

# **PARTS MANUAL**

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**H40-50-55-60-70FT  
(B977)**

**CUSTOMER EDITION**

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***HYSTER***



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This Parts Manual is divided into 18 major sections which are listed above. Quick reference to these sections can be made by placing the right thumb on the tab of the desired section, bending the book back and thumbing the pages to the corresponding tab.



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This Parts Manual is divided into 18 major sections which are listed above. Quick reference to these sections can be made by placing the right thumb on the tab of the desired section, bending the book back and thumbing the pages to the corresponding tab.



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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 USE THE ILLUSTRATED PARTS MANUAL

This parts manual describes and illustrates assemblies, subassemblies, and detail parts needed for service replacement.

The different constructions are indicated by keys and footnotes. The callouts correspond to descriptions found on the next page.

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- 8 MAST-THREE ST
- 9 MAST-TWO ST
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**TRANSMISSION HOUSING** ⇒ S/N D001H-2628

KEY:  
A: Diesel  
B: Gasoline and LPG

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	202547	Transmission	1	1
2	2023329	Transmission	1	1
3	2021670	Case	2	2
4	2023418	Bearing Cap	4	4
5	296429	Washer	4	4
6	293947	Bolt	1	1
7	2021390	Cover	2	2
8	1371656	Colter Pin	4	4
9	2021915	O-Ring	1	1
10	2021329	Plug	4	4
11	2021675	Housing	22	22
12	2021336	Pin	39	39
13	287860	Lockwasher	1	1
14	292682	Hydraulic Pump	1	1
15	2021345	⇒ Figure 5-3	1	1
16	214364	Gasket	8	8
17	296418	Bolt	1	1
18	2021388	Washer	1	1
19	2021389	Temperature Switch	1	1
20	2021383	Breather	9	9
21	292515	Dipstick	9	9
22	136692	Bolt	2	2
23	292527	Nut	3	3
24	292531	Bolt	3	2
25	292583	Capscrew	4	4
26	293637	Lockwasher	4	4
	296420	Lockwasher	4	4
	296420	Bolt	1	1
	296420	Washer	1	1
	996403	Transmission Kit (Includes Item 7)	1	1
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This Parts Manual is divided into 11 major sections which are listed above. Quick be made by placing the right thumb on the tab of the desired section, bending the pages to the corresponding tab.

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HP990004

## 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 18-1) 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.

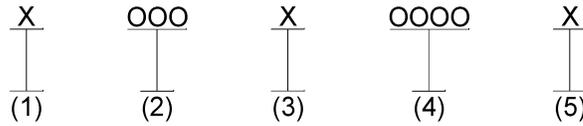
Contact your local dealer for Hyster lift trucks for serial number information for items with a ECN or a date break.

### ORDERING PARTS:

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

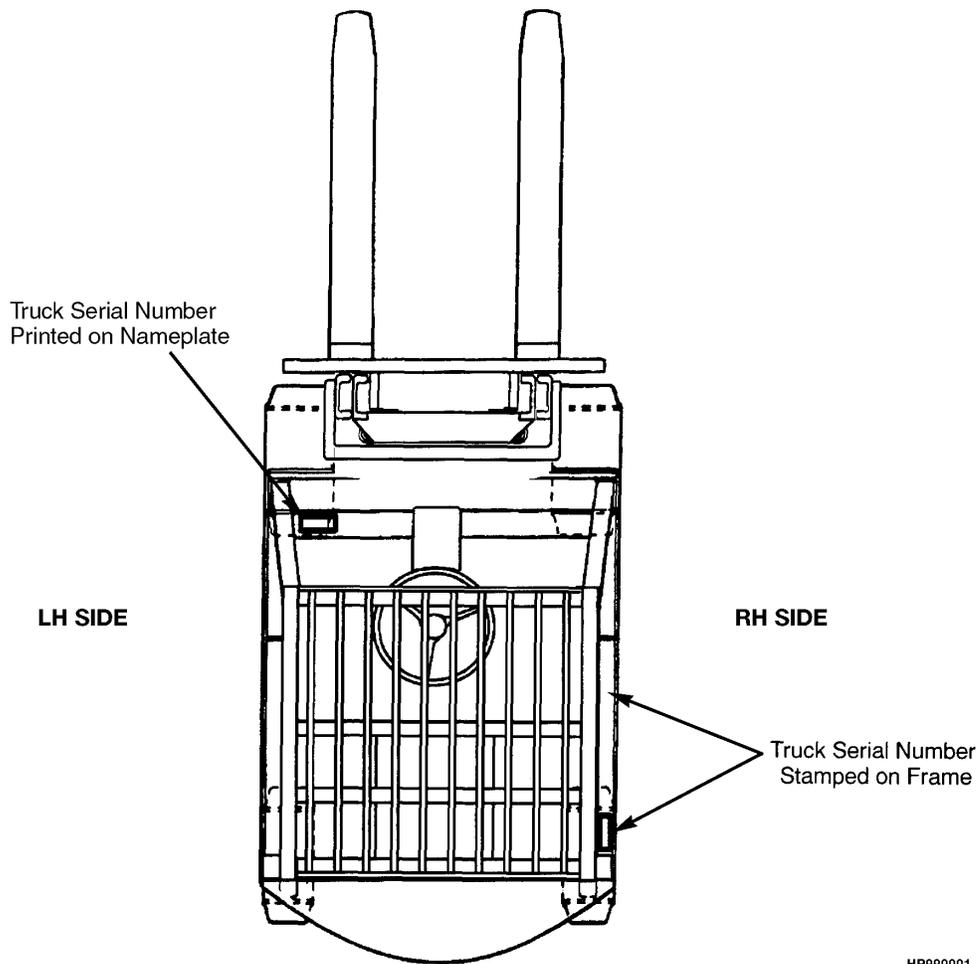
For any further information on parts, service, or ordering, consult your local dealer for Hyster lift trucks.

## 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.

**PUBLICATIONS**

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

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

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

PUBLICATION	HYSTER PART NUMBER
Operating Manual.....	4134057
Service Manual (Complete).....	4120716
Parts Manual.....	4134058



**1**

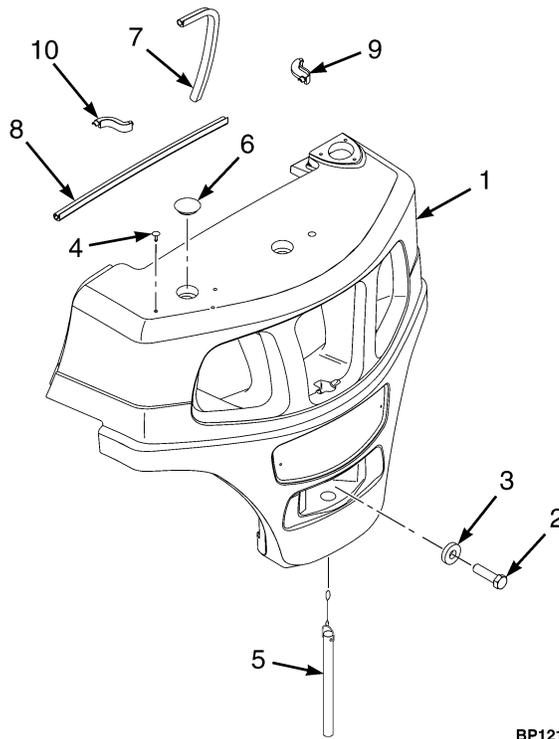
**FRAME**



**SECTION 1**  
**FRAME**

DESCRIPTION	PAGE
ARMREST ASSEMBLY	
MINI-LEVER MODULES - FULL SUSPENSION SEAT .....	1-18
COUNTERWEIGHT .....	1-2
COWL MOUNT .....	1-30
DASH PANEL AND STEERING COLUMN COVER .....	1-22
FENDER EXTENSIONS .....	1-28
FLOORPLATES AND COVERS .....	1-24
FORKS	
STANDARD .....	1-34
HOOD ASSEMBLY .....	1-20
LABELS	
EXTERIOR .....	1-36
HYDRAULIC CONTROL LABELS - MANUAL HYDRAULIC .....	1-40
INTERIOR .....	1-38
LOAD BACKREST EXTENSION .....	1-32
MINI LEVER MODULE LABELS	
HYDRAULIC CONTROL FUNCTIONS .....	1-42
OVERHEAD GUARD .....	1-4
RAIN TOP .....	1-44
SEAT	
NON SUSPENSION - WITH MANUAL HYDRAULIC CONTROLS .....	1-6
SEAT (FULL SUSPENSION ATTACHING PARTS)	
NOT INCLUDED WITH SEAT - SHEET 4 OF 4 WITH MANUAL HYDRAULICS .....	1-14
NOT INCLUDED WITH SEAT - SHEET 4 OF 4 WITH ELECTRO-HYDRAULICS .....	1-16
SEAT (FULL SUSPENSION)	
MANUAL AND ELECTRO-HYDRAULIC — SWIVEL AND NON SWIVEL - SHEET 1 OF 4 .....	1-8
RECLINER AND DAMPER KITS - SHEET 3 OF 4 .....	1-12
SERVICE KITS FOR NON SWIVEL AND SWIVEL - SHEET 2 OF 4 .....	1-10
STATIC STRAP INSTALLATION	
(OPTIONAL) .....	1-26

## COUNTERWEIGHT (FIGURE 1-1)



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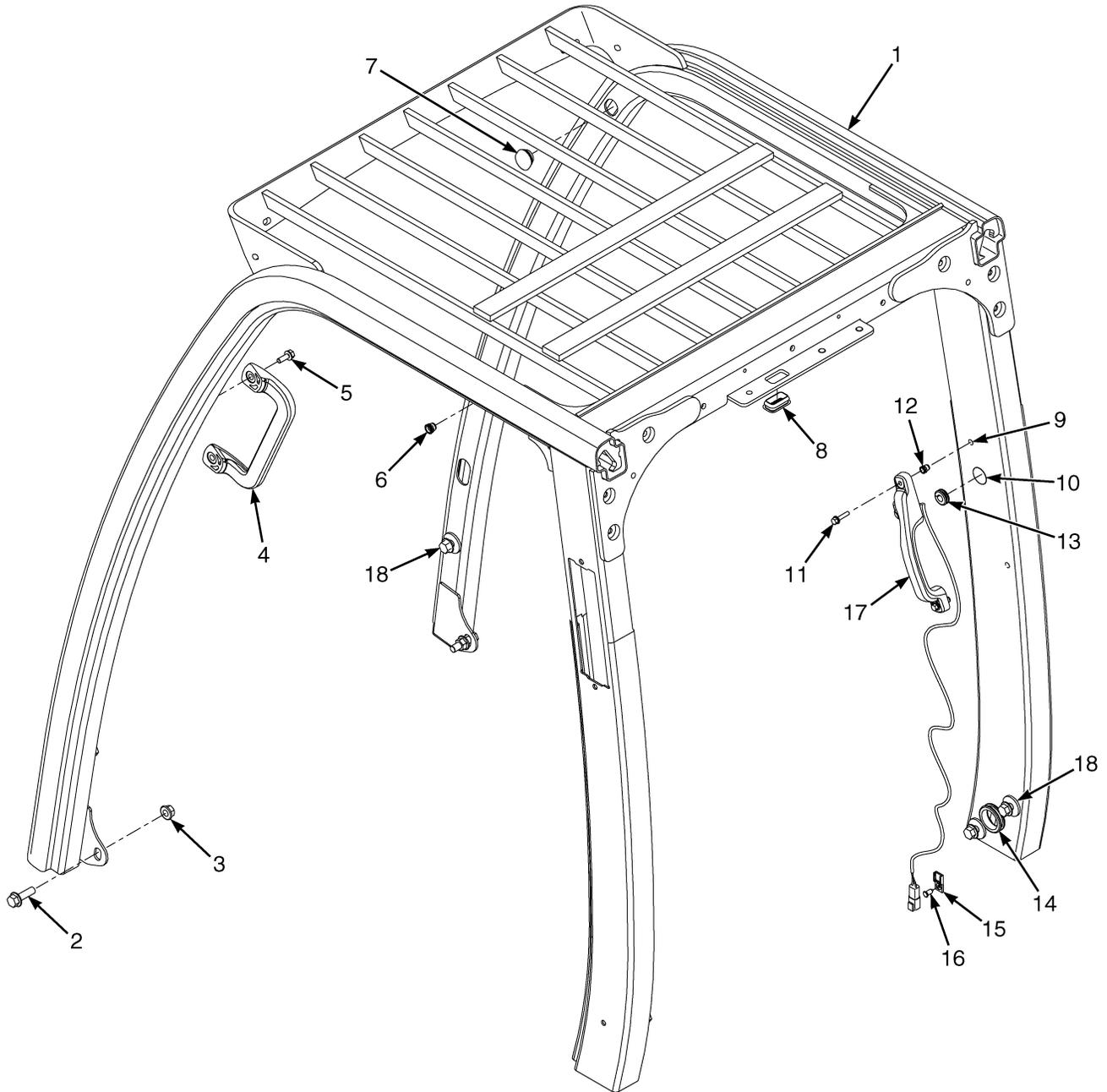
ITEM	PART NO.	DESCRIPTION	QTY
1	4133413	Counterweight (H40FT) .....	1
1	4133538	Counterweight (H50FT) .....	1
1	4133539	Counterweight (H55FT) .....	1
1	4133540	Counterweight (H60FT) .....	1
1	4133541	Counterweight (H70FT) .....	1
2	292607	Capscrew (H40FT) .....	1
2	292612	Capscrew (H50-70FT) .....	1
3	1375214	Washer .....	1
4	1347045	Fastener (Gasoline and Diesel) .....	6
5	<b>a</b> 1643947	Tow Pin .....	1
6	2021395	Cap .....	2
7	1590279	Seal (Counterweight) .....	2
8	1590280	Seal (Counterweight) .....	1
9	1590152	Seal (RH) .....	1
10	1590153	Seal (LH) .....	1

### FOOTNOTES:

**a** Optional



## OVERHEAD GUARD (FIGURE 1-2)

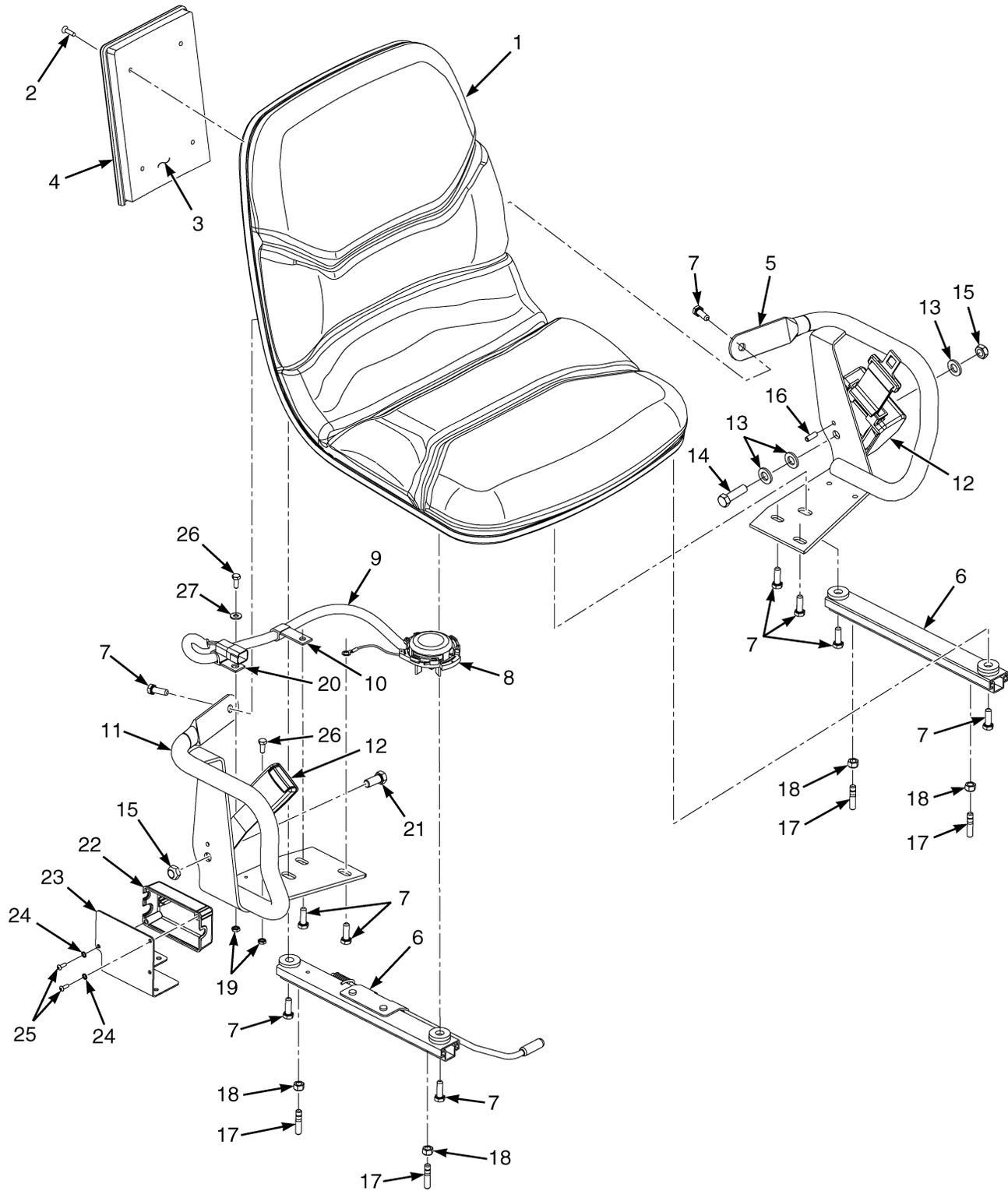


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**OVERHEAD GUARD**

ITEM	PART NO.	DESCRIPTION	QTY
1	4135415	Overhead Guard (Standard) .....	1
2	1527888	Capscrew .....	2
3	<del>1370949</del>		
	1528888	Nut (Shoulder) .....	2
4	1536813	Handle (Grab) .....	1
5	1583611	Capscrew .....	2
6	1531557	Insert .....	4
7	1558219	Grommet .....	2
8	1560671	Grommet .....	1
9	1494888	Plug (Yellow) .....	4
10	1599415	Plug (Yellow) .....	1
11	1586495	Capscrew .....	2
12	1531558	Insert .....	2
13	1598220	Grommet .....	1
14	362255	Grommet .....	1
15	1500912	Clip .....	1
16	1582464	Fastener .....	1
17	2070223	Handle (Assembly) .....	1
17	2069454	Handle .....	1
17	1566726	Push Button Switch .....	1
17	1493465	Connector (2 Pin) .....	1
17	1330414	Connector (Secondary Lock) .....	1
17	1330437	Terminal (Pin) .....	1
18	1527888	Capscrew .....	6
18	1566853	Capscrew (Optional) .....	6

## SEAT (FIGURE 1-3) NON SUSPENSION — WITH MANUAL HYDRAULIC CONTROLS



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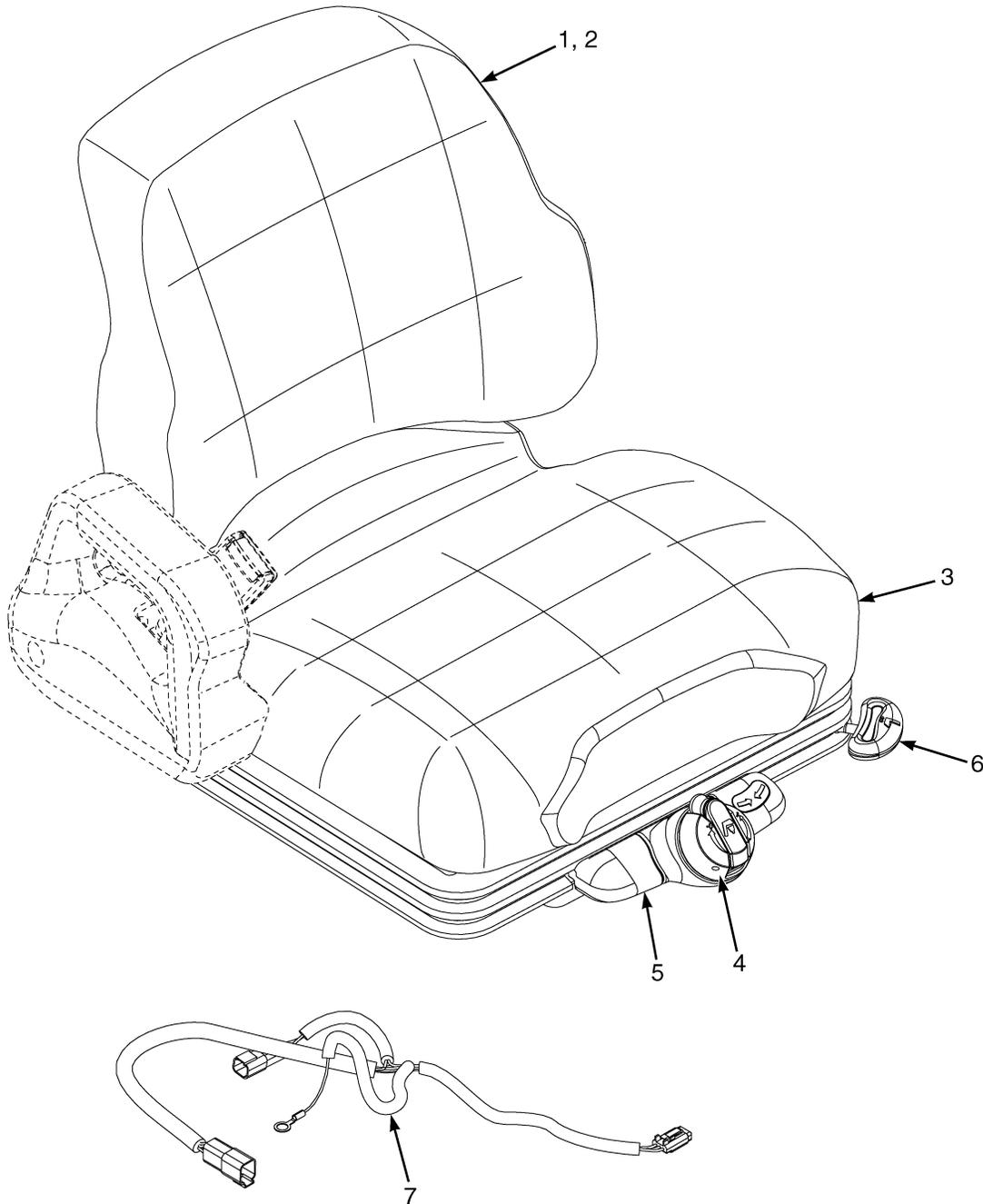
**SEAT**  
**NON SUSPENSION – WITH MANUAL HYDRAULIC CONTROLS**

ITEM	PART NO.	DESCRIPTION	QTY
	4615812		
	4636318	Seat-Non Suspension Assy (Vinyl) .....	1
1	4615813	Seat-Non Suspension (Base) .....	1
2	296463	Screw .....	4
3	4030278	Box , Operator Manual (Operator Manual Storage) .....	1
4	4030279	Cover (Manual Storage Box) .....	1
5	.....	Hip Restraint (LH) .....	1
6	<b>a</b> 4618438	Seat Rail Assembly (Includes Locking and Slave Seat Rails) (Assembly) .....	1
7	136749	Screw .....	10
8	4615811	Sensor Assy (Operator Presence) .....	1
9	4615969	Sensor (Operator Presence System) .....	1
10	1479453	Clamp .....	1
11	.....	Hip Restraint (RH) .....	1
12	1598504	Kit-Seat Belt (Black) .....	1
12	1636120	Kit-Red Seat Belt High Visibility without Interlock .....	1
12	4053079	Seat Belt (High Visibility with Interlock) .....	1
13	1581852	Washer .....	3
14	221536	Capscrew .....	1
15	221353	Locknut .....	2
16	19901	Roll Pin .....	1
17	1677286	Stud (Front M8x30) .....	2
17	4125619	Stud (Rear M8x20) .....	2
18	313828	Nut (M8 x 1.25) .....	4
19	1593334	Nut (M6 x 1) .....	2
20	272133	Clamp .....	1
21	221530	Capscrew .....	1
22	2107969	Cover (Seat-Side Electrical) .....	1
23	4007891	Cover Plate .....	1
24	296357	Washer .....	2
25	1694830	Capscrew (M4 x 0.7 x 12) .....	2
26	292500	Capscrew (M6 x 1 x 16) .....	2
27	15127	Washer .....	1

**FOOTNOTES:**

- a** Includes left and right hand sides

## SEAT (FULL SUSPENSION) (FIGURE 1-4) MANUAL AND ELECTRO-HYDRAULIC — SWIVEL AND NON SWIVEL — SHEET 1 OF 4



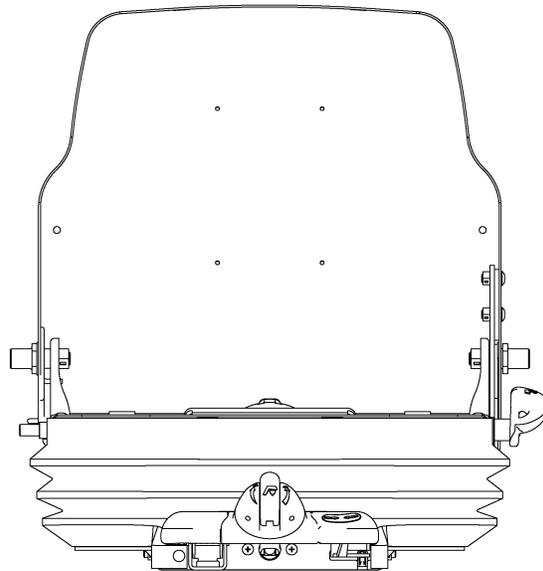
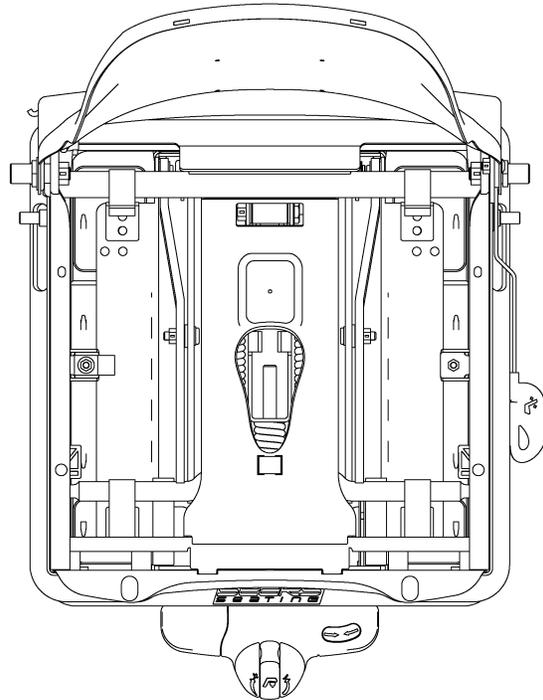
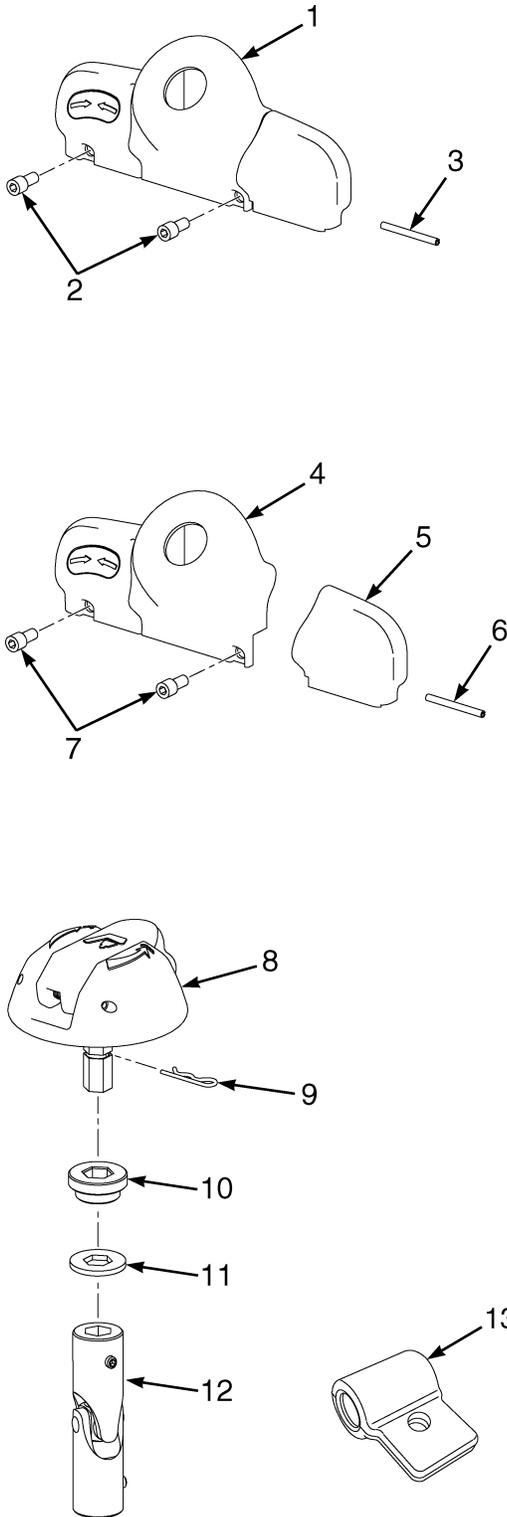
BP121050

**SEAT (FULL SUSPENSION)**  
**MANUAL AND ELECTRO-HYDRAULIC — SWIVEL AND NON SWIVEL – SHEET 1 OF 4**

ITEM	PART NO.	DESCRIPTION	QTY
	4603382	Seat-Full Suspension (Vinyl) (Non-Swivel) .....	1
	2101604		
	4603384	Seat-Full Suspension (Vinyl) (Swivel) .....	1
1	<b>a</b> 1703903	Kit-Cushion (Seat and Back, Vinyl) .....	1
2	<b>a</b> 1703901	Kit-Cushion (Back Cushion, Vinyl) .....	1
2	.....	Back Cushion .....	1
2	.....	Screw .....	2
3	<b>a</b> 1703902	Kit-Seat Cushion (Vinyl) .....	1
3	<b>a</b> 1703899	Kit-Seat Cushion (Cloth) .....	1
3	.....	Seat Cushion .....	1
3	.....	Spring .....	2
3	.....	Cotter Pin .....	2
4	<b>a</b> 1703892	Kit-Weight Adjuster (☞Figure 1-5).....	1
5	<b>a</b> 1703893	Kit-Service (Front Panel) (Non Swivel) (☞Figure 1-5).....	1
5	<b>a</b> 1703894	Kit-Service (Front Panel) (With Swivel) (☞Figure 1-5).....	1
6	<b>a</b> 1703904	Kit-Seat Rail (With Swivel) .....	1
6	<b>a</b> 4043082	Kit-Seat Rail (Non Swivel) .....	1
6	.....	Locking Rail .....	1
6	.....	Slave Rail .....	1
6	.....	Bolt .....	4
6	.....	Nut .....	4
7	<b>a</b> 4013095	Wire Harness .....	1
	<b>ab</b> 1470155	Information Case (Kit) .....	1
	<b>ab</b> 4027341	Bracket (Angle Controller) .....	1
	<b>ab</b> 1563208	Sensor (Operator Presence) .....	1

**FOOTNOTES:****a** Included with seat**b** Not Illustrated

## SEAT (FULL SUSPENSION) (FIGURE 1-5) SERVICE KITS FOR NON SWIVEL AND SWIVEL — SHEET 2 OF 4

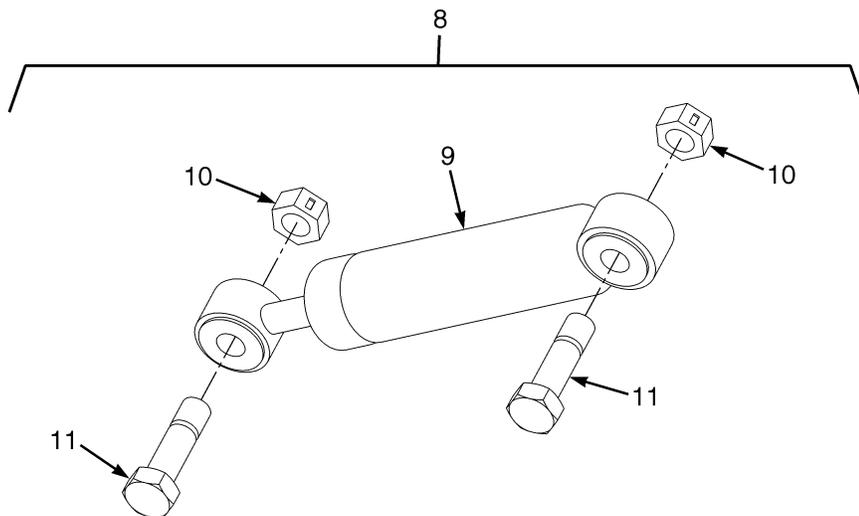
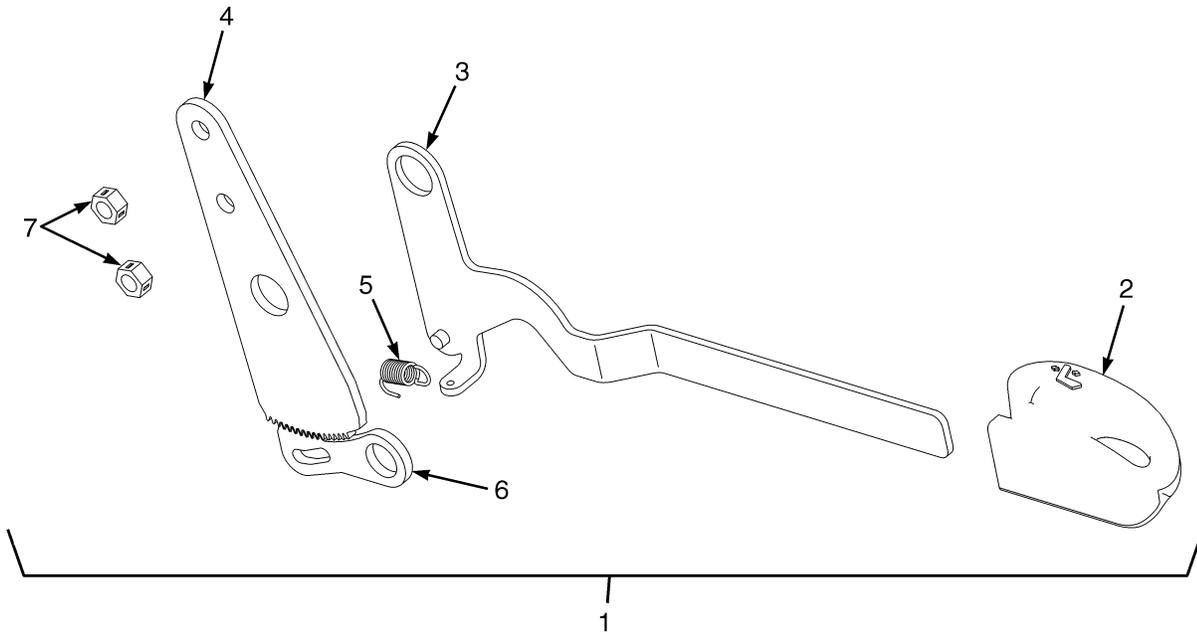


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**SEAT (FULL SUSPENSION)  
SERVICE KITS FOR NON SWIVEL AND SWIVEL – SHEET 2 OF 4**

ITEM	PART NO.	DESCRIPTION	QTY
	4036586	Kit -Seat Suspension without Swivel .....	1
	4036587	Kit -Seat Suspension with Swivel .....	1
1	1703893	Kit-Service (Front Panel) (Non Swivel) .....	1
1	.....	Front Panel .....	1
2	.....	Capscrew .....	2
3	.....	Roll Pin .....	1
4	1703894	Kit-Service (Front Panel) (With Swivel) .....	1
4	.....	Front Panel .....	1
5	.....	Swivel Knob .....	1
6	.....	Roll Pin .....	1
7	.....	Capscrew .....	2
8	1703892	Kit-Weight Adjuster .....	1
8	.....	Knob .....	1
9	.....	Cotter Pin .....	1
10	.....	Bushing .....	1
11	.....	Washer .....	1
12	4046492	Lever Spring Pull .....	2

## SEAT (FULL SUSPENSION) (FIGURE 1-6) RECLINER AND DAMPER KITS — SHEET 3 OF 4



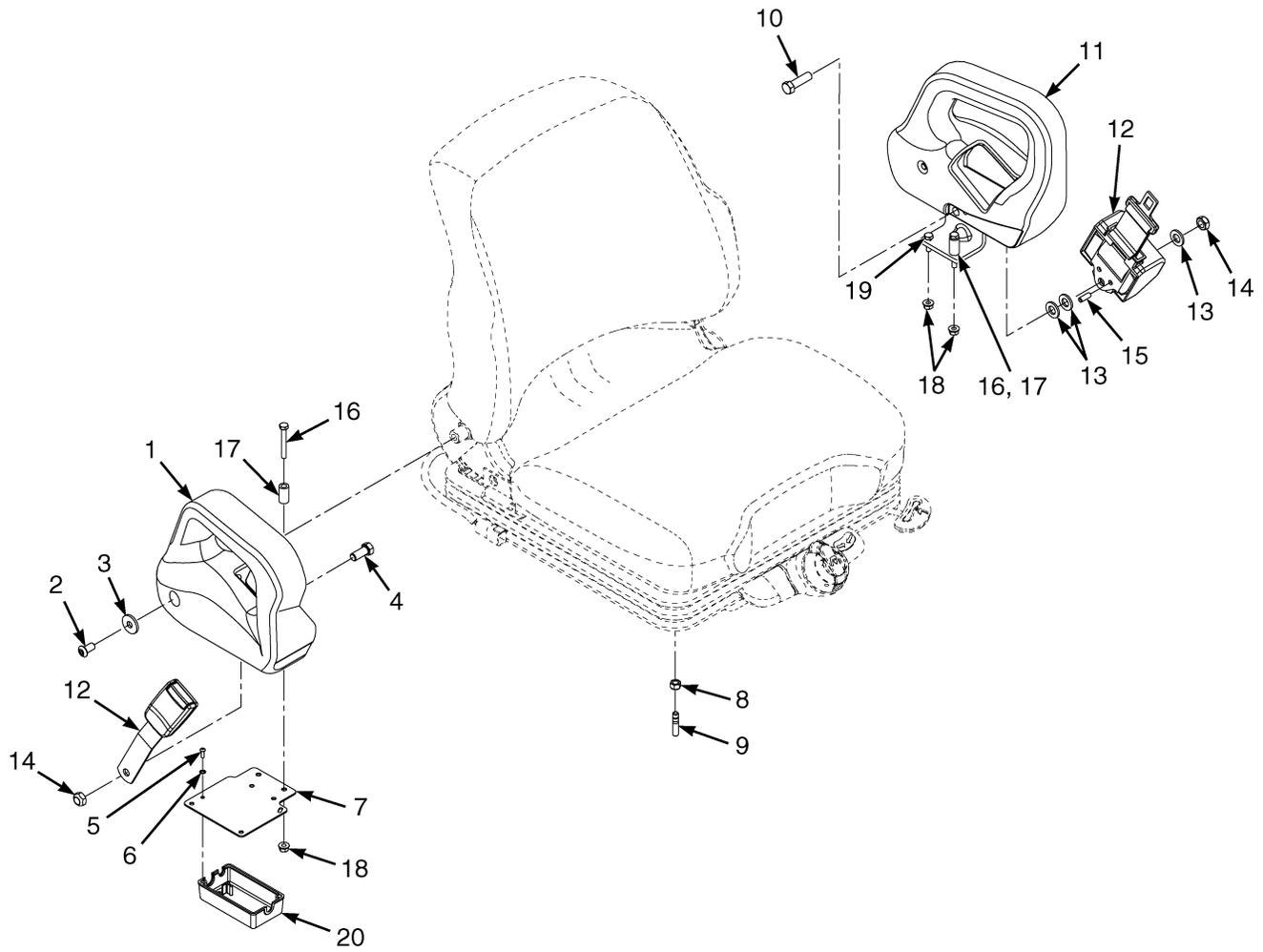
BP120646

**SEAT (FULL SUSPENSION)  
RECLINER AND DAMPER KITS – SHEET 3 OF 4**

ITEM	PART NO.	DESCRIPTION	QTY
1	<b>ab</b> 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	<b>a</b> 1703890	Kit-Damper Service .....	1
9	1584632	Damper .....	1
10	1367150	Nut .....	2
11	1584638	Bolt .....	2

**FOOTNOTES:****a** Included with Seat**b** Included with Seat and Non Swivel/Swivel Sets

## SEAT (FULL SUSPENSION ATTACHING PARTS) (FIGURE 1-7) NOT INCLUDED WITH SEAT — SHEET 4 OF 4 WITH MANUAL HYDRAULICS



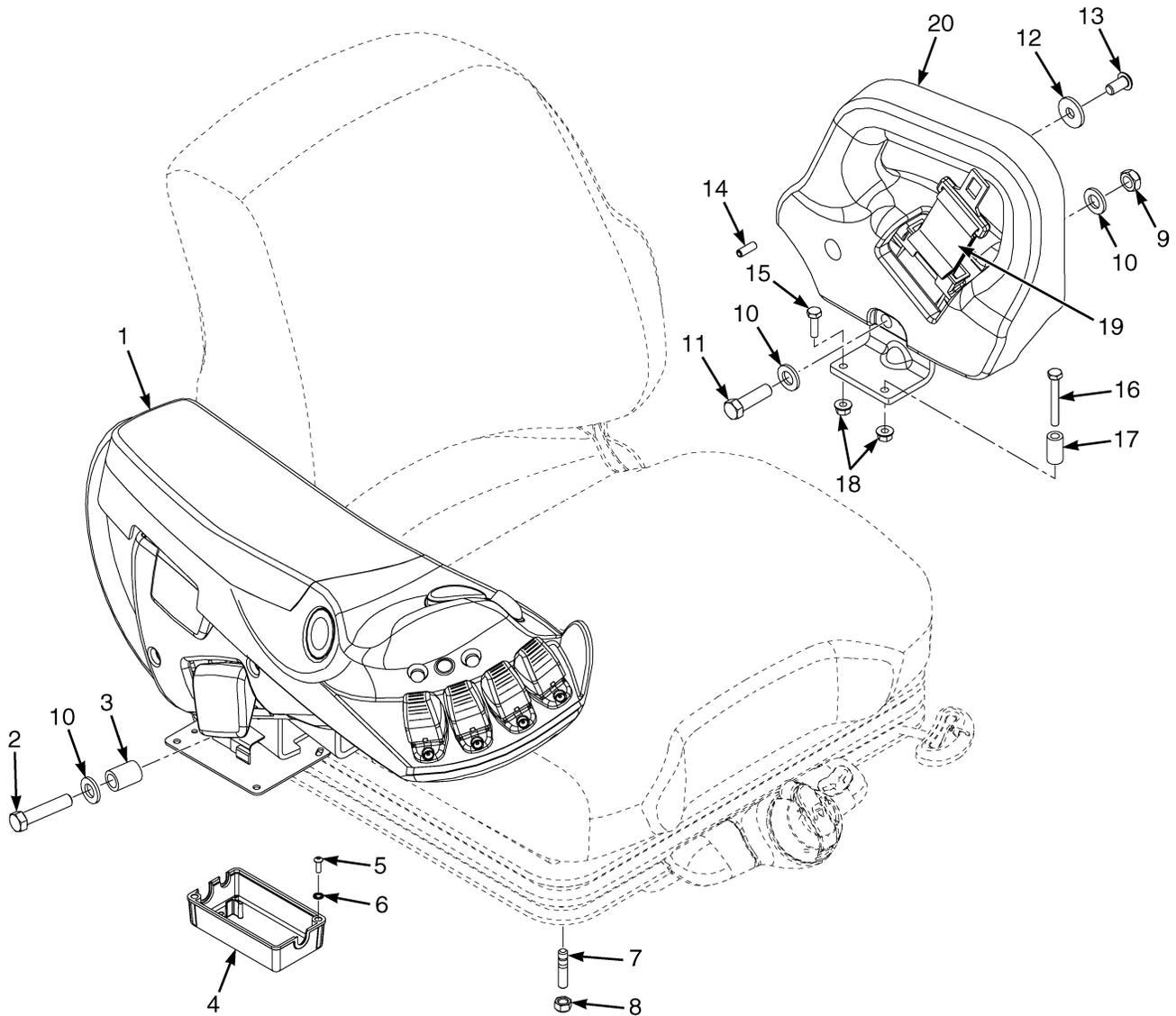
BP121247

**SEAT (FULL SUSPENSION ATTACHING PARTS)**  
**NOT INCLUDED WITH SEAT – SHEET 4 OF 4 WITH MANUAL HYDRAULICS**

ITEM	PART NO.	DESCRIPTION	QTY
1	2099951	Armrest (Right-Hand Side) .....	1
2	18735	Screw .....	2
3	1512536	Washer .....	2
4	221530	Capscrew .....	1
5	1694830	Capscrew .....	2
6	296357	Washer .....	2
7	4004776	Cover Plate .....	1
8	313828	Nut .....	4
9	1677286	Stud (Front M8x30) .....	2
9	4125619	Stud (Rear M8x20) .....	2
10	221536	Capscrew .....	1
11	4612911	Armrest (Left-Hand Side) .....	1
12	1598504	Kit-Seat Belt (Black) .....	1
12	1636120	Kit-Red Seat Belt High Visibility without Interlock .....	1
12	4053079	Seat Belt (High Visibility with Interlock) .....	1
13	1581852	Washer .....	3
14	221353	Locknut .....	2
15	19901	Roll Pin .....	1
16	18735	Screw .....	2
17	4007318	Spacer (Frame) .....	2
18	169874	Nut .....	4
19	18462	Capscrew .....	2
20	2107969	Cover (Seat-Side Electrical) .....	1
	<b>a</b> 114312	Strap Clamp .....	1
	<b>a</b> 296379	Washer .....	2
	1703895	Kit-Service Internal Tether-80 MM Travel .....	1
	1703896	Kit-Service Internal Tether-56 MM Travel .....	1
	1703897	Kit-Service Internal Tether-40 MM Travel .....	1

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

## SEAT (FULL SUSPENSION ATTACHING PARTS) (FIGURE 1-8) NOT INCLUDED WITH SEAT — SHEET 4 OF 4 WITH ELECTRO-HYDRAULICS



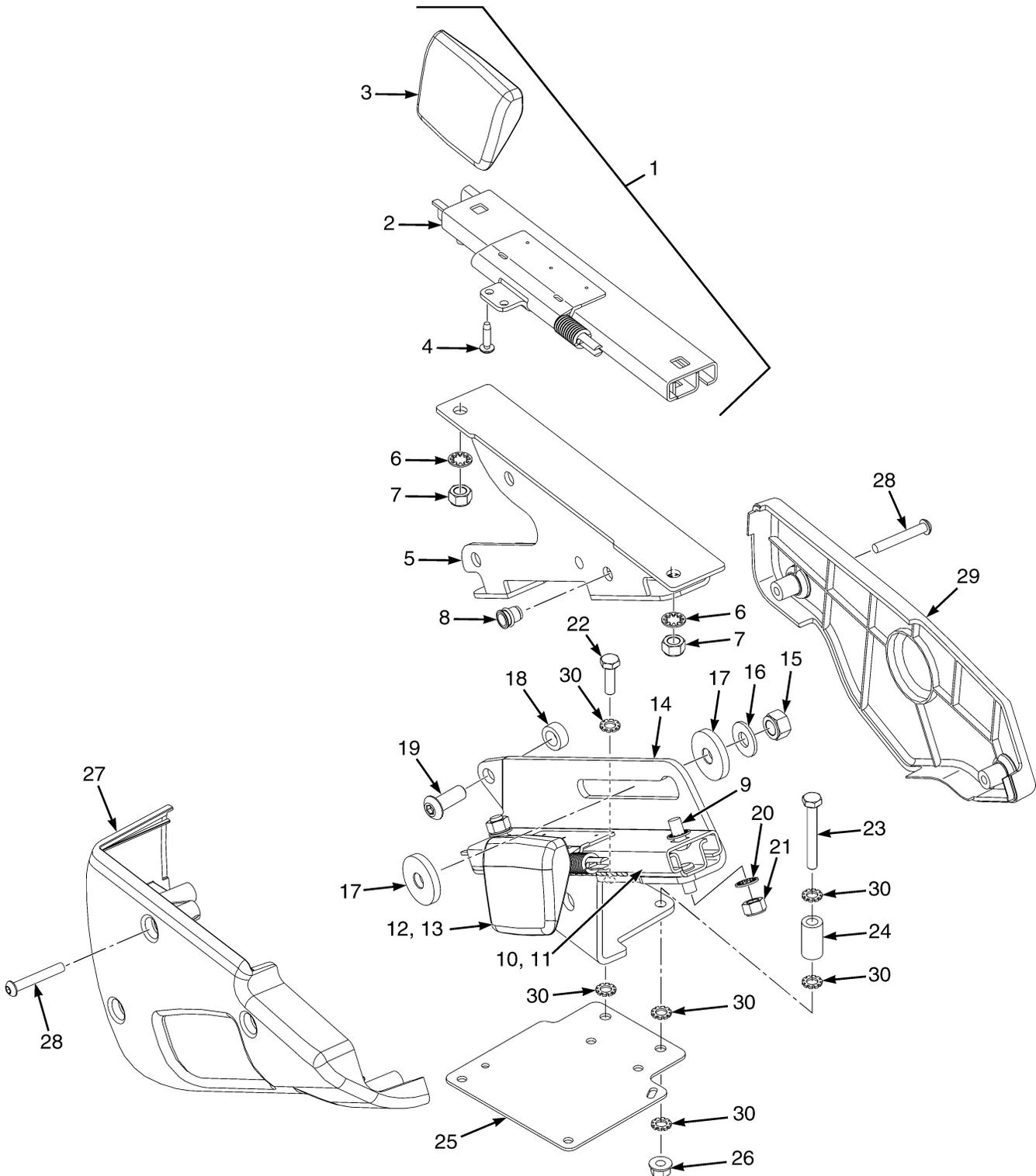
BP121248

**SEAT (FULL SUSPENSION ATTACHING PARTS)**  
**NOT INCLUDED WITH SEAT – SHEET 4 OF 4 WITH ELECTRO-HYDRAULICS**

ITEM	PART NO.	DESCRIPTION	QTY
1	.....	Armrest (Electro-Hydraulic) (Right Hand Side) .....	1
1	4005010	Armrest (Slider for Mini Lever) (☞Figure 1-9).....	1
1	.....	Mini-Lever Modules (☞Figure 7-12, ☞Figure 7-13).....	1
2	221542	Capscrew .....	1
3	1694700	Spacer .....	1
4	2107969	Cover (Seat-Side Electrical) .....	1
5	1694830	Capscrew .....	2
6	296357	Washer .....	2
7	1677286	Stud (Front M8x30) .....	2
7	4125619	Stud (Rear M8x20) .....	2
8	313828	Nut .....	4
9	221353	Locknut .....	2
10	1581852	Washer .....	3
11	221536	Capscrew .....	1
12	1512536	Washer .....	1
13	18735	Screw .....	1
14	19901	Roll Pin .....	1
15	18462	Capscrew .....	1
16	18735	Screw .....	1
17	4007318	Spacer (Frame) .....	1
18	169874	Nut .....	2
19	1598504	Kit-Seat Belt (Black) .....	1
19	1636120	Kit-Red Seat Belt High Visibility without Interlock .....	1
20	4612911	Armrest (Left-Hand Side) .....	1
	<b>a</b> 114312	Strap Clamp .....	1
	<b>a</b> 296379	Washer .....	2
	1703895	Kit-Service Internal Tether-80 MM Travel .....	1
	1703896	Kit-Service Internal Tether-56 MM Travel .....	1
	1703897	Kit-Service Internal Tether-40 MM Travel .....	1

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

## ARMREST ASSEMBLY (FIGURE 1-9) MINI-LEVER MODULES — FULL SUSPENSION SEAT

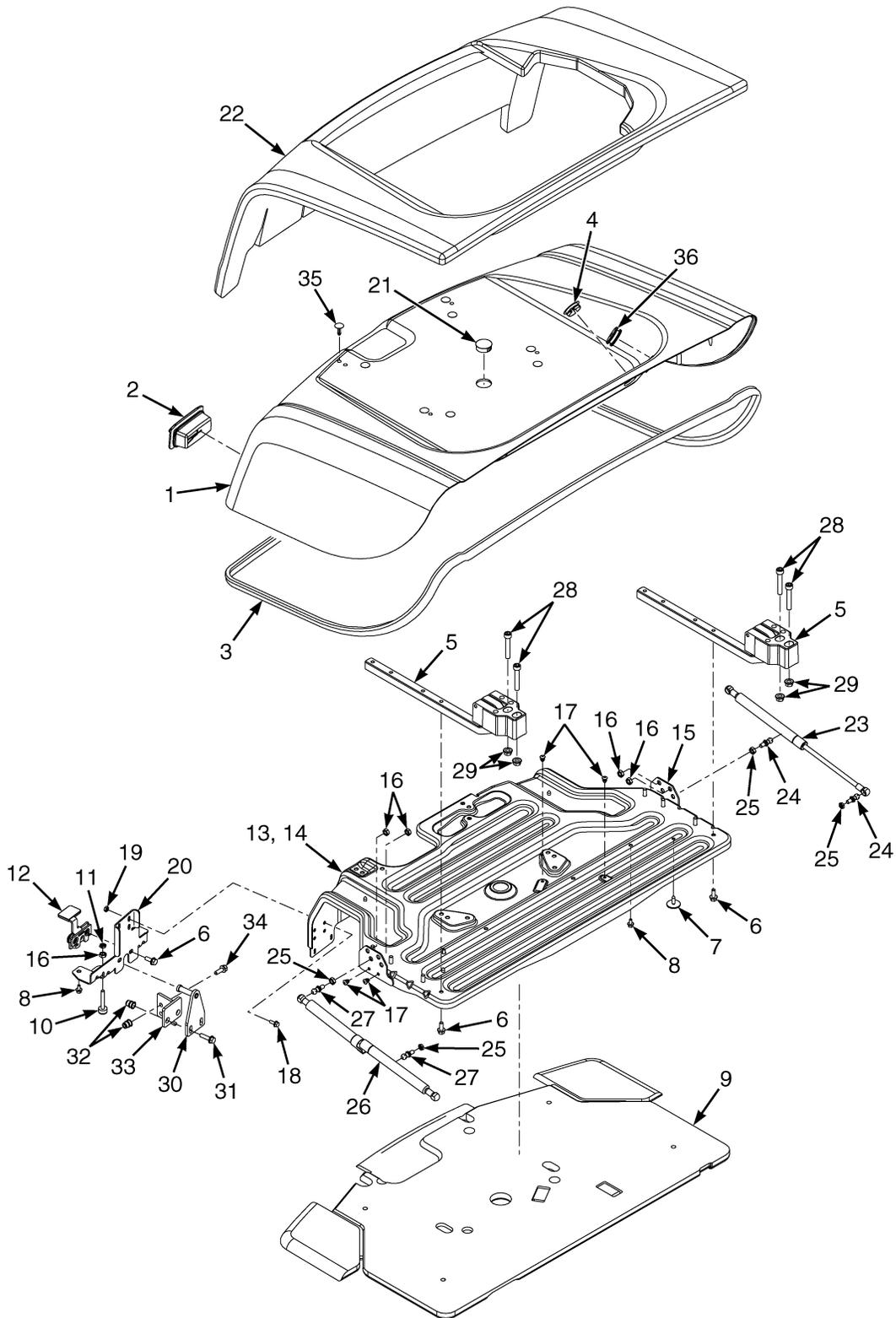


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**ARMREST ASSEMBLY**  
**MINI-LEVER MODULES – FULL SUSPENSION SEAT**

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	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	18735	Screw .....	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
30	296379	Washer .....	6

## HOOD ASSEMBLY (FIGURE 1-10)

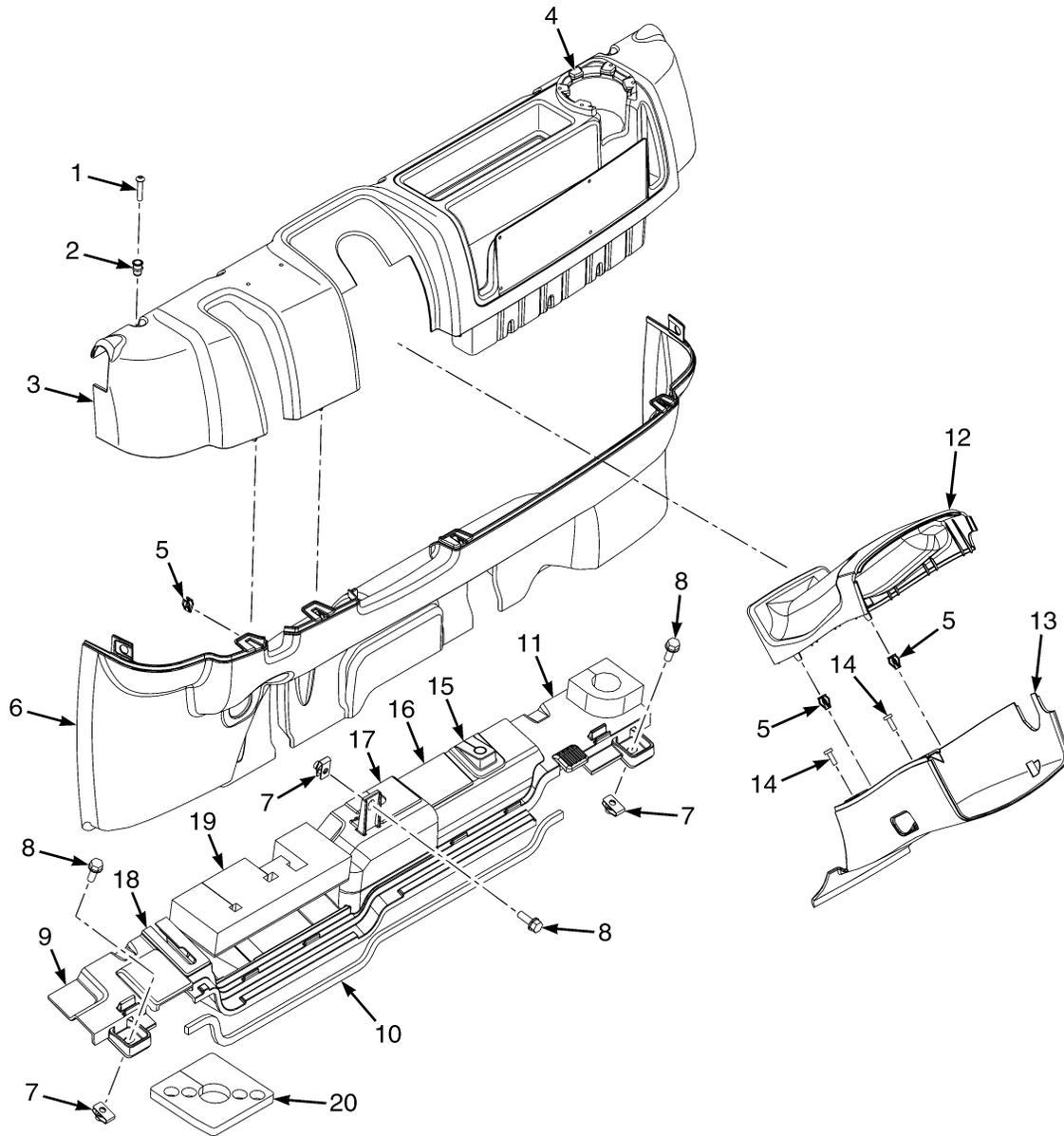


BP121267

**HOOD ASSEMBLY**

ITEM	PART NO.	DESCRIPTION	QTY
1	4134577	Hood (Non-Vented) .....	1
2	1666732	Boot .....	1
3	1580652	Seal .....	1
4	1616379	Plug (Yellow) .....	1
5	1548618	Hinge .....	2
6	1527880	Capscrew .....	10
7	1304971	Fastener .....	4
8	1534417	Capscrew .....	4
9	4123946	Hood Liner .....	1
10	1585581	Bumper (Hood) .....	2
11	329069	Nut .....	2
12	1387170	Latch .....	1
13	4134575	Hood Reinforcement Assembly .....	1
14	.....	Hood Reinforcement .....	1
15	4134573	Bracket .....	2
16	364868	Nut .....	8
17	1608879	Capscrew .....	4
18	1527876	Capscrew .....	4
19	1324360	Nut .....	4
20	1672560	Plate .....	1
21	1585592	Plug .....	1
23	1563497	Gas Spring (RH) .....	1
24	1563369	Ball Stud (RH) .....	2
25	329069	Nut .....	4
26	1563497	Gas Spring (LH) .....	1
27	1563369	Ball Stud (LH) .....	2
28	296032	Capscrew .....	4
29	1460477	Nut .....	4
30	1674131	Striker Bolt .....	1
31	1510113	Capscrew .....	2
32	1530243	Insert .....	4
33	1674030	Hood Support .....	1
34	1583611	Capscrew .....	2
35	1347045	Fastener .....	8
36	4031944	Grommet .....	1

## DASH PANEL AND STEERING COLUMN COVER (FIGURE 1-11)



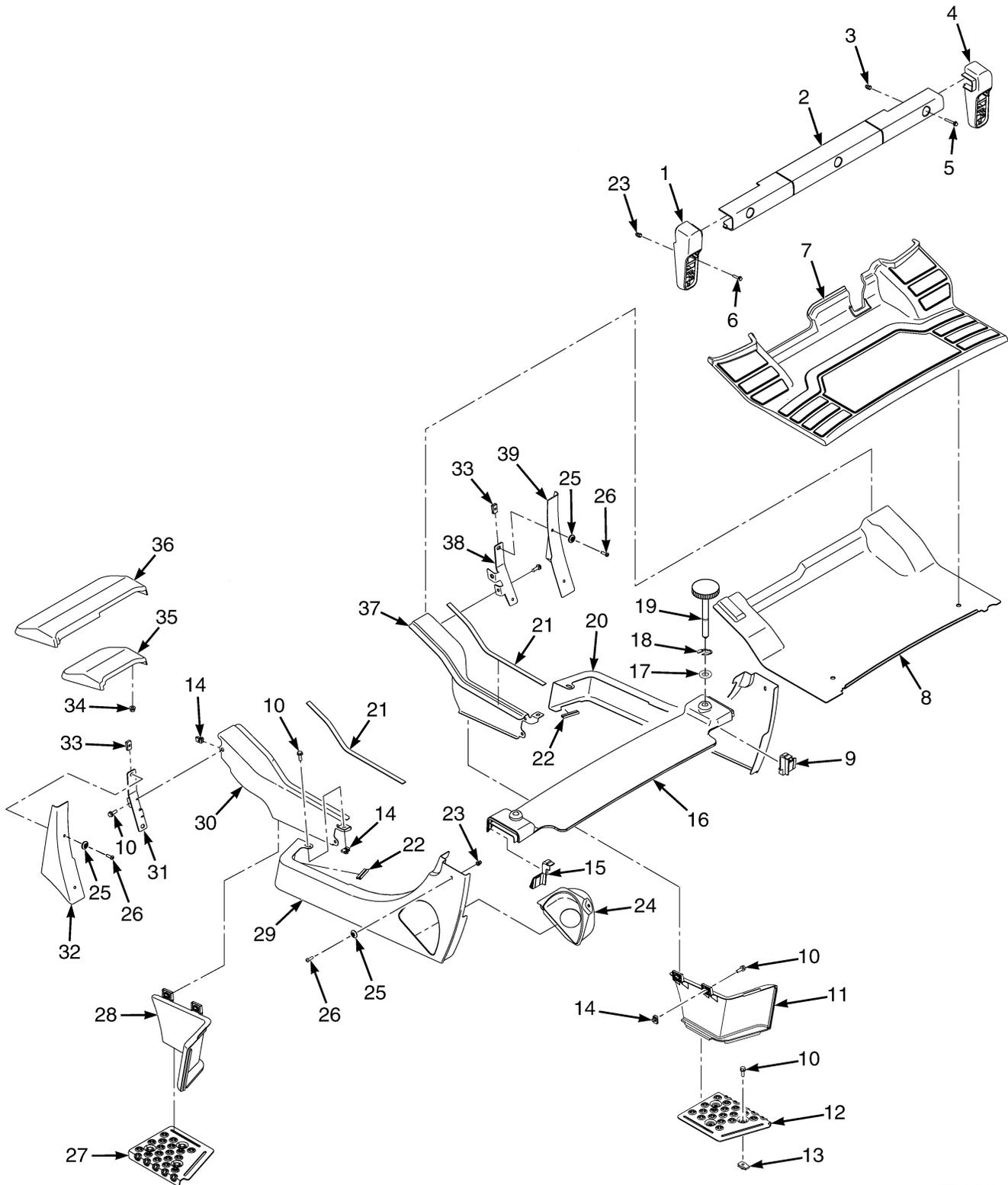
BP121326

**DASH PANEL AND STEERING COLUMN COVER**

ITEM	PART NO.	DESCRIPTION	QTY
1	1710007	Capscrew .....	5
2	1531001	Insert .....	5
3	1517420	Dash Panel (Manual Hydraulic) .....	1
3	1517421	Dash Panel (Electro-Hydraulic) .....	1
4	2070975	Cup Holder .....	1
5	2065667	Clip .....	6
6	2071595	Panel (Single Brake Pedal) .....	1
7	1480237	Nut , Foldover .....	3
8	1583611	Capscrew .....	3
9	1618992	Plate .....	1
10	1529427	Seal .....	1
11	1530135	Grommet .....	1
12	2098330	Cover (Steering Column Upper) .....	1
13	2065666	Cover (Steering Column Lower) .....	1
14	2027655	Screw .....	2
15	<b>a</b> 2069464	Seal (Not Used) .....	..
16	<b>a</b> 2065826	Seal (Not Used) .....	..
17	<b>a</b> 2065827	Seal (Not Used) .....	..
18	<b>a</b> 2065796	Seal .....	..
19	1705891	Liner (With Dry Brakes) .....	1
20	4014251	Seal (With Dry Brakes) .....	1

**FOOTNOTES:****a** Not Used

## FLOORPLATES AND COVERS (FIGURE 1-12)



BP121327

**FLOORPLATES AND COVERS**

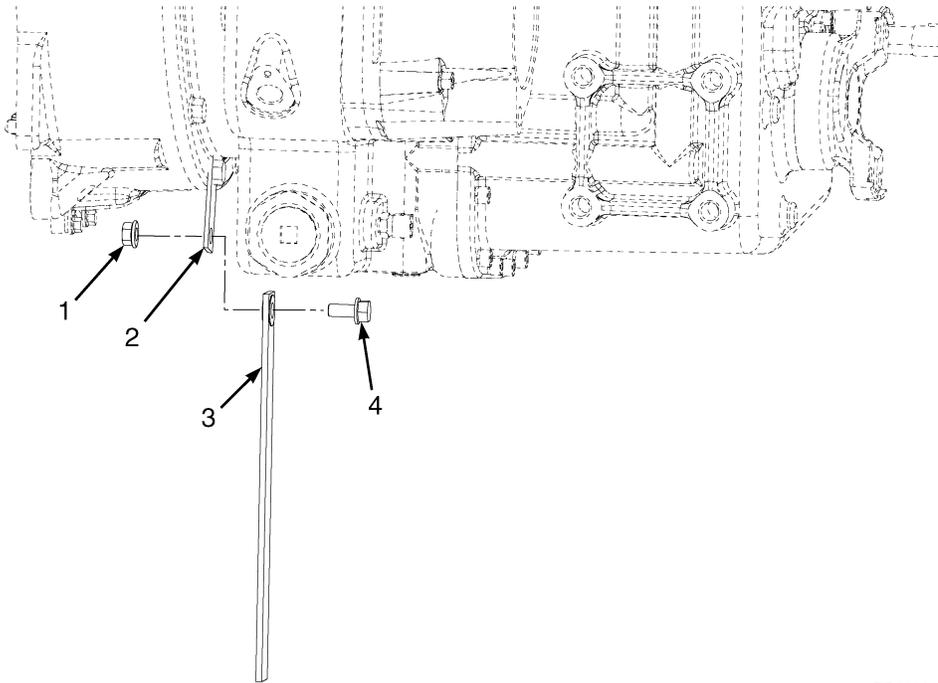
ITEM	PART NO.	DESCRIPTION	QTY
1	2107958	Tail Light Base (LH) .....	1
2	859235	Cover (Rear) .....	1
3	1531001	Insert .....	3
4	2107957	Tail Light Base (RH) .....	1
5	1586495	Capscrew .....	2
6	1586495	Capscrew .....	4
7	2071262	Floormat .....	1
8	1573774	Floorplate .....	1
9	2071198	Seal (RH) .....	1
10	1583611	Capscrew .....	20
11	2102559	Step Panel (RH) .....	1
12	1544415	Plate (RH) .....	1
13	1393879	Nut .....	6
14	1480237	Nut , Foldover .....	14
15	2071197	Seal (LH) .....	1
16	1547466	Cover .....	1
17	<b>c</b> 320157	Washer (Not used) .....	2
18	<b>c</b> 353206	Retaining Ring .....	2
19	1588247	Screw .....	2
20	4027451	Panel (RH) .....	1
21	1564529	Seal .....	2
22	1582072	Trim Seal .....	2
23	1531558	Insert .....	6
24	<b>a</b> 1517656	Shield .....	1
25	1709980	Washer .....	6
26	1710006	Capscrew .....	6
27	1544413	Plate (LH) .....	1
28	2102558	Step Panel (LH) .....	1
29	<b>a</b> 4027456	Panel (Rear LH) .....	1
29	<b>b</b> 4027457	Panel (Rear LH) .....	1
30	1540860	Panel (LH) .....	1
31	859216	Bracket (Fender Cover) .....	1
32	859213	Cover (Fender) .....	1
33	1350215	Nut .....	4
34	1544153	Locknut (Not Used) .....	..
35	2069008	Mud Flap (Not Used) .....	..
36	2069544	Mud Flap (LH, Wide Tread) .....	..
37	1540870	Panel (RH) .....	1
38	859217	Bracket (Fender Cover) .....	1
39	859215	Cover (Fender) .....	1

**FOOTNOTES:**

- a** Diesel Option  
**b** LPG Option

**c** Not Used

## STATIC STRAP INSTALLATION (FIGURE 1-13) (OPTIONAL)



BP120922

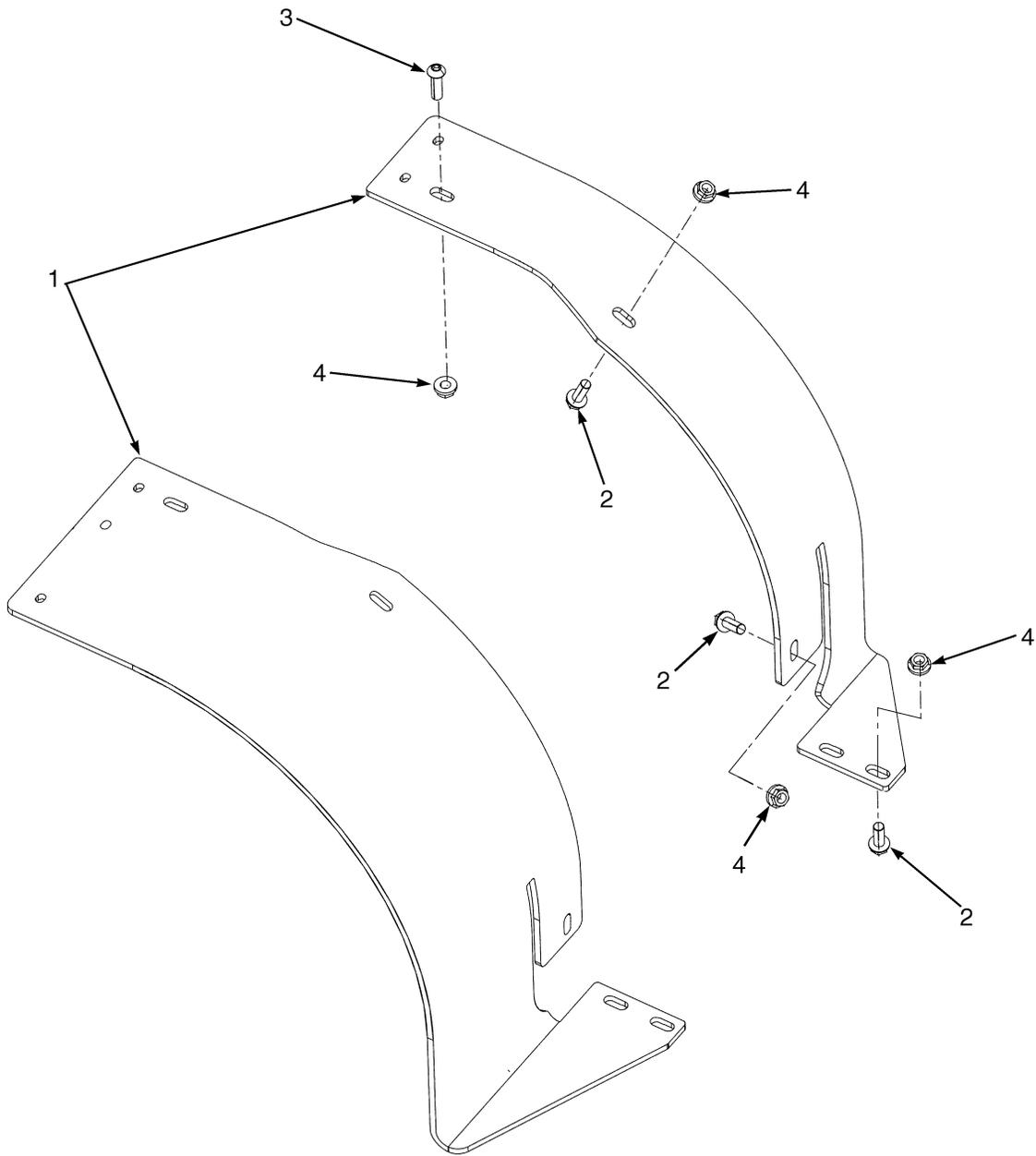
ITEM	PART NO.	DESCRIPTION	QTY
1	1460477	Nut .....	1
2	1565832	Bracket .....	1
3	216895	Static Strap .....	1
4	1586013	Capscrew .....	1
	a 296420	Washer .....	1

### FOOTNOTES:

- a Located between Flywheel Housing Plate and Bracket



## FENDER EXTENSIONS (FIGURE 1-14)



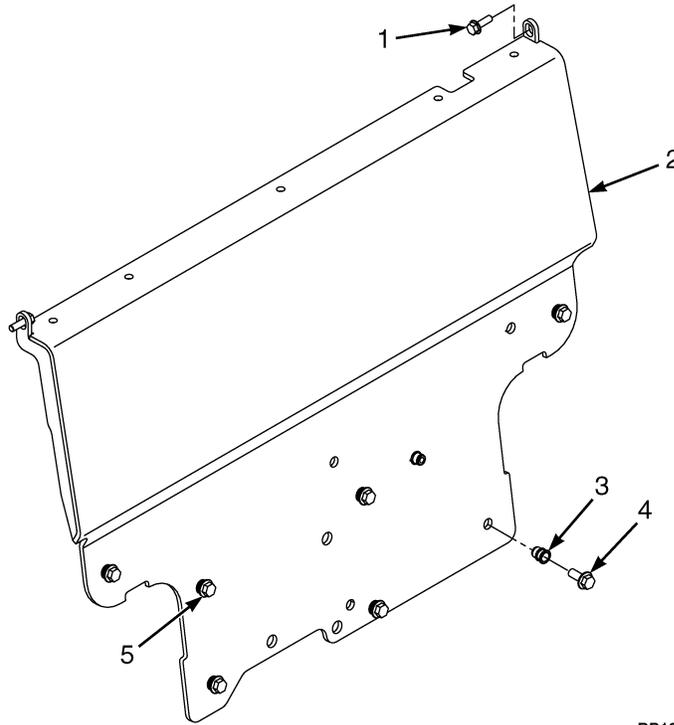
HP120835

**FENDER EXTENSIONS**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
1	1562359	Fender (Wide) (LH) .....	1
1	1562361	Fender (Dual) (LH) .....	1
1	1562360	Fender (Wide) (RH) .....	1
1	1562362	Fender (Dual) (RH) .....	1
2	1586630	Capscrew .....	8
3	2076289	Capscrew .....	2
3	<b>ab</b> 1581079	Plug .....	2
4	1586432	Nut .....	10

**FOOTNOTES:****a** For Option Without Fender Extensions**b** Not Illustrated

## COWL MOUNT (FIGURE 1-15)

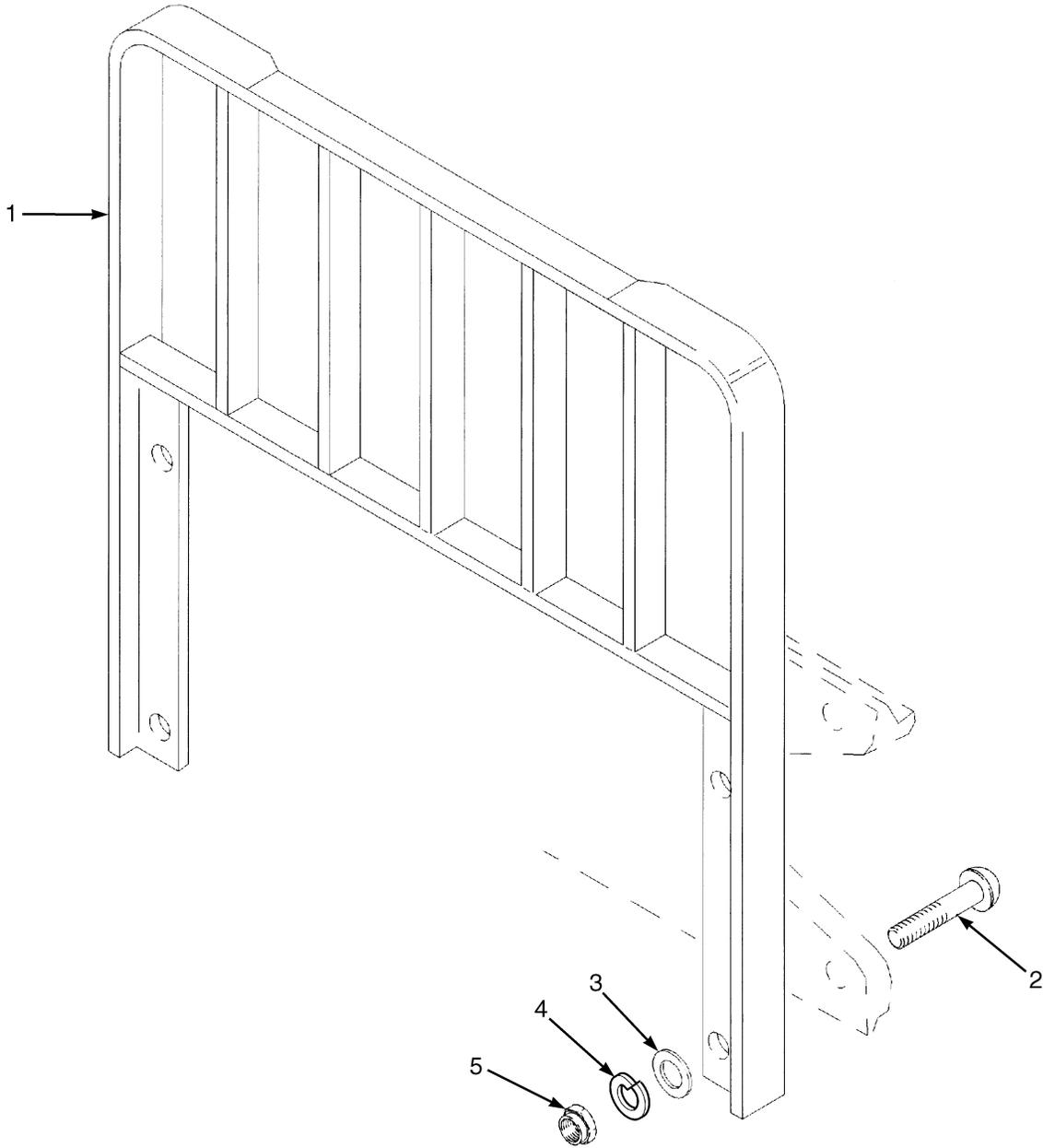


BP121375

ITEM	PART NO.	DESCRIPTION	QTY
1	1583611	Capscrew .....	2
1	1510113	Capscrew (Optional) .....	2
2	4014340	Cowl .....	1
3	1640776	Insert .....	7
3	1581567	Nut (Optional) .....	7
3	320160	Washer (Optional) .....	7
4	1586629	Capscrew .....	6
5	1605990	Capscrew .....	1



**LOAD BACKREST EXTENSION (FIGURE 1-16)**

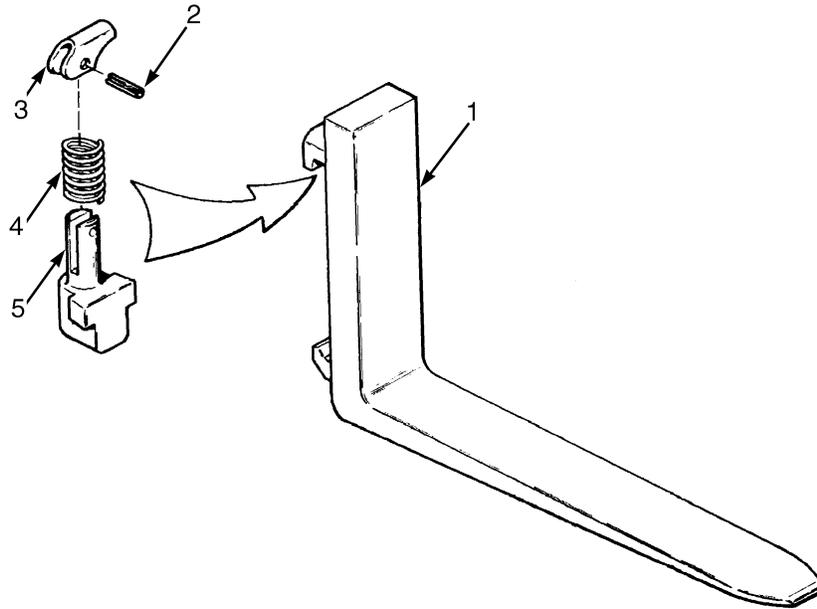


HP120836

**LOAD BACKREST EXTENSION****KEY:****A: For Use With Standard Carriage Only****B: For Use With Integral Side-Shift Carriage Only**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4119248	Load Backrest .....	1	1
1	4119242	Load Backrest .....	1	1
2	1581838	Capscrew .....	4	..
2	1581593	Capscrew .....	..	4
3	221771	Washer (Optional) .....	4	4
4	296423	Washer .....	4	4
5	300937	Nut .....	4	4

## FORKS (FIGURE 1-17) STANDARD



HP120793

**KEY:**

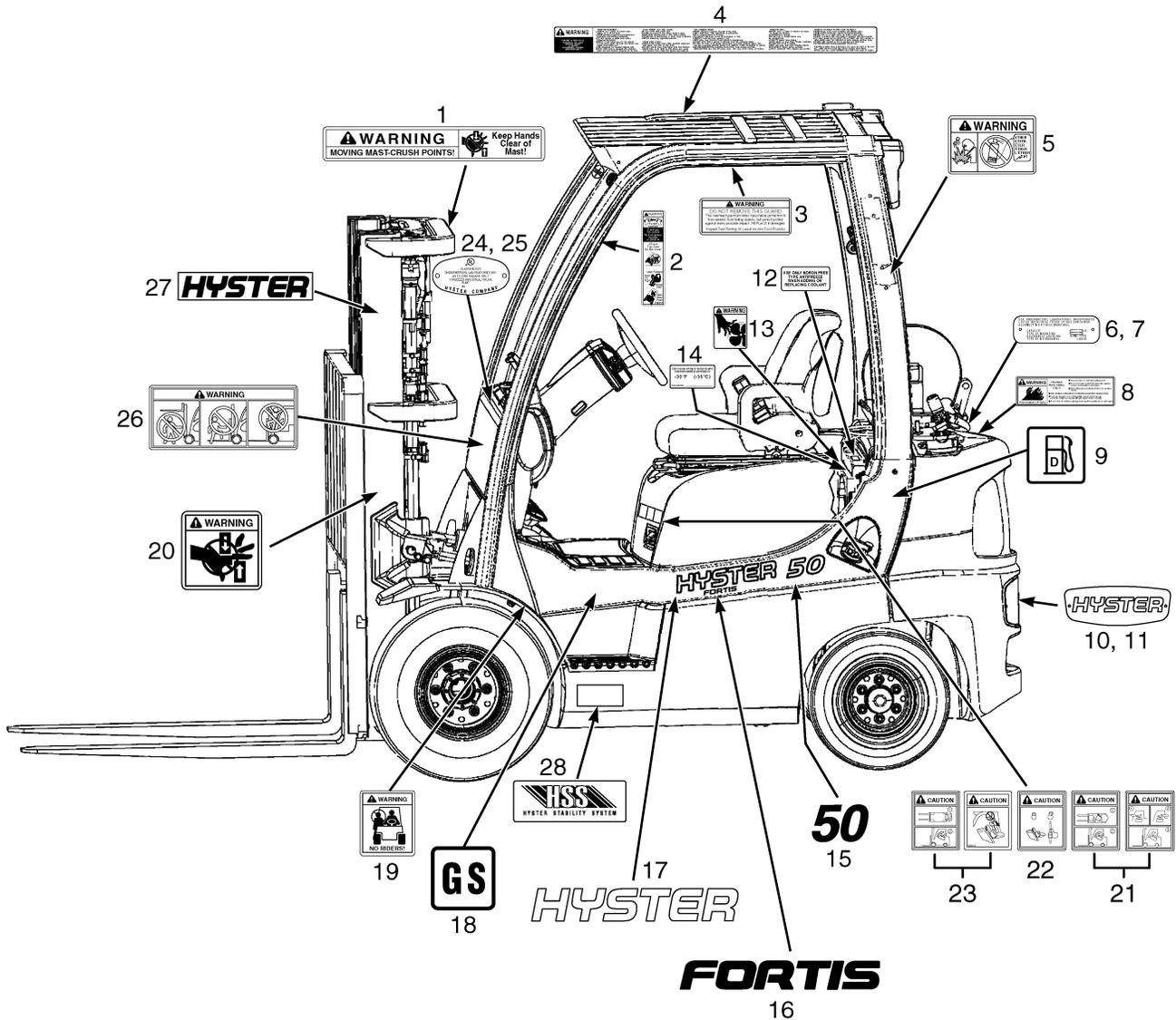
**A:** Standard Taper, Class II (100mm x 40mm.)

**B:** Standard Taper, Class III (125mm x 50mm)

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1672456	Fork (1100mm) (MSI) .....	2	..
1	1672464	Fork (1200mm) (MSI) .....	2	..
1	1672460	Fork (1400mm) (MSI) .....	2	..
1	1672461	Fork (1500mm) (MSI) .....	2	..
1	1648908	Fork (1100mm) (MSI) .....	..	2
1	1648909	Fork (1200mm) (MSI) .....	..	2
1	1648910	Fork (1400mm) (MSI) .....	..	2
1	1648911	Fork (1500mm) (MSI) .....	..	2
1	1648912	Fork (1800mm) (MSI) .....	..	2
2	4039844			
	1624974	Roll Pin .....	1	1
3	4039840			
	1624971	Lever .....	1	1
4	4039842			
	1624973	Spring .....	1	1
5	1624972	Pin .....	1	..
5	1627423	Pin .....	..	1
99	4027925	Kit-Latch (MSI) .....	2	..
99	1701249	Kit (Latch) (MSI) .....	..	2



## LABELS (FIGURE 1-18) EXTERIOR



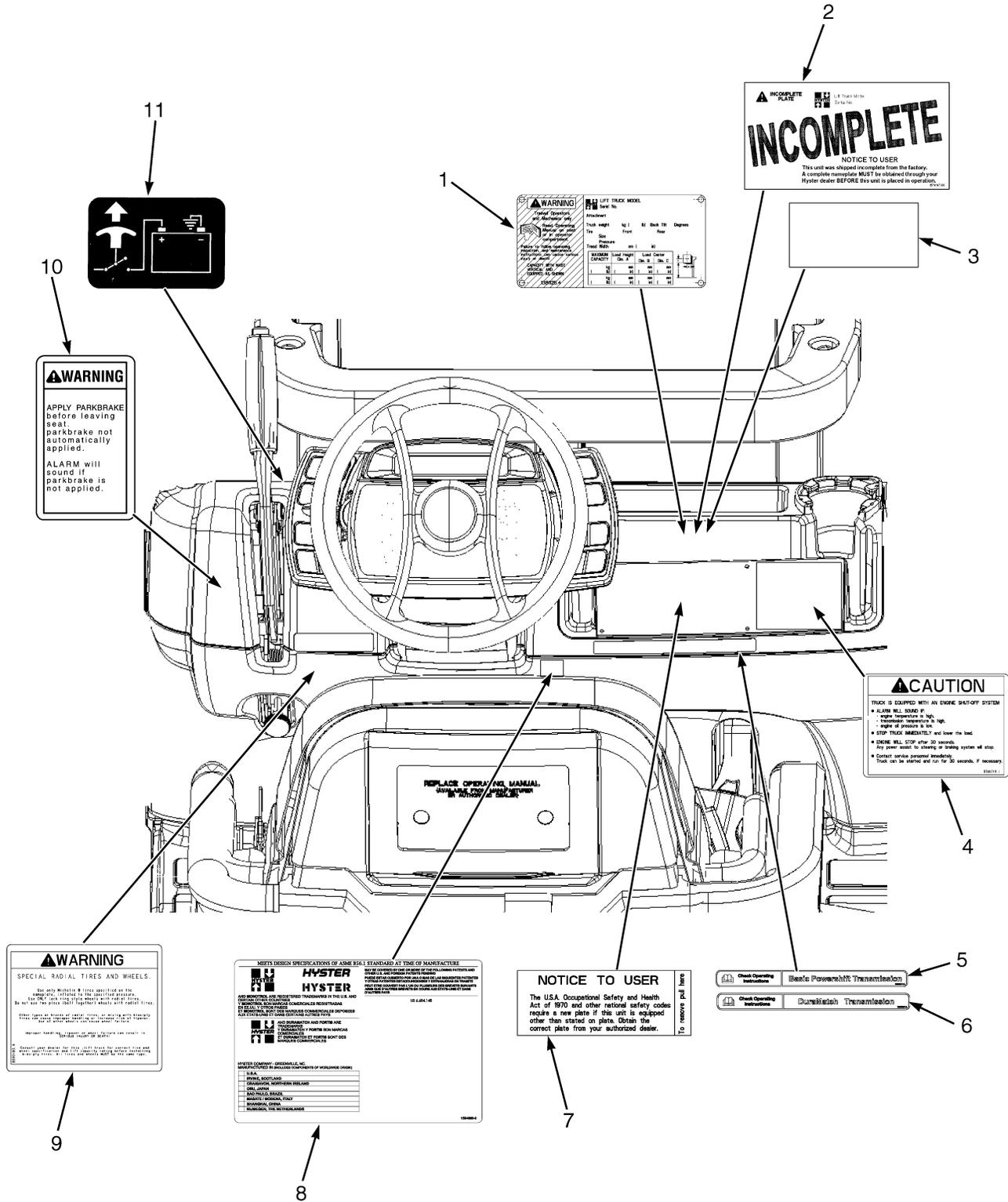
HP120855

**LABELS  
EXTERIOR**

ITEM	PART NO.	DESCRIPTION	QTY
1	1343277	Label (Mast Warning) .....	1
2	1359588	Label (Operator Restraint) .....	2
3	<b>a</b> . . . . .	Label (Impact Rating) .....	1
4	2074501	Label .....	1
5	2034460	Label (Ether Warning) .....	1
6	<b>b</b> 1501258	Nameplate (LP Tank) (Not Used) .....	..
7	170658	Rivet .....	4
8	1354173	Label .....	1
9	2074256	Label (Diesel Fuel Only) .....	1
10	1677428	Label (Hyster Logo) .....	1
11	<b>b</b> 1566951	Fastener (Not Used) .....	..
12	1375677	Label-Boron Free Anti- .....	1
13	1300094	Label (Fan Warning) .....	2
14	1354165	Label (Antifreeze) .....	2
15	1586444	Label (Model 40) .....	2
15	1586447	Label (Model 50) .....	2
15	1586448	Label (Model 60) .....	2
15	1586449	Label (Model 70) .....	2
15	1586446	Label (Model 55) .....	2
16	1586439	Label (Fortis) .....	2
17	1586440	Label (Hyster) .....	2
18	<b>b</b> 154065	Label (Type GS) (Not Used) .....	..
18	<b>b</b> 154066	Label (Type LPS) (Not Used) .....	..
18	<b>b</b> 154067	Label (Type DS) (Not Used) .....	..
18	<b>b</b> 4083354	Label UL/NFPA Designation GS/LPS (Dual Fuel) (Not Used) .....	..
19	1339828	Label (No Riders) .....	2
20	1339832	Label (Pinch Point) .....	2
21	2075614	Label (Hood Opening Warning) .....	1
21	2082680	Label (Electronic Arm Caution) .....	1
23	2076171	Label (Swivel Seat Caution) .....	1
24	<b>a</b> . . . . .	Inspection Plate .....	1
25	170658	Rivet .....	2
26	2075655	Label (Mast Warning) .....	2
27	1562353	Label (Hyster) .....	2
28	4035750	Label (Stability System) .....	2
29	2109997	Label (Not Illustrated) .....	1

**FOOTNOTES:****a** Contact Your Local Hyster Dealer**b** Not Used

## LABELS (FIGURE 1-19) INTERIOR



HP120856

**LABELS  
INTERIOR**

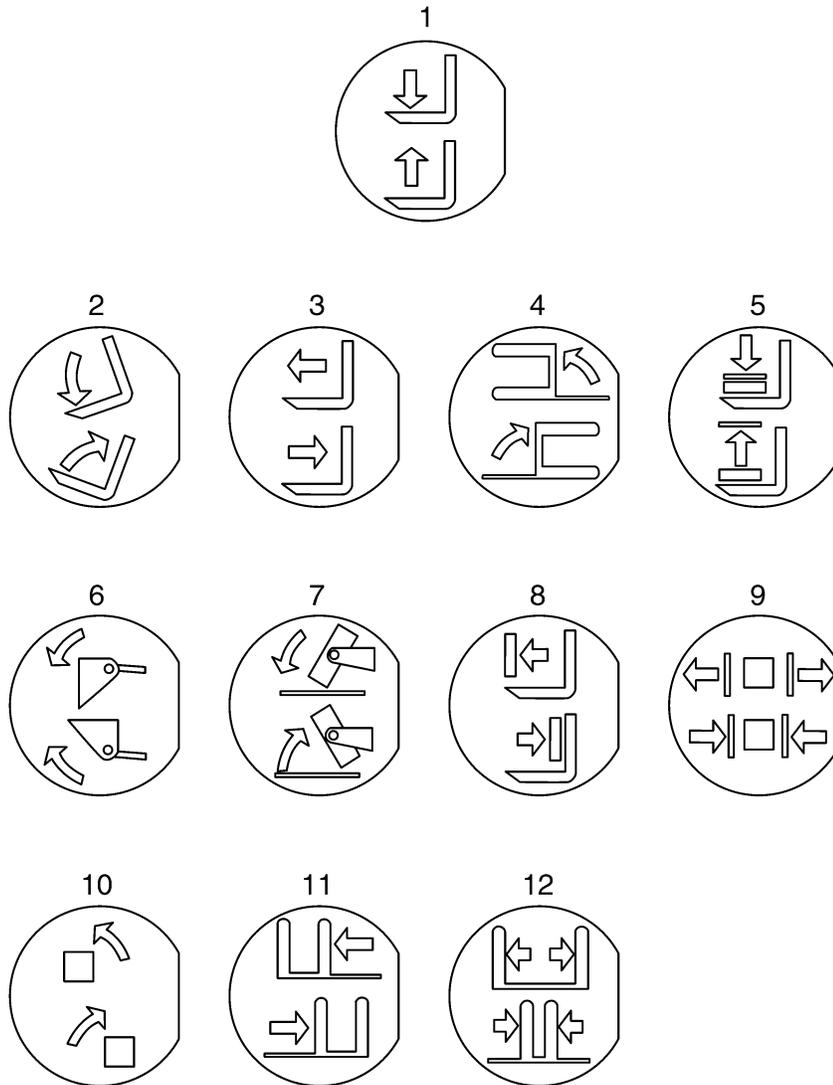
ITEM	PART NO.	DESCRIPTION	QTY
1	<b>a</b> . . . . .	Nameplate .....	1
1	170658	Rivet .....	4
1	2307400	Rivet (Optional) .....	4
2	1574147	Nameplate (Incomplete Truck) .....	1
3	389688	Nameplate Cover .....	1
4	1385102	Label (Drive Train Protection) .....	1
5	<b>b</b> 1589377	Label (Basic Powershift Transmission) (Not Used) .....	..
6	1589399	Label (DuraMatch Transmission) .....	1
7	1335412	Label .....	1
8	1534660	Label (Patents and Trademarks) .....	1
9	4612322	Label (Radial Tire) .....	1
10	2074599	Label .....	1
11	1324480	Label (Battery Switch) (Optional) .....	1
12	. . . . .	0288646 (Not Illustrated) .....	1

**FOOTNOTES:**

**a** Contact Your Local Hyster Dealer

**b** Not Used

## LABELS (FIGURE 1-20) HYDRAULIC CONTROL LABELS — MANUAL HYDRAULIC



BP121111

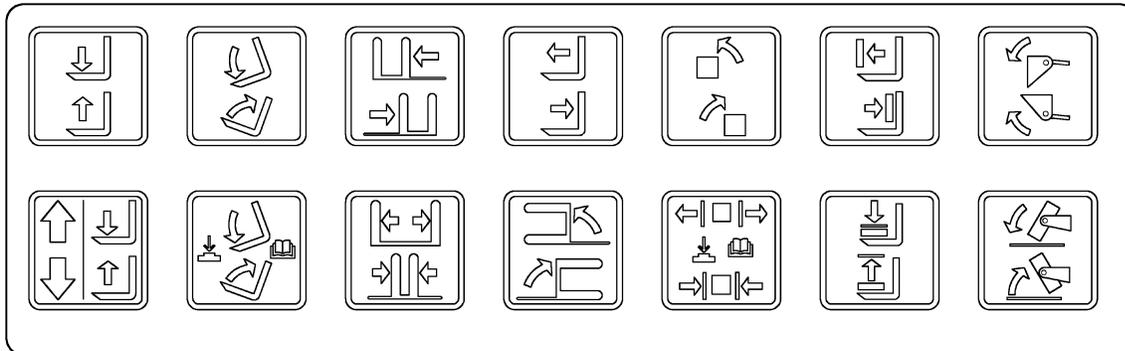
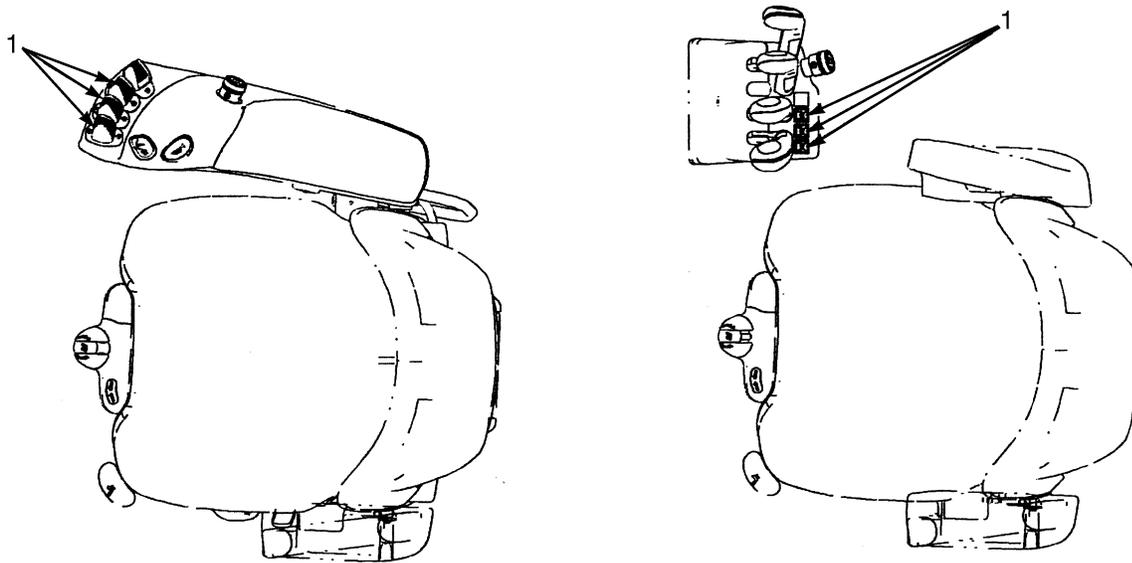
**LABELS**  
**HYDRAULIC CONTROL LABELS – MANUAL HYDRAULIC**

ITEM	PART NO.	DESCRIPTION	QTY
1	2070296 4034931	Lens , Hoist (With Adhesive Back) .....	1
2	2070297 4034932	Lens , Tilt (With Adhesive Back) .....	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 , Side-Shift (With Adhesive Back) .....	1
12	4034942	Lens , Fork Spread (With Adhesive Back) (Fork Spread) .....	1
	<b>a</b> 2070655	Lens (Blank) .....	1

**FOOTNOTES:**

**a** Not Illustrated

## MINI LEVER MODULE LABELS (FIGURE 1-21) HYDRAULIC CONTROL FUNCTIONS

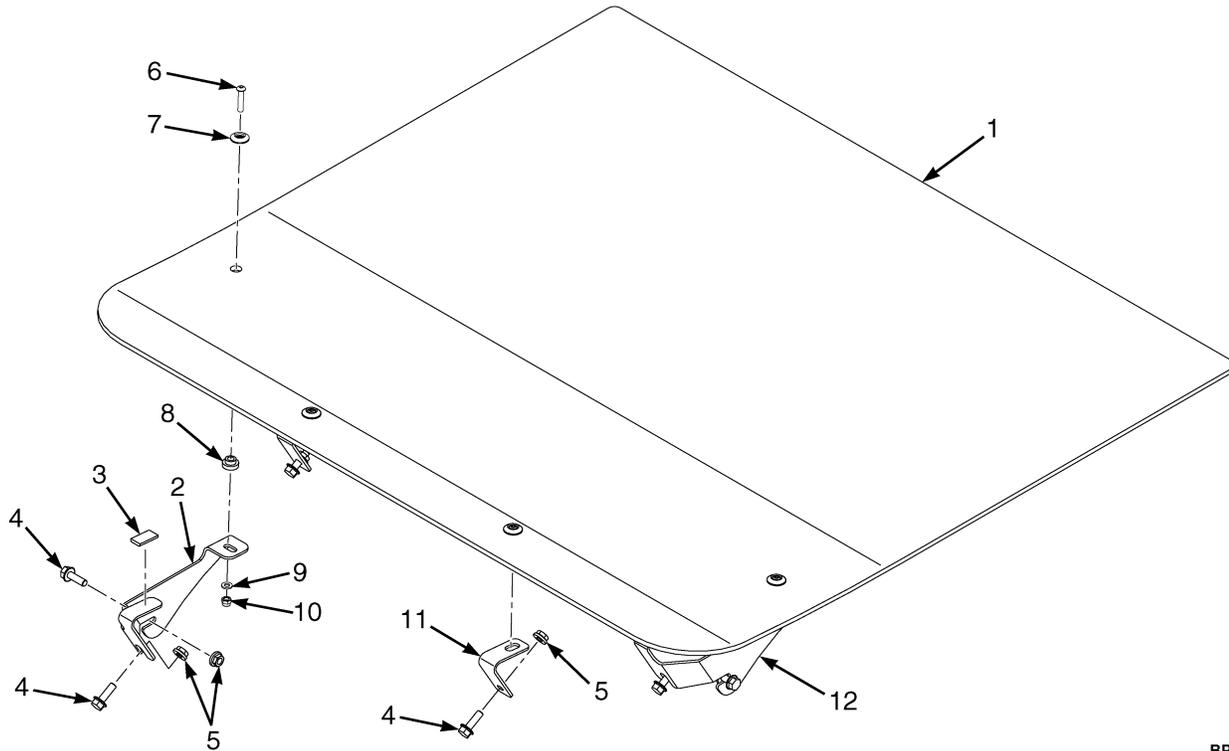


BP120427

**MINI LEVER MODULE LABELS  
HYDRAULIC CONTROL FUNCTIONS**

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

## RAIN TOP (FIGURE 1-22)



BP121074

ITEM	PART NO.	DESCRIPTION	QTY
1	4051334	Roof Panel .....	1
2	4050312	Bracket .....	1
3	4050311	Seal .....	2
4	4043638	Capscrew .....	6
5	1586430	Nut .....	6
6	1710007	Capscrew .....	4
7	1709980	Washer .....	4
8	261395	Bushing .....	4
9	1673754	Washer .....	4
10	4050426	Locknut .....	4
11	4050343	Bracket .....	2
12	4050313	Bracket .....	1

**2**

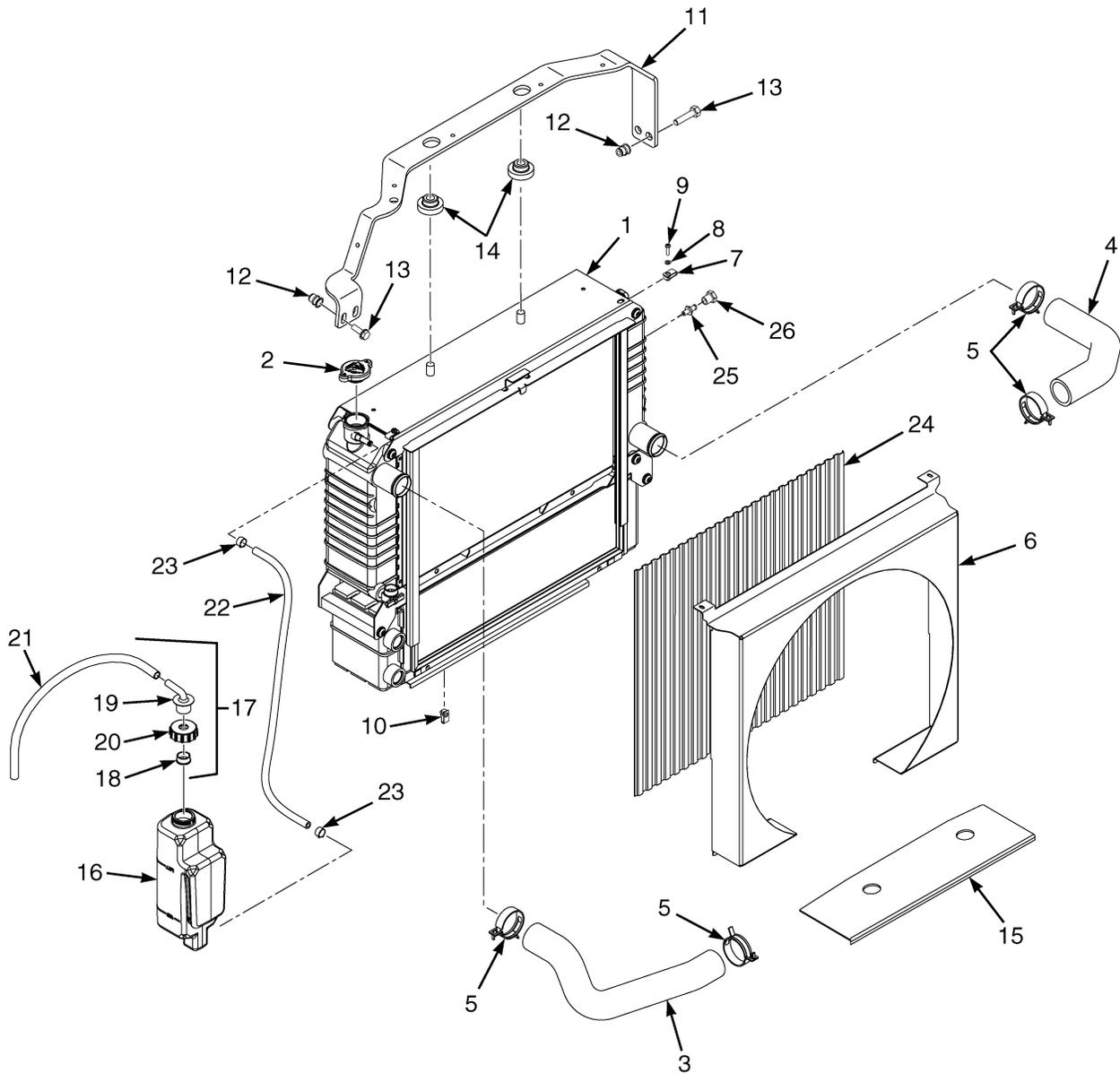
**ENGINE ASSEMBLY-YANMAR**



## SECTION 2 ENGINE ASSEMBLY-YANMAR

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## COOLING SYSTEM (FIGURE 2-1) YANMAR 3.3L, DIESEL, SQUARE WAVE RADIATOR — WITH EXTERNAL OIL COOLER



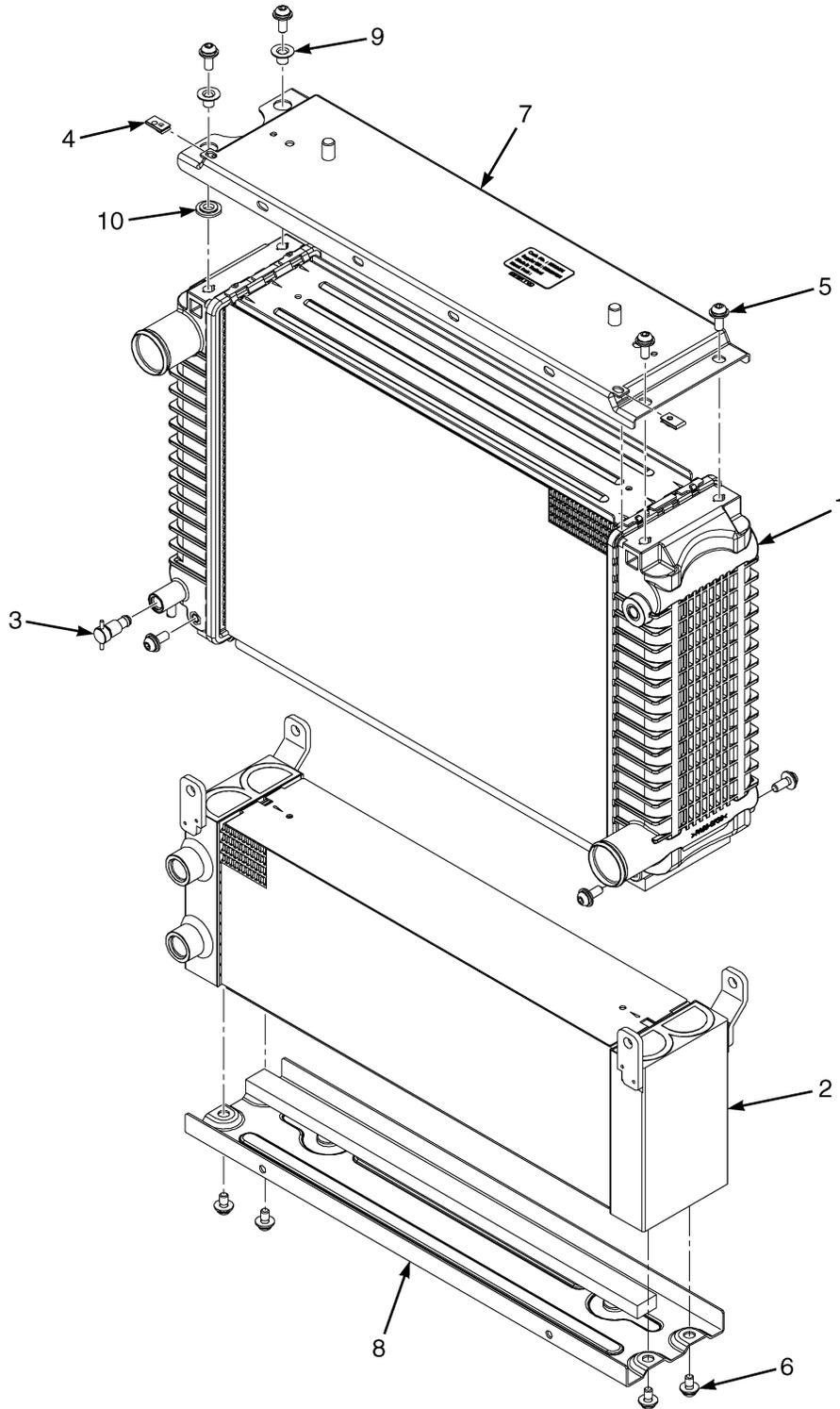
BP060118

**COOLING SYSTEM**  
**YANMAR 3.3L, DIESEL, SQUARE WAVE RADIATOR – WITH EXTERNAL OIL COOLER**

ITEM	PART NO.	DESCRIPTION	QTY
1	4603554	Radiator (Assembly) (☞ Figure 2-2).....	1
2	1352140	Radiator Cap .....	1
3	2085104	Radiator Hose (Upper) .....	1
4	2069688	Radiator Hose (Lower) .....	1
5	369804	Clamp .....	4
6	1622272	Shroud .....	1
7	1535257	Nut .....	2
8	320154	Washer .....	2
9	302020	Screw .....	2
10	1329271	Clip .....	2
11	4085712	Bracket .....	1
12	1530243	Insert .....	4
13	1527881	Capscrew .....	4
14	1529787	Isolator .....	4
15	1565692	Exhaust Shield .....	1
16	1633307	Reservoir .....	1
17	345455	Outlet Assembly .....	1
18	336550	Bushing .....	1
19	345453	Outlet (Reservoir) .....	1
20	345454	Cap .....	1
21	<del>339735</del> 1663877	Hose .....	1
22	1567674	Hose .....	1
23	369815	Clamp .....	2
24	<b>a</b> 4077917	Screen .....	1
25	1531404	Sensor (Low Coolant Level) .....	1
26	<b>b</b> 14385	Fitting .....	1

**FOOTNOTES:****a** 3.3L with Basic Transmission**b** Without Low Coolant Level Sensor

## RADIATOR ASSEMBLY (FIGURE 2-2) WITH EXTERNAL OIL COOLER

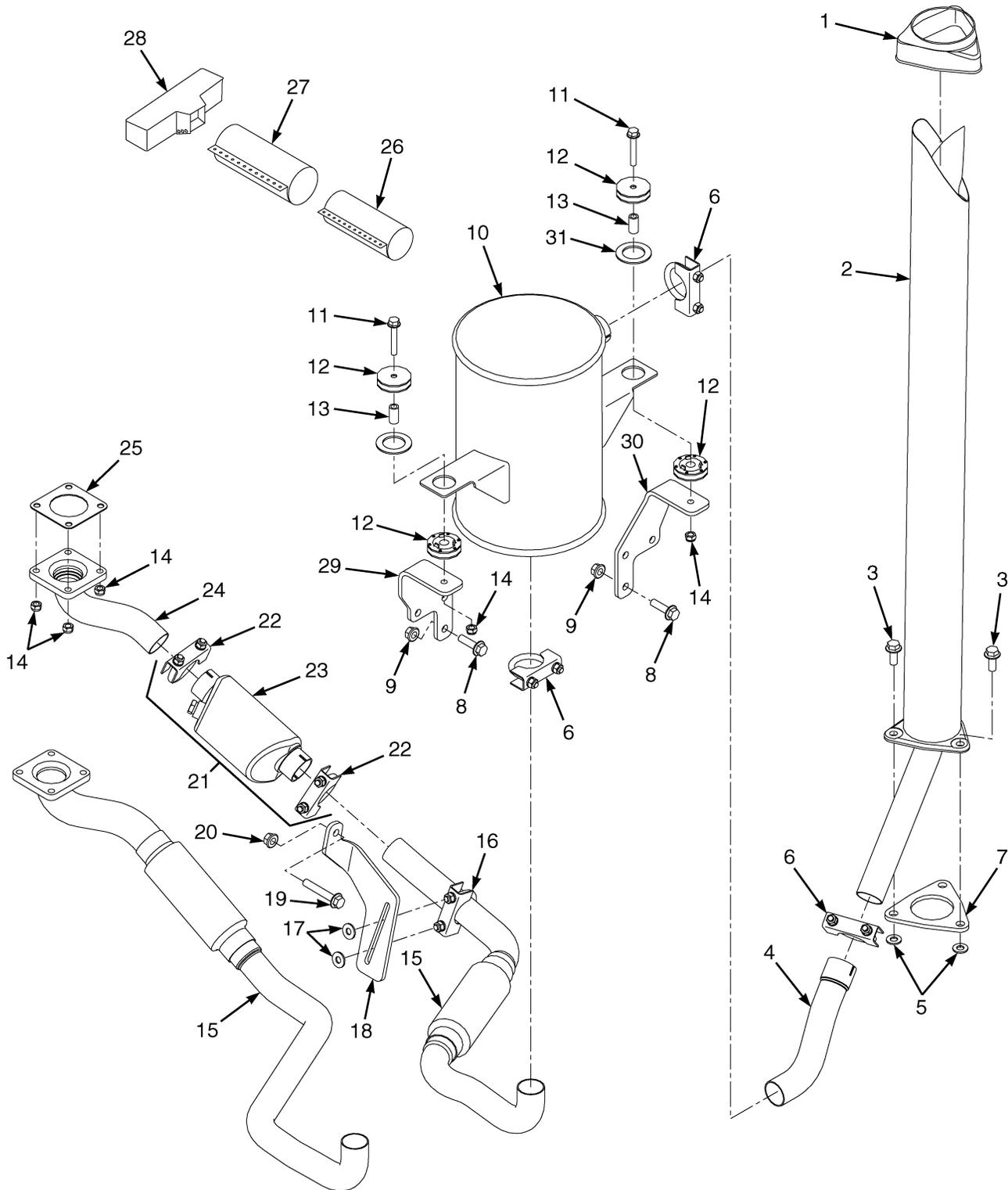


BP060083

**RADIATOR ASSEMBLY  
WITH EXTERNAL OIL COOLER**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
	4603554	Radiator (Assembly) .....	1
1	4038258	Radiator .....	1
2	4038263	Oil Cooler .....	1
3	4038264	Drain Valve .....	1
4	4038265	Nut , Foldover .....	2
5	4038266	Bolt (With Washer) .....	8
5	4038267	Bolt (With Washer) .....	4
6	4142036	Frame (Top) .....	1
7	4142041	Frame (Bottom) .....	1
8	4136558	Isolator .....	2
9	4136559	Collar .....	1

## OVERHEAD EXHAUST SYSTEM (FIGURE 2-3) YANMAR 3.3L, DIESEL — WITH VERTICAL MUFFLER



BP110158

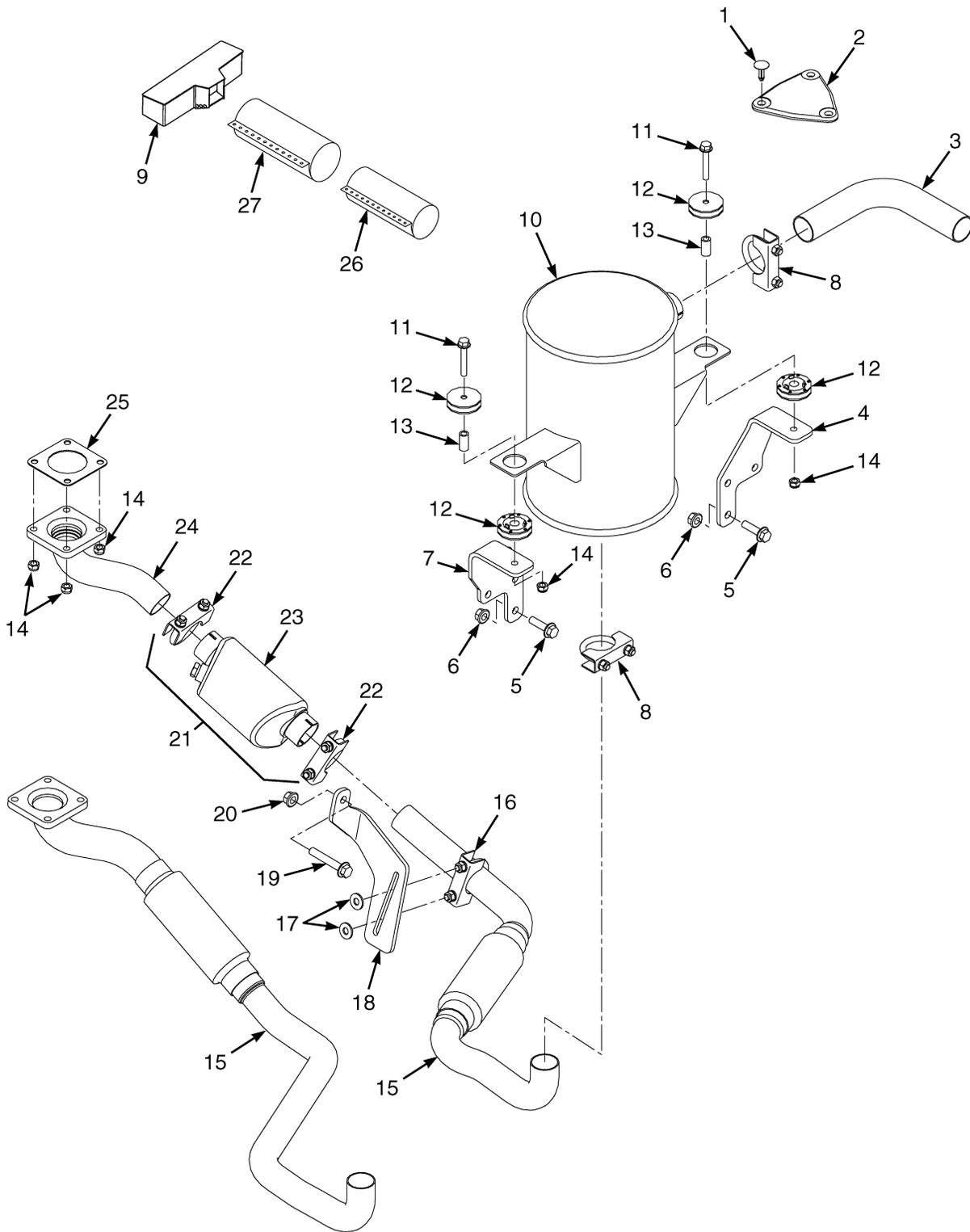
**OVERHEAD EXHAUST SYSTEM**  
**YANMAR 3.3L, DIESEL – WITH VERTICAL MUFFLER**

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

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2021394	Cover .....	1	1
2	4051418	Tail Pipe .....	1	1
3	1510117	Capscrew .....	3	3
4	4612595	Exhaust Pipe (Overhead) .....	1	1
5	320159	Washer .....	3	3
6	63117	Clamp .....	3	3
7	1533639	Cover .....	1	1
8	1527885	Capscrew .....	6	6
9	1460477	Nut .....	6	6
10	4613004	Muffler .....	1	1
11	1510115	Capscrew .....	2	2
12	1709996	Isolator .....	4	4
13	4124257	Spacer .....	2	2
14	1582222	Locknut .....	6	6
15	4604617	Exhaust Pipe .....	..	1
15	4010287	Exhaust Pipe .....	1	..
16	63117	Clamp .....	1	..
17	15175	Lockwasher .....	2	..
18	2109163	Bracket .....	1	..
19	1527887	Capscrew .....	1	..
20	1460477	Nut .....	1	..
21	878258	Diesel Exhaust Purifier (Exhaust) .....	1	..
22	1391757	Clamp .....	2	..
23	1391758	Sock (Fiberglass) .....	2	..
24	1589635	Exhaust Pipe .....	1	..
25	1532363	Gasket .....	1	1
26	<b>a</b> 2084000	Exhaust Wrap .....	1	1
27	<b>a</b> 2084002	Wrap .....	1	1
28	<b>a</b> 2084001	Wrap .....	1	1
29	4120446			
	4139738	Bracket (LH) (LH) .....	1	1
30	4120445			
	4139737	Bracket (RH) (RH) .....	1	1
31	1532585	Washer .....	2	2
	<b>ab</b> 2073024	Wrap (Flex Joint) .....	1	1

**FOOTNOTES:****a** For Paper Industry Applications**b** Not Illustrated

## COUNTERWEIGHT EXHAUST SYSTEM (FIGURE 2-4) YANMAR 3.3L, DIESEL — WITH VERTICAL MUFFLER



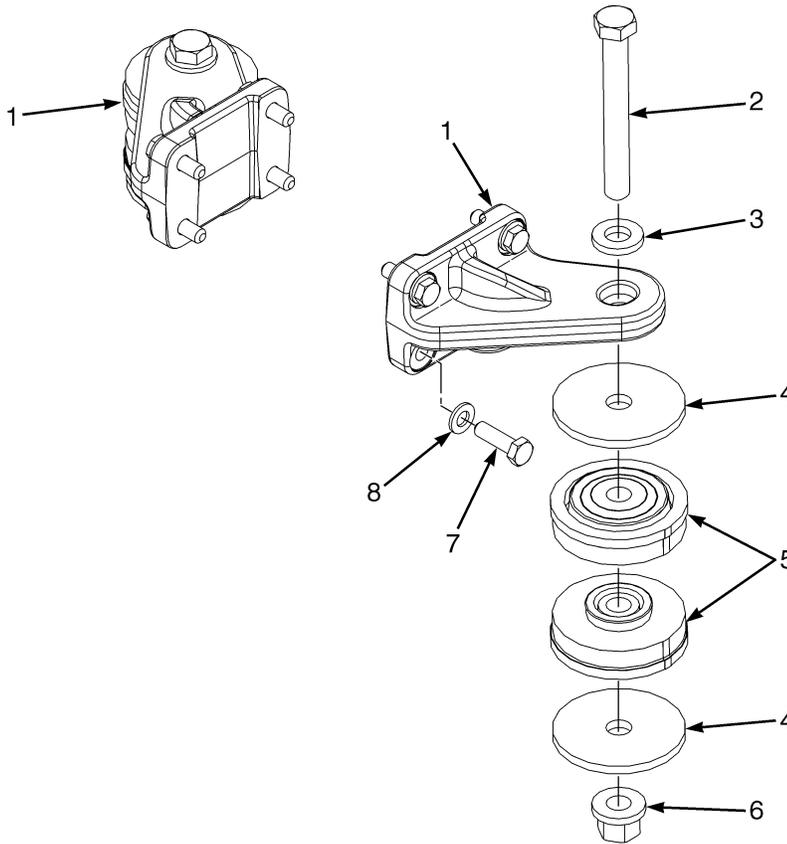
BP110135

**COUNTERWEIGHT EXHAUST SYSTEM  
YANMAR 3.3L, DIESEL – WITH VERTICAL MUFFLER****KEY:****A: With Catalytic Converter****B: Without Catalytic Converter**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1347045	Fastener .....	3	3
2	1533639	Cover .....	1	1
3	1585212	Exhaust Pipe (Counterweight) .....	1	1
4	4120445			
	4139737	Bracket (RH) (RH) .....	1	1
5	1527885	Capscrew .....	6	6
6	1460477	Nut .....	6	6
7	4120446			
	4139738	Bracket (LH) (LH) .....	1	1
8	63117	Clamp .....	2	2
9	<b>a</b> 2084001	Wrap .....	1	1
10	4613004	Muffler .....	1	1
11	1510115	Capscrew .....	3	3
12	1709996	Isolator .....	4	4
13	4124257	Spacer .....	2	2
14	1582222	Locknut .....	6	6
15	4604617	Exhaust Pipe .....	..	1
15	4010287	Exhaust Pipe .....	1	..
16	63117	Clamp .....	1	..
17	15175	Lockwasher .....	2	..
18	2109163	Bracket .....	1	..
19	1527887	Capscrew .....	1	..
20	1460477	Nut .....	1	..
21	878258	Diesel Exhaust Purifier (Exhaust) .....	1	..
22	1391757	Clamp .....	2	..
23	1391758	Sock (Fiberglass) .....	2	..
24	1589635	Exhaust Pipe .....	1	..
25	1532363	Gasket .....	1	1
26	<b>a</b> 2084000	Exhaust Wrap .....	1	1
27	<b>a</b> 2084002	Wrap .....	1	1
	<b>ab</b> 2073024	Wrap (Flex Joint) .....	1	1
99	4651366	Exhaust Wrap .....	1	..

