

# **PARTS MANUAL**

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**J45-70XN  
(A276)**

**CUSTOMER EDITION**

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**1**

**FRAME**

**HOOD**  
**WITH RAPID CHARGE OPTION (10/2013 →)**

ITEM	PART NO.	DESCRIPTION	QTY
1	4046451	Hood (With Rapid Charge) .....	1
2	2027694	Clip .....	1
3	222021	Rivet .....	2
4	1599415	Plug (Yellow) .....	1
5	1494888	Plug .....	2
6	4047975	Trim .....	1
6	326004	Edge Protector .....	AR
7	1527880	Capscrew .....	5
8	153667	Clamp .....	1
9	1531557	Insert .....	7
10	4011591	Crossmember .....	1
11	1528889	Capscrew .....	4
12	<del>1370949</del>		
	1528888	Nut (Shoulder) .....	4
13	1585581	Bumper (Hood) .....	2
14	329069	Nut .....	4
15	1683193	Bolt (Shoulder) .....	2
16	320165	Washer .....	4
17	302402	Locknut .....	2
18	4020999	Ball Stud .....	4
19	1677115	Clip (Locking) .....	4
20	4010362	Gas Spring (With Non-Suspension Seats) .....	2
20	4000206	Gas Spring (With Full Suspension Seat) .....	2
21	4047911	Plate (Connector) .....	1
22	296228	Capscrew .....	2
23	4047943	Plate .....	1
24	320158	Washer .....	2
25	302400	Nut .....	2
26	89220	Clamp .....	3
27	110322	Clamp .....	1
28	4626274	Trim .....	1
29	4000692	Bracket .....	1
30	1701416	Padlock .....	1
31	1531479	Capscrew .....	4
32	1709984	Hood Latch .....	1
33	1661162	Handle (Hood) .....	1
34	4626276	Trim .....	1

**COUNTERWEIGHT**

ITEM	PART NO.	DESCRIPTION	QTY
1	4001244	Tow Pin (Standard) .....	1
1	4001245	Tow Pin (Side Rem) .....	1
1	4001242	Tow Pin (Standard) .....	1
1	4001243	Tow Pin (Side Rem) .....	1
2	1651284	Handle .....	1
3	302467	Spring Pin .....	2
4	<b>b</b> 1670184	Counterweight (J45-50XN) .....	1
4	<b>a</b> 1670185	Counterweight (J50XN-J60XN) .....	1
4	1670186	Counterweight (J70XN) .....	1
5	296434	Washer .....	7
6	1308451	Capscrew .....	3
7	292660	Nut .....	2
8	4002516	Bracket .....	1
9	225065	Capscrew .....	2

**FOOTNOTES:****a** Long Wheel Base**b** Short Wheel Base

**BATTERY REMOVAL**

ITEM	PART NO.	DESCRIPTION	QTY
1	4001574	Gate (Low Wheel-base) .....	1
1	4001573	Gate (Standard Wheel-base) .....	1
2	1677335		
	4046964	Roller .....	14
3	1706062	Isolator .....	2
4	1307884		
	1514429	Nut .....	4
5	1382472		
	1502543	Nut (Flange) .....	4
6	4001697	Bracket .....	2
7	1527880	Capscrew .....	4
8	<b>a</b> 4002420	Plate Wldmt .....	1
8	<b>b</b> 4018595	Handle .....	1
8	<b>b</b> 4018596	Plate Wldmt .....	1
8	<b>b</b> 1694657	Bushing .....	1
9	4014497	Plate .....	1
10	1527877	Capscrew .....	2
11	1540805	Cap .....	1
12	4002321	Pin .....	1
13	4002322	Lever .....	1
14	136687	Nut .....	1
15	1677361	Spring .....	1
16	292568	Capscrew .....	1
17	316828	Nut .....	4
18	1500912	Clip .....	1
19	2100710	Fastener .....	1
20	302010	Screw (M3 x .05 x 12) .....	4
21	1585765	Nut .....	1
22	1565545	Magnet .....	1
23	1337798	Grommet .....	1
24	1627835	Switch Assembly .....	1

