

# **PARTS MANUAL**

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**FORTENS®  
H4.0FT5, H4.0FT6, H4.5FTS5,  
H4.5FT6, H5.0FT, H5.5FT  
(P005)**

**CUSTOMER EDITION**

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***HYSTER***



**SECTIONS**

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**ABBREVIATIONS QUICK REFERENCE SHEET**

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

<b>TERM</b>	<b>DEFINITION</b>	<b>TERM</b>	<b>DEFINITION</b>
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 14-1) 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.

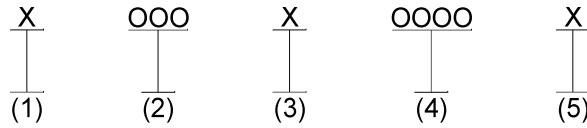
Contact your local dealer for Hyster lift trucks for serial number information for items with a ECN or a date break.

### ORDERING PARTS:

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

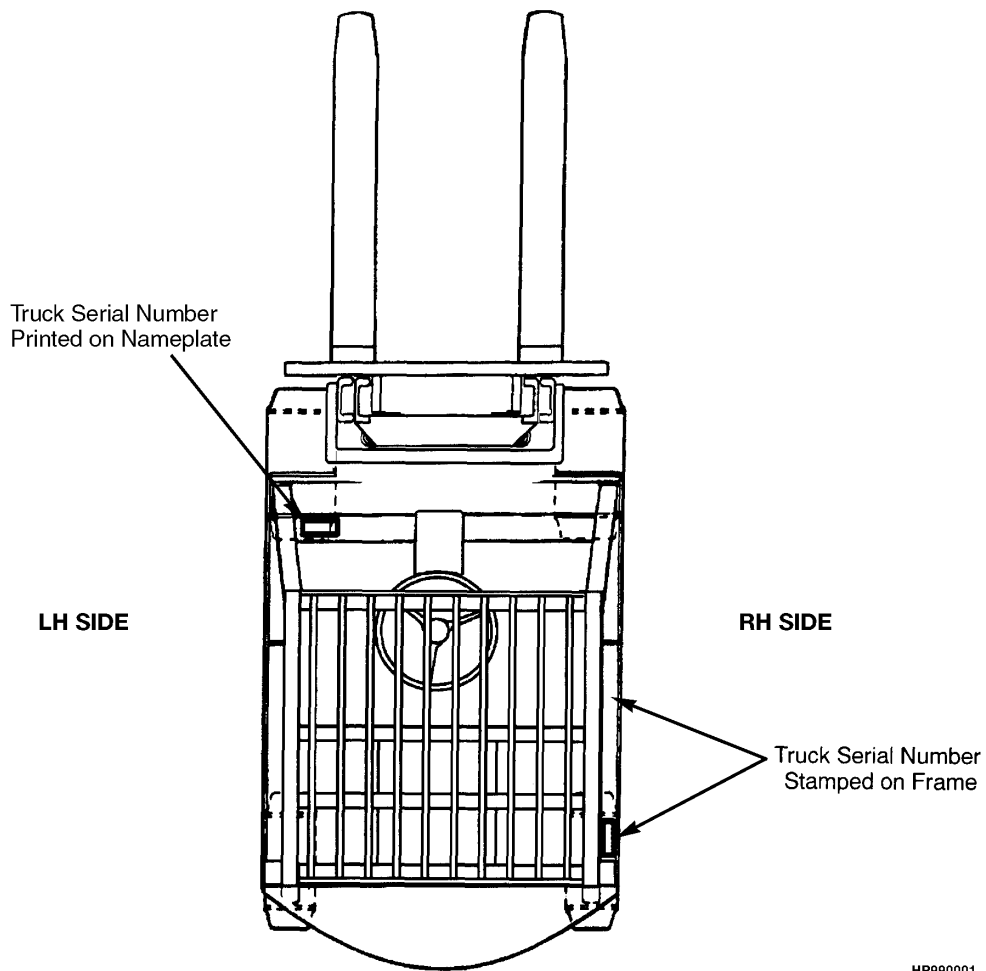
For any further information on parts, service, or ordering, consult your local dealer for Hyster lift trucks.

## IDENTIFICATION OF TRUCK SERIAL NUMBERS

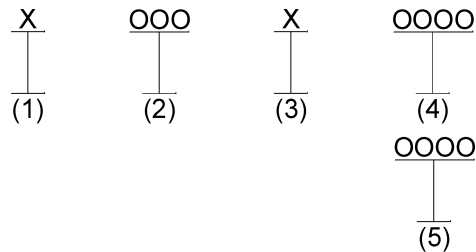


- (1) and (2) The first letter and three numbers indicate the truck unit code.
- (3) The second letter indicates the plant of manufacture.
- (4) The four or five digit number indicates the production sequence number of the truck.
- (5) The final letter indicates the year of manufacture starting with "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.



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).

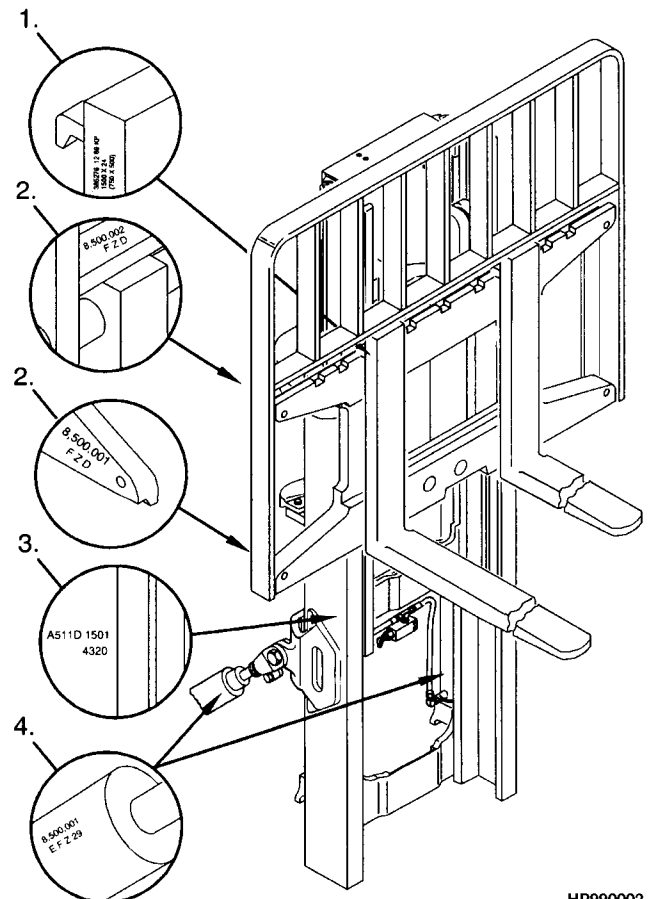
For pending production sequence numbers contact your local dealer for Hyster lift trucks.

**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.

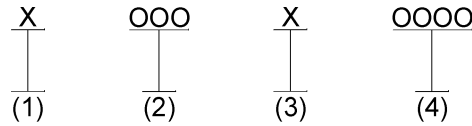
Always refer to the group, serial, or part number when ordering service parts.

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

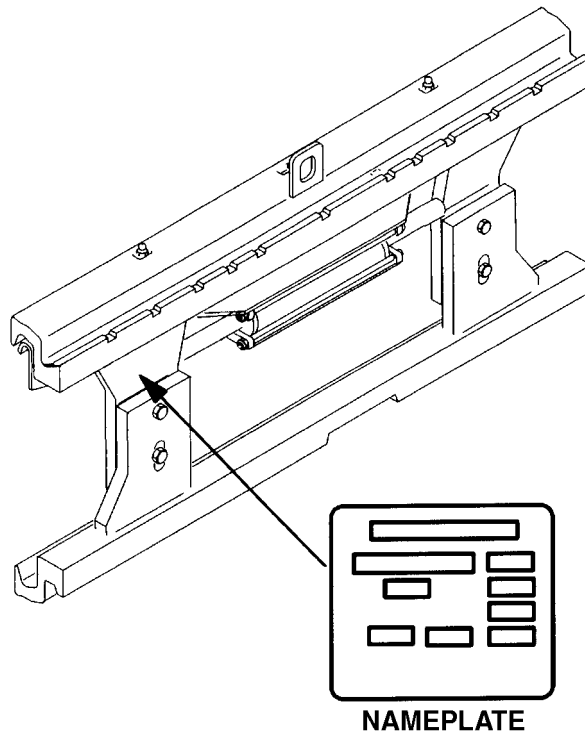


(1) and (2) The first letter and three numbers indicate the attachment unit code.

(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.

---

<b>PUBLICATION</b>	<b>HYSTER PART NUMBER</b>
Operating Manual.....	1624752
Service Manual (Complete).....	1698686
Parts Manual.....	1698694





**1**

**FRAME**



**SECTION 1**  
**FRAME**

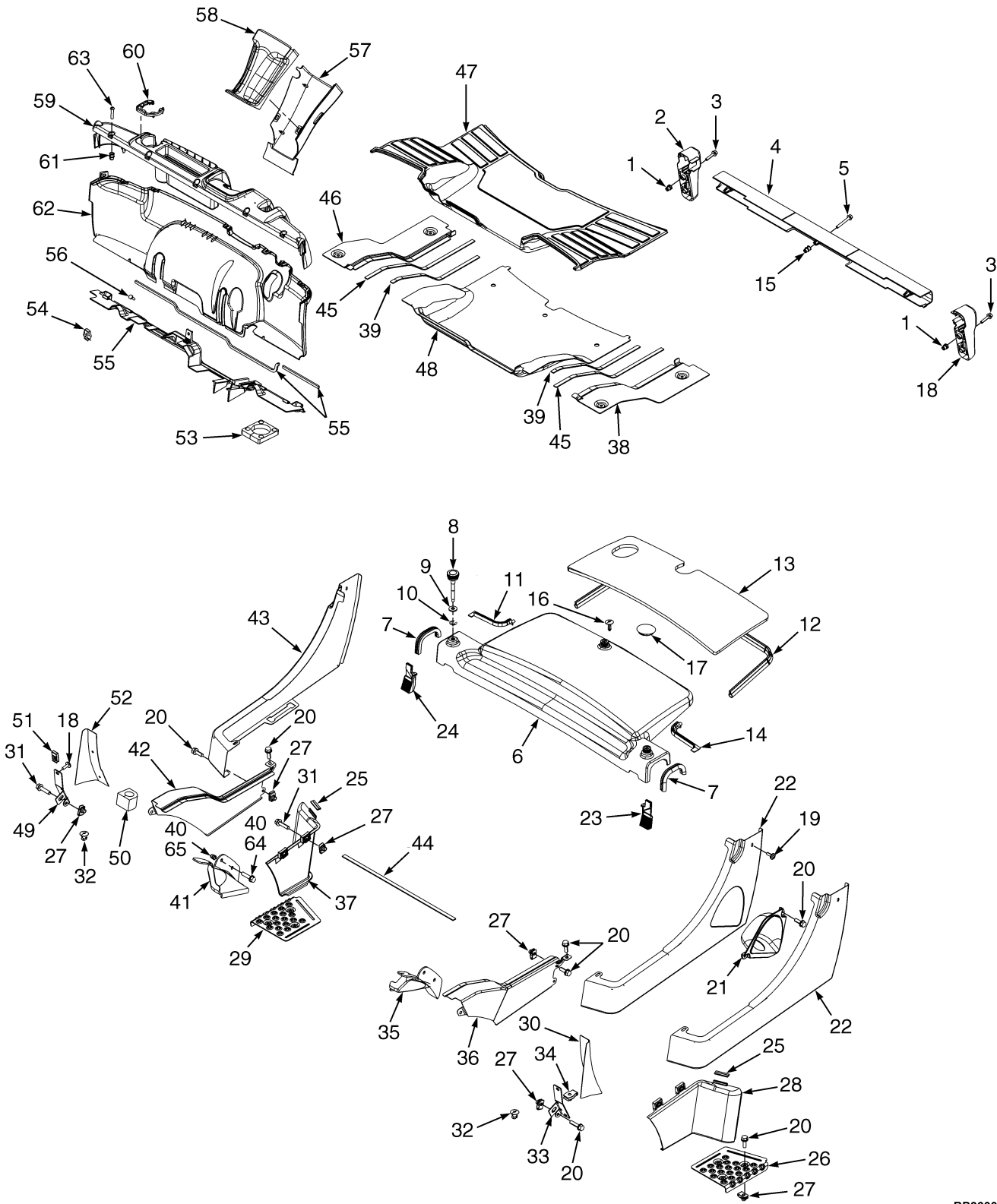
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## FLOOR PLATES AND COVERS (FIGURE 1-1)



BP260074

**FLOOR PLATES AND COVERS**

ITEM	PART NO.	DESCRIPTION	QTY
1	1531558	Insert .....	6
2	2056823	Tail Light Base (RH) .....	1
2	2107957	Tail Light Base (RH) .....	1
3	1586495	Capscrew .....	4
4	2067475	Cover (Rear Crossmember) .....	1
5	1540643	Capscrew .....	3
6	1688244	Cover .....	1
6	1587872	Cover .....	1
7	1603285	Trim Seal .....	2
8	1588247	Screw .....	3
9	320158	Washer .....	3
10	353206	Retaining Ring .....	3
11	1603959	Seal (RH) .....	1
12	1590332	Trim Seal .....	1
13	1617194	Sound Liner .....	1
14	1603893	Seal (LH) .....	1
15	1531001	Insert .....	3
16	1347045	Fastener .....	6
17	2021395	Cap .....	2
18	2056822	Tail Light Base (LH) .....	1
18	2107958	Tail Light Base (LH) .....	1
19	1530019	Screw .....	6
20	1583611	Capscrew .....	20
21	1517656	Shield .....	1
22	1584130	Panel (Rear LH) (LPG Only) .....	1
22	1584129	Panel (Rear LH) (Diesel Only) .....	1
23	2089201	Seal (LH) .....	1
24	2089202	Seal .....	1
25	1582072	Trim Seal .....	2
26	1544413	Plate (LH) .....	1
26	1393879	Nut .....	3
27	1480237	Nut .....	22
28	2102514	Step Panel (LH) .....	1
29	1544415	Plate (RH) .....	1
29	1393879	Nut .....	3
30	1565962	Cover (LH Fender) .....	1
31	1586627	Capscrew .....	6
32	1581079	Plug .....	4
33	1597837	Bracket (LH) .....	1
34	1393879	Nut .....	2
35	1626734	Flap (LH) (LH) .....	1
36	1597410	Panel (Front LH) .....	1
37	2102513	Step Panel (RH) .....	1
38	1583582	Floorplate (LH) .....	1
39	1586762	Seal (Rubber) .....	1
40	1581851	Washer .....	8
41	1626735	Flap (RH) (RH) .....	1
42	1597412	Panel (Front RH) .....	1
43	1584135	Panel (Rear RH) .....	1
44	1588766	Seal (Rubber) .....	1
45	1567329	Seal (Rubber) .....	2

## FLOOR PLATES AND COVERS

ITEM	PART NO.	DESCRIPTION	QTY
46	1583583	Floorplate (RH) .....	1
47	2077209	Floormat .....	1
48	1583581	Floorplate (Center) .....	1
49	1597838	Bracket (RH) .....	1
50	1530135	Grommet .....	1
51	1350215	Nut .....	4
52	1565964	Cover (RH Fender) .....	1
53	1595782	Seal (Foam) .....	1
54	2065667	Clip .....	8
55	1567328	Cover Plate .....	1
55	1529428	Seal .....	1
56	2027655	Screw .....	2
57	2065666	Cover (Steering Column Lower) .....	1
58	2098330	Cover (Steering Column Upper) .....	1
59	1573597	Dash Panel (Manual Hydraulics) .....	1
59	1573598	Dash Panel (Electronic Hydraulics) .....	1
60	2070975	Cup Holder .....	1
61	1531001	Insert .....	5
62	2070726	Panel (Single Brake Pedal) .....	1
62	2076204	Panel (Dual Brake Pedal) .....	1
63	2071261	Capscrew .....	5
63	<b>a</b> 1710007	Capscrew .....	4
63	<b>a</b> 1307737	Fastener .....	1
64	1581581	Capscrew .....	4
65	239503	Nut .....	4

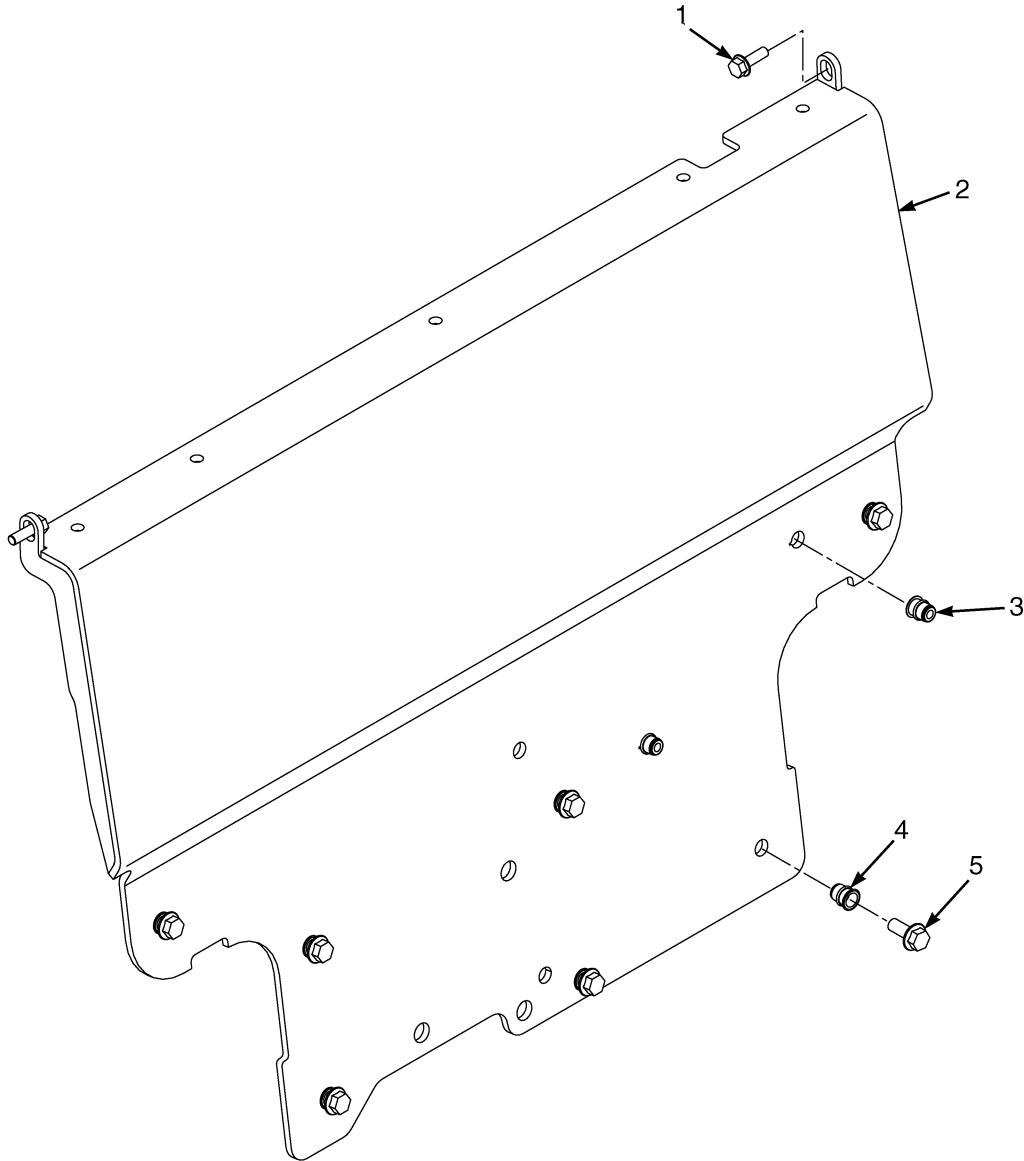
### FOOTNOTES:

**a** With Alternate Fastener





## COWL MOUNT (FIGURE 1-2)



HP121070

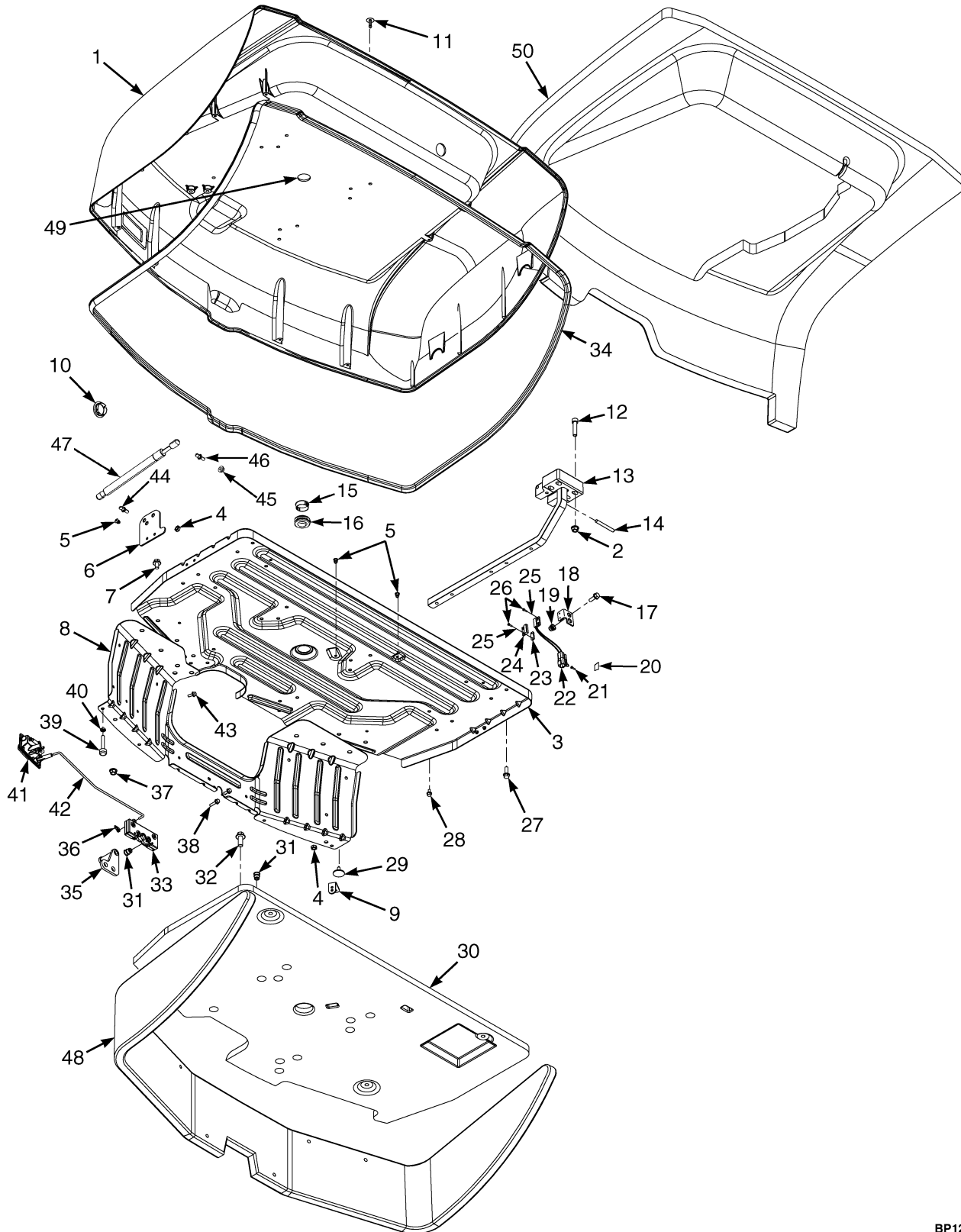
**COWL MOUNT**

ITEM	PART NO.	DESCRIPTION	QTY
1	1583611	Capscrew .....	2
1	1510113	Capscrew (Optional) .....	2
2	<b>d</b> 1686713	Cowl .....	1
2	<b>be</b> 4014162	Cowl .....	1
2	<b>c</b> 4030072	Cowl .....	1
3	1530243	Insert .....	2
4	1640776	Insert .....	7
4	<b>a</b> 1581567	Nut (Optional) .....	7
4	<b>a</b> 320160	Washer (Optional) .....	7
5	1586629	Capscrew .....	7

**FOOTNOTES:**

- |          |   |          |                   |
|----------|---|----------|-------------------|
| <b>a</b> | Not Illustrated                                 | <b>d</b> | → S/N P005B03423J |
| <b>b</b> | With brake pedal and master cylinder support    | <b>e</b> | S/N P005B03424J → |
| <b>c</b> | Without brake pedal and master cylinder support |          |                   |

## HOOD (FIGURE 1-3)



BP120698

**HOOD**

ITEM	PART NO.	DESCRIPTION	QTY
1	<b>eg</b> 1676379	Hood (Assembly) .....	1
1	<b>dg</b> 1676378	Hood (Assembly) (Low Noise) .....	1
1	<b>g</b> 1616931	Hood .....	1
1	<b>j</b> 4016238	Hood (Assembly) (Low Noise) .....	1
1	<b>j</b> 4015889	Hood .....	1
2	1460477	Nut .....	6
3	1676375	Hood Reinforcement .....	1
3	4025271	Hood Reinforcement (Alternate Part) .....	1
4	364868	Nut .....	8
5	1608879	Capscrew .....	6
6	1623041	Bracket .....	2
7	1528778	Capscrew .....	6
8	.....	Hood Reinforcement (Front) .....	1
9	1585590	Bracket .....	1
10	1582370	Bracket .....	1
11	1347045	Fastener .....	8
12	296029	Capscrew .....	4
13	1567821	Hinge .....	2
14	302381	Dowel .....	1
15	1585592	Plug .....	1
16	1561015	Grommet .....	1
16	4031944	Grommet (Alternate Part) .....	1
17	1583611	Capscrew .....	2
18	1527228	Bracket .....	1
19	1531557	Insert .....	2
20	1500912	Clip .....	1
21	1582464	Fastener .....	1
22	1627835	Switch Assembly .....	1
22	1627834	Switch .....	1
22	1493465	Connector (2 Pin) .....	1
23	1585765	Nut .....	1
24	1565545	Magnet .....	1
25	320152	Washer .....	4
26	302021	Screw .....	4
27	1510113	Capscrew .....	8
27	1527880	Capscrew (Alternate Part) .....	8
28	1534417	Capscrew .....	8
29	1304971	Fastener .....	4
30	1676377	Hood Liner .....	1
31	1530243	Insert .....	4
32	1528889	Capscrew .....	6
33	1590370	Latch .....	1
34	1590488	Seal .....	1
35	1584654	Striker Bolt (Striker) .....	1
36	1530221	Clip .....	2
37	1460477	Nut .....	4
38	1527878	Capscrew .....	4
39	1585581	Bumper (Hood) .....	2
40	329069	Nut .....	2
41	1564263	Handle .....	1
42	1584142	Link (Link) .....	1

## HOOD

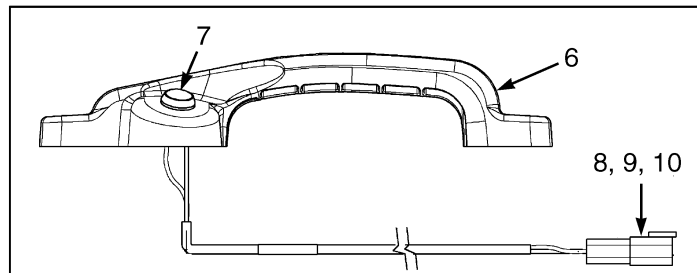
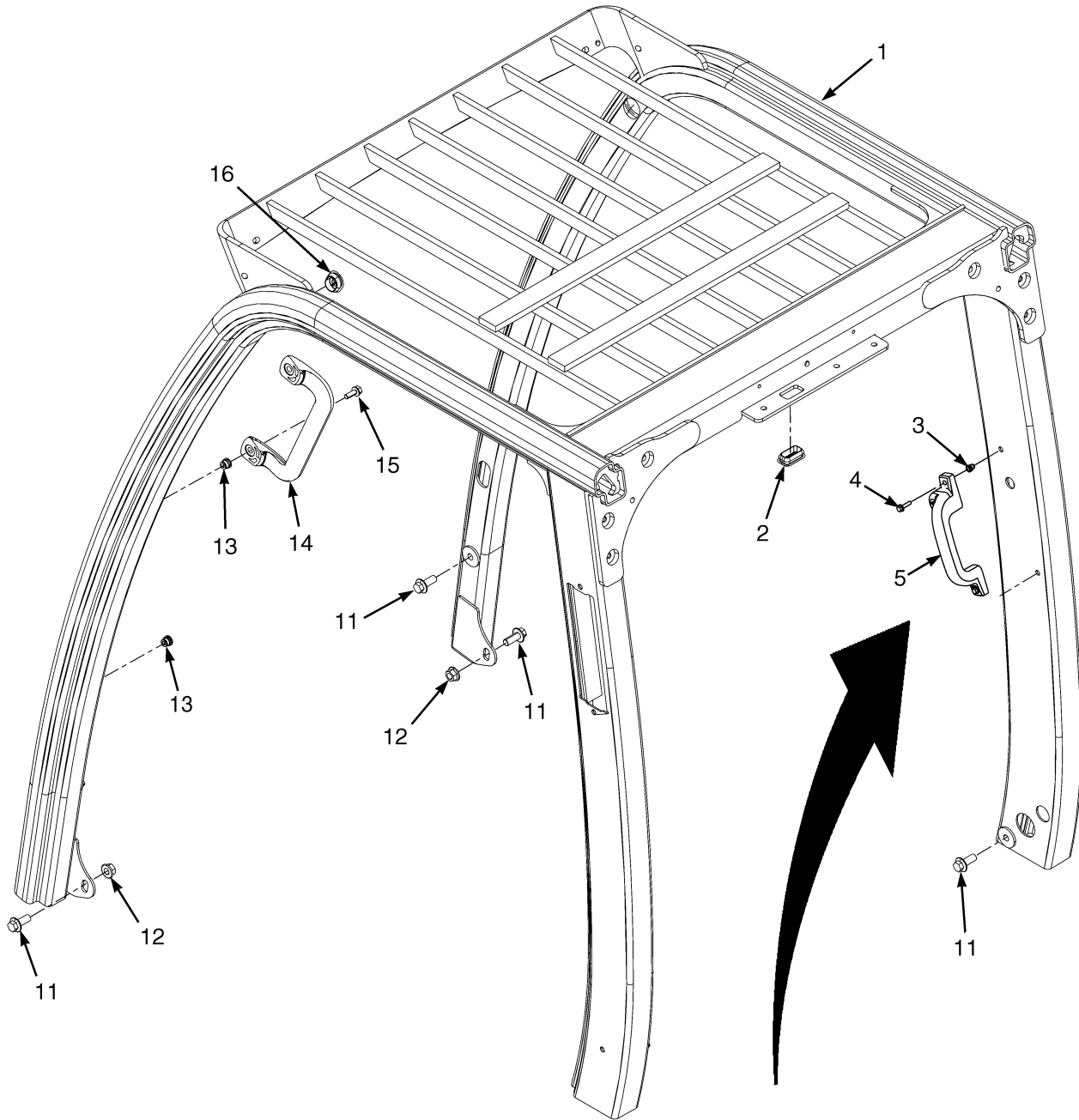
ITEM	PART NO.	DESCRIPTION	QTY
43	1527876	Capscrew .....	2
44	<b>f</b> 1563369	Ball Stud (With Cab) .....	3
44	1563369	Ball Stud (With Overhead Guard) .....	4
44	<b>i</b> 1563369	Ball Stud (with Cab) .....	2
45	1586430	Nut .....	2
46	<b>f</b> 1606659	Ball Stud (With Cab) .....	1
46	<b>i</b> 4011397	Ball Stud (with Cab) .....	4
47	<b>f</b> 1632293	Gas Spring (With Overhead Guard) .....	2
47	<b>f</b> 1632293	Gas Spring (With Cab - RH) .....	1
47	<b>f</b> 1610854	Gas Spring (Locking) (With Cab - LH) .....	1
47	<b>i</b> 4014557	Gas Spring (with Overhead Guard RH/LH) .....	2
47	<b>i</b> 4014557	Gas Spring (with Cab RH) .....	1
47	<b>i</b> 4011395	Gas Spring (LH) .....	1
48	<b>ad</b> 1708350	Liner .....	1
49	1616379	Plug (Yellow) .....	1
50	<b>h</b> 1708352	Blanket .....	1
50	<b>k</b> 4009730	Blanket .....	1
50	<b>ad</b> 4009734	Blanket .....	1
	<b>bcd</b> 1593942	Hood Liner (Low Noise) (LH Panel) .....	1
	<b>bcd</b> 1593943	Hood Liner (Low Noise) (RH Panel) .....	1
	<b>bcd</b> 1593951	Hood Liner (Low Noise) (Front Panel) .....	1

### FOOTNOTES:

- |          |   |          |                   |
|----------|---|----------|-------------------|
| <b>a</b> | Low Noise Sound Abatement Option            | <b>g</b> | → 8/2010          |
| <b>b</b> | Not Illustrated                             | <b>h</b> | → S/N P005B02424G |
| <b>c</b> | Replaced with 1708350 one piece hood liner. | <b>i</b> | 1/2010 →          |
| <b>d</b> | Used with Cab                               | <b>j</b> | 8/2010 →          |
| <b>e</b> | With Overhead Guard                         | <b>k</b> | S/N P005B02425G → |
| <b>f</b> | → 12/2009                                   |          |                   |



## OVERHEAD GUARD (FIGURE 1-4)



BP120165

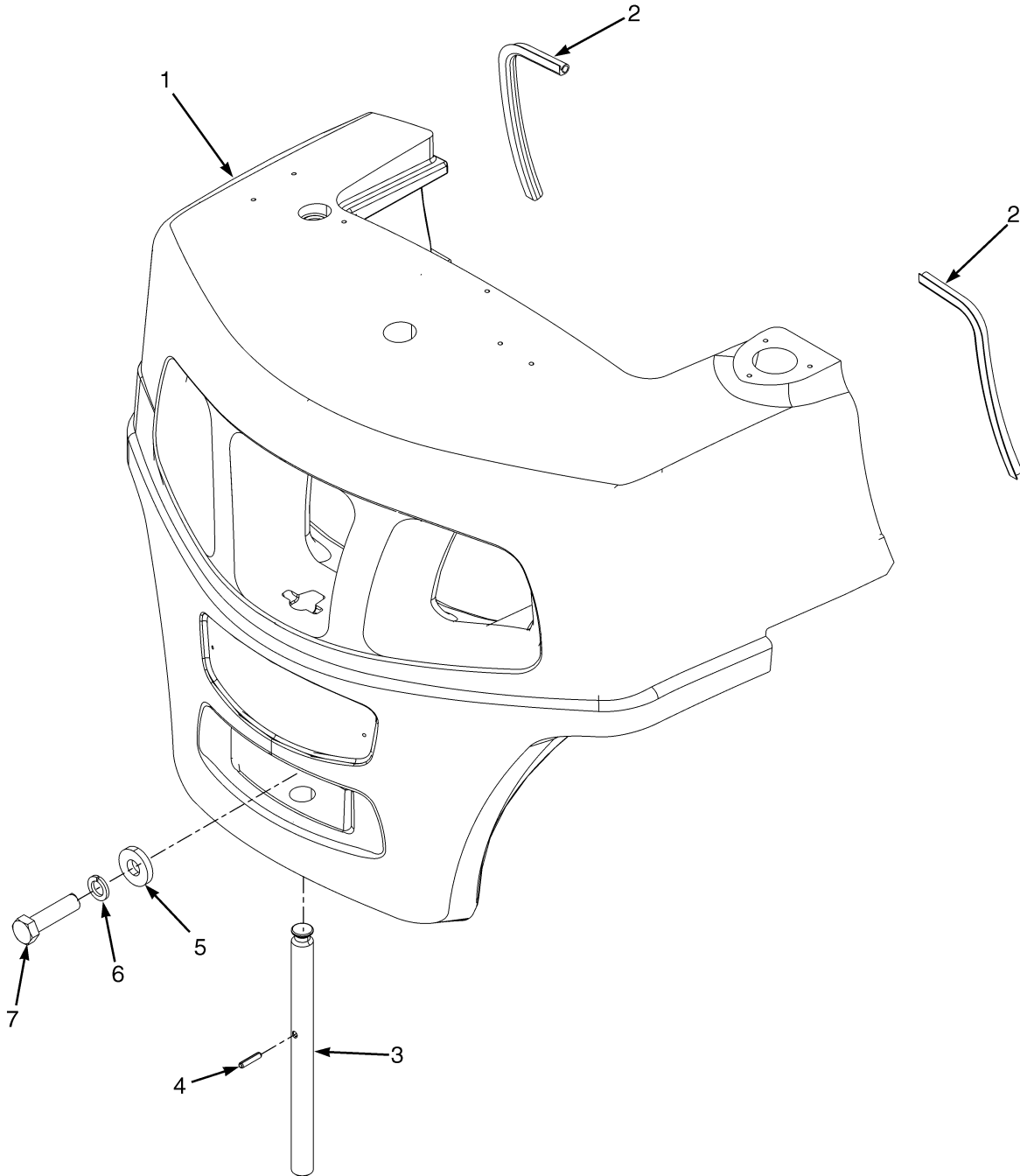


**OVERHEAD GUARD**

ITEM	PART NO.	DESCRIPTION	QTY
1	1599206	Overhead Guard (Tall) .....	1
1	1599212	Overhead Guard (Short) .....	1
2	1560671	Grommet .....	1
3	1531558	Insert .....	2
4	1586495	Capscrew .....	2
5	2070223	Handle Assembly .....	1
6	2069454	Handle .....	1
7	1566726	Push Button Switch .....	1
8	1493465	Connector (2 Pin) .....	1
9	1330414	Connector (Secondary Lock) .....	1
10	1330437	Terminal (Pin) .....	2
11	1566853	Capscrew .....	8
12	<del>1370949</del>		
	1528888	Nut (Shoulder) .....	2
13	1531557	Insert .....	4
14	1536813	Handle (Grab) .....	1
15	1583611	Capscrew .....	2
16	1558219	Grommet .....	2
	<b>a</b> 1494888	Plug .....	4
	<b>a</b> 1599415	Plug .....	1

**FOOTNOTES:****a** Not Illustrated

## COUNTERWEIGHT (FIGURE 1-5)

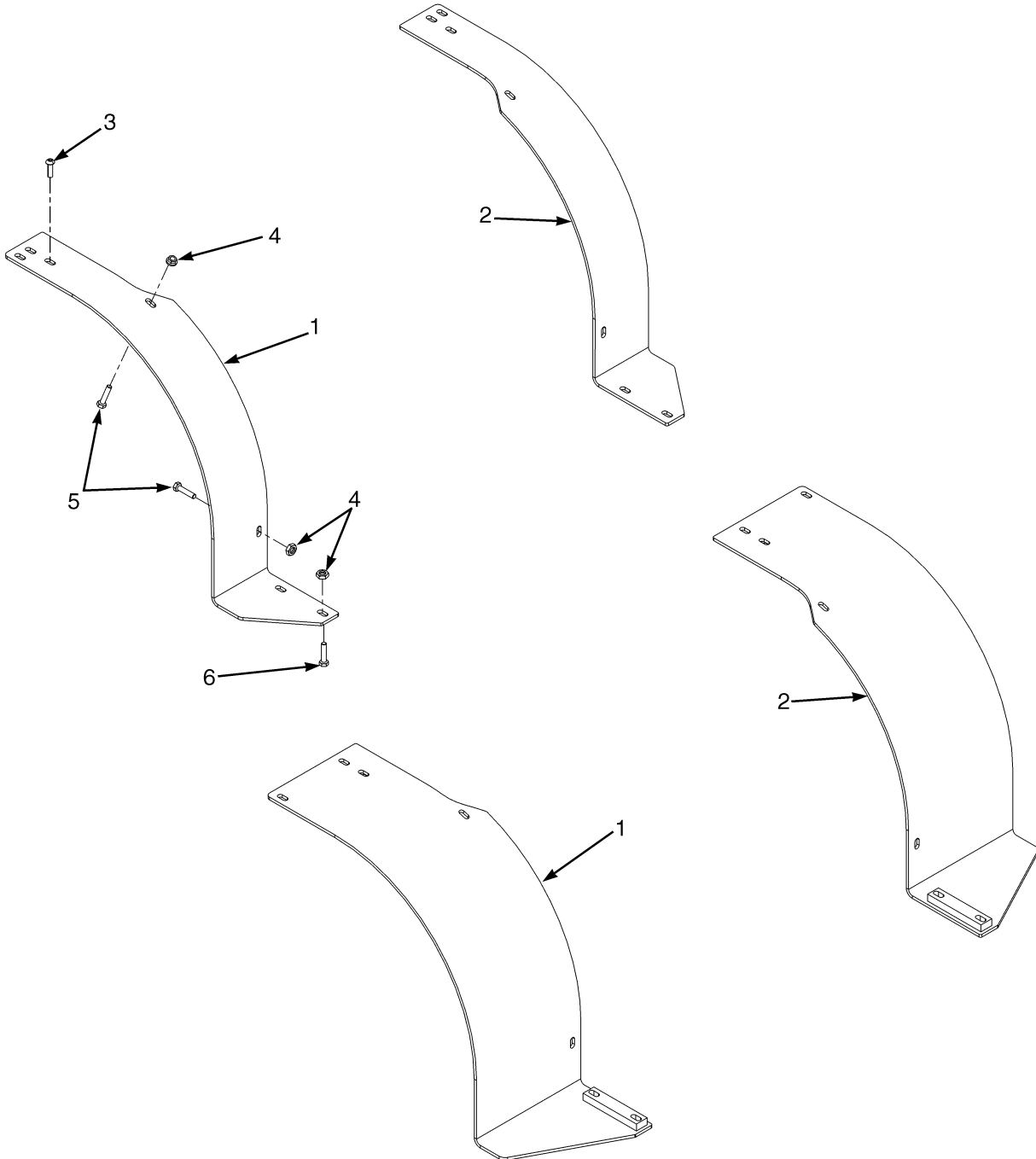


BP120215

**COUNTERWEIGHT**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
1	1670188	Counterweight (H4.0FT5) .....	1
1	1670189	Counterweight (H4.5FT5) .....	1
1	1670190	Counterweight (H4.5FT6) .....	1
1	1670193	Counterweight (H5.0FT) .....	1
1	1670191	Counterweight (H5.5FT) .....	1
1	1670192	Counterweight (H4.0FT6) .....	1
2	1603681	Seal .....	2
3	1668335	Tow Pin .....	1
4	302491	Roll Pin .....	1
5	1571610	Washer .....	1
6	292691	Washer .....	1
7	292627	Capscrew .....	1

## FENDERS (FIGURE 1-6)

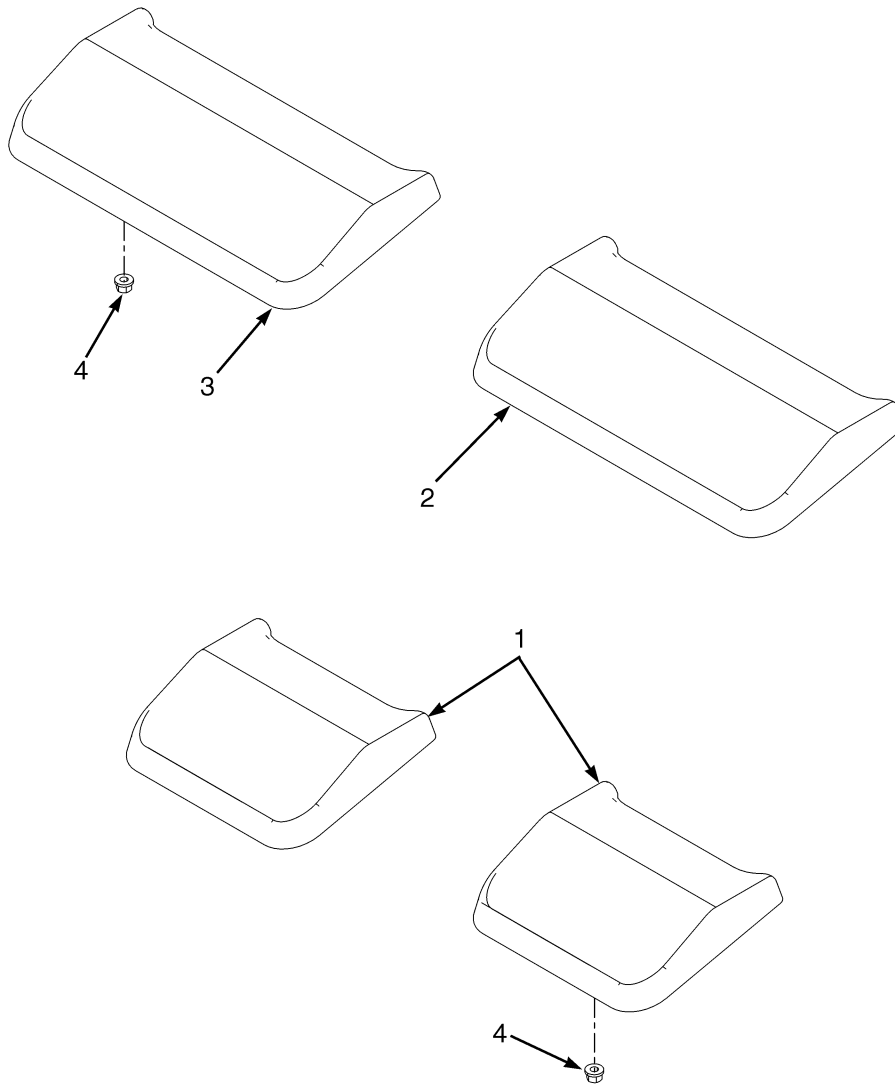


BP120229

**FENDERS****KEY:****A: H4.0-4.5FT5****B: H4.5FT6-H5.5FT**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1578570	Fender (Wide Tread) (LH) .....	1	..
1	1578571	Fender (Wide Tread) (LH) .....	..	1
1	1578572	Fender (Dual Tread) (LH) .....	1	..
1	1578573	Fender (Dual Tread) (LH) .....	..	1
2	1578574	Fender (Wide Tread) (RH) .....	1	..
2	1578575	Fender (Wide Tread) (RH) .....	..	1
2	1578576	Fender (Dual Tread) (RH) .....	1	..
2	1578577	Fender (Dual Tread) (RH) .....	..	1
3	2076289	Capscrew .....	2	2
4	1586432	Nut .....	10	10
5	1613433	Capscrew .....	4	4
6	1613434	Capscrew .....	4	4

## MUD GUARDS (FIGURE 1-7)



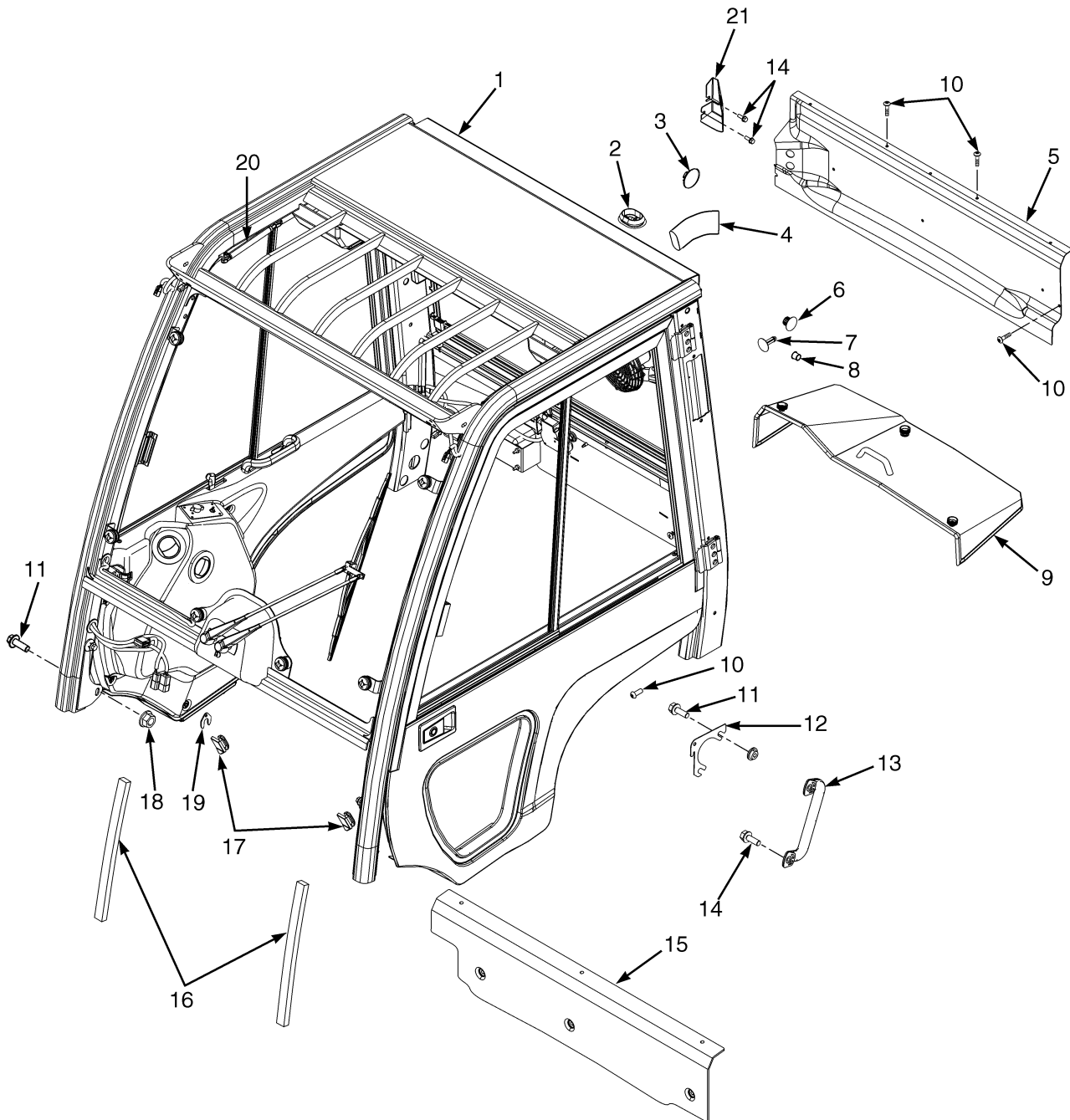
BP120221

**MUD GUARDS****KEY:****A: Standard Tread****B: Wide Tread****C: Dual Tread**

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
1	2071647	Mud Flap .....	2	..	..
2	<b>a</b> 2074436	Mud Flap (LH) .....	..	1	..
2	<b>b</b> 2074437	Mud Flap (LH) .....	..	1	..
2	<b>a</b> 2074438	Mud Flap (LH) .....	..	..	1
2	<b>b</b> 2074439	Mud Flap (LH) .....	..	..	1
3	<b>a</b> 2074440	Mud Flap (RH) .....	..	1	..
3	<b>b</b> 2074441	Mud Flap (RH) .....	..	1	..
3	<b>a</b> 2074442	Mud Flap (RH) .....	..	..	1
3	<b>b</b> 2074443	Mud Flap (RH) .....	..	..	1
4	1544153	Locknut .....	4	4	6

**FOOTNOTES:****a** H4.0FT5, H4.0FT6, H4.5FTS5**b** H4.5FT6, H5.0-5.5FT

## CAB AND ATTACHING PARTS (FIGURE 1-8) WITH STEEL DOORS



BP120220

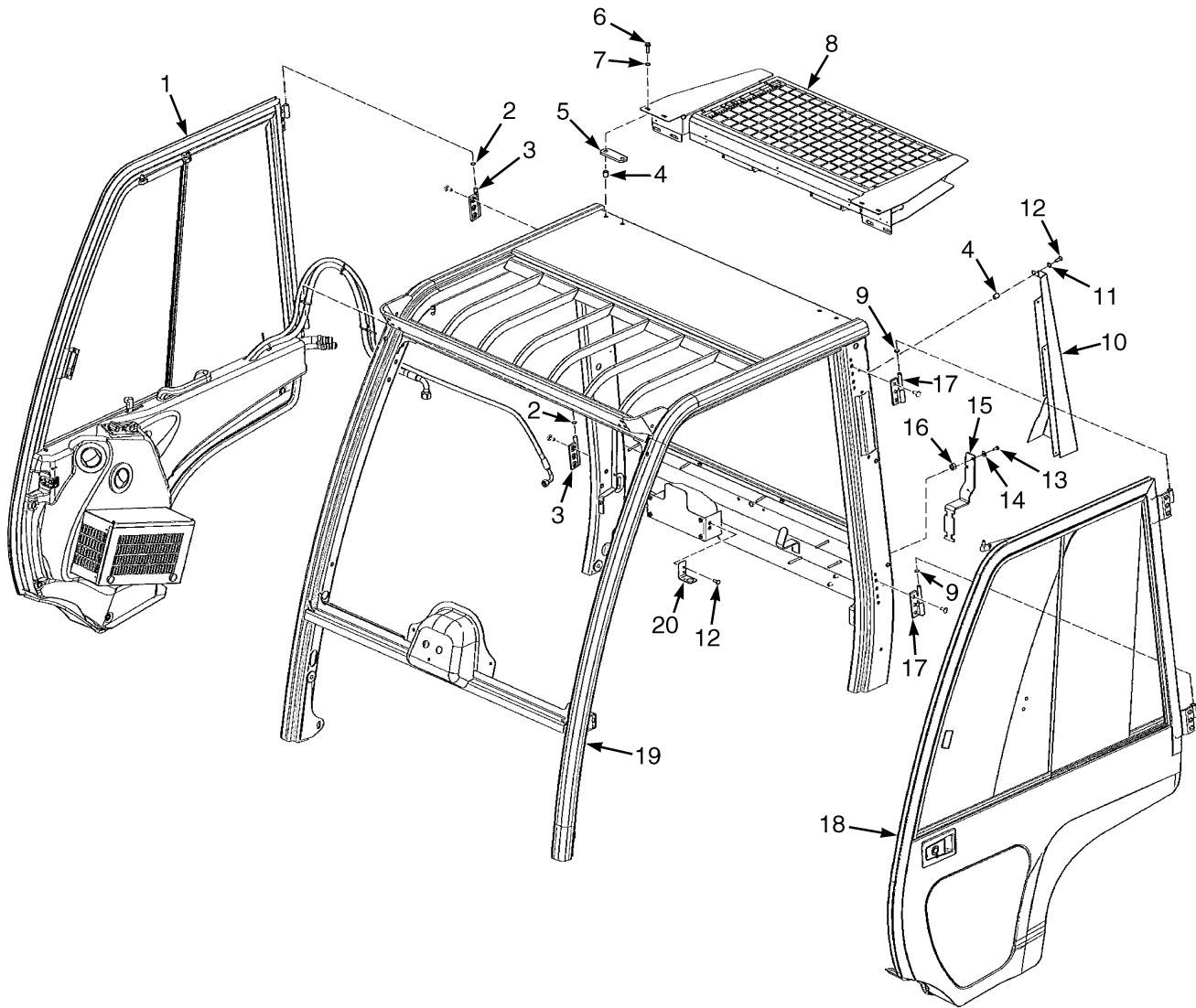


**CAB AND ATTACHING PARTS  
WITH STEEL DOORS**

ITEM	PART NO.	DESCRIPTION	QTY
1	1670240	Cab (With Steel Doors) .....	1
2	2070996	Grommet .....	1
3	1599415	Plug .....	1
4	1593845	Sleeve .....	1
5	1661567	Cover (Inner Rear) .....	1
5	1668667	Cover .....	1
5	1623377	Seal .280 M .....	1
5	1668666	Plate .....	1
5	1623396	Fastener .....	6
6	1574301	Plug .....	8
7	2090695	Fastener .....	6
8	1494888	Plug .....	4
9	1615902	Cover (Counterweight) .....	1
10	1510126	Screw (Button Head) .....	3
11	1527888	Capscrew .....	8
12	1636853	Shim .....	AR
13	1536813	Handle (Grab) .....	1
14	1583611	Capscrew .....	4
15	1635652	Cover .....	1
16	4040607	Seal .....	2
17	1589787	Seal .....	2
18	<del>1370949</del>		
	1528888	Nut (Shoulder) .....	2
19	1636647	Shim .....	AR
20	1598414	Gas Spring (RH) .....	1
20	1598397	Gas Spring (LH) .....	1
21	1661564	Bracket (Heater Hose) .....	1
21	<del>1670529</del>		
	1598327	Connector (Female) .....	1
	<b>a</b> 1595161	Blanket .....	1
	<b>a</b> 320156	Washer .....	1

**FOOTNOTES:****a** Not Illustrated

## CAB WITH STEEL DOORS (FIGURE 1-9) WITH AIR CONDITIONING (PENDING PER ECN 94360 →)

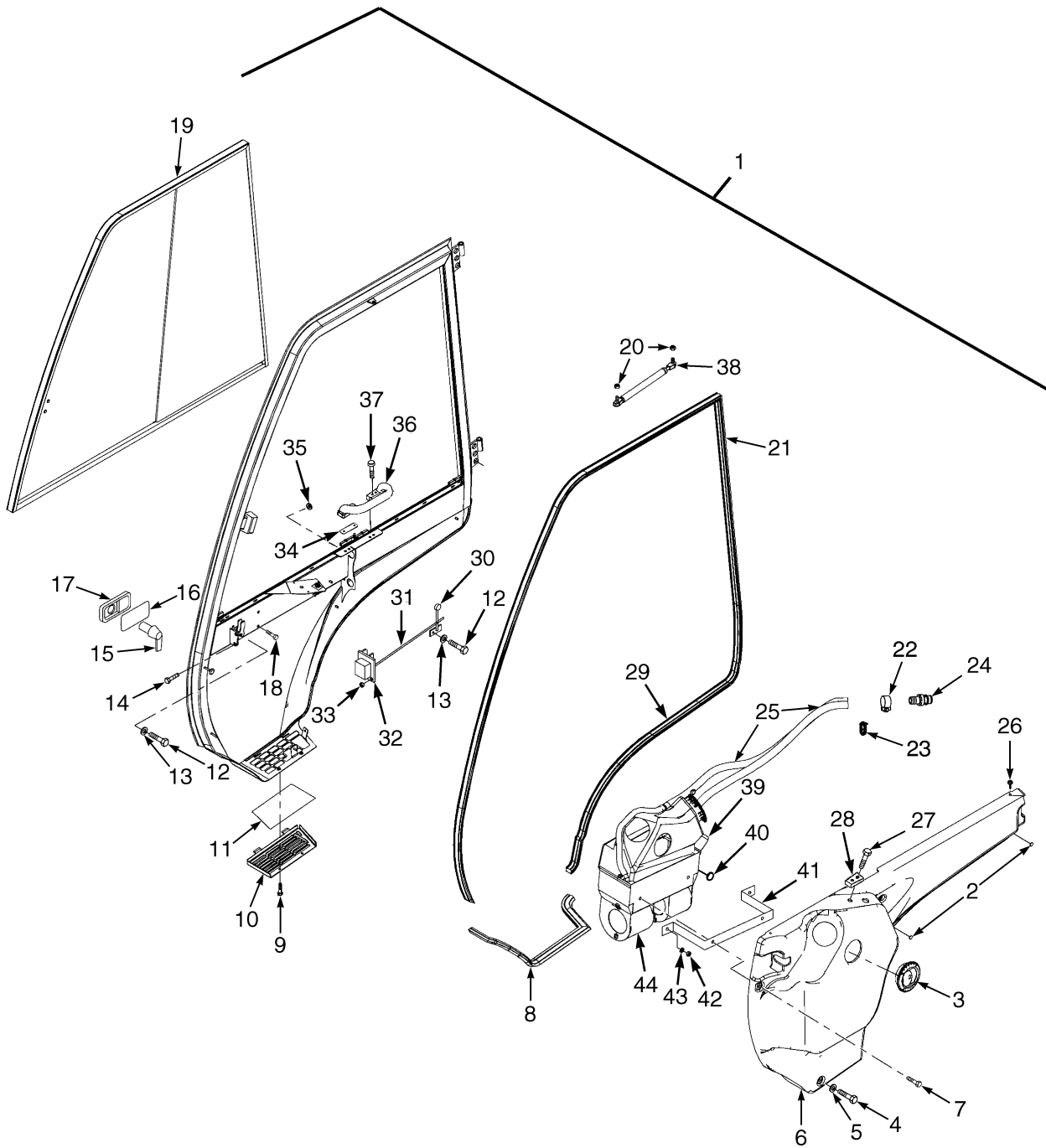


YP120263

**CAB WITH STEEL DOORS**  
**WITH AIR CONDITIONING (PENDING PER ECN 94360 →)**

ITEM	PART NO.	DESCRIPTION	QTY
	1693291	Cab (With Air Conditioning) .....	1
1	4014295	Door (RH) (☞Figure 1-11).....	1
2	1468312	Washer .....	2
3	1393474	Hinge (RH) .....	2
4	1468308	Nut .....	9
5	4033835	Bracket .....	2
6	320158	Washer .....	9
7	287851	Capscrew .....	8
8	4007135	Condenser (☞Figure 1-22).....	1
9	1468312	Washer .....	2
10	4033832	Cover (Hose) .....	1
11	320158	Washer .....	3
12	287851	Capscrew .....	3
13	1623395	Capscrew .....	2
14	320158	Washer .....	4
15	4033834	Plate (Fastening) .....	1
16	239503	Nut .....	2
17	1393473	Hinge (LH) .....	2
18	1623359	Door (LH) (☞Figure 1-12).....	1
19	1670240	Cab (☞Figure 1-8).....	1
20	4033833	Bracket .....	1

## CAB (FIGURE 1-10) STEEL DOOR AND HEATER ASSEMBLY — RIGHT HAND



BP120724

**CAB**  
**STEEL DOOR AND HEATER ASSEMBLY – RIGHT HAND**

ITEM	PART NO.	DESCRIPTION	QTY
	1670240	Cab (With Steel Doors) .....	1
1	1623358	Door .....	1
	4020219	Door .....	1
2	1651739	Rivet .....	2
3	1598398	Louver (Air) .....	3
4	1623395	Capscrew .....	2
5	320158	Washer .....	4
6	1623394	Cover .....	1
7	1598389	Fastener .....	3
8	1623391	Seal .....	AR
9	1598399	Screw .....	2
10	1623398	Bracket .....	1
11	1623399	Air Filter .....	1
12	302047	Screw .....	4
13	320156	Washer .....	4
14	296229	Capscrew .....	2
15	1598411	Lever .....	1
16	1598394	Shim .....	1
17	1598393	Grip (Without Key) .....	1
18	1623393	Capscrew .....	2
19	1623392	Sliding Window (RH) (☞Figure 1-15).....	1
19	1673274	Dust Seal .....	1
19	1673275	Clip .....	1
20	316835	Nut .....	1
20	302400	Nut (Alternate Part) .....	1
21	1393463	Seal .....	AR
22	1674073	Clamp .....	1
23	1393499	Clamp .....	1
24	1598670	Fitting (Male) .....	2
25	1623400	Hose (Bulk) .....	AR
26	1623406	Plug .....	2
27	1468318	Screw .....	4
28	1623403	Plate .....	1
29	1515337	Seal .....	AR
30	1598410	Lever .....	1
31	1598409	Bar .....	1
32	1598412	Latch (RH) .....	1
33	1598408	Nut .....	2
34	1623397	Plate .....	2
35	1579116	Grommet .....	2
36	1598406	Handle .....	1
37	1701962	Screw .....	2
38	1393472	Ball Stud .....	2
38	4009902	Ball Stud (Alternate Part) .....	1
39	1598404	Heater Assembly .....	1
39	1598675	Heater .....	1
39	1598674	Hose .....	4
39	1598673	Switch (Blower) .....	1
39	1640800	Knob (Heater) .....	1
39	1598672	Valve (Water) .....	1

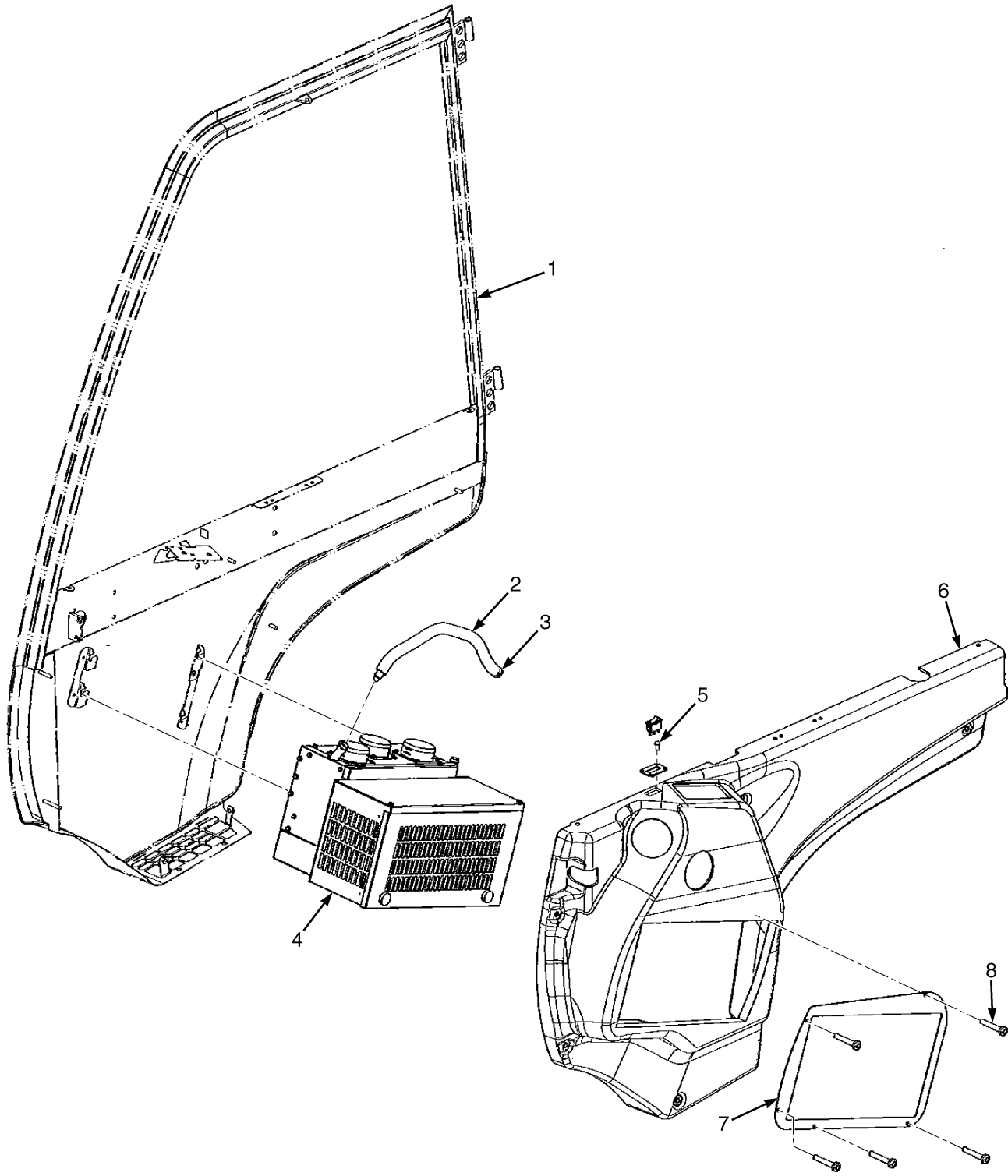
**CAB**  
**STEEL DOOR AND HEATER ASSEMBLY – RIGHT HAND**

ITEM	PART NO.	DESCRIPTION	QTY
39	1598671	Wire Harness .....	1
39	1598670	Fitting (Male) (Heater Hose) .....	2
40	1598390	Plug .....	2
41	1598669	Bracket .....	1
42	239503	Nut .....	2
42	239503	Nut .....	2
43	320158	Washer .....	2
	<b>a</b> 1593629	Key (For Cab Door Grip) .....	2
	<b>a</b> 1689908	Door Key (Alternate Part) .....	1
	<b>a</b> 1506825	Strap Clamp .....	1
	<b>a</b> 1558294	Seal .....	AR

**FOOTNOTES:****a** Not Illustrated



## CAB (FIGURE 1-11) STEEL DOOR AND AIR CONDITIONER ASSEMBLY — RIGHT HAND (PENDING PER ECN 94360 →)



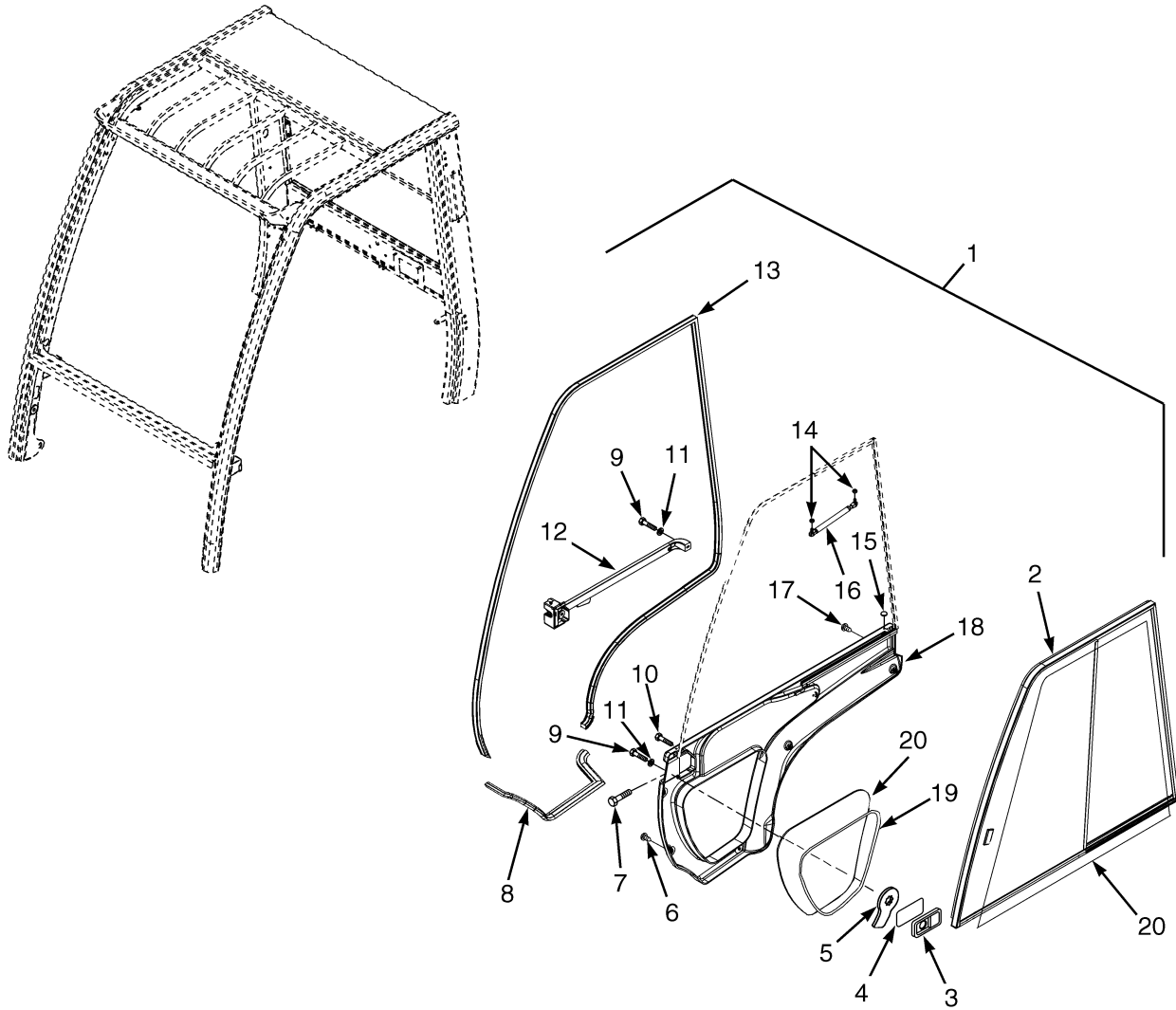
BP200129



**CAB****STEEL DOOR AND AIR CONDITIONER ASSEMBLY – RIGHT HAND (PENDING PER ECN 94360 →)**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
1	4017717	Door (RH) .....	1
2	1598674	Hose .....	1
3	1623402	Clip (Hose Clamp) .....	2
4	1701967	Air Conditioner (☞Figure 1-20).....	1
5	1701963	Nut .....	4
6	4017718	Panel (Door Trim) .....	1

## CAB (FIGURE 1-12) STEEL DOOR — LEFT HAND



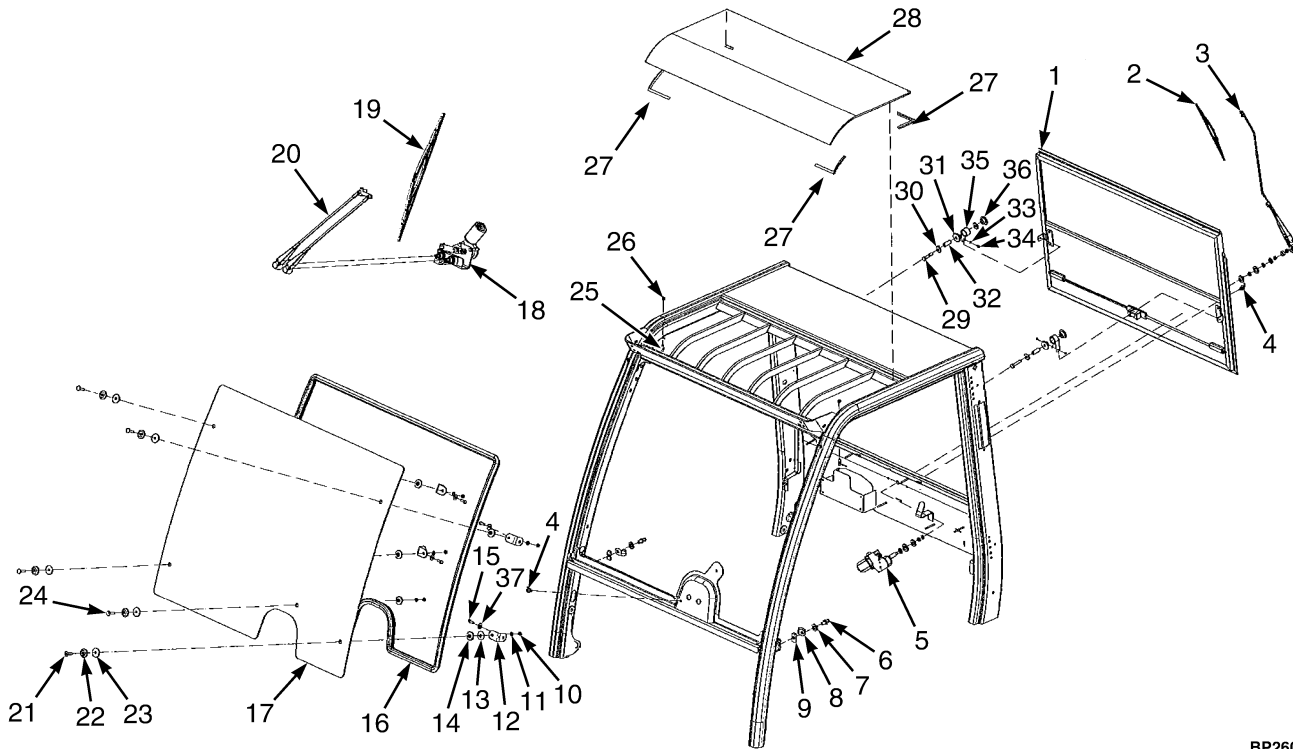
BP120223

**CAB**  
**STEEL DOOR – LEFT HAND**

ITEM	PART NO.	DESCRIPTION	QTY
	1670240	Cab (With Steel Doors) .....	1
1	1623359	Door (LH) .....	1
2	1623404	Sliding Window (☞Figure 1-14).....	1
2	1673274	Dust Seal .....	1
2	1673275	Clip .....	1
3	1598393	Grip (Without Key) .....	1
4	1598394	Shim .....	1
5	1598392	Lever .....	1
6	1598389	Fastener .....	3
7	296229	Capscrew .....	2
8	1623391	Seal .....	AR
9	302047	Screw .....	5
10	1623393	Capscrew .....	2
11	320156	Washer .....	5
12	1393479	Door Handle .....	1
13	1393463	Seal .....	AR
14	316835	Nut .....	2
14	302400	Nut (Alternate Part) .....	2
14	4009902	Ball Stud (Alternate Part) .....	1
15	1623406	Plug .....	2
16	1598397	Gas Spring .....	1
17	1623396	Fastener .....	5
18	<del>1623405</del>		
	4035980	Cover .....	1
19	1598395	Window .....	1
	<b>a</b> 1593629	Key (For Cab Door Grip) .....	2
	<b>a</b> 1558294	Seal .....	AR

**FOOTNOTES:****a** Not Illustrated

## CAB (FIGURE 1-13) WINDOWS AND WINDOW WIPER SYSTEM — WITH STEEL AND PVC DOORS



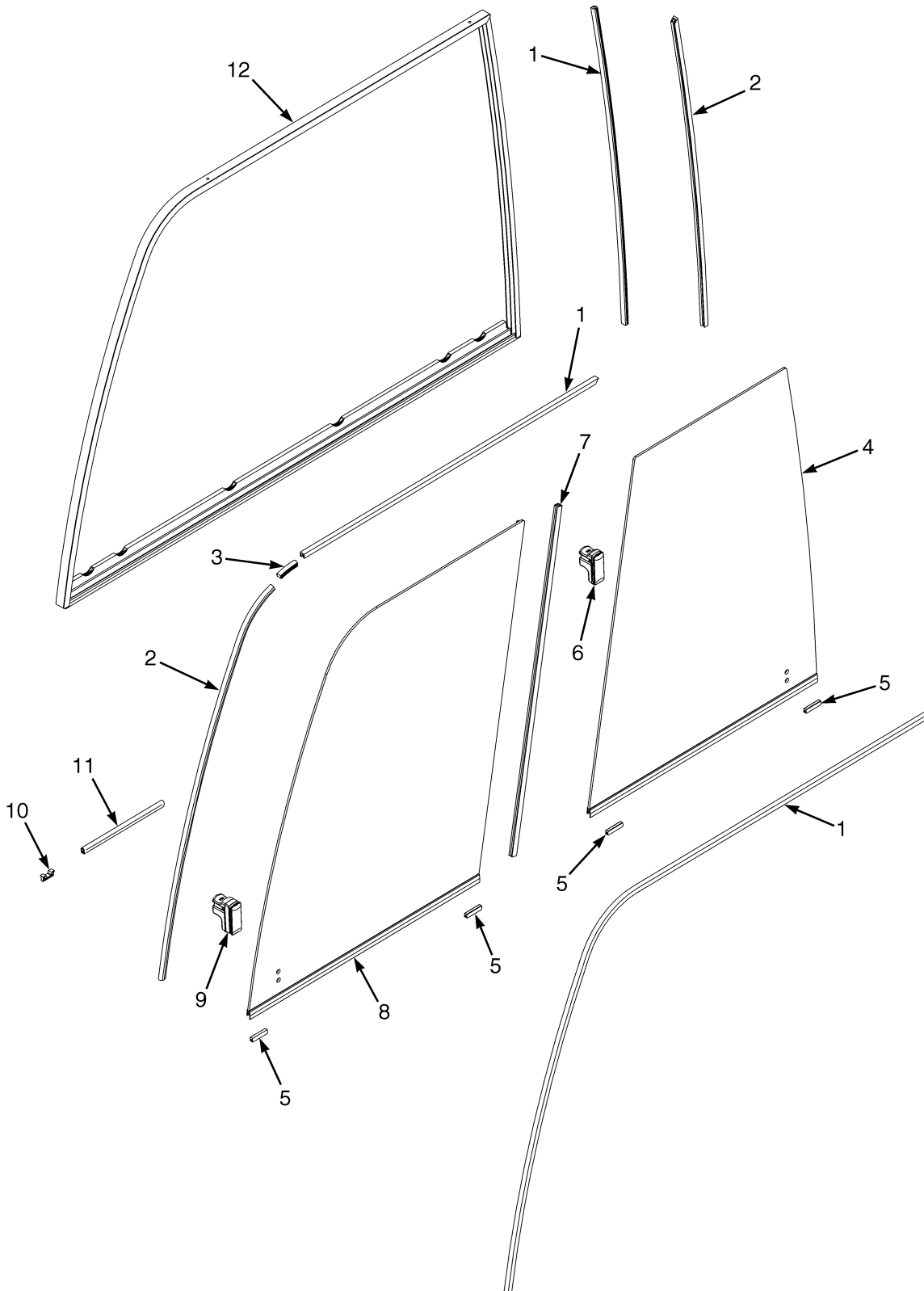
BP260100

ITEM	PART NO.	DESCRIPTION	QTY
	1670240	Cab (With Steel Doors) .....	1
	1670242	Cab (With PVC Doors) .....	1
	1693291	Cab (With Air Conditioning) (Diesel Engine) (With Steel Doors) (☞ Figure 1-9).....	1
1	c 1623365	Sliding Window (☞ Figure 1-24).....	1
2	c 1598297	Wiper Blade .....	1
3	c 1598296	Wiper Arm .....	1
4	1493336	Connector (Spray Nozzle) (Bulk Head) .....	2
5	c 1598295	Wiper Motor .....	1
5	1645316	Kit-Wiper Motor .....	1
5	1645317	Kit-Wiper Motor .....	1
6	1639003	Striker Bolt (PVC Doors) .....	2
6	1653630	Striker Bolt (Steel Doors) .....	2
7	1571029	Washer .....	2
8	1674101	Spacer .....	2
9	1393488	Block .....	2
10	1468313	Nut .....	5
11	320158	Washer .....	11
12	1598210	Bracket .....	4
13	1598211	Washer .....	5
14	1468317	Washer .....	5
15	1623364	Capscrew .....	4
16	1495441	Seal 4.528 M .....	AR
17	1674090	Front Window .....	1
18	a 1674087	Wiper Motor .....	1
19	a 1520927	Wiper Blade .....	1

ITEM	PART NO.	DESCRIPTION	QTY
20	<b>a</b> 1623369	Wiper Arm .....	1
21	1506668	Screw .....	4
22	1468315	Washer .....	5
23	1468316	Washer .....	5
24	1674089	Screw .....	1
25	1393472	Ball Stud .....	2
26	316835	Nut .....	2
27	1674088	Seal .....	4
28	1623367	Kit-Top Screen .....	1
29	1598291	Capscrew .....	2
30	1558052	Washer .....	2
31	292667	Nut .....	2
32	1623366	Sleeve .....	2
33	296415	Washer .....	10
34	302019	Screw .....	2
35	1598302	Spring .....	2
36	1598301	Bushing .....	4
37	1504941	Washer .....	4
	<b>b</b> 1668665	Label (PVC Doors) .....	1
	<b>b</b> 1674109	Kit-Repair (Glue) .....	1

**FOOTNOTES:****a** Front**c** Rear**b** Not Illustrated

## CAB (FIGURE 1-14) WINDOW — LH DOOR

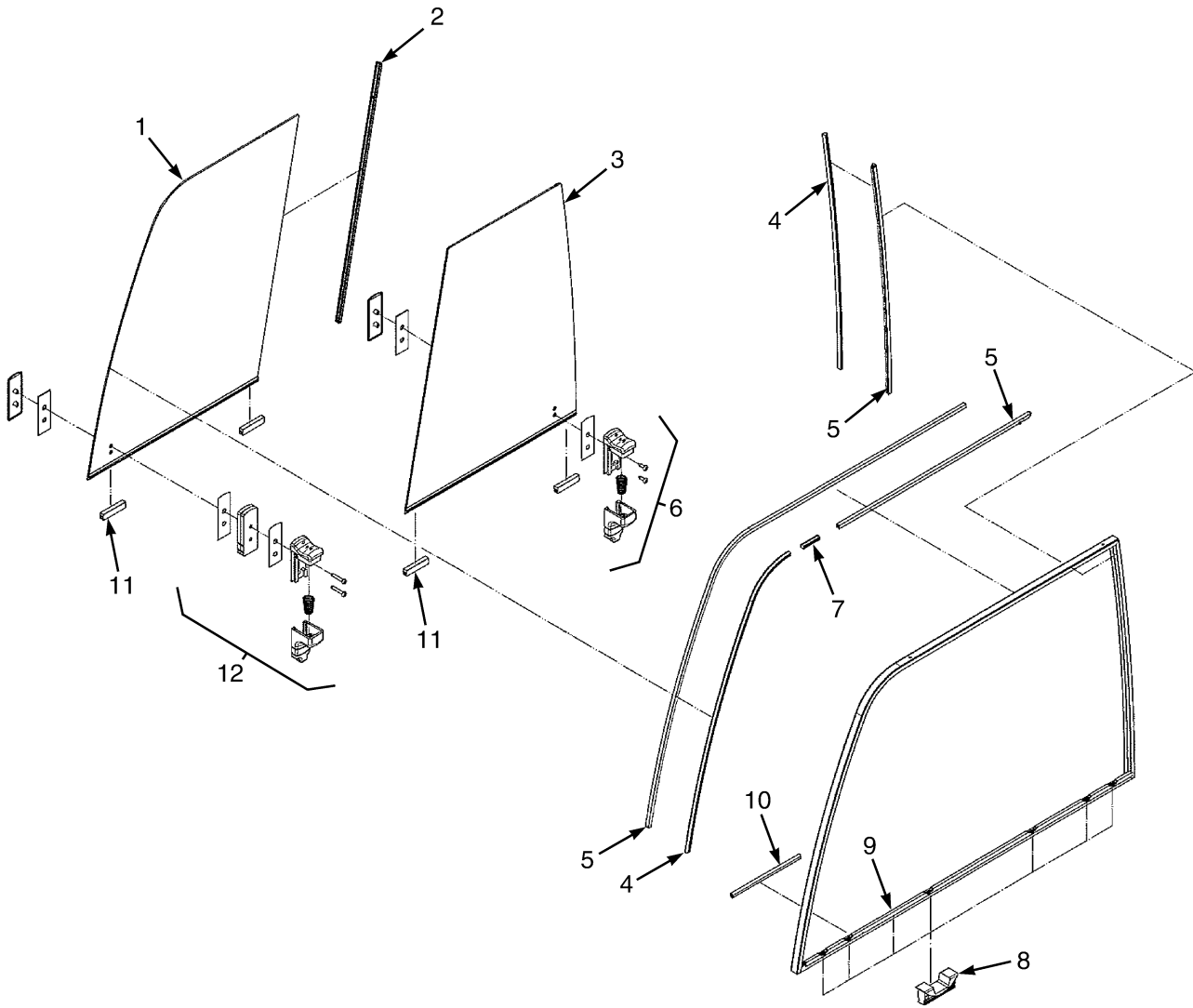


BP200102

**CAB  
WINDOW – LH DOOR**

ITEM	PART NO.	DESCRIPTION	QTY
	1623404	Sliding Window (LH Door) .....	1
1	1644804	Seal .....	AR
2	4009783	Seal .....	1
3	1641640	Strip Seal .....	AR
4	4013618	Sliding Window (Rear) .....	1
5	<del>1644804</del>		
	4009782	Guide .....	4
6	4009780	Latch .....	1
7	1690792	Channel (Sealing Bar) .....	1
8	4013617	Sliding Window (Front) .....	1
9	<del>1653969</del>		
	4013559	Latch (With Screws) (Mounted from Inside) .....	1
9	4013558	Latch (With Screws) (Mounted from Outside) .....	1
10	4009779	Clip .....	3
11	1498336	Edge Protector .....	AR
12	4013616	Window Frame .....	1

## CAB (FIGURE 1-15) WINDOW — RH DOOR



BP120706

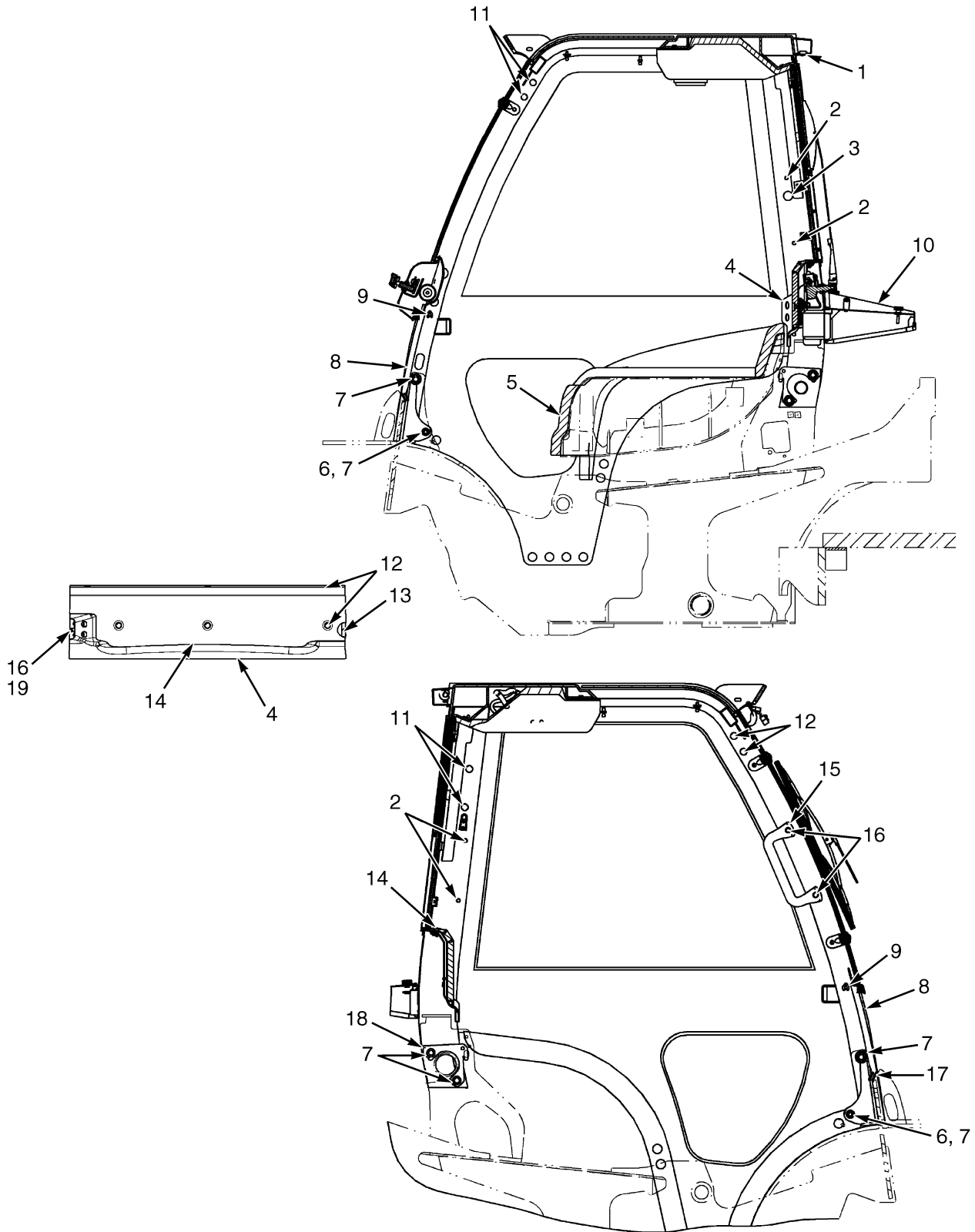


**CAB  
WINDOW – RH DOOR**

ITEM	PART NO.	DESCRIPTION	QTY
	1623392	Sliding Window .....	1
1	4026695	Sliding Window (Front) .....	1
2	4009781	Seal .....	1
3	4028787	Sliding Window (Rear) .....	1
4	4009783	Seal .....	AR
5	1644804	Seal .....	AR
6	4009780	Latch .....	1
7	1641640	Strip Seal .....	AR
8	4009779	Clip .....	3
9	4013619	Window Frame (RH) .....	1
10	1498336	Edge Protector .....	AR
11	<del>1644804</del>		
	4009782	Guide .....	4
12	<del>1653969</del>		
	4013559	Latch (With Screws) (Mounted from Inside) .....	1
	<b>a</b> 4013558	Latch (With Screws) (Mounted from Outside) .....	1

**FOOTNOTES:****a** Not Illustrated

## CAB AND ATTACHING PARTS (FIGURE 1-16) WITH PVC DOORS

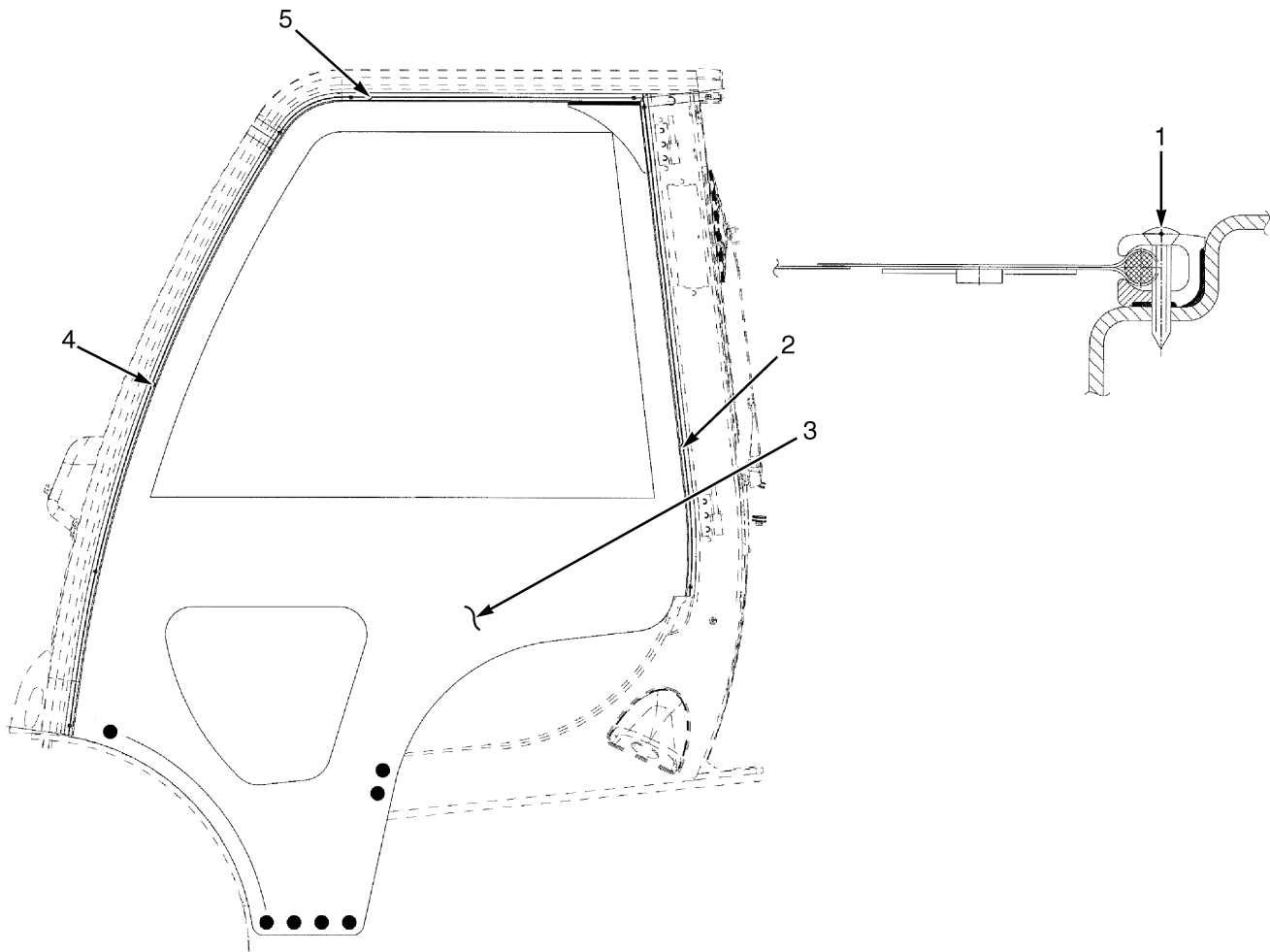


BP120245

**CAB AND ATTACHING PARTS  
WITH PVC DOORS**

ITEM	PART NO.	DESCRIPTION	QTY
	1670242	Cab (With PVC Doors) (☞Figure 1-13, ☞Figure 1-18, ☞Figure 1-19).....	1
	1646709	Door (RH) (☞Figure 1-17).....	1
	1646710	Door Pvc (LH) (☞Figure 1-17).....	1
1	2070996	Grommet .....	1
2	1494888	Plug .....	4
3	1599415	Plug .....	1
4	1661567	Cover (Inner Rear) .....	1
4	1668667	Cover .....	1
4	1623377	Seal .280 M .....	1
4	1668666	Plate .....	1
4	1623396	Fastener .....	6
5	1595161	Blanket .....	1
6	<del>1370949</del>		
	1528888	Nut (Shoulder) .....	2
7	1527888	Capscrew .....	8
8	4040607	Seal .....	2
9	1636647	Shim .....	AR
10	1615902	Cover .....	1
11	1574301	Plug .....	8
12	2090695	Fastener .....	6
13	1510126	Screw (Button Head) .....	3
14	1635652	Cover .....	1
15	1536813	Handle (Grab) .....	1
16	1583611	Capscrew .....	4
17	1589787	Seal .....	2
18	1636853	Shim .....	AR
19	1661564	Bracket (Heater Hose) .....	1
19	<del>1670529</del>		
	1598327	Connector (Female) .....	1
	1674072	Label .....	1

## CAB (FIGURE 1-17) PVC DOORS

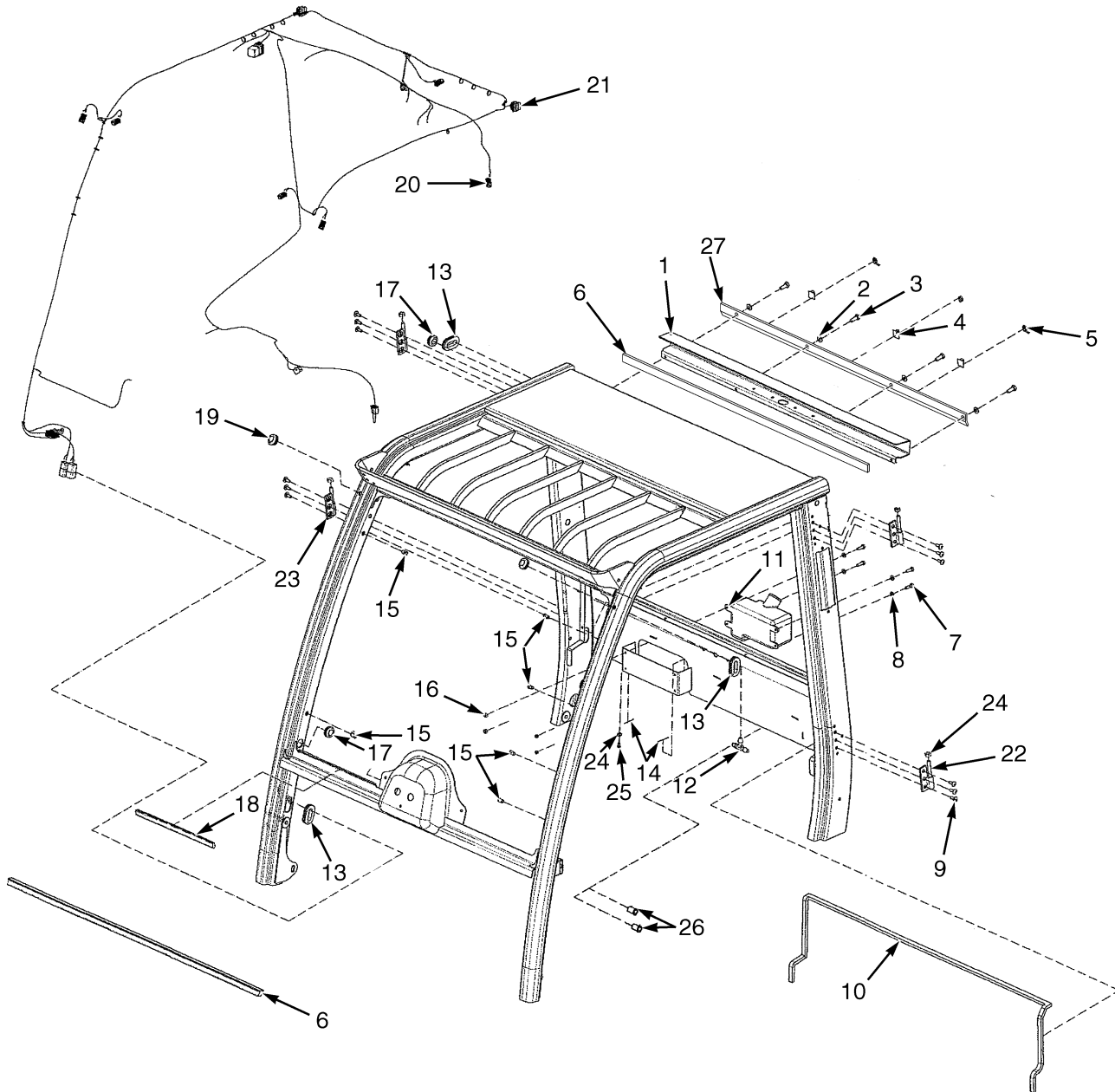


BP120249

**CAB  
PVC DOORS**

ITEM	PART NO.	DESCRIPTION	QTY
	1670242	Cab (With PVC Doors) .....	1
	1646709	Door (RH) .....	1
	1646710	Door Pvc (LH) .....	1
1	1627172	Screw .....	10
2	1646714	Door (Rear LH) .....	1
2	1646719	Door (Rear RH) .....	1
3	1646711	Door Pvc (Door LH) .....	1
3	1646720	Door Pvc (Door RH) .....	1
4	1646712	Door (Front LH) .....	1
4	1646717	Door (Front RH) .....	1
5	1646713	Door (Top LH) .....	1
5	1646718	Door (Top RH) .....	1
	1674072	Label .....	1

## CAB (FIGURE 1-18) WIRING AND ATTACHING PARTS — WITH STEEL AND PVC DOORS



BP260077

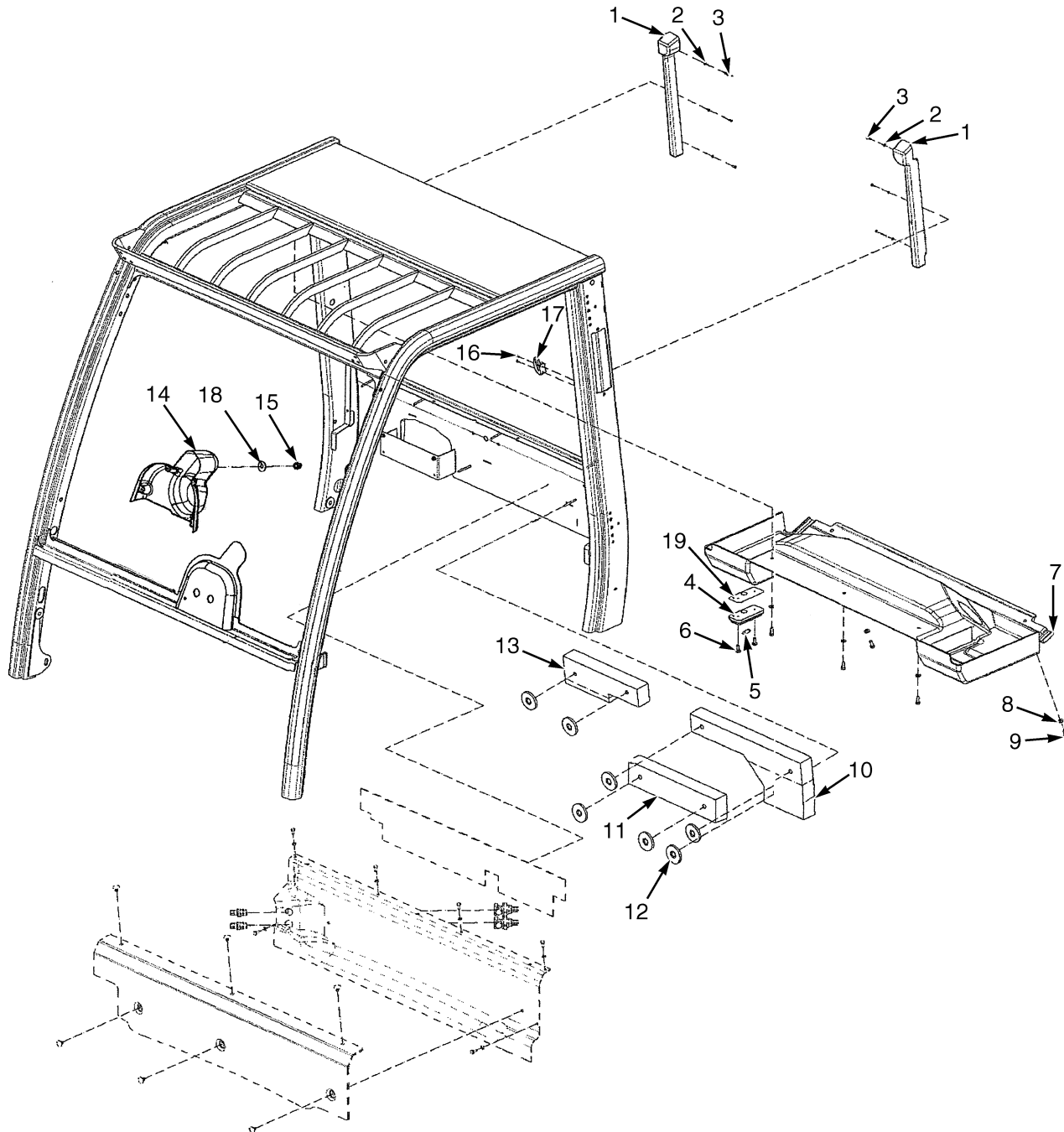
**CAB**  
**WIRING AND ATTACHING PARTS – WITH STEEL AND PVC DOORS**

ITEM	PART NO.	DESCRIPTION	QTY
	1670242	Cab (With PVC Doors) .....	1
	1670240	Cab (With Steel Doors) .....	1
1	1646725	Cover .....	1
2	320158	Washer .....	4
3	136681	Capscrew .....	6
4	1558036	Clip .....	3
5	1393499	Clamp .....	4
6	1674106	Seal 1.179 M .....	AR
7	1623380	Bolt .....	4
8	320156	Washer .....	4
9	1674103	Screw .....	12
10	1646722	Seal (PVC Doors) .....	AR
10	1623377	Seal (Steel Doors), .016 M .....	AR
11	1646922	Reservoir .....	1
11	1635026	Cap .....	1
11	1705156	Pump (Windshield Washer, 12V) .....	1
12	1646727	Connector (PVC Doors) .....	1
13	1598332	Grommet .....	3
14	1498336	Edge Protector (PVC Doors), .135 M .....	AR
15	1646724	Rivet (PVC Doors) .....	6
15	1468308	Nut (Steel Door) .....	6
16	1623379	Nut .....	4
17	1646729	Grommet (PVC Doors) .....	2
17	1579116	Grommet .....	2
18	1646726	Seal (PVC Doors), 1.704 M .....	AR
19	1646728	Sleeve .....	2
20	1646730	Connector .....	1
21	1623382	Wire Harness .....	1
21	2044712	Relay (30 Amp) .....	1
22	1503958	Hinge (LH) .....	2
23	1503959	Hinge (RH) .....	2
24	1558035	Lockwasher .....	2
25	1674104	Screw .....	2
26	1674102	Rivet .....	9
27	1674112	Plate .....	1
	<b>a</b> 1668665	Label (PVC Doors) .....	1

**FOOTNOTES:**

**a** Not Illustrated

## CAB ASSEMBLY (FIGURE 1-19) INTERIOR — WITH STEEL AND PVC DOORS



BP260078



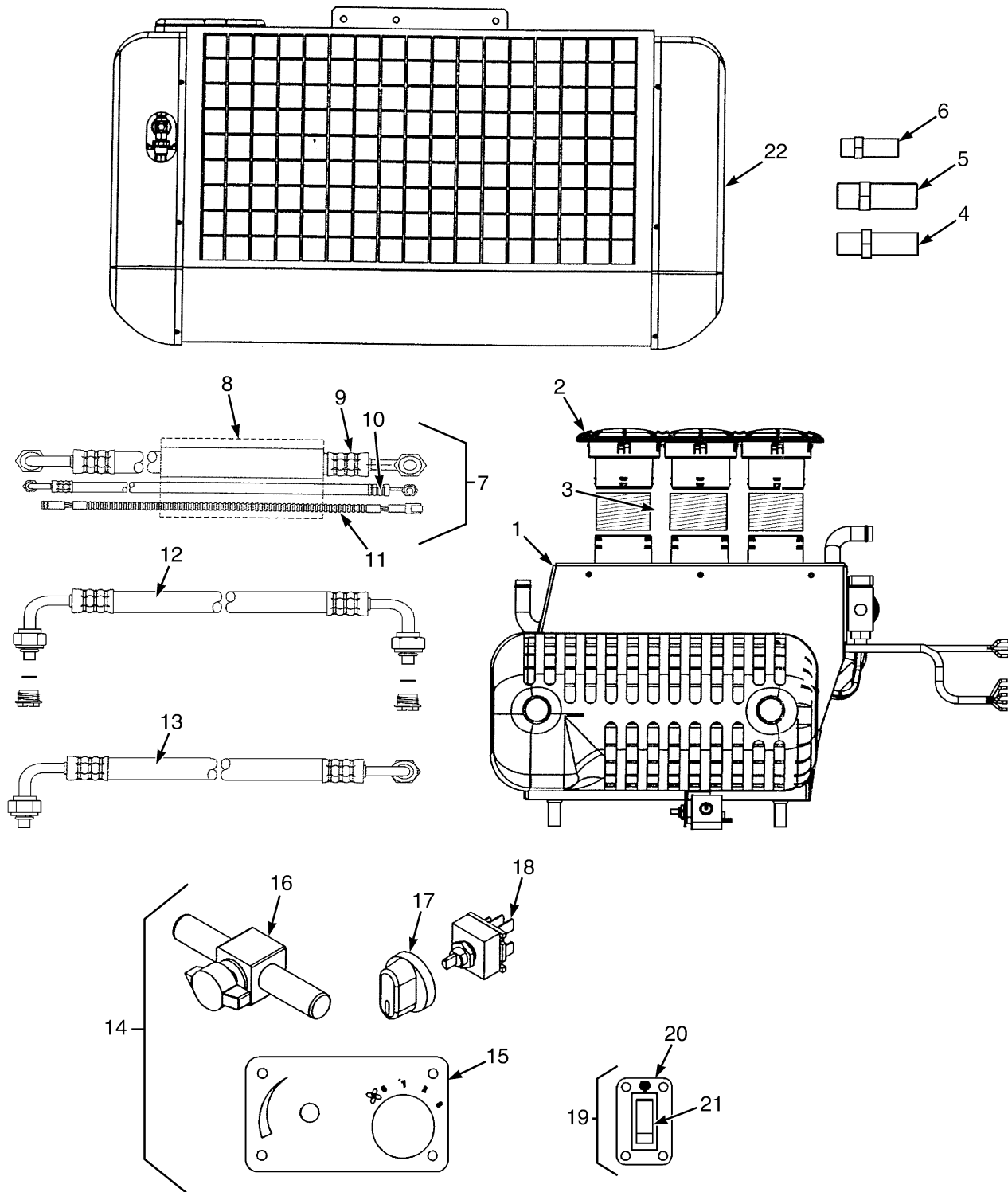
**CAB ASSEMBLY**  
**INTERIOR – WITH STEEL AND PVC DOORS**

ITEM	PART NO.	DESCRIPTION	QTY
	1670242	Cab (With PVC Doors) .....	1
	1670240	Cab (With Steel Doors) .....	1
1	1598424	Support (RH) .....	1
1	1598425	Support (LH) .....	1
2	296415	Washer .....	8
4	1393528	Dome Light .....	1
5	1393527	Bulb .....	1
6	1468319	Screw .....	12
7	1623371	Headliner .....	1
8	296419	Washer .....	5
9	1468311	Screw .....	5
10	1646732	Block .....	1
11	1646731	Block .....	1
12	1623396	Fastener .....	7
13	1646733	Block .....	1
14	1674108	Cover .....	1
15	1674107	Nut .....	3
16	1623370	Screw .....	2
17	1393458	Hanger .....	1
18	1492140	Washer .....	3
19	1566767	Bracket .....	1
	<b>a</b> 1668665	Label (PVC Doors) .....	1
	<b>a</b> 1668663	Label (Steel Doors) .....	1

**FOOTNOTES:**

**a** Not Illustrated

## CAB (FIGURE 1-20) AIR CONDITIONER (PENDING PER ECN 94360 →)

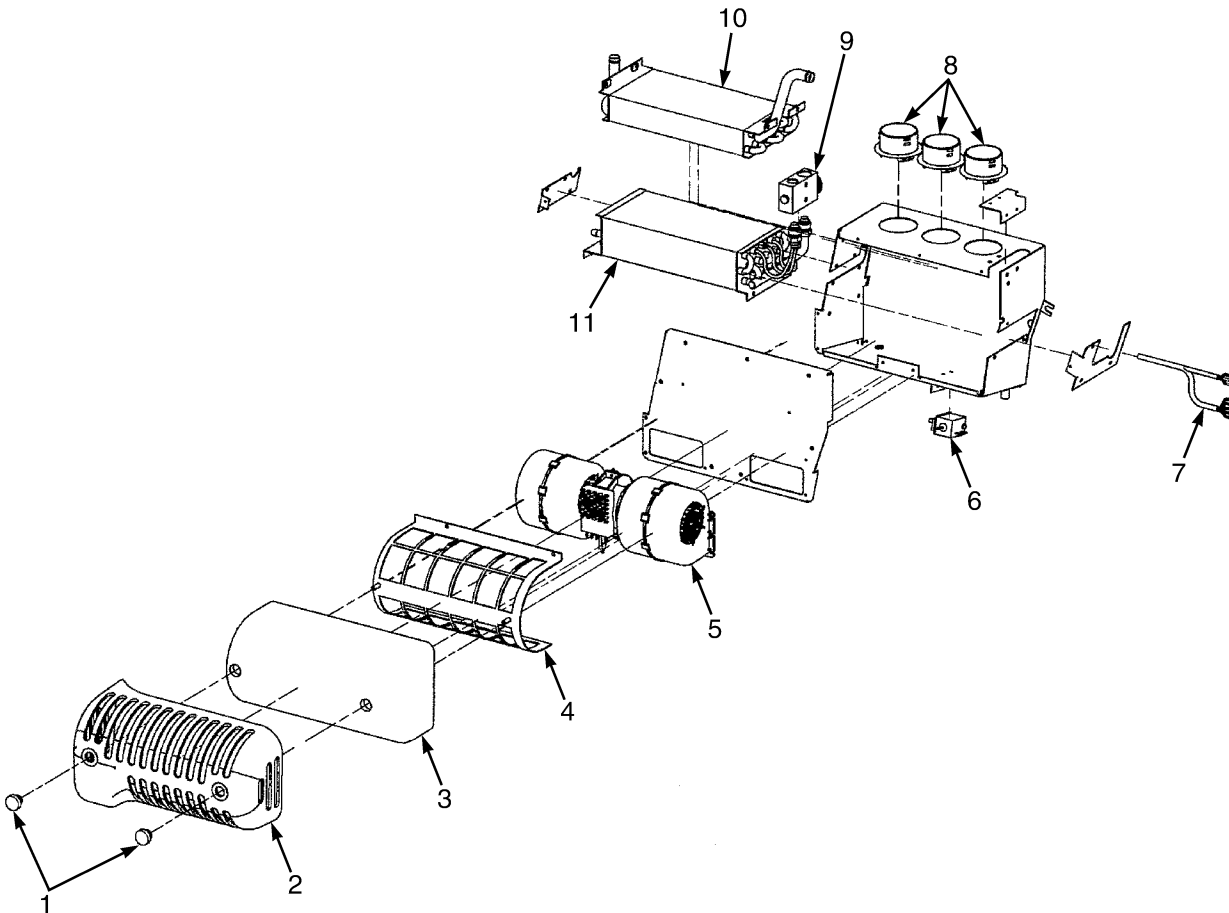


BP120634

**CAB**  
**AIR CONDITIONER (PENDING PER ECN 94360 →)**

ITEM	PART NO.	DESCRIPTION	QTY
	1701967	Air Conditioner .....	1
1	4004149	Heater (☞Figure 1-21).....	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 1-22).....	1

## CAB WITH AIR CONDITIONER (FIGURE 1-21) HEATER (PENDING PER ECN 94360 →)

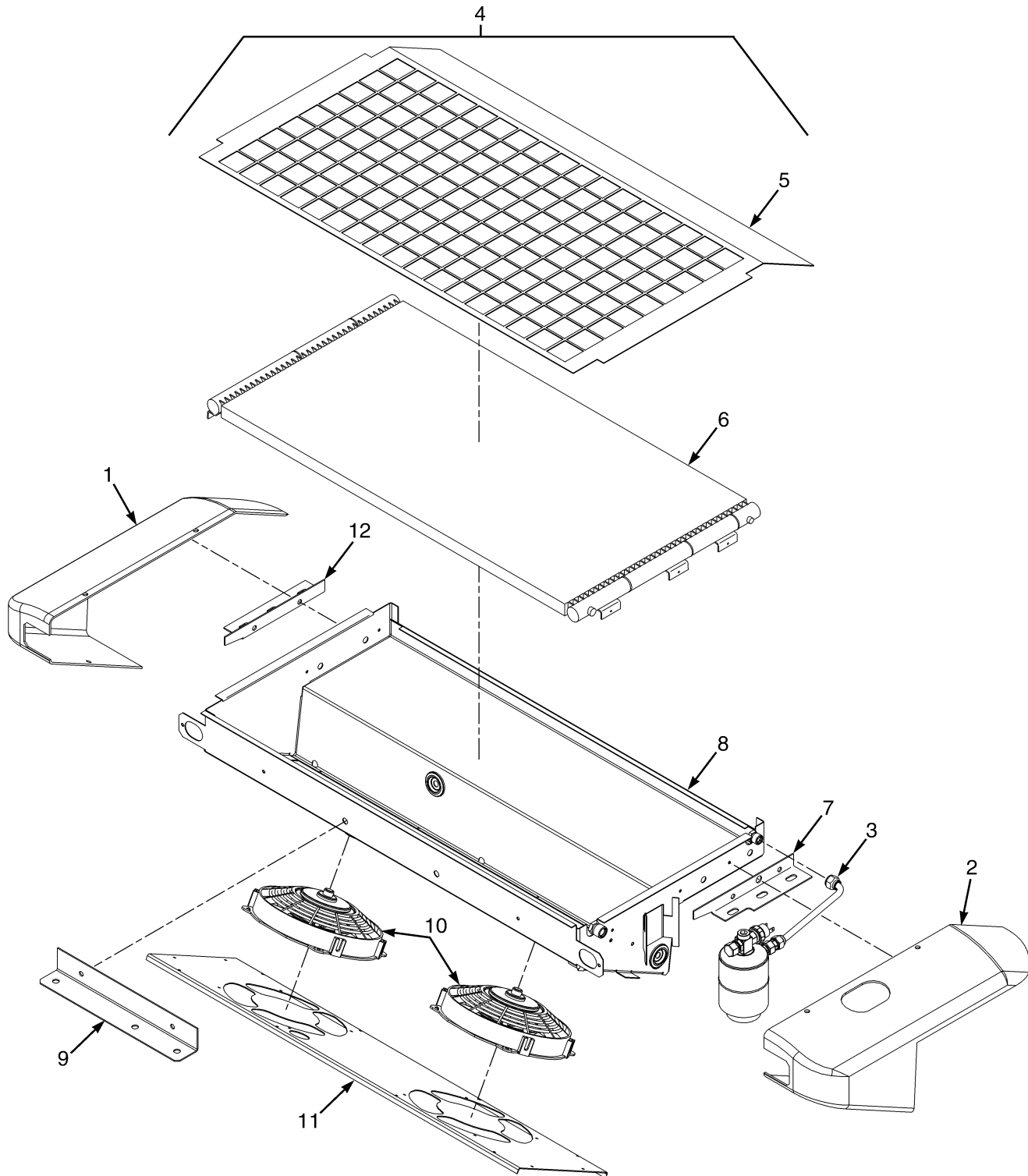


BP120633

**CAB WITH AIR CONDITIONER  
HEATER (PENDING PER ECN 94360 →)**

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	<del>4004064</del>		
	4060157	Wire Harness .....	1
8	4004066	Hose Adapter .....	3
9	1487945	Valve (Block) .....	1
10	4004062	Heater .....	1
11	4004063	Evaporator .....	1

## CAB (FIGURE 1-22) CONDENSER ASSEMBLY (PENDING PER ECN 94360 →)



BP120637

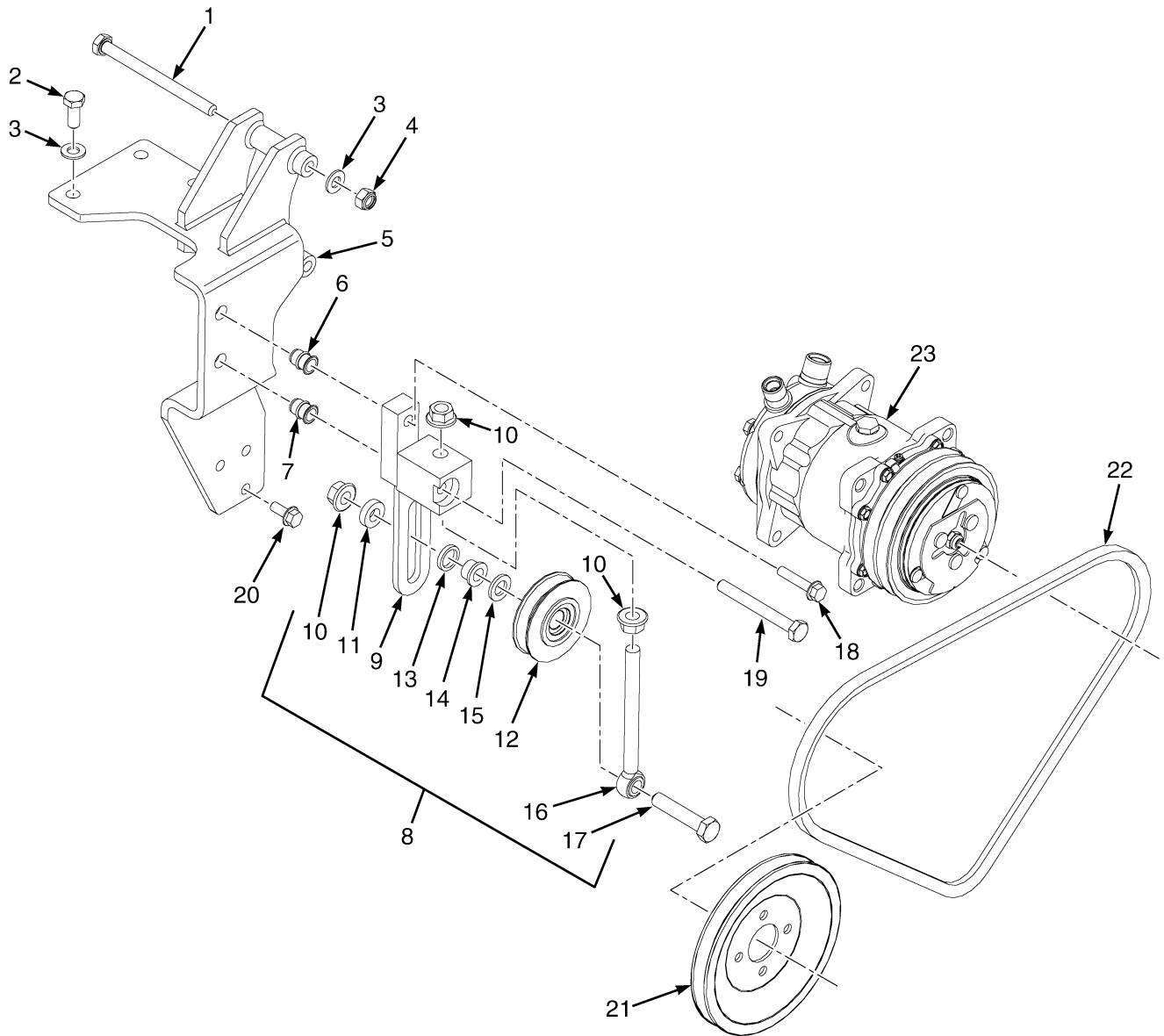
**CAB**  
**CONDENSER ASSEMBLY (PENDING PER ECN 94360 →)**

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
	<b>a</b> 4007142	Relay .....	1
	<b>a</b> 4002509	Cap .....	1
	<b>a</b> 4007147	Clip .....	1
	<b>a</b> 4002504	Clamp .....	1
	<b>a</b> 4007209	Wire Harness .....	1
	<b>a</b> 4007210	Wire Harness .....	1
	<b>a</b> 4007211	Wire Harness .....	1
	<b>a</b> 4007212	Filter .....	1
	<b>a</b> 4007213	Fuse .....	1

**FOOTNOTES:**

**a** Not Illustrated

## AIR CONDITIONING COMPRESSOR AND ATTACHING PARTS (FIGURE 1-23) (PENDING PER ECN 94360 →)



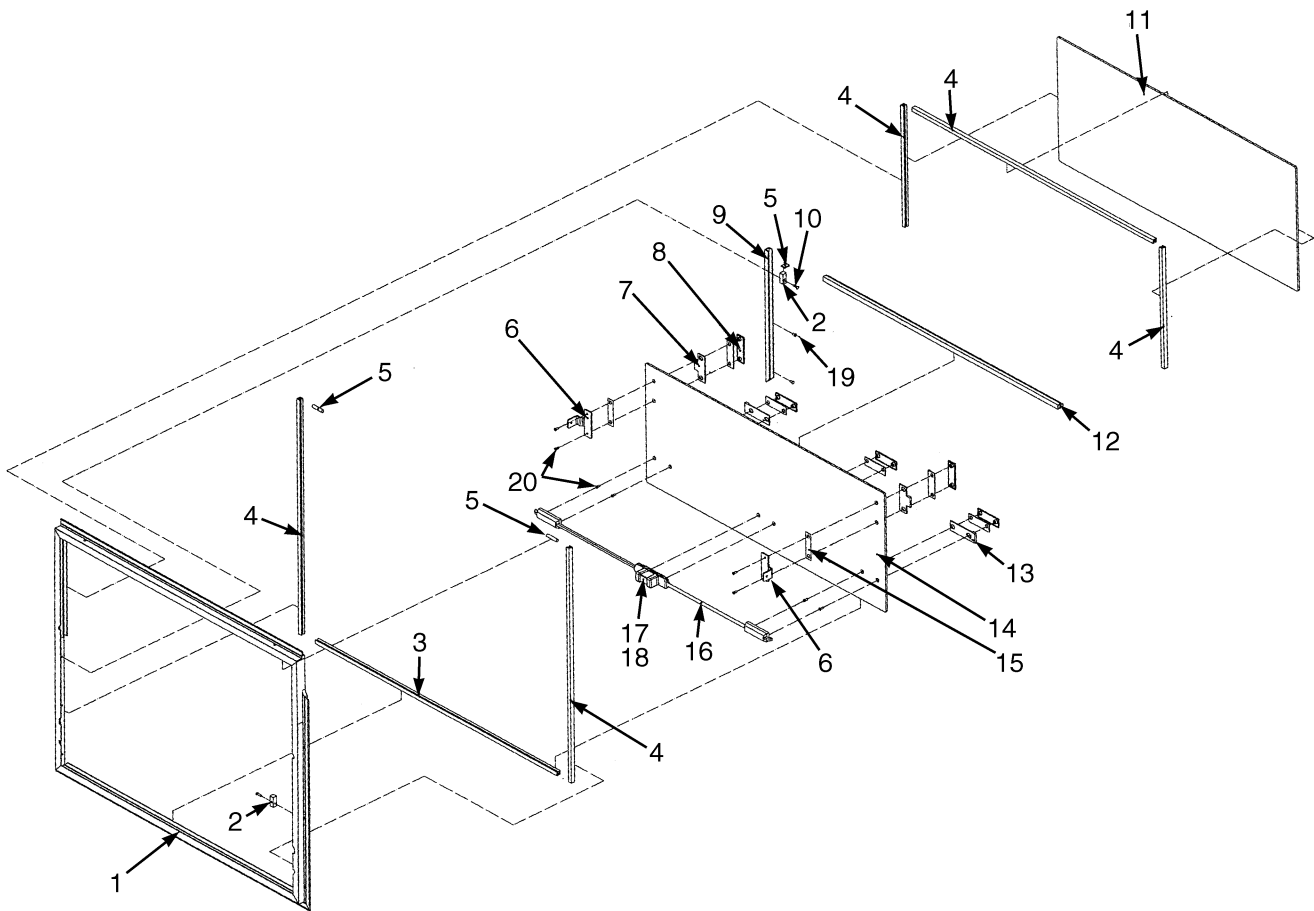
BP120825



**AIR CONDITIONING COMPRESSOR AND ATTACHING PARTS**  
(PENDING PER ECN 94360 →)

ITEM	PART NO.	DESCRIPTION	QTY
1	1390281	Capscrew .....	2
2	293628	Capscrew .....	3
3	320159	Washer .....	7
4	302401	Locknut .....	2
5	4005652	Compressor (Mounting Bracket) .....	1
6	1530243	Insert .....	1
7	1530244	Insert .....	1
8	.....	Belt Tensioner Assembly .....	1
9	4005619	Plate Wldmt .....	1
10	<del>1370949</del>		
	1528888	Nut (Shoulder) .....	3
11	4005608	Spacer .....	1
12	1396781	Pulley .....	1
13	1396780	Spacer .....	1
14	4005607	Bearing .....	1
15	296422	Washer .....	1
16	4005596	Link (Adjusting) .....	1
17	292531	Capscrew .....	1
18	1510114	Capscrew .....	1
19	292524	Capscrew .....	1
20	1527880	Capscrew .....	3
21	4005601	Pulley .....	1
22	4005609	V-Belt .....	1
23	4005656	Compressor .....	1

## SLIDING REAR WINDOW (FIGURE 1-24)

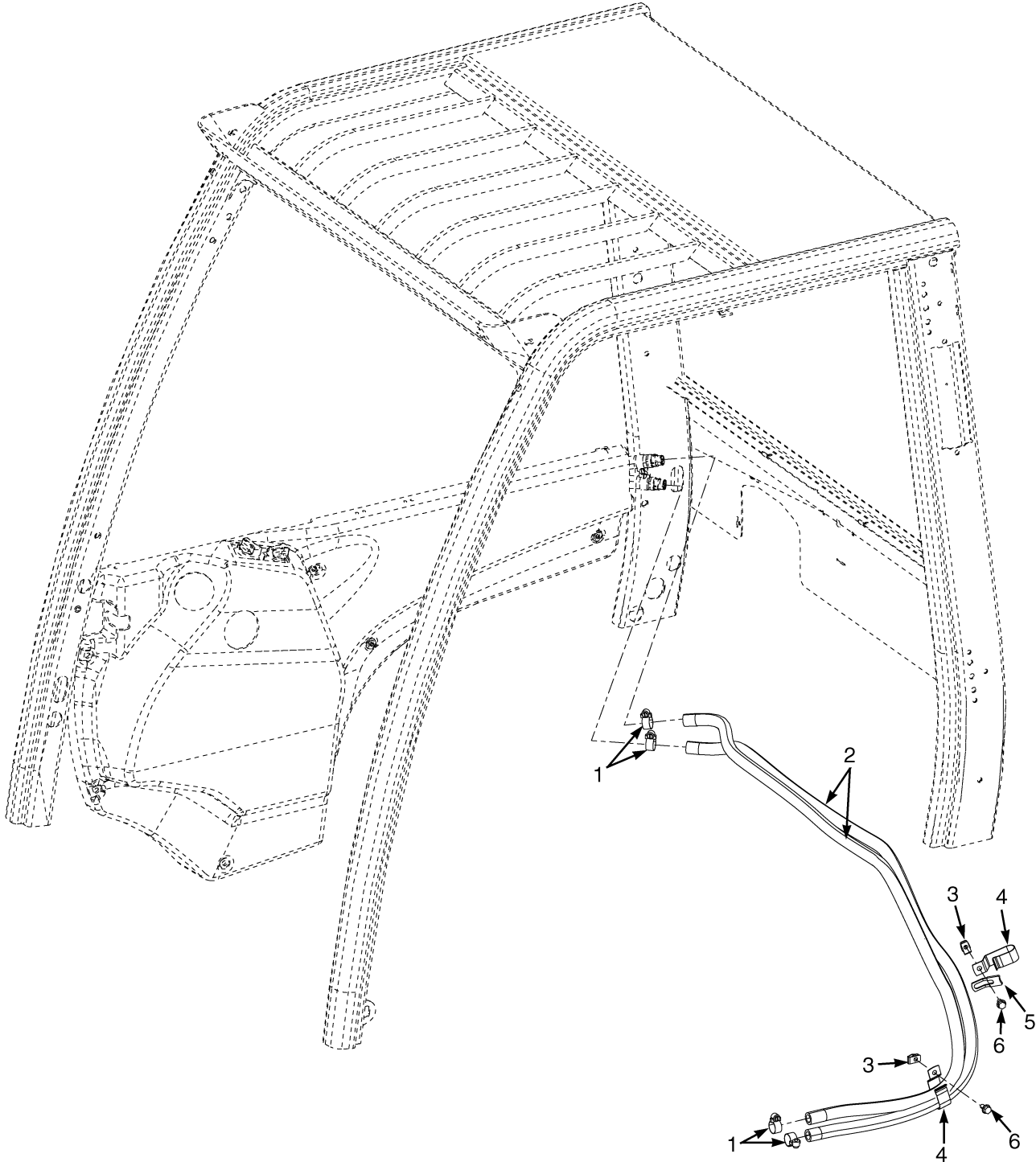


BP120365

**SLIDING REAR WINDOW**

ITEM	PART NO.	DESCRIPTION	QTY
	1623365	Sliding Window .....	1
1	1670524	Frame .....	1
2	1670443	Bushing .....	2
3	1670519	Guide .....	1
4	1641637	Seal .....	AR
5	1641640	Strip Seal .....	AR
6	1670427	Stop .....	2
7	1670428	Pad .....	2
8	1670429	Plate .....	2
9	1670525	Rail .....	1
10	1670421	Screw .....	2
11	1670520	Glass (Rear) .....	1
12	1670526	Seal .....	1
13	1670423	Pad .....	2
14	1670521	Glass (Sliding) .....	1
15	1670440	Pad .....	2
16	1670518	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

## HEATER HOSE ARRANGEMENT (FIGURE 1-25) GM 4.3L LPG WITH CAB — GFI (→ S/N P005V04468J EXC. 04255, 04460)

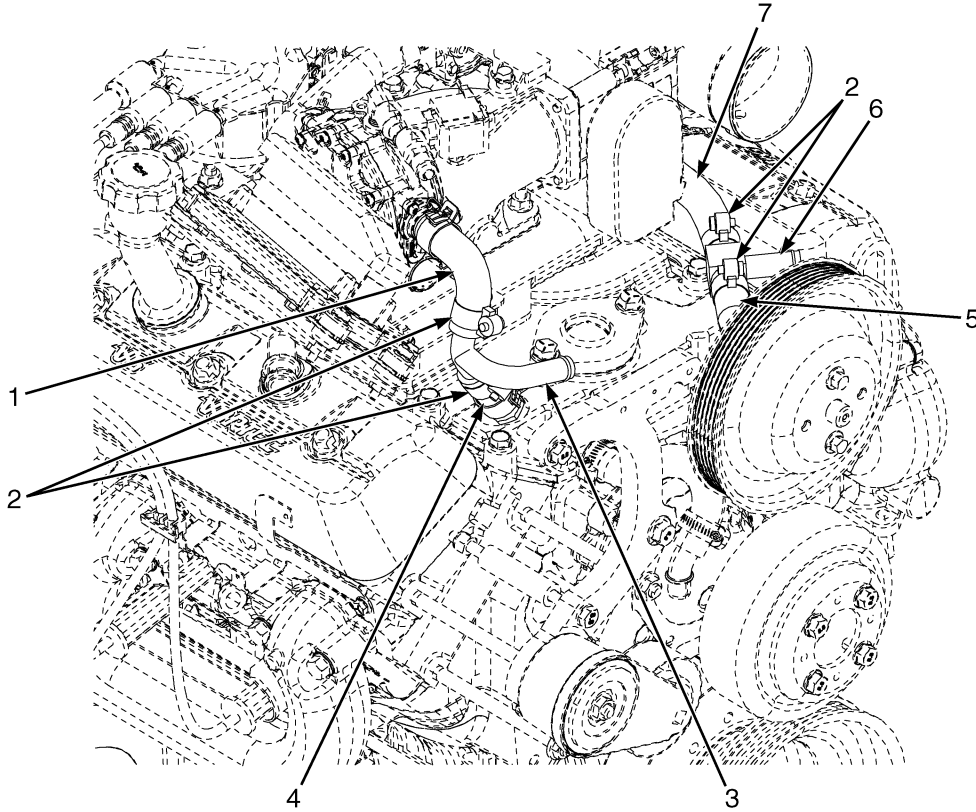


BP120327

**HEATER HOSE ARRANGEMENT**  
**GM 4.3L LPG WITH CAB – GFI (→ S/N P005V04468J EXC. 04255, 04460)**

ITEM	PART NO.	DESCRIPTION	QTY
1	130845	Clamp .....	4
2	2071001	Hose .....	2
3	1480237	Nut .....	2
4	1562648	Clip .....	2
5	1356947	Strap .....	1
6	1527879	Capscrew .....	2

**COOLANT HOSES (FIGURE 1-26)**  
GM 4.3L LPG WITH CAB — PSI OPTION (PENDING PER ECN 105943 →)

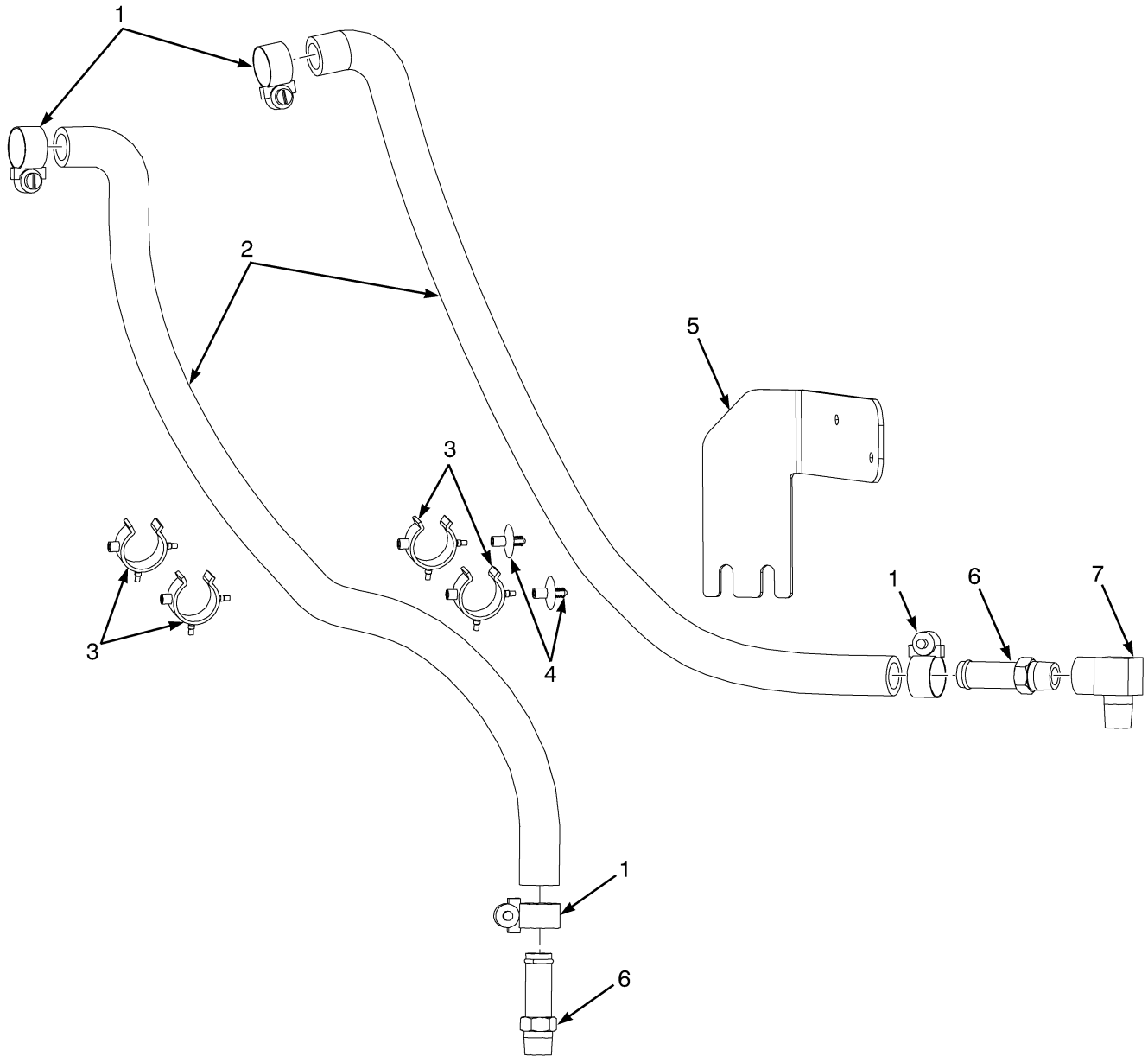


BP120850

ITEM	PART NO.	DESCRIPTION	QTY
1	4615669	Hose (Coolant) .....	1
2	130845	Clamp .....	4
3	4615673	Tube .....	1
4	4615670	Hose (Coolant) .....	1
5	4615671	Hose (Coolant) .....	1
6	366000	Fitting .....	1
7	4615672	Hose (Coolant) .....	1



## HEATER HOSE ARRANGEMENT (FIGURE 1-27) CUMMINS QSB 3.3L DIESEL — WITH CAB



BP120504



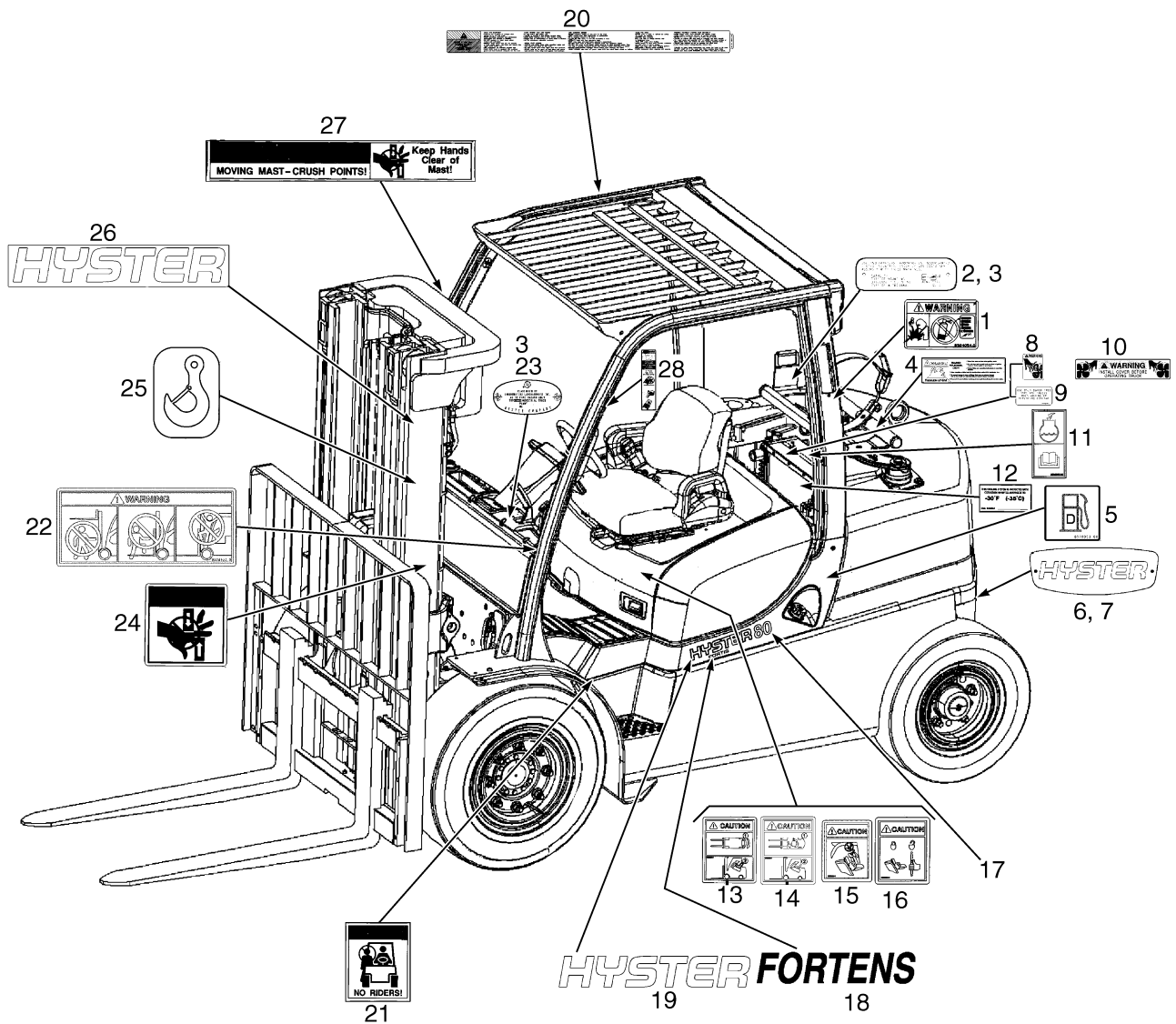
**HEATER HOSE ARRANGEMENT  
CUMMINS QSB 3.3L DIESEL – WITH CAB**

ITEM	PART NO.	DESCRIPTION	QTY
1	130845	Clamp .....	4
2	2107745	Hose .....	2
3	1612617	Clamp .....	4
4	1543842	Clamp .....	2
5	1694699	Bracket .....	1
5	<b>a</b> 1527881	Capscrew .....	2
6	138710	Fitting .....	2
7	16143	Fitting .....	1
	246108	Sealant .....	AR

**FOOTNOTES:**

**a** Not Illustrated

## LABELS (FIGURE 1-28) EXTERIOR



**LABELS  
EXTERIOR**

ITEM	PART NO.	DESCRIPTION	QTY
1	<b>b</b> 2034460	Label (Ether Warning) .....	1
2	1501259	Nameplate (LP Tank) .....	1
3	170658	Rivet .....	6
4	1354172	Label (Flammable LPG) .....	1
5	2074256	Label (Fuel Fill) .....	1
6	1677428	Label (Hyster Logo) .....	1
7	1566951	Fastener .....	2
8	1300094	Label (Fan Warning) .....	2
9	1354165	Label (Antifreeze) .....	2
10	1345926	Label (Fan Warning) .....	1
11	2089112	Label (Coolant Fill) .....	1
12	1375676	Label (Boron-Free Antifreeze) .....	1
13	<b>d</b> 2075614	Label (Hood Opening Warning) .....	1
14	<b>c</b> 2076171	Label (Swivel Seat Caution) .....	1
15	2074740	Label (Joystick Caution) .....	1
15	<b>f</b> 2082679	Label (Electronic Arm Caution) (Mini Levers) .....	1
16	2075417	Label (Locking Gas Spring) .....	1
17	1594807	Label (Model 4.0) .....	2
17	1628690	Label (Model 4.5) .....	2
17	1594808	Label (Model 5.0) .....	2
17	1594809	Label (Model 5.5) .....	2
18	1601748	Label (Fortens) .....	2
19	1586440	Label (Hyster) .....	2
20	2073198	Label (Operator Warning) .....	1
21	1339828	Label (No Riders) .....	2
22	2075655	Label (Mast Warning) .....	2
23	<b>a</b> . . . .	Inspection Plate .....	1
24	1339832	Label (Pinch Point) .....	2
25	316448	Label (Lifting Eye) .....	3
26	1562353	Label (Hyster) .....	2
27	1343276	Label (Mast Warning) .....	1
28	1359588	Label (Operator Restraint) .....	2
	<b>eg</b> 4603387	Label (Hydraulic Quick Disconnect) .....	1

**FOOTNOTES:**

- |          |                                    |          |                   |
|----------|------------------------------------|----------|-------------------|
| <b>a</b> | Contact Your Local Hyster Dealer   | <b>e</b> | Not Illustrated   |
| <b>b</b> | Diesel Only                        | <b>f</b> | S/N P005B02570H → |
| <b>c</b> | For Vehicles With Swivel Seat Only | <b>g</b> | 5/2010 →          |
| <b>d</b> | LPG Only                           |          |                   |



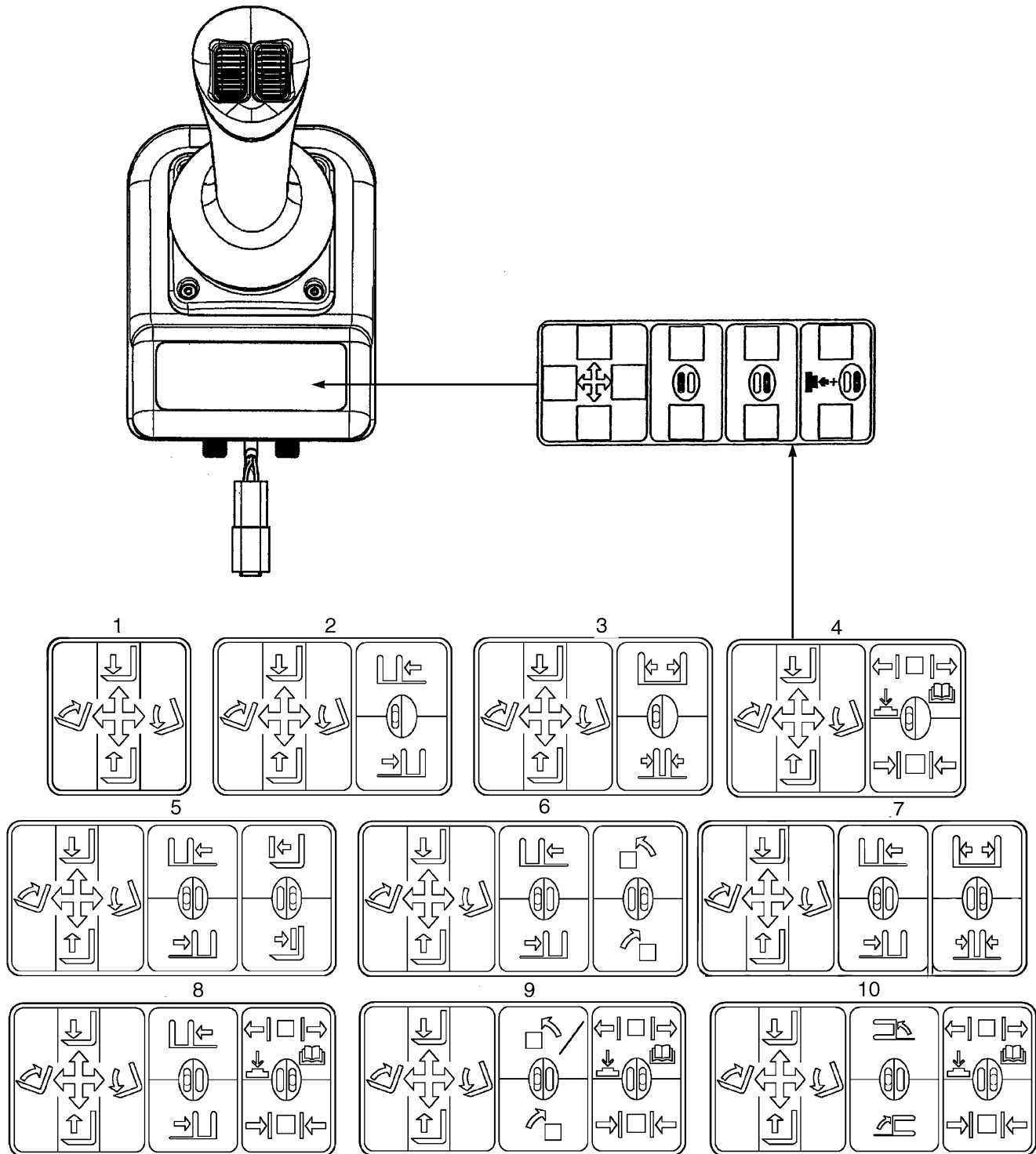
**LABELS  
INTERIOR**

ITEM	PART NO.	DESCRIPTION	QTY
1	<b>b</b> . . . . .	Nameplate .....	1
1	170658	Rivet .....	4
2	389688	Nameplate Cover .....	1
3	2038100	Label (Drive Train Protection) .....	1
4	<b>a</b> 1589377	Label (Basic Powershift Transmission) .....	1
5	<b>c</b> 1589397	Label (DuraMatch Transmission) .....	1
6	1589437	Label (DuraMatch Plus2 Transmission) .....	1
	<b>d</b> 1627200	Label (DuraMatch 2 Transmission) .....	1
7	1534660	Label (Patents and Trademarks) .....	1
8	1374775	Label (Radial Tire Warning) .....	1
9	2104728	Label (Flexibility Scheme) .....	1
10	1365830	Label (Caution Soot Trap) .....	1
11	2073198	Label (Operator Warning) .....	1
	<b>d</b> 1365843	Label (Diesel Caution Soot Trap) (Steering Wheel) .....	1
13	<b>d</b> 2106332	Label (ECM Code) (Standard Transmission only) (☞ Figure 4-16).....	1

**FOOTNOTES:**

- |          |                                  |          |                       |
|----------|----------------------------------|----------|-----------------------|
| <b>a</b> | Basic Transmission               | <b>c</b> | Electric Transmission |
| <b>b</b> | Contact Your Local Hyster Dealer | <b>d</b> | Not Illustrated       |

## JOYSTICK CONTROL LABELS (FIGURE 1-30)

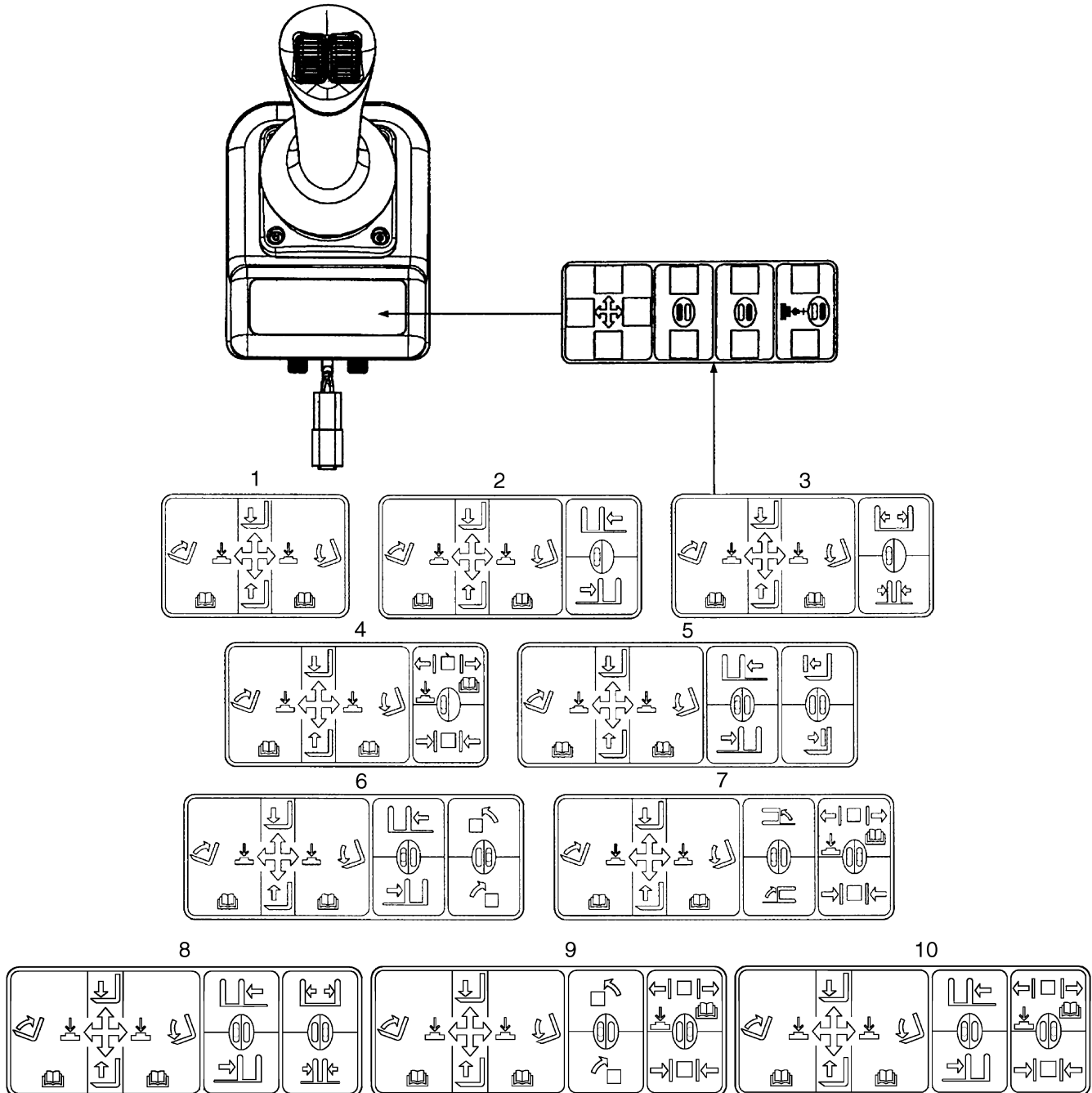


BP120197

**JOYSTICK CONTROL LABELS**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
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 CONTROL LABELS (FIGURE 1-31) WITH RETURN TO SET TILT



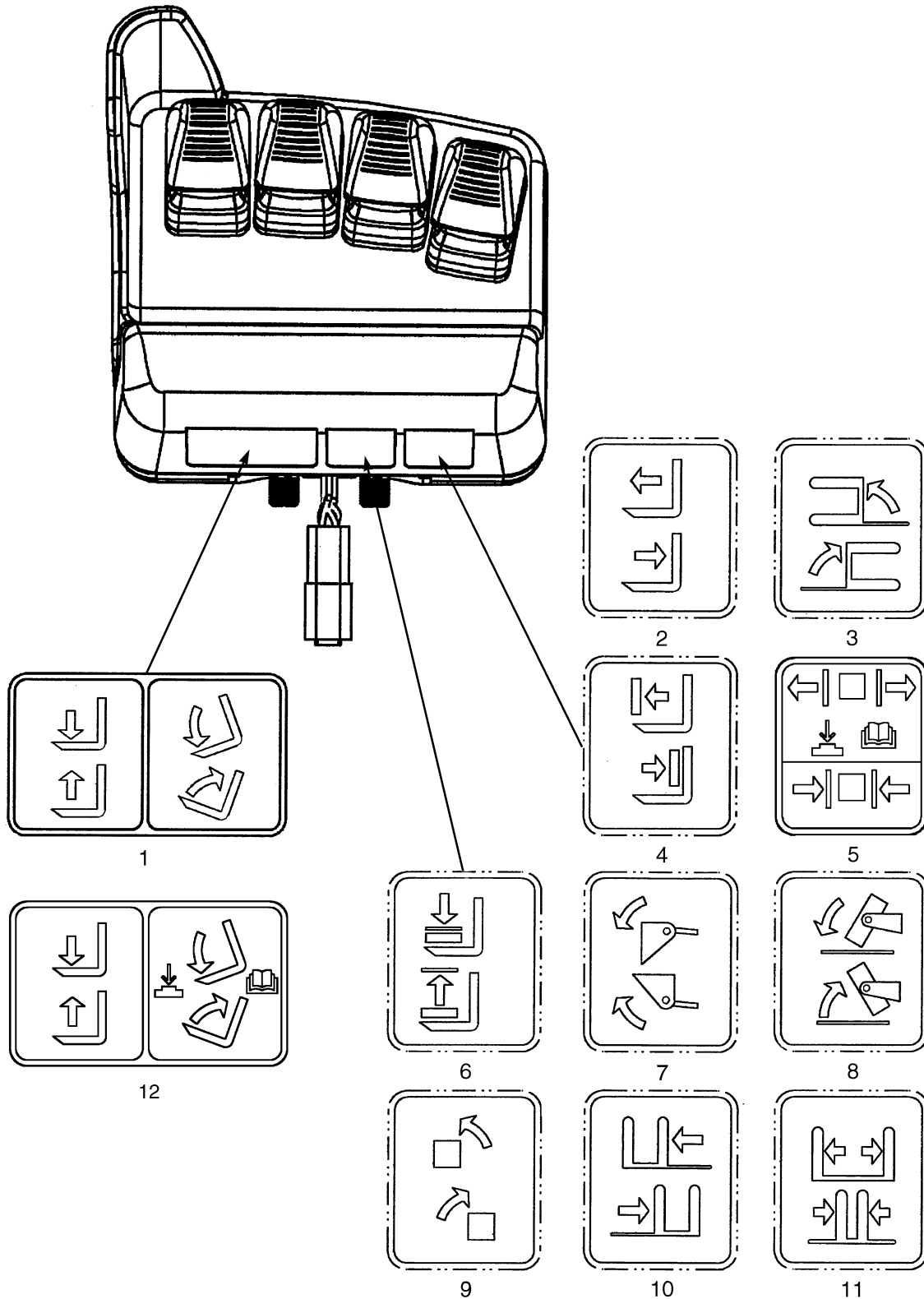
BP120198



**JOYSTICK CONTROL LABELS  
WITH RETURN TO SET TILT**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
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

## ELECTRONIC LEVER LABELS (FIGURE 1-32) MINI LEVERS

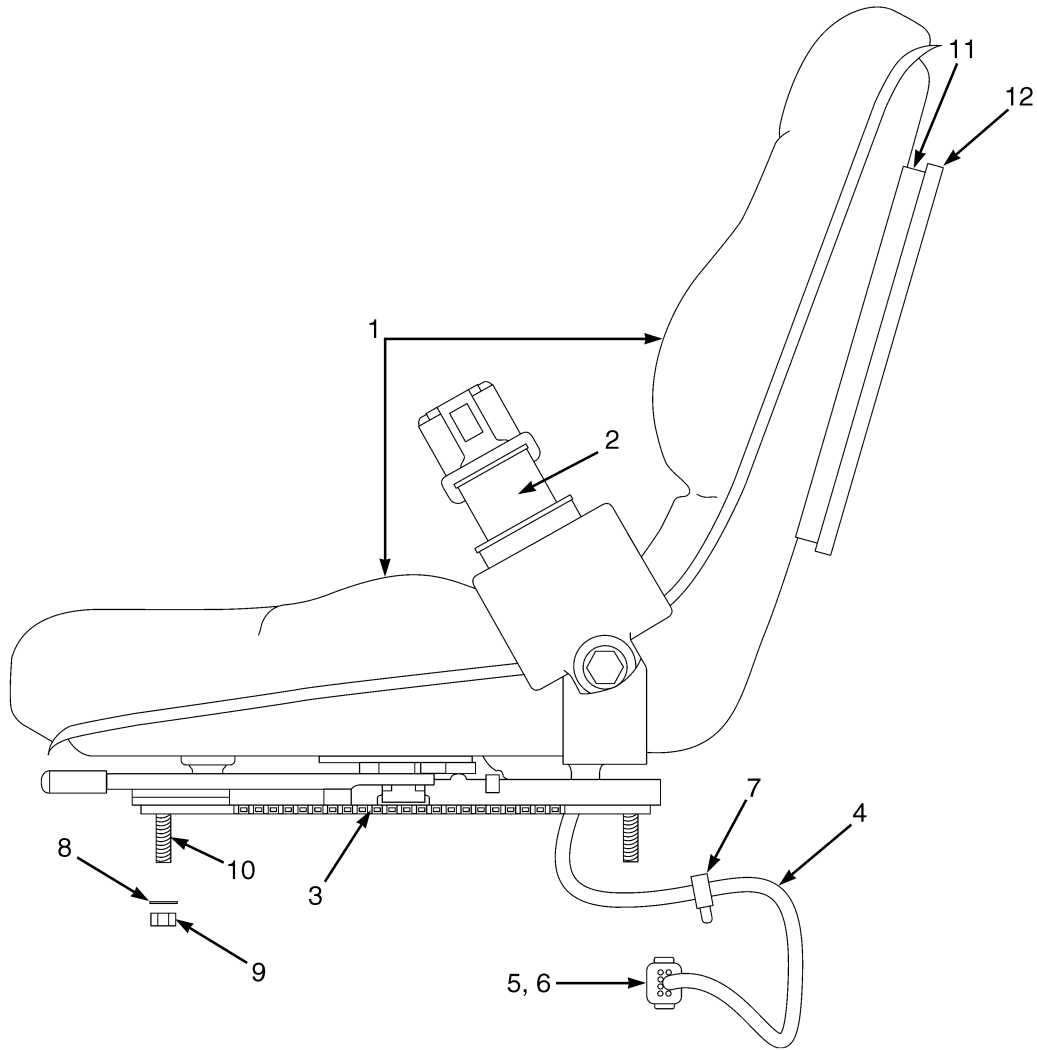


BP120199

**ELECTRONIC LEVER LABELS  
MINI LEVERS**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
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

## NON-SUSPENSION SEAT (FIGURE 1-33) WITHOUT ELECTRONIC CONTROLS (→ S/N P005B02569H)



HP120851

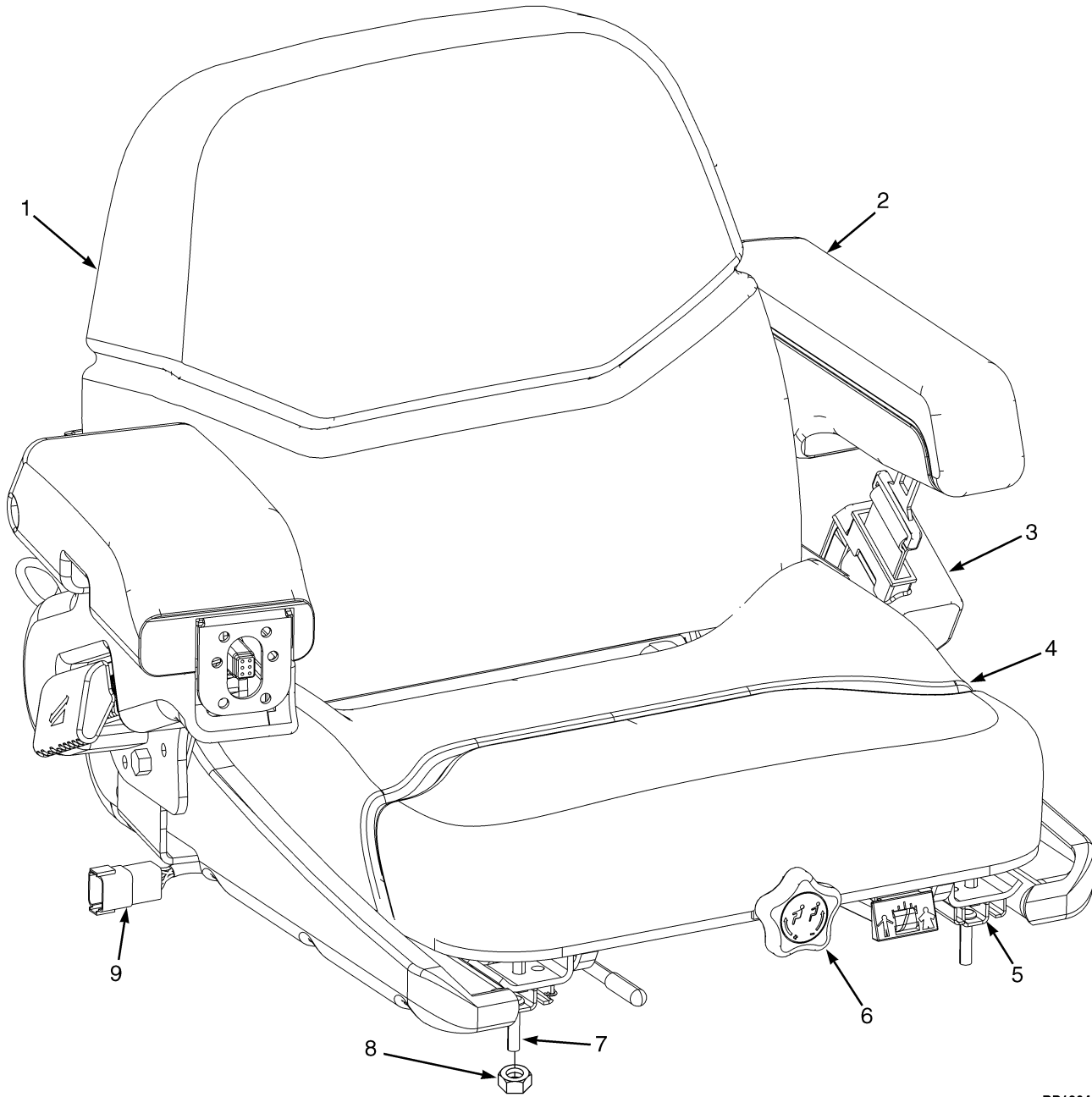
**NON-SUSPENSION SEAT**  
**WITHOUT ELECTRONIC CONTROLS (→ S/N P005B02569H)**

ITEM	PART NO.	DESCRIPTION	QTY
	2103362	Seat-Non Suspension (Vinyl) .....	1
	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	302400	Nut .....	4
10	1677286	Stud .....	4
11	335988	Information Case .....	1
12	335991	Cover (Information Case) .....	1
	<b>a</b> 1709876	Sensor (Operator Presence) .....	1
	<b>a</b> 4002682	Bracket (Operator Presence Sensor) .....	1

**FOOTNOTES:**

**a** Not Illustrated

## SEMI-SUSPENSION SEAT (FIGURE 1-34) WITH ELECTRONIC CONTROLS (→ S/N P005B02569H)



BP120458

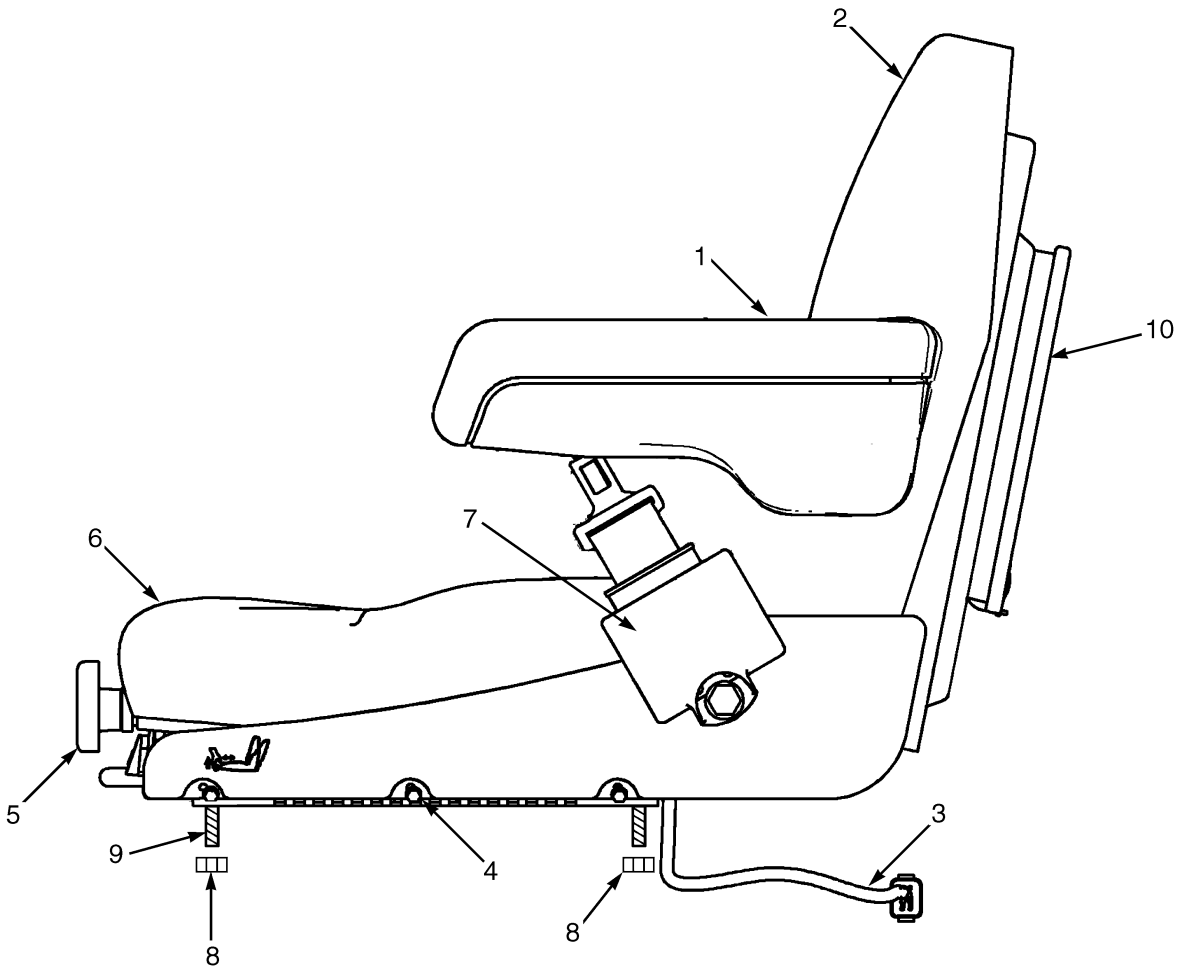
**SEMI-SUSPENSION SEAT  
WITH ELECTRONIC CONTROLS (→ S/N P005B02569H)**

ITEM	PART NO.	DESCRIPTION	QTY
	2103371	Seat-Semi Suspension (Cloth) .....	1
	2103370	Seat-Semi Suspension (Vinyl) .....	1
1	1382111	Seat Cushion (Back Cushion) (Vinyl) .....	1
1	1382113	Seat Cushion (Back Cushion) (Cloth) .....	1
2	1453882	Armrest .....	1
3	1598504	Kit-Seat Belt (Black) .....	1
3	1636120	Kit-Red Seat Belt .....	1
4	1382112	Seat Cushion (Vinyl) .....	1
4	1382114	Seat Cushion (Cloth) .....	1
	1690995	Kit-Seat Rail .....	1
	1563227	Knob (Weight Adjustment) .....	1
7	1677286	Stud .....	4
8	302400	Nut .....	4
	1654891	Wire Harness .....	1
a	1362049	Kit-Shock Absorber .....	1
a	1647532	Foam .....	1
a	1563211	Knob (Electronic Control Arm) .....	1
a	1453887	Holder (Manual) .....	1
a	1709876	Sensor (Operator Presence) .....	1
a	4002682	Bracket (Operator Presence Sensor) .....	1

**FOOTNOTES:**

**a** Not Illustrated

**SEMI-SUSPENSION SEAT (FIGURE 1-35)  
WITHOUT ELECTRONIC CONTROLS (→ S/N P005B02569H)**



BP120309

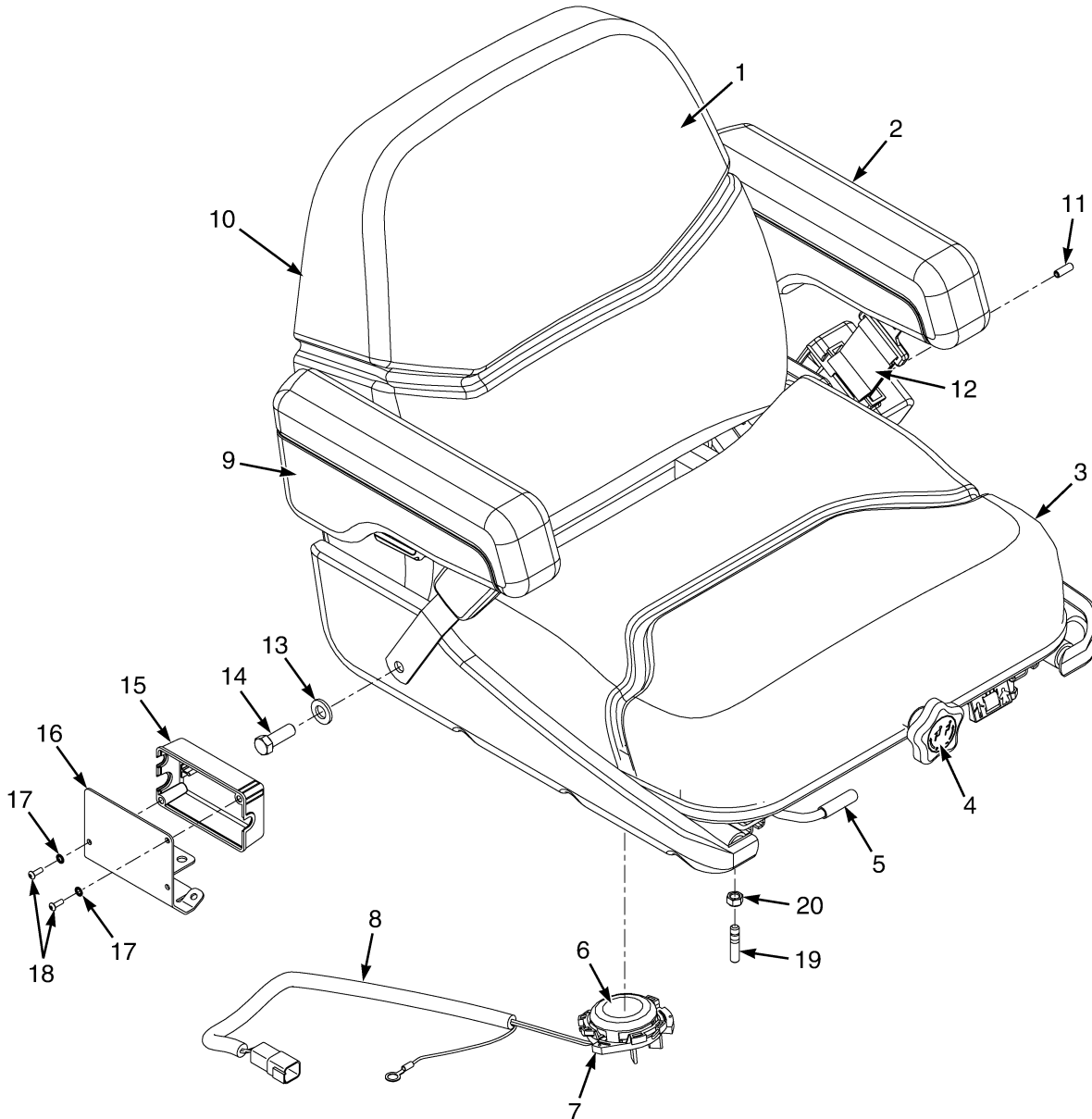


**SEMI-SUSPENSION SEAT  
WITHOUT ELECTRONIC CONTROLS (→ S/N P005B02569H)**

ITEM	PART NO.	DESCRIPTION	QTY
	2103368	Seat-Semi Suspension (Vinyl) .....	1
	2103369	Seat-Semi Suspension (Cloth) .....	1
1	1453882	Armrest (LH) .....	1
1	1453883	Armrest (RH) .....	1
2	1382111	Seat Cushion (Back Cushion) (Vinyl) .....	1
2	1382113	Seat Cushion (Back Cushion) (Cloth) .....	1
3	1591652	Wire Harness .....	1
4	1690995	Kit-Seat Rail .....	1
5	1563227	Knob .....	1
6	1382112	Seat Cushion (Vinyl) .....	1
6	1382114	Seat Cushion (Cloth) .....	1
7	1598504	Kit-Seat Belt (Black) .....	1
7	1636120	Kit-Red Seat Belt .....	1
8	302400	Nut .....	4
9	1677286	Stud .....	4
10	1453887	Holder (Manual) .....	1
	1709876	Sensor (Operator Presence) .....	1
	<b>a</b> 4002682	Bracket (Operator Presence Sensor) .....	1
	<b>a</b> 1362049	Kit-Shock Absorber .....	1

**FOOTNOTES:****a** Not Illustrated

## SEMI-SUSPENSION SEAT (FIGURE 1-36) WITH AND WITHOUT ELECTRONIC CONTROLS (S/N P005B02570H →)



BP120692

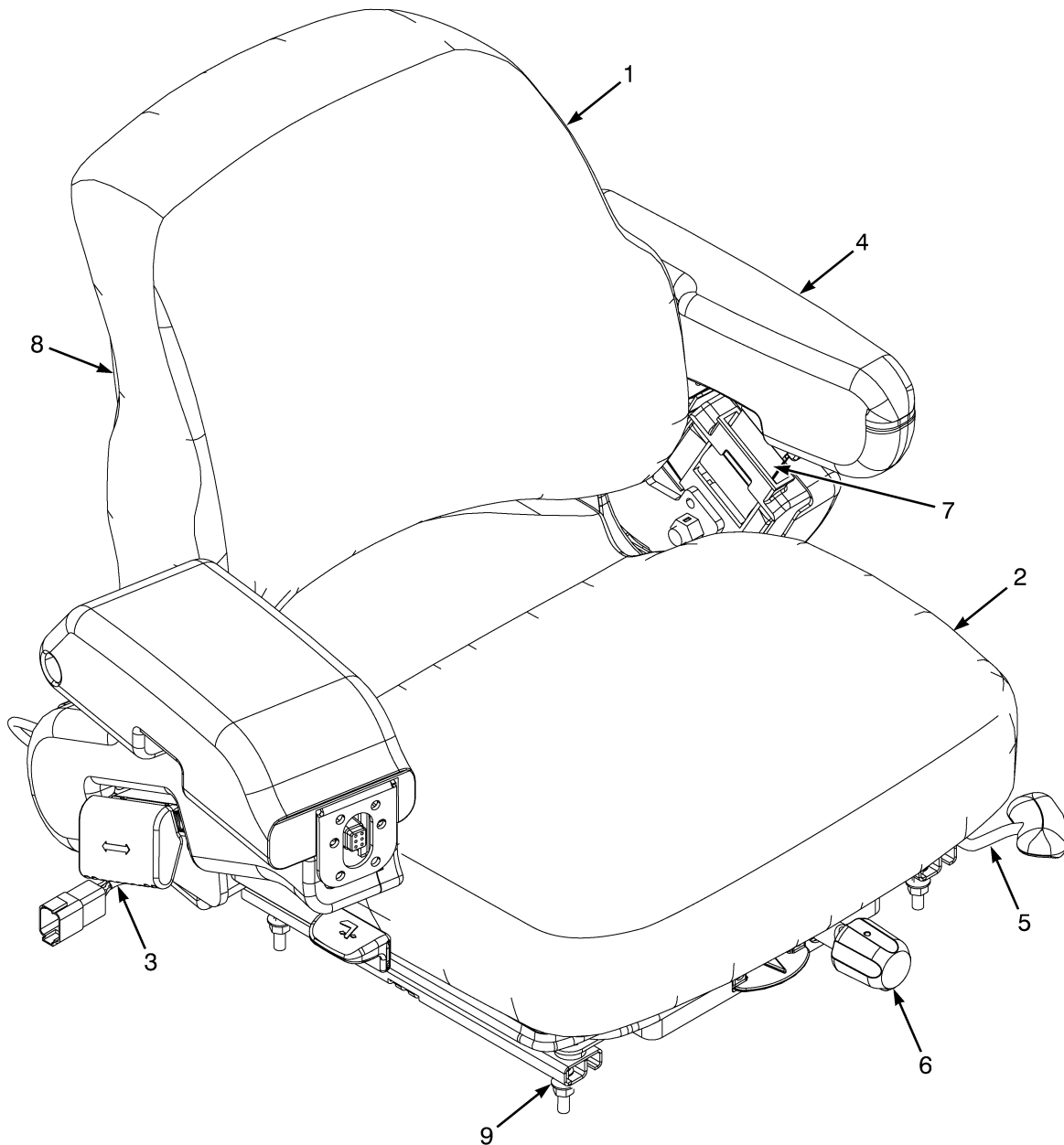
**SEMI-SUSPENSION SEAT**  
WITH AND WITHOUT ELECTRONIC CONTROLS (S/N P005B02570H →)

**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 for Mini Lever) (☞Figure 1-43).....	..	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 1-37) WITH AND WITHOUT ELECTRONIC CONTROLS (→ S/N P005B02569H)



BP120561

**FULL SUSPENSION SEAT**  
WITH AND WITHOUT ELECTRONIC CONTROLS (→ S/N P005B02569H)

**KEY:**

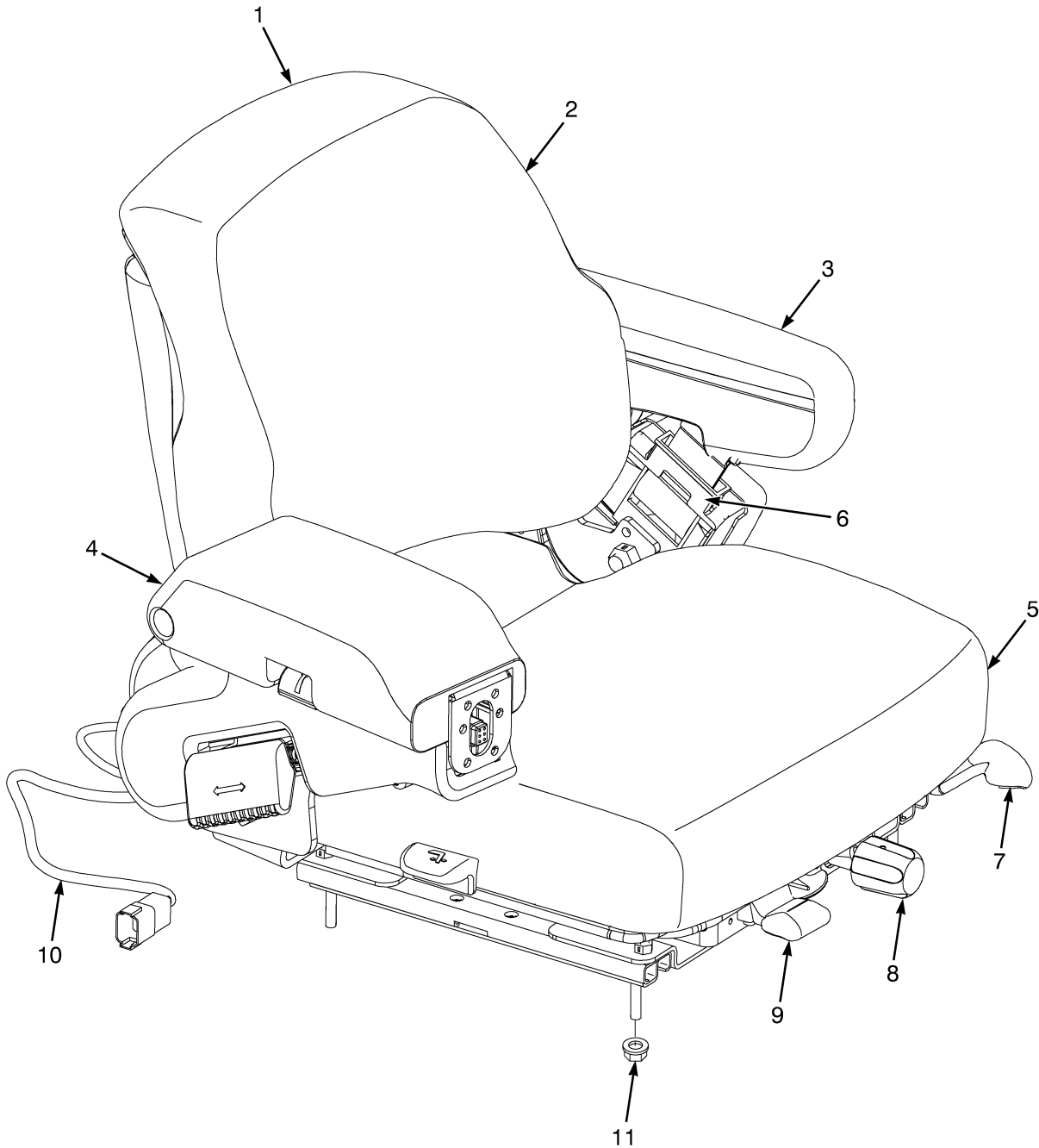
- A:** Full Suspension (Vinyl)  
**B:** Full Suspension (Cloth)  
**C:** Full Suspension (Vinyl with Electronic Control Arm)  
**D:** Full Suspension (Cloth with Electronic Control Arm)

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) (Arm Rest) .....	1	1	1	1
4	1563231	Cushion (RH) (Arm Rest) .....	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 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 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 1647532	Foam .....	..	..	1	1

**FOOTNOTES:**

- a** Not Illustrated

## FULL SUSPENSION SWIVEL SEAT (FIGURE 1-38) WITH AND WITHOUT ELECTRONIC CONTROLS (→ S/N P005B02569H)



BP120562

**FULL SUSPENSION SWIVEL SEAT  
WITH AND WITHOUT ELECTRONIC CONTROLS (→ S/N P005B02569H)**

**KEY:**

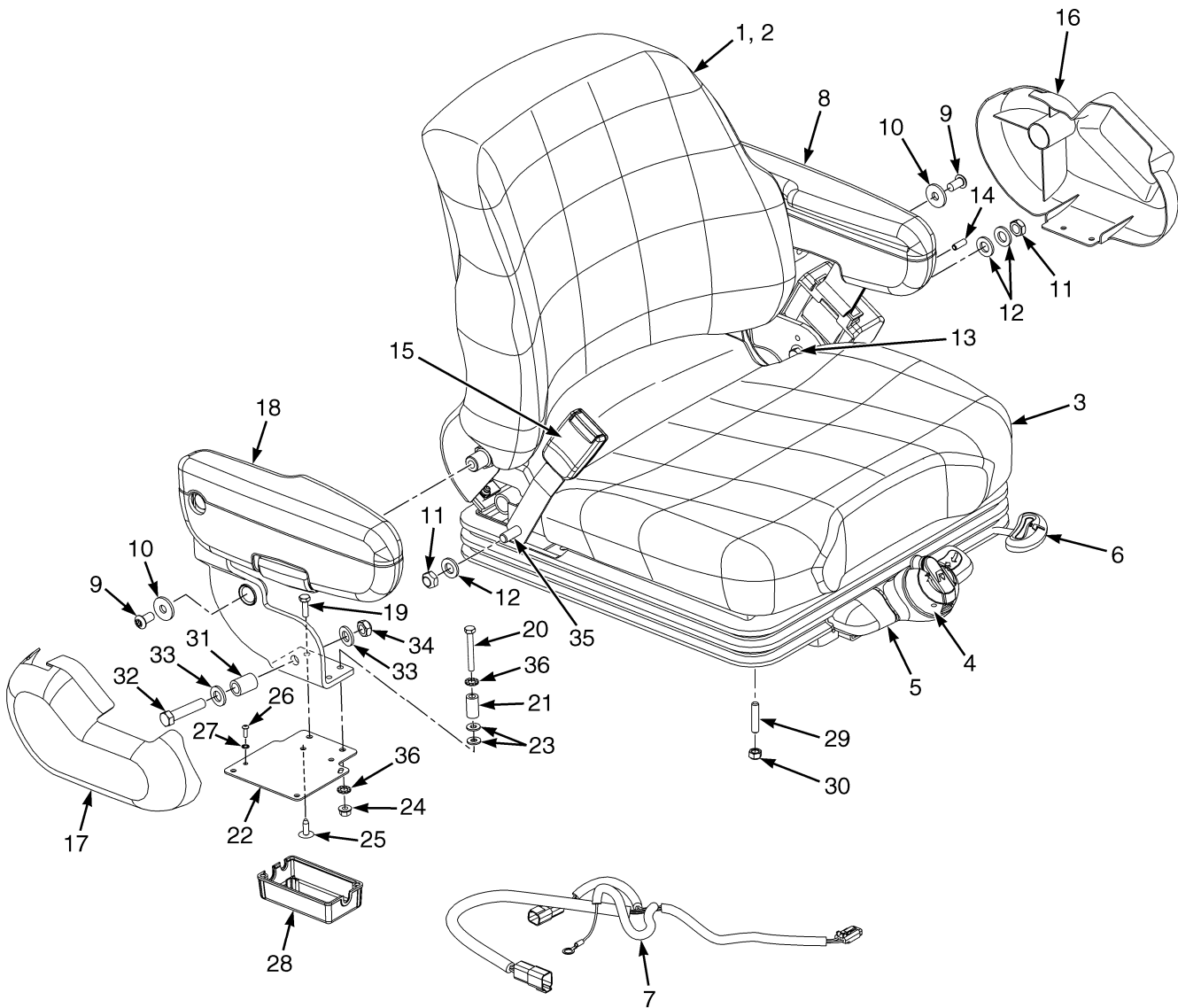
- A: Full Suspension Swivel Seat (Vinyl)**  
**B: Full Suspension Swivel Seat (Cloth)**  
**C: Full Suspension Swivel Seat (Vinyl with Electronic Controls)**  
**D: Full Suspension (Cloth with Electronic Controls)**

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) (Arm Rest) .....	1	1	1	1
	<b>a</b> 1563231	Cushion (RH) (Arm Rest Without Electronic Controls) .....	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	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	1591652	Wire Harness (Without Electronic Controls) .....	1	1	..	..
8	1654891	Wire Harness .....	..	..	1	1
9	.....	Swivel Adjust .....	1	1	1	1
10	191941	Nut .....	4	4	4	4
	<b>a</b> 1563208	Sensor (Operator Presence) .....	1	1	1	1
	<b>a</b> 1647532	Foam .....	..	..	1	1
	<b>a</b> 1563211	Knob (Electronic Control Arm) .....	..	..	1	1
	<b>a</b> 1470155	Information Case (Kit) .....	1	1	1	1
	<b>a</b> 1684395	Kit-Swivel Seat Full Susp .....	1	1	1	1
	<b>a</b> 1467529	Kit-Spring .....	1	1	1	1
	<b>a</b> 1627639	Weight Adjust Rack .....	1	1	1	1
	<b>a</b> 1467523	Kit-Boot .....	1	1	1	1
	<b>a</b> 1467527	Kit-Weight Adjuster Indicator .....	1	1	1	1
	<b>a</b> 1467526	Kit-Shaft and Bearing .....	1	1	1	1
	<b>a</b> 1467524	Kit-Bearing .....	1	1	1	1
	<b>a</b> 1467525	Kit-Bumper .....	1	1	1	1
	<b>a</b> 1483828	Kit-Gas Spring (Mounted to the rear of the seat) .....	1	1	1	1
	<b>a</b> 4602965	Wire Harness (Seat Adapter) (☞Figure 4-43).....	1	1	1	1

**FOOTNOTES:**

- a** Not Illustrated

## FULL SUSPENSION SEAT (FIGURE 1-39) MANUAL AND ELECTRO-HYDRAULIC — SWIVEL AND NON-SWIVEL (S/N P005B02570H →)



BP120828



**FULL SUSPENSION SEAT**  
**MANUAL AND ELECTRO-HYDRAULIC – SWIVEL AND NON-SWIVEL (S/N P005B02570H →)**

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

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4603382	Seat-Full Suspension (Vinyl) (Non-Swivel) (Vinyl) (Non-Swivel) .....	1	1
	4603383	Seat-Full Suspension (Cloth) (Non-Swivel) (Cloth) (Non-Swivel) .....	1	1
	2101604			
	4603384	Seat-Full Suspension (Vinyl) (Swivel) (Vinyl) (Swivel) .....	1	1
	2101605			
	4603385	Seat-Full Suspension (Cloth) (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	4043082	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 P005B02570H →)

**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 for Mini Lever) (☞Figure 1-44).....	..	1
18	.....	Mini-Lever Module (☞Figure 4-25, ☞Figure 4-26).....	..	1
18	.....	Armrest (Electro-Hydraulic-Joystick) (☞Figure 1-47).....	..	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	<b>b</b> 1694700	Spacer .....	..	1
32	<b>b</b> 221542	Capscrew .....	..	1
33	<b>b</b> 1581852	Washer .....	..	2
34	<b>b</b> 221353	Locknut .....	..	2
35	221530	Capscrew .....	1	..
36	296379	Washer .....	2	2
	<b>a</b> 114312	Strap Clamp .....	1	1
	<b>a</b> 1470155	Information Case (Kit) .....	1	1
	<b>a</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

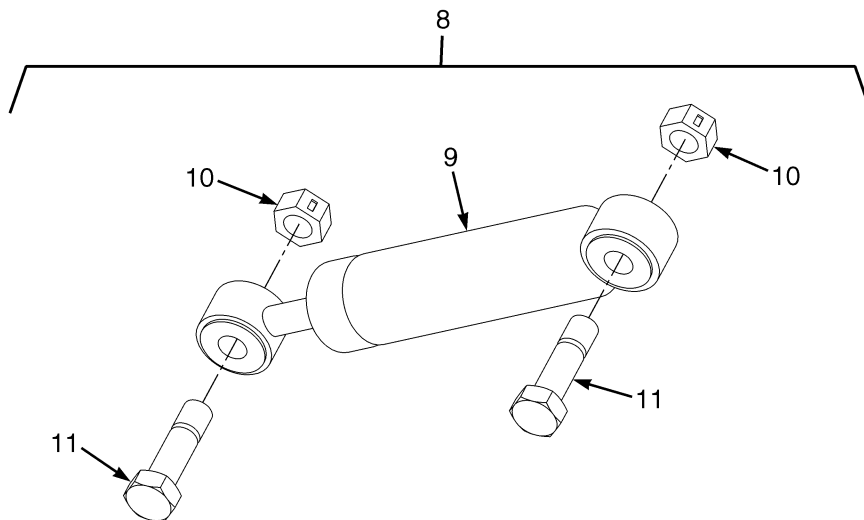
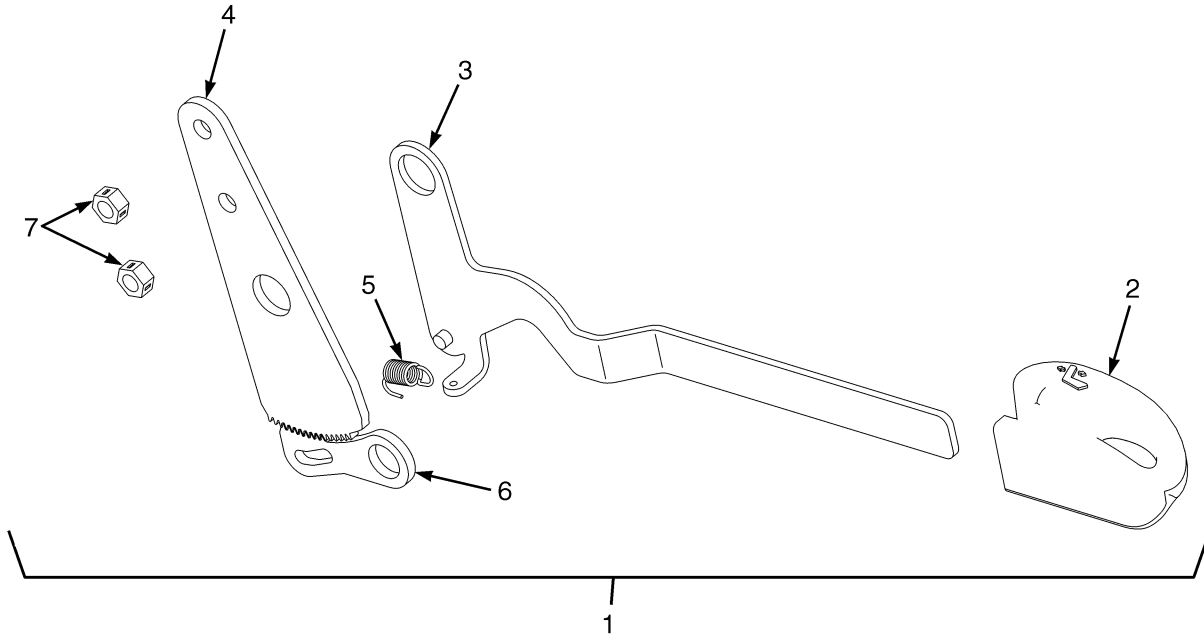
**FOOTNOTES:**

**a** Not Illustrated

**b** Used with lower seat belt mounting.



## FULL SUSPENSION SEAT (FIGURE 1-40) SHEET 2 OF 2 (S/N P005B02570H →)

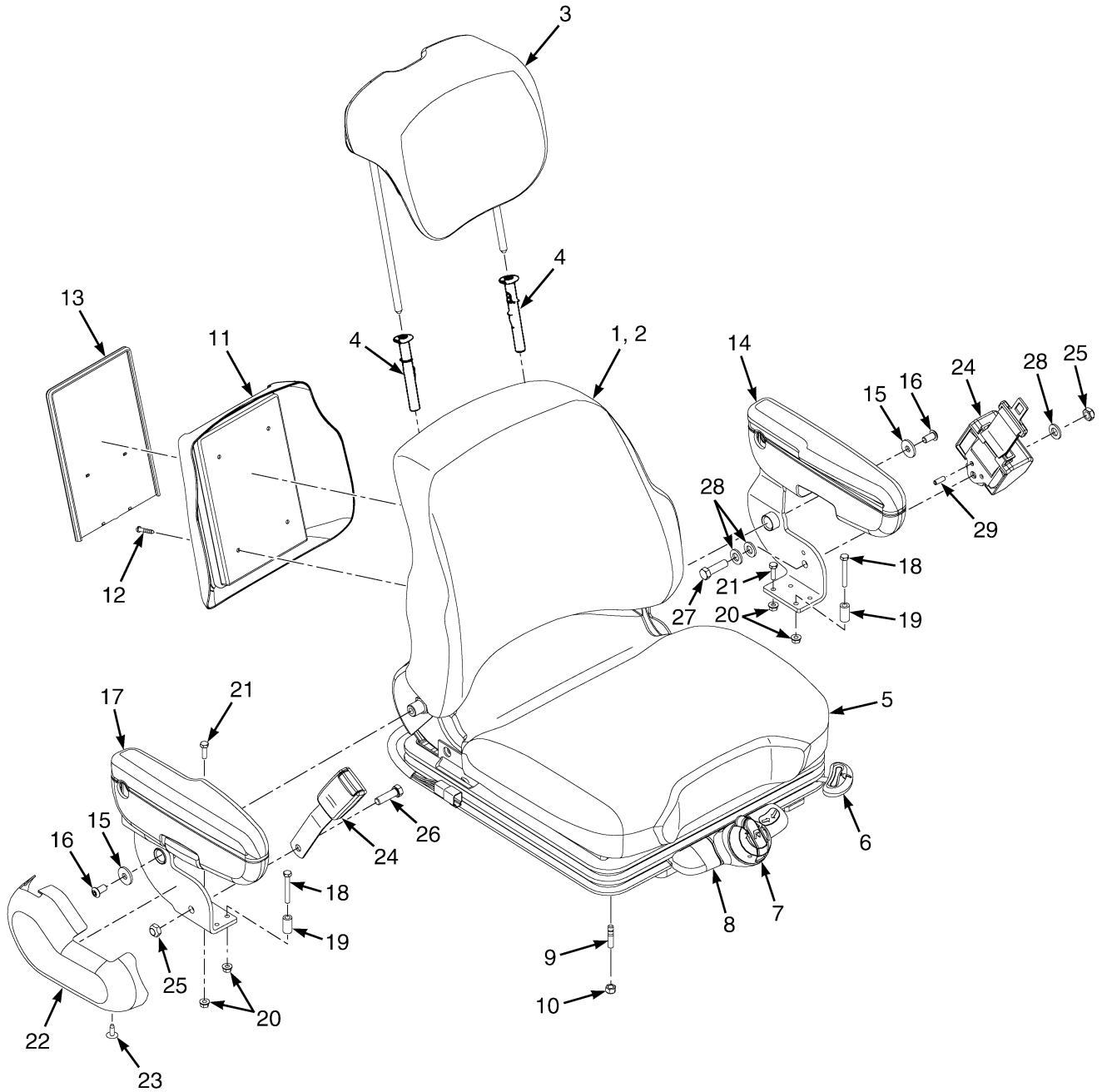


BP120646

**FULL SUSPENSION SEAT**  
**SHEET 2 OF 2 (S/N P005B02570H →)**

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

## SEAT (FIGURE 1-41) FULL SUSPENSION, HIGH BACK — SHEET 1 OF 2



BP120939

**SEAT**  
**FULL SUSPENSION, HIGH BACK – SHEET 1 OF 2**

ITEM	PART NO.	DESCRIPTION	QTY
	4614480	Seat-Full Suspension (Vinyl) .....	1
	4614481	Seat-Full Suspension (Cloth) .....	1
1	4016924	Kit-Cushion (Seat Back, Vinyl) .....	1
1	4016928	Kit-Cushion (Seat Back, Cloth) .....	1
2	.....	Back Cushion .....	1
2	1584643	Screw .....	2
3	4016926	Cushion (Head Rest Vinyl) .....	1
3	4016930	Cushion (Head Rest Cloth) .....	1
4	1615149	Guide Assembly (Tubes) .....	2
5	1703903	Kit-Cushion (Seat and Back, Vinyl) .....	1
5	1703900	Kit-Cushion (Seat and Back, Cloth) .....	1
5	1703902	Kit-Seat Cushion (Vinyl) .....	1
5	1703899	Kit-Seat Cushion (Cloth) .....	1
5	.....	Seat Cushion .....	1
5	1637285	Spring .....	2
5	1513089	Cotter Pin (Hair) .....	2
6	4043082	Kit-Seat Rail .....	1
6	.....	Locking Rail .....	1
6	.....	Slave Rail .....	1
6	.....	Bolt .....	4
6	1367150	Nut .....	4
7	1703892	Kit-Weight Adjuster .....	1
7	.....	Knob .....	1
7	.....	Bushing .....	1
7	.....	Washer .....	1
7	.....	Pin .....	1
7	.....	U-Joint .....	1
8	1703893	Kit-Service (Front Panel) (Non Swivel) .....	1
8	.....	Front Panel .....	1
8	.....	Socket Head Capscrew .....	2
8	.....	Roll Pin .....	1
9	1677286	Stud .....	4
10	313828	Nut .....	4
11	1482925	Plate (Book Box) .....	1
12	1482949	Screw .....	4
13	1453887	Holder .....	1
14	2099947	Armrest (LH) .....	1
14	1563230	Cushion (LH Armrest) .....	1
15	1512536	Washer .....	2
16	18735	Screw .....	2
17	2099949	Armrest (RH) .....	1
17	1563231	Cushion (RH) .....	1
18	18471	Capscrew .....	2
19	4007318	Spacer .....	2
20	169874	Nut .....	4
21	18462	Capscrew .....	2
22	2099950	Seat Cover (Right-Hand Side) .....	1
23	1379945	Fastener .....	2
24	1598504	Kit-Seat Belt (Black) .....	1
24	1636120	Kit-Red Seat Belt .....	1

## SEAT FULL SUSPENSION, HIGH BACK – SHEET 1 OF 2

ITEM	PART NO.	DESCRIPTION	QTY
25	221353	Locknut .....	2
26	221530	Capscrew .....	1
27	221536	Capscrew .....	1
28	1581852	Washer .....	3
29	19901	Roll Pin .....	1
	<b>b</b> 4046492	Lever .....	1
	<b>b</b> 1703903	Kit-Cushion (Seat and Back, Vinyl) .....	1
	<b>b</b> 1563208	Sensor (Operator Presence) .....	1
	<b>b</b> 4027341	Bracket .....	1
	<b>b</b> 1703895	Kit-Service Internal Tether-80 MM Travel .....	1
	<b>b</b> 114312	Strap Clamp .....	1
	<b>b</b> 4032461	Kit (Mechanical Lumbar) .....	1
	<b>ab</b> 4032460	Kit (Non Swivel Seat) (Includes Items 7-8) (☞ Figure 1-42).....	1

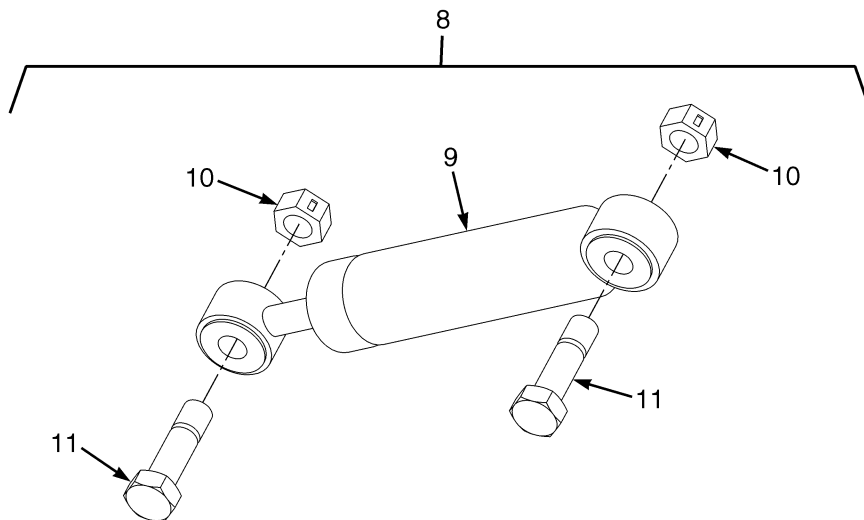
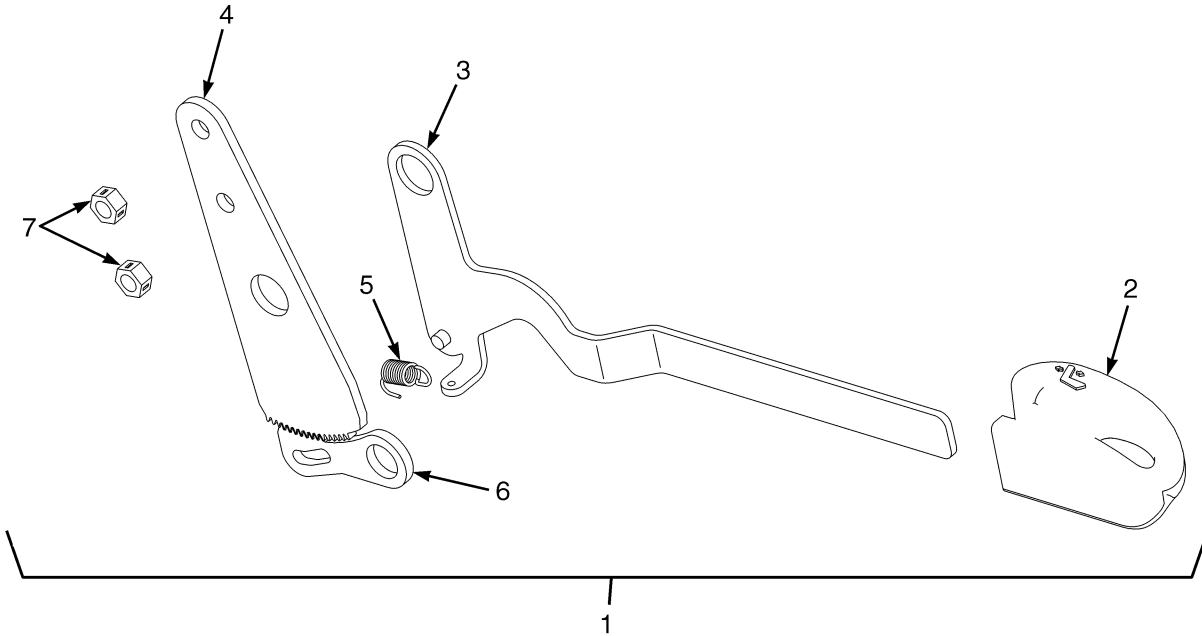
**FOOTNOTES:**

- a** Kit includes Tether and Recliner from Sheet 2 of 2.      **b** Not Illustrated





