spring (Suction Screen)	1
12	1515654	Temperature Sensor	1
13	188210	Fitting	1
13	16983	O-Ring	1
14	292500	Capscrew	2
15	292680	Washer	2
16	1550567	Cover Plate (Torque Converter Housing)	1
17	43207	Ball Bearing	1
18	1550574	Sprocket (Driven)	1
19	44307	Ball Bearing	1
20	a 1529894	Pump (20.5 CC/REV)	1
20	b 1552853	Pump (27.0 CC/REV)	1
20	1623836	O-Ring	1
21	1653815	Gasket (Charge Pump)	1
22	292681	Lockwasher	6
23	296022	Capscrew	4
24	1516818	Dipstick	1
25	1566166	Dipstick Tube	1
26	169690	Hose	1
27	1569616	Hose Clamp	2
28	16448	Fitting	1
29	136681	Capscrew	3
30	1566168	Tube	1
31	1487063	Fitting	1
31	16483	O-Ring	1
32	2075558	Transmission Filter	1
33	1558515	Fitting	1
34	320161	Washer	1
35	292683	Lockwasher	1
36	292526	Capscrew	1

FOOTNOTES:**a** Dry Brakes**b** Wet Brakes

TRANSMISSION (FIGURE 7-17) SINGLE SPEED, DRY BRAKE — SHEET 1 OF 2 (S/N L177B10030D ↔ S/N L177B15791E)



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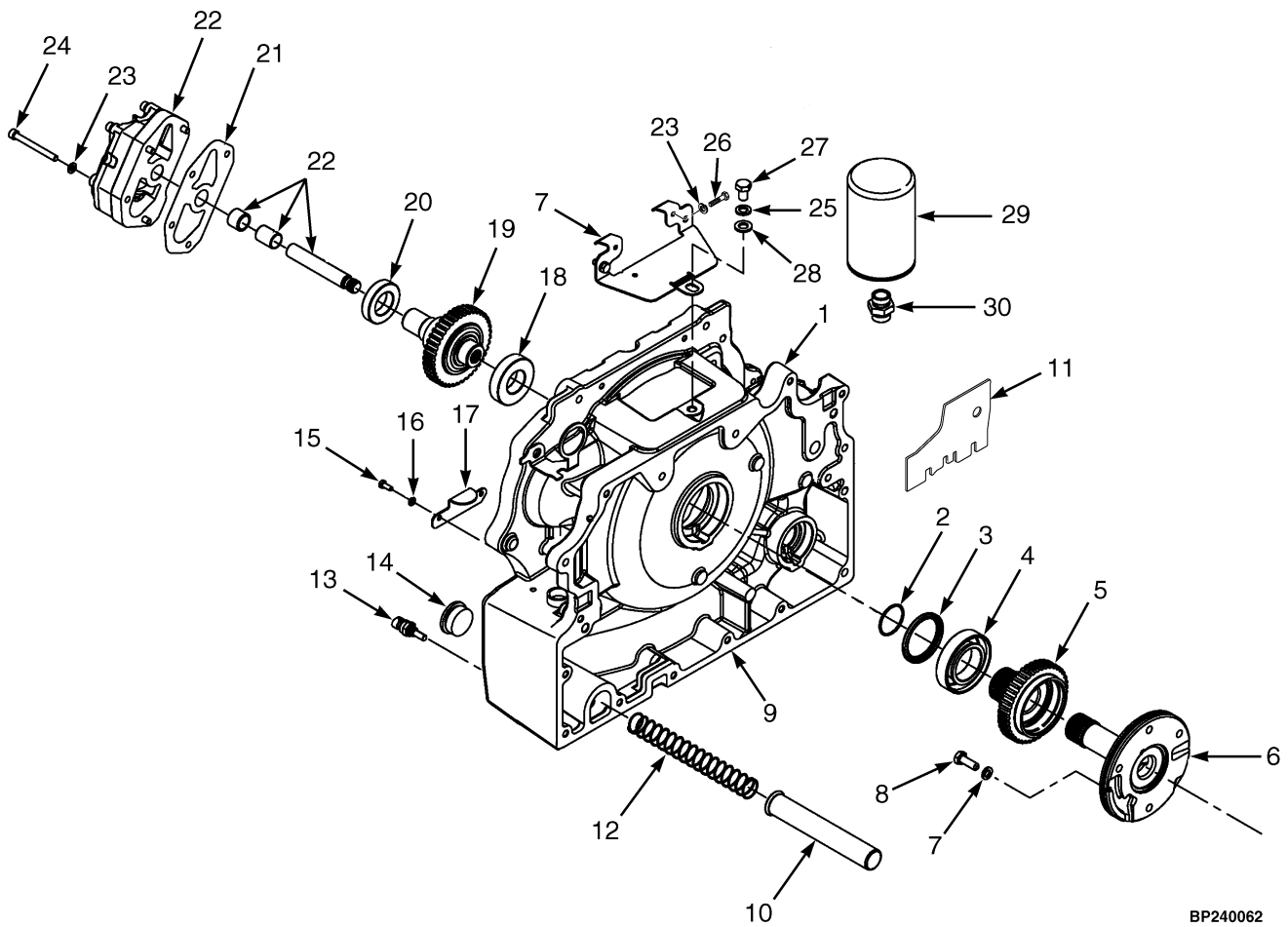
TRANSMISSION
SINGLE SPEED, DRY BRAKE – SHEET 1 OF 2 (S/N L177B10030D ↔ S/N L177B15791E)

ITEM	PART NO.	DESCRIPTION	QTY
	1632260	Transmission Assy (Single Speed Dry Brake)	1
1	1613695	Hydraulic Control Valve (☞Figure 7-43).....	1
2	292509	Capscrew	11
3	320157	Washer	11
4	1570360	Gasket	1
5	233693	Fitting	1
5	16485	O-Ring	1
6	1624509	Transmission Housing	1
7	1547447	Oil Seal	1
8	1550578	Yoke (24 Teeth)	1
9	18595	Capscrew	1
10	15158	Washer	1
11	15135	Washer	1
12	1550576	Gasket (Cover to Transmission Housing)	1
13	1595421	Clutch Pack (Counter/Reverse) (☞Figure 7-30).....	1
14	1595420	Clutch Pack (Input/Forward) (☞Figure 7-27).....	1
15	1541231	Sensor (Input Speed, TISS)	1
16	1541232	Sensor (Output Speed, TOSS)	1
17	292680	Washer	2
18	292500	Capscrew	2
19	86229	Seal	1
20	43208	Ball Bearing	1
21	1585745	Gear (Output)	1
22	1516851	Spacer	1
23	1516849	Nut	1
24	58916	Snap Ring	1
25	44308	Ball Bearing	1
26	1624415	Cover (Pump Drive)	1
27	1624503	Housing (Front Cover)	1
28	1550573	Gasket (Torque Converter Housing to Cover)	1
29	388049		
	292682	Lockwasher	20
30	292516	Capscrew	4
31	334560	Magnet	1
32	16682	O-Ring	1
33	1494750	Chain (Drive Pump)	1
34	1544218	Sealing Ring	1
35	44310	Ball Bearing	1
36	303100	Roll Pin	4
37	1553270	Snubber	2
38	1624401	Dipstick	1
39	1624405	Fitting	1
40	16485	O-Ring	1
41	1632741	Breather	1
42	16486	O-Ring	1
43	1634651	Fitting	1
44	222444	Fitting	1
44	16486	O-Ring	1
45	303150	Dowel	4
46	235691	Fitting	1

TRANSMISSION**SINGLE SPEED, DRY BRAKE – SHEET 1 OF 2 (S/N L177B10030D ↔ S/N L177B15791E)**

ITEM	PART NO.	DESCRIPTION	QTY
46	16484	O-Ring	1
47	1612918	Spring (Regulator)	1
48	1612916	Spool (Regulator)	1
49	1359458	Capscrew	16
50	2070263	Pressure Transducer	1
51	1553475	O-Ring	1
52	1553403	O-Ring	4
53	1527879	Capscrew	1
54	1569768	Shield	1
55	1380849	Edge Protector	2
55	4013363	Trim (Alternate Part)	2

TRANSMISSION (FIGURE 7-18) SINGLE SPEED, DRY BRAKE — SHEET 2 OF 2 (S/N L177B10030D ↔ S/N L177B15791E)



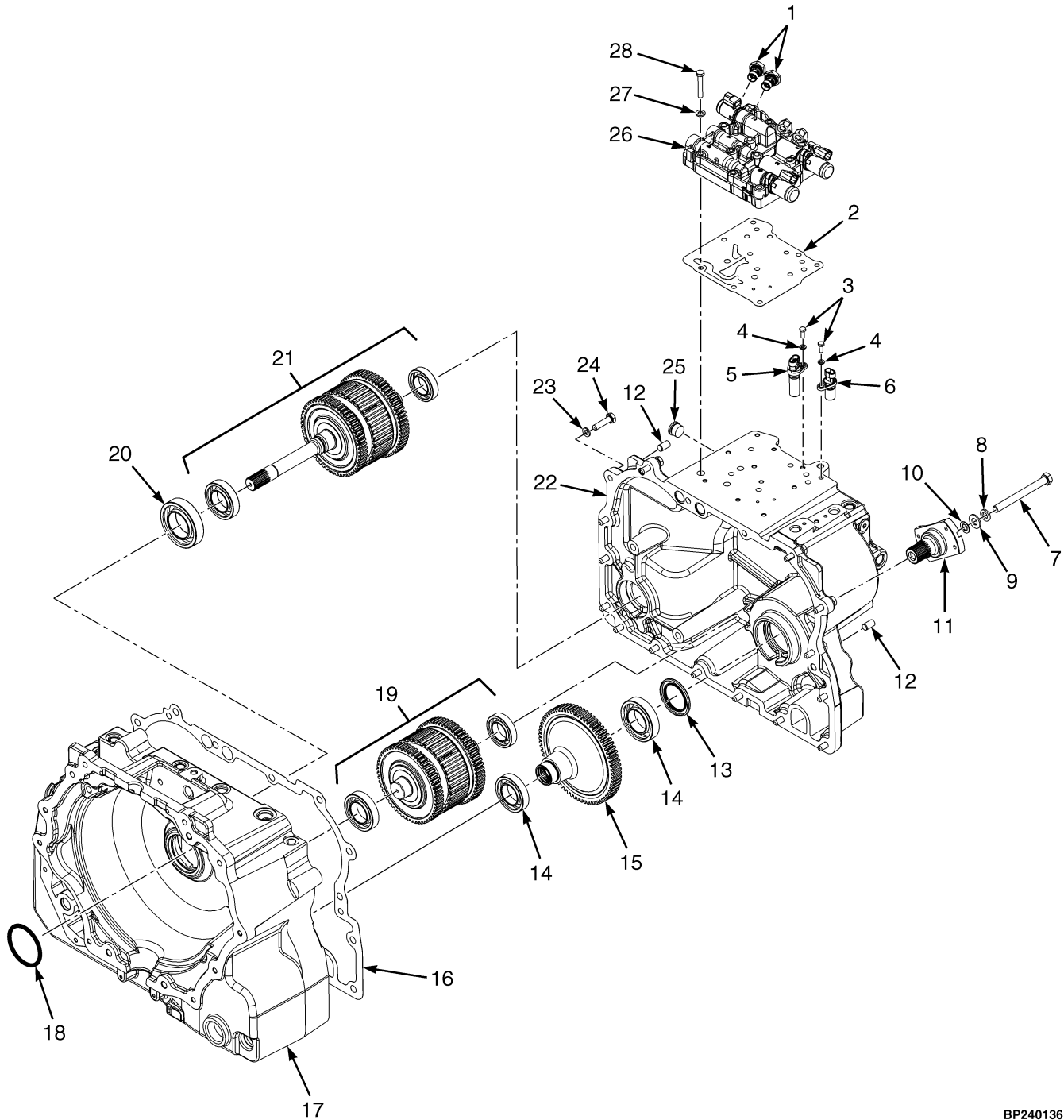
BP240062

TRANSMISSION
SINGLE SPEED, DRY BRAKE – SHEET 2 OF 2 (S/N L177B10030D ↔ S/N L177B15791E)

ITEM	PART NO.	DESCRIPTION	QTY
	1632260	Transmission Assy (Single Speed Dry Brake)	1
1	1624504	Converter Housing (Torque Converter)	1
2	145481	O-Ring	1
3	1544217	Oil Seal (Torque Converter)	1
4	1544216	Bearing	1
5	1541556	Sprocket	1
6	1550585	Stator	1
6	1516826	Bushing	1
6	.....	Stator	1
7	1566169	Cover	1
8	136985	Capscrew	4
9	1636640	Gasket (Torque Converter Housing To Cover)	1
10	1550571	Screen (Suction)	1
11	1624414	Baffle	1
12	1550572	Spring (Suction Screen)	1
13	1515654	Temperature Sensor	1
14	188210	Fitting	1
15	292500	Capscrew	2
16	292680	Washer	2
17	1550567	Cover Plate (Torque Converter Housing)	1
18	43207	Ball Bearing	1
19	1550574	Sprocket (Driven)	1
20	44307	Ball Bearing	1
21	1653815	Gasket (Charge Pump)	1
22	1529894	Pump	1
22	1623836	O-Ring	1
23	292681	Lockwasher	7
24	296022	Capscrew	4
25	292683	Lockwasher	1
26	136681	Capscrew	3
27	292526	Capscrew	1
28	320161	Washer	1
29	2075558	Transmission Filter (Transmission)	1
30	1558515	Fitting (Transmission Filter)	1

TRANSMISSION (FIGURE 7-19)

SINGLE SPEED, WET AND DRY BRAKE — SHEET 1 OF 2 (S/N L177B15792E → (DRY BRAKE))
(S/N 133M0001501 → (DRY BRAKE)) (S/N L177B15746E → (WET BRAKE))
(S/N T134M0001501 → (WET BRAKE))



BP240136

TRANSMISSION

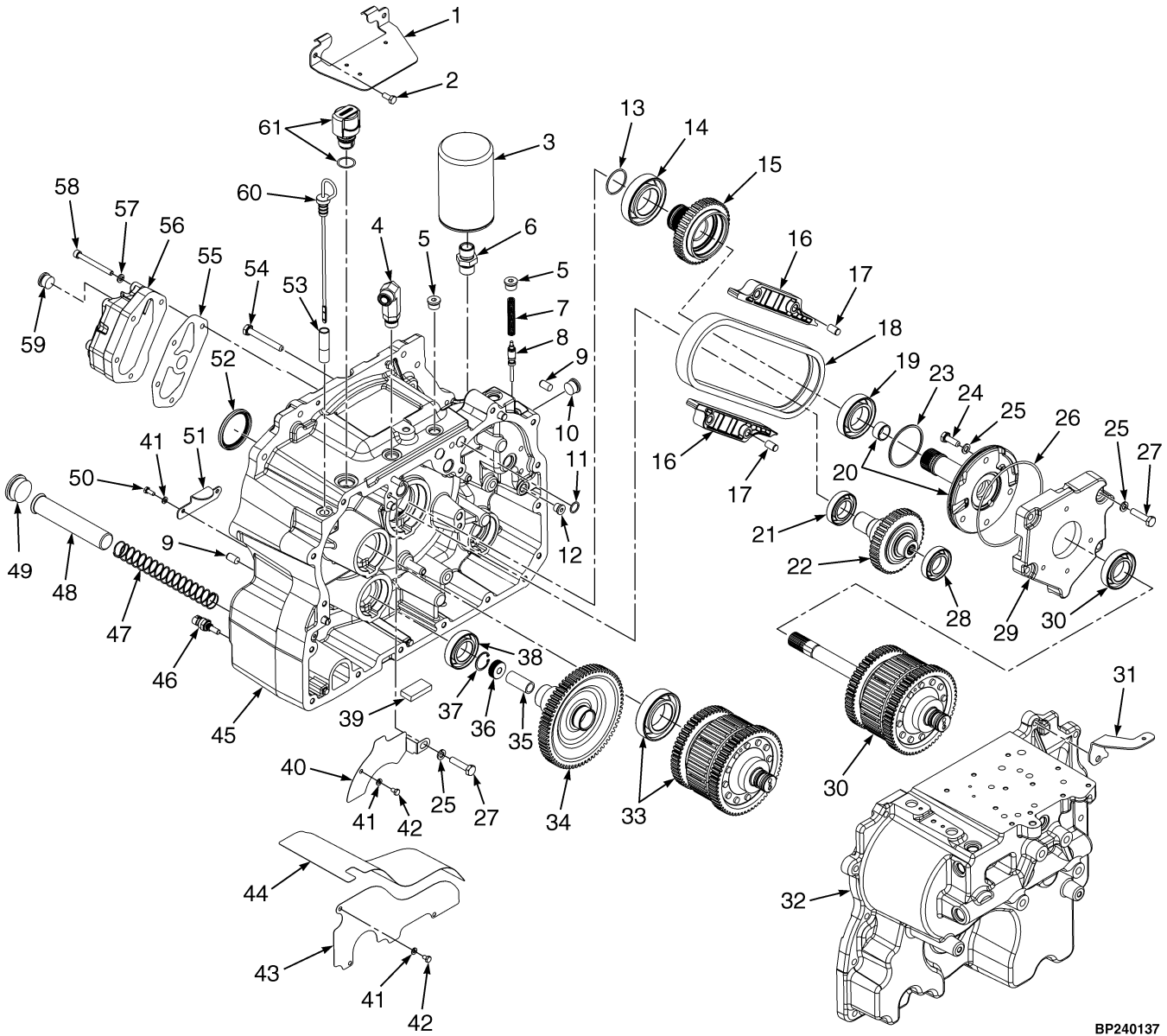
**SINGLE SPEED, WET AND DRY BRAKE – SHEET 1 OF 2 (S/N L177B15792E → (DRY BRAKE))
(S/N 133M0001501 → (DRY BRAKE)) (S/N L177B15746E → (WET BRAKE))
(S/N T134M0001501 → (WET BRAKE))**

ITEM	PART NO.	DESCRIPTION	QTY
	a 1646871	Transmission Assy (Single Speed Dry Brake) (T133M)	1
	b 1703481	Transmission Assy (Single Speed Dry Brake) (T133M)	1
	a 1646872	Transmission Assy (Single Speed Wet Brake) (T134M)	1
	b 1703482	Transmission Assy (Single Speed) (T134M)	1
1	2070263	Pressure Transducer	2
2	1570360	Gasket	1
3	292500	Capscrew	4
4	292680	Washer	8
5	1541231	Sensor (Input Speed, TISS)	1
6	1541232	Sensor (Output Speed, TOSS)	1
7	1654651	Flange Head Capscrew	1
8	15158	Washer	1
9	15135	Washer	1
10	86229	Seal	1
11	1655880	Yoke	1
12	303150	Dowel	4
13	1547447	Oil Seal	1
14	43208	Ball Bearing	2
15	1638791	Gear (Output)	1
16	1636640	Gasket	1
17	1615602	Converter Housing	1
18	1544217	Oil Seal (Torque Converter)	1
19	2093523	Clutch Pack (Counter/Reverse) (☞ Figure 7-31).....	1
19	1581116	Ball Bearing	1
19	43207	Ball Bearing	1
20	1544216	Bearing	1
21	1646880	Clutch Pack (Input/Forward) (☞ Figure 7-28).....	1
21	1581116	Ball Bearing	1
21	124603	Ball Bearing	1
22	1615601	Transmission Housing (Dry Brake)	1
22	1629361	Transmission Housing (Wet Brake)	1
23	388049		
	292682	Lockwasher	25
24	292515	Capscrew	15
25	233693	Fitting	1
25	16485	O-Ring	1
26	1665205	Valve (Low Pressure) (Dry Brake)	1
26	1665204	Valve (High Pressure) (Wet Brake)	1
27	320157	Washer	11
28	292509	Capscrew	11

FOOTNOTES:**a** → S/N L177B29083G**b** S/N L177B29084G →

TRANSMISSION (FIGURE 7-20)

SINGLE SPEED, WET AND DRY BRAKE — SHEET 2 OF 2 (S/N L177B15792E → (DRY BRAKE))
(S/N T133M0001501 → (DRY BRAKE)) (S/N L177B15746E → (WET BRAKE))
(S/N T134M0001501 → (WET BRAKE))



BP240137

TRANSMISSION

**SINGLE SPEED, WET AND DRY BRAKE – SHEET 2 OF 2 (S/N L177B15792E → (DRY BRAKE))
(S/N T133M0001501 → (DRY BRAKE)) (S/N L177B15746E → (WET BRAKE))
(S/N T134M0001501 → (WET BRAKE))**

ITEM	PART NO.	DESCRIPTION	QTY
	b 1646871	Transmission Assy (Single Speed Dry Brake) (T133M)	1
	b 1646872	Transmission Assy (Single Speed Wet Brake) (T134M)	1
	c 1703481	Transmission Assy (Single Speed Dry Brake) (T133M)	1
	c 1703482	Transmission Assy (Single Speed) (T134M)	1
1	1622888	Cover (Converter Housing)	1
1	1699141	Cover Plate (Converter Housing) (Alternate Part)	1
2	136681	Capscrew	2
3	2075558	Transmission Filter	1
3	4020588	Transmission Filter (Alternate Part)	1
4	1487067	Fitting	1
4	252729	O-Ring	1
4	16485	O-Ring	1
5	235691	Fitting	8
5	16484	O-Ring	1
6	1558515	Fitting	1
7	a 1612917	Spring (System Regulator)	1
8	1612916	Spool (System Regulator)	1
9	303150	Dowel	4
10	233693	Fitting	2
10	16485	O-Ring	1
11	1553403	O-Ring	4
12	222443	Fitting	1
12	16483	O-Ring	1
13	145481	O-Ring	1
14	1544216	Bearing	1
15	1541556	Sprocket (Driving)	1
16	1615804	Snubber	2
17	303100	Roll Pin	4
18	1494750	Chain (Drive Pump)	1
19	44310	Ball Bearing	1
20	1550585	Stator (Support Assy)	1
20	1516826	Bushing	1
21	44307	Ball Bearing	1
22	1550574	Sprocket (Driven)	1
23	1544218	Sealing Ring	1
24	136985	Capscrew	4
25	388049		
	292682	Lockwasher	4
26	16682	O-Ring	1
27	292616	Capscrew (178 mm)	1
28	43207	Ball Bearing	1
29	1615603	Carrier	1
30	1646880	Clutch Pack (Input/Forward) (☞ Figure 7-41).....	1
30	124603	Ball Bearing	1
31	1652575	Bracket	1
32	1615601	Transmission Housing (Dry Brake)	1
32	1629361	Transmission Housing (Wet Brake)	1
33	2093523	Clutch Pack (Counter/Reverse) (☞ Figure 7-31).....	1

TRANSMISSION

SINGLE SPEED, WET AND DRY BRAKE – SHEET 2 OF 2 (S/N L177B15792E → (DRY BRAKE))
(S/N T133M0001501 → (DRY BRAKE)) (S/N L177B15746E → (WET BRAKE))
(S/N T134M0001501 → (WET BRAKE))

ITEM	PART NO.	DESCRIPTION	QTY
33	43207	Ball Bearing	1
34	1638791	Gear (Output)	1
35	1636645	Spacer	1
36	1516849	Nut	1
37	58916	Snap Ring	1
38	44308	Ball Bearing	1
39	334560	Magnet	1
40	1624408	Shield (Upper) (Oil)	1
41	292680	Washer	8
42	148962	Capscrew	4
43	1627453	Shield (Lower) (Oil)	1
44	1622887	Baffle	1
45	1615602	Converter Housing	1
46	1515654	Temperature Sensor	1
47	1550572	Spring (Suction Screen)	1
48	1627465	Screen (Suction)	1
49	188210	Fitting	1
49	16983	O-Ring	1
50	b 292500	Capscrew	4
50	c 292516	Capscrew	4
51	1550567	Cover Plate	1
52	1544217	Oil Seal (Torque Converter)	1
53	1624406	Dipstick Tube	1
54	292522	Capscrew	2
55	1653815	Gasket (Charge Pump)	1
56	1529894	Pump (Charge, Dry Brake)	1
56	1623836	O-Ring	1
56	1552853	Pump (Charge, Wet Brake)	1
56	1623836	O-Ring	1
57	292681	Lockwasher	6
58	296022	Capscrew	4
59	235691	Fitting	1
59	16484	O-Ring	1
60	1624401	Dipstick	1
61	1632741	Breather	1
61	16486	O-Ring	1

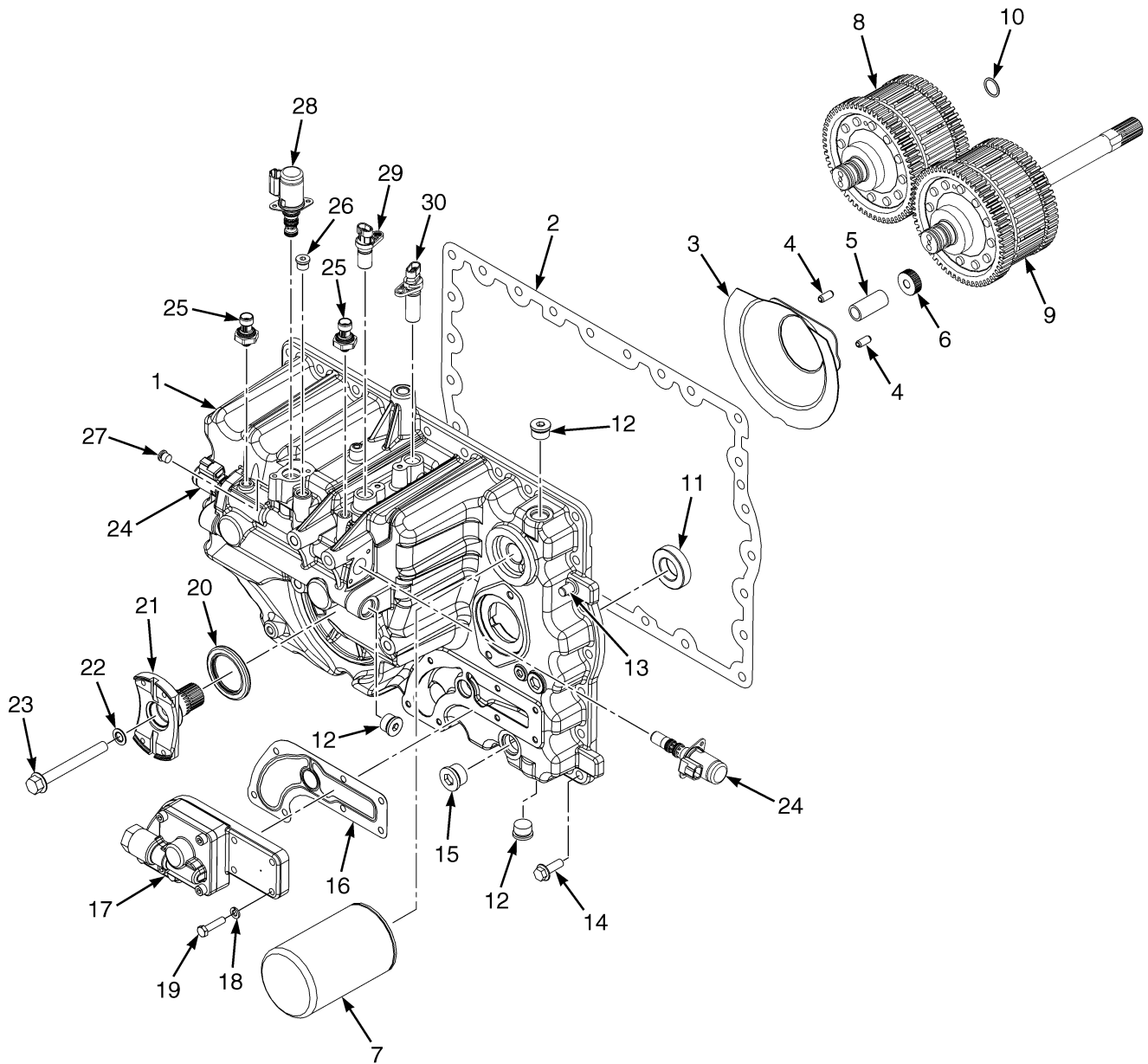
FOOTNOTES:

a Used on wet brake application only.

c S/N L177B29084G →

b → S/N L177B29083G

TRANSMISSION HOUSING AND ASSEMBLY (FIGURE 7-21) (SINGLE SPEED) (S/N L177B29535G →) (S/N T141M001501 →)



BP240173

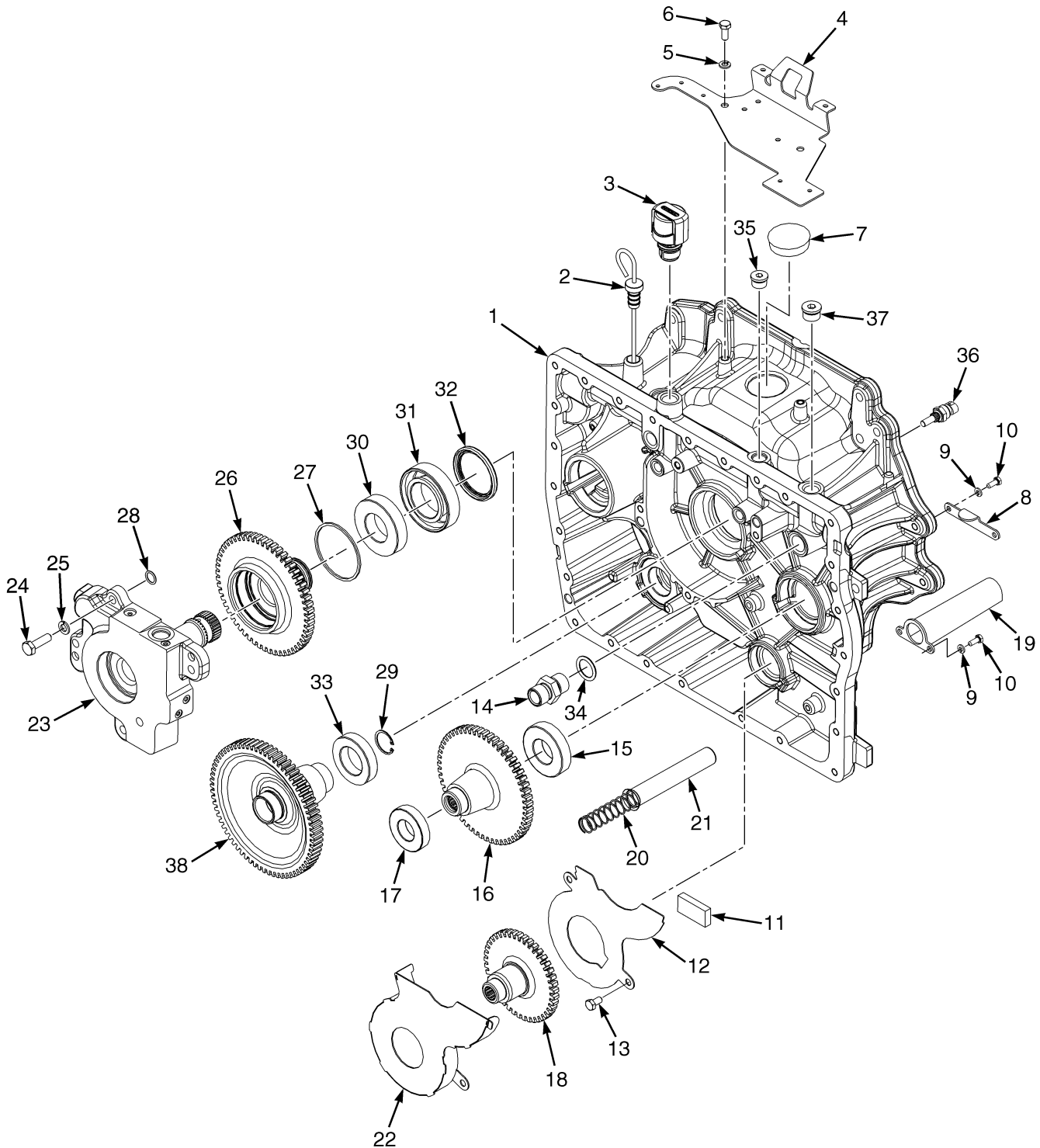
TRANSMISSION HOUSING AND ASSEMBLY
(SINGLE SPEED) (S/N L177B29535G →) (S/N T141M001501 →)

ITEM	PART NO.	DESCRIPTION	QTY
	1675651	Transmission Assy	1
1	1675648	Transmission Housing	1
2	1702335	Gasket	1
3	1688435	Cover	1
4	302472	Roll Pin	2
5	1636645	Spacer	1
6	1516849	Nut	1
7	2089366	Filter	1
7	4020588	Transmission Filter (Alternate Part)	1
8	1676324	Clutch Pack (Reverse) (☞Figure 7-32).....	1
9	1676323	Clutch Pack (Forward) (☞Figure 7-29).....	1
10	1553403	O-Ring	1
11	44306	Ball Bearing	2
12	233693	Fitting	3
13	303150	Dowel	2
14	1527884	Capscrew	26
15	222444	Fitting	1
16	1702336	Gasket	1
17	2102764		
	4606846	Charge Pump (☞Figure 7-25).....	1
18	292681	Lockwasher	9
19	293616	Capscrew	7
20	1547447	Oil Seal	1
21	1655880	Yoke	1
22	86229	Seal	1
23	1654651	Flange Head Capscrew	1
24	1660500	Solenoid Valve	2
25	2070263	Pressure Transducer	2
26	222443	Fitting	1
27	222442	Fitting	1
28	1520660	Solenoid	1
29	1541231	Sensor (Input Speed, TISS)	1
30	1541232	Sensor (Output Speed, TOSS)	1
	a 145481	O-Ring	1
	a 293741	Capscrew	6

FOOTNOTES:

a Not Illustrated

TORQUE CONVERTER HOUSING AND ATTACHING PARTS (FIGURE 7-22) (SINGLE SPEED) (S/N L177B29535G →) (S/N T141M001501 →)

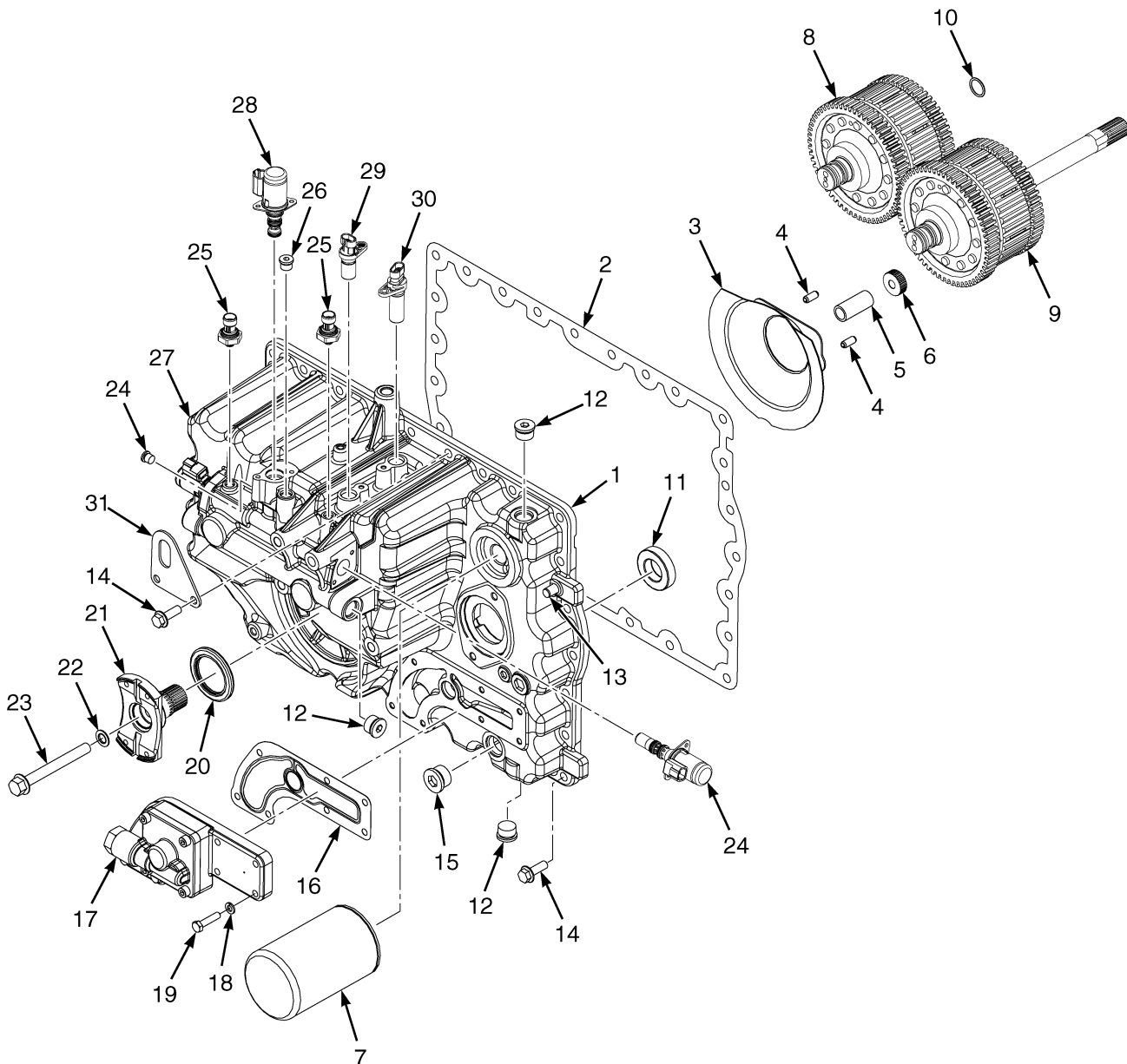


BP240174

TORQUE CONVERTER HOUSING AND ATTACHING PARTS
(SINGLE SPEED) (S/N L177B29535G →) (S/N T141M001501 →)

ITEM	PART NO.	DESCRIPTION	QTY
	1675651	Transmission Assy	1
1	1675649	Converter Housing	1
2	1624401	Dipstick	1
3	1632741	Breather	1
4	1684027 4026774	Cover (Converter Housing)	1
5	292681	Lockwasher	2
6	136681	Capscrew	2
7	1703644	Plug	1
8	1687847	Cover Plate	1
9	292680	Washer	3
10	292500	Capscrew	3
11	334560	Magnet	1
12	1676519	Cover	1
13	287851	Capscrew	2
14	1558515	Fitting	1
15	43207	Ball Bearing	1
16	4006034	Drive Gear	1
17	44307	Ball Bearing	1
18	4006035	Drive Gear	1
19	1702520	Cover	1
20	334450	Screen	1
21	1688598	Spring	1
22	1686782	Cover	1
23	1675647	Housing	1
24	287860	Capscrew	4
25	388049 292682	Lockwasher	4
26	4006033	Drive Gear	1
27	1544218	Sealing Ring	1
28	1553475	O-Ring	2
29	58916	Snap Ring	1
30	43208	Ball Bearing	2
31	1544216	Bearing	1
32	1544217	Oil Seal (Torque Converter)	1
33	44308	Ball Bearing	1
34	280157	O-Ring AS568A-120	1
35	235691	Fitting	1
36	1515654	Temperature Sensor	1
37	233693	Fitting	3
38	1684389	Transmission Gear	1

TRANSMISSION HOUSING AND ASSEMBLY (FIGURE 7-23) SINGLE SPEED, ALUMINUM CHAIN DRIVE — T148M001501 (S/N L177B32237J →)



BP240185

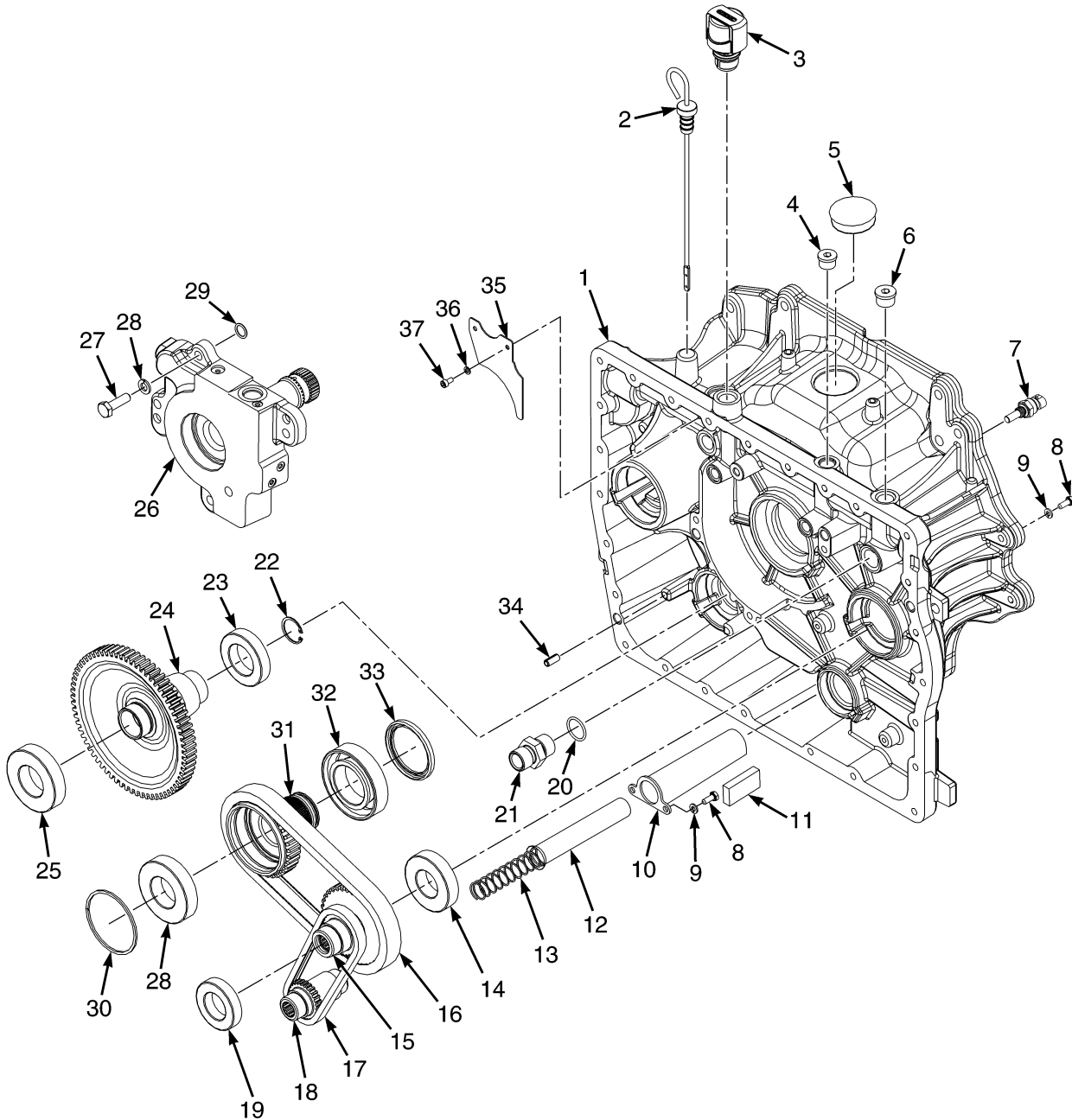
TRANSMISSION HOUSING AND ASSEMBLY
SINGLE SPEED, ALUMINUM CHAIN DRIVE – T148M001501 (S/N L177B32237J →)

ITEM	PART NO.	DESCRIPTION	QTY
	b 4020056	Transmission Assy	1
1	4025209	Transmission Housing	1
2	1702335	Gasket	1
3	1688435	Cover	1
4	173056	Roll Pin	2
5	1636645	Spacer	1
6	1516849	Nut	1
7	4020588	Transmission Filter	1
8	1676324	Clutch Pack (Reverse) (☞Figure 7-32).....	1
9	1676323	Clutch Pack (Forward) (☞Figure 7-29).....	1
10	118361	O-Ring	1
11	44306	Ball Bearing	2
12	233693	Fitting	3
13	303150	Dowel	2
14	1527884	Capscrew	26
15	222444	Fitting	1
15	16486	O-Ring	1
16	1702336	Gasket	1
17	2102764		
	4606846	Charge Pump (☞Figure 7-25).....	1
18	292681	Lockwasher	9
19	293616	Capscrew	7
20	1547447	Oil Seal	1
21	1655880	Yoke	1
22	86229	Seal	1
23	1654651	Flange Head Capscrew	1
24	1660500	Solenoid Valve (Proportional Value)	2
24	293741	Capscrew	4
25	2070263	Pressure Transducer	2
26	222443	Fitting	1
26	16483	O-Ring	1
27	222442	Fitting	1
27	204128	Plug	1
27	16481	O-Ring	1
28	1520660	Solenoid (Valve)	1
28	293741	Capscrew	2
29	1541231	Sensor (Input Speed, TISS)	1
29	292500	Capscrew	1
29	292680	Washer	1
30	1541232	Sensor (Output Speed, TOSS)	1
30	292500	Capscrew	1
30	292680	Washer	1
31	4025106	Bracket (Lifting Eye)	1
	a 145481	O-Ring	1
	a 293741	Capscrew	6

FOOTNOTES:**a** Not Illustrated

- b** S/N L177B32237J → EXC. 32238-32242,
32245-32247, 32249, 32251, 32293-32294,
32305-32306, 32309, 32313, 32316, 32318-32319

TORQUE CONVERTER HOUSING AND ATTACHING PARTS (FIGURE 7-24) SINGLE SPEED, ALUMINUM CHAIN DRIVE — T148M001501 (S/N L177B32237J →)



BP240179

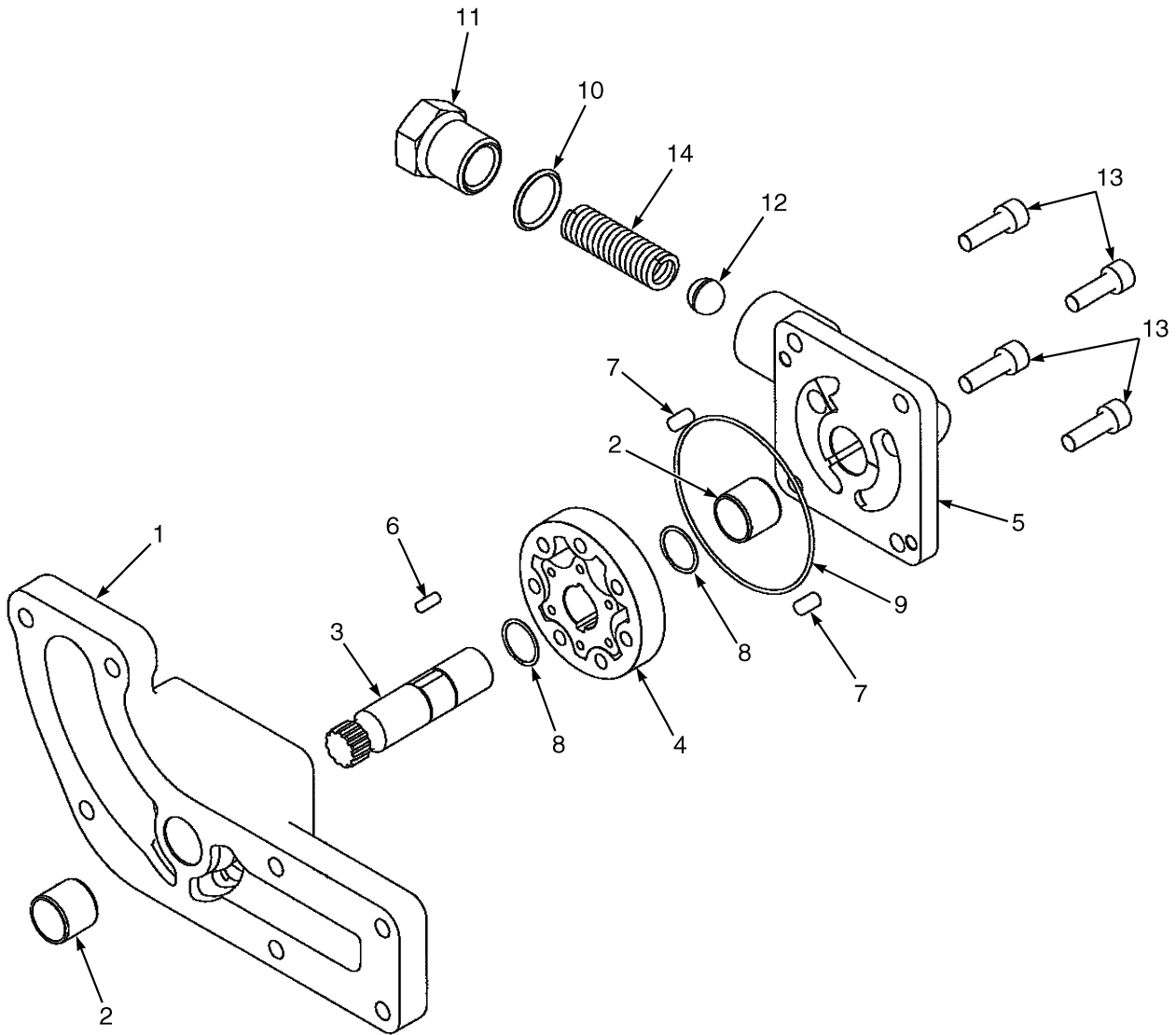
TORQUE CONVERTER HOUSING AND ATTACHING PARTS
SINGLE SPEED, ALUMINUM CHAIN DRIVE – T148M001501 (S/N L177B32237J →)

ITEM	PART NO.	DESCRIPTION	QTY
	a 4020056	Transmission Assy	1
1	4016150	Converter Housing	1
2	1624401	Dipstick	1
3	1632741	Breather	1
3	16486	O-Ring	1
4	235691	Fitting	1
5	1703644	Plug	1
6	233693	Fitting	3
6	16485	O-Ring	1
7	1515654	Temperature Sensor	1
8	292500	Capscrew	2
9	292680	Washer	4
10	1702520	Cover (Suction Screen)	1
11	334560	Magnet	1
12	334450	Screen	1
13	1688598	Spring	1
14	43207	Ball Bearing	1
15	4016152	Sprocket (Driven)	1
16	4020467	Drive Chain	1
17	4020466	Drive Chain	1
18	4010318	Sprocket (Driven)	1
19	44307	Ball Bearing	1
20	39375	O-Ring	1
21	1558515	Fitting	1
22	58916	Snap Ring	1
23	44308	Ball Bearing	1
24	1684389	Transmission Gear (Output)	1
25	43208	Ball Bearing	2
26	1675647	Housing (Stator Support Assembly) (☞ Figure 7-26).....	1
27	287860	Capscrew	4
28	388049		
	292682	Lockwasher	4
29	104681	O-Ring	2
30	1544218	Sealing Ring	1
31	4016151	Sprocket (Driving)	1
32	1544216	Bearing	1
33	1544217	Oil Seal (Torque Converter)	1
34	303150	Dowel	2
35	4020311	Plate	1
36	292679	Washer	2
37	293741	Capscrew	2

FOOTNOTES:

- a** S/N L177B32237 → EXC. 32238-32242,
32245-32247, 32249, 32251, 32293-32294,
32305-32306, 32309, 32313, 32316, 32318-32319

CHARGE PUMP (FIGURE 7-25)

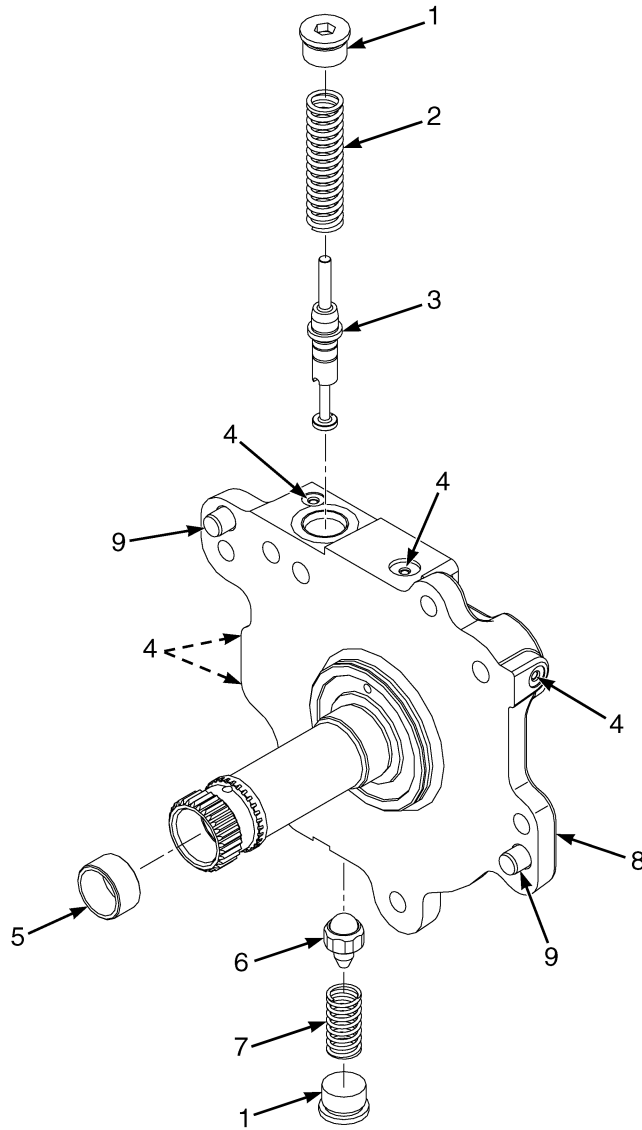


BP150416

CHARGE PUMP

ITEM	PART NO.	DESCRIPTION	QTY
	2102764		
	4606846	Charge Pump	1
1	.....	Body	2
2	.....	Bushing	1
3	.....	Drive Shaft	1
4	.....	Gear Set	1
5	.....	End Cover	1
6	4017719	Pin (Shear)(.187 x .500)	1
7	1705980	Pin (Shear)(.25 x .50)	2
8	.....	Retainer Ring	2
9	1705981	O-Ring	1
10	.....	O-Ring	1
11	.....	Cap Valve	1
12	1705984	Ball	1
13	.....	Capscrews	4
14	.....	Compression Spring	1

STATOR SUPPORT HOUSING (FIGURE 7-26)

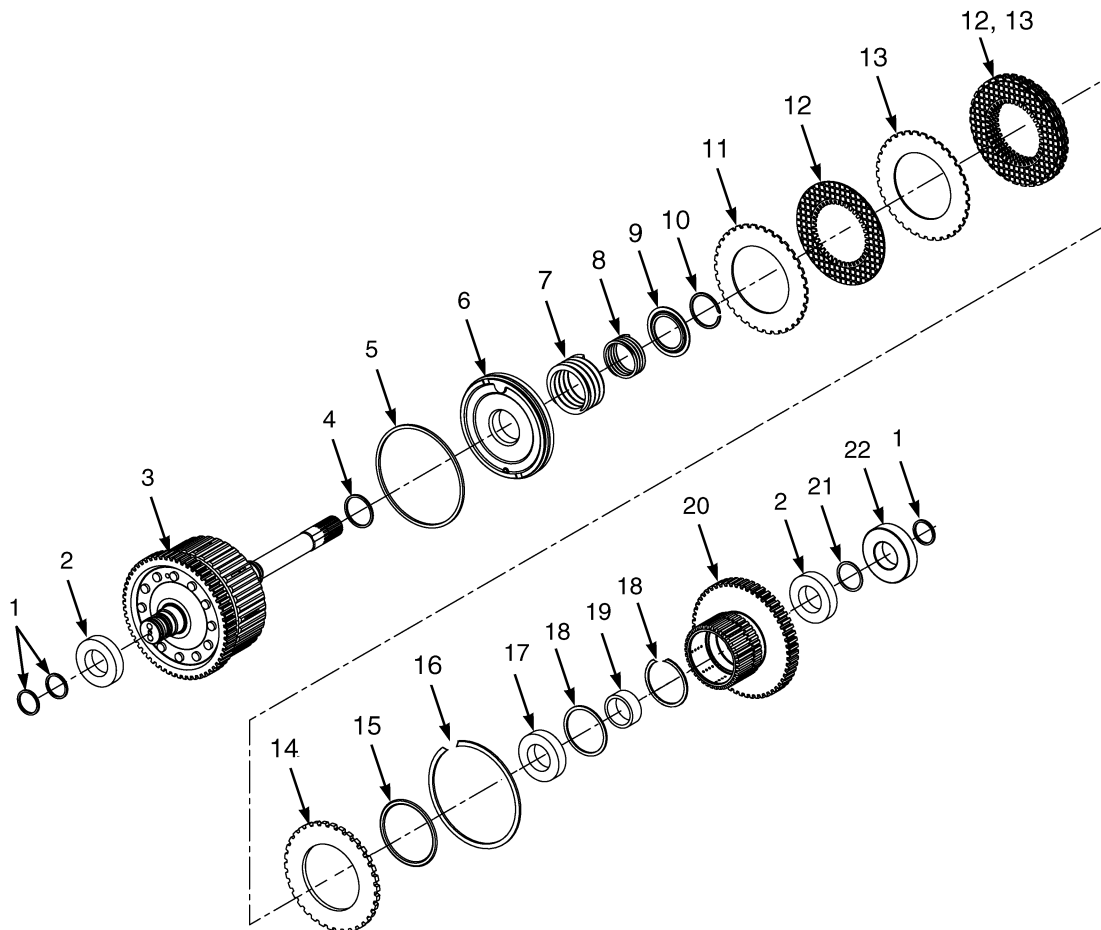


BP240196

STATOR SUPPORT HOUSING

ITEM	PART NO.	DESCRIPTION	QTY
	1675647	Housing Stator Support	1
1	233693	Fitting	2
1	16485	O-Ring	1
2	1676327	Spring	1
3	1676326	Spool	1
4	.....	Plug	5
5	1516826	Bushing	1
6	63081	Ball	1
7	1676328	Spring	1
8	.....	Body	1

INPUT/FORWARD CLUTCH (FIGURE 7-27) SINGLE SPEED TRANSMISSION (→ S/N L177B13420E)

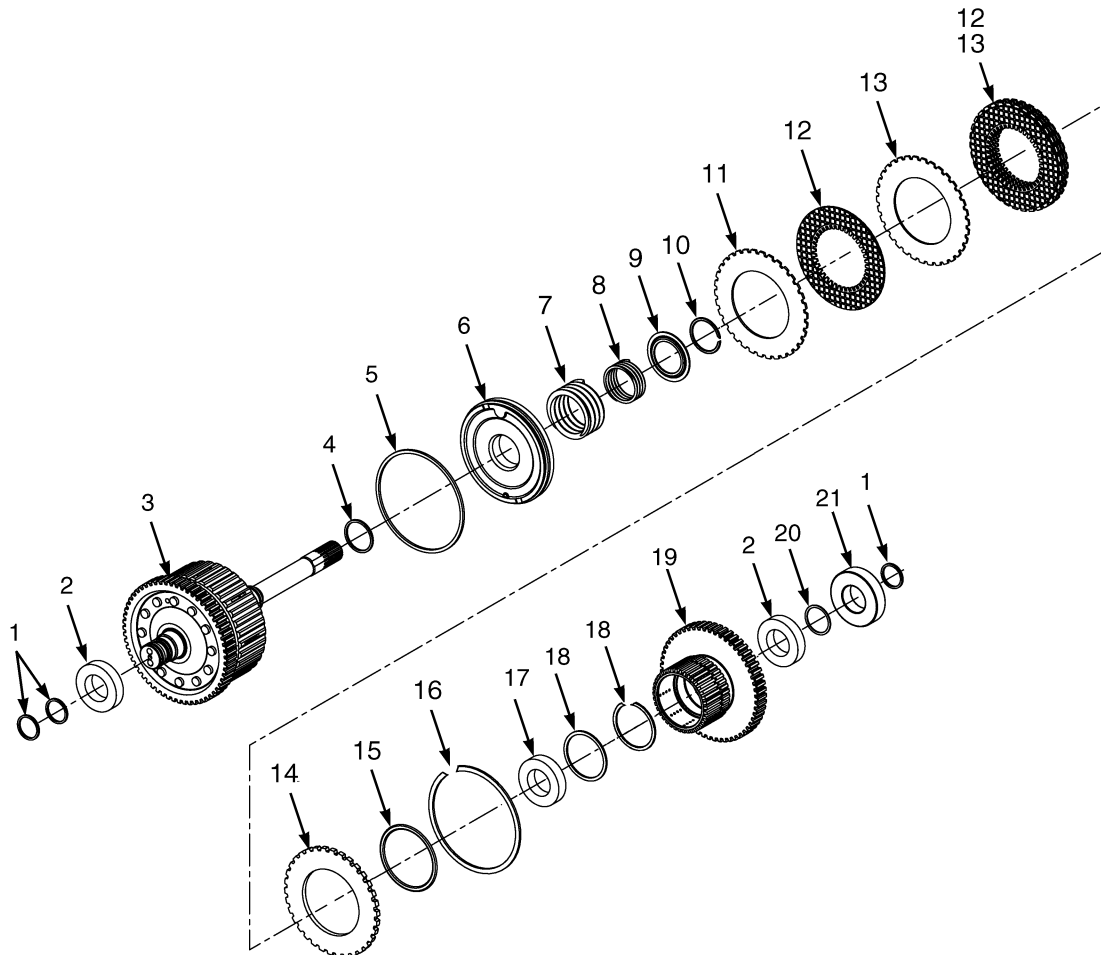


BP240049

INPUT/FORWARD CLUTCH
SINGLE SPEED TRANSMISSION (→ S/N L177B13420E)

ITEM	PART NO.	DESCRIPTION	QTY
	1595420	Clutch Pack (Input/Forward)	1
1	.....	Ring Seal	3
2	1581116	Ball Bearing	2
3	1581104	Shaft	1
4	.....	Ring Seal	1
5	.....	Ring Seal	1
6	1552525	Piston	1
7	1581108	Spring	1
8	1581098	Spring	1
9	1581099	Spring Guide	1
10	1581100	Snap Ring	1
11	.....	Conical Plate	1
12	.....	Friction Plate	5
13	.....	Separator Plate	4
14	1543094	Pressure Plate (5.8 mm)	1
14	1537449	Pressure Plate (6.0 mm)	1
14	1543096	Pressure Plate (5.6 mm)	1
14	1543097	Pressure Plate (5.4 mm)	1
14	1543098	Pressure Plate (5.2 mm)	1
15	.....	O-Ring	1
16	1537450	Snap Ring	1
17	124603	Ball Bearing	1
18	1581107	Snap Ring	2
19	1581117	Spacer	1
20	1595427	Gear	1
21	1581106	Snap Ring	1
22	43207	Ball Bearing	1
	1595426	Kit-Clutch Pack Plates/Seals	1
	1543102	Kit-Clutch Pack Plates	1
	1595425	Kit-Clutch Pack Seals	1

INPUT/FORWARD CLUTCH (FIGURE 7-28) SINGLE SPEED TRANSMISSION (S/N L177B13421E ↔ S/N L177B29534G)



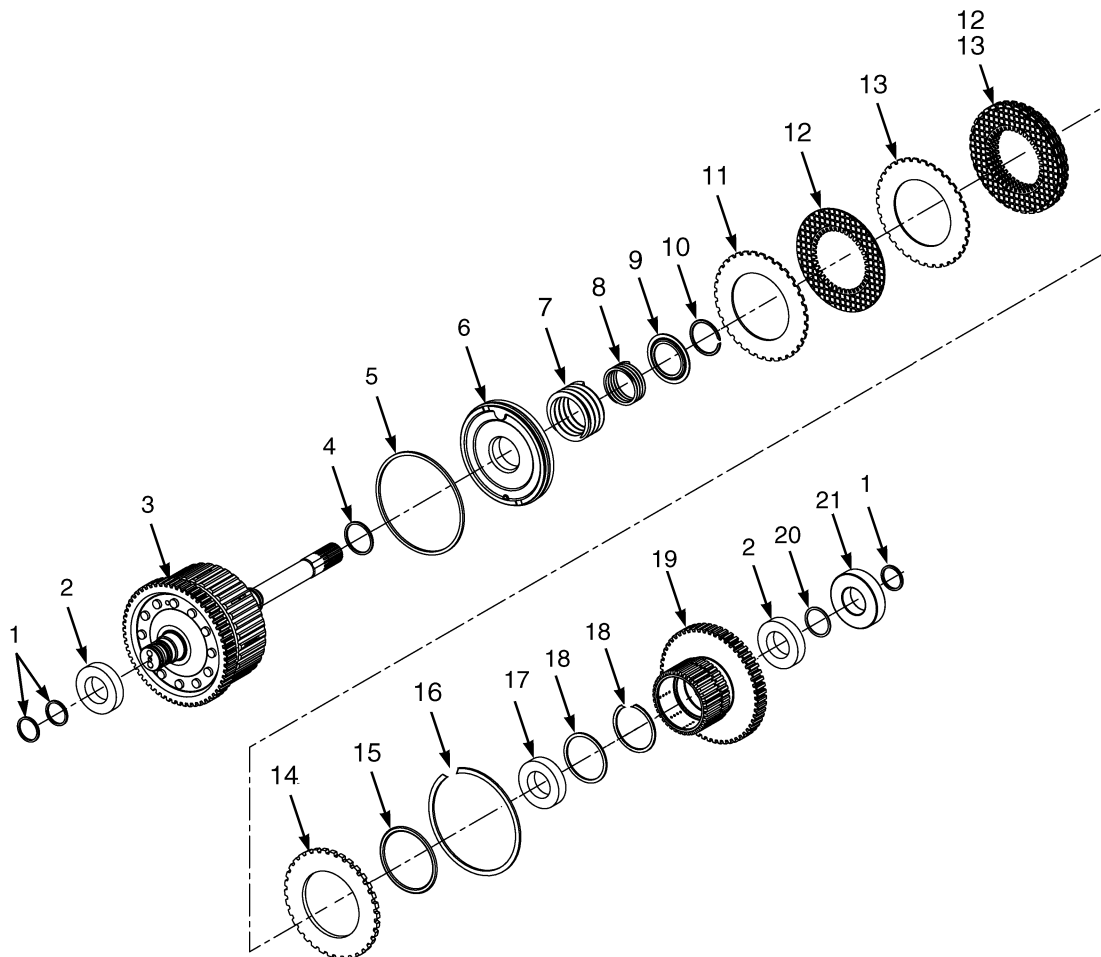
BP240098

INPUT/FORWARD CLUTCH
SINGLE SPEED TRANSMISSION (S/N L177B13421E ↔ S/N L177B29534G)

ITEM	PART NO.	DESCRIPTION	QTY
	1646880	Clutch Pack (Input/Forward)	1
1	.....	Ring Seal	3
2	1581116	Ball Bearing	2
3	1581104	Shaft	1
4	.....	Ring Seal	1
5	.....	Ring Seal	1
6	2085129	Piston	1
7	1581108	Spring	1
8	1581098	Spring	1
9	1581099	Spring Guide	1
10	1581100	Snap Ring	1
11	.....	Conical Plate	1
12	.....	Friction Plate	5
13	.....	Separator Plate	4
14	1537449	Pressure Plate (6.0 mm)	1
15	.....	O-Ring	1
16	1537450	Snap Ring	1
17	124603	Ball Bearing	1
18	1581107	Snap Ring	2
19	1595427	Gear	1
19	2095533	Clutch Gear (Alternate Part)	1
20	1581106	Snap Ring	1
20	1537459	Snap Ring (Alternate Part)	1
21	43207	Ball Bearing	1
	1543102	Kit-Clutch Pack Plates	1
	1595425	Kit-Clutch Pack Seals	1

INPUT/FORWARD CLUTCH (FIGURE 7-29)

SINGLE SPEED TRANSMISSION (S/N L177B29535G →) (S/N T141M001501 →) (S/N T148M001501 →)

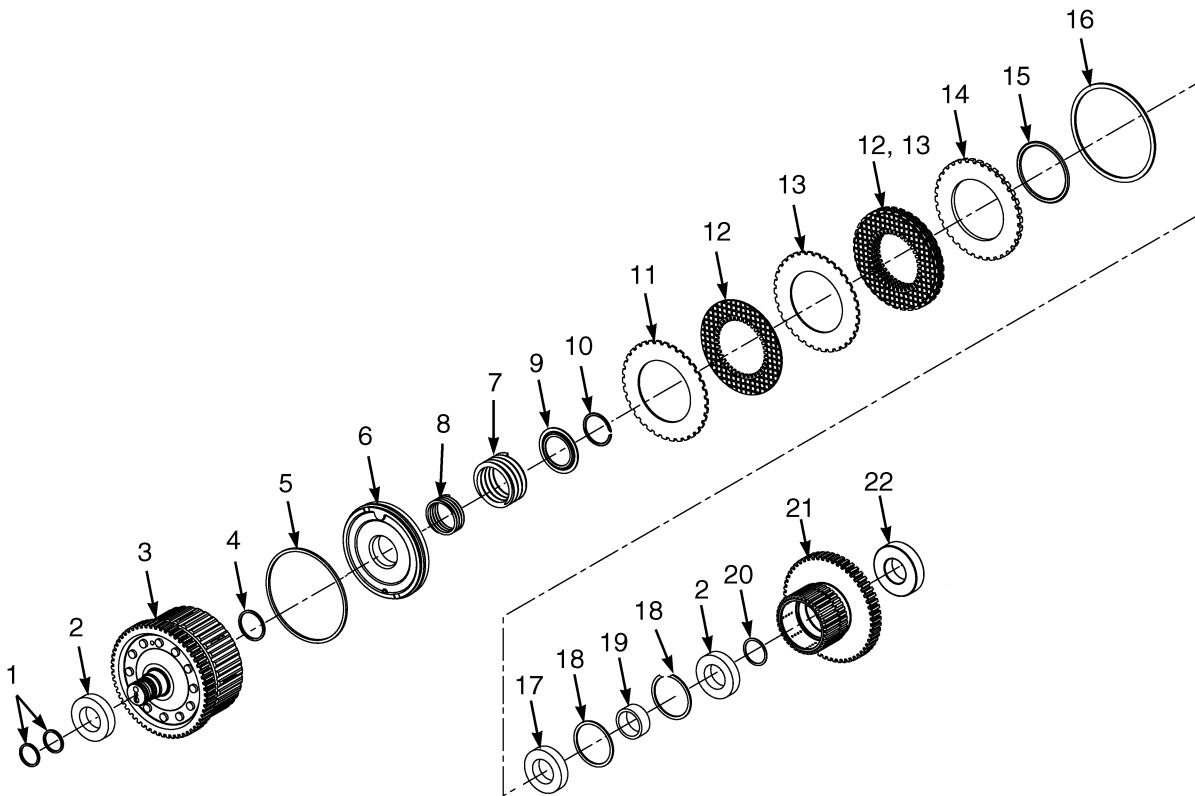


BP240098

INPUT/FORWARD CLUTCH**SINGLE SPEED TRANSMISSION (S/N L177B29535G →) (S/N T141M001501 →) (S/N T148M001501 →)**

ITEM	PART NO.	DESCRIPTION	QTY
	1676323	Clutch Pack	1
1	.....	Ring Seal	3
2	1581116	Ball Bearing	2
3	4007888	Shaft	1
4	.....	Ring Seal	1
5	.....	Ring Seal	1
6	2085129	Piston	1
7	1581108	Spring	1
8	1581098	Spring	1
9	1581099	Spring Guide	1
10	1581100	Snap Ring	1
11	.....	Conical Plate	1
12	.....	Friction Plate	5
13	.....	Separator Plate	4
14	1537449	Pressure Plate (6.0 mm)	1
15	.....	O-Ring	1
16	1537450	Snap Ring	1
17	124603	Ball Bearing	1
18	1581107	Snap Ring	2
19	4007889	Clutch Gear	1
20	1537459	Snap Ring	1
21	43207	Ball Bearing	1
	1543102	Kit-Clutch Pack Plates	1
	1595425	Kit-Clutch Pack Seals	1

COUNTER/REVERSE CLUTCH (FIGURE 7-30) SINGLE SPEED TRANSMISSION (→ S/N L177B13245E)

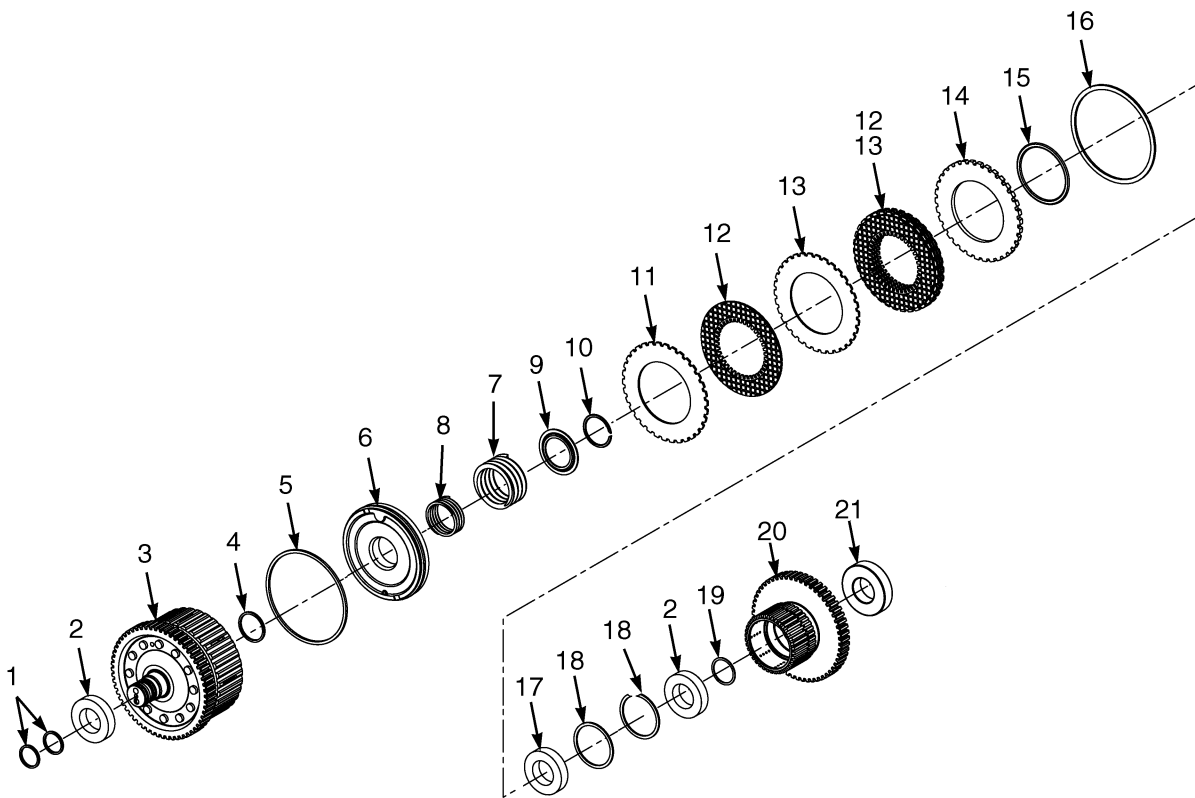


BP240051

COUNTER/REVERSE CLUTCH
SINGLE SPEED TRANSMISSION (→ S/N L177B13245E)

ITEM	PART NO.	DESCRIPTION	QTY
	1595421	Clutch Pack (Counter/Reverse)	1
1	.....	Seal	2
2	1581116	Ball Bearing	2
3	1581114	Shaft	1
4	.....	Seal	1
5	.....	Seal	1
6	1552525	Piston	1
7	1581108	Spring	1
8	1581098	Spring	1
9	1581099	Spring Guide	1
10	1581100	Snap Ring	1
11	.....	Conical Plate	1
12	.....	Friction Plate	5
13	.....	Separator Plate	4
14	1543094	Pressure Plate (5.8 mm)	1
14	1537449	Pressure Plate (6.0 mm)	1
14	1543096	Pressure Plate (5.6 mm)	1
14	1543097	Pressure Plate (5.4 mm)	1
14	1543098	Pressure Plate (5.2 mm)	1
15	.....	O-Ring	1
16	1537450	Snap Ring	1
17	124603	Ball Bearing	1
18	1581107	Snap Ring	1
19	1581117	Spacer	1
20	1581106	Snap Ring	1
21	1595427	Gear	1
22	43207	Ball Bearing	1
	1595426	Kit-Clutch Pack Plates/Seals	1
	1543102	Kit-Clutch Pack Plates	1
	1595425	Kit-Clutch Pack Seals	1

COUNTER/REVERSE CLUTCH (FIGURE 7-31) SINGLE SPEED TRANSMISSION (S/N L177B13246E ↔ S/N L177B29534G)



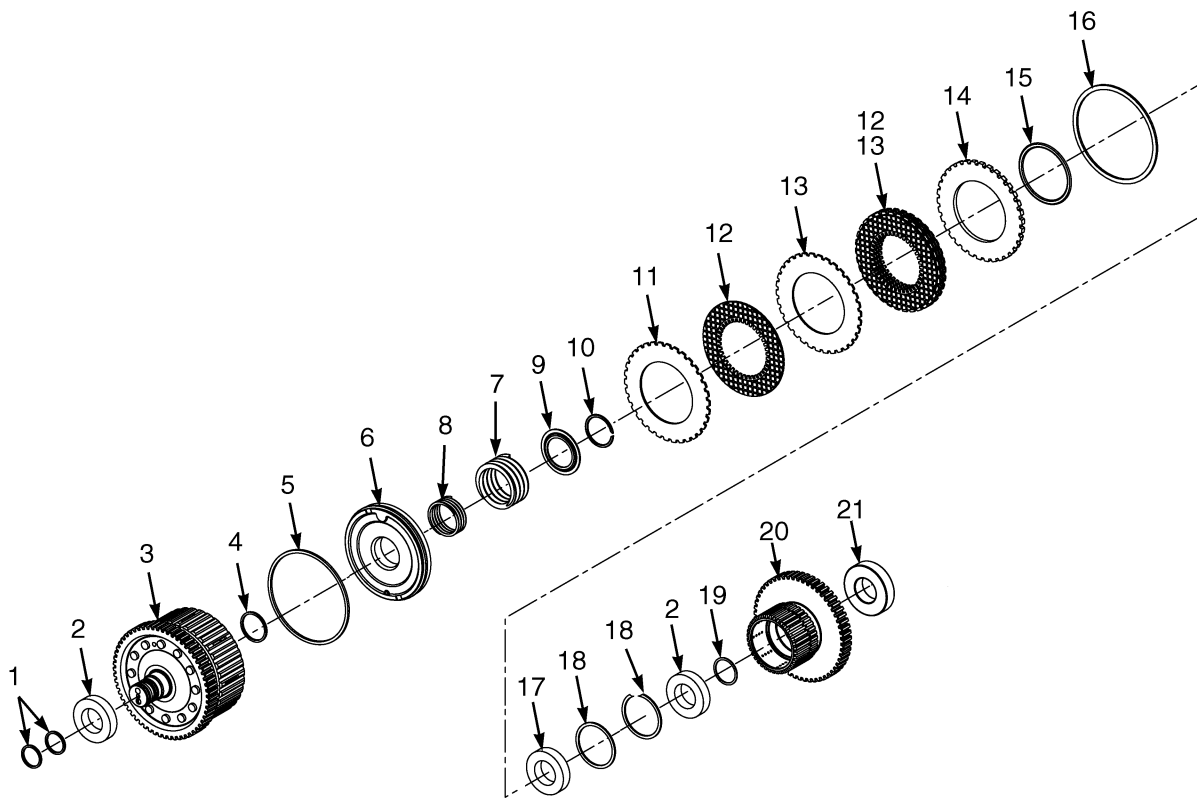
BP240099

COUNTER/REVERSE CLUTCH
SINGLE SPEED TRANSMISSION (S/N L177B13246E ↔ S/N L177B29534G)

ITEM	PART NO.	DESCRIPTION	QTY
	2093523	Clutch Pack (Counter/Reverse)	1
1	.....	Seal	2
2	1581116	Ball Bearing	2
3	1581114	Shaft	1
4	.....	Seal	1
5	.....	Seal	1
6	2085129	Piston	1
7	1581108	Spring	1
8	1581098	Spring	1
9	1581099	Spring Guide	1
10	1581100	Snap Ring	1
11	.....	Conical Plate	1
12	.....	Friction Plate	5
13	.....	Separator Plate	4
14	1537449	Pressure Plate (6.0 mm)	1
15	.....	O-Ring	1
16	1537450	Snap Ring	1
17	124603	Ball Bearing	1
18	1581107	Snap Ring	1
19	1581106	Snap Ring	1
19	1537459	Snap Ring (Alternate Part)	1
20	1595427	Gear	1
20	2095533	Clutch Gear (Alternate Part)	1
21	43207	Ball Bearing	1
	1543102	Kit-Clutch Pack Plates	1
	1595425	Kit-Clutch Pack Seals	1

COUNTER/REVERSE CLUTCH (FIGURE 7-32)

SINGLE SPEED TRANSMISSION (S/N L177B29535G →) (S/N T141M001501 →) (S/N T148M001501 →)



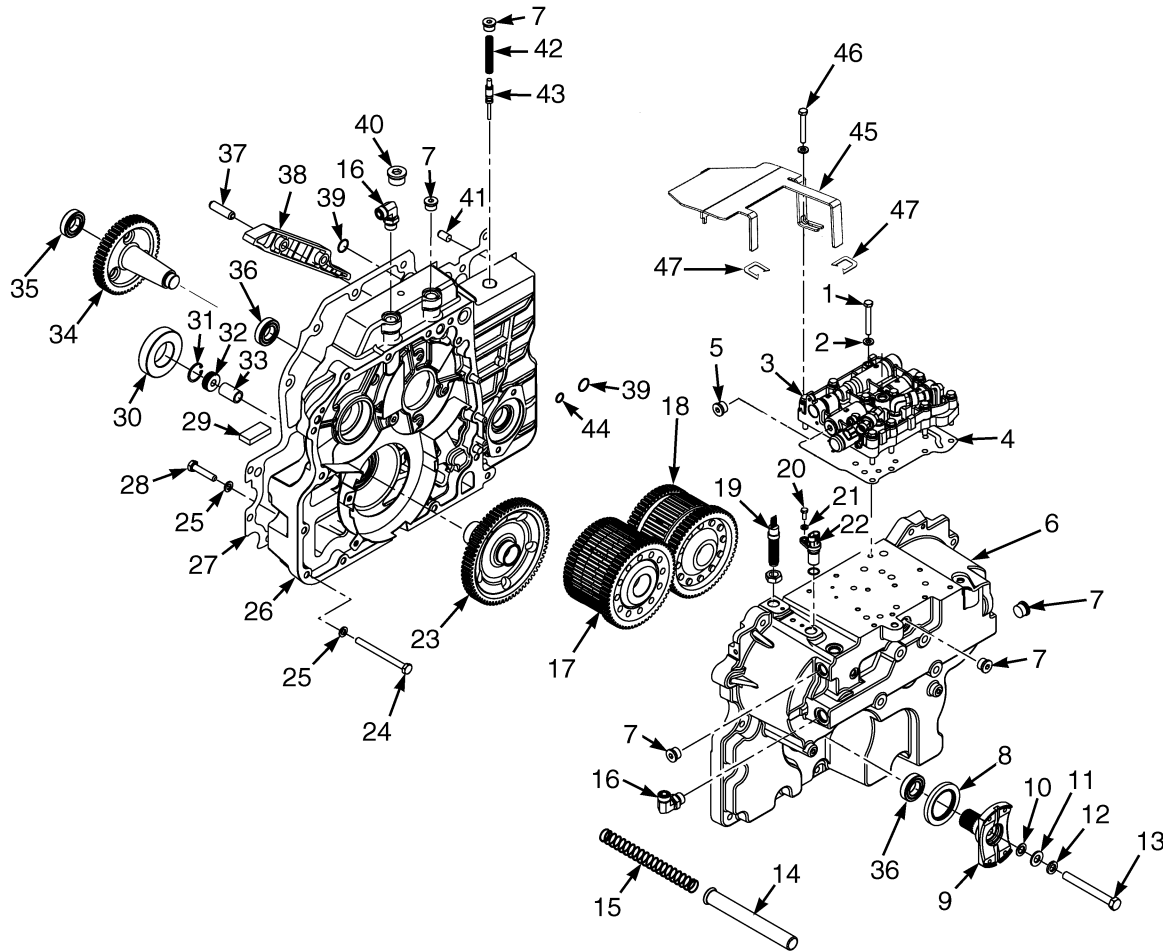
BP240099

COUNTER/REVERSE CLUTCH

SINGLE SPEED TRANSMISSION (S/N L177B29535G →) (S/N T141M001501 →) (S/N T148M001501 →)

ITEM	PART NO.	DESCRIPTION	QTY
	1676324	Clutch Pack	1
1	.....	Seal	2
2	1581116	Ball Bearing	2
3	4007888	Shaft	1
4	.....	Seal	1
5	.....	Seal	1
6	2085129	Piston	1
7	1581108	Spring	1
8	1581098	Spring	1
9	1581099	Spring Guide	1
10	1581100	Snap Ring	1
11	.....	Conical Plate	1
12	.....	Friction Plate	5
13	.....	Separator Plate	4
14	1543094	Pressure Plate (5.8 mm)	1
15	.....	O-Ring	1
16	1537450	Snap Ring	1
17	124603	Ball Bearing	1
18	1581107	Snap Ring	1
19	1537459	Snap Ring	1
20	4007889	Clutch Gear	1
21	43207	Ball Bearing	1
	1543102	Kit-Clutch Pack Plates	1
	1595425	Kit-Clutch Pack Seals	1

TRANSMISSION (FIGURE 7-33) DUAL SPEED — SHEET 1 OF 2 (→ S/N L177B13445E)



HP240491

TRANSMISSION
DUAL SPEED – SHEET 1 OF 2 (→ S/N L177B13445E)

ITEM	PART NO.	DESCRIPTION	QTY
	a 1529896	Transmission Assy	1
	b 1616479	Transmission Assy (Dual Speed)	1
1	292509	Capscrew	11
2	320157	Washer	12
3	a 1613695	Hydraulic Control Valve	1
3	b 1611835	Hydraulic Control Valve (☞Figure 7-43).....	1
4	1570360	Gasket (Control Valve)	1
5	233693	Fitting	1
5	16485	O-Ring	1
6	1624507	Housing (Transmission)	1
7	235691	Fitting	7
7	16484	O-Ring	7
8	1547447	Oil Seal	1
9	1550584	Yoke (27 Tooth)	1
10	86229	Seal	1
11	15135	Washer	1
12	15158	Washer	1
13	18595	Capscrew	1
14	1550571	Screen (Suction)	1
15	1550572	Spring (Suction Screen)	1
16	1487067	Fitting	1
16	16485	O-Ring	1
17	1595423	Clutch Pack (Counter/Reverse) (☞Figure 7-39).....	1
18	1595424	Clutch Pack (Forward-High) (☞Figure 7-38).....	1
19	1541232	Sensor (Output Speed, TOSS)	1
20	292500	Capscrew	2
21	292680	Washer	2
22	1541231	Sensor (Input Speed, TISS)	1
23	1565135	Gear (Output)	1
24	1359458	Capscrew	16
25	388049		
	292682	Lockwasher	23
26	1550581	Housing (Front Cover)	1
27	1550573	Gasket (Torque Converter Housing to Cover)	1
28	292516	Capscrew	3
29	334560	Magnet	1
30	44309	Ball Bearing (Charge Pump)	1
31	213099	Snap Ring	1
32	1525686	Nut	1
33	1516851	Spacer	1
34	1585750	Gear (Idler)	1
35	44306	Ball Bearing	1
36	43209	Ball Bearing	1
37	303100	Roll Pin	4
38	1553270	Snubber	2
39	1553475	O-Ring	1
40	233683	Fitting	1
40	16487	O-Ring	1
41	303150	Dowel	4
42	1612918	Spring (Regulator)	1

TRANSMISSION

DUAL SPEED – SHEET 1 OF 2 (→ S/N L177B13445E)

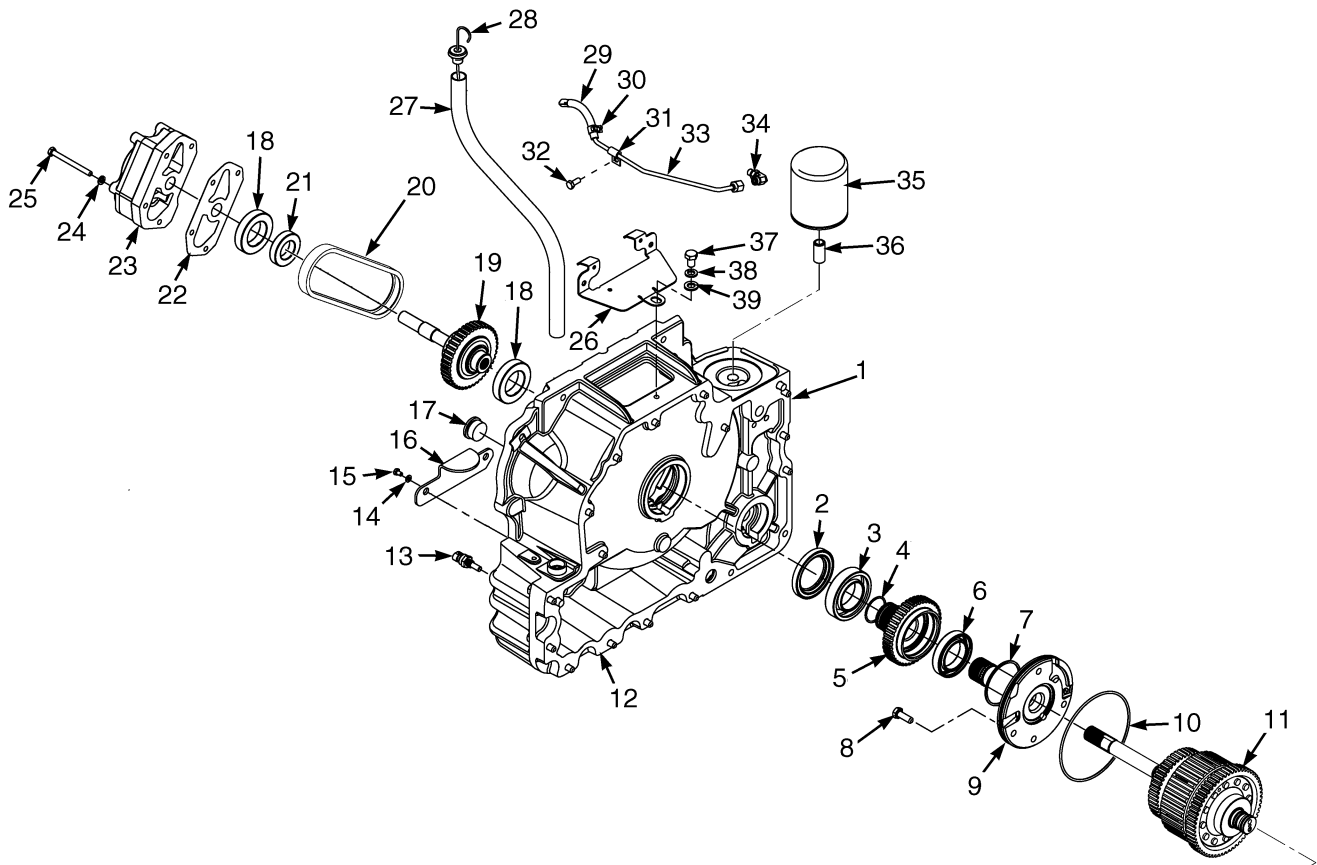
ITEM	PART NO.	DESCRIPTION	QTY
43	1612916	Spool (Regulator)	1
44	1553403	O-Ring	1
45	1569768	Shield	1
46	1527879	Capscrew	1
47	1380849	Edge Protector	2
47	4013363	Trim (Alternate Part)	2
	1566457	Baffle (Not Illustrated)	1

FOOTNOTES:

a Dry Brakes

b Wet Brakes

TRANSMISSION (FIGURE 7-34) DUAL SPEED — SHEET 2 OF 2 (→ S/N L177B13445E)



HP240492

TRANSMISSION
DUAL SPEED – SHEET 2 OF 2 (→ S/N L177B13445E)

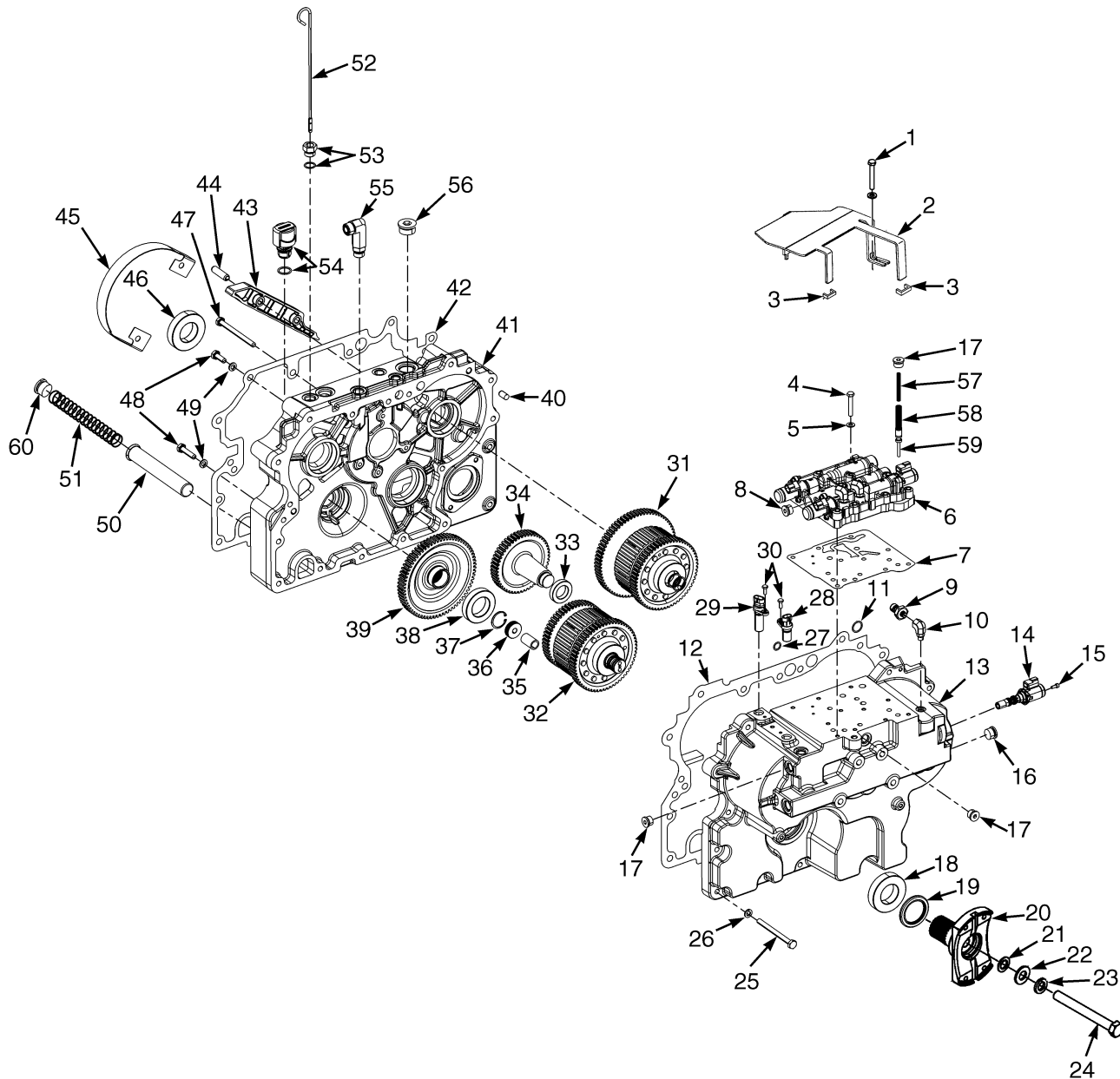
ITEM	PART NO.	DESCRIPTION	QTY
	a 1529896	Transmission Assy	1
	b 1616479	Transmission Assy (Dual Speed)	1
1	1550566	Converter Housing (Torque Converter)	1
2	1544217	Oil Seal (Torque Converter)	1
3	44310	Ball Bearing	1
4	145481	O-Ring	1
5	1541556	Sprocket	1
6	1544216	Bearing	1
7	1544218	Sealing Ring	1
8	136985	Capscrew	4
9	1525677	Stator	1
9	1516826	Bushing	1
10	16682	O-Ring	1
11	1595422	Clutch Pack (Input/Forward-Low) (☞Figure 7-41).....	1
12	1550573	Gasket (Torque Converter Housing to Cover)	1
13	1515654	Temperature Sensor	1
14	292680	Washer	2
15	292500	Capscrew	2
16	1550567	Cover Plate (Torque Converter Housing)	1
17	188210	Fitting	1
17	16983	O-Ring	1
18	43209	Ball Bearing	1
19	1550580	Sprocket (Driven)	1
20	1494750	Chain (Drive Pump)	1
21	44307	Ball Bearing	1
22	1653815	Gasket (Charge Pump)	1
23	a 1552853	Pump (27.0 CC/REV)	1
23	1623836	O-Ring	1
23	b 2073470	Pump (32.4 CC/REV Without Boost)	1
23	b 2076527	Pump (32.4 CC/REV With Boost)	1
24	292681	Lockwasher	7
25	296022	Capscrew	4
26	1566169	Cover	1
27	1566166	Dipstick Tube (Dipstick)	1
28	1516818	Dipstick	1
29	169690	Hose	1
30	1569616	Hose Clamp	2
31	164488	Clamp	1
32	136681	Capscrew	3
33	1566168	Tube	1
34	1487063	Fitting	1
34	16483	O-Ring	1
35	2075558	Transmission Filter	1
35	4020588	Transmission Filter (Alternate Part)	1
36	1558515	Fitting	1
37	292526	Capscrew	1
38	292683	Lockwasher	1
39	320161	Washer	1

FOOTNOTES:

a Dry Brakes

b Wet Brakes

TRANSMISSION (FIGURE 7-35) DUAL SPEED, WET BRAKE — SHEET 1 OF 2 (S/N L177B13446E →)



BP240101

TRANSMISSION
DUAL SPEED, WET BRAKE – SHEET 1 OF 2 (S/N L177B13446E →)

ITEM	PART NO.	DESCRIPTION	QTY
	b 1646874	Transmission Assy	1
	c 1703476	Transmission Assy	1
	d 4010632	Transmission Assy	1
	e 4032049	Transmission Assy	1
1	1527879	Capscrew	1
2	1569768	Shield	1
3	1380849	Edge Protector	2
3	4013363	Trim (Alternate Part)	2
4	292509	Capscrew	11
5	320157	Washer	11
6	1611835	Hydraulic Control Valve (☞Figure 7-43).....	1
7	1570360	Gasket	1
8	.....	Plug	1
9	2070263	Pressure Transducer	1
10	1545546	Fitting	1
11	1553403	O-Ring	4
12	1550573	Gasket (Torque Converter Housing to Cover)	1
13	1639067	Transmission Housing (Transmission)	1
14	a 1530722	Solenoid Valve	1
14	1650819	Kit-Seal	1
14	f 1660500	Solenoid Valve	1
14	1650819	Kit-Seal	1
15	293742	Screw	2
16	233693	Fitting	1
16	16485	O-Ring	1
17	235691	Fitting	3
17	16484	O-Ring	1
18	43209	Ball Bearing	1
19	1547447	Oil Seal	1
20	1550584	Yoke	1
21	86229	Seal	1
22	15135	Washer	1
23	15158	Washer	1
24	18595	Capscrew	1
25	1359458	Capscrew	16
26	388049		
	292682	Lockwasher	19
27	1553475	O-Ring	1
28	1541231	Sensor (Input Speed, TISS)	1
29	1541232	Sensor (Output Speed, TOSS)	1
30	292500	Capscrew	4
30	292680	Washer	4
31	1646882	Clutch Pack (Forward-High) (☞Figure 7-37).....	1
32	1646883	Clutch Pack (Counter/Reverse) (☞Figure 7-40).....	1
33	44306	Ball Bearing	1
34	1585760	Chain	1
35	1516851	Spacer	1
36	1525686	Nut	1
37	213099	Snap Ring	1
38	44309	Ball Bearing	1