**FOOTNOTES:****a** For Paper Industry Applications**b** Not Illustrated

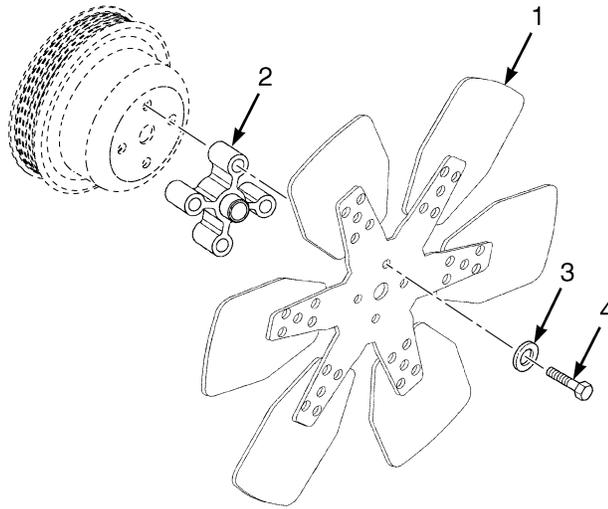
## ENGINE MOUNTING (FIGURE 2-5) YANMAR 3.3L, DIESEL



BP090419

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

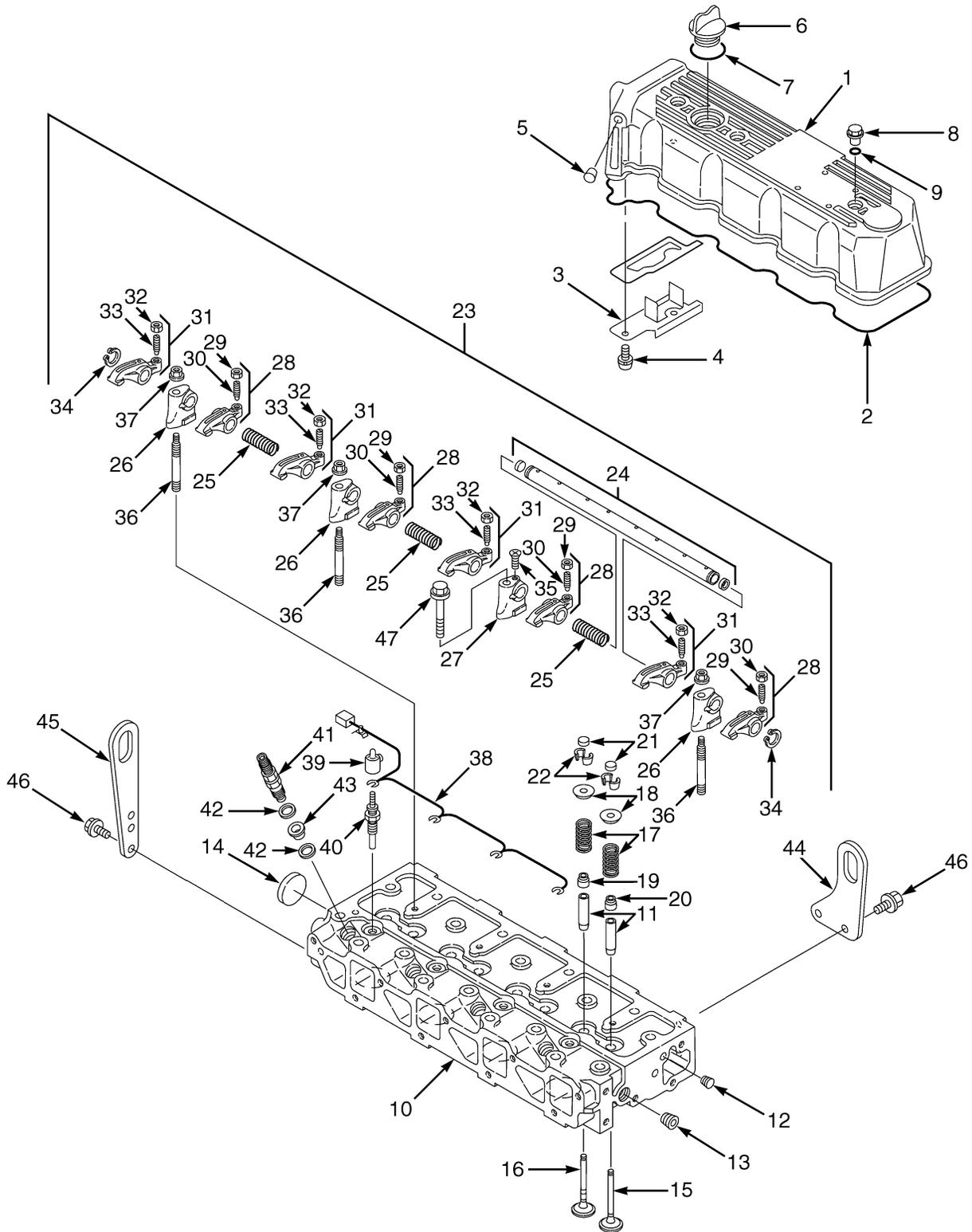
**FAN ASSEMBLY (FIGURE 2-6)  
YANMAR DIESEL**



BP090418

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

## CYLINDER HEAD (FIGURE 2-7) YANMAR 3.3L, DIESEL

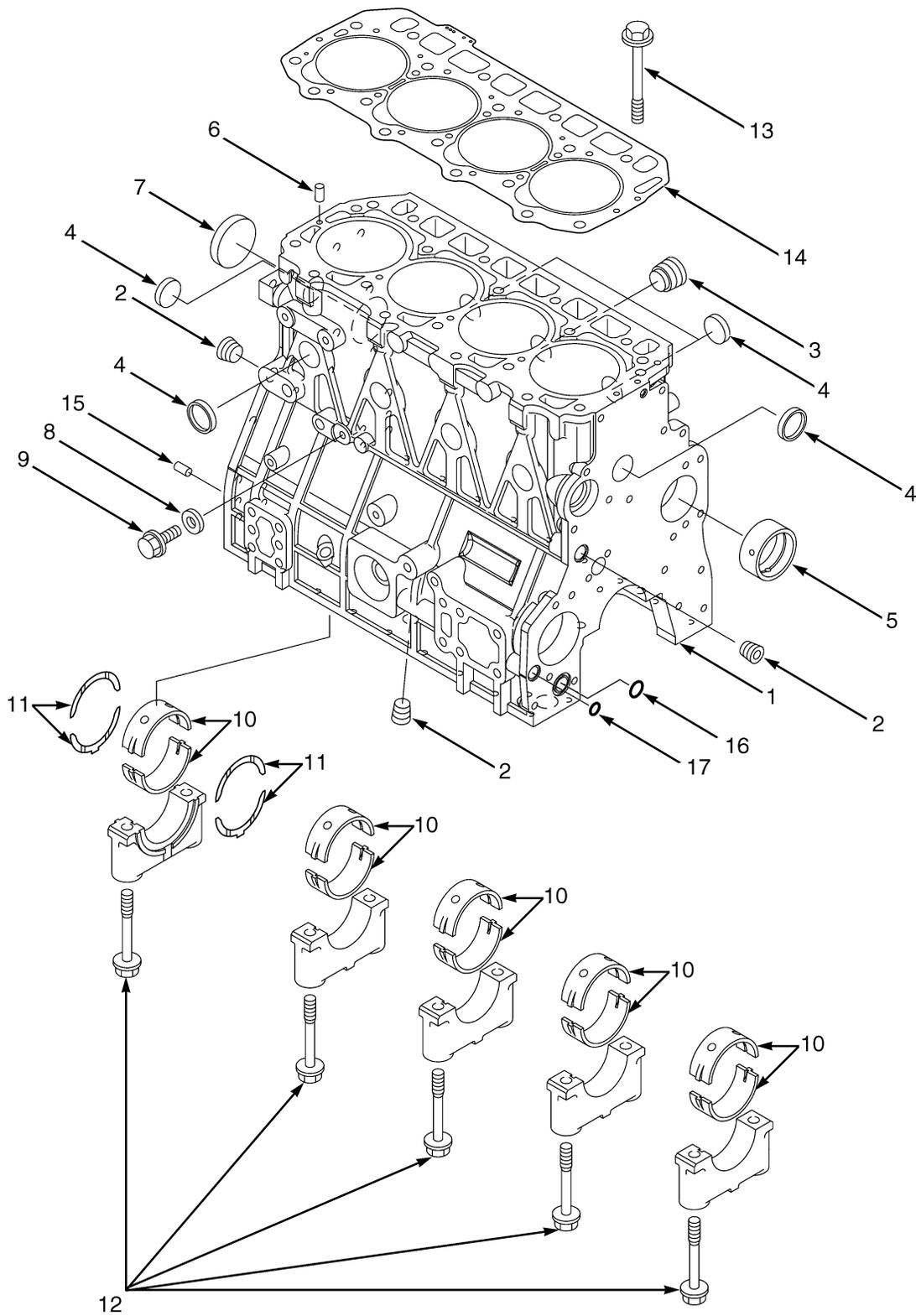


BP090184

**CYLINDER HEAD  
YANMAR 3.3L, DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	4626064	Engine Assy-Diesel (Yanmar 3.3L Non-Emissions) .....	1
1	1599545	Engine Cover .....	1
2	1599546	Gasket .....	1
3	1599547	Plate .....	1
4	1599548	Screw .....	2
5	1599549	Plug .....	1
6	1599463	Cap (Oil Fill) .....	1
7	1599464	O-Ring .....	1
8	1599544	Plug .....	3
9	1599550	O-Ring .....	3
10	1600273	Cylinder Head (3.3L) .....	1
11	1599525	Guide .....	8
12	1599526	Plug .....	1
13	1599441	Plug .....	1
14	1599528	Plug .....	1
15	1599489	Inlet Valve .....	4
16	1599516	Exhaust Valve .....	4
17	1599517	Spring .....	8
18	1599518	Retainer .....	8
19	1599519	Seal (Exhaust Valve) .....	4
20	1599520	Seal (Intake Valve) .....	4
21	1599521	Cap .....	8
22	1599529	Retainer .....	8
23	1599530	Support Assembly (Rocker Arm) .....	1
24	1599531	Shaft .....	1
25	1599532	Spring .....	3
26	1599533	Support .....	3
27	1599534	Support .....	1
28	1599535	Kit-Rocker Arm .....	4
29	1599536	Screw .....	1
30	1599537	Nut .....	1
31	1599538	Kit-Rocker Arm .....	4
32	1599536	Screw .....	1
33	1599537	Nut .....	1
34	1599539	Retaining Ring .....	2
35	1599540	Screw .....	1
36	1599541	Stud .....	3
37	1599542	Nut .....	3
38	2084316	Connector (Glow Plug) (3.3L) .....	1
39	1599557	Cover .....	4
40	4068196	Plug (Glow Plug) (3.3L) .....	4
41	1599818	Injector (☞Figure 5-7).....	4
42	1599523	Gasket .....	8
43	1599522	Protector .....	4
44	1599487	Lifting Eye .....	1
45	1599486	Lifting Eye .....	1
46	1599470	Bolt .....	4
47	1599555	Bolt .....	1
	1689744	Kit-Gasket (Complete Engine) (3.3L) (Includes Items 2, 7, 9, 19-20, 42-43) .....	1

## CYLINDER BLOCK (FIGURE 2-8) YANMAR 3.3L, DIESEL

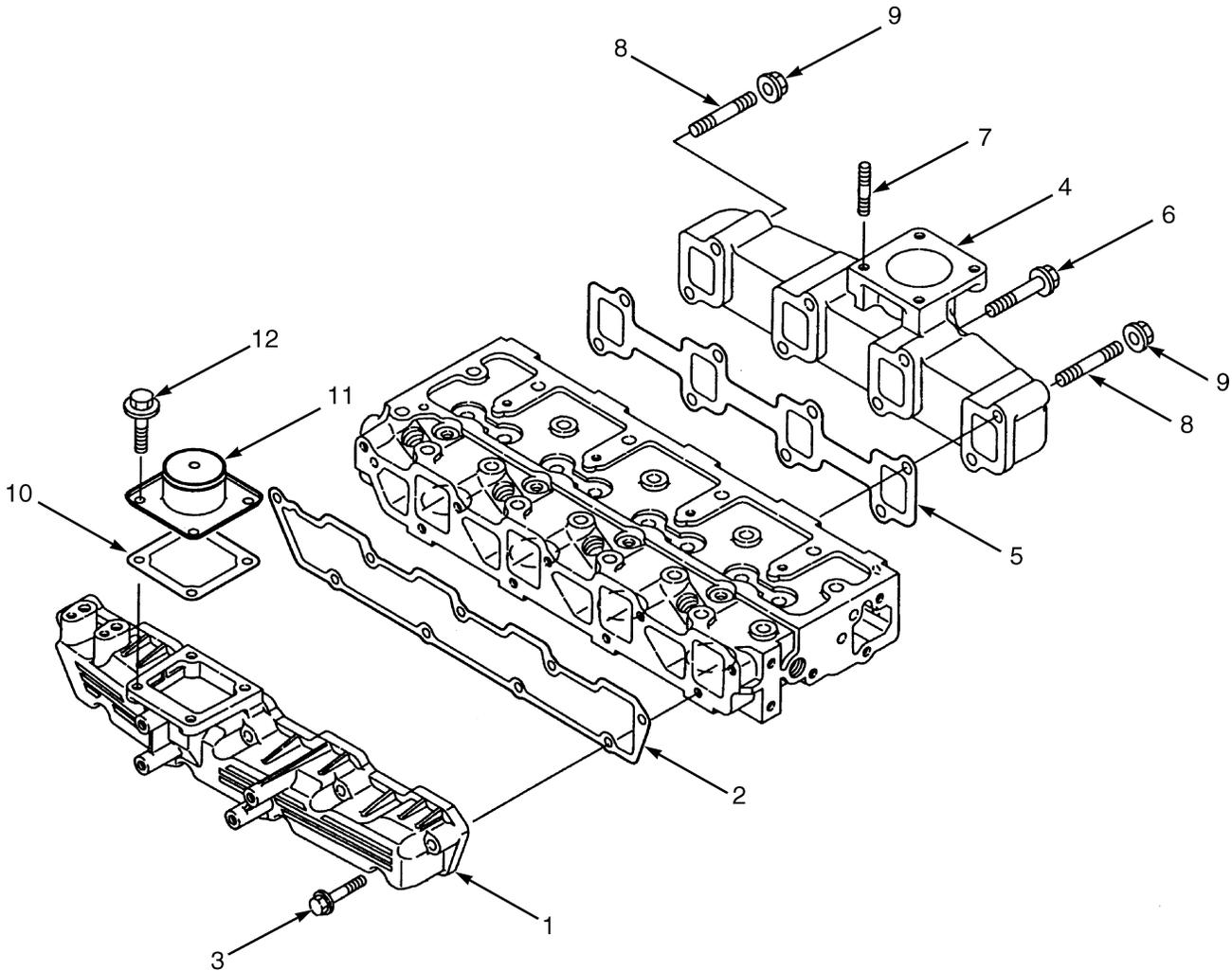


BP090181

**CYLINDER BLOCK  
YANMAR 3.3L, DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	4626064	Engine Assy-Diesel (Yanmar 3.3L Non-Emissions) .....	1
1	1689742	Cylinder Block (3.3L) .....	1
2	1599441	Plug .....	3
3	1599442	Plug .....	1
4	1599451	Plug .....	8
5	1599444	Bushing .....	1
6	1599446	Cotter Pin .....	2
7	1599449	Plug .....	1
8	1599445	Washer .....	1
9	1599448	Bolt .....	1
10	2092548	Kit-Crankshaft Bearing (Standard) .....	5
10	2092549	Kit-Bearing (U/S 0.25) .....	5
11	2092552	Kit-Thrust Bearing (Standard) .....	2
11	2092553	Kit-Thrust Bearing (U/S 0.25) .....	2
12	1599443	Bolt .....	10
13	1599454	Bolt .....	18
14	1720519	Gasket (3.3L) .....	1
15	1599458	Pin .....	2
16	1599468	O-Ring .....	1
17	1599469	O-Ring .....	1
	1689744	Kit-Gasket (Complete Engine) (3.3L) (Includes Items 8, 14, 16-17) .....	1

## INTAKE AND EXHAUST MANIFOLD (FIGURE 2-9) YANMAR 3.3L, DIESEL

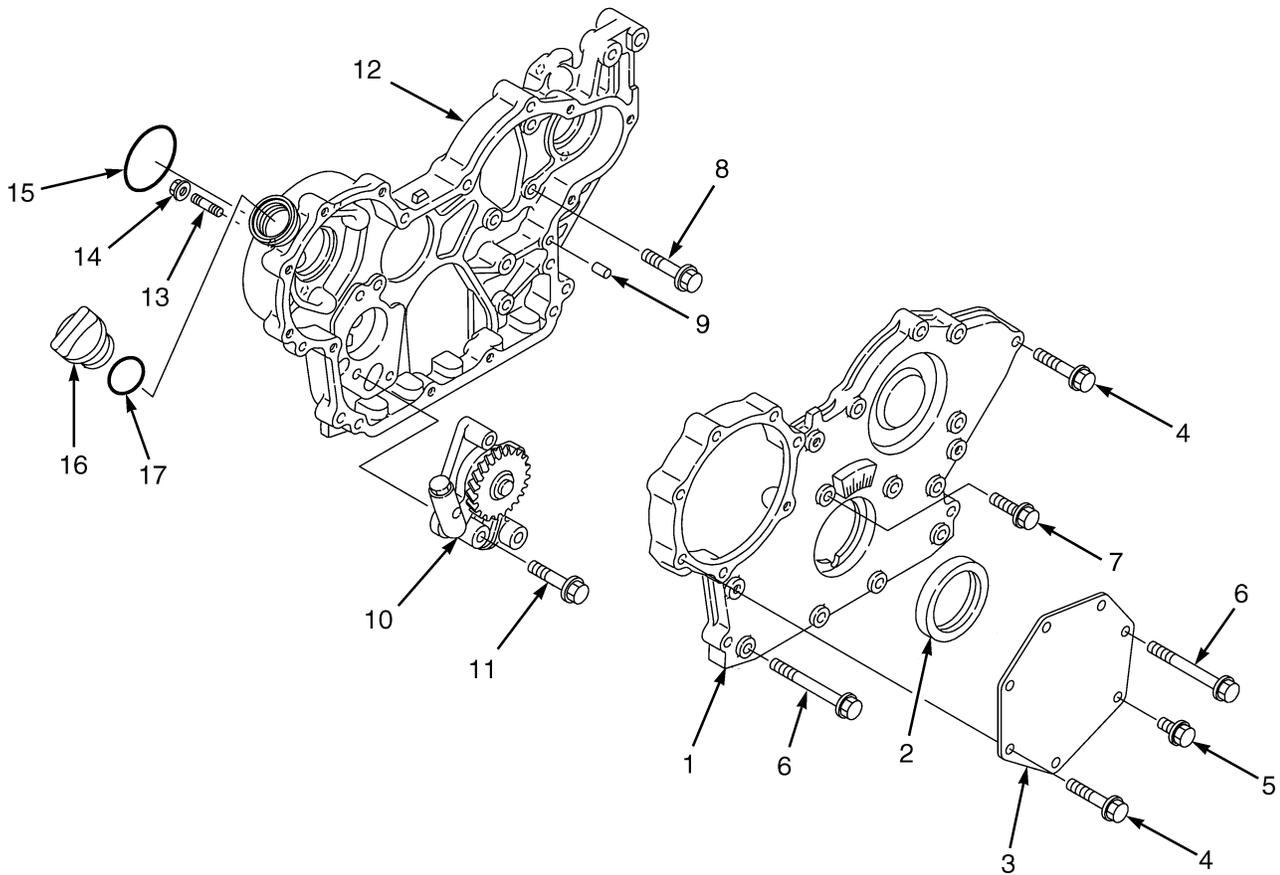


BP090185

**INTAKE AND EXHAUST MANIFOLD  
YANMAR 3.3L, DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	4626064	Engine Assy-Diesel (Yanmar 3.3L Non-Emissions) .....	1
1	1599556	Intake Manifold .....	1
2	1599543	Gasket .....	1
3	1599475	Bolt .....	9
4	1599559	Exhaust Manifold .....	1
5	1599560	Gasket .....	1
6	1599561	Bolt .....	9
7	1599562	Stud .....	4
8	1599563	Stud .....	2
9	2068378	Nut .....	2
10	1599565	Gasket .....	1
11	1599567	Adapter .....	1
12	1599568	Bolt .....	4
	1689744	Kit-Gasket (Complete Engine) (3.3L) .....	1

## GEAR HOUSING (FIGURE 2-10) YANMAR 3.3L, DIESEL

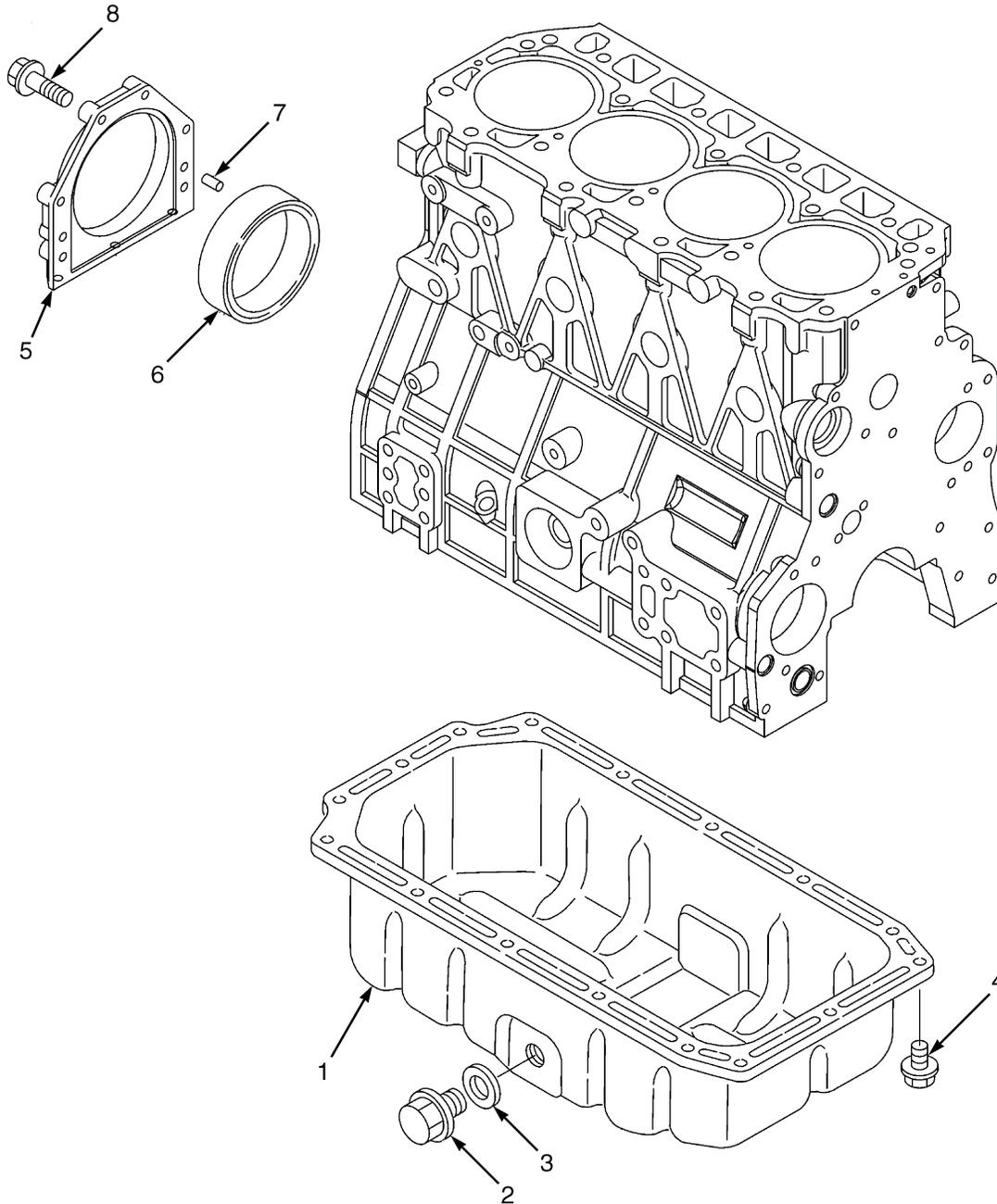


BP090182

**GEAR HOUSING  
YANMAR 3.3L, DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	4626064	Engine Assy-Diesel (Yanmar 3.3L Non-Emissions) .....	1
1	2101708	Gear Cover Assembly .....	1
2	1599460	Oil Seal .....	1
2	2100927	Oil Seal .....	1
3	1599461	Cover .....	1
4	1599473	Bolt .....	10
5	1599470	Bolt .....	1
6	1599476	Bolt .....	7
7	1599472	Bolt .....	1
8	1599471	Bolt .....	3
9	1599458	Pin .....	4
10	1599466	Engine Oil Pump .....	1
11	1599475	Bolt .....	1
12	1599465	Cover .....	1
13	1599467	Stud .....	3
14	2068378	Nut .....	3
15	1599462	O-Ring .....	1
16	1599463	Cap (Oil Fill) .....	1
17	1599464	O-Ring .....	1
	1599478	Gasket (Liquid) .....	AR
	2084312	Gasket (Liquid) .....	1
	1689744	Kit-Gasket (Complete Engine) (3.3L) (Includes Items 15, 17) .....	1

## OIL PAN (FIGURE 2-11) YANMAR 3.3L, DIESEL

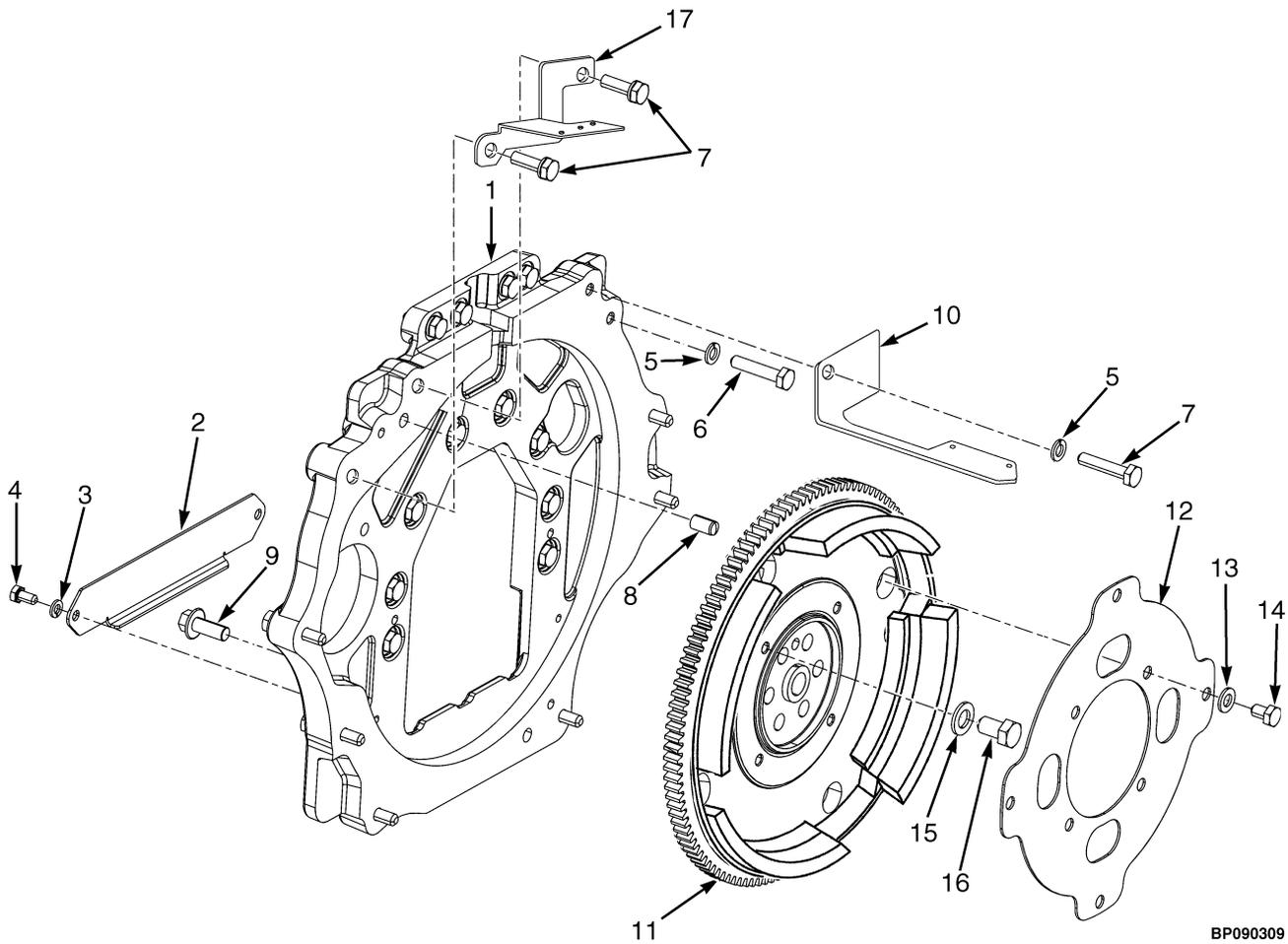


BP090183

**OIL PAN  
YANMAR 3.3L, DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	4626064	Engine Assy-Diesel (Yanmar 3.3L Non-Emissions) .....	1
1	1599479	Oil Pan .....	1
2	1599480	Drain Plug .....	1
3	1599481	Oil Seal .....	1
4	1599448	Bolt .....	16
5	1599483	Case (3.3L) .....	1
6	<del>1599484</del> 1707826	Seal .....	1
7	1599458	Pin .....	2
8	1599485	Bolt .....	6
	1599478	Gasket (Liquid) (Not Illustrated) .....	AR
	1689744	Kit-Gasket (Complete Engine) (3.3L) (Includes Items 3, 9) .....	1

## FLYWHEEL AND HOUSING (FIGURE 2-12) YANMAR 3.3L, DIESEL



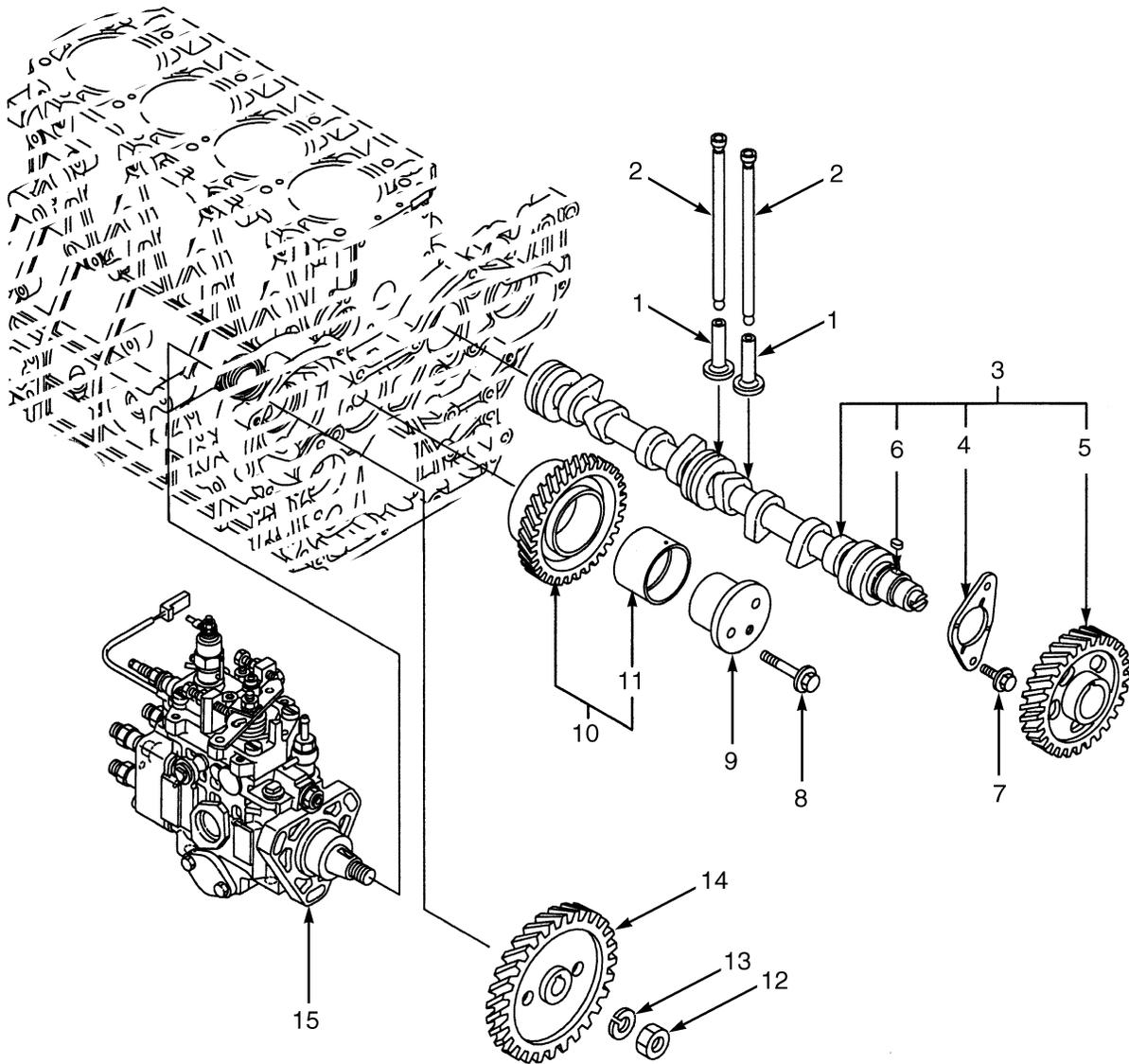
BP090309

**FLYWHEEL AND HOUSING  
YANMAR 3.3L, DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
1	1553265	Housing .....	1
2	1522363	Cover .....	1
3	292681	Lockwasher .....	2
4	287851	Capscrew .....	2
5	<del>388049</del>		
	292682	Lockwasher .....	22
6	136985	Capscrew .....	12
7	292517	Capscrew .....	10
8	303150	Dowel .....	2
9	1528889	Capscrew .....	2
10	1653569	Bracket .....	1
11	1707341	Flywheel .....	1
11	1506604	Starter Ring Gear .....	1
12	1531806	Flex Plate .....	1
13	296420	Washer .....	4
14	293626	Capscrew .....	4
15	296424	Washer .....	6
16	1550747	Capscrew .....	6
17	1623093	Bracket .....	1
99	<b>a</b> 1534417	Capscrew .....	2
99	<b>a</b> 1625999	Dust Cover .....	1

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

## CAMSHAFT AND DRIVE GEAR (FIGURE 2-13) YANMAR 3.3L, DIESEL

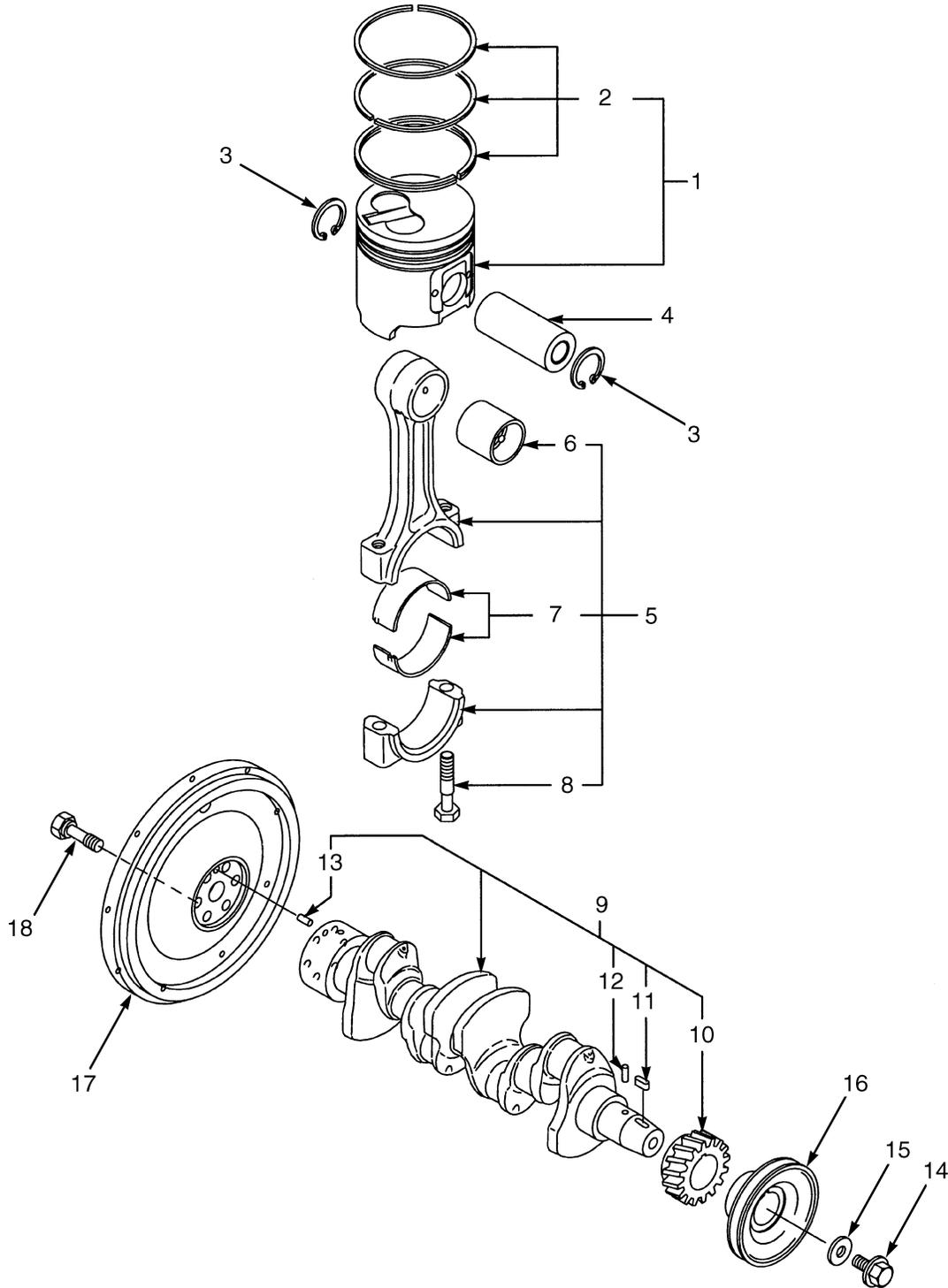


BP090186

**CAMSHAFT AND DRIVE GEAR  
YANMAR 3.3L, DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	4626064	Engine Assy-Diesel (Yanmar 3.3L Non-Emissions) .....	1
1	1599569	Tappet .....	8
2	1599570	Push Rod .....	8
3	1599571	Camshaft (3.3L) .....	1
4	1599572	Retainer .....	1
5	1599573	Gear (3.3L) .....	1
6	1599574	Key .....	1
7	1599470	Bolt .....	2
7	1599568	Bolt .....	2
8	1599579	Bolt .....	2
9	1599576	Shaft .....	1
10	<del>1599577</del>		
	4021292	Idler Gear .....	1
11	1599578	Bushing .....	1
12	1599582	Locknut .....	1
13	1599581	Spring Washer .....	1
14	1599580	Gear .....	1
15	1689747	Fuel Pump (3.3L) (☞ Figure 5-7).....	1

**CRANKSHAFT AND PISTONS (FIGURE 2-14)**  
**YANMAR 3.3L, DIESEL**

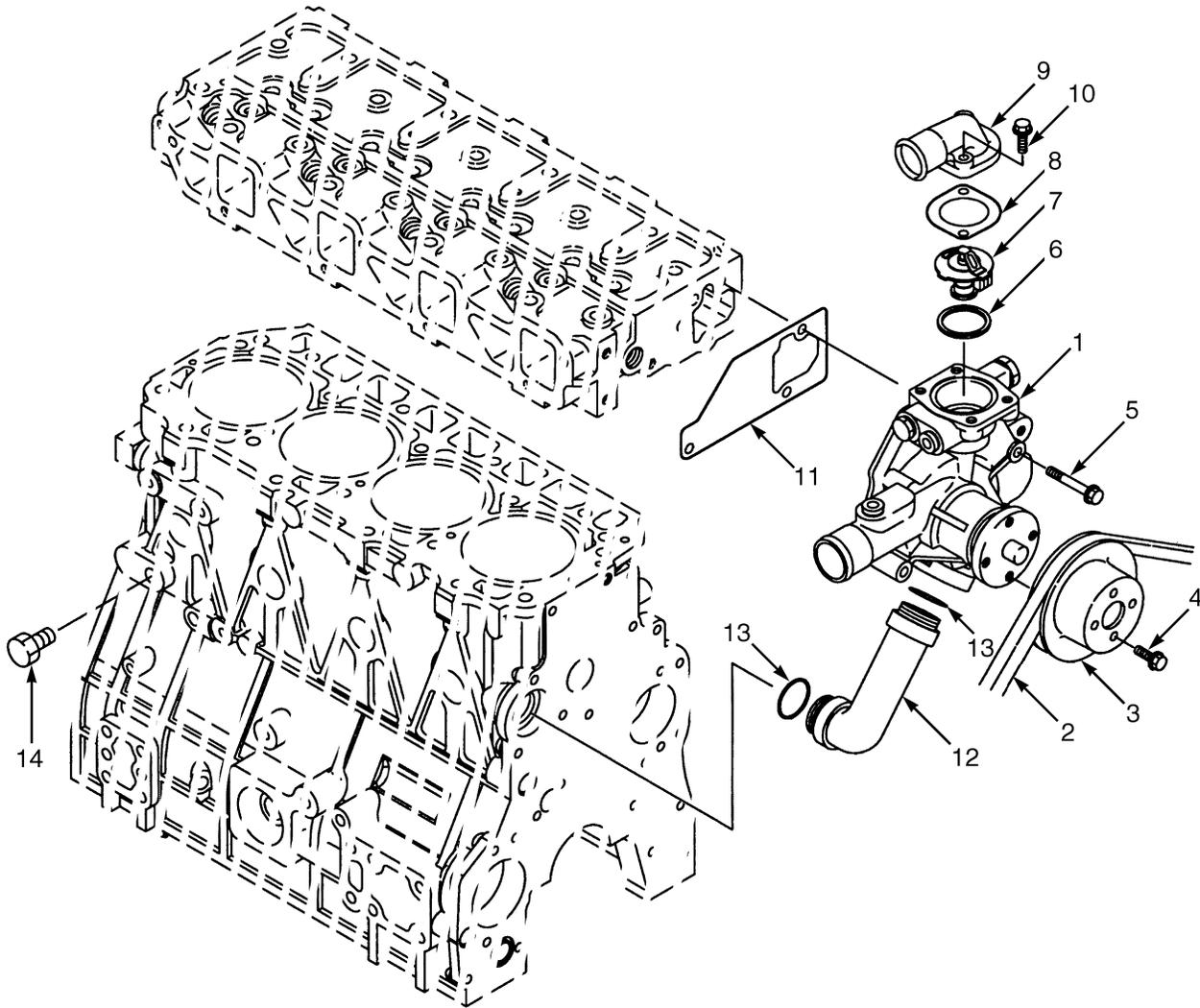


BP090187

**CRANKSHAFT AND PISTONS  
YANMAR 3.3L, DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	4626064	Engine Assy-Diesel (Yanmar 3.3L Non-Emissions) .....	1
1	1600276	Piston (With Standard Rings) (3.3L) .....	4
1	1600278	Piston (O/S 0.25 with Rings) (3.3L) .....	4
2	1600277	Kit-Piston Ring (Standard) (3.3L) .....	1
2	1600279	Kit-Piston Ring (O/S 0.25) (3.3L) .....	1
3	1599595	Snap Ring .....	8
4	1599594	Pin .....	4
5	1599596	Piston Rod .....	4
6	1599597	Bushing .....	1
7	2092550	Piston Rod Bearing (Standard) .....	1
7	2092551	Bearing (U/S 0.25) .....	4
8	1599598	Bolt .....	2
9	1600275	Crankshaft (3.3L) .....	1
10	1599584	Gear (3.3L) .....	1
11	1599574	Key .....	1
12	1599585	Pin .....	1
13	1599586	Pin .....	1
14	1599590	Bolt (3.3L) .....	1
15	1599589	Washer .....	1
16	1599588	Pulley .....	1
17	1707341	Flywheel .....	1
18	1599591	Bolt .....	6

## ENGINE COOLING (FIGURE 2-15) YANMAR 3.3L, DIESEL



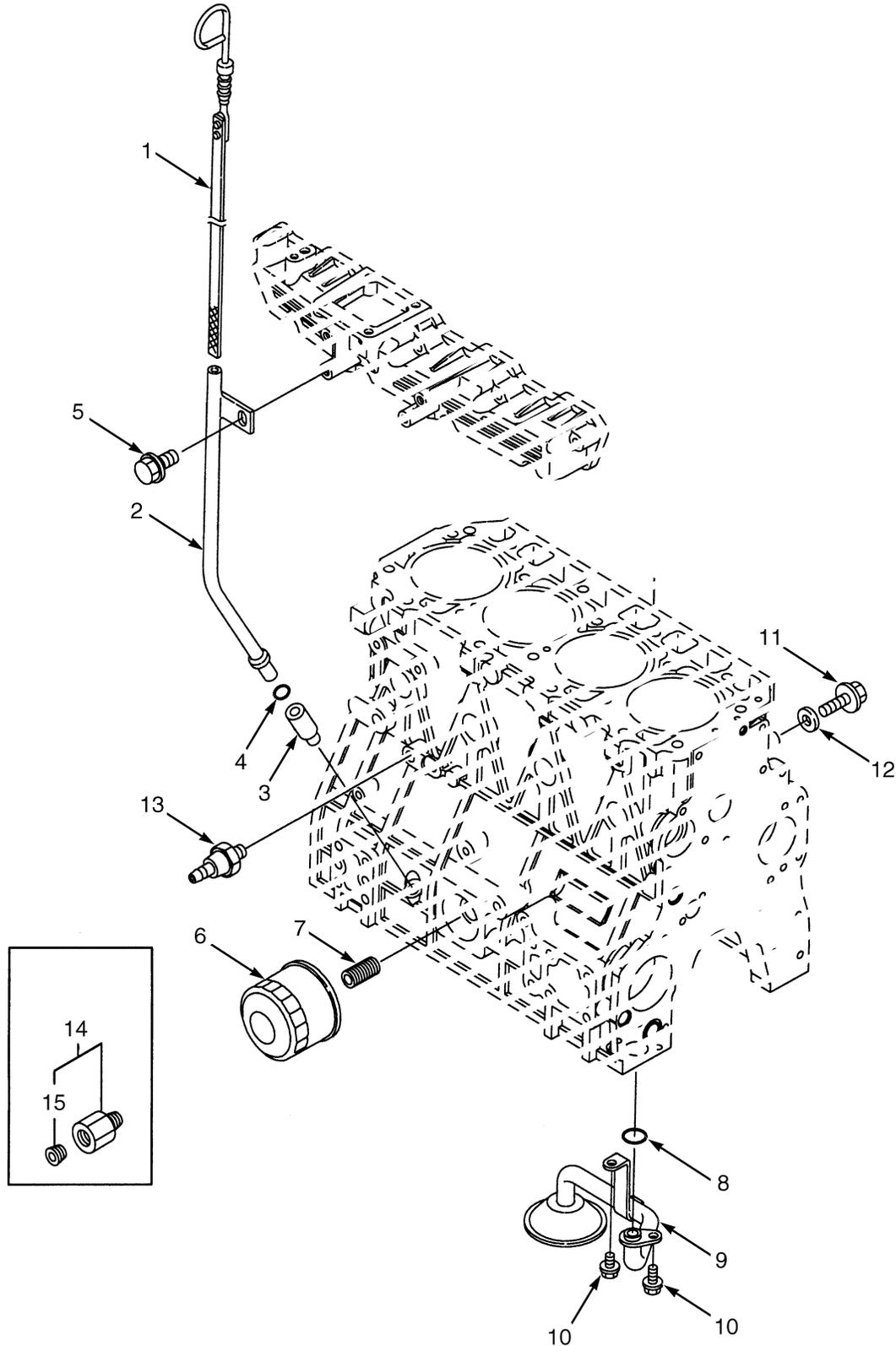
BP090193

**ENGINE COOLING  
YANMAR 3.3L, DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	4626064	Engine Assy-Diesel (Yanmar 3.3L Non-Emissions) .....	1
1	1599804	Water Pump .....	1
1	<b>a</b> 1599815	Gasket .....	1
1	<b>a</b> 1600086	Seal .....	1
2	1581441	V-Belt .....	1
3	1616427	Water Pump Pulley .....	1
4	1599448	Bolt .....	4
5	1599579	Bolt .....	3
6	1597709	Gasket .....	1
7	1599800	Thermostat (3.3L) .....	1
8	1597710	Gasket .....	1
9	1599798	Cover .....	1
10	1599801	Bolt .....	1
11	1599803	Gasket .....	1
12	1599797	Pipe .....	1
13	1599807	O-Ring .....	2
14	1599802	Drain Plug .....	2
	1689744	Kit-Gasket (Complete Engine) (3.3L) (Includes Items 11-13) .....	1

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

## LUBRICATION SYSTEM (FIGURE 2-16) YANMAR 3.3L, DIESEL



BP090188

**LUBRICATION SYSTEM  
YANMAR 3.3L, DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	4626064	Engine Assy-Diesel (Yanmar 3.3L Non-Emissions) .....	1
1	1599604	Dipstick .....	1
2	1599606	Dipstick Tube .....	1
3	1599605	Guide .....	1
4	1599607	O-Ring (3.3L) .....	1
5	1599470	Bolt .....	1
6	2077983	Oil Filter .....	1
7	1599610	Stud .....	1
8	1599468	O-Ring .....	1
9	1599611	Pipe .....	1
10	1599612	Bolt (3.3L) .....	2
11	1599448	Bolt .....	1
12	1599445	Washer .....	1
13	1566654	Pressure Transducer Sensor (Oil Pressure) (3.3L) .....	1
14	1599616	Plug (Oil Pressure Sensor) .....	1
15	1599793	Plug .....	1
	1689744	Kit-Gasket (Complete Engine) (3.3L) (Includes Items 4, 8, 12) .....	1



**3**

**ENGINE ASSEMBLY-PSI**



**SECTION 3  
ENGINE ASSEMBLY-PSI**

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**SECTION 3  
ENGINE ASSEMBLY-PSI**

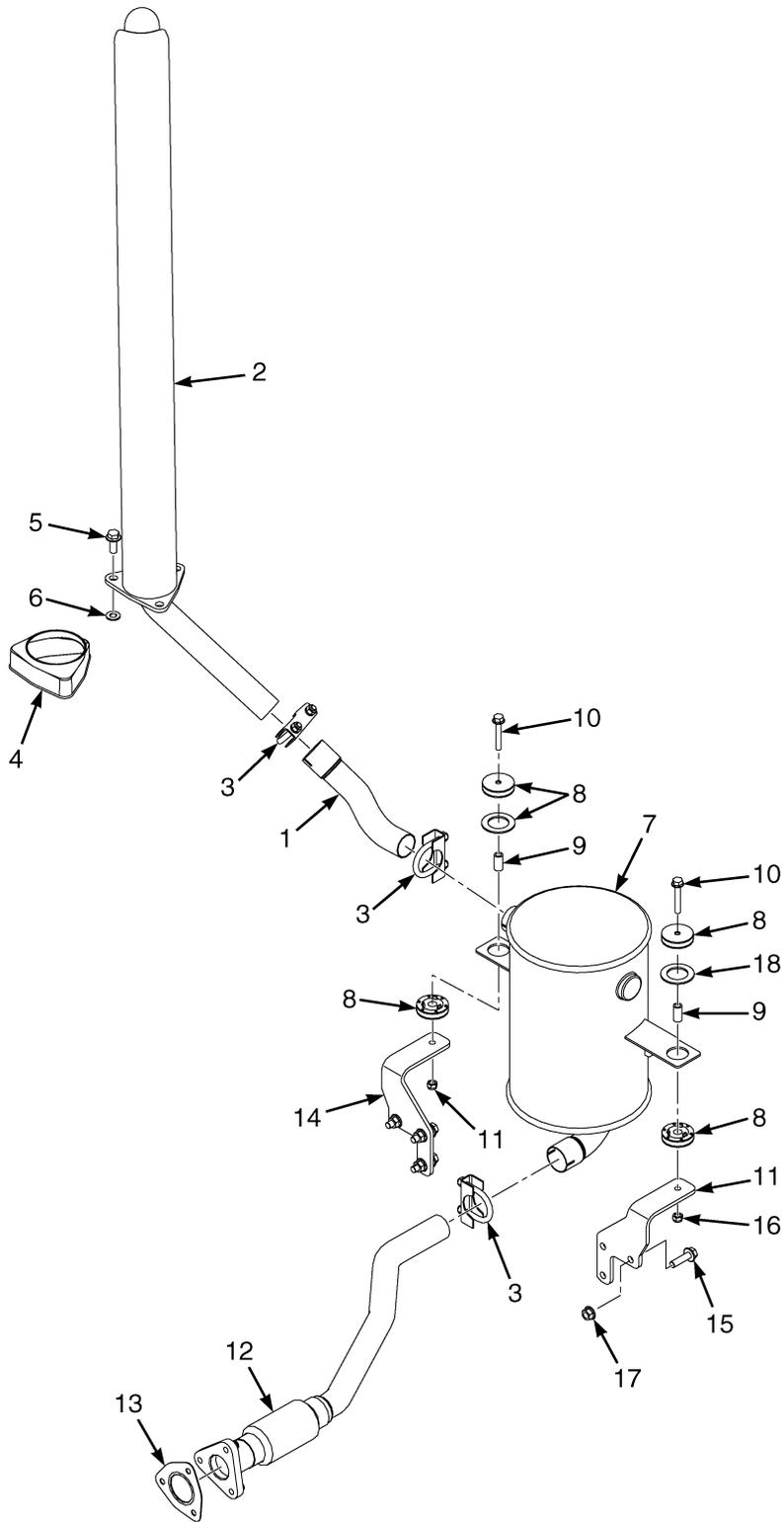
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DESCRIPTION	PAGE
WATER PUMP	
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## EXHAUST SYSTEM (FIGURE 3-1) COUNTERWEIGHT EXHAUST WITHOUT CATALYTIC CONVERTER — PSI 2.4L LPG

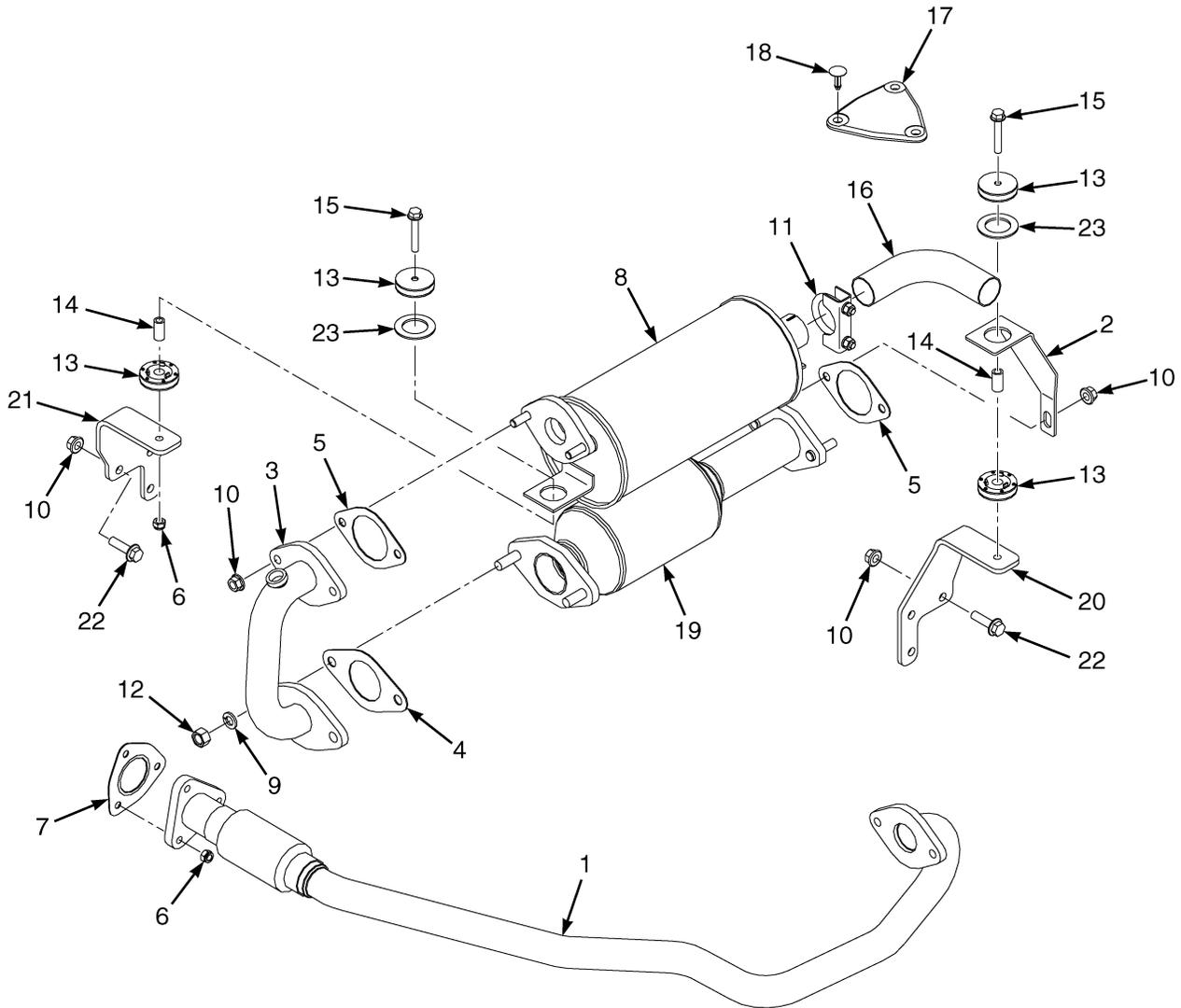


BP110157

**EXHAUST SYSTEM**  
**COUNTERWEIGHT EXHAUST WITHOUT CATALYTIC CONVERTER – PSI 2.4L LPG**

ITEM	PART NO.	DESCRIPTION	QTY
1	1585212	Exhaust Pipe .....	1
2	4051418	Tail Pipe (Not Used) .....	..
3	63117	Clamp .....	2
4	1533639	Cover .....	1
5	1510117	Capscrew (Not Used) .....	..
6	320159	Washer (Not Used) .....	..
7	4613003	Muffler .....	1
8	1709996	Isolator .....	4
9	4124257	Spacer .....	2
10	1510115	Capscrew .....	2
11	<del>4120446</del>		
	4139738	Bracket (LH) .....	1
12	4074547	Exhaust Pipe .....	1
13	4110365	Gasket .....	1
14	<del>4120445</del>		
	4139737	Bracket (RH) .....	1
15	1527885	Capscrew .....	4
16	1582222	Locknut .....	2
17	1460477	Nut .....	4
18	1532585	Washer .....	2
99	1347045	Fastener .....	3

## EXHAUST SYSTEM (FIGURE 3-2) COUNTERWEIGHT EXHAUST WITH CATALYTIC CONVERTER — PSI 2.4L LPG

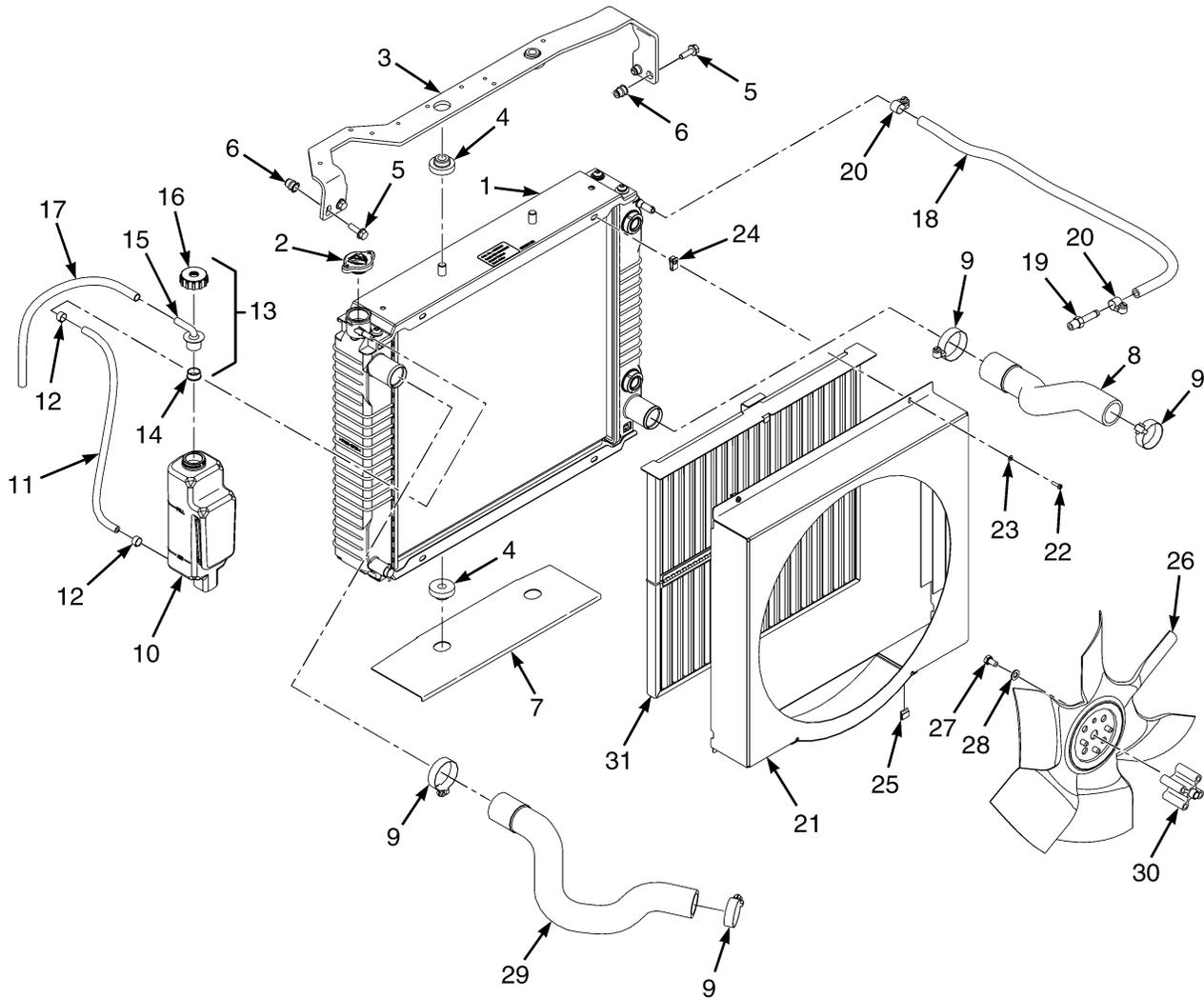


BP110155

**EXHAUST SYSTEM**  
**COUNTERWEIGHT EXHAUST WITH CATALYTIC CONVERTER – PSI 2.4L LPG**

ITEM	PART NO.	DESCRIPTION	QTY
1	4073967	Exhaust Pipe .....	1
2	1532523	Bracket .....	1
3	4011286	Exhaust Pipe .....	1
4	4086500	Gasket .....	1
5	4086499	Gasket .....	1
6	1582222	Locknut .....	5
7	4110365	Gasket .....	1
8	2089895	Muffler (Crimped) .....	1
9	292683	Lockwasher .....	2
10	1460477	Nut .....	10
11	63117	Clamp .....	1
12	1469405	Nut .....	2
13	1709996	Isolator .....	4
14	4124257	Spacer .....	2
15	1510115	Capscrew .....	2
16	1589312	Exhaust Pipe .....	1
17	1533639	Cover .....	1
18	1347045	Fastener .....	3
19	4060812	Catalytic Converter .....	1
20	<del>4120445</del>		
	4139737	Bracket (RH) .....	1
21	<del>4120446</del>		
	4139738	Bracket (LH) .....	1
22	1527885	Capscrew .....	6
23	1532585	Washer .....	2

## COOLING SYSTEM (FIGURE 3-3) 2.4L PSI ENGINE

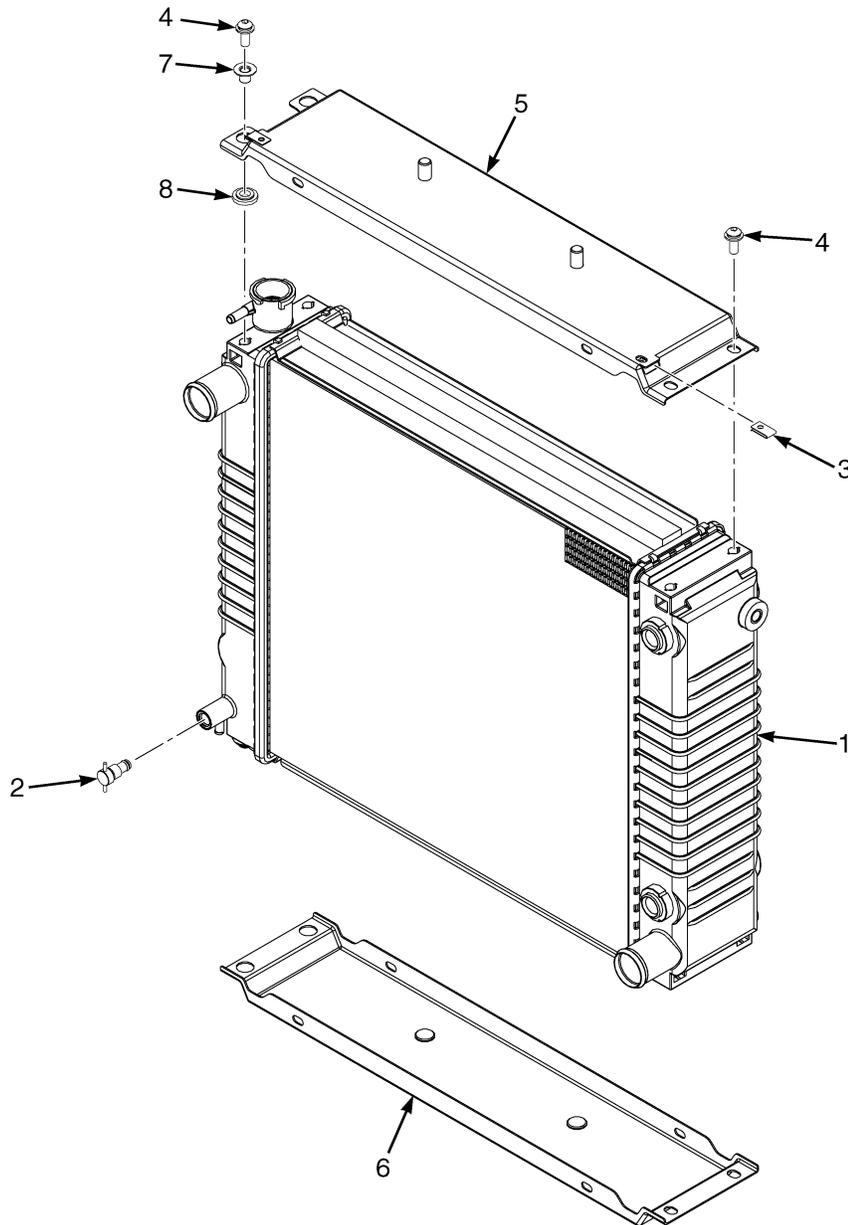


BP060123

**COOLING SYSTEM  
2.4L PSI ENGINE**

ITEM	PART NO.	DESCRIPTION	QTY
1	4628074	Radiator Assembly (☞ Figure 3-4).....	1
2	1352140	Radiator Cap .....	1
3	4085712	Bracket .....	1
4	1529787	Isolator .....	4
5	1527881	Capscrew .....	4
6	1530243	Insert .....	4
7	1565692	Exhaust Shield .....	1
8	4628004	Radiator Hose .....	1
9	369804	Clamp .....	4
10	1633307	Reservoir .....	1
11	1567674	Hose .....	1
12	369815	Clamp .....	2
13	345455	Outlet Assembly .....	1
14	336550	Bushing .....	1
15	345453	Outlet (Reservoir) .....	1
16	345454	Cap .....	1
17	<del>339735</del> 1663877	Hose .....	1
18	4628432	Hose .....	1
19	.....	Fitting .....	1
20	166857	Clamp .....	2
21	4629359	Shroud .....	1
22	302023	Screw .....	2
23	320154	Washer .....	2
24	1535257	Nut .....	2
25	1329271	Clip .....	2
26	4618615	Fan .....	1
27	293622	Capscrew .....	4
28	296418	Washer .....	4
29	4625277	Radiator Hose .....	1
30	1377795	Spacer .....	1
31	1582078	Screen .....	1
	4633941	Wrap (Bottom Radiator Hose) .....	1

## RADIATOR ASSEMBLY (FIGURE 3-4) PSI 2.4L LPG

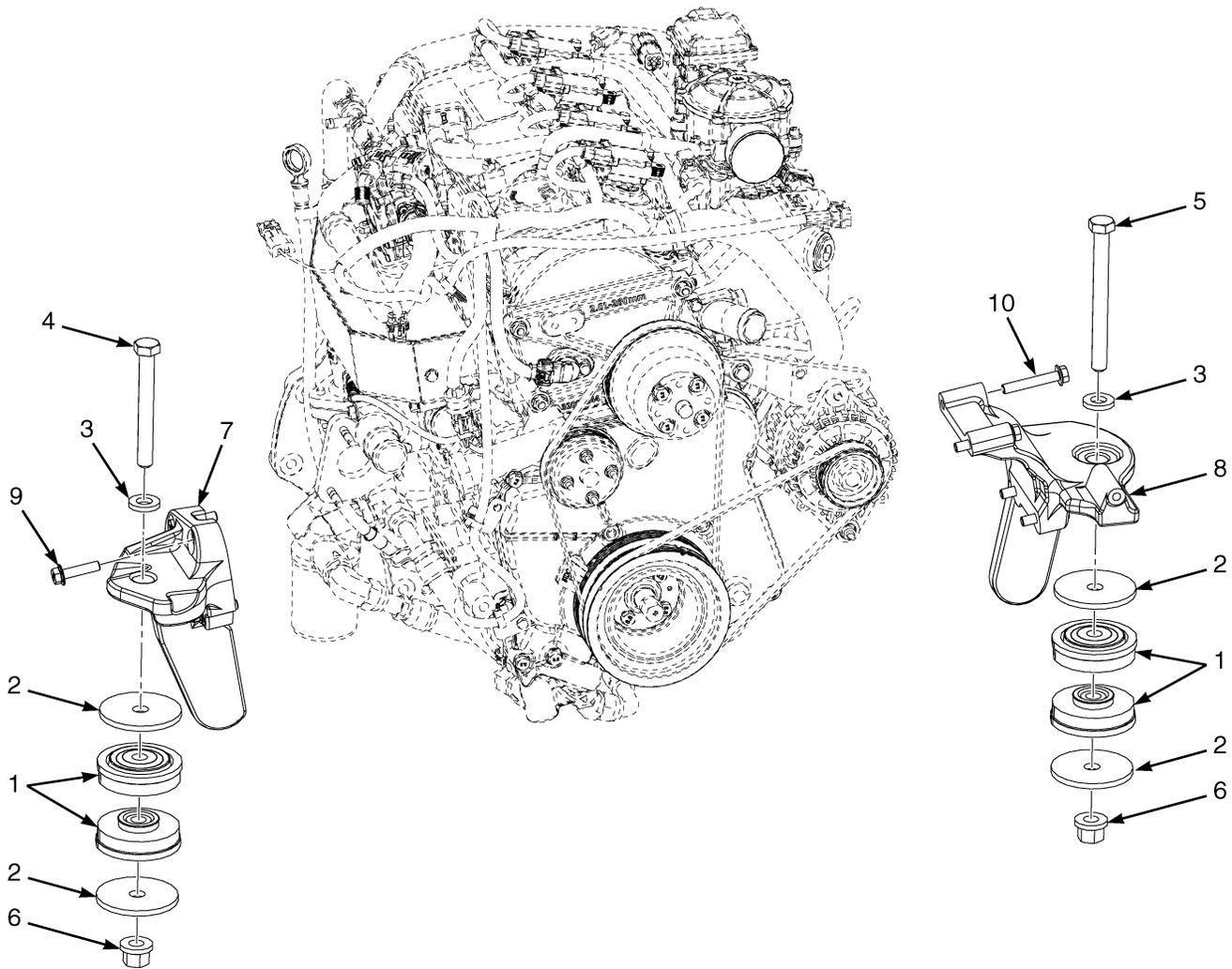


BP060154

**RADIATOR ASSEMBLY**  
**PSI 2.4L LPG**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
	4628074	Radiator Assembly .....	1
1	4123881	Radiator .....	1
2	4038264	Drain Valve .....	1
3	4038265	Nut , Foldover .....	2
4	4038266	Bolt (With Washer) .....	8
5	4142037	Frame (Top) .....	1
6	4142042	Frame (Bottom) .....	1
7	4136559	Collar .....	2
8	4136558	Isolator .....	2

## ENGINE MOUNTING (FIGURE 3-5) PSI ENGINE

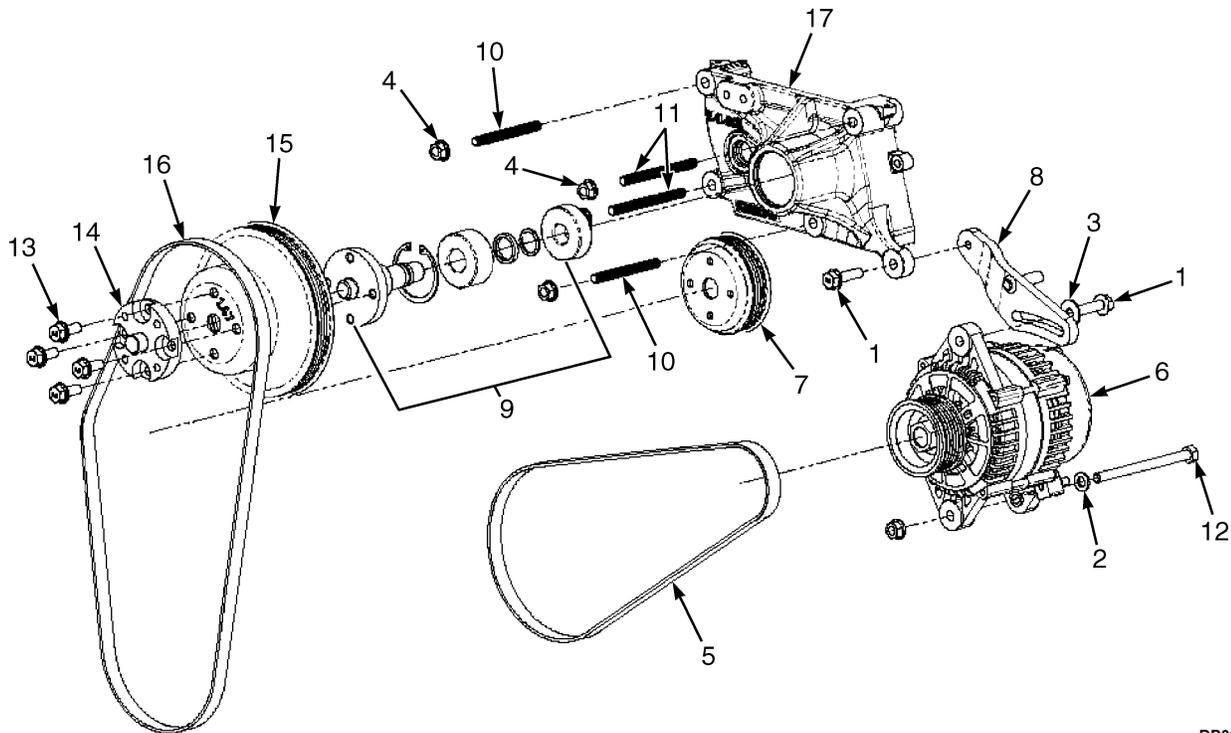


BP090690

**ENGINE MOUNTING  
PSI ENGINE**

ITEM	PART NO.	DESCRIPTION	QTY
1	2069951	Isolator .....	4
2	1557737	Washer , Snubbing .....	4
3	1504075	Washer .....	2
4	293698	Capscrew .....	1
5	293701	Capscrew .....	1
6	1565453	Nut (Flange) .....	2
7	<del>4111657</del> 4123256	Motor Mount (LH) .....	1
8	<del>4111652</del> 4123257	Motor Mount (RH) .....	1
9	4109995	Bolt .....	6
10	4111647	Bolt , M10 x 1.50 x 70 .....	2

## FRONT END AUXILIARY DRIVE (FIGURE 3-6) PSI 2.4L

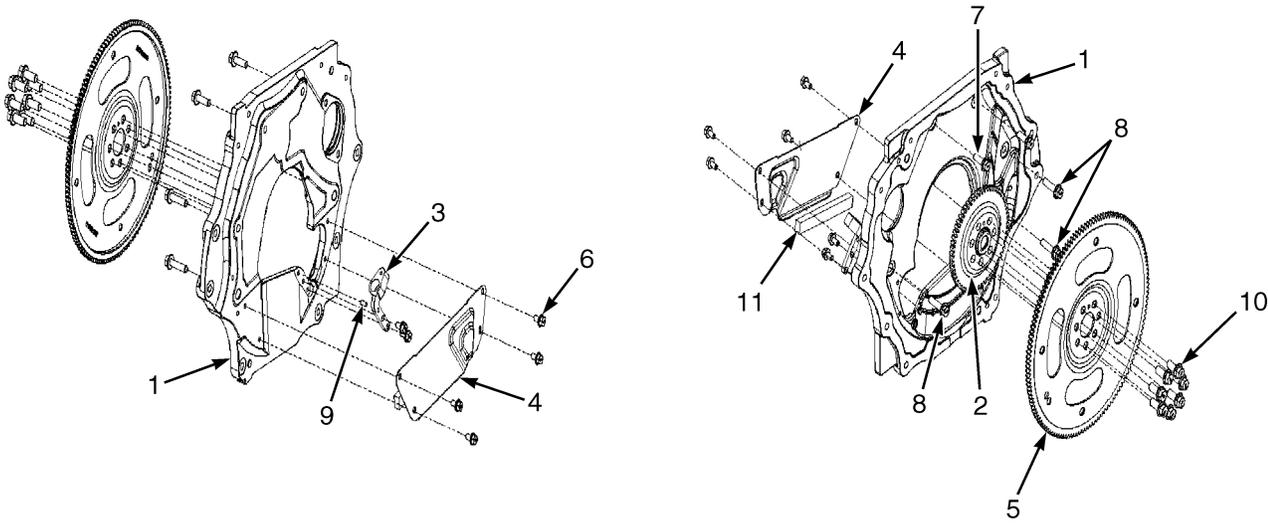


BP090704

**FRONT END AUXILIARY DRIVE  
PSI 2.4L**

ITEM	PART NO.	DESCRIPTION	QTY
	4122334	Long Block (PSI 2.4L) .....	1
1	4104446	Bolt .....	2
2	320157	Washer .....	1
3	18515	Washer .....	1
4	<del>1382472</del>		
	1502543	Nut .....	4
5	4104447	Belt .....	1
6	4145981	Alternator (50 Amp) .....	1
7	4104448	Pulley .....	1
8	4104449	Bracket .....	1
9	<del>4104450</del>		
	4137309	Shaft (Fan Assembly) (HI-Fan) .....	1
10	4104451	Stud .....	2
11	4104452	Stud .....	2
12	4111042	Bolt .....	1
13	4104477	Bolt .....	4
14	4104478	Spacer .....	1
15	4109981	Fan Pulley .....	1
16	<del>4109984</del>		
	4137674	Belt .....	1
17	4109985	Cover (Fan Hub) .....	1

## TRANSMISSION INTERFACE (FIGURE 3-7) PSI 2.4L

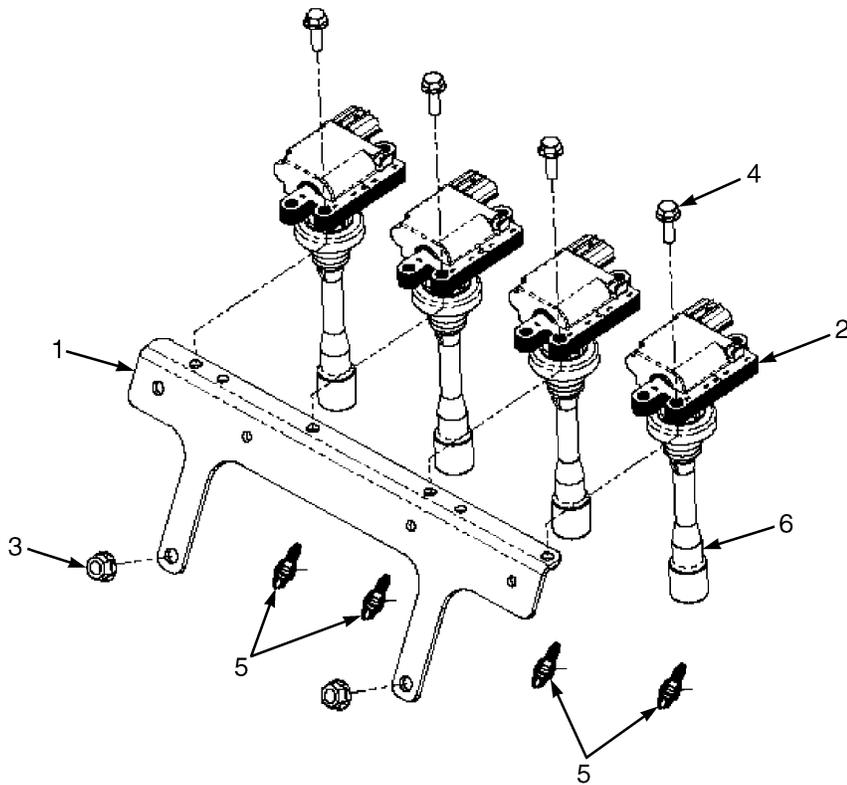


BP090706

**TRANSMISSION INTERFACE**  
**PSI 2.4L**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
	4122334	Long Block (PSI 2.4L) .....	1
1	<del>4109988</del>		
	4655944	Flywheel Housing (Transmission) .....	1
2	4109989	Adapter (Crank to Flexplate) .....	1
3	4109990	Mount (Crank Sensor) .....	1
4	4109991	Cover -Dust .....	1
5	4109992	Flex Plate .....	1
6	<del>4109993</del>		
	1527879	Capscrew .....	6
7	4109994	Bolt , M10 x 1.50 x 30 .....	2
8	4109995	Bolt .....	3
9	4109996	Dowel Pin .....	1
10	4109997	Bolt .....	7
11	4109998	Tape .....	1

## IGNITION COIL (FIGURE 3-8) PSI 2.4L

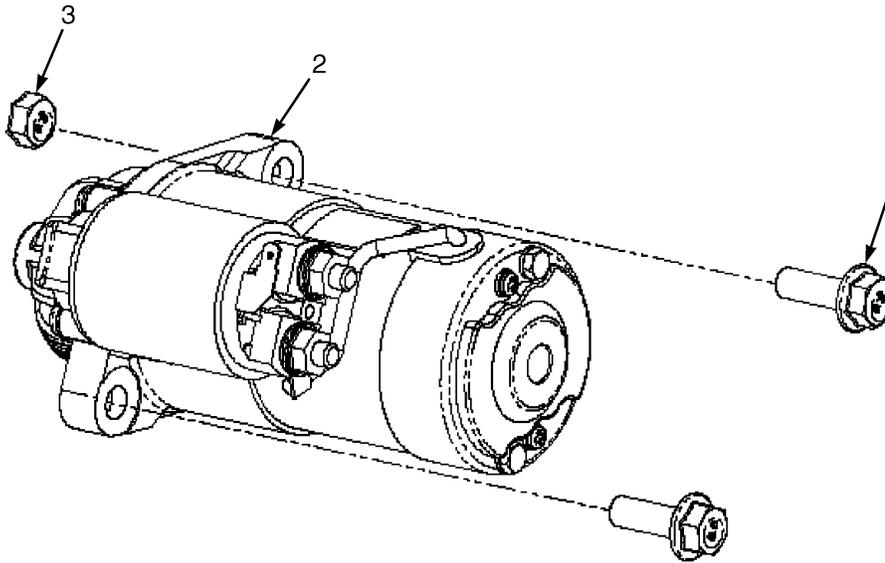


BP090707

**IGNITION COIL  
PSI 2.4L**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
	4122334	Long Block (PSI 2.4L) .....	1
1	4110027	Bracket .....	1
2	4110028	Ignition Coil .....	4
3	<del>1382472</del> 1502543	Nut .....	2
4	4110029	Bolt .....	4
5	4110030	Spark Plug .....	4
6	4110031	Boot .....	4

## STARTER (FIGURE 3-9) PSI 2.4L

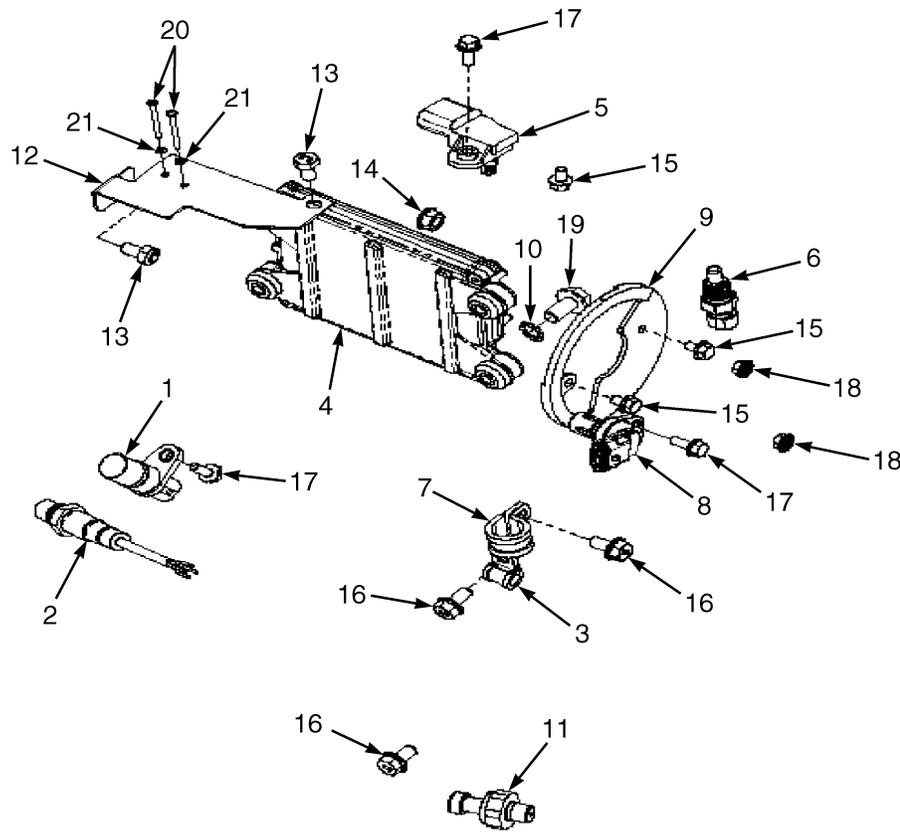


BP090708

ITEM	PART NO.	DESCRIPTION	QTY
1	4122334	Long Block (PSI 2.4L) .....	1
	4110034		
2	4137303	Capscrew .....	2
	4110035	Starter .....	1
3	1382472		
	1502543	Nut .....	2



## ENGINE ELECTRICAL (FIGURE 3-10) PSI 2.4L

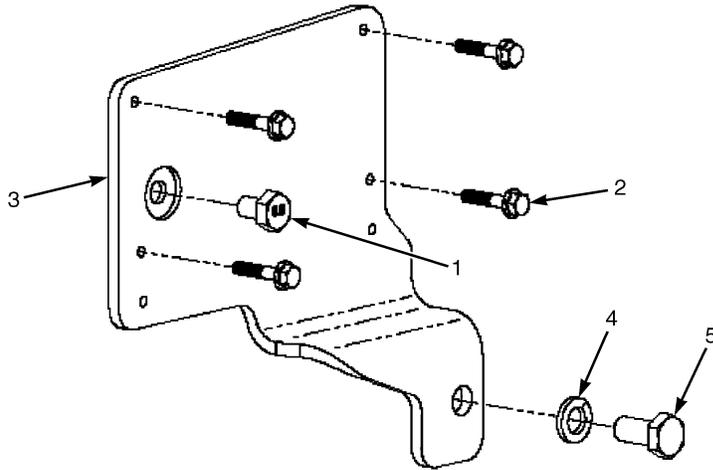


BP090709

**ENGINE ELECTRICAL**  
**PSI 2.4L**

ITEM	PART NO.	DESCRIPTION	QTY
	4122334	Long Block (PSI 2.4L) .....	1
1	4110038	Sensor (Speed Timing Wheel) .....	1
2	1646456	Sensor (Oxygen) .....	1
3	4110039	Clamp .....	1
4	4628224	Engine Control Module (2.4L Non Certified) .....	1
5	4019045		
	1559567	Sensor (Temperature manifold absolute pressure) .....	1
5	4042986	Seal .....	1
6	4019046		
	1314381	Temperature Sender (Coolant) .....	1
7	4110040	Clamp .....	1
8	4110041	Sensor (Phase) .....	1
9	4110042	Sensor (Cam Wheel) .....	1
10	4104445	Washer .....	1
11	4019047		
	4104443	Pressure Sender (Oil Pressure) .....	1
12	4110043	Bracket .....	1
13	4110037	Bolt .....	1
14	1382472		
	1502543	Nut .....	1
15	4019051	Bolt .....	6
16	4109993		
	1527879	Capscrew .....	3
17	1527876	Capscrew .....	3
18	1307884		
	1514429	Nut .....	2
19	4110044	Bolt .....	1
20	4110045	Screw .....	2
21	4104444	Washer .....	2
	4628749	Wire Harness (Engine) (2.4L LPG) .....	1

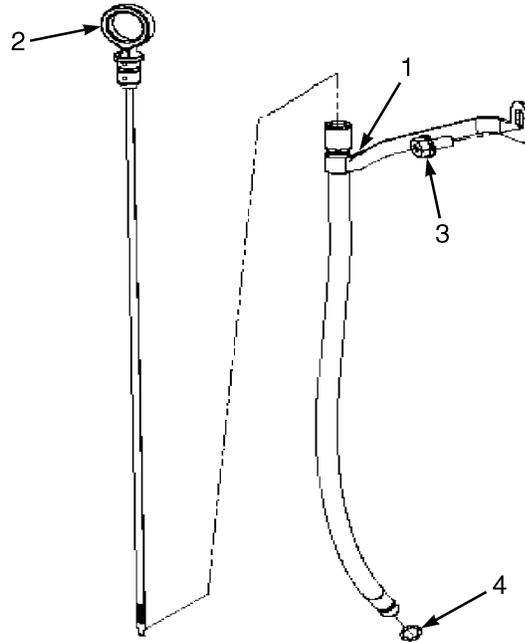
## ECM MOUNT (FIGURE 3-11) PSI 2.4L



BP090717

ITEM	PART NO.	DESCRIPTION	QTY
	4122334	Long Block (PSI 2.4L) .....	1
1	4111126	Bolt .....	1
2	4111127	Bolt .....	4
3	4111183	Mount .....	1
4	4111185	Washer .....	1
5	4111184	Bolt .....	1

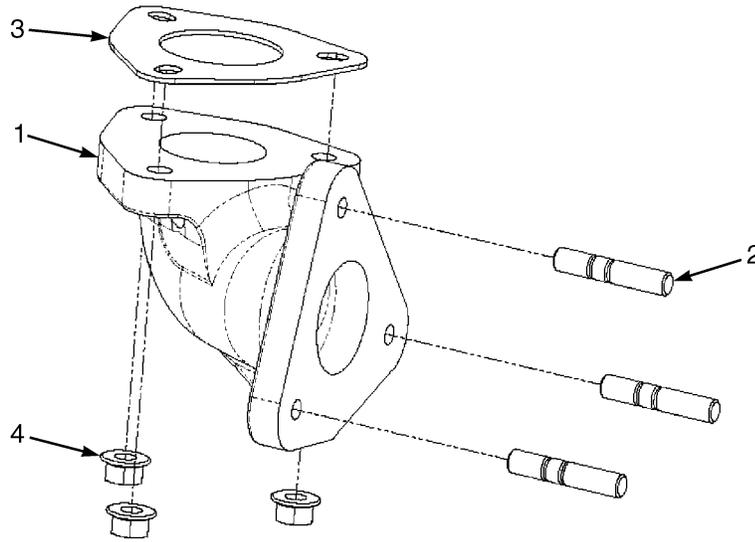
**DIPSTICK (FIGURE 3-12)**  
**PSI 2.4L**



BP090718

ITEM	PART NO.	DESCRIPTION	QTY
	4122334	Long Block (PSI 2.4L) .....	1
1	4111188	Dipstick Assembly .....	1
2	4111189	Dipstick .....	1
3	4109993		
	1527879	Capscrew .....	1
4	.....	O-Ring .....	1

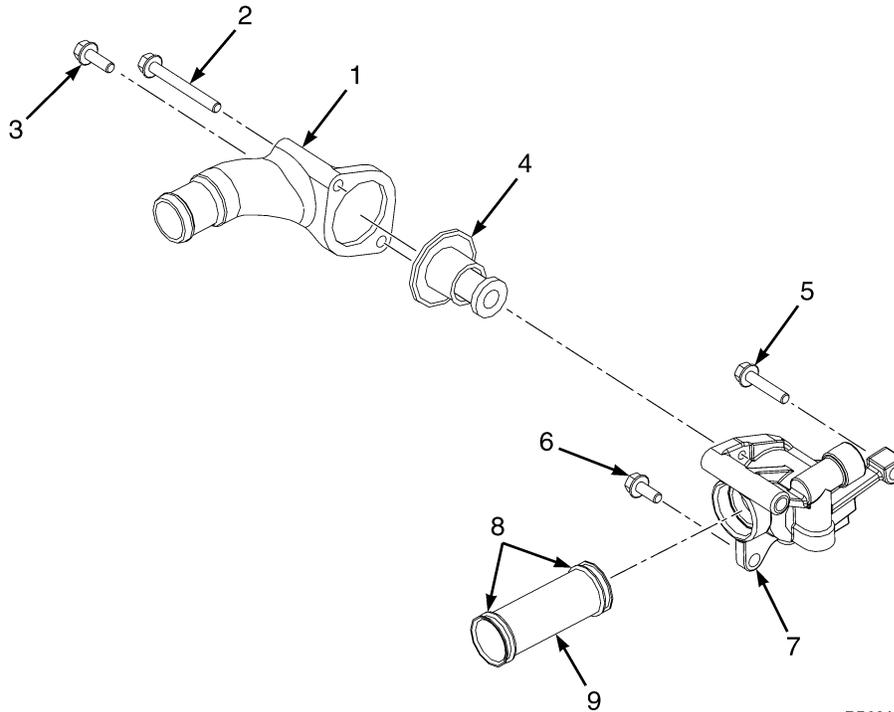
## EXHAUST ADAPTER (FIGURE 3-13) PSI 2.4L



BP090720

ITEM	PART NO.	DESCRIPTION	QTY
	4122334	Long Block (PSI 2.4L) .....	1
1	4111222	Elbow .....	1
2	4111228	Stud .....	3
3	4110365	Gasket .....	1
4	1382472	Nut .....	3
	1502543		

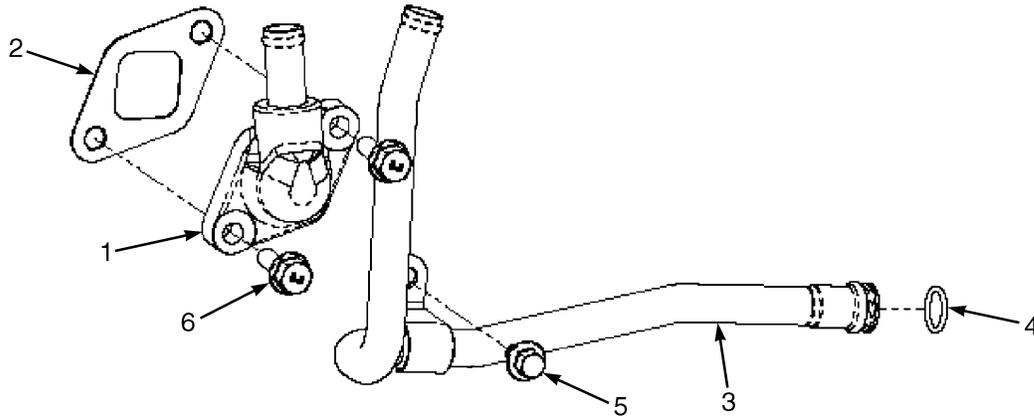
**THERMOSTAT AND HOUSING (FIGURE 3-14)**  
**PSI 2.4L**



BP091034

ITEM	PART NO.	DESCRIPTION	QTY
	4122334	Long Block (PSI 2.4L) .....	1
1	4111234	Cover (Thermostat) .....	1
2	4111220	Bolt .....	1
3	4111235	Bolt .....	1
4	4111238	Thermostat .....	1
5	.....	Bolt .....	1
6	4111239	Bolt .....	1
7	4111236	Thermostat Housing .....	1
8	4111240	O-Ring .....	2
9	4111241	Pipe .....	1

## WATER BYPASS OUTLET (FIGURE 3-15) PSI 2.4L

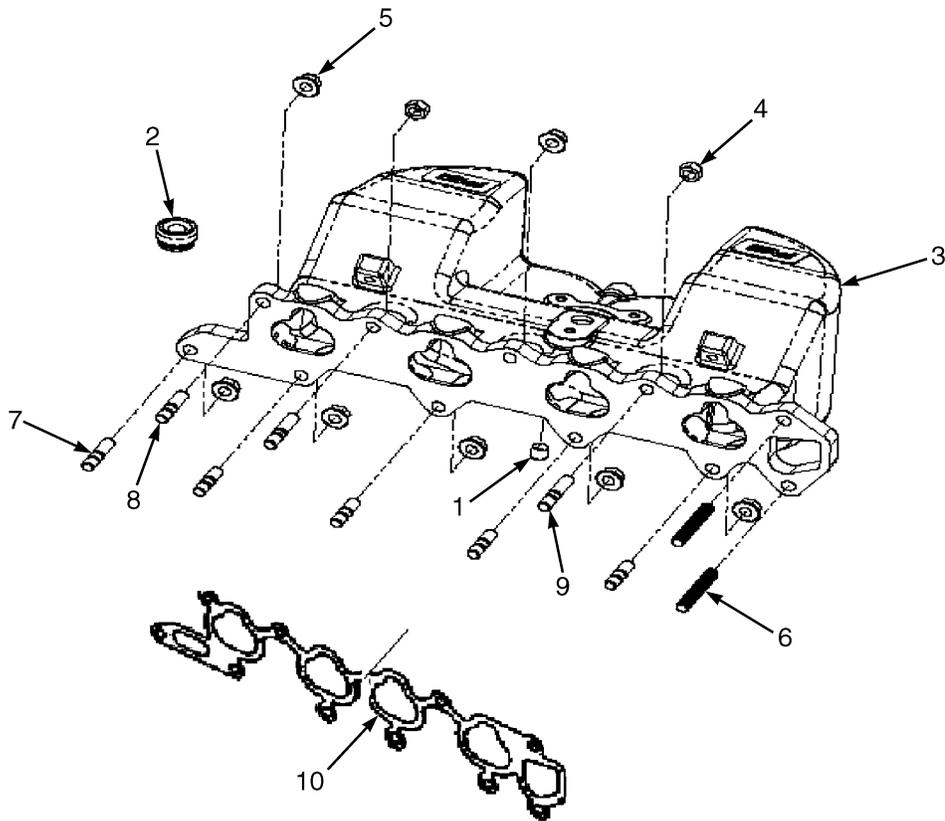


BP090725

ITEM	PART NO.	DESCRIPTION	QTY
1	4122334	Long Block (PSI 2.4L) .....	1
	4111249		
	4153346	Outlet (Water Bypass) .....	1
2	4111250	Gasket .....	1
3	4111251	Tube .....	1
4	4111252		
	4168639	O-Ring .....	1
5	4019122	Bolt .....	1
6	4111235	Bolt .....	1



## INTAKE MANIFOLD (FIGURE 3-16) PSI 2.4L

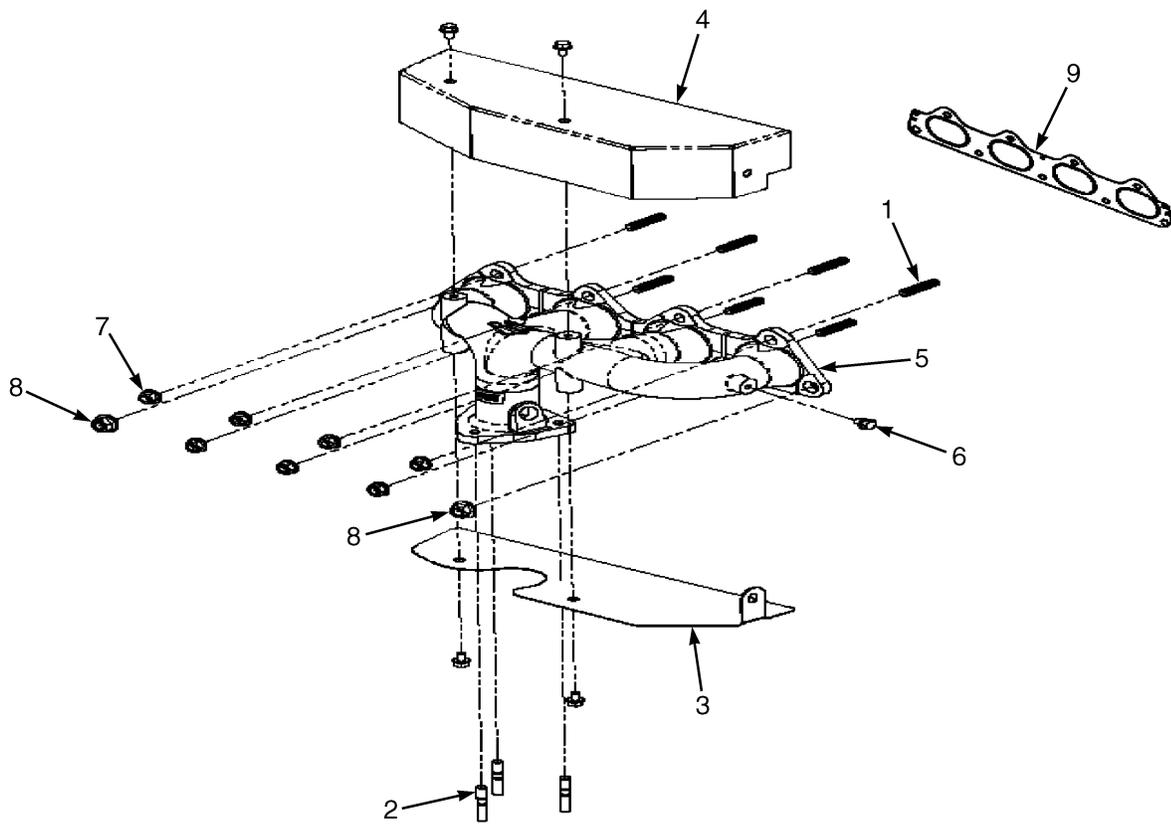


BP090727

**INTAKE MANIFOLD**  
**PSI 2.4L**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
	4122334	Long Block (PSI 2.4L) .....	1
1	4019120	Plug .....	1
2	4111257	Grommet .....	1
3	4111259	Intake Manifold .....	1
4	4111260	Nut .....	2
5	<del>1382472</del> 1502543	Nut .....	7
6	4111261	Stud .....	2
7	4111262	Stud .....	2
8	4111264	Stud .....	4
9	4111265	Stud .....	2
10	4111266	Gasket .....	1
	4112701	Kit-Gasket (Includes Items 10) .....	1