**SEAT (FIGURE 1-42)**  
**FULL SUSPENSION, HIGH BACK — SHEET 2 OF 2**

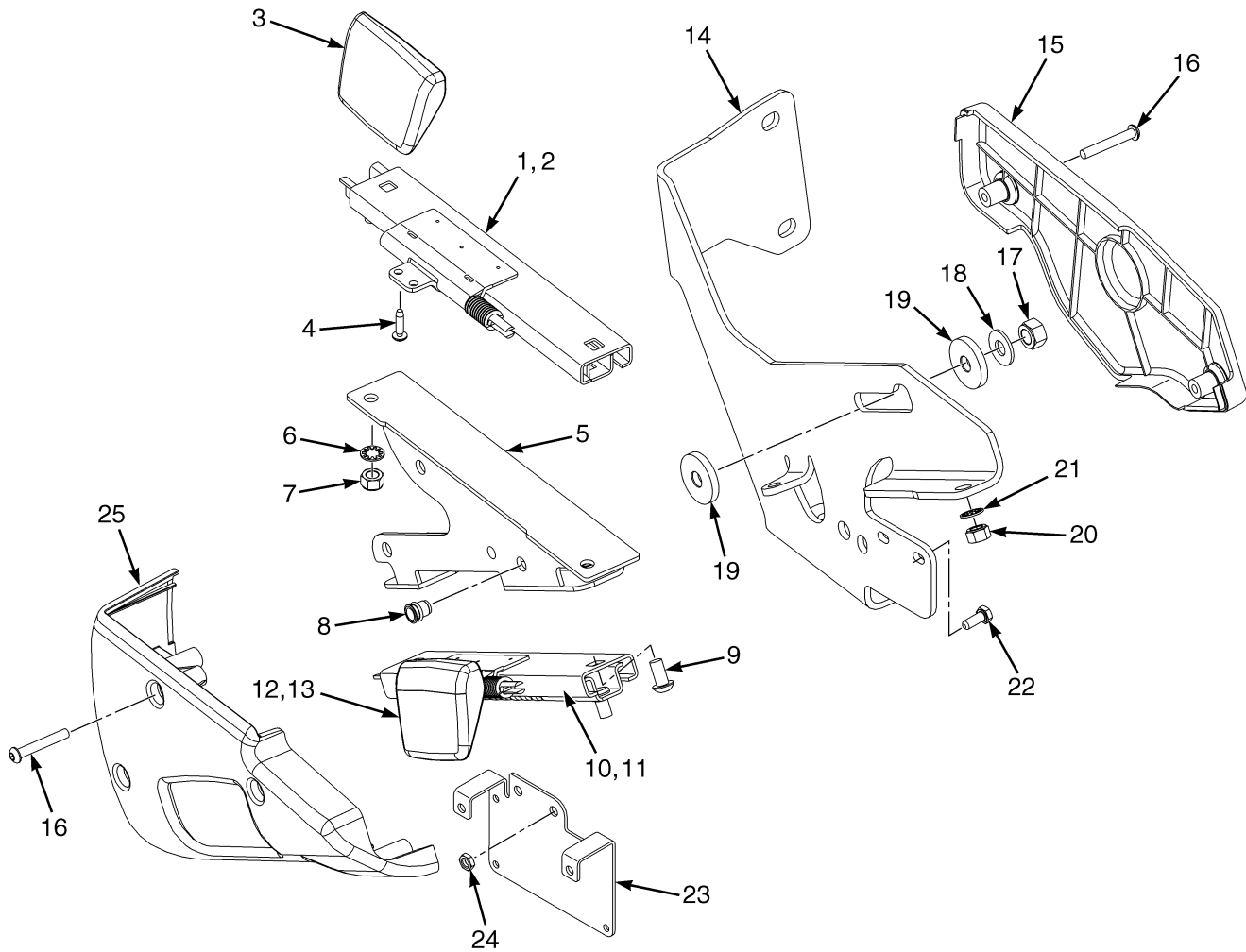


BP120646

**SEAT**  
**FULL SUSPENSION, HIGH BACK – SHEET 2 OF 2**

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 1-43) MINI-LEVER MODULES — SEMI-SUSPENSION SEAT

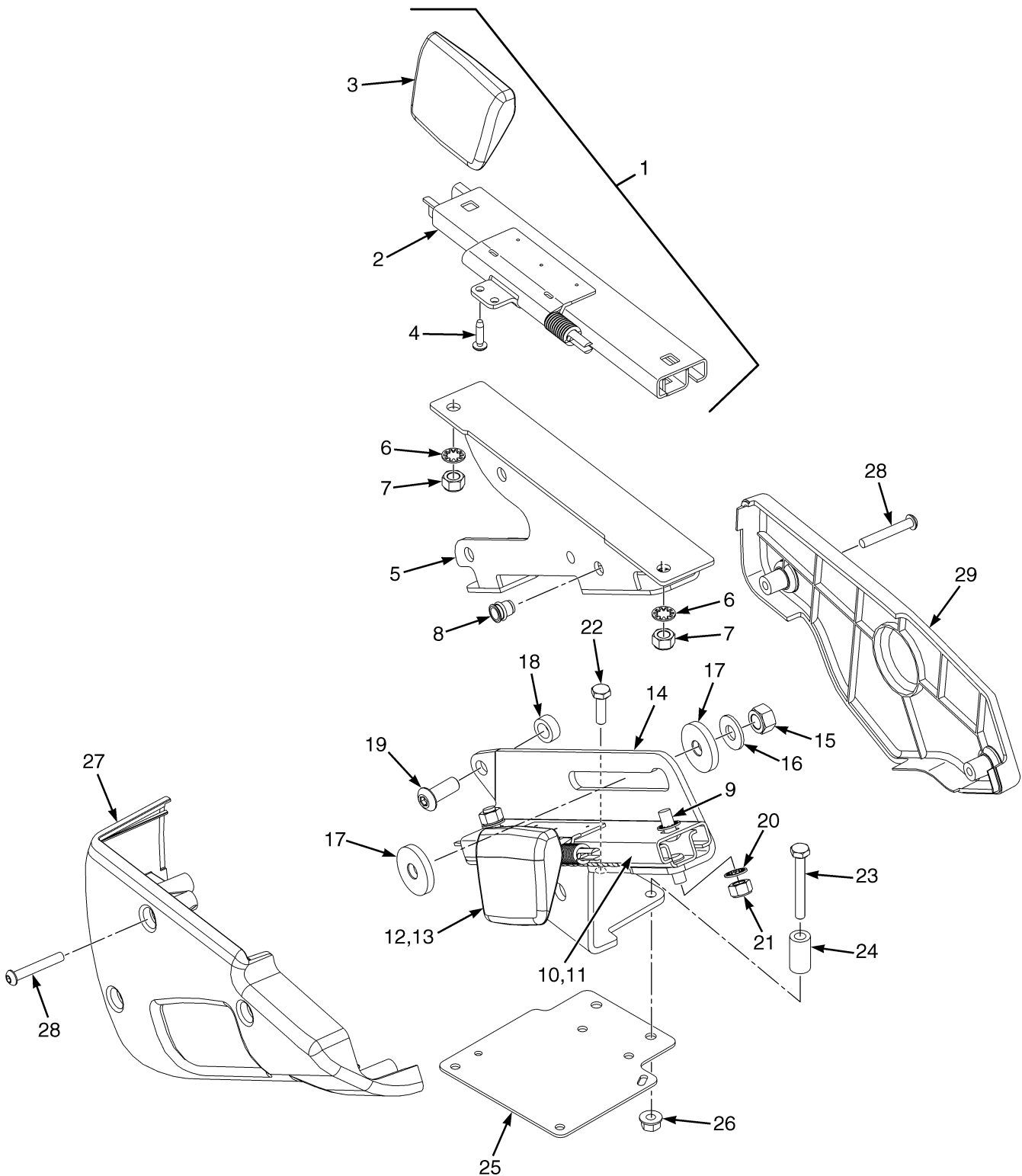


BP120702

**ARMREST ASSEMBLY**  
**MINI-LEVER MODULES – SEMI-SUSPENSION SEAT**

ITEM	PART NO.	DESCRIPTION	QTY
	4005010	Armrest (Slider for 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 1-44) MINI-LEVER MODULES

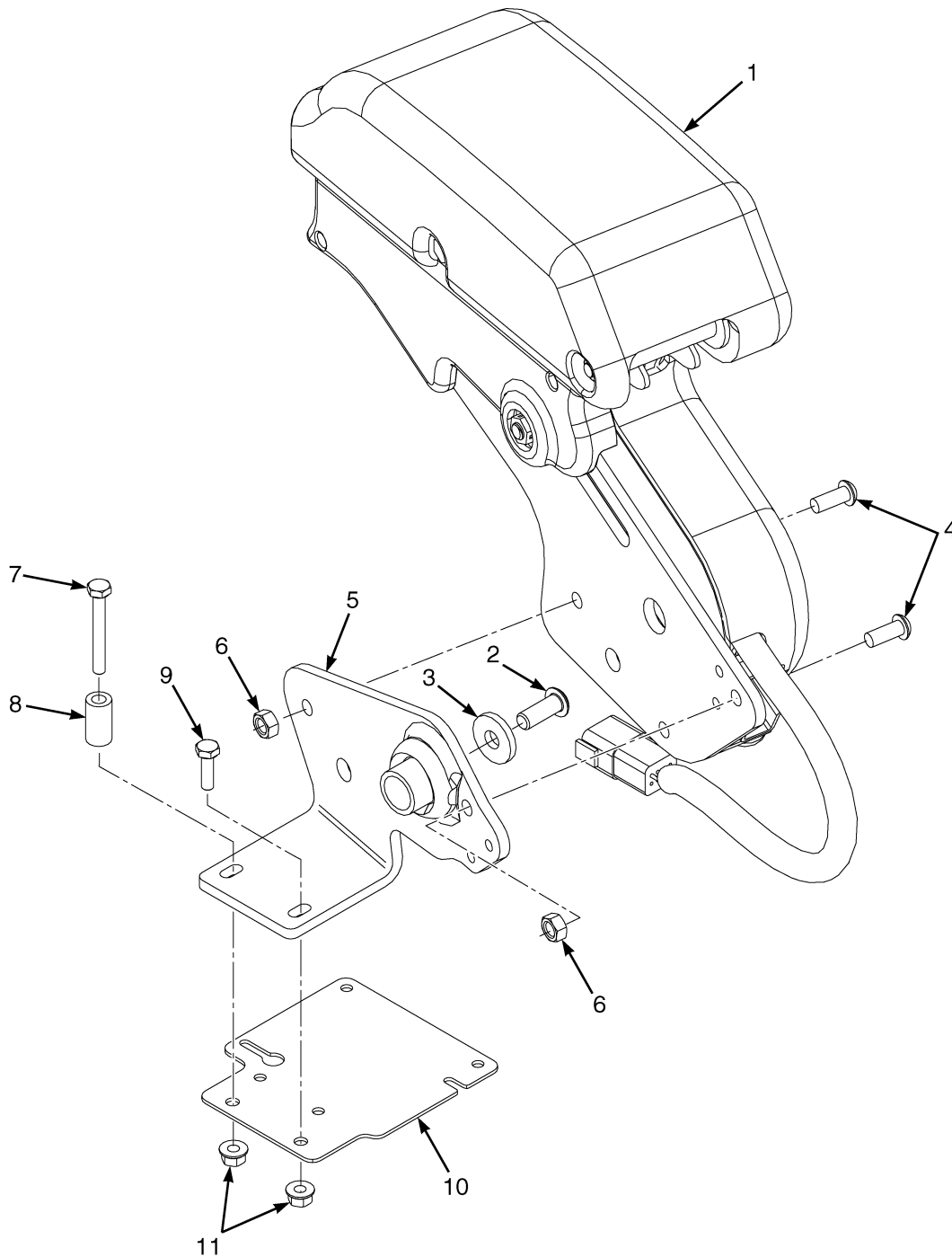


BP120701

**ARMREST ASSEMBLY  
MINI-LEVER MODULES**

ITEM	PART NO.	DESCRIPTION	QTY
	4005010	Armrest (Slider for 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 1-45) JOYSTICK



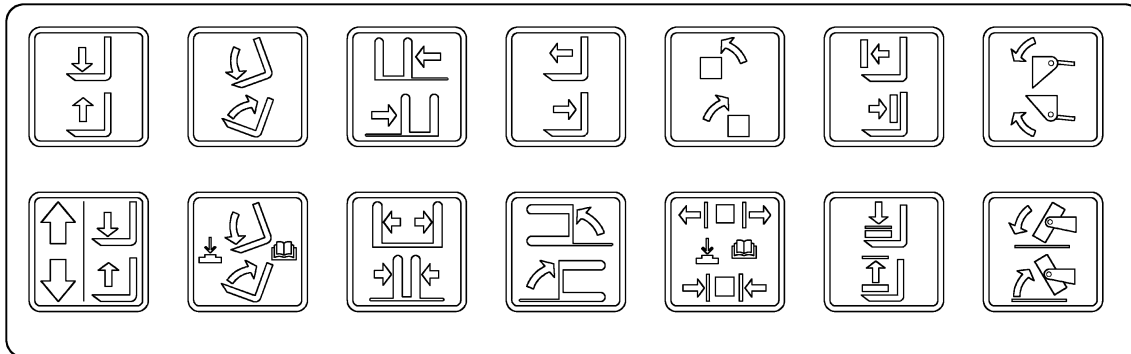
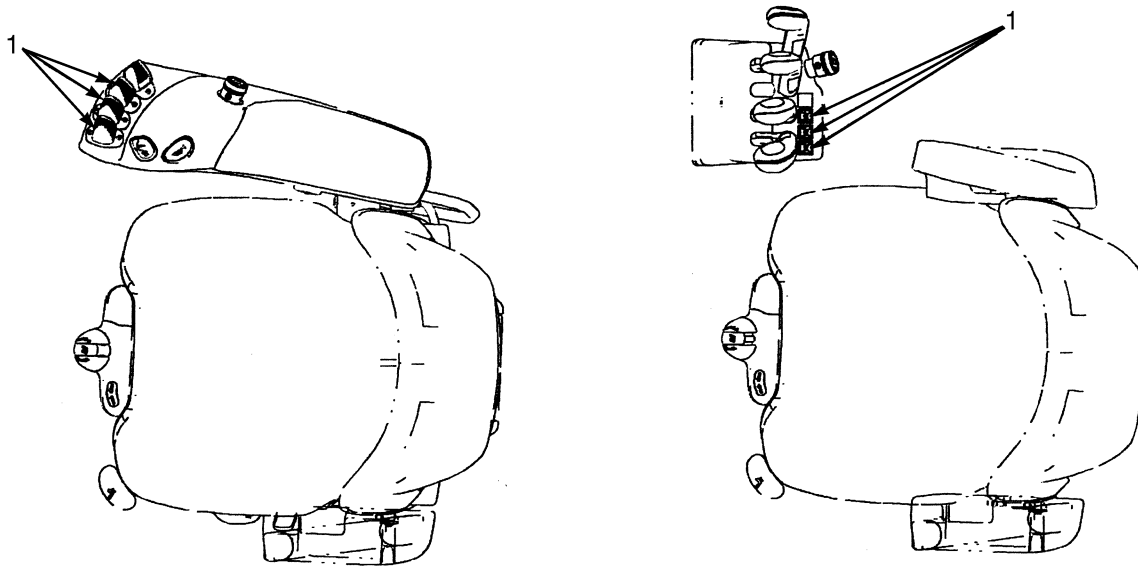
BP120726



**ARMREST ASSEMBLY  
JOYSTICK**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
1	4602207	Armrest (Joy Stick Slider Assembly) (☞Figure 1-47).....	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 1-46) HYDRAULIC CONTROL FUNCTIONS

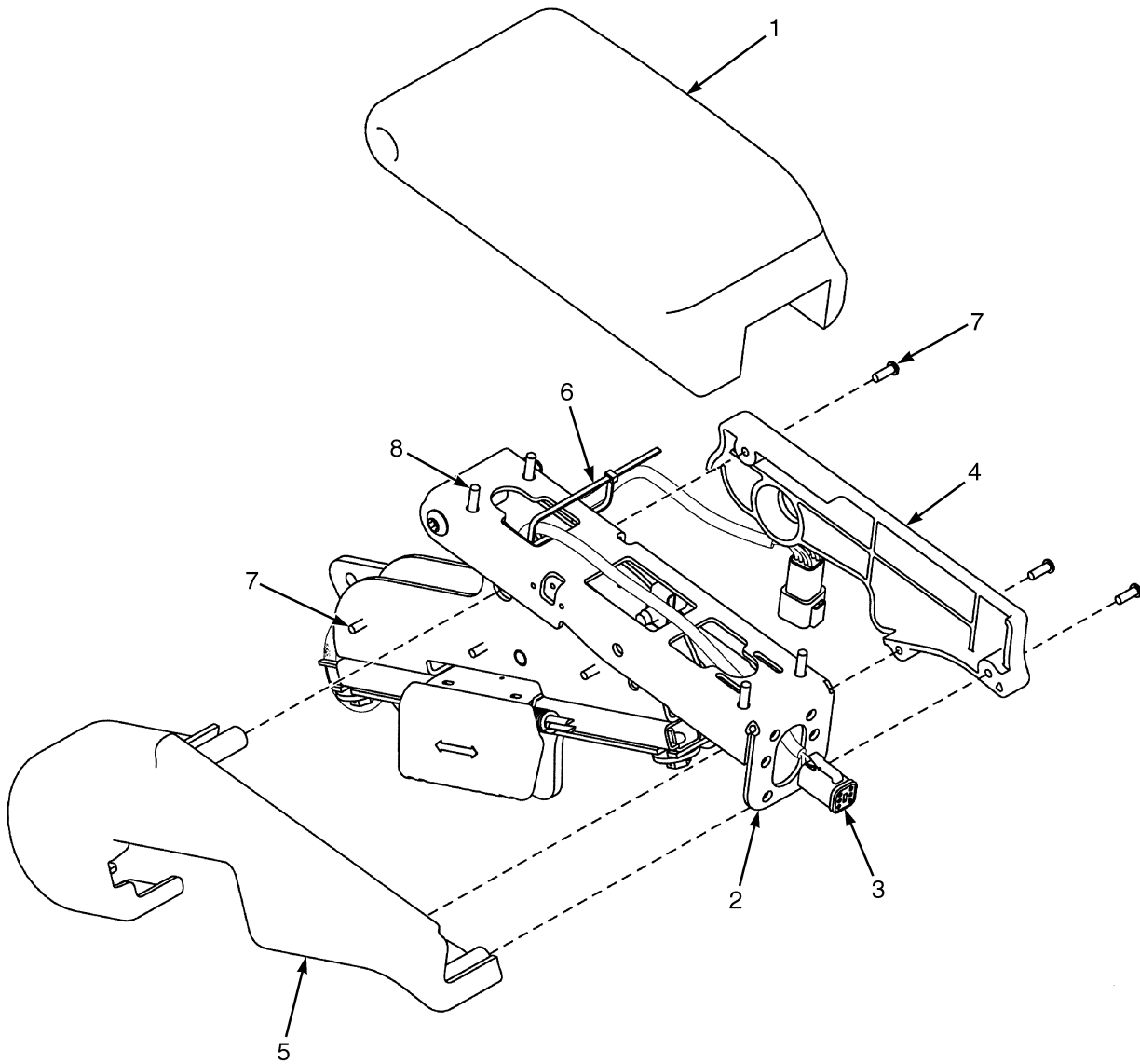


BP120427

**MINI LEVER MODULE LABELS  
HYDRAULIC CONTROL FUNCTIONS**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
1	2102640	Label .....	1

## JOYSTICK SLIDER ASSEMBLY (FIGURE 1-47)

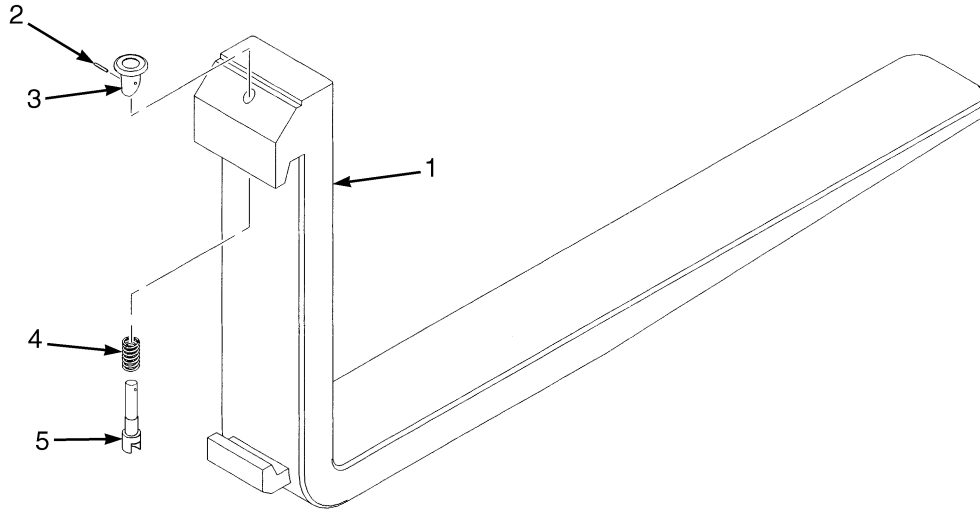


BP120690

**JOYSTICK SLIDER ASSEMBLY**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
	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

## FORKS (FIGURE 1-48) STANDARD TAPER — CLASS III



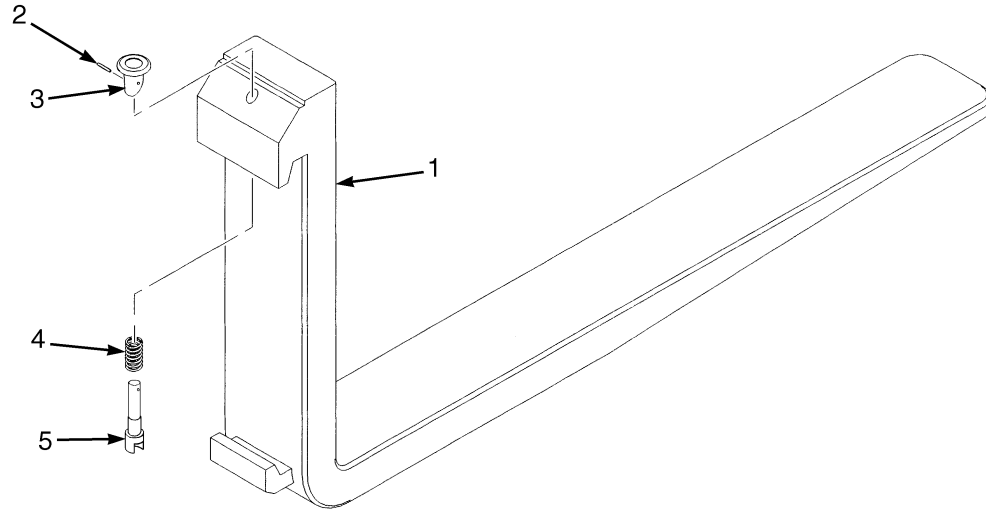
BP000187

**KEY:**

- A: 125 mm x 50 mm
- B: 150 mm x 50 mm

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1338140	Fork (1000 mm) .....	2	..
1	1338142	Fork (1100 mm) .....	2	..
1	1338144	Fork (1200 mm) .....	2	..
1	1338146	Fork (1397 mm) .....	2	..
1	1519439	Fork (1200 mm) .....	..	2
1	1519440	Fork (1300 mm) .....	..	2
1	1519441	Fork (1397 mm) .....	..	2
1	1519442	Fork (1499 mm) .....	..	2
2	1523734	Pin .....	1	1
3	1523732	Knob .....	1	1
4	1500784	Spring .....	1	1
5	1523737	Pin .....	1	1
	1523739	Kit-Latch (Class III) .....	1	1

**FORKS (FIGURE 1-49)  
STANDARD TAPER — CLASS IV**



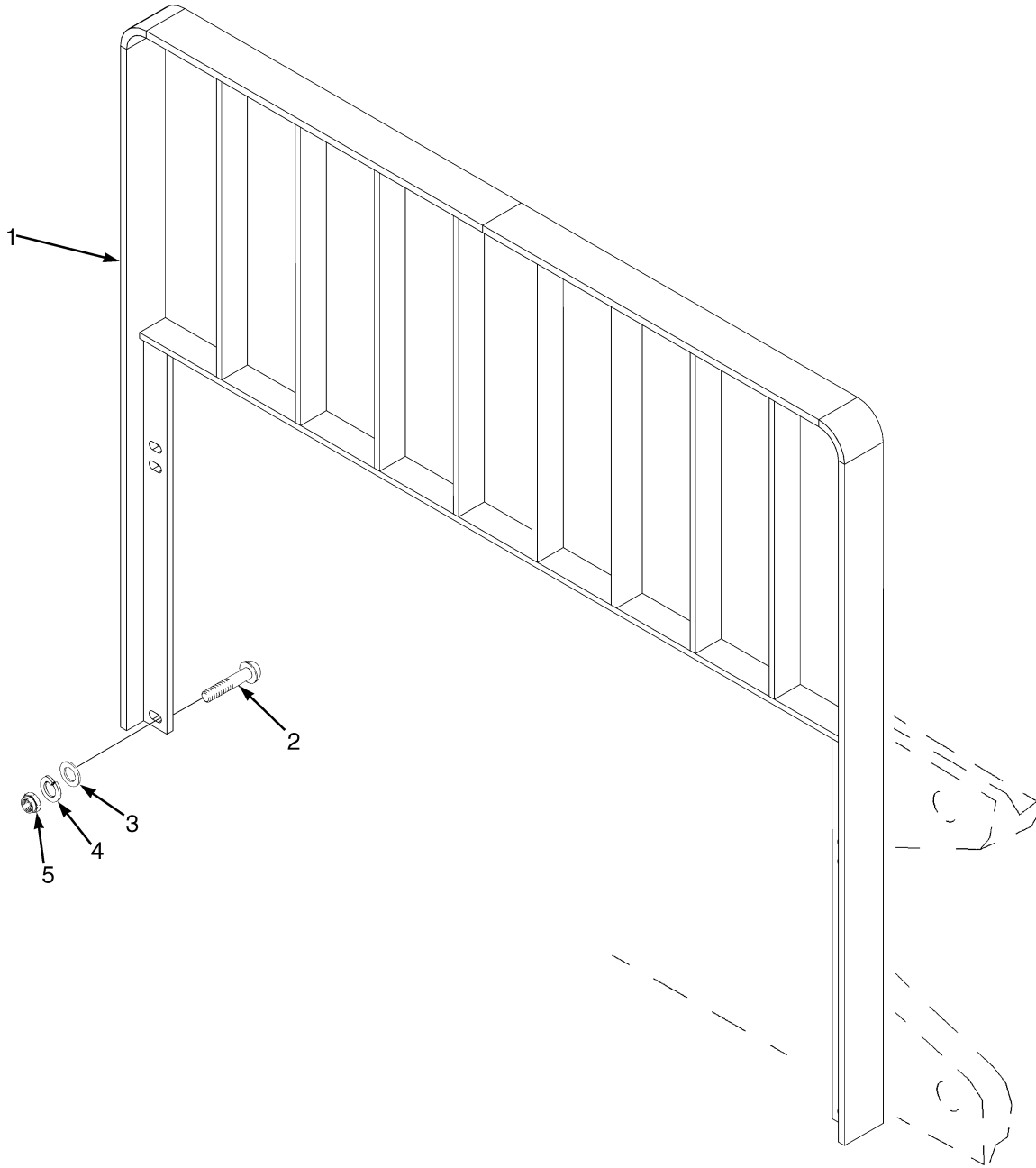
BP000187

**KEY:**

- A: 150 mm x 50 mm**
- B: 150 mm x 60 mm**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1519444	Fork (1200 mm) .....	2	..
1	1479132	Fork (1300 mm) .....	2	..
1	1479133	Fork (1500 mm) .....	2	..
1	1362229	Fork (1200 mm) .....	..	2
1	1362231	Fork (1300 mm) .....	..	2
1	1362233	Fork (1500 mm) .....	..	2
1	1362235	Fork (1800 mm) .....	..	2
2	1523734	Pin .....	1	1
3	1523732	Knob .....	1	1
4	1500786	Spring .....	1	1
5	1523741	Pin .....	1	1
	1523742	Kit-Latch (Class IV) .....	1	1

## LOAD BACKREST EXTENSION (FIGURE 1-50)



BP120217

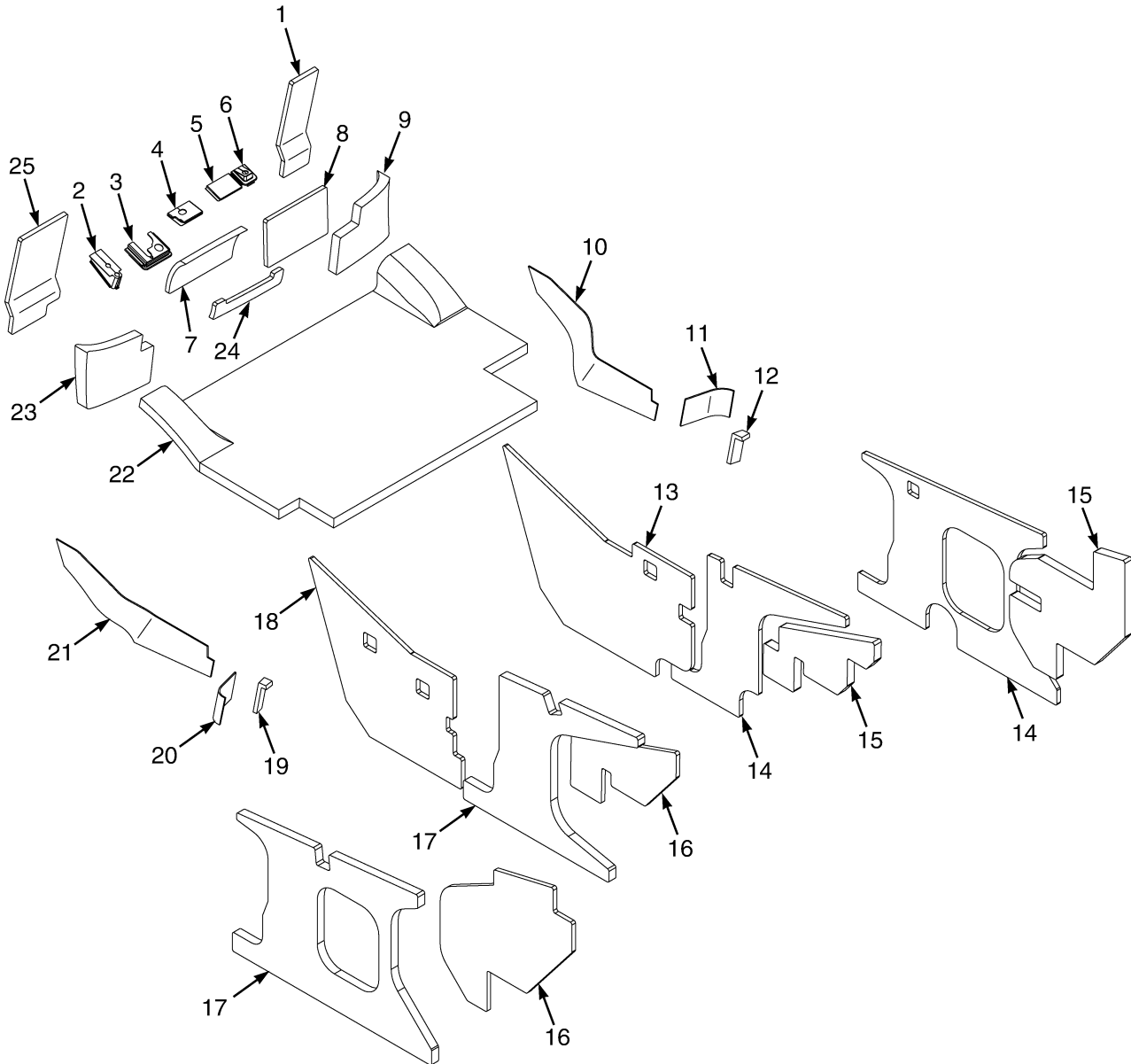


**LOAD BACKREST EXTENSION**

ITEM	PART NO.	DESCRIPTION	QTY
1	<b>a</b> 1387341	Load Backrest (1219 mm) (Class III) .....	1
1	<b>a</b> 1387345	Load Backrest (1524 mm) (Class III) .....	1
1	<b>b</b> 1387348	Load Backrest (1219 mm) (Class IV) .....	1
1	<b>b</b> 1387904	Load Backrest (1372 mm) (Class IV) .....	1
1	<b>b</b> 1387349	Load Backrest (1524 mm) (Class IV) .....	1
2	1354923	Capscrew .....	4
2	1387330	Capscrew .....	4
3	221771	Washer .....	4
3	296423	Washer (Optional) .....	4
4	292683	Lockwasher .....	4
5	292656	Nut .....	4

**FOOTNOTES:****a** H4.0FT5, H4.0FT6, H4.5FTS5**b** H4.5FT6, H5.0-5.5FT

## SOUND ABATEMENT (FIGURE 1-51) WITH CAB



BP120641

**SOUND ABATEMENT  
WITH CAB**

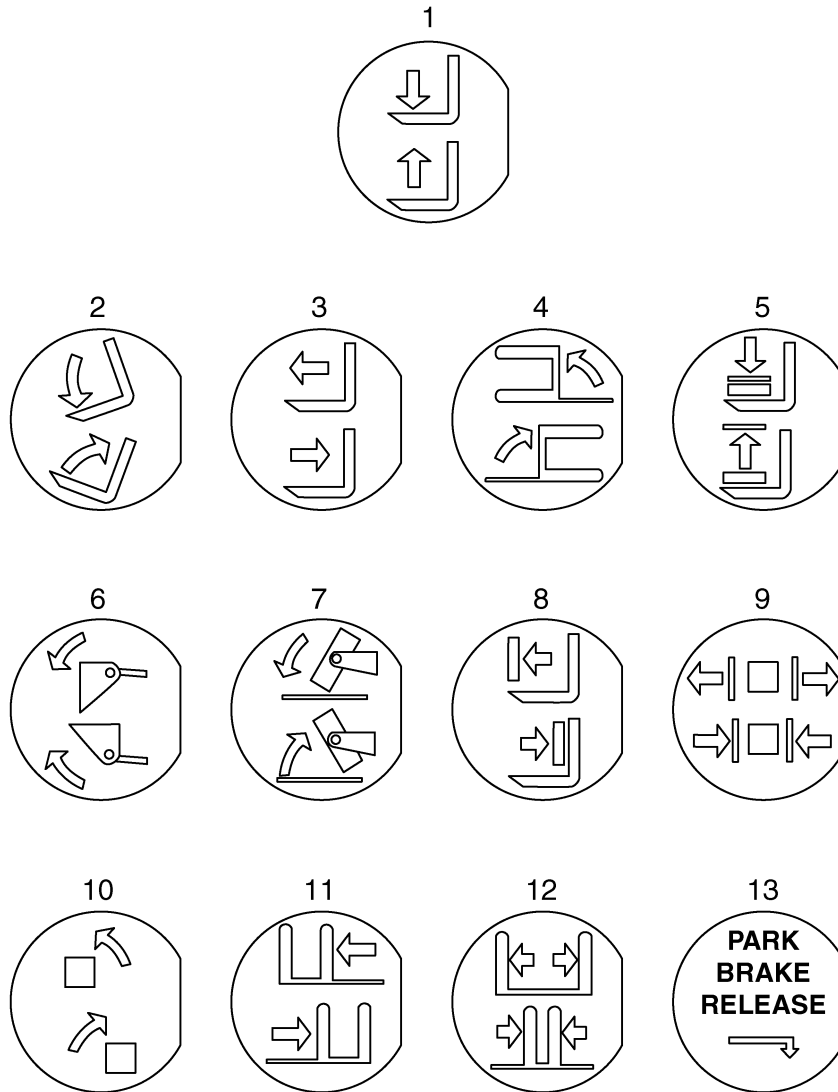
ITEM	PART NO.	DESCRIPTION	QTY
1	1616485	Sound Liner .....	1
2	2076134	Seal .....	1
3	2065797	Seal .....	1
4	2065827	Seal (with E-Hydraulics) .....	1
4	2065798	Seal (with Manual Hydraulics) (without Operator Presence Lockout) .....	1
4	2096902	Seal with Manual Hydraulics) (with Operator Presence Lockout) .....	1
5	2065826	Seal (with E-Hydraulics) .....	1
5	2065799	Seal (Manual Valve) (with Manual Hydraulics) (without Operator Presence Lockout) .....	1
5	2096903	Seal (with Manual Hydraulics) (with Operator Presence Lockout) .....	1
6	2069464	Seal .....	1
7	1616482	Sound Liner (Foam) .....	1
8	1616484	Sound Liner .....	1
9	1617081	Sound Liner (Foam) (RH) .....	1
10	1603895	Damping Sheet (Front RH) .....	1
11	1597058	Damping Sheet .....	1
12	1596624	Seal .....	1
13	1616593	Sound Liner (RH) .....	1
13	1683673	Sound Liner (Foam) (RH) (RH) (Alternate Part) .....	1
14	<b>b</b> 1616594	Sound Liner (RH) .....	1
14	<b>a</b> 1616598	Sound Liner (RH) .....	1
15	<b>a</b> 1616597	Sound Liner (RH) .....	1
15	<b>b</b> 1616595	Sound Liner (RH) .....	1
16	<b>a</b> 1616599	Sound Liner (LH) .....	1
16	<b>b</b> 1616592	Sound Liner (LH) .....	1
17	<b>a</b> 1616596	Sound Liner (LH) .....	1
17	<b>b</b> 1616591	Sound Liner (LH) .....	1
18	4029340	Sound Liner (LH) .....	1
19	1596625	Seal (LH) .....	1
20	1597052	Damping Sheet .....	1
21	1603894	Damping Sheet (Front LH) .....	1
22	1708351	Liner .....	1
22	<b>c</b> 1682828	Sound Liner (Alternate Part) .....	1
23	1617082	Sound Liner (Dash) (LH) .....	1
24	1616483	Sound Liner .....	1
25	1617193	Sound Liner .....	1

**FOOTNOTES:**

- a** H4.0FT5, H4.0FT6, H4.5FTS5  
**b** H4.5FT6, H5.0-5.5FT

- c** Used With Variable Displacement Pump

## LABELS (FIGURE 1-52) HYDRAULIC CONTROL LABELS — MANUAL HYDRAULIC LEVERS



BP120880

**LABELS**  
**HYDRAULIC CONTROL LABELS – MANUAL HYDRAULIC LEVERS**

ITEM	PART NO.	DESCRIPTION	QTY
1	2070296 4034931	Lens with label (Hoist) .....	1
2	2070297 4034932	Lens with label (Tilt) .....	1
3	4034933	Lens with label (Reach) .....	1
4	4034934	Lens with label (Swing) .....	1
5	4034935	Lens with label (Load Stabilizer) .....	1
6	4034936	Lens with label (Scoop) .....	1
7	4034937	Lens with label (Upender) .....	1
8	4034938	Lens with Label (Push and Pull) .....	1
9	4034939	Lens with label (Clamp) .....	1
10	4034940	Lens with label (Rotate) .....	1
11	2070306 4034941	Lens with label (Side-Shift) .....	1
12	4034942	Lens with Label (Fork Spread) .....	1
13	4034943	Lens with label (Park Brake Release) .....	1



**2**

**ENGINES**





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ENGINES**

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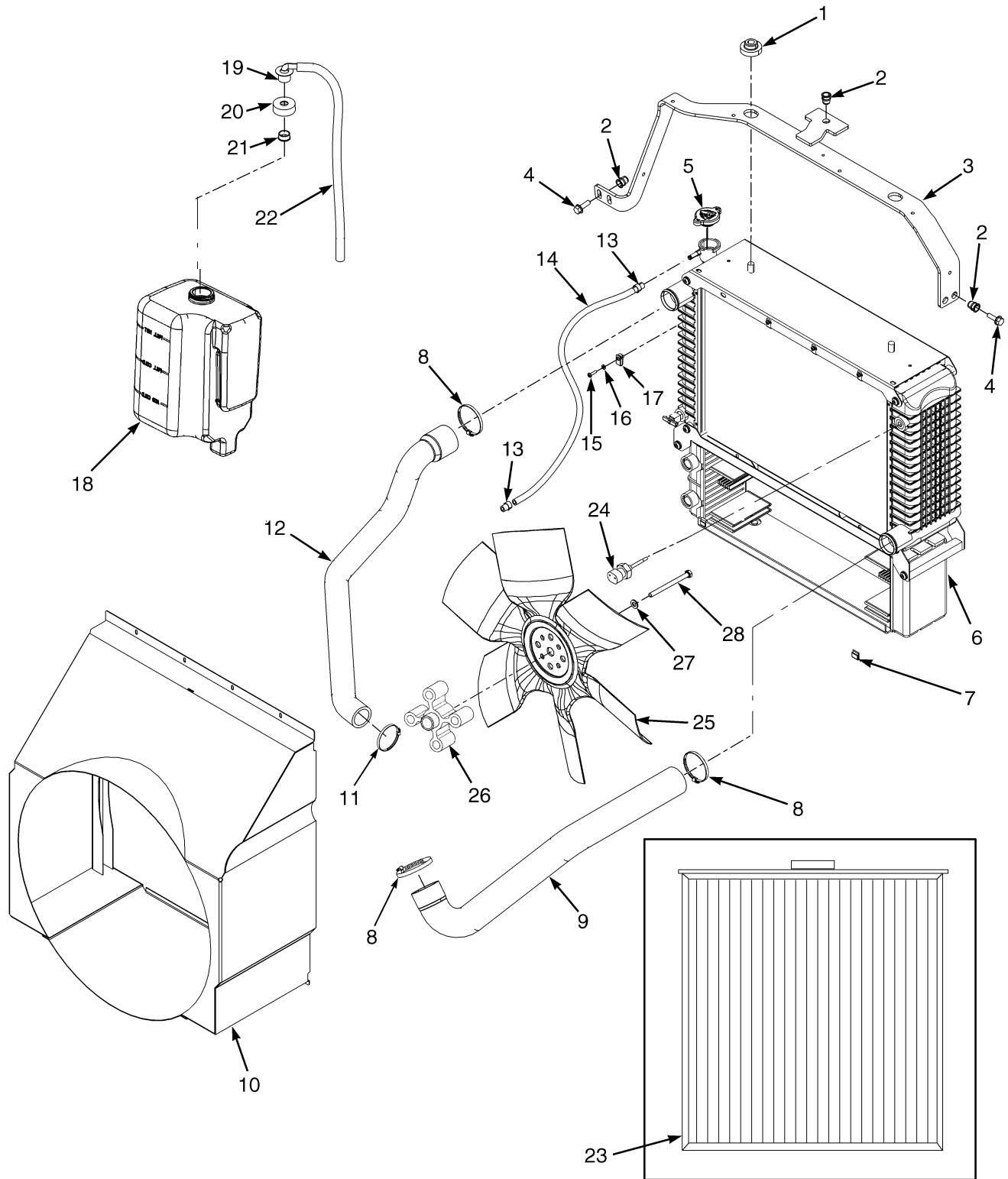
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## COOLING (FIGURE 2-1)

GM 4.3L WITH EXTERNAL OIL COOLER AND ELECTRONIC TRANSMISSION — OR WITH WET BRAKE



BP060062

**COOLING****GM 4.3L WITH EXTERNAL OIL COOLER AND ELECTRONIC TRANSMISSION – OR WITH WET BRAKE**

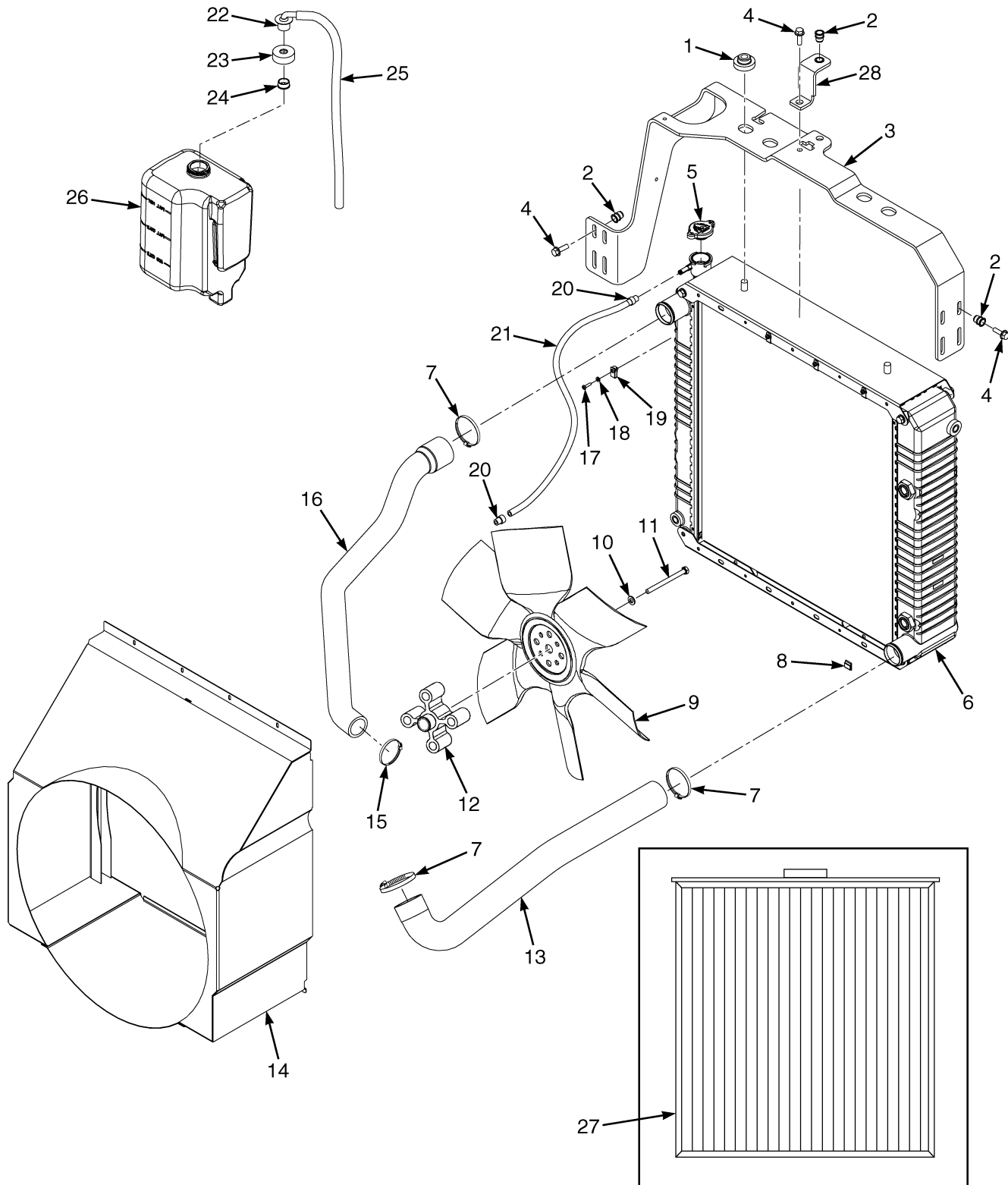
ITEM	PART NO.	DESCRIPTION	QTY
1	1529787	Isolator .....	4
2	1530243	Insert .....	5
3	<b>a</b> 1587535	Bracket .....	1
3	<b>b</b> 1587536	Bracket .....	1
4	1510113	Capscrew .....	4
5	178899	Radiator Cap .....	1
6	<b>d</b> 2066322	Radiator (Assembly) .....	1
6	<b>d</b> 1623821	Radiator .....	1
6	<b>d</b> 1623819	Oil Cooler .....	1
6	<b>e</b> 4603551	Radiator (Assembly) .....	1
6	<b>e</b> 4038256	Radiator .....	1
6	<b>e</b> 4038262	Oil Cooler .....	1
6	<b>e</b> 4038264	Drain Valve .....	1
6	<b>e</b> 4038265	Nut .....	2
6	<b>e</b> 4038266	Bolt .....	8
6	<b>e</b> 4038267	Bolt .....	4
7	1551663	Clip .....	2
8	119236	Clamp .....	4
9	<b>a</b> 2072827	Radiator Hose (Lower) .....	1
9	<b>b</b> 2102984	Radiator Hose (Lower) .....	1
10	<b>a</b> 1641649	Shroud .....	1
10	<b>b</b> 1624925	Shroud .....	1
11	369804	Clamp .....	1
12	<b>a</b> 2072819	Radiator Hose (Upper) .....	1
12	<b>b</b> 2072821	Radiator Hose (Upper) .....	1
13	369815	Clamp .....	2
14	<b>a</b> 1581024	Hose .....	1
14	<b>b</b> 1302955	Hose .....	1
15	302023	Screw .....	4
16	320154	Washer .....	4
17	1535257	Nut .....	4
18	1643342	Reservoir .....	1
18	4022937	Seal (Not Illustrated) .....	1
19	345455	Outlet Assembly .....	1
19	345453	Outlet (Reservoir) .....	1
20	345454	Cap .....	1
21	336550	Bushing .....	1
22	1663877	Hose .....	1
23	1672910	Screen .....	1
23	4003844	Screen (Alternate Part) .....	1
24	1531404	Sensor (Low Coolant Level) .....	1
25	2099479	Fan .....	1
26	1453247	Spacer .....	1
27	1566505	Capscrew .....	4
28	296418	Washer .....	4
	<b>c</b> 14385	Fitting (Without Coolant Sensor) .....	1

**FOOTNOTES:**

- a** H4.0FT5, H4.0FT6, H4.5FTS5
- b** H4.5FT6, H5.0FT, H5.5FT
- c** Not Illustrated
- d** → PENDING PER ECN 134242
- e** PENDING PER ECN 134242 →



## COOLING (FIGURE 2-2) GM 4.3L WITH INTERNAL OIL COOLER — WITH BASIC TRANSMISSION AND DRY BRAKE



BP060063



**COOLING****GM 4.3L WITH INTERNAL OIL COOLER – WITH BASIC TRANSMISSION AND DRY BRAKE**

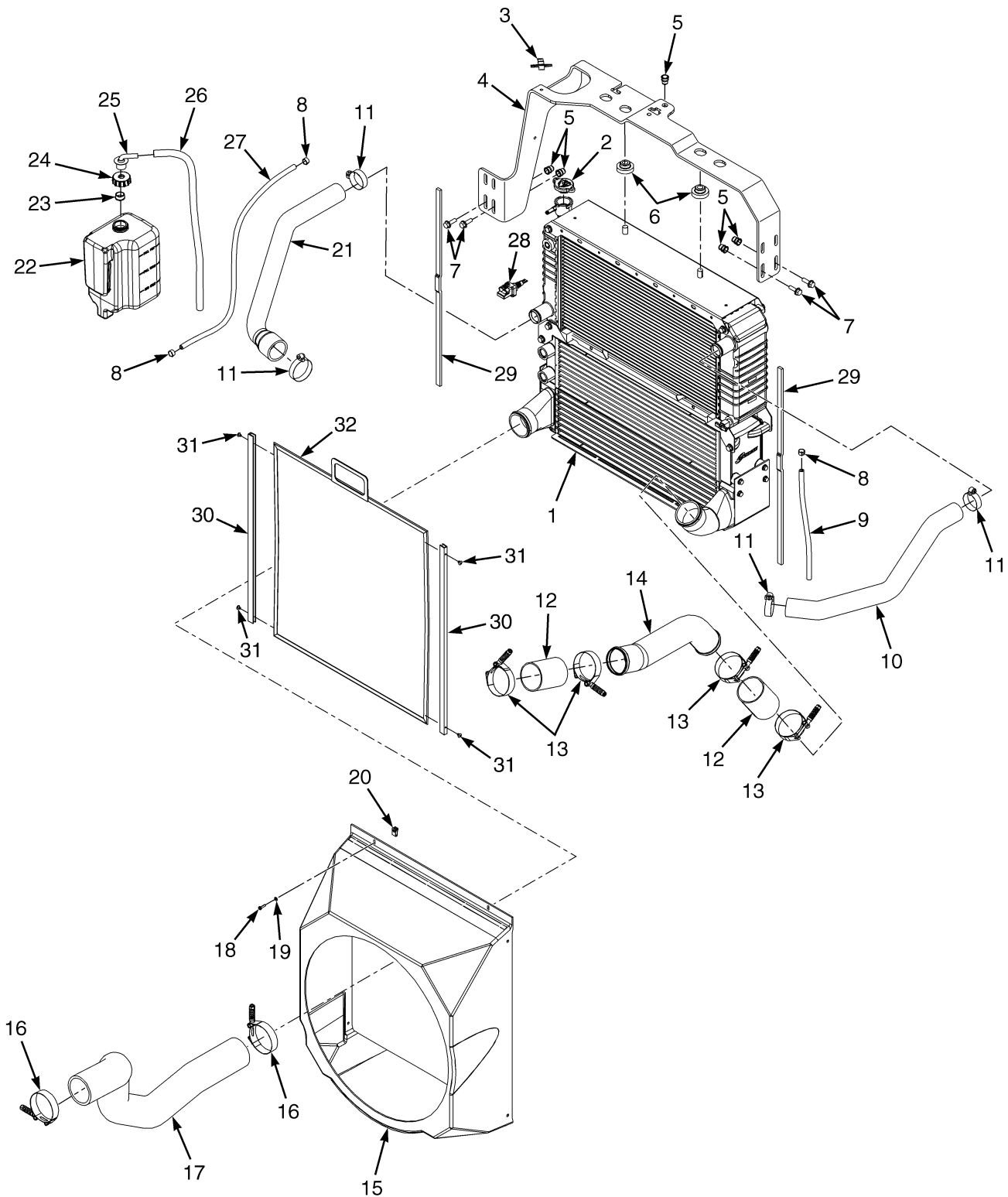
ITEM	PART NO.	DESCRIPTION	QTY
1	1529787	Isolator .....	4
2	1530243	Insert .....	5
3	<b>ae</b> 1699135	Bracket Wldmt (Radiator) .....	1
3	<b>ad</b> 4000086	Bracket (Radiator) .....	1
4	1510113	Capscrew .....	4
5	1352140	Radiator Cap .....	1
6	<b>f</b> 2065853	Radiator .....	1
6	<b>g</b> 2102313	Radiator .....	1
7	119236	Clamp .....	3
8	1329271	Clip .....	2
9	<b>f</b> 2095233	Fan .....	1
9	<b>g</b> 2099479	Fan .....	1
10	296418	Washer .....	4
11	1566505	Capscrew .....	4
12	1453247	Spacer .....	1
13	<b>a</b> 2072823	Radiator Hose (Lower) .....	1
13	<b>b</b> 2072825	Radiator Hose (Lower) .....	1
14	<b>a</b> 1624919	Shroud .....	1
14	<b>b</b> 1624921	Shroud .....	1
15	369804	Clamp .....	1
16	<b>a</b> 2072819	Radiator Hose (Upper) .....	1
16	<b>b</b> 2072821	Radiator Hose (Upper) .....	1
17	302023	Screw .....	4
18	320154	Washer .....	4
19	1535257	Nut .....	4
20	369815	Clamp .....	2
21	<b>a</b> 1581024	Hose .....	1
22	345455	Outlet Assembly .....	1
22	345453	Outlet (Reservoir) .....	1
23	345454	Cap .....	1
24	336550	Bushing .....	1
25	1663877	Hose .....	1
26	1643342	Reservoir .....	1
26	4022937	Seal (Not Illustrated) .....	1
27	1672910	Screen .....	1
27	4003844	Screen (Alternate Part) .....	1
28	<b>b</b> 1678327	Bracket .....	1
	<b>c</b> 1531404	Sensor (Low Coolant Level) .....	1
	<b>c</b> 14385	Fitting .....	1
	<b>c</b> 1672824	Exhaust Shield .....	1

**FOOTNOTES:**

- a** H4.0FT5, H4.0FT6, H4.5FTS5  
**b** H4.5FT6, 5.0FT, 55FT  
**c** Not Illustrated  
**d** One Piece Design

- e** Three Piece Design  
**f** → S/N P005B02163G  
**g** S/N P005B02164G →

## COOLING (FIGURE 2-3) CUMMINS QSB 3.3L DIESEL



BP060001

**COOLING**  
**CUMMINS QSB 3.3L DIESEL****KEY:****A: H4.0FT5, H4.0FT6, H4.5FTS5****B: H4.5FT6, H5.0FT, H5.5FT**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2101482	Radiator Assembly .....	1	1
1	1687742	Radiator .....	1	1
1	1687743	Air Cooler .....	1	1
1	1687744	Oil Cooler .....	1	1
1	1687748	Capscrew .....	8	8
2	1352140	Radiator Cap .....	1	1
3	.....	Harness Clip .....	1	1
4	<b>c</b> 1699135	Bracket Wldmt (Radiator) .....	1	..
4	<b>b</b> 4000086	Bracket (Radiator) .....	1	..
5	1530243	Insert .....	5	6
6	1529787	Isolator .....	4	4
7	1510113	Capscrew .....	4	5
8	369815	Clamp .....	3	3
9	1359580	Hose .....	1	1
10	2099432	Radiator Hose (Upper) .....	1	..
10	2099430	Radiator Hose (Upper) .....	..	1
11	119236	Clamp .....	4	4
12	1665700	Hose .....	2	2
13	1665556	Clamp .....	4	4
14	2101970	Tube .....	1	..
14	1663158	Tube .....	..	1
15	2101870	Shroud .....	1	..
15	2103218	Shroud .....	..	1
16	1666557	Clamp .....	2	2
17	2099553	Hose .....	1	..
17	2104163	Hose .....	..	1
18	302023	Screw .....	2	2
19	320154	Washer .....	2	2
19	197066	Washer (Alternate Part) .....	2	2
20	1535257	Nut .....	2	2
21	<b>d</b> 2099433	Radiator Hose (Lower) .....	1	..
21	<b>e</b> 4610079	Radiator Hose (Lower) .....	1	..
21	<b>d</b> 2099431	Radiator Hose (Lower) .....	..	1
21	<b>e</b> 4610080	Radiator Hose (Lower) .....	..	1
22	1643342	Reservoir .....	1	1
23	336550	Bushing .....	1	1
24	345454	Cap .....	1	1
25	345455	Outlet Assembly .....	1	1
26	1663877	Hose .....	1	1
27	1581024	Hose .....	1	1
28	1689881	Sensor (Coolant Level) .....	1	1
28	<b>a</b> 14385	Fitting (Without Coolant Sensor) .....	1	1
29	1677231	Seal .....	2	2
30	1676621	Channel .....	2	2
31	1676808	Rivet .....	4	4

## COOLING CUMMINS QSB 3.3L DIESEL

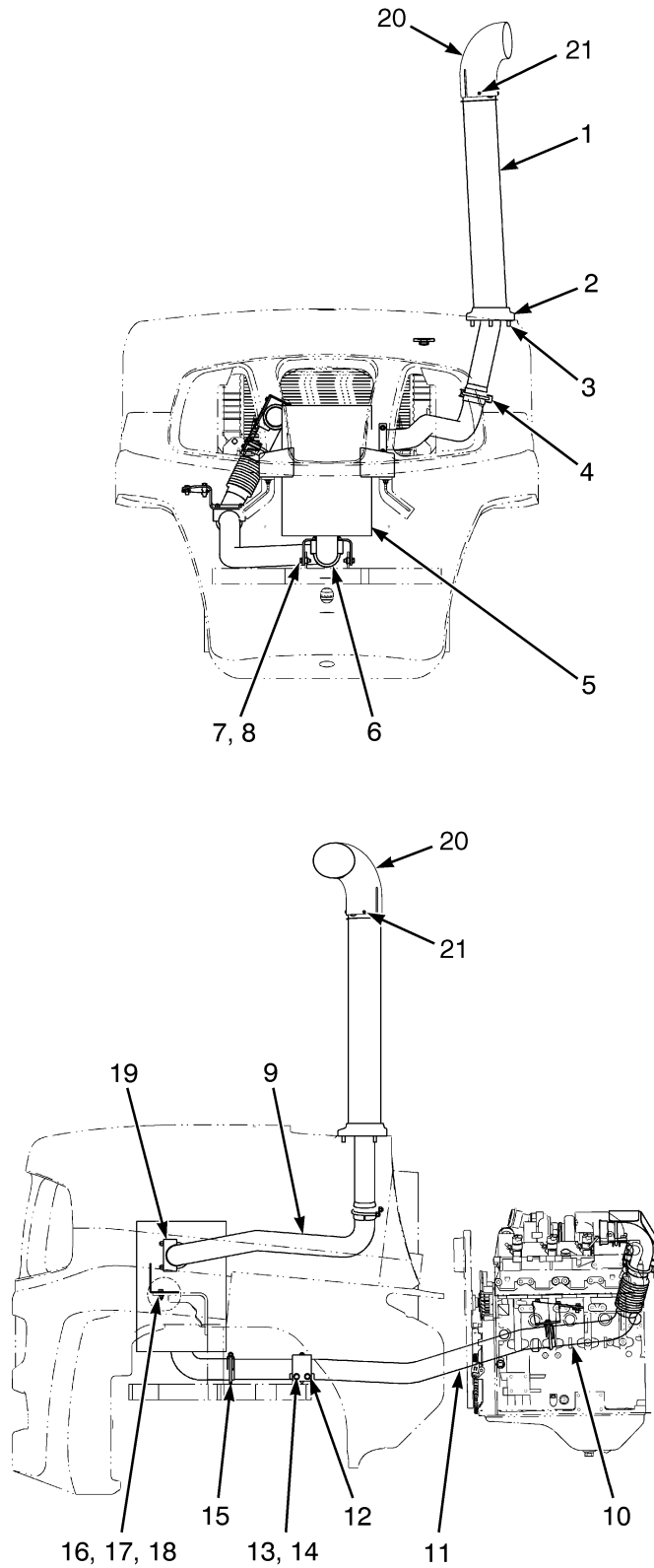
**KEY:****A:** H4.0FT5, H4.0FT6, H4.5FTS5**B:** H4.5FT6, H5.0FT, H5.5FT

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
32	1676450	Screen .....	1	1

**FOOTNOTES:****a** Not Illustrated**b** One Piece Design**c** Three Piece Design**d** → PENDING PER ECN 94360**e** PENDING PER ECN 94360 →



## EXHAUST SYSTEM (FIGURE 2-4) OVERHEAD EXHAUST — CUMMINS QSB 3.3L DIESEL



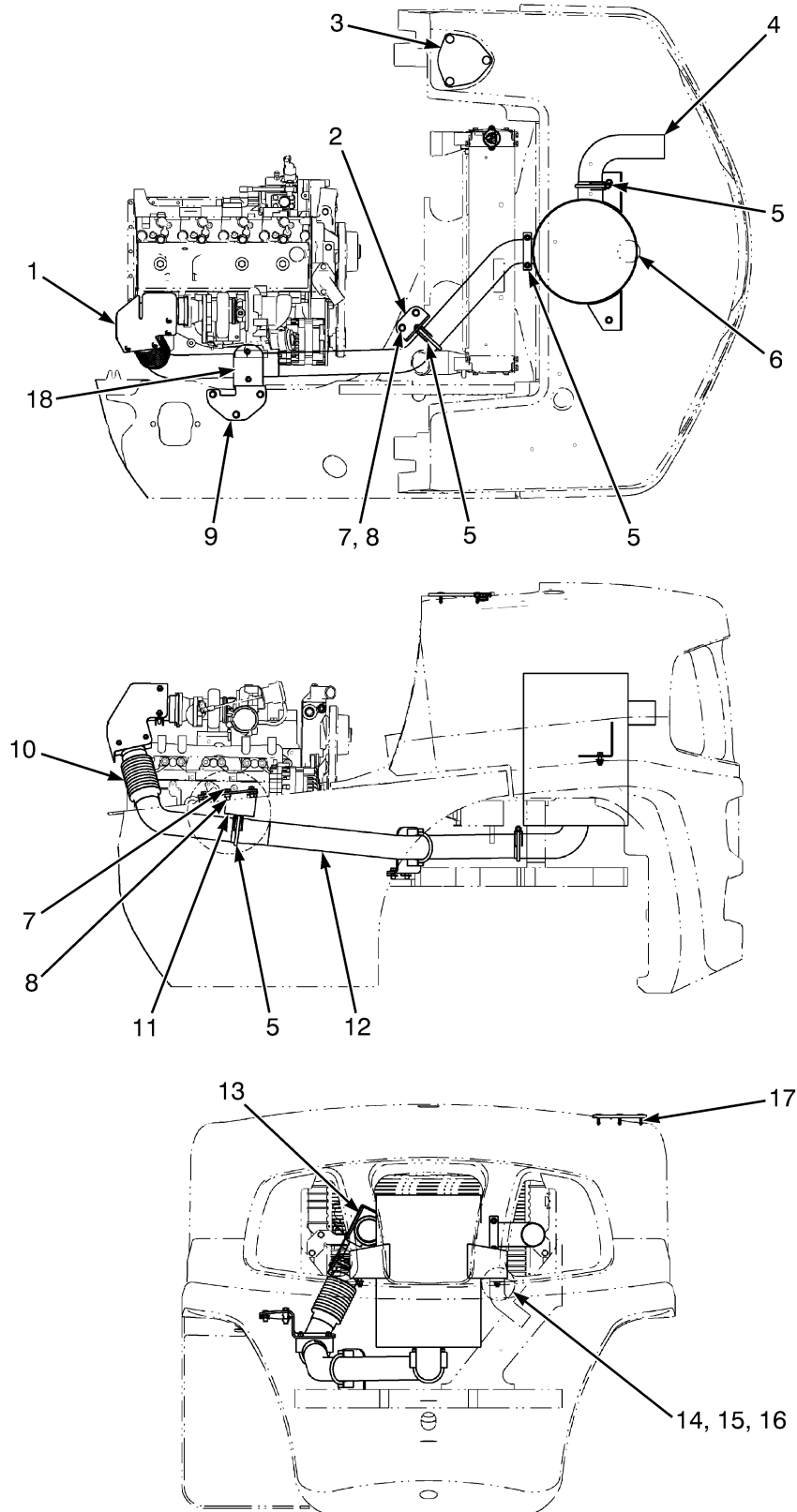
BP110037

**EXHAUST SYSTEM**  
**OVERHEAD EXHAUST – CUMMINS QSB 3.3L DIESEL**

**KEY:****A: H4.0FT5, H4.0FT6, H4.5FTS5****B: H4.5FT6, H5.0FT, H5.5FT**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1664474	Overhead Exhaust .....	1	1
2	1668428	Cover .....	1	1
3	1510117	Capscrew .....	3	3
4	30372	Clamp .....	1	1
5	2103428	Muffler .....	1	1
6	30372	Clamp .....	1	1
7	1393879	Nut .....	4	4
8	1510113	Capscrew .....	4	4
9	1664475	Exhaust Pipe .....	1	..
9	1664478	Exhaust Pipe .....	..	1
10	1670604	Exhaust Pipe .....	1	1
11	1676196	Exhaust Pipe .....	1	..
11	1676197	Exhaust Pipe .....	..	1
12	1696450	Bracket .....	1	..
12	1696451	Bracket .....	..	1
12	4013381	Bracket (Exhaust) (Alternate Part) .....	1	1
13	4010345	Clamp .....	1	1
14	4010497	Bracket (Exhaust) .....	1	1
14	1510113	Capscrew .....	2	2
14	<del>1382472</del>			
	1502543	Nut (Flange) .....	2	2
15	30372	Clamp .....	1	1
16	1510113	Capscrew .....	2	2
17	320158	Washer .....	2	2
18	1582222	Locknut .....	2	2
19	30372	Clamp .....	1	1
20	4050187	Exhaust Pipe .....	1	1
21	1708540	Screw .....	2	2

## EXHAUST SYSTEM (FIGURE 2-5) COUNTERWEIGHT EXHAUST — CUMMINS QSB 3.3L DIESEL



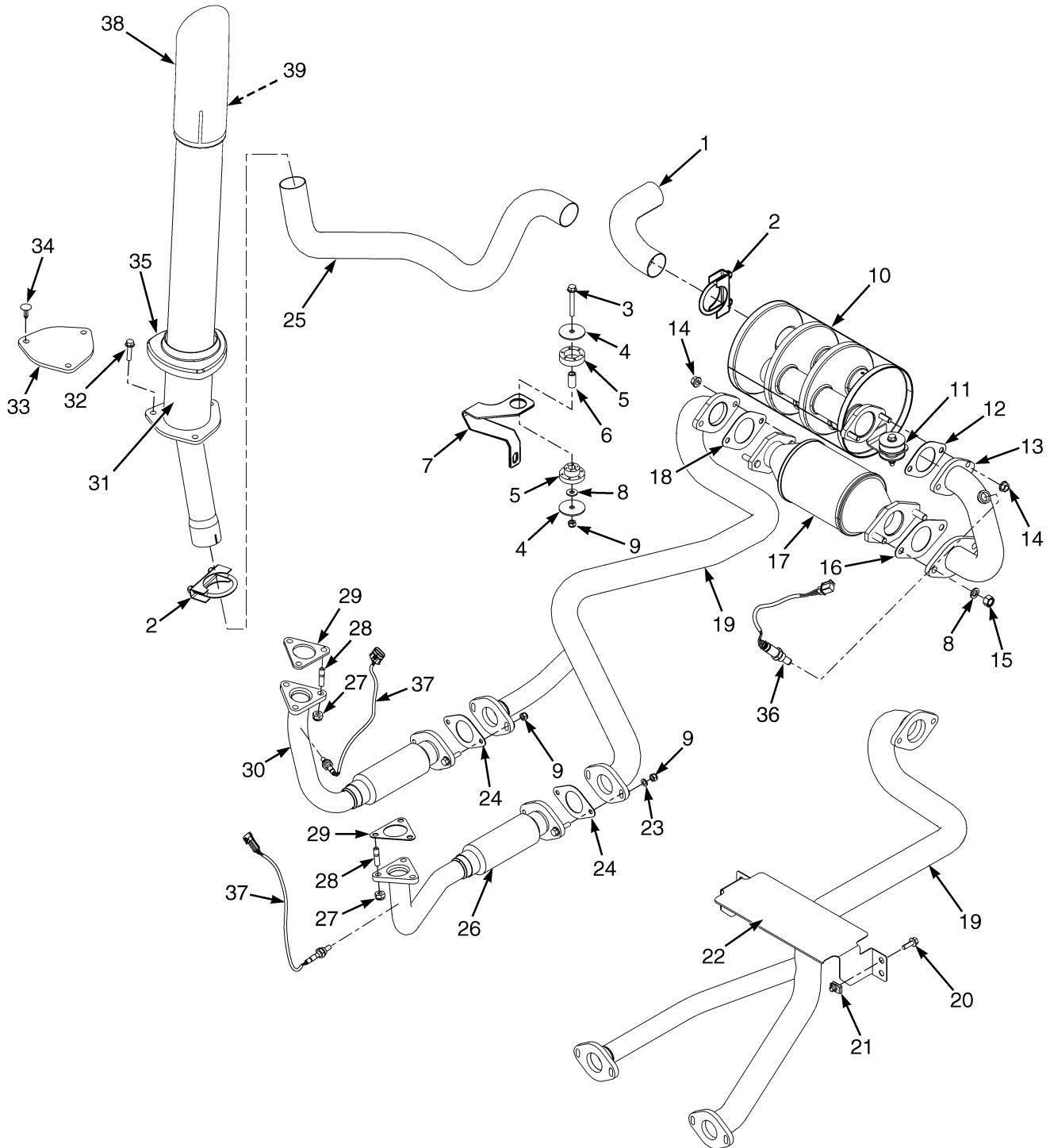
BP110052



**EXHAUST SYSTEM**  
**COUNTERWEIGHT EXHAUST – CUMMINS QSB 3.3L DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
1	1678058	Exhaust Shield .....	1
2	1696450	Bracket .....	1
3	1347043	Cover .....	1
4	1664482	Exhaust Pipe .....	1
5	30372	Clamp .....	5
6	2103428	Muffler .....	1
7	1527880	Capscrew .....	5
8	1480237	Nut .....	5
9	4013381	Bracket (Exhaust) .....	1
9	4010497	Bracket (Exhaust) (Not Illustrated) .....	1
9	1510113	Capscrew .....	2
9	<del>1382472</del>		
	1502543	Nut (Flange) .....	2
10	1670604	Exhaust Pipe .....	1
11	1696452	Bracket .....	1
12	1676196	Exhaust Pipe .....	1
13	1682835	Spacer .....	2
14	1510113	Capscrew .....	2
15	320158	Washer .....	2
16	1582222	Locknut .....	2
17	1347045	Fastener .....	3
18	4010345	Clamp .....	1

## EXHAUST SYSTEM (FIGURE 2-6) GM 4.3L, LPG — WITH CATALYTIC CONVERTER



BP110039

**EXHAUST SYSTEM**  
**GM 4.3L, LPG – WITH CATALYTIC CONVERTER****KEY:****A: Short Overhead Guard****B: Tall Overhead Guard Or With Cab**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1578926	Exhaust Pipe .....	1	1
2	30370	Clamp .....	2	2
3	1510115	Capscrew .....	2	2
4	1528938	Washer .....	4	4
5	1528930	Mount .....	2	2
5	1709996	Isolator .....	4	4
6	1649471	Spacer .....	2	2
6	1708371	Spacer .....	2	2
7	1578873	Bracket .....	1	1
8	292683	Lockwasher .....	2	2
9	1582222	Locknut .....	6	6
10	2078353	Muffler (Crimped) .....	1	1
10	2072202	Muffler (Welded) (Safety Truck Only) .....	1	1
11	1532585	Washer .....	1	1
12	1402189	Gasket .....	1	1
13	1677530	Exhaust Pipe .....	1	1
13	<del>4006456</del> 4020857	Exhaust Pipe (Alternate Part) .....	1	1
14	1460477	Nut .....	4	4
15	1469405	Nut .....	2	2
16	1580028	Gasket .....	1	1
17	2098586	Catalytic Converter (2008-2009 Series) .....	1	1
17	<b>f</b> 4601152	Catalytic Converter (2010 Series) .....	1	1
17	<b>g</b> 4615342	Catalytic Converter (2010 Series) .....	1	1
18	1580027	Gasket .....	1	1
19	<b>b</b> 1639681	Exhaust Pipe .....	1	1
19	<b>bf</b> 4039957	Exhaust Pipe .....	1	1
19	<b>c</b> 1639685	Exhaust Pipe .....	1	1
19	<b>cg</b> 4039961	Exhaust Pipe .....	1	1
20	<b>c</b> 1510113	Capscrew .....	4	4
21	<b>c</b> 1480237	Nut .....	4	4
22	<b>c</b> 1582333	Exhaust Shield .....	1	1
23	320158	Washer .....	6	6
24	1566528	Gasket .....	2	2
25	<b>b</b> 1581072	Exhaust Pipe .....	1	1
25	<b>c</b> 1581068	Exhaust Pipe .....	1	1
26	<b>f</b> 1641405	Exhaust Pipe .....	1	1
26	<b>g</b> 4040182	Exhaust Pipe .....	1	1
27	1580136	Locknut .....	6	6
28	<del>1580092</del> 4033440	Stud .....	6	6
29	1580029	Gasket .....	2	2
29	4006052	Gasket (Alternate Part) .....	2	2
30	<b>f</b> 1683623	Exhaust Pipe .....	1	1
30	<b>g</b> 4040183	Exhaust Pipe .....	1	1

## EXHAUST SYSTEM GM 4.3L, LPG – WITH CATALYTIC CONVERTER

**KEY:****A:** Short Overhead Guard**B:** Tall Overhead Guard Or With Cab

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
31	e 1650668	Tail Pipe .....	1	..
31	e 1650669	Tail Pipe .....	..	1
32	e 1510117	Capscrew .....	3	3
33	a 1347043	Cover .....	1	1
34	a 1347045	Fastener .....	3	3
35	e 1351178	Cover .....	1	1
36	d 4006802	Sensor (Oxygen) (2010 Series) .....	1	1
36	1482668	Plug (Cavity Plug ) (Without Oxygen Sensor) .....	1	1
37	1557546	Oxygen Sensor (With Wire Harness) (2010 Series) .....	2	2
37	1482668	Plug (Cavity Plug ) (Without Oxygen Sensor) .....	2	2
37	1483329	Connector Body (Without Oxygen Sensor) .....	1	1
38	4050337	Exhaust Pipe .....	1	1
39	1708540	Screw .....	2	2

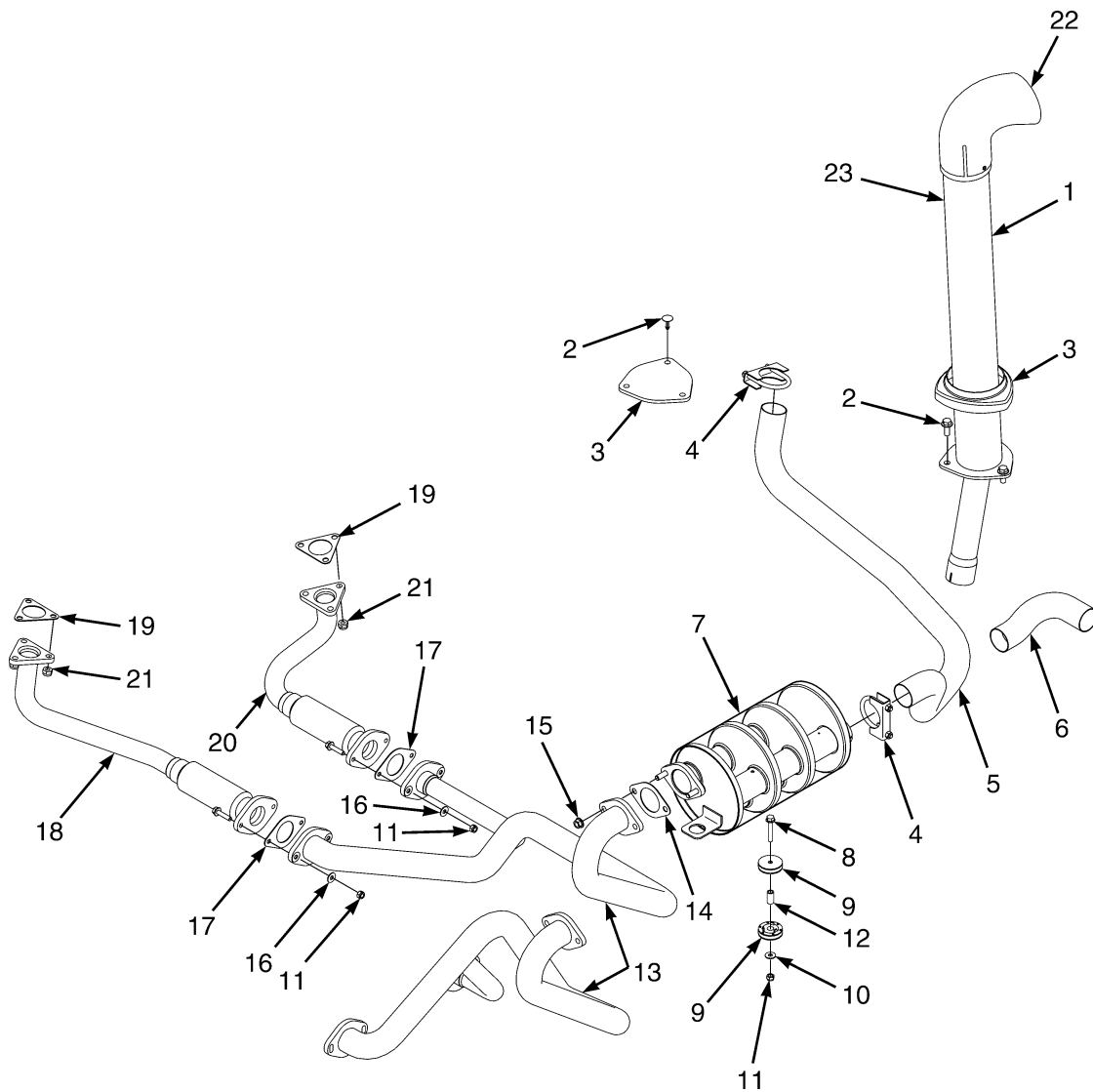
**FOOTNOTES:**

- a** Counterweight Exhaust
- b** H4.0FT5-6, H4.5FTS5
- c** H4.5FT6, H5.0-5.5FT
- d** Not Illustrated

- e** Overhead Exhaust
- f** → S/N P005V04468J EXC. 04255, 04460
- g** S/N P005V04469J → INC. 04255, 04460



## EXHAUST SYSTEM (FIGURE 2-7) GM 4.3L LPG — WITHOUT CATALYTIC CONVERTER



BP110074

## EXHAUST SYSTEM

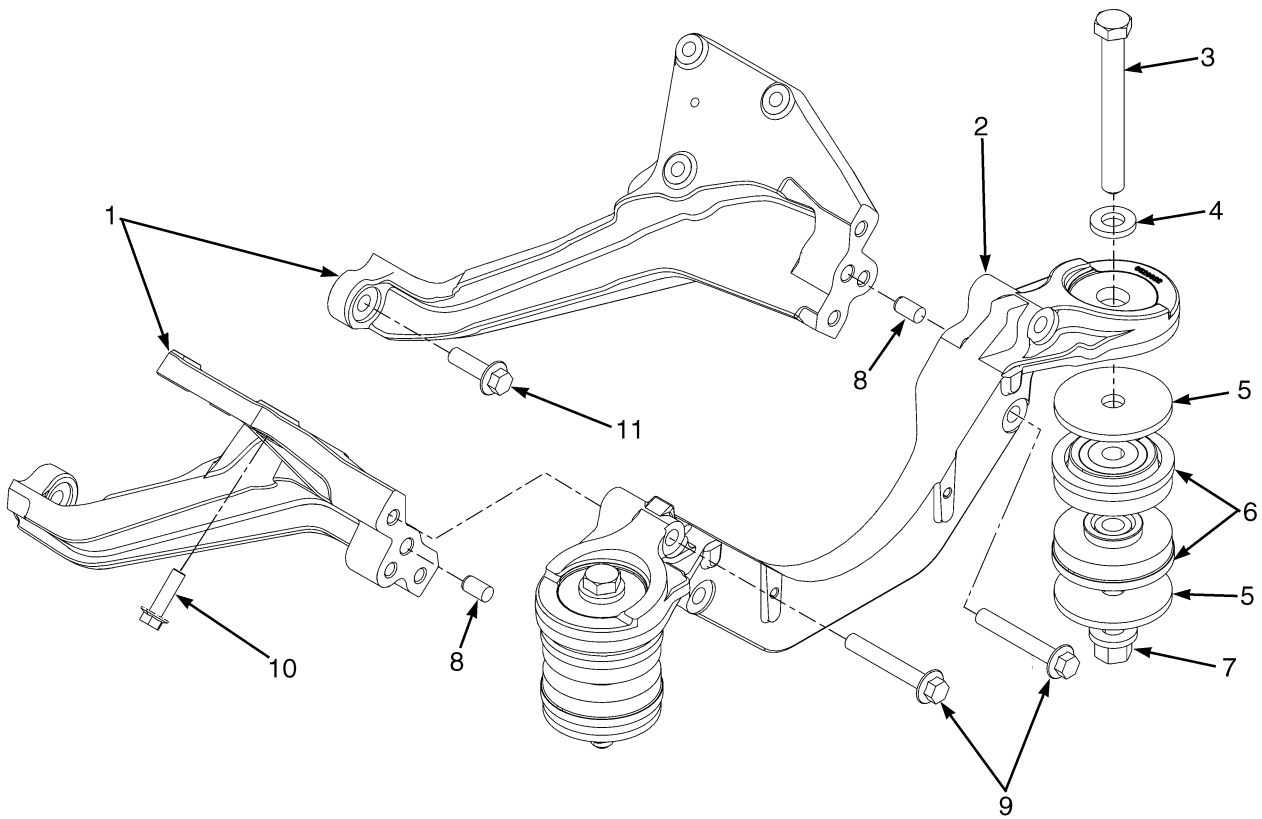
### GM 4.3L LPG – WITHOUT CATALYTIC CONVERTER

**KEY:****A:** Short Overhead Guard**B:** Tall Overhead Guard Or With Cab

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1650668	Tail Pipe .....	1	..
1	1664482	Exhaust Pipe .....	..	1
2	<b>a</b> 1347045	Fastener .....	3	3
2	<b>d</b> 1510117	Capscrew .....	3	3
3	<b>a</b> 1347043	Cover .....	1	1
3	<b>d</b> 1351178	Cover .....	1	1
4	30370	Clamp .....	2	2
5	<b>b</b> 1581072	Exhaust Pipe .....	1	1
5	<b>c</b> 1581068	Exhaust Pipe .....	1	1
6	<b>a</b> 1578926	Exhaust Pipe .....	1	1
6	<b>a</b> 1677528	Exhaust Pipe (Alternate Part) .....	1	1
7	2072202	Muffler (Welded) (Safety Truck Only) .....	1	1
7	2078353	Muffler .....	1	1
8	1510115	Capscrew .....	2	2
9	1709996	Isolator .....	4	4
10	320158	Washer .....	6	6
11	1582222	Locknut .....	6	6
12	1649471	Spacer .....	2	2
13	<b>be</b> 1639683	Exhaust Pipe .....	1	1
13	<b>bf</b> 4039959	Exhaust Pipe .....	1	1
13	<b>ce</b> 1639687	Exhaust Pipe .....	1	1
13	<b>cf</b> 4039963	Exhaust Pipe .....	1	1
14	1402189	Gasket .....	1	1
15	1460477	Nut .....	2	2
17	4018959	Gasket .....	2	2
18	<b>e</b> 1641405	Exhaust Pipe .....	1	1
18	<b>f</b> 4040183	Exhaust Pipe .....	1	1
19	<b>e</b> 1580029	Gasket .....	2	2
19	<b>f</b> 4006052	Gasket (Alternate Part) .....	2	2
20	<b>e</b> 1683623	Exhaust Pipe .....	1	1
20	<b>f</b> 4040182	Exhaust Pipe .....	1	1
21	1580136	Locknut .....	6	6
22	4050337	Exhaust Pipe .....	1	1
23	1708540	Screw .....	2	2

**FOOTNOTES:****a** Counterweight Exhaust**b** H4.0FT5-6, H4.5FTS5**c** H4.5FT6, H5.0-5.5FT**d** Overhead Exhaust**e** → S/N P005V04468J EXC. 04255, 04460**f** S/N P005V04469J → INC. 04255, 04460

## ENGINE MOUNTING (FIGURE 2-8) GM 4.3L LPG



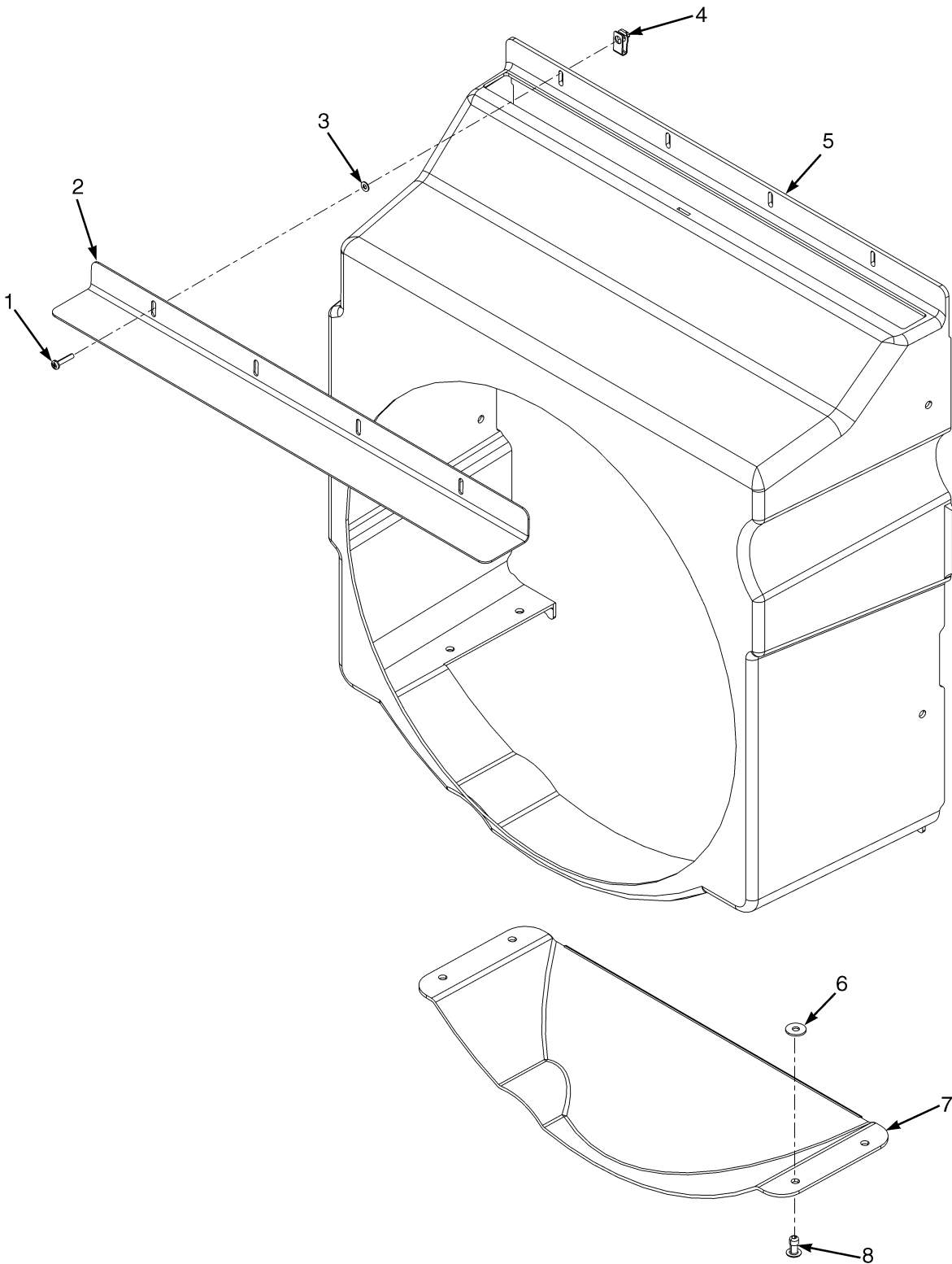
BP090206



**ENGINE MOUNTING**  
**GM 4.3L LPG**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
1	1590397	Mount (LH) .....	1
1	1590399	Mount (RH) .....	1
2	1597842	Bracket (Crossmember) .....	1
3	293699	Capscrew .....	2
4	1504075	Washer .....	2
5	1557737	Washer .....	4
6	2069951	Isolator .....	4
7	1565453	Nut (Flange) .....	2
8	303150	Dowel .....	2
9	1591666	Capscrew .....	4
10	1565195	Capscrew .....	6
11	1566853	Capscrew .....	4

## FAN SHROUD WITHOUT RADIATOR SCREEN (FIGURE 2-9) GM 4.3L LPG

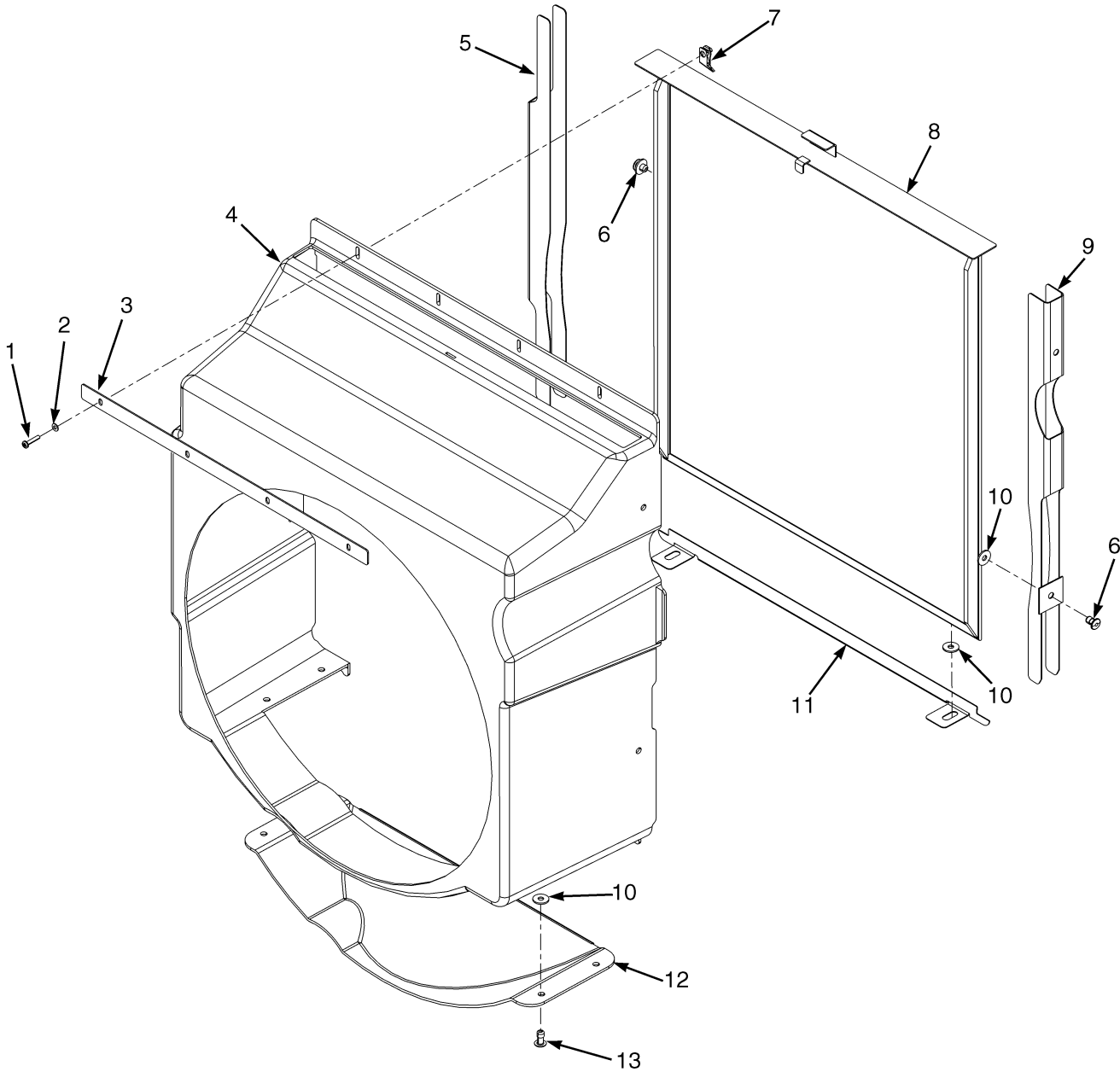


BP060069

**FAN SHROUD WITHOUT RADIATOR SCREEN  
GM 4.3L LPG**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
1	302024	Screw .....	4
2	1676093	Cover (Shroud) .....	1
3	320154	Washer .....	4
4	1535257	Nut .....	4
5	2098883	Shroud (Upper) .....	1
6	1476421	Washer .....	8
7	2098884	Shroud (Lower) .....	1
8	222037	Rivet .....	4

## FAN SHROUD WITH RADIATOR SCREEN (FIGURE 2-10) GM 4.3L LPG

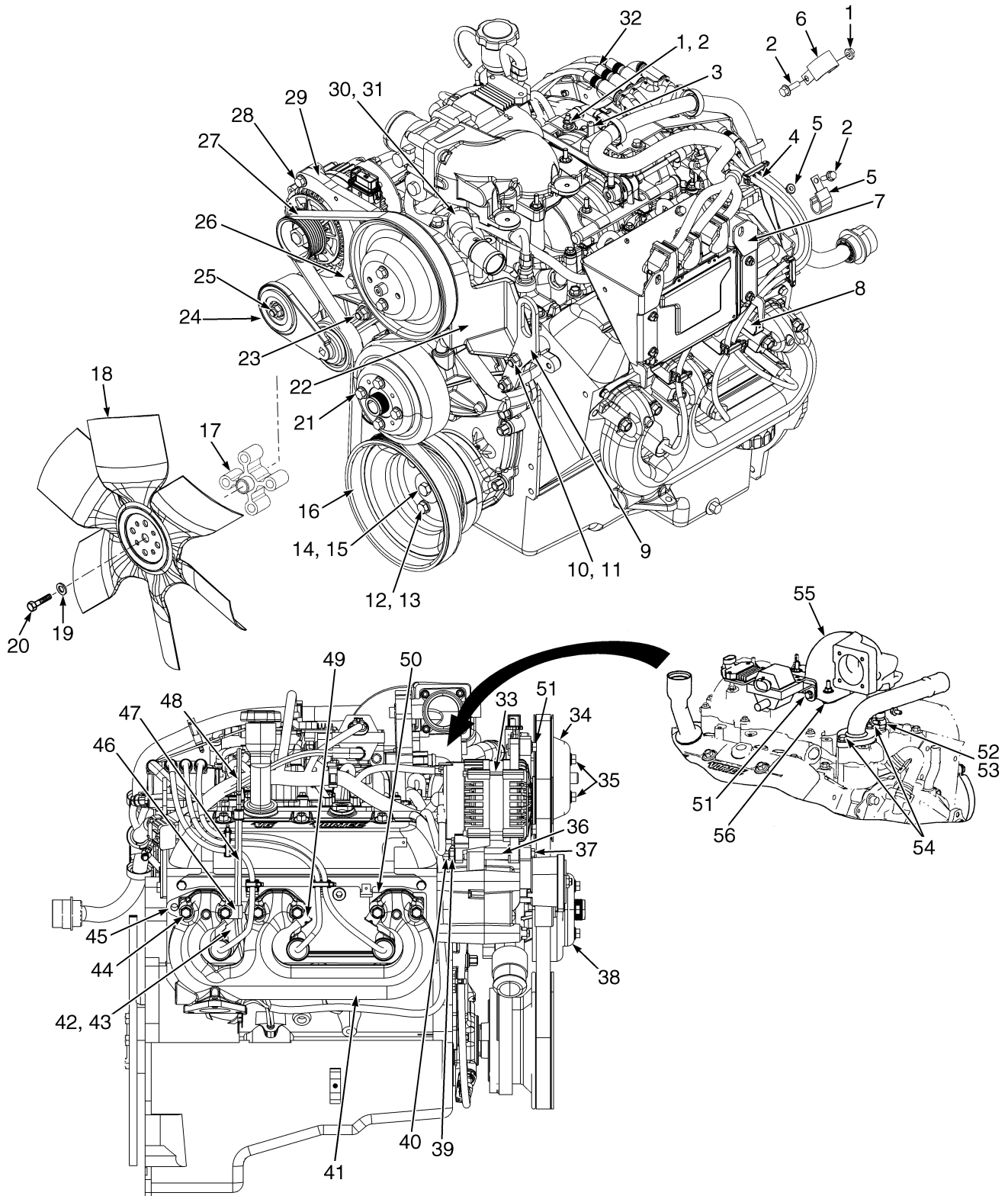


BP060070

**FAN SHROUD WITH RADIATOR SCREEN  
GM 4.3L LPG**

ITEM	PART NO.	DESCRIPTION	QTY
1	302024	Screw .....	4
2	320154	Washer .....	4
3	1695670	Plate .....	1
4	2098883	Shroud (Upper) .....	1
5	1676125	Channel (RH) .....	1
5	4006020	Channel (RH) (Alternate Part) .....	1
6	222036	Rivet .....	4
7	1535257	Nut .....	1
8	1672910	Screen .....	1
9	1676129	Channel (LH) .....	1
9	4006017	Channel (LH) (Alternate Part) .....	1
10	1476421	Washer .....	12
11	1684275	Bracket .....	1
12	2098884	Shroud (Lower) .....	1
13	222037	Rivet .....	1

## ASSEMBLED ENGINE (FIGURE 2-11) GM 4.3L LPG (GFI OPTION) — SHEET 1 OF 3



BP090306

**ASSEMBLED ENGINE**  
**GM 4.3L LPG (GFI OPTION) – SHEET 1 OF 3**

ITEM	PART NO.	DESCRIPTION	QTY
	1649334	Engine Assy-LPG (2008 Series) .....	1
	1694586	Engine Assy-LPG (2009 Series) .....	1
	4004338	Engine Assy -LPG (2010 Series) .....	1
	4019146	Engine Assy -LPG (Heavy Duty) (Heavy Duty, Optional) .....	1
	4020187	Engine Assy -LPG (2011 Series) (2011 Series) .....	1
1	<del>1307884</del>		
	1514429	Nut .....	6
2	1527877	Capscrew .....	6
3	1570664	Cap (Vacuum Port) .....	1
4	.....	Wire Harness Spark Plug LH .....	1
5	1628118	Clamp .....	2
6	1628117	Clamp .....	1
7	1641371	Bracket (2011 Series) .....	1
8	1564035	Bracket .....	2
9	1544212	Bracket .....	1
10	1460477	Nut .....	5
11	<del>4019034</del>		
	1578620	Stud .....	2
12	<del>388049</del>		
	292682	Lockwasher .....	3
13	16634	Capscrew .....	3
14	<del>4019024</del>		
	1305165	Washer .....	1
15	221544	Capscrew .....	1
16	<del>4019025</del>		
	1377750	Pulley .....	1
17	1453247	Spacer .....	1
18	<b>b</b> 2095233	Fan .....	1
18	<b>c</b> 2099479	Fan (2008 - 2011 Series) .....	1
19	296418	Washer .....	4
20	1566505	Capscrew .....	4
21	1527879	Capscrew .....	4
22	1583769	Fan Mount Assembly (☞Figure 2-8).....	1
23	<del>4019032</del>		
	1578617	Stud .....	2
24	2090303	Belt Tensioner .....	1
25	<del>4019030</del>		
	1578619	Stud .....	1
26	1527885	Capscrew .....	1
27	2090051	V-Belt (Serpentine 6 Rib Micro) .....	1
28	1528482	Capscrew .....	1
29	<del>4019178</del>		
	1636803	Bracket (Alternator) .....	1
30	1560200	Thermostat Housing .....	1
31	1569540	Thermostat (Bypass Type 197 Degree With Seal) .....	1
32	.....	Wire Harness Spark Plug RH .....	1
33	<del>4019177</del>		
	1534017	Alternator .....	1
34	2071579	Fan Pulley .....	1
35	1529366	Capscrew .....	2

## ASSEMBLED ENGINE GM 4.3L LPG (GFI OPTION) – SHEET 1 OF 3

ITEM	PART NO.	DESCRIPTION	QTY
36	1554814	Spacer .....	1
37	1327647	Capscrew .....	1
38	4019123		
	2063017	Pulley (Water Pump) .....	1
39	320157	Washer .....	1
40	302400	Nut .....	1
41	1623917	Manifold (Exhaust) .....	2
41	4008610	Exhaust Manifold (Heavy Duty) (2010 Series) .....	2
42	1671273	Exhaust Shield .....	2
43	1316487	Shield .....	1
44	1580092		
	4033440	Stud .....	6
45	1539274	Gasket (Exhaust) .....	2
46	133696	Clamp .....	1
47	1671271	Dipstick Tube (2011 Series) .....	1
48	1676923	Dipstick .....	1
49	1316488	Shield .....	2
50	1539273	Gasket .....	2
51	1534417	Capscrew .....	3
52	1560255	Sensor (Coolant Temperature) .....	1
53	246108	Sealant .....	AR
54	1510113	Capscrew .....	2
55	1654871	Adapter (LPG) .....	1
55	1560193	Sleeve .....	2
56	2067592	Gasket .....	1
57	1527876	Capscrew .....	2
	<b>a</b> 1309993	Screw .....	4
	<b>a</b> 385670	Clamp .....	2
	2088997	Kit-Ignition Cable (Spark Plug Wires and Coil Wire) .....	1

**FOOTNOTES:**

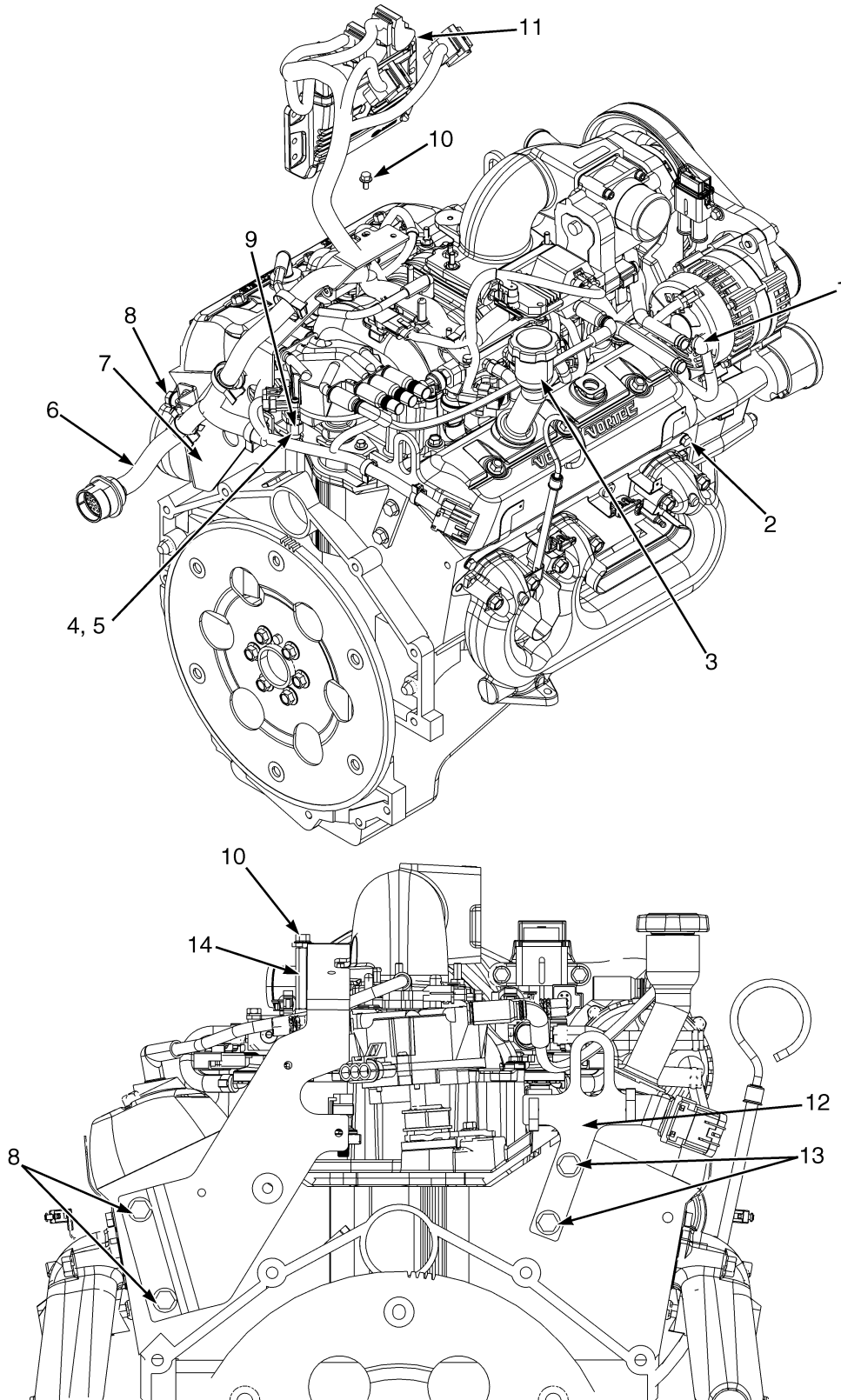
**a** Not Illustrated  
**b** → S/N P005B02163G

**c** S/N P005B02164G →





## ASSEMBLED ENGINE (FIGURE 2-12) GM 4.3L LPG (GFI OPTION) — SHEET 2 OF 3

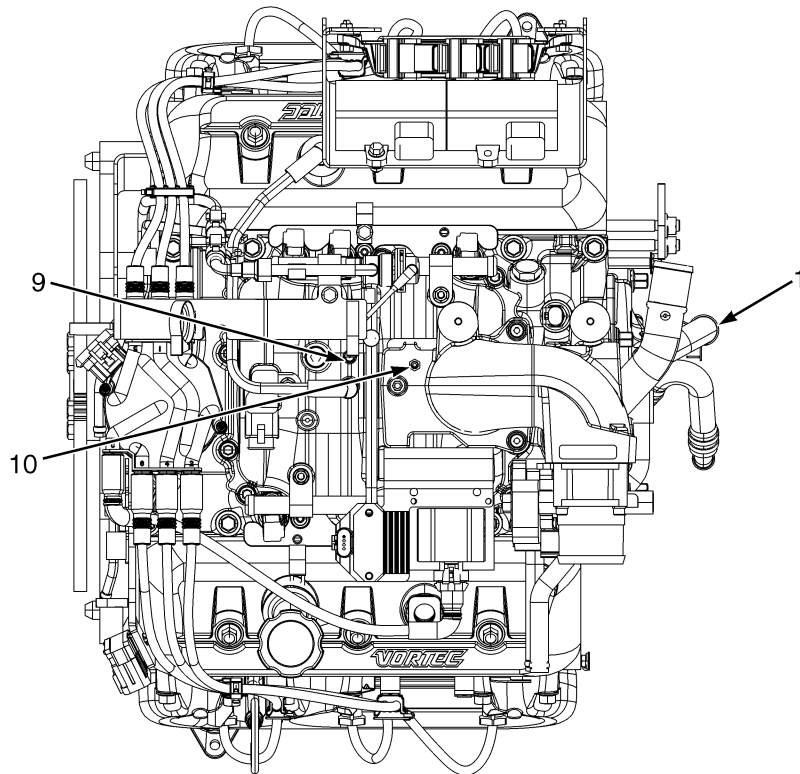
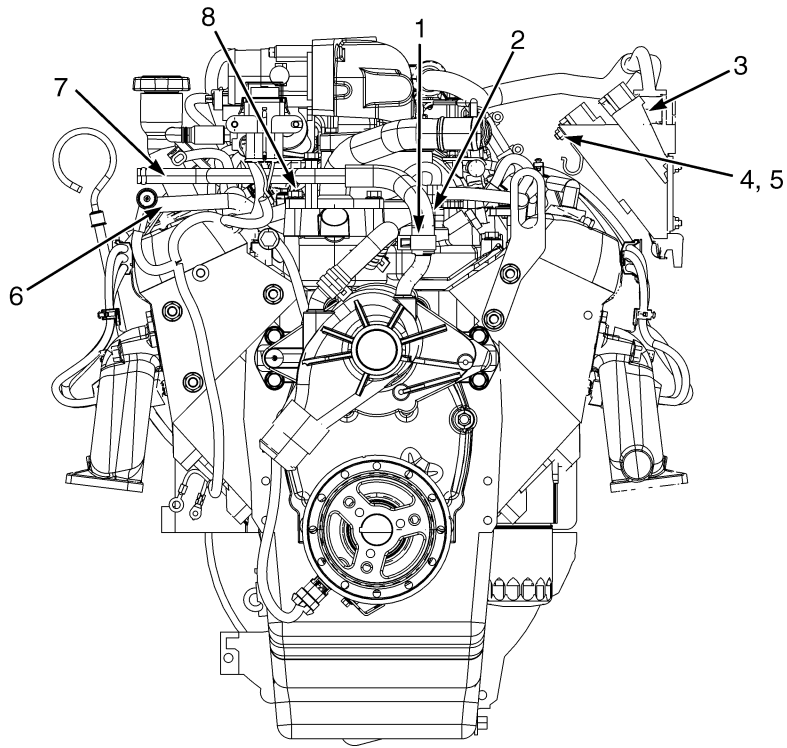


BP090308

**ASSEMBLED ENGINE**  
**GM 4.3L LPG (GFI OPTION) – SHEET 2 OF 3**

ITEM	PART NO.	DESCRIPTION	QTY
	1649334	Engine Assy-LPG (2008 Series) .....	1
	1694586	Engine Assy-LPG (2009 Series) .....	1
	4004338	Engine Assy -LPG (2010 Series) .....	1
	4019146	Engine Assy -LPG (Heavy Duty) (Heavy Duty, Optional) .....	1
	4020187	Engine Assy -LPG (2011 Series) (2011 Series) .....	1
1	<del>1307884</del>		
	1514429	Nut .....	1
2	392620	Screw .....	4
3	1552141	Filler Neck .....	1
4	1590201	Fitting .....	1
5	246108	Sealant .....	AR
6	2093682	Wire Harness (Engine) (2008-2009 Series) (☞Figure 4-32).....	1
6	4601160	Wire Harness (Engine) (☞Figure 4-33).....	1
7	1636048	Bracket .....	1
8	1309993	Screw .....	2
9	1566654	Pressure Transducer Sensor (Oil Pressure) .....	1
10	1534417	Capscrew .....	3
11	2101429	Engine Control Module (2008-2009 Engine ECU) .....	1
11	4603426	Engine Control Module (With Catalytic Converter) .....	1
11	4603427	Engine Control Module (2010 without Catalytic Converter) .....	1
12	1636047	Bracket .....	1
13	174413	Screw .....	2
14	2081315	Adapter .....	1

## ASSEMBLED ENGINE (FIGURE 2-13) GM 4.3L LPG (GFI OPTION) — SHEET 3 OF 3



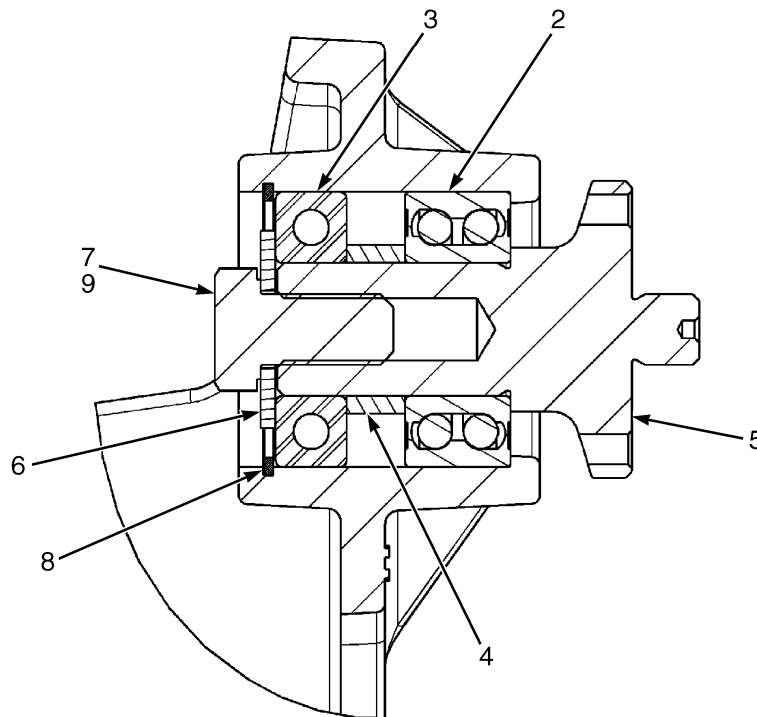
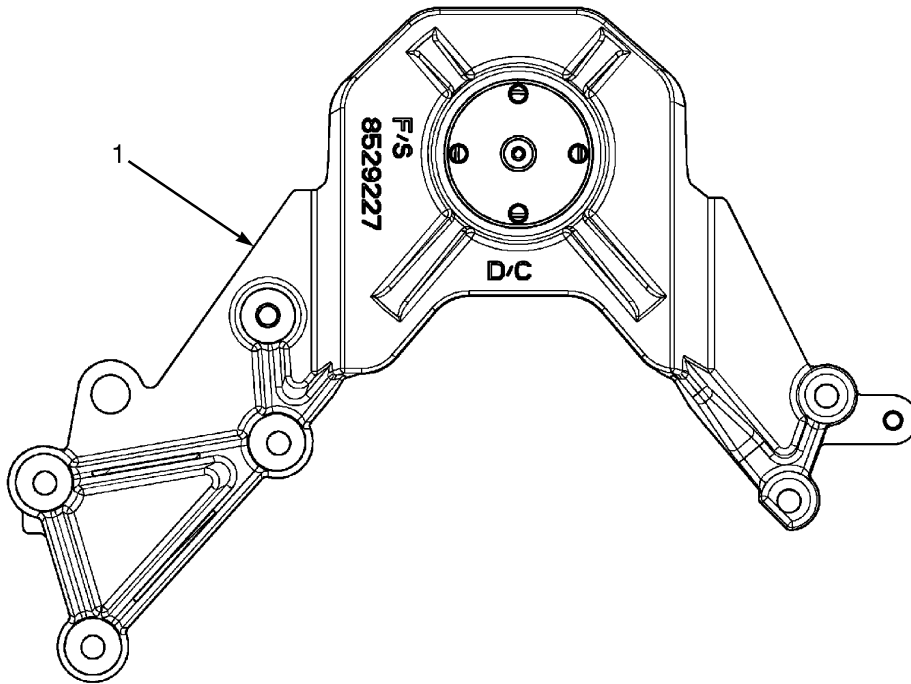
BP090273

**ASSEMBLED ENGINE**  
**GM 4.3L LPG (GFI OPTION) – SHEET 3 OF 3**

ITEM	PART NO.	DESCRIPTION	QTY
	1649334	Engine Assy-LPG (2008 Series) .....	1
	1694586	Engine Assy-LPG (2009 Series) .....	1
	4004338	Engine Assy -LPG (2010 Series) (2010 Series) .....	1
	4019146	Engine Assy -LPG (Heavy Duty) (Heavy Duty, Optional) .....	1
	4020187	Engine Assy -LPG (2011 Series) (2011 Series) .....	1
1	1501994	Hose Clamp .....	2
2	<b>a</b> 2076429	Hose .....	1
3	2082657	Module (Injector Driver) (2008-2009 Series) .....	2
4	<del>1307884</del>		
	1514429	Nut .....	2
5	1527877	Capscrew .....	2
6	<b>a</b> 1570597	Tube .....	1
7	<b>a</b> 1593913	Tube .....	1
8	<b>a</b> 1510116	Capscrew .....	1
9	<b>a</b> 1579136	Fitting .....	1
10	1593914	Cap .....	1
	<b>b</b> 1527876	Capscrew .....	3

**FOOTNOTES:****a** LPG Engine**b** Not Illustrated

## FAN MOUNT ASSEMBLY (FIGURE 2-14) GM 4.3L LPG — GFI OPTION

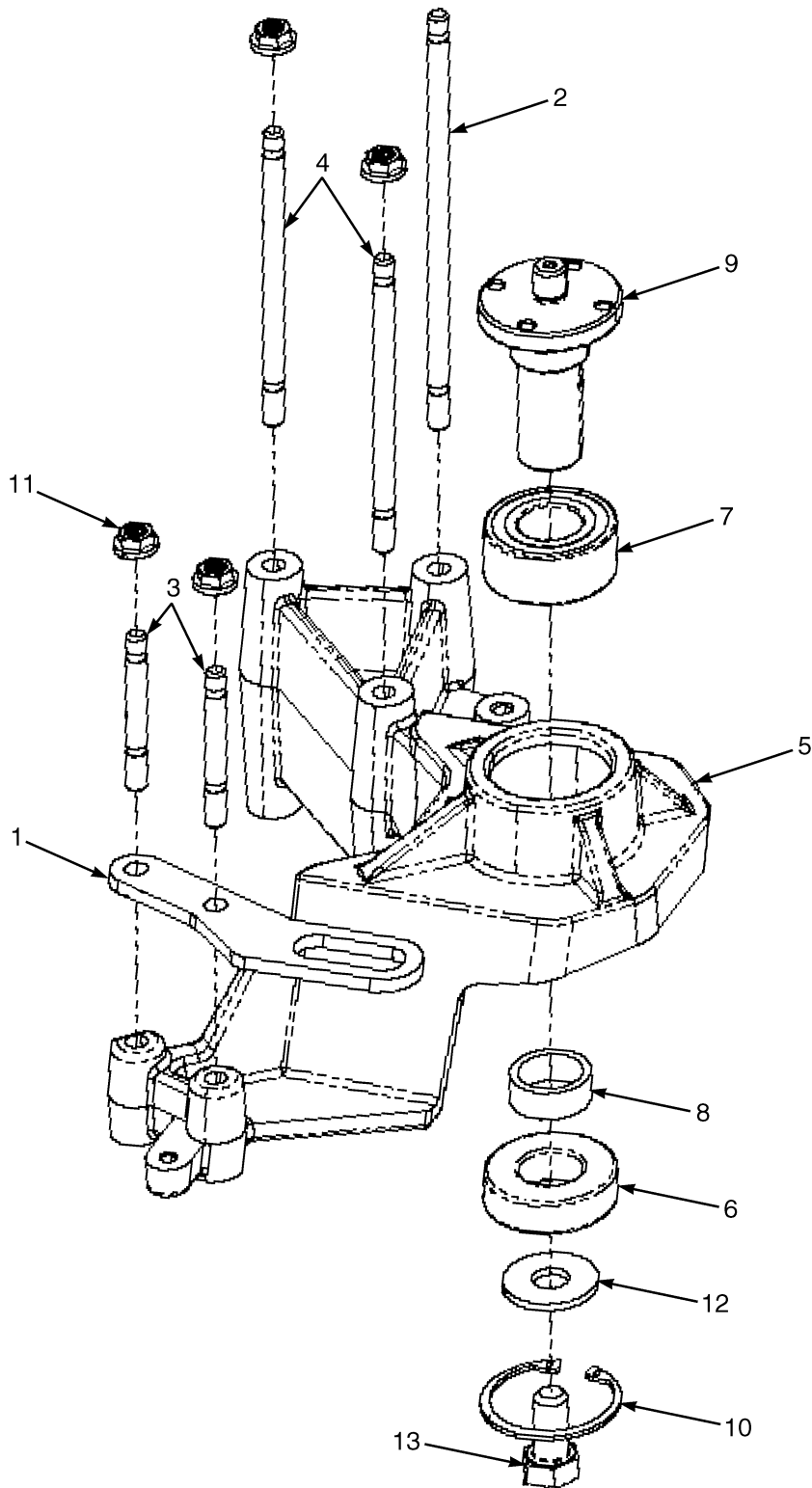


BP090311

**FAN MOUNT ASSEMBLY**  
**GM 4.3L LPG – GFI OPTION**

ITEM	PART NO.	DESCRIPTION	QTY
	1583769	Fan Mount Assembly .....	1
1	1615817	Bracket .....	1
2	1615920	Ball Bearing .....	1
3	2014670	Bearing .....	1
4	1615818	Spacer .....	1
5	<del>4019037</del> 2083634	Shaft .....	1
6	15180	Washer .....	1
7	292559	Capscrew .....	1
8	<del>1502093</del> 12921	Snap Ring .....	1
9	360387	Loctite .....	AR

## FAN MOUNT ASSEMBLY (FIGURE 2-15) GM 4.3L LPG — PSI OPTION



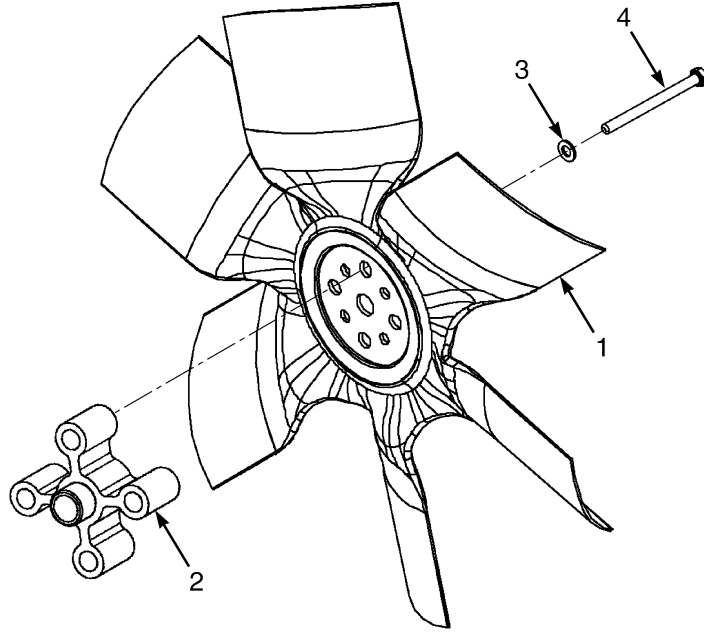
BP090457



**FAN MOUNT ASSEMBLY**  
**GM 4.3L LPG – PSI OPTION**

ITEM	PART NO.	DESCRIPTION	QTY
1	4019016	Bracket .....	1
2	<del>4019030</del> 1578619	Stud .....	1
3	<del>4019034</del> 1578620	Stud .....	2
4	<del>4019032</del> 1578617	Stud .....	2
5	4019033	Bracket .....	1
6	4019034	Ball Bearing .....	1
7	4019035	Ball Bearing .....	1
8	4019036	Spacer .....	1
9	<del>4019037</del> 2083634	Shaft .....	1
10	4019038	Snap Ring .....	1
11	1460477	Nut .....	4
12	15906	Lockwasher .....	1
13	292559	Capscrew .....	1

## FAN ASSEMBLY (FIGURE 2-16) GM 4.3L LPG — PSI OPTION

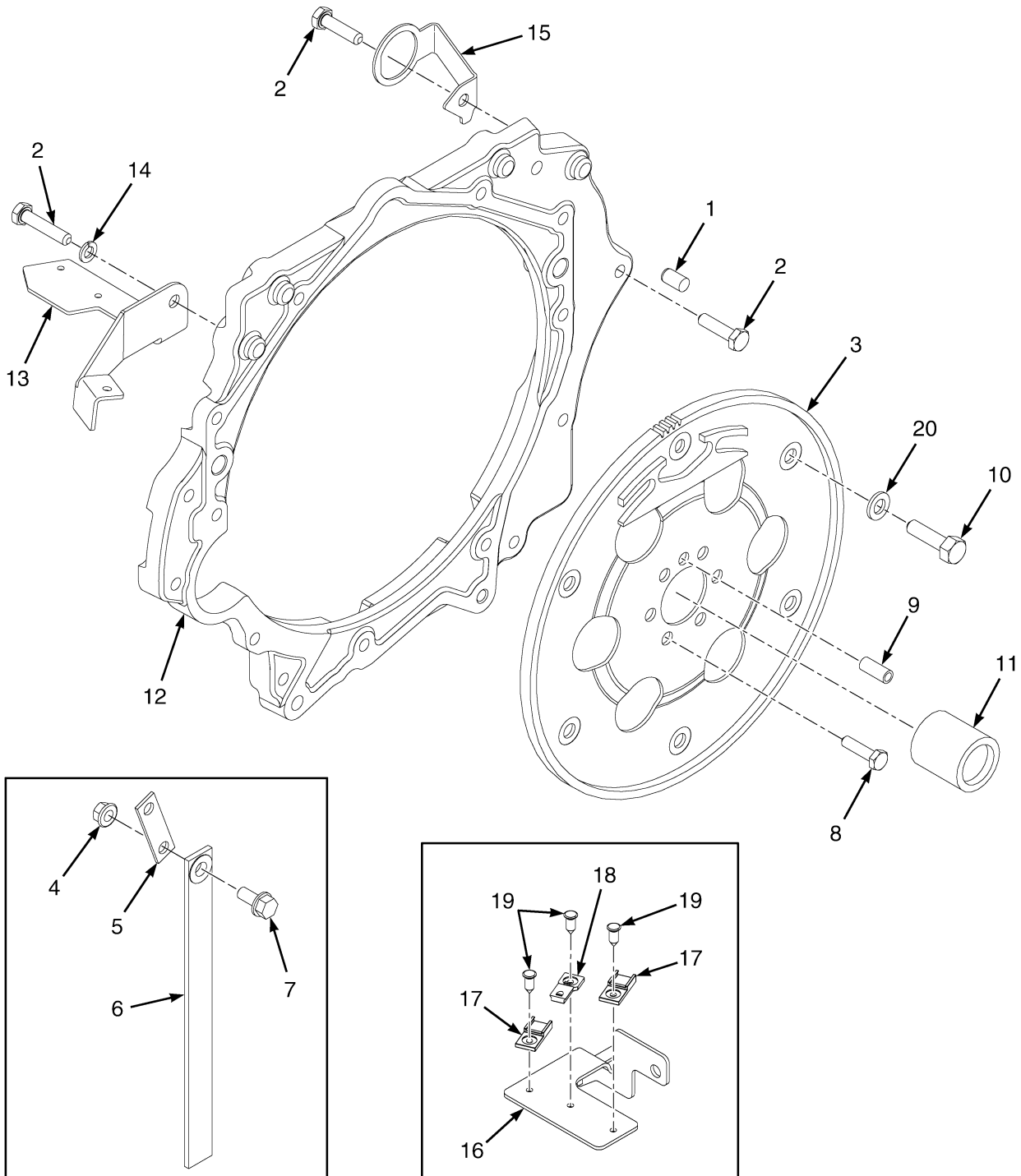


BP090468

ITEM	PART NO.	DESCRIPTION	QTY
1	2099479	Fan .....	1
2	1453247	Spacer .....	1
3	296418	Washer .....	4
4	1566505	Capscrew .....	4



## FLYWHEEL AND HOUSING (FIGURE 2-17) GM 4.3L LPG



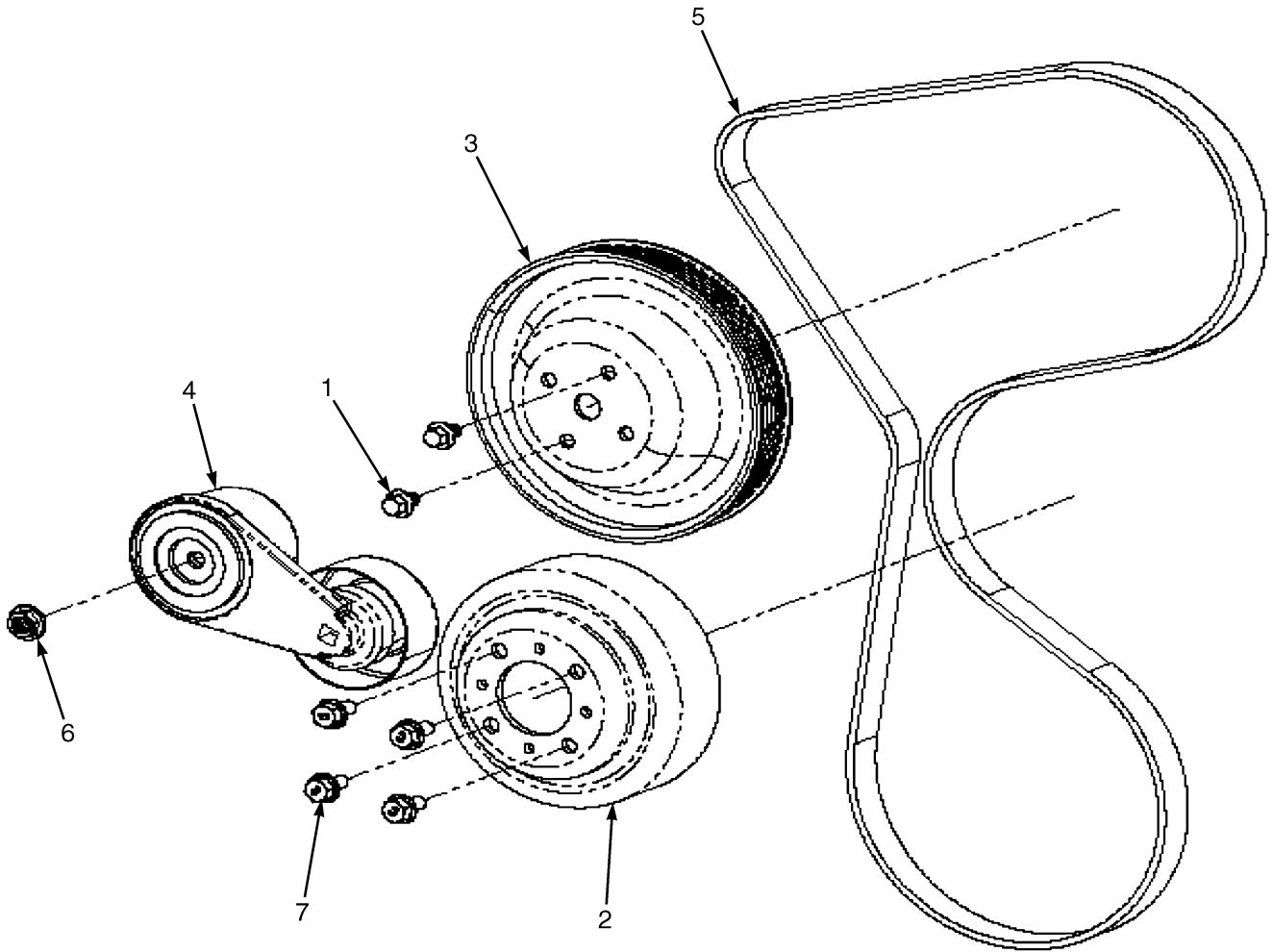
BP130288

**FLYWHEEL AND HOUSING  
GM 4.3L LPG**

ITEM	PART NO.	DESCRIPTION	QTY
1	303150	Dowel .....	2
2	292515	Capscrew .....	18
3	<del>1627227</del> 1399298	Flywheel .....	1
4	1460477	Nut .....	1
5	1565832	Bracket .....	1
6	240072	Static Strap .....	1
7	1586013	Capscrew .....	1
8	1456112	Bolt .....	6
9	375571	Pin .....	1
10	1541921	Capscrew .....	6
11	1627345	Bearing .....	1
12	1553269	Housing .....	1
13	1660913	Bracket (Tube Retention) .....	1
14	<del>388049</del> 292682	Lockwasher .....	19
15	1654415	Bracket (Electrical Connector) .....	1
16	1623093	Bracket .....	1
17	1500912	Clip .....	2
18	1531480	Clip .....	1
19	1582464	Fastener .....	3
20	296420	Washer .....	6
	<b>a</b> 1707207	Plug (2010 Series) .....	2

**FOOTNOTES:****a** Not Illustrated

**PULLEY AND TENSIONER (FIGURE 2-18)**  
**GM 4.3L LPG — PSI OPTION**

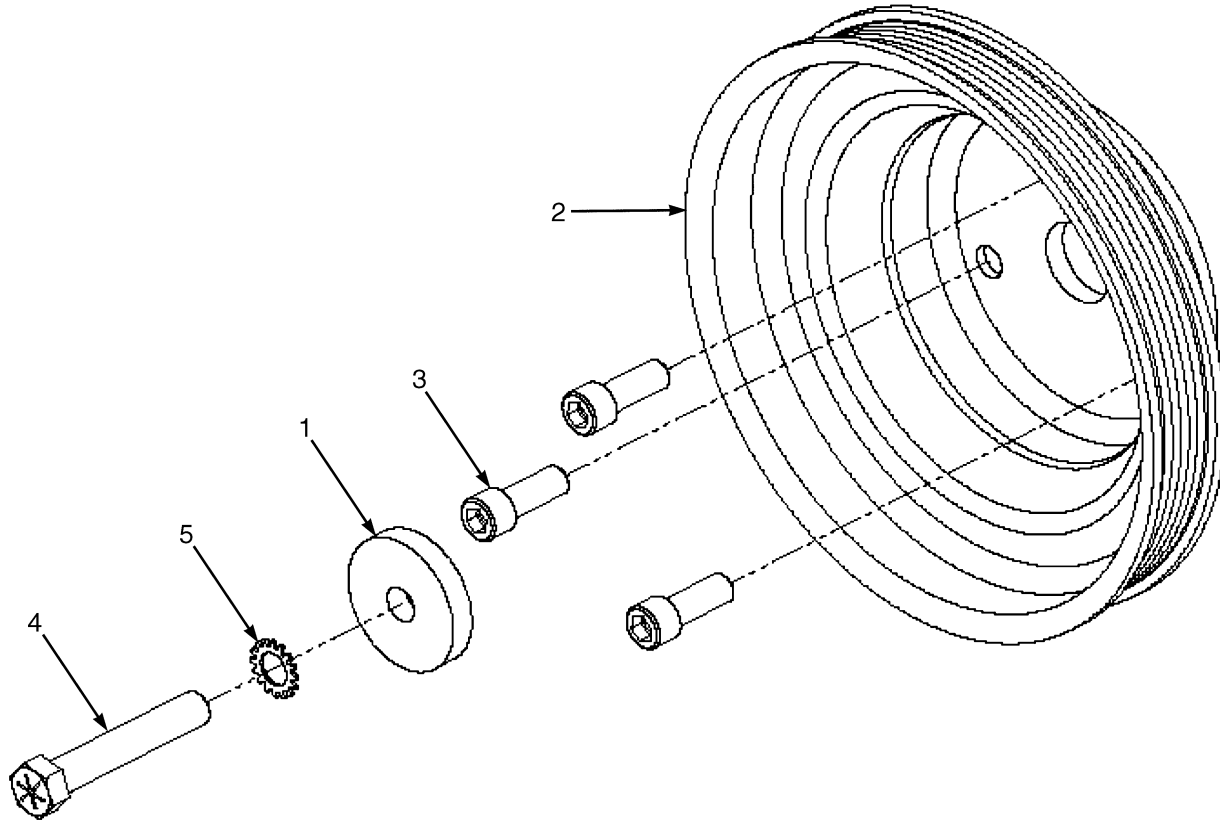


BP090458

**PULLEY AND TENSIONER  
GM 4.3L LPG – PSI OPTION**

ITEM	PART NO.	DESCRIPTION	QTY
	4615531	Engine Assy-LPG (With Catalytic Converter) .....	1
	4615533	Engine Assy-LPG (Heavy Duty) (With Catalytic Converter) .....	1
	4615532	Engine Assy-LPG (Without Catalytic Converter) .....	1
1	4019122	Bolt .....	2
2	4019123		
	2063017	Pulley (Water Pump) .....	1
3	4019124	Fan Pulley .....	1
4	4019125	Tensioner .....	1
5	2090051	V-Belt (Serpentine 6 Rib Micro) .....	1
6	1460477	Nut .....	1
7	1527879	Capscrew .....	4

## CRANKSHAFT PULLEY (FIGURE 2-19) GM 4.3L LPG — PSI OPTION

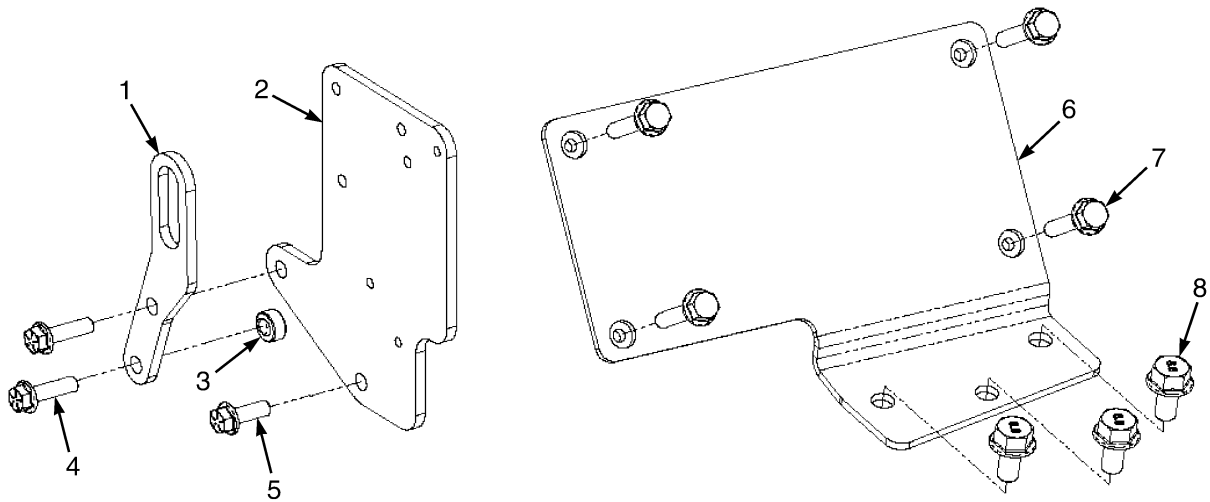


BP090465

ITEM	PART NO.	DESCRIPTION	QTY
	4615531	Engine Assy-LPG (With Catalytic Converter) .....	1
	4615533	Engine Assy-LPG (Heavy Duty) (With Catalytic Converter) .....	1
	4615532	Engine Assy-LPG (Without Catalytic Converter) .....	1
1	4019024		
	1305165	Washer .....	1
2	4019025		
	1377750	Pulley .....	1
3	34811	Screw .....	3
4	221545	Capscrew .....	1
5	15917	Lockwasher .....	1



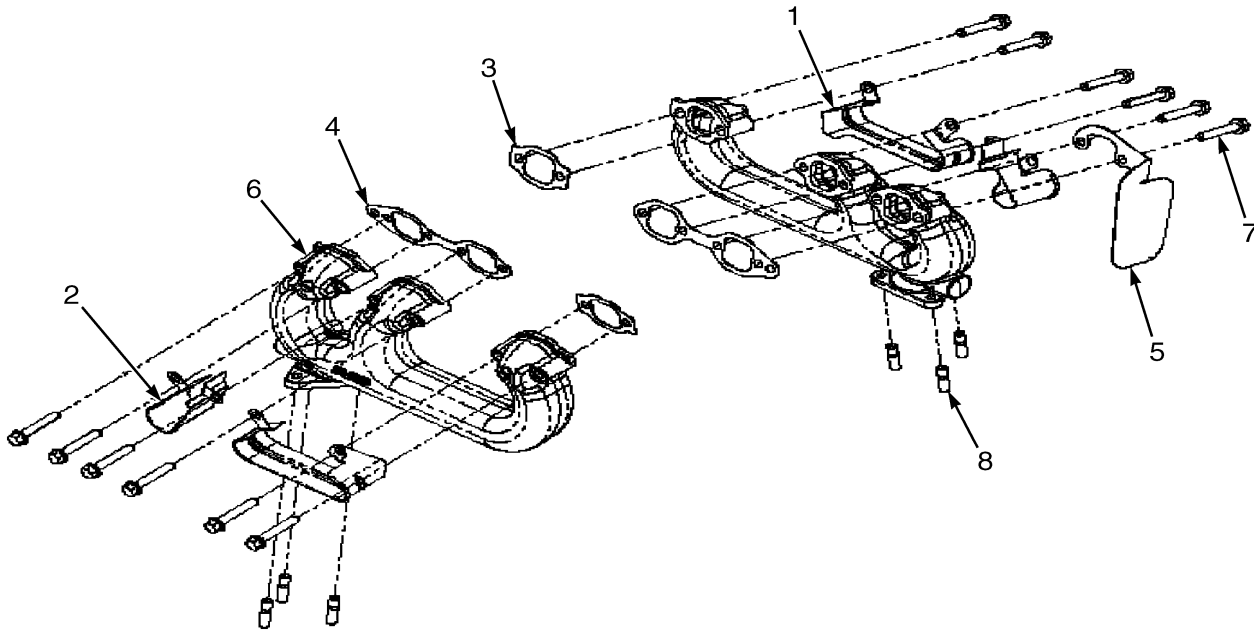
**ELECTRICAL MOUNTING PLATE (FIGURE 2-20)  
GM 4.3L LPG — PSI OPTION**



BP090469

ITEM	PART NO.	DESCRIPTION	QTY
1	4019016	Bracket (Lifting Eye) .....	1
2	4040248	Bracket (Electrical) .....	1
3	4040289	Spacer .....	1
4	4040290	Bolt .....	2
5	4040290	Bolt .....	1
6	4040269	Bracket (ECU) .....	1
7	1527879	Capscrew .....	3
8	4019082	Bolt .....	4

## EXHAUST MANIFOLDS (FIGURE 2-21) GM 4.3L LPG — PSI OPTION

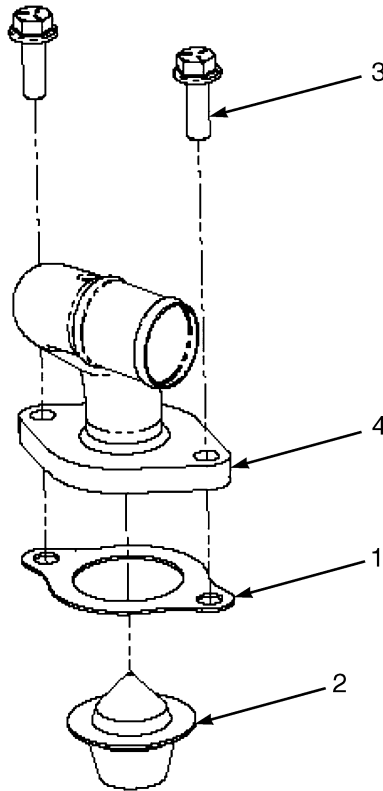


BP090459

ITEM	PART NO.	DESCRIPTION	QTY
	4615531	Engine Assy-LPG (With Catalytic Converter) .....	1
	4615533	Engine Assy-LPG (Heavy Duty) (With Catalytic Converter) .....	1
	4615532	Engine Assy-LPG (Without Catalytic Converter) .....	1
1	1316488	Shield .....	2
2	1316487	Shield .....	1
3	4040272	Gasket .....	2
4	4040273	Gasket .....	2
5	1529010	Heat Shield .....	1
6	4040274	Exhaust Manifold (Standard) .....	2
6	4040281	Exhaust Manifold (Heavy Duty) .....	2
7	1383257	Bolt .....	12
8	1580092	Stud .....	6
	4033440	Stud .....	6



## THERMOSTAT AND WATER OUTLET HOUSING (FIGURE 2-22) GM 4.3L LPG — PSI OPTION

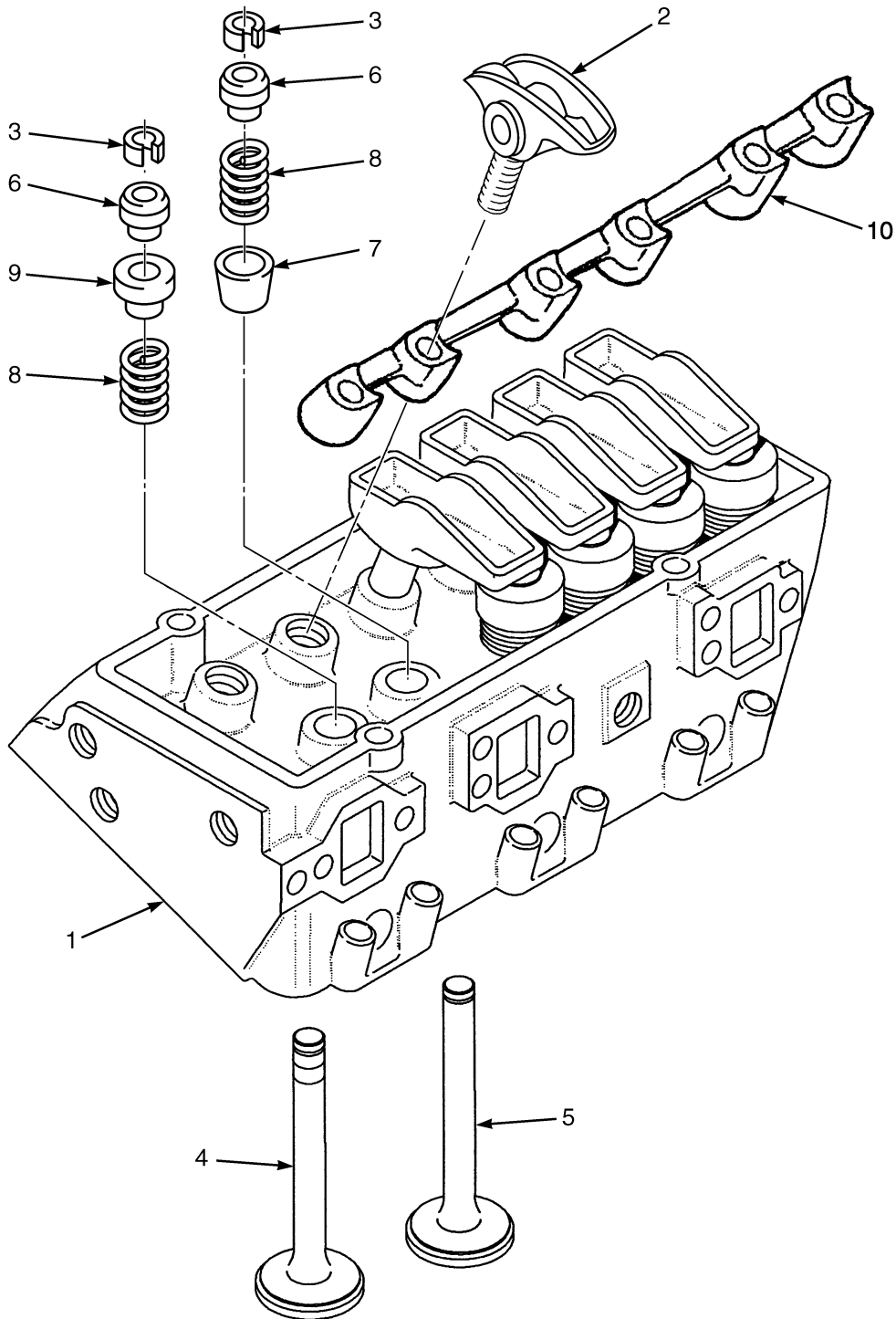


BP090461

**THERMOSTAT AND WATER OUTLET HOUSING**  
**GM 4.3L LPG – PSI OPTION**

ITEM	PART NO.	DESCRIPTION	QTY
	4615531	Engine Assy-LPG (With Catalytic Converter) .....	1
	4615533	Engine Assy-LPG (Heavy Duty) (With Catalytic Converter) .....	1
	4615532	Engine Assy-LPG (Without Catalytic Converter) .....	1
1	4019021	Gasket .....	1
2	4019022	Thermostat .....	1
3	<del>1331349</del>		
	159708	Capscrew .....	2
4	4040271	Thermostat Housing .....	1

## CYLINDER HEAD (FIGURE 2-23) GM 4.3L LPG

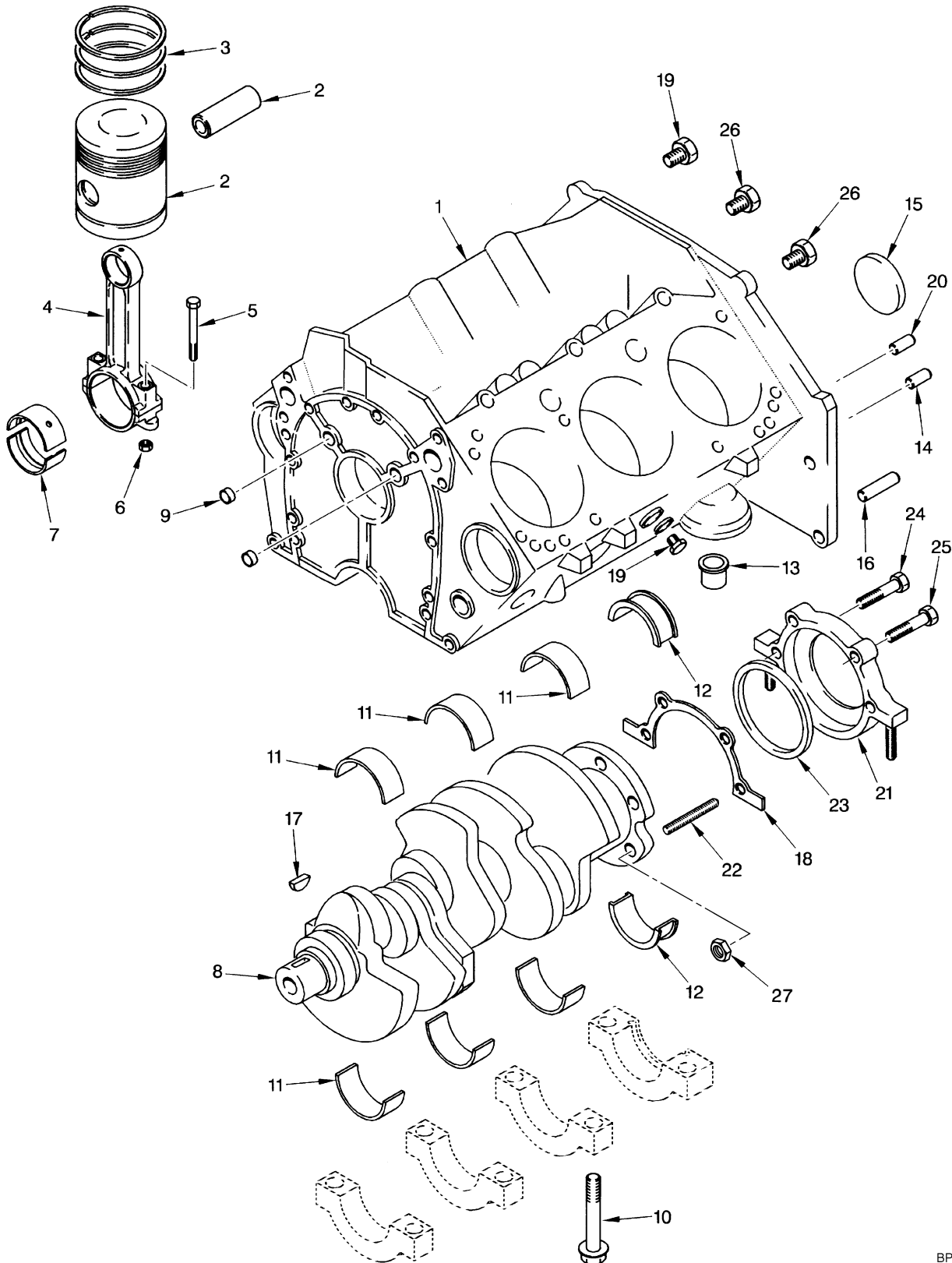


HP090254

**CYLINDER HEAD  
GM 4.3L LPG**

ITEM	PART NO.	DESCRIPTION	QTY
	1649334	Engine Assy-LPG (2008 Series) .....	1
	1694586	Engine Assy-LPG (2009 Series) .....	1
	4004338	Engine Assy -LPG (2010 Series) .....	1
	4019146	Engine Assy -LPG (Heavy Duty) (Heavy Duty, Optional) .....	1
	4020187	Engine Assy -LPG (2011 Series) (2011 GFI Series) .....	1
	4615531	Engine Assy-LPG (PSI Series with Catalytic Converter) .....	1
	4615532	Engine Assy-LPG (PSI Series without Catalytic Converter) .....	1
	4615533	Engine Assy-LPG (Heavy Duty) (PSI Series with Catalytic Converter) .....	1
1	1653888	Cylinder Head .....	2
1	1386190	Cylinder Head Gasket .....	1
1	4017128	Kit-Service (Head-LPG) (Heavy Duty with Intake Seat Insert) .....	2
2	1389051	Bolt .....	4
2	1653887	Rocker Arm .....	12
3	1377110	Valve Stop .....	24
4	1482701	Exhaust Valve .....	6
5	1386195	Inlet Valve .....	6
6	1393127	Cap .....	12
7	1386197	Seal (Black) (Intake) .....	6
8	1689026	Spring .....	12
9	1460384	Seal (Orange) (Exhaust) .....	6
10	1489643	Support (Rocker Arm) .....	2

## CYLINDER BLOCK (FIGURE 2-24) GM 4.3L LPG



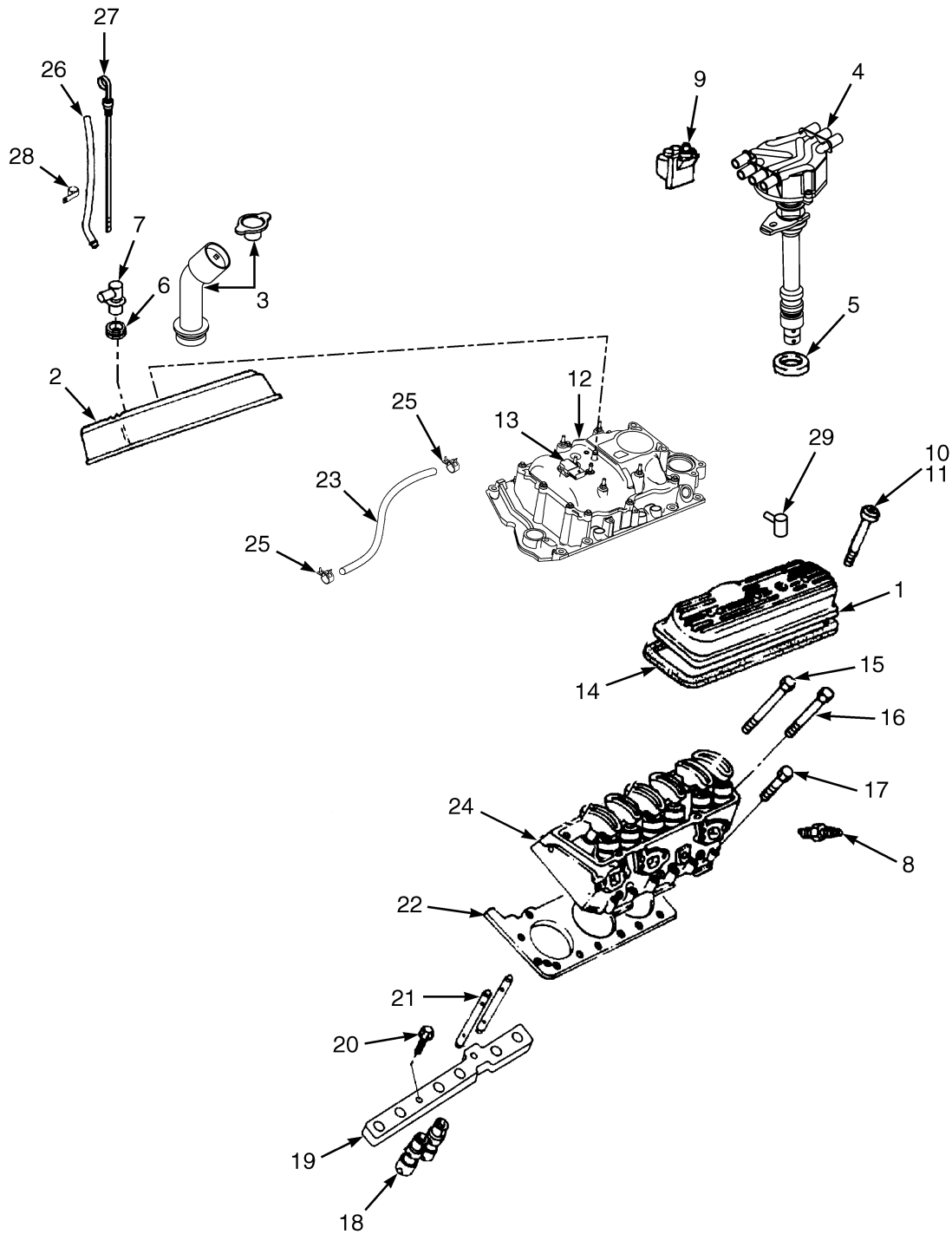
BP090113



**CYLINDER BLOCK**  
**GM 4.3L LPG**

ITEM	PART NO.	DESCRIPTION	QTY
	1649334	Engine Assy-LPG (2008 Series) .....	1
	1694586	Engine Assy-LPG (2009 Series) .....	1
	4004338	Engine Assy -LPG (2010 Series) .....	1
	4019146	Engine Assy -LPG (Heavy Duty) (Heavy Duty, Optional) .....	1
	4020187	Engine Assy -LPG (2011 Series) (2011 GFI Series) .....	1
	4615531	Engine Assy-LPG (PSI Series with Catalytic Converter) .....	1
	4615532	Engine Assy-LPG (PSI Series without Catalytic Converter) .....	1
	4615533	Engine Assy-LPG (Heavy Duty) (PSI Series with Catalytic Converter) .....	1
1	.....	Short Block Assembly .....	1
2	1390759	Kit-Piston (Standard) .....	6
2	1390760	Kit-Piston (0.5 mm O/S) (0,5 mm) .....	6
2	1627183	Kit-Piston (0.127 mm O/S) .....	6
3	1390761	Kit-Piston Ring (Standard) .....	6
3	1390765	Kit-Piston Ring (0.5 mm O/S) (0,5 mm) .....	6
4	1360179	Piston Rod (GFI Series) .....	6
4	4038242	Rod Assy (Piston) (PSI Series) .....	6
5	1360182	Bolt (GFI Series) .....	2
5	4038241	Bolt (PSI Series) .....	2
6	1330450	Nut .....	2
7	1390770	Piston Rod Bearing (Connecting Rod) (Standard) .....	1
8	1460386	Crankshaft .....	1
9	388302	Plug .....	3
10	263842	Bolt .....	10
11	1558807	Bearing Set (Standard) .....	3
11	1460738	Bearing Set (0.50 mm O/S) .....	3
12	1309839	Bearing Set (0.25 mm O/S) (Crankshaft) (GFI Series) .....	1
12	1390773	Bearing Set (0.025 mm) (PSI Series) .....	1
13	1514968	Valve .....	1
14	159977	Pin .....	4
15	1374313	Plug .....	1
16	1335499	Pin .....	2
17	1451319	Key .....	1
18	1500884	Gasket .....	1
19	388302	Plug .....	2
20	375601	Pin (CR/SHF RR Seal Retainer) .....	1
21	1460330	Retainer .....	1
22	1450555	Stud .....	2
23	1460331	Seal .....	1
24	375575	Bolt .....	1
25	375602		
	1335490	Bolt .....	1
26	1331341	Plug .....	4
27	388313	Nut .....	1
	159971	Plug (Not Illustrated) .....	8

## VALVE COVER AND INLET MANIFOLD (FIGURE 2-25) GM 4.3L LPG — GFI OPTION



BP090414

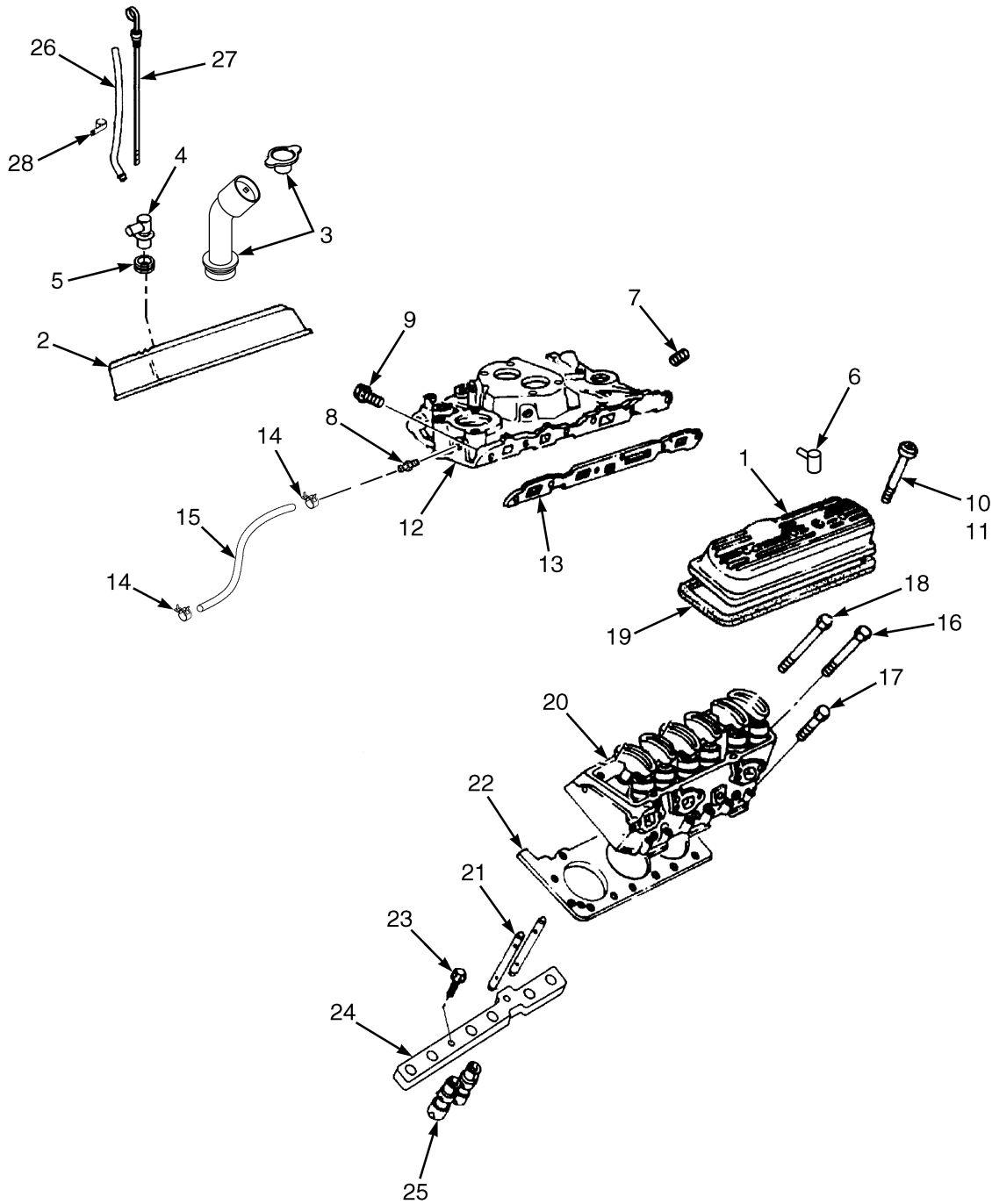
**VALVE COVER AND INLET MANIFOLD  
GM 4.3L LPG – GFI OPTION**

ITEM	PART NO.	DESCRIPTION	QTY
	1649334	Engine Assy-LPG (2008 Series) .....	1
	1694586	Engine Assy-LPG (2009 Series) .....	1
	4004338	Engine Assy -LPG (2010 Series) .....	1
	4019146	Engine Assy -LPG (Heavy Duty) (Heavy Duty, Optional) .....	1
	4020187	Engine Assy -LPG (2011 Series) (2011 Series) .....	1
1	1597705	Cover (LH) .....	1
2	1389102	Cover (RH) .....	1
3	1552141	Filler Neck .....	1
3	1374290	Cap .....	1
3	1683749	Cap .....	1
4	1559695	Distributor Assembly .....	1
5	1334423	Gasket .....	1
6	1374288	Grommet .....	3
7	379407	Fitting .....	1
8	1641492	Spark Plug .....	6
9	1564670	Ignition Coil Assembly .....	1
10	1383904	Grommet .....	6
11	1374289	Bolt .....	6
12	1684098	Manifold Assy (2008-2011) .....	1
12	1684085	Intake Manifold (Lower) .....	1
12	1684099	Intake Manifold (Upper) .....	1
12	4019127		
	1389093	Bolt .....	8
12	1559570	Gasket .....	1
13	4019045		
	1559567	Sensor (Temperature manifold absolute pressure) .....	1
14	1374293	Gasket .....	2
15	<b>a</b> 1377792	Bolt (Long) .....	10
16	<b>a</b> 1377793	Bolt (Medium) .....	4
17	<b>a</b> 1377794	Bolt (Short) .....	12
18	1471559	Valve Lifter .....	12
19	1389050	Guide .....	2
20	1389051	Bolt .....	2
21	1386189	Push Rod .....	12
22	1386190	Cylinder Head Gasket .....	1
23	1627354	Hose Assy .....	1
24	1653888	Cylinder Head (LPG)(2007-2010 Series) .....	1
24	4017128	Kit-Service (Head-LPG) (Heavy Duty with Intake Seat Insert) .....	1
25	1471560	Clamp .....	2
26	1671271	Dipstick Tube (2008-2011 Series) .....	1
27	1676923	Dipstick (2008-2011 Series) .....	1
28	133696	Clamp .....	1
29	1600925	Fitting (90 Degree) .....	1
	1386187	Kit-Gasket (The kit includes two intake manifold gaskets) (Intake Manifold) .....	1

**FOOTNOTES:**

**a** Quantity is listed for both heads.

## VALVE COVER AND INLET MANIFOLD (FIGURE 2-26) GM 4.3L LPG — PSI OPTION

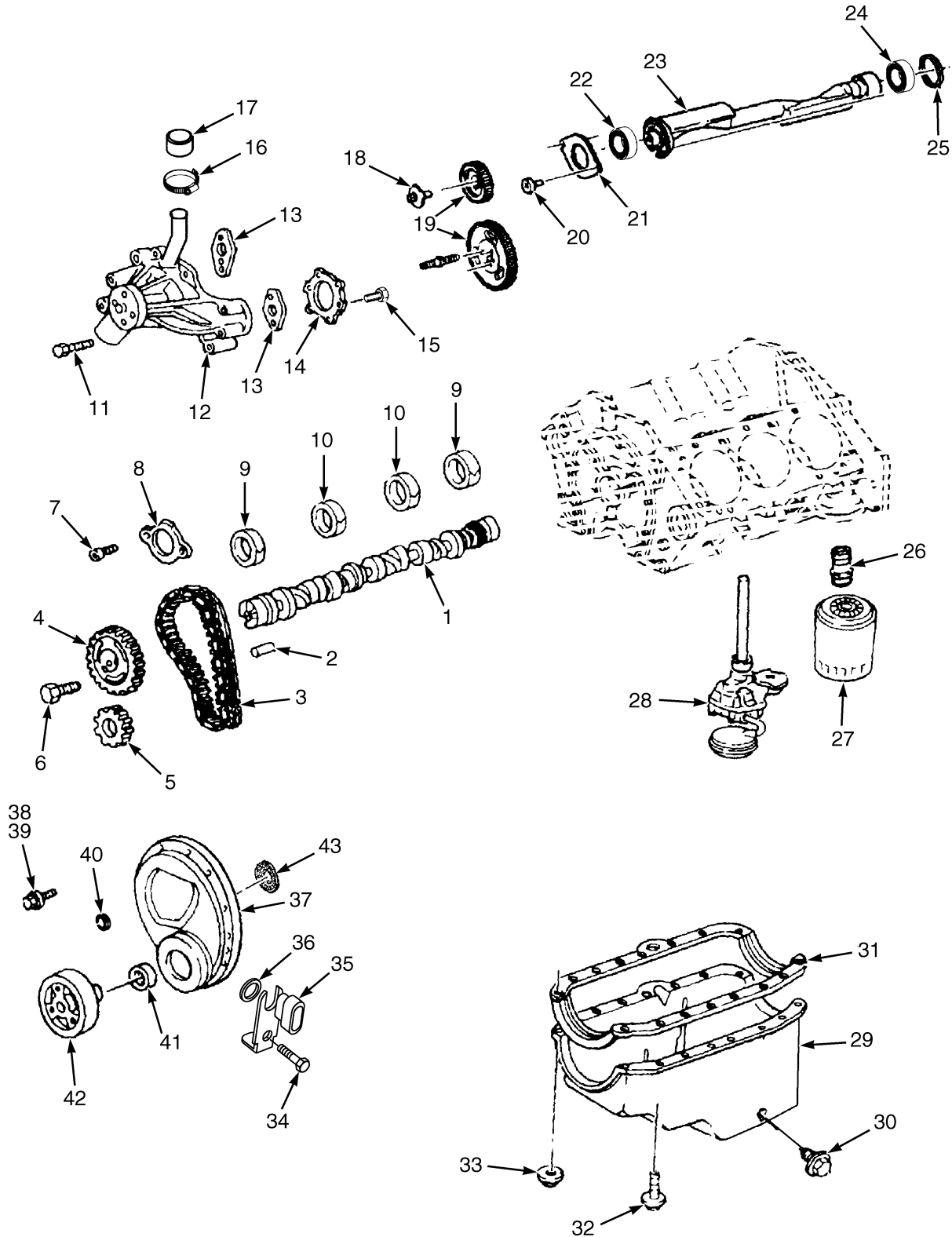


BP090466

**VALVE COVER AND INLET MANIFOLD  
GM 4.3L LPG – PSI OPTION**

ITEM	PART NO.	DESCRIPTION	QTY
	4615531	Engine Assy-LPG (With Catalytic Converter) .....	1
	4615533	Engine Assy-LPG (Heavy Duty) (With Catalytic Converter) .....	1
	4615532	Engine Assy-LPG (Without Catalytic Converter) .....	1
1	1597705	Cover (LH) .....	1
2	1389102	Cover (RH) .....	1
3	1552141	Filler Neck .....	1
3	1683749	Cap .....	1
4	379407	Fitting .....	1
5	1374288	Grommet .....	3
6	4040268	Fitting .....	1
7	1331341	Plug .....	1
8	4040255	Fitting .....	1
9	4019127		
	1389093	Bolt .....	8
10	1374289	Bolt .....	6
11	1383904	Grommet .....	6
12	1627349	Intake Manifold .....	1
13	1386187	Kit-Gasket (The kit includes two intake manifold gaskets) .....	1
14	4019128	Clamp .....	2
15	1460332	Hose Assy .....	1
16	1377793	Bolt (Medium) .....	4
17	1377794	Bolt (Short) .....	12
18	1377792	Bolt (Long) .....	10
19	1374293	Gasket .....	2
20	1653888	Cylinder Head (Standard) (☞ Figure 2-23).....	1
20	4017128	Kit-Service (Head-LPG) (Heavy Duty) .....	1
21	1386189	Push Rod .....	12
22	1386190	Cylinder Head Gasket .....	2
23	1339963	Bolt .....	2
24	1389050	Guide .....	2
25	1386188	Valve Lifter .....	12
26	1671271	Dipstick Tube .....	1
27	1676923	Dipstick .....	1
28	133696	Clamp .....	1

## CAMSHAFT AND OIL PAN (FIGURE 2-27) GM 4.3L LPG — GFI OPTION



BP090277

**CAMSHAFT AND OIL PAN  
GM 4.3L LPG – GFI OPTION**

ITEM	PART NO.	DESCRIPTION	QTY
	1649334	Engine Assy-LPG (2008 Series) .....	1
	1694586	Engine Assy-LPG (2009 Series) .....	1
	4004338	Engine Assy -LPG (2010 Series) .....	1
	4019146	Engine Assy -LPG (Heavy Duty) (Heavy Duty, Optional) .....	1
	4020187	Engine Assy -LPG (2011 Series) (2011 Series) .....	1
1	1627196	Camshaft .....	1
2	1374297	Pin .....	1
3	1683675	Kit-Repair Cable Chain .....	1
3	.....	Timing Chain .....	1
4	.....	Sprocket .....	1
5	.....	Sprocket .....	1
6	1374301	Bolt .....	3
7	1374299	Bolt .....	2
8	1374298	Retainer .....	1
9	1454955	Bearing .....	2
10	1454957	Bearing .....	2
11	1383257	Bolt .....	4
12	1683678	Water Pump (2008-2011 Series) .....	1
13	263828	Gasket .....	2
13	1683677	Gasket .....	1
14	1460322	Gasket .....	1
15	1374108	Bolt .....	10
16	130845	Clamp .....	1
17	1383263	Cap .....	1
18	1374317	Bolt .....	6
19	1374315	Kit-Gear (Balancer) .....	1
20	1339963	Bolt .....	2
21	1374326	Retainer .....	1
22	1374314	Bearing .....	1
23	1377107	Shaft .....	1
24	1451321	Bearing .....	1
25	1374313	Plug .....	2
26	375587	Fitting .....	1
27	1320000	Oil Filter .....	1
28	1386176	Engine Oil Pump (☞Figure 2-31).....	1
29	1683746	Oil Pan .....	1
30	1460757	Screw .....	1
30	1460758	Gasket .....	1
31	1386184	Gasket (Oil Pan) .....	1
31	1683744	Gasket .....	1
32	1386183	Bolt .....	10
33	1360178	Nut .....	1
34	1514965	Bolt .....	1
35	1683747	Sensor (Crankshaft Position) .....	1
36	1514964	O-Ring .....	1
37	1683720	Engine Cover (Front Cover) .....	1
37	1654480	Bracket .....	1
37	1654481	Shoe (Tensioner) .....	1
38	1386179	Bolt .....	4
39	1377103	Bolt .....	2

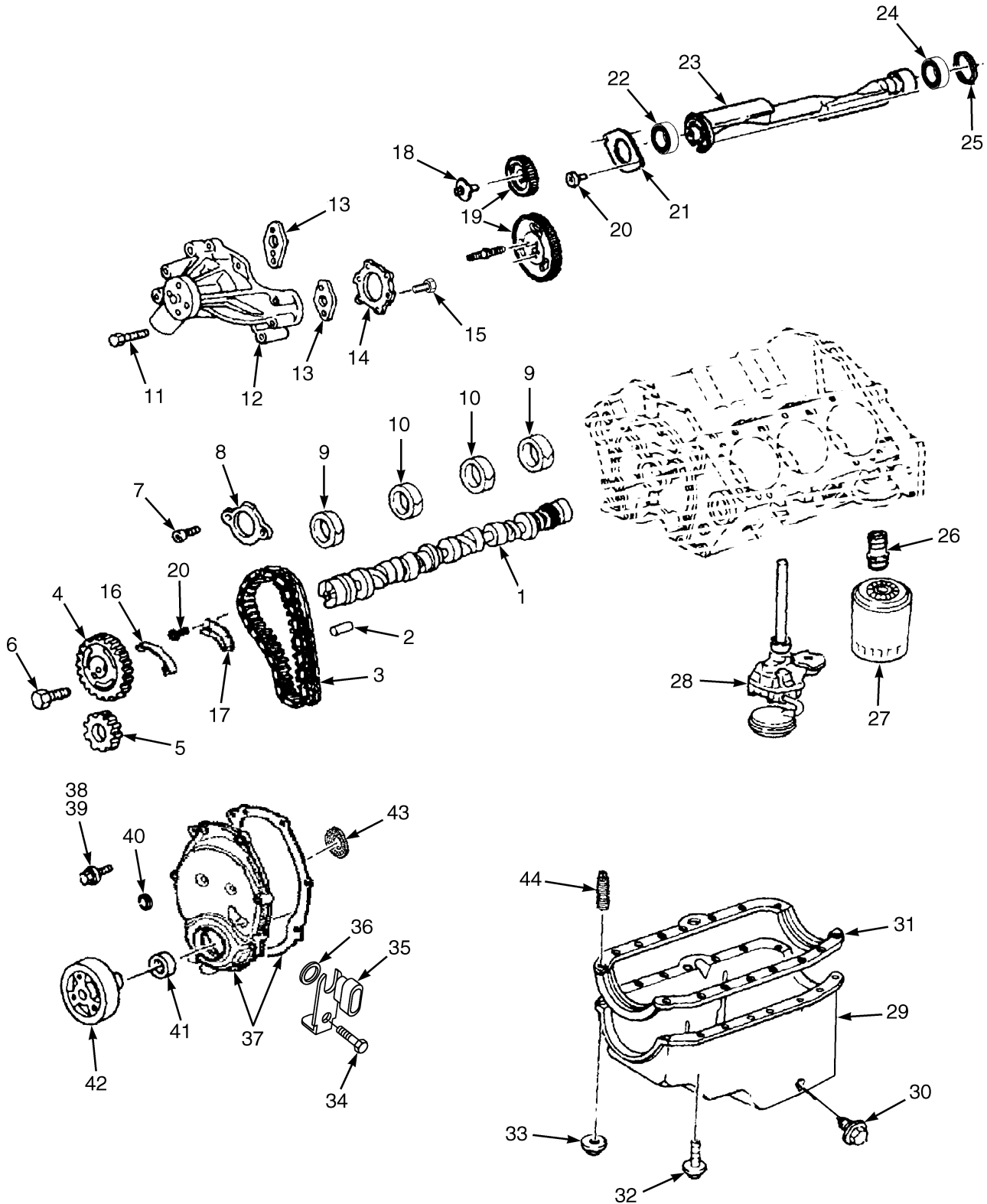
**CAMSHAFT AND OIL PAN  
GM 4.3L LPG – GFI OPTION**

ITEM	PART NO.	DESCRIPTION	QTY
40	1389092	Grommet .....	6
41	1377104	Seal .....	1
41	1690267	Oil Seal .....	1
42	1627199	Damper .....	1
43	1514962	Ring (Crankshaft Position Sensor) .....	1
43	4004594	Ring (Crankshaft Position Sensor) (Alternate Part) .....	1
	263827	Stud (not illustrated) .....	1
	1683721	Pin (not illustrated) .....	2
	1683722	Gasket (Engine Front Cover) (not illustrated) .....	1





## CAMSHAFT AND OIL PAN (FIGURE 2-28) GM 4.3L LPG — PSI OPTION



BP090467

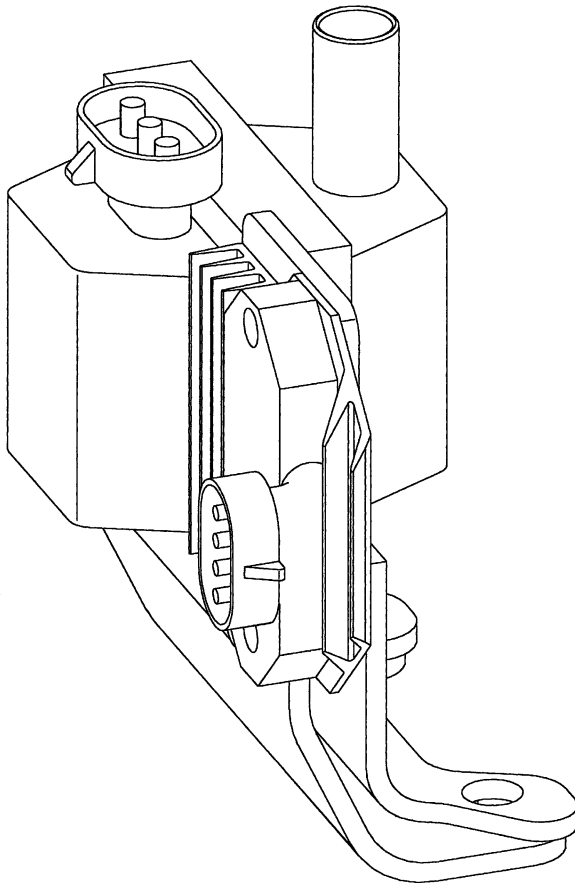
**CAMSHAFT AND OIL PAN  
GM 4.3L LPG – PSI OPTION**

ITEM	PART NO.	DESCRIPTION	QTY
	4615531	Engine Assy-LPG (With Catalytic Converter) .....	1
	4615533	Engine Assy-LPG (Heavy Duty) (With Catalytic Converter) .....	1
	4615532	Engine Assy-LPG (Without Catalytic Converter) .....	1
1	1627196	Camshaft .....	1
2	1374297	Pin .....	1
3	1683675	Kit-Repair Cable Chain .....	1
3	.....	Timing Chain .....	1
4	.....	Sprocket .....	1
5	.....	Sprocket .....	1
6	1374301	Bolt .....	3
7	1374299	Bolt .....	2
8	1374298	Retainer .....	1
9	1454955	Bearing .....	2
10	1454957	Bearing .....	2
11	1383257	Bolt .....	4
12	4040276	Water Pump .....	1
13	263828	Gasket .....	1
14	1460322	Gasket .....	1
15	1677876	Bolt .....	10
16	1654481	Shoe (Tensioner) .....	1
17	1654480	Bracket .....	1
18	1374317	Bolt .....	6
19	1374315	Kit-Gear .....	1
20	1339963	Bolt .....	3
21	1374326	Retainer .....	1
22	1451321	Bearing .....	1
23	1377107	Shaft .....	1
24	1451321	Bearing .....	1
25	1374313	Plug .....	2
26	375587	Fitting .....	1
27	1320000	Oil Filter .....	1
28	1386176	Engine Oil Pump (☞Figure 2-31).....	1
29	1683746	Oil Pan .....	1
30	1460757	Screw .....	1
30	1460758	Gasket .....	1
31	1683744	Gasket .....	1
32	1386183	Bolt .....	10
33	1360178	Nut .....	1
34	1514965	Bolt .....	1
35	1683747	Sensor (Crankshaft Position) .....	1
36	1514964	O-Ring .....	1
37	1683720	Engine Cover (Front Cover) .....	1
37	1683722	Gasket (Engine Front Cover) .....	1
38	1386179	Bolt .....	4
39	1377103	Bolt .....	2
40	1389092	Grommet .....	6
41	1690267	Oil Seal .....	1
42	1627199	Damper .....	1
43	1514962	Ring (Crankshaft Position Sensor) .....	1

**CAMSHAFT AND OIL PAN  
GM 4.3L LPG – PSI OPTION**

ITEM	PART NO.	DESCRIPTION	QTY
44	388364	Stud (Oil Pan) .....	1

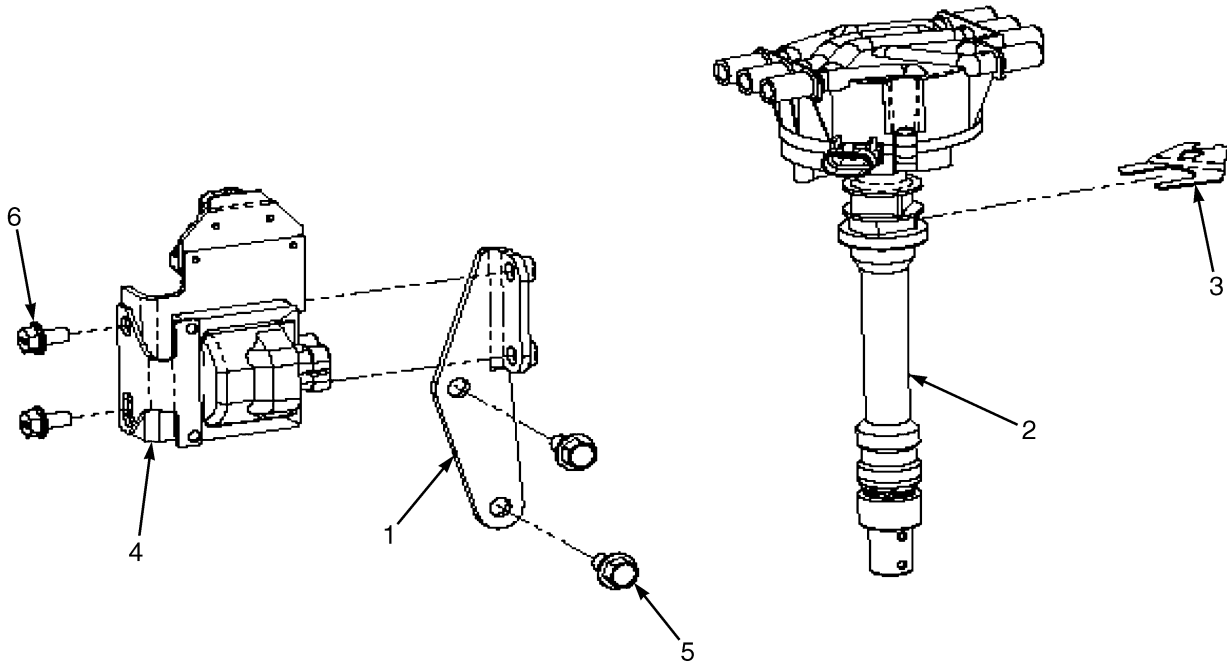
**COIL ASSEMBLY (FIGURE 2-29)  
GM 4.3L LPG — GFI OPTION**



BP090140

ITEM	PART NO.	DESCRIPTION	QTY
	1564670	Ignition Coil Assembly .....	1
	1578517	Bracket .....	1
	1371237	Bolt .....	4
	1578518	Module .....	1
	1578519	Heatsink .....	1
	1578520	Screw .....	2
	1578521	Ignition Coil .....	1
	1374323	Nut .....	1
	1578522	Bracket .....	1

## DISTRIBUTER AND COIL (FIGURE 2-30) GM 4.3L LPG — PSI OPTION

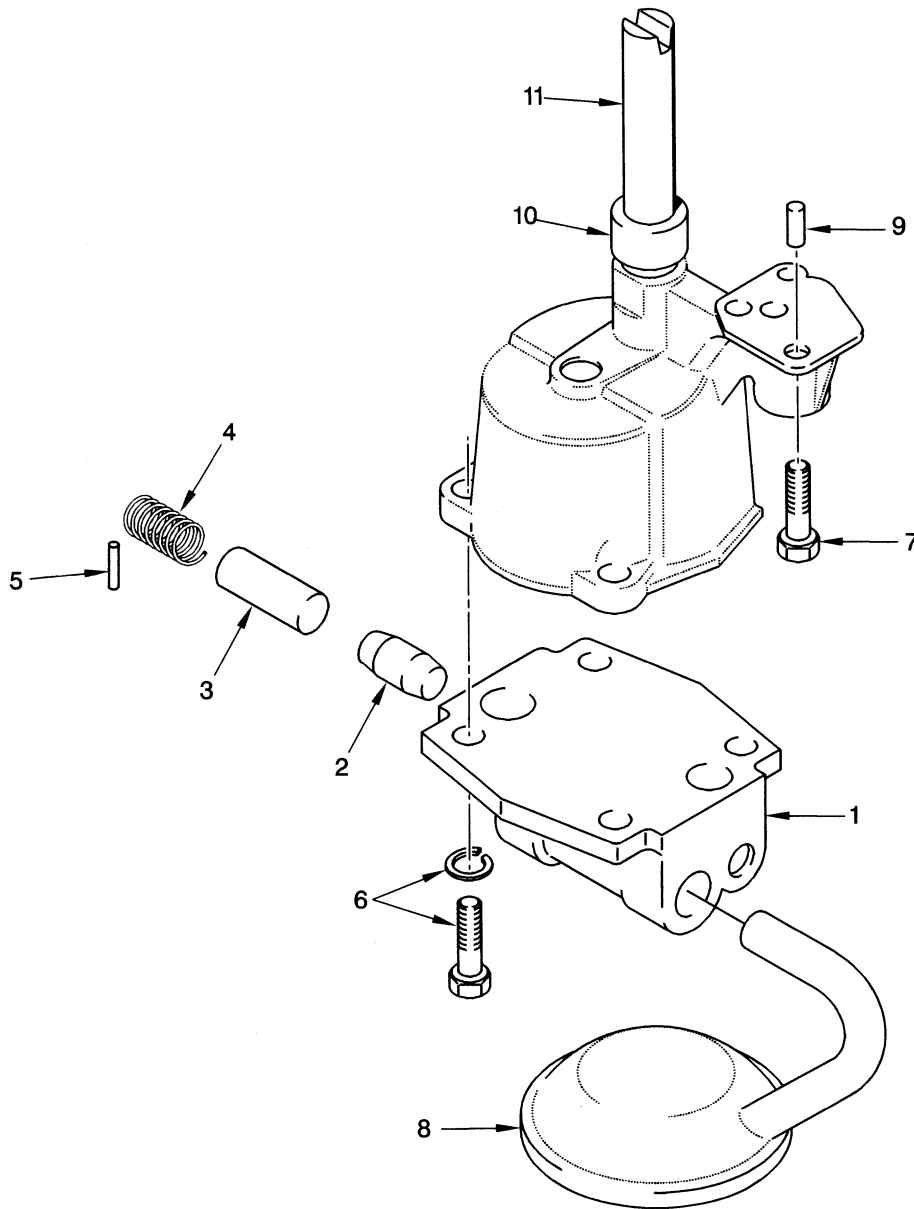


BP090462

ITEM	PART NO.	DESCRIPTION	QTY
1	4040252	Bracket .....	1
2	1559695	Distributor Assembly (☞ Figure 4-6).....	1
3	4019057		
	1569750	Yoke (Distributor) .....	1
4	4019058	Ignition Coil .....	1
5	162572	Capscrew .....	2
6	1527879	Capscrew .....	2



## OIL PUMP (FIGURE 2-31) GM 4.3L LPG



HP090044

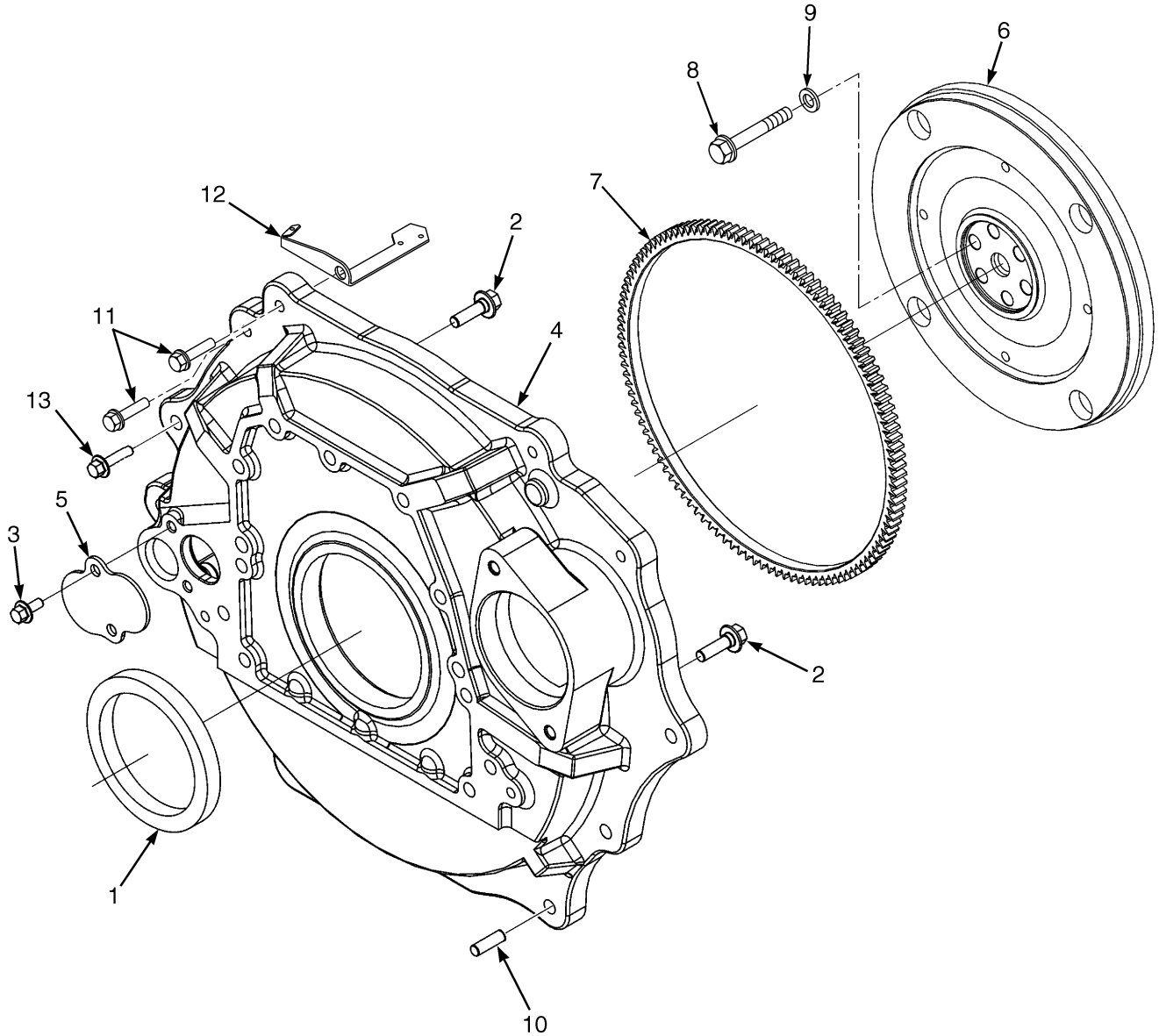


**OIL PUMP  
GM 4.3L LPG**

ITEM	PART NO.	DESCRIPTION	QTY
	1649334	Engine Assy-LPG (2008 Series) .....	1
	1694586	Engine Assy-LPG (2009 Series) .....	1
	4004338	Engine Assy -LPG (2010 Series) .....	1
	4019146	Engine Assy -LPG (Heavy Duty) (Heavy Duty, Optional) .....	1
	<b>a</b> 4020187	Engine Assy -LPG (2011 Series) (2011 GFI Series) .....	1
	<b>b</b> 4615531	Engine Assy-LPG (With Catalytic Converter) .....	1
	<b>b</b> 4615532	Engine Assy-LPG (Without Catalytic Converter) .....	1
	<b>b</b> 4615533	Engine Assy-LPG (Heavy Duty) (With Catalytic Converter) .....	1
	1386176	Engine Oil Pump .....	1
1	1374319	Cover .....	1
2	1338223	Stop .....	1
3	268573	Regulator Valve .....	1
4	1374320	Spring .....	1
5	1330453	Pin .....	1
6	1333541	Kit-Screw .....	2
7	388306	Bolt .....	1
8	1386177	Screen .....	1
9	1450941	Pin .....	2
10	263795	Retainer .....	1
11	263794	Shaft .....	1

**FOOTNOTES:****a** → S/N P005V04468J EXC. 04255, 04460**b** S/N P005V04469J → INC. 04255, 04460

## FLYWHEEL AND HOUSING (FIGURE 2-32) CUMMINS QSB 3.3L DIESEL

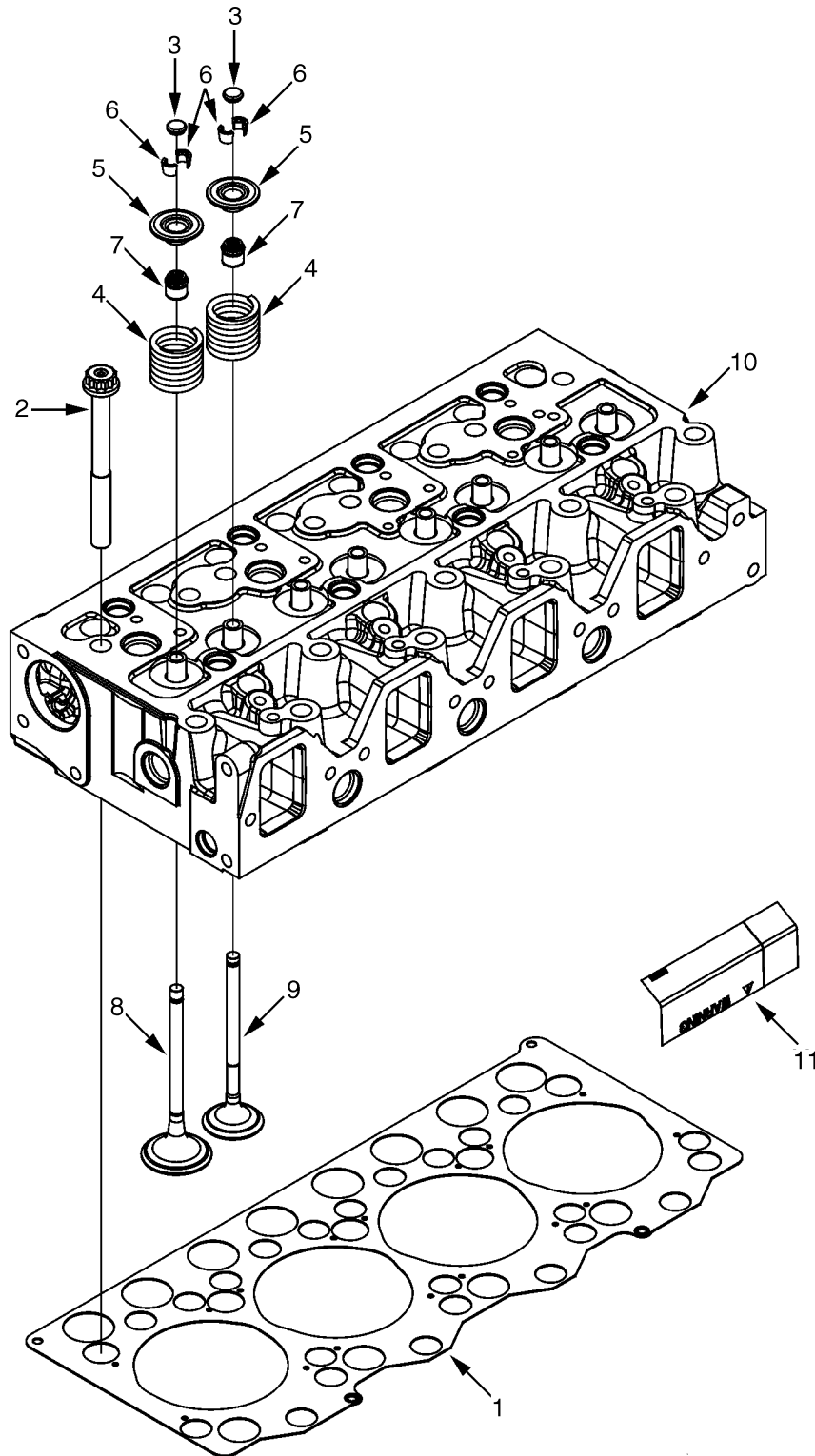


BP090329

**FLYWHEEL AND HOUSING  
CUMMINS QSB 3.3L DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1691663	Oil Seal .....	1
2	1543337	Capscrew .....	11
3	1511970	Capscrew .....	2
4	1694039	Flywheel Housing .....	1
5	1694041	Cover Plate .....	1
6	1694042	Flywheel .....	1
7	1654058	Ring Gear (Flywheel Ring) .....	1
8	1691678	Capscrew .....	6
9	1691807	Washer .....	6
10	303150	Dowel .....	3
11	1581400	Capscrew .....	4
11	292516	Capscrew (Alternate Part) .....	4
11	<del>388049</del>		
	292682	Lockwasher (Not Illustrated) .....	4
12	1660913	Bracket (Tube Retention) .....	1
13	1586629	Capscrew .....	6
13	292515	Capscrew (Alternate Part) .....	6
13	<del>388049</del>		
	292682	Lockwasher (Not Illustrated) .....	6

## CYLINDER HEAD (FIGURE 2-33) CUMMINS QSB 3.3L DIESEL

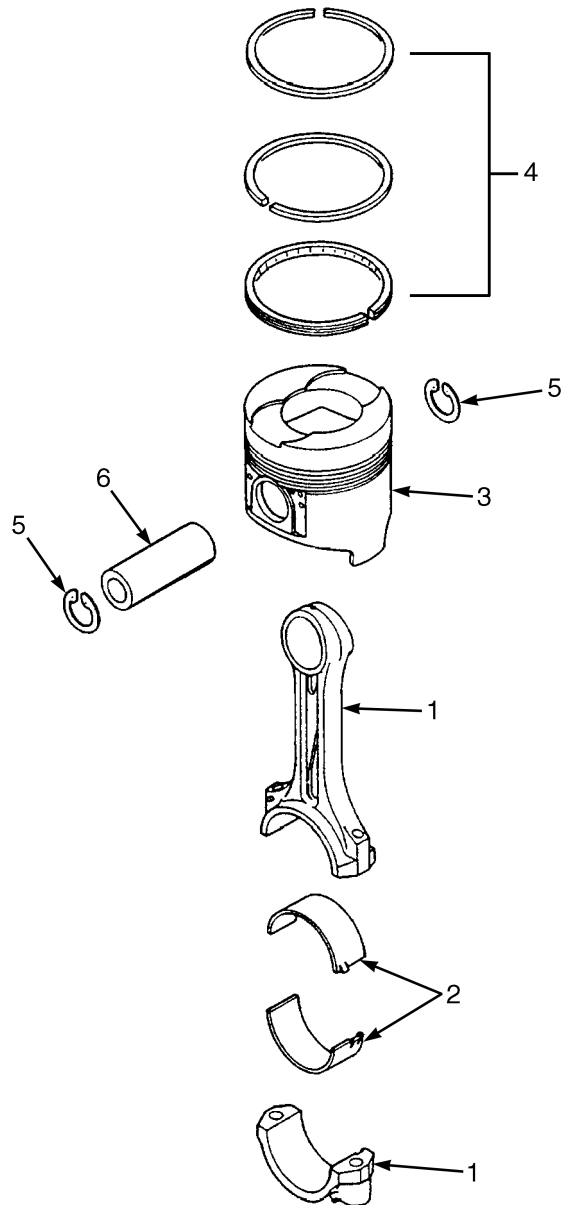


BP090394

**CYLINDER HEAD  
CUMMINS QSB 3.3L DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1691897	Cylinder Head Gasket .....	1
2	1691898	Capscrew .....	17
3	1691899	Cap .....	8
4	1691901	Spring .....	8
5	1691902	Retainer .....	8
6	1691903	Valve (Collet) .....	16
7	1691904	Seal (Valve Stem) .....	8
8	1691905	Inlet Valve .....	4
9	1691906	Exhaust Valve .....	4
10	.....	Cylinder Head .....	1
11	1707215	Label .....	1
12	1691913	Kit-Cylinder Head .....	1

## PISTON AND CONNECTING ROD (FIGURE 2-34) CUMMINS QSB 3.3L DIESEL



BP090228

**PISTON AND CONNECTING ROD  
CUMMINS QSB 3.3L DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	<del>1691882</del>		
	4047386	Kit-Piston Rod .....	4
1	4047928	Capscrew .....	2
2	4035760	Bearing Set .....	2
3	.....	Piston .....	1
3	1691892	Kit-Piston .....	4
4	1691893	Piston Ring Set .....	1
5	1691890	Retaining Ring .....	2
6	1691881	Pin .....	4

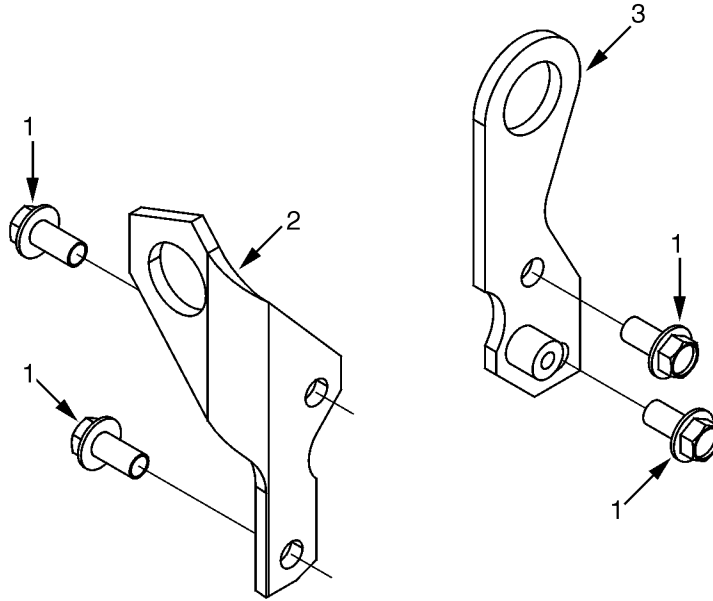




**TURBOCHARGER  
CUMMINS QSB 3.3L DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1691986	Stud .....	4
2	1691987	Nut .....	4
3	1691988	Gasket .....	1
4	1691989	Connector .....	1
5	1691990	Gasket .....	1
6	.....	Turbocharger .....	1
7	1691806	Clamp .....	1
8	1691822	Seal .....	1
9	1691823	Pipe .....	1
10	1513191	Fitting .....	1
11	1692003	Kit-Turbocharger and Gasket .....	1

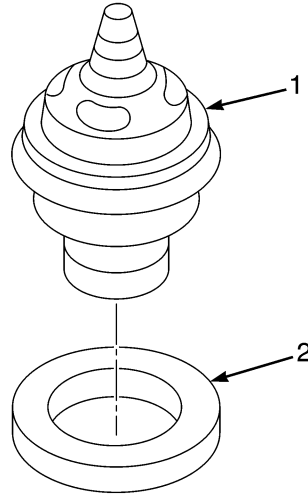
## LIFTING BRACKET (FIGURE 2-36) CUMMINS QSB 3.3L DIESEL



BP090402

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1691825	Capscrew .....	4
2	1691679	Bracket .....	1
3	1696967	Bracket .....	1

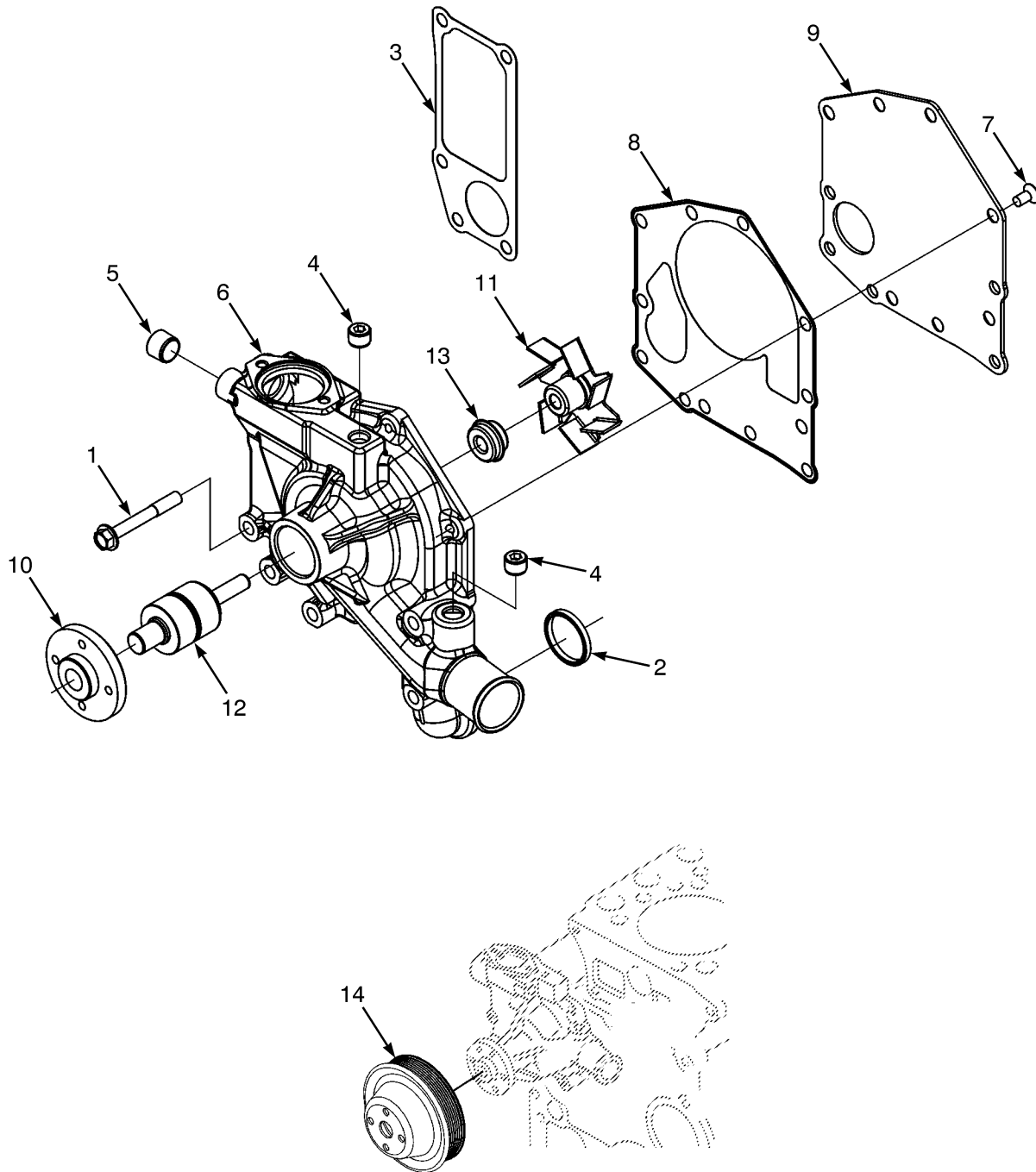
**THERMOSTAT (FIGURE 2-37)  
CUMMINS QSB 3.3L DIESEL**



BP090406

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1691627	Kit-Thermostat .....	1
2	1691629	Gasket .....	1

## WATER PUMP AND PULLEY (FIGURE 2-38) CUMMINS QSB 3.3L DIESEL

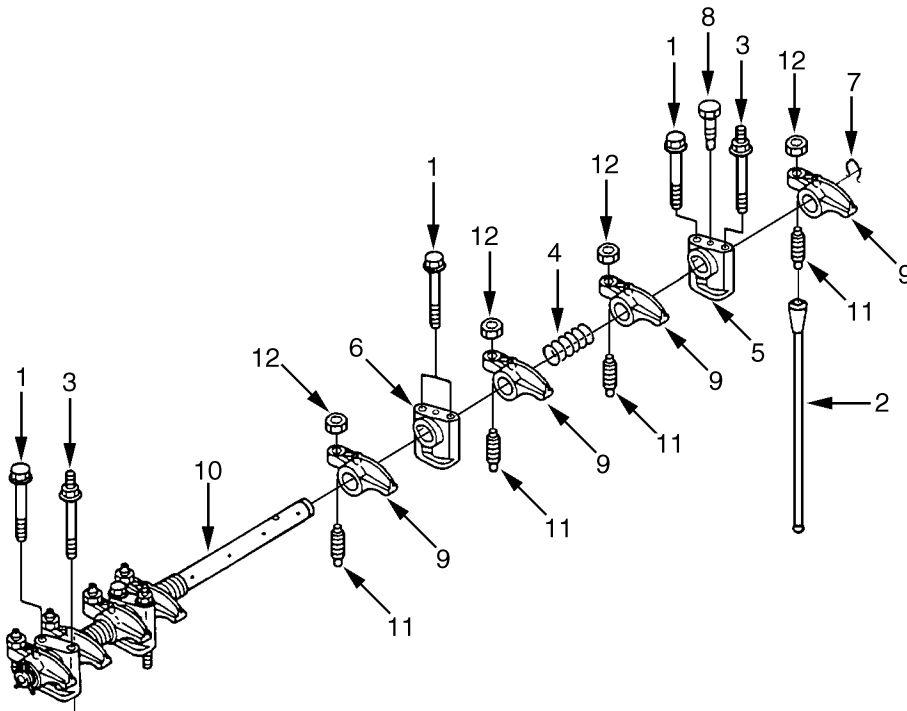


BP090405

**WATER PUMP AND PULLEY  
CUMMINS QSB 3.3L DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1691840	Capscrew .....	4
2	1692048	Seal .....	1
3	1692049	Gasket .....	1
4	1692050	Plug .....	2
5	1692051	Plug .....	1
6	1692052	Water Pump .....	1
6	1692058	Body .....	1
7	1692057	Capscrew .....	7
8	1692059	Gasket .....	1
9	1692060	Cover Plate .....	1
10	1692053	Boss .....	1
11	1692054	Impeller .....	1
12	<del>1692055</del>		
	4041627	Shaft .....	1
13	<del>1692056</del>		
	<del>4046394</del>		
	1692056	Seal .....	1
14	1691647	Water Pump Pulley .....	1
	1692061	V-Belt (Not illustrated) .....	1