TRANSMISSION

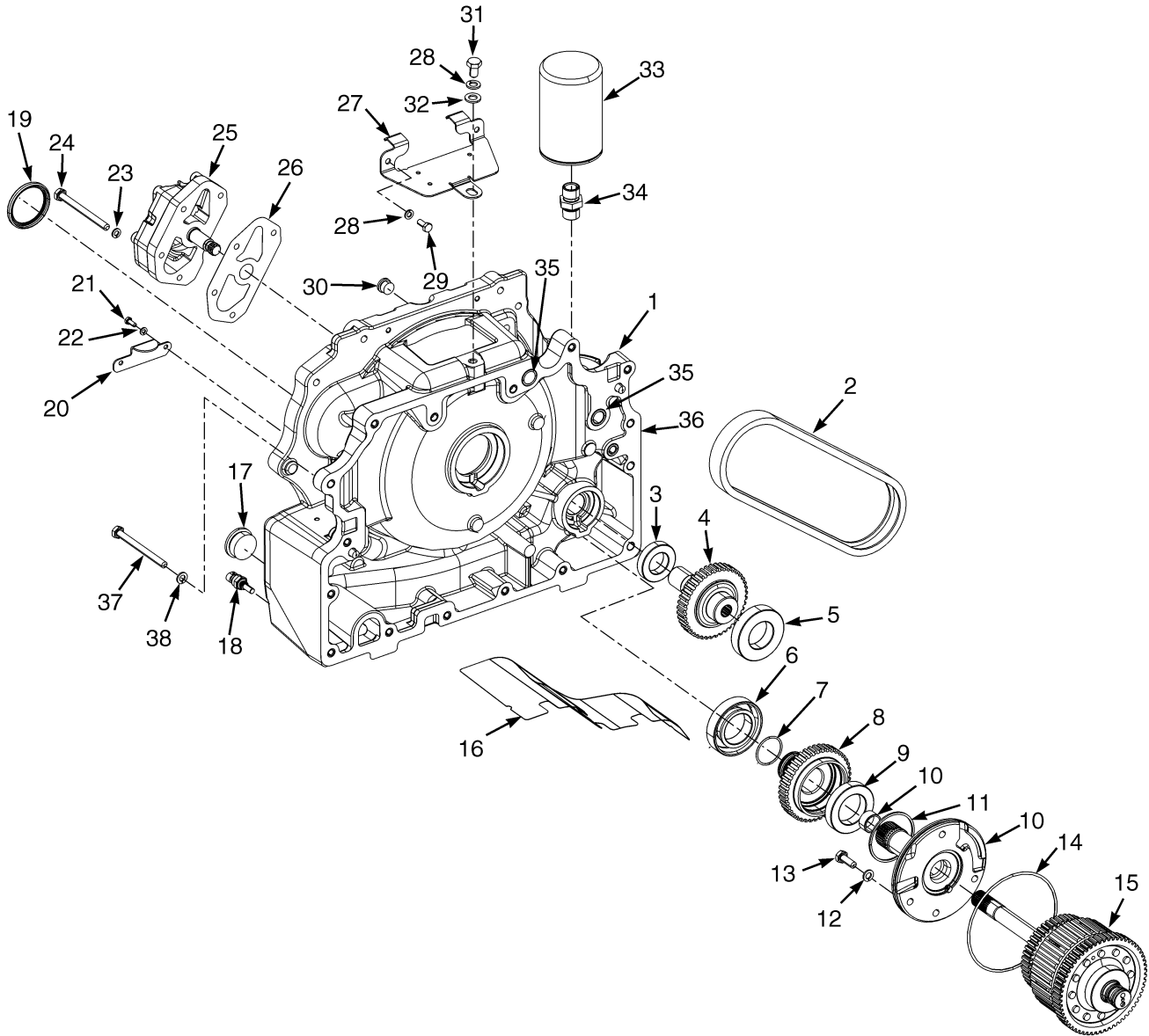
DUAL SPEED, WET BRAKE – SHEET 1 OF 2 (S/N L177B13446E →)

ITEM	PART NO.	DESCRIPTION	QTY
39	1565135	Gear (Output)	1
40	303150	Dowel	4
41	1624502	Housing (Front Cover)	1
42	1550573	Gasket (Torque Converter Housing to Cover)	1
43	1553270	Snubber	1
44	303100	Roll Pin	4
45	1624415	Cover (Pump Drive)	1
46	43209	Ball Bearing	1
47	136985	Capscrew	4
48	1359456	Bolt	16
49	388049		
	292682	Lockwasher	16
50	1550571	Screen	1
51	1550572	Spring	1
52	1624401	Dipstick	1
53	1624405	Fitting	1
53	16485	O-Ring	1
54	1632741	Breather	1
54	16486	O-Ring	1
55	1634651	Fitting	1
56	233683	Fitting	1
56	16487	O-Ring	1
57	1612917	Spring	1
58	1612918	Spring	1
59	1612916	Spool	1
60	188210	Fitting	1
60	16983	O-Ring	1

FOOTNOTES:

- | | | | |
|----------|--|----------|----------------------------|
| a | → S/N L177B22665F | d | PENDING PER ECN 10616304 → |
| b | → S/N L177B29083G | e | PENDING PER ECN 154021 → |
| c | S/N L177B29085G ↔ PENDING PER ECN 10616304 | f | S/N L177B22666F → |

TRANSMISSION (FIGURE 7-36) DUAL SPEED, WET BRAKE — SHEET 2 OF 2 (S/N L177B13446E →)



BP240100

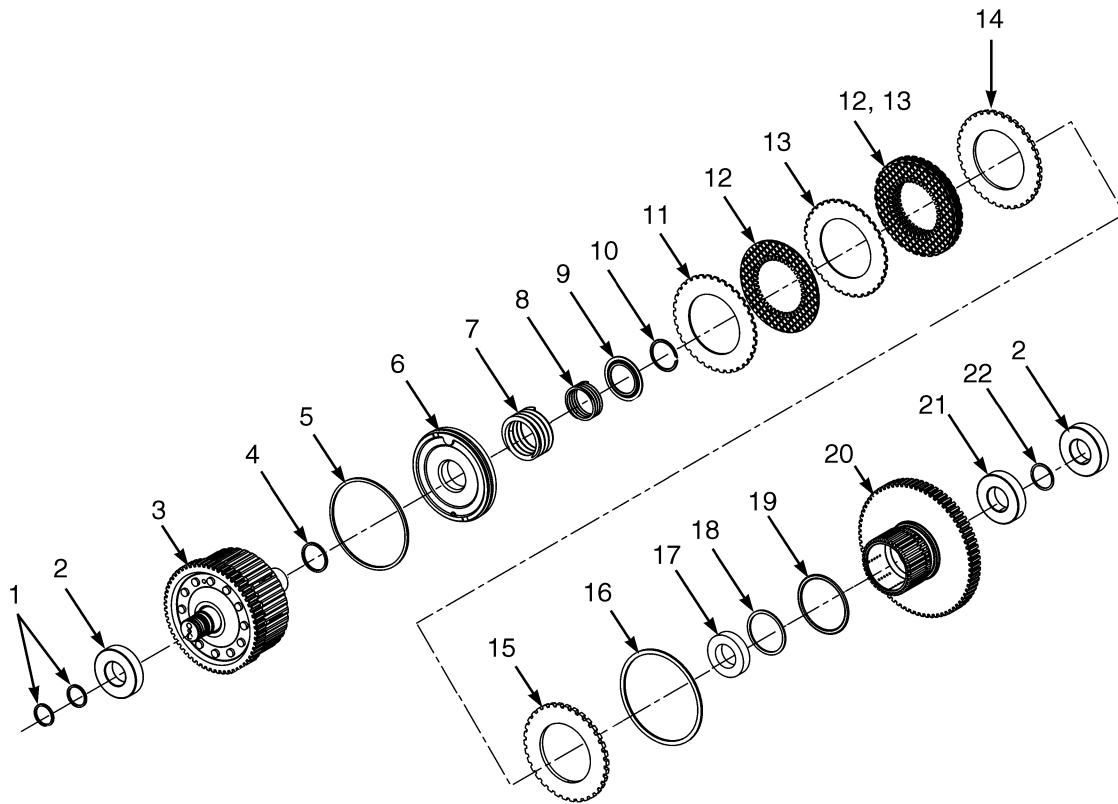
TRANSMISSION
DUAL SPEED, WET BRAKE – SHEET 2 OF 2 (S/N L177B13446E →)

ITEM	PART NO.	DESCRIPTION	QTY
	b 1646874	Transmission Assy	1
	c 1703476	Transmission Assy	1
	d 4010632	Transmission Assy	1
	e 4032049	Transmission Assy	1
1	1624504	Converter Housing (Torque Converter)	1
2	1494750	Chain (Drive Pump)	1
3	44307	Ball Bearing	1
4	1550580	Sprocket (Driven)	1
5	43209	Ball Bearing	1
6	1544216	Bearing	1
7	145481	O-Ring	1
8	a 1541556	Sprocket (Driving)	1
8	e 4010507	Sprocket	1
9	44310	Ball Bearing	1
10	1525677	Stator	1
10	1516826	Bushing	1
11	1544218	Sealing Ring	1
12	388049		
	292682	Lockwasher	4
13	136985	Capscrew	4
14	16682	O-Ring	1
15	1646881	Clutch Pack (Input/Forward-Low) (☞Figure 7-42).....	1
16	1624414	Baffle	1
17	188210	Fitting	1
17	16983	O-Ring	1
18	1515654	Temperature Sensor	1
19	1544217	Oil Seal (Torque Converter)	1
20	1550567	Cover Plate (Torque Converter Housing)	1
21	292500	Capscrew	2
22	292680	Washer	2
23	292681	Lockwasher	6
24	296022	Capscrew	4
25	1552853	Pump	1
25	1623836	O-Ring	1
26	1653815	Gasket (Charge Pump)	1
27	1566169	Cover (Converter Housing)	1
28	292683	Lockwasher	1
29	292526	Capscrew	1
30	235691	Fitting	1
31	136681	Capscrew	2
32	320161	Washer	1
33	2075558	Transmission Filter	1
34	1558515	Fitting	1
35	1553403	O-Ring	2
36	1550573	Gasket (Torque Converter Housing to Cover)	1
37	1359458	Capscrew	16
38	388049		
	292682	Lockwasher	16

FOOTNOTES:

- a** → PENDING PER ECN 154021
- b** → S/N L177B29084G
- c** S/N L177B29085G ↔ PENDING PER ECN 10616304
- d** PENDING PER ECN 10616304 →
- e** PENDING PER ECN 154021 →

FORWARD CLUTCH, HIGH (FIGURE 7-37) DUAL SPEED TRANSMISSION (S/N L177B13446E →)

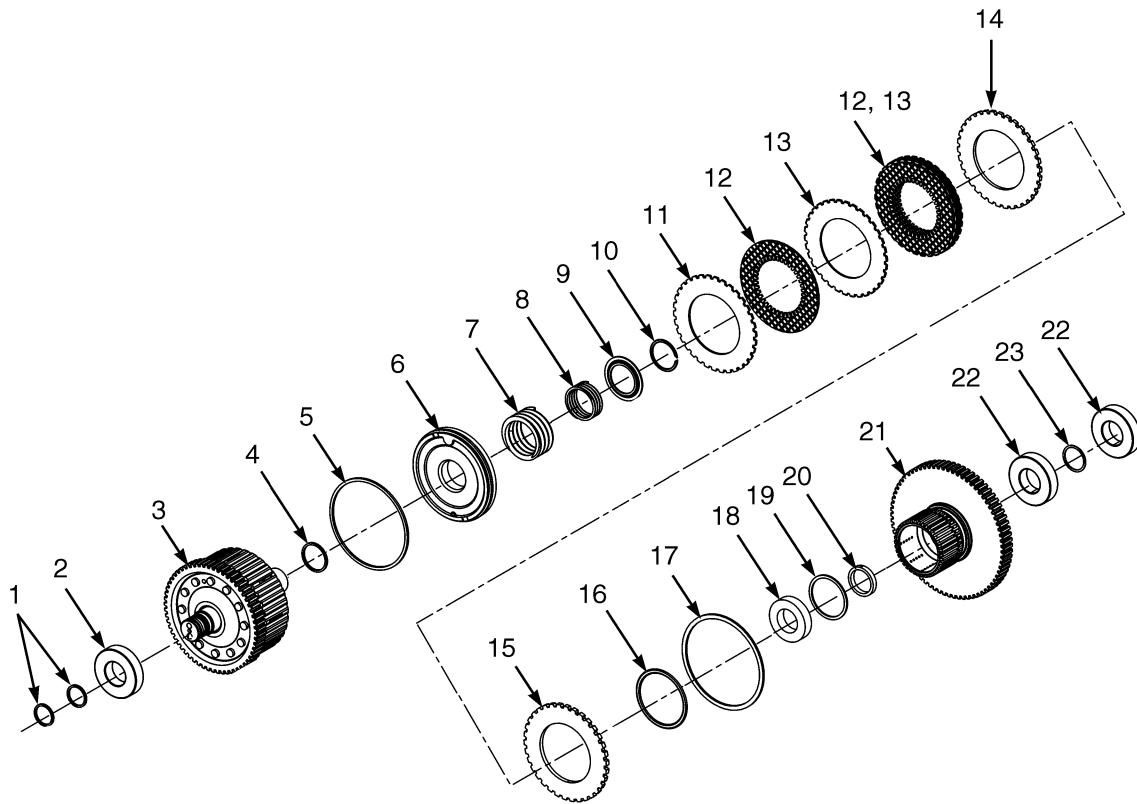


BP240104

FORWARD CLUTCH, HIGH
DUAL SPEED TRANSMISSION (S/N L177B13446E →)

ITEM	PART NO.	DESCRIPTION	QTY
	1646882	Clutch Pack (Forward-High)	1
1	.....	Seal	2
2	1651753	Ball Bearing	2
3	1651752	Shaft	1
3	4025479	Shaft (Alternate Part)	1
4	.....	Seal	1
5	.....	Seal	1
6	2085129	Piston	1
7	1581108	Spring	1
8	1581098	Spring	1
9	1581099	Spring Guide	1
10	1581100	Snap Ring	1
11	.....	Conical Plate	1
12	.....	Friction Plate	5
13	.....	Separator Plate	4
14	1537449	Pressure Plate (6.0 mm)	1
15	1581109	Backplate	1
16	1537450	Snap Ring	1
17	124603	Ball Bearing	1
18	1581107	Snap Ring	1
19	.....	Seal	1
20	1595430	Gear	1
21	43207	Ball Bearing	1
22	1581106	Snap Ring	1
	1543102	Kit-Clutch Pack Plates	1
	1595425	Kit-Clutch Pack Seals	1

FORWARD CLUTCH, HIGH (FIGURE 7-38) DUAL SPEED TRANSMISSION (→ S/N L177B13445E)

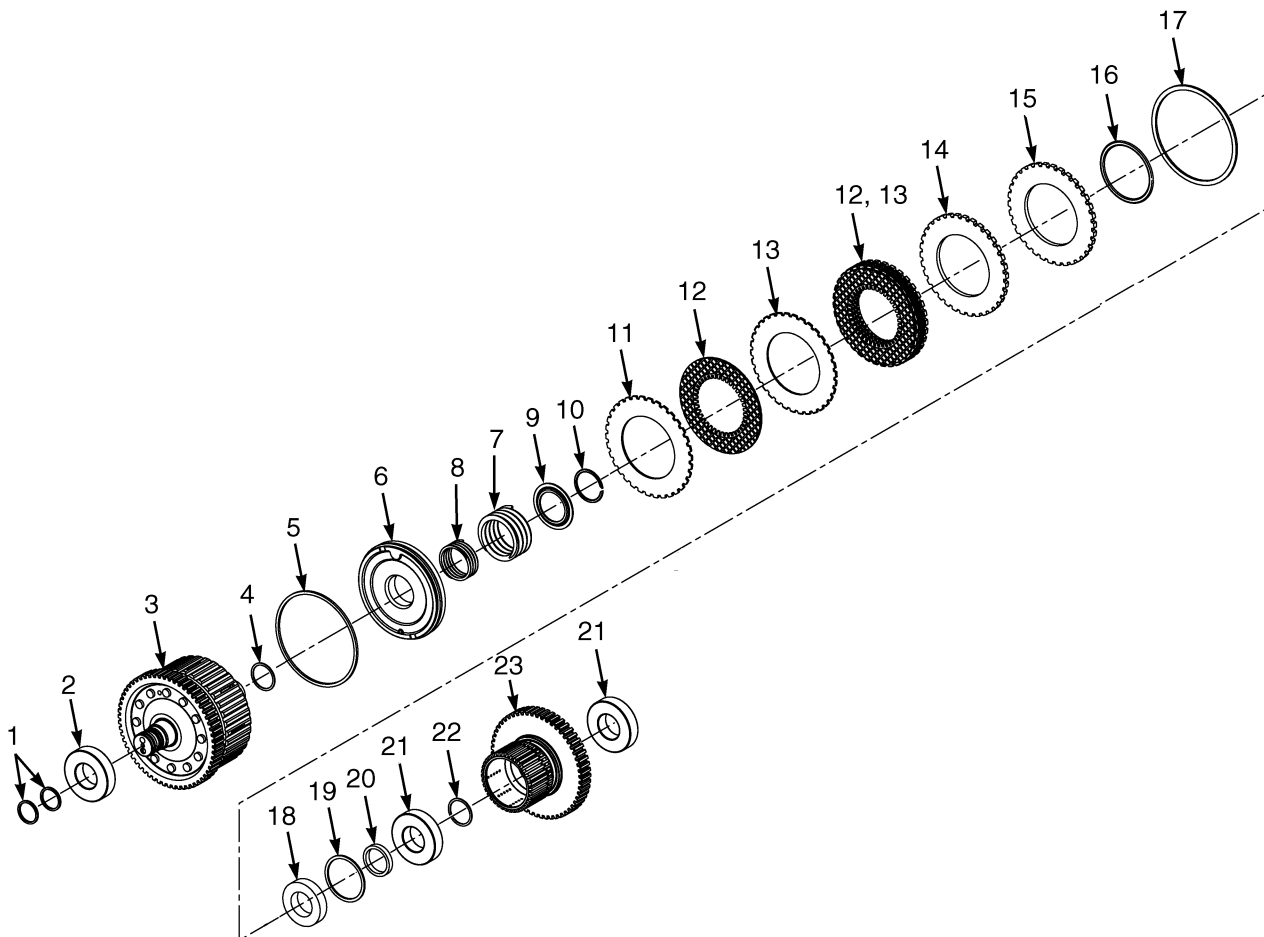


BP240053

**FORWARD CLUTCH, HIGH
DUAL SPEED TRANSMISSION (→ S/N L177B13445E)**

ITEM	PART NO.	DESCRIPTION	QTY
	1595424	Clutch Pack (Forward-High)	1
1	.....	Seal	2
2	1537455	Ball Bearing	1
3	1581097	Shaft	1
4	.....	Seal	1
5	.....	Seal	1
6	1552525	Piston	1
7	1581108	Spring	1
8	1581098	Spring	1
9	1581099	Spring Guide	1
10	1581100	Snap Ring	1
11	.....	Conical Plate	1
12	.....	Friction Plate	5
13	.....	Separator Plate	4
14	1543094	Pressure Plate (5.8 mm)	1
14	1537449	Pressure Plate (6.0 mm)	1
14	1543096	Pressure Plate (5.6 mm)	1
14	1543097	Pressure Plate (5.4 mm)	1
14	1543098	Pressure Plate (5.2 mm)	1
15	1581109	Backplate	1
16	.....	O-Ring	1
17	1537450	Snap Ring	1
18	124603	Ball Bearing	1
19	1581107	Snap Ring	1
20	1581105	Spacer	1
21	1595430	Gear	1
22	43207	Ball Bearing	1
23	1581106	Snap Ring	1
	1595426	Kit-Clutch Pack Plates/Seals	1
	1543102	Kit-Clutch Pack Plates	1
	1595425	Kit-Clutch Pack Seals	1

COUNTER/REVERSE CLUTCH (FIGURE 7-39) DUAL SPEED TRANSMISSION (→ S/N L177B13478E)

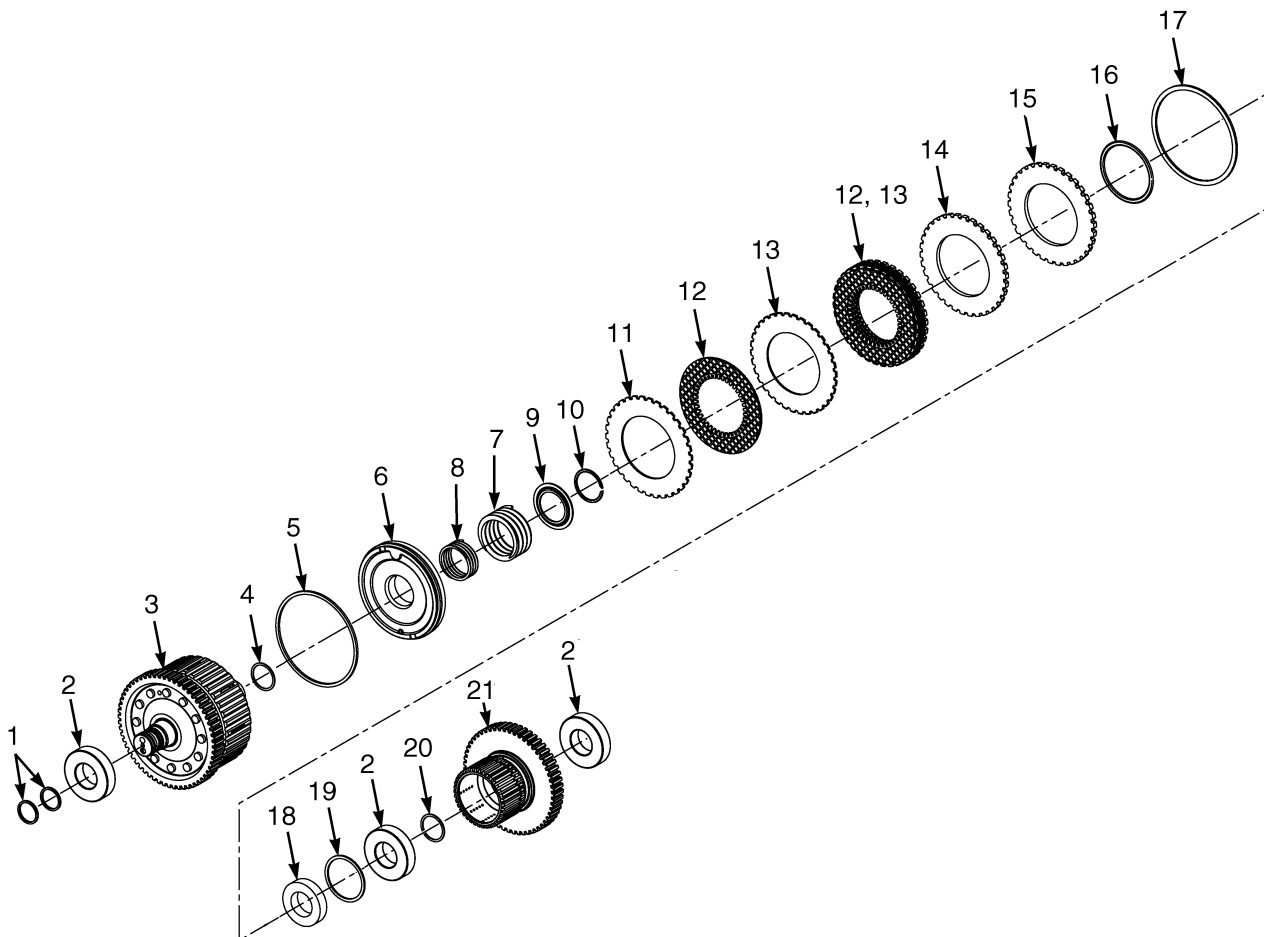


BP240052

COUNTER/REVERSE CLUTCH
DUAL SPEED TRANSMISSION (→ S/N L177B13478E)

ITEM	PART NO.	DESCRIPTION	QTY
	1595423	Clutch Pack (Counter/Reverse)	1
1	.....	Seal	2
2	2029343	Ball Bearing	2
3	1581097	Shaft	1
4	.....	Seal	1
5	.....	Seal	1
6	1552525	Piston	1
7	1581108	Spring	1
8	1581098	Spring	1
9	1581099	Spring Guide	1
10	1581100	Snap Ring	1
11	.....	Conical Plate	1
12	.....	Friction Plate	5
13	.....	Separator Plate	4
14	1543094	Pressure Plate (5.8 mm)	1
14	1537449	Pressure Plate (6.0 mm)	1
14	1543096	Pressure Plate (5.6 mm)	1
14	1543097	Pressure Plate (5.4 mm)	1
14	1543098	Pressure Plate (5.2 mm)	1
15	1581109	Backplate	1
16	.....	O-Ring	1
17	1537450	Snap Ring	1
18	124603	Ball Bearing	1
19	1581107	Snap Ring	1
20	1581105	Spacer	1
21	43207	Ball Bearing	2
22	1581106	Snap Ring	1
23	1595429	Gear	1
	1595426	Kit-Clutch Pack Plates/Seals	1
	1543102	Kit-Clutch Pack Plates	1
	1595425	Kit-Clutch Pack Seals	1

COUNTER/REVERSE CLUTCH (FIGURE 7-40) DUAL SPEED TRANSMISSION (S/N L177B13479E →)

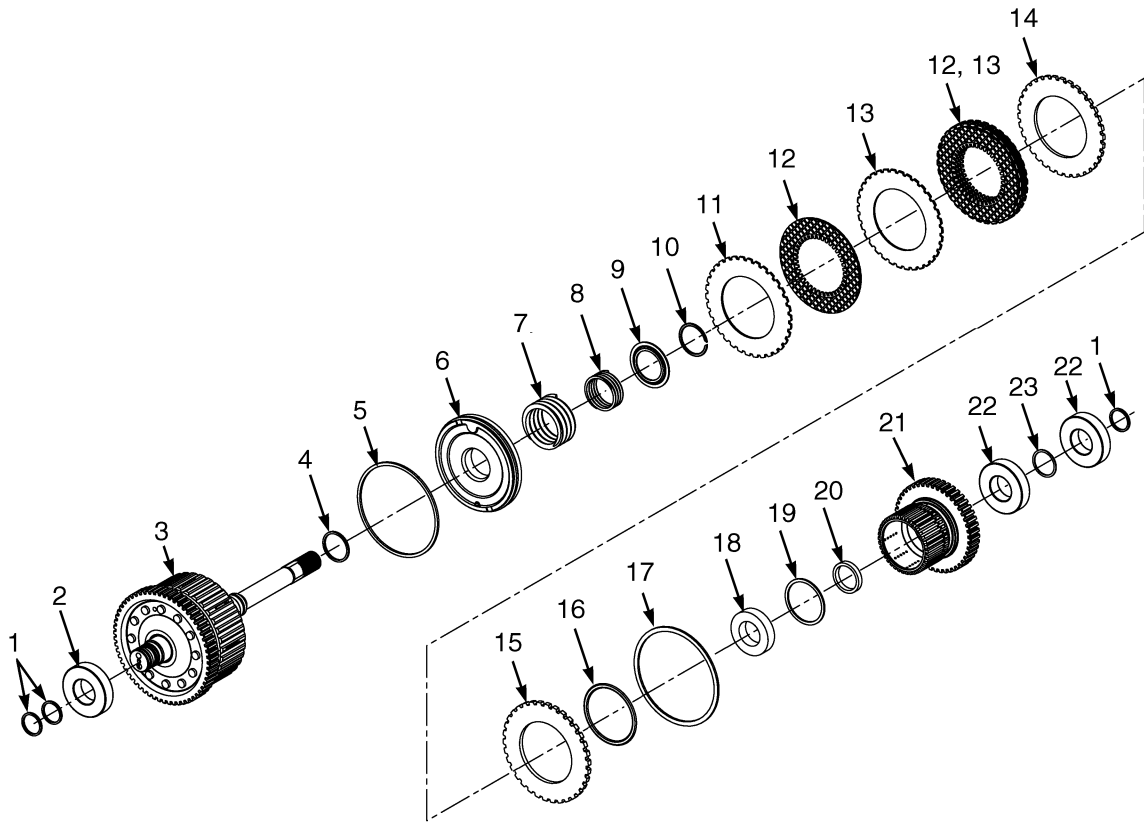


BP240102

**COUNTER/REVERSE CLUTCH
DUAL SPEED TRANSMISSION (S/N L177B13479E →)**

ITEM	PART NO.	DESCRIPTION	QTY
	1646883	Clutch Pack (Counter/Reverse)	1
1	.....	Seal	3
2	43207	Ball Bearing	3
3	1651752	Shaft	1
3	4025479	Shaft (Alternate Part)	1
4	.....	Seal	1
5	.....	Seal	1
6	2085129	Piston	1
7	1581108	Spring	1
8	1581098	Spring	1
9	1581099	Spring Guide	1
10	1581100	Snap Ring	1
11	.....	Conical Plate	1
12	.....	Friction Plate	5
13	.....	Separator Plate	4
14	1537449	Pressure Plate (6.0 mm)	1
15	1581109	Backplate	1
16	.....	Seal	1
17	1537450	Snap Ring	1
18	124603	Ball Bearing	1
19	1581107	Snap Ring	1
20	1581106	Snap Ring	1
20	1537459	Snap Ring (Alternate Part)	1
21	1595429	Gear	1
	1543102	Kit-Clutch Pack Plates	1
	1595425	Kit-Clutch Pack Seals	1

INPUT/FORWARD CLUTCH, LOW (FIGURE 7-41) DUAL SPEED TRANSMISSION (→ S/N L177B13441E)

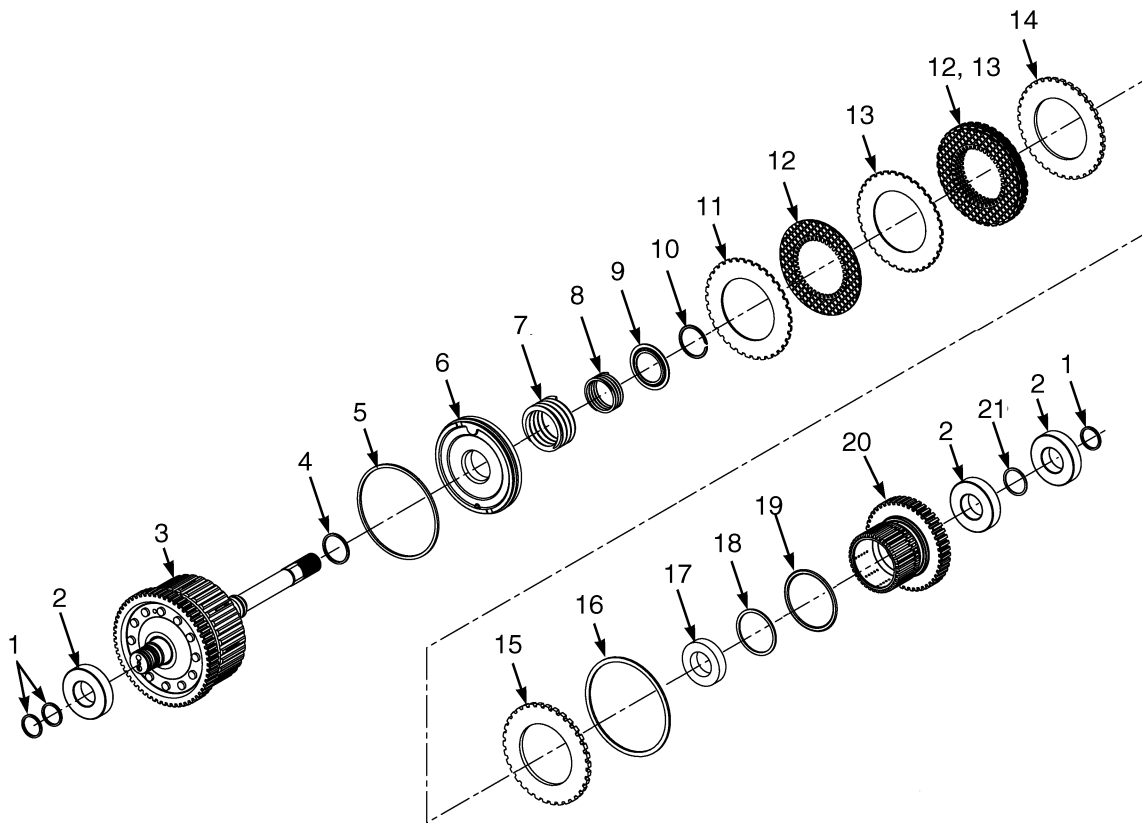


BP240050

**INPUT/FORWARD CLUTCH, LOW
DUAL SPEED TRANSMISSION (→ S/N L177B13441E)**

ITEM	PART NO.	DESCRIPTION	QTY
	1595422	Clutch Pack (Input/Forward-Low)	1
1	.....	Seal	3
2	2029343	Ball Bearing	1
3	1581112	Shaft	1
4	.....	Seal	1
5	.....	Seal	1
6	1552525	Piston	1
7	1581108	Spring	1
8	1581098	Spring	1
9	1581099	Spring Guide	1
10	1581100	Snap Ring	1
11	.....	Conical Plate	1
12	.....	Friction Plate	5
13	.....	Separator Plate	4
14	1543094	Pressure Plate (5.8 mm)	1
14	1537449	Pressure Plate (6.0 mm)	1
14	1543096	Pressure Plate (5.6 mm)	1
14	1543097	Pressure Plate (5.4 mm)	1
14	1543098	Pressure Plate (5.2 mm)	1
15	1581109	Backplate	1
16	.....	Ring	1
17	1537450	Snap Ring	1
18	124603	Ball Bearing	1
19	1581107	Snap Ring	1
20	1581105	Spacer	1
21	1595428	Gear	1
22	43207	Ball Bearing	2
23	1581106	Snap Ring	1
	1595426	Kit-Clutch Pack Plates/Seals	1
	1543102	Kit-Clutch Pack Plates	1
	1595425	Kit-Clutch Pack Seals	1

INPUT/FORWARD CLUTCH, LOW (FIGURE 7-42) DUAL SPEED TRANSMISSION (S/N L177B13442E →)

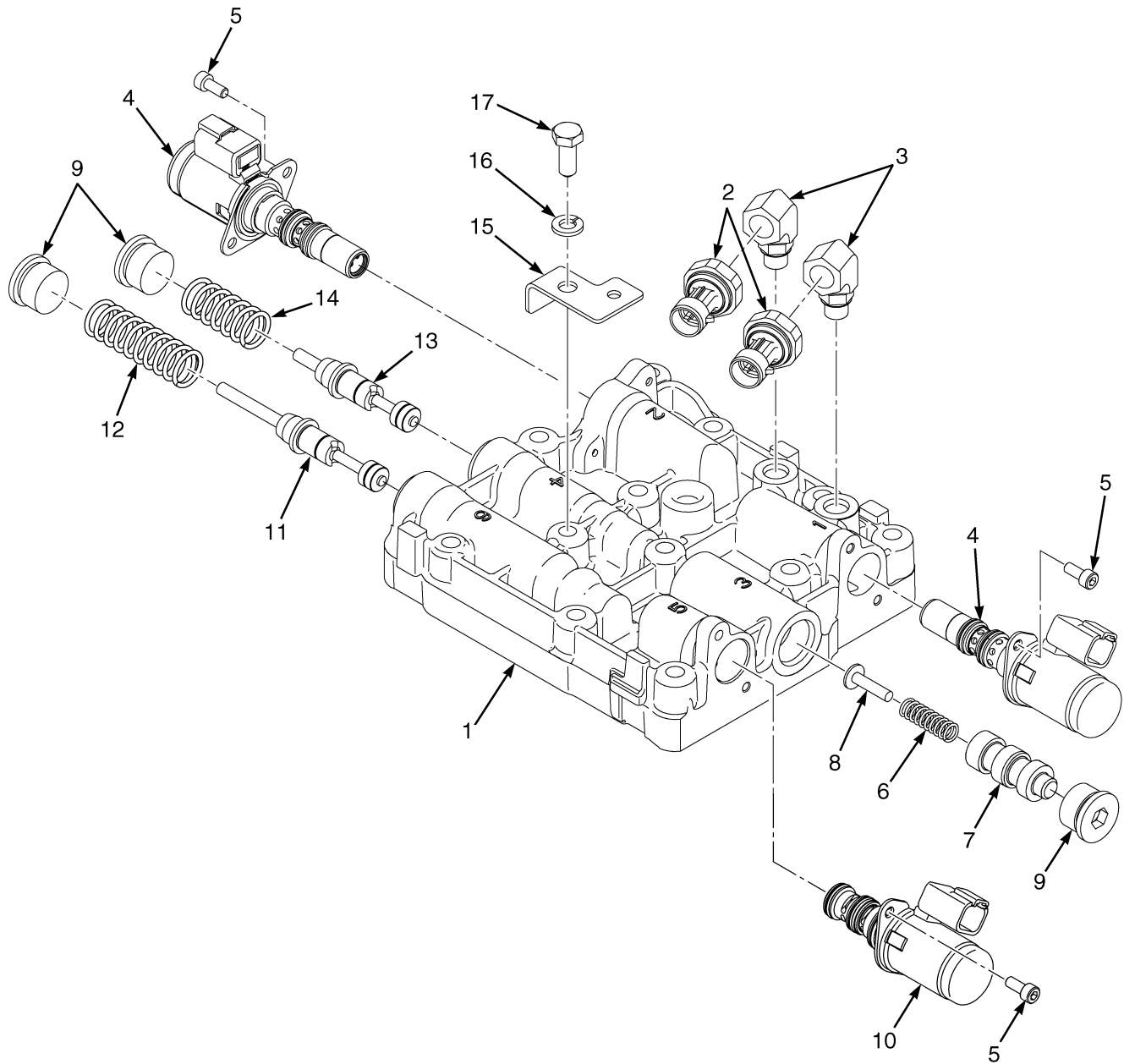


BP240103

INPUT/FORWARD CLUTCH, LOW
DUAL SPEED TRANSMISSION (S/N L177B13442E →)

ITEM	PART NO.	DESCRIPTION	QTY
	1646881	Clutch Pack (Input/Forward-Low)	1
1	.....	Seal	3
2	43207	Ball Bearing	3
3	1651750	Shaft	1
3	4025478	Shaft (Alternate Part)	1
4	.....	Seal	1
5	.....	Seal	1
6	2085129	Piston	1
7	1581108	Spring	1
8	1581098	Spring	1
9	1581099	Spring Guide	1
10	1581100	Snap Ring	1
11	.....	Conical Plate	1
12	.....	Friction Plate	5
13	.....	Separator Plate	4
14	1537449	Pressure Plate (6.0 mm)	1
15	1581109	Backplate	1
16	1537450	Snap Ring	1
17	124603	Ball Bearing	1
18	1581107	Snap Ring	1
19	.....	Seal	1
20	1595427	Gear	1
20	1595428	Gear (Alternate Part)	1
21	1581106	Snap Ring	1
21	1537459	Snap Ring (Alternate Part)	1
	1543102	Kit-Clutch Pack Plates	1
	1595425	Kit-Clutch Pack Seals	1

CONTROL VALVE (FIGURE 7-43) TRANSMISSION (→ S/N L177B19874E (HIGH PRESSURE IDLE)) (→ S/N L177B19274E (LOW PRESSURE IDLE))



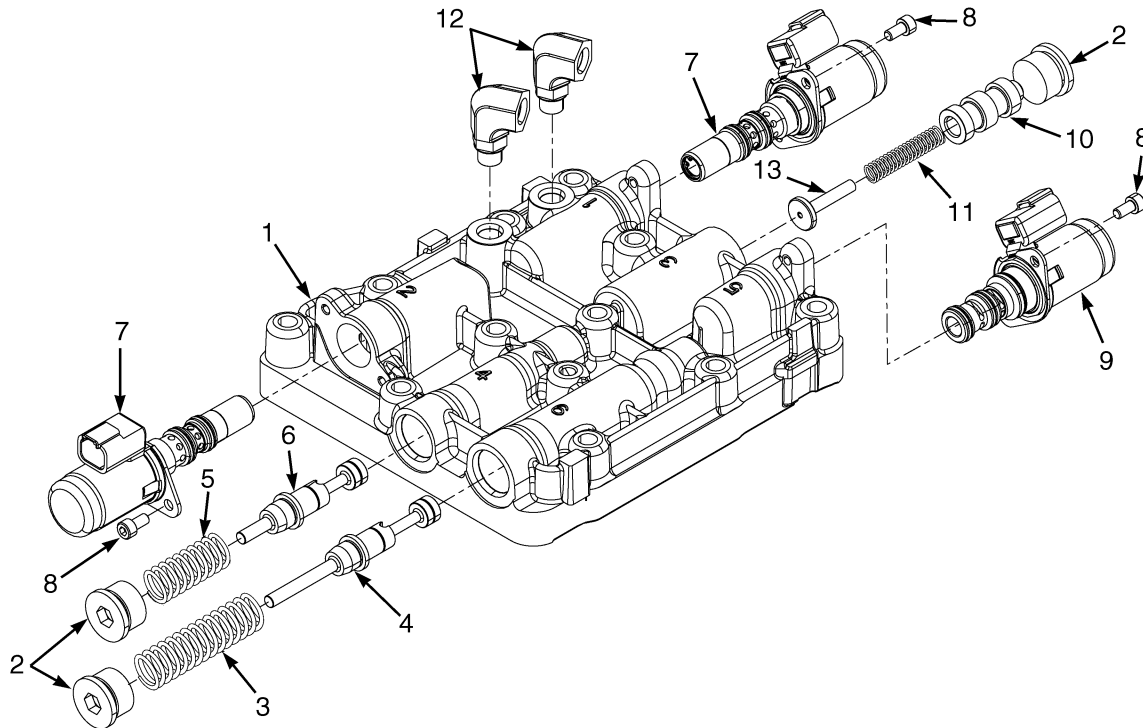
BP240046

CONTROL VALVE
TRANSMISSION (→ S/N L177B19874E (HIGH PRESSURE IDLE))
(→ S/N L177B19274E (LOW PRESSURE IDLE))

ITEM	PART NO.	DESCRIPTION	QTY
	1613695	Hydraulic Control Valve (Low Pressure)	1
	1611835	Hydraulic Control Valve (High Pressure)	1
1	.....	Body	1
2	2070263	Pressure Transducer	2
3	1545546	Fitting	2
3	16481	O-Ring	2
4	1530722	Solenoid Valve (Forward and Reverse)	2
4	1650819	Kit-Seal	1
5	293742	Screw	6
6	1590866	Return Spring	1
7	1590865	Spool (Cut-Off) (Supply)	1
8	1590839	Spool (Stop)	1
9	233693	Fitting	3
9	16485	O-Ring	3
10	1520660	Solenoid	1
11	1613470	Spool (High Pressure Proportional Supply Regulator)	1
11	1610746	Spool (Low Pressure, Proportional Supply Regulator)	1
12	1550561	Spring (Proportional Supply Regulator)	1
13	1544759	Spool (Torque Converter Regulator)	1
14	1514138	Spring (Torque Converter Regulator)	1
15	1562310	Clip	1
16	292681	Lockwasher	1
17	136681	Capscrew	1

CONTROL VALVE ASSEMBLY (FIGURE 7-44)

(S/N L177B19875E → (HIGH PRESSURE IDLE)) (S/N L177B19275E → (LOW PRESSURE IDLE))



BP240127

ITEM	PART NO.	DESCRIPTION	QTY
	1665204	Valve (High Pressure) (Wet Brake)	1
	1665205	Valve (Low Pressure) (Dry Brake)	1
1	.....	Body	1
2	233693	Fitting	3
3	1550561	Spring	1
4	1613470	Spool (High Pressure)	1
4	1610746	Spool (Low Pressure)	1
5	1514138	Spring	1
6	1544759	Spool	1
7	1660500	Solenoid Valve	2
7	1650819	Kit-Seal	1
8	293741	Capscrew	6
9	1520660	Solenoid	1
10	1590865	Spool (Cut-Off)	1
11	1590866	Return Spring	1
12	1545546	Fitting	2
13	1590839	Spool (Stop)	1

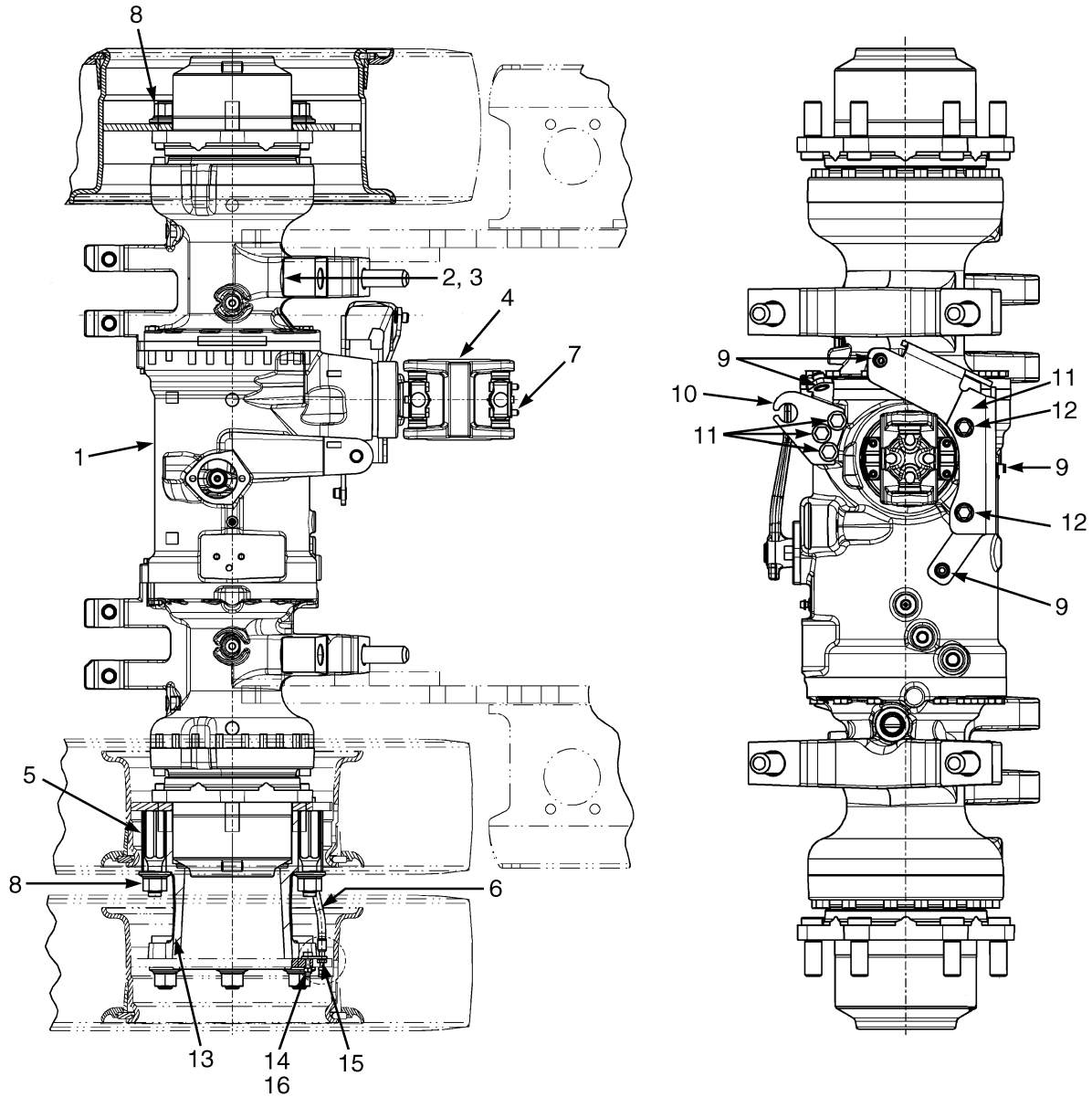
8

DRIVE AXLE

**SECTION 8
DRIVE AXLE**

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DRIVE AXLE AND ATTACHING PARTS (FIGURE 8-1) WET BRAKE



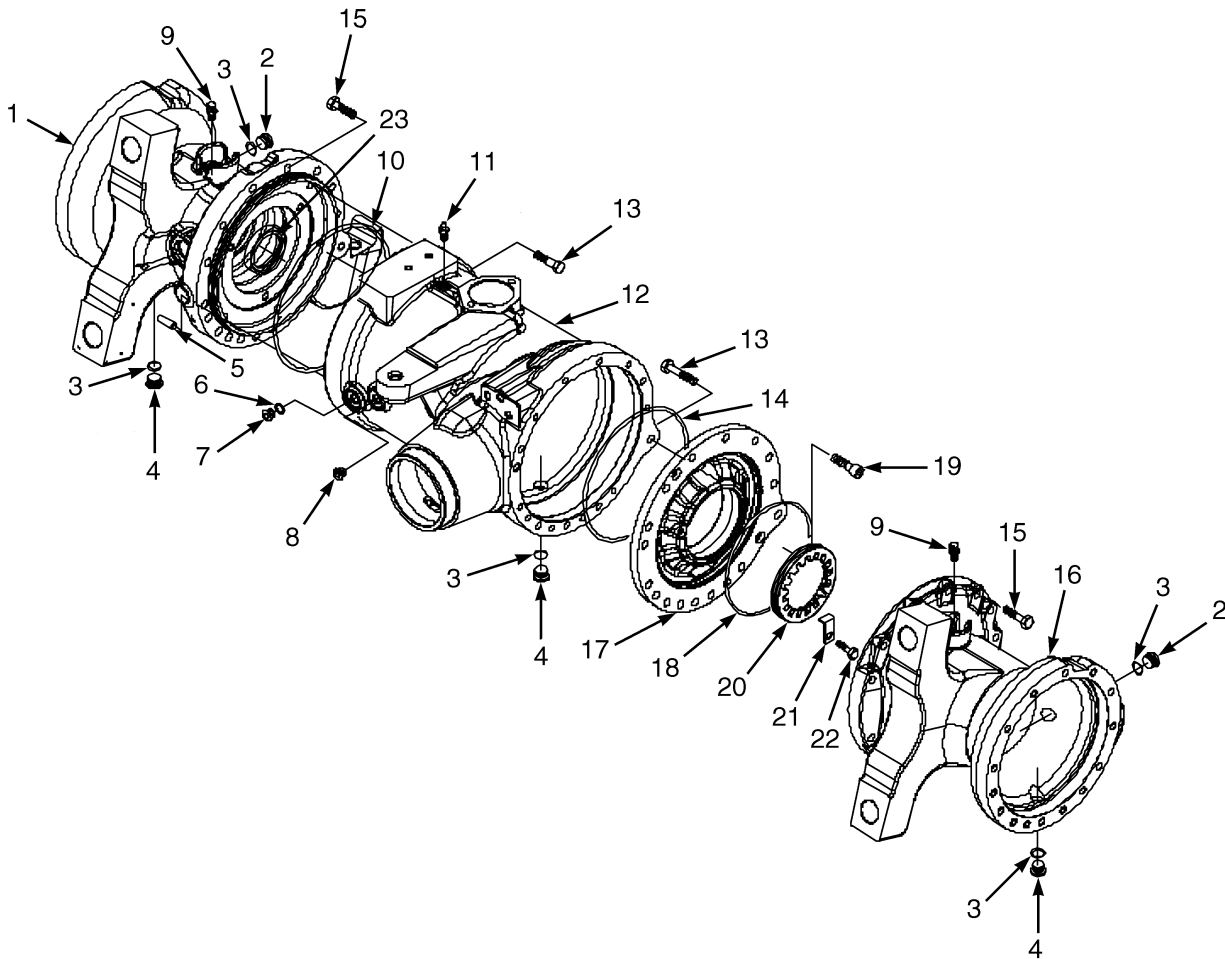
BP070074

**DRIVE AXLE AND ATTACHING PARTS
WET BRAKE****KEY:****A: Single Wheel****B: Dual Wheel**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	b 1539245	Drive Axle (14.52 Overall Ratio)	1	1
1	a 1539246	Drive Axle (17.82 Overall Ratio)	1	1
1	c 2070734	Drive Axle (12.79 Overall Ratio)	1	1
2	296434	Washer	4	4
3	226430	Capscrew	4	4
4	1600539	Drive Shaft	1	1
4	1611535	Coupling	1	1
4	1566462	Universal Joint	1	1
5	1545401	Stud .....	..	12
6	1583169	Extension .....	..	2
7	293616	Capscrew	8	8
8	1537133	Wheel Nut	6	12
9	1527884	Capscrew	3	3
10	1580213	Plate	1	1
11	1585528	Bracket	1	1
12	1527879	Capscrew	2	2
13	1613386	Wheel Hub .....	..	2
13	1613383	Hub .....	..	1
13	1532337	Wheel Stud .....	..	6
14	1584690	Bracket .....	..	2
15	136687	Nut .....	..	2
16	292680	Washer .....	..	2

FOOTNOTES:**a** GM 2.4L, Yanmar 3.3L**c** Yanmar 3.3L**b** Mazda Engine 2.0/2.2L, GM 2.4L, Yanmar 2.6L

AXLE HOUSING (FIGURE 8-2) WET BRAKE

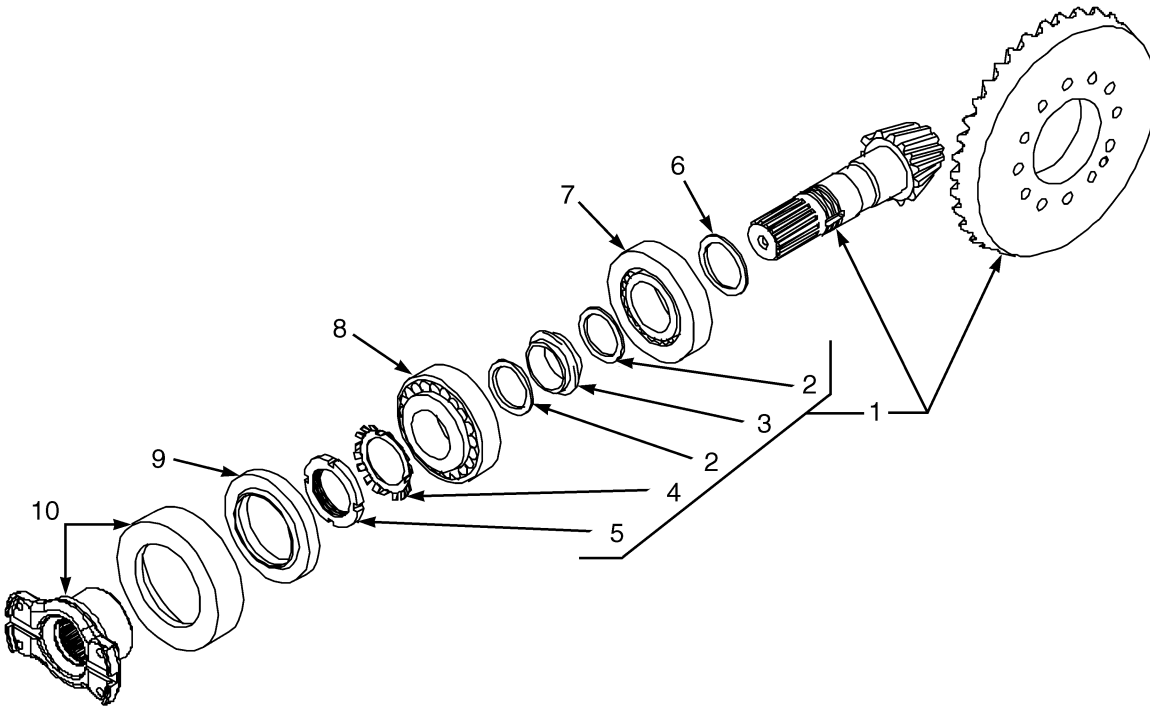


BP070063

**AXLE HOUSING
WET BRAKE**

ITEM	PART NO.	DESCRIPTION	QTY
	1539245	Drive Axle (14.52 Overall Ratio)	1
	1539246	Drive Axle (17.82 Overall Ratio)	1
	2070734	Drive Axle (12.79 Overall Ratio)	1
1	1589789	Drive Axle Housing (LH)	1
2	1589792	Plug (Fluid Check And Fill)	2
3	1589791	O-Ring	5
4	1589792	Plug (Fluid Drain)	5
5	1589793	Pin	2
6	1589794	Washer	1
7	1589795	Plug	1
8	1589797	Plug	1
9	1557392	Breather	2
10	1589798	O-Ring	1
11	1557383	Breather	1
12	1589799	Valve Section	1
13	1589807	Bolt	2
14	1589801	O-Ring	1
15	1589806	Bolt	30
16	1589803	Drive Axle Housing (RH)	1
17	1589804	Support Plate	1
18	1589805	O-Ring	1
19	1589808	Capscrew	2
20	1589811	Nut	1
21	1589812	Plate (Locking)	1
22	1589813	Bolt	1
23	1589814	Sealing Ring	1

**BEVEL GEAR (FIGURE 8-3)
WET BRAKE**

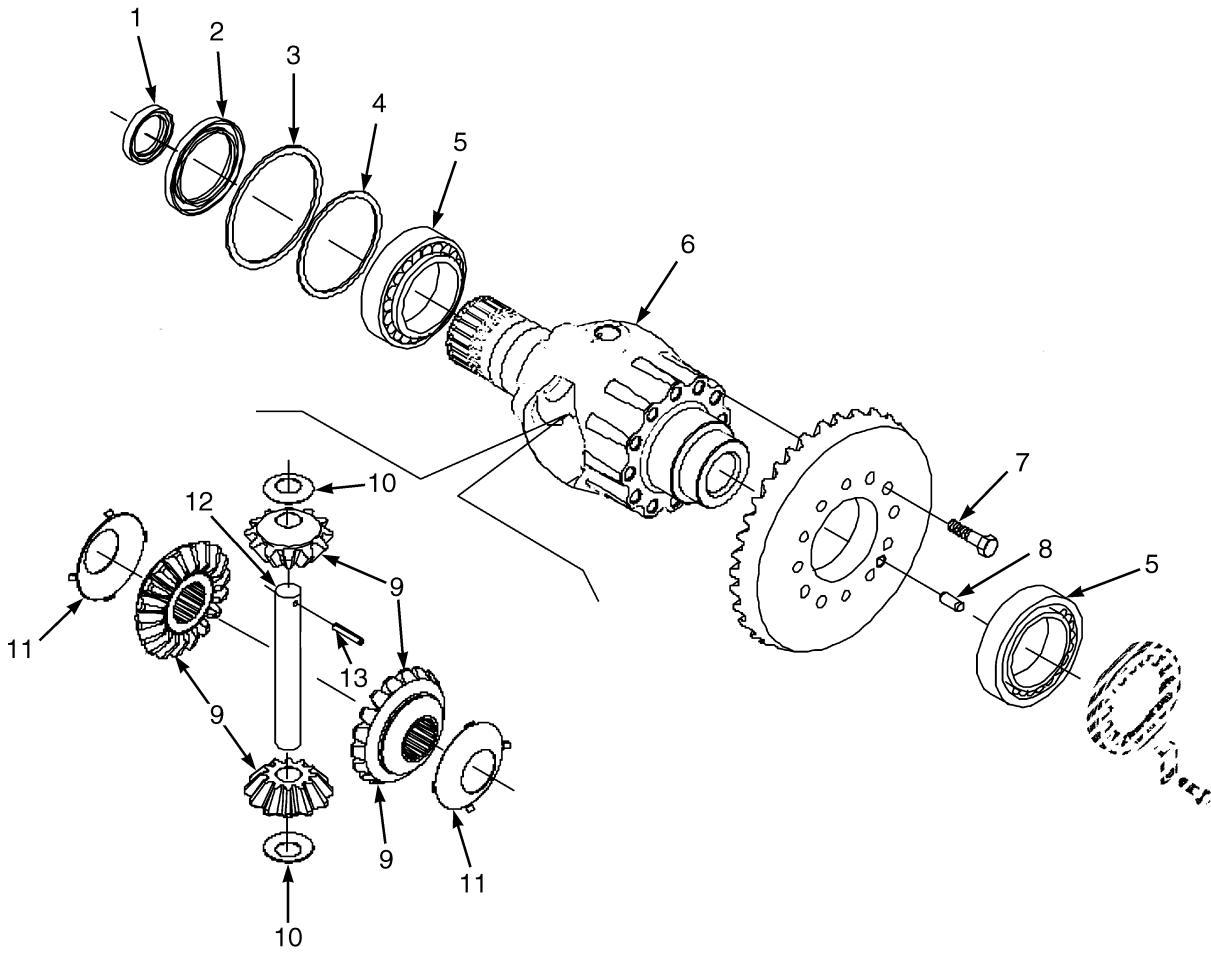


BP070020

**BEVEL GEAR
WET BRAKE**

ITEM	PART NO.	DESCRIPTION	QTY
	1539245	Drive Axle (14.52 Overall Ratio)	1
	1539246	Drive Axle (17.82 Overall Ratio)	1
	2070734	Drive Axle (12.79 Overall Ratio)	1
1	1590206	Kit-Gear and Pinion (14.52 Overall Ratio)	1
1	1589815	Kit-Gear and Pinion (17.82 Overall Ratio)	1
1	1590204	Kit-Gear and Pinion (12.79 Overall Ratio)	1
2	1589816	Washer	2
3	1589817	Spacer	1
4	1589818	Washer	1
5	1589819	Nut	1
6	1589820	Shim (2.0 mm)	AR
6	1589821	Shim (2.1 mm)	AR
6	1589822	Shim (2.2 mm)	AR
6	1589823	Shim (2.3 mm)	AR
6	1589824	Shim (2.4 mm)	AR
6	1589825	Shim (2.5 mm)	AR
6	1589826	Shim (2.6 mm)	AR
6	1589827	Shim (2.7 mm)	AR
6	1589828	Shim (2.8 mm)	AR
7	1589829	Bearing	1
8	1589830	Bearing	1
9	1589831	Sealing Ring	1
10	1589832	Flange (Input)	1

**DIFFERENTIAL (FIGURE 8-4)
WET BRAKE**

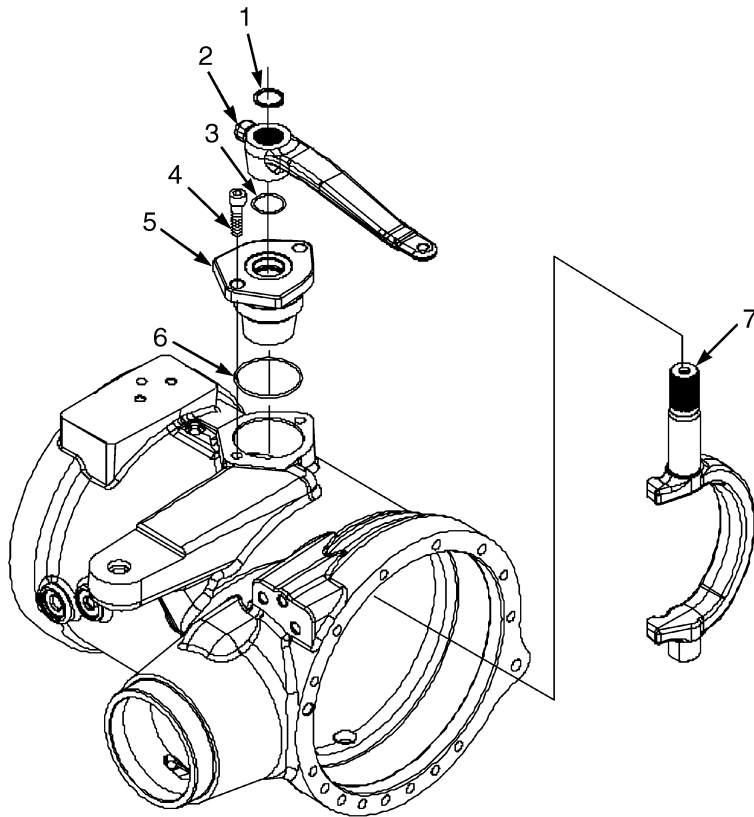


BP070022

**DIFFERENTIAL
WET BRAKE**

ITEM	PART NO.	DESCRIPTION	QTY
	1539245	Drive Axle (14.52 Overall Ratio)	1
	1539246	Drive Axle (17.82 Overall Ratio)	1
	2070734	Drive Axle (12.79 Overall Ratio)	1
1	1589833	Sealing Ring	1
2	1589834	Sealing Ring	1
3	1610522	Spacer	1
4	1589835	Shim (0.5 mm)	AR
4	1589836	Shim (0.3 mm)	AR
4	1589837	Shim (0.1 mm)	AR
4	1589838	Shim (0.05 mm)	AR
5	1557445	Bearing	2
6	1589839	Differential Housing	1
7	1589840	Bolt	12
8	1589841	Pin	1
9	1589842	Gear Set	1
10	1589843	Thrust Washer	2
11	1589844	Thrust Washer	2
12	1589845	Drive Shaft	1
13	1589846	Dowel	1

PARK BRAKE (FIGURE 8-5) WET BRAKE

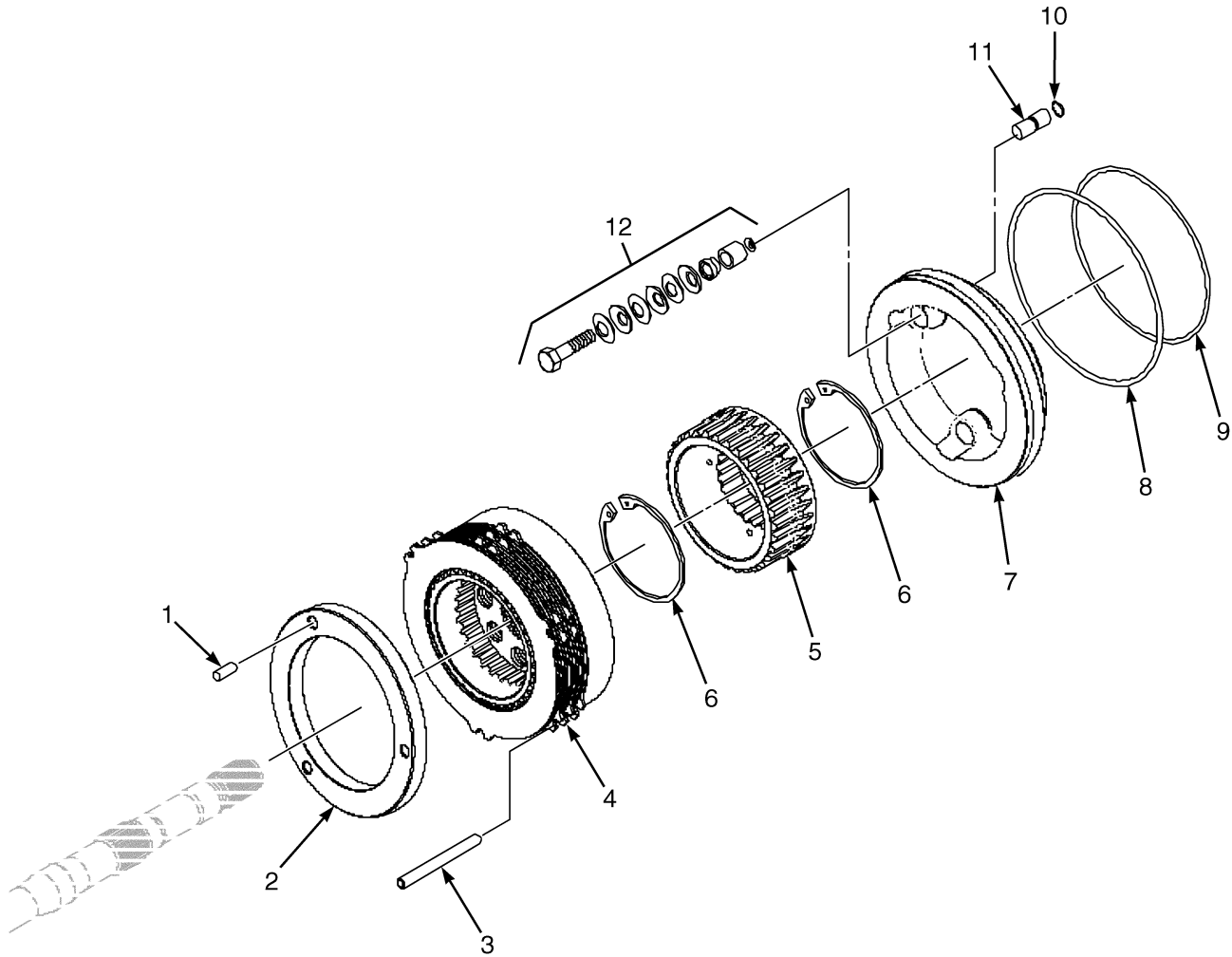


BP070023

ITEM	PART NO.	DESCRIPTION	QTY
	1539245	Drive Axle (14.52 Overall Ratio)	1
	1539246	Drive Axle (17.82 Overall Ratio)	1
	2070734	Drive Axle (12.79 Overall Ratio)	1
1	1589847	Snap Ring	1
2	1589848	Parking Brake Lever	1
3	1589849	O-Ring	1
4	1589850	Bolt	2
5	1589851	Flange	1

ITEM	PART NO.	DESCRIPTION	QTY
6	1589852	O-Ring	1
7	1589853	Shaft	1

WET BRAKES (FIGURE 8-6)

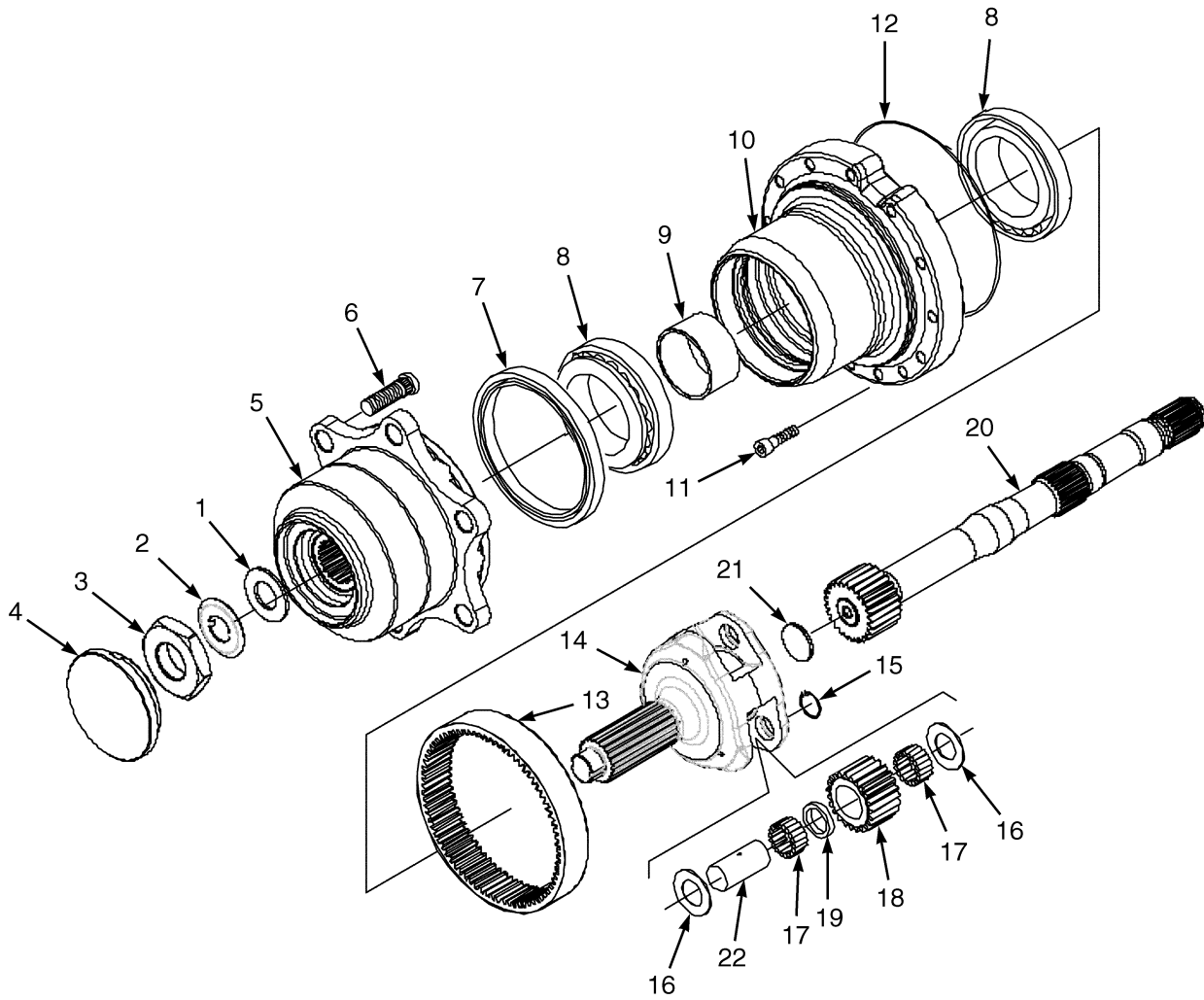


BP070024

WET BRAKES

ITEM	PART NO.	DESCRIPTION	QTY
	1539245	Drive Axle (14.52 Overall Ratio)	1
	1539246	Drive Axle (17.82 Overall Ratio)	1
	2070734	Drive Axle (12.79 Overall Ratio)	1
1	1610516	Pin	3
2	1610521	Drive Plate	1
3	1589854	Pin	6
4	1610506	Brake Assembly	1
4	4038135	Kit-Brake Disk	1
5	1610512	Hub (Spline)	1
6	1610514	Snap Ring	2
7	1589856	Piston	1
8	1589857	O-Ring	1
9	1610508	O-Ring	1
10	1589860	O-Ring	2
11	1589861	Pin	2
12	1610510	Kit-Self Adjusting	1

WHEEL HUB (FIGURE 8-7) WET BRAKE

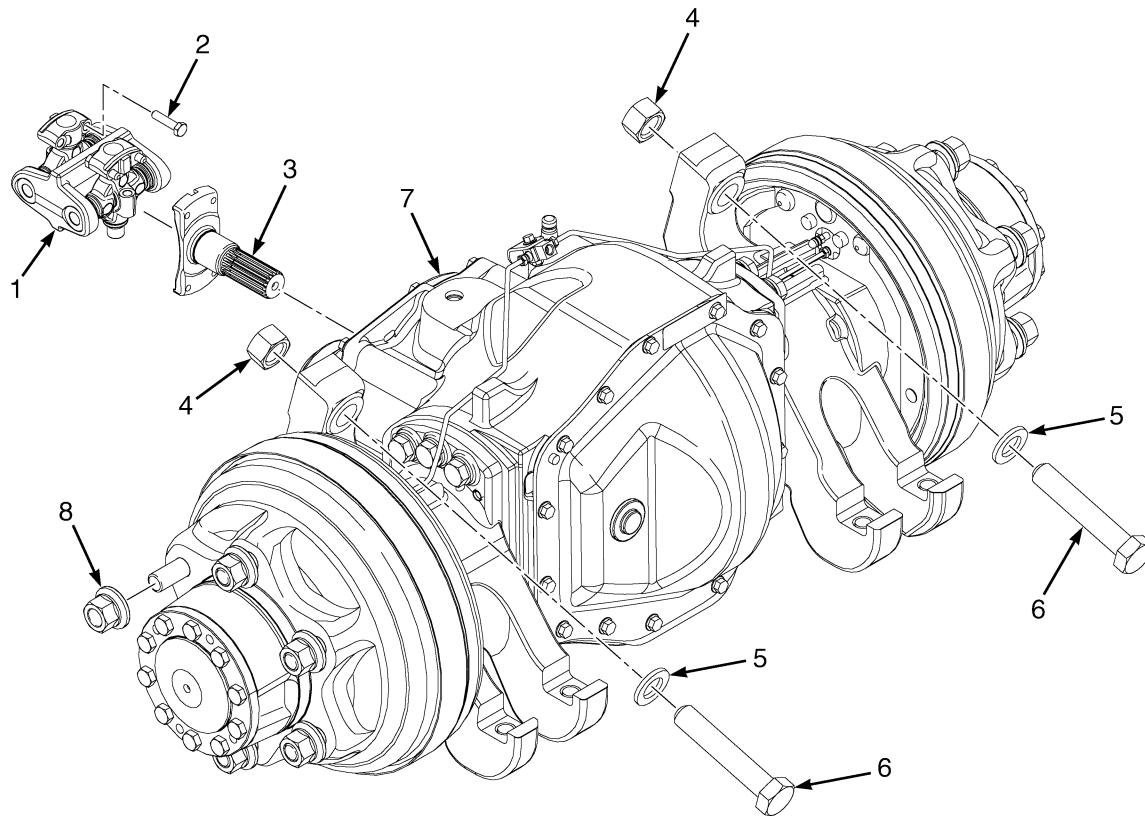


BP0700025

**WHEEL HUB
WET BRAKE**

ITEM	PART NO.	DESCRIPTION	QTY
	1539245	Drive Axle (14.52 Overall Ratio)	1
	1539246	Drive Axle (17.82 Overall Ratio)	1
	2070734	Drive Axle (12.79 Overall Ratio)	1
1	1613375	Washer	2
2	1613376	Thrust Washer	2
3	1613377	Nut	2
4	1613378	Plug	2
5	1589867	Wheel Hub	2
6	1589868	Stud	6
7	1613379	Sealing Ring	2
8	1589870	Bearing	4
9	1613380	Spacer	2
10	1589872	Support	2
11	1589873	Bolt	30
12	1589874	O-Ring	2
13	1589875	Ring Gear	2
14	1589876	Carrier	2
15	1613381	Snap Ring	6
16	1589878	Thrust Washer	12
17	1589879	Needle Bearing	28
18	1589880	Gear	6
19	1589881	Spacer	6
20	1589886	Axle Shaft (RH)	1
20	1589887	Axle Shaft (LH)	1
21	1613382	Washer	2
22	1589924	Shaft	6

DRIVE AXLE AND ATTACHING PARTS (FIGURE 8-8)

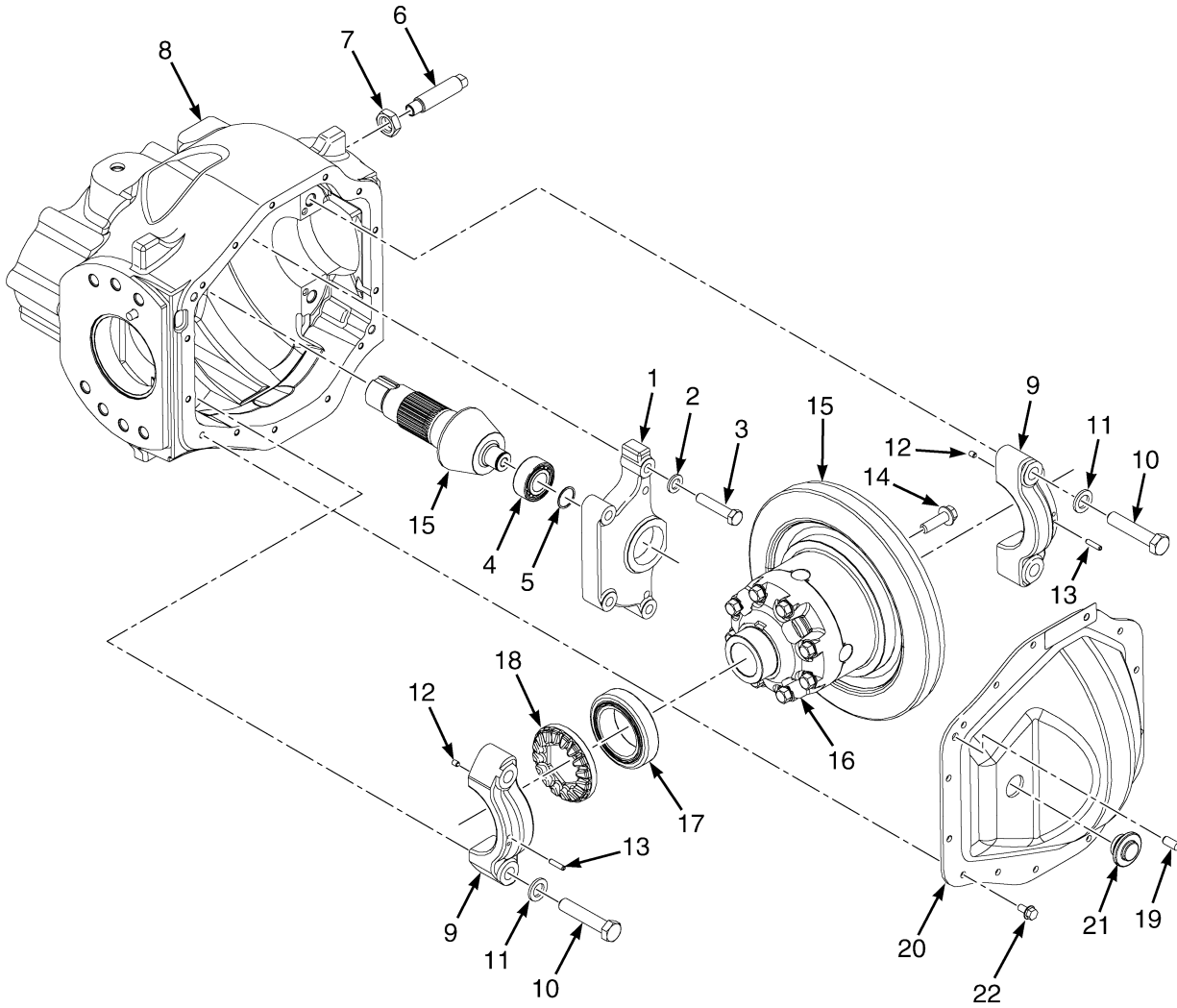


BP070133

DRIVE AXLE AND ATTACHING PARTS

ITEM	PART NO.	DESCRIPTION	QTY
1	1547757	Drive Shaft	1
2	293616	Capscrew	8
3	1517673	Shaft	1
4	292660	Nut	4
5	296434	Washer	4
6	293733	Capscrew	4
7	1532729		
	2105822	Drive Axle (2.17 Gear Ratio) (☞ Figure 8-9, ☞ Figure 8-10, ☞ Figure 8-11).....	1
7	1532730		
	2105823	Drive Axle (2.48 Gear Ratio) (☞ Figure 8-9, ☞ Figure 8-10, ☞ Figure 8-11).....	1
8	1537133	Wheel Nut	12

DRIVE AXLE (FIGURE 8-9) SHEET 1 OF 3



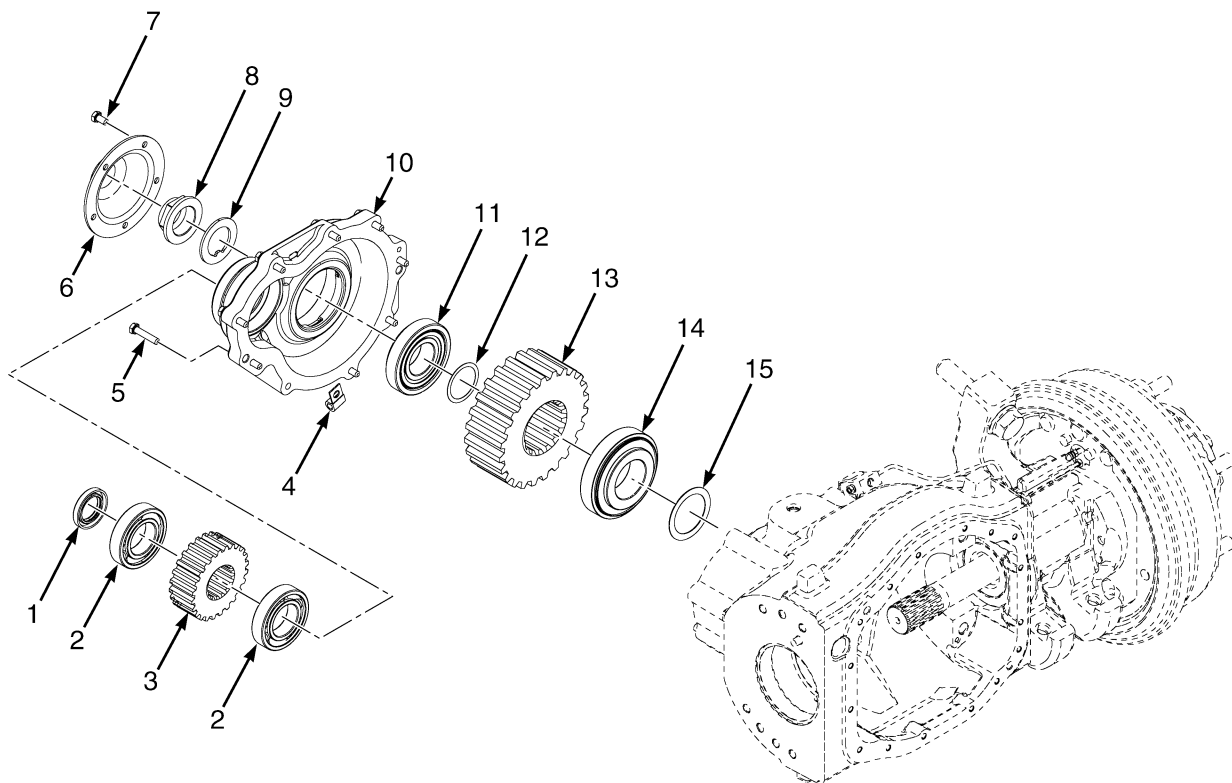
BP070134

**DRIVE AXLE
SHEET 1 OF 3**

ITEM	PART NO.	DESCRIPTION	QTY
	1532729		
	2105822	Drive Axle (2.17 Gear Ratio)	1
	1532730		
	2105823	Drive Axle (2.48 Gear Ratio)	1
1	1512561	Support	1
2	296422	Washer	4
3	293651	Capscrew	4
4	135158	Bearing	1
5	320264	Snap Ring	1
6	1583732	Thrust Screw	1
7	296137	Nut	1
8	1656333	Drive Axle Housing (Center)	1
9	.....	Bearing Cap	2
10	293692	Capscrew	4
11	296426	Washer	4
12	234038	Dowel	4
13	302449	Roll Pin	2
14	2029436	Bolt	14
15	2067965	Gear and Pinion (Hypoid)	1
16	2067962	Differential (☞ Figure 8-12).....	1
17	1375488	Bearing Set	2
17	2027661	Roller Bearing (Optional)	2
18	1652926	Retainer	2
19	302385	Dowel	7
20	1532735	Cover (Center)	1
21	1516075	Plug	1
22	1527879	Capscrew	15
	a 264159	Adhesive	AR
	a 383789	Thread Sealant	AR

FOOTNOTES:**a** Not Illustrated

DRIVE AXLE (FIGURE 8-10) SHEET 2 OF 3

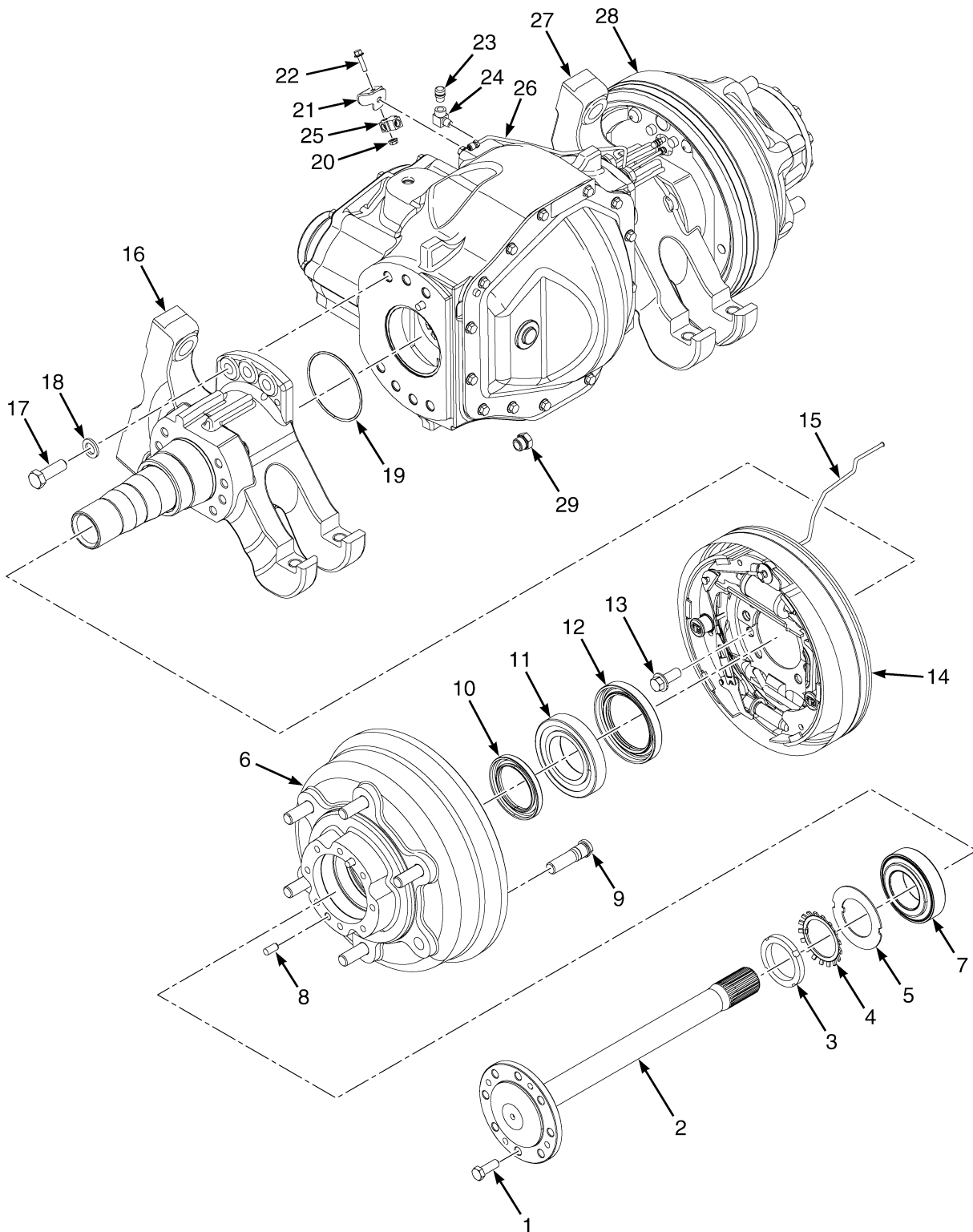


BP070135

**DRIVE AXLE
SHEET 2 OF 3**

ITEM	PART NO.	DESCRIPTION	QTY
	1532729		
	2105822	Drive Axle (2.17 Gear Ratio)	1
	1532730		
	2105823	Drive Axle (2.48 Gear Ratio)	1
1	1522377	Oil Seal	1
2	1523479	Ball Bearing	2
3	1517578	Gear (2.17 Gear Ratio) (Drive)	1
3	1516530	Gear (2.49 Gear Ratio) (Drive)	1
4	2075120	Clamp	2
4	164488	Clamp	2
5	1510114	Capscrew	9
6	1516536	Cover	1
7	1527879	Capscrew	5
8	2026861	Nut	1
9	1530588	Washer	1
10	1516535	Housing	1
11	2022352	Tapered Roller Bearing	1
11	1578978	Tapered Roller Bearing	1
12	1516335	Shim (0.50 mm)	AR
12	1516331	Shim (0.12 mm)	AR
12	1516332	Shim (0.15 mm)	AR
12	1516333	Shim (0.18 mm)	AR
12	1516334	Shim (0.25 mm)	AR
13	1517576	Gear (2.17 Gear Ratio) (Driven)	1
13	1516526	Gear (2.48 Gear Ratio) (Driven)	1
14	2028862	Tapered Roller Bearing	1
14	1578981	Tapered Roller Bearing	1
15	1520755	Shim (1.00 mm)	AR
15	1569912	Shim (0.20 mm)	AR
15	1569913	Shim (0.25 mm)	AR
15	1520752	Shim (0.30 mm)	AR
15	1569914	Shim (0.35 mm)	AR
15	1520753	Shim (0.40 mm)	AR
15	1569915	Shim (0.45 mm)	AR
15	1520754	Shim (0.50 mm)	AR

DRIVE AXLE (FIGURE 8-11) SHEET 3 OF 3

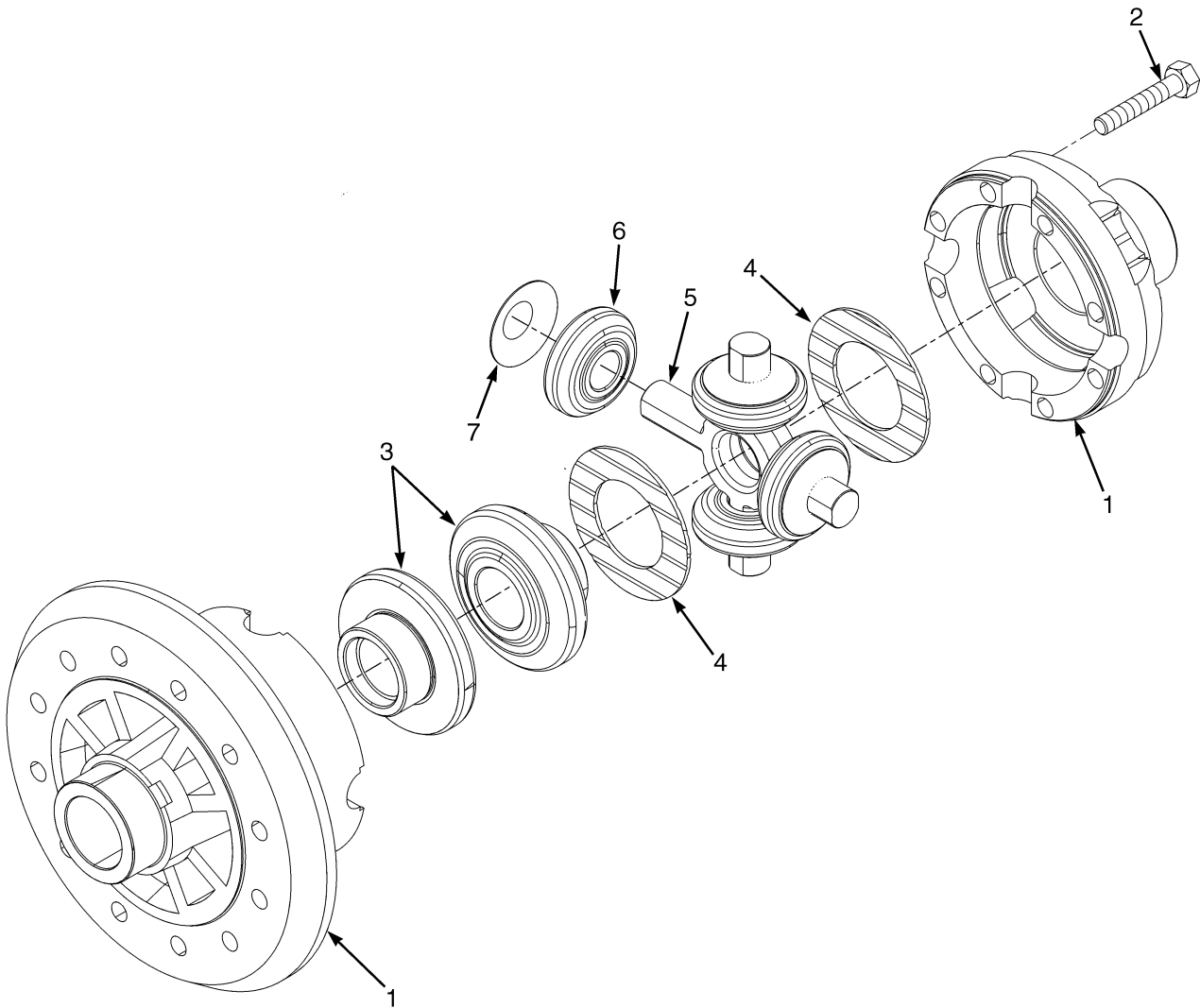


BP070136

**DRIVE AXLE
SHEET 3 OF 3**

ITEM	PART NO.	DESCRIPTION	QTY
	1532729		
	2105822	Drive Axle (2.17 Gear Ratio)	1
	1532730		
	2105823	Drive Axle (2.48 Gear Ratio)	1
1	293646	Capscrew	20
2	1532708	Axle Shaft	2
3	2028145	Nut	2
4	2027756	Lockwasher	2
5	1515219	Washer	2
6	1634451	Hub Assembly	2
6	1614672	Hub	1
7	2027663	Bearing Set (Tapered)	1
8	302385	Dowel	2
9	1532337	Wheel Stud	6
10	2028621	Oil Seal	1
11	1375492		
	2027662	Bearing Set (Tapered)	1
12	2027817	Oil Seal	1
13	1327246	Bolt	16
14	1579455	Brake Assembly (RH)	1
15	2063264		
	4613341	Tube Assy (RH)	1
16	1641525	Hanger (RH)	1
17	293686	Capscrew	14
18	296426	Washer	14
19	2027828	O-Ring	2
20	1514429	Nut	1
21	1618311	Bracket	1
22	1527878	Capscrew	1
23	21420	Breather	1
24	16151	Fitting	1
25	1641351	Fitting	1
26	2063265	Tube Assy (LH)	1
27	1644700	Hanger (LH)	1
28	1579454	Brake Assembly (LH)	1
29	1521809	Drain Plug	1

DIFFERENTIAL (FIGURE 8-12) DRY BRAKE

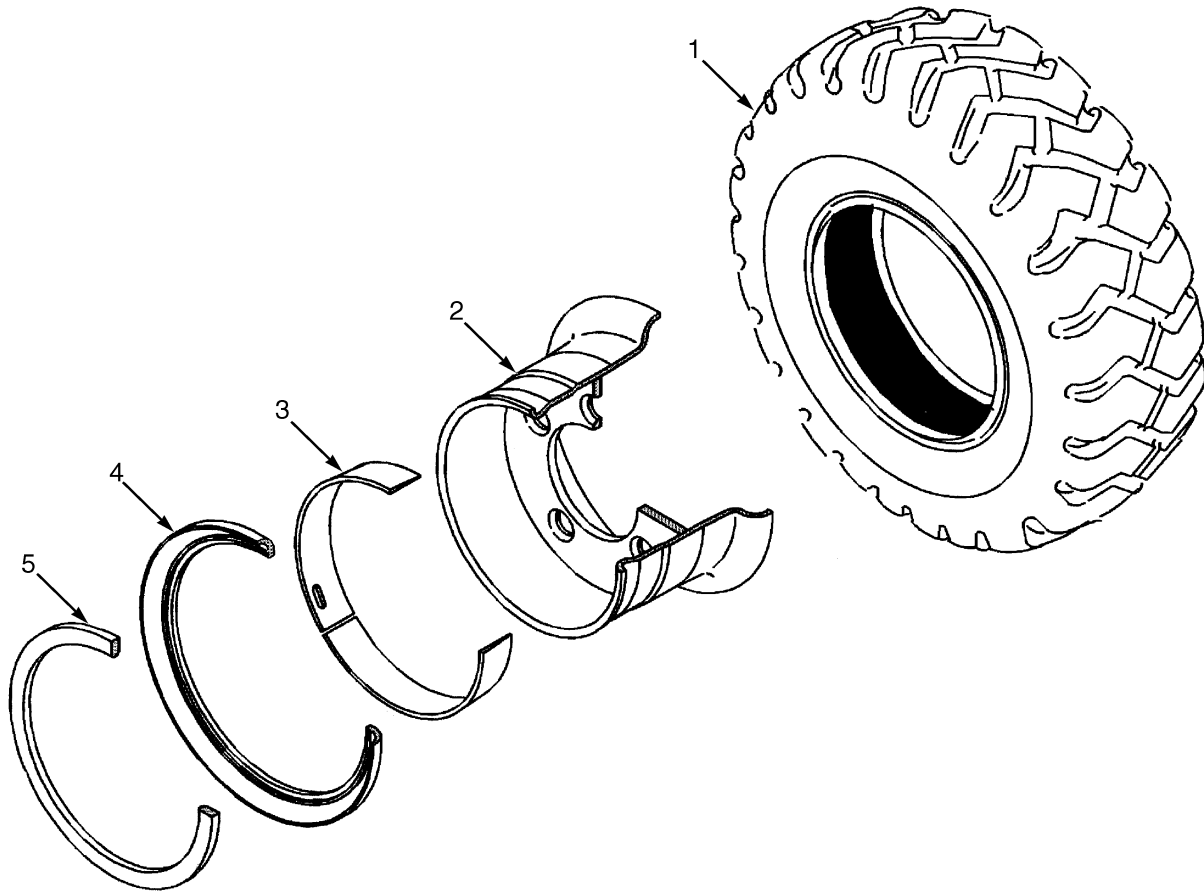


BP070055

**DIFFERENTIAL
DRY BRAKE**

ITEM	PART NO.	DESCRIPTION	QTY
	2067962	Differential	1
1	.....	Case Set	1
2	1565327	Bolt	8
3	.....	Gear (Side)	2
4	.....	Washer (Side)	2
5	2029383	Spider	1
6	.....	Gear (Pinion)	4
7	.....	Washer (Pinion)	4
	1606532	Kit-Gear	1
	1565324	Kit-Washer	1