## EXHAUST MANIFOLD (FIGURE 3-17) PSI 2.4L

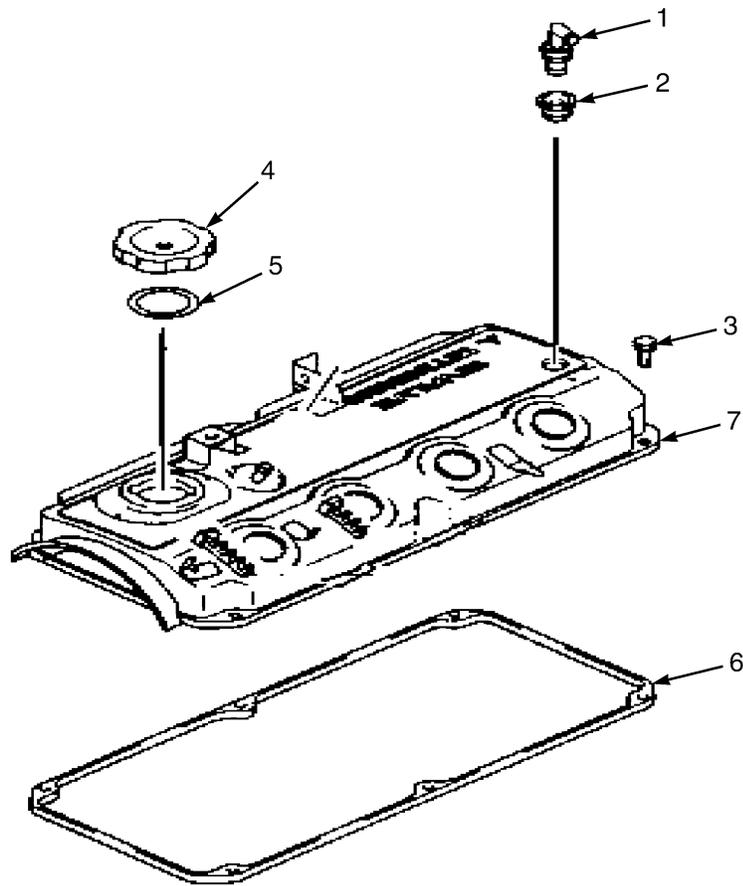


BP090728

**EXHAUST MANIFOLD  
PSI 2.4L**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
	4122334	Long Block (PSI 2.4L) .....	1
1	4111269	Stud .....	7
2	4111228	Stud .....	3
3	4111270	Heat Shield .....	1
4	4111271	Heat Shield .....	1
5	4111272	Exhaust Manifold .....	1
6	4019051	Bolt .....	5
7	4111273	Nut .....	7
8	4111274	Nut .....	2
9	4111275	Gasket .....	1
	4112701	Kit-Gasket (2.4L) (Includes Items 9) .....	1

## ENGINE VALVE COVER (FIGURE 3-18) PSI 2.4L

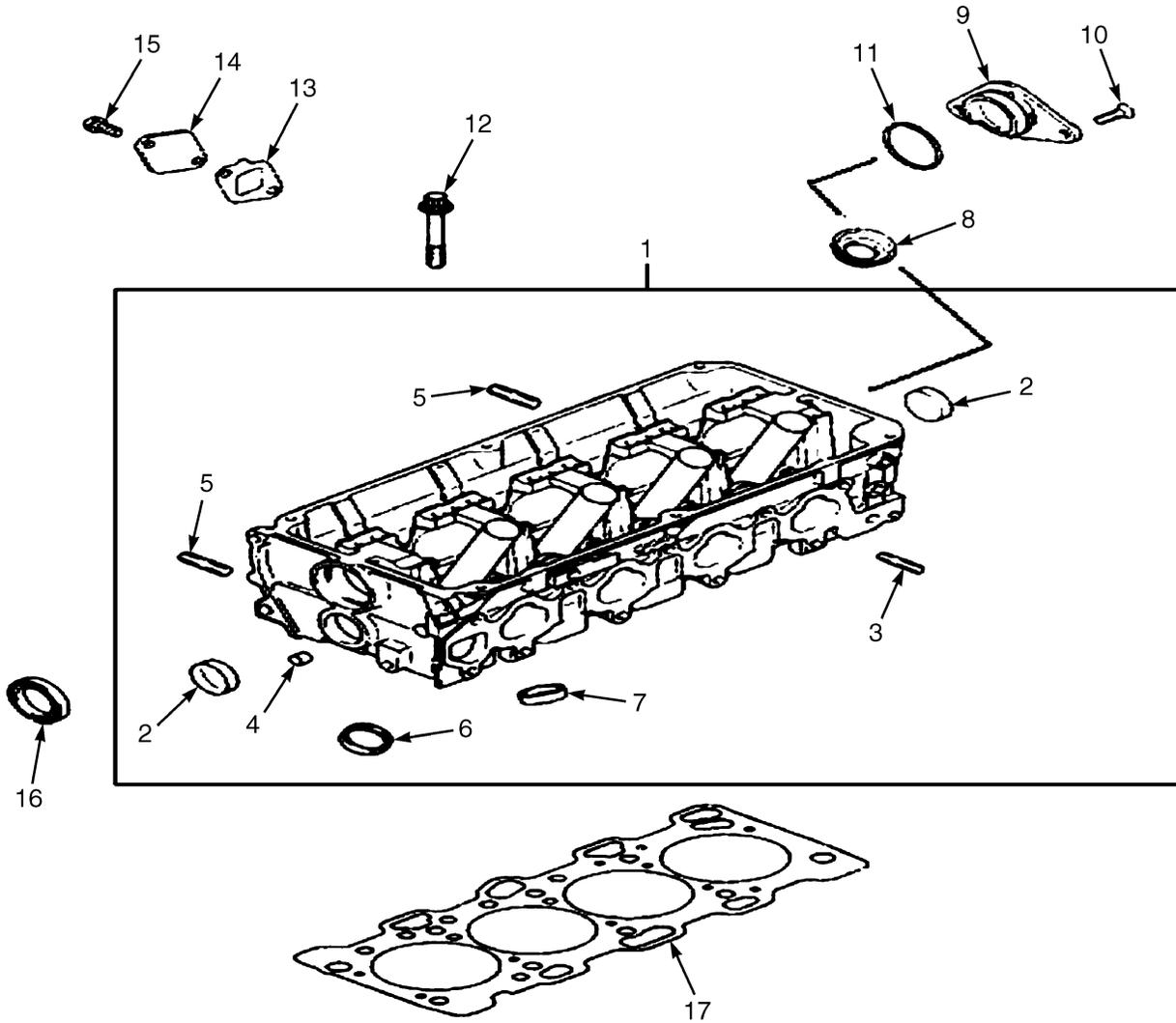


BP090732

**ENGINE VALVE COVER  
PSI 2.4L**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
	4122334	Long Block (PSI 2.4L) .....	1
1	4111670	Pcv Valve .....	1
2	4111257	Grommet .....	1
3	4111671	Bolt .....	6
4	4111672	Cap (Oil Fill) .....	1
5	.....	Gasket .....	1
6	4111673	Gasket (Rocker Cover) .....	1
7	4111674	Engine Cover (Valve) .....	1
	4112701	Kit-Gasket (Includes Items 6) .....	1

## CYLINDER HEAD (FIGURE 3-19) PSI 2.4L

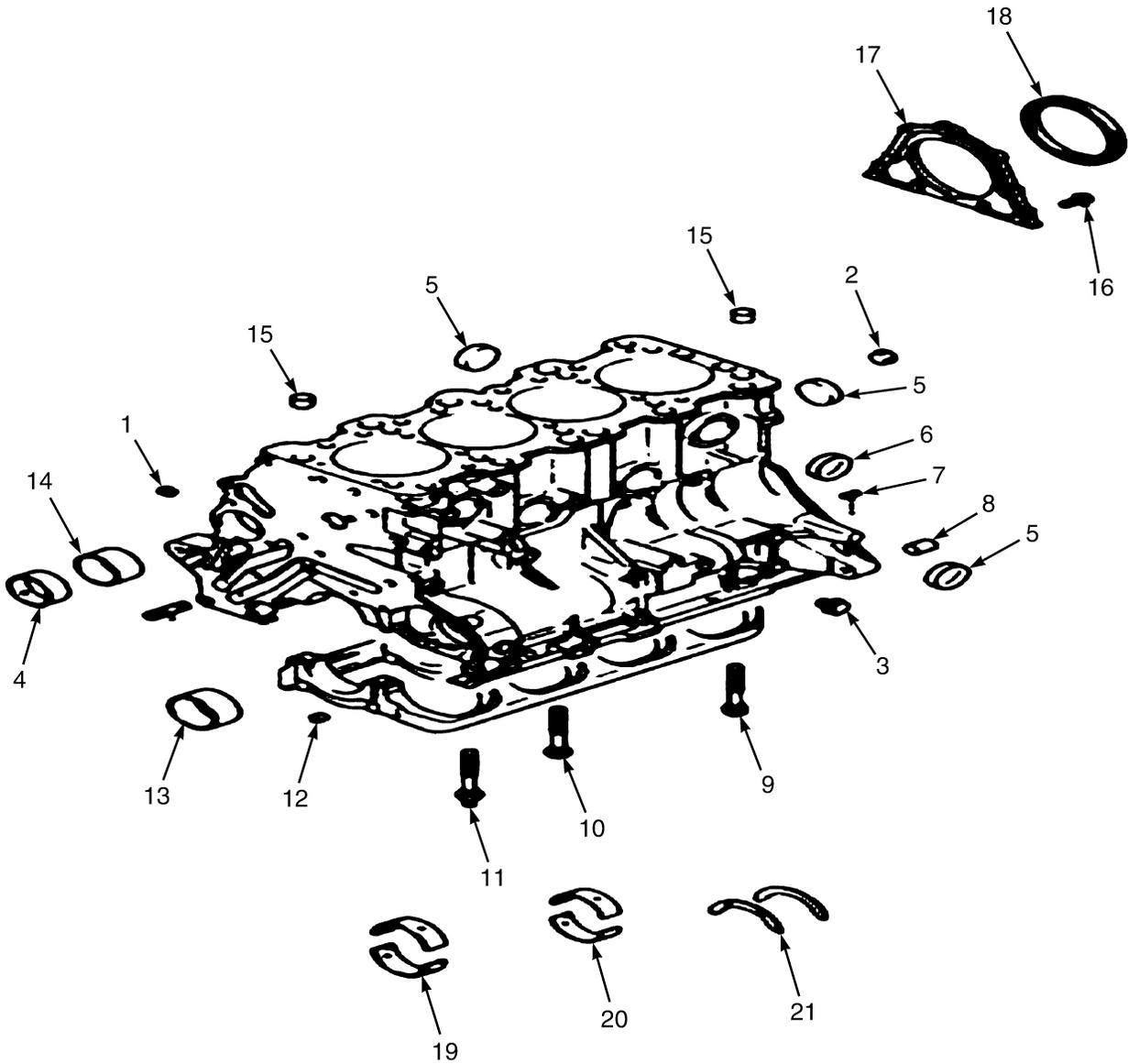


BP090733

**CYLINDER HEAD  
PSI 2.4L**

ITEM	PART NO.	DESCRIPTION	QTY
	4122334	Long Block (PSI 2.4L) .....	1
1	4111675	Cylinder Head .....	1
2	4111678	Cap .....	2
3	4111679	Stud .....	4
4	4111681	Bushing .....	2
5	4111682	Stud .....	3
6	.....	Exhaust Seat .....	1
7	.....	Intake Seat .....	1
8	4111683	Oil Seal .....	4
9	4111684	Thrust Plate .....	1
10	4111685	Screw .....	2
11	4111686	O-Ring .....	1
12	4111687	Bolt .....	10
13	4111688	Gasket .....	1
14	4111689	Cover .....	1
15	4111690	Bolt .....	2
16	4111680	Oil Seal .....	1
17	4111676	Gasket .....	1
	4112701	Kit-Gasket (Includes Items 8, 11, 16-17) .....	1

## CYLINDER BLOCK (FIGURE 3-20) PSI 2.4L



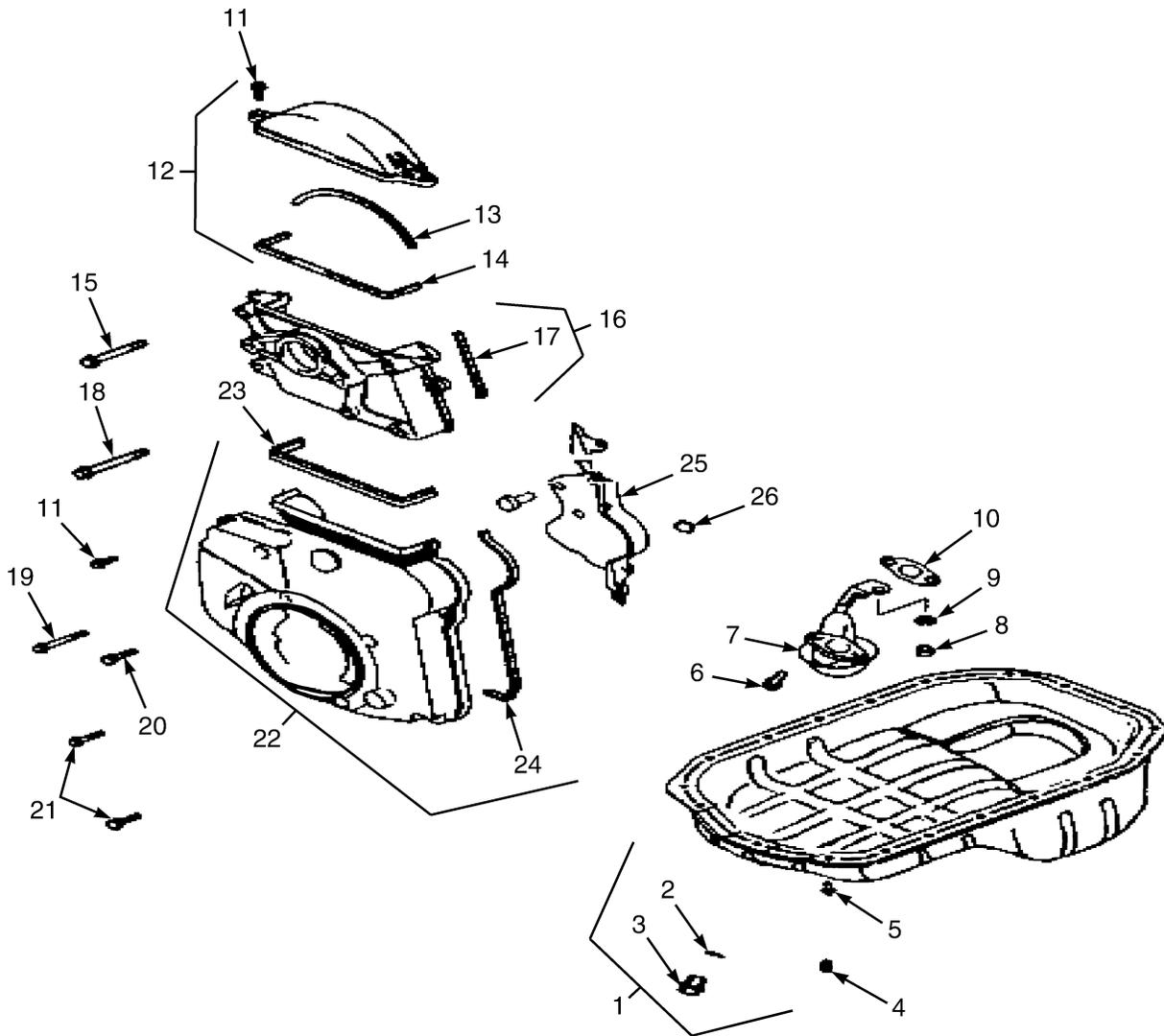
BP090734

**CYLINDER BLOCK**  
**PSI 2.4L**

ITEM	PART NO.	DESCRIPTION	QTY
	4122334	Long Block (PSI 2.4L) .....	1
1	4111691	Plug .....	2
2	4111692	Plug .....	1
3	4111693	Plug .....	1
4	4111734	Bearing (Balancer) .....	1
4	4111735	Bearing (Balancer) (Oversize) .....	1
5	4111695	Cap .....	7
6	4111696	Cap .....	2
7	4111697	Dowel .....	2
8	4111698	Bushing .....	2
9	4111699	Bolt .....	2
10	4111700	Bolt .....	7
11	4111701	Bolt .....	1
12	4111681	Bushing .....	2
13	4111702	Bearing .....	1
13	4111703	Bearing (Oversize 1.0 mm) .....	1
14	4111704	Bearing .....	1
14	4111705	Bearing (Oversize 1.0 mm) .....	1
15	4111706	Bushing .....	2
16	4111713	Bolt .....	5
17	4111714	Cover .....	1
18	4111715	Oil Seal .....	1
19	4111716	Crankshaft Bearing (1,2,4,5 (Green) .....	5
19	4111717	Crankshaft Bearing (1,2,4,5 (Yellow) .....	5
19	4111718	Crankshaft Bearing (1,2,4,5 (Standard) .....	5
19	4111719	Crankshaft Bearing (1,2,4,5 (Lan Standard) .....	5
19	4111727	Crankshaft Bearing (1,2,4,5 (Red) .....	5
20	4111728	Crankshaft Bearing (3, Green) .....	1
20	4111729	Crankshaft Bearing (3, Yellow) .....	1
20	4111730	Crankshaft Bearing (3, Standard) .....	1
20	4111731	Crankshaft Bearing (3, Lan Standard) .....	1
20	4111732	Crankshaft Bearing (3, Black) .....	1
21	4111733	Thrust Bearing .....	1
	<b>a</b> 4111694	Plug .....	1
	4112701	Kit-Gasket (Includes Items 18) .....	1

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

## FRONT COVER AND OIL PAN (FIGURE 3-21) PSI 2.4L

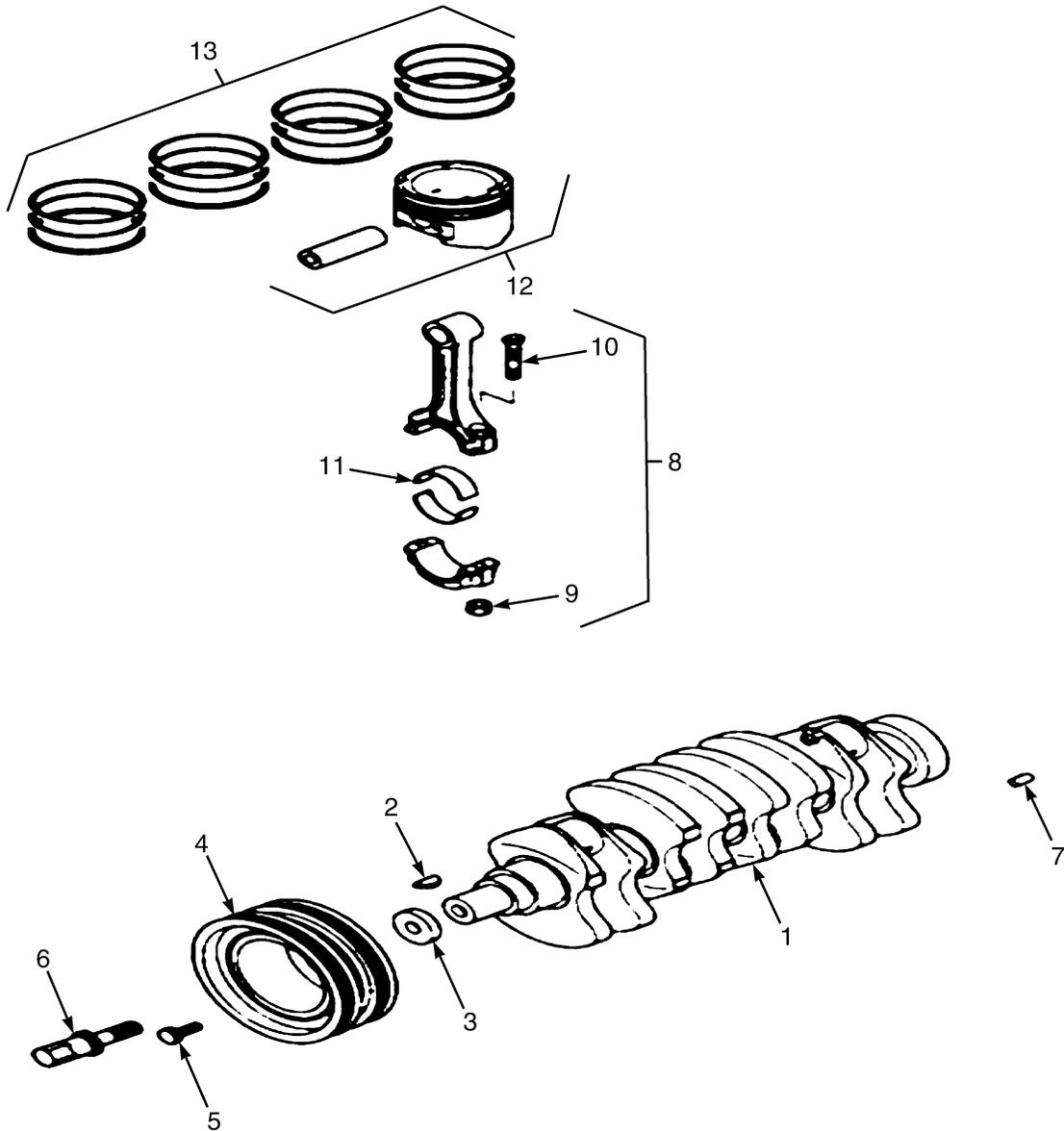


BP090735

**FRONT COVER AND OIL PAN  
PSI 2.4L**

ITEM	PART NO.	DESCRIPTION	QTY
	4122334	Long Block (PSI 2.4L) .....	1
1	4111194		
	4141178	Oil Pan .....	1
2	4111208	Gasket (Oil Drain) .....	1
3	4111209	Drain Plug .....	1
4	4111210	Bolt .....	17
5	4111276	Bolt .....	2
6	4111632	Bolt .....	2
7	4111645	Screen .....	1
8	4111736	Nut .....	1
9	4111737	Washer .....	1
10	4111738	Gasket .....	1
11	4111739	Bolt .....	8
12	4111740	Cover (Front Upper) .....	1
13	.....	Gasket (Timing Belt Cover) .....	1
14	.....	Gasket (Timing Belt Cover) .....	1
15	4111742	Bolt .....	3
16	4111741	Bracket (Middle Timing Cover) .....	1
17	.....	Gasket .....	1
18	4111743	Bolt .....	1
19	4111744	Bolt .....	1
20	4111745	Bolt .....	2
21	4111746	Bolt .....	2
22	4111747	Cover (T-Belt) .....	1
23	.....	Gasket (Lower Cover) .....	1
24	.....	Gasket (Lower Cover) .....	1
25	4111749	Cover (Rear) .....	1
26	4111751	Plug .....	1
	4112701	Kit-Gasket (Includes Items 2, 10) .....	1

## PISTON AND CRANKSHAFT (FIGURE 3-22) PSI 2.4L

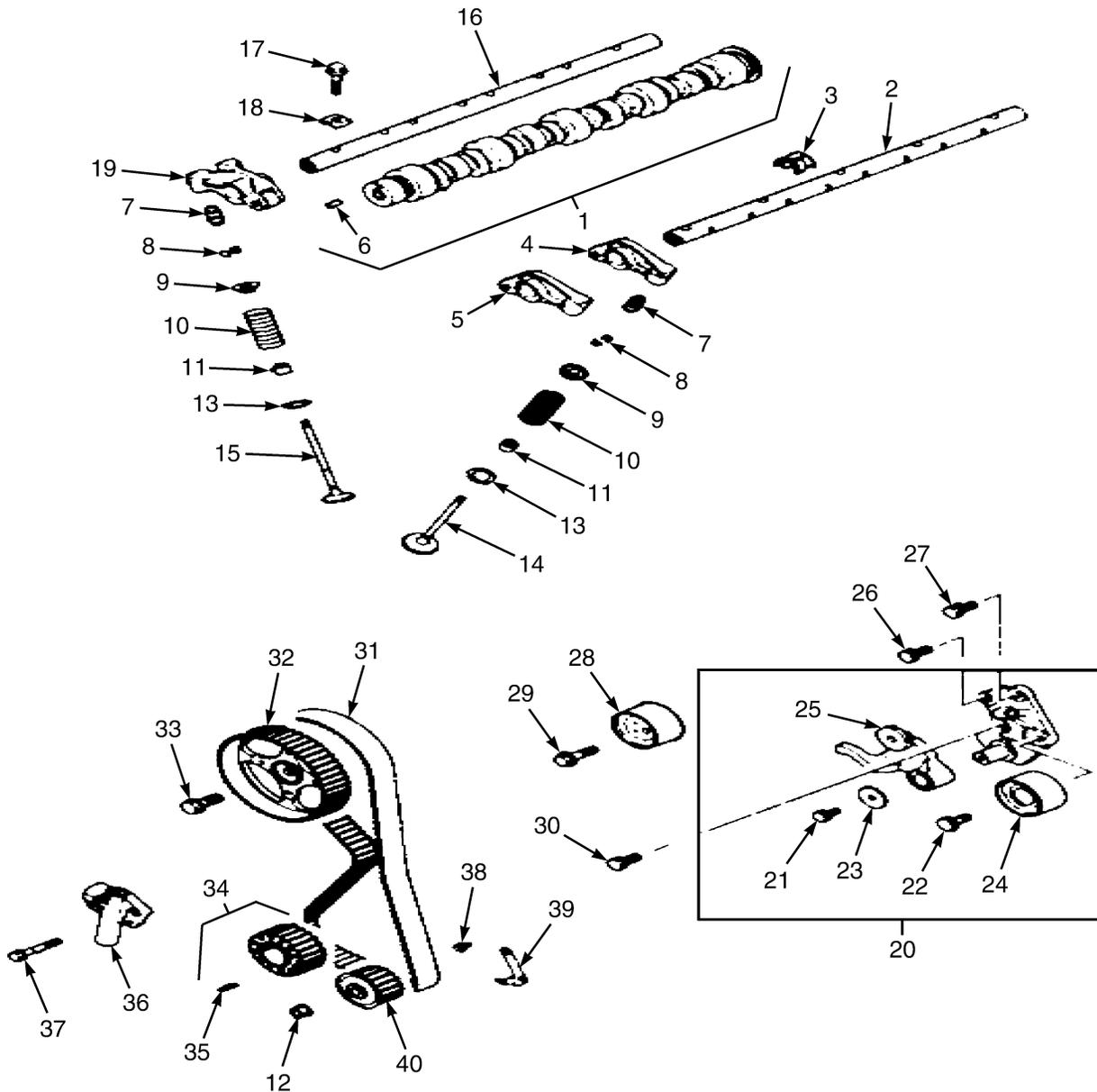


BP090736

**PISTON AND CRANKSHAFT  
PSI 2.4L**

ITEM	PART NO.	DESCRIPTION	QTY
	4122334	Long Block (PSI 2.4L) .....	1
1	4111753	Crankshaft .....	1
2	4111755	Key .....	1
3	4111756	Washer .....	1
4	4111757	Pulley (Damper) .....	1
5	4111758	Bolt .....	4
6	4111759	Bolt .....	1
7	4111760	Pin .....	1
8	4111761	Piston Rod .....	4
9	4111762	Nut .....	8
10	4111766	Bolt .....	8
11	4111765	Piston Rod Bearing (Lan Standard) .....	4
11	4111764	Piston Rod Bearing (Standard) .....	4
11	4111763	Piston Rod Bearing (Yellow) .....	4
12	4111767	Piston ("A") .....	4
12	4111768	Piston ("B") .....	4
12	4111769	Piston ("C") .....	4
13	4111773	Kit-Piston Ring .....	1

## CAMSHAFT AND VALVES (FIGURE 3-23) PSI 2.4L



BP090737

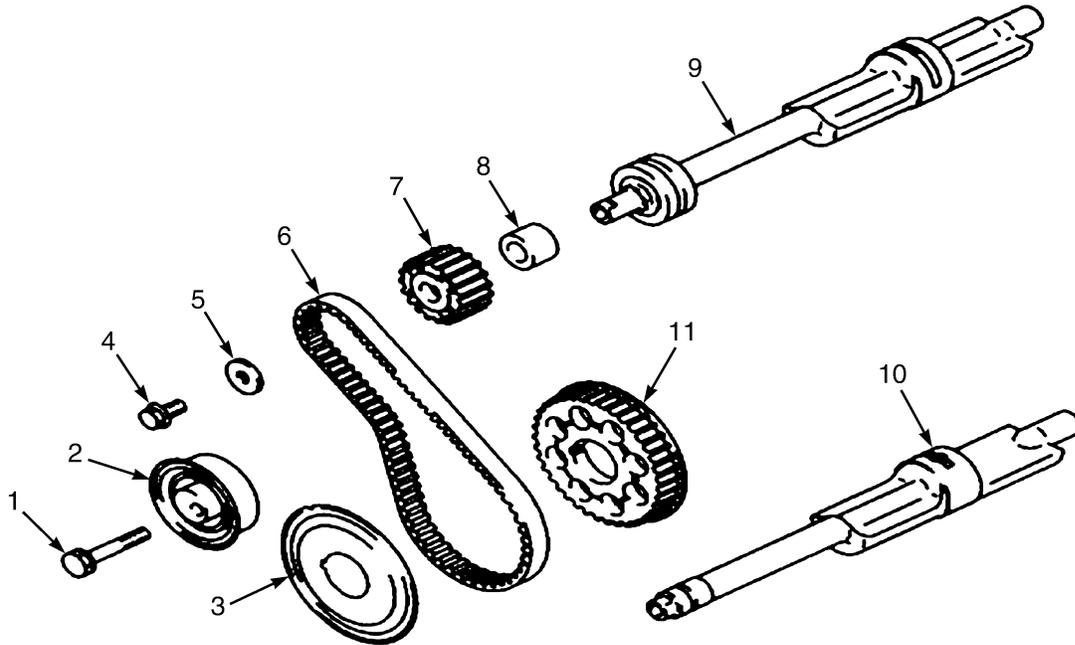
**CAMSHAFT AND VALVES**  
**PSI 2.4L**

ITEM	PART NO.	DESCRIPTION	QTY
	4122334	Long Block (PSI 2.4L) .....	1
1	4111774	Camshaft .....	1
2	a 4111775	Rocker Shaft .....	1
3	a 4111776	Spring (Rocker Shaft) .....	4
4	a 4112104	Rocker Arm ("B") .....	4
5	a 4112105	Rocker Arm ("A") .....	4
6	a 4112106	Pin .....	1
7	a 4112107	Adjuster .....	16
8	a 4112108	Lock (Valve Spring) .....	32
9	a 4112109	Retainer (Valve Spring) .....	16
10	a 4112110	Spring (Valve) .....	16
11	a 4112111	Seal .....	16
12	a 4112324	Nut .....	1
13	a 4112112	Valve Seat .....	16
14	a 4112113	Valve (Inlet) .....	8
15	a 4112114	Valve (Exhaust) .....	8
16	a 4112115	Rocker Shaft .....	1
17	a 4112116	Bolt .....	13
18	a 4112117	Cap .....	13
19	a 4112118	Rocker Arm .....	4
20	4112119	Bracket Assembly (Tensioner Pulley) .....	1
21	4112120	Bolt .....	1
22	4112121	Bolt .....	1
23	4112122	Washer .....	1
24	4112123	Idler Pulley .....	1
25	.....	Tensioner Arm Assembly .....	1
26	4112124	Bolt .....	1
27	4112125	Bolt .....	1
28	4112126	Pulley .....	1
29	4112127	Bolt .....	1
30	4112121	Bolt .....	1
31	4112128	Timing Belt -Cam .....	1
32	4112130	Sprocket .....	1
33	4112131	Bolt .....	1
34	4112132	Sprocket .....	1
35	4112133	Pin .....	1
36	4112320	Tensioner .....	1
37	4112321	Bolt .....	2
38	4111276	Bolt .....	2
39	4112322	Bracket (Indicator) .....	1
40	4112323	Sprocket (Oil Pump) .....	1
	4112701	Kit-Gasket (Includes Items 11) .....	1
	4112702	Kit -Sprocket (Includes Items 32, 34, 40) .....	1

**FOOTNOTES:**

a Included with Cylinder Head 4111675

## TENSIONER AND TIMING BELT (FIGURE 3-24) PSI 2.4L

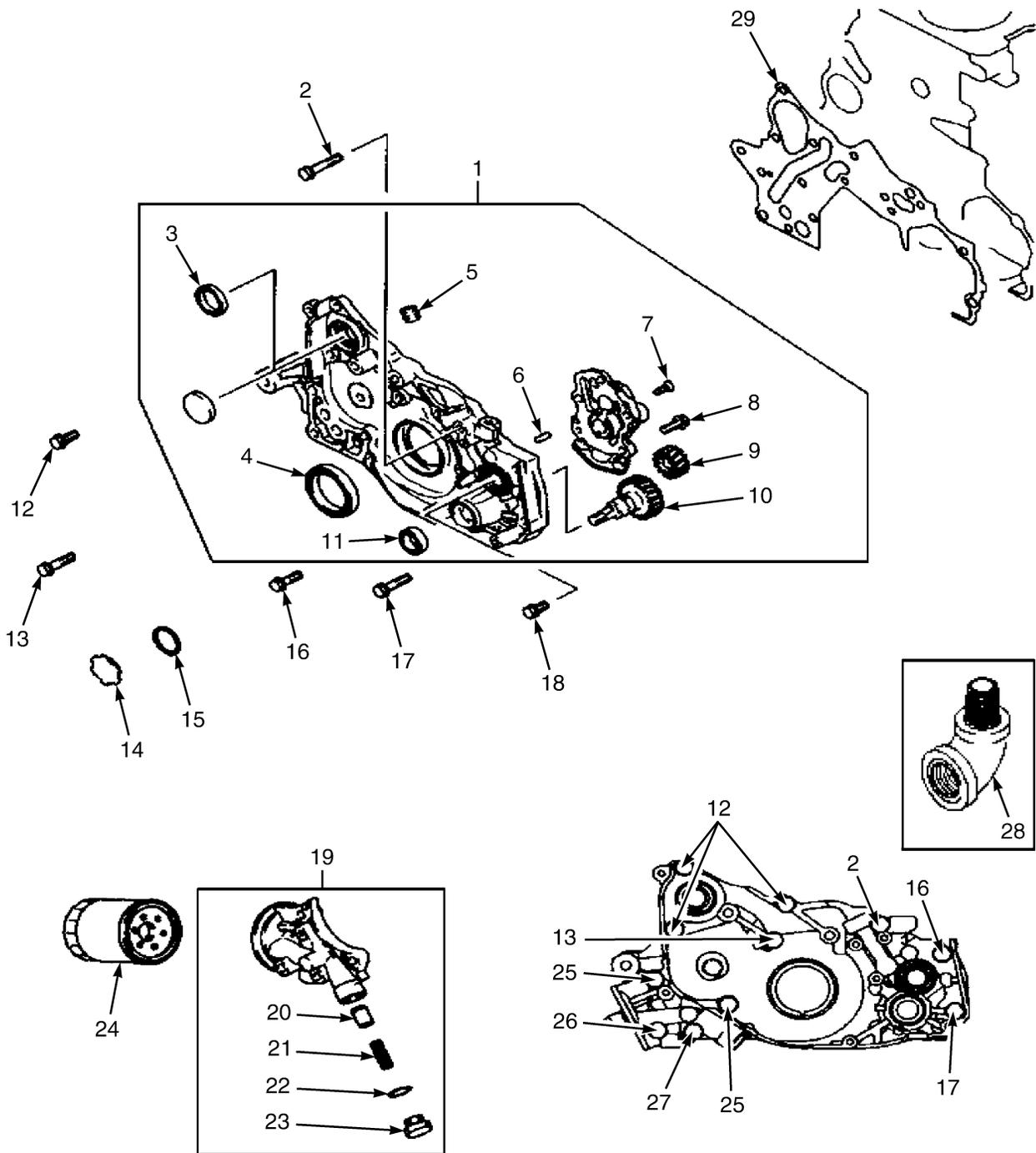


BP090738

ITEM	PART NO.	DESCRIPTION	QTY
	4122334	Long Block (PSI 2.4L) .....	1
1	4112325	Bolt .....	1
2	4112327	Tensioner (Timing Belt) .....	1
3	4112328	Flange .....	1
4	4112329	Bolt .....	1
5	4112330	Washer .....	1
6	4112331	Timing Belt -Balancer .....	1
7	4112332	Sprocket .....	1
8	4112333	Spacer .....	1
9	4112334	Shaft .....	1
10	4112336	Shaft .....	1
11	4112338	Sprocket .....	1
	4112702	Kit -Sprocket (Includes Items 7) .....	1



## OIL PUMP AND FILTER (FIGURE 3-25) PSI 2.4L

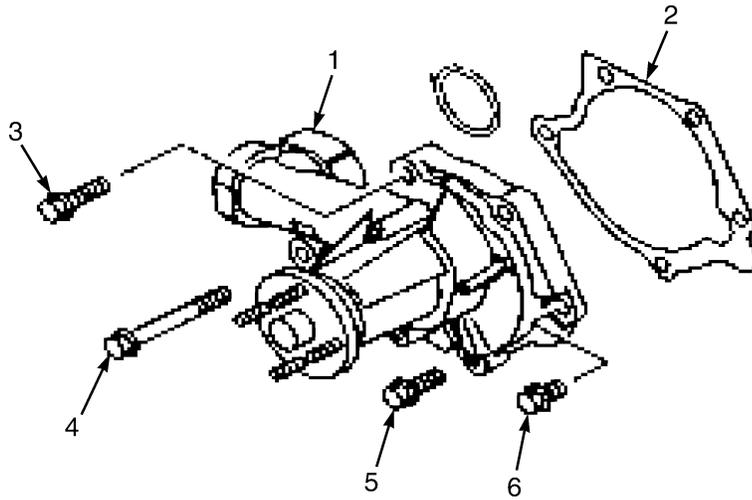


BP090739

**OIL PUMP AND FILTER  
PSI 2.4L**

ITEM	PART NO.	DESCRIPTION	QTY
	4122334	Long Block (PSI 2.4L) .....	1
1	4112340	Oil Pump .....	1
2	4112341	Bolt .....	1
3	4112342	Oil Seal .....	1
4	4112343	Oil Seal .....	1
5	4112344	Plug .....	1
6	4111697	Dowel .....	2
7	4112345	Screw .....	1
8	4112346	Bolt .....	4
9	.....	Oil Pump Gear .....	1
10	.....	Oil Pump Drive Gear .....	1
11	4112361	Oil Seal .....	1
12	4111239	Bolt .....	3
13	4112348	Bolt .....	1
14	4112349	Cap .....	1
15	4112350	O-Ring .....	1
16	4112351	Bolt .....	1
17	4112352	Bolt .....	1
18	4112329	Bolt .....	1
19	4112353	Bracket .....	1
20	.....	Plunger .....	1
21	4112355	Spring .....	1
22	4112356	Gasket .....	1
23	4112357	Plug .....	1
24	4090340	Filter (Oil) .....	1
25	4112358	Bolt .....	2
26	4112359	Bolt .....	1
27	4112360	Bolt .....	1
28	4112699	Adapter .....	1
29	4112347	Gasket .....	1
	4112701	Kit-Gasket (Includes Items 3-4, 11, 15, 29) .....	1

## WATER PUMP (FIGURE 3-26) PSI 2.4L



BP090741

ITEM	PART NO.	DESCRIPTION	QTY
	4122334	Long Block (PSI 2.4L) .....	1
1	4112416	Water Pump .....	1
2	4112417	Gasket .....	1
3	4112418	Bolt .....	1
4	4111742	Bolt .....	1
5	4112419	Bolt .....	2
6	4112420	Bolt .....	1
	4112701	Kit-Gasket (Includes Items 2) .....	1

**4**

**FUEL SYSTEM-COMMON TO UNIT**



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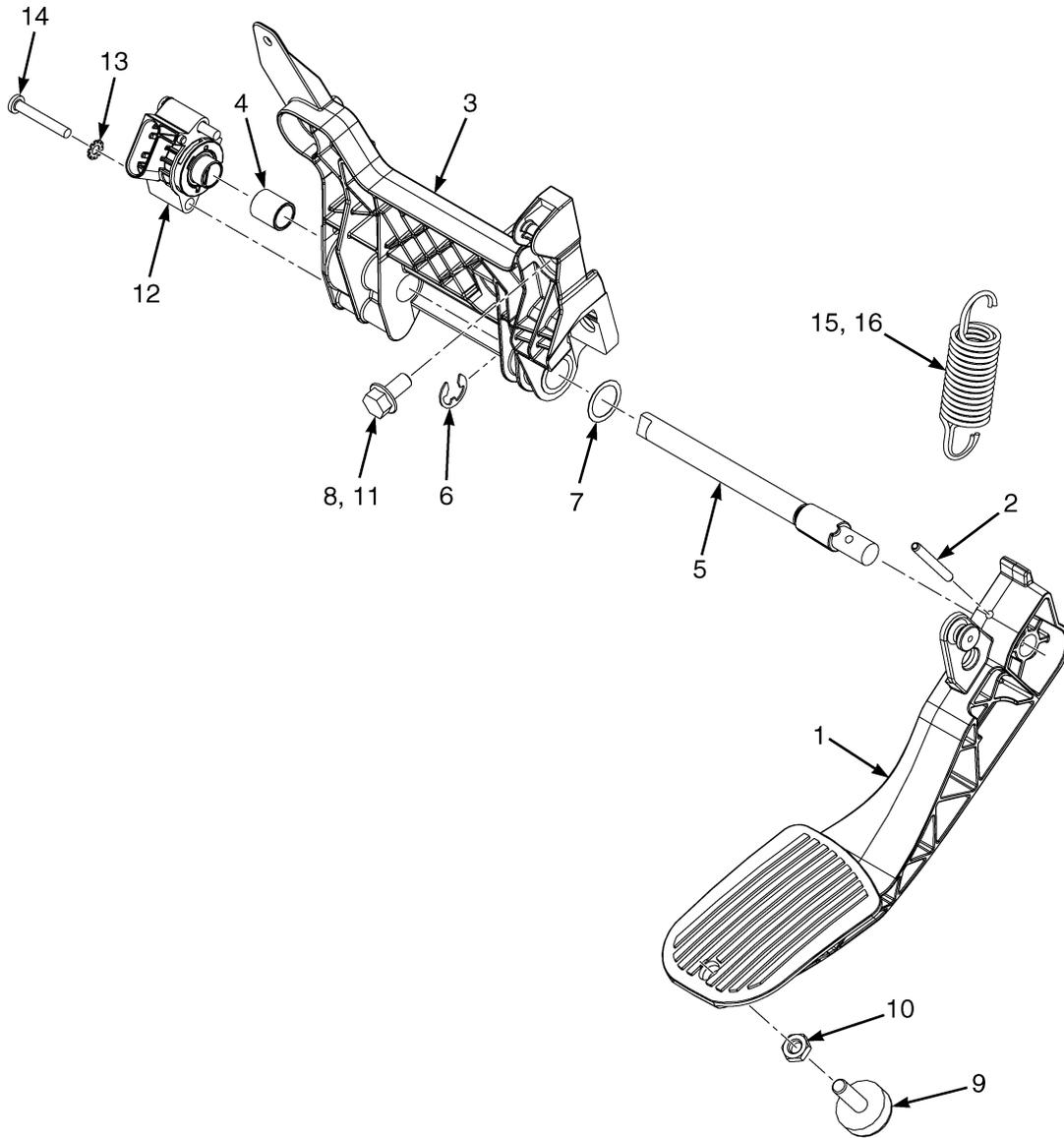
**SECTION 4**  
**FUEL SYSTEM-COMMON TO UNIT**

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<b>DESCRIPTION</b>	<b>PAGE</b>
THROTTLE PEDAL ASSEMBLY AND ATTACHING PARTS	
MONOTROL PEDAL .....	4-4
STANDARD PEDAL .....	4-2

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## THROTTLE PEDAL ASSEMBLY AND ATTACHING PARTS (FIGURE 4-1) STANDARD PEDAL

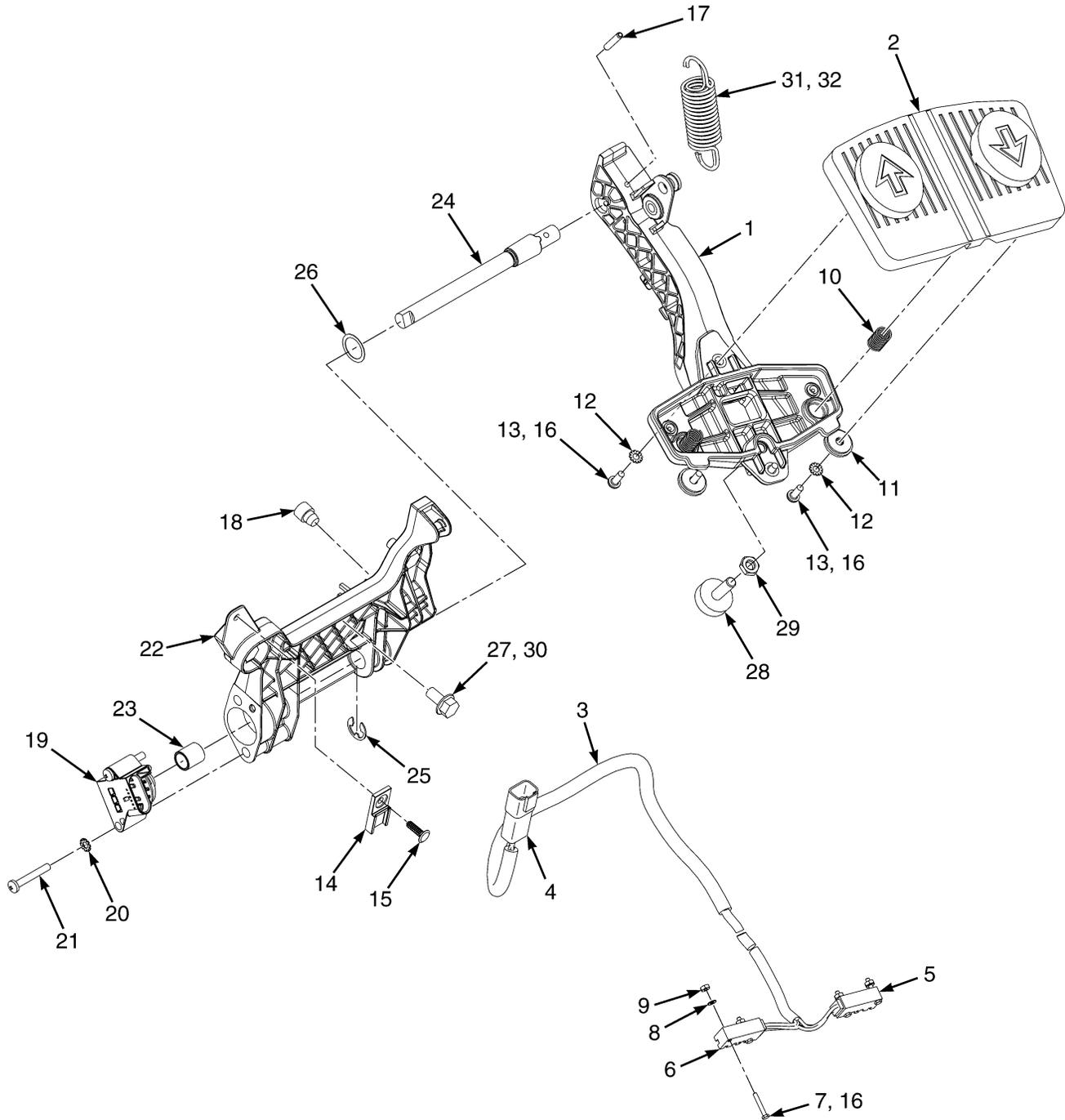


BP130362

**THROTTLE PEDAL ASSEMBLY AND ATTACHING PARTS  
STANDARD PEDAL**

ITEM	PART NO.	DESCRIPTION	QTY
1	2071181	Pedal (Standard) .....	1
2	302443	Roll Pin .....	1
3	4051924	Base Assembly (Throttle) .....	1
3	4615964	Molding .....	1
4	1524267	Bushing .....	1
5	1654754	Shaft .....	1
6	1530971	E-Ring .....	1
7	1654156	Shim .....	AR
8	4109993		
	1527879	Capscrew .....	3
9	1530311	Screw (Stop) .....	1
10	329069	Nut .....	1
11	251099	Loctite .....	AR
12	2063842	Sensor (Hall Throttle Position) .....	1
13	296378	Washer .....	2
14	1564752	Capscrew .....	2
15	1582301	Spring (Inner) .....	1
16	1582300	Spring (Outer) .....	1

## THROTTLE PEDAL ASSEMBLY AND ATTACHING PARTS (FIGURE 4-2) MONOTROL PEDAL



BP130363

**THROTTLE PEDAL ASSEMBLY AND ATTACHING PARTS  
MONOTROL PEDAL**

ITEM	PART NO.	DESCRIPTION	QTY
	4051938	Pedal Assy .....	1
1	2074702	Pedal .....	1
2	1340470	Pad .....	1
3	<del>2072782</del> 4634485	Wire Harness .....	1
4	.....	Connector Assembly (To Cowl Harness) .....	1
4	1489655	Connector (4 Way) .....	1
4	1330416	Connector (Secondary Lock) .....	1
4	1531312	Terminal .....	4
5	.....	Switch (Reverse) .....	1
6	.....	Switch (Forward) .....	1
7	220428	Screw .....	4
8	53162	Lockwasher .....	4
9	16865	Nut .....	4
10	325699	Spring .....	2
11	4040523	Washer (Bonded) .....	2
12	15931	Lockwasher .....	4
13	16708	Screw .....	4
14	1500912	Clip .....	1
15	1582464	Fastener .....	1
16	360387	Loctite .....	AR
17	302437	Roll Pin .....	1
18	4031769	Isolator (Throttle Pedal) .....	1
19	2063842	Sensor (Hall Throttle Position) (To Cowl Harness) .....	1
20	296378	Washer .....	2
21	1564752	Capscrew .....	2
22	4051924	Base Assembly (Throttle) .....	1
22	4615964	Molding .....	1
23	1524267	Bushing .....	1
24	1654754	Shaft .....	1
25	1530971	E-Ring .....	1
26	1654156	Shim .....	AR
27	<del>4109993</del> 1527879	Capscrew .....	3
28	1530311	Screw (Stop) .....	1
29	329069	Nut .....	1
30	251099	Loctite .....	AR
31	1582301	Spring (Inner) .....	1
32	1582300	Spring (Outer) .....	1



**5**

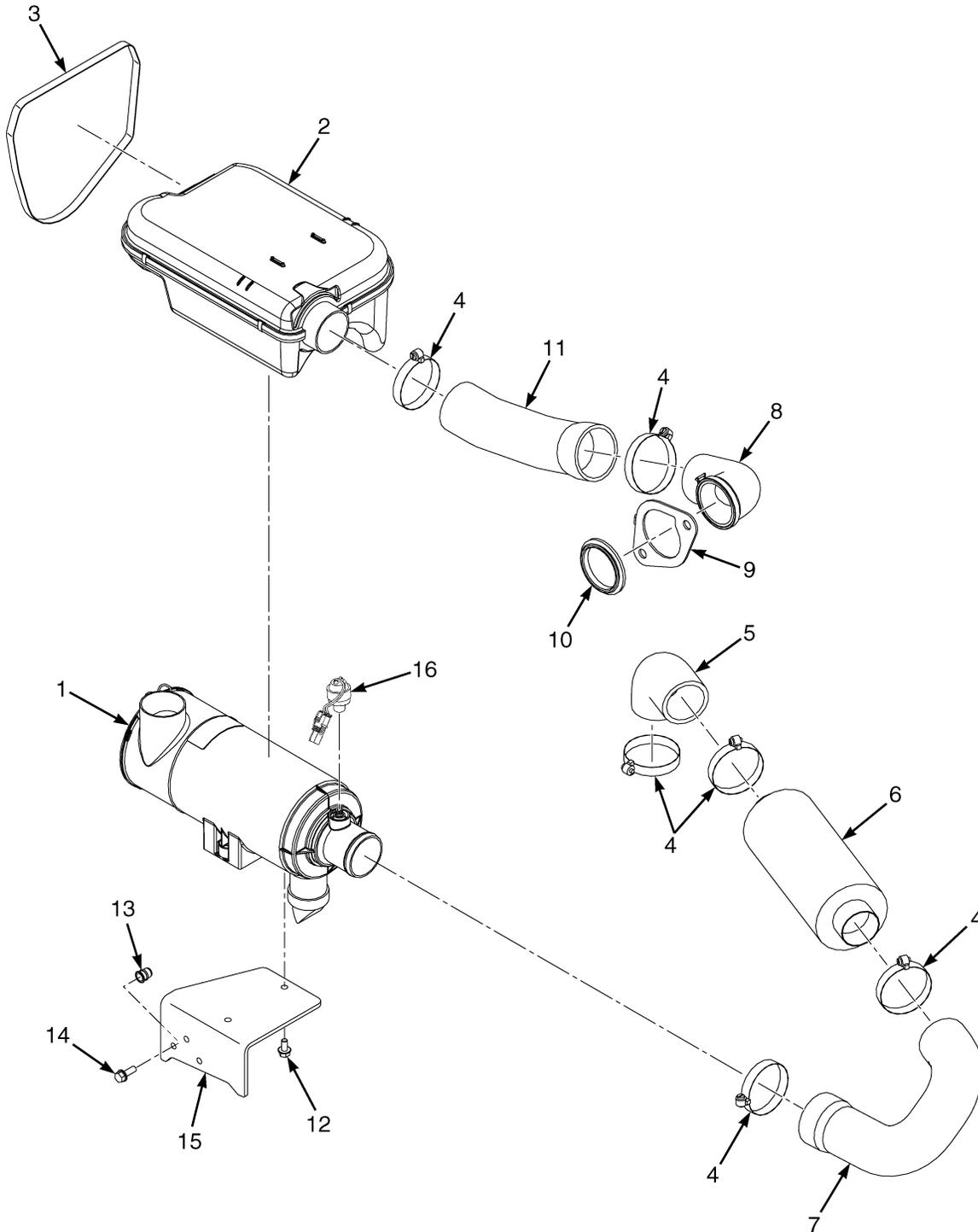
**FUEL SYSTEM-DIESEL**



## SECTION 5 FUEL SYSTEM-DIESEL

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## AIR INTAKE AND FILTER SYSTEM (FIGURE 5-1) YANMAR 3.3L — WITH AUXILIARY INTAKE SILENCER



BP130311

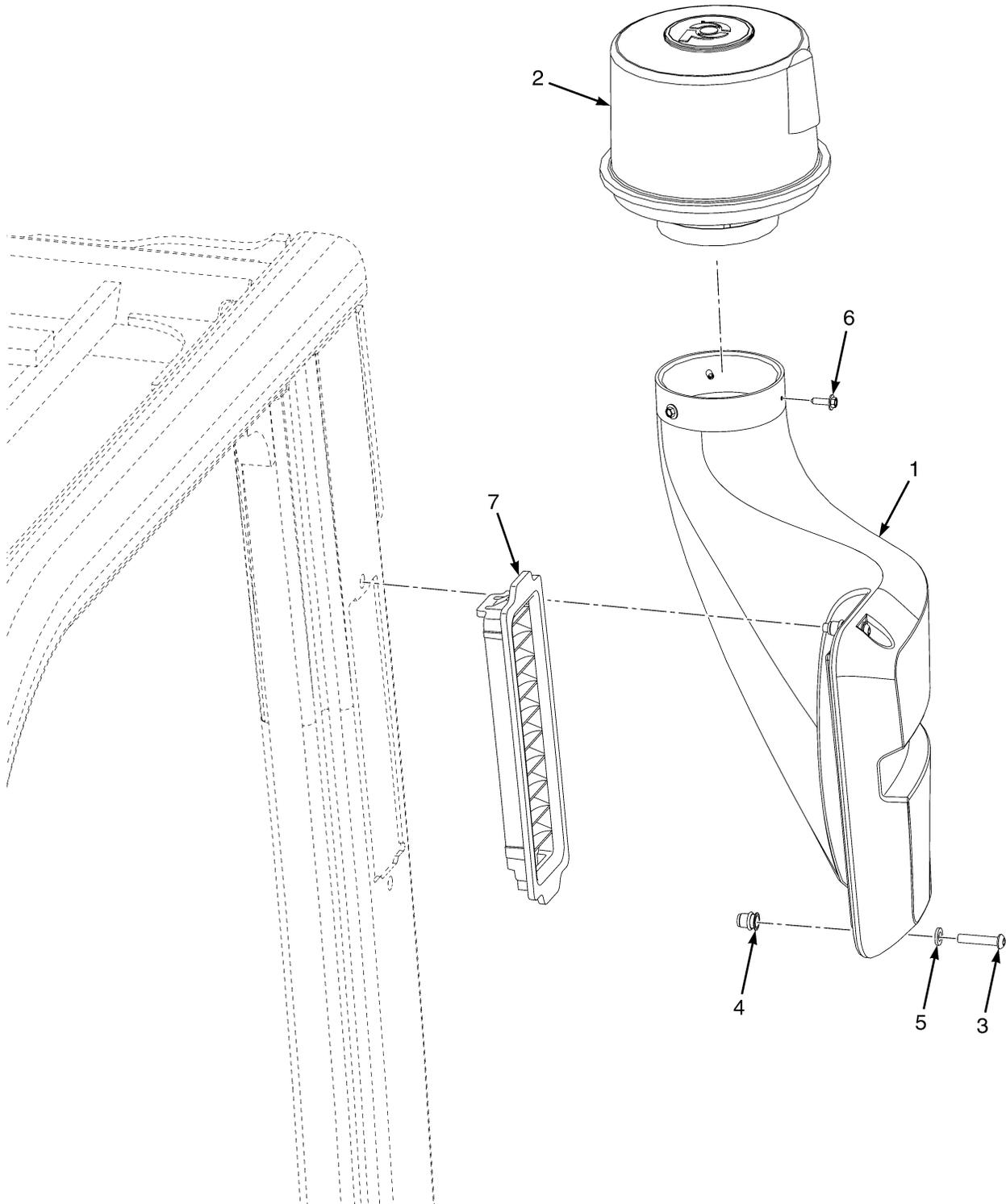
**AIR INTAKE AND FILTER SYSTEM**  
**YANMAR 3.3L – WITH AUXILIARY INTAKE SILENCER**

ITEM	PART NO.	DESCRIPTION	QTY
1	4612945	Air Filter (☞ Figure 5-4).....	1
2	2102226	Silencer , Assembly (☞ Figure 5-3).....	1
3	1636797	Strap .....	1
4	1394008	Hose Clamp .....	6
5	<del>4603923</del>		
	4607510	Hose (Clean Air) .....	1
6	<del>4603922</del>		
	4607291	Air Inlet (Silencer) .....	1
7	<del>4603924</del>		
	4607511	Hose (Clean Air) .....	1
8	1581438	Elbow .....	1
9	1581439	Retainer .....	1
10	1502079	Grommet .....	1
11	1565212	Hose .....	1
12	<del>4109993</del>		
	1527879	Capscrew .....	2
13	1530243	Insert .....	3
14	1583611	Capscrew .....	3
15	1501849	Bracket .....	1
15	4034386	Bracket (Alternate Part) .....	1
16	1529257	Sensor (Air Flow Restriction) .....	1
	<b>a</b> 16151	Fitting (Air Flow Sensor) .....	1

**FOOTNOTES:**

**a** Not Illustrated

## AIR INTAKE SYSTEM (FIGURE 5-2) PRE-CLEANER AND DUCT

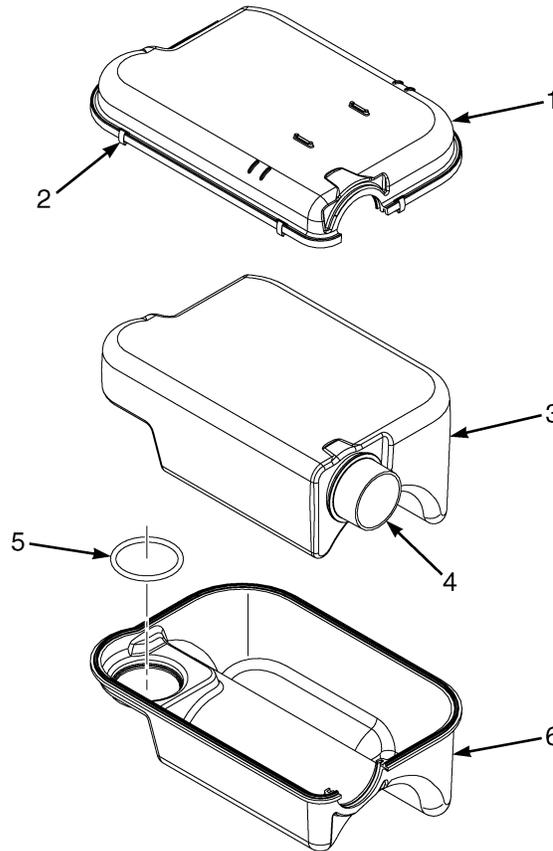


BP090692

**AIR INTAKE SYSTEM  
PRE-CLEANER AND DUCT**

ITEM	PART NO.	DESCRIPTION	QTY
1	1677793	Air Duct .....	1
2	1501888	Pre-Cleaner .....	1
3	2071261	Capscrew .....	2
4	1531558	Insert .....	2
5	1506738	Washer .....	2
6	1677833	Screw (Pre-Cleaner Mounting) .....	1
7	2067476	Grill .....	1

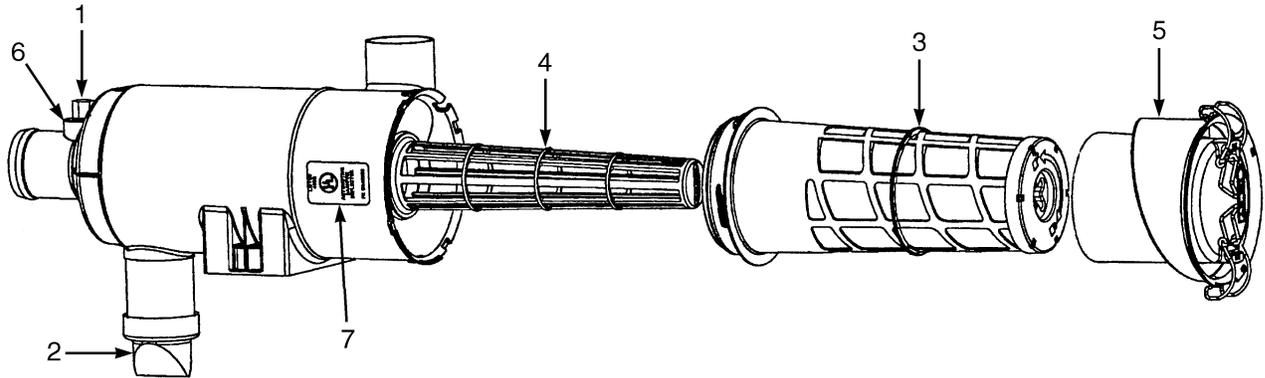
## AIR INTAKE SILENCER (FIGURE 5-3) YANMAR 3.3L



BP130529

ITEM	PART NO.	DESCRIPTION	QTY
	2102226	Silencer , Assembly (Assembly) .....	1
1	2102224	Silencer , Upper Shell (Upper Shell) .....	1
2	2092848	Clip .....	6
3	.....	Inner Silencer .....	1
4	2090566	Tube .....	1
5	15871	O-Ring .....	1
6	2102223	Silencer , Lower Shell (Lower Shell) .....	1

**AIR FILTER ASSEMBLY (FIGURE 5-4)  
YANMAR 3.3L**



HP091227

ITEM	PART NO.	DESCRIPTION	QTY
	4612945	Air Filter .....	1
1	141331	Cap .....	1
2	374923	Valve .....	1
3	1574111	Filter Element .....	1
4	1574260	Liner .....	1
5	1687933	Cover .....	1
6	4030497	Connector , Pipe Nipple (Pipe Nipple) .....	1
	2095890	Label (Air Filter Installation) .....	1



**FUEL SYSTEM  
YANMAR 3.3L, DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
1	4053789	Fuel Sender .....	1
1	1532528	Cover .....	1
2	1532530	Tube Assembly .....	1
3	1501811	Fuel Sender .....	1
4	14303	Fitting .....	2
5	.....	Fitting .....	1
6	1532526	Tube .....	1
7	28584	Fitting .....	1
8	222480	Fitting .....	2
9	353000	O-Ring .....	2
10	1527881	Capscrew .....	2
11	1528893	Quad Ring .....	1
12	4617767	Fuel Filter .....	1
13	4621731	Hose .....	2
14	1301601	Hose .....	1
15	168718	Clamp .....	6
16	1542440	Clamp (Swivel) .....	1
17	1543691	Clamp (Swivel) .....	1
18	2081840	Fuel Cap .....	1
19	2021683	Gasket .....	1
20	1528608	Grommet .....	1
21	1564392	Pipe (Fill) .....	1
22	<del>1528314</del>		
	1593391	Seal .....	1
23	1529366	Capscrew .....	2
	<b>a</b> 2058000	Adhesive .....	1

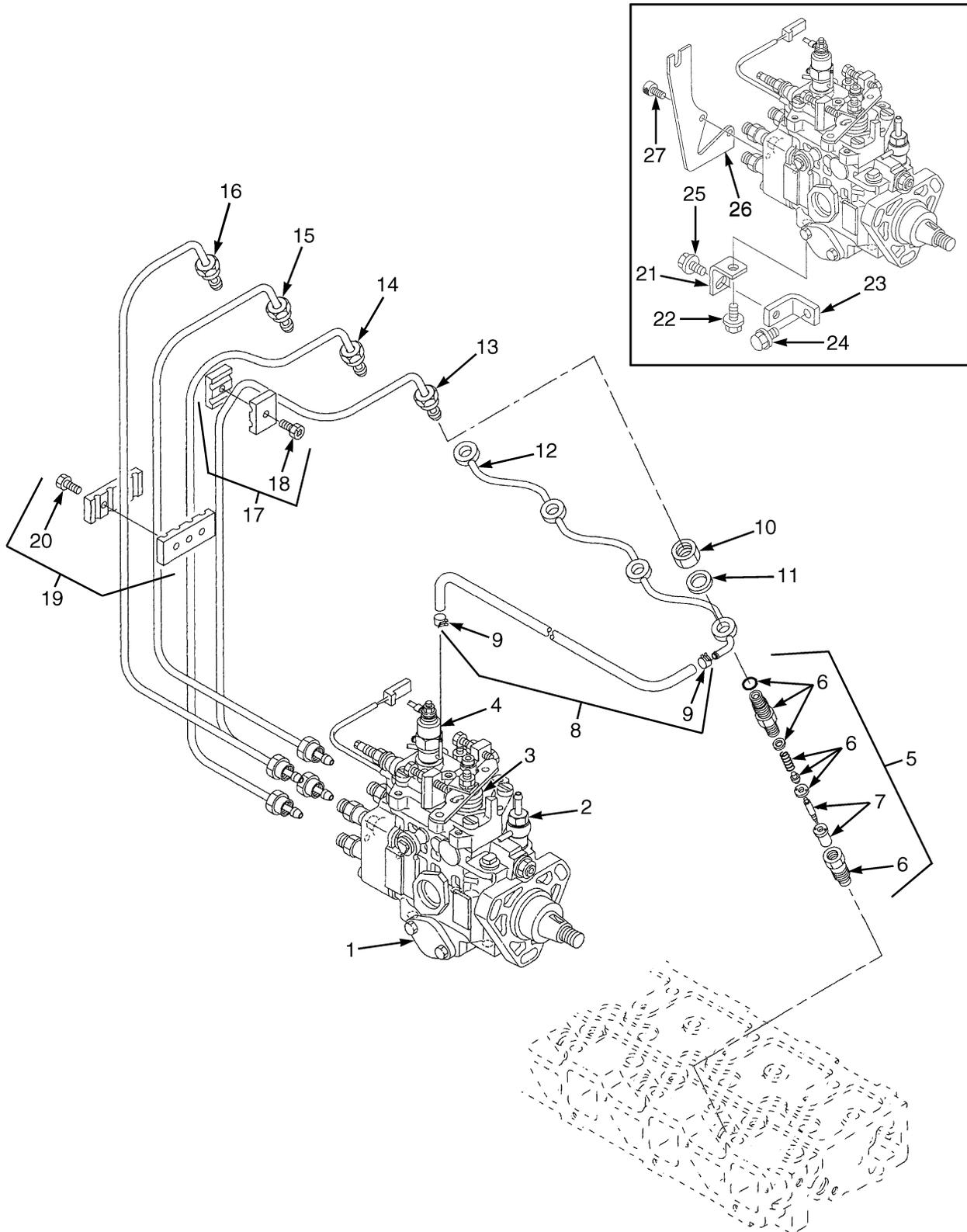
**FOOTNOTES:****a** Not Illustrated



**FUEL FILTER AND WATER SEPARATOR  
YANMAR 3.3L, DIESEL**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
	4626064	Engine Assy-Diesel (Yanmar 3.3L Non-Emissions) .....	1
1	2084448	Fuel Filter (3.3L) .....	1
2	2084449	Filter Head (3.3L) .....	1
3	2084450	Sensor (3.3L) .....	1
4	2084451	Plug (3.3L) .....	1
5	2084452	O-Ring (3.3L) .....	1
6	2084453	Element Assy (3.3L) .....	1
8	1599801	Bolt .....	2
9	1599841	Tube Assy .....	1
10	1599842	Clamp .....	2
11	1599843	Clamp .....	2

## FUEL INJECTION SYSTEM (FIGURE 5-7) YANMAR 3.3L, DIESEL



BP090190

**FUEL INJECTION SYSTEM  
YANMAR 3.3L, DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	4626064	Engine Assy-Diesel (Yanmar 3.3L Non-Emissions) .....	1
1	1706816	Injection Pump (3.3L) .....	1
2	1608616	Solenoid (Fuel Shut-Off) .....	1
2	1608617	O-Ring .....	1
4	1597644	Solenoid Valve (Cold Start) .....	1
4	1600093	O-Ring .....	1
5	1599818	Injector .....	4
6	1599820	Retainer .....	1
7	1599819	Nozzle .....	1
8	1599828	Tube Assy .....	1
9	1599829	Clamp .....	2
10	1599832	Nut .....	4
11	1599831	Gasket .....	4
12	1599830	Tube Assy (Fuel Return) .....	1
13	1599827	Tube Assy (#4) .....	1
14	1599826	Tube Assy (#3) .....	1
15	1599825	Tube Assy (#2) .....	1
16	1599824	Tube Assy (#1) .....	1
17	1599821	Retainer .....	2
18	1599822	Bolt .....	1
19	1599823	Retainer .....	1
20	1599822	Bolt .....	2
21	1599909	Retainer .....	1
22	1599911	Bolt .....	1
23	1599910	Bracket .....	1
24	1599913	Bolt .....	1
25	1599912	Bolt .....	1
26	1599907	Bracket .....	1
27	1599908	Bolt .....	2
	1689744	Kit-Gasket (Complete Engine) (3.3L) (Includes Items 11) .....	1



**THROTTLE POSITION SENSOR AND ATTACHING PARTS  
YANMAR 3.3L, DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
1	4097551	Bracket .....	1
2	1527880	Capscrew .....	7
3	1553897	Capscrew .....	2
4	296378	Washer .....	2
5	292679	Washer .....	2
6	292668	Nut .....	2
7	2080376	Sensor (Hall Throttle Postion) .....	1
8	1616491	Bracket .....	1
9	2078335	Rotor .....	1
10	287816	Capscrew .....	2
11	<del>1512440</del> 302399	Nut .....	2
12	293762	Capscrew .....	2
13	4649561	Linkage .....	1
14	2107187	Actuator .....	1
15	<del>1382472</del> 1502543	Nut .....	4
16	1500912	Clip .....	1
16	1344124	Fastener .....	1
17	1529366	Capscrew .....	2







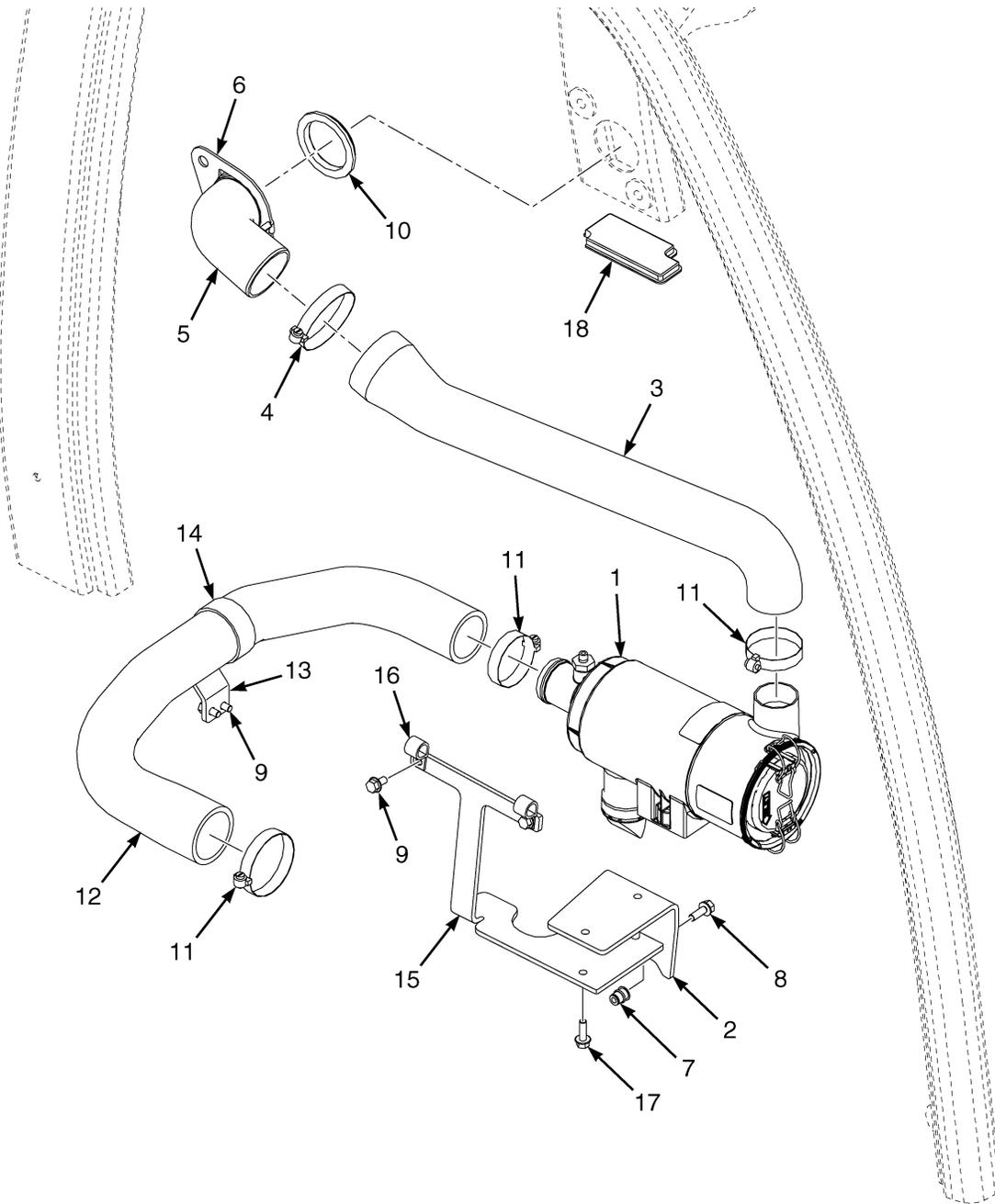
**SECTION 6  
FUEL SYSTEM-LPG**

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MIXER/EPR AND PCV AIR HOSES	
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## AIR INTAKE (FIGURE 6-1) PSI ENGINE

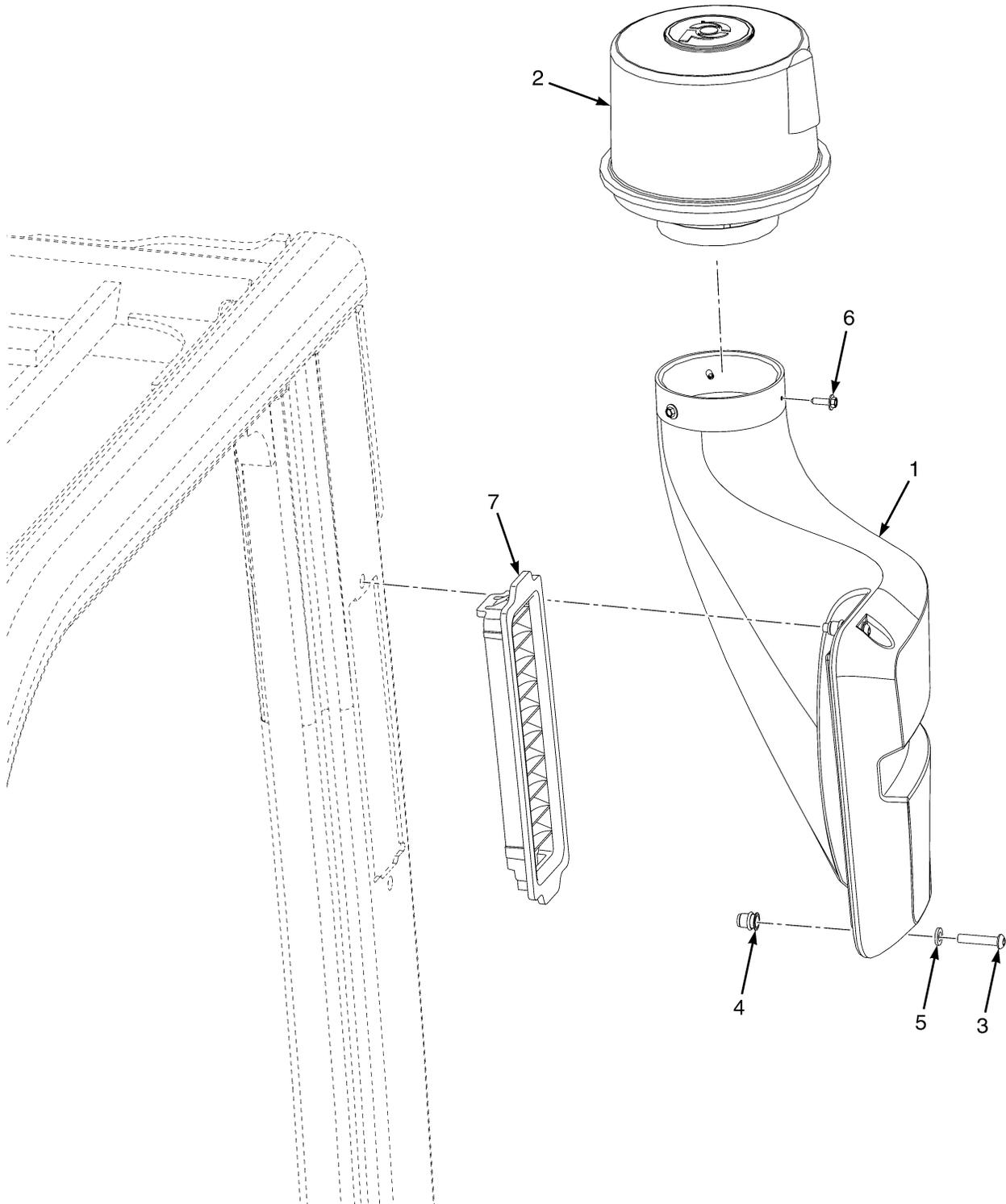


BP090691

**AIR INTAKE  
PSI ENGINE**

ITEM	PART NO.	DESCRIPTION	QTY
1	2055193		
	4611248	Air Filter (☞ Figure 6-3).....	1
3	1502034	Hose (Dirty) .....	1
4	1394008	Hose Clamp .....	1
5	1581438	Elbow .....	1
6	1581439	Retainer .....	1
7	1530243	Insert .....	3
8	1583611	Capscrew .....	3
9	1527880	Capscrew .....	5
10	1502079	Grommet .....	1
11	112989	Hose Clamp .....	3
12	4626780	Hose (Clean) .....	1
13	4083043	Bracket Wldmt .....	1
14	1545418	Clamp (Insulated) .....	1
15	4137355	Bracket (One Piece) .....	1
16	173247	Clamp .....	2
17	1510113	Capscrew .....	2
18	1704793	End Plug (OHG Leg) .....	1

## AIR INTAKE SYSTEM (FIGURE 6-2) PRE-CLEANER AND DUCT

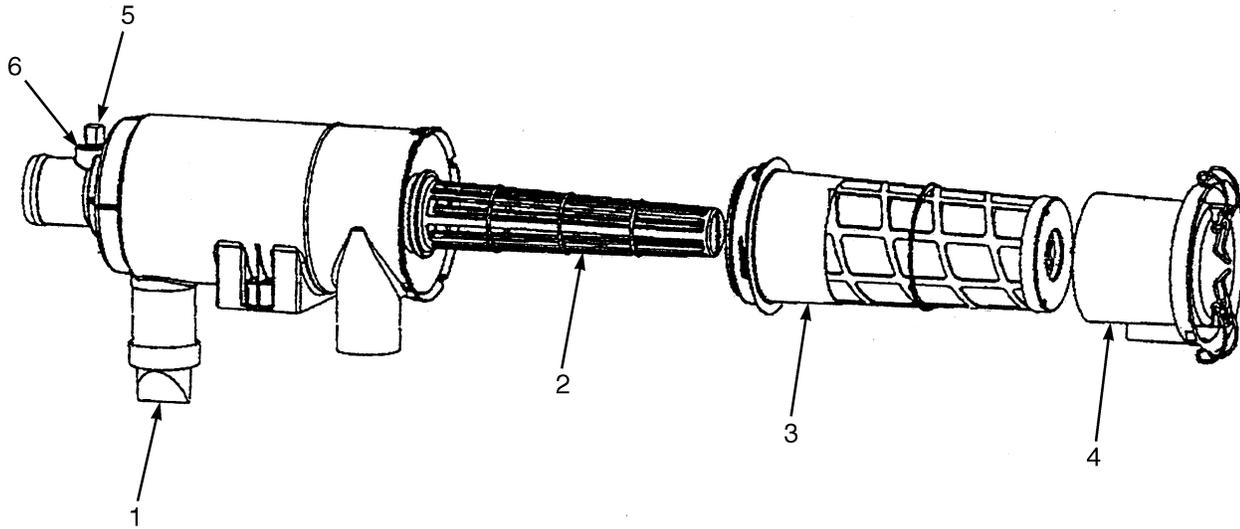


BP090692

**AIR INTAKE SYSTEM  
PRE-CLEANER AND DUCT**

ITEM	PART NO.	DESCRIPTION	QTY
1	1677793	Air Duct .....	1
2	1501888	Pre-Cleaner .....	1
3	2071261	Capscrew .....	2
4	1531558	Insert .....	2
5	1506738	Washer .....	2
6	1677833	Screw .....	3
7	2067476	Grill .....	1

## AIR FILTER ASSEMBLY (FIGURE 6-3) PSI ENGINE

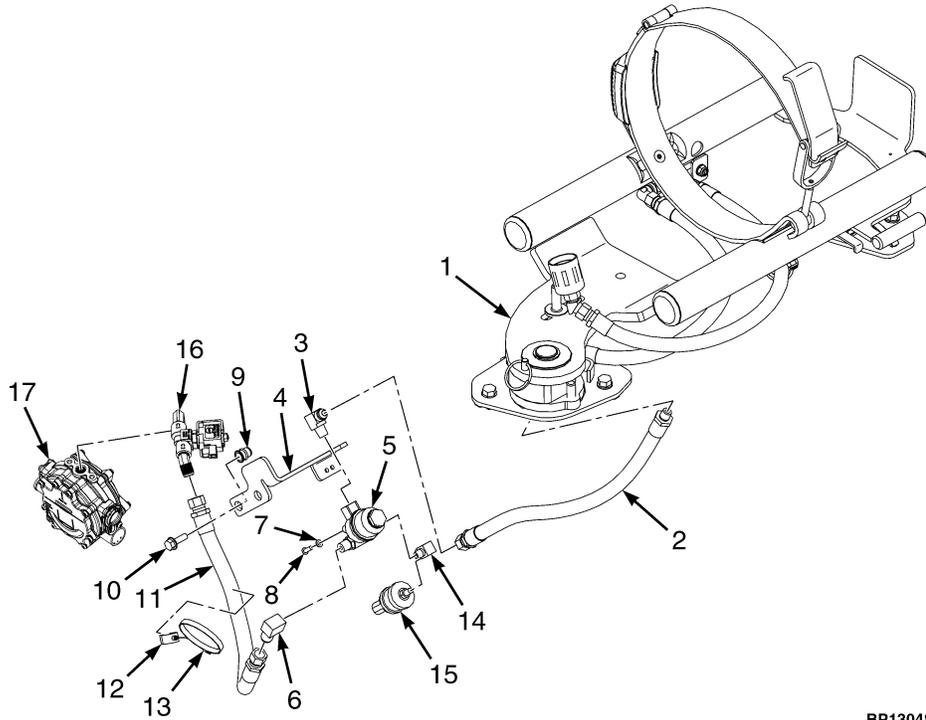


BP130113

ITEM	PART NO.	DESCRIPTION	QTY
	2055193		
	4611248	Air Filter .....	1
1	374923	Valve .....	1
2	1559419	Guide .....	1
3	1559418	Filter Element .....	1
4	1559420	Cover .....	1
5	141331	Cap .....	1
6	4030497	Connector , Pipe Nipple (Pipe Nipple) .....	1
	2095889	Label (Air Filter Installation) .....	1



## FUEL SYSTEM (FIGURE 6-4) PSI-LPG — WITHOUT LOW FUEL SENSOR



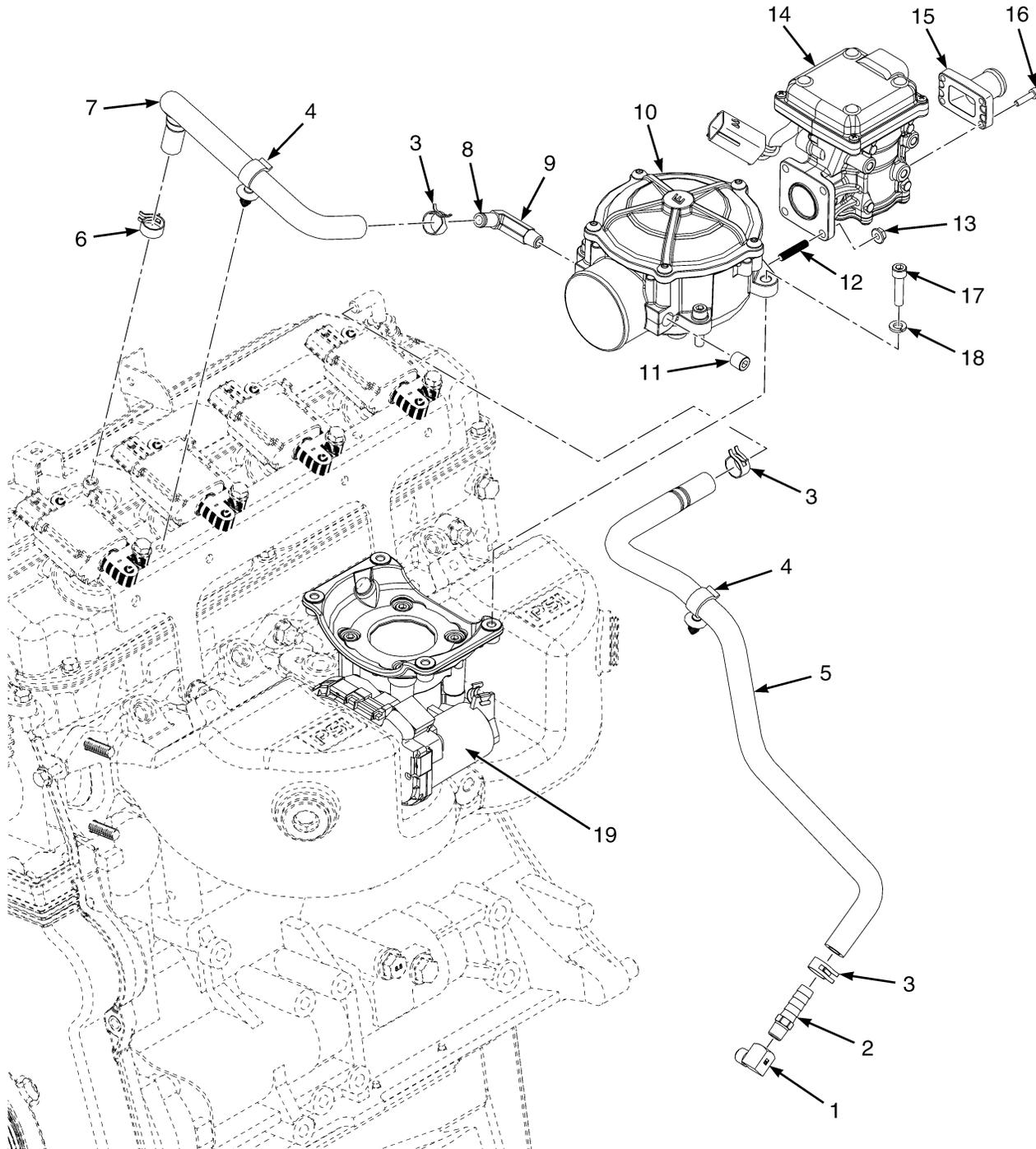
BP130485

**FUEL SYSTEM**  
**PSI-LPG – WITHOUT LOW FUEL SENSOR**

ITEM	PART NO.	DESCRIPTION	QTY
1	4043982	Bracket .....	1
2	88791	Hose Assy .....	1
3	14358	Fitting .....	1
4	4121568	Bracket .....	1
5	2105803	Fuel Filter (LPG) .....	1
5	1689544	Kit-Filter Element .....	1
6	14372	Fitting .....	1
7	320155	Washer .....	2
8	296152	Capscrew .....	2
9	1530243	Insert .....	2
10	1510113	Capscrew .....	2
11	2090361	Hose Assy .....	1
12	1502059	Clamp (Swivel) .....	1
13	1502061	Clamp (Swivel) .....	1
14	16151	Fitting .....	1
15	1501970	Pressure Switch (Low Fuel) .....	1
16	<del>4112697</del> 4099352	LPG Lock-Off .....	1
17	<del>4040260</del> 4148661	Regulator .....	1
99	<b>a</b> 1510117	Capscrew (Fix item 1) .....	3
99	<b>a</b> 804043	Disconnect .....	1
99	<b>a</b> 2071517	Sleeve .....	1
99	<b>a</b> 101809	Relief Valve .....	1
99	<b>a</b> 17664	Fitting .....	1
99	<b>a</b> 16134	Fitting .....	1

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

## MIXER/EPR AND PCV AIR HOSES (FIGURE 6-5) PSI 2.4L

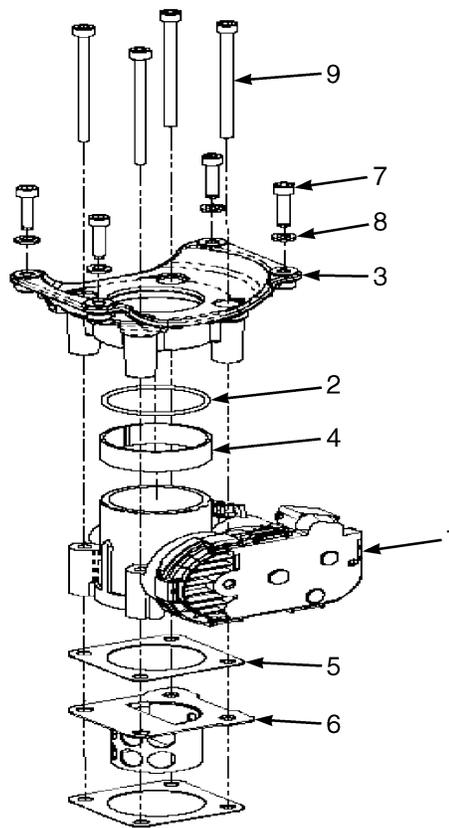


BP090744

**MIXER/EPR AND PCV AIR HOSES  
PSI 2.4L**

ITEM	PART NO.	DESCRIPTION	QTY
	4122334	Long Block (PSI 2.4L) .....	1
1	4110072	Fitting .....	1
2	4110071	Fitting .....	1
3	4019090	Clamp .....	3
4	4110082	Clip .....	2
5	4110074	Hose (Molded) .....	1
6	4110080	Clamp .....	1
7	4110081	Hose .....	1
8	4110078	Fitting .....	1
9	4110079	Fitting .....	1
10	<del>4097619</del>		
	4111124	Mixer-LPG .....	1
10	4111125	Kit-Repair .....	1
11	4019120	Plug .....	1
12	4019121	Stud .....	4
13	1565407	Nut .....	4
14	4019119	Regulator .....	1
15	4019118	Fitting .....	1
16	292672	Capscrew .....	4
17	4110065	Bolt .....	4
18	4110066	Washer .....	4
19	.....	Throttle Body Assembly .....	1

**THROTTLE BODY (FIGURE 6-6)**  
PSI 2.4L

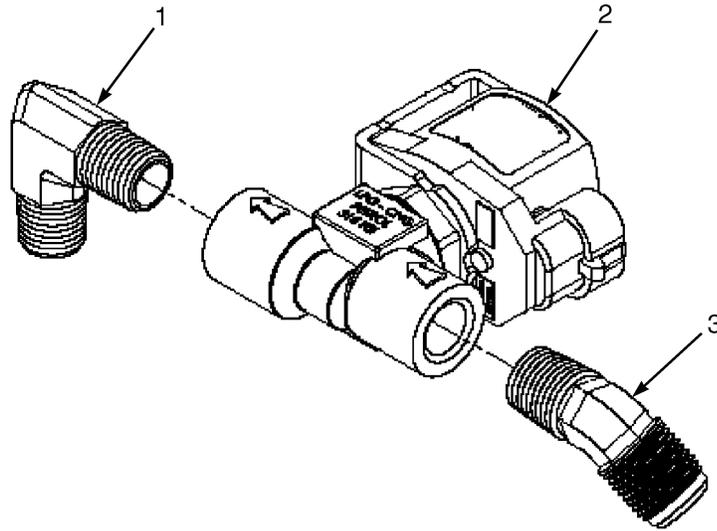


BP090710

**THROTTLE BODY**  
**PSI 2.4L**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
	4122334	Long Block (PSI 2.4L) .....	1
1	4110059	Throttle Body .....	1
2	4110060	O-Ring .....	1
3	4110061	Adapter .....	1
4	4110062	Spacer .....	1
5	4110063	Gasket (Throttle Body) .....	2
6	4110064	Baffle .....	1
7	4110065	Bolt .....	4
8	4110066	Washer .....	4
9	<del>1331349</del> 159708	Capscrew .....	4

## LOCK-OFF VALVE (FIGURE 6-7) PSI 2.4L



BP090714

ITEM	PART NO.	DESCRIPTION	QTY
	4122334	Long Block (PSI 2.4L) .....	1
1	4019019	Fitting .....	1
2	4112697		
	4099352	LPG Lock-Off .....	1
3	4112698	Fitting .....	1





**FUEL REGULATING SYSTEM  
PSI 2.4L**

ITEM	PART NO.	DESCRIPTION	QTY
	4122334	Long Block (PSI 2.4L) .....	1
1	4110979	Hose .....	1
2	4111123	Nut .....	1
3	4111116	Hose .....	1
4	4111117	Hose .....	1
5	4111119	Hose .....	1
6	4111118	Connector (3-Way) (T-Fitting) .....	1
7	4019092	Clamp .....	6
8	4019102	Clamp .....	1
9	4111007	Bracket .....	2
10	4040259	Fitting .....	2
11	4111120	Clamp .....	1
12	4019099	Clamp .....	2
13	<del>4040260</del>		
	4148661	Regulator .....	1
13	4040288	Kit-Regulator Repair .....	1
14	4111121	Bracket .....	1
15	4111122	Bracket .....	1
16	4104453	Mount .....	3
17	4019051	Bolt .....	3
18	4111055	Bolt .....	2
19	<del>1307884</del>		
	1514429	Nut .....	1
	<b>a</b> 4111115	Conduit .....	AR

**FOOTNOTES:**

- a** Protective sleeve for item #3



**7**

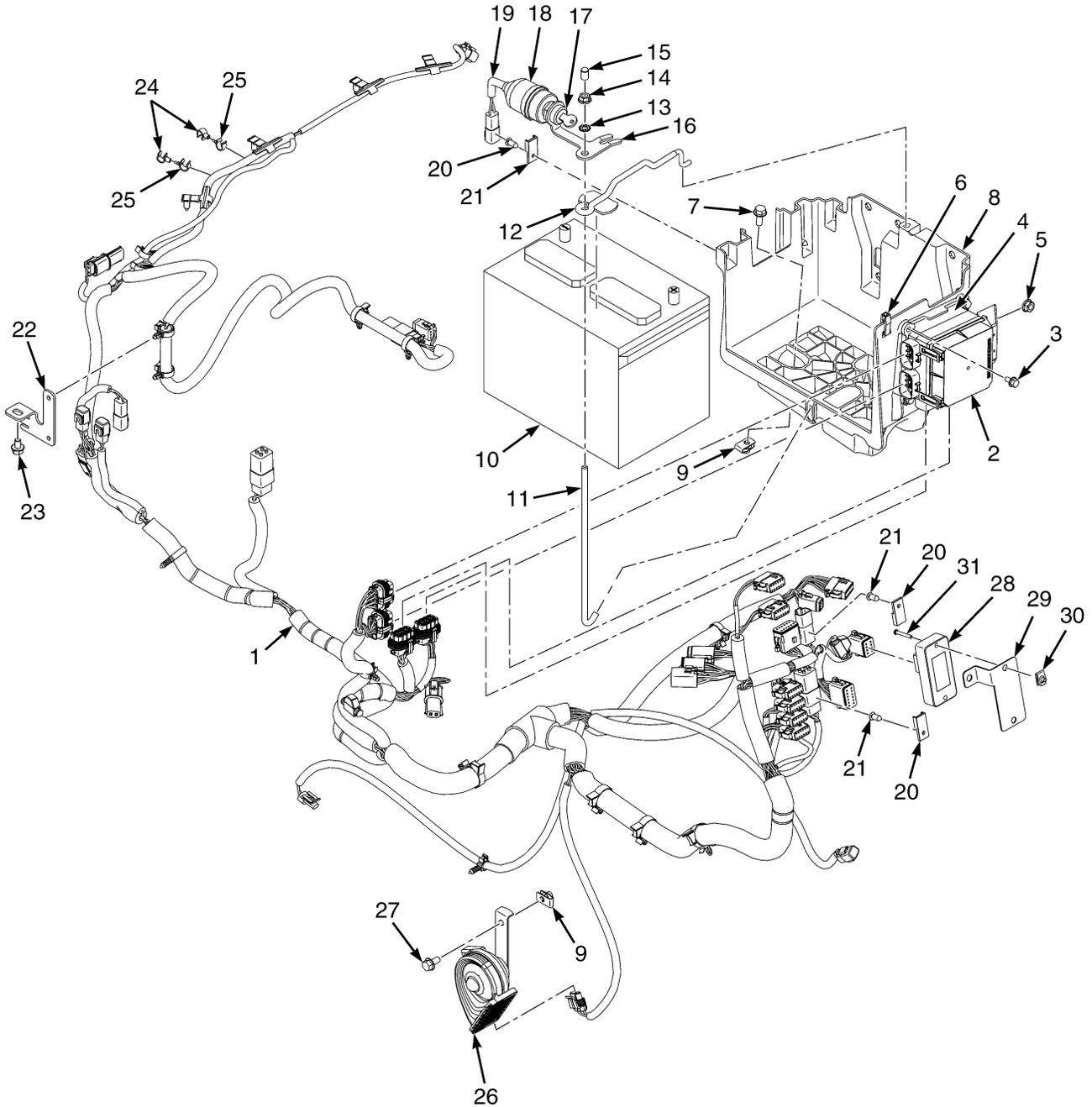
**ELECTRICAL SYSTEM-COMMON TO UNIT**



## SECTION 7 ELECTRICAL SYSTEM-COMMON TO UNIT

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## ELECTRICAL SYSTEM (FIGURE 7-1) RH CHASSIS



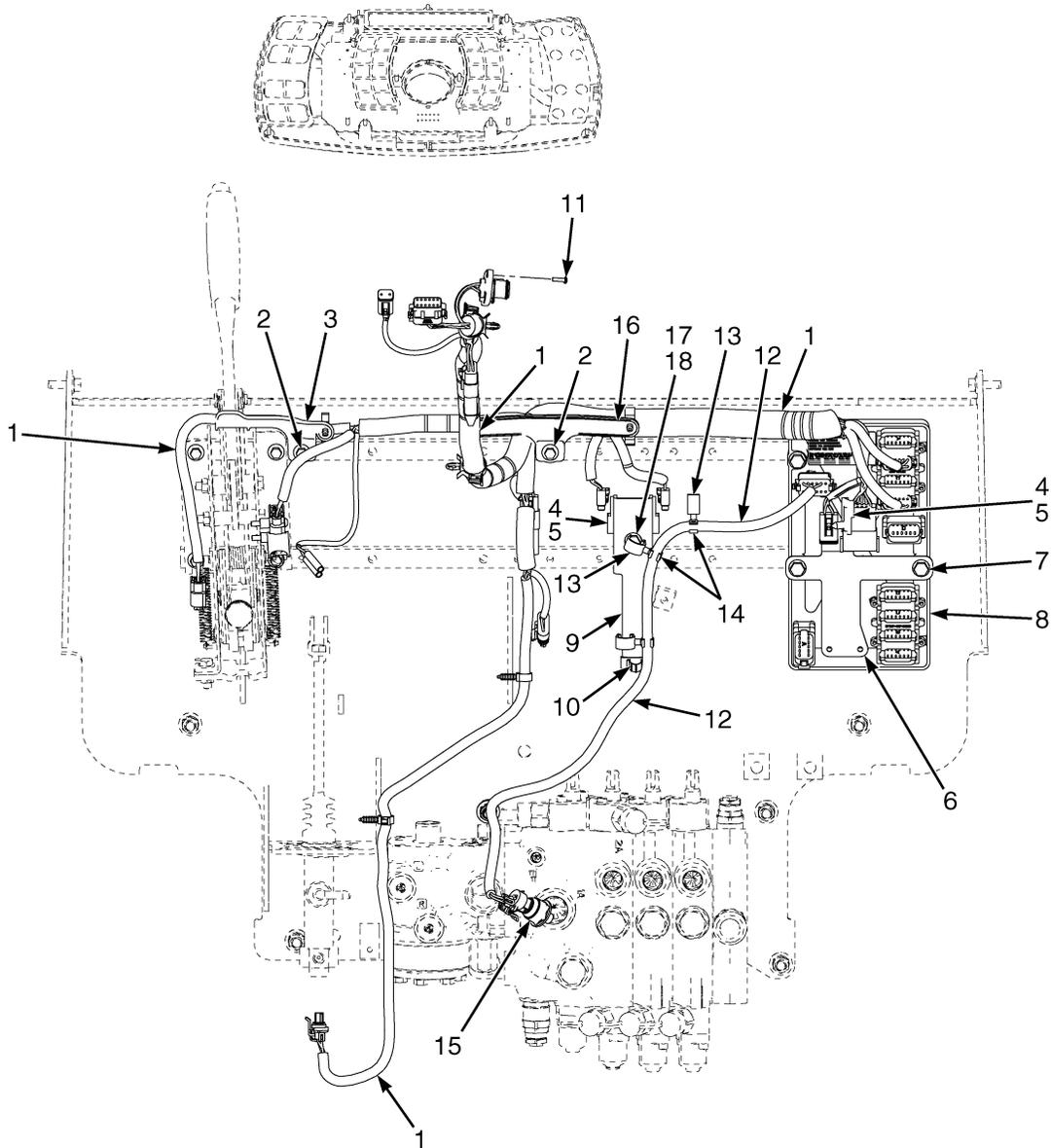
BP081842

**ELECTRICAL SYSTEM  
RH CHASSIS**

ITEM	PART NO.	DESCRIPTION	QTY
1	4630231	Wire Harness (Chassis) (PSI 2.4L LPG) (☞Figure 7-23).....	1
1	4629784	Wire Harness (Chassis) (Yanmar 3.3L) (☞Figure 7-24).....	1
1	<b>a</b> 4635258	Wire Harness (Chassis) (PSI 2.4L LPG) (☞Figure 7-25).....	1
1	<b>a</b> 4635288	Wire Harness (Chassis) (Yanmar 2.6L, 3.0L 3.3L) (☞Figure 7-26).....	1
2	2090613	Fuse Box (PDM) (☞Figure 7-4).....	1
3	1534417	Capscrew .....	3
4	1559928	Seal .....	1
5	<del>1382472</del> 1502543	Nut .....	2
6	1402883	Fuse Puller .....	1
7	1527880	Capscrew .....	3
8	2090661	Battery Tray (Plastic) .....	1
9	1480237	Nut , Foldover .....	4
10	1643935	Start Battery Wet (LPG) .....	1
10	1643936	Start Battery Wet (Diesel) .....	1
11	2065745	Link (Battery Hold Down) .....	1
12	1641368	Link (Battery Hold Down) .....	1
13	296380	Washer .....	1
14	<del>1382472</del> 1502543	Nut .....	1
15	1540805	Cap .....	1
16	1582337	Bracket (Remote Keyswitch) .....	1
17	2058111	Ignition Switch (Remote Keyswitch) .....	1
18	190383	Boot (Remote Keyswitch) .....	1
19	2058110	Wire Harness (Remote Keyswitch) .....	1
19	1493465	Connector (2 Pin) .....	1
19	1330414	Connector (Secondary Lock) .....	2
19	1330437	Terminal (Pin) .....	2
19	1497433	Ring Terminal .....	2
20	1582464	Fastener .....	7
21	1500912	Clip .....	5
22	1617080	Bracket (Hood Switch) .....	1
23	1529366	Capscrew .....	1
24	1561871	Clamp (Swivel) .....	2
25	1573549	Clamp (Swivel) .....	2
26	<del>1618978</del> <del>4043562</del> 4077726	Horn (Electronic) .....	1
27	<del>4109993</del> 1527879	Capscrew .....	1
28	<b>a</b> <del>4634955</del> <del>4651927</del> 4655560	Control Module .....	1
29	<b>a</b> 4102512	Bracket .....	1
30	<b>a</b> 1537551	Nut (Clip) .....	2
31	<b>a</b> 1672692	Screw .....	2

**FOOTNOTES:****a** With Seat Belt Sequence Module

## COWL ELECTRICAL (FIGURE 7-2) MANUAL HYDRAULIC — WITH OPERATOR PRESENCE SYSTEM



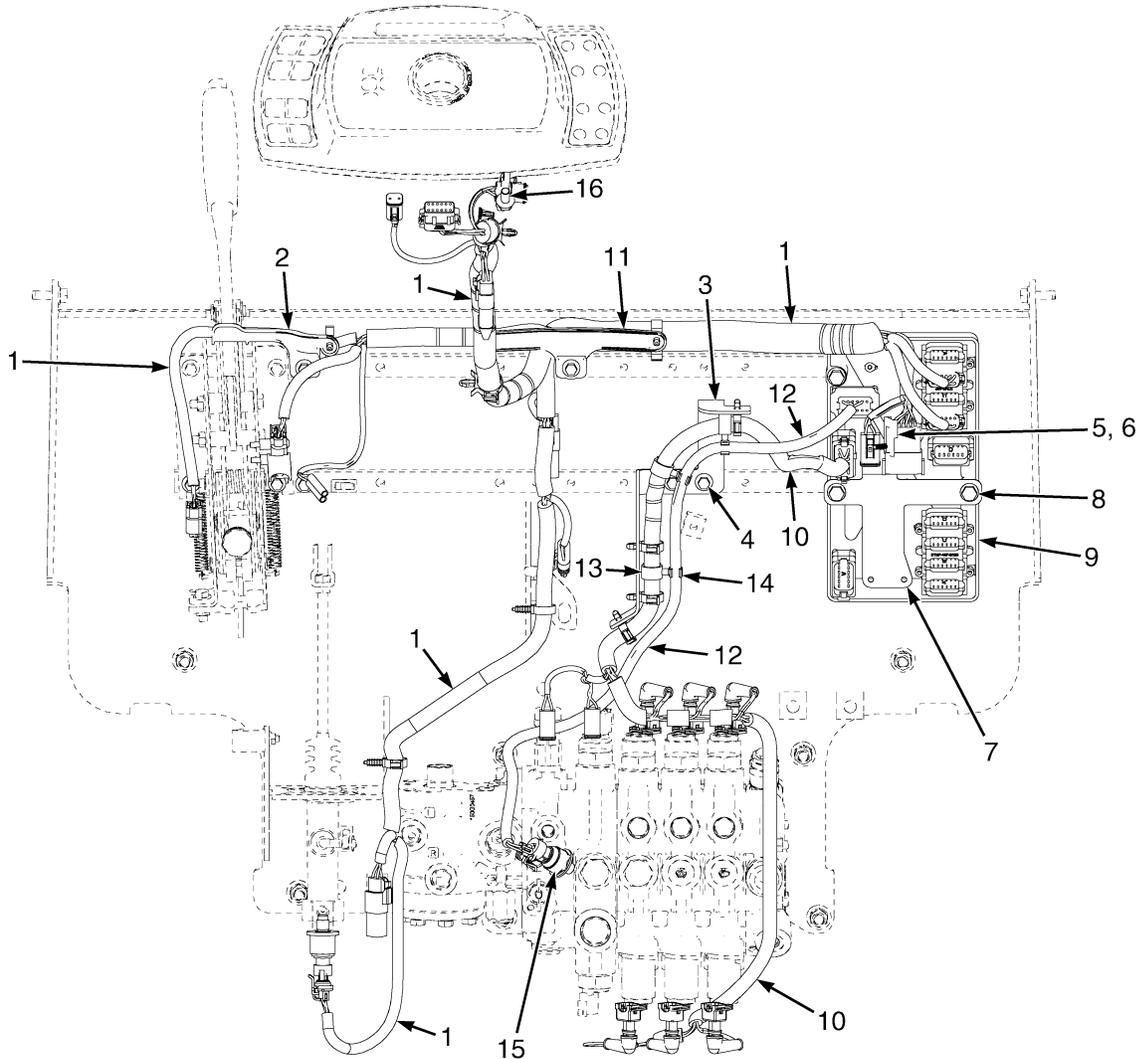
BP081825

**COWL ELECTRICAL**  
**MANUAL HYDRAULIC – WITH OPERATOR PRESENCE SYSTEM**

**KEY:****A: Cowl w/ Monotrol Pedal****B: Cowl w/ Forward Reverse Mini-Lever**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4603281	Wire Harness (Cowl) (☞Figure 7-17).....	1	..
1	4603282	Wire Harness (Cowl) (☞Figure 7-16).....	..	1
2	4011940	Capscrew .....	2	2
3	2111004	Bracket (Left Hand) .....	1	1
4	1500912	Clip (With Monotrol) .....	4	3
5	1582464	Fastener (With Monotrol) .....	4	3
6	1582465	Bracket .....	1	1
7	1510115	Capscrew .....	3	3
8	2068342	Vehicle System Manager (VSM) (w/ Manual Hydraulics) .....	1	1
9	1684542	Bracket .....	1	1
10	1562088	Clip .....	1	1
11	1554902	Screw .....	2	2
12	2079326	Wire Harness (Load Weigh) (☞Figure 7-8).....	1	1
13	1606544	Clamp (Swivel) .....	3	3
14	1573549	Clamp (Swivel) .....	3	3
15	1606735	Sensor (Load Sensing) .....	1	1
16	2111005	Bracket (Right Hand) .....	1	1
17	1528482	Capscrew .....	1	1
18	1398062	Nut (Fold Over) .....	1	1

## COWL ELECTRICAL (FIGURE 7-3) ELECTRO-HYDRAULIC



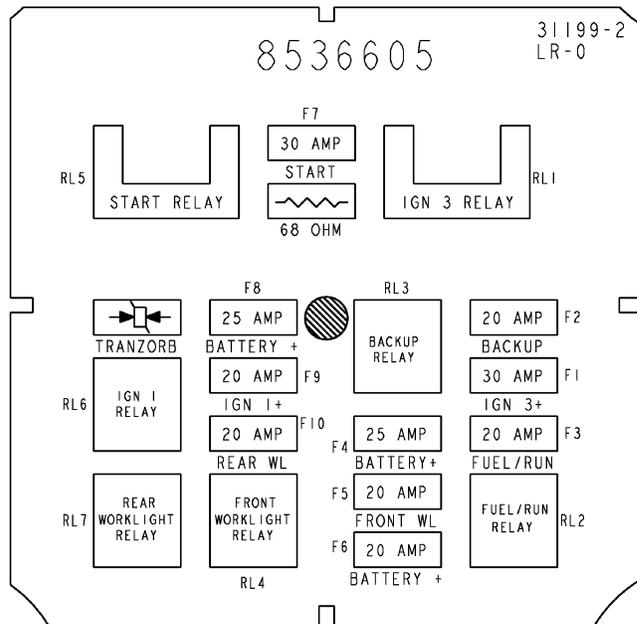
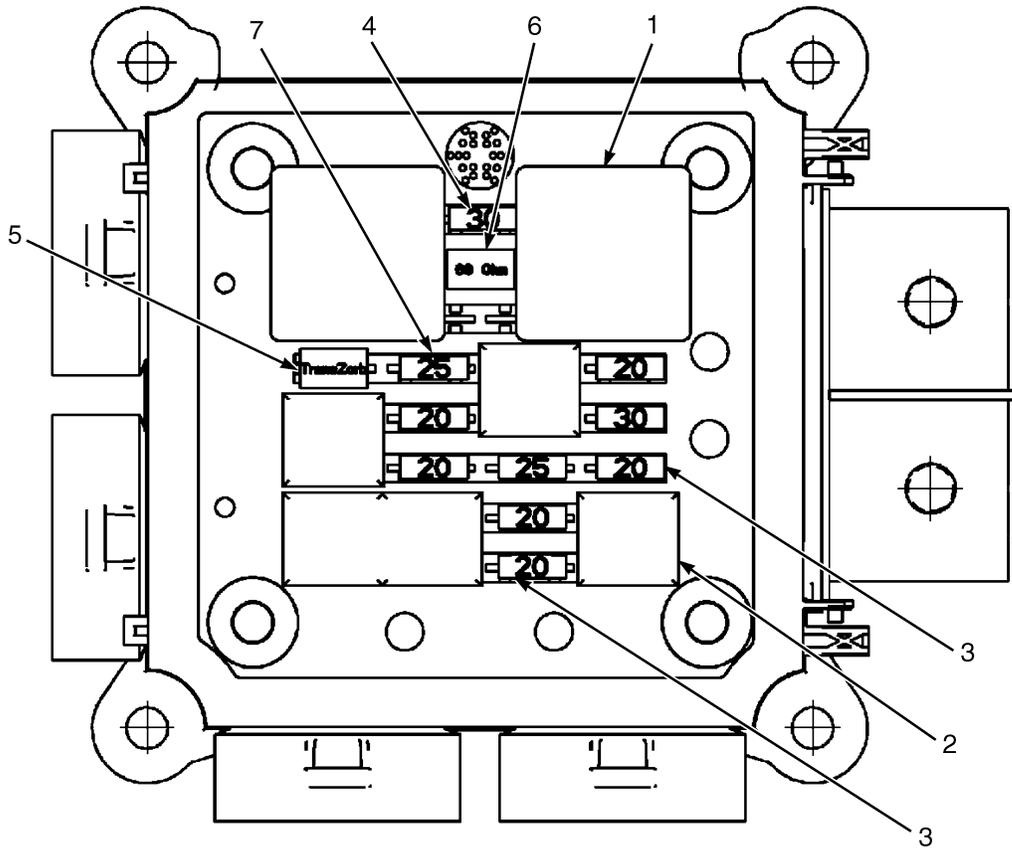
BP081637

**COWL ELECTRICAL  
ELECTRO-HYDRAULIC****KEY:****A: Cowl w/ Monotrol Pedal****B: Cowl w/ Forward Reverse Mini-Lever**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4603283	Wire Harness (Cowl) (☞Figure 7-14).....	1	..
1	4603280	Wire Harness (Cowl) (☞Figure 7-15).....	..	1
2	2111004	Bracket (Left Hand) .....	1	1
3	1531975	Bracket .....	1	1
4	4011940	Capscrew .....	4	4
5	1500912	Clip .....	3	1
6	1582464	Fastener .....	3	1
7	1582465	Bracket .....	1	1
8	1510115	Capscrew .....	3	3
9	<b>b</b> 2068343	Vehicle System Manager (VSM) (w/ Electro-Hydraulics) .....	1	1
10	4605072	Wire Harness (Electronic Control Valve) (Three Function) (☞Figure 7-27).....	1	1
10	4605073	Wire Harness (Electronic Control Valve) (Four Function) (☞Figure 7-28).....	1	1
11	2111005	Bracket (Right Hand) .....	1	1
12	2079326	Wire Harness (Load Weigh) (☞Figure 7-8).....	1	1
13	1606544	Clamp (Swivel) .....	3	3
14	1573549	Clamp (Swivel) .....	3	3
15	1606735	Sensor (Load Sensing) .....	1	2
16	1554902	Screw .....	2	2
	<b>a</b> 1563841	Dust Cap .....	1	1