**FOOTNOTES:****a** → S/N A276B01515H (Raised Hood)**b** S/N A276B01516H → (Riased Hood) (Raised Hood)

**OVERHEAD GUARD**

ITEM	PART NO.	DESCRIPTION	QTY
1	<b>b</b> 4012339	Overhead Guard (86.3 in.) .....	1
1	<b>c</b> 4064238	Overhead Guard (86.3 in.) .....	1
1	<b>b</b> 4012340	Overhead Guard (90.4 in.) .....	1
1	<b>c</b> 4064239	Overhead Guard (90.4 in.) .....	1
2	<b>b</b> 1574301	Plug .....	37
2	<b>c</b> 1574301	Plug .....	33
3	<b>b</b> 2070996	Grommet .....	3
3	<b>c</b> 2070996	Grommet .....	4
4	<b>b</b> 1527881	Capscrew .....	2
4	<b>c</b> 1586627	Capscrew .....	2
5	1676884	Handle .....	1
6	1530243	Insert .....	2
7	1566420	Nut (Foldover) .....	2
8	2106007	Cover (Display) .....	1
9	1527877	Capscrew .....	2
10	<b>b</b> 1527888	Capscrew .....	4
10	<b>c</b> 4035130	Capscrew .....	4
11	1398009	Plug .....	2
12	1363916	Plug .....	4
13	1597479	Capscrew .....	4
14	4010784	Shim (0.5 mm) .....	AR
14	4010785	Shim (1.0 mm) .....	AR
15	1476421	Washer .....	2
16	320166	Washer .....	4
	<b>a</b> 1702413	Plug (Yellow) (0.91 in) .....	2
	<b>a</b> 2109933	Plug .....	2

**FOOTNOTES:****a** Not Illustrated**c** 10/2013 →**b** → 10/2013

**CAB**  
**FRONT PANEL ASSEMBLY**

ITEM	PART NO.	DESCRIPTION	QTY
	1661809	Kit-Front Screen .....	1
1	4010863	Front Window .....	1
2	1491115	Seal .....	AR
3	1468314	Screw .....	5
4	1468315	Washer .....	6
5	1468316	Washer .....	6
6	1468317	Washer .....	6
7	1598211	Washer .....	6
8	1598210	Bracket .....	5
9	296419	Washer .....	5
10	1468313	Nut .....	6
11	1476584	Cover (Capscrew Head) .....	6
12	1703749	Screw .....	1
13	1703748	Washer .....	1
14	1504941	Washer .....	1

**CAB**  
**LEFT HAND DOOR ASSEMBLY – WITH HORIZONTAL BATTERY REMOVAL**

ITEM	PART NO.	DESCRIPTION	QTY
	1676903	Door (LH) .....	1
1	1515337	Seal .....	AR
2	1468311	Screw .....	1
3	1558303	Washer .....	1
4	1558302	Plate (Door Handle) .....	1
5	1695067	Rod .....	1
6	1695063	Tube (Door Handle) .....	1
7	1695066	Screw .....	1
8	1695065	Washer .....	1
9	1695064	Door Handle .....	1
10	1598389	Fastener .....	7
11	1695068	Cover (Door) .....	1
12	1695057	Window (LH Door) (☞ Figure 1-29).....	1
13	1558294	Seal .....	AR
14	1695058	Window (LH Door Bottom) .....	1
15	1695059	Grip .....	1
16	4004139	Seal .....	1
17	4004138	DOOR (LH) .....	1
18	1558446	Latch .....	1
19	1695062	Screw .....	2
20	1708221	Screw .....	1
21	320156	Washer .....	3
22	1506668	Screw .....	3
23	1695061	Plate (Locking) .....	1
24	1558305	Lock .....	1
25	4004140	Lockplate .....	1
26	1393539	Seal .....	AR
	<b>a</b> 1593629	Key (For Cab Door Grip) .....	1

**FOOTNOTES:**

**a** Not Illustrated

**CAB**  
**TOP PANEL AND ROOF LINER (→ 3/2009)**

ITEM	PART NO.	DESCRIPTION	QTY
1	1661828	Roof Panel (☞ Figure 1-35).....	1
2	1699334	Cap .....	15
3	287816	Capscrew .....	11
4	320156	Washer .....	15
5	<del>1307884</del> 1514429	Nut .....	4
6	1691921	Headliner .....	1
7	2111852	Dome Light .....	1
8	1694618	Screw .....	2
	<b>a</b> 1706046	Adhesive .....	1
	<b>a</b> 1706047	Activator .....	AR
	<b>a</b> 1706048	Primer .....	AR