DRIVE TIRE AND WHEEL (FIGURE 8-13) SINGLE



BP070012

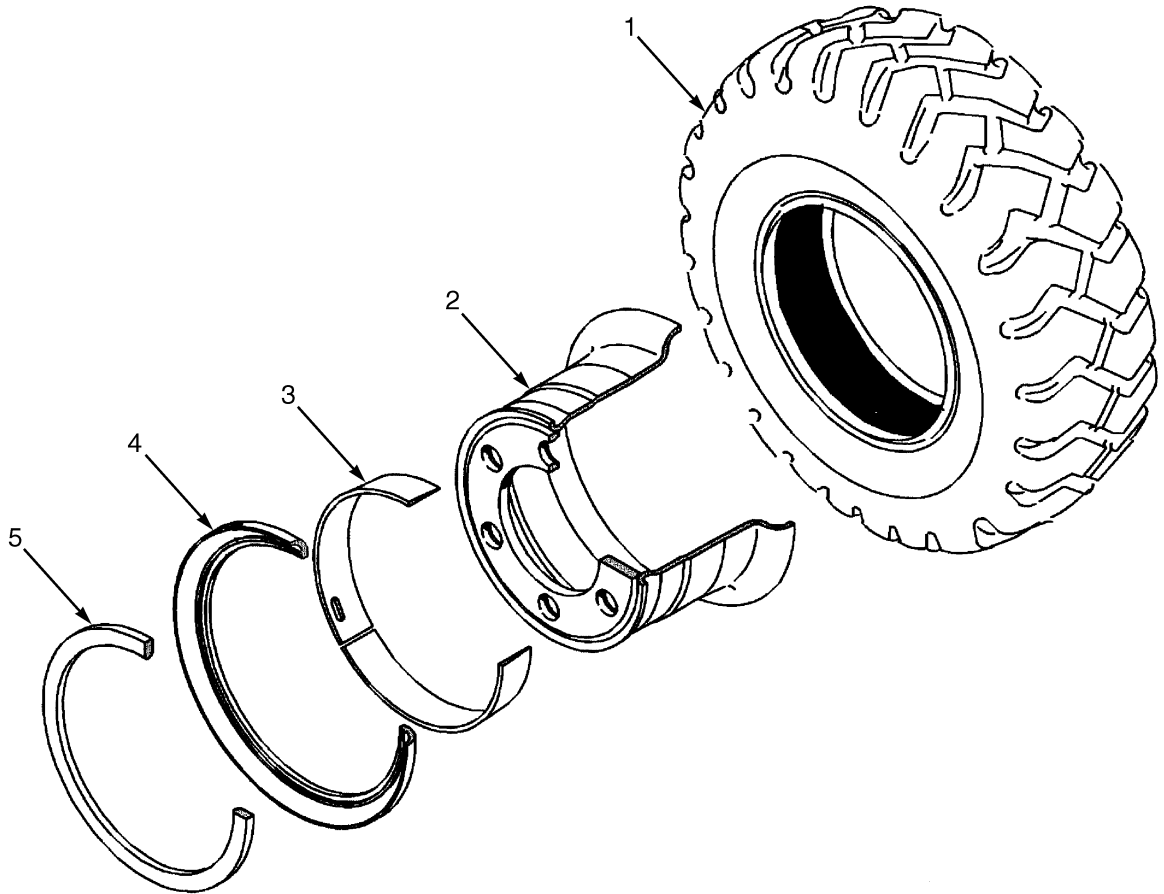
KEY:

A: 7.00 X 12 (H2.0-2.5FT)

B: 28 X 9-15 (H2.0-3.5FT)

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1644915	Pneumatic Tire	2	..
1	1543061	Tire (Trell) (Pneumatic) .....	..	2
2	2070073	Rim (5.00 x 12)	2	..
2	2070074	Wheel Assy (7.00 x 15) .....	..	2
3	1584694	Wedge Band	1	..
3	1584695	Wedge Band .....	..	1
4	161890	Wheel Side Ring	1	..
4	160653	Wheel Side Ring .....	..	1
5	161889	Wheel Lock Ring	1	..
5	980542	Wheel Lock Ring .....	..	1

**DRIVE TIRE AND WHEEL (FIGURE 8-14)
WIDE TREAD**



BP070013

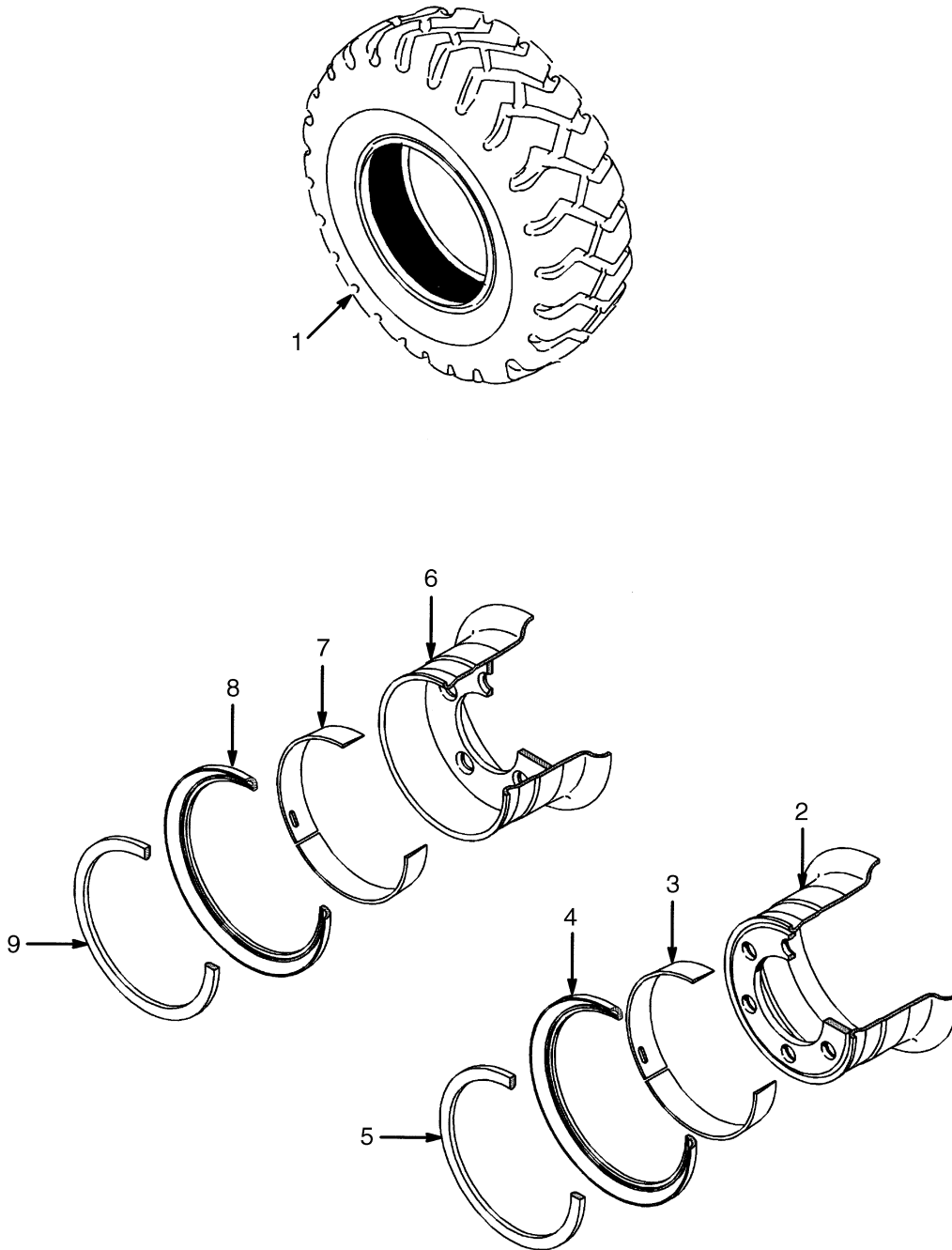
KEY:

A: 7.00 x 12 16 (H2.0-2.5FT)

B: 28 x 9-15/7 (H2.0-3.5FT)

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1644915	Pneumatic Tire	2	..
1	1543061	Tire (Trell) (Pneumatic) .....	..	2
1	.....	Tube	1	1
2	2070075	Rim (5.00 x 12)	2	..
2	2070076	Wheel Assy (7.00 x 15) .....	..	2
3	1584694	Wedge Band	1	..
3	1584695	Wedge Band .....	..	1
4	161890	Wheel Side Ring	1	..
4	160653	Wheel Side Ring .....	..	1
5	161889	Wheel Lock Ring	1	..
5	980542	Wheel Lock Ring .....	..	1

DRIVE TIRE AND WHEEL (FIGURE 8-15) PNEUMATIC RADIAL

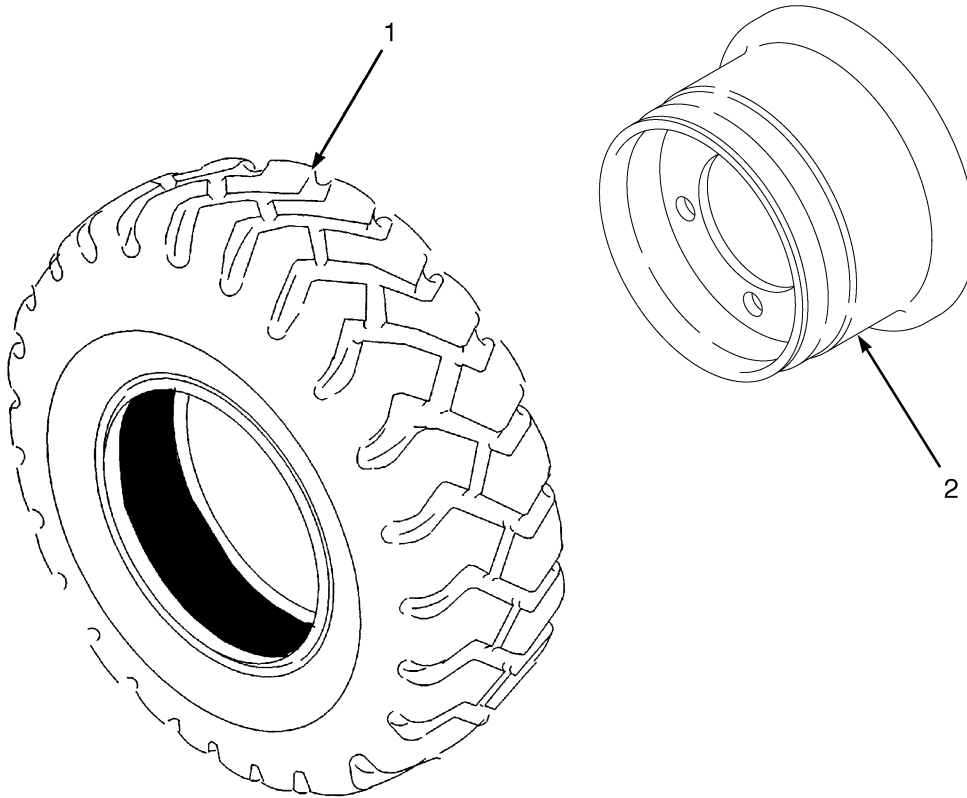


BP070014

**DRIVE TIRE AND WHEEL
PNEUMATIC RADIAL****KEY:****A: 7.00 R12 Pneumatic Radial (H2.0-2.5FT)****B: 225/75 R15 Pneumatic Radial (H2.0-3.5FT)**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1471829	Pneumatic Tire (Michelin XZM)	2	..
1	1471591	Tubeless Bead Seal	1	..
1	1358179	Pneumatic Tire	1	..
1	1471922	Tubeless Bead Seal Valve	1	..
1	4029270	Tire Assembly (Conti RT20)	2	..
1	4029457	Tire	1	..
1	4029482	Seal (Tubeless Sealing Ring)	1	..
1	1471835	Pneumatic Tire .....	..	2
1	1462617	Tubeless Bead Seal .....	..	1
1	1358183	Pneumatic Tire (Michelin XZM) .....	..	1
1	1471922	Tubeless Bead Seal Valve .....	..	1
1	4029271	Tire Assembly (Conti RT20) .....	..	2
1	4029458	Tire .....	..	1
1	4029483	Seal (Tubeless Sealing Ring) .....	..	1
2	2070073	Rim (5.00 x 12)	2	..
2	2070075	Rim (5.00 x 12) (Wide Tread)	2	..
3	1584694	Wedge Band	1	..
4	161890	Wheel Side Ring	1	..
5	161889	Wheel Lock Ring	1	..
6	2070074	Wheel Assy (7.00 x 15) .....	..	2
6	2070076	Wheel Assy (7.00 x 15) (Wide Tread) .....	..	2
7	1584695	Wedge Band .....	..	1
8	160653	Wheel Side Ring .....	..	1
9	980542	Wheel Lock Ring .....	..	1

**DRIVE TIRE AND WHEEL (FIGURE 8-16)
SNAP-ON SOLID TIRE**

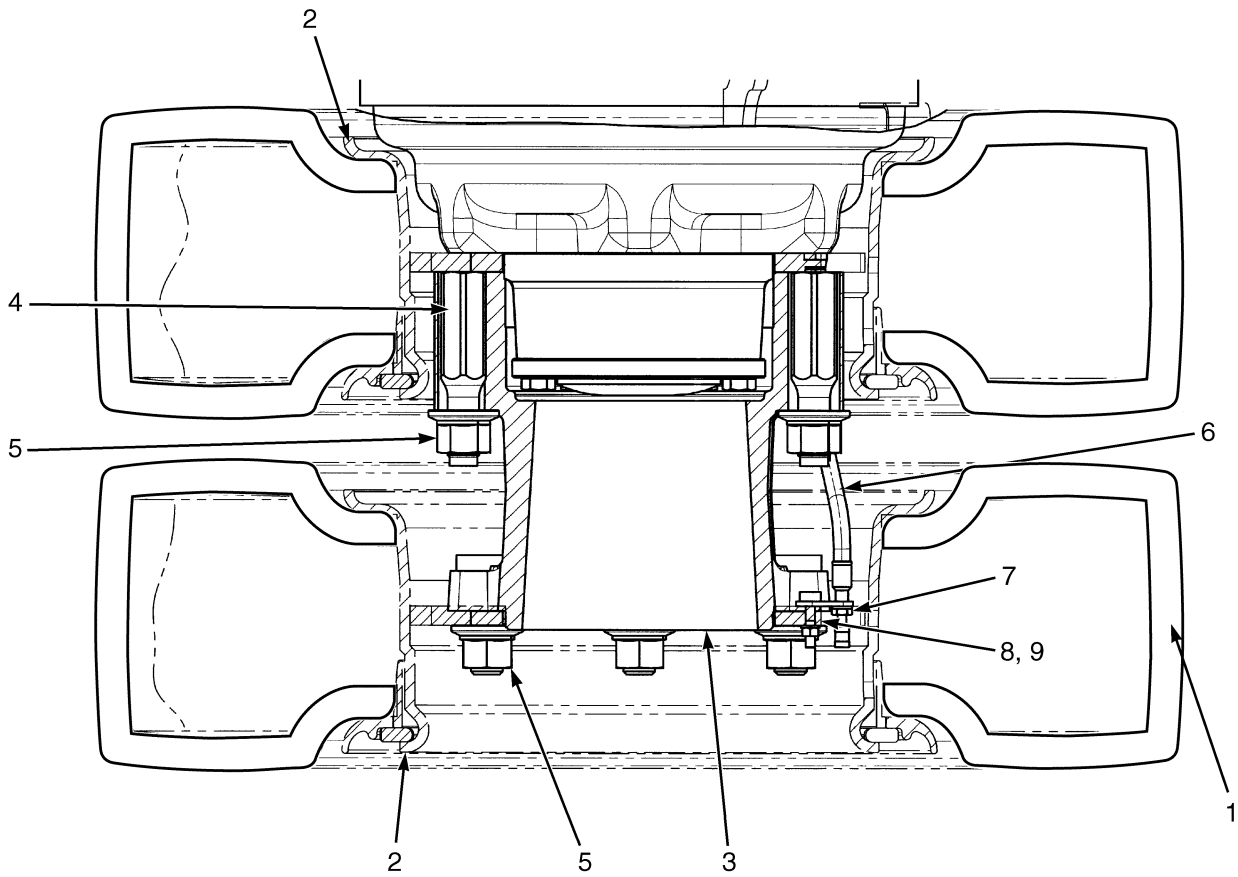


BP000223

**DRIVE TIRE AND WHEEL
SNAP-ON SOLID TIRE****KEY:****A: 7.00 x 12 Tire****B: 28 x 9-15 Tire****C: 7.00 x 12 Wide Tread****D: 28 x 9-15 Wide Tread**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1543063	Solid Pneumatic Tire	2	..	2	..
1	1543064	Solid Pneumatic Tire .....	..	2	..	2
1	1603487	Solid Pneumatic Tire (Non Marking)	2	..	2	..
1	1603488	Solid Pneumatic Tire (Non Marking) .....	..	2	..	2
2	2070080	Rim	2	..	..	..
2	2070079	Rim .....	..	2	..	..
2	2070078	Wheel .....	..	..	2	..
2	2070077	Rim .....	..	..	..	2

DUAL DRIVE WHEELS AND TIRES (FIGURE 8-17)

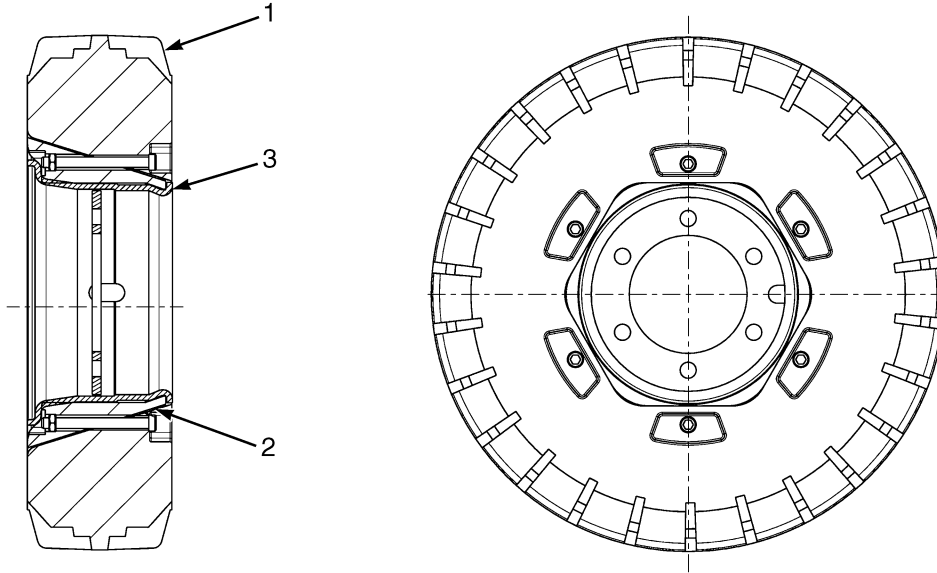


HP070054

DUAL DRIVE WHEELS AND TIRES

ITEM	PART NO.	DESCRIPTION	QTY
1	1644915	Pneumatic Tire (Trell)	4
1	1471829	Pneumatic Tire (Michelin XZM)	4
1	1471591	Tubeless Bead Seal	1
1	1358179	Pneumatic Tire (Michelin)	1
1	1471922	Tubeless Bead Seal Valve	1
2	2075454	Rim Assembly (5.00 x 12)	4
2	2075455	Rim (Dual Wheel)	1
2	161889	Wheel Lock Ring	1
2	1584694	Wedge Band	1
2	161890	Wheel Side Ring	1
3	1613386	Wheel Hub	2
3	1532337	Wheel Stud	6
3	1613383	Hub	1
4	1545401	Stud	12
5	1537133	Wheel Nut	12
6	1583169	Extension	2
7	1584690	Bracket	2
8	136687	Nut	2
9	292680	Washer	2

DRIVE TIRE AND WHEEL (FIGURE 8-18) CSEASY SC20 (7.00-12)



BP070140

KEY:

A: Single or Wide Rim

B: Dual Wheel

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4030289	Solid Pneumatic Tire (7.00-12)	2	4
1	4030295	Solid Pneumatic Tire (Non Marking)	2	4
2	a 4030301	Adapter Assembly	2	4
3	2070080	Rim	2	..
3	2070078	Wheel (Wide Rim)	2	..
3	2075455	Rim (Dual Wheel) .....	..	4

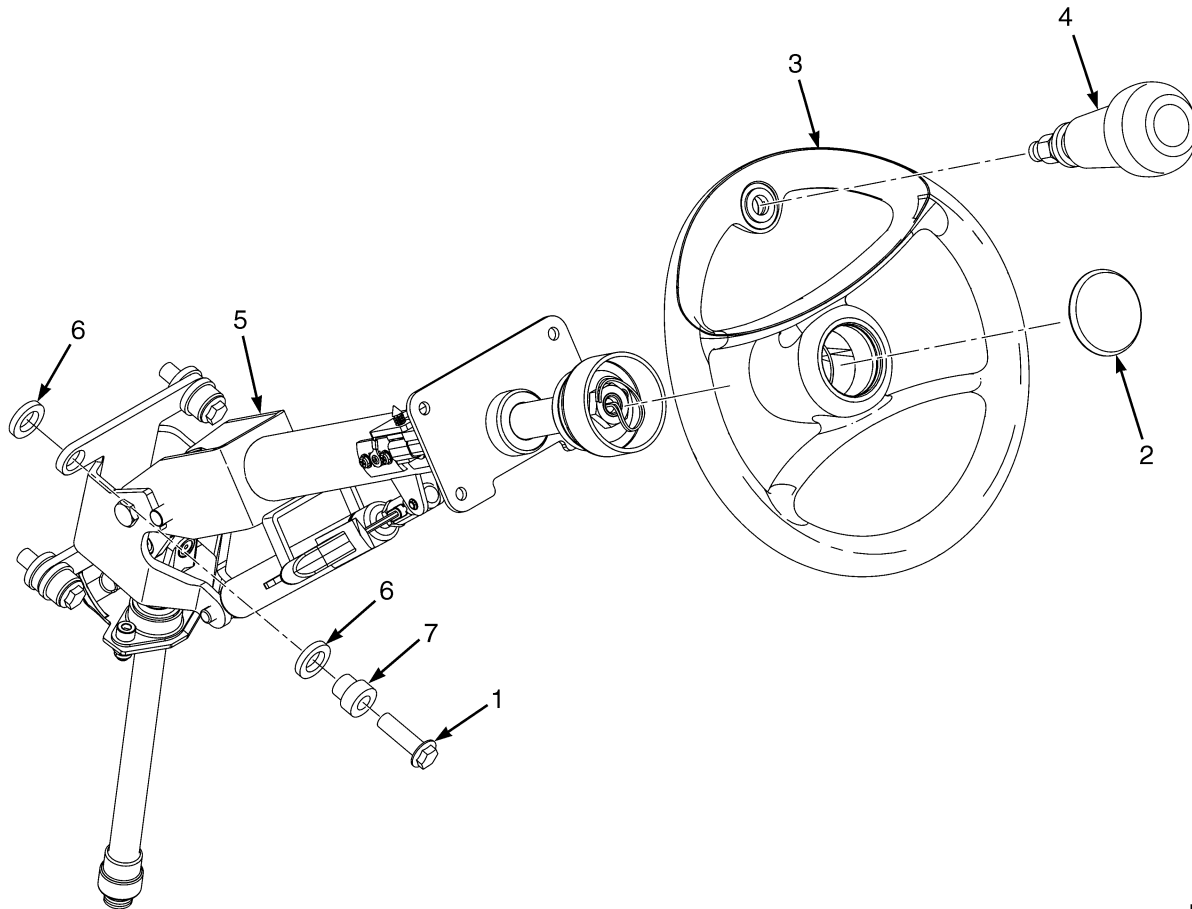
FOOTNOTES:

a Includes compression pad, capscrews and nuts

**SECTION 9
STEERING SYSTEM**

DESCRIPTION	PAGE
STEER AXLE	9-10
STEER CYLINDER	9-12
STEER TIRE AND WHEEL	
CSEASY SC20 (6.00-9)	9-18
STEER TIRES AND WHEELS	
H2.0-2.5FT (6.00 X 9.00)	9-14
H2.0-3.5FT (6.50 X 10)	9-16
STEERING COLUMN AND ATTACHING PARTS	
DIESEL	9-2
LPG	9-3
STEERING COLUMN ASSEMBLY	9-4
STEERING CONTROL UNIT	9-6
STEERING LINES	9-8

STEERING COLUMN AND ATTACHING PARTS (FIGURE 9-1) DIESEL



HP220499

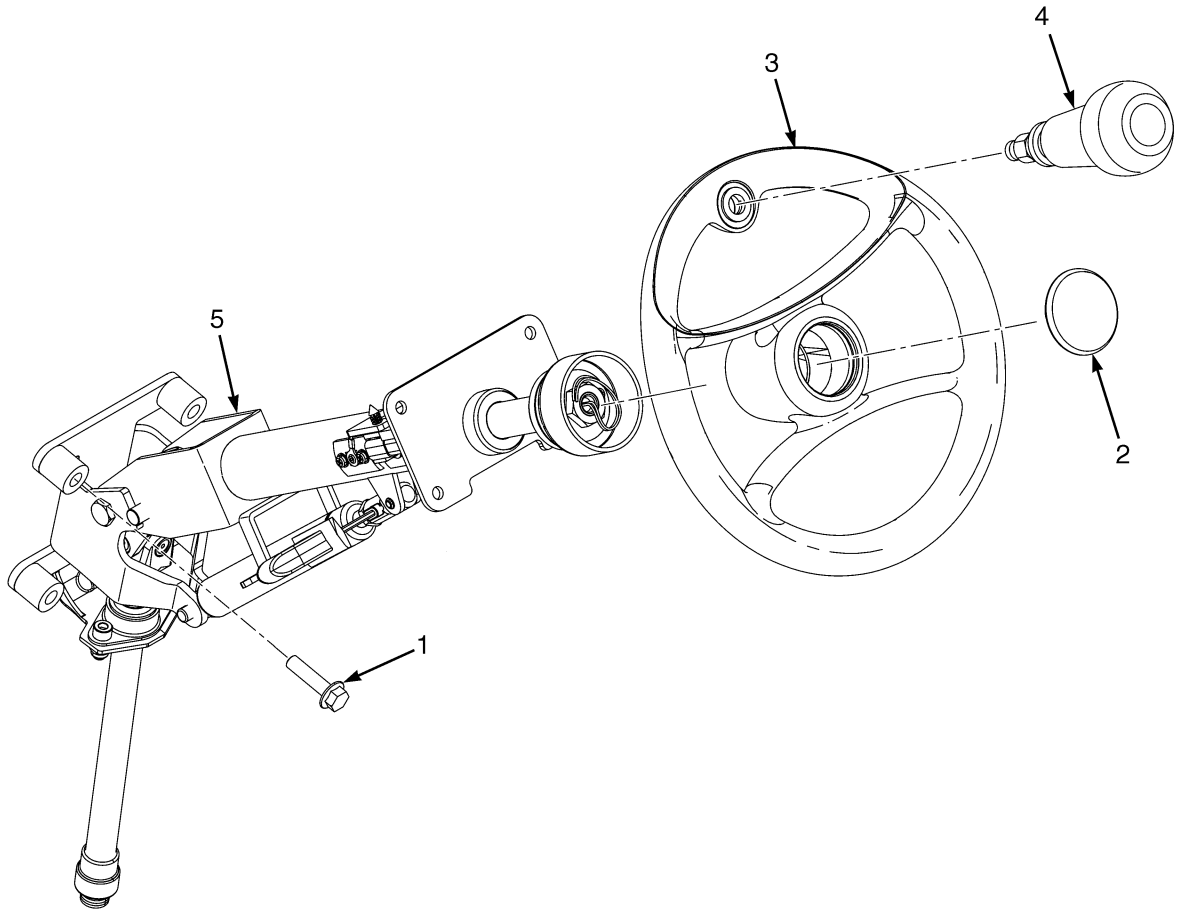
ITEM	PART NO.	DESCRIPTION	QTY
1	1512403	Capscrew	4
2	a 1450503	Horn Button	1
3	1551839	Steering Wheel (Without Spinner Knob)	1
3	1531563	Steering Wheel (With Spinner)	1
4	1586109	Knob Assembly	1
5	b 1606891	Steering Column (☞ Figure 9-3).....	1
5	c 1657959	Steering Column (☞ Figure 9-3).....	1
5	d 4023451	Steering Column (☞ Figure 9-3).....	1
6	2079369	Isolator	8
7	1606750	Spacer	4

FOOTNOTES:

a Service with Horn Replacement Kit 1642089
b → 2/2007

c 2/2007 ↔ S/N L177B32157J
d S/N L177B32158J →

**STEERING COLUMN AND ATTACHING PARTS (FIGURE 9-2)
LPG**



HP220500

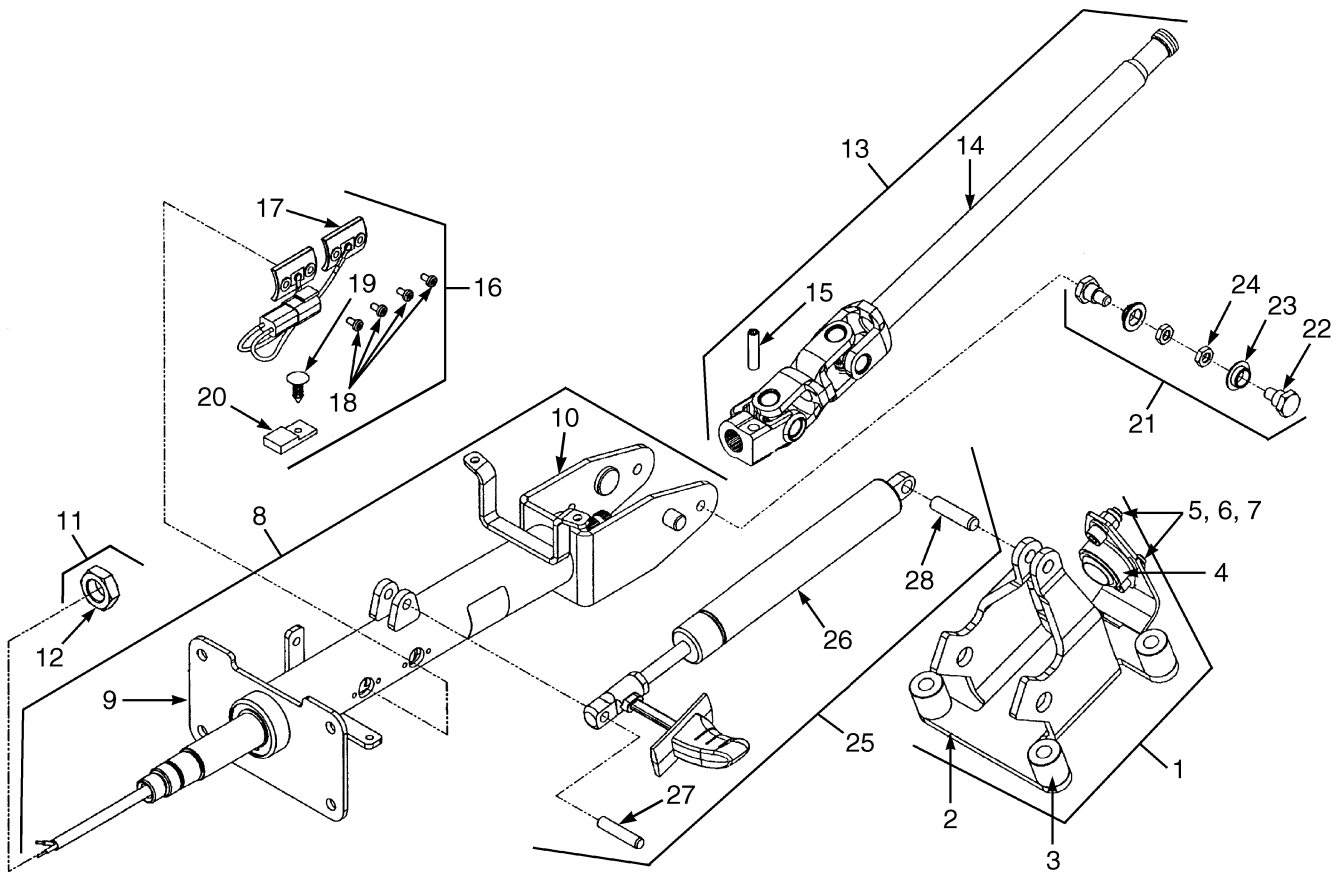
ITEM	PART NO.	DESCRIPTION	QTY
1	1512403	Capscrew	4
2	a 1450503	Horn Button	1
3	1551839	Steering Wheel (Without Spinner Knob)	1
3	1531563	Steering Wheel (With Spinner)	1
4	1586109	Knob Assembly	1
5	b 1544566	Steering Column (☞ Figure 9-3).....	1
5	c 1657962	Steering Column (☞ Figure 9-3).....	1
5	d 4023450	Steering Column (☞ Figure 9-3).....	1

FOOTNOTES:

a Service with Horn Replacement Kit 1642089
b → 2/2007

c 2/2007 ↔ S/N L177B32252J
d S/N L177B32253J →

STEERING COLUMN ASSEMBLY (FIGURE 9-3)



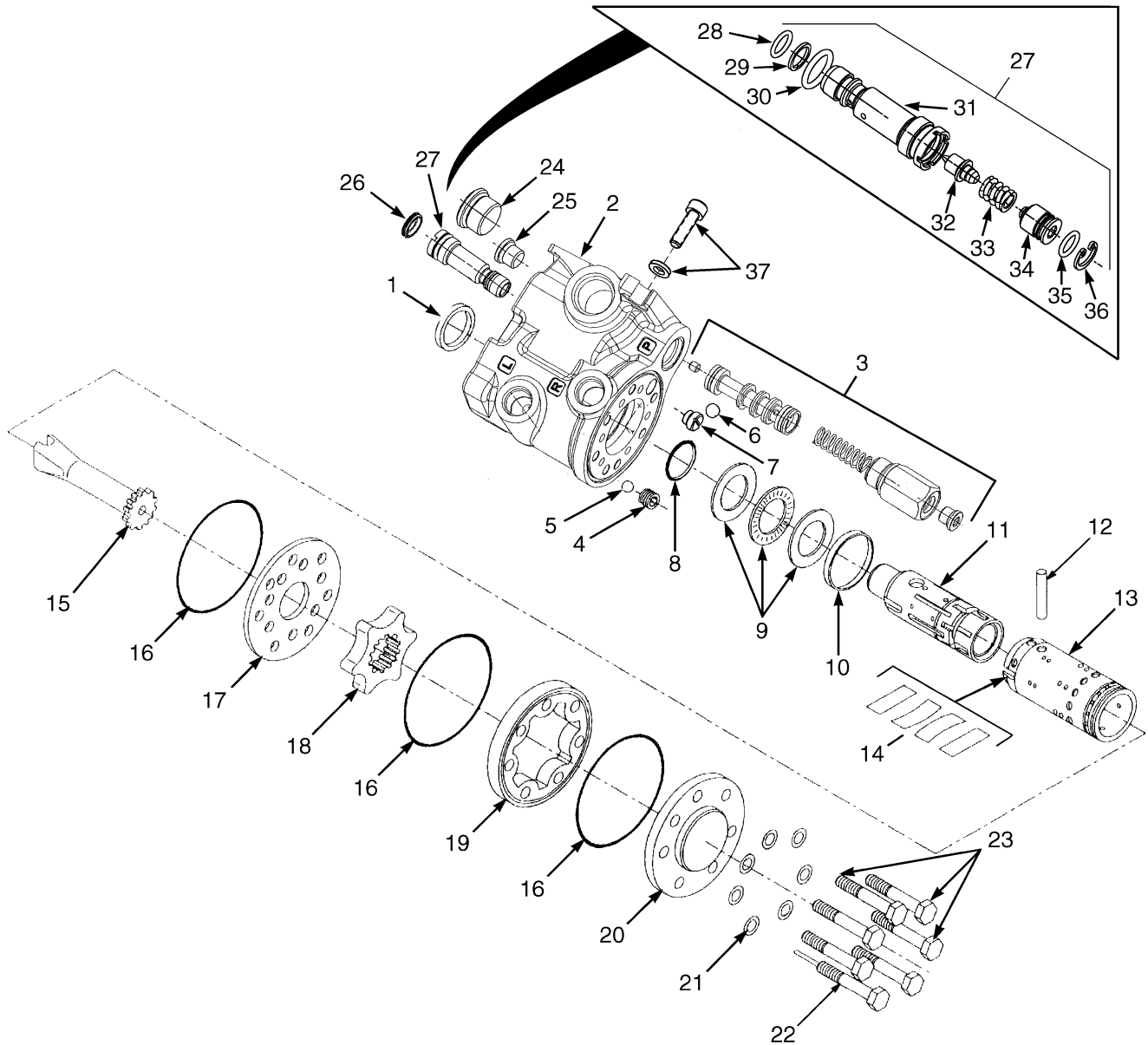
HP220445

STEERING COLUMN ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QTY
	a 1544566	Steering Column (LPG)	1
	c 1657962	Steering Column (LPG)	1
	f 4023450	Steering Column (LPG)	1
	a 1606891	Steering Column (Diesel)	1
	b 1657959	Steering Column (Diesel)	1
	e 4023451	Steering Column (Diesel)	1
1	1562509	Kit-Support (LPG)	1
1	d 1647530	Kit-Support (Diesel)	1
2	.....	Support	1
3	.....	Spacer (LPG Only)	4
4	.....	Joint	1
5	.....	Nut	2
6	.....	Washer	2
7	.....	Screw	2
8	a 1562489	Kit-Shaft (Upper)	1
8	d 1647528	Kit-Shaft (Upper)	1
8	ef 4028642	Kit (Shaft Upper)	1
9	.....	Shaft Assembly (Upper)	1
10	.....	Housing Assembly	1
11	1562492	Kit-Nut	1
12	.....	Nut	2
13	1562493	Kit-Shaft (Lower)	1
14	.....	Shaft Assembly (Lower)	1
15	.....	Pin	1
16	1562496	Kit-Contact	1
17	.....	Contact Assembly (Horn)	1
18	.....	Screw	4
19	.....	Fastener	1
20	.....	Connector	1
21	1562501	Kit-Pivot (Lower)	1
22	.....	Bolt (Pivot)	2
23	.....	Bushing	2
24	.....	Nut	2
25	1562505	Kit-Gas Spring	1
26	.....	Gas Spring	1
27	.....	Pin	1
28	.....	Pin	1

FOOTNOTES:**a** → 2/2007**b** 2/2007 ↔ S/N L177B32157J**c** 2/2007 ↔ S/N L177B32252J**d** 2/2007 →**e** S/N L177B32158J →**f** S/N L177B32253J →

STEERING CONTROL UNIT (FIGURE 9-4)

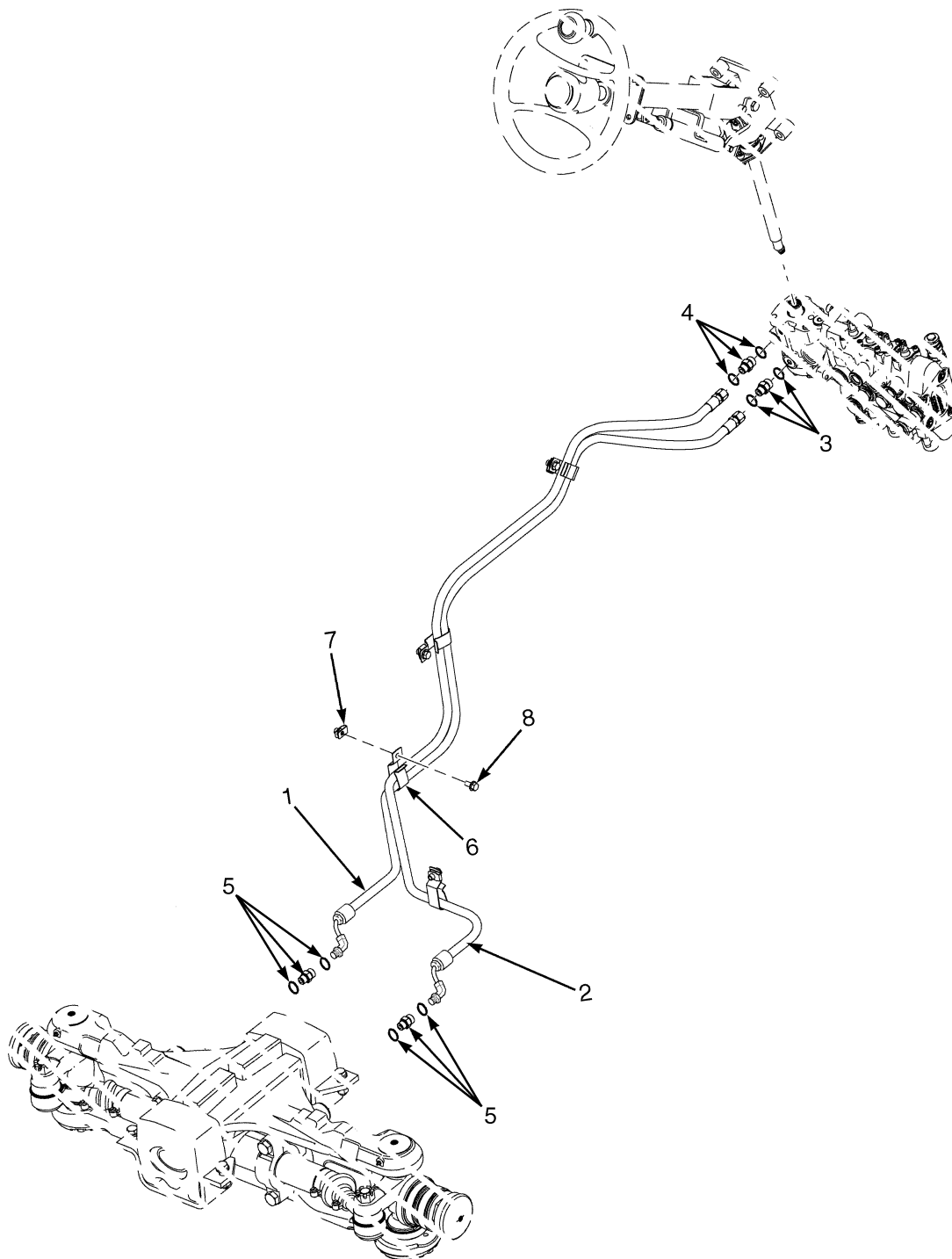


BP220056

STEERING CONTROL UNIT

ITEM	PART NO.	DESCRIPTION	QTY
	2063117	Steering Control Unit (H2.0-3.0FT)	1
	2063118	Steering Control Unit (H3.5FT)	1
1	Dust Seal	1
2	Housing	1
3	Relief Valve	1
4	Bushing	1
5	Check Ball	1
6	Check Ball	1
7	Seat	1
8	O-Ring	1
9	Bearing Set	1
10	Ring	1
11	Spool	1
12	Pin	1
13	Sleeve	1
14	Spring Set	1
15	Shaft	1
16	O-Ring	3
17	Plate	1
18	Gear Set	1
19	Gear Ring	1
20	Cover	1
21	Washer	7
22	Special Screw	2
23	Capscrew	5
24	Priority Valve Plug	1
25	Diagnostic Plug (Supply Pressure)	1
26	Cap	1
27	System Relief Valve	1
28	O-Ring	1
29	Back-Up Ring	1
30	O-Ring	1
31	Cartridge	1
32	Seat	1
33	Spring	1
34	Plug	1
35	Anti-Tamper Ring	1
36	Snap Ring	1
37	1581858	Kit-Capscrew	1
	1579908	Kit-Seal	1

STEERING LINES (FIGURE 9-5)



HP220443

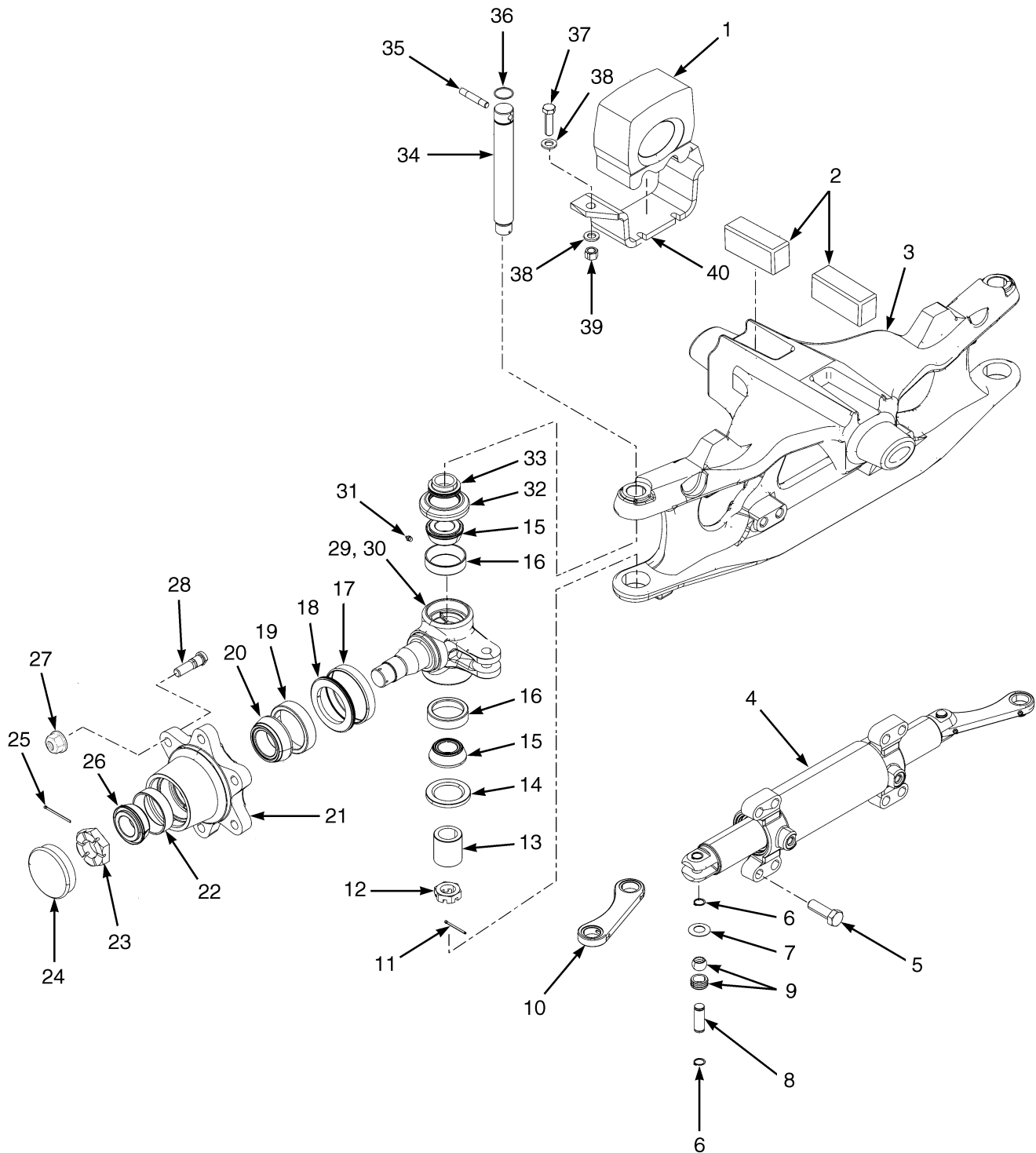
STEERING LINES

ITEM	PART NO.	DESCRIPTION	QTY
1	b 2072902	Hose Assy (H2.0-3.0FT)	1
1	d 2104068	Hose Assy (H2.0-3.0FT)	1
1	c 2073017	Hose Assy (H3.5FT)	1
1	e 2104070	Hose Assy (H3.5FT)	1
2	b 2073016	Hose Assy (H2.0-3.0FT)	1
2	d 2103497	Hose Assy (H2.0-3.0FT)	1
2	c 2072903	Hose Assy (H3.5FT)	1
2	e 2104069	Hose Assy (H3.5FT)	1
3	bc 1516201	Fitting	1
3	de 4022958	Fitting	2
3	265787	O-Ring	1
3	16484	O-Ring	1
4	bc 1486742	Fitting	1
4	de 1486742	Fitting .....	..
4	265787	O-Ring	1
4	16484	O-Ring	1
5	1487063	Fitting	2
5	265787	O-Ring	2
5	1527813	O-Ring	2
6	bc 1544157	Clip	6
6	de 1544157	Clip	5
7	1480237	Nut	6
8	1527879	Capscrew	6
	a 203230	Clamp	1
	a 110322	Clamp	1

FOOTNOTES:

- | | | | |
|----------|-------------------|----------|-------------------|
| a | Not Illustrated | d | S/N L177B27448F → |
| b | → S/N L177B27447F | e | S/N L177B27506F → |
| c | → S/N L177B27505F | | |

STEER AXLE (FIGURE 9-6)

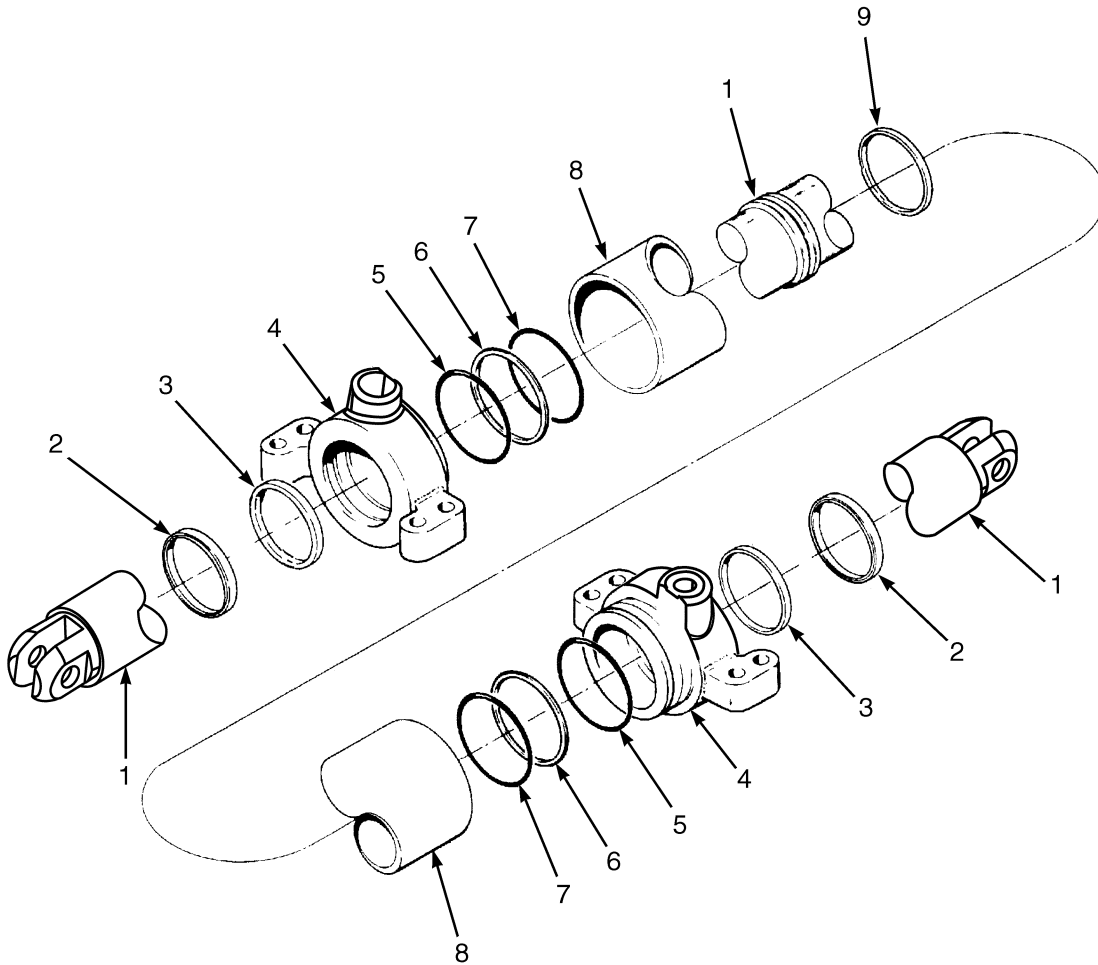


HP220442

STEER AXLE

ITEM	PART NO.	DESCRIPTION	QTY
1	1525354	Rubber Mount	2
2	1388838	Rubber Mount	2
3	1537400	Steering Axle	1
4	2071096	Steering Cylinder (☞ Figure 9-7).....	1
5	293686	Capscrew	8
6	58903	Snap Ring	8
7	300752	Spherical Washer	8
8	1568271	Pin	4
9	300751	Bushing	4
10	381298	Tie Rod	2
11	15225	Cotter Pin	2
12	249289	Nut	2
13	300766	Sleeve	2
14	98525	Oil Seal	2
15	156195	Bearing Cone	4
16	156194	Bearing Cup	4
17	164639	Wear Sleeve	2
18	44542	Seal	2
19	163970	Bearing Cup	2
20	30273	Bearing Cone	2
21	1537667	Hub	2
22	317075	Bearing Cup	2
23	1383777	Nut	2
24	69029	Cap	2
25	15227	Cotter Pin	2
26	317076	Bearing Cone	2
27	1517836	Wheel Nut	12
28	1502276	Wheel Stud	12
29	1310599	Spindle (LH)	1
30	1315425	Spindle (RH)	1
31	13957	Grease Fitting	6
32	264973	Seal	2
33	300767	Spacer	2
34	300765	King Pin	2
35	226986	Pin	2
36	39352	O-Ring	2
37	293648	Capscrew	4
38	320161	Washer	8
39	300937	Nut	4
40	1543254	Plate	2

STEER CYLINDER (FIGURE 9-7)

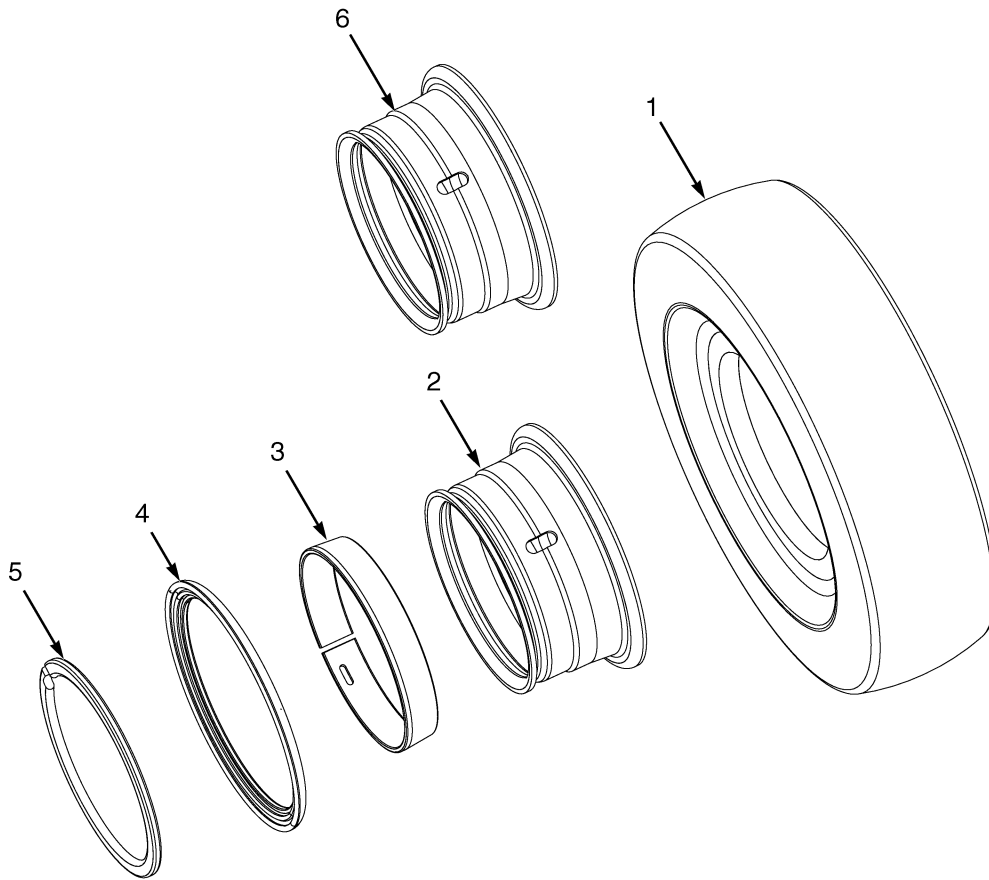


BP220070

STEER CYLINDER

ITEM	PART NO.	DESCRIPTION	QTY
	2071096	Steering Cylinder	1
1	375634	Cylinder Rod	1
2	2071094	Rod Wiper	2
3	1380092	Rod Seal	2
4	1561008	End Cap	1
5	268619	O-Ring	2
6	147973	Back-Up Ring	2
7	118358	O-Ring	2
8	375635	Tube Wldmt-Cylinder	1
9	2044371	Piston Seal	1
	1566700	Kit-Seal	1

STEER TIRES AND WHEELS (FIGURE 9-8)
H2.0-2.5FT (6.00 X 9.00)

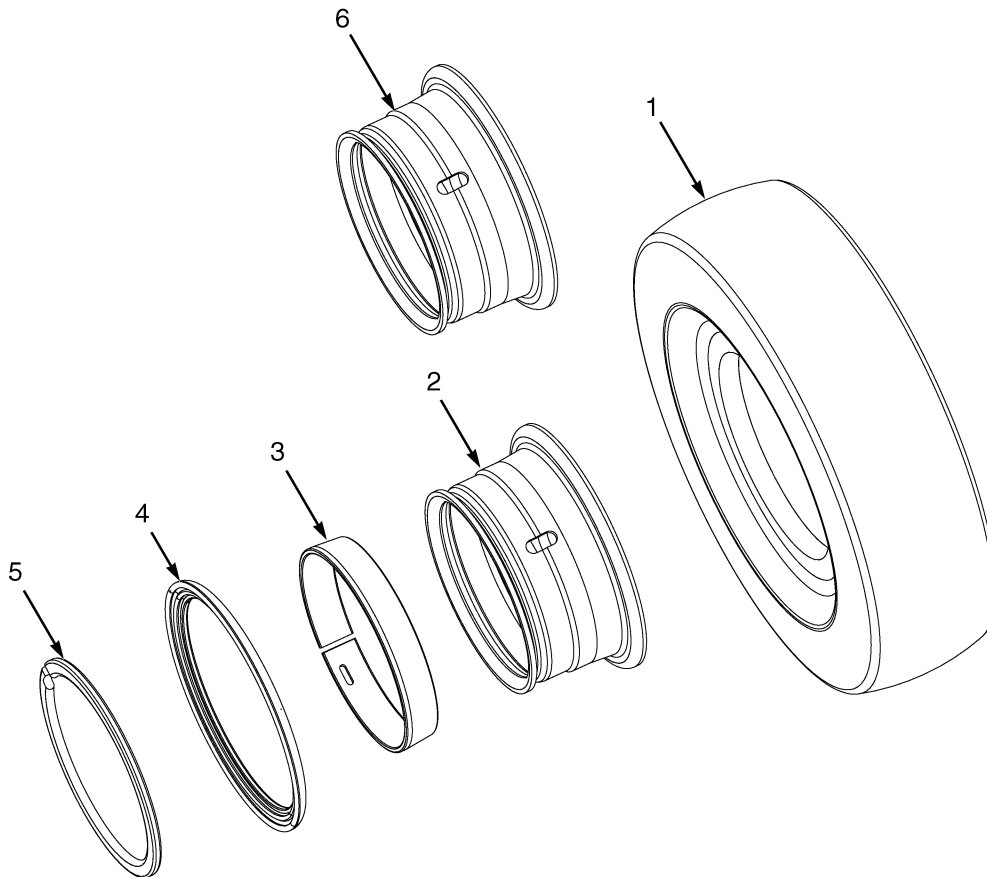


HP070092

STEER TIRES AND WHEELS
H2.0-2.5FT (6.00 X 9.00)**KEY:****A: 6.00 x 9.00 Pneumatic****B: 6.00 x 9 Radial****C: 6.00 x 9-12 PR****D: 6.00 x 9 Snap-On Tire**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1543059	Tire	2	..	2	..
1	1543062	Solid Pneumatic Tire .....	..	..	..	2
1	1603491	Solid Pneumatic Tire (Non-Marking) .....	..	..	..	2
1	1471837	Pneumatic Tire .....	..	2	..	..
1	1358177	Pneumatic Tire (Michelin XZM) .....	..	2	..	..
1	1471921	Tubeless Bead Seal Valve .....	..	1	..	..
1	1462615	Tubeless Bead Seal .....	..	1	..	..
1	4029268	Tire Assembly (Conti RT20) .....	..	2	..	..
1	4029455	Tire .....	..	1	..	..
1	4029480	Seal (Tubeless Sealing Ring) .....	..	1	..	..
2	2070081	Rim (4.00 x 9)	2	2	2	..
3	1584693	Ring-Tapered Bead Seat	1	1	1	..
4	161885	Wheel Side Ring	1	1	1	..
5	161884	Wheel Lock Ring	1	1	1	..
6	2070083	Rim .....	..	..	..	2

STEER TIRES AND WHEELS (FIGURE 9-9) H2.0-3.5FT (6.50 X 10)

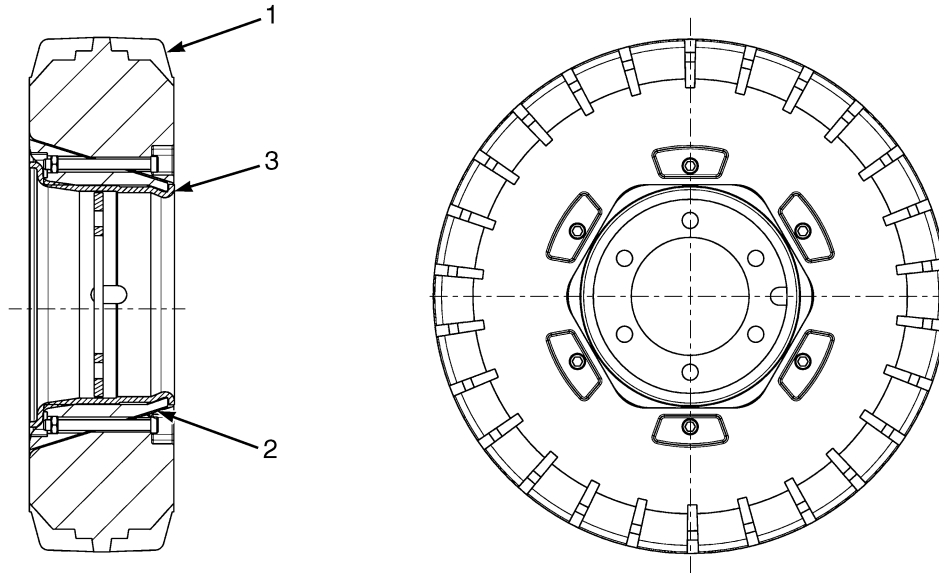


HP070092

STEER TIRES AND WHEELS
H2.0-3.5FT (6.50 X 10)**KEY:****A: 6.50 R10 Radial****B: 6.50 x 10-12PR****C: 6.50 x 10 Snap-On Tire**

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
1	1539639	Solid Pneumatic Tire .....	..	..	2
1	1603493	Solid Pneumatic Tire (Non Marking Compound) .....	..	..	2
1	1544232	Pneumatic Tire (6.50 x 10-12PR) .....	..	2	..
1	1471832	Pneumatic Tire (6.5 R10 Pneu Radial)	2	..	..
1	1462616	Tubeless Bead Seal	1	..	..
1	1358178	Pneumatic Tire (Michelin XZM 6.50 R10)	1	..	..
1	1471922	Tubeless Bead Seal Valve	1	..	..
1	4029269	Tire Assembly (Conti RT20)	2	..	..
1	4029456	Tire	1	..	..
1	4029481	Seal (Tubeless Sealing Ring)	1	..	..
2	2067044	Rim (5.00 x 10)	2	2	..
3	1580427	Wedge Band	1	1	..
4	1580426	Wheel Side Ring	1	1	..
5	161894	Wheel Lock Ring	1	1	..
6	2067045	Wheel Assy .....	..	..	2

STEER TIRE AND WHEEL (FIGURE 9-10) CSEASY SC20 (6.00-9)



BP070140

ITEM	PART NO.	DESCRIPTION	QTY
1	4030287	Solid Pneumatic Tire (6.00-9)	2
1	4030293	Solid Pneumatic Tire (6.00-9, Non-Marking)	2
2	a 4030299	Adapter Assembly	2
3	2070083	Rim	2

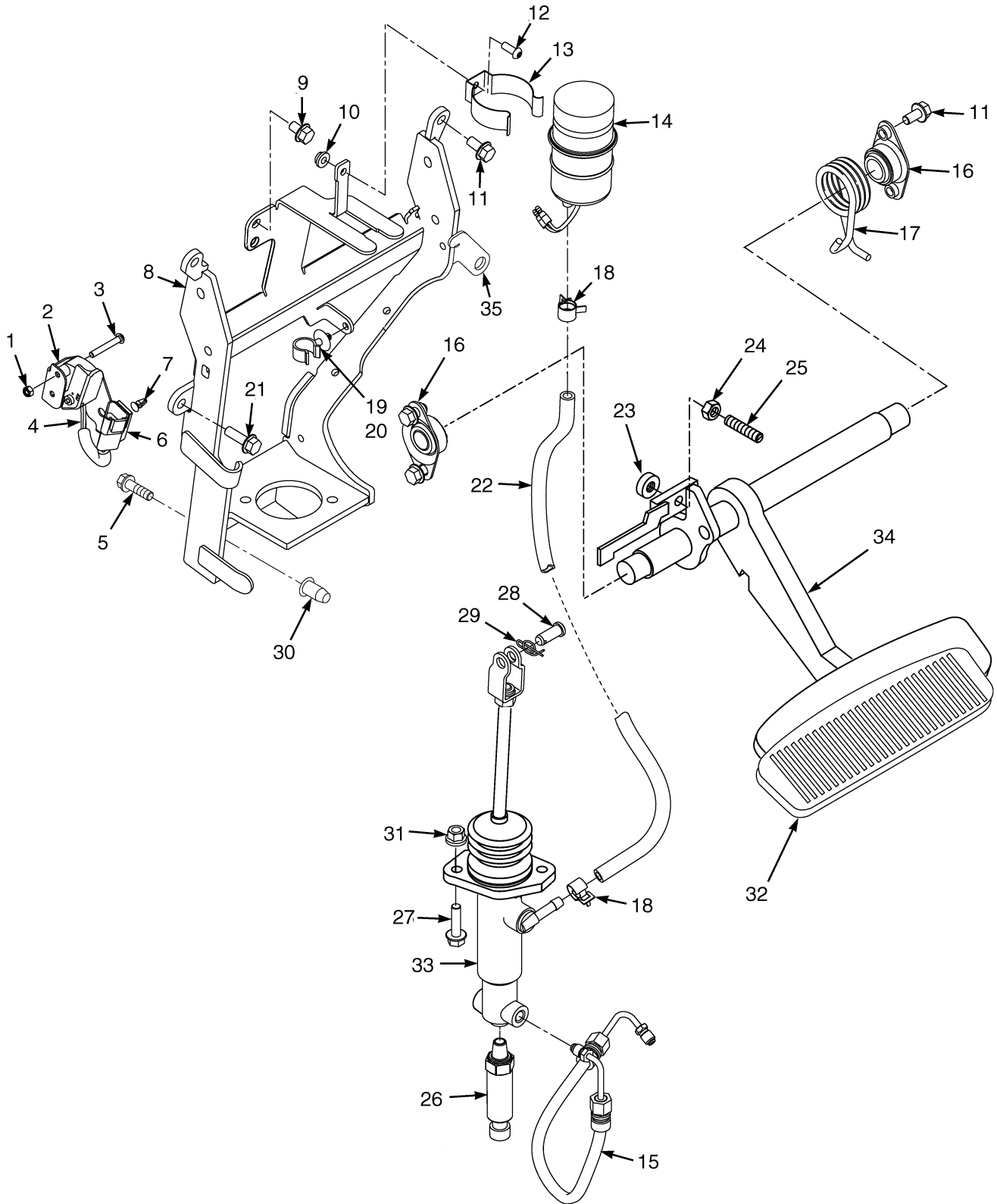
FOOTNOTES:

a Includes compression pad, capscrews and nuts

**SECTION 10
BRAKE SYSTEM**

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BRAKE LINKAGE (FIGURE 10-1) SINGLE PEDAL — DRY BRAKE (→ S/N L177B31320H)

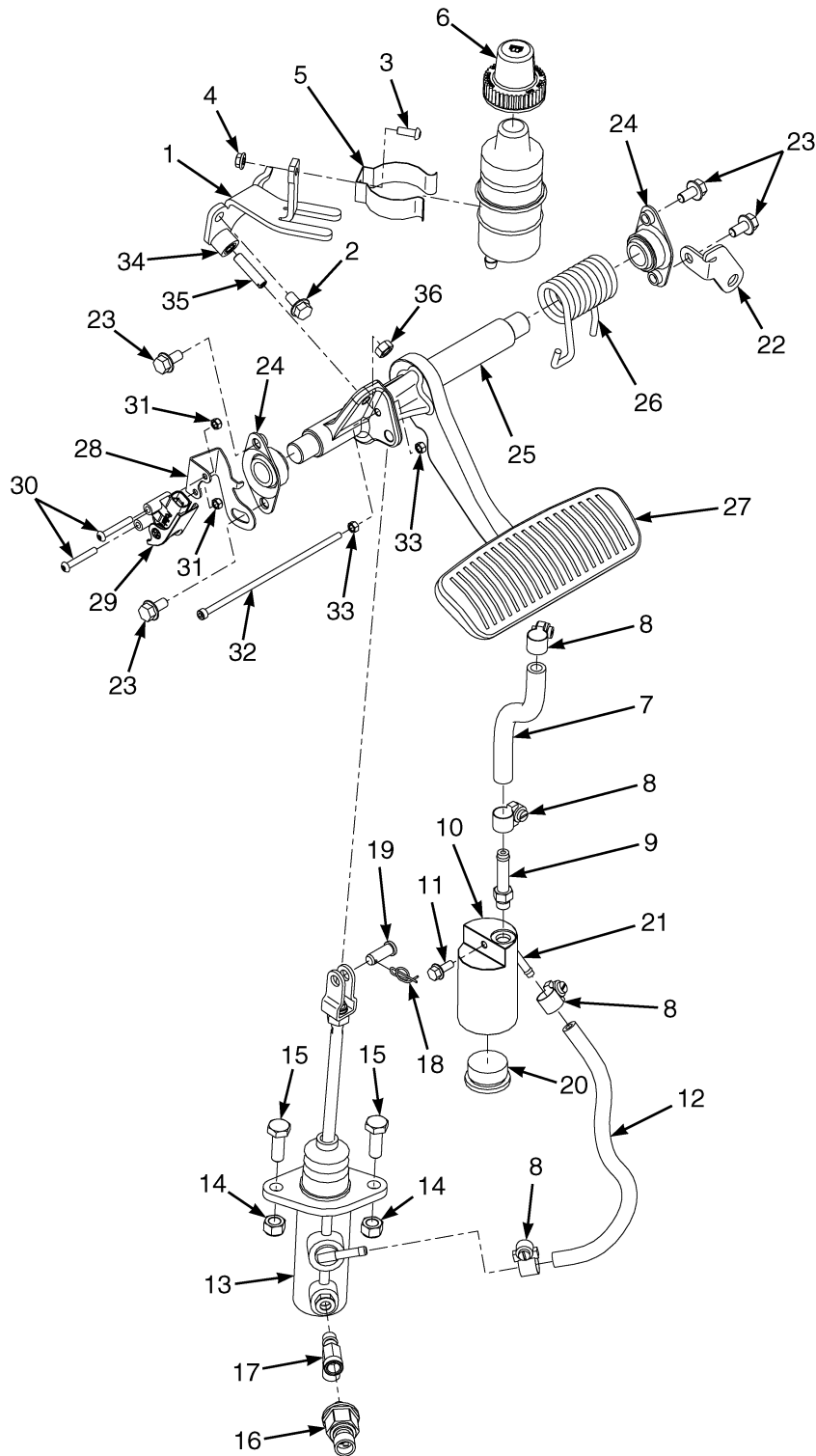


HP040421

BRAKE LINKAGE
SINGLE PEDAL – DRY BRAKE (→ S/N L177B31320H)

ITEM	PART NO.	DESCRIPTION	QTY
1	302398	Locknut	2
2	1531567	Bracket (Inching Sensor)	1
3	1553897	Capscrew	2
4	1547849	Sensor (Brake Position)	1
5	1586627	Capscrew	2
6	1500912	Clip	1
7	1564526	Clip (Key Hole)	1
8	1570290	Bracket Wldmt	1
9	1529366	Capscrew	1
10	1514429	Nut	1
11	1527879	Capscrew	6
12	1510126	Screw (Button Head)	1
13	2021353	Holder	1
14	2314223	Reservoir	1
14	2021341	Cap	1
14	2077604	Tank	1
14	2021343	Packing	1
15	2059937	Hose Assy (Brake)	1
16	1585575	Bushing	2
17	1568075	Spring (RH)	1
18	1502003	Hose Clamp	2
19	1543842	Clamp	1
20	1543698	Clamp (Swivel)	1
21	1583611	Capscrew	2
22	1531569	Hose (Brake Feed)	1
23	1556475	Bumper	1
24	239503	Nut	1
25	1534871	Bolt	1
26	1590033	Transducer	1
27	1527881	Capscrew	2
28	1375391	Pin (Rod End)	1
29	1351689	Locking Cotter Pin	1
30	1530243	Insert	2
31	1544153	Locknut	2
32	1570298	Rubber Pad	1
33	1536724	Master Cylinder (☞ Figure 10-6).....	1
34	1568243	Pedal	1
35	1594950	Bracket	1
	2093225	Label (Brake System Fluid Tag)	1

BRAKE LINKAGE (FIGURE 10-2) SINGLE PEDAL — DRY BRAKE (S/N L177B31321H →)



BP040136

BRAKE LINKAGE
SINGLE PEDAL – DRY BRAKE (S/N L177B31321H →)

ITEM	PART NO.	DESCRIPTION	QTY
1	1699992	Mount	1
2	1529366	Capscrew	1
3	1510126	Screw (Button Head)	1
4	1514429	Nut	1
5	2021353	Holder	1
6	1646439	Reservoir	1
6	2077604	Tank	1
6	2314223	Reservoir	1
6	2021341	Cap	1
6	2077604	Tank	1
6	2021343	Packing	1
6	1645381	Diaphragm	1
6	1646397	Cap	1
7	1531569	Hose	1
8	1502003	Hose Clamp	2
9	222491	Fitting	1
9	16481	O-Ring	1
10	2092613	Cylinder Block	1
11	1527876	Capscrew	1
12	2059937	Hose Assy	1
13	1536724	Master Cylinder	1
14	1544153	Locknut	2
15	1527881	Capscrew	2
16	1590033	Transducer	1
17	1674374	T-Fitting	1
17	16481	O-Ring	1
17	1527813	O-Ring	1
18	1351689	Locking Cotter Pin	1
19	1375391	Pin (Rod End)	1
20	233683	Fitting	1
20	16487	O-Ring	1
21	222509	Fitting	1
21	16481	O-Ring	1
22	1594950	Bracket	1
23	1527879	Capscrew	4
24	1585575	Bushing	2
25	1707008	Brake Pedal	1
26	1568075	Spring (RH)	1
27	1570298	Rubber Pad	1
28	1688503	Mount	1
29	1683486	Sensor (Brake Position)	1
30	1701768	Screw	2
31	302398	Locknut	1
32	1704902	Capscrew	1
33	292668	Nut	2
34	1556475	Bumper	1
35	1534871	Bolt	1
36	239503	Nut	1
	a 2064554	Loctite	1
	a 2111171	Wire Harness (Jumper) (Brake Sensor)	1

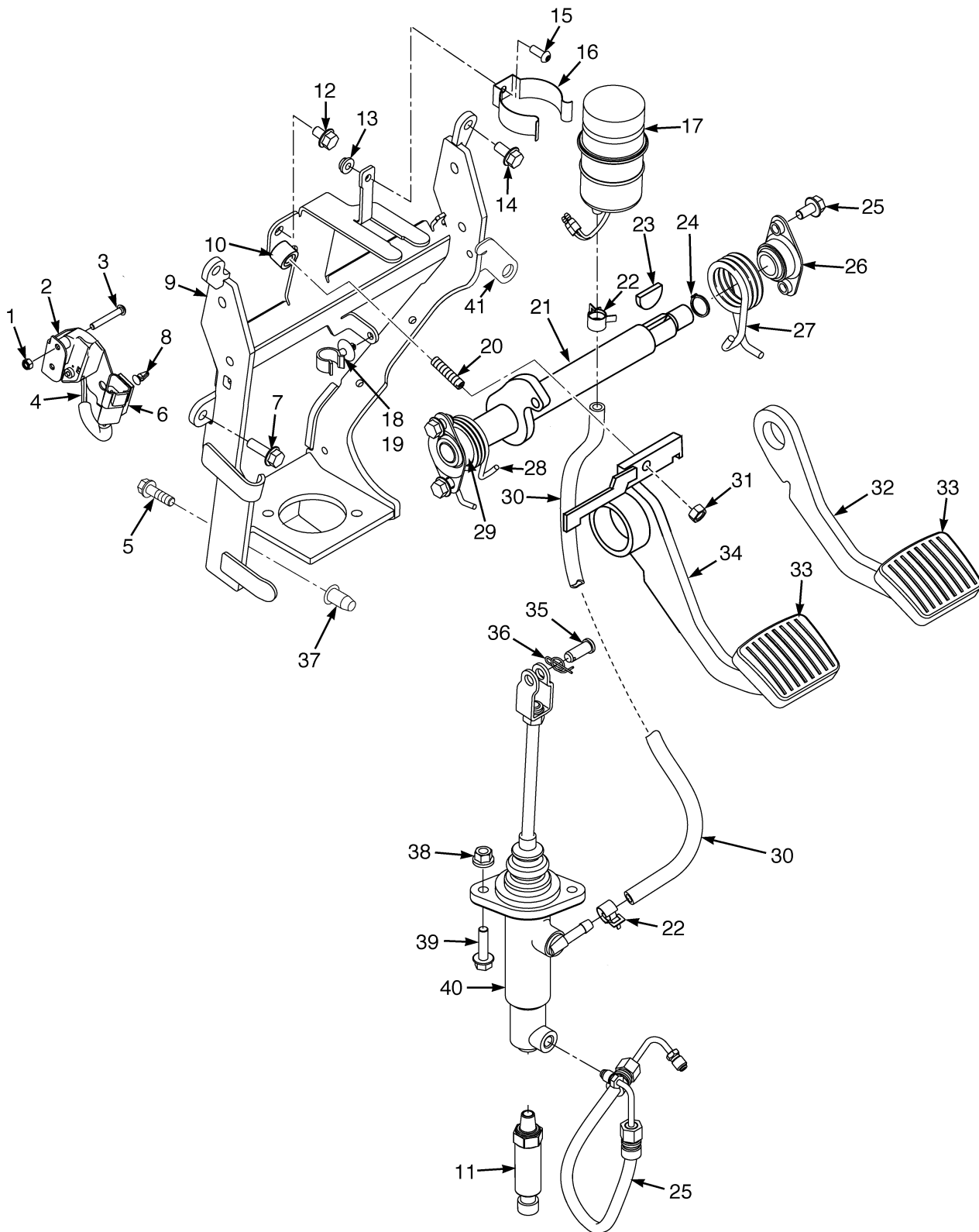
BRAKE LINKAGE
SINGLE PEDAL – DRY BRAKE (S/N L177B31321H →)

ITEM	PART NO.	DESCRIPTION	QTY
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FOOTNOTES:

- a Not Illustrated

BRAKE LINKAGE (FIGURE 10-3) DUAL PEDAL — DRY BRAKE (→ S/N L177B31320H)

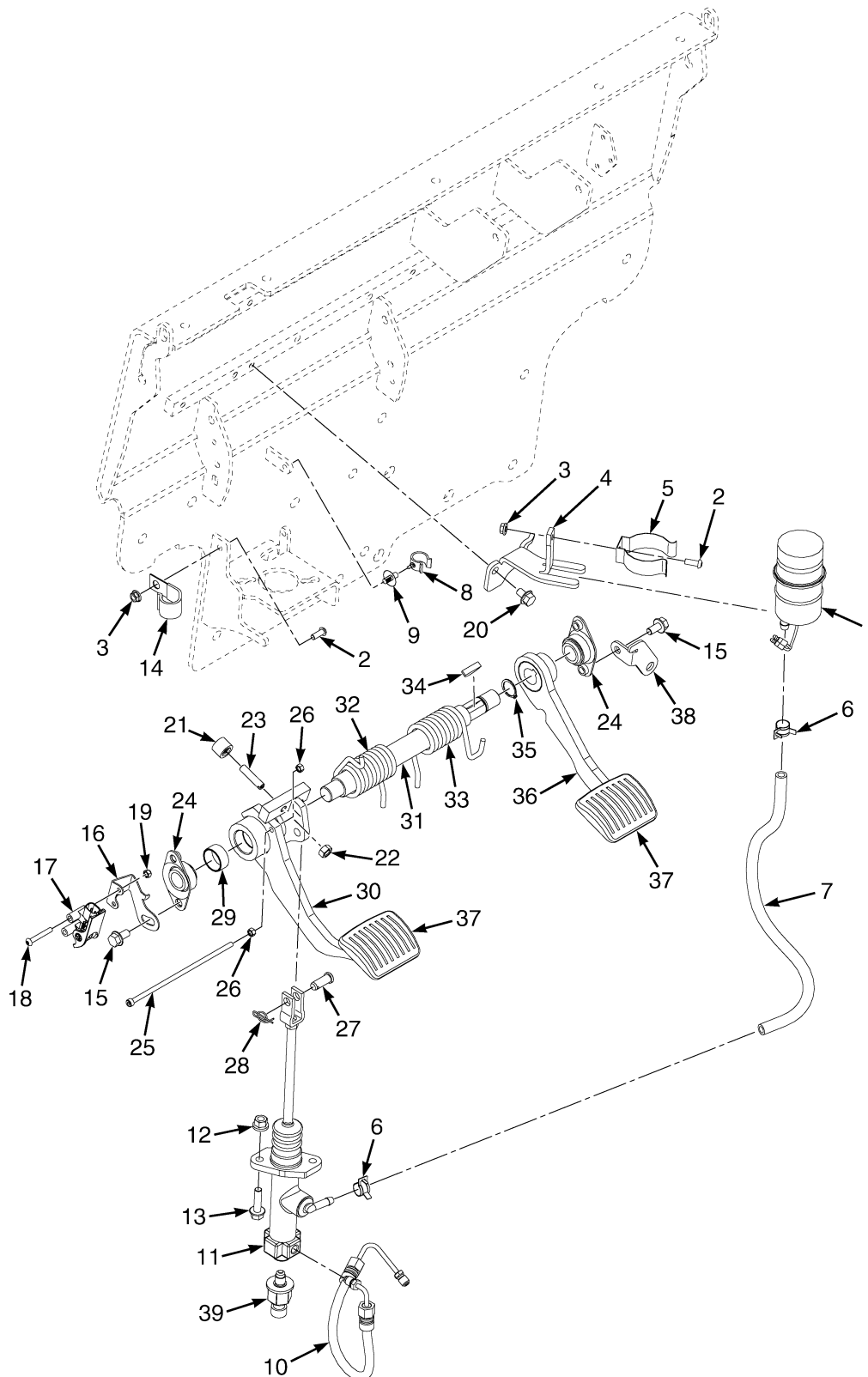


HP040422

BRAKE LINKAGE
DUAL PEDAL – DRY BRAKE (→ S/N L177B31320H)

ITEM	PART NO.	DESCRIPTION	QTY
1	302398	Locknut	2
2	1531567	Bracket (Inching Sensor)	1
3	1553897	Capscrew	2
4	1547849	Sensor (Brake Position)	1
5	1586627	Capscrew	2
6	1500912	Clip (Connector)	1
7	1583611	Capscrew	2
8	1564526	Clip (Key Hole)	1
9	1570290	Bracket Wldmt	1
10	1556475	Bumper	1
11	1590033	Transducer	1
12	1529366	Capscrew	1
13	1514429	Nut	1
14	1527879	Capscrew	6
15	1510126	Screw (Button Head)	1
16	2021353	Holder	1
17	2314223	Reservoir	1
17	2021341	Cap	1
17	2077604	Tank	1
17	2021343	Packing	1
18	1543698	Clamp (Swivel)	1
19	1543842	Clamp	1
20	1534871	Bolt	1
21	1568253	Crank	1
22	1502003	Hose Clamp	2
23	206	Woodruff Key	1
24	12929	Snap Ring	1
25	2059937	Hose Assy (Brake)	1
26	1585575	Bushing	2
27	1568076	Spring (RH)	1
28	1568077	Spring (LH)	1
29	244540	Bushing	2
30	1531569	Hose (Brake Feed)	1
31	239503	Nut	1
32	1568256	Brake Pedal (RH)	1
33	1570300	Pad	2
34	1568245	Brake Pedal (LH)	1
35	1375391	Pin (Rod End)	1
36	1351689	Locking Cotter Pin	1
37	1530243	Insert	2
38	1544153	Locknut	2
39	1527881	Capscrew	2
40	1536724	Master Cylinder (☞Figure 10-6).....	1
41	1594950	Bracket	1
	2093225	Label (Brake System Fluid Tag)	1

BRAKE LINKAGE (FIGURE 10-4) DUAL PEDAL — DRY BRAKE (S/N L177B31321H →)



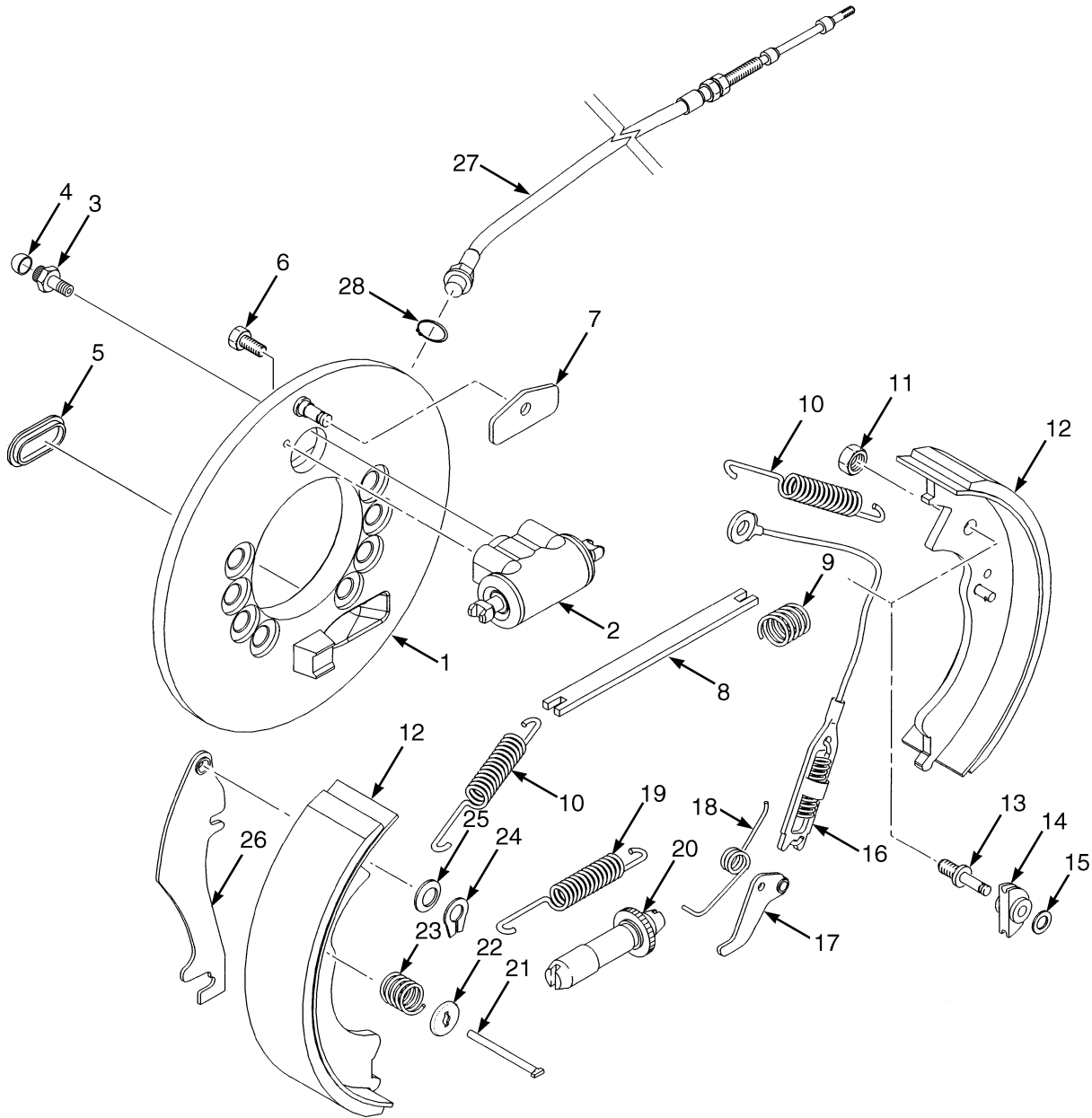
BP040149

BRAKE LINKAGE
DUAL PEDAL – DRY BRAKE (S/N L177B31321H →)

ITEM	PART NO.	DESCRIPTION	QTY
1	2314223	Reservoir	1
1	2021341	Cap	1
1	2077604	Tank	1
1	2021343	Packing	1
2	1510126	Screw (Button Head)	2
3	1514429	Nut	2
4	1699992	Mount	1
5	2021353	Holder	1
6	1502003	Hose Clamp	2
7	1531569	Hose	1
8	1543698	Clamp (Swivel)	1
9	1543842	Clamp	1
10	2059937	Hose Assy	1
11	1536724	Master Cylinder	1
12	1544153	Locknut	2
13	1527881	Capscrew	2
14	325897	Clamp	1
15	1527879	Capscrew	2
16	1688503	Mount	1
17	1683486	Sensor (Brake Position)	1
18	1701768	Screw	2
19	302398	Locknut	2
20	1529366	Capscrew	1
21	1556475	Bumper	1
22	239503	Nut	1
23	1534871	Bolt	1
24	1585575	Bushing	2
25	1704901	Capscrew	1
26	292668	Nut	2
27	1375391	Pin (Rod End)	1
28	1351689	Locking Cotter Pin	1
29	244540	Bushing	2
30	1701771	Inching Pedal (Left Hand)	1
31	1568253	Crank	1
32	1568077	Spring (LH)	1
33	1568076	Spring (RH)	1
34	206	Woodruff Key	1
35	12929	Snap Ring	1
36	1568256	Brake Pedal (RH)	1
37	1570300	Pad	1
38	1594950	Bracket	1
39	1590033	Transducer	1
	a 2111171	Wire Harness (Jumper) (Position Sensor/Cowl Harness)	1
	2064554	Loctite	1

FOOTNOTES:**a** Not Illustrated

BRAKE ASSEMBLY (FIGURE 10-5) DRY BRAKE



BP040047

**BRAKE ASSEMBLY
DRY BRAKE**

KEY:
A: RH
B: LH

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1579455	Brake Assembly (With Cable and Dust Shield)	1	..
	1579454	Brake Assembly (With Cable and Dust Shield) .....	..	1
	1606086	Brake Assembly (Without Cable)	1	..
	1606085	Brake Assembly (Without Cable) .....	..	1
1	1606088	Backplate	1	..
1	1606087	Backplate .....	..	1
2	1565290	Wheel Cylinder	1	1
2	1334647	Kit-Repair Wheel Cylinder	1	1
3	1361503	Bleeder Screw	1	1
4	1361504	Cap	1	1
5	1334642	Cover	1	1
6	1565303	Bolt	2	2
7	2037343	Wear Plate	1	1
8	1360796	Bracket	1	..
8	1361507	Strut .....	..	1
9	1360797	Spring	1	1
10	.....	Spring	1	1
11	.....	Nut	1	1
12	1565314	Kit-Brake Shoe	1	..
12	1565313	Kit-Brake Shoe .....	..	1
13	.....	Pin	1	1
14	1334644	Sheave	1	1
15	1361500	Washer	1	1
16	.....	Cable and Spring Assembly	1	1
17	2037518	Lever	1	..
17	2037517	Lever .....	..	1
18	.....	Spring	1	1
19	2037340	Spring	1	1
20	1600492	Adjuster	1	..
20	1600491	Adjuster .....	..	1
21	2037323	Pin	1	1
22	2037341	Cup	1	1
23	.....	Spring	1	1
24	1338916	Retainer	1	1
25	1338917	Washer	1	1
26	.....	Park Brake Lever	1	1
27	1565305	Parking Brake Cable	1	..
27	1600493	Parking Brake Cable .....	..	1
28	1361502	Snap Ring	1	1
	1565316	Kit-Spring	1	1
	1565310	Kit-Adjuster (RH)	1	..
	1565309	Kit-Adjuster (LH) .....	..	1
	1565311	Kit-Repair Parking Brake (LH) .....	..	1
	1565312	Kit-Park Brake (RH)	1	..