## ROCKER ARM SHAFT (FIGURE 2-39) CUMMINS QSB 3.3L DIESEL

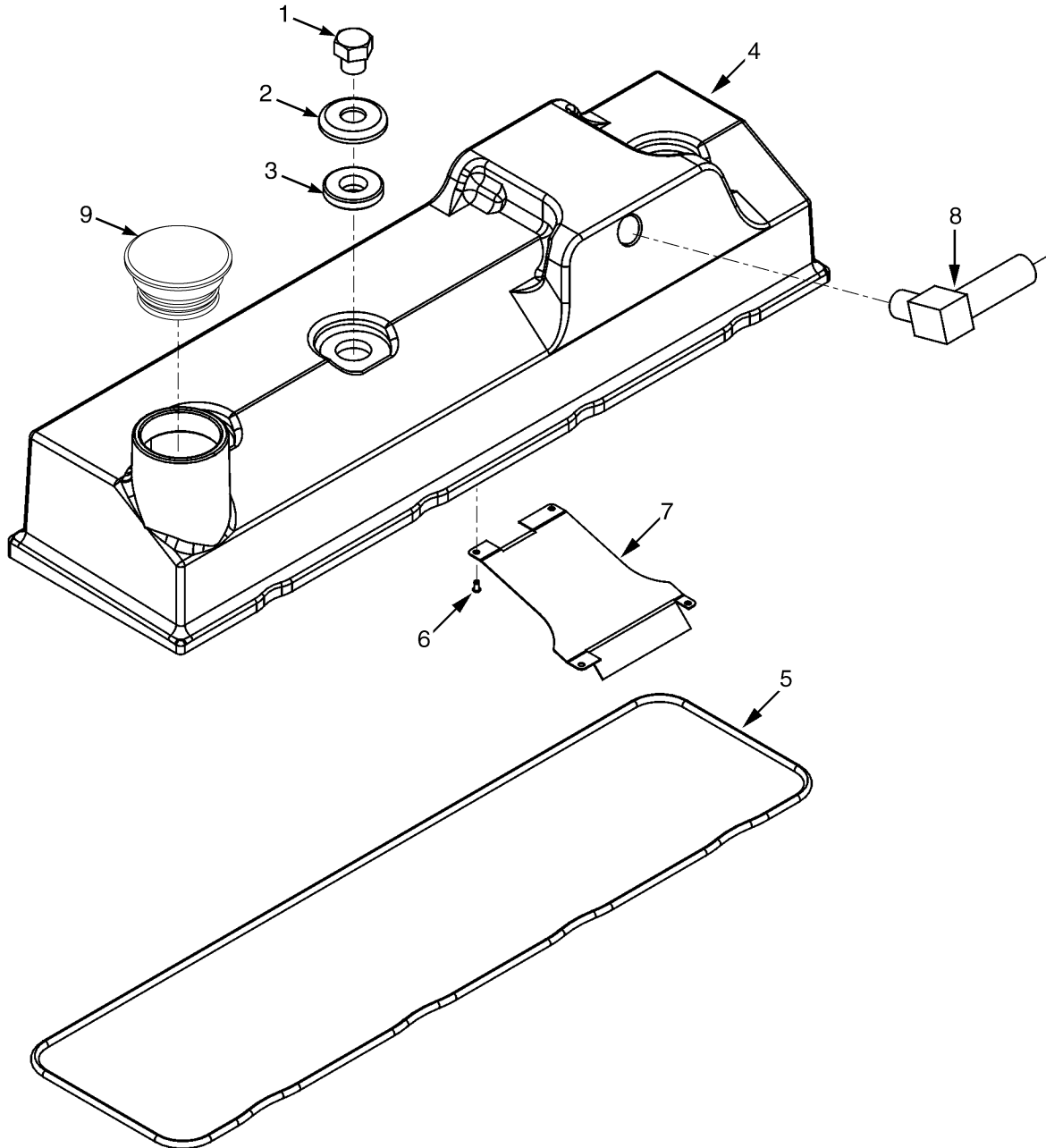


BP080739

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1691992	Capscrew .....	5
2	1691993	Push Rod .....	8
3	1691994	Capscrew .....	3
4	1691996	Spring .....	3
5	1691997	Support .....	1
6	1691998	Support .....	3
7	1691999	Clip .....	2
8	1692000	Capscrew .....	1
9	1692001	Lever .....	8
10	1692002	Shaft .....	1
11	1692004	Screw .....	8
12	1692005	Locknut .....	8



## VALVE COVER (FIGURE 2-40) CUMMINS QSB 3.3L DIESEL



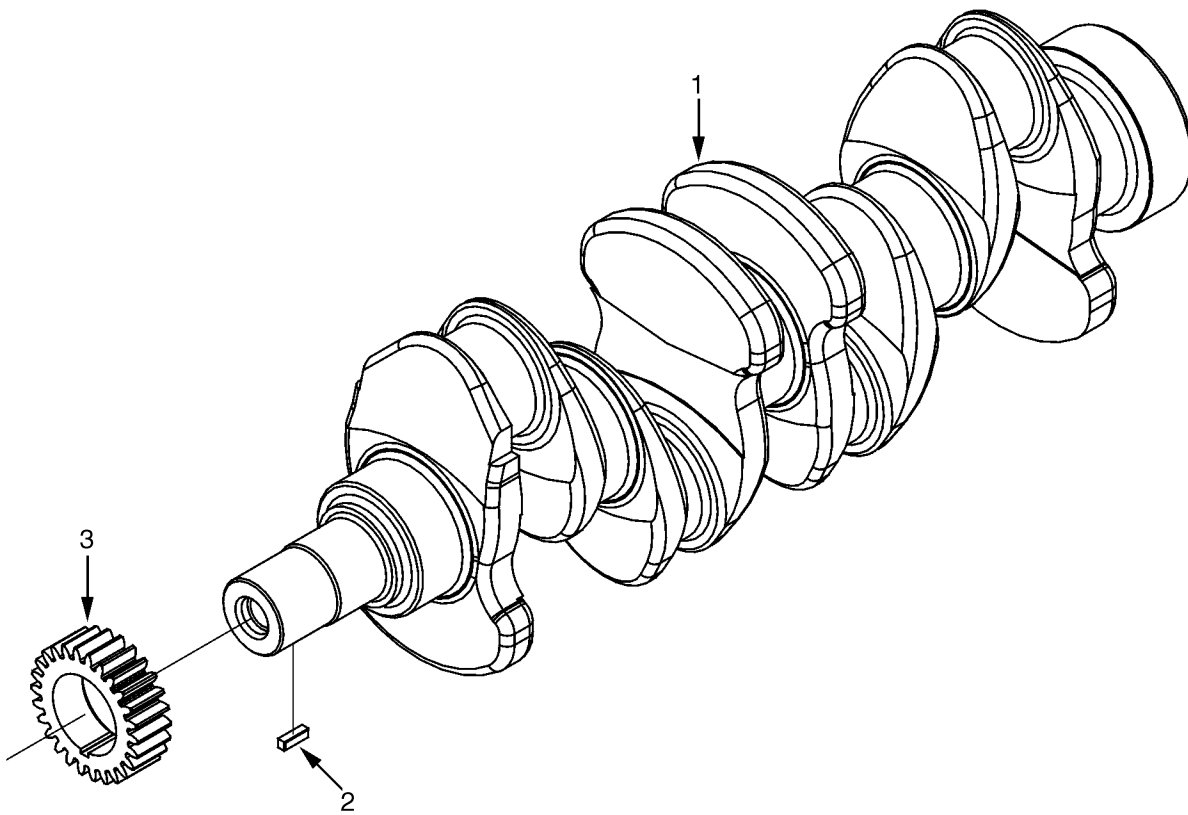
BP090415



**VALVE COVER  
CUMMINS QSB 3.3L DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1692035	Locknut .....	3
2	1692036	Washer .....	3
3	1692037	Gasket .....	3
4	1692038	Cover .....	1
5	1692040	Gasket .....	1
6	.....	Rivet .....	4
7	.....	Cover Plate .....	1
8	.....	Tube .....	1
9	1691858	Cap .....	1

**CRANKSHAFT (FIGURE 2-41)**  
**CUMMINS QSB 3.3L DIESEL**

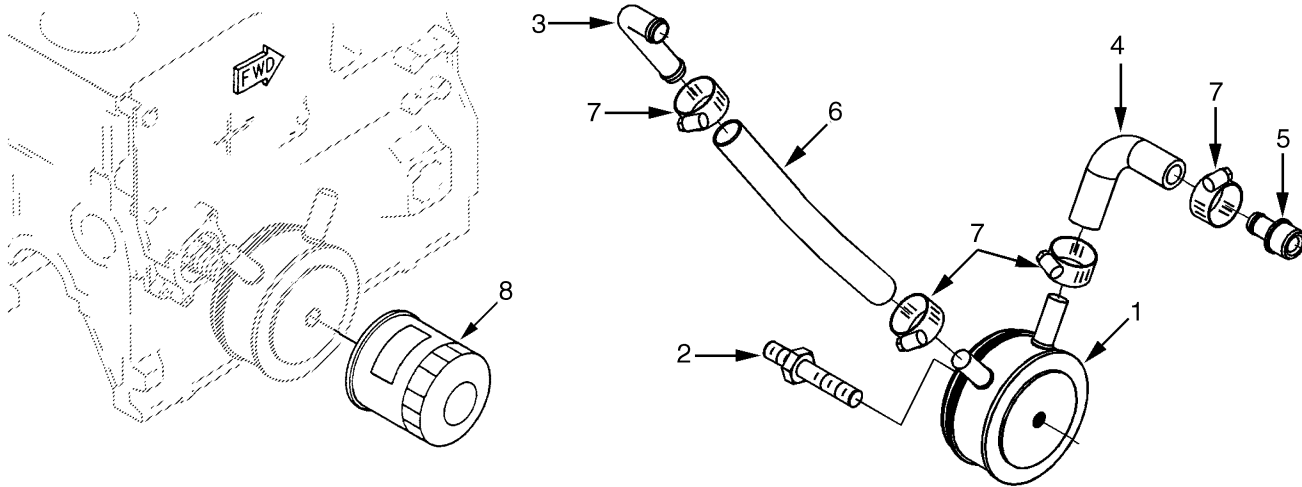


BP090178

**CRANKSHAFT  
CUMMINS QSB 3.3L DIESEL**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
	2103243	Engine Assy-Diesel .....	1
1	1691597	Crankshaft .....	1
2	1691598	Woodruff Key .....	1
3	.....	Crankshaft Gear .....	1

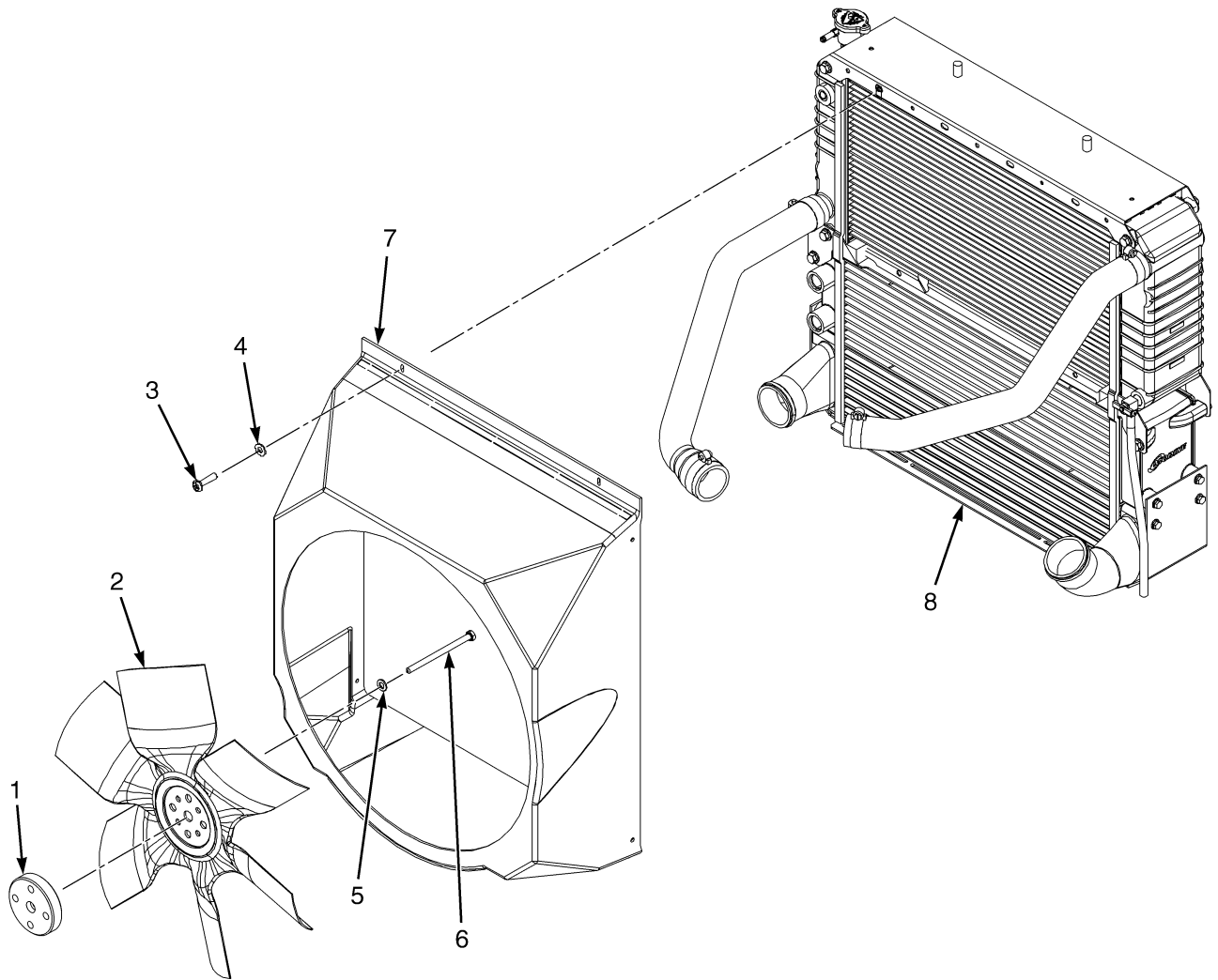
## OIL FILTER AND COOLER (FIGURE 2-42) CUMMINS QSB 3.3L DIESEL



BP090403

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1691844	Oil Cooler .....	1
2	1691845	Coupling .....	1
3	1691841	Coupling .....	1
4	1691842	Hose .....	1
5	1691837	Coupling .....	1
6	1691843	Hose .....	1
7	1691828	Hose Clamp .....	4
8	1691846	Oil Filter .....	1

**FAN ASSEMBLY (FIGURE 2-43)**  
**CUMMINS QSB 3.3L DIESEL**



BP060055

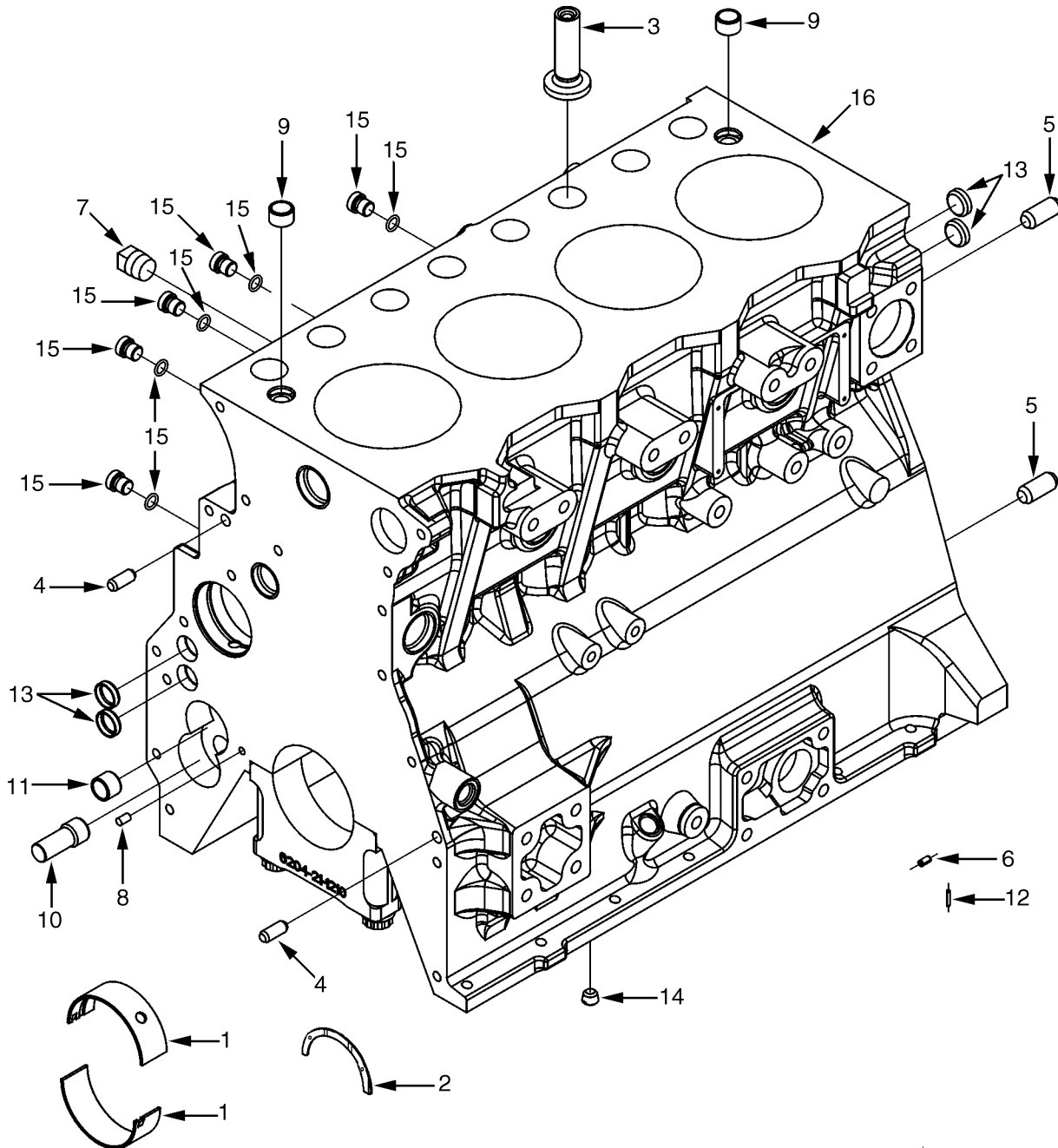
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ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1668640	Spacer (Fan) .....	1
2	2099479	Fan .....	1
3	302023	Screw .....	2
4	320154	Washer .....	2
5	296418	Washer .....	4
6	1334820	Capscrew .....	4
7	2101870	Shroud .....	1

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## CYLINDER BLOCK (FIGURE 2-44) CUMMINS QSB 3.3L DIESEL



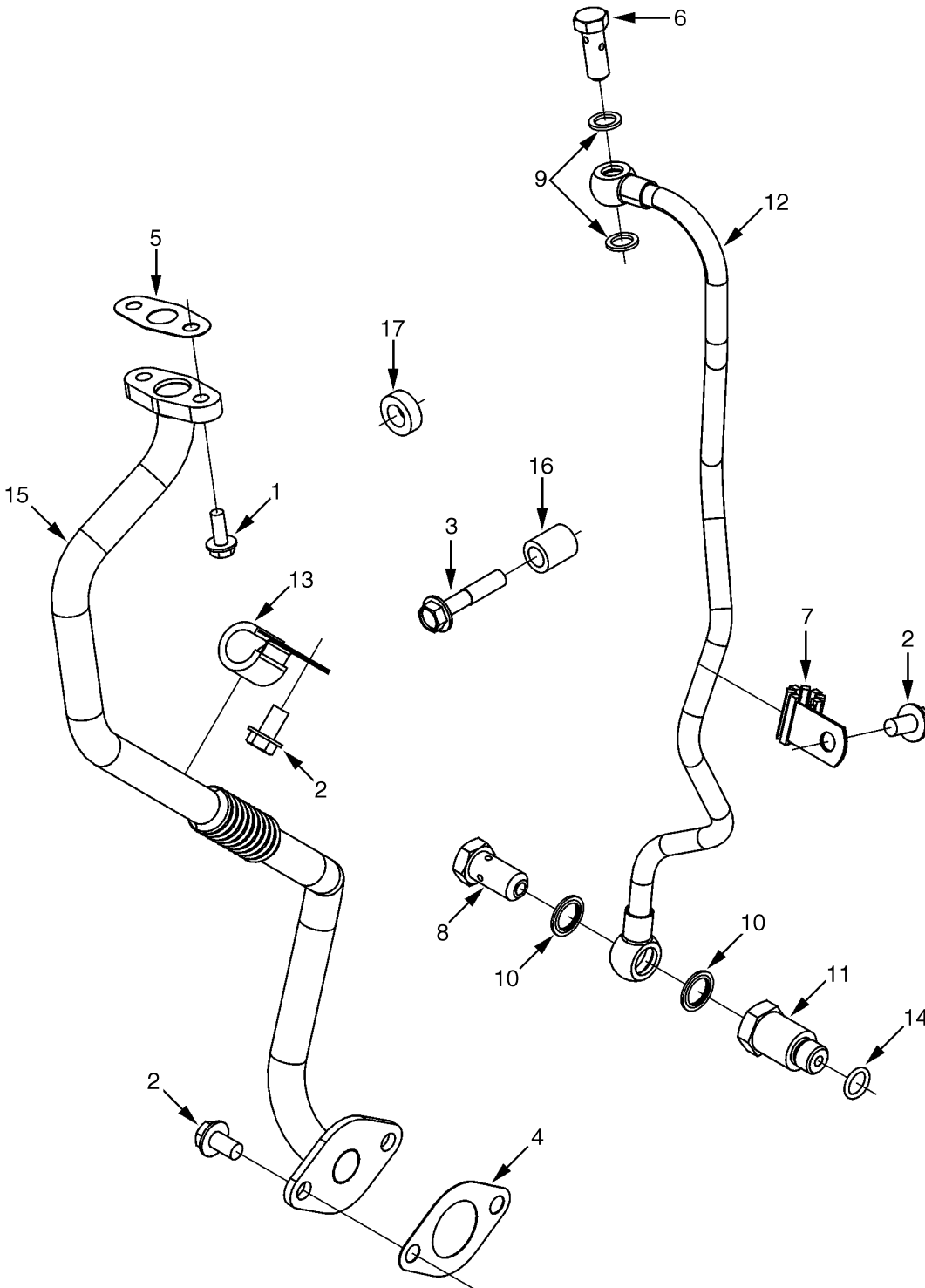
BP090292



**CYLINDER BLOCK  
CUMMINS QSB 3.3L DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1693601	Kit-Bearing .....	1
2	.....	Thrust Bearing .....	3
3	1691581	Valve Tappet .....	8
4	1691583	Dowel Pin .....	2
5	1691584	Dowel Pin .....	2
6	1691586	Dowel Pin .....	6
7	1691587	Plug .....	1
8	1691588	Dowel .....	1
9	1691589	Dowel .....	2
10	.....	Shaft (Lub Oil Pump) .....	1
11	.....	Bushing .....	1
12	1691592	Dowel .....	4
13	1691593	Plug .....	4
14	1691594	Plug .....	1
15	1517010	Plug Assembly .....	1
15	1517011	O-Ring .....	1
16	.....	Cylinder Block .....	1

## TURBOCHARGER PLUMBING (FIGURE 2-45) CUMMINS QSB 3.3L DIESEL

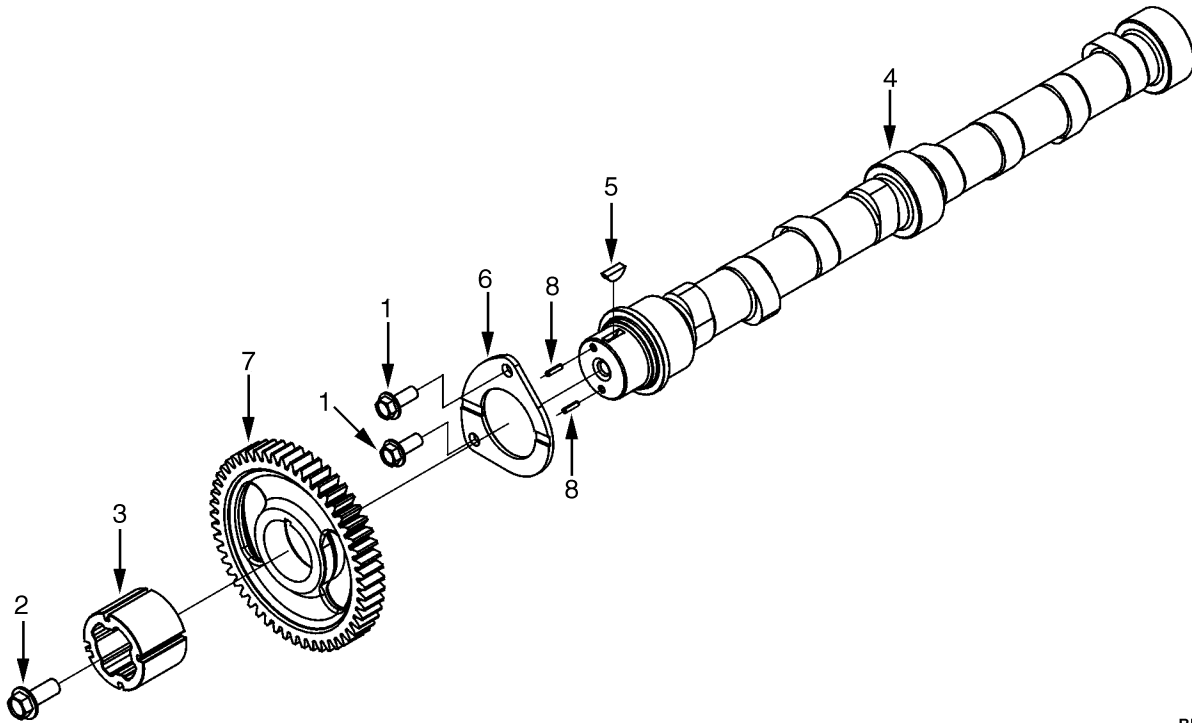


BP090397

**TURBOCHARGER PLUMBING  
CUMMINS QSB 3.3L DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1692011	Capscrew .....	2
2	1691860	Capscrew .....	2
3	1691909	Capscrew .....	2
4	1692023	Gasket (Oil Drain) .....	1
5	1692024	Gasket (Oil Drain) .....	1
6	1692025	Screw (Banjo Connector) .....	1
7	1692026	Clip .....	1
8	1673878	Screw (Banjo Connector) .....	1
9	1692027	Washer .....	2
10	1513714	Sealing Ring .....	2
11	1692028	Boot .....	1
12	1692029	Tube (Oil Supply) .....	1
13	1692030	Clip .....	1
14	1692031	Seal .....	1
15	1692032	Tube (Oil Drain) .....	1
16	1692033	Spacer .....	1
17	1692034	Spacer .....	1

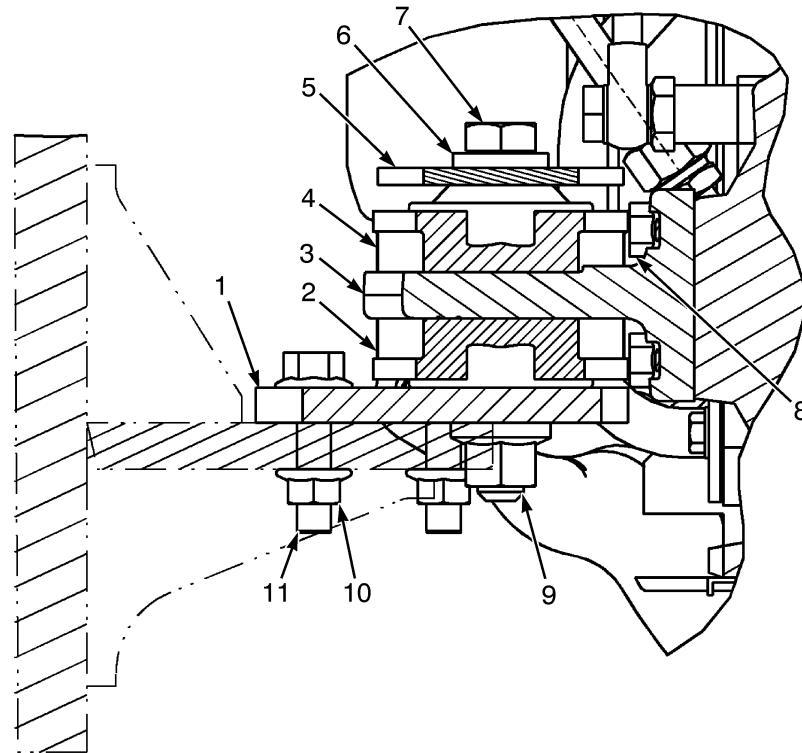
## CAMSHAFT (FIGURE 2-46) CUMMINS QSB 3.3L DIESEL



BP090393

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1691869	Capscrew .....	2
2	1691886	Capscrew .....	1
3	1691887	Adapter (Position Sensor) .....	1
4	1691888	Camshaft .....	1
5	1691894	Key .....	1
6	1693081	Plate (Clamping) .....	1
7	1691885	Gear .....	1
8	1691896	Cotter Pin .....	2

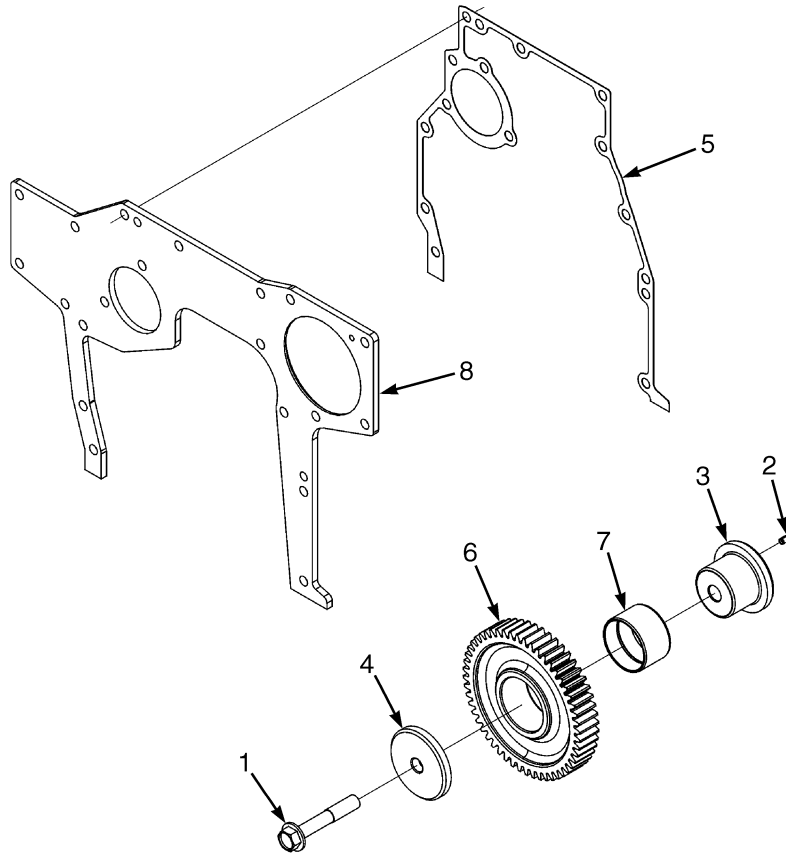
**ENGINE MOUNTING (FIGURE 2-47)  
CUMMINS QSB 3.3L DIESEL**



BP090391

ITEM	PART NO.	DESCRIPTION	QTY
1	1663740	Plate .....	2
2	2069951	Isolator .....	2
3	1663183	Motor Mount .....	2
4	2069951	Isolator .....	2
5	1557737	Washer .....	2
6	1504075	Washer .....	2
7	293697	Capscrew .....	2
8	1663739	Bolt .....	8
9	1565453	Nut (Flange) .....	2
10	4370949	Nut (Shoulder) .....	6
11	1665557	Capscrew .....	6

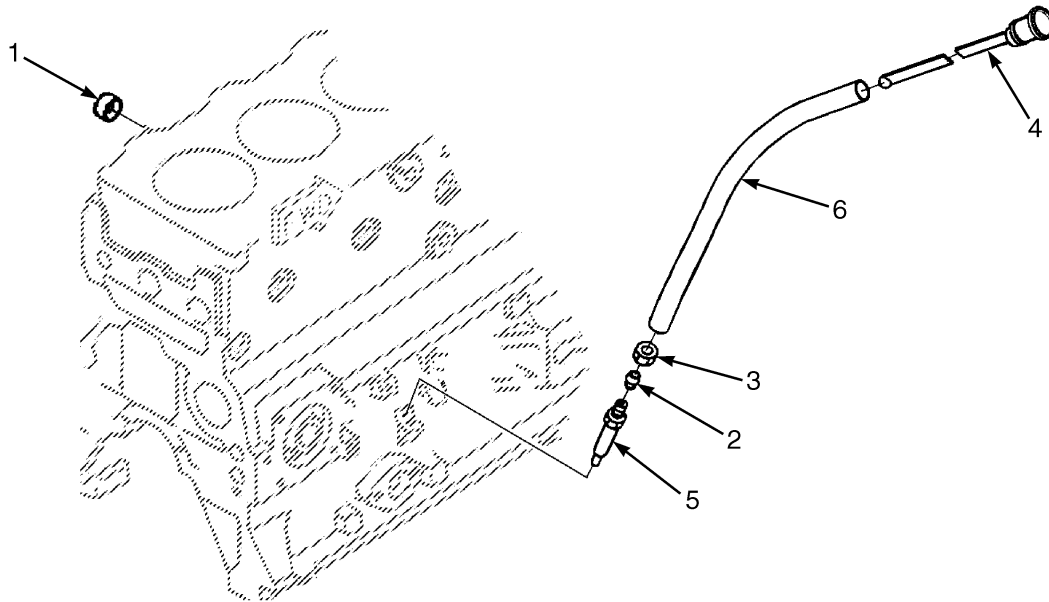
## FRONT GEAR HOUSING (FIGURE 2-48) CUMMINS QSB 3.3L DIESEL



BP060410

ITEM	PART NO.	DESCRIPTION	QTY
1	1691601	Capscrew .....	1
2	1691602	Cotter Pin .....	1
3	1691603	Shaft .....	1
4	1691604	Washer .....	1
5	1691605	Gasket (Gear Cover) .....	1
6	1691606	Idler Gear .....	1
7	.....	Bushing .....	1
8	1691607	Cover Plate .....	1

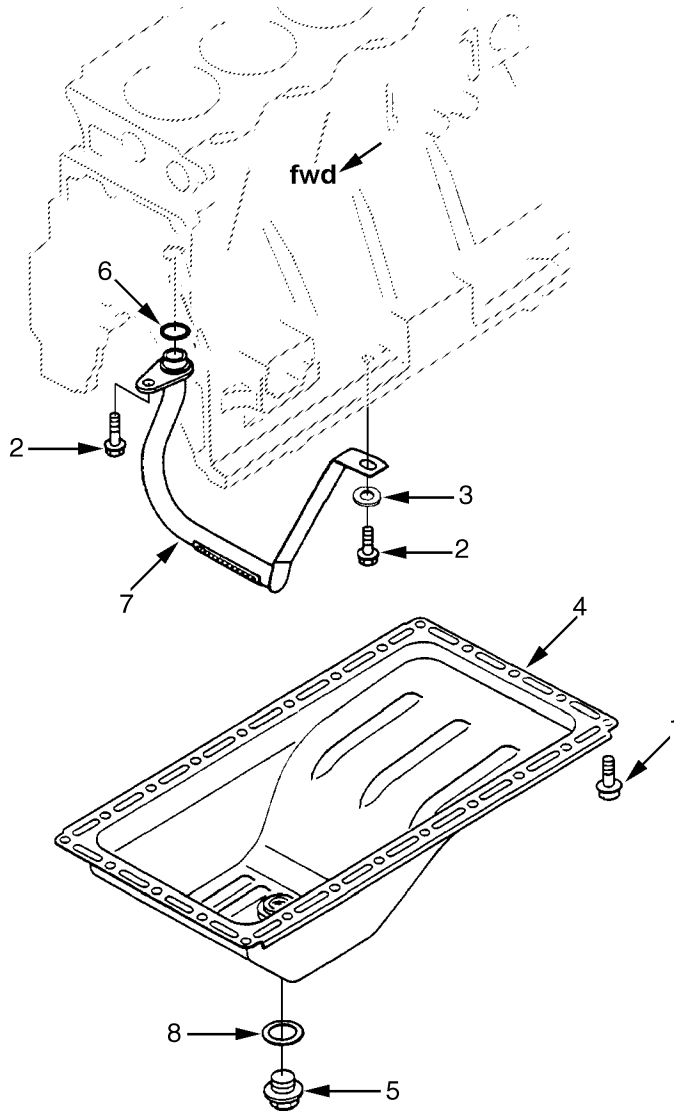
**OIL LEVEL GAUGE (FIGURE 2-49)  
CUMMINS QSB 3.3L DIESEL**



BP090409

ITEM	PART NO.	DESCRIPTION	QTY
1	1691847	Plug .....	1
2	1691848	Collar .....	1
3	1691849	Nut .....	1
4	1691850	Dipstick .....	1
5	1691851	Dipstick Tube (Lower) .....	1
6	1691852	Dipstick Tube (Upper) .....	1

## OIL PAN (FIGURE 2-50) CUMMINS QSB 3.3L DIESEL



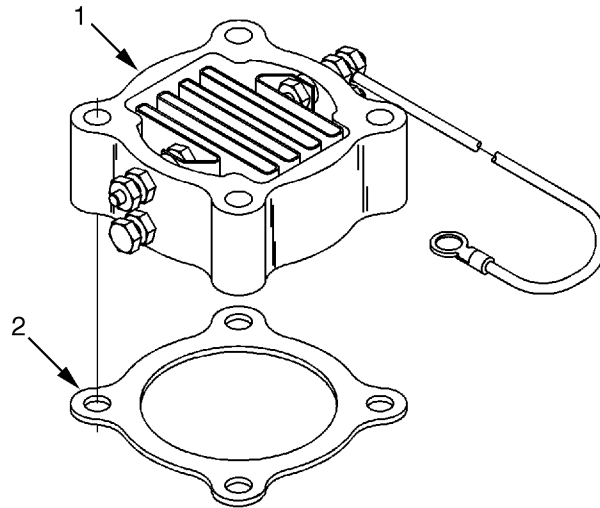
BP090395



**OIL PAN**  
**CUMMINS QSB 3.3L DIESEL**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
	2103243	Engine Assy-Diesel .....	1
1	1691860	Capscrew .....	24
2	1691853	Capscrew .....	2
3	1691862	Washer .....	1
4	2109562	Oil Pan .....	1
5	1691864	Plug .....	1
6	1691865	Seal .....	1
7	1691866	Tube .....	1
8	1691867	Washer .....	1

## STARTING AID (FIGURE 2-51) CUMMINS QSB 3.3L DIESEL



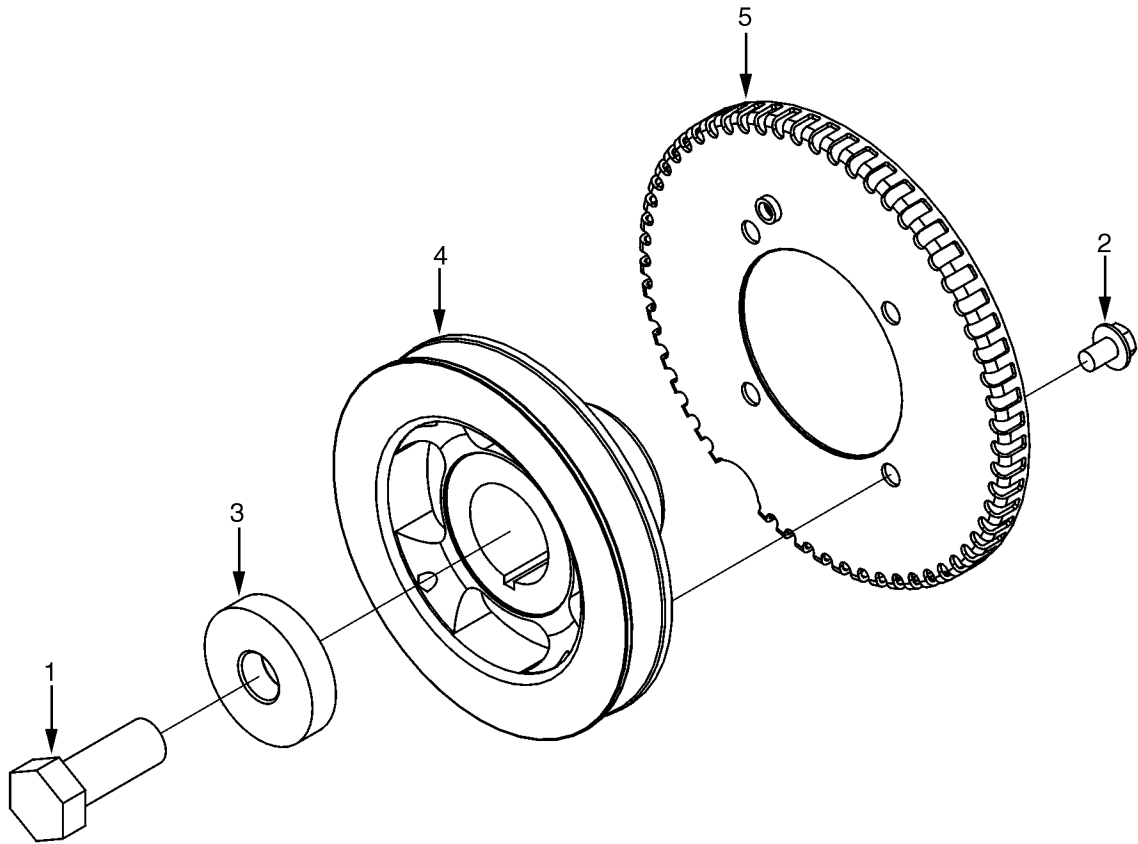
BP090404

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1691576	Heater .....	1
1	1705956	Heater (Alternate Part) .....	1
2	1691577	Gasket .....	1
2	<b>a</b> 1691613	Plug (Not Illustrated) .....	1

**FOOTNOTES:**

**a** When heater is not used

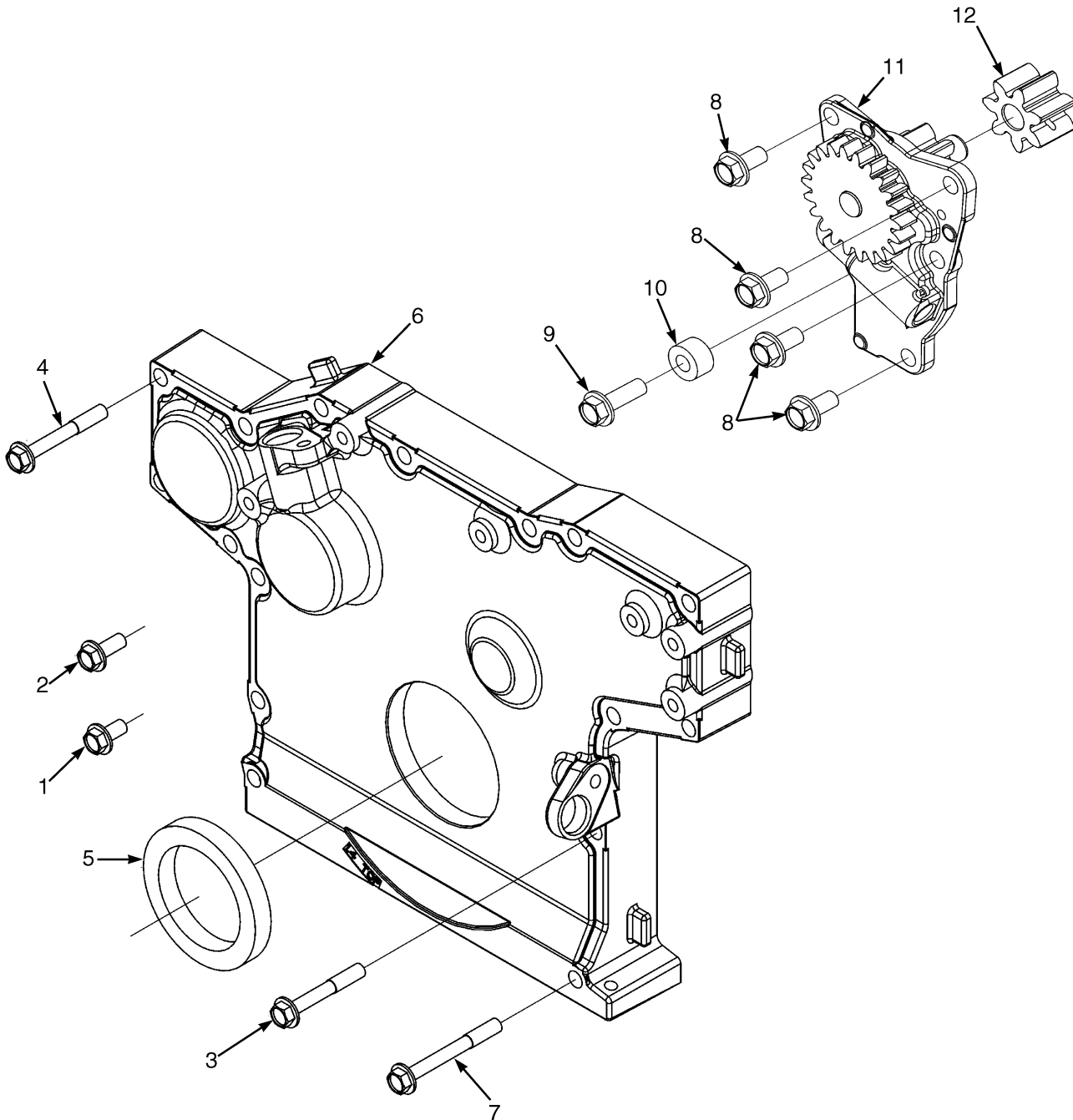
**VIBRATION DAMPER (FIGURE 2-52)  
CUMMINS QSB 3.3L DIESEL**



BP090400

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1691614	Capscrew .....	1
2	1691615	Capscrew .....	4
3	1691624	Plate .....	1
4	1691625	Crankshaft Pulley .....	1
5	1691626	Ring (Speed Indicator) .....	1

## OIL PUMP AND FRONT GEAR COVER (FIGURE 2-53) CUMMINS QSB 3.3L DIESEL

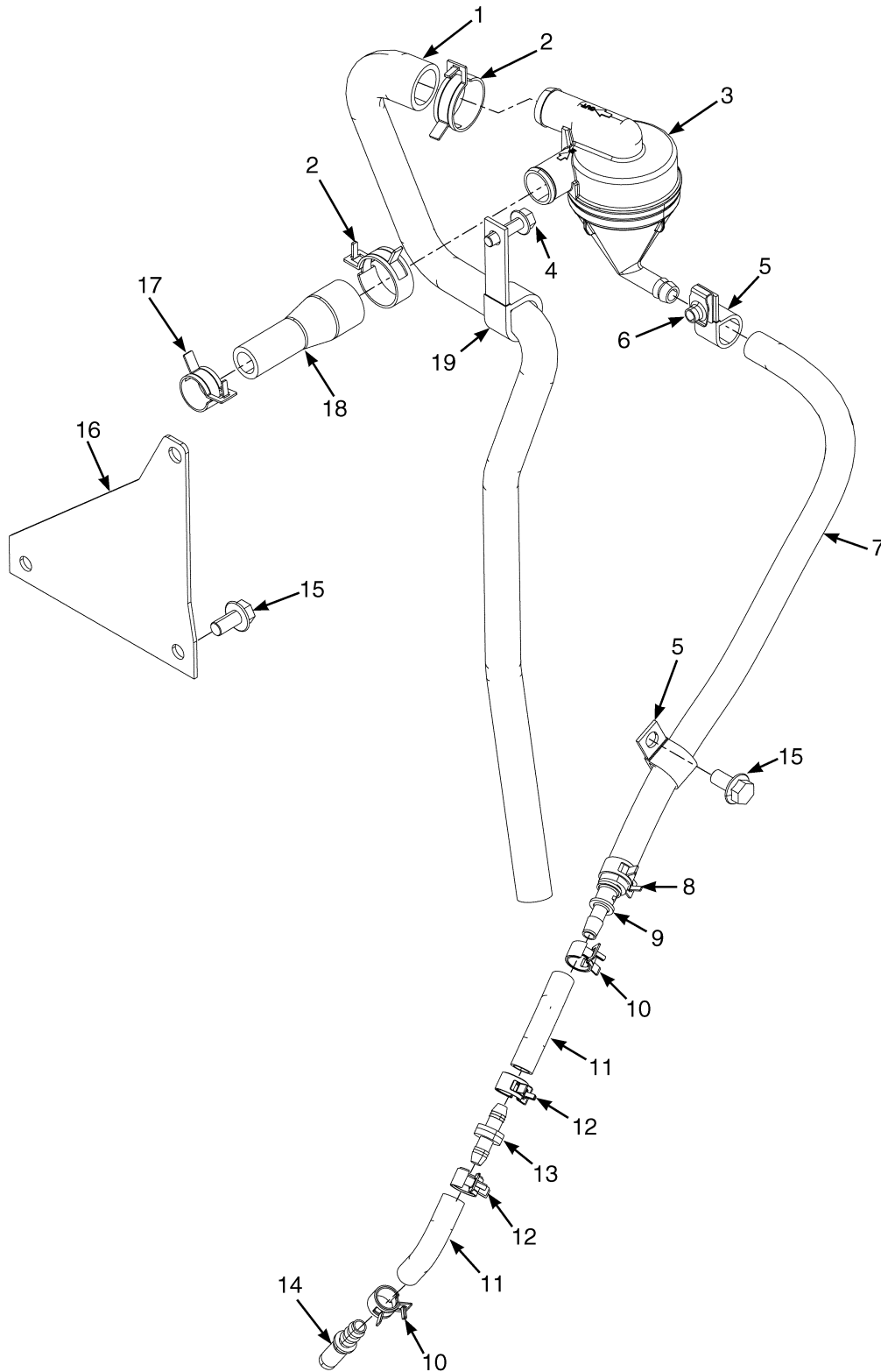


BP090143

**OIL PUMP AND FRONT GEAR COVER  
CUMMINS QSB 3.3L DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1691853	Capscrew .....	2
2	1691869	Capscrew .....	2
3	1691830	Capscrew .....	6
4	1691831	Capscrew .....	8
5	1691832	Oil Seal .....	1
6	1691833	Cover .....	1
7	1691834	Capscrew .....	2
8	1691853	Capscrew .....	4
9	<del>1691854</del>		
	1597807	Capscrew (Flange) .....	1
10	1691856	Spacer .....	1
11	1691857	Oil Pump .....	1
12	1691855	Gear .....	1

## CRANKCASE BREATHER (FIGURE 2-54) CUMMINS QSB 3.3L DIESEL

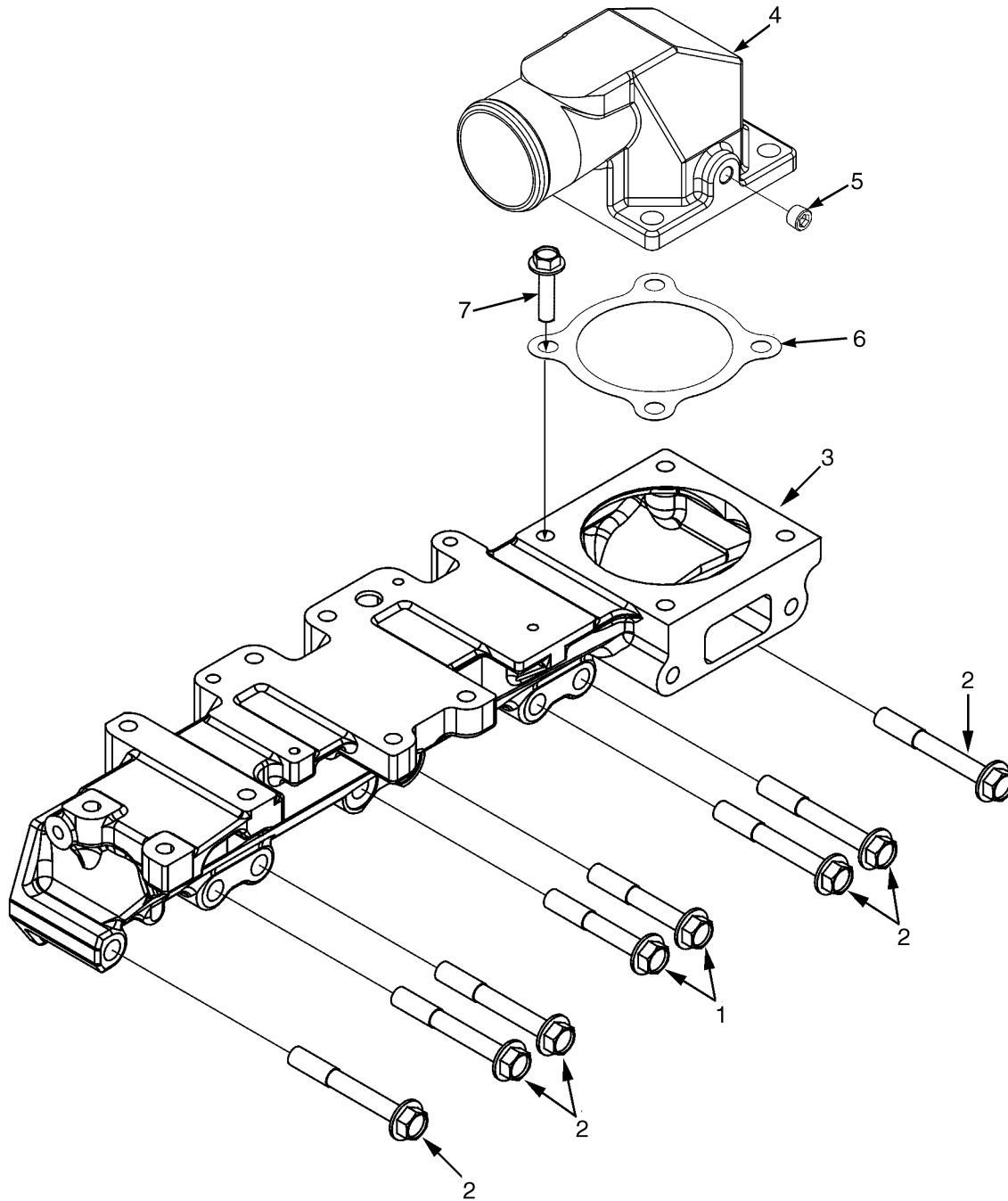


BP090398

**CRANKCASE BREATHER  
CUMMINS QSB 3.3L DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
1	2102765	Hose .....	1
2	1527980	Hose Clamp .....	2
3	1676948	Separator .....	1
4	1527881	Capscrew .....	1
5	173247	Clamp .....	2
6	1480237	Nut .....	1
7	1686731	Hose .....	1
8	1502006	Hose Clamp .....	1
9	1677717	Reducer .....	1
10	1502004	Hose Clamp .....	1
11	1473099	Hose .....	2
12	1569616	Hose Clamp .....	4
13	1677426	Check Valve .....	1
14	1687413	Fitting .....	1
15	1527883	Capscrew .....	3
16	1676949	Bracket .....	1
17	1501994	Hose Clamp .....	1
18	2102767	Hose .....	1
19	1399400	Clamp .....	1

## AIR INTAKE MANIFOLD (FIGURE 2-55) CUMMINS QSB 3.3L DIESEL



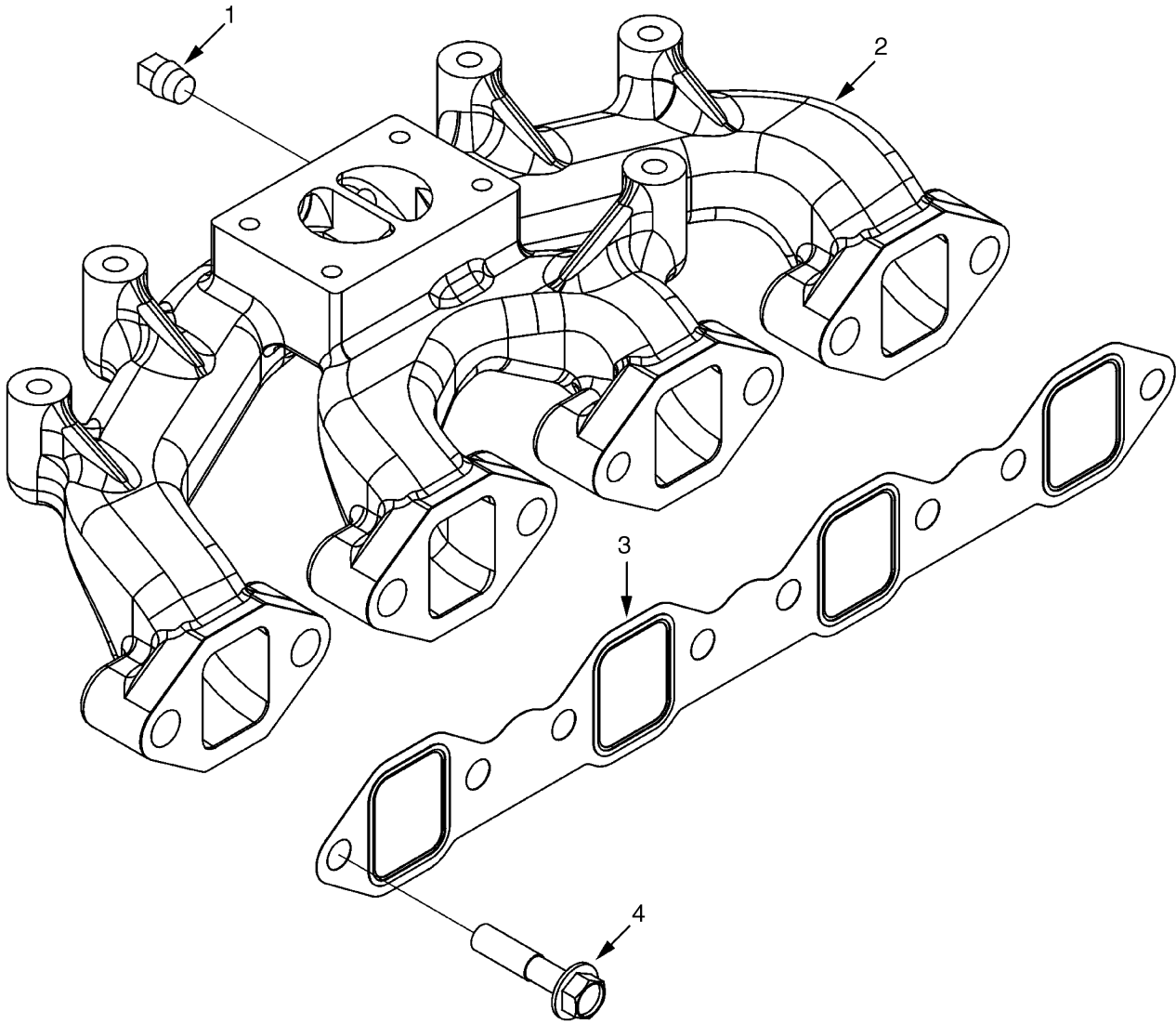
BP090258



**AIR INTAKE MANIFOLD  
CUMMINS QSB 3.3L DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1691839	Capscrew .....	2
2	1691840	Capscrew .....	6
3	1691645	Intake Manifold .....	1
4	1691838	Connector (Air Intake) .....	1
5	1513191	Fitting .....	1
6	1691577	Gasket .....	1
7	1691835	Capscrew .....	4

**EXHAUST MANIFOLD (FIGURE 2-56)**  
**CUMMINS QSB 3.3L DIESEL**

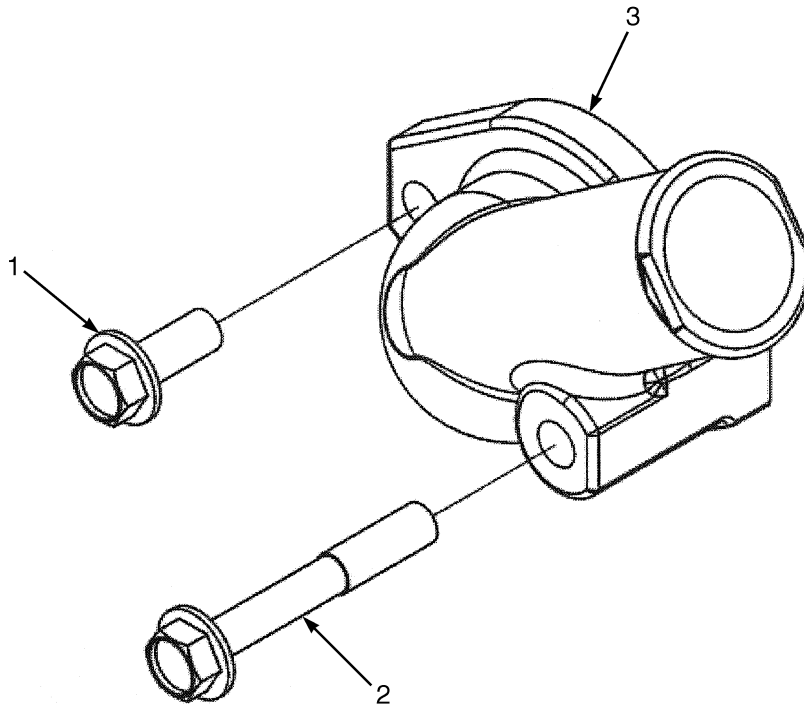


BP090259

**EXHAUST MANIFOLD  
CUMMINS QSB 3.3L DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1692009	Plug .....	1
2	1692010	Exhaust Manifold .....	1
3	1692008	Gasket .....	1
4	1644113	Capscrew .....	7

## WATER OUTLET CONNECTION (FIGURE 2-57) CUMMINS QSB 3.3L DIESEL



BP090455

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1691869	Capscrew .....	1
2	1691830	Capscrew .....	1
3	1692046	Connector (Water Outlet) .....	1

**3**

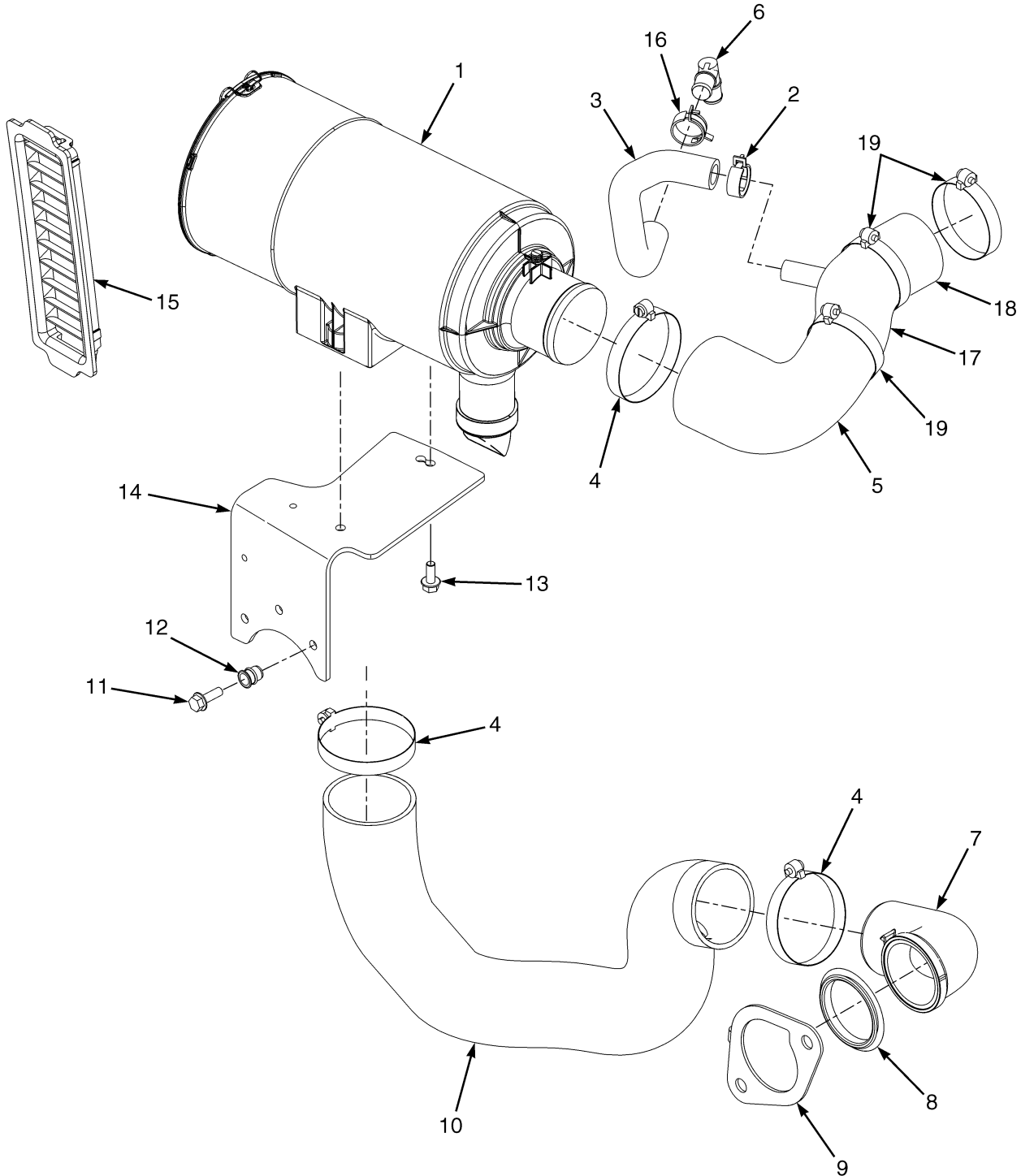
**FUEL SYSTEM**



**SECTION 3  
FUEL SYSTEM**

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## AIR CLEANER (FIGURE 3-1) GM 4.3L LPG — GFI OPTION



BP130289

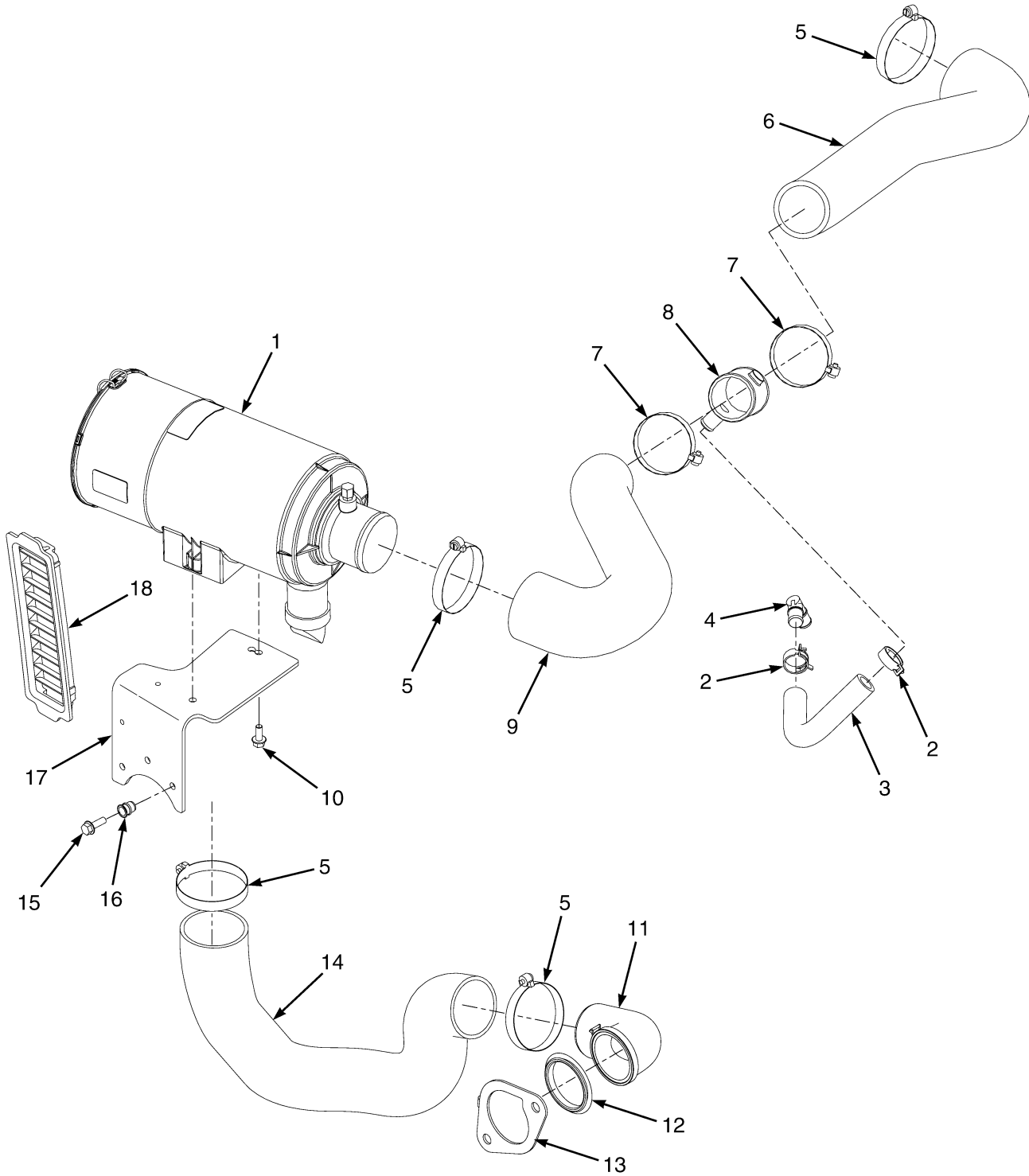


**AIR CLEANER**  
**GM 4.3L LPG – GFI OPTION**

ITEM	PART NO.	DESCRIPTION	QTY
1	<b>a</b> 2105572	Air Filter (☞ Figure 3-6).....	1
1	<b>b</b> 4613023	Air Filter (☞ Figure 3-6).....	1
2	353199	Clamp .....	1
3	1579660	Hose (PVC Vent) .....	1
4	115696	Hose Clamp .....	3
5	<del>2098440</del> 2085423	Hose (Clean Air) (Clean Air) .....	1
6	379407	Fitting .....	1
7	1581438	Elbow .....	1
8	1502079	Grommet .....	1
9	1650184	Retainer .....	1
10	2076637	Hose (Dirty Air) .....	1
11	1510113	Capscrew .....	3
12	1530243	Insert .....	3
13	1527879	Capscrew .....	2
14	1666746	Bracket (Air Cleaner) .....	1
15	2067476	Grill .....	1
16	1501997	Hose Clamp .....	1
17	1661665	Coupler (PCV) .....	1
18	2098441	Hose (Clean Air) .....	1
19	112989	Hose Clamp .....	3

**FOOTNOTES:****a** → 8/2011**b** 8/2011 →

## AIR CLEANER (FIGURE 3-2) GM 4.3L LPG — PSI OPTION



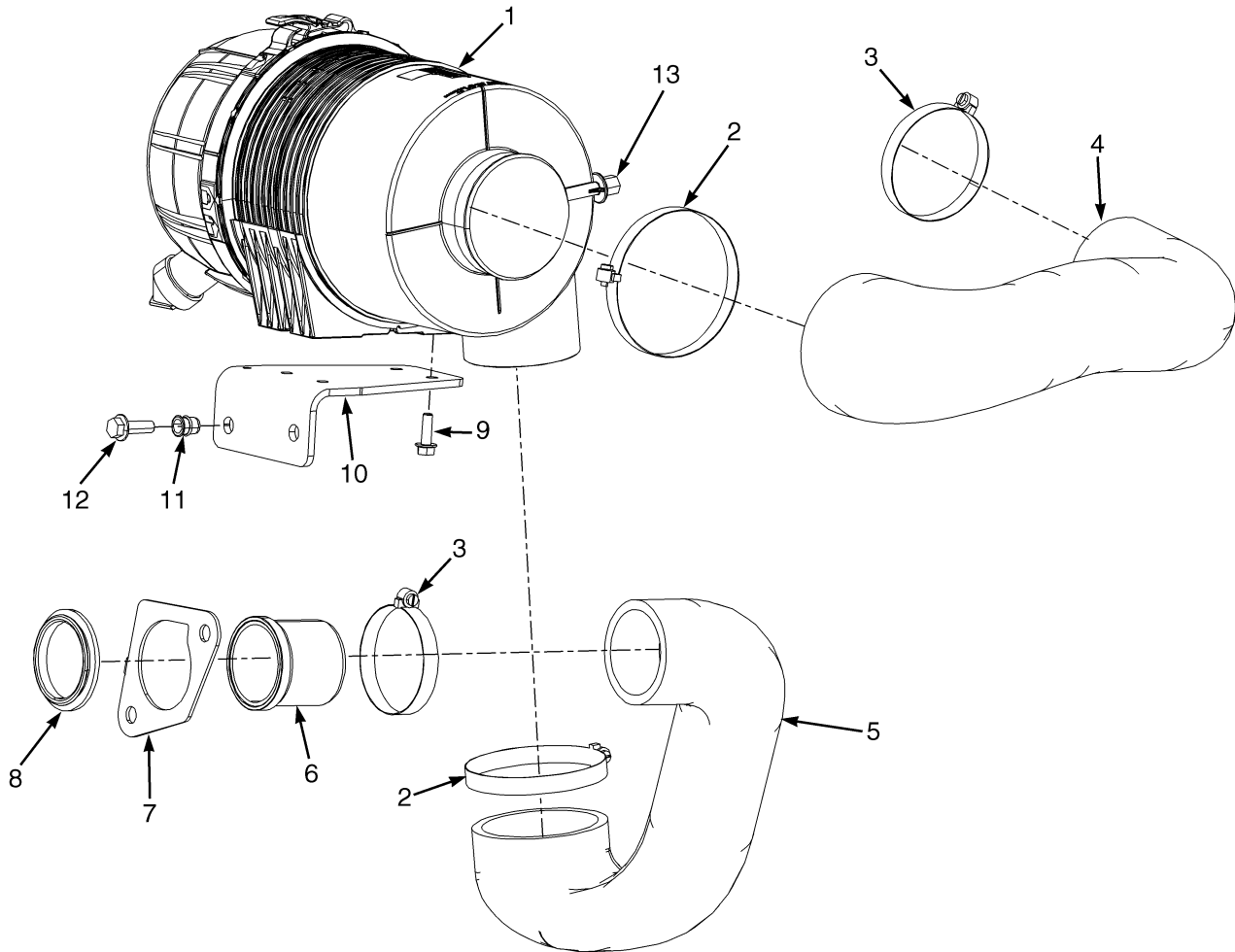
BP130332

**AIR CLEANER**  
**GM 4.3L LPG – PSI OPTION**

ITEM	PART NO.	DESCRIPTION	QTY
1	4613023	Air Filter (☞ Figure 3-6).....	1
2	1502009	Hose Clamp .....	2
3	<del>4615235</del>		
	4616201	Hose .....	1
4	379407	Fitting .....	1
5	115696	Hose Clamp .....	4
6	4615352	Hose (Clean Air) .....	1
7	112989	Hose Clamp .....	2
8	1661665	Coupler (PCV) .....	1
9	4615353	Hose (Clean Air) .....	1
10	1527879	Capscrew .....	2
11	1581438	Elbow (Air Intake) .....	1
12	1502079	Grommet .....	1
13	1650184	Retainer (Elbow) .....	1
14	2076637	Hose (Dirty Air) .....	1
15	1510113	Capscrew .....	3
16	1530243	Insert .....	3
17	1666746	Bracket (Air Cleaner) .....	1
18	2067476	Grill .....	1
	<b>a</b> 1543842	Clamp .....	1
	<b>a</b> 1502061	Clamp .....	1

**FOOTNOTES:****a** Not Illustrated

## AIR CLEANER (FIGURE 3-3) CUMMINS QSB 3.3L DIESEL

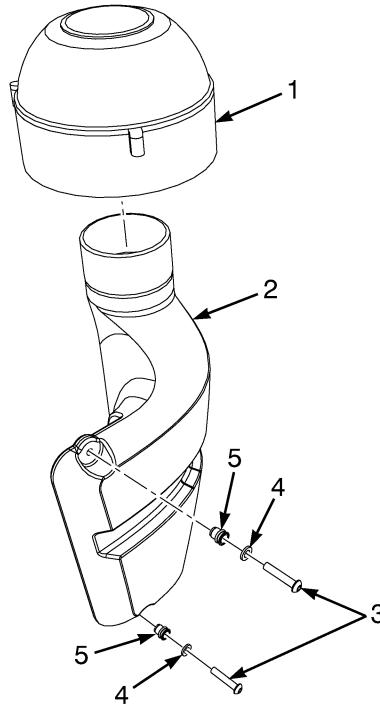


BP130053

**AIR CLEANER  
CUMMINS QSB 3.3L DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
1	2098998	Air Filter .....	1
1	2103627	Filter Element .....	1
1	1689294	Kit-Cover .....	1
2	227220	Clamp .....	2
3	115696	Hose Clamp .....	2
4	2099001	Hose .....	1
5	2099000	Hose (Dirty Air) .....	1
6	1664489	Adapter .....	1
7	1650184	Retainer .....	1
8	1502079	Grommet .....	1
9	1510113	Capscrew .....	4
9	1527879	Capscrew (Alternate Part) .....	4
10	1692283	Bracket .....	1
11	1530244	Insert .....	2
12	1527884	Capscrew .....	2
13	1703650	Plug .....	1

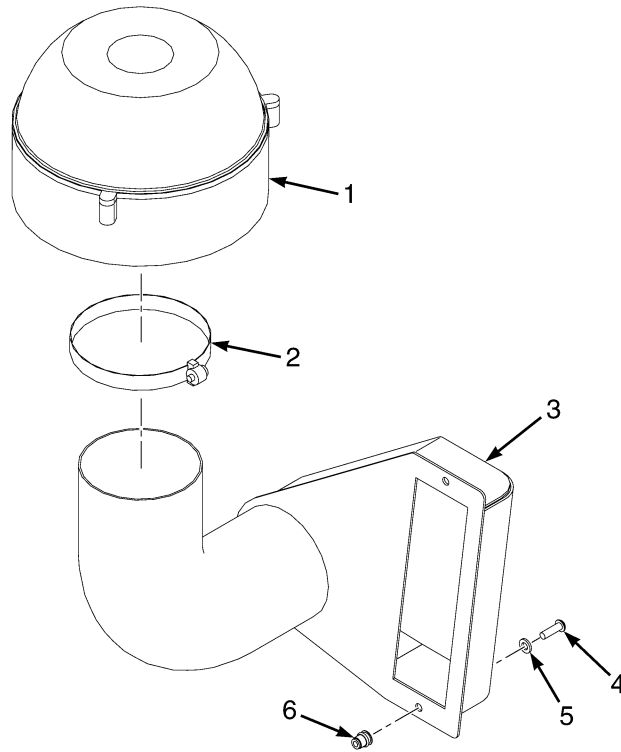
## PRE-CLEANER AND MOUNT (FIGURE 3-4)



BP130014

ITEM	PART NO.	DESCRIPTION	QTY
1	2102887	Pre-Cleaner .....	1
1	1678215	Clamp .....	1
2	1677385	Duct .....	1
3	2071261	Capscrew .....	2
4	1506738	Washer .....	2
5	1531558	Insert .....	2

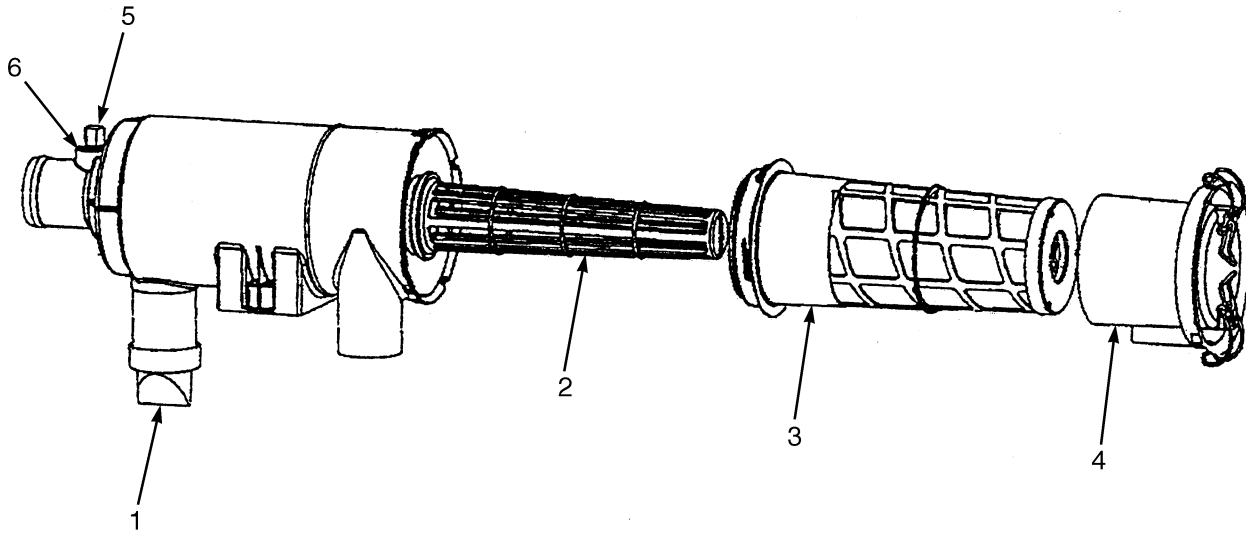
**PRE-CLEANER AND MOUNT (FIGURE 3-5)  
DIESEL ENGINE — WITH AIR CONDITIONING**



BP130327

ITEM	PART NO.	DESCRIPTION	QTY
1	2102887	Pre-Cleaner .....	1
2	1678215	Clamp .....	1
3	4019931	Air Duct .....	1
4	353144	Capscrew .....	2
5	1506738	Washer .....	2
6	1531558	Insert .....	2

## AIR FILTER (FIGURE 3-6)



BP130113

ITEM	PART NO.	DESCRIPTION	QTY
	<b>a</b> 2105572	Air Filter .....	1
	<b>b</b> 4613023	Air Filter .....	1
1	374923	Valve .....	1
2	1620145	Inner Liner Assy (Cage) .....	1
3	1620142	Filter Element .....	1
4	1688547	Cover .....	1
5	141331	Cap .....	1
6	<b>b</b> 4030497	Connector (Pipe Nipple) .....	1

### FOOTNOTES:

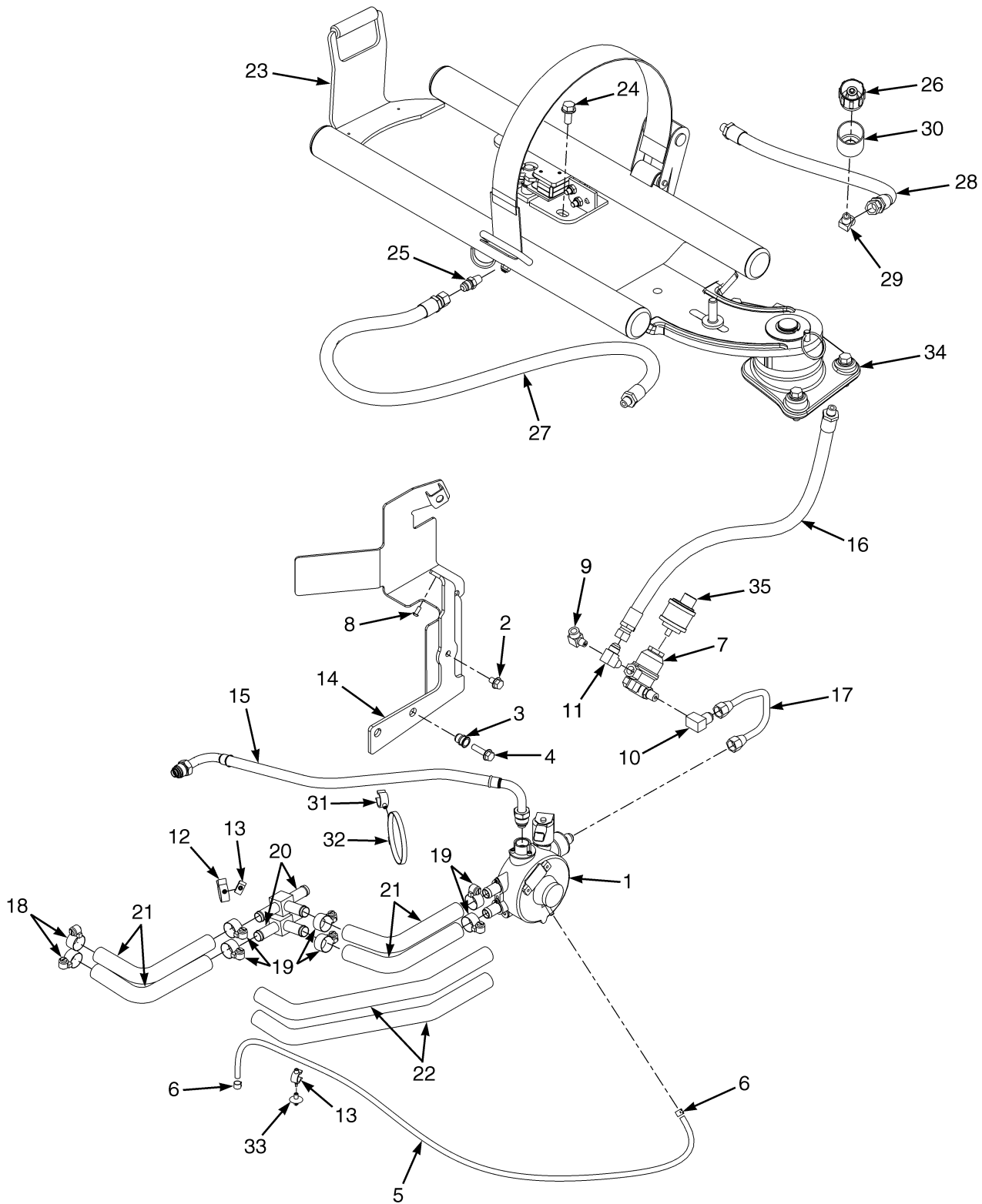
**a** → 8/2011

**b** 8/2011 →





## FUEL SYSTEM (FIGURE 3-7) GM 4.3L LPG — GFI OPTION



BP130281

**FUEL SYSTEM**  
**GM 4.3L LPG – GFI OPTION****KEY:****A: With Overhead Guard or PVC Door Cab****B: With Steel Door Cab**

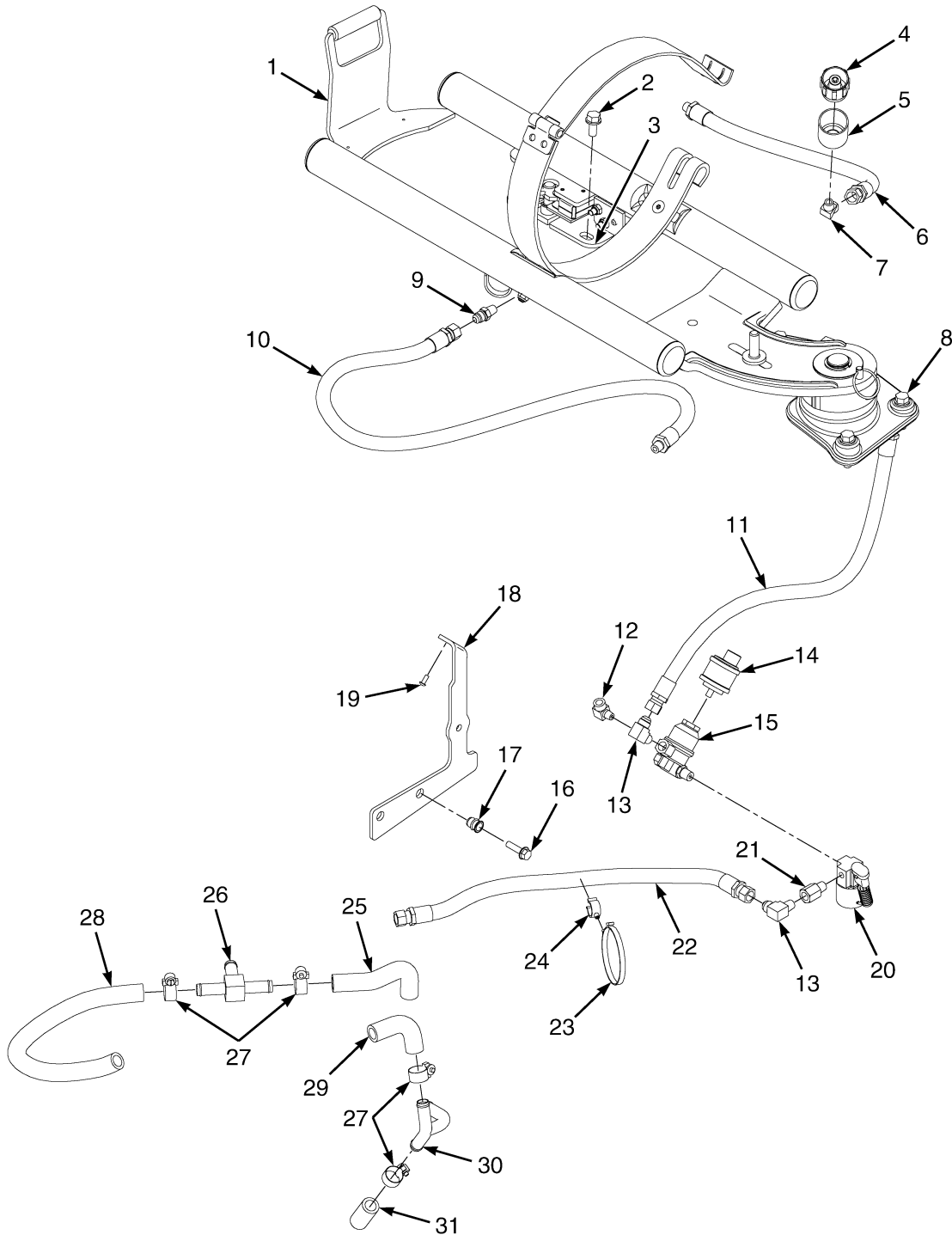
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	<b>d</b> 2056762			
	4602051	LPG Converter (☞ Figure 3-12).....	1	1
2	1529366	Capscrew .....	1	1
3	1530243	Insert .....	2	2
4	1527881	Capscrew .....	2	2
5	1399437	Hose .....	1	1
6	366473	Clamp .....	2	2
7	<b>e</b> 2105803	Fuel Filter (LPG) .....	1	1
7	<b>e</b> 1689544	Kit-Filter Element .....	1	1
8	296152	Capscrew .....	2	2
9	<b>b</b> 16151	Fitting .....	1	1
9	<b>a</b> 14349	Fitting (Pipe Plug) (Not Shown) .....	1	1
10	<b>b</b> 14372	Fitting .....	1	1
10	<b>a</b> 17314	Fitting (Not Shown) .....	1	1
11	14358	Fitting .....	1	1
12	1542436	Clamp .....	1	1
13	1542439	Clamp (Swivel) .....	1	1
14	1592287	Bracket .....	1	1
15	2072631	Hose .....	1	1
15	1698684	Kit-O-Ring .....	1	1
16	2059895	Hose Assy .....	1	1
17	<b>b</b> 1568749	Tube .....	1	1
17	<b>a</b> 2110915	Tube Assy .....	1	1
18	130845	Clamp .....	..	8
19	130845	Clamp .....	4	..
20	366000	Fitting .....	..	2
21	2078950	Coolant Hose .....	..	4
22	2071009	Coolant Hose .....	2	..
23	1664036	Lpg Tank Bracket (Swing Out) .....	1	1
23	1664038	LPG Tank Bracket (EZ-Lift) .....	1	1
24	1586013	Capscrew .....	4	4
25	16134	Fitting .....	2	2
26	97999	Fitting .....	1	1
27	2072298	Hose Assy .....	1	1
28	2058426	Hose Assy .....	1	1
29	16863	Fitting (Swing Out) .....	1	1
30	2071517	Sleeve .....	1	1
31	1502061	Clamp .....	1	1
32	1502059	Clamp .....	1	1
33	1543842	Clamp .....	1	1
34	1581400	Capscrew .....	3	3
35	1501970	Pressure Switch (Low Fuel) .....	1	1
	<b>ac</b> 1662253	Sensor (Vapor) .....	1	1

**FOOTNOTES:**

- |          |   |          |                   |
|----------|---|----------|-------------------|
| <b>a</b> | For use only with premium low fuel sensor.    | <b>d</b> | S/N P005B02378G → |
| <b>b</b> | For use only without premium low fuel sensor. | <b>e</b> | 8/2008 →          |
| <b>c</b> | Not Illustrated                               |          |                   |



## FUEL SYSTEM (FIGURE 3-8) GM 4.3L LPG — PSI OPTION



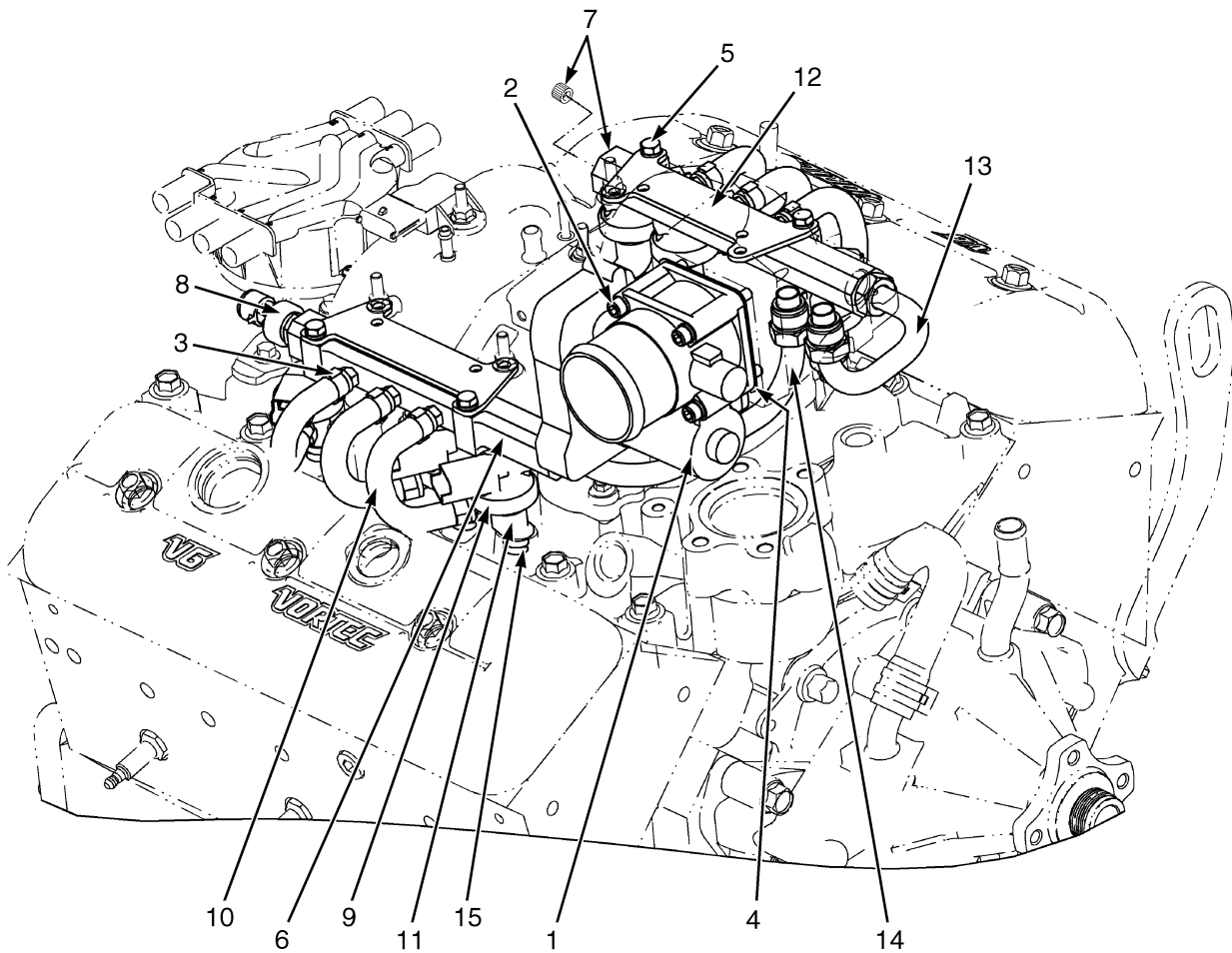
BP130330

**FUEL SYSTEM**  
**GM 4.3L LPG – PSI OPTION**

ITEM	PART NO.	DESCRIPTION	QTY
1	1664035	Lpg Tank Bracket .....	1
1	1664037	Lpg Tank Bracket (Swing Out/Drop Down) .....	1
2	1586013	Capscrew .....	3
3	1682752	Striker .....	1
4	97999	Fitting .....	1
5	2071517	Sleeve .....	1
6	2111874		
	4607258		
	4609648	Hose Assy .....	1
7	14358	Fitting .....	1
8	1581400	Capscrew .....	3
9	16134	Fitting .....	2
10	2072298	Hose Assy .....	1
11	2059895	Hose Assy .....	1
12	<b>b</b> 14349	Fitting (Pipe Plug) .....	1
12	<b>c</b> 16151	Fitting .....	1
13	14358	Fitting .....	2
14	1501970	Pressure Switch (Low Fuel) .....	1
15	2105803	Fuel Filter (LPG) .....	1
16	1527881	Capscrew .....	2
17	1530243	Insert .....	2
18	4044081	Bracket .....	1
19	296152	Capscrew .....	2
20	<b>b</b> 1662253	Sensor .....	1
21	12855	Fitting .....	1
22	4616993	Hose Assy .....	1
23	1502061	Clamp .....	1
24	1502059	Clamp .....	1
25	4615671	Hose .....	1
26	366000	Fitting .....	1
27	130845	Clamp .....	4
28	4615672	Hose .....	1
29	4615669	Hose .....	1
30	4615673	Tube .....	1
31	4615670	Hose .....	1
	<b>ac</b> 17350	Fitting .....	1
	<b>a</b> 1687376	Sealant .....	AR
	<b>a</b> 246108	Sealant .....	AR
	<b>a</b> 1687377	Activator .....	AR
	<b>a</b> 1688803	Shim .....	AR
	<b>a</b> 246108	Sealant .....	AR

**FOOTNOTES:****a** Not Illustrated**b** With premium low fuel sensor**c** Without premium low fuel sensor

## THROTTLE BODY ASSEMBLY (FIGURE 3-9) GM 4.3L LPG — 2007-2009 SERIES (→ S/N P005B02545H)



BP090275



**THROTTLE BODY ASSEMBLY**  
**GM 4.3L LPG – 2007-2009 SERIES (→ S/N P005B02545H)**

ITEM	PART NO.	DESCRIPTION	QTY
1	1557547	Throttle Body .....	1
2	1540643	Capscrew .....	4
3	1557566	Hose Clamp .....	12
4	1557551	Gasket (Throttle Body) .....	1
5	1527876	Capscrew .....	4
6	1632297	Fuel Rail .....	1
6	1632298	Fuel Rail .....	1
7	<b>c</b> 15347	Fitting .....	1
8	<b>a</b> 1632300	Sensor (Fuel Air Pressure) .....	1
9	1557560	Injector (LPG) .....	6
10	1632301	Hose .....	6
11	1632302	Adapter .....	6
12	1632303	Bracket .....	2
13	1632304	Tube Assy .....	1
14	1632305	Tube Assy .....	1
15	1557565	O-Ring .....	6
	<b>b</b> 1632307	Bracket .....	2

**FOOTNOTES:**

- a** Left Rail Only  
**b** Not Illustrated

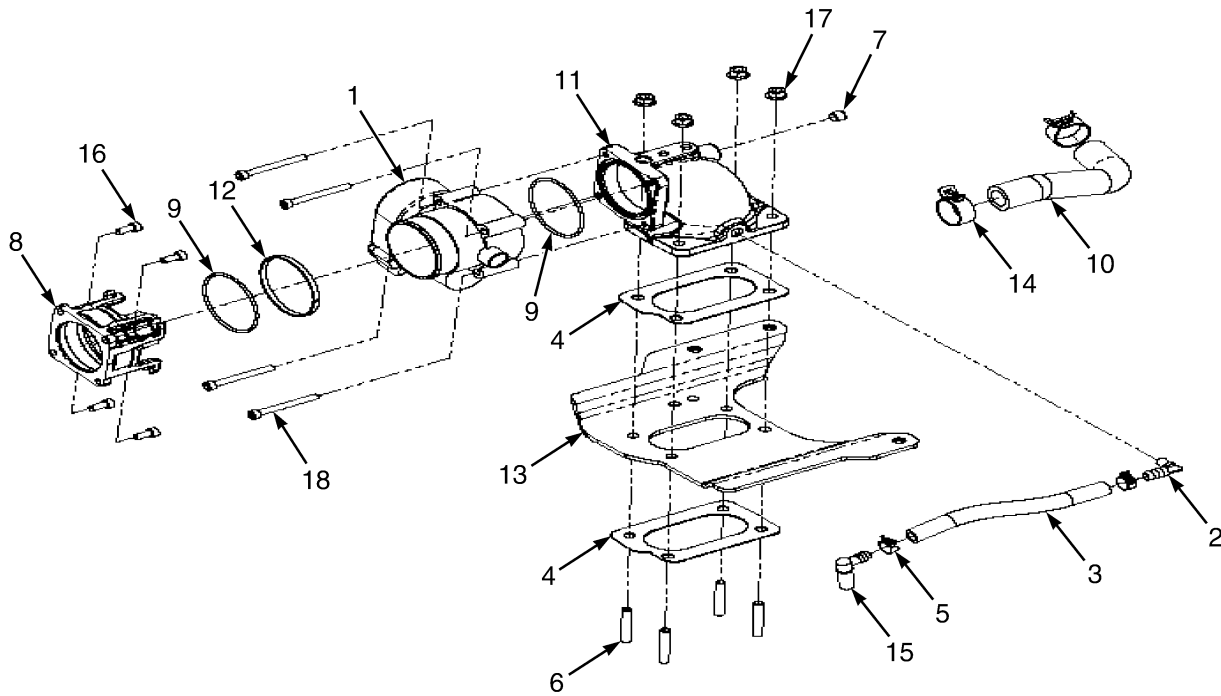
- c** Right Rail Only



**THROTTLE BODY ASSEMBLY**  
**GM 4.3L LPG – 2010 GFI SERIES (S/N P005B02546H →)**

ITEM	PART NO.	DESCRIPTION	QTY
1	1557547	Throttle Body .....	1
2	1557551	Gasket (Throttle Body) .....	1
3	1540643	Capscrew .....	4
4	1632305	Tube Assy .....	1
5	1632304	Tube Assy .....	1
6	4013329	Bracket .....	2
7	4013328	Fuel Rail (LH) .....	1
8	1527876	Capscrew .....	8
9	4013327	Fuel Rail (RH) .....	1
10	1632300	Sensor (Fuel Air Pressure) .....	1
11	4013301	Injector .....	6
12	4013302	O-Ring .....	6
13	4013303	O-Ring .....	6
14	4013299	O-Ring .....	6
15	4013304	Adapter .....	6
15	1557565	O-Ring .....	6
15	1632306	Lubricant .....	AR
16	15347	Fitting .....	1
	246108	Sealant .....	AR

## THROTTLE BODY ASSEMBLY (FIGURE 3-11) GM 4.3L LPG — PSI OPTION

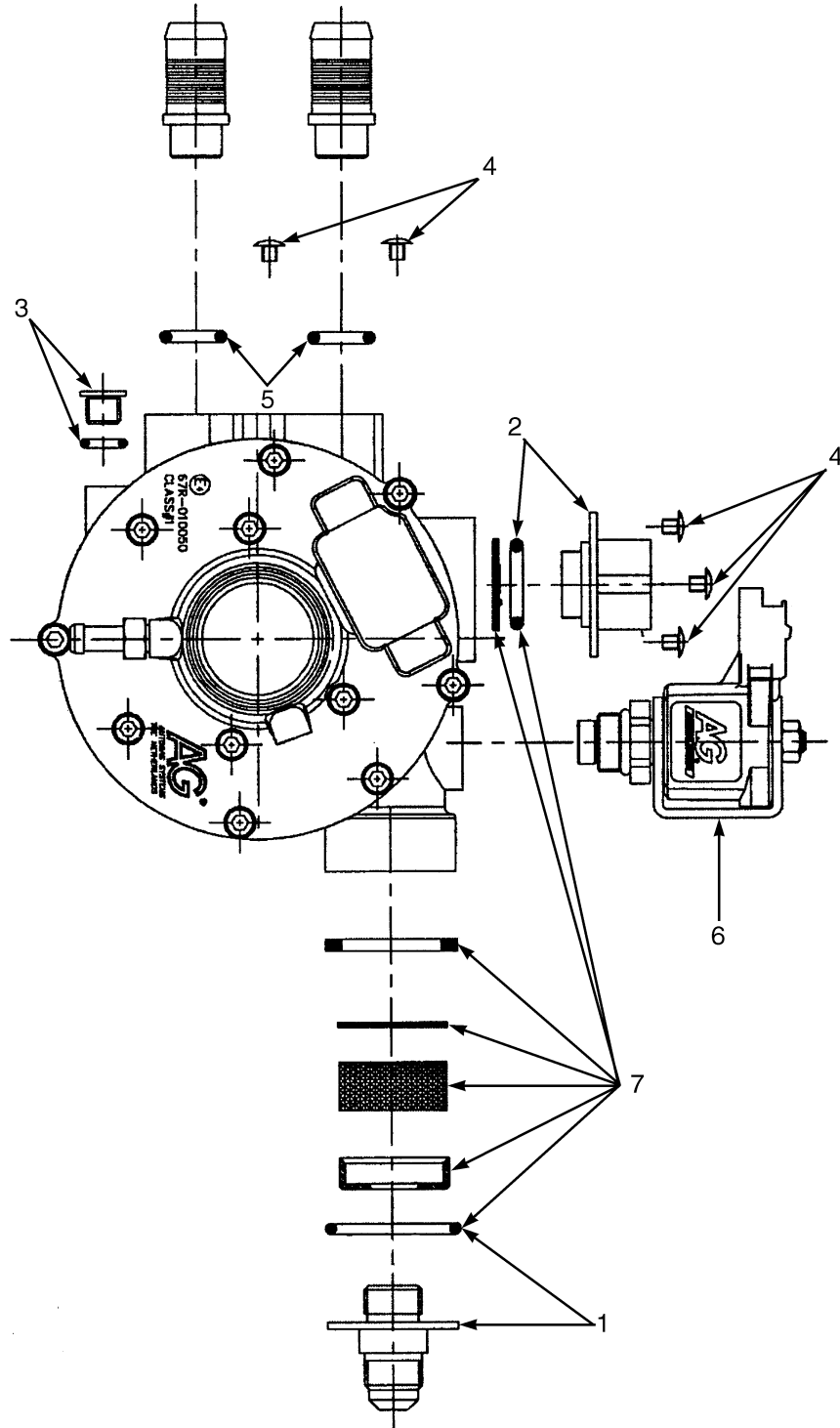


BP130338

ITEM	PART NO.	DESCRIPTION	QTY
1	4019103	Throttle Body .....	1
2	4040263	Fitting .....	1
3	4040264	Hose (8 in.) .....	1
4	4040265	Gasket .....	2
5	4019090	Clamp .....	2
6	4019104	Stud .....	4
7	4019120	Plug .....	1
8	4019105	Adapter .....	1
9	4019106	O-Ring .....	2
10	4040250	Hose .....	1
11	4040266	Adapter .....	1
12	4019107	Spacer .....	1
13	4040267	Bracket .....	1
14	4019099	Clamp .....	2
15	4040268	Fitting .....	1
16	293774	Capscrew .....	4
17	191534	Nut .....	4
18	296003	Screw .....	4



## REGULATOR (FIGURE 3-12) GM 4.3L LPG — GFI OPTION

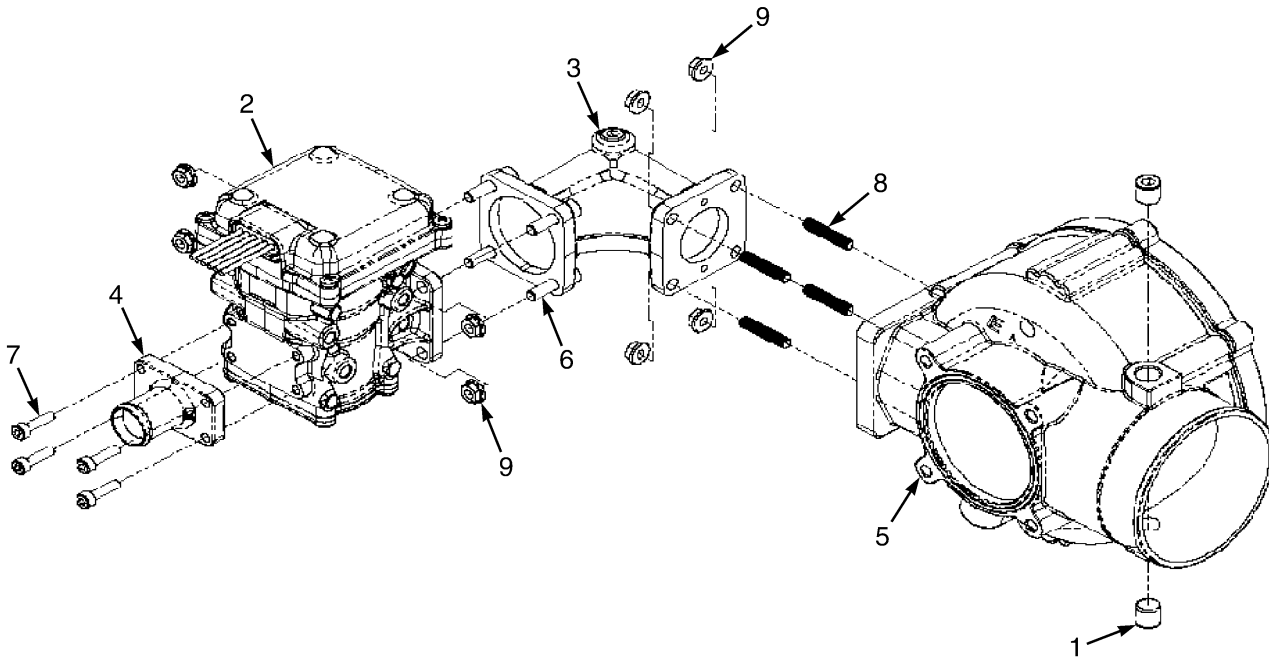


HP130352

**REGULATOR**  
**GM 4.3L LPG – GFI OPTION**

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 (With Connector Screw) .....	1
5	1585748	Kit-O-Ring (With Coolant Fitting O-Ring) .....	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 REGULATOR AND MIXER (FIGURE 3-13) GM 4.3L — PSI OPTION

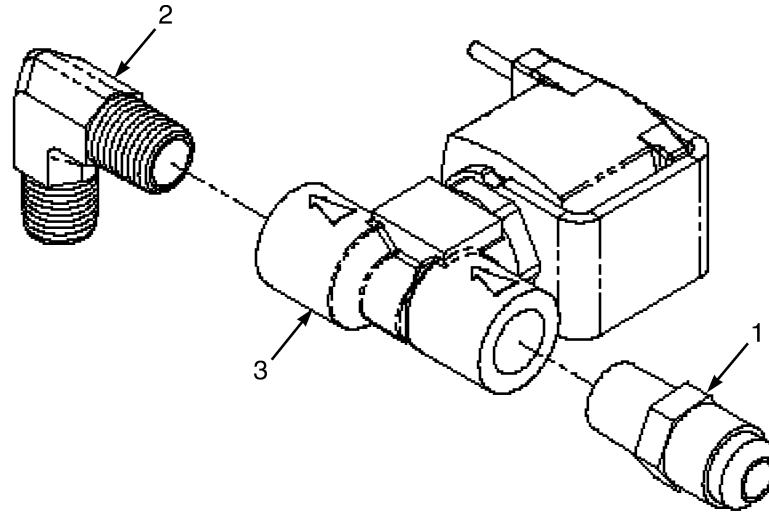


BP130336

ITEM	PART NO.	DESCRIPTION	QTY
1	4019120	Plug .....	2
2	4019119	Regulator .....	1
3	4040270	Adapter .....	1
4	4019118	Fitting .....	1
5	4019117	Carburetor (Mixer) .....	1
5	4051286	Kit-Repair .....	1
6	293744	Screw .....	4
7	292672	Capscrew .....	4
8	4019121	Stud .....	4
9	1565407	Nut .....	8



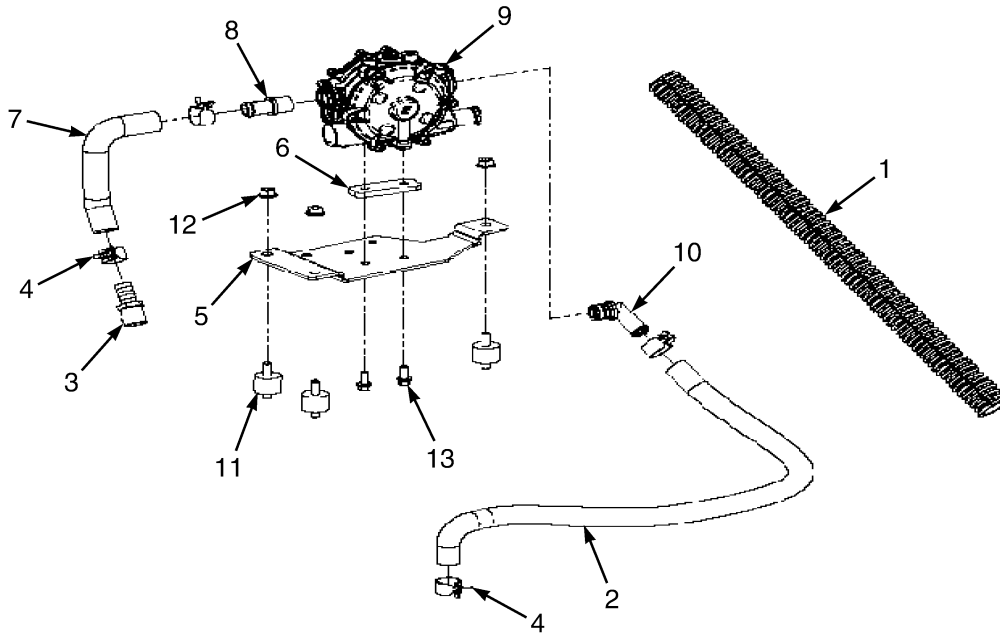
**LPG LOCK OFF (FIGURE 3-14)**  
**GM 4.3L — PSI OPTION**



BP130339

ITEM	PART NO.	DESCRIPTION	QTY
1	4019018	Fitting .....	1
2	4019019	Fitting .....	1
3	4019020	Valve (Lock-Off) .....	1

## LPG CONVERTER (FIGURE 3-15) GM 4.3L LPG — PSI OPTION

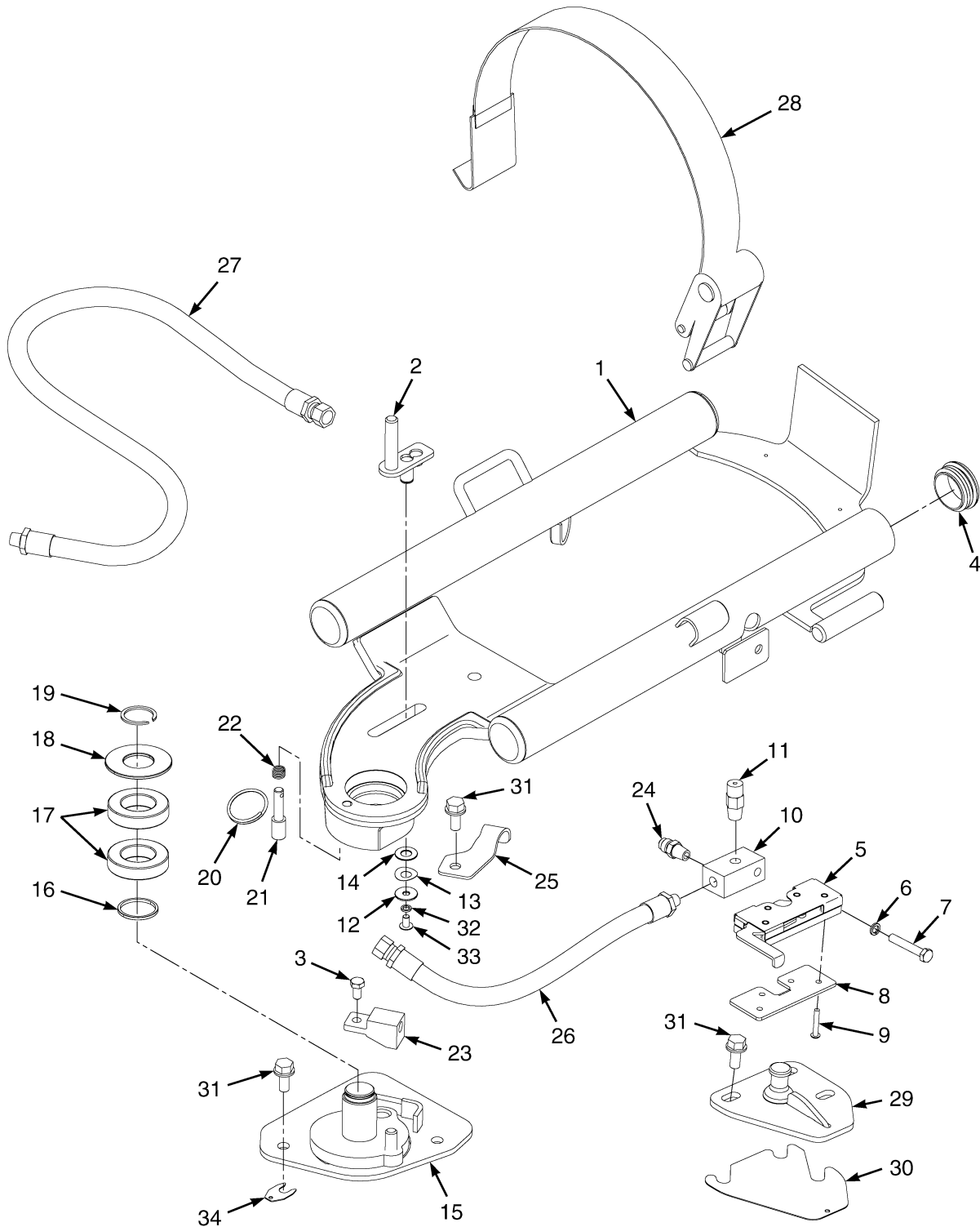


BP130337

ITEM	PART NO.	DESCRIPTION	QTY
1	4040254	Conduit (20 in.) .....	AR
2	4019086	Hose .....	1
3	4040255	Fitting .....	1
4	4019092	Clamp .....	4
5	4040256	Bracket .....	1
6	4040257	Spacer .....	1
7	4040258	Hose .....	1
8	4040259	Fitting .....	1
9	4040260	Regulator .....	1
9	4040288	Kit-Regulator Repair .....	1
10	4040261	Fitting .....	1
11	4040262	Isolator .....	3
12	1382472		
	1502543	Nut (Flange) .....	3
13	1527876	Capscrew .....	2



## LPG TANK BRACKET (FIGURE 3-16) SWING OUT WITH FABRIC STRAP



BP130306

**LPG TANK BRACKET  
SWING OUT WITH FABRIC STRAP**

ITEM	PART NO.	DESCRIPTION	QTY
	1664036	Lpg Tank Bracket .....	1
1	1652238	Lpg Tank Bracket .....	1
2	1651119		
	4032607	Pin .....	1
3	1581579	Capscrew .....	1
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	4032291	Washer .....	1
13	4029538	Washer .....	1
14	4029920	Washer .....	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	1615956	Pin .....	1
22	1528903	Spring .....	1
23	1525451	Fitting .....	1
24	16134	Fitting .....	1
25	1656903	Bracket .....	1
26	2085908	Hose Assy .....	1
27	2072298	Hose Assy .....	1
28	1379455	Strap .....	1
29	1664059	Striker .....	1
29	1682752	Striker (Alternate Part) .....	1
30	1655328	Shim .....	1
31	1586013	Capscrew .....	6
32	4032292	Spacer .....	1
33	4031146	Capscrew .....	1
	a 246108	Sealant .....	1
	a 1687376	Sealant (Alternate Part) .....	1
	a 1687377	Activator (Alternate Part) .....	1

**FOOTNOTES:**

a Not Illustrated



**LPG TANK BRACKET  
SWING OUT, DROP DOWN WITH FABRIC STRAP**

ITEM	PART NO.	DESCRIPTION	QTY
	1664038	LPG Tank Bracket .....	1
1	1664015	Bracket Wldmt .....	1
2	1398099	Plug .....	4
3	1517405	Latch .....	1
4	1534674	Plate .....	1
5	101809	Relief Valve .....	1
6	1581583	Capscrew .....	1
7	1581898	Washer .....	1
8	1534675	Fitting .....	1
9	1581899	Capscrew .....	4
10	1402414	Gas Spring .....	1
11	1581888	Bushing .....	2
12	302468	Roll Pin .....	1
13	4029538	Washer .....	1
14	4029920	Washer .....	1
15	4032291	Washer .....	1
16	1581579	Capscrew .....	1
17	1525451	Fitting .....	1
18	1584083	Bracket Wldmt .....	1
19	1584094	Base .....	1
20	.....	Pivot .....	1
21	1581848	Nut .....	1
22	1586022	Capscrew .....	1
23	1525478	Pin .....	1
24	1615956	Pin .....	1
25	1534672	Ring .....	1
26	1528903	Spring .....	1
27	1581557	Washer .....	2
28	1525442	E-Ring .....	2
29	1581887	Shaft .....	1
30	1615671	Pivot .....	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	1664059	Striker .....	1
36	1682752	Striker (Alternate Part) .....	1
37	16134	Fitting .....	1
38	1581400	Capscrew .....	3
39	1379455	Strap .....	1
40	1586013	Capscrew .....	3
41	4031146	Capscrew .....	1
42	4032292	Spacer .....	1
	a 246108	Sealant .....	1
	a 1687376	Sealant (Alternate Part) .....	1
	a 1687377	Activator (Alternate Part) .....	1

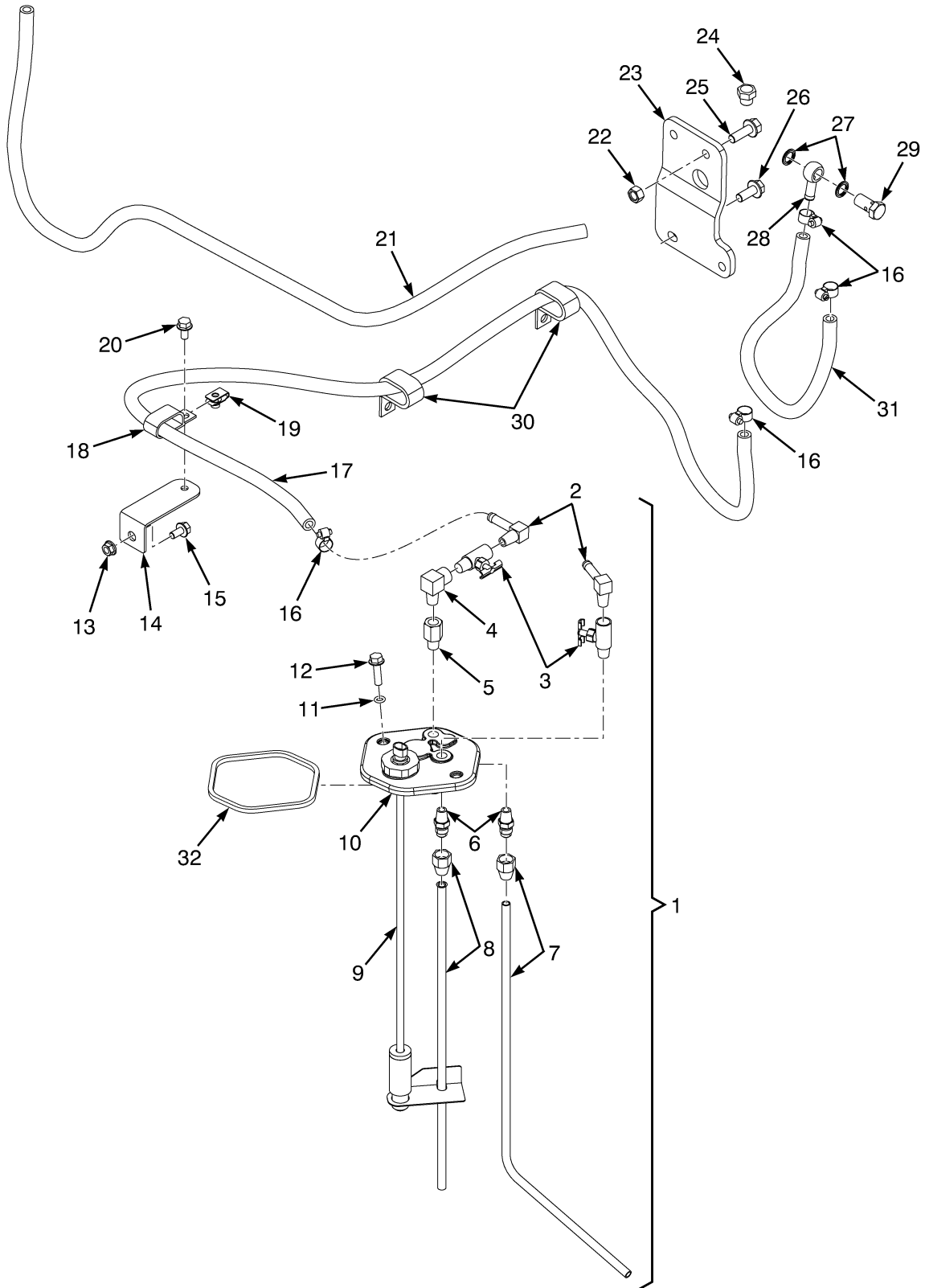
**FOOTNOTES:**

- a Not Illustrated





## FUEL SYSTEM (FIGURE 3-18) CUMMINS QSB 3.3L DIESEL



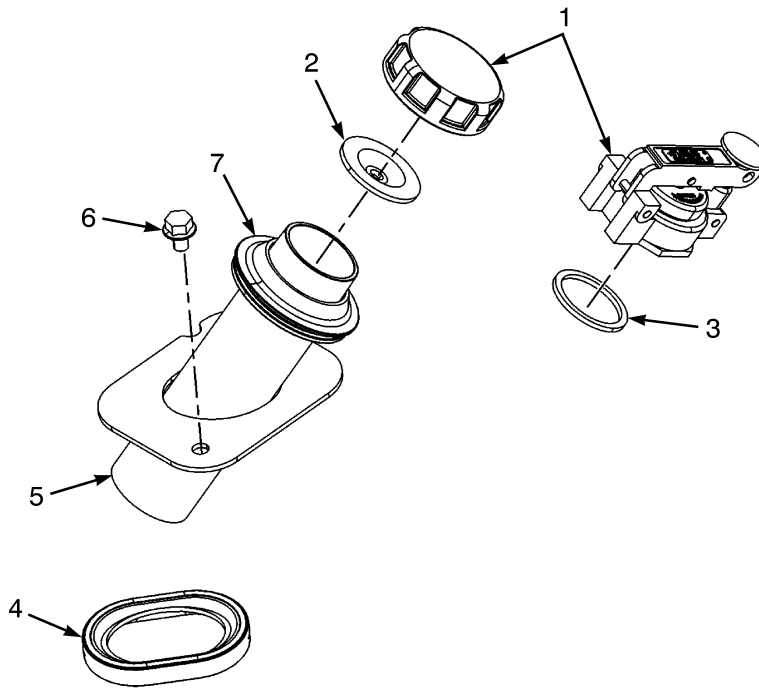
BP130073

**FUEL SYSTEM**  
**CUMMINS QSB 3.3L DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
1	1667300	Fuel Sender .....	1
2	17353	Fitting .....	2
3	16190	Drain Valve (Shutoff) .....	2
4	17314	Fitting .....	1
5	12855	Fitting .....	1
6	16134	Fitting .....	2
7	1638500	Tube .....	1
8	1571662	Tube .....	1
9	1371159	Fuel Sender .....	1
10	1584171	Cover .....	1
11	353000	O-Ring .....	2
12	1527881	Capscrew .....	2
13	<del>1382472</del>		
	1502543	Nut (Flange) .....	1
14	1675311	Bracket .....	1
15	1527879	Capscrew .....	1
16	166857	Clamp .....	6
17	1665258	Hose .....	1
18	110322	Clamp .....	2
19	1480237	Nut .....	3
20	1527880	Capscrew .....	3
21	1665259	Hose .....	1
22	292655	Nut .....	2
23	1675311	Bracket .....	1
24	1668425	Plug .....	1
25	1663739	Bolt .....	2
26	1510117	Capscrew .....	1
27	1513714	Sealing Ring .....	4
28	1673877	Fitting .....	2
29	1673878	Screw .....	2
30	2052903	Clamp .....	2
31	1665260	Hose .....	1
32	1528893	Quad Ring .....	1
	<b>a</b> 1693766	Bracket .....	1
	<b>a</b> 1527892	Capscrew .....	1
	<b>a</b> 1606544	Clamp .....	3
	<b>a</b> 1573549	Clamp .....	1
	<b>a</b> 1502066	Clamp .....	2

**FOOTNOTES:****a** Not Illustrated

## FUEL CAP (FIGURE 3-19) DIESEL



BP130296

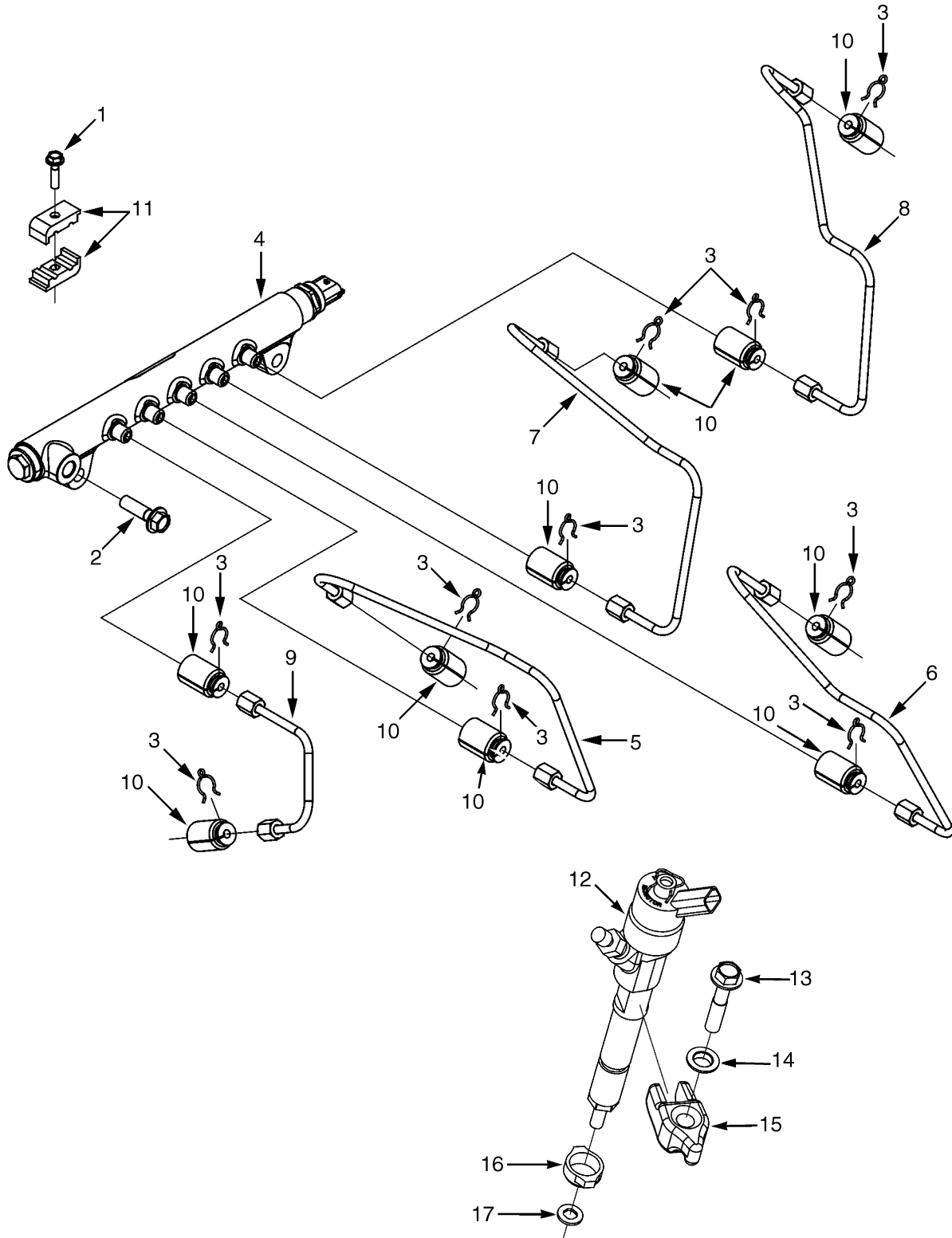
ITEM	PART NO.	DESCRIPTION	QTY
1	2081840	Fuel Cap .....	1
1	<b>a</b> 1579677	Fuel Cap .....	1
2	2021683	Gasket .....	1
3	<b>a</b> 2021685	Gasket .....	1
4	4528314	Seal .....	1
5	1564392	Pipe (Fill) .....	1
6	1529366	Capscrew .....	2
7	1528608	Grommet .....	1

### FOOTNOTES:

**a** Safety Option



## FUEL INJECTOR AND INJECTOR PLUMBING (FIGURE 3-20) CUMMINS QSB 3.3L DIESEL

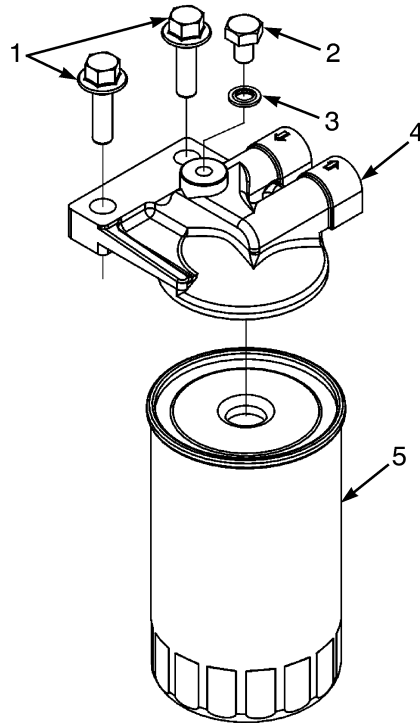


BP130018

**FUEL INJECTOR AND INJECTOR PLUMBING  
CUMMINS QSB 3.3L DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1691886	Capscrew .....	2
2	1691653	Capscrew .....	2
3	1691664	Clip .....	10
4	1691665	Manifold (Fuel Rail) .....	1
5	1691836	Tube (Injector Fuel Supply) .....	1
6	1691872	Tube (Injector Fuel Supply) .....	1
7	1691874	Tube (Injector Fuel Supply) .....	1
8	1691884	Tube (Injector Fuel Supply) .....	1
9	1691982	Tube (Injector Fuel Supply) .....	1
10	1691983	Cover .....	10
11	1691984	Clamp .....	4
12	.....	Injector .....	4
13	1691909	Capscrew .....	4
14	1691911	Washer .....	4
15	1691632	Capscrew .....	4
16	1691608	Dust Seal .....	4
17	1691912	Gasket .....	4
18	1691914	Kit-Injector .....	4

## FUEL FILTER (FIGURE 3-21) CUMMINS QSB 3.3L DIESEL



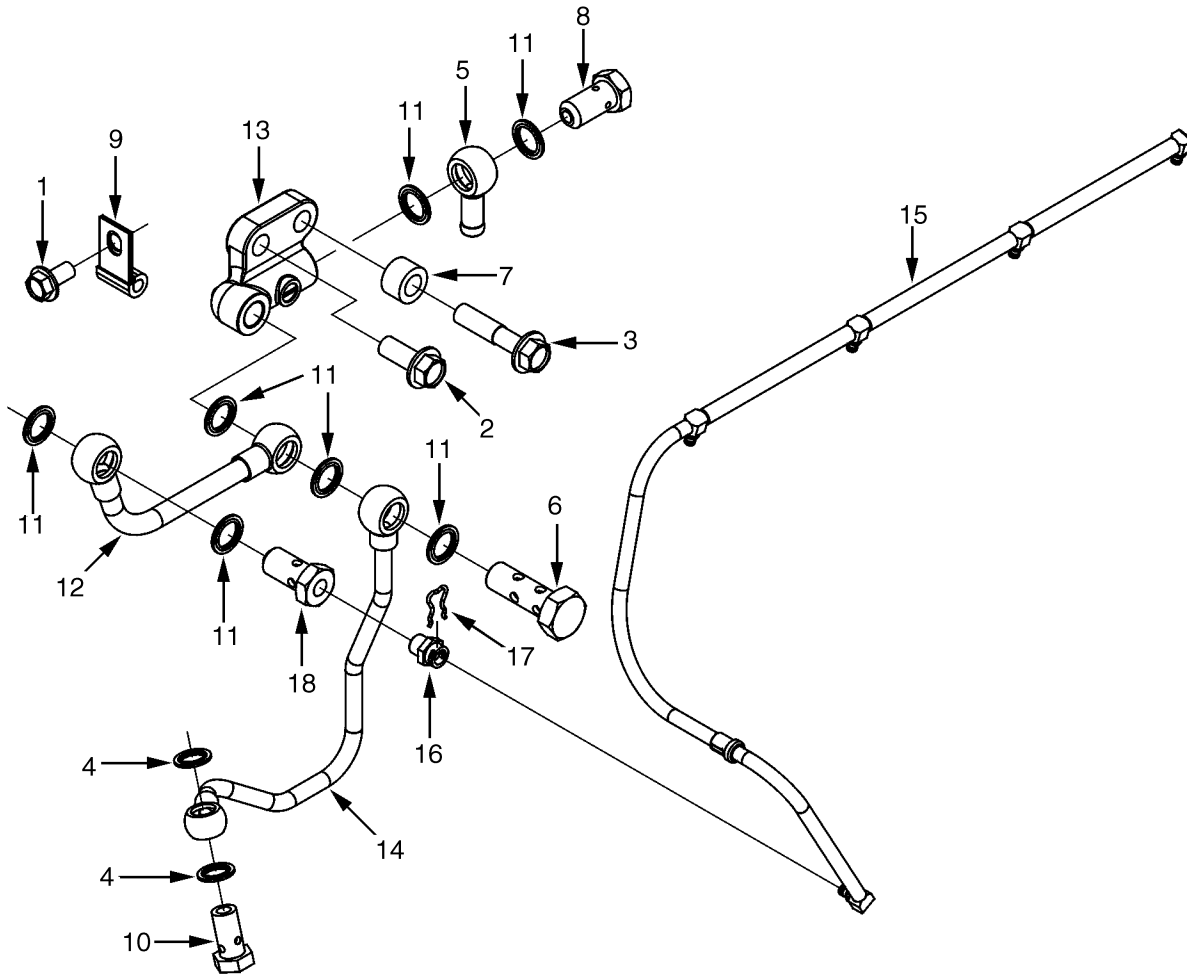
BP130150

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1543337	Capscrew .....	1
2	1691649	Plug .....	1
3	1691650	Washer .....	1
4	1691651	Filter Head .....	1
5	1691652	Fuel Filter .....	1





## FUEL PUMP PLUMBING (FIGURE 3-22) CUMMINS QSB 3.3L DIESEL

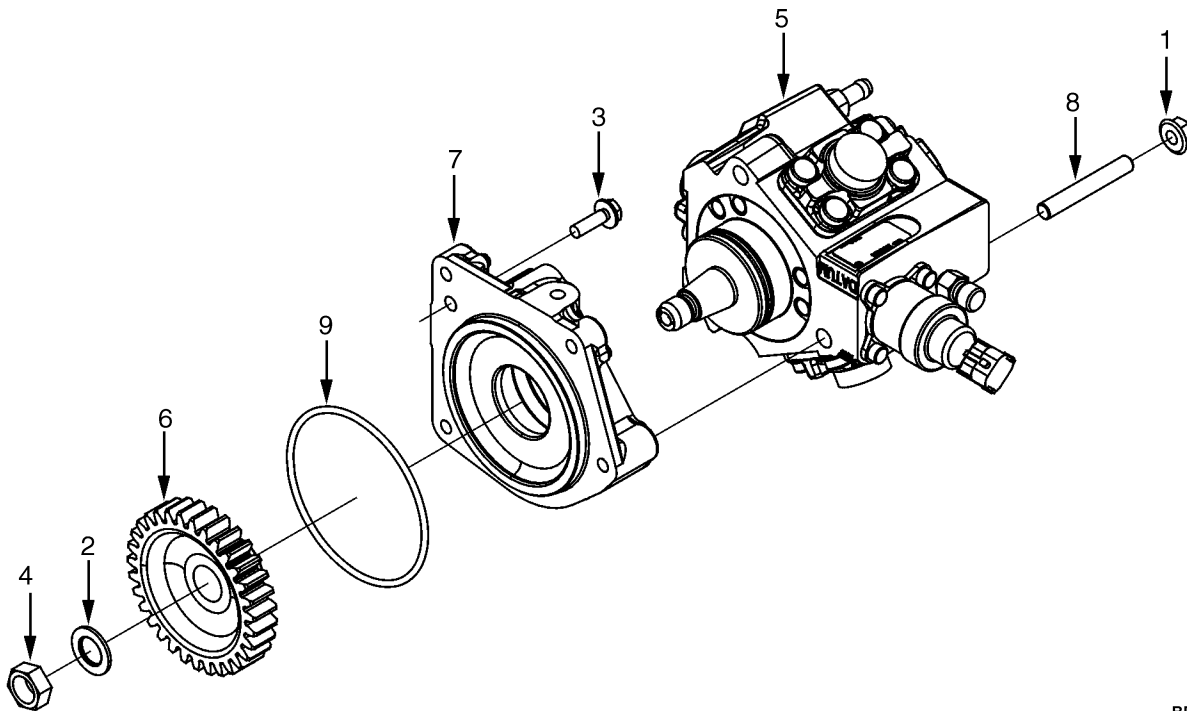


BP130020

**FUEL PUMP PLUMBING  
CUMMINS QSB 3.3L DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1691853	Capscrew .....	1
2	1691660	Capscrew .....	1
3	1644113	Capscrew .....	1
4	1691824	Gasket .....	2
5	1673877	Fitting (Banjo Connector) .....	1
6	1691826	Screw (Banjo Connector) .....	1
7	1691827	Spacer .....	1
8	1673878	Screw (Banjo Connector) .....	1
9	1691669	Clip .....	1
10	1691670	Screw (Banjo Connector) .....	1
11	1513714	Sealing Ring .....	7
12	1691671	Tube (Fuel Supply) .....	1
13	1691672	Adapter (Fuel Connector) .....	1
14	1691673	Tube (Fuel Supply) .....	1
15	1691674	Hose .....	1
16	<del>1691675</del>		
	4017851	Connector (Banjo) .....	1
17	1691676	Roll Pin .....	1
18	1691677	Screw (Banjo Connector) .....	1

## FUEL INJECTION PUMP (FIGURE 3-23) CUMMINS QSB 3.3L DIESEL

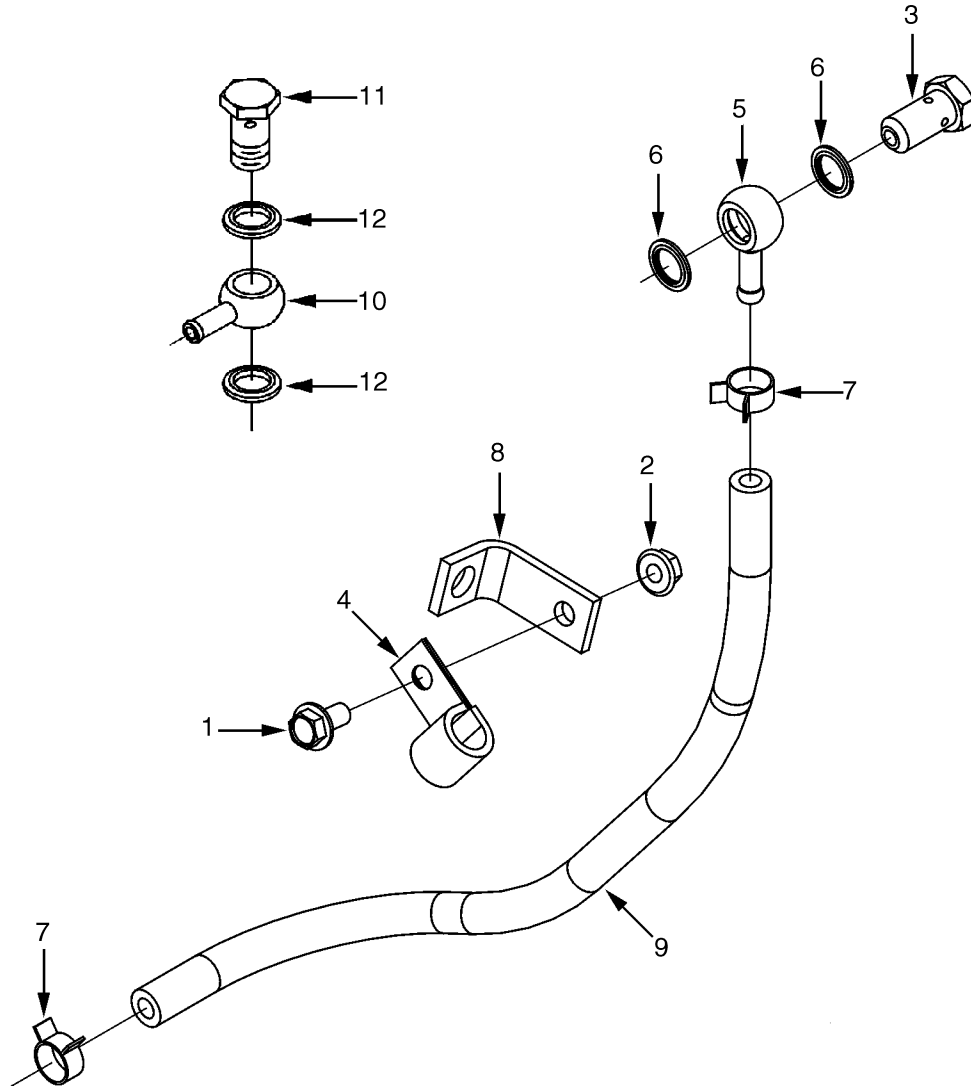


BP130035

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1691806	Clamp .....	3
2	1691807	Washer .....	1
3	1691808	Capscrew .....	1
4	1691809	Nut .....	1
5	1691810	Fuel Pump .....	1
6	1691811	Gear .....	1
7	1691812	Support .....	1
8	1691813	Stud .....	3
9	1691816	Seal .....	1



## FUEL FILTER PLUMBING (FIGURE 3-24) CUMMINS QSB 3.3L DIESEL



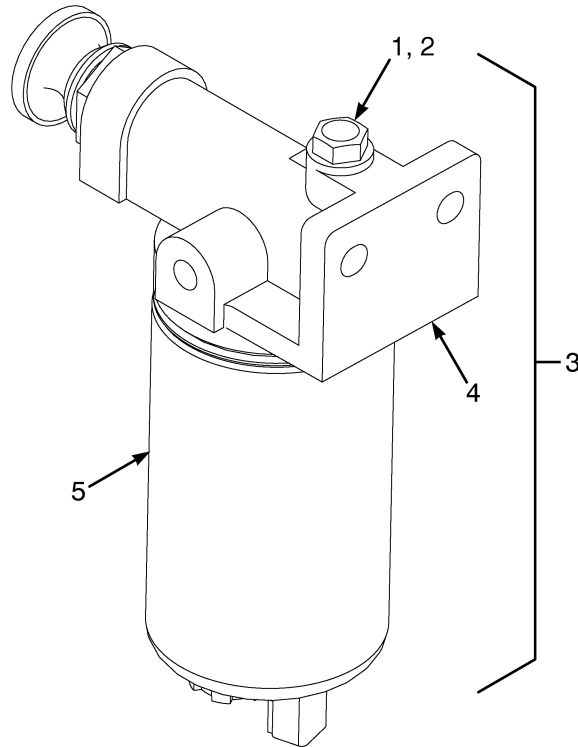
BP130042

**FUEL FILTER PLUMBING  
CUMMINS QSB 3.3L DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	<b>b</b> 1691853	Capscrew .....	1
2	<b>b</b> 1691654	Nut .....	1
3	<b>b</b> 1673878	Screw (Banjo Connector) .....	1
4	<b>b</b> 1691655	Clip .....	1
5	<b>b</b> 1691656	Coupling .....	1
6	<b>b</b> 1513714	Sealing Ring .....	2
6	4004645	Washer (Copper) (Alternate Part) .....	2
7	<b>b</b> 1691657	Clip .....	2
8	<b>b</b> 1691658	Plate (Clamping) .....	1
9	<b>b</b> 1691659	Hose .....	1
10	<b>a</b> 1673877	Fitting (Banjo Connector) .....	1
11	<b>a</b> 1673878	Screw .....	1
12	<b>a</b> 1513714	Sealing Ring .....	2
12	4004645	Washer (Copper) (Alternate Part) .....	2

**FOOTNOTES:****a** Fuel Inlet**b** Mounting location: Fuel Pump Side Middle Mount

## WATER SEPARATOR (FIGURE 3-25) CUMMINS QSB 3.3L DIESEL



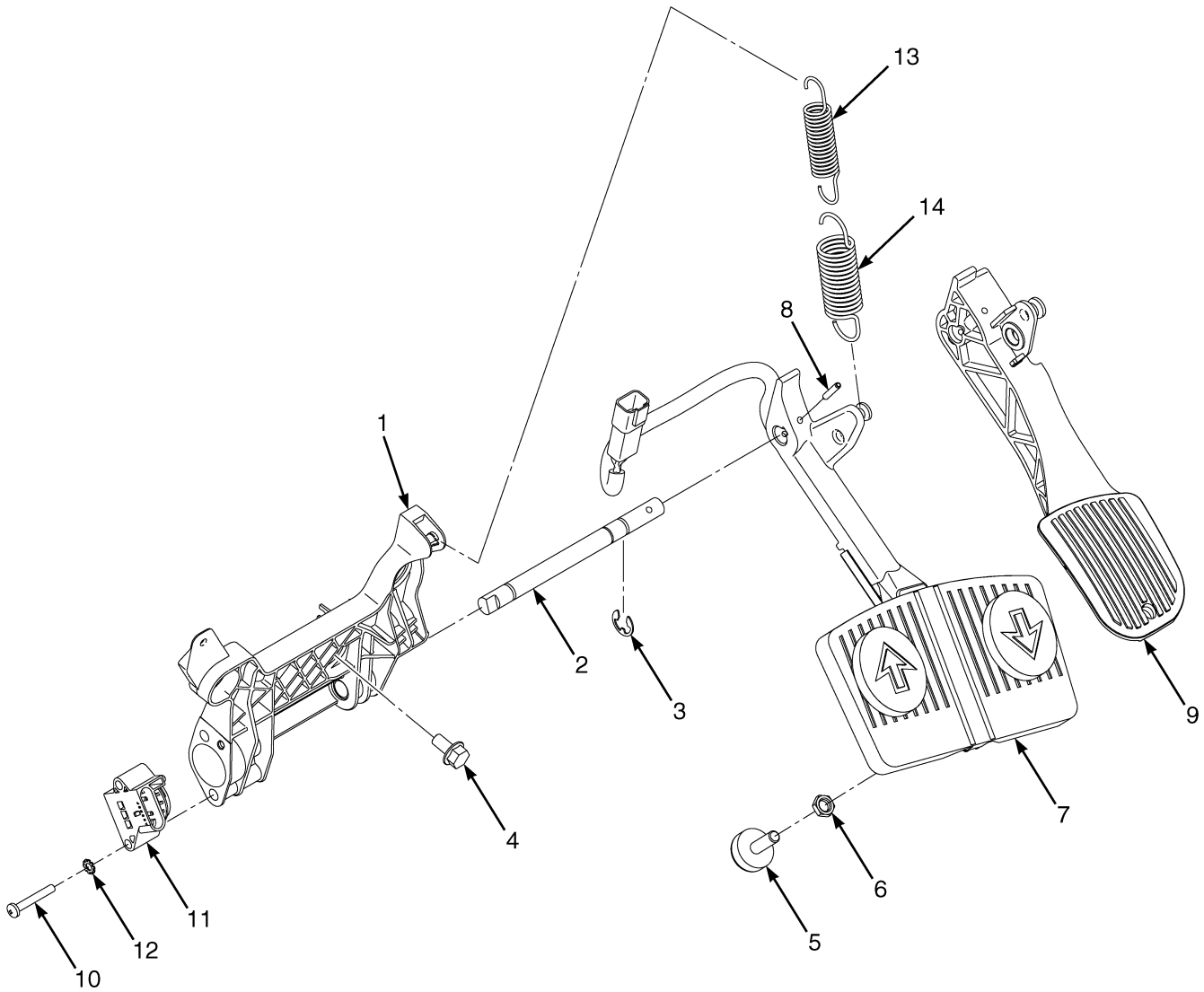
BP130138

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1691817	Plug .....	1
2	1691818	Seal .....	1
3	1691819	Fuel Filter .....	1
4	.....	Filter Head .....	1
5	1691821	Cartridge (Includes Sensor) .....	1





## THROTTLE PEDAL AND ATTACHING PARTS (FIGURE 3-26)



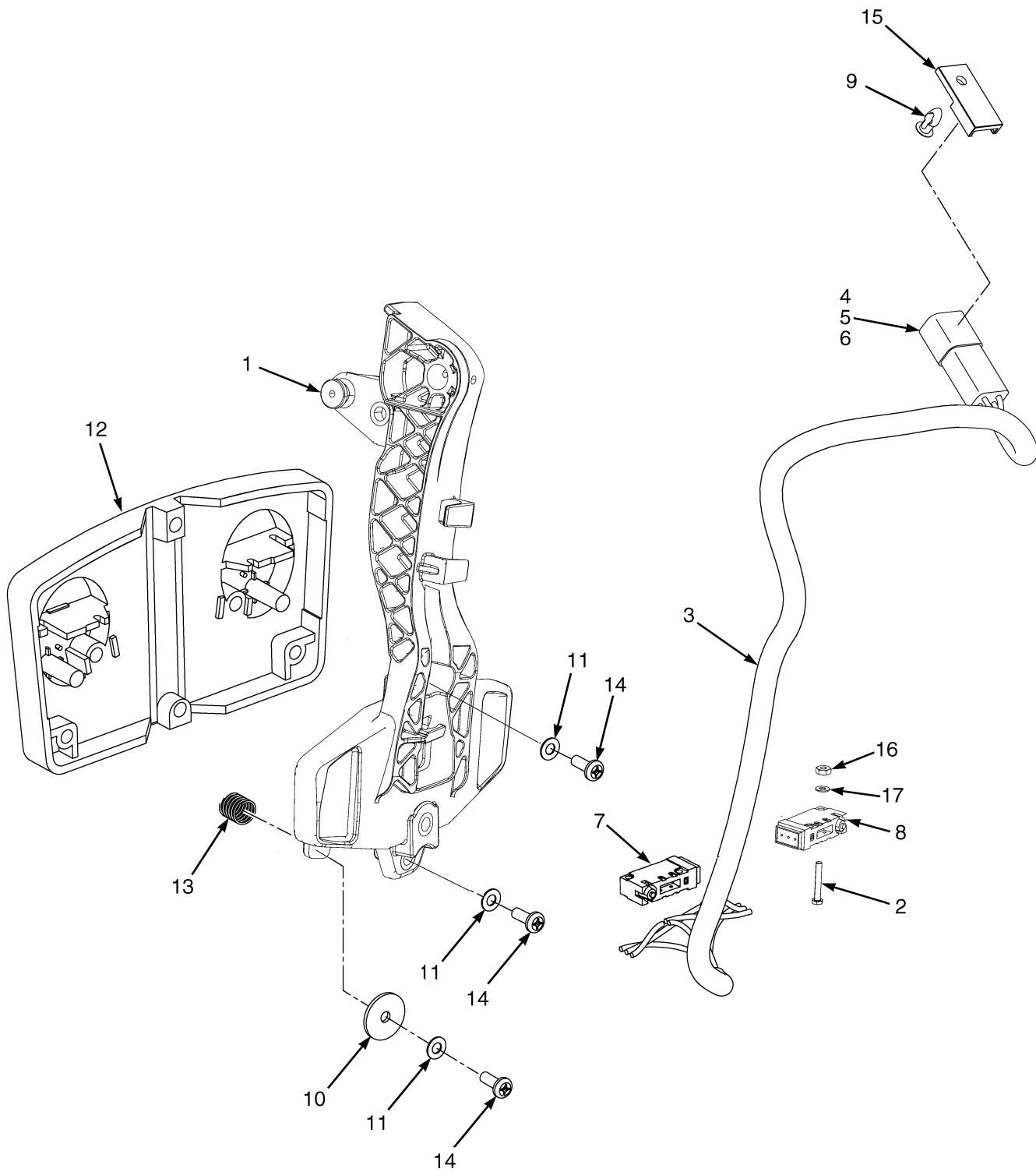
HP130383

**THROTTLE PEDAL AND ATTACHING PARTS**

ITEM	PART NO.	DESCRIPTION	QTY
1	1538488	Throttle Plate .....	1
1	1654411	Throttle Plate .....	1
1	1524267	Bushing .....	1
2	1521005	Shaft .....	1
2	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 (☞ Figure 3-27).....	1
8	<b>a</b> 302437	Roll Pin .....	1
8	<b>b</b> 302443	Roll Pin .....	1
9	2071181	Pedal (Standard) .....	1
10	1564752	Capscrew .....	2
11	2063842	Sensor (Hall Throttle Position) .....	1
12	296378	Washer .....	2
13	1582301	Spring (Inner) .....	1
14	1582300	Spring (Outer) .....	1

**FOOTNOTES:****a** For Use With Monotrol Pedal Only**b** For Use With Standard Pedal Only

## MONOTROL PEDAL ASSEMBLY (FIGURE 3-27)



BP130201

**MONOTROL PEDAL ASSEMBLY**

ITEM	PART NO.	DESCRIPTION	QTY
	1608412	Monotrol Pedal Assembly .....	1
1	2074702	Pedal .....	1
2	220428	Screw .....	4
3	2072782	Wire Harness .....	1
4	1330416	Connector (Secondary Lock) .....	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
16	16865	Nut .....	4
17	53162	Lockwasher .....	4



**4**

**ELECTRICAL SYSTEM**





**SECTION 4  
ELECTRICAL SYSTEM**

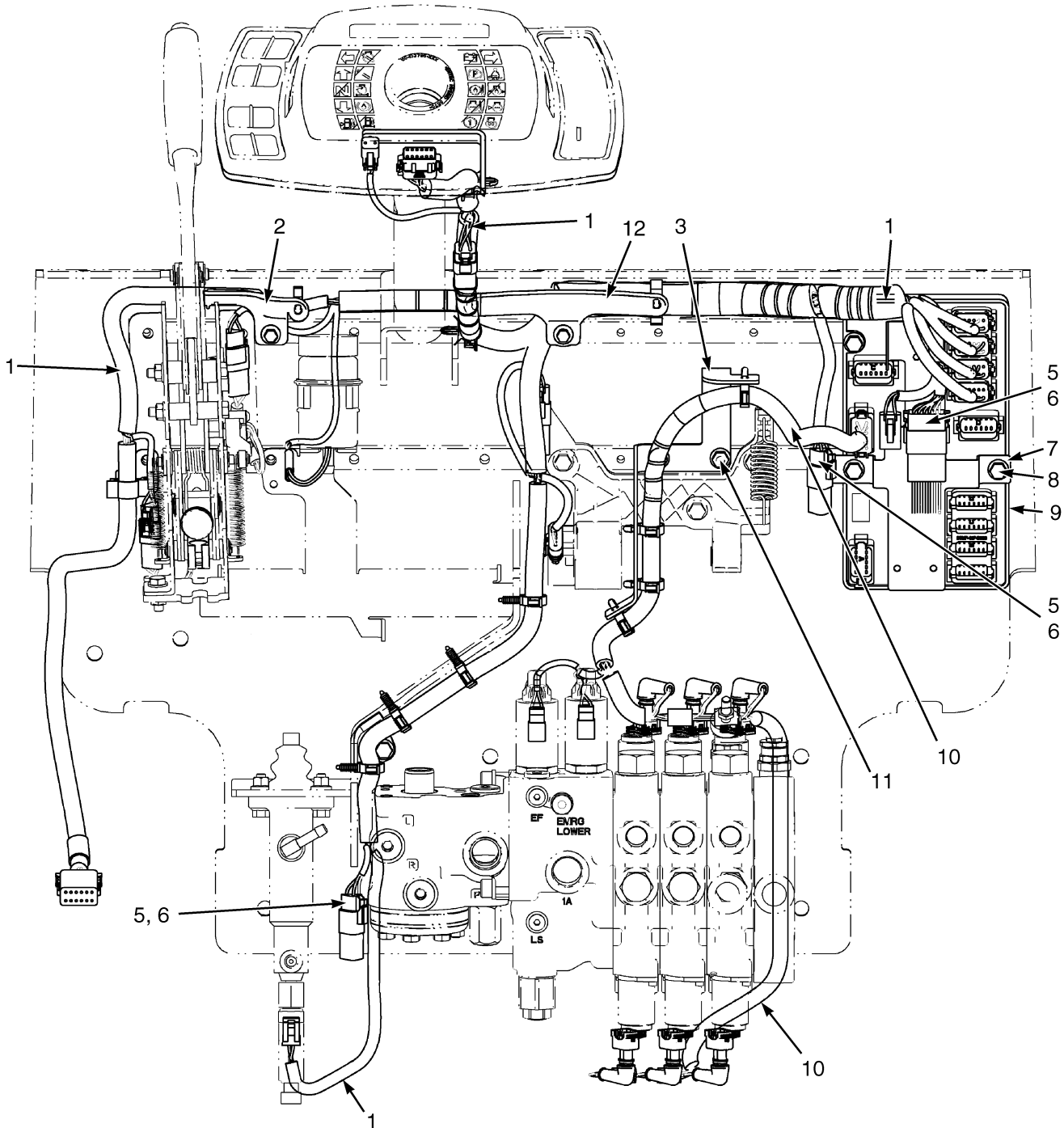
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ELECTRICAL SYSTEM**

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## COWL ELECTRICAL (FIGURE 4-1) ELECTRO-HYDRAULIC



BP080206

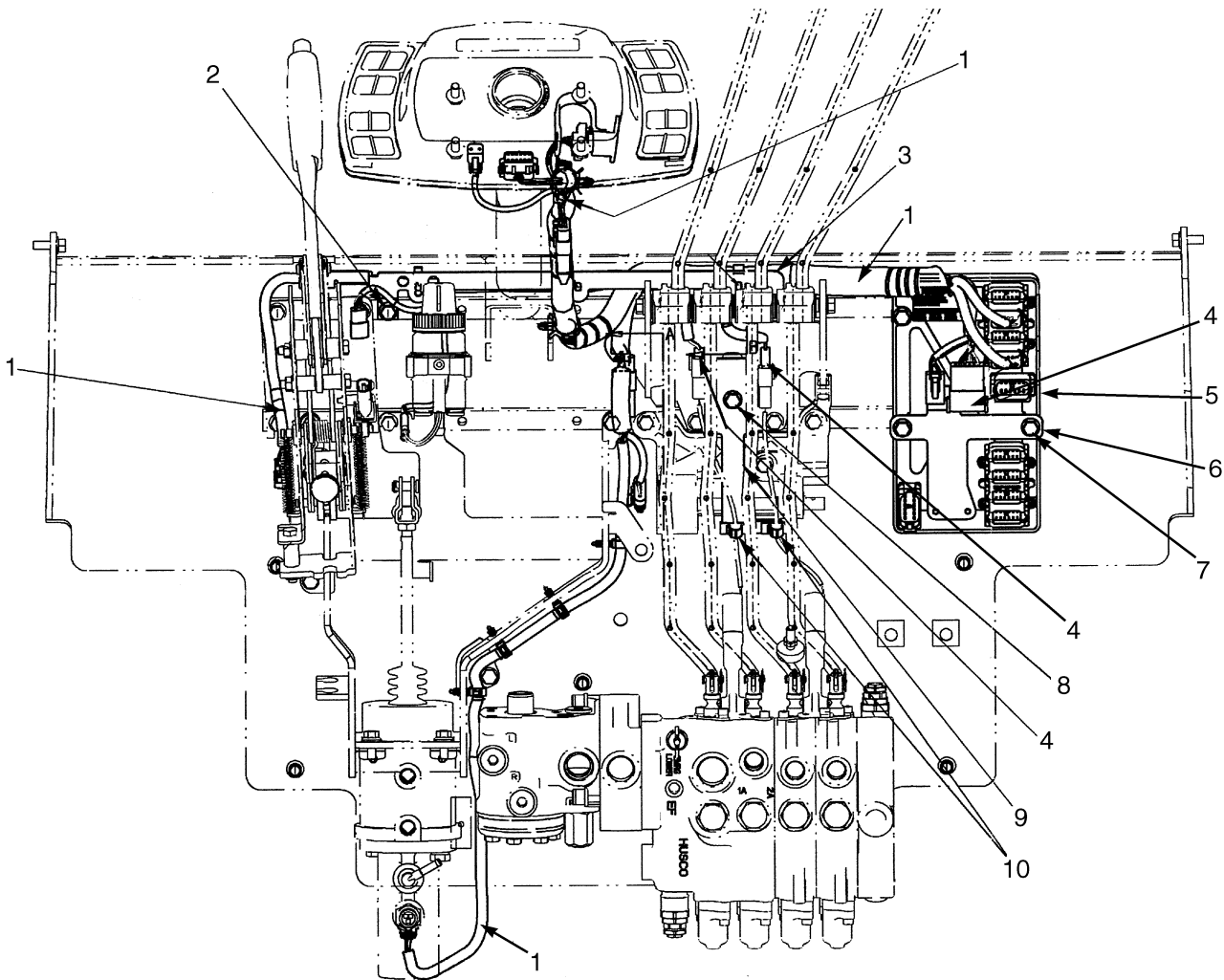
**COWL ELECTRICAL  
ELECTRO-HYDRAULIC**

ITEM	PART NO.	DESCRIPTION	QTY
1	<b>fdg</b> 2098011	Wire Harness (Monotrol Pedal) .....	1
1	<b>g</b> 2098012	Wire Harness (Cowl with Forward/Reverse Lever) (☞Figure 4-54).....	1
2	1600190	Bracket .....	1
2	2111004	Bracket (Left Hand) (Alternate Part) .....	1
3	1531975	Bracket .....	1
4	1529366	Capscrew .....	2
4	1529366	Capscrew (Alternate Part) .....	2
5	1500912	Clip .....	3
6	1582464	Fastener .....	3
7	1582465	Bracket .....	1
8	1510115	Capscrew .....	3
9	<b>c</b> 2068343	Vehicle System Manager (VSM) .....	1
9	<b>b</b> 2068344	Vehicle System Manager (VSM) .....	1
10	<b>e</b> 2058909	Wire Harness (Control Valve) (☞Figure 4-24).....	1
10	<b>a</b> 2060198	Wire Harness (Control Valve) (☞Figure 4-48).....	1
10	4605072	Wire Harness (Electronic Control Valve) (☞Figure 4-49).....	1
10	4605073	Wire Harness (Electronic Control Valve) (☞Figure 4-51).....	1
11	1529366	Capscrew .....	4
12	2111005	Bracket (Right Hand) (Alternate Part) .....	1

**FOOTNOTES:**

- |  |                            |
|--|----------------------------|
| <b>a</b> Three Function                                | <b>e</b> Four Function     |
| <b>b</b> With Electronic Hydraulics and Cab            | <b>f</b> LPG               |
| <b>c</b> With Electronic Hydraulics and Overhead Guard | <b>g</b> S/N P005B02191G → |
| <b>d</b> With Return to Set Tilt                       |                            |

## COWL ELECTRICAL (FIGURE 4-2) MANUAL HYDRAULIC (→ S/N P005B02105G)

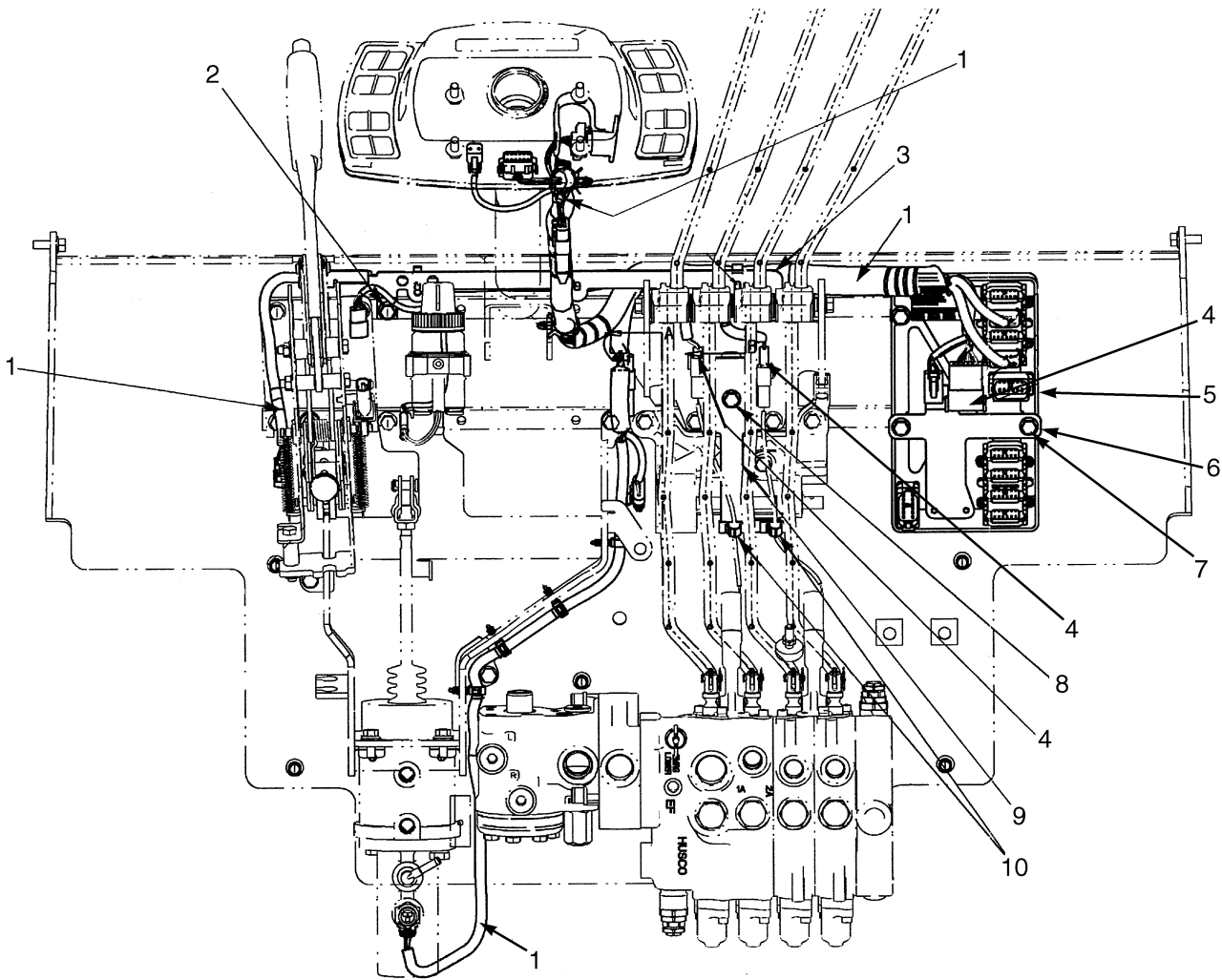


BP080709

**COWL ELECTRICAL**  
**MANUAL HYDRAULIC (→ S/N P005B02105G)**

ITEM	PART NO.	DESCRIPTION	QTY
1	2070269	Wire Harness .....	1
1	2084829	Wire Harness (Cowl with Forward/Reverse Lever) .....	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 (Fold Over) .....	1
9	1686719	Bracket .....	1
10	1562088	Clip .....	2

## COWL ELECTRICAL (FIGURE 4-3) MANUAL HYDRAULIC — WITH OPERATOR PRESENCE SYSTEM (S/N P005B02106G →)



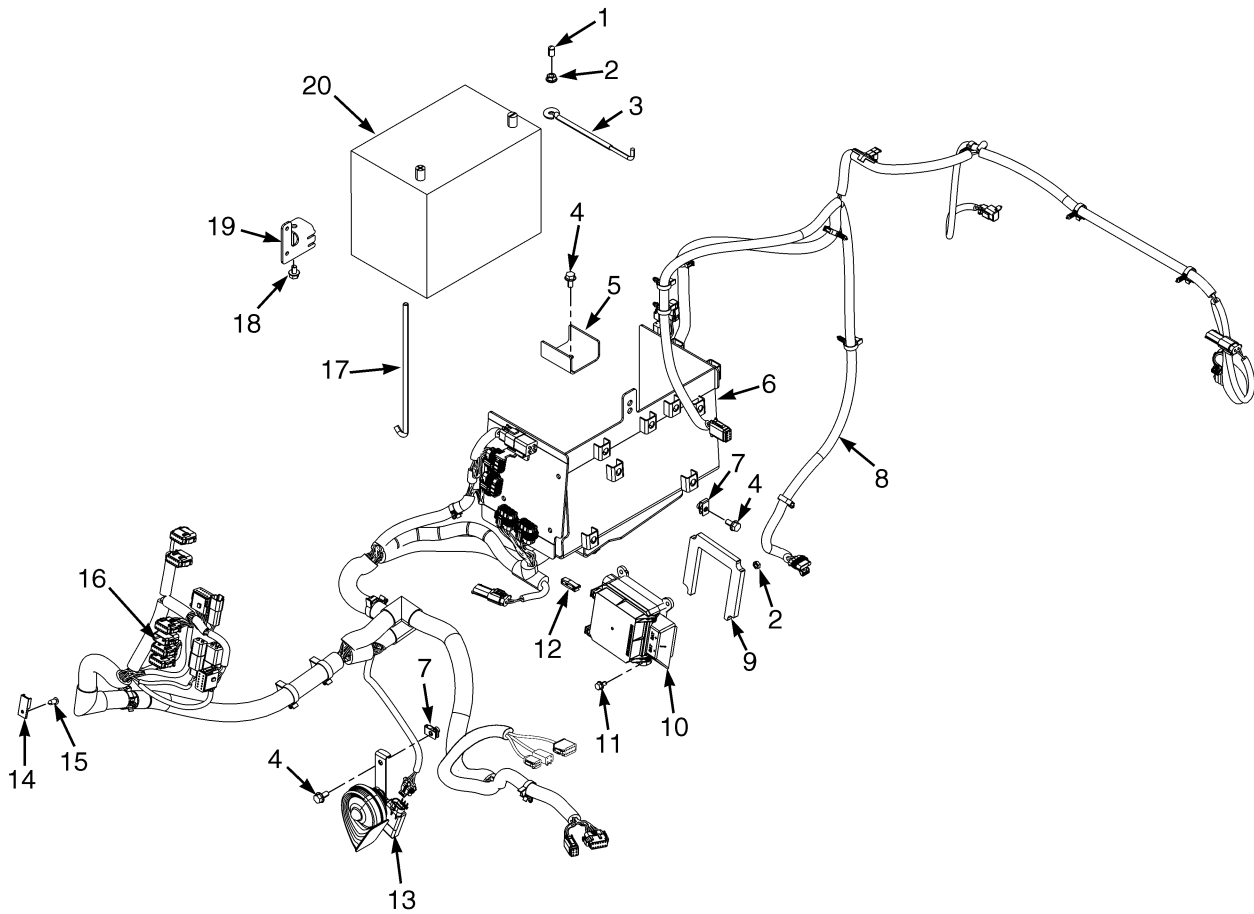
BP080709



**COWL ELECTRICAL**  
**MANUAL HYDRAULIC – WITH OPERATOR PRESENCE SYSTEM (S/N P005B02106G →)**

ITEM	PART NO.	DESCRIPTION	QTY
1	2104701	Wire Harness (With Monotrol) (☞ Figure 4-56).....	1
1	2104702	Wire Harness (Cowl with Forward/Reverse Lever) (☞ Figure 4-55).....	1
2	1529366	Capscrew .....	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	2068342	Vehicle System Manager (VSM) -8525419 .....	1
6	1582465	Bracket .....	1
7	1510115	Capscrew .....	3
8	1528482	Capscrew .....	1
8	1398062	Nut (Fold Over) .....	1
9	1686719	Bracket .....	1
10	1562088	Clip .....	2

## ELECTRICAL SYSTEM (FIGURE 4-4) RIGHT HAND CHASSIS



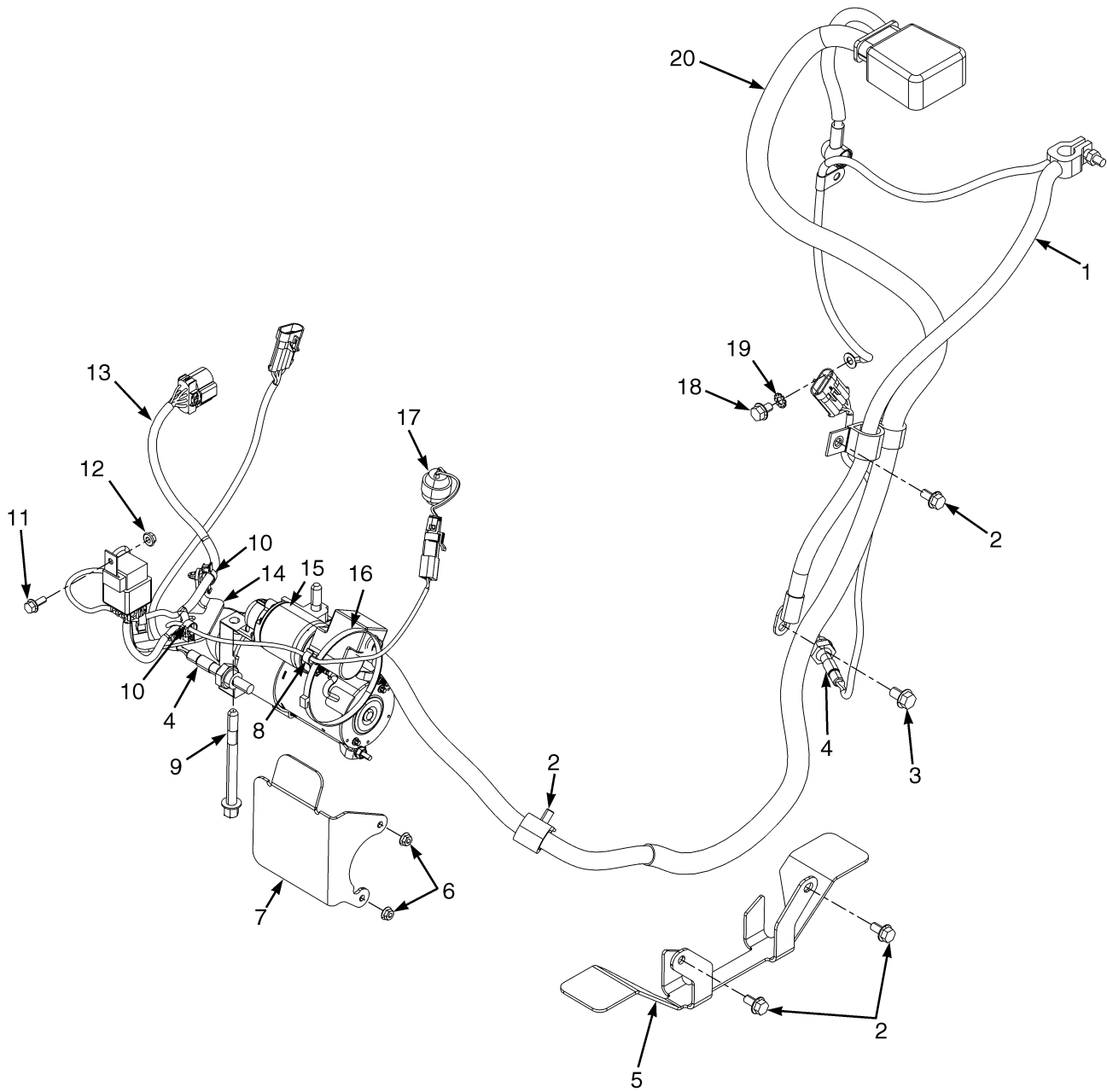
BP080484

**ELECTRICAL SYSTEM  
RIGHT HAND CHASSIS****KEY:****A: GM 4.3L****B: Cummins QSB 3.3L Diesel**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1540805	Cap .....	1	1
2	<del>1382472</del> 1502543	Nut (Flange) .....	3	3
3	<b>b</b> 1638706	Link (Battery Hold Down) .....	1	1
3	<b>d</b> 1641368	Link (Battery Hold Down) .....	1	1
4	<b>b</b> 1527879	Capscrew .....	7	4
4	<b>d</b> 1527879	Capscrew .....	4	1
4	<b>d</b> 1527880	Capscrew .....	3	3
5	1584143	Bracket .....	1	1
6	<b>b</b> 1648991	Battery Tray (Metal) .....	1	1
6	<b>d</b> 2097662	Battery Tray (Plastic) .....	1	1
7	1480237	Nut .....	7	4
8	<b>c</b> 2105636	Wire Harness (RH Chassis) (LPG) (☞Figure 4-41).....	1	..
8	<b>e</b> 4603984	Wire Harness (RH Chassis) (LPG) (☞Figure 4-42).....	1	..
8	<b>c</b> 2106378	Wire Harness (RH Chassis) (Diesel) (☞Figure 4-39).....	..	1
8	<b>e</b> 4603985	Wire Harness (RH Chassis) (Diesel) (☞Figure 4-40).....	..	1
9	1559928	Seal .....	1	1
10	2090613	Module (☞Figure 4-19).....	1	1
11	1534417	Capscrew .....	4	..
11	1527877	Capscrew .....	..	3
12	1402883	Fuse Puller .....	1	1
13	<del>4618978</del> 4043562	Horn (Electronic) .....	1	1
14	1500912	Clip .....	4	4
15	1582464	Fastener .....	6	6
16	1593331	Connector .....	1	..
17	2065745	Link (Battery Hold Down) .....	1	1
18	1529366	Capscrew .....	1	1
19	1611542	Bracket .....	1	1
20	1383331	Start Battery Wet .....	1	..
20	1643935	Start Battery Wet (Optional) .....	1	..
20	1399332	Start Battery Wet .....	..	1
20	1643937	Start Battery Wet (Optional) .....	..	1
	<b>a</b> 4602965	Wire Harness (Seat Adapter) (☞Figure 4-43).....	1	1
22	4616988	Wire Harness (Jumper, Horn) .....	1	1

**FOOTNOTES:****a** Not Illustrated**b** → 11/2008**c** → S/N P005B03203J**d** 11/2008 →**e** S/N P005B03204J →

## ENGINE ELECTRICAL SYSTEM (FIGURE 4-5) GM 4.3L LPG



BP080525

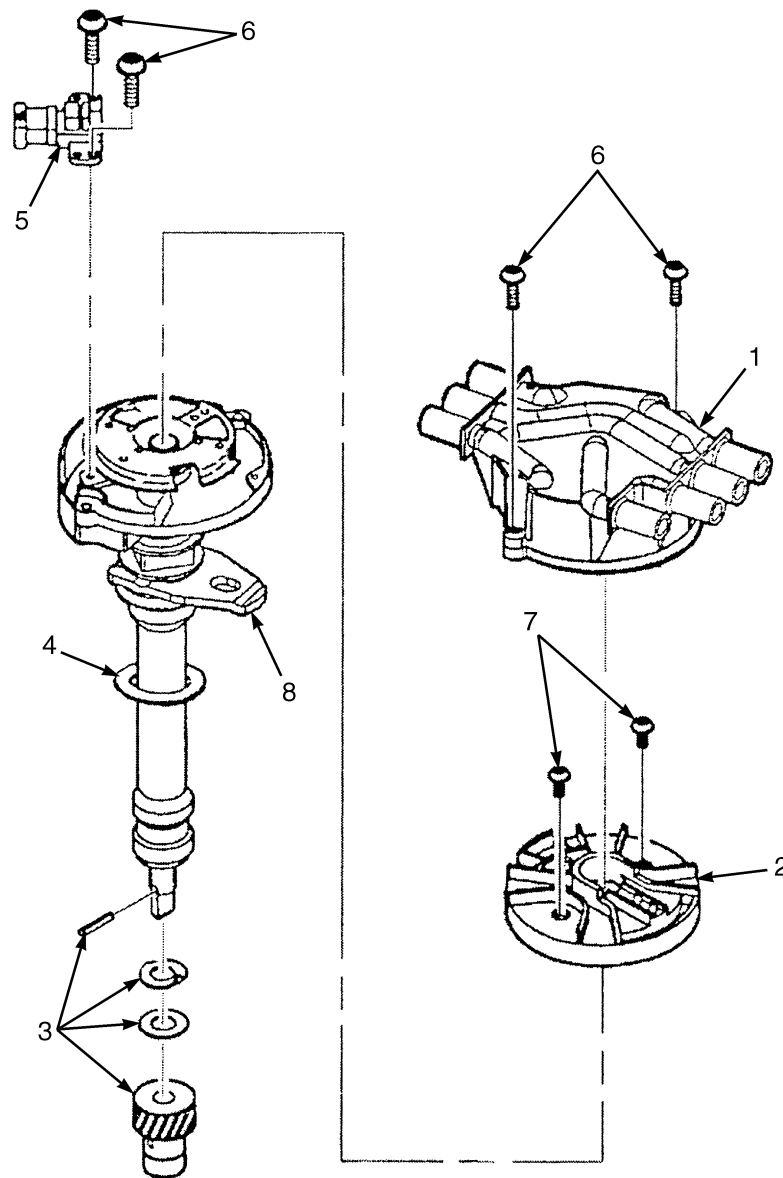
**ENGINE ELECTRICAL SYSTEM  
GM 4.3L LPG**

ITEM	PART NO.	DESCRIPTION	QTY
1	2093469	Battery Cable (Negative) .....	1
1	1616122	Terminal .....	1
2	1527879	Capscrew .....	4
3	1309993	Screw .....	1
4	1557546	Oxygen Sensor (With Wire Harness) .....	2
5	1632294	Bracket .....	1
6	264148	Nut .....	2
7	1640818	Bracket .....	1
8	1561871	Clamp (Swivel) .....	2
9	1677876	Bolt .....	2
10	1402816	Clip .....	2
11	1527876	Capscrew .....	1
12	<del>1307884</del> 1514429	Nut .....	1
13	<b>d</b> 2079116	Wire Harness (LH Chassis) (2008-2009 Series) (☞ Figure 4-36).....	1
13	<b>be</b> 4604535	Wire Harness (LH Chassis) (2010 Series) (☞ Figure 4-37).....	1
13	<b>ce</b> 4604396	Wire Harness (LH Chassis) (2010 Series) (☞ Figure 4-38).....	1
14	1402629	Bracket .....	1
15	1640531	Starter (☞ Figure 4-13).....	1
16	1502061	Clamp .....	1
17	1529257	Sensor (Air Flow Restriction) .....	1
18	1529366	Capscrew .....	1
19	296380	Washer .....	2
20	2093470	Battery Cable (Positive) .....	1
	<b>a</b> 292668	Nut .....	1
	<b>a</b> 1382472		
	1502543	Nut (Flange) .....	1

**FOOTNOTES:**

- |          |                                 |          |                   |
|----------|---------------------------------|----------|-------------------|
| <b>a</b> | Not Illustrated                 | <b>d</b> | → S/N P005B02545H |
| <b>b</b> | With Premium Low Fuel Sensor    | <b>e</b> | S/N P005B02546H → |
| <b>c</b> | Without Premium Low Fuel Sensor |          |                   |

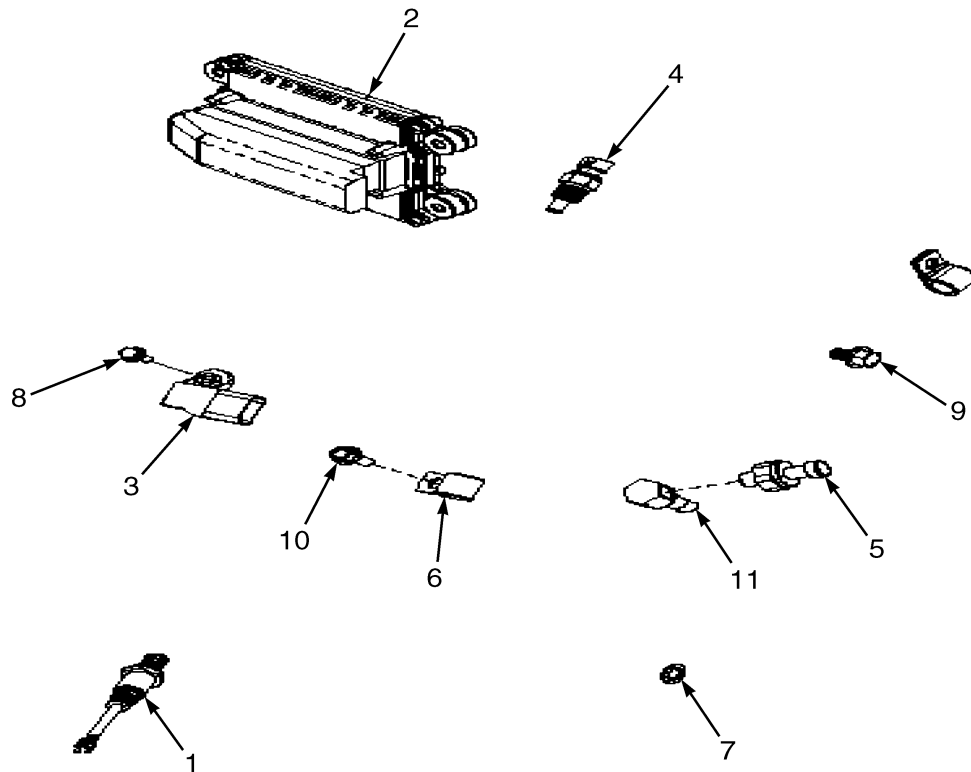
## DISTRIBUTOR ASSEMBLY (FIGURE 4-6) GM 4.3L LPG



BP080184

ITEM	PART NO.	DESCRIPTION	QTY
	1559695	Distributor Assembly .....	1
1	1566458	Distributor Cap .....	1
2	1566459	Rotor .....	1
3	1559922	Kit-Gear .....	1
4	1334423	Gasket .....	1
5	1559923	Sensor (Cam) .....	1
6	1559924	Screw .....	4
7	1559925	Screw .....	2
8	4019054		
	1335497	Clamp .....	1

**ENGINE CONTROL MODULE AND SENSORS (FIGURE 4-7)**  
**GM 4.3L LPG — PSI OPTION (S/N P005V04469J → INC. 04255, 04460)**



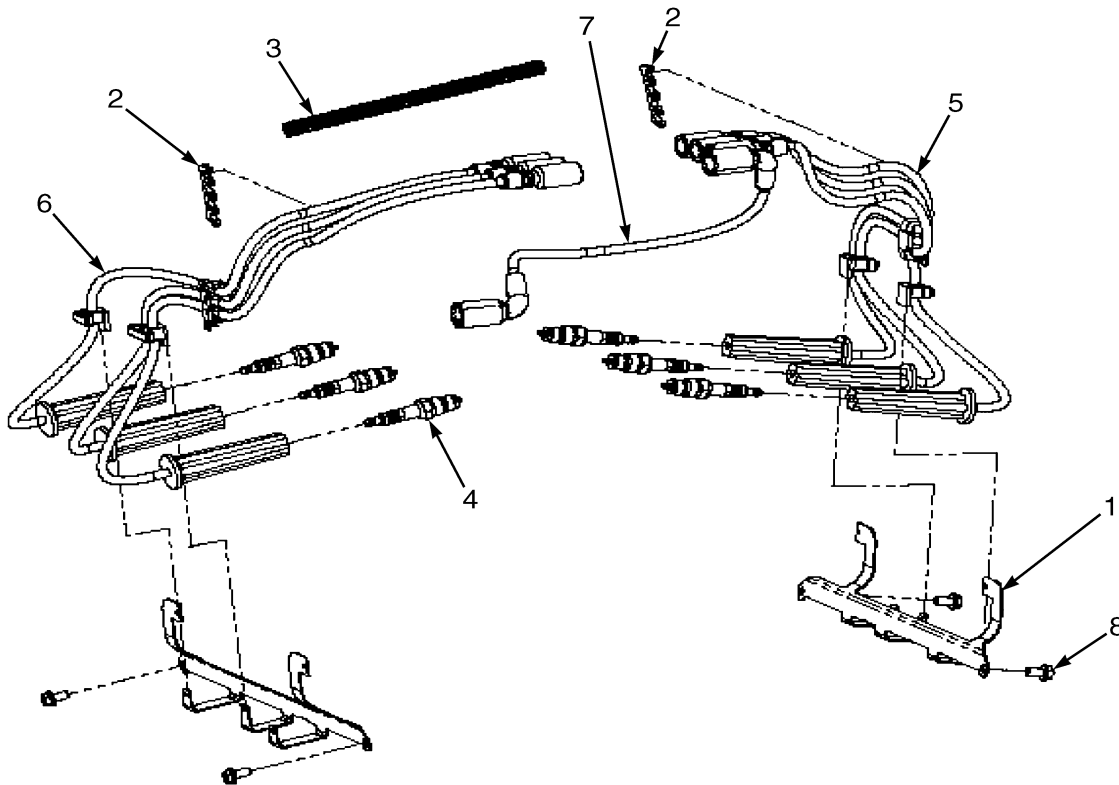
BP090463

ITEM	PART NO.	DESCRIPTION	QTY	
1	1646456	Sensor (Oxygen) .....	2	
2	4040286	Electronic Control Module (With Catalytic Converter) .....	1	
2	4040287	Electronic Control Module (without Catalytic Converter) .....	1	
3	4019045	1559567	Sensor (Temperature manifold absolute pressure) (T-Map) .....	1
4	4019046	Sensor (Coolant) .....	1	
5	4019047	Pressure Sender (Oil) .....	1	
6	128408	Clamp .....	2	
7	4019050	Washer .....	1	
8	1527876	Capscrew .....	1	
9	221493	Capscrew .....	2	
10	148818	Capscrew .....	1	
11	4019052	Fitting .....	1	
	a 4040249	Wire Harness .....	1	

**FOOTNOTES:**

a Not Illustrated

## SPARK PLUGS AND WIRES (FIGURE 4-8) GM 4.3L LPG — PSI OPTION

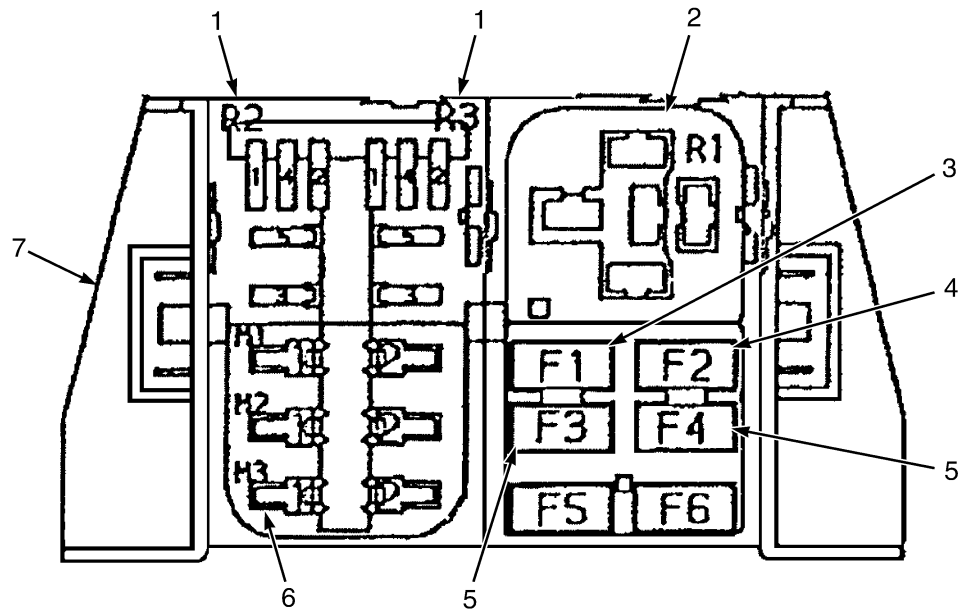


BP090464

ITEM	PART NO.	DESCRIPTION	QTY
1	1564035	Bracket .....	2
2	4019061	Separator .....	2
3	4040251	Conduit (46 in.) .....	AR
4	1452376	Spark Plug .....	6
5	.....	Spark Plug Harness (RH) .....	1
6	.....	Spark Plug Harness (LH) .....	1
7	.....	Coil Wire .....	1
8	221416	Capscrew .....	4
	2088997	Kit-Ignition Cable (Spark Plug Wires and Coil Wire) .....	1
10	4040249	Wire Harness (Engine) (☞ Figure 4-34).....	1



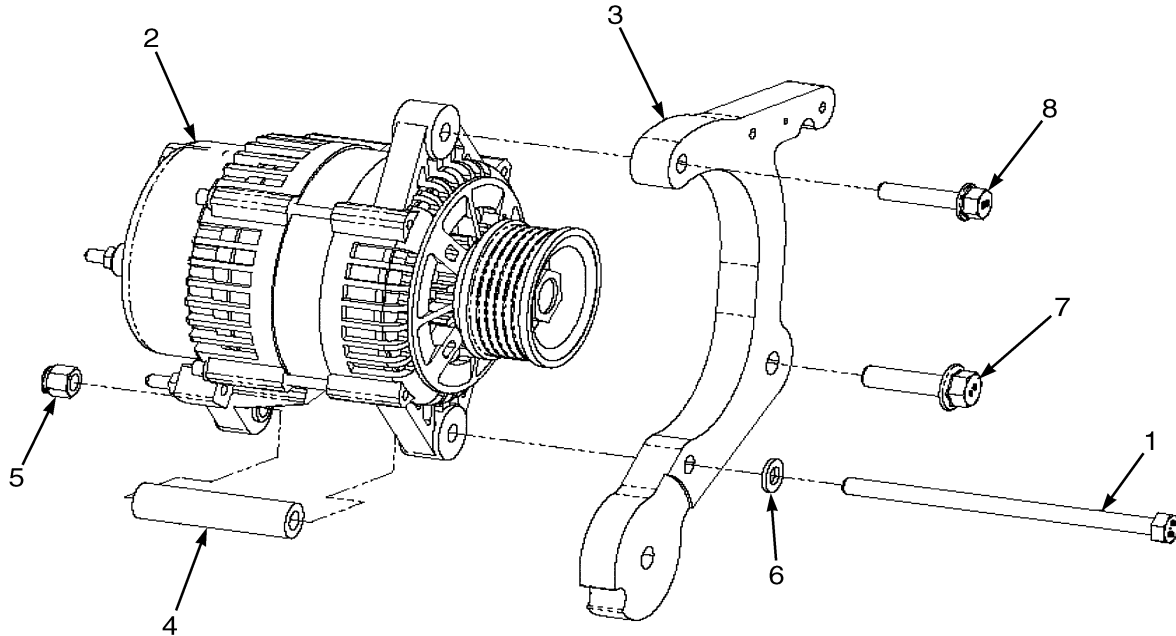
**FUSE BOX (FIGURE 4-9)**  
**GM 4.3L LPG — PSI OPTION**



BP090431

ITEM	PART NO.	DESCRIPTION	QTY
1	1567317	Relay (Power and Fuel Pump) .....	2
2	1567316	Relay (Starter) .....	1
3	1498046	Fuse (10 Amp) .....	1
4	1498044	Fuse (5 Amp) .....	1
5	1498047	Fuse (15 Amp) .....	2
6	1378418	Fuse (50 Amp) .....	1
7	4567320		
	1567835	Cover (Bottom-Fuse Box) .....	1

## ALTERNATOR AND MOUNTING (FIGURE 4-10) GM 4.3L LPG — PSI OPTION

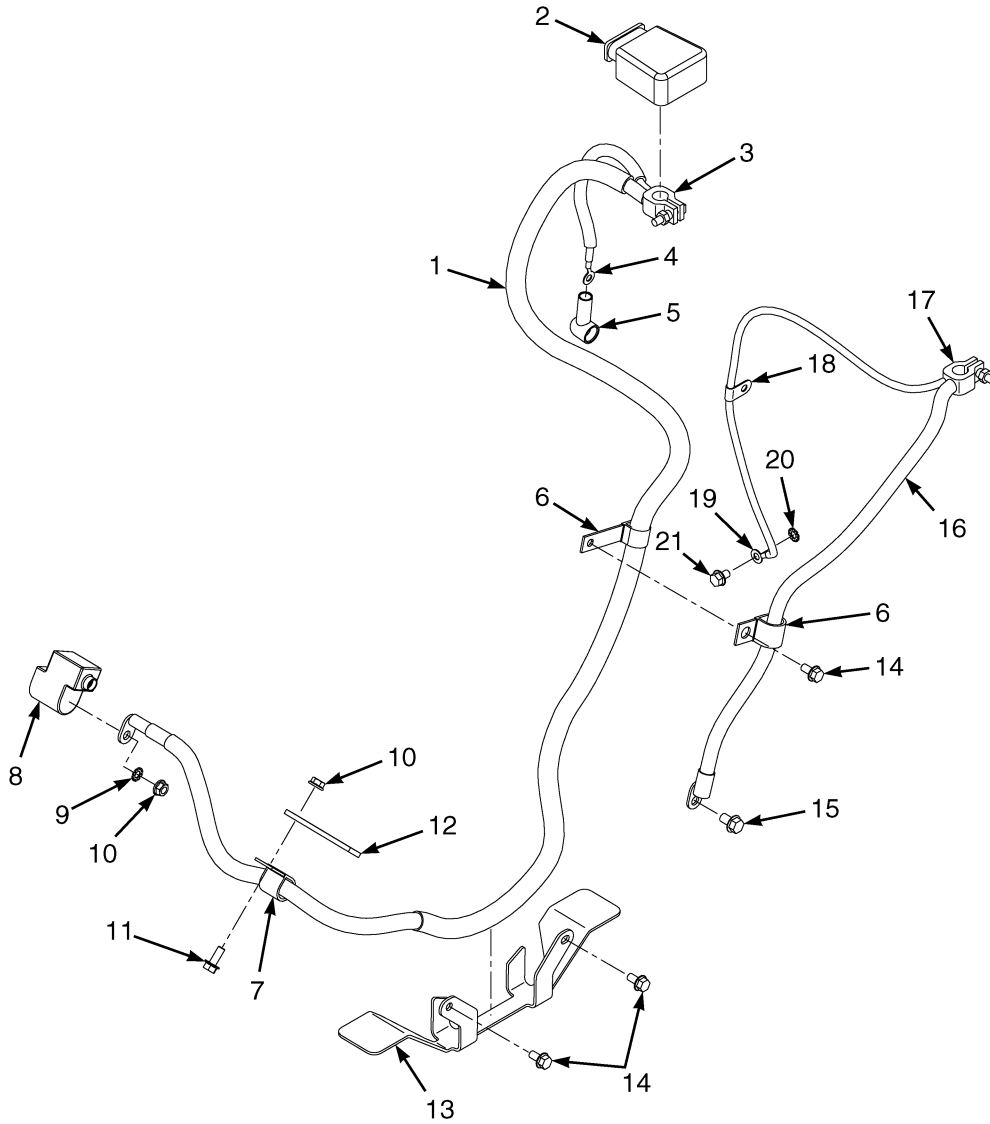


BP090460

ITEM	PART NO.	DESCRIPTION	QTY
1	1327647	Capscrew .....	1
2	4019177		
	1534017	Alternator .....	1
3	4019178		
	1636803	Bracket (Alternator) .....	1
4	1554814	Spacer .....	1
5	302326	Nut .....	1
6	320157	Washer .....	1
7	1527885	Capscrew .....	1
8	1528482	Capscrew .....	1



## BATTERY CABLES (FIGURE 4-11) GM 4.3L LPG — GFI OPTION

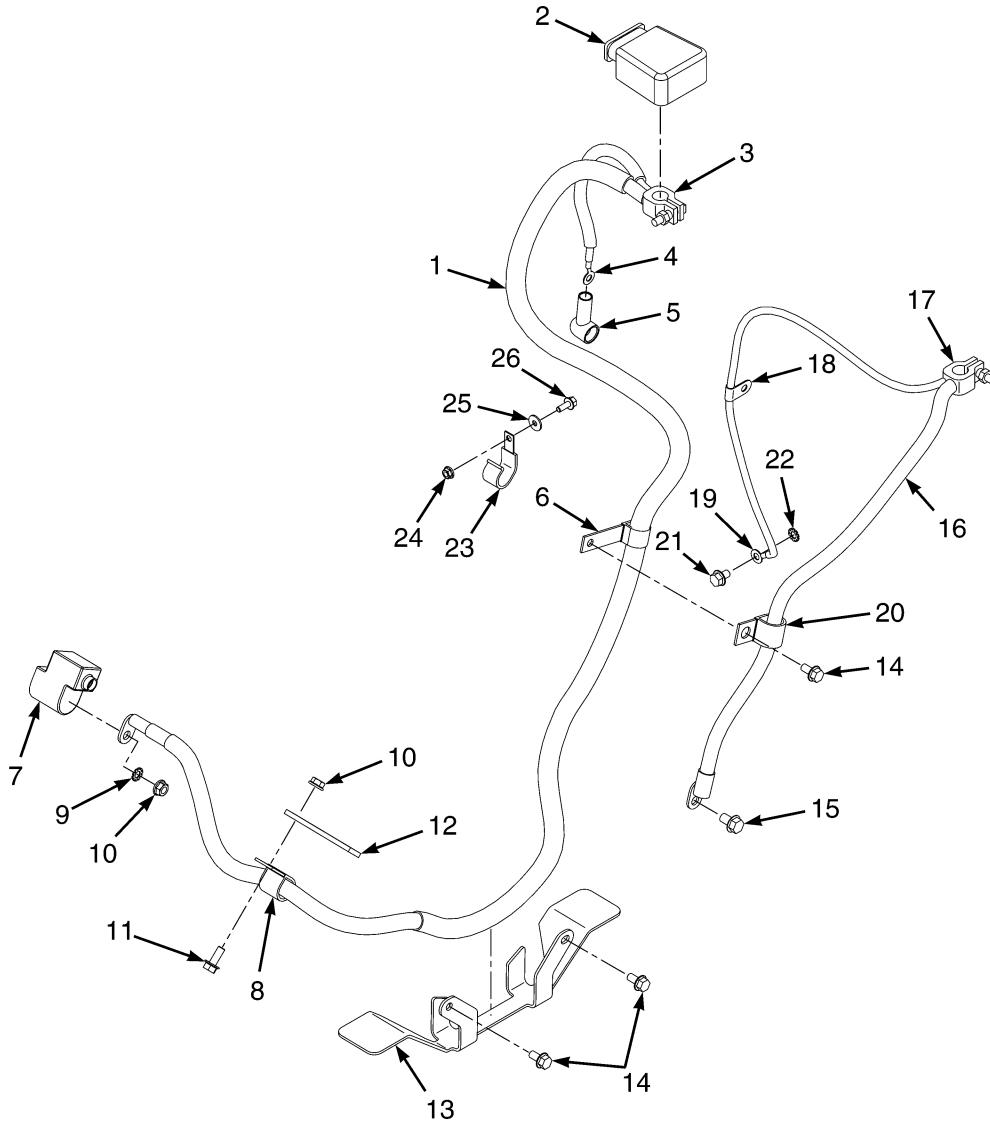


BP081003

**BATTERY CABLES**  
**GM 4.3L LPG – GFI OPTION**

ITEM	PART NO.	DESCRIPTION	QTY
1	2072157	Battery Cable (Positive) .....	1
1	1357268	Battery Cable (Red) .....	AR
2	1536304	Boot .....	1
3	148792	Terminal .....	1
4	806426	E-Ring .....	1
5	1566146	Boot .....	1
6	1474893	Clamp .....	1
7	153070	Clamp .....	1
8	1590173	Boot .....	1
9	296380	Washer .....	2
10	<del>1382472</del>		
	1502543	Nut (Flange) .....	2
11	1527880	Capscrew .....	2
12	1682835	Spacer .....	1
13	1632294	Bracket .....	1
14	1527879	Capscrew .....	3
15	1309993	Screw .....	1
16	2093469	Battery Cable (Negative) .....	1
16	16078	Battery Cable .....	AR
17	148789	Terminal .....	1
18	1564044	E-Ring .....	1
19	806426	E-Ring .....	1
20	296380	Washer .....	1
21	1529366	Capscrew .....	1

## BATTERY CABLES (FIGURE 4-12) GM 4.3L LPG — PSI OPTION

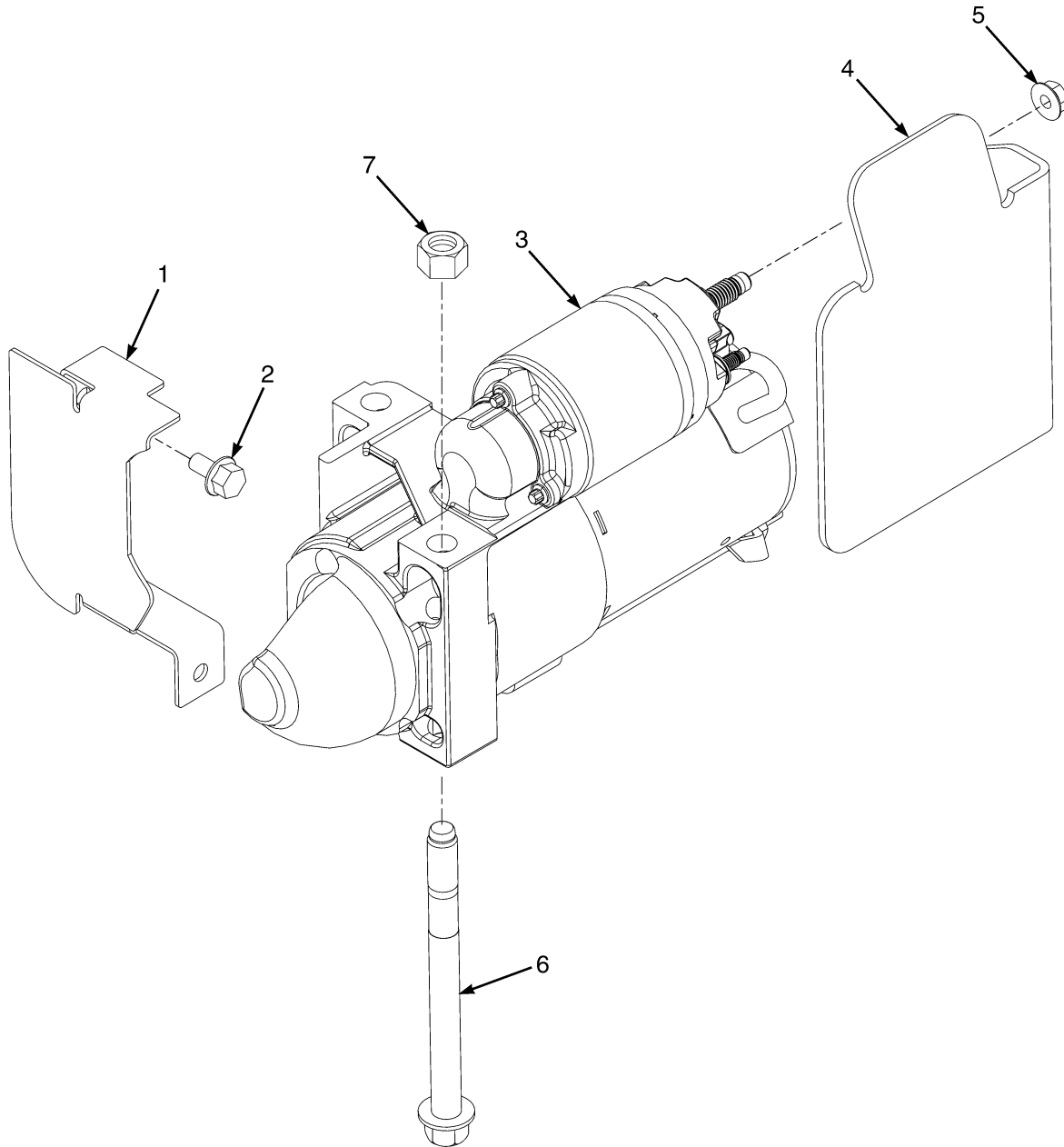


BP081164

**BATTERY CABLES**  
**GM 4.3L LPG – PSI OPTION**

ITEM	PART NO.	DESCRIPTION	QTY
1	2072157	Battery Cable (Positive) .....	1
1	1357268	Battery Cable (Red) .....	AR
2	1536304	Boot .....	1
3	148792	Terminal .....	1
4	806426	E-Ring .....	1
5	1566146	Boot .....	1
6	1474893	Clamp .....	1
7	1590173	Boot .....	1
8	153070	Clamp .....	1
9	296380	Washer .....	2
10	<del>1382472</del>		
	1502543	Nut (Flange) .....	2
11	1527880	Capscrew .....	2
12	1682835	Spacer .....	1
13	1632294	Bracket .....	1
14	1527879	Capscrew .....	3
15	1309993	Screw .....	1
16	2093469	Battery Cable (Negative) .....	1
16	16078	Battery Cable .....	AR
17	148789	Terminal .....	1
18	1564044	E-Ring .....	1
19	806426	E-Ring .....	1
20	153070	Clamp .....	1
21	1529366	Capscrew .....	1
22	296380	Washer .....	1
23	1628118	Clamp .....	1
24	<del>1307884</del>		
	1514429	Nut .....	1
25	1476421	Washer .....	1
26	1527876	Capscrew .....	1