**FOOTNOTES:**

**a** Not Illustrated

**CAB**  
**REAR PANEL AND WIPER ATTACHMENT (10/2013 →)**

ITEM	PART NO.	DESCRIPTION	QTY
1	1662170	Kit-Rear Screen (☞ Figure 1-39).....	1
2	<b>a</b> 1393506	Wiper Blade .....	1
3	<b>a</b> 1703770	Wiper Arm .....	1
4	2109744	Capscrew .....	4
5	1531557	Insert .....	6
6	1531558	Insert .....	9
7	4043634	Capscrew .....	4
8	4045064	Screw .....	5
9	<b>c</b> 4625392	Wire Harness (Rear Wiper) .....	1
9	<b>d</b> 2108954	Wire Harness (Rear Wiper) .....	1
10	<b>c</b> 4617363	Switch .....	1
10	<b>d</b> 1699224	Switch .....	1
11	<b>a</b> 4009406	Wiper Motor .....	1
12	1699447	Bracket .....	1
	<b>b</b> 1706049	Sleeve-Bulk .....	1

**FOOTNOTES:**

- a** Included in Kit 1662170
- b** Not Illustrated

- c** With Outdoor Protection Option
- d** Without Outdoor Protection Option

**NON SUSPENSION SEAT  
ASSEMBLY**

ITEM	PART NO.	DESCRIPTION	QTY
1	4615813	Seat-Non Suspension (Vinyl) .....	1
2	.....	Hip Restraint (Right Hand) .....	1
3	136749	Screw .....	10
4	1479453	Clamp .....	1
5	.....	Hip Restraint (Left Hand) .....	1
6	4618438	Seat Rail .....	1
7	.....	Washers .....	6
8	4615811	Sensor (Operator Presence) .....	1
9	4030278	Box .....	1
10	4030279	Cover .....	1
11	296463	Screw .....	4
	<b>a</b> 4615969	Wire Harness .....	1

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

**ARMREST SLIDER ASSEMBLY**  
(9/2010 →)

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

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**AUXILIARY KEY SWITCH**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
1	2058111	Ignition Switch .....	1
1	262798	Key Set .....	1
2	190380	Boot .....	1
3	2109126	Wire Harness .....	1
4	1301784	E-Spade .....	2
5	1521309	Connector Body .....	2

**HEATER ASSEMBLY**

ITEM	PART NO.	DESCRIPTION	QTY
	2109639		
	4607951	Kit-Cab Heater .....	1
1	4006806	Cable .....	1
2	4006807	Control Panel .....	1
3	4006812	Thermistor .....	1
4	4022979	Heater Element .....	1
5	4022983	Filter .....	1
6	4006815	Filter (EMC) .....	1
7	4022980	Fan .....	1
8	4006813	Thermistor .....	1
9	4022981	Controller .....	1
10	4022982	Filter .....	1
	<b>a</b> 4022984	Fuse .....	1
	<b>a</b> 4022985	Fuse Holder .....	1
	<b>a</b> 4022986	Contact .....	1

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

**CONTROL PANEL**

**TRACTION MOTOR – WITH INTEGRATED HEATSINK (S/N A276B03243K → (LONG WHEEL BASE))  
(S/N A276B03249K → (SHORT WHEEL BASE))**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
1	4612139	Control Panel .....	2
2	1527876	Capscrew .....	8
3	4029339	Bracket .....	1
4	1527880	Capscrew .....	2
5	<del>1382472</del> 1502543	Nut (Flange) .....	2
6	4611032	Air Duct .....	1
6	4054997	Air Duct (Alternate Part) .....	1
7	1500912	Clip .....	2
8	1582464	Fastener .....	2
9	4609751	Fan (12 Volt) .....	2
10	1565693	Guard .....	2
11	4609752	Screw .....	8
11	1683346	Insert (Not Illustrated) .....	8