BRAKE ASSEMBLY DRY BRAKE

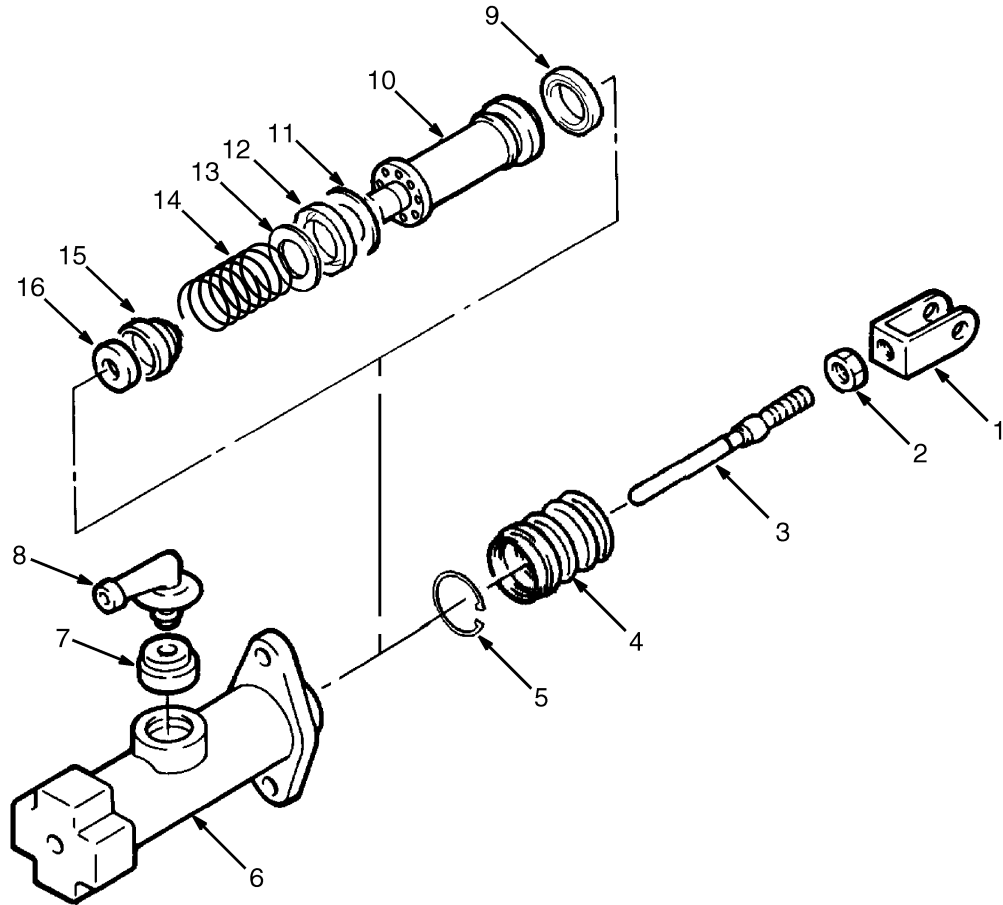
KEY:

A: RH

B: LH

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1565315	Kit-Hold Down	1	1

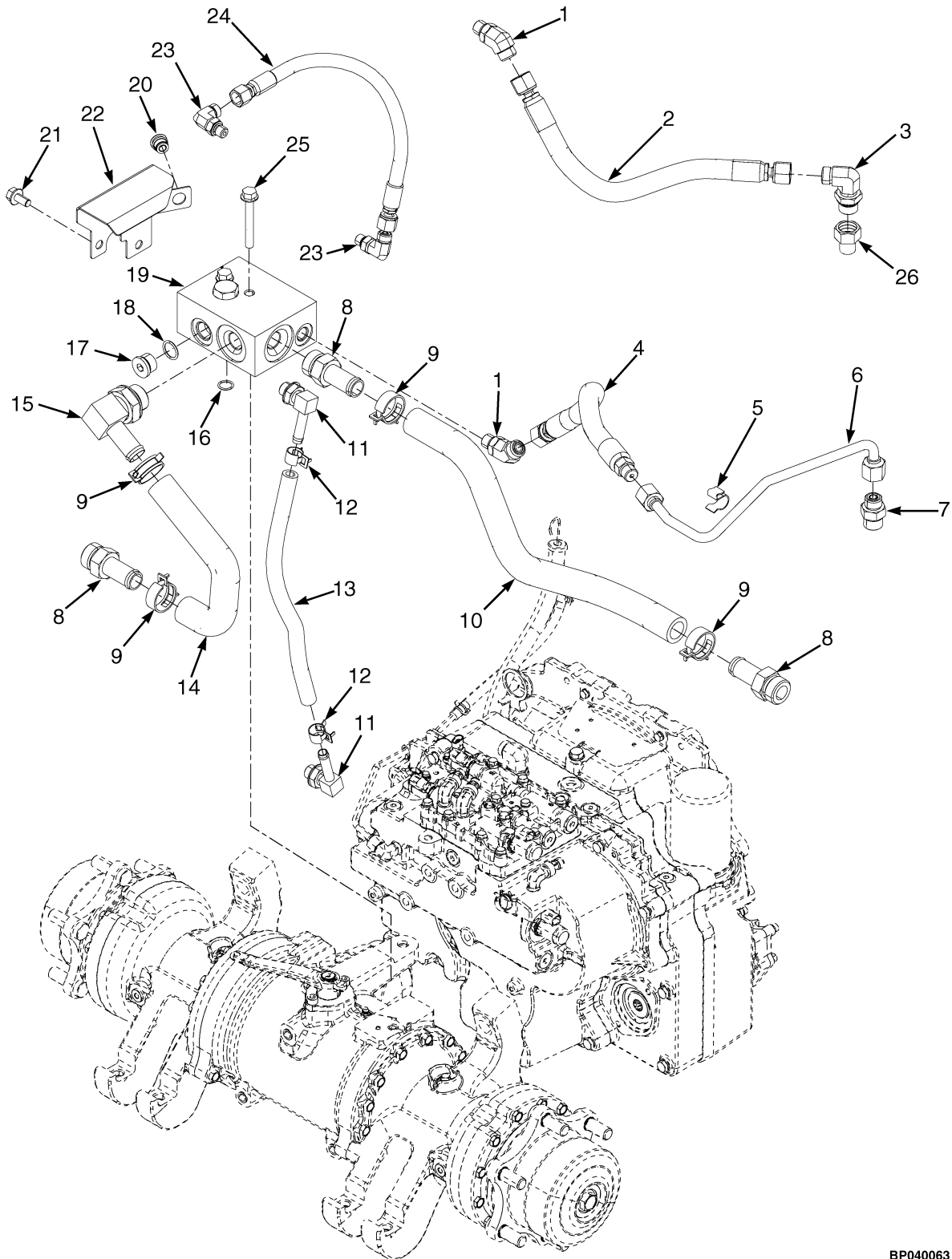
**MASTER CYLINDER (FIGURE 10-6)
DRY BRAKE**



BP040123

ITEM	PART NO.	DESCRIPTION	QTY
	1536724	Master Cylinder	1
1	2041520	Yoke	1
2	1566142	Nut	1
3	1566141	Push Rod	1
4	.....	Boot	1
5	.....	Snap Ring	1
6	.....	Housing	1
7	1566144	Gasket	1
8	1566143	Fitting	1
9	.....	Seal	1
10	.....	Piston	1
11	.....	Spacer	1
12	.....	Piston Cup	1
13	.....	Retainer	1
14	.....	Spring	1
15	.....	Check Valve	1
16	.....	Valve Seat	1
	1566131	Kit-Repair Master Cylinder	1

BRAKE COOLING SYSTEM (FIGURE 10-7) SINGLE AND DUAL PEDAL — WET BRAKE (→ S/N L177B15745E)

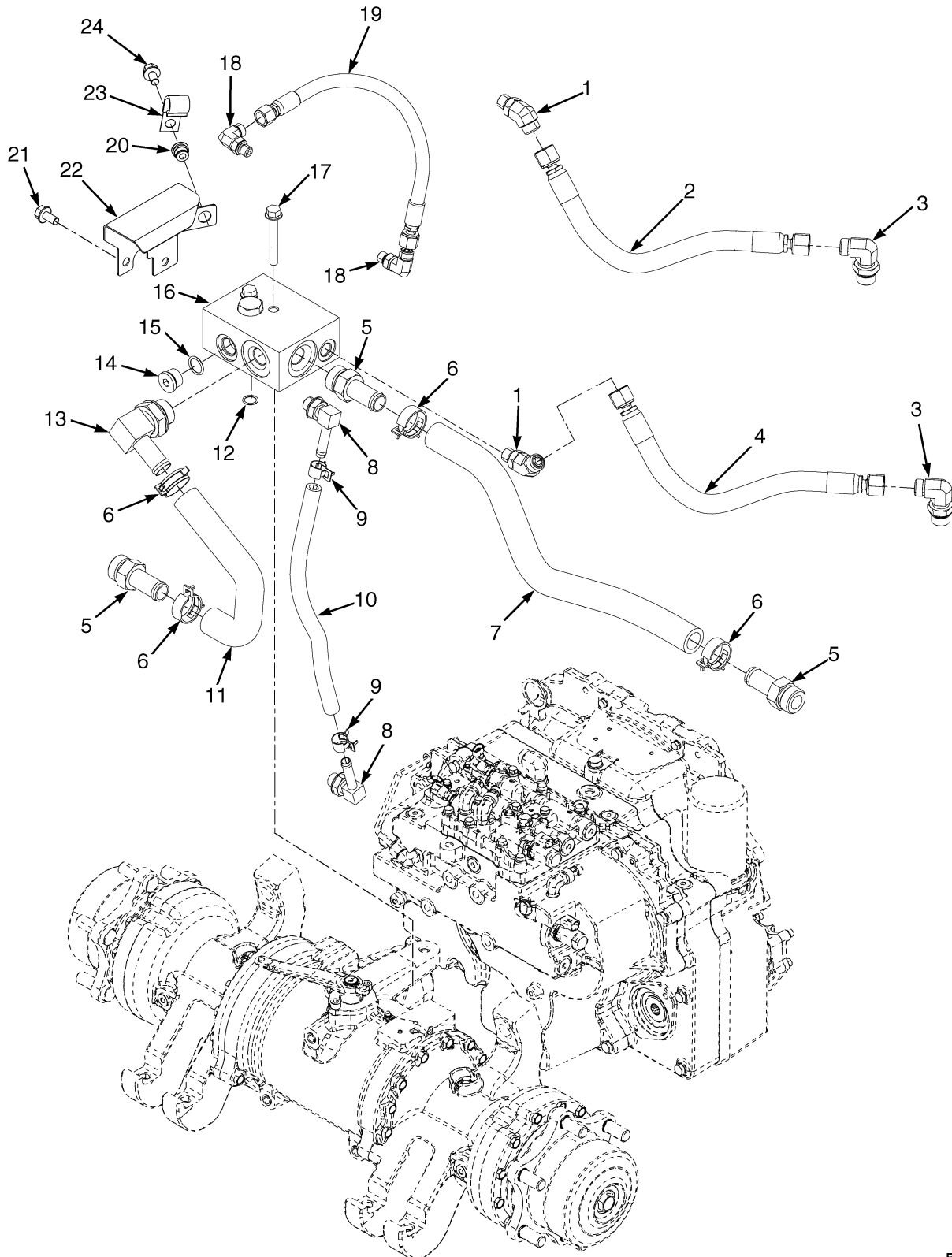


BP040063

BRAKE COOLING SYSTEM
SINGLE AND DUAL PEDAL – WET BRAKE (→ S/N L177B15745E)

ITEM	PART NO.	DESCRIPTION	QTY
1	1516199	Fitting	2
1	16483	O-Ring	2
1	265787	O-Ring	2
2	2082235	Hose Assy (Master Cylinder To Torque Converter)	1
3	1487061	Fitting	1
3	265787	O-Ring	1
3	16484	O-Ring	1
4	2083929	Hose Assy (Torque Converter)	1
5	1612097	Clip	1
6	2083930	Tube	1
7	1486742	Fitting	1
7	265787	O-Ring	1
7	16483	O-Ring	1
8	17758	Fitting	3
8	16486	O-Ring	2
9	1502009	Hose Clamp	4
10	2083934 4606207	Hose (Transmission Return)	1
11	17221	Fitting	2
11	16483	O-Ring	1
11	265731	O-Ring	1
12	1569616	Hose Clamp	2
13	2083928	Hose	1
14	2072897	Hose (Coolant)	1
15	16486	O-Ring	2
15	17775	Fitting	2
16	265731	O-Ring	1
17	222443	Fitting	1
18	16483	O-Ring	1
19	2083971	Manifold	1
19	1616055	O-Ring	1
19	2045627	Plug	1
19	1517909	O-Ring	1
19	1616054	Check Valve	1
19	1517906	Kit-Seal	1
20	1531557	Insert	1
21	1527879	Capscrew	2
22	1588577	Bracket	1
23	1487058	Fitting	2
23	16481	O-Ring	2
23	1527813	O-Ring	2
24	2083955	Hose Assy (Brake Actuation)	1
25	1510116	Capscrew	2
26	77186	Fitting	1
26	16487	O-Ring	1

BRAKE COOLING SYSTEM (FIGURE 10-8) SINGLE AND DUAL PEDAL — WET BRAKE (S/N L177B15746E ↔ S/N L177B30739H)



BP040094

BRAKE COOLING SYSTEM
SINGLE AND DUAL PEDAL – WET BRAKE (S/N L177B15746E ↔ S/N L177B30739H)

ITEM	PART NO.	DESCRIPTION	QTY
1	1516199	Fitting	2
1	16483	O-Ring	2
1	265787	O-Ring	2
2	2095227	Hose Assy (Torque Converter To Master Cylinder)	1
3	1487061	Fitting	2
3	265787	O-Ring	1
3	16484	O-Ring	1
4	2095228	Hose Assy (Torque Converter)	1
5	17758	Fitting	3
5	16486	O-Ring	2
6	1502009	Hose Clamp	4
7	2083934		
	4606207	Hose	1
8	17221	Fitting	2
8	16483	O-Ring	1
8	265731	O-Ring	1
9	1569616	Hose Clamp	2
10	2083928	Hose (Coolant)	1
11	2072897	Hose	1
12	265731	O-Ring	1
13	17775	Fitting	2
13	16486	O-Ring	2
14	222443	Fitting	1
15	16483	O-Ring	1
15	1616054	Check Valve	1
16	2083971	Manifold	1
16	1616055	O-Ring	1
16	2045627	Plug	1
16	1517909	O-Ring	1
16	1517906	Kit-Seal	1
17	1510116	Capscrew	2
18	1487058	Fitting	2
18	16481	O-Ring	2
18	1527813	O-Ring	2
19	2083955	Hose Assy	1
20	1531557	Insert	1
21	1527879	Capscrew	2
22	1588577	Bracket	1
23	325804	Clamp	1
24	1613324	Capscrew	1

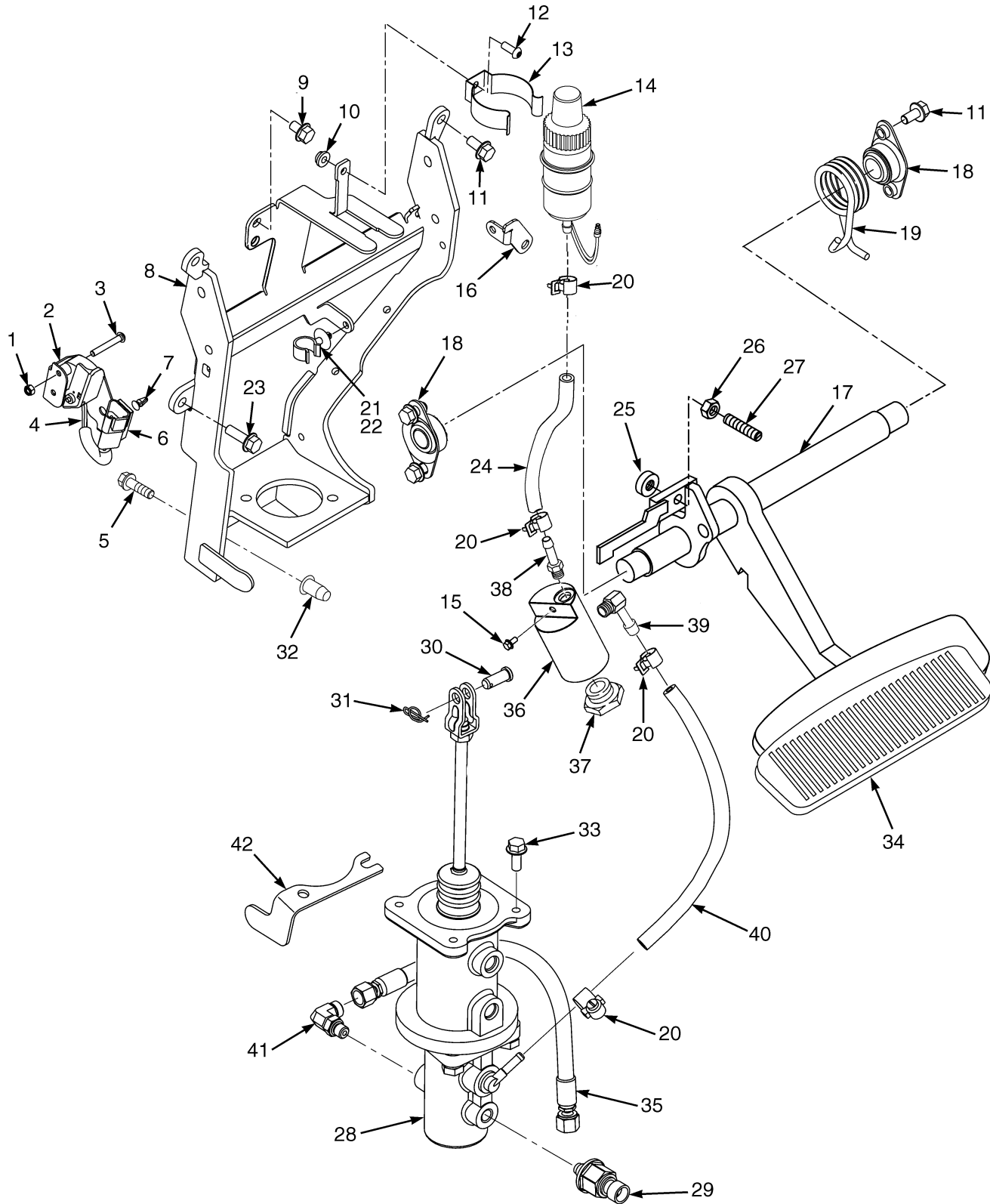
BRAKE COOLING SYSTEM
SINGLE AND DUAL PEDAL – WET BRAKE (S/N L177B30740H →)

KEY:**A: With Yanmar Engine****B: With Mazda Engine**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1516199	Fitting	2	2
2	1487061	Fitting	2	2
3	2095228	Hose Assy	1	..
3	2110267	Hose Assy .....	..	1
4	17758	Fitting	3	3
4	16486	O-Ring	2	2
5	1502009	Hose Clamp	4	4
6	2083934 4606207	Hose	1	..
6	4612188	Hose Assy .....	..	1
7	2072897	Hose	1	1
8	265731	O-Ring	1	1
9	17775	Fitting	2	2
9	16486	O-Ring	2	2
10	2083971	Manifold	1	..
10	1616055	O-Ring	1	..
10	235691	Fitting	1	..
10	1616054	Check Valve	1	..
10	1517906	Kit-Seal	1	..
10	2110265	Manifold .....	..	1
10	235691	Fitting .....	..	1
10	1708456	Housing .....	..	1
10	1616054	Check Valve .....	..	1
10	1517906	Kit-Seal .....	..	1
11	1510116	Capscrew	2	2
12	1487058	Fitting	2	2
13	2083955	Hose Assy	1	1
14	1531557	Insert	1	1
15	1527879	Capscrew	2	2
16	1588577	Bracket	1	1
17	325804	Clamp	1	1
18	1613324	Capscrew	1	1
19	222505	Fitting .....	..	2
	a 14594	Plug	1	1

FOOTNOTES:**a** Not Illustrated

BRAKE LINKAGE (FIGURE 10-10) SINGLE PEDAL — WET BRAKE (→ S/N L177B31320H)



HP040417

BRAKE LINKAGE
SINGLE PEDAL – WET BRAKE (→ S/N L177B31320H)

ITEM	PART NO.	DESCRIPTION	QTY
1	302398	Locknut	2
2	1531567	Bracket	1
3	1553897	Capscrew	2
4	1547849	Sensor (Brake Position)	1
5	1586627	Capscrew	2
6	1500912	Clip	1
7	1564526	Clip (Key Hole)	1
8	1639075	Bracket Wldmt	1
9	1529366	Capscrew	1
10	1514429	Nut	1
11	1527879	Capscrew	6
12	1510126	Screw (Button Head)	1
13	2021353	Holder	1
14	1646439	Reservoir	1
14	2077604	Tank	1
14	c 1646557	Diaphragm	1
14	g 1645381	Diaphragm	1
14	1646397	Cap	1
15	1527876	Capscrew	1
16	1594950	Bracket	1
17	1641558	Pedal	1
18	1585575	Bushing	2
19	1568075	Spring (RH)	1
20	166857	Clamp	4
20	b 168718	Clamp	4
21	1543842	Clamp	1
22	1543698	Clamp (Swivel)	1
23	1583611	Capscrew	2
24	2092888	Hose (Upper Brake Feed)	1
25	1556475	Bumper	1
26	239503	Nut	1
27	1534871	Bolt	1
28	d 1573675	Brake Booster (☞Figure 10-14).....	1
28	e 2096079	Master Cylinder (Boosted) (☞Figure 10-14).....	1
28	f 1569527	Master Cylinder (Boosted)	1
29	1590033	Transducer	1
30	1375391	Pin (Rod End)	1
31	1351689	Locking Cotter Pin	1
32	1530243	Insert	2
33	1527880	Capscrew	4
34	1570298	Rubber Pad	1
35	2083955	Hose Assy (Lower Brake Feed)	1
36	2092613	Cylinder Block	1
37	233683	Fitting	1
37	16487	O-Ring	1
38	222491	Fitting	1
38	16481	O-Ring	1
39	222509	Fitting	1
39	16481	O-Ring	1
40	117989	Hose	1

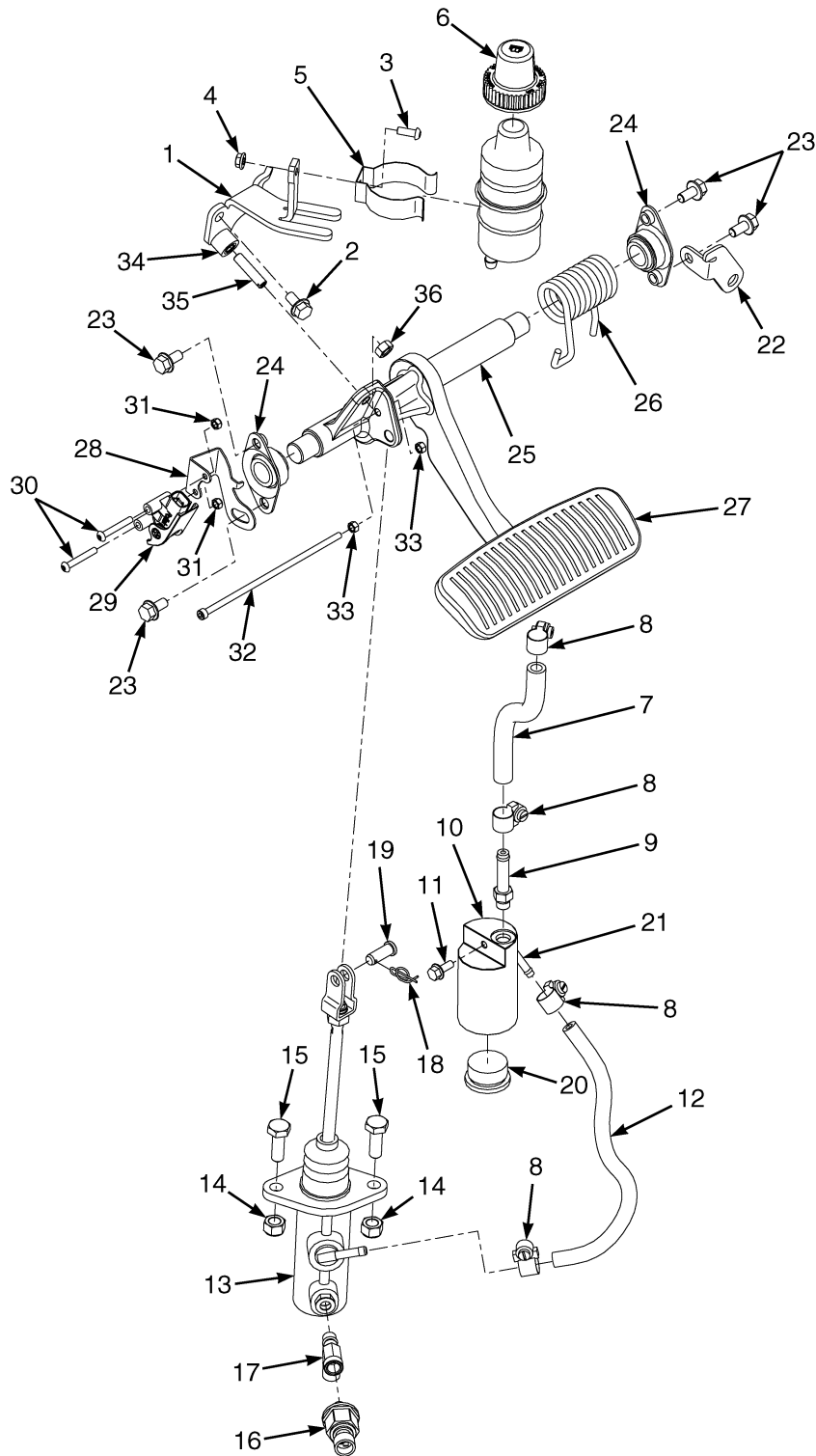
BRAKE LINKAGE SINGLE PEDAL – WET BRAKE (→ S/N L177B31320H)

ITEM	PART NO.	DESCRIPTION	QTY
41	1487058	Fitting	1
41	16481	O-Ring	1
41	1527813	O-Ring	1
42	a 1670905	Bracket	1

FOOTNOTES:

- | | | | |
|----------|-------------------|----------|-----------------------------------|
| a | Not Required | e | S/N L177B13169E ↔ S/N L177B16711E |
| b | Optional | f | S/N L177B16712E → |
| c | → S/N L177B11900D | g | S/N L177B11901D → |
| d | → S/N L177B13168E | | |

BRAKE LINKAGE (FIGURE 10-11) SINGLE PEDAL — WET BRAKE (S/N L177B31321H →)



BP040136

BRAKE LINKAGE
SINGLE PEDAL – WET BRAKE (S/N L177B31321H →)

ITEM	PART NO.	DESCRIPTION	QTY
1	1699992	Mount	1
2	1529366	Capscrew	1
3	1510126	Screw (Button Head)	1
4	1514429	Nut	1
5	2021353	Holder	1
6	1646439	Reservoir	1
6	2077604	Tank	1
6	2314223	Reservoir	1
6	2021341	Cap	1
6	2077604	Tank	1
6	2021343	Packing	1
6	1645381	Diaphragm	1
6	1646397	Cap	1
7	2092888	Hose	1
8	166857	Clamp	4
8	168718	Clamp (Optional)	4
9	222491	Fitting	1
9	16481	O-Ring	1
10	2092613	Cylinder Block	1
11	1527876	Capscrew	1
12	893308	Hose	1
13	1667199	Master Cylinder	1
14	316826	Nut	2
15	136985	Capscrew	2
16	1590033	Transducer	1
17	1674374	T-Fitting	1
17	16481	O-Ring	1
17	1527813	O-Ring	1
18	1351689	Locking Cotter Pin	1
19	1375391	Pin (Rod End)	1
20	233683	Fitting	1
20	16487	O-Ring	1
21	222509	Fitting	1
21	16481	O-Ring	1
22	1594950	Bracket	1
23	1527879	Capscrew	4
24	1585575	Bushing	2
25	4707009		
	4014374	Brake Pedal	1
26	1568075	Spring (RH)	1
27	1570298	Rubber Pad	1
28	1688503	Mount	1
29	1683486	Sensor (Brake Position)	1
30	1701768	Screw	2
31	302398	Locknut	1
32	1704902	Capscrew	1
33	292668	Nut	2
34	1556475	Bumper	1
35	1534871	Bolt	1
36	239503	Nut	1

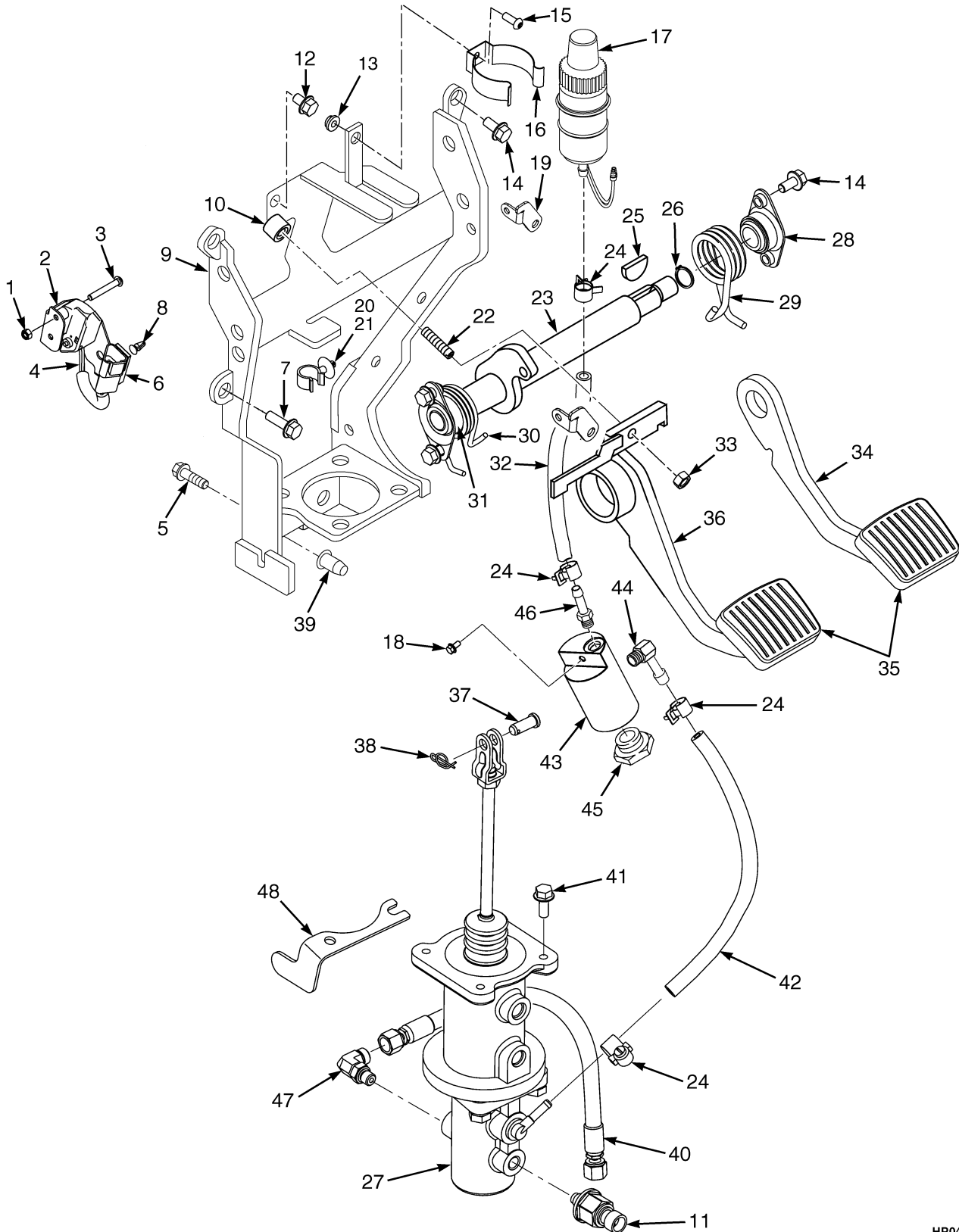
BRAKE LINKAGE
SINGLE PEDAL – WET BRAKE (S/N L177B31321H →)

ITEM	PART NO.	DESCRIPTION	QTY
	a 2064554	Loctite	1
	a 2111171	Wire Harness (Jumper) (Brake Sensor/Cowl Harness)	1

FOOTNOTES:

a Not Illustrated

BRAKE LINKAGE (FIGURE 10-12) DUAL PEDAL — WET BRAKE (→ S/N L177B31320H)



HP040418

BRAKE LINKAGE
DUAL PEDAL – WET BRAKE (→ S/N L177B31320H)

ITEM	PART NO.	DESCRIPTION	QTY
1	302398	Locknut	2
2	1531567	Bracket	1
3	1553897	Capscrew	2
4	1547849	Sensor (Brake Position)	1
5	1586627	Capscrew	2
6	1500912	Clip (Connector)	1
7	1583611	Capscrew	2
8	1564526	Clip (Key Hole) (Key Hole)	1
9	1639075	Bracket Wldmt	1
10	1556475	Bumper	1
11	1590033	Transducer	1
12	1529366	Capscrew	1
13	1514429	Nut	1
14	1527879	Capscrew	6
15	1510126	Screw (Button Head)	1
16	2021353	Holder	1
17	1646439	Reservoir	1
17	2077604	Tank	1
17	b 1646557	Diaphragm	1
17	f 1645381	Diaphragm	1
17	1646397	Cap	1
18	1527876	Capscrew	1
19	1594950	Bracket	1
20	1543698	Clamp (Swivel)	1
21	1543842	Clamp	1
22	1534871	Bolt	1
23	1579028	Crank	1
24	166857	Clamp	4
24	a 168718	Clamp	4
25	206	Woodruff Key	1
26	12929	Snap Ring	1
27	c 1573675	Brake Booster (☞Figure 10-14).....	1
27	e 2096079	Master Cylinder (Boosted) (☞Figure 10-14).....	1
27	d 1569527	Master Cylinder (Boosted)	1
28	1585575	Bushing	2
29	1568076	Spring (RH)	1
30	1568077	Spring (LH)	1
31	244540	Bushing	2
32	2092888	Hose (Upper Brake Feed)	1
33	239503	Nut	1
34	1568256	Brake Pedal (RH)	1
35	1570300	Pad	2
36	1639801	Brake Pedal (LH)	1
37	1375391	Pin (Rod End)	1
38	1351689	Locking Cotter Pin	1
39	1530243	Insert	2
40	2076656	Hose Assy (Brake)	1
41	1527880	Capscrew	4
42	2083955	Hose Assy (Lower Brake Feed)	1
43	2092613	Cylinder Block	1

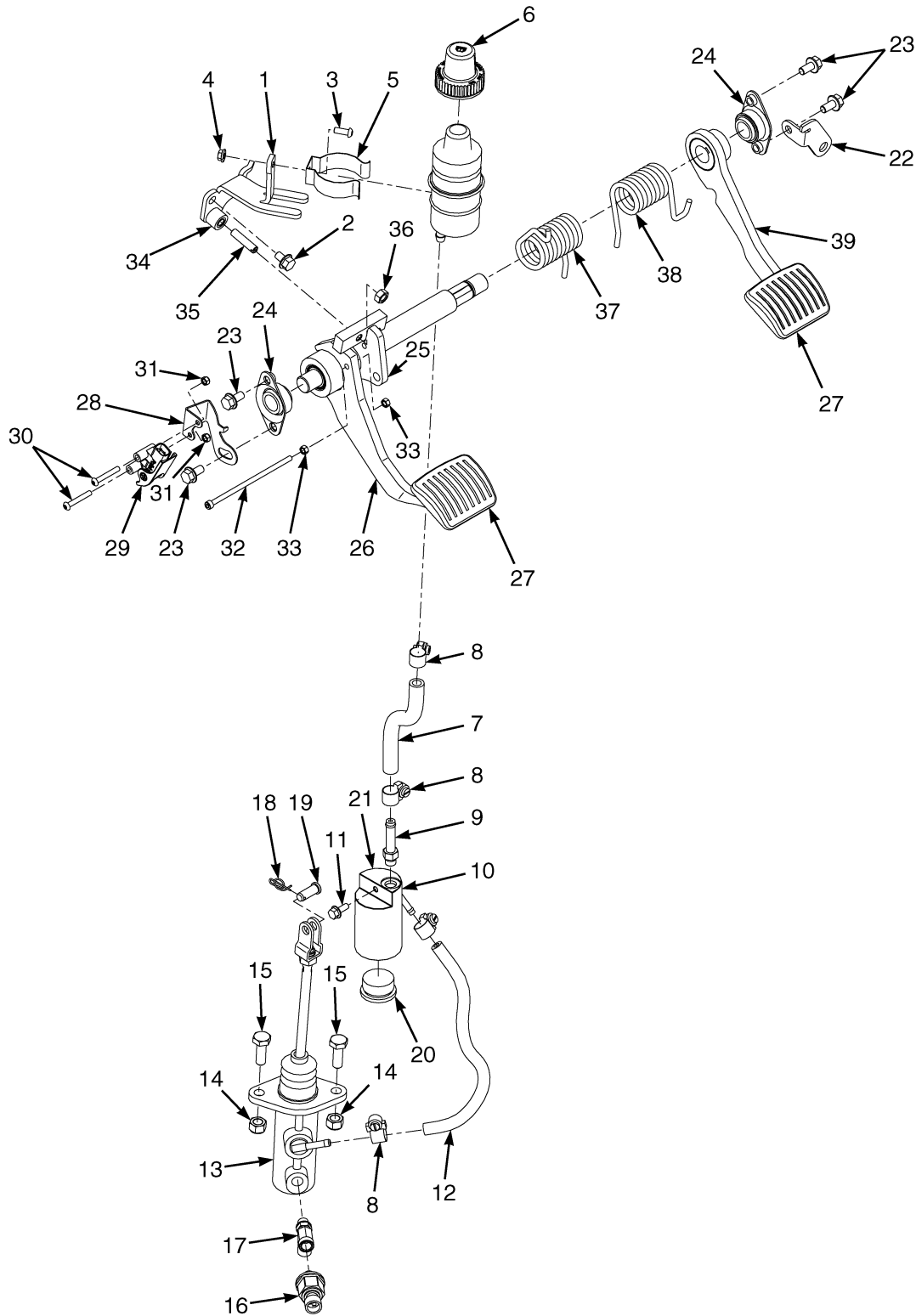
BRAKE LINKAGE
DUAL PEDAL – WET BRAKE (→ S/N L177B31320H)

ITEM	PART NO.	DESCRIPTION	QTY
44	222509	Fitting	1
44	16481	O-Ring	1
45	1569616	Hose Clamp	2
45	233683	Fitting	1
45	16487	O-Ring	1
46	222491	Fitting	1
46	16481	O-Ring	1
47	1487058	Fitting	1
47	16481	O-Ring	1
47	1527813	O-Ring	1
48	1670905	Bracket	1

FOOTNOTES:

- | | |
|----------------------------|--|
| a Optional | d → S/N L177B16712E |
| b → S/N L177B11900D | e S/N L177B13169E ↔ S/N L177B16711E |
| c → S/N L177B13168E | f S/N L177B11901D → |

BRAKE LINKAGE (FIGURE 10-13) DUAL PEDAL — WET BRAKE (S/N L177B31321H →)



BP040137

BRAKE LINKAGE
DUAL PEDAL – WET BRAKE (S/N L177B31321H →)

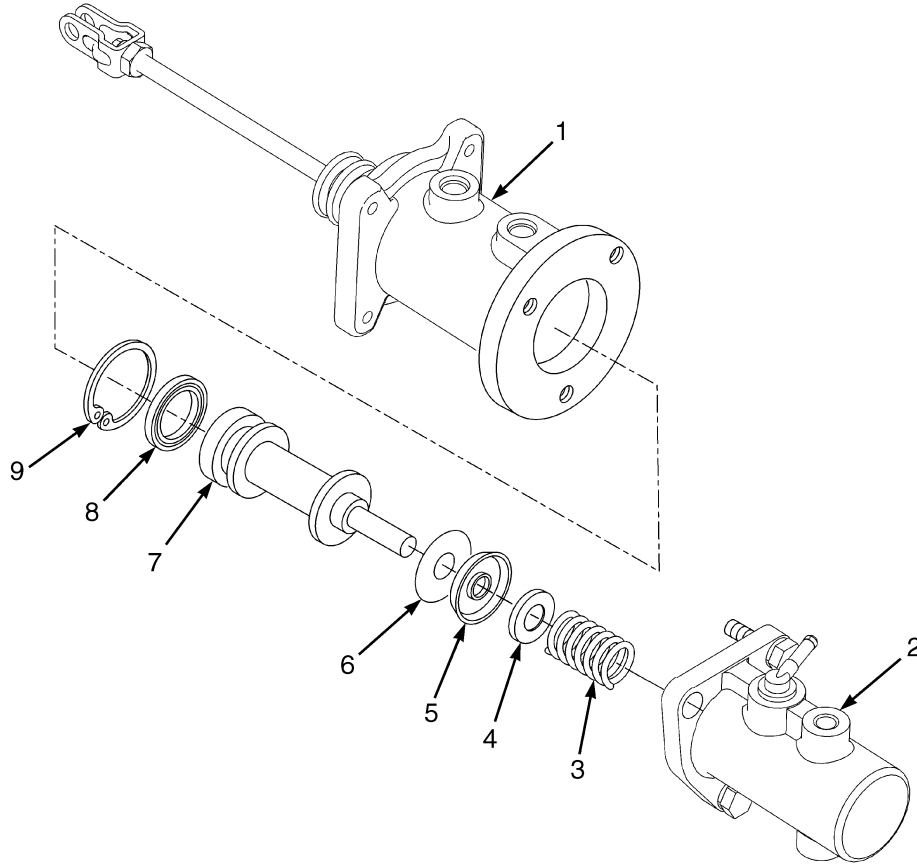
ITEM	PART NO.	DESCRIPTION	QTY
1	1699992	Mount	1
2	1529366	Capscrew	1
3	1510126	Screw (Button Head)	1
4	1514429	Nut	1
5	2021353	Holder	1
6	1646439	Reservoir	1
6	2077604	Tank	1
6	2314223	Reservoir	1
6	2021341	Cap	1
6	2077604	Tank	1
6	2021343	Packing	1
6	1645381	Diaphragm	1
6	1646397	Cap	1
7	2092888	Hose	1
8	166857	Clamp	4
8	168718	Clamp (Optional)	4
9	222491	Fitting	1
9	16481	O-Ring	1
10	2092613	Cylinder Block	1
11	1527876	Capscrew	1
12	893308	Hose	1
13	1667199	Master Cylinder	1
14	316826	Nut	2
15	136985	Capscrew	2
16	1590033	Transducer	1
17	1674374	T-Fitting	1
17	16481	O-Ring	1
17	1527813	O-Ring	1
18	1351689	Locking Cotter Pin	1
19	1375391	Pin (Rod End)	1
20	233683	Fitting	1
20	16487	O-Ring	1
21	222509	Fitting	1
21	16481	O-Ring	1
22	1594950	Bracket	1
23	1527879	Capscrew	4
24	1585575	Bushing	2
25	1668130	Brake Pedal	1
26	1701765	Brake Pedal	1
27	1570300	Pad	2
28	1688503	Mount (Inching Sensor)	1
29	1683486	Sensor (Brake Position)	1
30	1701768	Screw	2
31	302398	Locknut	1
32	1704901	Capscrew	1
33	292668	Nut	2
34	1556475	Bumper	1
35	1534871	Bolt	1
36	239503	Nut	1
37	1568077	Spring (LH)	1

BRAKE LINKAGE
DUAL PEDAL – WET BRAKE (S/N L177B31321H →)

ITEM	PART NO.	DESCRIPTION	QTY
38	1568076	Spring (RH)	1
39	1568256	Brake Pedal (RH)	1
40	206	Woodruff Key	1
41	12929	Snap Ring	1
	a 244540	Bushing	2
	a 2064554	Loctite	1
	a 2111171	Wire Harness (Jumper) (Brake Sensor/Cowl Harness)	1

FOOTNOTES:**a** Not Illustrated

**BRAKE MASTER CYLINDER ASSEMBLY (FIGURE 10-14)
WET BRAKE**



BP040065

KEY:

- A: 1573675**
- B: 2096079**
- C: 1569527**

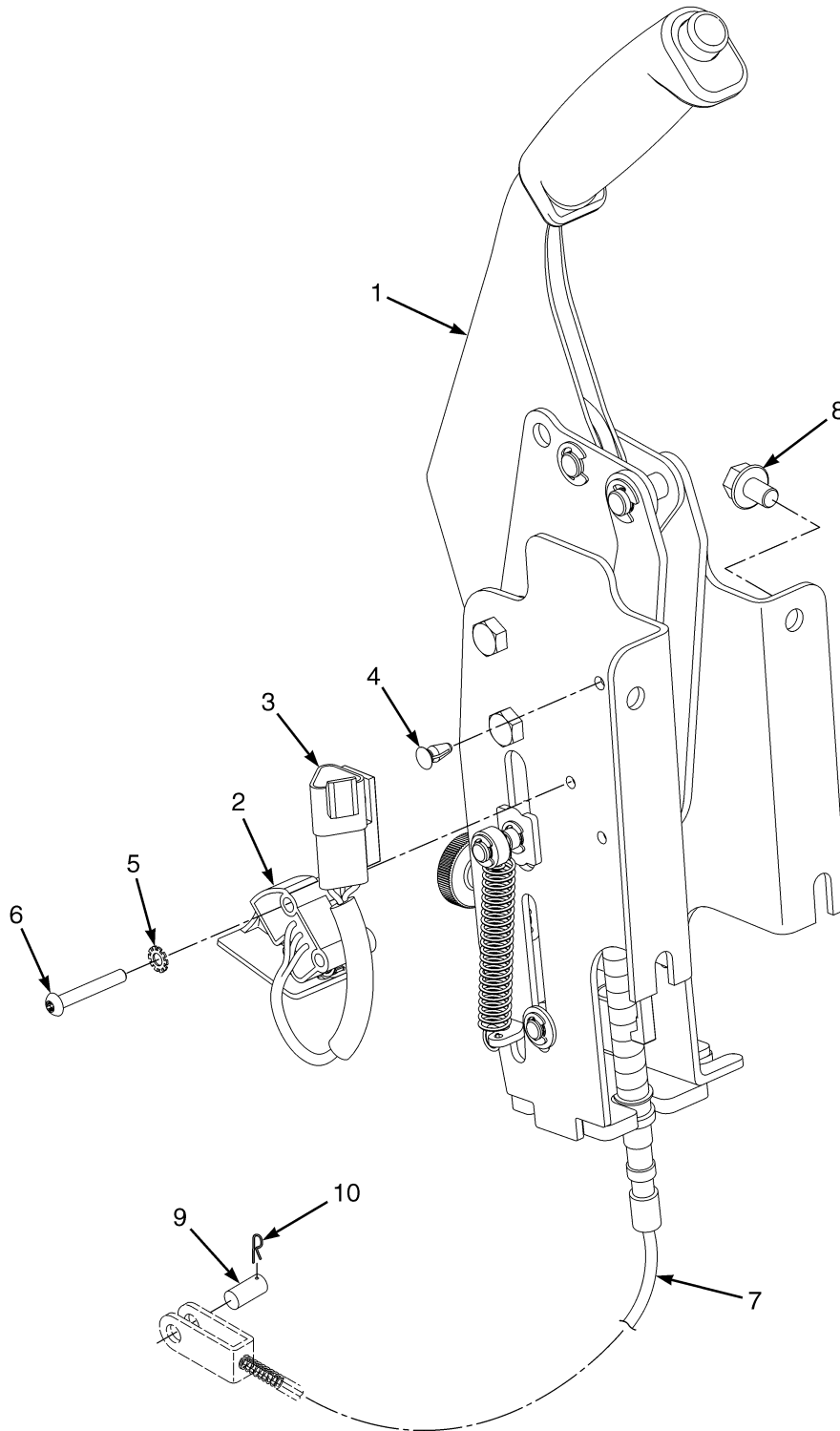
ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
	b 1573675	Brake Booster (31.75 Bore)	1	..	..
	c 2096079	Master Cylinder (31.75 Bore) .....	..	1	..
	d 1569527	Master Cylinder (38.1 Bore) .....	..	..	1
1	1670332	Brake Booster .....	..	1	1
1	1692229	Kit-Repair Brake Booster .....	..	1	1
2	1670333	Master Cylinder .....	..	1	..
2	1670334	Master Cylinder .....	..	..	1
2	.....	Housing	1	1	1
3	.....	Spring	1	1	1
4	.....	Retainer	1	1	1
5	.....	Seal (Pressure)	1	1	1
6	.....	Washer	1	1	1
7	.....	Piston	1	1	1
8	.....	Seal (Retaining)	1	1	1
9	.....	Snap Ring	1	1	1
	a 1596179	Kit-Repair Master Cylinder (31.75 Bore)	1	1	..
	1596180	Kit-Repair Minor-Master Cyl (31.75 Bore)	1	1	..

KEY:**A: 1573675****B: 2096079****C: 1569527**

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
	a 1620023	Kit-Repair Major-Master Cyl (38.1 Bore) .....	..	..	1
	1620024	Kit-Repair Minor-Master Cyl (38.1 Bore) .....	..	..	1

FOOTNOTES:**a** Includes Minor Repair Kit.**b** → S/N L177B131268E**c** S/N L177B13169E ↔ S/N L177B16711E**d** S/N L177B16712E →

PARK BRAKE ASSEMBLY (FIGURE 10-15)



HP040419

PARK BRAKE ASSEMBLY**KEY:****A: Without Cab - Dry Brakes****B: With Cab - Dry Brakes****C: Without Cab - Wet Brakes****D: With Cab - Wet Brakes**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
	c 1544466	Parking Brake Assembly	1	..	..	..
	e 1702933	Parking Brake Assembly	1	..	..	..
	c 1548181	Parking Brake Assembly .....	..	1	..	..
	e 1702937	Parking Brake Assembly .....	..	1	..	..
	b 1612215	Parking Brake-Single Cable .....	..	..	1	..
	d 1654317	Parking Brake Assembly .....	..	..	1	..
	e 1701778	Parking Brake .....	..	..	1	..
	b 1612216	Parking Brake-Single Cable .....	..	..	..	1
	d 1654315	Parking Brake Assembly .....	..	..	..	1
	e 1701779	Parking Brake .....	..	..	..	1
1	1528799	Parking Brake Lever	1	..	..	..
1	1583915	Grip	1	..	..	..
1	1548032	Parking Brake Lever .....	..	1	..	..
1	1654318	Parking Brake .....	..	..	1	..
1	1654316	Parking Brake .....	..	..	..	1
2	c 1547849	Sensor (Brake Position)	1	1	1	1
2	ae 1683486	Sensor (Brake Position)	1	1	1	1
3	1500912	Clip	1	1	1	1
4	1564526	Clip (Key Hole)	1	1	1	1
5	296378	Washer	2	2	2	2
6	1553897	Capscrew	2	2	2	2
7	2082685	Parking Brake Cable .....	..	..	1	1
7	2097830					
	4611578	Parking Brake Cable .....	..	..	1	1
7	1600493	Parking Brake Cable (LH)	1	1	..	..
7	1565305	Parking Brake Cable (RH)	1	1	..	..
8	1529366	Capscrew	4	4	4	4
9	133683	Pin .....	..	..	1	1
9	240724	Pin .....	..	..	1	1
10	1530010	Lockring .....	..	..	1	1
	ae 2111171	Wire Harness (Jumper) (Brake Sensor/Cowl Harness)	1	1	1	1

FOOTNOTES:**a** Not Illustrated**b** → S/N L177B24983F**c** → S/N L177B31320H**d** S/N L177B24983F ↔ S/N L177B31320H**e** S/N L177B31321H →

SECTION 11 HYDRAULIC SYSTEM

DESCRIPTION	PAGE
AUXILIARY ONE AND TWO	
MANUAL CONTROL VALVE - THREE AND FOUR FUNCTION (→ S/N L177B17861E (3 FUNCTION LOW RELIEF)) (→ S/N L177B18169E (4 FUNCTION LOW RELIEF)) (→ S/N L177B18729E (3 FUNCTION HIGH RELIEF)) (→ S/N L177B18808E (4 FUNCTION HIGH RELIEF))	11-50
MANUAL CONTROL VALVE - THREE AND FOUR FUNCTION (S/N L177B18170E → (4 FUNCTION LOW RELIEF)) (S/N L177B17862E → (3 FUNCTION LOW RELIEF)) (S/N L177B18730E → (3 FUNCTION HIGH RELIEF)) (S/N L177B18809E → (4 FUNCTION HIGH RELIEF))	11-52
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**HYDRAULIC SUPPLY AND RETURN
WITH IRON TRANSMISSION (→ S/N L177B29534G)**

ITEM	PART NO.	DESCRIPTION	QTY
1	d 2076408	Hose Assy (Third Function)	1
1	h 2104944	Hose Assy (Third Function)	1
1	c 2085958	Hose Assy (Fourth Function)	1
1	g 2104945	Hose Assy (Fourth Function)	1
2	369804	Clamp	6
2	369804	Clamp (Alternate Part)	4
3	1544975	Hydraulic Filter (☞Figure 11-9).....	1
3	132861	Capscrew	4
3	1639704	Seal	4
3	1637158	Retainer	4
3	1624189	Retainer	4
4	1502543	Nut (Flange)	4
5	2060751	Dipstick	1
5	1580682	O-Ring	1
6	222510	Fitting	1
6	16484	O-Ring	1
7	1502007	Hose Clamp	1
8	1502123	Hose	1
9	1582160	Adapter (Breather)	1
10	1582161	Breather	1
10	16486	O-Ring	1
11	1510116	Capscrew	4
12	1393879	Nut	2
13	1624904	Strainer	1
14	2061778	Hose	1
15	ab 2068947	Tube Assy (Suction)	1
15	ef 2095146	Tube Assy (Suction)	1
16	1527879	Capscrew	3
17	2069005	Hose (Pump Suction)	1
18	.....	Gear Pump (☞Figure 11-6, ☞Figure 11-7).....	1
19	1564515	Capscrew	4
20	1486749	Fitting	1
21	1568199	Adapter (Suction)	1
21	16487	O-Ring	1
22	2070114	Hose Assy	1
23	1487069	Fitting	1
24	.....	Hydraulic Control Valve (☞Figure 11-24, ☞Figure 11-16).....	1
	264159	Adhesive	AR

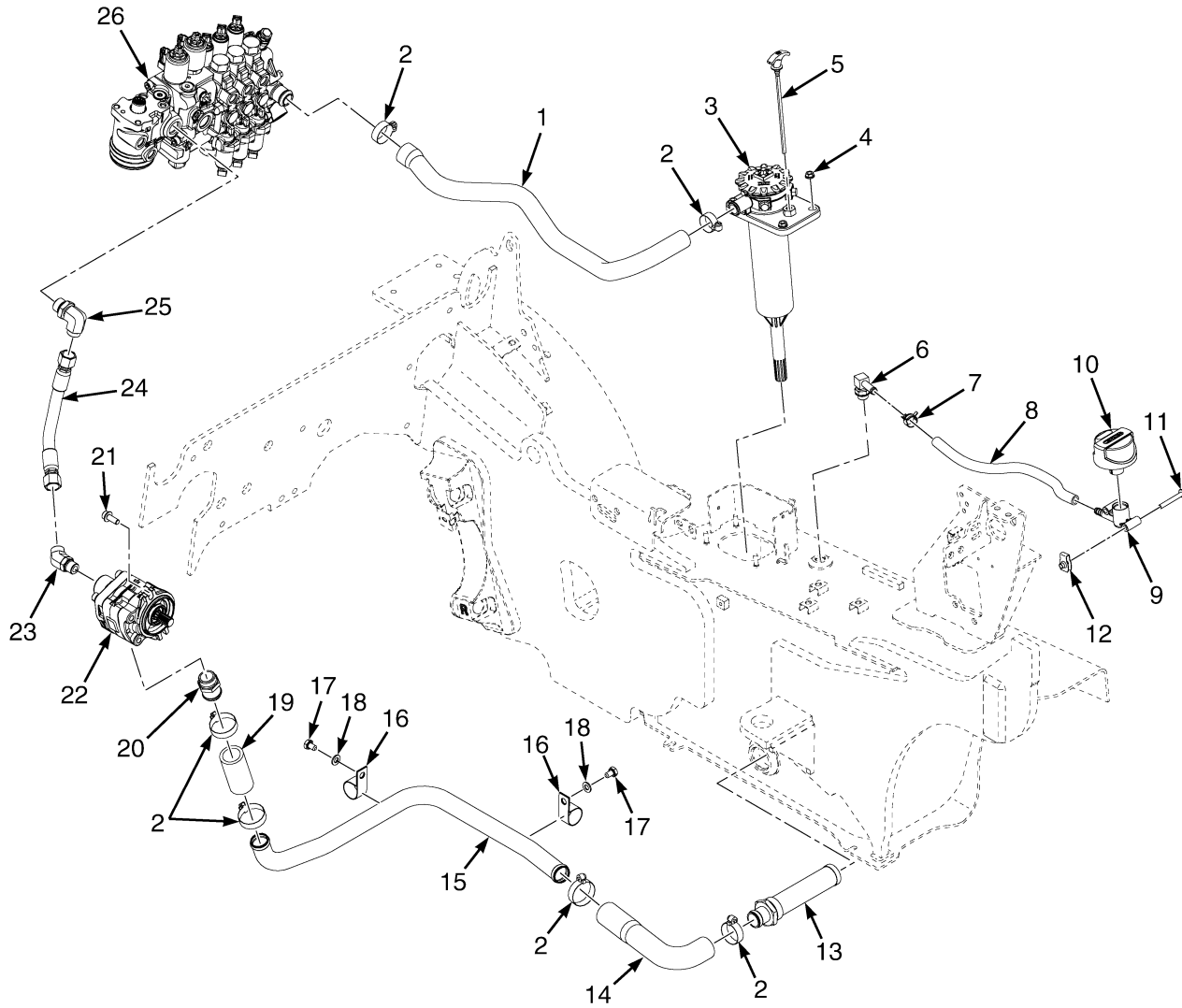
FOOTNOTES:

a → S/N L177B15745E (Wet Brake)
b → S/N L177B15791E (Dry Brake)
c → S/N L177B28856G
d → S/N L177B28860G

e S/N L177B15746E → (Wet Brake)
f S/N L177B15792E → (Dry Brake)
g S/N L177B28857G →
h S/N L177B28861G →

HYDRAULIC SUPPLY AND RETURN (FIGURE 11-2) WITH ALUMINUM TRANSMISSION — WITH GEAR DRIVE

(S/N L177B29535G ↔ S/N L177B32319J EXC. 32238-32242, 32245-32247, 32249-32250, 32293-32294, 32251)

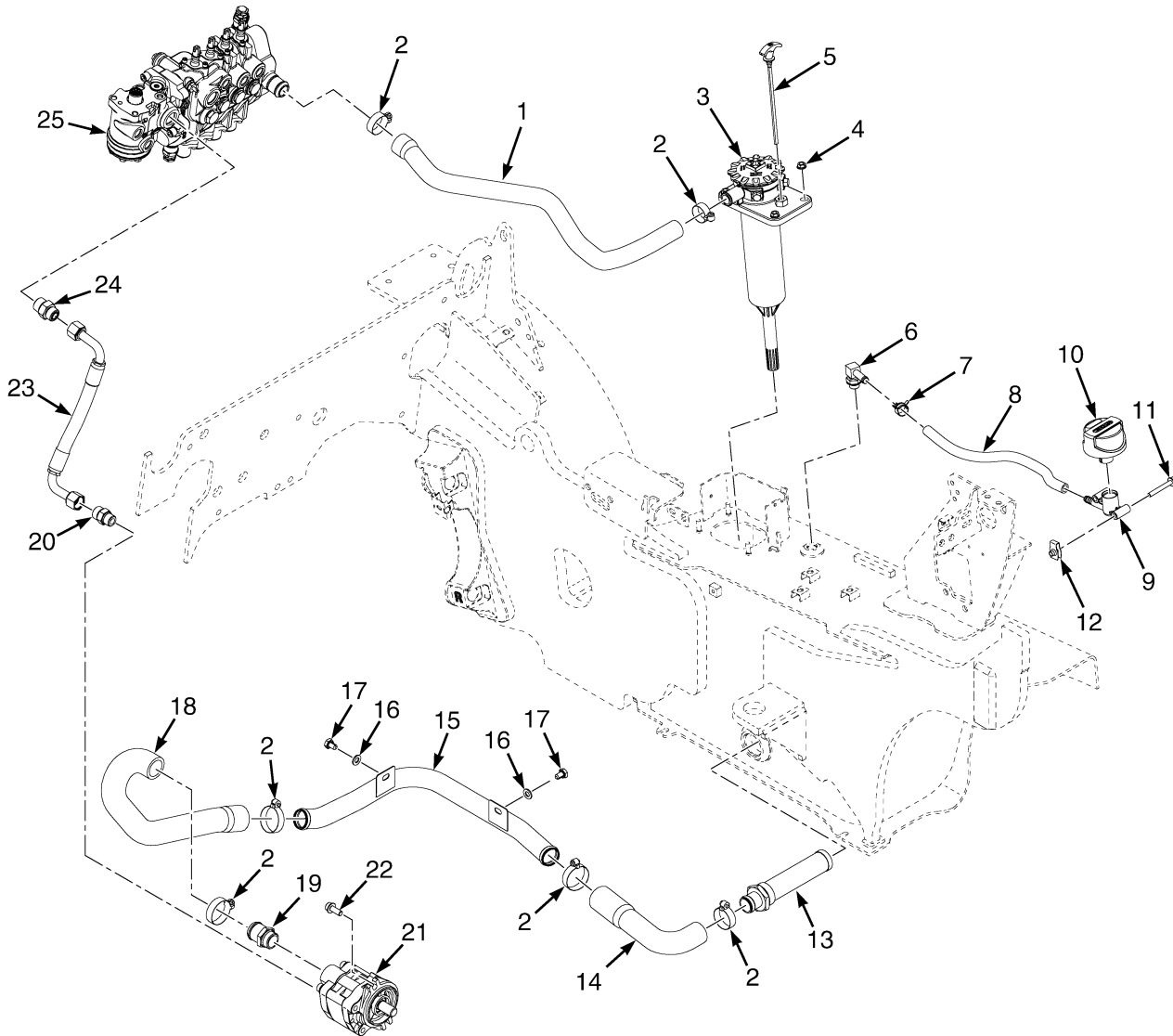


BP150451

HYDRAULIC SUPPLY AND RETURN**WITH ALUMINUM TRANSMISSION – WITH GEAR DRIVE****(S/N L177B29535G ↔ S/N L177B32319J EXC. 32238-32242, 32245-32247, 32249-32250, 32293-32294, 32251)**

ITEM	PART NO.	DESCRIPTION	QTY
1	2111369	Hose	1
1	2111370	Hose	1
2	369804	Clamp	6
2	369804	Clamp (Alternate Part)	1
3	.....	Hydraulic Filter (☞Figure 11-9, ☞Figure 11-10).....	1
4	1502543	Nut (Flange)	4
5	2060751	Dipstick	1
5	1580682	O-Ring	1
6	222510	Fitting	1
6	16484	O-Ring	1
7	1502007	Hose Clamp	1
8	1502123	Hose	1
9	1582160	Adapter (Breather)	1
10	1582161	Breather	1
10	16486	O-Ring	1
11	1510116	Capscrew	2
12	1393879	Nut	2
13	1624904	Strainer	1
14	2061778	Hose	1
15	2109937	Tube	1
16	4015887	Clamp	2
17	292513	Capscrew	2
18	296420	Washer	2
19	2109982	Hose	1
20	1568199	Adapter (Suction)	1
21	1564515	Capscrew	2
22	.....	Gear Pump (☞Figure 11-5).....	1
23	1516205	Fitting	1
24	2110268	Hose Assy	1
25	1487069	Fitting	1
26	.....	Hydraulic Control Valve (☞Figure 11-16, ☞Figure 11-25).....	1
	264159	Adhesive	AR

HYDRAULIC SUPPLY AND RETURN (FIGURE 11-3) WITH ALUMINUM TRANSMISSION — WITH CHAIN DRIVE (S/N L177B32320J → INC. 32238-32242, 32245-32247, 32249-32251, 32293-32294)



BP150452

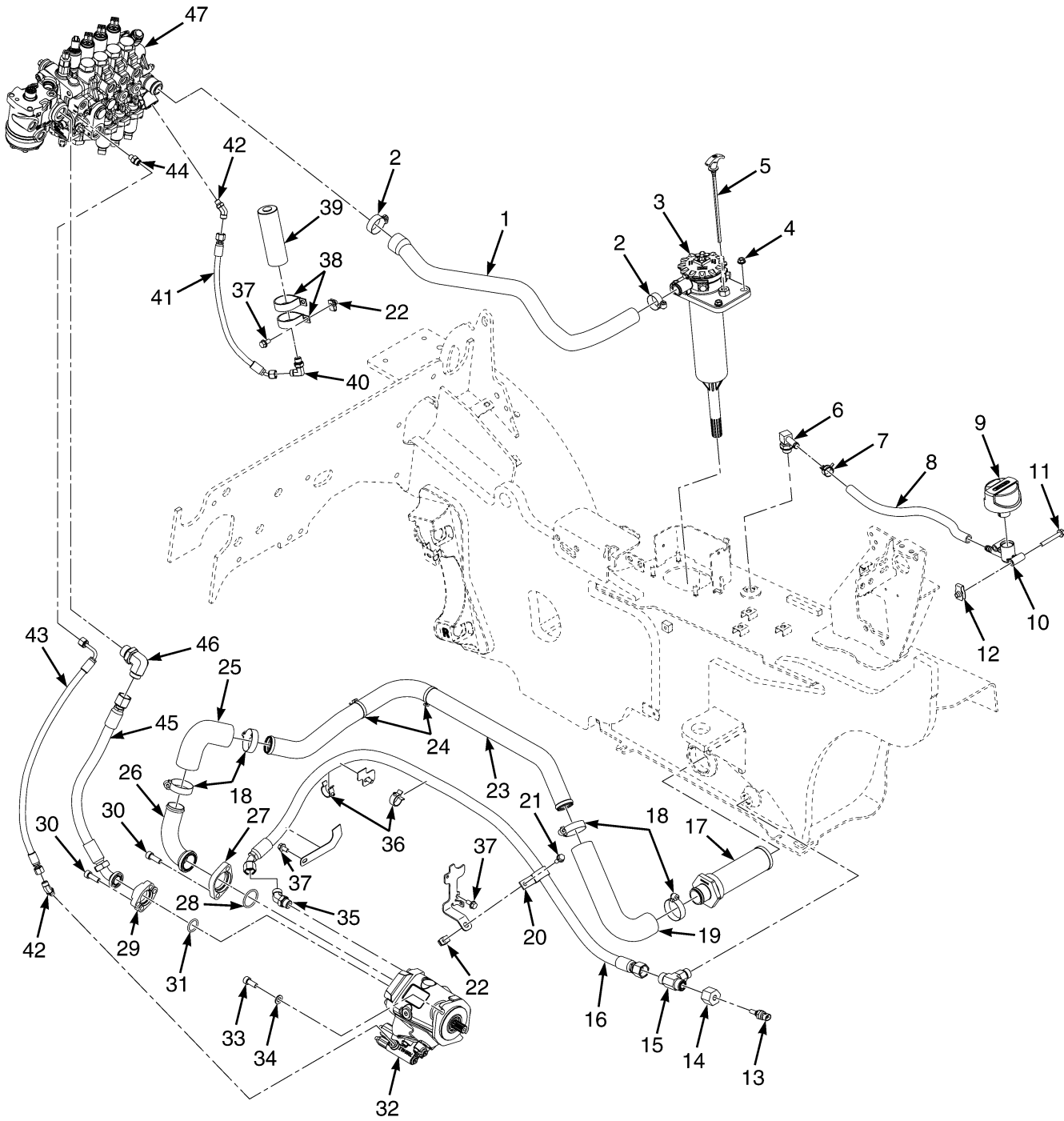
HYDRAULIC SUPPLY AND RETURN
WITH ALUMINUM TRANSMISSION – WITH CHAIN DRIVE
(S/N L177B32320J → INC. 32238-32242, 32245-32247, 32249-32251, 32293-32294)

ITEM	PART NO.	DESCRIPTION	QTY
1	2111369	Hose	1
1	2111370	Hose	1
2	369804	Clamp	6
2	369804	Clamp (Alternate Part)	4
3	.....	Hydraulic Filter (☞Figure 11-9, ☞Figure 11-10).....	1
4	1502543	Nut (Flange)	2
5	2060751	Dipstick	1
6	222510	Fitting	1
7	1502007	Hose Clamp	1
8	1502123	Hose	1
8	127918	Hose (Optional)	1
9	1582160	Adapter (Breather)	1
10	1582161	Breather	1
11	1510116	Capscrew	2
12	1393879	Nut	2
13	1624904	Strainer	1
14	4605974	Hose	1
15	4026661	Tube Assy	1
16	296420	Washer	2
17	292513	Capscrew	2
18	4605946	Hose	1
19	1568199	Adapter (Suction)	1
20	1486749	Fitting	1
20	a 4028685	Adapter	1
21	.....	Gear Pump (☞Figure 11-6, ☞Figure 11-7).....	1
22	1564515	Capscrew	2
23	4612085	Hose Assy	1
23	a 4611861	Hose Assy	1
24	1486751	Fitting	1
24	a 4028686	Adapter	1
25	.....	Hydraulic Control Valve (☞Figure 11-16, ☞Figure 11-25).....	1
	264159	Adhesive	AR

FOOTNOTES:

a With Quick-lock Option

HYDRAULIC SUPPLY AND RETURN (FIGURE 11-4) WITH VARIABLE DISPLACEMENT PUMP (PENDING PER ECN 106122 →)



BP150444

HYDRAULIC SUPPLY AND RETURN
WITH VARIABLE DISPLACEMENT PUMP (PENDING PER ECN 106122 →)

KEY:**A: With 1-Speed Transmission****B: With 2-Speed Transmission**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2111369	Hose	1	1
1	2111370	Hose	1	1
2	369804	Clamp	2	2
3	4000257	Hydraulic Filter (☞Figure 11-10).....	1	1
4	1502543	Nut (Flange)	4	4
5	2060751	Dipstick	1	1
6	222510	Fitting	1	1
6	16484	O-Ring	1	1
7	1502007	Hose Clamp	1	1
8	127918	Hose	1	1
9	1582161	Breather	1	1
10	1582160	Adapter (Breather)	1	1
11	1510116	Capscrew	2	2
12	1393879	Nut	2	2
13	1515654	Temperature Sensor	1	1
14	4003165	Fitting	1	1
15	1532650	Fitting	1	1
16	4606331	Hose Assy	1	..
16	4606335	.....	..	1
17	4604580	Strainer	1	1
18	369804	Clamp	4	4
19	4604910	Hose	1	1
20	140612	Hose Clamp .....	..	1
21	1527880	Capscrew .....	..	1
22	1480237	Nut	2	3
23	4026661	Tube Assy	1	..
23	4007544	Tube Assy .....	..	1
24	1644398	Clamp	1	2
25	4603912	Hose	1	..
25	4606333	Hose .....	..	1
26	222586	Fitting	1	1
27	4004390	Flange	1	1
28	199917	O-Ring	1	1
29	160266	Clamp (Split Half)	2	2
30	296026	Capscrew	6	6
31	210641	O-Ring	1	1
32	4604072	Pump (GM) (☞Figure 11-8).....	1	1
32	4604073	Pump (Yanmar) (☞Figure 11-8).....	1	1
32	4608080	Pump (Mazda) (☞Figure 11-8).....	1	1
33	1564515	Capscrew	2	2
34	.....	Washer	2	2
35	1486750	Fitting	1	..
35	1473887	Fitting .....	..	1
36	198678	Clamp	2	..

HYDRAULIC SUPPLY AND RETURN WITH VARIABLE DISPLACEMENT PUMP (PENDING PER ECN 106122 →)

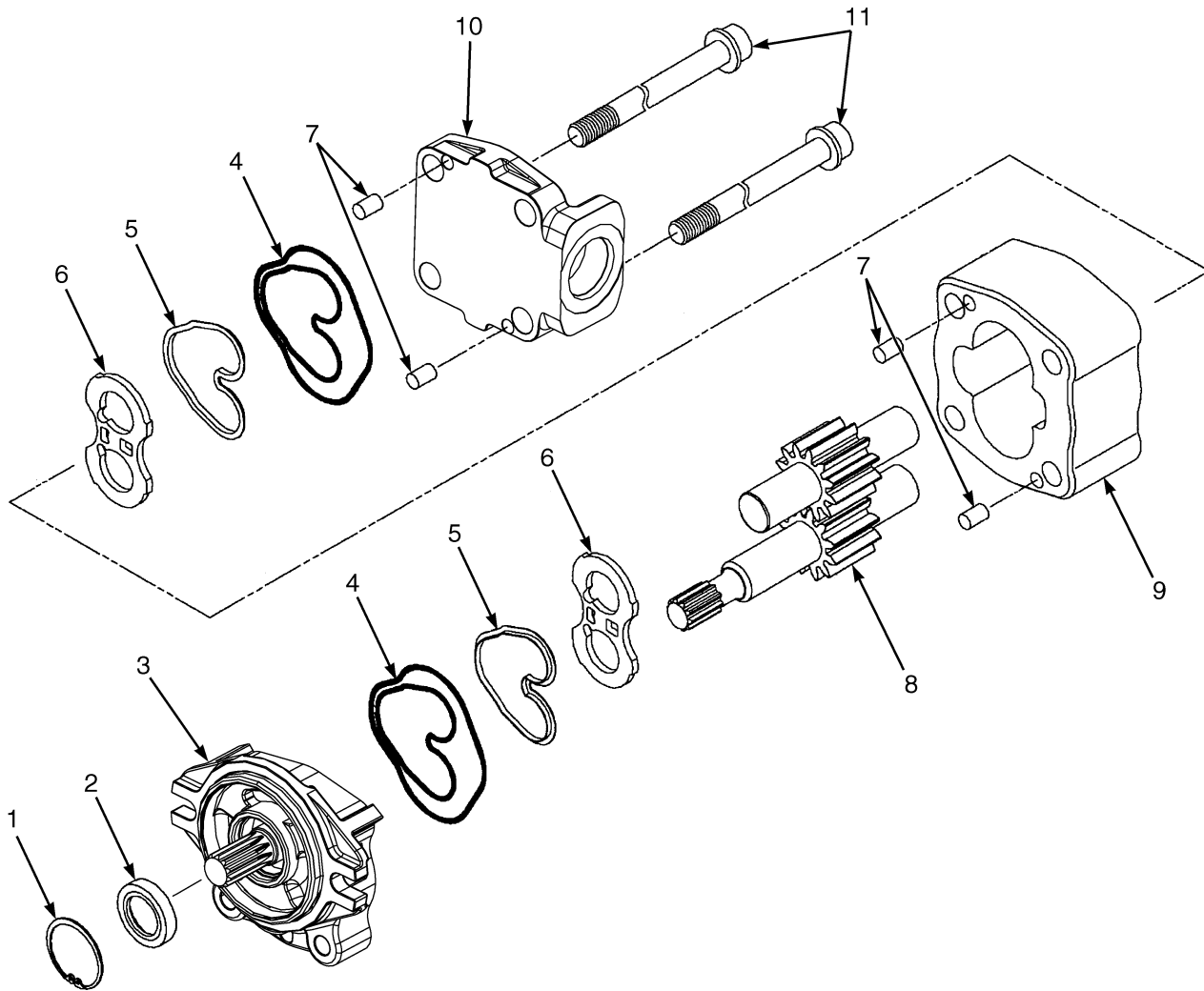
KEY:

A: With 1-Speed Transmission

B: With 2-Speed Transmission

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
36	1542436	Clamp	1	2
37	1527879	Capscrew	3	5
38	181899	Clamp	2	2
39	4609405	Accumulator	1	1
40	1487059	Fitting	1	1
41	4613340	Hose Assy	1	..
41	4610754	Hose Assy .....	..	2
42	1516197	Fitting	1	2
43	4613342	Hose Assy	1	..
43	4606336 4614653	Hose Assy .....	..	1
44	1487058	Fitting	1	..
44	1486737	Fitting .....	..	2
45	4603913	Hose Assy	1	..
45	4606334	Hose Assy .....	..	1
46	1486751	Fitting	1	..
46	1487069	Fitting .....	..	1
47	.....	Hydraulic Control Valve (☞Figure 11-26).....	1	1
	264159	Adhesive	AR	AR
	292513	Capscrew	2	..
	296420	Washer	2	..
	198678	Clamp	2	..
	1487058	Fitting	1	..

GEAR PUMP ASSEMBLY (FIGURE 11-5) LOW PRESSURE — GEAR DRIVE OPTION

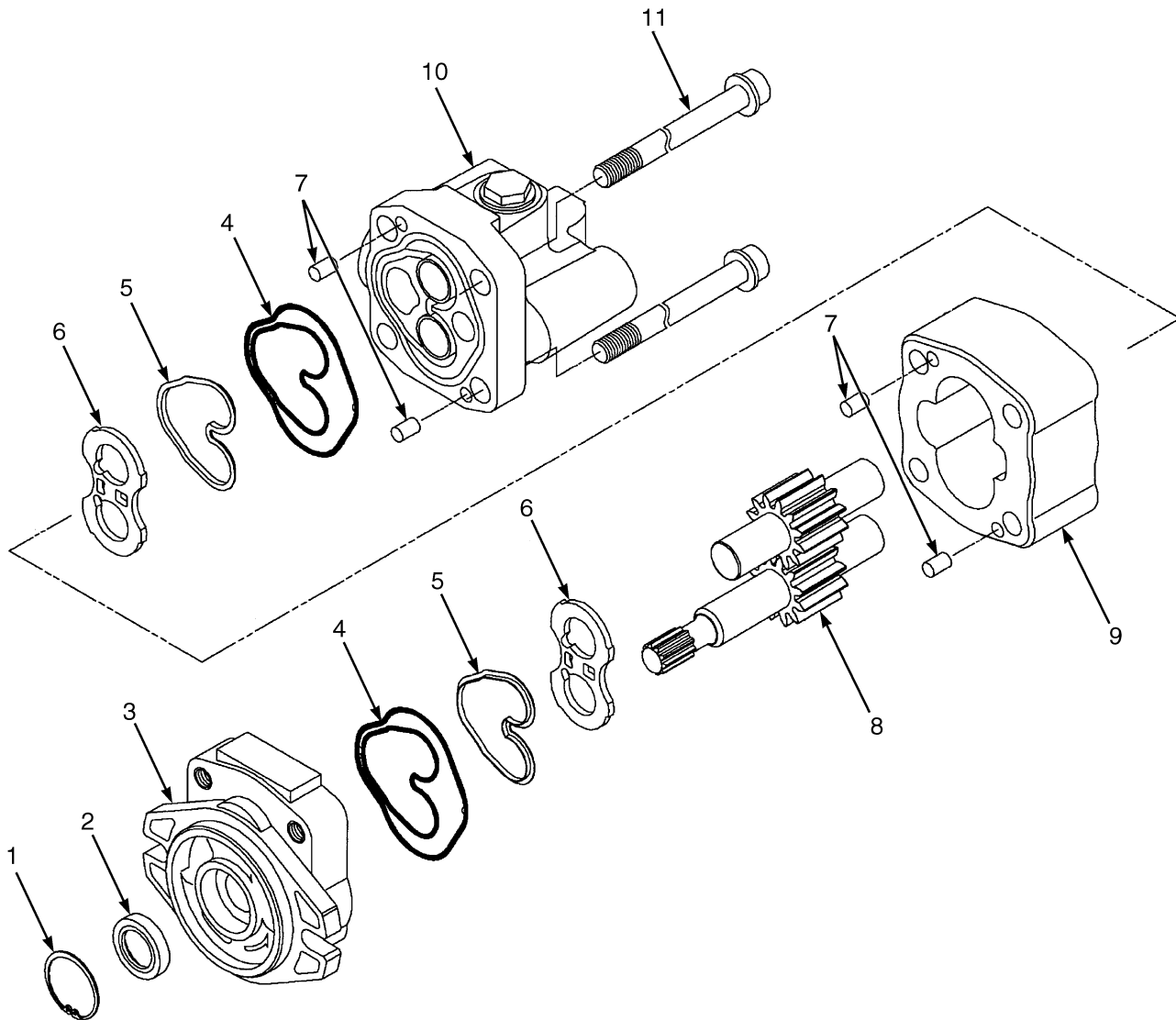


BP150453

GEAR PUMP ASSEMBLY
LOW PRESSURE – GEAR DRIVE OPTION**KEY:****A: Mazda****B: GM****C: Yanmar**

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
	2104430	Gear Pump	1	..	..
	2104431	Gear Pump .....	..	1	..
	2104432	Gear Pump .....	..	..	1
1	.....	Snap Ring	1	1	1
2	.....	Oil Seal	1	1	1
3	2081832	Flange	1	1	1
4	.....	Back-Up Seal	2	2	2
5	.....	Plate Seal	2	2	2
6	1700084	Side Plate	2	2	2
7	1578672	Dowel	4	4	4
8	1581537	Gear Set	1	..	..
8	1584987	Gear Set .....	..	1	..
8	1581534	Gear Set .....	..	..	1
8	.....	Drive Gear	1	1	1
8	.....	Driven Gear	1	1	1
9	.....	Gear Plate	1	1	1
10	4600549	Cover	1	1	1
11	1578671	Screw	4	..	..
11	1578693	Screw .....	..	4	4
	1465140	Kit-Seal	1	1	1

GEAR PUMP ASSEMBLY (FIGURE 11-6) LOW PRESSURE — CHAIN DRIVE OPTION

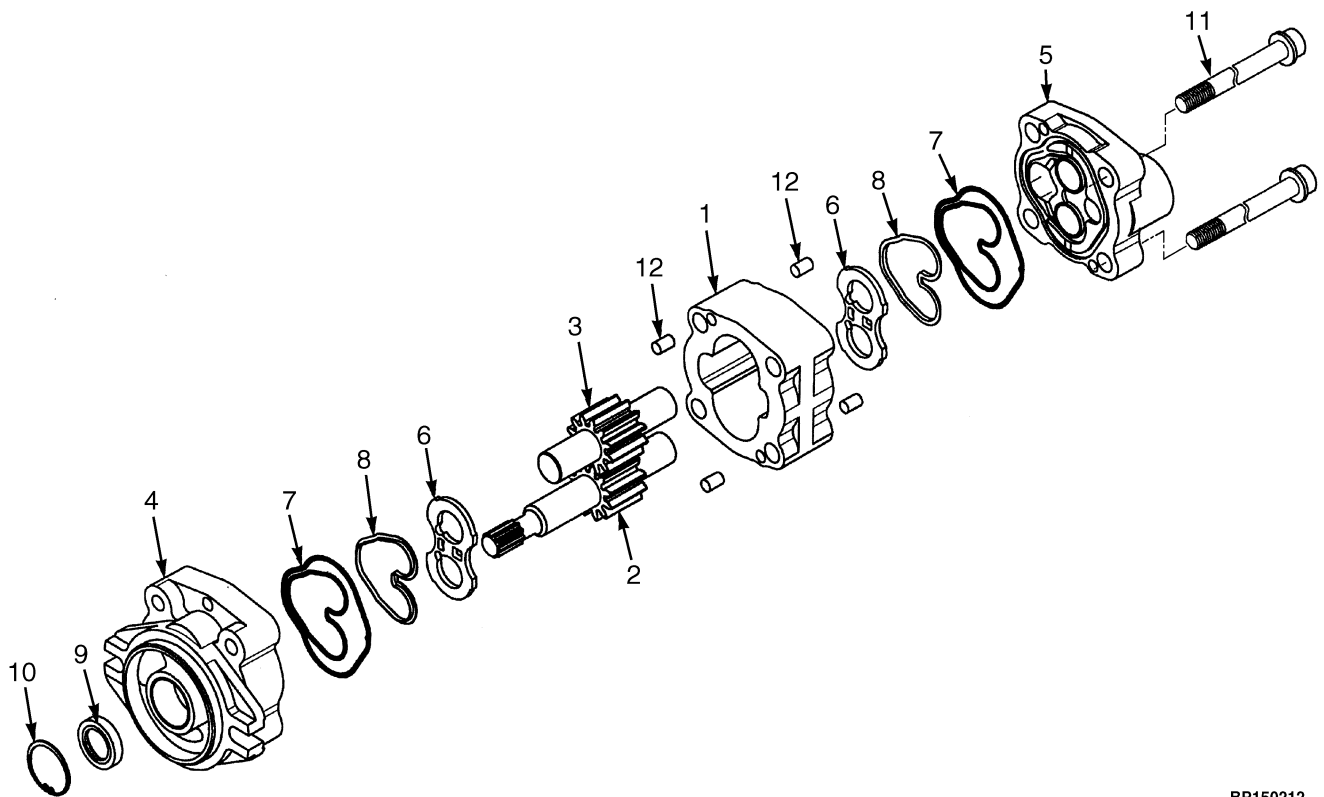


BP150098

**GEAR PUMP ASSEMBLY
LOW PRESSURE – CHAIN DRIVE OPTION****KEY:****A: Mazda****B: GM****C: Yanmar**

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
	2067800	Gear Pump	1	..	..
	2074230	Gear Pump .....	..	1	..
	2067802	Gear Pump .....	..	..	1
1	.....	Snap Ring	1	1	1
2	.....	Oil Seal	1	1	1
3	1581536	Flange	1	1	1
4	.....	Back-Up Seal	2	2	2
5	.....	Plate Seal	2	2	2
6	1578673	Side Plate	2	2	2
7	1578672	Dowel	4	4	4
8	1581537	Gear Set	1	..	..
8	1584987	Gear Set .....	..	1	..
8	1581534	Gear Set .....	..	..	1
8	.....	Drive Gear	1	1	1
8	.....	Driven Gear	1	1	1
9	.....	Gear Plate	1	1	1
10	1581535	Cover	1	1	1
11	1578671	Screw	4	4	..
11	1578693	Screw .....	..	..	4
	1465140	Kit-Seal	1	1	1

GEAR PUMP ASSEMBLY (FIGURE 11-7) HIGH PRESSURE



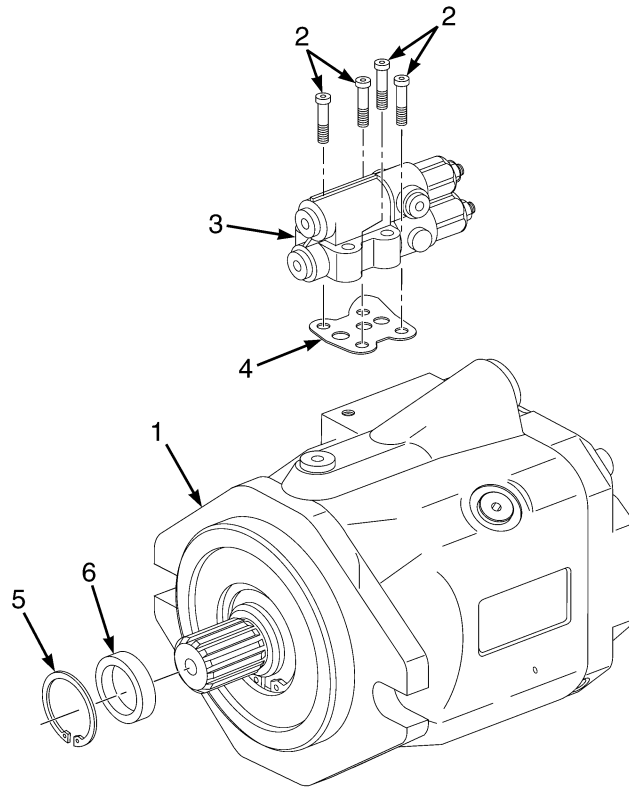
BP150212

**GEAR PUMP ASSEMBLY
HIGH PRESSURE****KEY:****A: 24.0 Liter per Minute****B: 25.7 Liter per Minute****C: 29.4 Liter per Minute**

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
	c 2067801	Gear Pump	1	..	..
	f 2098695	Gear Pump	1	..	..
	a 2074211	Gear Pump .....	..	1	..
	d 2098694	Gear Pump .....	..	1	..
	b 2067803	Gear Pump .....	..	..	1
	e 2098693	Gear Pump .....	..	..	1
1	.....	Gear Plate	1	..	..
1	.....	Gear Plate .....	..	1	..
1	.....	Gear Plate .....	..	..	1
2	.....	Drive Gear	1	..	..
2	.....	Drive Gear .....	..	1	..
2	.....	Drive Gear .....	..	..	1
3	.....	Driven Gear	1	..	..
3	.....	Driven Gear .....	..	1	..
3	.....	Driven Gear .....	..	..	1
4	1581536	Flange	1	1	1
5	1578665	Cover	1	1	1
6	1578673	Side Plate	2	2	2
7	.....	Plate Seal	2	2	2
8	.....	Back-Up Ring	2	2	2
9	.....	Oil Seal	1	1	1
10	.....	Snap Ring	1	1	1
11	1578671	Screw	4	4	..
11	1578693	Screw .....	..	..	4
12	1578672	Dowel	4	4	4
	1581537	Gear Set	1	..	..
	1584987	Gear Set .....	..	1	..
	1581534	Gear Set .....	..	..	1
	1465140	Kit-Seal	1	1	1

FOOTNOTES:**a** → S/N L177B19934E**b** → S/N L177B20271E**c** → S/N L177B22938F**d** S/N L177B19935E →**e** S/N L177B20272E →**f** S/N L177B32239F →

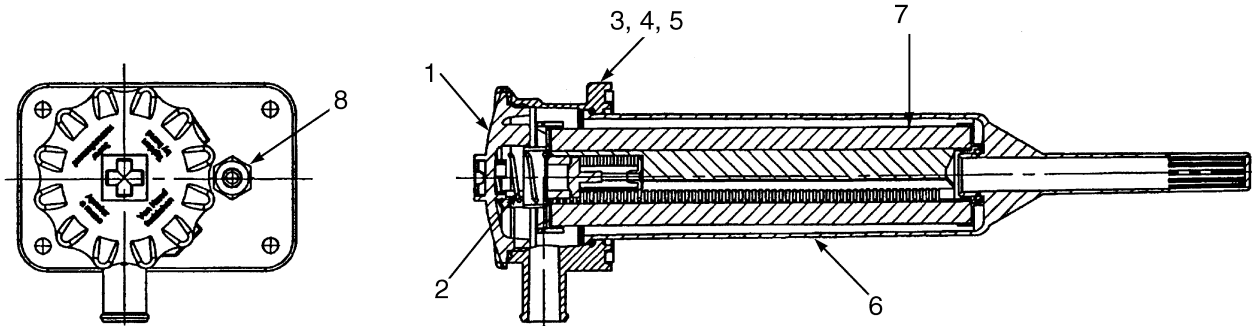
VARIABLE DISPLACEMENT PUMP (FIGURE 11-8) ASSEMBLY (PENDING PER ECN 106122 →)



BP150445

ITEM	PART NO.	DESCRIPTION	QTY
1	4608080	Pump (24 cc)	1
1	4604072	Pump (26 cc)	1
1	4604073	Pump (28 cc)	1
2	4021485	Screw	4
3	4021523	Valve	1
4	4021490	Seal	1
5	4021536	Seal	1
6	4021492	Retaining Ring	1
	4038423	Kit Variable Replacement Pump Shaft Seal Replacement	1
	4038489	Kit VDP Shaft Seal Replacement and Tool	1

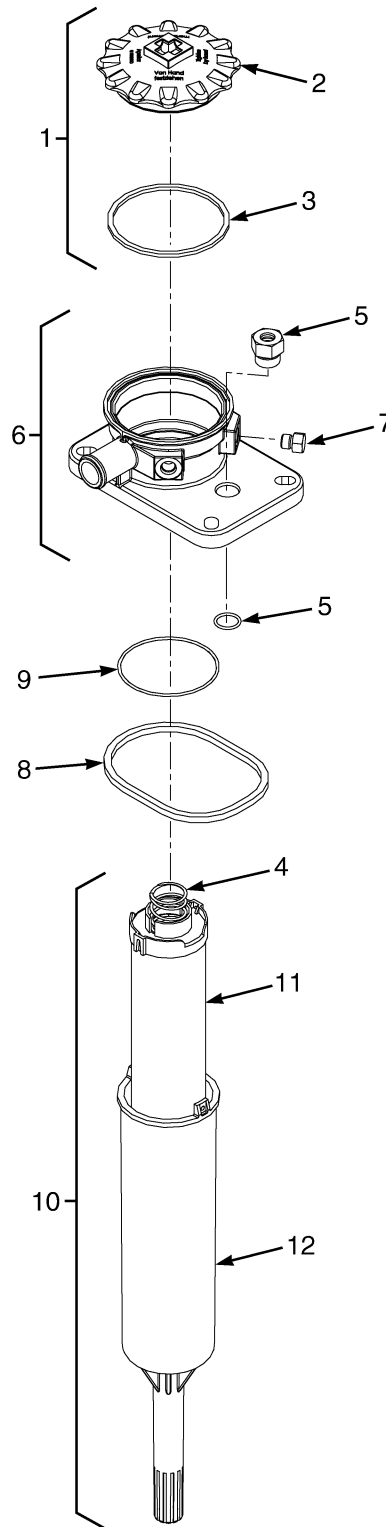
HYDRAULIC FILTER (FIGURE 11-9)
(→ S/N L177B30348H)



BP150095

ITEM	PART NO.	DESCRIPTION	QTY
	1544975	Hydraulic Filter	1
1	1705820	Cap (Hydraulic Filter)	1
1	1705548	O-Ring	1
2	.....	Spring	1
3	1570342	Filter Head Assembly	1
4	16481	O-Ring	2
4	1705548	O-Ring	1
4	209457	Quad Ring	1
5	14191	O-Ring	1
5	16481	O-Ring	1
6	1570346	Filter Can Assembly	1
6	.....	O-Ring	1
7	2070611	Hydraulic Filter Assembly	1
7	1705548	O-Ring	1
8	1568182	Fitting (Dipstick Assembly)	1
8	.....	Plug	1
	1705720	Kit-Filter Element	1
	1705723	Kit-Seal	1

HYDRAULIC FILTER (FIGURE 11-10) (S/N L177B30348H →)

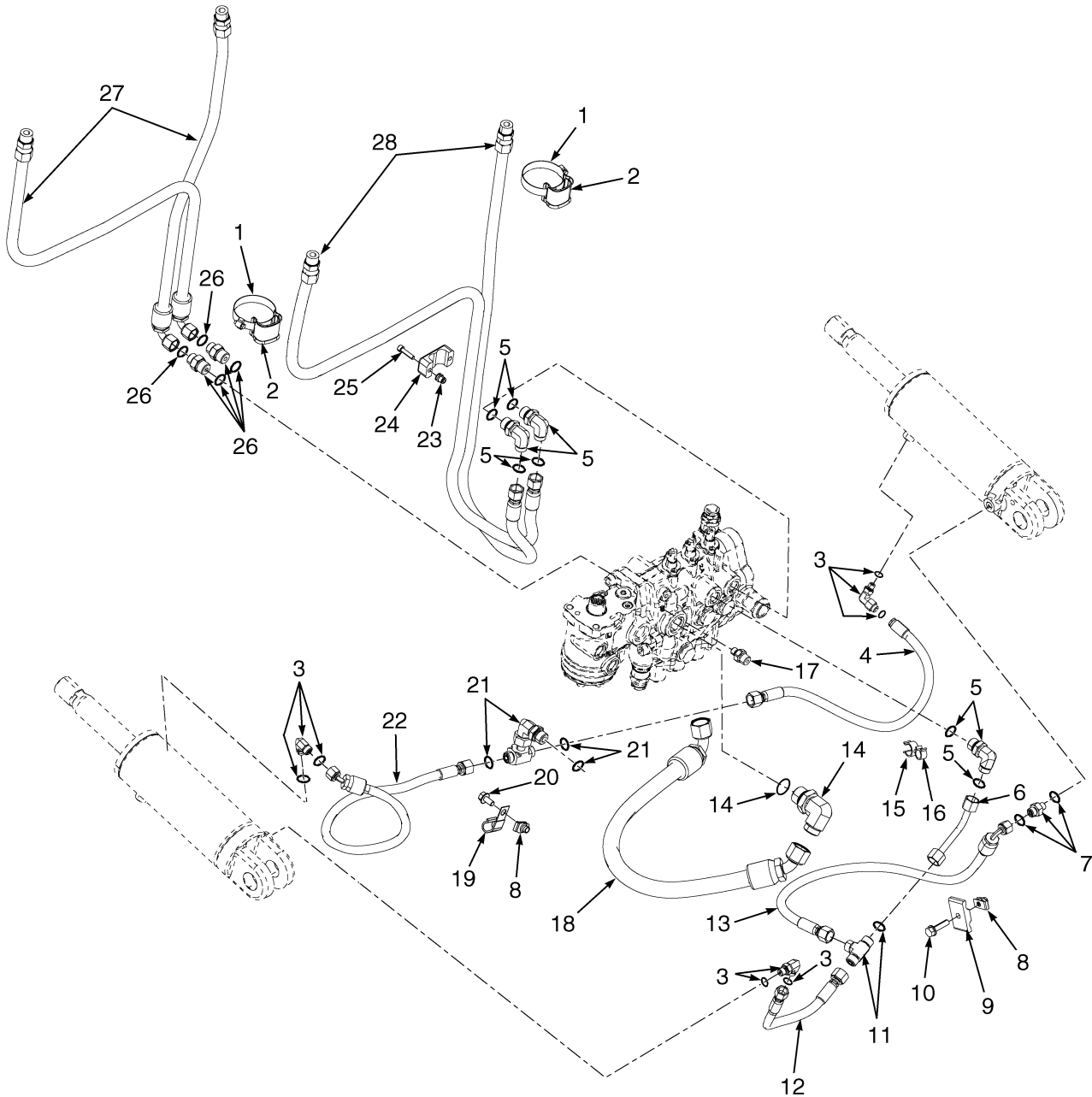


BP150355

HYDRAULIC FILTER
(S/N L177B30348H →)

ITEM	PART NO.	DESCRIPTION	QTY
	4000256	Hydraulic Filter Assembly	1
1	1708700	Cap Assembly	1
2	1570339	Lid	1
3	.....	Sealing Ring	1
4	1570340	Spring	1
5	4003067	Dipstick Holder	1
5	.....	O-ring	1
6	4000257	Hydraulic Filter Head Assembly	1
7	14591	Plug	2
7	16481	O-Ring	1
8	.....	Quad Ring (Tank Sealing)	1
9	.....	O-Ring (Element)	1
10	4000258	Hydraulic Filter (Bowl Assembly)	1
11	4000997	Filter	1
12	1570347	Filter Can (Bowl)	1
	1708596	Kit-Seal	1

HYDRAULIC HOSES (FIGURE 11-11) LIFT, TILT, AND AUXILIARY



HP150984

**HYDRAULIC HOSES
LIFT, TILT, AND AUXILIARY****KEY:****A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1481229	Clamp	1	1
1	1617657	Clamp (Alternate Part)	1	1
2	1477996	Hose Clamp	1	1
3	1487058	Fitting	3	3
3	1527813	O-Ring	3	3
3	16481	O-Ring	3	3
4	2075630	Hose Assy	1	1
5	1487061	Fitting (Electronic Valve)	3	3
5	265787	O-Ring	1	1
5	16484	O-Ring	1	1
5	abcd 1487061	Fitting (Manual Valve)	1	1
5	265787	O-Ring	1	1
5	16484	O-Ring	1	1
5	efgh 1516201	Fitting (Manual Valve)	1	1
5	265731	O-Ring	1	1
5	16484	O-Ring	1	1
6	4606301	Tube Assy (Electronic Valve)	1	1
6	abcd 2074327	Tube Assy (Manual Valve)	1	1
6	efgh 4604147	Tube Assy (Manual Valve)	1	1
7	1486737	Fitting	1	1
7	16481	O-Ring	1	1
7	1527813	O-Ring	1	1
8	1480237	Nut	2	2
9	1359620	Clamp	1	1
10	1586627	Capscrew	1	1
11	1522425	Fitting	1	1
11	265787	O-Ring	1	1
12	4606302	Hose Assy	1	1
13	4606303	Hose Assy	1	1
14	1487069	Fitting	1	1
14	252729	O-Ring	1	1
15	1502055	Clamp (Swivel)	1	1
16	1502059	Clamp	1	1
17	2061646	Fitting (Diagnostic)	1	1
18	2070148	Hose Assy	1	1
19	325804	Clamp	1	1
20	1527879	Capscrew	1	1
21	1488464	Fitting	1	1
21	265787	O-Ring	3	3
22	2074325	Hose Assy	1	1
23	1531558	Insert	2	..
24	1360386	Clamp	1	..
25	293796	Capscrew	2	..
26	1486742	Fitting	2	2
26	265787	O-Ring	2	2

HYDRAULIC HOSES LIFT, TILT, AND AUXILIARY

KEY:

A: Three Function

B: Four Function

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
26	16484	O-Ring	2	2
27	2065051	Hose Assy	1	..
27	2065052	Hose Assy .....	..	1
28	2073495	Hose Assy	1	..
28	2073496	Hose Assy .....	..	1

FOOTNOTES:

a → S/N L177B17861E (Three Function Low Relief)

b → S/N L177B18169E (Four Function Low Relief)

c → S/N L177B18729E (Three Function High Relief)

d → S/N L177B18808E (Four Function High Relief)

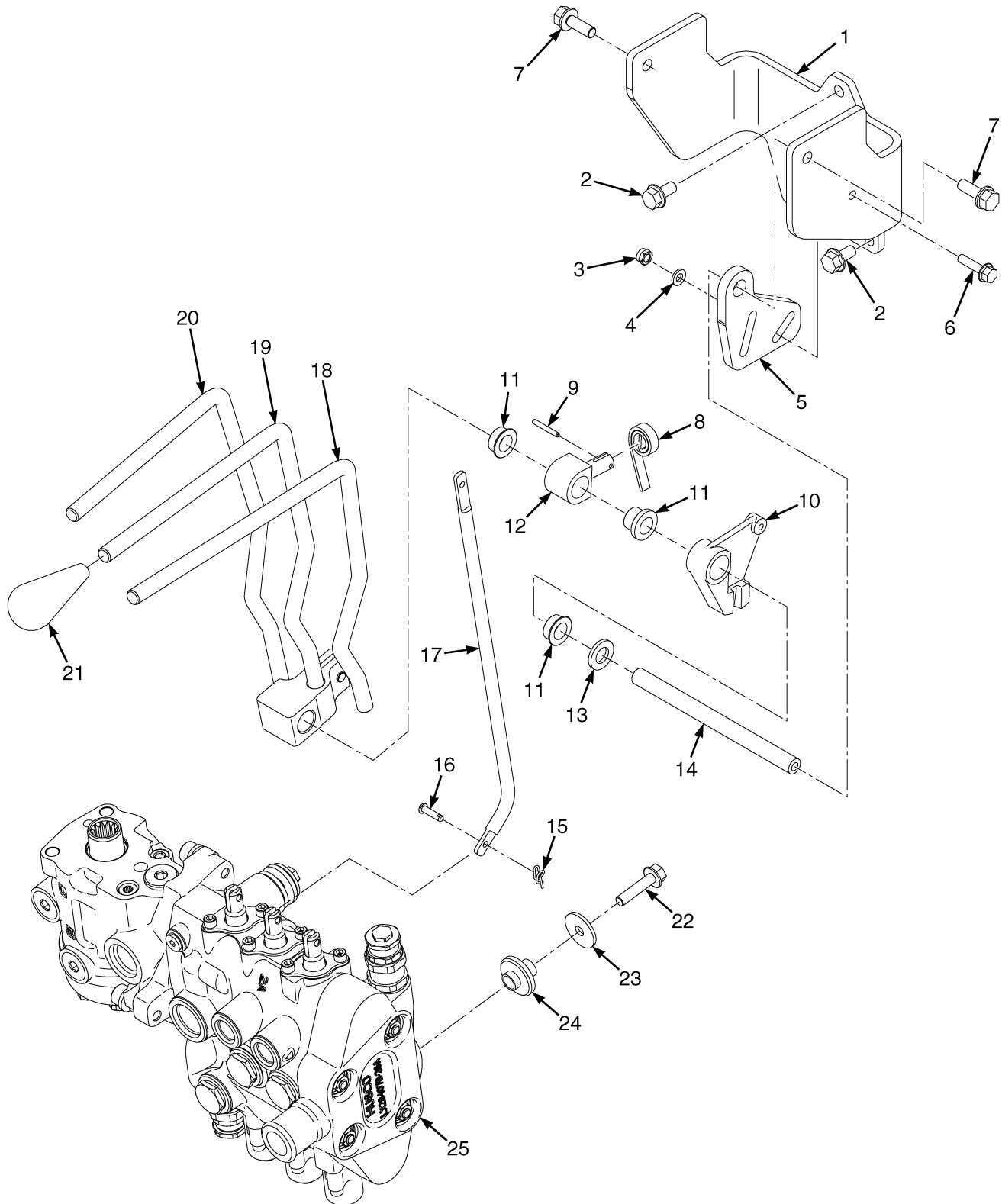
e S/N L177B17862E → (Three Function Low Relief)

f S/N L177B18170E → (Four Function Low Relief)

g S/N L177B18730E → (Three Function High Relief)

h S/N L177B18809E → (Four Function High Relief)