**STARTER (FIGURE 4-13)**  
**GM 4.3L LPG**



BP081163

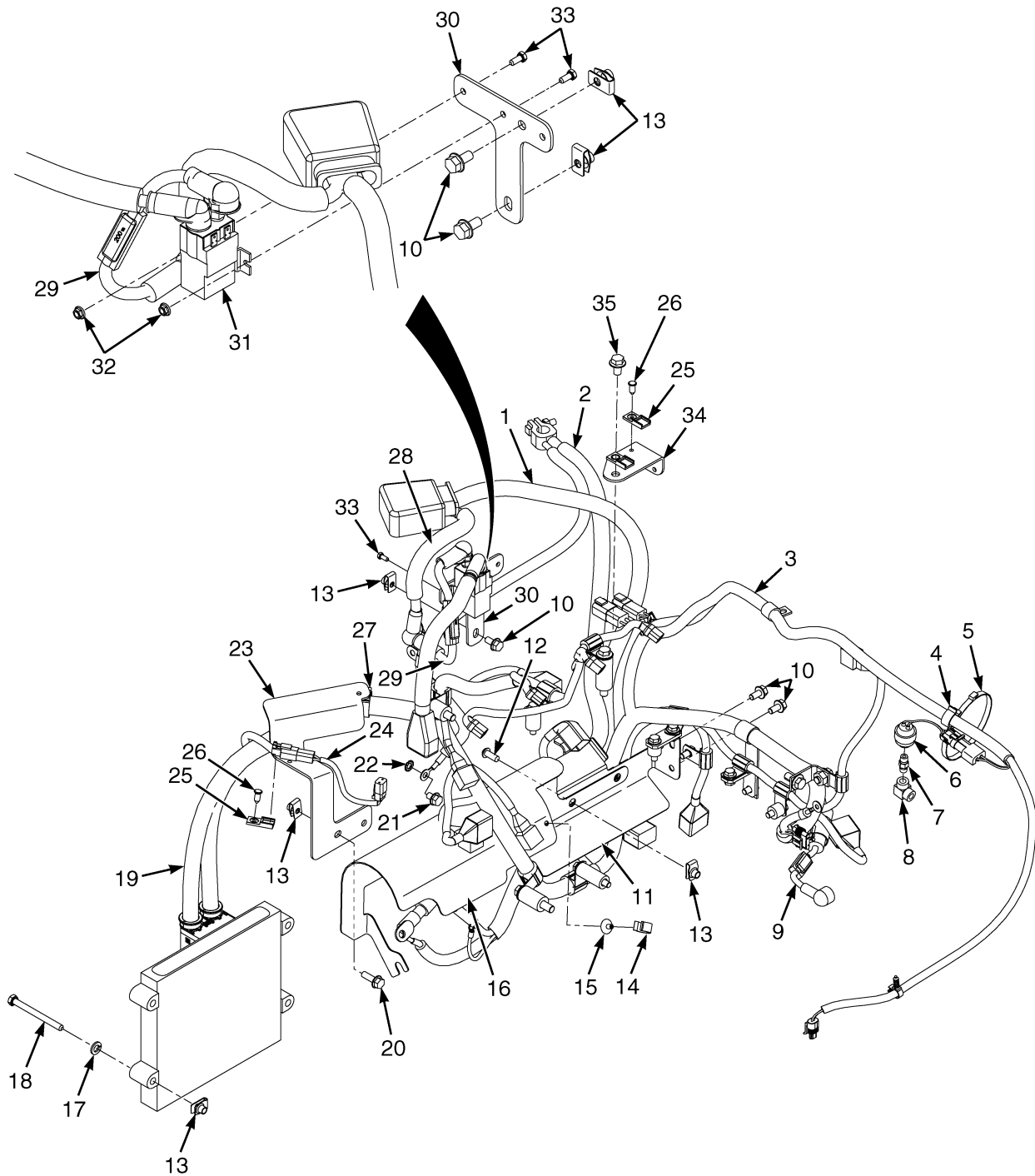


**STARTER  
GM 4.3L LPG**

ITEM	PART NO.	DESCRIPTION	QTY
1	2109666	Dust Shield .....	1
2	1534417	Capscrew .....	2
2	<b>a</b> 1463910	Capscrew .....	2
3	1640531	Starter .....	1
4	1640818	Bracket (Heat Shield) .....	1
5	264148	Nut .....	2
6	1677876	Bolt .....	2
7	<b>a</b> 292668	Nut .....	1

**FOOTNOTES:****a** PSI Option

## ENGINE ELECTRICAL SYSTEM (FIGURE 4-14) CUMMINS QSB 3.3L DIESEL

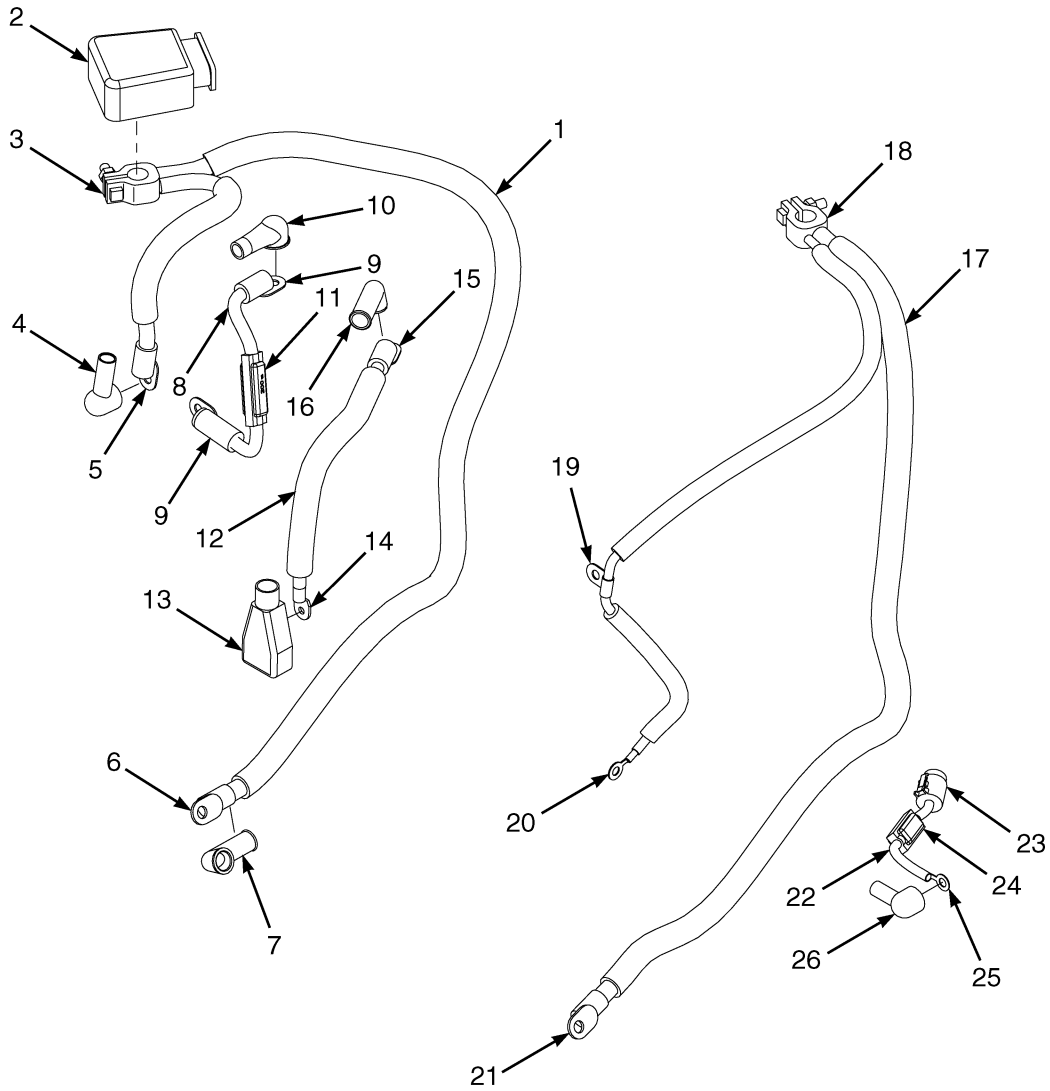


BP081014

**ENGINE ELECTRICAL SYSTEM  
CUMMINS QSB 3.3L DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
1	2099793		
	2111096	Battery Cable (Positive) (☞Figure 4-15).....	1
2	2099794	Battery Cable (Negative) (☞Figure 4-15).....	1
3	2101334		
	2110984	Wire Harness (Alternator) .....	1
4	1502053	Clamp (Swivel) .....	1
5	1502061	Clamp .....	1
6	1529257	Sensor (Air Flow Restriction) .....	1
7	16150	Fitting .....	1
8	69392	Fitting .....	1
9	2082921	Battery Cable (Fused 100A) .....	1
9	2106666	Battery Cable (Fused 100A UL) (☞Figure 4-15).....	1
10	1527879	Cap screw .....	4
11	1691441	Bracket Wldmt .....	1
11	1691441	Bracket Wldmt .....	1
12	296166	Cap screw .....	2
13	1480237	Nut .....	9
14	1543698	Clamp (Swivel) .....	1
15	1543842	Clamp .....	1
16	1673254		
	1691542	Shield .....	1
17	388049		
	292682	Lockwasher .....	3
18	1676908	Cap screw .....	3
19	.....	Engine Wire Harness (☞Figure 4-35).....	1
20	1510113	Cap screw .....	2
21	1529366	Cap screw .....	1
22	296380	Washer .....	1
23	1677323	Bracket .....	1
24	2103224	Wire Harness (2 Pin Extension) .....	1
25	1500912	Clip .....	3
26	1582464	Fastener .....	3
27	1534282	Clip .....	2
28	2099796	Battery Cable (Positive) (☞Figure 4-15).....	1
29	2094237	Battery Cable (Fused 200A) .....	1
29	2106665	Battery Cable (Negative) (Fused 200A UL) (☞Figure 4-15).....	1
30	1676916	Bracket .....	1
31	1501896	Contacto r .....	1
32	1565407	Nut .....	2
33	2046866	Cap screw .....	2
34	1676873	Bracket .....	1
35	1528778	Cap screw .....	1

## BATTERY CABLES (FIGURE 4-15) CUMMINS QSB 3.3L DIESEL

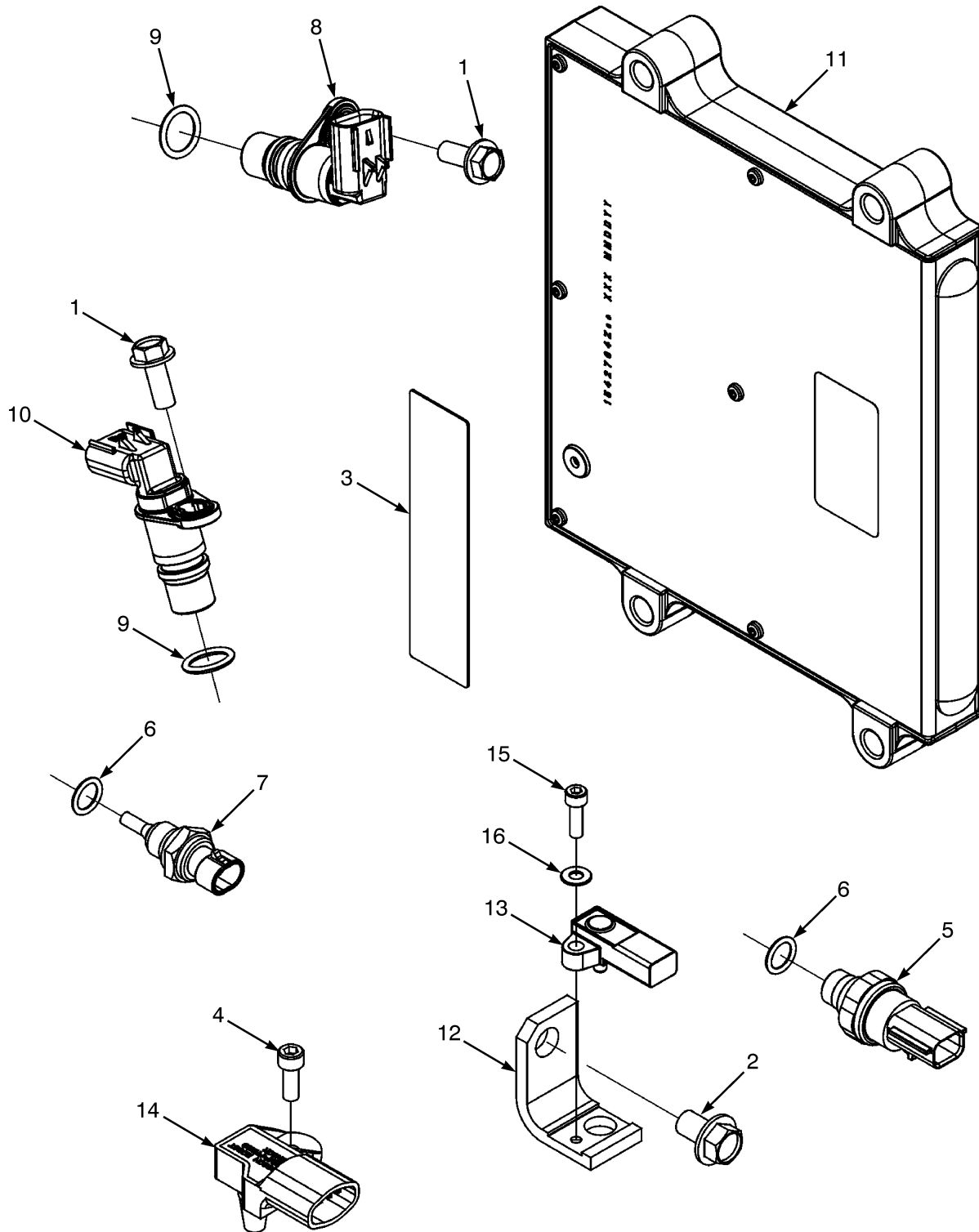


BP081015

**BATTERY CABLES**  
**CUMMINS QSB 3.3L DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
1	2099793		
	2111096	Battery Cable (Positive) .....	1
1	1357268	Battery Cable (Red) .....	AR
1	1357266	Battery Cable (Red) .....	AR
2	1539153	Conduit .....	AR
3	148792	Terminal .....	1
4	1566146	Boot .....	1
5	148798	Terminal .....	1
6	16079	Terminal .....	1
7	204223	Boot .....	1
8	2106665	Battery Cable (Negative) (Fused 200A UL) .....	1
8	1357265	Battery Cable (Red) .....	AR
9	148800	Terminal (Battery) .....	2
10	1560091	Boot .....	1
11	133483	Heat Shrink .....	AR
12	2099796	Battery Cable (Positive) .....	1
12	1357265	Battery Cable (Red) .....	AR
12	1539153	Conduit .....	AR
13	321158	Boot .....	1
14	203689	E-Ring .....	1
15	148800	Terminal (Battery) .....	1
16	204223	Boot .....	1
17	2099794	Battery Cable (Negative) .....	1
17	16078	Battery Cable .....	AR
17	1357533	Wire-Bulk .....	AR
17	275495	Conduit .....	AR
17	275497	Conduit .....	AR
18	148789	Terminal .....	1
19	1564044	E-Ring .....	1
20	806426	E-Ring .....	1
21	16079	Terminal .....	1
22	2106666	Battery Cable (Fused 100A UL) .....	1
22	1357527	Wire-Bulk .....	AR
23	1544729	Connector Body .....	1
24	1544730	Socket .....	1
25	148615	E-Ring .....	1
26	1520864	Boot .....	1

## ELECTRONIC CONTROL MODULE AND SENSORS (FIGURE 4-16) CUMMINS QSB 3.3L DIESEL



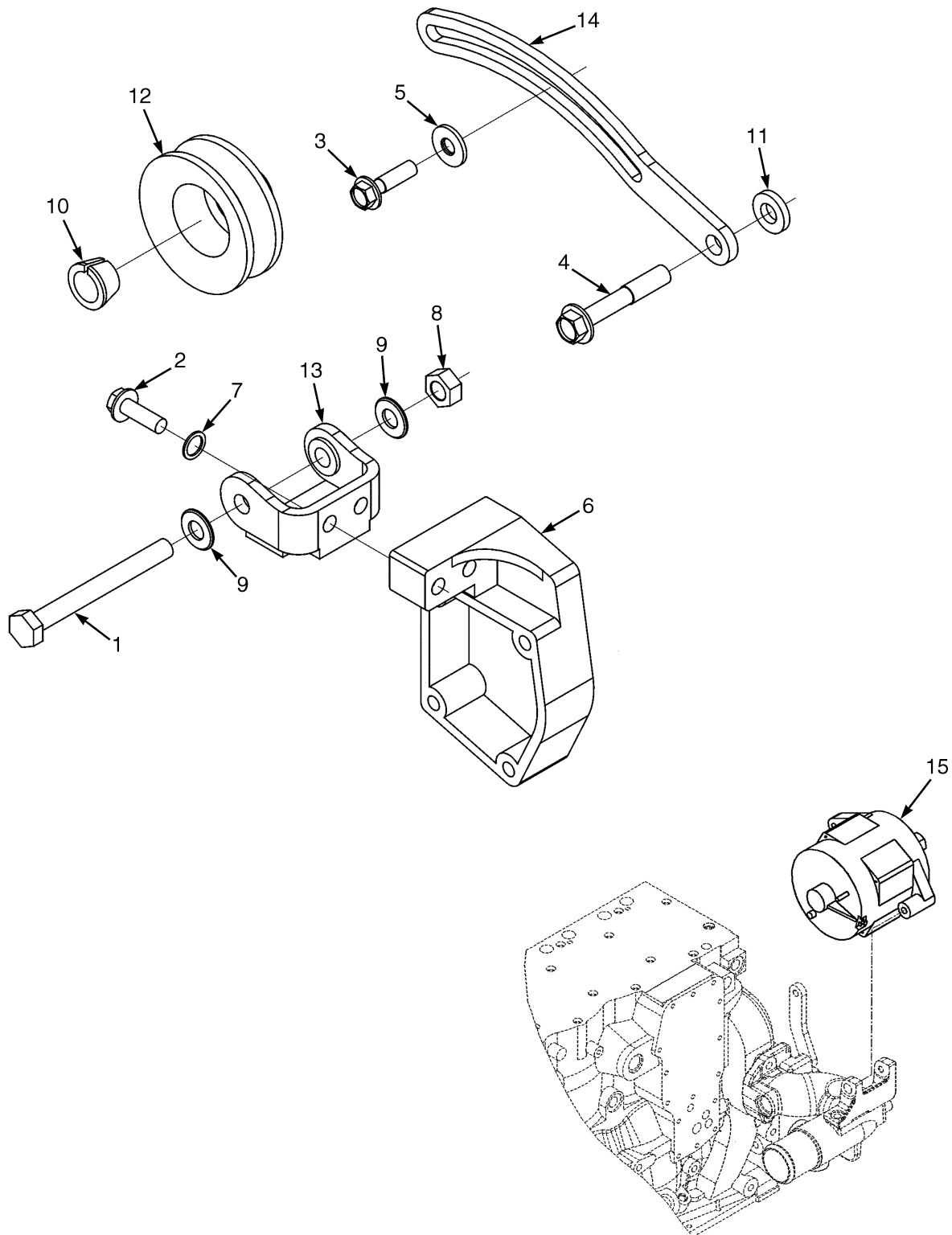
BP090407

**ELECTRONIC CONTROL MODULE AND SENSORS  
CUMMINS QSB 3.3L DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1691869	Capscrew .....	2
2	1691870	Capscrew .....	1
3	1517120	Data Plate .....	1
4	1691871	Capscrew .....	1
5	1543439	Switch, Oil Pressure .....	1
6	1543435	O-Ring .....	2
7	1691873	Sensor Assembly (Temperature) .....	1
8	1644129	Crank Position Sensor .....	1
9	1644128	O-Ring .....	2
10	1644131	Cam Position Sensor (Crank Position) .....	1
11	1691861	Electronic Control Module .....	1
12	1691868	Support .....	1
13	1691877	Sensor (Ambient Air Pressure) .....	1
14	1691878	Sensor (Intake Manifold Temperature) .....	1
15	1691879	Capscrew .....	1
16	1691880	Washer .....	1
17	<b>a</b> 2106332	Label (ECM Code) (Standard Transmission Only) .....	1

**FOOTNOTES:****a** Not Illustrated

## ALTERNATOR AND MOUNTING (FIGURE 4-17) CUMMINS QSB 3.3L DIESEL



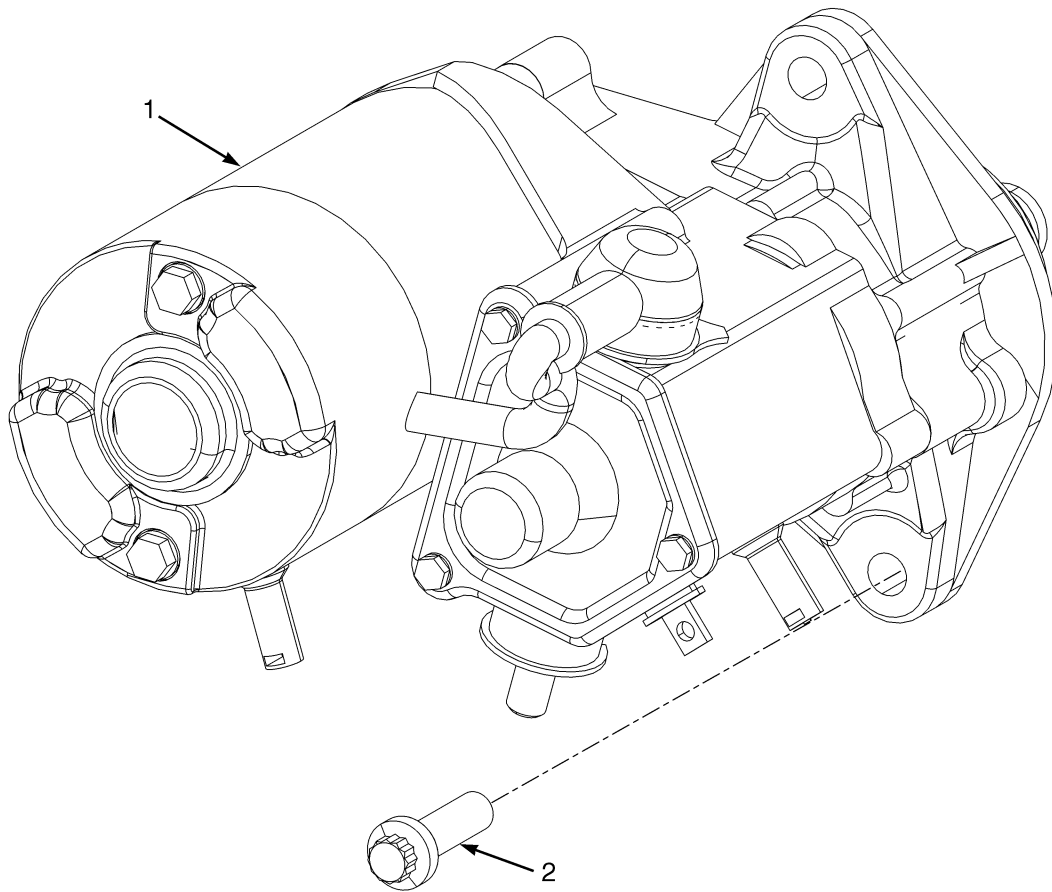
BP090401



**ALTERNATOR AND MOUNTING  
CUMMINS QSB 3.3L DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1691634		
	4023567	Capscrew .....	1
2	1691854		
	1597807	Capscrew (Flange) .....	2
3	1691633		
	4023568	Capscrew .....	1
4	1691634	Capscrew .....	1
5	1691635	Spacer .....	1
6	1691641	Support .....	1
7	.....	Washer .....	2
8	1691638	Nut .....	1
9	1691639	Washer .....	2
10	1637812	Retainer .....	1
11	1691636	Spacer .....	1
12	1691640	Pulley .....	1
13	1691642	Bracket .....	1
13	.....	Bushing .....	1
14	1691637	Plate (Pivot) .....	1
15	1637805	Alternator (Without Pulley) .....	1
15	4007486	Alternator (With Pulley) .....	1
15	1691640	Pulley .....	1
15	1637812	Retainer .....	1

## STARTER MOTOR (FIGURE 4-18) CUMMINS QSB 3.3L DIESEL

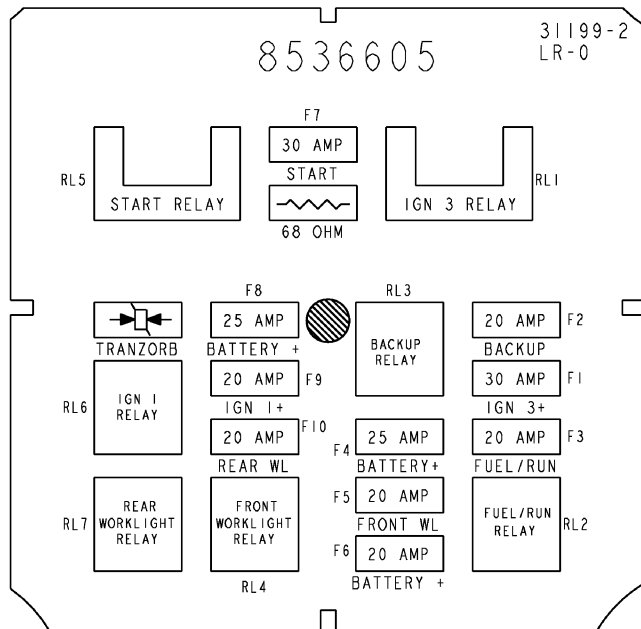
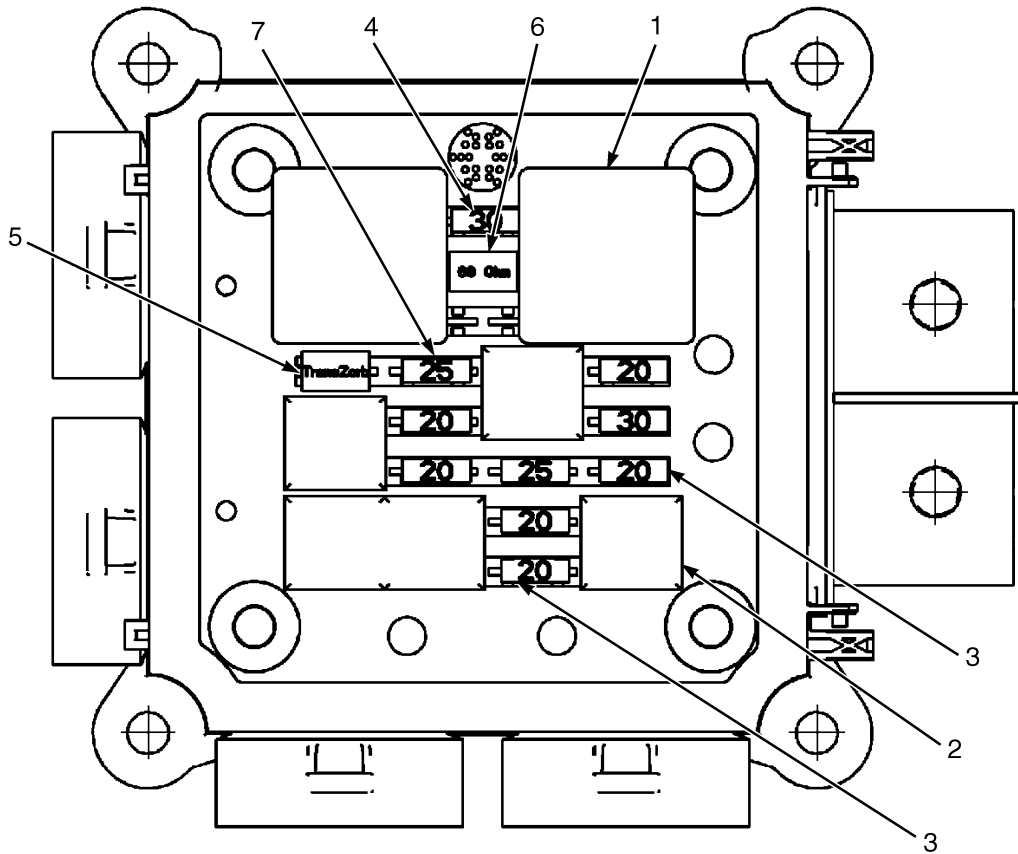


BP090305

ITEM	PART NO.	DESCRIPTION	QTY
	2103243	Engine Assy-Diesel .....	1
1	1692007	Motor (Starter) .....	1
2	1692006	Capscrew .....	3
2	1707217	Capscrew (Alternate Part) .....	3



## POWER DISTRIBUTION MODULE (FIGURE 4-19)



BP080485

**POWER DISTRIBUTION MODULE**

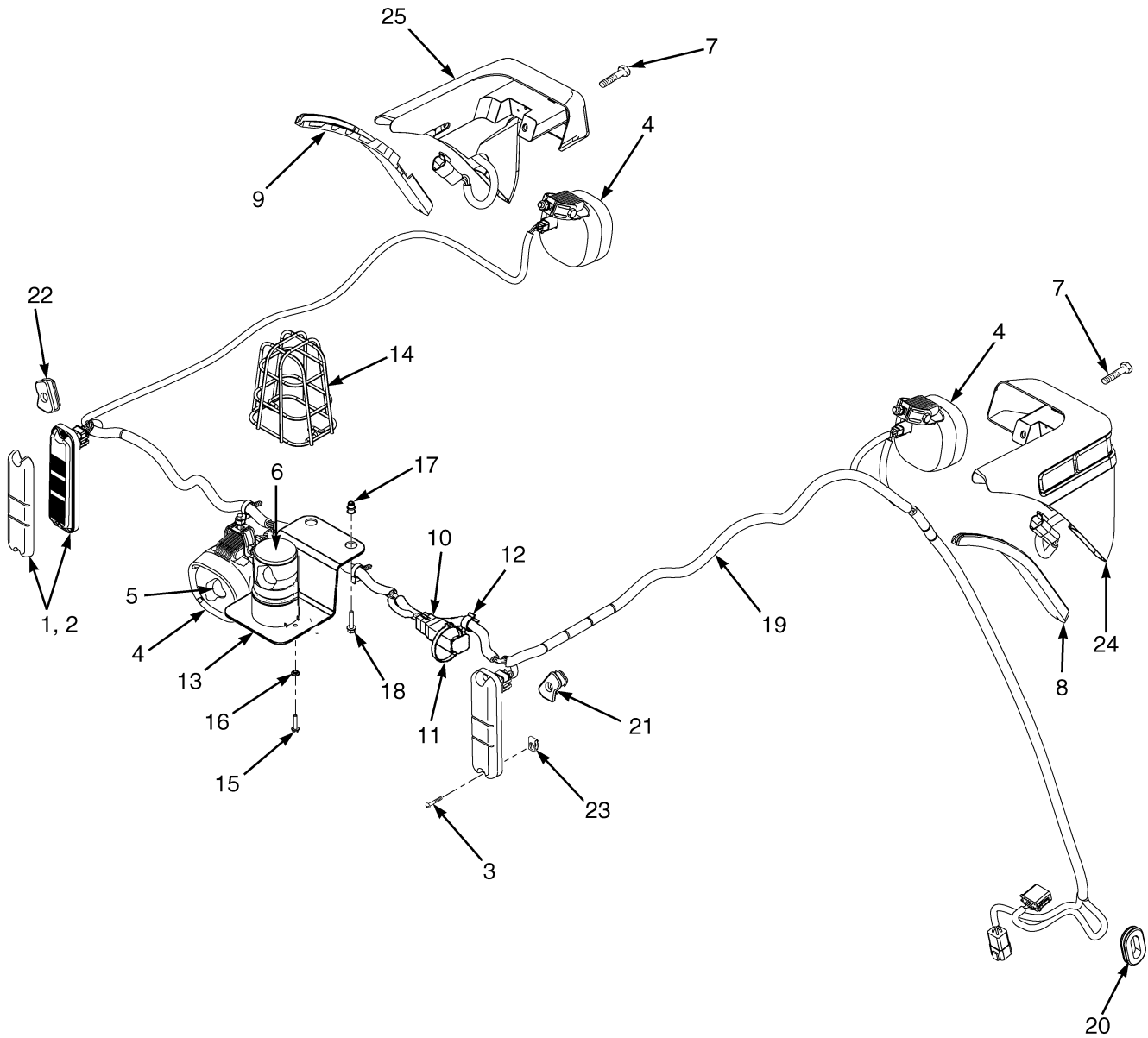
ITEM	PART NO.	DESCRIPTION	QTY
	2090613	Module .....	1
1	2044712	Relay (30 Amp) .....	2
2	1528315	Relay (20 Amp) .....	5
3	1528132	Fuse (20 Amp) .....	6
4	1528133	Fuse (30 Amp) .....	2
5	1528630	Semiconductor .....	1
6	1528631	Resistor (68 Ohm, 5 Watt) .....	1
7	1544255	Fuse (25 Amp) .....	2
	<b>a</b> 1534417	Capscrew .....	4
	<b>a</b> <del>1382472</del>		
	1502543	Nut (Flange) .....	2
	<b>a</b> 1402883	Fuse Puller .....	1
	<b>a</b> 1559928	Seal .....	1

**FOOTNOTES:****a** Not Illustrated





## LIGHTS (FIGURE 4-21) BRAKE, TAIL, BACKUP, SIDE, TURN SIGNALS, WORK, STROBE — WITH OVERHEAD GUARD



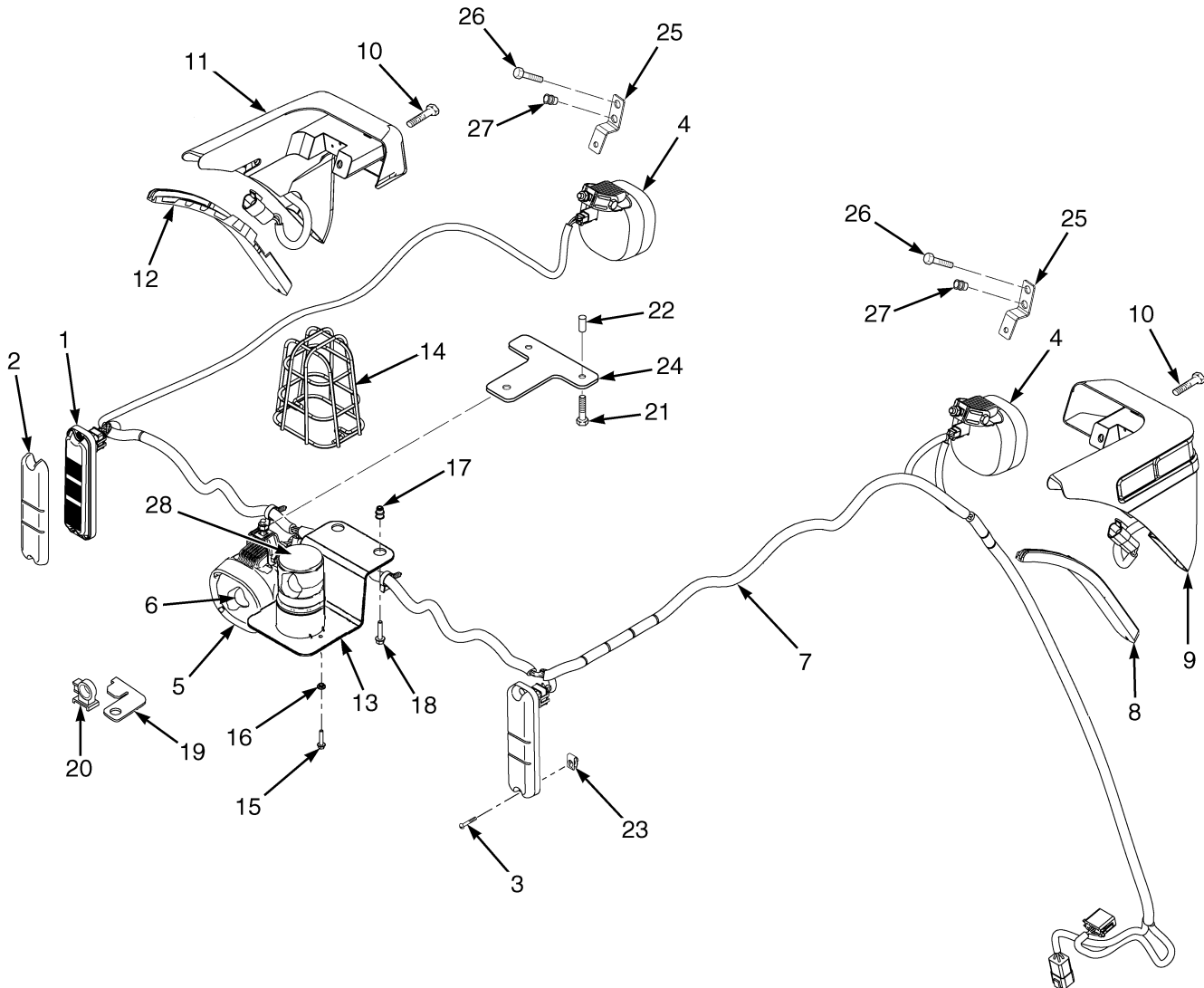
BP080385



**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	2107957	Tail Light Base (RH) .....	1
1	2107958	Tail Light Base (LH) .....	1
2	2056826	Reflector (Tail) .....	2
3	1565125	Screw .....	4
4	2098083	Work Light (Rear) (Halogen) .....	1
4	2107382	Head/Work Light (Rear) (LED) (LED) .....	1
4	2098086	Work Light (RH Front) (Halogen) .....	1
4	2107385	Head/Work Light (RH Front) (LED) .....	1
4	2098087	Work Light (LH Front) (Halogen) .....	1
4	2107386	Head/Work Light (LH Front) (LED) .....	1
5	2098082	Bulb (Halogen) .....	1
6	1654013	Strobe Light Assembly .....	1
7	1608654	Capscrew .....	4
7	1613324	Capscrew (Alternate Part) .....	1
8	1608589	Trim (Right Hand) .....	1
9	1608590	Trim (Left Hand) .....	1
10	2095895	Wire Harness .....	1
10	1514597	Connector .....	1
10	1514598	Connector .....	1
10	1484709	Terminal (Pin) .....	4
10	1634047	Resistor .....	3
11	1644398	Clamp .....	1
12	1606544	Clamp .....	1
13	1565076	Bracket Wldmt .....	1
14	1302024	Guard (Strobe Light) .....	1
15	1586759	Capscrew .....	2
16	1586428	Nut .....	2
17	1531001	Insert .....	2
18	1586495	Capscrew .....	2
19	2101862	Wire Harness (Lights) (☞ Figure 4-52).....	1
20	1539584	Grommet (Vehicle System Manager) .....	1
21	1560447	Grommet (Right Hand Tail Light) .....	1
22	1560448	Grommet (Left Hand 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
25	1330437	Terminal (Pin) .....	3

## LIGHTS (FIGURE 4-22) BRAKE, TAIL, BACKUP, SIDE, TURN SIGNALS, WORK, STROBE — WITH CAB

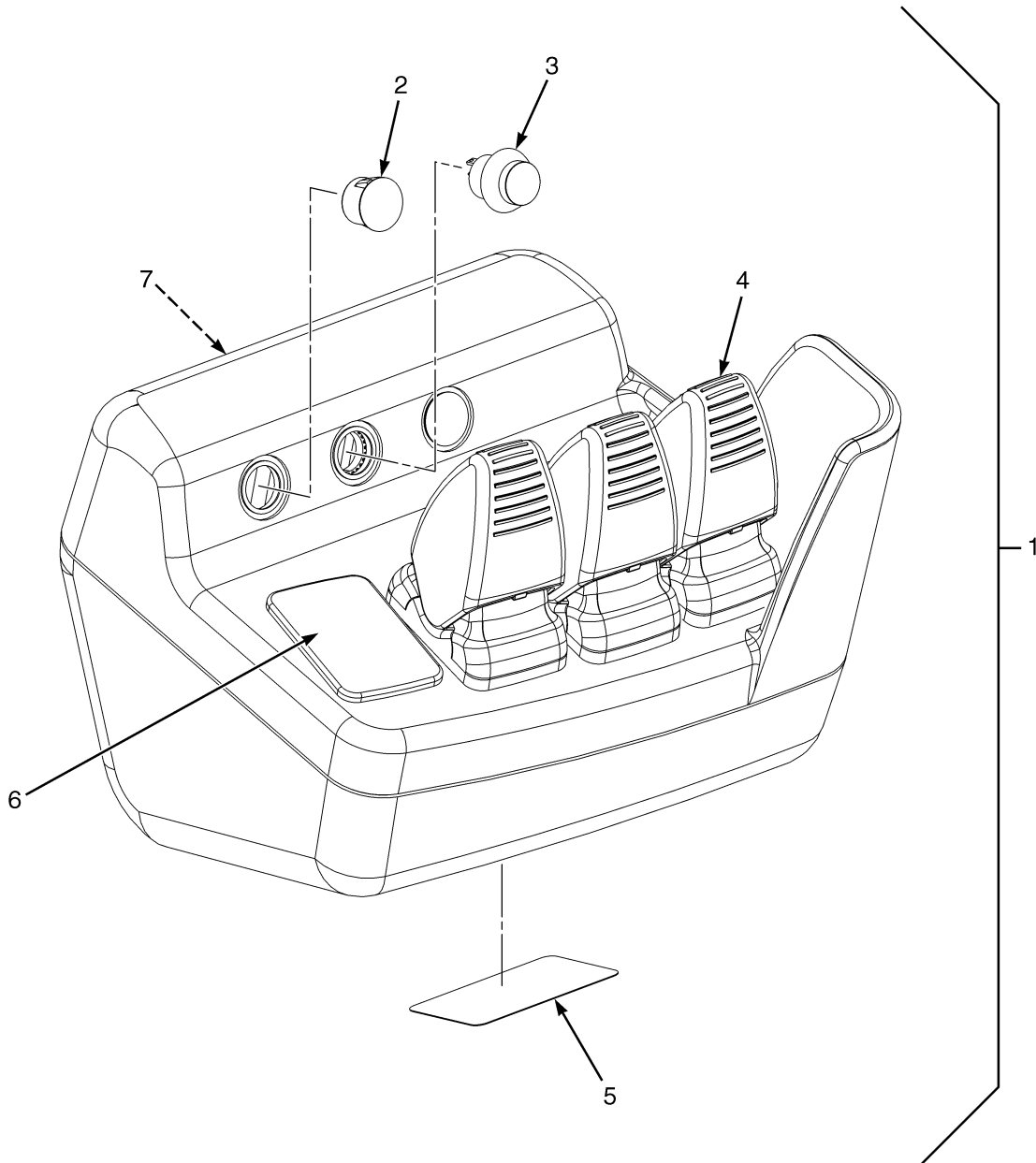


BP080386

**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	2107957	Tail Light Base (RH) (Not Shown) .....	1
1	2107958	Tail Light Base (LH) (Not Shown) .....	1
2	2056826	Reflector (Tail) .....	2
3	1565125	Screw .....	4
4	2098084	Work Light (RH Front) (Halogen) .....	1
4	2107385	Head/Work Light (RH Front) (LED) .....	1
4	2098085	Work Light (LH Front) (Halogen) .....	1
4	2107386	Head/Work Light (LH Front) (LED) .....	1
5	2098083	Work Light (Rear) (Halogen) .....	1
5	2107382	Head/Work Light (Rear) (LED) (LED) .....	1
6	2098082	Bulb (Halogen) .....	1
7	1623382	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) .....	1
11	2070562	Turn Signal Light (LH Front) .....	1
12	1608592	Trim (LH) .....	1
13	1565076	Bracket Wldmt .....	1
14	1302024	Guard (Strobe Light) .....	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	1654013	Strobe Light Assembly .....	1

## ELECTRONIC CONTROL LEVERS (FIGURE 4-23) MINI-LEVER MODULES (THREE FUNCTION) (→ S/N P005B02569H)



BP150259

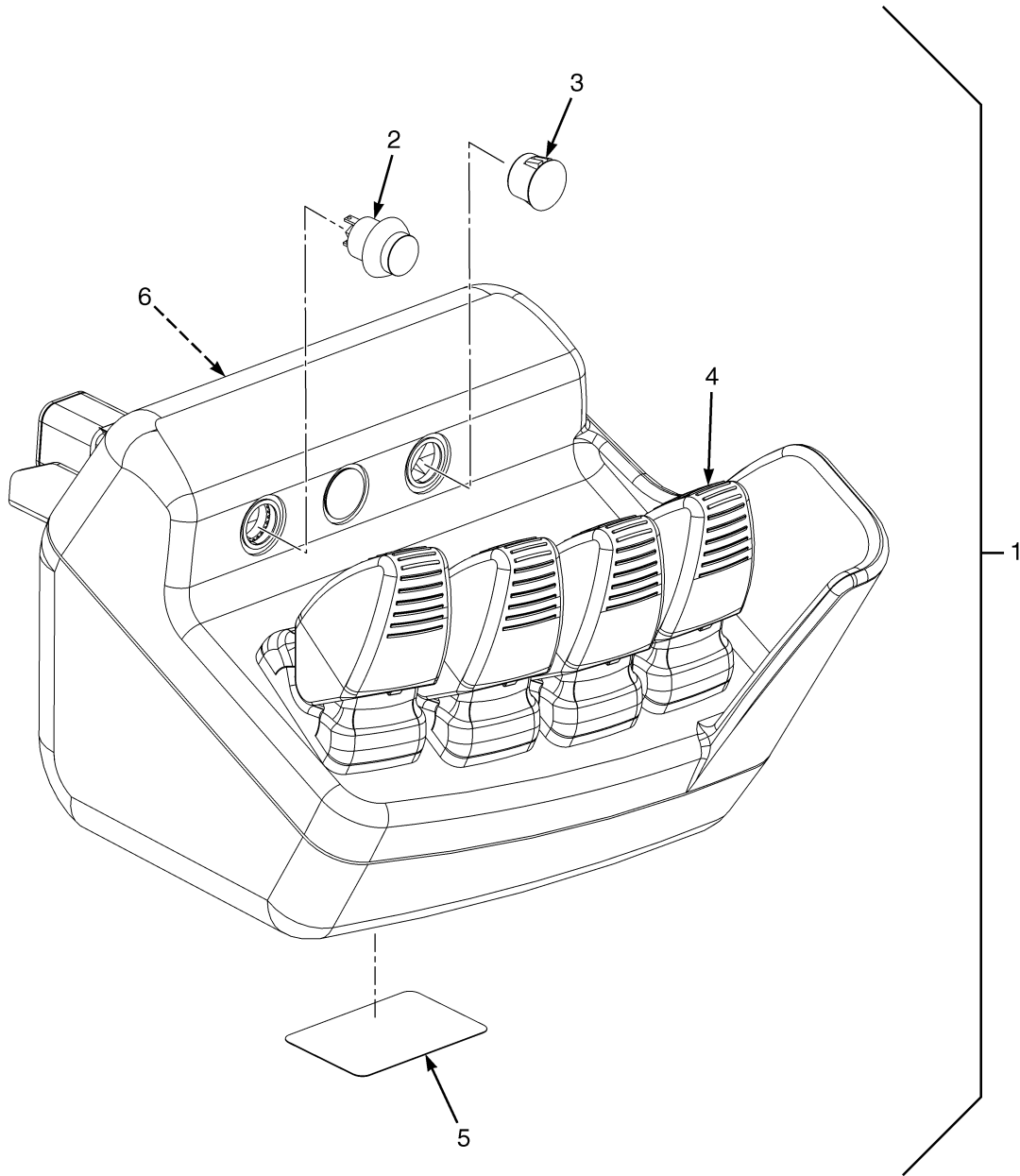
**ELECTRONIC CONTROL LEVERS**  
**MINI-LEVER MODULES (THREE FUNCTION) (→ S/N P005B02569H)**

ITEM	PART NO.	DESCRIPTION	QTY
1	2105372	Mini-Lever (8544613) .....	1
	1689455	Kit-Mini-Lever (Non-Clamping) .....	3
	<b>b</b> 1598224	Plug .....	1
	<b>c</b> 1598223	Kit-Plug (Interlock Switch Plug) .....	3
1	2105376	Mini-Lever (8544617) (With Clamping) .....	1
	<b>a</b> 1598223	Kit-Plug (Interlock Switch Plug) .....	1
	<b>d</b> 1598221	Kit-Switch (Interlock Switch) .....	1
	<b>b</b> 1598224	Plug .....	1
	<b>c</b> 1689455	Kit-Mini-Lever (Non-Clamping) .....	2
	1689460	Kit-Mini-Lever (Clamping) .....	1
1	2105378	Mini-Lever (8544619) (With Return To Set Tilt) .....	1
	<b>a</b> 1598223	Kit-Plug (Interlock Switch Plug) .....	2
	<b>d</b> 1598221	Kit-Switch (Interlock Switch) .....	1
	<b>b</b> 1598224	Plug .....	1
	<b>c</b> 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
	<b>d</b> 1598221	Kit-Switch (Interlock Switch) .....	2
	<b>b</b> 1598224	Plug .....	2
	<b>c</b> 1598223	Kit-Plug (Interlock Switch Plug) .....	1
	1689455	Kit-Mini-Lever (Non-Clamping) .....	1
	1689460	Kit-Mini-Lever (Clamping) .....	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 .....	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 4-24) MINI-LEVER MODULE (FOUR FUNCTION) (→ S/N P005B02569H)



BP150258

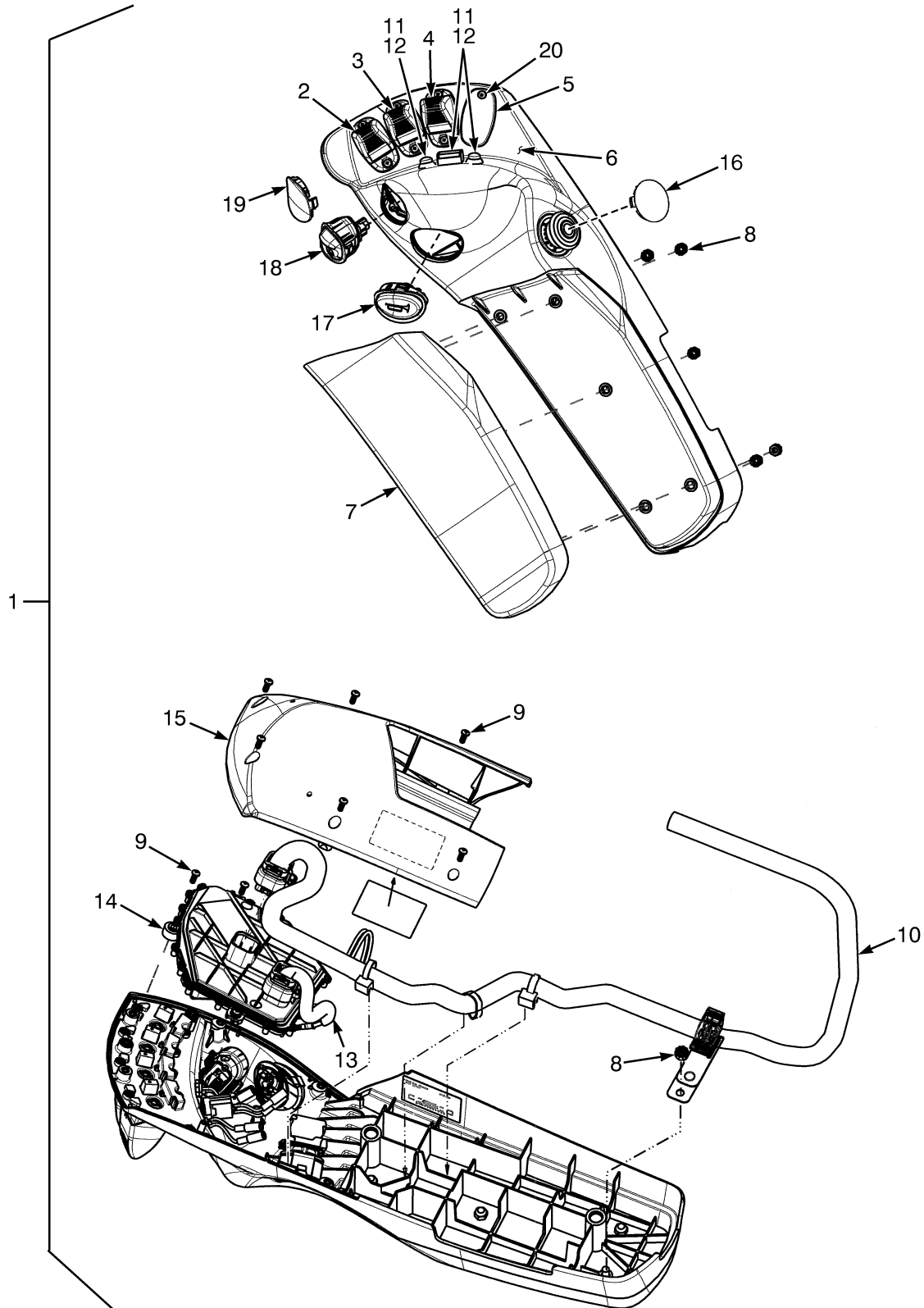
**ELECTRONIC CONTROL LEVERS**  
**MINI-LEVER MODULE (FOUR FUNCTION) (→ S/N P005B02569H)**

ITEM	PART NO.	DESCRIPTION	QTY
1	2105373	Mini-Lever Module (8544614) .....	1
	1689455	Kit-Mini-Lever (Non-Clamping) .....	4
	<b>b</b> 1598223	Kit-Plug (Interlock Switch Plug) .....	3
1	2105377	Mini-Lever Module (8544618) (With Clamping) .....	1
	1689455	Kit-Mini-Lever (Non-Clamping) .....	3
	1689460	Kit-Mini-Lever (Clamping) .....	1
	<b>c</b> 1598221	Kit-Switch (Interlock Switch) .....	1
	<b>b</b> 1598223	Kit-Plug (Interlock Switch Plug) .....	1
1	2105379	Mini-Lever Module (8544620) (With Return to Set Tilt) .....	1
	1689455	Kit-Mini-Lever (Non-Clamping) .....	3
	<b>a</b> 1689460	Kit-Mini-Lever (Clamping) .....	1
	<b>c</b> 1598221	Kit-Switch (Interlock Switch) .....	1
	<b>b</b> 1598223	Kit-Plug (Interlock Switch Plug) .....	2
1	2105381	Mini-Lever Module (8544622) (Clamping and Return to Set Tilt) .....	1
	1689455	Kit-Mini-Lever (Non-Clamping) .....	2
	<b>c</b> 1598221	Kit-Switch (Interlock Switch) .....	2
	<b>b</b> 1598223	Kit-Plug (Interlock Switch Plug) .....	1
	1689460	Kit-Mini-Lever (Clamping) .....	2
	2103850	Mini Lever Module (8543800) .....	1
	1683379	Kit-Mini-Lever (Non-Clamping) .....	4
	<b>b</b> 1598223	Kit-Plug (Interlock Switch Plug) .....	3
1	2103854	Mini Lever Module (8543804) (With Clamping) .....	1
	1683379	Kit-Mini-Lever (Non-Clamping) .....	3
	1683398	Kit-Mini-Lever (Clamping) .....	1
	<b>c</b> 1598221	Kit-Switch (Interlock Switch) .....	1
	<b>b</b> 1598223	Kit-Plug (Interlock Switch Plug) .....	2
1	2103856	Mini Lever Module (8543806) (With Return to Set Tilt) .....	1
	1683379	Kit-Mini-Lever (Non-Clamping) .....	3
	1683398	Kit-Mini-Lever (Clamping) .....	1
	<b>c</b> 1598221	Kit-Switch (Interlock Switch) .....	1
	<b>b</b> 1598223	Kit-Plug (Interlock Switch Plug) .....	2
1	2103858	Mini Lever Module (8543808) (Clamping with Return to Set Tilt) .....	1
	1683379	Kit-Mini-Lever (Non-Clamping) .....	2
	1683398	Kit-Mini-Lever (Clamping) .....	2
	<b>c</b> 1598221	Kit-Switch (Interlock Switch) .....	2
	<b>b</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 .....	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 4-25) WITH ARMREST — THREE FUNCTION (S/N P005B02570H →)



BP080959



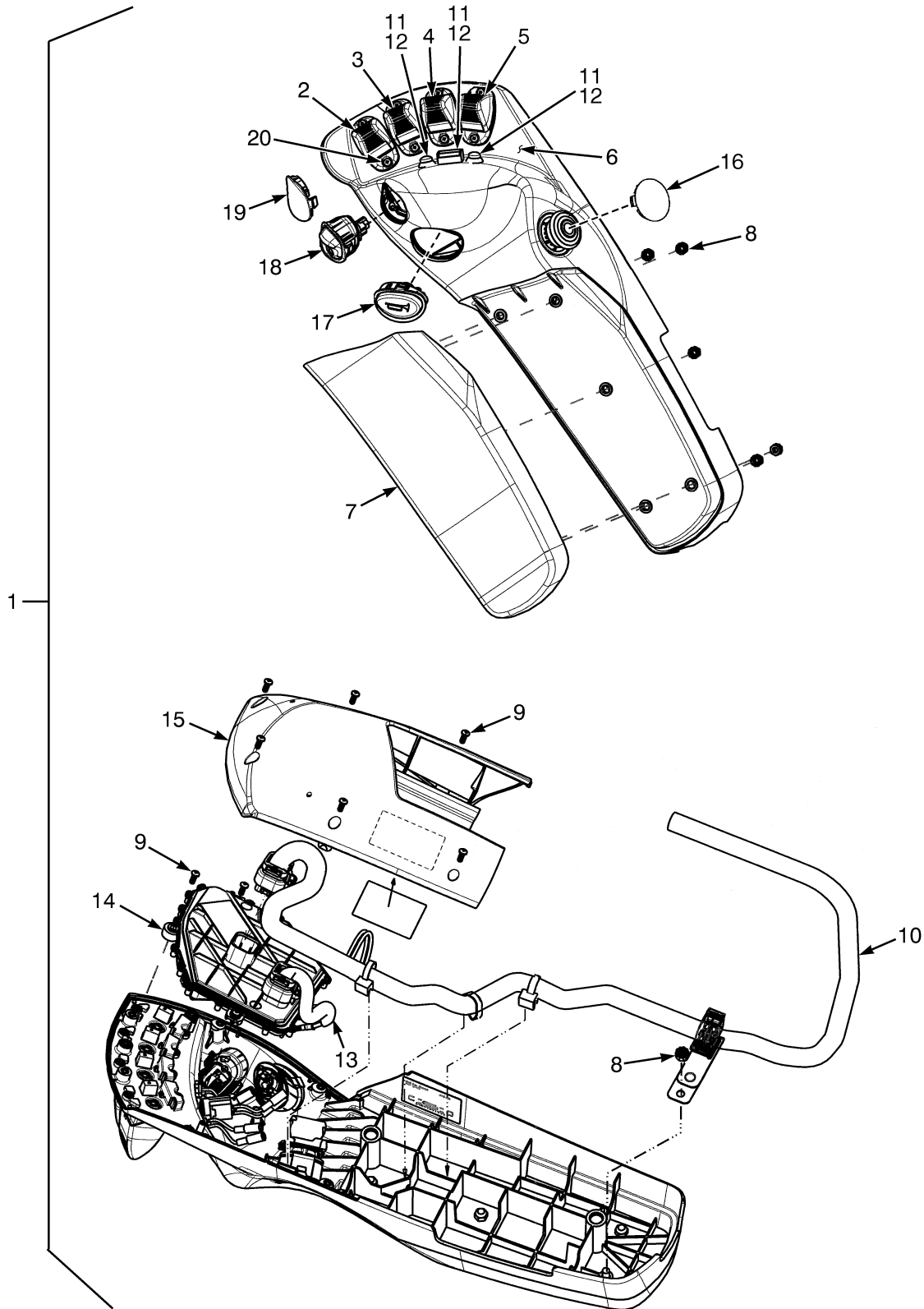
### MINI-LEVER CONTROLS WITH ARMREST – THREE FUNCTION (S/N P005B02570H →)

**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	<b>c</b> 4601265	Mini-Lever Assembly .....	1	..
1	<b>a</b> 4601097	Mini-Lever Assembly .....	1	..
1	<b>b</b> 4601099	Mini-Lever Assembly .....	1	..
1	4601101	Mini-Lever Assembly .....	..	1
1	<b>c</b> 4601103	Mini-Lever Assembly .....	..	1
1	<b>a</b> 4601105	Mini-Lever Assembly .....	..	1
1	<b>b</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	<b>a</b> 2110793	Lever (With Override) .....	1	1
4	.....	Lever Position 3 .....	1	1
4	2110791	Lever (Single Function) .....	1	1
4	<b>c</b> 2110792	Lever (Clamping) .....	1	1
5	2108249	Plug .....	1	1
6	2111799	Armrest (Without Push Buttons) .....	1	1
6	<b>ac</b> 4603439	Armrest (With Push Buttons) .....	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	<b>c</b> 1704528	Push Button (Position 3) .....	1	1
11	<b>b</b> 1704528	Push Button (Position 2 and 3) .....	2	2
11	<b>a</b> 1704528	Push Button (Position 2) .....	1	1
12	<b>c</b> 1705359	Cover (Push Button) .....	1	1
12	<b>b</b> 1705359	Cover (Push Button) .....	1	1
13	1704529	Wire Harness (Forward/Reverse Switch in the MLM module) (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 4-26) WITH ARMREST — FOUR FUNCTION (S/N P005B02570H →)



BP080960

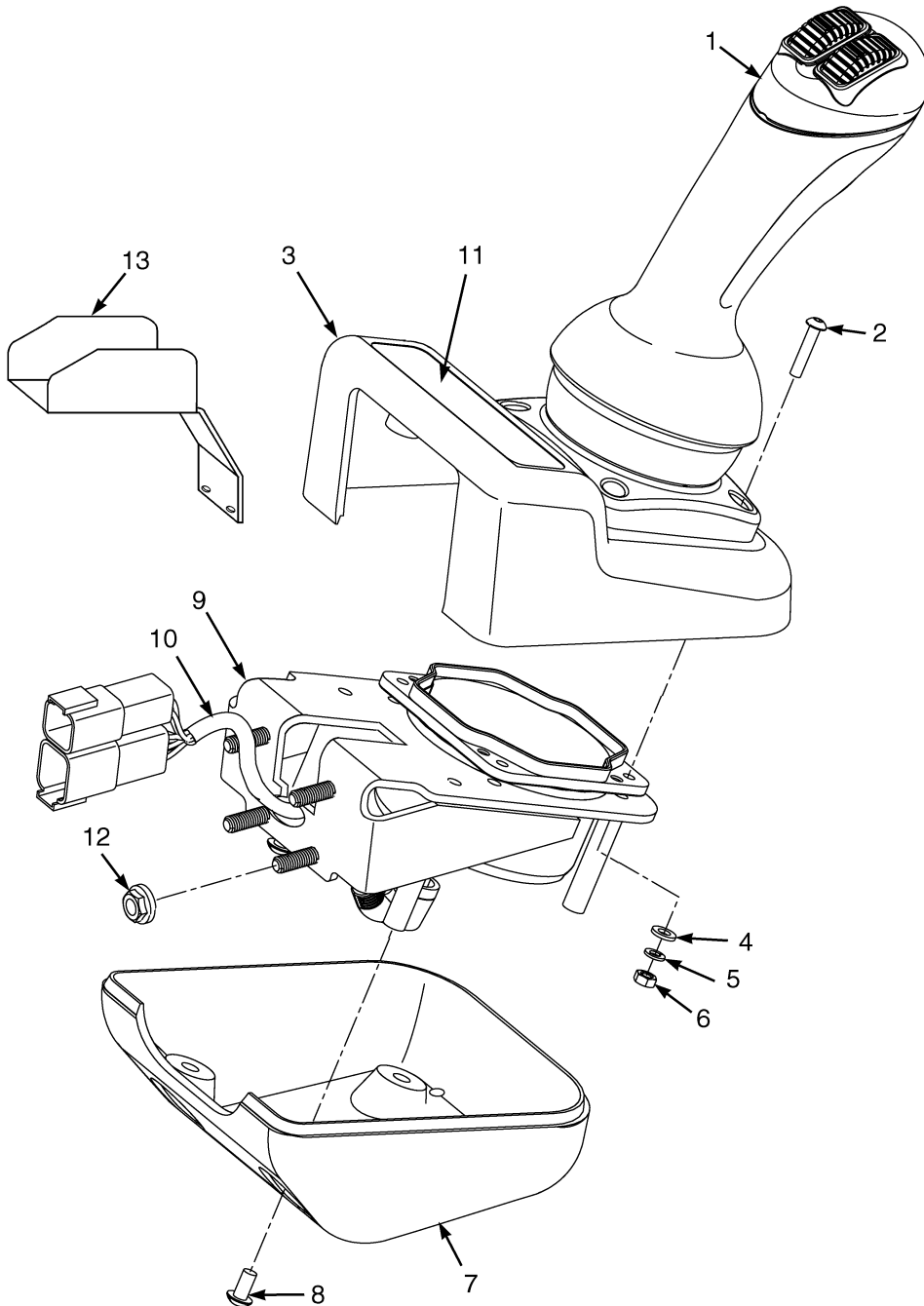
**MINI-LEVER CONTROLS**  
**WITH ARMREST – FOUR FUNCTION (S/N P005B02570H →)**

**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	<b>a</b> 4601096	Mini-Lever Assembly .....	1	..
1	<b>c</b> 4601098	Mini-Lever Assembly .....	1	..
1	<b>b</b> 4601100	Mini-Lever Assembly .....	1	..
1	4601102	Mini-Lever Assembly .....	..	1
1	<b>a</b> 4601104	Mini-Lever Assembly .....	..	1
1	<b>c</b> 4601106	Mini-Lever Assembly .....	..	1
1	<b>b</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>b</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	<b>ab</b> 2110792	Lever (Clamping) .....	1	1
6	2111799	Armrest (Without Push Buttons) .....	1	1
6	<b>abc</b> 4603439	Armrest (With Push Buttons) .....	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	<b>a</b> 1591181	Switch-Momentary .....	1	1
11	<b>b</b> 1591181	Switch-Momentary .....	2	2
12	<b>a</b> 1598225	Hole Plug .....	2	2
12	<b>b</b> 1598225	Hole Plug .....	1	1
13	1704529	Wire Harness (Forward/Reverse Switch in the MLM module) (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

## JOYSTICK (FIGURE 4-27)



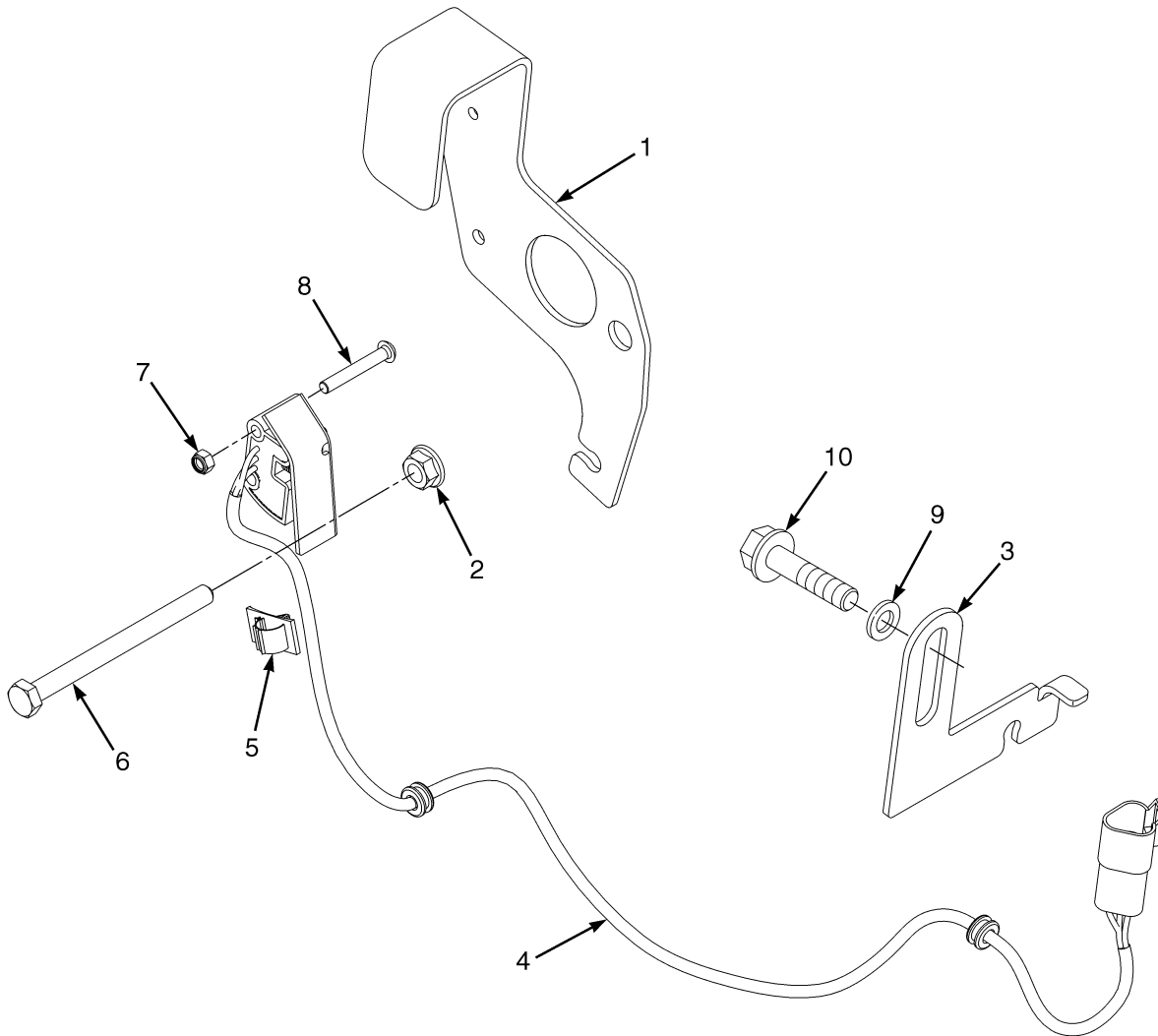
BP150080

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

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	2085179	Joystick (Without Interlock) .....	1	..
	<b>a</b> 2093801	Joystick (Three Function) (Without Interlock) .....	1	..
	<b>b</b> 4601794	Joystick (Three Function) (Without Interlock) .....	1	..
	2085171	Joystick (With Interlock) .....	1	..
	<b>a</b> 2093804	Joystick (Three Function) (With Interlock) .....	1	..
	<b>b</b> 4601796	Joystick (Three Function) (With Interlock) .....	1	..
	2085180	Joystick (Without Interlock) .....	..	1
	<b>a</b> 2093803	Joystick (Four Function) (Without Interlock) .....	..	1
	<b>b</b> 4601795	Joystick (Four Function) (Without Interlock) .....	..	1
	2085172	Joystick (With Interlock) .....	..	1
	<b>a</b> 2093805	Joystick (Four Function) (With Interlock) .....	..	1
	<b>b</b> 4601797	Joystick (Four Function) (With Interlock) .....	..	1
1	2085175	Joystick (Without Interlock) .....	1	..
1	<b>a</b> 2093806	Joystick (Three Function) (Without Interlock) .....	1	..
1	<b>b</b> 4601802	Joystick (Three Function) (Without Interlock) .....	1	..
1	2085167	Joystick (With Interlock) .....	1	..
1	<b>a</b> 2093808	Joystick (Three Function) (With Interlock) .....	1	..
1	<b>b</b> 4601804	Joystick (Three Function) (With Interlock) .....	1	..
1	2085176	Joystick (Without Interlock) .....	..	1
1	<b>a</b> 2093807	Joystick (Four Function) (Without Interlock) .....	..	1
1	<b>b</b> 4601803	Joystick (Four Function) (Without Interlock) .....	..	1
1	2085168	Joystick (With Interlock) .....	..	1
1	<b>a</b> 2093809	Joystick (Four Function) (With Interlock) .....	..	1
1	<b>b</b> 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	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 .....	1	1
12	<del>1307884</del> 1514429	Nut .....	4	4
13	1579847	Bracket .....	1	1

**FOOTNOTES:****a** → 8/2009**b** 8/2009 →

## MAST ELECTRICAL (FIGURE 4-28)

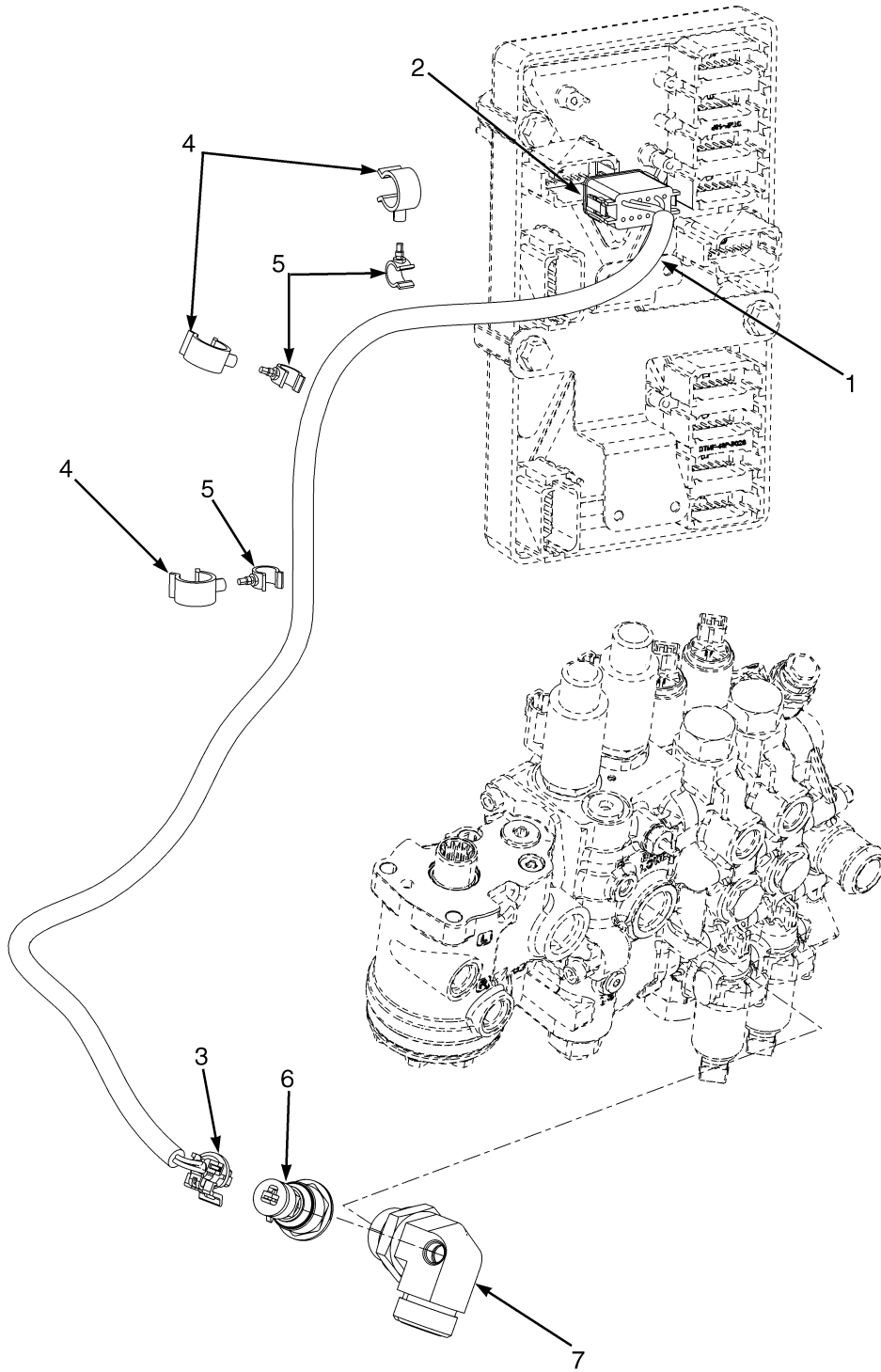


BP080399

ITEM	PART NO.	DESCRIPTION	QTY
1	1625255	Bracket .....	1
2	1586430	Nut .....	1
3	1595731	Bracket .....	1
4	1595234	Sensor (Mast Tilt Position) .....	1
5	1562088	Clip .....	1
6	1597451	Capscrew .....	1
7	302398	Locknut .....	2
8	1553897	Capscrew .....	2
9	1626478	Washer .....	1
10	1658075	Capscrew .....	1



**LOAD WEIGH ELECTRICAL (FIGURE 4-29)**



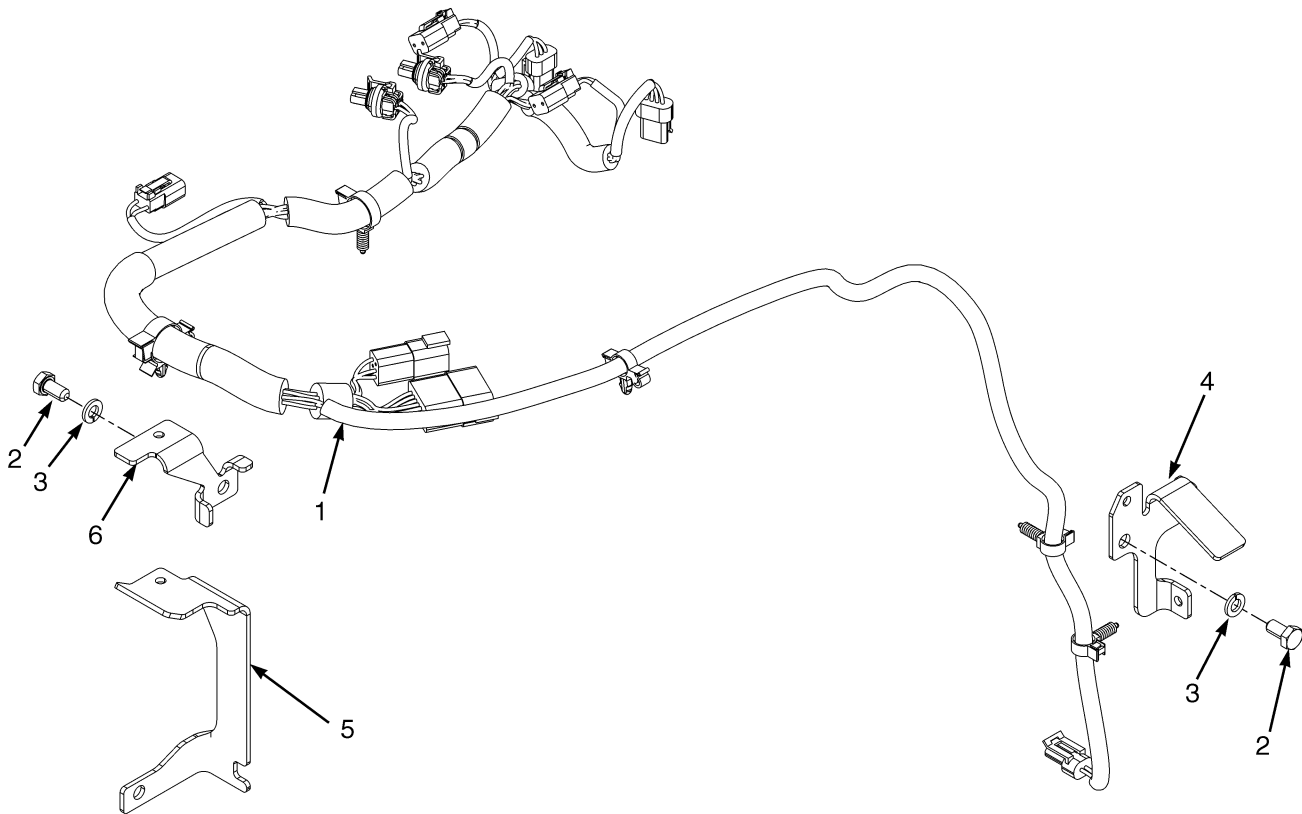
BP080413



**LOAD WEIGH ELECTRICAL**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
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	1648259	Fitting .....	1

## TRANSMISSION ELECTRICAL SYSTEM (FIGURE 4-30)

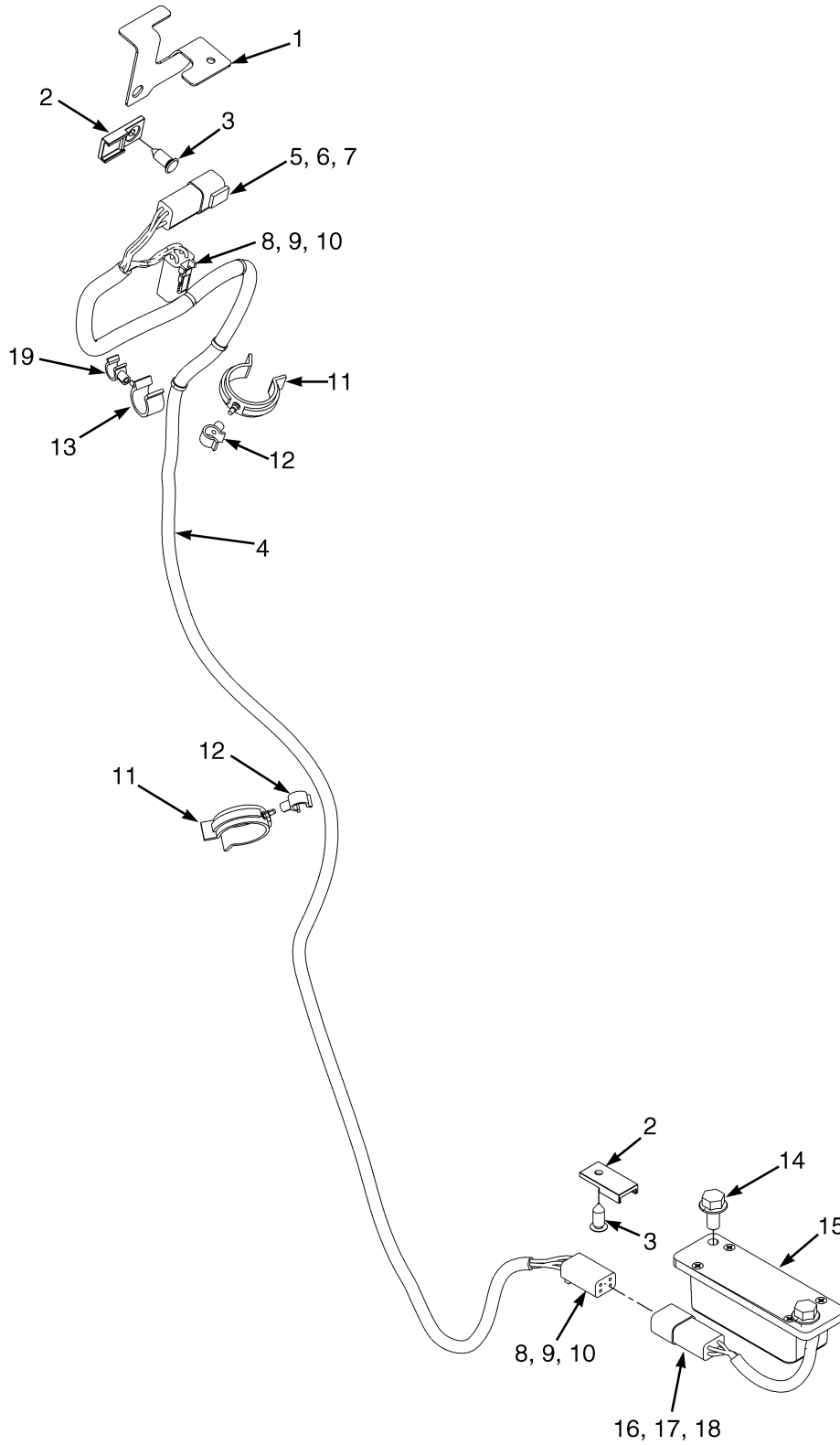


BP080514

**TRANSMISSION ELECTRICAL SYSTEM****KEY:****A: Single Speed****B: Dual Speed**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2085943	Wire Harness (Transmission) (Single Speed) (☞ Figure 4-44).....	1	..
1	2085942	Wire Harness (Transmission) (Dual Speed) (☞ Figure 4-45).....	..	1
2	287851	Capscrew .....	2	2
3	292681	Lockwasher .....	2	2
4	1612223	Bracket .....	1	1
5	1616222	Bracket .....	1	..
6	1612399	Bracket .....	..	1

## IMPACT SENSOR (FIGURE 4-31)

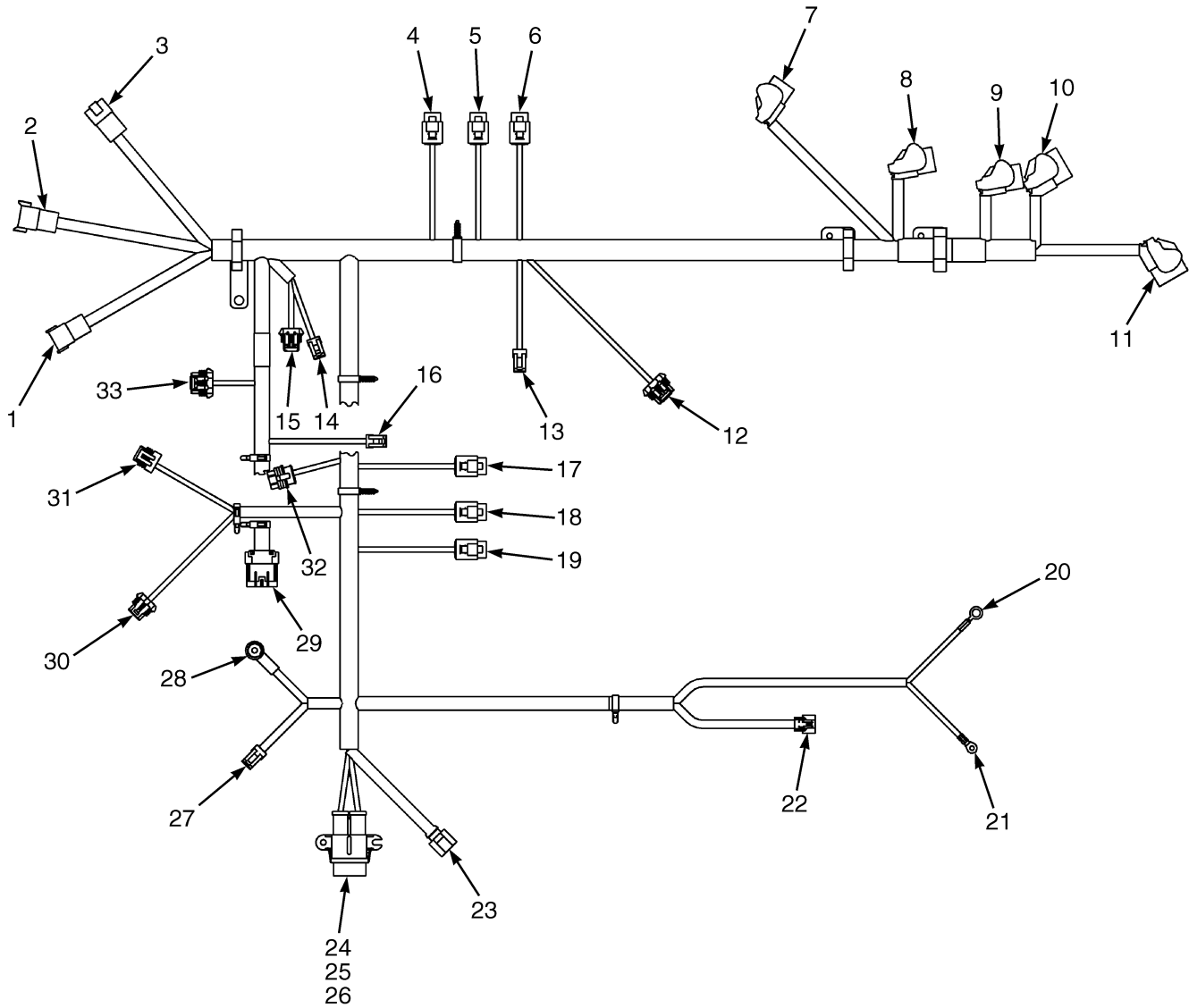


BP080394

**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 (Secondary Lock) .....	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 (Secondary Lock) .....	1
18	1330433	Terminal .....	4
19	1502053	Clamp (Swivel) .....	1

## WIRE HARNESS (FIGURE 4-32) ENGINE — GM 4.3L LPG (→ S/N P005B02545H)



BP080686

**WIRE HARNESS**  
**ENGINE – GM 4.3L LPG (→ S/N P005B02545H)**

ITEM	PART NO.	DESCRIPTION	QTY
	2093682	Wire Harness (Engine) (2008-2009 Series) .....	1
1	.....	Connector Assembly (Chassis Harness) .....	1
1	1541988	Connector (8 Pin) .....	1
2	.....	Connector Assembly (Chassis Harness) .....	1
2	1330413	Connector (8 Pin) .....	1
3	.....	Connector Assembly (Chassis Harness) .....	1
3	1514597	Connector .....	1
4	.....	Connector Assembly (Injector #5) .....	1
4	1561146	Terminal .....	2
4	1607548	Connector .....	1
5	.....	Connector Assembly (Injector #3) .....	1
5	1561146	Terminal .....	2
5	1607548	Connector .....	1
6	.....	Connector Assembly (Injector #1) .....	1
6	1561146	Terminal .....	2
6	1607548	Connector .....	1
7	.....	Connector Assembly .....	1
8	.....	Connector Assembly .....	1
9	.....	Connector Assembly .....	1
10	.....	Connector Assembly .....	1
11	.....	Connector Assembly .....	1
12	.....	Connector Assembly (RH Oxygen Sensor) .....	1
12	1482667	Connector Body .....	1
12	1402877	Electrical Terminal .....	4
12	1330355	Terminal .....	4
12	1482663	Connector .....	1
13	.....	Connector Assembly .....	1
13	1323586	Connector .....	1
13	1354237	Terminal .....	2
14	.....	Connector Assembly (Oil Pressure) .....	1
14	1327957	Connector .....	1
14	1354237	Terminal .....	3
15	.....	Connector Assembly (Cam Sensor) .....	1
15	1476067	Connector .....	1
15	1476109	Connector Lock .....	1
15	1330355	Terminal .....	3
15	1476108	Wire Seal .....	3
16	.....	Connector Assembly (Fuel Pressure) .....	1
16	1402613	Connector .....	1
16	1323576	Terminal .....	3
17	.....	Connector Assembly (Injector #6) .....	1
17	1561146	Terminal .....	2
17	1607548	Connector .....	1
18	.....	Connector Assembly (Injector #4) .....	1
18	1561146	Terminal .....	2
18	1607548	Connector .....	1
19	.....	Connector Assembly (Injector #2) .....	1
19	1561146	Terminal .....	2
19	1607548	Connector .....	1
20	.....	Connector Assembly (Battery) .....	1

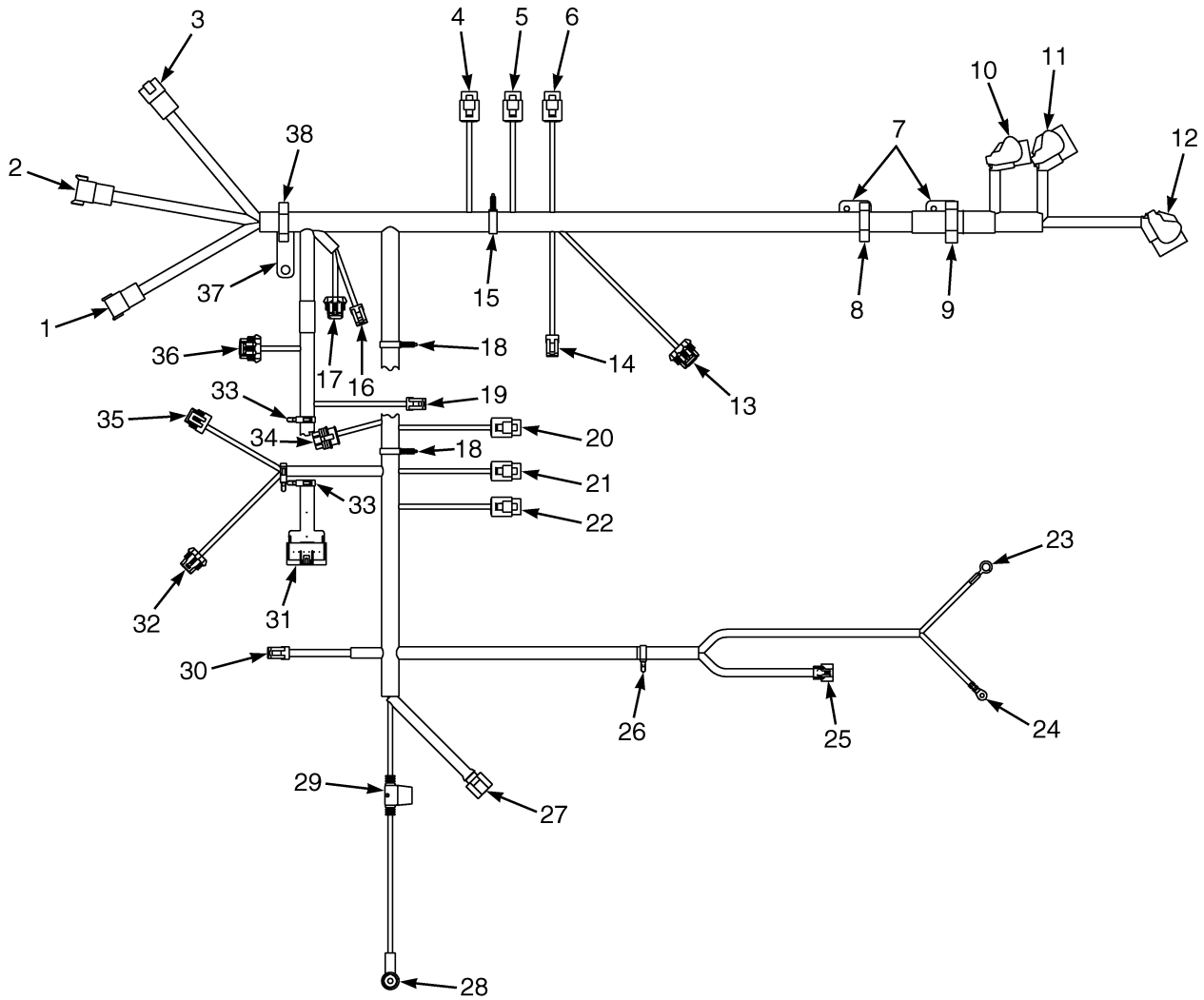
**WIRE HARNESS**  
**ENGINE – GM 4.3L LPG (→ S/N P005B02545H)**

ITEM	PART NO.	DESCRIPTION	QTY
20	129886	E-Ring .....	1
21	.....	Connector Assembly (Starter) .....	1
21	1519025	Ring Terminal .....	1
22	.....	Connector Assembly (Crank Position Sensor) .....	1
22	1655119	Electrical Connector .....	1
22	1655120	Electrical Terminal .....	3
22	1655121	Seal .....	3
23	.....	Connector Assembly .....	1
23	1607743	Connector .....	1
24	.....	Connector Assembly .....	1
24	1543553	Fuse Holder .....	1
24	1454829	Fuse (60 Amp) .....	1
24	1520543	Terminal .....	2
25	.....	Connector Assembly (Cover) .....	1
25	1454862	Cover (With Seal) .....	1
26	.....	Connector Assembly (Connector) .....	1
26	1454827	Seal .....	1
27	.....	Connector Assembly (Alternator) .....	1
27	1323576	Terminal .....	2
27	1323586	Connector .....	1
28	.....	Connector Assembly (Alternator) .....	1
28	148614	E-Ring .....	1
29	.....	Connector Assembly (LH Chassis Harness) .....	1
29	1402809	Clip .....	1
29	1527275	Connector .....	1
30	.....	Connector Assembly (Coil) .....	1
30	1476071	Connector .....	1
30	1402877	Electrical Terminal .....	2
30	1476109	Connector Lock .....	1
30	1330356	Seal .....	3
30	1351139	Seal .....	1
31	.....	Connector Assembly (Ignition) .....	1
31	1547483	Connector .....	1
31	1354237	Terminal .....	1
31	1323576	Terminal .....	3
31	1476109	Connector Lock .....	1
32	.....	Connector Assembly (Map Sensor) .....	1
32	1607839	Connector .....	1
32	1402814	Terminal .....	4
32	1562649	Seal .....	4
33	.....	Connector Assembly (LH Oxygen Sensor) .....	1
33	1482663	Connector .....	1
33	1330355	Terminal .....	4
33	1402877	Electrical Terminal .....	4
33	1482667	Connector Body .....	1





## WIRE HARNESS (ENGINE) (FIGURE 4-33) GM 4.3L LPG (GFI OPTION) — 2010 SERIES (S/N P005B02546H →)



BP080898

**WIRE HARNESS (ENGINE)**  
**GM 4.3L LPG (GFI OPTION) – 2010 SERIES (S/N P005B02546H →)**

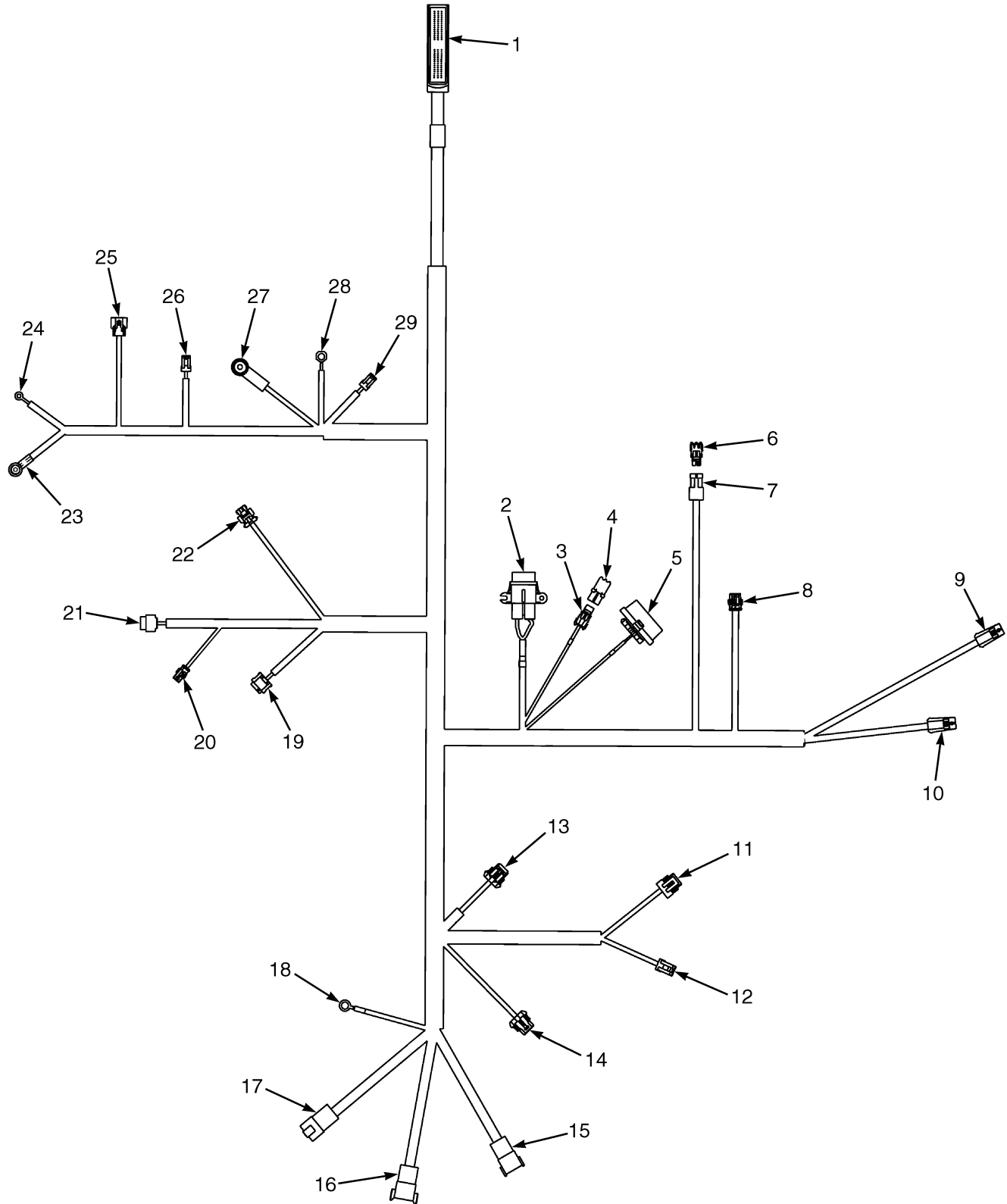
ITEM	PART NO.	DESCRIPTION	QTY
	4601160	Wire Harness (Engine) .....	1
1	.....	Connector Assembly (Chassis Harness) .....	1
1	1541988	Connector (8 Pin) .....	1
2	.....	Connector Assembly (Chassis Harness) .....	1
2	1330413	Connector (8 Pin) .....	1
3	.....	Connector Assembly (Chassis Harness) .....	1
3	1514597	Connector .....	1
4	.....	Connector Assembly (Injector #5) .....	1
4	1561146	Terminal .....	2
4	1607548	Connector .....	1
5	.....	Connector Assembly (Injector #3) .....	1
5	1561146	Terminal .....	2
5	1607548	Connector .....	1
6	.....	Connector Assembly (Injector #1) .....	1
6	1561146	Terminal .....	2
6	1607548	Connector .....	1
7	1558227	Clip .....	2
8	1532778	Clip .....	2
9	1532779	Clip .....	1
10	.....	Connector Assembly (CP 203) .....	1
11	.....	Connector Assembly (CP 204) .....	1
12	.....	Connector Assembly (CP 205) .....	1
13	.....	Connector Assembly (Right Hand Oxygen Sensor) .....	1
13	1482667	Connector Body .....	1
13	1402877	Electrical Terminal .....	4
13	1330355	Terminal .....	4
13	1482663	Connector .....	1
14	.....	Connector Assembly (CTS) .....	1
14	1323586	Connector .....	1
14	1354237	Terminal .....	2
15	1509889	Clip .....	1
16	.....	Connector Assembly (Oil Pressure) .....	1
16	1327957	Connector .....	1
16	1354237	Terminal .....	3
17	.....	Connector Assembly (Cam Sensor) .....	1
17	1476067	Connector .....	1
17	1476109	Connector Lock .....	1
17	1330355	Terminal .....	3
17	1476108	Wire Seal .....	3
18	1608857	Clip .....	2
19	.....	Connector Assembly (Fuel ABS Pressure) .....	1
19	1402613	Connector .....	1
19	1323576	Terminal .....	3
20	.....	Connector Assembly (Injector #6) .....	1
20	1607548	Connector .....	1
20	1561146	Terminal .....	2
21	.....	Connector Assembly (Injector #4) .....	1
21	1607548	Connector .....	1
21	1561146	Terminal .....	2
22	.....	Connector Assembly (Injector #2) .....	1

**WIRE HARNESS (ENGINE)**  
**GM 4.3L LPG (GFI OPTION) – 2010 SERIES (S/N P005B02546H →)**

ITEM	PART NO.	DESCRIPTION	QTY
22	1607548	Connector .....	1
22	1561146	Terminal .....	2
23	.....	Connector Assembly (Battery, Positive) .....	1
23	129886	E-Ring .....	1
24	.....	Connector Assembly (Starter) .....	1
24	1519025	Ring Terminal .....	1
25	.....	Connector Assembly (Crank Position) .....	1
25	1655119	Electrical Connector .....	1
25	1655120	Electrical Terminal .....	3
25	1655121	Seal .....	3
25	4001358	Retainer .....	1
26	1500901	Clip .....	1
27	.....	Connector Assembly (Electronic Throttle Body) .....	1
27	1607743	Connector .....	1
28	.....	Connector Assembly (Alternator Positive) .....	1
28	148614	E-Ring .....	1
28	1566146	Boot .....	1
29	.....	Connector Assembly (Alternator Inline Fuse) .....	1
29	4008604	Fuse .....	1
29	4007984	Connector (Fuse Holder) .....	1
30	.....	Connector Assembly (Alternator) .....	1
30	1323576	Terminal .....	2
30	1323586	Connector .....	1
31	.....	Connector Assembly (Left Hand Chassis Harness) .....	1
31	1402809	Clip .....	1
31	4006329	Connector .....	1
32	.....	Connector Assembly (Coil) .....	1
32	1476071	Connector .....	1
32	1402877	Electrical Terminal .....	2
32	1476109	Connector Lock .....	1
32	1330356	Seal .....	3
32	1351139	Seal .....	1
33	1500900	Clip .....	3
34	.....	Connector Assembly (MAP/MAT) .....	1
34	1607839	Connector .....	1
34	1402814	Terminal .....	4
34	1562649	Seal .....	4
35	.....	Connector Assembly (Ignition) .....	1
35	1547483	Connector .....	1
35	1354237	Terminal .....	1
35	1323576	Terminal .....	3
35	1476109	Connector Lock .....	1
36	.....	Connector Assembly (Left Hand Oxygen Sensor) .....	1
36	1482663	Connector .....	1
36	1330355	Terminal .....	4
36	1402877	Electrical Terminal .....	4
36	1482667	Connector Body .....	1
37	1570327	Bracket .....	1
38	1532778	Clip .....	2



## WIRE HARNESS (ENGINE) (FIGURE 4-34) GM 4.3L, LPG — PSI OPTION



BP081167

**WIRE HARNESS (ENGINE)**  
**GM 4.3L, LPG – PSI OPTION**

ITEM	PART NO.	DESCRIPTION	QTY
	4040249	Wire Harness .....	1
1	.....	Connector Assembly (Engine Control Unit) .....	1
1	1641949	Connector .....	1
1	1653510	Terminal (Gold) .....	32
1	1561147	Plug .....	54
1	4025683	Connector Lock .....	1
1	4025684	Strain Relief (Cover) .....	1
1	4023295	Terminal .....	4
2	.....	Connector Assembly (Alternate Fuse) .....	1
2	1543553	Fuse Holder .....	1
2	1454862	Cover (With Seal) .....	1
2	1402889	Terminal .....	2
2	1454827	Seal .....	2
2	1500899	Clip .....	1
3	.....	Connector Assembly (ECU Diagnostic Connector) .....	1
3	1641944	Connector .....	1
3	1650522	Terminal .....	8
3	1641945	Spacer .....	1
4	1641947	Cap .....	1
5	.....	Connector Assembly (Mini Fuses) .....	1
5	1327959	Connector .....	1
5	1330281	Terminal .....	3
5	1521989	Terminal .....	1
5	1327164	Seal .....	2
5	1323579	Seal .....	6
5	1330297	Lock .....	1
5	1641937	Cap .....	1
5	1641938	Clip .....	1
5	1498044	Fuse (5 Amp) .....	2
6	.....	Connector Assembly (Air Filter Restriction) .....	1
6	1465468	Connector .....	1
6	1327164	Seal .....	2
7	1323579	Seal .....	6
7	1323578	Terminal .....	2
7	1465469	Connector .....	1
8	.....	Connector Assembly (Low Fuel) .....	1
8	1547629	Connector (3 Way) .....	1
8	1508232	Terminal .....	3
8	2060555	Wire Seal .....	3
9	.....	Connector Assembly (Pre-Catalyst O2 Sensor) .....	1
9	1498424	Housing .....	1
9	1653508	Terminal (Gold) .....	4
9	1476108	Wire Seal .....	5
9	1650797	Lock .....	1
10	.....	Connector Assembly (Pre-Catalyst O2 Sensor) .....	1
10	1498424	Housing .....	1
10	1653508	Terminal (Gold) .....	4
10	1476108	Wire Seal .....	5
10	1650797	Lock .....	1
11	.....	Connector Assembly (Ignition Module) .....	1

## WIRE HARNESS (ENGINE) GM 4.3L, LPG – PSI OPTION

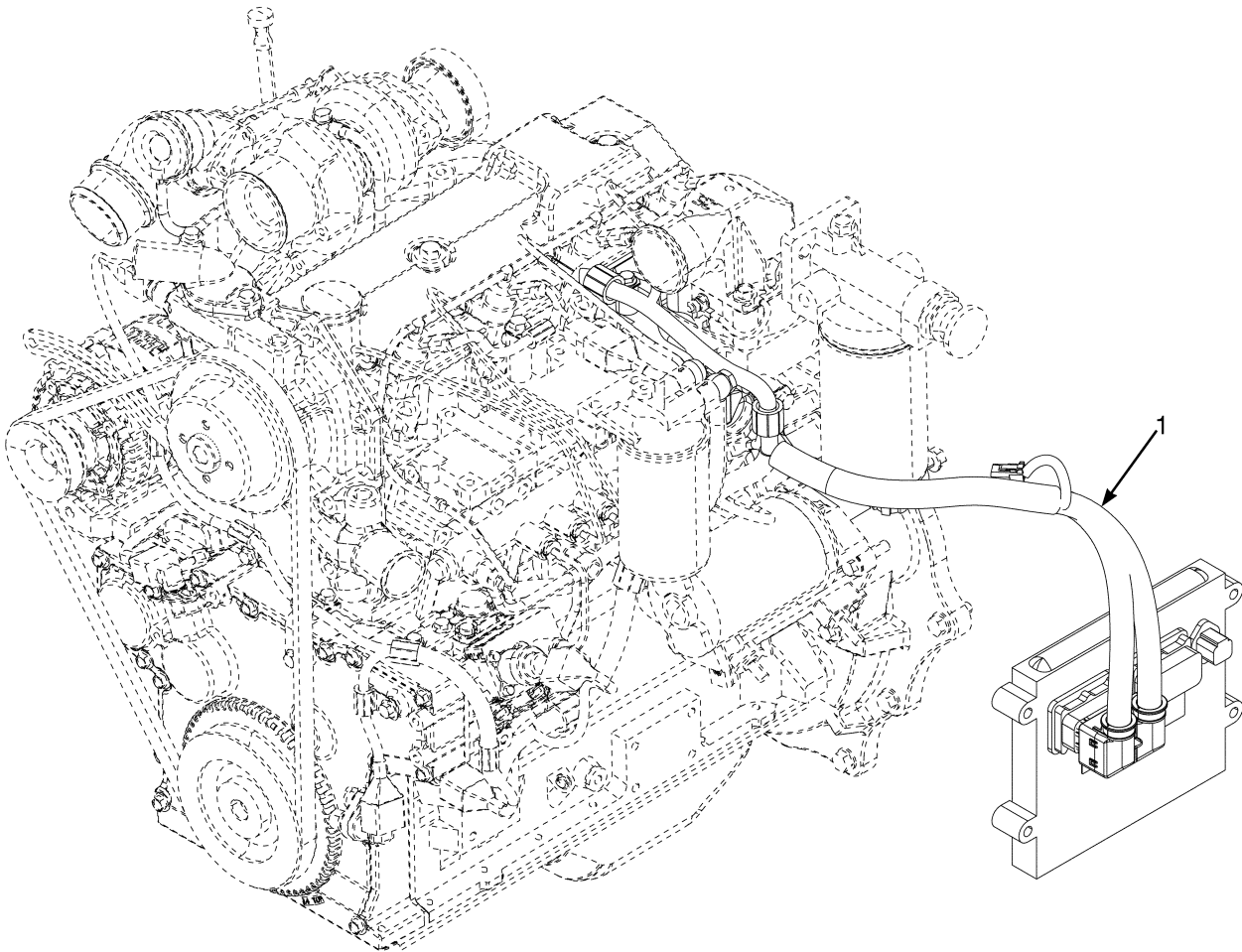
ITEM	PART NO.	DESCRIPTION	QTY
11	1548517	Terminal (Socket) .....	4
11	1548519	Seal .....	4
11	1547483	Connector .....	1
11	1476109	Connector Lock .....	1
12	.....	Connector Assembly (Oil Pressure) .....	1
12	1548517	Terminal (Socket) .....	3
12	1603236	Connector (Secondary Lock) .....	1
12	1548519	Seal .....	3
12	1603021	Connector .....	1
13	.....	Connector Assembly (Cam Sensor) .....	1
13	1330355	Terminal .....	3
13	1476109	Connector Lock .....	1
13	1476067	Connector .....	1
14	.....	Connector Assembly (Ignition Coil) .....	1
14	1476071	Connector .....	1
14	1330355	Terminal .....	3
14	1476109	Connector Lock .....	1
14	1330356	Seal .....	5
14	1482668	Plug (Cavity Plug ) .....	1
15	.....	Connector Assembly (Vehicle Interface Connector) .....	1
15	1500912	Clip .....	1
15	1541988	Connector (8 Pin) .....	1
15	1463138	Terminal Pin .....	8
15	1541989	Connector (Secondary Lock) (Lock) .....	1
16	.....	Connector Assembly (Vehicle Interface Connector) .....	1
16	1623050	Housing .....	1
16	1330418	Connector (Secondary Lock) (Lock) .....	1
16	1330437	Terminal (Pin) .....	7
16	1330439	Plug .....	1
16	1531480	Clip .....	1
17	.....	Connector Assembly (Vehicle Interface Connector) .....	1
17	1514597	Connector .....	1
17	1484709	Terminal (Pin) .....	4
17	1500912	Clip .....	1
17	1514598	Connector (Lock) .....	1
18	1651850	E-Ring (Engine Ground) .....	1
19	.....	Connector Assembly (Throttle) .....	1
19	1569973	Connector Body .....	1
19	1610975	Terminal .....	6
19	1533810	Seal .....	6
20	.....	Connector Assembly (LPG Lockoff) .....	1
20	1330355	Terminal .....	1
20	1476108	Wire Seal .....	1
20	1539872	Connector .....	1
20	1345690	Terminal (E FTG SEC LOCK) .....	1
21	.....	Connector Assembly (TMAP) .....	1
21	1567469	Plug .....	1
21	1567471	Terminal .....	4
21	1567470	Wire Seal .....	4
22	.....	Connector Assembly CPS269) .....	1



**WIRE HARNESS (ENGINE)**  
**GM 4.3L, LPG – PSI OPTION**

ITEM	PART NO.	DESCRIPTION	QTY
22	2314771	Plug .....	1
22	4612836	Connector .....	1
22	1561027	Terminal .....	5
22	2314768	Wire Seal .....	1
22	4612844	Connector Lock .....	1
23	1524397	E-Ring (Starter Solenoid) .....	1
23	190383	Boot .....	1
24	148615	E-Ring (Starter B+) .....	1
25	.....	Connector Assembly (Crank Position Sensor) .....	1
25	1655119	Electrical Connector .....	1
25	1655120	Electrical Terminal .....	3
25	1655121	Seal .....	3
25	4001358	Retainer .....	1
26	.....	Connector Assembly (Alternator) .....	1
26	1547480	Connector (2 Way) .....	1
26	1548517	Terminal (Socket) .....	2
26	1548519	Seal .....	2
27	148614	E-Ring (Alternator Positive) .....	1
27	1520864	Boot .....	1
28	148614	E-Ring (Alternator Ground) .....	1
29	.....	Connector Assembly (Engine Coolant Temp) .....	1
29	1547480	Connector (2 Way) .....	1
29	1548517	Terminal (Socket) .....	2
29	1548519	Seal .....	2

**WIRE HARNESS (FIGURE 4-35)  
ENGINE — CUMMINS QSB 3.3L DIESEL**

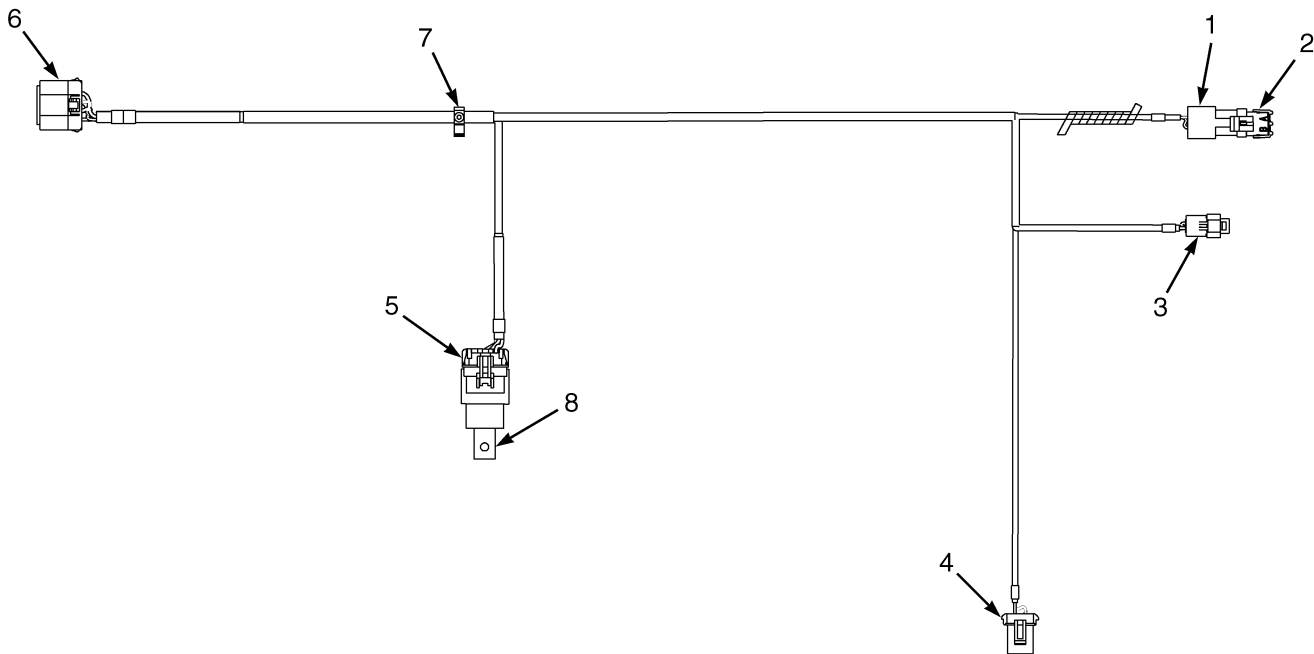


BP090411

**WIRE HARNESS**  
**ENGINE – CUMMINS QSB 3.3L DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
1	1700243	Wire Harness (Engine) .....	1

## WIRE HARNESS (FIGURE 4-36) LEFT HAND CHASSIS — GM 4.3L LPG (→ S/N P005B02545H)

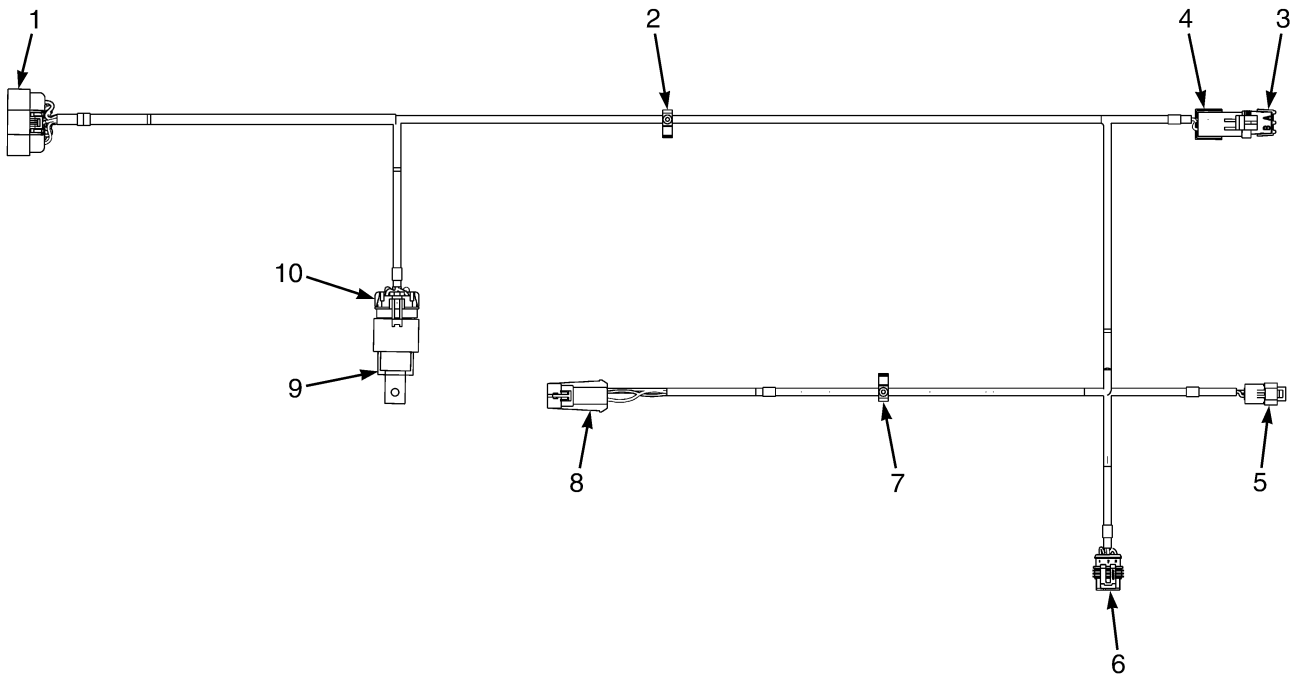


BP080436

ITEM	PART NO.	DESCRIPTION	QTY
	2079116	Wire Harness (LH Chassis) .....	1
1	.....	Connector Assembly (Air Restriction) .....	1
1	1465469	Connector .....	1
1	1323578	Terminal .....	2
1	1402888	Seal .....	2
2	.....	End Cap Assembly (Air Restriction Cap) .....	1
2	1465468	Connector .....	1
2	1327164	Seal .....	1
3	.....	Connector Assembly (LPG Lockoff) .....	1
3	1599337	Connector .....	1
3	1561146	Terminal .....	2
4	.....	Connector Assembly (Low LPG Switch) .....	1
4	1402888	Seal .....	2
4	1329152	Plug .....	1
4	1329151	Terminal .....	1
4	1329148	Terminal .....	2
5	.....	Connector Assembly (Fuel Pump Relay) .....	1
5	1461744	Connector Body .....	1
5	1327164	Seal .....	1
5	1323579	Seal .....	4
5	1402912	Terminal .....	4
5	1498483	Sealant .....	AR
6	.....	Connector Assembly (To Engine Wire Harness) .....	1
6	1527273	Connector .....	1
6	1402926	Terminal .....	3

ITEM	PART NO.	DESCRIPTION	QTY
6	1402927	Terminal .....	5
6	1507571	Seal .....	5
6	1402929	Wire Seal .....	3
6	1527305	Connector Lock .....	1
7	1509888	Clip .....	1
8	1461743	Relay (Fuel Pump) .....	1
8	1654579	Clip (Relay) .....	1

**WIRE HARNESS (FIGURE 4-37)**  
**LEFT HAND CHASSIS — GM 4.3L LPG (2010 SERIES)(WITH PREMIUM LOW FUEL SENSOR)**  
**(S/N P005B02546H →)**

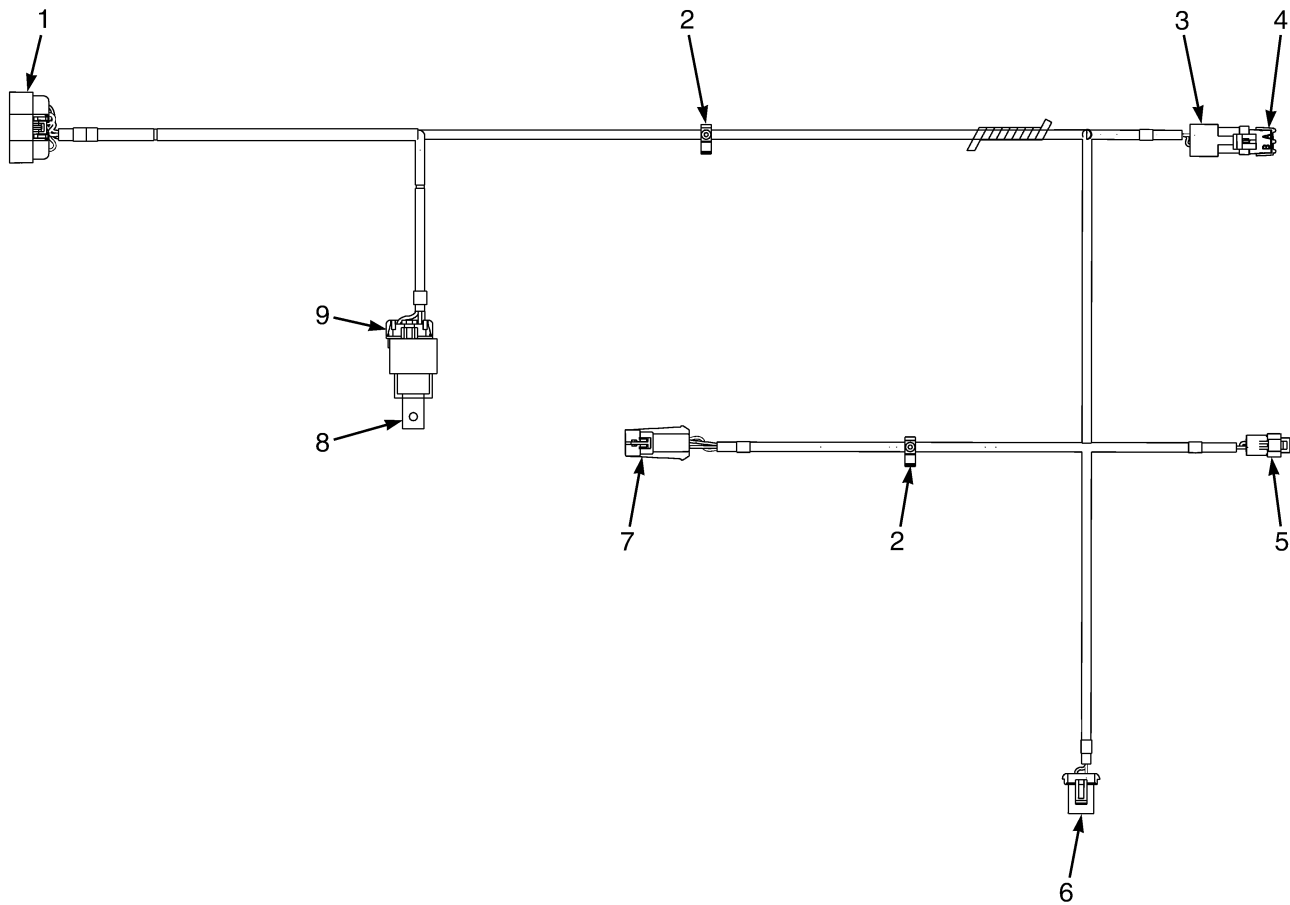


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**WIRE HARNESS**  
**LEFT HAND CHASSIS – GM 4.3L LPG (2010 SERIES)(WITH PREMIUM LOW FUEL SENSOR)**  
**(S/N P005B02546H →)**

ITEM	PART NO.	DESCRIPTION	QTY
	4604535	Wire Harness (LH Chassis) .....	1
1	.....	Connector Assembly (To Engine Harness) .....	1
1	4006330	Connector .....	1
1	1527305	Connector Lock .....	1
1	1402926	Terminal .....	3
1	1402927	Terminal .....	9
1	1402929	Wire Seal .....	3
1	1507571	Seal .....	9
2	1509890	Clip .....	1
3	.....	Connector Assembly (Air Restriction Cap) .....	1
3	1465468	Connector .....	1
3	1327164	Seal .....	1
4	.....	Connector Assembly (Air Restriction Sensor) .....	1
4	1465469	Connector .....	1
4	1323578	Terminal .....	2
4	1402888	Seal .....	2
5	.....	Connector Assembly (LPG Lockoff) .....	1
5	1599337	Connector .....	1
5	1623057	Terminal .....	2
6	.....	Connector Assembly (Low LPG Sensor) .....	1
6	1547629	Connector (3 Way) .....	1
6	1508232	Terminal .....	3
6	1323579	Seal .....	3
7	1509888	Clip .....	1
8	.....	Connector Assembly (Rear Oxygen Sensor) .....	1
8	1498424	Housing .....	1
8	1650797	Lock .....	1
8	1482666	Terminal (Male) .....	4
8	1476108	Wire Seal .....	4
9	.....	Connector Assembly (Relay) .....	1
9	1461743	Relay .....	1
10	.....	Connector Assembly (Latch Relay) .....	1
10	1461744	Connector Body .....	1
10	1503088	Lock .....	1
10	1327164	Seal .....	1
10	1402912	Terminal .....	4
10	1323579	Seal .....	4

## WIRE HARNESS (FIGURE 4-38) LEFT HAND CHASSIS — GM 4.3L LPG (2010 SERIES)(WITHOUT PREMIUM LOW FUEL SENSOR) (S/N P005B02546H →)



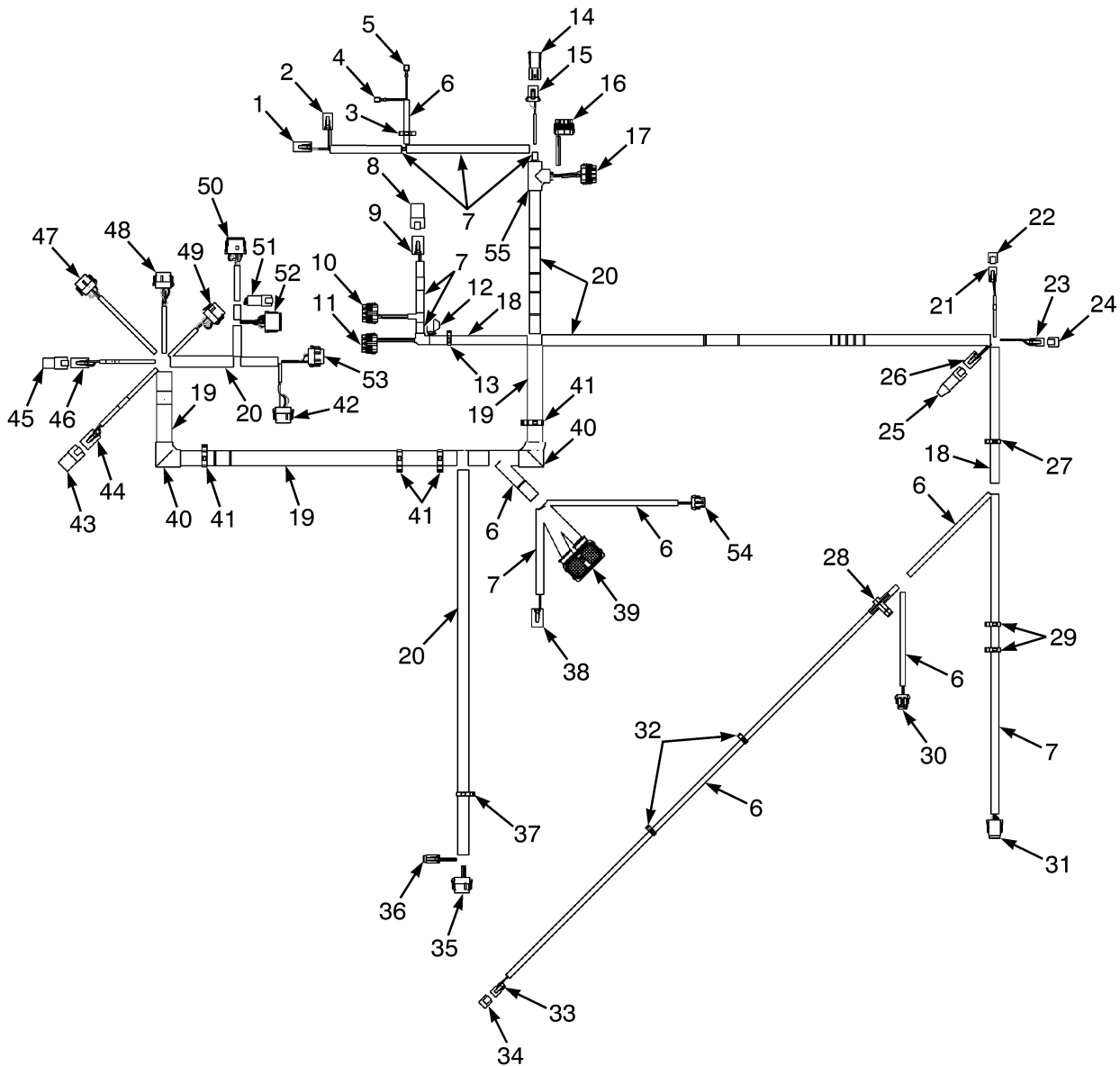
BP080930



**WIRE HARNESS**  
**LEFT HAND CHASSIS – GM 4.3L LPG (2010 SERIES)(WITHOUT PREMIUM LOW FUEL SENSOR)**  
**(S/N P005B02546H →)**

ITEM	PART NO.	DESCRIPTION	QTY
	4604396	Wire Harness (LH Chassis) .....	1
1	.....	Connector Assembly (To Engine Harness) .....	1
1	4006330	Connector .....	1
1	1527305	Connector Lock .....	1
1	1402926	Terminal .....	3
1	1402927	Terminal .....	9
1	1402929	Wire Seal .....	3
1	1507571	Seal .....	9
2	1509888	Clip .....	2
3	.....	Connector Assembly (Air Restriction Sensor) .....	1
3	1465469	Connector .....	1
3	1323578	Terminal .....	2
3	1402888	Seal .....	3
4	.....	Connector Assembly (Air Restrictor Sensor Cap) .....	1
4	1465468	Connector .....	1
4	1327164	Seal .....	2
5	.....	Connector Assembly (LPG Lockoff) .....	1
5	1599337	Connector .....	1
5	1623057	Terminal .....	2
6	.....	Connector Assembly (Low LPG Switch) .....	1
6	1329152	Plug .....	1
6	1329151	Terminal .....	1
6	1329148	Terminal .....	2
6	1402888	Seal .....	2
7	.....	Connector Assembly (Rear Oxygen Sensor) .....	1
7	1498424	Housing .....	1
7	1650797	Lock .....	1
7	1482666	Terminal (Male) .....	4
7	1476108	Wire Seal .....	4
8	.....	Connector Assembly (Relay) .....	1
8	1461743	Relay .....	1
9	.....	Connector Assembly (Latch Relay) .....	1
9	1461744	Connector Body .....	1
9	1503088	Lock .....	1
9	1327164	Seal .....	1
9	1402912	Terminal .....	4
9	1323579	Seal .....	4

## WIRE HARNESS (FIGURE 4-39) RIGHT HAND CHASSIS — CUMMINS QSB 3.3L (→ S/N P005B03203J)



BP080561

**WIRE HARNESS**  
**RIGHT HAND CHASSIS – CUMMINS QSB 3.3L (→ S/N P005B03203J)**

ITEM	PART NO.	DESCRIPTION	QTY
	2106378	Wire Harness (RH Chassis) .....	1
1	.....	Connector Assembly (To Alternator Harness) .....	1
1	1545202	Connector .....	1
1	1546697	Connector .....	1
1	1554359	Terminal .....	2
2	.....	Connector Assembly (To Alternator Harness) .....	1
2	1489656	Connector (4-Way) .....	1
2	1489657	Connector .....	1
2	1330438	Terminal (Socket) .....	4
3	1402816	Clip .....	1
4	.....	Connector Assembly (Contactor Signal) .....	1
4	1402849	Connector Body .....	1
5	.....	Connector Assembly (Contactor Ground) .....	1
5	1402849	Connector Body .....	1
6	275493	Conduit .....	AR
7	275495	Conduit .....	AR
8	.....	Connector Assembly (Endcap) .....	1
8	1514597	Connector .....	1
8	1330439	Plug .....	4
9	.....	Connector Assembly (Accessory Two) .....	1
9	1514602	Connector .....	1
9	1514603	Connector .....	1
9	1330439	Plug .....	1
9	1554359	Terminal .....	3
10	.....	Connector Assembly (Power Distribution Module) .....	1
10	1521183	Connector .....	1
10	1521188	Lock .....	1
10	1323579	Seal .....	7
10	1327164	Seal .....	1
10	1330281	Terminal .....	4
10	1521989	Terminal .....	3
11	.....	Connector Assembly (Power Distribution Module) .....	1
11	1521184	Connector .....	1
11	1521188	Lock .....	1
11	1323579	Seal .....	5
11	1327164	Seal .....	2
11	1330281	Terminal .....	5
11	1521989	Terminal .....	1
11	1402888	Seal .....	1
12	.....	Connector Assembly (Ignition Fuse) .....	1
12	1602431	Fuse Holder .....	1
12	1498044	Fuse (5 Amp) .....	1
13	1534828	Clip .....	1
14	.....	Connector Assembly (Endcap) .....	1
14	1329150	Connector .....	1
14	1329151	Terminal .....	1
14	1327164	Seal .....	2
15	.....	Connector Assembly (Hydraulic Filter) .....	1
15	1329152	Plug .....	1
15	1329151	Terminal .....	1

## WIRE HARNESS RIGHT HAND CHASSIS – CUMMINS QSB 3.3L (→ S/N P005B03203J)

ITEM	PART NO.	DESCRIPTION	QTY
15	1330281	Terminal .....	1
15	1402888	Seal .....	1
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	.....	Connection Assembly (Power Distribution Module) .....	1
17	1521185	Connector .....	1
17	1521188	Lock .....	1
17	1330281	Terminal .....	5
17	1521989	Terminal .....	3
17	1323579	Seal .....	7
17	1402888	Seal .....	1
18	275496	Conduit .....	AR
19	1540388	Conduit .....	AR
20	275497	Conduit .....	AR
21	.....	Connector Assembly (Hood Switch/Keyswitch) .....	1
21	1490242	Connector (2 Way) .....	1
21	1490243	Connector (Secondary Lock) .....	1
21	1330438	Terminal (Socket) .....	2
22	.....	Connector Assembly .....	1
22	1626727	Connector .....	1
23	.....	Connector Assembly (Alternate Horn Button) .....	1
23	1490242	Connector (2 Way) .....	1
23	1490243	Connector (Secondary Lock) .....	1
23	1330438	Terminal (Socket) .....	2
24	.....	Connector Assembly (Endcap) .....	1
24	1626727	Connector .....	1
25	.....	Connector Assembly (Endcap) .....	1
25	1525577	Connector (With Resistor) .....	1
26	.....	Connector Assembly (Bus Terminal) .....	1
26	1489656	Connector (4-Way) .....	1
26	1489657	Connector .....	1
26	1330438	Terminal (Socket) .....	4
27	1509890	Clip .....	1
28	1587778	Clip .....	1
29	1402815	Clip .....	1
30	.....	Connector Assembly (Coolant Level) .....	1
30	1476067	Connector .....	1
30	1476109	Connector Lock .....	1
30	1330355	Terminal .....	3
30	1476108	Wire Seal .....	3
31	.....	Connector Assembly (To Seat Harness) .....	1
31	1541991	Connector .....	1
31	1541992	Connector .....	1
31	1463139	Terminal .....	8
32	1509888	Clip .....	2
33	.....	Connector Assembly (Backup Alarm) .....	1

**WIRE HARNESS**  
**RIGHT HAND CHASSIS – CUMMINS QSB 3.3L (→ S/N P005B03203J)**

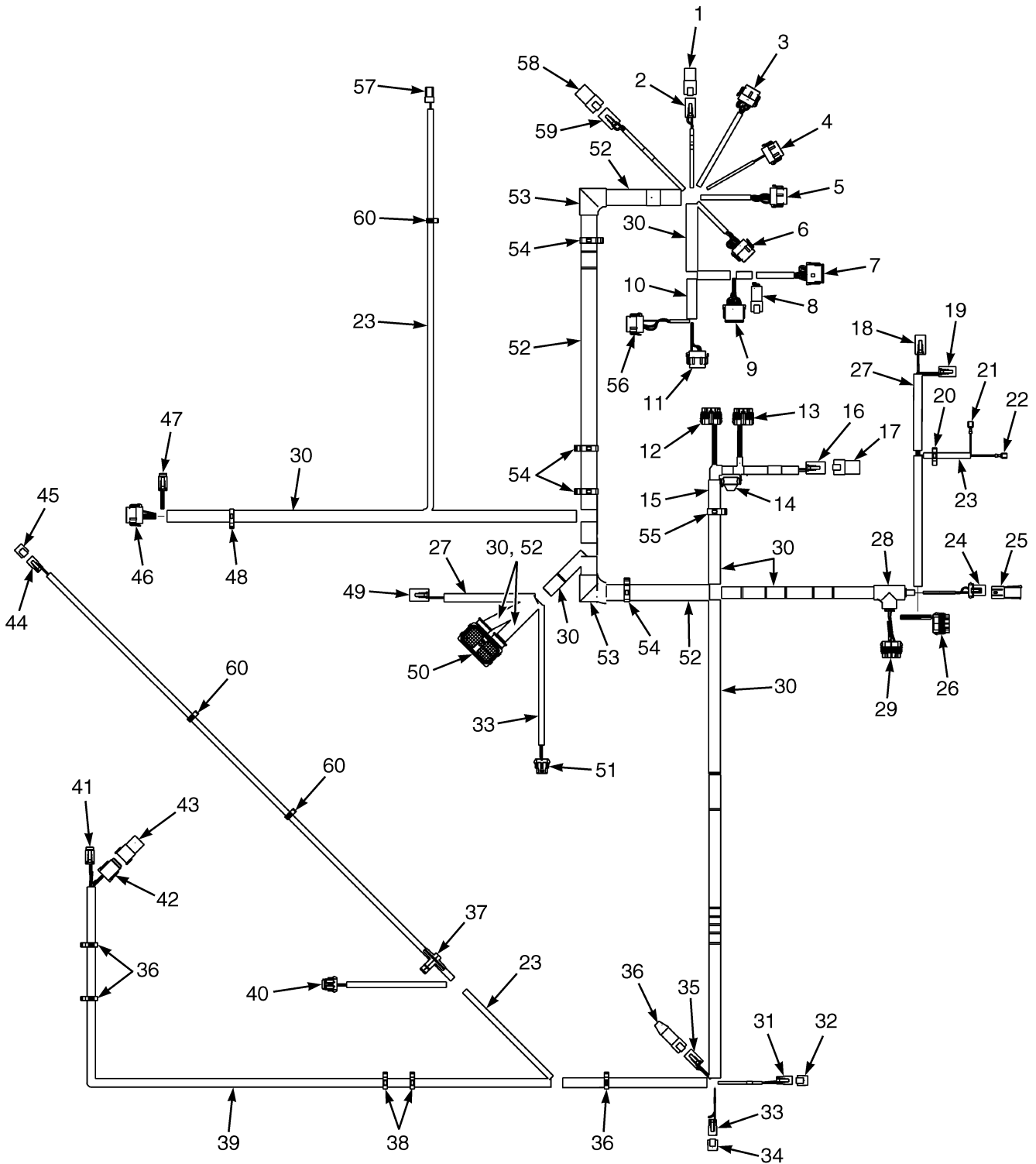
ITEM	PART NO.	DESCRIPTION	QTY
33	1490242	Connector (2 Way) .....	1
33	1490243	Connector (Secondary Lock) .....	1
33	1330438	Terminal (Socket) .....	2
34	.....	Connector Assembly (Endcap) .....	1
34	1626727	Connector .....	1
35	.....	Connector Assembly (To Transmission Harness) .....	1
35	1525567	Connector .....	1
35	1529046	Connector .....	1
35	1463139	Terminal .....	11
35	1484377	Plug .....	1
36	.....	Connector Assembly (To Transmission Harness) .....	1
36	1531973	Connector .....	1
36	1531974	Connector .....	1
36	1463139	Terminal .....	6
37	1500899	Clip .....	1
38	.....	Connector Assembly (Engine Control Module) .....	1
38	1514602	Connector .....	1
38	1514603	Connector .....	1
38	1330439	Plug .....	2
38	1554359	Terminal .....	2
39	.....	Connector Assembly (Engine Control Module) .....	1
39	1664870	Connector .....	1
39	1664886	Strain Relief .....	1
39	1484377	Plug .....	46
39	1507725	Terminal .....	14
40	1560692	Conduit (Elbow) .....	2
41	1534282	Clip .....	4
42	.....	Connector Assembly (Vehicle System Manager) .....	1
42	1525567	Connector .....	1
42	1529046	Connector .....	1
42	1463139	Terminal .....	3
42	1484377	Plug .....	9
43	.....	Connector Assembly (Endcap) .....	1
43	1514597	Connector .....	1
43	1330439	Plug .....	4
44	.....	Connector Assembly (To Lights/Cab Harness) .....	1
44	1514602	Connector .....	1
44	1514603	Connector .....	1
44	1554359	Terminal .....	4
45	.....	Connector Assembly (Endcap) .....	1
45	1480187	Connector .....	1
45	1330439	Plug .....	2
46	.....	Connector Assembly (Accessory One) .....	1
46	1545202	Connector .....	1
46	1546697	Connector .....	1
46	1554359	Terminal .....	2
47	.....	Connector Assembly (Vehicle System Manager) .....	1
47	1525570	Connector .....	1
47	1530037	Connector .....	1
47	1463139	Terminal .....	8

**WIRE HARNESS**  
**RIGHT HAND CHASSIS – CUMMINS QSB 3.3L (→ S/N P005B03203J)**

ITEM	PART NO.	DESCRIPTION	QTY
47	1484377	Plug .....	4
48	.....	Connector Assembly (Vehicle System Manager) .....	1
48	1525568	Connector .....	1
48	1530037	Connector .....	1
48	1463139	Terminal .....	7
48	1484377	Plug .....	5
49	.....	Connector Assembly (Vehicle System Manager) .....	1
49	1525567	Connector .....	1
49	1530037	Connector .....	1
49	1463139	Terminal .....	8
49	1484377	Plug .....	4
50	.....	Connector Assembly (Vehicle System Manager) .....	1
50	1525563	Connector .....	1
50	1500913	Connector .....	1
50	1330438	Terminal (Socket) .....	8
50	1363886	Terminal (Socket) .....	4
51	.....	Connector Assembly (To Cowl Harness) .....	1
51	1489655	Connector (4 Way) .....	1
51	1330416	Connector (Secondary Lock) .....	1
51	1330437	Terminal (Pin) .....	4
52	.....	Connector Assembly (To Cowl Harness) .....	1
52	1493428	Connector (12-Way) .....	1
52	1500913	Connector .....	1
52	1330438	Terminal (Socket) .....	9
52	1484377	Plug .....	3
53	.....	Connector Assembly (Vehicle System Manager) .....	1
53	1525569	Connector .....	1
53	1529046	Connector .....	1
53	1463139	Terminal .....	3
53	1484377	Plug .....	3
54	.....	Connector Assembly (Horn) .....	1
54	1476064	Connector .....	1
54	1476109	Connector Lock .....	1
54	1330356	Seal .....	2
54	1330355	Terminal .....	3
54	1476108	Wire Seal .....	1
55	1531490	Conduit .....	AR



## WIRE HARNESS (FIGURE 4-40) RIGHT HAND CHASSIS — CUMMINS QSB 3.3L (S/N P005B03204J →)



BP081008



**WIRE HARNESS**  
**RIGHT HAND CHASSIS – CUMMINS QSB 3.3L (S/N P005B03204J →)**

ITEM	PART NO.	DESCRIPTION	QTY
	4603985	Wire Harness (RH Chassis) .....	1
1	.....	Connector Assembly (Endcap) .....	1
1	1480187	Connector .....	1
1	1330439	Plug .....	1
2	.....	Connector Assembly (ACC 1) .....	1
2	1545202	Connector .....	1
2	1546697	Connector .....	1
2	1554359	Terminal .....	2
3	.....	Connector Assembly (Vehicle Systems Manager) .....	1
3	1525570	Connector .....	1
3	1530037	Connector .....	1
3	1463139	Terminal .....	9
3	1484377	Plug .....	3
4	.....	Connector Assembly (Vehicle Systems Manager) .....	1
4	1525569	Connector .....	1
4	1530037	Connector .....	1
4	1463139	Terminal .....	2
4	1484377	Plug .....	10
5	.....	Connector Assembly (Vehicle Systems Manager) .....	1
5	1525568	Connector .....	1
5	1530037	Connector .....	1
5	1463139	Terminal .....	7
5	1484377	Plug .....	5
6	.....	Connector Assembly (Vehicle Systems Manager) .....	1
6	1525567	Connector .....	1
6	1530037	Connector .....	1
6	1463139	Terminal .....	8
6	1484377	Plug .....	4
7	.....	Connector Assembly (Vehicle Systems Manager) .....	1
7	1525563	Connector .....	1
7	1500913	Connector .....	1
7	1330438	Terminal (Socket) .....	8
7	1363886	Terminal (Socket) .....	4
8	.....	Connector Assembly (Vehicle Systems Manager) .....	1
8	1489655	Connector (4 Way) .....	1
8	1330416	Connector (Secondary Lock) .....	1
8	1330437	Terminal (Pin) .....	4
9	.....	Connector Assembly (To Cowl Harness) .....	1
9	1493428	Connector (12-Way) .....	1
9	1500913	Connector .....	1
9	1330438	Terminal (Socket) .....	9
9	1484377	Plug .....	3
10	275496	Conduit .....	AR
11	.....	Connector Assembly (Vehicle Systems Manager) .....	1
11	1525569	Connector .....	1
11	1529046	Connector .....	1
11	1463139	Terminal .....	3
11	1484377	Plug .....	9
12	.....	Connector Assembly (Power Distribution Module) .....	1
12	1521184	Connector .....	1

## WIRE HARNESS

### RIGHT HAND CHASSIS – CUMMINS QSB 3.3L (S/N P005B03204J →)

ITEM	PART NO.	DESCRIPTION	QTY
12	1521188	Lock .....	1
12	1323579	Seal .....	5
12	1327164	Seal .....	2
12	1330281	Terminal .....	5
12	1521989	Terminal .....	1
12	1402888	Seal .....	1
13	.....	Connector Assembly (Power Distribution Module) .....	1
13	1521183	Connector .....	1
13	1521188	Lock .....	1
13	1323579	Seal .....	7
13	1327164	Seal .....	1
13	1330281	Terminal .....	4
13	1521989	Terminal .....	3
14	.....	Connector Assembly (Ignition Fuse) .....	1
14	1602431	Fuse Holder .....	1
14	1498044	Fuse (5 Amp) .....	1
15	275495	Conduit .....	AR
16	.....	Connector Assembly (ACC 2) .....	1
16	1514602	Connector .....	1
16	1514603	Connector .....	1
16	1330439	Plug .....	1
16	1554359	Terminal .....	3
17	.....	Connector Assembly (Endcap) .....	1
17	1514597	Connector .....	1
17	1330439	Plug .....	4
18	.....	Connector Assembly (To Alternator Harness) .....	1
18	1545202	Connector .....	1
18	1546697	Connector .....	1
18	1554359	Terminal .....	2
19	.....	Connector Assembly (To Alternator Harness) .....	1
19	1489656	Connector (4-Way) .....	1
19	1489657	Connector .....	1
19	1330438	Terminal (Socket) .....	4
20	1402816	Clip .....	1
21	.....	Connector Assembly (Contactor Signal) .....	1
21	1402849	Connector Body .....	1
22	.....	Connector Assembly (Contactor Ground) .....	1
22	1402849	Connector Body .....	1
23	275493	Conduit .....	AR
24	.....	Connector Assembly (Hydraulic Filter) .....	1
24	1329152	Plug .....	1
24	1329151	Terminal .....	1
24	1330281	Terminal .....	2
24	1402888	Seal .....	2
25	.....	Connector Assembly (Endcap) .....	1
25	1329150	Connector .....	1
25	1329151	Terminal .....	1
25	1327164	Seal .....	2
26	.....	Connector Assembly (Power Distribution Module) .....	1
26	1521186	Connector .....	1

**WIRE HARNESS**  
**RIGHT HAND CHASSIS – CUMMINS QSB 3.3L (S/N P005B03204J →)**

ITEM	PART NO.	DESCRIPTION	QTY
26	1521188	Lock .....	1
26	1323579	Seal .....	7
26	1327164	Seal .....	1
26	1521989	Terminal .....	7
27	275495	Conduit .....	AR
28	1531490	Conduit .....	1
29	.....	Connector Assembly (Power Distribution Module) .....	1
29	1521185	Connector .....	1
29	1521188	Lock .....	1
29	1330281	Terminal .....	5
29	1521989	Terminal .....	3
29	1323579	Seal .....	7
29	1402888	Seal .....	1
30	275497	Conduit .....	AR
31	.....	Connector Assembly (Hood Switch/Keyswitch) .....	1
31	1490242	Connector (2 Way) .....	1
31	1490243	Connector (Secondary Lock) .....	1
31	1330438	Terminal (Socket) .....	2
32	.....	Connector Assembly (Endcap) .....	1
32	1626727	Connector .....	1
33	.....	Connector Assembly (Alternate Horn Button) .....	1
33	1490242	Connector (2 Way) .....	1
33	1490243	Connector (Secondary Lock) .....	1
33	1330438	Terminal (Socket) .....	2
34	.....	Connector Assembly (Endcap) .....	1
34	1626727	Connector .....	1
35	.....	Connector Assembly (Bus Terminal 2) .....	1
35	1489656	Connector (4-Way) .....	1
35	1489657	Connector .....	1
35	1330438	Terminal (Socket) .....	4
36	.....	Connector Assembly (Endcap with Resistor) .....	1
36	1525577	Connector (With Resistor) .....	1
37	1587778	Clip .....	1
38	1402815	Clip .....	2
39	1699754	Conduit .....	AR
40	.....	Connector Assembly (Coolant Level) .....	1
40	1476067	Connector .....	1
40	1476109	Connector Lock .....	1
40	1330355	Terminal .....	3
40	1476108	Wire Seal .....	3
41	.....	Connector Assembly (To Seat Harness) .....	1
41	1531973	Connector .....	1
41	1531974	Connector .....	1
41	1463139	Terminal .....	4
41	1484377	Plug .....	2
42	.....	Connector Assembly (To MLM Harness) .....	1
42	1541991	Connector .....	1
42	1541992	Connector .....	1
42	1463139	Terminal .....	5
42	1484377	Plug .....	3

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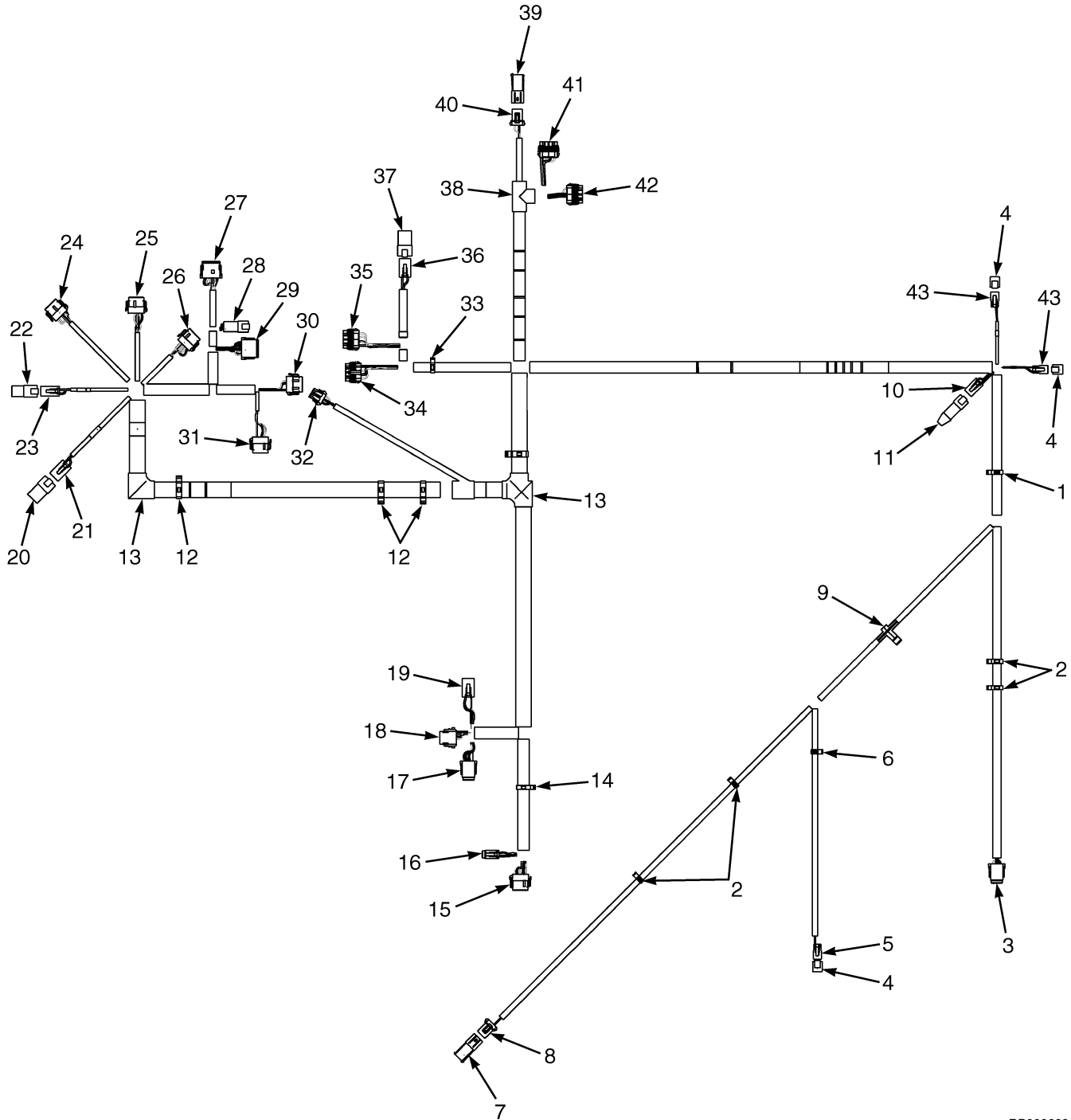
### RIGHT HAND CHASSIS – CUMMINS QSB 3.3L (S/N P005B03204J →)

ITEM	PART NO.	DESCRIPTION	QTY
43	.....	Connector Assembly (Endcap) .....	1
43	1541988	Connector (8 Pin) .....	1
43	1484377	Plug .....	8
44	.....	Connector Assembly (Backup Alarm) .....	1
44	1490242	Connector (2 Way) .....	1
44	1490243	Connector (Secondary Lock) .....	1
44	1330438	Terminal (Socket) .....	2
45	.....	Connector Assembly (Endcap) .....	1
45	1626727	Connector .....	1
46	.....	Connector Assembly (To Transmission Harness) .....	1
46	1525567	Connector .....	1
46	1529046	Connector .....	1
46	1463139	Terminal .....	12
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 (Engine Control Module) .....	1
49	1514602	Connector .....	1
49	1514603	Connector .....	1
49	1330439	Plug .....	2
49	1554359	Terminal .....	2
50	.....	Connector Assembly (Engine Control Module) .....	1
50	1664870	Connector .....	1
50	1664886	Strain Relief .....	1
50	1484377	Plug .....	46
50	1507725	Terminal .....	14
51	.....	Connector Assembly (Horn) .....	1
51	1476064	Connector .....	1
51	1476109	Connector Lock .....	1
51	1330356	Seal .....	2
51	1330355	Terminal .....	3
51	1476108	Wire Seal .....	1
52	1540388	Conduit .....	AR
53	1560692	Conduit (Elbow) .....	2
54	1534282	Clip .....	4
55	1534329	Clip .....	1
56	.....	Connector Assembly (Vehicle Systems Manager) .....	1
56	1525567	Connector .....	1
56	1529046	Connector .....	1
56	1463139	Terminal .....	3
56	1484377	Plug .....	9
57	.....	Connector Assembly (Hydraulic Temperature) .....	1
57	1402868	Connector .....	1
57	1323576	Terminal .....	2
58	.....	Connector Assembly (Endcap) .....	1
58	1514597	Connector .....	1
58	1330439	Plug .....	4
59	.....	Connector Assembly (To Lights/Cab Harness) .....	1

**WIRE HARNESS**  
**RIGHT HAND CHASSIS – CUMMINS QSB 3.3L (S/N P005B03204J →)**

ITEM	PART NO.	DESCRIPTION	QTY
59	1514602	Connector .....	1
59	1514603	Connector .....	1
59	1554359	Terminal .....	4
60	1509888	Clip .....	3

## WIRE HARNESS (FIGURE 4-41) RIGHT HAND CHASSIS — GM 4.3L LPG (→ S/N P005B03203J)



BP080683

**WIRE HARNESS**  
**RIGHT HAND CHASSIS – GM 4.3L LPG (→ S/N P005B03203J)**

ITEM	PART NO.	DESCRIPTION	QTY
	2105636	Wire Harness (RH Chassis) .....	1
1	1509890	Clip .....	2
2	1402815	Clip .....	2
3	.....	Connector Assembly (To Seat Harness) .....	1
3	1541991	Connector .....	1
3	1541992	Connector .....	1
3	1463139	Terminal .....	8
4	1626727	Connector (End Cap) .....	3
5	.....	Connector Assembly (To Backup Alarm Harness) .....	1
5	1490242	Connector (2 Way) .....	1
5	1490243	Connector (Secondary Lock) .....	1
5	1330438	Terminal (Socket) .....	2
6	1509888	Clip .....	3
7	.....	Connector Assembly (End Cap) .....	1
7	1329150	Connector .....	1
7	1329151	Terminal .....	1
7	1327164	Seal .....	2
8	.....	Connector Assembly (Coolant Level) .....	1
8	1329152	Plug .....	1
8	1329151	Terminal .....	1
8	1330281	Terminal .....	2
8	1402888	Seal .....	2
9	1587778	Clip .....	3
10	.....	Connector Assembly (Bus Terminal Two) .....	1
10	1489656	Connector (4-Way) .....	1
10	1489657	Connector .....	1
10	1330438	Terminal (Socket) .....	4
11	1525577	Connector (With Resistor) (End Cap) .....	1
12	1534282	Clip .....	4
13	1560692	Conduit (Elbow) .....	3
14	1500899	Clip .....	1
15	.....	Connector Assembly (To Transmission Harness) .....	1
15	1525567	Connector .....	1
15	1529046	Connector .....	1
15	1463139	Terminal .....	11
15	1484377	Plug .....	1
15	1521989	Terminal .....	7
16	.....	Connector Assembly (To Transmission Harness) .....	1
16	1531973	Connector .....	1
16	1531974	Connector .....	1
16	1463139	Terminal .....	6
17	.....	Connector Assembly (To Engine Harness) .....	1
17	1541991	Connector .....	1
17	1541992	Connector .....	1
17	1463139	Terminal .....	8
18	.....	Connector Assembly (To Engine Harness) .....	1
18	1502625	Connector .....	1
18	1502626	Connector .....	1
18	1330438	Terminal (Socket) .....	7
18	1484377	Plug .....	1

## WIRE HARNESS RIGHT HAND CHASSIS – GM 4.3L LPG (→ S/N P005B03203J)

ITEM	PART NO.	DESCRIPTION	QTY
19	.....	Connector Assembly (To Engine Harness) .....	1
19	1514602	Connector .....	1
19	1514603	Connector .....	1
19	1554359	Terminal .....	4
20	.....	Connector Assembly (End Cap) .....	1
20	1514597	Connector .....	1
20	1330439	Plug .....	1
21	.....	Connector Assembly (To Lights/Cab Harness) .....	1
21	1514602	Connector .....	1
21	1514603	Connector .....	1
21	1554359	Terminal .....	4
22	.....	Connector Assembly (End Cap) .....	1
22	1480187	Connector .....	1
22	1330439	Plug .....	2
23	.....	Connector Assembly (Accessory One) .....	1
23	1545202	Connector .....	1
23	1546697	Connector .....	1
23	1554359	Terminal .....	4
24	.....	Connector Assembly (Vehicle System Manager) .....	1
24	1525570	Connector .....	1
24	1530037	Connector .....	1
24	1463139	Terminal .....	8
24	1484377	Plug .....	4
25	.....	Connector Assembly (Vehicle System Manager) .....	1
25	1525568	Connector .....	1
25	1530037	Connector .....	1
25	1463139	Terminal .....	7
25	1484377	Plug .....	5
26	.....	Connector Assembly (Vehicle System Manager) .....	1
26	1525567	Connector .....	1
26	1530037	Connector .....	1
26	1463139	Terminal .....	9
26	1484377	Plug .....	3
27	.....	Connector Assembly (Vehicle System Manager) .....	1
27	1525563	Connector .....	1
27	1500913	Connector .....	2
27	1330438	Terminal (Socket) .....	8
27	1363886	Terminal (Socket) .....	4
28	.....	Connector Assembly (To Cowl Harness) .....	1
28	1489655	Connector (4 Way) .....	1
28	1330416	Connector (Secondary Lock) .....	1
28	1330437	Terminal (Pin) .....	4
29	.....	Connector Assembly (To Cowl Harness) .....	1
29	1493428	Connector (12-Way) .....	1
29	1500913	Connector .....	1
29	1330438	Terminal (Socket) .....	9
29	1484377	Plug .....	3
30	.....	Connector Assembly (Vehicle System Manager) .....	1
30	1531973	Connector .....	1
30	1529046	Connector .....	1



**WIRE HARNESS**  
**RIGHT HAND CHASSIS – GM 4.3L LPG (→ S/N P005B03203J)**

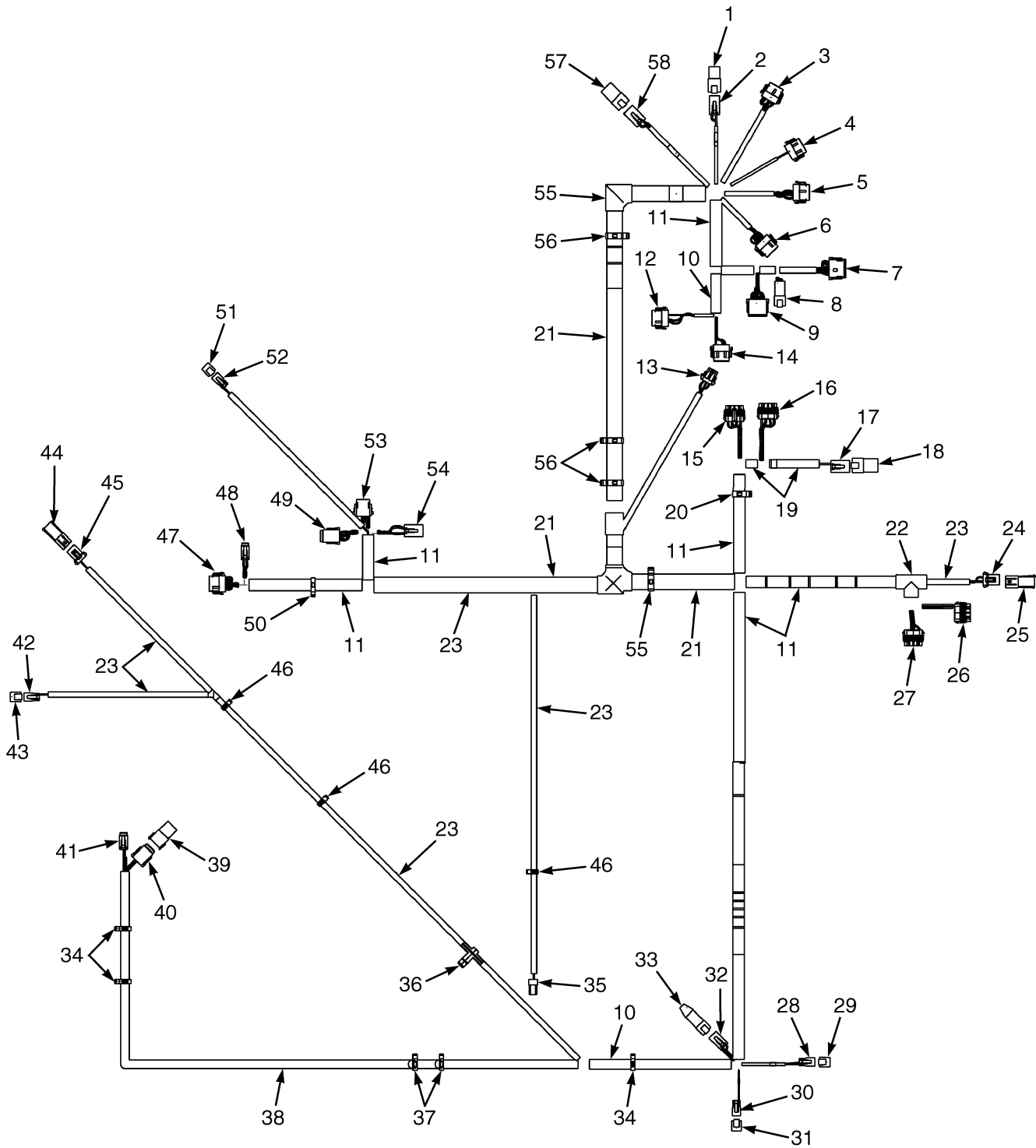
ITEM	PART NO.	DESCRIPTION	QTY
30	1463139	Terminal .....	3
30	1484377	Plug .....	9
31	.....	Connector Assembly (Vehicle System Manager) .....	1
31	1525567	Connector .....	1
31	1476109	Connector Lock .....	1
31	1463139	Terminal .....	3
31	1484377	Plug .....	9
32	.....	Connector Assembly (To Horn) .....	1
32	1476064	Connector .....	1
32	1330416	Connector (Secondary Lock) .....	1
32	1330356	Seal .....	2
32	1330355	Terminal .....	3
32	1476108	Wire Seal .....	1
33	1534828	Clip .....	1
34	.....	Connector Assembly (Power Distribution Module) .....	1
34	1521184	Connector .....	1
34	1521188	Lock .....	1
34	1323579	Seal .....	5
34	1327164	Seal .....	1
34	1330281	Terminal .....	6
34	1521989	Terminal .....	1
34	1402888	Seal .....	2
35	.....	Connector Assembly (Power Distribution Module) .....	1
35	1521183	Connector .....	1
35	1521188	Lock .....	1
35	1323579	Seal .....	7
35	1327164	Seal .....	1
35	1330281	Terminal .....	4
35	1521989	Terminal .....	3
36	.....	Connector Assembly (Accessory Two) .....	1
36	1514602	Connector .....	1
36	1514603	Connector .....	1
36	1330439	Plug .....	1
36	1554359	Terminal .....	3
37	.....	Connector Assembly (End Cap) .....	1
37	1514597	Connector .....	1
37	1476064	Connector .....	4
38	1531490	Conduit .....	1
39	.....	Connector Assembly (End Cap) .....	1
39	1329150	Connector .....	1
39	1329151	Terminal .....	1
39	1327164	Seal .....	2
40	.....	Connector Assembly (To Hydraulic Filter) .....	1
40	1329152	Plug .....	1
40	1329151	Terminal .....	1
40	1330281	Terminal .....	2
40	1402888	Seal .....	2
41	.....	Connector Assembly (Power Distribution Module) .....	1
41	1521186	Connector .....	1
41	1521188	Lock .....	1

**WIRE HARNESS**  
**RIGHT HAND CHASSIS – GM 4.3L LPG (→ S/N P005B03203J)**

ITEM	PART NO.	DESCRIPTION	QTY
41	1323579	Seal .....	7
41	1554359	Terminal .....	1
41	1521989	Terminal .....	7
42	.....	Connector Assembly (Power Distribution Module) .....	1
42	1521185	Connector .....	1
42	1521188	Lock .....	1
42	1323579	Seal .....	8
42	1330281	Terminal .....	5
42	1521989	Terminal .....	3
43	.....	Connector Assembly (Key Switch/Alternate Horn Button) .....	2
43	1490242	Connector (2 Way) .....	1
43	1490243	Connector (Secondary Lock) .....	1
43	1330438	Terminal (Socket) .....	2



## WIRE HARNESS (FIGURE 4-42) RIGHT HAND CHASSIS — GM 4.3L LPG (S/N P005B03204J →)



BP081009

**WIRE HARNESS**  
**RIGHT HAND CHASSIS – GM 4.3L LPG (S/N P005B03204J →)**

ITEM	PART NO.	DESCRIPTION	QTY
	4603984	Wire Harness (RH Chassis) .....	1
1	.....	Connector Assembly (Endcap) .....	1
1	1480187	Connector .....	1
1	1330439	Plug .....	2
2	.....	Connector Assembly (ACC 1) .....	1
2	1545202	Connector .....	1
2	1546697	Connector .....	1
2	1330439	Plug .....	2
3	.....	Connector Assembly (Vehicle Systems Manager) .....	1
3	1525570	Connector .....	1
3	1530037	Connector .....	1
3	1463139	Terminal .....	9
3	1484377	Plug .....	3
4	.....	Connector Assembly (Vehicle Systems Manager) .....	1
4	1525569	Connector .....	1
4	1530037	Connector .....	1
4	1463139	Terminal .....	2
4	1484377	Plug .....	10
5	.....	Connector Assembly (Vehicle Systems Manager) .....	1
5	1525568	Connector .....	1
5	1530037	Connector .....	1
5	1463139	Terminal .....	7
5	1484377	Plug .....	5
6	.....	Connector Assembly (Vehicle Systems Manager) .....	1
6	1525567	Connector .....	1
6	1530037	Connector .....	1
6	1463139	Terminal .....	9
6	1484377	Plug .....	3
7	.....	Connector Assembly (Vehicle Systems Manager) .....	1
7	1525563	Connector .....	1
7	1500913	Connector .....	1
7	1330438	Terminal (Socket) .....	8
7	1363886	Terminal (Socket) .....	4
8	.....	Connector Assembly (To Cowl Harness) .....	1
8	1489655	Connector (4 Way) .....	1
8	1330416	Connector (Secondary Lock) .....	1
8	1330437	Terminal (Pin) .....	4
9	.....	Connector Assembly (To Cowl Harness) .....	1
9	1493428	Connector (12-Way) .....	1
9	1500913	Connector .....	1
9	1330438	Terminal (Socket) .....	10
9	1484377	Plug .....	2
10	275496	Conduit .....	AR
11	275497	Conduit .....	AR
12	.....	Connector Assembly (Vehicle Systems Manager) .....	1
12	1525567	Connector .....	1
12	1529046	Connector .....	1
12	1463139	Terminal .....	3
12	1484377	Plug .....	9
13	.....	Connector Assembly (Horn) .....	1

## WIRE HARNESS

### RIGHT HAND CHASSIS – GM 4.3L LPG (S/N P005B03204J →)

ITEM	PART NO.	DESCRIPTION	QTY
13	1476064	Connector .....	1
13	1476109	Connector Lock .....	1
13	1330356	Seal .....	2
13	1330355	Terminal .....	3
13	1476108	Wire Seal .....	1
14	.....	Connector Assembly (Vehicle Systems Manager) .....	1
14	1525569	Connector .....	1
14	1529046	Connector .....	1
14	1463139	Terminal .....	3
14	1484377	Plug .....	9
15	.....	Connector Assembly (Power Distribution Module) .....	1
15	1521184	Connector .....	1
15	1521188	Lock .....	1
15	1323579	Seal .....	5
15	1327164	Seal .....	1
15	1330281	Terminal .....	6
15	1521989	Terminal .....	1
15	1402888	Seal .....	2
16	.....	Connector Assembly (Power Distribution Module) .....	1
16	1521183	Connector .....	1
16	1521188	Lock .....	1
16	1323579	Seal .....	7
16	1327164	Seal .....	1
16	1330281	Terminal .....	4
16	1521989	Terminal .....	3
17	.....	Connector Assembly (ACC 2) .....	1
17	1514602	Connector .....	1
17	1514603	Connector .....	1
17	1330439	Plug .....	1
17	1554359	Terminal .....	3
18	.....	Connector Assembly (Endcap) .....	1
18	1514597	Connector .....	1
18	1330439	Plug .....	4
19	275495	Conduit .....	AR
20	1534329	Clip .....	1
21	1540388	Conduit .....	AR
22	1531490	Conduit .....	1
23	275493	Conduit .....	AR
24	.....	Connector Assembly (Hydraulic Filter) .....	1
24	1329152	Plug .....	1
24	1329151	Terminal .....	1
24	1330281	Terminal .....	2
24	1402888	Seal .....	2
25	.....	Connector Assembly (Endcap) .....	1
25	1329150	Connector .....	1
25	1329151	Terminal .....	1
25	1327164	Seal .....	2
26	.....	Connector Assembly (Power Distribution Module) .....	1
26	1521186	Connector .....	1
26	1521188	Lock .....	1

**WIRE HARNESS**  
**RIGHT HAND CHASSIS – GM 4.3L LPG (S/N P005B03204J →)**

ITEM	PART NO.	DESCRIPTION	QTY
26	1323579	Seal .....	7
26	1327164	Seal .....	1
26	1521989	Terminal .....	7
27	.....	Connector Assembly (Power Distribution Module) .....	1
27	1521185	Connector .....	1
27	1521188	Lock .....	1
27	1323579	Seal .....	8
27	1330281	Terminal .....	5
27	1521989	Terminal .....	3
28	.....	Connector Assembly (Hood Switch/Keyswitch) .....	1
28	1490242	Connector (2 Way) .....	1
28	1490243	Connector (Secondary Lock) .....	1
28	1330438	Terminal (Socket) .....	2
29	.....	Connector Assembly (Endcap) .....	1
29	1626727	Connector .....	1
30	.....	Connector Assembly (Alternate Horn Button) .....	1
30	1490242	Connector (2 Way) .....	1
30	1490243	Connector (Secondary Lock) .....	1
30	1330438	Terminal (Socket) .....	2
31	.....	Connector Assembly (Endcap) .....	1
31	1626727	Connector .....	1
32	.....	Connector Assembly (Bus Terminal 2) .....	1
32	1489656	Connector (4-Way) .....	1
32	1489657	Connector .....	1
32	1330438	Terminal (Socket) .....	4
33	.....	Connector Assembly (Endcap with Resistor) .....	1
33	1525577	Connector (With Resistor) .....	1
34	1509890	Clip .....	3
35	.....	Connector Assembly (Hydraulic Temperature) .....	1
35	1402868	Connector .....	1
35	1323576	Terminal .....	2
36	1587778	Clip .....	1
37	1402815	Clip .....	2
38	1699754	Conduit .....	AR
39	.....	Connector Assembly (Endcap) .....	1
39	1541988	Connector (8 Pin) .....	1
39	1484377	Plug .....	8
40	.....	Connector Assembly (To MLM Harness) .....	1
40	1541991	Connector .....	1
40	1541992	Connector .....	1
40	1463139	Terminal .....	5
40	1484377	Plug .....	3
41	.....	Connector Assembly (To Seat Harness) .....	1
41	1531973	Connector .....	1
41	1531974	Connector .....	1
41	1463139	Terminal .....	4
41	1484377	Plug .....	2
42	.....	Connector Assembly (Backup Alarm) .....	1
42	1490242	Connector (2 Way) .....	1
42	1490243	Connector (Secondary Lock) .....	1

## WIRE HARNESS

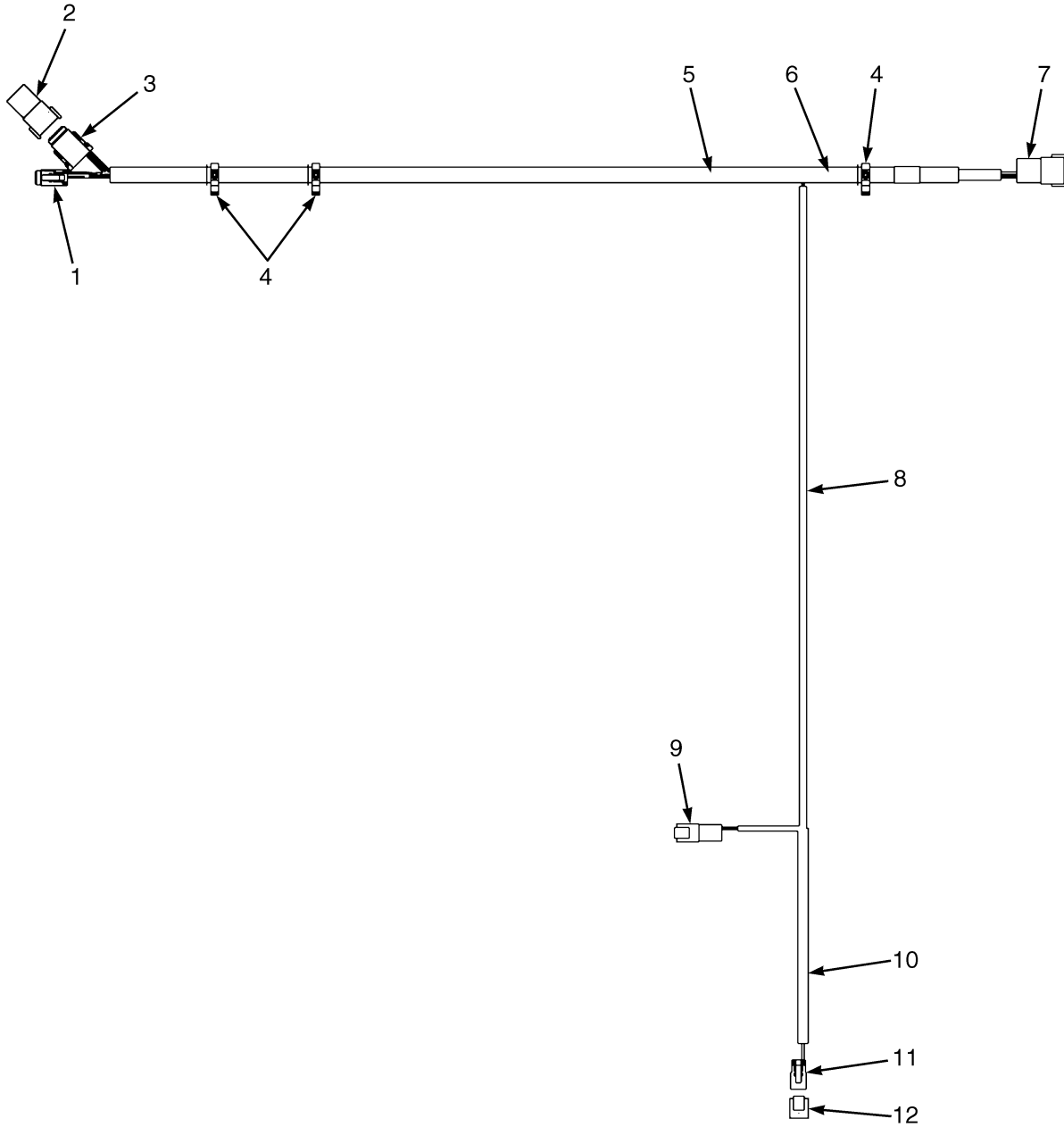
### RIGHT HAND CHASSIS – GM 4.3L LPG (S/N P005B03204J →)

ITEM	PART NO.	DESCRIPTION	QTY
42	1330438	Terminal (Socket) .....	2
43	.....	Connector Assembly (Endcap) .....	1
43	1626727	Connector .....	1
44	.....	Connector Assembly (Endcap) .....	1
44	1329150	Connector .....	1
44	1329151	Terminal .....	1
44	1327164	Seal .....	2
45	.....	Connector Assembly (Coolant Level) .....	1
45	1329152	Plug .....	1
45	1329151	Terminal .....	1
45	1330281	Terminal .....	2
45	1402888	Seal .....	2
46	1509888	Clip .....	3
47	.....	Connector Assembly (To Transmission Harness) .....	1
47	1525567	Connector .....	1
47	1529046	Connector .....	1
47	1463139	Terminal .....	12
48	.....	Connector Assembly (To Transmission Harness) .....	1
48	1531973	Connector .....	1
48	1531974	Connector .....	1
48	1463139	Terminal .....	6
49	.....	Connector Assembly (To Engine Harness) .....	1
49	1541991	Connector .....	1
49	1541992	Connector .....	1
49	1463139	Terminal .....	8
50	1500899	Clip .....	1
51	.....	Connector Assembly (Endcap) .....	1
51	1626727	Connector .....	1
52	.....	Connector Assembly (Hydraulic Solenoid) .....	1
52	1490242	Connector (2 Way) .....	1
52	1490243	Connector (Secondary Lock) .....	1
52	1330438	Terminal (Socket) .....	2
53	.....	Connector Assembly (To Engine Harness) .....	1
53	1502625	Connector .....	1
53	1502626	Connector .....	1
53	1330438	Terminal (Socket) .....	7
53	1484377	Plug .....	1
54	.....	Connector Assembly (To Engine Harness) .....	1
54	1514602	Connector .....	1
54	1514603	Connector .....	1
54	1554359	Terminal .....	4
55	1560692	Conduit (Elbow) .....	3
56	1534282	Clip .....	4
57	.....	Connector Assembly (Endcap) .....	1
57	1514597	Connector .....	1
57	1330439	Plug .....	4
58	.....	Connector Assembly (To Lights/Cab Harness) .....	1
58	1514602	Connector .....	1
58	1514603	Connector .....	1
58	1554359	Terminal .....	4





## WIRE HARNESS (FIGURE 4-43) SEAT JUMPER (→ S/N P005B02569H)

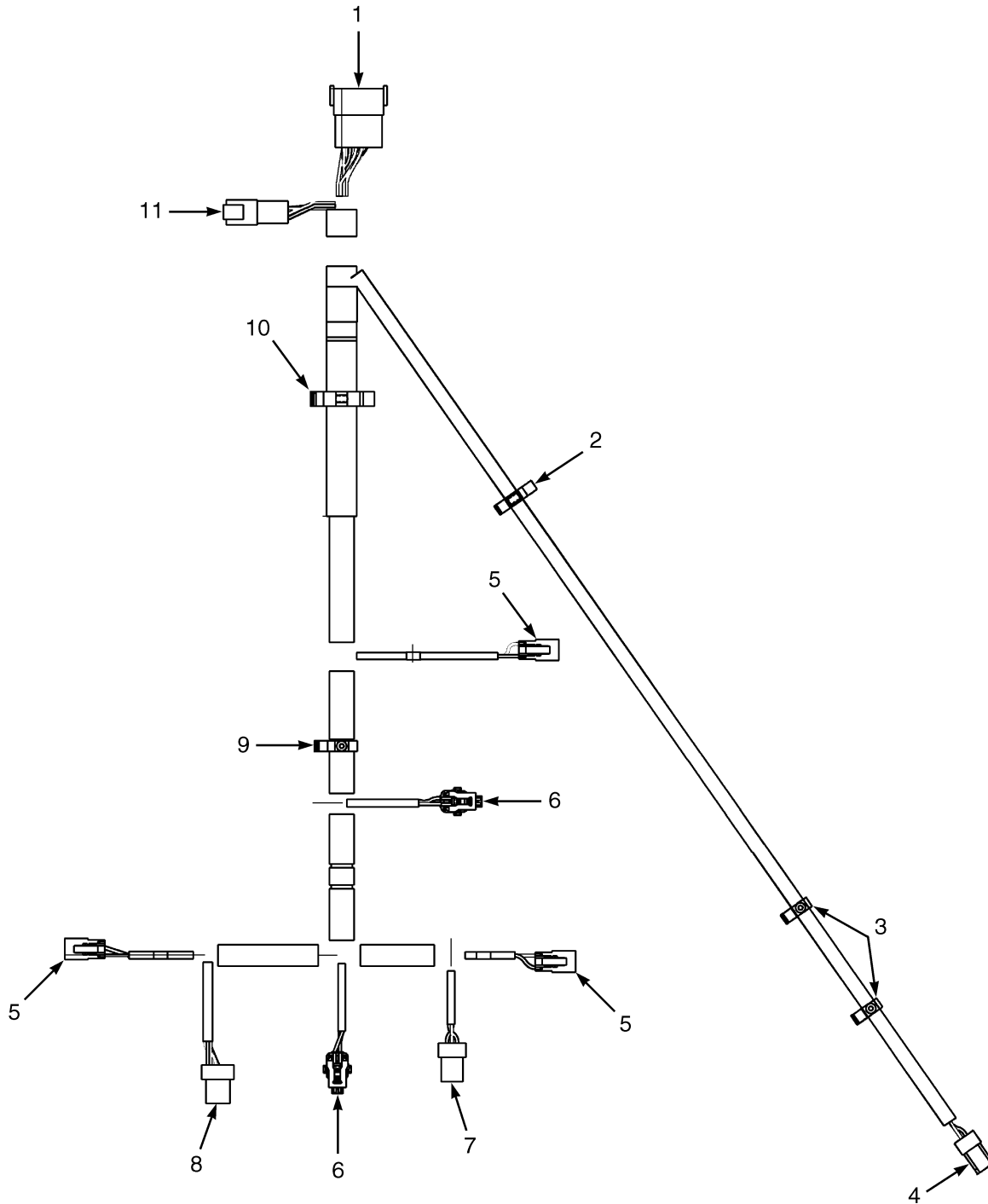


BP081007

**WIRE HARNESS**  
**SEAT JUMPER (→ S/N P005B02569H)**

ITEM	PART NO.	DESCRIPTION	QTY
	4602965	Wire Harness (Seat Adapter) .....	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 (8 Pin) .....	1
3	1484377	Plug .....	8
4	1509890	Clip .....	2
5	1699754	Conduit .....	AR
6	275495	Conduit .....	AR
7	.....	Connector Assembly (RH Chassis Harness) .....	1
7	1541988	Connector (8 Pin) .....	1
7	1541989	Connector (Secondary Lock) (Lock) .....	1
7	1463138	Terminal Pin (Pin) .....	8
8	1697181	Conduit .....	AR
9	.....	Connector Assembly (RH Chassis Harness) .....	1
9	1493465	Connector (2 Pin) .....	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 (2 Way) .....	1
11	1490243	Connector (Secondary Lock) (Lock) .....	1
11	1330438	Terminal (Socket) .....	2
12	1626727	Connector (End Cap) .....	1

## WIRE HARNESS (FIGURE 4-44) TRANSMISSION — SINGLE SPEED

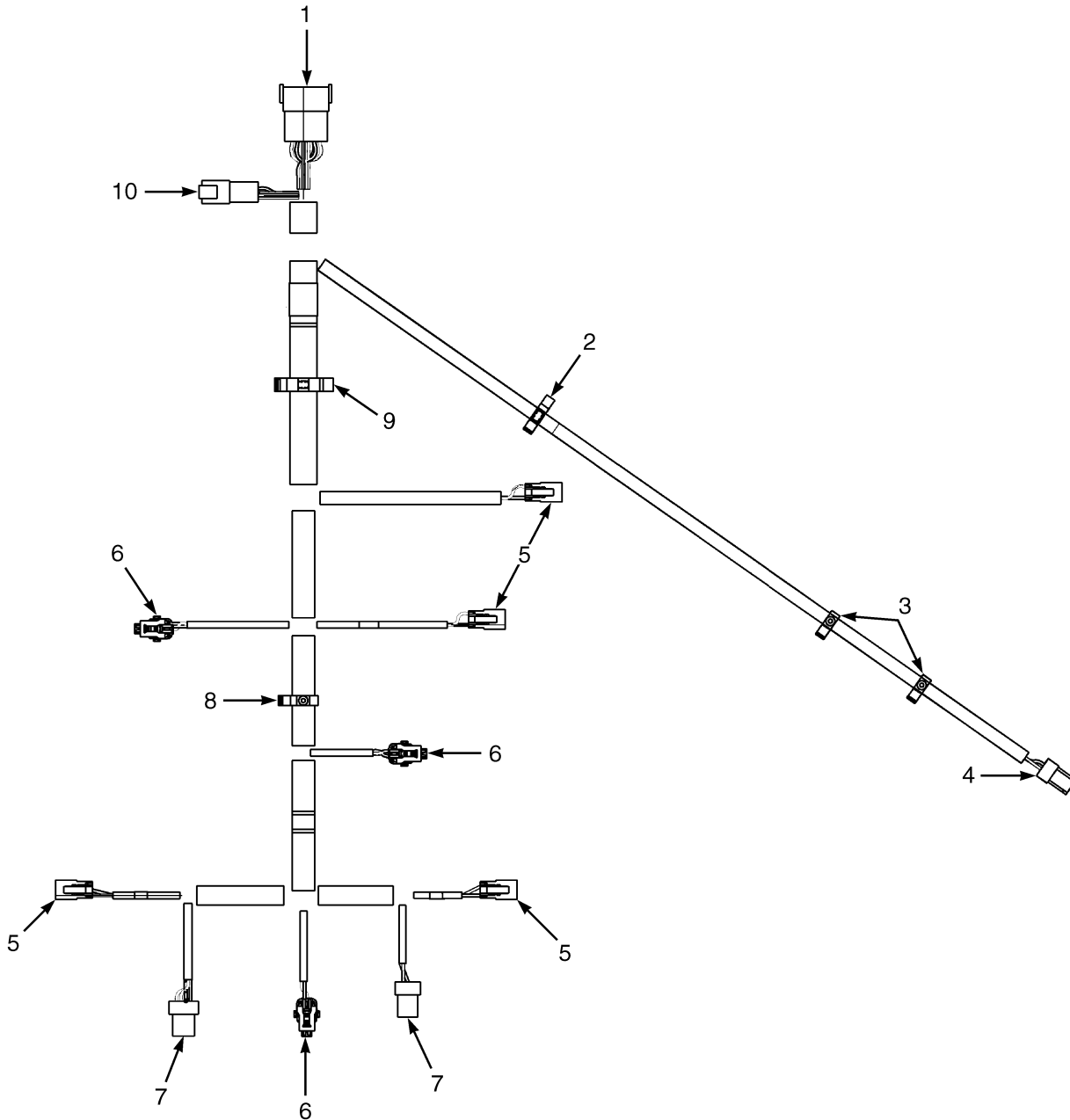


BP080478

**WIRE HARNESS  
TRANSMISSION – SINGLE SPEED**

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 (2 Way) .....	1
5	1490243	Connector (Secondary Lock) .....	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 4-45) TRANSMISSION — DUAL SPEED

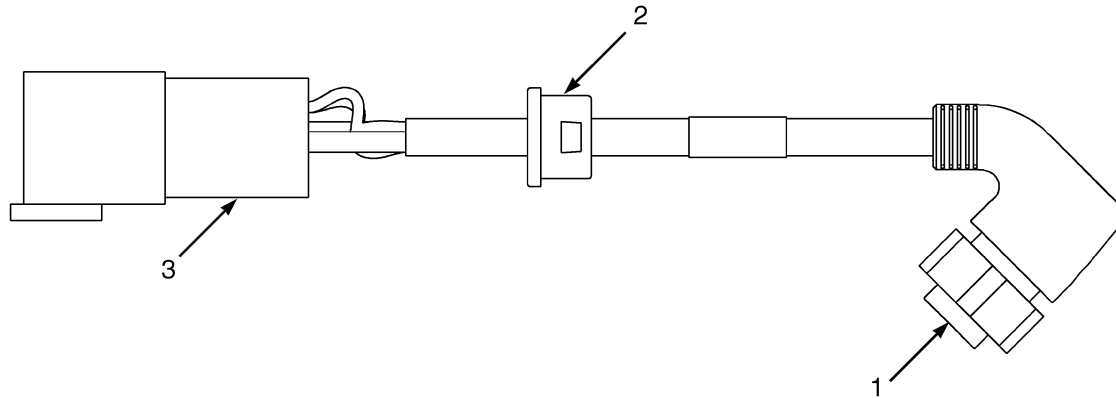


BP080479

**WIRE HARNESS  
TRANSMISSION – DUAL SPEED**

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) .....	4
5	1490242	Connector (2 Way) .....	1
5	1490243	Connector (Secondary Lock) .....	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) .....	2
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 4-46) JOYSTICK



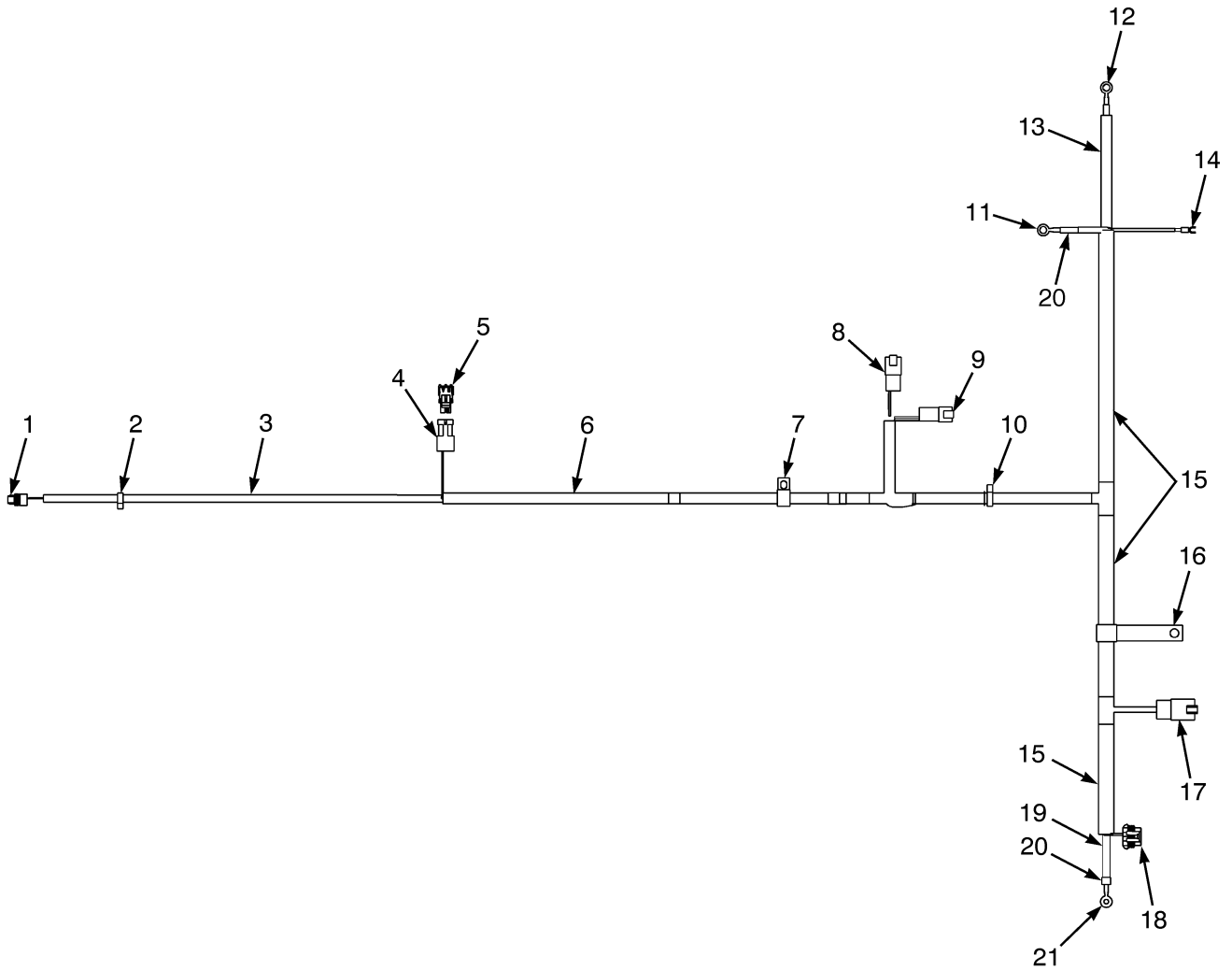
BP080452

ITEM	PART NO.	DESCRIPTION	QTY
	2084703	Wire Harness (Joystick) .....	1
1	.....	Connector Assembly (To Joystick) .....	1
1	1616384	Connector .....	2
1	1616386	Terminal (Socket) .....	6
1	1616388	Collar (Joystick) .....	1
1	1616390	O-Ring .....	1
2	1569995	Bushing .....	1
3	.....	Connector Assembly (To Seat Harness) .....	1
3	1530960	Connector .....	1
3	1530961	Connector (Secondary Lock) .....	1
3	1463140	Terminal (Pin) .....	6





## WIRE HARNESS (FIGURE 4-47) ALTERNATOR — CUMMINS QSB 3.3L DIESEL

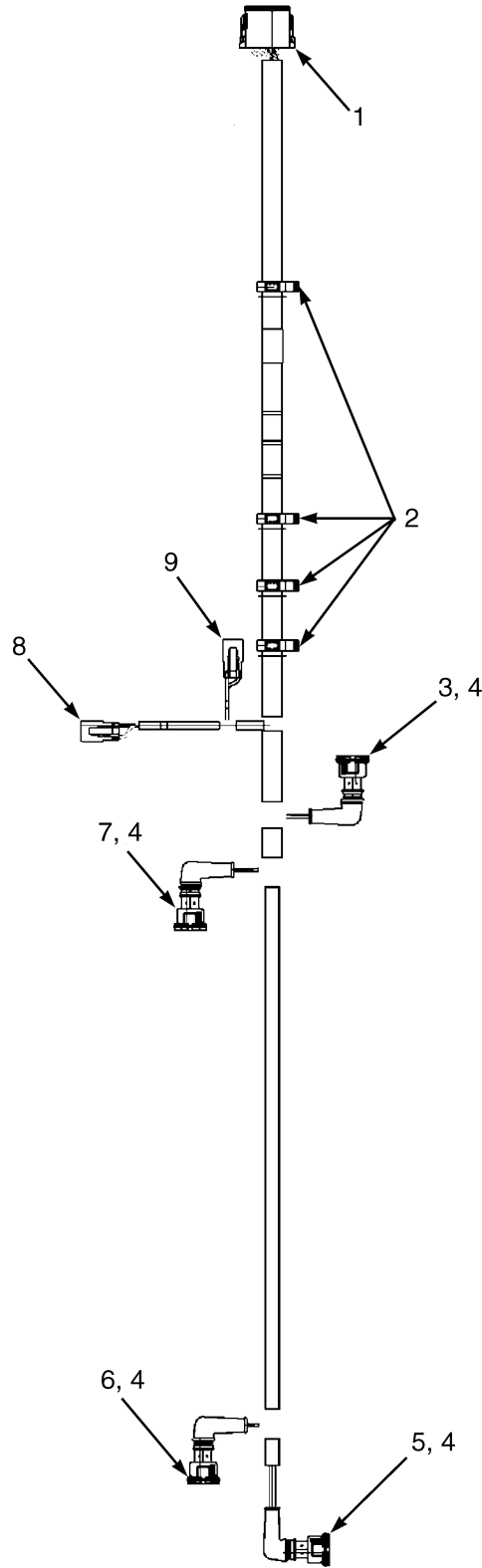


BP080751

**WIRE HARNESS  
ALTERNATOR – CUMMINS QSB 3.3L DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	2101334		
	2110984	Wire Harness (Alternator) .....	1
	2101334		
	2110984	Wire Harness (Alternator) (Alternate Part) .....	1
1	.....	Connector Assembly (Fuel Level) .....	1
1	1476077	Connector .....	1
1	1323576	Terminal .....	2
2	1509888	Clip .....	1
3	275493	Conduit .....	AR
4	.....	Connector Assembly (Air Restriction Sensor) .....	1
4	1465469	Connector .....	1
4	1323578	Terminal .....	2
4	1402888	Seal .....	2
5	.....	Connector Assembly (Endcap) .....	1
5	1465468	Connector .....	1
5	1327164	Seal .....	2
6	275495	Conduit .....	AR
7	209266	Clamp .....	1
8	.....	Connector Assembly (To Right Hand Chassis Harness) .....	1
8	1480187	Connector .....	1
8	1480188	Connector .....	1
8	866401	Terminal .....	2
9	.....	Connector Assembly (To Tight Hand Chassis Assembly) .....	1
9	1489655	Connector (4 Way) .....	1
9	1330416	Connector (Secondary Lock) .....	1
9	1330437	Terminal (Pin) .....	4
10	1402815	Clip .....	1
11	.....	Connector Assembly (Starter Positive Stud) .....	1
11	806427	E-Ring .....	1
12	.....	Connector Assembly (Starter Negative Stud) .....	1
12	806427	E-Ring .....	1
13	275495	Conduit .....	AR
14	.....	Connector Assembly (Sarter Solenoid) .....	1
14	148638	E Ftg Spade Term #10 .....	1
15	275497	Conduit .....	AR
16	1364263	Clamp .....	1
17	.....	Connector Assembly (Alternatoe Fuse) .....	1
17	1544731	Receptacle .....	1
17	1544733	Pin .....	1
18	.....	Connector Assembly (Alternator) .....	1
18	1501919	Connector .....	1
18	1482663	Connector .....	1
18	1330355	Terminal .....	2
18	1482668	Plug (Cavity Plug ) .....	2
18	1330356	Seal .....	2
19	1673486	Sleeve .....	AR
20	133483	Heat Shrink .....	AR
21	.....	Connector Assembly (Alternator Ground) .....	1
21	806425	E-Ring .....	1

**WIRE HARNESS (FIGURE 4-48)  
ELECTRONIC CONTROL VALVE — THREE FUNCTION**

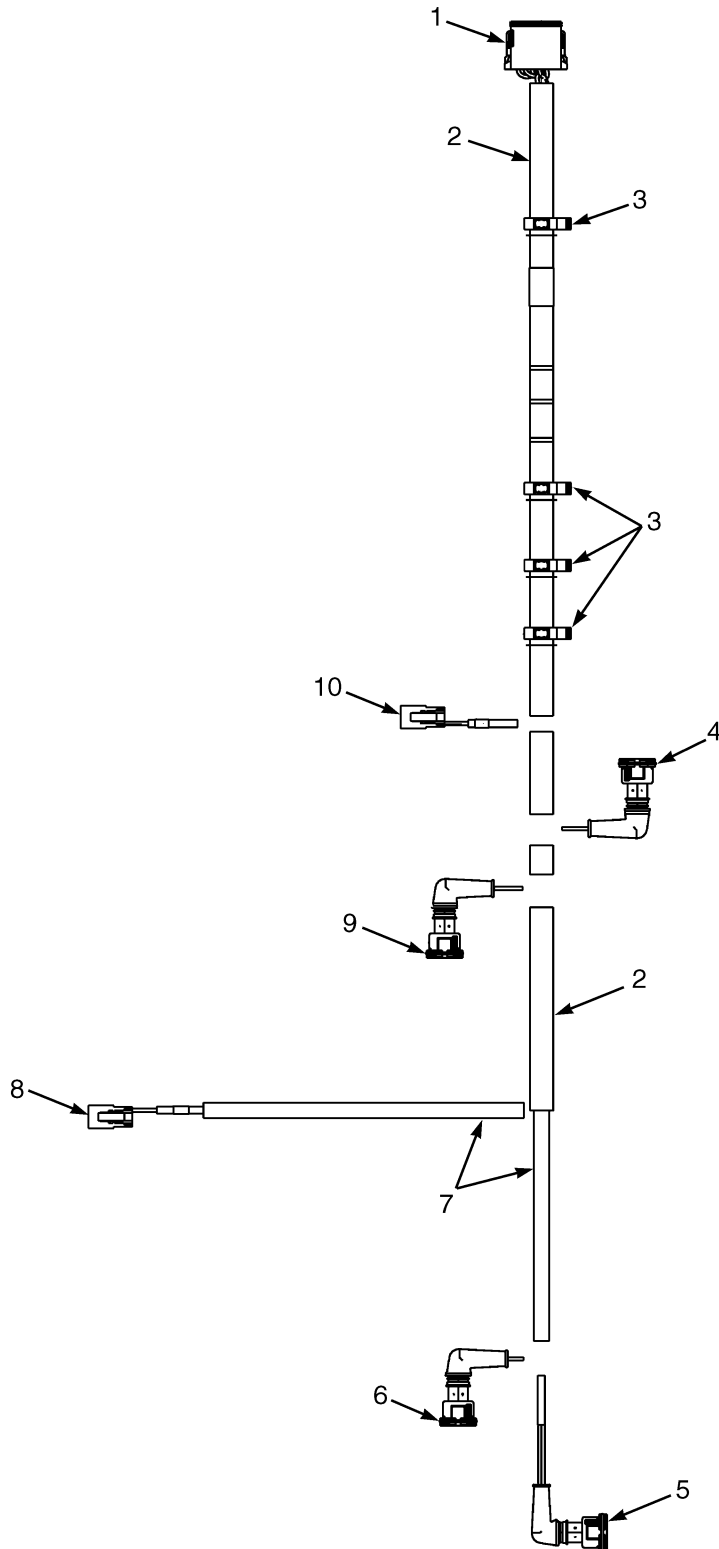


HP081569

**WIRE HARNESS  
ELECTRONIC CONTROL VALVE – THREE FUNCTION**

ITEM	PART NO.	DESCRIPTION	QTY
	2060198	Wire Harness (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 (2 Way) .....	1
8	1330438	Terminal (Socket) .....	2
8	1490243	Connector (Secondary Lock) .....	1
9	.....	Connector Assembly (Lower) .....	1
9	1490242	Connector (2 Way) .....	1
9	1330438	Terminal (Socket) .....	2
9	1490243	Connector (Secondary Lock) .....	1

## WIRE HARNESS (FIGURE 4-49) ELECTRONIC CONTROL VALVE — THREE FUNCTION-WITH VARIABLE DISPLACEMENT PUMP

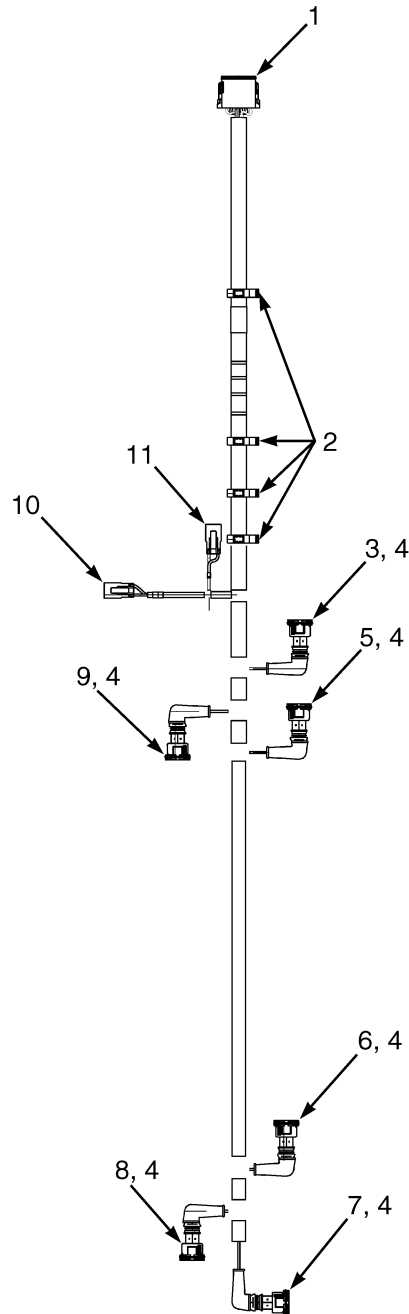


BP081116

**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 (2 Way) .....	1
8	1330438	Terminal (Socket) .....	2
8	1490243	Connector (Secondary Lock) (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 (2 Way) .....	1
10	1330438	Terminal (Socket) .....	2
10	1490243	Connector (Secondary Lock) (Secondary Lock) .....	1

## WIRE HARNESS (FIGURE 4-50) ELECTRONIC CONTROL VALVE — FOUR FUNCTION



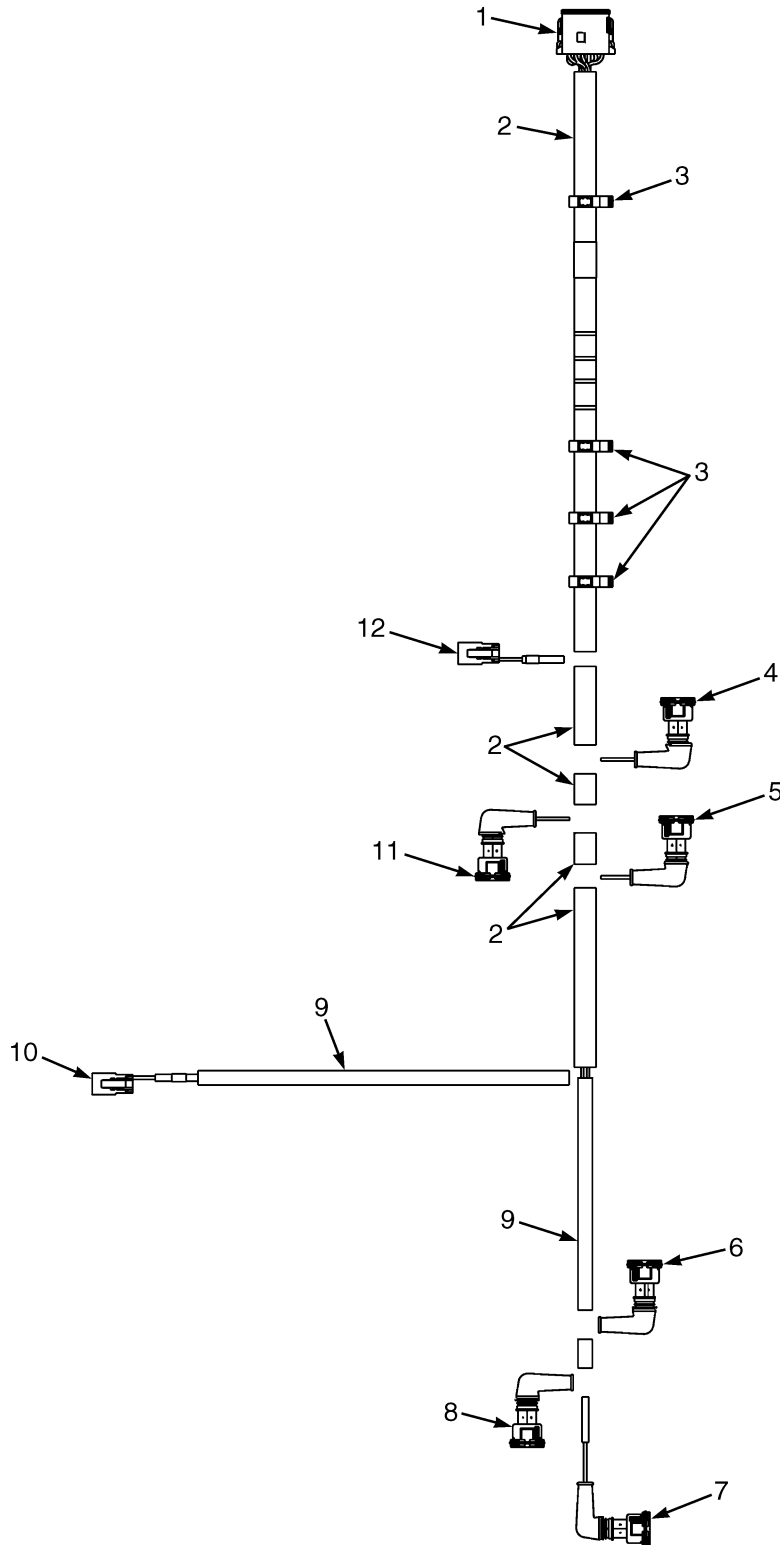
HP081568



**WIRE HARNESS**  
**ELECTRONIC CONTROL VALVE – FOUR FUNCTION**

ITEM	PART NO.	DESCRIPTION	QTY
	2058909	Wire Harness (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 (2 Way) .....	1
10	1330438	Terminal (Socket) .....	2
10	1490243	Connector (Secondary Lock) .....	1
11	.....	Connector Assembly (Lower) .....	1
11	1490242	Connector (2 Way) .....	1
11	1330438	Terminal (Socket) .....	2
11	1490243	Connector (Secondary Lock) .....	1