**CONTACTOR ASSEMBLY  
UL-E**

ITEM	PART NO.	DESCRIPTION	QTY
	4600271	Contactor .....	1
1	4001311	Contactor (☞ Figure 2-18).....	1
2	1704190	Buss Bar (2 Pole) .....	1
3	1525921	Thermistor .....	1
3	1525922	Thermistor .....	2
3	4003770	Thermistor .....	2
3	1525920	E-Ring .....	2
3	222522	Heat Shrink .....	AR
4	296358	Washer .....	2
5	369218	Screw .....	2
6	4000825	Buss Bar .....	1
7	302020	Screw .....	4
8	1454478	Terminal Post .....	2
9	239503	Nut .....	2
10	325810	Fuse (500 Amp) .....	1
11	302008	Screw .....	2
12	320152	Washer .....	2
13	350996	Fuse (5 Amp) .....	1
14	314878	Fuse (15 Amp) .....	3
15	1553417	Fuse Connector .....	3
16	1374210	Fuse Block .....	1
17	4000098	Wire .....	1
17	2007554	E-Spade .....	1
18	4000090	Bracket .....	1
19	1527879	Capscrew .....	2
20	1480237	Nut .....	2
21	2105360	Cover (Fuse Box) .....	1



**MINI-LEVER CONTROLS  
4 FUNCTION****KEY:****A: Without Directional Control Switch****B: With Directional Control Switch****C: Without Directional Control Switch, With RTST****D: With Directional Control Switch, With RTST**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	2108497	Mini-Lever Assembly .....	1	..	..	..
1	<b>e</b> 2108498	Mini-Lever Assembly .....	1	..	..	..
1	2108502	Mini-Lever Assembly .....	..	1	..	..
1	<b>e</b> 2108504	Mini-Lever Assembly .....	..	1	..	..
1	2108516	Mini-Lever Assembly .....	..	..	1	..
1	<b>e</b> 2108501	Mini-Lever Assembly .....	..	..	1	..
1	2108518	Mini-Lever Assembly .....	..	..	..	1
1	<b>e</b> 2108506	Mini-Lever Assembly .....	..	..	..	1
2	.....	Lever Position 1 .....	1	1	1	1
2	2110791	Lever (Single Function) .....	1	1	1	1
3	.....	Lever Position 2 .....	1	1	1	1
3	2110791	Lever (Single Function) .....	1	1	..	..
3	2110793	Lever (With Override) .....	..	..	1	1
4	.....	Lever Position 3 .....	1	1	1	1
4	2110791	Lever (Single Function) .....	1	1	1	1
5	.....	Lever Position 4 .....	1	1	1	1
5	2110791	Lever (Single Function) .....	1	1	..	..
5	2110792	Lever (Clamping) .....	..	..	1	1
6	<b>f</b> 2111799	Armrest (Without Push Buttons) .....	1	1	..	..
6	4603439	Armrest (With Push Buttons) .....	1	1	1	1
7	2111769	Cushion (Armrest) .....	1	1	1	1
8	1709587	Nut .....	5	5	5	5
9	1703513	Screw .....	9	9	9	9
10	2111801	Wire Harness .....	1	1	1	1
11	2111768	Switch (E-Stop) (Emergency Switch) .....	1	1	1	1
12	<b>a</b> 2107320	Push Button Switch .....	1	1	1	1
13	<b>ae</b> 1704528	Push Button (Position 4) .....	1	1	..	..
13	<b>a</b> 1704528	Push Button (Position 2) .....	..	..	1	1
13	<b>ae</b> 1704528	Push Button (Position 2 and 4) .....	..	..	1	1
13	<b>bc</b> 1705359	Cover (Push Button) .....	AR	AR	AR	AR
14	<b>d</b> 1704529	Wire Harness (Forward/Reverse Switch in the MLM) .....	1	1	1	1
15	2111802	.....				
	4605337	Printed Circuit Board .....	1	1	1	1
16	2111800	Cover (Bottom Armrest) .....	1	1	1	1
17	2111770	Horn Button .....	1	1	1	1
18	2110943	Switch (Directional Control) .....	..	1	1	..
19	2110942	Plug (Directional Control Switch) .....	1	..	..	1
20	1698449	Capscrew .....	8	8	8	8