HAND LEVERS (FIGURE 11-12) THREE FUNCTION — WITH DETENTED LEVERS



BP150484

HAND LEVERS

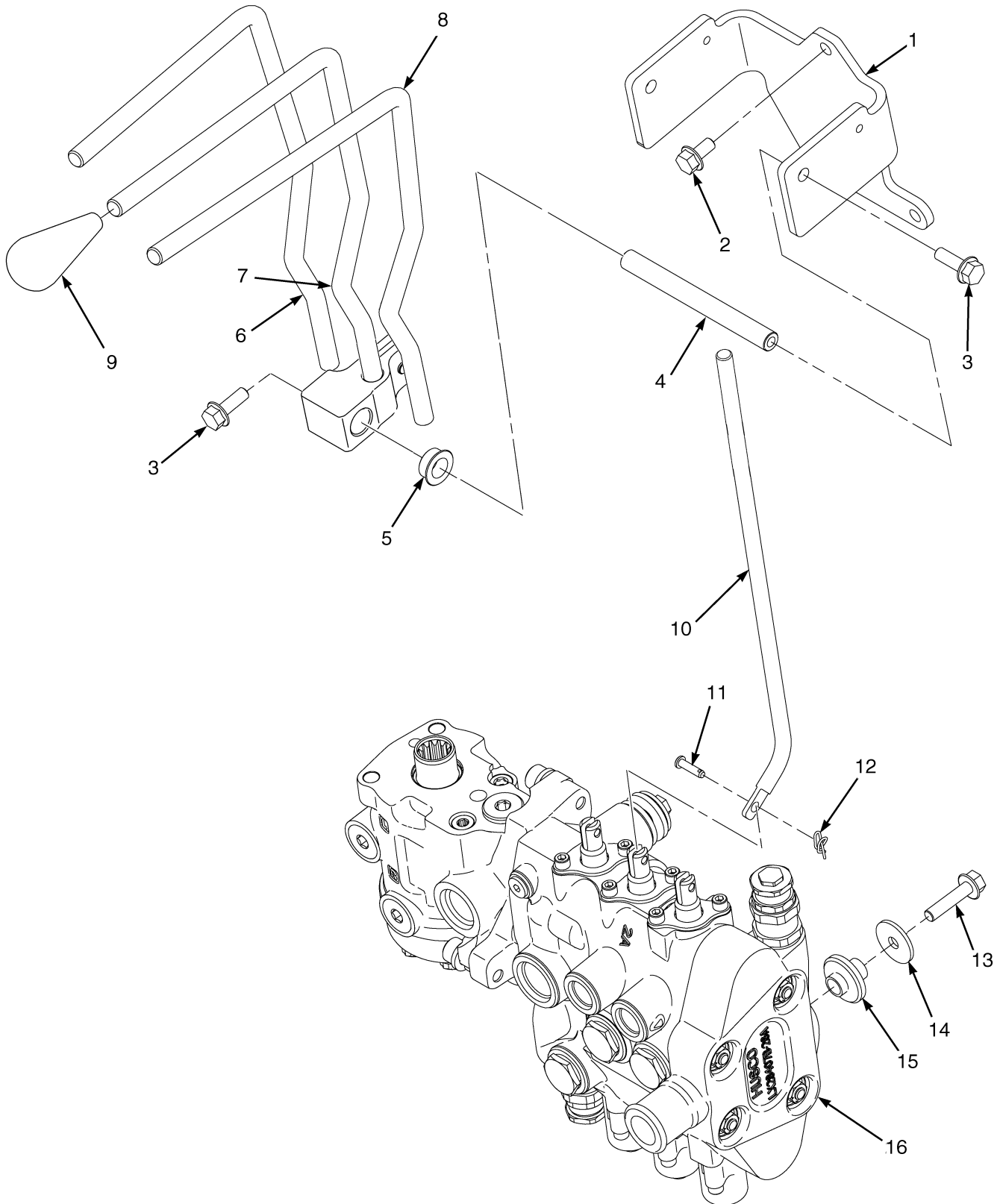
THREE FUNCTION – WITH DETENTED LEVERS

ITEM	PART NO.	DESCRIPTION	QTY
1	c 1578454	Bracket	1
1	f 1670194	Bracket	1
2	1527879	Capscrew	3
3	c 230882	Locknut	1
3	f 316834	Nut	1
4	c 197067	Washer	2
4	f 320156	Washer	1
5	c 1528339	Spacer	1
5	f 1670677	Plate	1
6	f 18094	Capscrew	1
6	f 1527878	Capscrew	1
7	1583611	Capscrew	2
8	175861	Spring	1
9	302428	Roll Pin	1
10	1542546	Lever	2
11	1564747	Bushing	10
12	306113	Pin (Selector)	1
13	320161	Washer	3
14	c 1528328	Shaft	1
14	f 1670195	Shaft (Pivot)	1
15	1517361	Locking Ring Cotter Pin	6
16	309109	Pin	6
17	c 1517394	Link	3
17	f 1662420	Link	3
18	c 2083706	Lever (Auxiliary One And Two)	1
18	f 2099398	Lever (Auxiliary One and Two)	1
19	c 2083702	Lever (Tilt)	1
19	f 2099394	Lever (Tilt)	1
20	c 2083701	Lever (Lift)	1
20	f 2099393	Lever (Lift)	1
21	1517395	Knob	3
22	1586627	Capscrew	3
23	1346752	Washer	3
24	2063991	Isolator	3
25	a 2064895	Hydraulic Control Valve (Manual) (H2.0-3.0FT) (☞Figure 11-16).....	1
25	d 2095079	Hydraulic Control Valve (Manual) (H2.0-3.0FT)	1
25	g 2105870	Hydraulic Control Valve (Manual) (H2.0-3.0FT) (☞Figure 11-16).....	1
25	b 2064899	Hydraulic Control Valve (Manual) (H3.5FT) (☞Figure 11-16).....	1
25	e 2095083	Hydraulic Control Valve (Manual) (H3.5FT)	1
25	h 2105874	Hydraulic Control Valve (Manual) (H3.5FT) (☞Figure 11-16).....	1

FOOTNOTES:

a	→ S/N L177B17861E	e	S/N L177B18730E ↔ S/N L177B30109H
b	→ S/N L177B18729E	f	S/N L177B26282F →
c	→ S/N L177B26281F	g	S/N L177B29560G →
d	S/N L177B17826E ↔ S/N L177B29559G	h	S/N L177B30110H →

HAND LEVERS (FIGURE 11-13) THREE FUNCTION — WITHOUT DETENTED LEVERS



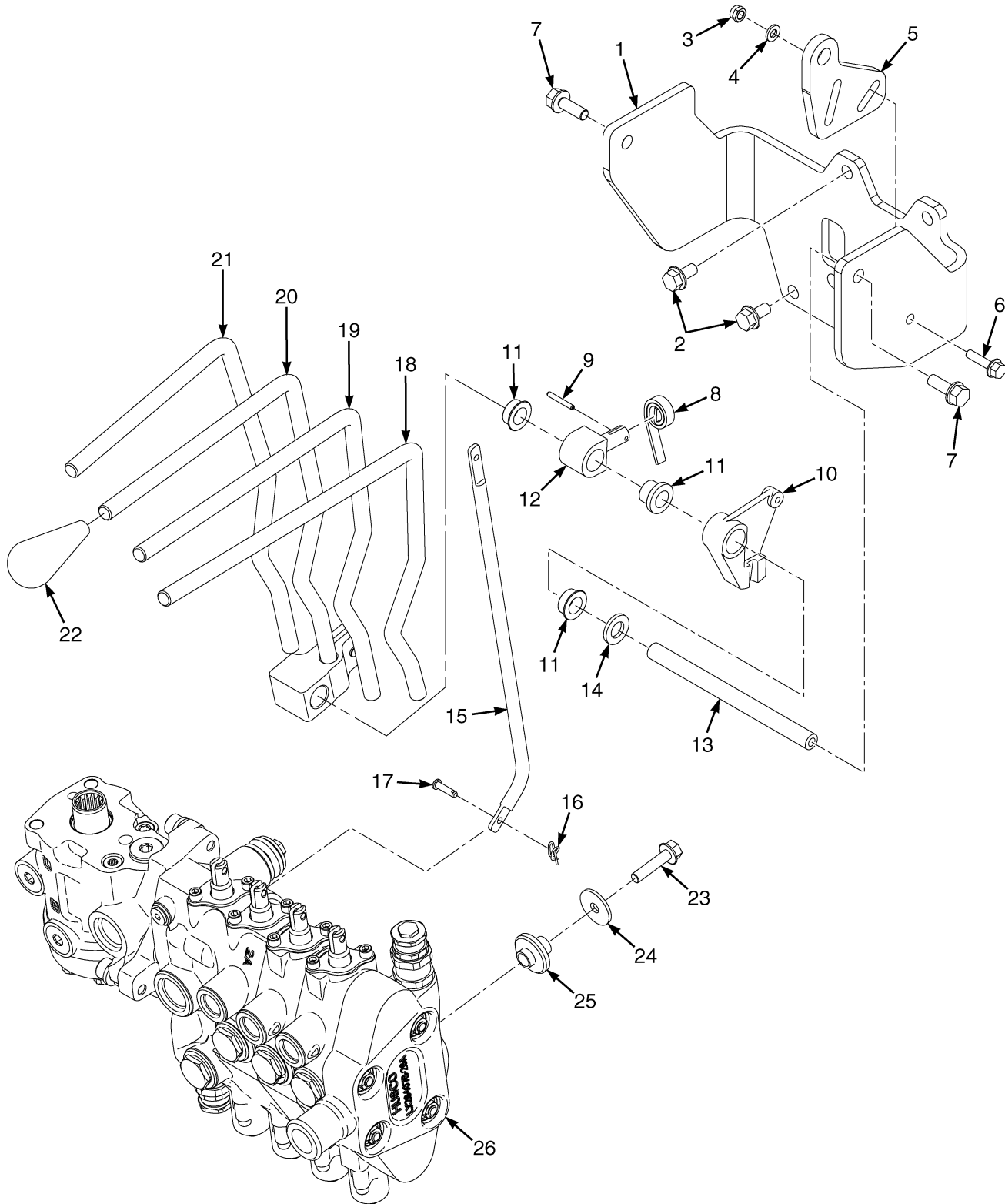
BP150076

ITEM	PART NO.	DESCRIPTION	QTY
1	c 1578453	Bracket	1
1	f 1656383	Bracket	1
1	j 1665746	Bracket	1
2	1527879	Capscrew	3
3	1583611	Capscrew	2
4	c 1528327	Shaft	1
4	g 1670292	Shaft	1
5	1564747	Bushing	6
6	c 2083701	Lever (Lift)	1
6	g 2099393	Lever (Lift)	1
7	c 2083702	Lever (Tilt)	1
7	g 2099394	Lever (Tilt)	1
8	c 2083703	Lever (Auxiliary One)	1
8	g 2099395	Lever (Auxiliary One)	1
9	1517395	Knob	3
10	c 1517394	Link	3
10	g 1662420	Link	3
11	309109	Pin	6
12	1517361	Locking Ring Cotter Pin	6
13	1586627	Capscrew	3
14	1346752	Washer	3
15	2063991	Isolator	3
16	a 2064895	Hydraulic Control Valve (Manual) (H2.0-3.0FT) (☞ Figure 11-16).....	1
16	d 2095079	Hydraulic Control Valve (Manual) (H2.0-3.0FT)	1
16	h 2105870	Hydraulic Control Valve (Manual) (H2.0-3.0FT)	1
16	b 2064899	Hydraulic Control Valve (Manual) (H3.5FT)	1
16	e 2095083	Hydraulic Control Valve (Manual) (H3.5FT)	1
16	i 2105874	Hydraulic Control Valve (Manual) (H3.5FT) (☞ Figure 11-16).....	1

FOOTNOTES:

a	→ S/N L177B17862E	f	S/N L177B26282F ↔ 9/2007
b	→ S/N L177B18730E	g	S/N L177B26282F →
c	→ S/N L177B26281F	h	S/N L177B29560G →
d	S/N L177B17862E ↔ S/N L177B29559G	i	S/N L177B30110H →
e	S/N L177B18731E ↔ S/N L177B30109H	j	9/2007 →

HAND LEVERS (FIGURE 11-14) FOUR FUNCTION — WITH DETENTED LEVERS



BP150483

HAND LEVERS

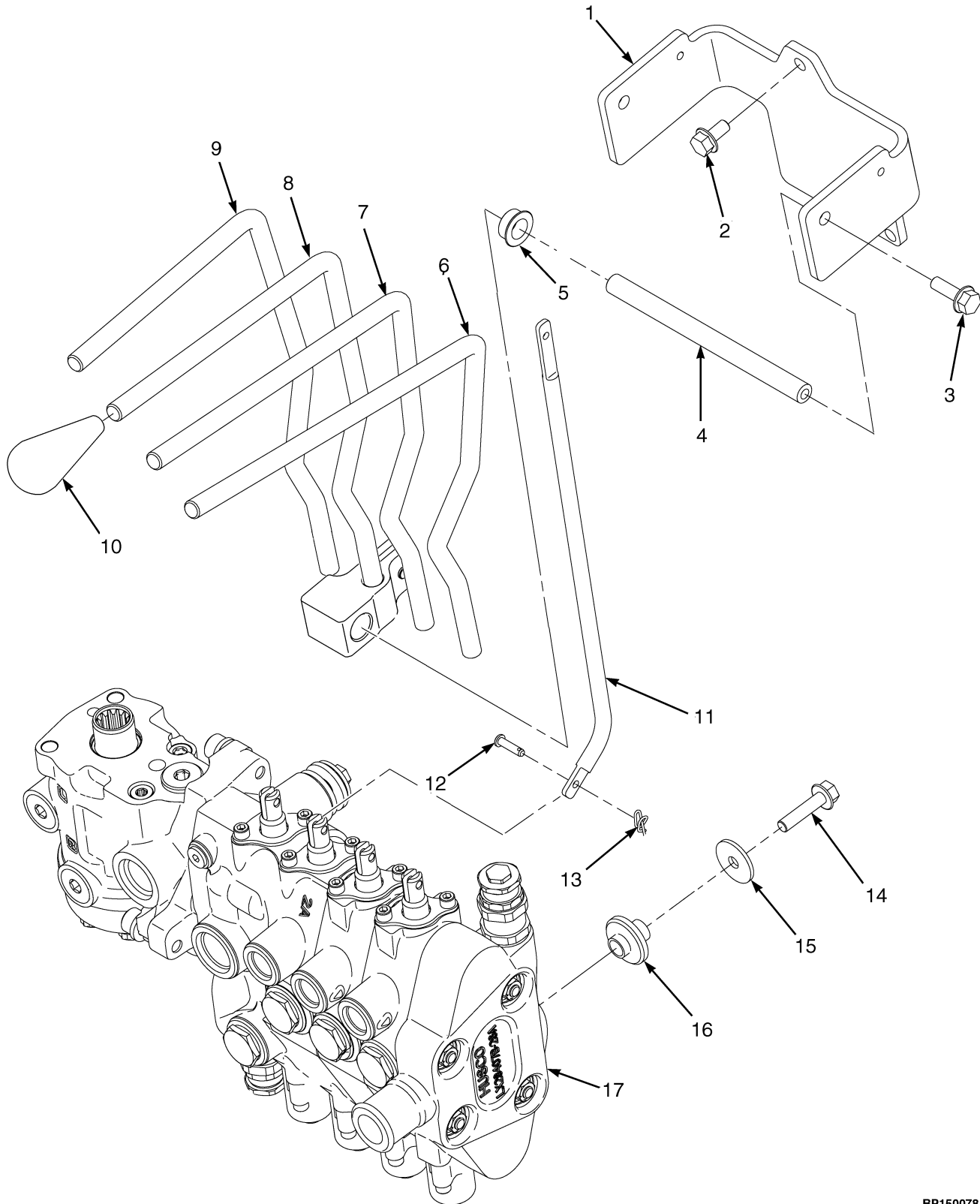
FOUR FUNCTION – WITH DETENTED LEVERS

ITEM	PART NO.	DESCRIPTION	QTY
1	a 1619997	Bracket	1
1	e 1656385	Bracket	1
1	h 1665748	Bracket	1
2	1527879	Capscrew	3
3	d 230882	Locknut	1
3	h 316834	Nut	1
4	d 197067	Washer	2
4	h 320156	Washer	1
5	d 1528339	Spacer	1
5	h 1670677	Plate	1
6	d 18094	Capscrew	1
6	h 1527878	Capscrew	1
7	1583611	Capscrew	2
8	175861	Spring	1
9	302428	Roll Pin	1
10	1542546	Lever	2
11	1564747	Bushing	12
12	306113	Pin (Selector)	1
13	d 1528329	Shaft	1
13	h 1670196	Shaft	1
14	320161	Washer	3
15	d 1517394	Link	4
15	h 1662420	Link	4
16	1517361	Locking Ring Cotter Pin	8
17	309109	Pin	8
18	d 2083705	Lever (Auxiliary Two And Three)	1
18	h 2099397	Lever (Auxiliary Two and Three)	1
19	d 2083703	Lever (Auxiliary One)	1
19	h 2099395	Lever (Auxiliary One)	1
20	d 2083702	Lever (Tilt)	1
20	h 2099394	Lever (Tilt)	1
21	d 2083701	Lever (Lift)	1
21	h 2099393	Lever (Lift)	1
22	1517395	Knob	4
22	2070655	Lens (Blank)	1
23	1586627	Capscrew	3
24	1346752	Washer	3
25	2063991	Isolator	3
26	b 2064897	Hydraulic Control Valve (Manual) (H2.0-3.0FT) (☞Figure 11-16).....	1
26	f 2095081	Hydraulic Control Valve (Manual) (H2.0-3.0FT)	1
26	i 2105872	Hydraulic Control Valve (H2.0-3.0FT) (☞Figure 11-16).....	1
26	c 2064901	Hydraulic Control Valve (Manual) (H3.5FT) (☞Figure 11-16).....	1
26	g 2095085	Hydraulic Control Valve (Manual) (H3.5FT)	1
26	j 2105876	Hydraulic Control Valve (Manual) (H3.5FT) (☞Figure 11-16).....	1

FOOTNOTES:

- a** → 9/2007
- b** → S/N L177B18169E
- c** → S/N L177B18808E
- d** → S/N L177B26281F
- e** 9/2007 ↔ S/N L177B26281F
- f** S/N L177B18170E ↔ S/N L177B29611G
- g** S/N L177B18809E ↔ S/N L177B30100H
- h** S/N L177B26282F →
- i** S/N L177B29612G →
- j** S/N L177B30101H →

HAND LEVERS (FIGURE 11-15) FOUR FUNCTION — WITHOUT DETENTED LEVERS



BP150078

HAND LEVERS

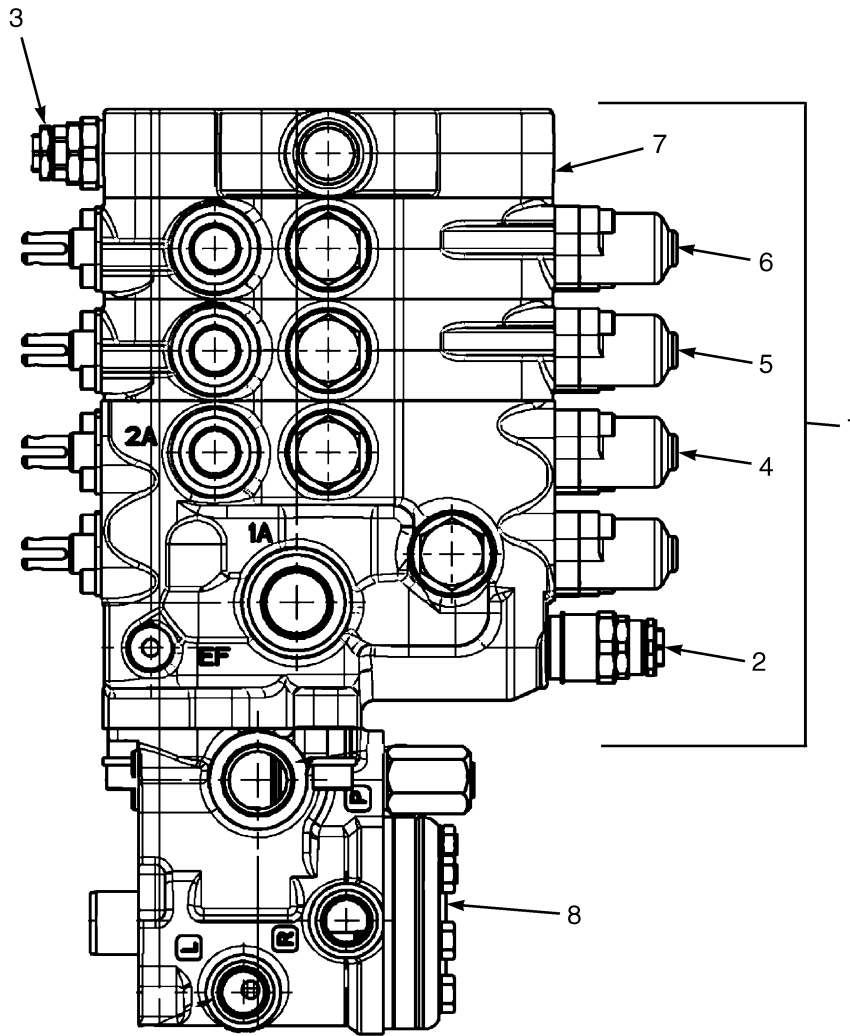
FOUR FUNCTION – WITHOUT DETENTED LEVERS

ITEM	PART NO.	DESCRIPTION	QTY
1	a 1578454	Bracket	1
1	e 1656384	Bracket	1
1	h 1665747	Bracket	1
2	1527879	Capscrew	3
3	1583611	Capscrew	2
4	d 1528328	Shaft	1
4	h 1670293	Shaft	1
5	1564747	Bushing	8
6	d 2083704	Lever (Auxiliary Two)	1
6	h 2099396	Lever (Auxiliary Two)	1
7	d 2083703	Lever (Auxiliary One)	1
7	h 2099395	Lever (Auxiliary One)	1
8	d 2083702	Lever (Tilt)	1
8	h 2099394	Lever (Tilt)	1
9	d 2083701	Lever (Lift)	1
9	h 2099393	Lever (Lift)	1
10	1517395	Knob	4
10	2070655	Lens (Blank)	1
11	d 1517394	Link	4
11	h 1662420	Link	4
12	309109	Pin	8
13	1517361	Locking Ring Cotter Pin	8
14	1586627	Capscrew	3
15	1346752	Washer	3
16	2063991	Isolator	3
17	b 2064897	Hydraulic Control Valve (Manual) (H2.0-3.0FT) (☞Figure 11-16).....	1
17	f 2095081	Hydraulic Control Valve (Manual) (H2.0-3.0FT)	1
17	i 2105872	Hydraulic Control Valve (H2.0-3.0FT) (☞Figure 11-16).....	1
17	c 2064901	Hydraulic Control Valve (Manual) (H3.5FT) (☞Figure 11-16).....	1
17	g 2095085	Hydraulic Control Valve (Manual) (H3.5FT)	1
17	j 2105876	Hydraulic Control Valve (Manual) (H3.5FT) (☞Figure 11-16).....	1

FOOTNOTES:

a	→ 9/2007	f	S/N L177B18170E ↔ S/N L177B29611G
b	→ S/N L177B16169E	g	S/N L177B18809E ↔ S/N L177B30100H
c	→ S/N L177B18808E	h	S/N L177B26282F →
d	→ S/N L177B26281F	i	S/N L177B29612G →
e	9/2007 ↔ S/N L177B26281F	j	S/N L177B30101H →

**CONTROL VALVE ASSEMBLY (FIGURE 11-16)
MANUAL CONTROL — THREE AND FOUR FUNCTION**



BP140045

**CONTROL VALVE ASSEMBLY
MANUAL CONTROL – THREE AND FOUR FUNCTION**

KEY:

A: H2.0-3.0FT

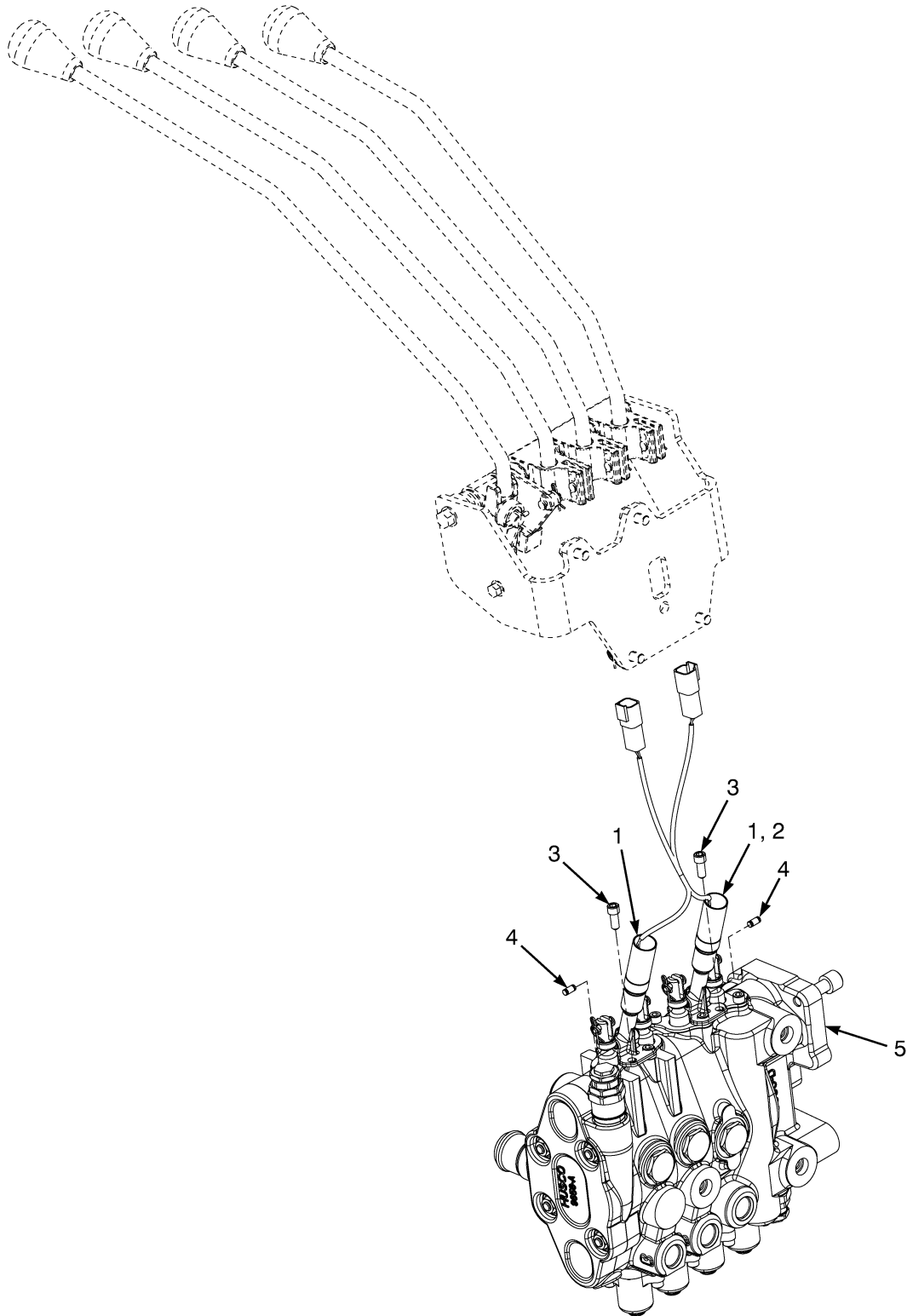
B: H3.5FT

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a 2064895	Hydraulic Control Valve (Manual) (3 Function)	1	..
	e 2095079	Hydraulic Control Valve (Manual) (3 Function)	1	..
	k 2105870	Hydraulic Control Valve (Manual) (3 Function)	1	..
	b 2064897	Hydraulic Control Valve (Manual) (4 Function)	1	..
	g 2095081	Hydraulic Control Valve (Manual) (4 Function)	1	..
	l 2105872	Hydraulic Control Valve (4 Function)	1	..
	c 2064899	Hydraulic Control Valve (Manual) (3 Function) .....	..	1
	h 2095083	Hydraulic Control Valve (Manual) (3 Function) .....	..	1
	n 2105874	Hydraulic Control Valve (Manual) (3 Function) .....	..	1
	d 2064901	Hydraulic Control Valve (Manual) (4 Function) .....	..	1
	i 2095085	Hydraulic Control Valve (Manual) (4 Function) .....	..	1
	m 2105876	Hydraulic Control Valve (Manual) (3 Function) .....	..	1
1	a 2064885	Hydraulic Control Valve (3 Function)	1	..
1	f 2095088	Hydraulic Control Valve (3 Function)	1	..
1	k 2105879	Hydraulic Control Valve (3 Function)	1	..
1	b 2064886	Hydraulic Control Valve (4 Function)	1	..
1	g 2095089	Hydraulic Control Valve (4 Function)	1	..
1	l 2105880	Hydraulic Control Valve (4 Function)	1	..
1	c 2064887	Hydraulic Control Valve (3 Function) .....	..	1
1	h 2095090	Hydraulic Control Valve (3 Function) .....	..	1
1	n 2105881	Hydraulic Control Valve (3 Function) .....	..	1
1	d 2064888	Hydraulic Control Valve (4 Function) .....	..	1
1	i 2095091	Hydraulic Control Valve (4 Function) .....	..	1
1	m 2105882	Hydraulic Control Valve (4 Function) .....	..	1
2	1578747	Relief Valve (3100 PSI) (Main Relief)	1	..
2	1578748	Relief Valve (3400 PSI) (Main Relief) .....	..	1
3	1578707	Relief Valve (2250 PSI) (Secondary)	1	1
4	abcd 1578743	Valve Section (Lift and Tilt) (☞Figure 11-18).....	1	1
4	eghi 1670464	Valve Section (Lift and Tilt) (☞Figure 11-19).....	1	1
4	klmn 1702420	Valve Section (Lift And Tilt) (☞Figure 11-20).....	1	1
5	ac 1578744	Valve Section (3 Function) (☞Figure 11-21).....	1	1
5	qo 1670463	Valve Section (3 Function) (☞Figure 11-22).....	1	1
6	bd 1578745	Valve Section (4 Function) (☞Figure 11-21).....	1	1
6	pj 1670462	Valve Section (4 Function) (☞Figure 11-22).....	1	1
7	1578746	Valve Section (☞Figure 11-23).....	1	1
8	2063117	Steering Control Unit (☞Figure 9-4).....	1	..
8	2063118	Steering Control Unit (☞Figure 9-4).....	..	1
	ac 1580146	Kit-Seal (Three Function)	1	1
	qo 1670434	Kit-Seal (Three Function)	1	1
	bd 1580148	Kit-Seal (Four Function)	1	1
	pj 1670054	Kit-Seal (Four Function)	1	1

FOOTNOTES:

a	→ S/N L177B17862E	j	S/N L177B18809E →
b	→ S/N L177B18169E	k	S/N L177B29560G →
c	→ S/N L177B18729E	l	S/N L177B29612G →
d	→ S/N L177B18808E	m	S/N L177B30101H →
e	S/N L177B17862E ↔ S/N L177B29559G	n	S/N L177B30110H →
f	S/N L177B17862E ↔ S/N L177B29659G	o	S/N L177B18730E →
g	S/N L177B18170E ↔ S/N L177B29611G	p	S/N L177B18170E →
h	S/N L177B18730E ↔ S/N L177B30109H	q	S/N L177B17862E →
i	S/N L177B18809E ↔ S/N L177B30100H		

CONTROL VALVE LOCKOUT GROUP (FIGURE 11-17) MANUAL CONTROL VALVE (S/N L177B28589G →)



BP140133

CONTROL VALVE LOCKOUT GROUP
MANUAL CONTROL VALVE (S/N L177B28589G →)

KEY:

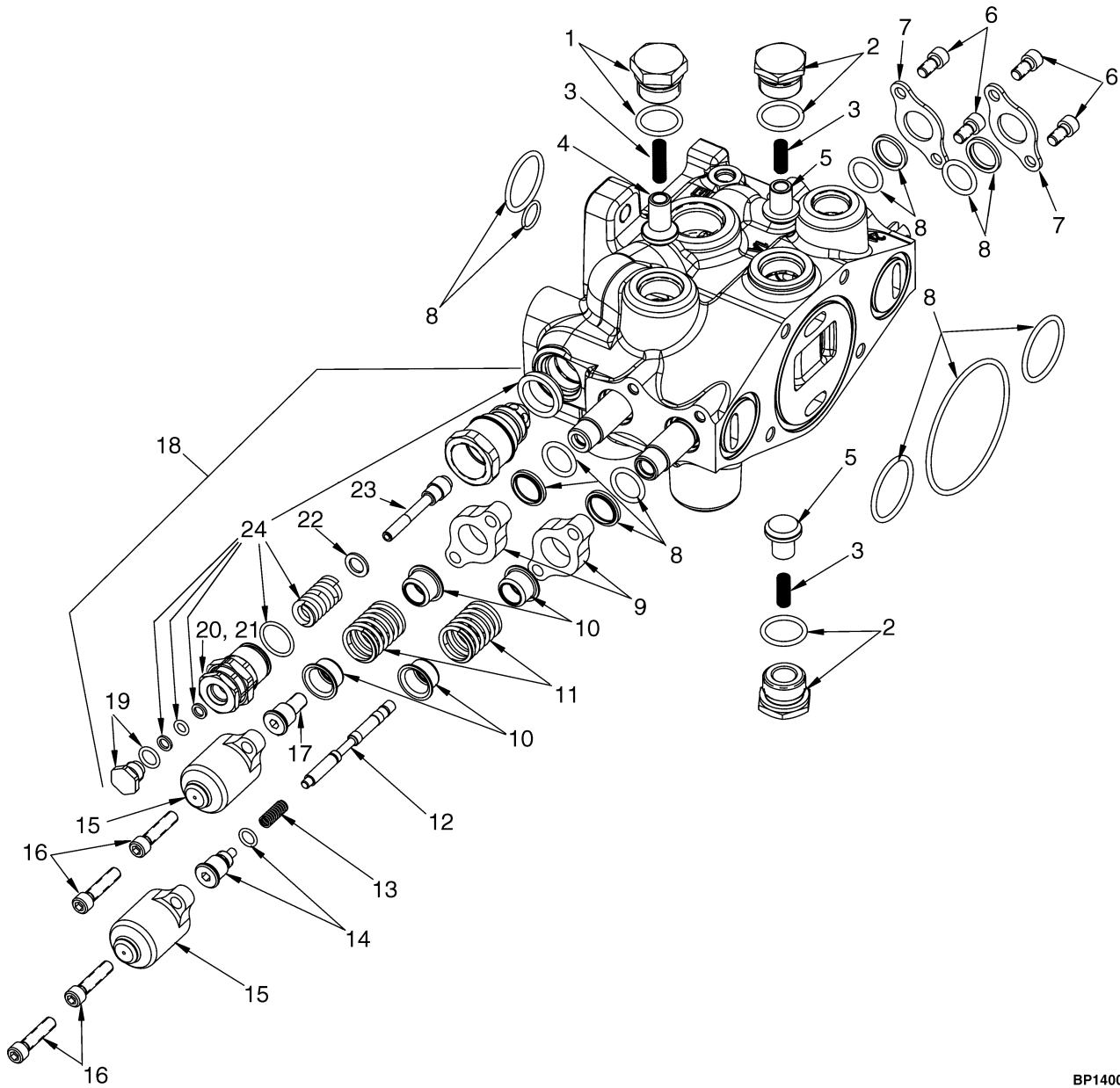
A: 3 Function

B: 4 Function

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1683529	Solenoid Assembly (Double Function)	1	2
2	1683621	Solenoid Assembly (Single Function)	1	..
3	18748	Capscrew	4	4
4	1670413	Needle Roller	3	4
5	.....	Manual Control Valve (☞ Figure 11-16).....	1	1

VALVE ASSEMBLY, LIFT AND TILT (FIGURE 11-18) MANUAL CONTROL VALVE — THREE AND FOUR FUNCTION

(→ S/N L177B17861E (3 FUNCTION LOW RELIEF)) (→ S/N L177B18729E (3 FUNCTION HIGH RELIEF))
(→ S/N L177B18169E (4 FUNCTION LOW RELIEF)) (→ S/N L177B18808E (4 FUNCTION HIGH RELIEF))



BP140046

VALVE ASSEMBLY, LIFT AND TILT**MANUAL CONTROL VALVE – THREE AND FOUR FUNCTION**

(→ S/N L177B17861E (3 FUNCTION LOW RELIEF)) (→ S/N L177B18729E (3 FUNCTION HIGH RELIEF))
 (→ S/N L177B18169E (4 FUNCTION LOW RELIEF)) (→ S/N L177B18808E (4 FUNCTION HIGH RELIEF))

ITEM	PART NO.	DESCRIPTION	QTY
	1578743	Valve Section (Lift and Tilt)	1
1	1578713	Plug	2
2	1578940	Plug	1
3	77442	Spring	3
4	1578943	Poppet	1
5	77443	Poppet	2
6	16706	Screw	4
7	188515	Plate	2
8	1670445	Kit-Seal (Lift and Tilt)	1
9	.....	Seal Plate	2
10	320289	Spring Seat	2
11	1581860	Spring	2
12	1581861	Piston	1
13	341462	Spring	1
14	386015	Spool End	1
15	1560681	Cap	2
16	1578705	Capscrew	4
17	1581859	Spool End	1
18	1578747	Relief Valve (3100 PSI) (Main Relief) (H2.0-3.0FT)	1
18	1578748	Relief Valve (3400 PSI) (Main Relief) (H3.5FT)	1
19	.....	Plug	1
20	.....	Screw	1
21	.....	Nut	1
22	.....	Washer	1
23	.....	Poppet	1
24	1580097	Kit-Seal (H2.0-3.0FT)	1
24	1580131	Kit-Seal (H3.5FT)	1

VALVE ASSEMBLY, LIFT AND TILT (FIGURE 11-19)

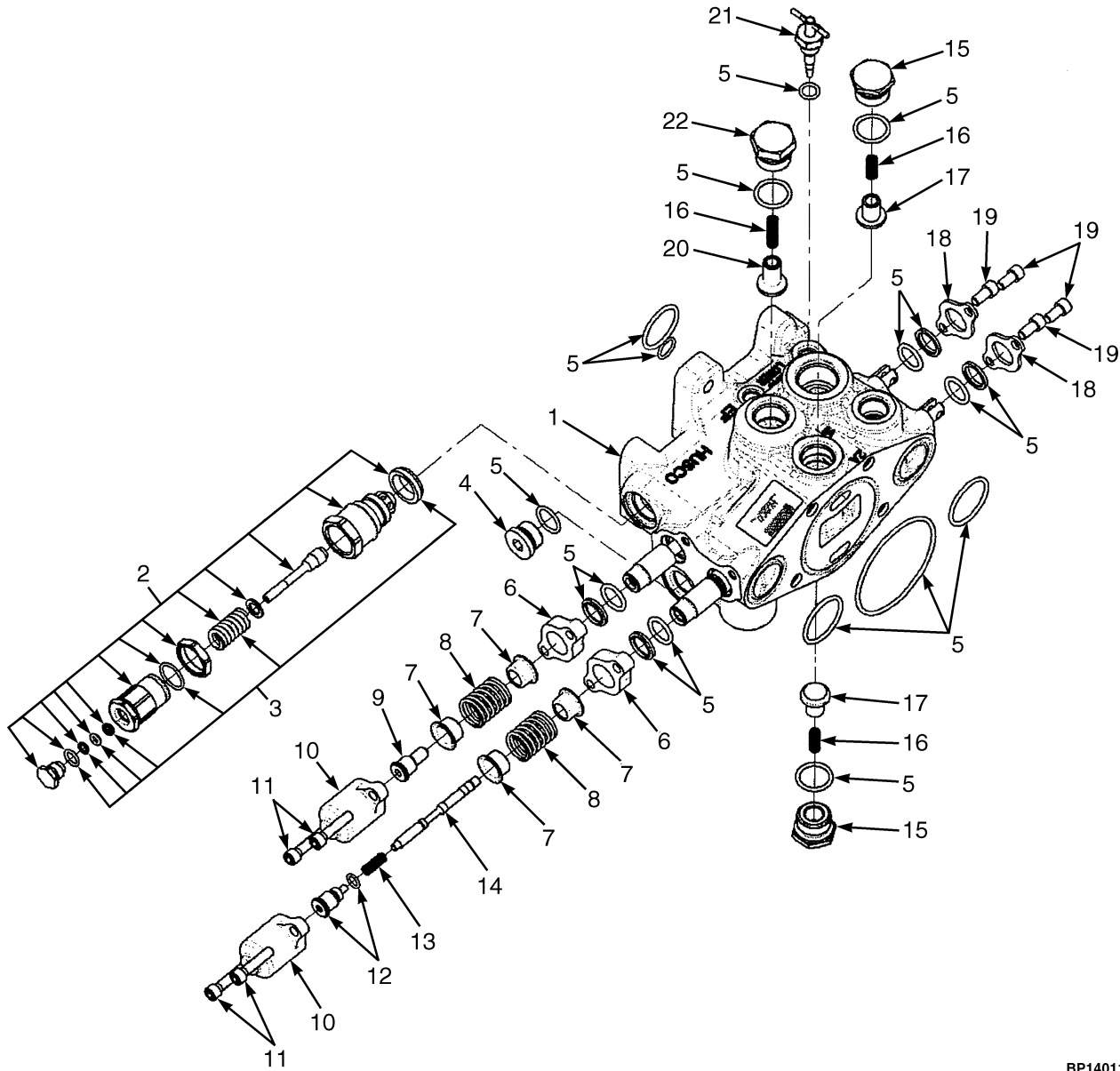
MANUAL CONTROL VALVE — THREE AND FOUR FUNCTION

(S/N L177B17862E ↔ S/N L177B29559G (3 FUNCTION LOW RELIEF))

(S/N L177B18170E ↔ S/N L177B29611G (4 FUNCTION LOW RELIEF))

(S/N L177B18809E ↔ S/N L177B30100H (4 FUNCTION HIGH RELIEF))

(S/N L177B18730E ↔ S/N L177B30109H (3 FUNCTION HIGH RELIEF))



BP140111

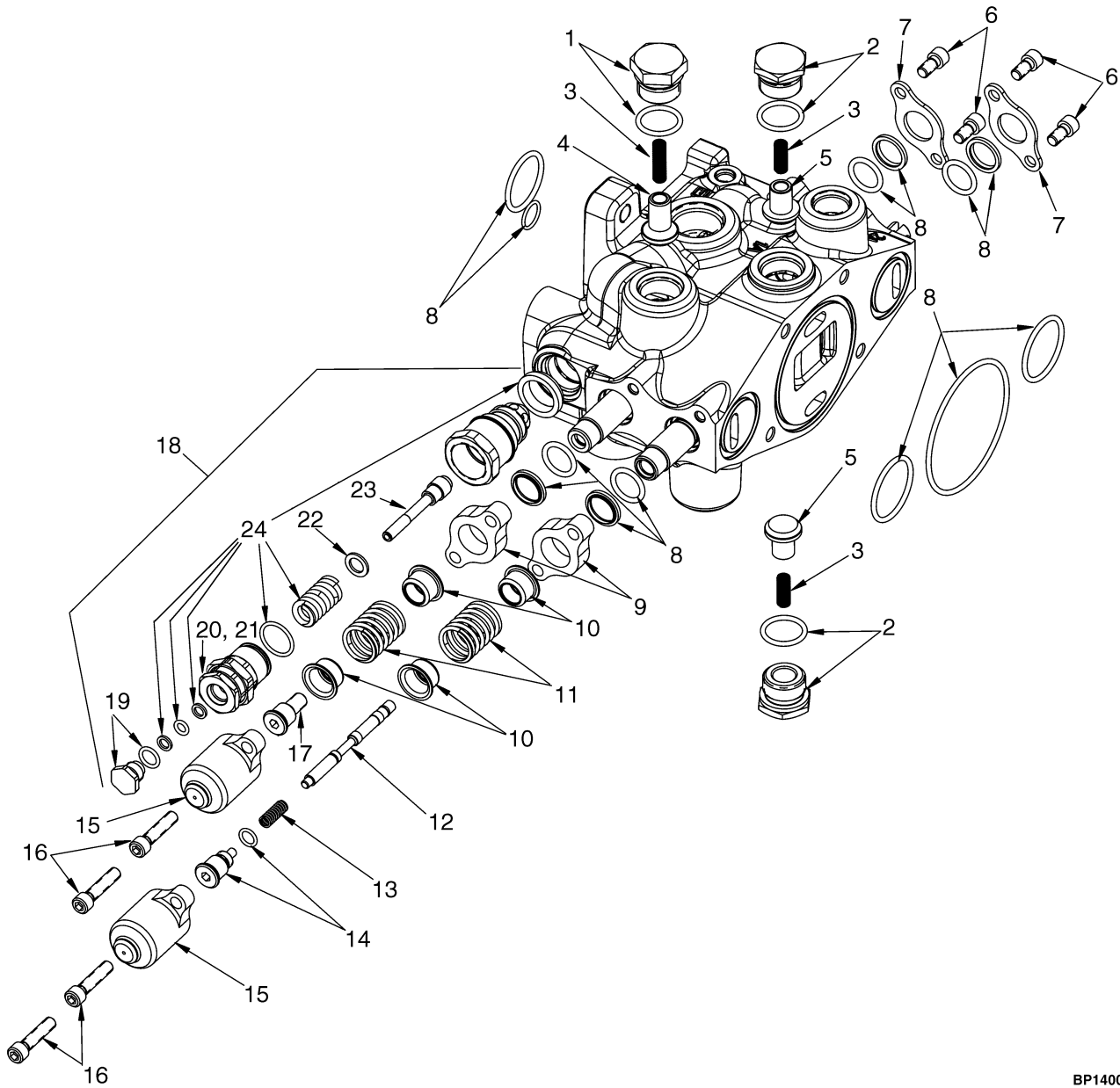
VALVE ASSEMBLY, LIFT AND TILT
MANUAL CONTROL VALVE – THREE AND FOUR FUNCTION
(S/N L177B17862E ↔ S/N L177B29559G (3 FUNCTION LOW RELIEF))
(S/N L177B18170E ↔ S/N L177B29611G (4 FUNCTION LOW RELIEF))
(S/N L177B18809E ↔ S/N L177B30100H (4 FUNCTION HIGH RELIEF))
(S/N L177B18730E ↔ S/N L177B30109H (3 FUNCTION HIGH RELIEF))

KEY:**A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1670464	Valve Section (Lift and Tilt)	1	1
2	1578747	Relief Valve (3100 PSI) (Main Relief)	1	1
2	1578748	Relief Valve (3400 PSI) (Main Relief)	1	1
2	1580694	Plug	1	1
2	1580697	Screw	1	1
2	1580698	Nut	1	1
2	1580695	Washer	1	1
2	1580696	Poppet	1	1
3	1580097	Kit-Seal	1	1
4	1569602	Plug	1	1
5	1670445	Kit-Seal (Lift and Tilt)	1	1
6	.....	Seal Plate	2	2
7	320289	Spring Seat	4	4
8	1581860	Spring	2	2
9	1581859	Spool End	1	1
10	1560681	Cap	2	2
11	1578705	Capscrew	4	4
12	386015	Spool End	1	1
13	341462	Spring	1	1
14	1581861	Piston	1	1
15	1578713	Plug	1	1
16	77442	Spring	3	3
17	77443	Poppet	2	2
18	188515	Plate	2	2
19	16706	Screw	4	4
20	1578943	Poppet	1	1
21	1670522	Kit-Valve (Manual Lower Assembly)	1	1
22	1578940	Plug	1	1
	1670054	Kit-Seal (Four Function) .....	..	1
	1670434	Kit-Seal (Three Function)	1	..

VALVE ASSEMBLY, LIFT AND TILT (FIGURE 11-20) MANUAL CONTROL VALVE — THREE AND FOUR FUNCTION

(S/N L177B29560G → (3 FUNCTION LOW RELIEF)) (S/N L177B29612G → (4 FUNCTION LOW RELIEF))
(S/N L177B30110H → (3 FUNCTION HIGH RELIEF)) (S/N L177B30101H → (4 FUNCTION HIGH RELIEF))



BP140046

VALVE ASSEMBLY, LIFT AND TILT**MANUAL CONTROL VALVE – THREE AND FOUR FUNCTION**

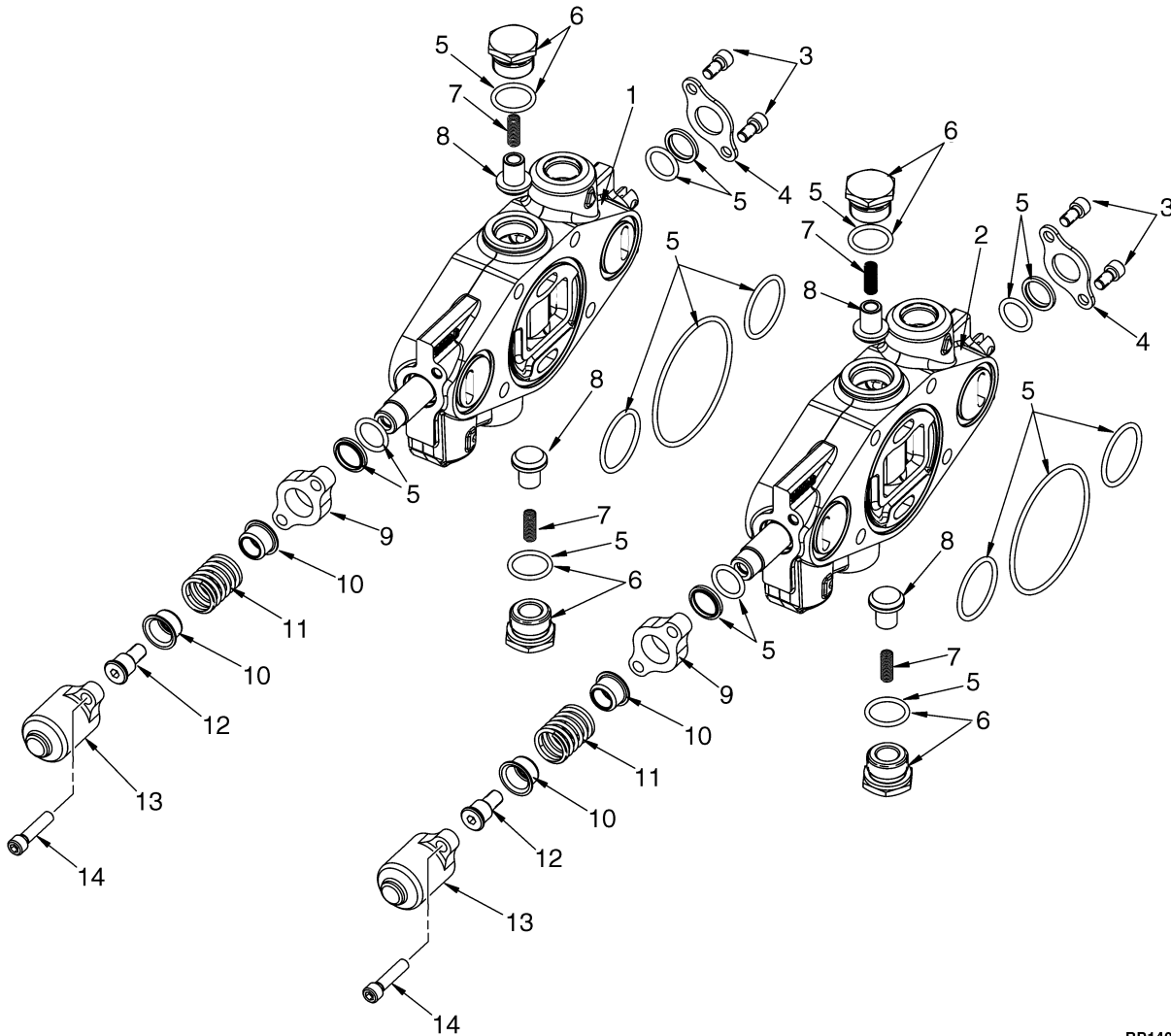
(S/N L177B29560G → (3 FUNCTION LOW RELIEF)) (S/N L177B29612G → (4 FUNCTION LOW RELIEF))
 (S/N L177B30110H → (3 FUNCTION HIGH RELIEF)) (S/N L177B30101H → (4 FUNCTION HIGH RELIEF))

ITEM	PART NO.	DESCRIPTION	QTY
	1702420	Valve Section (Lift And Tilt)	1
1	1578713	Plug	2
2	1578940	Plug	1
3	77442	Spring	3
4	1578943	Poppet	1
5	77443	Poppet	2
6	16706	Screw	4
7	188515	Plate	2
8	1670522	Kit-Valve (Manual Lower Assembly)	1
9	1560682	Plate	2
10	320289	Spring Seat	4
11	1581860	Spring	2
12	1581861	Piston	1
13	341462	Spring	1
14	386015	Spool End	1
15	1560681	Cap	2
16	1578705	Capscrew	4
17	1581859	Spool End	1
18	1578747	Relief Valve (3100 PSI) (Main Relief) (Low Relief)	1
18	1578748	Relief Valve (3400 PSI) (Main Relief) (High Relief)	1
19	1580694	Plug	1
20	1580697	Screw	1
21	1580698	Nut	1
22	1580695	Washer	1
23	1580696	Poppet	1
24	1580097	Kit-Seal	1

AUXILIARY ONE AND TWO (FIGURE 11-21)

MANUAL CONTROL VALVE — THREE AND FOUR FUNCTION

(→ S/N L177B17861E (3 FUNCTION LOW RELIEF)) (→ S/N L177B18169E (4 FUNCTION LOW RELIEF))
(→ S/N L177B18729E (3 FUNCTION HIGH RELIEF)) (→ S/N L177B18808E (4 FUNCTION HIGH RELIEF))



BP140047

AUXILIARY ONE AND TWO**MANUAL CONTROL VALVE – THREE AND FOUR FUNCTION**

(→ S/N L177B17861E (3 FUNCTION LOW RELIEF)) (→ S/N L177B18169E (4 FUNCTION LOW RELIEF))
 (→ S/N L177B18729E (3 FUNCTION HIGH RELIEF)) (→ S/N L177B18808E (4 FUNCTION HIGH RELIEF))

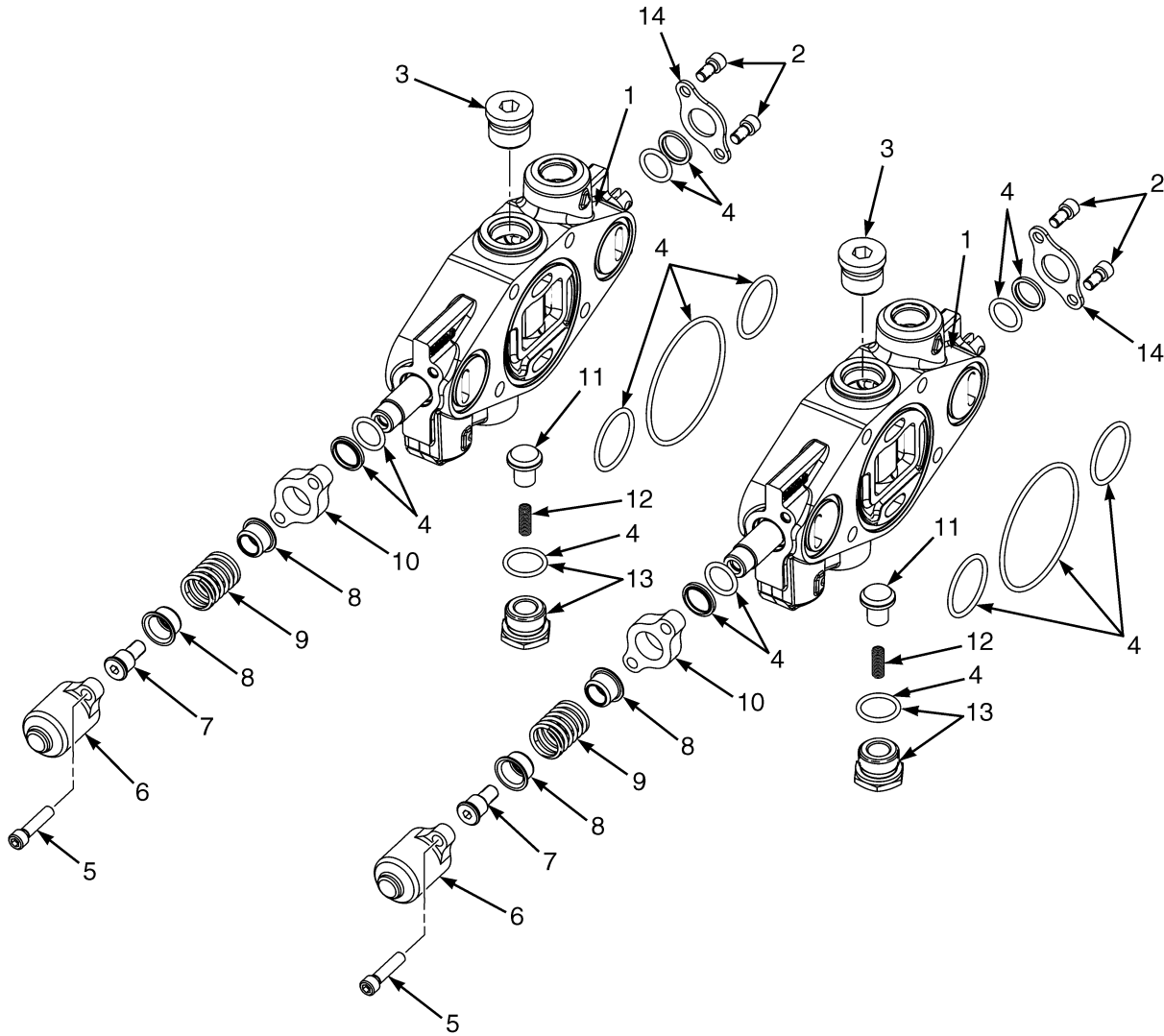
KEY:**A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1578744	Valve Section	1	1
2	1578745	Valve Section .....	..	1
3	16706	Screw	2	2
4	188515	Plate	1	1
5	1580147	Kit-Seal (Auxiliary Functions)	1	1
6	1578713	Plug	2	2
6	77441	Plug	2	2
7	77442	Spring	2	2
8	77443	Poppet	2	2
9	.....	Seal Plate	1	1
10	320289	Spring Seat	1	1
11	1581860	Spring	1	1
12	1581859	Spool End	1	1
13	1560681	Cap	1	1
14	1578705	Capscrew	2	4

AUXILIARY ONE AND TWO (FIGURE 11-22)

MANUAL CONTROL VALVE — THREE AND FOUR FUNCTION

(S/N L177B18170E → (4 FUNCTION LOW RELIEF)) (S/N L177B17862E → (3 FUNCTION LOW RELIEF))
(S/N L177B18730E → (3 FUNCTION HIGH RELIEF)) (S/N L177B18809E → (4 FUNCTION HIGH RELIEF))



BP140119

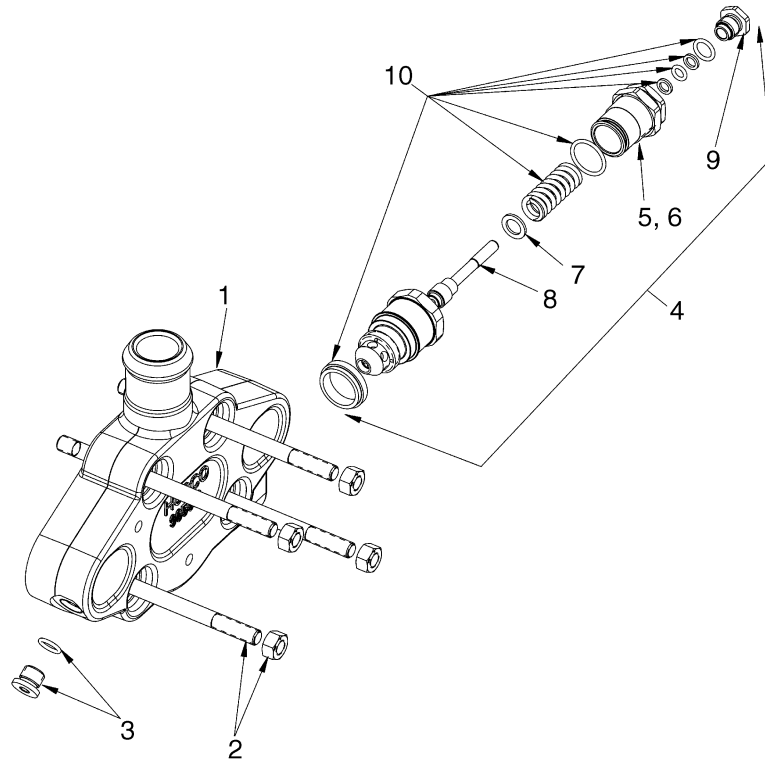
AUXILIARY ONE AND TWO**MANUAL CONTROL VALVE – THREE AND FOUR FUNCTION**

(S/N L177B18170E → (4 FUNCTION LOW RELIEF)) (S/N L177B17862E → (3 FUNCTION LOW RELIEF))
 (S/N L177B18730E → (3 FUNCTION HIGH RELIEF)) (S/N L177B18809E → (4 FUNCTION HIGH RELIEF))

KEY:**A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1670463	Valve Section	1	1
1	1670462	Valve Section .....	..	1
2	16706	Screw	2	4
3	1578714	Plug	1	1
4	1580147	Kit-Seal (Auxiliary Functions)	1	1
5	1578705	Capscrew	2	4
6	1560681	Cap	1	2
7	1581859	Spool End	1	2
8	320289	Spring Seat	2	4
9	1581860	Spring	1	2
10	1560682	Plate	1	2
11	77443	Poppet	1	2
12	77442	Spring	1	2
13	1578713	Plug	1	2
14	188515	Plate	1	2
	1670434	Kit-Seal (Three Function)	1	..
	1670054	Kit-Seal (Four Function) .....	..	1

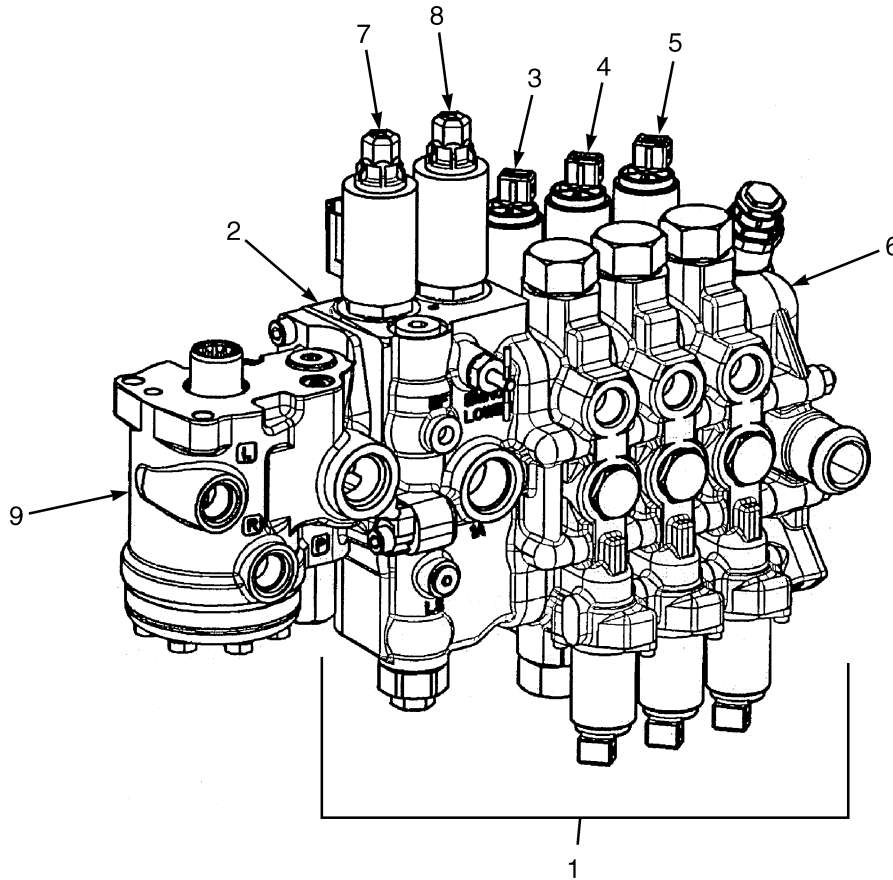
OUTLET SECTION (FIGURE 11-23) MANUAL CONTROL VALVE — THREE AND FOUR FUNCTION



BP140048

ITEM	PART NO.	DESCRIPTION	QTY
1	1578746	Valve Section	1
2	1580155	Kit-Tie Rod (Three Function)	1
2	1580156	Kit-Tie Rod (Four Function)	1
2	15055	Nut	4
3	1578712	Plug	1
3	204128	Plug	1
4	1578707	Relief Valve (2250 PSI) (Secondary)	1
5	.....	Nut	1
6	.....	Screw	1
7	.....	Washer	1
8	.....	Poppet	1
9	.....	Plug	1
10	1580131	Kit-Seal	1

HYDRAULIC CONTROL VALVE (FIGURE 11-24)
ELECTRONIC VALVE ASSEMBLY — THREE AND FOUR FUNCTION
(→ S/N L177B18261E (4 FUNCTION LOW RELIEF))
(→ S/N L177B18806E (3 AND 4 FUNCTION HIGH RELIEF))
(→ S/N L177B18237E (3 FUNCTION LOW RELIEF))



BP140053

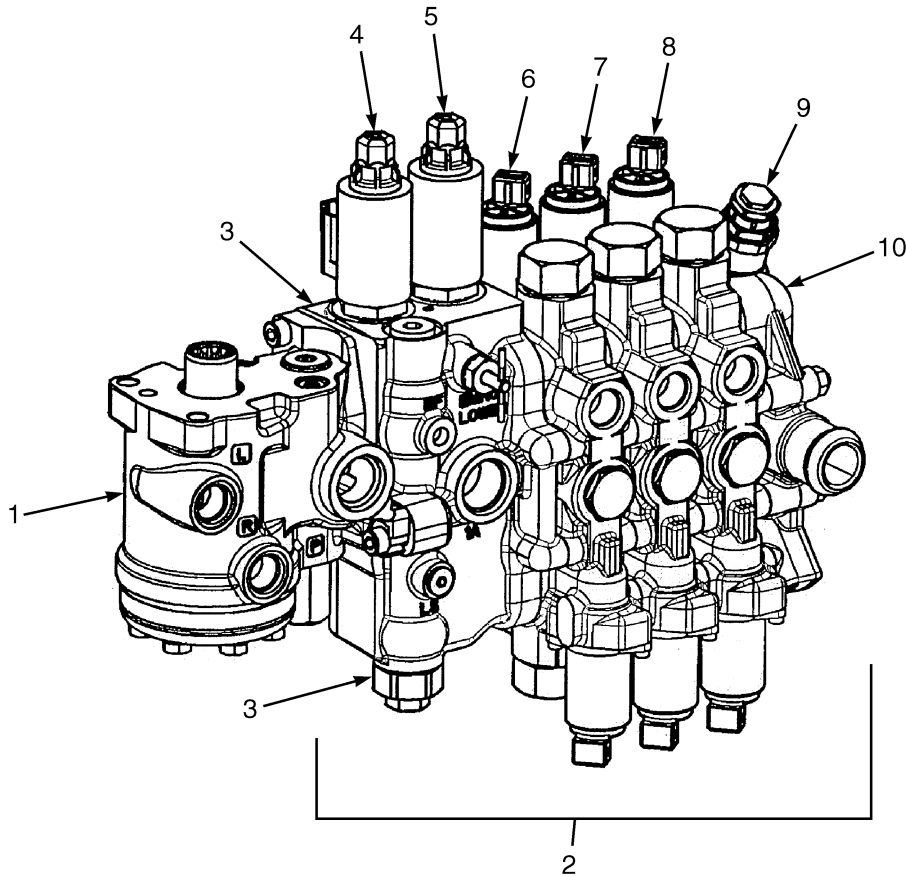
HYDRAULIC CONTROL VALVE
ELECTRONIC VALVE ASSEMBLY – THREE AND FOUR FUNCTION
 (→ S/N L177B18261E (4 FUNCTION LOW RELIEF)) (→ S/N L177B18806E (3 AND 4 FUNCTION HIGH RELIEF))
 (→ S/N L177B18237E (3 FUNCTION LOW RELIEF))

KEY:**A: H2.0-3.0FT****B: H3.5FT**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	c 2064848	Hydraulic Control Valve	1	..
	c 2064851	Hydraulic Control Valve .....	..	1
	a 2064859	Hydraulic Control Valve	1	..
	a 2064862	Hydraulic Control Valve .....	..	1
1	c 2064845	Hydraulic Control Valve (Electronic)	1	..
1	c 2064849	Hydraulic Control Valve (Electronic) .....	..	1
1	a 2064857	Hydraulic Control Valve (Electronic)	1	..
1	a 2064860	Hydraulic Control Valve (Electronic) .....	..	1
2	1578701	Valve Section (Lift and Lower) (☞Figure 11-27).....	1	..
2	1578700	Valve Section (Lift and Lower) (☞Figure 11-27).....	..	1
3	1578702	Valve Section (Tilt) (☞Figure 11-32).....	1	1
4	c 1578703	Valve Section (Aux. 1) (☞Figure 11-33).....	1	1
5	a 1578741	Valve Section (Aux. 2) (☞Figure 11-34).....	1	1
6	1578704	Valve Section (Outlet) (☞Figure 11-35).....	1	1
7	1590113	Poppet Valve (Lift) (☞Figure 11-30).....	1	1
8	1590114	Poppet Valve (Lower) (☞Figure 11-30).....	1	1
9	2063117	Steering Control Unit (☞Figure 9-4).....	1	..
9	2063118	Steering Control Unit (☞Figure 9-4).....	..	1
	b 1579908	Kit-Seal	1	1
	b 2063991	Isolator	3	3
	b 1586627	Capscrew	3	3
	b 1346752	Washer	3	3

FOOTNOTES:**a** Four Function**c** Three Function**b** Not Illustrated

HYDRAULIC CONTROL VALVE (FIGURE 11-25)
ELECTRONIC VALVE ASSEMBLY — THREE AND FOUR FUNCTION
(S/N L177B18238E → (4 FUNCTION LOW RELIEF)) (S/N L177B18238E → (3 FUNCTION LOW RELIEF))
(S/N L177B18807E → (3 AND 4 FUNCTION HIGH RELIEF))



BP140112

HYDRAULIC CONTROL VALVE
ELECTRONIC VALVE ASSEMBLY – THREE AND FOUR FUNCTION
 (S/N L177B18238E → (4 FUNCTION LOW RELIEF)) (S/N L177B18238E → (3 FUNCTION LOW RELIEF))
 (S/N L177B18807E → (3 AND 4 FUNCTION HIGH RELIEF))

KEY:

- A: Three Function Valve, Low Relief**
- B: Four Function Valve, Low Relief**
- C: Three Function Valve, High Relief**
- D: Four Function Valve, High Relief**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
	b 2095423	Hydraulic Control Valve	1	..	..	..
	e 2102727	Hydraulic Control Valve	1	..	..	..
	c 2095425	Hydraulic Control Valve .....	..	1	..	..
	f 2102729	Hydraulic Control Valve .....	..	1	..	..
	a 2095427	Hydraulic Control Valve .....	..	..	1	..
	d 2102731	Hydraulic Control Valve .....	..	..	1	..
	a 2095429	Hydraulic Control Valve .....	..	..	..	1
	d 2102733	Hydraulic Control Valve .....	..	..	..	1
1	2063117	Steering Control Unit	1	1	..	..
1	2063118	Steering Control Unit .....	..	..	1	1
2	b 2095432	Hydraulic Control Valve (Electronic)	1	..	..	..
2	e 2102736	Hydraulic Control Valve (Electronic)	1	..	..	..
2	c 2095433	Hydraulic Control Valve (Electronic) .....	..	1	..	..
2	f 2102738	Hydraulic Control Valve (Electronic) .....	..	1	..	..
2	a 2095434	Hydraulic Control Valve (Electronic) .....	..	..	1	..
2	d 2102737	Hydraulic Control Valve (Electronic) .....	..	..	1	..
2	a 2095435	Hydraulic Control Valve (Electronic) .....	..	..	..	1
2	d 2102739	Hydraulic Control Valve (Electronic) .....	..	..	..	1
3	1664485	Valve Section (Inlet) (☞Figure 11-28).....	1	1	..	..
3	1578706	Relief Valve (Main)	1	1	..	..
3	1664486	Valve Section (Inlet) (☞Figure 11-28).....	..	..	1	1
3	1578753	Relief Valve (Main) .....	..	..	1	1
4	1590113	Poppet Valve (☞Figure 11-30).....	1	1	1	1
5	1590114	Poppet Valve (☞Figure 11-30).....	1	1	1	1
6	abc 1578702	Valve Section (Tilt) (☞Figure 11-32).....	1	1	1	1
6	def 1708295	Valve Section (Tilt) (☞Figure 11-32).....	1	1	1	1
7	abc 1578703	Valve Section (Aux. 1) (☞Figure 11-33).....	1	1	1	1
7	def 1708263	Valve Section (Aux. 1) (☞Figure 11-33).....	1	1	1	1
8	abc 1578741	Valve Section (Aux. 2) (☞Figure 11-34).....	..	1	..	1
8	def 1708294	Valve Section (Aux. 2) (☞Figure 11-34).....	1	1	1	1
9	abc 1578707	Relief Valve (2250 PSI) (Secondary) (☞Figure 11-35)....	1	1	1	1
9	def 1708054	Relief Valve	1	1	1	1
10	abc 1578704	Valve Section (Outlet) (☞Figure 11-35).....	1	1	1	1
10	def 1708262	Valve Section (Outlet) (☞Figure 11-36).....	1	1	1	1
	1578909	Kit-Seal	1	..	1	..
	1578908	Kit-Seal .....	..	1	..	1
	1578715	Kit-Tie Rod	1	..	1	..
	1580151	Kit-Tie Rod .....	..	1	..	1

FOOTNOTES:

a → S/N L177B30215H
b → S/N L177B30223H
c → S/N L177B30225H

d S/N L177B30216H →
e S/N L177B30224H →
f S/N L177B30226H →

**HYDRAULIC CONTROL VALVE
ELECTRONIC VALVE ASSEMBLY – THREE AND FOUR FUNCTION-WITH VDP
(PENDING PER ECN 10612201 →)**

KEY:

A: 3 Function

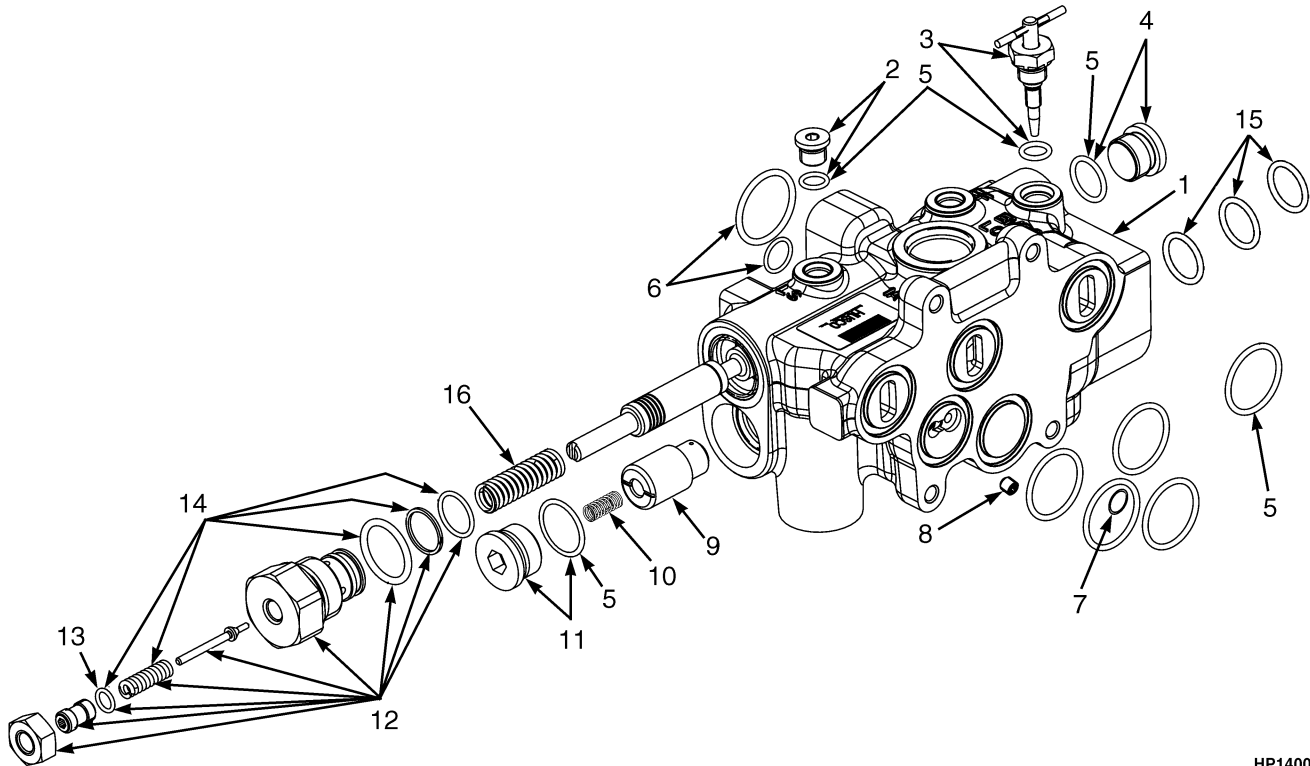
B: 4 Function

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4604778	Hydraulic Control Valve (Assembly, H2.5-3.0)	1	..
	4604779	Hydraulic Control Valve (Assembly, H2.5-3.0) .....	..	1
	4613673	Hydraulic Control Valve (Assembly, H2.0)	1	..
	4613674	Hydraulic Control Valve (Assembly, H2.0) .....	..	1
	4605234	Hydraulic Control Valve (H2.5-3.0)	1	..
	4605235	Hydraulic Control Valve (H2.5-3.0) .....	..	1
	4613675	Hydraulic Control Valve (H2.0)	1	..
	4613676	Hydraulic Control Valve (H2.0) .....	..	1
1	4031384	Valve Section (Transition) (☞Figure 11-29).....	1	1
2	4031379	Relief Valve	1	1
3	4031383	Valve Section (Lift) (☞Figure 11-31).....	1	1
4	4031382	Valve Section (Tilt) (☞Figure 11-32).....	1	1
5	4031381	Valve Section (Aux. 1) (☞Figure 11-33).....	1	1
6	4031526	Valve Section (Aux. 2) (☞Figure 11-34).....	..	1
7	1578707	Relief Valve (2250 PSI) (Secondary)	1	1
8	4031380	Valve Section (Outlet) (☞Figure 11-36).....	1	1
9	4031370	Kit-Tie Rod (☞Figure 11-23).....	1	..
9	4031371	Kit-Tie Rod (☞Figure 11-36).....	..	1
10	1581858	Kit-Capscrew	1	1
10	1629155	Washer	2	2
10	.....	Capscrew	2	2
11	1569602	Plug	1	1
12	4608005	Steering Control Unit	1	1
	a 4031374	Kit-Seal	1	1
	a 4031377	Kit-Seal	1	..
	a 4031378	Kit-Seal .....	..	1

FOOTNOTES:

a Not Illustrated

ELECTRONIC VALVE INLET SECTION (FIGURE 11-27)
THREE AND FOUR FUNCTION (→ S/N L177B18237E (3 FUNCTION LOW RELIEF))
(→ S/N L177B18261E (4 FUNCTION LOW RELIEF))
(→ S/N L177B18806E (3 AND 4 FUNCTION HIGH RELIEF))

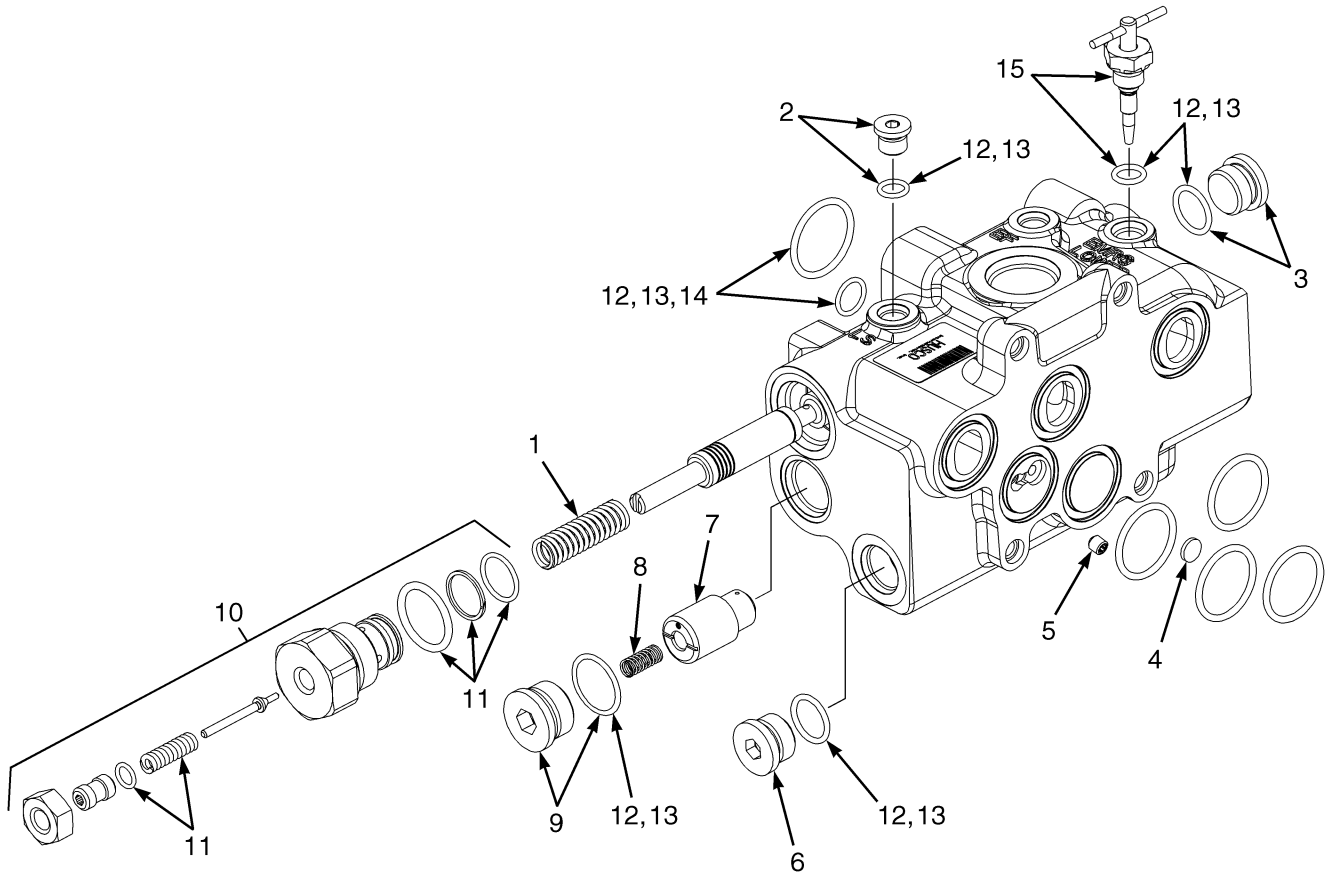


HP140018

ELECTRONIC VALVE INLET SECTION
THREE AND FOUR FUNCTION (→ S/N L177B18237E (3 FUNCTION LOW RELIEF))
(→ S/N L177B18261E (4 FUNCTION LOW RELIEF))
(→ S/N L177B18806E (3 AND 4 FUNCTION HIGH RELIEF))

ITEM	PART NO.	DESCRIPTION	QTY
1	1578701	Valve Section (Lift and Lower) (H2.0-3.0FT)	1
1	1578700	Valve Section (Lift and Lower) (H3.5FT)	1
2	1578712	Plug	1
2	204128	Plug	1
3	1581862	Kit-Valve (Manual Lowering)	1
4	1569602	Plug	1
5	1578904	Kit-Seal (Inlet)	1
6	1578911	Kit-Seal (Steering Control Unit Interface)	1
7	1578875	Shuttle Valve	1
8	1578888	Setscrew	1
9	1586280	Poppet	1
10	1578876	Spring	1
11	1578714	Plug	1
12	1578706	Relief Valve (Main) (H2.0-3.0FT)	1
12	1578753	Relief Valve (Main) (H3.5FT)	1
12	1580749	Screw	1
13	16480	O-Ring	1
14	1580132	Kit-Relief Valve	1
15	1586279	Kit-Seal (Electro Hydraulic Poppet Valve)	AR
16	1578881	Spring	1

ELECTRONIC VALVE INLET SECTION (FIGURE 11-28)
THREE AND FOUR FUNCTION (S/N L177B18238E → (3 FUNCTION LOW RELIEF))
(S/N L177B18283E → (4 FUNCTION LOW RELIEF))
(S/N L177B18807E → (3 AND 4 FUNCTION HIGH RELIEF))



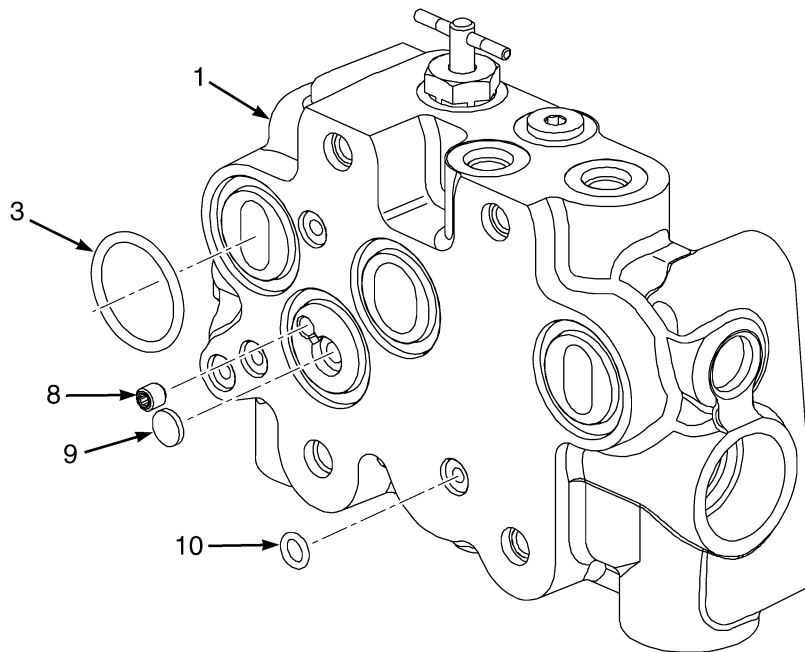
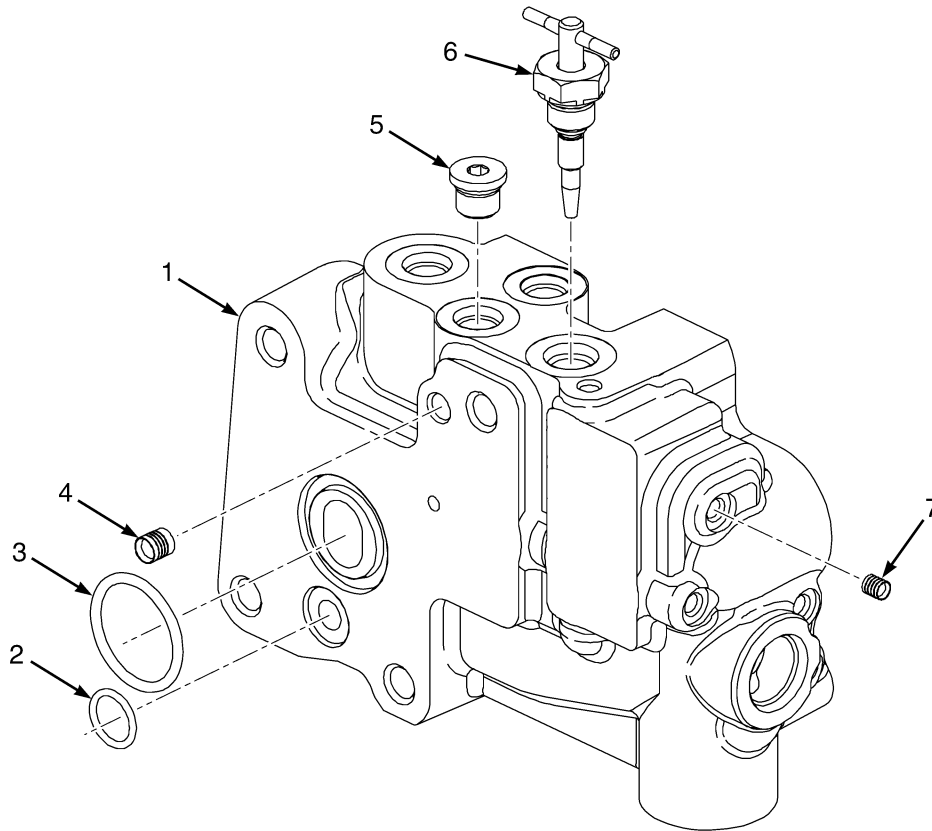
BP140113

ELECTRONIC VALVE INLET SECTION
THREE AND FOUR FUNCTION (S/N L177B18238E → (3 FUNCTION LOW RELIEF))
(S/N L177B18283E → (4 FUNCTION LOW RELIEF))
(S/N L177B18807E → (3 AND 4 FUNCTION HIGH RELIEF))

KEY:**A: 3 Function Valve****B: 4 Function Valve**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1664485	Valve Section (Inlet)	1	..
	1664486	Valve Section (Inlet) .....	..	1
1	1578881	Spring	1	1
2	1578712	Plug	1	1
3	1629210	Plug	1	1
4	1578875	Shuttle Valve	1	1
5	1578888	Setscrew	1	1
6	1569602	Plug	1	1
7	1586280	Poppet	1	1
8	1578876	Spring	1	1
9	1578714	Plug	1	1
10	1578706	Relief Valve (Main)	1	..
10	1578753	Relief Valve (Main) .....	..	1
11	1580132	Kit-Relief Valve	1	1
12	1578909	Kit-Seal	1	1
13	1578904	Kit-Seal (Inlet)	1	1
14	1578911	Kit-Seal (Steering Control Unit Interface)	1	1
15	1581862	Kit-Valve (Manual Lowering)	1	1

ELECTRONIC VALVE TRANSITION SECTION (FIGURE 11-29) WITH VARIABLE DISPLACEMENT PUMP



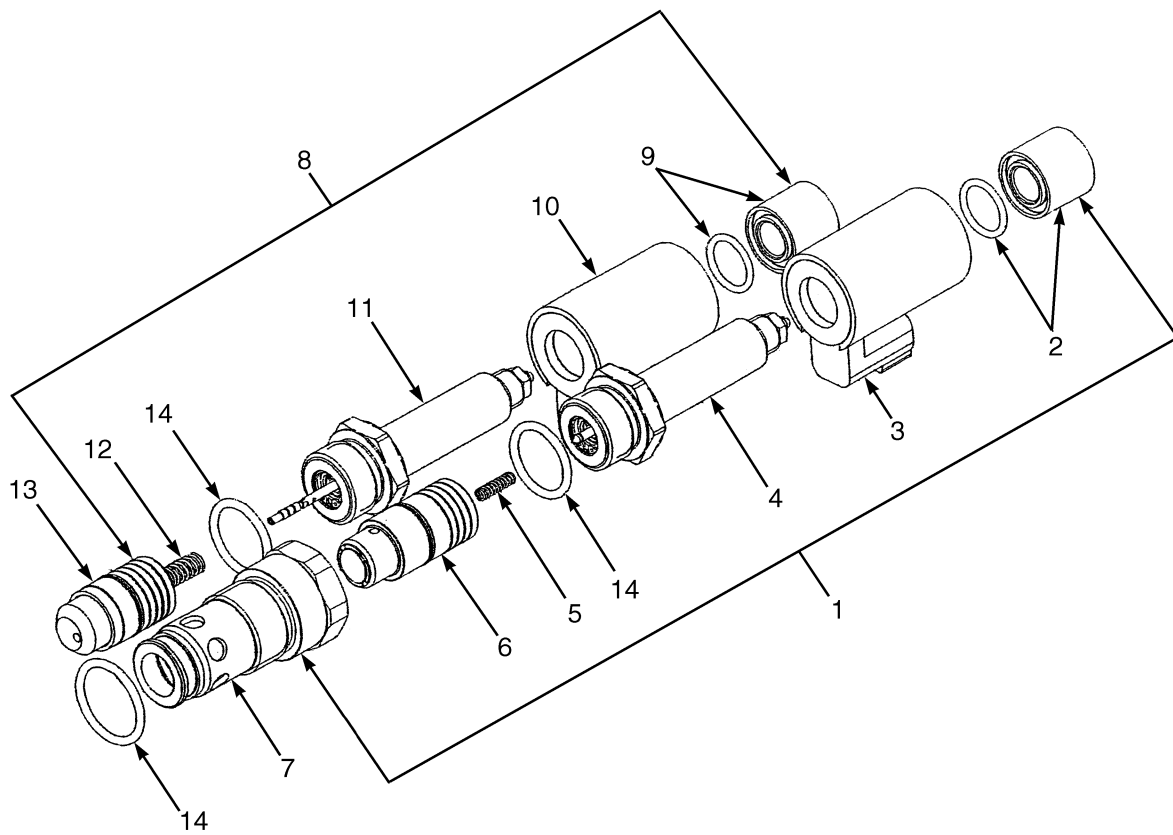
BP140207

**ELECTRONIC VALVE TRANSITION SECTION
WITH VARIABLE DISPLACEMENT PUMP**

ITEM	PART NO.	DESCRIPTION	QTY
1	4031384	Valve Section	1
2	.....	O-Ring	1
3	.....	O-Ring	5
4	1371250	Plug	1
5	1578712	Plug	2
6	1581862	Kit-Valve (Manual Lowering)	1
6	1658142	Valve	1
7	.....	Plug	1
8	1578888	Setscrew	1
9	1578875	Shuttle Valve	1
10	.....	O-Ring	4
	a 4031373	Kit-Seal	1

FOOTNOTES:**a** Not Illustrated

ELECTRO HYDRAULIC POPPET VALVE (FIGURE 11-30) LIFT AND LOWER



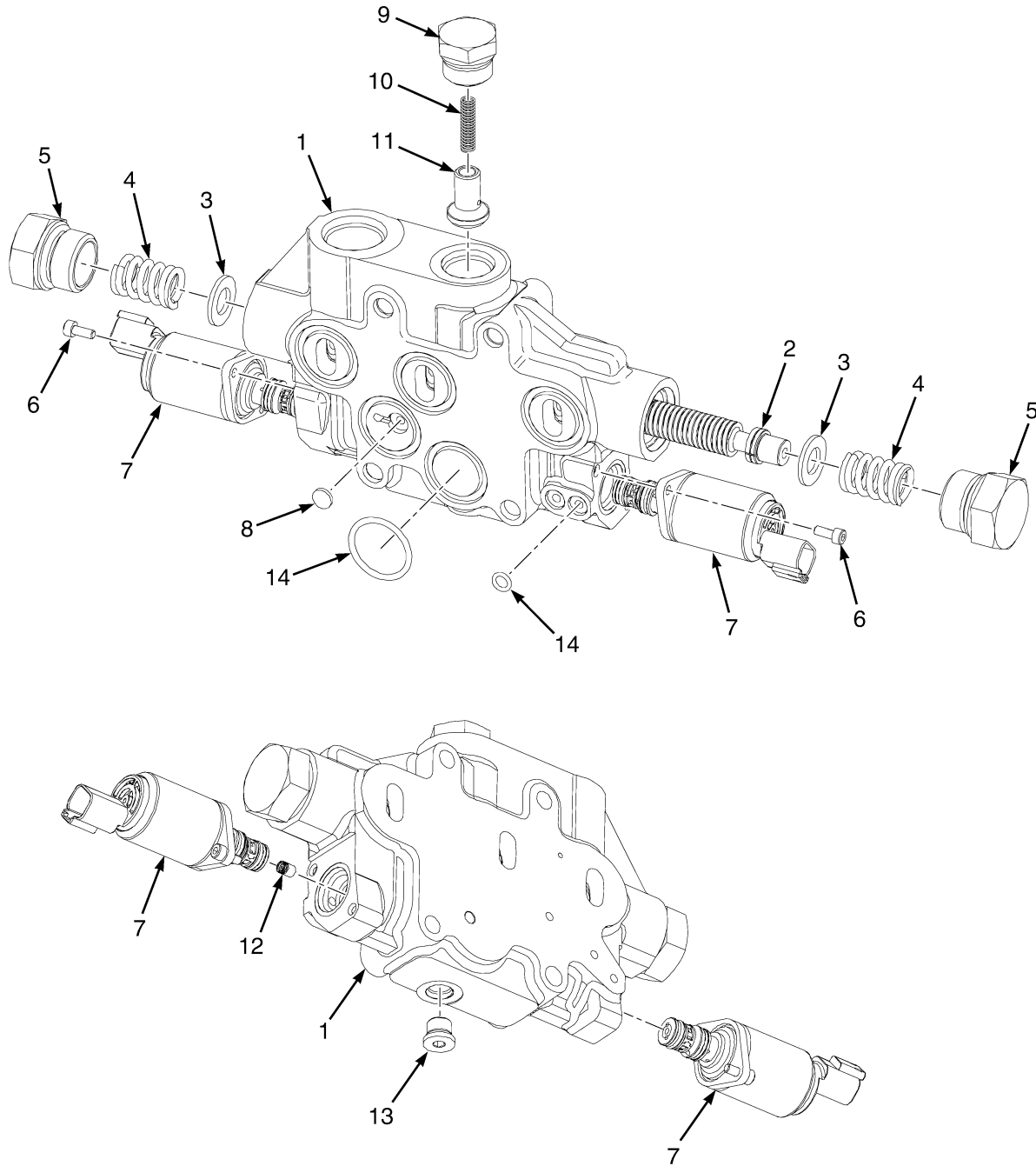
BP140055

**ELECTRO HYDRAULIC POPPET VALVE
LIFT AND LOWER**

ITEM	PART NO.	DESCRIPTION	QTY
1	a 1590114	Poppet Valve (Lower)	1
1	b 1699589	Poppet Valve	1
2	1629163	Nut	1
3	1578710	Coil	1
4	1578918	Tube Assy (Solenoid)	1
5	1578934	Spring	1
6	a 1586021	Poppet	1
6	b 1699591	Poppet Valve	1
7	1586020	Sleeve	1
8	1590113	Poppet Valve (Lift)	1
9	1629163	Nut	1
10	1578710	Coil	1
11	1586019	Tube Assy (Solenoid)	1
12	1586017	Spring	1
13	1586016	Poppet	1
14	1586279	Kit-Seal (Electro Hydraulic Poppet Valve)	1

FOOTNOTES:**a** → S/N L177B30215H**b** S/N L177B30216H →

ELECTRONIC VALVE LIFT SECTION (FIGURE 11-31) WITH VARIABLE DISPLACEMENT PUMP

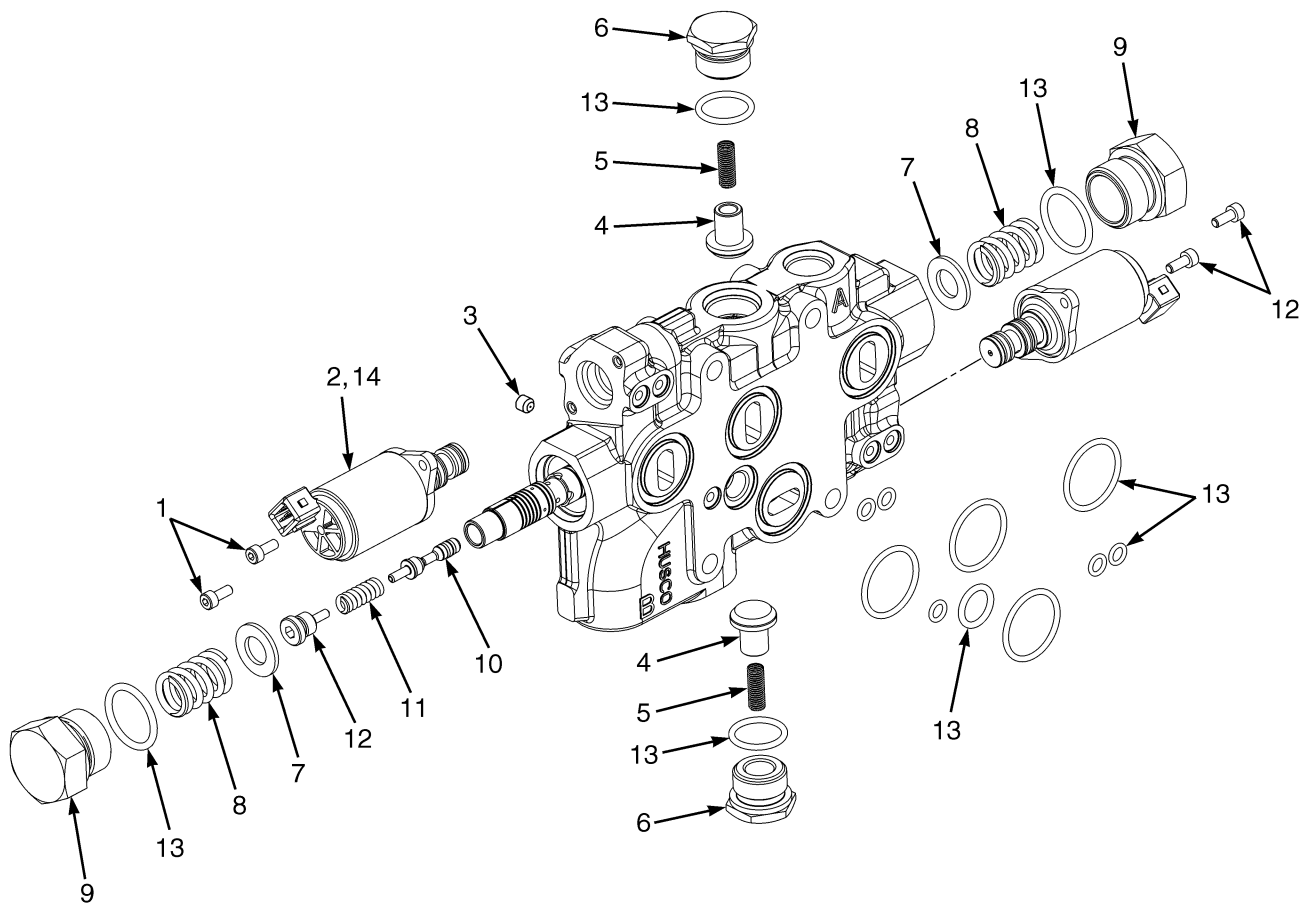


BP140208

**ELECTRONIC VALVE LIFT SECTION
WITH VARIABLE DISPLACEMENT PUMP**

ITEM	PART NO.	DESCRIPTION	QTY
1	4031383	Valve Section	1
2	. . . . .	Spool	1
3	1578883	Washer	2
4	4031471	Spring	2
5	1578889	Plug	2
6	1664395	Capscrew	4
7	4031472	Solenoid Valve	2
8	1578875	Shuttle Valve	1
9	1578940	Plug	1
10	77442	Spring	1
11	4036094	Poppet	1
12	4031473	Check Valve	1
13	1578712	Plug	1
14	4031375	Kit-Seal	1

ELECTRONIC VALVE TILT SECTION (FIGURE 11-32) THREE AND FOUR FUNCTION



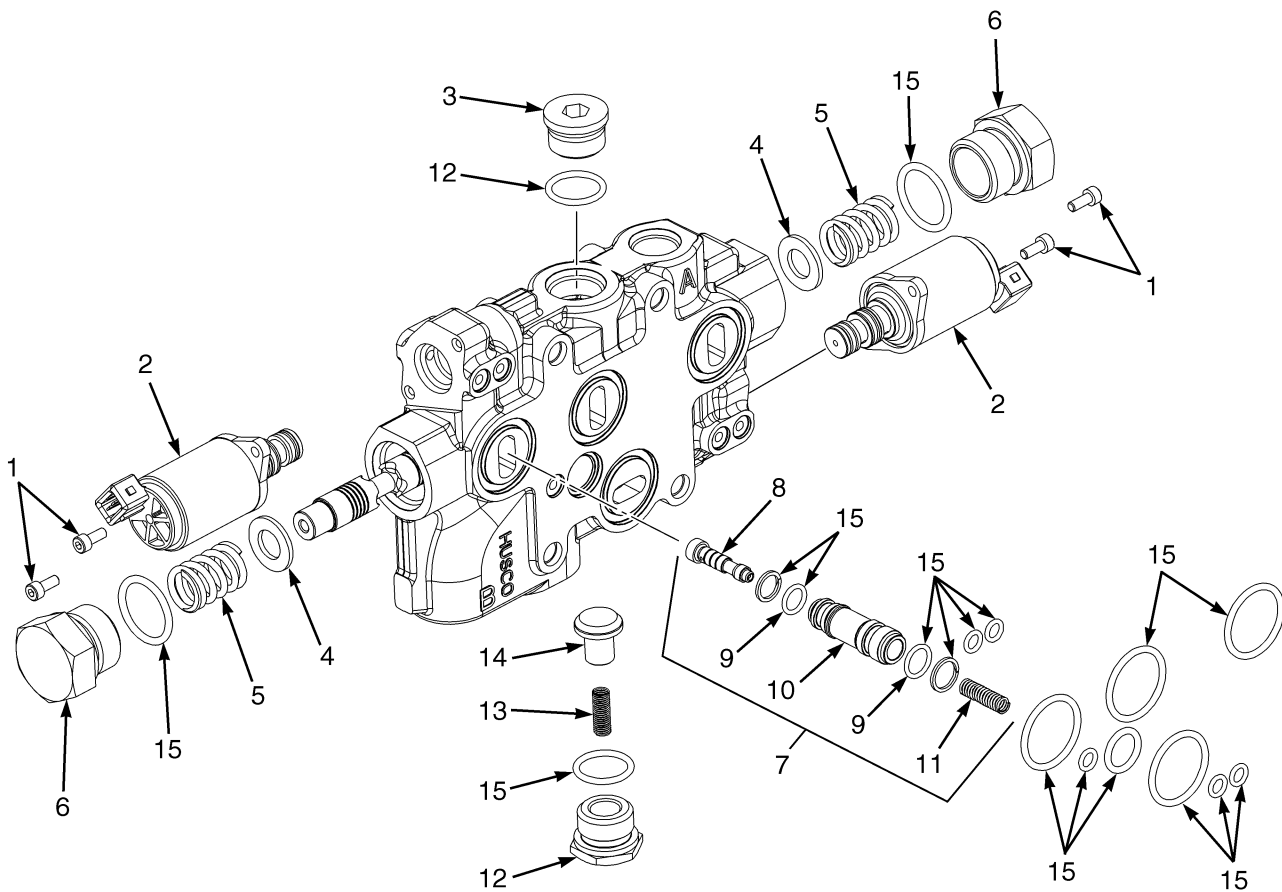
BP140114

**ELECTRONIC VALVE TILT SECTION
THREE AND FOUR FUNCTION****KEY:****A: Used With Gear Pump****B: Used With Variable Displacement Pump**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a 1578702	Valve Section (Tilt)	1	..
	b 1708295	Valve Section (Tilt)	1	..
	4031382	Valve Section (Tilt) .....	..	1
1	1664395	Capscrew	4	4
2	1578711	Valve (Pressure Reducing)	2	2
3	1578887	Setscrew	1	1
4	77443	Poppet	2	2
5	77442	Spring	2	2
6	1578713	Plug	2	2
7	1578883	Washer	2	2
8	1578882	Spring	2	2
9	1578889	Plug	2	2
10	1580099	Piston and Rod	1	..
11	1580759	Spring	1	..
12	1580760	Spool End	1	..
13	1578905	Kit-Seal (Tilt)	1	1
14	1578912	Kit-Seal (Pressure Reducing Valve)	1	..