## WIRE HARNESS (FIGURE 4-51) ELECTRONIC CONTROL VALVE — FOUR FUNCTION-WITH VARIABLE DISPLACEMENT PUMP

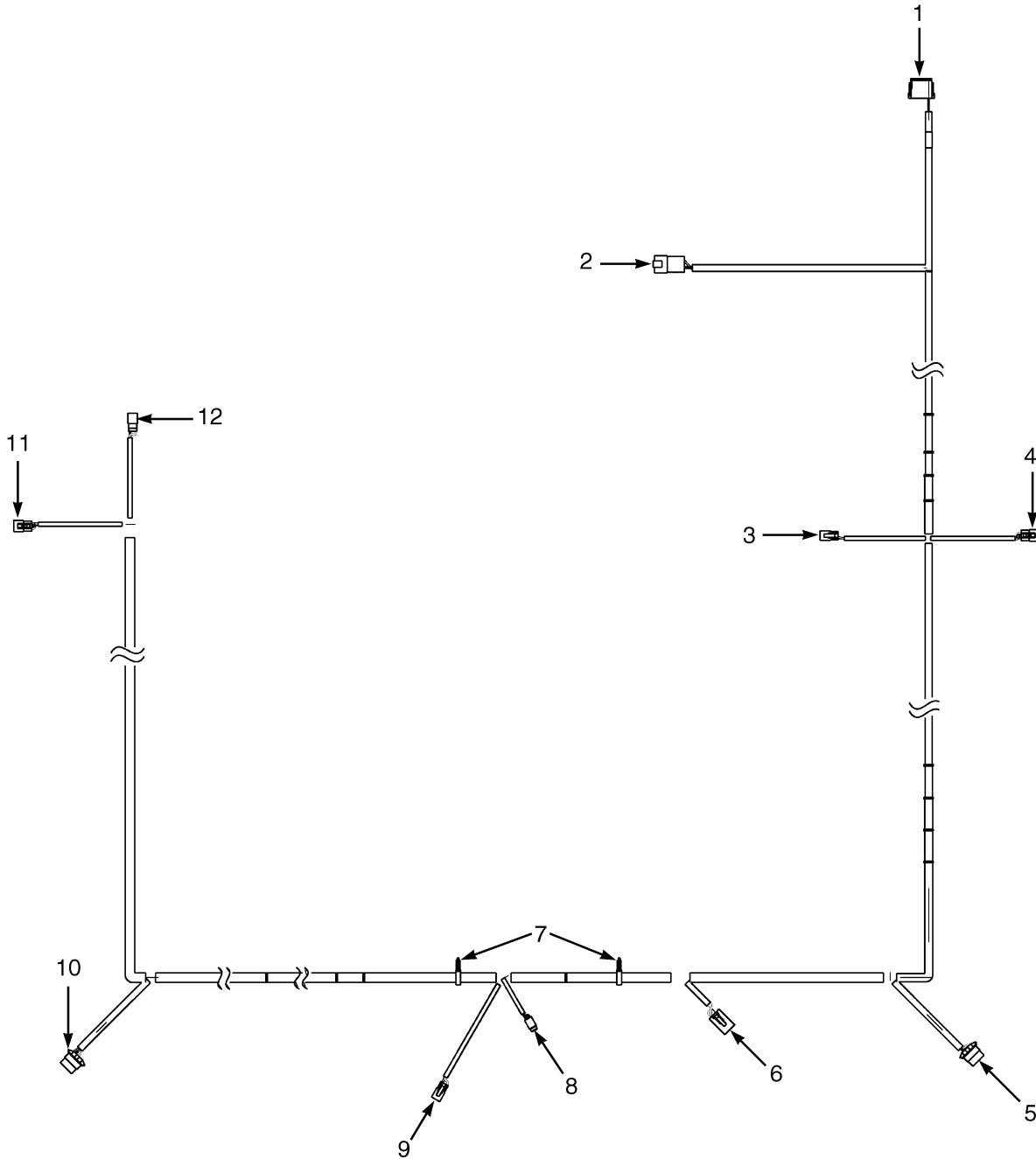


BP081117

**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 (2 Way) .....	1
10	1330438	Terminal (Socket) .....	2
10	1490243	Connector (Secondary Lock) (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 (2 Way) .....	1
12	1330438	Terminal (Socket) .....	2
12	1490243	Connector (Secondary Lock) (Secondary Lock) .....	1

**WIRE HARNESS (FIGURE 4-52)  
LIGHTS — WITH OVERHEAD GUARD**



BP080502

**WIRE HARNESS  
LIGHTS – WITH OVERHEAD GUARD**

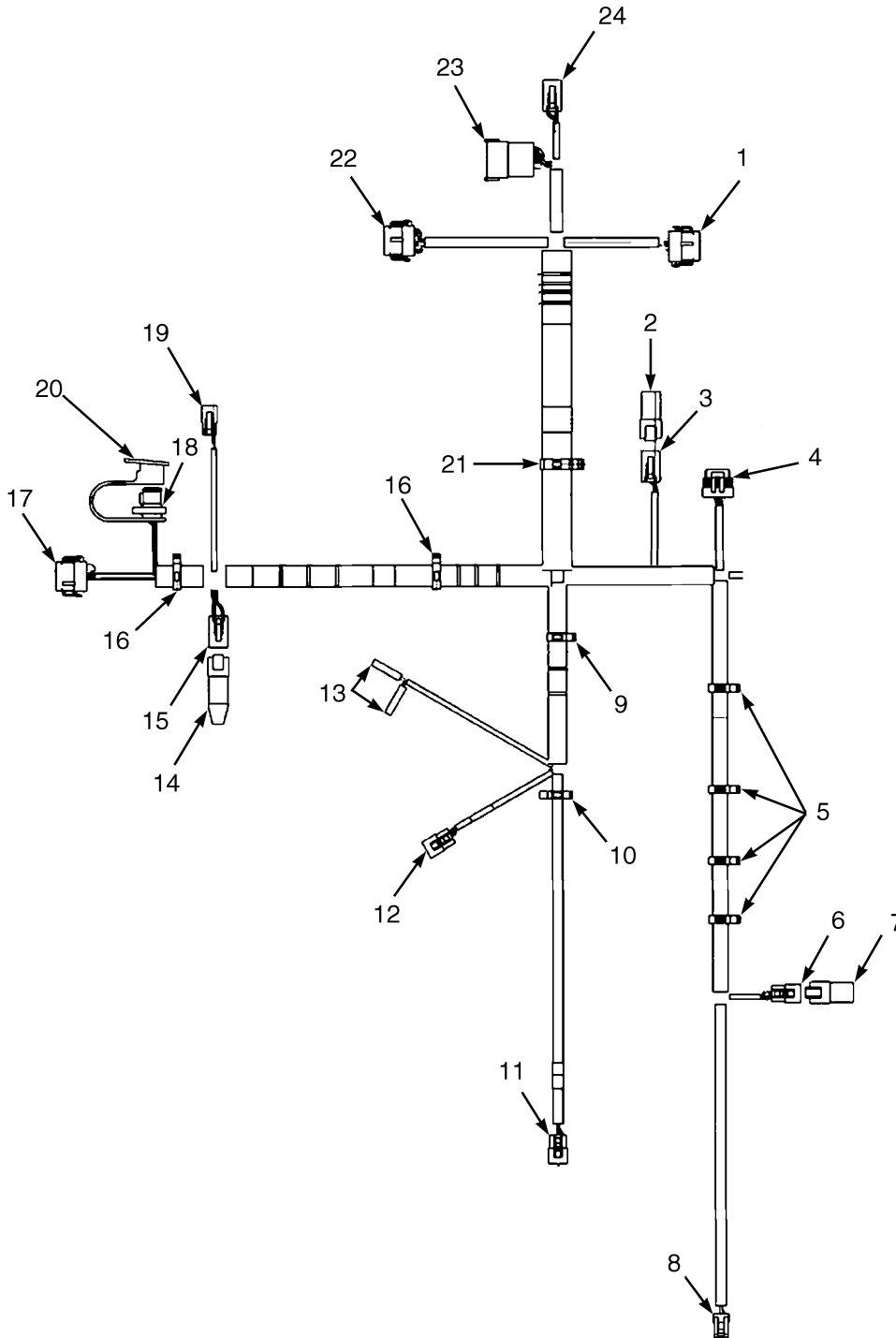
ITEM	PART NO.	DESCRIPTION	QTY
	2101862	Wire Harness (Lights) .....	1
1	.....	Connector Assembly (Vehicle System Manager) .....	1
1	1525566	Connector .....	1
1	1484377	Plug .....	7
1	1330438	Terminal (Socket) .....	5
1	1500913	Connector .....	1
2	.....	Connector Assembly (To RH Chassis Harness) .....	1
2	1514597	Connector .....	1
2	1514598	Connector .....	1
2	1484709	Terminal (Pin) .....	4
3	.....	Connector Assembly (RH Front Work Lights) .....	1
3	1490242	Connector (2 Way) .....	1
3	1490243	Connector (Secondary Lock) .....	1
3	1363886	Terminal (Socket) .....	2
4	.....	Connector Assembly (To RH Front Signal) .....	1
4	1484397	Connector (3-Way) .....	1
4	1463194	Connector (Secondary Lock) .....	1
4	1330438	Terminal (Socket) .....	3
5	.....	Connector Assembly (RH Rear Signal Lights) .....	1
5	1531486	Connector .....	1
5	930591	Connector (Secondary Lock) .....	1
5	1330356	Seal .....	1
5	1482668	Plug (Cavity Plug ) .....	1
5	1330355	Terminal .....	5
5	1476108	Wire Seal .....	4
6	.....	Connector Assembly (Work Light Resistor) .....	1
6	1514602	Connector .....	1
6	1514603	Connector .....	1
6	1554359	Terminal .....	4
7	1509890	Clip .....	2
8	.....	Connector Assembly (Strobe) .....	1
8	1484557	Connector (2 Socket) .....	1
8	1484558	Connector (Secondary Lock) .....	1
8	1463139	Terminal .....	2
9	.....	Connector Assembly (Rear Front Work Lights) .....	1
9	1490242	Connector (2 Way) .....	1
9	1490243	Connector (Secondary Lock) .....	1
9	1363886	Terminal (Socket) .....	2
10	.....	Connector Assembly (LH Rear Signal) .....	1
10	1531486	Connector .....	1
10	930591	Connector (Secondary Lock) .....	1
10	1330355	Terminal .....	5
10	1330356	Seal .....	1
10	1482668	Plug (Cavity Plug ) .....	1
10	1476108	Wire Seal .....	4
11	.....	Connector Assembly (LH Front Signal) .....	1
11	1330438	Terminal (Socket) .....	3
11	1463194	Connector (Secondary Lock) .....	1
11	1484397	Connector (3-Way) .....	1
12	.....	Connector Assembly .....	1

**WIRE HARNESS  
LIGHTS – WITH OVERHEAD GUARD**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
12	1363886	Terminal (Socket) .....	2
12	1490242	Connector (2 Way) .....	1
12	1490243	Connector (Secondary Lock) .....	1



## WIRE HARNESS (FIGURE 4-53) COWL WITH MONOTROL PEDAL — (WITH RETURN TO SET TILT) (WITH HYDRAULIC PUMP SOLENOID)



HP081702



**WIRE HARNESS****COWL WITH MONOTROL PEDAL – (WITH RETURN TO SET TILT) (WITH HYDRAULIC PUMP SOLENOID)**

ITEM	PART NO.	DESCRIPTION	QTY
	2098011	Wire Harness .....	1
1	.....	Connector Assembly (Vehicle System Manager) .....	1
1	1525568	Connector .....	1
1	1529046	Connector .....	1
1	1463139	Terminal .....	10
1	1484377	Plug .....	2
2	1525573	Connector .....	1
2	.....	Connector Assembly (Endcap) .....	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 Sensor) .....	1
4	1525584	Connector .....	1
4	1532571	Terminal .....	6
5	1509890	Clip .....	4
6	.....	Connector Assembly (To Mast Harness) .....	1
6	1484397	Connector (3-Way) .....	1
6	1463194	Connector (Secondary Lock) .....	1
6	1330438	Terminal (Socket) .....	3
7	.....	Connector Assembly (Endcap) .....	1
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 (Secondary Lock) .....	1
11	1484397	Connector (3-Way) .....	1
11	1330438	Terminal (Socket) .....	3
12	.....	Connector Assembly (Park Brake) .....	1
12	1463194	Connector (Secondary Lock) .....	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

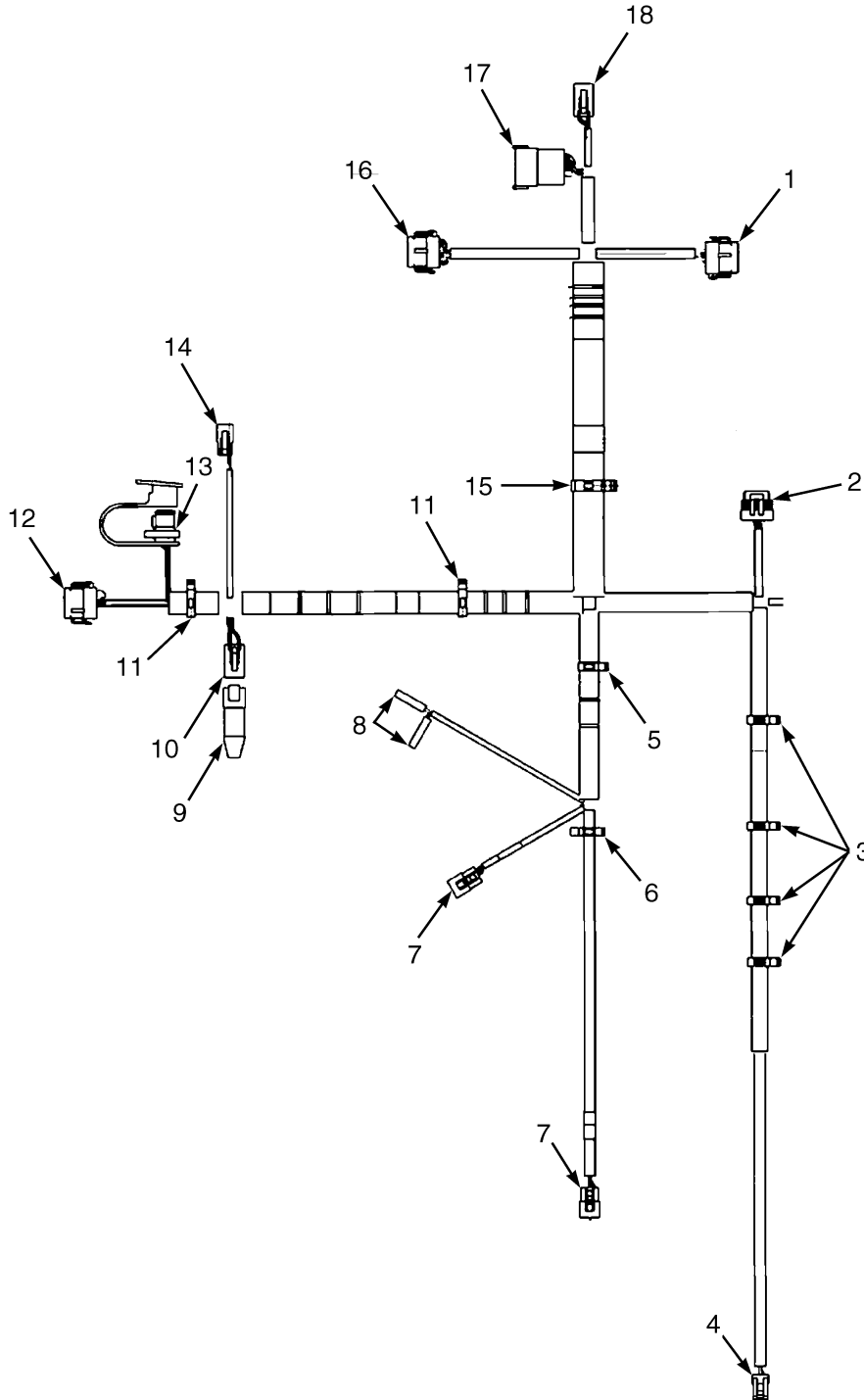
## WIRE HARNESS

### COWL WITH MONOTROL PEDAL – (WITH RETURN TO SET TILT) (WITH HYDRAULIC PUMP SOLENOID)

ITEM	PART NO.	DESCRIPTION	QTY
17	1484377	Plug .....	7
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 (2 Way) .....	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 (To Right Hand Chassis Harness) .....	1
23	1500925	Connector .....	1
23	1352603	Connector .....	1
23	1330437	Terminal (Pin) .....	9
23	1484377	Plug .....	3
24	.....	Connector Assembly (To Right Hand Chassis Harness) .....	1
24	1489656	Connector (4-Way) .....	1
24	1330438	Terminal (Socket) .....	4
24	1489657	Connector .....	1



## WIRE HARNESS (FIGURE 4-54) COWL WITH FORWARD/REVERSE LEVER — WITH HYDRAULIC PUMP SOLENOID



BP080443

**WIRE HARNESS**  
**COWL WITH FORWARD/REVERSE LEVER – WITH HYDRAULIC PUMP SOLENOID**

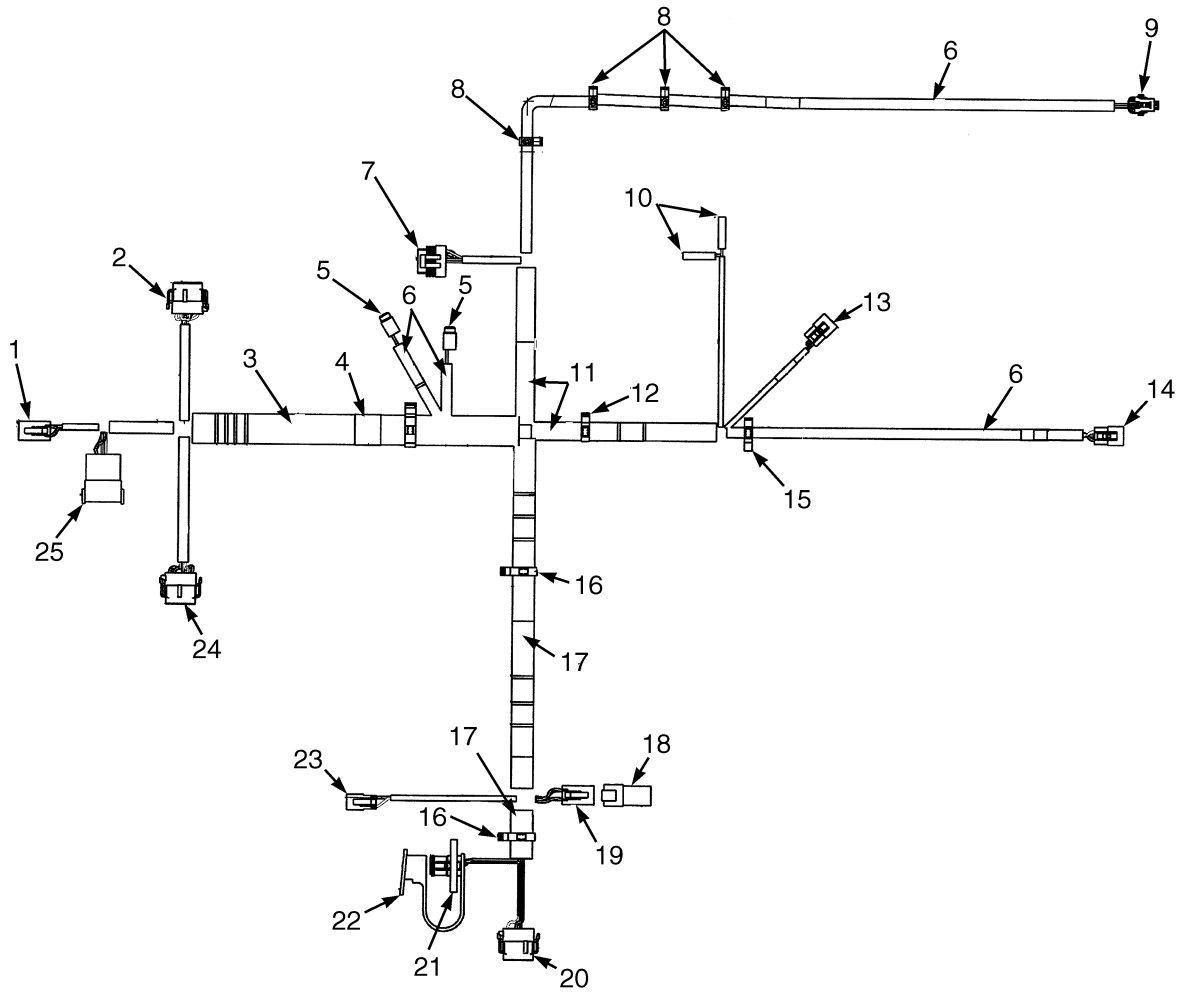
ITEM	PART NO.	DESCRIPTION	QTY
	2098012	Wire Harness (Cowl with Forward/Reverse Lever) .....	1
1	.....	Connector Assembly (Vehicle System Manager) .....	1
1	1525568	Connector .....	1
1	1529046	Connector .....	1
1	1463139	Terminal .....	7
1	1484377	Plug .....	5
2	.....	Connector Assembly (Accelerator Pedal 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) .....	1
7	1484397	Connector (3-Way) .....	1
7	1463194	Connector (Secondary Lock) .....	1
7	1330438	Terminal (Socket) .....	3
8	.....	Connector Assembly (Brake Fluid) .....	2
8	1324309	Sleeve .....	1
8	1324310	Terminal .....	1
9	.....	Connector Assembly (End Cap with Resistor) .....	1
9	1525577	Connector (With Resistor) .....	1
10	.....	Connector Assembly (Connector) .....	1
10	1489656	Connector (4-Way) .....	1
10	1489657	Connector .....	1
10	1330438	Terminal (Socket) .....	1
11	1500899	Clip .....	1
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 (2 Way) .....	1
14	1490243	Connector (Secondary Lock) .....	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 – WITH HYDRAULIC PUMP SOLENOID**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
16	1484377	Plug .....	5
17	.....	Connector Assembly (To Right Hand Chassis Harness .....	1
17	1500925	Connector .....	1
17	1352603	Connector .....	1
17	1330437	Terminal (Pin) .....	7
17	1484377	Plug .....	5
18	.....	Connector Assembly (To Right Hand Chassis Harness( .....	1
18	1489656	Connector (4-Way) .....	1
18	1489657	Connector .....	1
18	1330438	Terminal (Socket) .....	4



## WIRE HARNESS (FIGURE 4-55) COWL WITH FORWARD/REVERSE — MANUAL WITH OPERATOR PRESENCE (S/N P005B02106G →)



BP080711



**WIRE HARNESS****COWL WITH FORWARD/REVERSE – MANUAL WITH OPERATOR PRESENCE (S/N P005B02106G →)**

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 (2 Socket) .....	1
5	1484558	Connector (Secondary Lock) .....	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 (Secondary Lock) .....	1
13	1330438	Terminal (Socket) .....	3
14	.....	Brake Pedal .....	1
14	1484397	Connector (3-Way) .....	1
14	1463194	Connector (Secondary Lock) .....	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
20	1529046	Connector .....	1

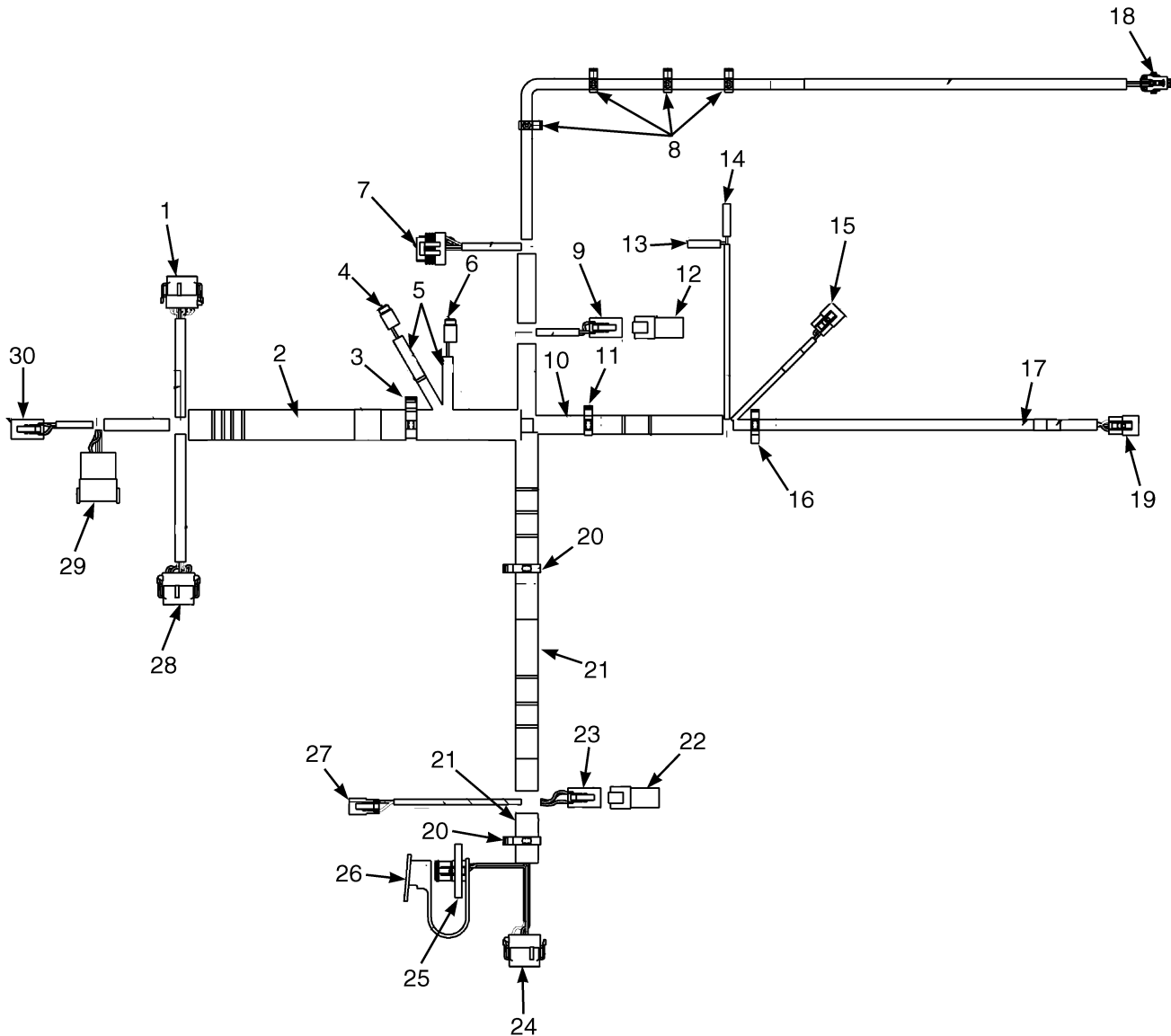
## WIRE HARNESS

### COWL WITH FORWARD/REVERSE – MANUAL WITH OPERATOR PRESENCE (S/N P005B02106G →)

ITEM	PART NO.	DESCRIPTION	QTY
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 (2 Way) .....	1
23	1490243	Connector (Secondary Lock) .....	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 4-56) COWL WITH MONOTROL PEDAL — WITH HYDRAULIC PUMP SOLENOID (S/N P005B02106G →)



BP080757

**WIRE HARNESS**  
**COWL WITH MONOTROL PEDAL – WITH HYDRAULIC PUMP SOLENOID (S/N P005B02106G →)**

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 (2 Socket) .....	1
4	1484558	Connector (Secondary Lock) .....	1
4	1463139	Terminal .....	2
5	275493	Conduit .....	AR
6	.....	Connector Assembly .....	1
6	1484557	Connector (2 Socket) .....	1
6	1484558	Connector (Secondary Lock) .....	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 (Secondary Lock) .....	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 (Secondary Lock) .....	1
19	1330438	Terminal (Socket) .....	3
20	1500899	Clip .....	2

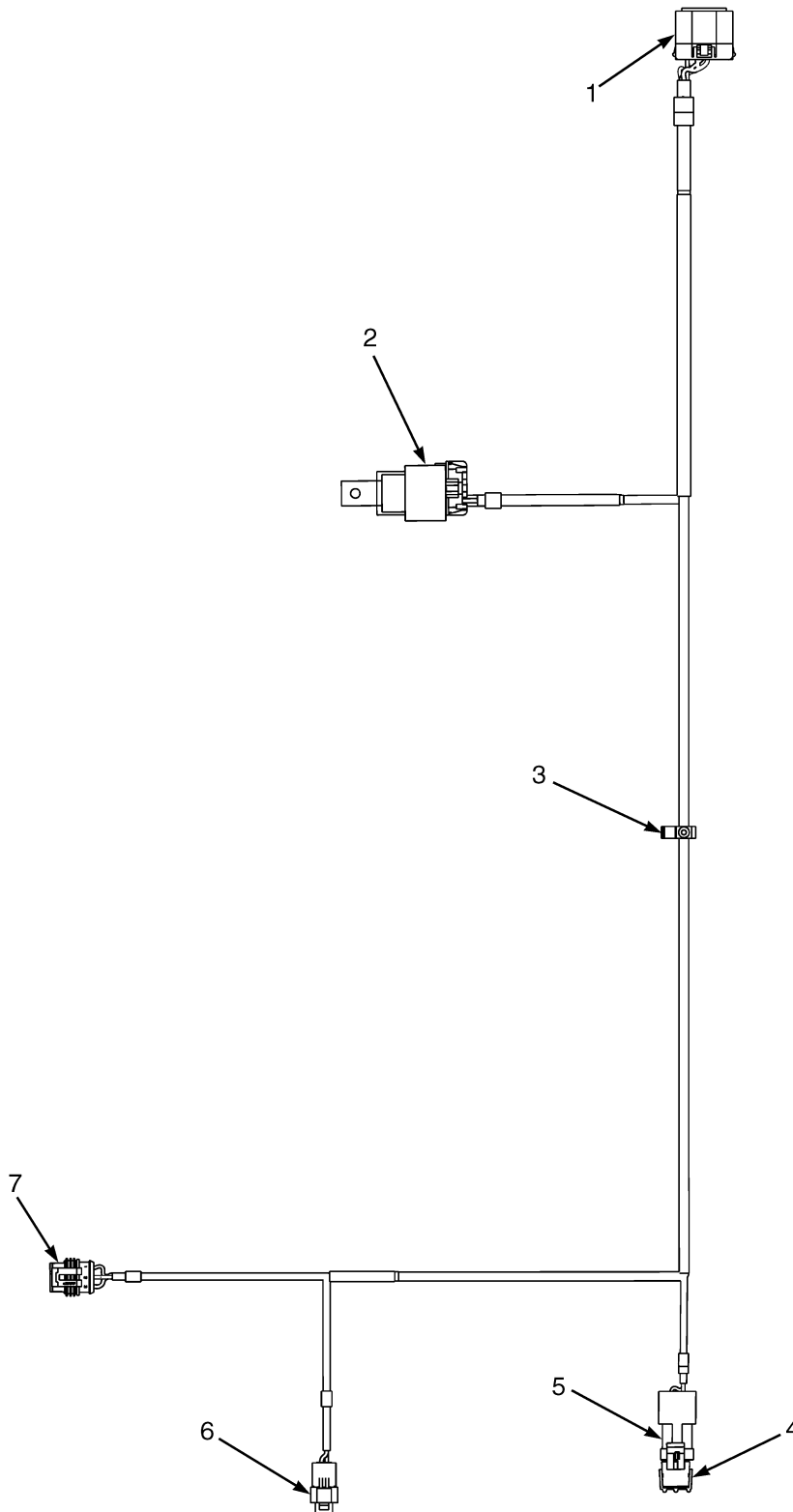
## WIRE HARNESS

### COWL WITH MONOTROL PEDAL – WITH HYDRAULIC PUMP SOLENOID (S/N P005B02106G →)

ITEM	PART NO.	DESCRIPTION	QTY
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 (2 Way) .....	1
27	1490243	Connector (Secondary Lock) .....	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 4-57) LOW FUEL SENSOR



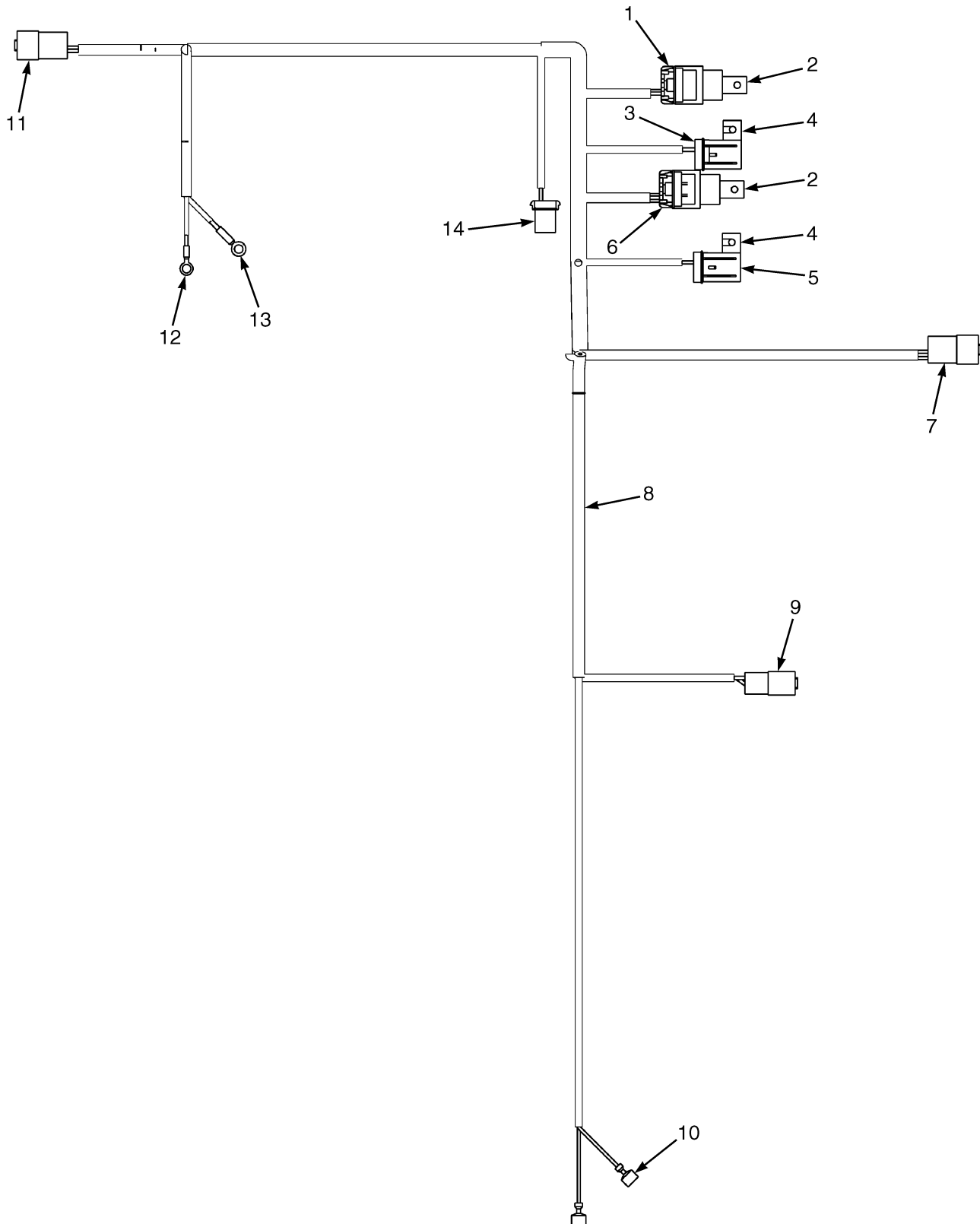
HP082025



**WIRE HARNESS  
LOW FUEL SENSOR**

ITEM	PART NO.	DESCRIPTION	QTY
	4601525	Wire Harness (Low Fuel Sensor) .....	1
1	.....	Connector Assembly (To Engine Harness) .....	1
1	1527273	Connector .....	1
1	1527305	Connector Lock .....	1
1	1402926	Terminal .....	3
1	1402927	Terminal .....	5
1	1503334	Seal .....	3
1	1507571	Seal .....	5
2	.....	Connector Assembly (Latching Relay) .....	1
2	1461743	Relay .....	1
2	1461744	Connector Body .....	1
2	1503088	Lock .....	1
2	1327164	Seal .....	1
2	1402912	Terminal .....	4
2	1323579	Seal .....	4
3	1509888	Clip .....	1
4	.....	Connector Assembly (Air Restriction Sensor Cap) .....	1
4	1465468	Connector .....	1
4	1327164	Seal .....	2
5	.....	Connector Assembly (Air Restriction Sensor) .....	1
5	1465469	Connector .....	1
5	1323578	Terminal .....	2
5	1402888	Seal .....	2
6	.....	Connector Assembly (LPG Lockoff) .....	1
6	1599337	Connector .....	1
6	1623057	Terminal .....	2
7	.....	Connector Assembly (Low LPG Sensor) .....	1
7	1547629	Connector (3 Way) .....	1
7	1508232	Terminal .....	3
7	2060555	Wire Seal .....	3

## WIRE HARNESS (FIGURE 4-58) AIR CONDITIONER (PENDING PER ECN 94360 →)



BP081133

**WIRE HARNESS**  
**AIR CONDITIONER (PENDING PER ECN 94360 →)**

ITEM	PART NO.	DESCRIPTION	QTY
	4610066	Wire Harness (Air Conditioner) .....	1
1	.....	Connector Assembly (Condenser Relay) .....	1
1	1461744	Connector Body .....	1
1	1327164	Seal .....	1
1	1375797	Terminal .....	4
1	1323579	Seal .....	2
1	1329147	Seal .....	2
1	1498483	Sealant .....	1
2	.....	Connector Assembly (Relay) .....	1
2	1461743	Relay .....	2
3	.....	Connector Assembly (Condenser Fuse Holder) .....	1
3	1330292	Connector .....	1
3	1330283	Terminal .....	1
3	1300134	Fuse (25 Amp) .....	1
4	.....	Connector Assembly (Fuse Holder) .....	1
4	1330293	Cover (Fuse) .....	2
5	.....	Connector Assembly (Compressor Fuse Holder) .....	1
5	1330292	Connector .....	1
5	1330283	Terminal .....	2
5	370646	Fuse (5 Amp) .....	1
6	.....	Connector Assembly (Blower Relay) .....	1
6	1461744	Connector Body .....	1
6	1327164	Seal .....	1
6	1375797	Terminal .....	4
6	1323579	Seal .....	1
6	1329147	Seal .....	3
6	1498483	Sealant .....	1
7	.....	Connector Assembly (RH Door Harness) .....	1
7	1514597	Connector .....	1
7	1514598	Connector .....	1
7	866401	Terminal .....	4
8	381919	Braiding .....	AR
9	.....	Connector Assembly (Condenser) .....	1
9	1480187	Connector .....	1
9	1480188	Connector .....	1
9	866401	Terminal .....	2
10	.....	Connector Assembly (Pressure Switch) .....	1
10	1310142	Terminal .....	2
11	.....	Connector Assembly (CPS 18) .....	1
11	1514597	Connector .....	1
11	1514598	Connector .....	1
11	866401	Terminal .....	3
11	1330439	Plug .....	1
12	.....	Connector Assembly (B+ at Power Distribution Module) .....	1
12	148606	E-Ring .....	1
13	.....	Connector Assembly (B- at Power Distribution Module) .....	1
13	148611	E-Ring .....	1
14	.....	Connector Assembly (Compressor Clutch) .....	1
14	1329152	Plug .....	1
14	1329151	Terminal .....	1

**WIRE HARNESS**  
**AIR CONDITIONER (PENDING PER ECN 94360 →)**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
14	1329148	Terminal .....	2
14	1323579	Seal .....	1
14	1329147	Seal .....	1

**5**

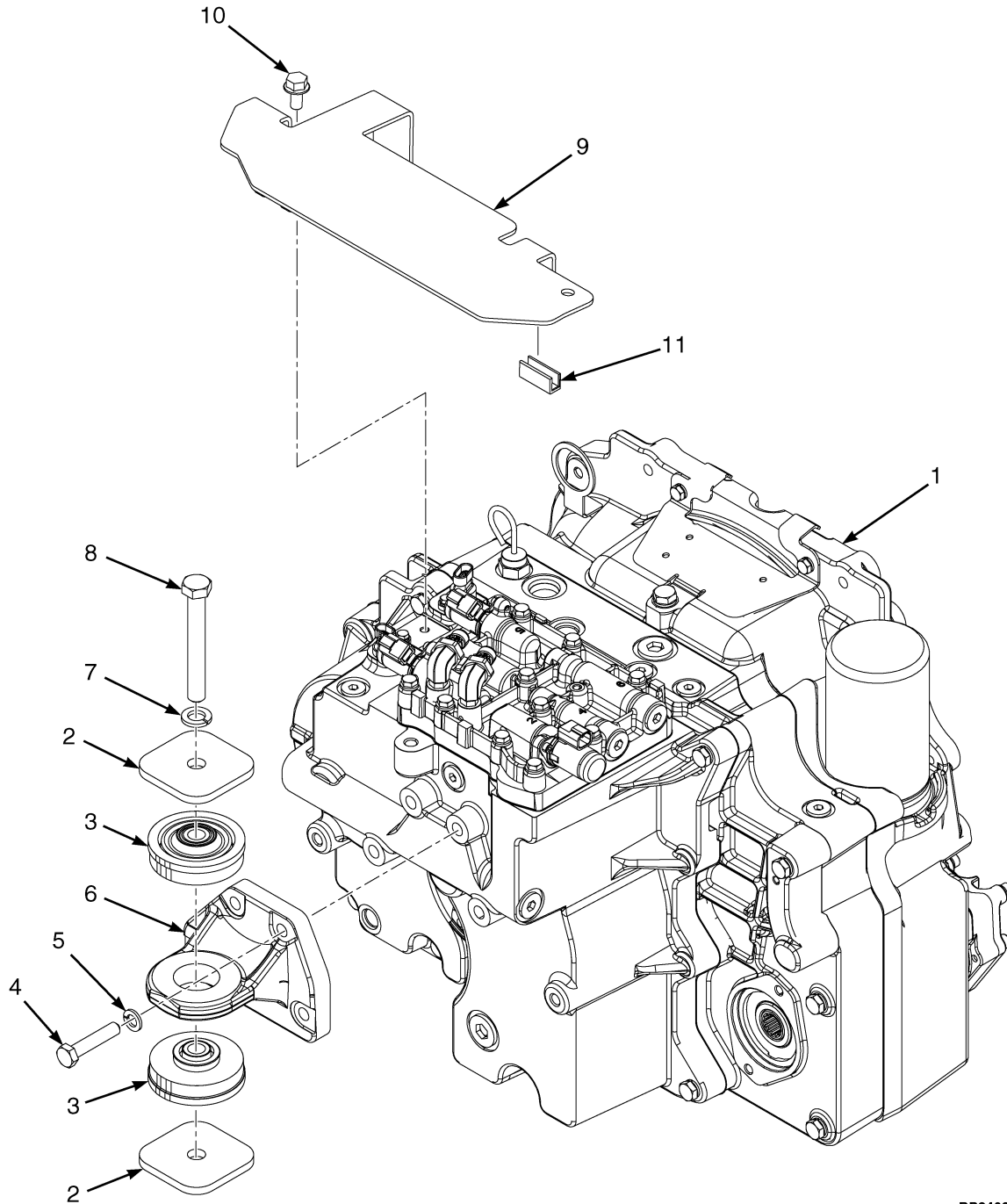
**TRANSMISSION**



**SECTION 5  
TRANSMISSION**

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WITH EXTERNAL OIL COOLER - GM 4.3L GASOLINE AND LPG (6/2011 →) .....	5-18
WITH INTERNAL OIL COOLER - GM 4.3L LPG (→ 6/2011) .....	5-12
WITH INTERNAL OIL COOLER - GM 4.3L LPG (6/2011 →) .....	5-14
TRANSMISSION MOUNTING .....	5-2

## TRANSMISSION MOUNTING (FIGURE 5-1)



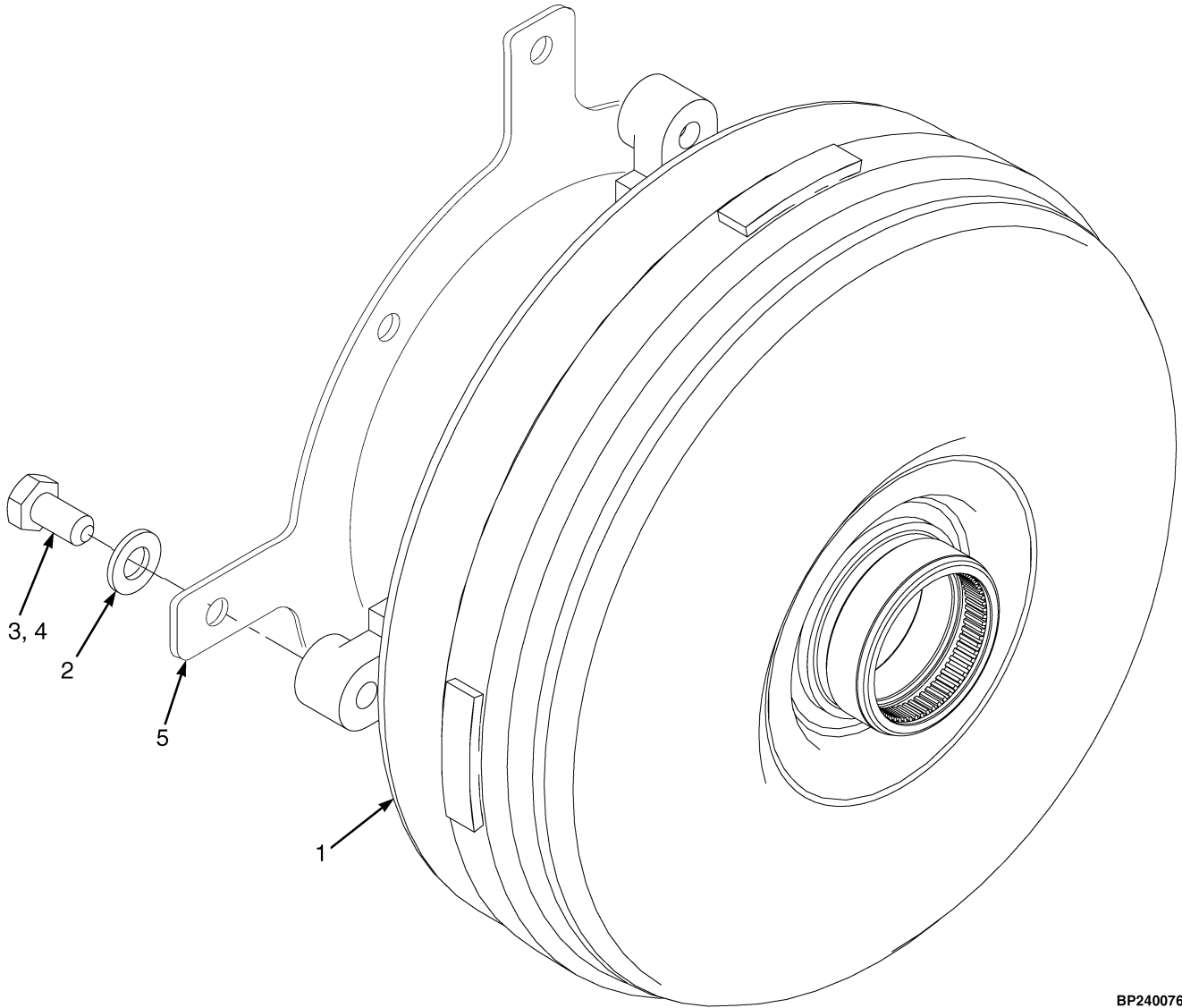
BP240210



**TRANSMISSION MOUNTING**

ITEM	PART NO.	DESCRIPTION	QTY
1	1654415	Bracket (Electrical Connector) .....	1
2	1566329	Washer .....	2
3	2070147	Isolator .....	2
4	292531	Capscrew .....	4
5	292683	Lockwasher .....	4
6	1501276	Bracket .....	1
7	292685	Lockwasher .....	1
7	320165	Washer (Alternate Part) .....	1
8	293697	Capscrew .....	1
9	1569768	Shield .....	1
10	1527879	Capscrew .....	1
11	1380849	Edge Protector .....	2
	264134	Loctite .....	AR

## TORQUE CONVERTER (FIGURE 5-2) CUMMINS QSB 3.3L DIESEL

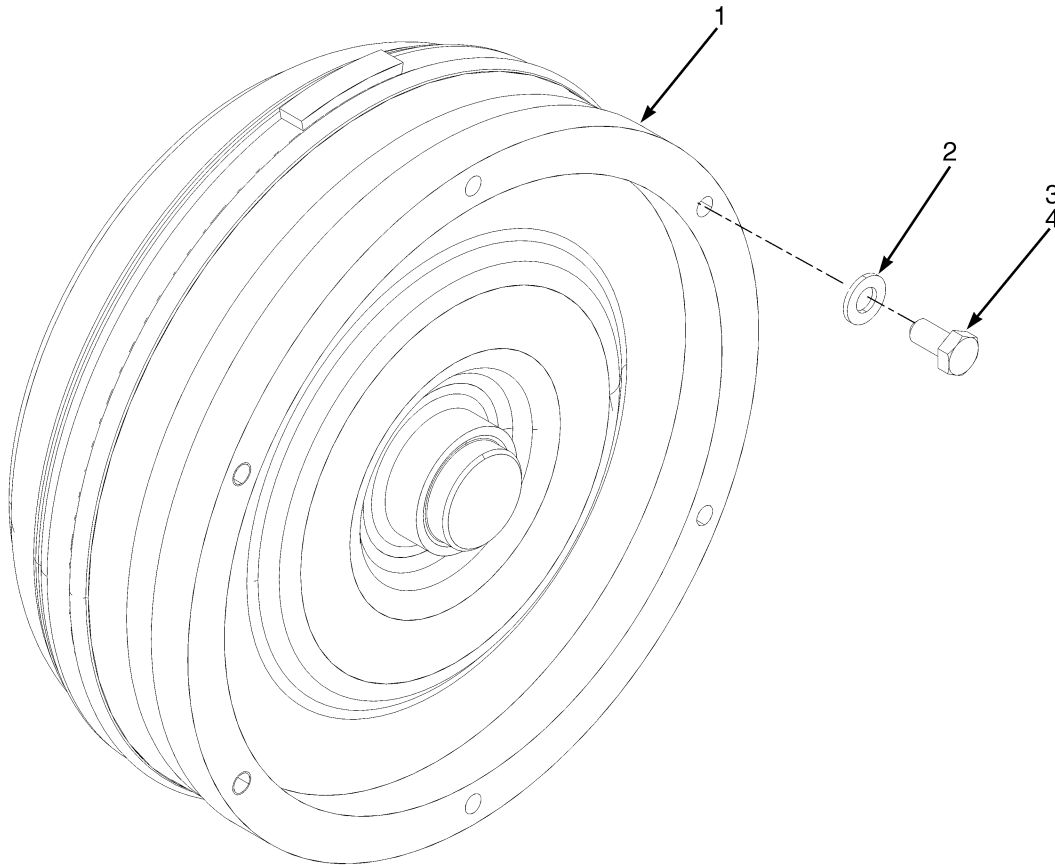


BP240076

**TORQUE CONVERTER  
CUMMINS QSB 3.3L DIESEL**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
1	1554087	Torque Converter .....	1
2	296420	Washer .....	4
3	1541921	Capscrew .....	4
4	360387	Loctite .....	AR
5	1569767	Flex Plate .....	1

## TORQUE CONVERTER (FIGURE 5-3) GM 4.3L LPG

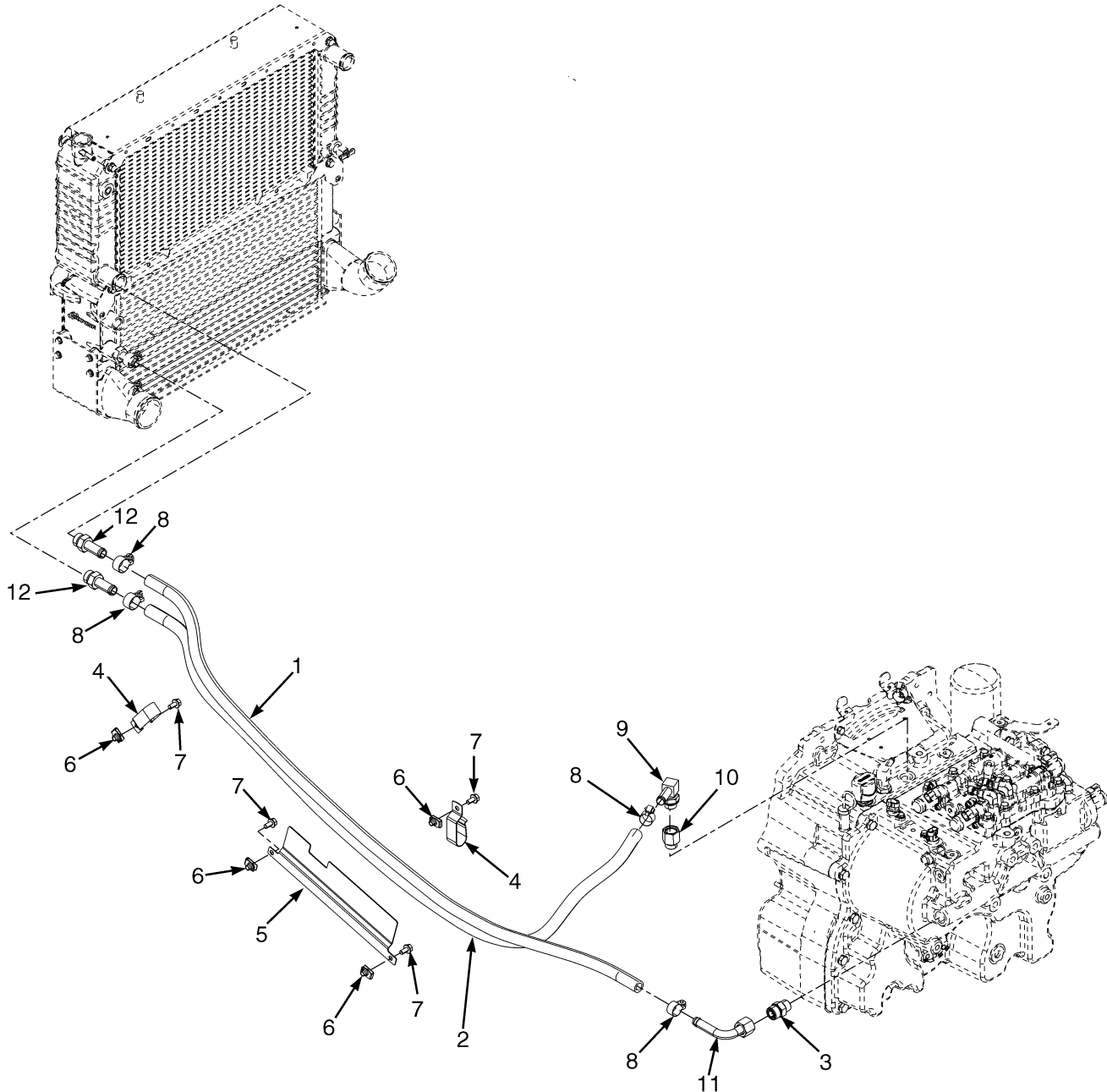


BP240064

ITEM	PART NO.	DESCRIPTION	QTY
1	1554085	Torque Converter (Without Extended Function Transmission) .....	1
1	1554086	Torque Converter (With Extended Function Transmission) .....	1
2	296420	Washer .....	6
3	1541921	Capscrew .....	6
4	360387	Loctite .....	AR



## TRANSMISSION COOLING (FIGURE 5-4) WITH EXTERNAL OIL COOLER — CUMMINS QSB 3.3L DIESEL (→ 6/2011)



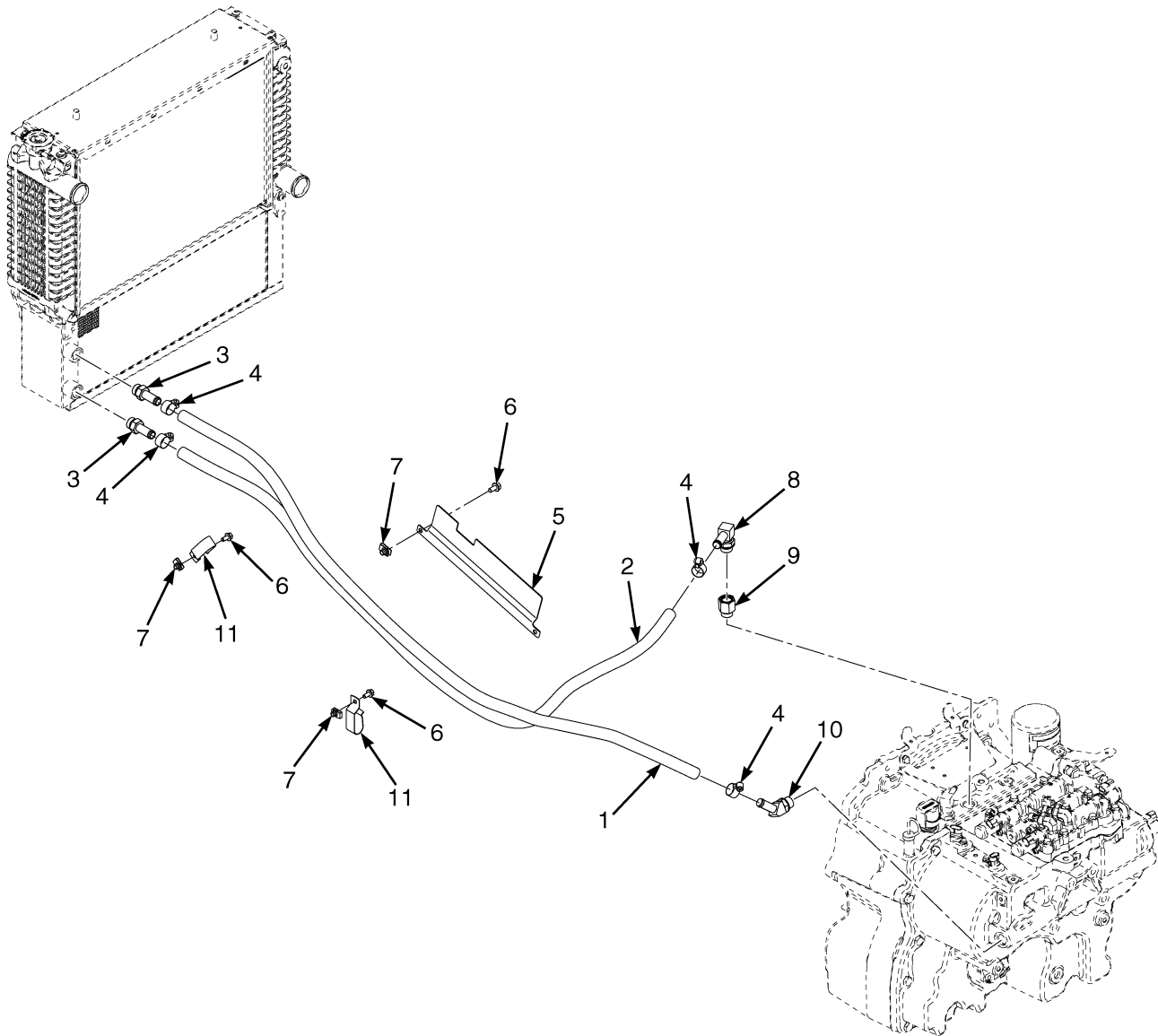
BP240168

**TRANSMISSION COOLING**  
WITH EXTERNAL OIL COOLER – CUMMINS QSB 3.3L DIESEL (→ 6/2011)

ITEM	PART NO.	DESCRIPTION	QTY
1	<b>a</b> 2100178	Hose Assy .....	1
1	<b>b</b> 2108703	Hose .....	1
2	<b>a</b> 2100179	Hose Assy .....	1
2	<b>b</b> 2108676	Hose .....	1
3	1486749	Fitting .....	1
4	1562648	Clip .....	2
5	2079845	Shield .....	1
6	1480237	Nut .....	4
7	1527879	Capscrew .....	4
8	130845	Clamp .....	4
9	222512	Fitting .....	1
9	16485	O-Ring .....	1
10	1691525	Adapter .....	1
11	2109875	Tube Assy .....	1
12	17223	Fitting .....	2
12	16485	O-Ring .....	1

**FOOTNOTES:****a** → S/N P005B02245G**b** S/N P005B02246G →

## TRANSMISSION COOLING (FIGURE 5-5) WITH EXTERNAL OIL COOLER — CUMMINS QSB 3.3L DIESEL (6/2011 →)



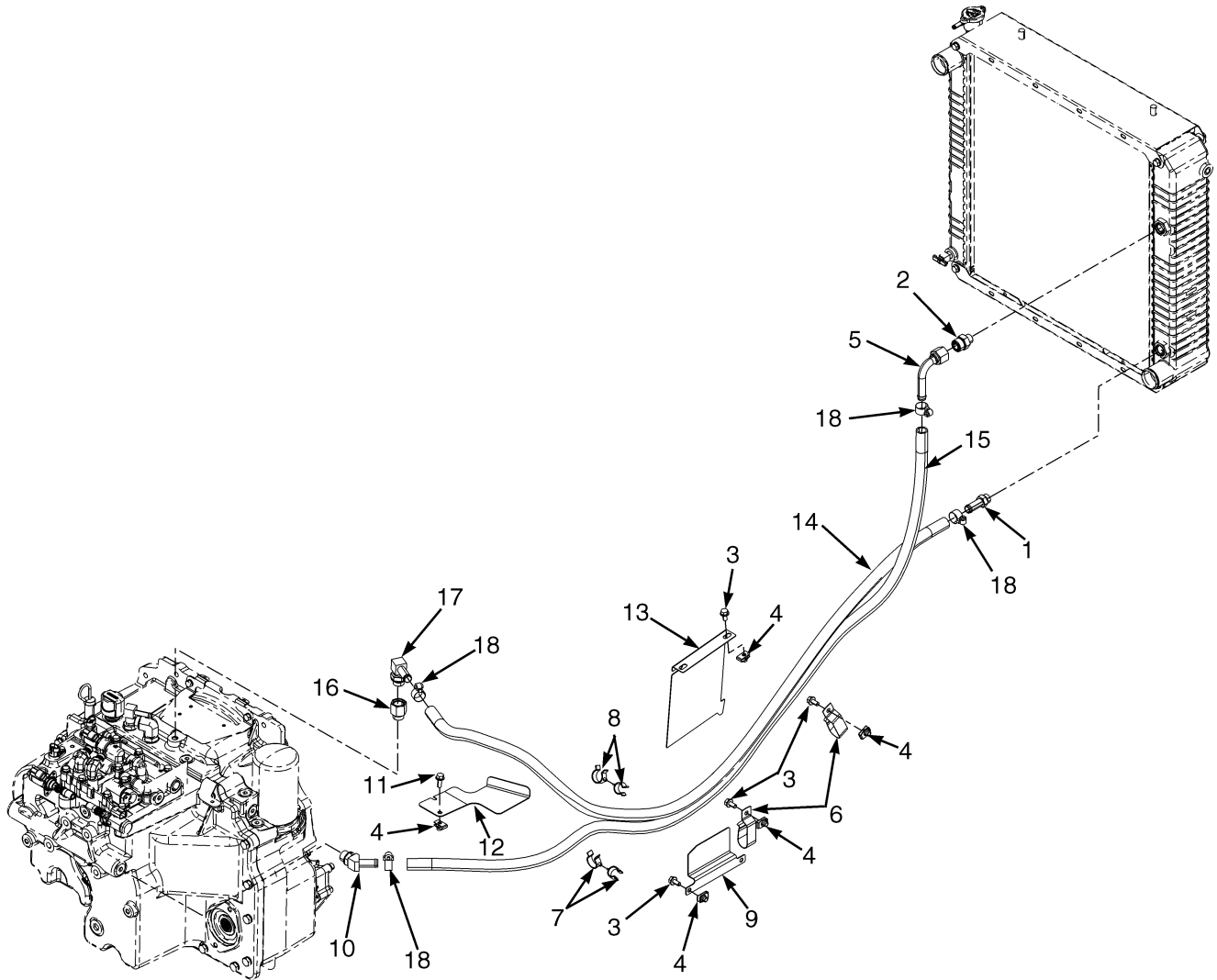
BP240207



**TRANSMISSION COOLING**  
WITH EXTERNAL OIL COOLER – CUMMINS QSB 3.3L DIESEL (6/2011 →)

ITEM	PART NO.	DESCRIPTION	QTY
1	2108676	Hose .....	1
2	2109872	Hose .....	1
3	17223	Fitting .....	2
3	16485	O-Ring .....	1
4	130845	Clamp .....	4
5	2079845	Shield .....	1
6	1527879	Capscrew .....	4
7	1480237	Nut .....	4
8	222512	Fitting .....	1
8	16485	O-Ring .....	1
9	1691525	Adapter .....	1
10	222504	Fitting .....	1
10	16485	O-Ring .....	1
11	1562648	Clip .....	2

## TRANSMISSION COOLING (FIGURE 5-6) WITH INTERNAL OIL COOLER — GM 4.3L LPG (→ 6/2011)



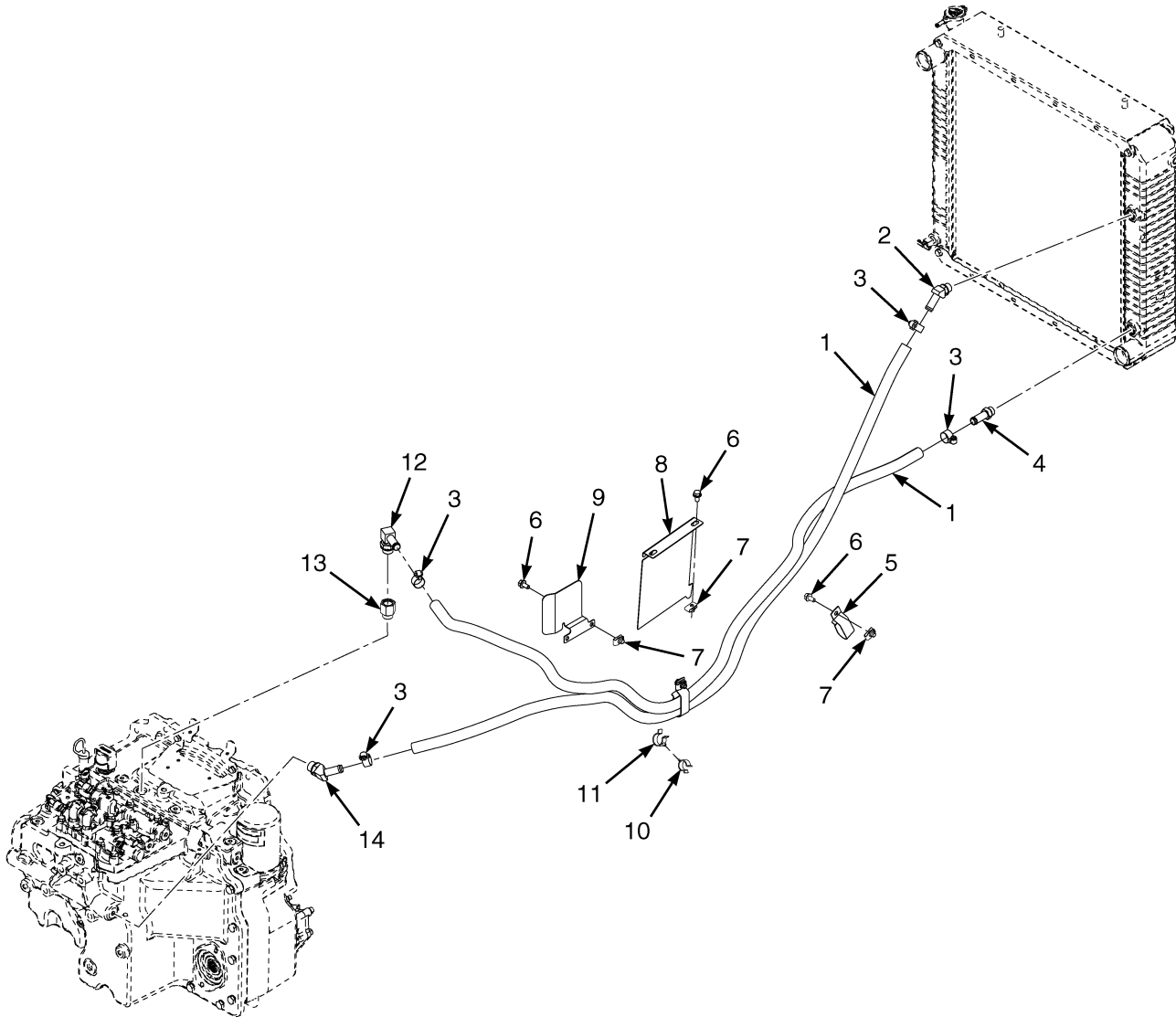
BP060071

**TRANSMISSION COOLING**  
WITH INTERNAL OIL COOLER – GM 4.3L LPG (→ 6/2011)

ITEM	PART NO.	DESCRIPTION	QTY
1	<b>a</b> 1487068	Fitting .....	1
1	<b>b</b> 1673198	Fitting .....	1
2	1565127	Fitting .....	1
3	1527879	Capscrew .....	6
4	1480237	Nut .....	7
5	2109875	Tube Assy .....	1
6	1562648	Clip .....	2
7	1502066	Clamp .....	2
8	1542436	Clamp .....	2
9	2079844	Shield .....	1
10	1516205	Fitting .....	1
10	222504	Fitting .....	1
11	1527880	Capscrew .....	1
12	2077444	Drip Shield .....	1
13	2090425	Heat Shield .....	1
14	<b>a</b> 2090113	Hose Assy .....	1
14	<b>b</b> 2109868	Hose .....	1
15	<b>a</b> 2078983	Hose Assy .....	1
15	<b>b</b> 2108677	Hose .....	1
16	1691525	Adapter .....	1
17	222512	Fitting .....	1
18	130845	Clamp .....	4

**FOOTNOTES:****a** → S/N P005B02245G**b** S/N P005B02246G →

## TRANSMISSION COOLING (FIGURE 5-7) WITH INTERNAL OIL COOLER — GM 4.3L LPG (6/2011 →)

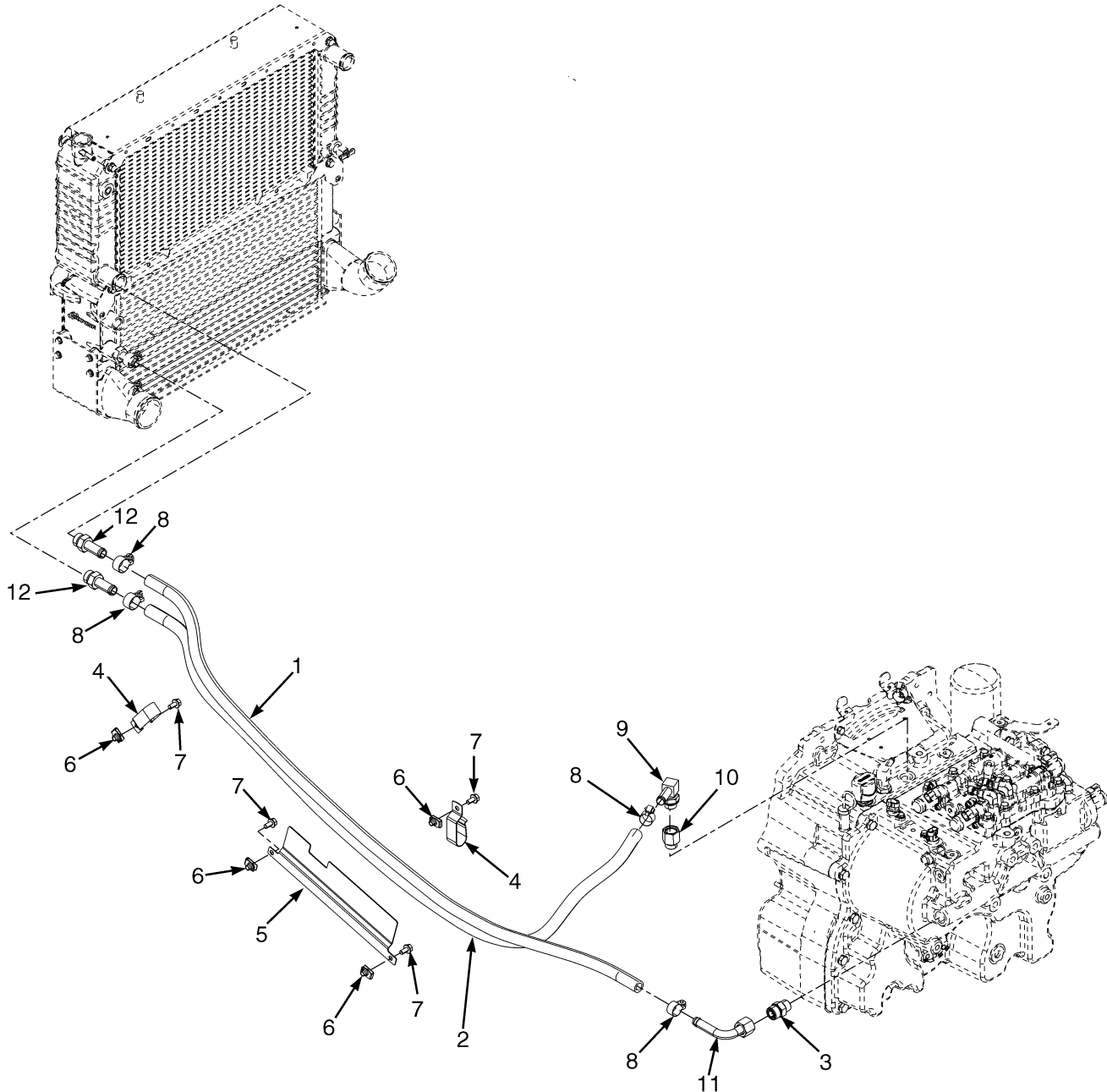


BP240208

**TRANSMISSION COOLING**  
**WITH INTERNAL OIL COOLER – GM 4.3L LPG (6/2011 →)**

ITEM	PART NO.	DESCRIPTION	QTY
1	2108677	Hose .....	2
2	222503	Fitting .....	1
2	16485	O-Ring .....	1
3	130845	Clamp .....	4
4	1673198	Fitting .....	1
4	16484	O-Ring .....	1
5	1562648	Clip .....	2
6	1527879	Capscrew .....	6
7	1480237	Nut .....	6
8	2090425	Heat Shield .....	1
9	4014164	Shield .....	1
10	1502066	Clamp .....	2
11	1542436	Clamp .....	2
12	222512	Fitting .....	1
12	16485	O-Ring .....	1
13	1691525	Adapter .....	1
14	222504	Fitting .....	1
14	16485	O-Ring .....	1

## TRANSMISSION COOLING (FIGURE 5-8) WITH EXTERNAL OIL COOLER — GM 4.3L LPG (→ 6/2011)



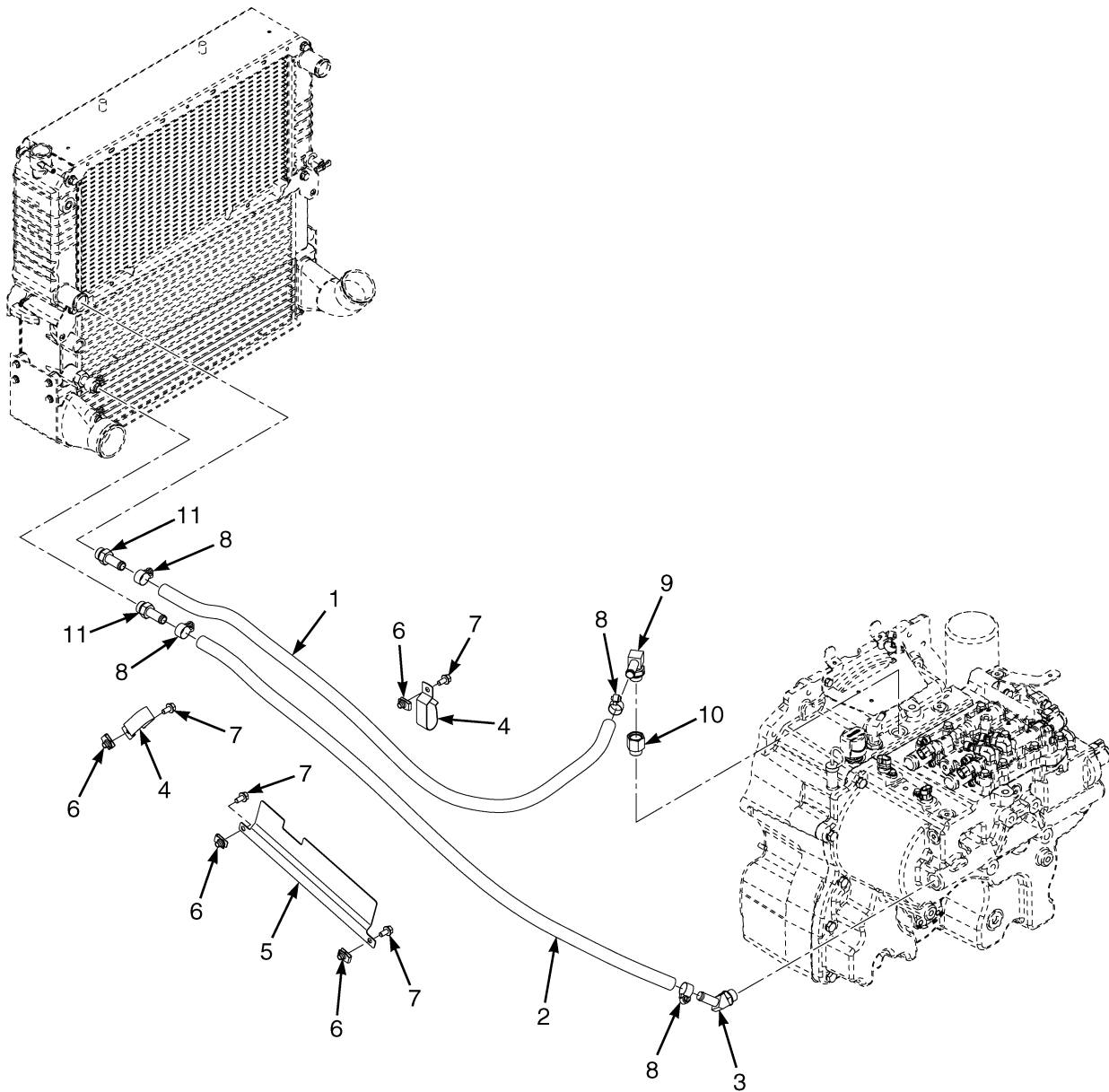
BP240168

**TRANSMISSION COOLING**  
**WITH EXTERNAL OIL COOLER – GM 4.3L LPG (→ 6/2011)**

ITEM	PART NO.	DESCRIPTION	QTY
1	<b>a</b> 2078984	Hose Assy .....	1
1	<b>b</b> 2109873	Hose .....	1
2	<b>a</b> 2093759	Hose Assy .....	1
2	<b>b</b> 2109872	Hose .....	1
3	1486749	Fitting .....	1
4	1562648	Clip .....	1
5	2079845	Shield .....	1
6	1480237	Nut .....	3
7	1527879	Capscrew .....	3
8	130845	Clamp .....	4
9	222512	Fitting .....	1
9	16485	O-Ring .....	1
10	1691525	Adapter .....	1
11	2109875	Tube Assy .....	1
12	17223	Fitting .....	2
12	16485	O-Ring .....	1

**FOOTNOTES:****a** → S/N P005B02245G**b** S/N P005B02246G →

## TRANSMISSION COOLING (FIGURE 5-9) WITH EXTERNAL OIL COOLER — GM 4.3L GASOLINE AND LPG (6/2011 →)



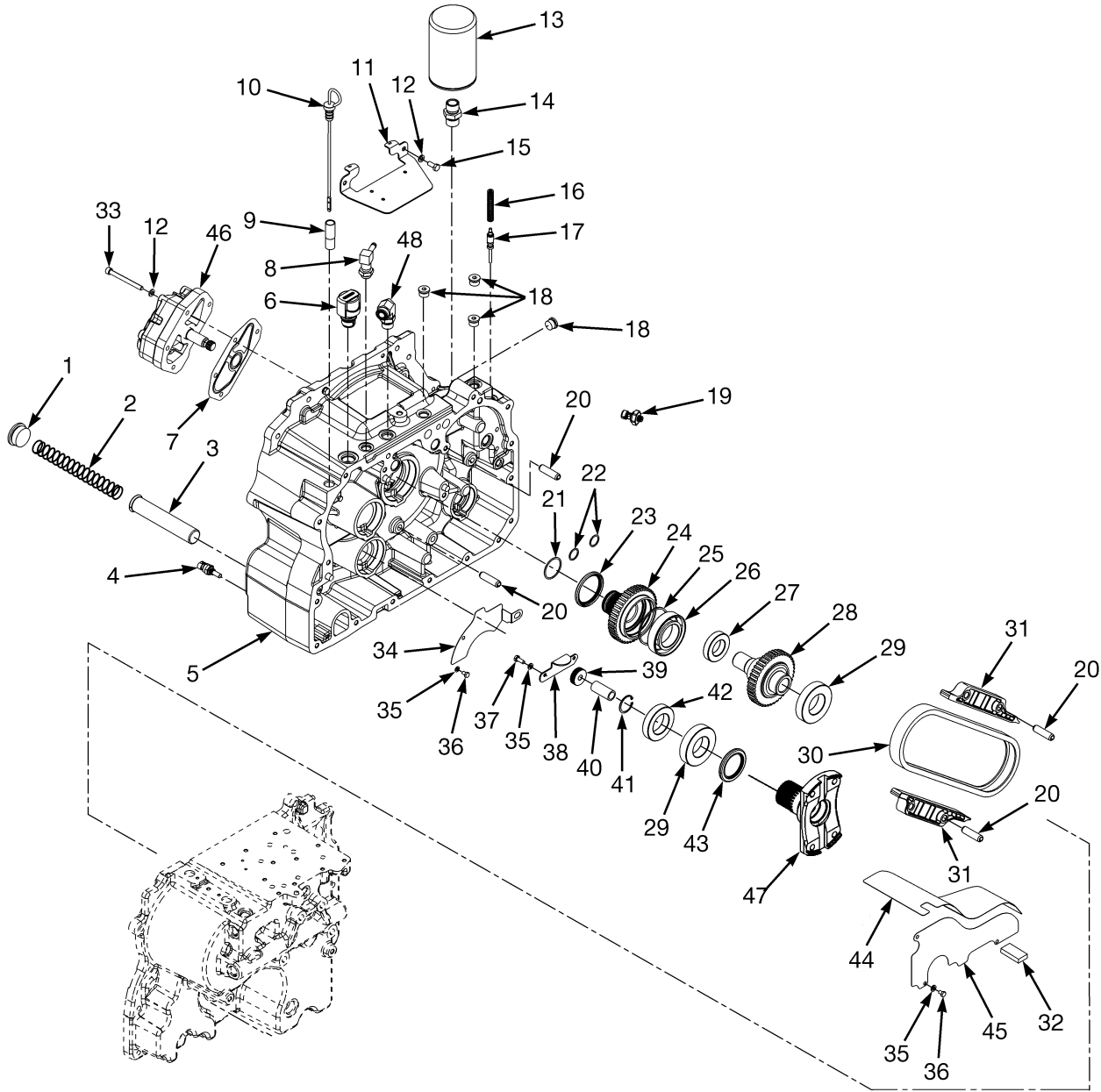
BP240212



**TRANSMISSION COOLING**  
WITH EXTERNAL OIL COOLER – GM 4.3L GASOLINE AND LPG (6/2011 →)

ITEM	PART NO.	DESCRIPTION	QTY
1	2108703	Hose .....	1
2	2109872	Hose .....	1
3	222504	Fitting .....	1
3	16485	O-Ring .....	1
4	1562648	Clip .....	1
5	2079845	Shield .....	1
6	1480237	Nut .....	3
7	1527879	Capscrew .....	3
8	130845	Clamp .....	4
9	222512	Fitting .....	1
9	16485	O-Ring .....	1
10	1691525	Adapter .....	1
11	17223	Fitting .....	2
11	16485	O-Ring .....	1

## TRANSMISSION (FIGURE 5-10) SINGLE SPEED — SHEET 1 OF 2



BP240131

**TRANSMISSION**  
**SINGLE SPEED – SHEET 1 OF 2**

ITEM	PART NO.	DESCRIPTION	QTY
	<b>a</b> 1638795	Transmission Assy (Single Speed Dry Brake) .....	1
	<b>b</b> 1703472	Transmission Assy (Dry Brake)(T139) (Single Speen Dry) .....	1
	<b>a</b> 1638796	Transmission Assy (Single Speed Wet Brake) .....	1
	<b>b</b> 1703473	Transmission Assy (T140) (Single Speed Wet) .....	1
1	188210	Fitting .....	1
2	1550572	Spring .....	1
3	1627465	Screen .....	1
4	1515654	Temperature Sensor .....	1
5	1636644	Converter Housing (Torque Converter) .....	1
6	1632741	Breather .....	1
7	1653815	Gasket .....	2
8	1640573	Fitting .....	1
9	1624406	Dipstick Tube .....	1
10	1624401	Dipstick .....	1
11	1622888	Cover (Converter Housing) .....	1
11	1699141	Cover Plate (Converter Housing) (Alternate Part) .....	1
12	292681	Lockwasher .....	6
13	2075558	Transmission Filter .....	1
13	4020588	Transmission Filter (Alternate Part) .....	1
14	1558515	Fitting .....	1
15	136681	Capscrew .....	2
16	1612918	Spring .....	1
17	1612916	Spool .....	1
18	235691	Fitting .....	4
19	2070263	Pressure Transducer .....	1
20	303100	Roll Pin .....	4
21	145481	O-Ring .....	1
22	1553403	O-Ring .....	2
23	1544217	Oil Seal (Torque Converter) .....	1
24	1541556	Sprocket .....	1
25	1544218	Sealing Ring .....	1
26	1544216	Bearing .....	1
27	44307	Ball Bearing .....	1
28	1529890	Sprocket .....	1
29	43209	Ball Bearing .....	2
30	1494750	Chain (Drive Pump) .....	1
31	1615804	Snubber .....	2
32	334560	Magnet .....	1
33	296022	Capscrew .....	4
34	1624408	Shield (Upper) .....	1
35	292680	Washer .....	6
36	148962	Capscrew .....	4
37	292500	Capscrew .....	2
38	1550567	Cover Plate .....	1
39	1525686	Nut .....	1
40	1636645	Spacer .....	1
41	213099	Snap Ring .....	1
42	44309	Ball Bearing .....	1
43	1547447	Oil Seal .....	1
44	1622887	Baffle .....	1

## TRANSMISSION SINGLE SPEED – SHEET 1 OF 2

ITEM	PART NO.	DESCRIPTION	QTY
45	1627453	Shield (Lower) .....	1
46	2076519	Pump .....	1
46	1623836	O-Ring .....	1
46	1623837	O-Ring .....	1
47	1654004	Yoke .....	1
48	1487067	Fitting .....	1

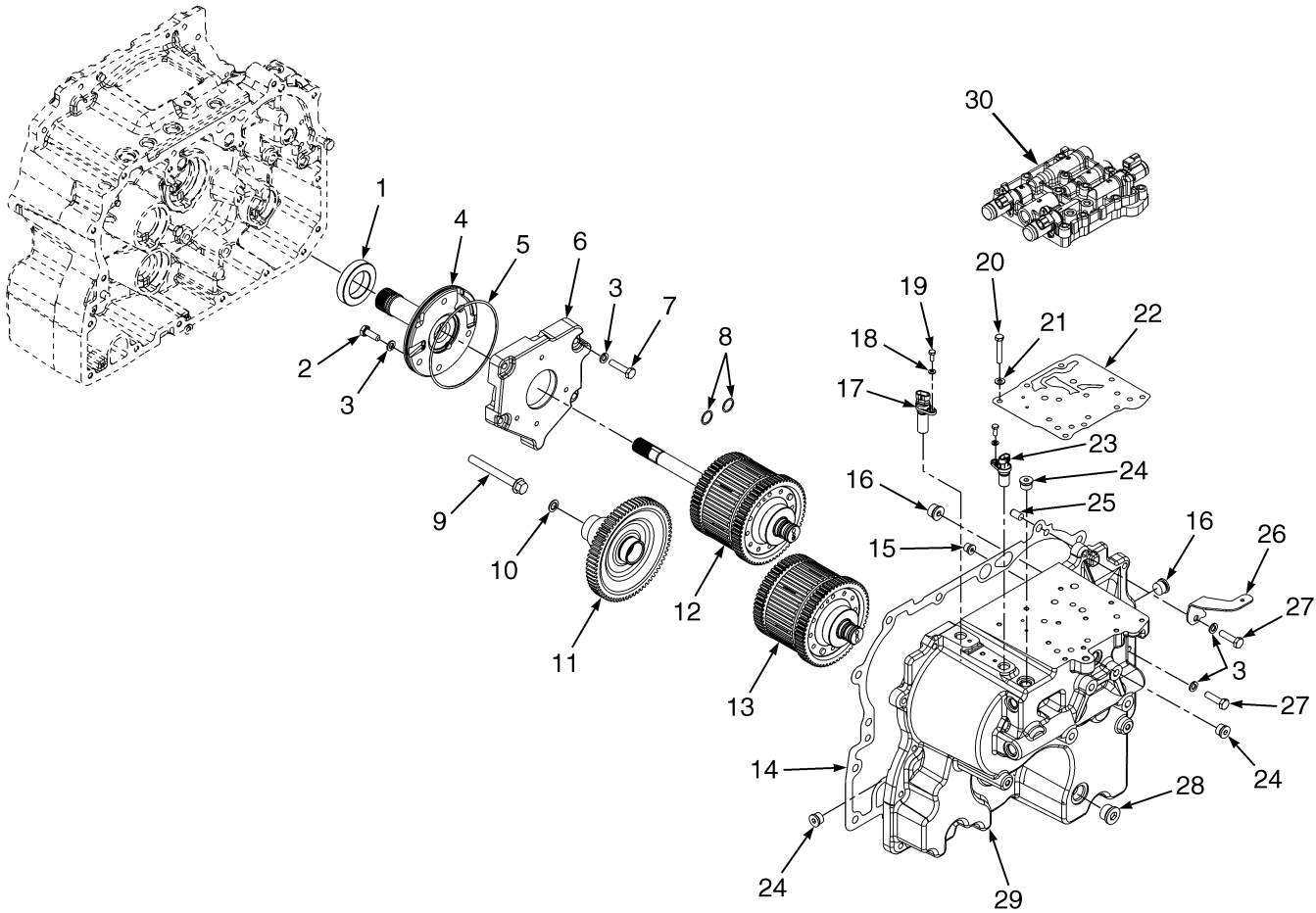
### FOOTNOTES:

**a** → S/N P005B02245G

**b** S/N P005B02246G →



## TRANSMISSION (FIGURE 5-11) SINGLE SPEED — SHEET 2 OF 2



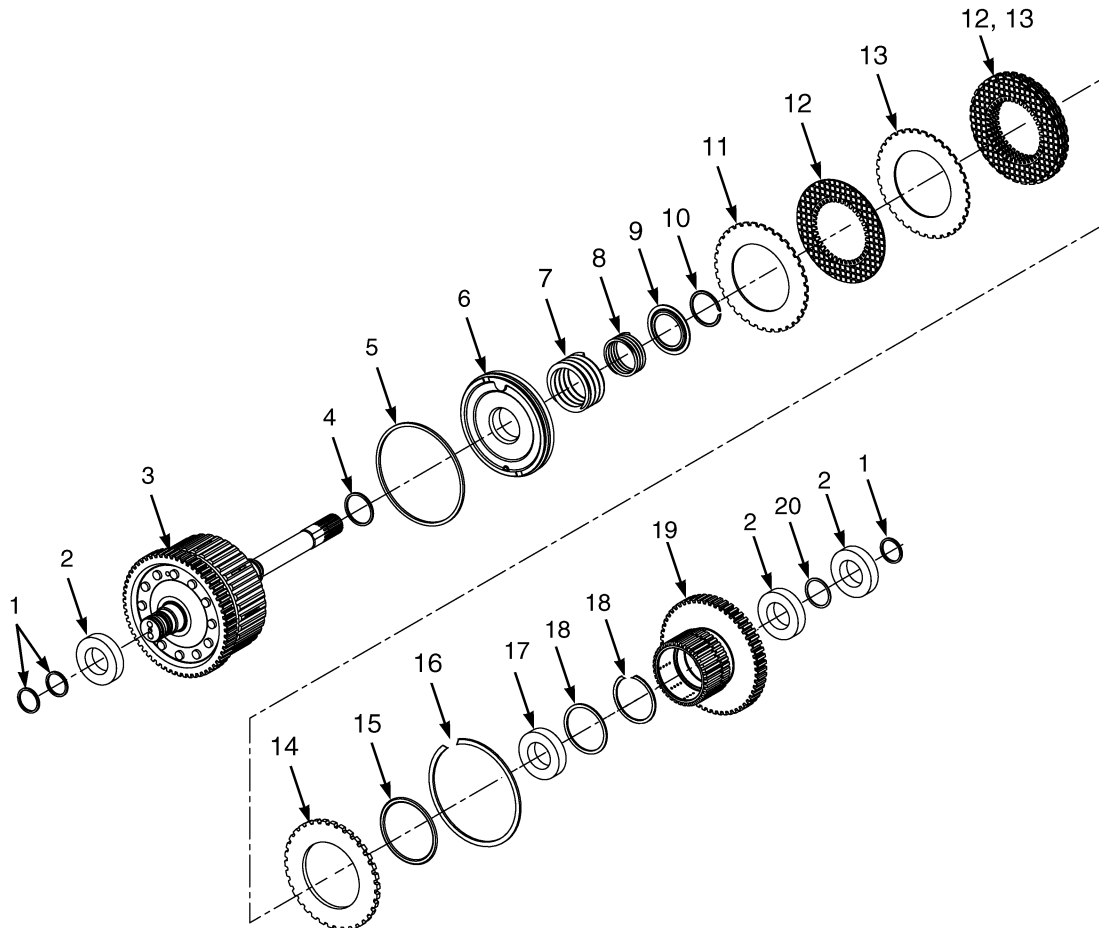
BP240132

**TRANSMISSION**  
**SINGLE SPEED – SHEET 2 OF 2**

ITEM	PART NO.	DESCRIPTION	QTY
	<b>a</b> 1638795	Transmission Assy (Single Speed Dry Brake) .....	1
	<b>b</b> 1703472	Transmission Assy (Dry Brake)(T139) (Single Speed Dry Brake) .....	1
	<b>a</b> 1638796	Transmission Assy (Single Speed Wet Brake) .....	1
	<b>b</b> 1703473	Transmission Assy (T140) (Single Speed Wet Brake) .....	1
1	44310	Ball Bearing .....	1
2	136985	Capscrew .....	4
3	<del>388049</del>		
	292682	Lockwasher .....	25
4	1525677	Stator .....	1
5	16682	O-Ring .....	1
6	1638799	Carrier .....	1
7	292516	Capscrew .....	4
8	1553403	O-Ring .....	2
9	1654651	Flange Head Capscrew .....	1
10	86229	Seal .....	1
11	1638793	Gear (Output) .....	1
12	1646887	Clutch Pack (Forward) (☞Figure 5-12).....	1
13	1646888	Clutch Pack (Reverse) (☞Figure 5-13).....	1
14	1636640	Gasket .....	1
15	222443	Fitting .....	1
16	233693	Fitting .....	2
17	1541232	Sensor (Output Speed, TOSS) .....	1
18	292680	Washer .....	2
19	292500	Capscrew .....	2
20	292509	Capscrew .....	11
21	320157	Washer .....	1
22	1570360	Gasket .....	1
23	1541231	Sensor (Input Speed, TISS) .....	1
24	235691	Fitting .....	4
25	303150	Dowel .....	4
26	1652575	Bracket .....	1
27	292515	Capscrew .....	15
28	222444	Fitting .....	1
29	1636643	Transmission Housing .....	1
30	1665205	Valve (Low Pressure) (Wet Brake) (☞Figure 5-21).....	1
30	1665204	Valve (High Pressure) (Dry Brake) (☞Figure 5-21).....	1

**FOOTNOTES:****a** → S/N P005B02245G**b** S/N P005B02246G →

## FORWARD CLUTCH (FIGURE 5-12) SINGLE SPEED TRANSMISSION



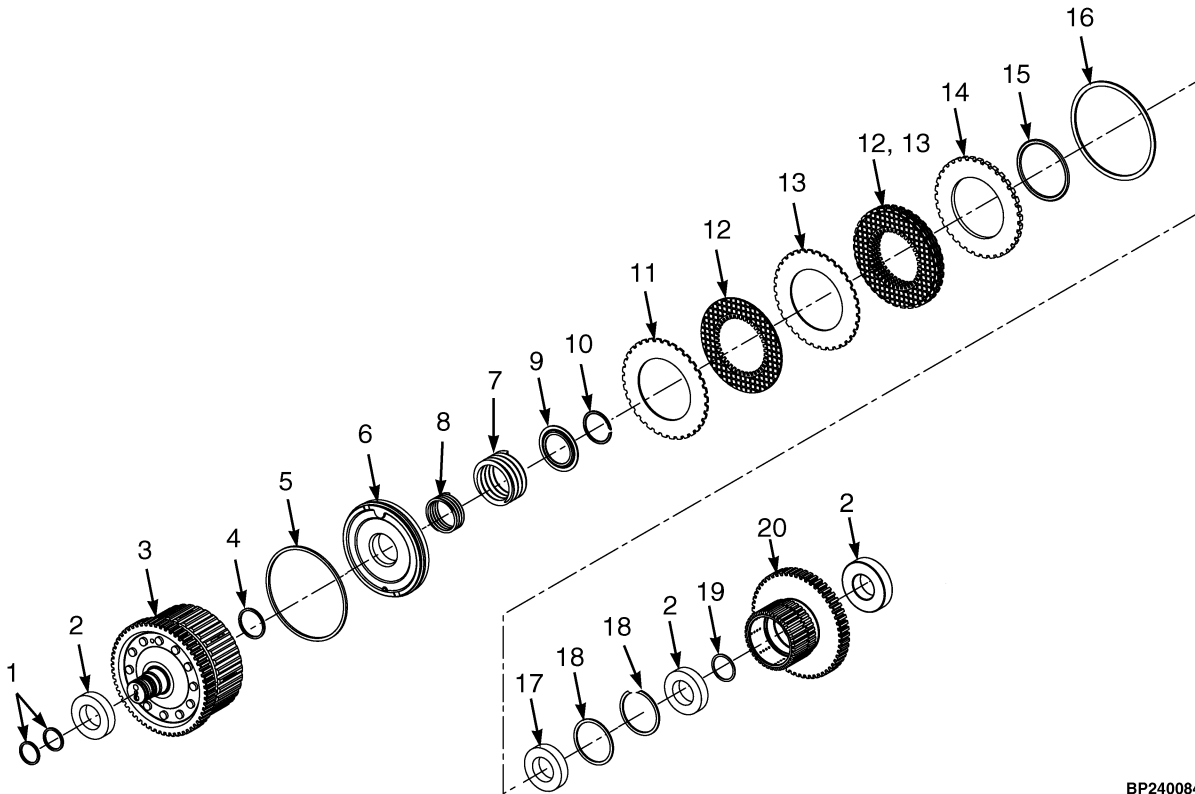
BP240089



**FORWARD CLUTCH  
SINGLE SPEED TRANSMISSION**

ITEM	PART NO.	DESCRIPTION	QTY
	1646887	Clutch Pack .....	1
1	.....	Ring Seal .....	3
2	43207	Ball Bearing .....	3
3	1651760	Shaft .....	1
3	4025492	Shaft (Alternate Part) .....	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 .....	8
13	.....	Separator Plate .....	7
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	1651761	Clutch Gear .....	1
20	1581106	Snap Ring .....	1
	1652272	Kit-Repair .....	1
	1571673	Kit-Clutch Pack Plates (Clutch Pack Plates) .....	1
	1595425	Kit-Clutch Pack Seals .....	1

## REVERSE CLUTCH (FIGURE 5-13) SINGLE SPEED TRANSMISSION

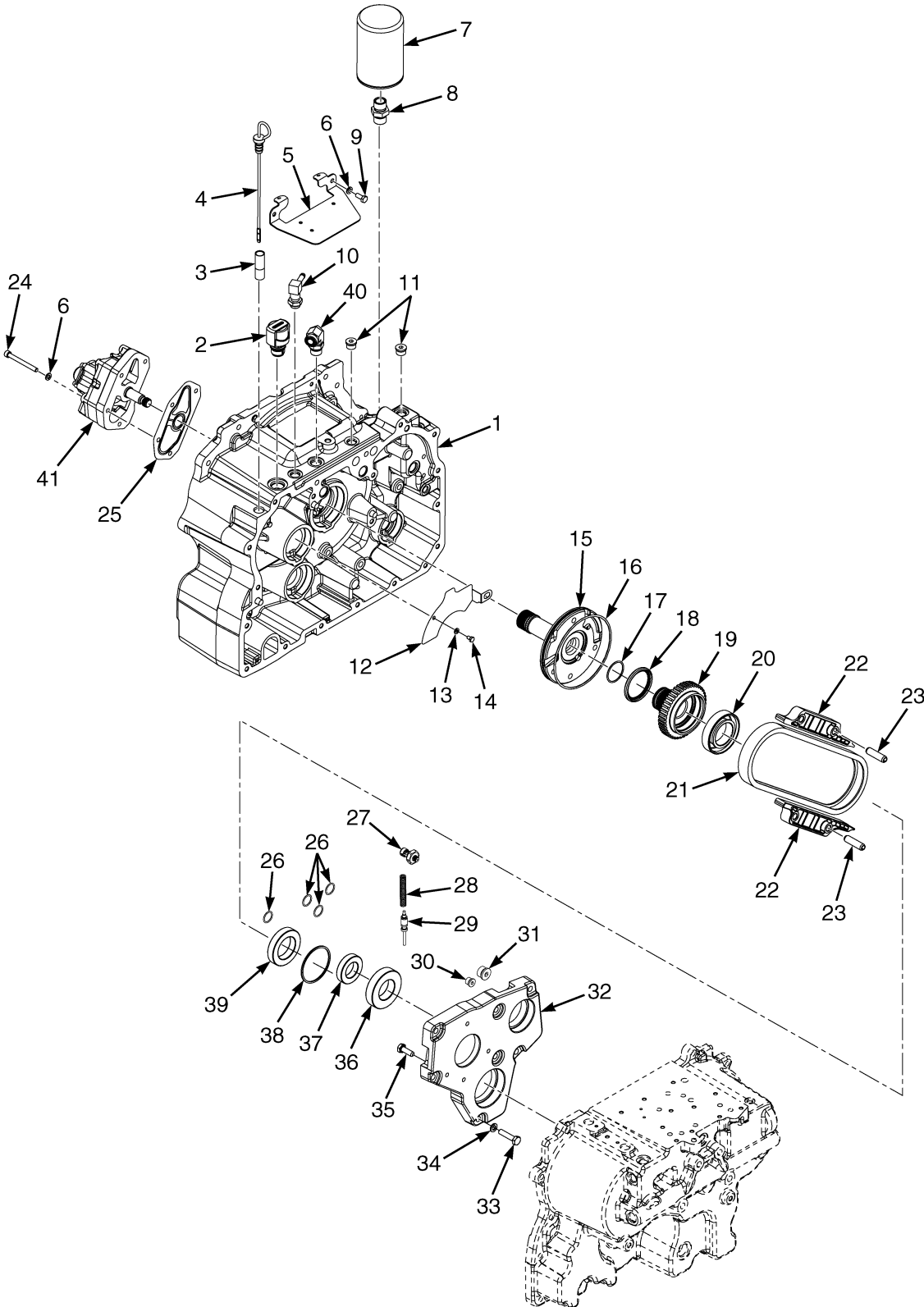


BP240084

**REVERSE CLUTCH  
SINGLE SPEED TRANSMISSION**

ITEM	PART NO.	DESCRIPTION	QTY
	1646888	Clutch Pack .....	1
1	.....	Seal .....	2
2	43207	Ball Bearing .....	3
3	1651762	Shaft .....	1
3	4025493	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	.....	O-Ring .....	1
16	1537450	Snap Ring .....	1
17	124603	Ball Bearing .....	1
18	1581107	Snap Ring .....	1
19	1537459	Snap Ring .....	1
20	1651761	Clutch Gear .....	1
	1652272	Kit-Repair .....	1
	1571673	Kit-Clutch Pack Plates (Clutch Pack Plates) .....	1
	1595425	Kit-Clutch Pack Seals .....	1

## TRANSMISSION (FIGURE 5-14) DUAL SPEED, TWO PIECE HOUSING — SHEET 1 OF 2 (→ S/N P005B02244G)

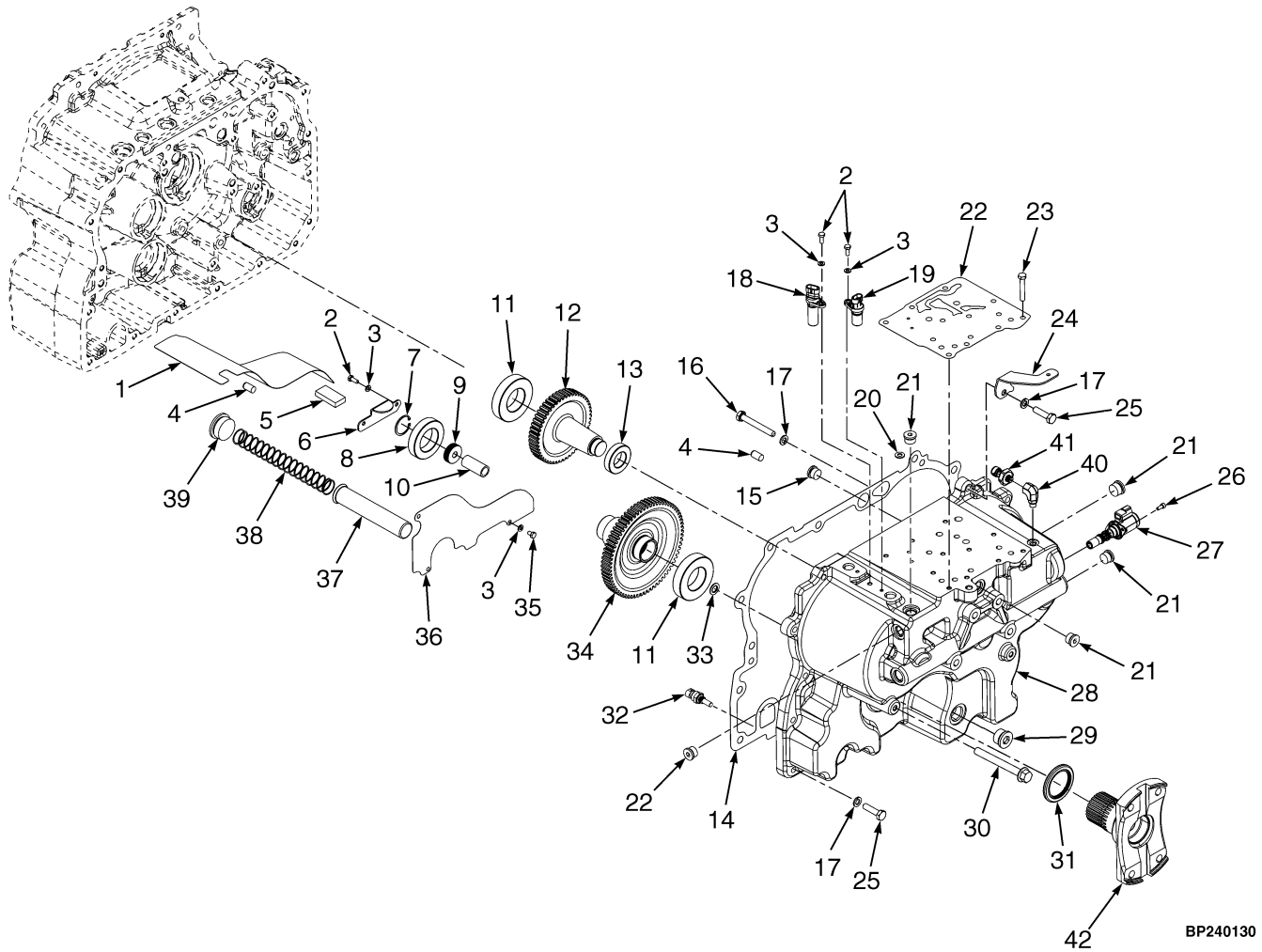


BP240129

**TRANSMISSION**  
**DUAL SPEED, TWO PIECE HOUSING – SHEET 1 OF 2 (→ S/N P005B02244G)**

ITEM	PART NO.	DESCRIPTION	QTY
	1636633	Transmission Assy (Dual Speed Dry Brake) .....	1
	1636634	Transmission Assy (Dual Speed Wet Brake) .....	1
1	1636639	Converter Housing (Torque Converter) .....	1
2	1632741	Breather .....	1
3	1624406	Dipstick Tube .....	1
4	1624401	Dipstick .....	1
5	1622888	Cover (Converter Housing) .....	1
5	1699141	Cover Plate (Converter Housing) (Alternate Part) .....	1
6	292681	Lockwasher .....	6
7	2075558	Transmission Filter .....	1
8	1558515	Fitting .....	1
9	136681	Capscrew .....	2
10	1640573	Fitting .....	1
11	235691	Fitting .....	4
12	1624408	Shield (Upper) .....	1
13	292680	Washer .....	1
14	148962	Capscrew .....	1
15	1525677	Stator .....	1
16	16682	O-Ring .....	1
17	145481	O-Ring .....	1
18	1544217	Oil Seal (Torque Converter) .....	1
19	1541556	Sprocket .....	1
20	1544216	Bearing .....	1
21	1494750	Chain (Drive Pump) .....	1
22	1615804	Snubber .....	2
23	303100	Roll Pin .....	4
24	296022	Capscrew .....	4
25	1653815	Gasket .....	1
26	1553403	O-Ring .....	4
27	2070263	Pressure Transducer .....	2
28	1612918	Spring .....	1
29	1612916	Spool .....	1
30	222443	Fitting .....	1
31	233693	Fitting .....	2
32	1636626	Carrier .....	1
33	292516	Capscrew .....	7
34	<del>388049</del>		
	292682	Lockwasher .....	7
35	136985	Capscrew .....	4
36	43209	Ball Bearing .....	1
37	44307	Ball Bearing .....	1
38	1544218	Sealing Ring .....	1
39	44310	Ball Bearing .....	1
40	1487067	Fitting .....	1
41	2076527	Pump (Charge) .....	1

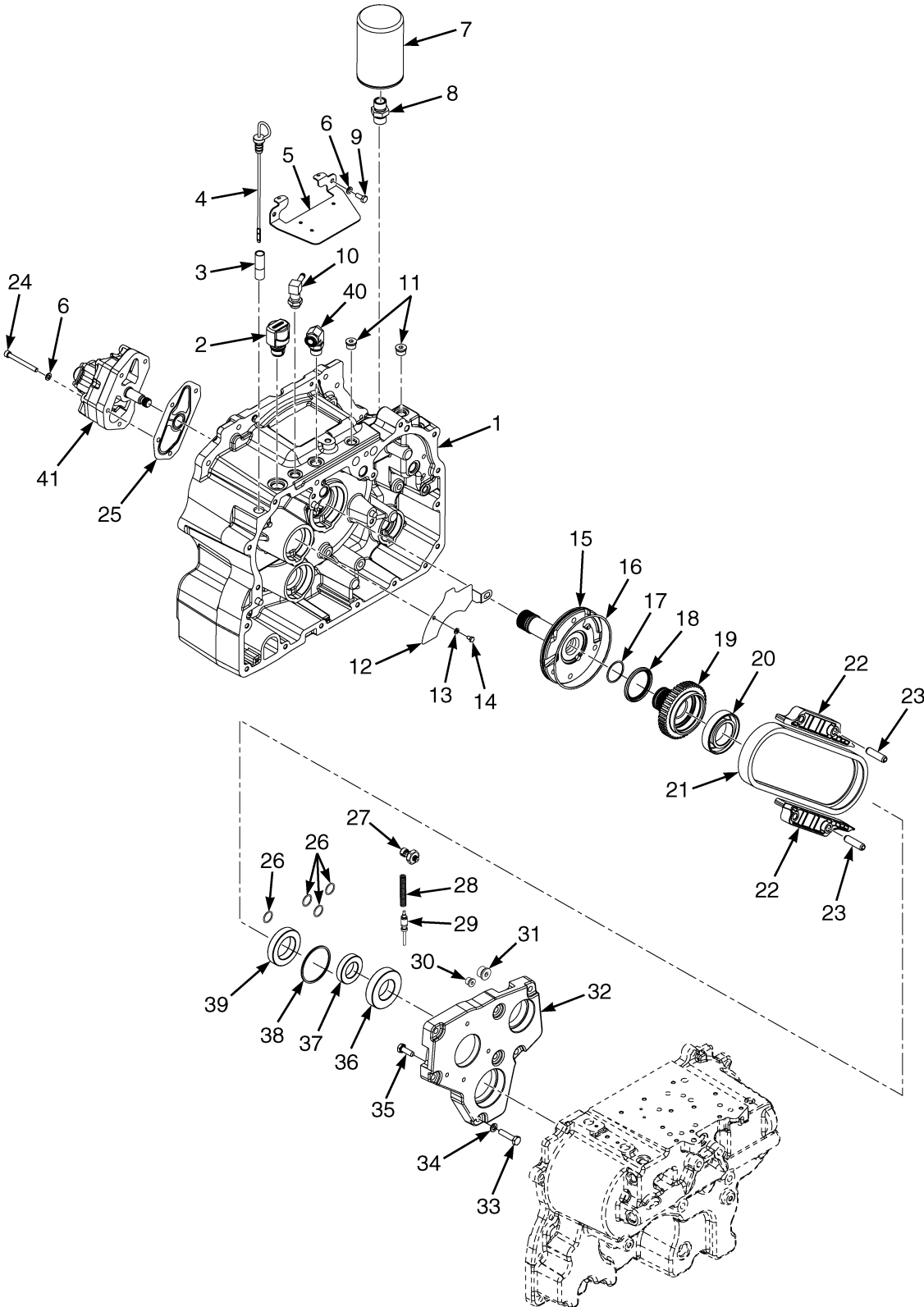
## TRANSMISSION (FIGURE 5-15) DUAL SPEED, TWO PIECE HOUSING — SHEET 2 OF 2 (→ S/N P005B02244G)



**TRANSMISSION**  
**DUAL SPEED, TWO PIECE HOUSING – SHEET 2 OF 2 (→ S/N P005B02244G)**

ITEM	PART NO.	DESCRIPTION	QTY
	1636633	Transmission Assy (Dual Speed Dry Brake) .....	1
	1636634	Transmission Assy (Dual Speed Wet Brake) .....	1
1	1622887	Baffle .....	1
2	292500	Capscrew .....	4
3	292680	Washer .....	7
4	303150	Dowel .....	4
5	334560	Magnet .....	1
6	1550567	Cover Plate .....	1
7	213099	Snap Ring .....	1
8	44309	Ball Bearing .....	1
9	1525686	Nut .....	1
10	1636645	Spacer .....	1
11	43209	Ball Bearing .....	2
12	1585750	Gear (Idler) .....	1
13	44306	Ball Bearing .....	1
14	1636640	Gasket .....	1
15	235691	Fitting .....	4
16	292522	Capscrew .....	2
17	<del>388049</del>		
	292682	Lockwasher .....	21
18	1541232	Sensor (Output Speed, TOSS) .....	1
19	1541231	Sensor (Input Speed, TISS) .....	1
20	320157	Washer .....	11
21	235691	Fitting .....	4
22	1570360	Gasket .....	1
23	292509	Capscrew .....	11
24	1652575	Bracket .....	1
25	292515	Capscrew .....	15
26	293742	Screw .....	2
27	1660500	Solenoid Valve .....	1
28	1636630	Transmission Housing .....	1
29	222444	Fitting .....	1
30	1654651	Flange Head Capscrew .....	1
31	1547447	Oil Seal .....	1
32	1515654	Temperature Sensor .....	1
33	86229	Seal .....	1
34	1638793	Gear (Output) .....	1
35	148962	Capscrew .....	3
36	1627453	Shield (Lower) .....	1
37	1627465	Screen .....	1
38	1550572	Spring .....	1
39	188210	Fitting .....	1
40	1545546	Fitting .....	1
41	2070263	Pressure Transducer .....	1
42	1654004	Yoke .....	1

## TRANSMISSION (FIGURE 5-16) DUAL SPEED, TWO PIECE HOUSING — SHEET 1 OF 2 (S/N P005B02245G →)



BP240129



**TRANSMISSION**  
**DUAL SPEED, TWO PIECE HOUSING – SHEET 1 OF 2 (S/N P005B02245G →)**

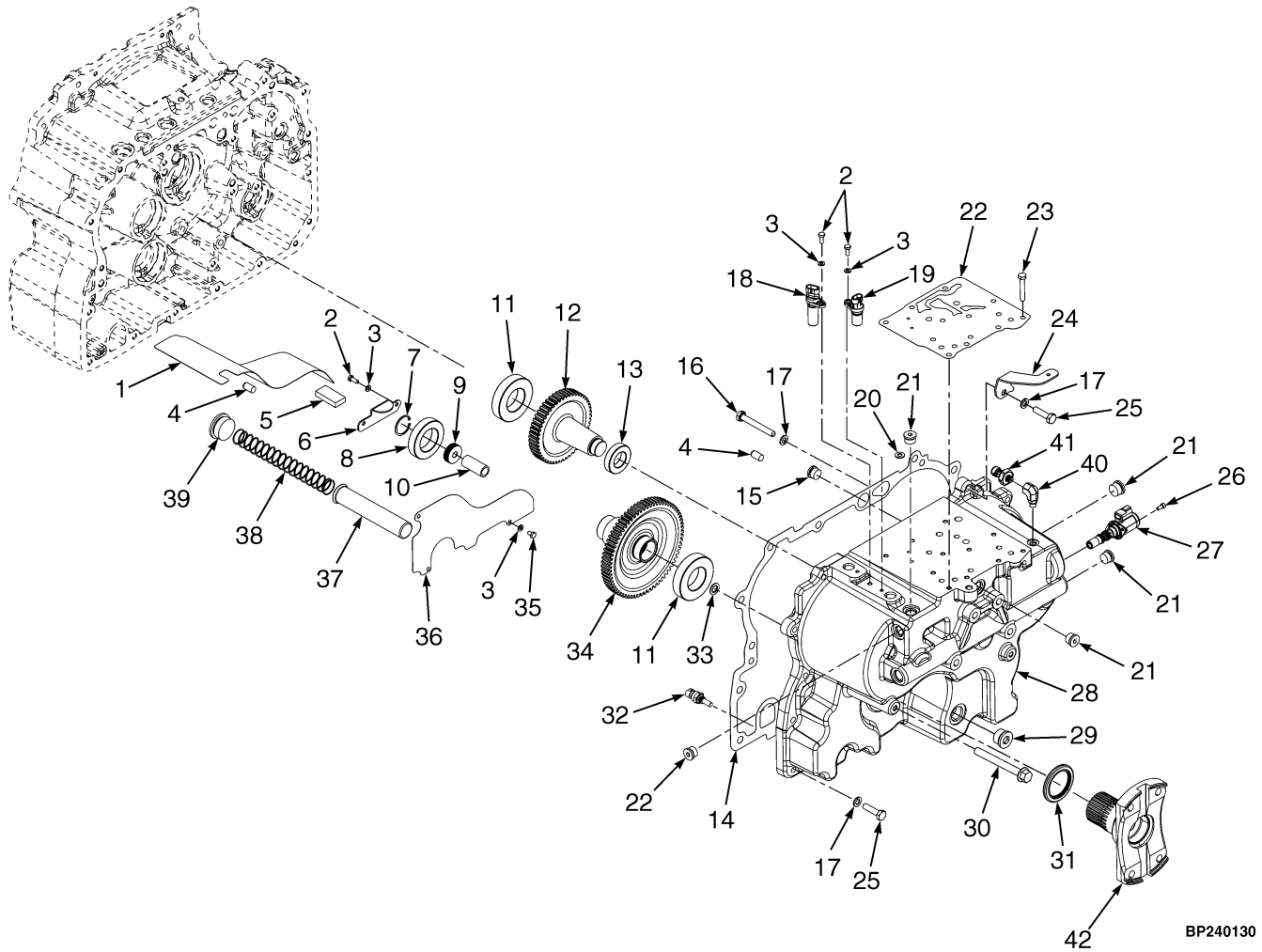
ITEM	PART NO.	DESCRIPTION	QTY
	1703474	Transmission Assy (Dual Speed Dry Brake)(T136) (Dry Brake) .....	1
	1703475	Transmission Assy (Dual Speed Wet Brake)(T137) (Wet Brake) .....	1
1	1636639	Converter Housing (Torque Converter) .....	1
2	1632741	Breather .....	1
2	16486	O-Ring .....	1
3	1624406	Dipstick Tube .....	1
4	1624401	Dipstick .....	1
5	1699141	Cover Plate (Converter Housing) (Alternate Part) .....	1
5	1622888	Cover (Converter Housing) .....	1
6	292681	Lockwasher .....	6
7	2075558	Transmission Filter .....	1
7	4020588	Transmission Filter (Alternate Part) .....	1
8	1558515	Fitting .....	1
9	136681	Capscrew .....	2
10	1640573	Fitting .....	1
11	235691	Fitting .....	4
12	1624408	Shield (Upper) .....	1
13	292680	Washer .....	1
14	148962	Capscrew .....	1
14	1516826	Bushing .....	1
15	1525677	Stator .....	1
16	16682	O-Ring .....	1
17	145481	O-Ring .....	1
18	1544217	Oil Seal (Torque Converter) .....	1
19	1541556	Sprocket .....	1
20	1544216	Bearing .....	1
21	1494750	Chain (Drive Pump) .....	1
22	1615804	Snubber .....	2
23	303100	Roll Pin .....	4
24	296022	Capscrew .....	4
25	1653815	Gasket .....	1
26	1553403	O-Ring .....	4
27	2070263	Pressure Transducer .....	2
28	1612918	Spring .....	1
29	1612916	Spool .....	1
30	222443	Fitting .....	1
30	16485	O-Ring .....	1
31	233693	Fitting .....	2
31	16485	O-Ring .....	1
32	1636626	Carrier .....	1
33	292516	Capscrew .....	7
34	388049		
	292682	Lockwasher .....	7
35	136985	Capscrew .....	4
36	43209	Ball Bearing .....	1
37	44307	Ball Bearing .....	1
38	1544218	Sealing Ring .....	1
39	44310	Ball Bearing .....	1
40	1487067	Fitting .....	1
41	2076527	Pump (w/Aux Pump) .....	1

**TRANSMISSION****DUAL SPEED, TWO PIECE HOUSING – SHEET 1 OF 2 (S/N P005B02245G →)**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
41	2073470	Pump (w/o Aux pump) .....	1



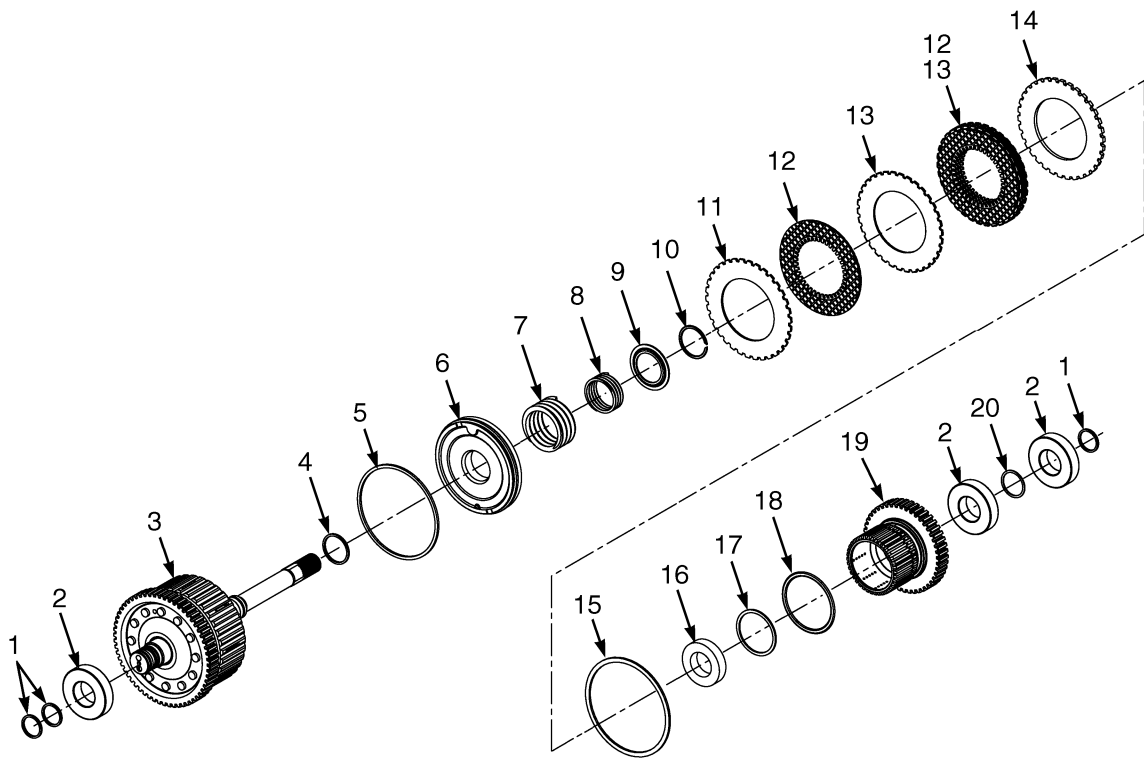
## TRANSMISSION (FIGURE 5-17) DUAL SPEED, TWO PIECE HOUSING — SHEET 2 OF 2 (S/N P005B02245G →)



**TRANSMISSION**  
**DUAL SPEED, TWO PIECE HOUSING – SHEET 2 OF 2 (S/N P005B02245G →)**

ITEM	PART NO.	DESCRIPTION	QTY
	1703474	Transmission Assy (Dual Speed Dry Brake)(T136) .....	1
	1703475	Transmission Assy (Dual Speed Wet Brake)(T137) .....	1
1	1622887	Baffle .....	1
2	292500	Capscrew .....	4
3	292680	Washer .....	7
4	303150	Dowel .....	4
5	334560	Magnet .....	1
6	1550567	Cover Plate .....	1
7	213099	Snap Ring .....	1
8	44309	Ball Bearing .....	1
9	1525686	Nut .....	1
10	1636645	Spacer .....	1
11	43209	Ball Bearing .....	2
12	1585750	Gear (Idler) .....	1
13	44306	Ball Bearing .....	1
14	1636640	Gasket .....	1
15	235691	Fitting .....	4
16	292522	Capscrew .....	2
17	<del>388049</del>		
	292682	Lockwasher .....	21
18	1541232	Sensor (Output Speed, TOSS) .....	1
19	1541231	Sensor (Input Speed, TISS) .....	1
20	320157	Washer .....	11
21	235691	Fitting .....	4
22	1570360	Gasket .....	1
23	292509	Capscrew .....	11
24	1652575	Bracket .....	1
25	292515	Capscrew .....	15
26	293742	Screw .....	2
27	1660500	Solenoid Valve .....	1
28	1636630	Transmission Housing .....	1
29	222444	Fitting .....	1
30	1654651	Flange Head Capscrew .....	1
31	1547447	Oil Seal .....	1
32	1515654	Temperature Sensor .....	1
33	86229	Seal .....	1
34	1638793	Gear (Output) .....	1
35	148962	Capscrew .....	3
36	1627453	Shield (Lower) .....	1
37	1627465	Screen .....	1
38	1550572	Spring .....	1
39	188210	Fitting .....	1
40	1545546	Fitting .....	1
41	2070263	Pressure Transducer .....	1
42	1654004	Yoke .....	1

**FORWARD CLUTCH, LOW (FIGURE 5-18)  
DUAL SPEED TRANSMISSION**

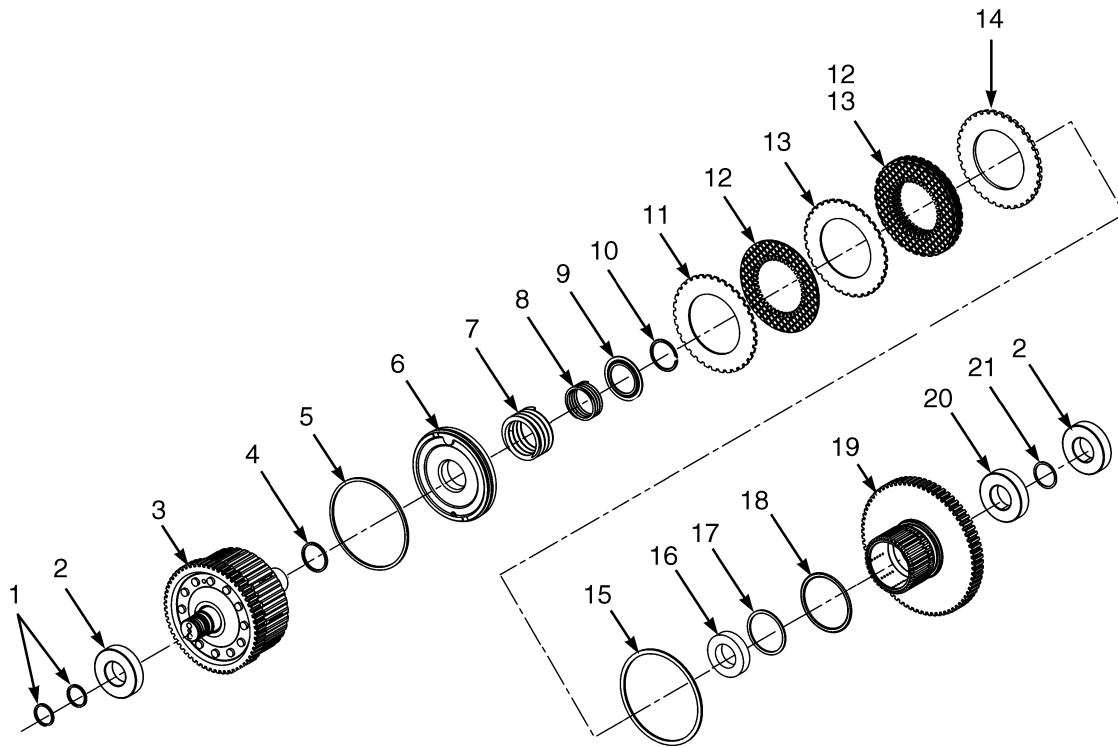


BP240107

**FORWARD CLUTCH, LOW  
DUAL SPEED TRANSMISSION**

ITEM	PART NO.	DESCRIPTION	QTY
	1646884	Clutch Pack (Input/Forward-Low) .....	1
1	.....	Seal .....	3
2	43207	Ball Bearing .....	3
3	1639865	Shaft .....	1
3	4025480	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 .....	9
13	.....	Separator Plate .....	8
14	1537449	Pressure Plate (6.0 mm) .....	1
15	1537450	Snap Ring .....	1
16	124603	Ball Bearing .....	1
17	1581107	Snap Ring .....	1
18	.....	Seal .....	1
19	1639866	Gear .....	1
20	1537459	Snap Ring .....	1
	1652269	Kit-Clutch Pack Plates/Seals .....	1
	1651852	Kit-Clutch Pack Plates .....	1
	1595425	Kit-Clutch Pack Seals .....	1

## FORWARD CLUTCH, HIGH (FIGURE 5-19) DUAL SPEED TRANSMISSION



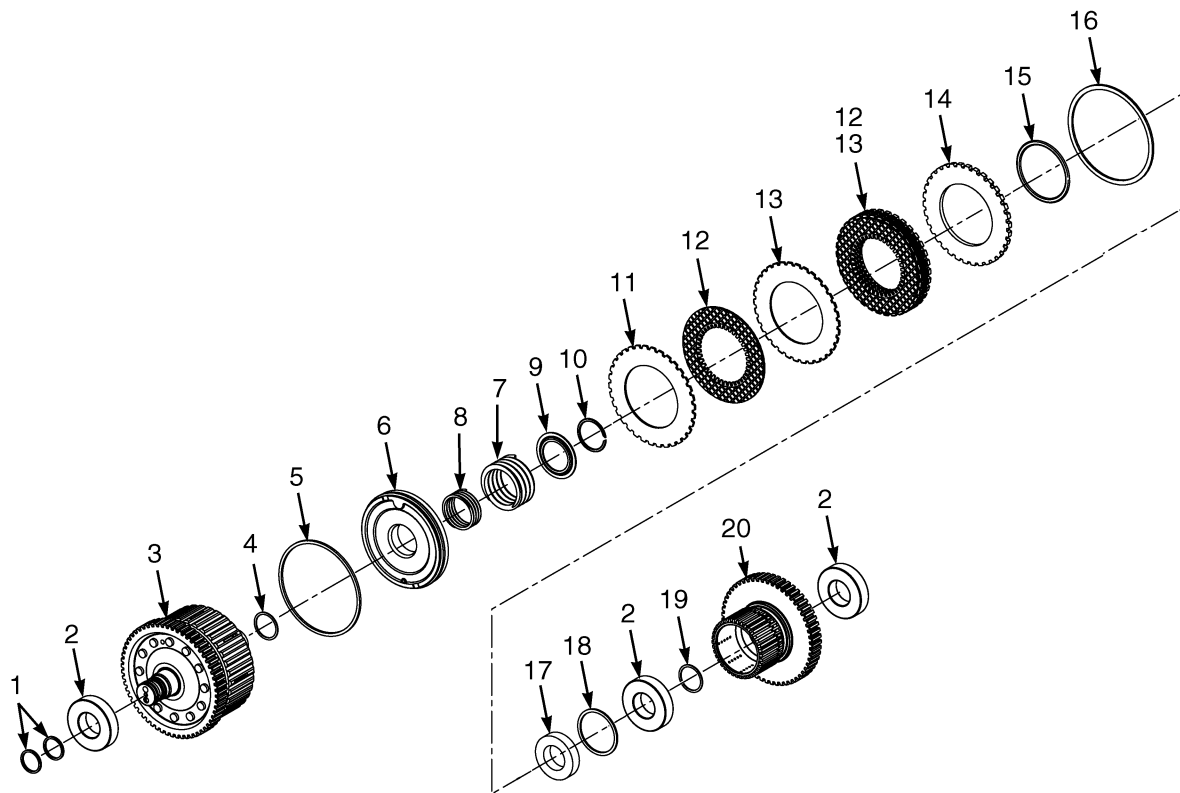
BP240105



**FORWARD CLUTCH, HIGH  
DUAL SPEED TRANSMISSION**

ITEM	PART NO.	DESCRIPTION	QTY
	1646885	Clutch Pack (Forward-High) .....	1
1	.....	Seal .....	2
2	1651753	Ball Bearing .....	2
3	1639862	Shaft .....	1
3	4025491	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 .....	9
13	.....	Separator Plate .....	8
14	1537449	Pressure Plate (6.0 mm) .....	1
15	1537450	Snap Ring .....	1
16	124603	Ball Bearing .....	1
17	1581107	Snap Ring .....	1
18	.....	Seal .....	1
18	1581105	Spacer .....	1
19	1639864	Gear .....	1
20	43207	Ball Bearing .....	1
21	1537459	Snap Ring .....	1
	1652269	Kit-Clutch Pack Plates/Seals .....	1
	1651852	Kit-Clutch Pack Plates .....	1
	1595425	Kit-Clutch Pack Seals .....	1

## REVERSE CLUTCH (FIGURE 5-20) DUAL SPEED TRANSMISSION

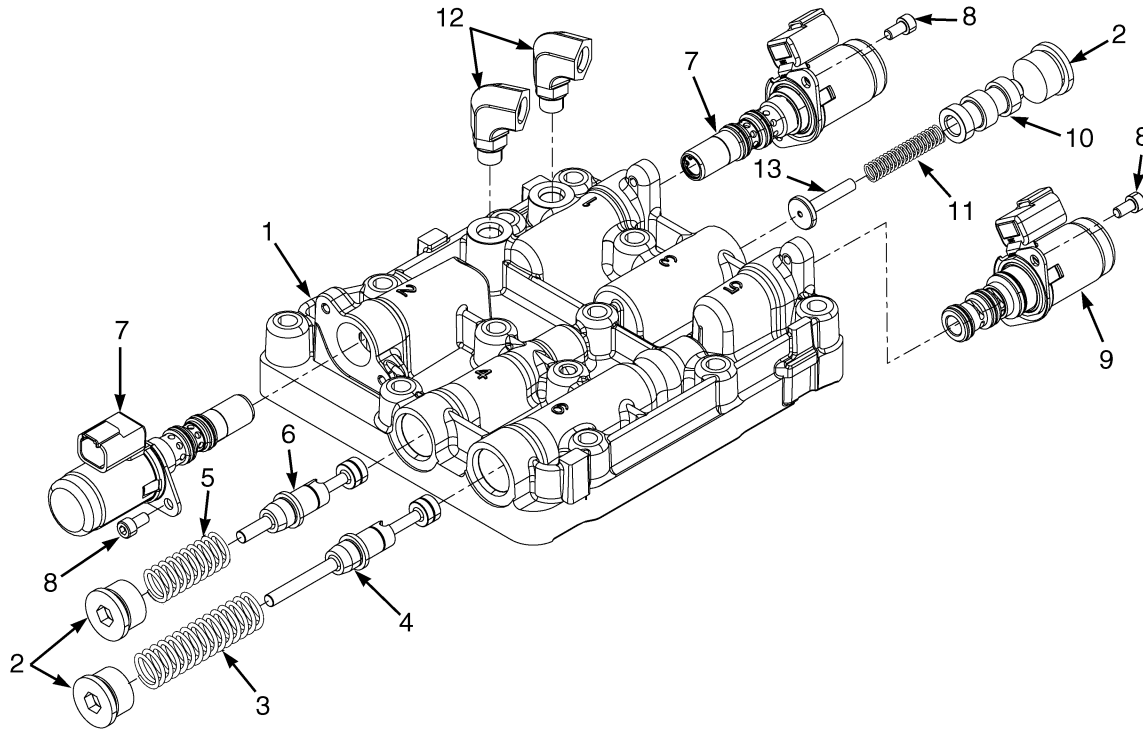


BP240106

**REVERSE CLUTCH  
DUAL SPEED TRANSMISSION**

ITEM	PART NO.	DESCRIPTION	QTY
	1646886	Clutch Pack (Reverse) .....	1
1	.....	Seal .....	3
2	43207	Ball Bearing .....	3
3	1639862	Shaft .....	1
3	4025491	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 .....	9
13	.....	Separator Plate .....	8
14	1537449	Pressure Plate (6.0 mm) .....	1
15	.....	Seal .....	1
16	1537450	Snap Ring .....	1
17	124603	Ball Bearing .....	1
18	1581107	Snap Ring .....	1
19	1537459	Snap Ring .....	1
20	1639863	Gear .....	1
	1652269	Kit-Clutch Pack Plates/Seals .....	1
	1651852	Kit-Clutch Pack Plates .....	1
	1595425	Kit-Clutch Pack Seals .....	1

## CONTROL VALVE ASSEMBLY (FIGURE 5-21)



BP240127

ITEM	PART NO.	DESCRIPTION	QTY
	1665204	Valve (High Pressure) (Dry Brake) .....	1
	1665205	Valve (Low Pressure) (Wet Brake) .....	1
1	1613469	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	384279		
	293741	Capscrew .....	6
9	1520660	Solenoid (Transmisison Enable) .....	1
10	1590865	Spool (Cut-Off) .....	1
11	1590866	Return Spring .....	1
12	1545546	Fitting .....	2
13	1590839	Spool (Stop) .....	1

**6**

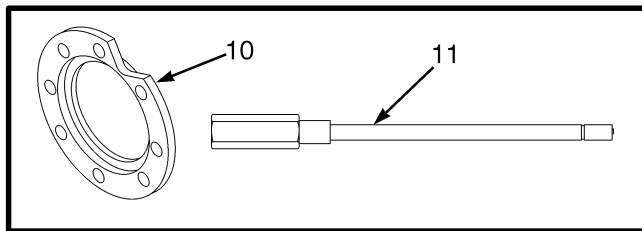
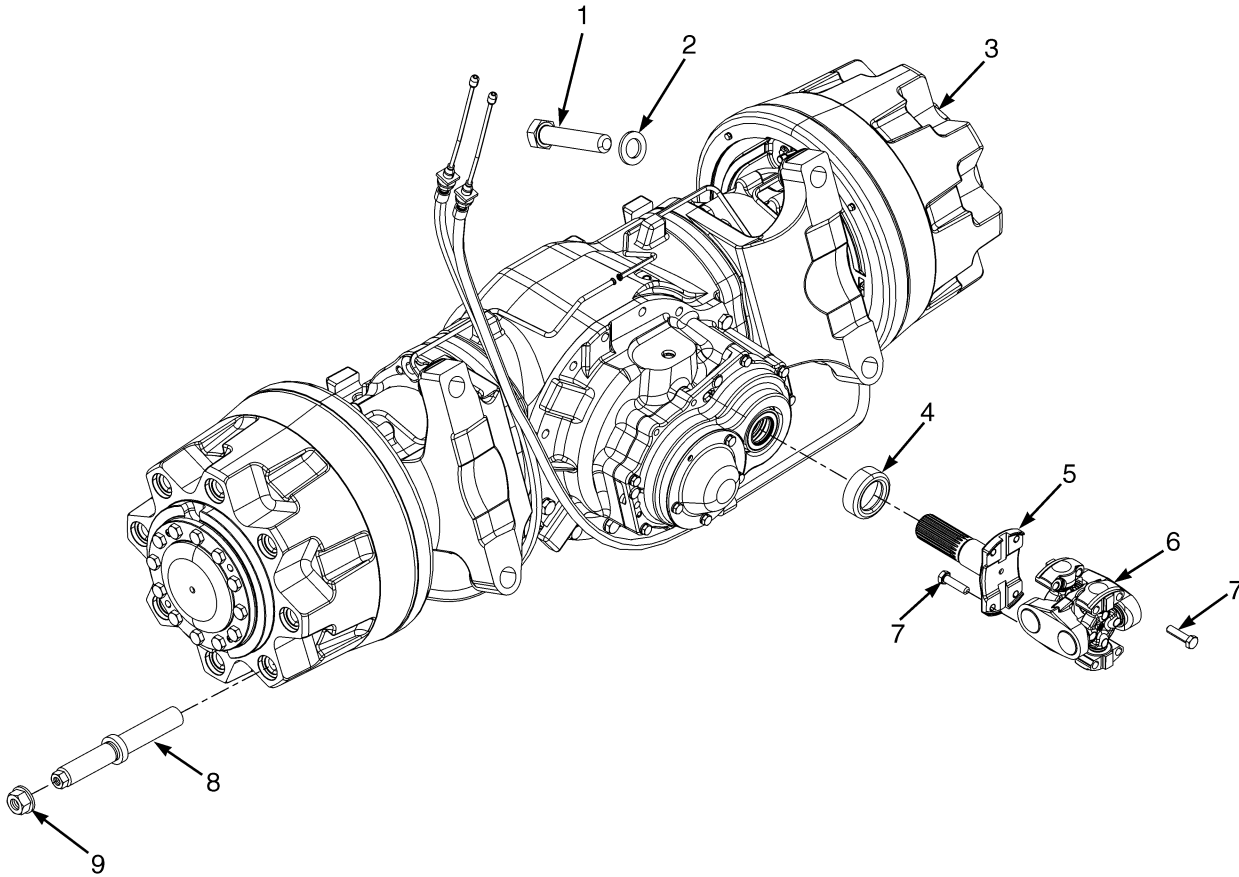
**DRIVE AXLE**



**SECTION 6  
DRIVE AXLE**

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## DRIVE AXLE AND ATTACHING PARTS (FIGURE 6-1) DRY BRAKE



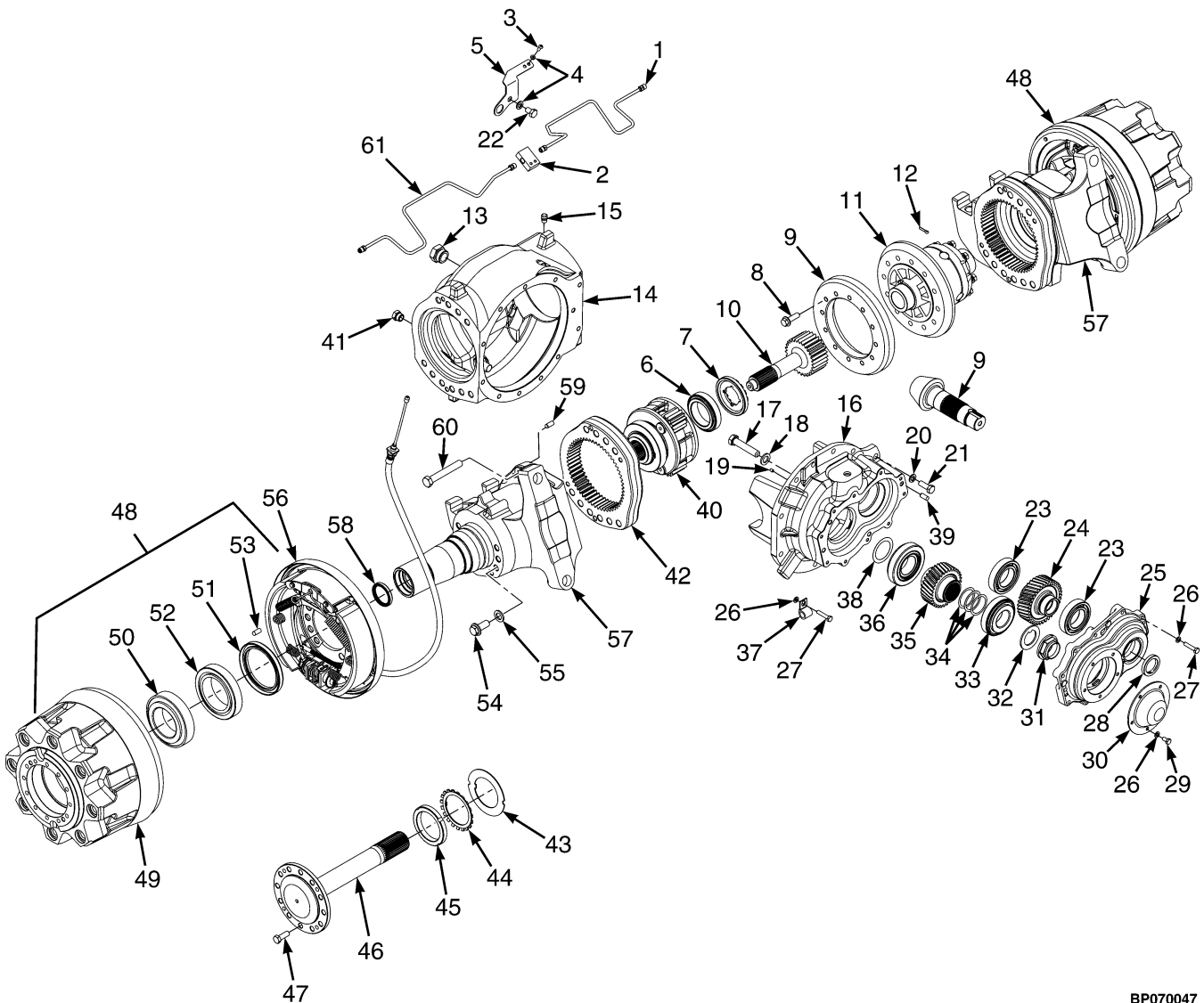
BP070038



**DRIVE AXLE AND ATTACHING PARTS  
DRY BRAKE**

ITEM	PART NO.	DESCRIPTION	QTY
1	226430	Capscrew .....	4
2	296434	Washer .....	4
3	1545455	Drive Axle (.889 DB Ratio) (☞Figure 6-2).....	..
3	1545457	Drive Axle (.789 DB Ratio) (☞Figure 6-2).....	..
4	1542147	Dust Cover .....	1
5	1542146	Shaft .....	1
6	1594314	Universal Joint .....	1
7	1329286	Capscrew .....	8
8	1569463	Wheel Stud .....	16
8	1501277	Wheel Stud (Dual Wheel) .....	16
9	376026	Wheel Nut .....	16
10	1581973	Spacer .....	2
11	2028341	Extension (Valve Stem) .....	2

## DRIVE AXLE ASSEMBLY (FIGURE 6-2) DRY BRAKE



BP070047

**DRIVE AXLE ASSEMBLY  
DRY BRAKE**

ITEM	PART NO.	DESCRIPTION	QTY
	1545457	Drive Axle (0.789 Gear Ratio) .....	1
	1545455	Drive Axle (0.889 Gear Ratio) .....	1
1	2089136	Tube Assy (RH) .....	1
1	1580636	Nut .....	1
2	1608822	Manifold Assy .....	1
2	1595808	Manifold .....	1
3	1510126	Screw (Button Head) .....	2
4	292680	Washer .....	2
5	.....	Bracket .....	1
6	1375487	Bearing Set .....	2
6	302385	Dowel .....	13
7	1652926	Retainer .....	2
8	2029436	Bolt .....	12
9	2098414	Gear Set .....	1
10	.....	Sun Gear .....	2
11	2067574	Differential (☞ Figure 6-3).....	1
12	302449	Roll Pin .....	2
13	14604	Plug .....	1
13	16487	O-Ring .....	1
14	1542160	Housing (Differential) .....	1
15	21420	Breather .....	1
16	1542161	Support .....	1
17	293692	Capscrew .....	4
18	296426	Washer .....	4
19	234038	Dowel .....	4
20	292683	Lockwasher .....	12
21	<del>4048814</del>		
	292528	Capscrew .....	11
22	292526	Capscrew .....	1
23	1542143	Ball Bearing .....	2
24	1664495	Drive Gear (0.789 Gear Ratio) .....	1
24	1664496	Gear (0.889 Gear Ratio) .....	1
25	1542144	Transmission Housing .....	1
26	292681	Lockwasher .....	15
27	292508	Capscrew .....	10
28	1542169	Oil Seal .....	1
29	287851	Capscrew .....	5
30	1516536	Cover .....	1
31	2026861	Nut .....	1
32	1530588	Washer .....	1
33	2022352	Tapered Roller Bearing .....	1
34	1516331	Shim (0.12 mm) .....	AR
34	1516332	Shim (0.15 mm) .....	AR
34	1516333	Shim (0.18 mm) .....	AR
34	1516334	Shim (0.25 mm) .....	AR
34	1516335	Shim (0.50 mm) .....	AR
35	1664499	Gear (0.789 Gear Ratio) .....	1
35	1664500	Gear (0.889 Gear Ratio) .....	1
36	2028862	Tapered Roller Bearing .....	1
37	153070	Clamp .....	2

## DRIVE AXLE ASSEMBLY DRY BRAKE

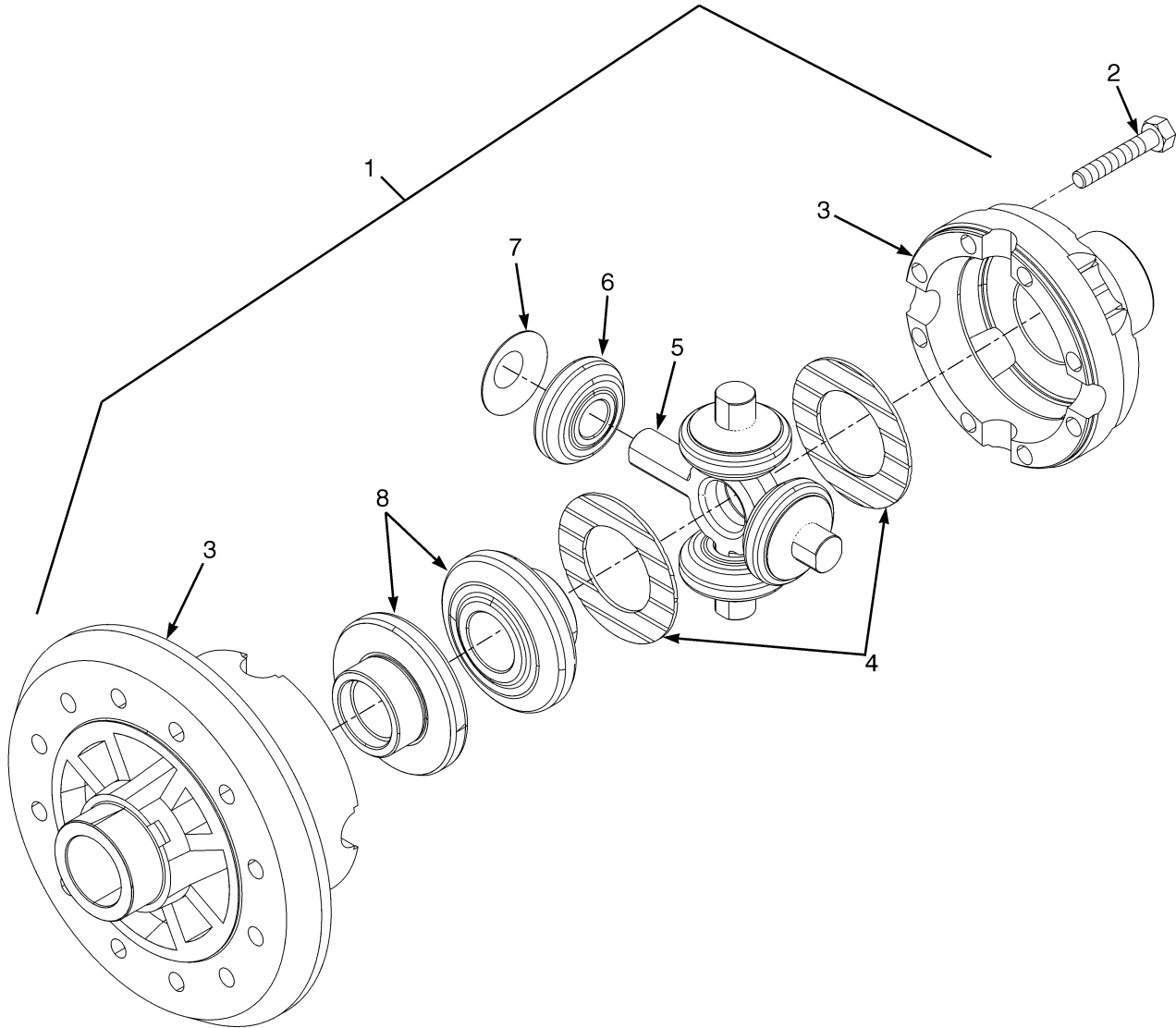
ITEM	PART NO.	DESCRIPTION	QTY
38	1520752	Shim (0.30 mm) .....	AR
38	1520753	Shim (0.40 mm) .....	AR
38	1520754	Shim (0.50 mm) .....	AR
38	1520755	Shim (1.00 mm) .....	AR
38	1569912	Shim (0.20 mm) .....	AR
38	1569913	Shim (0.25 mm) .....	AR
38	1569914	Shim (0.35 mm) .....	AR
38	1569915	Shim (0.45 mm) .....	AR
39	302385	Dowel .....	7
40	.....	Carrier (☞ Figure 6-4).....	1
41	1521809	Drain Plug .....	1
41	16983	O-Ring .....	1
42	1556794	Gear .....	2
43	1542157	Washer .....	2
44	2083429	Lockwasher .....	2
45	2039504	Nut .....	2
46	1545484	Axle Shaft .....	2
47	293646	Capscrew .....	24
48	1613605	Wheel Hub .....	1
49	1613608	Hub .....	1
50	2039493	Bearing Set .....	1
51	2039492	Seal .....	1
52	2039494	Bearing Set .....	1
53	302385	Dowel .....	2
54	1615652	Bolt (Serrated) .....	16
55	296426	Washer .....	20
56	1688566	Brake Assembly (LH) .....	1
56	1688567	Brake Assembly (RH) .....	1
57	1610749	Hanger (Left Hand) .....	1
57	1610750	Hanger (Right Hand) .....	1
58	1608403	Seal .....	1
59	302385	Dowel .....	2
60	293696	Capscrew .....	20
61	2089137	Tube Assy (LH) .....	1
61	1580636	Nut .....	1
62	<b>a</b> .....	ID Plate .....	1
	4046046	Kit Planetary Gears .....	1

### FOOTNOTES:

**a** Not Illustrated



**DIFFERENTIAL (FIGURE 6-3)  
DRY BRAKE**

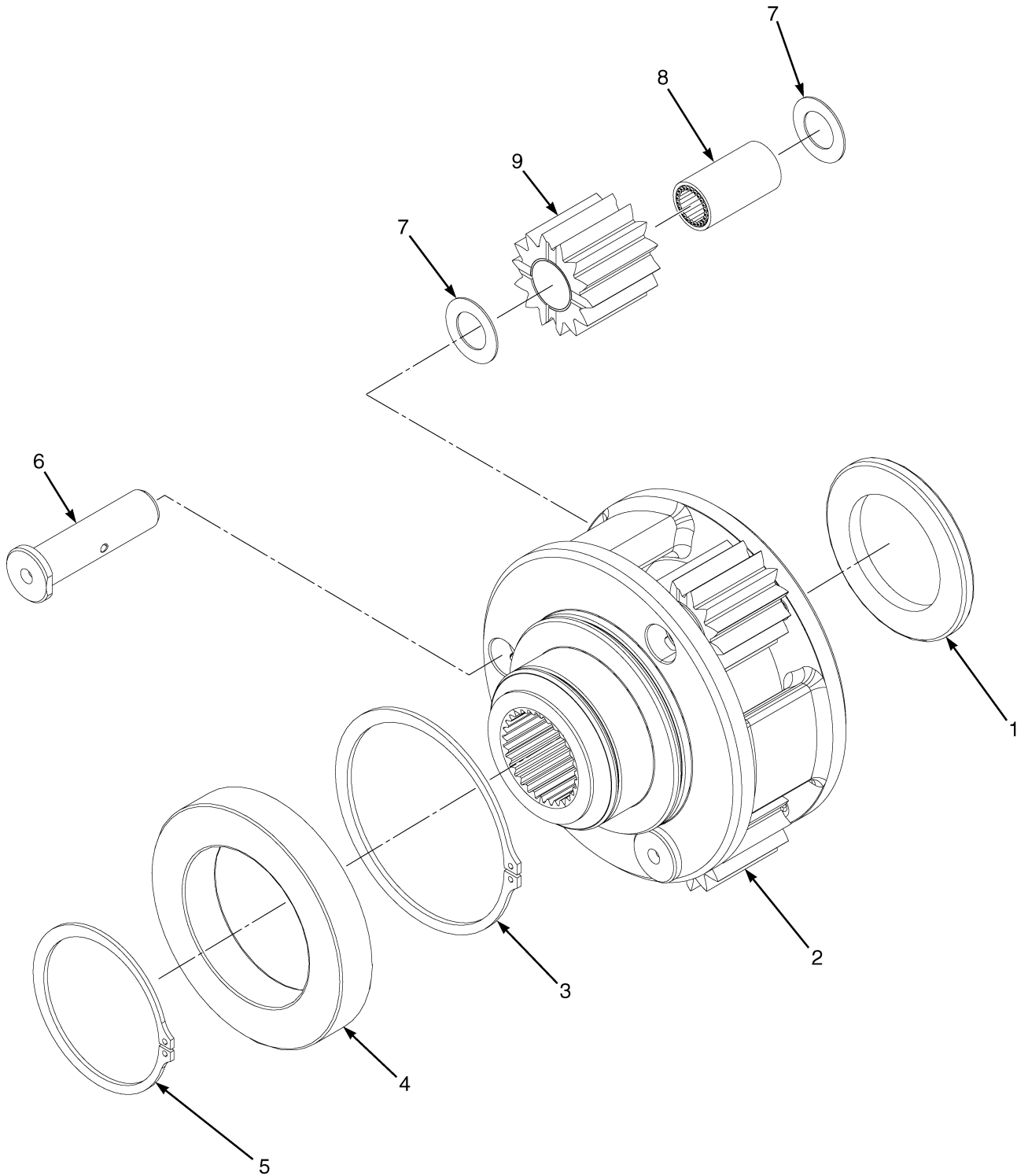


BP070026

**DIFFERENTIAL  
DRY BRAKE**

ITEM	PART NO.	DESCRIPTION	QTY
1	2067574	Differential .....	1
2	1565327	Bolt .....	8
3	.....	Case Set .....	1
4	1565325	Washer (Side) .....	2
5	2029383	Spider .....	1
6	.....	Gear (Pinion) .....	4
7	.....	Washer (Pinion) .....	4
8	.....	Gear (Side) .....	2
	1606531	Kit-Gear .....	1
	1565324	Kit-Washer .....	1

## CARRIER ASSEMBLY (FIGURE 6-4) DRY BRAKE



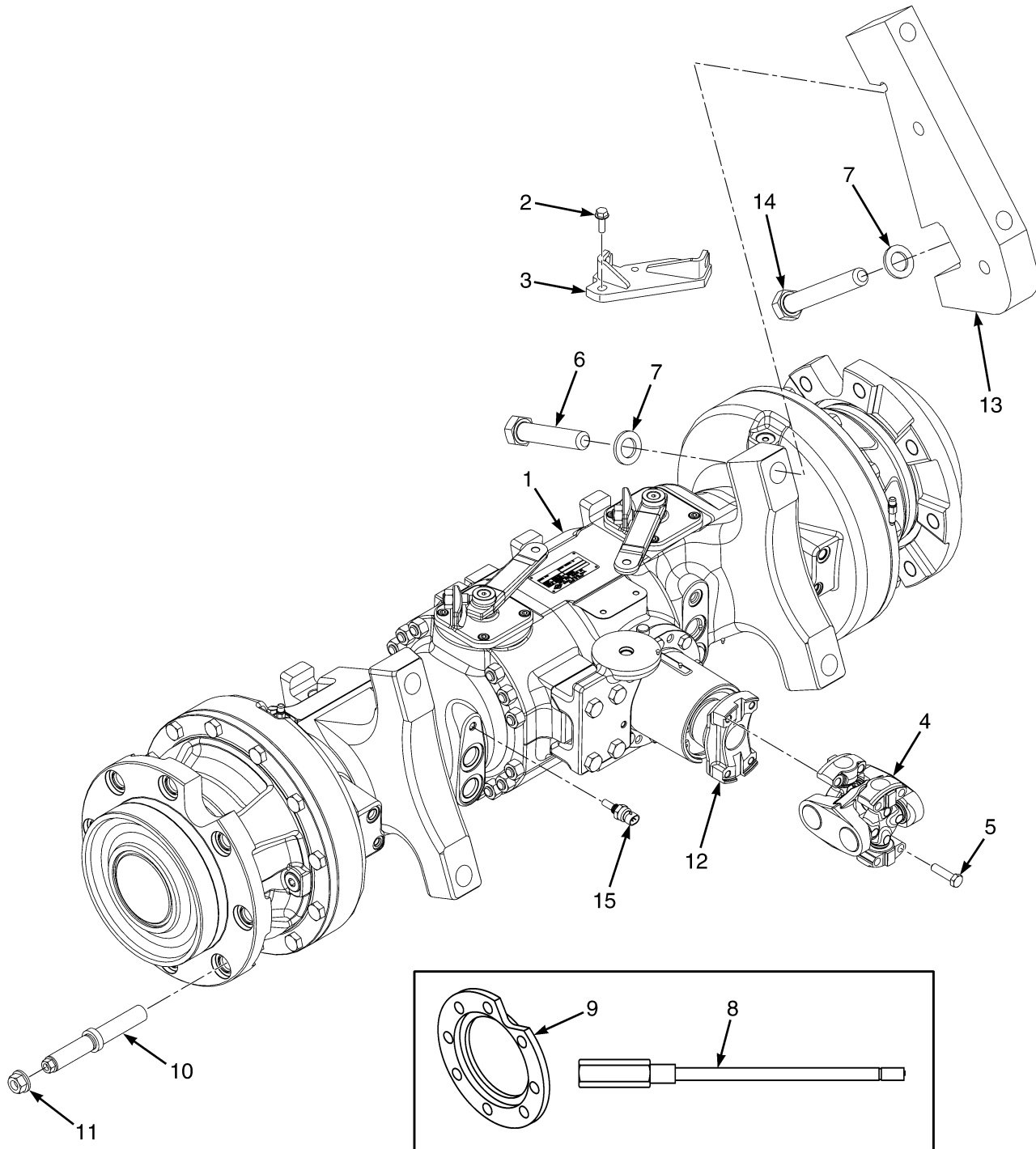
BP070034



**CARRIER ASSEMBLY  
DRY BRAKE**

ITEM	PART NO.	DESCRIPTION	QTY
	.....	Carrier .....	1
1	1556800	Thrust Washer .....	1
2	1601967	Carrier .....	1
3	307284	Retaining Ring .....	1
4	44317	Ball Bearing .....	1
5	58943	Snap Ring .....	1
6	1601966	Pin .....	3
7	1556799	Thrust Washer .....	6
8	1633297	Roller .....	3
9	.....	Planetary Gear .....	1
	4046046	Kit Planetary Gears .....	1

## DRIVE AXLE AND ATTACHING PARTS (FIGURE 6-5) WET BRAKE



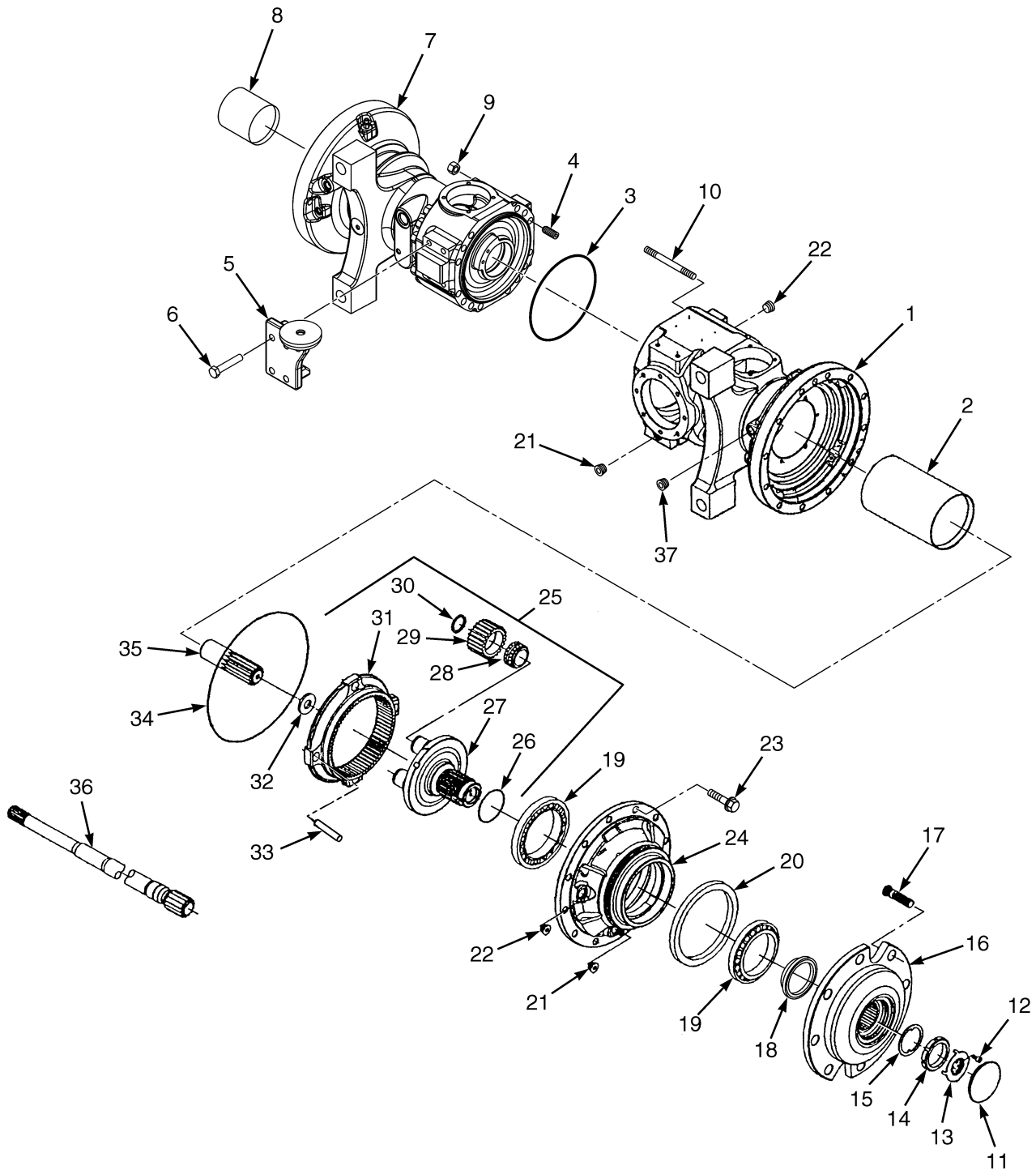
BP070147

**DRIVE AXLE AND ATTACHING PARTS  
WET BRAKE****KEY:****A: H4.5FT6, H5.0FT, H5.5FT****B: H4.0FT5, H4.0FT6, H4.5FTS5**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2099764	Drive Axle (11.2 Overall Ratio) .....	1	..
1	2099761	Drive Axle (12.8 Overall Ratio) .....	..	1
1	2099762	Drive Axle (13.7 Overall Ratio) .....	..	1
1	2099763	Drive Axle (15.2 Overall Ratio) .....	1	..
2	1510113	Capscrew .....	2	2
3	1626353	Bracket .....	1	1
4	1594314	Universal Joint .....	1	1
5	1329286	Capscrew .....	8	8
6	226430	Capscrew .....	4	4
7	296434	Washer .....	4	4
8	<b>a</b> 1303417			
	49189	Extension (Valve Stem) (Dual Drive) .....	2	2
8	1638961	Extension (Single Drive) .....	..	2
8	<b>b</b> 2028341	Extension (Valve Stem) (Dual Drive) .....	2	2
9	1581561	Spacer .....	2	2
10	1501278	Wheel Stud (Dual Drive) .....	16	..
10	1501277	Wheel Stud (Dual Drive) .....	..	16
10	1569463	Wheel Stud (Single Drive) .....	..	16
11	376026	Wheel Nut .....	16	16
12	1684429	Yoke .....	1	1
13	4049121	Adapter .....	2	2
14	4051327	Capscrew .....	4	4
15	1515654	Temperature Sensor .....	1	1

**FOOTNOTES:****a** Bias Ply Tires**b** Radial Tires

## DRIVE AXLE HOUSING AND HUB (FIGURE 6-6) WET BRAKE



BP070067

**DRIVE AXLE HOUSING AND HUB  
WET BRAKE**

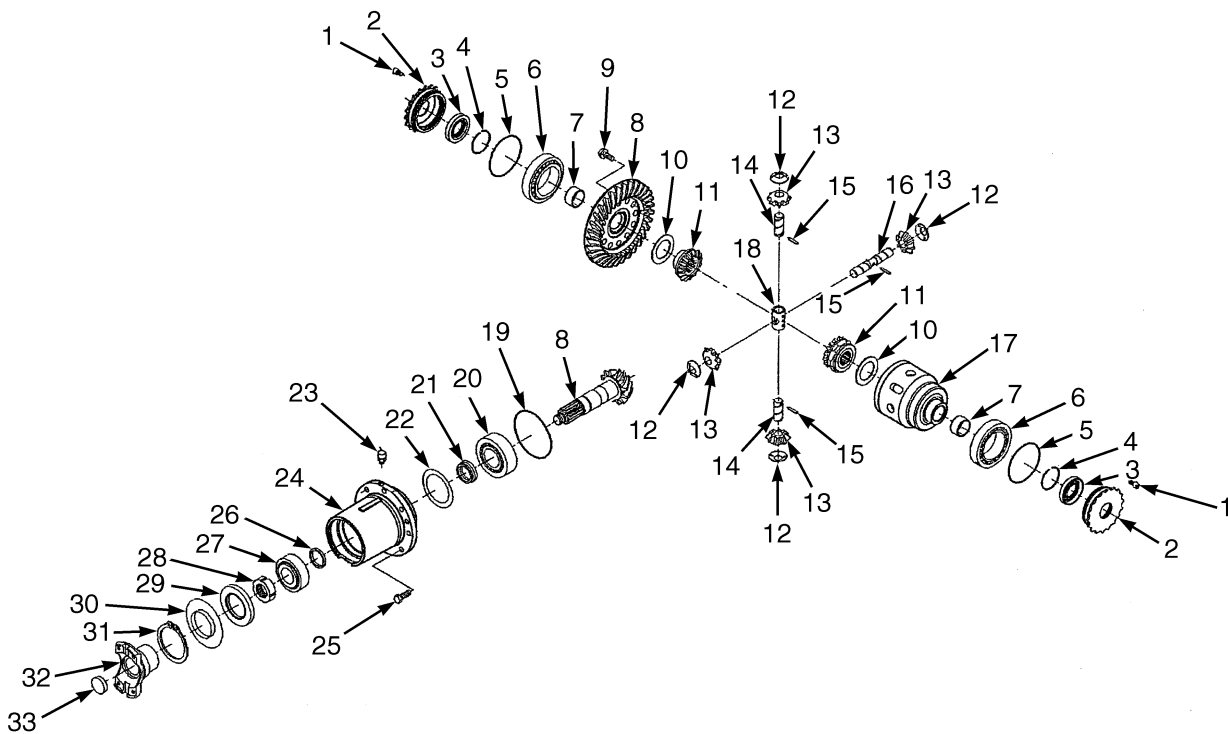
ITEM	PART NO.	DESCRIPTION	QTY
	2099764	Drive Axle (11.2 Overall Ratio) .....	1
	2099761	Drive Axle (12.8 Overall Ratio) .....	1
	2099762	Drive Axle (13.7 Overall Ratio) .....	1
	2099763	Drive Axle (15.2 Overall Ratio) .....	1
1	1644462	Drive Axle Housing (RH) .....	1
1	a 1641352	Plug .....	1
1	a 1623671	O-Ring .....	1
1	a 1641353	Plug .....	1
2	1627819	Tube (Long) .....	1
3	1623654	O-Ring .....	1
4	1623658	Bolt .....	4
5	1627817	Support .....	1
6	1623666	Bolt .....	4
7	1644463	Drive Axle Housing (LH) .....	1
8	1627818	Tube (Short) .....	1
9	1649534	Nut .....	14
10	1627812	Stud .....	14
11	1627813	Plug .....	2
12	1623652	Bolt .....	2
13	1627806	Cap .....	2
14	1627805	Nut .....	2
15	1627804	Washer .....	2
16	1627803	Wheel Hub .....	2
17	1569463	Wheel Stud .....	16
18	1627820	Washer (Hub Shaft) .....	2
19	1623645	Bearing .....	4
20	1627802	Ring .....	2
21	1623545	Drain Plug (Fluid Drain) .....	2
22	1623544	Plug (Fluid Check And Fill) .....	2
23	1623643	Bolt .....	24
24	1647656	Cover .....	2
25	1627814	Carrier .....	2
26	1689459	O-Ring .....	2
27	1627800	Carrier .....	2
28	1623640	Bearing .....	4
29	1623639	Gear .....	4
30	1623638	Retaining Ring .....	4
31	1623636	Ring Gear .....	1
32	1623635	Thrust Washer .....	1
33	1623637	Dowel .....	8
34	1623634	O-Ring .....	2
35	1627799	Pinion .....	2
36	1627815	Axle Shaft (Short) .....	1
36	1627816	Axle Shaft (Long) .....	1
37	1641354	Plug (Fluid Check And Fill) .....	2
37	a 1641355	Washer .....	12
37	a 1641356	Sealing Ring .....	6

**FOOTNOTES:**

- a Not Illustrated



## DIFFERENTIAL (FIGURE 6-7) WET BRAKE



BP070043



**DIFFERENTIAL  
WET BRAKE**

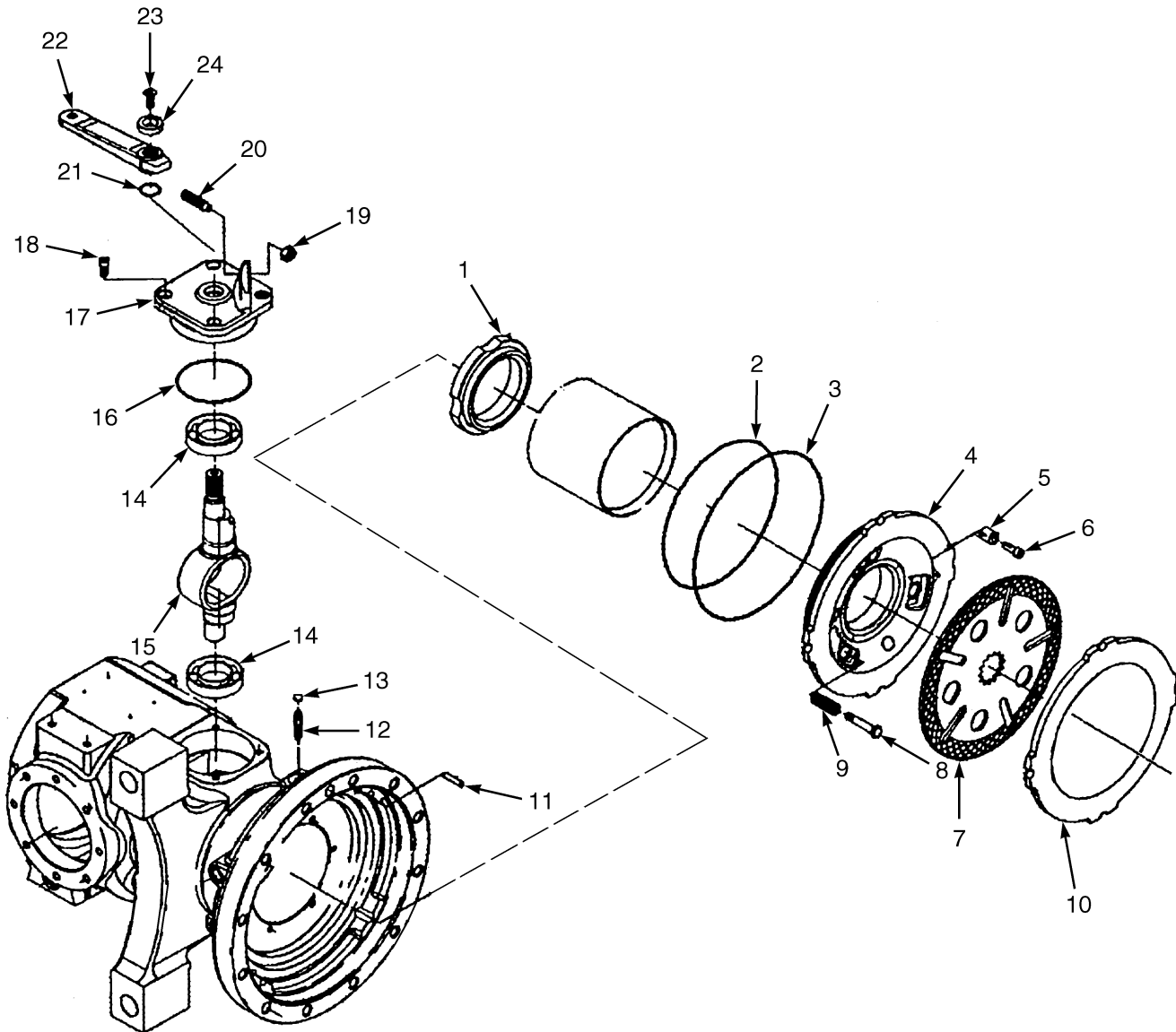
ITEM	PART NO.	DESCRIPTION	QTY
	2099764	Drive Axle (11.2 Overall Ratio) .....	1
	2099761	Drive Axle (12.8 Overall Ratio) .....	1
	2099762	Drive Axle (13.7 Overall Ratio) .....	1
	2099763	Drive Axle (15.2 Overall Ratio) .....	1
1	1623593	Bolt .....	2
2	1627793	Nut .....	2
3	1627794	Seal .....	2
4	1623590	Snap Ring .....	2
5	1623591	O-Ring .....	2
6	1623592	Bearing .....	2
7	1641362	Bushing .....	2
8	1623817	Bevel Gear (12.8 Overall Ratio) .....	1
8	1627925	Gear and Pinion (13.7 Overall Ratio) .....	1
8	1627927	Gear and Pinion (15.2 Overall Ratio) .....	1
8	1623575	Bevel Gear (11.2 Overall Ratio) .....	1
9	1623578	Bolt .....	12
10	1623580	Thrust Washer .....	2
11	1623581	Gear .....	2
12	1623587	Thrust Washer .....	4
13	1623586	Pinion .....	4
14	1623584	Pin .....	2
15	1623585	Dowel .....	3
16	1623583	Pin .....	1
17	1623579	Differential Carrier .....	1
18	1623582	Retainer .....	1
19	1623574	O-Ring .....	1
20	1623573	Bearing .....	1
21	1623572	Spacer .....	1
22	1627788	Shim (0.10 mm) .....	1
22	1627789	Shim (0.15 mm) .....	1
22	1627790	Shim (0.25 mm) .....	1
22	1641361	Shim (0.50 mm) .....	1
23	1627791	Plug .....	1
24	1623568	Cover .....	1
25	1627792	Bolt .....	8
26	1623553	Spacer (5.0 mm) .....	1
26	1623554	Spacer (5.1 mm) .....	1
26	1623555	Spacer (5.2 mm) .....	1
26	1623556	Spacer (5.3 mm) .....	1
26	1623557	Spacer (5.4 mm) .....	1
26	1623558	Spacer (5.5 mm) .....	1
26	1623559	Spacer (5.6 mm) .....	1
26	1623560	Spacer (5.7 mm) .....	1
26	1623561	Spacer (5.8 mm) .....	1
26	1623562	Spacer (5.9 mm) .....	1
26	1623563	Spacer (3.02 mm) .....	1
26	1623564	Spacer (3.04 mm) .....	1
26	1623565	Spacer (3.06 mm) .....	1
26	1623566	Spacer (3.08 mm) .....	1
26	1623567	Spacer (3.00 mm) .....	1

**DIFFERENTIAL  
WET BRAKE**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
27	1623552	Bearing .....	1
28	1623551	Nut .....	1
29	1623550	Seal .....	1
30	1623549	Cover Plate .....	1
31	1623548	Retaining Ring .....	1
32	1623547	Flange (Input Yoke) .....	1
33	1623546	Plug .....	1



## WET BRAKE ASSEMBLY (FIGURE 6-8)

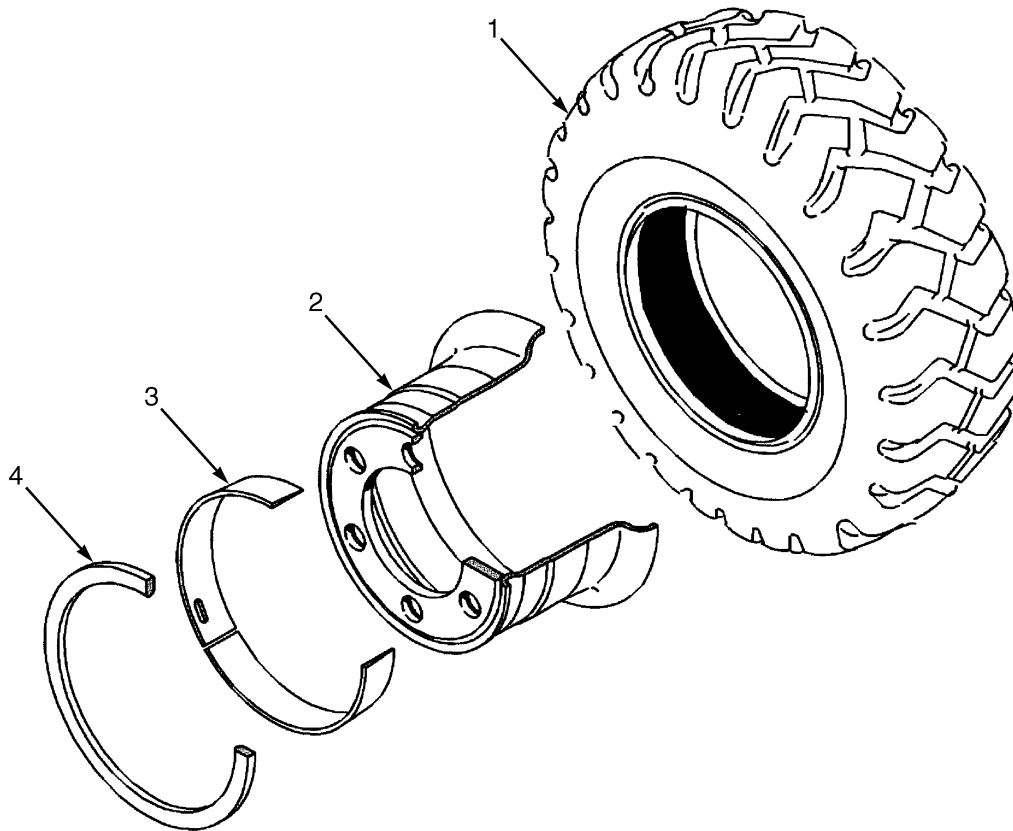


BP070032

**WET BRAKE ASSEMBLY**

ITEM	PART NO.	DESCRIPTION	QTY
	2099764	Drive Axle (11.2 Overall Ratio) .....	1
	2099761	Drive Axle (12.8 Overall Ratio) .....	1
	2099762	Drive Axle (13.7 Overall Ratio) .....	1
	2099763	Drive Axle (15.2 Overall Ratio) .....	1
1	1627823	Disk .....	2
2	1623687	Seal .....	2
3	1623688	Seal .....	2
4	1644455	Piston .....	2
5	1623690	Spring .....	6
6	1623691	Bolt (Adjusting) .....	6
7	1627837	Brake Disk .....	4
8	1627826	Bolt (Adjusting) .....	6
9	1627825	Spring .....	6
10	1644456	Disk (Intermediate) .....	4
11	1627822	Dowel .....	8
12	1623677	Stud (Bleeding) .....	2
13	1623676	Plug .....	2
14	1623674	Bearing .....	4
15	1623675	Lever (Brake) .....	2
16	1623673	O-Ring .....	2
17	1627836	Bushing (Reduction) .....	2
18	1623672	Bolt .....	8
19	1623696	Nut .....	2
20	1623695	Bolt (Left) .....	1
20	1646920	Bolt (Right) .....	1
21	1623671	O-Ring .....	2
22	1623670	Lever .....	2
23	1623669	Bolt .....	2
24	1623694	Spacer .....	2

## DRIVE TIRE AND WHEEL (FIGURE 6-9) SINGLE MOUNT WITH STANDARD TREAD



BP070041

**KEY:**

**A:** 250 x 15-20 PR (H4.0-4.5FT5)

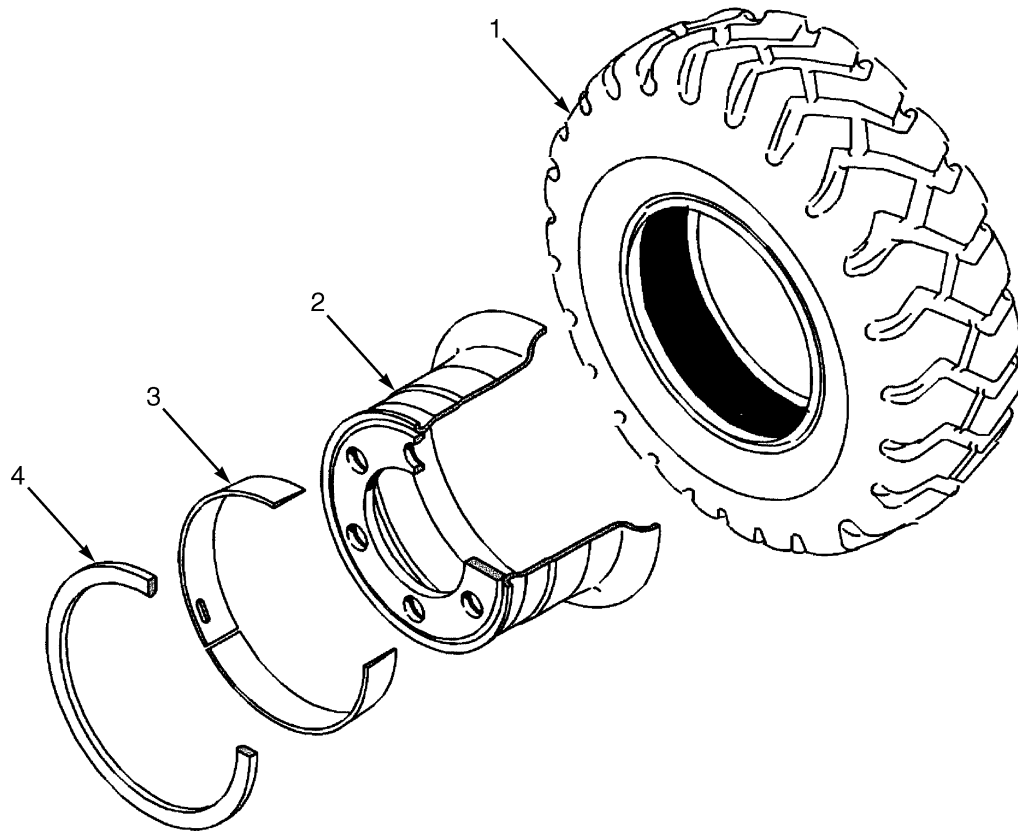
**B:** 300 x 15-20 PR (H4.5FT6-H5.5)

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1547342	Tire .....	2	..
1	1547348	Tire .....	..	2
2	2083537	Wheel Assy .....	2	..
2	2083540	Wheel Assy .....	..	2
3	1618588	Wheel Side Ring .....	1	..
3	321124	Wheel Side Ring .....	..	1
4	1618589	Wheel Lock Ring .....	1	1
	a 1618586	Ring-Tapered Bead Seat .....	1	1

**FOOTNOTES:**

a Not Illustrated

**DRIVE TIRE AND WHEEL (FIGURE 6-10)  
SINGLE MOUNT WITH WIDE TREAD**



BP070041

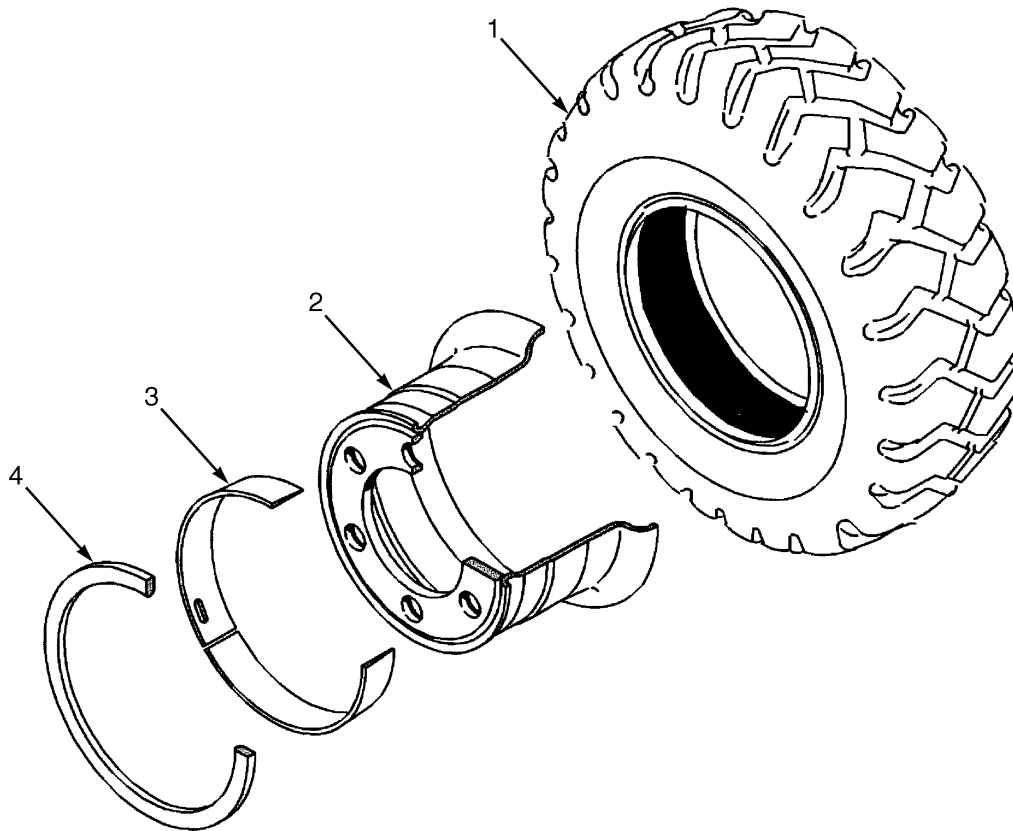
**KEY:**

**A:** 250 x 15-20PR (H4.0-4.5FT5)

**B:** 300 x 15-20PR (H40.5FT6-H5.5)

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1547342	Tire .....	2	..
1	1547348	Tire .....	..	2
2	2083538	Wheel Assy .....	2	..
2	2083541	Wheel Assy .....	..	2
3	1618588	Wheel Side Ring .....	1	..
3	321124	Wheel Side Ring .....	..	1
4	1618589	Wheel Lock Ring .....	1	1
	1618586	Ring-Tapered Bead Seat .....	1	1

## DRIVE TIRE AND WHEEL (FIGURE 6-11) PNEUMATIC RADIAL



BP070041

**KEY:**

- A:** 250/70 R15 Single Mount (H4.0-4.5FT5)
- B:** 7.00 R15 Dual Mount (H4.0-4.5FT5)
- C:** 315/70 R15 Single Mount (H4.5FT6-H5.5)
- D:** 8.25 x R15 PR Dual Mount (H4.5FT6-H5.5)

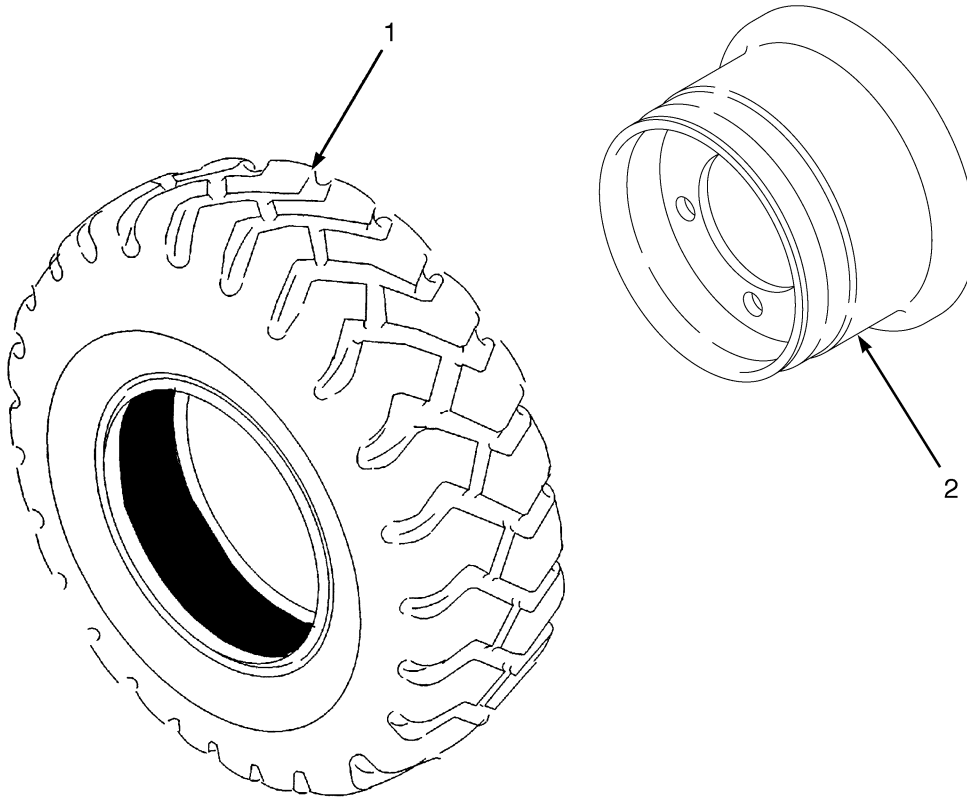
ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1471830	Pneumatic Tire Assembly (TBS) .....	2	..	..	..
1	1471836	Pneumatic Tire .....	..	4	..	..
1	1471831	Pneumatic Tire Assembly (TBS) .....	..	..	2	..
1	1471838	Pneumatic Tire .....	..	..	..	4
2	2083537	Wheel Assy .....	2	..	..	..
2	2083538	Wheel Assy (Wide Tread) .....	2	..	..	..
2	2083539	Wheel Assy .....	..	4	..	..
2	2083540	Wheel Assy .....	..	..	2	..
2	2083541	Wheel Assy (Wide Tread) .....	..	..	2	..
2	2083542	Wheel Assy .....	..	..	..	4
3	1618588	Wheel Side Ring .....	1	..	..	..
3	980541	Wheel Side Ring .....	..	1	..	..
3	321124	Wheel Side Ring .....	..	..	1	1
4	1618589	Wheel Lock Ring .....	1	..	1	1



**KEY:****A: 250/70 R15 Single Mount (H4.0-4.5FT5)****B: 7.00 R15 Dual Mount (H4.0-4.5FT5)****C: 315/70 R15 Single Mount (H4.5FT6-H5.5)****D: 8.25 x R15 PR Dual Mount (H4.5FT6-H5.5)**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
4	980542	Wheel Lock Ring .....	..	1	..	..
5	1618586	Ring-Tapered Bead Seat (Not Illustrated) .....	1	1	1	1

**DRIVE TIRE AND WHEEL (FIGURE 6-12)  
SNAP-ON SOLID TIRE**

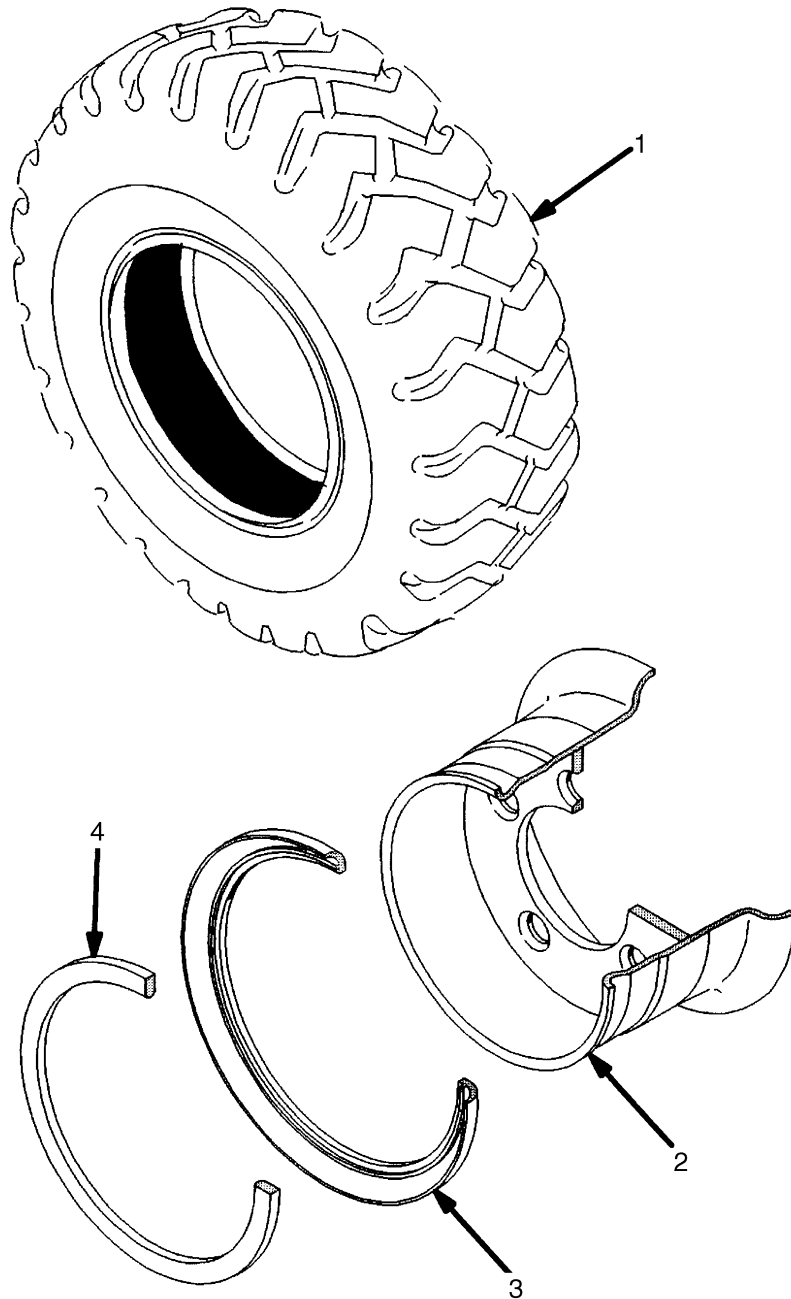


BP000223

**DRIVE TIRE AND WHEEL  
SNAP-ON SOLID TIRE****KEY:****A: 250 x 15 (H4.0-4.5FT5)****B: 300 x15 (H4.5FT6-H5.5FT)****C: 7.00 x 15 (H4.0-4.5FT5 Dual)****D: 8.25 x 15 (H4.5FT6-H5.5 Dual)**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1547354	Solid Pneumatic Tire .....	2	..	..	..
1	2083389	Solid Pneumatic Tire (Non-Marking) .....	2	..	..	..
1	1547356	Solid Pneumatic Tire .....	..	2	..	..
1	2083390	Solid Pneumatic Tire (Non-Marking) .....	..	2	..	..
1	1547355	Solid Pneumatic Tire .....	..	..	4	..
1	1547357	Solid Pneumatic Tire .....	..	..	..	4
2	2083523	Wheel .....	2	..	..	..
2	2083524	Wheel (Wide Tread) .....	2	..	..	..
2	2083526	Wheel .....	..	2	..	..
2	2083525	Wheel .....	..	..	4	..
2	2083528	Wheel .....	..	..	..	4

**DRIVE WHEEL AND TIRE (FIGURE 6-13)  
HEAVY DUTY**



BP070070

**DRIVE WHEEL AND TIRE  
HEAVY DUTY****KEY:****A: 20x12.5-15 (4.0-4.5S5)****B: 355/65-15 (4.5FT6-5.5)****C: 355/50-20 (4.5FT6-5.5)**

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
1	1688187	Solid Pneumatic Tire .....	2	..	..
1	1688188	Solid Pneumatic Tire .....	..	2	..
1	1688190	Solid Pneumatic Tire .....	..	..	2
2	2106024	Wheel .....	..	..	2
2	2103735	Wheel Assy (9.75 x 15) .....	2	2	..
3	160653	Wheel Side Ring .....	1	1	..
4	980542	Wheel Lock Ring .....	1	1	..
	<b>a</b> 1618586	Ring-Tapered Bead Seat .....	1	1	..