**WIRE HARNESS**  
**MAIN WITH MANUAL HYDRAULICS – SHEET 1 OF 2 (S/N A276B04637L →)**

ITEM	PART NO.	DESCRIPTION	QTY
	4625429	Wire Harness (Main) .....	1
1	.....	Connector Assembly (Hydraulic Enable Relay) .....	1
1	4030503	Connector .....	1
1	1354204	Terminal .....	4
1	1327164	Seal .....	1
1	1323579	Seal .....	4
2	.....	Connector Assembly (Key-Switch relay) .....	1
2	1521185	Connector .....	1
2	1521188	Lock (Secondary) .....	1
2	1330281	Terminal .....	2
2	1329148	Terminal .....	4
2	1327164	Seal .....	2
2	1323579	Seal .....	6
3	.....	Connector Assembly (Brake Fluid Level) .....	2
3	1324309	Sleeve .....	1
3	1324310	Terminal .....	1
4	.....	Connector Assembly (Service Brake Press Sensor) .....	1
4	1525595	Connector .....	1
4	1525596	Terminal .....	3
4	1533810	Seal .....	3
5	.....	Connector Assembly (Horn Assembly) .....	1
5	1547629	Connector (3 Way) .....	1
5	1508232	Terminal (Pin) .....	2
5	1597839	Receptacle Contact 20-22 AWG .....	1
5	2060555	Wire Seal .....	3
6	.....	Connector Assembly (VSM) .....	1
6	1553094	Connector .....	1
6	4600243	Cover .....	2
6	137852	Strap Clamp .....	1
6	1561019	.....	
	2035276	Connector (Socket Female) .....	19
6	2068741	Plug .....	16
7	.....	Connector Assembly (VSM) .....	1
7	2056243	Connector (35 Way) .....	1
7	4600243	Cover .....	2
7	137852	Strap Clamp .....	1
7	1561019	.....	
	2035276	Connector (Socket Female) .....	26
7	2068741	Plug .....	9
8	.....	Connector Assembly (Steering Harness) .....	1
8	1541991	Connector .....	1
8	1541992	Connector .....	1
8	1463141	Terminal (Socket) .....	7
8	1484377	Plug .....	1
9	.....	Connector Assembly (Synchronous Steering Harness) .....	1
9	1484557	Connector (2 Socket) .....	1
9	137852	Strap Clamp .....	1
9	1484558	Connector .....	1
9	1463141	Terminal (Socket) .....	2
10	1402815	Clip .....	1

**WIRE HARNESS****MAIN WITH MANUAL HYDRAULICS WITH OUTDOOR PROTECTION – SHEET 1 OF 2 (S/N A276B04637L →)**

ITEM	PART NO.	DESCRIPTION	QTY
11	1534282	Clip .....	1
12	.....	Connector Assembly (Hydraulic Oil Temperature Sensor) .....	1
12	1547480	Connector (2 Way) .....	1
12	1674376	Terminal .....	2
12	1673840	Seal .....	2
13	1500899	Clip .....	1
14	1500901	Clip .....	1
15	248196	Terminal (ESD Truck Frame) .....	1
16	1509890	Clip .....	3
17	.....	Connector Assembly (OHG Horn Switch) .....	1
17	1330419	Connector .....	1
17	137852	Strap Clamp .....	1
17	1330424	Connector (Secondary Lock) .....	1
17	1597773	Terminal .....	2
18	.....	Connector Assembly (Battery Gate Mag Switch) .....	1
18	1490242	Connector (2 Way) .....	1
18	1490243	Connector .....	1
18	1597773	Terminal .....	2
19	.....	Connector Assembly (Fan) .....	2
19	1490242	Connector (2 Way) .....	1
19	1490243	Connector .....	1
19	1597773	Terminal .....	2
20	1509888	Clip .....	1
21	.....	Connector Assembly (Pump Motor Controller) .....	1
21	2035275	Connector .....	1
21	4600244	Cover (Connector) .....	2
21	137852	Strap Clamp .....	1
21	1561019	Connector (Socket Female) .....	14
21	2068741	Plug .....	9
22	1402620	Ring Terminal (Negative Terminal Traction Controller) .....	1
23	.....	Connector Assembly (Seat Harness) .....	1
23	1531973	Connector .....	1
23	1531974	Connector .....	1
23	1330439	Plug .....	2
23	1463141	Terminal (Socket) .....	4
24	.....	Connector Assembly (Steering Axle Sensor) .....	1
24	1673825	Connector .....	1
24	1673826	Terminal .....	3
24	1673840	Seal .....	3
25	.....	Connector Assembly (Hydraulic Filter Pressure Switch) .....	1
25	1329152	Plug .....	1
25	137852	Strap Clamp .....	1
25	1329151	Terminal .....	1
25	1330281	Terminal .....	2
25	1402888	Seal .....	2
26	248196	Terminal (MN Contractor Coil) .....	2
27	2007554	E-Spade (FUI) .....	1
28	.....	Connector Assembly (Hydraulic Oil Level Sensor) .....	1
28	1476067	Connector .....	1