**FOOTNOTES:****a** Connect to VSM if Load Weigh Harness is not installed.**b** With Overhead Guard

## POWER DISTRIBUTION MODULE (FIGURE 7-4)



BP080485

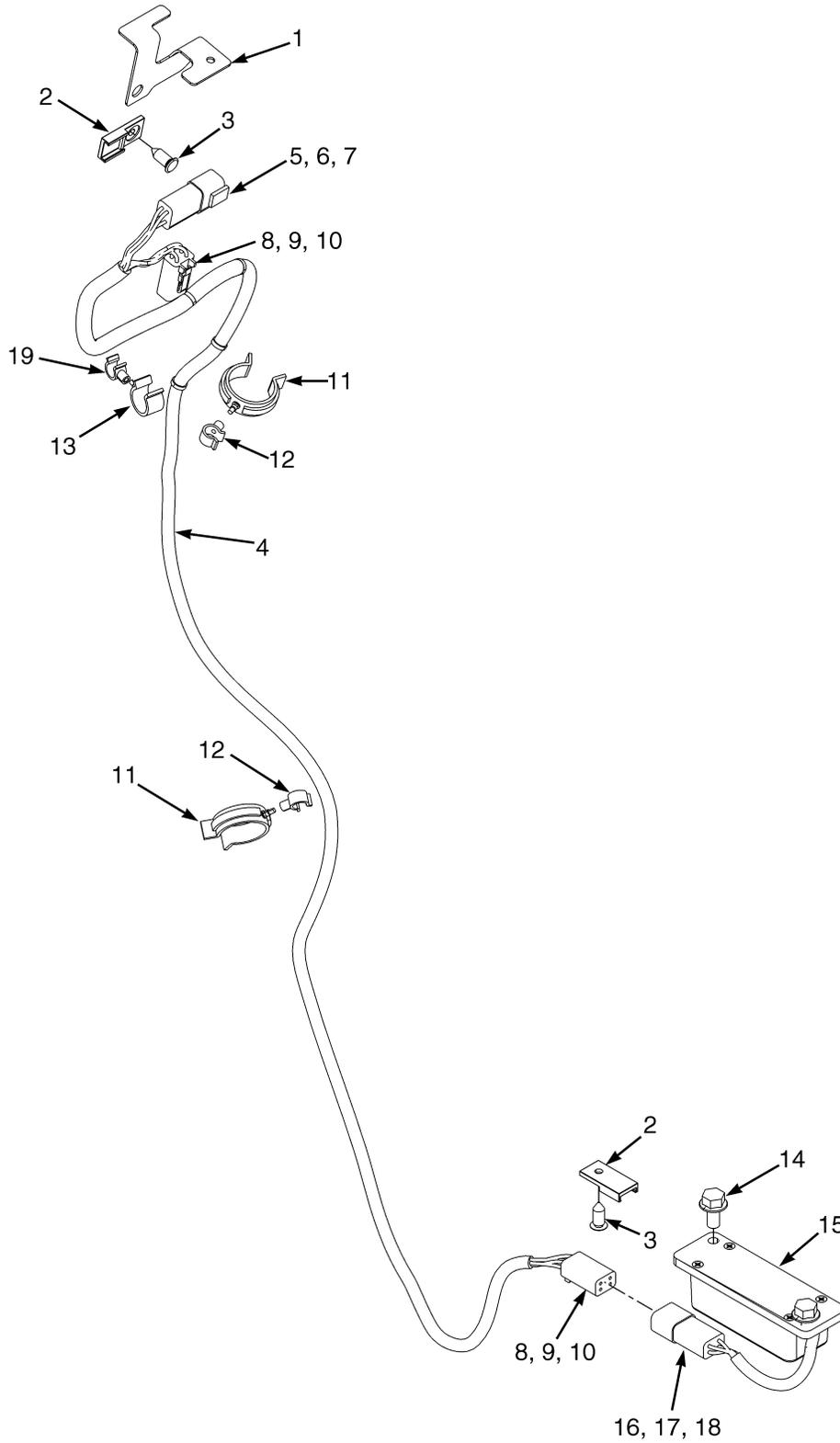
**POWER DISTRIBUTION MODULE**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
	2090613	Fuse Box (PDM) .....	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> 4046933	Fuse Box Cover .....	1

**FOOTNOTES:**

**a** Not Illustrated

## IMPACT SENSOR (FIGURE 7-5)

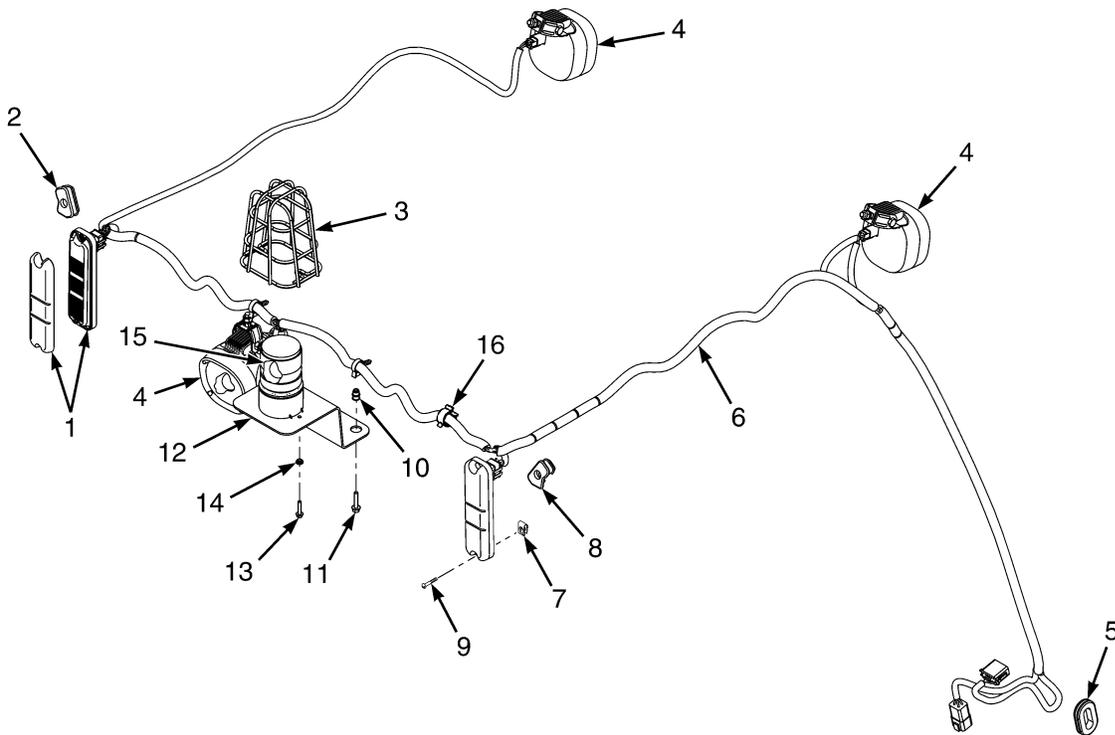


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**IMPACT SENSOR**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
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 (Secondary Lock) .....	2
10	1330438	Terminal (Socket) .....	8
11	1561759	Clamp (Swivel) .....	2
12	1542439	Clamp (Swivel) .....	2
13	1502055	Clamp (Swivel) .....	1
14	287851	Capscrew .....	2
14	320157	Washer .....	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

## LIGHTS (FIGURE 7-6) STOP, TAIL, TURN, BACKUP, AND STROBE — WITH OVERHEAD GUARD



BP081412

ITEM	PART NO.	DESCRIPTION	QTY
1	2056824	Brake/Backup Light (Stop, Turn, Tail, And Back-Up) .....	2
1	<b>a</b> 2056826	Reflector (Tail) .....	2
1	<b>b</b> 2107958	Tail Light Base (LH) (☞ Figure 1-12).....	1
1	<b>b</b> 2107957	Tail Light Base (RH) (☞ Figure 1-12).....	1
2	1560448	Grommet (LH) .....	1
3	1302024	Guard (Strobe Light) .....	1
4	2098083	Work Light (Rear, Includes Hardware) .....	1
4	2098082	Bulb (Halogen) .....	1
4	2107382	Worklight (Rear) (LED) .....	1
4	2098084	Work Light (RH Front, Includes Hardware) .....	1
4	2098082	Bulb (Halogen) .....	1
4	2107383	Worklight (RH Front) (LED) .....	1
4	2098085	Work Light (LH Front, Includes Hardware) .....	1
4	2098082	Bulb (Halogen) .....	1
4	2107384	Worklight (LH Front) (LED) .....	1
5	1539584	Grommet .....	1
6	2098385	Wire Harness (Lights) (☞ Figure 7-18).....	1
7	1537551	Nut (Clip) .....	4
8	1560447	Grommet (RH) .....	1
9	1565125	Screw .....	4
10	1531001	Insert .....	2
11	1586759	Capscrew .....	2
12	1565076	Bracket Wldmt .....	1
13	1586495	Capscrew .....	2
14	1586428	Nut .....	2
15	1654013	Strobe Light Assembly (☞ Figure 17-1).....	1

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ITEM	PART NO.	DESCRIPTION	QTY
16	1606544	Clamp (Swivel) .....	1

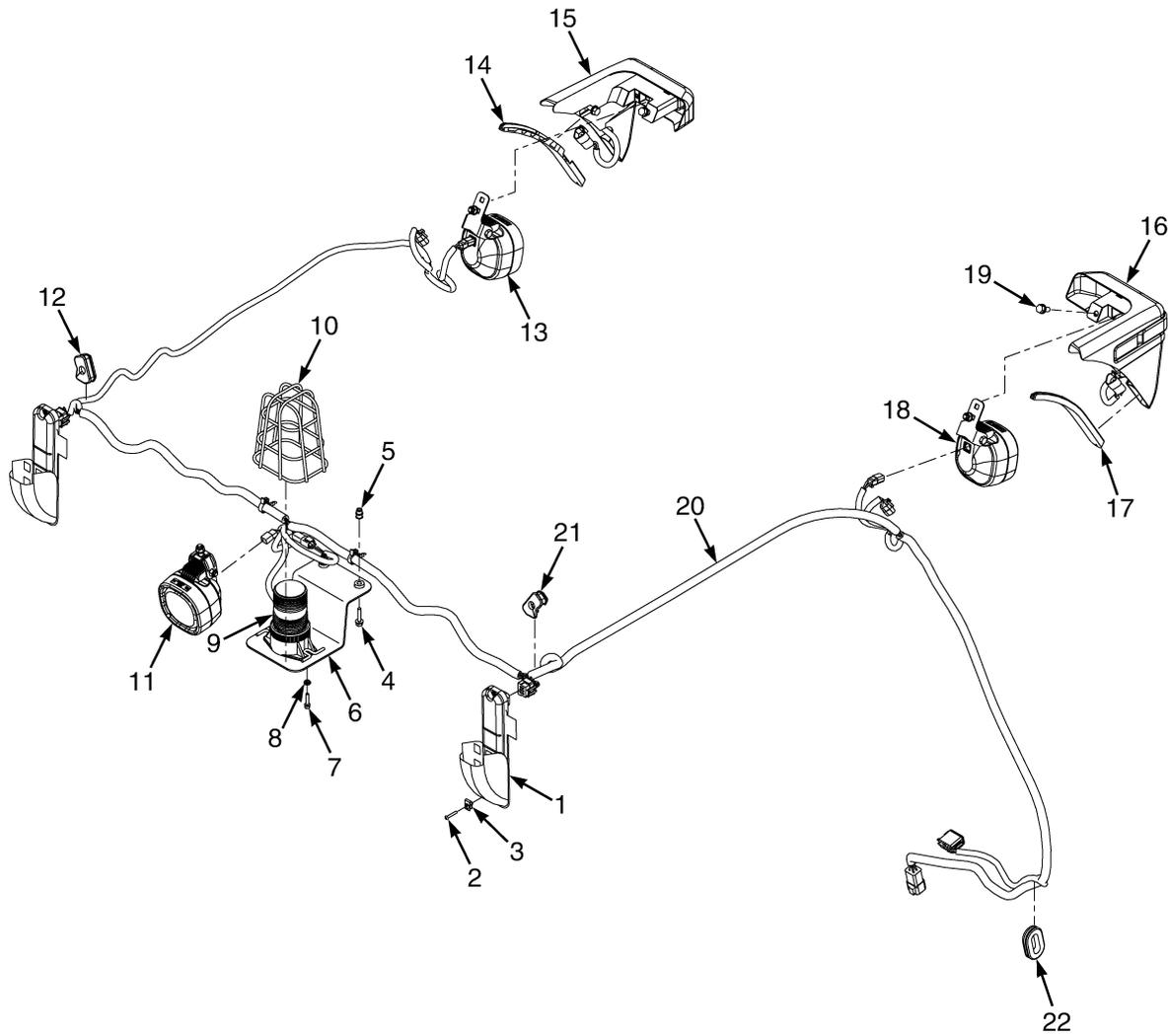
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**FOOTNOTES:**

**a** Optional

**b** See Floorplates and Covers

## LIGHTS (FIGURE 7-7) BRAKE, TAIL, BACKUP, SIDE, TURN SIGNALS, WORK, STROBE — WITH OVERHEAD GUARD



BP080868

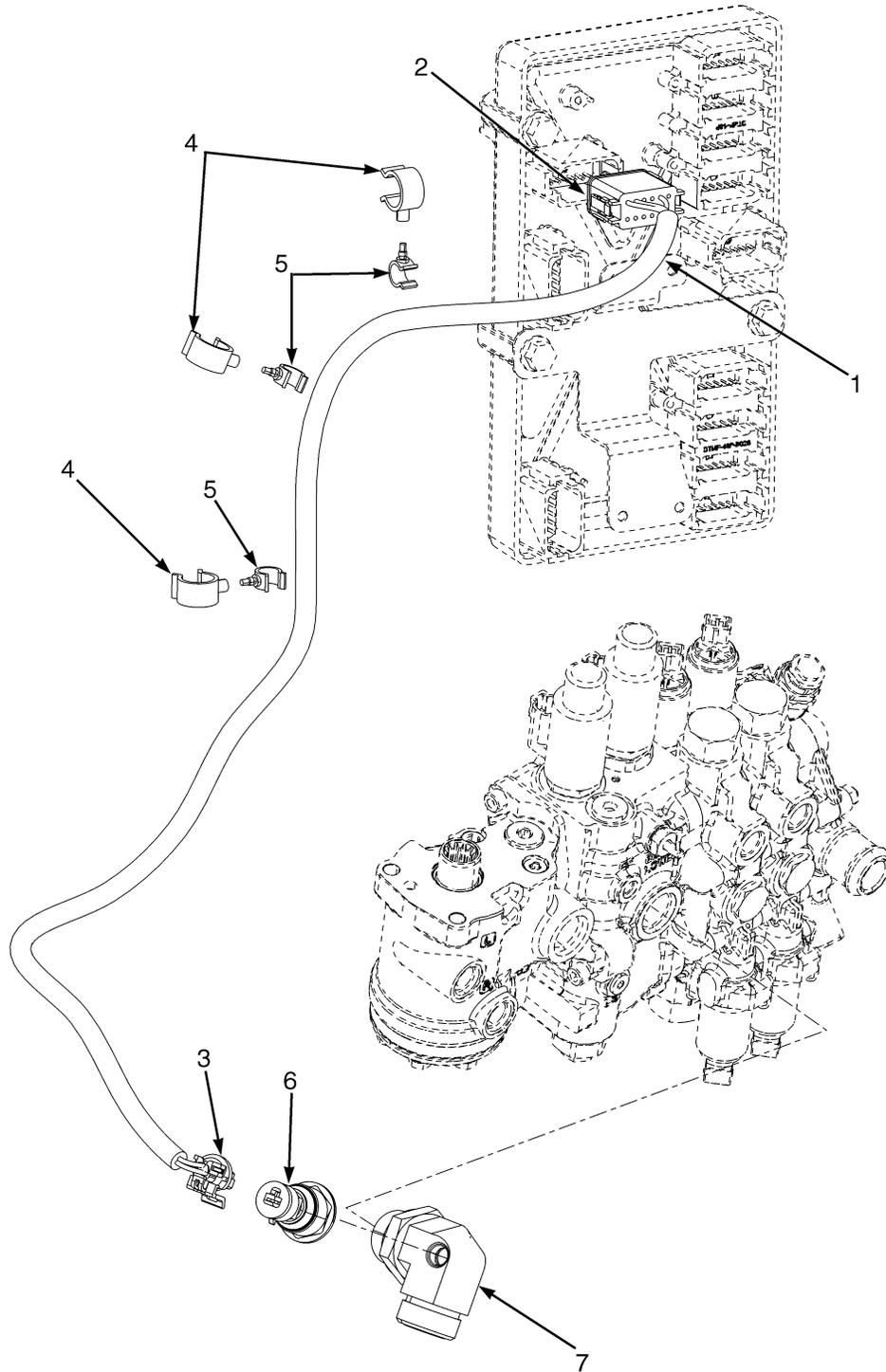
**LIGHTS****BRAKE, TAIL, BACKUP, SIDE, TURN SIGNALS, WORK, STROBE – WITH OVERHEAD GUARD**

ITEM	PART NO.	DESCRIPTION	QTY
1	2056824	Brake/Backup Light (Stop, Turn, Tail, And Back-Up) .....	2
1	<b>a</b> 2107957	Tail Light Base (RH) (☞ Figure 1-12).....	1
1	<b>a</b> 2107958	Tail Light Base (LH) (☞ Figure 1-12).....	1
2	1565125	Screw .....	4
3	1537551	Nut (Clip) .....	4
4	1586495	Capscrew .....	2
5	1531001	Insert .....	2
6	1565076	Bracket Wldmt .....	1
7	1586759	Capscrew .....	2
8	1586428	Nut .....	2
9	1654013	Strobe Light Assembly (☞ Figure 17-1).....	1
10	1302024	Guard (Strobe Light) .....	1
11	2107382	Worklight (Rear) (LED) .....	1
11	2098083	Work Light (Rear, Includes Hardware) (Halogen) .....	1
11	2098082	Bulb (Halogen) .....	1
12	1560448	Grommet (Left Hand Tail Light) .....	1
13	2107386	Head/Work Light (LH Front) (LED) .....	1
13	2098087	Work Light (LH Front) (Halogen) .....	1
13	2098082	Bulb (Halogen) .....	1
14	1608590	Trim (Left Hand) .....	1
15	2070562	Turn Signal Light (LH Front) .....	1
15	2070563	Cap (Black Plastic) .....	2
15	1493466	Connector (3-Way) .....	1
15	1330415	Connector (Secondary Lock) .....	1
15	1330437	Terminal (Pin) .....	3
16	2070561	Turn Signal Light (RH Front) .....	1
16	2070563	Cap (Black Plastic) .....	2
16	1493466	Connector (3-Way) .....	1
16	1330415	Connector (Secondary Lock) .....	1
16	1330437	Terminal (Pin) .....	3
17	1608589	Trim (Right Hand) .....	1
18	2107385	Head/Work Light (RH Front) (LED) .....	1
18	2098086	Work Light (RH Front) (Halogen) .....	1
18	2098082	Bulb (Halogen) .....	1
19	1608654	Capscrew .....	4
20	2098387	Wire Harness (Lights) (☞ Figure 7-19).....	1
21	1560447	Grommet (Right Hand Tail Light) .....	1
22	1539584	Grommet (Vehicle System Manager) .....	1

**FOOTNOTES:**

**a** See Floorplates and Covers

## LOAD WEIGH ELECTRICAL (FIGURE 7-8)

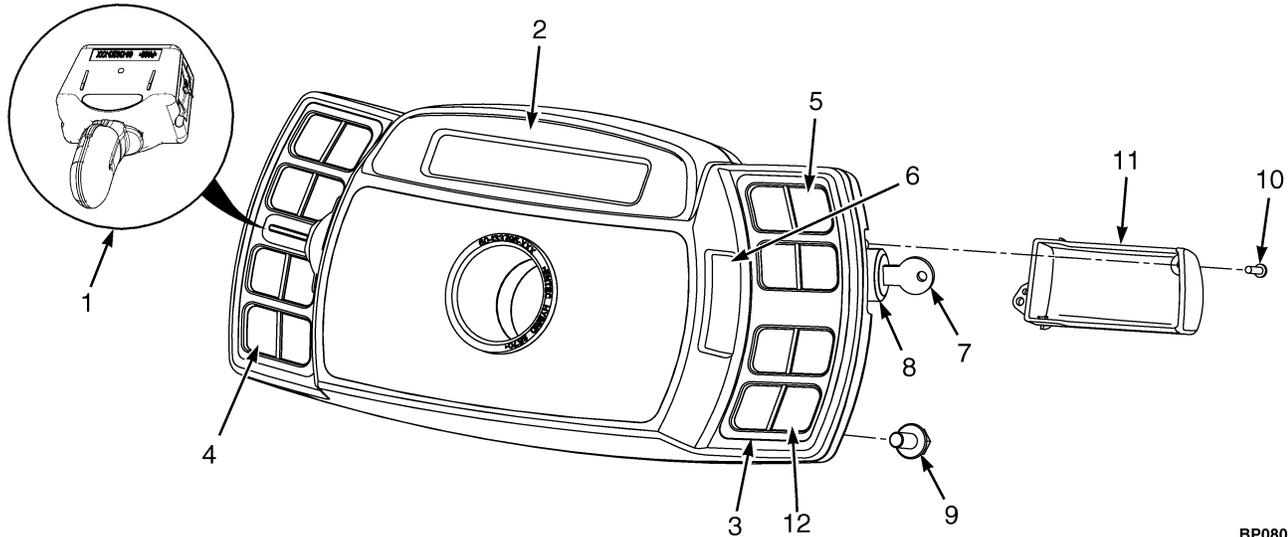


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**LOAD WEIGH ELECTRICAL**

<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 (Secondary Lock) .....	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 (Swivel) .....	3
5	1573549	Clamp (Swivel) .....	3
6	1606735	Sensor (Load Sensing) .....	1
7	1605768	Fitting (Load Weigh Display) .....	1

## INSTRUMENT CLUSTER (FIGURE 7-9)



BP080816

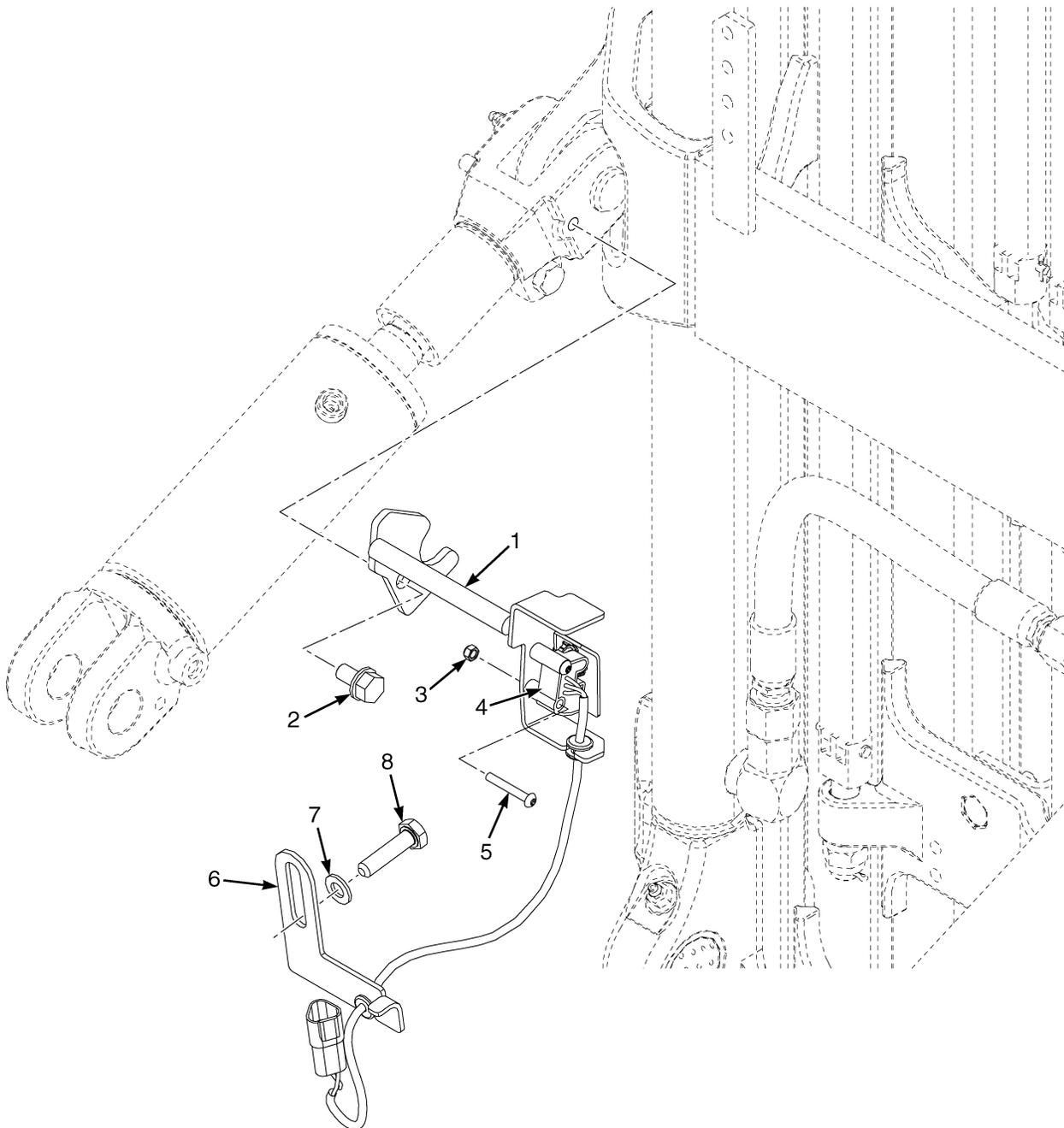
ITEM	PART NO.	DESCRIPTION	QTY
1	4604594	Lever (Detent Forward and Reverse) .....	1
2	2076695	Display Assembly .....	1
3	2066485	Bezel .....	1
4	2069431	Label (Display Cluster, LH) (LH Instrument Cluster) .....	1
5	<b>b</b> 2066482	Label Overlay, (Display Cluster, RH) (RH Display) .....	1
6	2060032	Cover (Without Turn Signals) .....	1
6	<b>a</b> 4604595	Lever (Turn Signal Lever) .....	1
7	<b>c</b> 1337197	Key Set .....	1
8	<b>c</b> 2057948	Ignition Switch .....	1
9	4109993	Capscrew .....	4
10	<b>d</b> 1554902	Screw .....	5
11	<b>d</b> 2060033	Cover .....	1
12	2066484	Label (Display Cluster, RH) (RH Display, All Options) .....	1

### FOOTNOTES:

- |  |   |
|--|---|
| <b>a</b> Not Illustrated   | <b>c</b> Start With Key Switch                        |
| <b>b</b> Remove Panels From Overlay As Required For Truck Configuration. | <b>d</b> Start with Push Button and Remote Key Switch |



**MAST ELECTRICAL (FIGURE 7-10)**

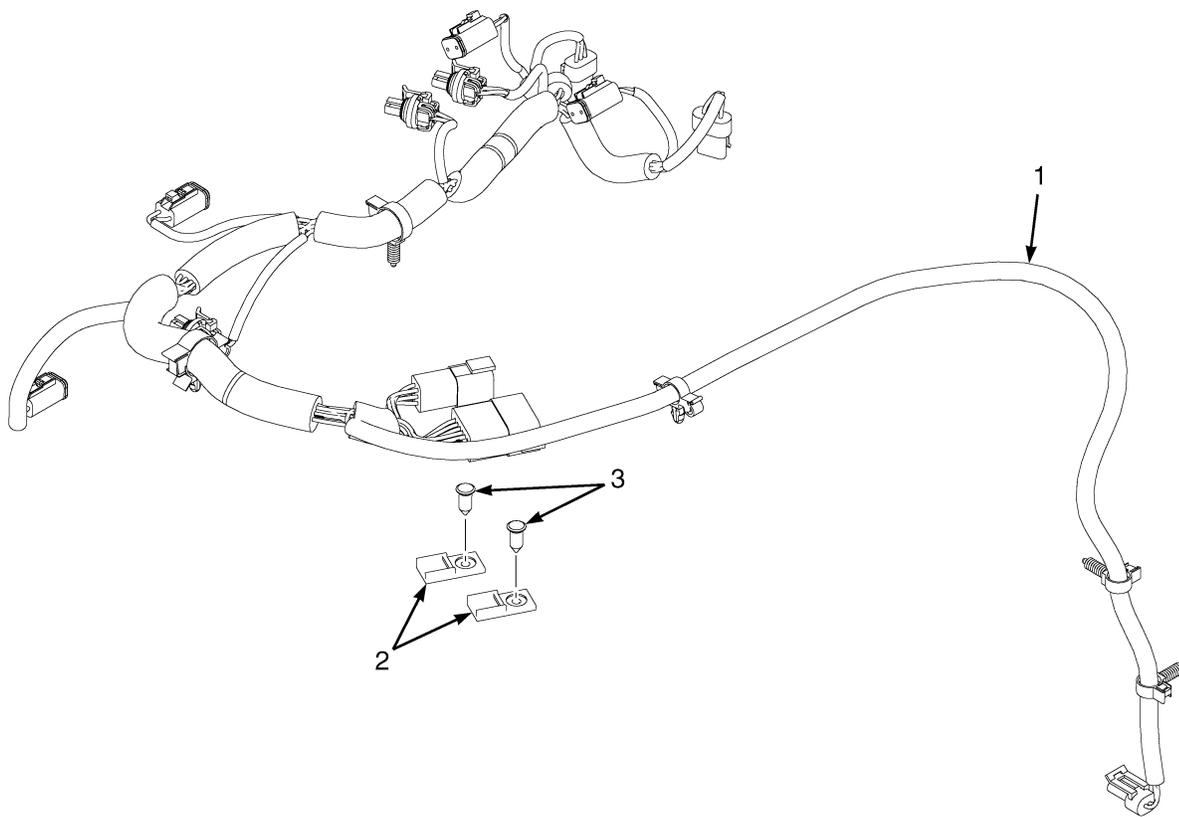


BP230014

**MAST ELECTRICAL**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
1	4090599	Bracket .....	1
2	1615163	Capscrew .....	1
3	302398	Locknut .....	2
4	1589621	Sensor (Mast Position) .....	1
5	1553897	Capscrew .....	2
6	1595731	Bracket .....	1
7	1626478	Washer .....	1
8	1658075	Capscrew .....	1

## TRANSMISSION ELECTRICAL (FIGURE 7-11)

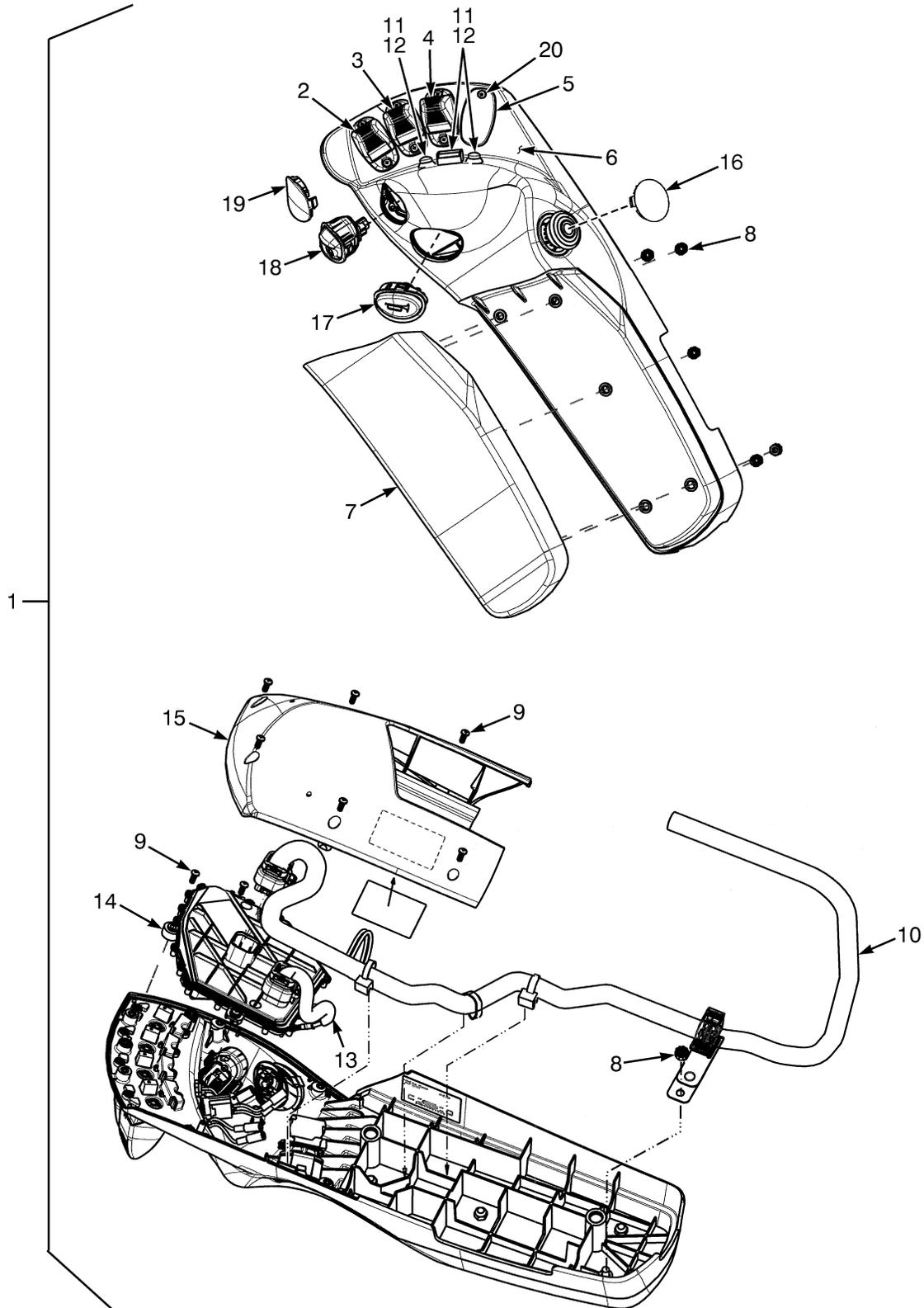


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**TRANSMISSION ELECTRICAL**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
1	2105959	Wire Harness (Transmission) (☞ Figure 7-20).....	1
2	1500912	Clip .....	2
3	1582464	Fastener .....	2

## MINI-LEVER CONTROLS (FIGURE 7-12) WITH ARMREST — THREE FUNCTION



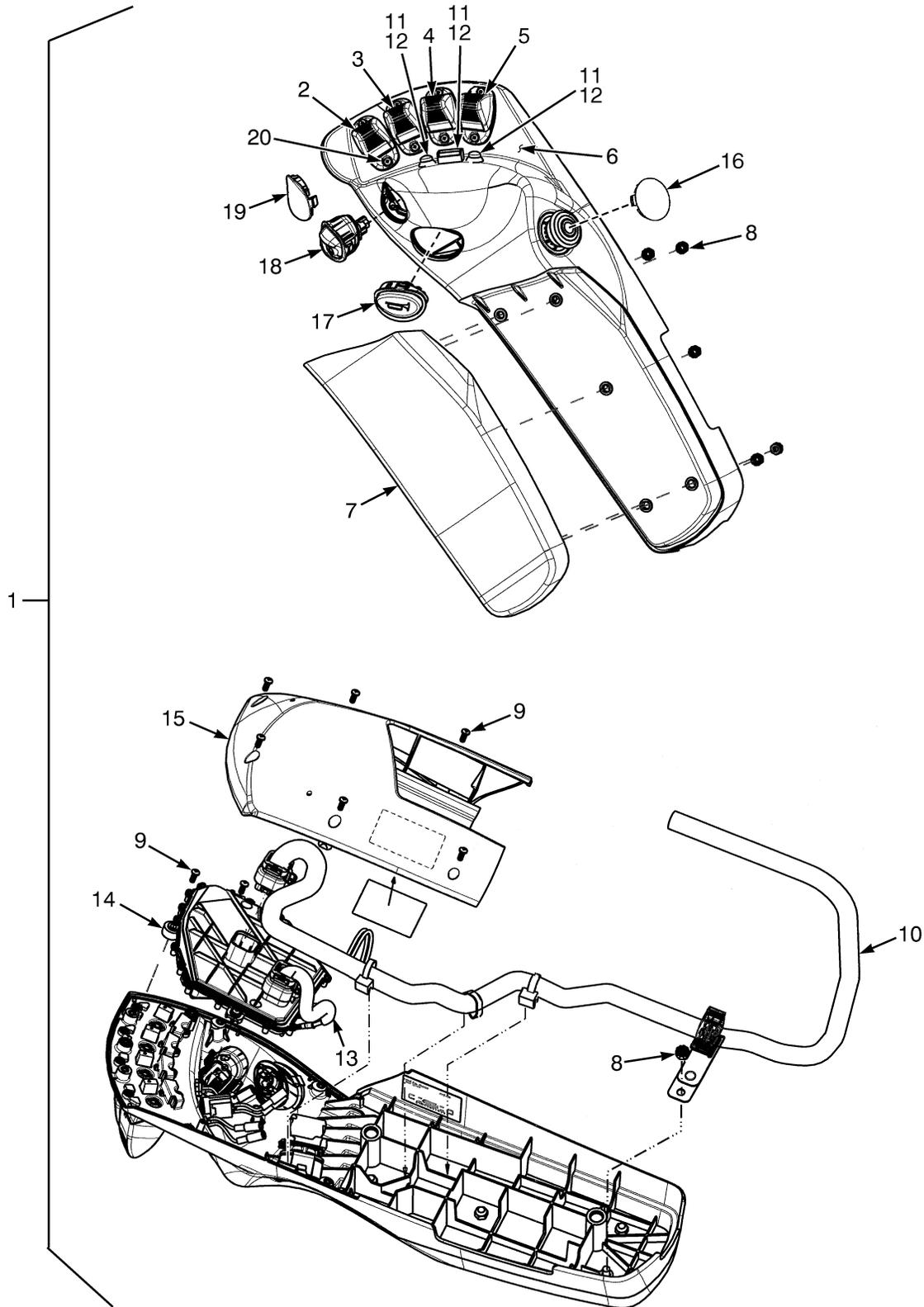
BP080959

**MINI-LEVER CONTROLS  
WITH ARMREST – THREE FUNCTION**

ITEM	PART NO.	DESCRIPTION	QTY
1	4601093	Mini-Lever Assembly .....	1
1	4601265	Mini-Lever Assembly .....	1
1	<b>a</b> 4601097	Mini-Lever Assembly .....	1
1	4601099	Mini-Lever Assembly .....	1
2	.....	Lever Position 1 .....	1
2	2110791	Lever (Single Function) .....	1
3	.....	Lever Position 2 .....	1
3	2110791	Lever (Single Function) .....	1
3	<b>a</b> 2110793	Lever (With Override) .....	1
4	.....	Lever Position 3 .....	1
4	2110791	Lever (Single Function) .....	1
5	2108249	Plug .....	1
6	2111799	Armrest (Without Push Buttons) .....	1
6	<b>a</b> 4603439	Armrest (With Push Buttons) .....	1
7	2111769	Cushion (Armrest) .....	1
8	1709587	Nut .....	5
9	1698449	Capscrew .....	6
10	4605336	Wire Harness .....	1
11	1704528	Push Button (Position 3) .....	1
11	1704528	Push Button (Position 2 and 3) .....	2
11	<b>a</b> 1704528	Push Button (Position 2) .....	1
12	1705359	Cover (Push Button) .....	1
12	1705359	Cover (Push Button) .....	1
13	1704529	Wire Harness (Forward/Reverse Switch in the MLM) (Push Buttons) .....	1
14	2111802		
	4605337	Printed Circuit Board .....	1
15	2111800	Cover (Bottom Armrest) .....	1
16	4601120	Plug .....	1
17	2111770	Horn Button .....	1
19	2110942	Plug (Directional Control Switch) .....	1
20	1698449	Capscrew .....	8

**FOOTNOTES:****a** Return to Set Tilt

## MINI-LEVER CONTROLS (FIGURE 7-13) WITH ARMREST — FOUR FUNCTION



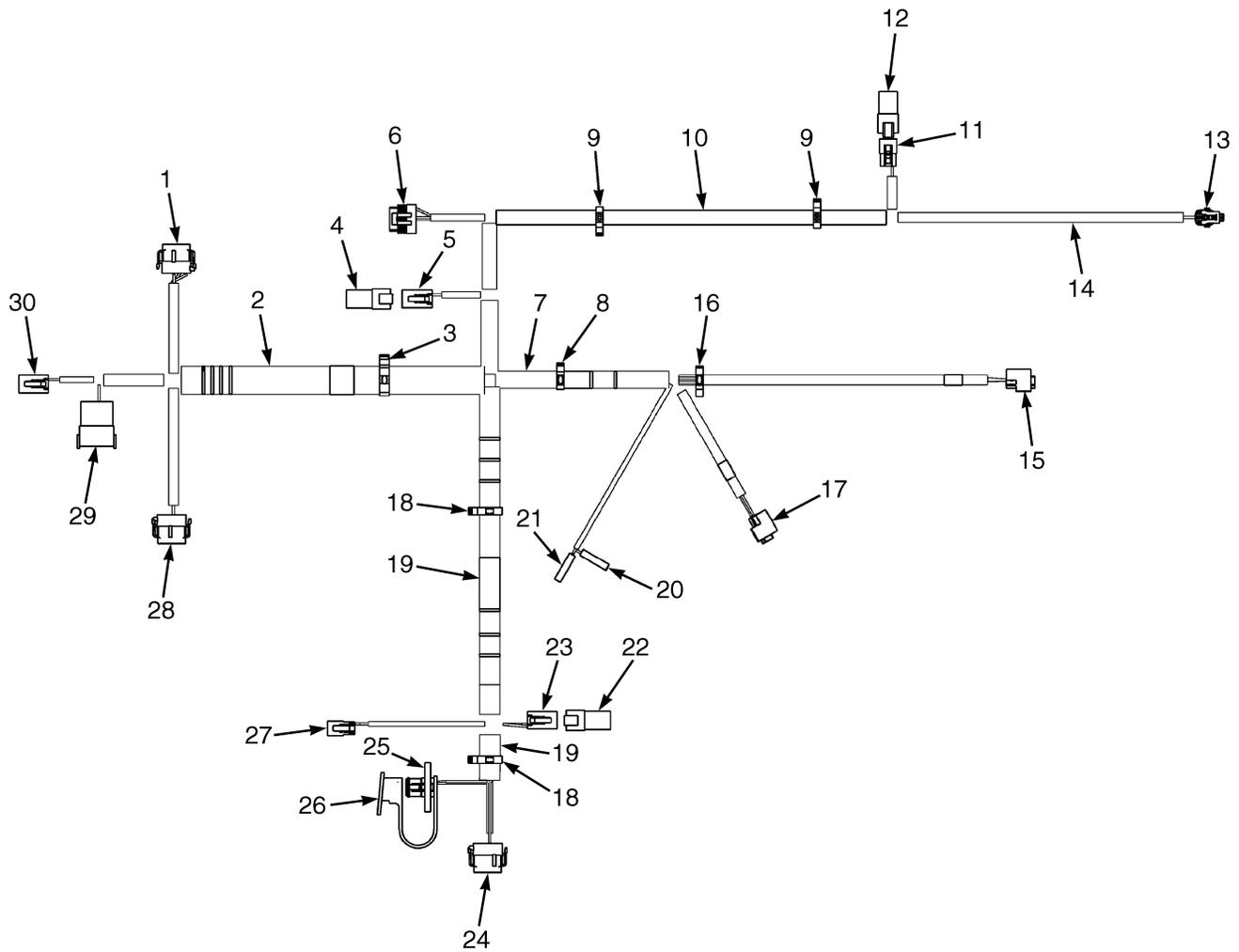
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**MINI-LEVER CONTROLS  
WITH ARMREST – FOUR FUNCTION**

ITEM	PART NO.	DESCRIPTION	QTY
1	<b>a</b> 4601096	Mini-Lever Assembly .....	1
1	<b>b</b> 4601100	Mini-Lever Assembly .....	1
2	.....	Lever Position 1 .....	1
2	2110791	Lever (Single Function) .....	1
3	.....	Lever Position 2 .....	1
3	2110791	Lever (Single Function) .....	1
3	<b>b</b> 2110793	Lever (With Override) .....	1
4	.....	Lever Position 3 .....	1
4	2110791	Lever (Single Function) .....	1
5	.....	Lever Position 4 .....	1
5	2110791	Lever (Single Function) .....	1
5	<b>ab</b> 2110792	Lever (Clamping) .....	1
6	2111799	Armrest (Without Push Buttons) .....	1
6	<b>ab</b> 4603439	Armrest (With Push Buttons) .....	1
7	2111769	Cushion (Armrest) .....	1
8	1709587	Nut .....	5
9	1698449	Capscrew .....	6
10	4605336	Wire Harness .....	1
11	<b>a</b> 1704528	Push Button .....	1
11	<b>b</b> 1704528	Push Button .....	2
12	<b>a</b> 1705359	Cover (Push Button) .....	2
12	<b>b</b> 1705359	Cover (Push Button) .....	1
13	1704529	Wire Harness (Forward/Reverse Switch in the MLM) (Push Buttons) .....	1
14	2111802		
	4605337	Printed Circuit Board .....	1
15	2111800	Cover (Bottom Armrest) .....	1
16	4601120	Plug .....	1
17	2111770	Horn Button .....	1
19	2110942	Plug (Directional Control Switch) .....	1
20	1698449	Capscrew .....	8

**FOOTNOTES:****a** With Clamping**b** With Clamping and Return to Set Tilt

## WIRE HARNESS (FIGURE 7-14) COWL WITH MONOTROL PEDAL — WITH RETURN TO SET TILT



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**WIRE HARNESS**  
**COWL WITH MONOTROL PEDAL – WITH RETURN TO SET TILT**

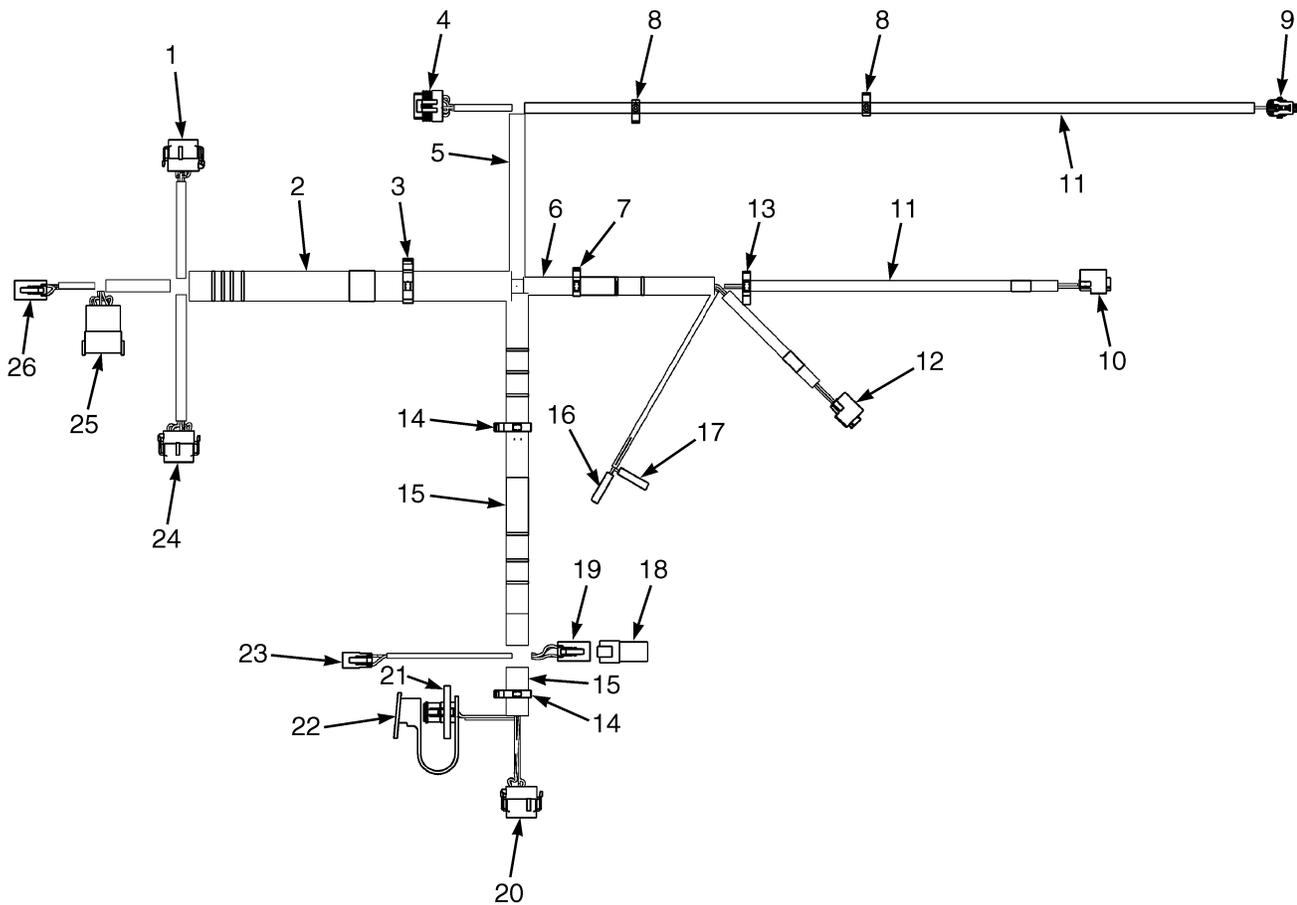
ITEM	PART NO.	DESCRIPTION	QTY
	4603283	Wire Harness .....	1
1	.....	Connector Assembly (Vehicle System Manager) .....	1
1	1525568	Connector .....	1
1	1529046	Connector (Secondary Lock) .....	1
1	1463139	Terminal .....	11
1	1484377	Plug .....	1
2	1540388	Conduit .....	AR
3	1534282	Clip .....	1
4	.....	Connector Assembly (Endcap) .....	1
4	1525573	Connector .....	1
5	.....	Connector Assembly (To Monotrol Pedal Harness) .....	1
5	1489656	Connector (4-Way) .....	1
5	1489657	Connector (Secondary Lock) .....	1
5	1330438	Terminal (Socket) .....	4
6	.....	Connector Assembly (Accelerator Pedal Sensor) .....	1
6	1525584	Connector .....	1
6	1532571	Terminal .....	6
7	275496	Conduit .....	AR
8	1534828	Clip .....	1
9	1509890	Clip .....	2
10	275495	Conduit .....	AR
11	.....	Connector Assembly (To Mast Harness) .....	1
11	1330438	Terminal (Socket) .....	3
11	1463194	Connector (Secondary Lock) .....	1
11	1484397	Connector (3-Way) .....	1
12	.....	Connector Assembly (Endcap) .....	1
12	1351682	Connector (End Cap) .....	1
13	.....	Connector Assembly (Brake Pressure) .....	1
13	1603021	Connector .....	1
13	1603236	Connector (Secondary Lock) .....	1
13	1548517	Terminal (Socket) .....	3
13	1548519	Seal .....	3
14	275493	Conduit .....	AR
15	.....	Connector Assembly (Brake Pedal) .....	1
15	1700460	Connector .....	1
15	1700461	Terminal .....	3
16	1402816	Clip .....	2
17	.....	Connector Assembly (Park Brake) .....	1
17	1700460	Connector .....	1
17	1700461	Terminal .....	3
18	1500899	Clip .....	2
19	275497	Conduit .....	AR
20	.....	Connector Assembly (Brake Fluid) .....	1
20	1566227	Terminal .....	1
20	1566076	Seal .....	1
21	.....	Connector Assembly (Brake Fluid) .....	1
21	1566227	Terminal .....	1
21	1566076	Seal .....	1
22	.....	Connector Assembly (Endcap w/ Resistor) .....	1
22	1525577	Connector (With Resistor) .....	1

## WIRE HARNESS COWL WITH MONOTROL PEDAL – WITH RETURN TO SET TILT

ITEM	PART NO.	DESCRIPTION	QTY
23	.....	Connector Assembly (Bus Terminal 1) .....	1
23	1489656	Connector (4-Way) .....	1
23	1489657	Connector (Secondary Lock) .....	1
23	1330438	Terminal (Socket) .....	4
24	.....	Connector Assembly (Display) .....	1
24	1525567	Connector .....	1
24	1529046	Connector (Secondary Lock) .....	1
24	1463139	Terminal .....	5
24	1484377	Plug .....	7
25	.....	Connector Assembly (J1939 Diagnostic) .....	1
25	1566116	Connector .....	1
25	1532664	Connector (Secondary Lock) .....	1
25	1330438	Terminal (Socket) .....	3
26	.....	Connector Assembly (Dust Cap) .....	1
26	1566117	Dust Cap (For Diagnostic Cable) .....	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 (Secondary Lock) .....	1
28	1463139	Terminal .....	7
28	1484377	Plug .....	5
29	.....	Connector Assembly (To Right Hand Chassis Harness) .....	1
29	1500925	Connector .....	1
29	1352603	Secondary Lock .....	1
29	1330437	Terminal (Pin) .....	10
29	1484377	Plug .....	2
30	.....	Connector Assembly .....	1
30	1489656	Connector (4-Way) .....	1
30	1489657	Connector (Secondary Lock) .....	1
30	1330438	Terminal (Socket) .....	4



## WIRE HARNESS (FIGURE 7-15) COWL WITH FORWARD/REVERSE LEVER — WITHOUT RETURN TO SET TILT



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**WIRE HARNESS**  
**COWL WITH FORWARD/REVERSE LEVER – WITHOUT RETURN TO SET TILT**

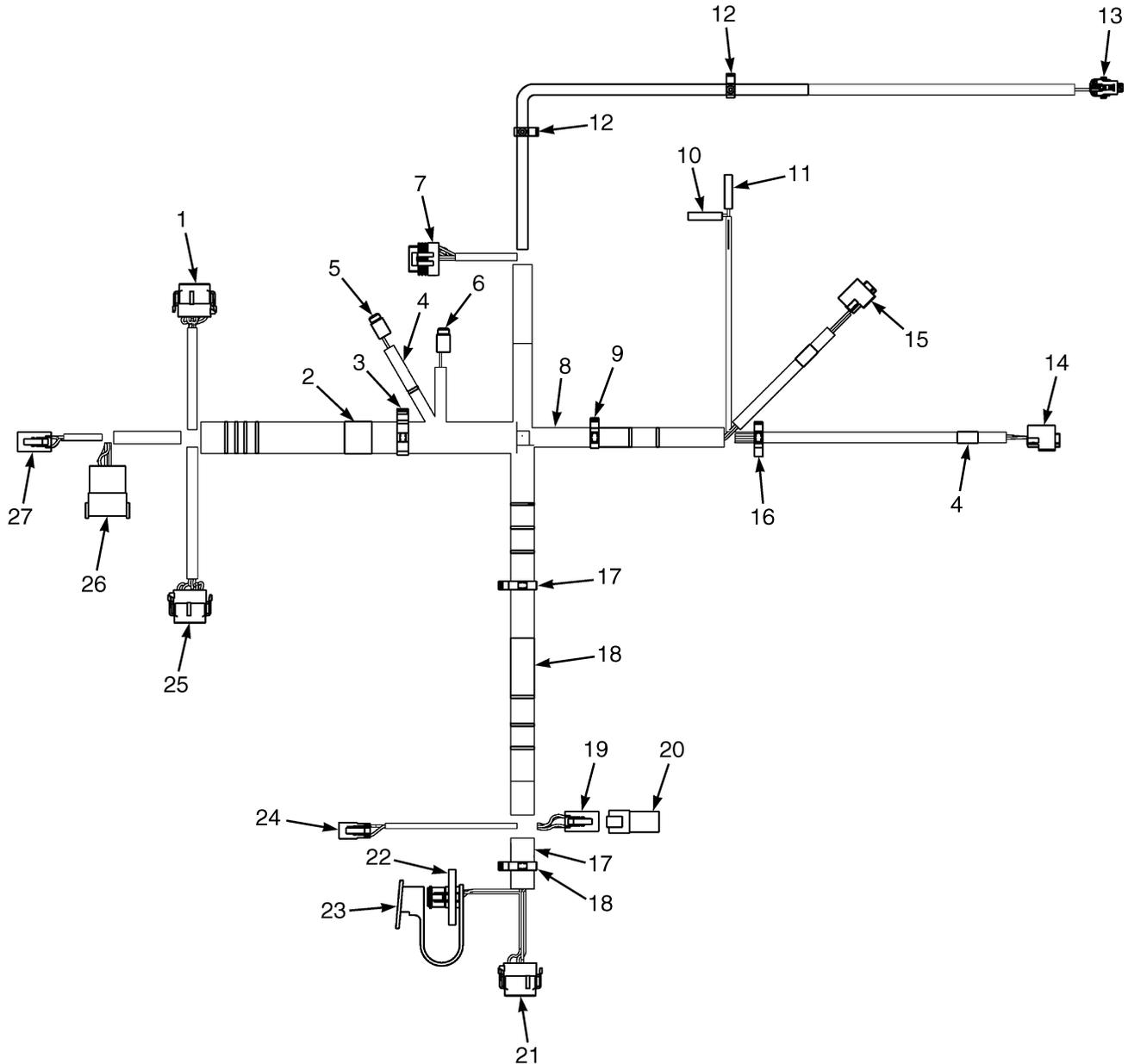
ITEM	PART NO.	DESCRIPTION	QTY
	4603280	Wire Harness .....	1
1	.....	Connector Assembly (Vehicle System Manager) .....	1
1	1525568	Connector .....	1
1	1529046	Connector (Secondary Lock) .....	1
1	1463139	Terminal .....	7
1	1484377	Plug .....	5
2	1540388	Conduit .....	AR
3	1534282	Clip .....	1
4	.....	Connector Assembly (Accelerator Pedal Sensor) .....	1
4	1525584	Connector .....	1
4	1532571	Terminal .....	6
5	275495	Conduit .....	AR
6	275496	Conduit .....	AR
7	1534828	Clip .....	1
8	1509888	Clip .....	2
9	.....	Connector Assembly (Brake Pressure) .....	1
9	1603021	Connector .....	1
9	1603236	Connector (Secondary Lock) .....	1
9	1548517	Terminal (Socket) .....	3
9	1548519	Seal .....	3
10	.....	Connector Assembly (Brake Pedal) .....	1
10	1700460	Connector .....	1
10	1700461	Terminal .....	3
11	275493	Conduit .....	AR
12	.....	Connector Assembly (Park Brake) .....	1
12	1700460	Connector .....	1
12	1700461	Terminal .....	3
13	1402816	Clip .....	1
14	1500899	Clip .....	2
15	275497	Conduit .....	AR
16	.....	Connector Assembly (Brake Fluid) .....	1
16	1324310	Terminal .....	1
16	1324309	Sleeve .....	1
17	.....	Connector Assembly (Brake Fluid) .....	1
17	1324310	Terminal .....	1
17	1324309	Sleeve .....	1
18	.....	Connector Assembly (Endcap w/ Resistor) .....	1
18	1525577	Connector (With Resistor) .....	1
19	.....	Connector Assembly (Bus Terminal 1) .....	1
19	1489656	Connector (4-Way) .....	1
19	1489657	Connector (Secondary Lock) .....	1
19	1330438	Terminal (Socket) .....	4
20	.....	Connector Assembly (Display) .....	1
20	1525567	Connector .....	1
20	1529046	Connector (Secondary Lock) .....	1
20	1463139	Terminal .....	5
20	1484377	Plug .....	7
21	.....	Connector Assembly (J1939 Diagnostic) .....	1
21	1566116	Connector .....	1
21	1532664	Connector (Secondary Lock) .....	1

**WIRE HARNESS**  
**COWL WITH FORWARD/REVERSE LEVER – WITHOUT RETURN TO SET TILT**

ITEM	PART NO.	DESCRIPTION	QTY
21	1330438	Terminal (Socket) .....	3
22	.....	Connector Assembly (Dust Cap) .....	1
22	1566117	Dust Cap (For Diagnostic Cable) .....	1
23	.....	Connector Assembly (Horn Button) .....	1
23	1490242	Connector (2 Way) .....	1
23	1490243	Connector (Secondary Lock) .....	1
23	1330438	Terminal (Socket) .....	2
24	.....	Connector Assembly (Vehicle System Manager) .....	1
24	1525570	Connector .....	1
24	1529046	Connector (Secondary Lock) .....	1
24	1463139	Terminal .....	7
24	1484377	Plug .....	5
25	.....	Connector Assembly (To Right Hand Chassis Harness) .....	1
25	1500925	Connector .....	1
25	1352603	Secondary Lock .....	1
25	1330437	Terminal (Pin) .....	7
25	1484377	Plug .....	5
26	.....	Connector Assembly (To Right Hand Chassis Harness) .....	1
26	1489657	Connector (Secondary Lock) .....	1
26	1489656	Connector (4-Way) .....	1
26	1330438	Terminal (Socket) .....	4



## WIRE HARNESS (FIGURE 7-16) COWL WITH FORWARD/REVERSE LEVER — WITH HYDRAULIC PUMP SOLENOID



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

ITEM	PART NO.	DESCRIPTION	QTY
	4603282	Wire Harness .....	1
1	.....	Connector Assembly (Vehicle System Manager) .....	1
1	1525568	Connector .....	1
1	1529046	Connector (Secondary Lock) .....	1
1	1463139	Terminal .....	8
1	1484377	Plug .....	4
2	1540388	Conduit .....	AR
3	1534282	Clip .....	1
4	275493	Conduit .....	AR
5	.....	Connector Assembly (Hydraulic Lockout Solenoid #2) .....	1
5	1484557	Connector (2 Socket) .....	1
5	1484558	Connector (Secondary Lock) .....	1
5	1463139	Terminal .....	2
6	.....	Connector Assembly (Hydraulic Lockout Solenoid #1) .....	1
6	1484557	Connector (2 Socket) .....	1
6	1484558	Connector (Secondary Lock) .....	1
6	1463139	Terminal .....	2
7	.....	Connector Assembly (Accelerator Pedal Sensor) .....	1
7	1525584	Connector .....	1
7	1532571	Terminal .....	6
8	275496	Conduit .....	AR
9	1534828	Clip .....	1
10	.....	Connector Assembly (Brake Fluid) .....	1
10	1324310	Terminal .....	1
10	1324309	Sleeve .....	1
11	.....	Connector Assembly (Brake Fluid) .....	1
11	1324310	Terminal .....	1
11	1324309	Sleeve .....	1
12	1509888	Clip .....	2
13	.....	Connector Assembly (Brake Pressure) .....	1
13	1603021	Connector .....	1
13	1603236	Connector (Secondary Lock) .....	1
13	1548517	Terminal (Socket) .....	3
13	1548519	Seal .....	3
14	.....	Connector Assembly (Brake Pedal) .....	1
14	1700460	Connector .....	1
14	1700461	Terminal .....	3
15	.....	Connector Assembly (Park Brake) .....	1
15	1700460	Connector .....	1
15	1700461	Terminal .....	3
16	1402816	Clip .....	1
17	1500899	Clip .....	2
18	275497	Conduit .....	AR
19	.....	Connector Assembly (Bus Terminal 1) .....	1
19	1489656	Connector (4-Way) .....	1
19	1489657	Connector (Secondary Lock) .....	1
19	1330438	Terminal (Socket) .....	4
20	.....	Connector Assembly (Endcap w/ Resistor) .....	1
20	1525577	Connector (With Resistor) .....	1
21	.....	Connector Assembly (Display) .....	1

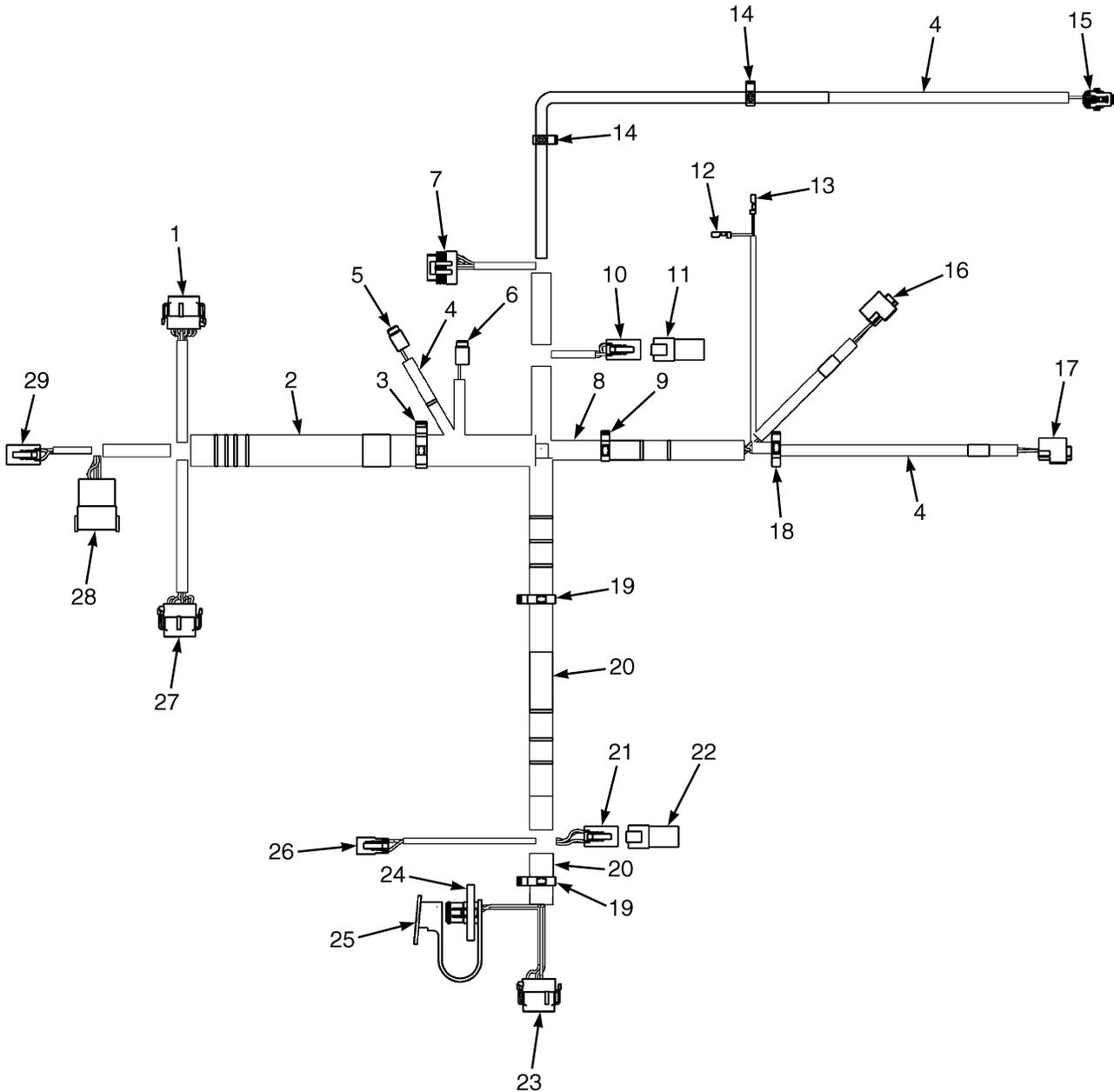
## WIRE HARNESS

### COWL WITH FORWARD/REVERSE LEVER – WITH HYDRAULIC PUMP SOLENOID

ITEM	PART NO.	DESCRIPTION	QTY
21	1525567	Connector .....	1
21	1529046	Connector (Secondary Lock) .....	1
21	1463139	Terminal .....	5
21	1484377	Plug .....	7
22	.....	Connector Assembly (J1939 Diagnostic) .....	1
22	1566116	Connector .....	1
22	1532664	Connector (Secondary Lock) .....	1
22	1330438	Terminal (Socket) .....	3
23	.....	Connector Assembly (Dust Cap) .....	1
23	1566117	Dust Cap (For Diagnostic Cable) .....	1
24	.....	Connector Assembly (Horn Button) .....	1
24	1490242	Connector (2 Way) .....	1
24	1490243	Connector (Secondary Lock) .....	1
24	1330438	Terminal (Socket) .....	1
25	.....	Connector Assembly (Vehicle System Manager) .....	1
25	1525570	Connector .....	1
25	1529046	Connector (Secondary Lock) .....	1
25	1463139	Terminal .....	7
25	1484377	Plug .....	5
26	.....	Connector Assembly (To Right Hand Chassis Harness) .....	1
26	1500925	Connector .....	1
26	1352603	Secondary Lock .....	1
26	1330437	Terminal (Pin) .....	7
26	1484377	Plug .....	5
27	.....	Connector Assembly (To Right Hand Chassis Harness) .....	1
27	1489656	Connector (4-Way) .....	1
27	1489657	Connector (Secondary Lock) .....	1
27	1330438	Terminal (Socket) .....	4



## WIRE HARNESS (FIGURE 7-17) COWL WITH MONOTROL PEDAL — WITH HYDRAULIC PUMP SOLENOID



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**WIRE HARNESS**  
**COWL WITH MONOTROL PEDAL – WITH HYDRAULIC PUMP SOLENOID**

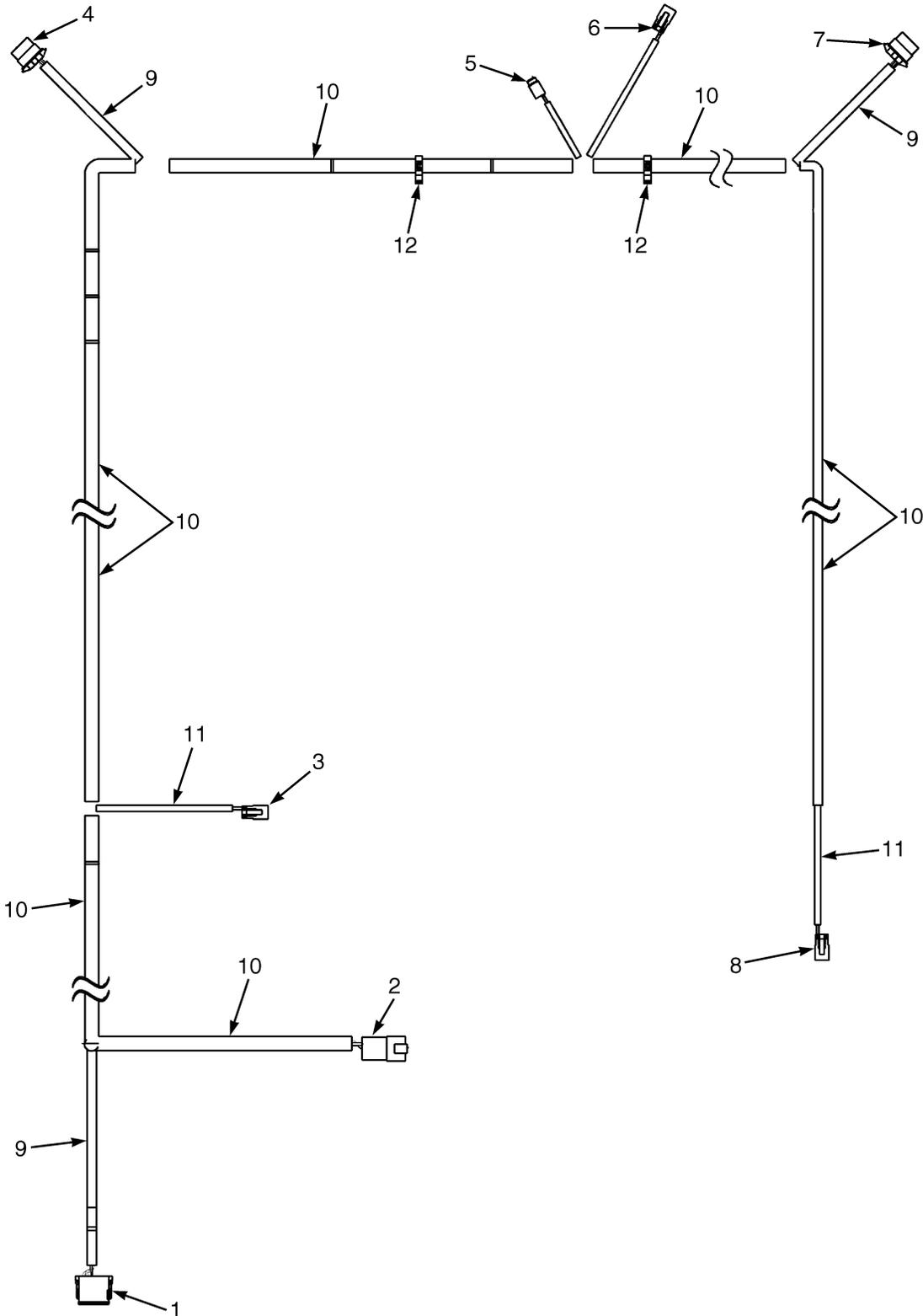
ITEM	PART NO.	DESCRIPTION	QTY
	4603281	Wire Harness .....	1
1	.....	Connector Assembly (Vehicle System Manager) .....	1
1	1525568	Connector .....	1
1	1529046	Connector (Secondary Lock) .....	1
1	1463139	Terminal .....	12
2	1540388	Conduit .....	AR
3	1534282	Clip .....	1
4	275493	Conduit .....	AR
5	.....	Connector Assembly (Hydraulic Lockout Solenoid #2) .....	1
5	1484557	Connector (2 Socket) .....	1
5	1484558	Connector (Secondary Lock) .....	1
5	1463139	Terminal .....	1
6	.....	Connector Assembly (Hydraulic Lockout Solenoid 1) .....	1
6	1484557	Connector (2 Socket) .....	1
6	1484558	Connector (Secondary Lock) .....	1
6	1463139	Terminal .....	2
7	.....	Connector Assembly (Accelerator Pedal Sensor) .....	1
7	1525584	Connector .....	1
7	1532571	Terminal .....	6
8	275496	Conduit .....	AR
9	1534828	Clip .....	1
10	.....	Connector Assembly (Monotrol Harness) .....	1
10	1489656	Connector (4-Way) .....	1
10	1489657	Connector (Secondary Lock) .....	1
10	1330438	Terminal (Socket) .....	4
11	.....	Connector Assembly (Endcap) .....	1
11	1525573	Connector .....	1
12	.....	Connector Assembly (Brake Fluid) .....	1
12	1566227	Terminal .....	1
12	1324309	Sleeve .....	1
13	.....	Connector Assembly (Brake Fluid) .....	1
13	1566227	Terminal .....	1
13	1324309	Sleeve .....	1
14	1509888	Clip .....	2
15	.....	Connector Assembly (Brake Pressure) .....	1
15	1603021	Connector .....	1
15	1603236	Connector (Secondary Lock) .....	1
15	1548517	Terminal (Socket) .....	3
15	1548519	Seal .....	3
16	.....	Connector Assembly (Park Brake) .....	1
16	1700460	Connector .....	1
16	1700461	Terminal .....	3
17	.....	Connector Assembly (Brake Pedal) .....	1
17	1700460	Connector .....	1
17	1700461	Terminal .....	3
18	1402816	Clip .....	1
19	1500899	Clip .....	2
20	275497	Conduit .....	AR
21	.....	Connector Assembly (Bus Terminal 1) .....	1
21	1489656	Connector (4-Way) .....	1

## WIRE HARNESS COWL WITH MONOTROL PEDAL – WITH HYDRAULIC PUMP SOLENOID

ITEM	PART NO.	DESCRIPTION	QTY
21	1489657	Connector (Secondary Lock) .....	1
21	1330438	Terminal (Socket) .....	4
22	.....	Connector Assembly (Endcap w/ Resistor) .....	1
22	1525577	Connector (With Resistor) .....	1
23	.....	Connector Assembly (Display) .....	1
23	1525567	Connector .....	1
23	1529046	Connector (Secondary Lock) .....	1
23	1463139	Terminal .....	5
23	1484377	Plug .....	7
24	.....	Connector Assembly (J1939 Diagnostic) .....	1
24	1566116	Connector .....	1
24	1532664	Connector (Secondary Lock) .....	1
24	1330438	Terminal (Socket) .....	3
25	.....	Connector Assembly (Dustcap) .....	1
25	1566117	Dust Cap (For Diagnostic Cable) .....	1
26	.....	Connector Assembly (Horn Button) .....	1
26	1490242	Connector (2 Way) .....	1
26	1490243	Connector (Secondary Lock) .....	1
26	1330438	Terminal (Socket) .....	2
27	.....	Connector Assembly (Vehicle System Manager) .....	1
27	1525570	Connector .....	1
27	1529046	Connector (Secondary Lock) .....	1
27	1463139	Terminal .....	7
27	1484377	Plug .....	5
28	.....	Connector Assembly (To Right Hand Chassis Harness) .....	1
28	1500925	Connector .....	1
28	1352603	Secondary Lock .....	1
28	1330437	Terminal (Pin) .....	7
28	1484377	Plug .....	5
29	.....	Connector Assembly (To Right Hand Chassis Harness) .....	1
29	1489656	Connector (4-Way) .....	1
29	1489657	Connector (Secondary Lock) .....	1
29	1330438	Terminal (Socket) .....	4



**WIRE HARNESS (FIGURE 7-18)  
LIGHTS WITHOUT TURN SIGNALS**

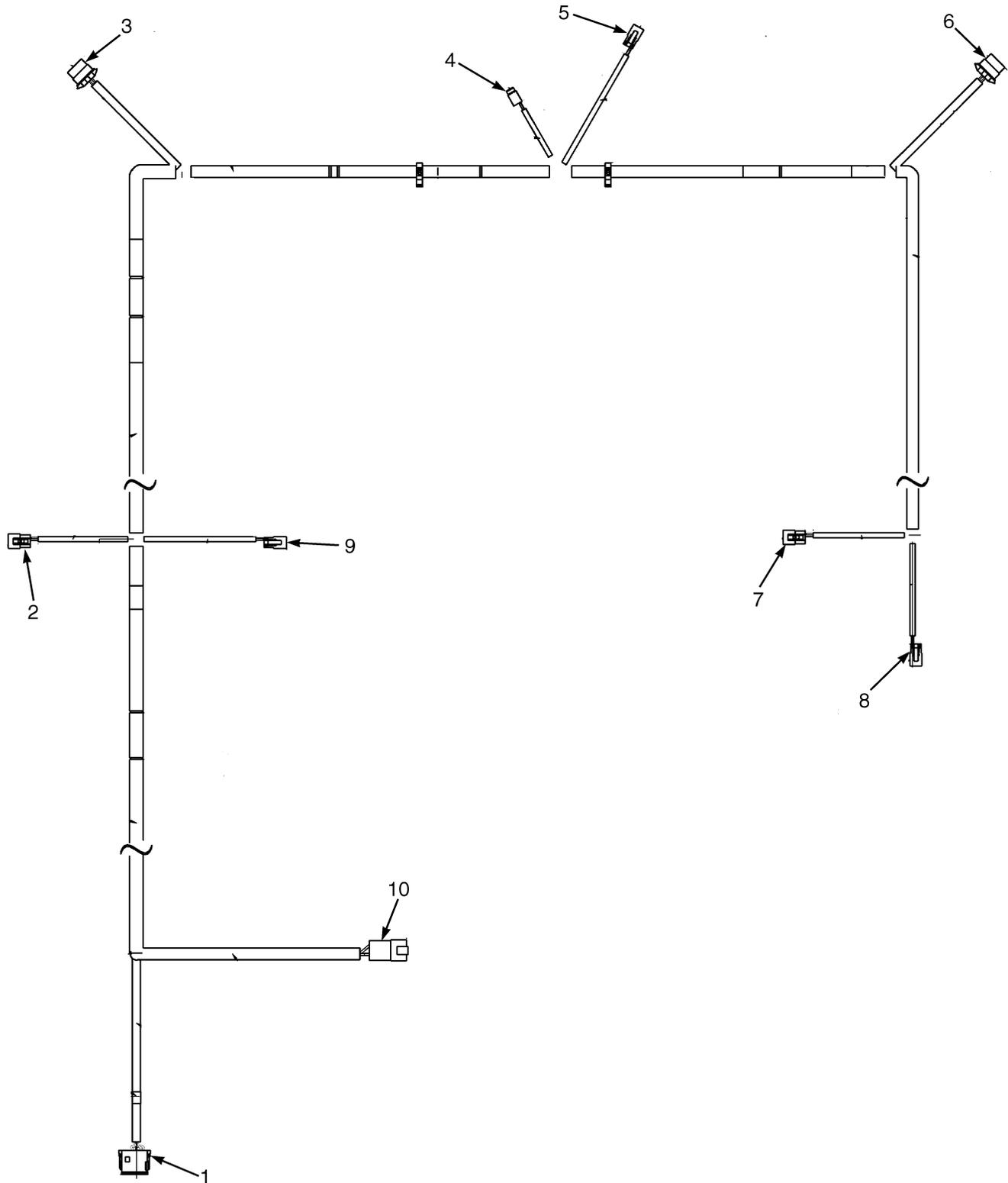


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**WIRE HARNESS  
LIGHTS WITHOUT TURN SIGNALS**

ITEM	PART NO.	DESCRIPTION	QTY
	2098385	Wire Harness (Lights) .....	1
1	.....	Connector Assembly (Vehicle System Management) .....	1
1	1525566	Connector .....	1
1	1500913	Connector (Secondary Lock) .....	1
1	1330438	Terminal (Socket) .....	3
1	1484377	Plug .....	9
2	.....	Connector Assembly (RH Chassis) .....	1
2	1514597	Connector .....	1
2	1514598	Connector (Secondary Lock) .....	1
2	1484709	Terminal (Pin) .....	4
3	.....	Connector Assembly (RH Front Work Light) .....	1
3	1490242	Connector (2 Way) .....	1
3	1490243	Connector (Secondary Lock) .....	1
3	1363886	Terminal (Socket) .....	2
4	.....	Connector Assembly (RH Rear Signal) .....	1
4	1531486	Connector .....	1
4	930591	Connector .....	1
4	1330355	Terminal .....	4
4	1330356	Seal .....	1
4	1482668	Plug (Cavity Plug) .....	2
4	1476108	Wire Seal (White) .....	3
5	.....	Connector Assembly (Strobe) .....	1
5	1484557	Connector (2 Socket) .....	1
5	1484558	Connector (Secondary Lock) .....	1
5	1463139	Terminal .....	2
6	.....	Connector Assembly (Rear Work Light) .....	1
6	1490242	Connector (2 Way) .....	1
6	1490243	Connector (Secondary Lock) .....	1
6	1363886	Terminal (Socket) .....	2
7	.....	Connector Assembly (LH Rear Signal) .....	1
7	1531486	Connector .....	1
7	930591	Connector .....	1
7	1330355	Terminal .....	4
7	1330356	Seal .....	1
7	1482668	Plug (Cavity Plug) .....	2
7	1476108	Wire Seal (White) .....	3
8	.....	Connector Assembly (LH Front Work Light) .....	1
8	1490242	Connector (2 Way) .....	1
8	1490243	Connector (Secondary Lock) .....	1
8	1363886	Terminal (Socket) .....	2
9	275493	Conduit .....	AR
10	275495	Conduit .....	AR
11	175944	Heat Shrink .....	AR
12	1509890	Clip .....	2

## WIRE HARNESS (FIGURE 7-19) LIGHTS WITH TURN SIGNALS

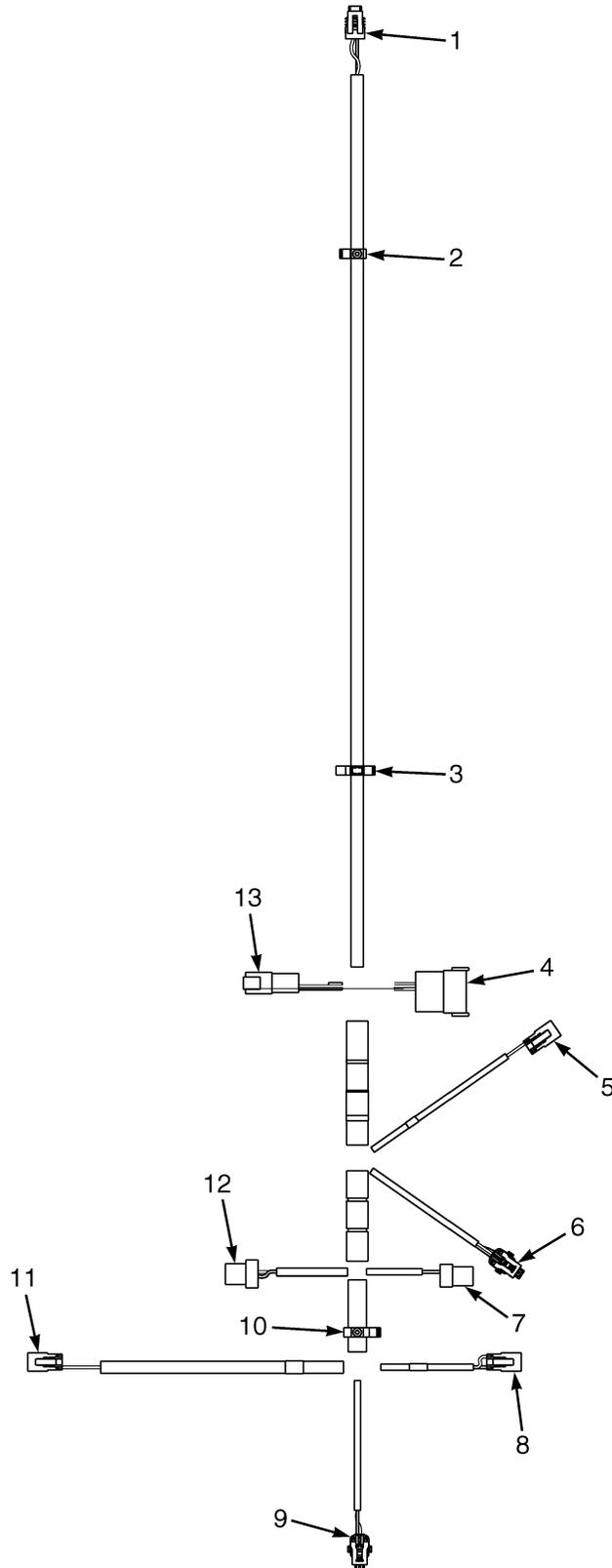


BP080631

**WIRE HARNESS  
LIGHTS WITH TURN SIGNALS**

ITEM	PART NO.	DESCRIPTION	QTY
	2098387	Wire Harness (Lights) .....	1
1	.....	Connector Assembly (Vehical System Management) .....	1
1	1525566	Connector .....	1
1	1500913	Connector (Secondary Lock) .....	1
1	1330438	Terminal (Socket) .....	5
1	1484377	Plug .....	7
2	.....	Connector Assembly (RH Front Signal) .....	1
2	1484397	Connector (3-Way) .....	1
2	1463194	Connector (Secondary Lock) .....	1
2	1330438	Terminal (Socket) .....	3
3	.....	Connector Assembly (RH Rear Signal) .....	1
3	1531486	Connector .....	1
3	930591	Connector .....	1
3	1330355	Terminal .....	5
3	1330356	Seal .....	1
3	1482668	Plug (Cavity Plug) .....	1
3	1476108	Wire Seal (White) .....	4
4	.....	Connector Assembly (Strobe) .....	1
4	1484557	Connector (2 Socket) .....	1
4	1484558	Connector (Secondary Lock) .....	1
4	1463139	Terminal .....	2
5	.....	Connector Assembly (Rear Work Light) .....	1
5	1490242	Connector (2 Way) .....	1
5	1490243	Connector (Secondary Lock) .....	1
5	1363886	Terminal (Socket) .....	2
6	.....	Connector Assembly (LH Rear Signal) .....	1
6	1531486	Connector .....	1
6	930591	Connector .....	1
6	1330355	Terminal .....	5
6	1330356	Seal .....	1
6	1482668	Plug (Cavity Plug) .....	1
6	1476108	Wire Seal (White) .....	4
7	.....	Connector Assembly (LH Front Signal) .....	1
7	1484397	Connector (3-Way) .....	1
7	1463194	Connector (Secondary Lock) .....	1
7	1330438	Terminal (Socket) .....	3
8	.....	Connector Assembly (LH Front Work Light) .....	1
8	1490242	Connector (2 Way) .....	1
8	1490243	Connector (Secondary Lock) .....	1
8	1363886	Terminal (Socket) .....	2
9	.....	Connector Assembly (RH Front Work Light) .....	1
9	1490242	Connector (2 Way) .....	1
9	1490243	Connector (Secondary Lock) .....	1
9	1363886	Terminal (Socket) .....	2
10	.....	Connector Assembly (RH Chassis) .....	1
10	1514597	Connector .....	1
10	1514598	Connector (Secondary Lock) .....	1
10	1484709	Terminal (Pin) .....	4

## WIRE HARNESS (FIGURE 7-20) TRANSMISSION — SINGLE SPEED



BP080894

**WIRE HARNESS  
TRANSMISSION – SINGLE SPEED**

ITEM	PART NO.	DESCRIPTION	QTY
	2105959	Wire Harness (Transmission) .....	1
1	.....	Connector Assembly (Transmission Temperature) .....	1
1	4009253	Connector .....	1
1	1323576	Terminal .....	2
2	1509888	Clip .....	1
3	1402816	Clip .....	1
4	.....	Connector Assembly (RH Chassis Harness) .....	1
4	1623280	Connector .....	1
4	1623281	Connector (Secondary Lock) .....	1
4	1463138	Terminal Pin .....	10
4	1484377	Plug .....	2
5	.....	Connector Assembly (Clutch Forward 1) .....	1
5	1490242	Connector (2 Way) .....	1
5	1490243	Connector (Secondary Lock) .....	1
5	1330438	Terminal (Socket) .....	2
6	.....	Connector Assembly (Forward 1 Pressure) .....	1
6	1603021	Connector .....	1
6	1603236	Connector (Secondary Lock) .....	1
6	1548517	Terminal (Socket) .....	3
6	1548519	Seal .....	3
7	.....	Connector Assembly (Turbine Shaft RPM) .....	1
7	1546673	Connector .....	1
7	1323576	Terminal .....	3
8	.....	Connector Assembly (Transmission Check Valve) .....	1
8	1490242	Connector (2 Way) .....	1
8	1490243	Connector (Secondary Lock) .....	1
8	1330438	Terminal (Socket) .....	2
9	.....	Connector Assembly (Reverse 1 Pressure) .....	1
9	1603021	Connector .....	1
9	1603236	Connector (Secondary Lock) .....	1
9	1548517	Terminal (Socket) .....	3
9	1548519	Seal .....	3
10	1509890	Clip .....	1
11	.....	Connector Assembly (Clutch Reverse 1) .....	1
11	1490242	Connector (2 Way) .....	1
11	1490243	Connector (Secondary Lock) .....	1
11	1330438	Terminal (Socket) .....	2
12	.....	Connector Assembly (Tail Shaft RPM - Toss) .....	1
12	1558156	Connector .....	1
12	1323576	Terminal .....	4
13	.....	Connector Assembly (RH Chassis Harness) .....	1
13	1530960	Connector .....	1
13	1530961	Connector (Secondary Lock) .....	1
13	1463138	Terminal Pin .....	4
13	1484377	Plug .....	2

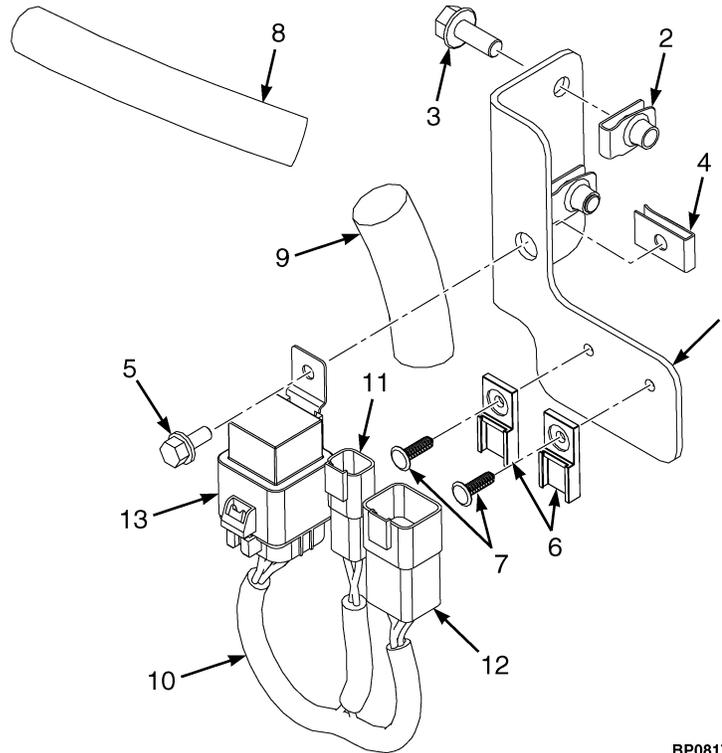
## WIRE HARNESS (FIGURE 7-21) ADAPTER — LOW FUEL PRESSURE



HP082028

ITEM	PART NO.	DESCRIPTION	QTY
	4602843	Wire Harness .....	1
1	.....	Connector Assembly (To LH Chassis Harness) .....	1
1	2795583	Connector (3 Way) .....	1
1	2787350	Pin Terminal .....	2
1	2069381	Plug .....	1
1	2060555	Wire Seal (Yellow) .....	2
2	.....	Connector Assembly (Low LPG Switch) .....	1
2	1329152	Plug .....	1
2	1329151	Terminal .....	1
2	1330281	Terminal .....	2
2	1402888	Seal (Purple) .....	2

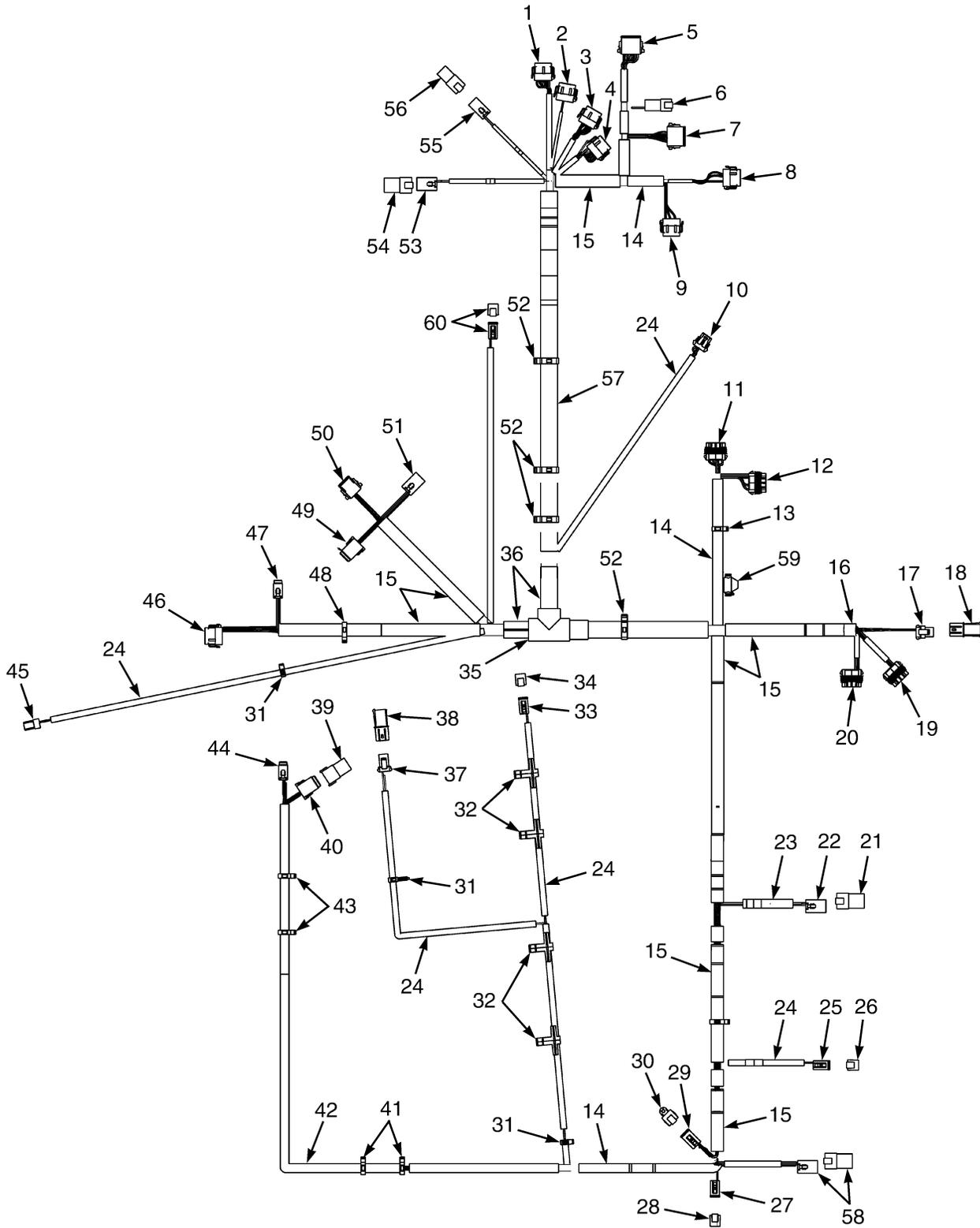
**SEAT BELT SWITCH ADAPTER (FIGURE 7-22)**



BP081704

ITEM	PART NO.	DESCRIPTION	QTY
1	4052234	Bracket .....	1
2	1480237	Nut , Foldover .....	2
3	1527880	Capscrew .....	2
4	1566420	Nut (Foldover) .....	1
5	1693371	Capscrew .....	1
6	1500912	Clip .....	2
7	1582464	Fastener .....	2
8	4099377	Wrap .....	1
9	4099378	Wrap .....	1
10	4620434	Wire Harness (Seat Belt Switch Adapter) .....	1
11	.....	Connector Assembly (Seat Belt Switch Harness) .....	1
11	1493465	Connector (2 Pin) .....	1
11	1330414	Connector (Secondary Lock) .....	1
11	1363885	Terminal (Pin) .....	2
12	.....	Connector Assembly (RH Chassis Harness) .....	1
12	4047669	Connector .....	1
12	1514598	Connector (Secondary Lock) .....	1
12	866401	Terminal .....	4
13	.....	Connector Assembly (Relay) .....	1
13	4030503	Connector .....	1
13	1330283	Terminal .....	4
13	1323581	Plug .....	1
13	4039364	Relay (With Diode) .....	1

## WIRE HARNESS (FIGURE 7-23) RH CHASSIS — PSI 2.4L LPG



BP081693

**WIRE HARNESS  
RH CHASSIS – PSI 2.4L LPG**

ITEM	PART NO.	DESCRIPTION	QTY
	4630231	Wire Harness (Chassis) .....	1
1	.....	Connector Assembly (Vehicle System Manager) .....	1
1	1525570	Connector .....	1
1	1463139	Terminal .....	8
1	1484377	Plug .....	4
1	1530037	Connector (Secondary Lock) (Secondary Lock) .....	1
2	.....	Connector Assembly (Vehicle System Manager) .....	1
2	1525569	Connector .....	1
2	1463139	Terminal .....	12
2	1530037	Connector (Secondary Lock) (Secondary Lock) .....	1
3	.....	Connector Assembly (Vehicle System Manager) .....	1
3	1525568	Connector .....	1
3	1463139	Terminal .....	9
3	1484377	Plug .....	3
3	1530037	Connector (Secondary Lock) (Secondary Lock) .....	1
4	.....	Connector Assembly (Vehicle System Manager) .....	1
4	1525567	Connector .....	1
4	1463139	Terminal .....	9
4	1484377	Plug .....	3
4	1530037	Connector (Secondary Lock) (Secondary Lock) .....	1
5	.....	Connector Assembly (Vehicle System Manager) .....	1
5	1525563	Connector .....	1
5	1330438	Terminal (Socket) .....	8
5	1363886	Terminal (Socket) .....	4
5	1500913	Connector (Secondary Lock) (Secondary Lock) .....	1
6	.....	Connector Assembly (To Cowl Harness) .....	1
6	1489655	Connector (4 Way) .....	1
6	1330437	Terminal (Pin) .....	4
6	1330416	Connector (Secondary Lock) .....	1
7	.....	Connector Assembly (To Cowl Harness) .....	1
7	1493428	Connector (12-Way) .....	1
7	1330438	Terminal (Socket) .....	9
7	1484377	Plug .....	3
7	1500913	Connector (Secondary Lock) (Secondary Lock) .....	1
8	.....	Connector Assembly (Vehicle System Manager) .....	1
8	1525567	Connector .....	1
8	1463139	Terminal .....	3
8	1484377	Plug .....	9
8	1529046	Connector (Secondary Lock) (Secondary Lock) .....	1
9	.....	Connector Assembly (Vehicle System Manager) .....	1
9	1525569	Connector .....	1
9	1463139	Terminal .....	9
9	1484377	Plug .....	3
9	1529046	Connector (Secondary Lock) (Secondary Lock) .....	1
10	.....	Connector Assembly (Horn) .....	1
10	1476064	Connector .....	1
10	1476109	Connector Lock .....	1
10	1330356	Seal .....	2
10	1330355	Terminal .....	3
10	1476108	Wire Seal (White) .....	1

## WIRE HARNESS RH CHASSIS – PSI 2.4L LPG

ITEM	PART NO.	DESCRIPTION	QTY
11	.....	Connector Assembly (Power Distribution Module) .....	1
11	1521184	Connector .....	1
11	1323579	Seal .....	5
11	1327164	Seal .....	2
11	1330281	Terminal .....	5
11	1521989	Terminal .....	1
11	1402888	Seal (Purple) .....	1
11	1521188	Lock .....	1
12	.....	Connector Assembly (Power Distribution Module) .....	1
12	1521183	Connector .....	1
12	1323579	Seal .....	7
12	1327164	Seal .....	1
12	1330281	Terminal .....	4
12	1521989	Terminal .....	3
12	1521188	Lock .....	1
13	1534828	Clip .....	1
14	275496	Conduit .....	AR
15	275497	Conduit .....	AR
16	1531490	Conduit .....	1
17	.....	Connector Assembly (Hydraulic Filter) .....	1
17	1329152	Plug .....	1
17	1329151	Terminal .....	1
17	1330281	Terminal .....	2
17	1402888	Seal (Purple) .....	2
18	.....	Connector Assembly (End Cap) .....	1
18	1329150	Connector .....	1
18	1327164	Seal .....	2
18	1329151	Terminal .....	1
19	.....	Connector Assembly (Power Distribution Module) .....	1
19	1521185	Connector .....	1
19	1521188	Lock .....	1
19	1323579	Seal .....	8
19	1521989	Terminal .....	2
19	1330281	Terminal .....	6
20	.....	Connector Assembly (Power Distribution Module) .....	1
20	1521186	Connector .....	1
20	1521188	Lock .....	1
20	1323579	Seal .....	7
20	1327164	Seal .....	1
20	1521989	Terminal .....	7
21	.....	Connector Assembly (End Cap) .....	1
21	4047669	Connector .....	1
21	1330439	Plug .....	4
22	.....	Connector Assembly (Accessory 2) .....	1
22	1632865	Connector .....	1
22	1514603	Connector (Secondary Lock) .....	1
22	1330439	Plug .....	1
22	1554359	Terminal .....	3
23	275495	Conduit .....	AR
24	275493	Conduit .....	AR

**WIRE HARNESS  
RH CHASSIS – PSI 2.4L LPG**

ITEM	PART NO.	DESCRIPTION	QTY
25	.....	Connector Assembly (Key Switch) .....	1
25	1490242	Connector (2 Way) .....	1
25	1490243	Connector (Secondary Lock) .....	1
25	1330438	Terminal (Socket) .....	2
26	1626727	Connector (End Cap) .....	1
27	.....	Connector Assembly (To Alternate Horn Button) .....	1
27	1490242	Connector (2 Way) .....	1
27	1490243	Connector (Secondary Lock) .....	1
27	1330438	Terminal (Socket) .....	1
28	1626727	Connector (Endcap) .....	1
29	.....	Connector Assembly (To Bus Terminal 2) .....	1
29	1489656	Connector (4-Way) .....	1
29	1489657	Connector (Secondary Lock) .....	1
29	1330438	Terminal (Socket) .....	4
30	4036523	Cap .....	1
31	1509888	Clip .....	3
32	1587778	Clip .....	4
33	.....	Connector Assembly (To Back-Up Alarm Harness) .....	1
33	1490242	Connector (2 Way) .....	1
33	1490243	Connector (Secondary Lock) .....	1
33	1330438	Terminal (Socket) .....	2
34	1626727	Connector (Endcap) .....	1
35	1531492	T-Fitting .....	1
36	275499	Conduit .....	AR
37	.....	Connector Assembly (Coolant Level) .....	1
37	4052151	Connector .....	1
37	1329151	Terminal .....	1
37	1330281	Terminal .....	2
37	1402888	Seal (Purple) .....	2
38	.....	Connector Assembly (Endcap) .....	1
38	1329150	Connector .....	1
38	1329151	Terminal .....	1
38	1327164	Seal .....	2
39	.....	Connector Assembly (Endcap) .....	1
39	1541988	Connector (8 Pin) .....	1
39	1484377	Plug .....	8
40	.....	Connector Assembly (To MLM Harness) .....	1
40	1541991	Connector .....	1
40	1541992	Connector (Secondary Lock) .....	1
40	1463139	Terminal .....	5
40	1484377	Plug .....	3
41	1509890	Clip .....	2
42	1699754	Conduit .....	AR
43	1509890	Clip .....	2
44	1587778	Clip .....	4
44	.....	Connector Assembly (To Seat Harness) .....	1
44	1531973	Connector .....	1
44	1531974	Connector (Secondary Lock) .....	1
44	1463139	Terminal .....	4
44	1484377	Plug .....	2

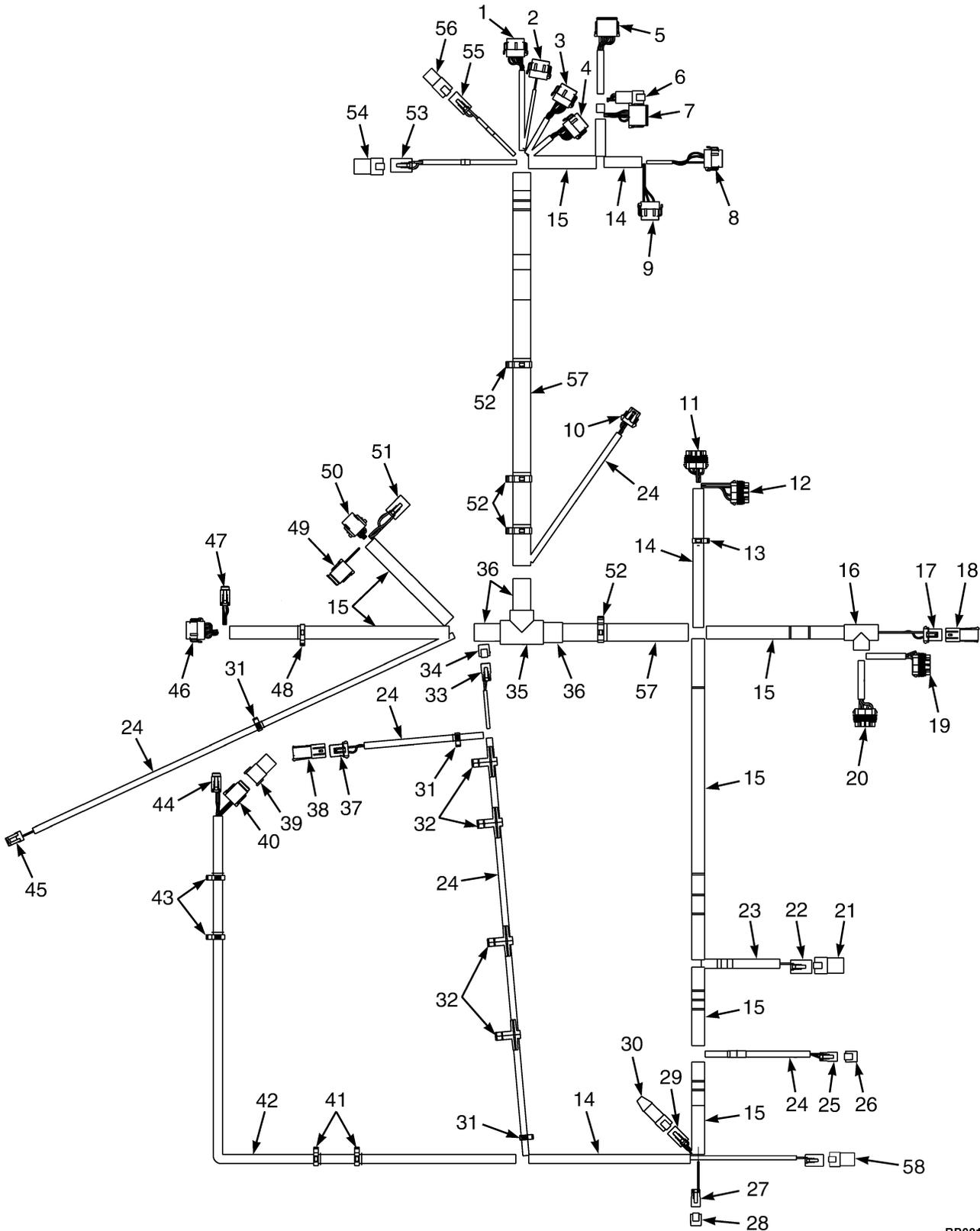
## WIRE HARNESS RH CHASSIS – PSI 2.4L LPG

ITEM	PART NO.	DESCRIPTION	QTY
45	.....	Connector Assembly (Hydraulic Temp) .....	1
45	1402868	Connector .....	1
45	1323576	Terminal .....	2
46	.....	Connector Assembly (To Transmission Harness) .....	1
46	1525567	Connector .....	1
46	1529046	Connector (Secondary Lock) (Lock) .....	1
46	1463139	Terminal .....	11
46	1484377	Plug .....	1
47	.....	Connector Assembly (To Transmission Harness) .....	1
47	1531973	Connector .....	1
47	1531974	Connector (Secondary Lock) .....	1
47	1463139	Terminal .....	6
48	1500899	Clip .....	1
49	.....	Connector Assembly (To Engine Harness) .....	1
49	1493428	Connector (12-Way) .....	1
49	1330438	Terminal (Socket) .....	11
49	1484377	Plug .....	1
49	1500913	Connector (Secondary Lock) (Secondary Lock) .....	1
50	.....	Connector Assembly (To Engine Harness) .....	1
50	1502625	Connector .....	1
50	1330438	Terminal (Socket) .....	8
50	1502626	Connector (Secondary Lock) (Secondary Lock) .....	1
51	.....	Connector Assembly (To Engine Harness) .....	1
51	1632865	Connector .....	1
51	1554359	Terminal .....	3
51	1330439	Plug .....	1
51	1514603	Connector (Secondary Lock) .....	1
52	1534282	Clip .....	4
53	.....	Connector Assembly (To Lights/Cab Harness) .....	1
53	1632865	Connector .....	1
53	1514603	Connector (Secondary Lock) .....	1
53	1554359	Terminal .....	4
54	.....	Connector Assembly (Endcap) .....	1
54	4060737	Connector .....	1
54	1330439	Plug .....	4
55	.....	Connector Assembly (Acc 1) .....	1
55	4047664	Connector .....	1
55	1554359	Terminal .....	2
55	1546697	Connector (Secondary Lock) (Secondary Lock) .....	1
56	.....	Connector Assembly .....	1
56	4060737	Connector .....	1
56	1330439	Plug .....	2
57	1540388	Conduit .....	AR
58	.....	Connector Assembly (Seat Switch Harness) .....	1
58	1632865	Connector .....	1
58	1514603	Connector (Secondary Lock) .....	1
58	1554359	Terminal .....	4
59	1602431	Fuse Holder .....	1
60	.....	Connector Assembly (Hydraulic Solenoid) .....	1
60	1490242	Connector (2 Way) .....	1

**WIRE HARNESS**  
**RH CHASSIS – PSI 2.4L LPG**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
60	1490243	Connector (Secondary Lock) .....	1
60	1330438	Terminal (Socket) .....	2
60	1626727	Connector (End Cap) .....	1

## WIRE HARNESS (FIGURE 7-24) RH CHASSIS — YANMAR 3.3L, DIESEL



BP081461

**WIRE HARNESS**  
**RH CHASSIS – YANMAR 3.3L, DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	4629784	Wire Harness (Chassis) .....	1
1	.....	Connector Assembly (Vehicle System Manager) .....	1
1	1525570	Connector .....	1
1	1463139	Terminal .....	8
1	1484377	Plug .....	4
1	1530037	Connector (Secondary Lock) (Secondary Lock) .....	1
2	.....	Connector Assembly (Vehicle System Manager) .....	1
2	1525569	Connector .....	1
2	1463139	Terminal .....	12
2	1530037	Connector (Secondary Lock) (Secondary Lock) .....	1
3	.....	Connector Assembly (Vehicle System Manager) .....	1
3	1525568	Connector .....	1
3	1463139	Terminal .....	9
3	1484377	Plug .....	3
3	1530037	Connector (Secondary Lock) (Secondary Lock) .....	1
4	.....	Connector Assembly (Vehicle System Manager) .....	1
4	1525567	Connector .....	1
4	1463139	Terminal .....	9
4	1484377	Plug .....	3
4	1530037	Connector (Secondary Lock) (Secondary Lock) .....	1
5	.....	Connector Assembly (Vehicle System Manager) .....	1
5	1525563	Connector .....	1
5	1330438	Terminal (Socket) .....	8
5	1363886	Terminal (Socket) .....	4
5	1500913	Connector (Secondary Lock) (Secondary Lock) .....	1
6	.....	Connector Assembly (To Cowl Harness) .....	1
6	1489655	Connector (4 Way) .....	1
6	1330437	Terminal (Pin) .....	4
6	1330416	Connector (Secondary Lock) .....	1
7	.....	Connector Assembly (To Cowl Harness) .....	1
7	1493428	Connector (12-Way) .....	1
7	1330438	Terminal (Socket) .....	9
7	1484377	Plug .....	3
7	1500913	Connector (Secondary Lock) (Secondary Lock) .....	1
8	.....	Connector Assembly (Vehicle System Manager) .....	1
8	1525567	Connector .....	1
8	1463139	Terminal .....	3
8	1484377	Plug .....	9
8	1529046	Connector (Secondary Lock) (Secondary Lock) .....	1
9	.....	Connector Assembly (Vehicle System Manager) .....	1
9	1525569	Connector .....	1
9	1463139	Terminal .....	9
9	1484377	Plug .....	3
9	1529046	Connector (Secondary Lock) (Secondary Lock) .....	1
10	.....	Connector Assembly (Horn) .....	1
10	1476064	Connector .....	1
10	1476109	Connector Lock .....	1
10	1330356	Seal .....	2
10	1330355	Terminal .....	3
10	1476108	Wire Seal (White) .....	1

## WIRE HARNESS RH CHASSIS – YANMAR 3.3L, DIESEL

ITEM	PART NO.	DESCRIPTION	QTY
11	.....	Connector Assembly (Power Distribution Module) .....	1
11	1521184	Connector .....	1
11	1323579	Seal .....	5
11	1327164	Seal .....	2
11	1330281	Terminal .....	5
11	1521989	Terminal .....	1
11	1402888	Seal (Purple) .....	1
11	1521188	Lock .....	1
12	.....	Connector Assembly (Power Distribution Module) .....	1
12	1521183	Connector .....	1
12	1323579	Seal .....	7
12	1327164	Seal .....	1
12	1330281	Terminal .....	4
12	1521989	Terminal .....	3
12	1521188	Lock .....	1
13	1534828	Clip .....	1
14	275496	Conduit .....	AR
15	275497	Conduit .....	AR
16	1531490	Conduit .....	1
17	.....	Connector Assembly (Hydraulic Filter) .....	1
17	1329152	Plug .....	1
17	1329151	Terminal .....	1
17	1330281	Terminal .....	2
17	1402888	Seal (Purple) .....	2
18	.....	Connector Assembly (End Cap) .....	1
18	1329150	Connector .....	1
18	1327164	Seal .....	2
18	1329151	Terminal .....	1
19	.....	Connector Assembly (Power Distribution Module) .....	1
19	1521185	Connector .....	1
19	1521188	Lock .....	1
19	1323579	Seal .....	8
19	1521989	Terminal .....	2
19	1330281	Terminal .....	6
20	.....	Connector Assembly (Power Distribution Module) .....	1
20	1521186	Connector .....	1
20	1521188	Lock .....	1
20	1323579	Seal .....	7
20	1327164	Seal .....	1
20	1521989	Terminal .....	7
21	.....	Connector Assembly (End Cap) .....	1
21	4047669	Connector .....	1
21	1330439	Plug .....	4
22	.....	Connector Assembly (Accessory 2) .....	1
22	1632865	Connector .....	1
22	1514603	Connector (Secondary Lock) .....	1
22	1330439	Plug .....	1
22	1554359	Terminal .....	3
23	275495	Conduit .....	AR
24	275493	Conduit .....	AR