FOOTNOTES:**a** → S/N L177B30215H**b** S/N L177B30216H →

ELECTRONIC VALVE AUXILIARY ONE SECTION (FIGURE 11-33) THREE AND FOUR FUNCTION



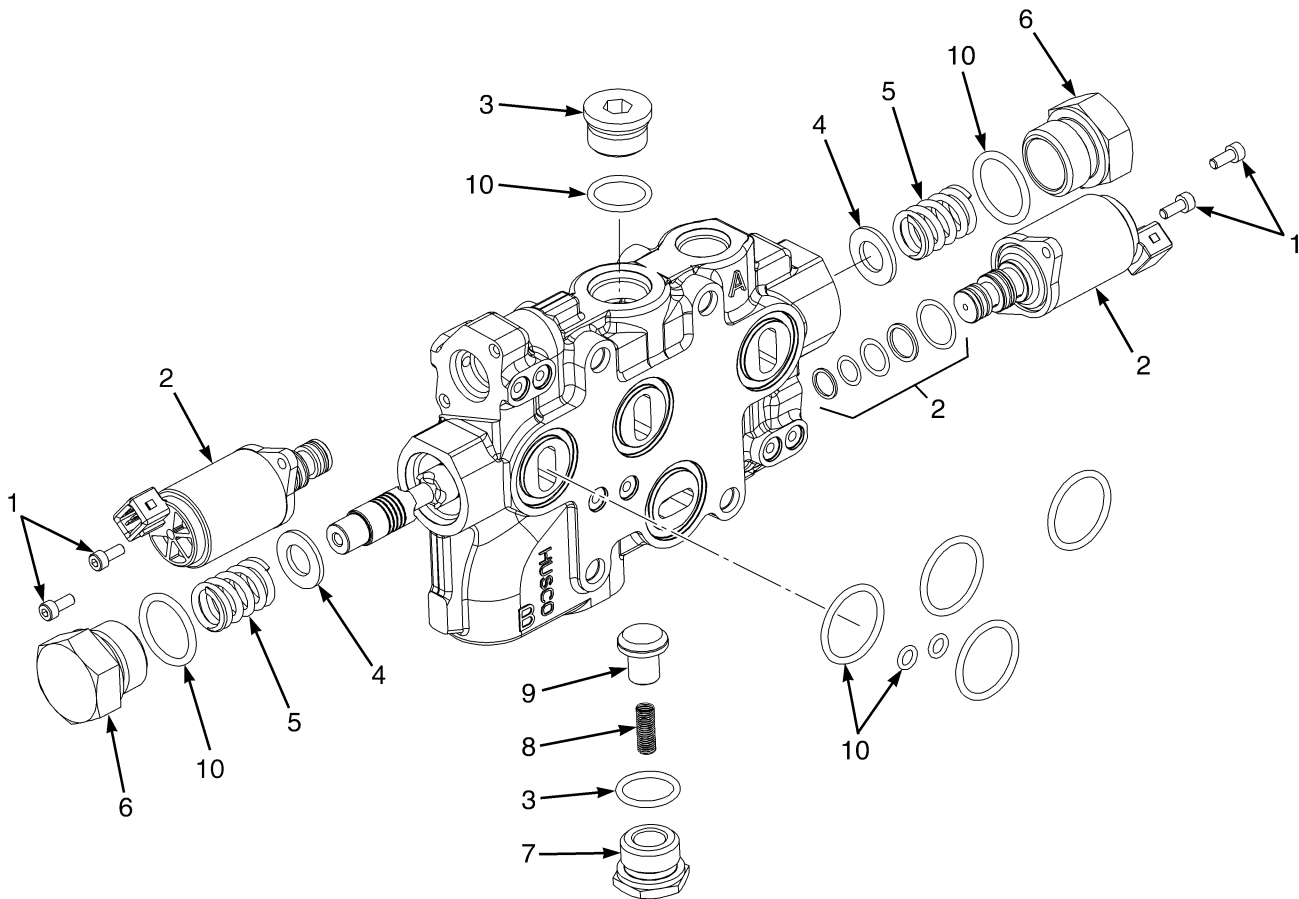
BP140115

**ELECTRONIC VALVE AUXILIARY ONE SECTION
THREE AND FOUR FUNCTION****KEY:****A: Used With Gear Pump****B: Used With Variable Displacement Pump**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a 1578703	Valve Section (Aux. 1)	1	..
	b 1708263	Valve Section (Aux. 1)	1	..
	4031381	Valve Section (Aux. 1) .....	..	1
1	1664395	Capscrew	4	4
2	1578711	Valve (Pressure Reducing)	2	2
2	1578912	Kit-Seal (Pressure Reducing Valve)	1	1
3	1578714	Plug	1	..
3	4031469	Plug .....	..	1
4	1578883	Washer	2	2
5	1578882	Spring	2	2
6	1578889	Plug	2	2
7	1578718	Cartridge Valve	1	..
8	.....	Spool	1	..
9	266519	O-Ring	1	..
10	1629166	Sleeve	1	..
11	1578886	Spring	1	..
12	1578713	Plug	1	1
13	77442	Spring	2	1
14	77443	Poppet	2	1
15	1578906	Kit-Seal (Auxiliary Section)	1	1

FOOTNOTES:**a** → S/N L177B30215H**b** S/N L177B30216H →

ELECTRONIC VALVE AUXILIARY TWO SECTION (FIGURE 11-34) FOUR FUNCTION



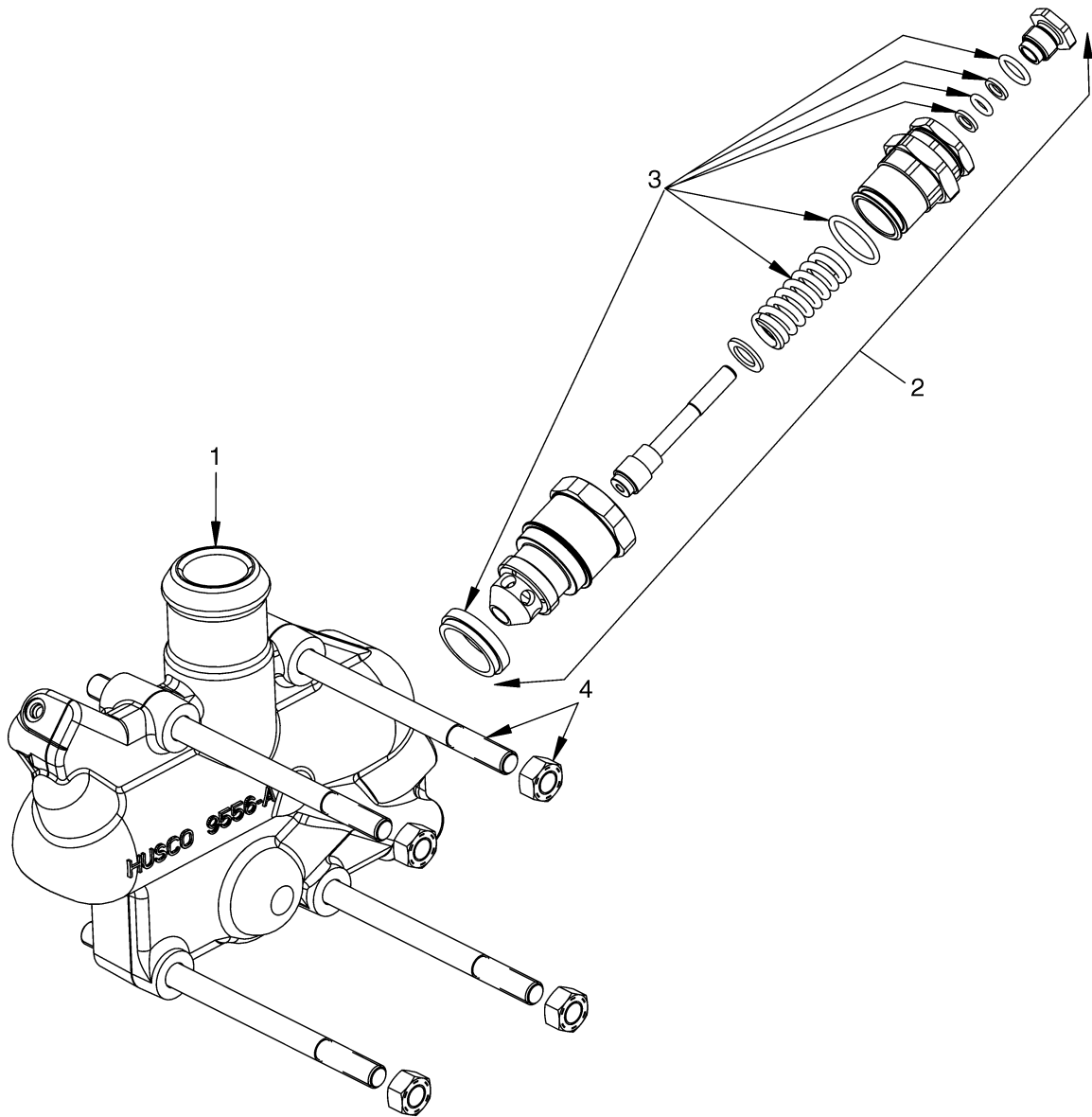
BP140116

**ELECTRONIC VALVE AUXILIARY TWO SECTION
FOUR FUNCTION****KEY:****A: Used With Gear Pump****B: Used With Variable Displacement Pump**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a 1578741	Valve Section (Aux. 2)	1	..
	b 1708294	Valve Section (Aux. 2)	1	..
	4031526	Valve Section (Aux. 2) .....	..	1
1	1578878	Capscrew	4	..
1	1664395	Capscrew .....	..	4
2	1578711	Valve (Pressure Reducing)	2	2
2	1578912	Kit-Seal (Pressure Reducing Valve)	1	..
3	1578714	Plug	1	1
4	1578883	Washer	2	2
5	1578882	Spring	2	2
6	1578889	Plug	2	2
7	1578713	Plug	1	1
8	77442	Spring	2	1
9	77443	Poppet	2	1
10	1578906	Kit-Seal (Auxiliary Section)	1	1
10	1578907	Kit-Seal (Auxiliary Section)	1	..

FOOTNOTES:**a** → S/N L177B30215H**b** S/N L177B30216H →

ELECTRONIC VALVE OUTLET SECTION (FIGURE 11-35) THREE AND FOUR FUNCTION (→ 1/2009)



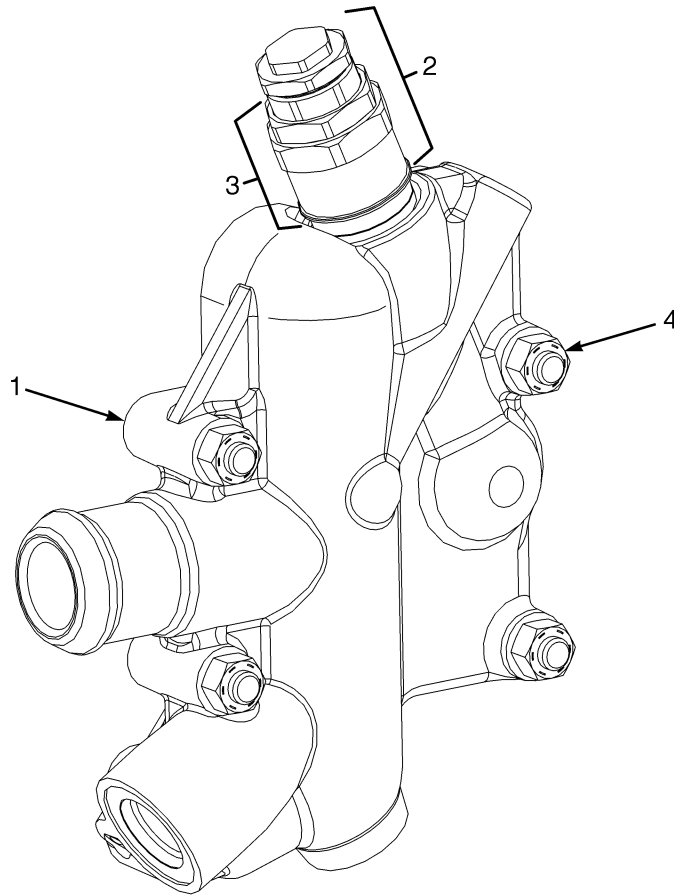
BP140075

**ELECTRONIC VALVE OUTLET SECTION
THREE AND FOUR FUNCTION (→ 1/2009)**

ITEM	PART NO.	DESCRIPTION	QTY
1	a 1578704	Valve Section (Outlet)	1
1	b 1708262	Valve Section (Outlet)	1
2	1578707	Relief Valve (2250 PSI) (Secondary)	1
3	1580131	Kit-Seal	1
4	1578715	Kit-Tie Rod (Three Function)	1
4	1580151	Kit-Tie Rod (Four Function)	1
4	15055	Nut	4

FOOTNOTES:**a** → S/N L177B30215H**b** S/N L177B30216H →

**ELECTRONIC VALVE OUTLET SECTION (FIGURE 11-36)
THREE AND FOUR FUNCTION (1/2009 →)**



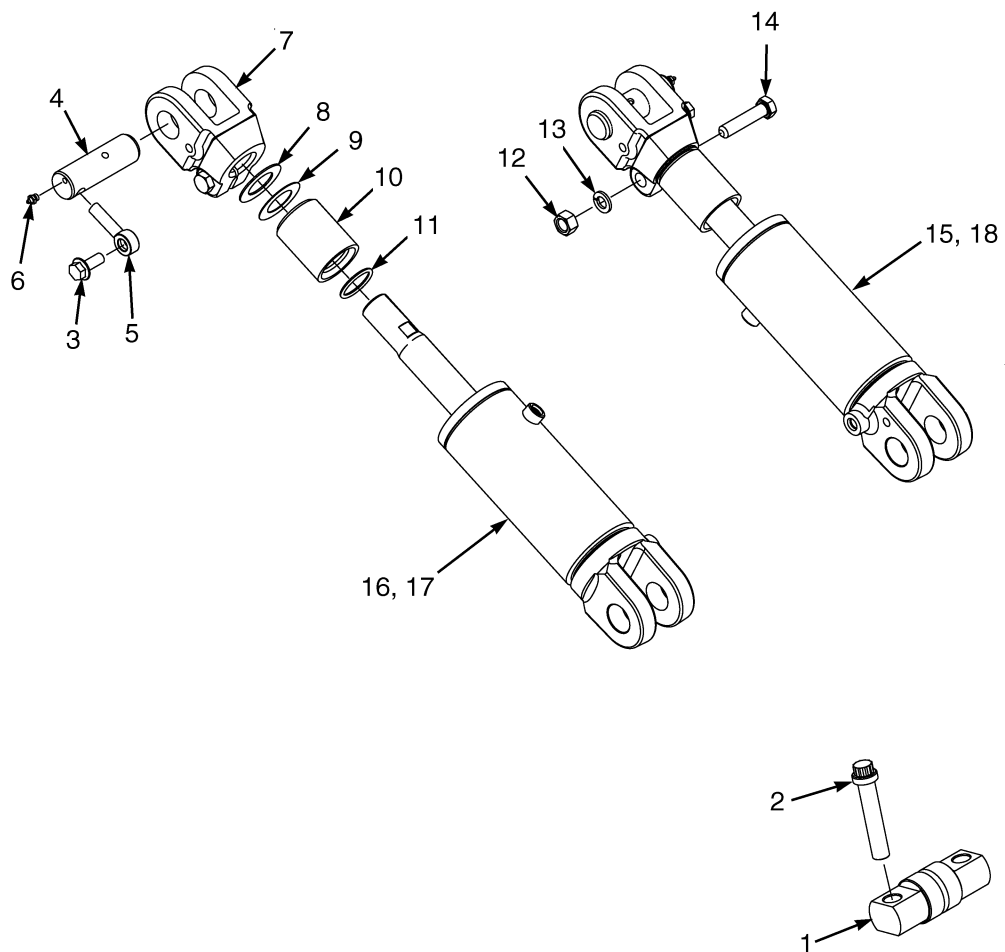
BP140169

KEY:**A: Used With Gear Pump****B: Used With Variable Displacement Pump**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1708262	Valve Section (Outlet)	1	..
1	4031380	Valve Section (Outlet) .....	..	1
2	1708054	Relief Valve	1	1
3	1580131	Kit-Seal	1	1
4	1578715	Kit-Tie Rod (Three Function)	1	..
4	1580151	Kit-Tie Rod (Four Function)	1	..
4	4031370	Kit-Tie Rod (Three Function) .....	..	1
4	4031371	Kit-Tie Rod (Four Function) .....	..	1
4	15055	Nut	4	4
	a 1678166	Plug	1	1

FOOTNOTES:**a** Not Illustrated

TILT CYLINDER AND MAST INSTALLATION (FIGURE 11-37)



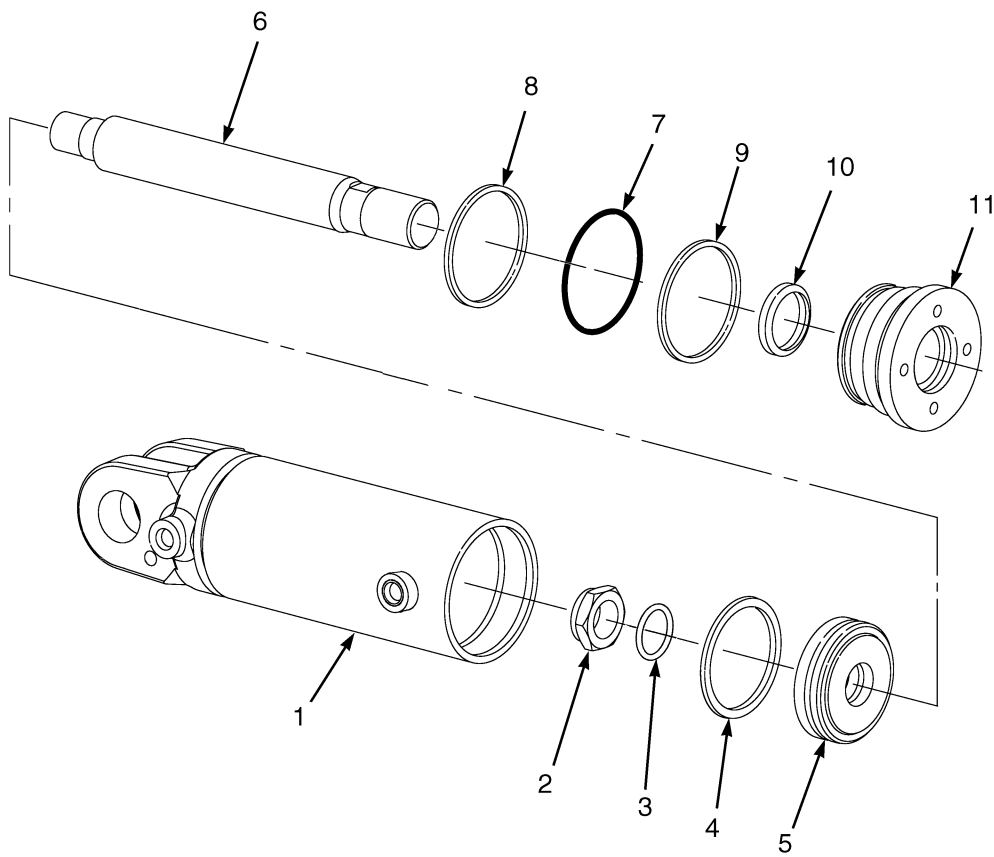
HP150985

TILT CYLINDER AND MAST INSTALLATION**KEY:****A: H2.0-2.5FT****B: H3.0-3.5FT**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1514269	Pin (Mast Mounting)	2	2
2	1520290	Capscrew	4	4
3	1586013	Capscrew	2	2
4	1533493	Pin	4	4
5	1533494	Pin Anchor	2	2
6	16041	Grease Fitting	2	2
7	bcd 1544118	Rod End	2	..
7	a 1544120	Rod End	2	..
7	bcd 1544119	Rod End .....	..	2
7	a 1544121	Rod End .....	..	2
8	cd 134675	Shim	4	..
8	cd 142247	Shim .....	..	4
9	cd 1325119	Shim	4	..
9	cd 1325120	Shim .....	..	4
10	d 1544122	Spacer	2	..
10	c 192877	Spacer	2	..
10	d 1544123	Spacer .....	..	2
10	c 1544124	Spacer .....	..	2
11	cd 55434	O-Ring	4	..
11	cd 60563	O-Ring .....	..	4
12	1581848	Nut	2	2
12	1581849	Nut (Alternate Part)	2	2
13	1581852	Washer	2	2
14	1597381	Capscrew	2	2
14	1581592	Capscrew (Alternate Part)	2	2
15	2069187	Tilt Cylinder (RH) (☞Figure 11-38).....	1	..
16	2069188	Tilt Cylinder (LH) (☞Figure 11-38).....	1	..
17	2069186	Tilt Cylinder (LH) (☞Figure 11-39).....	..	1
18	2069189	Tilt Cylinder (RH) (☞Figure 11-39).....	..	1

FOOTNOTES:**a** 10° Forward/6° Back**b** 6° Forward/10° Back**c** 6° Forward/5° Back**d** 6° Forward/6° Back

TILT CYLINDERS (FIGURE 11-38) H2.0-2.5FT

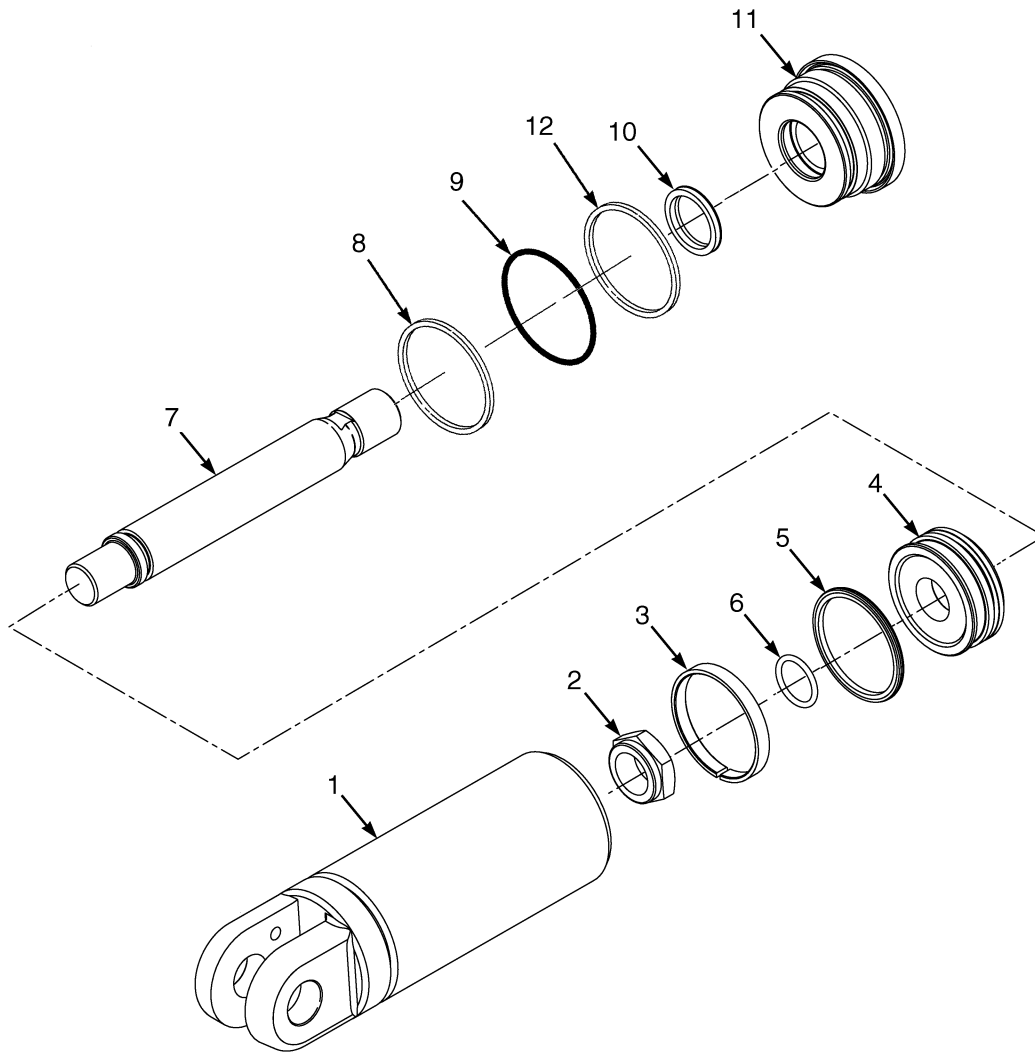


HP150974

TILT CYLINDERS
H2.0-2.5FT

ITEM	PART NO.	DESCRIPTION	QTY
	2069187	Tilt Cylinder (RH)	1
	2069188	Tilt Cylinder (LH)	1
1	2076537	Tube Wldmt-Cylinder (RH)	1
1	2076541	Tube Wldmt-Cylinder (LH)	1
2	2302899	Locknut	1
3	39374	O-Ring	1
4	2044370	Piston Seal	1
5	1338741	Piston	1
6	2076539	Cylinder Rod	1
7	46388	O-Ring	1
8	154375	Back-Up Ring	1
9	1381082	Rod Seal	1
10	1383062	Rod Wiper	1
11	1338744	Gland	1
	1492644	Kit-Seal	1

TILT CYLINDERS (FIGURE 11-39) H3.0-3.5FT



HP150975

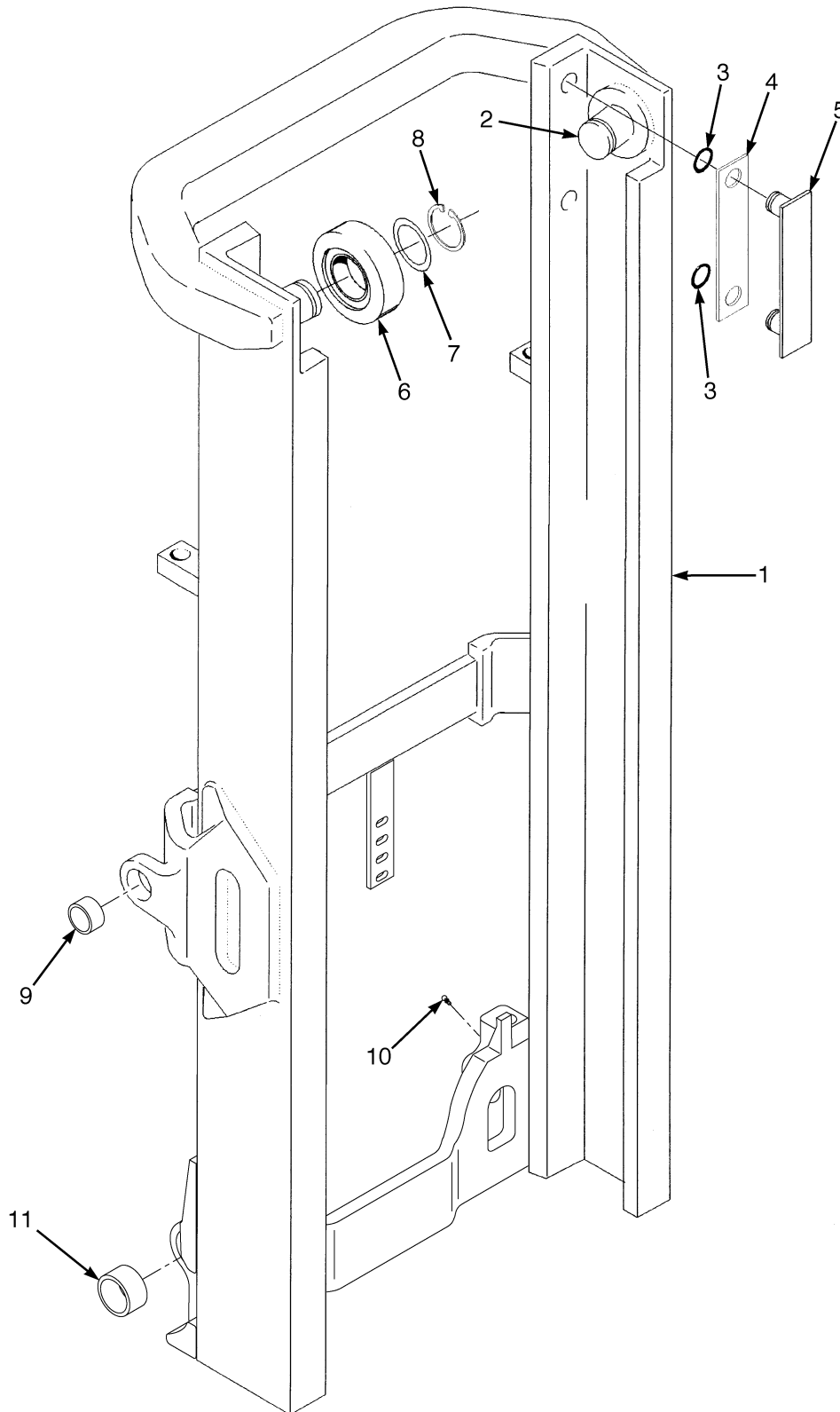
TILT CYLINDERS
H3.0-3.5FT

ITEM	PART NO.	DESCRIPTION	QTY
	2069186	Tilt Cylinder (LH)	1
	2069189	Tilt Cylinder (RH)	1
1	2076536	Tube Wldmt-Cylinder (RH)	1
1	2076540	Tube Wldmt-Cylinder (LH)	1
2	2070018	Locknut	1
3	199852	Wear Ring	1
4	1381078	Piston	1
5	2044371	Piston Seal	1
6	237812	O-Ring	1
7	2076538	Cylinder Rod	1
8	268619	O-Ring	1
9	147973	Back-Up Ring	1
10	1383063	Rod Wiper	1
11	1527520	Gland	1
12	1381083	Rod Seal	1
	1527719	Kit-Seal	1

SECTION 12
MAST-TWO STAGE LIMITED FREE-LIFT

DESCRIPTION	PAGE
CARRIAGE	
TWO STAGE LIMITED FREE-LIFT	12-16
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TWO STAGE LIMITED FREE-LIFT	12-2

OUTER MAST (FIGURE 12-1) TWO STAGE LIMITED FREE-LIFT



HP171372

**OUTER MAST
TWO STAGE LIMITED FREE-LIFT**

H2.0-2.5FT

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		3252 mm (128.0 in.)	3752 mm (147.7 in.)	4292 mm (169.0 in.)	4792 mm (188.7 in.)
		Mast Group Number	D507 3252	D507 3752	D507 4292	D507 4792
	Mast Assy	2054714	2054719	2054724	2054729
1	Outer Mast	1524755	1524760	1524766	1524771

H3.0-3.5FT

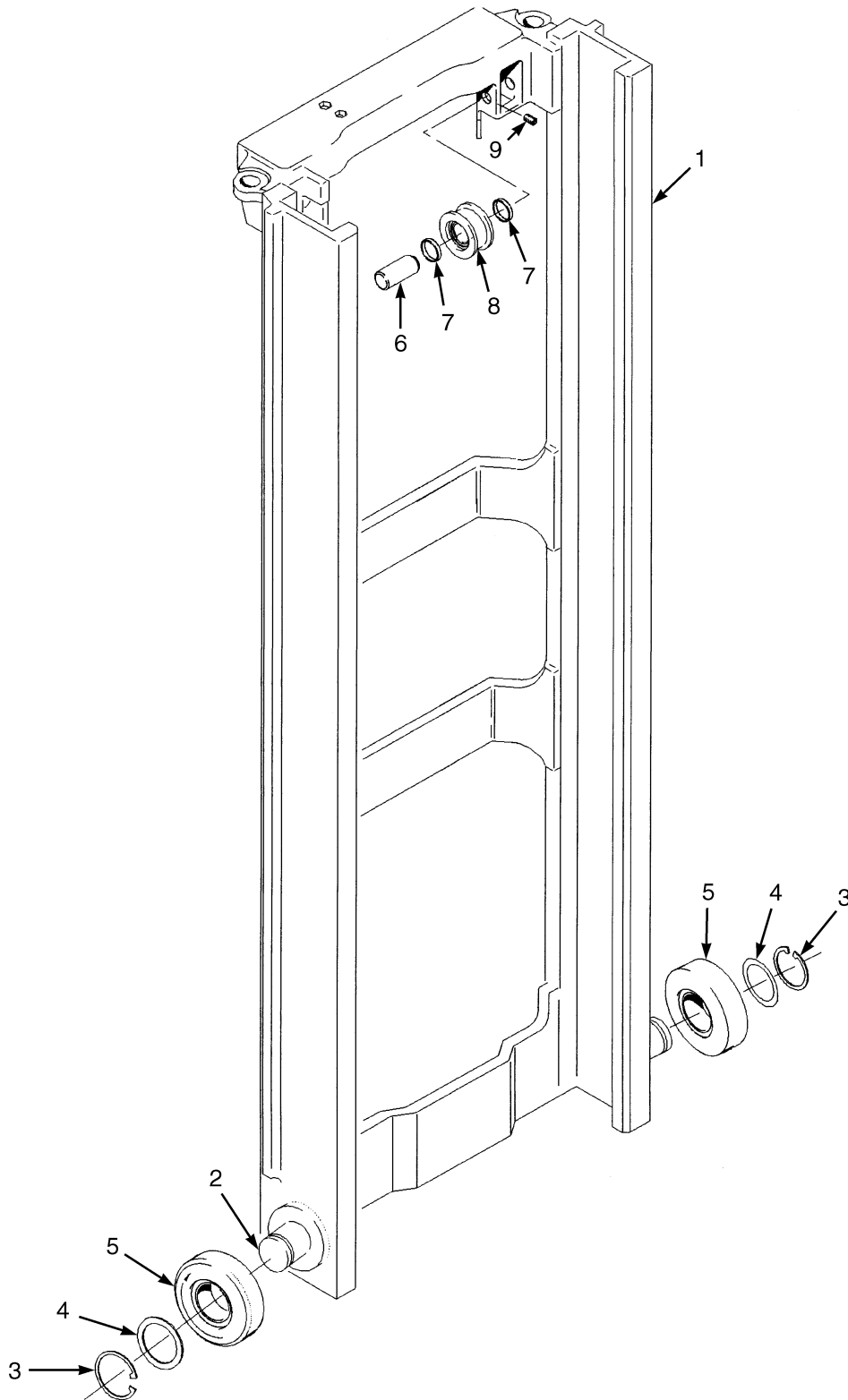
ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		3059 mm (120.4 in.)	3559 mm (140.1 in.)	4059 mm (159.8 in.)	4559 mm (179.5 in.)
		Mast Group Number	D562 3059	D562 3559	D562 4059	D562 4559
	Mast Assy	2054753	2054758	2054763	2054768
1	Outer Mast	1524755	1524760	1524766	1524771

ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Outer Mast	1
2	1345216	Stubshaft	2
3	104506	O-Ring	4
4	131716	Shim (0.508 mm)	AR
5	215211	Wear Strip	2
6	1395168	Load Roller ("A") (111.10/110.84)	2
6	1333396	Load Roller ("B") (111.48/111.22) (0,76 mm)	2
6	1333397	Load Roller ("C") (112.62/112.36)	2
7	129387	Shim (0.508 mm)	AR
8	58901	Snap Ring	2
9	300982	Bushing	2
10	16001	Grease Fitting	2
11	1502811	Bushing	2

FOOTNOTES:

a Refer to Table

INNER MAST (FIGURE 12-2) TWO STAGE LIMITED FREE-LIFT



HP290008

**INNER MAST
TWO STAGE LIMITED FREE-LIFT**

H2.0-2.5FT

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		3252 mm (128.0 in.)	3752 mm (147.7 in.)	4292 mm (169.0 in.)	4792 mm (188.7 in.)
		Mast Group Number	D507 3252	D507 3752	D507 4292	D507 4792
	Mast Assy	2054714	2054719	2054724	2054729
1	Inner Mast	1524798	1524803	1524808	1524813

H3.0-3.5FT

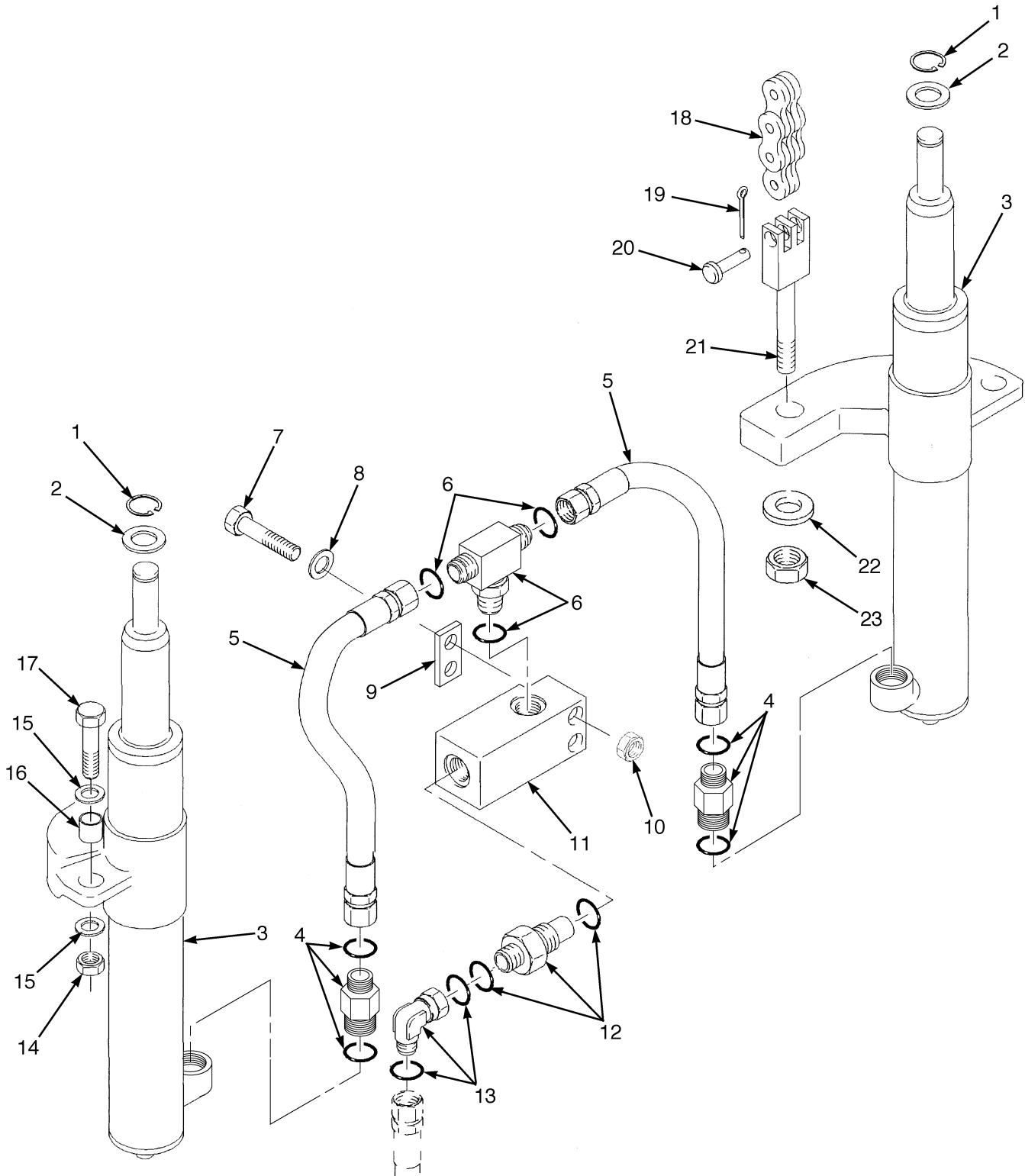
ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		3059 mm (120.4 in.)	3559 mm (140.1 in.)	4059 mm (159.8 in.)	4559 mm (179.5 in.)
		Mast Group Number	D562 3059	D562 3559	D562 4059	D562 4559
	Mast Assy	2054753	2054758	2054763	2054768
1	Inner Mast	1524798	1524803	1524808	1524813

ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Inner Mast	1
2	1345216	Stubshaft	2
3	58901	Snap Ring	2
4	129387	Shim (0.508 mm)	AR
5	1395168	Load Roller ("A") (111.10/110.84)	2
5	1333396	Load Roller ("B") (111.48/111.22)	2
5	1333397	Load Roller ("C") (112.62/112.36)	2
6	1368656	Pin	2
7	1378691	Spacer	4
8	1379685	Chain Sheave (H2.0-2.5FT)	2
8	1379684	Chain Sheave Assembly (H3.0-3.5FT)	2
8	1378698	Chain Sheave (H2.0-2.5FT)	1
8	1378694	Chain Sheave (H3.0-3.5FT)	1
8	37752	Snap Ring	1
8	1378699	Ball Bearing	1
9	302462	Roll Pin	2

FOOTNOTES:

a Refer to Table

MAIN LIFT (FIGURE 12-3) TWO STAGE LIMITED FREE-LIFT



HP290003

**MAIN LIFT
TWO STAGE LIMITED FREE-LIFT**

H2.0-2.5FT

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		3252 mm (128.0 in.)	3752 mm (147.7 in.)	4292 mm (169.0 in.)	4792 mm (188.7 in.)
		Mast Group Number	D507 3252	D507 3752	D507 4292	D507 4792
18	Chain	223389	1301870	246994	336393

H3.0-3.5FT

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		3059 mm (120.4 in.)	3559 mm (140.1 in.)	4059 mm (159.8 in.)	4559 mm (179.5 in.)
		Mast Group Number	D562 3059	D562 3559	D562 4059	D562 4559
18	Chain	1342383	1342393	1359234	1342392

ITEM	PART NO.	DESCRIPTION	QTY
1	131358	Snap Ring	2
2	1333382	Washer (1.500 mm)	2
2	1354915	Washer (0.254 mm)	AR
2	1354916	Washer (0.762 mm)	AR
2	1354917	Washer (1.524 mm)	AR
3	.....	Main Lift Cylinders (☞ Figure 12-4).....	2
4	2062686	Hyd Velocity Fuse (H2.0-2.5FT)	2
4	2062687	Hyd Velocity Fuse (H3.0-3.5FT)	2
4	16485	O-Ring	2
4	252729	O-Ring	2
5	1481097	Hose Assy	2
6	1532650	Fitting	1
6	252729	O-Ring	2
6	16485	O-Ring	1
7	1581836	Capscrew	2
8	1581556	Washer	2
9	1354913	Side Plate	1
10	1581566	Nut	2
11	1379687	Housing (Lowering Control)	1
12	2062651	Lowering Control Valve (H2.0-2.5FT)	1
12	2062652	Lowering Control Valve (H3.0-3.5FT)	1
12	16982	O-Ring	1
12	252729	O-Ring	1
13	1486773	Fitting	1
13	252729	O-Ring	2
14	1581849	Nut	2
15	1581852	Washer	4
16	323090	Spacer	2
17	1581829	Capscrew	2
18	a	Chain	2

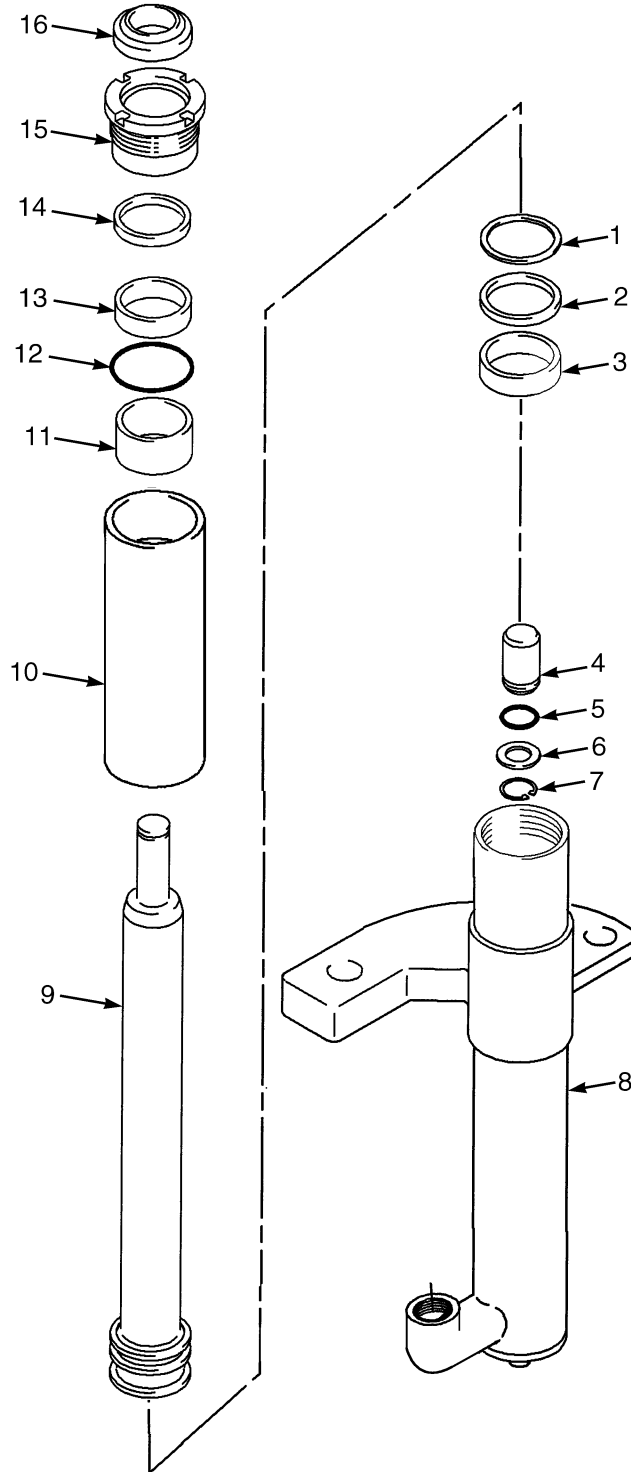
**MAIN LIFT
TWO STAGE LIMITED FREE-LIFT**

ITEM	PART NO.	DESCRIPTION	QTY
19	15211	Cotter Pin	2
20	1514866	Pin	2
21	1369357	Chain Anchor (H2.0-2.5FT)	2
21	1369356	Chain Anchor (H3.0-3.5FT)	2
22	297649	Ring	2
23	161003	Nut	2

FOOTNOTES:

- a Refer to Table

**MAIN LIFT CYLINDERS (FIGURE 12-4)
TWO STAGE LIMITED FREE-LIFT**



BP170293

**MAIN LIFT CYLINDERS
TWO STAGE LIMITED FREE-LIFT****LEFT HAND**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		3252 mm (128.0 in.)	3752 mm (147.7 in.)	4292 mm (169.0 in.)	4792 mm (188.7 in.)
		Mast Group Number	D507 3252	D507 3752	D507 4292	D507 4792
	Cylinder Group Number	8517709	8517714	8517719	8518101
	Cylinder Assy	2064142	2064147	2064152	2064106
8	Tube Wldmt- Cylinder	2064202	2064207	2064212	2064218
9	Cylinder Rod	1355158	1355178	1355199	1355217
10	Spacer	----	----	----	1355221

RIGHT HAND

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		3252 mm (128.0 in.)	3752 mm (147.7 in.)	4292 mm (169.0 in.)	4792 mm (188.7 in.)
		Mast Group Number	D507 3252	D507 3752	D507 4292	D507 4792
	Cylinder Group Number	8517759	8517764	8517769	8518151
	Cylinder Assy	2064166	2064171	2064176	2064120
8	Tube Wldmt- Cylinder	2064239	2064245	2064250	2064256
9	Cylinder Rod	1355158	1355178	1355199	1355217
10	Spacer	----	----	2045872	1355221

LEFT HAND

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		3252 mm (128.0 in.)	3752 mm (147.7 in.)	4292 mm (169.0 in.)	4792 mm (188.7 in.)
		Mast Group Number	D562 3059	D562 3559	D562 4059	D562 4559
	Cylinder Group Number	8518009	8518014	8518802	8518807
	Cylinder Assy	2064352	2064357	2064379	2064384
8	Tube Wldmt- Cylinder	2064278	2064283	2064288	2064293
9	Cylinder Rod	1355367	1355391	1355414	1355434
10	Spacer	1355711	1355711	2088124	2088124

**MAIN LIFT CYLINDERS
TWO STAGE LIMITED FREE-LIFT
RIGHT HAND**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		3252 mm (128.0 in.)	3752 mm (147.7 in.)	4292 mm (169.0 in.)	4792 mm (188.7 in.)
		Mast Group Number	D562 3059	D562 3559	D562 4059	D562 4559
	Cylinder Group Number	8518059	8518064	8518852	8518857
	Cylinder Assy	2064369	2064374	2064399	2064404
8	Tube Wldmt- Cylinder	2064314	2064319	2064324	2064343
9	Cylinder Rod	1355367	1355391	1355414	1355434
10	Spacer	1355711	1355711	2088124	2088124

KEY:

A: H2.0-2.5FT (D507)

B: H3.0-3.5FT (D562)

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a	Cylinder Assy	1	1
1	638246	Back-Up Ring	1	..
1	335012	Back-Up Ring .....	..	1
2	2013075	Rod Seal	1	..
2	334156	Rod Seal .....	..	1
3	1356750	Wear Ring	1	..
3	1356751	Wear Ring .....	..	1
4	257913	Check Valve	1	1
5	190580	O-Ring	1	1
6	297531	Washer	1	1
7	187388	Snap Ring	1	1
8	a	Tube Wldmt-Cylinder	1	1
9	a	Cylinder Rod	1	1
10	a	Spacer	1	1
11	322902	Wear Ring	1	1
11	1380570	Wear Ring (D507-4792 mm, D562-4059 mm and 4559 mm)	1	1
12	92861	O-Ring	1	..
12	59229	O-Ring .....	..	1
12	39389	O-Ring (D507-4792 mm)	1	..
13	1356749	Rod Seal	1	1
13	1356752	Rod Seal (D507-4792 mm, D562-4059 mm and 4559 mm)	1	1
14	322824	Back-Up Ring	1	1
14	335012	Back-Up Ring (D507-4792 mm, D562-4059 mm and 4559 mm) .....	..	1
15	2091257	Gland	1	..
15	2091258	Gland (D507-4792)	1	..
15	2091259	Gland (D562-3059 mm, D562-3559 mm) .....	..	1
15	2091260	Gland (D562-4059 mm, D562-4559 mm) .....	..	1
16	1319668	Rod Wiper	1	1

**MAIN LIFT CYLINDERS
TWO STAGE LIMITED FREE-LIFT**

KEY:

A: H2.0-2.5FT (D507)

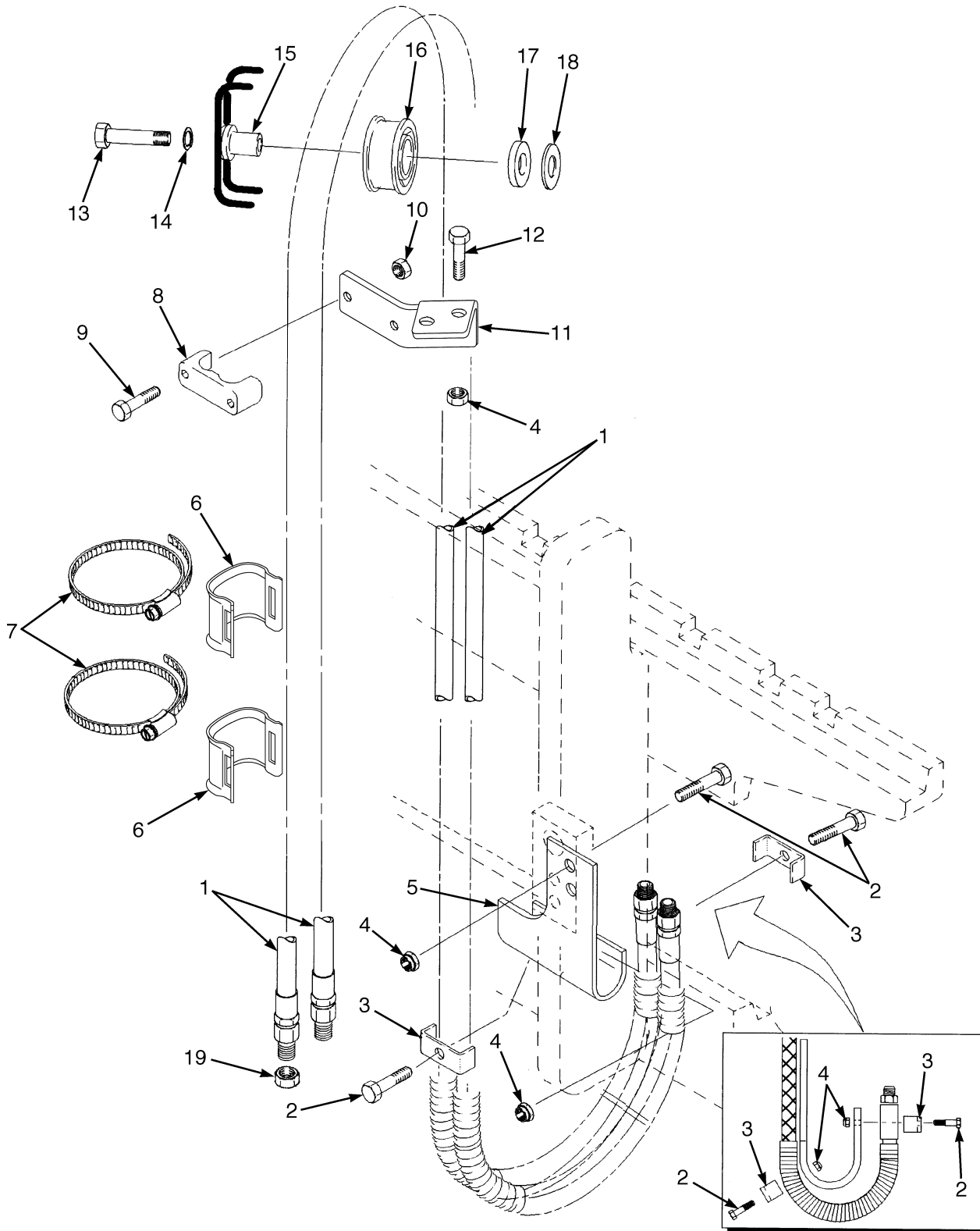
B: H3.0-3.5FT (D562)

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
16	1310370	Rod Wiper (D507-4792 mm, D562-4059 mm and 4559 mm) .....	..	1
	1355276	Kit-Seal	1	..
	1355277	Kit-Seal (D507-4792 mm)	1	..
	1499111	Kit-Seal (D562-3059 mm, D562-3559 mm) .....	..	1
	1355411	Kit-Seal (D562-4059 mm, D562-4559 mm) .....	..	1

FOOTNOTES:

a Refer to Table

HEADER HOSES (FIGURE 12-5) TWO STAGE LIMITED FREE-LIFT



HP171373

**HEADER HOSES
TWO STAGE LIMITED FREE-LIFT**

H2.0-2.5FT

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		3252 mm (128.0 in.)	3752 mm (147.7 in.)	4292 mm (169.0 in.)	4792 mm (188.7 in.)
		Mast Group Number	D507 3252	D507 3752	D507 4292	D507 4792
1	Hose Assy	2065138	2065143	2065148	2065153

H3.0-3.5FT

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		3059 mm (120.4 in.)	3559 mm (140.1 in.)	4059 mm (159.8 in.)	4559 mm (179.5 in.)
		Mast Group Number	D562 3059	D562 3559	D562 4059	D562 4559
1	Hose Assy	2065138	2065143	2065148	2065153

KEY:

A: Three Function

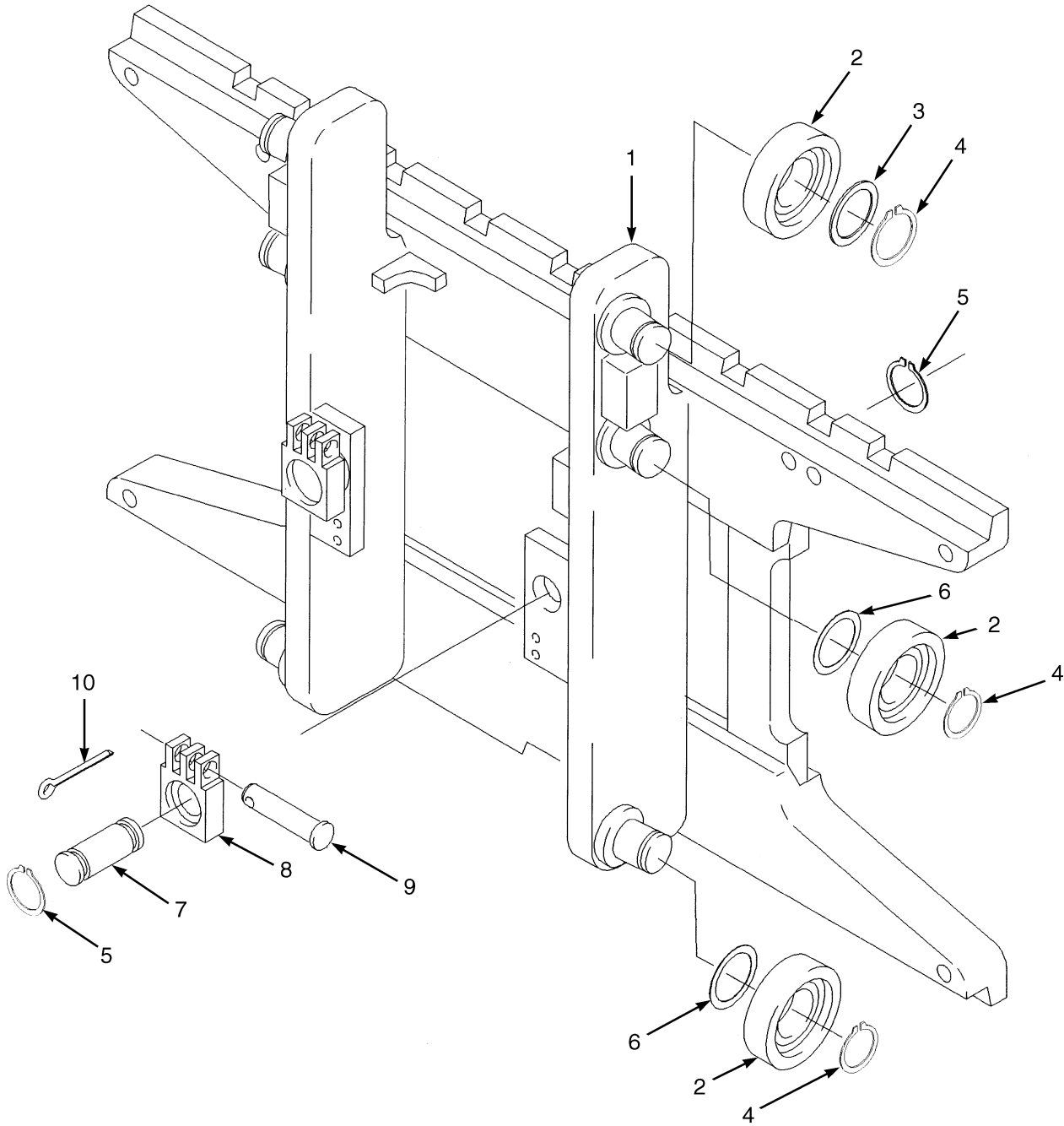
B: Four Function

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	a	Hose Assy	2	4
2	1581582	Capscrew	4	8
3	1345348	Clamp	2	4
4	1581566	Nut	6	12
5	1345412	Bracket (RH)	1	..
5	1345413	Bracket (LH)	1	1
6	1477996	Hose Clamp	3	6
7	1481229	Clamp	1	2
8	1360386	Clamp	1	2
9	1581834	Capscrew	2	4
10	1581565	Nut	2	4
11	1354919	Bracket (RH)	1	..
11	1354921	Bracket (LH)	1	1
12	1581836	Capscrew	2	4
13	1581830	Capscrew	1	2
14	1581564	Lockwasher	1	2
15	1360548	Stubshaft	1	2
16	1494017	Hose Sheave	1	2
17	1360549	Spacer	1	2
18	1345190	Washer	1	2
19	1529015	Cap	2	4

FOOTNOTES:

a Refer to Table

CARRIAGE (FIGURE 12-6) TWO STAGE LIMITED FREE-LIFT



HP290013

CARRIAGE
TWO STAGE LIMITED FREE-LIFT**KEY:****A: H2.0-2.5FT****B: H3.0-3.5FT**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1343846	Carriage (1067 mm)	1	..
	1477647	Carriage (1067 mm) .....	..	1
1	1338616	Carriage Wldmt	1	..
1	1477930	Carriage Wldmt .....	..	1
1	1345264	Stubshaft	6	6
2	1345219	Load Roller ("B") (111.48/111.22)	6	6
3	366116	Spacer	2	2
4	12891	Snap Ring	6	6
5	131358	Snap Ring	4	4
6	1345263	Shim (0.508 mm)	AR	AR
7	1353408	Pin	2	2
8	1369345	Chain Anchor (Dual Hole)	2	..
8	1504010	Chain Anchor (Single Hole) (Optional)	2	..
8	1369344	Chain Anchor (Dual Hole) .....	..	2
8	1504012	Chain Anchor (Single Hole) (Optional) .....	..	2
9	1514866	Pin	2	2
10	15211	Cotter Pin	2	2
	a 386422	Snap Ring	6	6

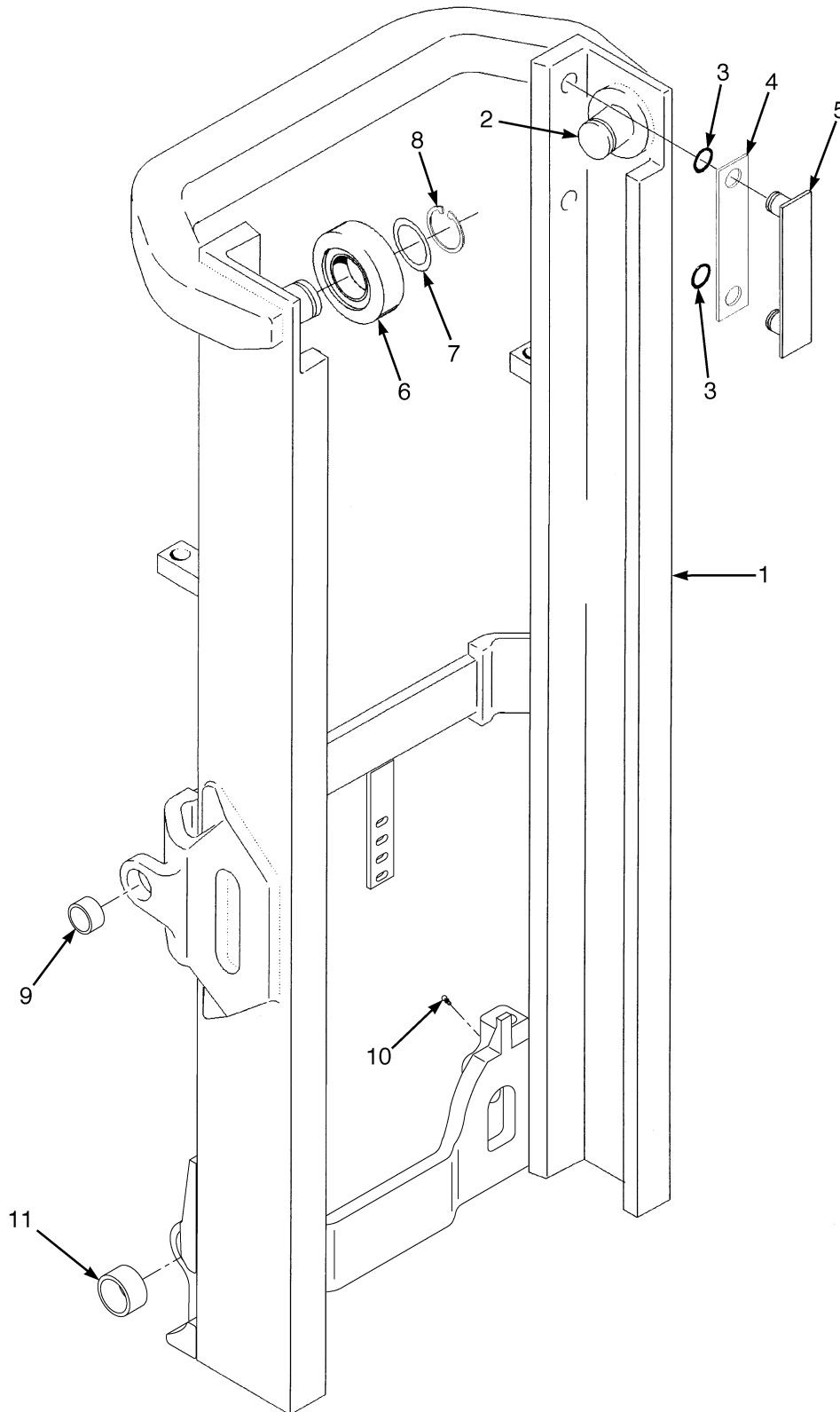
FOOTNOTES:**a** Not Illustrated

SECTION 13

MAST-TWO STAGE FULL FREE-LIFT

DESCRIPTION	PAGE
CARRIAGE	
TWO STAGE FULL FREE-LIFT	13-22
FREE-LIFT	
TWO STAGE FULL FREE-LIFT	13-12
FREE-LIFT CYLINDER	
TWO STAGE FULL FREE-LIFT	13-15
HEADER HOSES	
TWO STAGE FULL FREE-LIFT	13-18
INNER MAST	
TWO STAGE FULL FREE-LIFT	13-4
MAIN LIFT	
TWO STAGE FULL FREE-LIFT	13-6
MAIN LIFT CYLINDER	
LEFT HAND - TWO STAGE FULL FREE-LIFT	13-10
RIGHT HAND - TWO STAGE FULL FREE-LIFT	13-8
OUTER MAST	
TWO STAGE FULL FREE-LIFT	13-2

OUTER MAST (FIGURE 13-1) TWO STAGE FULL FREE-LIFT



HP290004

**OUTER MAST
TWO STAGE FULL FREE-LIFT**

D509

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS
		3262 mm (128.4 in.)
	Mast Group Number	D509 3262
	Mast Assy	2065580
1	Outer Mast	1524755

D564

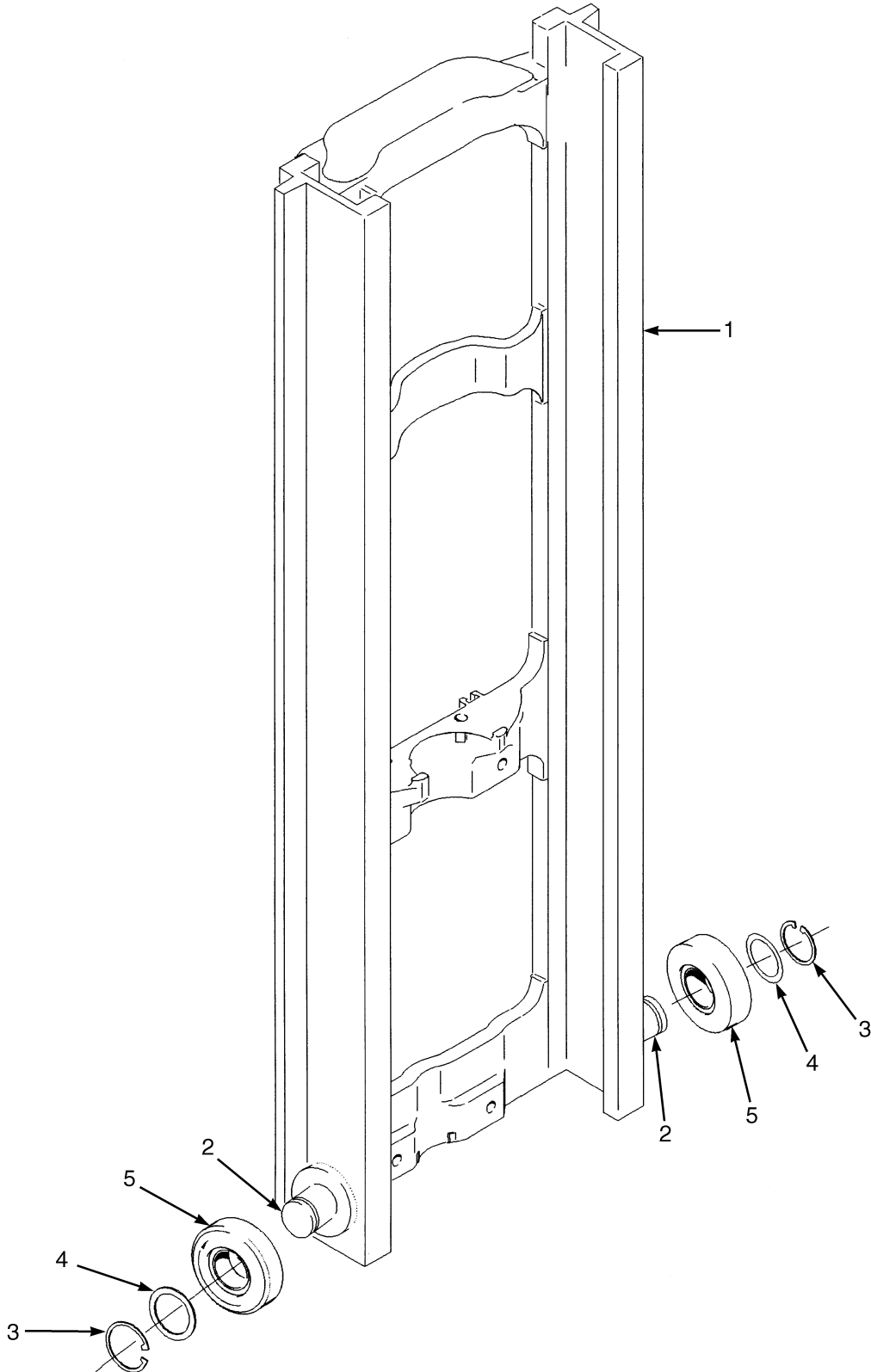
ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS
		3060 mm (120.5 in.)
	Mast Group Number	D564 3060
	Mast Assy	2065522
1	Outer Mast	1524755

ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Outer Mast	1
2	1345216	Stubshaft	2
3	104506	O-Ring	4
4	131716	Shim (0.508 mm)	AR
4	131715	Shim (0.178 mm) (Optional)	AR
5	215211	Wear Strip	2
6	1395168	Load Roller ("A") (111.10/110.84)	2
6	1333396	Load Roller ("B") (111.48/111.22)	2
6	1333397	Load Roller ("C") (112.62/112.36)	2
7	129387	Shim (0.508 mm)	AR
8	58901	Snap Ring	2
9	300982	Bushing	2
10	16001	Grease Fitting	2
11	1502811	Bushing	2

FOOTNOTES:

a Refer to Table

INNER MAST (FIGURE 13-2) TWO STAGE FULL FREE-LIFT



HP290005

**INNER MAST
TWO STAGE FULL FREE-LIFT**

D509

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS
		3262 mm (128.4 in.)
	Mast Group Number	D509 3262
	Mast Assy	2065580
1	Inner Mast	1342477

D564

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS
		3060 mm (120.5 in.)
	Mast Group Number	D564 3060
	Mast Assy	2065522
1	Inner Mast	1342477

KEY:

A: H2.0-2.5FT

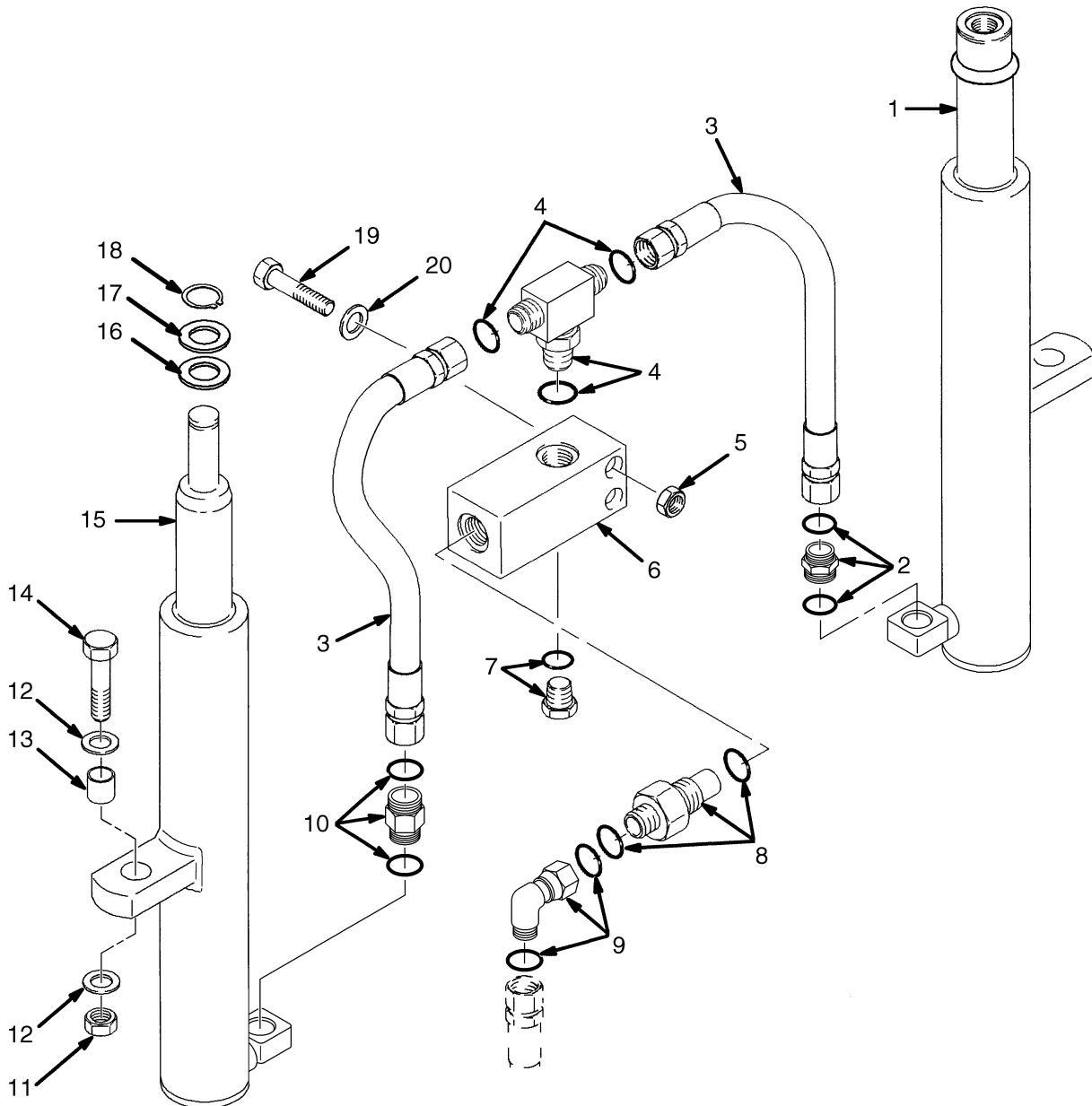
B: H3.0-3.5FT

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a	Mast Assy	1	1
1	a	Inner Mast	1	1
2	1345216	Stubshaft	2	2
3	58901	Snap Ring	2	2
4	129387	Shim (0.508 mm)	AR	AR
5	1395168	Load Roller ("A") (111.10/110.84)	2	2
5	1333396	Load Roller ("B") (111.48/111.22)	2	2
5	1333397	Load Roller ("C") (112.62/112.36)	2	2

FOOTNOTES:

a Refer to Table

MAIN LIFT (FIGURE 13-3) TWO STAGE FULL FREE-LIFT

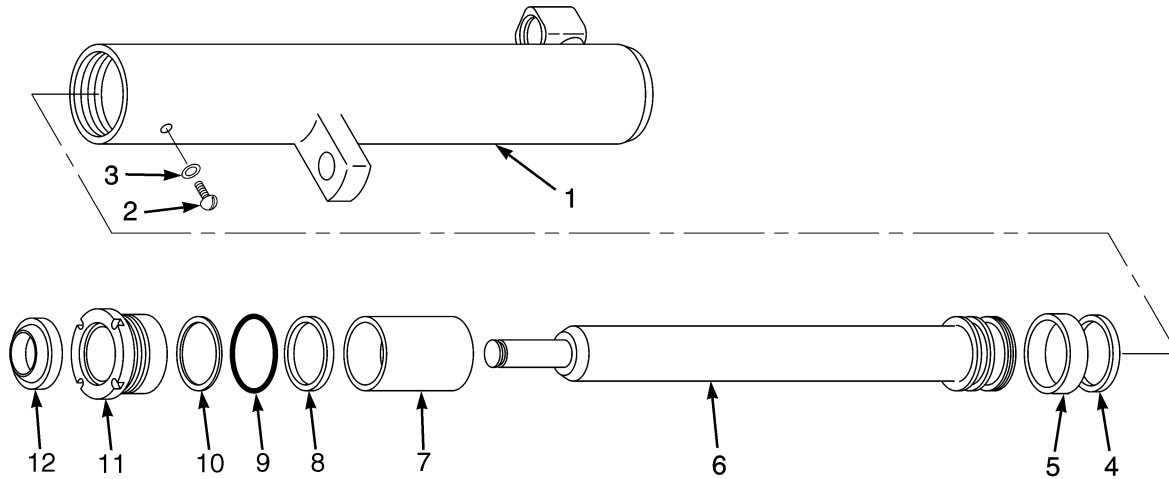


BP290036

**MAIN LIFT
TWO STAGE FULL FREE-LIFT****KEY:****A: H2.0-2.5FT, D509-3262 mm****B: H3.0-3.5FT, D564-3060 mm**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	.....	Main Lift Cylinder (LH) (☞Figure 13-5).....	1	1
2	1486749	Fitting	1	1
2	252729	O-Ring	1	1
2	16485	O-Ring	1	1
3	1481097	Hose Assy	2	2
4	1532650	Fitting	1	1
4	252729	O-Ring	2	2
4	16485	O-Ring	1	1
5	1581566	Nut	2	2
6	1379687	Housing (Lowering Control)	1	1
7	14603	Plug	1	1
7	16486	O-Ring	1	1
8	2062652	Lowering Control Valve .....	..	1
8	2062651	Lowering Control Valve	1	..
8	16982	O-Ring	1	1
8	252729	O-Ring	1	1
9	1486773	Fitting	1	1
9	252729	O-Ring	2	2
10	2062687	Hyd Velocity Fuse .....	..	1
10	2062686	Hyd Velocity Fuse	1	..
10	16485	O-Ring	1	1
10	252729	O-Ring	1	1
11	1581849	Nut	2	2
12	1581852	Washer	4	4
13	323090	Spacer	2	2
14	1581829	Capscrew	2	2
15	.....	Main Lift Cylinder (RH) (☞Figure 13-4).....	1	1
16	1354915	Washer (0.254 mm)	AR	AR
16	1354916	Washer (0.762 mm)	AR	AR
16	1354917	Washer (1.524 mm)	AR	AR
17	1333382	Washer (1.500 mm)	1	1
18	131358	Snap Ring	1	1
19	1581835	Capscrew	2	2
20	1581556	Washer	2	2

MAIN LIFT CYLINDER (FIGURE 13-4) RIGHT HAND — TWO STAGE FULL FREE-LIFT



HP171367

MAIN LIFT CYLINDER RIGHT HAND – TWO STAGE FULL FREE-LIFT

RIGHT HAND

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS
		3262 mm (128.4 in.)
	Mast Group Number	D509 3262
	Cylinder Group Number	8518609
	Cylinder Assy	2058651
1	Tube Wldmt- Cylinder	2058536
6	Cylinder Rod	1358940
7	Spacer	----

**MAIN LIFT CYLINDER
RIGHT HAND – TWO STAGE FULL FREE-LIFT
RIGHT HAND**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS
		3262 mm (128.4 in.)
	Mast Group Number	D564 3060
	Cylinder Group Number	8518659
	Cylinder Assy	2060422
1	Tube Wldmt- Cylinder	2058536
6	Cylinder Rod	1358940
7	Spacer	2073159

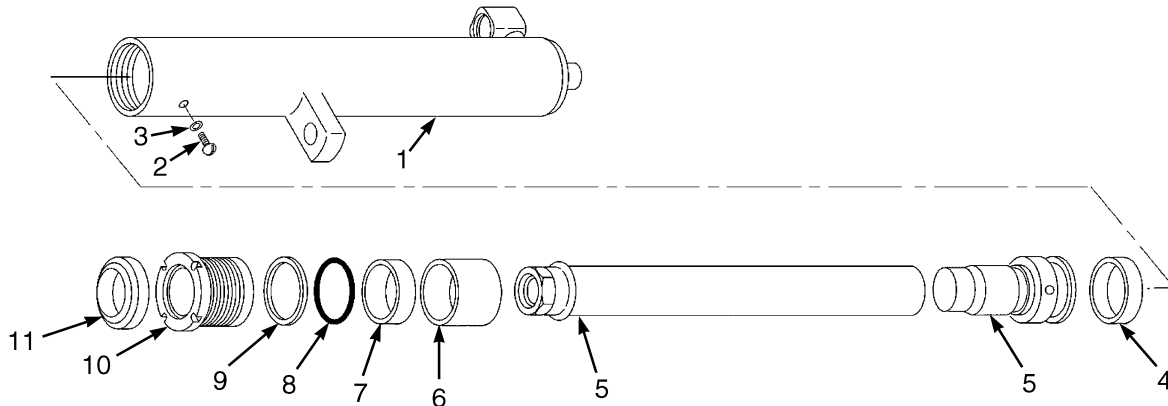
ITEM	PART NO.	DESCRIPTION	QTY
	b	Cylinder Assy	1
1	b	Tube Wldmt-Cylinder	1
2	295649	Screw	1
3	190887	Sealing Ring	1
4	1356748	Piston Ring	1
5	1356747	Wear Ring	1
6	b	Cylinder Rod	1
7	b	Spacer	1
8	1356749	Rod Seal	1
9	59229	O-Ring	1
10	147972	Back-Up Ring	1
11	2091259	Gland	1
12	1319668	Rod Wiper	1
	1496922	Kit-Seal	1
	a 322824	Back-Up Ring	1
	a 322902	Wear Ring	1

FOOTNOTES:

a Not Illustrated

b Refer to Table

MAIN LIFT CYLINDER (FIGURE 13-5) LEFT HAND — TWO STAGE FULL FREE-LIFT



HP171366

MAIN LIFT CYLINDER LEFT HAND – TWO STAGE FULL FREE-LIFT

LEFT HAND

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS
		3262 mm (128.4 in.)
	Mast Group Number	D509 3262
	Cylinder Group Number	8518509
	Cylinder Assy	2058619
1	Tube Wldmt- Cylinder	2058500
5	Cylinder Rod	1355929
6	Spacer	----

**MAIN LIFT CYLINDER
LEFT HAND – TWO STAGE FULL FREE-LIFT
LEFT HAND**

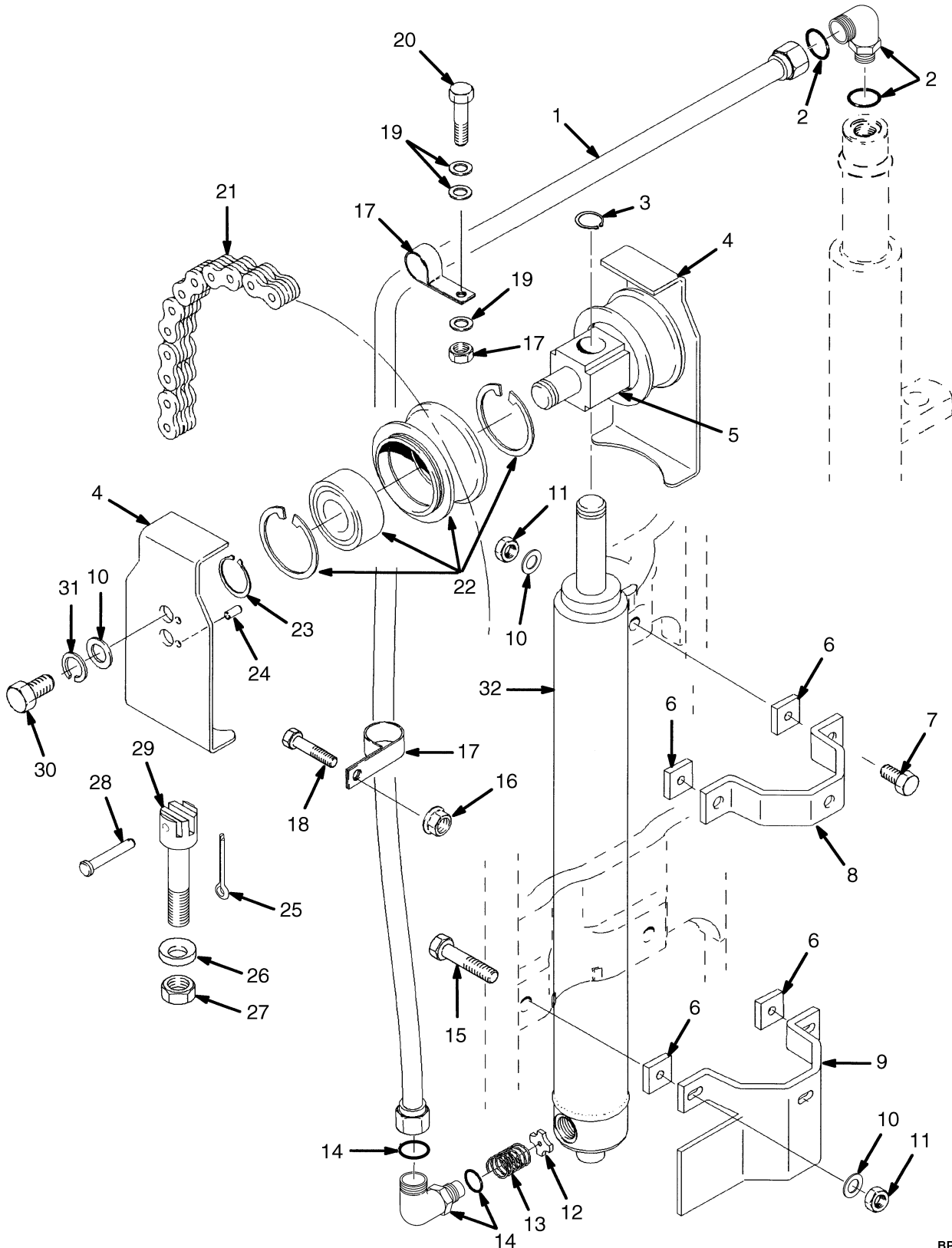
ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS
		3262 mm (128.4 in.)
	Mast Group Number	D564 3060
	Cylinder Group Number	8518559
	Cylinder Assy	2058823
1	Tube Wldmt- Cylinder	2058500
5	Cylinder Rod	1355929
6	Spacer	2073159

ITEM	PART NO.	DESCRIPTION	QTY
	a	Cylinder Assy	1
1	a	Tube Wldmt-Cylinder	1
2	295649	Screw	1
3	190887	Sealing Ring	1
4	1356747	Wear Ring	1
5	a	Cylinder Rod	1
5	1355930	Cylinder Rod	1
5	2064464	Piston	1
6	a	Spacer	1
7	1356749	Rod Seal	1
8	59229	O-Ring	1
9	147972	Back-Up Ring	1
10	2091259	Gland	1
11	1319668	Rod Wiper	1
	322824	Back-Up Ring	1
	322902	Wear Ring	1
	1496922	Kit-Seal	1

FOOTNOTES:

a Refer to Table

FREE-LIFT (FIGURE 13-6) TWO STAGE FULL FREE-LIFT



BP290037

**FREE-LIFT
TWO STAGE FULL FREE-LIFT**

D509

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS
		3262 mm (128.4 in.)
		Mast Group Number	D509 3262
1	Tube Assy	1481742
21	Chain	180177

D564

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS
		3060 mm (120.5 in.)
		Mast Group Number	D564 3060
1	Tube Assy	1481742
21	Chain	1342377

KEY:

A: H2.0-2.5FT, D509-3262 mm

B: H3.0-3.5FT, D564-3060 mm

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	a	Tube Assy	1	1
2	1481090	Fitting	1	1
2	16485	O-Ring	1	1
2	244167	O-Ring	1	1
3	131358	Snap Ring	1	1
4	1395285	Chain Guard	2	2
5	1378690	Crosshead	1	1
6	1354902	Spacer .....	..	4
7	1581828	Capscrew .....	..	2
7	1581827	Capscrew	2	..
8	1465504	Tie Down	1	1
9	1354967	Bracket Wldmt	1	1
10	1581559	Washer	6	6
11	1581849	Nut	4	4
12	356505	Washer (Special)	1	1
13	154355	Spring	1	1
14	1481096	Fitting	1	1
14	16485	O-Ring	1	1
14	244167	O-Ring	1	1
15	1581832	Capscrew	2	..
15	1581828	Capscrew .....	..	2
16	1581567	Nut	2	2
17	178119	Clamp	2	2

FREE-LIFT TWO STAGE FULL FREE-LIFT

KEY:

A: H2.0-2.5FT, D509-3262 mm

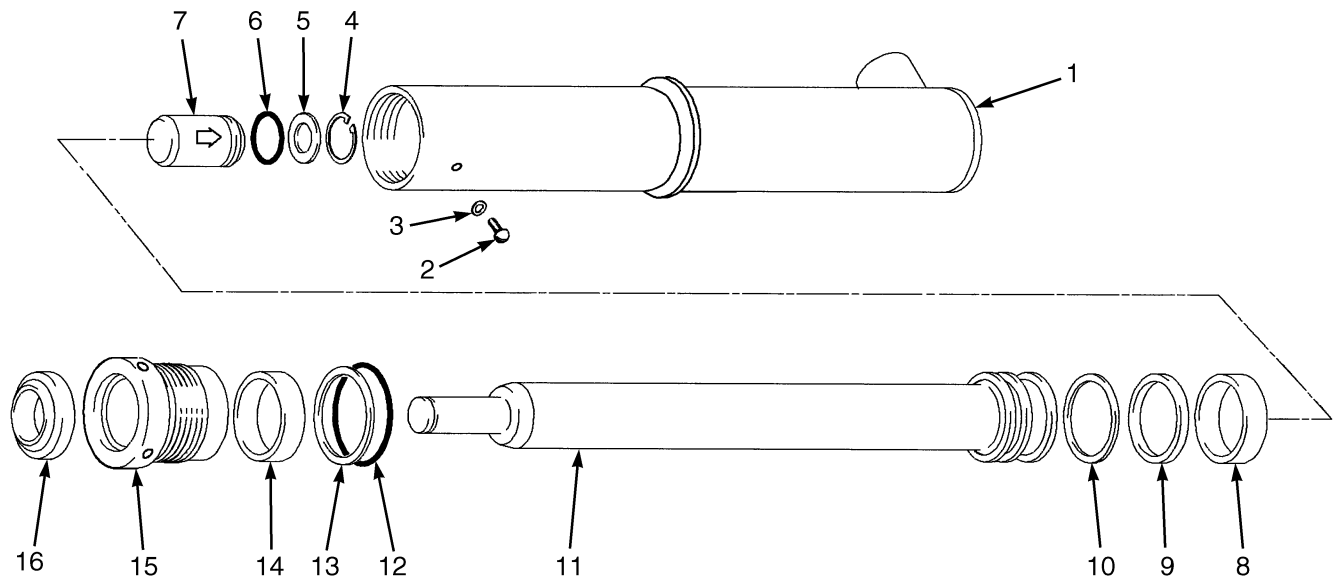
B: H3.0-3.5FT, D564-3060 mm

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
18	1581587	Capscrew	1	1
19	1581557	Washer	3	3
20	1581841	Capscrew	1	1
21	a	Chain	2	2
22	1379683	Chain Sheave Assembly (Assembly) .....	..	2
22	1379682	Chain Sheave Assembly (Assembly)	2	..
22	1378693	Chain Sheave .....	..	1
22	1378692	Chain Sheave	1	..
22	37752	Snap Ring	2	2
22	1378699	Ball Bearing	1	1
23	304526	Snap Ring	3	3
24	302461	Roll Pin	2	2
25	15211	Cotter Pin	2	2
26	297649	Ring	2	2
27	161003	Nut	2	2
28	1514866	Pin	2	2
29	1369356	Chain Anchor .....	..	2
29	1369357	Chain Anchor	2	..
30	1581590	Capscrew	2	2
31	1581564	Lockwasher	2	2
32	. . . .	Free-Lift Cylinder (☞Figure 13-7).....	1	1

FOOTNOTES:

a Refer to Table

**FREE-LIFT CYLINDER (FIGURE 13-7)
TWO STAGE FULL FREE-LIFT**



HP171368

**FREE-LIFT CYLINDER
TWO STAGE FULL FREE-LIFT**

D509

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS
		3262 mm (128.4 in.)
	Mast Group Number	D509 3262
	Cylinder Group Number	8514559
	Cylinder Assy	2053796
1	Tube Wldmt- Cylinder	2058213
11	Cylinder Rod	1356569

FREE-LIFT CYLINDER TWO STAGE FULL FREE-LIFT

D564

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS
		3060 mm (120.5 in.)
	Mast Group Number	D564 3060
	Cylinder Group Number	8518709
	Cylinder Assy	2058326
1	Tube Wldmt- Cylinder	2058252
11	Cylinder Rod	1356688

KEY:

A: H2.0-2.5FT, D509-3262 mm

B: H3.0-3.5FT, D564-3060 mm

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a	Cylinder Assy	1	1
1	a	Tube Wldmt-Cylinder	1	1
2	1361302	Screw	1	1
3	190887	Sealing Ring	1	1
4	187388	Snap Ring	1	1
5	297531	Washer	1	1
6	190580	O-Ring .....	..	1
6	39348	O-Ring	1	..
7	257913	Check Valve	1	1
7	297538	Check Valve (Alternate Part)	1	1
8	636941	Wear Ring .....	..	1
8	1358972	Wear Ring	1	..
9	309062	Rod Seal .....	..	1
9	2013088	Rod Seal	1	..
10	637565	Back-Up Ring .....	..	1
10	2013089	Back-Up Ring	1	..
11	a	Cylinder Rod	1	1
12	15880	O-Ring .....	..	1
12	90263	O-Ring	1	..
13	164840	Back-Up Ring .....	..	1
13	147973	Back-Up Ring	1	..
14	1358970	Rod Seal	1	1
14	1622946	Rod Seal (Alternate Part)	1	1
15	1356661	Gland .....	..	1
15	1356292	Gland	1	..
16	2013099	Rod Wiper	1	1
16	1463105	Rod Wiper (Alternate Part)	1	1
	1356662	Kit-Seal .....	..	1

**FREE-LIFT CYLINDER
TWO STAGE FULL FREE-LIFT**

KEY:

A: H2.0-2.5FT, D509-3262 mm

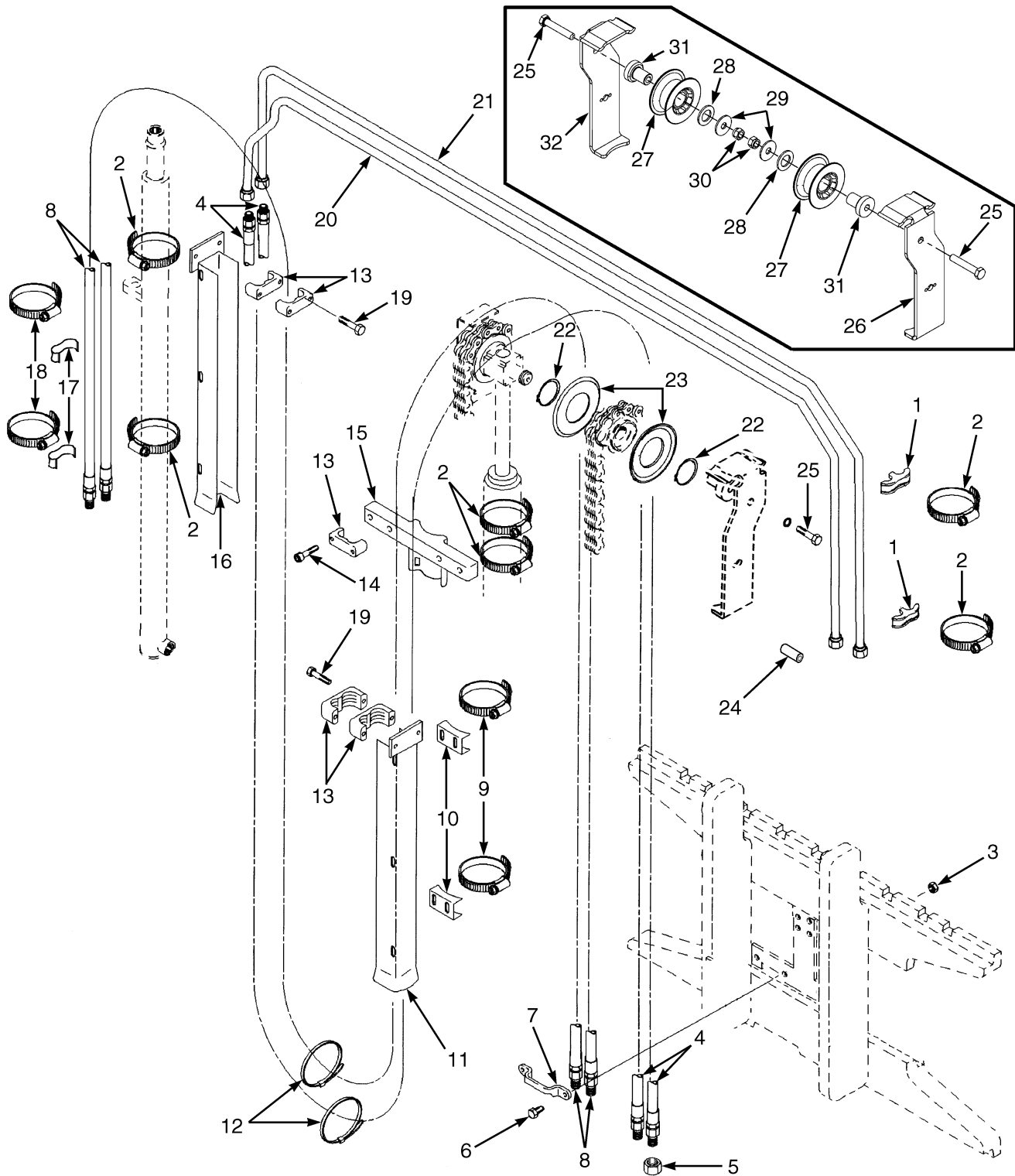
B: H3.0-3.5FT, D564-3060 mm

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1358969	Kit-Seal	1	..