**WIRE HARNESS**

**MAIN WITH ELECTRO-HYDRAULICS – SHEET 1 OF 2 (→ S/N A276B03242K (LONG WHEEL BASE))  
(→ S/N A276B03248K (SHORT WHEEL BASE))**

ITEM	PART NO.	DESCRIPTION	QTY
	2111718	Wire Harness (Main) .....	1
1	.....	Connector Assembly (Steer Axle Sensor) .....	1
1	1673825	Connector .....	1
1	1673826	Terminal .....	3
1	1673840	Seal .....	3
2	1402620	Ring Terminal .....	1
3	275495	Conduit .....	AR
4	.....	Connector Assembly (Pump Motor Controller) .....	1
4	1561019		
	2035276	Connector (Socket Female) .....	14
4	2068741	Plug .....	9
4	2035275	Connector .....	1
4	4600244	Cover (Connector) .....	2
4	137852	Strap Clamp .....	1
5	.....	Connector Assembly (Fan) .....	2
5	1490242	Connector (2 Way) .....	1
5	1490243	Connector .....	1
5	1597773	Terminal .....	2
6	.....	Connector Assembly (Battery Gate Magnetic Switch) .....	1
6	1490242	Connector (2 Way) .....	1
6	1490243	Connector .....	1
6	1597773	Terminal .....	2
7	1402816	Clip .....	2
8	275493	Conduit .....	AR
9	1500901	Clip .....	4
10	275494	Conduit .....	AR
11	.....	Connector Assembly (Overhead Guard Horn Switch) .....	1
11	1330419	Connector .....	1
11	1330424	Connector (Secondary Lock) .....	1
11	1597773	Terminal .....	2
12	.....	Connector Assembly (Pump Motor Speed Sensor) .....	1
12	1508211	Connector (4 Way) .....	1
12	1597839	Receptacle Contact 20-22 AWG .....	4
12	2060555	Wire Seal .....	4
13	1402815	Clip .....	4
14	.....	Connector Assembly (Seat Harness) .....	1
14	1351068	Connector (DT PLU 12 SOC) .....	1
14	1351069	Secondary Lock .....	1
14	1484377	Plug .....	1
14	1597773	Terminal .....	2
15	248196	Terminal .....	1
16	.....	Connector Assembly (Pump Motor Temperature Sensor) .....	1
16	1508206	Connector (2 Way) .....	1
16	1597839	Receptacle Contact 20-22 AWG .....	2
16	2060555	Wire Seal .....	2
17	.....	Connector Assembly (Hydraulic Filter Pressure Sensor) .....	1
17	1329151	Terminal .....	1
17	1330281	Terminal .....	2
17	1402888	Seal .....	2

**WIRE HARNESS**

**MAIN WITH ELECTRO-HYDRAULICS – SHEET 1 OF 2 (S/N A276B03243K → (LONG WHEEL BASE))  
(S/N A276B03249K → (SHORT WHEEL BASE))**

ITEM	PART NO.	DESCRIPTION	QTY
29	1476109	Connector Lock .....	1
29	1330355	Terminal .....	3
29	1476108	Wire Seal .....	3
30	.....	Connector Assembly (Pump Motor Temperature Sensor) .....	1
30	1508206	Connector (2 Way) (Pump Motor Speed Sensor) .....	1
30	1597839	Receptacle Contact 20-22 AWG .....	2
30	2060555	Wire Seal .....	2
31	.....	Connector Assembly (Pump Motor Speed Sensor) .....	1
31	1508211	Connector (4 Way) .....	1
31	1597839	Receptacle Contact 20-22 AWG .....	4
31	2060555	Wire Seal .....	4
32	.....	Connector Assembly (Hydraulic Oil Temperature Sensor) .....	1
32	1547480	Connector (2 Way) .....	1
32	1674376	Terminal .....	2
32	1673840	Seal .....	2