**FOOTNOTES:****a** Not Illustrated



**7**

**STEERING SYSTEM**





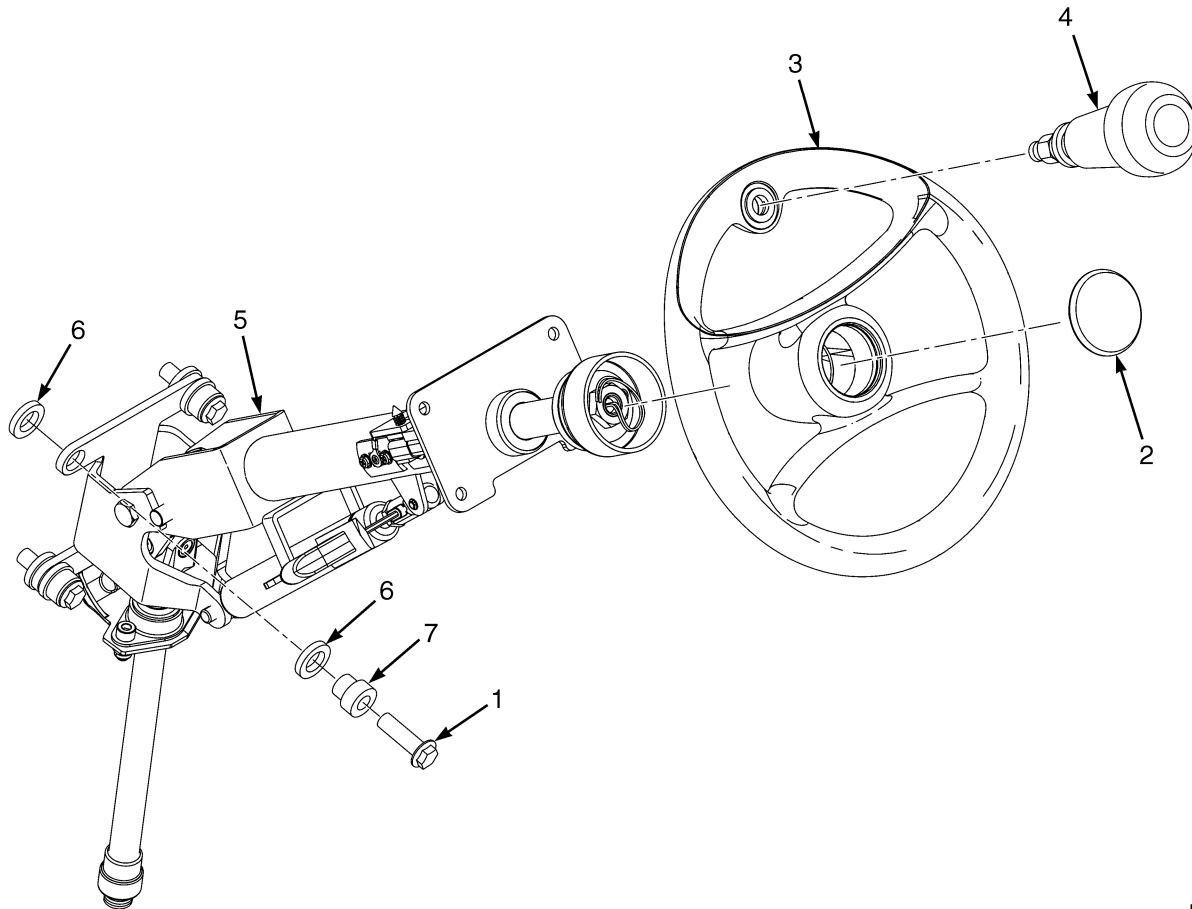
**SECTION 7  
STEERING SYSTEM**

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<b>DESCRIPTION</b>	<b>PAGE</b>
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STEER CYLINDER .....	7-16
STEER TIRE AND WHEEL .....	7-18
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DIESEL .....	7-6
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## STEERING COLUMN AND ATTACHING PARTS (FIGURE 7-1) DIESEL



HP220499

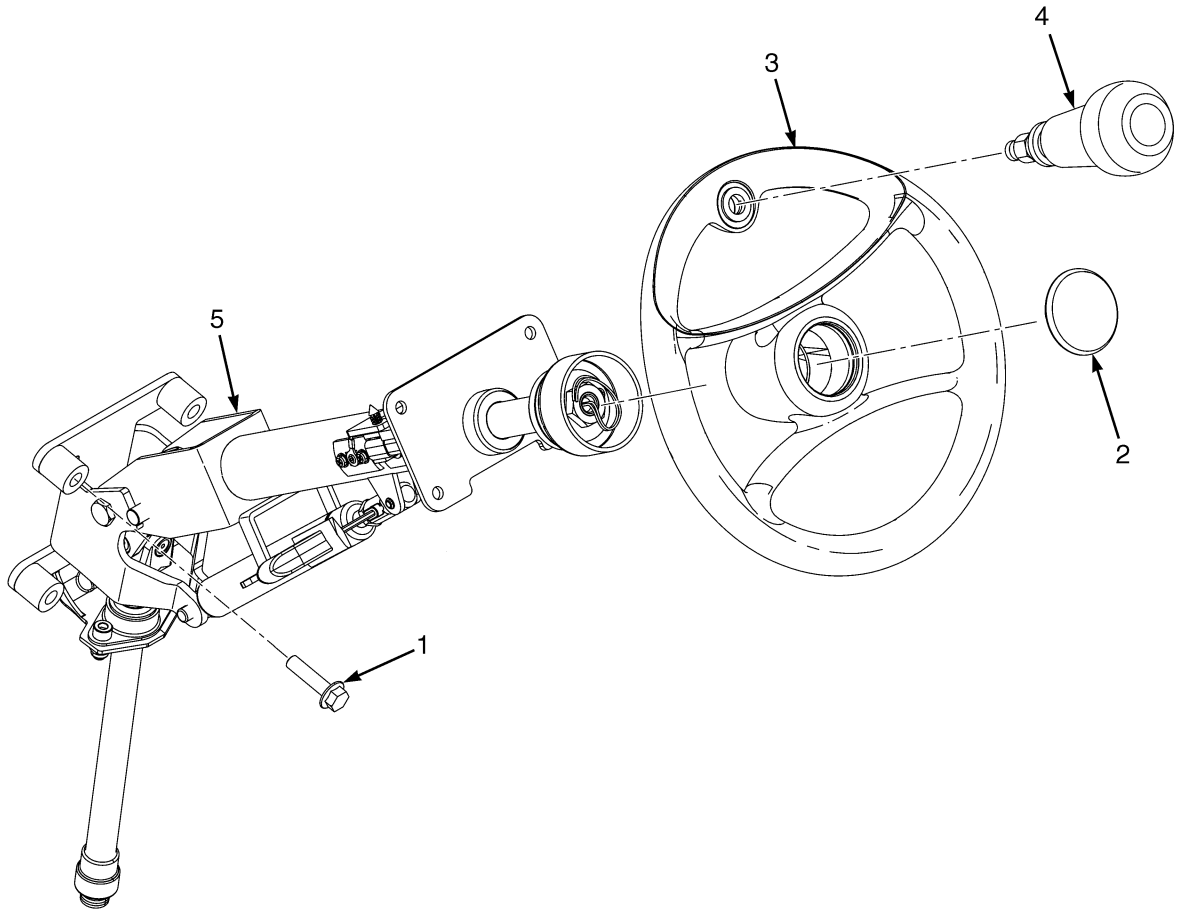
ITEM	PART NO.	DESCRIPTION	QTY
1	1512403	Capscrew .....	4
2	1608622	Horn Button .....	1
3	1551839	Steering Wheel (Without Spinner Knob) .....	1
3	1531563	Steering Wheel (With Spinner) .....	1
4	1586109	Knob Assembly .....	1
5	<b>a</b> 1657959	Steering Column (Diesel) (☞ Figure 7-3).....	1
5	<b>b</b> 4023451	Steering Column (☞ Figure 7-3).....	1
5	4611791	Steering Column (☞ Figure 7-4).....	1
6	2079369	Isolator .....	8
7	1606750	Spacer .....	4

### FOOTNOTES:

**a** → S/N P005B03168J

**b** S/N P005B03169J →

**STEERING COLUMN AND ATTACHING PARTS (FIGURE 7-2)  
LPG**



HP220500

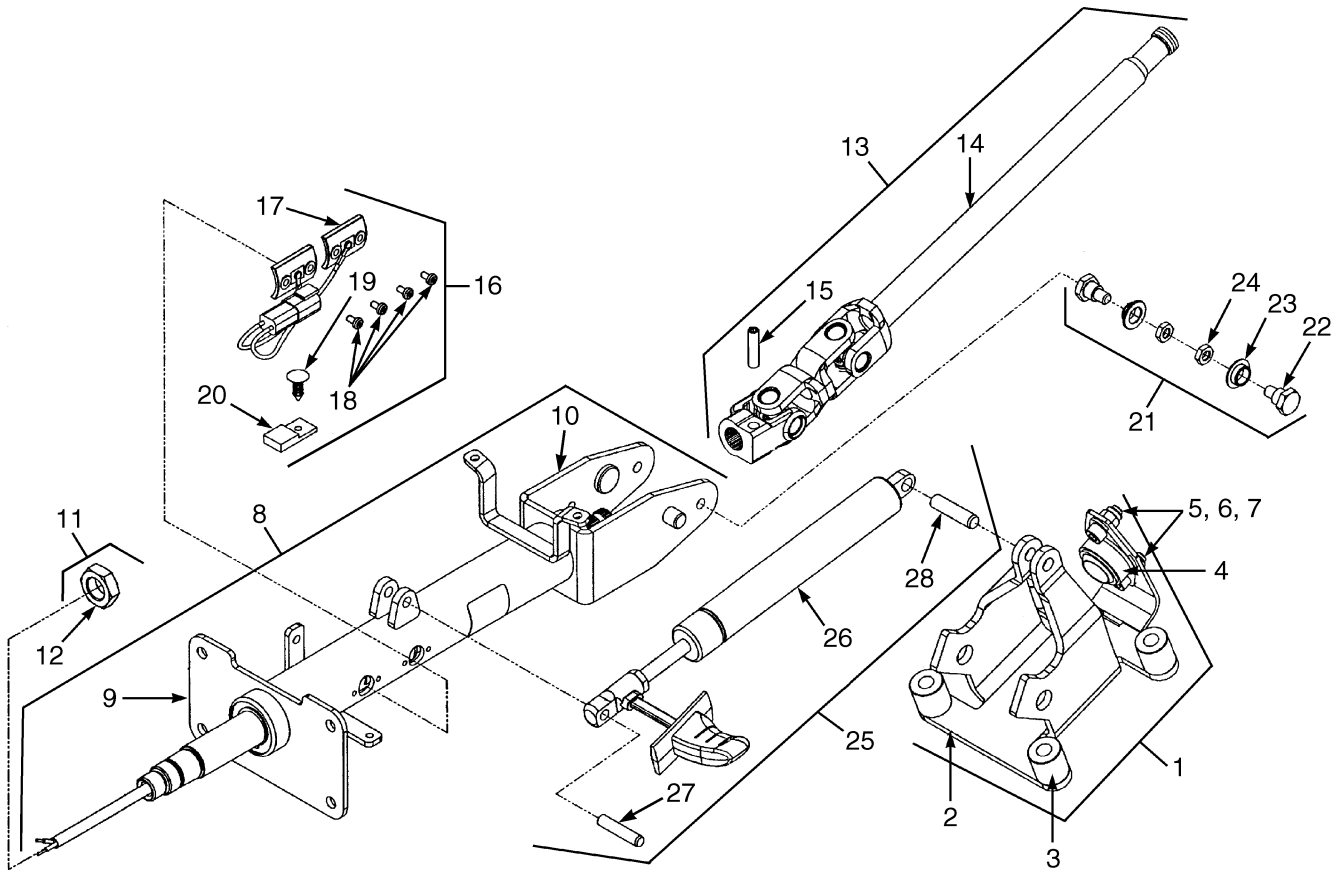
ITEM	PART NO.	DESCRIPTION	QTY
1	1512403	Capscrew .....	4
2	1608622	Horn Button .....	1
3	1551839	Steering Wheel (Without Spinner Knob) .....	1
3	1531563	Steering Wheel (With Spinner) .....	1
4	1586109	Knob Assembly .....	1
5	<b>a</b> 1657962	Steering Column (☞ Figure 7-3).....	1
5	<b>b</b> 4023450	Steering Column (☞ Figure 7-3).....	1

**FOOTNOTES:**

**a** → S/N P005B03198J

**b** S/N P005B03199J →

## STEERING COLUMN ASSEMBLY (FIGURE 7-3)



HP220445

**STEERING COLUMN ASSEMBLY**

ITEM	PART NO.	DESCRIPTION	QTY
	<b>b</b> 1657962	Steering Column (LPG) .....	1
	<b>d</b> 4023450	Steering Column (LPG) .....	1
	<b>a</b> 1657959	Steering Column (Diesel) .....	1
	<b>c</b> 4023451	Steering Column (Diesel) .....	1
1	1562509	Kit-Support (LPG) .....	1
1	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	<b>a</b> 1562489	Kit-Shaft (Upper) (LPG) .....	1
8	<b>b</b> 1647528	Kit-Shaft (Upper) (Diesel) .....	1
8	<b>cd</b> 4028642	Kit (Shaft Upper) (LPG and Diesel) .....	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** → S/N P005B03168J  
**b** → S/N P005B03198J

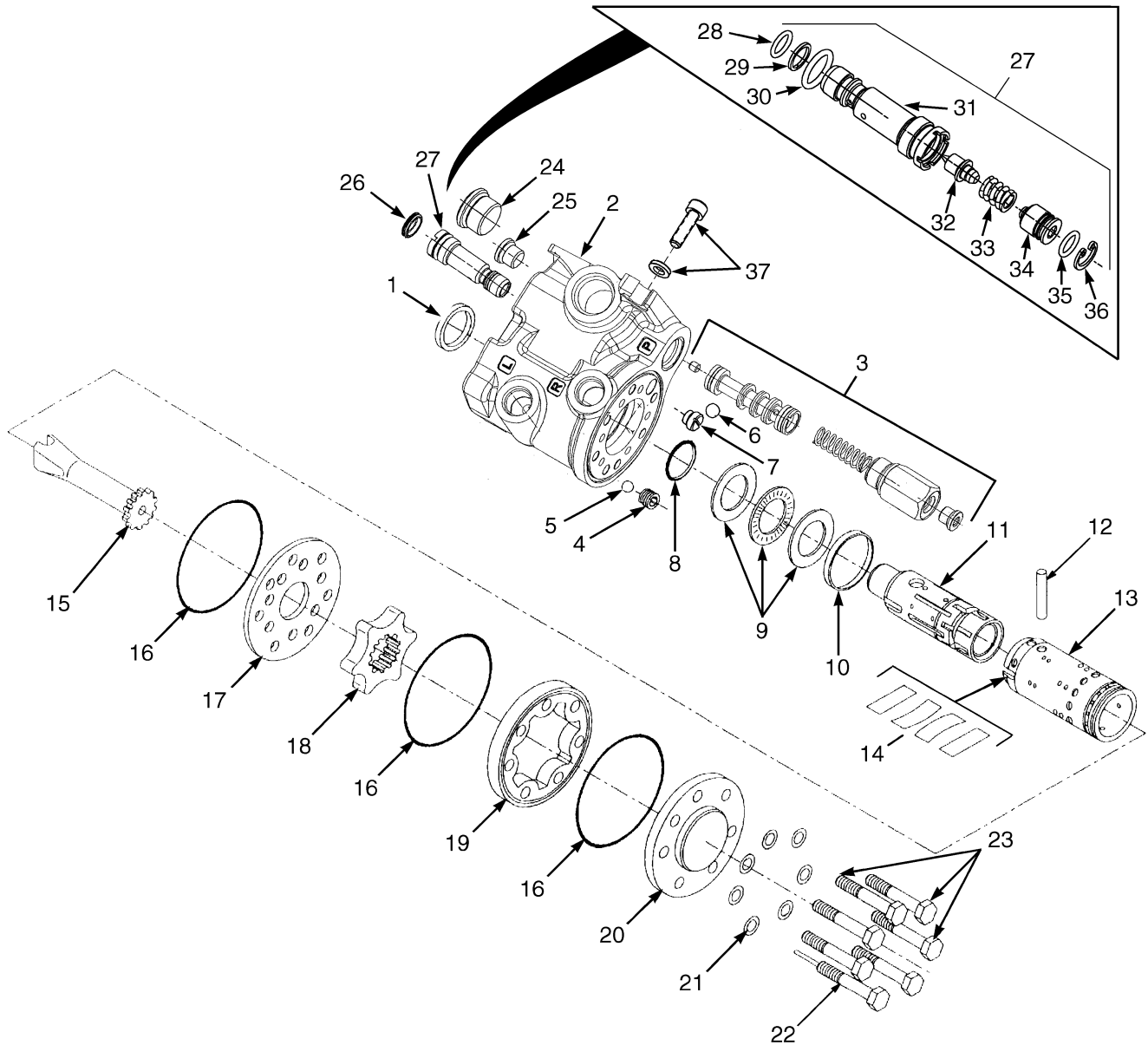
**c** S/N P005B03169J →  
**d** S/N P005B03199J →



**STEERING COLUMN ASSEMBLY  
DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	4611791	Steering Column .....	1
1	4038672	Kit-Support .....	1
2	.....	Support .....	1
3	.....	Spacer .....	4
4	.....	Joint .....	1
5	.....	Nut .....	2
6	.....	Washer .....	2
7	.....	Screw .....	2
8	4038673	Kit-Shaft (Upper) .....	1
9	.....	Shaft Assembly (Upper) .....	1
10	.....	Housing Assembly .....	1
11	4038674	Kit-Nut .....	1
12	.....	Nut .....	2
13	4038675	Kit-Shaft (Lower) .....	1
14	.....	Shaft Assembly (Lower) .....	1
15	.....	Pin .....	1
16	4038676	Kit-Contact .....	1
17	.....	Contact Assembly (Horn) .....	1
18	.....	Screw .....	4
19	.....	Fastener .....	1
20	.....	Connector .....	1
21	4038677	Kit Pivot (Lower) .....	1
22	.....	Bolt (Pivot) .....	2
23	.....	Bushing .....	2
24	.....	Nut .....	2
25	4038678	Kit-Gas Spring .....	1
26	.....	Gas Spring .....	1
27	.....	Pin .....	1
28	.....	Pin .....	1

## STEER CONTROL UNIT (FIGURE 7-5)



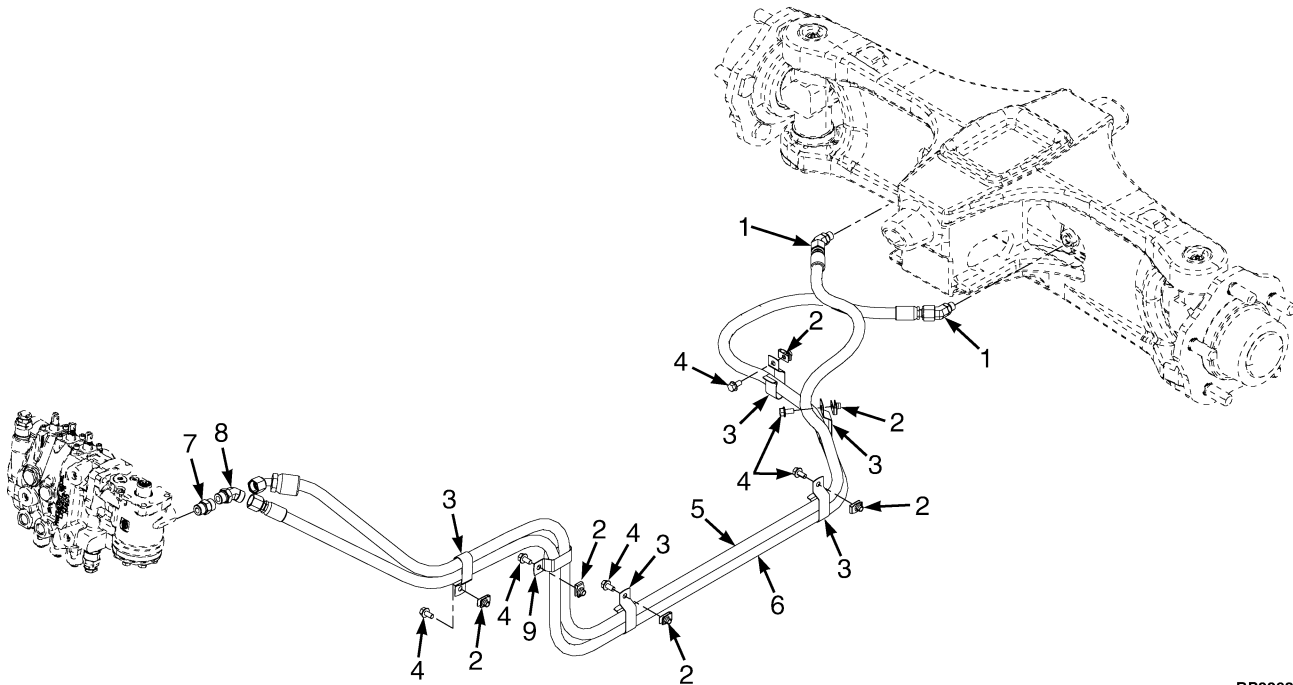
BP220056



**STEER CONTROL UNIT**

ITEM	PART NO.	DESCRIPTION	QTY
	2102566	Steering Control Unit .....	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 (Steering Control Unit) .....	1

## STEERING LINES (FIGURE 7-6)



BP220209

ITEM	PART NO.	DESCRIPTION	QTY
1	1516203	Fitting .....	2
1	265731	O-Ring .....	1
1	16483	O-Ring .....	1
2	1480237	Nut .....	6
3	1562648	Clip .....	6
4	1527879	Capscrew .....	6
5	<b>b</b> 2104076	Hose Assy .....	1
5	<b>a</b> 2104075	Hose Assy .....	1
6	<b>b</b> 2104077	Hose Assy .....	1
6	<b>a</b> 2103501	Hose Assy .....	1
7	1473887	Fitting .....	1
7	265731	O-Ring .....	1
7	16484	O-Ring .....	2
8	1516202	Fitting .....	1
8	265731	O-Ring .....	1
8	16484	O-Ring .....	1
9	251994	Clamp .....	1

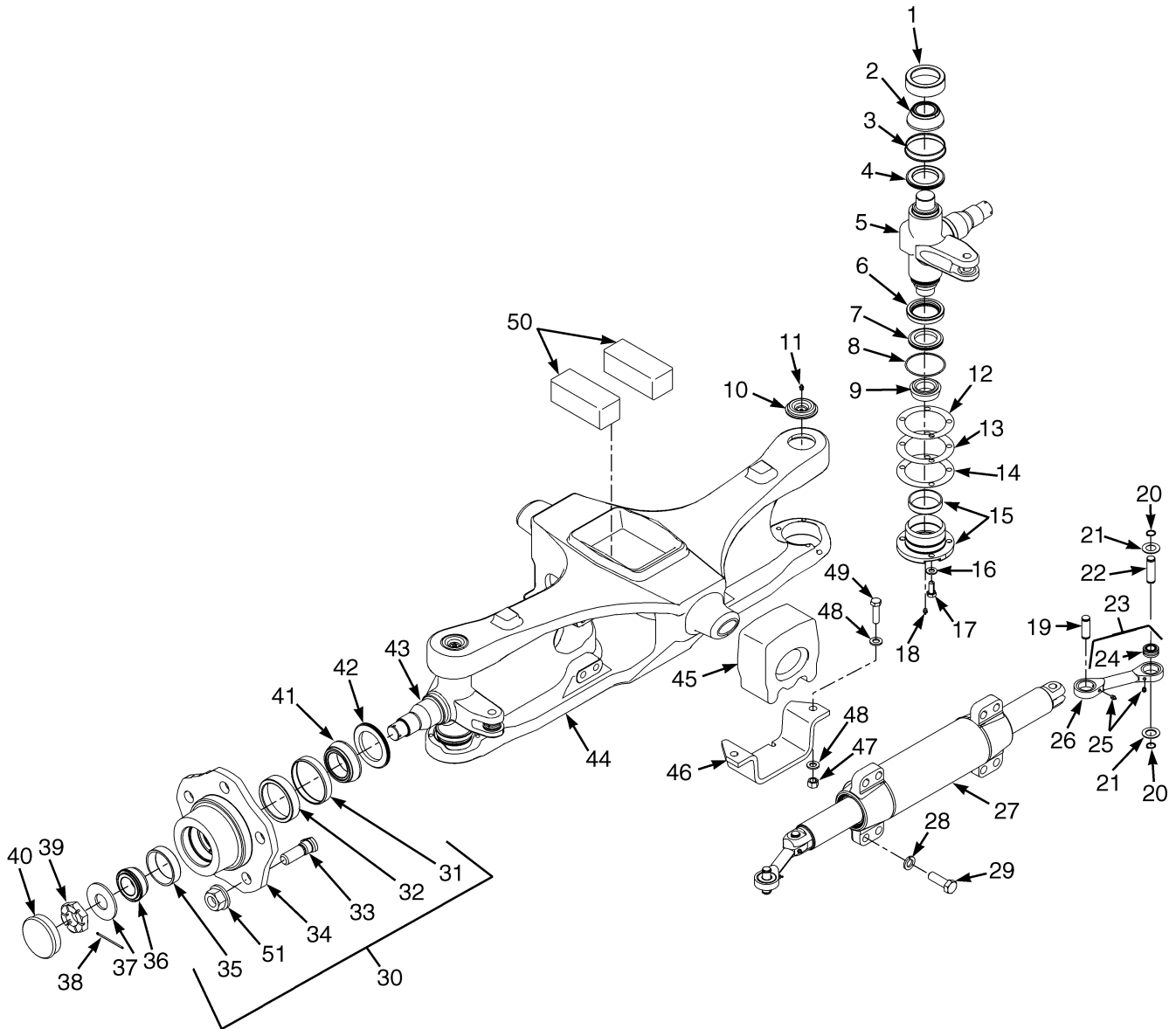
### FOOTNOTES:

**a** H4.0FT5, H4.0FT6, H4.5FTS5

**b** H4.5FT6, H5.0FT, H5.5FT



## STEER AXLE (FIGURE 7-7)



BP220086

**STEER AXLE**

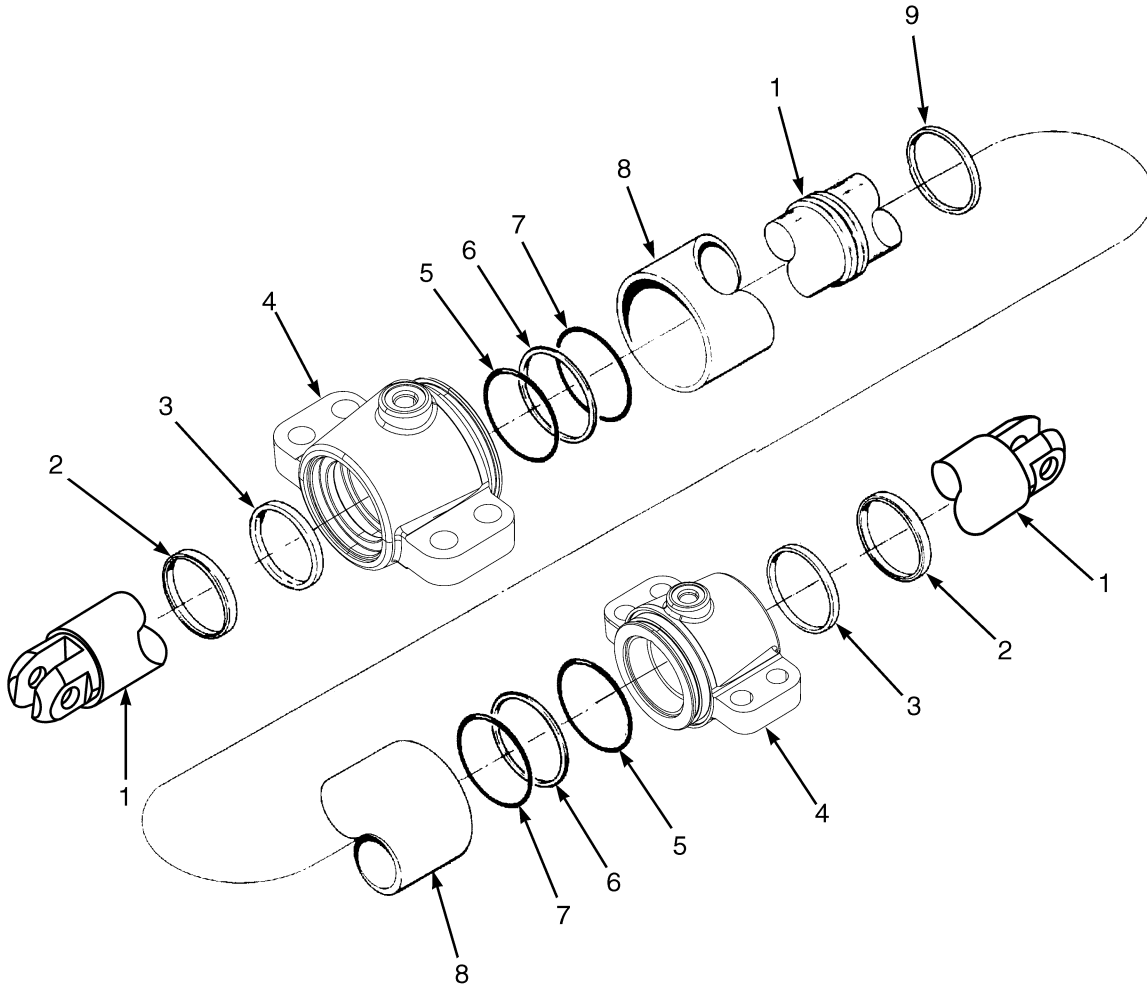
ITEM	PART NO.	DESCRIPTION	QTY
	1540851	Steer Axle Assembly .....	1
1	230421	Bearing Cup .....	2
2	153715	Bearing Cone .....	2
3	153717	Wear Sleeve .....	2
4	153716	Seal .....	2
5	1540854	Spindle (RH) .....	1
6	266733	Seal .....	2
7	266728	Seal .....	2
8	39678	O-Ring .....	2
9	135657	Bearing Cone .....	2
10	1388829	Dust Cap .....	2
11	185860	Plug .....	1
12	1388846	Shim (0.127 mm) .....	2
13	1388847	Shim (0.178 mm) .....	2
14	1388848	Shim (0.508 mm) .....	4
15	1394554	Bearing Cap Assembly .....	2
15	135658	Bearing Cup .....	1
15	1394552	Bearing Cap .....	1
16	296420	Washer .....	6
17	293628	Capscrew .....	6
18	13957	Grease Fitting .....	4
19	1568271	Pin .....	2
20	58903	Snap Ring .....	8
21	1345684	Seal .....	8
22	1568272	Pin .....	2
23	1568079	Tie Rod .....	2
24	1568039	Spherical Roller Bearing .....	2
25	13957	Grease Fitting .....	2
26	.....	Tie Rod .....	1
27	2085232	Steering Cylinder (☞ Figure 7-8).....	1
28	293686	Capscrew .....	8
29	292685	Lockwasher .....	8
30	1614849	Hub .....	2
31	164639	Wear Sleeve .....	1
32	30147	Bearing Cup .....	1
33	1393348	Wheel Stud .....	5
34	1614850	Wheel Hub .....	1
35	30019	Bearing Cup .....	1
36	30289	Bearing Cone .....	2
37	1388832	Lockwasher .....	2
38	15229	Cotter Pin .....	2
39	1383777	Nut .....	2
40	69029	Cap .....	2
41	230315	Bearing Cone .....	2
42	44542	Seal .....	2
43	1540856	Spindle (LH) .....	1
44	1540852	Steering Axle .....	1
45	1525354	Rubber Mount .....	2
46	1543254	Plate .....	2
47	300937	Nut .....	4
48	320161	Washer .....	8

**STEER AXLE**

ITEM	PART NO.	DESCRIPTION	QTY
49	293648	Capscrew .....	4
50	352205	Rubber Mount .....	2
51	376026	Wheel Nut .....	10
	2064554	Loctite .....	AR



## STEER CYLINDER (FIGURE 7-8)



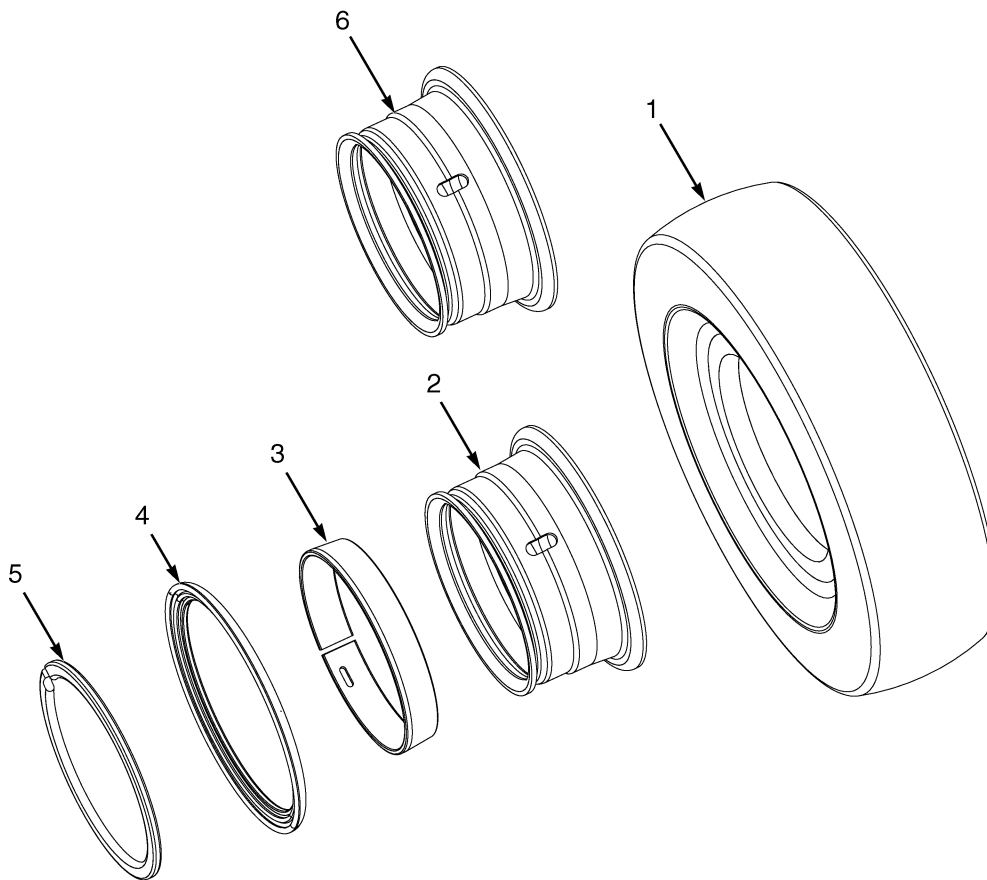
BP220087



**STEER CYLINDER**

ITEM	PART NO.	DESCRIPTION	QTY
	2085232	Steering Cylinder .....	1
1	1654465	Cylinder Rod .....	1
2	2071094	Rod Wiper .....	2
3	1380092	Rod Seal .....	2
4	1557651	End Cap .....	2
5	39713	O-Ring .....	2
6	270015	Back-Up Ring .....	2
7	79981	O-Ring .....	2
8	352199	Tube Wldmt-Cylinder .....	1
9	2047829	Seal .....	1
	1586427	Kit-Seal .....	1

**STEER TIRE AND WHEEL (FIGURE 7-9)**



HP070092

**STEER TIRE AND WHEEL****KEY:****A:** 7.00 x 12, Single**B:** 7.00 x 12 Snap On Tire (H4.00-4.50FT5, H4.00-4.5FT6), Single**C:** 28 x 9 Snap On Tire (H4.50FT6-H5.50), Single**D:** 28x9-15 Solid Heavy Duty

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1644915	Pneumatic Tire (Trell) .....	2	..	..	..
1	1471829	Pneumatic Tire (Radial) .....	2	..	..	..
1	1358179	Pneumatic Tire .....	1	..	..	..
1	1471591	Tubeless Bead Seal .....	1	..	..	..
1	1471922	Tubeless Bead Seal Valve .....	1	..	..	..
1	<b>a</b> 1603487	Solid Pneumatic Tire (Non-Marking) .....	..	2	..	..
1	1603488	Solid Pneumatic Tire (Non-Marking) .....	..	..	2	..
1	<b>b</b> 1543063	Solid Pneumatic Tire .....	..	2	..	..
1	1543064	Solid Pneumatic Tire .....	..	..	2	..
1	2107158	Tire .....	..	..	..	2
2	2035044	Rim (5.00 x 12) .....	2	..	..	..
2	2104843	Wheel Assy .....	..	..	..	2
3	806556	Shoulder Ring .....	1	..	..	..
	<b>c</b> 1618586	Ring-Tapered Bead Seat .....	..	..	..	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
6	1394514	Wheel .....	..	2	..	..
6	2104448	Wheel Rim .....	..	..	2	..
7	<b>d</b> 1394500	Plate (Valve Stem) (Not Illustrated) .....	1	..	..	..

**FOOTNOTES:****a** H4.00-4.50FT5**b** H4.00-4.50FT6**c** Not Illustrated**d** Used with Radial Tires



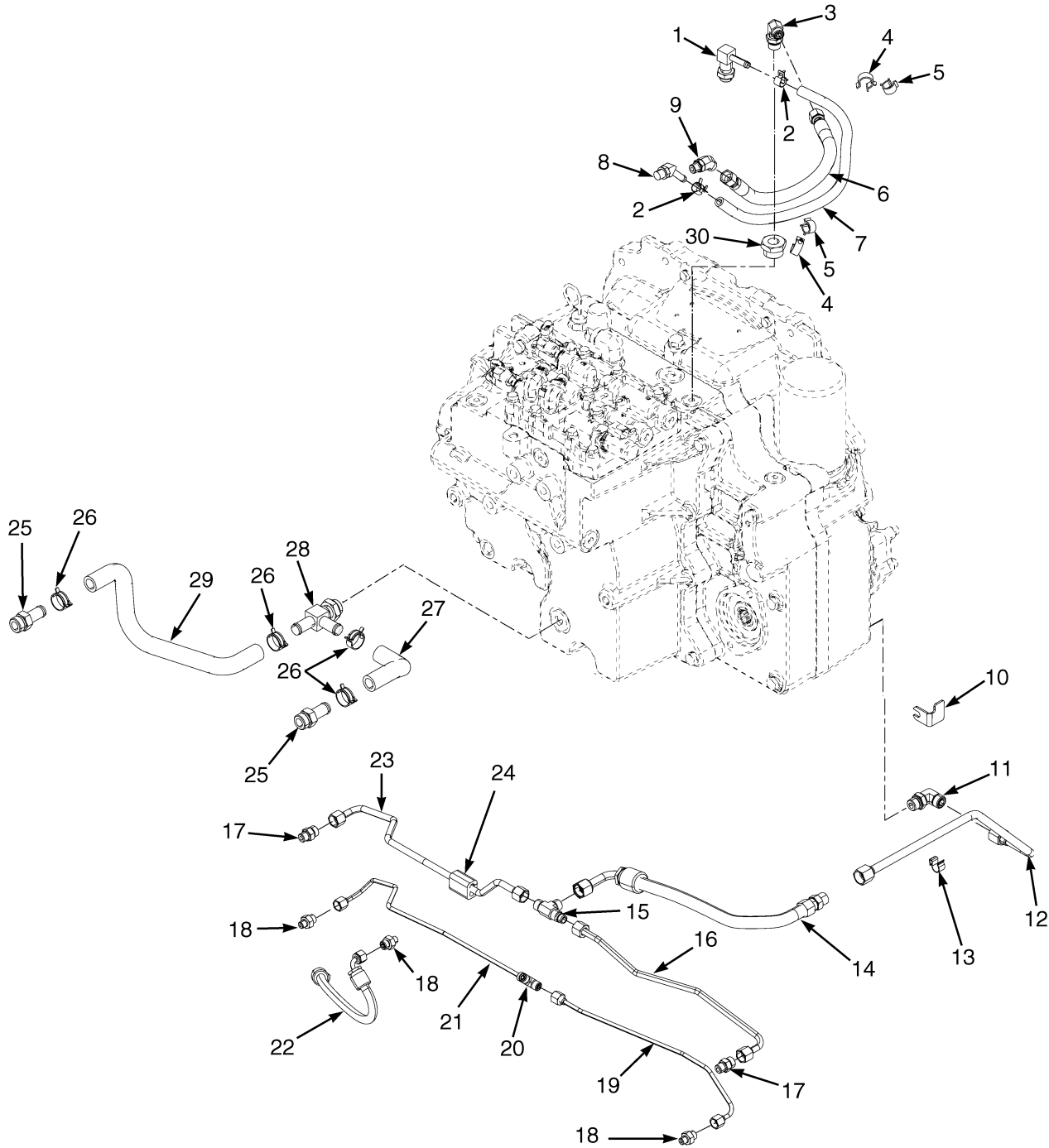




**SECTION 8  
BRAKE SYSTEM**

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## BRAKE COOLING SYSTEM (FIGURE 8-1) SINGLE AND DUAL PEDAL — WET BRAKE (→ S/N P005B03574J)



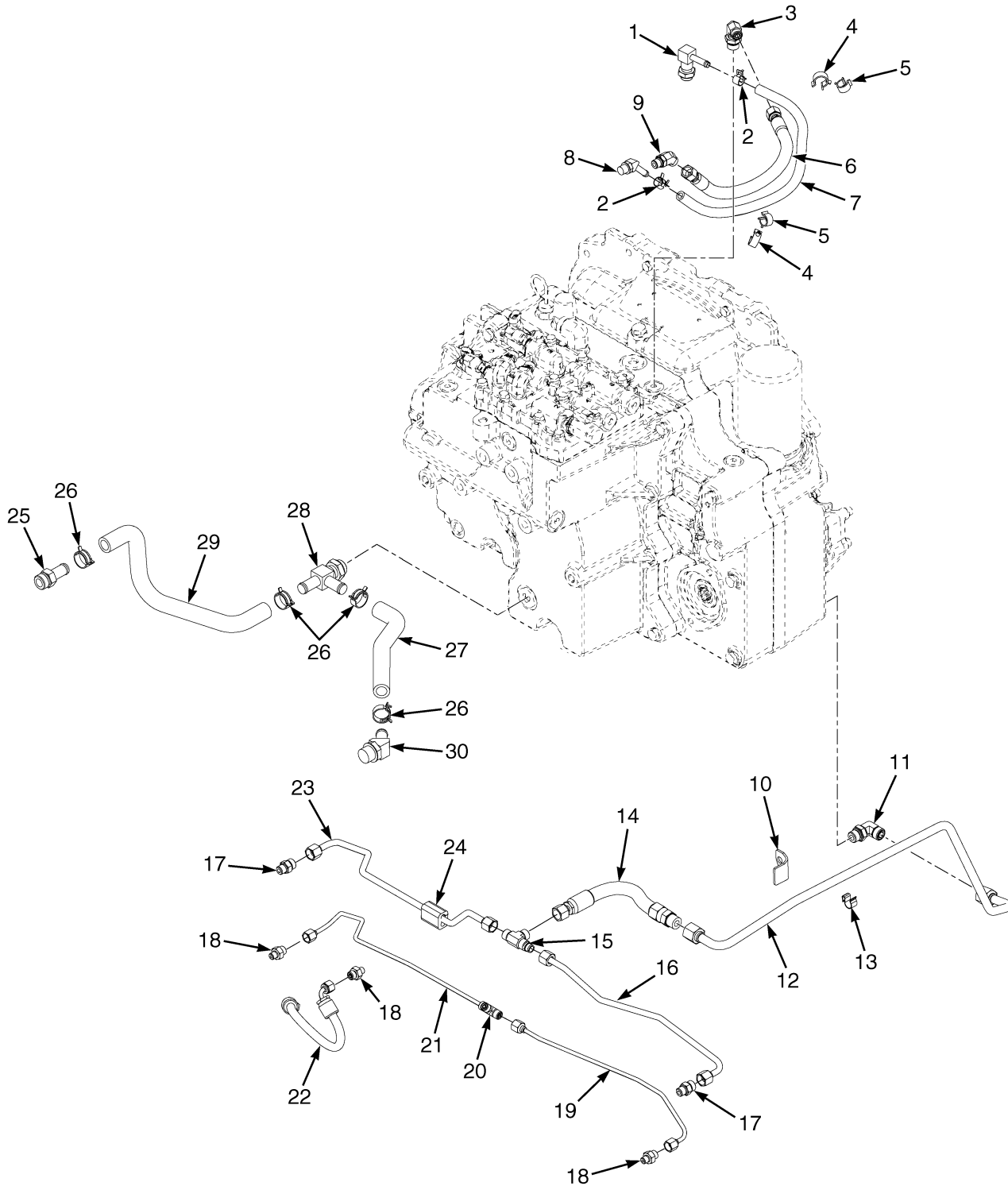
BP040077



**BRAKE COOLING SYSTEM**  
**SINGLE AND DUAL PEDAL – WET BRAKE (→ S/N P005B03574J)**

ITEM	PART NO.	DESCRIPTION	QTY
1	1640573	Fitting .....	2
2	1569616	Hose Clamp .....	2
3	1487061	Fitting .....	2
3	16484	O-Ring .....	1
3	265787	O-Ring .....	1
4	1502053	Clamp (Swivel) .....	2
5	1543698	Clamp (Swivel) .....	2
6	2091015	Hose Assy (High Temperature) .....	1
7	164289	Hose .....	1
7	112385	Hose .....	1
8	222501	Fitting .....	1
8	16483	O-Ring .....	1
9	1516199	Fitting .....	1
9	16483	O-Ring .....	1
9	265787	O-Ring .....	1
10	1582584	Bracket .....	1
11	1473897	Fitting .....	1
12	2086000	Tube (Booster Supply) .....	1
13	1582511	Clip .....	1
14	2086001	Hose Assy (Booster Supply) .....	1
15	1522425	Fitting .....	1
15	265787	O-Ring .....	3
16	2090895	Tube (Cooling Inlet) .....	1
17	1486740	Fitting .....	2
18	1486737	Fitting .....	3
19	2091149	Tube .....	1
20	1522424	Fitting .....	1
20	1527813	O-Ring .....	3
21	2091515	Tube .....	1
22	2073768	Hose Assy (Brake Actuation) .....	1
23	2090894	Tube (Cooling Inlet) .....	1
24	2091513	Block .....	1
25	17758	Fitting .....	2
25	16486	O-Ring .....	1
26	1502009	Hose Clamp .....	4
27	2090185	Hose (Right Hand Formed Axle Return) .....	1
28	1637397	Fitting .....	1
29	2090184	Hose (Left Hand Formed Axle Return) .....	1

## BRAKE COOLING SYSTEM (FIGURE 8-2) SINGLE AND DUAL PEDAL — WET BRAKE (S/N P005B03575J →)

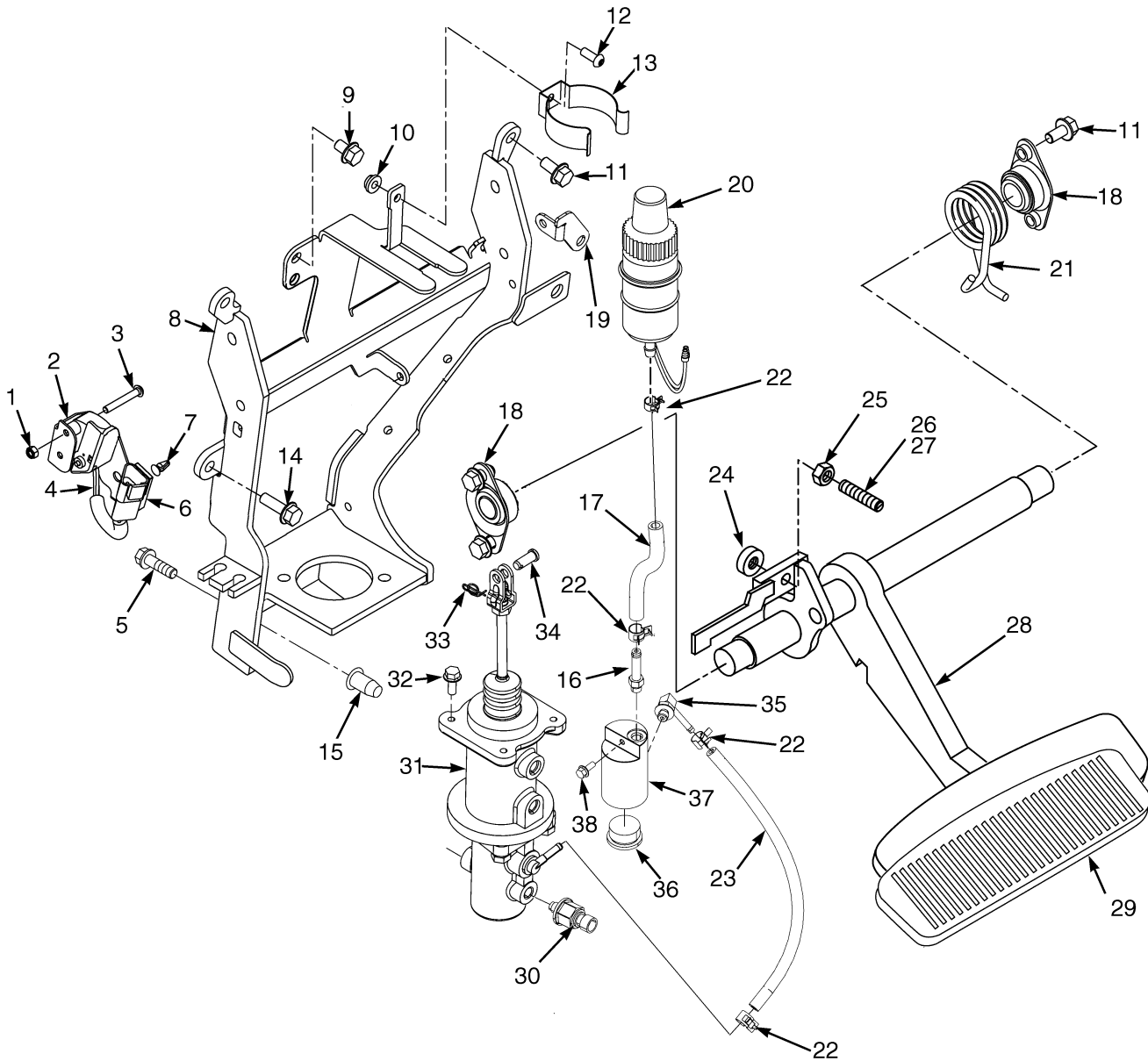


BP040169

**BRAKE COOLING SYSTEM**  
**SINGLE AND DUAL PEDAL – WET BRAKE (S/N P005B03575J →)**

ITEM	PART NO.	DESCRIPTION	QTY
1	1640573	Fitting .....	2
2	1569616	Hose Clamp .....	2
3	1487061	Fitting .....	1
4	1502053	Clamp (Swivel) .....	2
5	1543698	Clamp (Swivel) .....	2
6	2091015	Hose Assy .....	1
7	112385	Hose .....	1
8	222501	Fitting .....	1
9	1516199	Fitting .....	1
10	4003753	Bracket .....	1
11	1473897	Fitting .....	1
12	4601631	Tube Assy (Booster Supply) .....	1
13	1582511	Clip .....	1
14	4601632	Hose Assy (Booster Supply) .....	1
15	1522425	Fitting .....	1
16	2090895	Tube (Cooling Inlet) .....	1
17	1486740	Fitting .....	2
18	1486737	Fitting .....	3
19	2091149	Tube .....	1
20	1522424	Fitting .....	1
21	2091515	Tube .....	1
22	2073768	Hose Assy (Brake Actuator) .....	1
23	2090894	Tube (Cooling Inlet) .....	1
24	2091513	Block .....	1
25	17758	Fitting .....	1
26	1502009	Hose Clamp .....	4
27	2090185	Hose (Right Hand Axle Return) .....	1
28	1637397	Fitting .....	1
29	4612564	Hose (Left Hand Axle Return) .....	1
30	222505	Fitting .....	1

## BRAKE LINKAGE (FIGURE 8-3) SINGLE PEDAL — WET BRAKE (→ S/N P005B03898J)



BP040082

**BRAKE LINKAGE**  
**SINGLE PEDAL – WET BRAKE (→ S/N P005B03898J)**

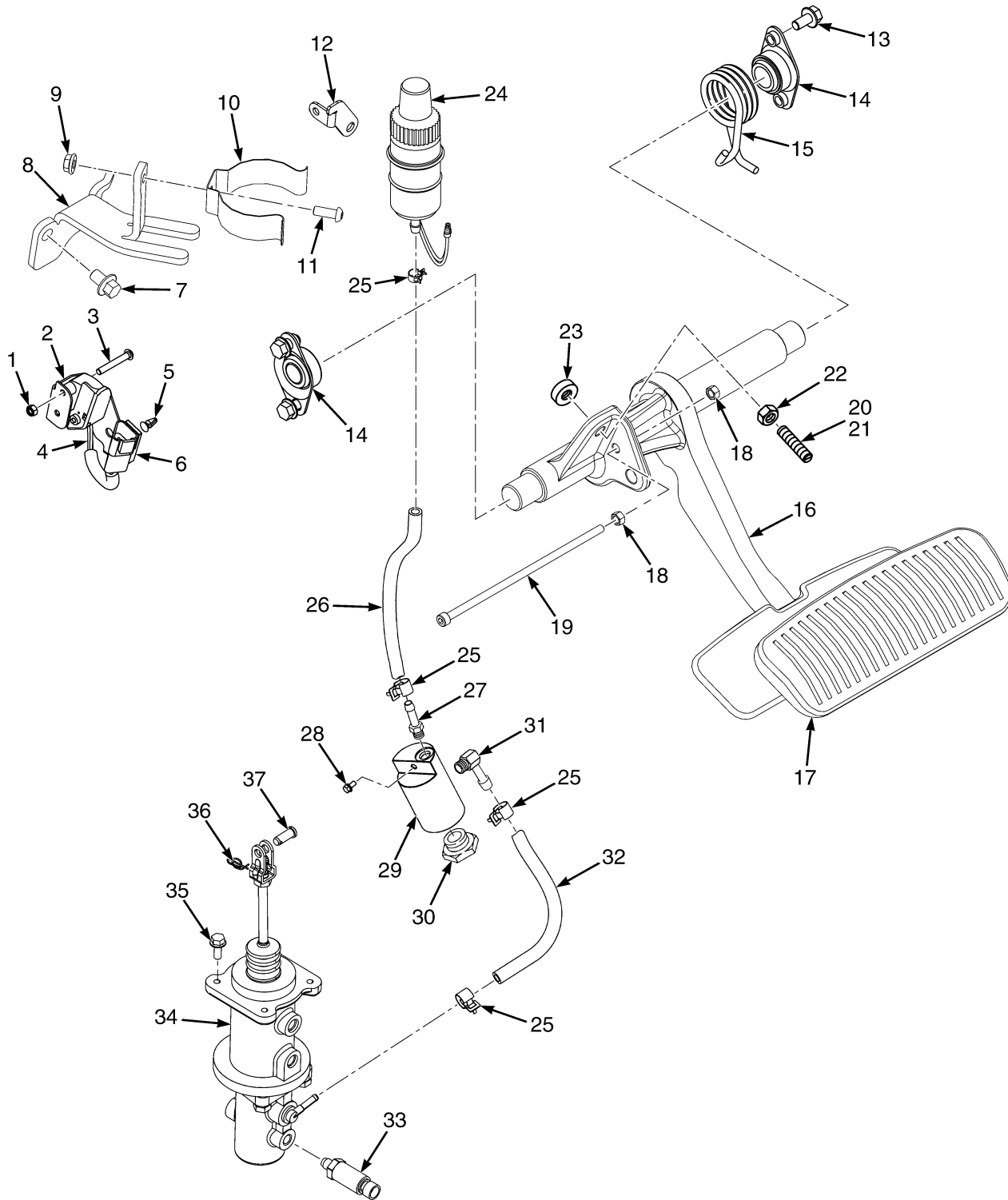
ITEM	PART NO.	DESCRIPTION	QTY
1	302398	Locknut .....	2
2	1531567	Bracket (Inching Sensor) .....	1
3	1553897	Capscrew .....	2
4	1547849	Sensor (Brake Position) .....	1
5	1586627	Capscrew .....	2
6	1500912	Clip .....	1
7	1564526	Clip (Key Hole) .....	1
8	1623904	Bracket Wldmt .....	1
9	1529366	Capscrew .....	1
10	<del>1307884</del>		
	1514429	Nut .....	1
11	1527879	Capscrew .....	6
12	1510126	Screw (Button Head) .....	1
13	2021353	Holder .....	1
14	1583611	Capscrew .....	2
15	1530243	Insert .....	2
16	222491	Fitting .....	1
16	16481	O-Ring .....	1
17	2092888	Hose .....	1
18	1585575	Bushing .....	2
19	1594950	Bracket .....	1
20	1646439	Reservoir .....	1
20	2077604	Tank .....	1
20	1645381	Diaphragm .....	1
20	1646397	Cap .....	1
21	1568075	Spring (RH) .....	1
22	166857	Clamp .....	4
22	<b>a</b> 168718	Clamp .....	4
23	117989	Hose (Brake Feed) .....	1
24	1556475	Bumper .....	1
25	239503	Nut .....	1
26	1534871	Bolt .....	1
27	2064554	Loctite .....	AR
28	1641556	Pedal .....	1
29	1570298	Rubber Pad .....	1
30	1590033	Transducer (Brake Pressure) .....	1
31	<b>b</b> 1569527	Master Cylinder (☞ Figure 8-14).....	1
31	<b>c</b> 1703607	Master Cylinder (☞ Figure 8-14).....	1
32	1527880	Capscrew .....	4
33	1351689	Locking Cotter Pin .....	1
34	1375391	Pin (Rod End) .....	1
35	222509	Fitting .....	1
35	16481	O-Ring .....	1
36	233683	Fitting .....	1
36	16487	O-Ring .....	1
37	2092613	Cylinder Block .....	1
38	1527876	Capscrew .....	1

**FOOTNOTES:**

- a** Optional
- b** → S/N P005B02096G
- c** S/N P005B02097G →



## BRAKE LINKAGE (FIGURE 8-4) SINGLE PEDAL — WET BRAKE (S/N P005B03899J →)



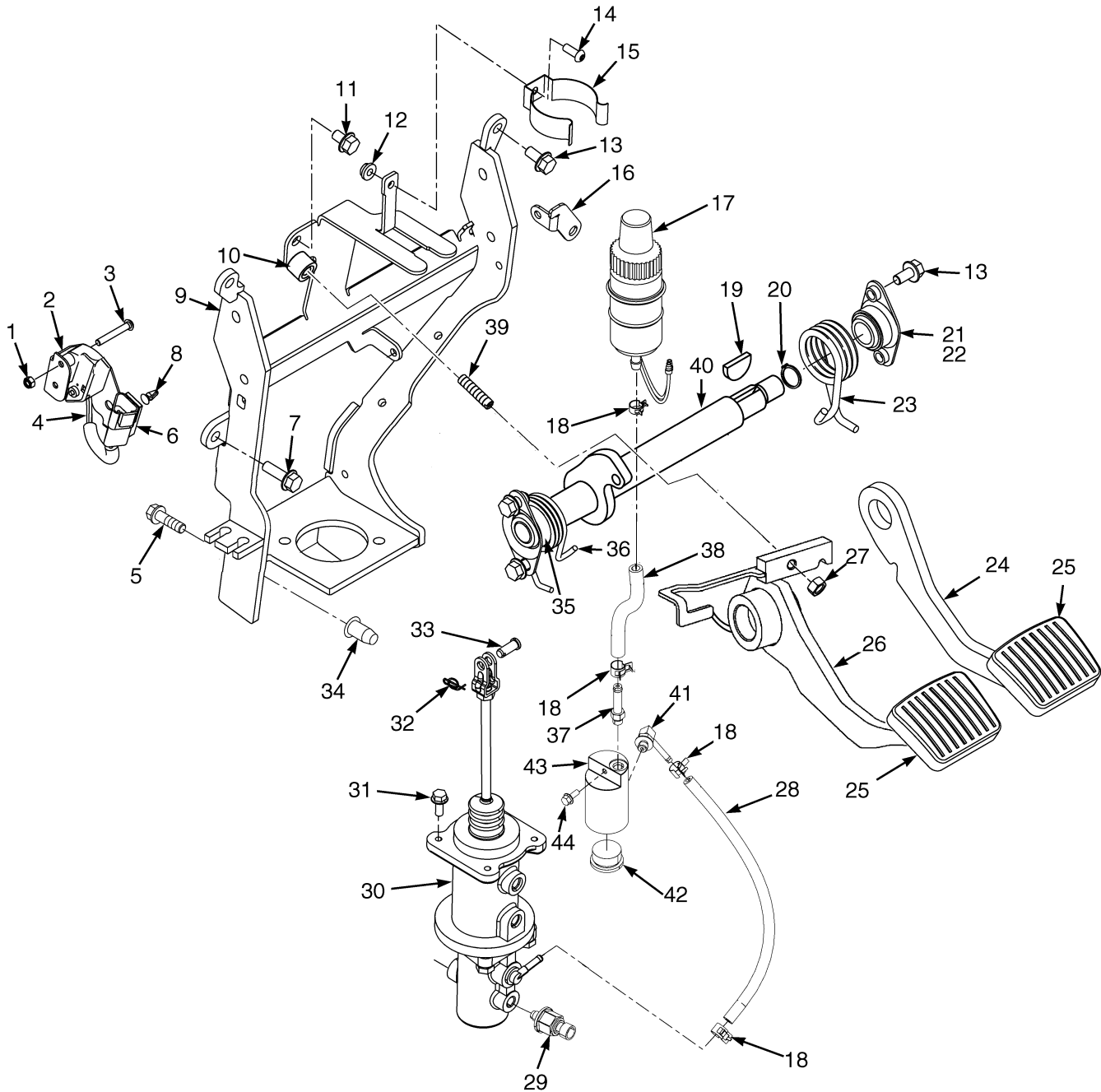
BP040165



**BRAKE LINKAGE**  
**SINGLE PEDAL – WET BRAKE (S/N P005B03899J →)**

ITEM	PART NO.	DESCRIPTION	QTY
1	302398	Locknut .....	2
2	1688503	Mount .....	1
3	1553897	Capscrew .....	2
4	1547849	Sensor (Brake Position) .....	1
5	1564526	Clip (Key Hole) .....	1
6	1500912	Clip .....	1
7	4011940	Capscrew .....	1
8	1699992	Mount .....	1
9	<del>1307884</del> 1514429	Nut .....	1
10	2021353	Holder .....	1
11	1510126	Screw (Button Head) .....	1
12	1594950	Bracket .....	1
13	1527879	Capscrew .....	4
14	1585575	Bushing .....	2
15	1568075	Spring (RH) .....	1
16	1707011	Brake Pedal .....	1
17	1570298	Rubber Pad .....	1
18	292668	Nut .....	2
19	1704902	Capscrew .....	1
20	1534871	Bolt .....	1
21	2064554	Loctite .....	AR
22	239503	Nut .....	1
23	1556475	Bumper .....	1
24	1646439	Reservoir .....	1
24	2077604	Tank .....	1
24	1645381	Diaphragm .....	1
24	1646397	Cap .....	1
25	166857	Clamp .....	4
25	168718	Clamp (Optional) .....	4
26	2092888	Hose .....	1
27	222491	Fitting .....	1
27	16481	O-Ring .....	1
28	1527876	Capscrew .....	1
29	2092613	Cylinder Block .....	1
30	233683	Fitting .....	1
30	16487	O-Ring .....	1
31	222509	Fitting .....	1
31	16481	O-Ring .....	1
32	117989	Hose .....	1
33	1590033	Transducer (Brake Pressure) .....	1
34	2110224	Master Cylinder (☞ Figure 8-14).....	1
34	1703607	Master Cylinder (☞ Figure 8-14).....	1
35	1527880	Capscrew .....	4
36	1351689	Locking Cotter Pin .....	1
37	1375391	Pin (Rod End) .....	1

## BRAKE LINKAGE (FIGURE 8-5) DUAL PEDALS — WET BRAKE (→ S/N P005B03898J)



BP040083

**BRAKE LINKAGE**  
**DUAL PEDALS – WET BRAKE (→ S/N P005B03898J)**

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	1623904	Bracket Wldmt .....	1
10	1556475	Bumper .....	1
11	1529366	Capscrew .....	1
12	<del>1307884</del> 1514429	Nut .....	1
13	1527879	Capscrew .....	6
14	1510126	Screw (Button Head) .....	1
15	2021353	Holder .....	1
16	1594950	Bracket .....	1
17	1646439	Reservoir .....	1
17	2077604	Tank .....	1
17	1646557	Diaphragm .....	1
17	1645381	Diaphragm .....	1
17	1646397	Cap .....	1
18	166857	Clamp .....	4
18	<b>a</b> 168718	Clamp .....	4
19	206	Woodruff Key .....	1
20	12929	Snap Ring .....	1
21	1585575	Bushing .....	2
22	2064554	Loctite .....	AR
23	1568076	Spring (RH) .....	1
24	1568256	Brake Pedal (RH) .....	1
25	1570300	Pad .....	2
26	1639801	Brake Pedal (LH) .....	1
27	239503	Nut .....	1
28	117989	Hose (Brake Feed) .....	1
29	1590033	Transducer (Brake Pressure) .....	1
30	<b>b</b> 1569527	Master Cylinder (☞ Figure 8-14).....	1
30	<b>c</b> 1703607	Master Cylinder (☞ Figure 8-14).....	1
31	1527880	Capscrew .....	4
32	1351689	Locking Cotter Pin .....	1
33	1375391	Pin (Rod End) .....	1
34	1530243	Insert .....	2
35	244540	Bushing .....	2
36	1568077	Spring (LH) .....	1
37	222491	Fitting .....	1
37	16481	O-Ring .....	1
38	2092888	Hose .....	1
39	1534871	Bolt .....	1
40	1578922	Crank .....	1
41	222509	Fitting .....	1
41	16481	O-Ring .....	1

## BRAKE LINKAGE DUAL PEDALS – WET BRAKE (→ S/N P005B03898J)

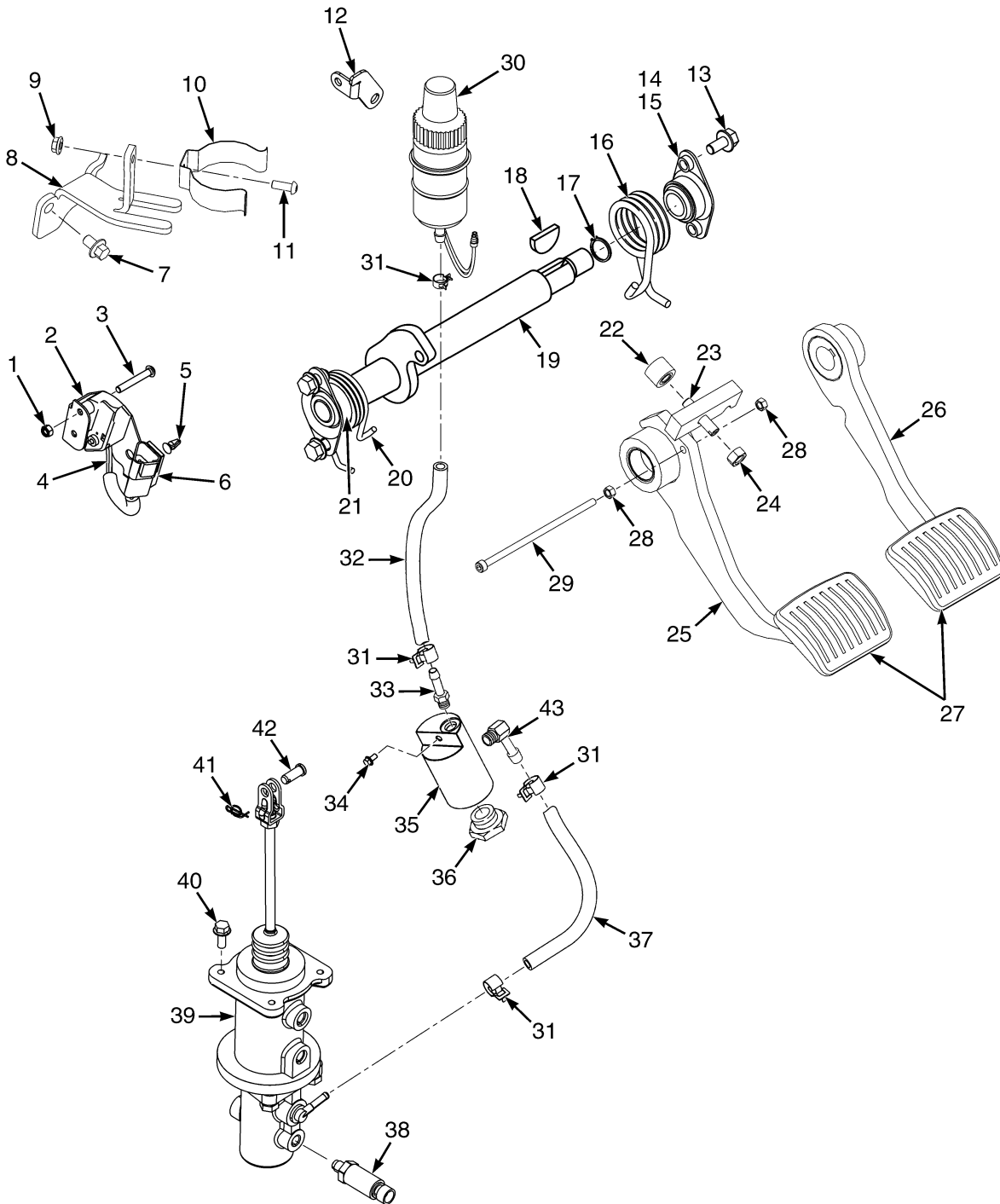
ITEM	PART NO.	DESCRIPTION	QTY
42	233683	Fitting .....	1
42	16487	O-Ring .....	1
43	2092613	Cylinder Block .....	1
44	1527876	Capscrew .....	1

### FOOTNOTES:

- a** Optional **c** → S/N P005B02097G  
**b** → S/N P005B02096G



## BRAKE LINKAGE (FIGURE 8-6) DUAL PEDAL — WET BRAKE (S/N P005B03899J →)

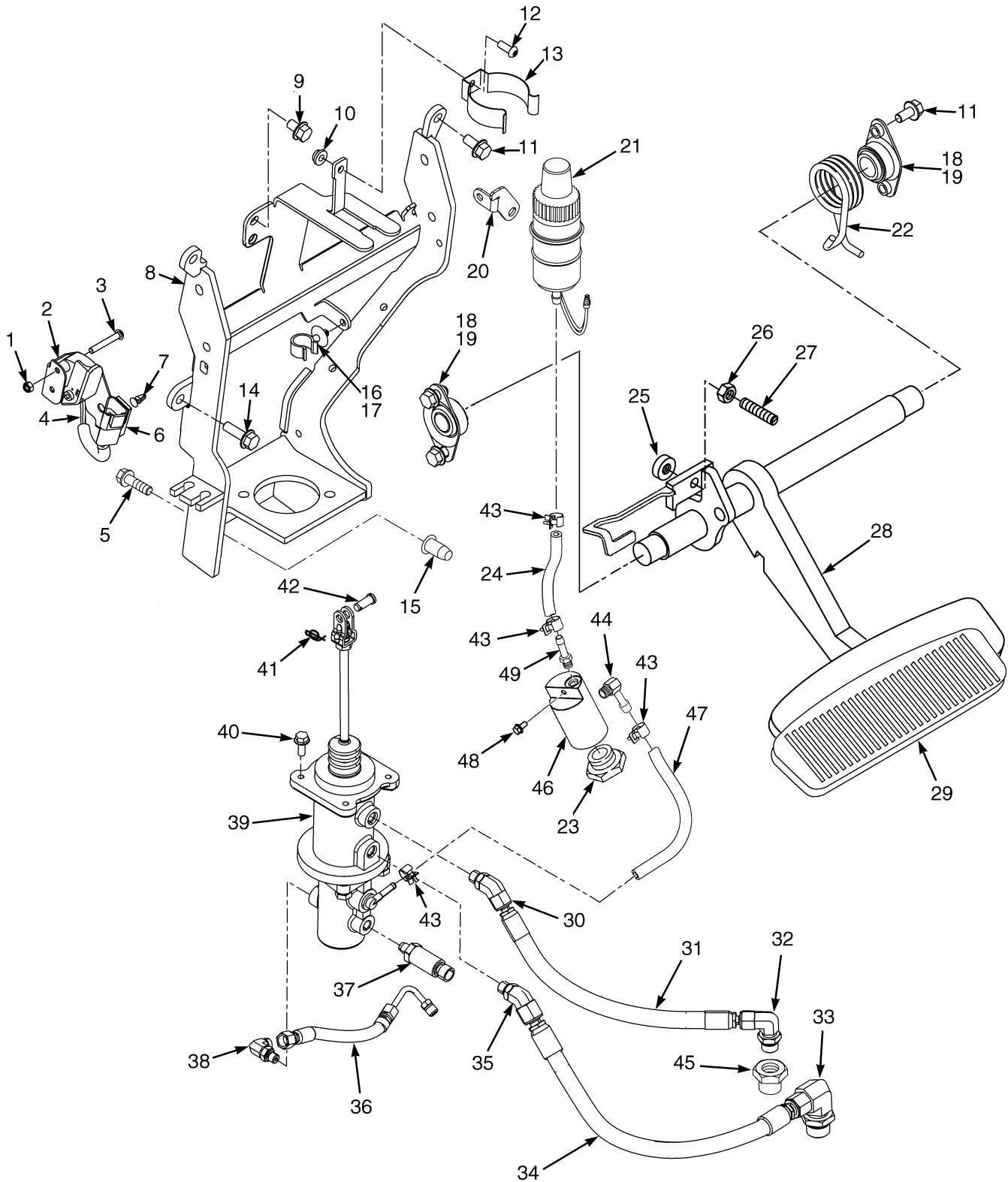


BP040166

**BRAKE LINKAGE**  
**DUAL PEDAL – WET BRAKE (S/N P005B03899J →)**

ITEM	PART NO.	DESCRIPTION	QTY
1	302398	Locknut .....	2
2	1688503	Mount .....	1
3	1553897	Capscrew .....	2
4	1547849	Sensor (Brake Position) .....	1
5	1564526	Clip (Key Hole) .....	1
6	1500912	Clip .....	1
7	4011940	Capscrew .....	1
8	1699992	Mount .....	1
9	<del>1307884</del> 1514429	Nut .....	1
10	2021353	Holder .....	1
11	1510126	Screw (Button Head) .....	1
12	1594950	Bracket .....	1
13	1527879	Capscrew .....	4
14	1585575	Bushing .....	2
15	2064554	Loctite .....	AR
16	1568076	Spring (RH) .....	1
17	12929	Snap Ring .....	1
18	206	Woodruff Key .....	2
19	1578922	Crank .....	1
20	1568077	Spring (LH) .....	1
21	244540	Bushing .....	2
22	1556475	Bumper .....	1
23	1534871	Bolt .....	1
24	239503	Nut .....	1
25	1701771	Inching Pedal (Left Hand) .....	1
26	1568256	Brake Pedal (RH) .....	1
27	1570300	Pad .....	1
28	292668	Nut .....	2
29	1704901	Capscrew .....	1
30	1646439	Reservoir .....	1
31	166857	Clamp .....	4
31	168718	Clamp (Optional) .....	4
32	2092888	Hose .....	1
33	222491	Fitting .....	1
33	16481	O-Ring .....	1
34	1527876	Capscrew .....	1
35	2092613	Cylinder Block .....	1
36	233683	Fitting .....	1
36	16487	O-Ring .....	1
37	117989	Hose .....	1
38	1590033	Transducer (Brake Pressure) .....	1
39	2110224	Master Cylinder (☞ Figure 8-14).....	1
39	1703607	Master Cylinder .....	1
40	1527880	Capscrew .....	4
41	1351689	Locking Cotter Pin .....	1
42	1375391	Pin (Rod End) .....	1
43	222509	Fitting .....	1
43	16481	O-Ring .....	1

## BRAKE LINKAGE (FIGURE 8-7) SINGLE PEDAL — DRY BRAKE (→ S/N P005B03936J)



BP040053



**BRAKE LINKAGE**  
**SINGLE PEDAL – DRY BRAKE (→ S/N P005B03936J)**

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	1623904	Bracket Wldmt .....	1
9	1529366	Capscrew .....	1
10	<del>1307884</del>		
	1514429	Nut .....	1
11	1527879	Capscrew .....	2
12	1510126	Screw (Button Head) .....	1
13	2021353	Holder .....	1
14	1510113	Capscrew .....	2
15	1530243	Insert .....	2
16	1543698	Clamp (Swivel) .....	2
17	1543842	Clamp .....	1
18	1585575	Bushing .....	2
19	2064554	Loctite .....	AR
20	1594950	Bracket .....	1
21	1646439	Reservoir .....	1
21	1645381	Diaphragm .....	1
21	1646397	Cap .....	1
22	1568075	Spring (RH) .....	1
23	233683	Fitting .....	1
24	2092888	Hose (Upper Brake Feed) .....	1
25	1556475	Bumper .....	1
26	239503	Nut .....	1
27	1534871	Bolt .....	1
28	1641557	Pedal (H4.0FT5, H4.0FT6) .....	1
28	1641555	Pedal (H4.5FTS5, H4.5FT6, H5.0FT, H5.5FT) .....	1
29	1570298	Rubber Pad .....	1
30	1516199	Fitting .....	1
30	265787	O-Ring .....	1
30	16483	O-Ring .....	1
31	2091015	Hose Assy .....	1
32	1487061	Fitting .....	1
32	16484	O-Ring .....	1
32	265787	O-Ring .....	1
33	1487066	Fitting .....	1
33	265731	O-Ring .....	1
33	16486	O-Ring .....	1
34	112385	Hose .....	1
35	222501	Fitting .....	1
35	16483	O-Ring .....	1
36	2074167	Hose Assy (Brake) .....	1
37	1590033	Transducer (Brake Pressure) .....	1
38	1487058	Fitting .....	1
38	1527813	O-Ring .....	1

**BRAKE LINKAGE**  
**SINGLE PEDAL – DRY BRAKE (→ S/N P005B03936J)**

ITEM	PART NO.	DESCRIPTION	QTY
38	16481	O-Ring .....	1
39	<b>c</b> 2096079	Master Cylinder (☞ Figure 8-14).....	1
39	<b>d</b> 2110224	Master Cylinder (☞ Figure 8-14).....	1
40	1527880	Capscrew .....	2
41	1351689	Locking Cotter Pin .....	1
42	1375391	Pin (Rod End) .....	1
43	166857	Clamp .....	4
43	<b>b</b> 168718	Clamp .....	4
44	222509	Fitting .....	1
44	16481	O-Ring .....	1
45	77186	Fitting .....	1
45	16487	O-Ring .....	1
46	2092613	Cylinder Block .....	1
47	117989	Hose .....	1
48	1527876	Capscrew .....	1
49	222491	Fitting .....	1
49	16481	O-Ring .....	1
	<b>a</b> 2093224	Label (Brake Fluid Warning) .....	1
	<b>a</b> 114312	Strap Clamp .....	1

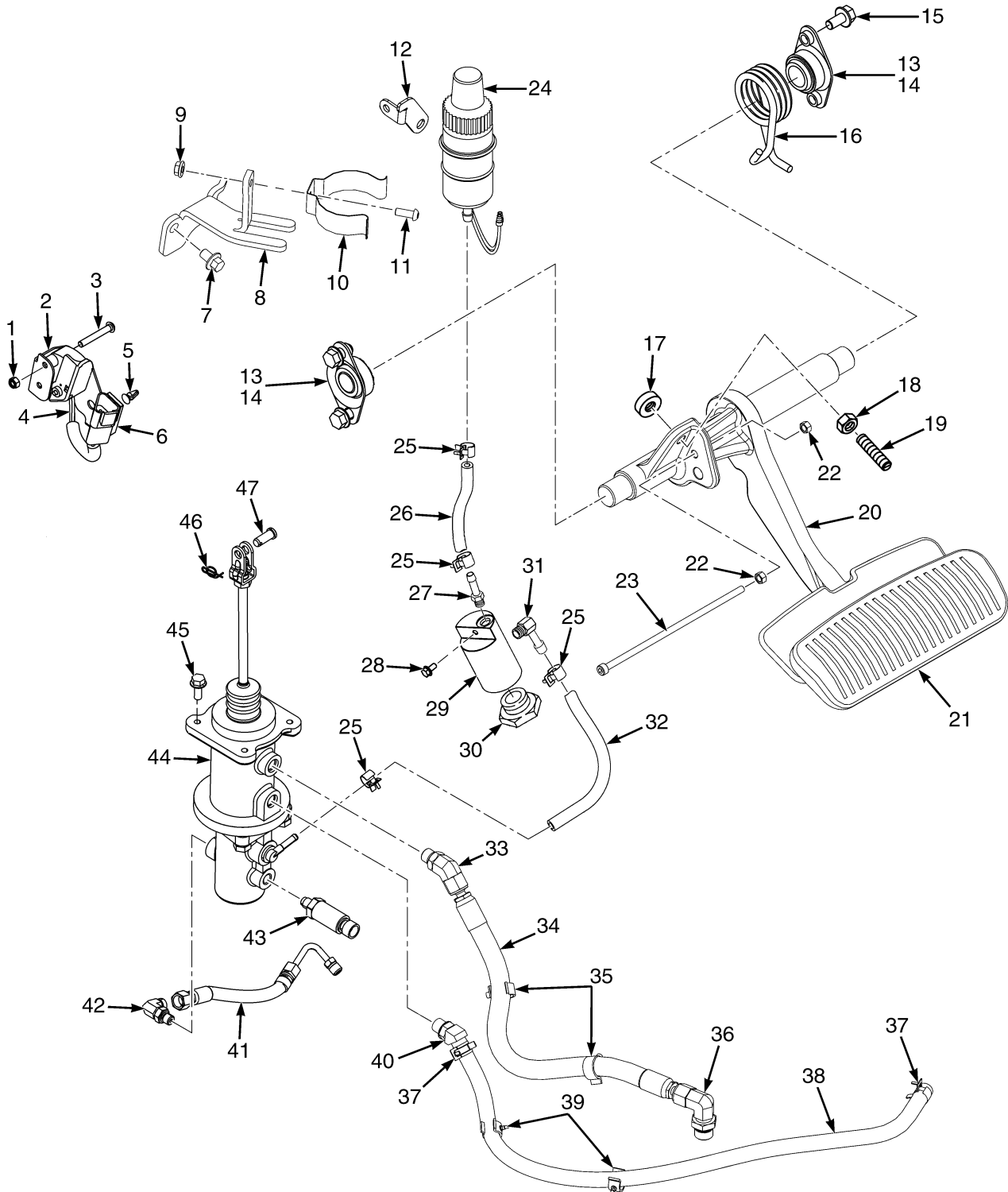
**FOOTNOTES:**

**a** Not Illustrated  
**b** Optional

**c** → S/N P005B02341G  
**d** S/N P005B02342G →



## BRAKE LINKAGE (FIGURE 8-8) SINGLE PEDAL — DRY BRAKE (S/N P005B03937J →)



BP040163

**BRAKE LINKAGE**  
**SINGLE PEDAL – DRY BRAKE (S/N P005B03937J →)**

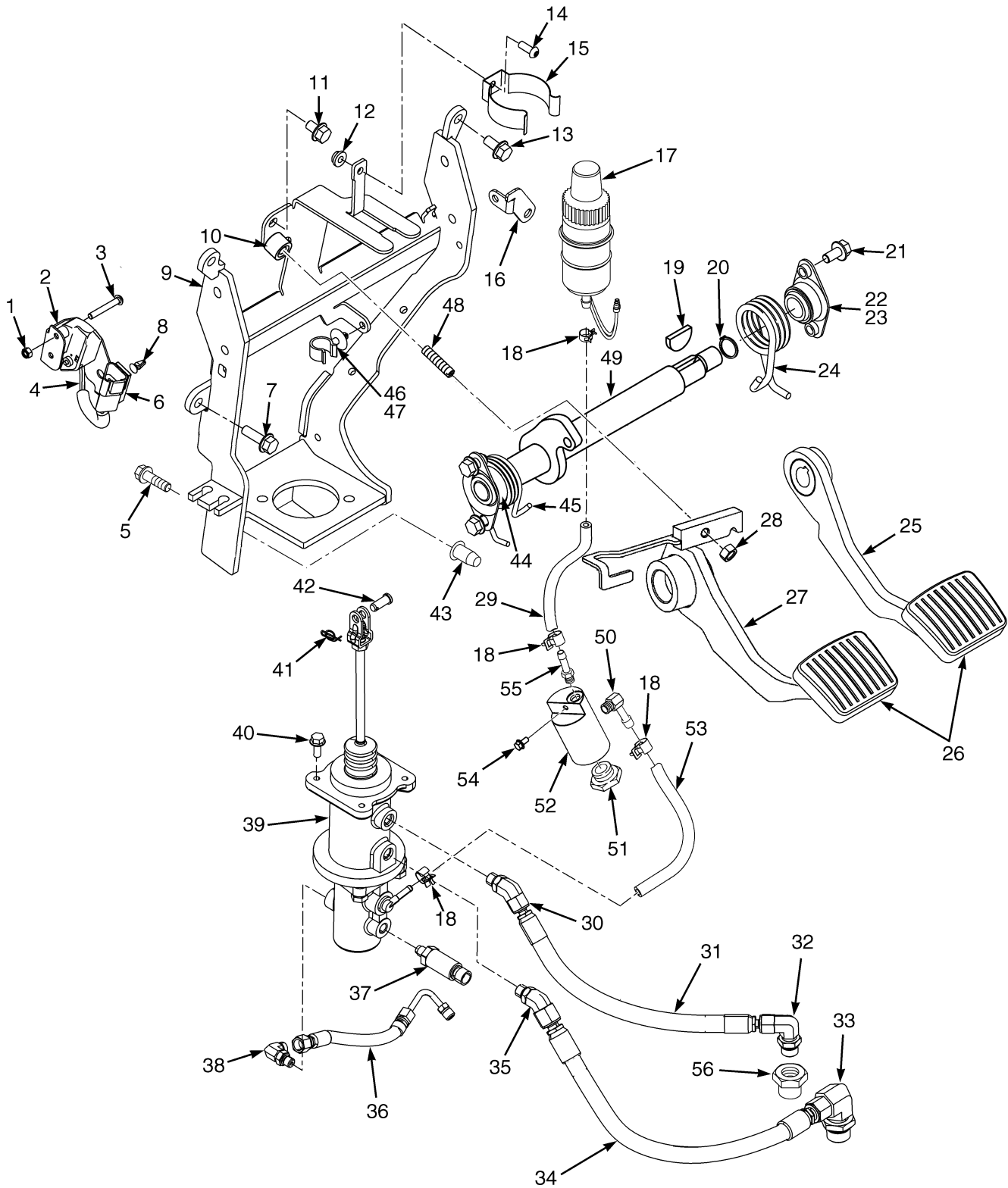
ITEM	PART NO.	DESCRIPTION	QTY
1	302398	Locknut .....	2
2	1688503	Mount .....	1
3	1553897	Capscrew .....	2
4	1547849	Sensor (Brake Position) .....	1
5	1564526	Clip (Key Hole) .....	1
6	1500912	Clip .....	1
7	4011940	Capscrew .....	1
8	1699992	Mount .....	1
9	<del>1307884</del>		
	1514429	Nut .....	1
10	2021353	Holder .....	1
11	1510126	Screw (Button Head) .....	1
12	1594950	Bracket .....	1
13	1585575	Bushing .....	2
14	2064554	Loctite .....	AR
15	1527879	Capscrew .....	4
16	1568075	Spring (RH) .....	1
17	1556475	Bumper .....	1
18	239503	Nut .....	1
19	1534871	Bolt .....	1
20	1707007	Brake Pedal .....	1
21	1570298	Rubber Pad .....	1
22	292668	Nut .....	2
23	1704902	Capscrew .....	1
24	1646439	Reservoir .....	1
24	2077604	Tank .....	1
24	1645381	Diaphragm .....	1
24	1646397	Cap .....	1
25	168718	Clamp .....	4
25	166857	Clamp (Optional) .....	4
26	2092888	Hose .....	1
27	222491	Fitting .....	1
27	16481	O-Ring .....	1
28	1527876	Capscrew .....	1
29	2092613	Cylinder Block .....	1
30	233683	Fitting .....	1
30	16487	O-Ring .....	1
31	222509	Fitting .....	1
31	16481	O-Ring .....	1
32	117989	Hose .....	1
33	1516199	Fitting .....	1
34	2091015	Hose Assy .....	1
35	1502053	Clamp (Swivel) .....	2
36	1487061	Fitting .....	1
37	1569616	Hose Clamp .....	2
38	112385	Hose .....	1
39	1543698	Clamp (Swivel) .....	2
40	222501	Fitting .....	1
40	16483	O-Ring .....	1
41	2074167	Hose Assy .....	1

**BRAKE LINKAGE**  
**SINGLE PEDAL – DRY BRAKE (S/N P005B03937J →)**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
42	1487058	Fitting .....	1
43	1590033	Transducer (Brake Pressure) .....	1
44	2110224	Master Cylinder (☞ Figure 8-14).....	1
45	1527880	Capscrew .....	4
46	1351689	Locking Cotter Pin .....	1
47	1375391	Pin (Rod End) .....	1



## BRAKE LINKAGE (FIGURE 8-9) DUAL PEDAL — DRY BRAKE (→ S/N P005B03936J)



BP040054



**BRAKE LINKAGE**  
**DUAL PEDAL – DRY BRAKE (→ S/N P005B03936J)**

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	1510113	Capscrew .....	2
8	1564526	Clip (Key Hole) (Key Hole) .....	1
9	1623904	Bracket Wldmt .....	1
10	1556475	Bumper .....	1
11	1529366	Capscrew .....	1
12	<del>1307884</del> 1514429	Nut .....	1
13	1527879	Capscrew .....	6
14	1510126	Screw (Button Head) .....	1
15	2021353	Holder .....	1
16	1594950	Bracket .....	1
17	1646439	Reservoir .....	1
17	2077604	Tank .....	1
17	1645381	Diaphragm .....	1
17	1646397	Cap .....	1
18	166857	Clamp .....	4
18	<b>b</b> 168718	Clamp .....	4
19	206	Woodruff Key .....	1
20	12929	Snap Ring .....	1
21	2073192	Hose Assy (Brake) .....	1
22	1585575	Bushing .....	2
23	2064554	Loctite .....	AR
24	1568076	Spring (RH) .....	1
25	1568256	Brake Pedal (RH) .....	1
26	1570300	Pad .....	2
27	1639801	Brake Pedal (LH) .....	1
28	239503	Nut .....	1
29	2092888	Hose (Upper Brake Feed) .....	1
30	1516199	Fitting .....	1
30	265787	O-Ring .....	1
30	16483	O-Ring .....	1
31	2091015	Hose Assy .....	1
32	1487061	Fitting .....	1
32	16484	O-Ring .....	1
32	265787	O-Ring .....	1
33	1487066	Fitting .....	1
33	16486	O-Ring .....	1
33	265731	O-Ring .....	1
34	112385	Hose .....	1
35	222501	Fitting .....	1
35	16483	O-Ring .....	1
36	2074167	Hose Assy .....	1
37	1590033	Transducer (Brake Pressure) .....	1
38	1487058	Fitting .....	1

## BRAKE LINKAGE DUAL PEDAL – DRY BRAKE (→ S/N P005B03936J)

ITEM	PART NO.	DESCRIPTION	QTY
38	1527813	O-Ring .....	1
38	16481	O-Ring .....	1
39	<b>c</b> 2096079	Master Cylinder (☞ Figure 8-14).....	1
39	<b>d</b> 2110224	Master Cylinder (☞ Figure 8-14).....	1
40	1527880	Capscrew .....	2
41	1351689	Locking Cotter Pin .....	1
42	1375391	Pin (Rod End) .....	1
43	1530243	Insert .....	2
44	244540	Bushing .....	2
45	1568077	Spring (LH) .....	1
46	1543842	Clamp .....	1
47	1543698	Clamp (Swivel) .....	1
48	1534871	Bolt .....	1
49	1568253	Crank (H4.5FTS5, H4.5FT6, H5.0FT, H5.5FT) .....	1
49	1581193	Crank (H4.0FT5, H4.0FT6) .....	1
50	222509	Fitting .....	1
50	16481	O-Ring .....	1
51	233683	Fitting .....	1
51	16487	O-Ring .....	1
52	2092613	Cylinder Block .....	1
53	117989	Hose .....	1
54	1527876	Capscrew .....	1
55	222491	Fitting .....	1
55	16481	O-Ring .....	1
	<b>a</b> 2093224	Label (Brake Fluid Warning) .....	1
	<b>a</b> 114312	Strap Clamp .....	1

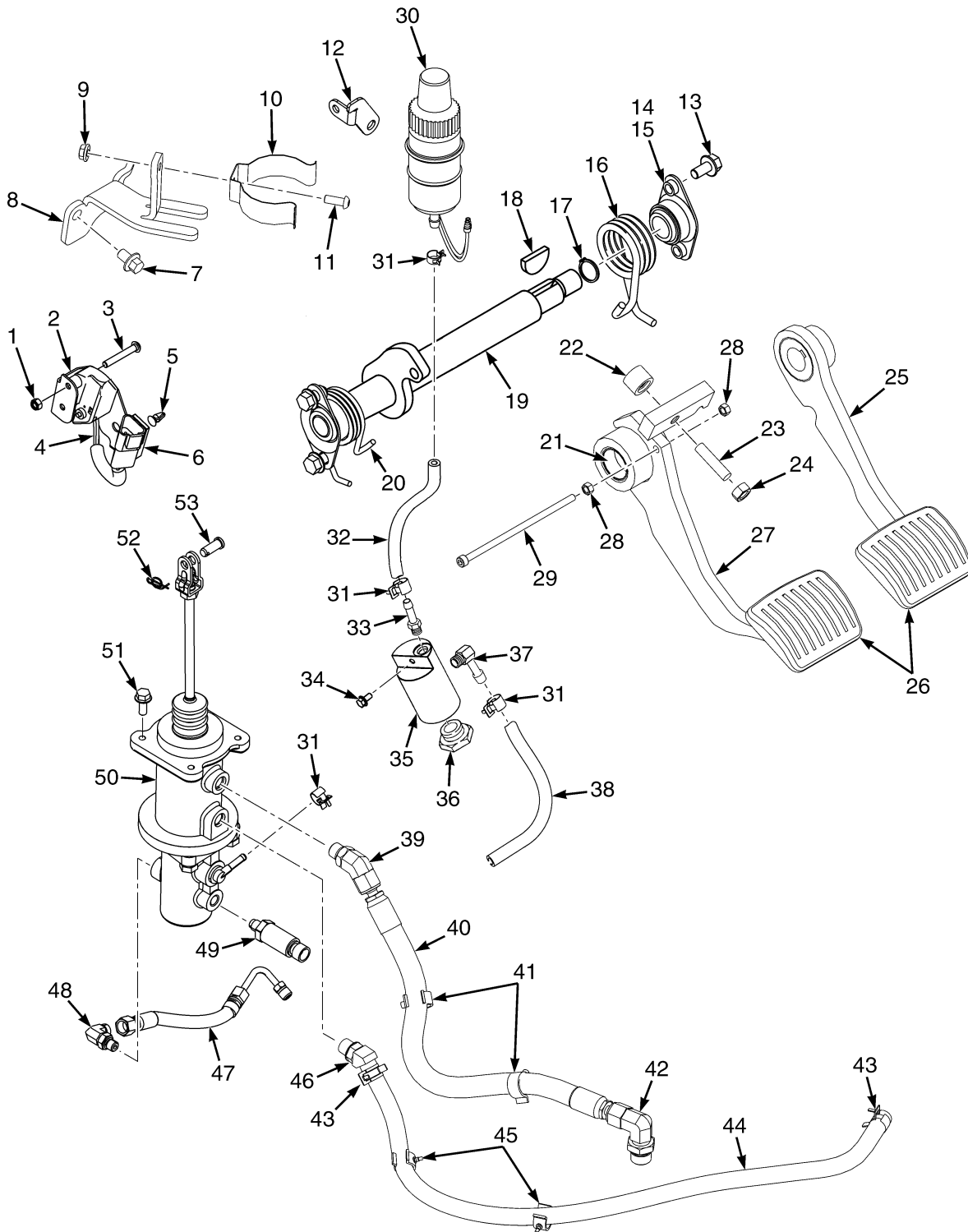
**FOOTNOTES:**

**a** Not Illustrated  
**b** Optional

**c** → S/N P005B02341G  
**d** S/N P005B02342G →



## BRAKE LINKAGE (FIGURE 8-10) DUAL PEDAL — DRY BRAKE (S/N P005B03937J →)



BP040164

**BRAKE LINKAGE**  
**DUAL PEDAL – DRY BRAKE (S/N P005B03937J →)**

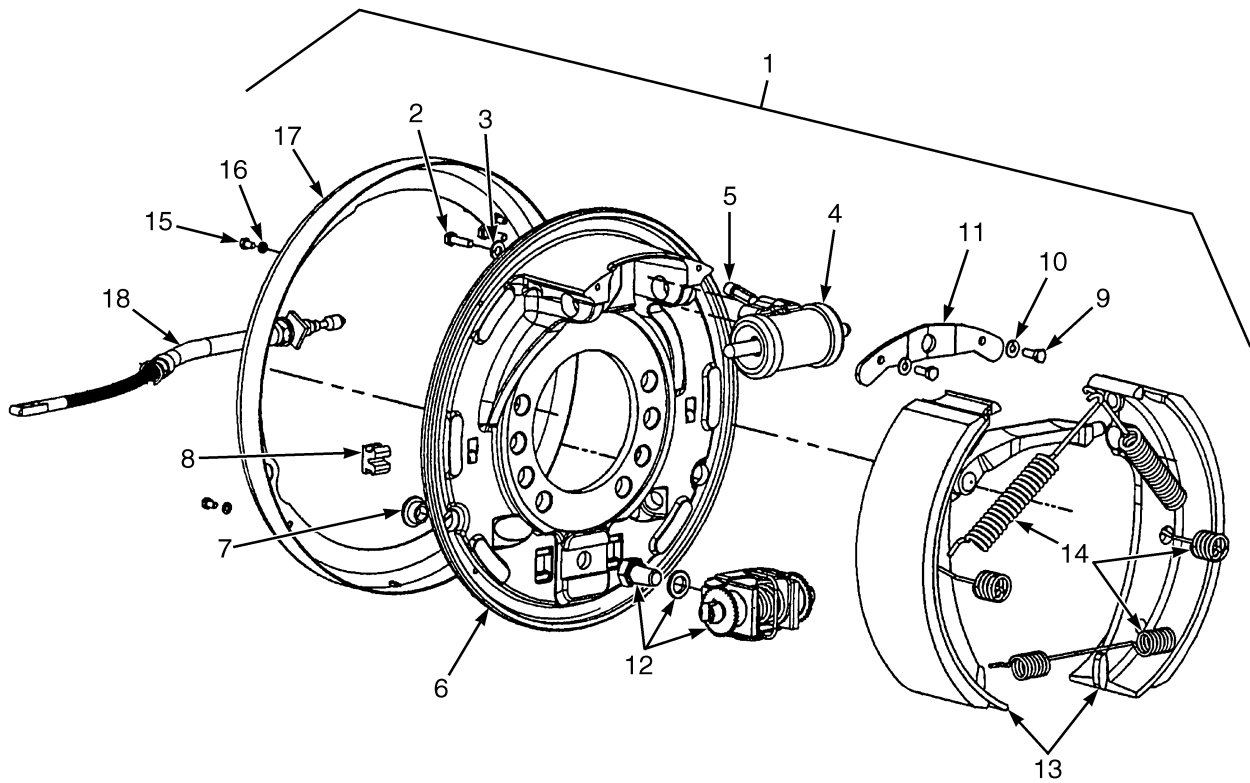
ITEM	PART NO.	DESCRIPTION	QTY
1	302398	Locknut .....	2
2	1688503	Mount .....	1
3	1553897	Capscrew .....	2
4	1547849	Sensor (Brake Position) .....	1
5	1564526	Clip (Key Hole) .....	1
6	1500912	Clip .....	1
7	4011940	Capscrew .....	1
8	1699992	Mount .....	1
9	<del>1307884</del> 1514429	Nut .....	1
10	2021353	Holder .....	1
11	1510126	Screw (Button Head) .....	1
12	1594950	Bracket .....	1
13	1527879	Capscrew .....	4
14	1585575	Bushing .....	2
15	2064554	Loctite .....	AR
16	1568076	Spring (RH) .....	1
17	12929	Snap Ring .....	1
18	206	Woodruff Key .....	1
19	1581193	Crank .....	1
20	1568077	Spring (LH) .....	1
21	244540	Bushing .....	2
22	1556475	Bumper .....	1
23	1534871	Bolt .....	1
24	239503	Nut .....	1
25	1568256	Brake Pedal (RH) .....	1
26	1570300	Pad .....	2
27	1701771	Inching Pedal (Left Hand) .....	1
28	292668	Nut .....	2
29	1704901	Capscrew .....	1
30	1646439	Reservoir .....	1
31	166857	Clamp .....	4
31	168718	Clamp (Optional) .....	4
32	2092888	Hose .....	1
33	222491	Fitting .....	1
33	16481	O-Ring .....	1
34	1527876	Capscrew .....	1
35	2092613	Cylinder Block .....	1
36	233683	Fitting .....	1
36	16487	O-Ring .....	1
37	222509	Fitting .....	1
37	16481	O-Ring .....	1
38	117989	Hose .....	1
39	1516199	Fitting .....	1
40	2091015	Hose Assy .....	1
41	1502053	Clamp (Swivel) .....	1
42	1487061	Fitting .....	1
43	1569616	Hose Clamp .....	2
44	112385	Hose .....	1
45	1543698	Clamp (Swivel) .....	2

**BRAKE LINKAGE**  
**DUAL PEDAL – DRY BRAKE (S/N P005B03937J →)**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
46	222501	Fitting .....	1
46	16483	O-Ring .....	1
47	2074167	Hose Assy .....	1
48	1487058	Fitting .....	1
49	1590033	Transducer (Brake Pressure) .....	1
50	2110224	Master Cylinder .....	1
51	1527880	Capscrew .....	4
52	1351689	Locking Cotter Pin .....	1
53	1375391	Pin (Rod End) .....	1



## BRAKE ASSEMBLY (FIGURE 8-11) DRY BRAKE



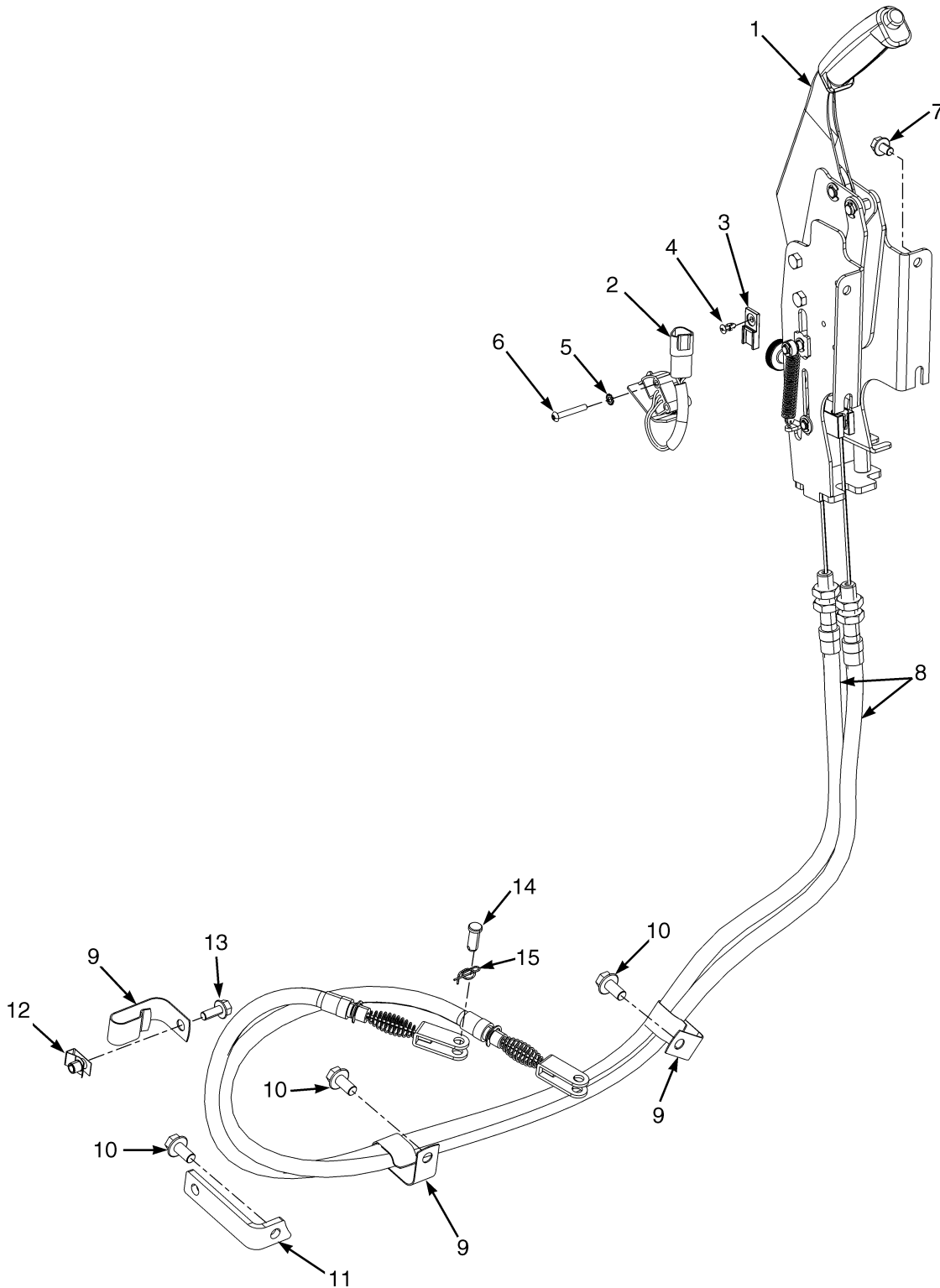
BP040072



**BRAKE ASSEMBLY  
DRY BRAKE****KEY:****A: Left Hand****B: Right Hand**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1688566	Brake Assembly (LH) .....	1	..
	1688567	Brake Assembly (RH) .....	..	1
1	1688570	Brake Assembly (LH, without cable) .....	1	..
1	1688571	Brake Assembly (RH, without cable) .....	..	1
2	1627168	Bolt .....	2	2
3	1627167	Spring Washer .....	2	2
4	1627118	Wheel Cylinder .....	1	1
5	.....	Bleeder Valve .....	1	1
6	1627126	Backplate (LH) .....	1	..
6	1627127	Backplate (RH) .....	..	1
7	1627163	Hole plug .....	2	2
8	1627164	Hole plug .....	2	2
9	1627149	Bolt .....	2	2
10	292680	Washer .....	2	2
11	.....	Retainer .....	1	1
12	1643380	Kit-Adjuster .....	1	1
12	.....	Adjuster .....	1	1
12	.....	Bolt .....	1	1
12	.....	Washer .....	2	2
13	1643388	Kit-Brake Shoe (RH) .....	..	1
13	1643387	Kit-Brake Shoe (LH) .....	1	..
14	1688572	Kit-Spring .....	1	1
14	.....	Spring .....	1	1
14	.....	Tension Spring .....	1	1
14	.....	Spring .....	1	1
15	.....	Bolt .....	2	2
16	.....	Spring Washer .....	2	2
17	.....	Dust Shield .....	1	1
18	1688555	Parking Brake Cable .....	1	..
18	1688556	Parking Brake Cable .....	..	1

## PARK BRAKE ASSEMBLY (FIGURE 8-12) (→ S/N P005B04204K)



BP040076

**PARK BRAKE ASSEMBLY**

(→ S/N P005B04204K)

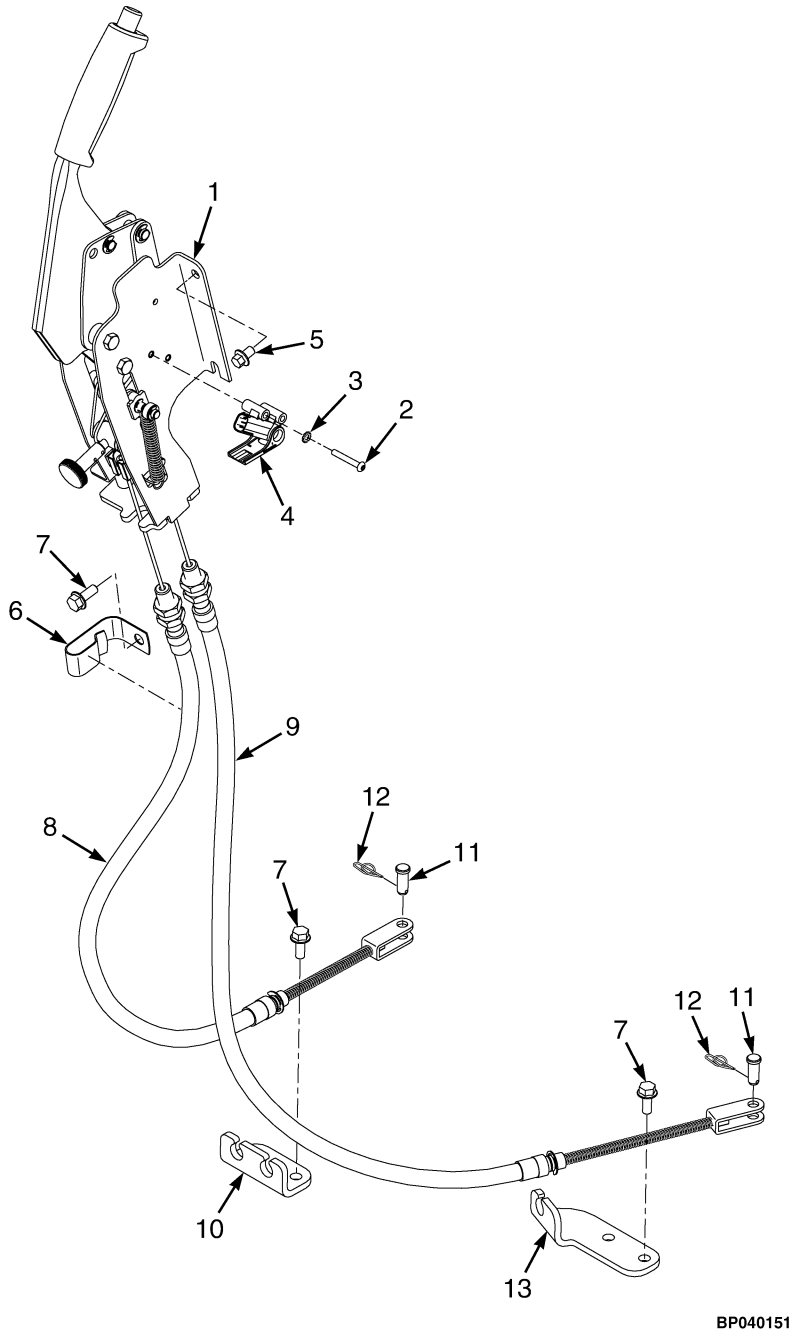
**KEY:****A: With Cab****B: With Overhead Guard**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1654319	Parking Brake Assy (Cab) .....	1	..
	1654321	Parking Brake Assy .....	..	1
1	1654320	Parking Brake Lever (Cab) .....	1	..
1	1654322	Parking Brake Lever Assy .....	..	1
1	1583915	Grip .....	1	1
2	1547849	Sensor (Brake Position) .....	1	1
3	1500912	Clip .....	1	1
4	1564526	Clip (Key Hole) .....	1	1
5	296378	Washer .....	2	2
6	1553897	Capscrew .....	2	2
7	1529366	Capscrew .....	4	4
8	<b>a</b> 2092505	Parking Brake Cable (LH) .....	1	1
8	<b>a</b> 2092506	Parking Brake Cable (RH) .....	1	1
9	<b>a</b> 1326653	Clamp .....	3	3
10	<b>a</b> 1527883	Capscrew .....	3	3
11	<b>a</b> 1637399	Bracket .....	1	1
12	<b>a</b> 203230	Clamp .....	1	1
13	<b>a</b> 1527880	Capscrew .....	2	2
14	<b>a</b> 1375391	Pin (Rod End) .....	2	2
15	<b>a</b> 1530010	Lockring .....	2	2

**FOOTNOTES:**

- a** Used with Wet Brake System, for dry brakes see Dry Brake Assembly

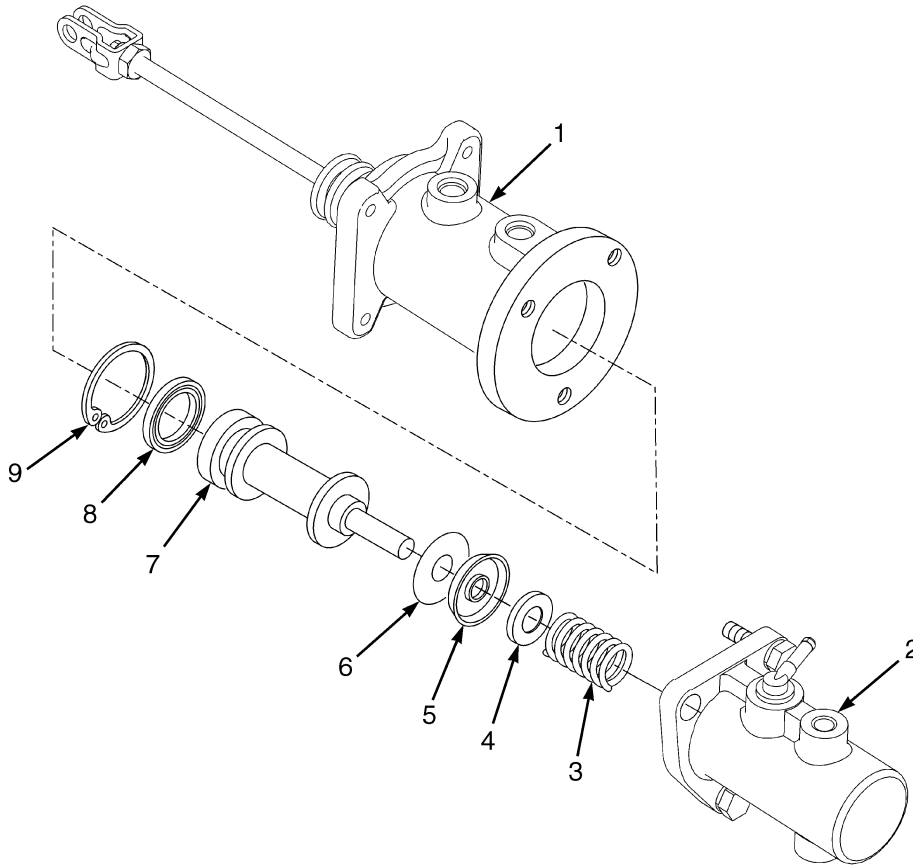
## PARK BRAKE ASSEMBLY (FIGURE 8-13) (S/N P005B04205K →)



**PARK BRAKE ASSEMBLY**  
(S/N P005B04205K →)**KEY:****A: Wet Brake****B: Dry Brake**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4039377	Parking Brake Assembly .....	1	1
1	4039370	Parking Brake Lever .....	1	1
2	1701768	Screw .....	2	2
3	296378	Washer .....	2	2
4	1683486	Sensor (Brake Position) .....	1	1
5	4011940	Capscrew .....	4	4
6	1637398	Clip .....	1	..
7	1527880	Capscrew .....	5	..
8	4609849	Parking Brake Cable (LH) .....	1	..
8	1688555	Parking Brake Cable (LH) .....	..	1
9	4609848	Parking Brake Cable (RH) .....	1	..
9	1688556	Parking Brake Cable (RH) .....	..	1
10	1600923	Bracket .....	1	..
11	1375391	Pin (Rod End) .....	2	2
12	1351689	Locking Cotter Pin .....	2	2
13	1654367	Bracket .....	1	..

## BRAKE MASTER CYLINDER ASSEMBLY (FIGURE 8-14)



BP040065

**KEY:**

**A:** 2096079 and 2110224

**B:** 1569527 and 1703607

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	<b>c</b> 2096079	Master Cylinder (31.75 Bore) .....	1	..
	<b>e</b> 2110224	Master Cylinder (31.75 Bore) .....	1	..
	<b>b</b> 1569527	Master Cylinder (38.1 Bore) .....	..	1
	<b>d</b> 1703607	Master Cylinder (38.1 Bore) .....	..	1
1	.....	Booster .....	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
3	.....	Spring .....	1	1
4	.....	Retainer .....	1	1
5	.....	Seal (Pressure) .....	1	1
6	.....	Washer .....	1	1
7	.....	Piston .....	1	1
8	.....	Seal (Retaining) .....	1	1
9	.....	Snap Ring .....	1	1
	1596180	Kit-Repair Minor-Master Cyl (31.75 Bore) .....	1	..
	<b>a</b> 1620023	Kit-Repair Major-Master Cyl (38.1 Bore) .....	..	1

**KEY:**

**A: 2096079 and 2110224**

**B: 1569527 and 1703607**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1620024	Kit-Repair Minor-Master Cyl (38.1 Bore) .....	..	1

**FOOTNOTES:**

**a** Includes Minor Repair Kit

**b** → S/N P005B02096G

**c** → S/N P005B02341G

**d** S/N P005B02097G →

**e** S/N P005B02342G →









**SECTION 9  
HYDRAULIC SYSTEM**

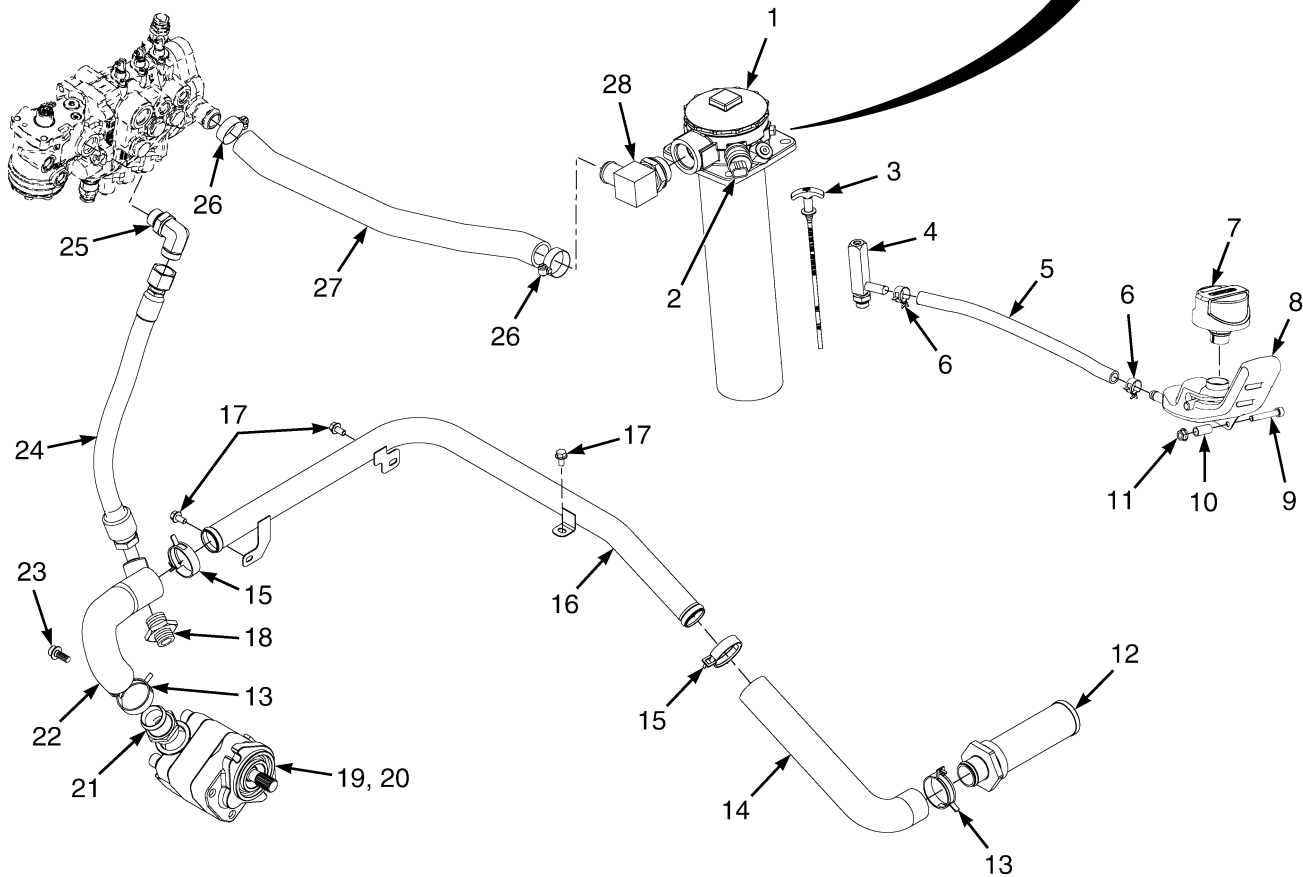
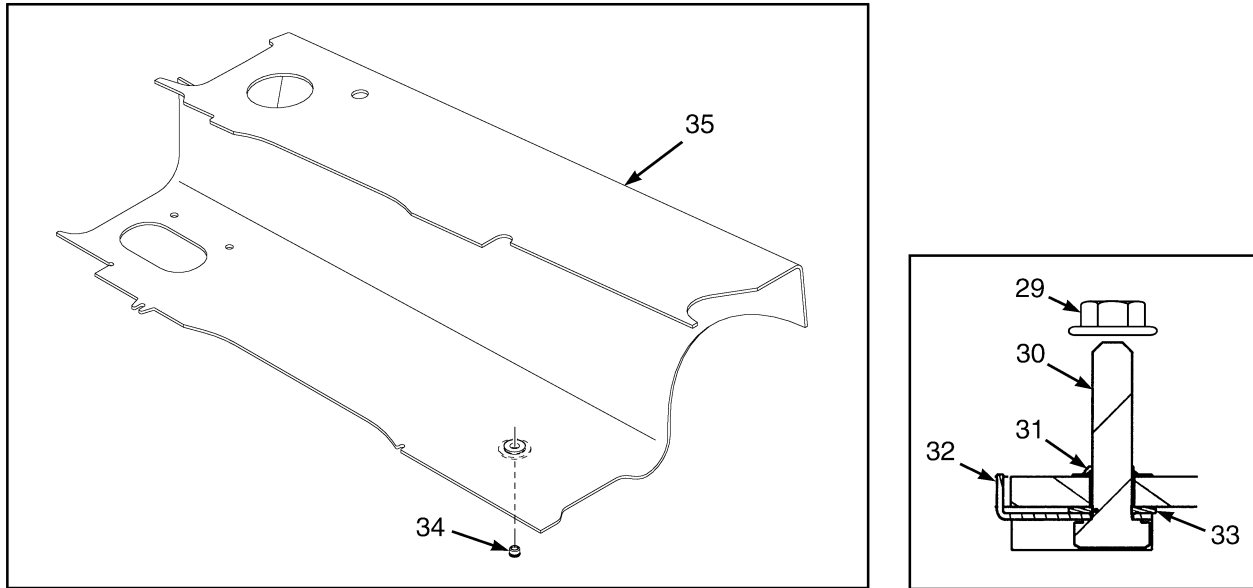
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**SECTION 9  
HYDRAULIC SYSTEM**

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## HYDRAULIC SUPPLY AND RETURN (FIGURE 9-1)



BP150516

**HYDRAULIC SUPPLY AND RETURN**

ITEM	PART NO.	DESCRIPTION	QTY
1	<b>e</b> 1567693	Hydraulic Filter (☞Figure 9-3).....	1
1	<b>g</b> 4001029	Hydraulic Filter (☞Figure 9-3).....	1
2	<b>d</b> 2068337	Pressure Switch .....	1
3	2083335	Dipstick .....	1
4	1570264	Fitting .....	1
4	16484	O-Ring .....	1
5	1567504	Hose .....	1
6	1502007	Hose Clamp .....	2
7	1582161	Breather .....	1
7	16486	O-Ring (Not Illustrated) .....	1
8	2081865	Surge Tank .....	1
9	296016	Capscrew .....	2
10	1617083	Spacer .....	1
11	<del>1382472</del> 1502543	Nut (Flange) .....	2
12	1617585	Strainer .....	1
12	18909	O-Ring .....	1
13	1527983	Hose Clamp .....	4
14	2079736	Hose (Tank Suction) .....	1
15	1549449	Hose Clamp .....	2
16	2079731	Tube .....	1
16	2098326	Tube .....	1
17	1527879	Capscrew .....	3
18	1473888	Fitting .....	1
18	280154	O-Ring .....	1
18	16486	O-Ring .....	1
19	<b>bf</b> 2082654	Gear Pump (41.3 cc) (☞Figure 9-4).....	1
19	<b>bh</b> 4602289	Gear Pump (41.3 cc) (☞Figure 9-5).....	1
19	<b>af</b> 2077588	Gear Pump (46.5 cc) (☞Figure 9-4).....	1
19	<b>ah</b> 4602290	Gear Pump (46.5 cc) (☞Figure 9-5).....	1
19	<b>cf</b> 2086562	Gear Pump (51.6 cc) (☞Figure 9-4).....	1
19	<b>ch</b> 4602291	Gear Pump (51.6 cc) (☞Figure 9-5).....	1
19	<b>bf</b> 2104449	Gear Pump (32.5 cc) (☞Figure 9-4).....	1
19	<b>bh</b> 4602292	Gear Pump (32.5 cc) (☞Figure 9-5).....	1
20	264159	Adhesive .....	AR
21	1566890	Adapter .....	1
21	16983	O-Ring .....	1
22	2079735	Hose (Pump Suction) .....	1
23	1564515	Capscrew .....	2
24	<del>2084750</del> 2088916	Hose Assy .....	1
25	1473898	Fitting .....	1
25	280154	O-Ring .....	1
25	16486	O-Ring .....	1
26	369804	Clamp .....	2
27	2105639	Hose Assy .....	1
28	1612214	Fitting .....	1
29	<del>1382472</del> 1502543	Nut (Flange) .....	4
30	<b>e</b> 132861	Capscrew .....	4
31	<b>e</b> 1639704	Seal .....	4

## HYDRAULIC SUPPLY AND RETURN

ITEM	PART NO.	DESCRIPTION	QTY
32	e 1637158	Retainer .....	4
33	e 1624189	Retainer .....	4
34	1528481	Plug (With O-Ring for Tank Drain) (Magnetic) .....	1
35	. . . . .	Hydraulic Tank .....	1

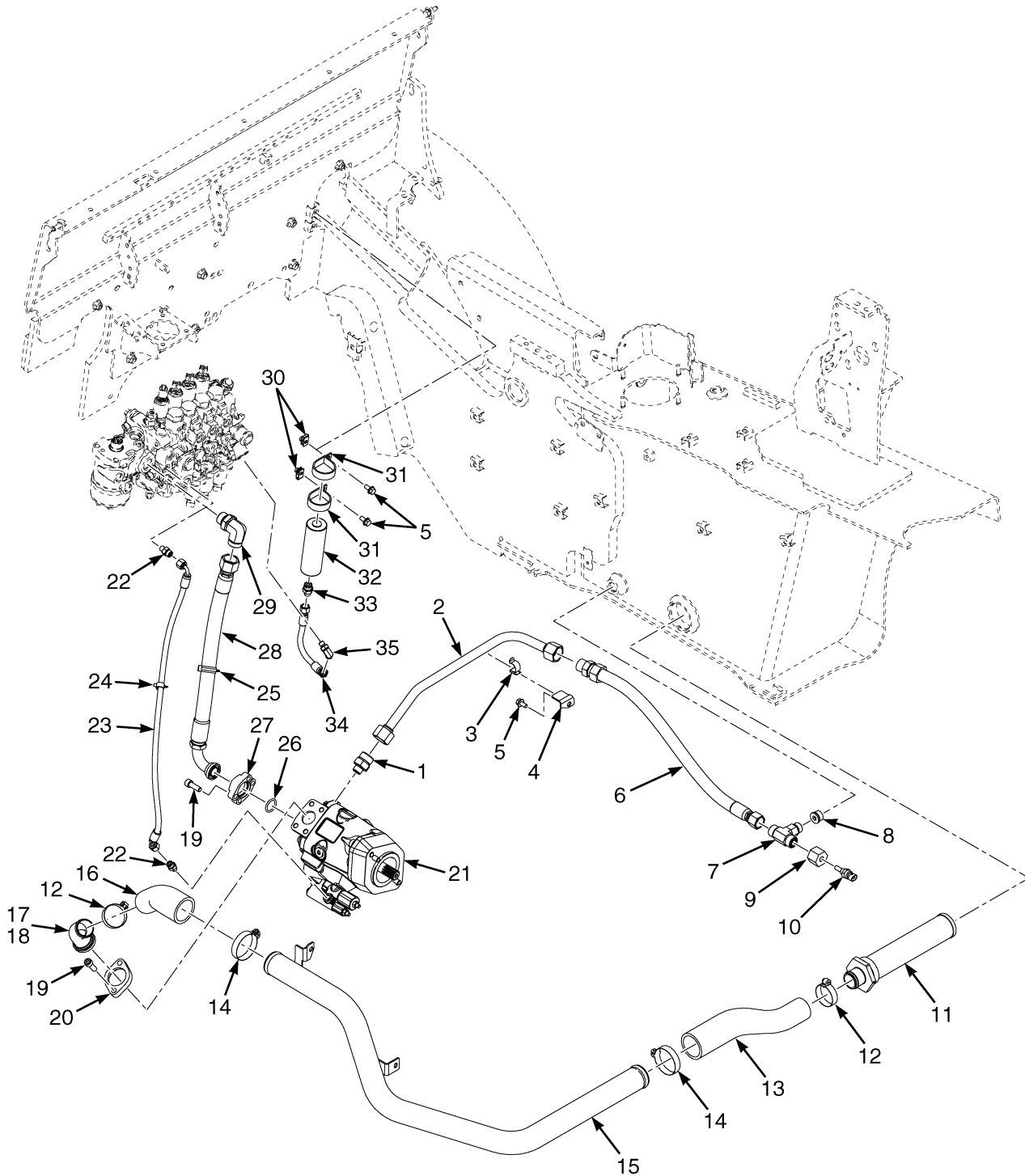
### FOOTNOTES:

- |          |                                    |          |                   |
|----------|------------------------------------|----------|-------------------|
| <b>a</b> | H4.0FT Diesel                      | <b>e</b> | → 12/2009         |
| <b>b</b> | H4.0FT LPG                         | <b>f</b> | → S/N P005B02789H |
| <b>c</b> | H4.5-5.5 Diesel                    | <b>g</b> | 12/2009 →         |
| <b>d</b> | With Electronic Monitoring Package | <b>h</b> | S/N P005B02790H → |





## HYDRAULIC SUPPLY AND RETURN (FIGURE 9-2) WITH VARIABLE DISPLACEMENT PUMP (S/N P005B03651J →)



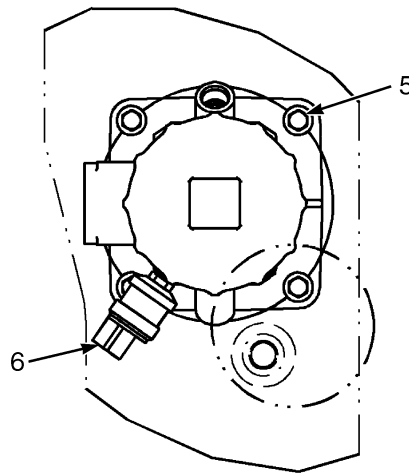
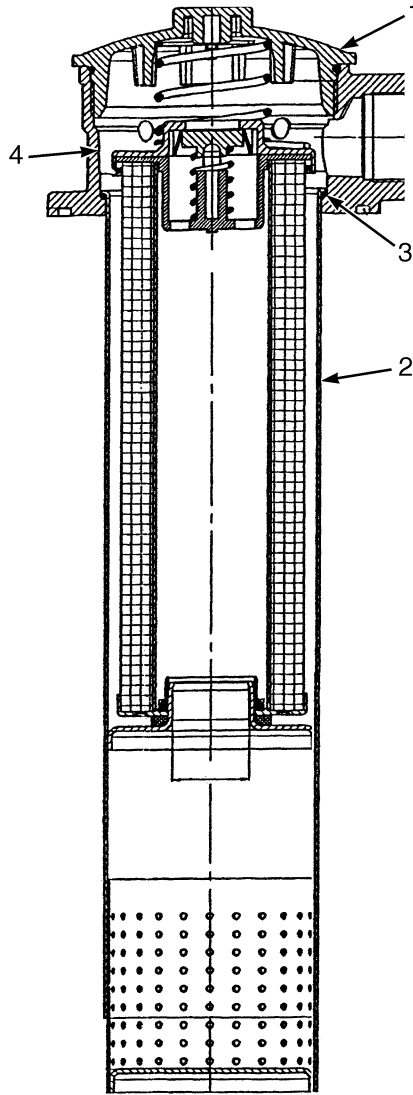
BP150427

**HYDRAULIC SUPPLY AND RETURN**  
**WITH VARIABLE DISPLACEMENT PUMP (S/N P005B03651J →)**

ITEM	PART NO.	DESCRIPTION	QTY
1	1486753	Fitting .....	1
2	4601719	Tube Assy .....	1
3	1582511	Clip .....	1
4	4003753	Bracket .....	1
5	1527879	Capscrew .....	3
6	4601722	Hose Assy .....	1
7	1532650	Fitting .....	1
8	233693	Fitting .....	1
9	4003165	Fitting .....	1
10	1515654	Temperature Sensor .....	1
11	4604581	Strainer .....	1
11	18909	O-Ring .....	1
12	369804	Clamp .....	2
13	4612097	Hose .....	1
14	112989	Hose Clamp .....	2
15	4029105	Tube .....	1
16	4601717	Hose .....	1
17	222567	Fitting .....	1
18	199917	O-Ring .....	1
19	296026	Capscrew .....	6
20	4004390	Flange .....	1
21	.....	Pump Group (☞Figure 9-6).....	1
22	1486737	Fitting .....	2
23	4601723	Hose Assy .....	1
24	1542439	Clamp (Swivel) .....	1
25	1561759	Clamp (Swivel) .....	1
26	210641	O-Ring .....	1
27	4010776	Fitting .....	2
28	4601720	Hose Assy .....	1
29	1473898	Fitting .....	1
30	1480237	Nut .....	2
31	181899	Clamp .....	2
32	4609405	Accumulator .....	1
33	1486738	Fitting .....	1
34	4609300	Hose Assy .....	1
35	1487058	Fitting .....	1
	<b>a</b> 264159	Adhesive .....	AR

**FOOTNOTES:****a** Not Illustrated

## HYDRAULIC FILTER (FIGURE 9-3)



BP150185

**HYDRAULIC FILTER**

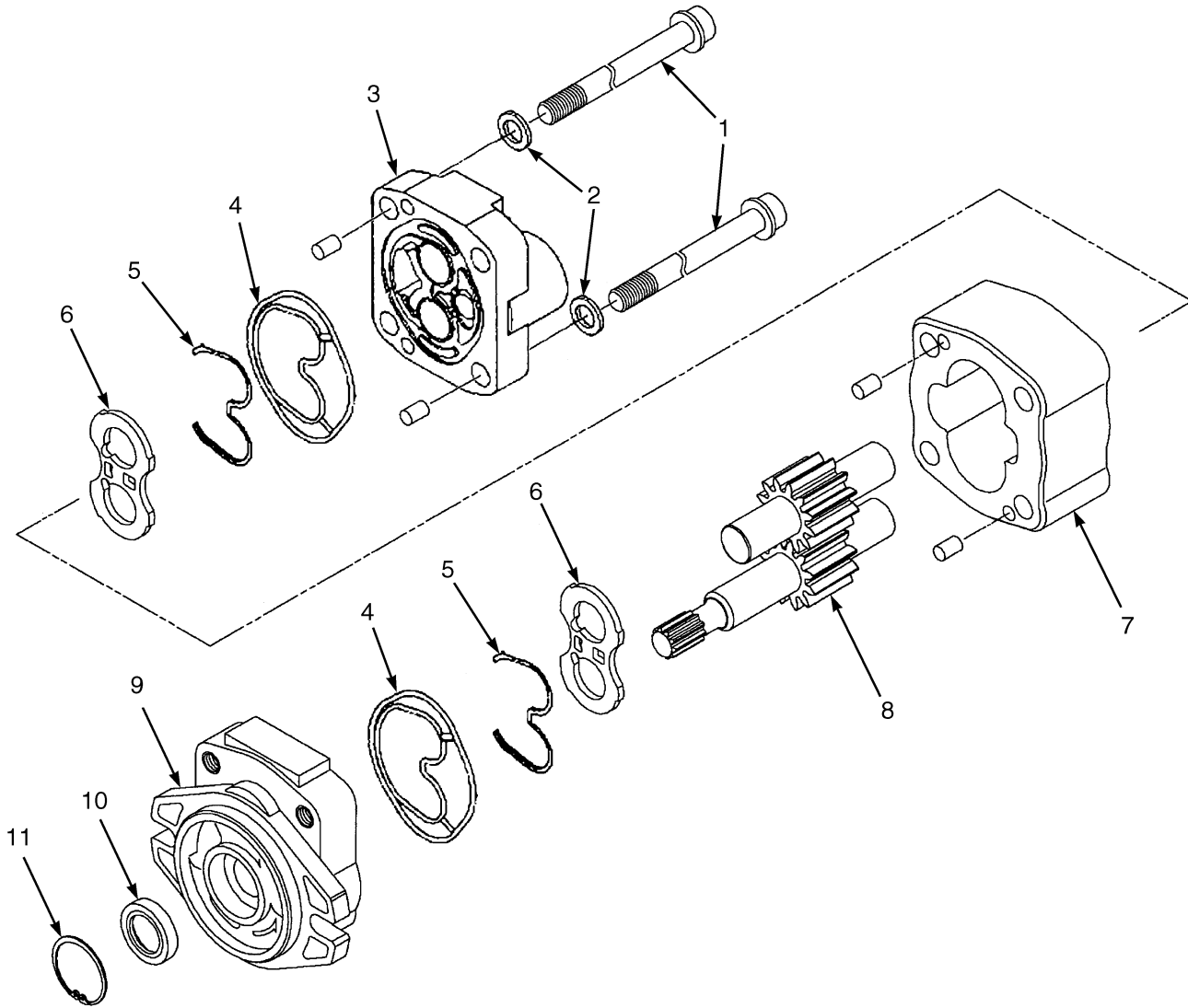
ITEM	PART NO.	DESCRIPTION	QTY
	<b>b</b> 1567693	Hydraulic Filter .....	1
	<b>c</b> 4001029	Hydraulic Filter .....	1
1	<b>b</b> 1615173	Cap Assembly .....	1
1	<b>c</b> 1708697	Cap .....	1
1	.....	O-Ring .....	1
1	.....	Spring .....	1
2	<b>b</b> 1624654	Hydraulic Filter .....	1
2	<b>c</b> 4000998	Filter .....	1
2	.....	O-Ring .....	1
3	<b>b</b> 1624657	Bowl Assembly .....	1
3	<b>c</b> .....	Bowl Assembly .....	1
3	.....	O-Ring .....	1
4	<b>c</b> 1627364	Head .....	1
4	.....	Quad Ring .....	1
4	14591	Plug .....	2
4	16481	O-Ring .....	1
5	<del>1382472</del>		
	1502543	Nut (Flange) .....	4
6	<b>a</b> 2068337	Pressure Switch .....	1
	<b>b</b> 1624663	Kit-O-Ring .....	1
8	<b>c</b> 1708691	Kit-O-Ring .....	1

**FOOTNOTES:**

**a** With Electronic Monitoring Package  
**b** → 12/2009

**c** 12/2009 →

## GEAR PUMP (FIGURE 9-4) (→ S/N P005B02789H)



BP150147

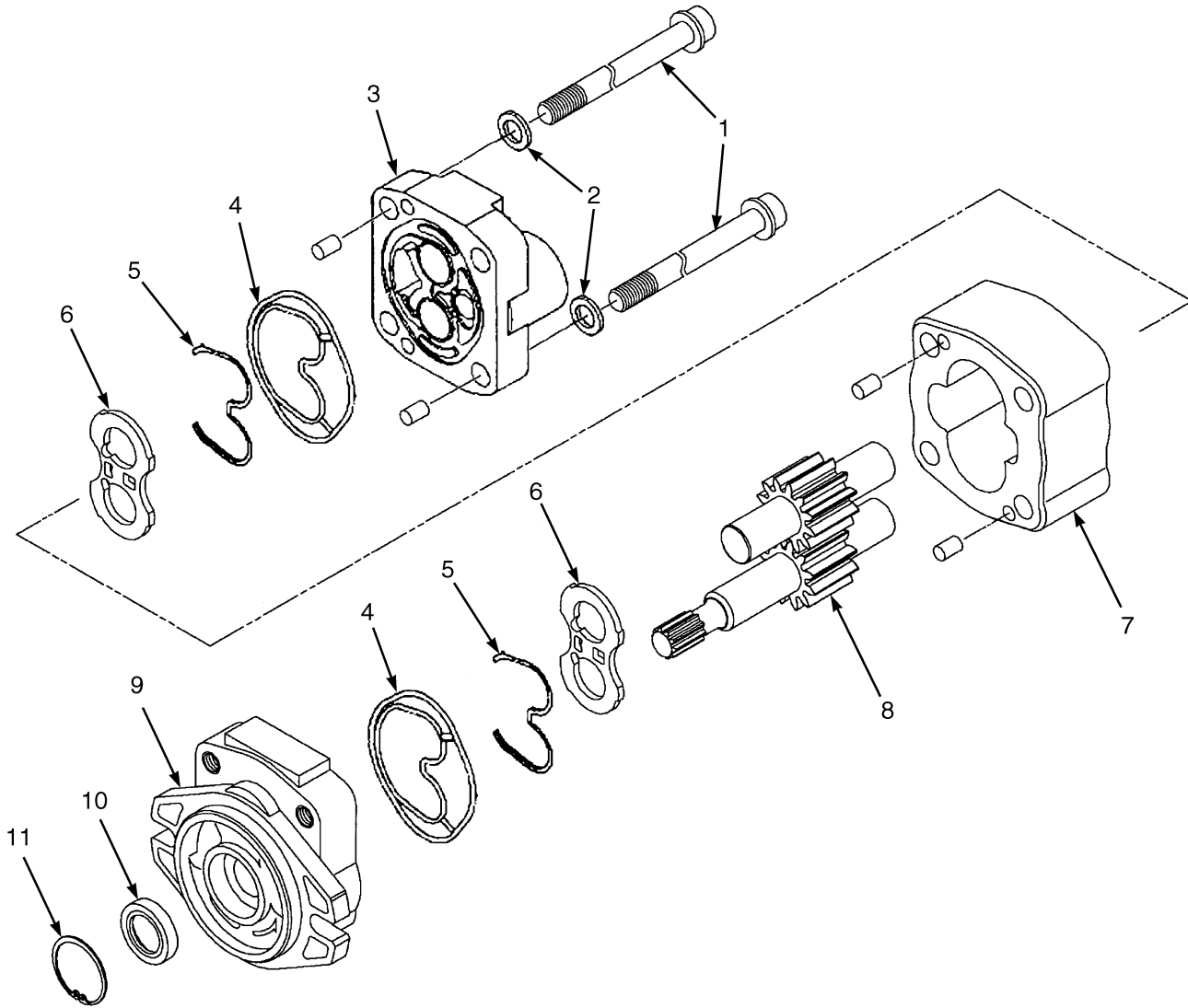
**GEAR PUMP**  
(→ S/N P005B02789H)

ITEM	PART NO.	DESCRIPTION	QTY
	<b>acf</b> 2082654	Gear Pump (41.3 cc) .....	1
	<b>b</b> 2086562	Gear Pump (51.6 cc) .....	1
	<b>e</b> 2077588	Gear Pump (46.5 cc) .....	1
	<b>d</b> 2104449	Gear Pump (32.5 cc) .....	1
1	1624864	Bolt (41.3 cc) .....	4
1	1636046	Bolt (51.6 cc) .....	4
1	2089776	Bolt (46.5 cc) .....	4
1	1695082	Bolt (32.5 cc) .....	4
2	1624865	Washer .....	4
3	1624853	Cover .....	1
4	1624862	Plate (Seal) .....	2
5	1624863	Back-Up Ring .....	2
6	1624861	Pressure Plate .....	2
7	.....	Gear Plate .....	1
8	1624869	Gear Set (41.3 cc) .....	1
8	1624870	Gear Set (51.6 cc) .....	1
8	1624992	Gear Set (46.5 cc) .....	1
8	1695078	Gear Set (32.5 cc) .....	1
8	.....	Drive Gear .....	1
8	.....	Driven Gear .....	1
9	1624856	Flange .....	1
10	1624866	Oil Seal .....	1
11	1624867	Snap Ring .....	1
	1624868	Kit-Seal .....	1

**FOOTNOTES:**

- |  |   |
|--|---|
| <b>a</b> 100-120 Low Displacement for Paper Industry, LPG        | <b>d</b> 80-90 Low Displacement for Paper Industry, LPG |
| <b>b</b> 100-120 Standard Displacement, Gasoline, LPG and Diesel | <b>e</b> 80-90 Standard Displacement, Diesel            |
| <b>c</b> 80-120 Low Displacement for Paper Industry, Diesel      | <b>f</b> 80-90 Standard Displacement, LPG               |

## GEAR PUMP (FIGURE 9-5) (S/N P005B02790H →)



BP150147



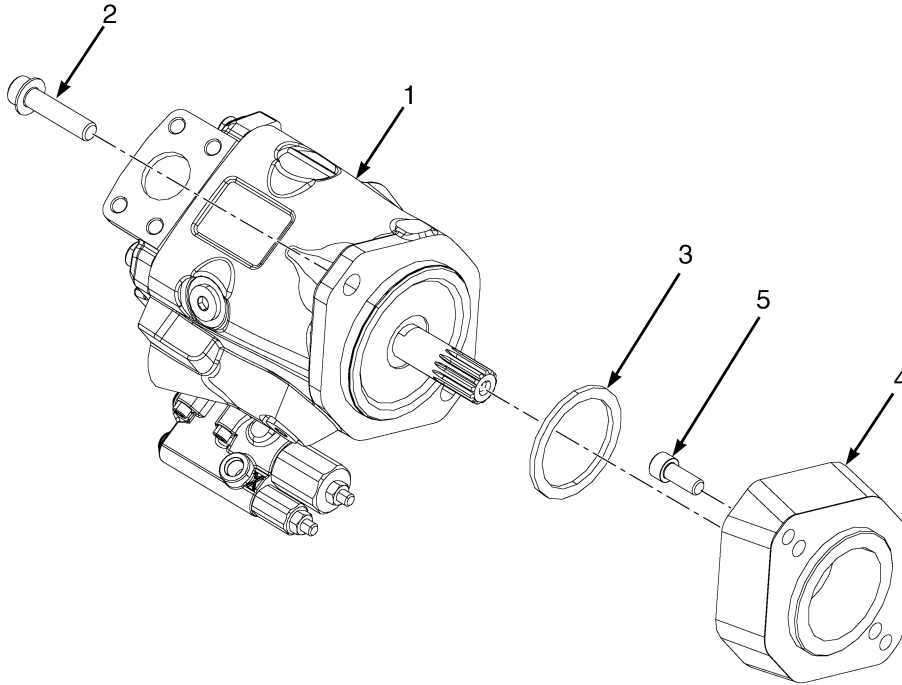
**GEAR PUMP**  
**(S/N P005B02790H →)**

ITEM	PART NO.	DESCRIPTION	QTY
	<b>acf</b> 4602289	Gear Pump (41.3 cc) .....	1
	<b>b</b> 4602291	Gear Pump (51.6 cc) .....	1
	<b>e</b> 4602290	Gear Pump (46.5 cc) .....	1
	<b>d</b> 4602292	Gear Pump (32.5 cc) .....	1
1	4009235	Screw (Flange Head) (41.3 cc) .....	1
1	4009237	Screw (Flange Head) (51.6 cc) .....	1
1	4009236	Screw (Flange Head) (46.5 cc) .....	1
1	4009234	Screw (Flange Head) (32.5 cc) .....	1
2	1624865	Washer .....	4
3	1624853	Cover .....	1
4	1624862	Plate (Seal) .....	2
5	1624863	Back-Up Ring .....	2
6	1624861	Pressure Plate .....	2
7	.....	Gear Plate .....	1
8	1624869	Gear Set (41.3 cc) .....	1
8	1624870	Gear Set (51.6 cc) .....	1
8	1624992	Gear Set (46.5 cc) .....	1
8	1695078	Gear Set (32.5 cc) .....	1
8	.....	Drive Gear .....	1
8	.....	Driven Gear .....	1
9	4009240	Flange .....	1
10	1624866	Oil Seal .....	1
11	1624867	Snap Ring .....	1
	1624868	Kit-Seal .....	1

**FOOTNOTES:**

- |   |   |
|---|---|
| <b>a</b> 100-120 Low Displacement for Paper Industry,<br>Gasoline and LPG | <b>d</b> 80-90 Low Displacement for Paper Industry,<br>Gasoline and LPG |
| <b>b</b> 100-120 Standard Displacement, Gasoline, LPG<br>and Diesel       | <b>e</b> 80-90 Standard Displacement, Diesel                            |
| <b>c</b> 80-120 Low Displacement for Paper Industry,<br>Diesel            | <b>f</b> 80-90 Standard Displacement, Gasoline and LPG                  |

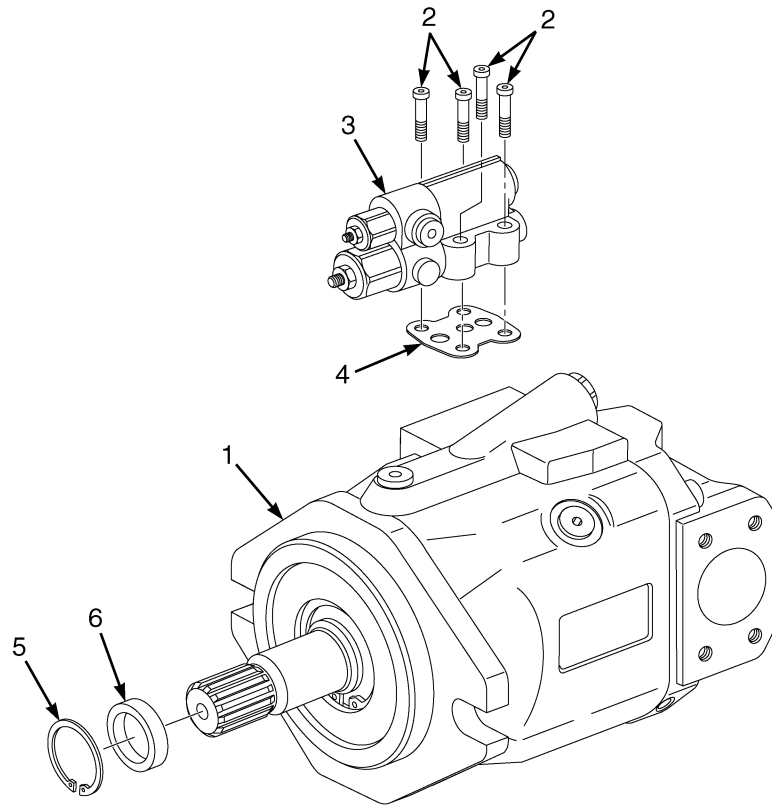
## VARIABLE DISPLACEMENT PUMP AND ADAPTOR (FIGURE 9-6) (S/N P005B03651J →)



BP150426

ITEM	PART NO.	DESCRIPTION	QTY
1	4601714	Hydraulic Pump (42 cc) (☞Figure 9-7).....	1
1	4601715	Hydraulic Pump (45 cc) (☞Figure 9-7).....	1
2	4002921	Capscrew .....	2
3	4027303	Seal .....	1
4	4027084	Adapter (42 cc) .....	1
4	4027085	Adapter (45 cc) .....	1
5	296025	Capscrew .....	2

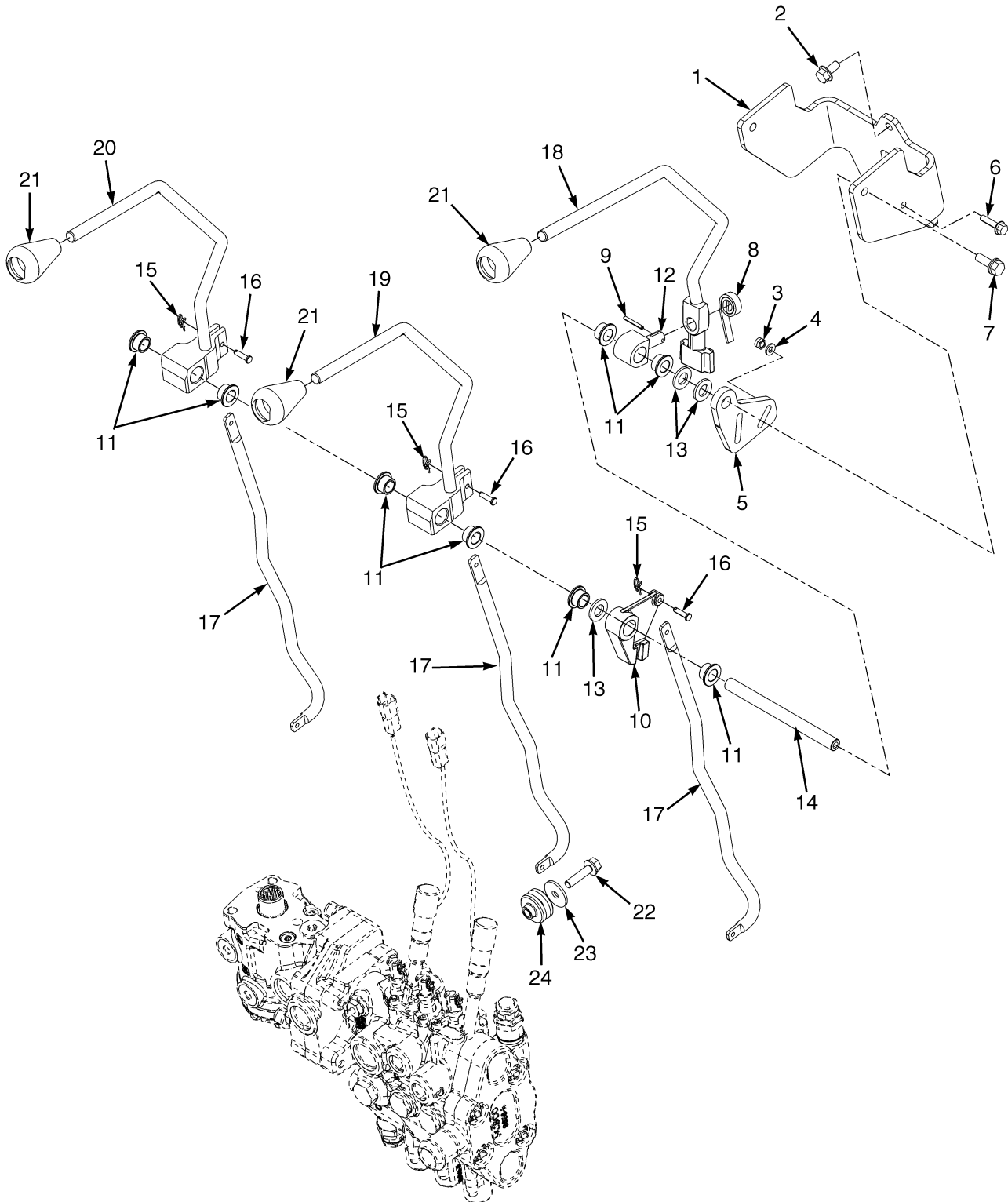
**VARIABLE DISPLACEMENT PUMP (FIGURE 9-7)  
ASSEMBLY (S/N P005B03651J →)**



BP150443

ITEM	PART NO.	DESCRIPTION	QTY
1	4601714	Hydraulic Pump (42 cc) .....	1
1	4601715	Hydraulic Pump (45 cc) .....	1
2	4021485	Screw .....	4
3	4021472	Valve .....	1
4	4021490	Seal .....	1
5	4021488	Seal .....	1
6	4021492	Retaining Ring .....	1
	4038424	Kit VDP Shaft Seal Replacement .....	1
	4038490	Kit VDP Shaft Seal Replacement and Tool .....	1

## HAND LEVERS (FIGURE 9-8) THREE FUNCTION — WITH DETENTED LEVERS

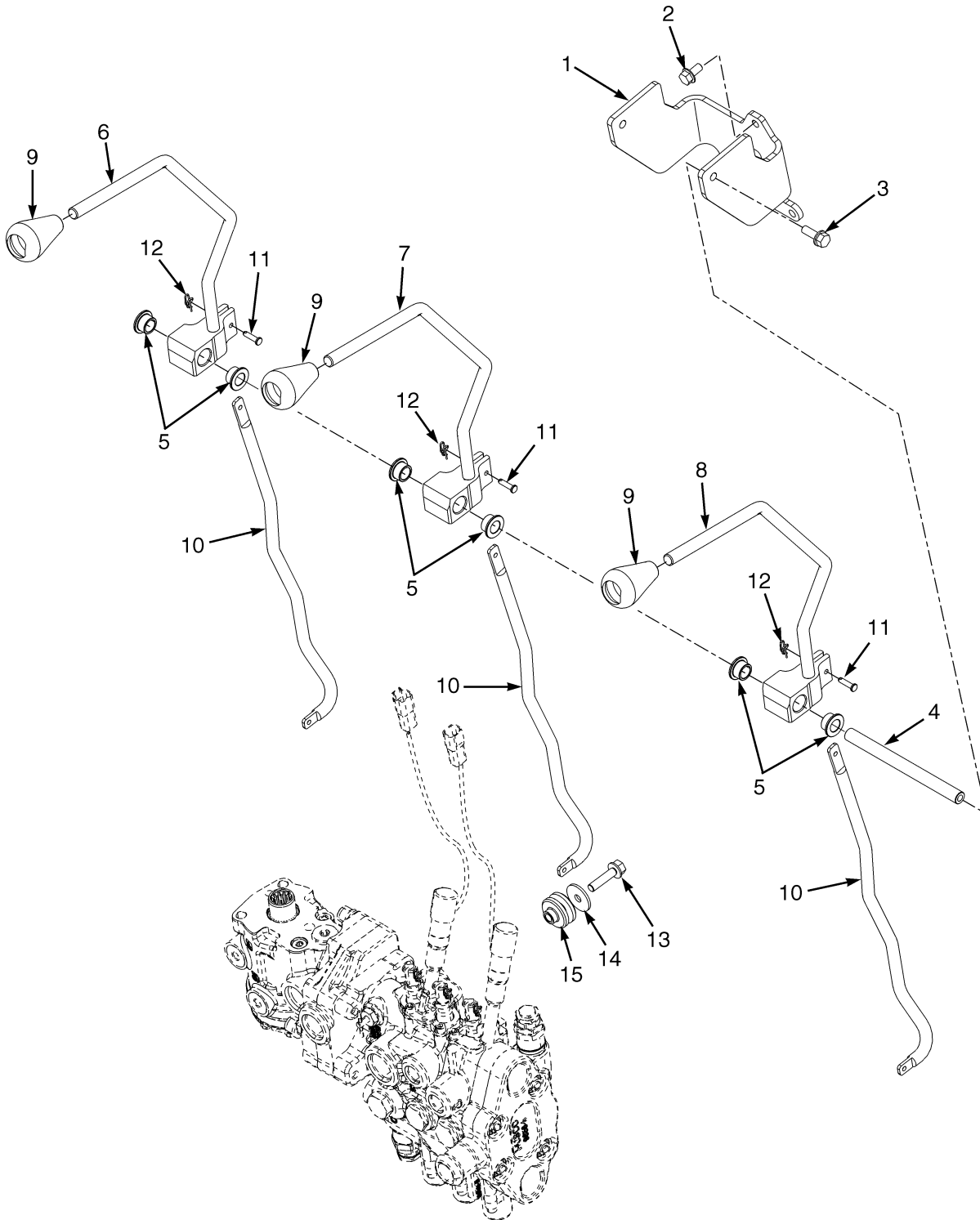


BP150138

**HAND LEVERS  
THREE FUNCTION – WITH DETENTED LEVERS**

ITEM	PART NO.	DESCRIPTION	QTY
1	1670194	Bracket .....	1
2	1527879	Capscrew .....	3
3	316834	Nut .....	1
4	320156	Washer .....	1
5	1670677	Plate .....	1
6	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 .....	2
14	1670195	Shaft (Pivot) .....	1
15	1517361	Locking Ring Cotter Pin .....	6
16	309109	Pin .....	6
17	1662420	Link .....	3
18	2099398	Lever (Auxiliary One and Two) .....	1
19	2099394	Lever (Tilt) .....	1
20	2099393	Lever (Lift) .....	1
21	1517395		
	4038182	Knob .....	3
22	1586627	Capscrew .....	3
23	1346752	Washer .....	3
24	2063991	Isolator .....	3
	.....	Hydraulic Control Valve (☞Figure 9-12, ☞Figure 9-19).....	1

## HAND LEVERS (FIGURE 9-9) THREE FUNCTION — WITHOUT DETENTED LEVERS

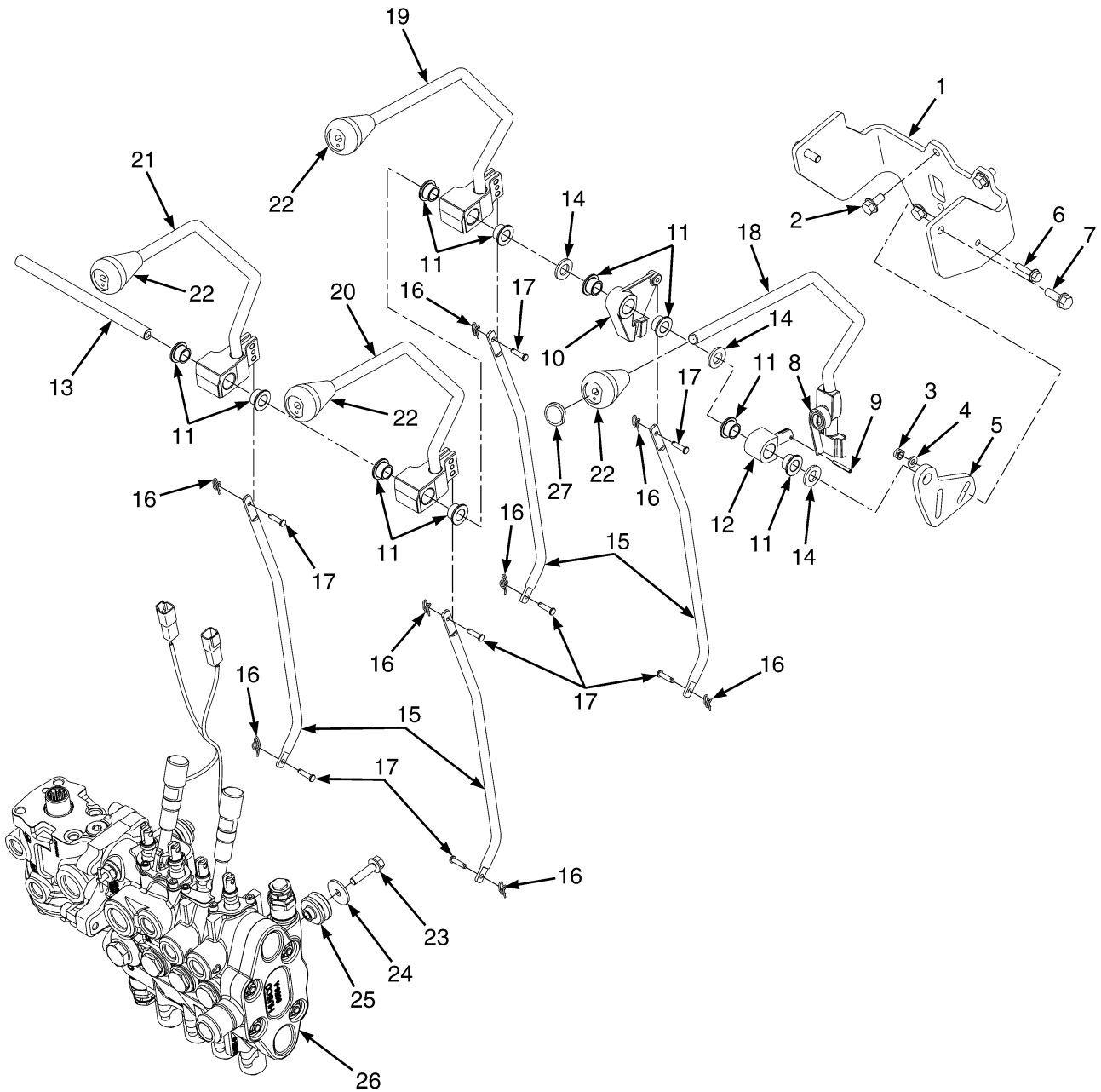


BP150139

**HAND LEVERS**  
**THREE FUNCTION – WITHOUT DETENTED LEVERS**

ITEM	PART NO.	DESCRIPTION	QTY
1	1665746	Bracket .....	1
2	1527879	Capscrew .....	3
3	1583611	Capscrew .....	2
4	1670292	Shaft .....	1
5	1564747	Bushing .....	6
6	2099393	Lever (Lift) .....	1
7	2099394	Lever (Tilt) .....	1
8	2099395	Lever (Auxiliary One) .....	1
9	1517395		
	4038182	Knob .....	3
10	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
	.....	Hydraulic Control Valve (☞Figure 9-12, ☞Figure 9-19).....	1

## HAND LEVERS (FIGURE 9-10) FOUR FUNCTION — WITH DETENTED LEVERS



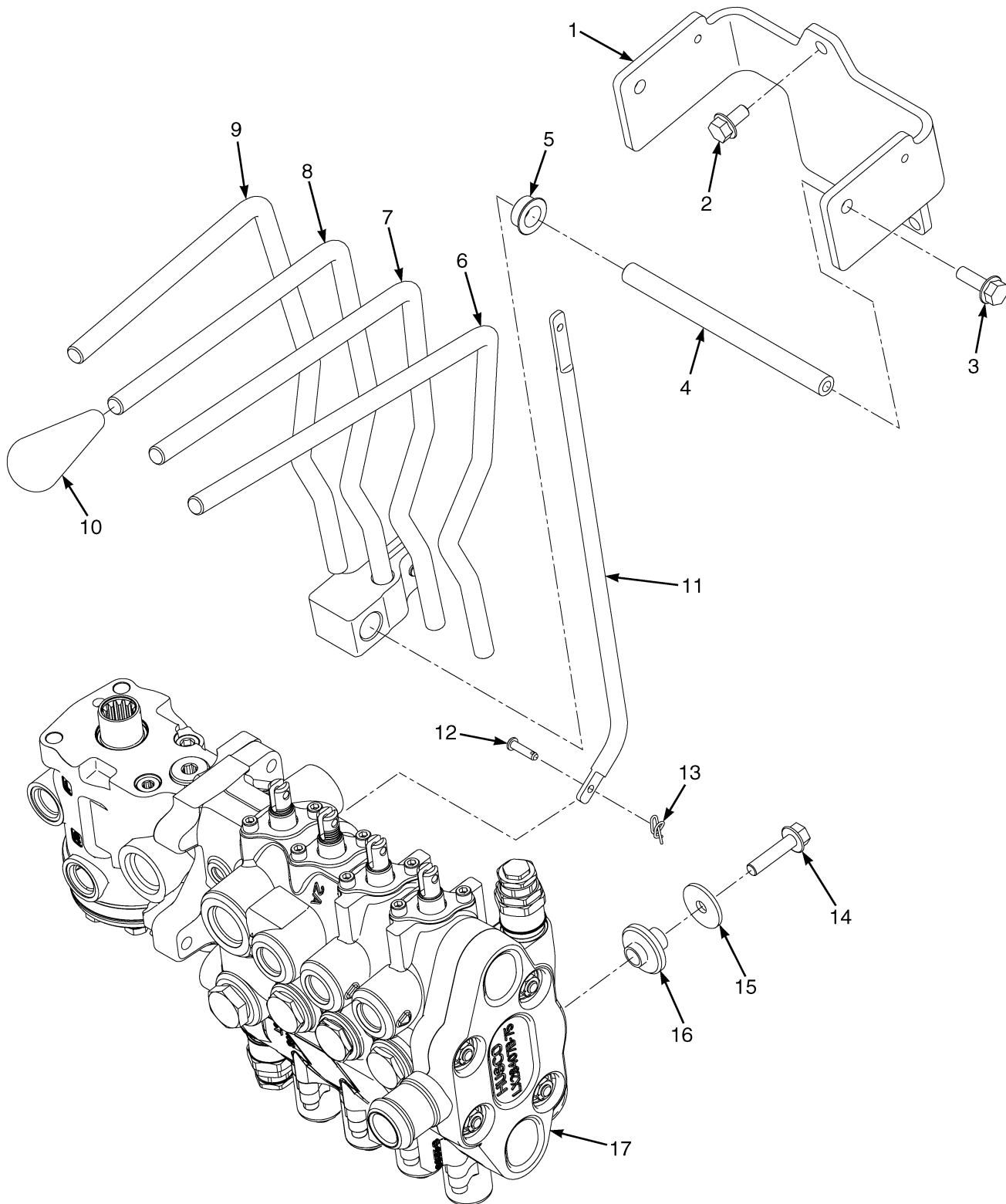
BP150140



**HAND LEVERS**  
**FOUR FUNCTION – WITH DETENTED LEVERS**

ITEM	PART NO.	DESCRIPTION	QTY
1	1665748	Bracket .....	1
2	1527879	Capscrew .....	4
3	316834	Nut .....	1
4	320156	Washer .....	1
5	1528339	Spacer .....	1
5	1670677	Plate .....	1
6	1527878	Capscrew .....	1
7	1583611	Capscrew .....	2
8	175861	Spring .....	1
9	302428	Roll Pin .....	1
10	1542546	Lever .....	1
11	1564747	Bushing .....	10
12	306113	Pin (Selector) .....	1
13	1670196	Shaft .....	1
14	320161	Washer .....	3
15	1662420	Link .....	4
16	1517361	Locking Ring Cotter Pin .....	8
17	309109	Pin .....	8
18	2099397	Lever (Auxiliary Two and Three) .....	1
19	2099395	Lever (Auxiliary One) .....	1
20	2099394	Lever (Tilt) .....	1
21	2099393	Lever (Lift) .....	1
22	1517395		
	4038182	Knob .....	4
23	1586627	Capscrew .....	3
24	1346752	Washer .....	3
25	2063991	Isolator .....	3
26	.....	Hydraulic Control Valve (☞Figure 9-12, ☞Figure 9-21).....	1
27	2070655	Lens (Blank) .....	1

## HAND LEVERS (FIGURE 9-11) FOUR FUNCTION — WITHOUT DETENTED LEVERS

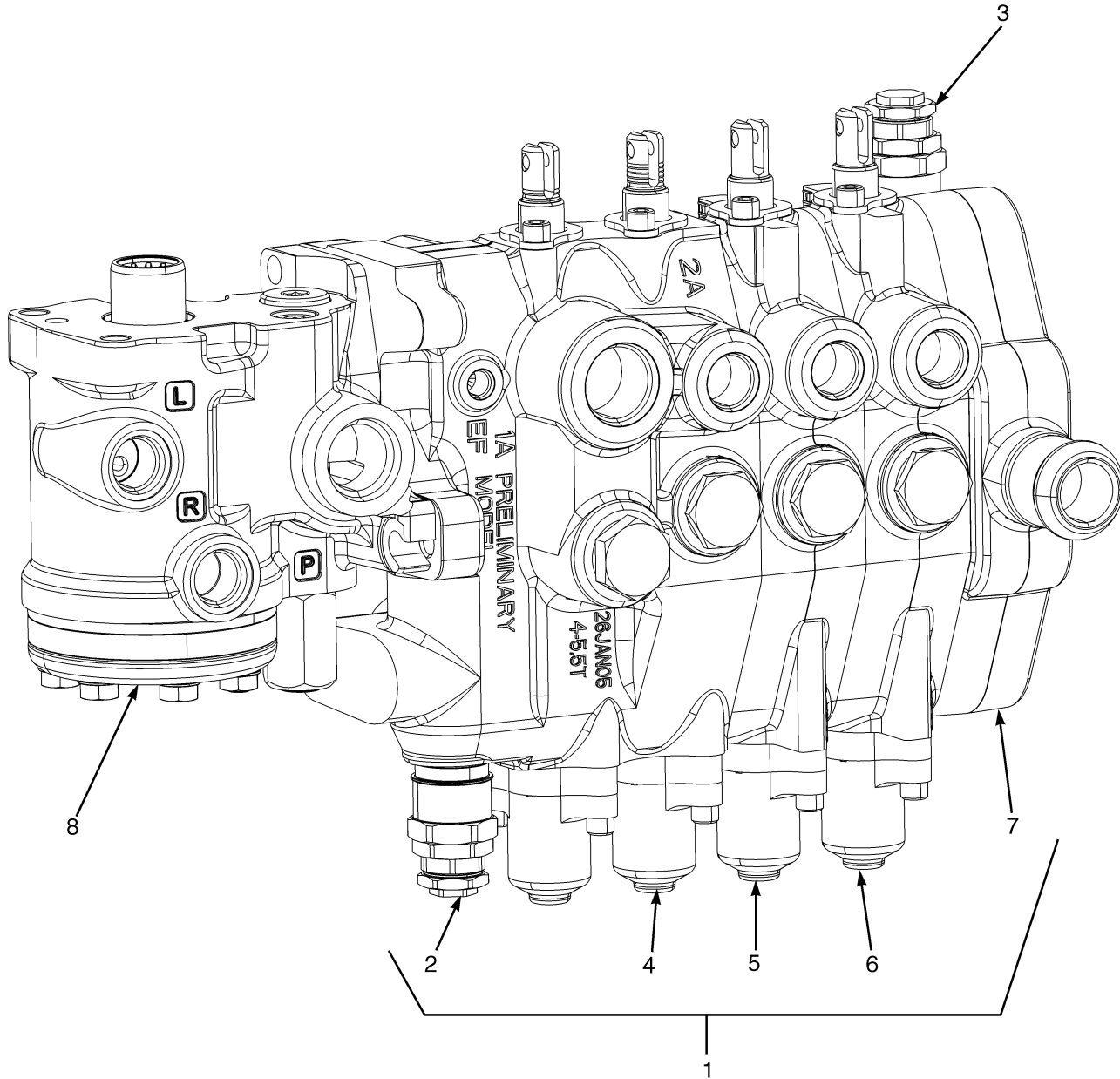


BP150141

**HAND LEVERS**  
**FOUR FUNCTION – WITHOUT DETENTED LEVERS**

ITEM	PART NO.	DESCRIPTION	QTY
1	1665747	Bracket .....	1
2	1527879	Capscrew .....	3
3	1583611	Capscrew .....	2
4	1670293	Shaft .....	1
5	1564747	Bushing .....	8
6	2099396	Lever (Auxiliary Two) .....	1
7	2099395	Lever (Auxiliary One) .....	1
8	2099394	Lever (Tilt) .....	1
9	2099393	Lever (Lift) .....	1
10	1517395		
	4038182	Knob .....	4
10	2070655	Lens (Blank) .....	1
11	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	.....	HYdraulic Control Valve (☞Figure 9-12, ☞Figure 9-21).....	1

**CONTROL VALVE ASSEMBLY (FIGURE 9-12)  
MANUAL CONTROL VALVE — THREE AND FOUR FUNCTION**



BP140077

## CONTROL VALVE ASSEMBLY

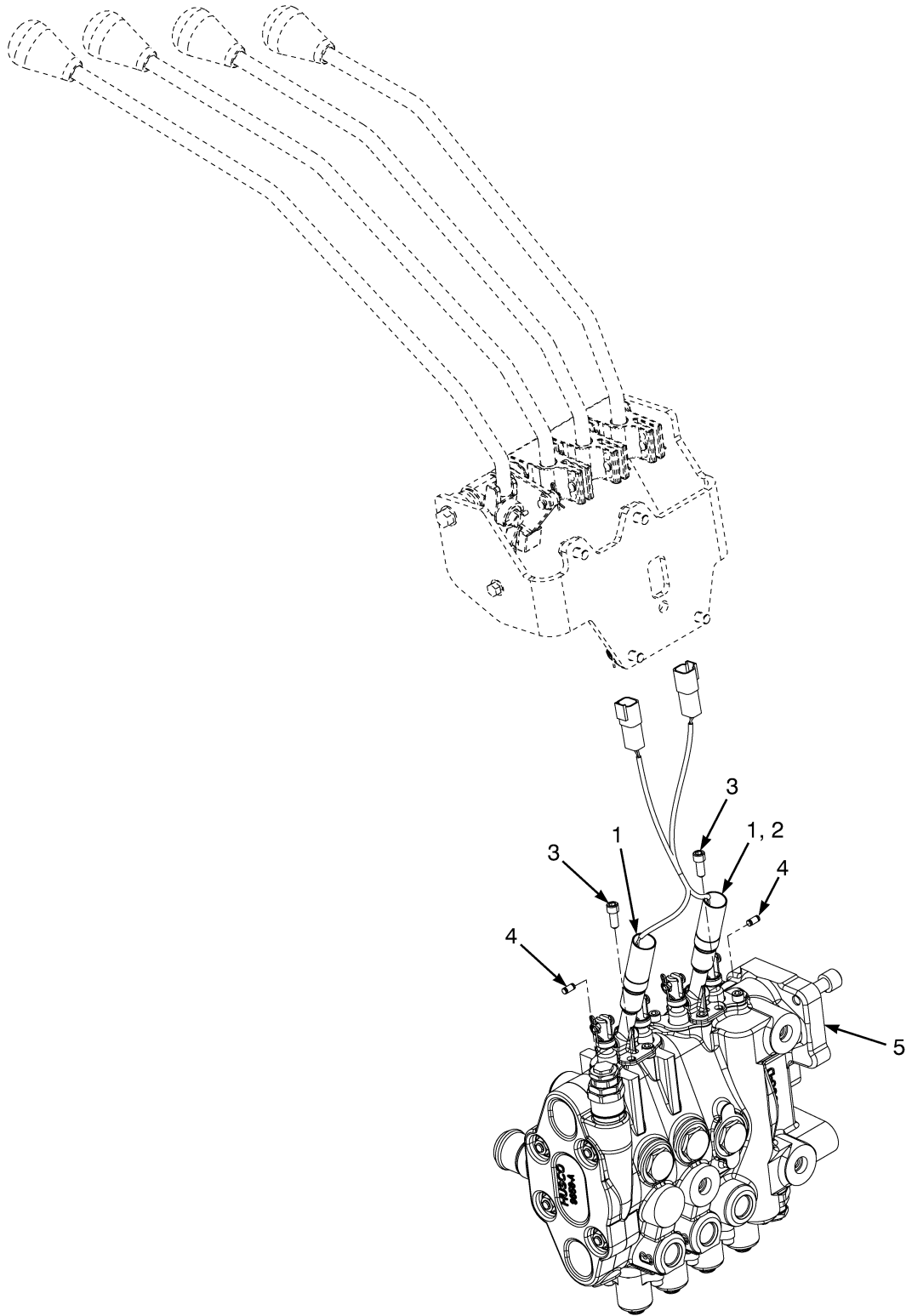
### MANUAL CONTROL VALVE – THREE AND FOUR FUNCTION

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

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	<b>b</b> 2095093	Hydraulic Control Valve .....	1	..
	<b>d</b> 2105888	Hydraulic Control Valve .....	1	..
	<b>a</b> 2095095	Hydraulic Control Valve .....	..	1
	<b>c</b> 2105890	Hydraulic Control Valve .....	..	1
1	<b>b</b> 2095096	Hydraulic Control Valve .....	1	..
1	<b>d</b> 2105891	Hydraulic Control Valve .....	1	..
1	1670434	Kit-Seal (Three Function) .....	1	..
1	<b>a</b> 2095097	Hydraulic Control Valve .....	..	1
1	<b>c</b> 2105892	Hydraulic Control Valve .....	..	1
1	1670054	Kit-Seal (Four Function) .....	..	1
2	1559973	Relief Valve (3100 PSI) (Main Relief) .....	1	..
2	1580097	Kit-Seal .....	1	1
3	1578707	Relief Valve (Secondary) (15.5 MPa) .....	1	1
3	1580131	Kit-Seal .....	1	1
4	1670432			
	1702466	Valve Section (Lift And Tilt) (☞Figure 9-14, ☞Figure 9-15).....	1	1
5	1670431	Valve Section (Spool Section) (☞Figure 9-16).....	1	1
6	1670533	Valve Section (Spool Section) (☞Figure 9-16).....	..	1
7	1578746	Valve Section (Outlet Section) (☞Figure 9-17).....	1	1
8	2102566	Steering Control Unit (☞Figure 7-5).....	1	1

**FOOTNOTES:****a** → S/N P005B02173G**b** → S/N P005B02178G**c** S/N P005B02174G →**d** S/N P005B02179G →

## CONTROL VALVE LOCKOUT GROUP (FIGURE 9-13) MANUAL CONTROL VALVE



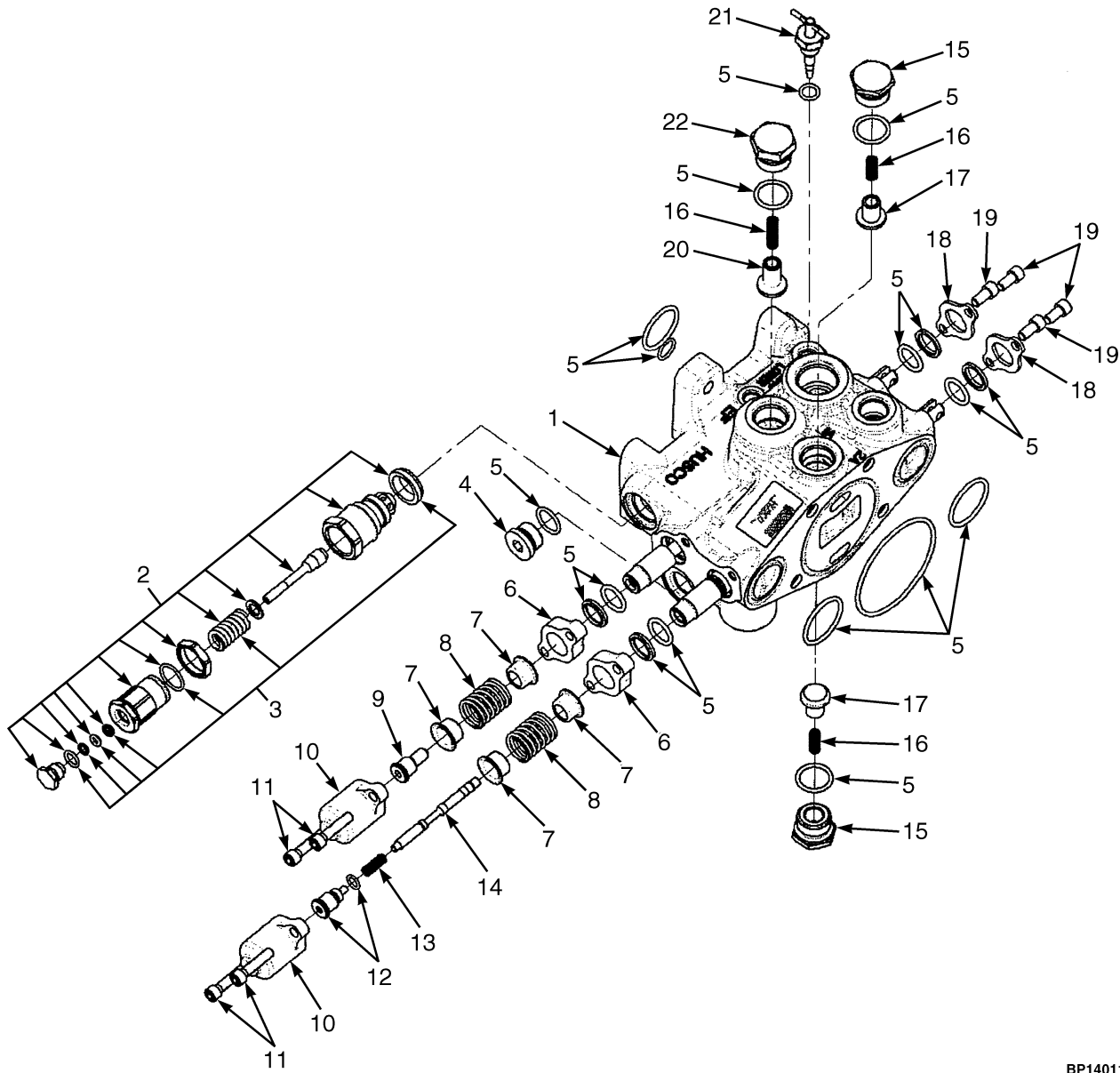
BP140133

**CONTROL VALVE LOCKOUT GROUP  
MANUAL CONTROL VALVE****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 9-12).....	1	1

## VALVE ASSEMBLY, LIFT AND TILT (FIGURE 9-14)

MANUAL CONTROL VALVE — THREE AND FOUR FUNCTION (→ S/N P005B02178G (THREE FUNCTION))  
(→ S/N P005B02173G (FOUR FUNCTION))



BP140111



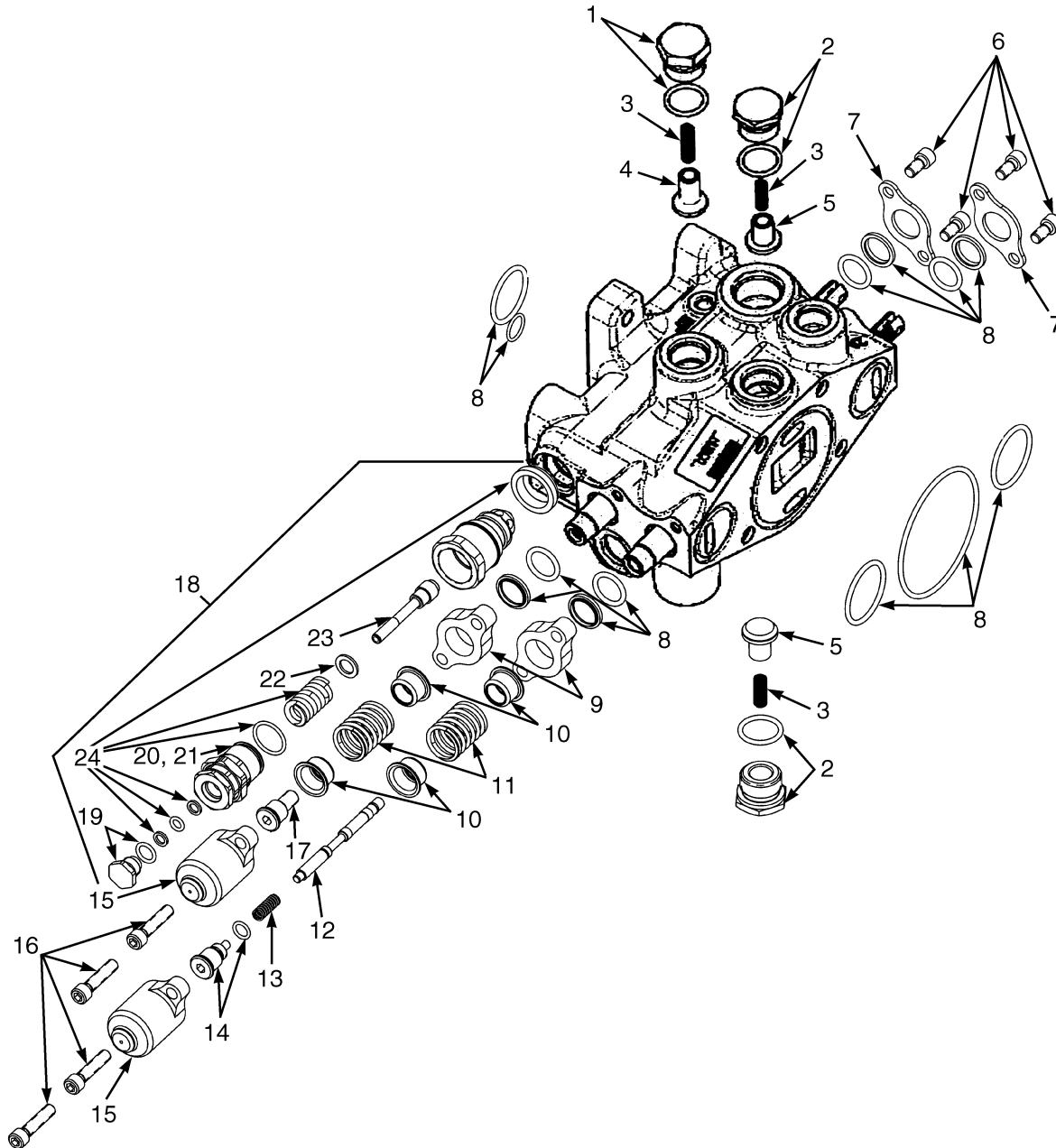
**VALVE ASSEMBLY, LIFT AND TILT**

**MANUAL CONTROL VALVE – THREE AND FOUR FUNCTION (→ S/N P005B02178G (THREE FUNCTION))  
(→ S/N P005B02173G (FOUR FUNCTION))**

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

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1670432			
	1702466	Valve Section (Lift And Tilt) .....	1	1
2	1578707	Relief Valve (Secondary) (15.5 MPa) .....	1	1
2	1559973	Relief Valve (3100 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	188517	Spring .....	2	2
9	1581859	Spool End .....	1	1
10	1560681	Cap .....	2	2
11	1628746			
	1578705	Capscrew .....	4	4
12	386015	Spool End .....	1	1
12	320291	Spool End .....	1	1
12	16480	O-Ring .....	1	1
13	341462	Spring .....	1	1
14	1581861	Piston .....	1	1
15	1578713	Plug Assembly .....	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	..