**WIRE HARNESS**  
**RH CHASSIS – YANMAR 3.3L, DIESEL**

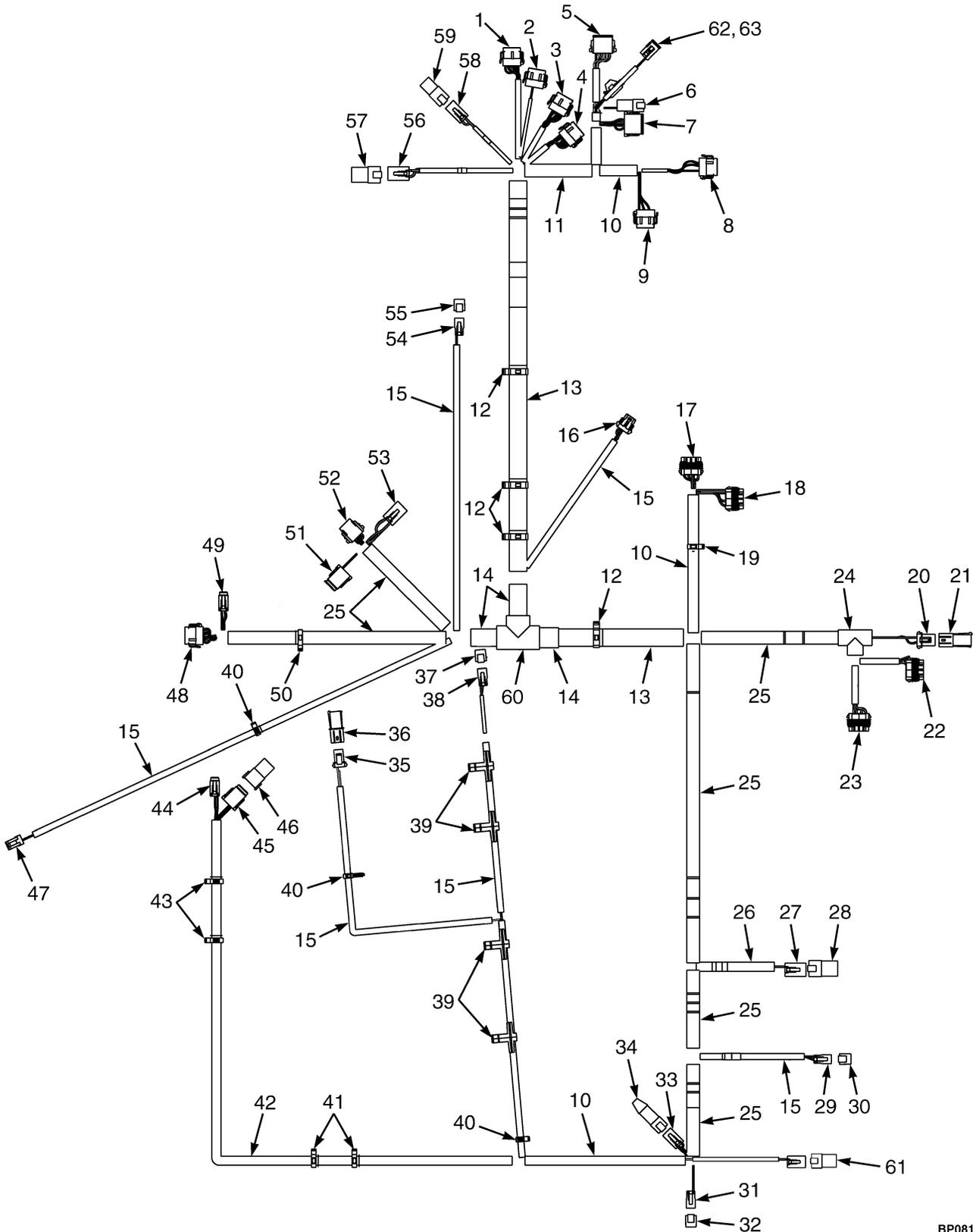
ITEM	PART NO.	DESCRIPTION	QTY
25	.....	Connector Assembly (Key Switch) .....	1
25	1490242	Connector (2 Way) .....	1
25	1490243	Connector (Secondary Lock) .....	1
25	1330438	Terminal (Socket) .....	2
26	1626727	Connector (End Cap) .....	1
27	.....	Connector Assembly (To Alternate Horn Button) .....	1
27	1490242	Connector (2 Way) .....	1
27	1490243	Connector (Secondary Lock) .....	1
27	1330438	Terminal (Socket) .....	1
28	1626727	Connector (Endcap) .....	1
29	.....	Connector Assembly (To Bus Terminal 2) .....	1
29	1489656	Connector (4-Way) .....	1
29	1489657	Connector (Secondary Lock) .....	1
29	1330438	Terminal (Socket) .....	4
30	1525577	Connector (With Resistor) .....	1
31	1509888	Clip .....	3
32	1587778	Clip .....	4
33	.....	Connector Assembly (To Back-Up Alarm Harness) .....	1
33	1490242	Connector (2 Way) .....	1
33	1490243	Connector (Secondary Lock) .....	1
33	1330438	Terminal (Socket) .....	2
34	1626727	Connector (Endcap) .....	1
35	1531492	T-Fitting .....	1
36	275499	Conduit .....	AR
37	.....	Connector Assembly (Coolant Level) .....	1
37	4052151	Connector .....	1
37	1329151	Terminal .....	1
37	1330281	Terminal .....	2
37	1402888	Seal (Purple) .....	2
38	.....	Connector Assembly (Endcap) .....	1
38	1329150	Connector .....	1
38	1329151	Terminal .....	1
38	1327164	Seal .....	2
39	.....	Connector Assembly (Endcap) .....	1
39	1541988	Connector (8 Pin) .....	1
39	1484377	Plug .....	8
40	.....	Connector Assembly (To MLM Harness) .....	1
40	1541991	Connector .....	1
40	1541992	Connector (Secondary Lock) .....	1
40	1463139	Terminal .....	5
40	1484377	Plug .....	3
41	1509890	Clip .....	2
42	1699754	Conduit .....	AR
43	1509890	Clip .....	2
44	1587778	Clip .....	4
44	.....	Connector Assembly (To Seat Harness) .....	1
44	1531973	Connector .....	1
44	1531974	Connector (Secondary Lock) .....	1
44	1463139	Terminal .....	4
44	1484377	Plug .....	2

## WIRE HARNESS RH CHASSIS – YANMAR 3.3L, DIESEL

ITEM	PART NO.	DESCRIPTION	QTY
45	.....	Connector Assembly (Hydraulic Temp) .....	1
45	1402868	Connector .....	1
45	1323576	Terminal .....	2
46	.....	Connector Assembly (To Transmission Harness) .....	1
46	1525567	Connector .....	1
46	1529046	Connector (Secondary Lock) (Lock) .....	1
46	1463139	Terminal .....	11
46	1484377	Plug .....	1
47	.....	Connector Assembly (To Transmission Harness) .....	1
47	1531973	Connector .....	1
47	1531974	Connector (Secondary Lock) .....	1
47	1463139	Terminal .....	6
48	1500899	Clip .....	1
49	.....	Connector Assembly (To Engine Harness) .....	1
49	1493428	Connector (12-Way) .....	1
49	1330438	Terminal (Socket) .....	11
49	1484377	Plug .....	1
49	1500913	Connector (Secondary Lock) (Secondary Lock) .....	1
50	.....	Connector Assembly (To Engine Harness) .....	1
50	1541991	Connector .....	1
50	1463139	Terminal .....	8
50	1541992	Connector (Secondary Lock) (Secondary Lock) .....	1
51	.....	Connector Assembly (To Engine Harness) .....	1
51	1632865	Connector .....	1
51	1554359	Terminal .....	3
51	1330439	Plug .....	1
51	1514603	Connector (Secondary Lock) .....	1
52	1534282	Clip .....	4
53	.....	Connector Assembly (To Lights/Cab Harness) .....	1
53	1632865	Connector .....	1
53	1514603	Connector (Secondary Lock) .....	1
53	1554359	Terminal .....	4
54	.....	Connector Assembly (Endcap) .....	1
54	4060737	Connector .....	1
54	1330439	Plug .....	4
55	.....	Connector Assembly (Acc 1) .....	1
55	4047664	Connector .....	1
55	1554359	Terminal .....	2
55	1546697	Connector (Secondary Lock) (Secondary Lock) .....	1
56	.....	Connector Assembly .....	1
56	4060737	Connector .....	1
56	1330439	Plug .....	2
57	1540388	Conduit .....	AR
58	.....	Connector Assembly (Seat Switch Harness) .....	1
58	1632865	Connector .....	1
58	1514603	Connector (Secondary Lock) .....	1
58	1554359	Terminal .....	4



**WIRE HARNESS (FIGURE 7-25)**  
**RH CHASSIS WITH SEAT BELT SEQUENCE MODULE — PSI 2.4L LPG**



BP081734

**WIRE HARNESS**  
**RH CHASSIS WITH SEAT BELT SEQUENCE MODULE – PSI 2.4L LPG**

ITEM	PART NO.	DESCRIPTION	QTY
	4635258	Wire Harness (Chassis) .....	1
1	.....	Connector Assembly (Vehicle System Manager) .....	1
1	1525570	Connector .....	1
1	1463139	Terminal .....	8
1	1484377	Plug .....	4
1	1530037	Connector (Secondary Lock) (Secondary Lock) .....	1
2	.....	Connector Assembly (Vehicle System Manager) .....	1
2	1525569	Connector .....	1
2	1484377	Plug .....	10
2	1463139	Terminal .....	2
2	1530037	Connector (Secondary Lock) (Secondary Lock) .....	1
3	.....	Connector Assembly (Vehicle System Manager) .....	1
3	1525568	Connector .....	1
3	1463139	Terminal .....	7
3	1484377	Plug .....	5
3	1530037	Connector (Secondary Lock) (Secondary Lock) .....	1
4	.....	Connector Assembly (Vehicle System Manager) .....	1
4	1525567	Connector .....	1
4	1463139	Terminal .....	9
4	1484377	Plug .....	3
4	1530037	Connector (Secondary Lock) (Secondary Lock) .....	1
5	.....	Connector Assembly (Vehicle System Manager) .....	1
5	1525563	Connector .....	1
5	1363886	Terminal (Socket) .....	4
5	1330438	Terminal (Socket) .....	8
5	1500913	Connector (Secondary Lock) .....	1
6	.....	Connector Assembly (Cowl Harness) .....	1
6	1489655	Connector (4 Way) .....	1
6	1330437	Terminal (Pin) .....	4
6	1330416	Connector (Secondary Lock) .....	1
7	.....	Connector Assembly (Cowl Harness) .....	1
7	1493428	Connector (12-Way) .....	1
7	1330438	Terminal (Socket) .....	10
7	1484377	Plug .....	2
7	1500913	Connector (Secondary Lock) .....	1
8	.....	Connector Assembly (Vehicle System Manager) .....	1
8	1525567	Connector .....	1
8	1484377	Plug .....	9
8	1463139	Terminal .....	3
8	1529046	Connector (Secondary Lock) (Secondary Lock) .....	1
9	.....	Connector Assembly (Vehicle System Manager) .....	1
9	1525569	Connector .....	1
9	1463139	Terminal .....	3
9	1484377	Plug .....	9
9	1529046	Connector (Secondary Lock) (Secondary Lock) .....	1
10	275496	Conduit .....	AR
11	275497	Conduit .....	AR
12	1534282	Clip .....	4
13	1540388	Conduit .....	AR
14	275499	Conduit .....	AR

## WIRE HARNESS

### RH CHASSIS WITH SEAT BELT SEQUENCE MODULE – PSI 2.4L LPG

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

**WIRE HARNESS**  
**RH CHASSIS WITH SEAT BELT SEQUENCE MODULE – PSI 2.4L LPG**

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

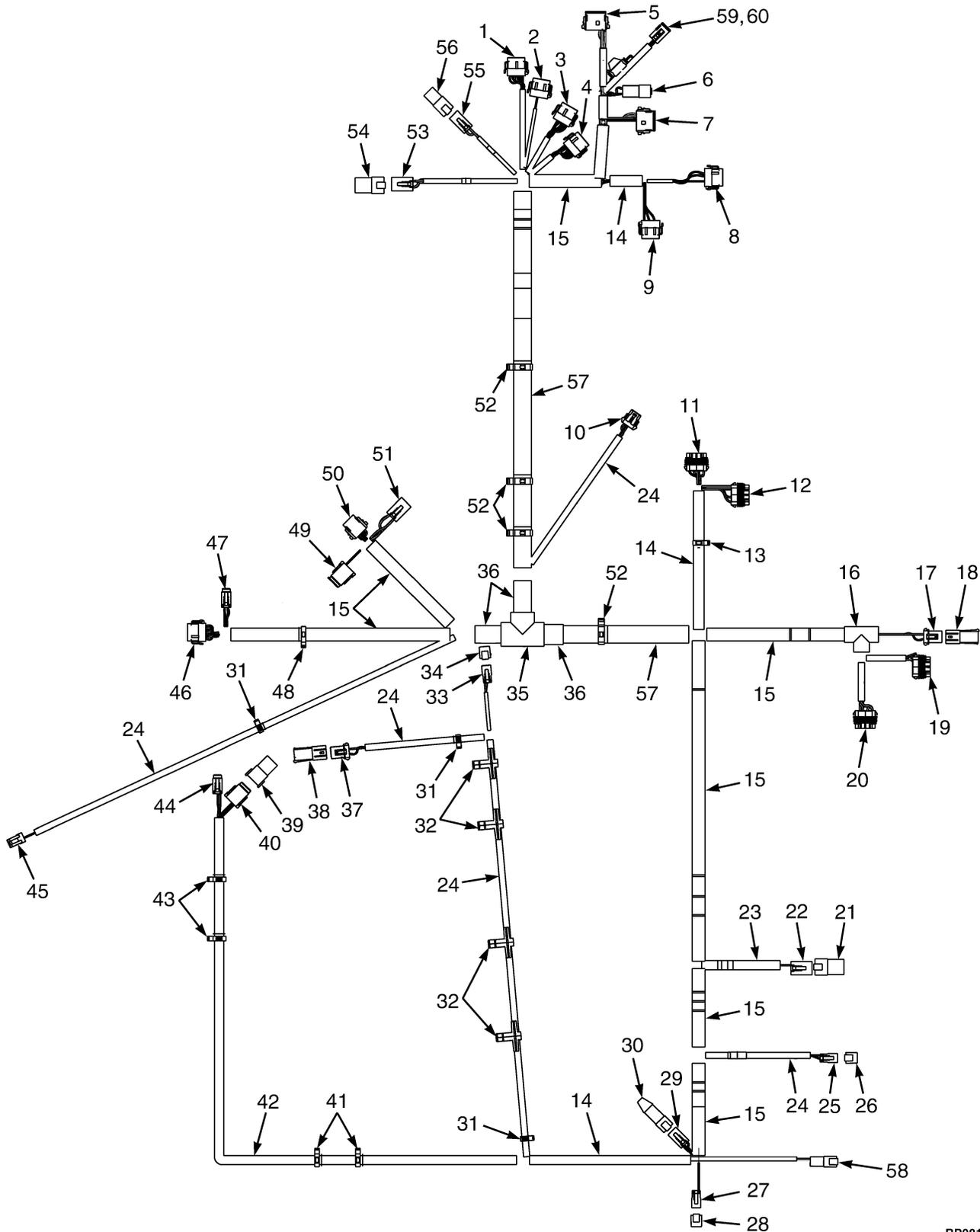
## WIRE HARNESS RH CHASSIS WITH SEAT BELT SEQUENCE MODULE – PSI 2.4L LPG

ITEM	PART NO.	DESCRIPTION	QTY
46	1541988	Connector (8 Pin) .....	1
46	1484377	Plug .....	8
47	.....	Connector Assembly (Hydraulic Temp) .....	1
47	1402868	Connector .....	1
47	1323576	Terminal .....	2
48	.....	Connector Assembly (Transmission Harness) .....	1
48	1525567	Connector .....	1
48	1463139	Terminal .....	11
48	1484377	Plug .....	1
48	1529046	Connector (Secondary Lock) (Secondary Lock) .....	1
49	.....	Connector Assembly (Transmission Harness) .....	1
49	1531973	Connector .....	1
49	1463139	Terminal .....	6
49	1531974	Connector (Secondary Lock) .....	1
50	1500899	Clip .....	1
51	.....	Connector Assembly (Engine Harness) .....	1
51	1541991	Connector .....	1
51	1463139	Terminal .....	8
51	1541992	Connector (Secondary Lock) (Secondary Lock) .....	1
52	.....	Connector Assembly (Engine Harness) .....	1
52	1502625	Connector .....	1
52	1330438	Terminal (Socket) .....	8
52	1484377	Plug .....	1
52	1502626	Connector (Secondary Lock) (Secondary Lock) .....	1
53	.....	Connector Assembly (Engine Harness) .....	1
53	1514602	Connector .....	1
53	1554359	Terminal .....	4
53	1514603	Connector (Secondary Lock) .....	1
54	.....	Connector Assembly (Hydraulic Solenoid) .....	1
54	1490242	Connector (2 Way) .....	1
54	1330438	Terminal (Socket) .....	2
54	1490243	Connector (Secondary Lock) .....	1
55	1626727	Connector (End Cap) .....	1
56	.....	Connector Assembly (Lights/Cab Harness) .....	1
56	1514602	Connector .....	1
56	1554359	Terminal .....	4
56	1514603	Connector (Secondary Lock) .....	1
57	.....	Connector Assembly (End Cap) .....	1
57	1514597	Connector .....	1
57	1330439	Plug .....	4
58	.....	Connector Assembly (Accessory 1) .....	1
58	1545202	Connector .....	1
58	1554359	Terminal .....	2
58	1546697	Connector (Secondary Lock) .....	1
59	.....	Connector Assembly (End Cap) .....	1
59	1480187	Connector .....	1
60	1531492	T-Fitting .....	1
61	.....	Connector Assembly (Seat Switch Harness) .....	1
61	1493465	Connector (2 Pin) .....	1
61	1330414	Connector (Secondary Lock) .....	1

**WIRE HARNESS**  
**RH CHASSIS WITH SEAT BELT SEQUENCE MODULE – PSI 2.4L LPG**

ITEM	PART NO.	DESCRIPTION	QTY
61	1330437	Terminal (Pin) .....	2
62	. . . . .	Connector Assembly (Seat Belt Sequence Module) .....	1
62	1502625	Connector .....	1
62	1502626	Connector (Secondary Lock) .....	1
62	1330438	Terminal (Socket) .....	6
62	1484377	Plug .....	2
63	1602431	Fuse Holder .....	1
63	1498044	Fuse (5 Amp) .....	1

## WIRE HARNESS (FIGURE 7-26) RH CHASSIS WITH SEAT BELT SEQUENCE MODULE — YANMAR 3.3L, DIESEL



BP081735

**WIRE HARNESS**  
**RH CHASSIS WITH SEAT BELT SEQUENCE MODULE – YANMAR 3.3L, DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	4635288	Wire Harness (Chassis) .....	1
1	.....	Connector Assembly (Vehicle System Manager) .....	1
1	1525570	Connector .....	1
1	1463139	Terminal .....	8
1	1484377	Plug .....	4
1	1530037	Connector (Secondary Lock) (Secondary Lock) .....	1
2	.....	Connector Assembly (Vehicle System Manager) .....	1
2	1525569	Connector .....	1
2	1463139	Terminal .....	12
2	1530037	Connector (Secondary Lock) (Secondary Lock) .....	1
3	.....	Connector Assembly (Vehicle System Manager) .....	1
3	1525568	Connector .....	1
3	1463139	Terminal .....	9
3	1484377	Plug .....	3
3	1530037	Connector (Secondary Lock) (Secondary Lock) .....	1
4	.....	Connector Assembly (Vehicle System Manager) .....	1
4	1525567	Connector .....	1
4	1463139	Terminal .....	9
4	1484377	Plug .....	3
4	1530037	Connector (Secondary Lock) (Secondary Lock) .....	1
5	.....	Connector Assembly (Vehicle System Manager) .....	1
5	1525563	Connector .....	1
5	1330438	Terminal (Socket) .....	8
5	1363886	Terminal (Socket) .....	4
5	1500913	Connector (Secondary Lock) .....	1
6	.....	Connector Assembly (To Cowl Harness) .....	1
6	1489655	Connector (4 Way) .....	1
6	1330437	Terminal (Pin) .....	4
6	1330416	Connector (Secondary Lock) .....	1
7	.....	Connector Assembly (To Cowl Harness) .....	1
7	1493428	Connector (12-Way) .....	1
7	1330438	Terminal (Socket) .....	9
7	1484377	Plug .....	3
7	1500913	Connector (Secondary Lock) .....	1
8	.....	Connector Assembly (Vehicle System Manager) .....	1
8	1525567	Connector .....	1
8	1463139	Terminal .....	3
8	1484377	Plug .....	9
8	1529046	Connector (Secondary Lock) (Secondary Lock) .....	1
9	.....	Connector Assembly (Vehicle System Manager) .....	1
9	1525569	Connector .....	1
9	1463139	Terminal .....	9
9	1484377	Plug .....	3
9	1529046	Connector (Secondary Lock) (Secondary Lock) .....	1
10	.....	Connector Assembly (Horn) .....	1
10	1476064	Connector .....	1
10	1476109	Connector Lock .....	1
10	1330356	Seal .....	2
10	1330355	Terminal .....	3
10	1476108	Wire Seal (White) .....	1

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### RH CHASSIS WITH SEAT BELT SEQUENCE MODULE – YANMAR 3.3L, DIESEL

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

**WIRE HARNESS**  
**RH CHASSIS WITH SEAT BELT SEQUENCE MODULE – YANMAR 3.3L, DIESEL**

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

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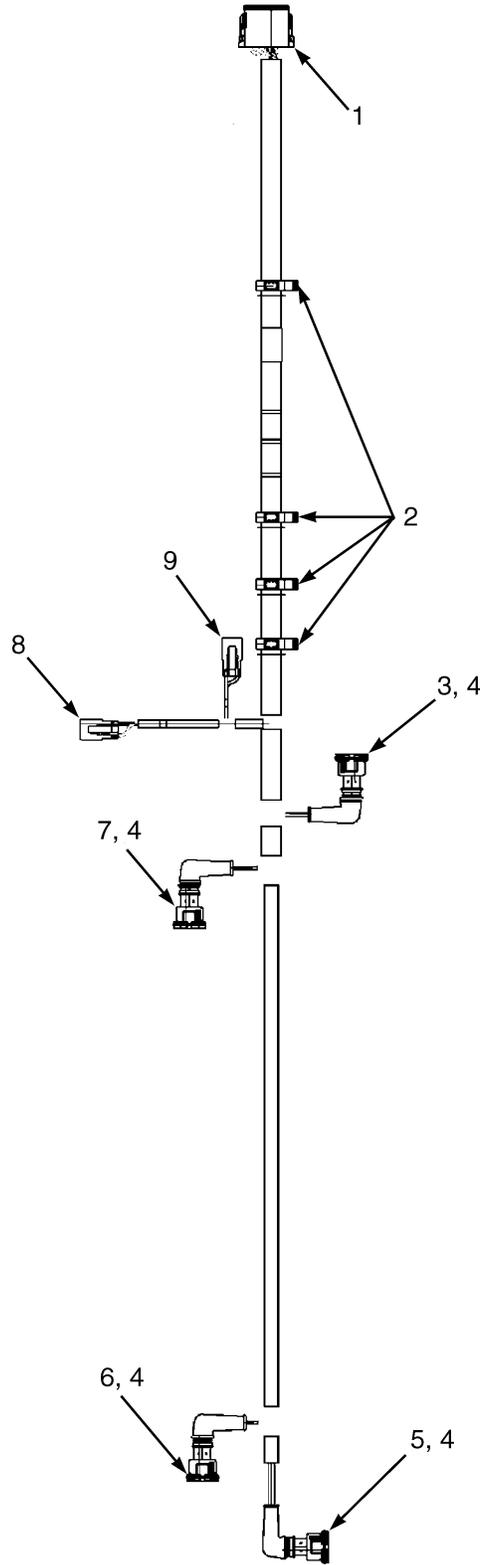
### RH CHASSIS WITH SEAT BELT SEQUENCE MODULE – YANMAR 3.3L, DIESEL

ITEM	PART NO.	DESCRIPTION	QTY
44	1463139	Terminal .....	4
44	1484377	Plug .....	2
45	.....	Connector Assembly (Hydraulic Temp) .....	1
45	1402868	Connector .....	1
45	1323576	Terminal .....	2
46	.....	Connector Assembly (To Transmission Harness) .....	1
46	1525567	Connector .....	1
46	1529046	Connector (Secondary Lock) .....	1
46	1463139	Terminal .....	11
46	1484377	Plug .....	1
47	.....	Connector Assembly (To Transmission Harness) .....	1
47	1531973	Connector .....	1
47	1531974	Connector (Secondary Lock) .....	1
47	1463139	Terminal .....	6
48	1500899	Clip .....	1
49	.....	Connector Assembly (To Engine Harness) .....	1
49	1493428	Connector (12-Way) .....	1
49	1330438	Terminal (Socket) .....	11
49	1484377	Plug .....	1
49	1500913	Connector (Secondary Lock) .....	1
50	.....	Connector Assembly (To Engine Harness) .....	1
50	1541991	Connector .....	1
50	1463139	Terminal .....	8
50	1541992	Connector (Secondary Lock) (Secondary Lock) .....	1
51	.....	Connector Assembly (To Engine Harness) .....	1
51	1514602	Connector .....	1
51	1554359	Terminal .....	3
51	1330439	Plug .....	1
51	1514603	Connector (Secondary Lock) .....	1
52	1534282	Clip .....	4
53	.....	Connector Assembly (To Lights/Cab Harness) .....	1
53	1514602	Connector .....	1
53	1514603	Connector (Secondary Lock) .....	1
53	1554359	Terminal .....	4
54	.....	Connector Assembly (Endcap) .....	1
54	1514597	Connector .....	1
54	1330439	Plug .....	4
55	.....	Connector Assembly (Acc 1) .....	1
55	1545202	Connector .....	1
55	1554359	Terminal .....	2
55	1546697	Connector (Secondary Lock) (Secondary Lock) .....	1
56	.....	Connector Assembly .....	1
56	1480187	Connector .....	1
56	1330439	Plug .....	2
57	1540388	Conduit .....	AR
58	.....	Connector Assembly (Seat Switch Harness) .....	1
58	1493465	Connector (2 Pin) .....	1
58	1330414	Connector (Secondary Lock) .....	1
58	1330437	Terminal (Pin) .....	2
59	.....	Connector Assembly (Seat Belt Sequence Module) .....	1

**WIRE HARNESS**  
**RH CHASSIS WITH SEAT BELT SEQUENCE MODULE – YANMAR 3.3L, DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
59	1502625	Connector .....	1
59	1502626	Connector (Secondary Lock) (Secondary Lock) .....	1
59	1330438	Terminal (Socket) .....	6
59	1484377	Plug .....	2
60	1602431	Fuse Holder .....	1
60	1498044	Fuse (5 Amp) .....	1

## WIRE HARNESS (FIGURE 7-27) ELECTRONIC CONTROL VALVE — THREE FUNCTION

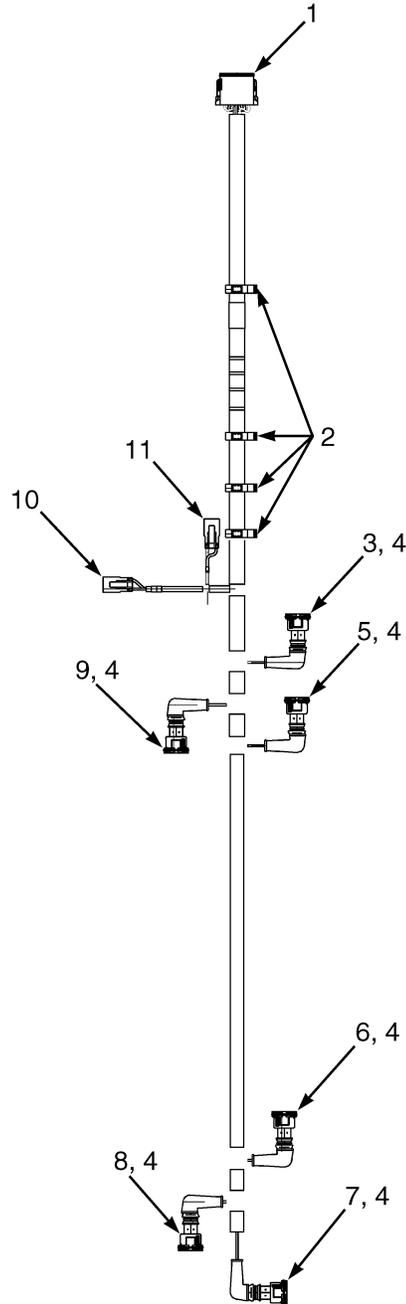


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**WIRE HARNESS  
ELECTRONIC CONTROL VALVE – THREE FUNCTION**

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 (Secondary Lock) .....	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 7-28)  
ELECTRONIC CONTROL VALVE — FOUR FUNCTION**



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**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 (Secondary Lock) .....	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







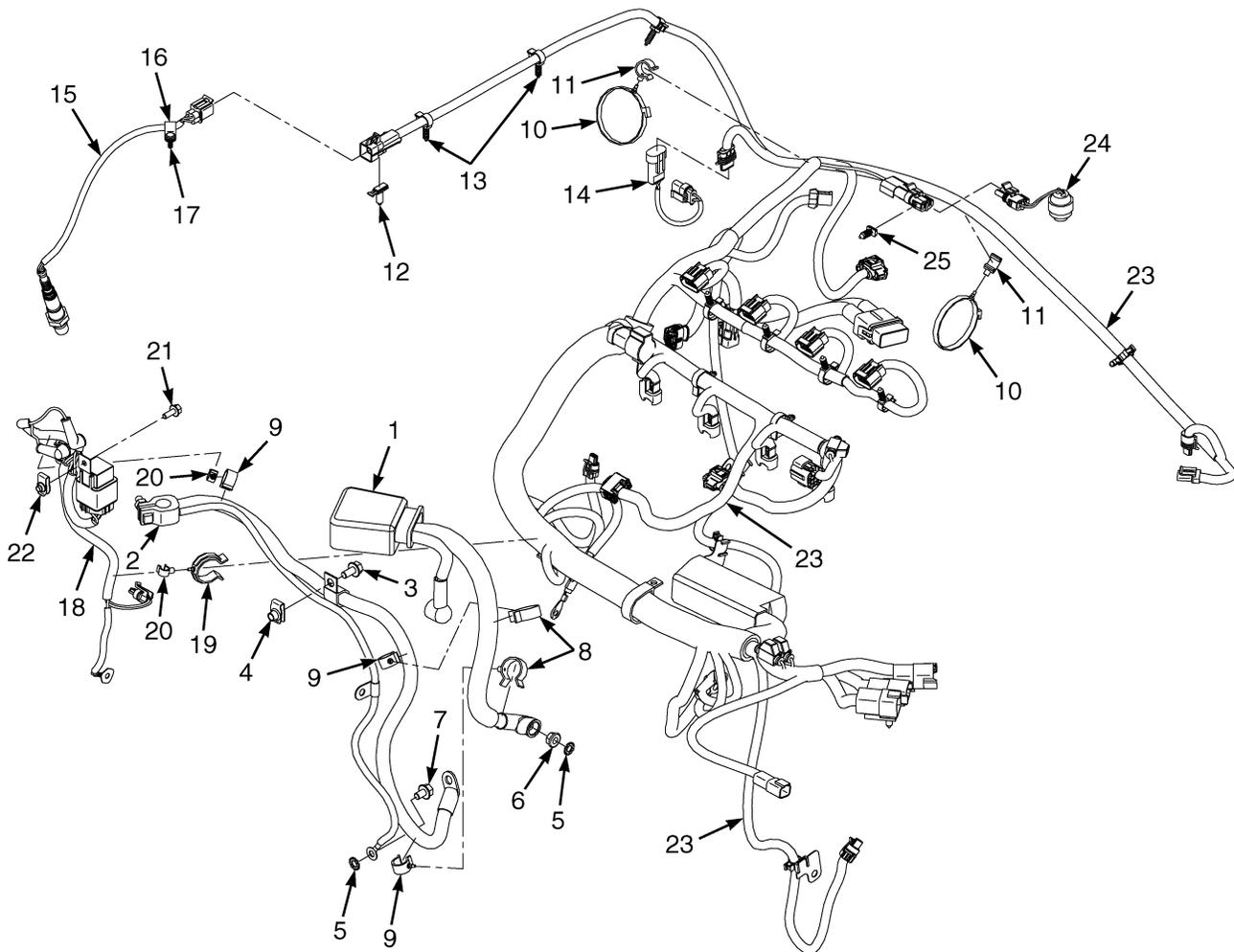
**SECTION 8  
ELECTRICAL SYSTEM-LPG**

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## ENGINE ELECTRICAL SYSTEM (FIGURE 8-1) PSI LPG

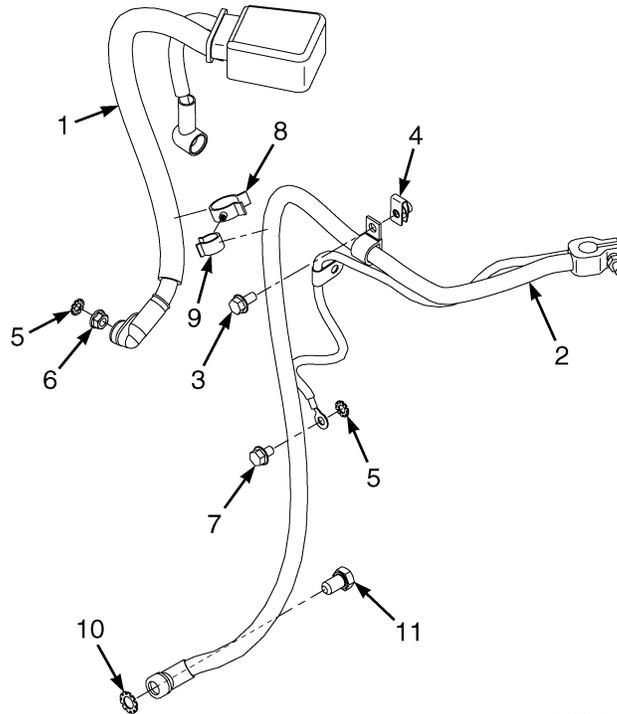


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**ENGINE ELECTRICAL SYSTEM  
PSI LPG**

ITEM	PART NO.	DESCRIPTION	QTY
1	2107181	Battery Cable (Positive) .....	1
1	1357268	Battery Cable (Red) .....	AR
1	1357535	Wire (Bulk) .....	AR
1	148795	Terminal .....	1
1	16079	Terminal .....	1
1	806426	E-Ring .....	1
1	204223	Boot .....	2
1	1566146	Boot .....	1
2	2069225	Battery Cable (Negative) .....	1
2	16078	Battery Cable .....	AR
2	1357533	Wire-Bulk .....	AR
2	148789	Terminal .....	1
2	1564044	E-Ring .....	1
2	128408	Clamp .....	1
2	806426	E-Ring .....	1
3	4109993		
	1527879	Capscrew .....	1
4	1480237	Nut , Foldover .....	1
5	296380	Washer .....	2
6	<del>1382472</del>		
	1502543	Nut .....	1
7	1529366	Capscrew .....	1
8	1542436	Clamp (Swivel) .....	2
9	1543698	Clamp (Swivel) .....	3
10	1502061	Clamp (Swivel) .....	2
11	1543691	Clamp (Swivel) .....	1
12	1520513	Clip .....	1
13	1509888	Clip .....	2
14	4602843	Wire Harness (Adapter) .....	1
15	1646456	Sensor (Oxygen) .....	1
16	4041292	Clip .....	1
17	1582464	Fastener .....	1
18	4628652	Wire Harness (Alternator) .....	1
19	1561759	Clamp (Swivel) .....	1
20	1561871	Clamp (Swivel) .....	2
21	1527876	Capscrew .....	1
22	1566420	Nut (Foldover) .....	1
23	4628749	Wire Harness (Engine) (LPG) (☞ Figure 8-3).....	1
24	1529257	Sensor (Air Flow Restriction) .....	1
25	1567333	Clip .....	1

## BATTERY CABLES (FIGURE 8-2) 2.4L PSI LPG



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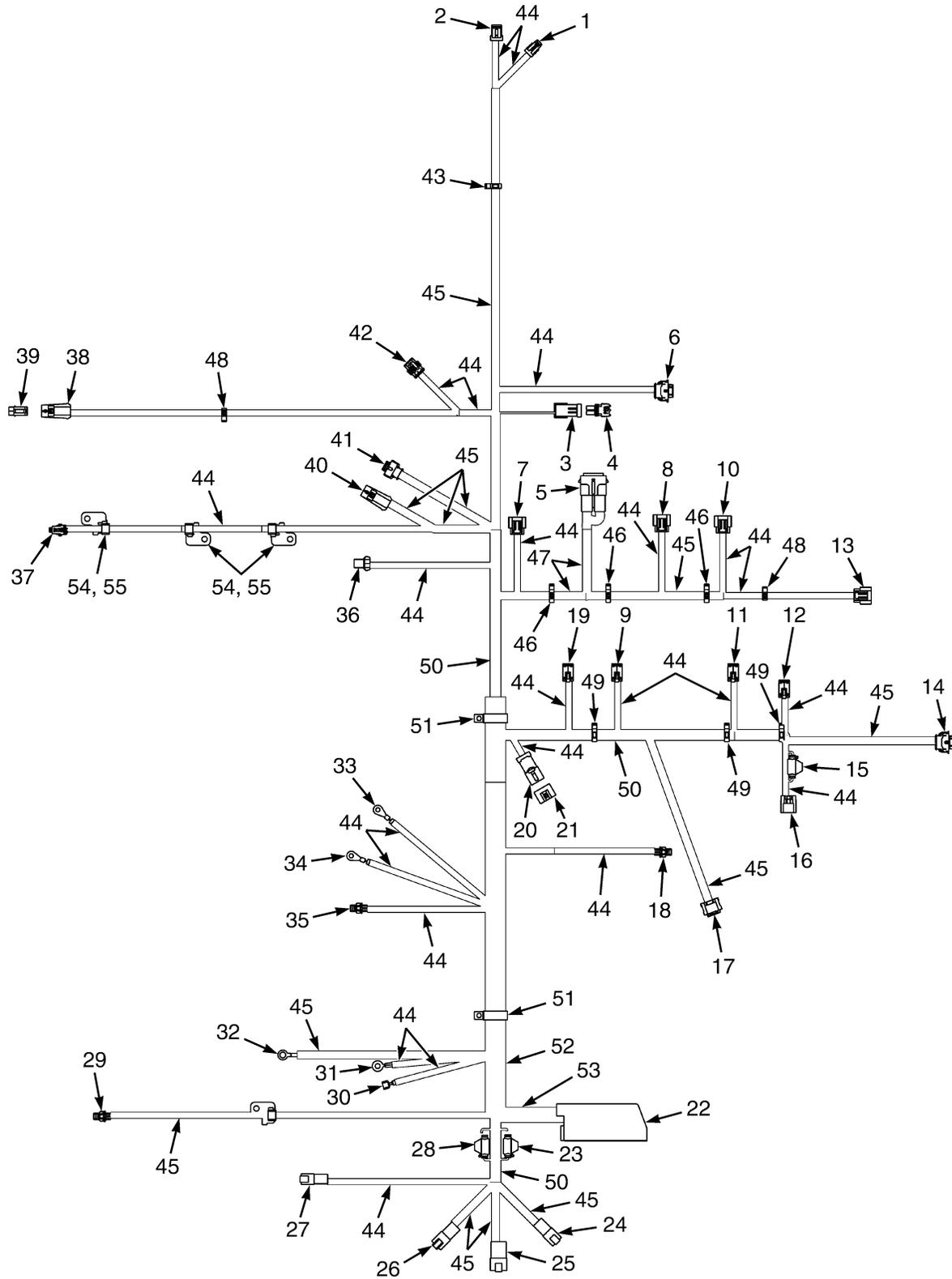
ITEM	PART NO.	DESCRIPTION	QTY
1	2107181	Battery Cable (Positive) .....	1
1	1357268	Battery Cable (Red) .....	AR
1	1357535	Wire (Bulk) .....	AR
1	148795	Terminal .....	1
1	16079	Terminal .....	1
1	806426	E-Ring .....	1
1	204223	Boot .....	2
1	1566146	Boot .....	1
2	2069225	Battery Cable (Negative) .....	1
2	16078	Battery Cable .....	AR
2	1357533	Wire-Bulk .....	AR
2	148789	Terminal .....	1
2	1564044	E-Ring .....	1
2	128408	Clamp .....	1
2	806426	E-Ring .....	1
3	4109993		
	1527879	Capscrew .....	1
4	1480237	Nut , Foldover .....	1
5	296380	Washer .....	2
6	4382472		
	1502543	Nut .....	1
7	1529366	Capscrew .....	1
8	1542436	Clamp (Swivel) .....	2
9	1543698	Clamp (Swivel) .....	2
10	296382	Washer .....	1

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ITEM	PART NO.	DESCRIPTION	QTY
11	4034828	Capscrew .....	1

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**WIRE HARNESS (FIGURE 8-3)  
ENGINE — PSI 2.4L LPG**



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**WIRE HARNESS  
ENGINE – PSI 2.4L LPG**

ITEM	PART NO.	DESCRIPTION	QTY
	4628749	Wire Harness (Engine) (LPG) .....	1
1	.....	Connector Assembly (Fuel Level) .....	1
1	1476077	Connector .....	1
1	1323576	Terminal .....	2
2	.....	Connector Assembly (Fuel Pump) .....	1
2	1519611	Connector .....	1
2	1323576	Terminal .....	2
3	.....	Connector Assembly (Air Filter Restriction) .....	1
3	1465469	Connector .....	1
3	1323578	Terminal .....	2
3	1402888	Seal (Purple) .....	2
4	.....	Connector Assembly (End Cap) .....	1
4	1465468	Connector .....	1
4	1327164	Seal .....	2
5	4136560	Fuse Holder .....	1
5	4043316	Fuse (70 Amp) .....	1
5	4136561	Cover .....	1
5	4136562	Terminal .....	2
5	4136563	Wire Seal .....	2
6	.....	Connector Assembly (Fuel Pressure Manifold) .....	1
6	1567469	Plug .....	1
6	4053417	Terminal .....	4
6	1567470	Wire Seal .....	4
7	.....	Connector Assembly (Cylinder #1) .....	1
7	4612989	Connector .....	1
7	4612978	Terminal .....	3
7	4614516	Wire Seal .....	3
8	.....	Connector Assembly (Cylinder #2) .....	1
8	4612989	Connector .....	1
8	4612978	Terminal .....	3
8	4614516	Wire Seal .....	3
9	4063897	Bracket .....	1
9	4073259	Connector Lock (Secondary) .....	1
9	1402919	Terminal .....	2
9	1503648	Connector Seal .....	2
10	.....	Connector Assembly (Cylinder #3) .....	1
10	4612989	Connector .....	1
10	4612978	Terminal .....	3
10	4614516	Wire Seal .....	3
11	4063797	Connector .....	1
11	4073259	Connector Lock (Secondary) .....	1
11	1402919	Terminal .....	2
11	1503648	Connector Seal .....	2
12	4063797	Connector .....	1
12	4073259	Connector Lock (Secondary) .....	1
12	1402919	Terminal .....	2
12	1503648	Connector Seal .....	2
13	.....	Connector Assembly (Cylinder #4) .....	1
13	4612989	Connector .....	1
13	4612978	Terminal .....	3

## WIRE HARNESS ENGINE – PSI 2.4L LPG

ITEM	PART NO.	DESCRIPTION	QTY
13	4614516	Wire Seal .....	3
14	.....	Connector Assembly (TMAP) .....	1
14	1567469	Plug .....	1
14	4053417	Terminal .....	4
14	1567470	Wire Seal .....	4
15	.....	Connector Assembly (DEPR 5 Amp) .....	1
15	1498044	Fuse (5 Amp) .....	1
15	1602431	Fuse Holder .....	1
16	.....	Connector Assembly (DEPR) .....	1
16	4612836	Connector .....	1
16	2314741	Terminal .....	6
16	2061333	Wire Seal .....	6
16	4612844	Connector Lock (Secondary) .....	1
17	.....	Connector Assembly (Throttle) .....	1
17	1569973	Connector Body .....	1
17	1525596	Terminal .....	6
17	1533810	Seal (Green) .....	6
18	.....	Connector Assembly (ECT) .....	1
18	4062635	Connector .....	1
18	4073293	Connector Lock (Secondary) .....	1
18	1548517	Terminal (Socket) .....	2
18	1548519	Seal .....	2
19	4063797	Connector .....	1
19	4073259	Connector Lock (Secondary) .....	1
19	1503648	Connector Seal .....	2
19	1402919	Terminal .....	2
20	.....	Connector Assembly (Diagnostic) .....	1
20	.....	Connector .....	1
20	4073259	Connector Lock (Secondary) .....	1
20	1402919	Terminal .....	8
20	1503648	Connector Seal .....	8
21	.....	Connector Assembly (End Cap) .....	1
21	1641947	Cap .....	1
22	.....	Connector Assembly (ECM) .....	1
22	1641949	Connector .....	1
22	1607549	Terminal .....	42
22	4023295	Terminal .....	6
22	4025685	Plug .....	42
23	.....	Connector Assembly (VSW 5 Amp) .....	1
23	1498044	Fuse (5 Amp) .....	2
23	1602431	Fuse Holder .....	1
24	.....	Connector Assembly (To RH Chassis Harness) .....	1
24	1541988	Connector (8 Pin) .....	1
24	1541989	Connector (Secondary Lock) .....	1
24	1463138	Terminal Pin .....	8
25	.....	Connector Assembly (To RH Chassis Harness) .....	1
25	4047669	Connector .....	1
25	1514598	Connector (Secondary Lock) .....	1
25	1484709	Terminal (Pin) .....	4
26	.....	Connector Assembly (To RH Chassis Harness) .....	1

**WIRE HARNESS  
ENGINE – PSI 2.4L LPG**

ITEM	PART NO.	DESCRIPTION	QTY
26	1623050	Housing (Connector) .....	1
26	1330418	Connector (Secondary) .....	1
26	1330437	Terminal (Pin) .....	7
26	1484377	Plug .....	1
27	1493465	Connector (2 Pin) .....	1
27	1330414	Connector (Secondary Lock) .....	1
27	1330437	Terminal (Pin) .....	1
28	.....	Connector Assembly (Fuel Pump, 10 Amp) .....	1
28	1498046	Fuse (10 Amp) .....	1
28	1602431	Fuse Holder .....	1
29	.....	Connector Assembly (Crank Sensor) .....	1
29	4062635	Connector .....	1
29	4073293	Connector Lock (Secondary) .....	1
29	1548517	Terminal (Socket) .....	2
29	1548519	Seal .....	2
30	.....	Connector Assembly (Starter) .....	1
30	1521309	Connector Body .....	1
30	4150822	Boot .....	1
31	1663276	Electrical Connector (Starter B+) .....	1
32	806427	E-Ring (Ground) .....	1
33	4062637	Terminal (Alternator, Negative) .....	1
34	1663276	Electrical Connector (Alternator, Positive) .....	1
34	1520864	Boot .....	1
35	.....	Connector Assembly (Alternator) .....	1
35	4062635	Connector .....	1
35	4073293	Connector Lock (Secondary) .....	1
35	1548517	Terminal (Socket) .....	2
35	1548519	Seal .....	2
36	.....	Connector Assembly (Lock-Off) .....	1
36	1539872	Connector .....	1
36	1330355	Terminal .....	2
36	1476108	Wire Seal (White) .....	2
37	.....	Connector Assembly (Oil Pressure) .....	1
37	1603021	Connector .....	1
37	1603236	Connector (Secondary Lock) .....	1
37	1548517	Terminal (Socket) .....	3
37	1548519	Seal .....	3
38	.....	Connector Assembly (EG02) .....	1
38	1498424	Housing (Connector) .....	1
38	1650797	Lock (Secondary) .....	1
38	1330355	Terminal .....	4
38	1476108	Wire Seal (White) .....	4
39	.....	Connector Assembly (End Cap) .....	1
39	1483329	Connector Body .....	1
39	1487441	Housing (Secondary Lock) .....	1
39	1482668	Plug (Cavity Plug) .....	4
40	.....	Connector Assembly (EG01) .....	1
40	1498424	Housing .....	1
40	1650797	Lock (Secondary) .....	1
40	1330355	Terminal .....	4

## WIRE HARNESS ENGINE – PSI 2.4L LPG

ITEM	PART NO.	DESCRIPTION	QTY
40	1476108	Wire Seal (White) .....	4
41	.....	Connector Assembly (Cam Sensor) .....	1
41	4062712	Connector .....	1
41	4053417	Terminal .....	3
41	1567470	Wire Seal .....	3
42	.....	Connector Assembly (LPG Sensor Switch) .....	1
42	4062712	Connector .....	1
42	4053417	Terminal .....	3
42	1567470	Wire Seal .....	3
43	1500901	Clip .....	1
44	275493	Conduit .....	AR
45	275494	Conduit .....	AR
46	1509890	Clip .....	3
47	275495	Conduit .....	AR
48	1509888	Clip .....	2
49	1402815	Clip .....	3
50	275496	Conduit .....	AR
51	147006	Clamp .....	2
52	275499	Conduit .....	AR
53	275498	Conduit .....	AR
54	1532774	Clip .....	4
55	1532761	Clip .....	4





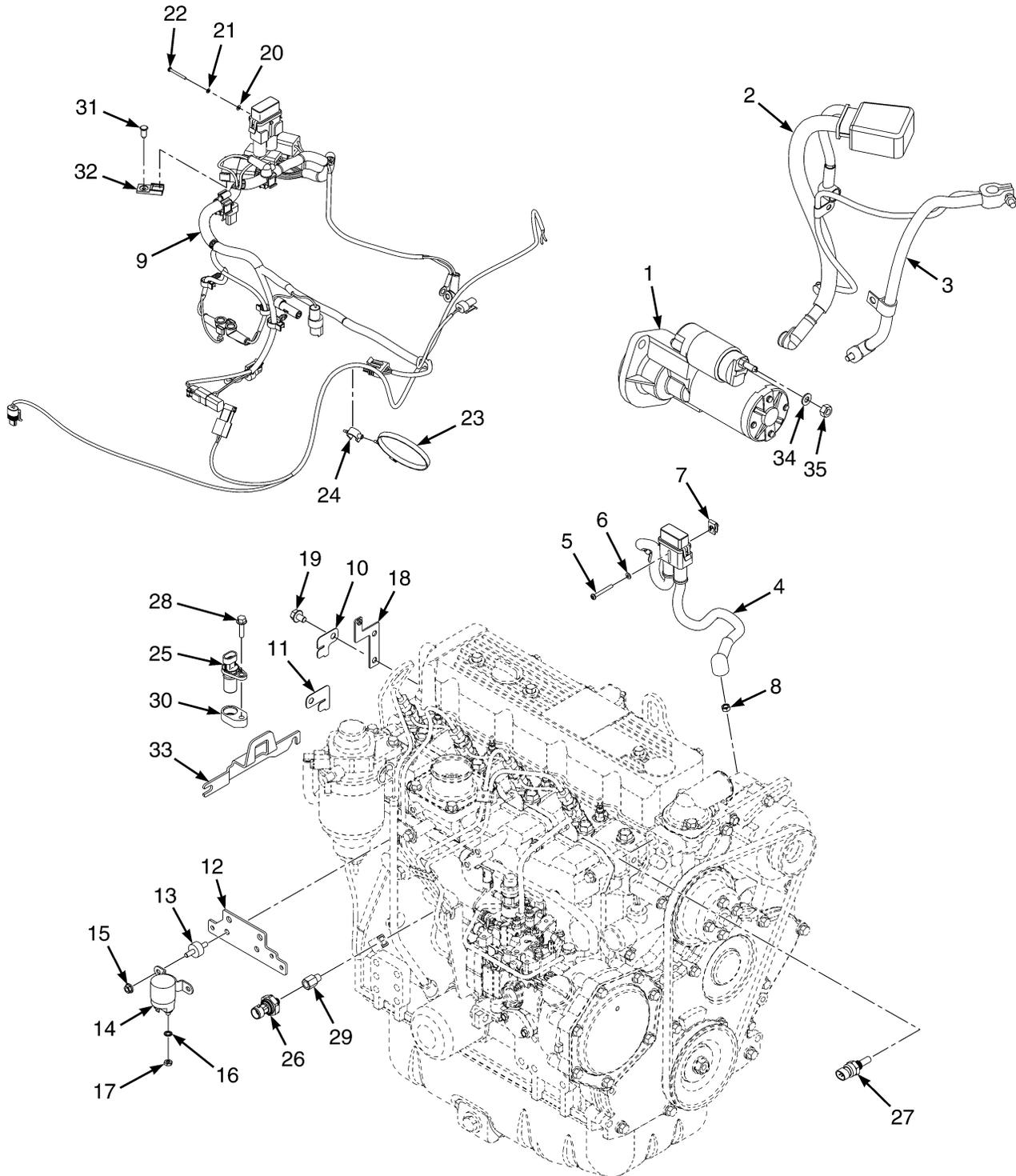
**SECTION 9  
ELECTRICAL SYSTEM-DIESEL**

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## ENGINE ELECTRICAL SYSTEM (FIGURE 9-1) YANMAR DIESEL



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**ENGINE ELECTRICAL SYSTEM  
YANMAR DIESEL**

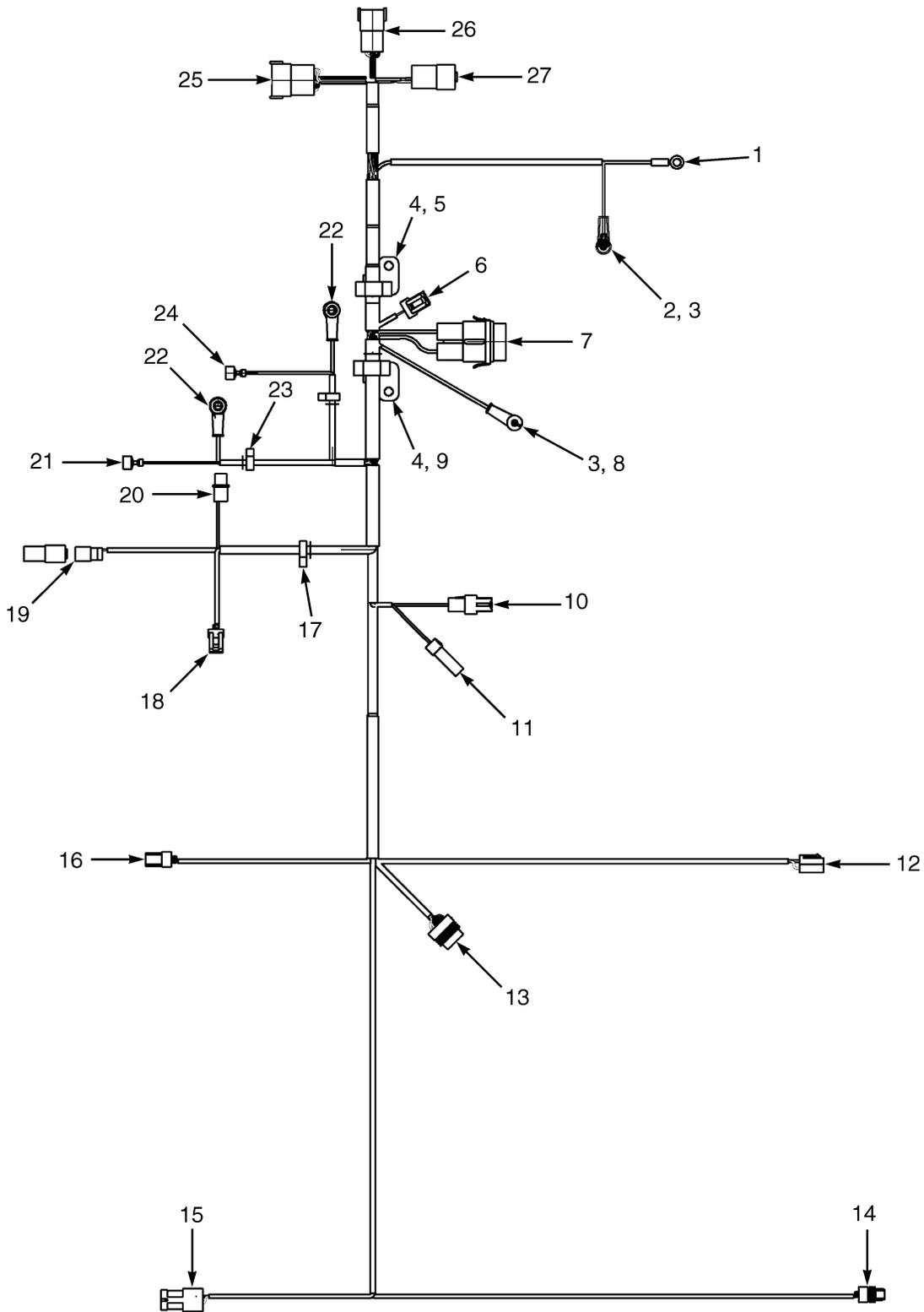
ITEM	PART NO.	DESCRIPTION	QTY
1	1599845	Starter Assembly .....	1
1	.....	Armature Assembly .....	1
1	1599847	Ball Bearing .....	1
1	1599848	Ball Bearing .....	1
1	.....	Coil Assembly .....	1
1	1599850	Screw .....	1
1	1599851	Brush .....	2
1	.....	Holder Assembly .....	1
1	1599851	Brush .....	2
1	1599853	Brush Spring .....	4
1	1599855	Magnetic Switch .....	1
1	.....	Gear Case Assembly .....	1
1	1599860	Pinion (Assembly) .....	1
1	1599861	Shaft .....	1
1	1599862	Stopper Kit .....	1
1	1599863	Clutch .....	1
1	1599864	Ball Bearing .....	1
1	1599865	Ball Bearing .....	1
1	1599866	Retainer .....	1
1	1599867	Housing .....	1
2	2107181	Battery Cable (Positive) .....	1
2	1357268	Battery Cable (Red) .....	1
2	1357535	Wire (Bulk) (Red) .....	1
2	148792	Terminal .....	1
2	16079	Terminal .....	1
2	806426	E-Ring .....	1
2	1536304	Boot .....	1
2	204223	Boot .....	1
2	1566146	Boot .....	1
3	2069226	Battery Cable (Negative) .....	1
3	16078	Battery Cable .....	1
3	1357533	Wire-Bulk (Black) .....	1
3	148789	Terminal .....	1
3	16079	Terminal .....	1
3	1564044	E-Ring .....	1
3	128408	Clamp .....	1
3	806426	E-Ring .....	1
4	2065098	Wire Harness (Alternator) (☞ Figure 9-4).....	1
5	302027	Screw .....	1
6	320154	Washer .....	1
7	1537551	Nut (Clip) .....	1
8	136687	Nut .....	1
9	2087191	Wire Harness (Powertrain Yanmar) (☞ Figure 9-3).....	1
10	1532761	Clip .....	1
11	1532759	Clip .....	1
12	1582151	Bracket (Glow Plug Relay) .....	1
13	1527562	Rubber Mount .....	2
14	1454967	Relay (Lift Pump/Starter or Glow Plug) .....	1
15	<del>1307884</del>		
	1514429	Nut .....	2

**ENGINE ELECTRICAL SYSTEM  
YANMAR DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
16	296379	Washer .....	2
17	1560678	Nut .....	2
18	1582150	Bracket (Glow Plug Fuse) .....	1
19	1529366	Capscrew .....	4
20	320152	Washer .....	1
21	292676	Lockwasher .....	1
22	302015	Screw .....	1
23	1502061	Clamp (Swivel) (Swivel) .....	1
24	1542439	Clamp (Swivel) .....	1
25	1541231	Sensor (Input Speed, TISS) .....	1
26	1566654	Pressure Transducer Sensor (Oil Pressure) .....	1
27	1515654	Temperature Sensor .....	1
28	1527878	Capscrew .....	1
29	367224	Adapter .....	1
30	1591454	Bracket (Speed Sensor) .....	1
31	1582464	Fastener .....	3
32	1500912	Clip .....	3
33	1594055	Bracket .....	1
34	296380	Washer .....	2
35	<del>1382472</del> 1502543	Nut .....	1



## WIRE HARNESS (FIGURE 9-3) ENGINE — YANMAR 3.3L, DIESEL



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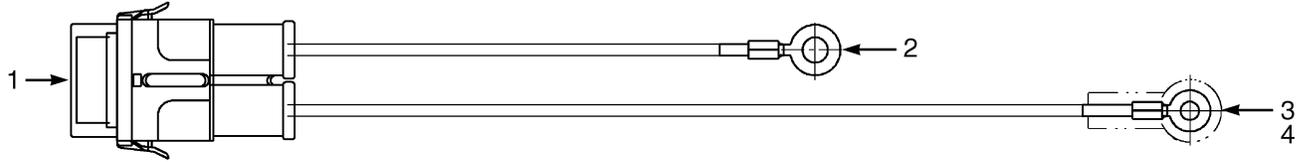
**WIRE HARNESS**  
**ENGINE – YANMAR 3.3L, DIESEL**

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

**WIRE HARNESS**  
**ENGINE – YANMAR 3.3L, DIESEL**

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

**WIRE HARNESS (FIGURE 9-4)  
ALTERNATOR — DIESEL**



BP080476

ITEM	PART NO.	DESCRIPTION	QTY
	2065098	Wire Harness (Alternator) .....	1
1	.....	Connector Assembly .....	1
1	1454827	Seal .....	2
1	1454828	Terminal .....	2
1	1454829	Fuse (60 Amp) .....	1
1	1454860	Connector Body .....	1
1	1454862	Cover (With Seal) .....	1
2	1566145	E-Ring (To PDM) .....	1
3	1560015	E-Ring (To Alternator) .....	1
4	1566146	Boot .....	1



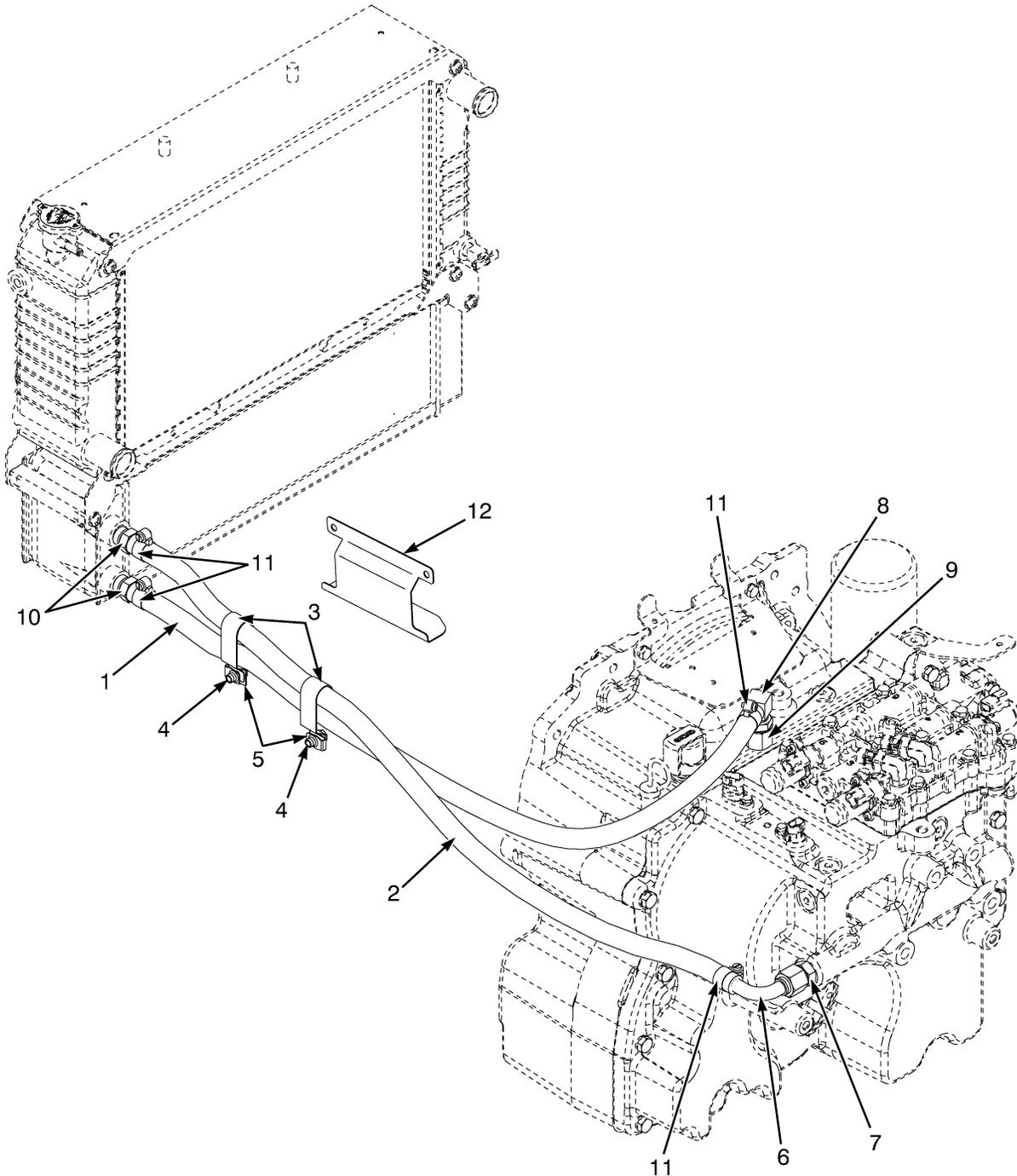




**SECTION 10  
TRANSMISSION**

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## TRANSMISSION COOLING (FIGURE 10-1) YANMAR 3.3L DIESEL — SQUARE WAVE WITH INTERNAL OIL COOLER



BP240164

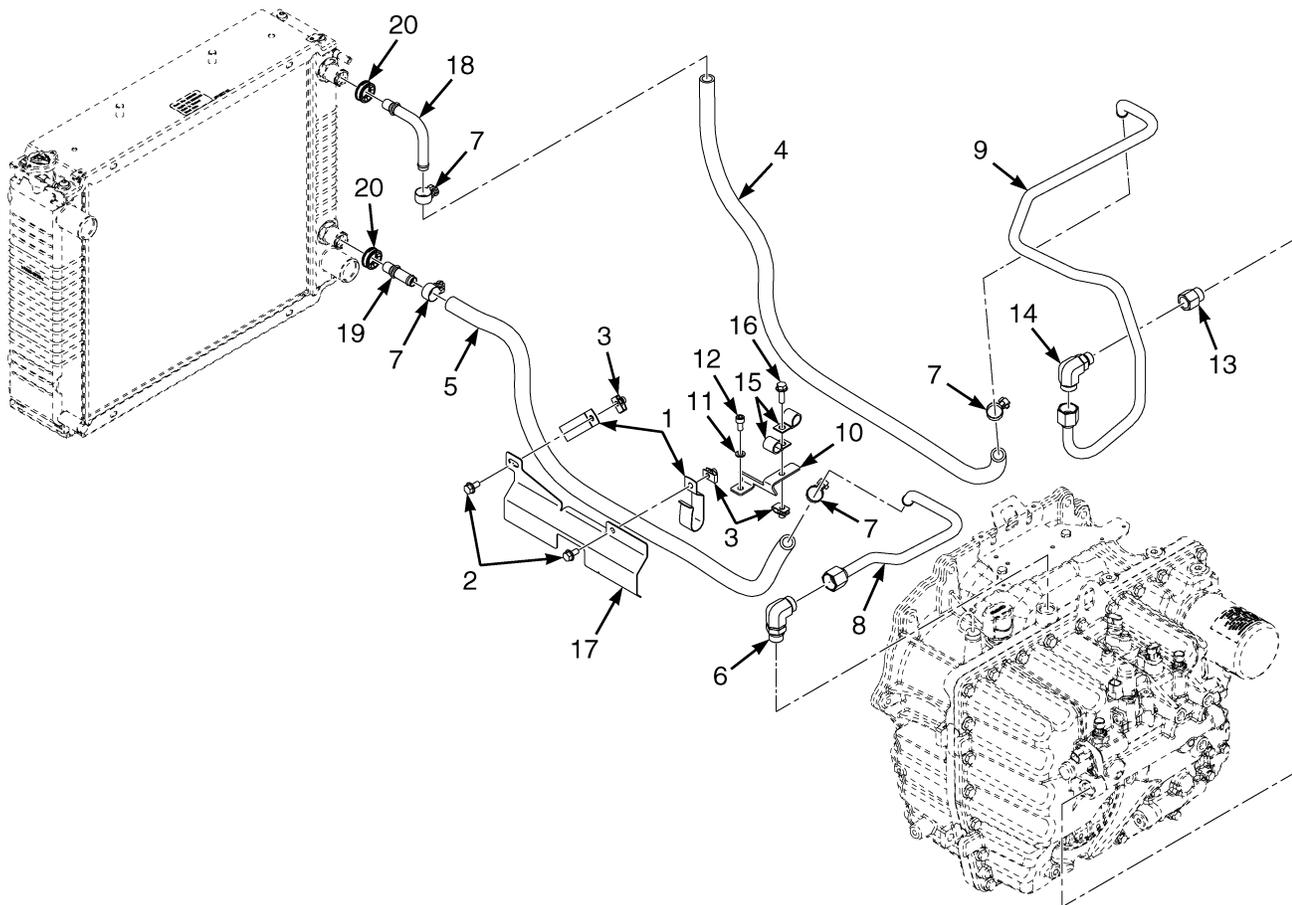
**TRANSMISSION COOLING**  
**YANMAR 3.3L DIESEL – SQUARE WAVE WITH INTERNAL OIL COOLER**

ITEM	PART NO.	DESCRIPTION	QTY
1	a 2107524	Hose .....	1
2	2110024	Hose .....	1
3	1562648	Clip .....	2
4	4109993		
	1527879	Capscrew .....	2
5	1480237	Nut , Foldover (Foldover) .....	2
6	2109875	Tube Assy .....	1
6	1487165	Fitting .....	1
7	1486749	Fitting .....	1
8	222512	Fitting .....	1
8	16485	O-Ring .....	1
9	1691525	Adapter (Not Used) .....	..
10	17223	Fitting .....	2
10	16485	O-Ring .....	1
11	130845	Clamp .....	4
12	1616979	Heat Shield .....	1

**FOOTNOTES:**

- a With Single Speed Transmission

## TRANSMISSION COOLING (FIGURE 10-2) 2.4L PSI ENGINE



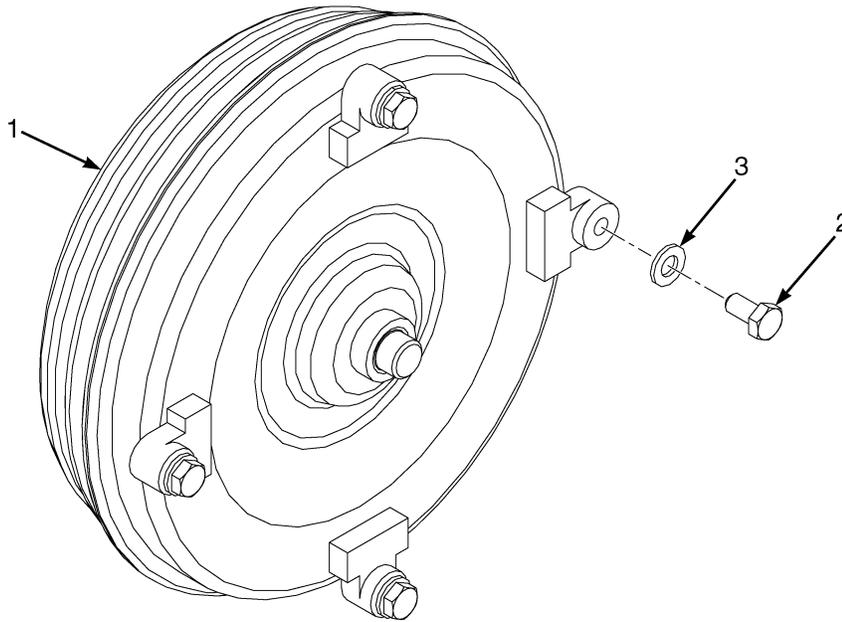
BP150707

**TRANSMISSION COOLING  
2.4L PSI ENGINE**

ITEM	PART NO.	DESCRIPTION	QTY
1	1562648	Clip .....	2
2	4109993		
	1527879	Capscrew .....	2
3	1480237	Nut , Foldover .....	4
4	2110024	Hose .....	1
5	4637164	Hose .....	1
6	4125957	Fitting .....	1
7	130845	Clamp .....	4
8	4644169	Tube Assy .....	1
9	4644170	Tube Assy .....	1
10	4123698	Bracket .....	1
11	292681	Lockwasher .....	1
12	296010	Capscrew .....	1
13	239222	Connector .....	1
13	16485	O-Ring .....	1
14	1487068	Fitting .....	1
15	128408	Clamp .....	2
16	1527880	Capscrew .....	1
17	4103550	Heat Shield .....	1
18	4634155		
	4643578	Tube (Transmission Cooling) .....	1
19	4634236		
	4643580	Tube (Transmission Cooling) .....	1
20	4130733	Dust Cap .....	2
20	<b>a</b> 4130734	Retainer .....	2

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

## TORQUE CONVERTER (FIGURE 10-3)

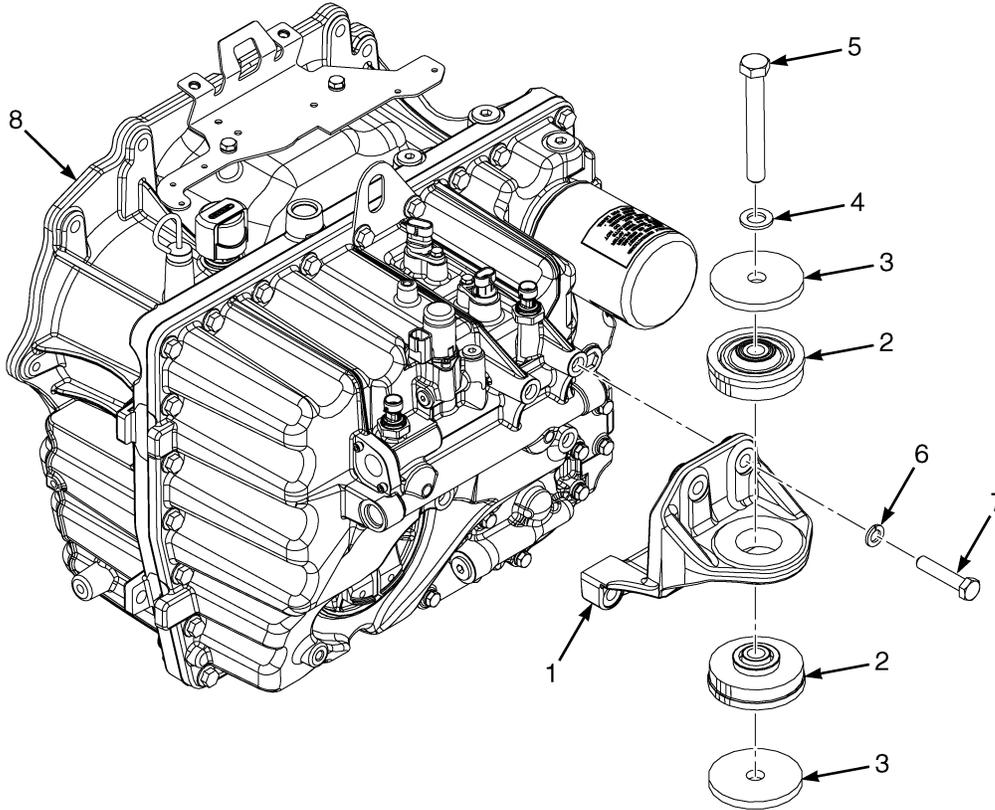


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**TORQUE CONVERTER****KEY:****A: PSI 2.4L LPG Engine****B: Yanmar Diesel Engine**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1553122	Torque Converter (PSI Engine) .....	1	..
1	1553123	Torque Converter (Kubota and Yanmar Engines) .....	..	1
2	1541921	Capscrew .....	..	4
2	4101319	Capscrew .....	4	..
3	296420	Washer .....	..	4
	360387	Loctite .....	AR	AR
	251979	Lubricant .....	AR	AR

## TRANSMISSION MOUNT (FIGURE 10-4) SINGLE SPEED — ALUMINUM CHAIN DRIVE

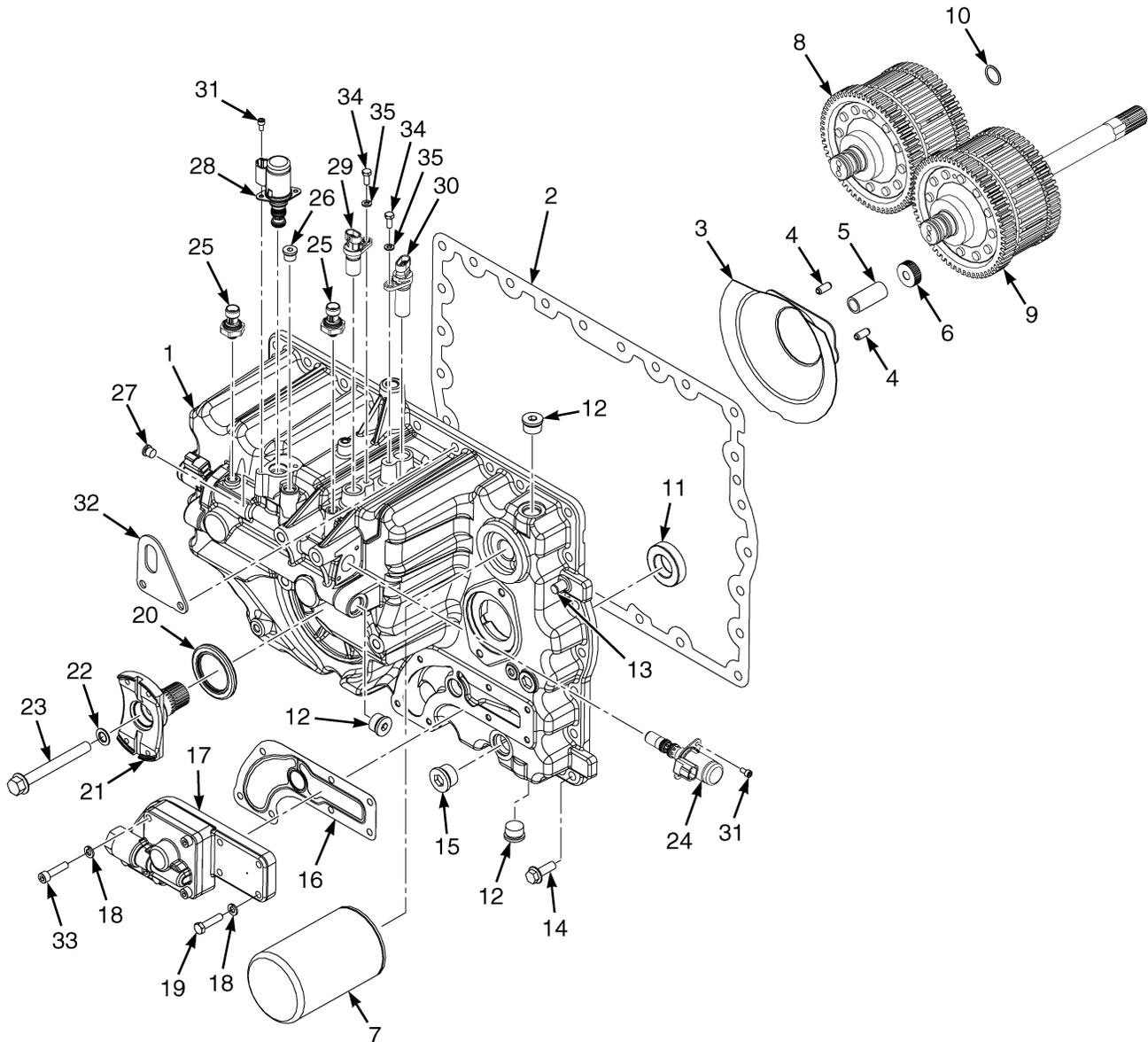


BP240237

ITEM	PART NO.	DESCRIPTION	QTY
1	1697665	Bracket .....	1
2	2070147	Isolator .....	2
3	4085524	Washer .....	2
4	320165	Washer .....	1
5	293697	Capscrew .....	1
6	292683	Lockwasher .....	4
7	292531	Capscrew .....	4
8	4089371	Transmission Assy (T1P8) (☞ Figure 10-5, ☞ Figure 10-6).....	1
	264134	Loctite .....	AR



## TRANSMISSION HOUSING AND ASSEMBLY (FIGURE 10-5) SINGLE SPEED — ALUMINUM CHAIN DRIVE

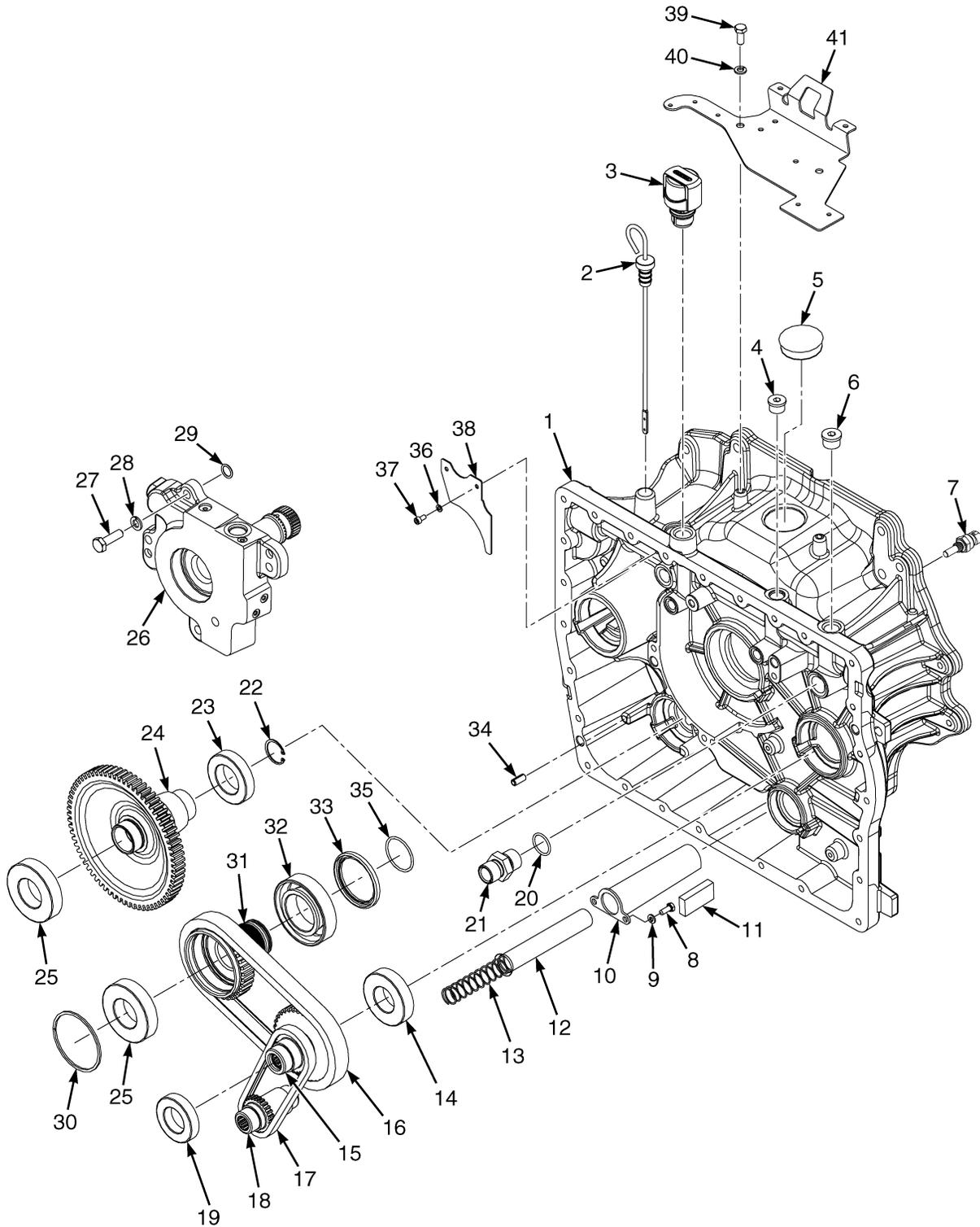


BP240243

**TRANSMISSION HOUSING AND ASSEMBLY  
SINGLE SPEED – ALUMINUM CHAIN DRIVE**

ITEM	PART NO.	DESCRIPTION	QTY
	4089371	Transmission Assy (T1P8) .....	1
1	4025209	Transmission Housing .....	1
2	1702335	Gasket .....	1
3	1688435	Cover .....	1
4	173056	Roll Pin .....	2
5	1636645	Spacer .....	1
6	1516849	Nut .....	1
7	4020588	Transmission Filter .....	1
8	1676324	Clutch Pack (Reverse) (☞Figure 10-9).....	1
9	1676323	Clutch Pack (Forward) (☞Figure 10-9).....	1
10	118361	O-Ring .....	1
11	44306	Ball Bearing .....	2
12	233693	Fitting .....	3
13	303150	Dowel .....	1
14	1527884	Capscrew .....	26
15	222444	Fitting .....	1
15	<del>1450764</del> 16486	O-Ring .....	1
16	1702336	Gasket .....	1
17	4614678	Charge Pump (☞Figure 10-10).....	1
18	292681	Lockwasher .....	7
19	293615	Capscrew .....	4
20	1547447	Oil Seal .....	1
21	1655880	Yoke .....	1
22	86229	Seal .....	1
23	1654651	Flange Head Capscrew .....	1
24	1660500	Solenoid Valve (Proportional Value) .....	2
25	2070263	Pressure Transducer .....	2
26	<del>1579809</del> 222443	Fitting .....	1
26	16483	O-Ring .....	1
27	222442	Fitting .....	1
27	16481	O-Ring .....	1
27	204128	Plug .....	1
28	1520660	Solenoid (Transmission Enable Valve) .....	1
29	1541231	Sensor (Input Speed, TISS) .....	1
30	1541232	Sensor (Output Speed, TOSS) .....	1
31	<del>384279</del> 293741	Capscrew .....	6
32	4025106	Bracket (Lifting Eye) .....	1
33	293622	Capscrew .....	3
34	292500	Capscrew .....	2
35	292680	Washer .....	2

## TORQUE CONVERTER HOUSING AND ATTACHING PARTS (FIGURE 10-6) SINGLE SPEED — ALUMINUM CHAIN DRIVE



BP240244

**TORQUE CONVERTER HOUSING AND ATTACHING PARTS**  
**SINGLE SPEED – ALUMINUM CHAIN DRIVE**

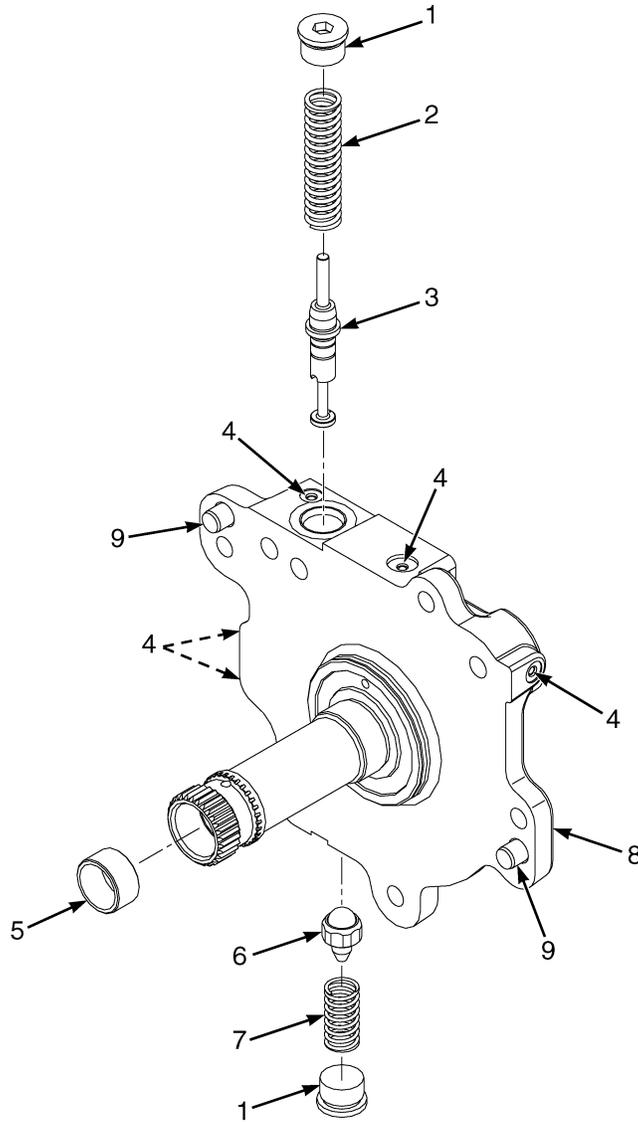
ITEM	PART NO.	DESCRIPTION	QTY
	4089371	Transmission Assy (T1P8) .....	1
1	4016150	Converter Housing .....	1
2	1624401	Dipstick .....	1
3	1632741	Breather .....	1
3	<del>1450764</del>		
	16486	O-Ring .....	1
4	<del>1589792</del>		
	235691	Fitting .....	1
5	1703644	Plug .....	1
6	233693	Fitting .....	3
6	16485	O-Ring .....	1
7	1515654	Temperature Sensor .....	1
8	292500	Capscrew .....	2
9	292680	Washer .....	2
10	1702520	Cover (Suction Screen) .....	1
11	334560	Magnet .....	1
12	334450	Screen .....	1
13	1688598	Spring .....	1
14	43207	Ball Bearing .....	1
15	4016152	Sprocket (Driven) .....	1
16	4020467	Drive Chain .....	1
17	4020466	Drive Chain .....	1
18	4010318	Sprocket (Driven) .....	1
19	44307	Ball Bearing .....	1
20	39375	O-Ring .....	1
21	1558515	Fitting .....	1
22	58916	Snap Ring .....	1
23	44308	Ball Bearing .....	1
24	1684389	Transmission Gear (Output) .....	1
25	43208	Ball Bearing .....	2
26	1675647	Housing (Stator Support Assembly) (☞ Figure 10-7).....	1
27	287860	Capscrew .....	4
28	<del>388049</del>		
	292682	Lockwasher .....	4
29	104681	O-Ring .....	2
30	1544218	Sealing Ring .....	1
31	4016151	Sprocket (Driving) .....	1
32	1544216	Bearing .....	1
33	1544217	Oil Seal (Torque Converter) .....	1
34	303150	Dowel .....	1
35	145481	O-Ring .....	1
36	292679	Washer .....	2
37	<del>384279</del>		
	293741	Capscrew .....	2
38	4020311	Plate (Baffle) .....	1
39	136681	Capscrew .....	2
40	292681	Lockwasher .....	2
41	4103857	Plate Wldmt .....	1
41	<b>a</b> 4103856	Cover .....	1

**FOOTNOTES:**

- a Requires (2) 1480237 Clip Nuts



## STATOR SUPPORT HOUSING (FIGURE 10-7)

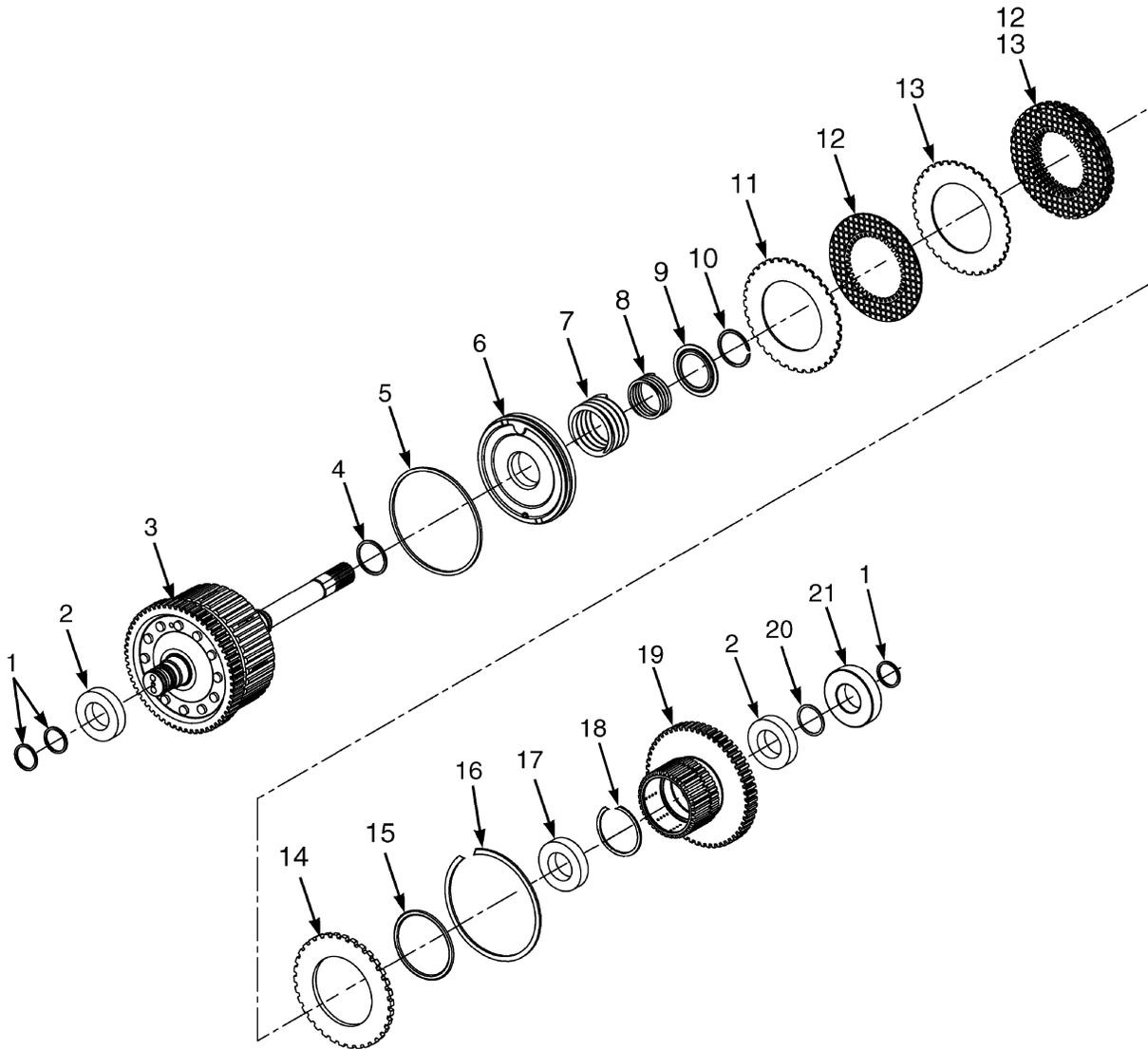


BP240196

**STATOR SUPPORT HOUSING**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
	1675647	Housing Stator Support .....	1
1	233693	Fitting .....	2
1	16485	O-Ring .....	1
2	1676327	Spring (Pack Regulator) .....	1
3	1676326	Spool (Pack Regulator) .....	1
4	.....	Plug .....	5
5	1516826	Bushing .....	1
6	63081	Ball .....	1
7	1676328	Spring (Converter Relief) .....	1
8	.....	Body .....	1
9	303150	Dowel .....	2

**INPUT/FORWARD CLUTCH (FIGURE 10-8)  
SINGLE SPEED TRANSMISSION**

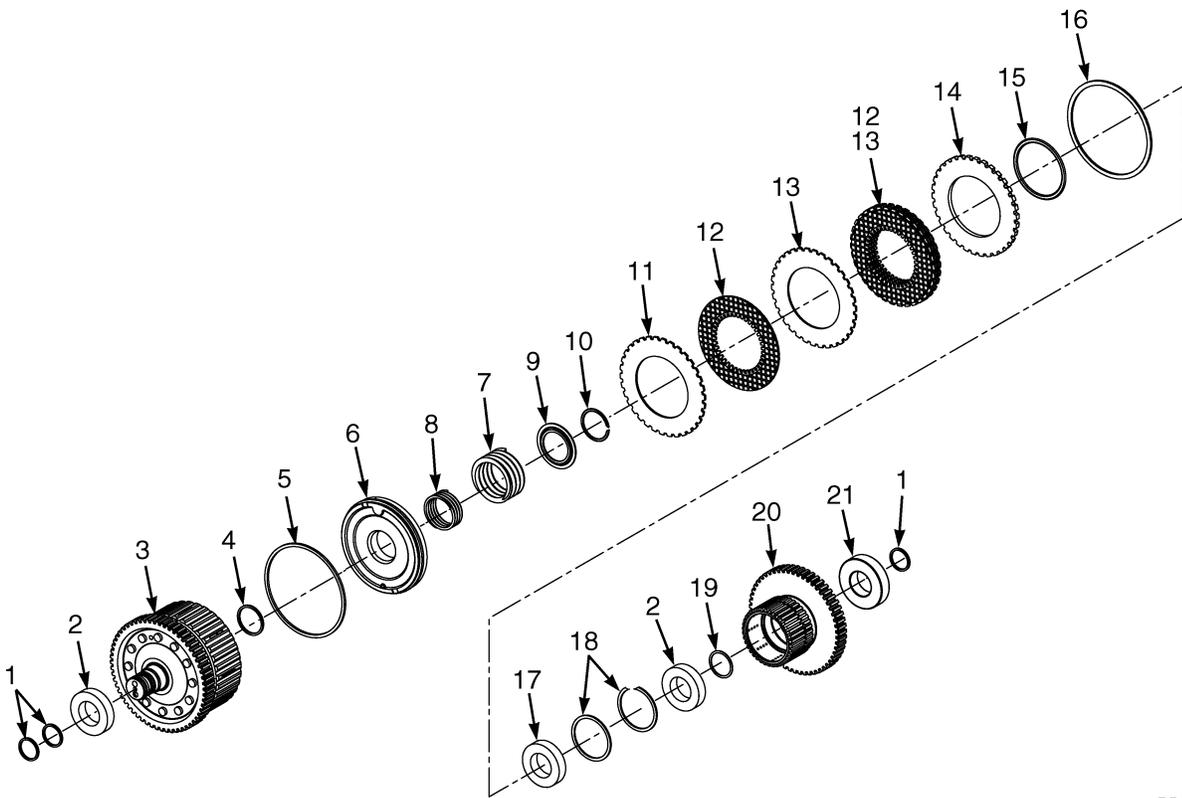


BP240240

**INPUT/FORWARD CLUTCH  
SINGLE SPEED TRANSMISSION**

ITEM	PART NO.	DESCRIPTION	QTY
	1676323	Clutch Pack .....	1
1	.....	Ring Seal .....	3
2	1581116		
	4025477	Ball Bearing .....	2
3	4053208	Shaft .....	1
4	.....	Ring Seal .....	1
5	.....	Ring Seal .....	1
6	2085129	Piston .....	1
7	1581108	Spring .....	1
8	1581098	Spring .....	1
9	1581099	Spring Guide .....	1
10	1581100	Snap Ring .....	1
11	.....	Conical Plate .....	1
12	.....	Friction Plate .....	5
13	.....	Separator Plate .....	4
14	1537449	Pressure Plate (6.0 mm) .....	1
15	.....	O-Ring .....	1
16	1537450	Snap Ring .....	1
17	124603	Ball Bearing .....	1
18	1581107	Snap Ring .....	1
19	4007889	Clutch Gear .....	1
20	1537459	Snap Ring .....	1
21	43207	Ball Bearing .....	1
	1543102	Kit-Clutch Pack Plates (Includes Items 11-13) .....	1
	1595425	Kit-Clutch Pack Seals (Includes Items 1, 4-5, 15) .....	1

**COUNTER/REVERSE CLUTCH (FIGURE 10-9)  
SINGLE SPEED TRANSMISSION**

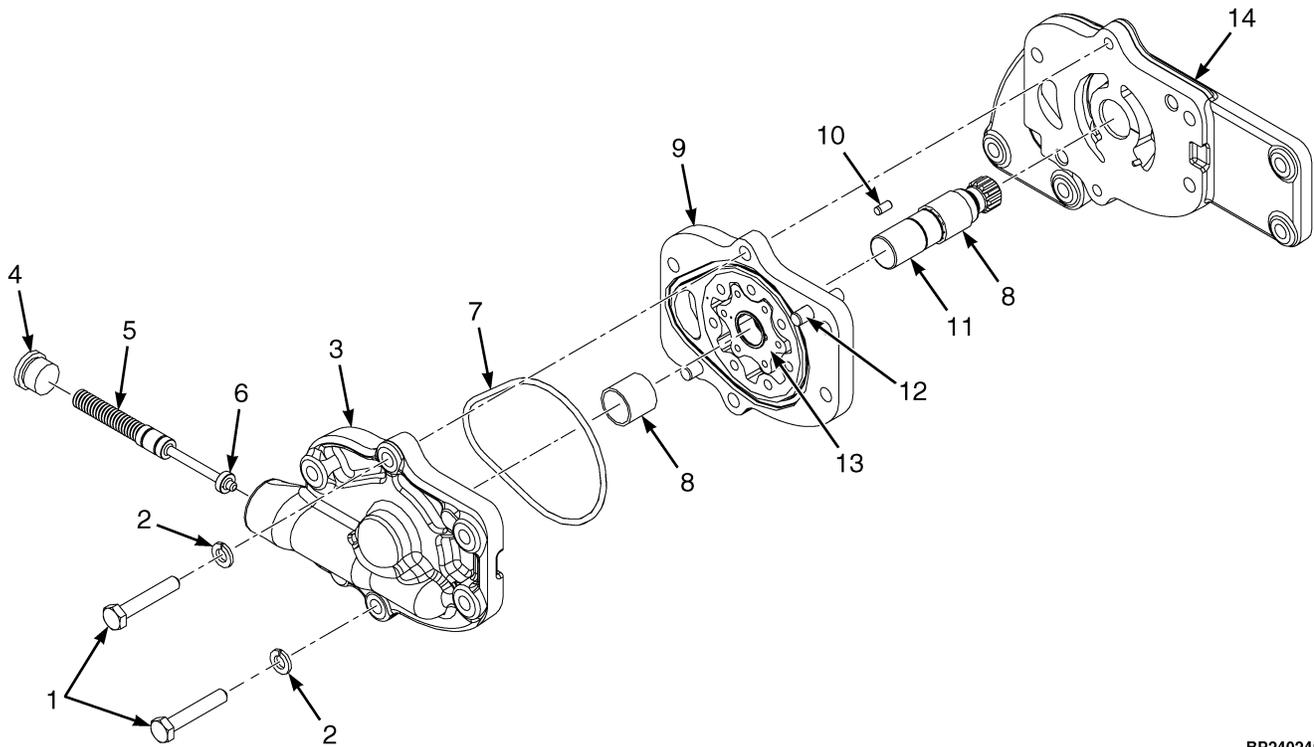


BP240099

**COUNTER/REVERSE CLUTCH  
SINGLE SPEED TRANSMISSION**

ITEM	PART NO.	DESCRIPTION	QTY
	1676324	Clutch Pack .....	1
1	.....	Seal .....	3
2	1581416		
	4025477	Ball Bearing .....	2
3	4007888	Shaft .....	1
4	.....	Seal .....	1
5	.....	Seal .....	1
6	2085129	Piston .....	1
7	1581108	Spring .....	1
8	1581098	Spring .....	1
9	1581099	Spring Guide .....	1
10	1581100	Snap Ring .....	1
11	.....	Conical Plate .....	1
12	.....	Friction Plate .....	5
13	.....	Separator Plate .....	4
14	1543094	Pressure Plate (5.8 mm) .....	1
15	.....	O-Ring .....	1
16	1537450	Snap Ring .....	1
17	124603	Ball Bearing .....	1
18	1581107	Snap Ring .....	1
19	1537459	Snap Ring .....	1
20	4007889	Clutch Gear .....	1
21	43207	Ball Bearing .....	1
	1543102	Kit-Clutch Pack Plates (Includes Items 11-13) .....	1
	1595425	Kit-Clutch Pack Seals (Includes Items 1, 4-5, 15) .....	1

## CHARGE PUMP ASSEMBLY (FIGURE 10-10)



BP240245

ITEM	PART NO.	DESCRIPTION	QTY
	<b>a</b> 4614678	Charge Pump .....	1
1	293618	Capscrew .....	2
2	292681	Lockwasher .....	2
3	.....	Charge Pump Section (Basic Cover) .....	1
4	1589792	Fitting .....	1
	235691	.....	1
5	.....	Spring .....	1
6	.....	Spool .....	1
7	4027880	O-Ring .....	2
8	1703021	Bushing .....	2
9	.....	Housing .....	1
10	1703020	Pin .....	1
11	.....	Drive Shaft Pump .....	1
12	302374	Dowel .....	2
13	.....	Rotor .....	1
14	.....	Charge Pump Section (Base) .....	1

### FOOTNOTES:

**a** Single Speed

11

DRIVE AXLE



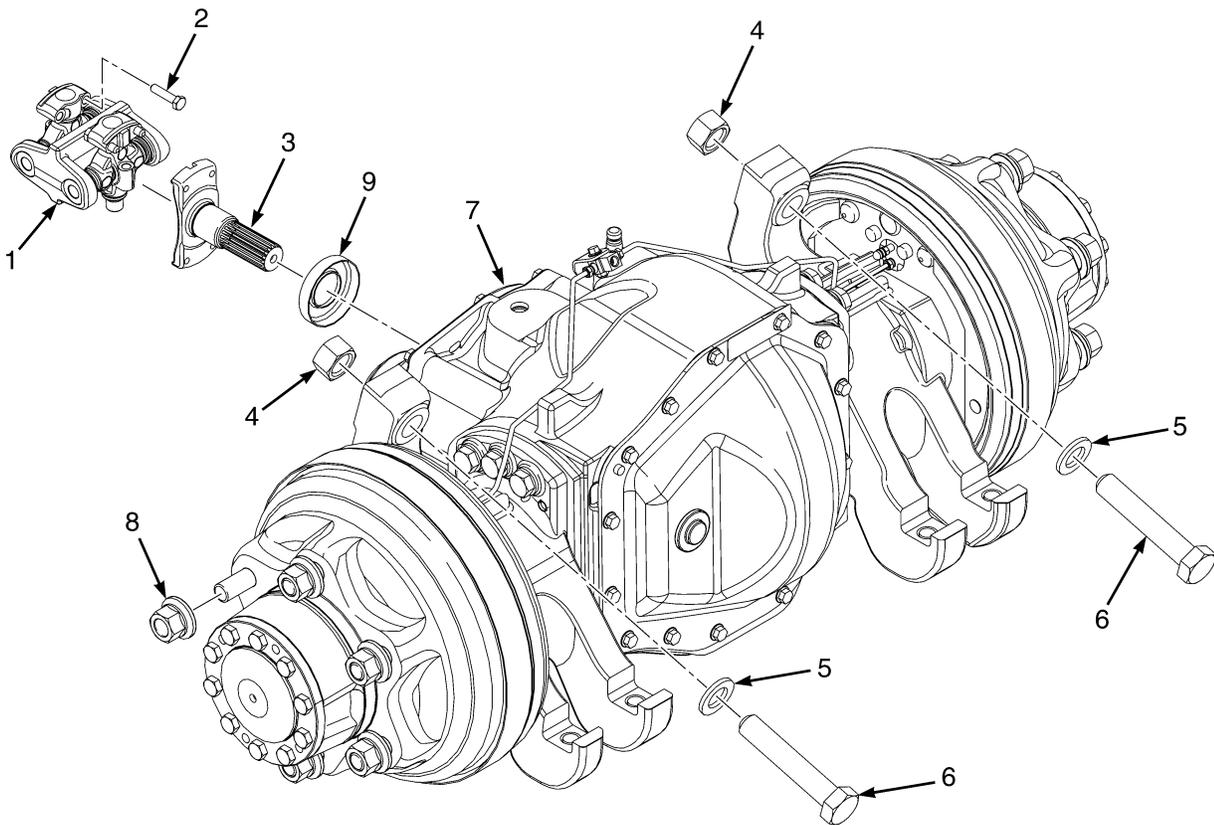
**SECTION 11  
DRIVE AXLE**

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<b>DESCRIPTION</b>	<b>PAGE</b>
<b>DRIVE AXLE</b>	
DRY BRAKE - SHEET 1 OF 3 .....	11-4
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DRY BRAKE - SHEET 3 OF 3 .....	11-8
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RADIAL TIRE .....	11-18
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SOLID TIRE .....	11-12
SOLID TIRE - DUAL WHEEL .....	11-14

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## DRIVE AXLE AND ATTACHING PARTS (FIGURE 11-1) DRY BRAKE



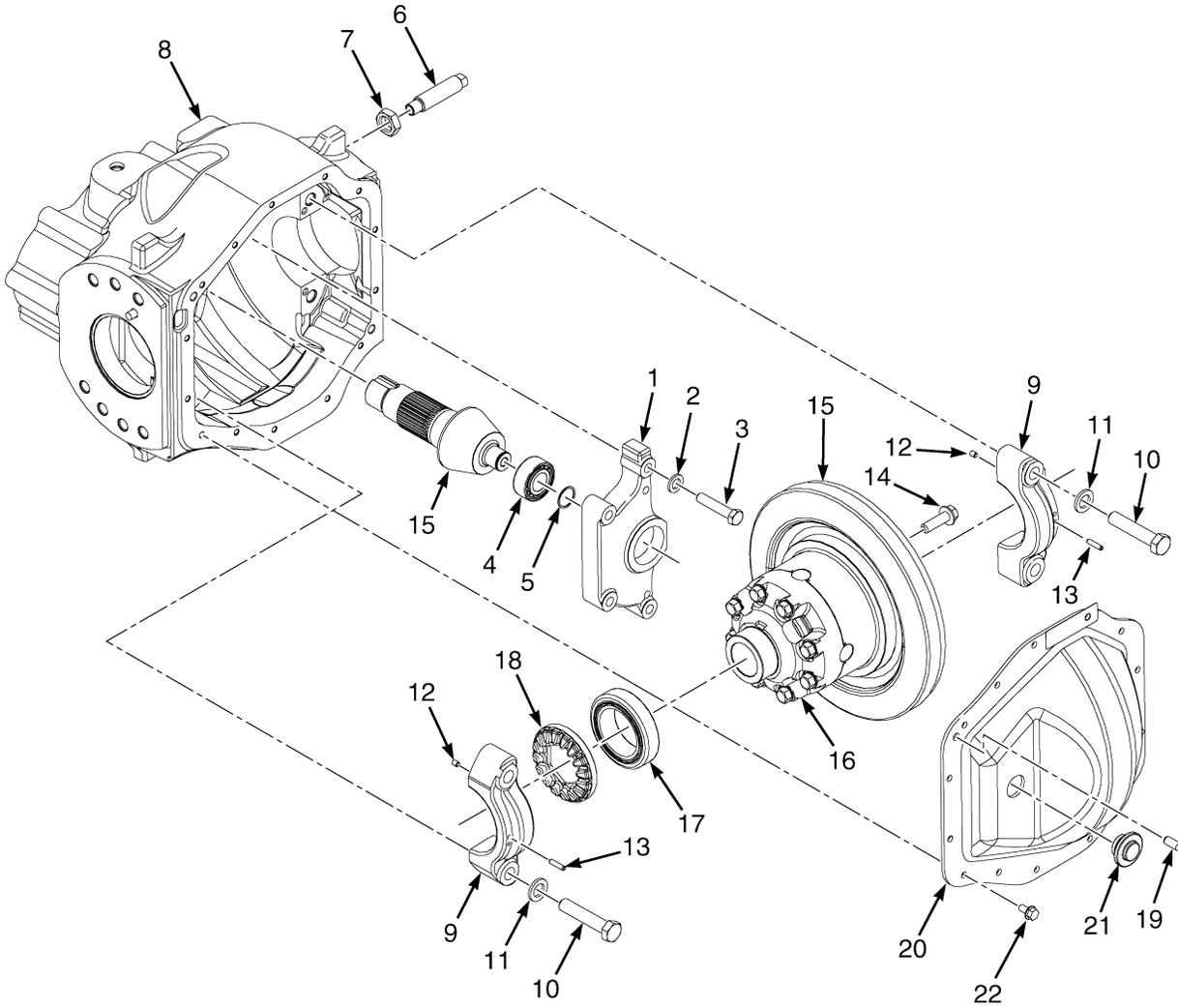
BP070133

**DRIVE AXLE AND ATTACHING PARTS  
DRY BRAKE**

ITEM	PART NO.	DESCRIPTION	QTY
1	1547757	Drive Shaft .....	1
2	293616	Capscrew .....	8
3	1517673	Shaft .....	1
4	292660	Nut .....	4
5	296434	Washer .....	4
6	293733	Capscrew .....	4
7	<b>b</b> 4624290	Drive Axle (2.17 Gear Ratio) (☞ Figure 11-2, ☞ Figure 11-3, ☞ Figure 11-4).....	1
7	<b>a</b> 4624291	Drive Axle (2.48 Gear Ratio) (☞ Figure 11-2, ☞ Figure 11-3, ☞ Figure 11-4).....	1
8	1537133	Wheel Nut .....	12
9	4000205	Dust Cover .....	1

**FOOTNOTES:****a** PSI LPG**b** Yanmar 3.3L Engine

## DRIVE AXLE (FIGURE 11-2) DRY BRAKE — SHEET 1 OF 3



BP070134

**DRIVE AXLE  
DRY BRAKE – SHEET 1 OF 3**

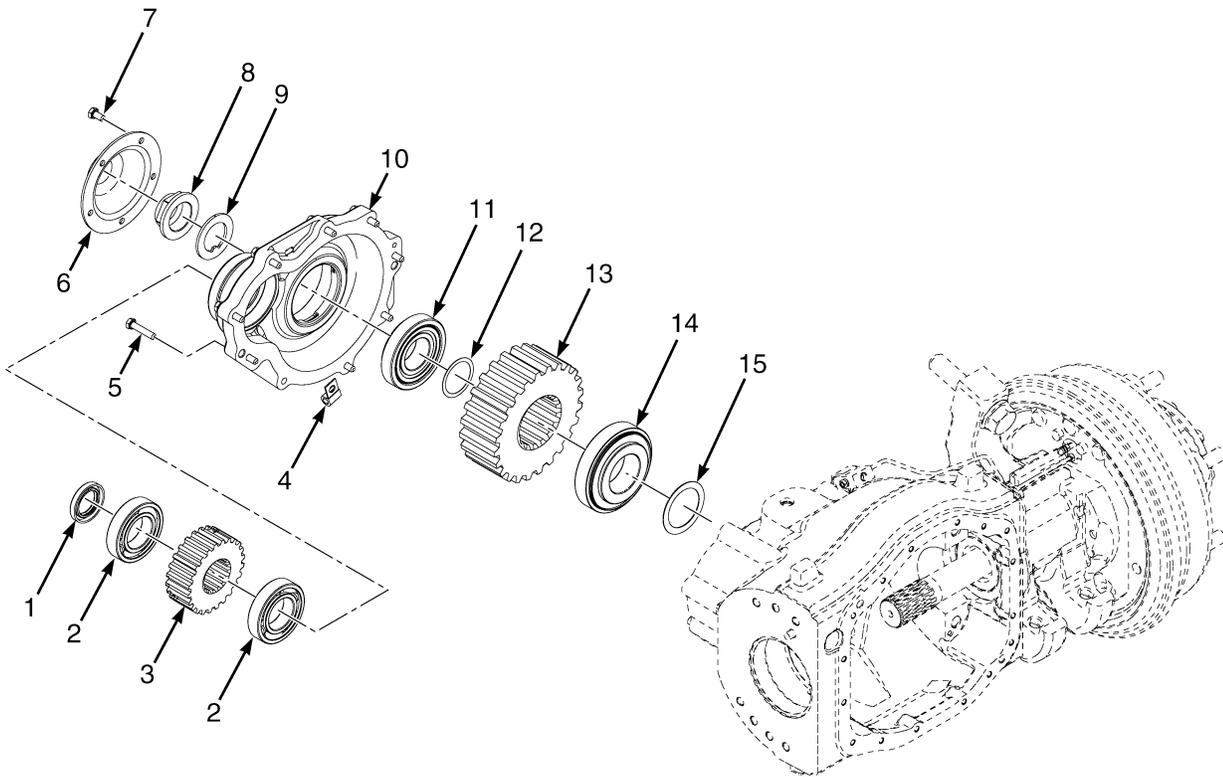
ITEM	PART NO.	DESCRIPTION	QTY
	<b>c</b> 4624290	Drive Axle (2.17 Gear Ratio) .....	1
	<b>b</b> 4624291	Drive Axle (2.48 Gear Ratio) .....	1
1	1512561	Support .....	1
2	296422	Washer .....	4
3	293651	Capscrew .....	4
4	135158	Bearing .....	1
5	320264	Snap Ring .....	1
6	1583732	Thrust Screw .....	1
7	296137	Nut .....	1
8	1656333	Drive Axle Housing (Center) .....	1
9	.....	Bearing Cap .....	2
10	293692	Capscrew .....	4
11	296426	Washer .....	4
12	234038	Dowel .....	4
13	15242	Cotter Pin .....	2
14	2029436	Bolt .....	14
15	2067965	Gear and Pinion (Hypoid) .....	1
16	2067962	Differential (☞ Figure 11-5).....	1
17	1375488	Bearing Set .....	2
17	2027661	Roller Bearing (Optional) .....	2
18	1652926	Retainer .....	2
19	302385	Dowel .....	7
20	1532735	Cover (Center) .....	1
21	1516075	Plug , Oil Level .....	1
22	4109993		
	1527879	Capscrew .....	15
	<b>a</b> 264159	Adhesive .....	AR
	<b>a</b> 383789	Thread Sealant .....	AR