FOOTNOTES:

a Refer to Table

HEADER HOSES (FIGURE 13-8) TWO STAGE FULL FREE-LIFT



HP020340

**HEADER HOSES
TWO STAGE FULL FREE-LIFT**

D509

ITEM	DESCRIPTION				LIFT HEIGHT TO BOTTOM OF FORKS	
					3262 mm (128.4 in.)	
	1	2	3	4	Mast Group Number	
						D509 3262
4					Hose Assy	2065211
8					Hose Assy	2065241
11					Hose Guard	1481232
16					Hose Guard	1365517
20					Tube Assy	2065001
21					Tube Assy	2065030

D564

ITEM	DESCRIPTION				LIFT HEIGHT TO BOTTOM OF FORKS	
					3060 mm (120.5 in.)	
	1	2	3	4	Mast Group Number	
						D564 3060
4					Hose Assy	2065211
8					Hose Assy	2065241
11					Hose Guard	1481232
16					Hose Guard	1365517
20					Tube Assy	2065001
21					Tube Assy	2065030

KEY:

A: Three Function

B: Four Function

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1606855	Spacer	2	2
2	1360507	Clamp	6	6
3	b 1581566	Nut	2	4
4	a	Hose Assy	2	4
5	1529015	Cap	2	4
6	b 1581581	Capscrew	2	4
6	c 1597448	Capscrew	2	4
7	b 1643405	Hose Clamp	1	2
7	c 4008020	Clamp	1	2
8	a	Hose Assy .....	..	2
9	1360508	Clamp	2	2
10	1345423	Clamp	2	2

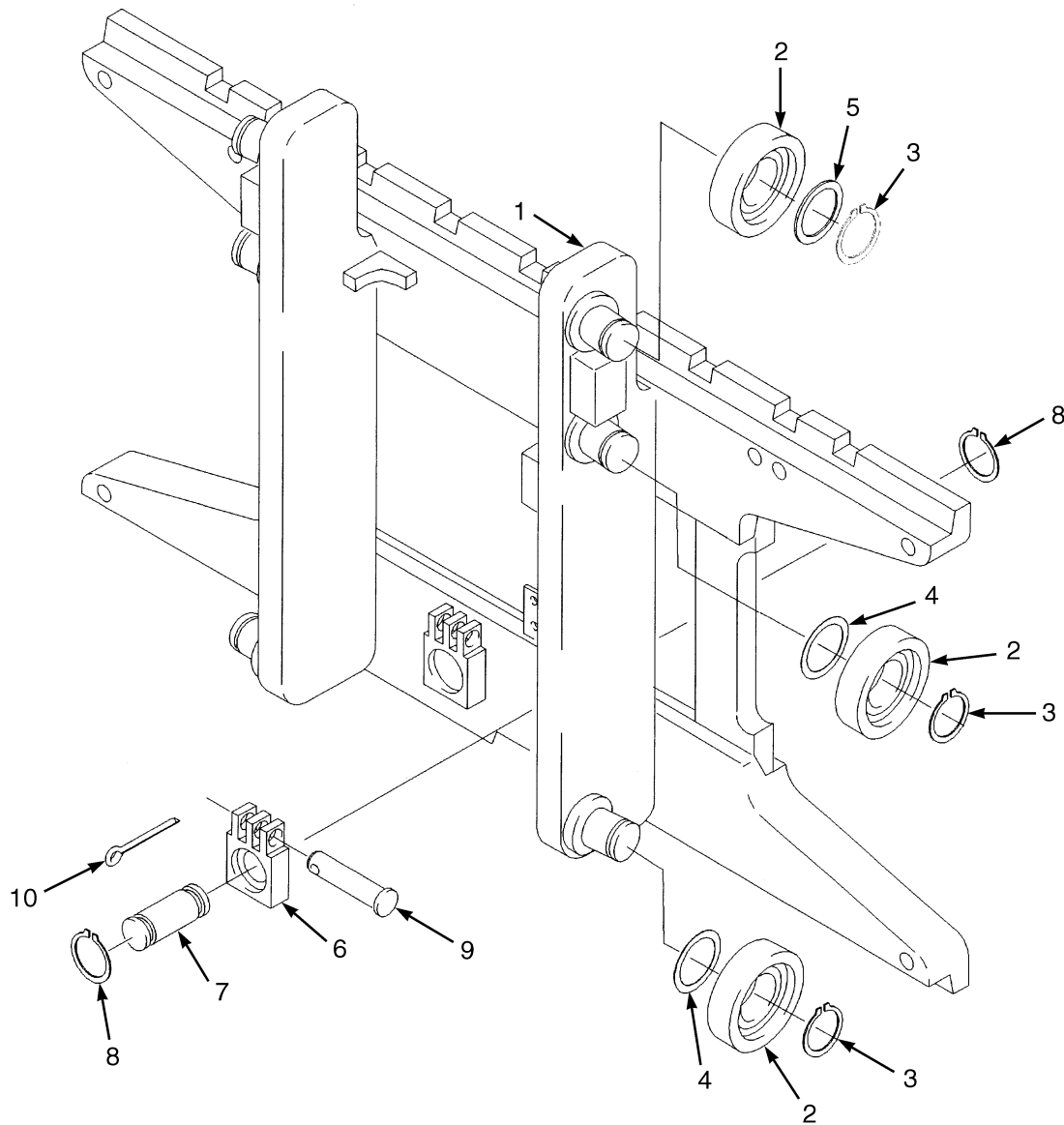
HEADER HOSES TWO STAGE FULL FREE-LIFT

KEY:**A:** Three Function**B:** Four Function

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
11	a	Hose Guard	1	1
12	137852	Strap Clamp	1	2
13	1360386	Clamp	3	6
14	1581741	Capscrew	2	4
15	1354918	Bracket	1	1
16	a	Hose Guard	1	1
17	1477996	Hose Clamp .....	..	2
18	1481229	Clamp .....	..	2
19	1581842	Capscrew	4	8
20	a	Tube Assy	1	1
21	a	Tube Assy	1	1
22	1345204	Snap Ring (Spiral Retaining Ring)	2	4
23	1345199	Hose Guide	2	4
24	302461	Roll Pin	2	4
25	1581830	Capscrew	1	2
26	1395292	Bracket .....	..	1
27	1494017	Hose Sheave	1	2
28	1581560	Washer	1	2
29	1345190	Washer	1	2
30	1581849	Nut	1	2
31	1396406	Stubshaft	1	2
32	1395291	Bracket	1	1

FOOTNOTES:**a** Refer to Table**c** PENDING PER ECN 10610809 →**b** → PENDING PER ECN 10610809

CARRIAGE (FIGURE 13-9) TWO STAGE FULL FREE-LIFT



HP290012

CARRIAGE
TWO STAGE FULL FREE-LIFT**KEY:****A: H2.0-2.5FT D509****B: H3.0-3.5FT D564**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1343844	Carriage	1	..
	1477683	Carriage .....	..	1
1	1345239	Carriage Wldmt	1	..
1	1477932	Carriage Wldmt .....	..	1
1	1345264	Stubshaft	6	6
2	1345219	Load Roller ("B") (111.48/111.22)	6	6
3	12891	Snap Ring	6	6
4	1345263	Shim (0.508 mm)	AR	AR
5	366116	Spacer	2	2
6	1369345	Chain Anchor (Dual Hole)	2	..
6	1504010	Chain Anchor (Single Hole) (Optional)	2	..
6	1369344	Chain Anchor (Dual Hole) .....	..	2
6	1504012	Chain Anchor (Single Hole) (Optional) .....	..	2
7	317735	Pin	2	2
8	131358	Snap Ring	4	4
9	1514866	Pin	2	2
10	15211	Cotter Pin	2	2
	a 386422	Snap Ring	6	6

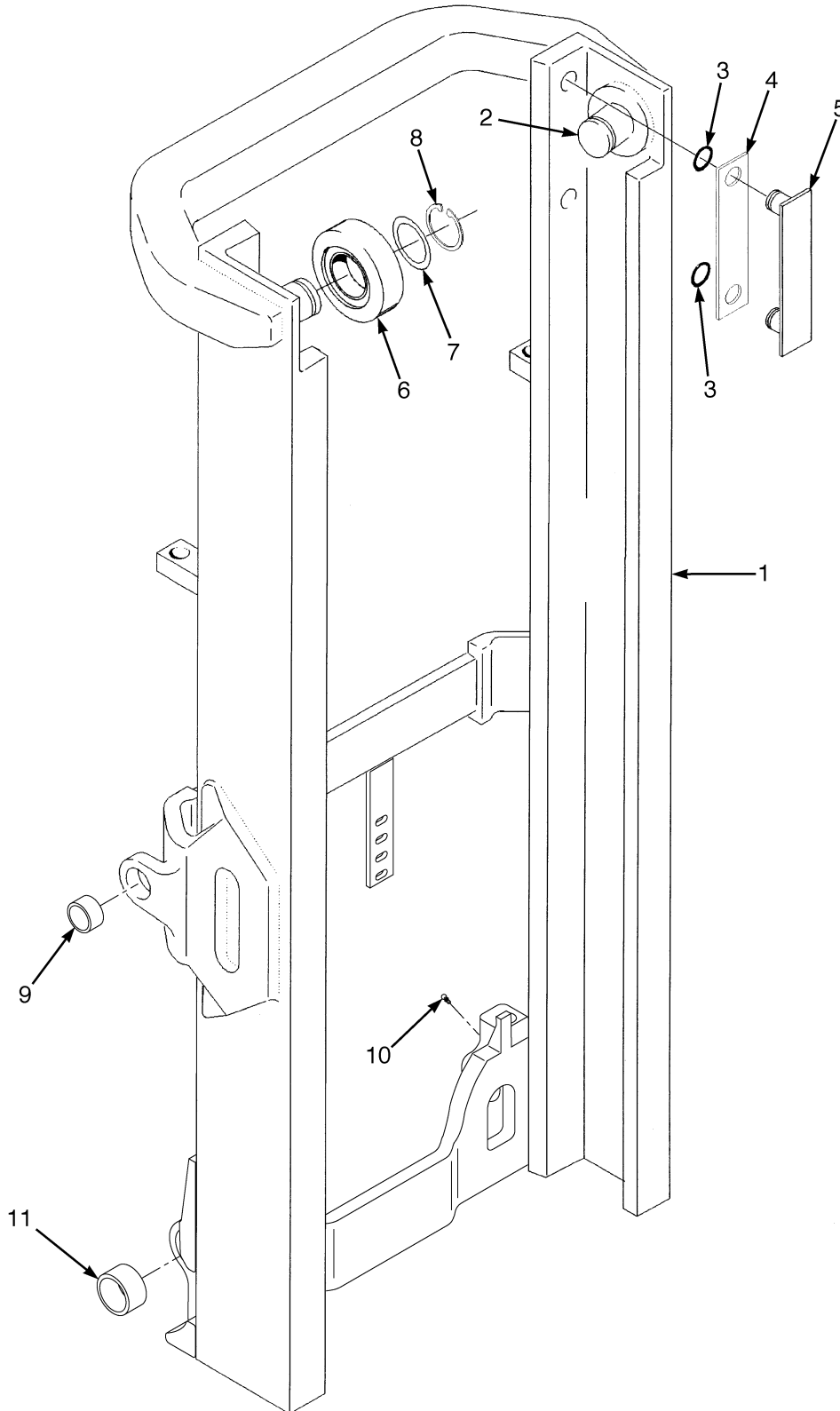
FOOTNOTES:**a** Not Illustrated

SECTION 14

MAST-THREE STAGE FULL FREE-LIFT

DESCRIPTION	PAGE
CARRIAGE	
THREE STAGE FULL FREE-LIFT	14-32
FREE-LIFT	
THREE STAGE FULL FREE-LIFT	14-18
FREE-LIFT CYLINDER	
THREE STAGE FULL FREE-LIFT	14-21
HEADER HOSES	
THREE STAGE FULL FREE-LIFT (→ 10/2010)	14-24
THREE STAGE FULL FREE-LIFT (10/2010 →)	14-28
INNER MAST	
THREE STAGE FULL FREE-LIFT	14-8
INTERMEDIATE MAST	
THREE STAGE FULL FREE-LIFT	14-4
MAIN LIFT	
THREE STAGE FULL FREE-LIFT	14-10
MAIN LIFT CYLINDERS	
THREE STAGE FULL FREE-LIFT	14-14
OUTER MAST	
THREE STAGE FULL FREE-LIFT	14-2

OUTER MAST (FIGURE 14-1) THREE STAGE FULL FREE-LIFT



HP290019

**OUTER MAST
THREE STAGE FULL FREE-LIFT
H2.0-2.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4310 mm (169.7 in.)	4910 mm (193.3 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
		Mast Group Number	D508 4310	D508 4910	D508 5510	D508 5960
	Mast Assy	2065448	2065456	2065464	2065469
1	Outer Mast	1524751	1524755	1524760	1524763

H3.0-3.5FT

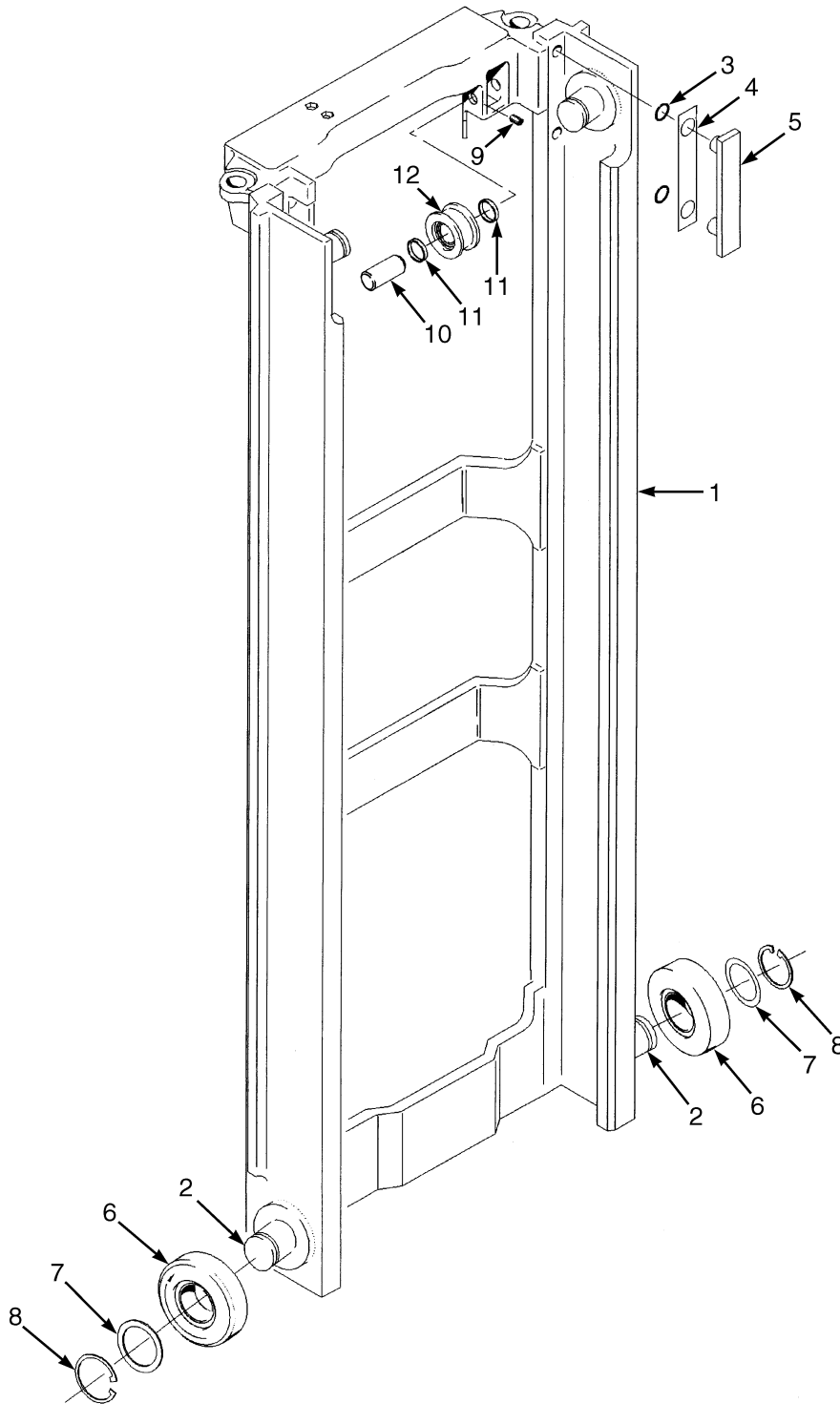
ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		3968 mm (156.2 in.)	4568 mm (179.8 in.)	4868 mm (191.7 in.)	5168 mm (203.5 in.)	5768 mm (227.1 in.)
		Mast Group Number	D563 3968	D563 4568	D563 4868	D563 5168	D563 5768
	Mast Assy	2065390	2065396	2065400	2065403	2065411
1	Outer Mast	1524751	1524755	1524758	1524760	1524764

ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Outer Mast	1
2	1345216	Stubshaft	2
3	104506	O-Ring	4
4	131716	Shim (0.508 mm)	AR
4	131715	Shim (0.178 mm) (Optional)	AR
5	215211	Wear Strip	2
6	1395168	Load Roller ("A") (111.10/110.84)	2
6	1333396	Load Roller ("B") (111.48/111.22)	2
6	1333397	Load Roller ("C") (112.62/112.36)	2
7	129387	Shim (0.508 mm)	AR
8	58901	Snap Ring	2
9	300982	Bushing	2
10	16001	Grease Fitting	2
11	1502811	Bushing	2

FOOTNOTES:

a Refer to Table

INTERMEDIATE MAST (FIGURE 14-2) THREE STAGE FULL FREE-LIFT



HP290018

**INTERMEDIATE MAST
THREE STAGE FULL FREE-LIFT**

H2.0-2.5FT

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4310 mm (169.7 in.)	4910 mm (193.3 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
		Mast Group Number	D508 4310	D508 4910	D508 5510	D508 5960
	Mast Assy	2065448	2065456	2065464	2065469
1	Intermediate Mast	1524831	1524835	1524839	1524842

H3.0-3.5FT

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		3968 mm (156.2 in.)	4568 mm (179.8 in.)	4868 mm (191.7 in.)	5168 mm (203.5 in.)	5768 mm (227.1 in.)
		Mast Group Number	D563 3968	D563 4568	D563 4868	D563 5168	D563 5768
	Mast Assy	2065390	2065396	2065400	2065403	2065411
1	Intermediate Mast	1524831	1524835	1524837	1524839	1524843

KEY:

A: H2.0-2.5FT

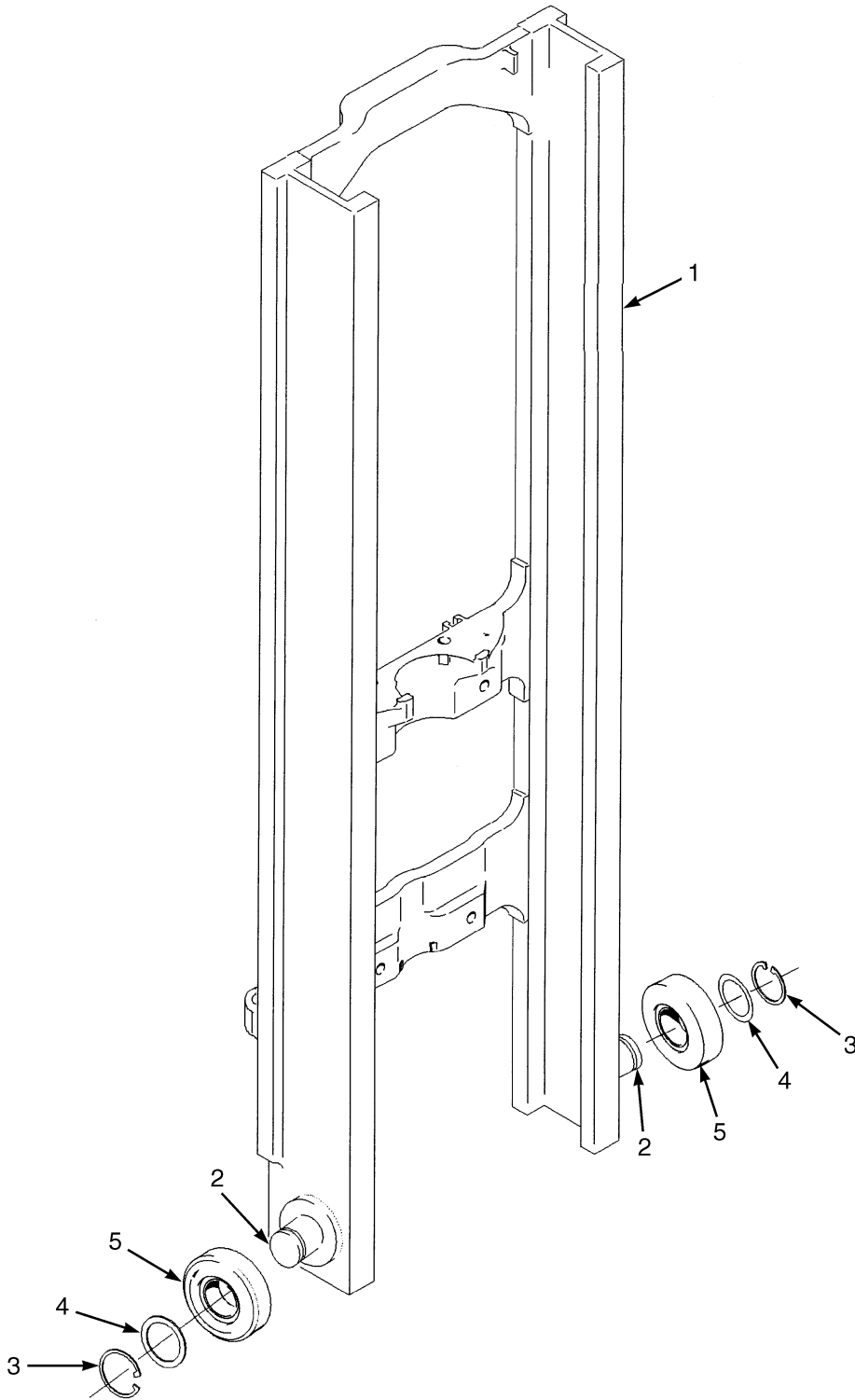
B: H3.0-3.5FT

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a	Mast Assy	1	1
1	a	Intermediate Mast	1	1
2	1345216	Stubshaft	2	2
3	104506	O-Ring	4	4
4	131716	Shim (0.508 mm)	AR	AR
4	131715	Shim (0.178 mm) (Optional)	AR	AR
5	215211	Wear Strip	2	2
6	1395168	Load Roller ("A") (111.10/110.84)	4	4
6	1333396	Load Roller ("B") (111.48/111.22)	4	4
6	1333397	Load Roller ("C") (112.62/112.36)	4	4
7	129387	Shim (0.508 mm)	AR	AR
8	58901	Snap Ring	4	4
9	302462	Roll Pin	2	2
10	1368656	Pin	2	2
11	1378691	Spacer	4	4
12	1379685	Chain Sheave	2	..
12	1379684	Chain Sheave Assembly .....	..	2
12	1378698	Chain Sheave	1	..
12	1378694	Chain Sheave .....	..	1
12	37752	Snap Ring	1	1
12	1378699	Ball Bearing	1	1

FOOTNOTES:

- a Refer to Table

INNER MAST (FIGURE 14-3) THREE STAGE FULL FREE-LIFT



HP290017

**INNER MAST
THREE STAGE FULL FREE-LIFT**

H2.0-2.5FT

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4310 mm (169.7 in.)	4910 mm (193.3 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
		Mast Group Number	D508 4310	D508 4910	D508 5510	D508 5960
	Mast Assy	2065448	2065456	2065464	2065469
1	Inner Mast	1381354	1381358	1381362	1381365

H3.0-3.5FT

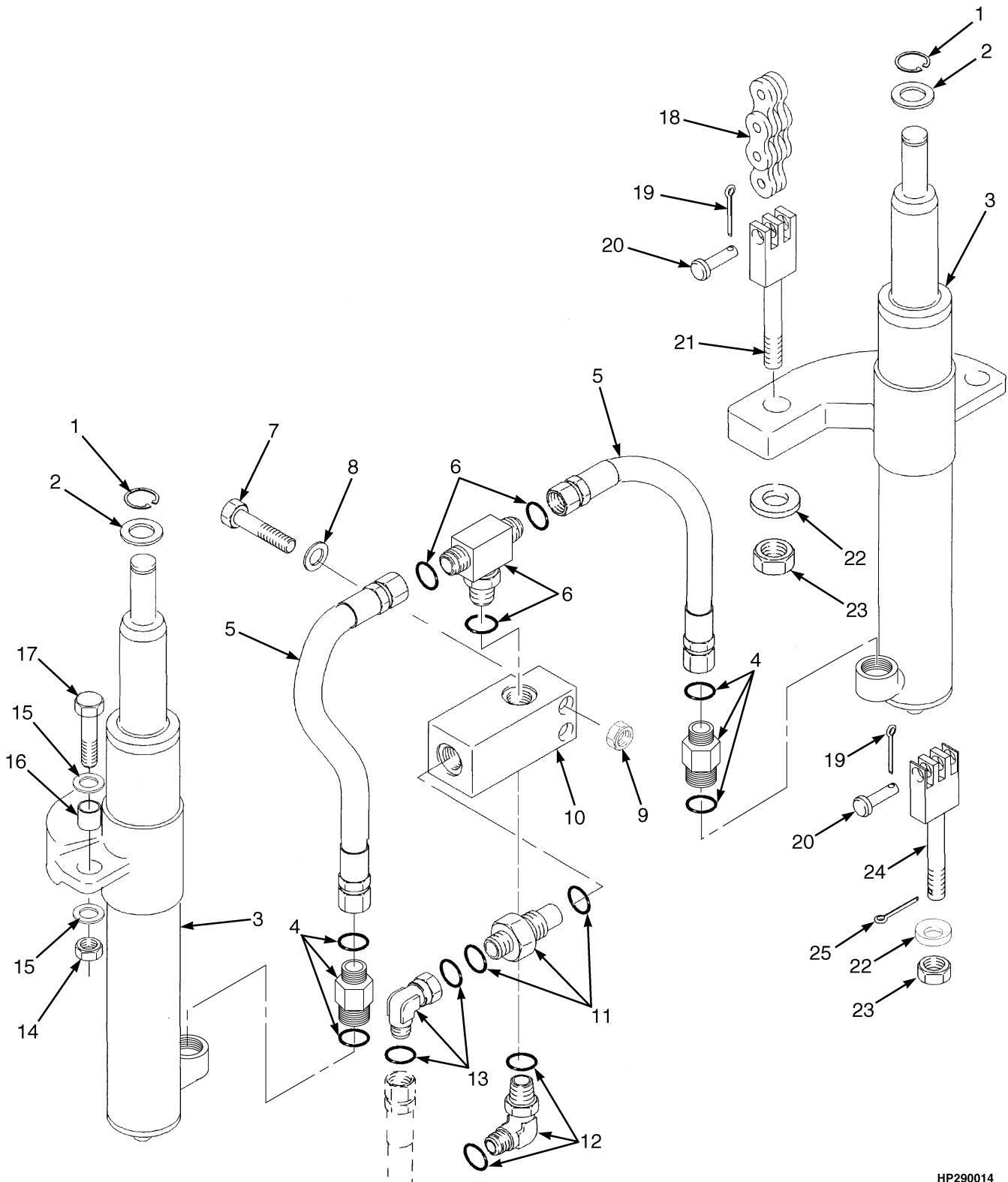
ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		3968 mm (156.2 in.)	4568 mm (179.8 in.)	4868 mm (191.7 in.)	5168 mm (203.5 in.)	5768 mm (227.1 in.)
		Mast Group Number	D563 3968	D563 4568	D563 4868	D563 5168	D563 5768
	Mast Assy	2065390	2065396	2065400	2065403	2065411
1	Inner Mast	1381354	1381358	1381360	1381362	1381366

ITEM	PART NO.	DESCRIPTION	QTY
	a	Mast Assy	1
1	a	Inner Mast	1
2	1345216	Stubshaft	2
3	58901	Snap Ring	2
4	129387	Shim (0.508 mm)	AR
5	1395168	Load Roller ("A") (111.10/110.84)	2
5	1333396	Load Roller ("B") (111.48/111.22)	2
5	1333397	Load Roller ("C") (112.62/112.36)	2

FOOTNOTES:

a Refer to Table

MAIN LIFT (FIGURE 14-4) THREE STAGE FULL FREE-LIFT



HP290014

**MAIN LIFT
THREE STAGE FULL FREE-LIFT
H2.0-2.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4310 mm (169.7 in.)	4910 mm (193.3 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
		Mast Group Number	D508 4310	D508 4910	D508 5510	D508 5960
18	Chain	182343	337174	135588	335041

H3.0-3.5FT

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		3968 mm (156.2 in.)	4568 mm (179.8 in.)	4868 mm (191.7 in.)	5168 mm (203.5 in.)	5768 mm (227.1 in.)
		Mast Group Number	D563 3968	D563 4568	D563 4868	D563 5168	D563 5768
18	Chain	1342120	1342124	1342127	1342129	1342132

KEY:

A: H2.0-2.5FT

B: H3.0-3.5FT

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	131358	Snap Ring	2	2
2	1333382	Washer (1.500 mm)	2	2
2	1354915	Washer (0.254 mm)	AR	AR
2	1354916	Washer (0.762 mm)	AR	AR
2	1354917	Washer (1.524 mm)	AR	AR
3	.....	Main Lift Cylinders (☞ Figure 14-5).....	2	2
4	2062686	Hyd Velocity Fuse	2	..
4	2062687	Hyd Velocity Fuse .....	..	2
4	16485	O-Ring	1	1
4	252729	O-Ring	1	1
5	1481097	Hose Assy	2	2
6	1532650	Fitting	1	1
6	252729	O-Ring	2	2
6	16485	O-Ring	1	1
7	1581835	Capscrew	2	2
8	1581556	Washer	2	2
9	1581566	Nut	2	2
10	1333392	Housing (Lowering Control)	1	1
11	2062651	Lowering Control Valve	1	..
11	2062652	Lowering Control Valve .....	..	1
11	280154	O-Ring	1	1
11	252729	O-Ring	1	1
12	1480747	Fitting	1	1
12	16486	O-Ring	1	1
12	244167	O-Ring	1	1
13	1486773	Fitting	1	1

MAIN LIFT THREE STAGE FULL FREE-LIFT

KEY:

A: H2.0-2.5FT

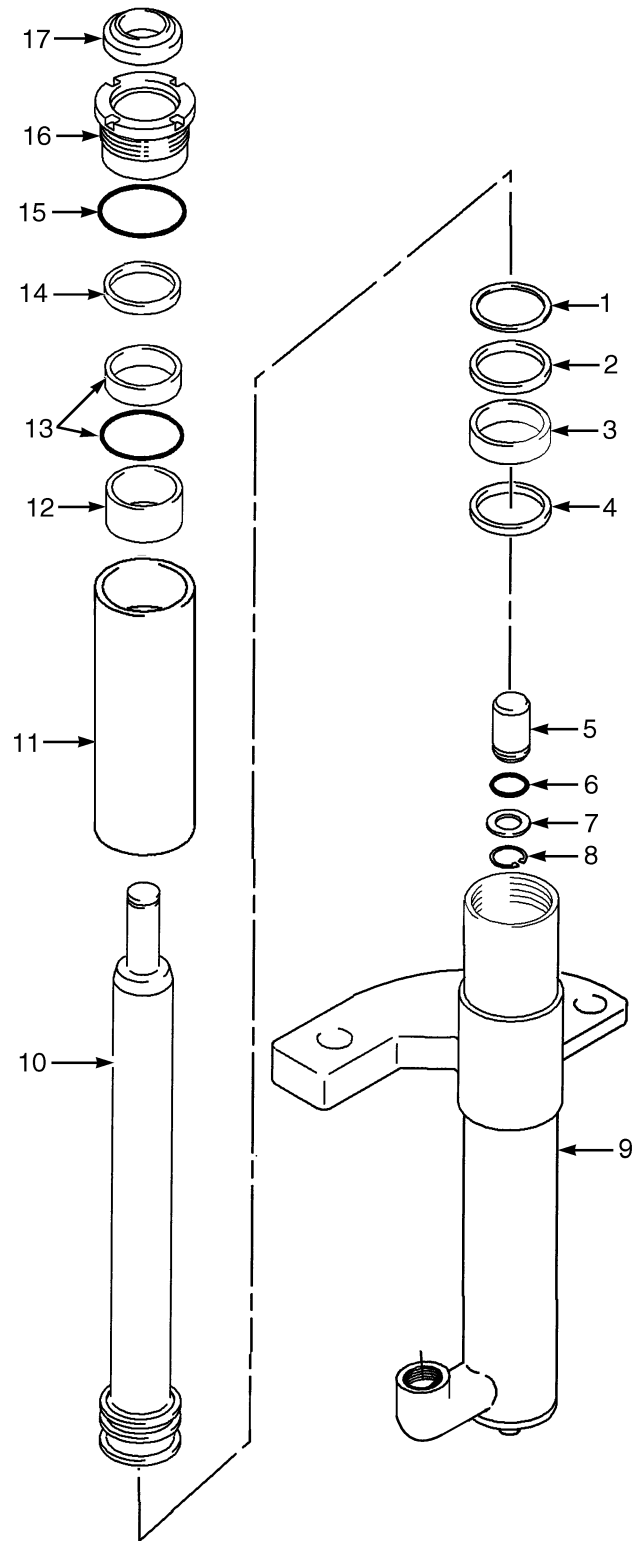
B: H3.0-3.5FT

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
13	252729	O-Ring	1	1
14	1581849	Nut	2	2
15	1581852	Washer	4	4
16	323090	Spacer	2	2
17	1581829	Capscrew	2	2
18	a	Chain	1	1
19	15211	Cotter Pin	4	4
20	1514866	Pin	4	4
21	1369357	Chain Anchor	2	..
21	1369356	Chain Anchor .....	..	2
22	297649	Ring	4	4
23	161003	Nut	4	4
24	1365140	Chain Anchor	2	..
24	1333329	Chain Anchor .....	..	2
25	15223	Cotter Pin	2	2

FOOTNOTES:

a Refer to Table

MAIN LIFT CYLINDERS (FIGURE 14-5) THREE STAGE FULL FREE-LIFT



BP170294

**MAIN LIFT CYLINDERS
THREE STAGE FULL FREE-LIFT****LEFT HAND (H2.0-2.5FT)**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4310 mm (169.7 in.)	4910 mm (193.3 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
		Mast Group Number	D508 4310	D508 4910	D508 5510	D508 5960
	Cylinder Group Number	8518205	8518209	8518213	8518216
	Cylinder Assy	2064640	2064644	2064648	2064651
9	Tube Wldmt- Cylinder	2064607	2064611	2064615	2064618
10	Cylinder Rod	1355587	1355603	1355620	1355633
11	Spacer	----	----	1355610	1355626

RIGHT HAND (H2.0-2.5FT)

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4310 mm (169.7 in.)	4910 mm (193.3 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
		Mast Group Number	D508 4310	D508 4910	D508 5510	D508 5960
	Cylinder Group Number	8518255	8518259	8518263	8518266
	Cylinder Assy	2064673	2064677	2064681	2064684
9	Tube Wldmt- Cylinder	2073082	2073084	2073086	2079984
10	Cylinder Rod	1355587	1355603	1355620	1355633
11	Spacer	----	----	1355610	1355626

LEFT HAND (H3.0-3.5FT)

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		3968 mm (156.2 in.)	4568 mm (179.8 in.)	4868 mm (191.7 in.)	5168 mm (203.5 in.)	5768 mm (227.1 in.)
		Mast Group Number	D563 3968	D563 4568	D563 4868	D563 5168	D563 5768
	Cylinder Group Number	8518305	8518309	8518311	8518313	8518317
	Cylinder Assy	2064706	2064710	2064712	2064714	2064718
9	Tube Wldmt- Cylinder	2064559	2064563	2064565	2064567	2064571
10	Cylinder Rod	1355729	1355745	1355710	1355758	1355775
11	Spacer	2046164	2046164	2073087	2073087	2077818

**MAIN LIFT CYLINDERS
THREE STAGE FULL FREE-LIFT
RIGHT HAND (H3.0-3.5FT)**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		3968 mm (156.2 in.)	4568 mm (179.8 in.)	4868 mm (191.7 in.)	5168 mm (203.5 in.)	5768 mm (227.1 in.)
	Mast Group Number	D563 3968	D563 4568	D563 4868	D563 5168	D563 5768
	Cylinder Group Number	8518355	8518359	8518361	8518363	8518367
	Cylinder Assy	2064731	2064735	2064737	2064739	2064743
9	Tube Wldmt- Cylinder	2064583	2064587	2064589	2064591	2064595
10	Cylinder Rod	1355729	1355745	1355710	1355758	1355775
11	Spacer	2046164	2046164	2073087	2073087	2077818

KEY:

A: H2.0-2.5FT

B: H3.0-3.5FT

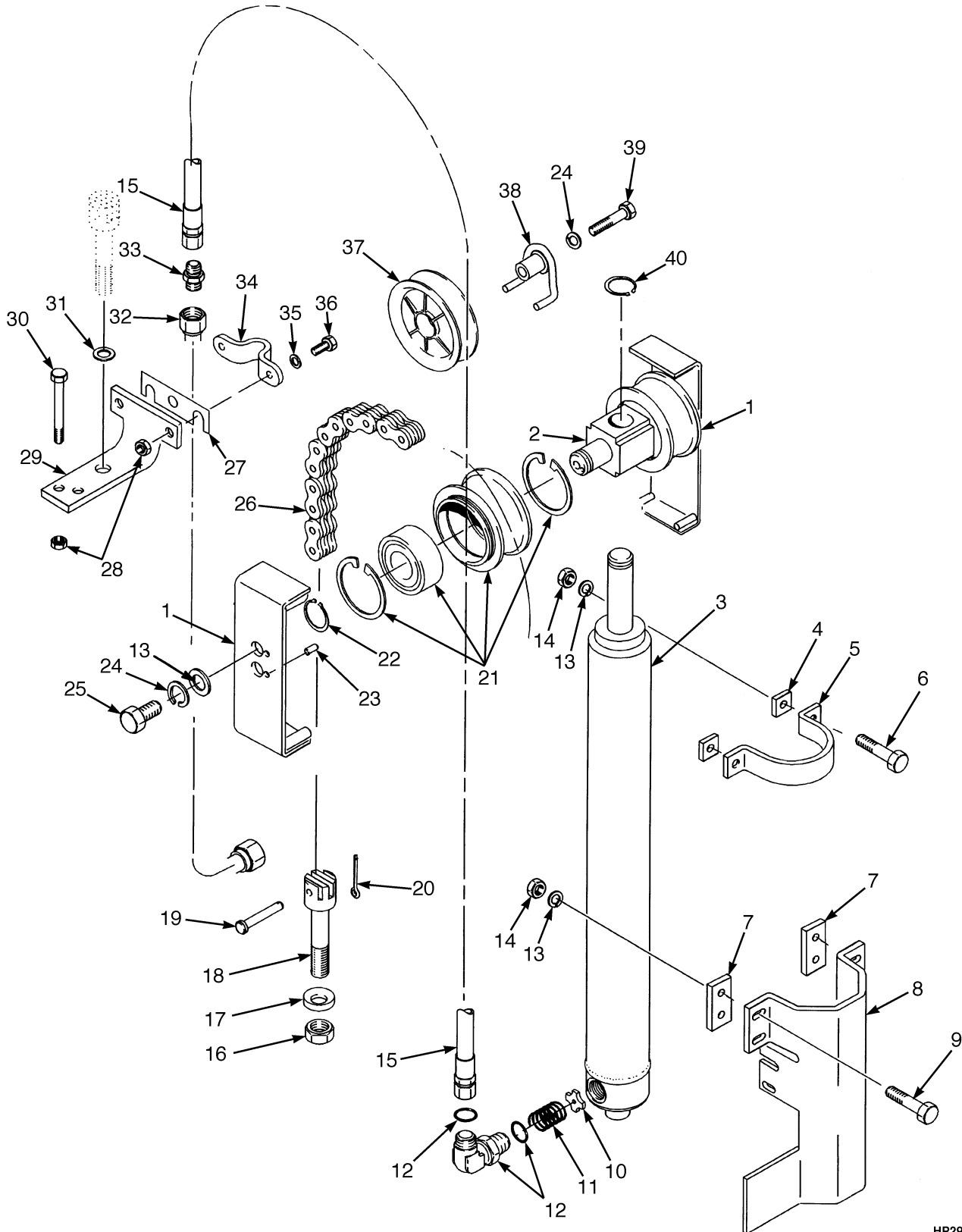
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	b	Cylinder Assy	1	1
1	335012	Back-Up Ring .....	..	1
1	638246	Back-Up Ring	1	..
2	2013075	Rod Seal	1	..
2	334156	Rod Seal .....	..	1
3	1356750	Wear Ring	1	..
3	1356751	Wear Ring .....	..	1
4	1360127	Piston Ring	1	..
4	1356748	Piston Ring .....	..	1
5	257913	Check Valve	1	1
6	190580	O-Ring	1	1
7	297531	Washer	1	1
8	187388	Snap Ring	1	1
9	b	Tube Wldmt-Cylinder	1	1
10	b	Cylinder Rod	1	1
11	b	Spacer	1	1
12	d 322902	Wear Ring	1	1
13	1356749	Rod Seal	1	1
13	1381095	Rod Seal	1	1
14	d 322824	Back-Up Ring	1	1
15	92861	O-Ring	1	..
15	59229	O-Ring .....	..	1
16	c 1355496	Gland	1	..
16	d 2091257	Gland	1	..
16	c 1355713	Gland .....	..	1
16	d 2091259	Gland .....	..	1
17	1319668	Rod Wiper	1	1
	a 322824	Back-Up Ring	1	1

**MAIN LIFT CYLINDERS
THREE STAGE FULL FREE-LIFT****KEY:****A: H2.0-2.5FT****B: H3.0-3.5FT**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a 322902	Wear Ring	1	1
	1355497	Kit-Seal	1	..
	1355714	Kit-Seal .....	..	1

FOOTNOTES:**a** Not Illustrated**c** → 3/2007**b** Refer to Table**d** 3/2007 →

FREE-LIFT (FIGURE 14-6) THREE STAGE FULL FREE-LIFT



HP290015

**FREE-LIFT
THREE STAGE FULL FREE-LIFT
H2.0-2.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4310 mm (169.7 in.)	4910 mm (193.3 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
		Mast Group Number D508 4310	D508 4910	D508 5510	D508 5960
15	Hose Assy	2084650	2084654	2084658	2084661
26	Chain	197345	161029	180057	180137
32	Tube Assy	2075925	2075929	2075933	2075936

H3.0-3.5FT

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		3968 mm (156.2 in.)	4568 mm (179.8 in.)	4868 mm (191.7 in.)	5168 mm (203.5 in.)	5768 mm (227.1 in.)
		Mast Group Number D563 3968	D563 4568	D563 4868	D563 5168	D563 5768
15	Hose Assy	2084543	2084570	2084572	2084574	2084578
26	Chain	1342391	1342116	1342380	1342121	1342384
32	Tube Assy	2075925	2075929	2075931	2075933	2075937

KEY:

A: H2.0-2.5FT

B: H3.0-3.5FT

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1395285	Chain Guard	2	2
2	1378690	Crosshead	1	1
3	.....	Free-Lift Cylinder (☞ Figure 14-7).....	1	1
4	1354902	Spacer .....	..	2
5	1465504	Tie Down	1	1
6	1581827	Capscrew	2	..
6	1581828	Capscrew .....	..	2
7	1354903	Spacer .....	..	2
8	b 1354962	Bracket Wldmt	1	1
8	c 1702706	Bracket	1	1
8	d 4015720	Bracket Wldmt	1	1
9	1581832	Capscrew	4	4
10	356505	Washer (Special)	1	1
11	154355	Spring	1	1
12	1481095	Fitting	1	1
12	16485	O-Ring	1	1
12	16982	O-Ring	1	1
13	1581559	Washer	8	8
14	1581849	Nut	6	6
15	a	Hose Assy	1	1

FREE-LIFT THREE STAGE FULL FREE-LIFT

KEY:

A: H2.0-2.5FT

B: H3.0-3.5FT

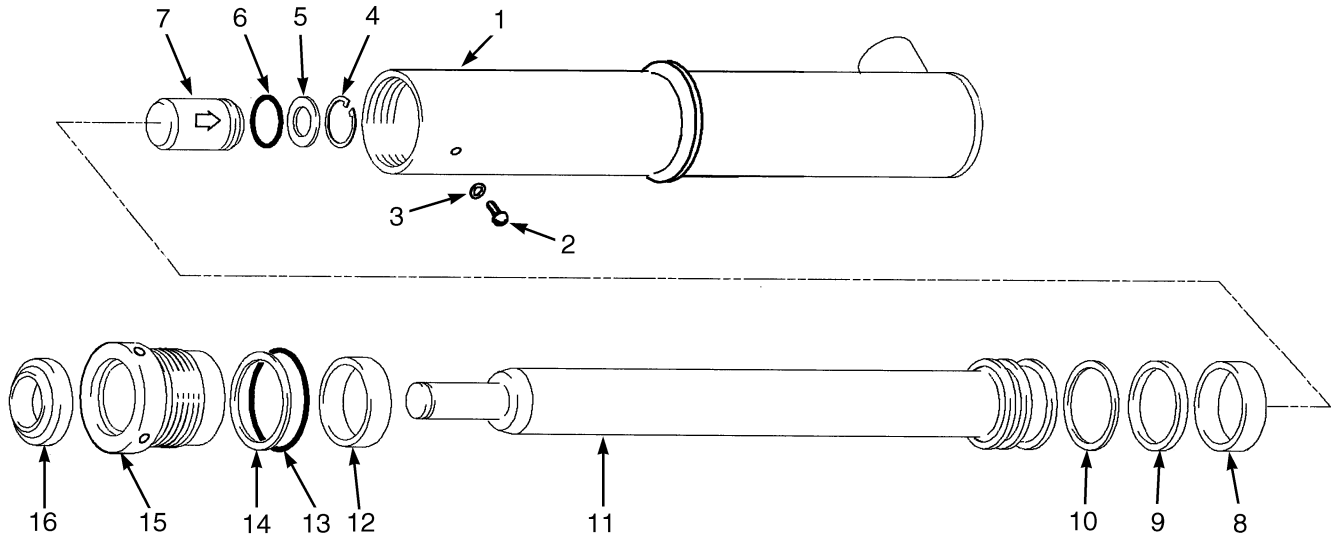
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
16	161003	Nut	2	2
17	297649	Ring	2	2
18	1369357	Chain Anchor	2	..
18	1369356	Chain Anchor .....	..	2
19	1514866	Pin	2	2
20	15211	Cotter Pin	2	2
21	1379682	Chain Sheave Assembly	2	..
21	1379683	Chain Sheave Assembly .....	..	2
21	1378692	Chain Sheave	1	..
21	1378693	Chain Sheave .....	..	1
21	37752	Snap Ring	1	1
21	1378699	Ball Bearing	1	1
22	304526	Snap Ring	2	2
23	302461	Roll Pin	2	2
24	1581564	Lockwasher	3	3
25	1581590	Capscrew	2	2
26	a	Chain	2	2
27	325616	Spacer	AR	AR
27	4022999	Spacer (Alternate Part)	AR	AR
28	1581566	Nut	4	4
28	1581565	Nut (Alternate Part)	6	6
29	1550298	Bracket	1	1
29	4022998	Bracket (Alternate Part)	1	1
30	1581836	Capscrew	2	2
31	1581850	Washer	1	1
32	a	Tube Assy	1	1
33	1522442	Fitting	1	1
33	244167	O-Ring	1	1
33	280154	O-Ring	1	1
34	1345401	Clamp	1	1
34	4022906	Clamp (Alternate Part)	1	1
35	1581556	Washer	2	2
35	1673754	Washer (Alternate Part)	4	4
36	1581581	Capscrew	2	2
36	4022940	Capscrew (Alternate Part)	2	2
37	1343989	Hose Sheave	1	1
37	1354901	Bushing	1	1
38	1360534	Stubshaft	1	1
39	1581829	Capscrew	1	1
40	131358	Snap Ring	1	1

FOOTNOTES:

a Refer to Table
b → S/N L177B28940G

c S/N L177B28941G ↔ 10/2010
d 10/2010 →

**FREE-LIFT CYLINDER (FIGURE 14-7)
THREE STAGE FULL FREE-LIFT**



HP171369

**FREE-LIFT CYLINDER
THREE STAGE FULL FREE-LIFT**

H2.0-2.5FT

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4310 mm (169.7 in.)	4910 mm (193.3 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
	Mast Group Number	D508 4310	D508 4910	D508 5510	D508 5960
	Cylinder Group Number	8514556	8514560	8514565	8514568
	Cylinder Assy	2053795	2053797	2053799	2058126
1	Tube Wldmt- Cylinder	2058210	2058214	2058219	2058222
11	Cylinder Rod	1356560	1356572	1371631	1356596

**FREE-LIFT CYLINDER
THREE STAGE FULL FREE-LIFT
H3.0-3.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		3968 mm (156.2 in.)	4568 mm (179.8 in.)	4868 mm (191.7 in.)	5168 mm (203.5 in.)	5768 mm (227.1 in.)
	Mast Group Number	D563 3968	D563 4568	D563 4868	D563 5168	D563 5768
	Cylinder Group Number	8518707	8518711	8518714	8518716	8518721
	Cylinder Assy	2058324	2058328	2058331	2058333	2058338
1	Tube Wldmt- Cylinder	2058251	2063691	2064046	2064754	2064753
11	Cylinder Rod	1356682	1356694	1356068	1356074	1356089

KEY:

A: H2.0-2.5FT

B: H3.0-3.5FT

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a	Cylinder Assy	1	1
1	a	Tube Wldmt-Cylinder	1	1
2	1361302	Screw	1	1
3	190887	Sealing Ring	1	1
4	187388	Snap Ring	1	1
5	297531	Washer	1	1
6	39348	O-Ring	1	..
6	190580	O-Ring .....	..	1
7	257913	Check Valve	1	1
7	297538	Check Valve (Alternate Part)	1	1
8	1358972	Wear Ring	1	..
8	636941	Wear Ring .....	..	1
9	2013088	Rod Seal	1	..
9	309062	Rod Seal .....	..	1
10	2013089	Back-Up Ring	1	..
10	637565	Back-Up Ring .....	..	1
11	a	Cylinder Rod	1	1
12	1358970	Rod Seal	1	1
12	1622946	Rod Seal (Alternate Part)	1	1
13	90263	O-Ring	1	..
13	15880	O-Ring .....	..	1
14	147973	Back-Up Ring	1	..
14	164840	Back-Up Ring .....	..	1
15	1356292	Gland	1	..
15	1356661	Gland .....	..	1
16	2013099	Rod Wiper	1	1
16	1463105	Rod Wiper (Alternate Part)	1	1
	1358969	Kit-Seal	1	..

**FREE-LIFT CYLINDER
THREE STAGE FULL FREE-LIFT**

KEY:

A: H2.0-2.5FT

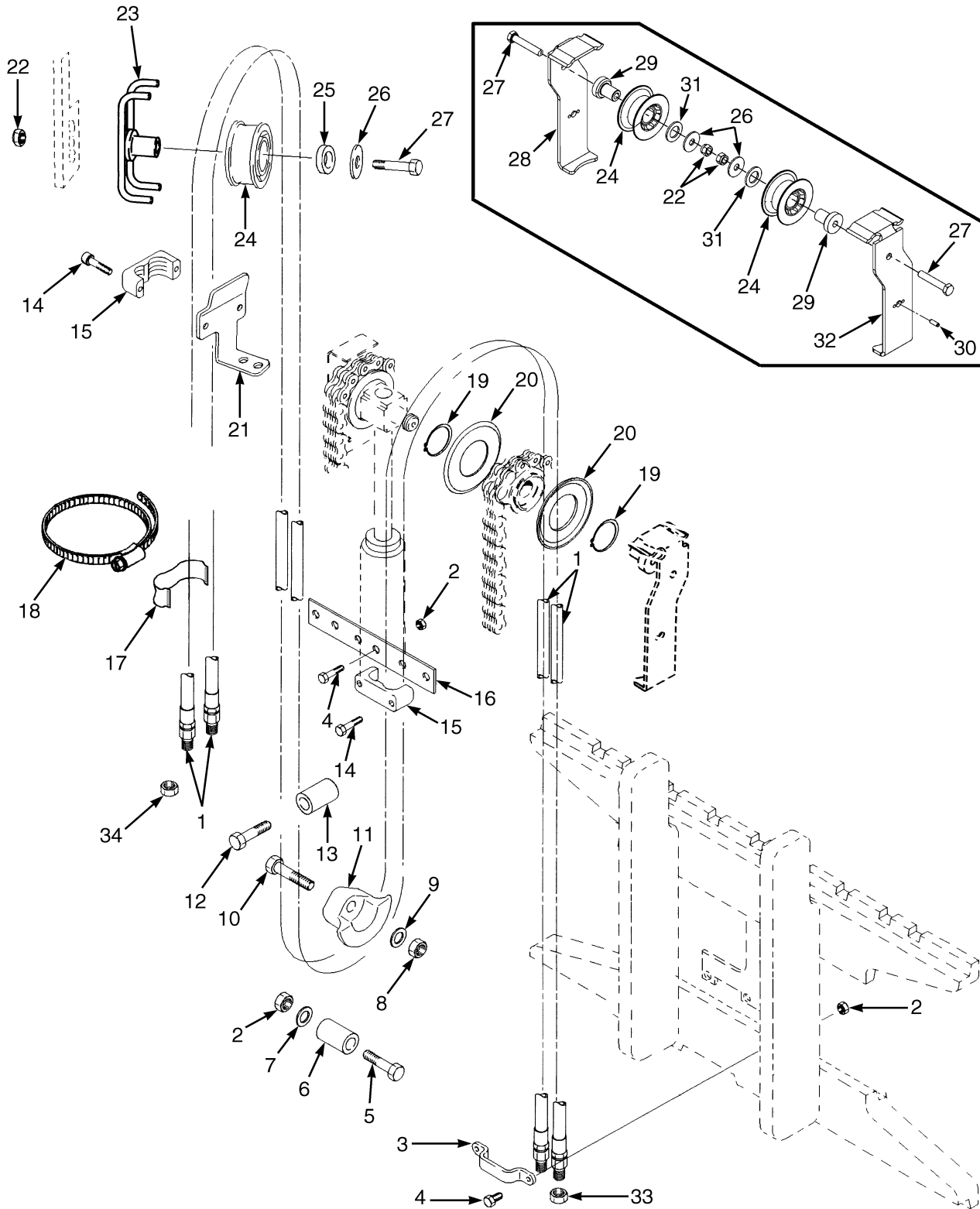
B: H3.0-3.5FT

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1356662	Kit-Seal .....	..	1

FOOTNOTES:

a Refer to Table

HEADER HOSES (FIGURE 14-8) THREE STAGE FULL FREE-LIFT (→ 10/2010)



HP020342

HEADER HOSES
THREE STAGE FULL FREE-LIFT (→ 10/2010)
H2.0-2.5FT

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4310 mm (169.7 in.)	4910 mm (193.3 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
		Mast Group Number	D508 4310	D508 4910	D508 5510	D508 5960
1	Hose Assy	2065121	2065125	2065164	2065167

H3.0-3.5FT

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		3968 mm (156.2 in.)	4568 mm (179.8 in.)	4868 mm (191.7 in.)	5168 mm (203.5 in.)	5768 mm (227.1 in.)
		Mast Group Number	D563 3968	D563 4568	D563 4868	D563 5168	D563 5768
1	Hose Assy	2065121	2065125	2065162	2065164	2065168

KEY:

- A:** Three Function
- B:** Four Function

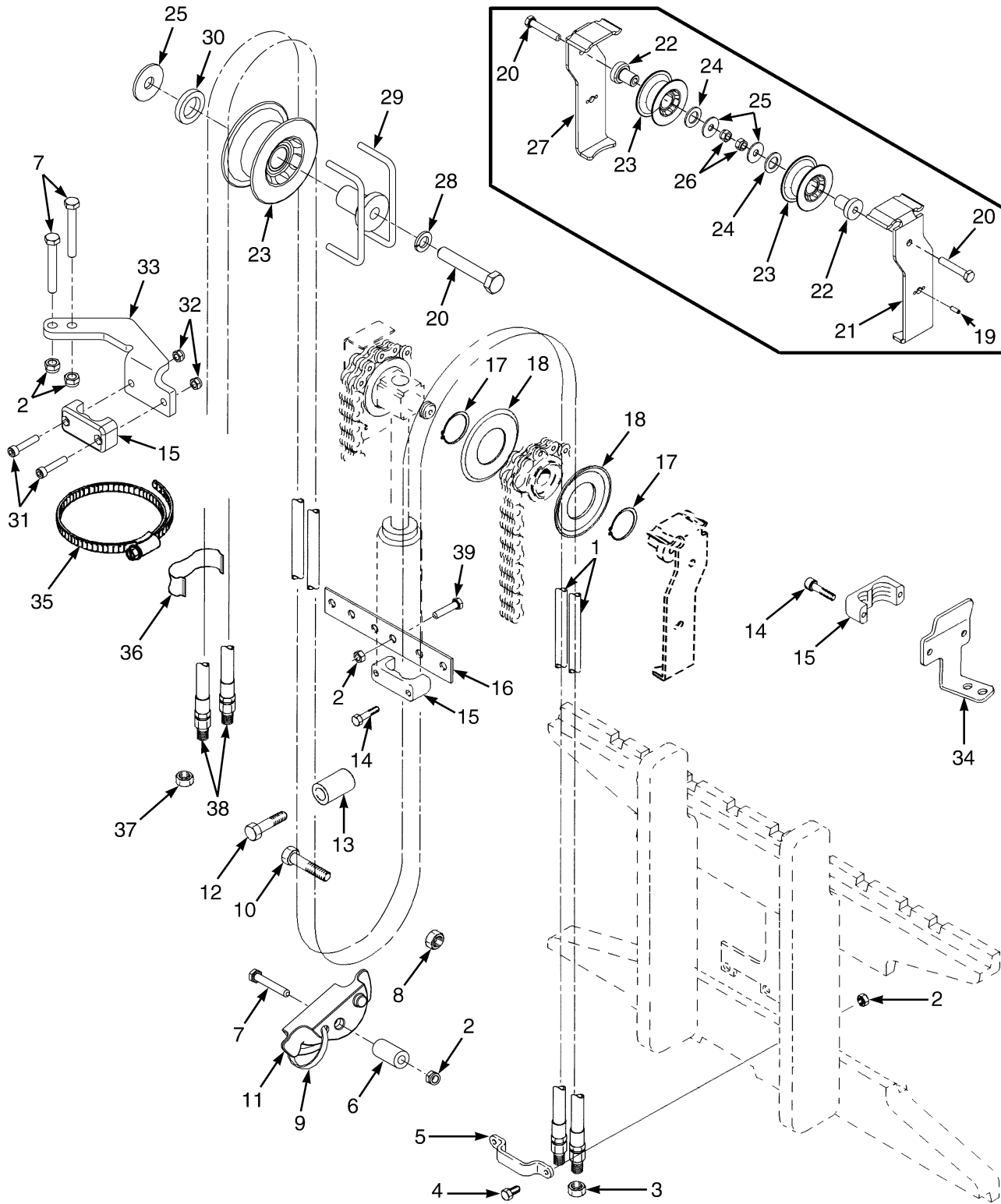
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	a	Hose Assy	2	4
2	1581566	Nut	5	10
3	1643405	Hose Clamp	1	2
4	1581581	Capscrew	4	10
5	1581835	Capscrew	1	2
6	1354961	Spacer	1	2
7	1581851	Washer	1	2
8	1581567	Nut	1	2
9	1581558	Washer	1	2
10	1581588	Capscrew	1	2
11	1348246	Hose Guide (RH)	1	1
11	1348247	Hose Guide (LH) .....	..	1
12	1581831	Capscrew	1	2
13	1360538	Tube Assy	1	2
14	1581842	Capscrew	4	8
15	1360386	Clamp	2	4
16	1353464	Plate	1	1
17	1477996	Hose Clamp	1	2
18	1617657	Clamp	1	2
19	1345204	Snap Ring (Spiral Retaining Ring)	2	4
20	1345199	Hose Guide	2	4
21	1354906	Bracket (RH)	1	1
21	1354907	Bracket (LH) .....	..	1
22	1390182	Nut	2	4
23	1362387	Stubshaft	1	2
24	1494017	Hose Sheave	2	4

HEADER HOSES
THREE STAGE FULL FREE-LIFT (→ 10/2010)**KEY:****A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
25	1360549	Spacer	1	2
26	1345190	Washer	2	4
27	1581830	Capscrew	2	4
28	1395291	Bracket (RH Hose Guard)	1	1
29	1396406	Stubshaft	1	2
30	302461	Roll Pin	1	2
31	1581560	Washer	1	2
32	1395292	Bracket (LH Hose Guard) .....	..	1
33	1529015	Cap	2	4
34	1566564	Cap	1	2

FOOTNOTES:**a** Refer to Table

HEADER HOSES (FIGURE 14-9) THREE STAGE FULL FREE-LIFT (10/2010 →)



BP170517

HEADER HOSES
THREE STAGE FULL FREE-LIFT (10/2010 →)

D508

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4310 mm (169.7 in.)	4910 mm (193.3 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)
		Mast Group Number D508 4310	D508 4910	D508 5510	D508 5960
1	Hose Assy	4608521	4608525	4608529	4608532
38	Hose Assy	4608556	4608560	4608564	4608567

D563

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		3968 mm (156.2 in.)	4568 mm (179.8 in.)	4868 mm (191.7 in.)	5168 mm (203.5 in.)	5768 mm (227.1 in.)
		Mast Group Number D563 3968	D563 4568	D563 4868	D563 5168	D563 5768
1	Hose Assy	4608521	4608525	4608527	4608529	4608533
38	Hose Assy	4608556	4608560	4608562	4608564	4608568

KEY:

- A: Three Function**
- B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	b	Hose Assy	2	4
2	c 1581566	Nut	5	10
2	d 1581566	Nut	3	6
3	1529015	Cap	2	4
4	c 1581581	Capscrew	4	6
4	d 1597448	Capscrew	2	4
5	c 1643405	Hose Clamp	1	2
5	d 4008020	Clamp	1	2
6	4021618	Spacer	1	2
7	1581836	Capscrew .....	..	3
8	1581567	Nut	1	2
9	397676	Strap Clamp .....	..	1
10	1658075	Capscrew	1	2
11	4609464 4613901	Casting Header Hose Turnaround Guide (RH)	1	1
11	4609465	Casting -Header Hose Turnaround Guide (LH) .....	..	1
12	1581831	Capscrew	1	2
13	1360538	Tube Assy	1	2
14	1581842	Capscrew	4	6
15	1360386	Clamp	2	4
16	1353464	Plate	1	1
17	1345204	Snap Ring (Spiral Retaining Ring)	2	4
18	1345199	Hose Guide	2	4

HEADER HOSES THREE STAGE FULL FREE-LIFT (10/2010 →)

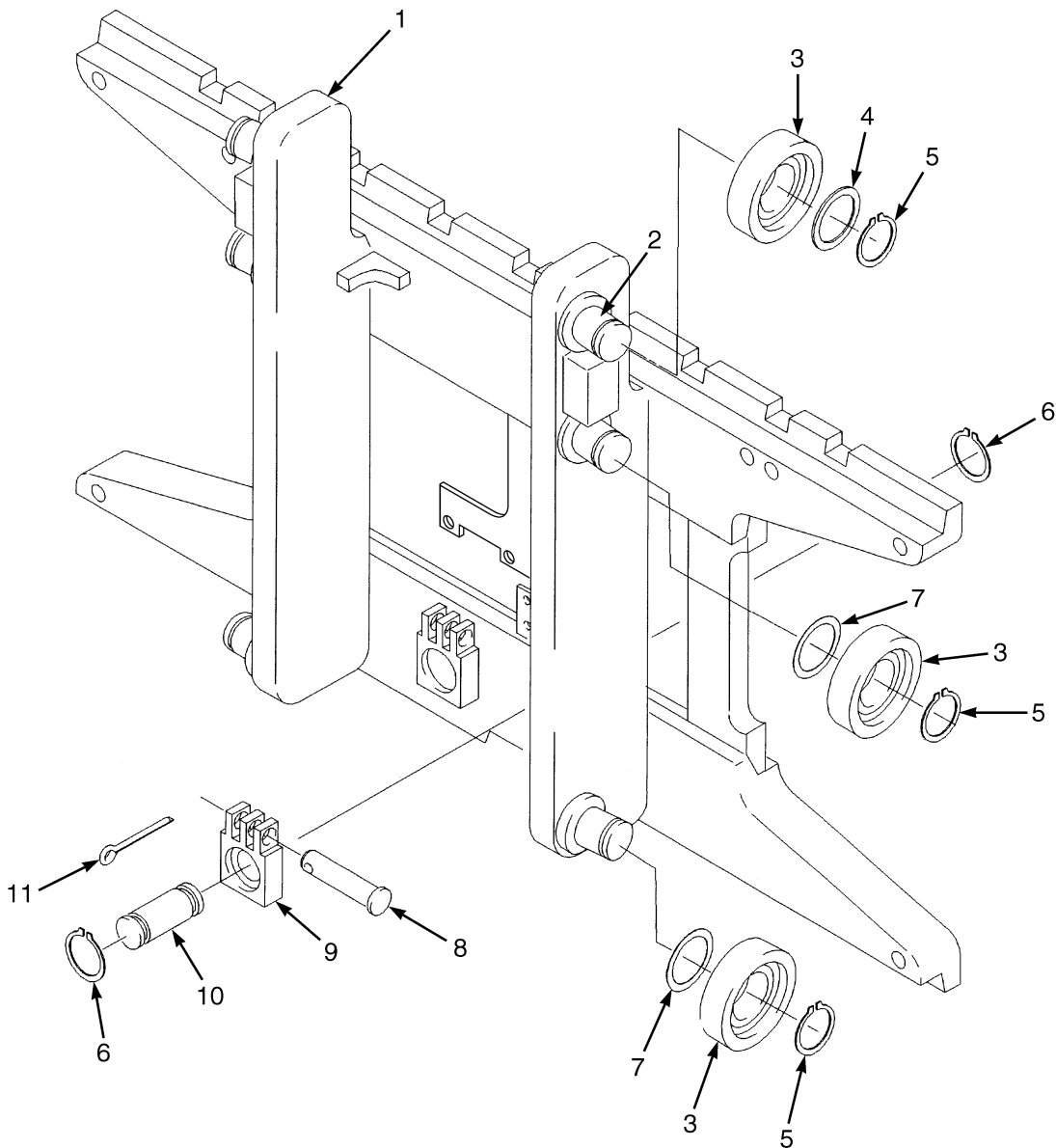
KEY:
A: Three Function
B: Four Function

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
19	302461	Roll Pin	1	2
20	1581830	Capscrew	2	4
21	1395292	Bracket (LH Hose Guard) .....	..	1
22	1396406	Stubshaft	1	2
23	1494017	Hose Sheave	2	4
24	1581560	Washer	1	2
25	1345190	Washer	2	4
26	1390182	Nut	2	3
27	1395291	Bracket (RH Hose Guard)	1	1
28	1581564	Lockwasher .....	..	1
29	1362387	Stubshaft	1	1
29	1360548	Stubshaft .....	..	1
30	1360549	Spacer	1	2
31	1581742	Capscrew .....	..	2
32	1581565	Nut .....	..	2
33	1354921	Bracket .....	..	1
34	1354906	Bracket	1	1
35	1617657	Clamp	1	2
36	1477996	Hose Clamp	1	2
37	1566564	Cap	1	2
38	b	Hose Assy .....	..	2
39	d 1581581	Capscrew	2	2
	ac 4019607			
	4034686	Bracket	1	1
	a 1581580	Capscrew	1	1

FOOTNOTES:

- | | |
|--------------------------|-------------------------------------|
| a Not Illustrated | c → PENDING PER ECN 10610809 |
| b Refer to Table | d PENDING PER ECN 10610809 → |

CARRIAGE (FIGURE 14-10) THREE STAGE FULL FREE-LIFT



HP290016

**CARRIAGE
THREE STAGE FULL FREE-LIFT****KEY:****A: H2.0-2.5FT****B: H3.0-3.5FT**

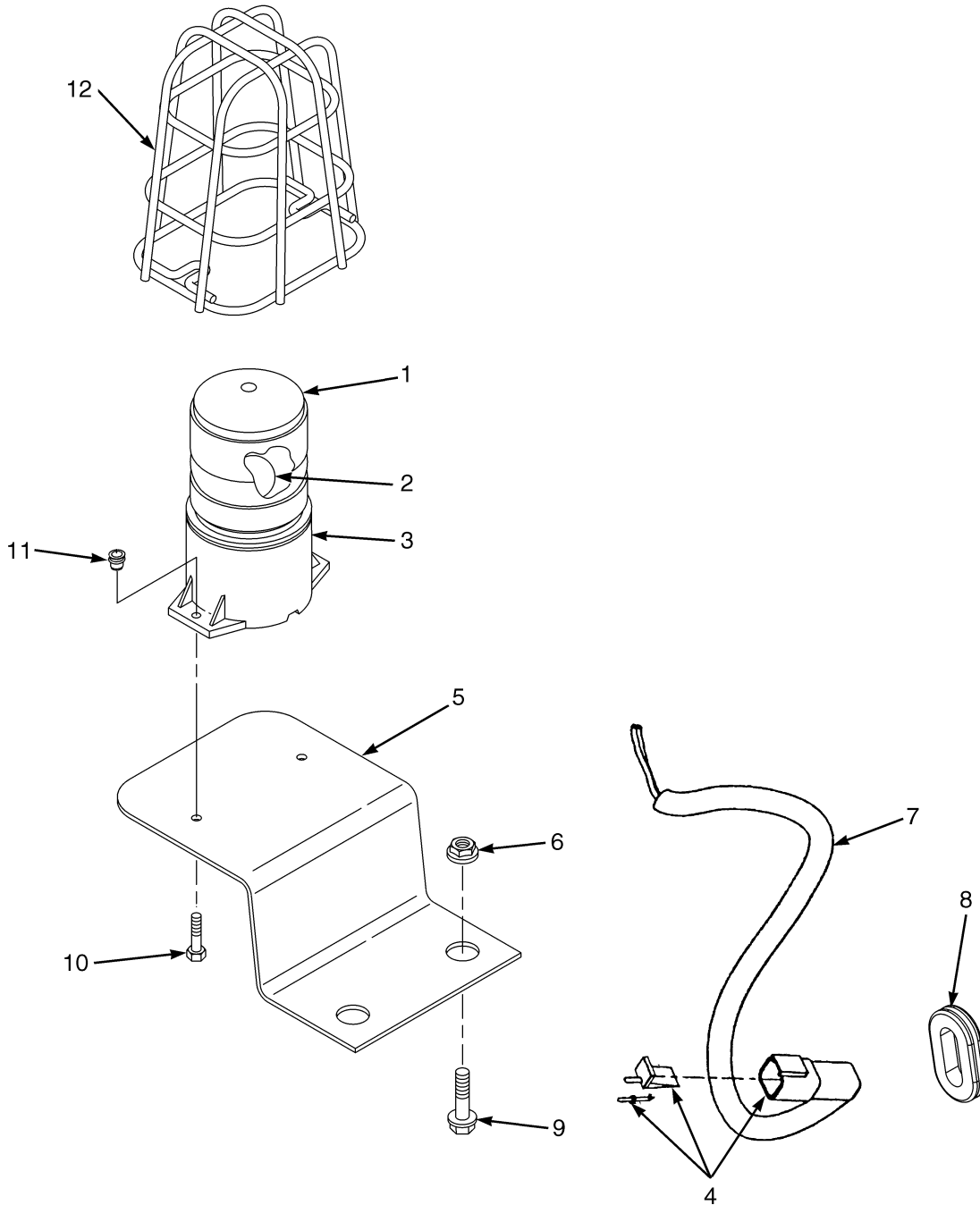
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1379459	Carriage (1067 mm)	1	1
	1477680	Carriage (1067 mm) .....	..	1
1	1381560	Carriage Wldmt (1067 mm)	1	..
1	1477931	Carriage Wldmt (1067 mm) .....	..	1
2	1345216	Stubshaft	6	6
3	1333399	Load Roller ("B") (92.18 mm/91.92 mm)	6	6
3	1393142	Load Roller ("B") (82.18 mm) (Optional)	6	6
3	1395174	Load Roller ("A") (81.80 mm) (Optional)	6	6
3	1395176	Load Roller ("A") (82.00 mm) (Optional)	6	6
4	366115	Spacer	2	2
5	58901	Snap Ring	6	6
5	a 1374797	Snap Ring (Optional)	6	6
6	131358	Snap Ring	4	4
7	129387	Shim (0.508 mm)	AR	AR
8	1514866	Pin (Chain Anchor)	2	2
9	1369345	Chain Anchor (Dual Hole)	2	..
9	1504010	Chain Anchor (Single Hole) (Optional)	2	..
9	1369344	Chain Anchor (Dual Hole) .....	..	2
9	1504012	Chain Anchor (Single Hole) (Optional) .....	..	2
10	317735	Pin	2	2
11	15211	Cotter Pin	2	2

FOOTNOTES:**a** Not Illustrated

**SECTION 15
OPTIONS**

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STROBE LIGHT (FIGURE 15-1) (→ S/N L177B18988E)

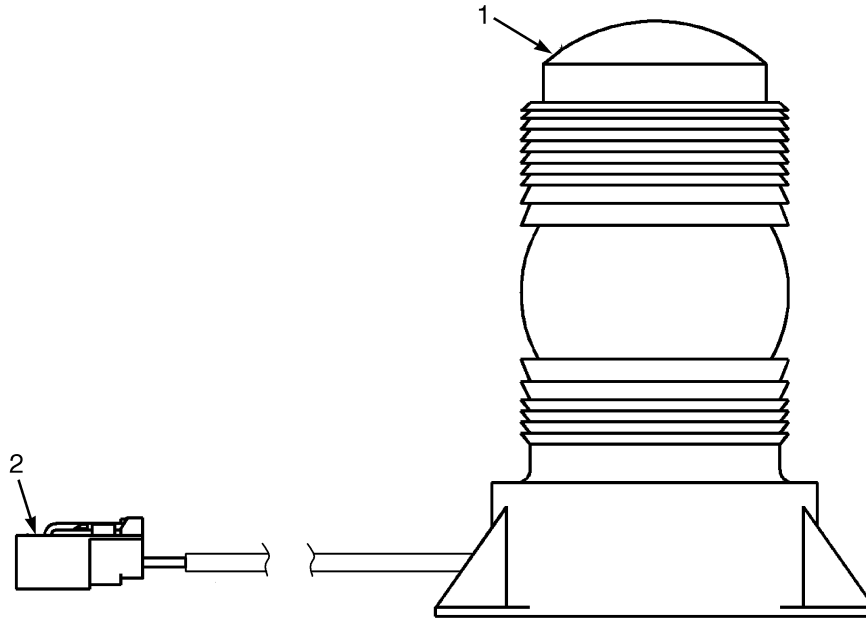


BP000283

STROBE LIGHT
(→ S/N L177B18988E)

ITEM	PART NO.	DESCRIPTION	QTY
1	1581670	Strobe Light	1
1	1382130	Strobe Light	1
2	1673704	Lamp	1
3	1673755	Lens	1
4	1463138	Terminal Pin	2
4	1561755	Connector (Secondary Lock)	1
4	1561559	Connector	2
5	1565076	Bracket Wldmt	1
6	1586428	Nut	2
7	2073760	Wire Harness (Lights)	1
8	1539584	Grommet	1
9	1586759	Capscrew	2
10	1586495	Capscrew	2
11	1531001	Insert	2
12	1302024	Guard	1

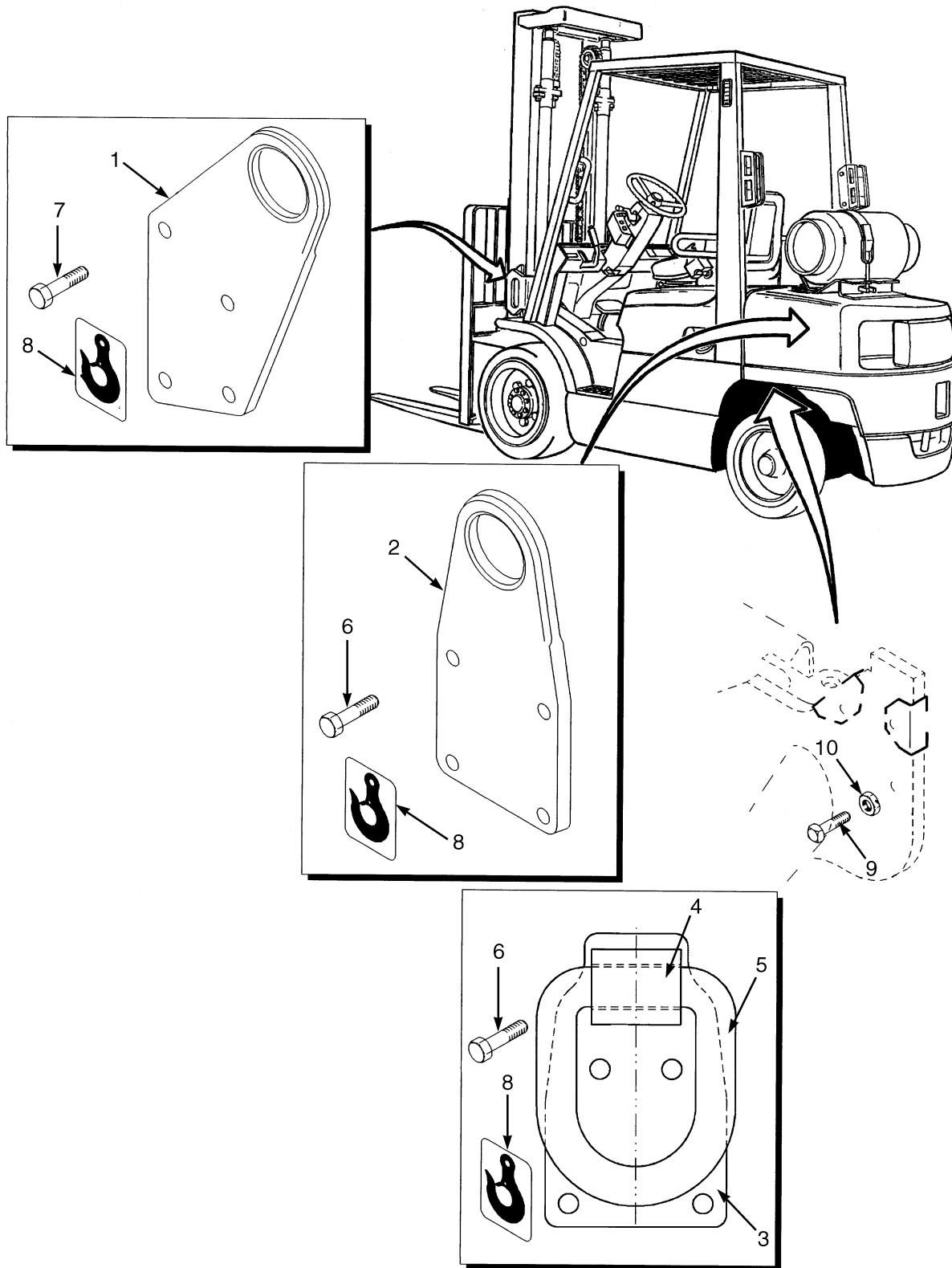
STROBE LIGHT (FIGURE 15-2) LED (S/N L177B18989E →)



BP000363

ITEM	PART NO.	DESCRIPTION	QTY
	1654013	Strobe Light Assembly	1
1	1652290	Strobe Light (LED)	1
2	1463138	Terminal Pin	2
2	1561559	Connector	1
2	1561755	Connector (Secondary Lock)	1

LIFTING EYE (FIGURE 15-3)



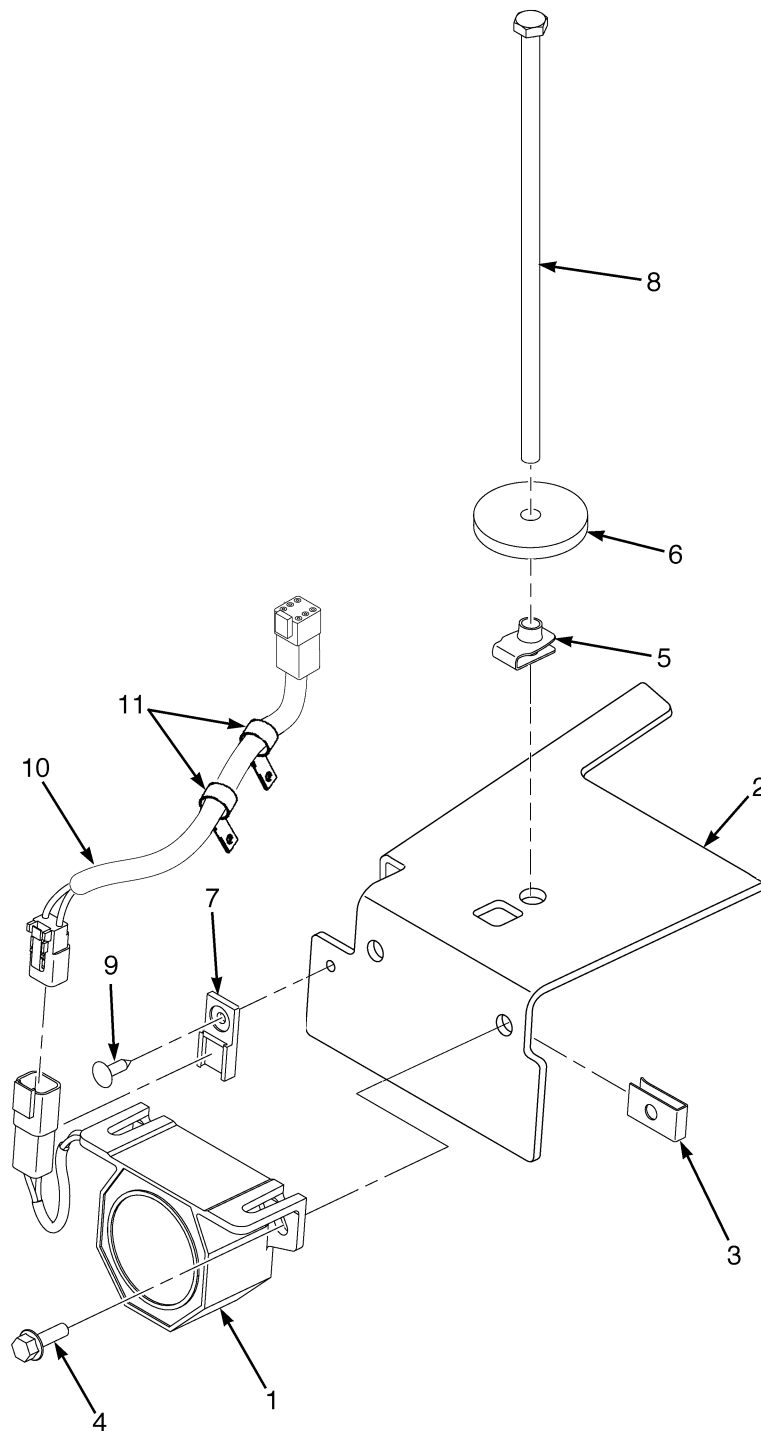
HP000898

LIFTING EYE

ITEM	PART NO.	DESCRIPTION	QTY
	1602394	Kit-Lifting Eye (LPG)	1
	1602395	Kit-Lifting Eye (Diesel or Gasoline Fuel)	1
1	1356400	Lifting Eye (Front)	2
2	a 1356401	Lifting Eye (Rear)	2
3	b 1566849	Lifting Eye Assembly (Rear)	2
4	1329850	Clip	1
5	1329851	Ring	1
6	1566853	Capscrew	8
7	1586790	Capscrew	8
8	316448	Label (Lifting Eye)	4
9	302323	Screw	2
10	296130	Nut	2

FOOTNOTES:**a** Diesel Only**b** LPG Only

BACK-UP ALARM (FIGURE 15-4)



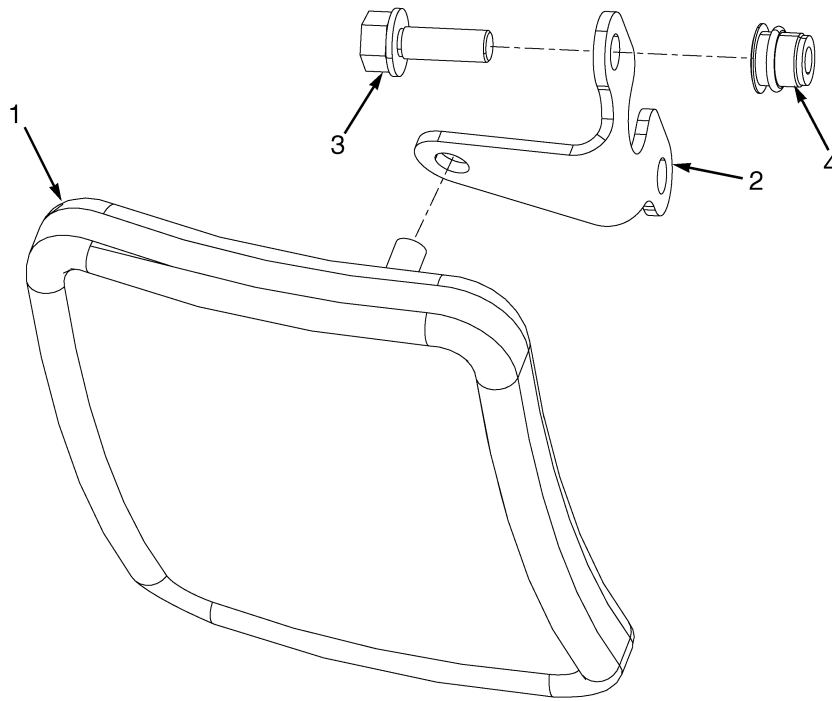
HP000897

BACK-UP ALARM

ITEM	PART NO.	DESCRIPTION	QTY
1	2064929	Back-Up Alarm (82-102 dbA)	1
2	1589195	Bracket	1
3	1350215	Nut	2
4	1527877	Capscrew	2
5	1480237	Nut	1
6	1547756	Washer	1
7	1500912	Clip	1
8	1543982	Capscrew	1
9	1582464	Fastener	1
10	b 2078883	Wire Harness (Back-Up Alarm) (To RH Chassis) (2-Pin Connector)	1
10	1402923	Connector	1
10	1330417	Connector	1
10	1490242	Connector	1
10	1490243	Connector	1
10	1330437	Terminal (Pin)	2
10	1330438	Terminal (Socket)	2
10	1330439	Plug	4
10	a 2070771	Wire Harness (Back-Up Alarm) (To RH Chassis) (6-Pin Connector)	1
10	1493465	Connector	1
10	1330414	Connector (Secondary Lock)	1
10	1490242	Connector	1
10	1490243	Connector	1
10	1330437	Terminal (Pin)	2
10	1330438	Terminal (Socket)	2
11	1509888	Clip	2

FOOTNOTES:**a** → 6/2006**b** 6/2006 →

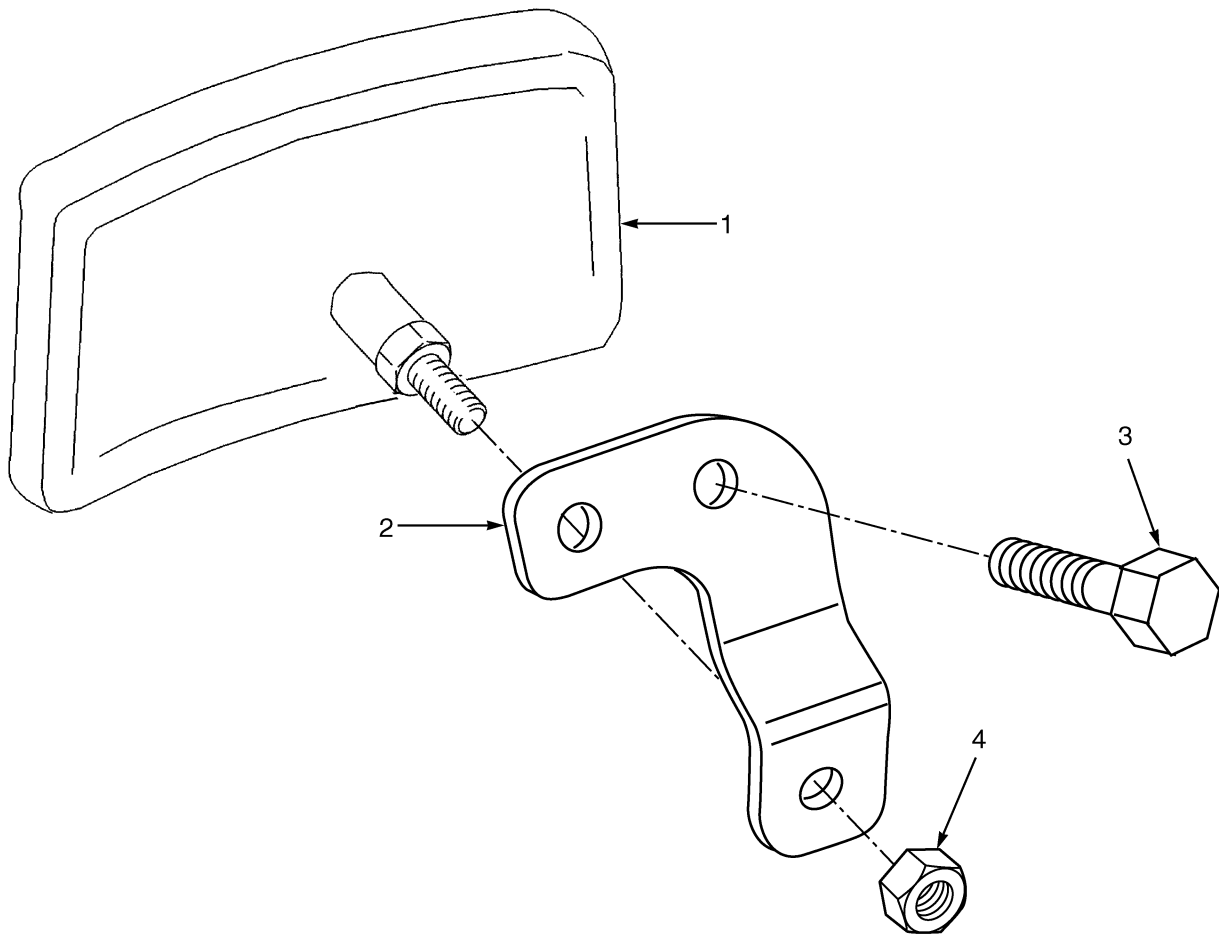
MIRRORS (FIGURE 15-5) WITH CAB



HP000896

ITEM	PART NO.	DESCRIPTION	QTY
1	4009488	Mirror	2
2	1579412	Bracket	2
3	1583611	Capscrew	4
4	1531557	Insert	4

MIRRORS (FIGURE 15-6) WITH OVERHEAD GUARD

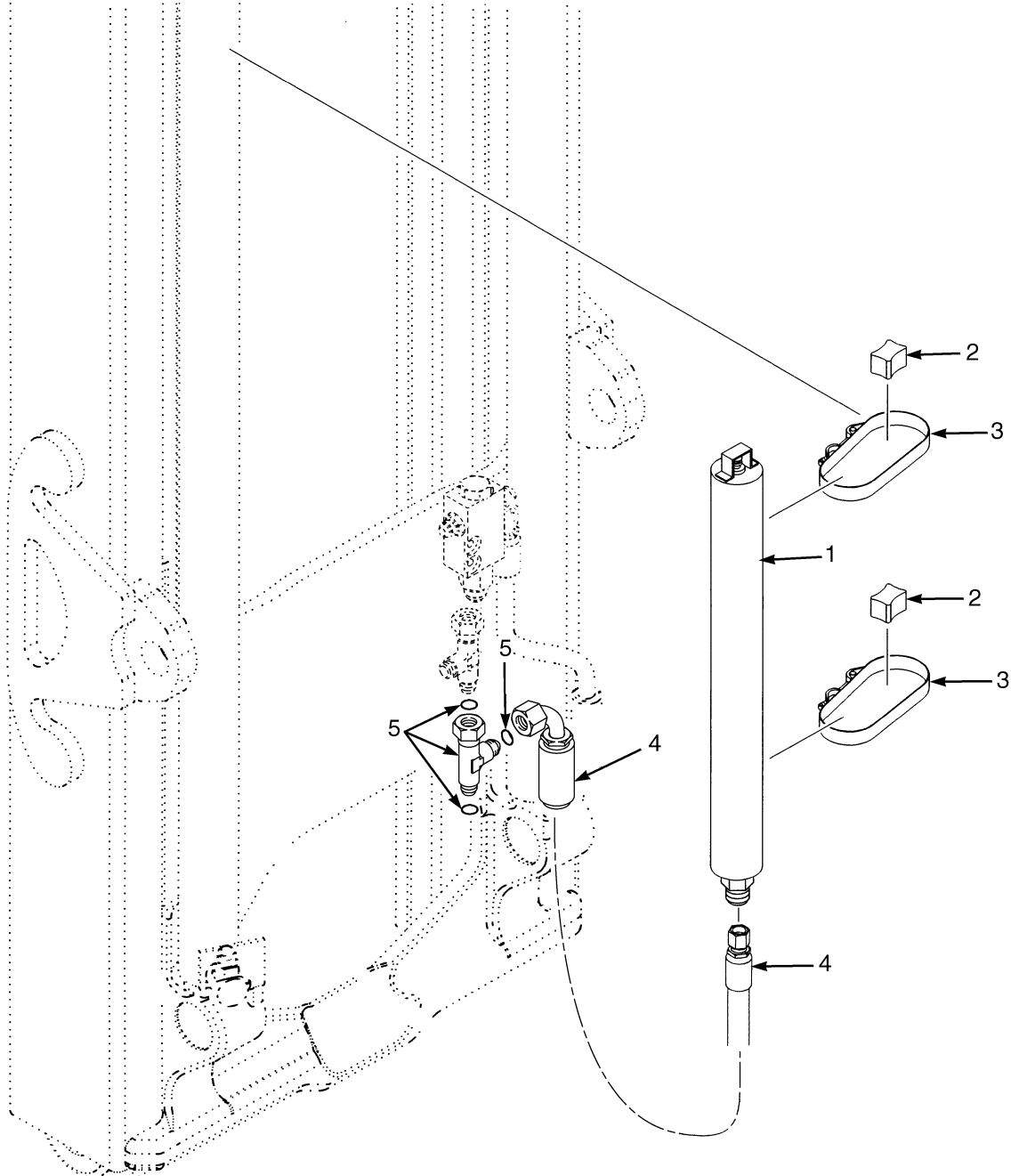


HP000895

**MIRRORS
WITH OVERHEAD GUARD**

ITEM	PART NO.	DESCRIPTION	QTY
1	4009488	Mirror	2
2	1656215	Bracket (RH)	1
2	1656216	Bracket (LH)	1
3	1583611	Capscrew	4
4	1586430	Nut	4

ACCUMULATOR AND ATTACHING PARTS (FIGURE 15-7)