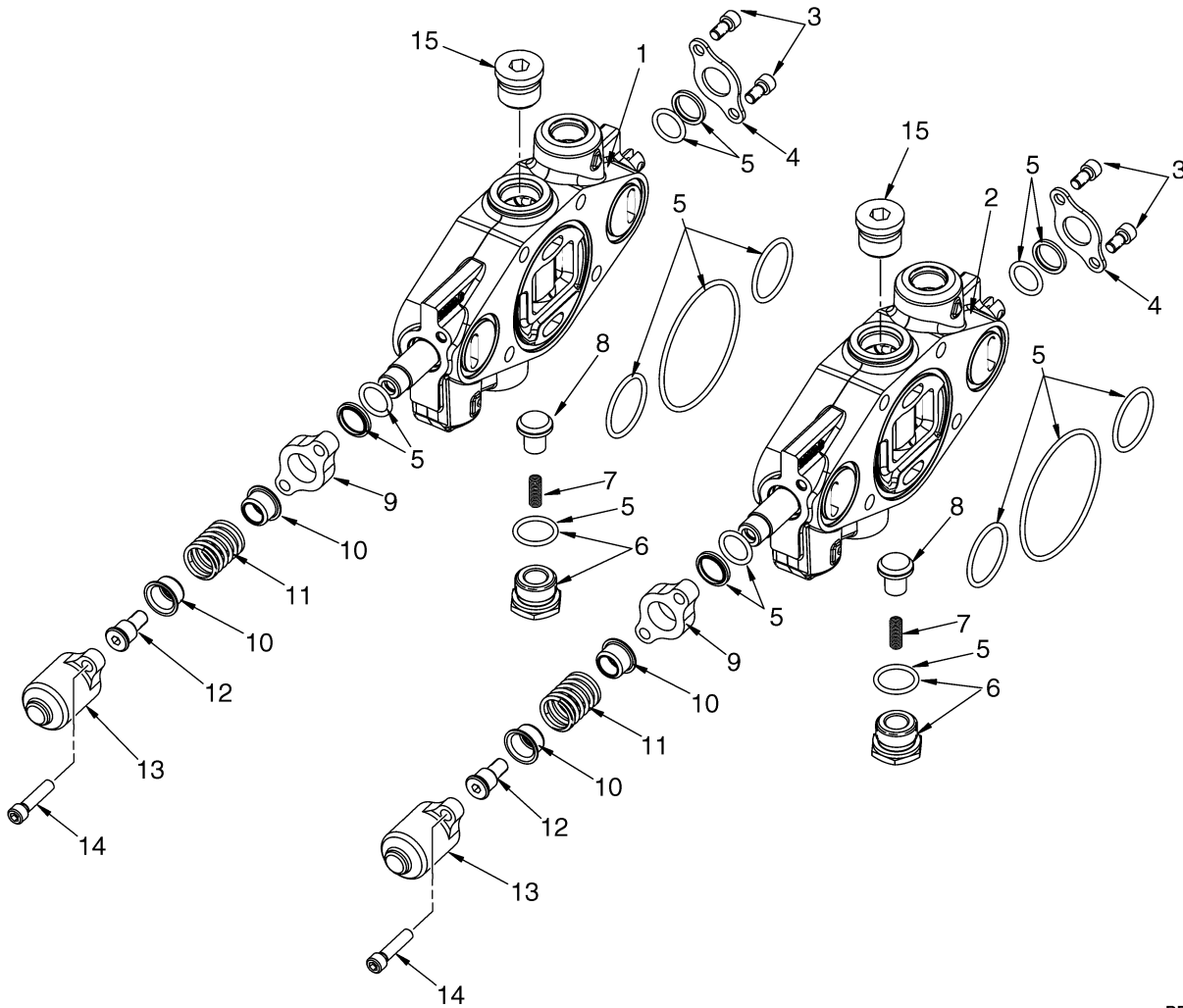
## VALVE ASSEMBLY, LIFT AND TILT (FIGURE 9-15) MANUAL CONTROL VALVE — THREE AND FOUR FUNCTION (S/N P005B02179G → (THREE FUNCTION)) (S/N P005B02174G → (FOUR FUNCTION))



**VALVE ASSEMBLY, LIFT AND TILT**  
**MANUAL CONTROL VALVE – THREE AND FOUR FUNCTION (S/N P005B02179G → (THREE FUNCTION))**  
**(S/N P005B02174G → (FOUR FUNCTION))**

ITEM	PART NO.	DESCRIPTION	QTY
	1670432		
	1702466	Valve Section (Lift And Tilt) .....	1
1	1578940	Plug .....	1
2	1578713	Plug Assembly .....	2
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 .....	4
11	188517	Spring .....	2
12	1581861	Piston .....	1
13	341462	Spring .....	1
14	386015	Spool End .....	1
14	320291	Spool End .....	1
14	16480	O-Ring .....	1
15	1560681	Cap .....	2
16	<del>1628746</del>		
	1578705	Capscrew .....	4
17	1581859	Spool End .....	1
18	1578747	Relief Valve (3100 PSI) (Main Relief) .....	1
19	1580694	Plug .....	1
20	1580697	Screw .....	1
21	1580698	Nut .....	1
22	1580695	Washer .....	1
23	1580696	Poppet .....	1
24	1581858	Kit-Capscrew .....	1
25	1580097	Kit-Seal .....	1

## VALVE ASSEMBLY, AUXILIARY ONE AND TWO (FIGURE 9-16) MANUAL CONTROL VALVE — THREE AND FOUR FUNCTION



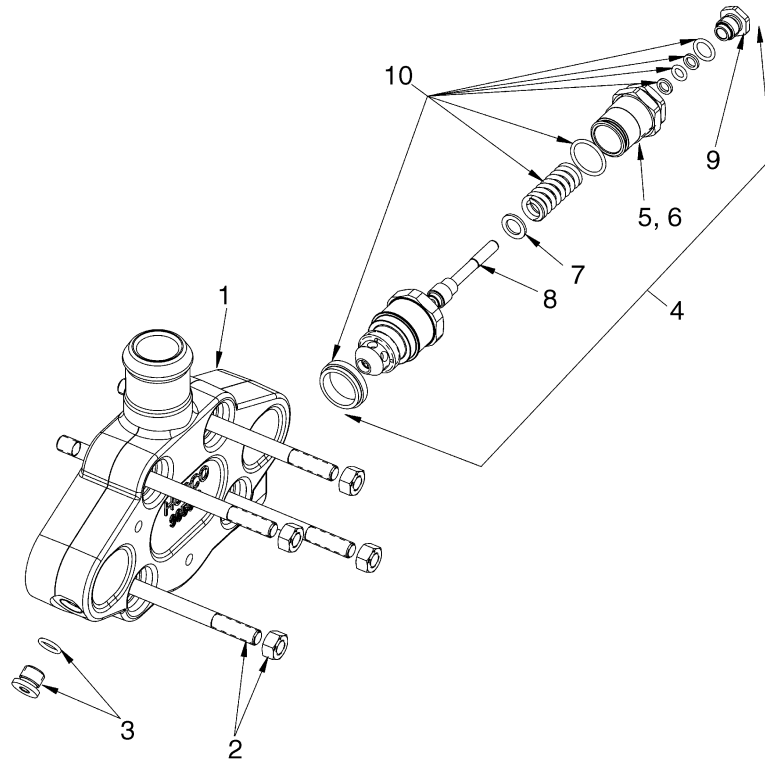
BP150220

**VALVE ASSEMBLY, AUXILIARY ONE AND TWO  
MANUAL CONTROL VALVE – THREE AND FOUR FUNCTION**

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

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1670431	Valve Section (Spool Section) One or Two .....	1	1
2	1670533	Valve Section (Spool Section) One .....	..	1
3	16706	Screw .....	2	2
4	188515	Plate .....	1	1
5	1580147	Kit-Seal (Auxiliary Functions) .....	1	1
6	1578713	Plug Assembly .....	1	1
6	77441	Plug .....	1	1
7	77442	Spring .....	1	1
8	77443	Poppet .....	1	1
9	.....	Seal Plate .....	1	1
10	320289	Spring Seat .....	1	1
11	188517	Spring .....	1	1
12	1581859	Spool End .....	1	1
13	1560681	Cap .....	1	1
14	<del>4628746</del>			
	1578705	Capscrew .....	2	2
15	1578714	Plug Assembly .....	1	1

## VALVE ASSEMBLY (FIGURE 9-17) OUTLET SECTION — MANUAL CONTROL, THREE AND FOUR FUNCTION

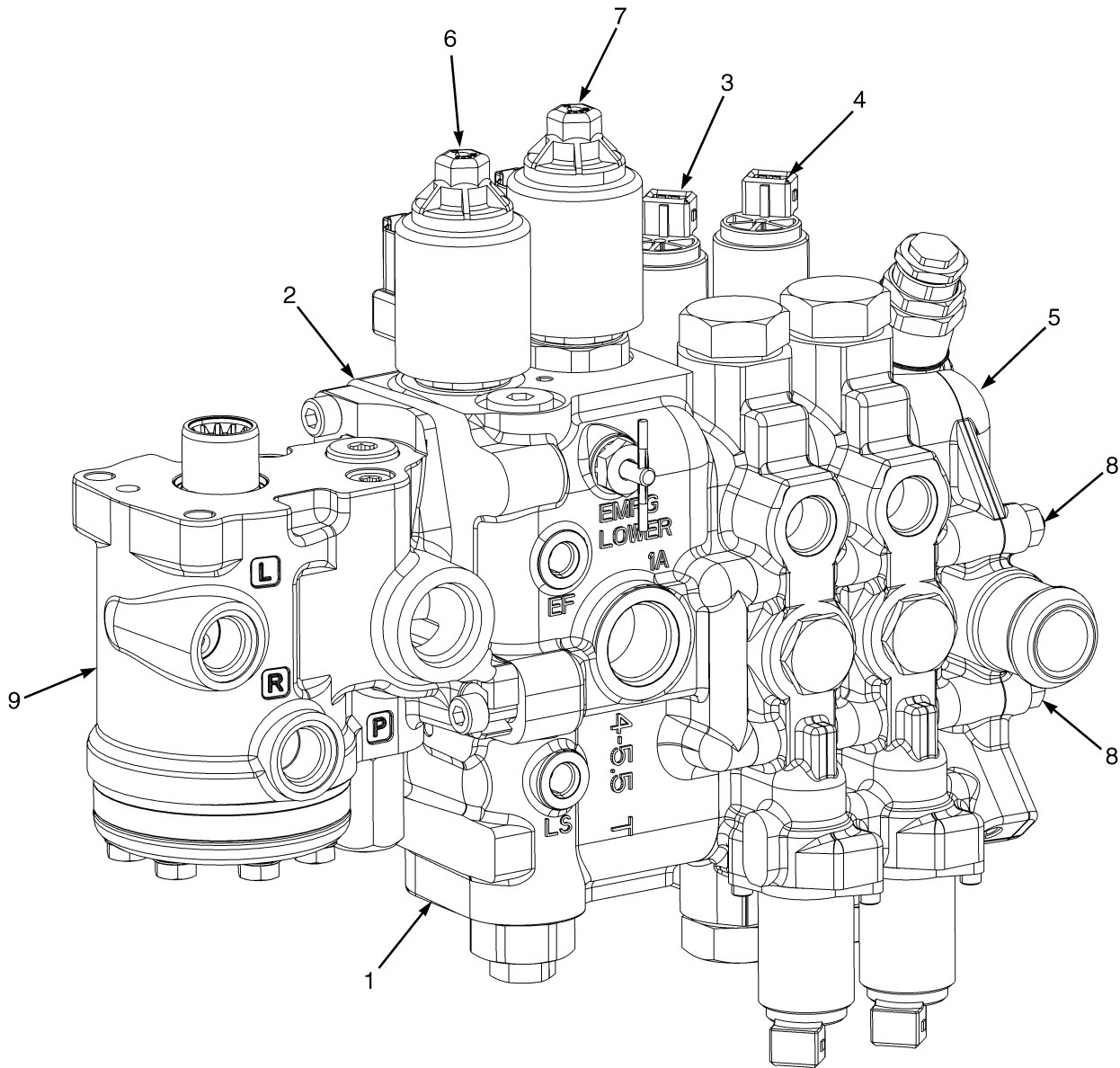


BP140048

ITEM	PART NO.	DESCRIPTION	QTY
1	1578746	Valve Section (Outlet Section) .....	1
2	1580155	Kit-Tie Rod (Three Function) .....	1
2	1580156	Kit-Tie Rod (Four Function) .....	1
3	1578712	Plug Assembly .....	1
4	1578707	Relief Valve (Secondary) (15.5 MPa) .....	1
5	.....	Nut .....	1
6	.....	Screw .....	1
7	.....	Washer .....	1
8	.....	Poppet .....	1
9	.....	Plug .....	1
10	1580131	Kit-Seal .....	1



**CONTROL VALVE ASSEMBLY (FIGURE 9-18)**  
**ELECTRONIC CONTROL — THREE FUNCTION (→ S/N P005B02190G)**



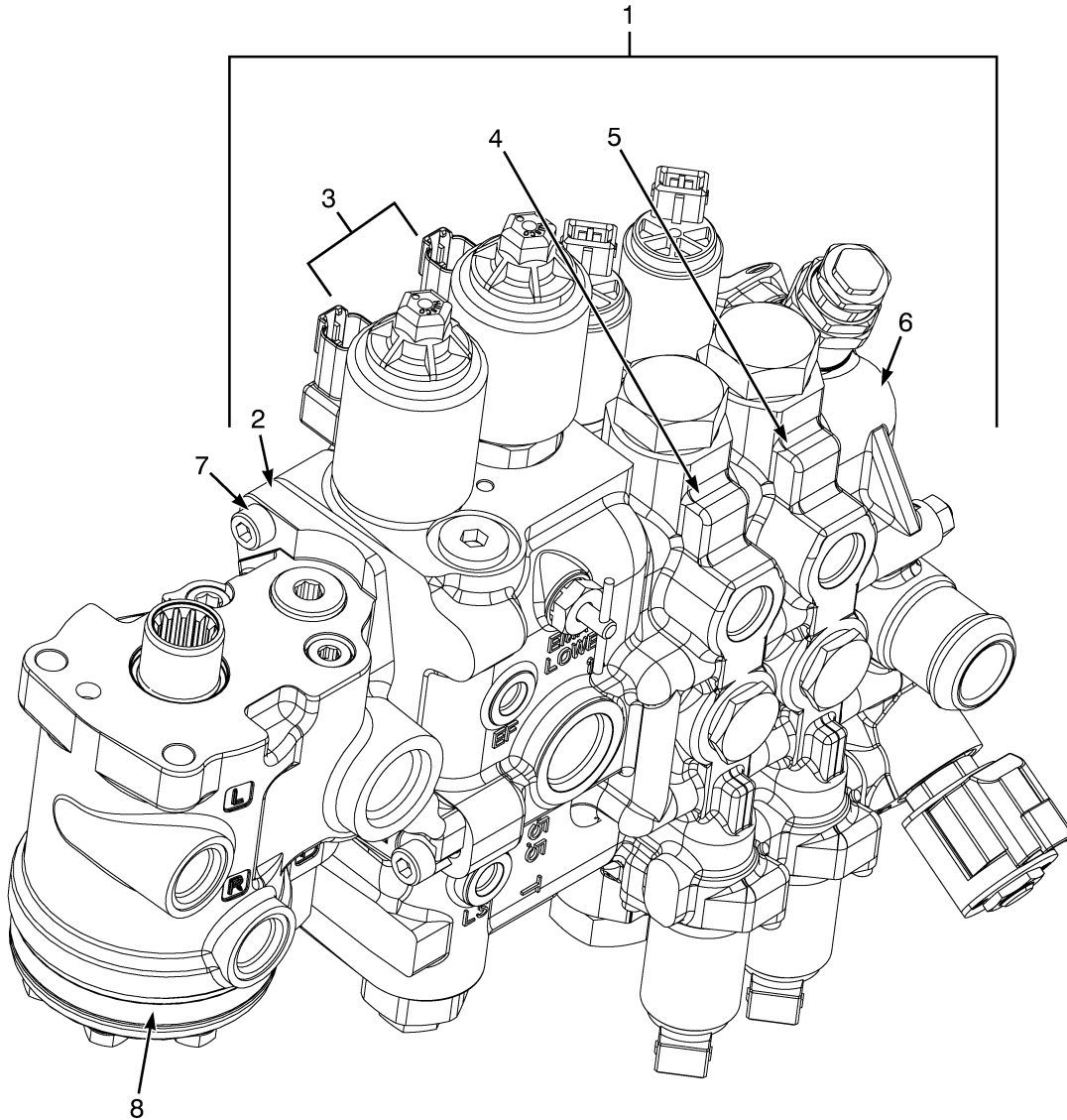
BP150157



**CONTROL VALVE ASSEMBLY**  
**ELECTRONIC CONTROL – THREE FUNCTION (→ S/N P005B02190G)**

ITEM	PART NO.	DESCRIPTION	QTY
	2079628	Hydraulic Control Valve .....	1
1	2078039	Hydraulic Control Valve .....	1
2	1629196	Valve Section (Inlet) (☞ Figure 9-24).....	1
3	1629197	Valve Section (Tilt) (☞ Figure 9-27).....	1
4	1629198	Valve Section (Auxiliary One) (☞ Figure 9-16).....	1
5	1578704	Valve Section (Outlet) (☞ Figure 9-32).....	1
6	1629201	Kit-Valve (Lower) (☞ Figure 9-26).....	1
7	1629200	Kit-Valve (Lift) (☞ Figure 9-26).....	1
8	1578715	Kit-Tie Rod .....	1
9	2102566	Steering Control Unit (☞ Figure 7-5).....	1

## CONTROL VALVE ASSEMBLY (FIGURE 9-19) ELECTRONIC CONTROL — THREE FUNCTION (S/N P005B02191G →)



BP140154

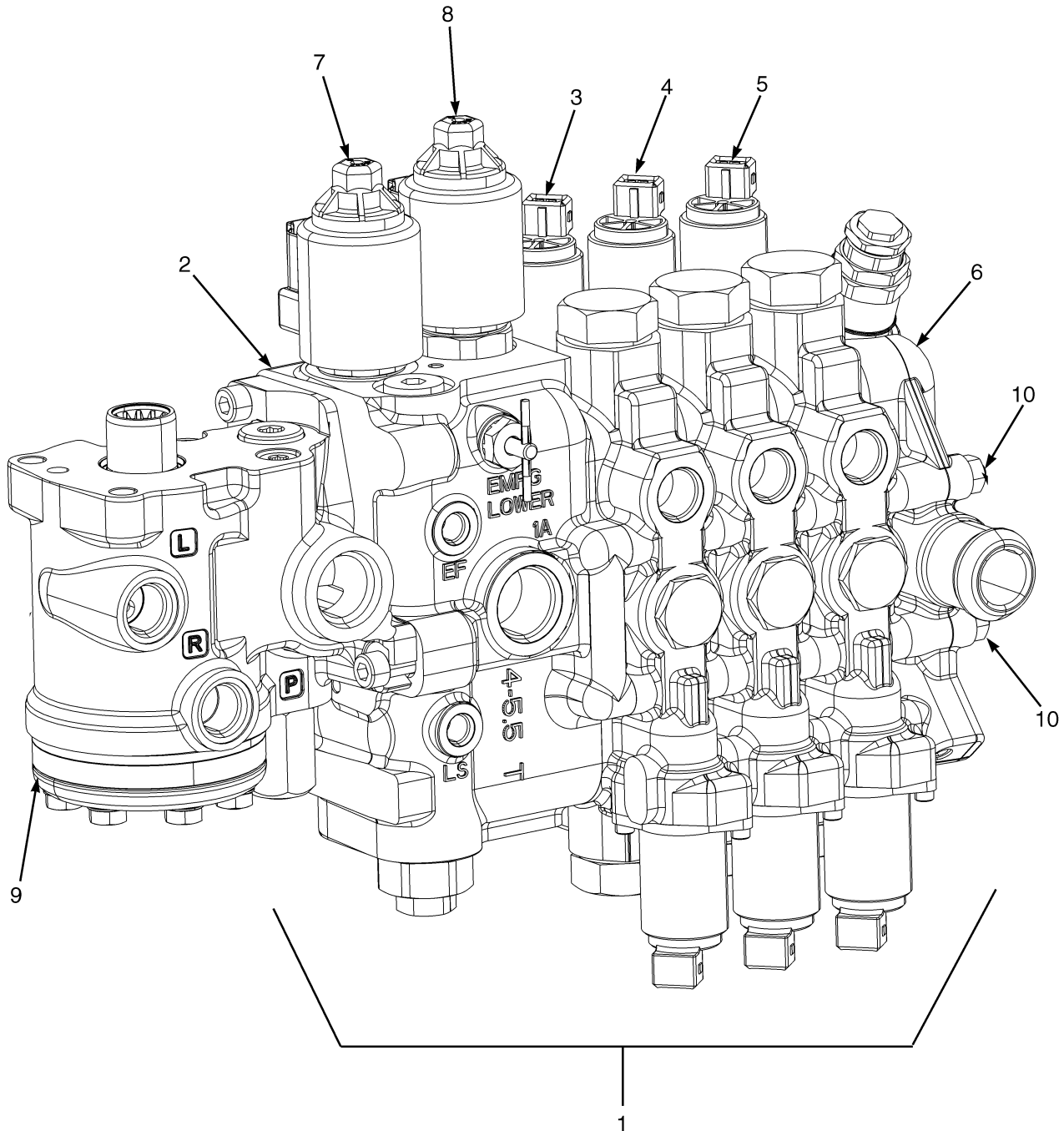
**CONTROL VALVE ASSEMBLY**  
**ELECTRONIC CONTROL – THREE FUNCTION (S/N P005B02191G →)**

ITEM	PART NO.	DESCRIPTION	QTY
	2103013	Hydraulic Control Valve Assembly .....	1
1	2103017	Hydraulic Control Valve .....	1
2	1629196	Valve Section (Inlet) (☞ Figure 9-26).....	1
3	.....	Poppet Valve (☞ Figure 9-26).....	1
4	1708317	Valve Section (Tilt) (☞ Figure 9-27).....	1
5	1708263	Valve Section (Aux. 1) (☞ Figure 9-29).....	1
6	1708262	Valve Section (Outlet) (☞ Figure 9-33).....	1
7	1581858	Kit-Capscrew .....	1
8	2102566	Steering Control Unit (☞ Figure 7-5).....	1
	a 1678166	Plug (Diesel) .....	1
	a 1578909	Kit-Seal .....	1

**FOOTNOTES:**

a Not Illustrated

## CONTROL VALVE ASSEMBLY (FIGURE 9-20) ELECTRONIC CONTROL — FOUR FUNCTION (→ S/N P005B02190G)

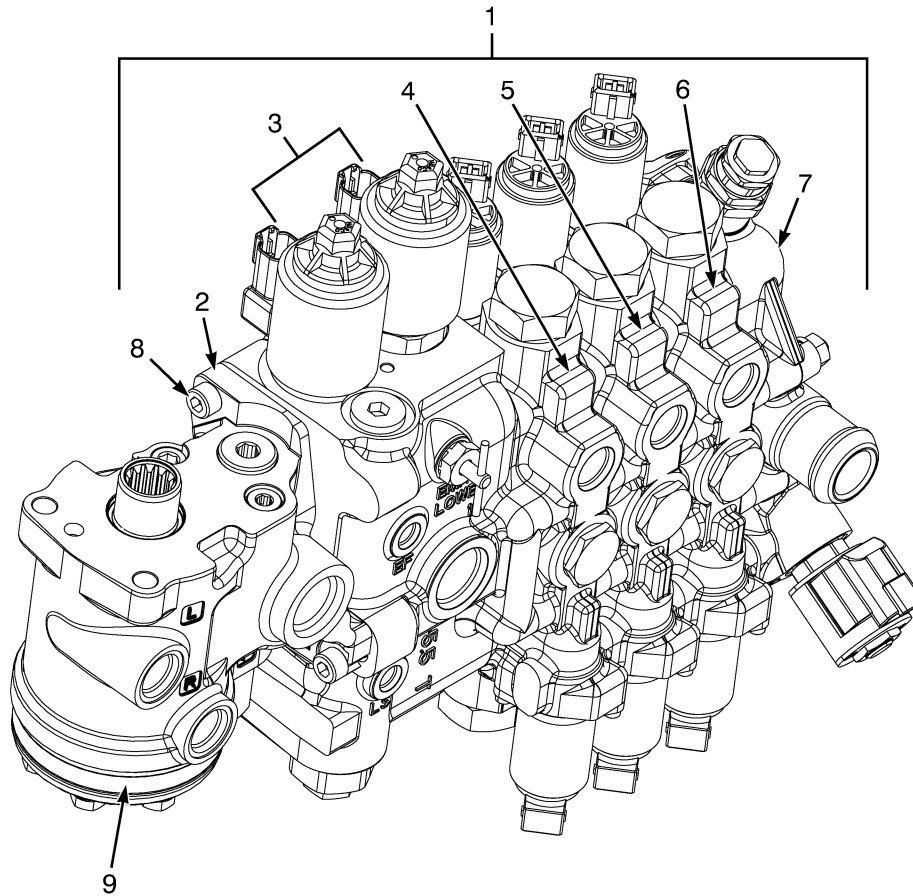


BP140001

**CONTROL VALVE ASSEMBLY**  
**ELECTRONIC CONTROL – FOUR FUNCTION (→ S/N P005B02190G)**

ITEM	PART NO.	DESCRIPTION	QTY
	2079627	Hydraulic Control Valve .....	1
1	2078041	Hydraulic Control Valve .....	1
2	1629196	Valve Section (Inlet) (☞ Figure 9-24).....	1
3	1629197	Valve Section (Tilt) (☞ Figure 9-27).....	1
4	1629198	Valve Section (Auxiliary One) (☞ Figure 9-28).....	1
5	1633693	Valve Section (Auxiliary Two and Three) (☞ Figure 9-30).....	1
6	1578704	Valve Section (Outlet) (☞ Figure 9-32).....	1
7	1629200	Kit-Valve (Lift) (☞ Figure 9-26).....	1
8	1629201	Kit-Valve (Lower) (☞ Figure 9-26).....	1
9	2102566	Steering Control Unit .....	1
10	1580151	Kit-Tie Rod .....	1

**CONTROL VALVE ASSEMBLY (FIGURE 9-21)**  
**ELECTRONIC CONTROL — FOUR FUNCTION (S/N P005B02191G →)**



BP140155

ITEM	PART NO.	DESCRIPTION	QTY
	2103015	Hydraulic Control Valve Assembly .....	1
1	2103018	Hydraulic Control Valve .....	1
2	1629196	Valve Section (Inlet) (☞ Figure 9-26).....	1
3	.....	Poppet Valves (☞ Figure 9-26).....	1
4	1708317	Valve Section (Tilt) (☞ Figure 9-27).....	1
5	1708263	Valve Section (Aux. 1) (☞ Figure 9-29).....	1
6	1708299	Valve Section (Auxiliary Two) (☞ Figure 9-31).....	1
7	1708262	Valve Section (Outlet) (☞ Figure 9-33).....	1
8	1581858	Kit-Capscrew .....	1
9	2102566	Steering Control Unit (☞ Figure 7-5).....	1
	a 1678166	Plug .....	1

**FOOTNOTES:**

a Not Illustrated







**CONTROL VALVE ASSEMBLY**  
**ELECTRONIC CONTROL – THREE AND FOUR FUNCTION-WITH VDP (S/N P005B03651J →)**

**KEY:**

**A: 3 Function**

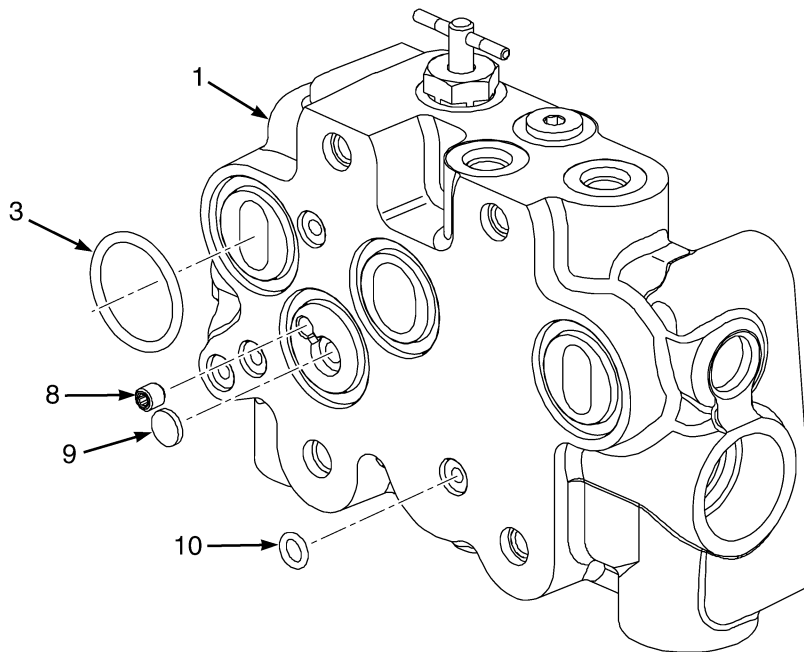
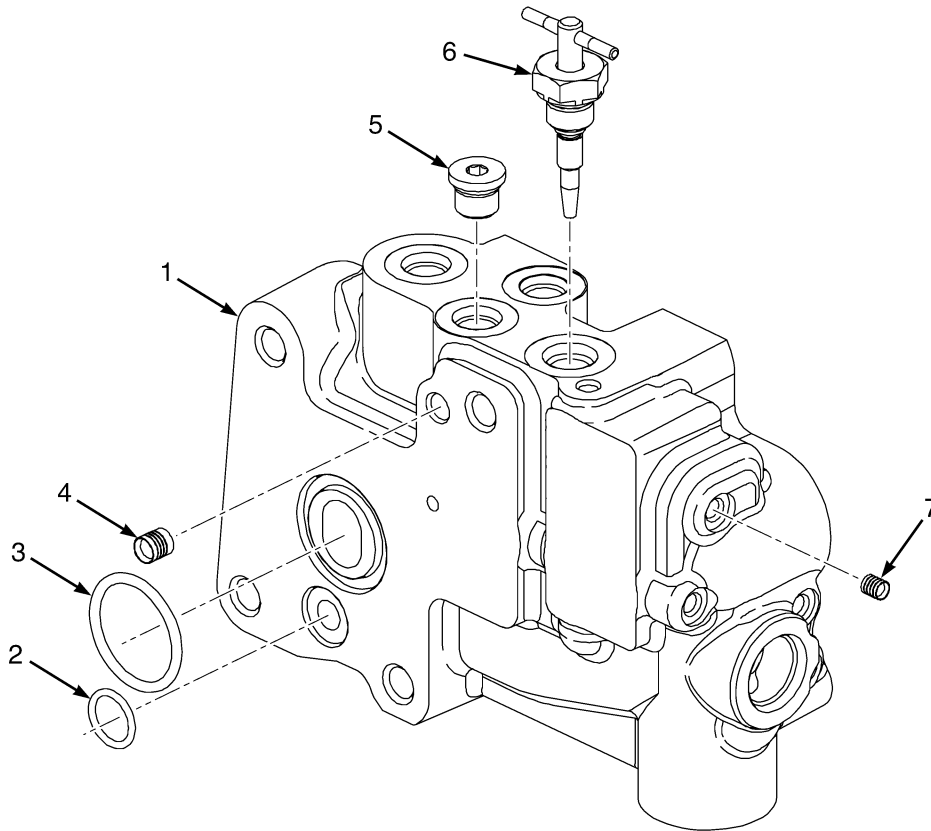
**B: 4 Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4614581	Hydraulic Control Valve (4.0T) .....	1	..
	4614582	Hydraulic Control Valve (4.0T) .....	..	1
	4604780	Hydraulic Control Valve (4.5-5.5T) .....	1	..
	4604781	Hydraulic Control Valve (4.5-5.5T) .....	..	1
	4614583	Hydraulic Control Valve (4.0T) .....	1	..
	4614584	Hydraulic Control Valve (4.0T) .....	..	1
	4605236	Hydraulic Control Valve (4.5-5.5T) .....	1	..
	4605237	Hydraulic Control Valve (4.5-5.5T) .....	..	1
1	4031384	Valve Section (Transition) (☞Figure 9-23).....	1	1
2	4031502	Relief Valve (Main) (23.7 MPa) .....	1	1
3	4031501	Valve Section (Lift) (☞Figure 9-25).....	1	1
4	4031500	Valve Section (Tilt) (☞Figure 9-27).....	1	1
5	4031499	Valve Section (Auxiliary One) (☞Figure 9-29).....	1	1
6	4031527	Valve Section (Auxiliary Two) (☞Figure 9-31).....	..	1
7	1578707	Relief Valve (Secondary) (15.5 MPa) .....	1	1
8	4031498	Valve Section (Outlet) (☞Figure 9-33).....	1	1
9	4031370	Kit-Tie Rod (☞Figure 9-33).....	1	..
9	4031371	Kit-Tie Rod (☞Figure 9-33).....	..	1
10	1581858	Kit-Capscrew .....	1	1
10	1629155	Washer .....	2	2
10	.....	Capscrew .....	2	2
11	1569602	Plug .....	1	1
12	4608006	Steering Control Unit .....	1	1
	a 222442	Fitting .....	1	1
	a 4031374	Kit-Seal (Transition Section) .....	1	1
	a 4031377	Kit-Seal (Valve Master Seal Kit) .....	1	1

**FOOTNOTES:**

**a** Not Illustrated

## ELECTRONIC CONTROL VALVE (FIGURE 9-23) TRANSITION SECTION — WITH VARIABLE DISPLACEMENT PUMP (S/N P005B03651J →)



BP140207

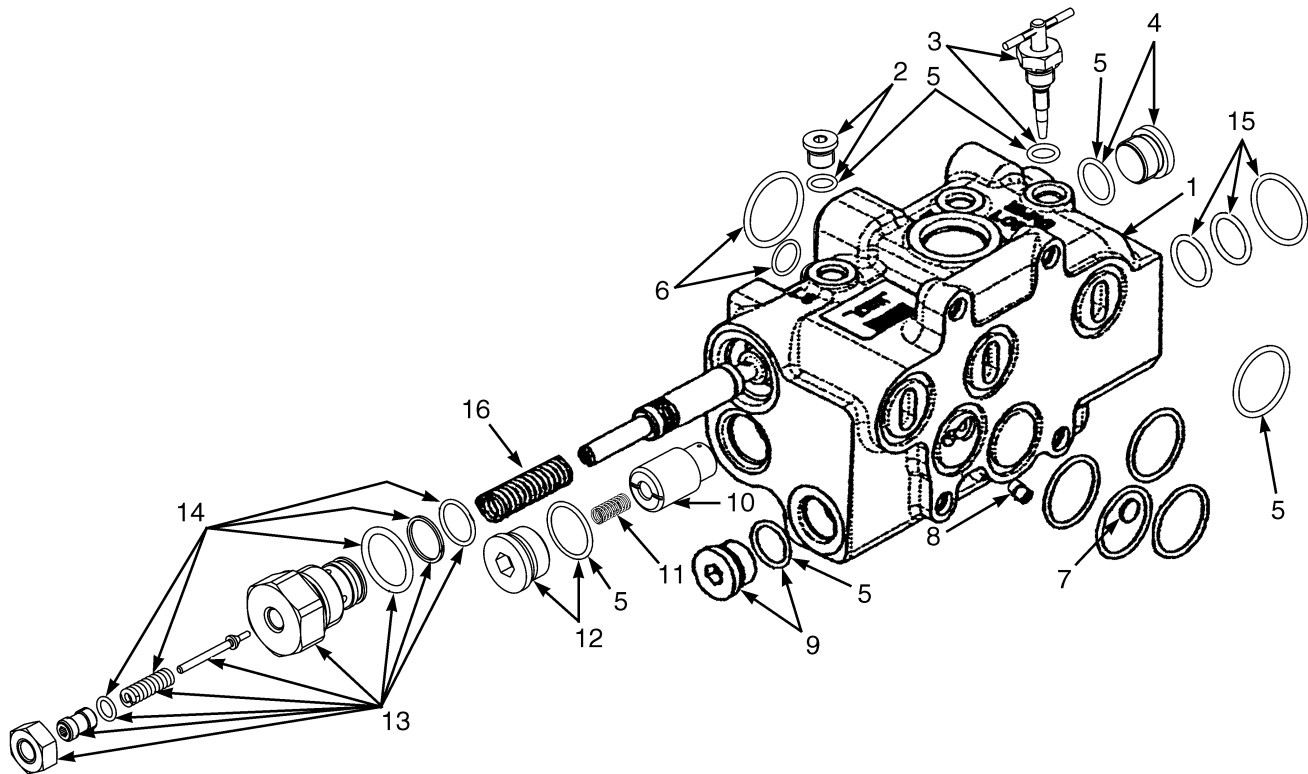
**ELECTRONIC CONTROL VALVE  
TRANSITION SECTION – WITH VARIABLE DISPLACEMENT PUMP (S/N P005B03651J →)**

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 Assembly .....	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
	<b>a</b> 4031373	Kit-Seal (Valve to Steering Control Unit) .....	1

**FOOTNOTES:**

**a** Not Illustrated

## ELECTRONIC CONTROL VALVE LIFT AND LOWER (FIGURE 9-24) THREE AND FOUR FUNCTION

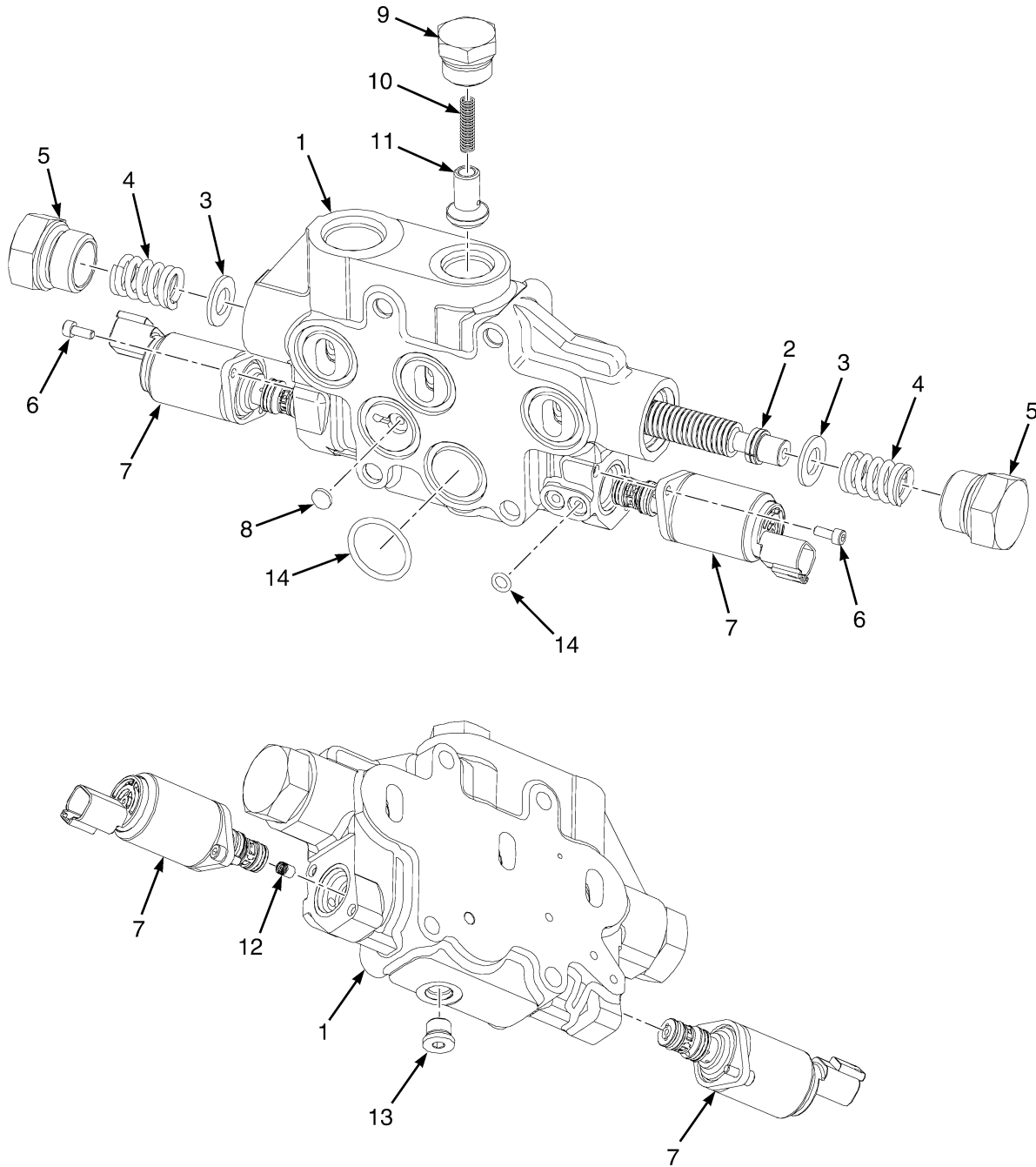


BP140076

**ELECTRONIC CONTROL VALVE LIFT AND LOWER  
THREE AND FOUR FUNCTION**

ITEM	PART NO.	DESCRIPTION	QTY
1	1629196	Valve Section (Inlet) .....	1
2	1578712	Plug Assembly .....	1
2	204128	Plug .....	1
3	1581862	Kit-Valve (Manual Lowering) .....	1
4	1629210	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	1569602	Plug .....	1
10	1586280	Poppet .....	1
11	1578876	Spring .....	1
12	1578714	Plug Assembly .....	1
13	1629209	Relief Valve (Main) .....	1
14	1580132	Kit-Relief Valve .....	1
15	1586279	Kit-Seal (Electro Hydraulic Poppet Valve) (Caged Lower) .....	AR
16	1629211	Spring .....	1
	1578908	Kit-Seal (Four Function) .....	1
	1578909	Kit-Seal (Three Function) .....	1

## ELECTRONIC CONTROL VALVE (FIGURE 9-25) LIFT SECTION — WITH VARIABLE DISPLACEMENT PUMP (S/N P005B03651J →)

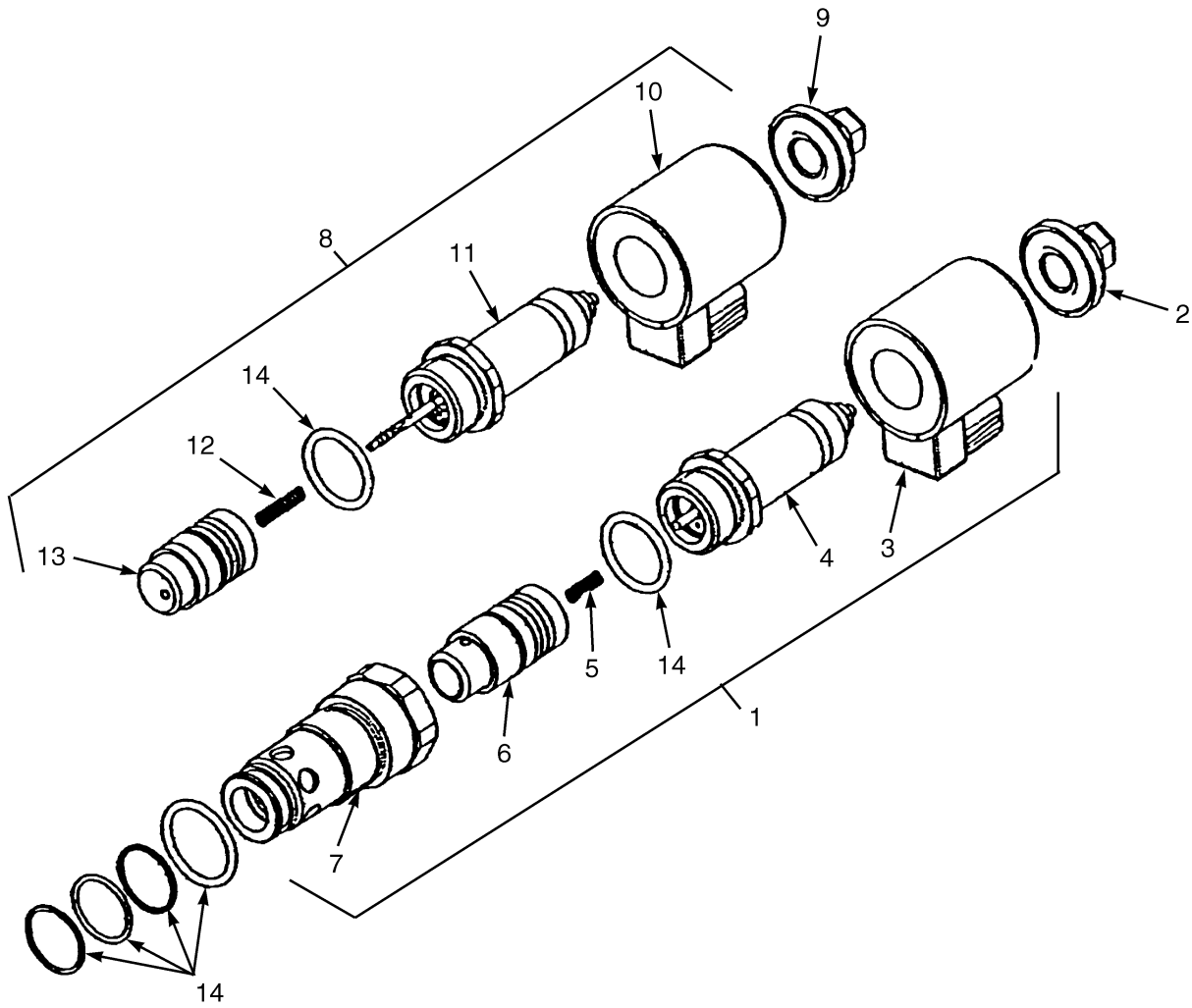


BP140208

**ELECTRONIC CONTROL VALVE**  
**LIFT SECTION – WITH VARIABLE DISPLACEMENT PUMP (S/N P005B03651J →)**

ITEM	PART NO.	DESCRIPTION	QTY
1	4031501	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	1578943	Poppet .....	1
12	4031473	Check Valve .....	1
13	1578712	Plug Assembly .....	1
14	4031375	Kit-Seal (Lift Section) .....	1

**ELECTRO HYDRAULIC POPPET VALVE (FIGURE 9-26)  
THREE AND FOUR FUNCTION**



BP140002

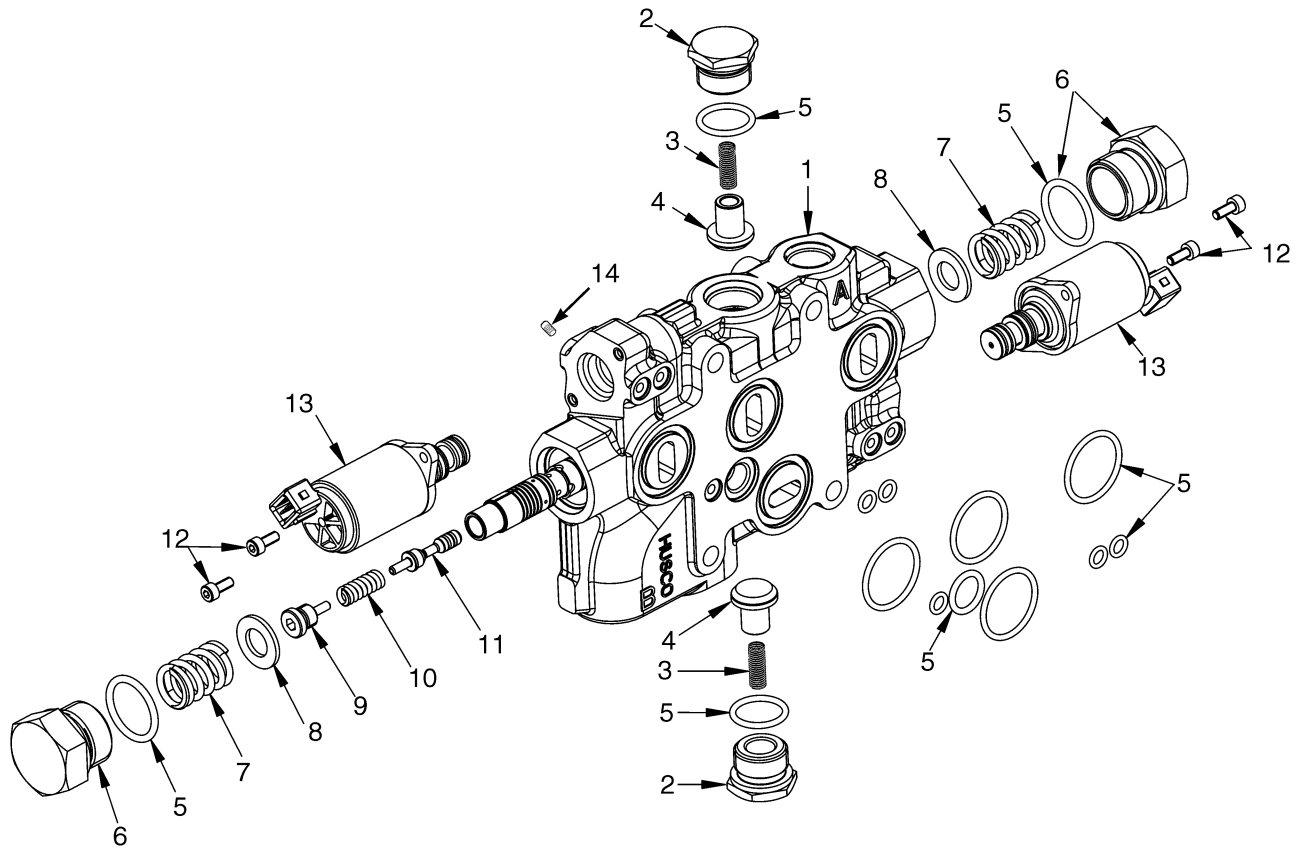


**ELECTRO HYDRAULIC POPPET VALVE  
THREE AND FOUR FUNCTION**

ITEM	PART NO.	DESCRIPTION	QTY
1	<b>a</b> 1629201	Kit-Valve (Lower) .....	1
1	<b>b</b> 1699590	Poppet Valve (Lower) .....	1
2	1629163	Nut .....	1
3	1578710	Coil .....	1
4	1629160	Tube (Solenoid) .....	1
5	1629165	Spring .....	1
6	<b>a</b> 1699591	Poppet Valve .....	1
6	<b>b</b> 1629159	Poppet Valve .....	1
7	1586020	Sleeve .....	1
8	1629200	Kit-Valve (Lift) .....	1
9	1629163	Nut .....	1
10	1629162	Coil .....	1
11	1629161	Tube Assy (Solenoid) .....	1
12	<del>1629164</del> 1657846	Spring .....	1
13	1629158	Poppet Valve .....	1
14	1586279	Kit-Seal (Electro Hydraulic Poppet Valve) .....	1

**FOOTNOTES:****a** → S/N P005B02190G**b** S/N P005B02191G →

## ELECTRONIC CONTROL VALVE TILT SECTION (FIGURE 9-27) THREE AND FOUR FUNCTION



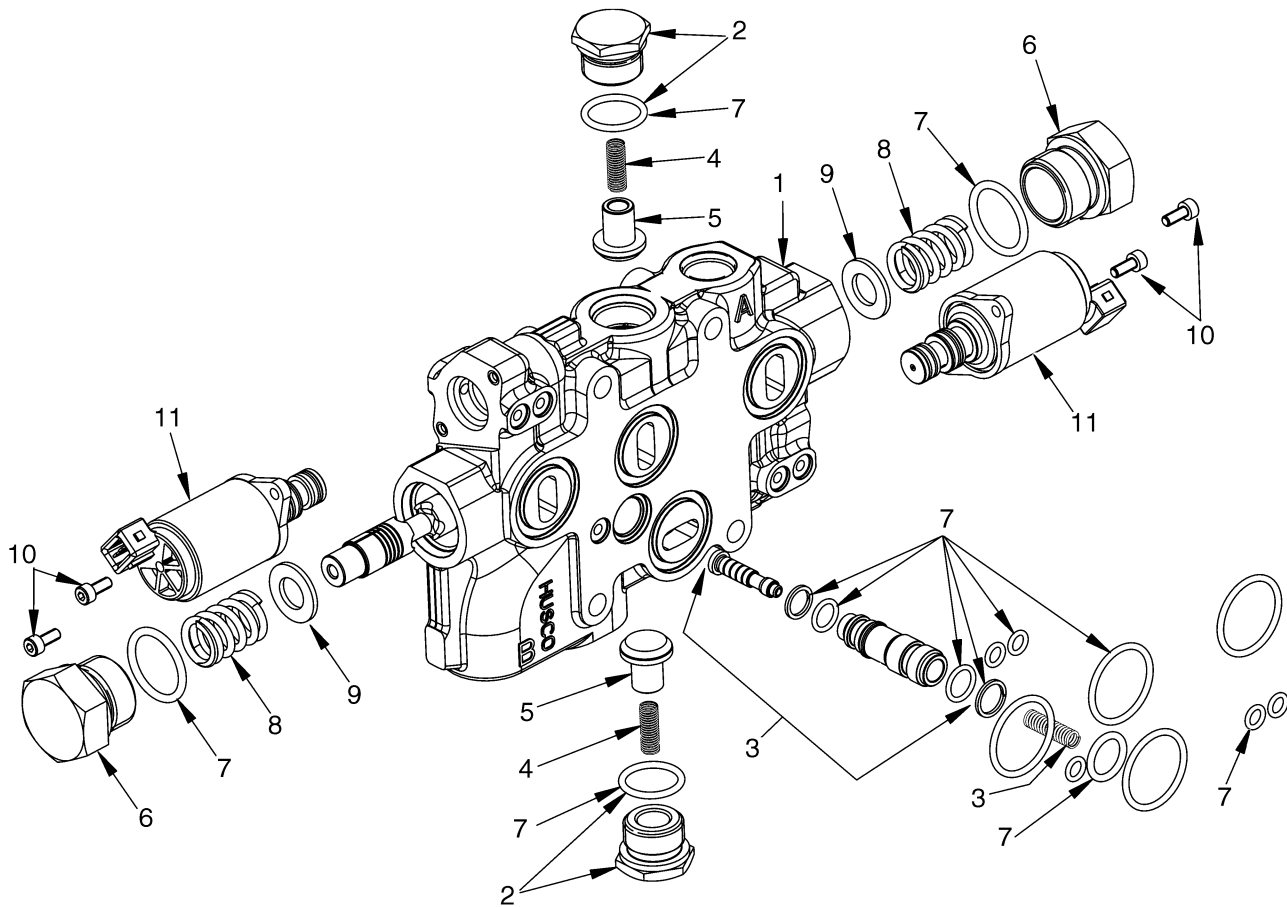
BP140054

**ELECTRONIC CONTROL 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
1	<b>a</b> 1629197	Valve Section (Tilt) .....	1	..
1	<b>b</b> 1708317	Valve Section (Tilt) .....	1	..
1	<b>c</b> 4031500	Valve Section (Tilt) .....	..	1
2	1578713	Plug Assembly .....	2	2
3	77442	Spring .....	2	2
4	77443	Poppet .....	2	2
5	1578905	Kit-Seal (Tilt) .....	1	1
6	1578889	Plug .....	2	2
7	1578882	Spring .....	2	2
8	1578883	Washer .....	2	2
9	1580760	Spool End .....	1	..
10	1580759	Spring .....	1	..
11	1580099	Piston and Rod .....	1	..
12	1578878	Capscrew .....	4	..
12	1664395	Capscrew .....	..	4
13	1578711	Valve (Pressure Reducing) .....	2	2
13	1578912			
	1687534	Kit-Seal (Solenoid Pressure Reducing) .....	1	..
14	1578887	Setscrew .....	1	1

**FOOTNOTES:****a** → S/N P005B02190G**c** S/N P005B03651J →**b** S/N P005B02191G →

## ELECTRONIC CONTROL VALVE (FIGURE 9-28) AUXILIARY ONE SECTION — THREE AND FOUR FUNCTION (→ S/N P005B02190G)

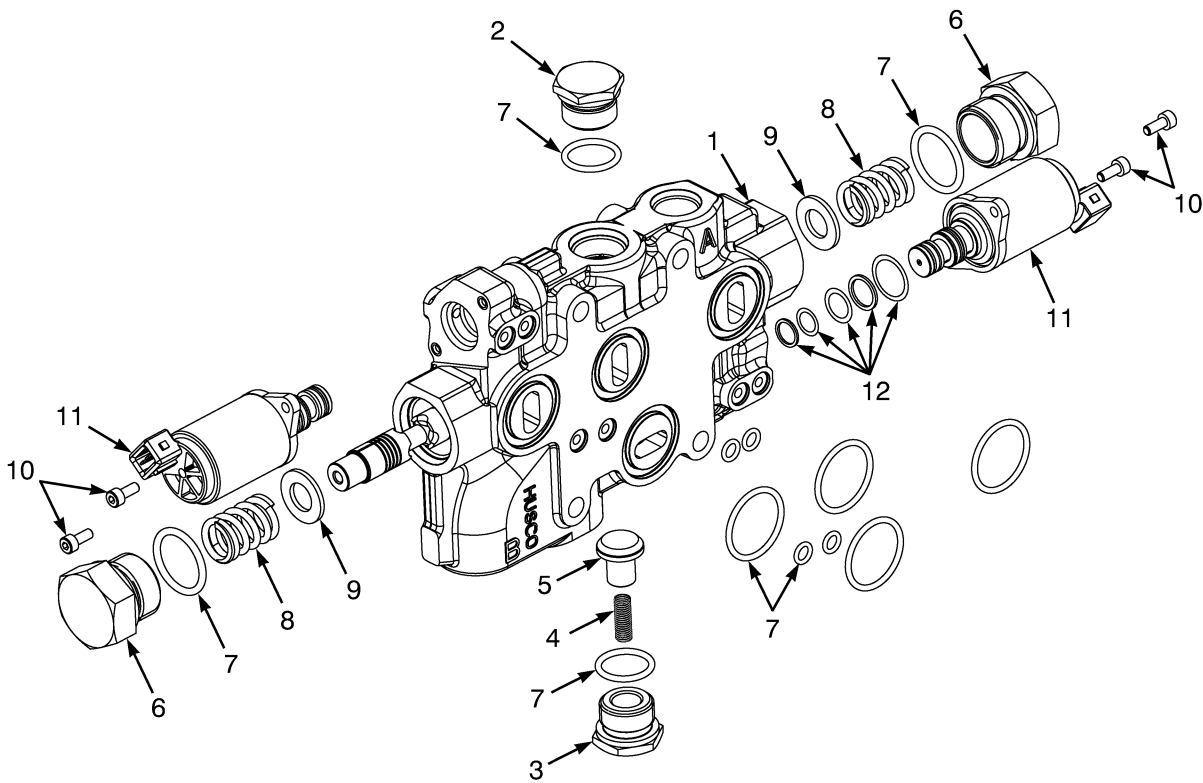


HP140019

**ELECTRONIC CONTROL VALVE**  
**AUXILIARY ONE SECTION – THREE AND FOUR FUNCTION (→ S/N P005B02190G)**

ITEM	PART NO.	DESCRIPTION	QTY
1	1629198	Valve Section (Auxiliary One) .....	1
2	1578713	Plug Assembly (Tilt/Auxiliary) .....	1
2	1578714	Plug Assembly (Lift) .....	1
3	1578718	Cartridge Valve .....	1
3	1578886	Spring .....	1
3	1629166	Sleeve .....	1
3	266519	O-Ring .....	2
4	77442	Spring .....	1
5	77443	Poppet .....	1
6	1578889	Plug .....	2
7	1578906	Kit-Seal (Auxiliary Section) .....	1
8	1578882	Spring .....	2
9	1578883	Washer .....	2
10	1578878	Capscrew .....	4
11	1578711	Valve (Pressure Reducing) .....	2
11	<del>1578912</del> 1687534	Kit-Seal (Solenoid Pressure Reducing) .....	1

## ELECTRONIC CONTROL VALVE (FIGURE 9-29) AUXILIARY ONE SECTION — THREE AND FOUR FUNCTION (S/N P005B02191G →)



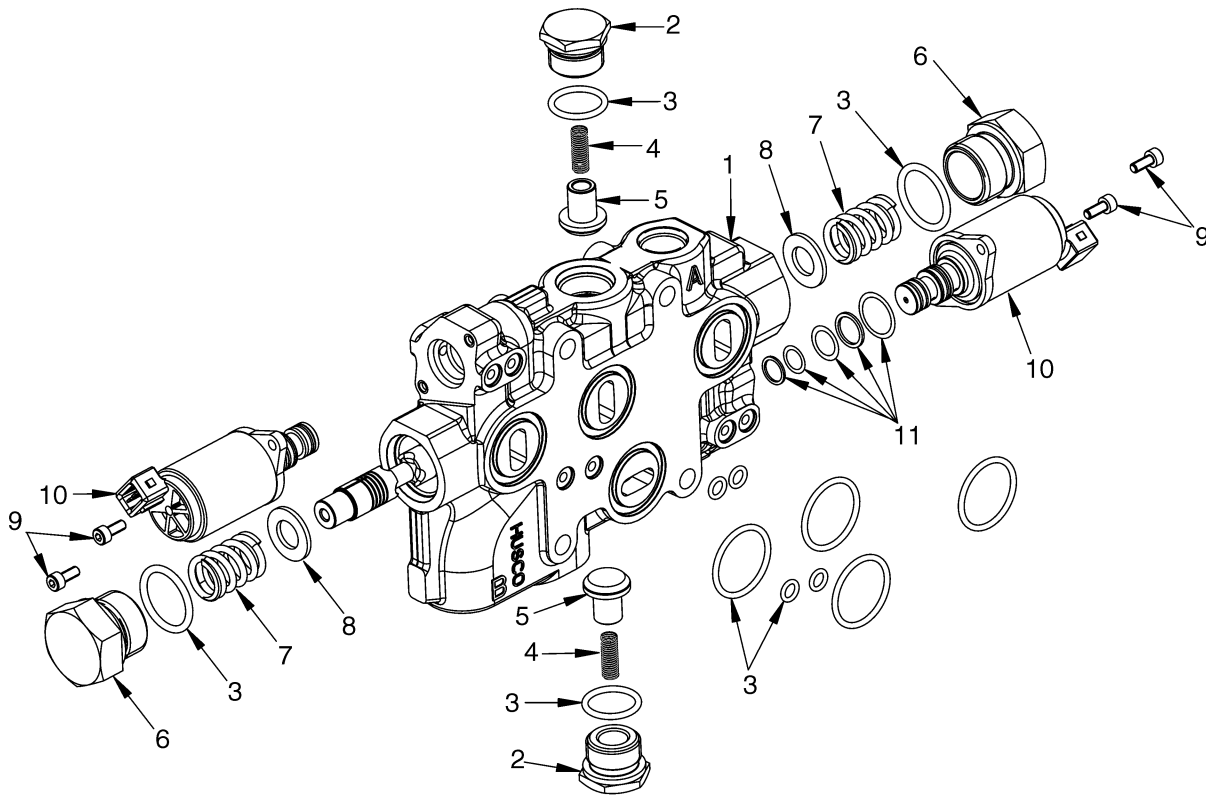
BP140153

**ELECTRONIC CONTROL VALVE**  
**AUXILIARY ONE SECTION – THREE AND FOUR FUNCTION (S/N P005B02191G →)**

**KEY:****A: Used With Gear Pump****B: Used With Variable Displacement Pump**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1708263	Valve Section (Aux. 1) (3 Function) .....	1	..
1	1708298	Valve Section (Aux. 1) (4 Function) .....	1	..
1	4031499	Valve Section (Auxiliary One) .....	..	1
2	1578714	Plug Assembly .....	1	..
2	4031469	Plug .....	..	1
3	1578713	Plug Assembly .....	1	1
3	77441	Plug .....	1	1
4	77442	Spring .....	2	1
5	77443	Poppet .....	2	1
6	1578889	Plug .....	1	2
7	1578906	Kit-Seal (Auxiliary Section) .....	1	1
8	1578882	Spring .....	2	2
9	1578883	Washer .....	2	2
10	1664395	Capscrew .....	4	4
11	1578711	Valve (Pressure Reducing) .....	2	2
12	1578912			
	1687534	Kit-Seal (Solenoid Pressure Reducing) .....	2	..

## ELECTRONIC CONTROL VALVE (FIGURE 9-30) AUXILIARY TWO SECTION — THREE FUNCTION (→ S/N P005B02190G)

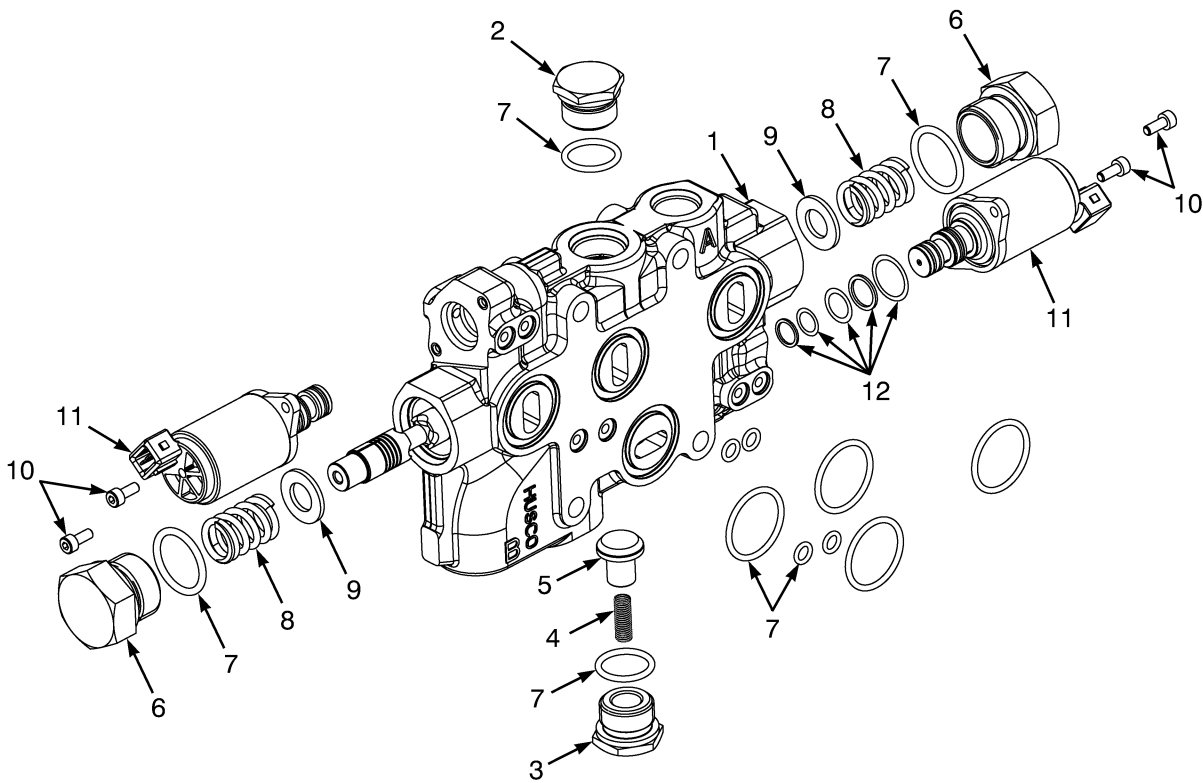




**ELECTRONIC CONTROL VALVE**  
**AUXILIARY TWO SECTION – THREE FUNCTION (→ S/N P005B02190G)**

ITEM	PART NO.	DESCRIPTION	QTY
1	1633693	Valve Section .....	1
2	1578713	Plug Assembly (Tilt/Auxiliary) .....	1
2	1578714	Plug Assembly (Lift) .....	1
3	1578907	Kit-Seal (Auxiliary Section) .....	1
4	77442	Spring .....	1
5	77443	Poppet .....	1
6	1578889	Plug .....	2
7	1578882	Spring .....	2
8	1578883	Washer .....	2
9	1578878	Capscrew .....	4
10	1578711	Valve (Pressure Reducing) .....	2
11	<del>1578912</del> 1687534	Kit-Seal (Solenoid Pressure Reducing) .....	1

## ELECTRONIC CONTROL VALVE (FIGURE 9-31) AUXILIARY TWO SECTION — THREE AND FOUR FUNCTION (S/N P005B02191G →)



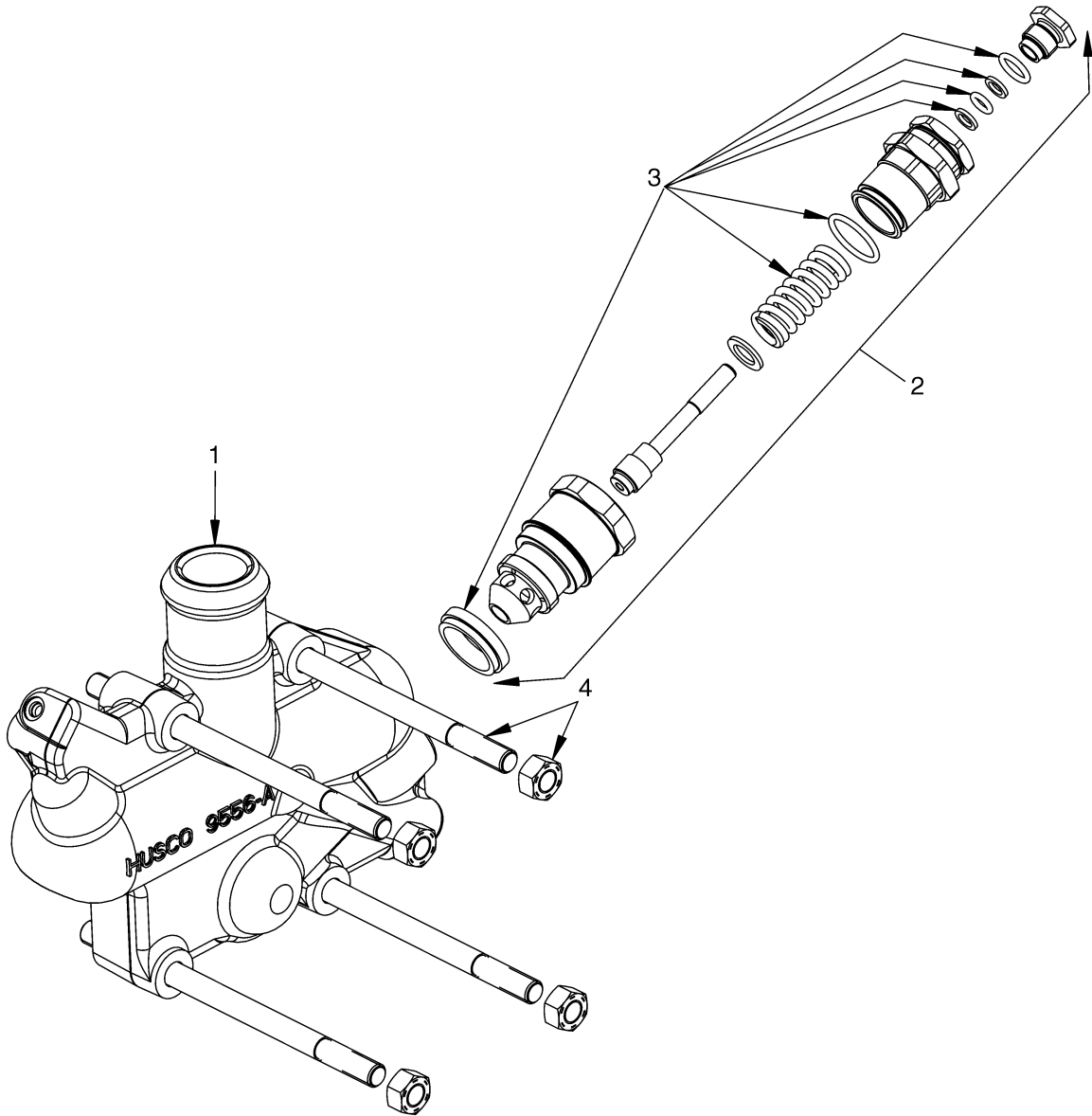
BP140153

**ELECTRONIC CONTROL VALVE**  
**AUXILIARY TWO SECTION – THREE AND FOUR FUNCTION (S/N P005B02191G →)**

**KEY:****A: Used With Gear Pump****B: Used With Variable Displacement Pump**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1708299	Valve Section (Auxiliary Two) .....	1	..
1	4031527	Valve Section (Auxiliary Two) .....	..	1
2	1578714	Plug Assembly .....	1	1
3	1578713	Plug Assembly .....	1	1
3	77441	Plug .....	1	1
4	77442	Spring .....	2	1
5	77443	Poppet .....	2	1
6	1578889	Plug .....	1	2
7	1578907	Kit-Seal (Auxiliary Section) .....	1	..
7	1578906	Kit-Seal (Auxiliary Section) .....	..	1
8	1578882	Spring .....	2	2
9	1578883	Washer .....	2	2
10	1664395	Capscrew .....	4	4
11	1578711	Valve (Pressure Reducing) .....	2	2
12	1578912			
	1687534	Kit-Seal (Solenoid Pressure Reducing) .....	2	..

## ELECTRONIC CONTROL VALVE (FIGURE 9-32) OUTLET SECTION — THREE AND FOUR FUNCTION (→ S/N P005B02190G)

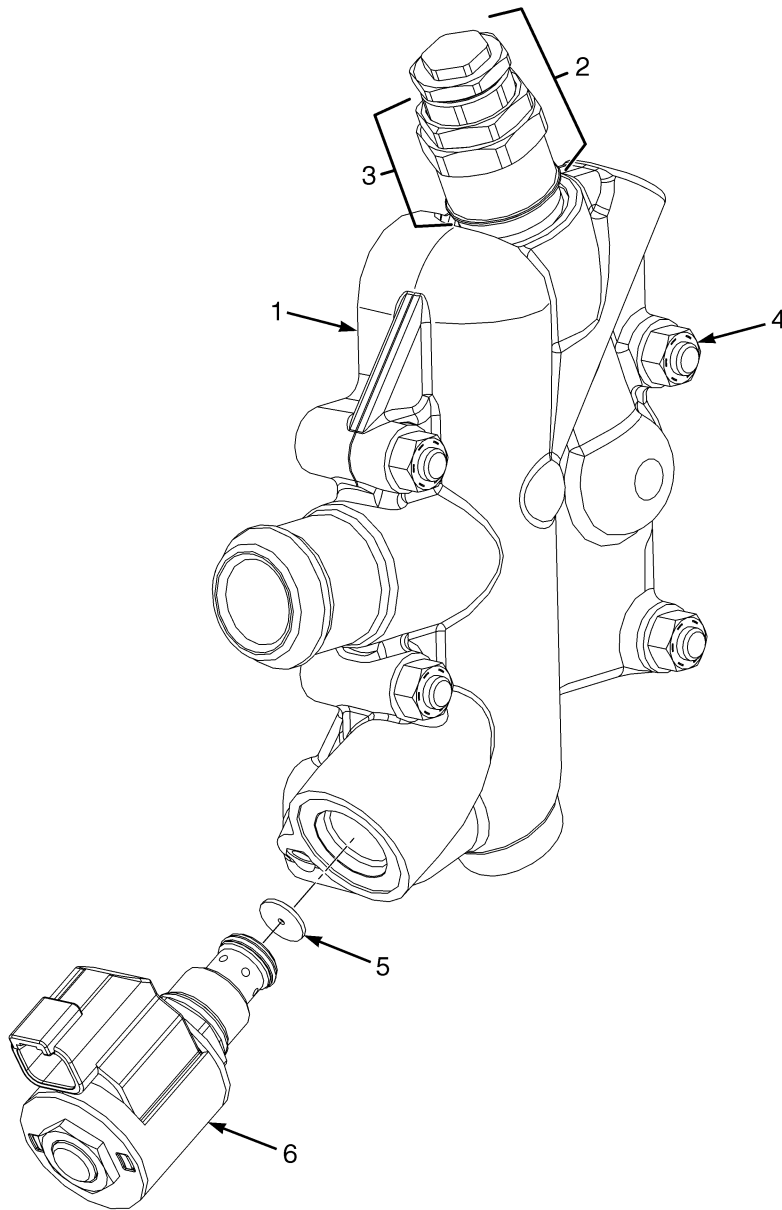


BP140075

**ELECTRONIC CONTROL VALVE  
OUTLET SECTION – THREE AND FOUR FUNCTION (→ S/N P005B02190G)**

ITEM	PART NO.	DESCRIPTION	QTY
1	1578704	Valve Section (Outlet) .....	1
2	1578707	Relief Valve (Secondary) (15.5 MPa) .....	1
3	1580131	Kit-Seal .....	1
4	1578715	Kit-Tie Rod (3 Function) .....	1
4	1580151	Kit-Tie Rod (4 Function) .....	1
4	1578750	Kit-Tie Rod (5 Function) .....	1
4	15055	Nut .....	4

## ELECTRONIC CONTROL VALVE (FIGURE 9-33) OUTLET SECTION — THREE AND FOUR FUNCTION (S/N P005B02191G →)

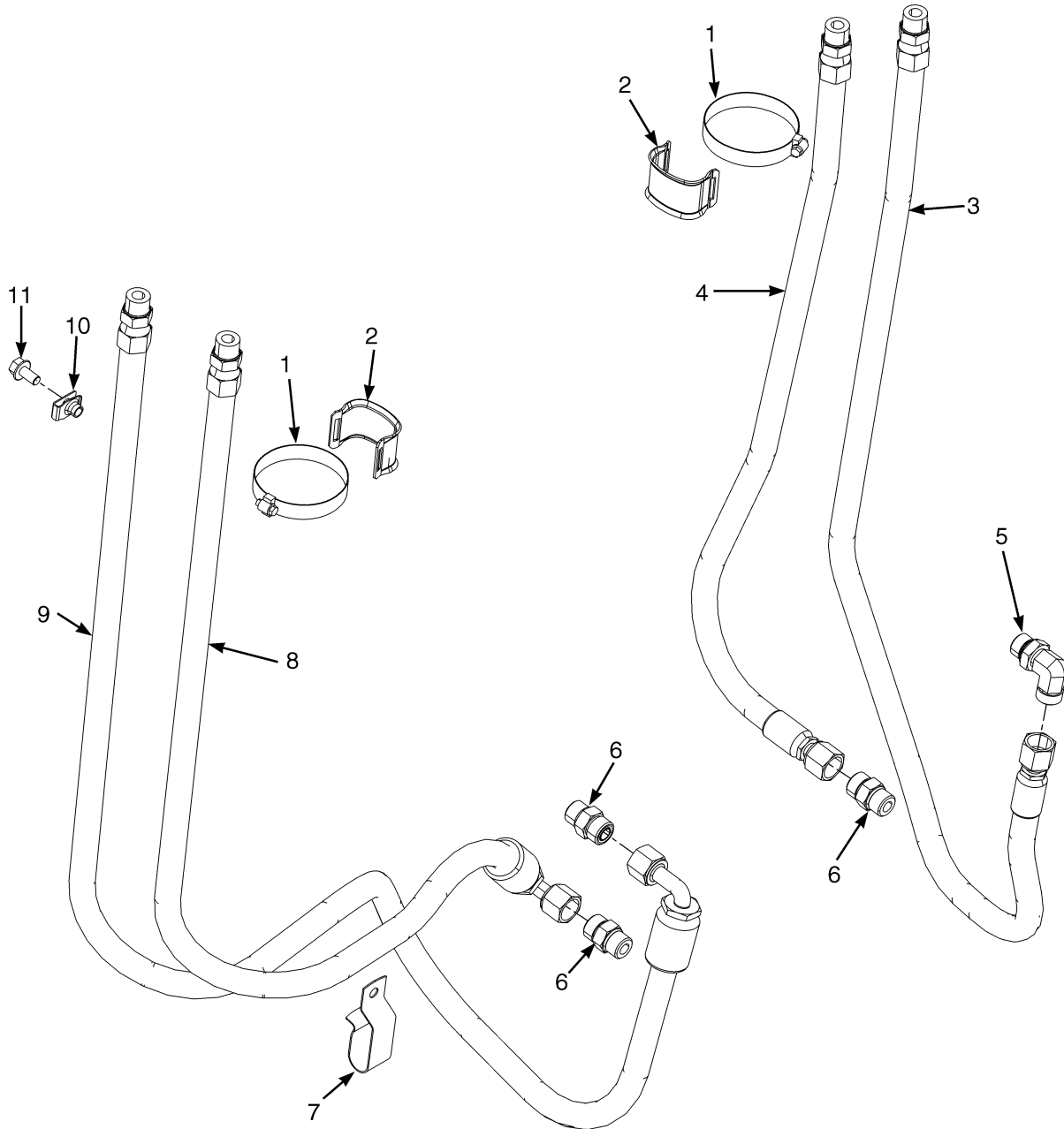


BP140177

**ELECTRONIC CONTROL VALVE  
OUTLET SECTION – THREE AND FOUR FUNCTION (S/N P005B02191G →)**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
1	1708262	Valve Section (Outlet) .....	1
2	1708054	Relief Valve .....	1
3	1580131	Kit-Seal .....	1
4	1578715	Kit-Tie Rod (Three Function) .....	1
4	1580151	Kit-Tie Rod (Four Function) .....	1
5	1695754	Disk .....	1
6	1678165	Solenoid Valve .....	1
6	1684487	Kit-Seal .....	1

## AUXILIARY HOSES (FIGURE 9-34)



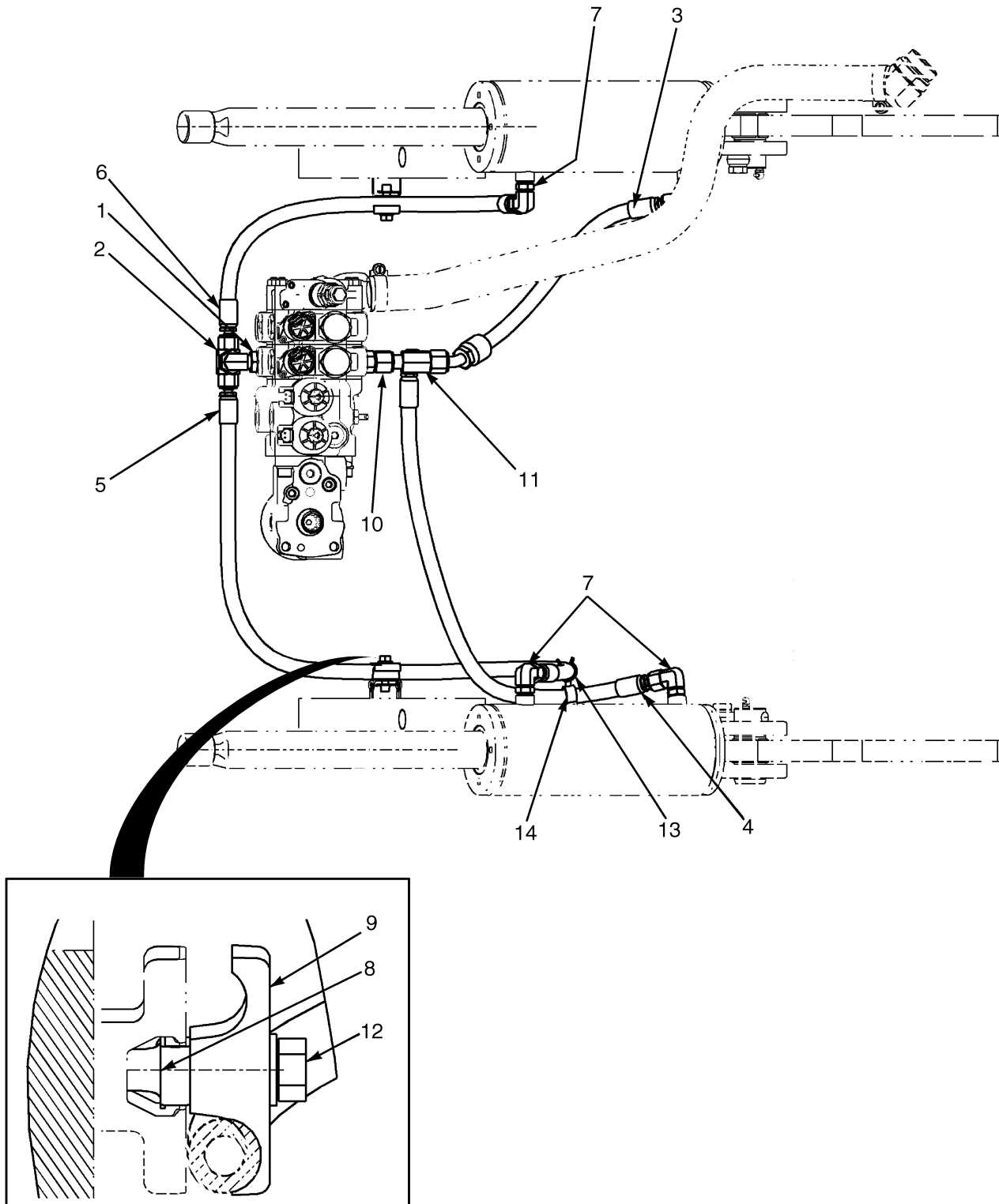
BP140018



**AUXILIARY HOSES****KEY:****A: Third Function****B: Fourth Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1360508	Clamp .....	1	2
1	16484	O-Ring .....	1	1
2	1502809	Hose Clamp .....	1	2
3	2104429	Hose Assy .....	1	1
4	<del>2087309</del> 4614655	Hose Assy .....	1	1
5	1473897	Fitting .....	1	2
6	1473887	Fitting (Electronic Hydraulics) .....	2	4
6	265731	O-Ring .....	1	1
6	16484	O-Ring .....	1	1
6	1516202	Fitting (Manual Hydraulics) .....	2	4
6	265731	O-Ring .....	1	1
7	1544157	Clip .....	..	1
8	2086157	Hose Assy .....	..	1
9	2084867	Hose Assy .....	..	1
10	1480237	Nut .....	1	1
11	1527879	Capscrew .....	1	1

## TILT HOSES (FIGURE 9-35)



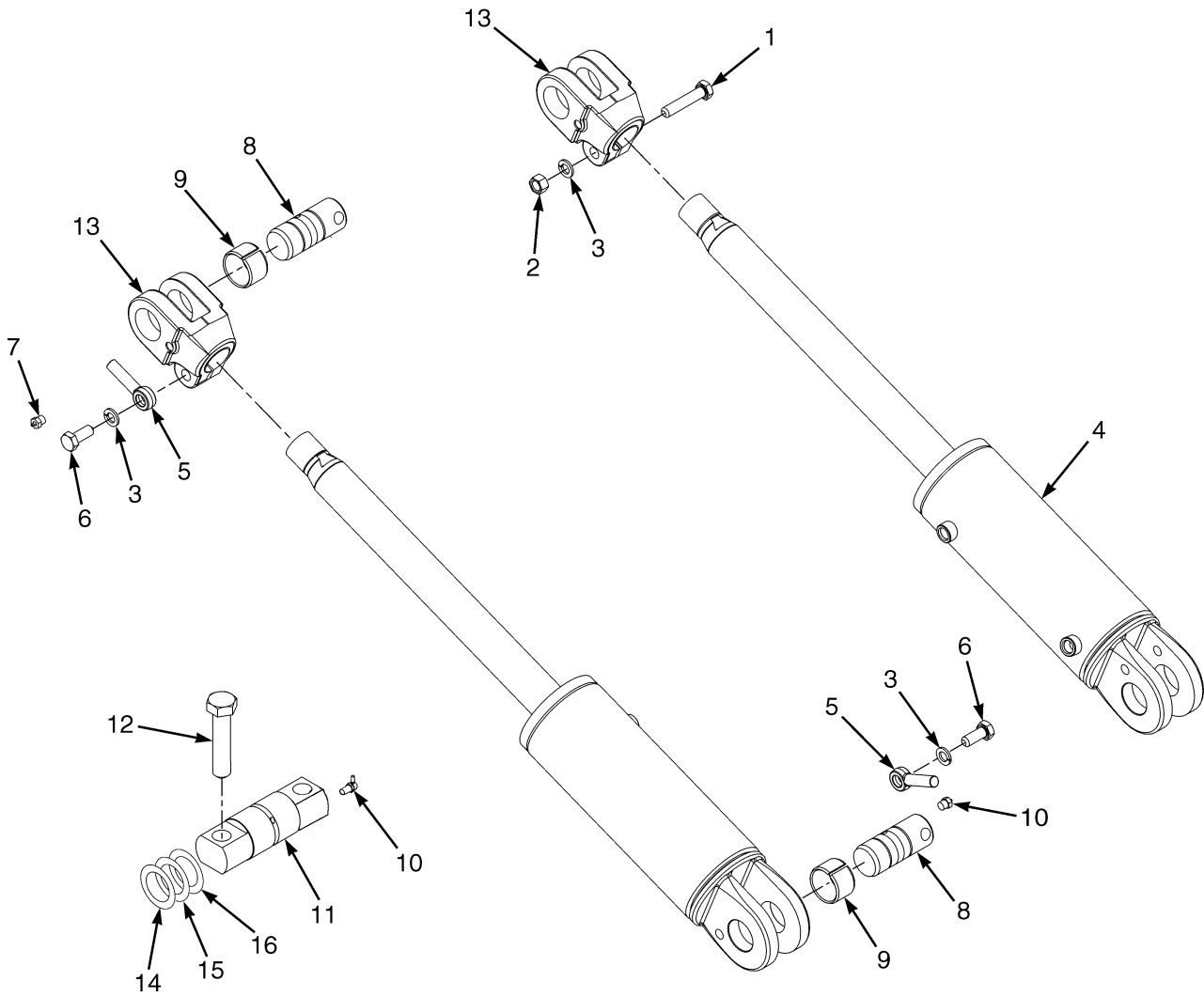
BP150289

**TILT HOSES**

ITEM	PART NO.	DESCRIPTION	QTY
1	1487061	Fitting .....	1
1	265787	O-Ring .....	1
1	16484	O-Ring .....	1
2	<b>a</b> 1488464	Fitting .....	1
2	265787	O-Ring .....	1
2	<b>b</b> 1487097	Fitting .....	1
3	2103985	Hose Assy .....	1
4	2103982	Hose Assy .....	1
5	<b>a</b> 2075859	Hose Assy .....	1
5	<b>b</b> 4604826	Hose Assy .....	1
6	2088913	Hose Assy .....	1
7	1487063	Fitting .....	4
7	265787	O-Ring .....	1
7	16483	O-Ring .....	1
8	1480237	Nut .....	2
9	1605479	Hose Clamp (Dual Hose) .....	2
10	1473887	Fitting .....	1
10	265731	O-Ring .....	1
10	16484	O-Ring .....	1
11	1487095	Fitting .....	1
12	1586627	Capscrew .....	2
13	1502066	Clamp .....	1
14	1502059	Clamp .....	1

**FOOTNOTES:****a** → S/N P005B03574J**b** S/N P005B03575J →

## TILT CYLINDER AND MAST INSTALLATION (FIGURE 9-36)



BP150165

**TILT CYLINDER AND MAST INSTALLATION**

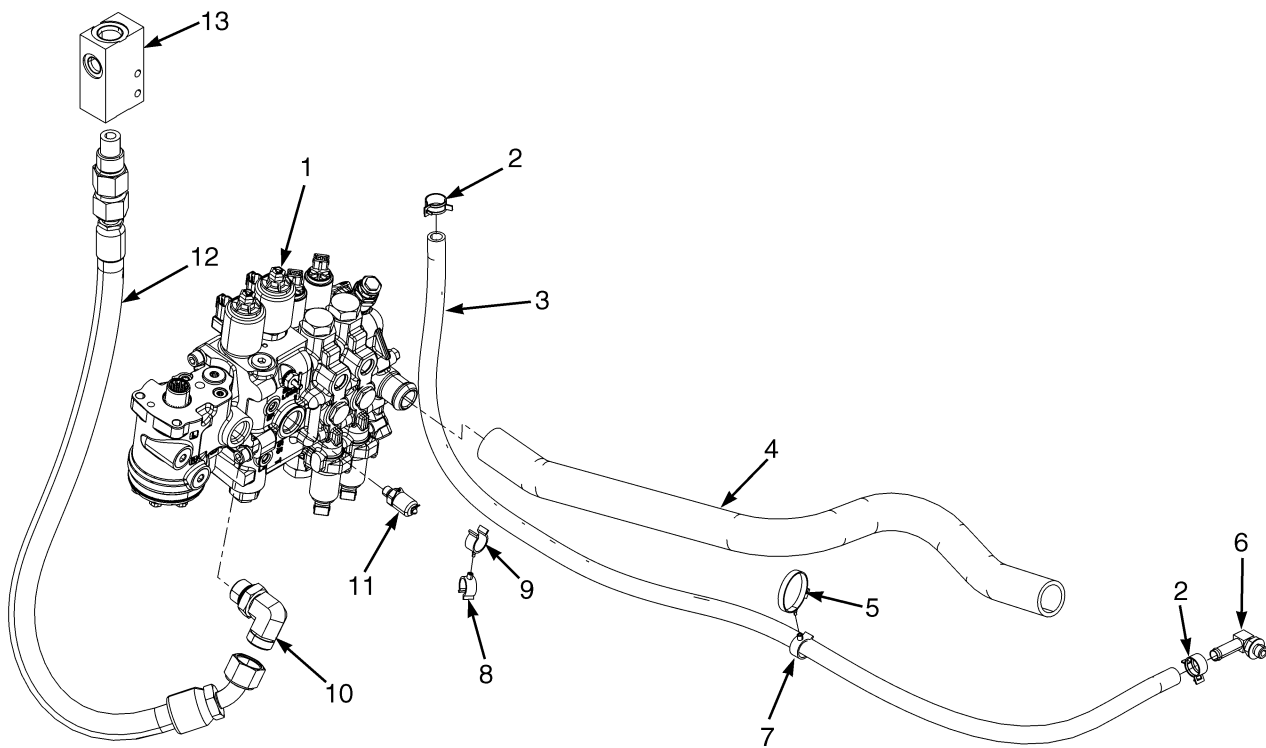
ITEM	PART NO.	DESCRIPTION	QTY
1	1597381	Capscrew .....	2
2	1581848	Nut .....	2
3	1581564	Lockwasher .....	6
4	<b>a</b> 2081137	Tilt Cylinder (☞ Figure 9-38).....	2
4	<b>d</b> 2081138	Tilt Cylinder (☞ Figure 9-38).....	2
4	<b>b</b> 2085566	Tilt Cylinder (☞ Figure 9-38).....	2
4	<b>c</b> 2094938	Tilt Cylinder (☞ Figure 9-38).....	2
5	241079	Anchor .....	4
6	1615240	Capscrew .....	4
7	16001	Grease Fitting .....	2
8	1570303	Pin .....	8
9	192429	Bushing .....	4
10	16015	Grease Fitting (Mast Installation) .....	4
11	1599316	Pin (Mast Installation) .....	2
12	1646441	Capscrew (Mast Installation) .....	4
13	<b>bd</b> 1566792	Rod End .....	2
13	<b>ac</b> 1578545	Rod End .....	2
14	1670900	Shim .....	1
15	1670901	Shim .....	1
16	1670902	Shim .....	1

**FOOTNOTES:**

**a** 12° Forward/6° Back  
**b** 6° Forward/10° Back

**c** 6° Forward/5° Back  
**d** 6° Forward/6° Back

## VENT LINE GROUP (FIGURE 9-37)



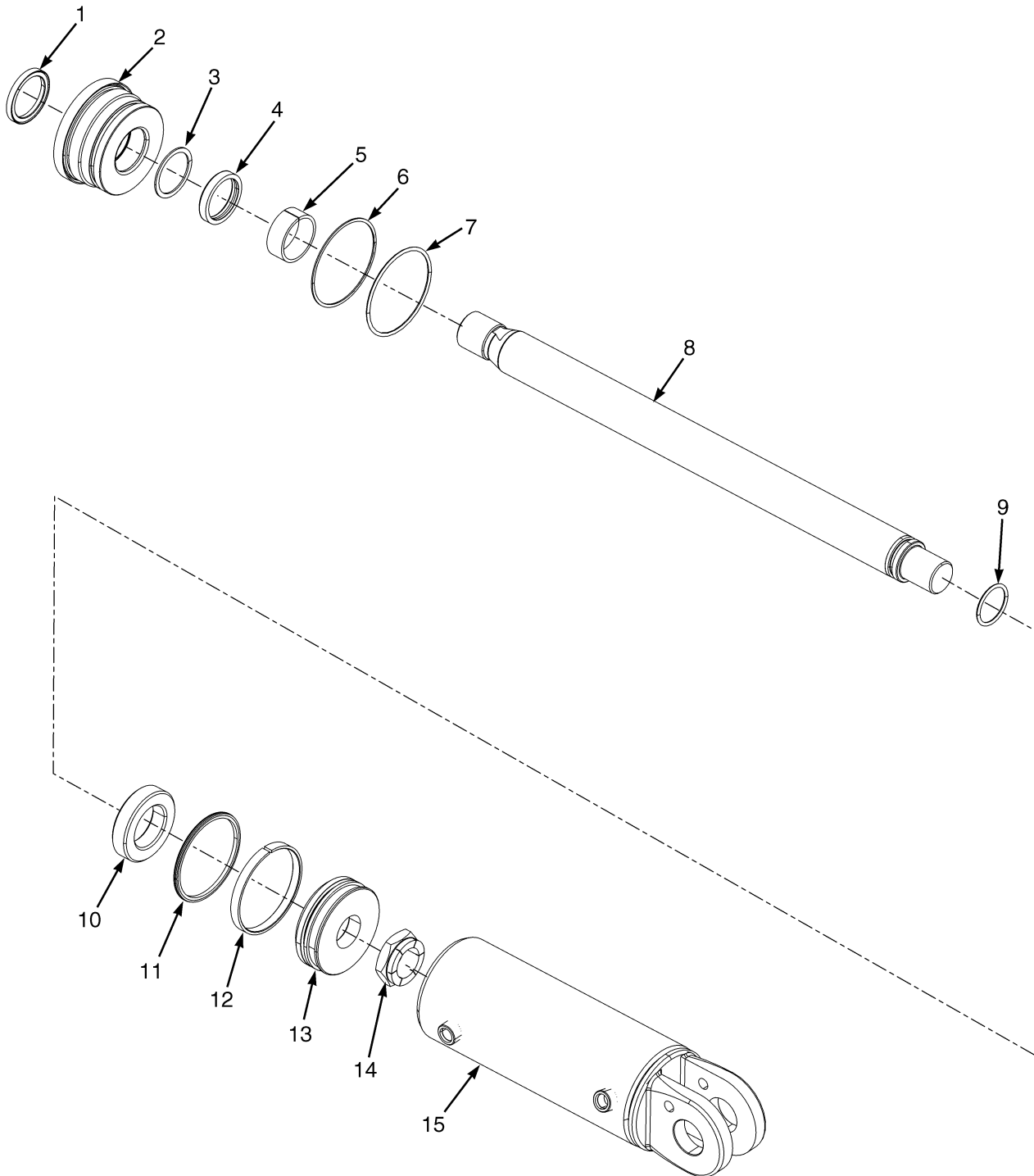
BP150240

**VENT LINE GROUP**

ITEM	PART NO.	DESCRIPTION	QTY
1	.....	Hydraulic Control Valve (☞Figure 9-12, ☞Figure 9-19, ☞Figure 9-21).....	1
2	1502007	Hose Clamp .....	2
3	1399086	Hose Assy .....	1
4	.....	Return Hose (☞Figure 9-1).....	1
5	1502061	Clamp .....	1
6	110178	Fitting (2 Stage Limited Free-Lift and 3 Stage Full Free-Lift) .....	1
6	222443	Fitting (2 Stage Full Free-Lift and no mast) .....	1
7	1502053	Clamp (Swivel) .....	1
8	1502059	Clamp .....	1
9	1502066	Clamp .....	1
10	1473898	Fitting .....	1
10	<b>b</b> 1648259	Fitting (with load weight display) .....	1
11	2061646	Fitting (Diagnostic) .....	1
12	<b>a</b> 2076763	Hose Assy (Hoist) .....	1
12	<b>b</b> 4605393	Hose Assy (Hoist) .....	1
13	.....	Lowering Control Valve (☞Figure 10-3, ☞Figure 11-1, ☞Figure 12-4).....	1

**FOOTNOTES:****a** Used With Gear Pump**b** Used With Variable Displacement Pump

## TILT CYLINDERS (FIGURE 9-38)



BP150166



**TILT CYLINDERS**

ITEM	PART NO.	DESCRIPTION	QTY
	<b>b</b> 2085566	Tilt Cylinder .....	2
	<b>d</b> 2081138	Tilt Cylinder .....	2
	<b>ae</b> 2081137	Tilt Cylinder .....	2
	<b>c</b> 2094938	Tilt Cylinder .....	2
1	193554	Rod Wiper .....	1
2	1380878	Gland .....	1
3	638248	Back-Up Ring .....	1
4	1381085	Rod Seal .....	1
5	334155	Wear Ring .....	1
6	270330	Back-Up Ring .....	1
7	46629	O-Ring .....	1
8	<b>d</b> 2035318	Cylinder Rod .....	1
8	<b>a</b> 2035316	Cylinder Rod .....	1
8	<b>b</b> 2035317	Cylinder Rod .....	1
8	<b>c</b> 2062535	Cylinder Rod .....	1
9	199917	O-Ring .....	1
10	<b>b</b> 1313196	Spacer .....	1
10	<b>d</b> 1383031	Spacer .....	1
10	<b>c</b> 1551303	Spacer .....	1
11	2044372	Piston Seal .....	1
12	352287	Wear Ring .....	1
13	352247	Piston .....	1
14	2036547	Locknut .....	1
15	2082190	Tube Wldmt-Cylinder .....	1
15	1493306	Kit-Seal .....	1

**FOOTNOTES:**

**a** 12° Forward/6° Back  
**b** 6° Forward/10° Back  
**c** 6° Forward/5° Back

**d** 6° Forward/6° Back  
**e** Spacer is not required for this application



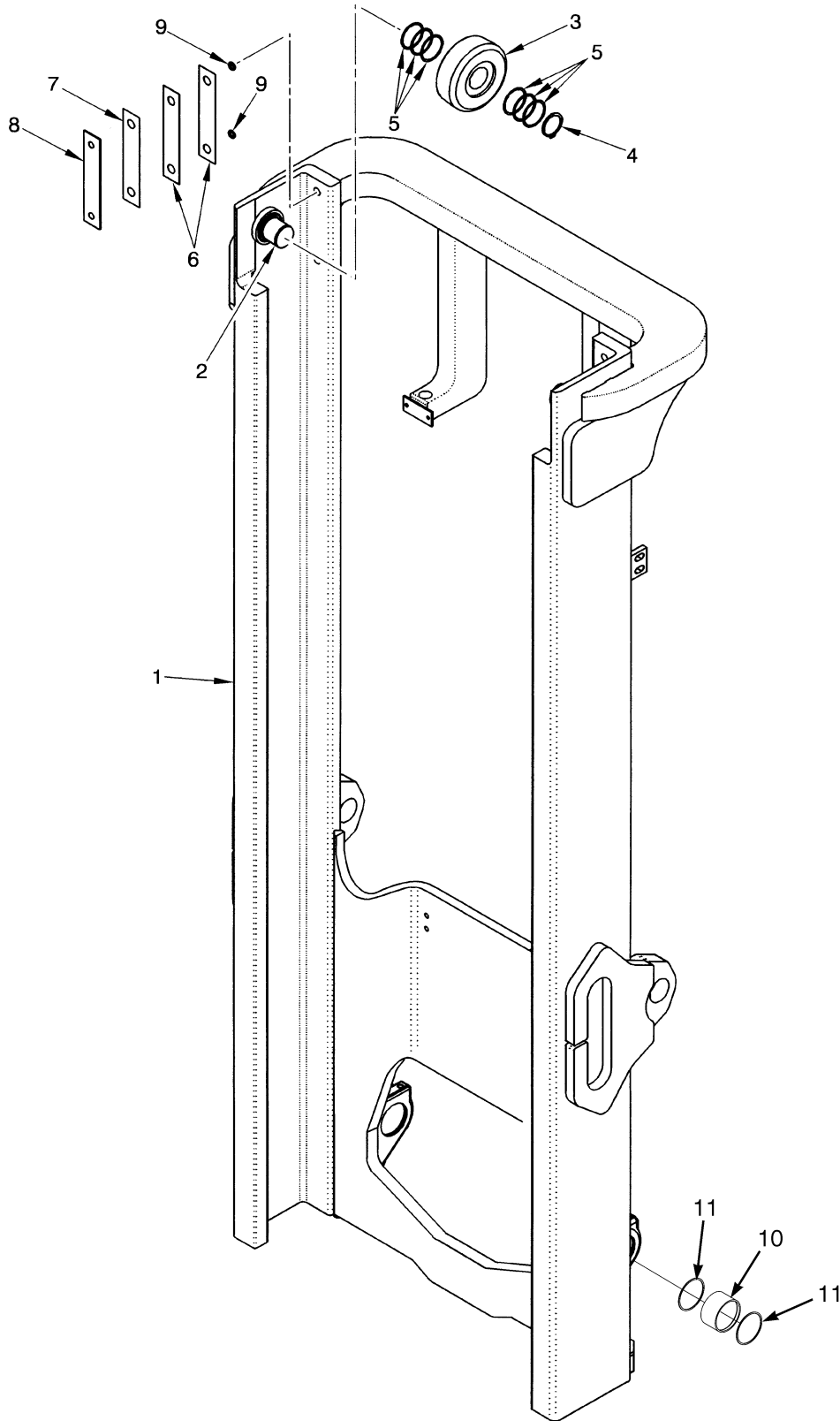




**SECTION 10**  
**MAST-TWO STAGE LIMITED FREE-LIFT**

DESCRIPTION	PAGE
CARRIAGE	
TWO STAGE LIMITED FREE-LIFT .....	10-24
HEADER HOSES	
TWO STAGE LIMITED FREE-LIFT .....	10-20
INNER MAST	
TWO STAGE LIMITED FREE-LIFT .....	10-6
MAIN CYLINDER	
H4.0FT5, H4.0FT6 - TWO STAGE LIMITED FREE-LIFT .....	10-14
H4.5FT5, H4.5FT6, H5.0FT, H5.5FT - TWO STAGE LIMITED FREE-LIFT .....	10-16
MAIN LIFT	
TWO STAGE LIMITED FREE-LIFT .....	10-10
OUTER MAST	
TWO STAGE LIMITED FREE-LIFT .....	10-2

## OUTER MAST (FIGURE 10-1) TWO STAGE LIMITED FREE-LIFT



HP170039

**OUTER MAST  
TWO STAGE LIMITED FREE-LIFT  
H4.0FT5-H4.0FT6**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		3000 mm (118.1 in.)	3600 mm (141.7 in.)	4200 mm (165.4 in.)	4900 mm (192.9 in.)
		Mast Group Number	B749 3000	B749 3600	B749 4200
	Mast Assy	2071745	2071750	2071756	2071763
1	Outer Mast	1573127	1573133	1573139	1573146

**H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		2740 mm (107.9 in.)	3340 mm (131.5 in.)	3940 mm (155.1 in.)	4640 mm (182.7 in.)
		Mast Group Number	B750 2740	B750 3340	B750 3940
	Mast Assy	2071818	2071824	2071830	2071837
1	Outer Mast	1573127	1573133	1573139	1573146

**H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		5240 mm (206.3 in.)	5840 mm (229.9 in.)
		Mast Group Number	B750 5240
	Mast Assy	2071843	2071849
1	Outer Mast	1573152	1573158

**KEY:**

**A: H4.0FT5, H4.0FT6**

**B: H4.5FTS5 ,H4.5FT6, H5.0-5.5FT**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	<b>a</b> . . . . .	Mast Assy .....	1	1
1	<b>a</b> . . . . .	Outer Mast .....	1	1
2	1500744	Stubshaft .....	2	2
3	1399204	Load Roller ("B") (127.51/127.25) .....	2	2
4	1465072	Snap Ring .....	2	2
5	126765	Shim .....	12	12
6	161273	Shim (0,508 mm) .....	AR	AR
7	161272	Shim (0,178 mm) .....	AR	AR
8	104264	Wear Strip .....	2	2
9	104506	O-Ring .....	4	4
10	1485449	Bushing .....	2	2
11	1465518	Snap Ring .....	4	4

## OUTER MAST TWO STAGE LIMITED FREE-LIFT

**KEY:****A:** H4.0FT5, H4.0FT6**B:** H4.5FTS5 ,H4.5FT6, H5.0-5.5FT

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ITEM	PART NO.	DESCRIPTION	QTY	
			A	B

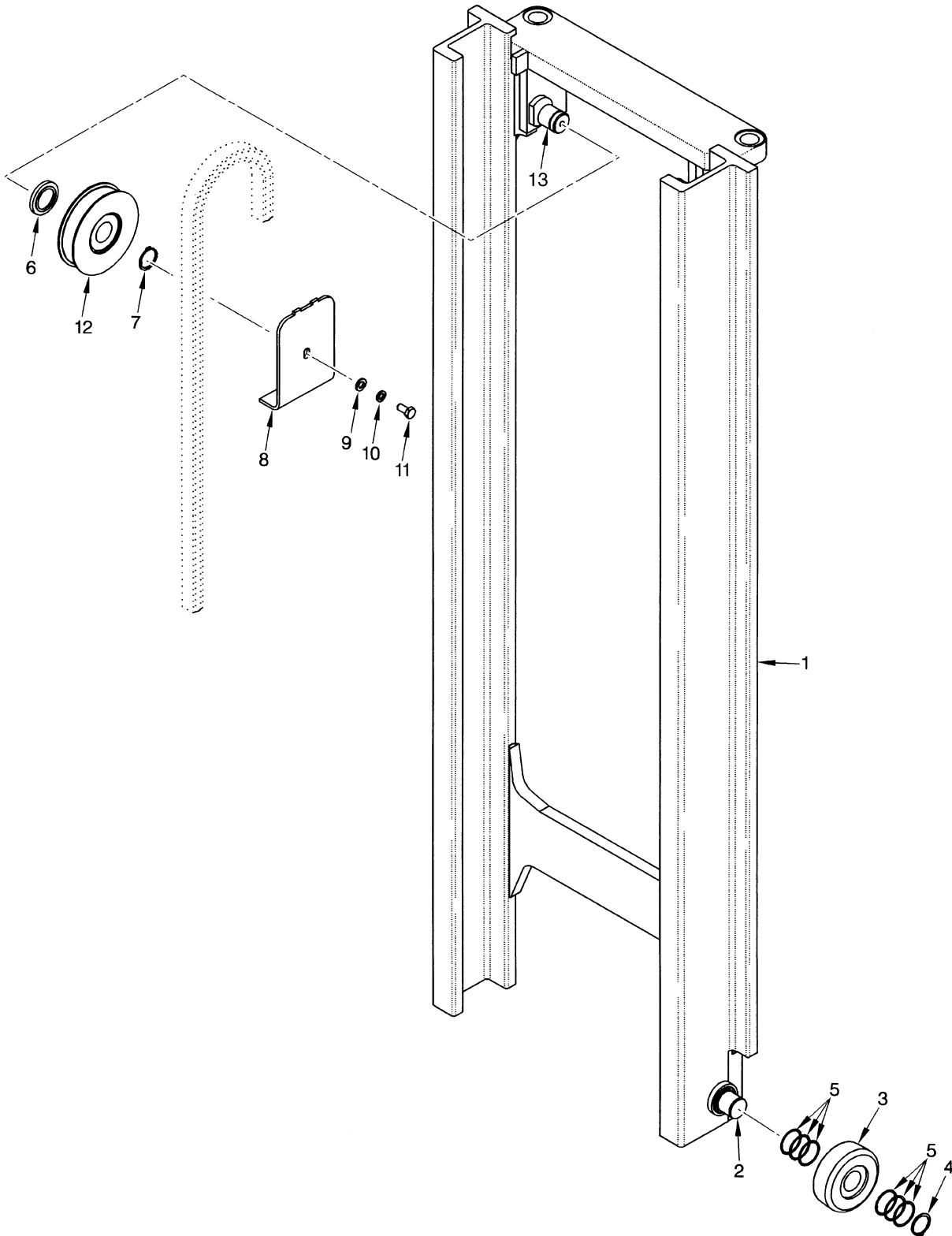
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**FOOTNOTES:****a** Refer to Table





## INNER MAST (FIGURE 10-2) TWO STAGE LIMITED FREE-LIFT



HP170040

**INNER MAST  
TWO STAGE LIMITED FREE-LIFT  
H4.0FT5-H4.0FT6**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		3000 mm (118.1 in.)	3600 mm (141.7 in.)	4200 mm (165.4 in.)	4900 mm (192.9 in.)
		Mast Group Number	B749 3000	B749 3600	B749 4200
	Mast Assy	2071745	2071750	2071756	2071763
1	Inner Mast	1395384	1395390	1395396	1395403

**H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		2740 mm (107.9 in.)	3340 mm (131.5 in.)	3940 mm (155.1 in.)	4640 mm (182.7 in.)
		Mast Group Number	B750 2740	B750 3340	B750 3940
	Mast Assy	2071818	2071824	2071830	2071837
1	Inner Mast	1395384	1395390	1395396	1395403

**H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		5240 mm (206.3 in.)	5840 mm (229.9 in.)
		Mast Group Number	B750 5240
	Mast Assy	2071843	2071849
1	Inner Mast	1395409	1395415

**KEY:**

**A:** H4.0FT5, H4.0FT6

**B:** H4.5FTS5, H4.5FT6, H5.0-5.5FT

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	<b>a</b> . . . . .	Mast Assy .....	1	1
1	<b>a</b> . . . . .	Inner Mast .....	1	1
2	1500744	Stubshaft .....	2	2
3	1399204	Load Roller ("B") (127.51/127.25) .....	2	2
4	1465072	Snap Ring .....	2	2
5	126765	Shim .....	12	12
6	1389846	Spacer .....	2	2
7	12891	Snap Ring .....	2	2
8	<b>b</b> 1389959	Bracket .....	2	2
9	<b>b</b> 1581559	Washer .....	2	2
10	<b>b</b> 1581564	Lockwasher .....	2	2
11	<b>b</b> 1581590	Capscrew .....	2	2

## INNER MAST TWO STAGE LIMITED FREE-LIFT

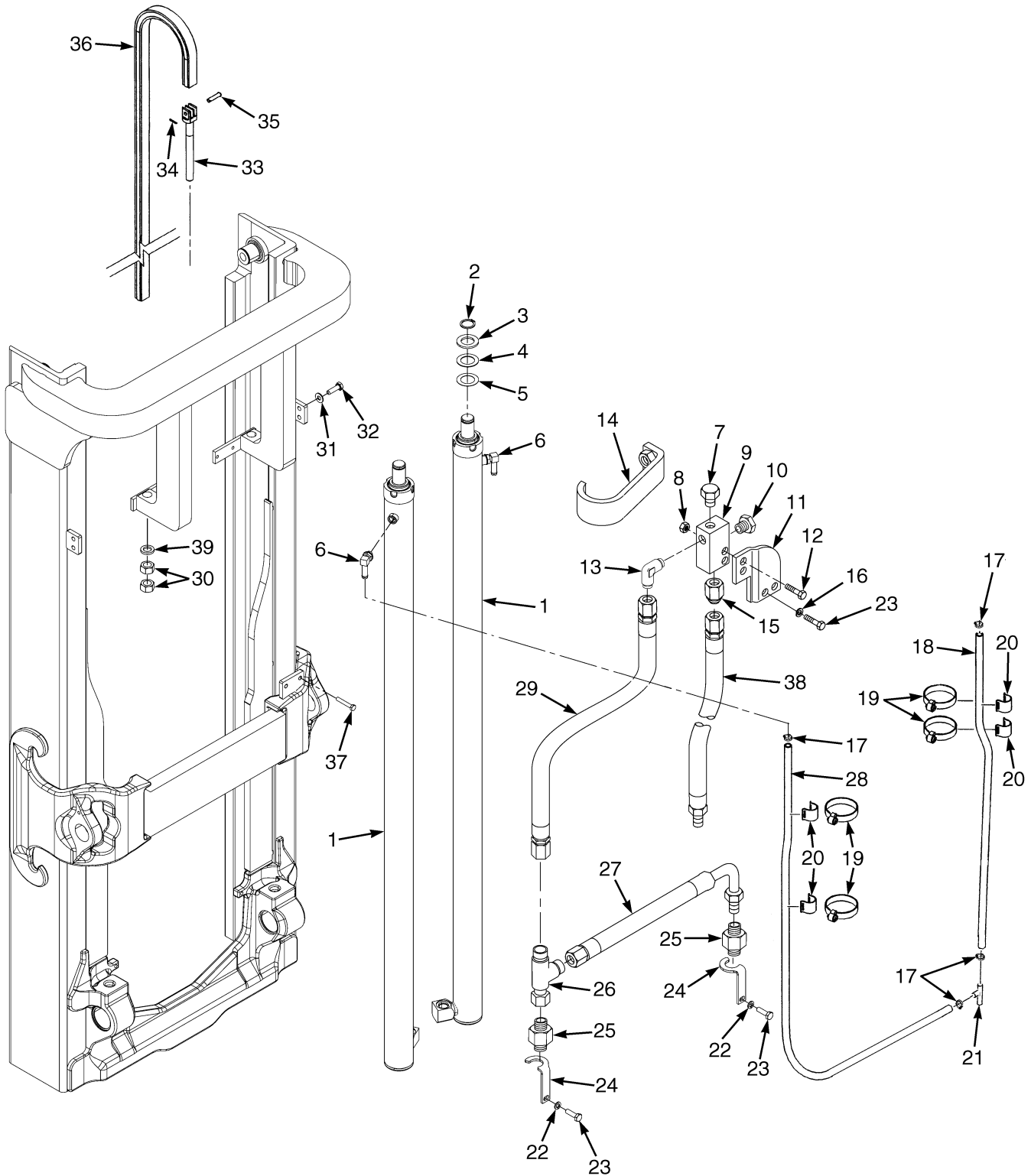
**KEY:****A:** H4.0FT5, H4.0FT6**B:** H4.5FTS5, H4.5FT6, H5.0-5.5FT

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
12	1387745	Chain Sheave .....	2	..
12	1387744	Chain Sheave .....	..	2
13	1389932	Stubshaft .....	2	2

**FOOTNOTES:****a** Refer to Table**b** → S/N P005B02169G



## MAIN LIFT (FIGURE 10-3) TWO STAGE LIMITED FREE-LIFT



BP170251

**MAIN LIFT  
TWO STAGE LIMITED FREE-LIFT  
H4.0FT5-H4.0FT6**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		3000 mm (118.1 in.)	3600 mm (141.7 in.)	4200 mm (165.4 in.)	4900 mm (192.9 in.)
		Mast Group Number	B749 3000	B749 3600	B749 4200
18	Hose Assy (RH)	1399081	1399093	1399105	1399123
28	Hose Assy (LH)	1399100	1399112	1399124	1399142
36	Chain	182342	191072	191076	291256

**H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		2740 mm (107.9 in.)	3340 mm (131.5 in.)	3940 mm (155.1 in.)	4640 mm (182.7 in.)
		Mast Group Number	B750 2740	B750 3340	B750 3940
18	Hose Assy (RH)	78561	1399088	1399100	1399118
28	Hose Assy (LH)	1399095	1399107	1399119	1399137
36	Chain	338647	348149	356917	357025

**H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		5240 mm (206.3 in.)	5840 mm (229.9 in.)
		Mast Group Number	B750 5240
18	Hose Assy (RH)	1399134	1399150
28	Hose Assy (LH)	1399153	1399169
36	Chain	1395492	1395499

**KEY:**

**A: H4.0FT5, H4.0FT6**

**B: H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	.....	Main Cylinder (☞Figure 10-4, ☞Figure 10-5).....	2	2
2	304523	Snap Ring .....	2	2
3	332061	Washer .....	2	2
4	142247	Shim .....	AR	AR
5	1325120	Shim .....	AR	AR
6	110178	Fitting .....	2	2
6	16483	O-Ring .....	1	1
7	14603	Plug .....	1	1

## MAIN LIFT TWO STAGE LIMITED FREE-LIFT

**KEY:**

**A:** H4.0FT5, H4.0FT6

**B:** H4.5FTS5, H4.5FT6, H5.0-5.5FT

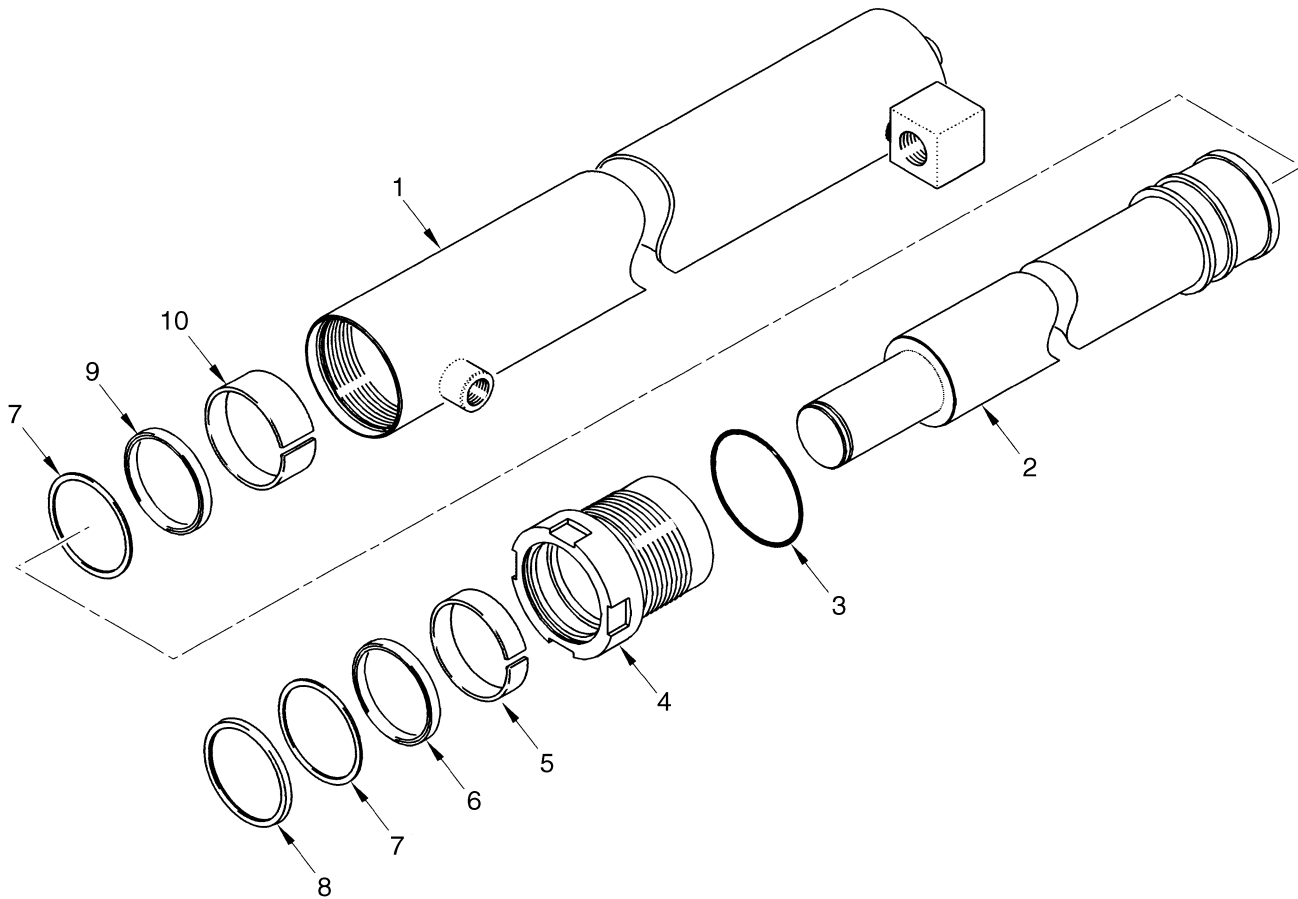
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
7	16486	O-Ring .....	1	1
8	1581566	Nut .....	10	10
9	1388019	Housing .....	1	1
10	14595	Plug Assembly .....	1	1
10	199524	Plug .....	1	1
10	16484	O-Ring .....	1	1
11	1477559	Bracket .....	1	1
12	1581583	Capscrew .....	2	2
13	1487068	Fitting .....	1	1
13	16484	O-Ring .....	1	1
14	1474399	Bracket Wldmt .....	2	2
15	1550197	Lowering Control Valve .....	1	..
15	1550198	Lowering Control Valve .....	..	1
16	110178	Fitting .....	2	2
17	379405	Clamp .....	4	4
18	<b>b</b> . . . .	Hose Assy (RH) .....	1	1
19	1360529	Clamp .....	4	..
20	1465585	Hose Clamp .....	4	4
21	2046871	Fitting .....	1	1
22	1581586	Capscrew .....	2	2
23	1581585	Capscrew .....	4	4
24	1550384	Bracket (LH) .....	1	1
24	1550386	Bracket (RH) .....	1	1
25	1550157	Hyd Velocity Fuse .....	2	..
25	1550158	Hyd Velocity Fuse .....	..	2
26	1487096	Fitting .....	1	1
27	2074184			
	4604938	Hose Assy .....	1	1
28	<b>b</b> . . . .	Hose Assy (LH) .....	1	1
29	2087555	Hose Assy .....	1	1
30	1581896	Nut .....	4	4
31	1581558	Washer .....	4	4
32	1581588	Capscrew .....	4	4
33	1331990	Chain Anchor .....	2	..
33	1331991	Chain Anchor .....	..	2
34	15222	Cotter Pin .....	2	2
35	327591	Pin (Anchor) .....	2	..
35	339932	Pin (Anchor) .....	..	2
36	<b>b</b> . . . .	Chain .....	1	1
37	1581583	Capscrew .....	2	2
38	2076763	Hose Assy (Hoist) .....	1	1
39	1626490	Washer .....	2	2
	<b>a</b> 4612788	Lockwasher (Chain Anchor) .....	2	2



**FOOTNOTES:**

- a** Not Illustrated
- b** Refer to Table

## MAIN CYLINDER (FIGURE 10-4) H4.0FT5, H4.0FT6 — TWO STAGE LIMITED FREE-LIFT



BP170220

**MAIN CYLINDER**  
**H4.0FT5, H4.0FT6 – TWO STAGE LIMITED FREE-LIFT**

**B749**

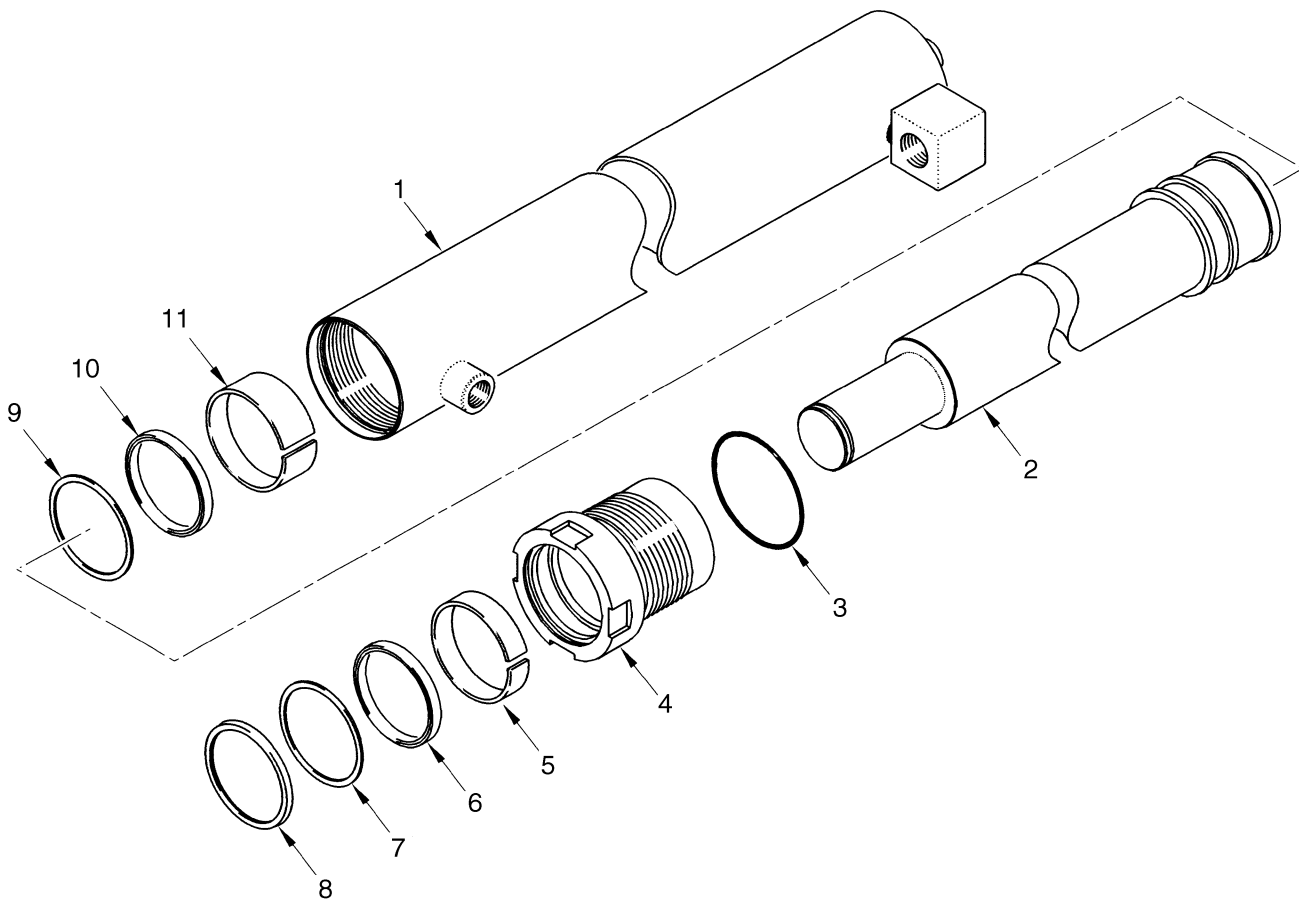
ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		3000 mm (118.1 in.)	3600 mm (141.7 in.)	4200 mm (165.4 in.)	4900 mm (192.9 in.)
		Mast Group Number	B749 3000	B749 3600	B749 4200
	Cylinder Group Number	8527601	8527607	8527613	8527620
	Cylinder Assy	2074622	2074629	2074637	2074645
1	Tube Wldmt- Cylinder	2075005	2075011	2075067	2075075
2	Cylinder Rod	2075442	2075127	2075133	2075140

ITEM	PART NO.	DESCRIPTION	QTY
	a . . . . .	Cylinder Assy .....	2
1	a . . . . .	Tube Wldmt-Cylinder .....	1
2	a . . . . .	Cylinder Rod .....	1
3	57664	O-Ring .....	1
4	2033243	Gland .....	1
5	215425	Wear Ring .....	1
6	270077	Rod Seal .....	1
7	638249	Back-Up Ring .....	2
8	1383066	Rod Wiper .....	1
9	1381061	Rod Seal .....	1
10	297532	Wear Ring .....	1
11	2035784	Kit-Seal .....	1

**FOOTNOTES:**

a Refer to Table

## MAIN CYLINDER (FIGURE 10-5) H4.5FTS5, H4.5FT6, H5.0FT, H5.5FT — TWO STAGE LIMITED FREE-LIFT



BP170221

**MAIN CYLINDER**  
**H4.5FTS5, H4.5FT6, H5.0FT,H5.5FT – TWO STAGE LIMITED FREE-LIFT**

**B750**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		2740 mm (107.9 in.)	3340 mm (131.5 in.)	3940 mm (155.1 in.)	4640 mm (182.7 in.)
		Mast Group Number	B750 2740	B750 3340	B750 3940
	Cylinder Group Number	8527701	8527707	8527713	8527720
	Cylinder Assy	2074895	2074901	2074954	2074962
1	Tube Wldmt- Cylinder	2075089	2075095	2075101	2075108
2	Cylinder Rod	2075151	2075157	2075163	2075165

**B750**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		5240 mm (206.3 in.)	5840 mm (229.9 in.)
		Mast Group Number	B750 5240
	Cylinder Group Number	8527726	8527753
	Cylinder Assy	2074968	2075819
1	Tube Wldmt- Cylinder	2075114	2075791
2	Cylinder Rod	2075171	2075761

ITEM	PART NO.	DESCRIPTION	QTY
	<b>c</b> . . . . .	Cylinder Assy .....	2
1	<b>c</b> . . . . .	Tube Wldmt-Cylinder .....	1
2	<b>c</b> . . . . .	Cylinder Rod .....	1
3	15879	O-Ring .....	1
4	2033281	Gland .....	1
5	297532	Wear Ring .....	1
5	215301	Wear Ring .....	1
6	327807	Rod Seal .....	1
6	201829	Rod Seal .....	1
7	327808	Back-Up Ring .....	1
7	638250	Back-Up Ring .....	1
8	1383067	Rod Wiper .....	1
8	1383068	Rod Wiper .....	1
9	351532	Back-Up Ring .....	1
10	1381062	Rod Seal .....	1
11	351531	Wear Ring .....	1
	<b>b</b> 2035785	Kit-Seal .....	1

## MAIN CYLINDER H4.5FTS5, H4.5FT6, H5.0FT, H5.5FT – TWO STAGE LIMITED FREE-LIFT

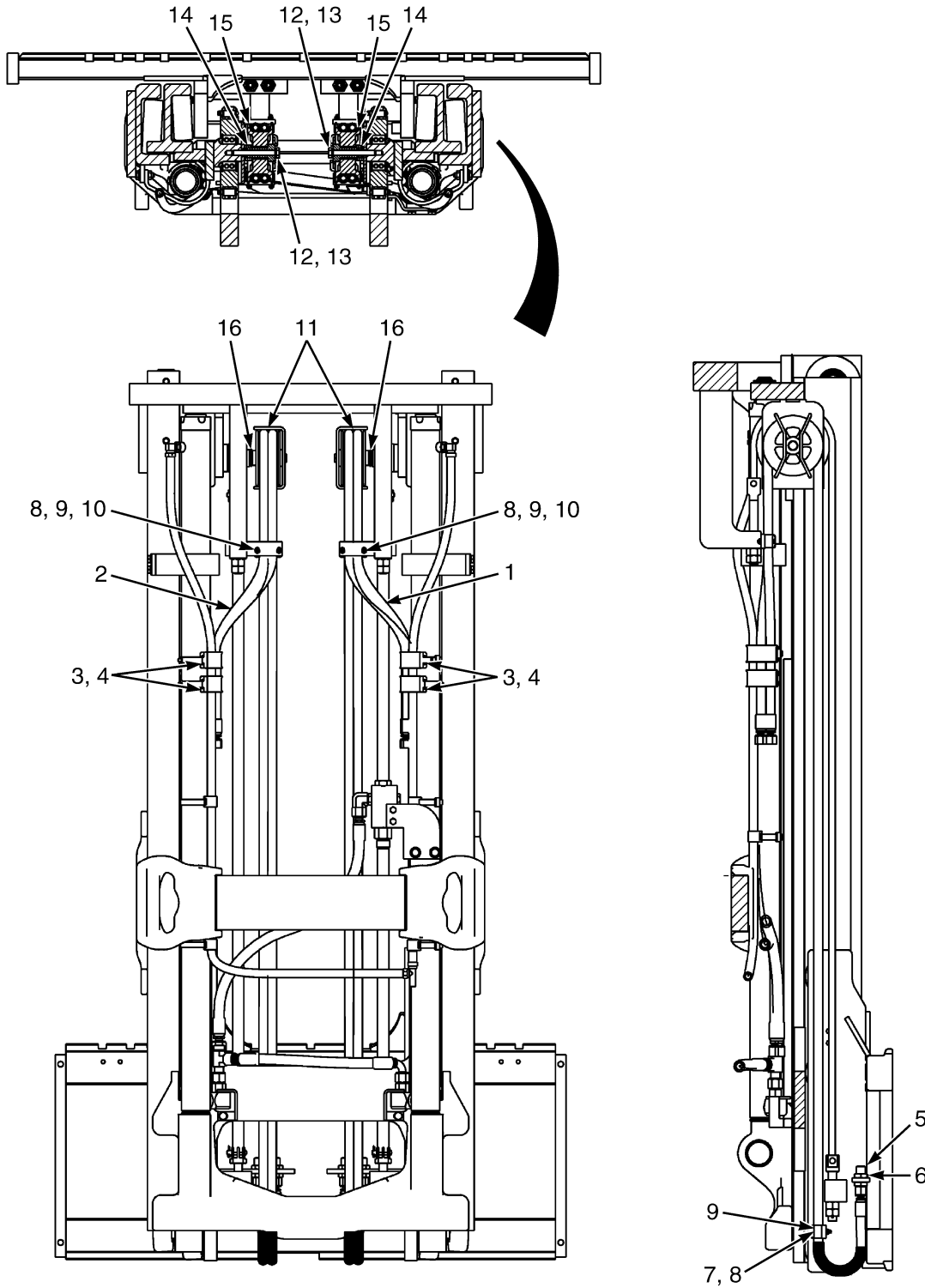
ITEM	PART NO.	DESCRIPTION	QTY
12	a 2035786	Kit-Seal .....	1

### FOOTNOTES:

- a For 5840 mm lift height
- b For lift heights 2740, 3340, 3940, 4640, and 5240 mm
- c Refer to Table



## HEADER HOSES (FIGURE 10-6) TWO STAGE LIMITED FREE-LIFT



BP170444



**HEADER HOSES**  
**TWO STAGE LIMITED FREE-LIFT**  
**FOUR FUNCTION H4.0FT5-H4.0FT6**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		3000 mm (118.1 in.)	3600 mm (141.7 in.)	4200 mm (165.4 in.)	4900 mm (192.9 in.)
		Mast Group Number	B749 3000	B749 3600	B749 4200
	Mast Assy	2071745	2071750	2071756	2071763
1	Hose Assy	2083261	2083267	2083273	2083279
2	Hose Assy	2083261	2083267	2083273	2083279

**THREE FUNCTION H4.0FT5-H4.0FT6**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		3000 mm (118.1 in.)	3600 mm (141.7 in.)	4200 mm (165.4 in.)	4900 mm (192.9 in.)
		Mast Group Number	B749 3000	B749 3600	B749 4200
	Mast Assy	2071745	2071750	2071756	2071763
1	Hose Assy	2083261	2083267	2083273	2083279

**FOUR FUNCTION H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		2740 mm (107.9 in.)	3340 mm (131.5 in.)	3940 mm (155.1 in.)	4640 mm (182.7 in.)
		Mast Group Number	B750 2740	B750 3340	B750 3940
	Mast Assy	2071818	2071824	2071830	2071837
1	Hose Assy	2083261	2083267	2083273	2083279
2	Hose Assy	2083261	2083267	2083273	2083279

**FOUR FUNCTION H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		5240 mm (206.3 in.)	5840 mm (229.9 in.)
		Mast Group Number	B750 5240
	Mast Assy	2071843	2071849
1	Hose Assy	2083282	2087925
2	Hose Assy	2083282	2087925

## HEADER HOSES TWO STAGE LIMITED FREE-LIFT

### THREE FUNCTION H4.5FTS5, H4.5FT6, H5.0-5.5FT

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		2740 mm (107.9 in.)	3340 mm (131.5 in.)	3940 mm (155.1 in.)	4640 mm (182.7 in.)
		Mast Group Number	B750 2740	B750 3340	B750 3940
	Mast Assy	2071818	2071824	2071830	2071837
1	Hose Assy	2083261	2083267	2083273	2083279

### THREE FUNCTION H4.5FTS5, H4.5FT6, H5.0-5.5FT

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		5240 mm (206.3 in.)	5840 mm (229.9 in.)
		Mast Group Number	B750 5240
	Mast Assy	2071843	2071849
1	Hose Assy	2083282	2087925

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

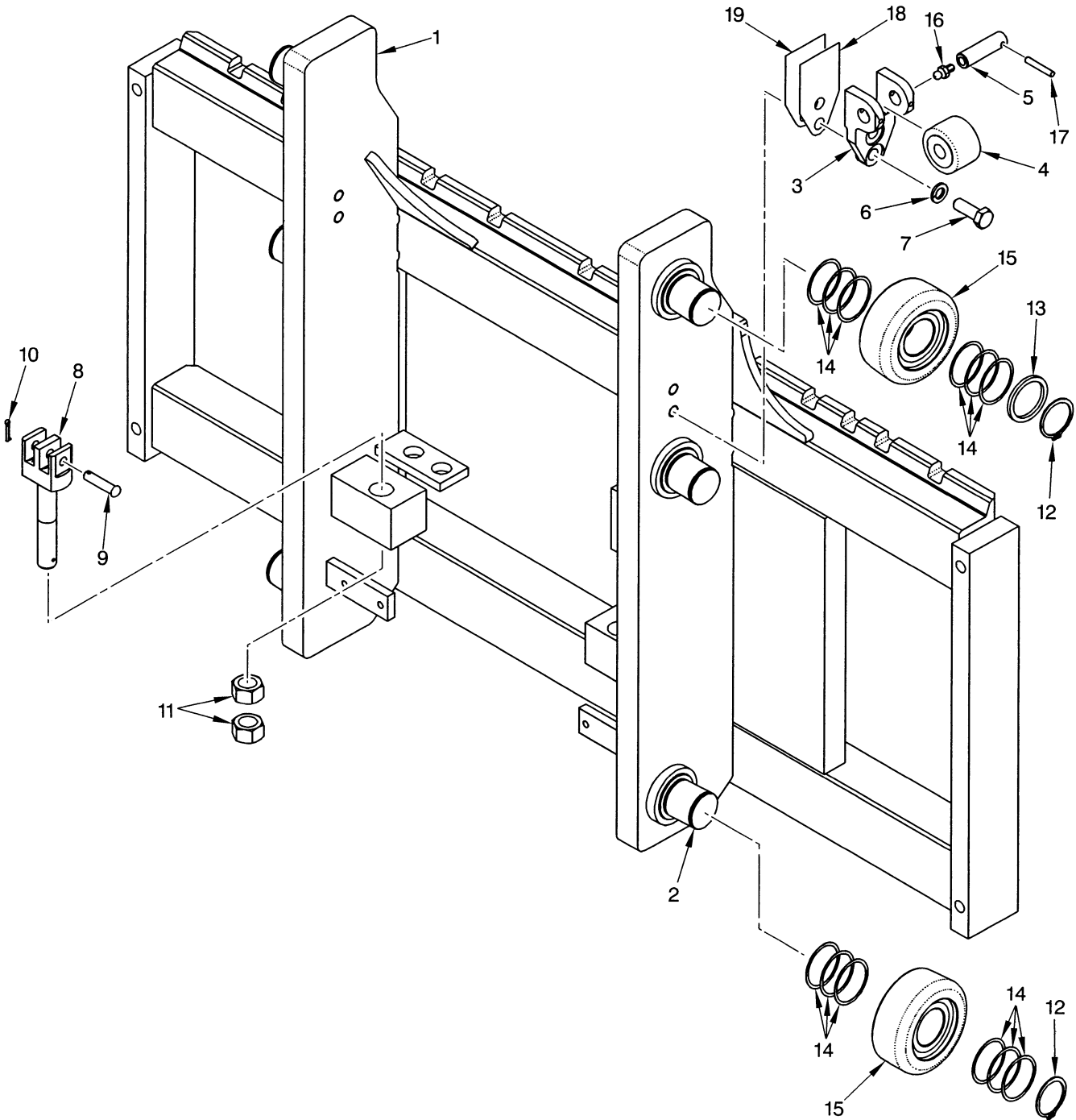
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	<b>a</b> . . . . .	Mast Assy .....	1	1
1	<b>a</b> . . . . .	Hose Assy .....	2	2
2	<b>a</b> . . . . .	Hose Assy .....	..	2
3	1465489	Hose Clamp .....	2	4
4	1360507	Clamp .....	2	4
5	1529016	Fitting .....	2	4
6	816591	Fitting .....	2	4
7	1581578	Capscrew .....	2	4
8	1581565	Nut .....	2	4
9	2035791	Hose Clamp .....	2	4
10	1654323	Capscrew .....	2	4
11	1477570	Stubshaft .....	1	2
12	1581594	Capscrew .....	1	2
13	1581564	Lockwasher .....	1	1
14	1477578	Spacer .....	1	2
15	1495279	Hose Sheave .....	1	2
15	332057	Bushing .....	1	2
16	<b>b</b> 1345190	Washer .....	1	2

**FOOTNOTES:**

**a** Refer to Table **b** S/N P005B02170G →



## CARRIAGE (FIGURE 10-7) TWO STAGE LIMITED FREE-LIFT



HP170741

**CARRIAGE**  
**TWO STAGE LIMITED FREE-LIFT****KEY:****A: H4.0FT5, H4.0FT6****B: H4.5FTS5, H4.5FT6, H5.0-5.5FT****C: H4.5FT (Attachment Carriage)**

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
	2035667	Carriage (1219 mm) .....	1	..	..
	2035669	Carriage (1524 mm) .....	1	..	..
	2035670	Carriage (1219 mm) .....	..	1	..
	2037706	Carriage (1372 mm) .....	..	..	1
	2035672	Carriage (1524 mm) .....	..	1	..
1	1388092	Carriage Wldmt (1219 mm) .....	1	..	..
1	1388094	Carriage Wldmt (1524 mm) .....	1	..	..
1	1387446	Carriage Wldmt (1219 mm) .....	..	1	..
1	1465226	Carriage Wldmt (1372 mm) .....	..	..	1
1	1387448	Carriage Wldmt (1524 mm) .....	..	1	..
2	1500744	Stubshaft .....	6	6	..
3	1465177	Bracket .....	..	..	2
4	1387993	Side Roller .....	..	..	2
5	1465028	Pin .....	..	..	2
6	292683	Lockwasher .....	..	..	4
7	4048814				
	292528	Capscrew .....	..	..	4
8	1387285	Chain Anchor .....	2	..	..
8	1387286	Chain Anchor .....	..	2	2
9	327591	Pin (Anchor) .....	2	..	..
9	339932	Pin (Anchor) .....	..	2	2
10	15222	Cotter Pin .....	2	2	2
11	221717	Nut .....	4	4	4
12	1465072	Snap Ring .....	6	6	6
13	1399224	Spacer .....	2	2	2
14	126765	Shim .....	AR	AR	24
15	<b>a</b> 1511882	Load Roller ("A") (103.68/103.42) (Optional) ("A") .....	6	6	..
15	<b>a</b> 1511883	Load Roller ("B") (104.44/104.18) ("B") (0,26 mm) .....	6	6	6
15	<b>a</b> 1511884	Load Roller ("C") (105.20/104.94) (Optional) ("C") (1,52 mm) .....	6	6	..
16	16001	Grease Fitting .....	..	..	2
17	66333	Roll Pin .....	..	..	2
18	192425	Shim (1.575 mm) .....	..	..	AR
19	192424	Shim (0.762 mm) .....	..	..	AR

**FOOTNOTES:****a** Letter Located on Inside Surface of Load Roller









**SECTION 11**  
**MAST-TWO STAGE FULL FREE-LIFT**

<b>DESCRIPTION</b>	<b>PAGE</b>
CARRIAGE	
TWO STAGE FULL FREE-LIFT .....	11-30
FREE-LIFT CYLINDER	
TWO STAGE FULL FREE-LIFT (→ S/N P005B02610H) .....	11-18
TWO STAGE FULL FREE-LIFT (S/N P005B02611H →) .....	11-22
HEADER HOSE	
TWO STAGE FULL FREE-LIFT .....	11-26
INNER MAST AND FREE-LIFT	
TWO STAGE FULL FREE-LIFT (→ S/N P005B02610H) .....	11-6
TWO STAGE FULL FREE-LIFT (S/N P005B02611H →) .....	11-10
MAIN LIFT CYLINDER	
TWO STAGE FULL FREE-LIFT .....	11-14
OUTER MAST AND MAIN LIFT	
TWO STAGE FULL FREE-LIFT .....	11-2



**OUTER MAST AND MAIN LIFT  
TWO STAGE FULL FREE-LIFT****H4.0FT5-H4.0FT6**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3025 mm (119.1 in.)	3625 mm (142.7 in.)
		Mast Group Number	B753 3025
	Mast Assy	2071931	2071937
1	Outer Mast	1573779	1573785
26	Tube Assy	2072127	2072133

**H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		2765 mm (108.9 in.)	3365 mm (132.5 in.)
		Mast Group Number	B754 2765
	Mast Assy	2071969	2071975
1	Outer Mast	1573779	1573785
26	Tube Assy	2072127	2072133

**KEY:****A: H4.0FT5-H4.0FT6****B: H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a . . . . .	Mast Assy .....	1	1
1	a . . . . .	Outer Mast .....	1	1
2	1500744	Stubshaft .....	2	2
3	304523	Snap Ring .....	2	2
4	332061	Washer .....	2	2
5	1325120	Shim .....	AR	AR
6	142247	Shim .....	AR	AR
7	. . . . .	Main Cylinder (RH) (☞ Figure 11-4).....	1	1
8	. . . . .	Main Cylinder (LH) (☞ Figure 11-4).....	1	1
9	14603	Plug .....	1	1
9	16486	O-Ring .....	1	1
10	14595	Plug Assembly .....	1	1
11	1388019	Housing (Control Valve) .....	1	1
11	16484	O-Ring .....	1	1
12	1550197	Lowering Control Valve .....	1	..
12	16982	O-Ring .....	1	..
12	1550198	Lowering Control Valve .....	..	1
12	16982	O-Ring .....	..	1
13	1487068	Fitting .....	1	1
13	252729	O-Ring .....	1	1

## OUTER MAST AND MAIN LIFT TWO STAGE FULL FREE-LIFT

**KEY:**

**A:** H4.0FT5-H4.0FT6

**B:** H4.5FTS5, H4.5FT6, H5.0-5.5FT

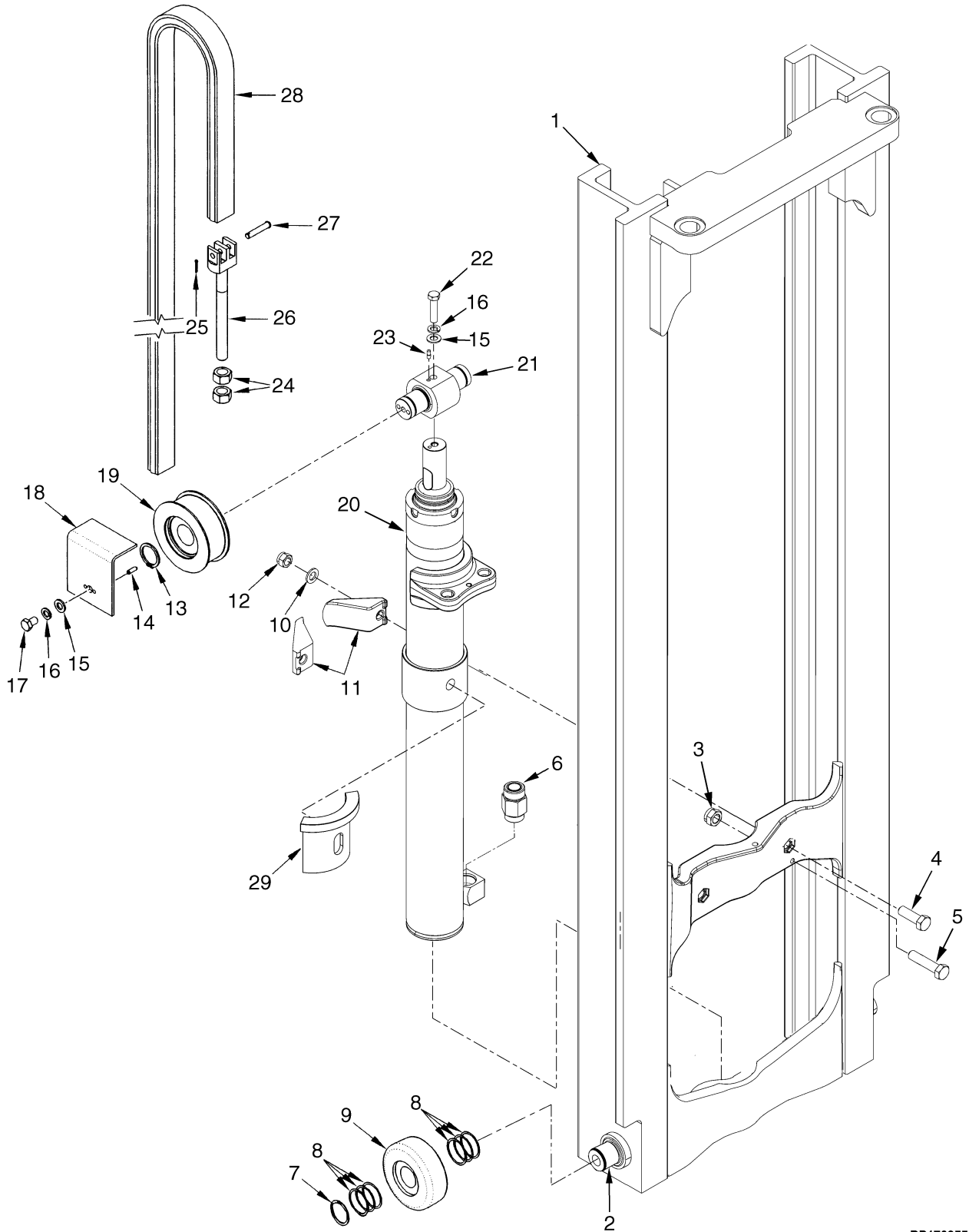
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
13	16484	O-Ring .....	1	1
14	1581566	Nut .....	4	4
15	1477559	Bracket .....	2	2
16	1581583	Capscrew .....	2	2
17	1581585	Capscrew .....	2	2
18	1581558	Washer .....	6	6
19	2074181			
	4604938	Hose Assy .....	1	1
20	1486749	Fitting .....	1	1
20	16485	O-Ring .....	1	1
20	252729	O-Ring .....	1	1
21	1487096	Fitting .....	1	1
21	252729	O-Ring .....	2	2
22	2075535	Hose Assy .....	1	1
23	1581586	Capscrew .....	2	2
24	1550385	Bracket (LH) .....	1	1
25	1550387	Bracket (RH) .....	1	1
26	a . . . .	Tube Assy .....	1	1
27	1581588	Capscrew .....	4	4
28	1474399	Bracket Wldmt .....	2	2
28	1474398	Bracket (Optional) .....	2	2
29	1465072	Snap Ring .....	2	2
30	126765	Shim .....	12	12
31	1399204	Load Roller ("B") (127.51/127.25) .....	2	2
32	104264	Wear Strip .....	2	2
33	104506	O-Ring .....	4	4
34	161272	Shim (0,178 mm) .....	AR	AR
35	161273	Shim (0,508 mm) .....	AR	AR
36	1550199	Fitting .....	1	1
37	1465518	Snap Ring .....	4	4
38	1485449	Bushing .....	2	2
39	2076763	Hose Assy (Hoist) .....	1	1

**FOOTNOTES:**

**a** Refer to Table



## INNER MAST AND FREE-LIFT (FIGURE 11-2) TWO STAGE FULL FREE-LIFT (→ S/N P005B02610H)



BP170255

**INNER MAST AND FREE-LIFT  
TWO STAGE FULL FREE-LIFT (→ S/N P005B02610H)**

**H4.0FT5-H4.0FT6**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3025 mm (119.1 in.)	3625 mm (142.7 in.)
		Mast Group Number	B753 3025
	Mast Assy	2071931	2071937
1	Inner Mast	1573809	1573815
28	Chain	337189	339897

**H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		2765 mm (108.9 in.)	3365 mm (132.5 in.)
		Mast Group Number	B754 2765
	Mast Assy	2071969	2071975
1	Inner Mast	1573809	1573815
28	Chain	386885	337189

ITEM	PART NO.	DESCRIPTION	QTY
	<b>a . . . . .</b>	Mast Assy .....	1
1	<b>a . . . . .</b>	Inner Mast .....	1
2	1500744	Stubshaft .....	4
3	1581566	Nut .....	3
4	1639154	Capscrew .....	2
5	1581582	Capscrew .....	1
6	1550193	Hyd Velocity Fuse (H4.0FT5-H4.0FT6) .....	1
6	1550194	Hyd Velocity Fuse (H4.5FTS5, H4.5FT6, H5.5-5.5FT) .....	1
7	1465072	Snap Ring .....	4
8	126765	Shim .....	24
9	1399204	Load Roller ("B") (127.51/127.25) .....	4
10	297649	Ring .....	2
11	2088450	Bracket (H4.0FT5-H4.0FT6) .....	2
11	2088451	Bracket (H4.5FTS5, H4.5FT6, H5.5-5.5FT) .....	2
12	161003	Nut .....	2
13	304527	Snap Ring .....	2
14	302472	Roll Pin .....	2
15	1581559	Washer .....	2
16	1581564	Lockwasher .....	3
17	1581589	Capscrew .....	3
18	1387519	Guard .....	2
19	1387743	Chain Sheave .....	2
19	1387740	Chain Sheave .....	1
19	40667	Snap Ring .....	2
19	126764	Double Row Bearing .....	1

**INNER MAST AND FREE-LIFT  
TWO STAGE FULL FREE-LIFT (→ S/N P005B02610H)**

ITEM	PART NO.	DESCRIPTION	QTY
20	.....	Free-Lift Cylinder (☞ Figure 11-5).....	1
21	1573177	Crosshead .....	1
22	1597456	Capscrew .....	1
23	310549	Pin .....	1
24	1581896	Nut .....	4
25	15222	Cotter Pin .....	2
26	1331991	Chain Anchor .....	2
27	339932	Pin .....	2
28	<b>a</b> .....	Chain .....	2
29	1611061	Collar .....	1

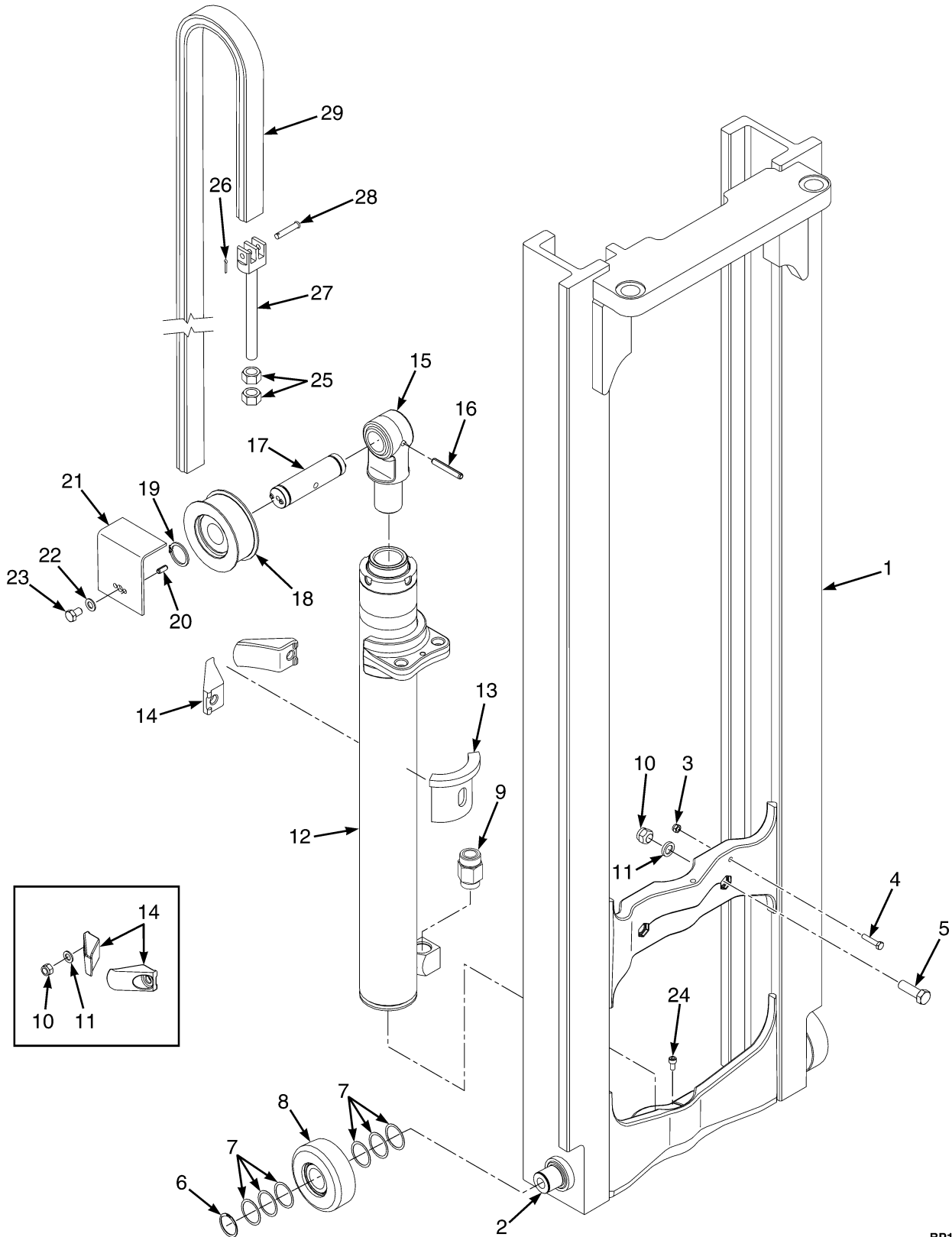
**FOOTNOTES:**

**a** Refer to Table





## INNER MAST AND FREE-LIFT (FIGURE 11-3) TWO STAGE FULL FREE-LIFT (S/N P005B02611H →)



BP170568

**INNER MAST AND FREE-LIFT  
TWO STAGE FULL FREE-LIFT (S/N P005B02611H →)**

**H4.0FT5-H4.0FT6**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3025 mm (119.1 in.)	3625 mm (142.7 in.)
		Mast Group Number	B753 3025
	Mast Assy	2071931	2071937
1	Inner Mast	1573809	1573815
29	Chain	337189	339897

**H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		2765 mm (108.9 in.)	3365 mm (132.5 in.)
		Mast Group Number	B754 2765
	Mast Assy	2071969	2071975
1	Inner Mast	1573809	1573815
29	Chain	386885	337189

ITEM	PART NO.	DESCRIPTION	QTY
	<b>d</b> . . . . .	Mast Assy .....	1
1	<b>d</b> . . . . .	Inner Mast .....	1
2	1500744	Stubshaft .....	4
3	1581566	Nut .....	1
4	1581582	Capscrew .....	1
5	221628	Capscrew .....	2
6	1465072	Snap Ring .....	4
7	126765	Shim .....	24
8	1399203	Load Roller ("A") (126.75/126.49) .....	2
8	1399204	Load Roller ("B") (127.51/127.25) .....	4
8	1399205	Load Roller ("C") (128.27/128.01) .....	2
9	<b>a</b> 1550193	Hyd Velocity Fuse .....	1
9	<b>b</b> 1550194	Hyd Velocity Fuse .....	1
10	161003	Nut .....	2
11	297649	Ring .....	2
12	. . . . .	Lift Cylinder (☞ Figure 11-6).....	1
13	<b>a</b> 1611061	Collar .....	1
14	<b>a</b> 2088450	Bracket (Two Piece Wedge) .....	2
14	<b>b</b> 2088451	Bracket (Two Piece Wedge) .....	2
15	1389825	Crosshead .....	1
16	302493	Roll Pin .....	1
17	1387281	Pin .....	1
18	1387743	Chain Sheave .....	2
19	304527	Snap Ring .....	2
20	302472	Roll Pin .....	2

**INNER MAST AND FREE-LIFT**  
**TWO STAGE FULL FREE-LIFT (S/N P005B02611H →)**

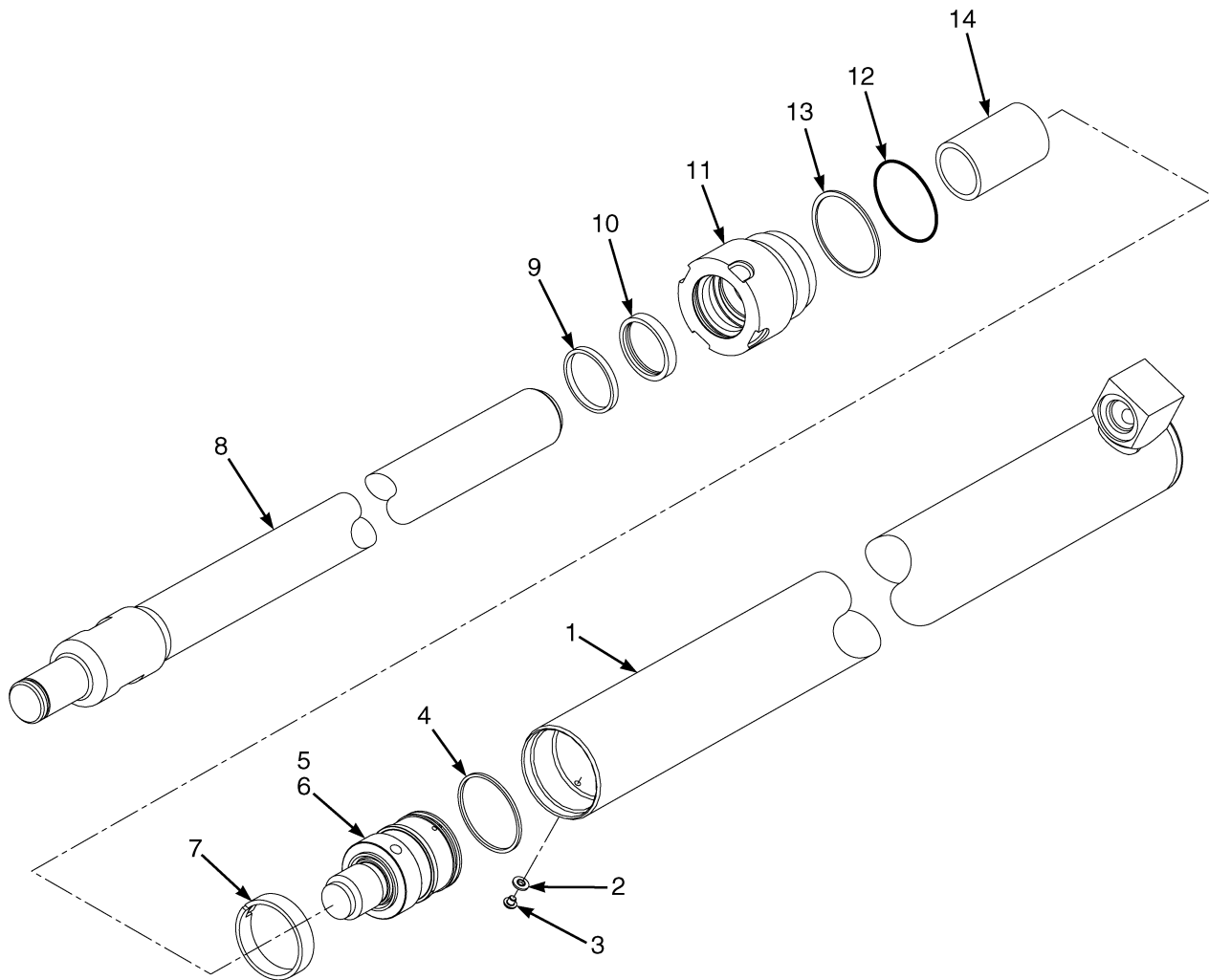
ITEM	PART NO.	DESCRIPTION	QTY
21	1387519	Guard .....	2
22	1581564	Lockwasher .....	2
23	1581589	Capscrew .....	2
25	1581896	Nut .....	4
26	15222	Cotter Pin .....	2
27	1331991	Chain Anchor .....	2
28	339932	Pin .....	2
29	<b>d</b> . . . . .	Chain .....	2
	<b>c</b> 4612788	Lockwasher (Chain Anchor) .....	2

**FOOTNOTES:**

- |          |                              |          |                 |
|----------|------------------------------|----------|-----------------|
| <b>a</b> | H4.0FT5, H4.0FT6             | <b>c</b> | Not Illustrated |
| <b>b</b> | H4.5FTS5, 4.5FT6, H5.0-5.5FT | <b>d</b> | Refer to Table  |



## MAIN LIFT CYLINDER (FIGURE 11-4) TWO STAGE FULL FREE-LIFT



BP170217

**MAIN LIFT CYLINDER  
TWO STAGE FULL FREE-LIFT****LEFT HAND**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3025 mm (119.1 in.)	3625 mm (142.7 in.)
		<b>Mast Group Number</b>	<b>B753 3025</b>
	<b>Cylinder Group Number</b>	<b>8503251</b>	<b>8503257</b>
	Cylinder Assy	2073992	2073998
1	Tube Wldmt- Cylinder	2074022	2074042
8	Cylinder Rod	1400551	1400557

**RIGHT HAND**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3025 mm (119.1 in.)	3625 mm (142.7 in.)
		<b>Mast Group Number</b>	<b>B753 3025</b>
	<b>Cylinder Group Number</b>	<b>8503201</b>	<b>8503207</b>
	Cylinder Assy	2073953	2073968
1	Tube Wldmt- Cylinder	2074022	2074042
8	Cylinder Rod	1400501	1400507

**LEFT HAND**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3025 mm (119.1 in.)	3625 mm (142.7 in.)
		<b>Mast Group Number</b>	<b>B754 2765</b>
	<b>Cylinder Group Number</b>	<b>8503351</b>	<b>8503357</b>
	Cylinder Assy	2074126	2074138
1	Tube Wldmt- Cylinder	2074022	2074042
8	Cylinder Rod	1400851	1400857

**MAIN LIFT CYLINDER  
TWO STAGE FULL FREE-LIFT  
RIGHT HAND**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3025 mm (119.1 in.)	3625 mm (142.7 in.)
	<b>Mast Group Number</b>	<b>B754 2765</b>	<b>B754 3365</b>
	<b>Cylinder Group Number</b>	<b>8503301</b>	<b>8503307</b>
	Cylinder Assy	2074087	2074093
1	Tube Wldmt- Cylinder	2074022	2074042
8	Cylinder Rod	1400801	1400807

ITEM	PART NO.	DESCRIPTION	QTY
	<b>d . . . . .</b>	Cylinder Assy .....	1
1	<b>d . . . . .</b>	Tube Wldmt-Cylinder .....	1
2	190887	Sealing Ring .....	1
3	295649	Screw .....	1
4	<b>b 1379063</b>	Piston Ring (RH) .....	1
5	1381056	Piston (RH) .....	1
5	1381055	Piston (LH) .....	1
6	264134	Loctite .....	1
7	2038675	Wear Ring .....	1
8	<b>d . . . . .</b>	Cylinder Rod .....	1
9	<b>a 1310370</b>	Rod Wiper .....	1
9	<b>b 1310371</b>	Rod Wiper .....	1
10	<b>a 1381084</b>	Rod Seal .....	1
10	<b>b 1381086</b>	Rod Seal .....	1
11	<b>a 2033295</b>	Gland .....	1
11	<b>b 2033296</b>	Gland .....	1
12	198518	O-Ring .....	1
13	166659	Back-Up Ring .....	1
14	<b>b 357626</b>	Spacer .....	1
15	<b>c 2094192</b>	Sleeve (Alternate Part) .....	1
	<b>b 2038679</b>	Kit-Seal .....	1
	2104947	Kit-Seal (Alternate Part) .....	1
	<b>a 2038676</b>	Kit-Seal .....	1

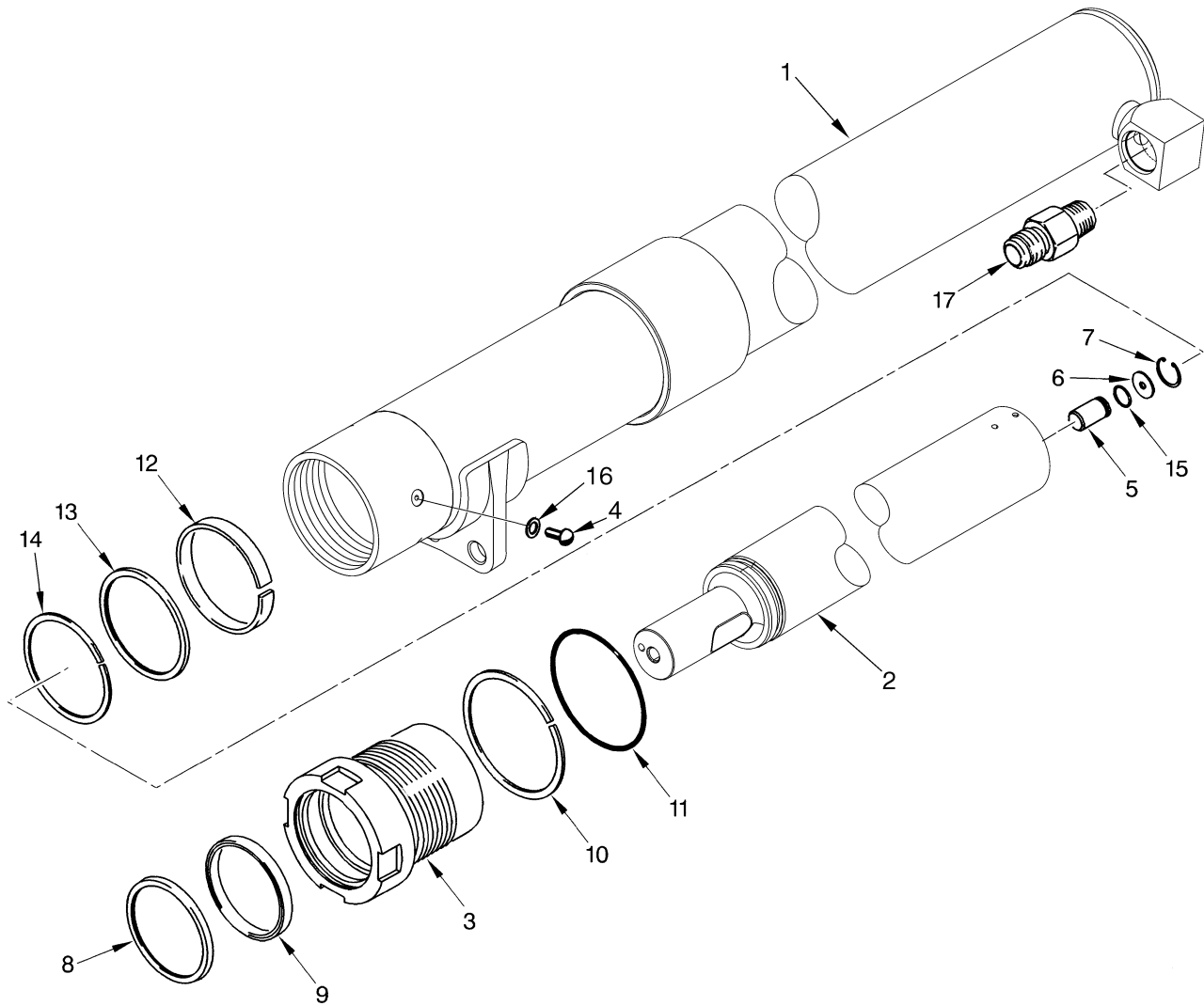
**FOOTNOTES:**

- |                                      |                          |
|--------------------------------------|--------------------------|
| <b>a</b> H4.0FT5, H4.5FT6            | <b>c</b> Not Illustrated |
| <b>b</b> H4.5FT5, 4.5FT6, H5.0-5.5FT | <b>d</b> Refer to Table  |





## FREE-LIFT CYLINDER (FIGURE 11-5) TWO STAGE FULL FREE-LIFT (→ S/N P005B02610H)



BP170214

**FREE-LIFT CYLINDER**  
**TWO STAGE FULL FREE-LIFT (→ S/N P005B02610H)**

**H4.0FT5-H4.0FT6**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3025 mm (119.1 in.)	3625 mm (142.7 in.)
	<b>Mast Group Number</b>	<b>B753 3025</b>	<b>B753 3625</b>
	<b>Cylinder Group Number</b>	<b>8501701</b>	<b>8501707</b>
	Cylinder Assy	2073395	2073401
1	Tube Wldmt- Cylinder	2073257	2073263
2	Cylinder Rod	2073223	2073229

**H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		2765 mm (108.9 in.)	3365 mm (132.5 in.)
	<b>Mast Group Number</b>	<b>B754 2765</b>	<b>B754 3365</b>
	<b>Cylinder Group Number</b>	<b>8527801</b>	<b>8527807</b>
	Cylinder Assy	2073553	2073570
1	Tube Wldmt- Cylinder	2073626	2073634
2	Cylinder Rod	2073681	2073687

**KEY:**

**A: H4.0FT5-H4.0FT6**

**B: H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	<b>a . . . . .</b>	Cylinder Assy .....	1	1
1	<b>a . . . . .</b>	Tube Wldmt-Cylinder .....	1	1
2	<b>a . . . . .</b>	Cylinder Rod .....	1	1
3	2036282	Gland .....	1	..
3	1541640	Gland .....	..	1
4	1361302	Screw .....	1	1
5	257913	Check Valve .....	1	1
5	297538	Check Valve (Optional) .....	1	1
6	297531	Washer .....	1	1
7	187388	Snap Ring .....	1	1
8	1383070	Rod Wiper .....	1	1
9	637161	Rod Seal .....	1	1
9	2033395	Seal (Alternate Part) .....	1	1

**FREE-LIFT CYLINDER**  
**TWO STAGE FULL FREE-LIFT (→ S/N P005B02610H)**

**KEY:**

**A:** H4.0FT5-H4.0FT6

**B:** H4.5FTS5, H4.5FT6, H5.0-5.5FT

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
10	164632	Back-Up Ring .....	1	..
10	615145	Back-Up Ring .....	..	1
11	46629	O-Ring .....	1	..
11	15885	O-Ring .....	..	1
12	636950	Wear Ring .....	1	..
12	1380982	Wear Ring .....	..	1
13	637162	Rod Seal .....	1	..
13	364059	Rod Seal .....	..	1
14	638293	Back-Up Ring .....	1	..
14	1381074	Back-Up Ring .....	..	1
15	39348	O-Ring .....	1	..
15	190580	O-Ring .....	..	1
16	190887	Sealing Ring .....	1	1
17	1550193	Hyd Velocity Fuse .....	1	..
17	1550194	Hyd Velocity Fuse .....	..	1
	2036279	Kit-Seal .....	1	..
	2065889	Kit-Seal .....	..	1

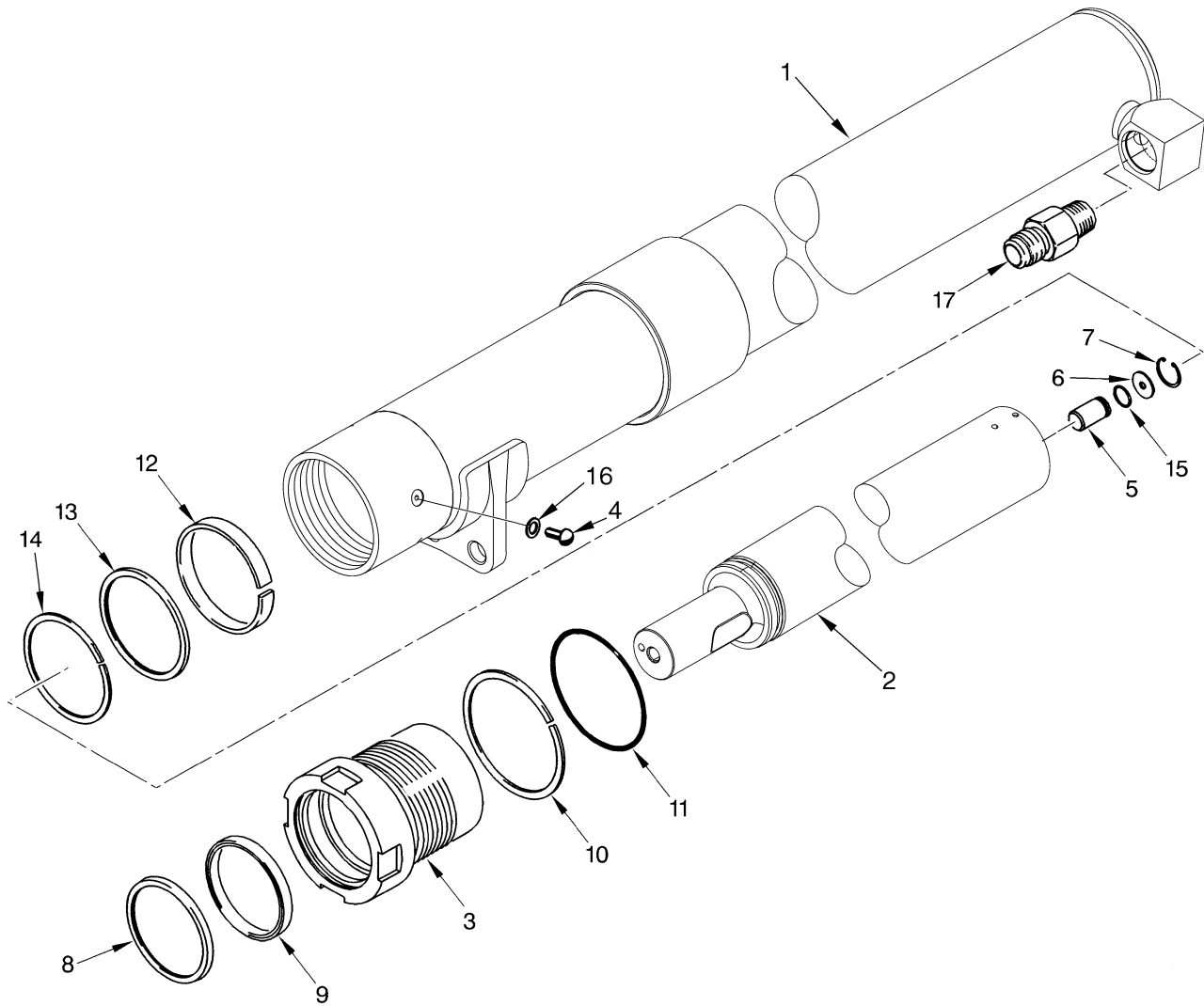
**FOOTNOTES:**

**a** Refer to Table

**b** → 5/2008



## FREE-LIFT CYLINDER (FIGURE 11-6) TWO STAGE FULL FREE-LIFT (S/N P005B02611H →)



BP170214

**FREE-LIFT CYLINDER**  
**TWO STAGE FULL FREE-LIFT (S/N P005B02611H →)**

**H4.0FT5-H4.0FT6**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3025 mm (119.1 in.)	3625 mm (142.7 in.)
		<b>Mast Group Number</b>	<b>B753 3025</b>
<b>Cylinder Group Number</b>	<b>8501701</b>	<b>8544051</b>	
	Cylinder Assy	2104542	2104548
1	Tube Wldmt- Cylinder	2073257	2073263
2	Cylinder Rod	2037833	2037837

**H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		2765 mm (108.9 in.)	3365 mm (132.5 in.)
		<b>Mast Group Number</b>	<b>B754 2765</b>
<b>Cylinder Group Number</b>	<b>8518451</b>	<b>8527801</b>	
	Cylinder Assy	2104508	2104514
1	Tube Wldmt- Cylinder	2073626	2073634
2	Cylinder Rod	2062074	2062079

**KEY:**

**A: H4.0FT5-H4.0FT6**

**B: H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	<b>a . . . . .</b>	Cylinder Assy .....	1	1
1	<b>a . . . . .</b>	Tube Wldmt-Cylinder .....	1	1
2	<b>a . . . . .</b>	Cylinder Rod .....	1	1
3	2036282	Gland .....	1	..
3	1541640	Gland .....	..	1
4	1361302	Screw .....	1	1
5	297538	Check Valve .....	1	1
6	297531	Washer .....	1	1
7	187388	Snap Ring .....	1	1
8	1383070	Rod Wiper .....	1	1
9	637161	Rod Seal .....	1	1
9	2033395	Seal (Alternate Part) .....	1	1
10	164632	Back-Up Ring .....	1	..

**FREE-LIFT CYLINDER**  
**TWO STAGE FULL FREE-LIFT (S/N P005B02611H →)**

**KEY:**

**A:** H4.0FT5-H4.0FT6

**B:** H4.5FTS5, H4.5FT6, H5.0-5.5FT

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
10	615145	Back-Up Ring .....	..	1
11	46629	O-Ring .....	1	..
11	15885	O-Ring .....	..	1
12	636950	Wear Ring .....	1	..
12	1380982	Wear Ring .....	..	1
13	637162	Rod Seal .....	1	..
13	364059	Rod Seal .....	..	1
14	638293	Back-Up Ring .....	1	..
14	1381074	Back-Up Ring .....	..	1
15	39348	O-Ring .....	1	..
15	190580	O-Ring .....	..	1
16	190887	Sealing Ring .....	1	1
17	1550193	Hyd Velocity Fuse .....	1	..
17	1550194	Hyd Velocity Fuse .....	..	1
	2036279	Kit-Seal .....	1	..
	2065889	Kit-Seal .....	..	1

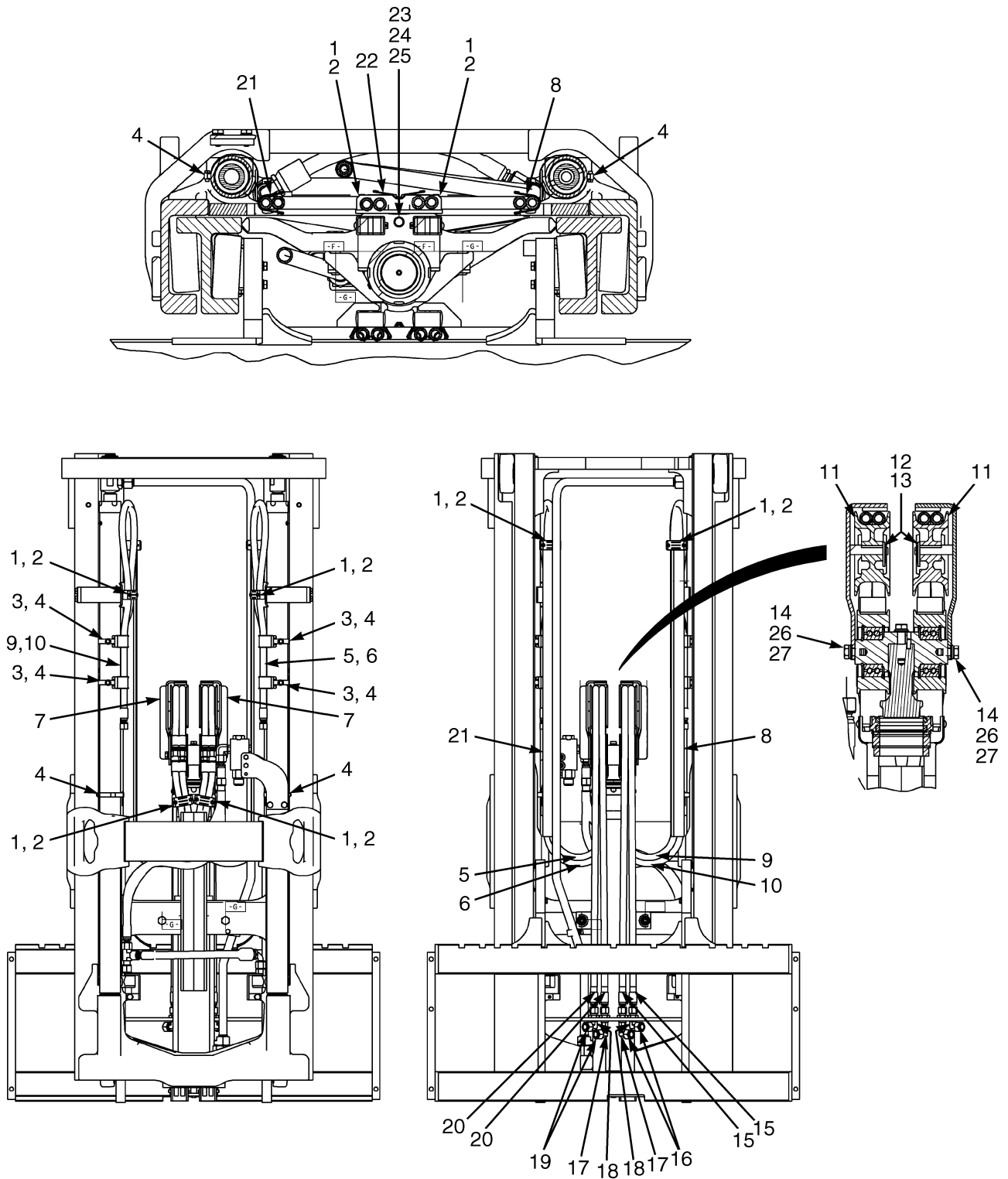
**FOOTNOTES:**

**a** Refer to Table





## HEADER HOSE (FIGURE 11-7) TWO STAGE FULL FREE-LIFT



BP170256

**HEADER HOSE  
TWO STAGE FULL FREE-LIFT  
FOUR FUNCTION H4.0FT5-H4.0FT6**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3025 mm (119.1 in.)	3625 mm (142.7 in.)
		Mast Group Number	B753 3025
8	Channel	1614331	1614337
9	Hose Assy	2083195	2083201
10	Hose Assy	2089674	2089690
15	Hose Assy	2078657	2078663

**THREE FUNCTION H4.0FT5-H4.0FT6**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3025 mm (119.1 in.)	3625 mm (142.7 in.)
		Mast Group Number	B753 3025
5	Hose Assy	2083195	2083201
6	Hose Assy	2089674	2089690
20	Hose Assy	2078657	2078663
21	Channel	1614230	1614236
22	Channel	1614406	1614412

**FOUR FUNCTION H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		2765 mm (108.9 in.)	3365 mm (132.5 in.)
		Mast Group Number	B754 2765
8	Channel	1614331	1614337
9	Hose Assy	2083196	2083202
10	Hose Assy	2089685	2089691
15	Hose Assy	2078688	2078694

## HEADER HOSE TWO STAGE FULL FREE-LIFT

### THREE FUNCTION H4.5FTS5, H4.5FT6, H5.0-5.5FT

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		2765 mm (108.9 in.)	3365 mm (132.5 in.)
		Mast Group Number B754 2765	B754 3365
5	Hose Assy	2083196	2083202
6	Hose Assy	2089685	2089691
20	Hose Assy	2078688	2078694
21	Channel	1614230	1614236
22	Channel	1614403	1614409

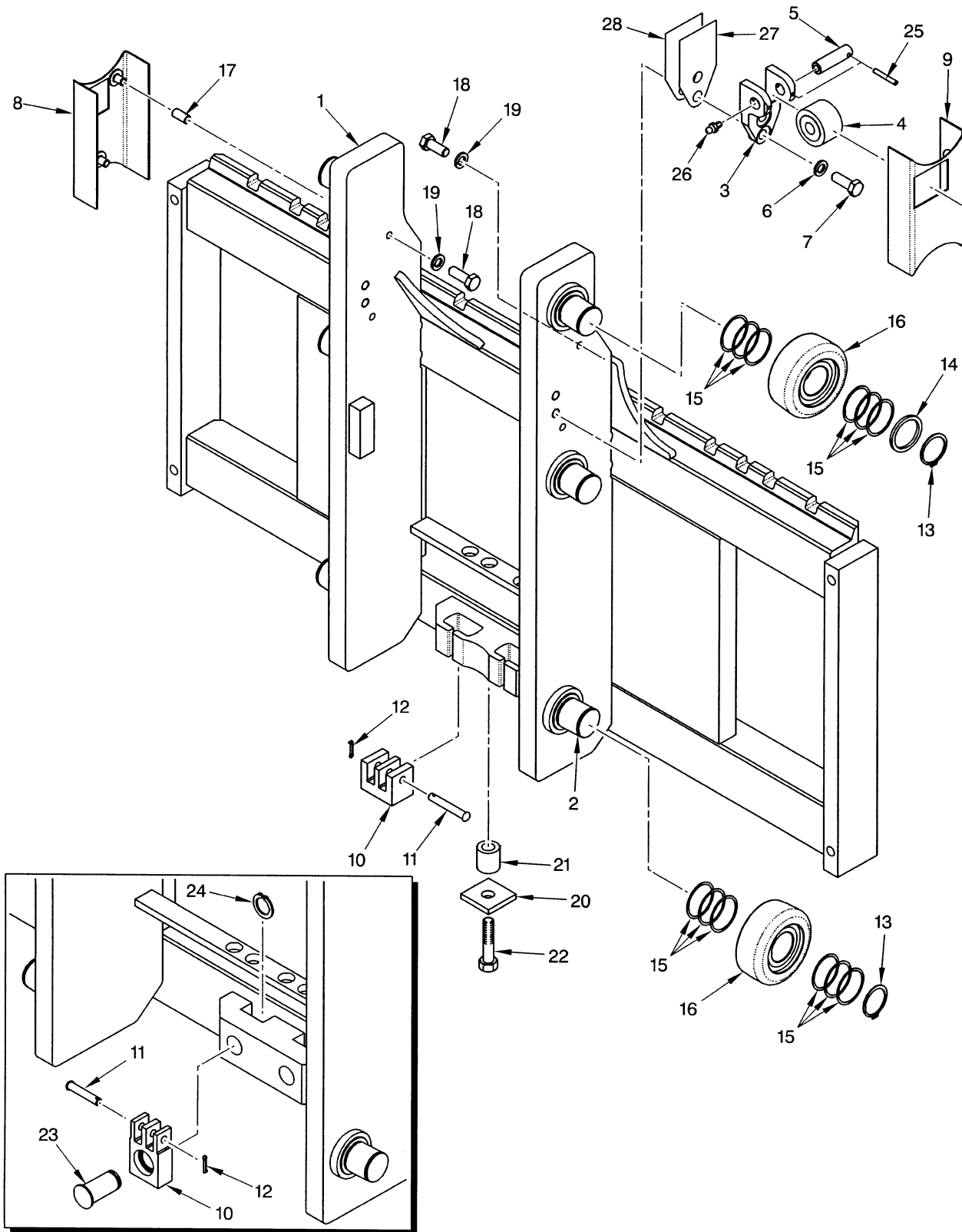
**KEY:**  
**A:** Three Function  
**B:** Four Function

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2035791	Hose Clamp .....	3	6
2	1581741	Capscrew .....	6	12
3	1465489	Hose Clamp .....	2	4
4	1617658	Clamp .....	3	6
5	a . . . .	Hose Assy .....	1	..
6	a . . . .	Hose Assy .....	1	..
7	1541242	Bracket Wldmt .....	1	1
7	1541243	Bracket Wldmt .....	..	1
8	a . . . .	Channel .....	..	1
9	a . . . .	Hose Assy .....	..	1
10	a . . . .	Hose Assy .....	..	1
11	1495279	Hose Sheave .....	1	2
11	332057	Bushing .....	1	2
12	1581560	Washer .....	1	2
13	58902	Snap Ring .....	1	2
14	302472	Roll Pin .....	1	2
15	a . . . .	Hose Assy .....	..	2
16	1529016	Fitting .....	1	2
17	1550425	Fitting .....	1	1
18	1528580	Fitting .....	1	1
19	1529016	Fitting .....	2	4
20	a . . . .	Hose Assy .....	1	..
21	a . . . .	Channel .....	1	..
22	a . . . .	Channel .....	1	..
23	1581556	Washer .....	1	..
24	1581582	Capscrew .....	1	..
25	1581562	Lockwasher .....	1	..
26	1581590	Capscrew .....	2	2
27	302472	Roll Pin .....	2	2

**FOOTNOTES:**

- a** Refer to Table

## CARRIAGE (FIGURE 11-8) TWO STAGE FULL FREE-LIFT



HP170766

**CARRIAGE**  
**TWO STAGE FULL FREE-LIFT****KEY:****A: H4.00FTS, H4.0FT6****B: H4.5FTS5, H4.5FT6, H5.0-5.5FT****C: H4.5FT (Attachment Carriage)**

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
	<b>b</b> 2038558	Carriage (1219 mm) .....	1	..	..
	<b>c</b> 2109343	Carriage (1219 mm) .....	1	..	..
	<b>b</b> 2038561	Carriage (1524 mm) .....	1	..	..
	<b>c</b> 2109348	Carriage (1524 mm) .....	1	..	..
	2038562	Carriage (1219 mm) .....	..	1	..
	2038564	Carriage (1372 mm) .....	..	1	..
	2038565	Carriage (1372 mm) .....	..	..	1
	2038566	Carriage (1524 mm) .....	..	1	..
1	<b>b</b> 1394984	Carriage Wldmt (1219 mm) .....	1	..	..
1	<b>c</b> 1699955	Carriage Wldmt (1219 mm) .....	1	..	..
1	<b>b</b> 1394986	Carriage Wldmt (1524 mm) .....	1	..	..
1	<b>c</b> 1699995	Carriage Wldmt (1524 mm) .....	1	..	..
1	1394991	Carriage Wldmt (1219 mm) .....	..	1	..
1	1394993	Carriage Wldmt (1524 mm) .....	..	1	..
1	1465885	Carriage Wldmt (1372 mm) .....	..	..	1
2	1500744	Stubshaft .....	6	6	6
3	1465177	Bracket .....	..	..	2
4	1387993	Side Roller .....	..	..	2
4	1670064	Thrust Bearing (Side Thrust Roller) (Alternate Part) .....	..	..	2
5	1465028	Pin .....	..	..	2
5	1670065	Pin (Alternate Part) .....	..	..	2
6	292683	Lockwasher .....	..	..	4
7	<del>4048814</del> 292528	Capscrew .....	..	..	4
8	319323	Bracket Wldmt (LH) .....	1	1	1
9	319322	Bracket Wldmt (RH) .....	1	1	1
10	1387548	Chain Anchor .....	2	..	..
10	1480392	Chain Anchor .....	..	2	2
11	1387549	Pin (Anchor) .....	2	..	..
11	339932	Pin (Anchor) .....	..	2	2
12	15222	Cotter Pin .....	2	2	2
13	1465072	Snap Ring .....	6	6	6
14	1399224	Spacer .....	2	2	2
15	126765	Shim .....	AR	AR	24
16	<b>a</b> 1511882	Load Roller ("A") (103.68/103.42) ("A") .....	6	6	..
16	<b>a</b> 1511883	Load Roller ("B") (104.44/104.18) ("B") (0,26 mm) .....	6	6	6
16	<b>a</b> 1511884	Load Roller ("C") (105.20/104.94) ("C") (1,52 mm) .....	6	6	..
17	317292	Spacer .....	4	4	4
18	18518	Capscrew .....	4	4	4
19	15155	Lockwasher .....	4	4	4
20	1400126	Plate .....	1	..	..
21	1400125	Spacer .....	1	..	..
22	292508	Capscrew .....	1	..	..
23	320327	Pin .....	..	2	2

## CARRIAGE TWO STAGE FULL FREE-LIFT

**KEY:****A:** H4.00FTS, H4.0FT6**B:** H4.5FTS5, H4.5FT6, H5.0-5.5FT**C:** H4.5FT (Attachment Carriage)

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
24	131358	Snap Ring .....	..	2	2
25	66333	Roll Pin .....	..	..	2
26	16001	Grease Fitting .....	..	..	2
27	192425	Shim (1.575 mm) .....	..	..	AR
28	192424	Shim (0.762 mm) .....	..	..	AR

**FOOTNOTES:****a** Letter Located on Inside Surface of Load Roller**c** S/N P005B02453H →**b** → S/N P005B02452H





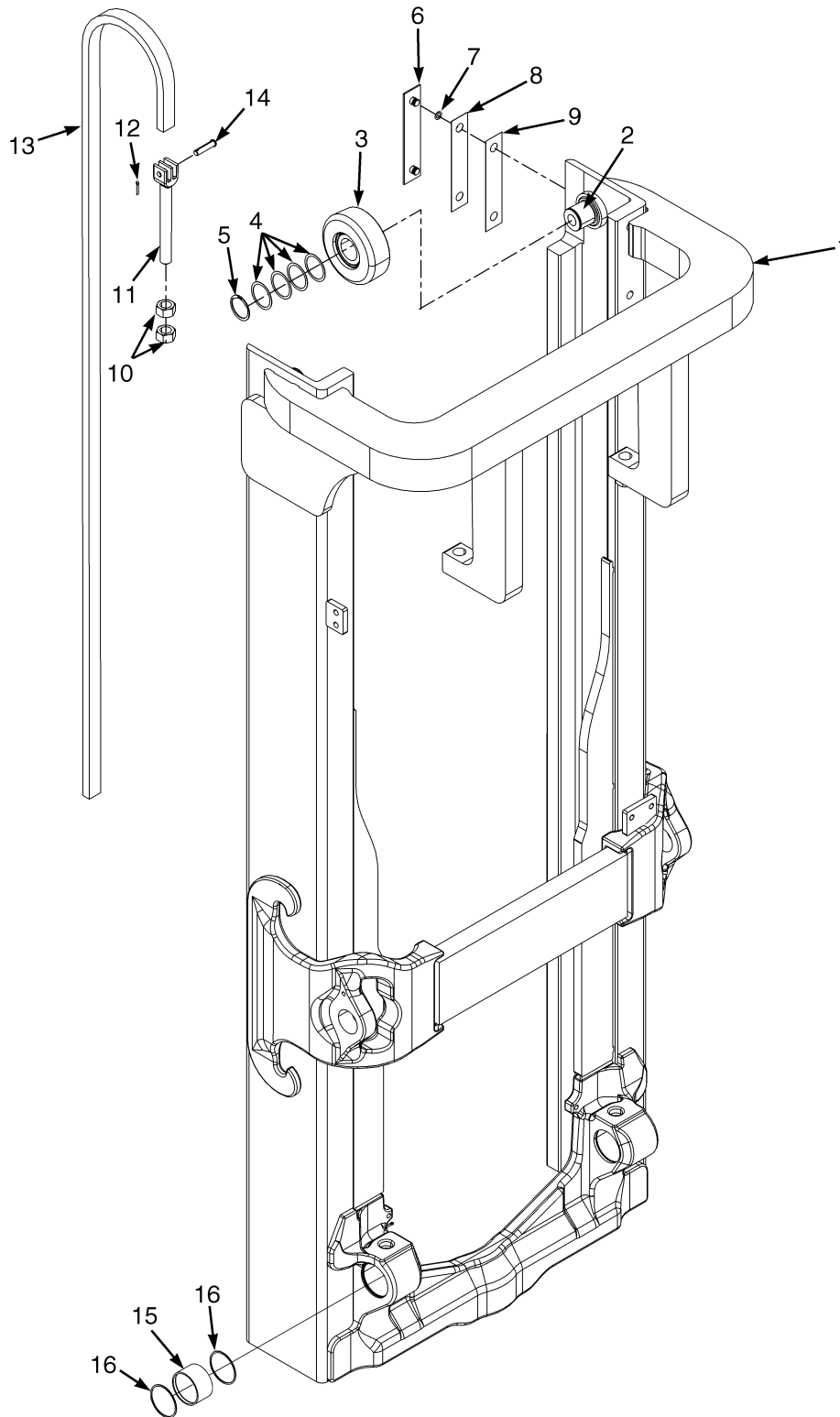


## SECTION 12

### MAST-THREE STAGE FULL FREE-LIFT

DESCRIPTION	PAGE
CARRIAGE	
THREE STAGE FULL FREE-LIFT .....	12-38
FREE-LIFT	
THREE STAGE FULL FREE-LIFT (→ S/N P005B02611H) .....	12-18
THREE STAGE FULL FREE-LIFT (S/N P005B02612H →) .....	12-22
FREE-LIFT CYLINDER	
THREE STAGE FULL FREE-LIFT (→ S/N P005B02610H) .....	12-26
THREE STAGE FULL FREE-LIFT (S/N P005B02611H →) .....	12-30
HEADER HOSES	
THREE STAGE FULL FREE-LIFT .....	12-34
INNER MAST	
THREE STAGE FULL FREE-LIFT .....	12-8
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MAIN CYLINDER	
THREE STAGE FULL FREE-LIFT .....	12-14
MAIN LIFT	
THREE STAGE FULL FREE-LIFT .....	12-10
OUTER MAST	
THREE STAGE FULL FREE-LIFT .....	12-2

## OUTER MAST (FIGURE 12-1) THREE STAGE FULL FREE-LIFT



BP170258

**OUTER MAST  
THREE STAGE FULL FREE-LIFT  
H4.0FT5-H4.0FT6**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4365 mm (171.9 in.)	4900 mm (192.9 in.)	5200 mm (204.7 in.)	5500 mm (216.5 in.)	5950 mm (234.3 in.)
		Mast Group Number B751 4365	B751 4900	B751 5200	B751 5500	B751 5950
	Mast Assy	2071871	2071874	2071876	2071878	2071881
1	Outer Mast	1573520	1573523	1573525	1573527	1573530
13	Chain	191081	194607	191085	191072	206749

**H4.5FTS5, H4.5FT6, H5.0-5.5FT**

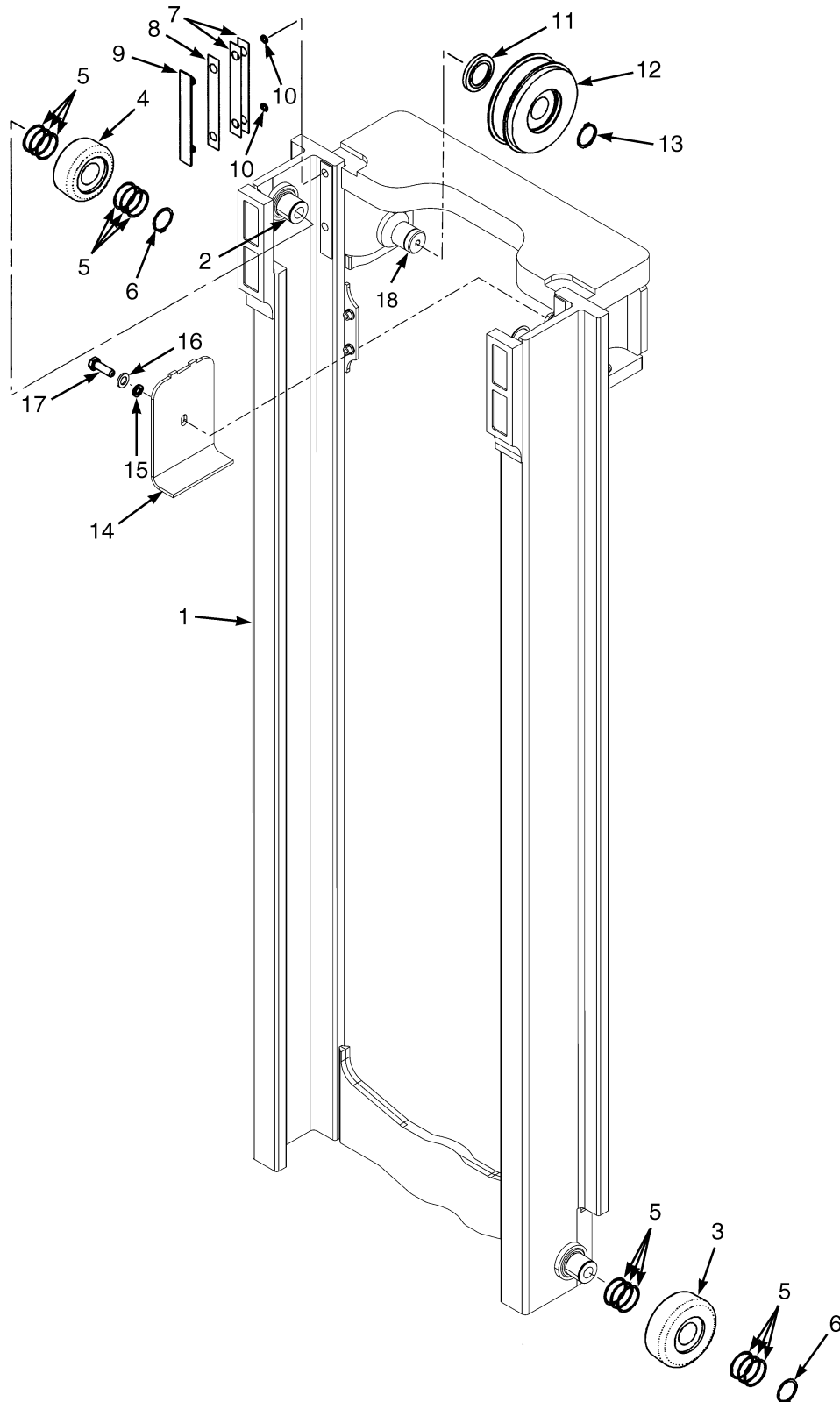
ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		4087 mm (160.9 in.)	4940 mm (194.5 in.)	5240 mm (206.3 in.)
		Mast Group Number B752 4087	B752 4940	B752 5240
	Mast Assy	2071898	2071903	2071905
1	Outer Mast	1573520	1573525	1573527
13	Chain	280878	339934	356916

ITEM	PART NO.	DESCRIPTION	QTY
	a . . . . .	Mast Assy .....	1
1	a . . . . .	Outer Mast .....	1
2	1500744	Stubshaft .....	2
3	1399204	Load Roller ("B") (127.51/127.25) .....	2
4	126765	Shim .....	AR
5	1465072	Snap Ring .....	2
6	104264	Wear Strip .....	2
7	104506	O-Ring .....	4
8	161273	Shim (0,508 mm) .....	AR
9	161272	Shim (0,178 mm) .....	AR
10	221717	Nut .....	4
11	1331990	Chain Anchor (H4.0FT5, H4.0FT6, H4.5FTS5) .....	2
11	1331991	Chain Anchor (H4.5FT6, H5.0-5.5FT) .....	2
12	15222	Cotter Pin .....	2
13	a . . . . .	Chain .....	2
14	339932	Pin .....	2
15	1485449	Bushing .....	2
16	1465518	Snap Ring .....	4

**FOOTNOTES:**

a Refer to Table

## INTERMEDIATE MAST (FIGURE 12-2) THREE STAGE FULL FREE-LIFT



BP170208

**INTERMEDIATE MAST  
THREE STAGE FULL FREE-LIFT**

**H4.0FT5-H4.0FT6**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4365 mm (171.9 in.)	4900 mm (192.9 in.)	5200 mm (204.7 in.)	5500 mm (216.5 in.)	5950 mm (234.3 in.)
		Mast Group Number	B751 4365	B751 4900	B751 5200	B751 5500
	Mast Assy	2071871	2071874	2071876	2071878	2071881
1	Intermediate Mast	1574162	1574165	1574167	1574169	1574172

**H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		4087 mm (160.9 in.)	4940 mm (194.5 in.)	5240 mm (206.3 in.)
		Mast Group Number	B752 4087	B752 4940
	Mast Assy	2071898	2071903	2071905
1	Intermediate Mast	1574162	1574167	1574169

ITEM	PART NO.	DESCRIPTION	QTY
	<b>b</b> . . . . .	Mast Assy .....	1
1	<b>b</b> . . . . .	Intermediate Mast .....	1
2	1500744	Stubshaft .....	4
3	1399204	Load Roller ("B") (127.51/127.25) .....	2
4	1511883	Load Roller ("B") (104.44/104.18) .....	2
5	126765	Shim .....	24
6	1465072	Snap Ring .....	4
7	131716	Shim (0.508 mm) .....	AR
8	131715	Shim (0.178 mm) .....	AR
9	215211	Wear Strip .....	2
10	104506	O-Ring .....	4
11	1389846	Spacer .....	2
12	1389780	Chain Sheave (H4.0FT5, H4.0FT6, H4.5FTS5) .....	2
12	1389673	Chain Sheave .....	1
12	41531	Snap Ring .....	2
12	126764	Double Row Bearing .....	1
12	1389779	Chain Sheave (H4.5FT6, H5.0-5.5FT) .....	2
12	1389672	Chain Sheave .....	1
12	41531	Snap Ring .....	2
12	126764	Double Row Bearing .....	1
13	12891	Snap Ring .....	2
14	<b>c</b> 1389959	Bracket .....	1
15	<b>c</b> 1581564	Lockwasher .....	1
16	<b>c</b> 1581559	Washer .....	1
17	<b>c</b> 1581590	Capscrew .....	1
18	1389932	Stubshaft .....	2
	<b>a</b> 1466633	Insert .....	4

**FOOTNOTES:**

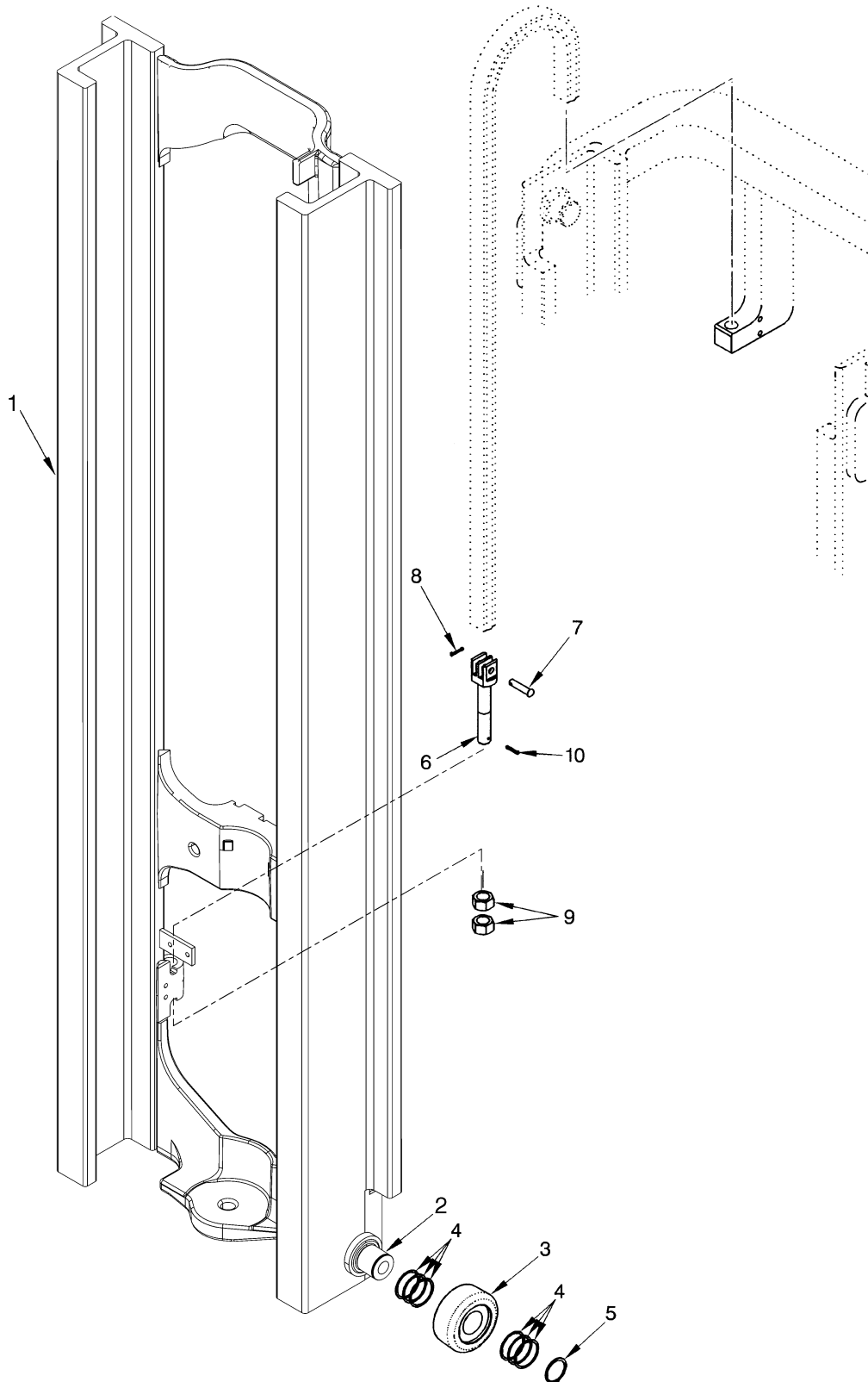
- a** Not Illustrated
- b** Refer to Table

**c** → S/N P005B02169G





## INNER MAST (FIGURE 12-3) THREE STAGE FULL FREE-LIFT



BP170209

**INNER MAST  
THREE STAGE FULL FREE-LIFT  
H4.0FT5-H4.0FT6**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4365 mm (171.9 in.)	4900 mm (192.9 in.)	5200 mm (204.7 in.)	5500 mm (216.5 in.)	5950 mm (234.3 in.)
		Mast Group Number	B751 4365	B751 4900	B751 5200	B751 5500
	Mast Assy	2071871	2071874	2071876	2071878	2071881
1	Inner Mast	1573599	1573602	1573604	1573606	1573609

**H4.5FTS5, H4.5FT6, H5.0-5.5FT**

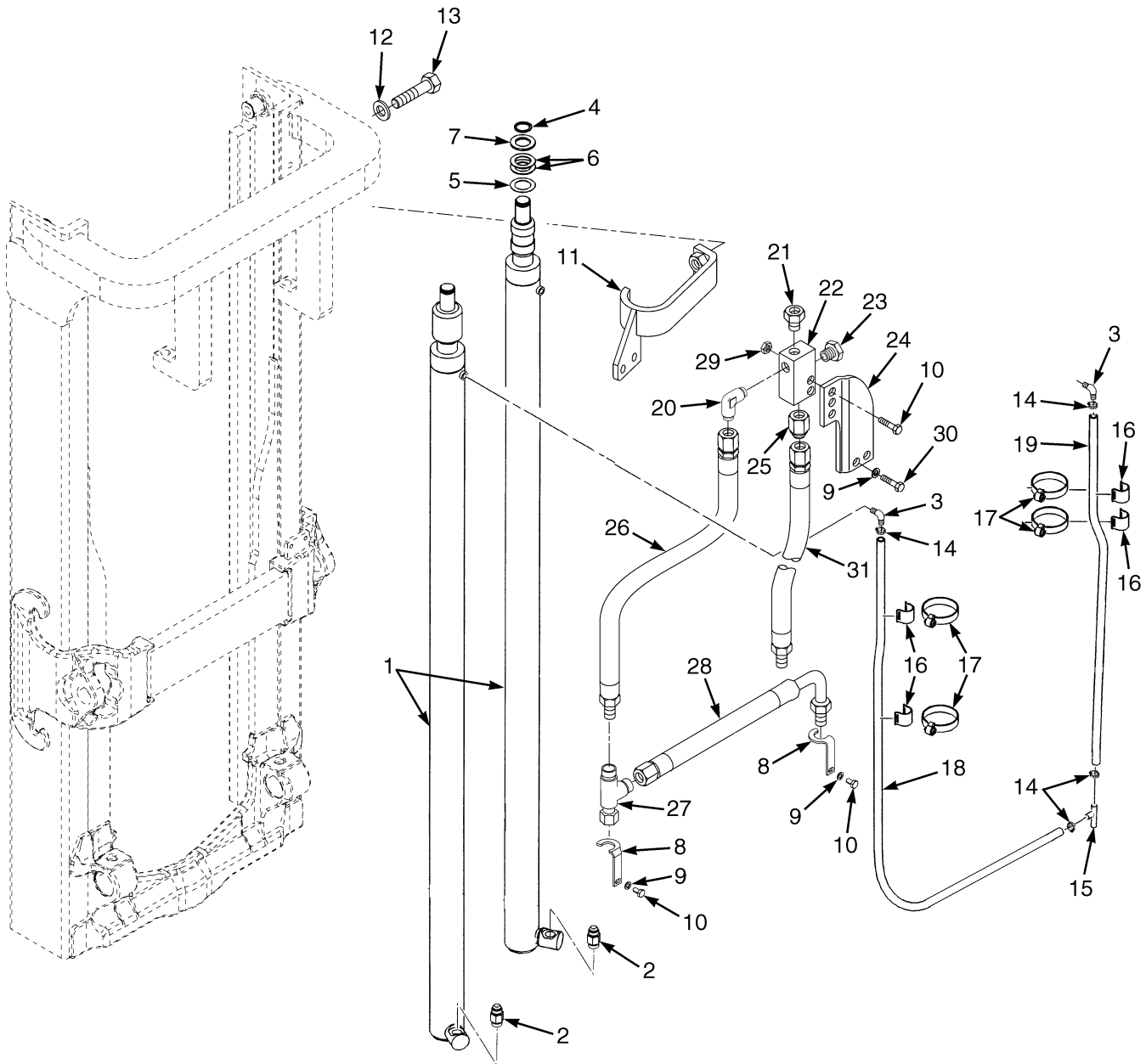
ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		4087 mm (160.9 in.)	4940 mm (194.5 in.)	5240 mm (206.3 in.)
		Mast Group Number	B752 4087	B752 4940
	Mast Assy	2071898	2071903	2071905
1	Inner Mast	1573599	1573604	1573606

ITEM	PART NO.	DESCRIPTION	QTY
	<b>a</b> . . . . .	Mast Assy .....	1
1	<b>a</b> . . . . .	Inner Mast .....	1
2	1500744	Stubshaft .....	2
3	1511883	Load Roller ("B") (104.44/104.18) .....	2
4	126765	Shim .....	AR
5	1465072	Snap Ring .....	2
6	1387286	Chain Anchor .....	2
7	327591	Pin (H4.0FT5, H4.0FT6) .....	2
7	339932	Pin (H4.5FTS5, H4.5FT6, H5.0-5.5FT) .....	2
8	15222	Cotter Pin .....	2
9	1581896	Nut .....	4
10	15224	Cotter Pin .....	2

**FOOTNOTES:**

**a** Refer to Table

## MAIN LIFT (FIGURE 12-4) THREE STAGE FULL FREE-LIFT



BP170259

**MAIN LIFT  
THREE STAGE FULL FREE-LIFT****H4.0FT5-H4.0FT6**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4365 mm (171.9 in.)	4900 mm (192.9 in.)	5200 mm (204.7 in.)	5500 mm (216.5 in.)	5950 mm (234.3 in.)
		Mast Group Number B751 4365	B751 4900	B751 5200	B751 5500	B751 5950
18	Hose Assy	1399096	1399104	1399108	1399112	1399120
19	Hose Assy	1399077	1399084	1399088	1399092	1399100

**H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		4087 mm (160.9 in.)	4940 mm (194.5 in.)	5240 mm (206.3 in.)
		Mast Group Number B752 4087	B752 4940	B752 5240
18	Hose Assy	1399094	1399106	1399110
19	Hose Assy	1399076	1399086	1399090

ITEM	PART NO.	DESCRIPTION	QTY
1	.....	Main Cylinder (☞Figure 12-5).....	2
2	a 1550195	Hyd Velocity Fuse (Free-Lift Cylinder) (12 x 16) .....	1
2	a 1550157	Hyd Velocity Fuse (10 x 10) .....	2
2	b 1550196	Hyd Velocity Fuse (Free-Lift Cylinder) (12 x 16) .....	1
2	b 1550158	Hyd Velocity Fuse (10 x 10) .....	2
3	110178	Fitting .....	2
3	16483	O-Ring .....	1
4	304523	Snap Ring .....	2
5	1325120	Shim .....	AR
6	142247	Shim .....	AR
7	332061	Washer .....	2
8	1634463	Bracket (LH) .....	1
8	1634462	Bracket (RH) .....	1
9	1581558	Washer .....	4
10	1581583	Capscrew .....	2
11	1474496	Bracket (RH) .....	1
11	1474497	Bracket (LH) .....	1
12	1581558	Washer .....	4
13	1581588	Capscrew .....	4
14	379405	Clamp .....	4
15	2046871	Fitting .....	1
16	1465585	Hose Clamp .....	4
17	1360529	Clamp .....	4
18	c.....	Hose Assy .....	1
19	c.....	Hose Assy .....	1
20	1487068	Fitting .....	1
20	16484	O-Ring .....	1

## MAIN LIFT THREE STAGE FULL FREE-LIFT

ITEM	PART NO.	DESCRIPTION	QTY
20	252729	O-Ring .....	1
21	1473888	Fitting .....	1
21	280154	O-Ring .....	1
21	16486	O-Ring .....	1
22	1388019	Housing .....	1
23	14595	Plug Assembly .....	1
23	16484	O-Ring .....	1
24	1474387	Bracket .....	1
25	<b>a</b> 1550197	Lowering Control Valve .....	1
25	<b>b</b> 1550198	Lowering Control Valve .....	1
26	2087555	Hose Assy .....	1
27	1487096	Fitting .....	1
28	2074184		
	4604938	Hose Assy .....	1
29	1581566	Nut .....	2
30	1581585	Capscrew .....	2
31	2076763	Hose Assy (Hoist) .....	1

**FOOTNOTES:**

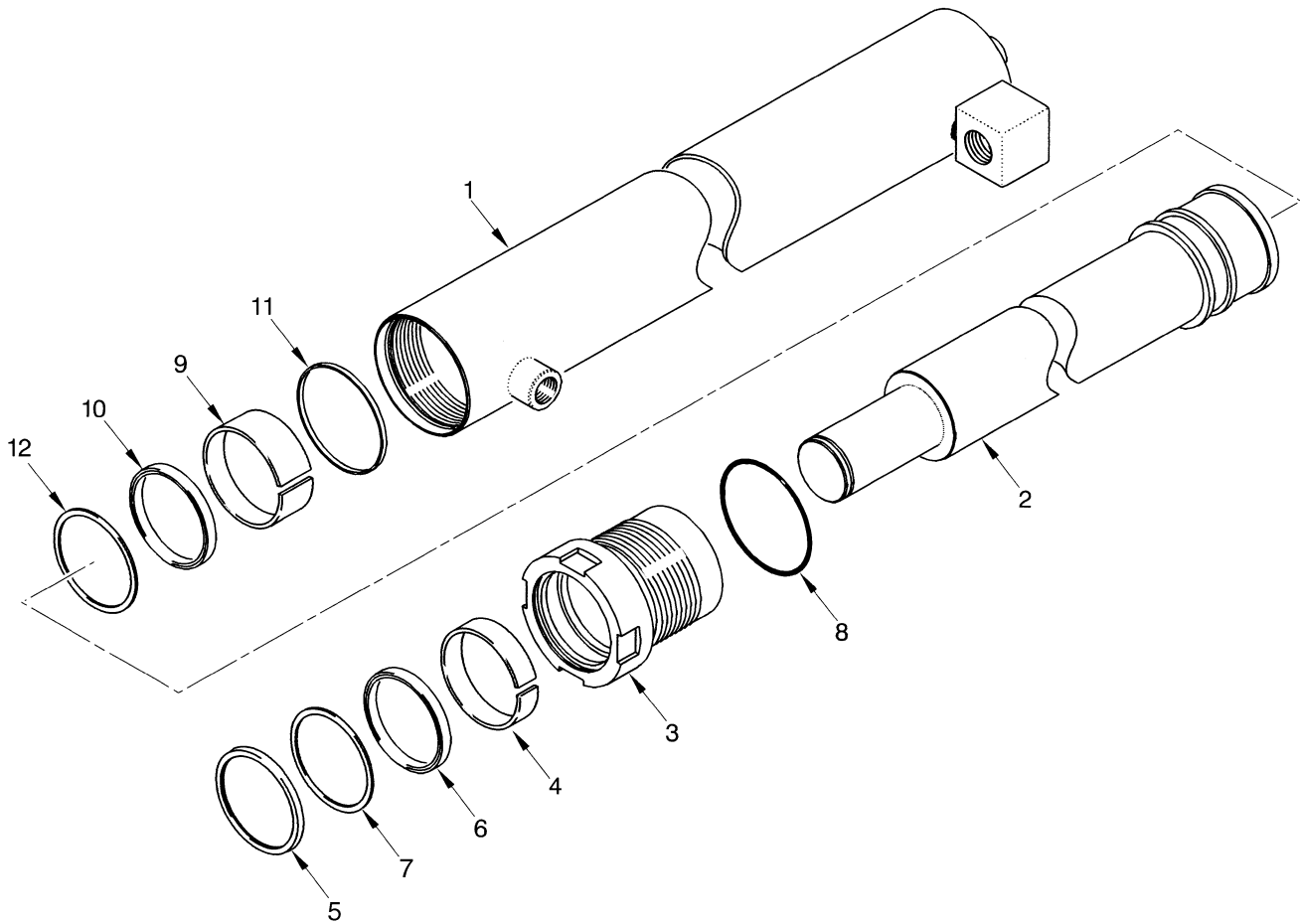
**a** H4.0FT5, H4.0FT6

**c** Refer to Table

**b** H4.5FTS5, H4.5FT6-H5.0-5.5FT



## MAIN CYLINDER (FIGURE 12-5) THREE STAGE FULL FREE-LIFT



BP170222



**MAIN CYLINDER  
THREE STAGE FULL FREE-LIFT  
H4.0FT5-H4.0FT6**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4365 mm (171.9 in.)	4900 mm (192.9 in.)	5200 mm (204.7 in.)	5500 mm (216.5 in.)	5950 mm (234.3 in.)
		Mast Group Number	B751 4365	B751 4900	B751 5200	B751 5500
	Cylinder Group Number	8509701	8509704	8509706	8509708	8509711
	Cylinder Assy	2073852	2073857	2073856	2073859	2073874
1	Tube Wldmt- Cylinder	2073888	2073891	2073893	2073895	2073898
2	Cylinder Rod	2037856	2037858	2037859	2037860	2037861

**H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		4087 mm (160.9 in.)	4940 mm (194.5 in.)	5240 mm (206.3 in.)
		Mast Group Number	B752 4087	B752 4940
	Cylinder Group Number	8509801	8509806	8509808
	Cylinder Assy	2073912	2073917	2073919
1	Tube Wldmt- Cylinder	2073932	2073937	2073939
2	Cylinder Rod	2037841	2037845	2037846

**KEY:**

**A: H4.0FT5, H4.0FT6**

**B: H4.5FTS5, H4.5FT6-H5.0-5.5FT**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	<b>d . . . . .</b>	Cylinder Assy .....	2	2
1	<b>d . . . . .</b>	Tube Wldmt-Cylinder .....	1	1
2	<b>d . . . . .</b>	Cylinder Rod .....	1	1
3	2033243	Gland .....	1	..
3	2033299	Gland .....	..	1
4	215425	Wear Ring .....	1	..
4	215301	Wear Ring .....	..	1
5	1383066	Rod Wiper .....	1	..
5	1383068	Rod Wiper .....	..	1
6	201829	Rod Seal .....	..	1
6	270077	Rod Seal .....	1	..
7	638249	Back-Up Ring .....	2	..
7	638250	Back-Up Ring .....	..	1

## MAIN CYLINDER THREE STAGE FULL FREE-LIFT

**KEY:**

**A:** H4.0FT5, H4.0FT6

**B:** H4.5FTS5, H4.5FT6-H5.0-5.5FT

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
8	57664	O-Ring .....	1	..
8	15879	O-Ring .....	..	1
9	297532	Wear Ring .....	1	..
9	351531	Wear Ring .....	..	1
10	1381061	Rod Seal .....	1	..
10	1381062	Rod Seal .....	..	1
11	1379063	Piston Ring (RH) .....	1	..
11	2036479	Piston Ring .....	..	1
12	351532	Back-Up Ring .....	..	1
	<b>ac</b> 2078399	Spacer .....	1	..
	<b>bc</b> 351673	Spacer .....	..	1
	2036277	Kit-Seal .....	1	..
	2036278	Kit-Seal .....	..	1

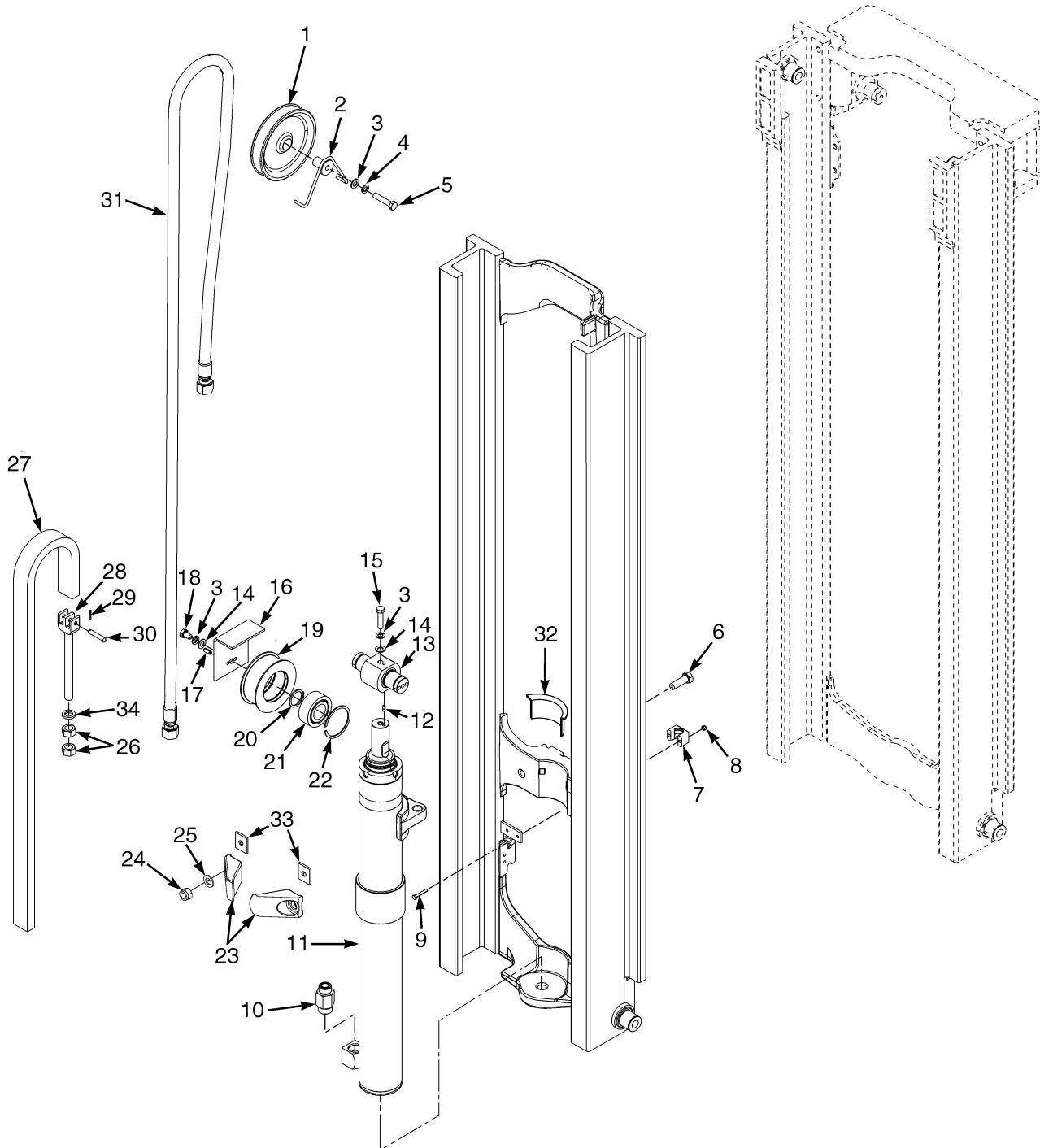
**FOOTNOTES:**

- a** Lift Heights of 4640mm and Higher
- b** Lift Heights of 4900mm and Higher

- c** Not Illustrated
- d** Refer to Table



## FREE-LIFT (FIGURE 12-6) THREE STAGE FULL FREE-LIFT (→ S/N P005B02611H)



BP170260

**FREE-LIFT**  
**THREE STAGE FULL FREE-LIFT (→ S/N P005B02611H)**  
**H4.0FT5-H4.0FT6**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4365 mm (171.9 in.)	4900 mm (192.9 in.)	5200 mm (204.7 in.)	5500 mm (216.5 in.)	5950 mm (234.3 in.)
		Mast Group Number	B751 4365	B751 4900	B751 5200	B751 5500
27	Chain	337189	337190	339897	348827	339933
31	Hose Assy	2072080	2072083	2072085	2072087	2072090

**H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		4087 mm (160.9 in.)	4940 mm (194.5 in.)	5240 mm (206.3 in.)
		Mast Group Number	B752 4087	B752 4940
27	Chain	386885	337189	320396
31	Hose Assy	2072080	2072085	2072087

ITEM	PART NO.	DESCRIPTION	QTY
1	2036778	Hose Sheave .....	1
2	1387553	Stubshaft .....	1
3	1581564	Lockwasher .....	4
4	1581559	Washer .....	4
5	1581592	Capscrew .....	1
6	1639154	Capscrew .....	2
7	1387479	Hose Clamp .....	1
8	1581565	Nut .....	2
9	1581578	Capscrew .....	2
10	<b>a</b> 1550195	Hyd Velocity Fuse (Free-Lift Cylinder) .....	1
10	<b>b</b> 1550196	Hyd Velocity Fuse (Free-Lift Cylinder) .....	1
10	16487	O-Ring .....	1
10	280154	O-Ring .....	1
11	.....	Free-Lift Cylinder (☞ Figure 12-8).....	1
12	310549	Pin .....	1
13	1573177	Crosshead .....	1
14	1581564	Lockwasher .....	4
15	1597456	Capscrew .....	1
16	1387519	Guard .....	2
17	302472	Roll Pin .....	4
18	1581589	Capscrew .....	2
19	1387743	Chain Sheave .....	2
19	1387740	Chain Sheave .....	1
20	304527	Snap Ring .....	2
21	126764	Double Row Bearing .....	1
22	40667	Snap Ring .....	2
23	<b>b</b> 2088451	Bracket .....	2

**FREE-LIFT**  
**THREE STAGE FULL FREE-LIFT (→ S/N P005B02611H)**

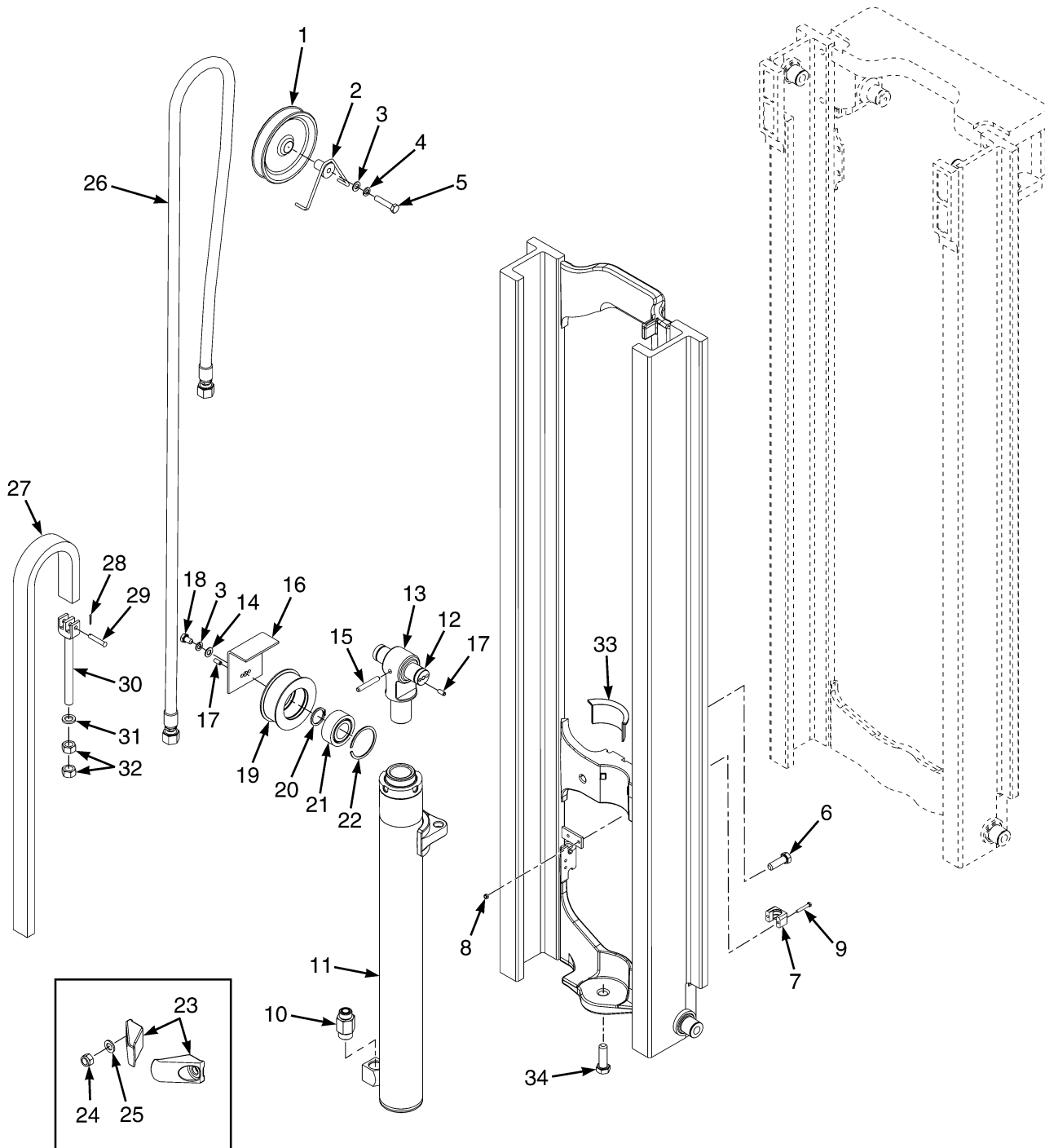
ITEM	PART NO.	DESCRIPTION	QTY
23	<b>a</b> 2088450	Bracket .....	2
24	161003	Nut .....	2
25	297649	Ring .....	2
26	1581896	Nut .....	4
27	<b>c</b> . . . . .	Chain .....	2
28	<b>a</b> 1331990	Chain Anchor .....	2
28	<b>b</b> 1331991	Chain Anchor .....	2
29	15222	Cotter Pin .....	2
30	339932	Pin .....	2
31	<b>c</b> . . . . .	Hose Assy .....	1
32	1611061	Collar .....	1
33	1638844	Shim .....	AR
34	1626490	Washer .....	2

**FOOTNOTES:**

- a** H4.0FT5, H4.0FT6
- b** H4.5FTS5, H4.5FT6-H5.0-5.5FT
- c** Refer to Table



## FREE-LIFT (FIGURE 12-7) THREE STAGE FULL FREE-LIFT (S/N P005B02612H →)



BP170569



**FREE-LIFT**  
**THREE STAGE FULL FREE-LIFT (S/N P005B02612H →)**  
**H4.0FT5-H4.0FT6**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4365 mm (171.9 in.)	4665 mm (183.7 in.)	4900 mm (192.9 in.)	5200 mm (204.7 in.)	5500 mm (216.5 in.)
		Mast Group Number B751 4365	B751 4665	B751 4900	B751 5200	B751 5500
26	Hose Assy	2072080	2072082	2072083	2072085	2072087
27	Chain	337189	320396	337190	339897	348827

**H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4087 mm (160.9 in.)	4387 mm (172.7 in.)	4640 mm (182.7 in.)	4940 mm (194.5 in.)	5240 mm (206.3 in.)
		Mast Group Number B752 4087	B752 4387	B752 4640	B752 4940	B752 5240
26	Hose Assy	2072080	2072082	2072083	2072085	2072087
27	Chain	386885	297640	337180	337189	320396

ITEM	PART NO.	DESCRIPTION	QTY
1	2036778	Hose Sheave .....	1
2	1387553	Stubshaft .....	1
3	1581564	Lockwasher .....	3
4	1581559	Washer .....	1
5	1581592	Capscrew .....	1
6	221628	Capscrew .....	2
7	1387479	Hose Clamp .....	1
8	1581565	Nut .....	2
9	1581578	Capscrew .....	2
10	<b>a</b> 1550195	Hyd Velocity Fuse (Free-Lift Cylinder) .....	1
10	<b>b</b> 1550196	Hyd Velocity Fuse (Free-Lift Cylinder) .....	1
10	16487	O-Ring .....	1
10	280154	O-Ring .....	1
11	.....	Free-Lift Cylinder (☞ Figure 12-9).....	1
12	1387281	Pin .....	1
13	1389825	Crosshead .....	1
14	1581559	Washer .....	2
15	302493	Roll Pin .....	1
16	1387519	Guard .....	2
17	302472	Roll Pin .....	4
18	1581589	Capscrew .....	2
19	1387743	Chain Sheave .....	2
19	1387740	Chain Sheave .....	1
20	304527	Snap Ring .....	2
21	126764	Double Row Bearing .....	1
22	41531	Snap Ring .....	2
23	<b>a</b> 2088450	Bracket (Two Piece Wedge Bracket) .....	2

**FREE-LIFT**  
**THREE STAGE FULL FREE-LIFT (S/N P005B02612H →)**

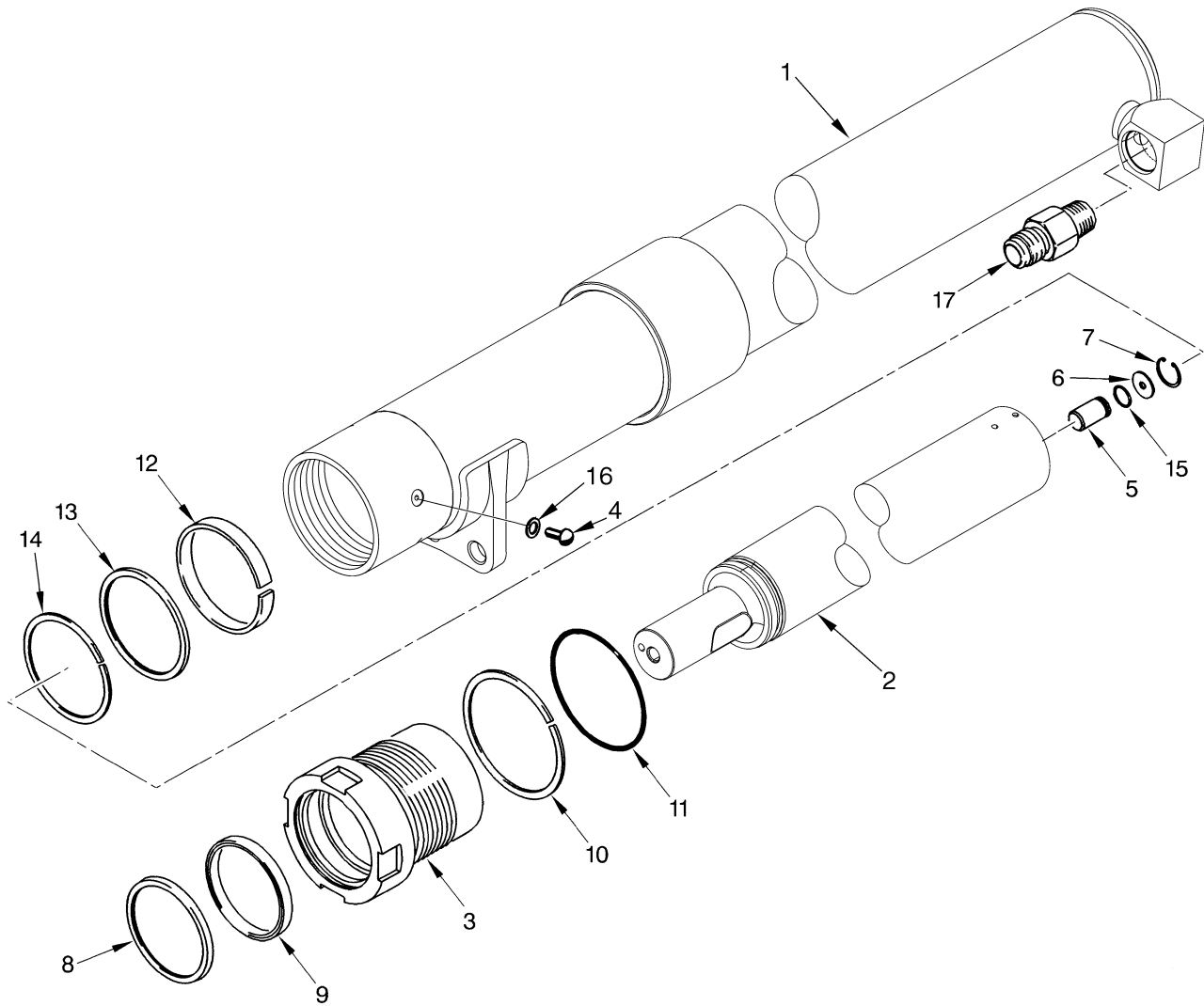
ITEM	PART NO.	DESCRIPTION	QTY
23	<b>b</b> 2088451	Bracket (Two Piece Wedge Bracket) .....	2
24	161003	Nut .....	2
25	297649	Ring .....	2
26	<b>c</b> . . . .	Hose Assy .....	1
27	<b>c</b> . . . .	Chain .....	2
28	15222	Cotter Pin .....	2
29	327591	Pin .....	4
30	<b>b</b> 1331990	Chain Anchor .....	2
30	<b>a</b> 1331991	Chain Anchor .....	4
31	1626490	Washer .....	2
32	1581896	Nut .....	4
33	<b>b</b> 1611061	Collar .....	1
34	296009	Capscrew .....	1
	<b>c</b> 4612788	Lockwasher (Chain Anchor) .....	2

**FOOTNOTES:**

- a** H4.0FT5, H4.0FT6
- b** H4.5FTS5, H4.5FT6-H5.0-5.5FT
- c** Refer to Table



## FREE-LIFT CYLINDER (FIGURE 12-8) THREE STAGE FULL FREE-LIFT (→ S/N P005B02610H)



BP170214

**FREE-LIFT CYLINDER**  
**THREE STAGE FULL FREE-LIFT (→ S/N P005B02610H)**

**H4.0FT5-H4.0FT6**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4365 mm (171.9 in.)	4665 mm (183.7 in.)	4900 mm (192.9 in.)	5200 mm (204.7 in.)
		Mast Group Number	B751 4365	B751 4665	B751 4900
	Cylinder Group Number	8501701	8501703	8501705	8501707
	Cylinder Assy	2073395	2073397	2073399	2073401
1	Tube Wldmt- Cylinder	2073257	2073259	2073261	2073263
2	Cylinder Rod	2073223	2073225	2073227	2073229

**H4.0FT5-H4.0FT6**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		5500 mm (216.5 in.)	5950 mm (234.3 in.)
		Mast Group Number	B751 5500
	Cylinder Group Number	8501709	8501713
	Cylinder Assy	2073403	2073408
1	Tube Wldmt- Cylinder	2073265	2073269
2	Cylinder Rod	2073231	2073235

**H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4087 mm (160.9 in.)	4387 mm (172.7 in.)	4640 mm (182.7 in.)	4940 mm (194.5 in.)	5240 mm (206.3 in.)
		Mast Group Number	B752 4087	B752 4387	B752 4640	B752 4940
	Cylinder Group Number	8527801	8527803	8527805	8527807	8527809
	Cylinder Assy	2073553	2073557	2073566	2073570	2073575
1	Tube Wldmt- Cylinder	2073626	2073630	2073632	2073634	2073636
2	Cylinder Rod	2073681	2073683	2073685	2073687	2073689

## FREE-LIFT CYLINDER THREE STAGE FULL FREE-LIFT (→ S/N P005B02610H)

**KEY:**

**A:** H4.5FTS5, H4.5FT6-H5.0-5.5FT

**B:** H4.0FT5, H4.0FT6

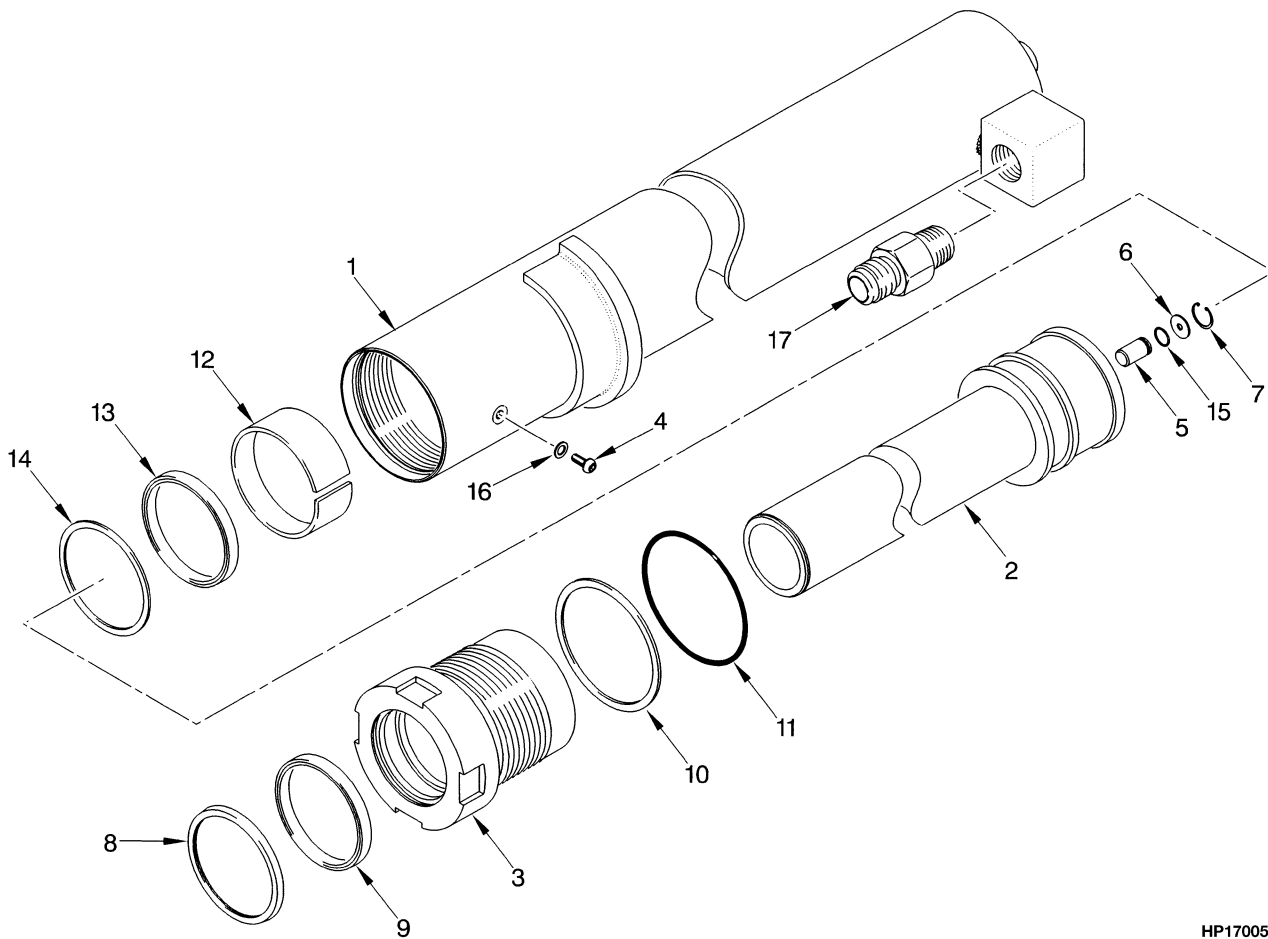
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a . . . . .	Cylinder Assy .....	1	1
1	a . . . . .	Tube Wldmt-Cylinder .....	1	1
2	a . . . . .	Cylinder Rod .....	1	1
3	2036282	Gland .....	..	1
3	1541640	Gland .....	1	1
4	1361302	Screw .....	1	1
5	257913	Check Valve .....	1	1
5	297538	Check Valve (Optional) .....	1	1
6	297531	Washer .....	1	1
7	187388	Snap Ring .....	1	1
8	1383070	Rod Wiper .....	1	1
9	637161	Rod Seal .....	1	1
9	2033395	Seal (Alternate Part) .....	1	1
10	164632	Back-Up Ring .....	..	1
10	615145	Back-Up Ring .....	1	1
11	15885	O-Ring .....	1	..
11	46629	O-Ring .....	..	1
12	636950	Wear Ring .....	..	1
12	1380982	Wear Ring .....	1	..
13	637162	Rod Seal .....	..	1
13	364059	Rod Seal .....	1	..
14	638293	Back-Up Ring .....	..	1
14	1381074	Back-Up Ring .....	1	..
15	190580	O-Ring .....	1	..
15	39348	O-Ring .....	..	1
16	190887	Sealing Ring .....	1	1
17	1550195	Hyd Velocity Fuse (Free-Lift Cylinder) .....	..	1
17	1550196	Hyd Velocity Fuse (Free-Lift Cylinder) .....	1	..
17	16487	O-Ring .....	1	1
17	280154	O-Ring .....	1	1
	2036279	Kit-Seal .....	..	1
	2065889	Kit-Seal .....	1	..