**FOOTNOTES:**

**a** Not Illustrated  
**b** PSI

**c** Yanmar 3.3L

## DRIVE AXLE (FIGURE 11-3) DRY BRAKE — SHEET 2 OF 3



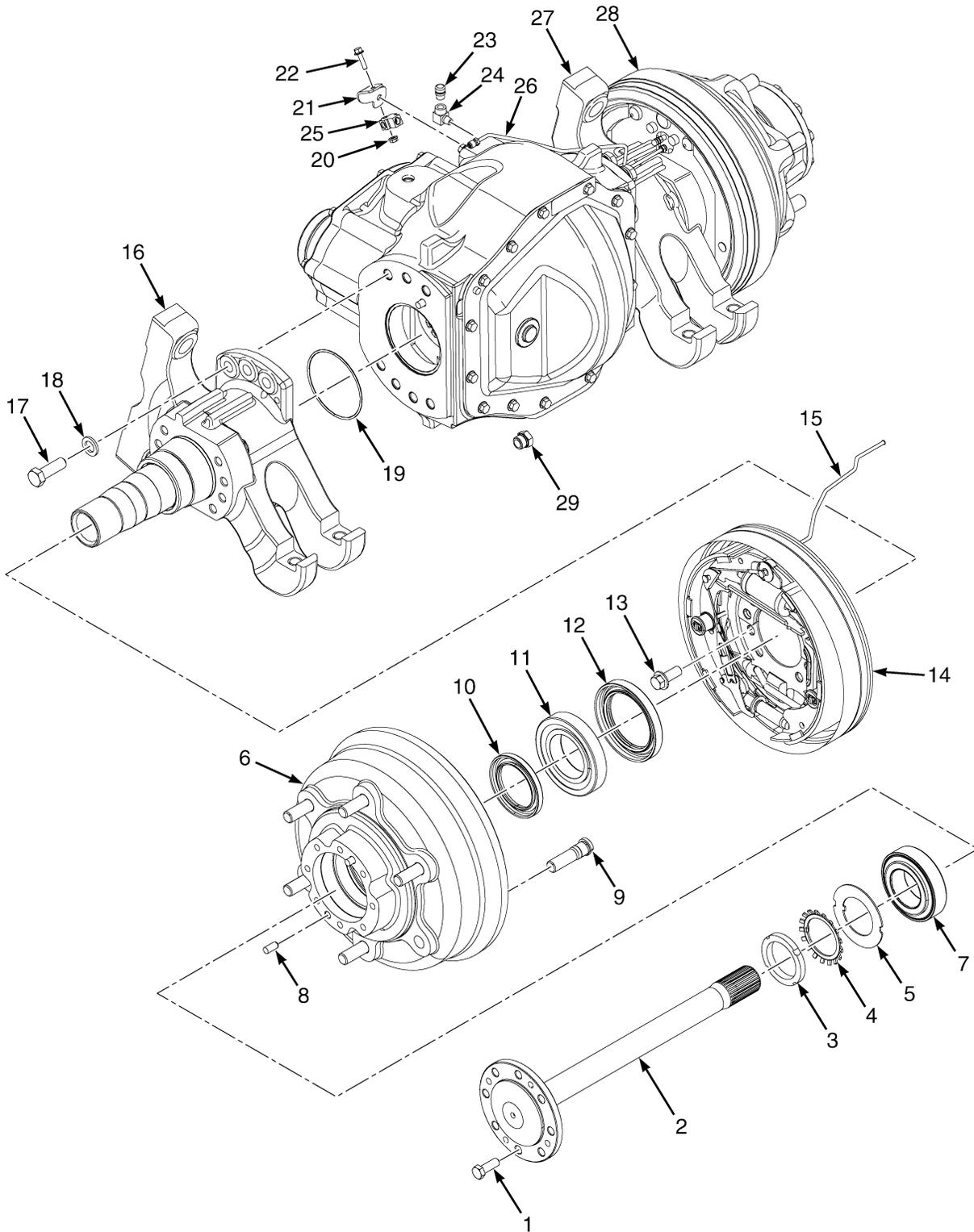
BP070135

**DRIVE AXLE  
DRY BRAKE – SHEET 2 OF 3**

ITEM	PART NO.	DESCRIPTION	QTY
	<b>b</b> 4624290	Drive Axle (2.17 Gear Ratio) .....	1
	<b>a</b> 4624291	Drive Axle (2.48 Gear Ratio) .....	1
1	1522377	Oil Seal .....	1
2	1523479	Ball Bearing .....	2
3	1517578	Gear (2.17 Gear Ratio) (Drive) .....	1
3	1516530	Gear (2.49 Gear Ratio) (Drive) .....	1
4	2075120	Clamp .....	2
4	164488	Clamp (Optional) .....	2
5	1510114	Capscrew .....	9
6	1516536	Cover (Pinion) .....	1
7	<del>4109993</del> 1527879	Capscrew .....	5
8	2026861	Nut .....	1
9	1530588	Washer .....	1
10	1516535	Housing .....	1
11	2022352	Tapered Roller Bearing .....	1
11	1578978	Tapered Roller Bearing (Optional) .....	1
12	1516335	Shim (0.019 in.) .....	AR
12	1516331	Shim (0.004 in.) .....	AR
12	1516332	Shim (0.005 in.) .....	AR
12	1516333	Shim (0.007 in.) .....	AR
12	1516334	Shim (0.009 in.) .....	AR
13	1517576	Gear (2.17 Gear Ratio) (Driven) .....	1
13	1516526	Gear (2.48 Gear Ratio) (Driven) .....	1
14	2028862	Tapered Roller Bearing .....	1
14	1578981	Tapered Roller Bearing .....	1
15	1520755	Shim (0.04 in.) .....	AR
15	1569912	Shim (0.008 in.) .....	AR
15	1569913	Shim (0.009 in.) .....	AR
15	1520752	Shim (0.012 in.) .....	AR
15	1569914	Shim (0.014 in.) .....	AR
15	1520753	Shim (0.016 in.) .....	AR
15	1569915	Shim (0.018 in.) .....	AR
15	1520754	Shim (0.19 in.) .....	AR

**FOOTNOTES:****a** PSI**b** Yanmar 3.3L Engine

## DRIVE AXLE (FIGURE 11-4) DRY BRAKE — SHEET 3 OF 3



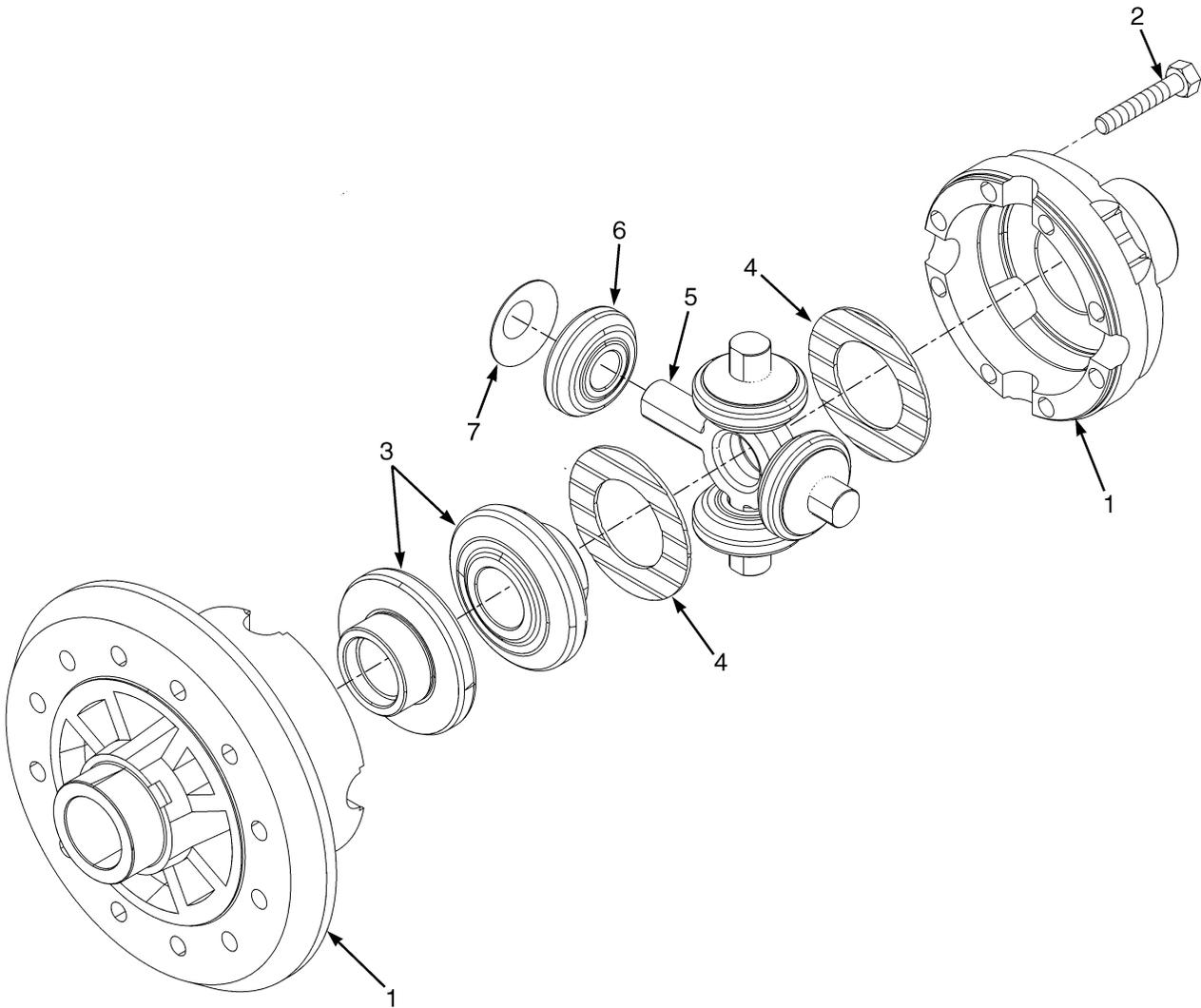
BP070136

**DRIVE AXLE  
DRY BRAKE – SHEET 3 OF 3**

ITEM	PART NO.	DESCRIPTION	QTY
	<b>b</b> 4624290	Drive Axle (2.17 Gear Ratio) .....	1
	<b>a</b> 4624291	Drive Axle (2.48 Gear Ratio) .....	1
1	293646	Capscrew .....	20
2	1532708	Axle Shaft .....	2
3	2028145	Nut .....	2
4	2027756	Lockwasher .....	2
5	1515219	Washer .....	2
6	1634451	Hub Assembly .....	2
6	1614672	Hub .....	1
7	2027663	Bearing Set (Tapered) .....	1
8	302385	Dowel .....	2
9	1532337	Wheel Stud .....	6
10	2028621	Oil Seal .....	1
11	<del>1375492</del>		
	2027662	Bearing Set (Tapered) .....	1
12	2027817	Oil Seal .....	1
13	1327246	Bolt .....	16
14	1579455	Brake Assembly (RH) (☞ Figure 13-3).....	1
15	4630498	Tube Assy (RH Brake Line) .....	1
16	4061321	Hanger (RH) .....	1
17	293686	Capscrew .....	14
18	296426	Washer .....	14
19	2027828	O-Ring .....	2
20	<del>1307884</del>		
	1514429	Nut .....	1
21	1618311	Bracket .....	1
22	1527878	Capscrew .....	1
23	21420	Breather .....	1
24	16151	Fitting .....	1
25	1641351	Fitting .....	1
26	2063265	Tube Assy (LH Brake line) .....	1
27	4061320	Hanger (LH) .....	1
28	1579454	Brake Assembly (LH) (☞ Figure 13-3).....	1
29	1521809	Drain Plug .....	1

**FOOTNOTES:****a** PSI**b** Yanmar 3.3L

## DRIVE AXLE (FIGURE 11-5) DRY BRAKE — DIFFERENTIAL

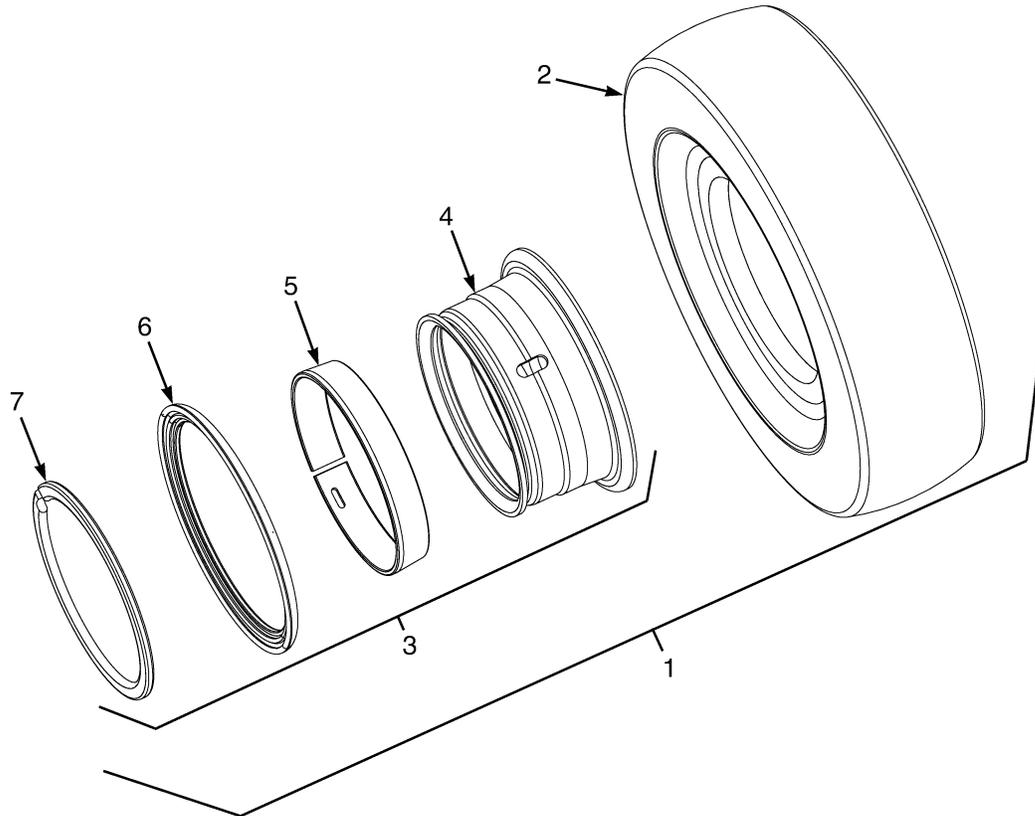


BP070055

**DRIVE AXLE  
DRY BRAKE – DIFFERENTIAL**

ITEM	PART NO.	DESCRIPTION	QTY
	2067962	Differential .....	1
1	.....	Case Set .....	1
2	1565327	Bolt .....	8
3	.....	Gear (Side) .....	2
4	.....	Washer (Side) .....	2
5	2029383	Spider .....	1
6	.....	Gear (Pinion) .....	4
7	.....	Washer (Pinion) .....	4
	1606532	Kit-Gear (Includes Items 3, 6) .....	1
	1565324	Kit-Washer (Includes Items 4, 7) .....	1

## DRIVE TIRES AND WHEELS (FIGURE 11-6) SOLID TIRE



BP220220

**KEY:**

**A:** 7.00 x 12 (H40-50FT)

**B:** 28 x 9-15 (H40-70FT)

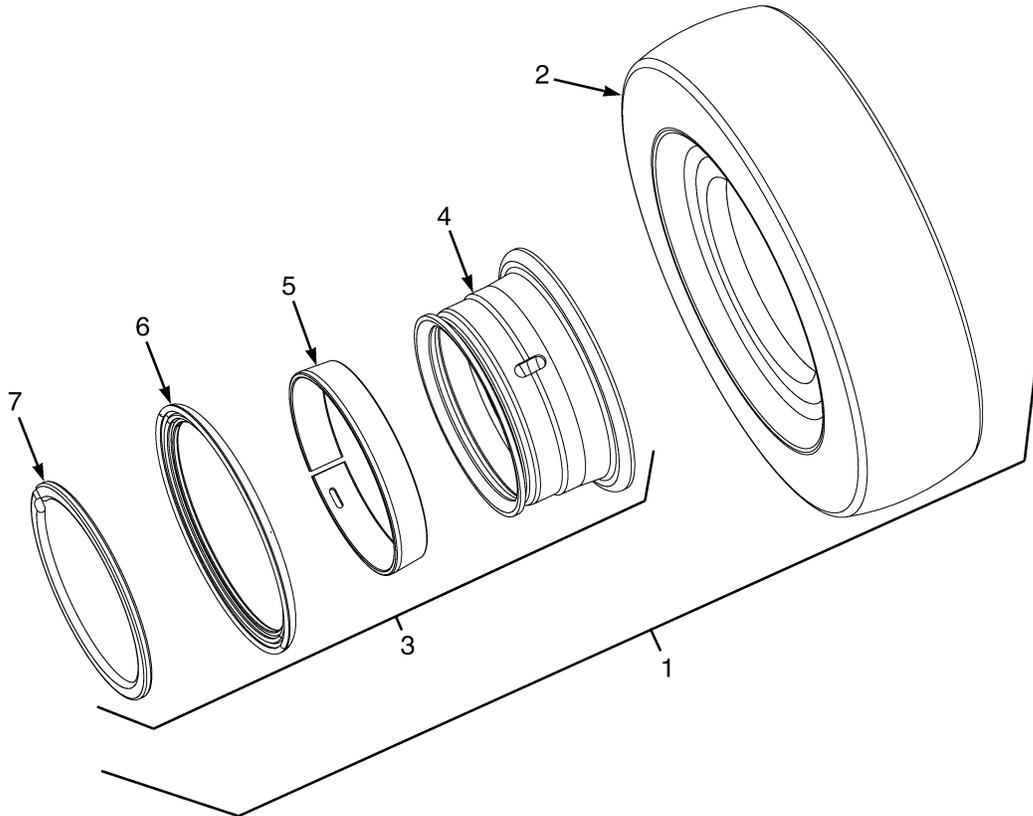
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4045805	Wheel And Tire (CB/WH) (Standard Compound) .....	2	..
1	4045808	Wheel And Tire (CB/WH) (Non-Marking Compound) .....	2	..
1	4045815	Wheel And Tire (CB/WH) (Standard Compound) .....	..	2
1	4045818	Wheel And Tire (CB/WH) (Non-Marking Compound) .....	..	2
1	<b>a</b> 4045824	Wheel And Tire (CB/WH) (Standard Compound) .....	2	..
1	<b>a</b> 4045827	Wheel And Tire (CB/WH) (Non-Marking Compound) .....	2	..
1	<b>a</b> 4045834	Wheel And Tire (CB/WH) (Standard Compound) .....	..	2
1	<b>a</b> 4045843	Wheel And Tire (CB/WH) (Non-Marking Compound) .....	..	2
2	4045806	Tire (Standard Compound) .....	1	..
2	4045809	Tire (Non-Marking Compound) .....	1	..
2	4045816	Tire (Standard Compound) .....	..	1
2	4045819	Tire (Non-Marking Compound) .....	..	1
3	2070073	Wheel Assy (5.00 x 12) .....	1	..
3	2070074	Wheel Assy (7.00 x 15) .....	..	1
3	<b>a</b> 2070075	Wheel Assy (5.00 x 12) .....	1	..
3	<b>a</b> 2070076	Wheel Assy (7.00 x 15) .....	..	1
4	2070080	Rim .....	1	..
4	2070079	Rim .....	..	1

**KEY:****A: 7.00 x 12 (H40-50FT)****B: 28 x 9-15 (H40-70FT)**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
4	a 2070078	Rim .....	1	..
4	a 2070077	Rim .....	..	1
5	1584694	Wedge Band .....	1	..
5	1584695	Wedge Band .....	..	1
6	161890	Wheel Side Ring .....	1	..
6	160653	Wheel Side Ring .....	..	1
7	161889	Wheel Lock Ring .....	1	..
7	980542	Wheel Lock Ring .....	..	1

**FOOTNOTES:****a** Wide Option

## DRIVE TIRES AND WHEELS (FIGURE 11-7) SOLID TIRE — DUAL WHEEL



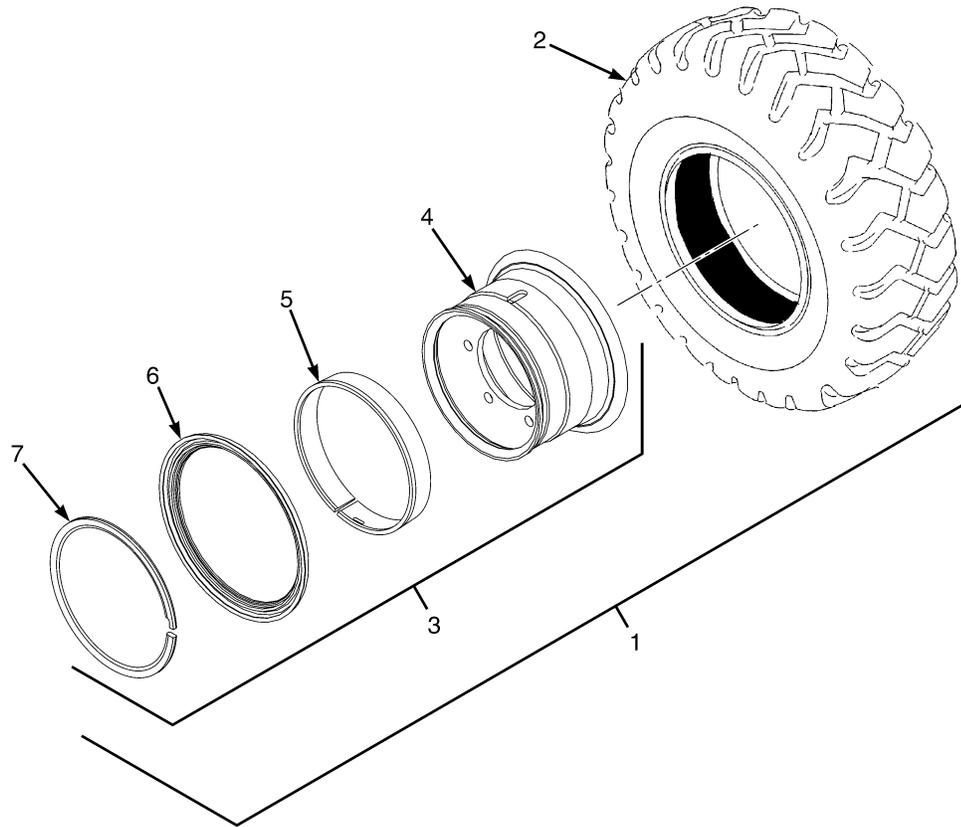
BP220220

**KEY:**

- A: Standard Compound**
- B: Non-Marking Compound**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4045987	Wheel And Tire (CB/WH) (7.00 x 12) .....	4	..
1	4045990	Wheel And Tire (CB/WH) (7.00 x 12) .....	..	4
2	4045806	Tire .....	2	..
2	4045809	Tire .....	..	2
3	2070073	Wheel Assy (5.00 x 12) .....	2	2
4	2070080	Rim .....	1	1
5	1584694	Wedge Band .....	1	1
6	161890	Wheel Side Ring .....	1	1
7	161889	Wheel Lock Ring .....	1	1

**DRIVE TIRES AND WHEELS (FIGURE 11-8)  
PNEUMATIC**



BP070185

**KEY:**

**A: 7.00 X 12 - 14PR(H40-50FT)**

**B: 28 X 9 15 - 14PR (H40-70FT)**

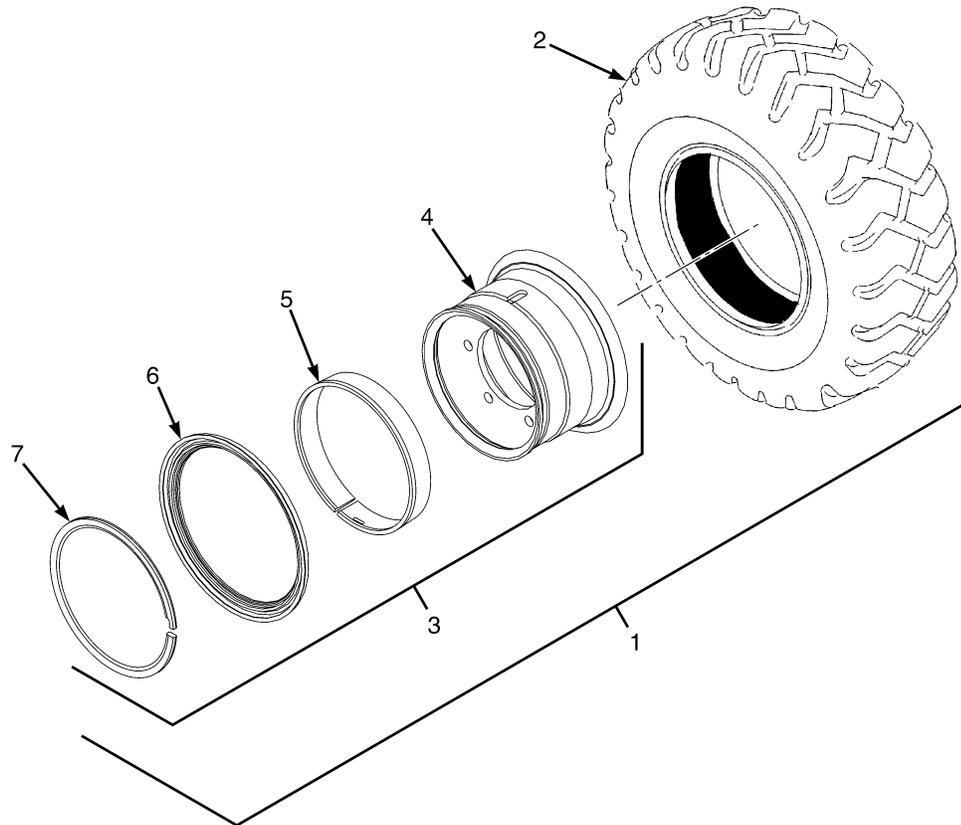
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4045802	Wheel And Tire (CB/WH) .....	2	..
1	4045812	Wheel And Tire (CB/WH) .....	..	2
1	<b>a</b> 4045821	Wheel And Tire (CB/WH) .....	2	..
1	<b>a</b> 4045830	Wheel And Tire (CB/WH) .....	..	2
2	4045803	Tire .....	1	..
2	4045813	Tire .....	..	1
3	2070073	Wheel Assy (5.00 x 12) .....	1	..
3	2070074	Wheel Assy (7.00 x 15) .....	..	1
3	<b>a</b> 2070075	Wheel Assy (5.00 x 12) .....	1	..
3	<b>a</b> 2070076	Wheel Assy (7.00 x 15) .....	..	1
4	2070080	Rim .....	1	..
4	2070079	Rim .....	..	1
4	<b>a</b> 2070078	Rim .....	1	..
4	<b>a</b> 2070077	Rim .....	..	1
5	1584694	Wedge Band .....	1	..
5	1584695	Wedge Band .....	..	1
6	161890	Wheel Side Ring .....	1	..
6	160653	Wheel Side Ring .....	..	1

**KEY:****A: 7.00 X 12 - 14PR(H40-50FT)****B: 28 X 9 15 - 14PR (H40-70FT)**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
7	161889	Wheel Lock Ring .....	1	..
7	980542	Wheel Lock Ring .....	..	1

**FOOTNOTES:****a** Wide Option

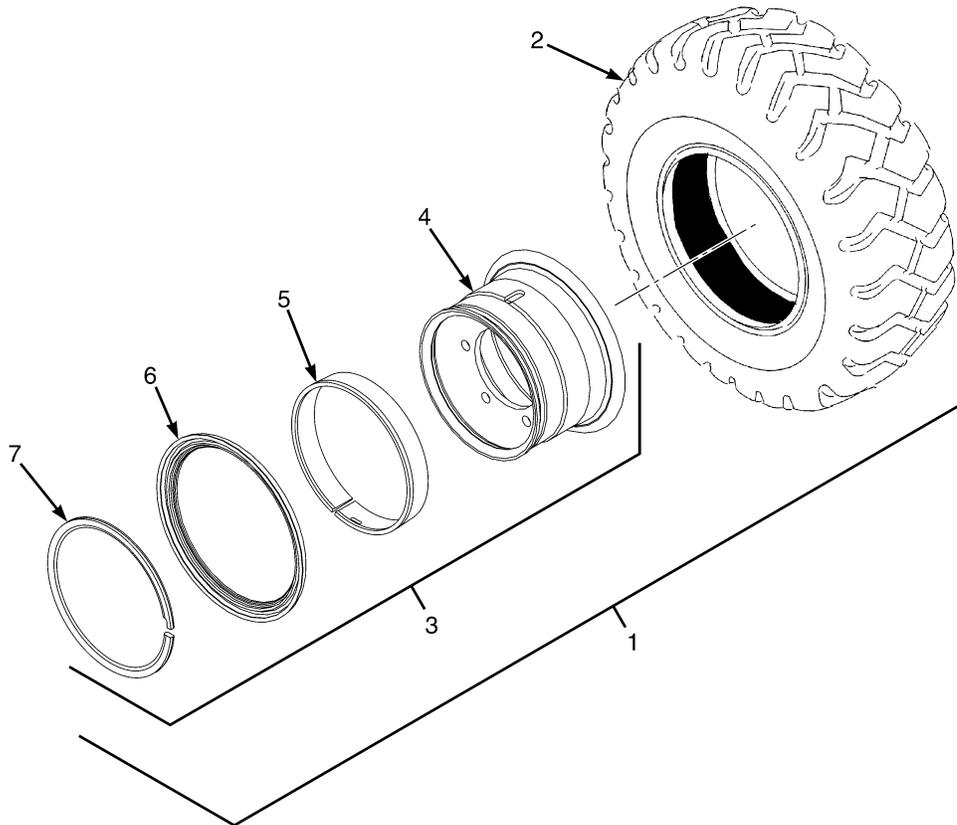
**DRIVE TIRES AND WHEELS (FIGURE 11-9)  
PNEUMATIC — DUAL WHEEL**



BP070185

ITEM	PART NO.	DESCRIPTION	QTY
1	4045984	Wheel And Tire (CB/WH) .....	4
2	4045803	Tire .....	1
3	2075454	Rim Assembly (5.00 x 12) .....	1
4	2075455	Rim (Dual Wheel) .....	1
5	1584694	Wedge Band .....	1
6	161890	Wheel Side Ring .....	1
7	161889	Wheel Lock Ring .....	1

## DRIVE TIRES AND WHEELS (FIGURE 11-10) RADIAL TIRE



BP070185

**KEY:**

**A:** 7.00 R12 (H40-50FT)

**B:** 225/75 R15 (H40-70FT)

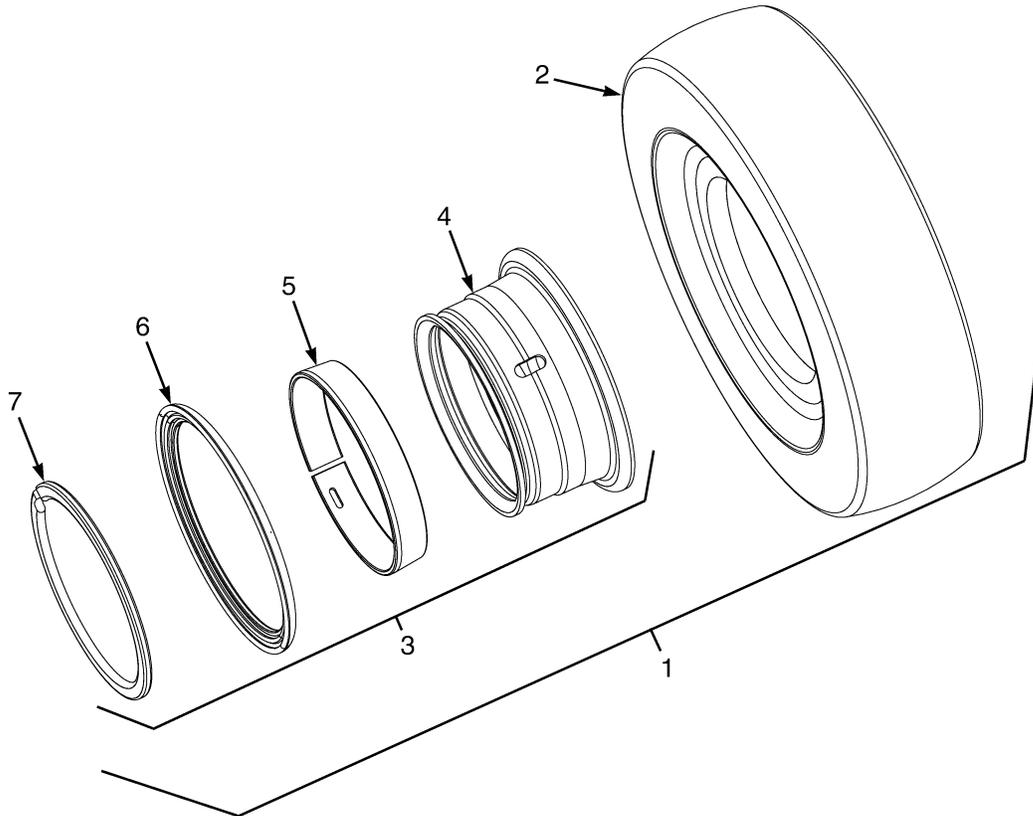
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1544981	Wheel And Tire 7.00R12 Pneu Radial .....	2	..
1	1544984	Wheel And Tire 225/75R15 Pneu Radial .....	..	2
1	<b>a</b> 1544987	Wheel And Tire 7.00R12 Pneu Radial .....	2	..
1	<b>a</b> 1544990	Wheel and Tire 225/75R15 Pneu Radial .....	..	2
2	1471829	Pneumatic Tire .....	1	..
2	1471591	Tubeless Bead Seal .....	1	..
2	1358179	Pneumatic Tire .....	1	..
2	1471922	Tubeless Bead Seal Valve .....	1	..
2	1471835	Pneumatic Tire .....	..	1
2	1462617	Tubeless Bead Seal .....	..	1
2	1358183	Pneumatic Tire (Michelin XZM) .....	..	1
2	1471922	Tubeless Bead Seal Valve .....	..	1
3	2070073	Wheel Assy (5.00 x 12) .....	1	..
3	2070074	Wheel Assy (7.00 x 15) .....	..	1
3	<b>a</b> 2070075	Wheel Assy (5.00 x 12) .....	1	..
3	<b>a</b> 2070076	Wheel Assy (7.00 x 15) .....	..	1
4	2070080	Rim .....	1	..
4	2070079	Rim .....	..	1

**KEY:****A: 7.00 R12 (H40-50FT)****B: 225/75 R15 (H40-70FT)**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
4	a 2070078	Rim .....	1	..
4	a 2070077	Rim .....	..	1
5	1584694	Wedge Band .....	1	..
5	1584695	Wedge Band .....	..	1
6	161890	Wheel Side Ring .....	1	..
6	160653	Wheel Side Ring .....	..	1
7	161889	Wheel Lock Ring .....	1	..
7	980542	Wheel Lock Ring .....	..	1

**FOOTNOTES:****a** Wide Option

## DRIVE TIRES AND WHEELS (FIGURE 11-11) RADIAL TIRE — DUAL WHEEL



BP220220

ITEM	PART NO.	DESCRIPTION	QTY
1	1587440	Wheel And Tire (7.00 x 12) .....	4
2	1471829	Pneumatic Tire .....	1
2	1471591	Tubeless Bead Seal .....	1
2	1358179	Pneumatic Tire .....	1
2	1471922	Tubeless Bead Seal Valve .....	1
3	2075454	Rim Assembly (5.00 x 12) .....	2
4	2075455	Rim (Dual Wheel) .....	1
5	1584694	Wedge Band .....	1
6	161890	Wheel Side Ring .....	1
7	161889	Wheel Lock Ring .....	1

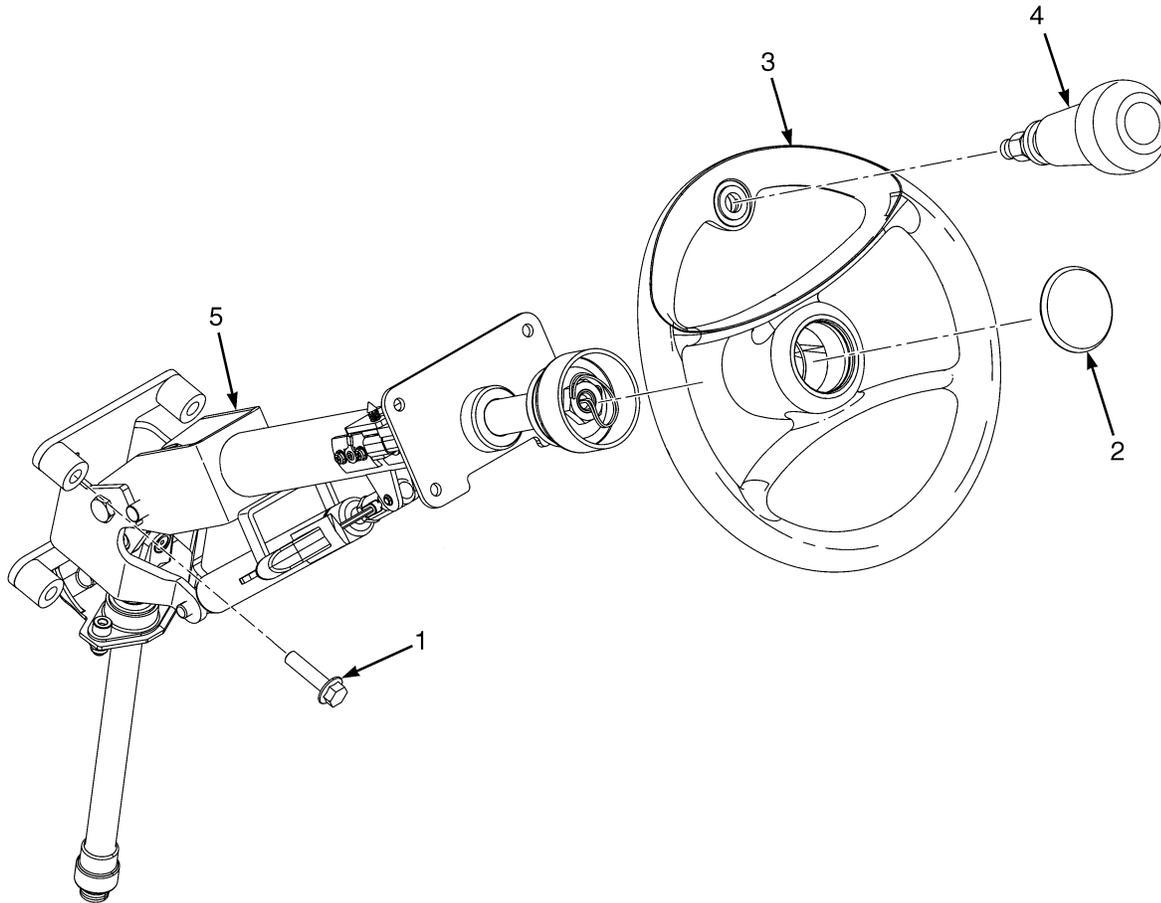




## SECTION 12 STEERING SYSTEM

DESCRIPTION	PAGE
STEER AXLE .....	12-12
STEER CYLINDER .....	12-14
STEER TIRES AND WHEELS	
PNEUMATIC - TWO-PIECE WHEEL .....	12-17
RADIAL .....	12-18
SOLID .....	12-16
STEERING COLUMN AND ATTACHING PARTS	
ISOLATED - DIESEL .....	12-3
NON-ISOLATED - LPG .....	12-2
STEERING COLUMN ASSEMBLY	
ISOLATED, DIESEL .....	12-6
NON-ISOLATED - LPG .....	12-4
STEERING CONTROL UNIT .....	12-8
STEERING LINES .....	12-10

## STEERING COLUMN AND ATTACHING PARTS (FIGURE 12-1) NON-ISOLATED — LPG



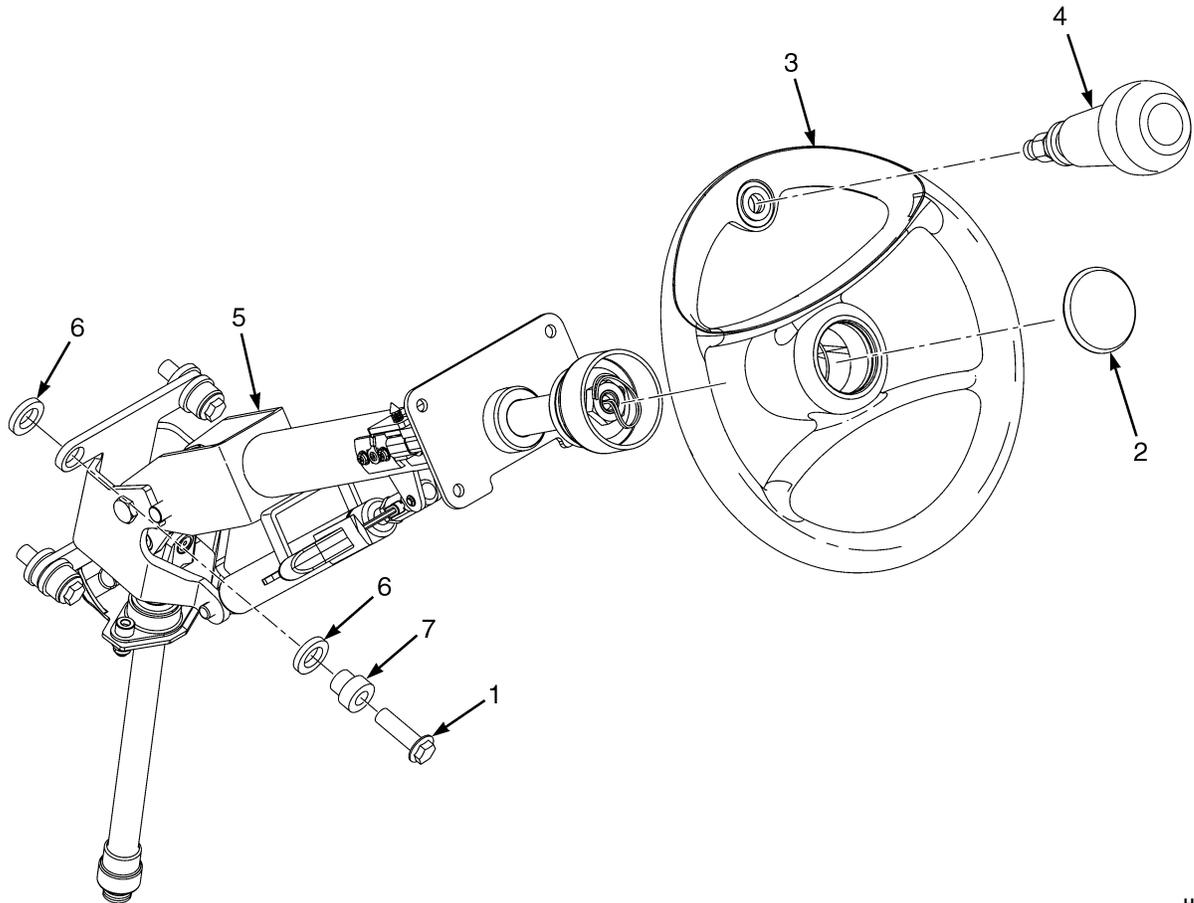
HP220500

ITEM	PART NO.	DESCRIPTION	QTY
1	1512403	Capscrew .....	4
2	<b>a</b> 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	4023450	Steering Column (☞ Figure 12-3).....	1

### FOOTNOTES:

**a** Service with Horn Replacement Kit 1642089

**STEERING COLUMN AND ATTACHING PARTS (FIGURE 12-2)  
ISOLATED — DIESEL**



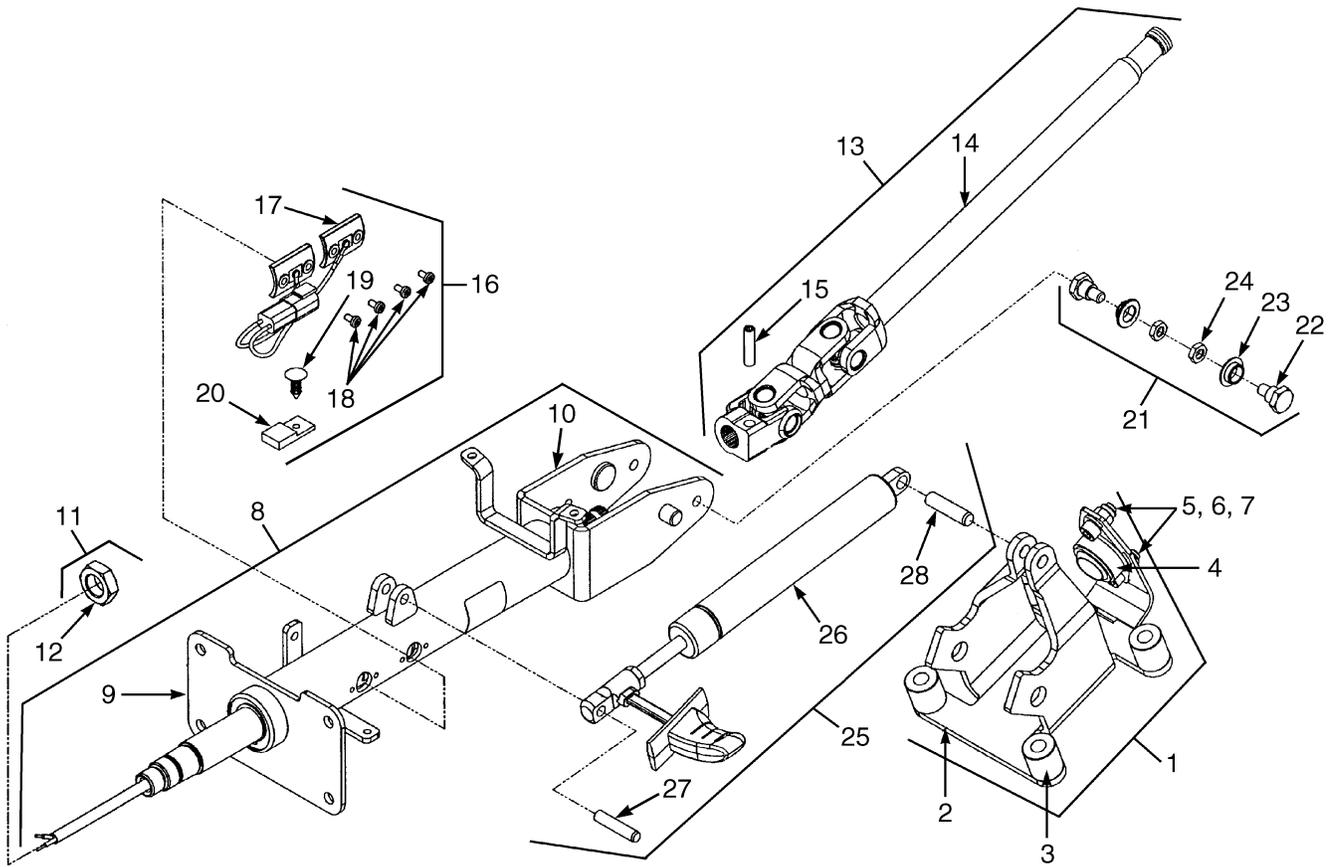
HP220499

ITEM	PART NO.	DESCRIPTION	QTY
1	1527885	Capscrew .....	4
2	<b>a</b> 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	4649994	Steering Column (☞ Figure 12-4).....	1
6	4151146	Isolator .....	8
7	4151147	Spacer .....	4

**FOOTNOTES:**

**a** Service with Horn Replacement Kit 1642089

## STEERING COLUMN ASSEMBLY (FIGURE 12-3) NON-ISOLATED — LPG

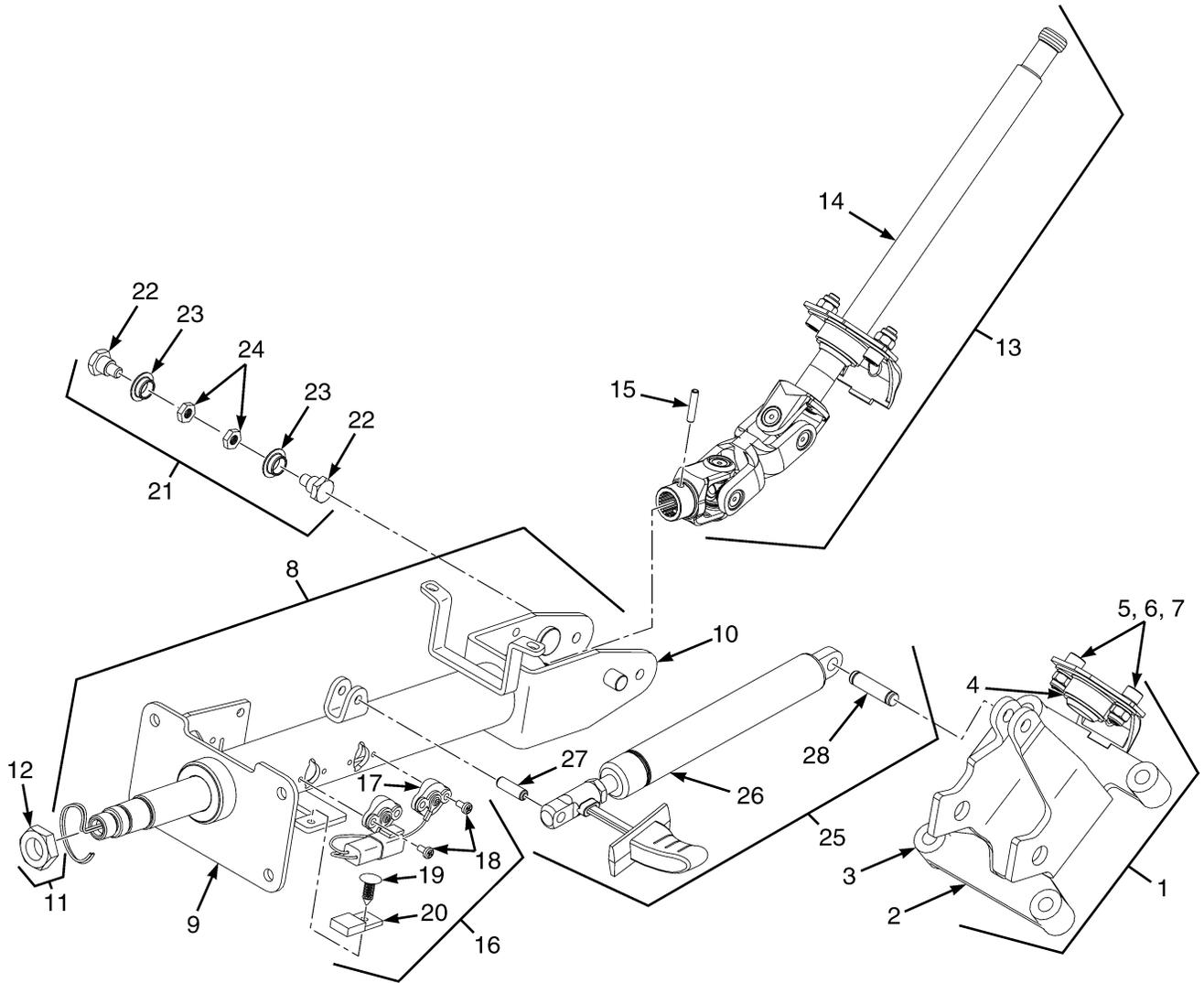


HP220445

**STEERING COLUMN ASSEMBLY  
NON-ISOLATED – LPG**

ITEM	PART NO.	DESCRIPTION	QTY
	4023450	Steering Column (LPG) .....	1
1	1562509	Kit-Support (LPG) .....	1
2	.....	Support .....	1
3	.....	Spacer (LPG) .....	4
4	.....	Joint .....	1
5	.....	Nut .....	2
6	.....	Washer .....	2
7	.....	Screw .....	2
8	4028642	Kit (Shaft Upper) .....	1
9	.....	Shaft Assembly (Upper) .....	1
10	.....	Housing Assembly .....	1
11	1562492	Kit-Nut .....	1
12	.....	Nut .....	2
13	1562493	Kit-Shaft (Lower) .....	1
14	.....	Shaft Assembly (Lower) .....	1
15	.....	Pin .....	1
16	1562496	Kit-Contact .....	1
17	.....	Contact Assembly (Horn) .....	1
18	.....	Screw .....	4
19	.....	Fastener .....	1
20	.....	Connector .....	1
21	1562501	Kit-Pivot (Lower) .....	1
22	.....	Bolt (Pivot) .....	2
23	.....	Bushing .....	2
24	.....	Nut .....	2
25	1562505	Kit-Gas Spring .....	1
26	.....	Gas Spring .....	1
27	.....	Pin .....	1
28	.....	Pin .....	1

## STEERING COLUMN ASSEMBLY (FIGURE 12-4) ISOLATED, DIESEL

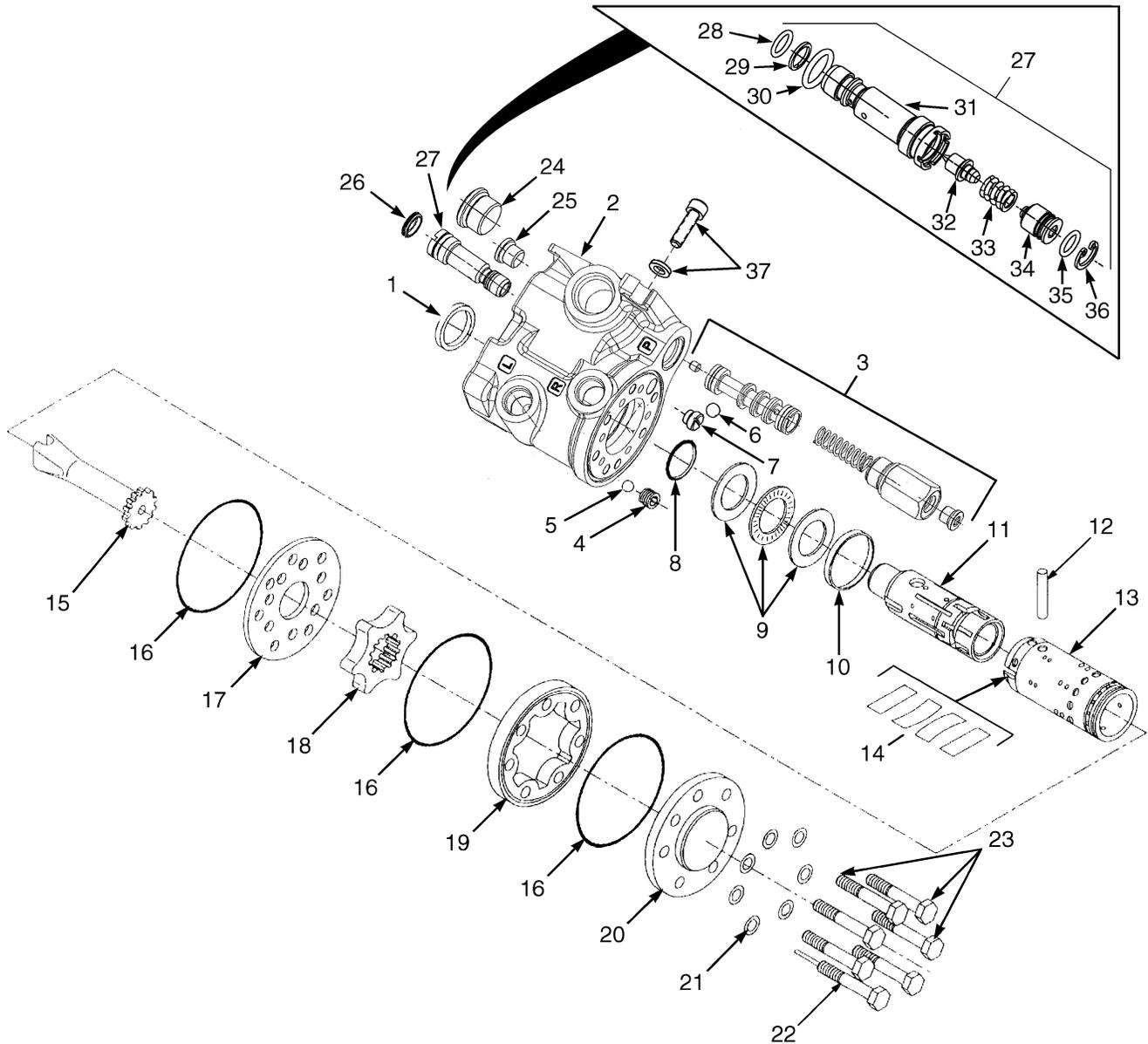


BP220435

**STEERING COLUMN ASSEMBLY  
ISOLATED, DIESEL**

ITEM	PART NO.	DESCRIPTION	QTY
	4649994	Steering Column .....	1
1	4166286	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 (Upper) .....	1
9	.....	Shaft Assembly (Upper) .....	1
10	.....	Housing Assembly .....	1
11	4038674	Kit-Nut .....	1
12	.....	Nut .....	2
13	4038675	Kit-Shaft , Lower (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

## STEERING CONTROL UNIT (FIGURE 12-5)

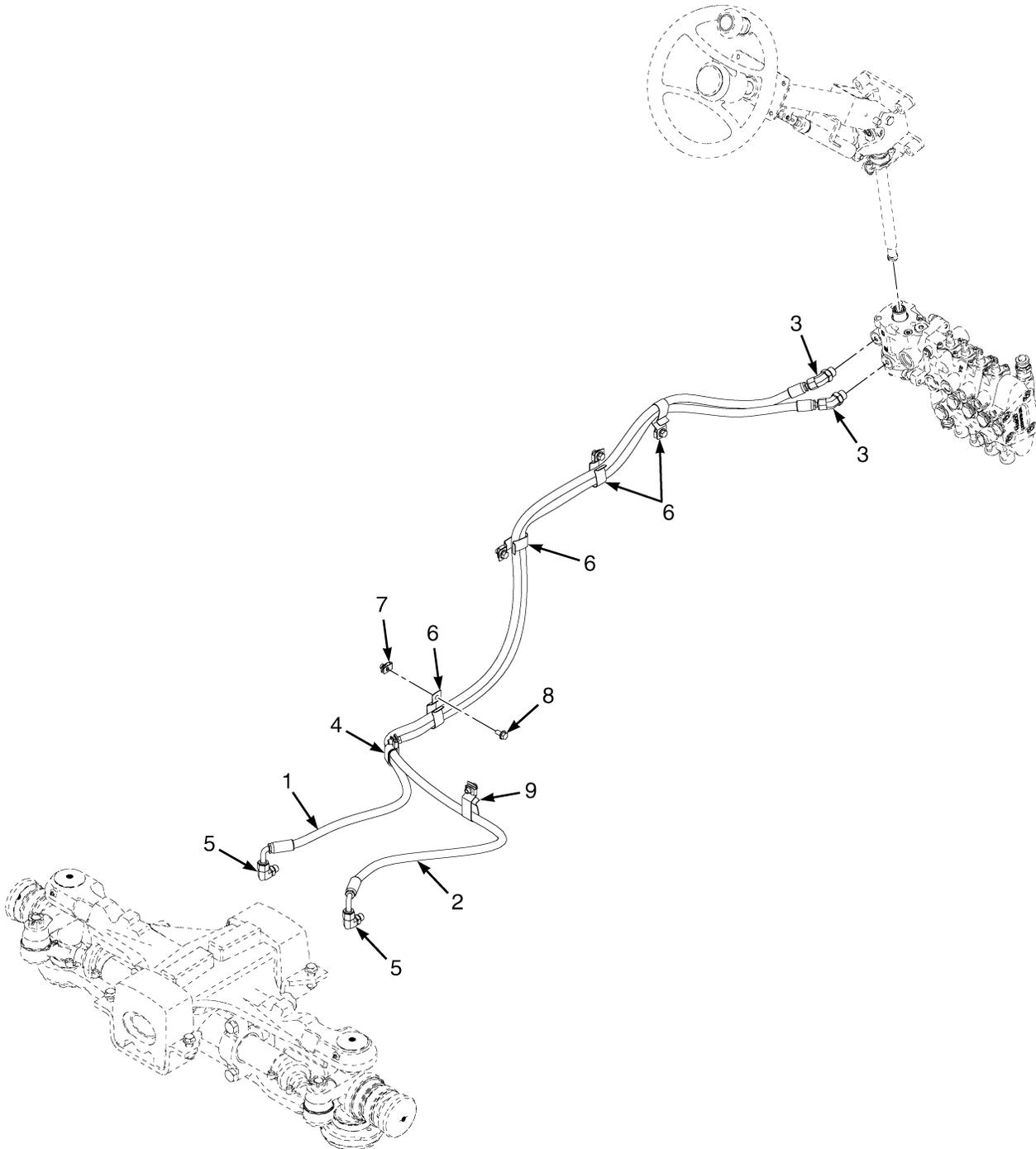


BP220056

**STEERING CONTROL UNIT**

ITEM	PART NO.	DESCRIPTION	QTY
	4650310	Steering Control Unit (H40-70FT) (Alternate Part) .....	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
38	1579908	Kit-Seal (Steering Control Unit) (Includes Items 1, 8, 16, 21, 28-30, 34) .....	1

## STEERING LINES (FIGURE 12-6)

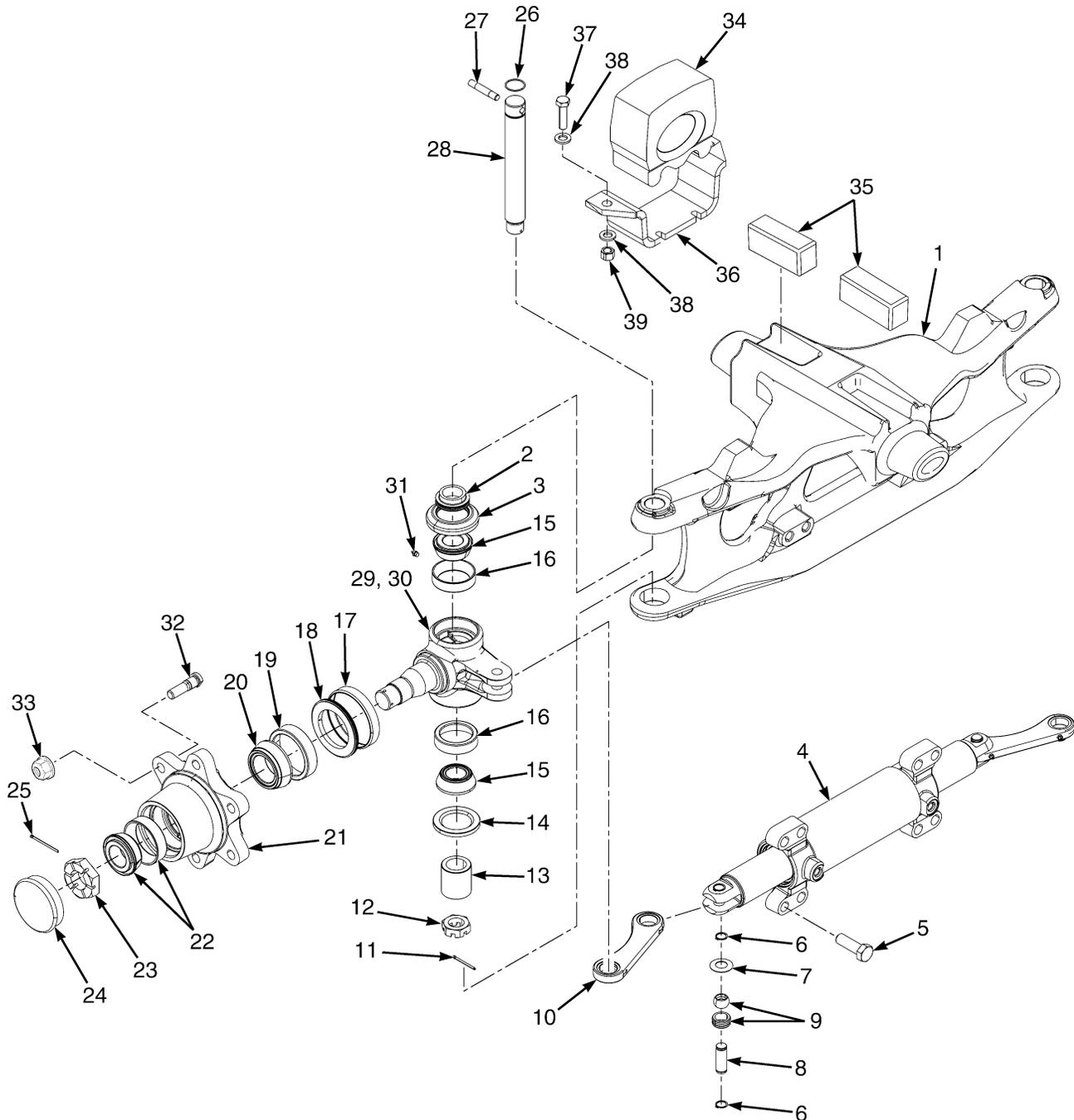


BP220348

**STEERING LINES****KEY:****A: Yanmar Diesel****B: PSI LPG**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2104068	Hose Assy (H40-60FT) .....	1	..
1	2104070	Hose Assy (H70FT) .....	1	..
1	4637871	Hose Assy (H40-60FT) .....	..	1
1	4637872	Hose Assy (H70FT) .....	..	1
2	<del>4637769</del>			
	4646433	Hose Assy (H40-60FT) .....	1	..
2	<del>4637770</del>			
	4646442	Hose Assy (H70FT) .....	1	..
2	<del>4637774</del>			
	4645822	Hose Assy (H40-60FT) .....	..	1
2	<del>4637772</del>			
	4646413	Hose Assy (H70FT) .....	..	1
3	4022958	Fitting .....	2	2
4	110322	Clamp .....	1	1
4	203230	Clamp (Optional) .....	1	1
5	1487063	Fitting .....	2	2
6	1544157	Clip .....	4	3
7	1480237	Nut , Foldover .....	6	5
8	<del>4109993</del>			
	1527879	Capscrew .....	6	5
9	89220	Clamp .....	1	1

## STEER AXLE (FIGURE 12-7)

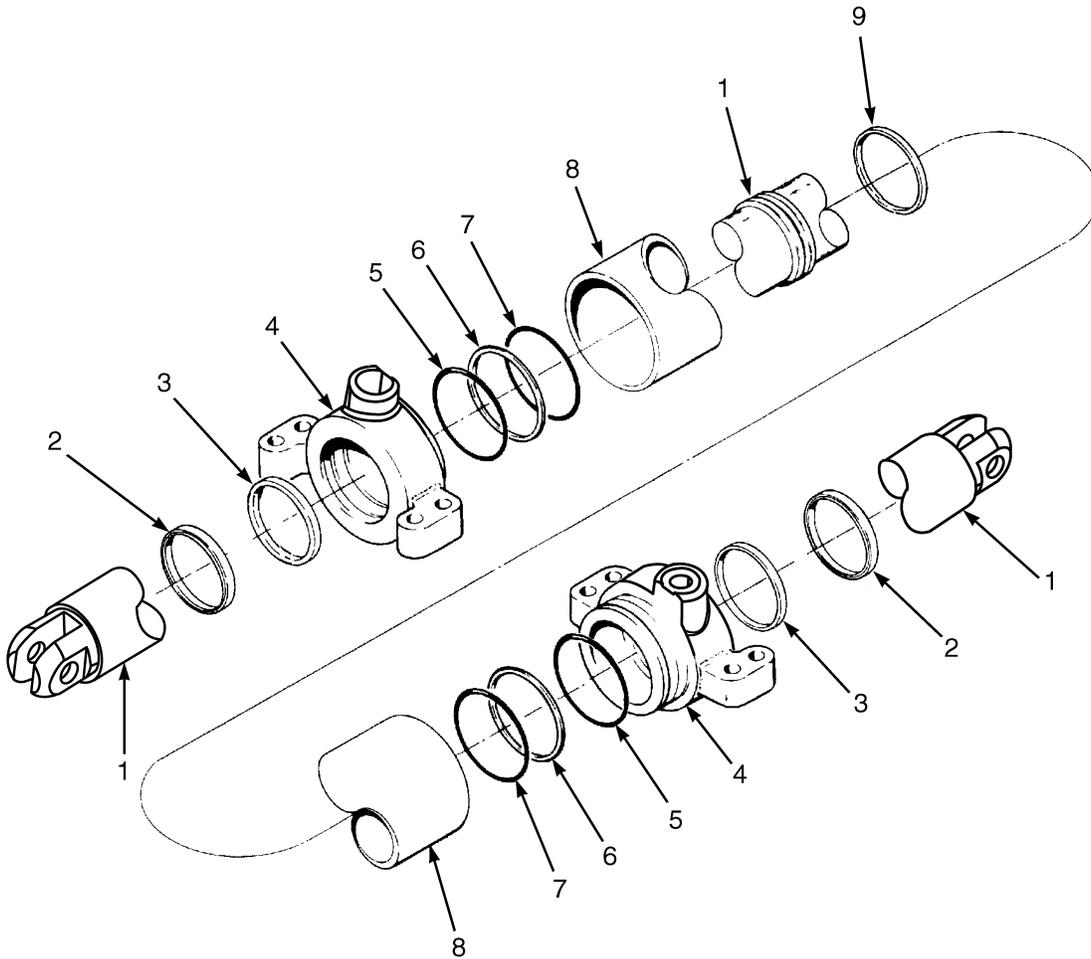


BP220349

**STEER AXLE**

ITEM	PART NO.	DESCRIPTION	QTY
1	1537963	Steering Axle Assembly .....	1
1	1537400	Steering Axle .....	1
2	300767	Spacer .....	2
3	264973	Seal .....	2
4	2071096	Steering Cylinder (☞ Figure 12-8).....	1
5	293686	Capscrew .....	8
6	58903	Snap Ring .....	8
7	300752	Spherical Washer .....	8
8	1568271	Pin .....	4
9	300751	Bushing .....	4
10	381298	Tie Rod .....	2
11	15225	Cotter Pin .....	2
12	249289	Nut .....	2
13	300766	Sleeve .....	2
14	98525	Oil Seal .....	2
15	1374815	Bearing Set .....	4
15	156195	Bearing Cone .....	1
16	156194	Bearing Cup .....	1
17	164639	Wear Sleeve .....	2
18	44542	Seal .....	2
19	4006721	Bearing Set (Optional) .....	2
19	4006667	Bearing Set .....	2
19	163970	Bearing Cup .....	2
20	30273	Bearing Cone .....	2
21	1537667	Hub .....	2
22	1375469	Bearing Set .....	2
22	4006722	Bearing Set (Optional) .....	2
23	1383777	Nut .....	2
24	69029	Cap .....	2
25	15227	Cotter Pin .....	2
26	39352	O-Ring .....	2
27	226986	Pin .....	2
28	300765	King Pin .....	2
29	1310599	Spindle (LH) .....	1
30	1315425	Spindle (RH) .....	1
31	13957	Grease Fitting .....	6
32	1502276	Wheel Stud .....	12
33	1517836	Wheel Nut .....	12
34	1525354	Rubber Mount .....	2
35	1388838	Rubber Mount .....	2
36	1543254	Plate .....	2
37	293648	Capscrew .....	4
38	296422	Washer .....	8
39	300937	Nut .....	4

**STEER CYLINDER (FIGURE 12-8)**

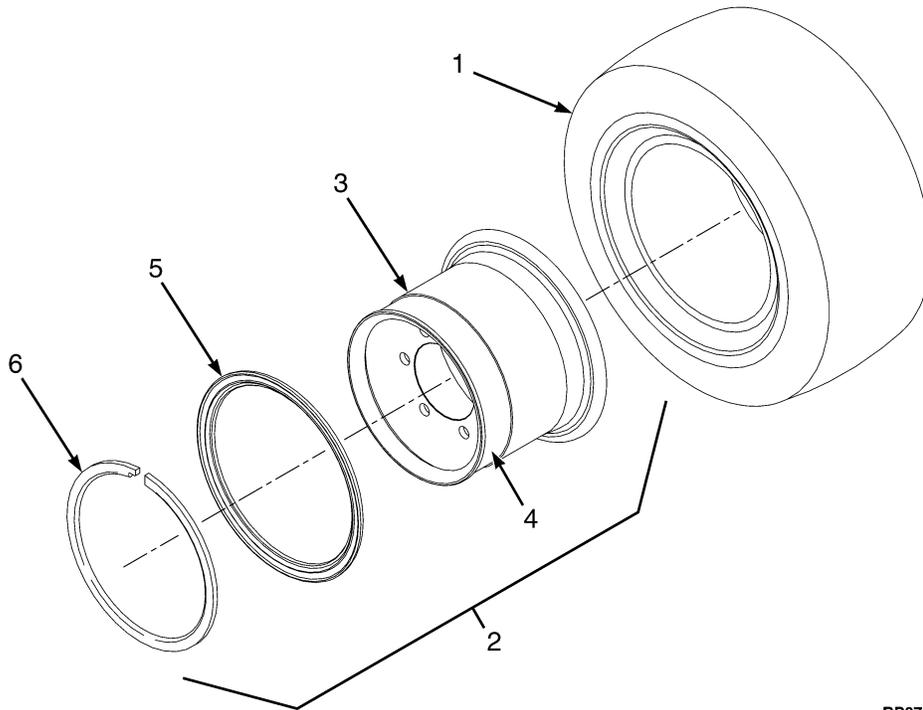


BP220070

**STEER CYLINDER**

ITEM	PART NO.	DESCRIPTION	QTY
	2071096	Steering Cylinder .....	1
1	375634	Cylinder Rod .....	1
2	2071094	Rod Wiper .....	2
3	1380092	Rod Seal .....	2
4	1561008	End Cap .....	1
5	268619	O-Ring .....	2
6	147973	Back-Up Ring .....	2
7	118358	O-Ring .....	2
8	375635	Tube Wldmt-Cylinder .....	1
9	2044371	Piston Seal .....	1
	1566700	Kit-Seal (Includes Items 2-3, 5-7, 9) .....	1
	2068015	Sleeve .....	1

## STEER TIRES AND WHEELS (FIGURE 12-9) SOLID



BP070182

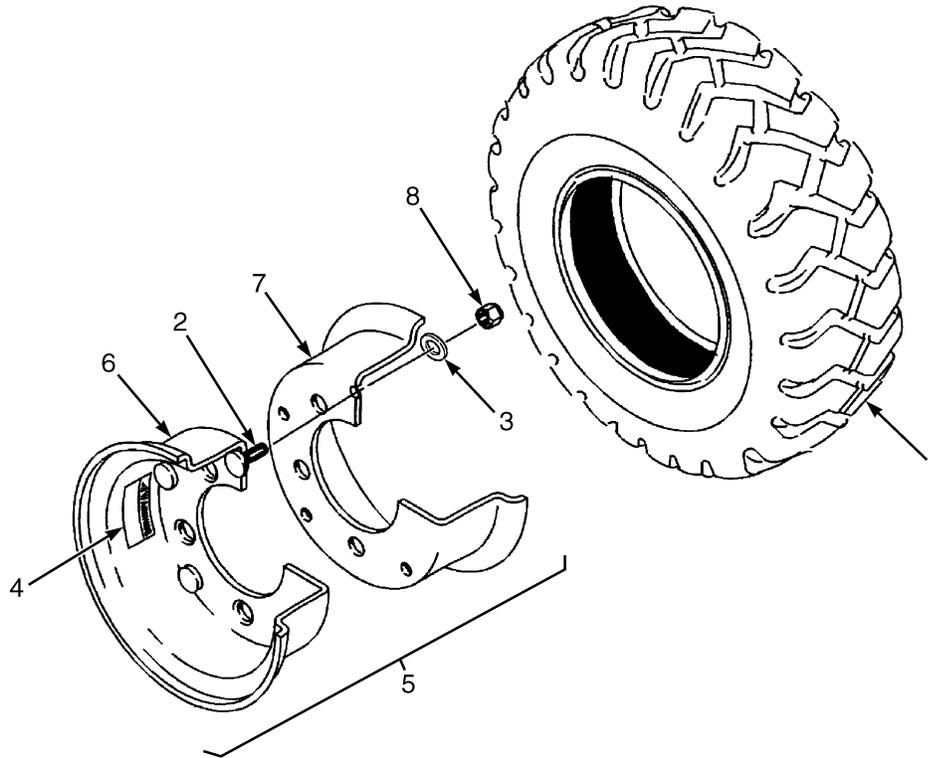
**KEY:**

**A: 6.00 x 9 (H40-50FT)**

**B: 6.50 x 10 (H40-70FT)**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4045999	Wheel And Tire (CB/WH) (Standard Compound) .....	2	..
	4046002	Wheel And Tire (CB/WH) (Non-Marking Compound) .....	2	..
	4046008	Wheel And Tire (CB/WH) (Standard Compound) .....	..	2
	4046011	Wheel And Tire (CB/WH) (Non-Marking Compound) .....	..	2
1	4046000	Tire (Standard Compound) .....	1	..
1	4046003	Tire (Non-Marking Compound) .....	1	..
1	4044086	Solid Pneumatic Tire (Standard Compound) .....	..	1
1	4046012	Tire (Non-Marking Compound) .....	..	1
2	2070081	Rim (4.00 x 9) .....	1	..
2	2067044	Wheel Assy (5.00 x 10) .....	..	1
3	2070083	Rim .....	1	..
3	2067045	Rim .....	..	1
4	1584693	Wedge Band .....	1	..
4	1580427	Wedge Band .....	..	1
5	161885	Wheel Side Ring .....	1	..
5	1580426	Wheel Side Ring .....	..	1
6	161884	Wheel Lock Ring .....	1	..
6	161894	Wheel Lock Ring .....	..	1

**STEER TIRES AND WHEELS (FIGURE 12-10)  
PNEUMATIC — TWO-PIECE WHEEL**



BP220347

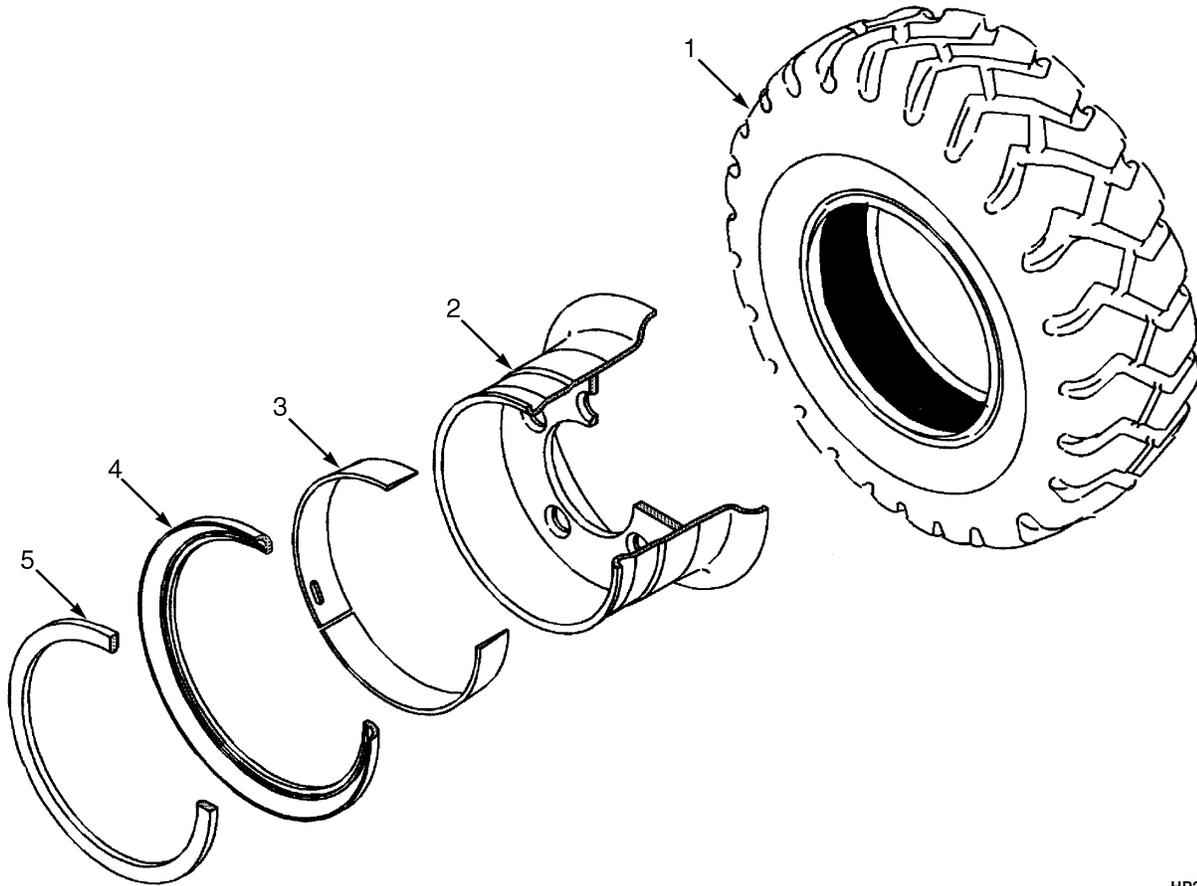
**KEY:**

**A: 6.00 x 9-12 PR (H40-50FT)**

**B: 6.50 x 10-12 PR (H40-70FT)**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4046014	Wheel And Tire (CB/WH) .....	2	..
	4046016	Wheel And Tire .....	..	2
1	4045997	Tire .....	1	..
1	4046006	Tire .....	..	1
2	2021575	Wheel Stud .....	6	..
2	2027618	Wheel Stud .....	..	6
3	292683	Lockwasher .....	6	..
3	292685	Lockwasher .....	..	6
4	288646	Label .....	1	1
5	2092535	Wheel Assy (4.00 x 9) .....	1	..
5	2092536	Wheel Assy (5.00 x 10) .....	..	1
6	.....	Inner Wheel .....	1	1
7	.....	Outer Wheel .....	1	1
8	303119	Nut .....	6	..
8	292600	Nut .....	..	6

## STEER TIRES AND WHEELS (FIGURE 12-11) RADIAL



HP240569

**STEER TIRES AND WHEELS  
RADIAL****KEY:****A: 6.00 R9 Pneumatic****B: 6.50 R10 Pneumatic**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1544997	Wheel And Tire .....	2	..
	1545000	Wheel And Tire .....	..	2
1	1471837	Pneumatic Tire Assembly (6.0 R9 PR) .....	1	..
1	1358177	Pneumatic Tire (Michelin XZM) .....	1	..
1	1462615	Tubeless Bead Seal .....	1	..
1	1471921	Tubeless Bead Seal Valve .....	1	..
1	1471832	Pneumatic Tire Assembly (6.5 R10 PR) .....	..	1
1	1358178	Pneumatic Tire (Michelin XZM 6.50 R10) .....	..	1
1	1462616	Tubeless Bead Seal .....	..	1
1	1471922	Tubeless Bead Seal Valve .....	..	1
2	2070081	Rim (4.00 x 9) .....	1	..
2	2070083	Rim .....	1	..
2	2067044	Wheel Assy (5.00 x 10) .....	..	1
2	2067045	Rim .....	..	1
3	1584693	Wedge Band .....	1	..
3	1580427	Wedge Band .....	..	1
4	161885	Wheel Side Ring .....	1	..
4	1580426	Wheel Side Ring .....	..	1
5	161884	Wheel Lock Ring .....	1	..
5	161894	Wheel Lock Ring .....	..	1







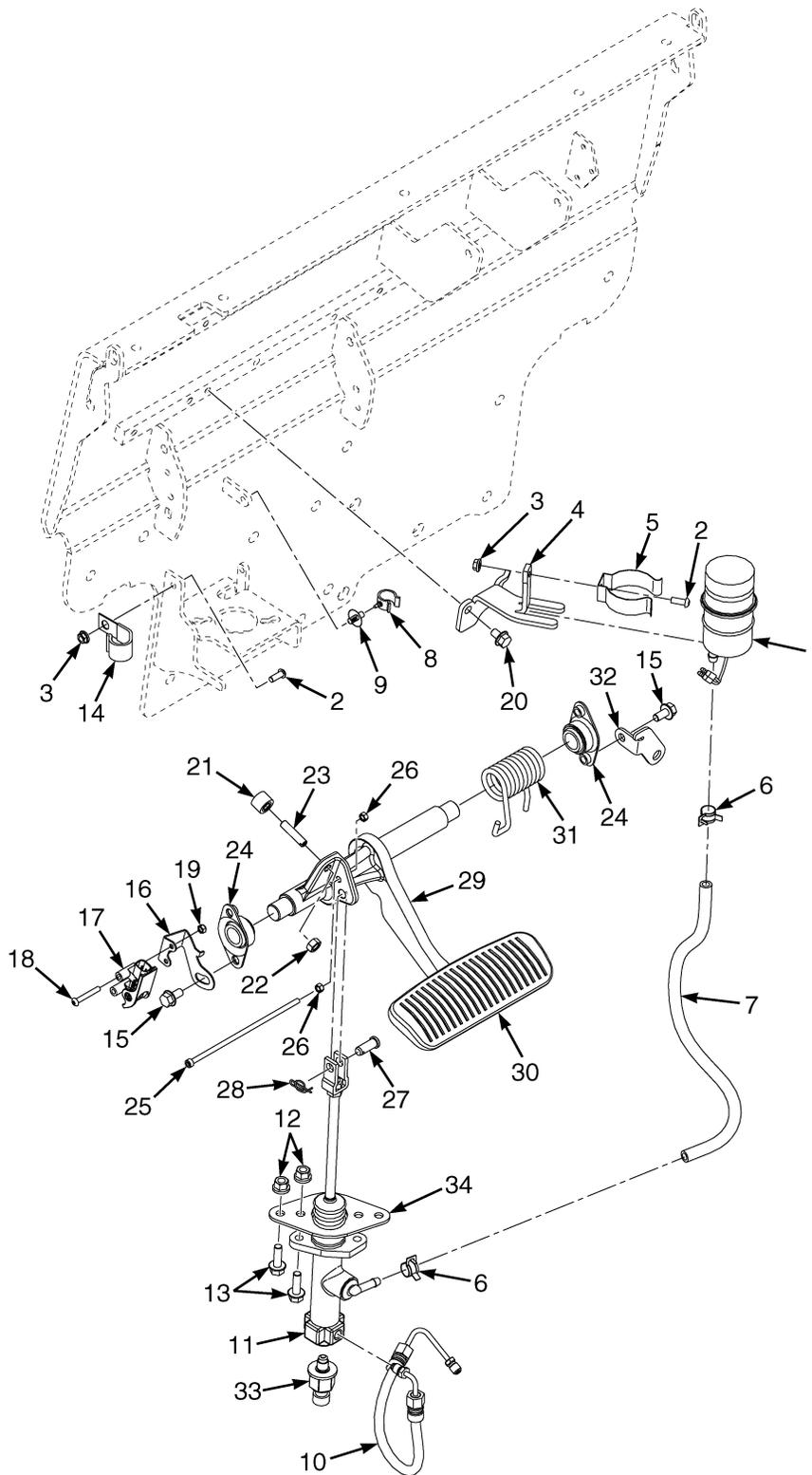
**SECTION 13  
BRAKE SYSTEM**

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## BRAKE LINKAGE (FIGURE 13-1) SINGLE PEDAL — DRY BRAKE

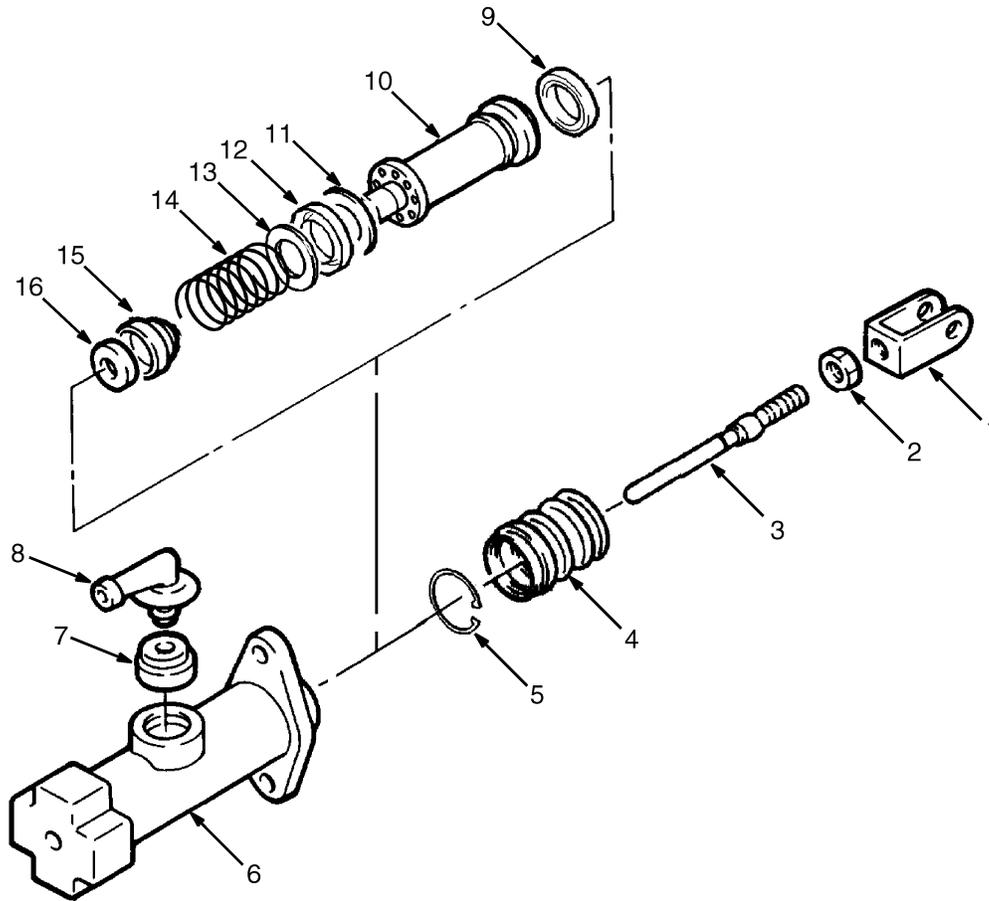


BP040238

**BRAKE LINKAGE  
SINGLE PEDAL – DRY BRAKE**

ITEM	PART NO.	DESCRIPTION	QTY
1	2314223	Reservoir .....	1
1	2021341	Cap .....	1
1	2077604	Tank Assembly .....	1
1	2021343	Packing .....	1
2	1510126	Screw (Button Head) .....	2
3	<del>1307884</del>		
	1514429	Nut .....	2
4	1699992	Mount .....	1
5	2021353	Holder , Reservoir Tank .....	1
6	1502003	Hose Clamp .....	2
7	1531569	Hose .....	1
8	1543698	Clamp (Swivel) .....	1
9	1543842	Clamp (Base) .....	1
10	2059937	Hose Assy .....	1
11	1536724	Master Cylinder (☞Figure 13-2).....	1
12	1544153	Locknut .....	4
13	1510113	Capscrew .....	4
14	325897	Clamp .....	1
15	4109993		
	1527879	Capscrew .....	4
16	1688503	Mount .....	1
17	1683486	Sensor (Brake Position) .....	1
18	1553897	Capscrew .....	2
19	302398	Locknut .....	2
20	4011940	Capscrew .....	1
21	1556475	Bumper .....	1
22	239503	Nut .....	1
23	1534871	Bolt .....	1
24	1585575	Bushing , Flange .....	2
25	1704902	Capscrew .....	1
26	292668	Nut .....	2
27	1375391	Pin (Rod End) .....	1
28	1351689	Locking Cotter Pin .....	1
29	1707008	Brake Pedal .....	1
30	1570298	Rubber Pad .....	1
31	1568075	Spring (RH) .....	1
32	<del>1594950</del>		
	4053949	Plate .....	1
33	1590033	Transducer (Brake Pressure) .....	1
34	4014682	Adapter (Master Cylinder) .....	1
	2064554	Loctite .....	1

## BRAKE MASTER CYLINDER ASSEMBLY (FIGURE 13-2) DRY BRAKE

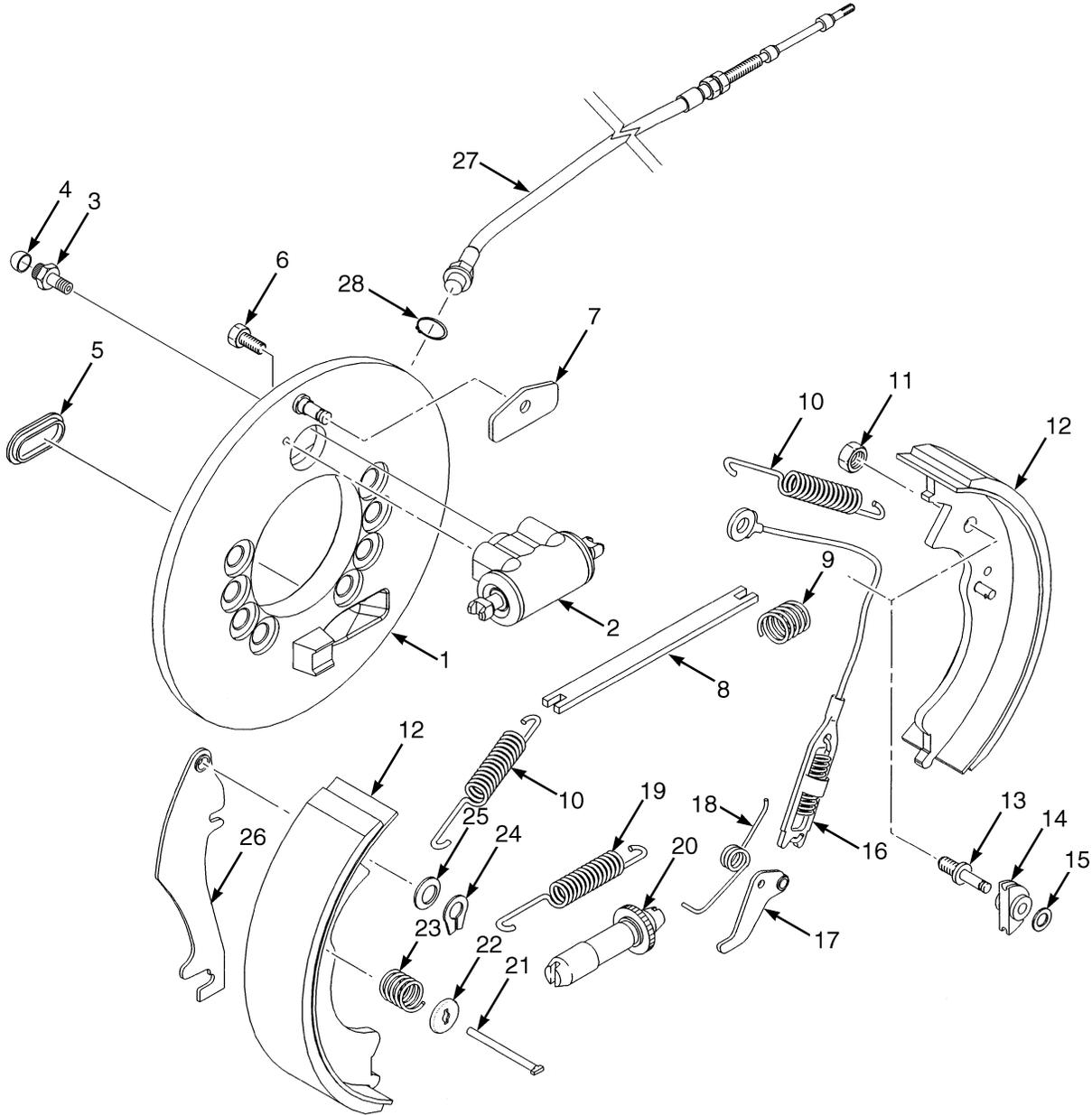


BP040123

ITEM	PART NO.	DESCRIPTION	QTY
	1536724	Master Cylinder .....	1
1	2041520	Yoke .....	1
2	1566142	Nut .....	1
3	1566141	Push Rod .....	1
4	.....	Boot .....	1
5	.....	Snap Ring .....	1
6	.....	Housing .....	1
7	1566144	Gasket .....	1
8	1566143	Fitting .....	1
9	.....	Seal .....	1
10	.....	Piston .....	1
11	.....	Spacer .....	1
12	.....	Piston Cup .....	1
13	.....	Retainer .....	1
14	.....	Spring .....	1
15	.....	Check Valve .....	1
16	.....	Valve Seat .....	1
	1566131	Kit-Repair Master Cylinder (Includes Items 4-5, 9-15) .....	1



## BRAKE ASSEMBLY (FIGURE 13-3) DRY BRAKE



BP040047

**BRAKE ASSEMBLY  
DRY BRAKE****KEY:**  
**A: RH**  
**B: LH**

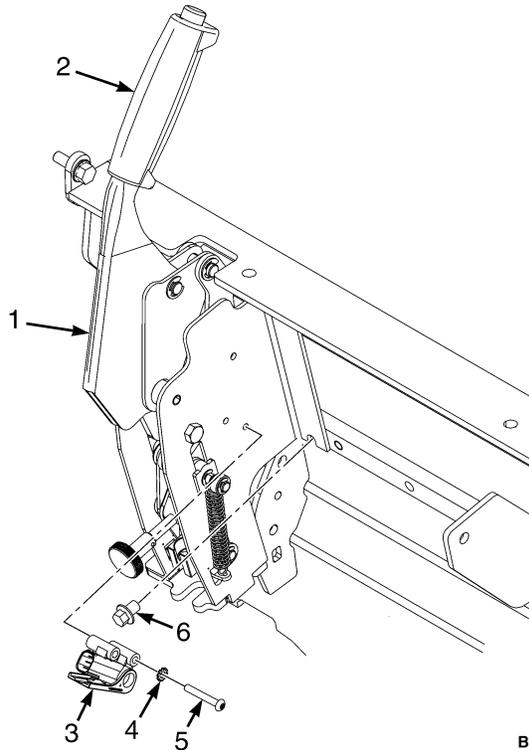
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1579455	Brake Assembly (With Cable and Dust Shield) .....	1	..
	1579454	Brake Assembly (With Cable and Dust Shield) .....	..	1
	1606086	Brake Assembly (Without Cable) .....	1	..
	1606085	Brake Assembly (Without Cable) .....	..	1
1	1606088	Backplate .....	1	..
1	1606087	Backplate .....	..	1
2	1565290	Wheel Cylinder .....	1	1
2	1334647	Kit-Repair Wheel Cylinder .....	1	1
3	<del>1361503</del>			
	4098513	Bleeder Screw .....	1	1
4	1361504	Cap .....	1	1
5	1334642	Cover .....	1	1
6	1565303	Bolt .....	2	2
7	2037343	Wear Plate .....	1	1
8	1360796	Strut .....	1	..
8	1361507	Strut .....	..	1
9	1360797	Spring .....	1	1
10	.....	Spring .....	1	1
11	.....	Nut .....	1	1
12	1565314	Kit-Brake Shoe .....	1	..
12	1565313	Kit-Brake Shoe .....	..	1
13	.....	Pin .....	1	1
14	1334644	Sheave .....	1	1
15	1361500	Washer .....	1	1
16	.....	Cable and Spring Assembly .....	1	1
17	2037518	Lever .....	1	..
17	2037517	Lever .....	..	1
18	.....	Spring .....	1	1
19	2037340	Spring .....	1	1
20	<del>1565295</del>			
	1600492	Adjuster .....	1	..
20	<del>1565294</del>			
	1600491	Adjuster .....	..	1
21	2037323	Pin .....	1	1
22	2037341	Cup .....	1	1
23	.....	Spring .....	1	1
24	1338916	Retainer .....	1	1
25	1338917	Washer .....	1	1
26	.....	Park Brake Lever .....	1	1
27	1565305	Parking Brake Cable .....	1	..
27	1600493	Parking Brake Cable .....	..	1
28	1361502	Snap Ring .....	1	1
	1565316	Kit-Spring (Includes Items 10) .....	1	1
	1565310	Kit-Adjuster , RH (RH) (Includes Items 16-19) .....	1	..
	1565309	Kit-Adjuster , LH (LH) (Includes Items 16-19) .....	..	1

## BRAKE ASSEMBLY DRY BRAKE

**KEY:****A: RH****B: LH**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1565312	Kit-Park Brake , RH (RH) (Includes Items 8-9, 24-26) .....	1	..
	1565311	Kit-Repair Parking Brake , LH (LH) (Includes Items 8-9, 24-26) .....	..	1
	1565315	Kit-Hold Down (Includes Items 21-23) .....	1	1

**PARK BRAKE (FIGURE 13-4)  
DRY BRAKE**



BP040148

ITEM	PART NO.	DESCRIPTION	QTY
1	4164560	Parking Brake Lever .....	1
2	4039367	Parking Brake Lever .....	1
3	1683486	Sensor (Brake Position) .....	1
4	296378	Washer .....	2
5	1701768	Screw .....	2
6	4011940	Capscrew .....	4



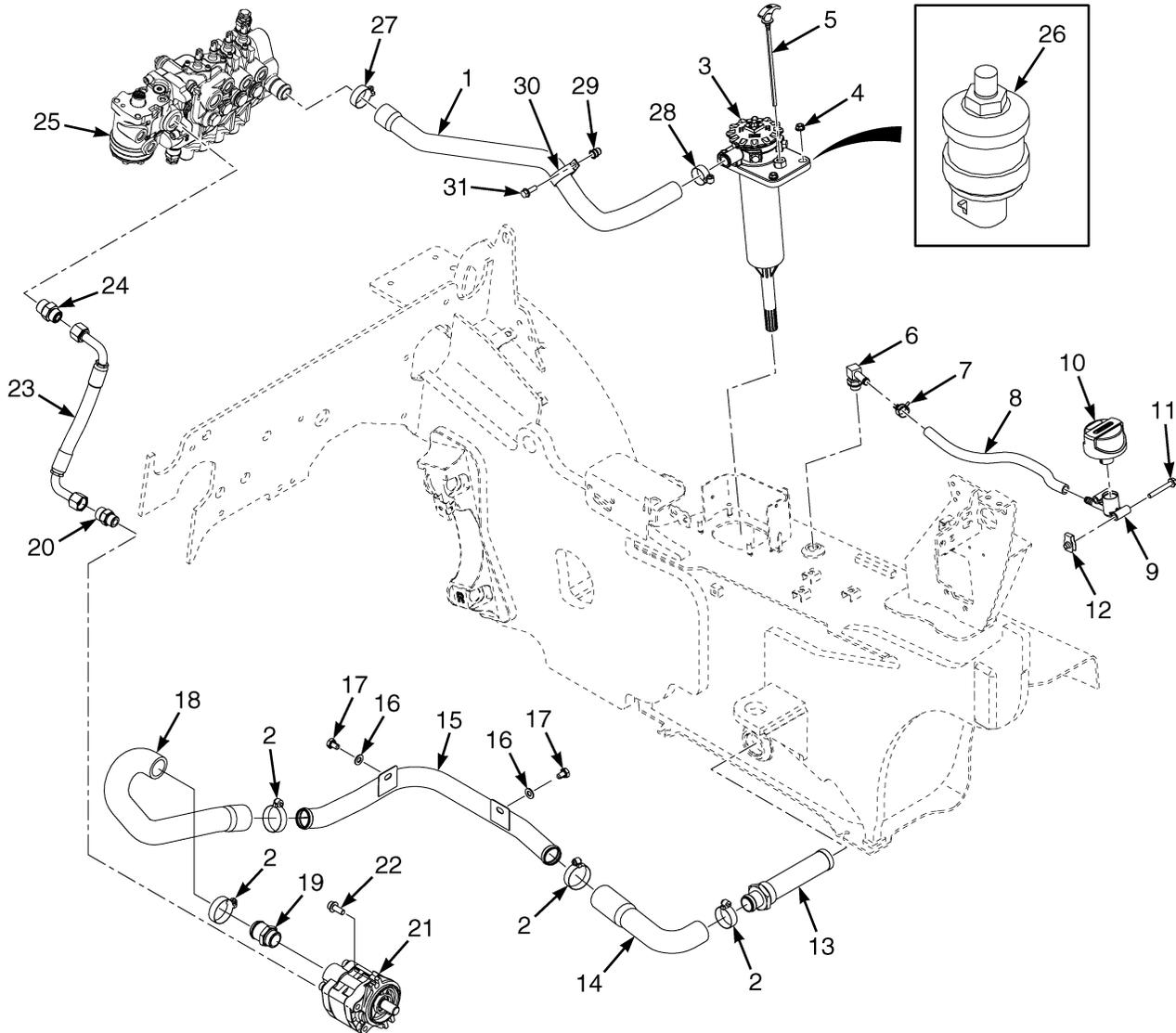




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## HYDRAULIC SUPPLY AND RETURN (FIGURE 14-1) WITH ALUMINUM TRANSMISSION — WITH CHAIN DRIVE



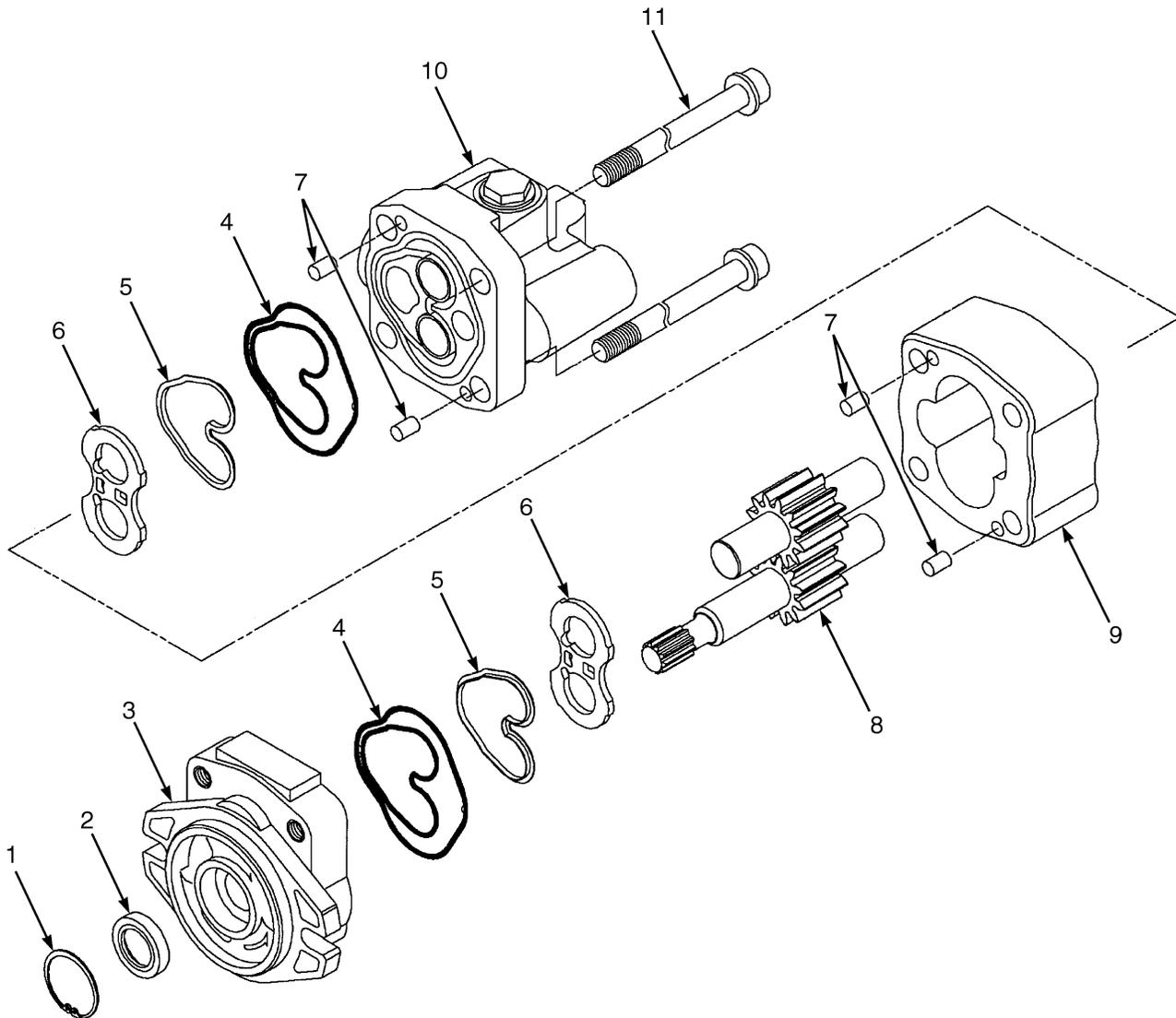
BP150758

**HYDRAULIC SUPPLY AND RETURN  
WITH ALUMINUM TRANSMISSION – WITH CHAIN DRIVE**

ITEM	PART NO.	DESCRIPTION	QTY
1	2111369	Hose (Hydraulic Return 3 Function Valve) .....	1
1	2111370	Hose (Hydraulic Return 4 Function Valve) .....	1
2	369804	Clamp .....	4
3	.....	Hydraulic Filter .....	1
4	<del>1382472</del> 1502543	Nut .....	2
5	2060751	Dipstick .....	1
6	222510	Fitting .....	1
7	1502007	Hose Clamp .....	1
8	1502123	Hose .....	1
8	127918	Hose (Optional) .....	1
9	1582160	Adapter (Breather) .....	1
10	1582161	Breather .....	1
11	1510116	Capscrew .....	2
12	1393879	Nut .....	2
13	1624904	Strainer .....	1
13	16984	O-Ring .....	1
14	4605974	Hose .....	1
15	4026661	Tube Assy .....	1
16	296420	Washer .....	2
17	292513	Capscrew .....	2
18	4605946	Hose .....	1
19	1568199	Adapter (Suction) .....	1
20	<b>c</b> 1486749	Fitting .....	1
20	<b>b</b> 4028685	Adapter .....	1
21	.....	Gear Pump (☞Figure 14-2, ☞Figure 14-3).....	1
22	1564515	Capscrew .....	2
23	<b>c</b> 4612085	Hose Assy .....	1
23	<b>b</b> 4611861	Hose Assy .....	1
24	1486751	Fitting .....	1
24	<b>b</b> 4028686	Adapter .....	1
25	.....	Hydraulic Control Valve (☞Figure 14-9, ☞Figure 14-15).....	1
26	2068337	Pressure Switch .....	1
27	127045	Clamp (Hose) .....	1
28	2306118	Clamp .....	1
29	1530243	Insert .....	1
30	339530	Clamp .....	1
31	1510113	Capscrew .....	1
	264159	Adhesive .....	AR
	<b>a</b> 1528481	Plug (With O-Ring for Drain) (Hydraulic Tank Drain) .....	1

**FOOTNOTES:****a** Not Illustrated**c** Without Quick-lock Option**b** With Quick-lock Option

## GEAR PUMP ASSEMBLY (FIGURE 14-2) LOW PRESSURE — CHAIN DRIVE OPTION



BP150098

**GEAR PUMP ASSEMBLY**  
**LOW PRESSURE – CHAIN DRIVE OPTION****KEY:****A: Yanmar 3.3L****B: PSI 2.4L**

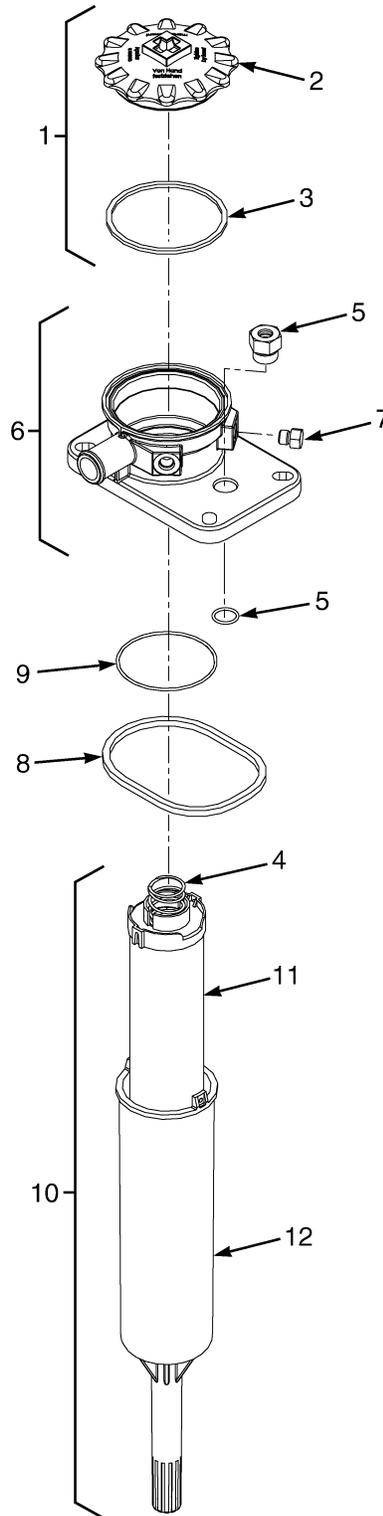
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	2067802	Gear Pump (29.4 cc/Rev) .....	1	..
	2074230	Gear Pump (25.7 cc/Rev) .....	..	1
1	.....	Snap Ring .....	1	1
2	.....	Oil Seal .....	1	1
3	1581536	Flange .....	1	1
4	.....	Back-Up Seal .....	2	2
5	.....	Plate Seal .....	2	2
6	1578673	Side Plate .....	2	2
7	1578672	Dowel .....	4	4
8	1581534	Gear Set .....	1	..
8	1584987	Gear Set .....	..	1
8	.....	Drive Gear .....	1	1
8	.....	Driven Gear .....	1	1
9	.....	Gear Plate .....	1	1
10	2081824	Cover .....	1	1
11	1578671	Screw .....	..	4
11	1578693	Screw .....	4	..
	1465140	Kit-Seal (Includes Items 1-2, 4-5) .....	1	1



**GEAR PUMP ASSEMBLY  
HIGH PRESSURE****KEY:****A: PSI 2.4L****B: Yanmar 3.3L**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	2098694	Gear Pump (25.7 cc/Rev) .....	1	..
	2098693	Gear Pump (29.4 cc/Rev) .....	..	1
1	.....	Gear Plate .....	1	..
1	.....	Gear Plate .....	..	1
2	.....	Drive Gear .....	1	..
2	.....	Drive Gear .....	..	1
3	.....	Driven Gear .....	1	..
3	.....	Driven Gear .....	..	1
4	1581536	Flange .....	1	1
5	1578665	Cover .....	1	1
6	1578673	Side Plate .....	2	2
7	.....	Plate Seal .....	2	2
8	.....	Back-Up Ring .....	2	2
9	.....	Oil Seal .....	1	1
10	.....	Snap Ring .....	1	1
11	1578671	Screw .....	4	..
11	1578693	Screw .....	..	4
12	1578672	Dowel .....	4	4
	1584987	Gear Set (Includes Items 2-3) .....	1	..
	1581534	Gear Set (Includes Items 2-3) .....	..	1
	1465140	Kit-Seal (Includes Items 7-10) .....	1	1