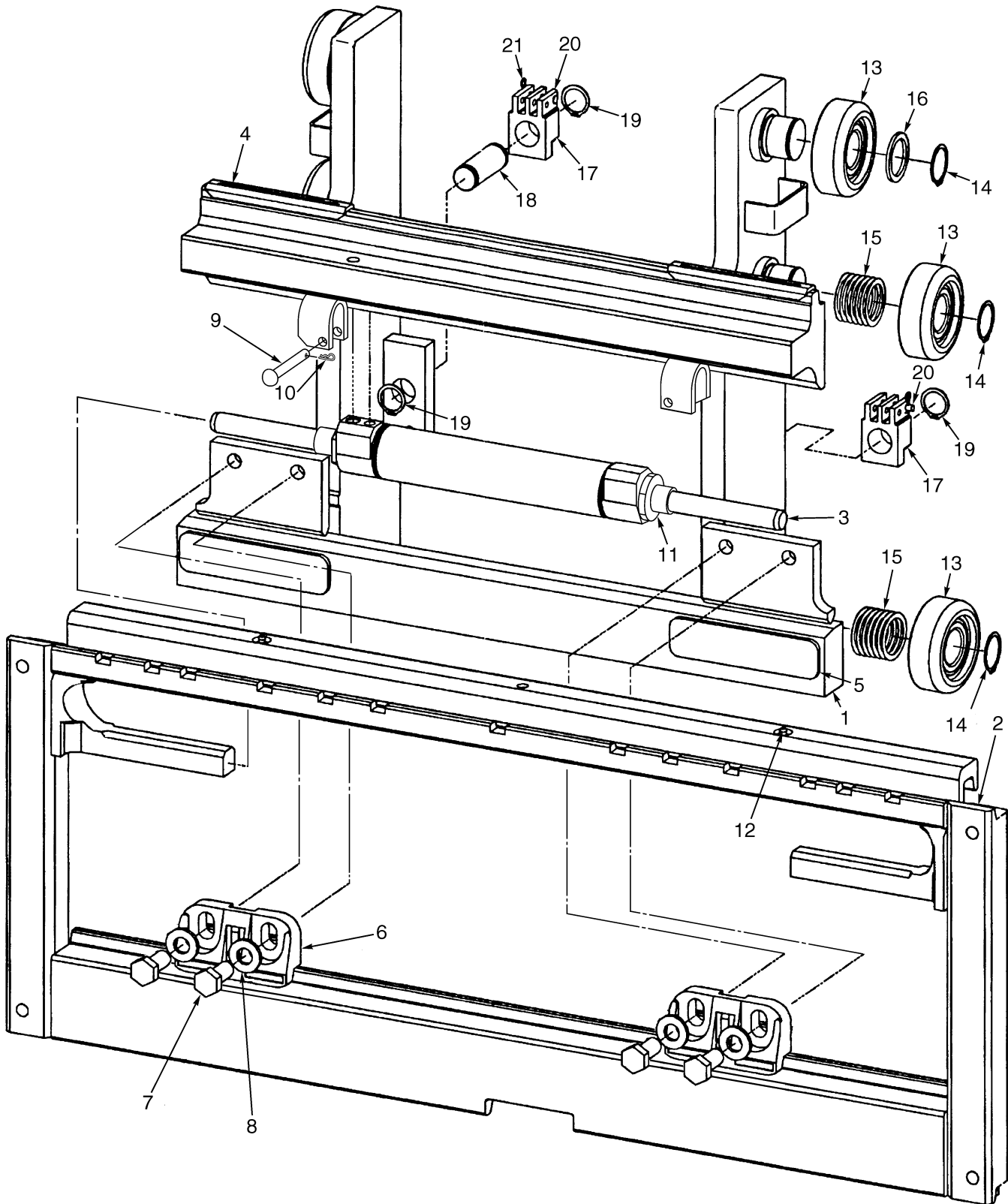


HP000908

ACCUMULATOR AND ATTACHING PARTS

ITEM	PART NO.	DESCRIPTION	QTY
1	1629185	Accumulator	1
1	1695807	Accumulator (Alternate Part)	1
2	1609864	Spacer	2
3	4031653	Strap Clamp	2
4	2073766	Hose Assy	1
5	1487096	Fitting	1
5	252729	O-Ring	3

INTEGRAL SIDE-SHIFT ASSEMBLY (FIGURE 15-8) TWO STAGE LIMITED FREE-LIFT



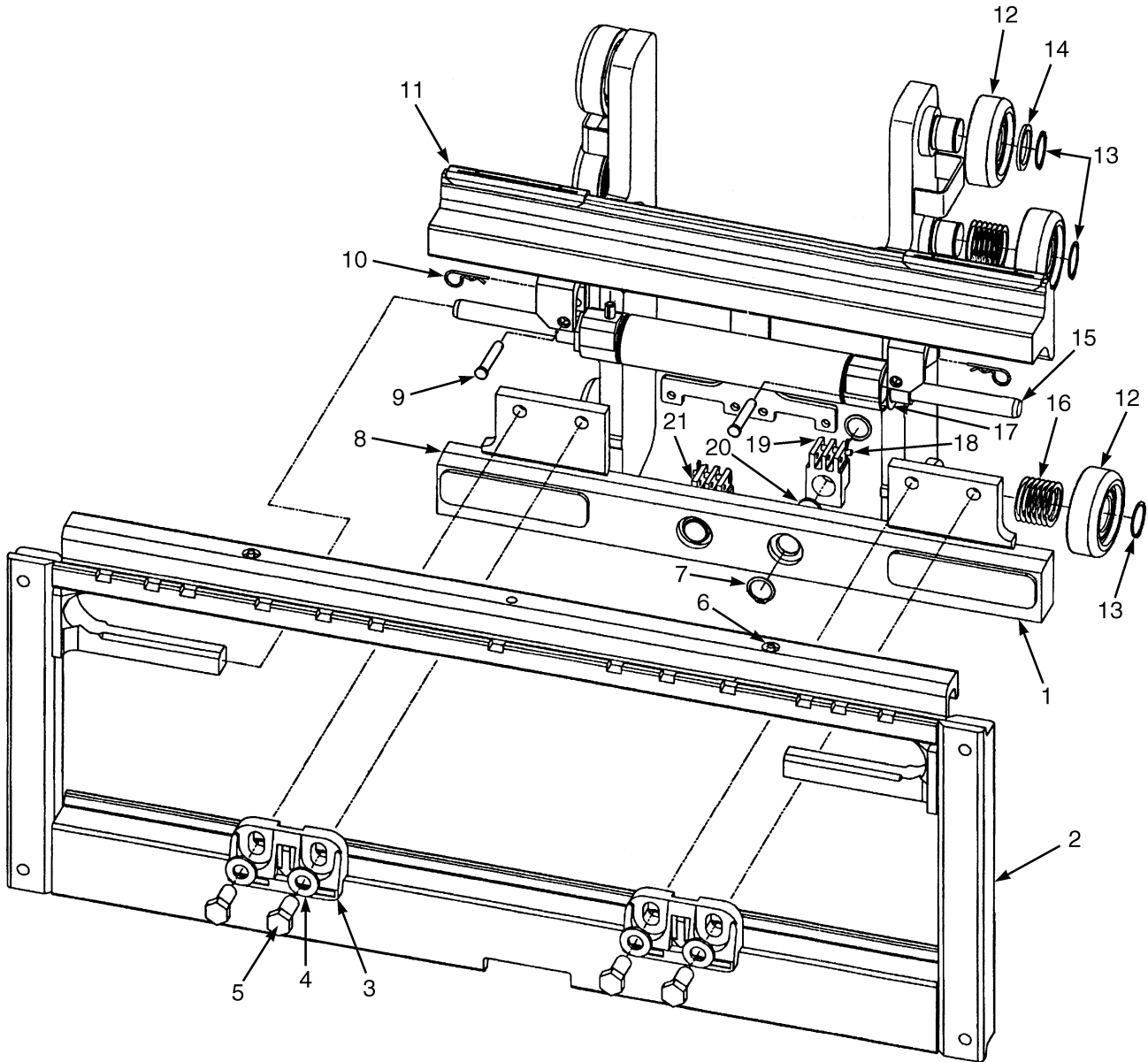
HP020343

**INTEGRAL SIDE-SHIFT ASSEMBLY
TWO STAGE LIMITED FREE-LIFT****KEY:****A: H2.0-2.5FT D507****B: H3.0-3.5FT D562**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1486182	Side-Shift Carriage (1067 mm)	1	..
	1486185	Side-Shift Carriage (1219 mm)	1	..
	1477981	Side-Shift Carriage (1067 mm) .....	..	1
	1477982	Side-Shift Carriage (1219 mm) .....	..	1
1	1489002	Carriage Wldmt (Inner) (1067 mm, 1219 mm)	1	..
1	1477849	Frame (Inner) .....	..	1
2	1489011	Carriage Wldmt (Outer) (1067 mm)	1	..
2	1489012	Frame (Outer) (1219 mm)	1	..
2	1488975	Carriage Wldmt (Outer) (1067 mm) .....	..	1
2	1488976	Carriage Wldmt (Outer) (1219 mm) .....	..	1
3	2043528	Sideshift Cylinder Assembly (☞Figure 15-13).....	1	..
3	2043529	Sideshift Cylinder Assembly (☞Figure 15-13).....	..	1
4	2043531	Bearing (Upper)	2	..
4	2043532	Bearing (Upper) .....	..	2
5	2043533	Bearing (Lower)	2	..
5	2043534	Bearing (Lower) .....	..	2
6	4611363	Hook	2	2
7	226458	Capscrew	4	4
8	296426	Washer	4	4
9	1401746	Pin	2	2
10	18832	Cotter Pin	2	2
11	1498326	Shim	3	3
12	16041	Grease Fitting	2	2
13	1345219	Load Roller ("B") (111.48/111.22)	6	6
14	12891	Snap Ring	6	6
14	a 386422	Snap Ring (Optional)	6	6
15	1345263	Shim (0.508 mm)	28	28
16	366116	Spacer	2	2
17	1369344	Chain Anchor (Dual Hole) .....	..	2
17	1504012	Chain Anchor (Single Hole) (Optional) .....	..	2
17	1369345	Chain Anchor (Dual Hole)	2	..
17	1504010	Chain Anchor (Single Hole) (Optional)	2	..
18	1353408	Pin	2	2
18	317735	Pin (48 in.)	2	..
19	131358	Snap Ring	4	4
20	1514866	Pin	2	2
21	15211	Cotter Pin	2	2
	a 4611880	Carriage (Fork Positioner) (☞Figure 15-14).....	1	..
	a 4611882	Carriage (Fork Positioner) (☞Figure 15-14).....	..	1

FOOTNOTES:**a** Not Illustrated

INTEGRAL SIDE-SHIFT ASSEMBLY (FIGURE 15-9) THREE STAGE FULL FREE-LIFT



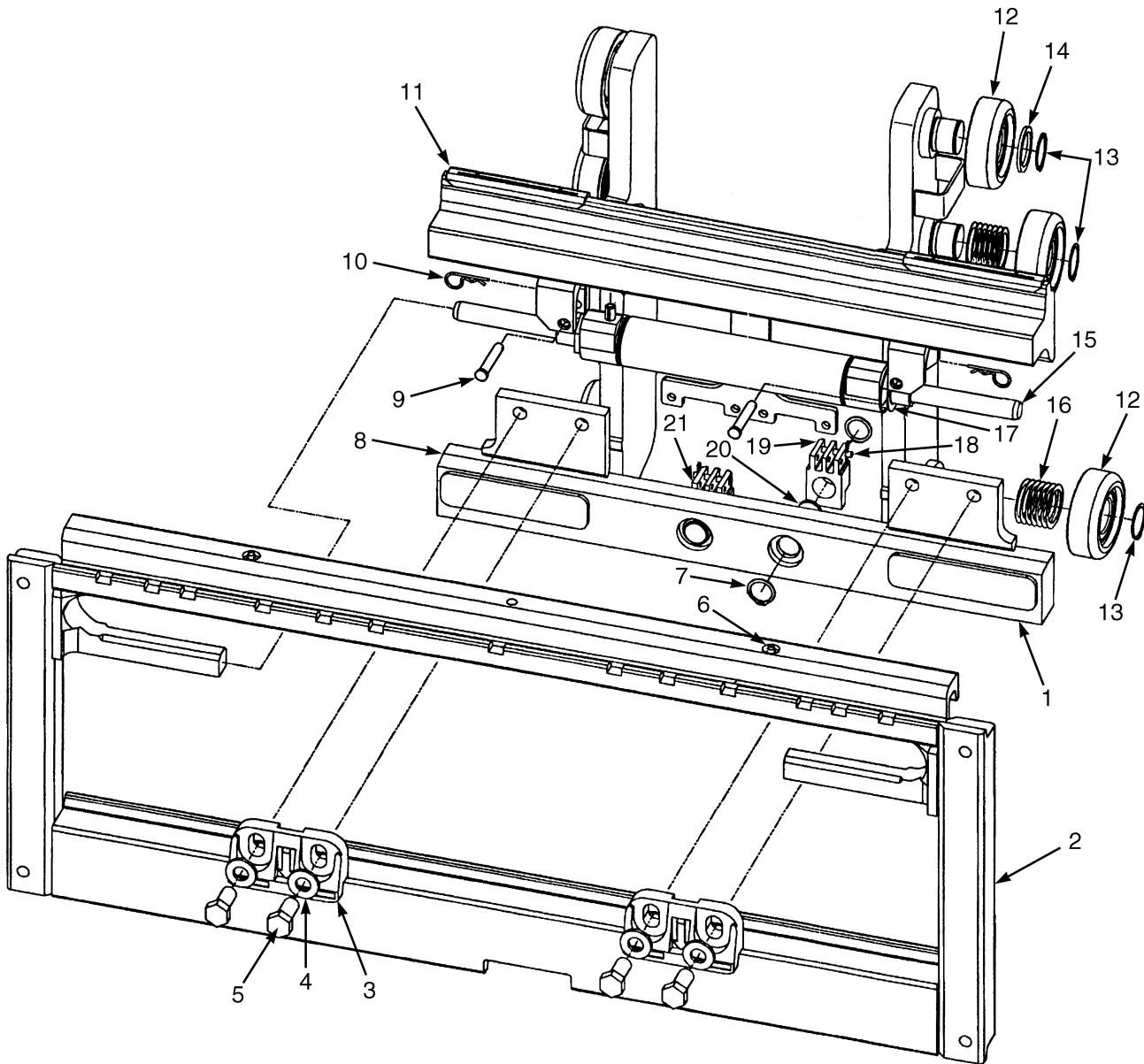
HP020344

**INTEGRAL SIDE-SHIFT ASSEMBLY
THREE STAGE FULL FREE-LIFT****KEY:****A: H2.0-2.5FT D508****B: H3.0-3.5FT D563**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1486184	Side-Shift Carriage (1067 mm)	1	..
	1486187	Side-Shift Carriage (1219 mm)	1	..
	1477945	Side-Shift Carriage (1067 mm) .....	..	1
	1477947	Side-Shift Carriage (1219 mm) .....	..	1
1	1489004	Carriage Wldmt (Inner) (1067 mm, 1219 mm)	1	..
1	1477939	Carriage Wldmt (Inner) (1067 mm, 1219 mm) .....	..	1
2	1489011	Carriage Wldmt (Outer) (1067 mm)	1	..
2	1489012	Frame (Outer) (1219 mm)	1	..
2	1488975	Carriage Wldmt (Outer) (1067 mm) .....	..	1
2	1488976	Carriage Wldmt (Outer) (1219 mm) .....	..	1
3	4611363	Hook	2	2
4	296426	Washer	4	4
5	226458	Capscrew	4	2
6	16041	Grease Fitting	2	2
7	131358	Snap Ring	4	4
8	2043533	Bearing (Lower)	2	..
8	2043534	Bearing (Lower) .....	..	2
9	1401746	Pin	2	2
10	18832	Cotter Pin	2	2
11	2043531	Bearing (Upper)	2	..
11	2043532	Bearing (Upper) .....	..	2
12	1333399	Load Roller ("B") (92.18 mm/91.92 mm)	6	6
13	58901	Snap Ring	6	6
14	366115	Spacer	2	2
15	2043528	Sideshift Cylinder Assembly (☞Figure 15-13).....	1	..
15	2043529	Sideshift Cylinder Assembly (☞Figure 15-13).....	..	1
16	129387	Shim (0.508 mm)	28	28
17	1498326	Shim	3	3
18	1514866	Pin	2	2
19	1369345	Chain Anchor (Dual Hole)	2	..
19	1504010	Chain Anchor (Single Hole) (Optional)	2	..
19	1369344	Chain Anchor (Dual Hole) .....	..	2
19	1504012	Chain Anchor (Single Hole) (Optional) .....	..	2
20	317735	Pin	2	2
21	15211	Cotter Pin	2	2
	a 1374797	Snap Ring	6	6
	1345216	Stubshaft	6	6
	a 4611880	Carriage (Fork Positioner) (☞Figure 15-15).....	1	..
	a 4611882	Carriage (Fork Positioner) (☞Figure 15-15).....	..	1

FOOTNOTES:**a** Not Illustrated

INTEGRAL SIDE-SHIFT ASSEMBLY (FIGURE 15-10) TWO STAGE FULL FREE-LIFT



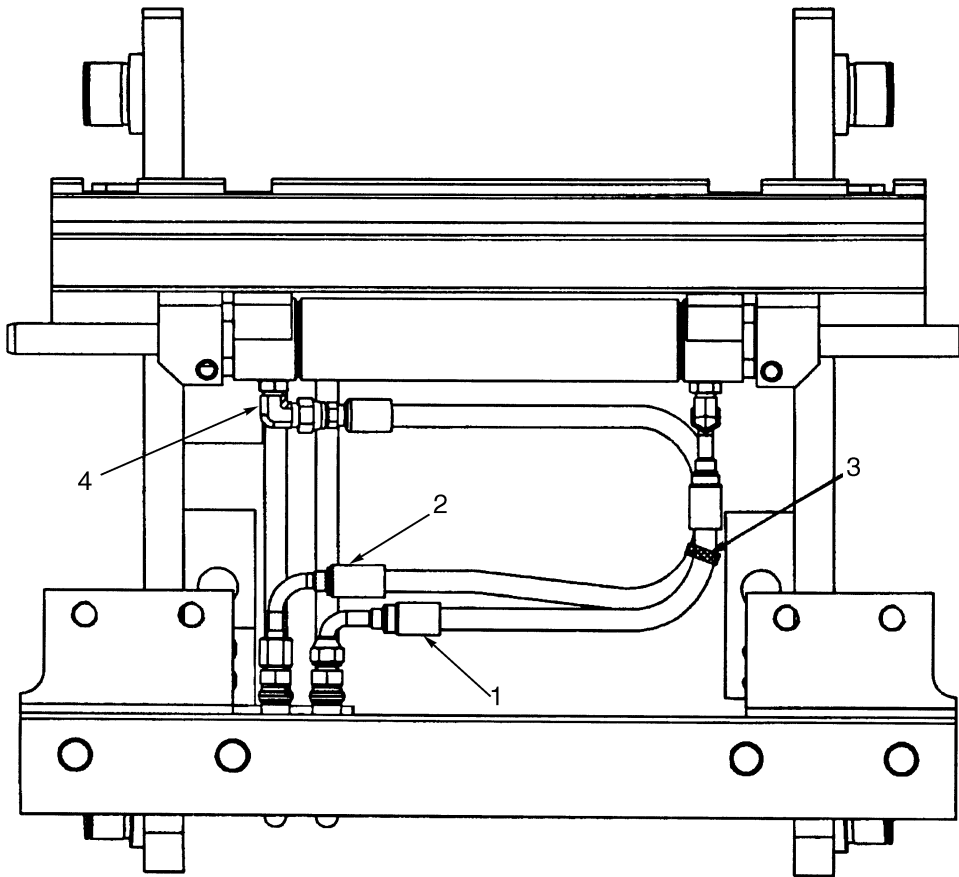
HP020344

**INTEGRAL SIDE-SHIFT ASSEMBLY
TWO STAGE FULL FREE-LIFT****KEY:****A: H2.0-2.5FT D509****B: H3.0-3.5FT D564**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1486183	Side-Shift Carriage (1067 mm)	1	..
	1486186	Side-Shift Carriage (1219 mm)	1	..
	1477944	Side-Shift Carriage (1067 mm) .....	..	1
	1477946	Side-Shift Carriage (1219 mm) .....	..	1
1	1489003	Carriage Wldmt (Inner) (1067 mm, 1219 mm)	1	..
1	1477938	Frame (Inner) (1067 mm, 1219 mm) .....	..	1
2	1489011	Carriage Wldmt (Outer) (1067 mm)	1	..
2	1489012	Frame (Outer) (1219 mm)	1	..
2	1488975	Carriage Wldmt (Outer) (1067 mm) .....	..	1
2	1488976	Carriage Wldmt (Outer) (1219 mm) .....	..	1
3	4611363	Hook	2	2
4	296426	Washer	4	4
5	226458	Capscrew	4	2
6	16041	Grease Fitting	2	2
7	131358	Snap Ring	4	4
8	2043533	Bearing (Lower)	2	..
8	2043534	Bearing (Lower) .....	..	2
9	1401746	Pin	2	2
10	18832	Cotter Pin	2	2
11	2043531	Bearing (Upper)	2	..
11	2043532	Bearing (Upper) .....	..	2
12	1345219	Load Roller ("B") (111.48/111.22)	6	6
13	12891	Snap Ring	6	6
13	a 386422	Snap Ring (Optional)	6	6
14	366116	Spacer	2	2
15	2043528	Sideshift Cylinder Assembly (☞Figure 15-13).....	1	..
15	2043529	Sideshift Cylinder Assembly (☞Figure 15-13).....	..	1
16	1345263	Shim (0.508 mm)	28	28
17	1498326	Shim	3	3
18	1514866	Pin	2	2
19	1369345	Chain Anchor (Dual Hole)	2	..
19	1504010	Chain Anchor (Single Hole) (Optional)	2	..
19	1369344	Chain Anchor (Dual Hole) .....	..	2
19	1504012	Chain Anchor (Single Hole) (Optional) .....	..	2
20	317735	Pin	2	2
21	15211	Cotter Pin	2	2
	a 4611880	Carriage (Fork Positioner) (☞Figure 15-16).....	1	..
	a 4611882	Carriage (Fork Positioner) (☞Figure 15-16).....	..	1

FOOTNOTES:**a** Not Illustrated

INTEGRAL SIDE-SHIFT HYDRAULIC HOSES (FIGURE 15-11) TWO STAGE LIMITED FREE-LIFT



BP000004

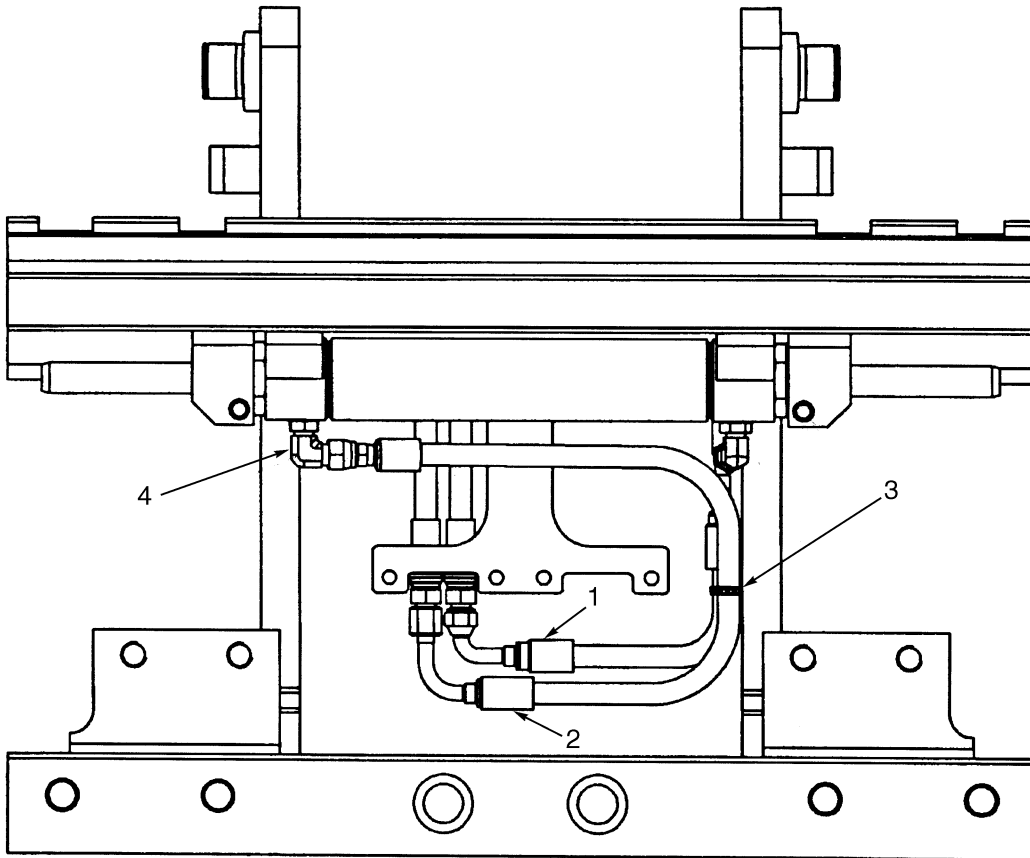
KEY:

A: H2.0-2.5FT

B: H3.0-3.5FT

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4612515	Hose Assy	1	..
1	4610728	Hose Assy .....	..	1
2	4612516	Hose Assy	1	..
2	4610727	Hose Assy .....	..	1
3	114312	Strap Clamp	1	1
4	1487059	Fitting	2	2

**INTEGRAL SIDE-SHIFT HYDRAULIC HOSES (FIGURE 15-12)
TWO AND THREE STAGE FULL FREE-LIFT**



BP000003

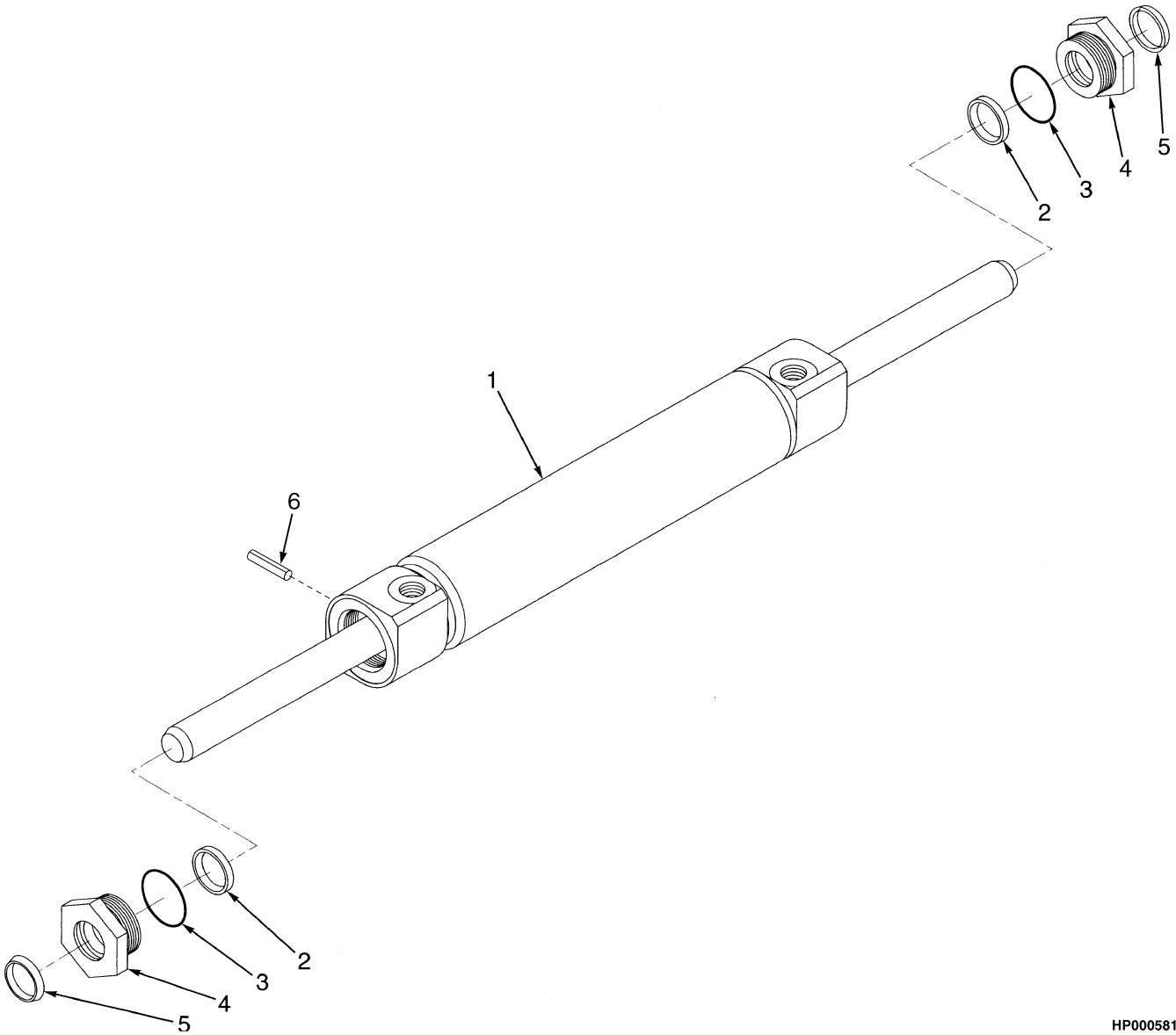
KEY:

A: H2.0-2.5FT

B: H3.0-3.5FT

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4612130	Hose Assy	1	..
1	4612128	Hose Assy .....	..	1
2	4612129	Hose Assy	1	..
2	4612127	Hose Assy .....	..	1
3	114312	Strap Clamp	1	1
4	1487059	Fitting	2	2

INTEGRAL SIDE-SHIFT CYLINDER (FIGURE 15-13)

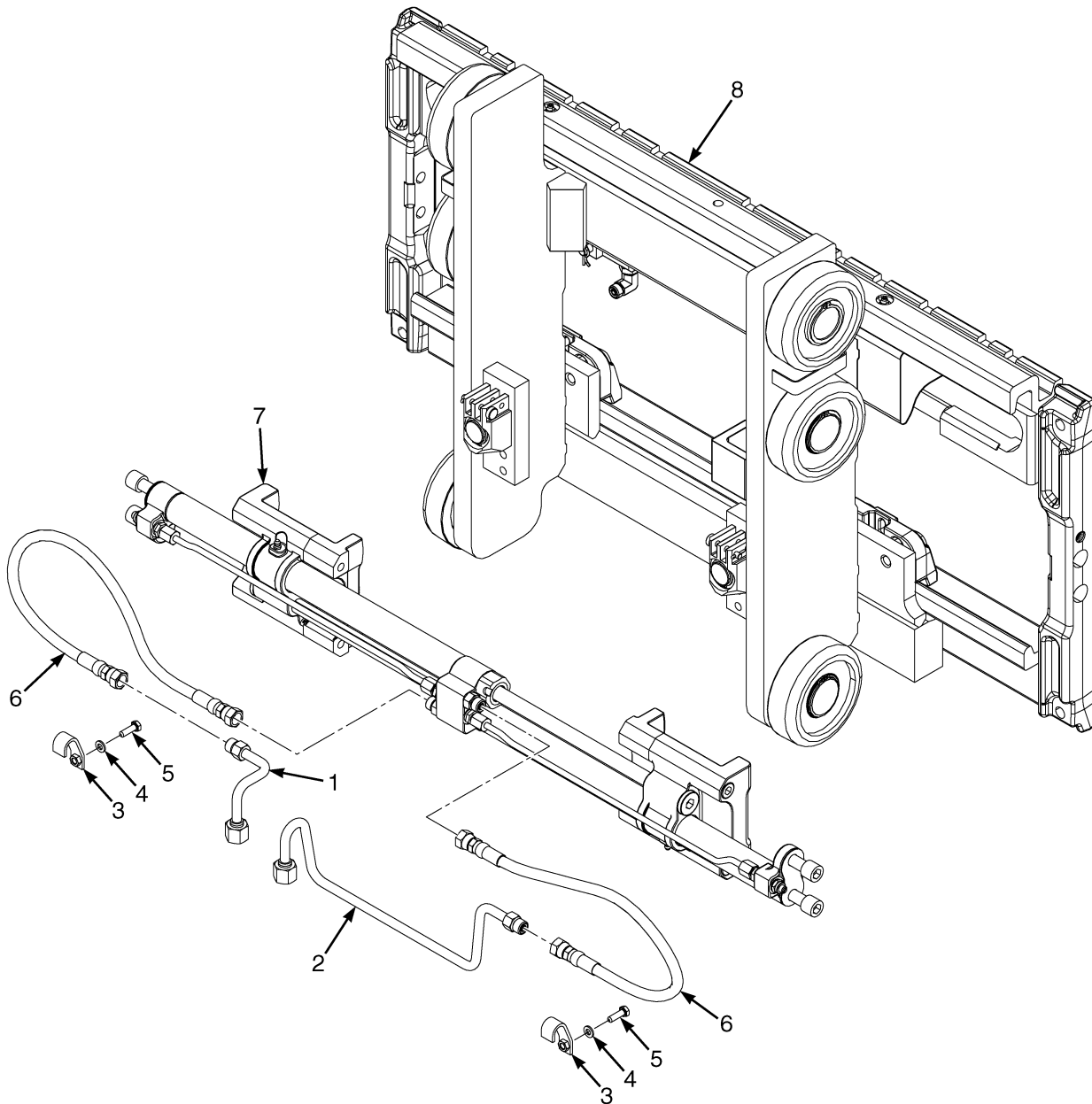


HP000581

INTEGRAL SIDE-SHIFT CYLINDER

ITEM	PART NO.	DESCRIPTION	QTY
	2043528	Sideshift Cylinder Assembly (H2.0-2.5FT)	1
	2043529	Sideshift Cylinder Assembly (H3.0-3.5FT)	1
1	1489016	Sideshift Cylinder	1
2	1489037	Rod Seal	2
3	1489035	O-Ring	2
4	1498325	Retainer	2
5	1489039	Rod Wiper	2
6	302487	Roll Pin	1
	1503096	Kit-Seal	1

INTEGRAL SIDE-SHIFT (FIGURE 15-14) FORK POSITIONER — TWO STAGE LIMITED FREE-LIFT



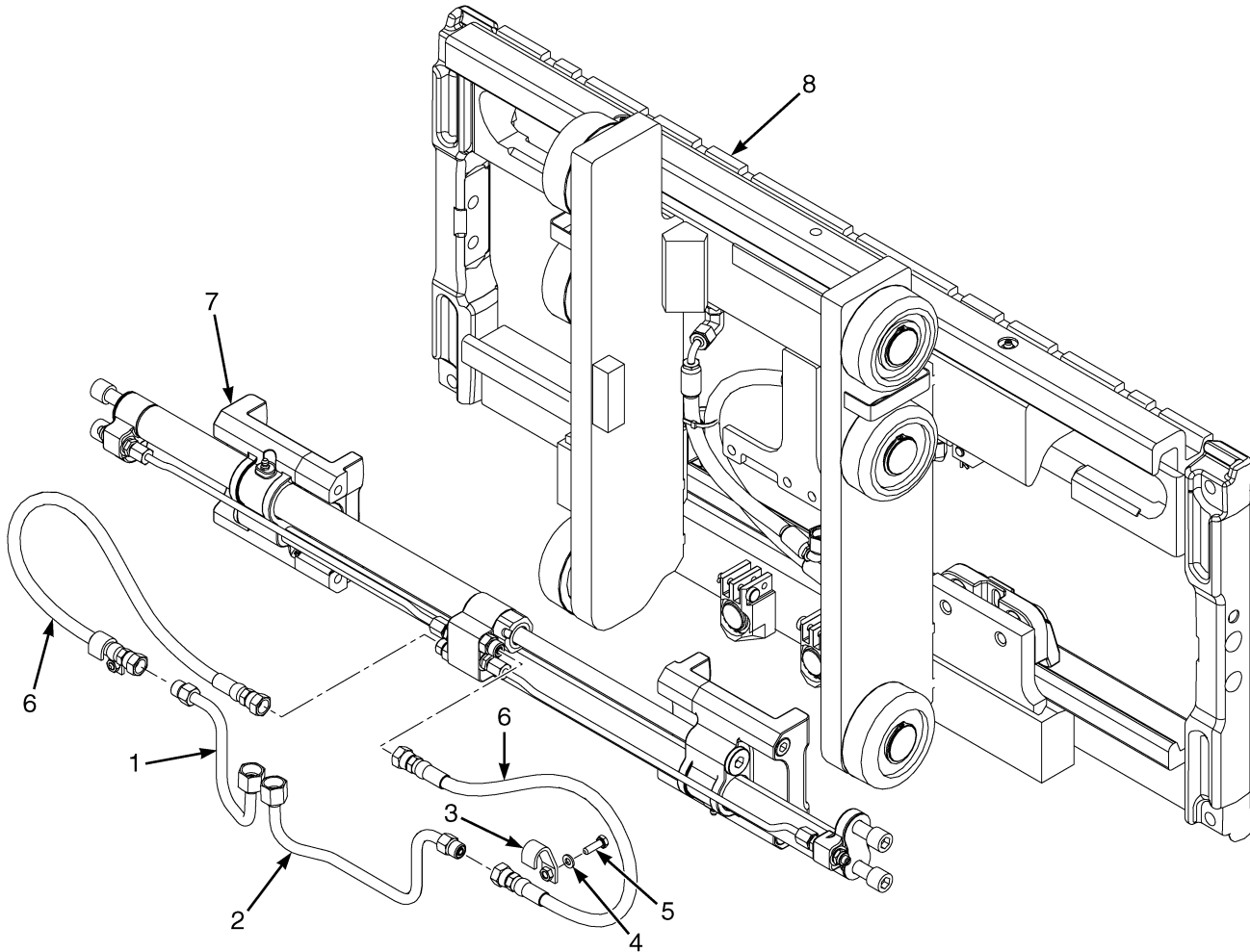
BP020033

**INTEGRAL SIDE-SHIFT
FORK POSITIONER – TWO STAGE LIMITED FREE-LIFT**

ITEM	PART NO.	DESCRIPTION	QTY
1	a 4612432	Tube Assy	1
1	b 4612434	Tube Assy	1
1	1487163	Fitting	1
2	a 4612431	Tube Assy	1
2	b 4612433	Tube Assy	1
2	1487163	Fitting	1
3	4027695	Bracket Wldmt	2
4	1673754	Washer	2
5	1670032	Capscrew	2
6	4610411	Hose Assy	2
7	a 4611880	Carriage (Fork Positioner)	1
7	b 4611882	Carriage (Fork Positioner)	1
7	4034634	Kit-Service Cylinder	1
7	4034635	Kit-Bearing	1
8	.....	Carriage Assembly (☞ Figure 15-8).....	1

FOOTNOTES:**a** Class II**b** Class III

INTEGRAL SIDE-SHIFT (FIGURE 15-15) FORK POSITIONER — THREE STAGE FULL FREE-LIFT



BP020032

**INTEGRAL SIDE-SHIFT
FORK POSITIONER – THREE STAGE FULL FREE-LIFT**

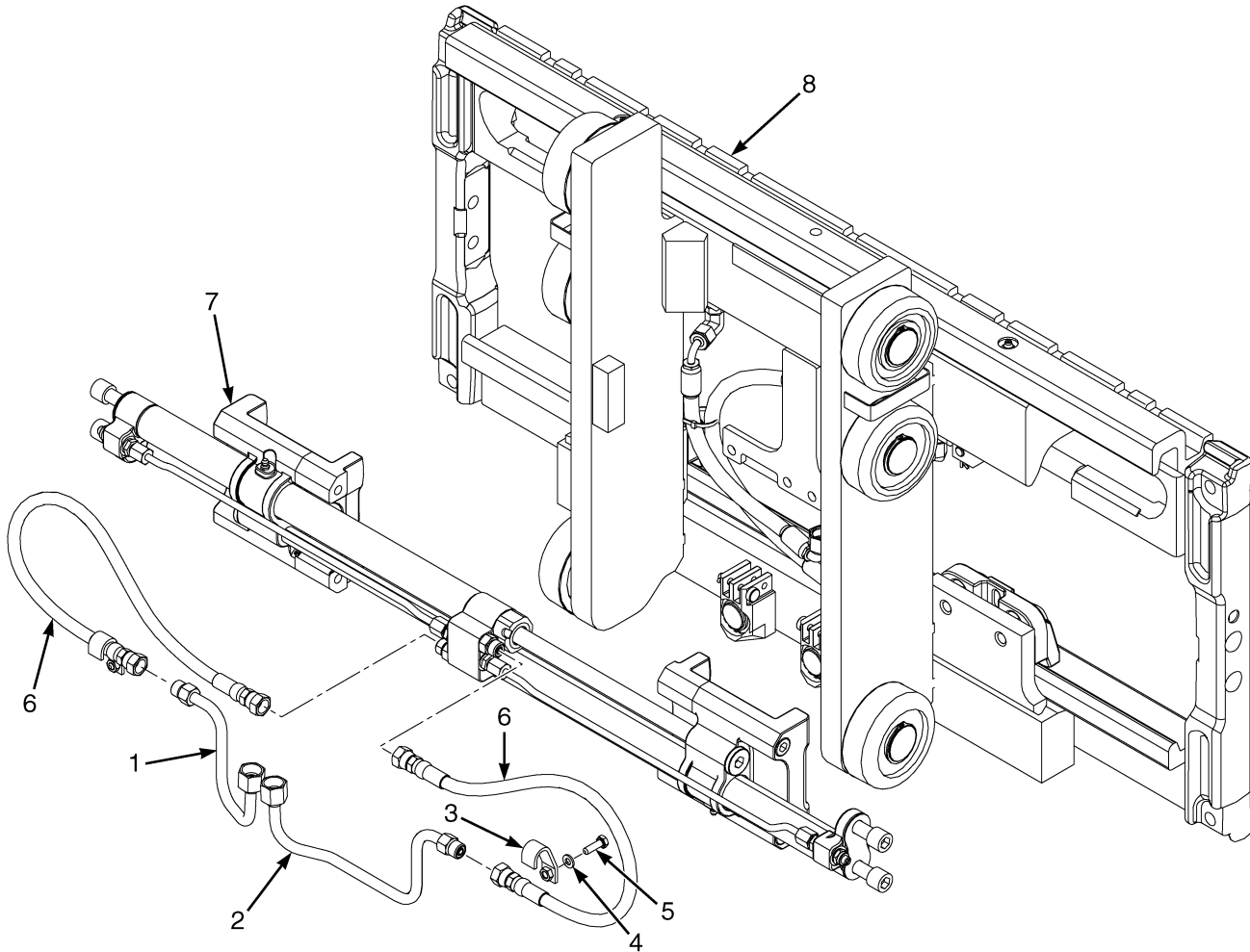
ITEM	PART NO.	DESCRIPTION	QTY
1	4612274	Tube Assy	1
1	1487163	Fitting	1
2	4612273	Tube Assy	1
2	1487163	Fitting	1
3	4027695	Bracket Wldmt	2
4	1673754	Washer	2
5	1670032	Capscrew	2
6	4610411	Hose Assy	2
7	a 4611880	Carriage (Fork Positioner)	1
7	b 4611882	Carriage (Fork Positioner)	1
7	4034634	Kit-Service Cylinder	1
7	4034635	Kit-Bearing	1
8	.....	Carriage Assembly (☞ Figure 15-9).....	1

FOOTNOTES:

a Class II

b Class III

INTEGRAL SIDE-SHIFT (FIGURE 15-16) FORK POSITIONER — TWO STAGE FULL FREE-LIFT



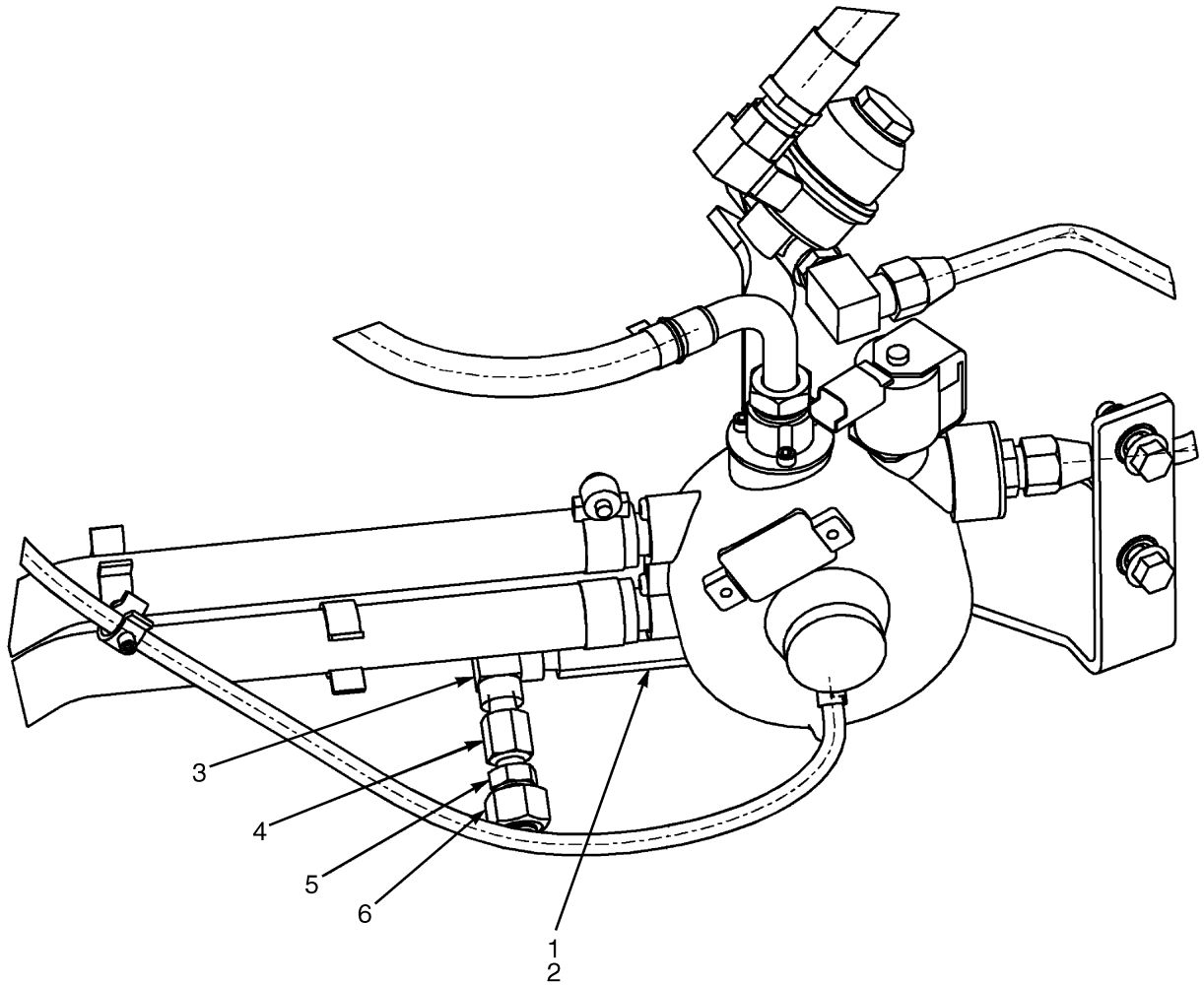
BP020032

**INTEGRAL SIDE-SHIFT
FORK POSITIONER – TWO STAGE FULL FREE-LIFT**

ITEM	PART NO.	DESCRIPTION	QTY
1	4611907	Tube Assy	1
1	1487163	Fitting	1
2	4611906	Tube Assy	1
2	1487163	Fitting	1
3	4027695	Bracket Wldmt	2
4	1673754	Washer	2
5	1670032	Capscrew	2
6	4610411	Hose Assy	2
7	a 4611880	Carriage (Fork Positioner)	1
7	b 4611882	Carriage (Fork Positioner)	1
7	4034634	Kit-Service Cylinder	1
7	4034635	Kit-Bearing	1
8	.....	Carriage Assembly (☞ Figure 15-10).....	1

FOOTNOTES:**a** Class II**b** Class III

GM LPG REGULATOR DRAIN KIT (FIGURE 15-17)



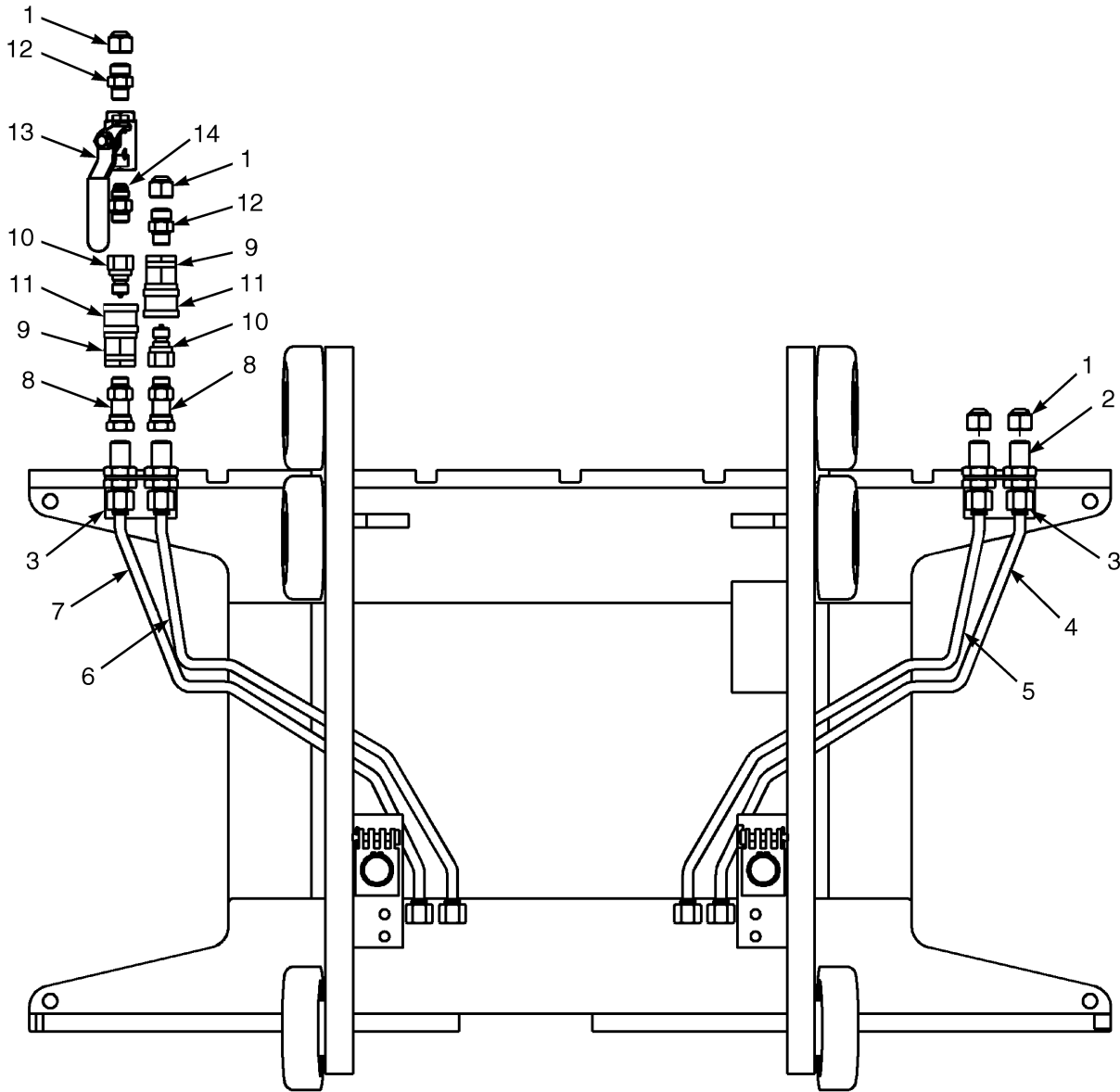
BP000396

GM LPG REGULATOR DRAIN KIT

ITEM	PART NO.	DESCRIPTION	QTY
	1664940	Kit-Service (GM LPG regulator Drain GM2.4L and 4.32)	1
1	1652140	Fitting	1
2	16481	O-Ring	1
3	69392	Fitting	1
4	28584	Fitting	1
5	1488404	Fitting	1
6	1529014	Fitting	1
7	a 273338	Thread Sealant	1

FOOTNOTES:**a** Not Shown

AUXILIARY TUBE EXTENSIONS (FIGURE 15-18) TWO STAGE LIMITED FREE-LIFT (→ PENDING PER ECN 10594304)



BP000291

AUXILIARY TUBE EXTENSIONS
TWO STAGE LIMITED FREE-LIFT (→ PENDING PER ECN 10594304)

KEY:

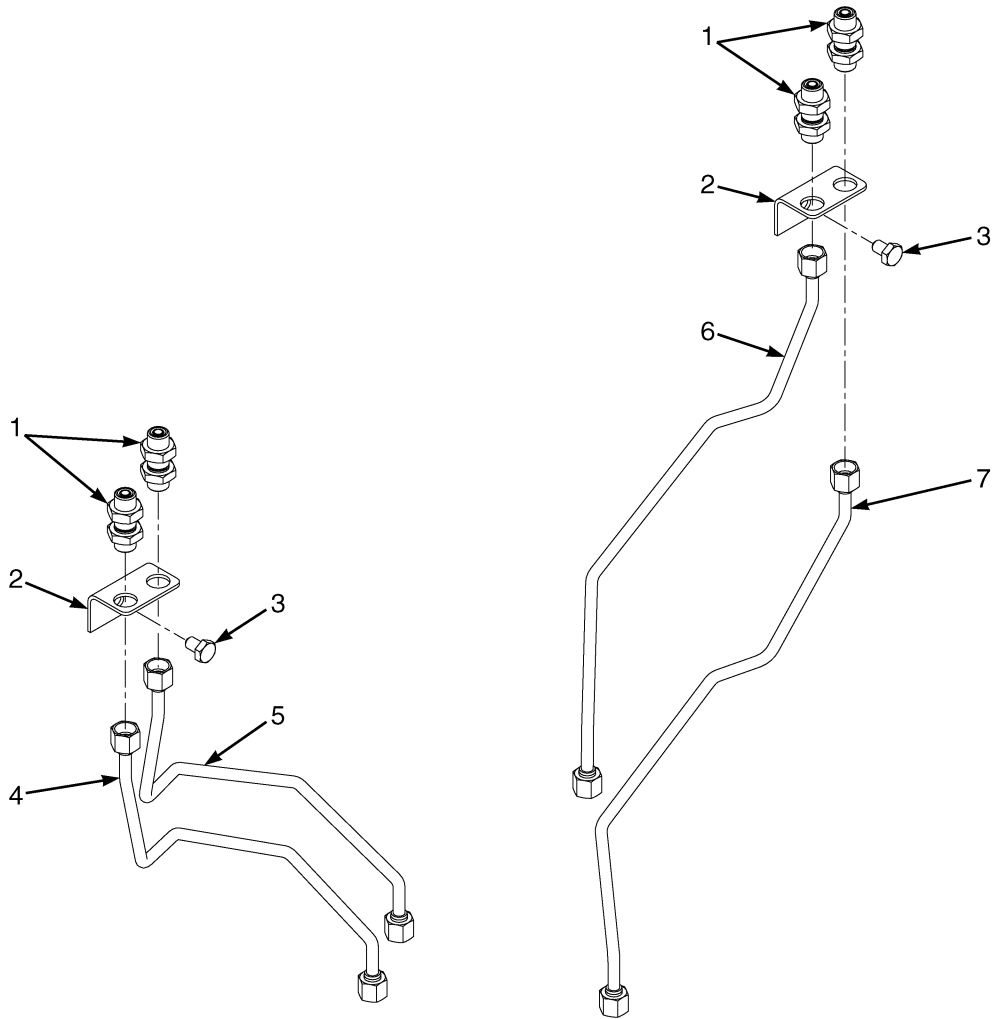
- A:** D507, Standard Carriage
B: D507, Integral Side-Shift Carriage
C: D562, Standard Carriage
D: D562, Integral Side-Shift Carriage

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1529015	Cap	2	2	2	2
2	1528573	Fitting	2	2	2	2
2	265787	O-Ring	4	4	4	4
3	1549718	Bracket .....	..	1	..	..
3	1549724	Bracket .....	..	..	..	1
3	1550070	Bracket	1	..	1	..
3	1696635	Bracket (Bolted on)	1	..	1	..
3	1527879	Capscrew (Bolted On)	1	..	1	..
4	2079327	Tube Assy	1	..	..	..
4	2079331	Tube Assy .....	..	..	1	..
5	2079328	Tube Assy	1	..	..	..
5	2079332	Tube Assy .....	..	..	1	..
6	2079329	Tube Assy	1	1	..	..
6	2079333	Tube Assy .....	..	..	1	1
7	2079330	Tube Assy	1	1	..	..
7	2079334	Tube Assy .....	..	..	1	1
8	a 1549715	Fitting	2	2	2	2
8	a 265787	O-Ring	2	2	2	2
8	a 1527813	O-Ring	2	2	2	2
9	a 1483663	Quick Disconnect Fitting	2	2	2	2
10	a 1483664	Fitting	2	2	2	2
11	a 1483661	Dust Cap	2	2	2	2
12	a 1486740	Fitting	2	2	2	2
12	a 1527813	O-Ring	2	2	2	2
12	a 265787	O-Ring	2	2	2	2
13	2081418	Drain Valve	1	1	1	1
14	16540	Connector	1	1	1	1
14	16483	O-Ring	1	1	1	1

FOOTNOTES:

- a** Used With Quick Disconnect Only

AUXILIARY TUBE EXTENSIONS (FIGURE 15-19) TWO STAGE LIMITED FREE-LIFT — WITHOUT QUICK DISCONNECT FITTINGS (PENDING PER ECN 10594304 →)



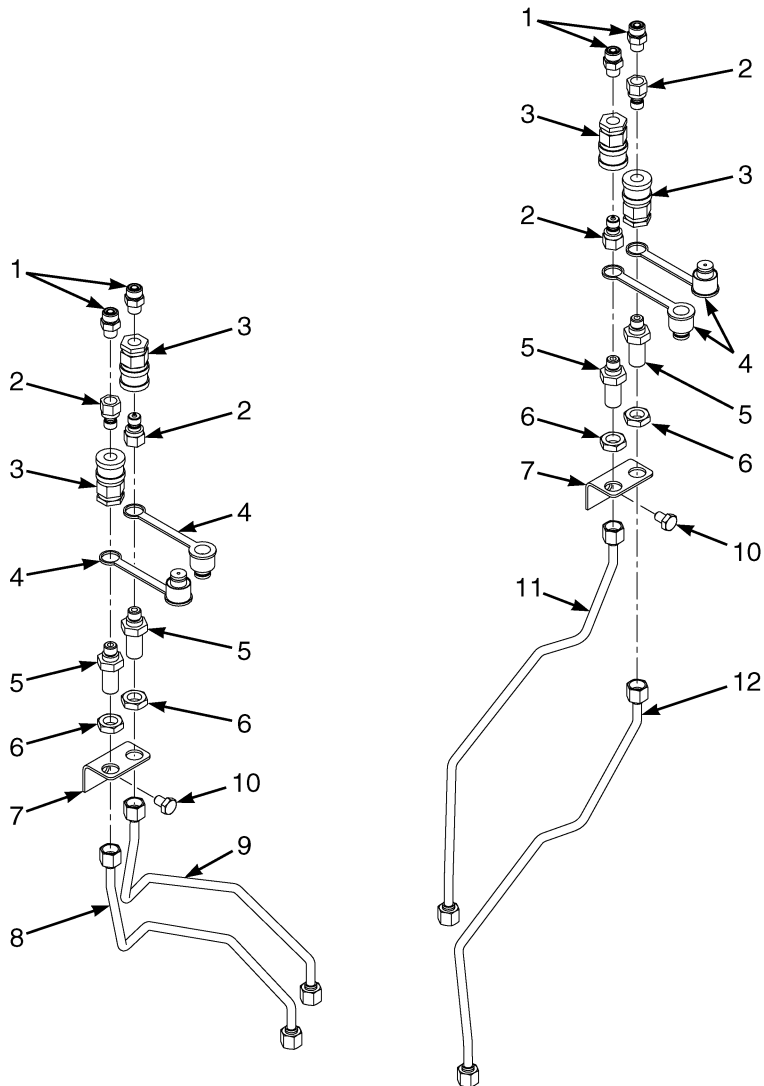
BP000545

AUXILIARY TUBE EXTENSIONS
TWO STAGE LIMITED FREE-LIFT – WITHOUT QUICK DISCONNECT FITTINGS
(PENDING PER ECN 10594304 →)

KEY:**A: D507 3 Function****B: D507 4 Function****C: D562 3 Function****D: D562 4 Function**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1528573	Fitting	1	2	1	2
2	1550070	Bracket	1	2	1	2
3	1658934	Capscrew	1	2	1	2
4	2079330	Tube Assy .....	..	1	..	..
4	2074403	Tube Assy (Cushion) .....	..	1	..	..
4	2074407	Tube Assy .....	..	..	..	1
5	2079329	Tube Assy .....	..	1	..	..
5	2074402	Tube Assy (Cushion) .....	..	1	..	..
5	2074406	Tube Assy .....	..	..	..	1
6	2079328	Tube Assy	1	1	..	..
6	2074401	Tube Assy (Cushion)	1	1	..	..
6	2074405	Tube Assy .....	..	..	1	1
7	2079327	Tube Assy	1	1	..	..
7	2074400	Tube Assy (Cushion)	1	1	..	..
7	2074404	Tube Assy .....	..	..	1	1

AUXILIARY TUBE EXTENSIONS (FIGURE 15-20) TWO STAGE LIMITED FREE-LIFT — MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS (PENDING PER ECN 10594304 →)



BP000546

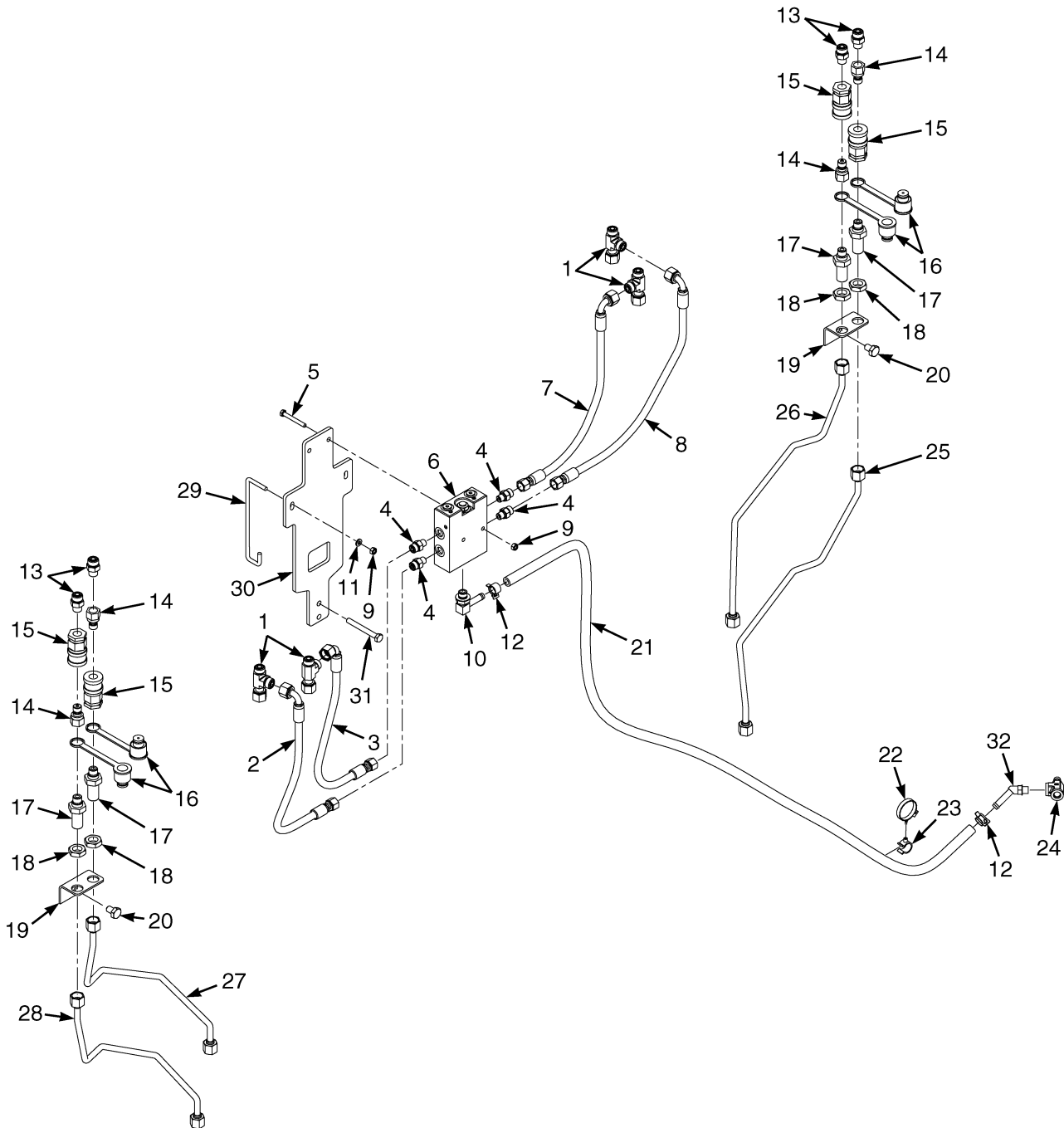
AUXILIARY TUBE EXTENSIONS
TWO STAGE LIMITED FREE-LIFT – MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS
(PENDING PER ECN 10594304 →)

KEY:

A: D507 3 Function
B: D507 4 Function
C: D562 3 Function
D: D562 4 Function

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1486740	Fitting	2	4	2	4
2	1483664	Fitting (Quick Disconnect)	2	4	2	4
3	1483663	Quick Disconnect Fitting	2	4	2	4
4	1483661	Dust Cap	2	4	2	4
5	1708364	Bulkhead (Fitting)	2	4	2	4
6	1528602	Locknut	2	4	2	4
7	1550070	Bracket	1	2	1	2
8	2074407	Tube Assy .....	..	..	..	1
8	2079330	Tube Assy .....	..	1	..	..
8	2074403	Tube Assy (Cushion) .....	..	1	..	..
9	2074406	Tube Assy .....	..	..	..	1
9	2079329	Tube Assy .....	..	1	..	..
9	2074402	Tube Assy (Cushion) .....	..	1	..	..
10	1658934	Capscrew	1	2	1	2
11	2074405	Tube Assy .....	..	..	1	1
11	2079328	Tube Assy	1	1	..	..
11	2074401	Tube Assy (Cushion)	1	1	..	..
12	2074404	Tube Assy .....	..	..	1	1
12	2079327	Tube Assy	1	1	..	..
12	2074400	Tube Assy (Cushion)	1	1	..	..

AUXILIARY TUBE EXTENSIONS (FIGURE 15-21) TWO STAGE LIMITED FREE-LIFT — E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (PENDING PER ECN 10594304 →)



BP000547

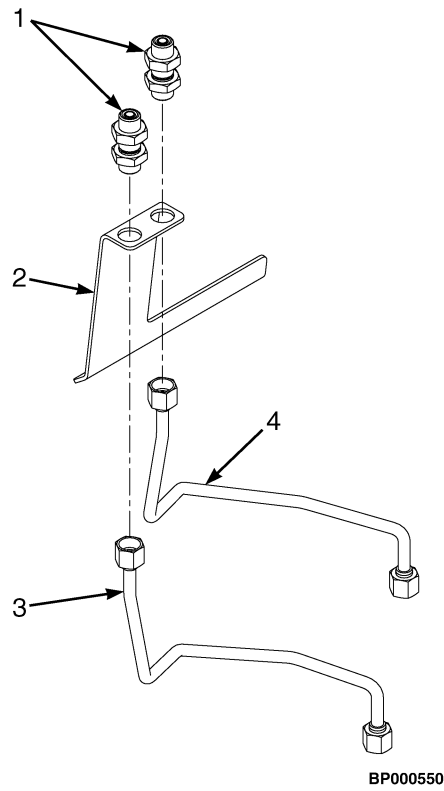
AUXILIARY TUBE EXTENSIONS
TWO STAGE LIMITED FREE-LIFT – E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS
(PENDING PER ECN 10594304 →)

KEY:

A: D507 3 Function
B: D507 4 Function
C: D562 3 Function
D: D562 4 Function

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1487095	Fitting	2	4	2	4
2	4604683	Hose Assy .....	..	1	..	1
3	4604565	Hose Assy .....	..	1	..	1
4	1486737	Fitting	2	4	2	4
5	292505	Capscrew	2	2	2	2
6	2111754	Valve (Single Auxiliary)	1	..	1	..
6	2111755	Valve (Dual Auxiliary) .....	..	1	..	1
7	4604566	Hose Assy	1	1	1	1
8	4604564	Hose Assy	1	1	1	1
9	302399	Nut	4	4	4	4
10	17221	Fitting	1	1	1	1
11	1673754	Washer	2	2	2	2
12	1569616	Hose Clamp	2	2	2	2
13	1486740	Fitting	2	4	2	4
14	1483664	Fitting (Quick Disconnect)	2	4	2	4
15	1483663	Quick Disconnect Fitting	2	4	2	4
16	1483661	Dust Cap	2	4	2	4
17	1708364	Bulkhead (Fitting)	2	4	2	4
18	1528602	Locknut	2	4	2	4
19	1550070	Bracket	1	2	1	2
20	1658934	Capscrew	1	2	1	2
21	110153	Hose	1	1	1	1
22	1644398	Clamp	1	1	1	1
23	1606544	Clamp	1	1	1	1
24	222500	Fitting	1	1	1	1
25	2079327	Tube Assy	1	1	..	..
25	2074400	Tube Assy (Cushion)	1	1	..	..
25	2074404	Tube Assy .....	..	..	1	1
26	2079328	Tube Assy	1	1	..	..
26	2074401	Tube Assy (Cushion)	1	1	..	..
26	2074405	Tube Assy .....	..	..	1	1
27	2079329	Tube Assy .....	..	1	..	..
27	2074402	Tube Assy (Cushion) .....	..	1	..	..
27	2074406	Tube Assy .....	..	..	..	1
28	2079330	Tube Assy .....	..	1	..	..
28	2074403	Tube Assy (Cushion) .....	..	1	..	..
28	2074407	Tube Assy .....	..	..	..	1
29	4016313	Hook	2	2	2	2
30	4013928	Bracket	1	1	1	1
31	1581836	Capscrew	2	2	2	2

AUXILIARY TUBE EXTENSIONS (FIGURE 15-22) TWO STAGE LIMITED FREE-LIFT — WITH ISS CARRIAGE AND WITHOUT QUICK DISCONNECT FITTINGS (PENDING PER ECN 10594304 →)



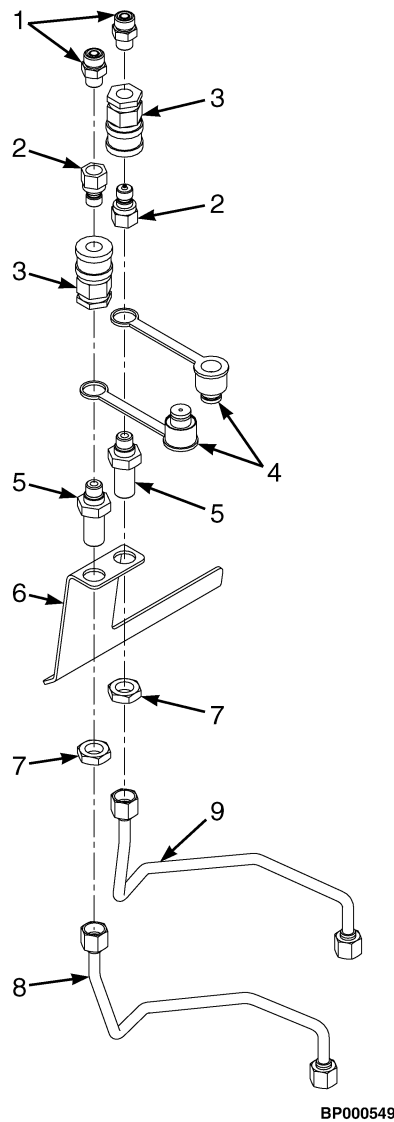
AUXILIARY TUBE EXTENSIONS

**TWO STAGE LIMITED FREE-LIFT – WITH ISS CARRIAGE AND WITHOUT QUICK DISCONNECT FITTINGS
(PENDING PER ECN 10594304 →)**

KEY:**A: D507 4 Function, Cushion****B: D507 4 Function, Pneumatic****C: D562 4 Function, Cushion****D: D562 4 Function, Pneumatic**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1528573	Fitting	2	2	2	2
2	1549724	Bracket	1	1	1	1
3	2074403	Tube Assy	1	..	..	..
3	2079330	Tube Assy .....	..	1	..	..
3	2074407	Tube Assy .....	..	..	1	..
3	2079334	Tube Assy .....	..	..	..	1
4	2074402	Tube Assy	1	..	..	..
4	2079329	Tube Assy .....	..	1	..	..
4	2074406	Tube Assy .....	..	..	1	..
4	2079333	Tube Assy .....	..	..	..	1

AUXILIARY TUBE EXTENSIONS (FIGURE 15-23) TWO STAGE LIMITED FREE-LIFT — WITH ISS CARRIAGE AND MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS (PENDING PER ECN 10594304 →)



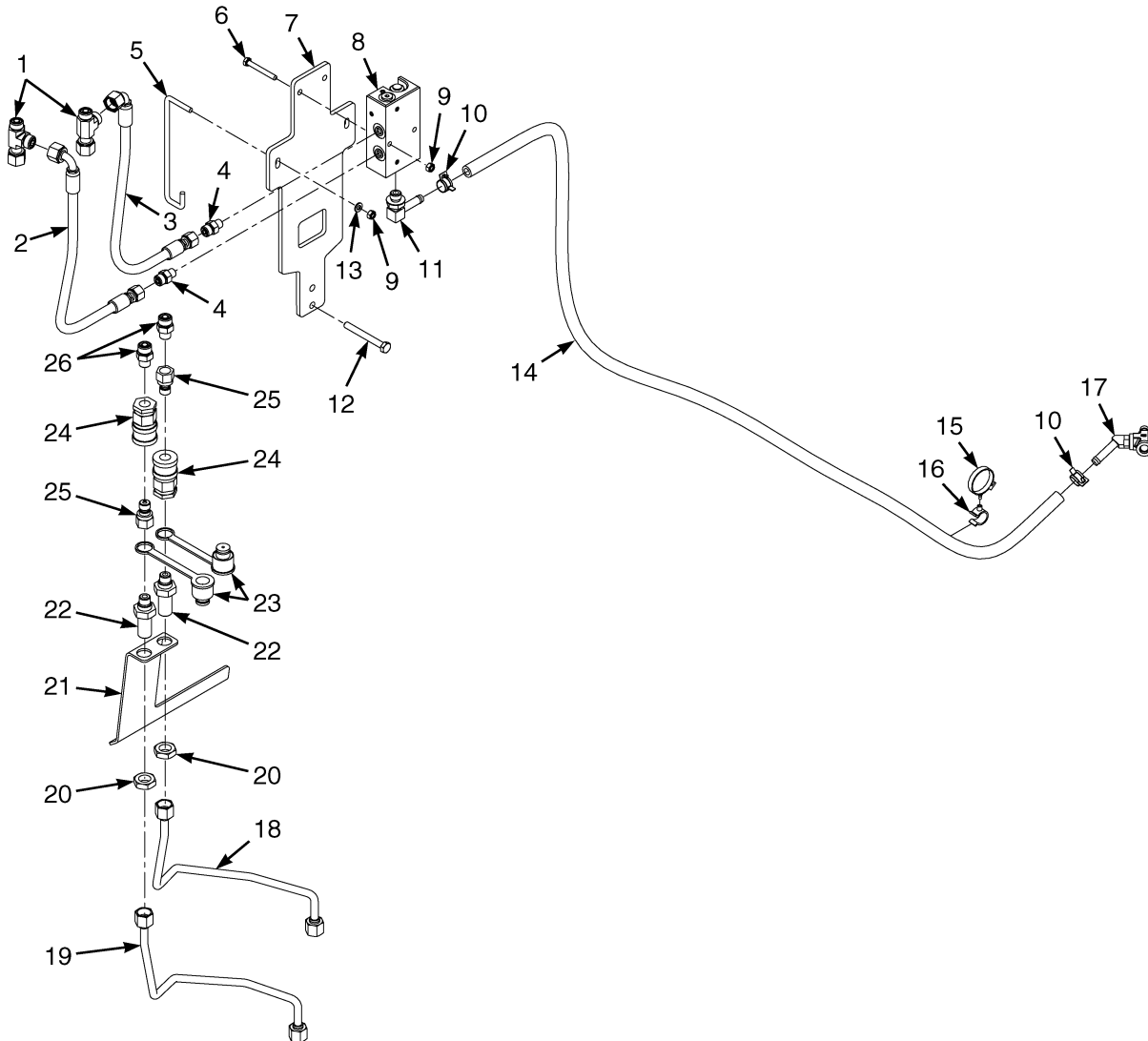
AUXILIARY TUBE EXTENSIONS

**TWO STAGE LIMITED FREE-LIFT – WITH ISS CARRIAGE AND MANUAL HYDRAULICS WITH QUICK
DISCONNECT FITTINGS (PENDING PER ECN 10594304 →)**

KEY:**A: D507 4 Function, Cushion****B: D507 4 Function, Pneumatic****C: D562 4 Function, Cushion****D: D562 4 Function, Pneumatic**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1486740	Fitting	2	2	2	2
2	1483664	Fitting (Quick Disconnect)	2	2	2	2
3	1483663	Quick Disconnect Fitting	2	2	2	2
4	1483661	Dust Cap	2	2	2	2
5	1708364	Bulkhead (Fitting)	2	2	2	2
6	1549718	Bracket	1	1	1	1
7	1528602	Locknut	2	2	2	2
8	2074403	Tube Assy	1	..	..	..
8	2079330	Tube Assy .....	..	1	..	..
8	2074407	Tube Assy .....	..	..	1	..
8	2079334	Tube Assy .....	..	..	..	1
9	2074402	Tube Assy	1	..	..	..
9	2079329	Tube Assy .....	..	1	..	..
9	2074406	Tube Assy .....	..	..	1	..
9	2079333	Tube Assy .....	..	..	..	1

AUXILIARY TUBE EXTENSIONS (FIGURE 15-24) TWO STAGE LIMITED FREE-LIFT — WITH ISS CARRIAGE AND E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (PENDING PER ECN 10594304 →)

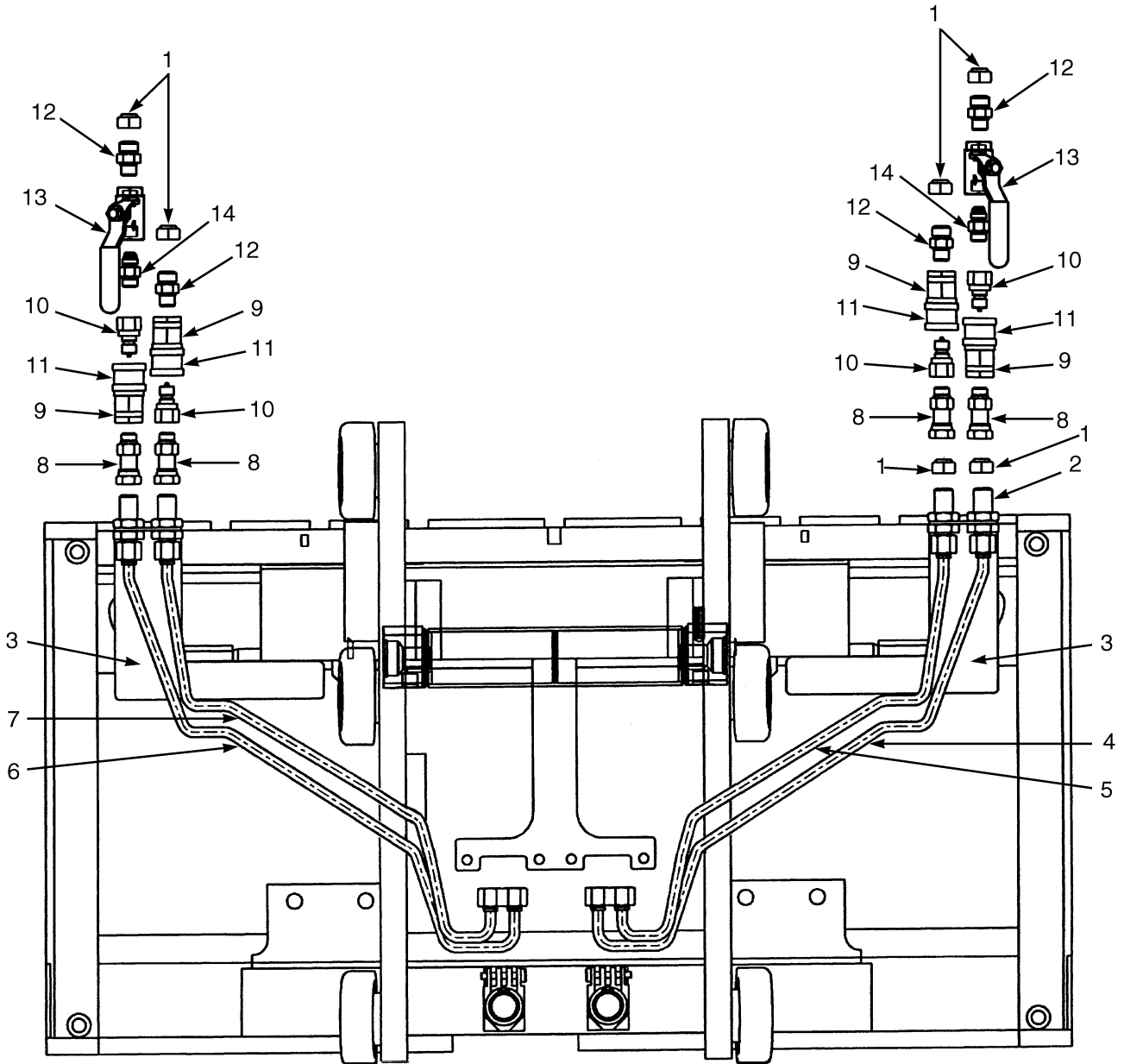


BP000548

AUXILIARY TUBE EXTENSIONS**TWO STAGE LIMITED FREE-LIFT – WITH ISS CARRIAGE AND E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (PENDING PER ECN 10594304 →)****KEY:****A: D507 4 Function Cushion****B: D507 4 Function Pneumatic****C: D562 4 Function Cushion****D: D562 4 Function Pneumatic**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1487095	Fitting	2	2	2	2
2	4604683	Hose Assy	1	1	1	1
3	4604565	Hose Assy	1	1	1	1
4	1486737	Fitting	2	2	2	2
5	4016313	Hook	2	2	2	2
6	292505	Capscrew	2	2	2	2
7	4013928	Bracket	1	1	1	1
8	2111754	Valve (Single Auxiliary)	1	1	1	1
9	302399	Nut	4	4	4	4
10	1569616	Hose Clamp	2	2	2	2
11	17221	Fitting	1	1	1	1
12	1581836	Capscrew	2	2	2	2
13	1673754	Washer	2	2	2	2
14	110153	Hose	1	1	1	1
15	1644398	Clamp	1	1	1	1
16	1606544	Clamp	1	1	1	1
17	4606305	T-Fitting	1	1	1	1
17	222500	Fitting	1	1	1	1
18	2074402	Tube Assy	1	..	..	..
18	2079329	Tube Assy .....	..	1	..	..
18	2074406	Tube Assy .....	..	..	1	..
18	2079333	Tube Assy .....	..	..	..	1
19	2074403	Tube Assy	1	..	..	..
19	2079330	Tube Assy .....	..	1	..	..
19	2074407	Tube Assy .....	..	..	1	..
19	2079334	Tube Assy .....	..	..	..	1
20	1528602	Locknut	2	2	2	2
21	1549724	Bracket	1	1	1	1
22	1708364	Bulkhead (Fitting)	2	2	2	2
23	1483661	Dust Cap	2	2	2	2
24	1483663	Quick Disconnect Fitting	2	2	2	2
25	1483664	Fitting (Quick Disconnect)	2	2	2	2
26	1486740	Fitting	2	2	2	2

AUXILIARY TUBE EXTENSIONS (FIGURE 15-25) TWO AND THREE STAGE FULL FREE-LIFT (→ PENDING PER ECN 10594304)



BP000295

AUXILIARY TUBE EXTENSIONS

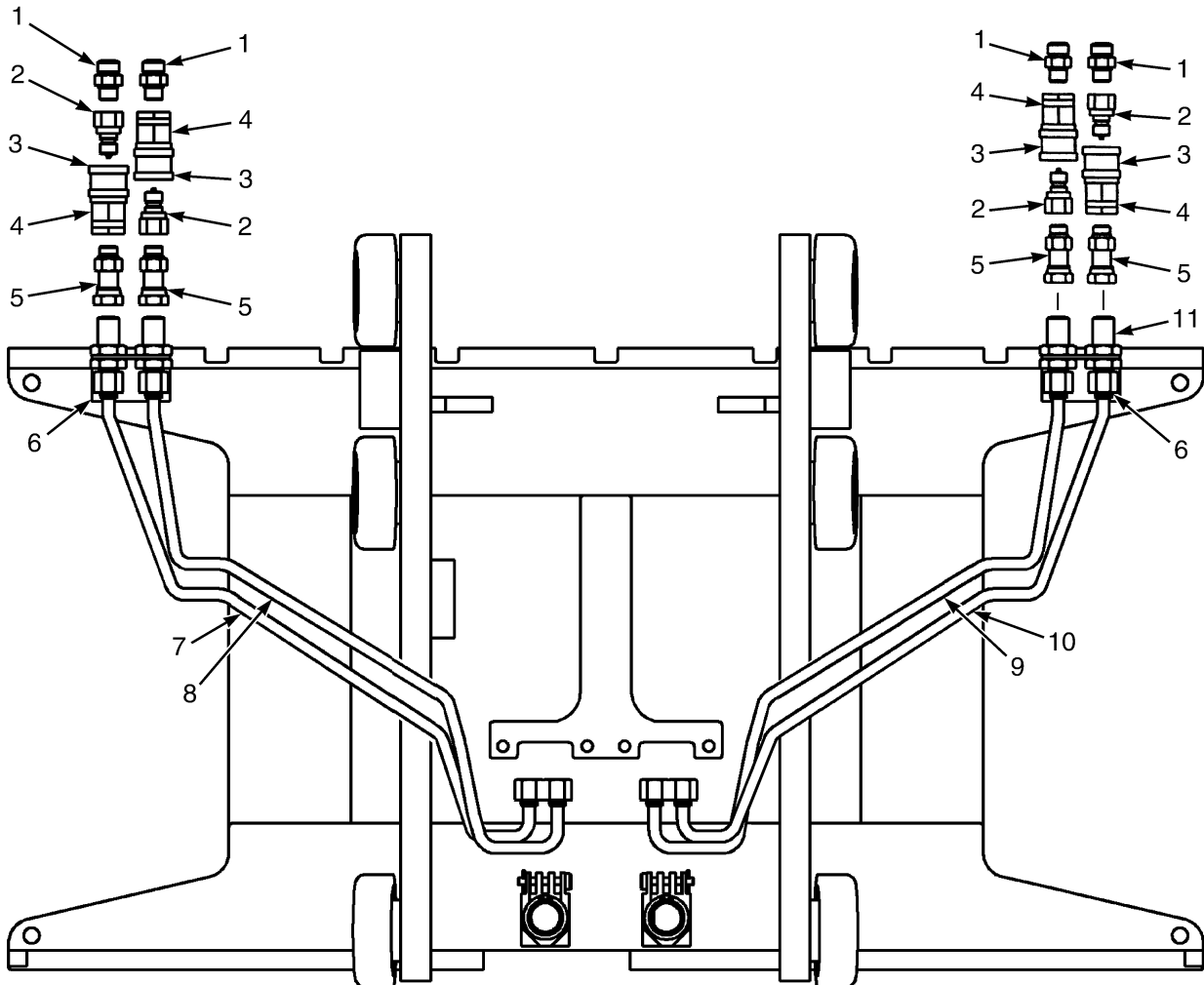
TWO AND THREE STAGE FULL FREE-LIFT (→ PENDING PER ECN 10594304)

KEY:**A:** D508, D509 Three Function, Class 2**B:** D508, D509 Four Function, Class 2**C:** D563, D564 Three Function, Class 3**D:** D563, D564 Four Function, Class 3

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1529015	Cap	2	4	2	4
2	d 1528573	Fitting	2	4	2	4
3	c 1550070	Bracket (LH)	1	1	1	1
3	c 1696635	Bracket (Bolted on) (LH)	1	1	1	1
3	a 1549717	Bracket (RH)	1	1	..	..
3	a 1549718	Bracket (LH) .....	..	1	..	..
3	a 1549723	Bracket (RH) .....	..	..	1	1
3	a 1549724	Bracket (LH) .....	..	..	..	1
3	c 1527879	Capscrew (Bolted On)	2	2	2	2
4	2079985	Tube Assy (RH)	1	1	..	..
4	2079989	Tube Assy (RH) .....	..	..	1	1
5	2079986	Tube Assy (RH)	1	1	..	..
5	2079990	Tube Assy (RH) .....	..	..	1	1
6	2079991	Tube Assy (LH) .....	..	..	..	1
6	2079988	Tube Assy (LH) .....	..	1	..	..
7	2079992	Tube Assy (LH) .....	..	..	..	1
7	2079987	Tube Assy (LH) .....	..	1	..	..
8	b 1549715	Fitting	2	4	2	4
8	b 1527813	O-Ring	2	4	2	4
8	b 265787	O-Ring	2	4	2	4
9	b 1483663	Quick Disconnect Fitting	2	4	2	4
10	b 1483664	Fitting	2	4	2	4
11	b 1483661	Dust Cap	2	4	2	4
12	b 1486740	Fitting	2	4	2	4
12	b 1527813	O-Ring	1	1	1	1
12	b 265787	O-Ring	1	1	1	1
13	b 2081418	Drain Valve	1	2	1	2
14	16540	Connector	1	2	1	2
14	16483	O-Ring	1	1	1	1

FOOTNOTES:**a** Used With Integral Sideshift Carriage**b** Used With Quick Disconnect Only**c** Used With Standard Carriage**d** Without Quick Disconnect

AUXILIARY TUBE EXTENSIONS (FIGURE 15-26) TWO AND THREE STAGE FULL FREE-LIFT (PENDING PER ECN 10594304 →)



BP000554

AUXILIARY TUBE EXTENSIONS
TWO AND THREE STAGE FULL FREE-LIFT (PENDING PER ECN 10594304 →)

KEY:

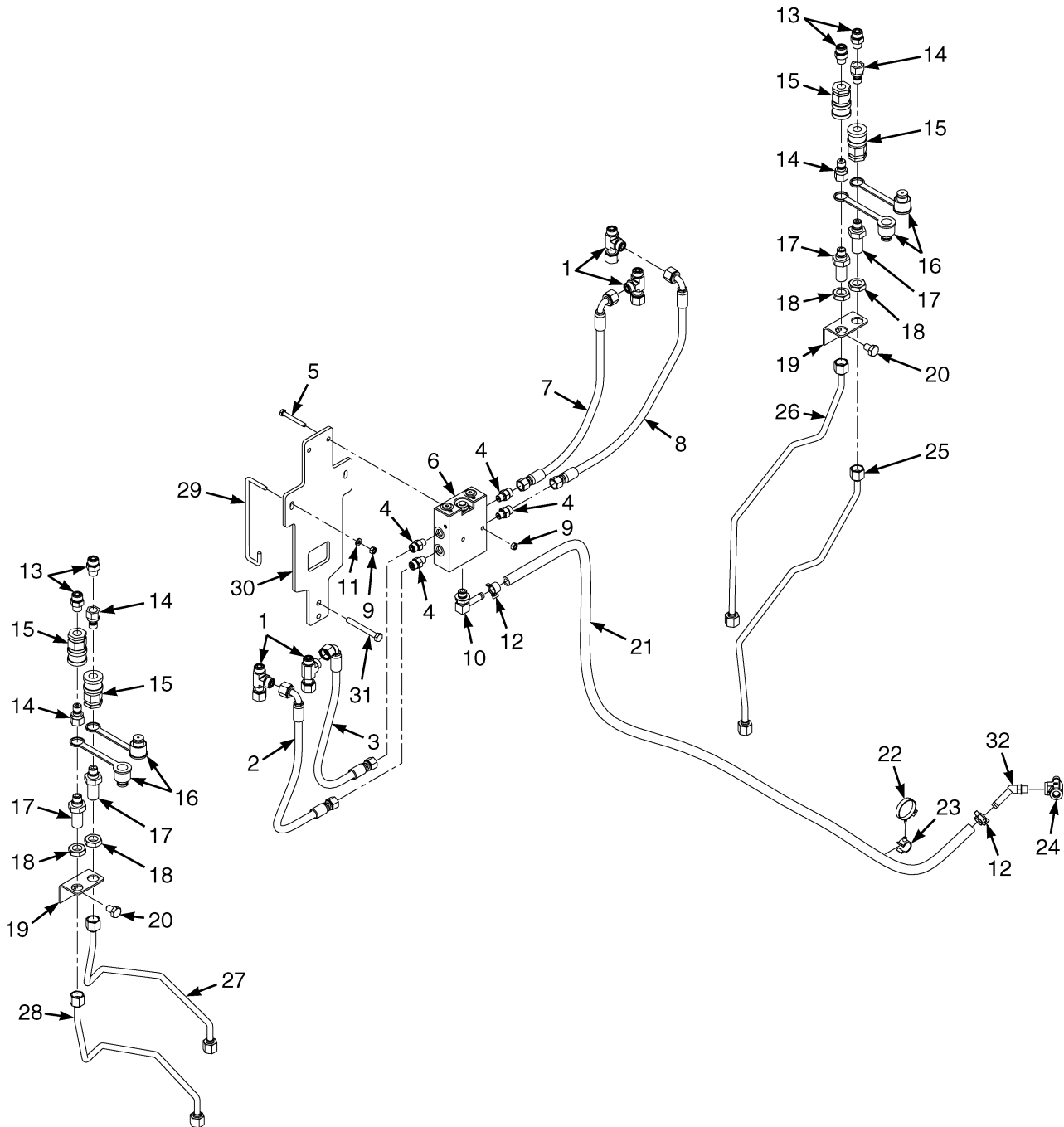
- A: D508, D509 Three Function, Class 2**
- B: D508, D509 Four Function, Class 2**
- C: D563, D564 Three Function, Class 3**
- D: D563, D564 Four Function, Class 3**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	b 1486740	Fitting	2	4	2	4
2	b 1483664	Fitting	2	4	2	4
3	b 1483661	Dust Cap	2	4	2	4
4	b 1483663	Quick Disconnect Fitting	2	4	2	4
5	b 1708364	Bulkhead (Fitting)	2	4	2	4
6	c 1550070	Bracket	1	2	1	2
6	a 1549718	Bracket .....	..	1	..	..
6	a 1549724	Bracket .....	..	..	..	1
7	2079987	Tube Assy .....	..	1	..	..
7	2079992	Tube Assy .....	..	..	..	1
8	2079988	Tube Assy .....	..	1	..	..
8	2079991	Tube Assy .....	..	..	..	1
9	2079986	Tube Assy	1	1	..	..
9	2079990	Tube Assy .....	..	..	1	1
10	2079985	Tube Assy	1	1	..	..
10	2079989	Tube Assy .....	..	..	1	1
11	d 1528573	Fitting	2	4	2	4

FOOTNOTES:

- a** Used With Integral Sideshift Carriage
- c** Used With Standard Carriage
- b** Used With Quick Disconnect Only
- d** Without Quick Disconnect

AUXILIARY TUBE EXTENSIONS (FIGURE 15-27) TWO AND THREE STAGE FULL FREE-LIFT — E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (PENDING PER ECN 10594304 →)



BP000547

AUXILIARY TUBE EXTENSIONS
TWO AND THREE STAGE FULL FREE-LIFT – E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS
(PENDING PER ECN 10594304 →)

KEY:**A: D508 3 Function, Class 2****B: D508 4 Function, Class 2****C: D563 3 Function, Class 3****D: D563 4 Function, Class 3**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1487095	Fitting	2	4	2	4
2	4604683	Hose Assy .....	..	1	..	1
3	4604565	Hose Assy .....	..	1	..	1
4	1486737	Fitting	2	4	2	4
5	292505	Capscrew	2	2	2	2
6	2111754	Valve (Single Auxiliary)	1	..	1	..
6	2111755	Valve (Dual Auxiliary) .....	..	1	..	1
7	4604566	Hose Assy	1	1	1	1
8	4604564	Hose Assy	1	1	1	1
9	302399	Nut	4	4	4	4
10	17221	Fitting	1	1	1	1
11	1673754	Washer	2	2	2	2
12	1569616	Hose Clamp	2	2	2	2
13	1486740	Fitting	2	4	2	4
14	1483664	Fitting (Quick Disconnect)	2	4	2	4
15	1483663	Quick Disconnect Fitting	2	4	2	4
16	1483661	Dust Cap	2	4	2	4
17	1708364	Bulkhead (Fitting)	2	4	2	4
18	1528602	Locknut	2	4	2	4
19	1550070	Bracket	1	2	1	2
19	a 1549718	Bracket .....	..	1	..	..
19	a 1549724	Bracket .....	..	1	..	1
20	1658934	Capscrew	1	2	1	2
21	110153	Hose	1	1	1	1
22	1644398	Clamp	1	1	1	1
23	1606544	Clamp	1	1	1	1
24	4606305	T-Fitting	1	1	1	1
25	2079985	Tube Assy	1	1	..	..
25	2079989	Tube Assy .....	..	..	1	1
26	2079986	Tube Assy	1	1	..	..
26	2079990	Tube Assy .....	..	..	1	1
27	2079988	Tube Assy .....	..	1	..	..
27	2079992	Tube Assy .....	..	..	..	1
28	2079987	Tube Assy .....	..	1	..	..
28	2079991	Tube Assy .....	..	..	..	1
29	4016313	Hook	2	2	2	2
30	4013928	Bracket	1	1	1	1
31	1581836	Capscrew	2	2	2	2
32	222500	Fitting	1	1	1	1

FOOTNOTES:

- a Use with Integral Sideshift Carriage

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MINI-LEVER CONVERSION KITS

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Kit-Mini Lever Conv 3 Way (w/o clamp to 4 way with clamp)	4034957
Kit-Mini Lever Conv 3 Way (with lockout to w/o lockout)	1701682
Kit-Mini Lever Conv 3 Way (w/o lockout to with lockout)	1701683
Kit-Mini Lever Conv 4 Way (with lockout to w/o lockout)	1701684
Kit-Mini Lever Conv 4 Way (w/o lockout to with lockout)	1701685
Kit-Mini Lever Conv 3 Way (w/o clamp to 4 way w/o clamp)	4035267
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	6-119	27		6-134	13		6-102	20		6-187	6
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	7-39	16		6-98	46		7-101	14	1544119	11-85	7
	7-45	6		6-103	45	1543096	7-65	14	1544120	11-85	7
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	7-85	29		6-118	20		7-101	14	1544124	11-85	10
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1544846	1-5	3		2-17	12	1548394	2-39	31		15-45	6
	1-9	3		2-19	12	1548497	3-3	18		15-49	3
1544975	11-5	3	1547368	6-195	6		3-5	13		15-51	6
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1653967	1-43	2		6-49	4	1665748	11-33	1	1670905	10-24	42
1653970	1-47	17		6-51	4	1666732	1-13	2		10-32	48
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1654316	10-41	1		15-53	20		15-31	5	1673704	6-65	28
1654317	10-41		1659839	2-44		1670054	11-39			15-3	2
1654318	10-41	1	1660500	7-51	24		11-47		1673754	14-20	35
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1701965	1-48	24		11-21	4		4-13	12	2027655	1-18	71
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2064207	12-12	8	2064684	14-16			14-25	1		1-21	4
2064212	12-12	8	2064706	14-16		2065138	12-15	1	2065668	1-18	69
2064218	12-12	8	2064710	14-16			12-15	1	2065745	6-5	19
2064239	12-12	8	2064712	14-16		2065143	12-15	1	2065796	1-18	67
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2064250	12-12	8	2064718	14-16		2065148	12-15	1	2065797	1-18	66
2064256	12-12	8	2064731	14-16			12-15	1		1-22	66
2064278	12-12	8	2064735	14-16		2065153	12-15	1	2065798	1-18	65
2064283	12-12	8	2064737	14-16			12-15	1		1-22	65
2064288	12-12	8	2064739	14-16		2065162	14-25	1	2065799	1-18	64
2064293	12-12	8	2064743	14-16		2065164	14-25	1		1-22	64
2064314	12-12	8	2064753	14-22	1		14-25	1	2065826	1-18	64
2064319	12-12	8	2064754	14-22	1	2065167	14-25	1		1-22	64
2064324	12-12	8	2064790	6-45	1	2065168	14-25	1	2065827	1-18	65
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2064352	12-12		2064836	6-61	4		13-19	4	2065855	6-13	6
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2064369	12-12		2064845	11-57	1		13-19	8	2065857	6-13	15
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2064379	12-12		2064849	11-57	1		14-5		2066482	6-38	5
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2064399	12-12		2064857	11-57	1	2065396	14-3		2066484	6-38	12
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2064554	10-5		2064887	11-39	1	2065403	14-3		2067395	5-79	18
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2064567	14-16	9		11-39			14-5			5-11	20
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2064583	14-16	9		11-31	16	2065456	14-3		2067597	7-25	6
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