**FOOTNOTES:**

**a** Refer to Table



## FREE-LIFT CYLINDER (FIGURE 12-9) THREE STAGE FULL FREE-LIFT (S/N P005B02611H →)



HP170059



**FREE-LIFT CYLINDER**  
**THREE STAGE FULL FREE-LIFT (S/N P005B02611H →)**

**H4.0FT5-H4.0FT6**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4365 mm (171.9 in.)	4665 mm (183.7 in.)	4900 mm (192.9 in.)	5200 mm (204.7 in.)
		Mast Group Number	B751 4365	B751 4665	B751 4900
	Cylinder Group Number	8544051	8544053	8544055	8544057
	Cylinder Assy	2104542	2104544	2104546	2104548
1	Tube Wldmt- Cylinder	2073257	2073259	2073261	2073263
2	Cylinder Rod	2037833	2037835	2037836	2037837

**H4.0FT5-H4.0FT6**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		5500 mm (216.5 in.)	5950 mm (234.3 in.)
		Mast Group Number	B751 5500
	Cylinder Group Number	8544059	8544063
	Cylinder Assy	2104550	2104554
1	Tube Wldmt- Cylinder	2073265	2073269
2	Cylinder Rod	2037838	2037840

**H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4087 mm (160.9 in.)	4387 mm (172.7 in.)	4640 mm (182.7 in.)	4940 mm (194.5 in.)	5240 mm (206.3 in.)
		Mast Group Number	B752 4087	B752 4387	B752 4640	B752 4940
	Cylinder Group Number	8518451	8518453	8518455	8518457	8518459
	Cylinder Assy	2104508	2104510	2104512	2104514	2104516
1	Tube Wldmt- Cylinder	2073626	2073630	2073632	2073634	2073636
2	Cylinder Rod	2062074	2062076	2062077	2062079	2062081

## FREE-LIFT CYLINDER THREE STAGE FULL FREE-LIFT (S/N P005B02611H →)

**KEY:**

**A:** H4.0FT5, H4.0FT6

**B:** H4.5FTS5, H4.5FT6-H5.0-5.5FT

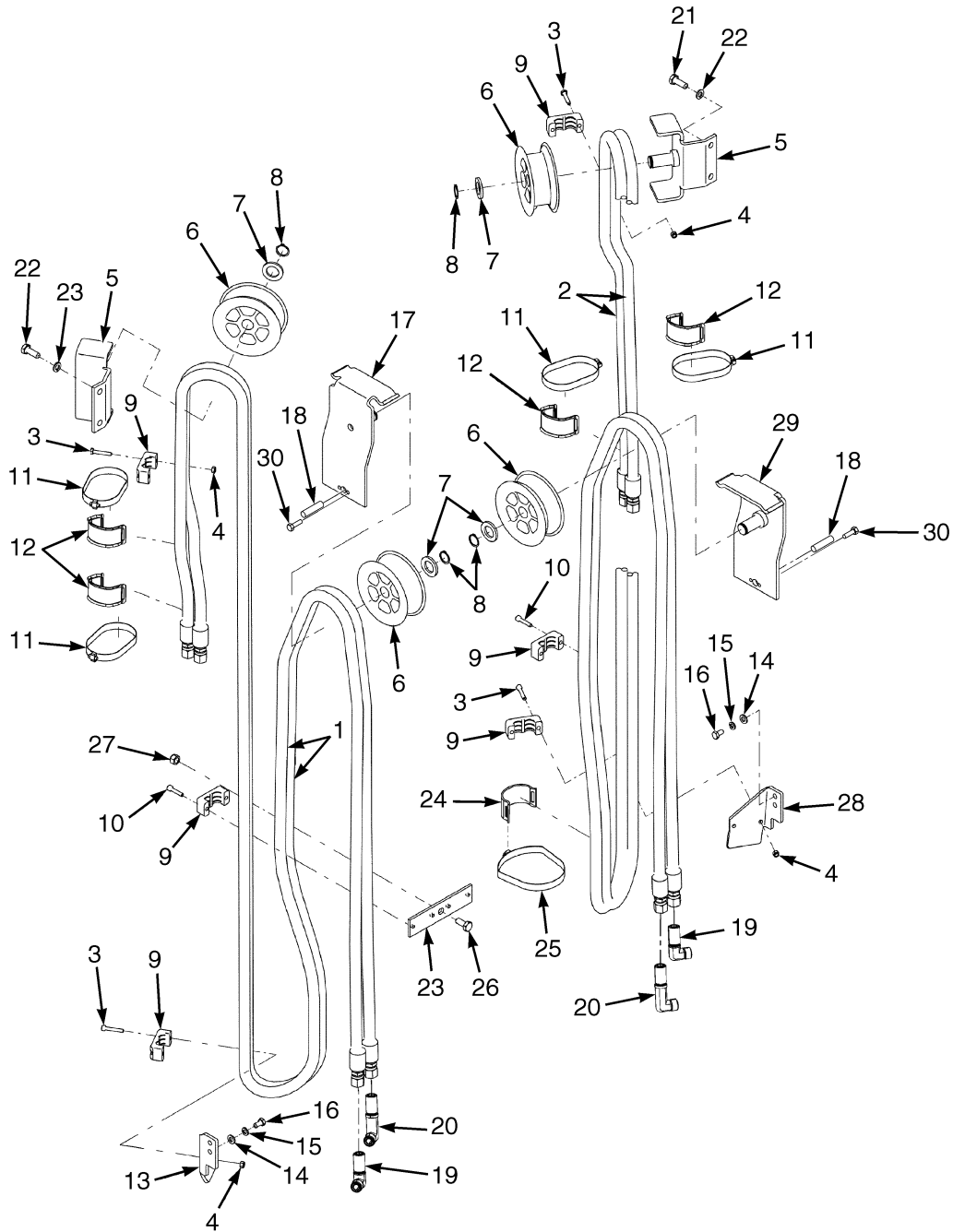
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a . . . . .	Cylinder Assy .....	1	1
1	a . . . . .	Tube Wldmt-Cylinder .....	1	1
2	a . . . . .	Cylinder Rod .....	1	1
3	2036282	Gland .....	1	..
3	1541640	Gland .....	..	1
4	1361302	Screw .....	1	1
5	297538	Check Valve .....	1	1
6	297531	Washer .....	1	1
7	187388	Snap Ring .....	1	1
8	1383070	Rod Wiper .....	1	1
9	637161	Rod Seal .....	1	1
9	2033395	Seal (Alternate Part) .....	1	1
10	164632	Back-Up Ring .....	1	..
10	615145	Back-Up Ring .....	..	1
11	15885	O-Ring .....	..	1
11	46629	O-Ring .....	1	..
12	636950	Wear Ring .....	1	..
12	1380982	Wear Ring .....	..	1
13	637162	Rod Seal .....	1	..
13	364059	Rod Seal .....	..	1
14	638293	Back-Up Ring .....	1	..
14	1381074	Back-Up Ring .....	..	1
15	190580	O-Ring .....	..	1
15	39348	O-Ring .....	1	..
16	190887	Sealing Ring .....	1	1
17	1550195	Hyd Velocity Fuse (Free-Lift Cylinder) .....	1	..
17	1550196	Hyd Velocity Fuse (Free-Lift Cylinder) .....	..	1
17	16487	O-Ring .....	1	1
17	280154	O-Ring .....	1	1
	2036279	Kit-Seal .....	1	..
	2065889	Kit-Seal .....	..	1

**FOOTNOTES:**

**a** Refer to Table



## HEADER HOSES (FIGURE 12-10) THREE STAGE FULL FREE-LIFT



BP170262

**HEADER HOSES  
THREE STAGE FULL FREE-LIFT  
H4.0FT5-H4.0FT6**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4365 mm (171.9 in.)	4900 mm (192.9 in.)	5200 mm (204.7 in.)	5500 mm (216.5 in.)	5950 mm (234.3 in.)
		<b>B751 4365</b>	<b>B751 4900</b>	<b>B751 5200</b>	<b>B751 5500</b>	<b>B751 5950</b>
	Mast Assy	2071871	2071874	2071876	2071878	2071881
1	Hose Assy	2083432	2083435	2083437	2083439	2083442
2	Hose Assy	2083432	2083435	2083437	2083439	2083442

**H4.5FTS5, H4.5FT6, H5.0-5.5FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		4087 mm (160.9 in.)	4940 mm (194.5 in.)	5240 mm (206.3 in.)
		<b>B752 4087</b>	<b>B752 4940</b>	<b>B752 5240</b>
	Mast Assy	2071898	2071903	2071905
1	Hose Assy	2083459	2083464	2083466
2	Hose Assy	2083459	2083464	2083466

**KEY:**

**A: Three Function**

**B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	<b>a . . . . .</b>	Mast Assy .....	1	1
1	<b>a . . . . .</b>	Hose Assy .....	2	2
2	<b>a . . . . .</b>	Hose Assy .....	..	2
3	1581577	Capscrew .....	4	8
4	1581565	Nut .....	4	8
5	1387523	Bracket Wldmt .....	1	2
6	1495279	Hose Sheave .....	2	4
6	332057	Bushing .....	2	4
7	1581560	Washer .....	2	4
8	58902	Snap Ring .....	2	4
9	2035791	Hose Clamp .....	3	6
10	1581741	Capscrew .....	2	4
11	1360507	Clamp .....	2	4
12	1465489	Hose Clamp .....	2	4
13	1387327	Bracket .....	1	1
14	1581556	Washer .....	2	4
15	1581562	Lockwasher .....	2	4
16	1581579	Capscrew .....	2	4
17	1541242	Bracket Wldmt (RH) .....	1	1
18	302472	Roll Pin .....	2	2

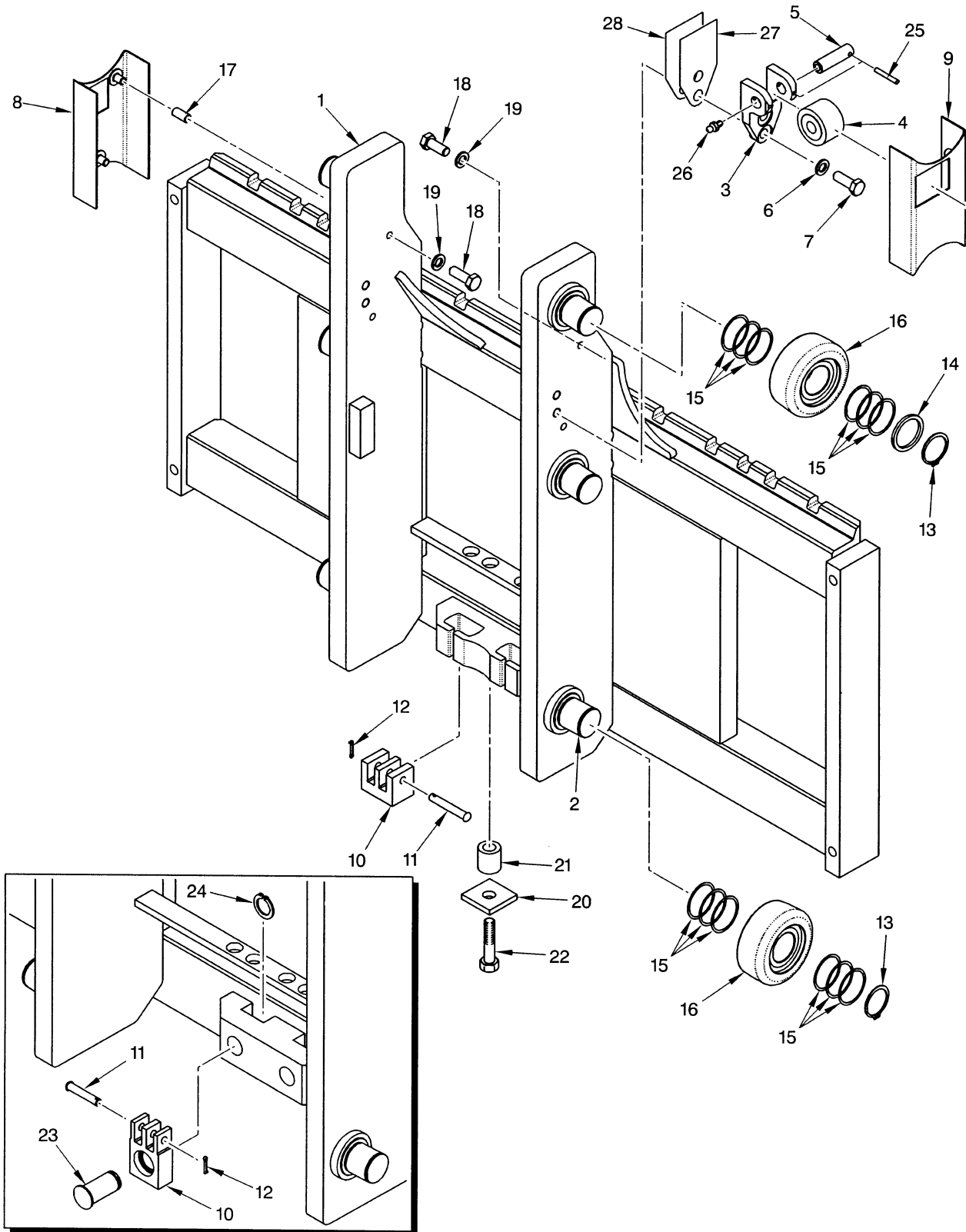
**HEADER HOSES  
THREE STAGE FULL FREE-LIFT****KEY:****A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
19	1528580	Fitting .....	1	2
20	1550425	Fitting .....	1	2
21	1581587	Capscrew .....	2	4
22	1581563	Lockwasher .....	2	4
23	1389828	Bracket .....	1	1
24	1502809	Hose Clamp .....	2	2
25	1399243	Clamp .....	1	1
26	1581586	Capscrew .....	1	1
27	1581567	Nut .....	1	1
28	1389854	Bracket .....	..	1
29	1541243	Bracket Wldmt (LH) .....	..	1
30	1581590	Capscrew .....	2	2

**FOOTNOTES:****a** Refer to Table



## CARRIAGE (FIGURE 12-11) THREE STAGE FULL FREE-LIFT



HP170754



**CARRIAGE  
THREE STAGE FULL FREE-LIFT****KEY:****A: H4.0FT5, H4.0FT6****B: H4.5FTS5, H4.5FT6, H5.0-5.5FT****C: H4.5FT (Attachment Carriage)**

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
	<b>b</b> 2035792	Carriage (1219 mm) .....	1	..	..
	<b>c</b> 2109388	Carriage (1219 mm) .....	1	..	..
	<b>b</b> 2035794	Carriage (1524 mm) .....	1	..	..
	<b>c</b> 2109423	Carriage (1524 mm) .....	1	..	..
	2035795	Carriage (1219 mm) .....	..	1	..
	2035797	Carriage (1524 mm) .....	..	1	..
	2037707	Carriage (1372 mm) .....	..	..	1
1	<b>b</b> 1387457	Carriage Wldmt (1219 mm) .....	1	..	..
1	<b>c</b> 1700060	Carriage Wldmt (1219 mm) .....	1	..	..
1	<b>b</b> 1387459	Carriage Wldmt (1524 mm) .....	1	..	..
1	<b>c</b> 1700217	Carriage Wldmt (1524 mm) .....	1	..	..
1	1387496	Carriage Wldmt (1219 mm) .....	..	1	..
1	1387498	Carriage Wldmt (1524 mm) .....	..	1	..
1	1465228	Carriage Wldmt (1372 mm) .....	..	..	1
2	1500744	Stubshaft .....	6	6	6
3	1465177	Bracket .....	..	..	2
4	1387993	Side Roller .....	..	..	2
4	1670064	Thrust Bearing (Side Thrust Roller) (Alternate Part) .....	..	..	2
5	1465028	Pin .....	..	..	2
5	1670065	Pin (Alternate Part) .....	..	..	2
6	292683	Lockwasher .....	..	..	4
7	4048814				
	292528	Capscrew .....	..	..	4
8	319323	Bracket Wldmt (LH) .....	1	1	1
9	319322	Bracket Wldmt (RH) .....	1	1	1
10	1387548	Chain Anchor .....	2	..	..
10	1480392	Chain Anchor .....	..	2	2
11	1387549	Pin (Anchor) .....	2	..	..
11	339932	Pin (Anchor) .....	..	2	2
12	15222	Cotter Pin .....	2	2	2
13	1465072	Snap Ring .....	6	6	7
14	1399224	Spacer .....	2	2	2
15	126765	Shim .....	AR	AR	24
16	<b>a</b> 1511882	Load Roller ("A") (103.68/103.42) ("A") .....	6	6	..
16	<b>a</b> 1511883	Load Roller ("B") (104.44/104.18) ("B") (0,26 mm) .....	6	6	6
16	<b>a</b> 1511884	Load Roller ("C") (105.20/104.94) ("C") (1,52 mm) .....	6	6	..
17	317292	Spacer .....	4	4	4
18	18518	Capscrew .....	4	4	4
19	15155	Lockwasher .....	4	4	4
20	1400126	Plate .....	1	..	..
21	1400125	Spacer .....	1	..	..
22	292508	Capscrew .....	1	..	..
23	320327	Pin .....	..	2	2
24	131358	Snap Ring .....	..	2	2

## CARRIAGE THREE STAGE FULL FREE-LIFT

**KEY:****A:** H4.0FT5, H4.0FT6**B:** H4.5FTS5, H4.5FT6, H5.0-5.5FT**C:** H4.5FT (Attachment Carriage)

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
25	66333	Roll Pin .....	..	..	2
26	16001	Grease Fitting .....	..	..	2
27	192425	Shim (1.575 mm) .....	..	..	AR
28	192424	Shim (0.762 mm) .....	..	..	AR

**FOOTNOTES:****a** Letter Located on Inside Surface of Load Roller**c** S/N P005B02453H →**b** → S/N P005B02452H





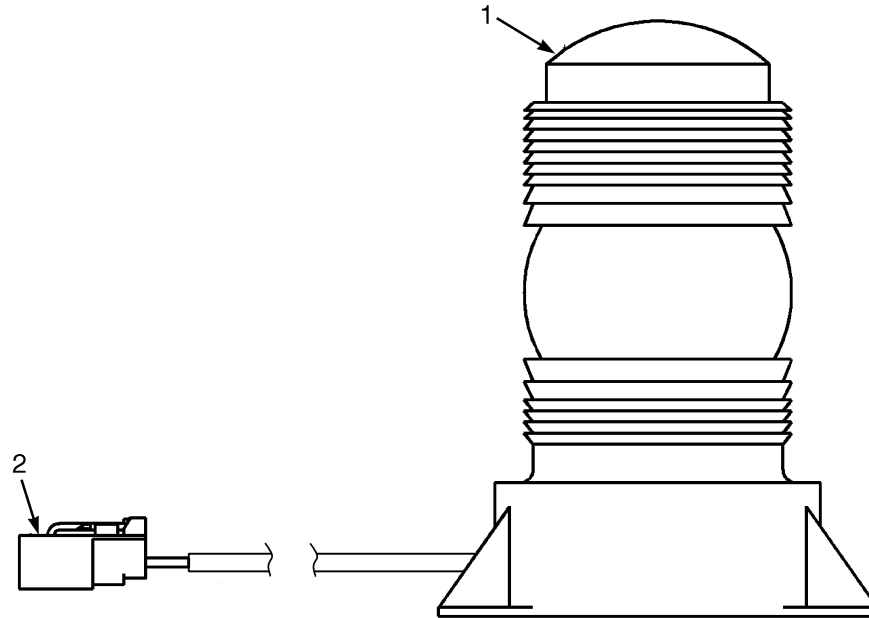
**SECTION 13  
OPTIONS**

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## SECTION 13 OPTIONS

DESCRIPTION	PAGE
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**STROBE LIGHT (FIGURE 13-1)  
LED**



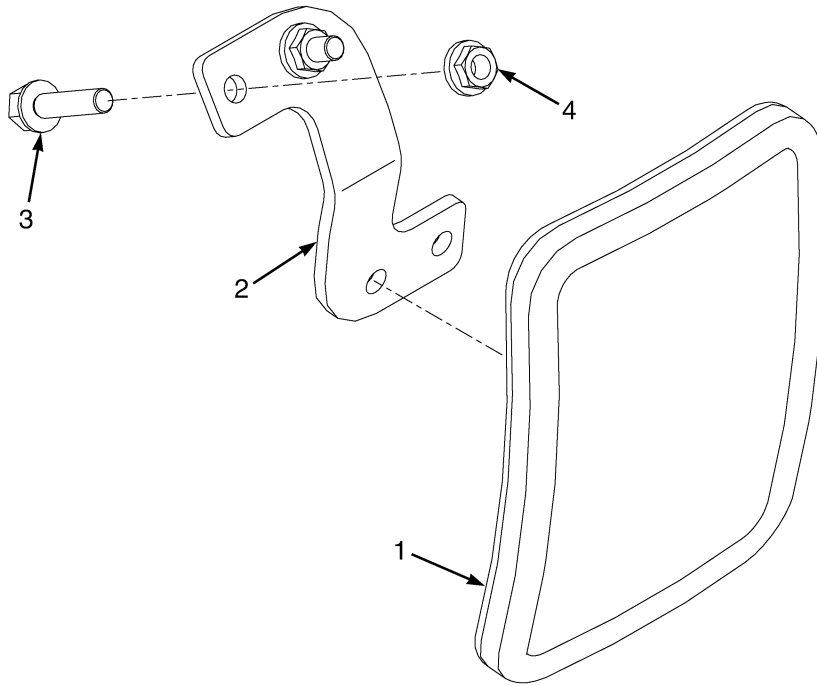
BP000363

ITEM	PART NO.	DESCRIPTION	QTY
	1654013	Strobe Light Assembly .....	1
1	1652290	Strobe Light (Amber LED) .....	1
2	1463138	Terminal Pin .....	1
2	1561559	Connector (2 Pin) .....	1
2	1561755	Connector (Secondary Lock) .....	1
a	1302024	Guard (Strobe Light) .....	1
a	1565076	Bracket Wldmt .....	1

**FOOTNOTES:**

a Not Illustrated

## MIRROR (FIGURE 13-2)

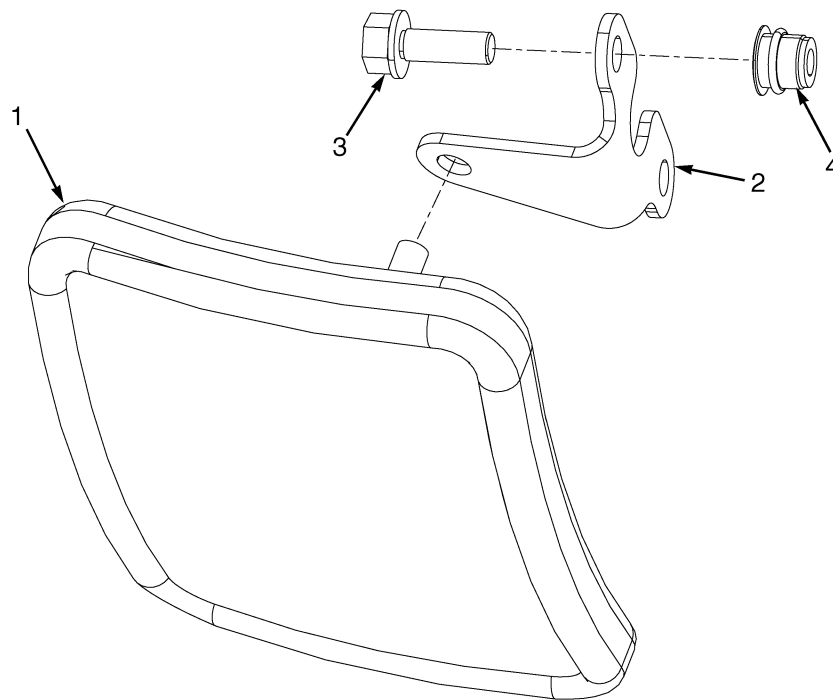


BP000540

ITEM	PART NO.	DESCRIPTION	QTY
1	4009488	Mirror .....	2
2	1656215	Bracket (RH) .....	1
2	1656216	Bracket (LH) .....	1
3	1586627	Capscrew .....	4
4	1586430	Nut .....	4



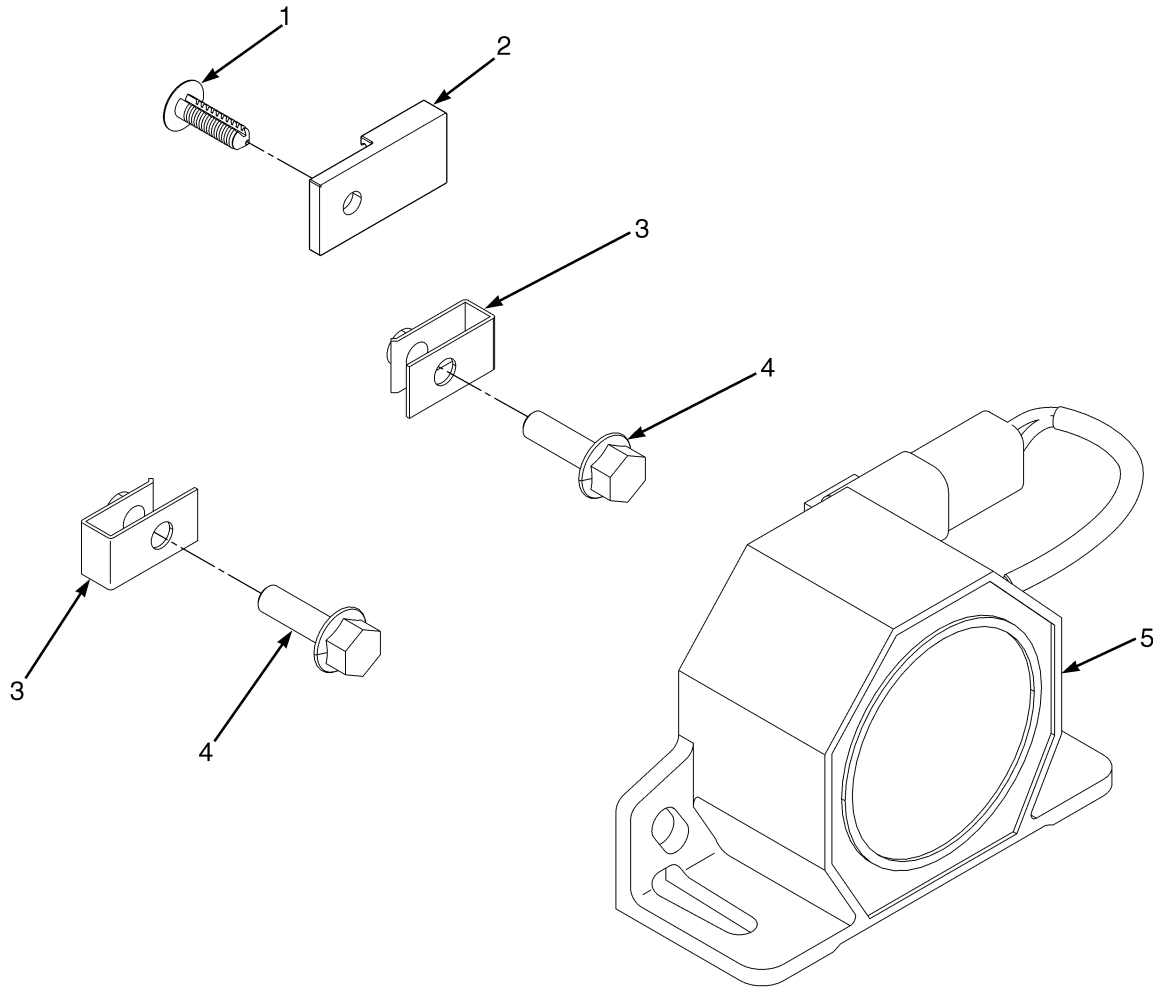
**DUAL MIRRORS (FIGURE 13-3)  
WITH CAB**



HP000896

ITEM	PART NO.	DESCRIPTION	QTY
1	4009488	Mirror .....	2
2	1579412	Bracket .....	2
3	1583611	Capscrew .....	4
4	1531557	Insert .....	4

## BACK-UP ALARM (FIGURE 13-4)



BP000308

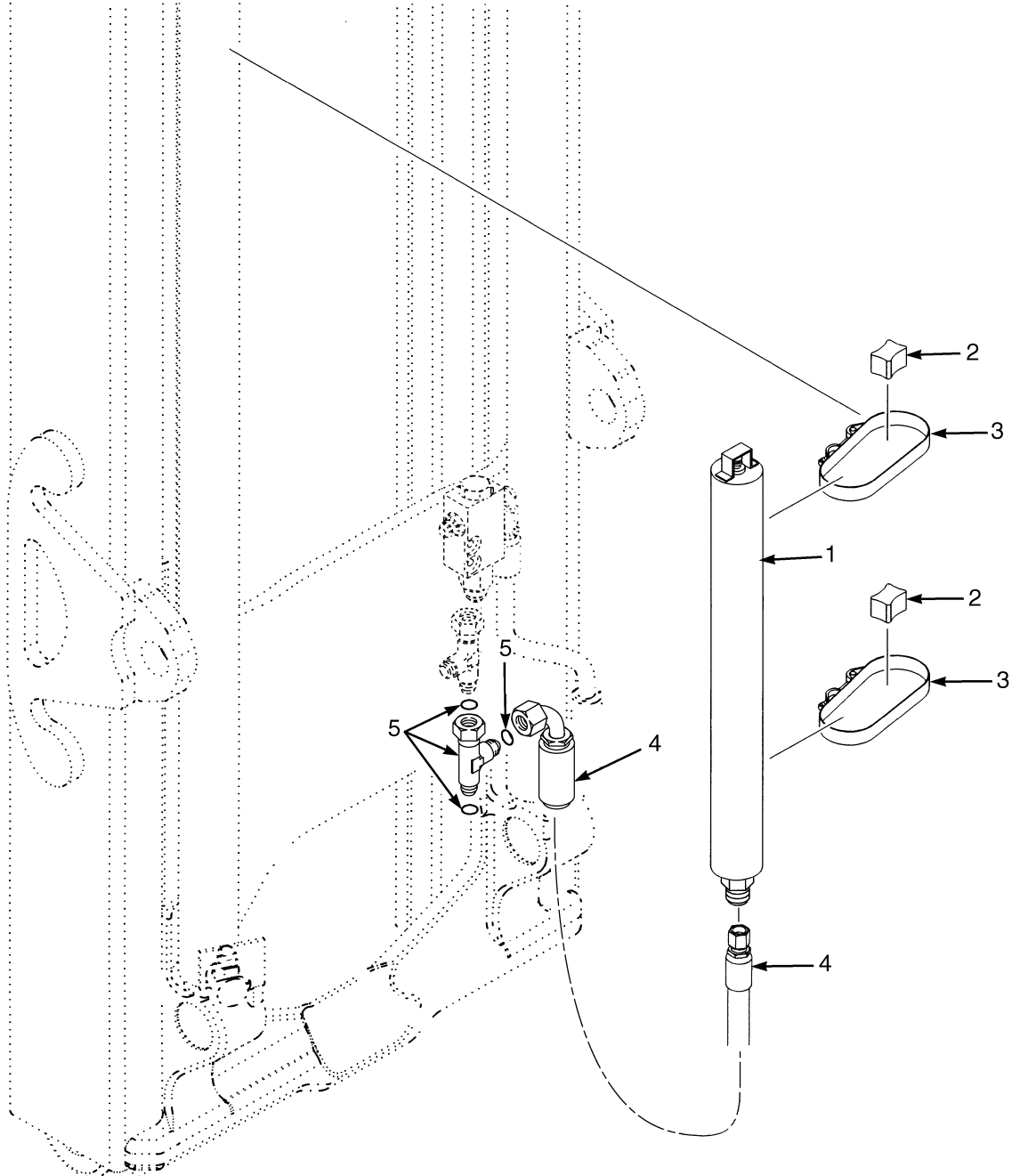
ITEM	PART NO.	DESCRIPTION	QTY
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<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
1	1582464	Fastener .....	1
2	1500912	Clip .....	1
3	1350215	Nut .....	2
4	1527877	Capscrew .....	2
5	2064929	Back-Up Alarm (82-102 dbA) .....	1

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**ACCUMULATOR (FIGURE 13-5)**

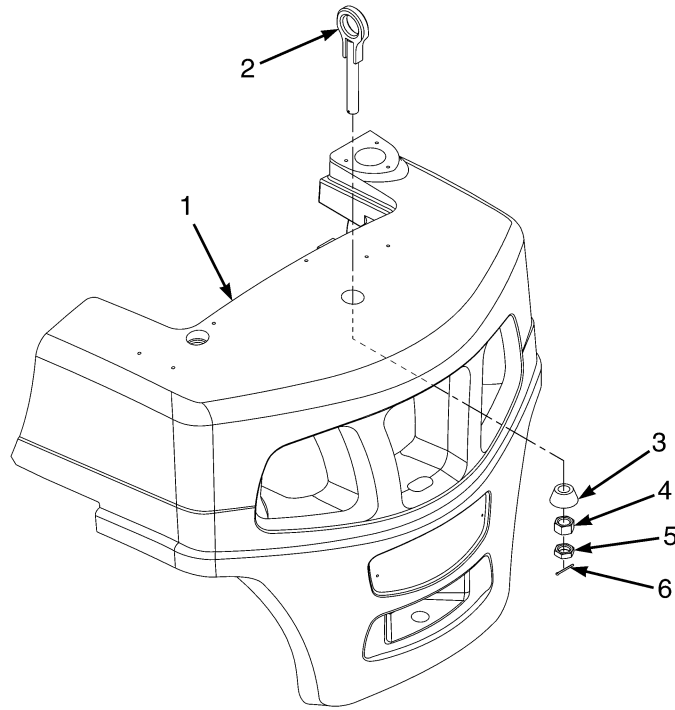


HP000908

**ACCUMULATOR**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
1	1629185	Accumulator .....	1
1	1695807	Accumulator (Alternate Part) .....	1
2	1609864	Spacer .....	2
3	4031653	Strap Clamp .....	2
4	2091868	Hose Assy .....	1
5	1487096	Fitting .....	1
5	252729	O-Ring .....	3

## LIFTING EYES (FIGURE 13-6)



BP000669

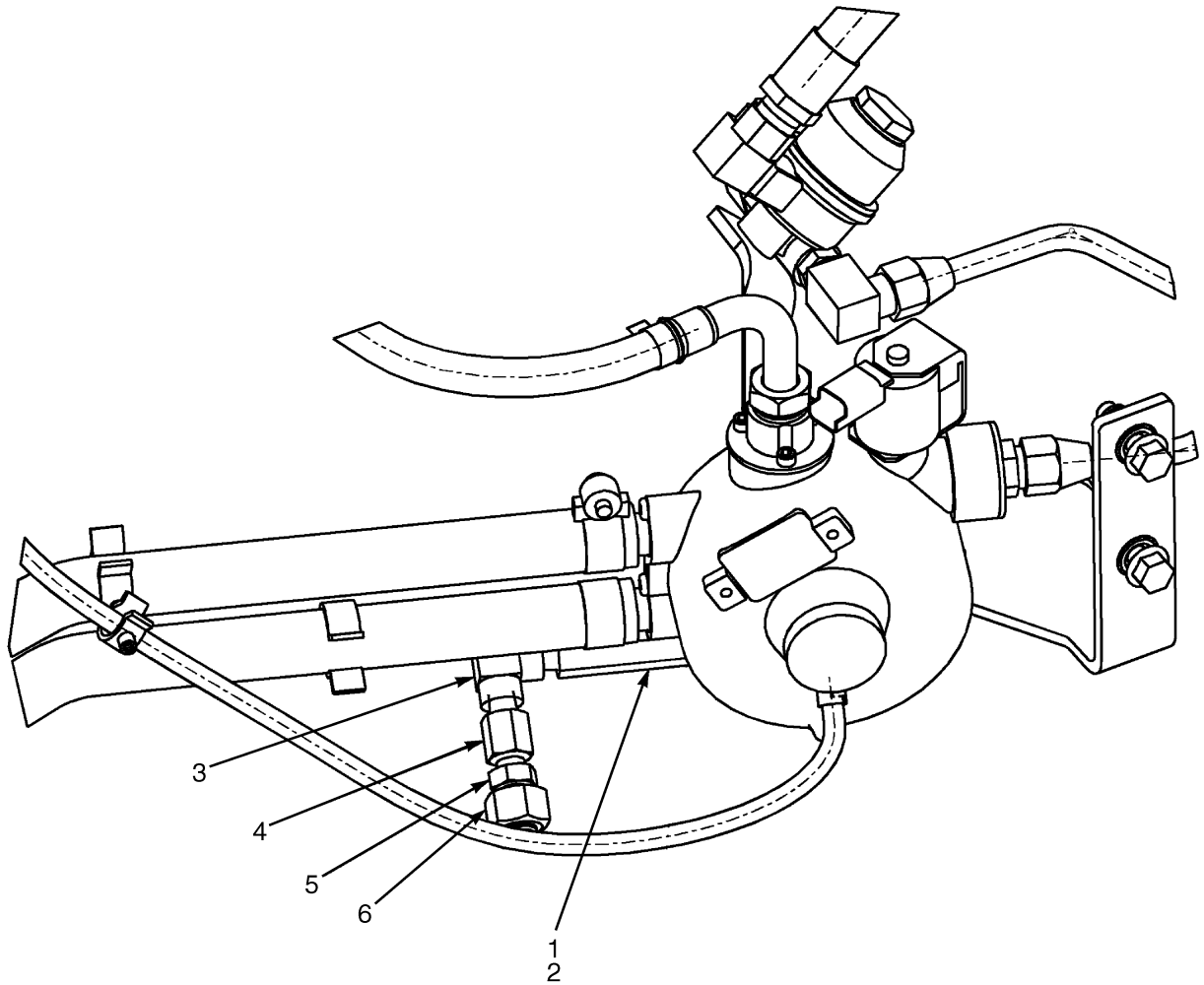
ITEM	PART NO.	DESCRIPTION	QTY
1	.....	Counterweight .....	1
2	1651797	Eyebolt .....	1
3	1474318	Anchor .....	1
4	292661	Nut .....	1
5	<b>a</b> 1593341	Nut (Jam) .....	1
6	15246	Cotter Pin .....	1
	1634340	Kit (Lifting Eye) .....	1

**FOOTNOTES:**

**a** Not Illustrated



## GM LPG REGULATOR DRAIN KIT (FIGURE 13-7)



BP000396

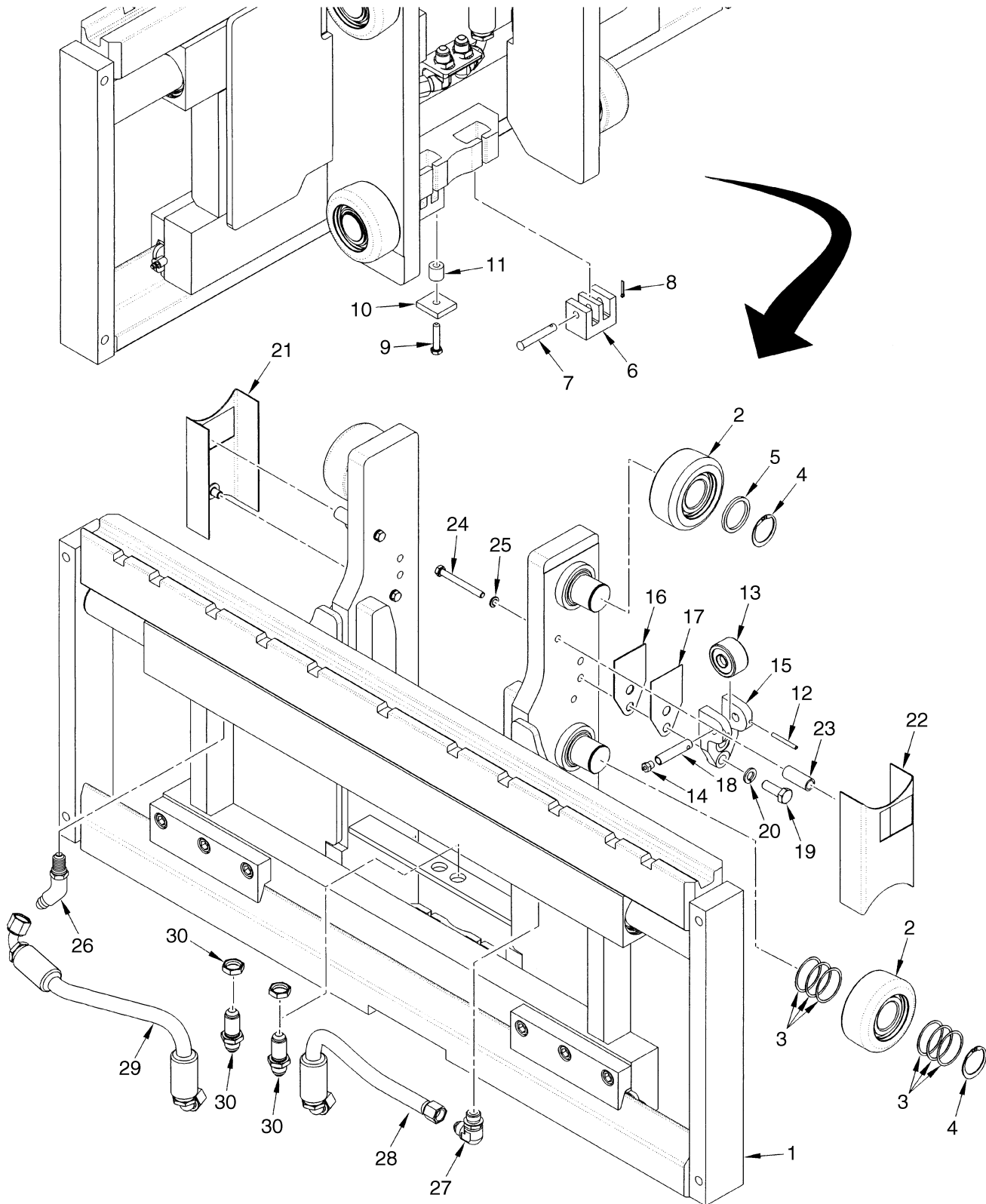


**GM LPG REGULATOR DRAIN KIT**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
	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	<b>a</b> 273338	Thread Sealant .....	1

**FOOTNOTES:****a** Not Shown

## INTEGRAL SIDE-SHIFT ASSEMBLY (FIGURE 13-8) H4.0FT5, H4.0FT6 (1219 MM, 1524 MM) — TWO AND THREE STAGE FULL FREE-LIFT



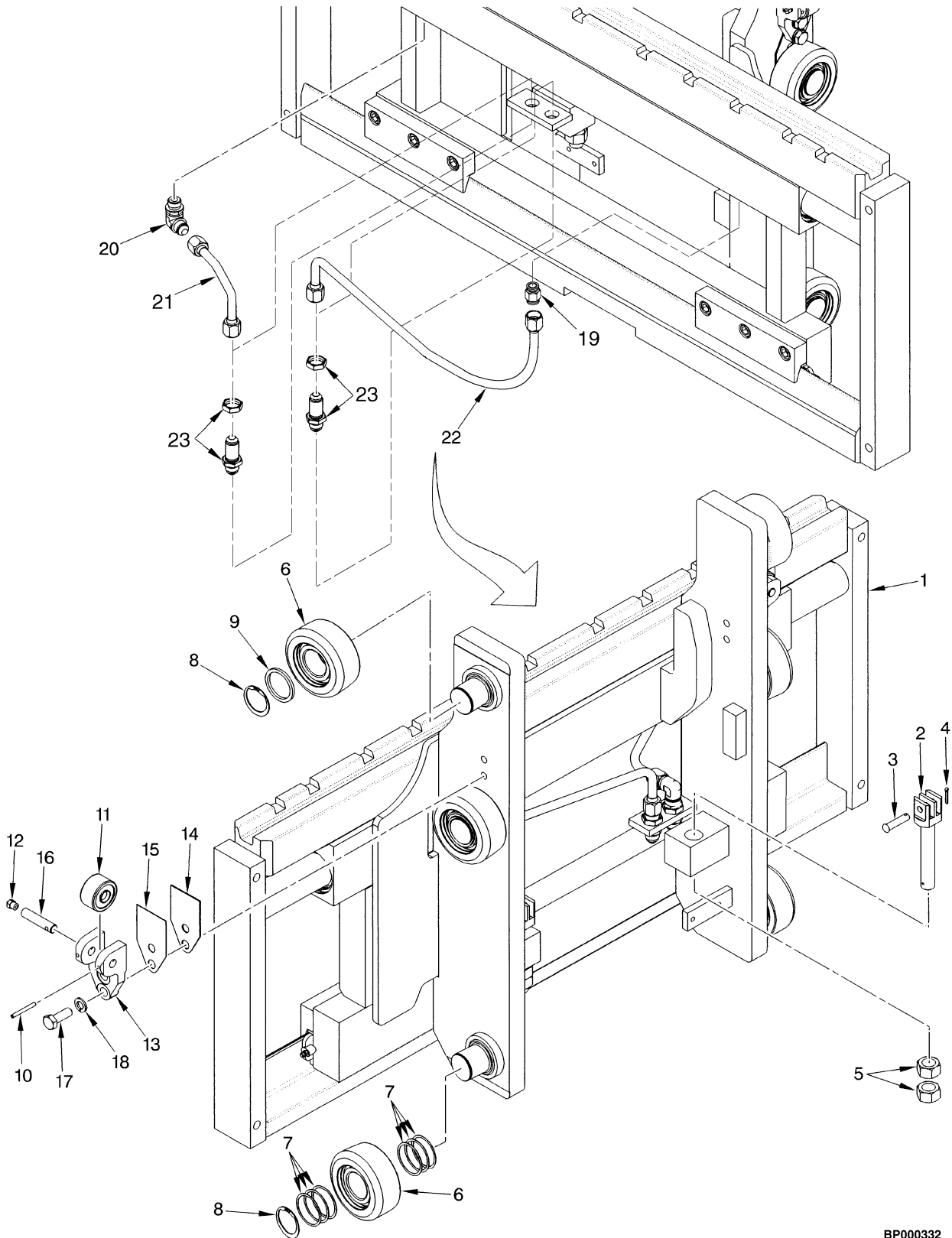
BP000334

**INTEGRAL SIDE-SHIFT ASSEMBLY**  
**H4.0FT5, H4.0FT6 (1219 MM, 1524 MM) – TWO AND THREE STAGE FULL FREE-LIFT**

ITEM	PART NO.	DESCRIPTION	QTY
	<b>b</b> 2038594	Side-Shift Carriage (1219 mm) (Group No. 8502090) .....	1
	<b>b</b> 2038596	Side-Shift Carriage (1524 mm) (Group No. 8502091) .....	1
	<b>a</b> 2037955	Side-Shift Carriage (1219 mm) (Group No. 8502070) .....	1
	<b>a</b> 2037956	Side-Shift Carriage (1524 mm) (Group No. 8502071) .....	1
1	.....	Carriage Frame (☞Figure 13-10, ☞Figure 13-11, ☞Figure 13-12).....	1
2	1511883	Load Roller ("B") (104.44/104.18) .....	6
3	126765	Shim .....	24
4	1465072	Snap Ring .....	6
5	1399224	Spacer .....	2
6	1387548	Chain Anchor .....	2
7	1387549	Pin .....	2
8	15222	Cotter Pin .....	2
9	18520	Capscrew .....	1
10	1400126	Plate .....	1
11	1400125	Spacer .....	1
12	66333	Roll Pin .....	2
13	1670064	Thrust Bearing (Side Thrust Roller) .....	2
14	16001	Grease Fitting .....	2
15	1465177	Bracket .....	2
16	192425	Shim (1.575 mm) .....	AR
17	192424	Shim (0.762 mm) .....	AR
18	1670065	Pin .....	2
19	<del>4048814</del> 292528	Capscrew .....	4
20	292683	Lockwasher .....	4
21	319322	Bracket Wldmt (RH) .....	1
22	319323	Bracket Wldmt (LH) .....	1
23	317292	Spacer .....	4
24	18518	Capscrew .....	4
25	15155	Lockwasher .....	4
26	1516202	Fitting .....	1
26	265731	O-Ring .....	1
26	16484	O-Ring .....	1
27	1473897	Fitting .....	1
27	16484	O-Ring .....	1
27	265731	O-Ring .....	1
28	2093349	Hose Assy .....	1
29	2093350	Hose Assy .....	1
30	16448	Fitting .....	2

**FOOTNOTES:****a** Three Stage Full Free-Lift**b** Two Stage Full Free-Lift

## INTEGRAL SIDE-SHIFT ASSEMBLY (FIGURE 13-9) H4.0FT5, H4.0FT6, (1219 MM, 1524 MM) — TWO STAGE LIMITED FREE-LIFT

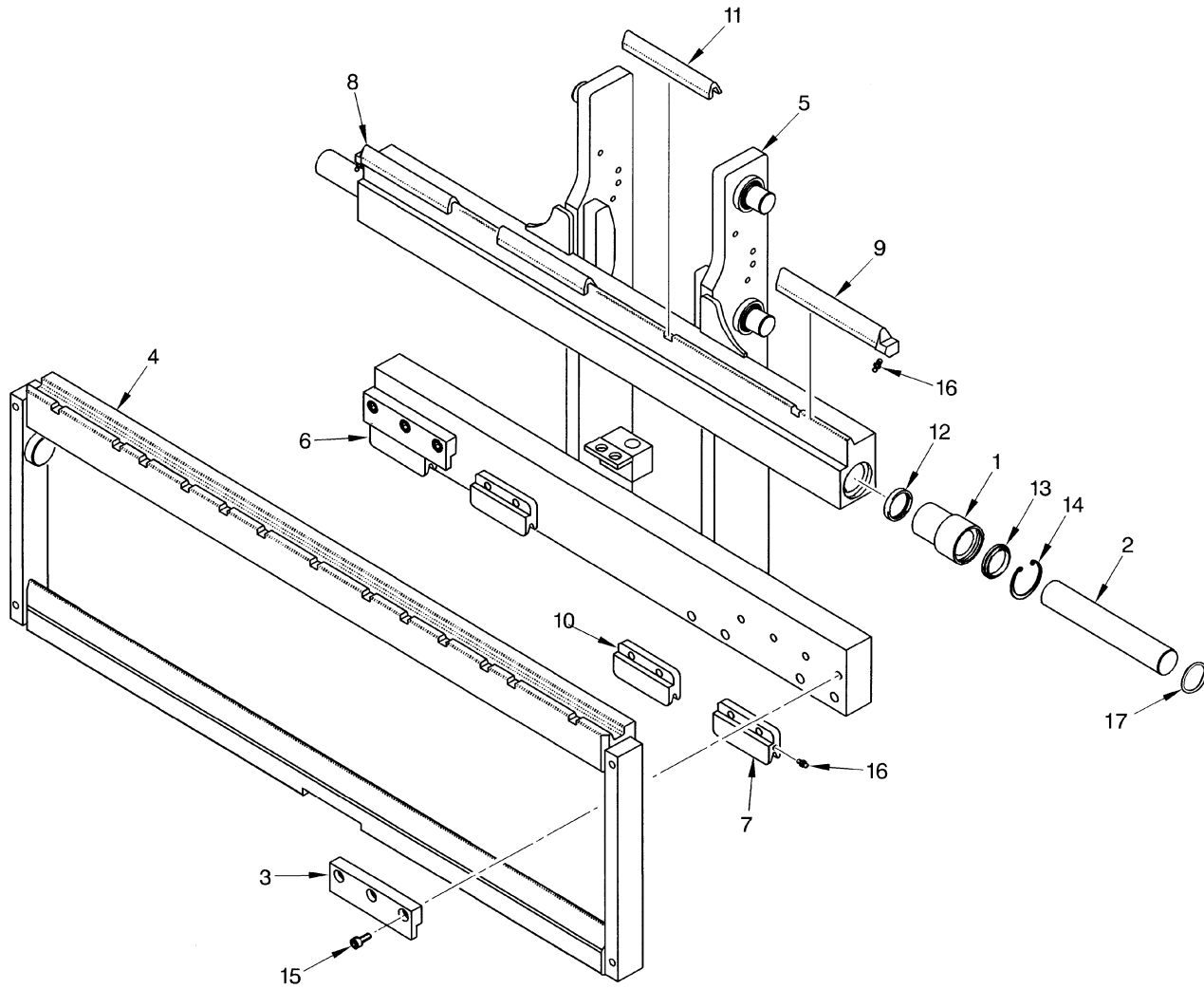


BP000332

**INTEGRAL SIDE-SHIFT ASSEMBLY**  
**H4.0FT5, H4.0FT6, (1219 MM, 1524 MM) – TWO STAGE LIMITED FREE-LIFT**

ITEM	PART NO.	DESCRIPTION	QTY
	2037951	Side-Shift Carriage Assembly (1219 mm) (Group No. 8502066) .....	1
	2037952	Side-Shift Carriage Assembly (1524 mm) (Group No. 8502067) .....	1
1	2037943	Side-Shift Carriage (1219 mm) (48 in.) (☞Figure 13-12).....	1
1	2037944	Side-Shift Carriage (1524 mm) (60 in.) (☞Figure 13-15).....	1
2	1387285	Chain Anchor .....	2
3	327591	Pin .....	2
4	15222	Cotter Pin .....	2
5	221717	Nut .....	4
6	1511883	Load Roller ("B") (104.44/104.18) .....	6
7	126765	Shim .....	24
8	1465072	Snap Ring .....	6
9	1399224	Spacer .....	2
10	66333	Roll Pin .....	2
11	1387993	Side Roller .....	2
12	16001	Grease Fitting .....	2
13	1465177	Bracket .....	2
14	192425	Shim (1.575 mm) .....	AR
15	192424	Shim (0.762 mm) .....	AR
16	1465028	Pin .....	2
17	<del>4048814</del> 292528	Capscrew .....	4
18	292683	Lockwasher .....	4
19	1473887	Fitting .....	1
19	265731	O-Ring .....	1
19	16484	O-Ring .....	1
20	1473897	Fitting .....	1
20	16484	O-Ring .....	1
20	265731	O-Ring .....	1
21	2093348	Hose Assy .....	1
22	2093347	Hose Assy .....	1
	16449	Fitting .....	2

## INTEGRAL SIDE-SHIFT CARRIAGE (FIGURE 13-10) H4.0FT5, H4.0FT6 (1219 MM, 1524 MM) — TWO STAGE LIMITED FREE-LIFT

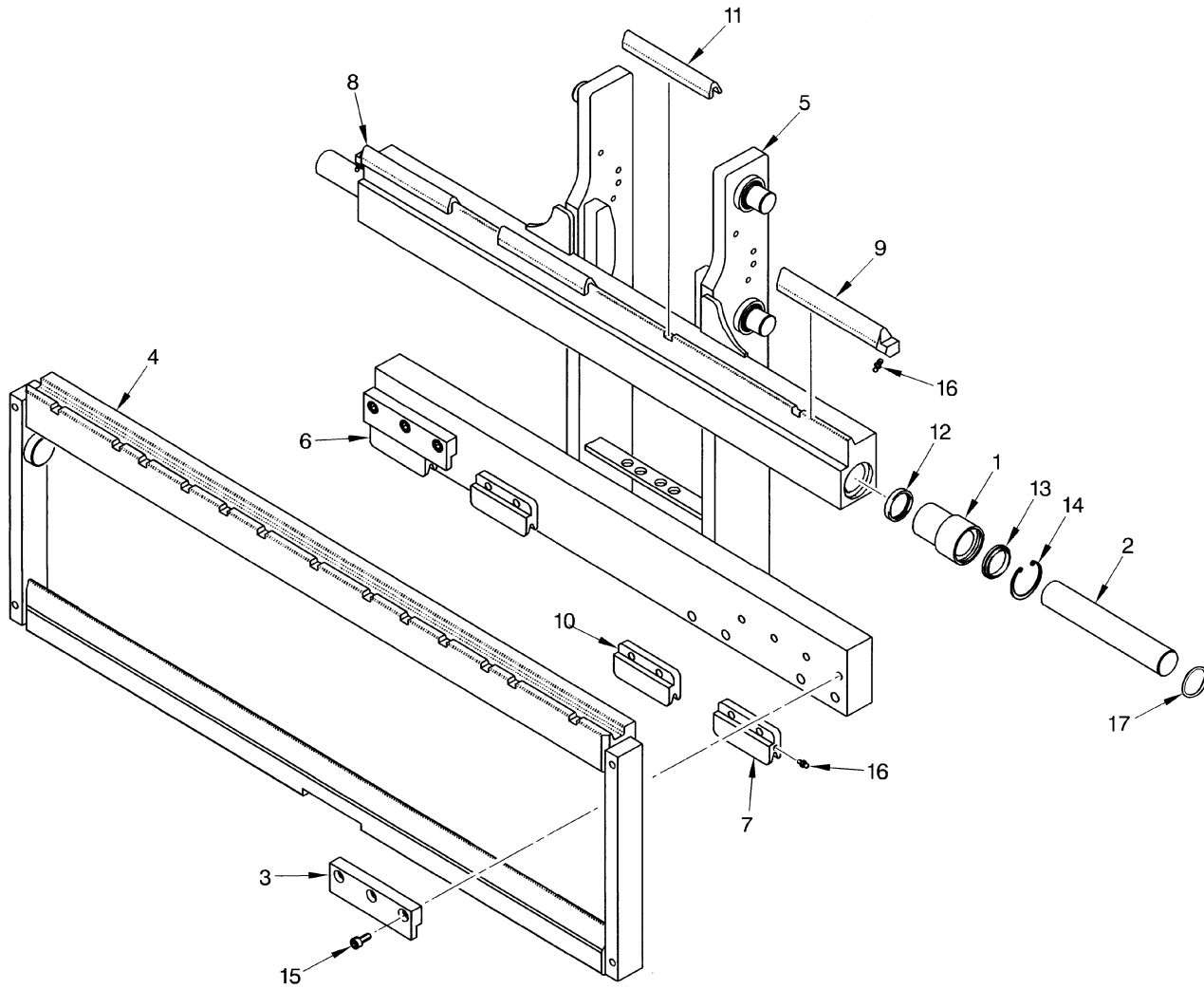


HP000036

**INTEGRAL SIDE-SHIFT CARRIAGE**  
**H4.0FT5, H4.0FT6 (1219 MM, 1524 MM) – TWO STAGE LIMITED FREE-LIFT**

ITEM	PART NO.	DESCRIPTION	QTY
	2037943	Side-Shift Carriage (1219 mm) (48 in.) .....	1
	2037944	Side-Shift Carriage (1524 mm) (60 in.) .....	1
1	1467151	Bushing .....	2
2	1467153	Rod .....	2
3	1467154	Hook .....	2
4	1532640	Apron (1219 mm) (48 in.) .....	1
4	1532643	Apron (1524 mm) (60 in.) .....	1
5	1467769	Side Shift Carriage Fixed Frame (1219 mm) (48 in.) .....	1
5	1467771	Side Shift Carriage Fixed Frame (1524 mm) (60 in.) .....	1
6	1467145	Wear Strip (Right Lower) .....	1
7	1467146	Wear Strip (Left Lower) .....	1
8	1467147	Wear Strip (Right Upper) .....	1
9	1467148	Wear Strip (Left Upper) .....	1
10	1467201	Wear Strip (Central Lower) (Lower Center) (60 in.) .....	2
11	1467200	Wear Strip (Central Upper) (Upper Center) (60 in.) .....	2
12	1622935	Seal .....	2
13	1467150	Rod Wiper .....	2
14	1467632	Snap Ring .....	2
15	1467633	Screw .....	6
16	16041	Grease Fitting .....	4
17	39365	O-Ring .....	2
	2083999	Kit-Seal (Class III) .....	1

## INTEGRAL SIDE-SHIFT CARRIAGE (FIGURE 13-11) H4.0FT5, H4.0FT6 (1524 MM) — TWO AND THREE STAGE FULL FREE-LIFT



HP000039

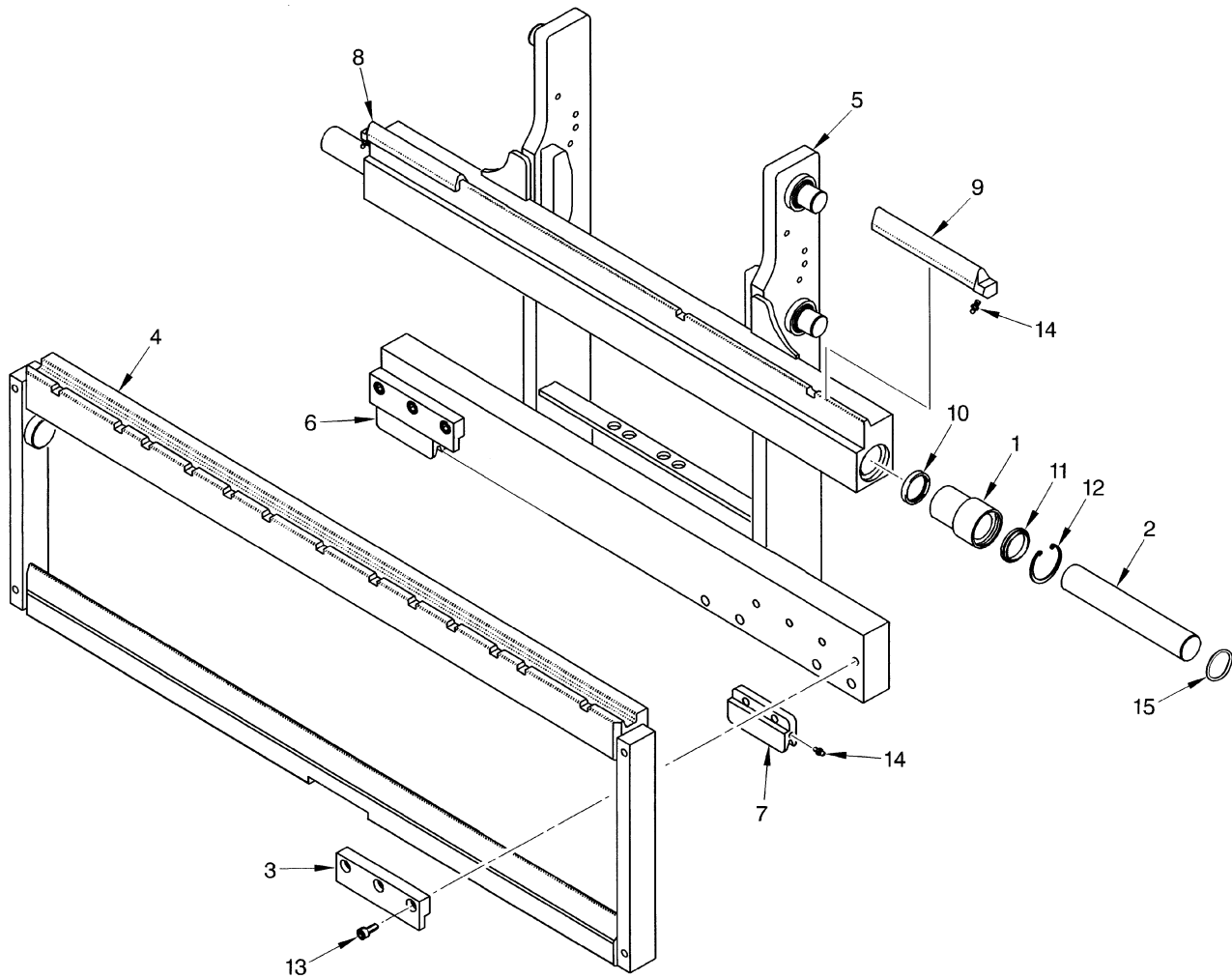


**INTEGRAL SIDE-SHIFT CARRIAGE**  
**H4.0FT5, H4.0FT6 (1524 MM) – TWO AND THREE STAGE FULL FREE-LIFT**

ITEM	PART NO.	DESCRIPTION	QTY
	<b>b</b> 2038599	Side-Shift Carriage (1524 mm) .....	1
	<b>a</b> 2037948	Side-Shift Carriage (1524 mm) .....	1
1	1467151	Bushing .....	2
2	1467153	Rod .....	2
3	1467154	Hook .....	2
4	1532643	Apron (1524 mm) .....	1
5	<b>b</b> 1483335	Frame .....	1
5	<b>a</b> 1467772	Frame .....	1
6	1467145	Wear Strip (Right Lower) .....	1
7	1467146	Wear Strip (Left Lower) .....	1
8	1467147	Wear Strip (Right Upper) .....	1
9	1467148	Wear Strip (Left Upper) .....	1
10	1467201	Wear Strip (Central Lower) (Lower Center) .....	2
11	1467200	Wear Strip (Central Upper) (Upper Center) .....	2
12	1622935	Seal .....	2
13	1467150	Rod Wiper .....	2
14	1467632	Snap Ring .....	2
15	1467633	Screw .....	6
16	16041	Grease Fitting .....	4
17	39365	O-Ring .....	2
	2083999	Kit-Seal (Class III) .....	1

**FOOTNOTES:****a** Three Stage Full Free-Lift**b** Two Stage Full Free-Lift

## INTEGRAL SIDE-SHIFT CARRIAGE (FIGURE 13-12) H4.0FT5, H4.0FT6 (1219 MM) — TWO AND THREE STAGE FULL FREE-LIFT



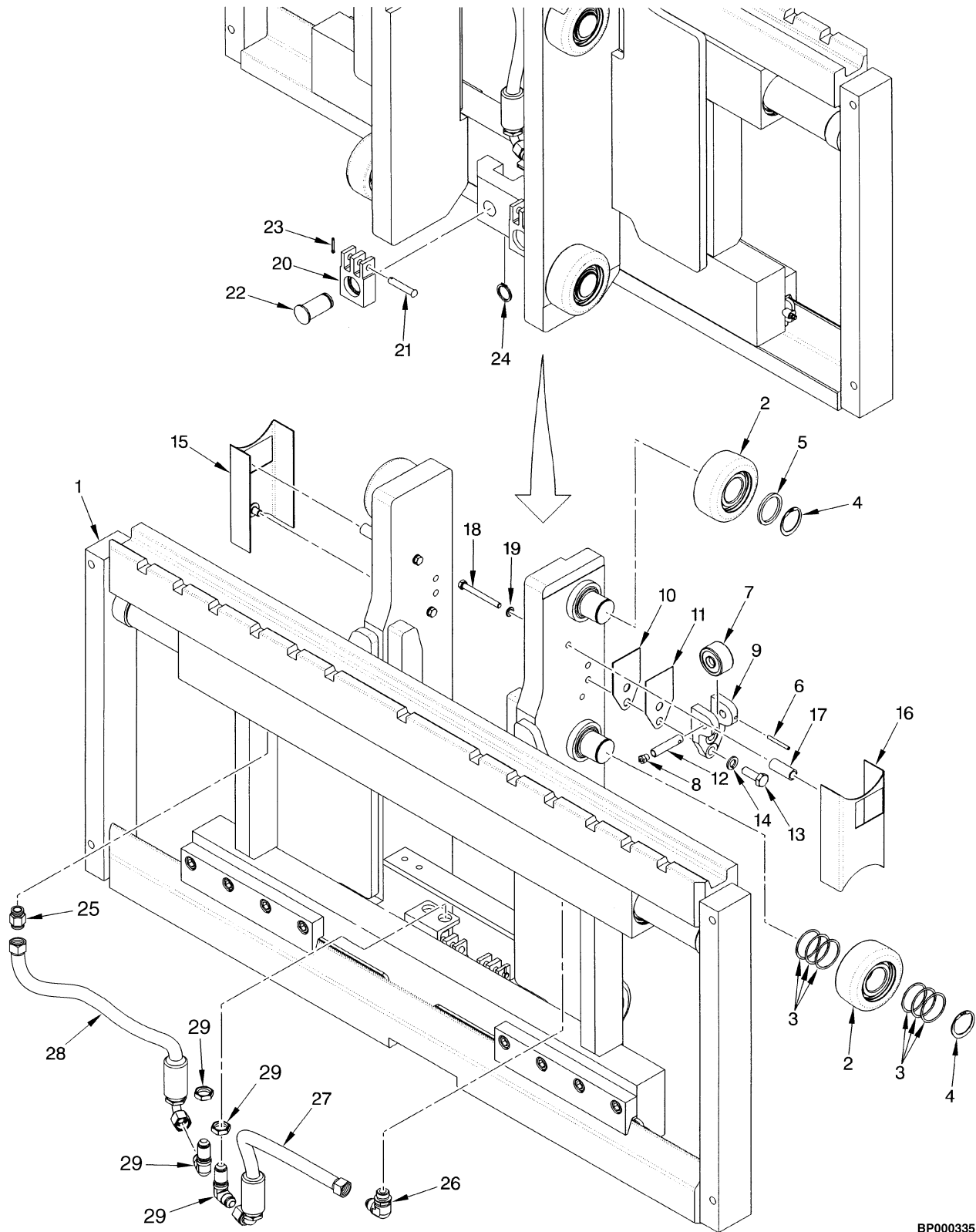
HP000038

**INTEGRAL SIDE-SHIFT CARRIAGE**  
**H4.0FT5, H4.0FT6 (1219 MM) – TWO AND THREE STAGE FULL FREE-LIFT**

ITEM	PART NO.	DESCRIPTION	QTY
	<b>b</b> 2038595	Side-Shift Carriage (1219 mm) .....	1
	<b>a</b> 2037947	Side-Shift Carriage (1219 mm) .....	1
1	1467151	Bushing .....	2
2	1467153	Rod .....	2
3	1467154	Hook .....	2
4	1532640	Apron (1219 mm) .....	1
5	<b>b</b> 1483336	Frame .....	1
5	<b>a</b> 1467770	Frame .....	1
6	1467145	Wear Strip (Right Lower) .....	1
7	1467146	Wear Strip (Left Lower) .....	1
8	1467147	Wear Strip (Right Upper) .....	1
9	1467148	Wear Strip (Left Upper) .....	1
10	1622935	Seal .....	2
11	1467150	Rod Wiper .....	2
12	1467632	Snap Ring .....	2
13	1467633	Screw .....	6
14	16041	Grease Fitting .....	4
15	39365	O-Ring .....	2
	2083999	Kit-Seal (Class III) .....	1

**FOOTNOTES:****a** Three Stage Full Free-Lift**b** Two Stage Full Free-Lift

## INTEGRAL SIDE-SHIFT ASSEMBLY (FIGURE 13-13) H4.5FTS5, H4.5FT6-H5.0-5.5FT (1372 MM AND 1524 MM) — TWO AND THREE STAGE FULL FREE-LIFT



BP000335

**INTEGRAL SIDE-SHIFT ASSEMBLY****H4.5FTS5, H4.5FT6-H5.0-5.5FT (1372 MM AND 1524 MM) – TWO AND THREE STAGE FULL FREE-LIFT**

ITEM	PART NO.	DESCRIPTION	QTY
	<b>b</b> 2038597	Side-Shift Carriage Assembly (1372 mm) (Group No. 8502092) .....	1
	<b>b</b> 2038598	Side-Shift Carriage Assembly (1524 mm) (Group No. 8502093) .....	1
	<b>a</b> 2037957	Side-Shift Carriage Assembly (1372 mm) (Group No. 8502072) .....	1
	<b>a</b> 2037958	Side-Shift Carriage Assembly (1524 mm) (Group No. 8502073) .....	1
1	.....	Carriage (☞ Figure 13-16).....	1
2	1511883	Load Roller ("B") (104.44/104.18) .....	6
3	126765	Shim .....	24
4	1465072	Snap Ring .....	6
5	1399224	Spacer .....	2
6	66333	Roll Pin .....	2
7	1670064	Thrust Bearing (Side Thrust Roller) .....	2
8	16001	Grease Fitting .....	2
9	1465177	Bracket .....	2
10	192425	Shim (1.575 mm) .....	AR
11	192424	Shim (0.762 mm) .....	AR
12	1670065	Pin .....	2
13	<del>4048814</del> 292528	Capscrew .....	4
14	292683	Lockwasher .....	4
15	319322	Bracket Wldmt (RH) .....	1
16	319323	Bracket Wldmt (LH) .....	1
17	317292	Spacer .....	4
18	18520	Capscrew .....	3
18	18518	Capscrew .....	1
19	15155	Lockwasher .....	4
20	1480392	Chain Anchor .....	2
21	339932	Pin .....	2
22	320327	Pin .....	2
23	15222	Cotter Pin .....	2
24	131358	Snap Ring .....	2
25	1473887	Fitting .....	1
25	265731	O-Ring .....	1
25	16484	O-Ring .....	1
26	1473897	Fitting .....	1
26	16484	O-Ring .....	1
26	265731	O-Ring .....	1
27	2093351	Hose Assy .....	1
28	2093352	Hose Assy .....	1
29	16458	Fitting .....	2

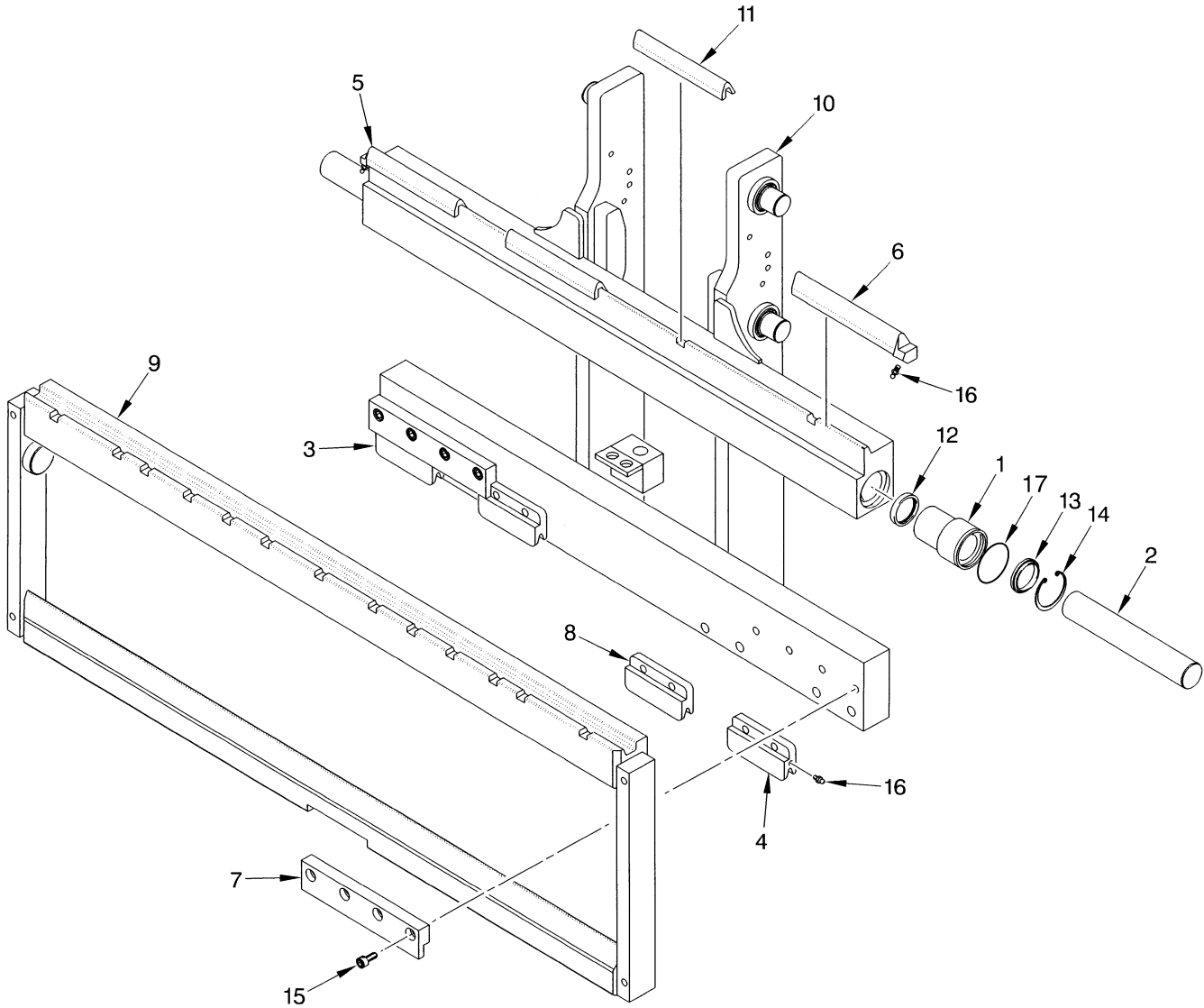
**FOOTNOTES:****a** Three Stage Full Free-Lift**b** Two Stage Full Free-Lift



**INTEGRAL SIDE-SHIFT ASSEMBLY**  
**H4.5FTS5 , H4.5FT6-H5.0-5.5FT (1372 MM AND 1524 MM) – TWO STAGE LIMITED FREE-LIFT**

ITEM	PART NO.	DESCRIPTION	QTY
	2037953	Side-Shift Carriage Assembly (1372 mm) (Group No. 8502068) .....	1
	2037954	Side-Shift Carriage Assembly (1524 mm) (Group No. 8502069) .....	1
1	2037945	Side-Shift Carriage (1372 mm) (☞ Figure 13-15).....	1
1	2037946	Side-Shift Carriage (1524 mm) (☞ Figure 13-15).....	1
2	1511883	Load Roller ("B") (104.44/104.18) .....	6
3	126765	Shim .....	24
4	1465072	Snap Ring .....	6
5	1399224	Spacer .....	2
6	66333	Roll Pin .....	2
7	1670064	Thrust Bearing (Side Thrust Roller) .....	2
8	16001	Grease Fitting .....	2
9	1465177	Bracket .....	2
10	192425	Shim (1.575 mm) .....	AR
11	192424	Shim (0.762 mm) .....	AR
12	1670065	Pin .....	2
13	4048814		
	292528	Capscrew .....	4
14	292683	Lockwasher .....	4
15	1387286	Chain Anchor .....	2
16	339932	Pin .....	2
17	15222	Cotter Pin .....	2
18	221717	Nut .....	4
19	1473887	Fitting .....	1
19	265731	O-Ring .....	1
19	16484	O-Ring .....	1
20	1473897	Fitting .....	1
20	16484	O-Ring .....	1
20	265731	O-Ring .....	1
21	2093346	Hose Assy .....	1
22	2093345	Hose Assy .....	1
23	16448	Fitting .....	2

## INTEGRAL SIDE-SHIFT CARRIAGE (FIGURE 13-15) H4.5FTS5 , H4.5FT6, H5.0-5.5FT (1372 MM AND 1524 MM) — TWO STAGE LIMITED FREE-LIFT



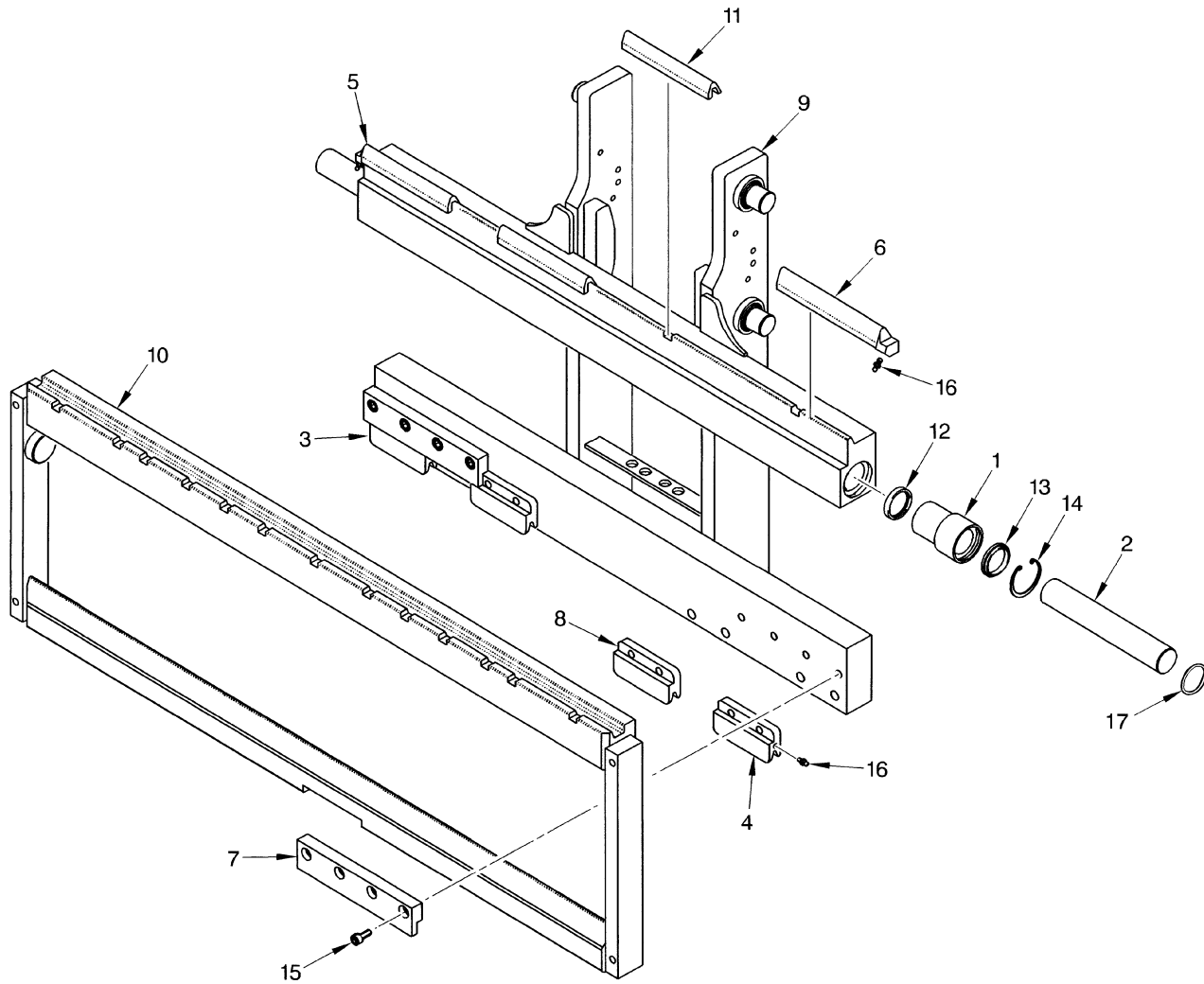
HP000037



**INTEGRAL SIDE-SHIFT CARRIAGE**  
**H4.5FTS5 , H4.5FT6, H5.0-5.5FT (1372 MM AND 1524 MM) – TWO STAGE LIMITED FREE-LIFT**

ITEM	PART NO.	DESCRIPTION	QTY
	2037945	Side-Shift Carriage (1372 mm) .....	1
	2037946	Side-Shift Carriage (1524 mm) .....	1
1	1467204	Bushing .....	2
2	1467205	Rod .....	2
3	1467145	Wear Strip (Right Lower) .....	1
4	1467146	Wear Strip (Left Lower) .....	1
5	1467147	Wear Strip (Right Upper) .....	1
6	1467148	Wear Strip (Left Upper) .....	1
7	1467206	Hook .....	2
8	1467201	Wear Strip (Central Lower) (Lower Center) .....	2
9	1532638	Apron (1372 mm) .....	1
9	1532639	Apron (1524 mm) .....	1
10	1467774	Side Shift Carriage Fixed Frame (1372 mm) .....	1
10	1467776	Side Shift Carriage Fixed Frame (1524 mm) .....	1
11	1467200	Wear Strip (Central Upper) (Upper Center) .....	2
12	1622936	Seal .....	2
13	1467203	Rod Wiper .....	2
14	1467634	Snap Ring .....	2
15	1467633	Screw .....	8
16	16041	Grease Fitting .....	8
17	39366	O-Ring .....	2
	2083998	Kit-Seal (Class IV) .....	1

## INTEGRAL SIDE-SHIFT CARRIAGE (FIGURE 13-16) H4.5FTS5, H4.5FT6-H5.0-5.5FT (1372 MM AND 1524 MM) — TWO AND THREE STAGE FULL FREE-LIFT



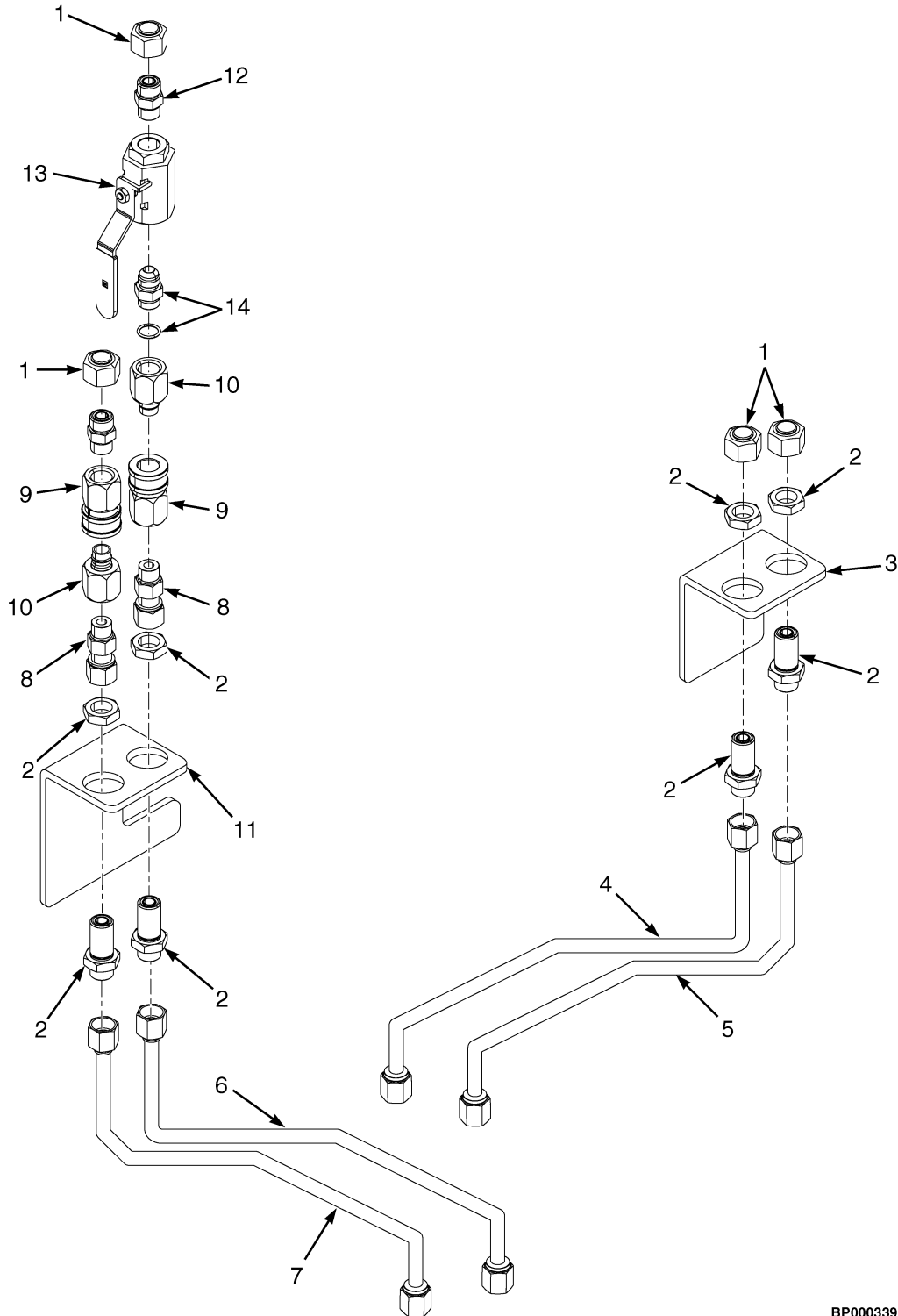
HP000040

**INTEGRAL SIDE-SHIFT CARRIAGE****H4.5FTS5, H4.5FT6-H5.0-5.5FT (1372 MM AND 1524 MM) – TWO AND THREE STAGE FULL FREE-LIFT**

ITEM	PART NO.	DESCRIPTION	QTY
	<b>b</b> 2038600	Side-Shift Carriage (1372 mm) .....	1
	<b>b</b> 2038601	Side-Shift Carriage (1524 mm) .....	1
	<b>a</b> 2037949	Side-Shift Carriage (1372 mm) .....	1
	<b>a</b> 2037950	Side-Shift Carriage (1524 mm) .....	1
1	1467204	Bushing .....	2
2	1467205	Rod .....	2
3	1467145	Wear Strip (Right Lower) .....	1
4	1467146	Wear Strip (Left Lower) .....	1
5	1467147	Wear Strip (Right Upper) .....	1
6	1467148	Wear Strip (Left Upper) .....	1
7	1467206	Hook .....	2
8	1467201	Wear Strip (Central Lower) (Lower Center) .....	2
9	<b>b</b> 1483331	Side-Shift Carriage Fixed Frame (1524 mm) .....	1
9	<b>b</b> 1483333	Side Shift Carriage Fixed Frame (1372 mm) .....	1
9	<b>a</b> 1467773	Side Shift Carriage Fixed Frame (1372 mm) .....	1
9	<b>a</b> 1467775	Side Shift Carriage Fixed Frame (1524 mm) .....	1
10	1532638	Apron (1372 mm) .....	1
10	1532639	Apron (1524 mm) .....	1
11	1467200	Wear Strip (Central Upper) (Upper Center) .....	2
12	1622936	Seal .....	2
13	1467203	Rod Wiper .....	2
14	1467634	Snap Ring .....	2
15	1467633	Screw .....	8
16	16041	Grease Fitting .....	8
17	39366	O-Ring .....	2
18	2083998	Kit-Seal (Class IV) .....	1

**FOOTNOTES:****a** Three Stage Full Free-Lift**b** Two Stage Full Free-Lift

## AUXILIARY TUBE EXTENSIONS (FIGURE 13-17) TWO STAGE LIMITED FREE-LIFT (→ 11/2009)



BP000339

**AUXILIARY TUBE EXTENSIONS**  
**TWO STAGE LIMITED FREE-LIFT (→ 11/2009)****KEY:****A: B749, Three Function****B: B749, Four Function****C: B750, Three Function****D: B750, Four Function**

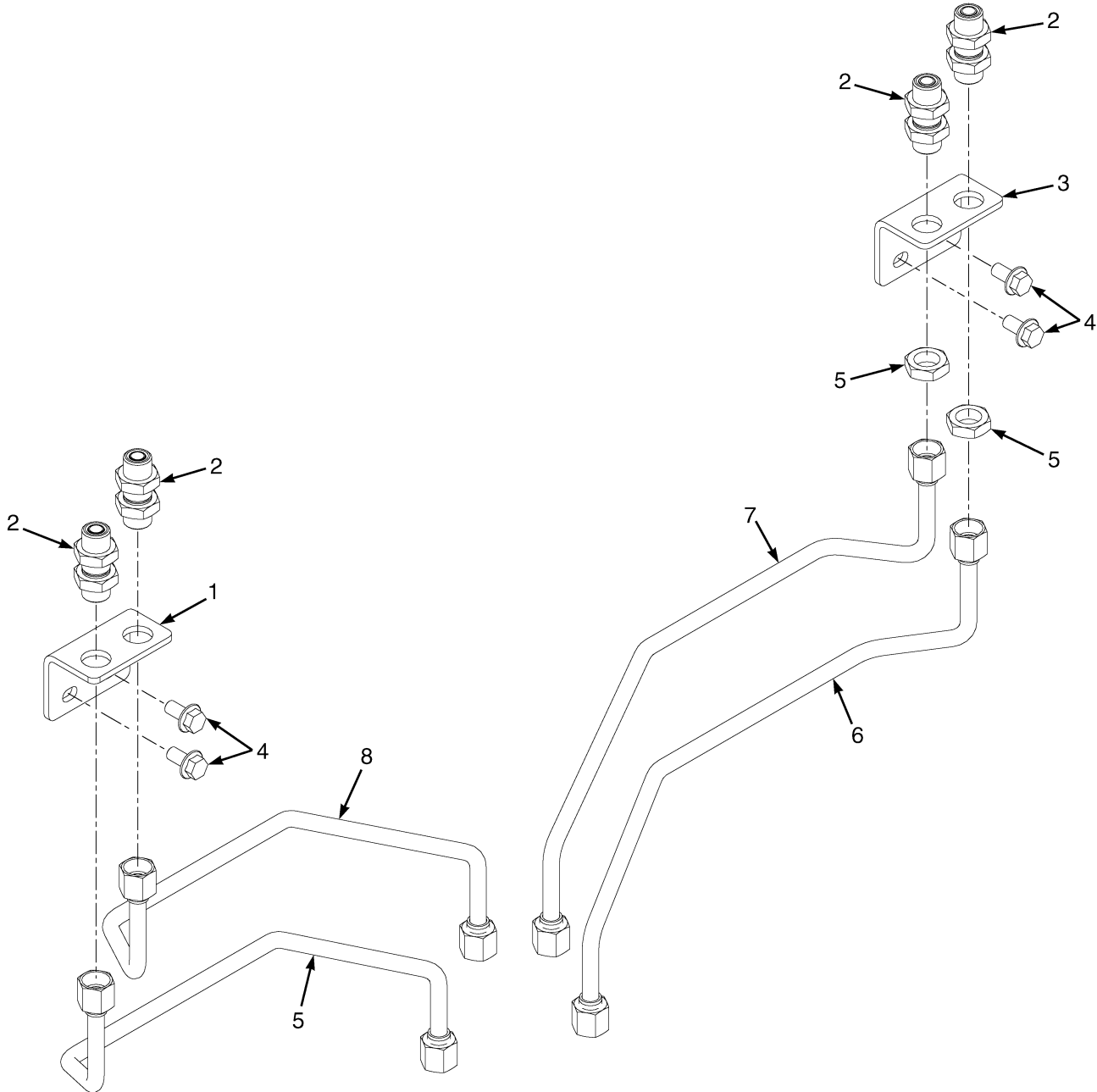
ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	<b>b</b> 1529016	Fitting .....	2	4	2	4
2	<b>b</b> 816591	Fitting .....	2	4	2	4
2	265731	O-Ring .....	2	2	2	2
3	<b>ce</b> 1646850	Bracket .....	1	1	1	1
3	<b>e</b> 1692933	Bracket (RH and LH Bolt On) .....	1	2	1	2
3	<b>c</b> 1692931	Bracket (Bolt-On) (RH) .....	1	1	1	1
3	<b>e</b> 1527883	Capscrew .....	2	4	2	4
3	<b>c</b> 1527884	Capscrew .....	2	4	2	4
3	<b>c</b> 136692	Nut .....	2	4	2	4
4	2093180	Tube Assy .....	1	..	..	..
4	2093184	Tube Assy .....	..	..	1	..
4	<b>c</b> 2093192	Tube Assy .....	1	..	..	..
5	2093179	Tube Assy .....	1	..	..	..
5	2093183	Tube Assy .....	..	..	1	..
5	<b>c</b> 2093191	Tube Assy .....	1	..	..	..
6	2093182	Tube Assy .....	..	1	..	..
6	2093186	Tube Assy .....	..	..	..	1
6	<b>d</b> 2093188	Tube Assy .....	..	1	..	..
6	<b>d</b> 2093190	Tube Assy .....	..	..	..	1
6	<b>c</b> 2093194	Tube Assy .....	..	1	..	..
7	2093181	Tube Assy .....	..	1	..	..
7	2093185	Tube Assy .....	..	..	..	1
7	<b>d</b> 2093187	Tube Assy .....	..	1	..	..
7	<b>d</b> 2093189	Tube Assy .....	..	..	..	1
7	<b>c</b> 2093193	Tube Assy .....	..	1	..	..
8	<b>b</b> 1622610	Fitting .....	2	4	2	4
8	16484	O-Ring .....	1	1	1	1
9	<b>b</b> 1377953	Quick Disconnect Fitting .....	2	4	2	4
10	<b>b</b> 1377954	Fitting .....	2	2	2	2
11	<b>d</b> 1647864	Bracket (LH) .....	1	1	1	1
11	<b>c</b> 1692932	Bracket (Bolt-On) (LH) .....	1	1	1	1
12	<b>b</b> 1473887	Fitting .....	2	4	2	4
12	16484	O-Ring .....	1	1	1	1
13	<b>b</b> 2087565	Drain Valve .....	1	1	1	1
14	<b>b</b> 16541	Fitting .....	1	1	1	1
14	16484	O-Ring .....	1	1	1	1
	<b>a</b> 181298	Dust Cap .....	1	2	1	2
	<b>a</b> 181266	Dust Cap .....	1	2	1	2

**FOOTNOTES:**

- a** Not Illustrated
- b** Used on Right Hand Side for Standard and Attachment Carriages
- c** Used With Attachment Carriage
- d** Used With Integral Side-Shift Carriage
- e** Used With Standard Carriage



## AUXILIARY TUBE EXTENSIONS (FIGURE 13-18) TWO STAGE LIMITED FREE-LIFT — WITHOUT QUICK DISCONNECT FITTINGS (S/N A749V02422G →) (S/N A750V02496G →)



BP000588



**AUXILIARY TUBE EXTENSIONS**

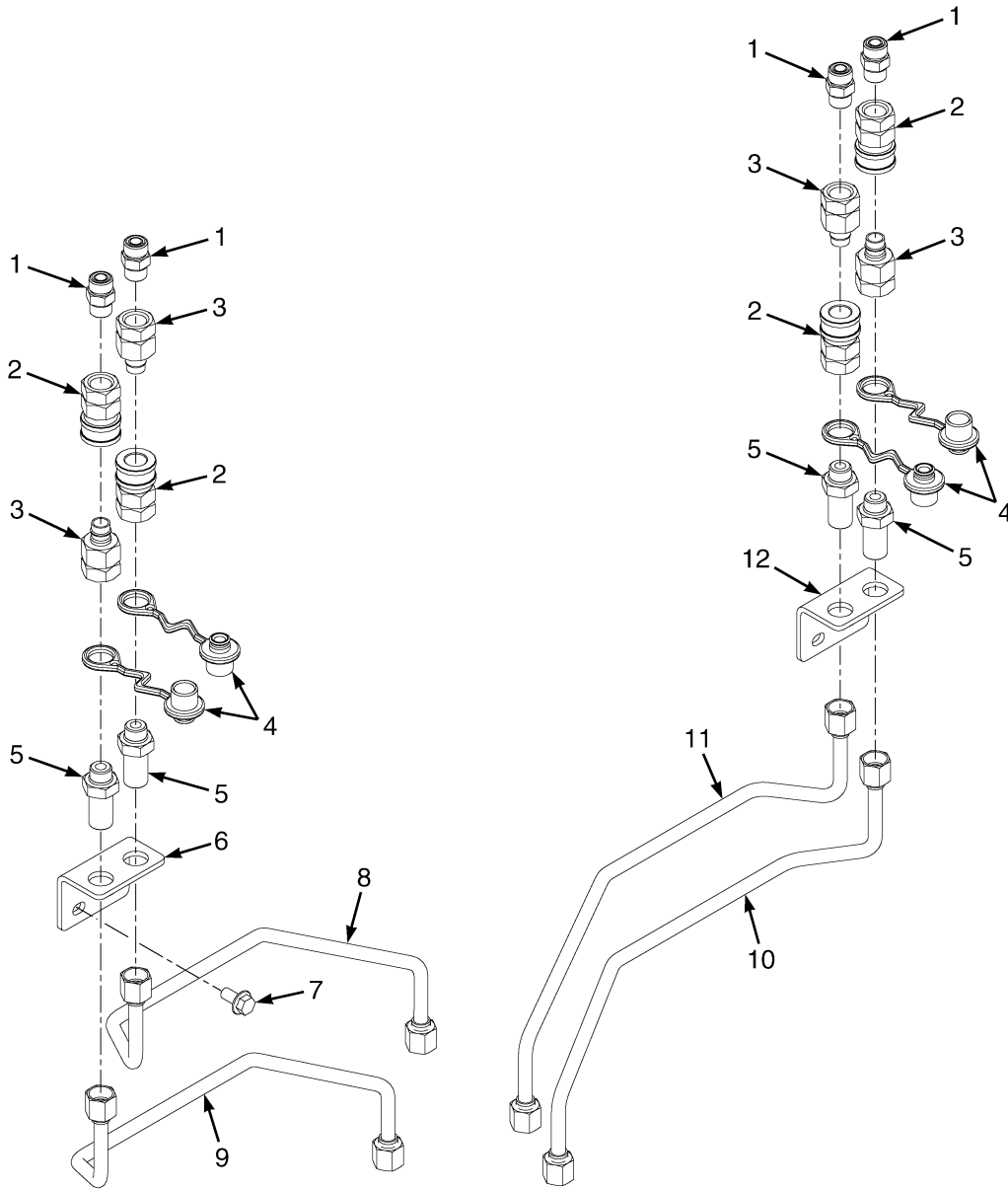
**TWO STAGE LIMITED FREE-LIFT – WITHOUT QUICK DISCONNECT FITTINGS (S/N A749V02422G →)  
(S/N A750V02496G →)**

**KEY:****A: B749, Three Function****B: B749, Four Function****C: B750, Three Function****D: B750, Four Function**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1692933	Bracket (RH and LH Bolt On) .....	..	1	..	1
1	<b>b</b> 1647864	Bracket (LH) .....	..	1	..	1
1	<b>a</b> 1692932	Bracket (Bolt-On) (LH) .....	..	1	..	1
2	816591	Fitting .....	2	4	2	4
3	1692933	Bracket (RH and LH Bolt On) .....	1	1	1	1
3	<b>a</b> 1692931	Bracket (Bolt-On) (RH) .....	..	..	1	1
4	1527883	Capscrew .....	2	4	2	4
5	816593	Locknut .....	2	4	2	4
5	2093181	Tube Assy .....	..	1	..	..
5	<b>b</b> 2093187	Tube Assy .....	..	1	..	..
5	2093185	Tube Assy .....	..	..	..	1
5	<b>b</b> 2093189	Tube Assy .....	..	..	..	1
5	<b>a</b> 2093194	Tube Assy .....	..	..	..	1
6	2093179	Tube Assy .....	1	1	..	..
6	2093183	Tube Assy .....	..	..	1	1
6	<b>a</b> 2093191	Tube Assy .....	..	..	1	1
7	2093180	Tube Assy .....	1	1	..	..
7	2093184	Tube Assy .....	..	..	1	1
7	<b>a</b> 2093192	Tube Assy .....	..	..	1	1
8	2093182	Tube Assy .....	..	1	..	..
8	<b>b</b> 2093188	Tube Assy .....	..	1	..	..
8	2093186	Tube Assy .....	..	..	..	1
8	<b>b</b> 2093190	Tube Assy .....	..	..	..	1
8	<b>a</b> 2093193	Tube Assy .....	..	..	..	1

**FOOTNOTES:****a** Used with Attachment Carriage**b** Used with Integral Side-Shift Carriage

## AUXILIARY TUBE EXTENSIONS (FIGURE 13-19) TWO STAGE LIMITED FREE-LIFT — MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS (PENDING PER ECN 105943 →)



BP000589

**AUXILIARY TUBE EXTENSIONS**  
**TWO STAGE LIMITED FREE-LIFT – MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS**  
**(PENDING PER ECN 105943 →)**

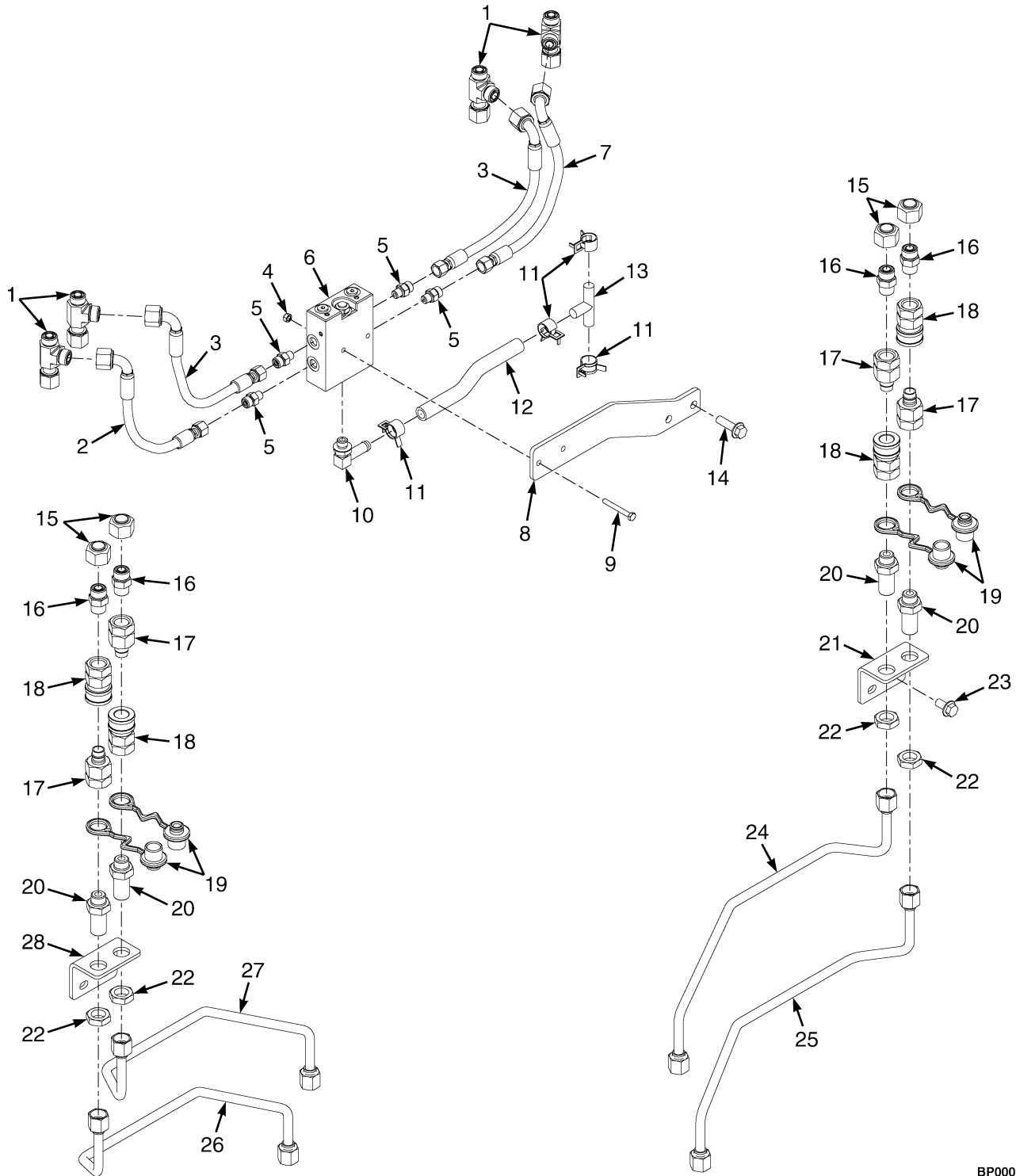
**KEY:**

- A: B749, Three Function**  
**B: B749, Four Function**  
**C: B750, Three Function**  
**D: B750, Four Function**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1473887	Fitting .....	2	4	2	4
2	1377953	Quick Disconnect Fitting .....	2	4	2	4
3	1377954	Fitting (Quick Disconnect) .....	2	4	2	4
4	1708368	Dust Cover .....	2	4	2	4
5	1708365	Bulkhead .....	2	4	2	4
6	1692933	Bracket (RH and LH Bolt On) .....	1	1	1	1
6	<b>b</b> 1647864	Bracket (LH) .....	..	1	..	1
6	<b>a</b> 1692932	Bracket (Bolt-On) (LH) .....	..	..	1	1
7	1527883	Capscrew .....	2	4	2	4
8	2093182	Tube Assy .....	..	1	..	..
8	<b>b</b> 2093188	Tube Assy .....	..	1	..	..
8	2093186	Tube Assy .....	..	..	..	1
8	<b>b</b> 2093190	Tube Assy .....	..	..	..	1
8	<b>a</b> 2093193	Tube Assy .....	..	..	..	1
9	2093181	Tube Assy .....	..	1	..	..
9	<b>b</b> 2093187	Tube Assy .....	..	1	..	..
9	2093185	Tube Assy .....	..	..	..	1
9	<b>b</b> 2093189	Tube Assy .....	..	..	..	1
9	<b>a</b> 2093194	Tube Assy .....	..	..	..	1
10	2093179	Tube Assy .....	1	1	..	..
10	2093183	Tube Assy .....	..	..	1	1
10	<b>a</b> 2093191	Tube Assy .....	..	..	1	1
11	2093180	Tube Assy .....	1	1	..	..
11	2093184	Tube Assy .....	..	..	1	1
11	<b>a</b> 2093192	Tube Assy .....	..	..	1	1
12	1692933	Bracket (RH and LH Bolt On) .....	1	1	1	1
12	1692931	Bracket (Bolt-On) (RH) .....	..	..	1	1

**FOOTNOTES:****a** Used with Attachment Carriage**b** Used with Integral Side-Shift Carriage

## AUXILIARY TUBE EXTENSIONS (FIGURE 13-20) TWO STAGE LIMITED FREE-LIFT — E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (11/2009 →)



BP000517

**AUXILIARY TUBE EXTENSIONS****TWO STAGE LIMITED FREE-LIFT – E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (11/2009 →)****KEY:****A: B749 Three Function****B: B749 Four Function****C: B750 Three Function****D: B750 Four Function**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1487095	Fitting .....	2	4	2	4
2	4604568	Hose Assy .....	..	1	..	1
2	<b>b</b> 4604567	Hose Assy .....	..	1	..	1
3	4604565	Hose Assy .....	1	2	1	2
3	<b>b</b> 4604566	Hose Assy .....	..	1	..	1
4	1512440					
	302399	Nut .....	2	2	2	2
5	1486737	Fitting .....	2	4	2	4
6	2111754	Valve (Single Aux) .....	1	..	1	..
6	2111755	Valve (Dual Aux) .....	..	1	..	1
7	4604566	Hose Assy .....	1	1	1	1
8	1708373	Bracket .....	1	1	1	1
9	292505	Capscrew .....	2	2	2	2
10	110178	Fitting .....	1	1	1	1
10	16483	O-Ring .....	1	1	1	1
11	1527979	Hose Clamp .....	4	4	4	4
12	1614069	Hose .....	1	1	1	1
13	2046871	Fitting .....	1	1	1	1
14	1527885	Capscrew .....	2	2	2	2
15	1529016	Fitting .....	2	4	2	4
16	1473887	Fitting .....	2	4	2	4
17	1377954	Fitting (Quick Disconnect) .....	2	4	2	4
18	1377953	Quick Disconnect Fitting .....	2	4	2	4
19	1708368	Dust Cover .....	2	4	2	4
20	1708365	Bulkhead (Fitting) .....	2	4	2	4
21	1692933	Bracket (RH and LH Bolt On) .....	1	1	1	1
21	<b>a</b> 1692931	Bracket (Bolt-On) (RH) .....	1	1	1	1
22	816593	Locknut .....	2	4	2	4
23	1527883	Capscrew .....	2	4	2	4
24	2093180	Tube Assy .....	1	1	..	..
24	2093184	Tube Assy .....	..	..	1	1
24	<b>a</b> 2093192	Tube Assy .....	..	..	1	1
25	2093179	Tube Assy .....	1	1	..	..
25	2093183	Tube Assy .....	..	..	1	1
25	<b>a</b> 2093191	Tube Assy .....	..	..	1	1
26	2093181	Tube Assy .....	..	1	..	..
26	<b>b</b> 2093187	Tube Assy .....	..	1	..	..
26	2093185	Tube Assy .....	..	..	..	1
26	<b>b</b> 2093189	Tube Assy .....	..	..	..	1
26	<b>a</b> 2093194	Tube Assy .....	..	..	..	1
27	2093182	Tube Assy .....	..	1	..	..
27	<b>b</b> 2093188	Tube Assy .....	..	1	..	..
27	2093186	Tube Assy .....	..	..	..	1

## AUXILIARY TUBE EXTENSIONS

TWO STAGE LIMITED FREE-LIFT – E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (11/2009 →)

**KEY:**

**A:** B749 Three Function

**B:** B749 Four Function

**C:** B750 Three Function

**D:** B750 Four Function

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
27	<b>b</b> 2093190	Tube Assy .....	..	..	..	1
27	<b>a</b> 2093193	Tube Assy .....	..	..	..	1
28	1692933	Bracket (RH and LH Bolt On) .....	..	1	..	1
28	<b>a</b> 1692932	Bracket (Bolt-On) (LH) .....	..	1	..	1
28	<b>b</b> 1647864	Bracket (LH) .....	..	1	..	1

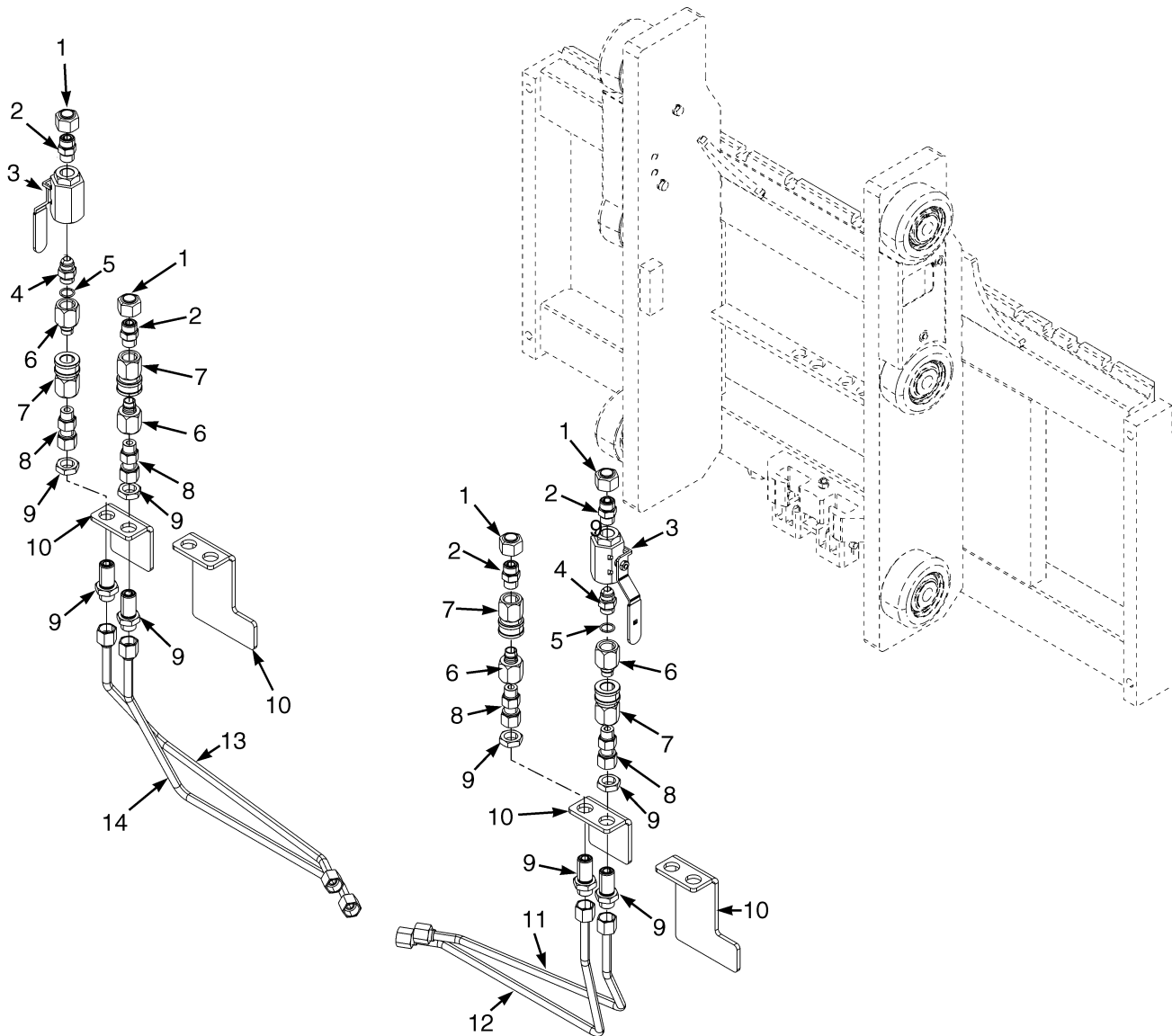
**FOOTNOTES:**

**a** Used with Attachment Carriage

**b** Used with Integral Side-Shift Carriage



## AUXILIARY TUBE EXTENSIONS (FIGURE 13-21) TWO STAGE FULL FREE-LIFT (→ 11/2009)



BP020026



## AUXILIARY TUBE EXTENSIONS

### TWO STAGE FULL FREE-LIFT (→ 11/2009)

**KEY:****A: B753, Three Function, Class III****B: B754, Three Function, Class IV****C: B753, Four Function, Class III****D: B754, Four Function, Class IV**

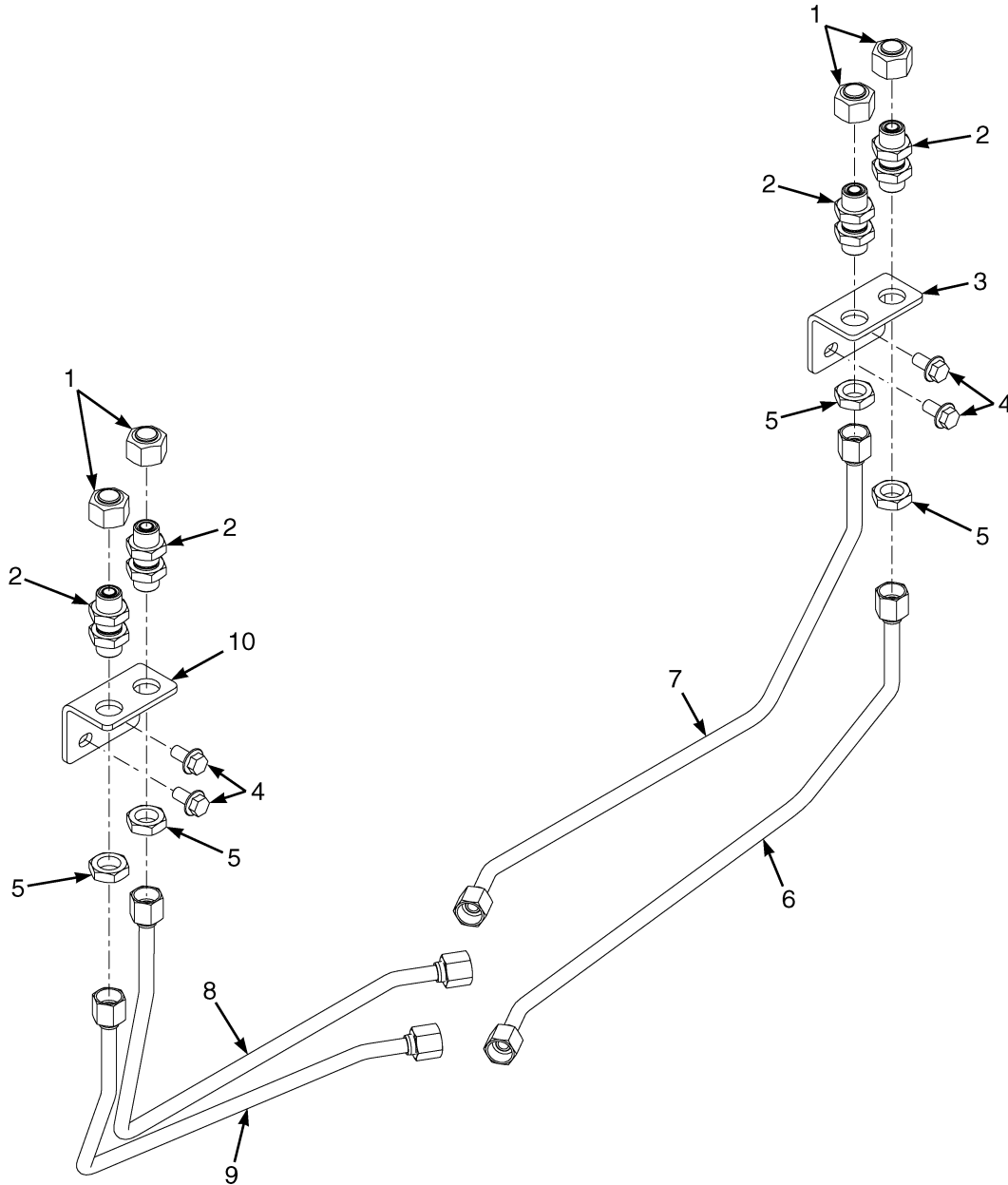
ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	<b>b</b> 1529016	Fitting .....	2	2	4	4
2	<b>bf</b> 1473887	Fitting .....	2	2	4	4
2	<b>f</b> 265731	O-Ring .....	1	1	2	2
2	<b>f</b> 16484	O-Ring .....	1	1	2	2
3	<b>bf</b> 2087565	Drain Valve .....	1	1	2	2
4	<b>bf</b> 16541	Fitting .....	1	1	1	2
5	<b>bf</b> 16484	O-Ring .....	1	1	2	2
6	<b>bf</b> 1377954	Fitting .....	2	2	4	4
7	<b>bf</b> 1377953	Quick Disconnect Fitting .....	2	2	4	4
8	<b>bf</b> 1622610	Fitting .....	2	2	4	4
8	16484	O-Ring .....	1	1	2	2
9	<b>b</b> 816591	Fitting .....	2	2	4	4
9	265731	O-Ring .....	1	1	1	1
10	<b>e</b> 1646850	Bracket .....	1	1	2	2
10	<b>e</b> 1692933	Bracket (RH and LH Bolt On) .....	1	1	2	2
10	<b>e</b> 1527883	Capscrew .....	2	2	4	4
10	<b>c</b> 1692931	Bracket (Bolt-On) (RH) .....	1	1	1	1
10	<b>c</b> 1692932	Bracket (Bolt-On) (LH) .....	1	1	1	1
10	<b>c</b> 136692	Nut .....	2	2	4	4
10	<b>d</b> 1647864	Bracket (LH) .....	..	..	1	1
11	<b>e</b> 2093653	Tube Assy .....	1	..	..	..
11	<b>e</b> 2093657	Tube Assy .....	..	1	..	..
11	<b>c</b> 2093665	Tube Assy .....	1	..	..	..
12	<b>e</b> 2093654	Tube Assy .....	1	..	..	..
12	<b>e</b> 2093658	Tube Assy .....	..	1	..	..
12	<b>c</b> 2093666	Tube Assy .....	1	..	..	..
13	<b>e</b> 2093655	Tube Assy .....	..	..	1	..
13	<b>e</b> 2093659	Tube Assy .....	..	..	..	1
13	<b>d</b> 2093661	Tube Assy .....	..	..	1	..
13	<b>c</b> 2093667	Tube Assy .....	..	..	1	..
13	<b>d</b> 2093663	Tube Assy .....	..	..	..	1
14	<b>e</b> 2093656	Tube Assy .....	..	..	1	..
14	<b>e</b> 2093660	Tube Assy .....	..	..	..	1
14	<b>e</b> 2093662	Tube Assy .....	..	..	1	..
14	<b>d</b> 2093664	Tube Assy .....	..	..	..	1
14	<b>c</b> 2093668	Tube Assy .....	..	..	1	..
	<b>a</b> 181266	Dust Cap .....	1	1	1	1
	<b>a</b> 181298	Dust Cap .....	1	1	1	1

**FOOTNOTES:**

- |   |   |
|---|---|
| <b>a</b> Not Illustrated                                | <b>d</b> Used With Integral Side-Shift Carriage |
| <b>b</b> Used on Left Hand Side with Integral Sideshift | <b>e</b> Used With Standard Carriage            |
| <b>c</b> Used With Attachment Carriage                  | <b>f</b> With Quick Disconnect                  |



## AUXILIARY TUBE EXTENSIONS (FIGURE 13-22) TWO STAGE FULL FREE- LIFT — WITHOUT QUICK DISCONNECT FITTINGS (11/2009 →)



BP000518

**AUXILIARY TUBE EXTENSIONS**  
**TWO STAGE FULL FREE- LIFT – WITHOUT QUICK DISCONNECT FITTINGS (11/2009 →)**

**KEY:**

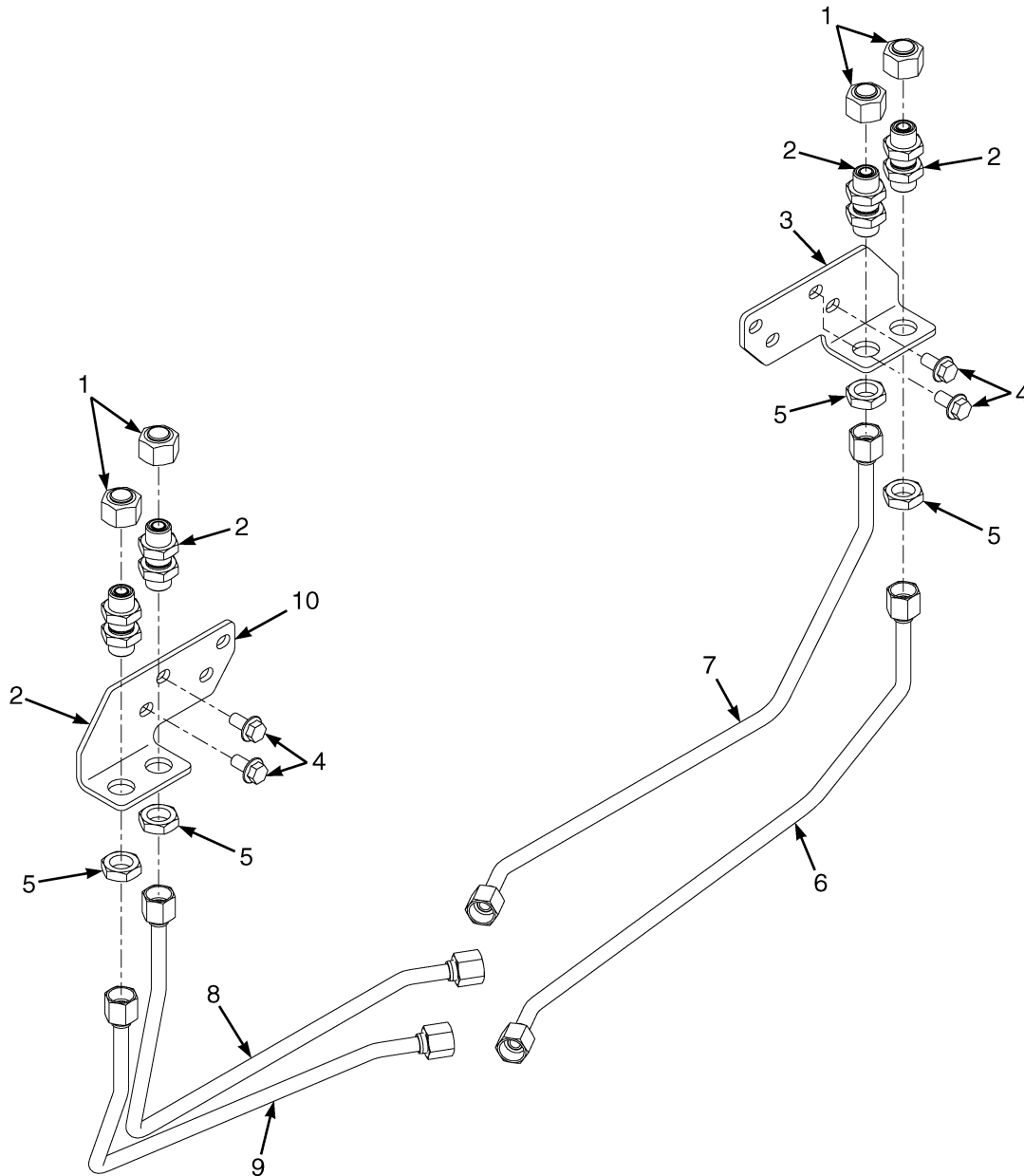
- A: B753 Four Function**  
**B: B753 Three Function**  
**C: B754 Three Function**  
**D: B754 Four Function**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1529016	Fitting .....	2	4	2	4
2	816591	Fitting .....	2	4	2	4
3	1692933	Bracket (RH and LH Bolt On) .....	1	1	1	1
4	1527883	Capscrew .....	2	4	2	4
5	816593	Locknut .....	2	4	2	4
6	2093653	Tube Assy .....	1	1	..	..
6	2093657	Tube Assy .....	..	..	1	1
7	2093654	Tube Assy .....	1	1	..	..
7	2093658	Tube Assy .....	..	..	1	1
8	2093656	Tube Assy .....	..	1	..	..
8	<b>a</b> 2093662	Tube Assy .....	..	1	..	..
8	2093660	Tube Assy .....	..	..	..	1
8	<b>a</b> 2093664	Tube Assy .....	..	..	..	1
9	2093655	Tube Assy .....	..	1	..	..
9	<b>a</b> 2093661	Tube Assy .....	..	1	..	..
9	2093659	Tube Assy .....	..	..	..	1
9	<b>a</b> 2093663	Tube Assy .....	..	..	..	1
10	1692933	Bracket (RH and LH Bolt On) .....	..	1	..	1
10	<b>a</b> 1647864	Bracket .....	..	1	..	1

**FOOTNOTES:**

- a** Used with Integral Side-Shift Carriage

## AUXILIARY TUBE EXTENSIONS (FIGURE 13-23) TWO STAGE FULL FREE-LIFT — WITH ATTACHMENT CARRIAGE WITHOUT QUICK DISCONNECT FITTINGS (11/2009 →)



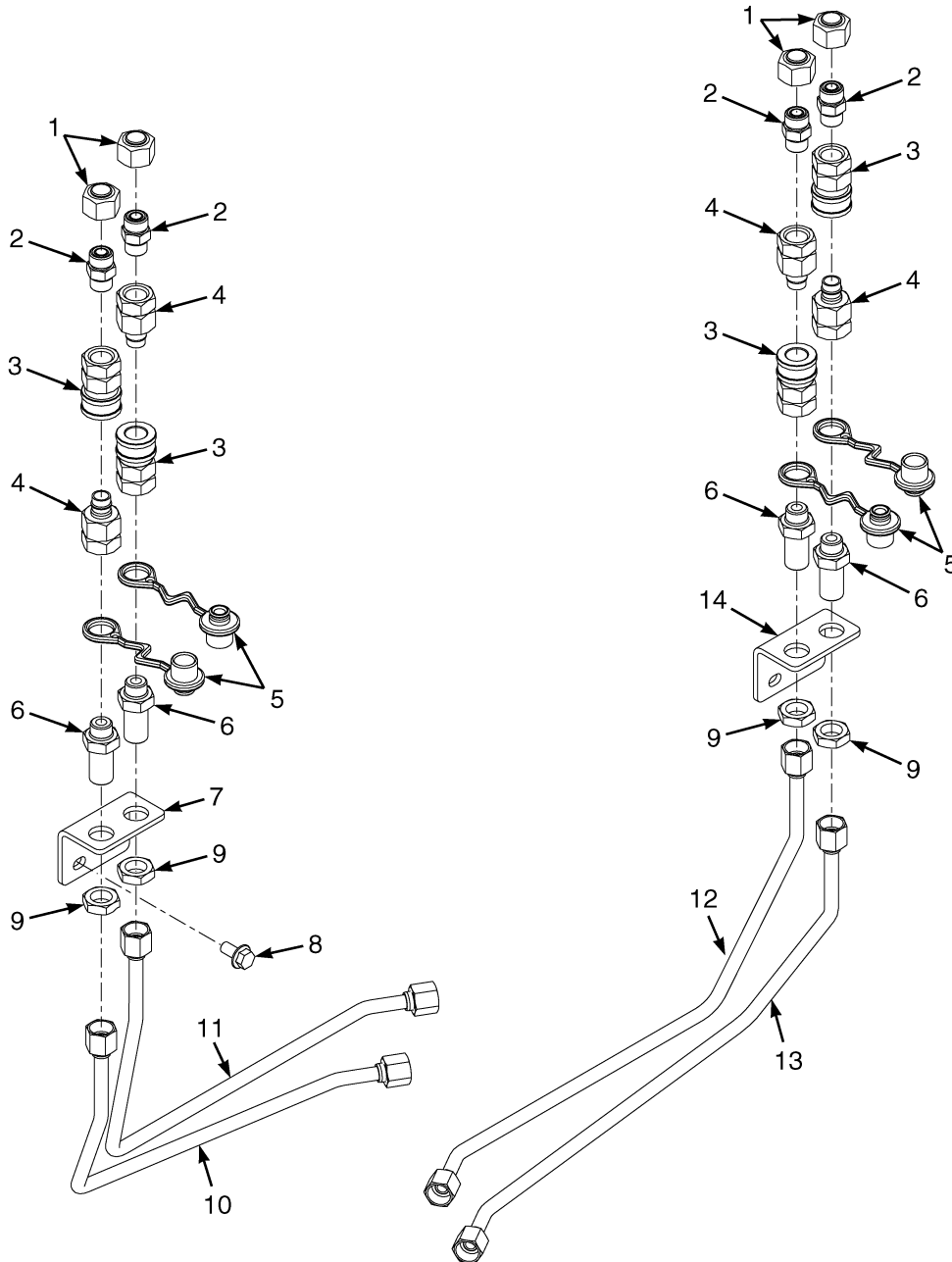
BP000521

**AUXILIARY TUBE EXTENSIONS**  
**TWO STAGE FULL FREE-LIFT – WITH ATTACHMENT CARRIAGE WITHOUT QUICK DISCONNECT**  
**FITTINGS (11/2009 →)**

**KEY:****A: B754 Three Function****B: B754 Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1529016	Fitting .....	2	4
2	816591	Fitting .....	2	4
3	1692931	Bracket (Bolt-On) (RH) .....	1	1
4	1527884	Capscrew .....	2	4
4	136692	Nut (Not Illustrated) .....	2	4
5	816593	Locknut .....	2	4
6	2093665	Tube Assy .....	1	1
7	2093666	Tube Assy .....	1	1
8	2093667	Tube Assy .....	..	1
9	2093668	Tube Assy .....	..	1
10	1692932	Bracket (Bolt-On) (LH) .....	..	1

## AUXILIARY TUBE EXTENSIONS (FIGURE 13-24) TWO STAGE FULL FREE-LIFT — MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS (11/2009 →)



BP000519



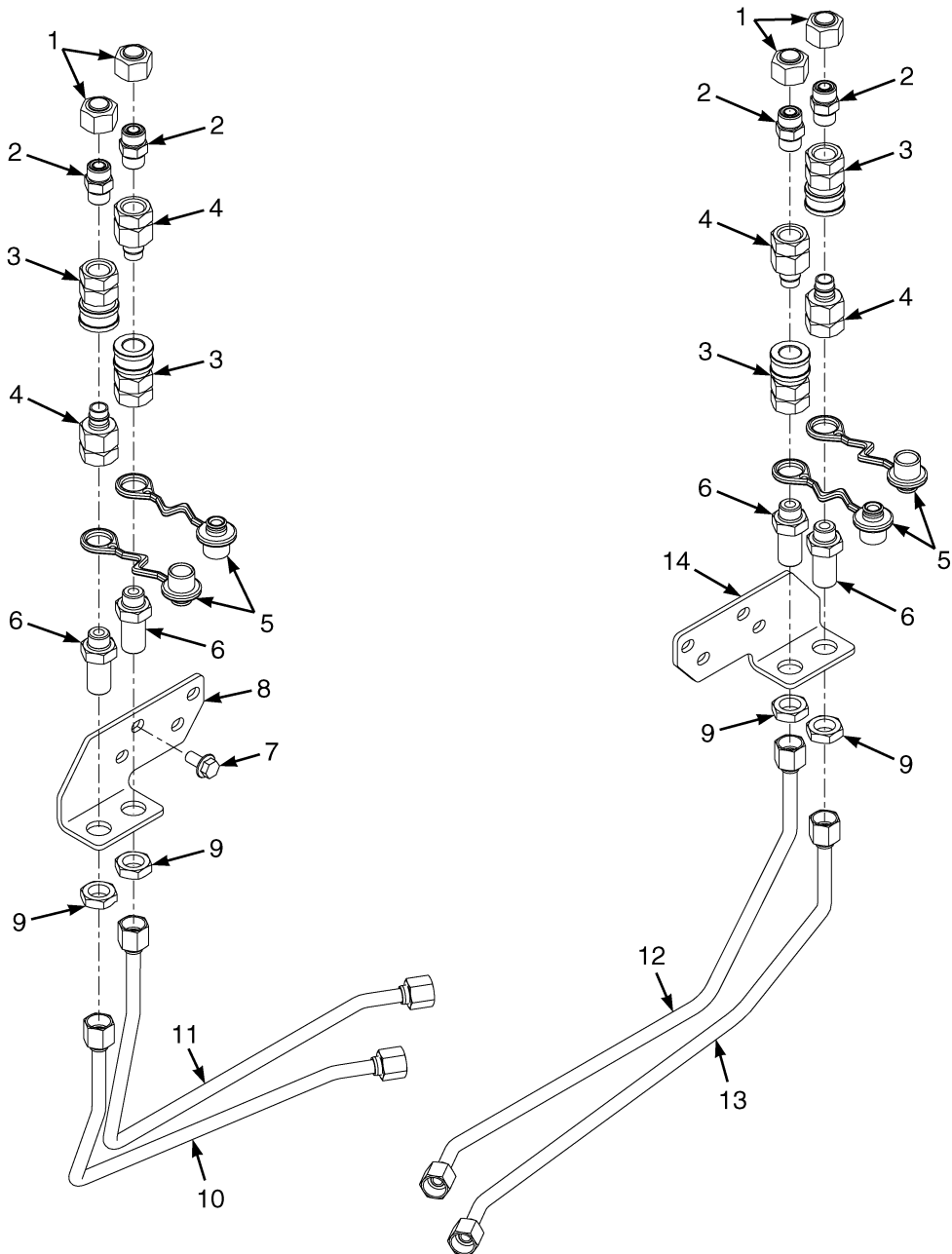
**AUXILIARY TUBE EXTENSIONS**  
**TWO STAGE FULL FREE-LIFT – MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS**  
**(11/2009 →)**

**KEY:****A: B753 Three Function****B: B753 Four Function****C: B754 Three Function****D: B754 Four Function**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1529016	Fitting .....	2	4	2	4
1	1473887	Fitting .....	2	4	2	4
3	1377953	Quick Disconnect Fitting .....	2	4	2	4
4	1377954	Fitting (Quick Disconnect) .....	2	4	2	4
5	1708368	Dust Cover .....	2	4	2	4
6	1708365	Bulkhead (Fitting) .....	2	4	2	4
7	1692933	Bracket (RH and LH Bolt On) .....	..	1	..	1
7	<b>a</b> 1647864	Bracket .....	..	1	..	1
8	1527883	Capscrew .....	2	4	2	4
9	816593	Locknut .....	2	4	2	4
10	2093655	Tube Assy .....	..	1	..	..
10	<b>a</b> 2093661	Tube Assy .....	..	1	..	..
10	2093659	Tube Assy .....	..	..	..	1
10	<b>a</b> 2093663	Tube Assy .....	..	..	..	1
11	2093656	Tube Assy .....	..	1	..	..
11	<b>a</b> 2093662	Tube Assy .....	..	1	..	..
11	2093660	Tube Assy .....	..	..	..	1
11	2093664	Tube Assy .....	..	..	..	1
12	2093654	Tube Assy .....	1	1	..	..
12	2093658	Tube Assy .....	..	..	1	1
13	2093653	Tube Assy .....	1	1	..	..
13	2093657	Tube Assy .....	..	..	1	1
14	1692933	Bracket (RH and LH Bolt On) .....	1	1	1	1

**FOOTNOTES:****a** Used with Integral Side-Shift Carriage

## AUXILIARY TUBE EXTENSIONS (FIGURE 13-25) TWO STAGE FULL FREE-LIFT — WITH ATTACHMENT CARRIAGE, MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS (11/2009 →)



BP000522

**AUXILIARY TUBE EXTENSIONS****TWO STAGE FULL FREE-LIFT – WITH ATTACHMENT CARRIAGE, MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS (11/2009 →)****KEY:****A: B754 Three Function****B: B754 Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1529016	Fitting .....	2	4
2	1473887	Fitting .....	2	4
3	1377953	Quick Disconnect Fitting .....	2	4
4	1377954	Fitting (Quick Disconnect) .....	2	4
5	1708368	Dust Cover .....	2	4
6	1708365	Bulkhead (Fitting) .....	2	4
7	1692932	Bracket (Bolt-On) (LH) .....	..	1
8	1527884	Capscrew .....	2	4
8	136692	Nut (Not Illustrated) .....	2	4
9	816593	Locknut .....	2	4
10	2093668	Tube Assy .....	..	1
11	2093667	Tube Assy .....	..	1
12	2093666	Tube Assy .....	1	1
13	2093665	Tube Assy .....	1	1
14	1692931	Bracket (Bolt-On) (RH) .....	1	1



**AUXILIARY TUBE EXTENSIONS****TWO STAGE FULL FREE- LIFT – E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (11/2009 →)****KEY:****A: B753 Three Function****B: B753 Four Function****C: B754 Three Function****D: B754 Four Function**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1487095	Fitting .....	2	4	2	4
2	4604565	Hose Assy .....	..	1	..	1
2	<b>a</b> 4604566	Hose Assy .....	..	1	..	1
3	4604568	Hose Assy .....	..	1	..	1
3	<b>a</b> 4604567	Hose Assy .....	..	1	..	1
4	1486737	Fitting .....	2	4	2	4
5	1512440					
	302399	Nut .....	2	2	2	2
6	2111754	Valve (Single Aux) .....	1	..	1	..
6	2111755	Valve (Dual Aux) .....	..	1	..	1
7	4604566	Hose Assy .....	1	1	1	1
8	4604565	Hose Assy .....	1	1	1	1
9	1527885	Capscrew .....	2	2	2	2
10	1708373	Bracket .....	1	1	1	1
11	292505	Capscrew .....	2	2	2	2
12	110178	Fitting .....	2	2	2	2
12	16483	O-Ring .....	2	2	2	2
13	1527979	Hose Clamp .....	2	2	2	2
14	1529016	Fitting .....	2	4	2	4
15	1473887	Fitting .....	2	4	2	4
16	1377954	Fitting (Quick Disconnect) .....	2	4	2	4
17	1377953	Quick Disconnect Fitting .....	2	4	2	4
18	1708368	Dust Cover .....	2	4	2	4
19	1708365	Bulkhead (Fitting) .....	2	4	2	4
20	1692933	Bracket (RH and LH Bolt On) .....	1	1	1	1
21	816593	Locknut .....	2	4	2	4
22	1502059	Clamp .....	1	1	1	1
23	1502066	Clamp .....	1	1	1	1
24	1399093	Hose Assy .....	1	1	1	1
25	2093653	Tube Assy .....	1	1	..	..
25	2093657	Tube Assy .....	..	..	1	1
26	2093654	Tube Assy .....	1	1	..	..
26	2093658	Tube Assy .....	..	..	1	1
27	2093656	Tube Assy .....	..	1	..	..
27	<b>a</b> 2093662	Tube Assy .....	..	1	..	..
27	2093660	Tube Assy .....	..	..	..	1
27	<b>a</b> 2093664	Tube Assy .....	..	..	..	1
28	2093655	Tube Assy .....	..	1	..	..
28	<b>a</b> 2093661	Tube Assy .....	..	1	..	..
28	2093659	Tube Assy .....	..	..	..	1
28	<b>a</b> 2093663	Tube Assy .....	..	..	..	1
29	1527883	Capscrew .....	2	4	2	4
30	1692933	Bracket (RH and LH Bolt On) .....	..	1	..	1

## AUXILIARY TUBE EXTENSIONS

TWO STAGE FULL FREE- LIFT – E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (11/2009 →)

**KEY:**

**A:** B753 Three Function

**B:** B753 Four Function

**C:** B754 Three Function

**D:** B754 Four Function

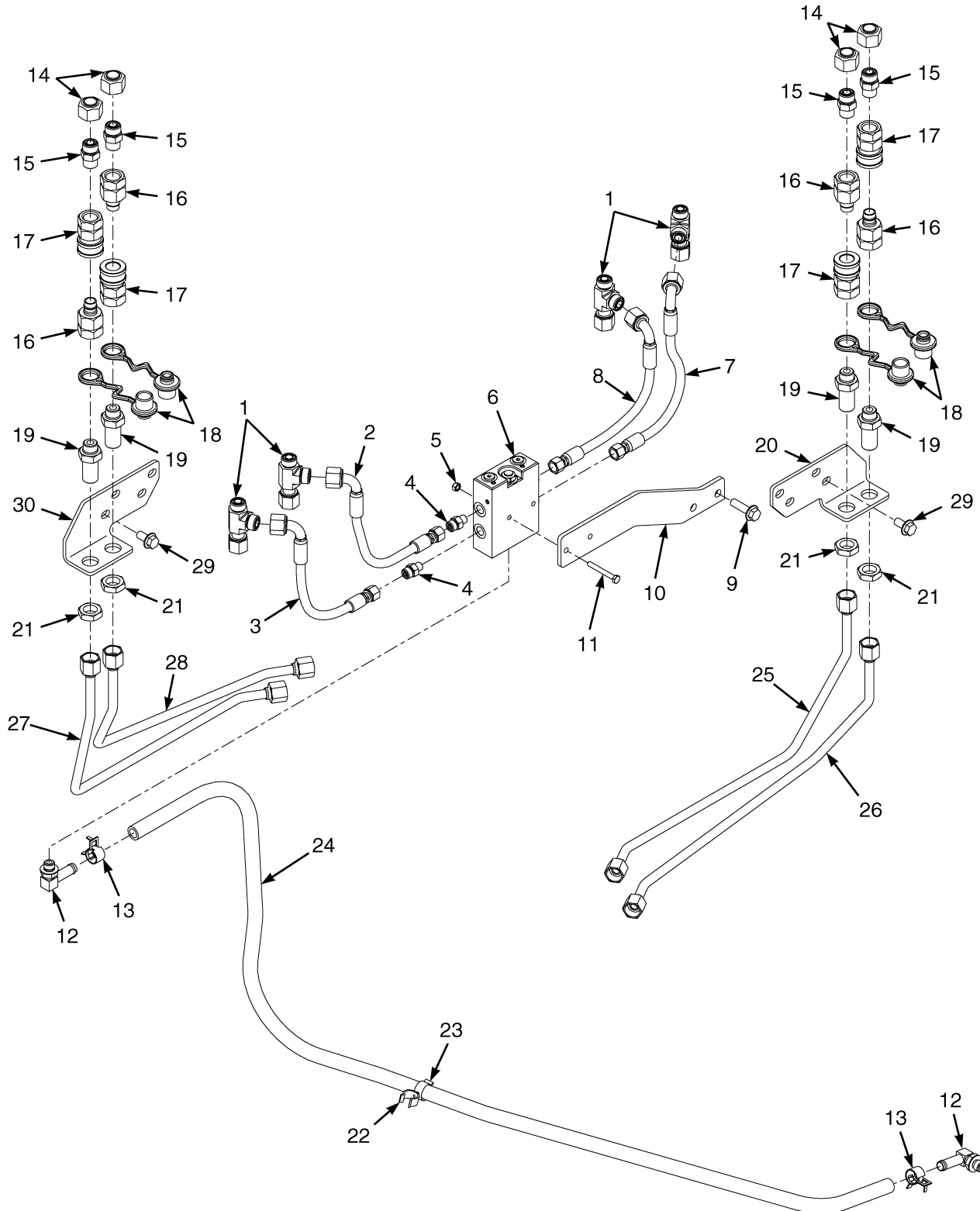
ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
30	1647864	Bracket (LH) .....	..	1	..	1

**FOOTNOTES:**

- a** Used with Integral Side-Shift Carriage



## AUXILIARY TUBE EXTENSIONS (FIGURE 13-27) TWO STAGE FULL FREE- LIFT — WITH ATTACHMENT CARRIAGE AND E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (11/2009 →)



BP000525

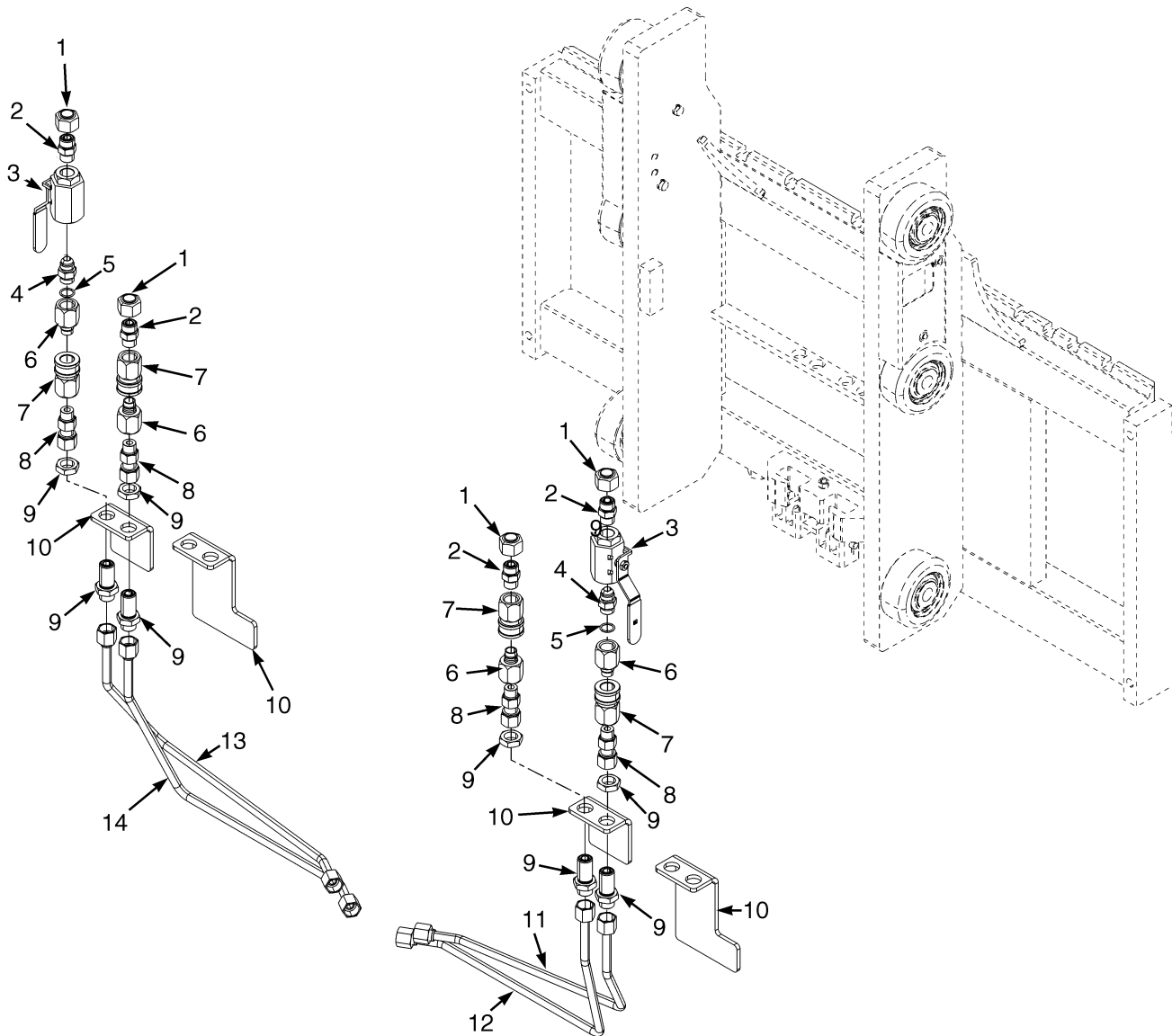


**AUXILIARY TUBE EXTENSIONS**  
**TWO STAGE FULL FREE- LIFT – WITH ATTACHMENT CARRIAGE AND E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (11/2009 →)**

**KEY:****A: B754 Three Function****B: B754 Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1487095	Fitting .....	2	4
2	4604565	Hose Assy .....	..	1
3	4604568	Hose Assy .....	..	1
4	1486737	Fitting .....	2	4
5	1512440			
	302399	Nut .....	2	2
6	2111754	Valve (Single Aux) .....	1	..
6	2111755	Valve (Dual Aux) .....	..	1
7	4604566	Hose Assy .....	1	1
8	4604565	Hose Assy .....	1	1
9	1527885	Capscrew .....	2	2
10	1708373	Bracket .....	1	1
11	292505	Capscrew .....	2	2
12	110178	Fitting .....	2	2
12	16483	O-Ring .....	2	2
13	1527979	Hose Clamp .....	2	2
14	1529016	Fitting .....	2	4
15	1473887	Fitting .....	2	4
16	1377954	Fitting (Quick Disconnect) .....	2	4
17	1377953	Quick Disconnect Fitting .....	2	4
18	1708368	Dust Cover .....	2	4
19	1708365	Bulkhead (Fitting) .....	2	4
20	1692931	Bracket (Bolt-On) (RH) .....	1	1
21	816593	Locknut .....	2	4
22	1502059	Clamp .....	1	1
23	1502066	Clamp .....	1	1
24	1399093	Hose Assy .....	1	1
25	2093665	Tube Assy .....	1	1
26	2093666	Tube Assy .....	1	1
27	2093667	Tube Assy .....	..	1
28	2093668	Tube Assy .....	..	1
29	1527884	Capscrew .....	2	4
29	136692	Nut (Not Illustrated) .....	2	4
30	1692932	Bracket (Bolt-On) (LH) .....	..	1

## AUXILIARY TUBE EXTENSIONS (FIGURE 13-28) THREE STAGE FULL FREE-LIFT (→ 11/2009)



BP020026

**AUXILIARY TUBE EXTENSIONS**  
**THREE STAGE FULL FREE-LIFT (→ 11/2009)****KEY:****A: B751, Three Function, Class III****B: B752, Three Function, Class IV****C: B751, Four Function, Class III****D: B752, Four Function, Class IV**

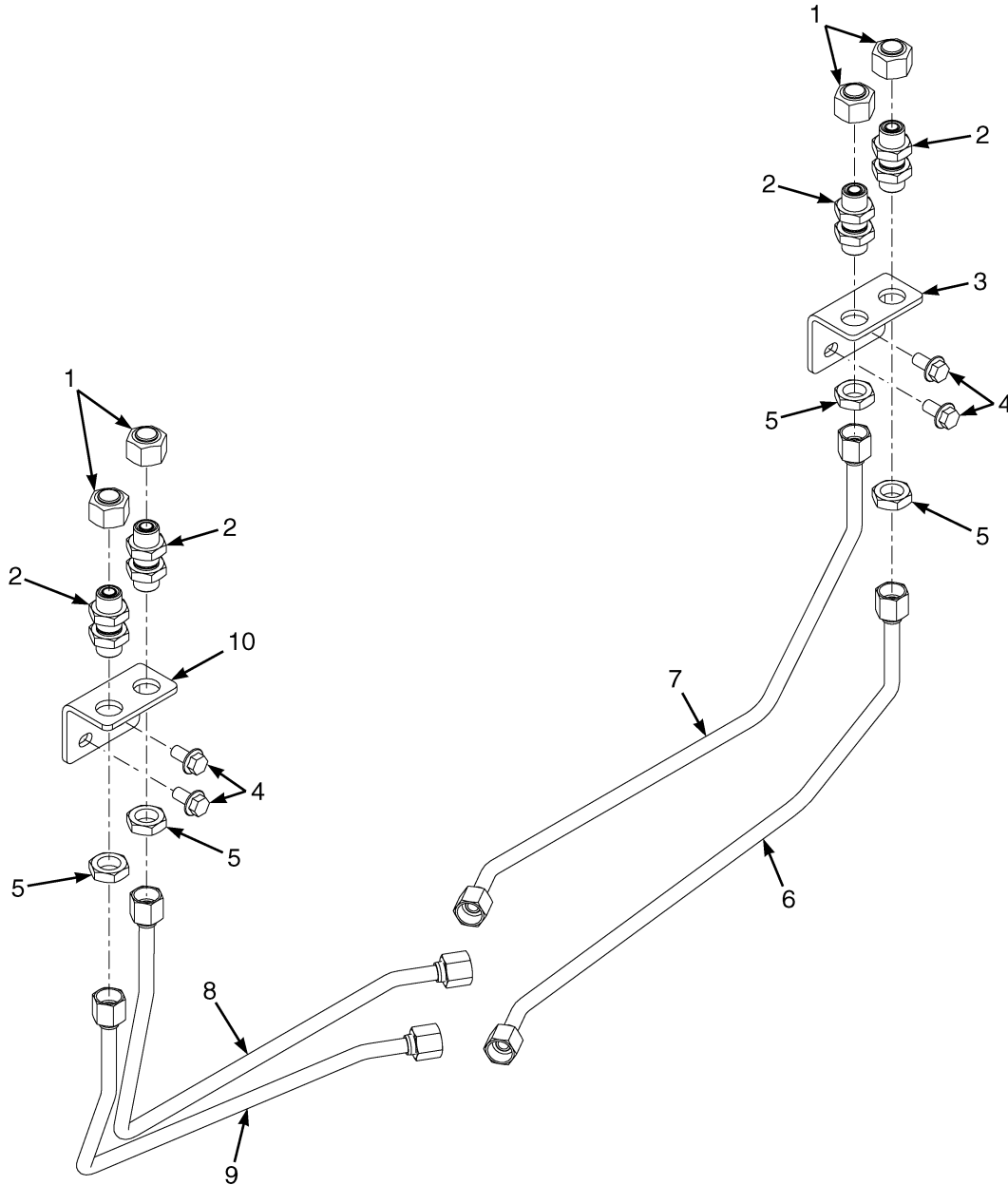
ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1529016	Fitting .....	2	2	4	4
2	e 1473887	Fitting .....	2	2	4	4
2	e 265731	O-Ring .....	1	1	2	2
2	e 16484	O-Ring .....	1	1	2	2
3	e 2087565	Drain Valve .....	1	1	2	2
4	e 16541	Fitting .....	1	1	1	2
5	e 16484	O-Ring .....	1	1	2	2
6	e 1377954	Fitting .....	2	2	4	4
7	e 1377953	Quick Disconnect Fitting .....	2	2	4	4
8	e 1622610	Fitting .....	2	2	4	4
8	16484	O-Ring .....	1	1	2	2
9	816591	Fitting .....	2	2	4	4
9	265731	O-Ring .....	1	1	1	1
10	d 1646850	Bracket .....	1	1	2	2
10	d 1692933	Bracket (RH and LH Bolt On) .....	1	1	2	2
10	d 1527883	Capscrew .....	2	2	4	4
10	c 1647864	Bracket .....	..	..	2	2
10	b 1692931	Bracket (Bolt-On) (RH) .....	1	1	1	1
10	b 1692932	Bracket (Bolt-On) (LH) .....	1	1	1	1
10	b 1527884	Capscrew .....	2	2	4	4
10	b 136692	Nut .....	2	2	4	4
11	d 2093669	Tube Assy .....	1	..	..	..
11	d 2093657	Tube Assy .....	..	1	..	..
11	b 2093665	Tube Assy .....	1	..	..	..
12	d 2093670	Tube Assy .....	1	..	..	..
12	d 2093658	Tube Assy .....	..	1	..	..
12	b 2093666	Tube Assy .....	1	..	..	..
13	d 2093671	Tube Assy .....	..	..	1	..
13	d 2093659	Tube Assy .....	..	..	..	1
13	c 2093677	Tube Assy .....	..	..	1	..
13	c 2093663	Tube Assy .....	..	..	..	1
13	b 2093667	Tube Assy .....	..	..	1	..
14	d 2093672	Tube Assy .....	..	..	1	..
14	d 2093660	Tube Assy .....	..	..	..	1
14	c 2093678	Tube Assy .....	..	..	1	..
14	c 2093664	Tube Assy .....	..	..	..	1
14	b 2093668	Tube Assy .....	..	..	1	..
	a 181266	Dust Cap .....	1	1	1	1
	a 181298	Dust Cap .....	1	1	1	1

**FOOTNOTES:**

- a** Not Illustrated
- b** Used With Attachment Carriage
- c** Used With Integral Side-Shift Carriage
- d** Used With Standard Carriage
- e** With Quick Disconnect



## AUXILIARY TUBE EXTENSIONS (FIGURE 13-29) THREE STAGE FULL FREE-LIFT — WITHOUT QUICK DISCONNECT FITTINGS (11/2009 ↔ 8/2010)



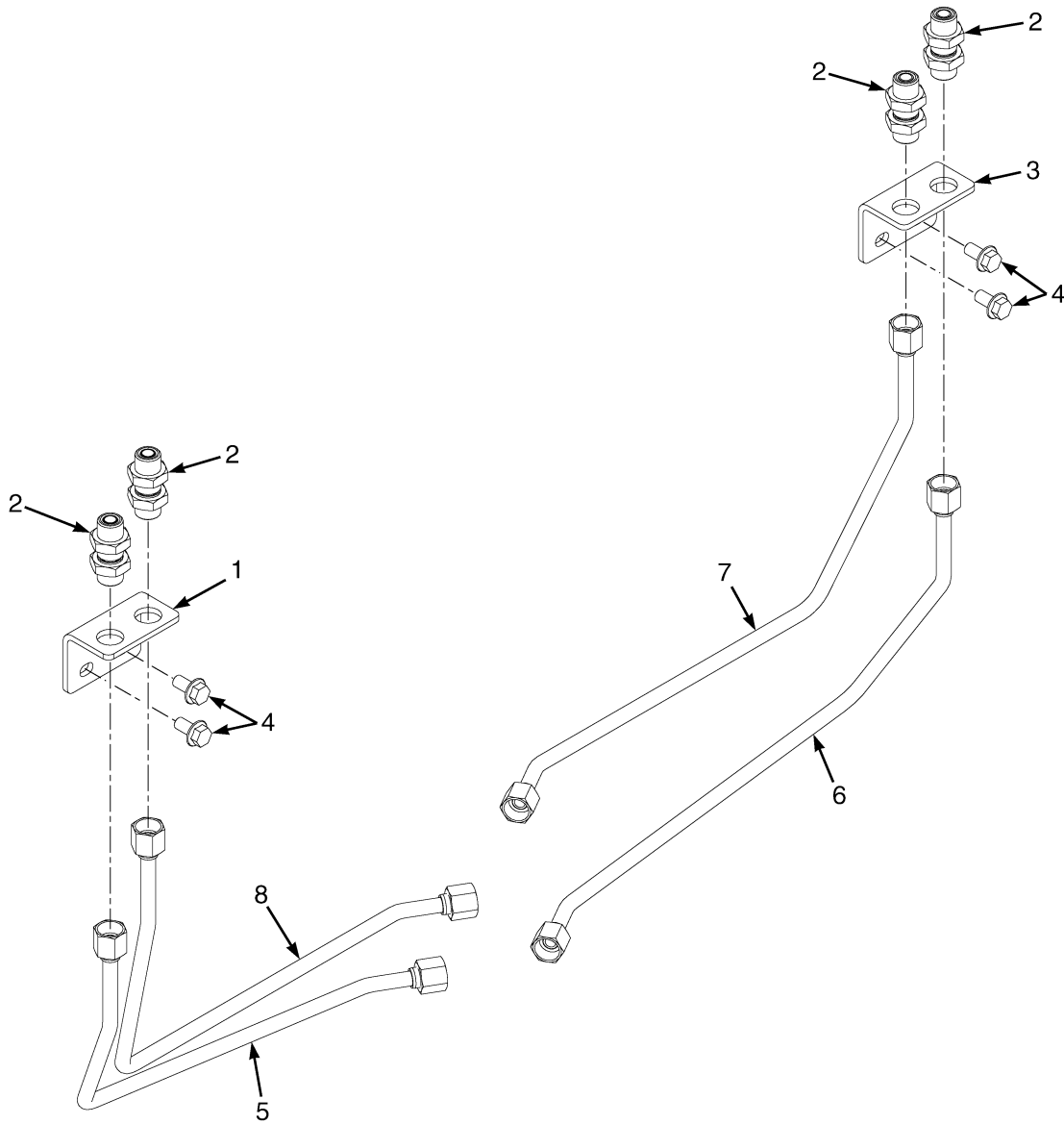
BP000518

**AUXILIARY TUBE EXTENSIONS****THREE STAGE FULL FREE-LIFT – WITHOUT QUICK DISCONNECT FITTINGS (11/2009 ↔ 8/2010)****KEY:****A: B751 Three Function****B: B751 Four Function****C: B752 Three Function****D: B752 Four Function**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1529016	Fitting .....	2	4	2	4
2	816591	Fitting .....	2	4	2	4
3	1692933	Bracket (RH and LH Bolt On) .....	1	1	1	1
3	<b>a</b> 1692931	Bracket (Bolt-On) (RH) .....	1	1	1	1
4	1527883	Capscrew .....	2	4	2	4
5	816593	Locknut .....	2	4	2	4
6	2093669	Tube Assy .....	1	1	..	..
6	2093657	Tube Assy .....	..	..	1	1
6	<b>a</b> 2093665	Tube Assy .....	..	..	1	1
7	2093670	Tube Assy .....	1	1	..	..
7	2093658	Tube Assy .....	..	..	1	1
7	<b>a</b> 2093666	Tube Assy .....	..	..	1	1
8	2093672	Tube Assy .....	..	1	..	..
8	<b>b</b> 2093678	Tube Assy .....	..	1	..	..
8	2093660	Tube Assy .....	..	..	..	1
8	<b>b</b> 2093664	Tube Assy .....	..	..	..	1
8	<b>a</b> 2093668	Tube Assy .....	..	..	..	1
9	2093671	Tube Assy .....	..	1	..	..
9	<b>b</b> 2093677	Tube Assy .....	..	1	..	..
9	2093659	Tube Assy .....	..	..	..	1
9	<b>b</b> 2093663	Tube Assy .....	..	..	..	1
9	<b>a</b> 2093667	Tube Assy .....	..	..	..	1
10	1692933	Bracket (RH and LH Bolt On) .....	..	1	..	1
10	<b>b</b> 1647864	Bracket (LH) .....	..	1	..	1
10	<b>a</b> 1692932	Bracket (Bolt-On) (LH) .....	..	1	..	1

**FOOTNOTES:****a** Used with Attachment Carriage**b** Used with Integral Side-Shift Carriage

## AUXILIARY TUBE EXTENSIONS (FIGURE 13-30) THREE STAGE FULL FREE-LIFT — WITHOUT QUICK DISCONNECT FITTINGS (8/2010 →)



BP000598



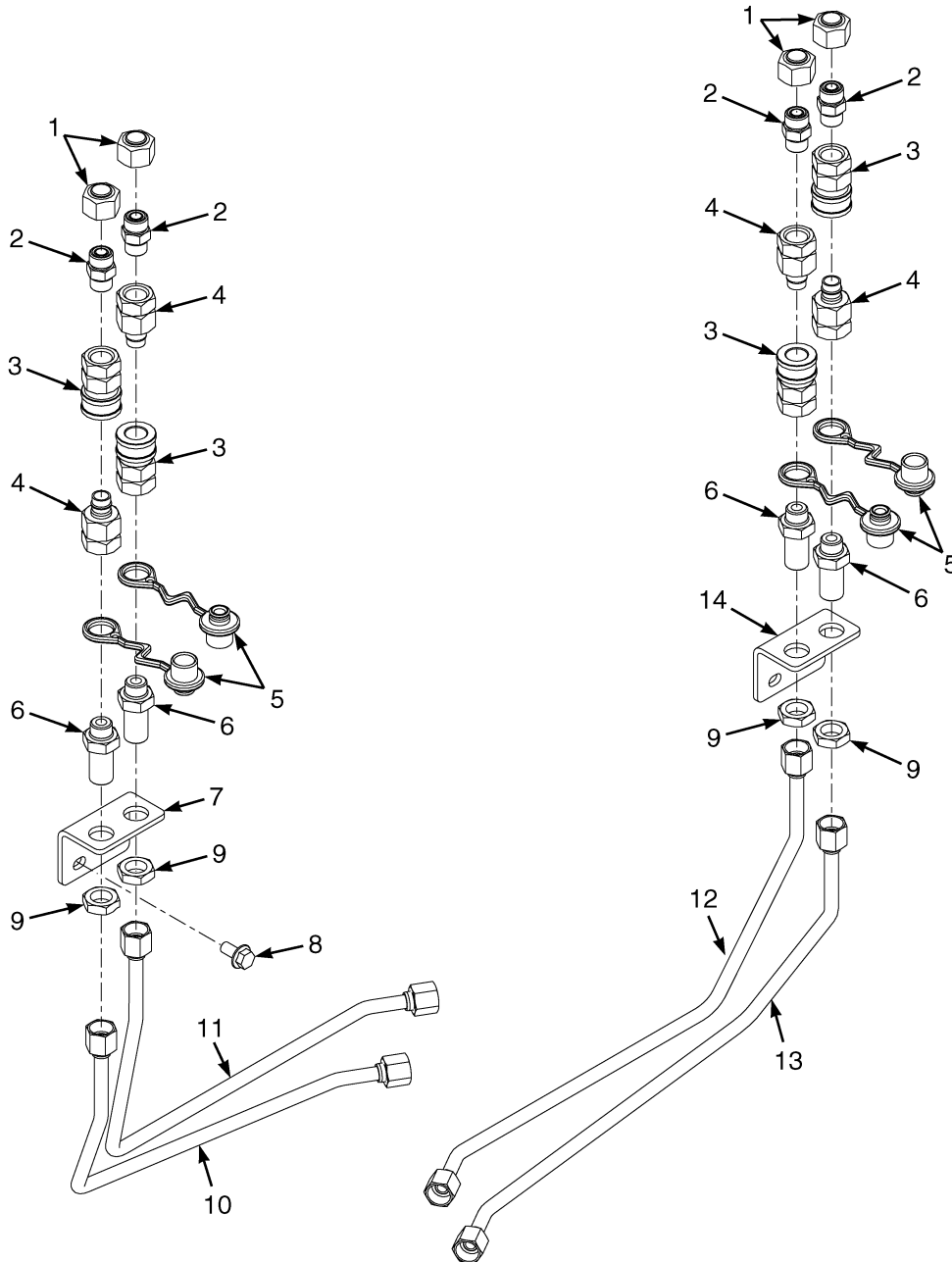
**AUXILIARY TUBE EXTENSIONS**  
**THREE STAGE FULL FREE-LIFT – WITHOUT QUICK DISCONNECT FITTINGS (8/2010 →)**

**KEY:****A: B751 Three Function****B: B751 Four Function****C: B752 Three Function****D: B752 Four Function**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1692933	Bracket (RH and LH Bolt On) .....	..	1	..	1
1	<b>b</b> 1647864	Bracket (LH) .....	..	1	..	1
1	<b>a</b> 1692932	Bracket (Bolt-On) (LH) .....	..	1	..	1
2	816591	Fitting .....	2	4	2	4
3	1692933	Bracket (RH and LH Bolt On) .....	1	1	1	1
3	<b>a</b> 1692931	Bracket (Bolt-On) (RH) .....	1	1	1	1
4	1527883	Capscrew .....	2	4	2	4
5	2093671	Tube Assy .....	..	1	..	..
5	<b>b</b> 2093677	Tube Assy .....	..	1	..	..
5	2093659	Tube Assy .....	..	..	..	1
5	<b>b</b> 2093663	Tube Assy .....	..	..	..	1
5	<b>a</b> 2093667	Tube Assy .....	..	..	..	1
6	2093669	Tube Assy .....	1	1	..	..
6	2093657	Tube Assy .....	..	..	1	1
6	<b>a</b> 2093665	Tube Assy .....	..	..	1	1
7	2093670	Tube Assy .....	1	1	..	..
7	2093658	Tube Assy .....	..	..	1	1
7	<b>a</b> 2093666	Tube Assy .....	..	..	1	1
8	2093672	Tube Assy .....	..	1	..	..
8	<b>b</b> 2093678	Tube Assy .....	..	1	..	..
8	2093660	Tube Assy .....	..	..	..	1
8	<b>b</b> 2093664	Tube Assy .....	..	..	..	1
8	<b>a</b> 2093668	Tube Assy .....	..	..	..	1

**FOOTNOTES:****a** Used with Attachment Carriage**b** Used with Integral Side-Shift Carriage

## AUXILIARY TUBE EXTENSIONS (FIGURE 13-31) THREE STAGE FULL FREE-LIFT — MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS (11/2009 ↔ 8/2010)



BP000519

**AUXILIARY TUBE EXTENSIONS**  
**THREE STAGE FULL FREE-LIFT – MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS**  
(11/2009 ↔ 8/2010)

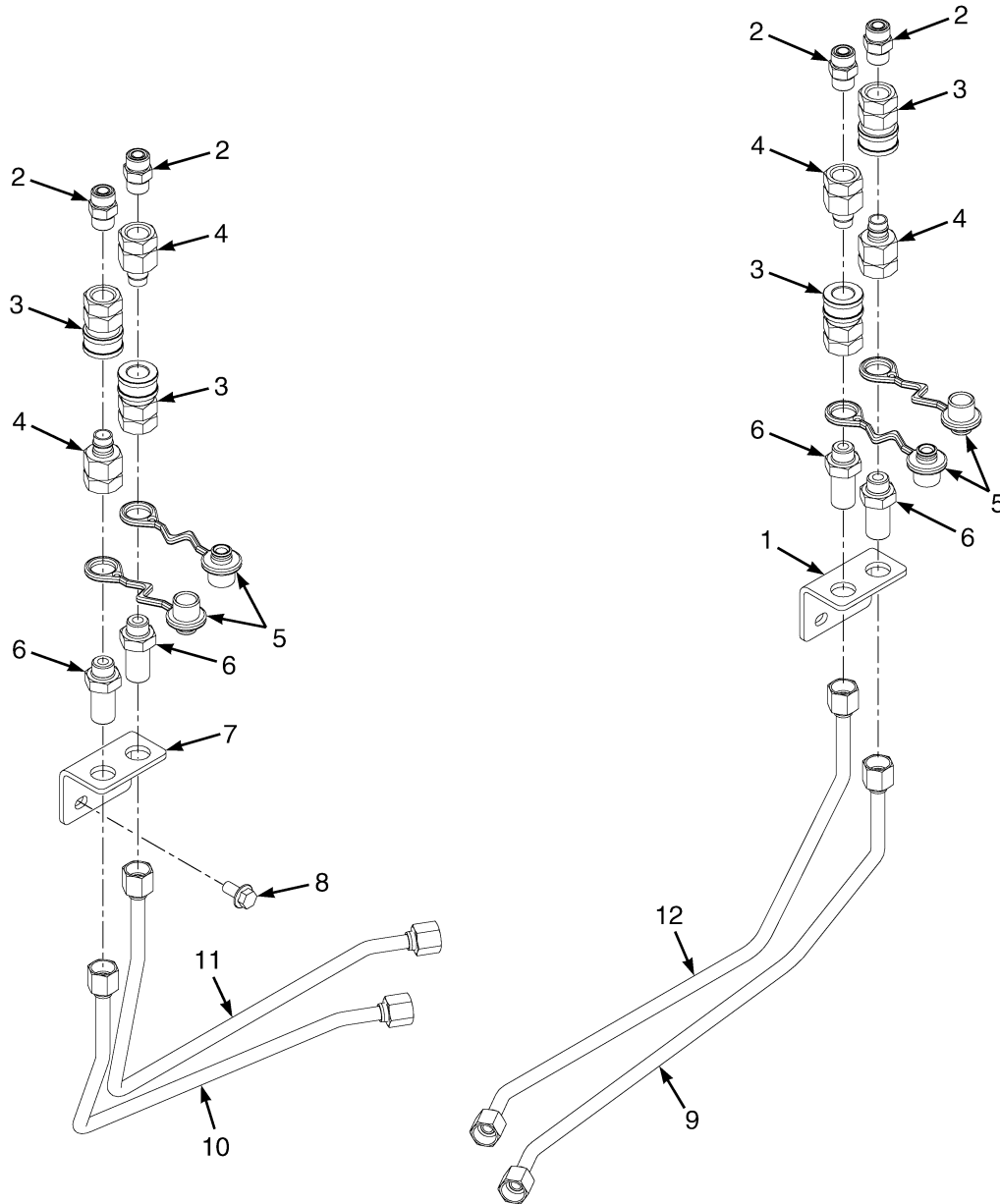
**KEY:**

- A: B751 Three Function**  
**B: B751 Four Function**  
**C: B752 Three Function**  
**D: B752 Four Function**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1529016	Fitting .....	2	4	2	4
2	1473887	Fitting .....	2	4	2	4
3	1377953	Quick Disconnect Fitting .....	2	4	2	4
4	1377954	Fitting (Quick Disconnect) .....	2	4	2	4
5	1708368	Dust Cover .....	2	4	2	4
6	1708365	Bulkhead (Fitting) .....	2	4	2	4
7	1692933	Bracket (RH and LH Bolt On) .....	..	1	..	1
7	<b>a</b> 1692932	Bracket (Bolt-On) (LH) .....	..	1	..	1
7	<b>b</b> 1647864	Bracket (LH) .....	..	1	..	1
8	1527883	Capscrew .....	2	4	2	4
9	816593	Locknut .....	2	4	2	4
10	2093671	Tube Assy .....	..	1	..	..
10	<b>b</b> 2093677	Tube Assy .....	..	1	..	..
10	2093659	Tube Assy .....	..	..	..	1
10	<b>b</b> 2093663	Tube Assy .....	..	..	..	1
10	<b>a</b> 2093667	Tube Assy .....	..	..	..	1
11	2093672	Tube Assy .....	..	1	..	..
11	<b>b</b> 2093678	Tube Assy .....	..	1	..	..
11	2093660	Tube Assy .....	..	..	..	1
11	<b>b</b> 2093664	Tube Assy .....	..	..	..	1
11	<b>a</b> 2093668	Tube Assy .....	..	..	..	1
12	2093670	Tube Assy .....	1	1	..	..
12	2093658	Tube Assy .....	..	..	1	1
12	<b>a</b> 2093666	Tube Assy .....	..	..	1	1
13	2093669	Tube Assy .....	1	1	..	..
13	2093657	Tube Assy .....	..	..	1	1
13	<b>a</b> 2093665	Tube Assy .....	..	..	1	1
14	1692933	Bracket (RH and LH Bolt On) .....	1	1	1	1
14	<b>a</b> 1692931	Bracket (Bolt-On) .....	..	..	1	1

**FOOTNOTES:****a** Used with Attachment Carriage**b** Used with Integral Side-Shift Carriage

## AUXILIARY TUBE EXTENSIONS (FIGURE 13-32) THREE STAGE FULL FREE-LIFT — MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS (8/2010 →)



BP000599

**AUXILIARY TUBE EXTENSIONS**  
**THREE STAGE FULL FREE-LIFT – MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS**  
**(8/2010 →)**

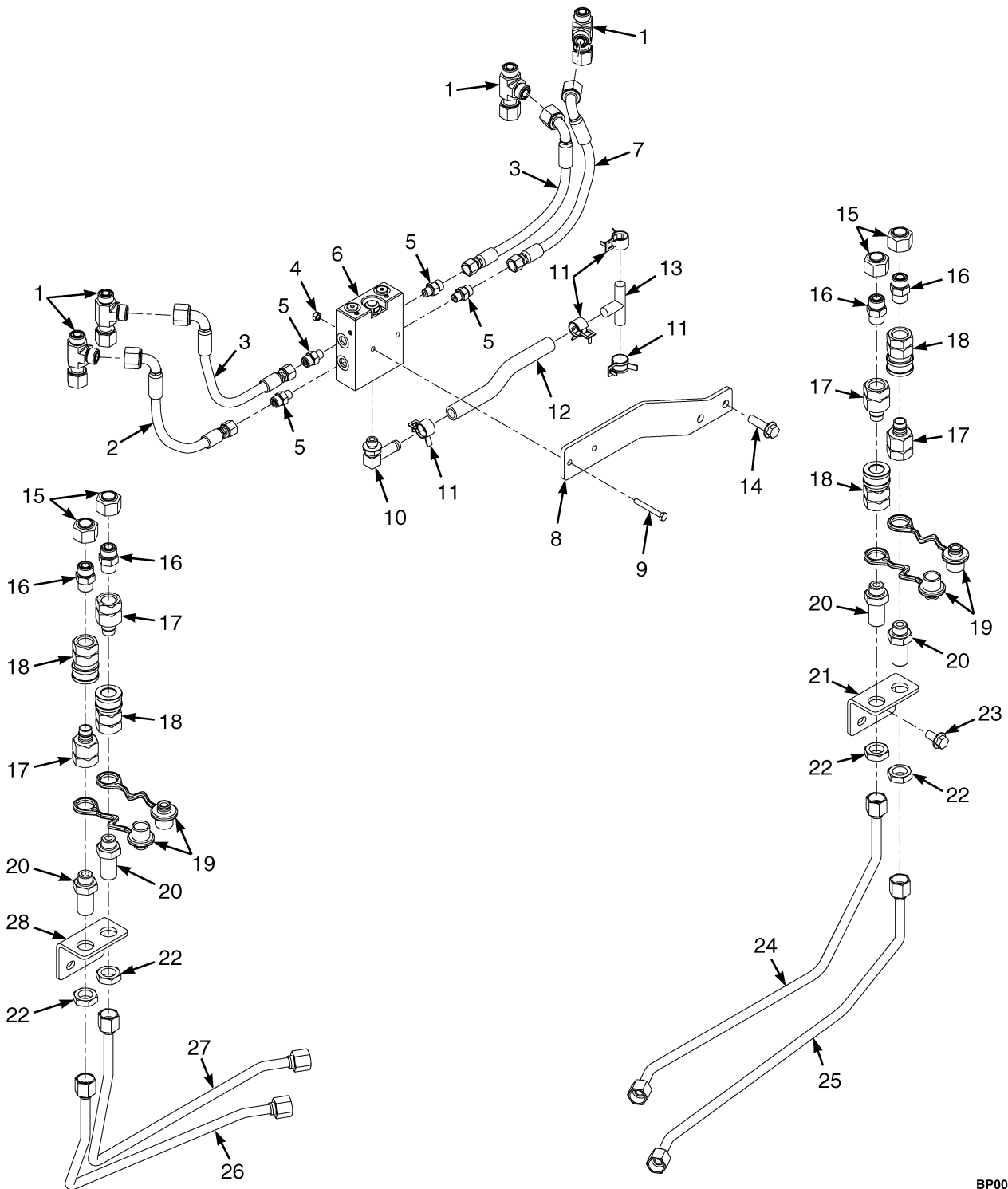
**KEY:**

- A: B751 Three Function**  
**B: B751 Four Function**  
**C: B752 Three Function**  
**D: B752 Four Function**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1692933	Bracket (RH and LH Bolt On) .....	1	1	1	1
1	<b>a</b> 1692931	Bracket (Bolt-On) .....	..	..	1	1
2	1473887	Fitting .....	2	4	2	4
3	1377953	Quick Disconnect Fitting .....	2	4	2	4
4	1377954	Fitting (Quick Disconnect) .....	2	4	2	4
5	1708368	Dust Cover .....	2	4	2	4
6	1708365	Bulkhead (Fitting) .....	2	4	2	4
7	1692933	Bracket (RH and LH Bolt On) .....	..	1	..	1
7	<b>a</b> 1692932	Bracket (Bolt-On) (LH) .....	..	1	..	1
7	<b>b</b> 1647864	Bracket (LH) .....	..	1	..	1
8	1527883	Capscrew .....	2	4	2	4
9	2093669	Tube Assy .....	1	1	..	..
9	2093657	Tube Assy .....	..	..	1	1
9	<b>a</b> 2093665	Tube Assy .....	..	..	1	1
10	2093671	Tube Assy .....	..	1	..	..
10	<b>b</b> 2093677	Tube Assy .....	..	1	..	..
10	2093659	Tube Assy .....	..	..	..	1
10	<b>b</b> 2093663	Tube Assy .....	..	..	..	1
10	<b>a</b> 2093667	Tube Assy .....	..	..	..	1
11	2093672	Tube Assy .....	..	1	..	..
11	<b>b</b> 2093678	Tube Assy .....	..	1	..	..
11	2093660	Tube Assy .....	..	..	..	1
11	<b>b</b> 2093664	Tube Assy .....	..	..	..	1
11	<b>a</b> 2093668	Tube Assy .....	..	..	..	1
12	2093670	Tube Assy .....	1	1	..	..
12	2093658	Tube Assy .....	..	..	1	1
12	<b>a</b> 2093666	Tube Assy .....	..	..	1	1

**FOOTNOTES:****a** Used with Attachment Carriage**b** Used with Integral Side-Shift Carriage

## AUXILIARY TUBE EXTENSIONS (FIGURE 13-33) THREE STAGE FULL FREE-LIFT — E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (11/2009 ↔ 8/2010)



BP000520

**AUXILIARY TUBE EXTENSIONS**  
**THREE STAGE FULL FREE-LIFT – E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS**  
(11/2009 ↔ 8/2010)

**KEY:****A: B751 Three Function****B: B751 Four Function****C: B752 Three Function****D: B752 Four Function**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1487095	Fitting .....	2	4	2	4
2	4604570	Hose Assy .....	..	1	..	1
2	<b>b</b> 4604566	Hose Assy .....	..	1	..	1
3	4604569	Hose Assy .....	1	1	1	1
4	1512440					
	302399	Nut .....	2	2	2	2
5	1486737	Fitting .....	2	4	2	4
6	2111754	Valve (Single Aux) .....	1	..	1	..
6	2111755	Valve (Dual Aux) .....	..	1	..	1
7	4604566	Hose Assy .....	1	..	1	..
8	1708373	Bracket .....	1	1	1	1
9	292505	Capscrew .....	2	2	2	2
10	110178	Fitting .....	1	1	1	1
10	16483	O-Ring .....	1	1	1	1
11	1527979	Hose Clamp .....	4	4	4	4
12	1614069	Hose .....	1	1	1	1
13	2046871	Fitting .....	1	1	1	1
14	1527885	Capscrew .....	2	2	2	2
15	1529016	Fitting .....	2	4	2	4
16	1473887	Fitting .....	2	4	2	4
17	1377954	Fitting (Quick Disconnect) .....	2	4	2	4
18	1377953	Quick Disconnect Fitting .....	2	4	2	4
19	1708368	Dust Cover .....	2	4	2	4
20	1708365	Bulkhead (Fitting) .....	2	4	2	4
21	1692933	Bracket (RH and LH Bolt On) .....	1	1	1	1
21	1692931	Bracket (Bolt-On) (RH) .....	1	1	1	1
22	816593	Locknut .....	2	4	2	4
23	1527883	Capscrew .....	2	4	2	4
24	2093670	Tube Assy .....	1	1	..	..
24	2093658	Tube Assy .....	..	..	1	1
24	<b>a</b> 2093666	Tube Assy .....	..	..	1	1
25	2093669	Tube Assy .....	1	1	..	..
25	2093657	Tube Assy .....	..	..	1	1
25	<b>a</b> 2093665	Tube Assy .....	..	..	1	1
26	2093671	Tube Assy .....	..	1	..	..
26	<b>b</b> 2093677	Tube Assy .....	..	1	..	..
26	2093659	Tube Assy .....	..	..	..	1
26	<b>b</b> 2093663	Tube Assy .....	..	..	..	1
26	<b>a</b> 2093667	Tube Assy .....	..	..	..	1
27	2093672	Tube Assy .....	..	1	..	..
27	<b>b</b> 2093678	Tube Assy .....	..	1	..	..
27	2093660	Tube Assy .....	..	..	..	1

**AUXILIARY TUBE EXTENSIONS**  
**THREE STAGE FULL FREE-LIFT – E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS**  
**(11/2009 ↔ 8/2010)**

**KEY:**

- A: B751 Three Function**
- B: B751 Four Function**
- C: B752 Three Function**
- D: B752 Four Function**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
27	<b>b</b> 2093664	Tube Assy .....	..	..	..	1
27	<b>a</b> 2093668	Tube Assy .....	..	..	..	1
28	1692933	Bracket (RH and LH Bolt On) .....	..	1	..	1
28	<b>a</b> 1692932	Bracket (Bolt-On) (LH) .....	..	1	..	1
28	<b>b</b> 1647864	Bracket (LH) .....	..	1	..	1

**FOOTNOTES:**

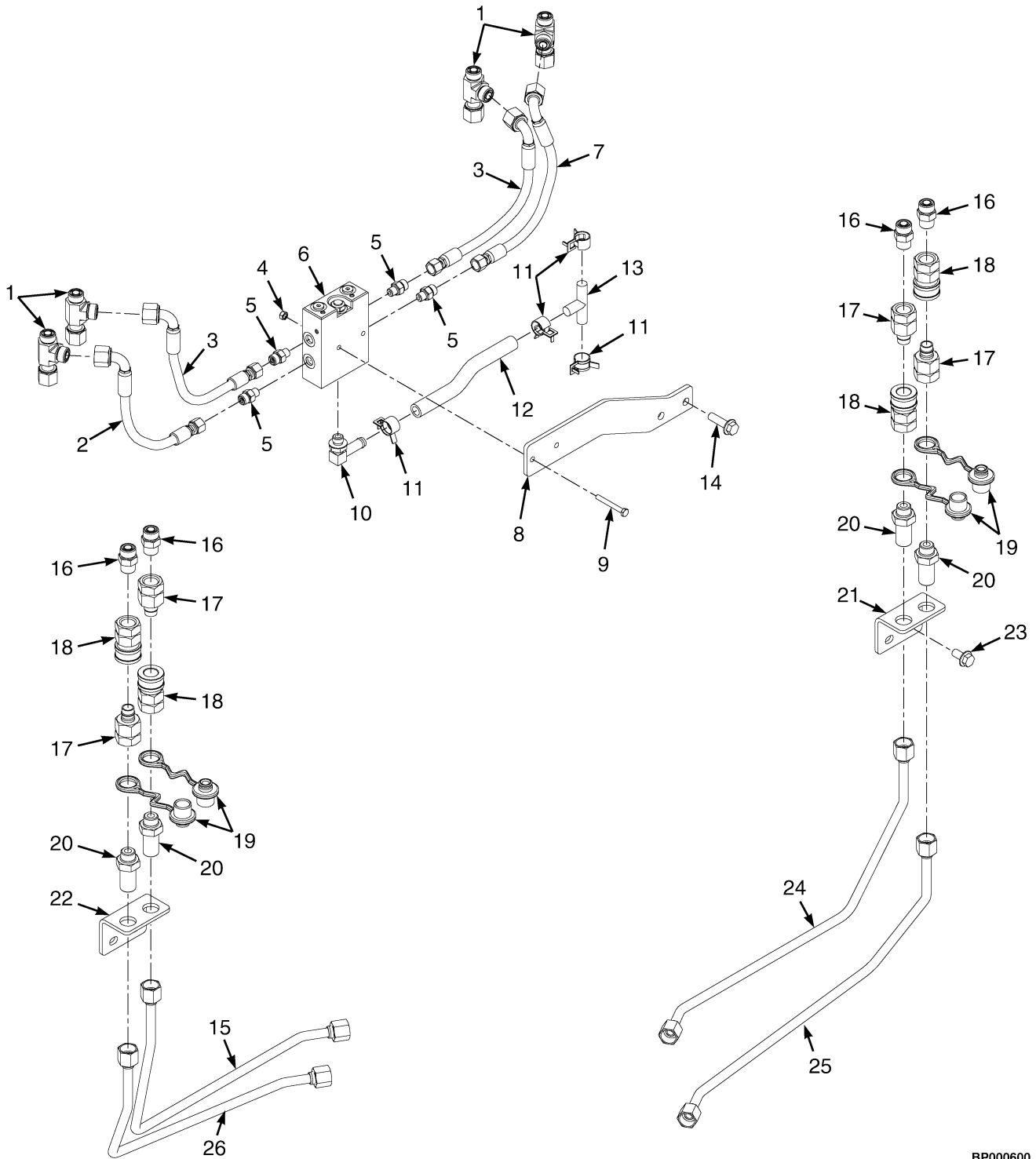
**a** Used with Attachment Carriage

**b** Used with Integral Side-Shift Carriage





## AUXILIARY TUBE EXTENSIONS (FIGURE 13-34) THREE STAGE FULL FREE-LIFT — E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (8/2010 →)



BP000600

**AUXILIARY TUBE EXTENSIONS****THREE STAGE FULL FREE-LIFT – E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (8/2010 →)****KEY:****A: B751 Three Function****B: B751 Four Function****C: B752 Three Function****D: B752 Four Function**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1487095	Fitting .....	2	4	2	4
2	4604570	Hose Assy .....	..	1	..	1
2	<b>b</b> 4604566	Hose Assy .....	..	1	..	1
3	4604569	Hose Assy .....	1	1	1	1
3	<b>b</b> 4604569	Hose Assy .....	..	1	..	1
4	1512440					
	302399	Nut .....	2	2	2	2
5	1486737	Fitting .....	2	4	2	4
6	2111754	Valve (Single Aux) .....	1	..	1	..
6	2111755	Valve (Dual Aux) .....	..	1	..	1
7	4604566	Hose Assy .....	1	..	1	..
8	1708373	Bracket .....	1	1	1	1
9	292505	Capscrew .....	2	2	2	2
10	110178	Fitting .....	1	1	1	1
10	16483	O-Ring .....	1	1	1	1
11	1527979	Hose Clamp .....	4	4	4	4
12	1614069	Hose .....	1	1	1	1
13	2046871	Fitting .....	1	1	1	1
14	1527885	Capscrew .....	2	2	2	2
15	<b>a</b> 2093668	Tube Assy .....	..	..	..	1
15	<b>b</b> 2093664	Tube Assy .....	..	..	..	1
15	2093660	Tube Assy .....	..	..	..	1
15	<b>b</b> 2093678	Tube Assy .....	..	1	..	..
15	2093672	Tube Assy .....	..	1	..	..
16	1473887	Fitting .....	2	4	2	4
17	1377954	Fitting (Quick Disconnect) .....	2	4	2	4
18	1377953	Quick Disconnect Fitting .....	2	4	2	4
19	1708368	Dust Cover .....	2	4	2	4
20	1708365	Bulkhead (Fitting) .....	2	4	2	4
21	1692933	Bracket (RH and LH Bolt On) .....	1	1	1	1
21	1692931	Bracket (Bolt-On) (RH) .....	1	1	1	1
22	1692933	Bracket (RH and LH Bolt On) .....	..	1	..	1
22	<b>a</b> 1692932	Bracket (Bolt-On) (LH) .....	..	1	..	1
22	<b>b</b> 1647864	Bracket (LH) .....	..	1	..	1
23	1527883	Capscrew .....	2	4	2	4
24	2093670	Tube Assy .....	1	1	..	..
24	2093658	Tube Assy .....	..	..	1	1
24	<b>a</b> 2093666	Tube Assy .....	..	..	1	1
25	2093669	Tube Assy .....	1	1	..	..
25	2093657	Tube Assy .....	..	..	1	1
25	<b>a</b> 2093665	Tube Assy .....	..	..	1	1
26	2093671	Tube Assy .....	..	1	..	..
26	<b>b</b> 2093677	Tube Assy .....	..	1	..	..

## AUXILIARY TUBE EXTENSIONS

THREE STAGE FULL FREE-LIFT – E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (8/2010 →)

**KEY:**

- A: B751 Three Function
- B: B751 Four Function
- C: B752 Three Function
- D: B752 Four Function

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
26	2093659	Tube Assy .....	..	..	..	1
26	<b>b</b> 2093663	Tube Assy .....	..	..	..	1
26	<b>a</b> 2093667	Tube Assy .....	..	..	..	1

**FOOTNOTES:**

**a** Used with Attachment Carriage

**b** Used with Integral Side-Shift Carriage





**SECTION 14  
NUMERICAL INDEX**

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1363886	4-86	50		8-20	42		12-16	11		2-61	11
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	4-67	17		4-67	13		4-96	24		4-141	4
	4-68	32		4-68	36		4-96	25		4-141	6
	4-68	35		4-115	18		4-96	26	1484558	4-125	8
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	8-5	18	1489643	2-55	10		4-103	30	1493336	1-34	4
	9-9	22	1489655	3-55	5		4-103	42	1493428	4-86	52
	13-41	5		4-61	5		4-104	52		4-89	9
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	13-61	4		4-86	51		4-109	5		4-101	9
	13-75	5		4-89	8		4-111	5	1493435	4-117	6
	13-79	5		4-96	28		4-117	8		4-117	7
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	8-5	17	1489656	4-61	8		4-119	10		4-121	8
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1487061	8-3	3		4-133	10		4-138	23		4-107	9
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1487096	10-12	26		4-142	30		4-123	10		4-71	10
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	11-31	2		4-101	9		9-73	13		4-95	6
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	12-39	2		4-123	1	1502079	3-3	8		4-115	2
1500784	1-108	4		4-125	1		3-5	12		4-133	3
1500786	1-109	4	1500925	4-130	23		3-7	8		4-137	8
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1500899	4-71	2		4-138	25		2-17	9		4-145	3
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	4-141	20	1501919	4-115	18		9-5	11		4-111	8
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1522425	8-3	15	1525569	4-86	53		4-23	26		9-19	2
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	1-109	3		4-101	4		8-14	44		9-25	2
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1523737	1-108	5		4-89	3		8-23	28		1-55	20
1523739	1-108			4-96	24		8-28	54		2-17	7
1523741	1-109	5		4-101	3		8-31	34		3-37	20
1523742	1-109			4-130	22	1527877	2-31	2		4-11	4
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1528315	4-37	2		4-102	14		4-101	4		4-97	38
1528339	9-23	5		4-104	47		4-101	5		4-102	22
1528481	9-6	34		4-129	1		4-101	6	1531557	1-11	19
1528482	2-31	28		4-129	17	1530135	1-6	50		1-15	13
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1528630	4-37	5		4-138	24		2-11	5		3-8	5
1528631	4-37	6		4-141	1		3-3	12		3-9	6
1528778	1-11	7		4-142	24		3-5	16		4-43	17
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1528903	3-31	22		4-5	11	1530311	3-53	5		4-91	41
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1528938	2-19	4		4-11	18		4-109	11		4-96	30
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1531974	4-85	36	1534660	1-67	7	1539584	4-41	20		4-91	42
	4-91	41	1534672	3-31	20	1539872	4-72	20		4-95	3
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1531975	4-5	3		4-97	33	1540643	1-5	5	1542144	6-5	25
1532571	4-129	4		4-129	9		3-19	2	1542146	6-3	5
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1532585	2-19	11	1534871	8-7	26	1540852	7-13	44	1542161	6-5	16
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1544733	4-115	17	1548517	4-57	3	1550384	10-12	24		4-96	19
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1623591	6-19	5		5-35	12	1627126	8-35	6	1627826	6-23	8
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1623635	6-15	32	1624853	9-13	3	1627164	8-35	8	1627837	6-23	7
1623636	6-15	31		9-15	3	1627167	8-35	3	1627925	6-19	8
1623637	6-15	33	1624856	9-13	9	1627168	8-35	2	1627927	6-19	8
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1623639	6-15	29		9-15	6	1627183	2-57	2	1628118	2-31	5
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1623654	6-15	3	1624864	9-13	1	1627200	1-67		1629159	9-55	6
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1623669	6-23	23	1624866	9-13	10	1627354	2-59	23	1629162	9-55	10
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	2-67	31	1688571	8-35	1	1691597	2-91	1	1691676	3-45	17
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	2-67	29	1688803	3-17		1691601	2-102	1	1691678	2-75	8
1683747	2-63	35	1689026	2-55	8	1691602	2-102	2	1691679	2-82	2
	2-67	35	1689294	3-7	1	1691603	2-102	3	1691806	2-81	7
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	2-61	3		4-45		1691605	2-102	5	1691807	2-75	9
1684085	2-59	12		4-45		1691606	2-102	6		3-46	2
1684098	2-59	12		4-45		1691607	2-102	8	1691808	3-46	3
1684099	2-59	12		4-47		1691608	3-41	16	1691809	3-46	4
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1684429	6-13	12		4-47		1691615	2-107	2	1691812	3-46	7
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1686719	4-7	9		4-45		1691626	2-107	5	1691817	3-50	1
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	9-61	12		1-79	4	1691641	4-33	6		2-116	2
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1687742	2-11	1	1691438	4-27	11	1691647	2-85	14	1691833	2-109	6
1687743	2-11	1	1691441	4-27	11	1691649	3-42	2	1691834	2-109	7
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1688190	6-31	1		5-17	10	1691654	3-49	2	1691839	2-113	1
1688244	1-5	6		5-19	10	1691655	3-49	4	1691840	2-85	1
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1691855	2-109	12	1691914	3-41	18	1692054	2-85	11		13-57	20
1691856	2-109	10	1691982	3-41	9	1692056	2-85	13		13-57	30
1691857	2-109	11	1691983	3-41	10	1692057	2-85	7		13-63	10
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1691868	4-31	12	1691996	2-86	4		13-39	12		13-76	28
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1691874	3-41	7	1692005	2-86	12		13-71	14	1694039	2-75	4
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1691880	4-31	16	1692009	2-115	1	1692932	13-33	11		2-35	
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1691887	2-100	3	1692026	2-99	7		13-55	7		2-73	
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1691892	2-79	3	1692029	2-99	12		13-67	10	1694830	1-81	18
1691893	2-79	4	1692030	2-99	13		13-69	1		1-88	26
1691894	2-100	5	1692031	2-99	14		13-71	7	1695078	9-13	8
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1696452	2-17	11	1703890	1-91	8	1708317	9-41	4		8-23	10
1696967	2-82	3		1-97	8		9-44	4		8-27	15
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1698684	3-13	15	1703894	1-87	5		13-53	6	2027655	1-6	56
1699135	2-9	3	1703895	1-88			13-55	6	2028341	6-3	11
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1701771	8-17	25	1704901	8-17	29		13-61	10	2035667	10-25	
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1701963	1-31	5		8-23	23	1708540	2-15	21	2035672	10-25	
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2085877	1-73	5	2089136	6-5	1		8-31	35		13-41	26
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2107158	7-19	1		4-51	5	4003082	1-51	6		1-88	18
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