**HYDRAULIC FILTER (FIGURE 14-4)**

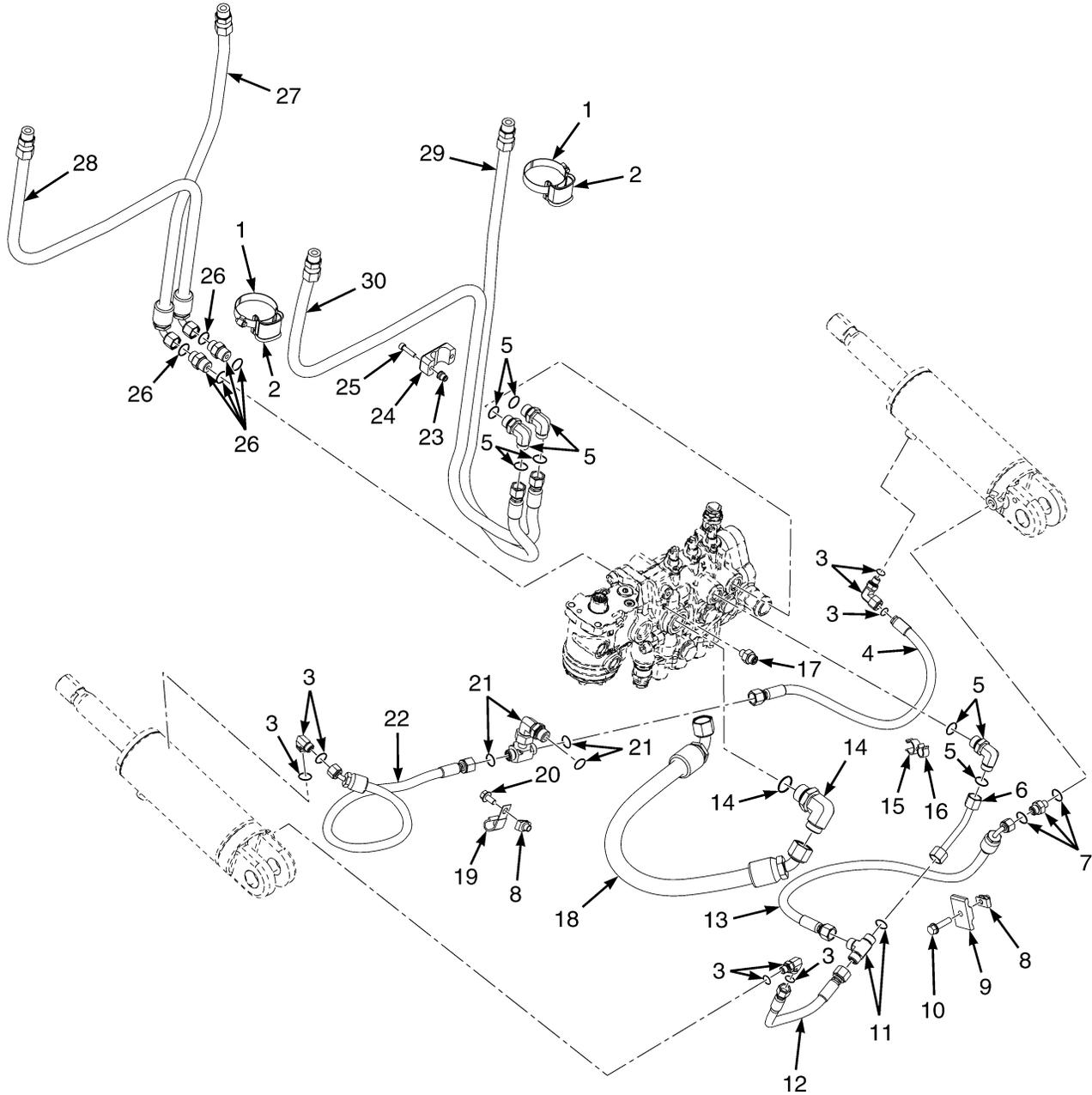


BP150355

**HYDRAULIC FILTER**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
	4000256	Hydraulic Filter Assembly .....	1
1	<del>1705820</del>		
	1708700	Cap Assembly .....	1
2	1570339	Lid .....	1
3	1705548	O-Ring .....	1
4	1570340	Spring .....	1
5	4003067	Dipstick Holder .....	1
5	.....	O-ring .....	1
6	4000257	Hydraulic Filter Head Assembly .....	1
7	14591	Plug .....	2
7	16481	O-Ring .....	1
8	.....	Quad Ring (Tank Sealing) .....	1
9	.....	O-Ring (Element) .....	1
10	4000258	Hydraulic Filter (Bowl Assembly) .....	1
11	.....	Element .....	1
12	1570347	Filter Can (Bowl) .....	1
	1708596	Kit-Seal (Includes Items 3, 5, 8-9) .....	1
	1707194	Kit-Filter Element and Cap Seal (Includes Items 9, 11) .....	1

## HYDRAULIC HOSES (FIGURE 14-5) LIFT, TILT, AND AUXILIARY



HP150984

**HYDRAULIC HOSES  
LIFT, TILT, AND AUXILIARY****KEY:****A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	369804	Clamp .....	1	2
2	1477996	Hose Clamp .....	1	2
3	1487058	Fitting .....	3	3
3	1527813	O-Ring .....	3	3
3	16481	O-Ring .....	3	3
4	2066783	Hose Assy (Tilt) .....	1	1
5	1487061	Fitting (Electronic Valve) .....	3	3
5	265787	O-Ring .....	1	1
5	16484	O-Ring .....	1	1
5	1487061	Fitting (Manual Valve) .....	1	1
5	265787	O-Ring .....	1	1
5	16484	O-Ring .....	1	1
5	1516201	Fitting (Manual Valve) .....	1	1
5	265731	O-Ring .....	1	1
5	16484	O-Ring .....	1	1
6	4606301	Tube Assy (Electronic Valve) .....	1	1
6	4604147	Tube Assy (Manual Valve) .....	1	1
7	1486737	Fitting .....	1	1
7	16481	O-Ring .....	1	1
7	16483	O-Ring .....	1	1
8	1480237	Nut , Foldover .....	2	2
9	1359620	Clamp .....	1	1
10	1586627	Capscrew .....	1	1
11	1522425	Fitting .....	1	1
11	265787	O-Ring .....	1	1
12	4606302	Hose Assy .....	1	1
13	4606303	Hose Assy .....	1	1
14	1487069	Fitting (Hoist) .....	1	1
14	1605768	Fitting (Load Weigh Display) .....	1	1
14	252729	O-Ring .....	1	1
15	1502055	Clamp (Swivel) .....	1	1
16	1502059	Clamp (Swivel) .....	1	1
17	2061646	Fitting (Diagnostic) .....	1	1
18	<b>a</b> 4624930	Hose Assy (Hoist) (Main Mast To Lowering Control Valve) .....	1	1
19	325804	Clamp .....	1	1
20	1613324	Capscrew .....	1	1
21	1488464	Fitting .....	1	1
21	265787	O-Ring .....	2	2
22	2074325	Hose Assy .....	1	1
23	1531558	Insert .....	2	..
24	1360386	Clamp (Double Hose) .....	1	..
25	293796	Capscrew .....	2	..
26	1486742	Fitting .....	2	2
26	265787	O-Ring .....	2	2
26	16484	O-Ring .....	2	2

## HYDRAULIC HOSES LIFT, TILT, AND AUXILIARY

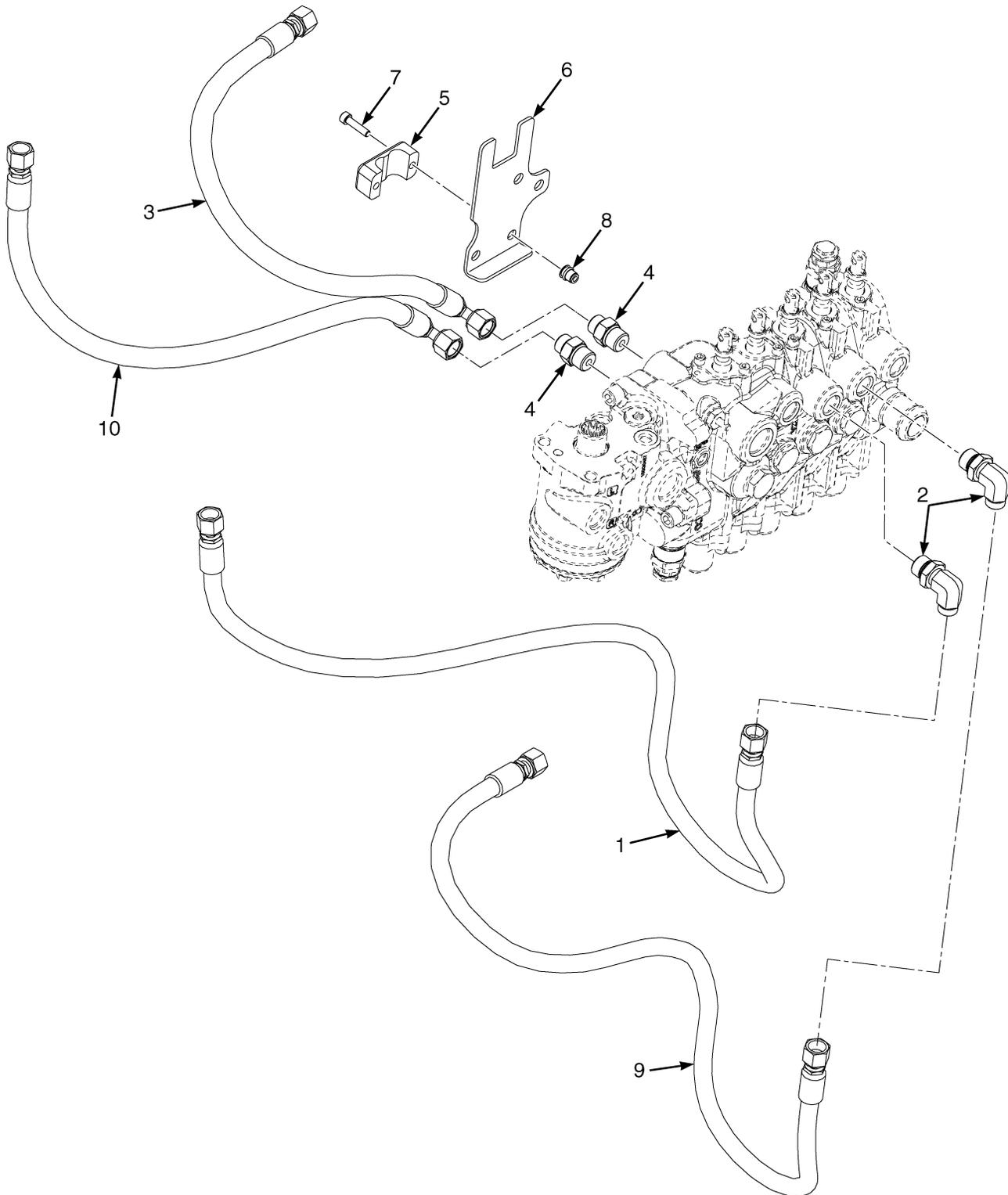
**KEY:****A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
27	a 4639587	Hose Assy .....	1	..
28	a 4624925	Hose Assy (☞ Figure 14-6).....	..	1
29	a 4639341	Hose Assy .....	1	..
30	a 4639342	Hose Assy (Alternate Part) .....	..	1

**FOOTNOTES:****a** Two Stage LFL and Three Stage FFL



## AUXILLIARY HOSES (FIGURE 14-6) THREE STAGE FULL FREE LIFT — TWO STAGE LIMITED FREE-LIFT



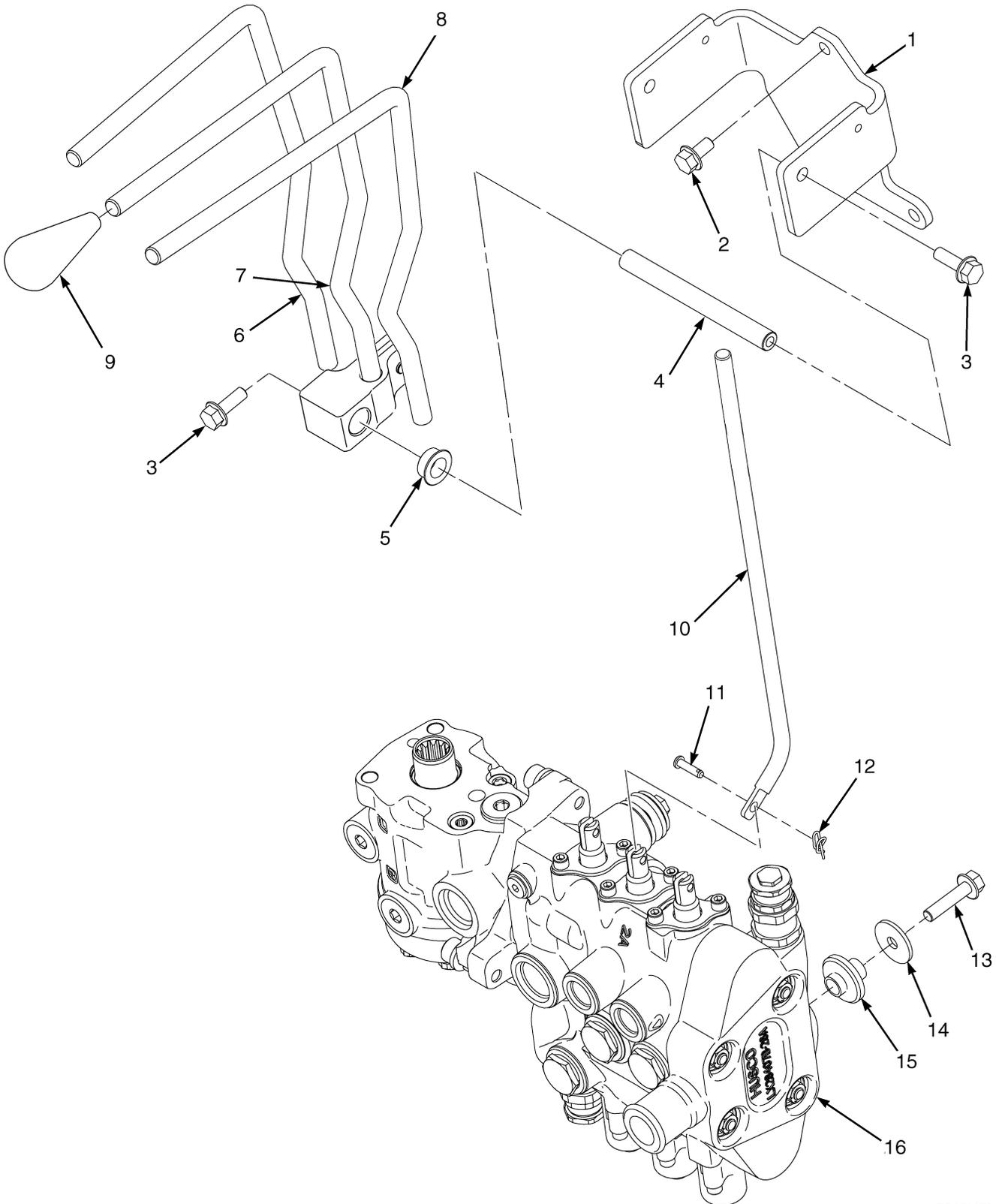
BP150764

**AUXILLIARY HOSES**  
**THREE STAGE FULL FREE LIFT – TWO STAGE LIMITED FREE-LIFT**

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

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4639341	Hose Assy .....	1	1
2	1487061	Fitting .....	1	2
3	4639587	Hose Assy (Alternate Part) .....	1	1
4	1486742	Fitting .....	1	2
5	1360386	Clamp (Double Hose) .....	1	1
6	4064677	Plate .....	1	1
7	293796	Capscrew .....	2	2
8	1531558	Insert .....	2	2
9	4639342	Hose Assy .....	..	1
10	4624925	Hose Assy .....	..	1

## HAND LEVERS (FIGURE 14-7) THREE FUNCTION — WITHOUT DETENTED LEVERS

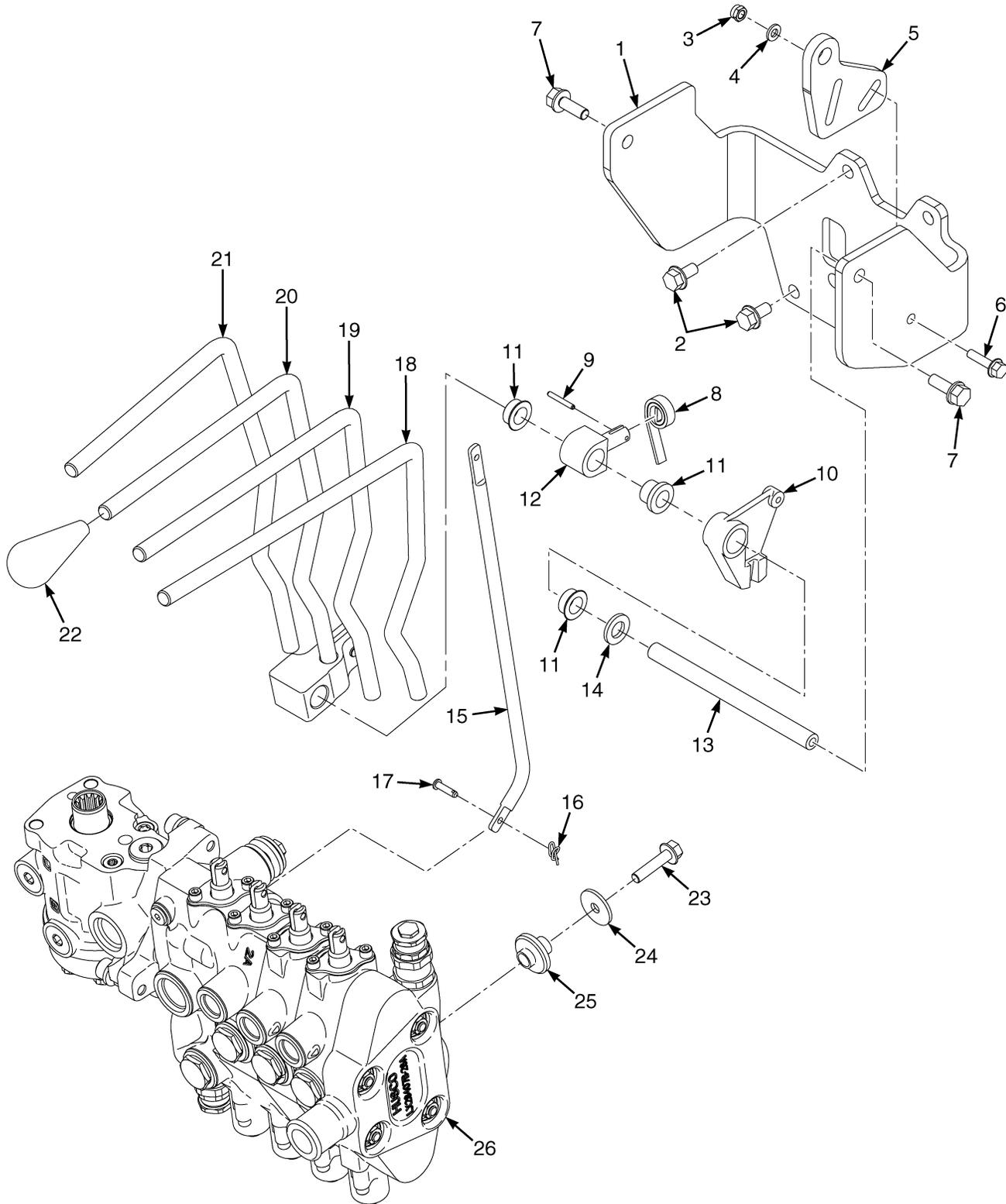


BP150076

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

ITEM	PART NO.	DESCRIPTION	QTY
1	1665746	Bracket .....	1
2	4109993		
	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
16	4629069	Hyd Control Valve (Manual) (H40-60FT) (☞Figure 14-9).....	1
16	4629073	Hyd Control Valve (Manual) (H70FT) (☞Figure 14-9).....	1

## HAND LEVERS (FIGURE 14-8) FOUR FUNCTION — WITH DETENTED LEVERS

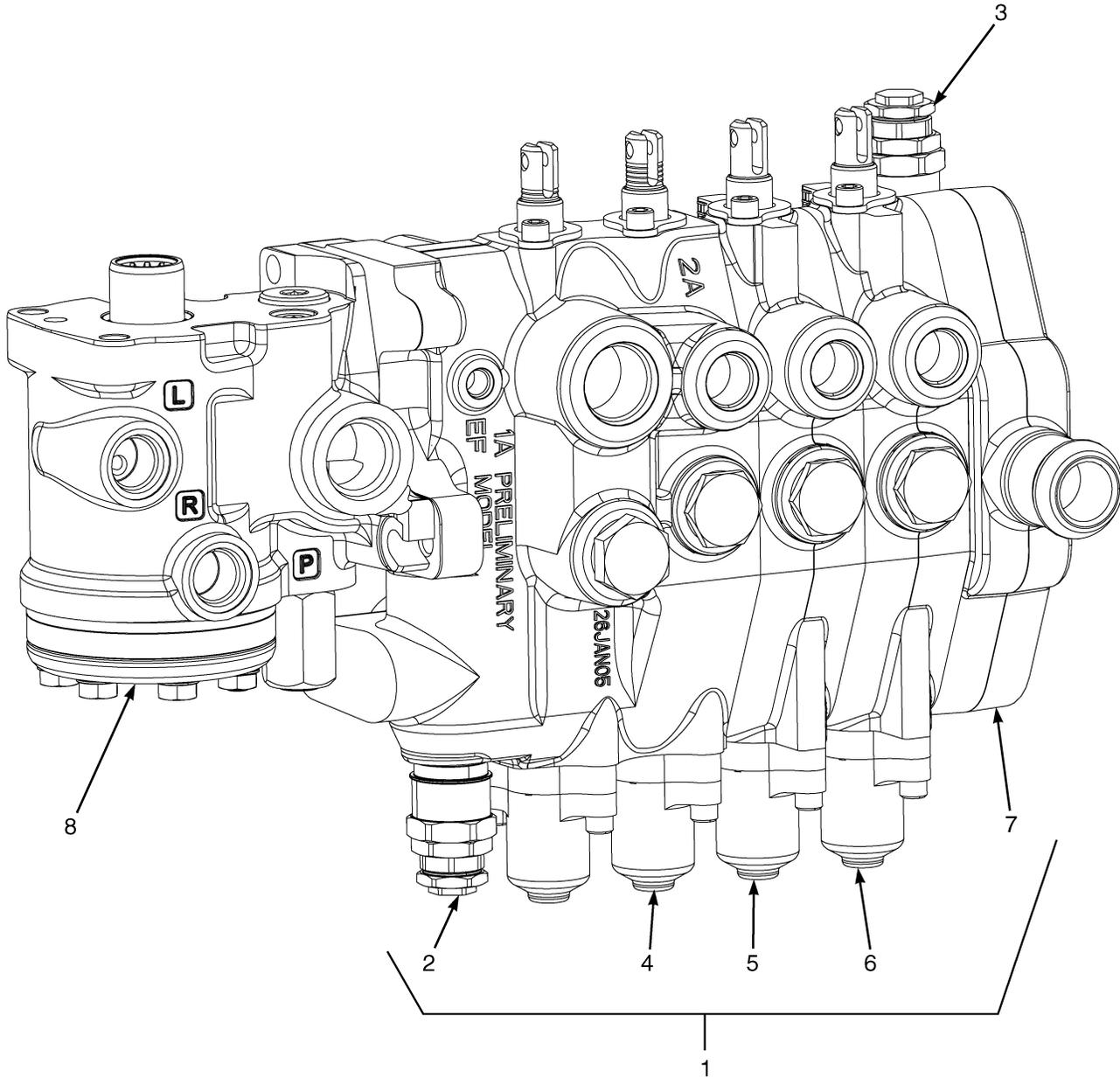


BP150483

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

ITEM	PART NO.	DESCRIPTION	QTY
1	1665748	Bracket .....	1
2	4109993		
	1527879	Capscrew .....	4
3	316834	Nut .....	1
4	4093489		
	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 .....	12
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	4517395		
	4038182	Knob .....	4
22	2070655	Lens (Blank) .....	1
23	1586627	Capscrew .....	3
24	1346752	Washer .....	3
25	2063991	Isolator .....	3
26	4629071	Hyd Control Valve (Manual) (H40-60FT) (☞Figure 14-9).....	1
26	4629075	Hyd Control Valve (Manual) (H70FT) (☞Figure 14-9).....	1

## CONTROL VALVE ASSEMBLY (FIGURE 14-9) MANUAL CONTROL — THREE AND FOUR FUNCTION



BP140045

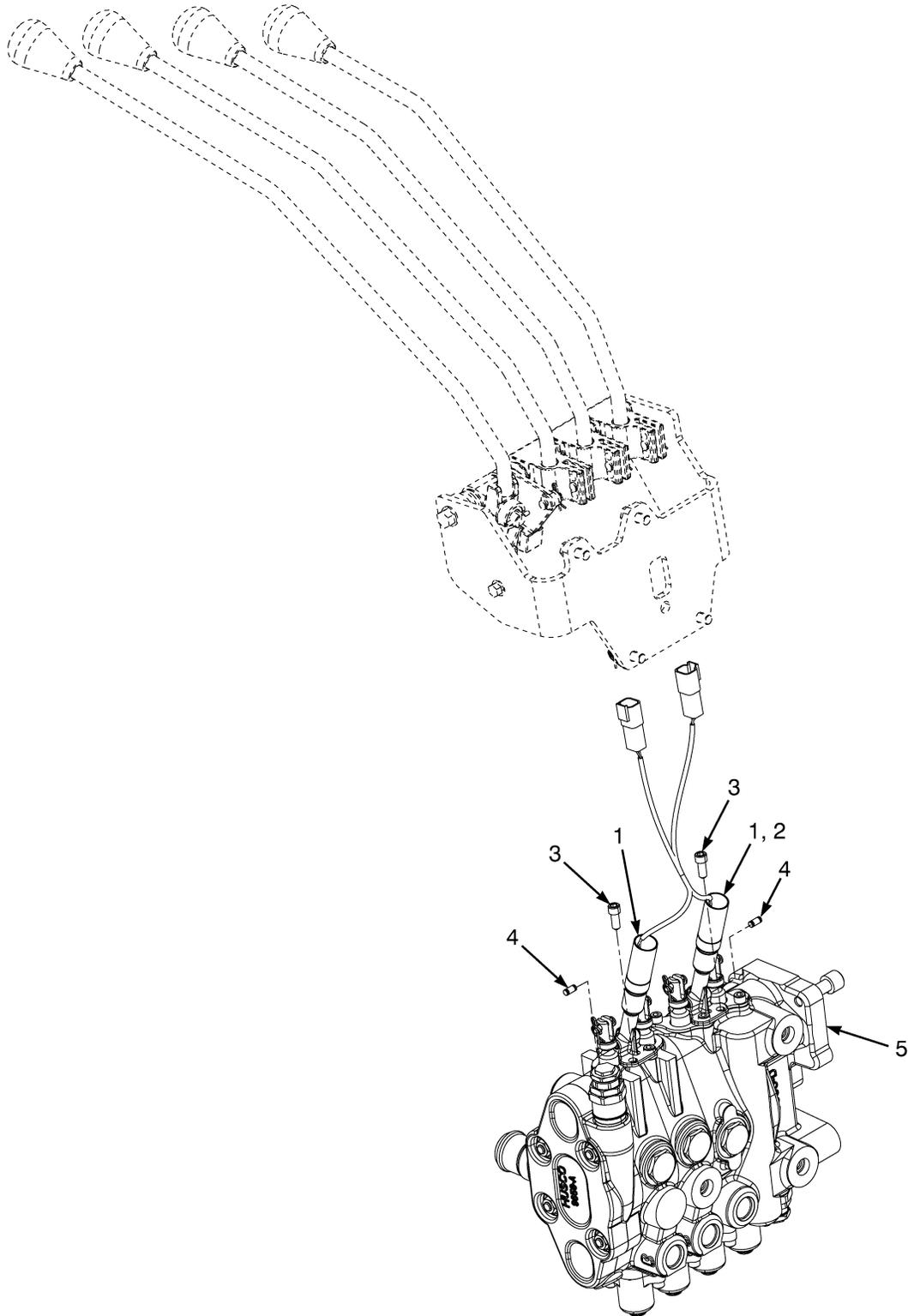
## CONTROL VALVE ASSEMBLY

### MANUAL CONTROL – THREE AND FOUR FUNCTION

**KEY:****A: H40-60FT****B: H70FT**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4629069	Hyd Control Valve (Manual) (3 Function) .....	1	..
	4629071	Hyd Control Valve (Manual) (4 Function) .....	1	..
	4629073	Hyd Control Valve (Manual) (3 Function) .....	..	1
	4629075	Hyd Control Valve (Manual) (4 Function) .....	..	1
1	1580146	Kit-Seal (Three Function) .....	1	..
1	4629077	Hyd Control Valve (3 Function) .....	1	..
1	1670434	Kit-Seal (Three Function) .....	1	..
1	1580148	Kit-Seal (Four Function) .....	1	..
1	4626786	Hyd Control Valve (4 Function) .....	1	..
1	1670054	Kit-Seal (Master) .....	1	..
1	1580146	Kit-Seal (Three Function) .....	..	1
1	4629078	Hyd Control Valve (3 Function) .....	..	1
1	1670434	Kit-Seal (Three Function) .....	..	1
1	1580148	Kit-Seal (Four Function) .....	..	1
1	4629079	Hyd Control Valve (4 Function) .....	..	1
1	1670054	Kit-Seal (Master) .....	..	1
2	4098672			
	1578747	Relief Valve (3100 PSI) (Main Relief) .....	1	..
2	1578748	Relief Valve (3400 PSI) (Main) .....	..	1
2	1580097	Kit-Seal and Spring .....	1	1
3	1578707	Relief Valve , Secondary .....	1	1
3	1580131	Kit-Seal and Spring .....	1	1
4	4088047	Valve Section (Lift And Tilt) (☞Figure 14-12).....	1	1
5	4087334	Valve Section (3 Function) (☞Figure 14-13).....	1	1
6	4087335	Valve Section (4 Function) (☞Figure 14-13).....	1	1
7	1578746	Valve Section (Outlet Section) (☞Figure 14-14).....	1	1
8	2063117	Steering Control Unit (☞Figure 12-5).....	1	..
8	2063118	Steering Control Unit (☞Figure 12-5).....	..	1
8	4650310	Steering Control Unit (Alternate Part) .....	1	1

## CONTROL VALVE LOCKOUT GROUP (FIGURE 14-10) MANUAL CONTROL VALVE

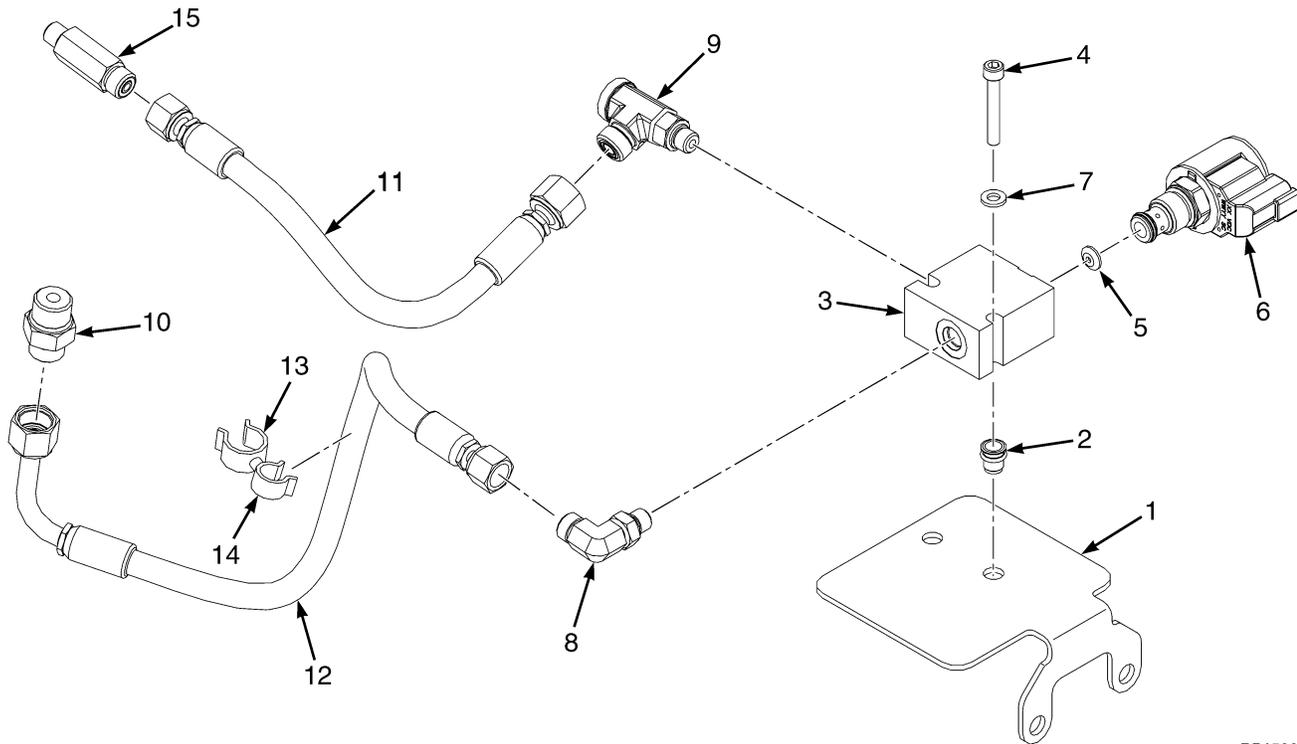


BP140133

**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 14-9).....	1	1

## MANUAL VALVE ANTI STALL GROUP (FIGURE 14-11) SINGLE SPEED TRANSMISSION

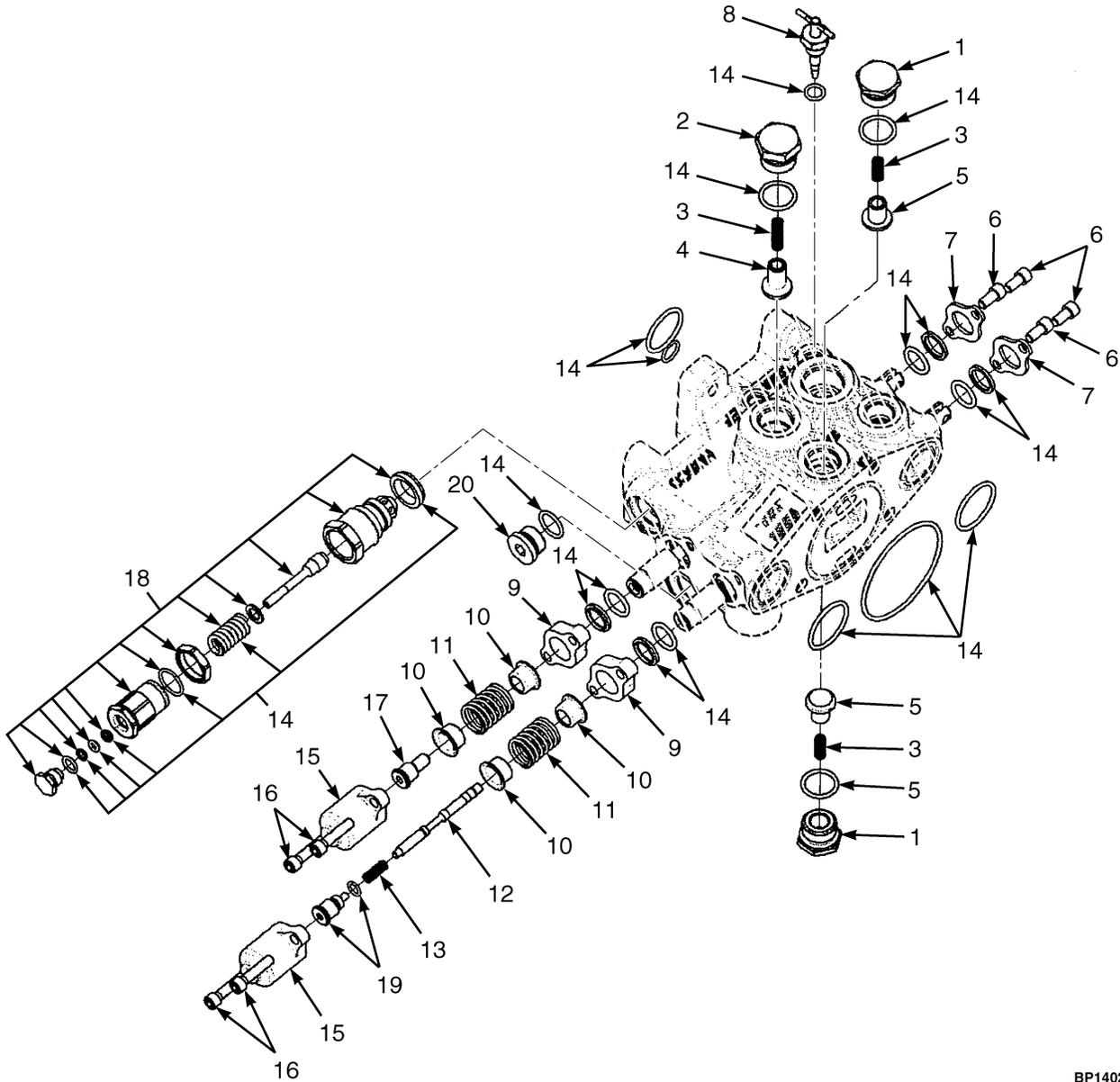


BP150696

ITEM	PART NO.	DESCRIPTION	QTY
1	4079563	Bracket .....	1
2	1531558	Insert .....	2
3	4630267	Valve Block .....	1
4	296000	Capscrew .....	2
5	4085979	Disk .....	1
6	1678165	Solenoid Valve .....	1
7	1673754	Washer .....	2
8	1487058	Fitting .....	1
9	4078018	T-Fitting .....	1
10	1486742	Fitting .....	1
11	4634425	Hose Assy .....	1
12	4630292	Hose Assy .....	1
13	1573549	Clamp (Swivel) .....	1
14	1542439	Clamp (Swivel) .....	1
15	4100401	Fitting .....	1



## VALVE ASSEMBLY, LIFT AND TILT (FIGURE 14-12) MANUAL CONTROL VALVE — THREE AND FOUR FUNCTION

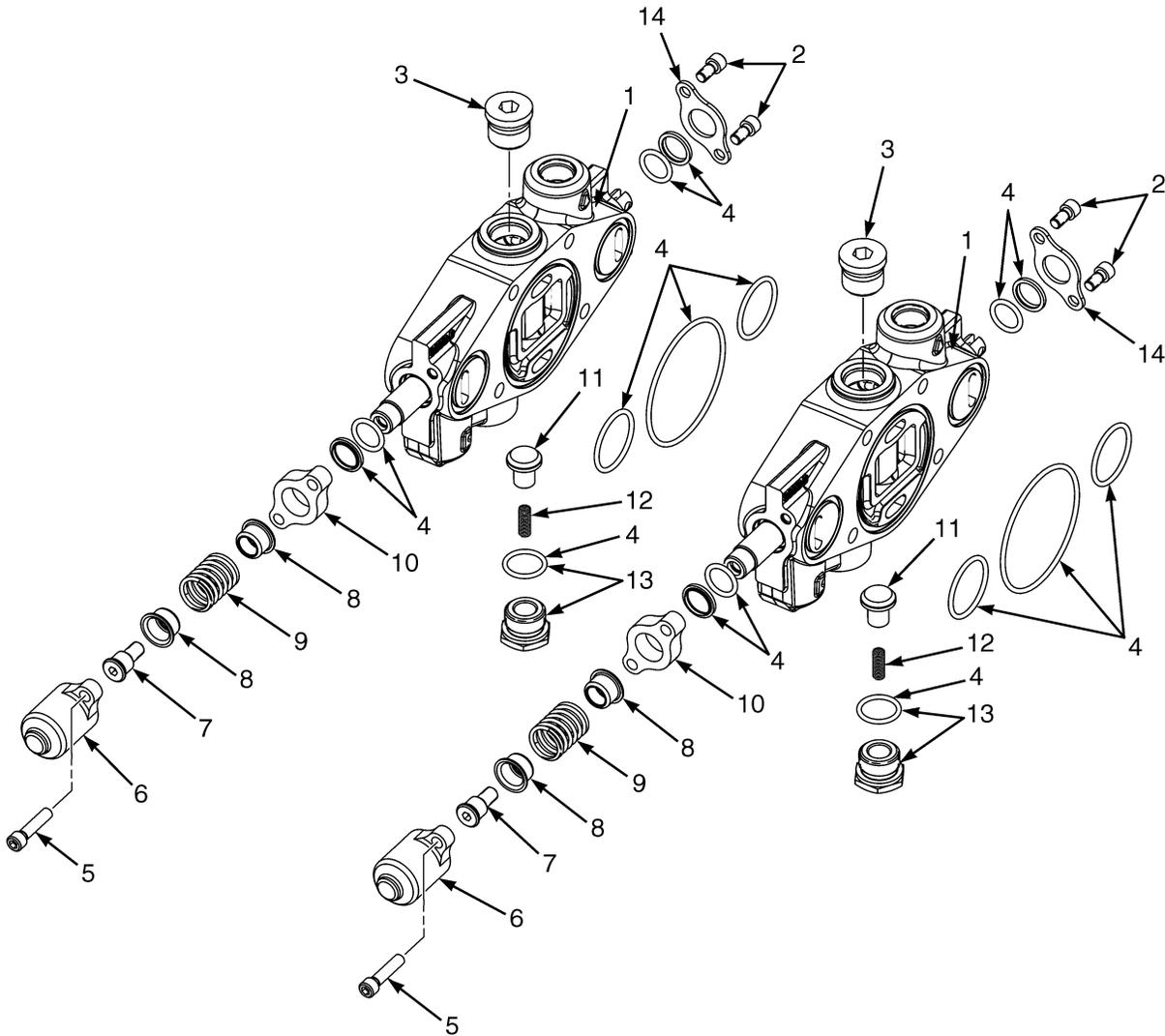


BP140244

**VALVE ASSEMBLY, LIFT AND TILT  
MANUAL CONTROL VALVE – THREE AND FOUR FUNCTION**

ITEM	PART NO.	DESCRIPTION	QTY
	4088047	Valve Section (Lift And Tilt) .....	1
1	1578713	Plug Assembly .....	2
2	1578940	Plug .....	1
3	77442	Spring .....	3
4	1578943	Poppet .....	1
5	77443	Poppet .....	2
6	16706	Screw .....	4
7	188515	Plate .....	2
8	1670522	Kit-Valve (Manual Lower Assembly) .....	1
9	1560682	Plate .....	2
10	320289	Spring Seat .....	4
11	1581860	Spring .....	2
12	1581861	Piston .....	1
13	341462	Spring .....	1
14	1670434	Kit-Seal (Three Function) .....	1
14	1670054	Kit-Seal (Master) .....	1
14	1670445	Kit-Seal (Lift and Tilt) .....	1
15	1560681	Cap .....	2
16	<del>1628746</del>		
	1578705	Capscrew .....	4
17	4088044	Spool End .....	1
18	<del>4098672</del>		
	1578747	Relief Valve (3100 PSI) (Main Relief) (Low Relief) .....	1
18	1578748	Relief Valve (3400 PSI) (Main) (High Relief) .....	1
19	4088045	Spool End .....	1
20	1569602	Plug Assembly .....	2
	1580097	Kit-Seal and Spring .....	1

## AUXILIARY ONE AND TWO (FIGURE 14-13) MANUAL CONTROL VALVE — THREE AND FOUR FUNCTION



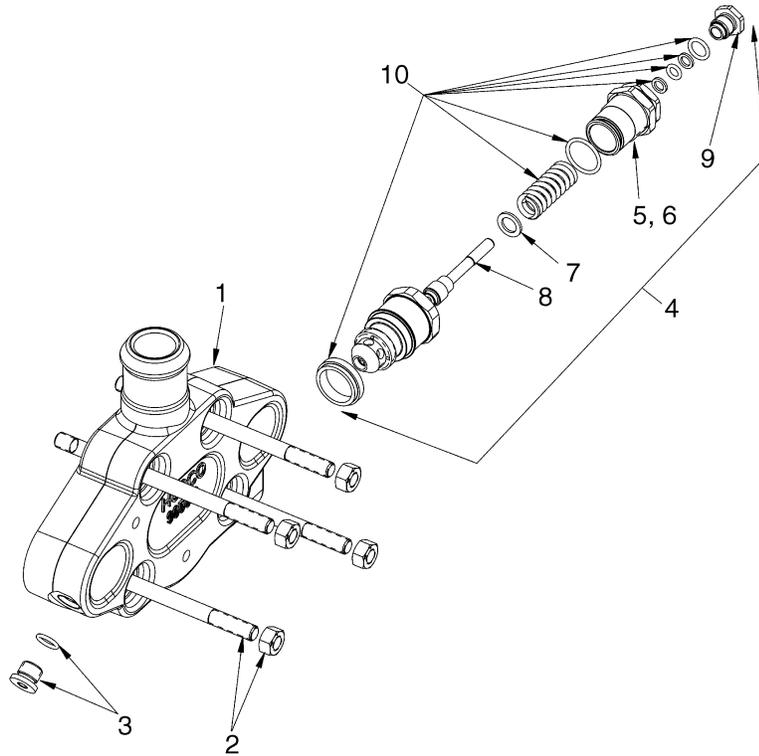
BP140119

**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	4087334	Valve Section .....	1	1
1	4087335	Valve Section .....	..	1
2	16706	Screw .....	2	4
3	4031469	Plug Assembly .....	1	1
4	1580147	Kit-Seal (Auxiliary Functions) .....	1	1
5	<del>1628746</del> 1578705	Capscrew .....	2	4
6	1560681	Cap .....	1	2
7	4088045	Spool End .....	1	2
8	320289	Spring Seat .....	2	4
9	1581860	Spring .....	1	2
10	1560682	Plate .....	1	2
11	77443	Poppet .....	1	2
12	77442	Spring .....	1	2
13	1578713	Plug Assembly .....	1	2
14	188515	Plate .....	1	2
	1670434	Kit-Seal (Three Function) .....	1	..
	1670054	Kit-Seal (Master) .....	..	1

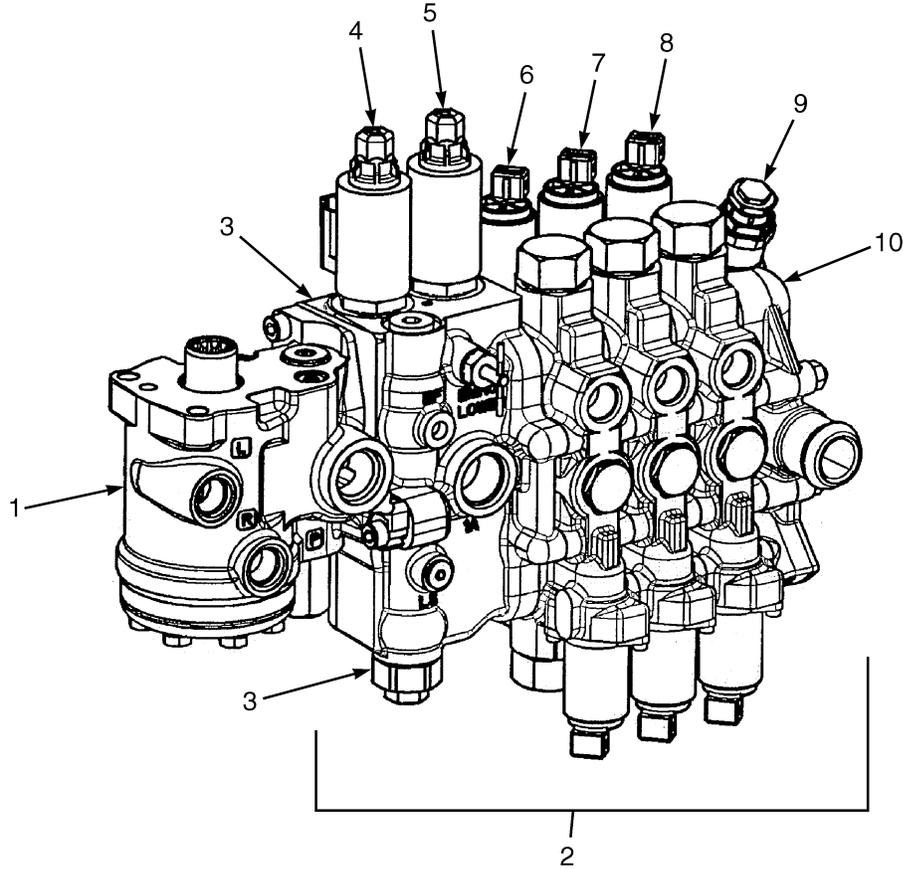
## OUTLET SECTION (FIGURE 14-14) MANUAL CONTROL VALVE — THREE AND FOUR FUNCTION



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 .....	1
2	15055	Nut .....	4
3	1578712	Plug Assembly .....	1
3	204128	Plug .....	1
4	1578707	Relief Valve , Secondary .....	1
5	.....	Nut .....	1
6	.....	Screw .....	1
7	.....	Washer .....	1
8	.....	Poppet .....	1
9	.....	Plug .....	1
10	1580131	Kit-Seal and Spring .....	1

**HYDRAULIC CONTROL VALVE (FIGURE 14-15)  
ELECTRONIC VALVE ASSEMBLY — THREE AND FOUR FUNCTION**



BP140112

**KEY:**

- A: Three Function Valve, Low Relief**
- B: Four Function Valve, Low Relief**
- C: Three Function Valve, High Relief**
- D: Four Function Valve, High Relief**

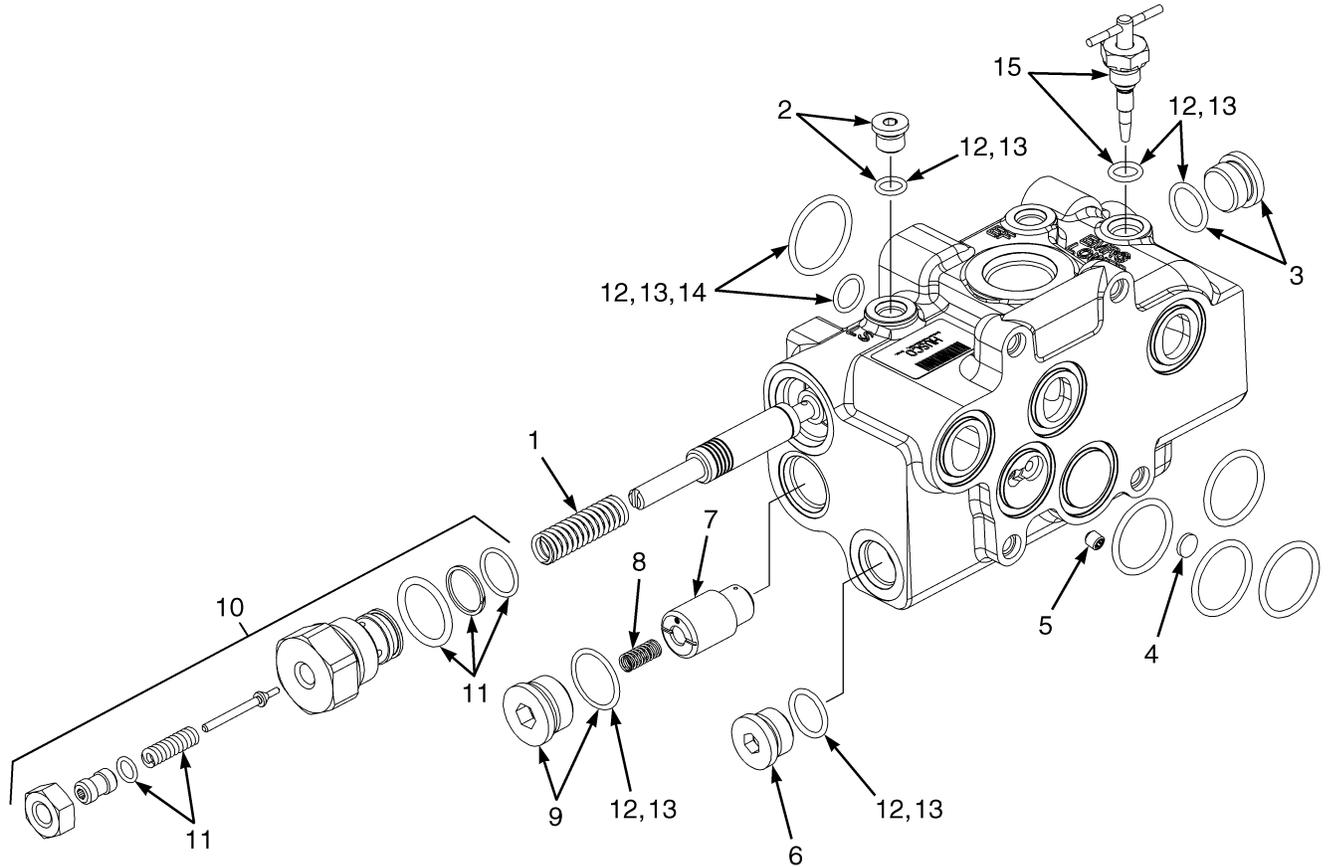
ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
	4629133	Hyd Valve W/Assembled Parts (E-Hydraulics Valve) .....	1	..	..	..
	4629135	Hyd Valve W/Assembled Parts (E-Hydraulics Valve) .....	..	1	..	..
	4629137	Hyd Valve W/Assembled Parts (E-Hydraulics Valve) .....	..	..	1	..
	4629139	Hyd Valve W/Assembled Parts (E-Hydraulics Valve) .....	..	..	..	1
1	2063117	Steering Control Unit (☞ Figure 12-5).....	1	1	..	..
1	2063118	Steering Control Unit (☞ Figure 12-5).....	..	..	1	1
1	4650310	Steering Control Unit (Alternate Part) .....	1	1	1	1
2	4629142	Hyd Control Valve (E-Hydraulics) .....	1	..	..	..
2	4629143	Hyd Control Valve (E-Hydraulics) .....	..	1	..	..
2	4629144	Hyd Control Valve (E-Hydraulics) .....	..	..	1	..
2	4629145	Hyd Control Valve (E-Hydraulics) .....	..	..	..	1
3	1664485	Valve Section (Inlet) (☞ Figure 14-16).....	1	1	..	..
3	1578706	Relief Valve (Main) .....	1	1	..	..
3	1664486	Valve Section (Inlet) (☞ Figure 14-16).....	..	..	1	1

**KEY:**

- A: Three Function Valve, Low Relief**
- B: Four Function Valve, Low Relief**
- C: Three Function Valve, High Relief**
- D: Four Function Valve, High Relief**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
3	1578753	Relief Valve (Main) .....	..	..	1	1
4	1590113	Poppet Valve .....	1	1	1	1
5	1699589	Poppet Valve .....	1	1	1	1
6	1708295	Valve Section (Tilt) (☞ Figure 14-18).....	1	1	1	1
7	1708263	Valve Section (Aux. 1) (☞ Figure 14-19).....	1	1	1	1
8	1708294	Valve Section (Aux. 2) (☞ Figure 14-20).....	1	1	1	1
9	1578707	Relief Valve , Secondary .....	1	1	1	1
10	1708262	Valve Section (Outlet) (☞ Figure 14-21).....	1	1	1	1
	1578909	Kit-Seal (Master 3 Function) .....	1	..	1	..
	1578908	Kit-Seal (Master 4 Function) .....	..	1	..	1
	1578715	Kit-Tie Rod .....	1	..	1	..
	1580151	Kit-Tie Rod .....	..	1	..	1

**HYDRAULIC CONTROL VALVE (FIGURE 14-16)  
ELECTRONIC VALVE INLET SECTION — THREE AND FOUR FUNCTION**



BP140113

**KEY:**

**A: 3 Function Valve**

**B: 4 Function Valve**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1664485	Valve Section (Inlet) (Low Relief) .....	1	1
	1664486	Valve Section (Inlet) (High Relief) .....	1	1
1	1578881	Spring .....	1	1
2	1578712	Plug Assembly .....	1	1
3	1569602	Plug .....	1	1
4	1578875	Shuttle Valve .....	1	1
5	1578888	Setscrew .....	1	1
6	1569602	Plug .....	1	1
7	1586280	Poppet .....	1	1
8	1578876	Spring .....	1	1
9	1578714	Plug Assembly .....	1	1
10	1578706	Relief Valve (Main) .....	1	..
10	1578753	Relief Valve (Main) .....	..	1
11	1580132	Kit-Relief Valve .....	1	1
12	1578909	Kit-Seal (Master 3 Function) .....	1	1
13	1578904	Kit-Seal (Inlet) .....	1	1
14	1578911	Kit-Seal (Steering Control Unit Interface) .....	1	1

**KEY:**

**A: 3 Function Valve**

**B: 4 Function Valve**

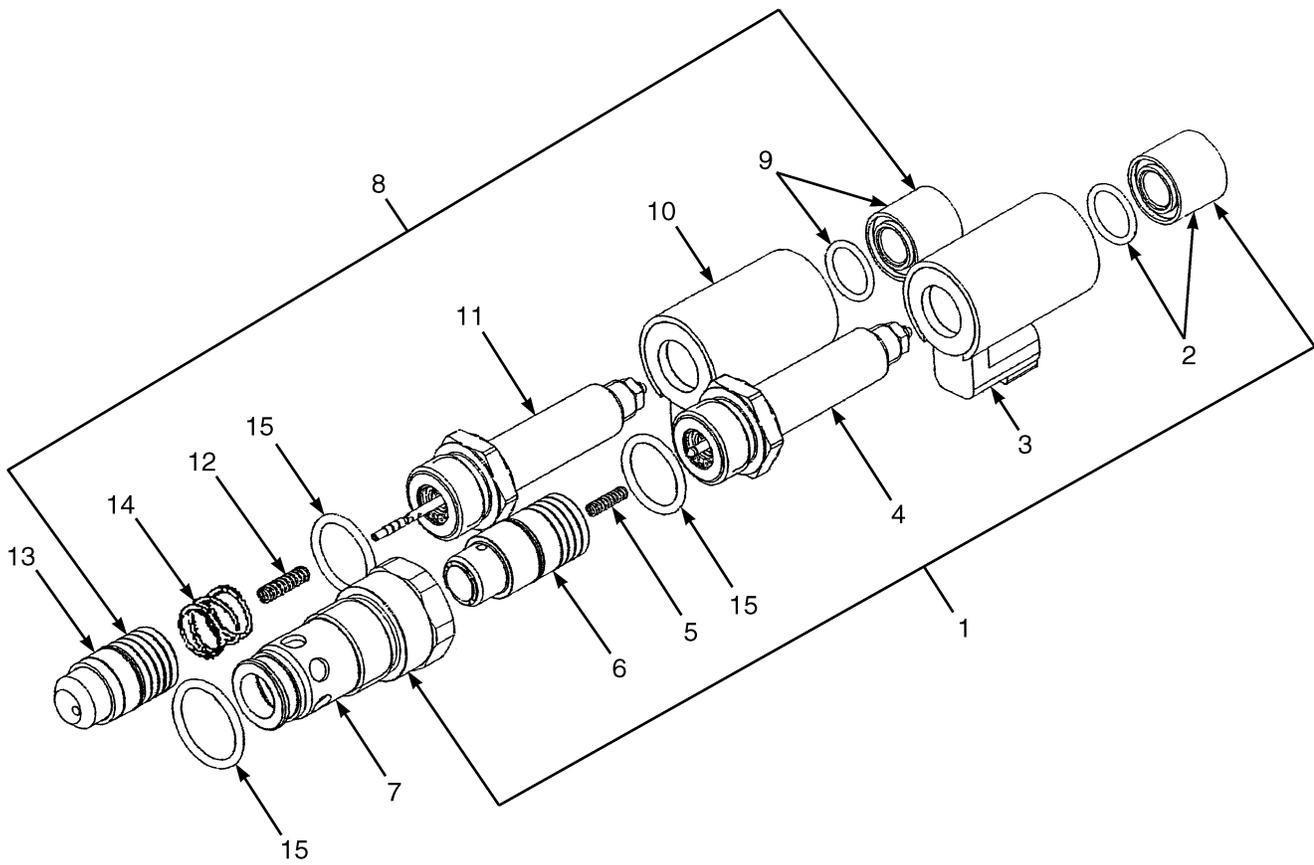
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ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
15	1581862	Kit-Valve (Manual Lowering) .....	1	1

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## HYDRAULIC CONTROL VALVE (ELECTRO-HYDRAULIC) (FIGURE 14-17) THREE AND FOUR FUNCTION — POPPET VALVES

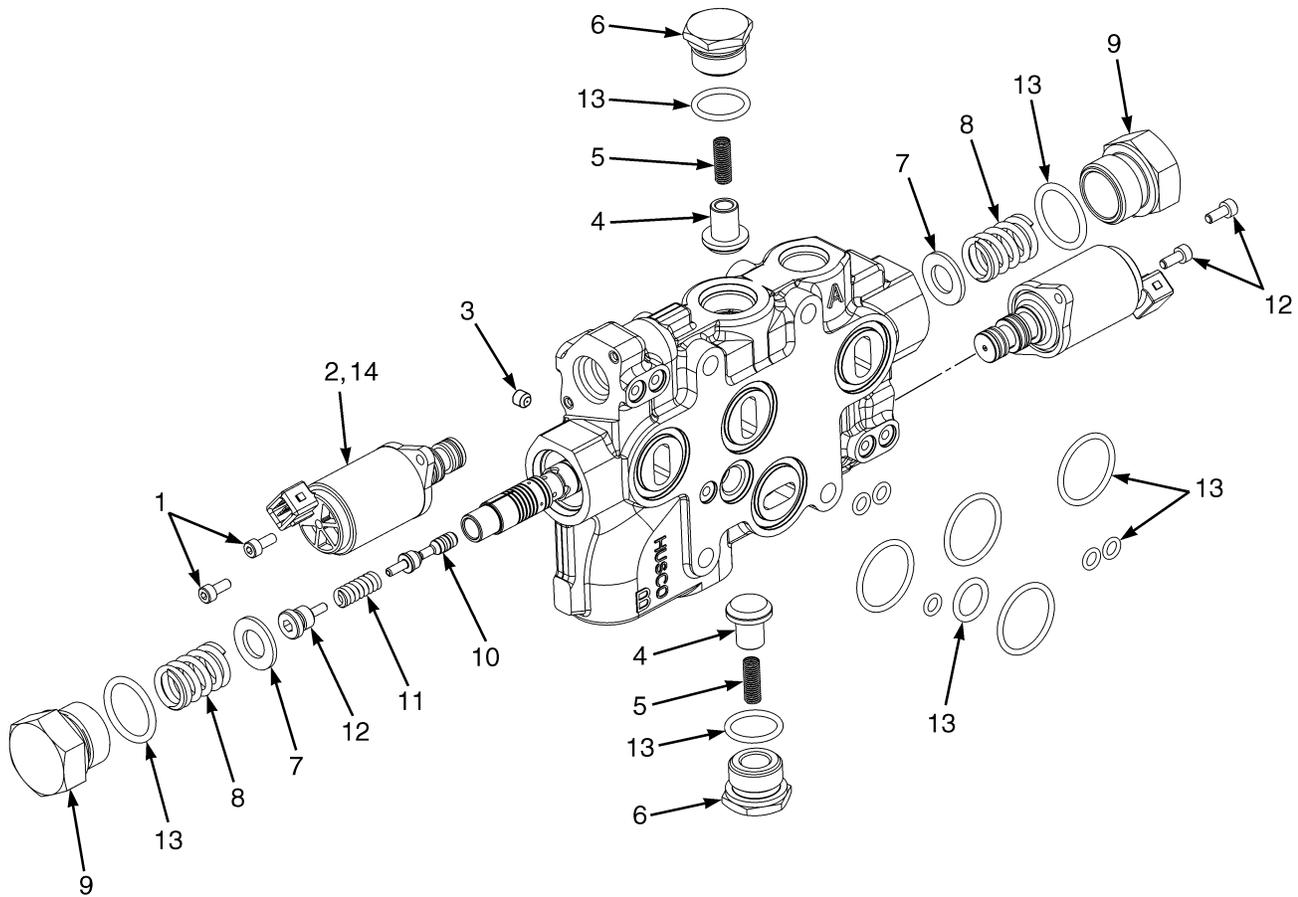


BP140250

**HYDRAULIC CONTROL VALVE (ELECTRO-HYDRAULIC)  
THREE AND FOUR FUNCTION – POPPET VALVES**

ITEM	PART NO.	DESCRIPTION	QTY
1	1699589	Poppet Valve (Lower) .....	1
2	1629163	Nut .....	1
3	1578710	Coil .....	1
4	1578918	Tube Assy (Solenoid) .....	1
5	1578934	Spring .....	1
6	1699591	Poppet Valve .....	1
7	1586020	Sleeve .....	1
8	1590113	Poppet Valve (Lift) .....	1
9	1629163	Nut .....	1
10	1578710	Coil .....	1
11	1629161	Tube Assy (Solenoid) .....	1
12	1629164	Spring .....	1
13	.....	Poppet Valve .....	1
14	4098456	Spring .....	1
15	1586279	Kit-Seal (Electro Hydraulic Poppet Valve) .....	1

## HYDRAULIC CONTROL VALVE (FIGURE 14-18) ELECTRONIC VALVE TILT SECTION — THREE AND FOUR FUNCTION

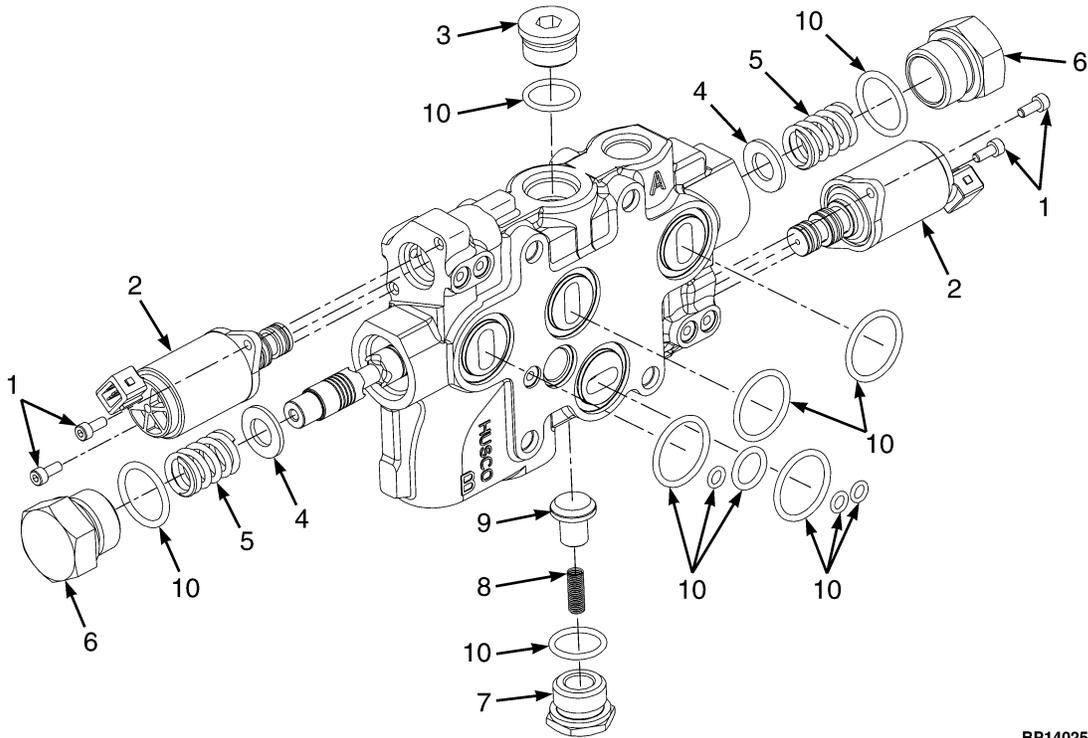


BP140114

**HYDRAULIC CONTROL VALVE  
ELECTRONIC VALVE TILT SECTION – THREE AND FOUR FUNCTION**

ITEM	PART NO.	DESCRIPTION	QTY
	1708295	Valve Section (Tilt) .....	1
1	1664395	Capscrew .....	4
2	1578711	Valve (Pressure Reducing) .....	2
3	1578887	Setscrew .....	1
4	77443	Poppet .....	2
5	77442	Spring .....	2
6	1578713	Plug Assembly .....	2
7	1578883	Washer .....	2
8	1578882	Spring .....	2
9	1578889	Plug .....	2
10	1580099	Piston and Rod .....	1
11	1580759	Spring .....	1
12	1580760	Spool End .....	1
13	1578905	Kit-Seal (Tilt) .....	1
14	1578912		
	1687534	Kit-Seal (Solenoid Pressure Reducing) .....	1

## HYDRAULIC CONTROL VALVE (FIGURE 14-19) ELECTRONIC VALVE AUXILIARY ONE SECTION — THREE AND FOUR FUNCTION

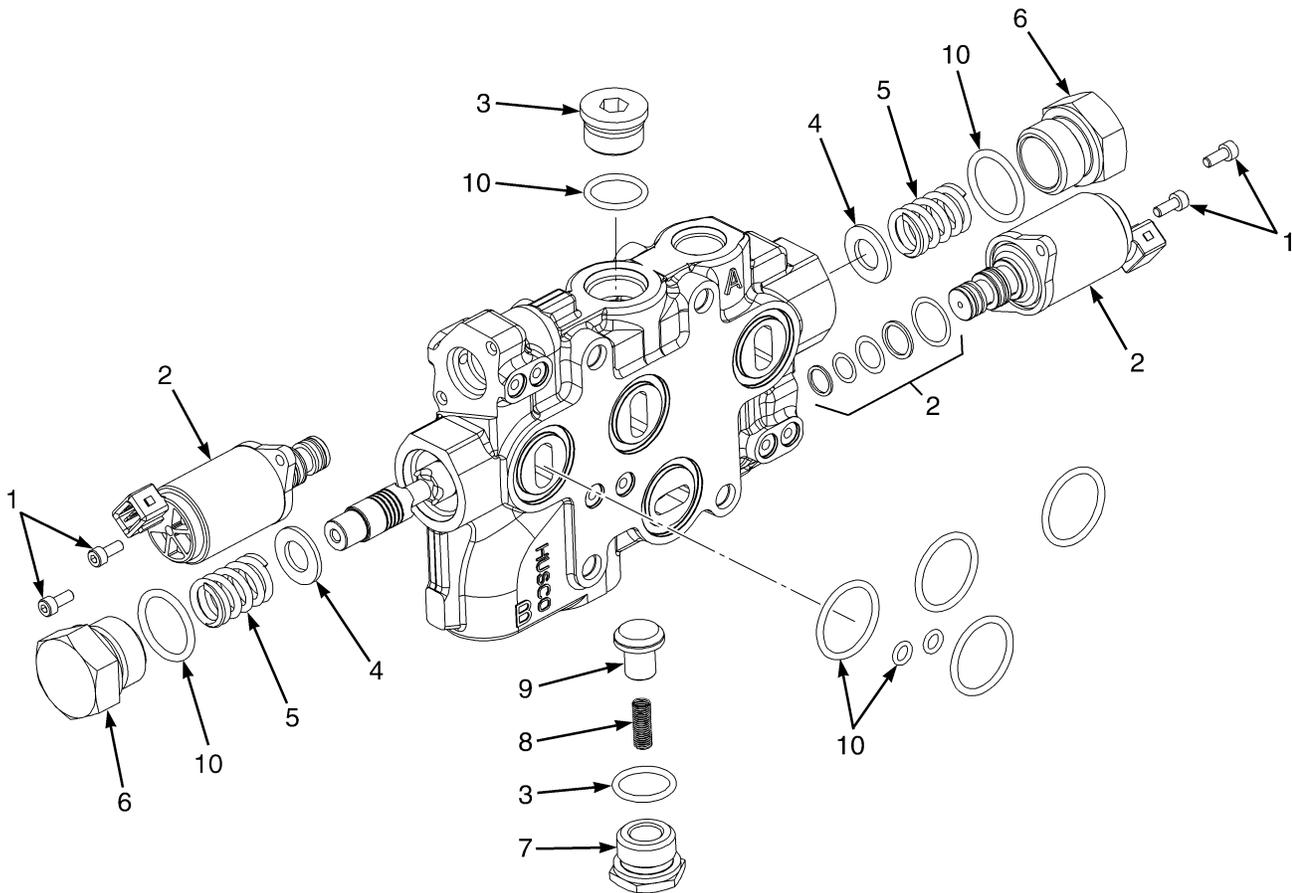


BP140251

ITEM	PART NO.	DESCRIPTION	QTY
	1708263	Valve Section (Aux. 1) .....	1
1	1664395	Capscrew .....	4
2	1578711	Valve (Pressure Reducing) .....	2
2	4578942	Kit-Seal (Solenoid Pressure Reducing) .....	1
3	4031469	Plug Assembly .....	1
4	1578883	Washer .....	2
5	1578882	Spring .....	2
6	1578889	Plug .....	2
7	1578713	Plug Assembly .....	1
8	77442	Spring .....	2
9	77443	Poppet .....	2
10	1578906	Kit-Seal (Auxiliary 1 Section) .....	1



## HYDRAULIC CONTROL VALVE (FIGURE 14-20) ELECTRONIC VALVE AUXILIARY TWO SECTION — FOUR FUNCTION

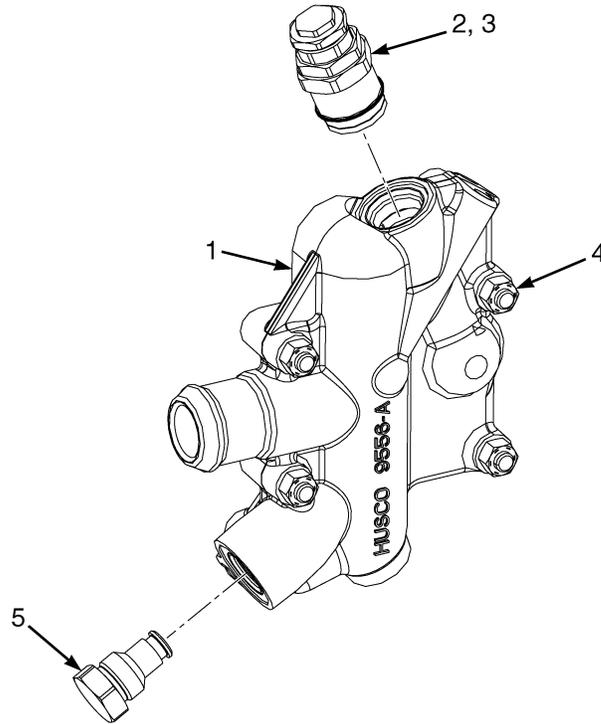


BP140116

**HYDRAULIC CONTROL VALVE  
ELECTRONIC VALVE AUXILIARY TWO SECTION – FOUR FUNCTION**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
	1708294	Valve Section (Aux. 2) .....	1
1	1664395	Capscrew .....	4
2	1578711	Valve (Pressure Reducing) .....	2
2	<del>1578912</del>		
	1687534	Kit-Seal (Solenoid Pressure Reducing) .....	1
3	1578714	Plug Assembly .....	1
4	1578883	Washer .....	2
5	1578882	Spring .....	2
6	1578889	Plug .....	2
7	1578713	Plug Assembly .....	1
8	77442	Spring .....	2
9	77443	Poppet .....	2
10	1578907	Kit-Seal (Auxiliary 2 and 3 Section) .....	1

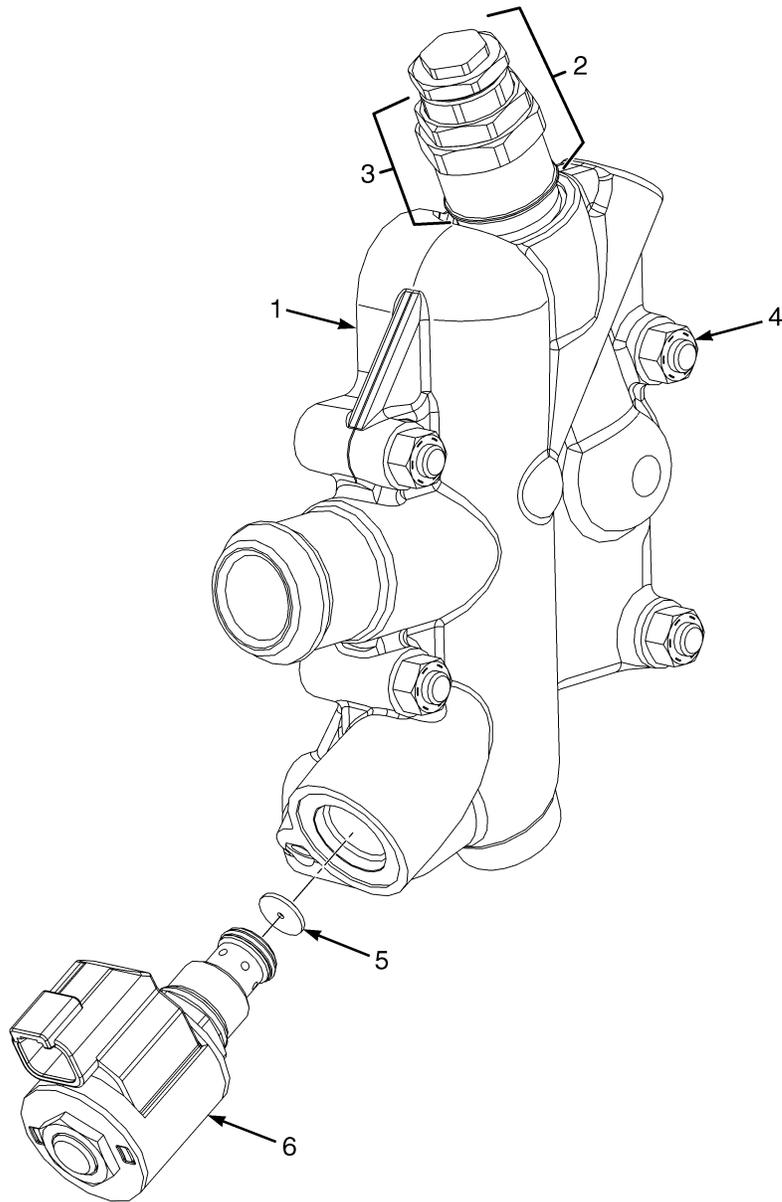
## OUTLET SECTION (FIGURE 14-21) ELECTRONIC CONTROL VALVE — WITH DIESEL ENGINES



BP140288

ITEM	PART NO.	DESCRIPTION	QTY
1	1708262	Valve Section (Outlet) .....	1
2	1578707	Relief Valve , Secondary .....	1
3	1580131	Kit-Seal and Spring .....	1
4	1578715	Kit-Tie Rod (Three Function) .....	1
4	1580151	Kit-Tie Rod (Four Function) .....	1
5	1678166	Plug .....	1
5	1684487	Kit-Seal , Viton Seals .....	1

**OUTLET SECTION (FIGURE 14-22)  
ELECTRONIC CONTROL VALVE — WITH LPG ENGINES**



BP140177

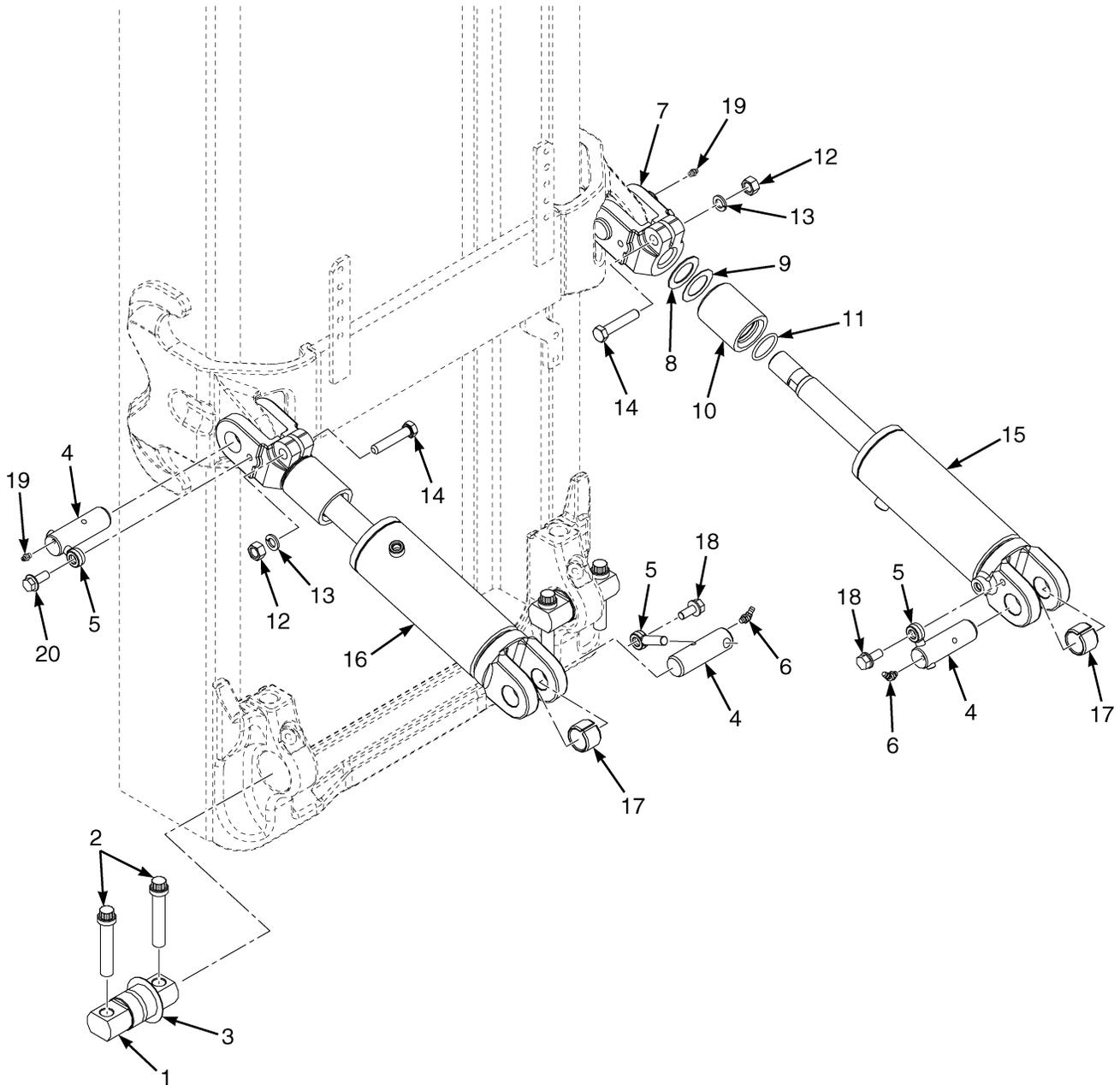
ITEM	PART NO.	DESCRIPTION	QTY
1	1708262	Valve Section (Outlet) .....	1
2	1578707	Relief Valve , Secondary .....	1
3	1580131	Kit-Seal and Spring .....	1
4	1580151	Kit-Tie Rod .....	1
4	15055	Nut .....	4
	<b>a</b> 4085979	Disk .....	1
6	1678165	Solenoid Valve .....	1
6	1684487	Kit-Seal , Viton Seals .....	1

**FOOTNOTES:**

**a** Not Illustrated



## TILT CYLINDER AND MAST INSTALLATION (FIGURE 14-23)



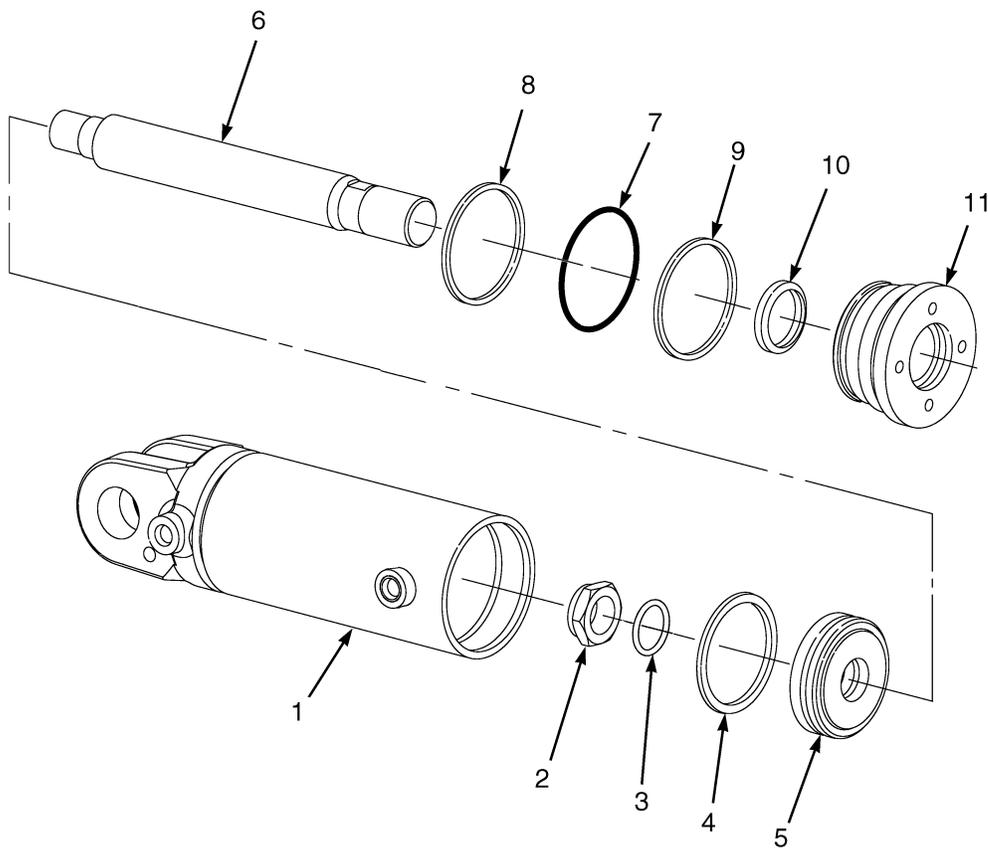
BP170750

**TILT CYLINDER AND MAST INSTALLATION****KEY:****A: H40-55FT****B: H60-70FT**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1514269	Pin (Mast Mounting) .....	2	2
2	1520290	Capscrew .....	4	4
3	4012960	Shim .....	1	1
4	1533493	Pin .....	4	4
5	1533494	Pin Anchor .....	4	4
6	16040	Grease Fitting .....	2	2
7	<b>ab</b> 1544118	Rod End .....	2	..
7	<b>ab</b> 1544119	Rod End .....	..	2
8	<b>b</b> 134675	Shim .....	4	..
8	<b>b</b> 142247	Shim .....	..	4
9	<b>b</b> 1325119	Shim .....	4	..
9	<b>b</b> 1325120	Shim .....	..	4
10	<b>b</b> 1544122	Spacer .....	2	..
10	<b>b</b> 1544123	Spacer .....	..	2
11	<b>b</b> 55434	O-Ring .....	4	..
11	<b>b</b> 60563	O-Ring .....	..	4
12	1581848	Nut .....	2	2
13	1581852	Washer .....	2	2
14	1597381	Capscrew .....	2	2
15	2069187	Tilt Cylinder (RH) (☞Figure 14-24).....	1	..
15	2069189	Tilt Cylinder (RH) (☞Figure 14-25).....	..	1
16	2069188	Tilt Cylinder (LH) (☞Figure 14-24).....	1	..
16	2069186	Tilt Cylinder (LH) (☞Figure 14-25).....	..	1
17	300982	Bushing .....	2	2
18	1586013	Capscrew .....	4	4
19	16041	Grease Fitting .....	2	2
20	1510117	Capscrew .....	2	2

**FOOTNOTES:****a** 6° Forward/10° Back**b** 6° Forward/6° Back

**TILT CYLINDERS (FIGURE 14-24)**  
**H40-50FT**

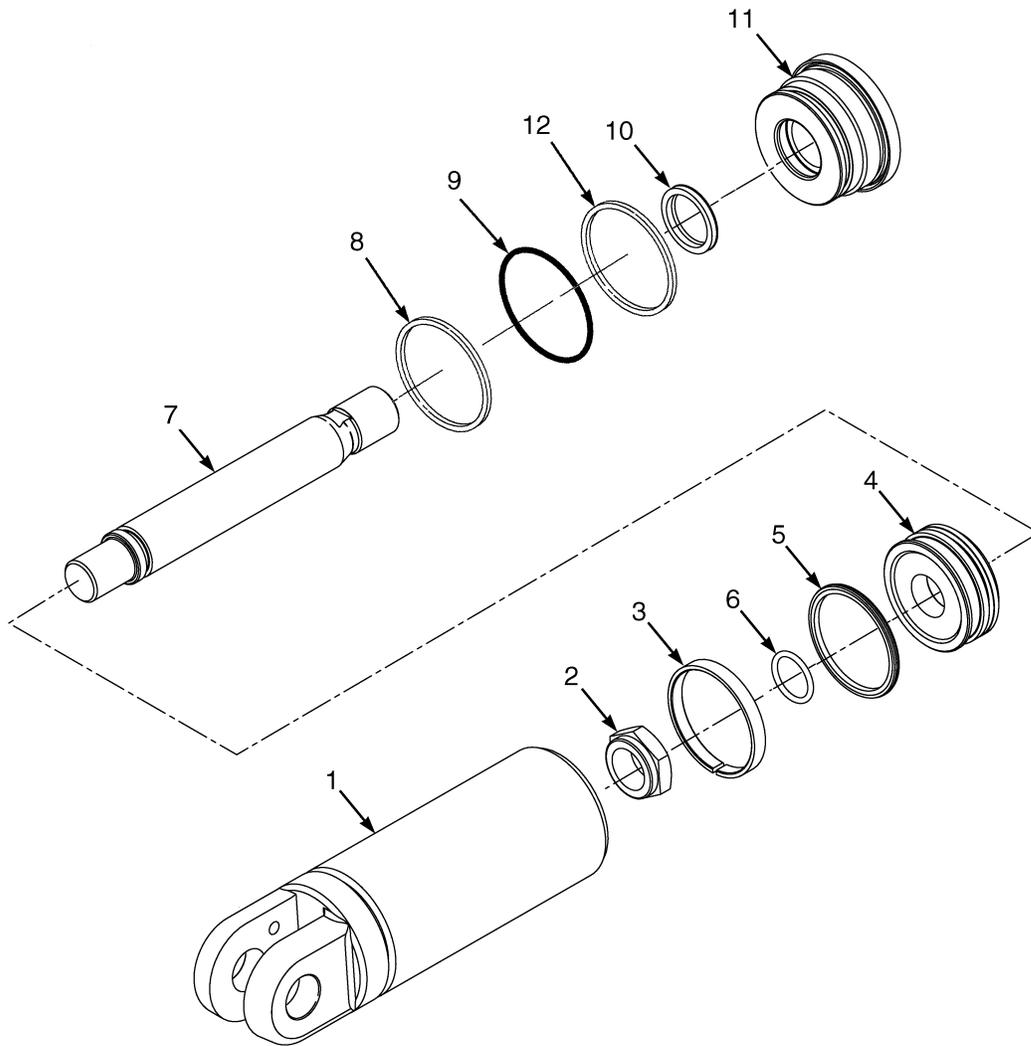


HP150974

**TILT CYLINDERS  
H40-50FT**

ITEM	PART NO.	DESCRIPTION	QTY
	2069187	Tilt Cylinder (RH) .....	1
	2069188	Tilt Cylinder (LH) .....	1
1	2076537	Tube Wldmt-Cylinder (RH) .....	1
1	2076541	Tube Wldmt-Cylinder (LH) .....	1
2	2302899	Locknut .....	1
3	39374	O-Ring .....	1
4	2044370	Piston Seal .....	1
5	1338741	Piston .....	1
6	2076539	Cylinder Rod .....	1
7	46388	O-Ring .....	1
8	154375	Back-Up Ring .....	1
9	1381082	Rod Seal .....	1
10	1383062	Rod Wiper .....	1
11	1338744	Gland .....	1
	1492644	Kit-Seal (Includes Items 3-4, 7-10) .....	1

**TILT CYLINDERS (FIGURE 14-25)  
H60-70FT**



HP150975

**TILT CYLINDERS  
H60-70FT**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
	2069186	Tilt Cylinder (LH) .....	1
	2069189	Tilt Cylinder (RH) .....	1
1	2076536	Tube Wldmt-Cylinder (RH) .....	1
1	2076540	Tube Wldmt-Cylinder (LH) .....	1
2	2070018	Locknut .....	1
3	199852	Wear Ring .....	1
4	1381078	Piston .....	1
5	2044371	Piston Seal .....	1
6	237812	O-Ring .....	1
7	2076538	Cylinder Rod .....	1
8	268619	O-Ring .....	1
9	147973	Back-Up Ring .....	1
10	1383063	Rod Wiper .....	1
11	1527520	Gland .....	1
12	1381083	Rod Seal .....	1
	1527719	Kit-Seal (Tilt Cylinder) (Includes Items 3, 5-6, 8-10, 12) .....	1



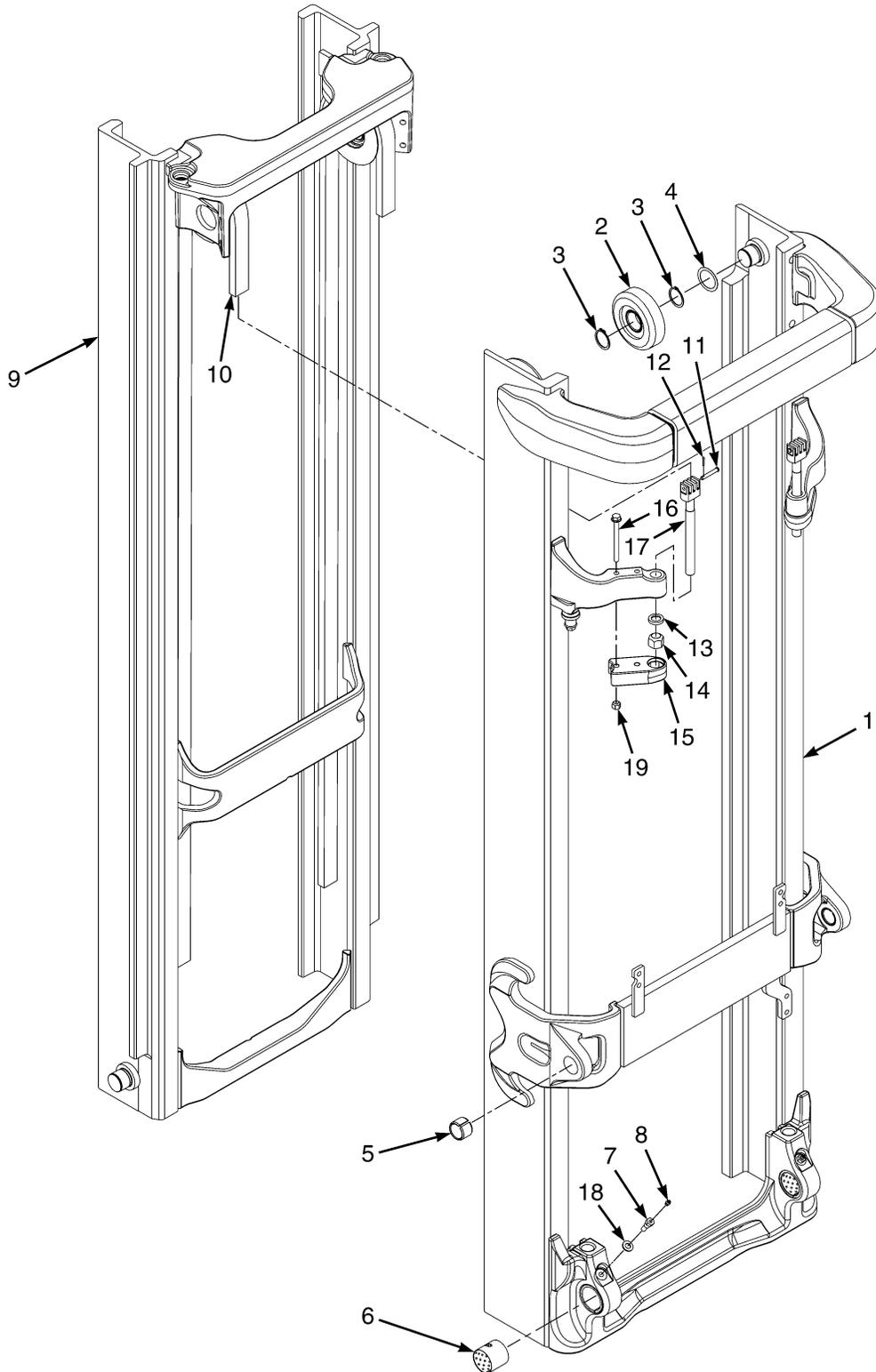




**SECTION 15**  
**MAST-TWO STAGE LIMITED FREE-LIFT**

DESCRIPTION	PAGE
CARRIAGE	
TWO STAGE LIMITED FREE-LIFT .....	15-16
HEADER HOSE AND ATTACHING PARTS	
TWO STAGE LIMITED FREE-LIFT .....	15-12
INNER MAST	
TWO STAGE LIMITED FREE LIFT .....	15-4
MAIN LIFT	
TWO STAGE LIMITED FREE LIFT .....	15-6
MAIN LIFT CYLINDER	
TWO STAGE LIMITED FREE LIFT .....	15-8
OUTER MAST	
TWO STAGE LIMITED FREE-LIFT .....	15-2

## OUTER MAST (FIGURE 15-1) TWO STAGE LIMITED FREE-LIFT



BP170642

**OUTER MAST  
TWO STAGE LIMITED FREE-LIFT****H40-55FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3752 mm (147.7 in.)	4392 mm (172.9 in.)
		Mast Group Number	F507 3752
	Mast Assy	4627980	4627986
1	Outer Mast	4053752	4053759

**H60-70FT**

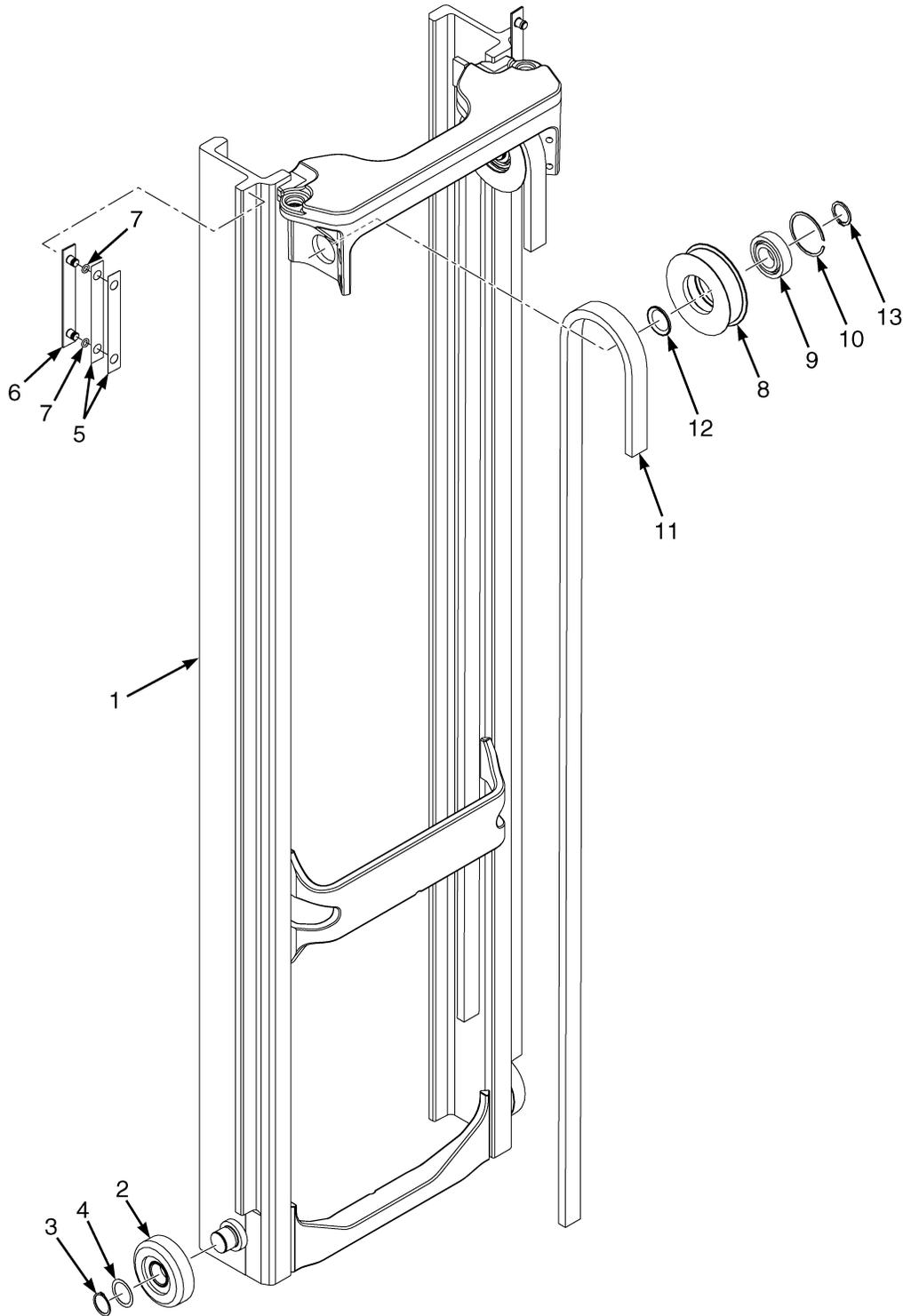
ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3659 mm (144.1 in.)	4359 mm (171.6 in.)
		Mast Group Number	F562 3659
	Mast Assy	4627962	4627969
1	Outer Mast	4053754	4053761

ITEM	PART NO.	DESCRIPTION	QTY
	a . . . . .	Mast Assy .....	1
1	a . . . . .	Outer Mast .....	1
2	1333396	Load Roller ("B") (111.48/111.22) .....	2
2	1395168	Load Roller ("A") (111.10/110.84) (Optional) .....	2
3	58901	Snap Ring .....	2
3	1374797	Snap Ring (Optional) .....	2
4	129387	Shim (0.020 in.) .....	AR
5	300982	Bushing .....	2
6	4033414	Bushing (Bronze) .....	2
7	4033412	Capscrew .....	2
8	13957	Grease Fitting .....	2
8	16041	Grease Fitting (Optional) .....	2
9	. . . . .	Inner Mast (☞Figure 15-2).....	1
10	. . . . .	Chain (☞Figure 15-2).....	2
11	1514866	Pin .....	2
12	15211	Cotter Pin .....	2
13	297649	Ring .....	2
14	4031973	Nut .....	2
15	4051079	Restraint .....	2
16	4082846	Capscrew .....	4
17	4072717	Chain Anchor (H40-50FT) .....	2
17	4072704	Chain Anchor (H60-70FT) .....	2
18	1581557	Washer .....	2
19	1581566	Nut .....	4

**FOOTNOTES:**

a Refer to Table

## INNER MAST (FIGURE 15-2) TWO STAGE LIMITED FREE LIFT



BP170708

**INNER MAST  
TWO STAGE LIMITED FREE LIFT**

**H40-55FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3752 mm (147.7 in.)	4392 mm (172.9 in.)
		Mast Group Number	F507 3752
	Mast Assy	4627980	4627986
1	Inner Mast	4054067	4054073
11	Chain	180176	336392

**H60-70FT**

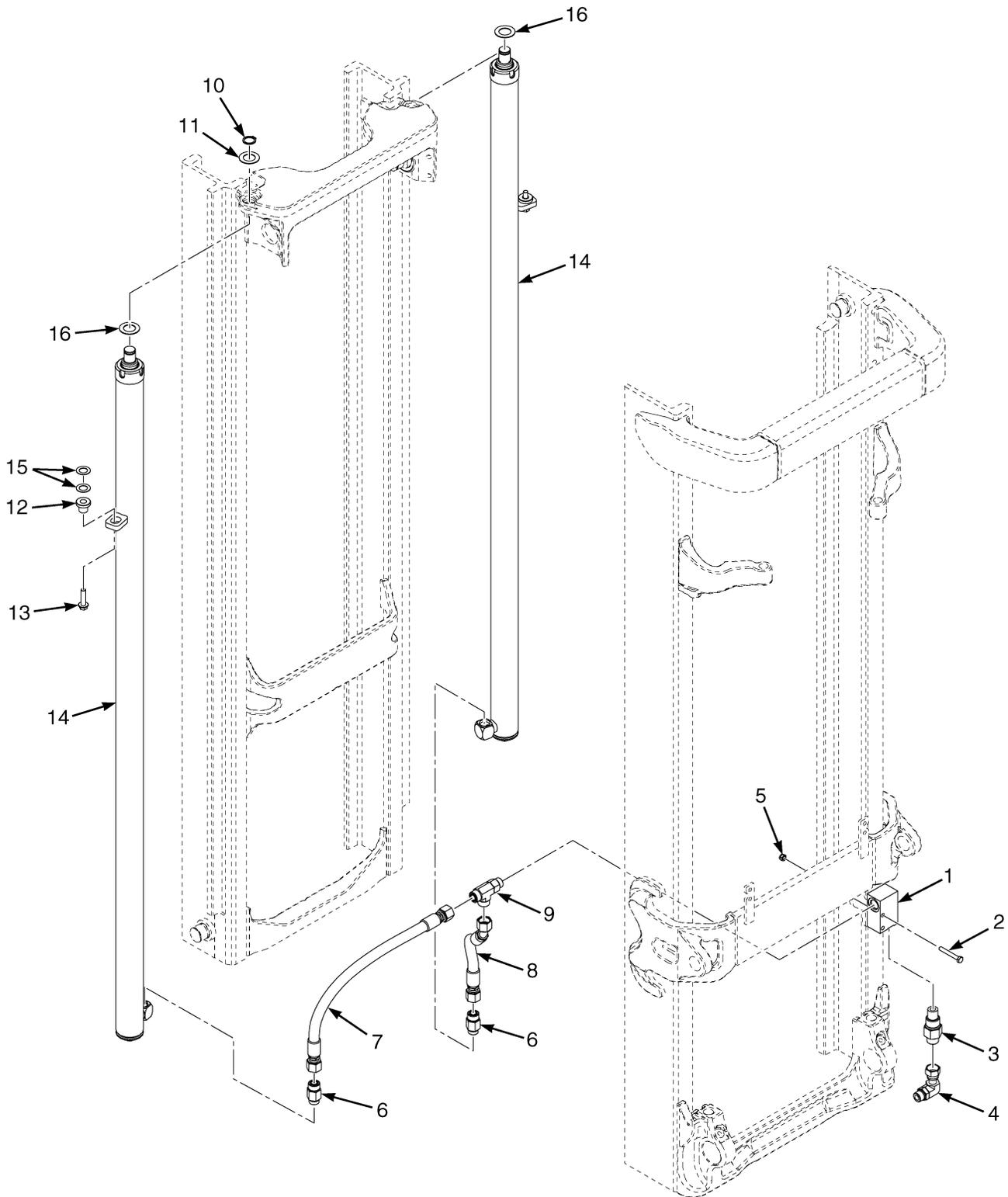
ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3659 mm (144.1 in.)	4359 mm (171.6 in.)
		Mast Group Number	F562 3659
	Mast Assy	4627962	4627969
1	Inner Mast	4054068	4054075
11	Chain	1342388	1359236

ITEM	PART NO.	DESCRIPTION	QTY
	<b>a</b> . . . . .	Mast Assy .....	1
1	<b>a</b> . . . . .	Inner Mast .....	1
2	1333396	Load Roller ("B") (111.48/111.22) .....	2
2	1395168	Load Roller ("A") (111.10/110.84) (Optional) .....	2
3	58901	Snap Ring .....	2
3	1374797	Snap Ring (Optional) .....	2
4	129387	Shim (0.020 in.) .....	AR
5	131716	Shim (0.020 in.) .....	2
5	131715	Shim (0.007 in.) (Optional) .....	2
6	215211	Wear Strip .....	2
7	104506	O-Ring .....	4
8	4054944	Chain Sheave Assembly (H40-55FT) .....	2
8	4048508	Chain Sheave Assembly (H60-70FT) .....	2
8	4054945	Chain Sheave (H40-50FT) .....	1
8	4046499	Chain Sheave (H60-70FT) .....	1
9	1378699	Ball Bearing .....	1
10	37752	Snap Ring .....	1
11	<b>a</b> . . . . .	Chain .....	2
12	335661	Spacer .....	2
13	304526	Snap Ring .....	2

**FOOTNOTES:**

**a** Refer to Table

## MAIN LIFT (FIGURE 15-3) TWO STAGE LIMITED FREE LIFT

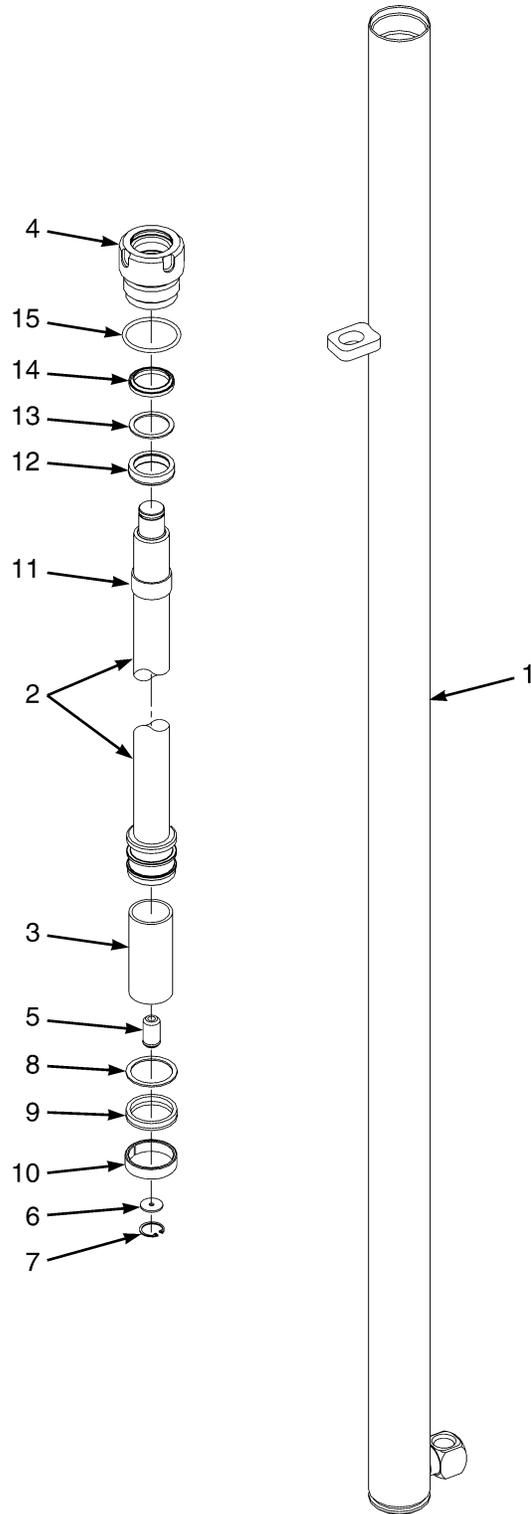


BP170644

**MAIN LIFT  
TWO STAGE LIMITED FREE LIFT**

ITEM	PART NO.	DESCRIPTION	QTY
1	4058916	Housing (Lowering Control) .....	1
2	1581836	Capscrew .....	2
3	2062651	Lowering Control Valve (H40-55FT) .....	1
3	2062652	Lowering Control Valve (H60-70FT) .....	1
4	1486773	Fitting .....	1
5	1581566	Nut .....	2
6	2062686	Hyd Velocity Fuse (H40-55FT) .....	2
6	2062687	Hyd Velocity Fuse (H60-70FT) .....	2
7	4620151	Hose Assy (LH) .....	1
8	4620152	Hose Assy (RH) .....	1
9	1592853	Fitting .....	1
10	131358	Snap Ring .....	2
11	1333382	Washer (0.060 in.) .....	2
12	4054558	Isolator .....	2
13	4029051	Capscrew .....	2
14	.....	Main Cylinder (☞Figure 15-4).....	2
15	1581557	Washer .....	4
16	1354915	Washer (0.010 in.) .....	2
16	1354916	Washer (0.030 in.) .....	2
16	1354917	Washer (0.060 in.) .....	2

## MAIN LIFT CYLINDER (FIGURE 15-4) TWO STAGE LIMITED FREE LIFT



BP170645

**MAIN LIFT CYLINDER  
TWO STAGE LIMITED FREE LIFT**

**H40-55FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3752 mm (147.7 in.)	4392 mm (172.9 in.)
	Mast Group Number	F507 3752	F507 4392
	Cylinder Group Number	8607411	8607417
	Lift Cylinder	4625313	4625319
1	Tube Wldmt- Cylinder	4064611	4064617
2	Cylinder Rod	1355178	1355202
3	Spacer	----	2045872

**H60-70FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3659 mm (144.1 in.)	4359 mm (171.6 in.)
	Mast Group Number	F562 3659	F562 4359
	Cylinder Group Number	8607511	8607555
	Lift Cylinder	4625345	4625351
1	Tube Wldmt- Cylinder	4064641	4064648
2	Cylinder Rod	1355395	1355426
3	Spacer	2304080	2088124

**KEY:**

**A: H40-55FT**

**B: H60-70FT**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a . . . . .	Lift Cylinder .....	2	2
1	a . . . . .	Tube Wldmt-Cylinder .....	1	1
2	a . . . . .	Cylinder Rod .....	1	1
3	a . . . . .	Spacer .....	1	1
4	4615847	Gland .....	1	..
4	4615848	Gland .....	..	1
5	257913	Check Valve .....	1	1
6	297531	Washer .....	1	1
6	637635	Washer (Optional) .....	1	1
7	187388	Snap Ring .....	1	1
8	638246	Back-Up Ring .....	1	..

## MAIN LIFT CYLINDER TWO STAGE LIMITED FREE LIFT

**KEY:**

**A:** H40-55FT

**B:** H60-70FT

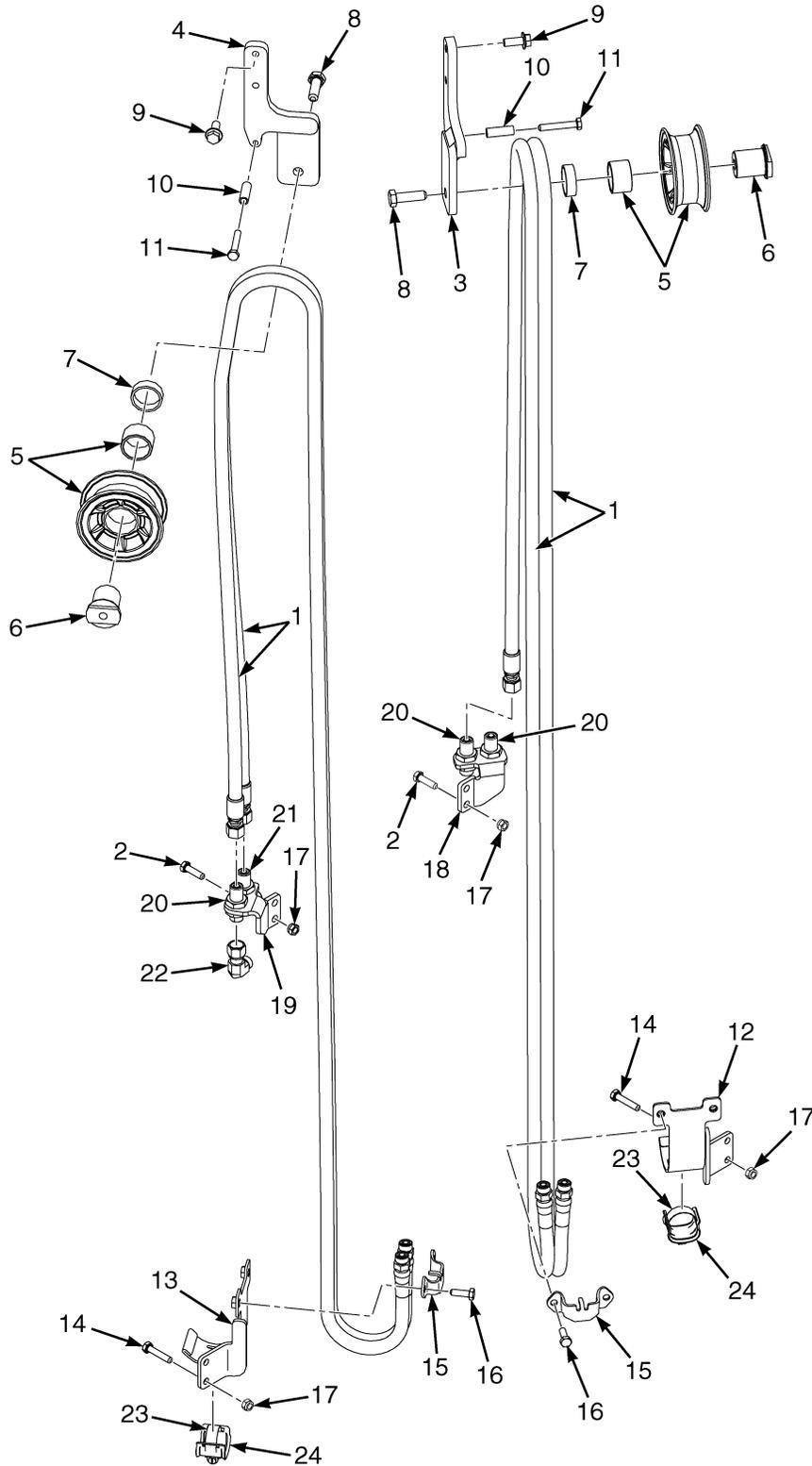
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
8	335012	Back-Up Ring .....	..	1
9	1381064	Piston Seal .....	1	..
9	1381063	Piston Seal .....	..	1
10	1356750	Wear Ring .....	1	..
10	1356751	Wear Ring .....	..	1
11	322902	Wear Ring .....	1	1
12	1356749	Rod Seal .....	1	1
13	322824	Back-Up Ring .....	1	1
14	1383063	Rod Wiper .....	1	1
15	<del>4028986</del>			
	92861	O-Ring .....	1	..
15	59229	O-Ring .....	..	1
	4623973	Kit-Seal (Includes Items 8-15) .....	1	..
	4623974	Kit-Seal (Includes Items 8-15) .....	..	1

**FOOTNOTES:**

**a** Refer to Table



## HEADER HOSE AND ATTACHING PARTS (FIGURE 15-5) TWO STAGE LIMITED FREE-LIFT



BP170751

**HEADER HOSE AND ATTACHING PARTS  
TWO STAGE LIMITED FREE-LIFT**

**H40-55FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3752 mm (147.7 in.)	4392 mm (172.9 in.)
		Mast Group Number	F507 3752
1	Header Hose	4636864	4636870

**H60-70FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS
		3659 mm (144.1 in.)
		Mast Group Number
1	Header Hose	4636865

**KEY:**

**A:** Three Function

**B:** Four Function

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	<b>b</b> . . . . .	Header Hose .....	2	4
2	1696161	Capscrew .....	2	4
3	4051290	Bracket Wldmt .....	1	1
4	4058915	Bracket Wldmt .....	..	1
5	4048781	Hose Sheave .....	1	2
5	4050091	Bushing .....	1	1
6	4013268	Stubshaft .....	1	2
7	4051293	Spacer .....	1	2
8	1581591	Capscrew .....	1	2
9	4051501	Capscrew .....	2	4
10	4013273	Spacer (Thin Wall) .....	1	2
11	1581583	Capscrew .....	1	2
12	4058930	Bracket Wldmt (LH) .....	1	1
13	4058935	Bracket Wldmt (RH) .....	..	1
14	1581582	Capscrew .....	2	4
15	4059830	Clamp .....	2	4
16	1581581	Capscrew .....	2	4
17	1581566	Nut .....	4	8
18	4122876	Bracket .....	1	1
19	4122875	Bracket .....	..	1
20	1528573	Fitting .....	2	2
21	1528579	Fitting .....	..	1
22	1473895	Fitting .....	..	1
23	369804	Clamp .....	1	2
24	1477996	Hose Clamp .....	1	2

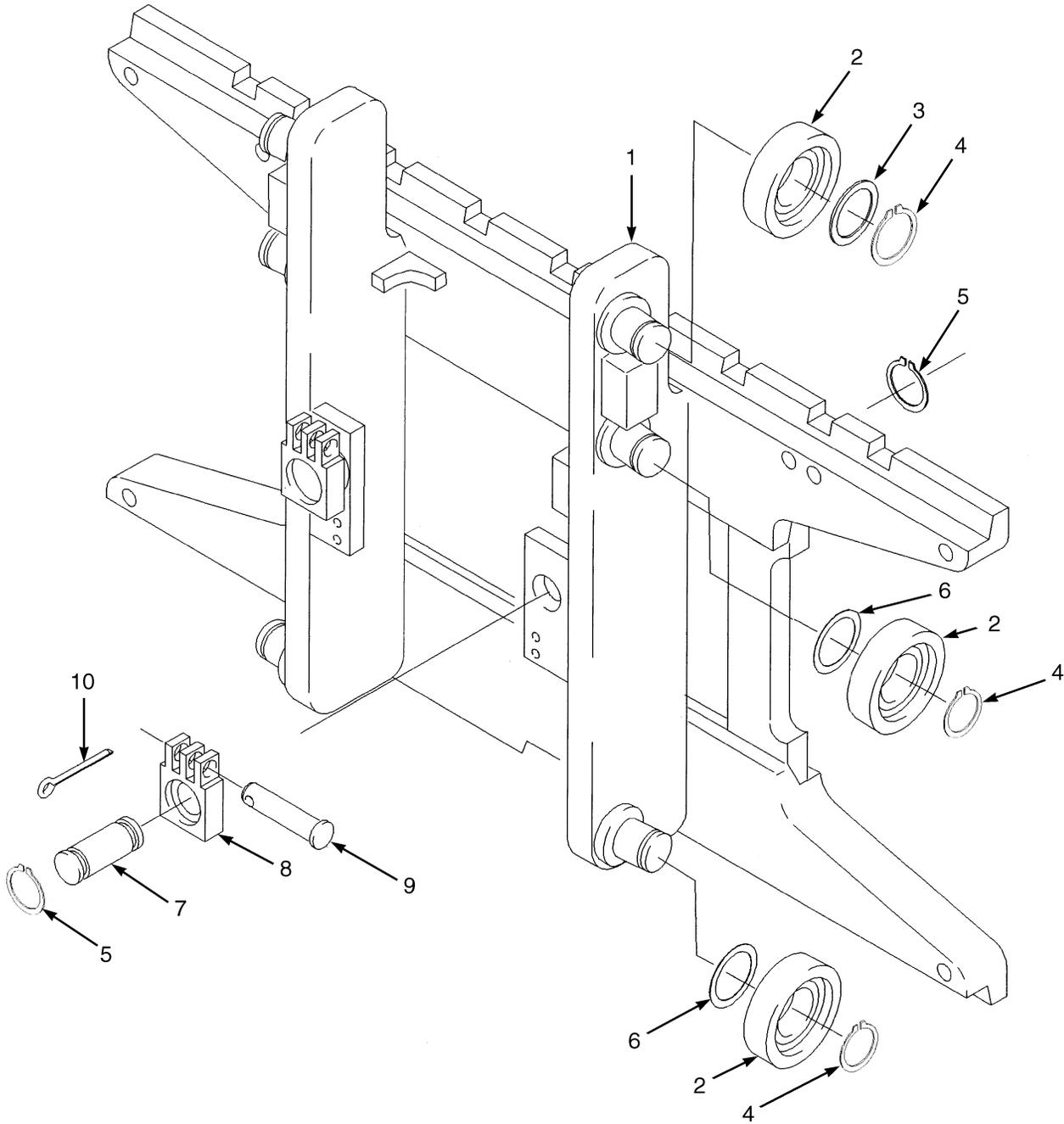
**HEADER HOSE AND ATTACHING PARTS  
TWO STAGE LIMITED FREE-LIFT****KEY:****A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	ac 1529015	Cap .....	2	4

**FOOTNOTES:****a** Not Illustrated**b** Refer to Table**c** Without header hoses



## CARRIAGE (FIGURE 15-6) TWO STAGE LIMITED FREE-LIFT



HP290013

**CARRIAGE  
TWO STAGE LIMITED FREE-LIFT****KEY:****A: H40-55FT****B: H60-70FT**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4625586	Carriage (42 in.) .....	1	..
	4625594	Carriage (42 in.) .....	..	1
1	4065173	Carriage Wldmt (42 in.) .....	1	..
1	4065200	Carriage Wldmt (42 in.) .....	..	1
1	1345264	Stubshaft .....	6	6
2	1345219	Load Roller ("B") (111.48/111.22) .....	6	6
3	366116	Spacer .....	2	2
4	12891	Snap Ring .....	6	6
4	386422	Snap Ring (Optional) .....	6	6
5	131358	Snap Ring .....	4	4
6	1345263	Shim (0.020 in.) .....	AR	AR
7	1353408	Pin .....	2	2
8	1369345	Chain Anchor (Dual Hole) .....	2	..
8	1504010	Chain Anchor (Single Hole) (Optional) .....	2	..
8	1369344	Chain Anchor (Dual Hole) .....	..	2
8	1504012	Chain Anchor (Single Hole) (Optional) .....	..	2
9	1514866	Pin .....	2	2
10	15211	Cotter Pin .....	2	2





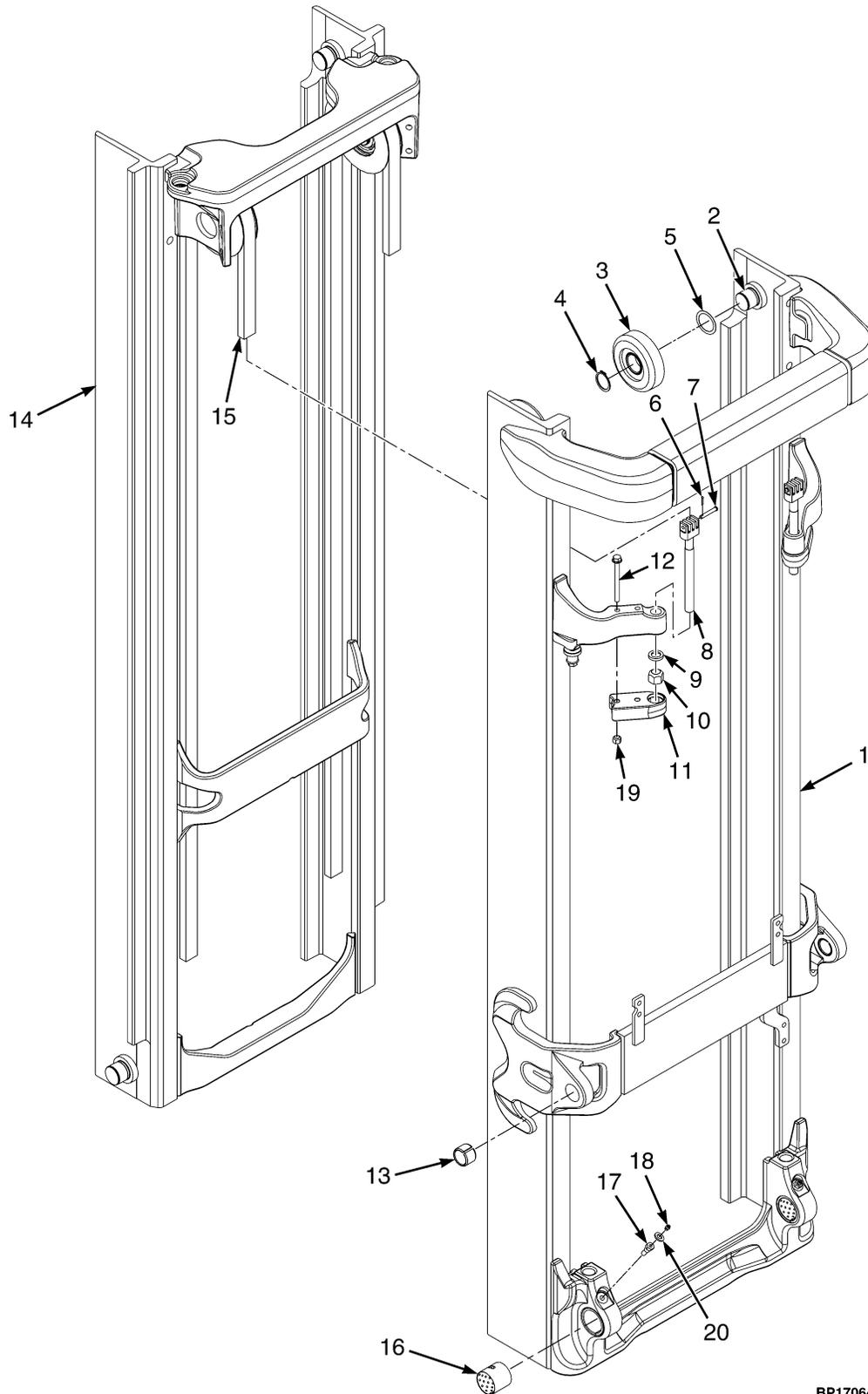


## SECTION 16

### MAST-THREE STAGE FULL FREE-LIFT

DESCRIPTION	PAGE
CARRIAGE	
THREE STAGE FULL FREE-LIFT .....	16-34
FREE-LIFT CYLINDER	
THREE STAGE FULL FREE-LIFT .....	16-26
FREE-LIFT CYLINDER AND ATTACHING PARTS	
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HEADER HOSES AND ATTACHING PARTS	
THREE STAGE FULL FREE-LIFT .....	16-30
INNER MAST	
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INTERMEDIATE MAST	
THREE STAGE FULL FREE-LIFT .....	16-6
MAIN LIFT CYLINDER	
THREE STAGE FULL FREE-LIFT .....	16-22
MAIN LIFT CYLINDER AND ATTACHING PARTS	
THREE STAGE FULL FREE-LIFT .....	16-14
OUTER MAST	
THREE STAGE FULL FREE LIFT .....	16-2

## OUTER MAST (FIGURE 16-1) THREE STAGE FULL FREE LIFT



BP170646

**OUTER MAST  
THREE STAGE FULL FREE LIFT**

**H40-55FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4310 mm (169.7 in.)	4760 mm (187.4 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)	6560 mm (258.3 in.)
		Mast Group Number	F508 4310	F508 4760	F508 5510	F508 5960
	Mast Assy	4623097	4623100	4623105	4623108	4623112
1	Outer Mast	4053744	4053746	4053752	4053755	4053760

**H60-70FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4118 mm (162.1 in.)	4718 mm (185.7 in.)	4868 mm (191.7 in.)	5318 mm (209.4 in.)
		Mast Group Number	F563 4118	F563 4718	F563 4868
	Mast Assy	4623078	4623082	4623083	4623086
1	Outer Mast	4053744	4053749	4053750	4053753

**H60-70FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		6068 mm (238.9 in.)	6368 mm (250.7 in.)	6518 mm (256.6 in.)
		Mast Group Number	F563 6068	F563 6368
	Mast Assy	4623091	4623093	4632223
1	Outer Mast	4053759	4053761	4053763

ITEM	PART NO.	DESCRIPTION	QTY
	<b>a</b> . . . . .	Mast Assy .....	1
1	<b>a</b> . . . . .	Outer Mast .....	1
2	1345216	Stubshaft .....	2
3	1333396	Load Roller ("B") (111.48/111.22) .....	2
3	1395168	Load Roller ("A") (111.10/110.84) (Optional) .....	2
4	58901	Snap Ring .....	2
4	1374797	Snap Ring (Optional) .....	2
5	129387	Shim (0.020 in.) .....	AR
6	15211	Cotter Pin .....	2
7	1514866	Pin .....	2
8	4072717	Chain Anchor (H40-55FT) .....	2
8	4072704	Chain Anchor (H60-70FT) .....	2
9	297649	Ring .....	2
10	4031973	Nut .....	2
11	4051079	Restraint .....	2
12	4082846	Capscrew .....	4
13	300982	Bushing .....	2

**OUTER MAST  
THREE STAGE FULL FREE LIFT**

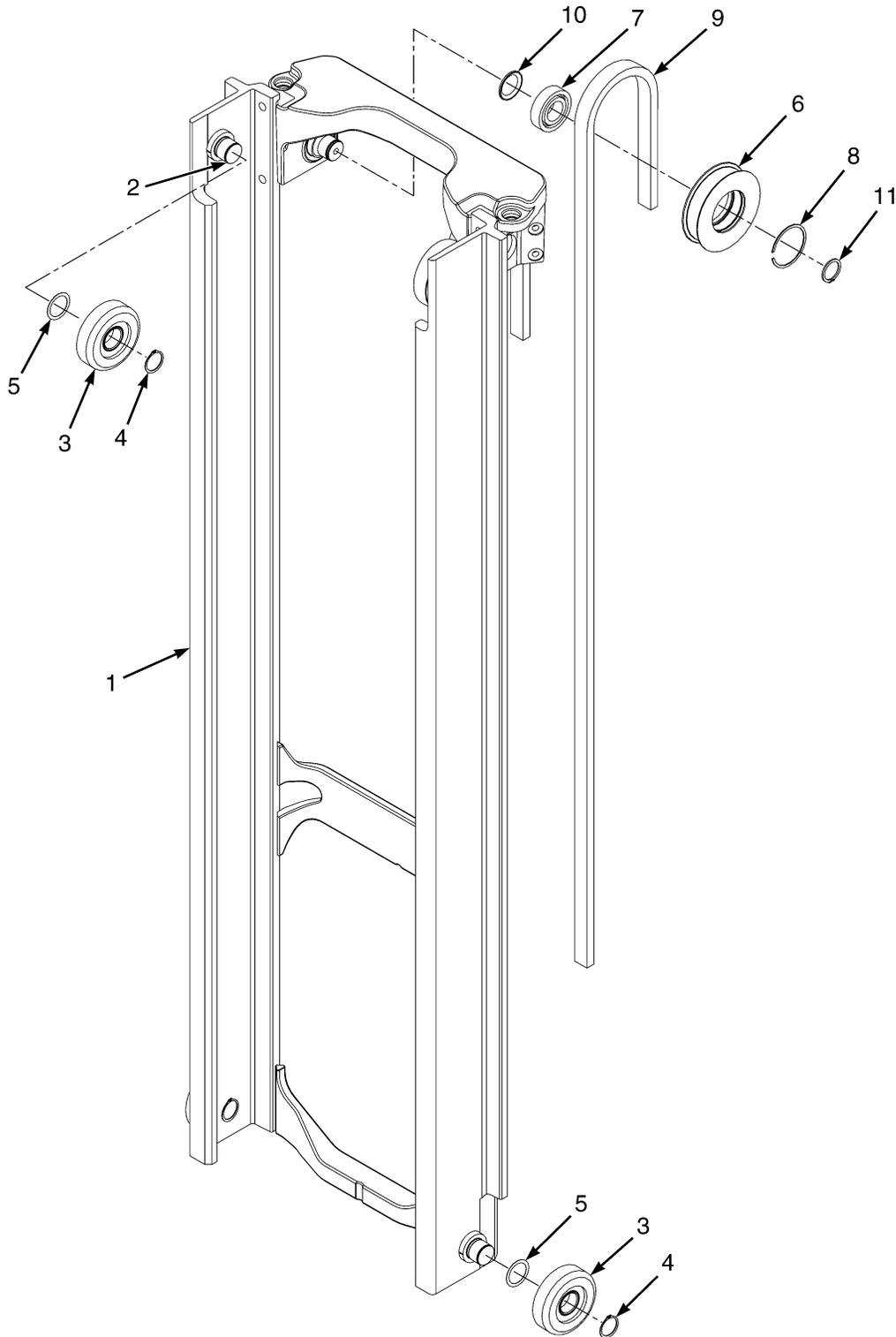
ITEM	PART NO.	DESCRIPTION	QTY
14	.....	Intermediate Mast (☞Figure 16-2).....	1
15	.....	Chain (☞Figure 16-2).....	2
16	4033414	Bushing .....	2
17	4033412	Capscrew .....	2
18	13957	Grease Fitting .....	2
18	16041	Grease Fitting (Optional) .....	2
19	1581566	Nut .....	4
20	1581557	Washer .....	2

**FOOTNOTES:**

- a Refer to Table



**INTERMEDIATE MAST (FIGURE 16-2)  
THREE STAGE FULL FREE-LIFT**



BP170647

**INTERMEDIATE MAST  
THREE STAGE FULL FREE-LIFT**

**H40-55FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4310 mm (169.7 in.)	4760 mm (187.4 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)	6560 mm (258.3 in.)
		Mast Group Number	F508 4310	F508 4760	F508 5510	F508 5960
	Mast Assy	4623097	4623100	4623105	4623108	4623112
1	Intermediate Mast	4053806	4053808	4053813	4053816	4053820
9	Chain	88441	180137	180176	1342079	1342080

**H60-70FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4118 mm (162.1 in.)	4718 mm (185.7 in.)	4868 mm (191.7 in.)	5318 mm (209.4 in.)
		Mast Group Number	F563 4118	F563 4718	F563 4868
	Mast Assy	4623078	4623082	4623083	4623086
1	Intermediate Mast	4053806	4053810	4053811	4053814
9	Chain	1342382	1342385	1342129	1342131

**H60-70FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		6068 mm (238.9 in.)	6368 mm (250.7 in.)	6518 mm (256.6 in.)
		Mast Group Number	F563 6068	F563 6368
	Mast Assy	4623091	4623093	4632223
1	Intermediate Mast	4053819	4053821	4095945
9	Chain	1342137	1342139	1342394

ITEM	PART NO.	DESCRIPTION	QTY
	a . . . . .	Mast Assy .....	1
1	a . . . . .	Intermediate Mast .....	1
2	1345216	Stubshaft .....	4
3	1333396	Load Roller ("B") (111.48/111.22) .....	4
3	1395168	Load Roller ("A") (111.10/110.84) (Optional) .....	4
4	58901	Snap Ring .....	4
4	1374797	Snap Ring (Optional) .....	4
5	129387	Shim (0.020 in.) .....	AR
6	4054944	Chain Sheave Assembly (H40-55FT) .....	2
6	4048508	Chain Sheave Assembly (H60-70FT) .....	2
6	4054945	Chain Sheave (H40-55FT) .....	1
6	4046499	Chain Sheave (H60-70FT) .....	1

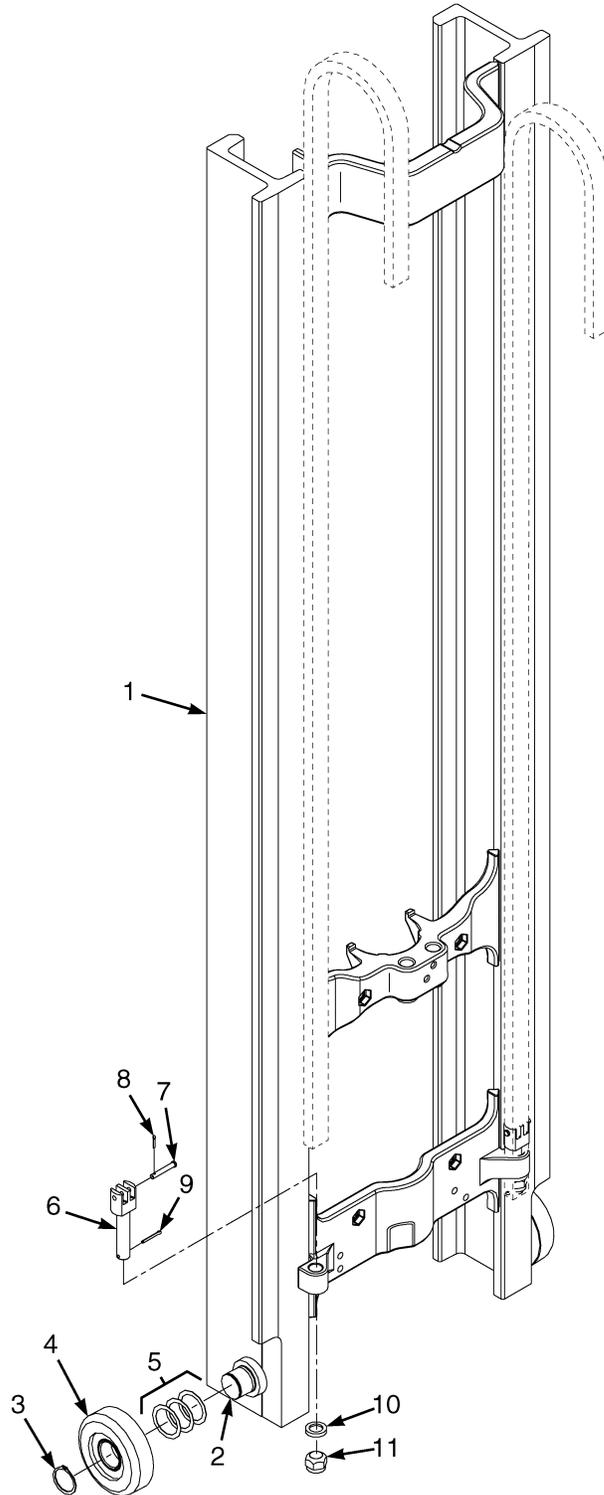
**INTERMEDIATE MAST  
THREE STAGE FULL FREE-LIFT**

ITEM	PART NO.	DESCRIPTION	QTY
7	1378699	Ball Bearing .....	1
8	37752	Snap Ring .....	1
9	<b>a</b> . . . . .	Chain .....	2
10	335661	Spacer .....	2
11	304526	Snap Ring .....	2

**FOOTNOTES:****a** Refer to Table



## INNER MAST (FIGURE 16-3) THREE STAGE FULL FREE-LIFT



BP170648

**INNER MAST  
THREE STAGE FULL FREE-LIFT****H40-55FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4310 mm (169.7 in.)	4760 mm (187.4 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)	6560 mm (258.3 in.)
		Mast Group Number	F508 4310	F508 4760	F508 5510	F508 5960
	Mast Assy	4623097	4623100	4623105	4623108	4623112
1	Inner Mast	4053838	4053840	4053845	4053848	4053852

**H60-70FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4118 mm (162.1 in.)	4718 mm (185.7 in.)	4868 mm (191.7 in.)	5318 mm (209.4 in.)
		Mast Group Number	F563 4118	F563 4718	F563 4868
	Mast Assy	4623078	4623082	4623083	4623086
1	Inner Mast	4053838	4053842	4053843	4053846

**H60-70FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		6068 mm (238.9 in.)	6368 mm (250.7 in.)	6518 mm (256.6 in.)
		Mast Group Number	F563 6068	F563 6368
	Mast Assy	4623091	4623093	4632223
1	Inner Mast	4053851	4053853	4095978

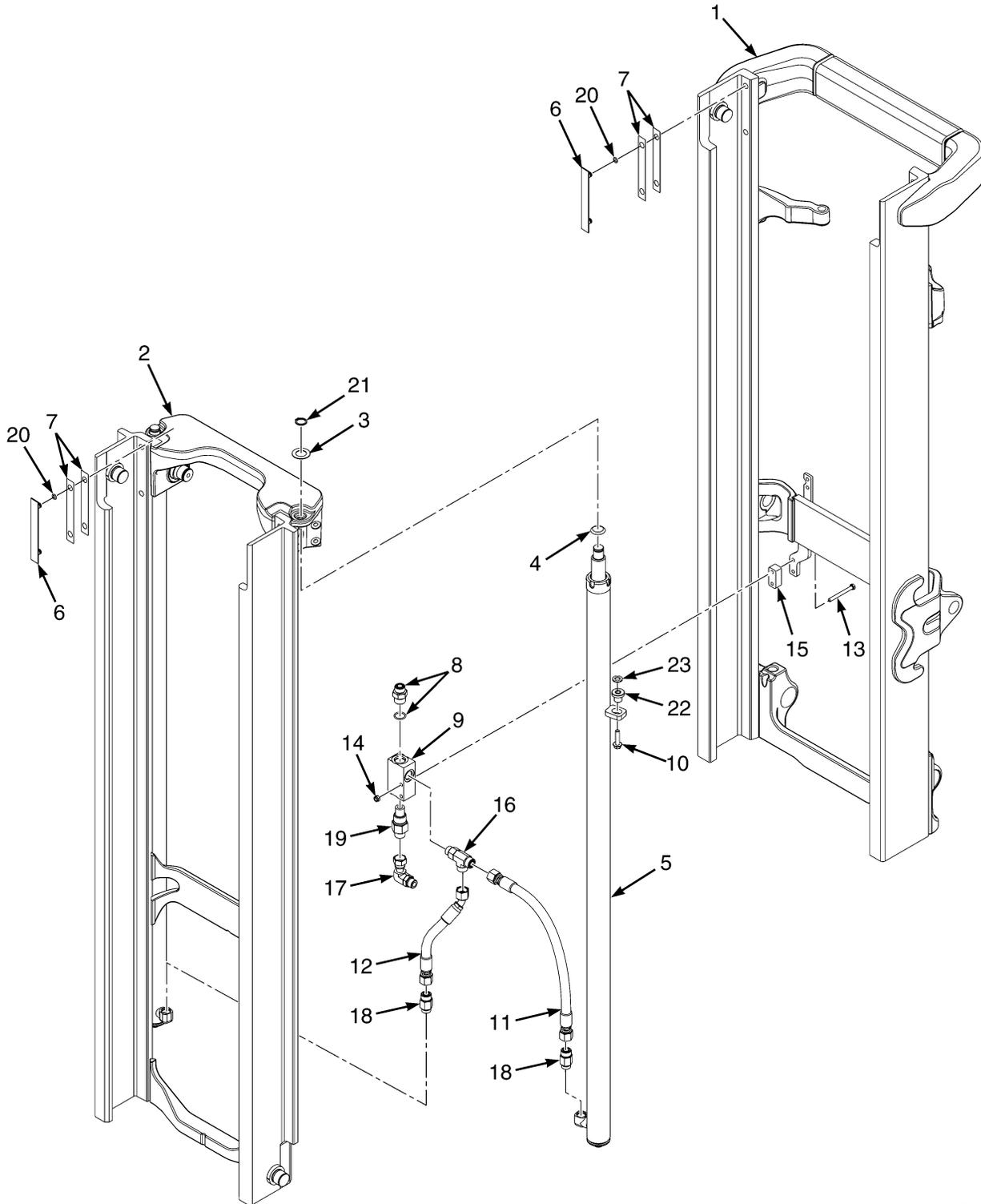
ITEM	PART NO.	DESCRIPTION	QTY
	<b>a</b> . . . . .	Mast Assy .....	1
1	<b>a</b> . . . . .	Inner Mast .....	1
2	1345216	Stubshaft .....	2
3	58901	Snap Ring .....	2
3	1374797	Snap Ring (Optional) .....	2
4	1333396	Load Roller ("B") (111.48/111.22) .....	2
4	1395168	Load Roller ("A") (111.10/110.84) (Optional) .....	2
5	129387	Shim (0.020 in.) .....	AR
6	1365140	Chain Anchor (H40-50FT) .....	2
6	1333329	Chain Anchor (H60-70FT) .....	2
7	1514866	Pin .....	2
8	15211	Cotter Pin .....	2
9	15223	Cotter Pin .....	2
10	297649	Ring .....	2
11	161003	Nut .....	2

**FOOTNOTES:**

- a Refer to Table



## MAIN LIFT CYLINDER AND ATTACHING PARTS (FIGURE 16-4) THREE STAGE FULL FREE-LIFT



BP170650

**MAIN LIFT CYLINDER AND ATTACHING PARTS  
THREE STAGE FULL FREE-LIFT**

**H40-55FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4310 mm (169.7 in.)	4760 mm (187.4 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)	6560 mm (258.3 in.)
		Mast Group Number	F508 4310	F508 4760	F508 5510	F508 5960
	Mast Assy	4623097	4623100	4623105	4623108	4623112

**H60-70FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4118 mm (162.1 in.)	4718 mm (185.7 in.)	4868 mm (191.7 in.)	5318 mm (209.4 in.)
		Mast Group Number	F563 4118	F563 4718	F563 4868
	Mast Assy	4623078	4623082	4623083	4623086

**H60-70FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		6068 mm (238.9 in.)	6368 mm (250.7 in.)	6518 mm (256.6 in.)
		Mast Group Number	F563 6068	F563 6368
	Mast Assy	4623091	4623093	4632223

ITEM	PART NO.	DESCRIPTION	QTY
	a . . . . .	Mast Assy .....	1
1	. . . . .	Outer Mast (☞ Figure 16-1).....	1
2	. . . . .	Intermediate Mast (☞ Figure 16-2).....	1
3	1333382	Washer (0.060 in.) .....	2
4	1354915	Washer (0.010 in.) .....	2
4	1354916	Washer (0.030 in.) .....	2
4	1354917	Washer (0.060 in.) .....	2
5	. . . . .	Main Lift Cylinder (☞ Figure 16-6).....	2
6	215211	Wear Strip .....	4
7	131716	Shim (0.020 in.) .....	4
7	131715	Shim (0.007 in.) .....	4
8	1486751	Fitting .....	1
9	4055582	Housing (Lowering Control) .....	1
10	4029051	Capscrew .....	2
11	4620151	Hose Assy .....	1
12	4620152	Hose Assy .....	1
13	4065168	Capscrew .....	2
14	1581566	Nut .....	2
15	4065167	Spacer .....	1
16	1592853	Fitting .....	1
17	1486773	Fitting .....	1

**MAIN LIFT CYLINDER AND ATTACHING PARTS  
THREE STAGE FULL FREE-LIFT**

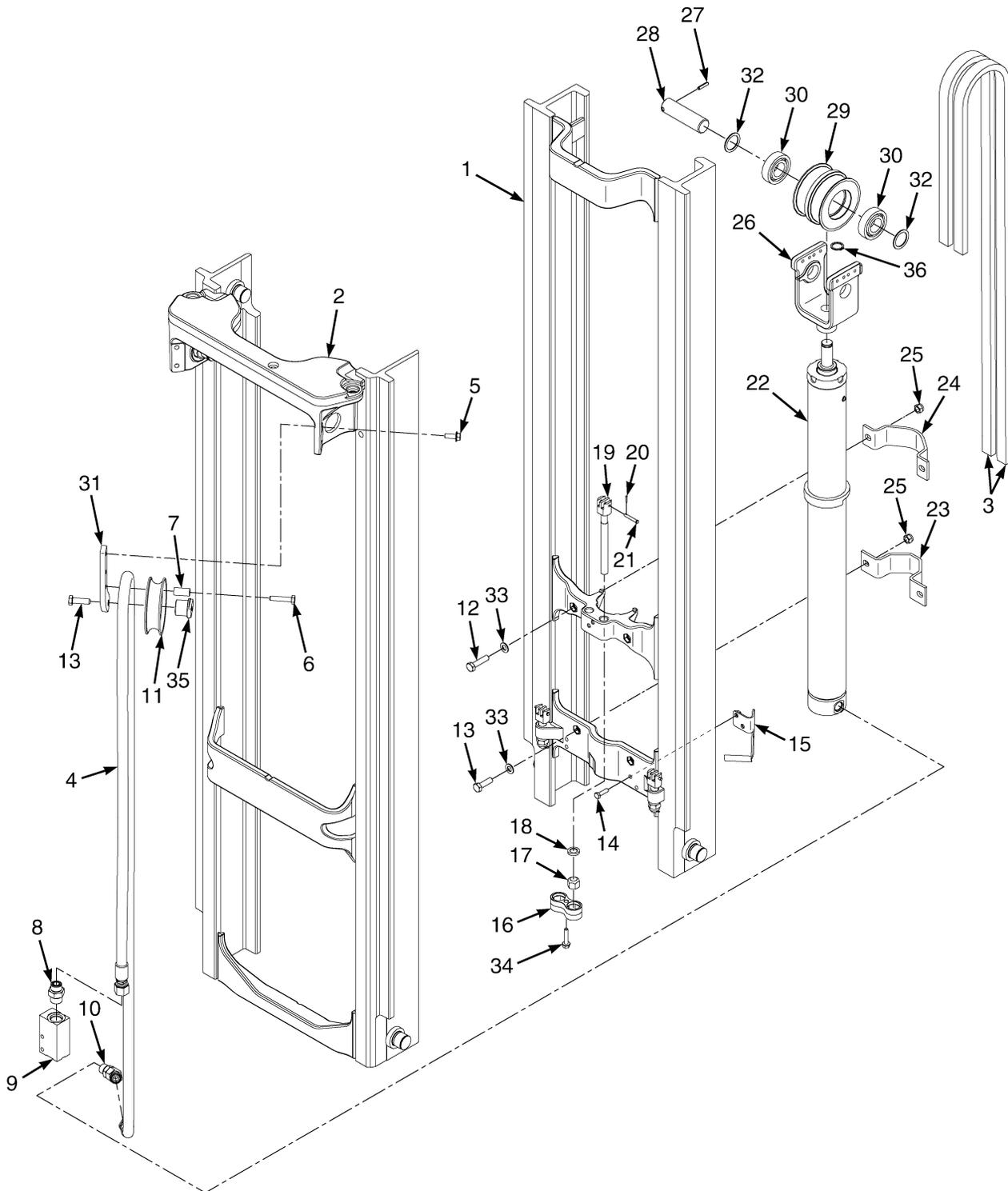
<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
18	2062686	Hyd Velocity Fuse (H40-55FT) .....	2
18	2062687	Hyd Velocity Fuse (H60-70FT) .....	2
18	16485	O-Ring .....	1
18	252729	O-Ring .....	1
19	2062651	Lowering Control Valve (H40-55FT) .....	1
19	2062652	Lowering Control Valve (H60-70FT) .....	1
19	16982	O-Ring .....	1
19	252729	O-Ring .....	1
20	104506	O-Ring .....	8
21	131358	Snap Ring .....	2
22	4054558	Isolator .....	2
23	1581557	Washer .....	4

**FOOTNOTES:**

- a** Refer to Table



## FREE-LIFT CYLINDER AND ATTACHING PARTS (FIGURE 16-5) THREE STAGE FULL FREE-LIFT



BP170717

**FREE-LIFT CYLINDER AND ATTACHING PARTS  
THREE STAGE FULL FREE-LIFT**

**H40-55FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4310 mm (169.7 in.)	4760 mm (187.4 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)	6560 mm (258.3 in.)
		Mast Group Number	F508 4310	F508 4760	F508 5510	F508 5960
	Mast Assy	4623097	4623100	4623105	4623108	4623112
3	Chain	180217	164474	320076	180176	129361
4	Hose Assy	4623611	4623613	4623618	4623621	4623625

**H60-70FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4118 mm (162.1 in.)	4718 mm (185.7 in.)	4868 mm (191.7 in.)	5318 mm (209.4 in.)
		Mast Group Number	F563 4118	F563 4718	F563 4868
	Mast Assy	4623078	4623082	4623083	4623086
3	Chain	1342119	1342124	1342125	1342129
4	Hose Assy	4637732	4637736	4637737	4637740

**H60-70FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		6068 mm (238.9 in.)	6368 mm (250.7 in.)	6518 mm (256.6 in.)
		Mast Group Number	F563 6068	F563 6368
	Mast Assy	4623091	4623093	4632223
3	Chain	1342125	1342127	1342129
4	Hose Assy	4637745	4637747	4637748

ITEM	PART NO.	DESCRIPTION	QTY
	a . . . . .	Mast Assy .....	1
1	. . . . .	Inner Mast (☞Figure 16-3).....	1
2	. . . . .	Intermediate Mast (☞Figure 16-2).....	1
3	a . . . . .	Chain .....	2
4	a . . . . .	Hose Assy .....	1
5	4051501	Capscrew .....	2
6	1598660	Capscrew .....	1
7	1660415	Spacer (Thin Wall) .....	1
8	1486751	Fitting .....	1
9	4055582	Housing .....	1
10	1516205	Fitting .....	1
11	4048782	Hose Sheave .....	1

## FREE-LIFT CYLINDER AND ATTACHING PARTS THREE STAGE FULL FREE-LIFT

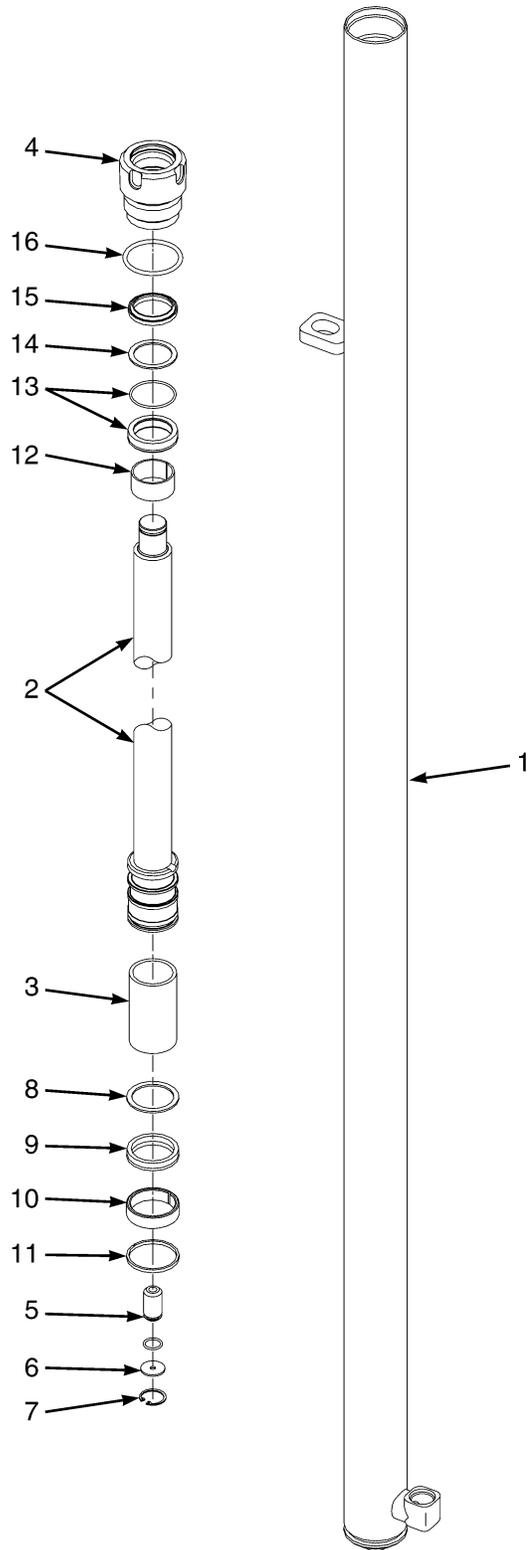
ITEM	PART NO.	DESCRIPTION	QTY
12	1581827	Capscrew .....	2
13	1581591	Capscrew .....	3
14	1696161	Capscrew .....	2
15	4051074	Bracket Wldmt .....	1
16	4052568	Restraint .....	1
17	4031973	Nut .....	2
18	297649	Ring .....	2
19	4072717	Chain Anchor (H40-50FT) .....	2
19	4072704	Chain Anchor (H60-70FT) .....	2
20	15211	Cotter Pin .....	2
21	1514866	Pin .....	2
22	.....	Free-Lift Cylinder (☞ Figure 16-7).....	1
23	4057313	Clamp .....	1
24	4057611	Clamp .....	1
25	1581849	Nut .....	4
26	4055072	Crosshead .....	1
27	302465	Roll Pin .....	1
28	4046548	Pin .....	1
29	4052261	Chain Sheave (Assembly) .....	1
29	4049031	Chain Sheave .....	1
30	1378699	Ball Bearing .....	2
31	4049173	Plate .....	1
32	1354902	Spacer .....	2
33	1581559	Washer .....	4
34	4069407	Capscrew .....	1
35	4013267	Stubshaft .....	1
36	131358	Snap Ring .....	1

**FOOTNOTES:**

- a Refer to Table



**MAIN LIFT CYLINDER (FIGURE 16-6)  
THREE STAGE FULL FREE-LIFT**



BP170651

**MAIN LIFT CYLINDER  
THREE STAGE FULL FREE-LIFT****H40-55FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4310 mm (169.7 in.)	4760 mm (187.4 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)	6560 mm (258.3 in.)
		Mast Group Number	F508 4310	F508 4760	F508 5510	F508 5960
	Cylinder Group Number	8607223	8607207	8607212	8607215	8607219
	Lift Cylinder	4630373	4616167	4615886	4615890	4615894
1	Tube Wldmt- Cylinder	4041105	4041107	4041112	4041115	4041119
2	Cylinder Rod	1355591	1355599	1355620	1355633	1355650
3	Spacer	1355610	----	1355610	1355626	1355643

**H40-55FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS
		4310 mm (169.7 in.)
		Mast Group Number
	Cylinder Group Number	
	Lift Cylinder	4615902
1	Tube Wldmt- Cylinder	----
2	Cylinder Rod	----
3	Spacer	----

**H60-70FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4718 mm (185.7 in.)	4868 mm (191.7 in.)	5318 mm (209.4 in.)	6068 mm (238.9 in.)
		Mast Group Number	F563 4718	F563 4868	F563 5318
	Cylinder Group Number	8607305	8607309	8607310	8607313
	Lift Cylinder	----	4615906	4615907	4615910
1	Tube Wldmt- Cylinder	4041235	4041239	4041240	4041243
2	Cylinder Rod	1355733	1355749	1355710	1355762
3	Spacer	2046164	2073087	2073087	2077818

**MAIN LIFT CYLINDER  
THREE STAGE FULL FREE-LIFT  
H60-70FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		6368 mm (250.7 in.)	6518 mm (256.6 in.)
	<b>Mast Group Number</b>	<b>F563 6368</b>	<b>F563 6518</b>
	<b>Cylinder Group Number</b>	<b>8607318</b>	<b>8607320</b>
	Lift Cylinder	4615915	4615917
1	Tube Wldmt- Cylinder	4041248	4041250
2	Cylinder Rod	1355784	1355792
3	Spacer	2078115	2078115

**KEY:**

**A: H40-55FT**

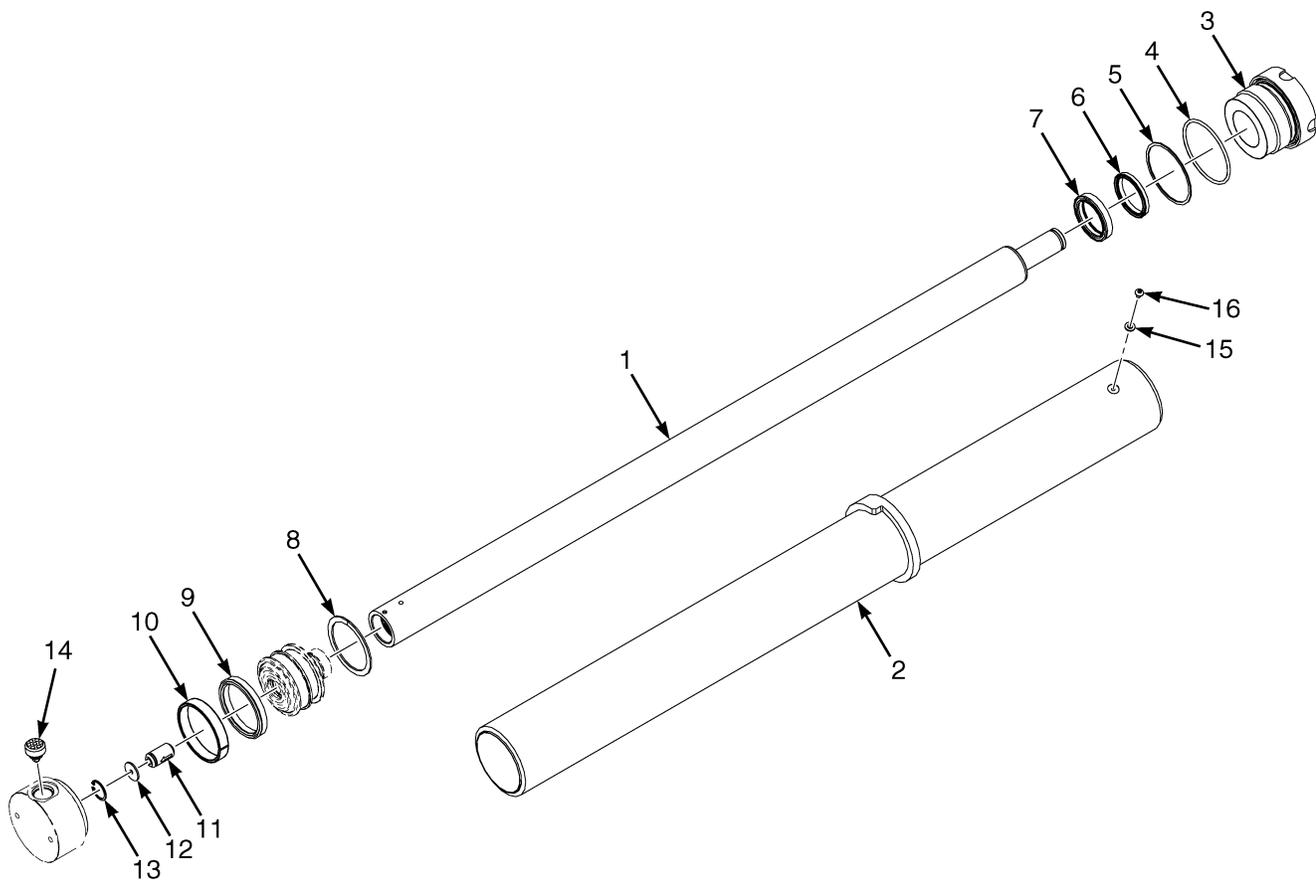
**B: H60-70FT**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	a . . . . .	Lift Cylinder .....	1	1
1	a . . . . .	Tube Wldmt-Cylinder .....	1	1
2	a . . . . .	Cylinder Rod .....	1	1
3	a . . . . .	Spacer .....	1	1
4	4615847	Gland (H40-50FT) .....	1	..
4	4615848	Gland (H60-70FT) .....	..	1
5	257913	Check Valve .....	1	1
6	297531	Washer .....	1	1
6	637635	Washer (Optional) .....	1	1
7	187388	Snap Ring .....	1	1
8	638246	Back-Up Ring .....	1	..
8	335012	Back-Up Ring .....	..	1
9	1381064	Piston Seal .....	1	..
9	1381063	Piston Seal .....	..	1
10	1356750	Wear Ring .....	1	..
10	1356751	Wear Ring .....	..	1
11	1360127	Piston Ring .....	1	..
11	1356748	Piston Ring .....	..	1
12	322902	Wear Ring .....	1	1
13	1356749	Rod Seal .....	1	1
14	322824	Back-Up Ring .....	1	1
15	1383063	Rod Wiper .....	1	1
16	4028986			
	92861	O-Ring .....	1	..
16	59229	O-Ring .....	..	1
	4623973	Kit-Seal (Includes Items 8-16) .....	1	..
	4623974	Kit-Seal (Includes Items 8-16) .....	..	1

**FOOTNOTES:**

- a** Refer to Table

**FREE-LIFT CYLINDER (FIGURE 16-7)  
THREE STAGE FULL FREE-LIFT**



BP170652

**FREE-LIFT CYLINDER  
THREE STAGE FULL FREE-LIFT****H40-55FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4310 mm (169.7 in.)	4760 mm (187.4 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)	6560 mm (258.3 in.)
		Mast Group Number	F508 4310	F508 4760	F508 5510	F508 5960
	Cylinder Group Number	8607255	8607257	8607263	8607266	8607271
	Free Lift Cylinder	4617958	4617961	4617967	4617970	4617975
1	Cylinder Rod	4046235	4046237	4046243	4046246	4046251
2	Tube Wldmt- Cylinder	4046205	4046207	4046213	4046216	4046221

**H60-70FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4118 mm (162.1 in.)	4718 mm (185.7 in.)	4868 mm (191.7 in.)	5318 mm (209.4 in.)
		Mast Group Number	F563 4118	F563 4718	F563 4868
	Cylinder Group Number	8607355	8607360	8607361	8607365
	Free Lift Cylinder	4618054	4618059	4618060	4618064
1	Cylinder Rod	4046305	4046310	4046311	4046315
2	Tube Wldmt- Cylinder	4046265	4046270	4046271	4046275

**H60-70FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		6068 mm (238.9 in.)	6368 mm (250.7 in.)	6518 mm (256.6 in.)
		Mast Group Number	F563 6068	F563 6368
	Cylinder Group Number	8607371	8607373	8607374
	Free Lift Cylinder	4618070	4618072	4618073
1	Cylinder Rod	4046321	4046323	4046324
2	Tube Wldmt- Cylinder	4046281	4046283	4046284

## FREE-LIFT CYLINDER THREE STAGE FULL FREE-LIFT

**KEY:**

**A:** H40-55FT

**B:** H60-70FT

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	<b>b</b> . . . . .	Free Lift Cylinder .....	1	1
1	<b>b</b> . . . . .	Cylinder Rod .....	1	1
2	<b>b</b> . . . . .	Tube Wldmt-Cylinder .....	1	1
3	1356292	Gland .....	1	..
3	1356661	Gland .....	..	1
4	90263	O-Ring .....	1	..
4	133920	O-Ring .....	..	1
5	147973	Back-Up Ring .....	1	..
5	154358	Back-Up Ring .....	..	1
6	1463105	Rod Wiper .....	1	1
7	1622946	Rod Seal .....	1	1
8	2013089	Back-Up Ring .....	1	..
8	637565	Back-Up Ring .....	..	1
9	2013088	Rod Seal .....	1	..
9	309062	Rod Seal .....	..	1
10	1358972	Wear Ring .....	1	..
10	636941	Wear Ring .....	..	1
11	297538	Check Valve .....	1	1
12	297531	Washer .....	1	1
12	637635	Washer (Optional) .....	1	1
13	187388	Snap Ring .....	1	1
14	4055505	Flow Valve .....	1	..
14	4055506	Flow Valve .....	..	1
15	190887	Sealing Ring .....	1	1
16	1361302	Screw .....	1	1
	<b>a</b> 190580	O-Ring .....	1	1
	1358969	Kit-Seal (Includes Items 4-10, 15) .....	1	..
	1356662	Kit-Seal (Includes Items 4-10, 15) .....	..	1

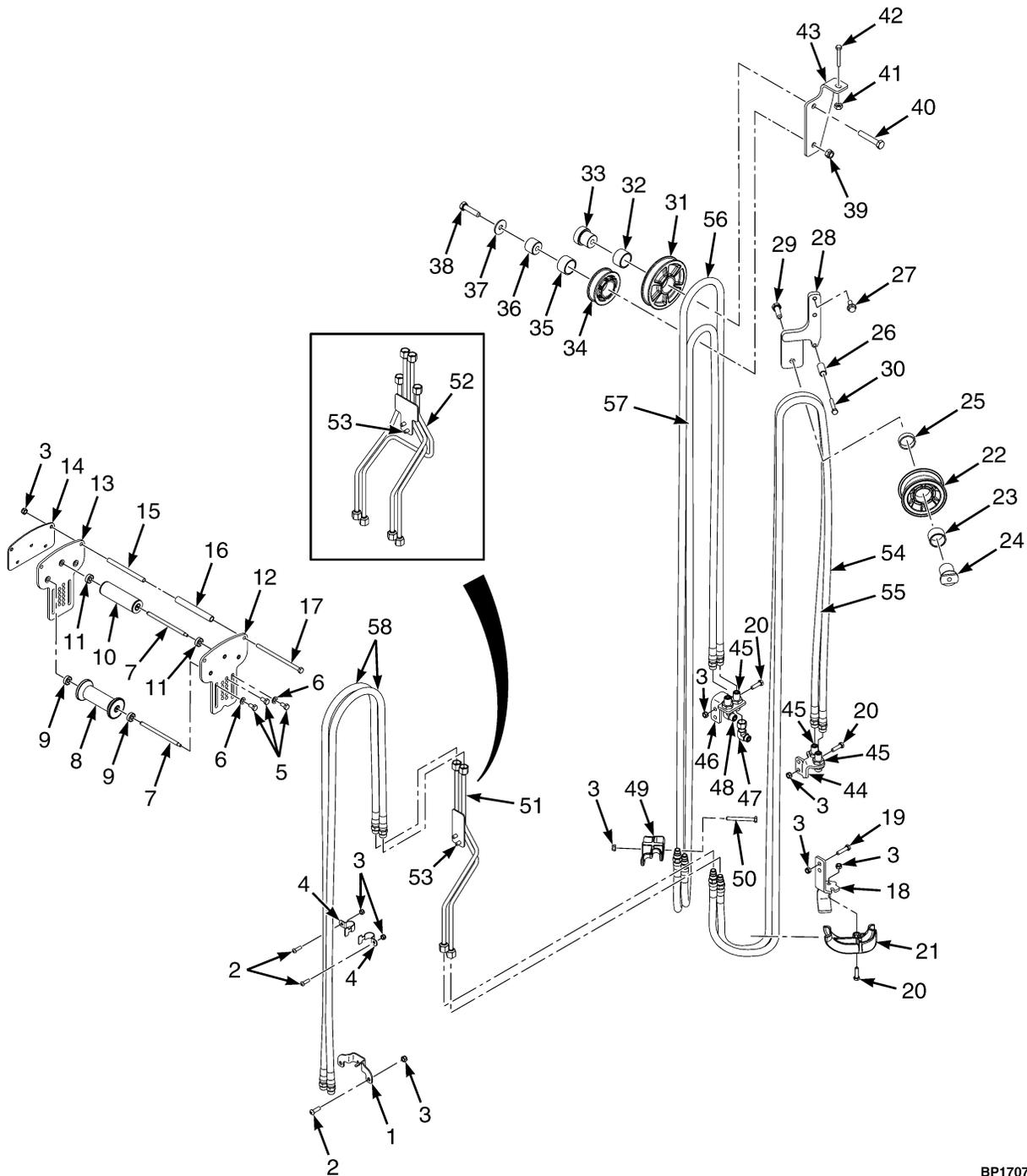
**FOOTNOTES:**

**a** Not Illustrated

**b** Refer to Table



## HEADER HOSES AND ATTACHING PARTS (FIGURE 16-8) THREE STAGE FULL FREE-LIFT



BP170752

**HEADER HOSES AND ATTACHING PARTS  
THREE STAGE FULL FREE-LIFT****H40-55FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4310 mm (169.7 in.)	4760 mm (187.4 in.)	5510 mm (216.9 in.)	5960 mm (234.6 in.)	6560 mm (258.3 in.)
		F508 4310	F508 4760	F508 5510	F508 5960	F508 6560
54	Header Hose	4636893	4636895	4636900	4636903	4636907
55	Header Hose	4636926	4636928	4636933	4636936	4636940
56	Header Hose	4636959	4636961	4636966	4636969	4636973
57	Header Hose	4636992	4636994	4636999	4637002	4637006
58	Header Hose	4624213	4624215	4624100	4624103	4624107

**H60-70FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4118 mm (162.1 in.)	4718 mm (185.7 in.)	4868 mm (191.7 in.)	5318 mm (209.4 in.)
		F563 4118	F563 4718	F563 4868	F563 5318
54	Header Hose	4636893	4636897	4636898	4636901
55	Header Hose	4636926	4636930	4636931	4636934
56	Header Hose	4636959	4636963	4636964	4636967
57	Header Hose	4636992	4636996	4636997	4637000
58	Header Hose	4624213	4624217	4624218	4624101

**H60-70FT**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		6068 mm (238.9 in.)	6368 mm (250.7 in.)	6518 mm (256.6 in.)
		F563 6068	F563 6368	F563 6518
54	Header Hose	4636906	4636908	4636909
55	Header Hose	4636939	4636941	4636942
56	Header Hose	4636972	4636974	4636975
57	Header Hose	4637005	4637007	4637008
58	Header Hose	4624106	4624108	4634022

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

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B

## HEADER HOSES AND ATTACHING PARTS THREE STAGE FULL FREE-LIFT

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

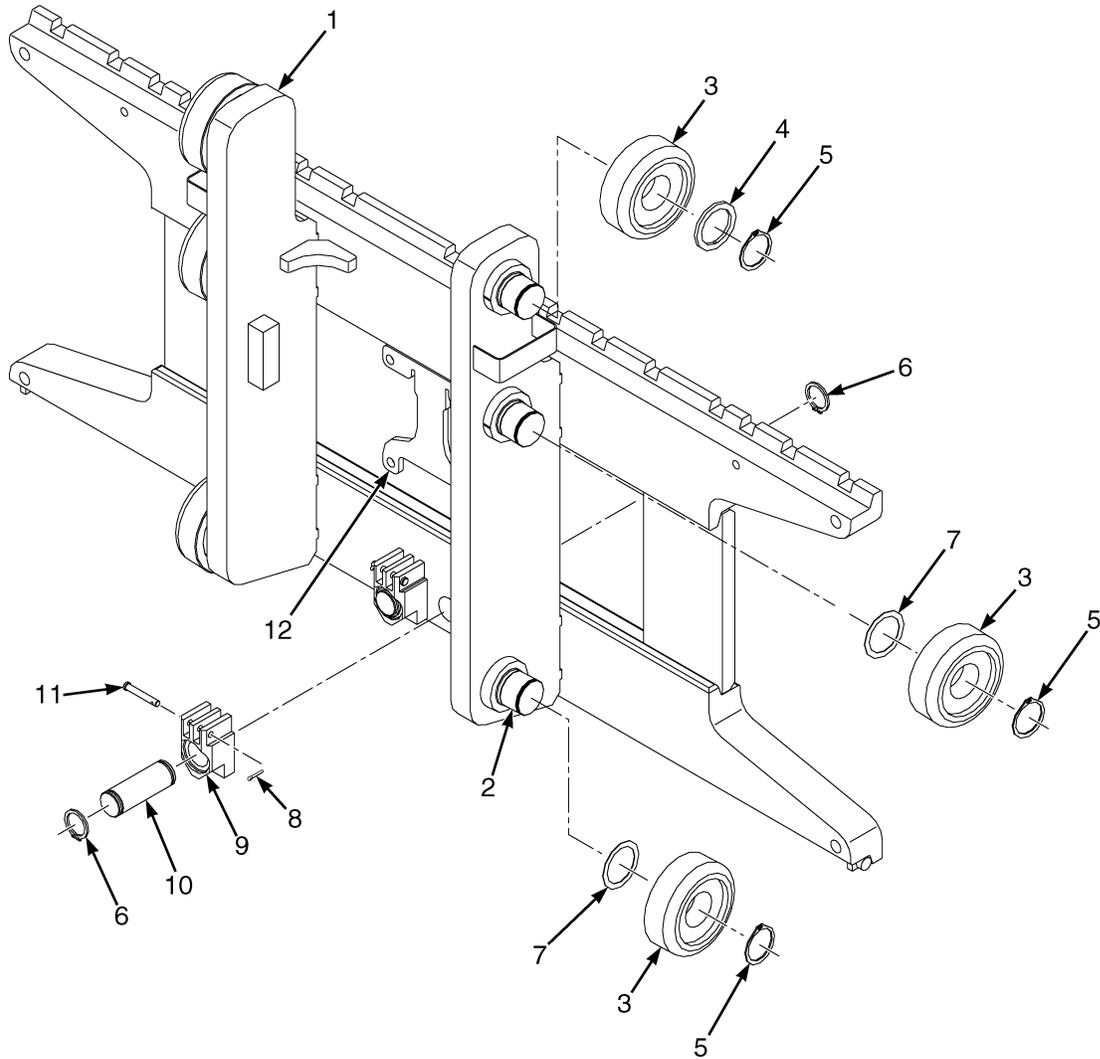
ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4055683	Hose Clamp .....	1	1
2	1597448	Capscrew .....	2	4
3	1581566	Nut .....	9	14
4	4082001	Clamp .....	..	2
5	1581580	Capscrew .....	6	6
6	4081768	Washer .....	4	4
7	4049213	Rod .....	3	3
8	4055608	Roller (Side Assy) .....	2	2
9	4032665	Ball Bearing .....	2	2
10	4055800	Roller (Center Assy) .....	1	1
11	4032665	Ball Bearing .....	2	2
12	4056125	Plate (LH) .....	1	1
12	4056123	Bushing .....	3	3
13	4056126	Plate (RH) .....	1	1
13	4056124	Bushing .....	3	3
14	4051460	Plate .....	1	1
15	4056718	Roller Spacer .....	2	2
16	4049218	Roller Shaft .....	2	2
17	4061309	Capscrew .....	2	2
18	<del>4104560</del> 4120649	Bracket .....	1	1
19	1596420	Capscrew .....	2	2
20	1696161	Capscrew .....	3	5
21	4622150	Turnaround .....	1	1
22	4048781	Hose Sheave .....	1	1
23	4050091	Bushing .....	1	1
24	4013268	Stubshaft .....	1	1
25	4051293	Spacer .....	1	1
26	4020913	Spacer .....	1	1
26	4013273	Spacer (Thin Wall) (Alternate Part) .....	1	1
27	4051501	Capscrew .....	2	2
28	4051290	Bracket Wldmt .....	1	1
29	1581591	Capscrew .....	1	1
30	1581583	Capscrew .....	1	1
31	4048784	Hose Sheave .....	..	1
32	4050091	Bushing .....	..	1
33	4051885	Stubshaft .....	..	1
34	4048783	Hose Sheave .....	..	1
35	4050091	Bushing .....	..	1
36	4048778	Stubshaft .....	..	1
37	1345190	Washer .....	..	1
38	1581827	Capscrew .....	..	1
39	1581849	Nut .....	..	1
40	1581830	Capscrew .....	..	1
41	1581567	Nut .....	..	1

**HEADER HOSES AND ATTACHING PARTS  
THREE STAGE FULL FREE-LIFT****KEY:****A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
42	1626461	Capscrew .....	..	1
42	4101577	Capscrew (Optional) .....	..	1
43	4049172	Bracket .....	..	1
44	4122876	Bracket .....	1	1
45	1528573	Fitting .....	2	3
46	4058926	Bracket .....	..	1
47	1473895	Fitting .....	..	1
48	1528579	Fitting .....	..	1
49	4057777	Bracket .....	..	1
50	4016370	Capscrew .....	..	1
51	4084720	Tube Assembly .....	1	..
52	4084719	Tube Assembly .....	..	1
53	1581579	Capscrew .....	2	2
54	<b>b</b> . . . . .	Header Hose .....	1	1
55	<b>b</b> . . . . .	Header Hose .....	1	1
56	<b>b</b> . . . . .	Header Hose .....	..	1
57	<b>b</b> . . . . .	Header Hose .....	..	1
58	<b>b</b> . . . . .	Header Hose .....	2	4
	<b>ac</b> 1529015	Cap .....	2	4

**FOOTNOTES:****a** Not Illustrated**b** Refer to Table**c** Without header hoses

## CARRIAGE (FIGURE 16-9) THREE STAGE FULL FREE-LIFT



BP170680

**CARRIAGE  
THREE STAGE FULL FREE-LIFT****KEY:****A: H40-55FT****B: H60-70FT**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4621631	Carriage Assembly (42 in.) .....	1	..
	4621637	Carriage Assembly (42 in.) .....	..	1
1	4055430	Carriage Wldmt (42 in.) .....	1	..
1	4055473	Carriage Wldmt (42 in.) .....	..	1
2	1345216	Stubshaft .....	6	6
3	1333399	Load Roller ("B") (3.63 in./3.62 in.) .....	6	6
3	1393142	Load Roller ("B") (3.24 in.) (Optional) .....	6	6
3	1395174	Load Roller ("A") (3.22 in.) (Optional) .....	6	6
3	1395176	Load Roller ("A") (3.23 in.) (Optional) .....	6	6
4	366115	Spacer .....	2	2
5	58901	Snap Ring .....	6	6
5	<b>a</b> 1374797	Snap Ring (Optional) .....	6	6
6	131358	Snap Ring .....	4	4
7	129387	Shim (0.020 in.) .....	AR	AR
8	15211	Cotter Pin .....	2	2
9	1369345	Chain Anchor (Dual Hole) .....	2	..
9	1504010	Chain Anchor (Single Hole) (Optional) .....	2	..
9	1369344	Chain Anchor (Dual Hole) .....	..	2
9	1504012	Chain Anchor (Single Hole) (Optional) .....	..	2
10	317735	Pin .....	2	2
11	1514866	Pin (Chain Anchor) .....	2	2
12	4082003	Plate (Hose) .....	1	..
12	4082005	Plate (Hose) .....	..	1

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



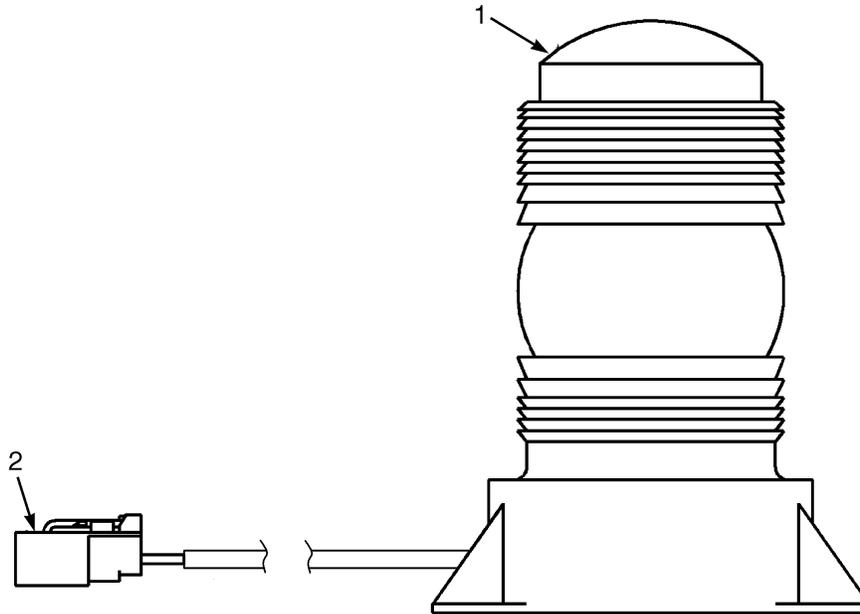




**SECTION 17  
OPTIONS**

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FIRE EXTINGUISHER .....	17-7
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MIRRORS	
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STROBE LIGHT	
LED .....	17-2

## STROBE LIGHT (FIGURE 17-1) LED

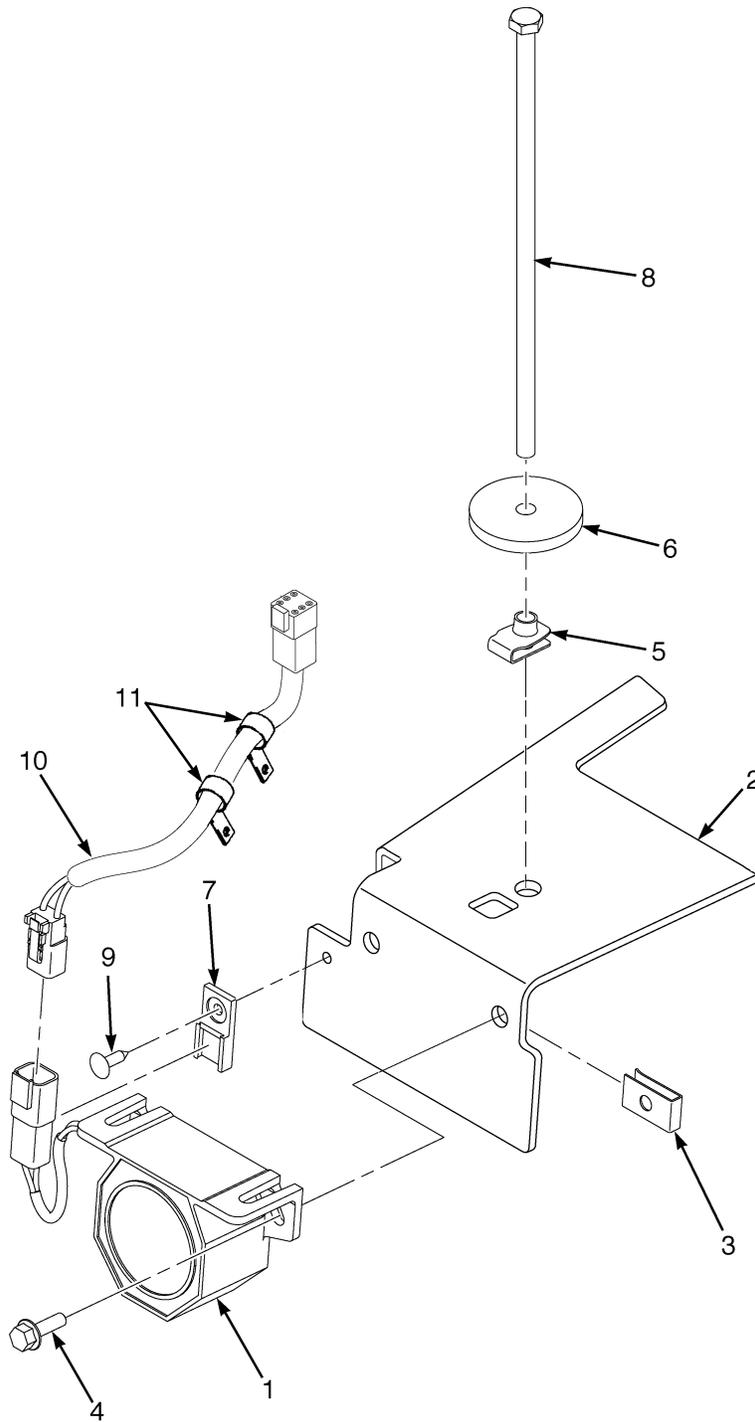


BP000363

ITEM	PART NO.	DESCRIPTION	QTY
	1654013	Strobe Light Assembly .....	1
1	1652290	Strobe Light (Amber LED) .....	1
2	1463138	Terminal Pin .....	2
2	1561559	Connector (2 Pin) .....	1
2	1561755	Connector (Secondary Lock) .....	1



## BACK-UP ALARM (FIGURE 17-2)

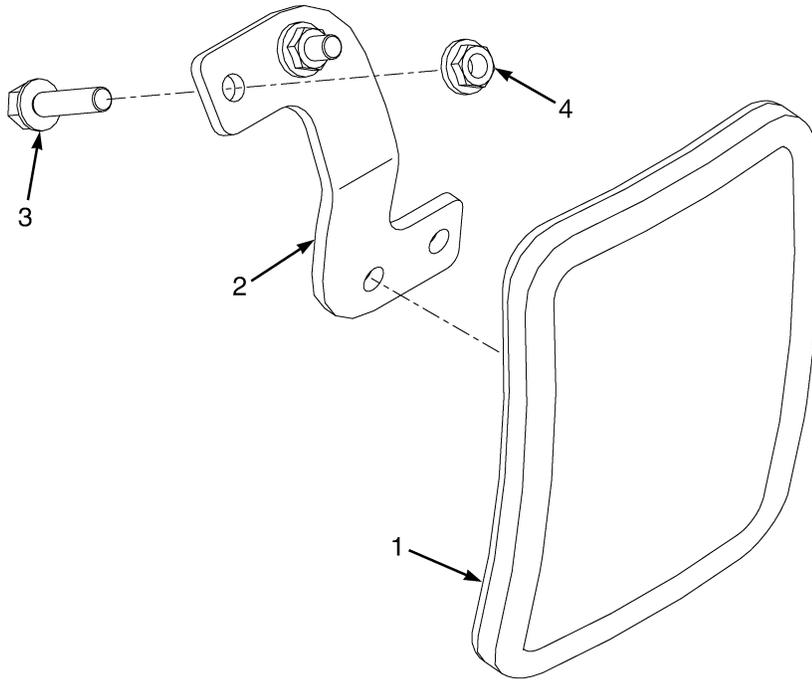


HP000897

**BACK-UP ALARM**

ITEM	PART NO.	DESCRIPTION	QTY
1	2064929	Back-Up Alarm (82-102 dbA) .....	1
2	1589195	Bracket .....	1
3	1350215	Nut .....	2
4	1527877	Capscrew .....	2
5	1480237	Nut , Foldover .....	1
6	1547756	Washer .....	1
7	1500912	Clip .....	1
8	1543982	Capscrew .....	1
9	1582464	Fastener .....	1
10	2078883	Wire Harness (Back-Up Alarm) (To RH Chassis) (2-Pin Connector) .....	1
10	1402923	Connector .....	1
10	1330417	Connector (Secondary Lock) .....	1
10	1490242	Connector (2 Way) .....	1
10	1490243	Connector (Secondary Lock) .....	1
10	1330437	Terminal (Pin) .....	2
10	1330438	Terminal (Socket) .....	2
10	1330439	Plug .....	4

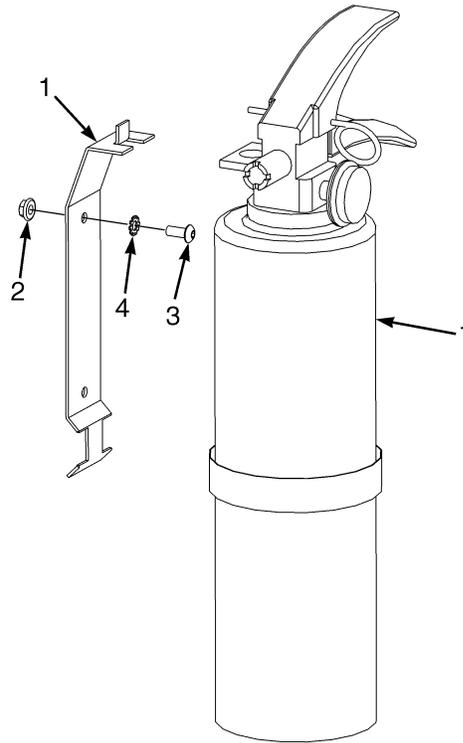
## MIRRORS (FIGURE 17-3) WITH OVERHEAD GUARD



BP000540

ITEM	PART NO.	DESCRIPTION	QTY
1	4009488	Mirror (Side Mirror Assembly) .....	2
2	1656215	Bracket (RH) .....	1
2	1656216	Bracket (LH) .....	1
3	1583611	Capscrew .....	4
4	1586430	Nut .....	4

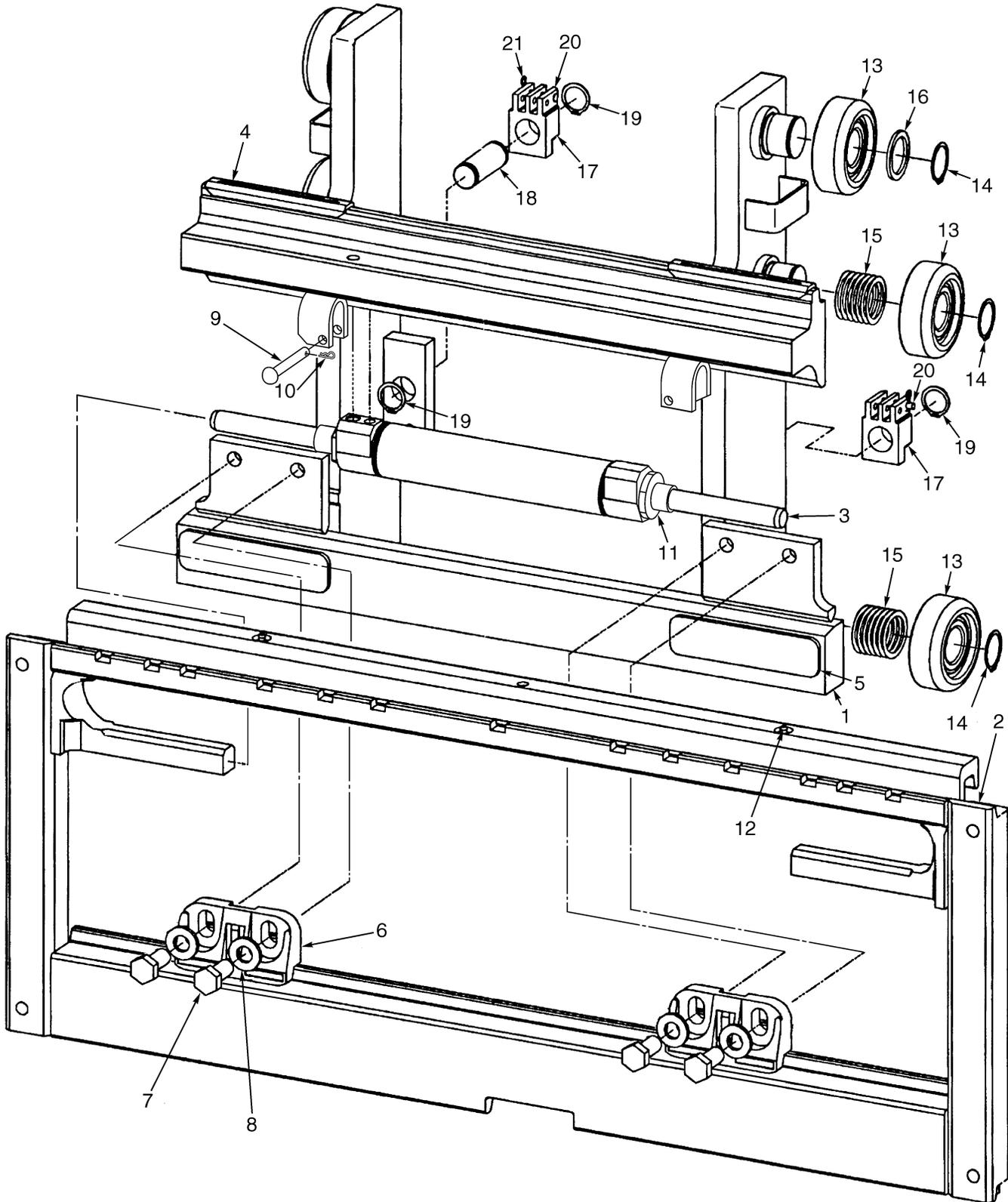
**FIRE EXTINGUISHER (FIGURE 17-4)**



BP000496

ITEM	PART NO.	DESCRIPTION	QTY
1	4136632	Fire Extinguisher Assembly .....	1
1	4136630	Bracket .....	1
1	4136631	Fire Extinguisher .....	1
1	1531558	Insert .....	2
1	292500	Capscrew .....	2
1	292680	Washer .....	2

## INTEGRAL SIDE-SHIFT CARRIAGE (FIGURE 17-5) TWO STAGE LIMITED FREE-LIFT



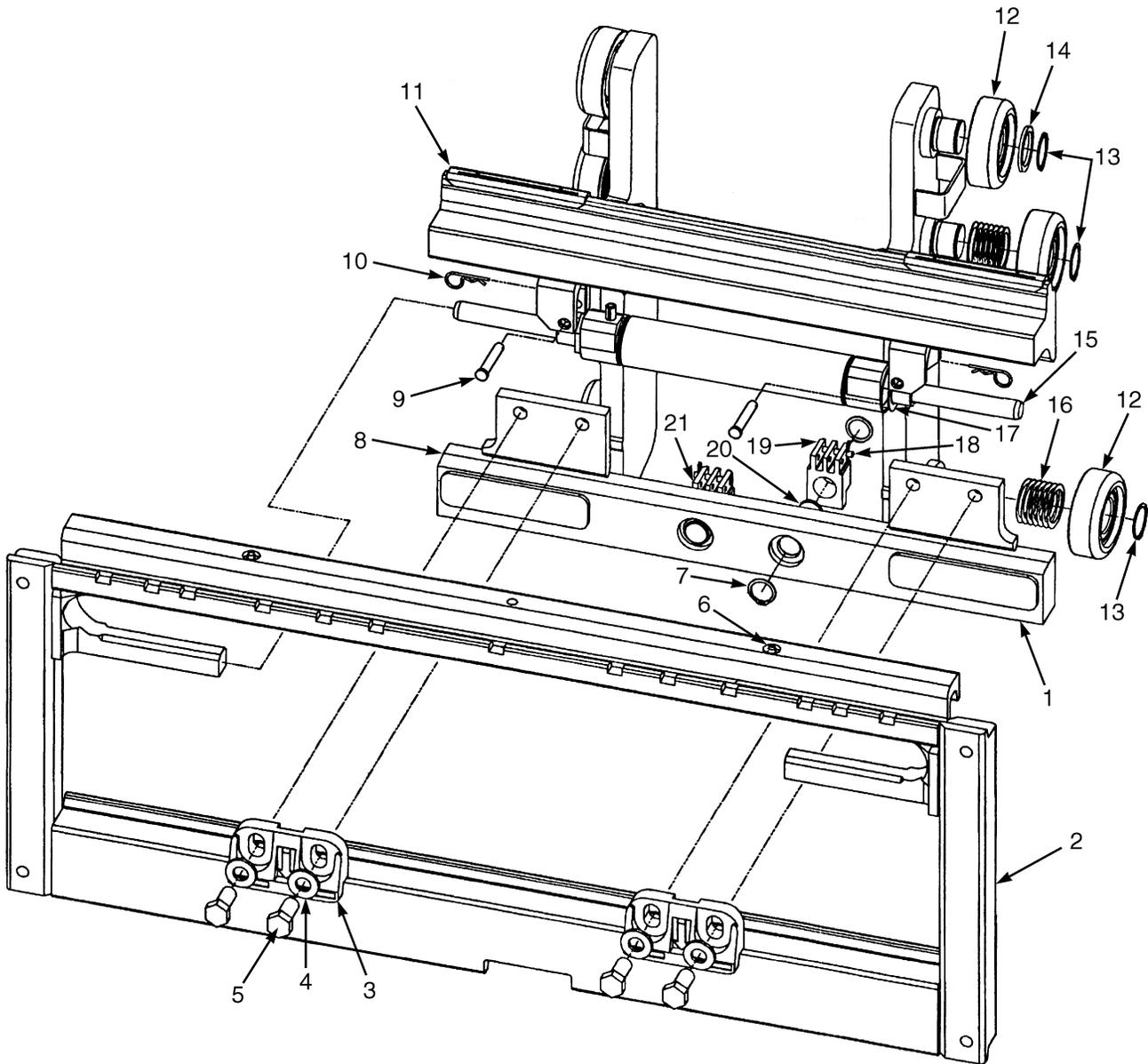
HP020343

**INTEGRAL SIDE-SHIFT CARRIAGE  
TWO STAGE LIMITED FREE-LIFT****KEY:****A: H40-55FT (F507)****B: H60-70FT (F562)**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4625591	Side-Shift Carriage (42 in.) .....	1	..
	4625598	Side-Shift Carriage (42 in.) .....	..	1
1	4065188	Carriage Wldmt .....	1	..
1	4065214	Carriage Wldmt (42 in. and 48 in.) .....	..	1
2	1489011			
	4033955	Frame (Outer) (42 in.) .....	1	..
2	1488975			
	4033960	Frame (Outer) (42 in.) .....	..	1
3	2043528	Sideshift Cylinder Assembly (☞Figure 17-9).....	1	..
3	2043529	Sideshift Cylinder Assembly (☞Figure 17-9).....	..	1
4	2043531	Bearing Strip (Upper) .....	2	..
4	2043532	Bearing (Upper) .....	..	2
5	2043533	Bearing Strip (Lower) .....	2	..
5	2043534	Bearing (Lower) .....	..	2
6	2043530			
	4611363	Hook .....	2	2
7	1581833	Capscrew .....	4	4
8	1581854	Washer .....	4	4
9	1401746	Pin .....	2	2
10	18832	Cotter Pin .....	2	2
11	1498326	Shim .....	3	3
12	16041	Grease Fitting .....	2	2
13	1345219	Load Roller ("B") (111.48/111.22) .....	6	6
14	12891	Snap Ring .....	6	6
14	386422	Snap Ring (Optional) .....	6	6
15	1345263	Shim (0.020 in.) .....	28	28
16	366116	Spacer .....	2	2
17	1369345	Chain Anchor (Dual Hole) .....	2	..
17	1504010	Chain Anchor (Single Hole) (Optional) .....	2	..
17	1369344	Chain Anchor (Dual Hole) .....	..	2
17	1504012	Chain Anchor (Single Hole) (Optional) .....	..	2
18	1353408	Pin .....	2	2
19	131358	Snap Ring .....	4	4
20	1514866	Pin .....	2	2
21	15211	Cotter Pin .....	2	2
	<b>a</b> 4611880	Carriage , Fork Positioner (42 in.) (Fork Positioner) (☞Figure 17-12).....	1	..
	<b>a</b> 4611882	Carriage , Fork Positioner (42 in.) (Fork Positioner) (☞Figure 17-12).....	..	1

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

## INTEGRAL SIDE-SHIFT CARRIAGE (FIGURE 17-6) THREE STAGE FULL FREE-LIFT



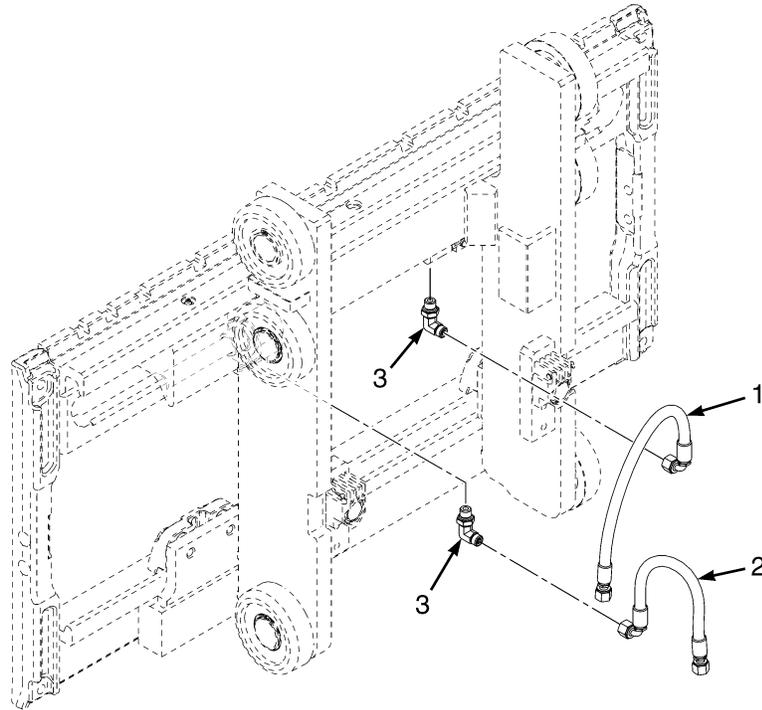
HP020344

**INTEGRAL SIDE-SHIFT CARRIAGE  
THREE STAGE FULL FREE-LIFT****KEY:****A: H40-55FT (F508)****B: H60-70FT (F563)**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4617799	Side-Shift Carriage (42 in.) .....	1	..
	4617798	Side-Shift Carriage (42 in.) .....	..	1
1	4046434	Carriage Wldmt (42 in. and 48 in.) (Inner) .....	1	..
1	4082004	Plate (Hose) .....	1	..
1	4082006	Plate (Hose) .....	..	1
2	1489011			
	4033955	Frame (Outer) (42 in.) .....	1	..
2	1488975			
	4033960	Frame (Outer) (42 in.) .....	..	1
3	2043530			
	4611363	Hook .....	2	2
4	1581854	Washer .....	4	4
5	1581833	Capscrew .....	4	4
6	16041	Grease Fitting .....	2	2
7	131358	Snap Ring .....	4	4
8	2043533	Bearing Strip (Lower) .....	2	..
8	2043534	Bearing (Lower) .....	..	2
9	1401746	Pin .....	2	2
10	18832	Cotter Pin .....	2	2
11	2043531	Bearing Strip (Upper) .....	2	..
11	2043532	Bearing (Upper) .....	..	2
12	1333399	Load Roller ("B") (3.63 in./3.62 in.) .....	6	6
13	58901	Snap Ring .....	6	6
14	366115	Spacer .....	2	2
15	2043528	Sideshift Cylinder Assembly (☞Figure 17-9).....	1	..
15	2043529	Sideshift Cylinder Assembly (☞Figure 17-9).....	..	1
16	129387	Shim (0.020 in.) .....	28	28
17	1498326	Shim .....	3	3
18	1514866	Pin .....	2	2
19	1369345	Chain Anchor (Dual Hole) .....	2	..
19	1504010	Chain Anchor (Single Hole) (Optional) .....	2	..
19	1369344	Chain Anchor (Dual Hole) .....	..	2
19	1504012	Chain Anchor (Single Hole) (Optional) .....	..	2
20	317735	Pin .....	2	2
21	15211	Cotter Pin .....	2	2
	a 1374797	Snap Ring .....	6	6
	a 1345216	Stubshaft .....	6	6
	a 4611880	Carriage , Fork Positioner (42 in.) (Fork Positioner) (☞Figure 17-12).....	1	..
	a 4611882	Carriage , Fork Positioner (42 in.) (Fork Positioner) (☞Figure 17-12).....	..	1

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

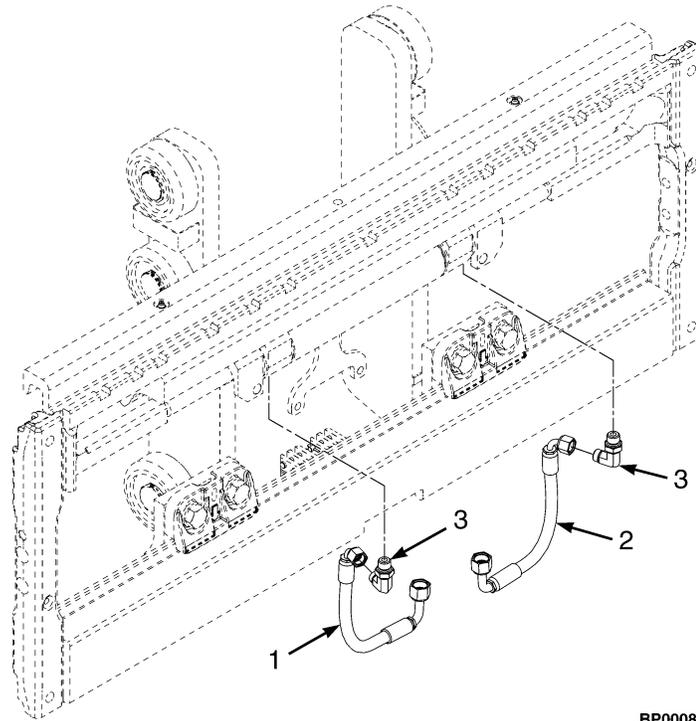
## INTEGRAL SIDE-SHIFT HYDRAULIC HOSES (FIGURE 17-7) TWO STAGE LIMITED FREE-LIFT



BP000832

ITEM	PART NO.	DESCRIPTION	QTY
1	4626625	Hose Assy .....	1
2	4626626	Hose Assy .....	1
3	1487059	Fitting .....	2

**INTEGRAL SIDE-SHIFT HYDRAULIC HOSES (FIGURE 17-8)  
THREE STAGE FULL FREE LIFT**



BP000833

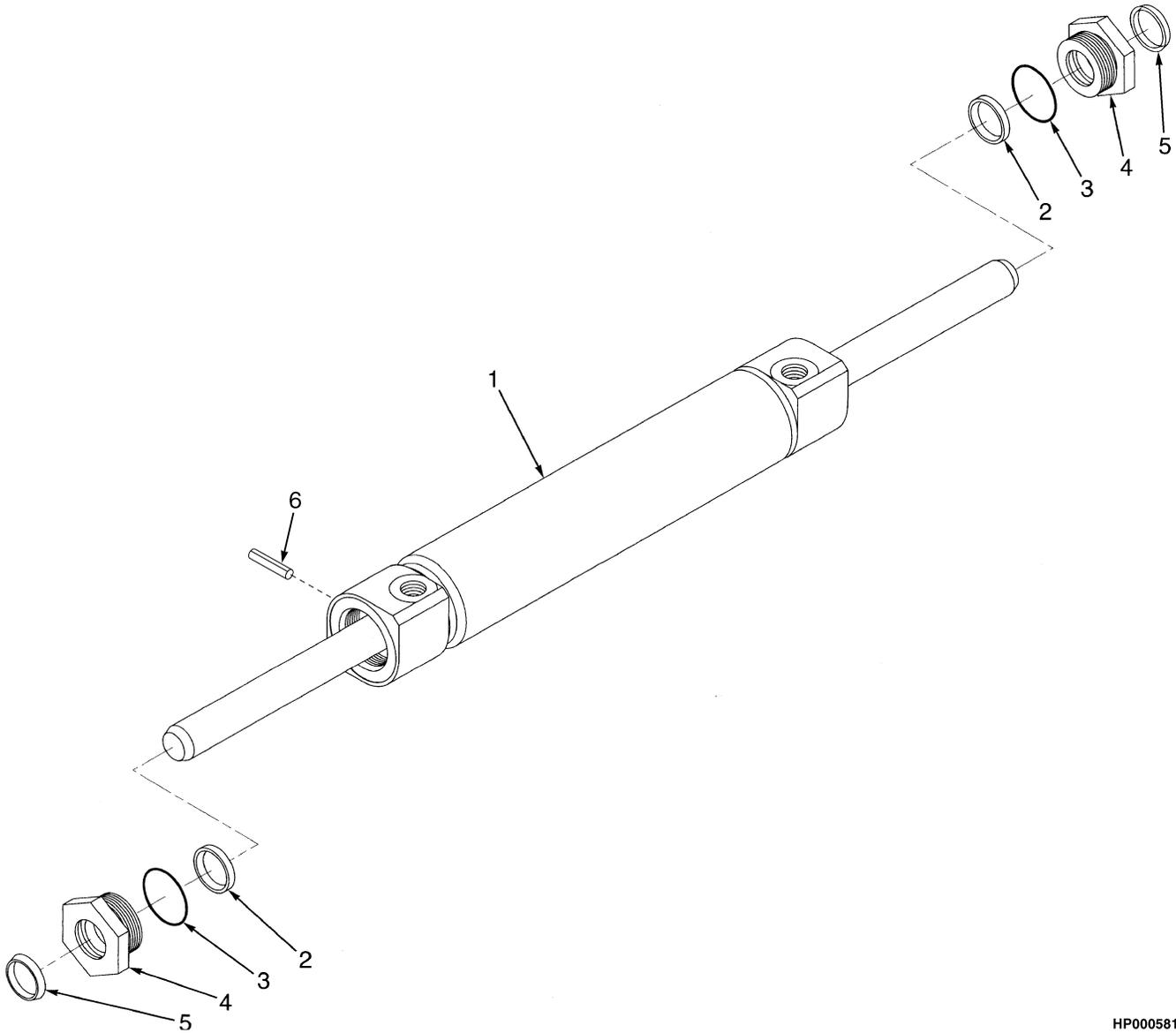
**KEY:**

**A: H40-55FT (F508)**

**B: H60-70FT (F563)**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4623988	Hose Assy .....	1	..
1	4623990	Hose Assy .....	..	1
2	4623989	Hose Assy .....	1	..
2	4623991	Hose Assy .....	..	1
3	1487059	Fitting .....	2	2

**INTEGRAL SIDE-SHIFT CYLINDER (FIGURE 17-9)**

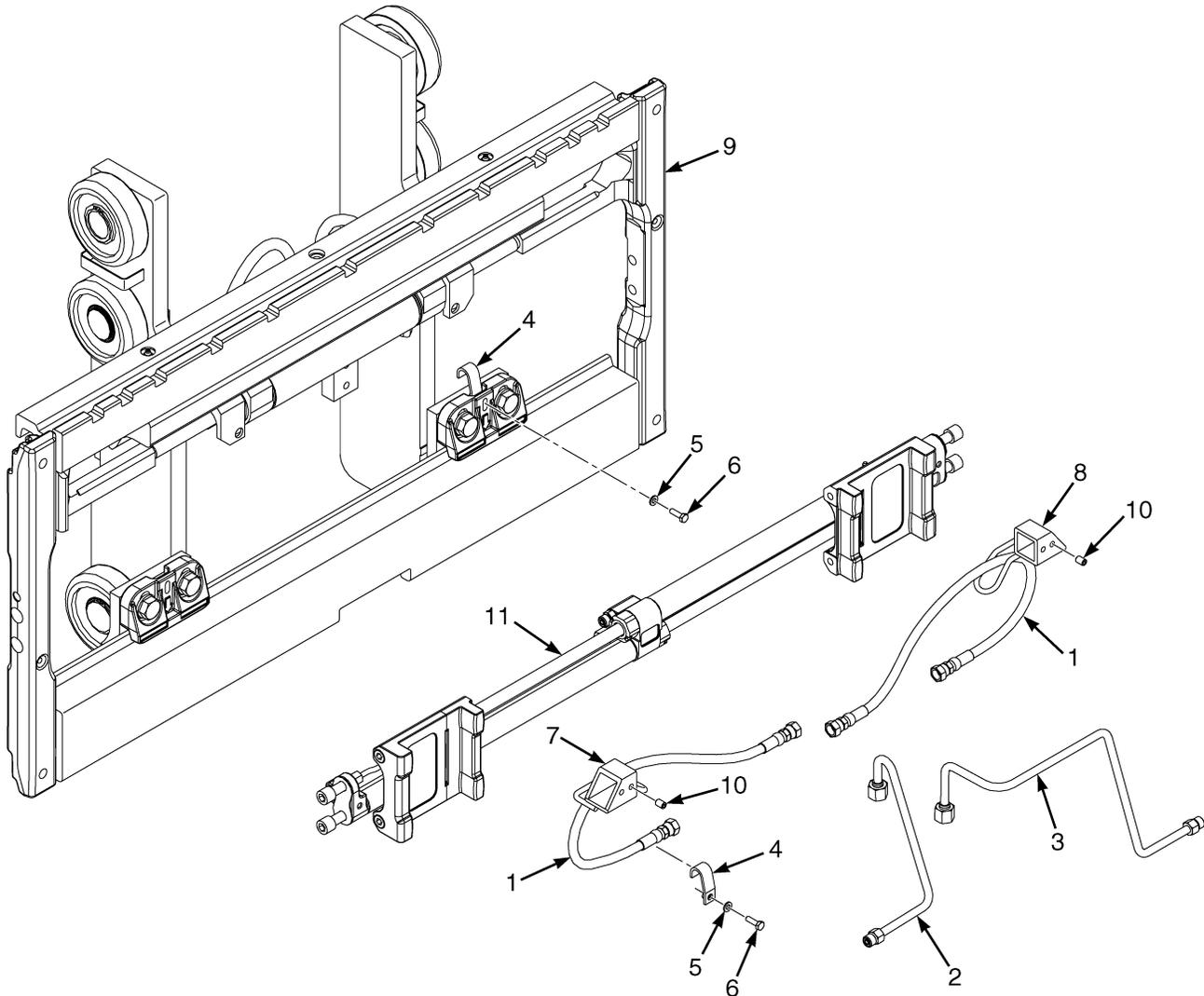


HP000581

**INTEGRAL SIDE-SHIFT CYLINDER**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
	2043528	Sideshift Cylinder Assembly (H40-50FT) .....	1
	2043529	Sideshift Cylinder Assembly (H60-70FT) .....	1
1	1489016	Sideshift Cylinder .....	1
2	1489037	Rod Seal .....	2
3	1489035	O-Ring .....	2
4	1498325	Retainer .....	2
5	1489039	Rod Wiper .....	2
6	302487	Roll Pin .....	1
	1503096	Kit-Seal (Includes Items 2-3, 5) .....	1

## INTEGRAL SIDE-SHIFT (FIGURE 17-10) FORK POSITIONER — TWO STAGE LIMITED FREE-LIFT



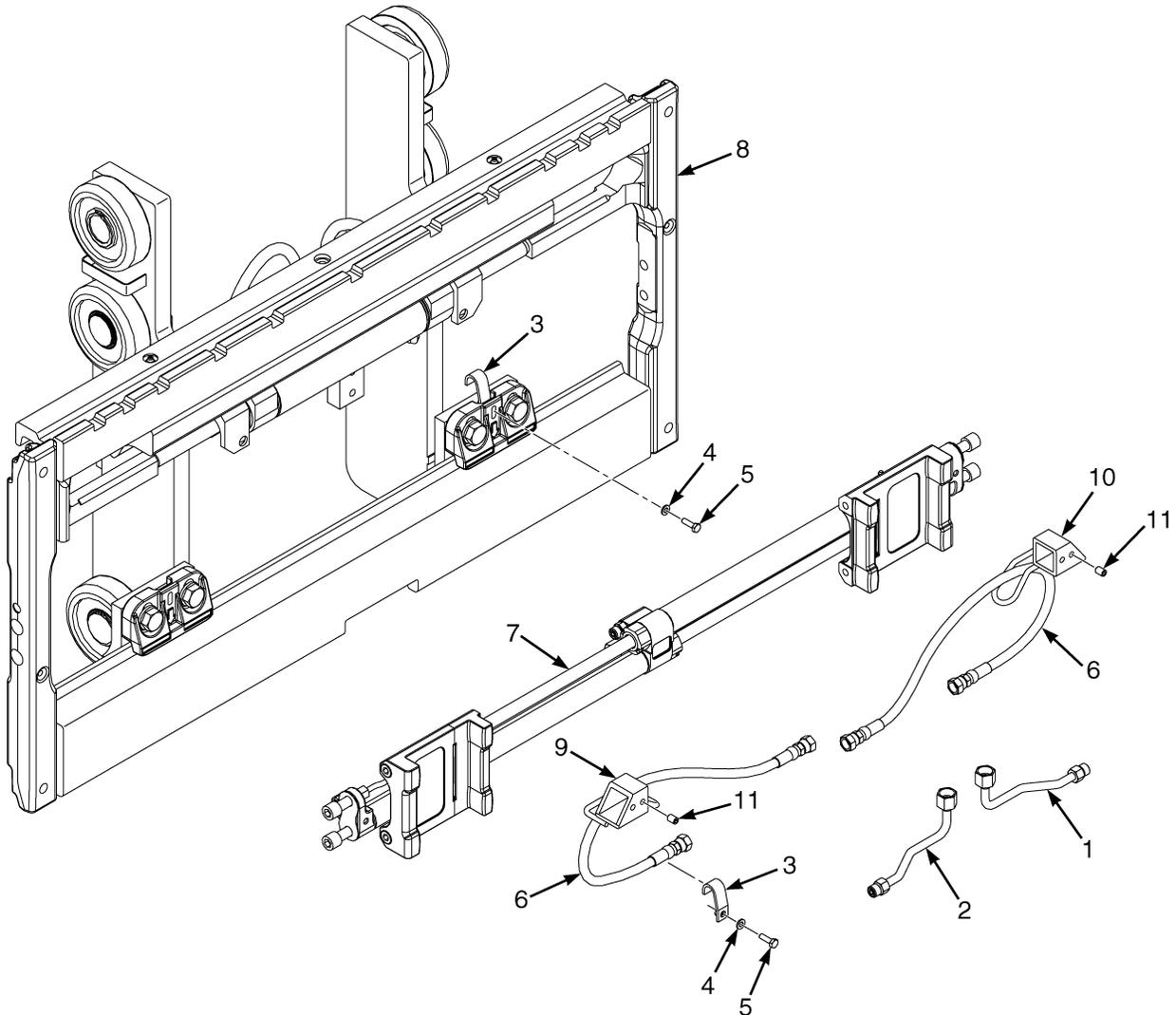
BP000831

**INTEGRAL SIDE-SHIFT  
FORK POSITIONER – TWO STAGE LIMITED FREE-LIFT**

**KEY:****A: H40-55FT(F507)****B: H60-70FT (F562)**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4618718			
	4611913	Hose Assy .....	2	2
2	4626768	Tube Assy .....	1	..
2	4626772	Tube Assy .....	..	1
3	4626769	Tube Assy .....	1	..
3	4626773	Tube Assy .....	..	1
4	4050817	Bracket Wldmt .....	2	2
5	1673754	Washer .....	2	2
6	1670032	Capscrew .....	2	2
7	4061318	Guide (Hose) (LH) .....	1	1
8	4061319	Guide (Hose) (RH) .....	1	1
9	.....	Carriage Assembly (☞Figure 17-5).....	1	1
10	4055634	Setscrew .....	4	4
11	4611880	Carriage , Fork Positioner (42 in.) (Fork Positioner) (☞Figure 17-12).....	1	..
11	4611882	Carriage , Fork Positioner (42 in.) (Fork Positioner) (☞Figure 17-12).....	..	1
11	4034634	Kit-Service Cylinder .....	1	1

## INTEGRAL SIDE-SHIFT (FIGURE 17-11) FORK POSITIONER — THREE STAGE FULL FREE-LIFT



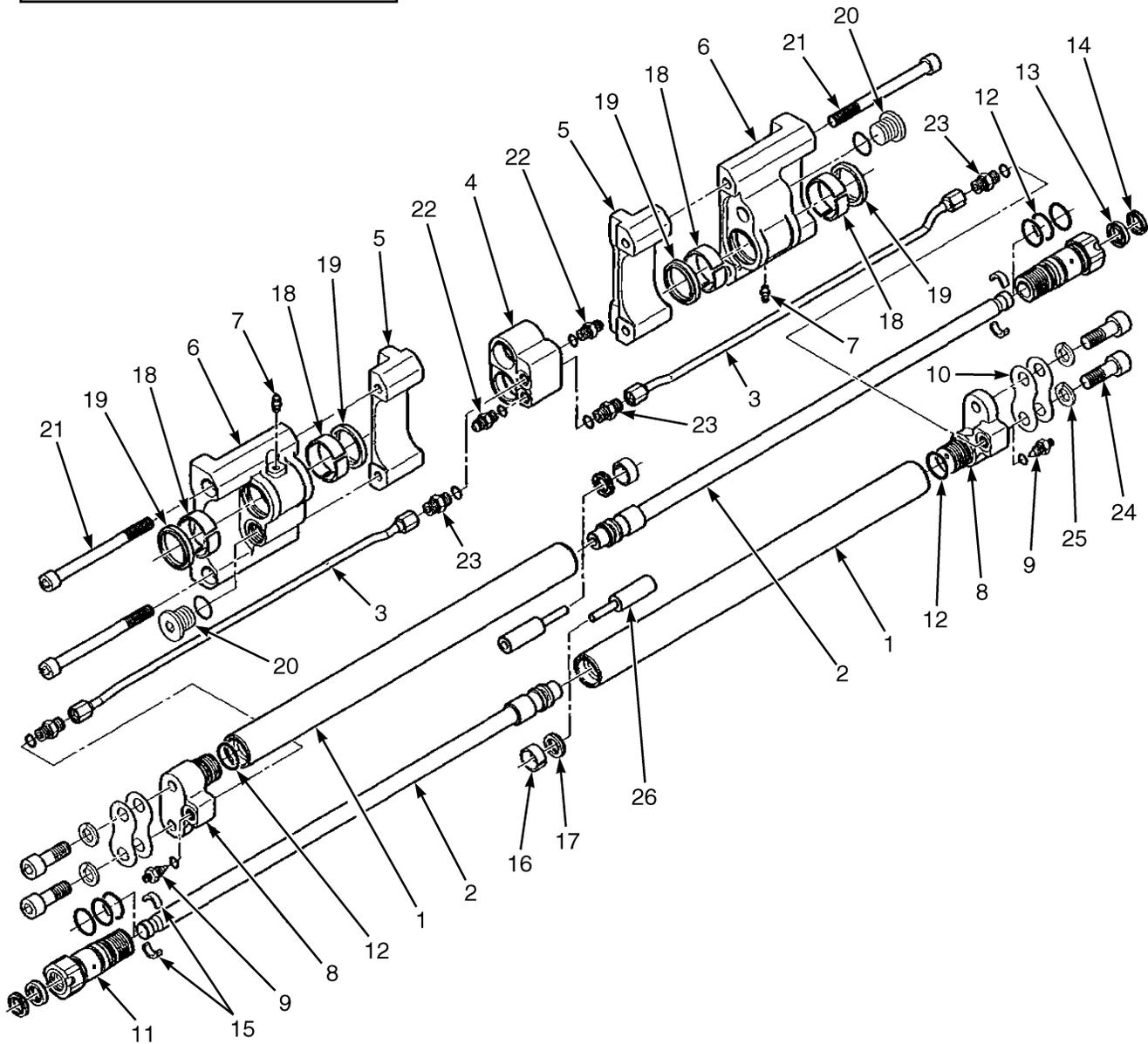
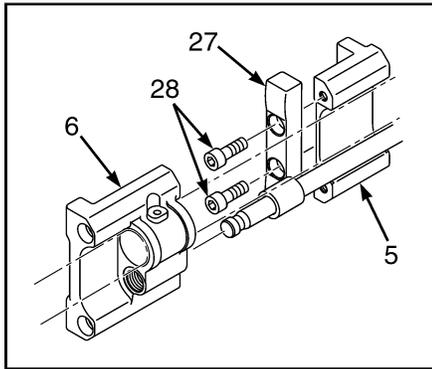
BP020071

**INTEGRAL SIDE-SHIFT  
FORK POSITIONER – THREE STAGE FULL FREE-LIFT**

**KEY:****A: H40-55FT (F508)****B: H60-70FT (F563)**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	4633850	Tube Assy (LH) .....	1	..
1	4633852	Tube Assy (LH) .....	..	1
2	4633851	Tube Assy (RH) .....	1	..
2	4633853	Tube Assy (RH) .....	..	1
3	4050817	Bracket Wldmt .....	2	2
4	1673754	Washer .....	2	2
5	1670032	Capscrew .....	2	2
6	4618718			
	4611913	Hose Assy .....	2	..
6	4622266	Hose Assy .....	..	2
7	4611880	Carriage , Fork Positioner (42 in.) (Fork Positioner) (☞Figure 17-12).....	1	..
7	4611882	Carriage , Fork Positioner (42 in.) (Fork Positioner) (☞Figure 17-12).....	..	1
7	4034634	Kit-Service Cylinder .....	1	1
7	4034635	Kit-Bearing .....	1	1
8	.....	Carriage Assembly (☞Figure 17-6).....	1	1
9	4061319	Guide (Hose) (RH) .....	1	1
10	4061318	Guide (Hose) (LH) .....	1	1
11	4055634	Setscrew .....	4	4

## FORK POSITIONER ASSEMBLY (FIGURE 17-12)



BP000920

**FORK POSITIONER ASSEMBLY**

ITEM	PART NO.	DESCRIPTION	QTY
	4611880	Carriage , Fork Positioner (42 in.) (H40-55FT) .....	1
	4611882	Carriage , Fork Positioner (42 in.) (H60-70FT) .....	1
1	.....	Cylinder Shell .....	2
2	.....	Cylinder Rod .....	2
3	4084993	Tube .....	2
4	.....	Mainfold .....	1
5	.....	Inner Carrier .....	2
6	.....	Outer Carrier .....	2
7	4063703	Grease Fitting .....	1
8	.....	Cylinder Head End .....	2
9	4133804	Restrictor Fitting .....	2
10	4084991	Shim .....	4
11	.....	Retainer .....	2
12	.....	O-Ring .....	8
13	.....	Rod Seal .....	2
14	.....	Rod Wiper .....	2
15	.....	Keeper .....	4
16	.....	Piston Wear Ring .....	2
17	.....	Piston Seal .....	2
18	.....	Composite Bearing .....	4
19	.....	Wiper .....	4
20	4139422	Plug .....	2
21	4139423	Capscrew .....	4
22	4145044	Fitting .....	2
23	4063717	Fitting .....	4
24	.....	Capscrew .....	4
25	4065036	Lockwasher .....	4
26	.....	Piston Spacers .....	2
27	<b>a</b> 4084441	Spacer Bar (Class II) .....	2
28	<b>a</b> 4058427	Capscrew (Class II) .....	4
	4034634	Kit-Service Cylinder (Includes Items 12-14, 16-17) .....	1
	4034635	Kit-Bearing (Includes Items 18-19) .....	1

**FOOTNOTES:****a** With 4" width Forks







**SECTION 18  
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1582484	9-7	10	1586495	1-5	11		1-15	12	1599486	2-13	45
1582486	9-7	11		1-25	5		1-17	19	1599487	2-13	44
1583611	1-5	5		1-25	6	1598660	16-19	6	1599489	2-13	15
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1584632	1-13	9	1587778	7-55	32		2-21	4	1599528	2-13	14
1584638	1-13	11		7-55	44		2-29	4	1599529	2-13	22
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1585581	1-21	10	1590152	1-2	9	1599467	2-19	13	1599544	2-13	8
1585592	1-21	21	1590153	1-2	10	1599468	2-15	16	1599545	2-13	1
1586013	1-26	4	1590279	1-2	7		2-31	8	1599546	2-13	2
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1586280	14-33	7	1593391	5-9	22	1599471	2-19	8	1599556	2-17	1
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1599573	2-25	5	1599827	5-13	13	1600278	2-27	1	1614672	11-9	6
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1599579	2-25	8	1599832	5-13	10	1602431	7-56	59	1616979	10-3	12
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1599585	2-27	12	1599848	9-3	1	1603021	7-17	3	1623050	8-9	26
1599586	2-27	13	1599850	9-3	1		7-29	13	1623093	2-23	17
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1599594	2-27	4	1599860	9-3	1		7-49	9	1624971	1-34	3
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1599610	2-31	7	1599870	9-5	7		8-9	37		7-55	34
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1648909	1-34	1	1670292	14-17	4	1687933	5-7	5		7-41	17
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2075655	1-37	26	2090661	7-3	8	2105959	7-23	1		7-27	6
2076171	1-37	23	2092535	12-17	5		7-49		2111800	7-25	15
2076289	1-29	3	2092536	12-17	5	2107181	8-3	1		7-27	15
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4046243	16-28	1		17-19	3	4053811	16-7	1	4058926	16-33	46
4046246	16-28	1	4051074	16-20	15	4053813	16-7	1	4058930	15-13	12
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4111734	3-39	4	4112119	3-45	20	4112361	3-49	11	4123257	3-13	8
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