**WIRE HARNESS**  
**MAIN WITH ELECTRO-HYDRAULICS – SHEET 2 OF 2 (S/N A276B04637L →)**

ITEM	PART NO.	DESCRIPTION	QTY
	4625387	Wire Harness (Main) .....	1
1	.....	Connector Assembly (Accelerator Pedal Position Sensor) .....	1
1	1525584	Connector .....	1
1	1532571	Terminal .....	6
2	.....	Connector Assembly (Direction Selection Sensor) .....	1
2	1463189	Connector .....	1
2	1463196	Connector .....	1
2	1463141	Terminal (Socket) .....	4
3	1509890	Clip .....	1
4	.....	Connector Assembly (Electronic Hydraulics VL Up Coils) .....	1
4	1541991	Connector .....	1
4	1541992	Connector .....	1
4	1463141	Terminal (Socket) .....	8
5	.....	Connector Assembly (Fan) .....	2
5	1490242	Connector (2 Way) .....	1
5	1490243	Connector .....	1
5	1597773	Terminal .....	2
6	1402817	Clip .....	2
7	.....	Connector Assembly (RH Traction Motor Controller) .....	1
7	2035275	Connector .....	1
7	4600244	Cover (Connector) .....	2
7	137852	Strap Clamp .....	1
7	1561019	.....	
	2035276	Connector (Socket Female) .....	15
7	2068741	Plug .....	8
8	.....	Connector Assembly (LH Traction Motor Controller) .....	1
8	2035275	Connector .....	1
8	4600244	Cover (Connector) .....	2
8	137852	Strap Clamp .....	1
8	1561019	.....	
	2035276	Connector (Socket Female) .....	14
8	2068741	Plug .....	9
9	.....	Connector Assembly (LH Traction Motor Temperature Sensor) .....	1
9	1508206	Connector (2 Way) .....	1
9	1597839	Receptacle Contact 20-22 AWG .....	2
9	2060555	Wire Seal .....	2
10	.....	Connector Assembly (LH Traction Motor Speed Sensor) .....	1
10	1508211	Connector (4 Way) .....	1
10	1597839	Receptacle Contact 20-22 AWG .....	4
10	2060555	Wire Seal .....	4
11	1534282	Clip .....	1
12	.....	Connector Assembly (Park Brake Diode) .....	1
12	1330421	Connector (4 Soc) .....	1
12	137852	Strap Clamp .....	1
12	1489657	Connector .....	1
12	1597773	Terminal .....	4
13	.....	Connector Assembly (RH Traction Motor Temperature Sensor) .....	1
13	1508206	Connector (2 Way) .....	1
13	1597839	Receptacle Contact 20-22 AWG .....	2
13	2060555	Wire Seal .....	2

**WIRE HARNESS**  
**MAIN WITH ELECTRO-HYDRAULICS WITH OUTDOOR PROTECTION – SHEET 2 OF 2**  
**(S/N A276B04637L →)**

ITEM	PART NO.	DESCRIPTION	QTY
	4625428	Wire Harness (Main) .....	1
1	.....	Connector Assembly (Accelerator Pedal Position Sensor) .....	1
1	1525584	Connector .....	1
1	1354237	Terminal .....	6
2	.....	Connector Assembly (Direction Selection Sensor) .....	1
2	1463189	Connector .....	1
2	1463196	Connector .....	1
2	1463141	Terminal (Socket) .....	4
3	1509890	Clip .....	1
4	.....	Connector Assembly (Electronic Hydraulics VL Up Coils) .....	1
4	1541991	Connector .....	1
4	1541992	Connector .....	1
4	1463141	Terminal (Socket) .....	8
5	.....	Connector Assembly (Fan) .....	2
5	1490242	Connector (2 Way) .....	1
5	1490243	Connector .....	1
5	1597773	Terminal .....	2
6	1402817	Clip .....	2
7	.....	Connector Assembly (RH Traction Motor Controller) .....	1
7	2035275	Connector .....	1
7	4600244	Cover (Connector) .....	2
7	137852	Strap Clamp .....	1
7	1561019	.....	
	2035276	Connector (Socket Female) .....	15
7	2068741	Plug .....	8
8	.....	Connector Assembly (LH Traction Motor Controller) .....	1
8	2035275	Connector .....	1
8	4600244	Cover (Connector) .....	2
8	137852	Strap Clamp .....	1
8	1561019	.....	
	2035276	Connector (Socket Female) .....	14
8	2068741	Plug .....	9
9	.....	Connector Assembly (LH Traction Motor Temperature Sensor) .....	1
9	1508206	Connector (2 Way) .....	1
9	1597839	Receptacle Contact 20-22 AWG .....	2
9	2060555	Wire Seal .....	2
10	.....	Connector Assembly (LH Traction Motor Speed Sensor) .....	1
10	1508211	Connector (4 Way) .....	1
10	1597839	Receptacle Contact 20-22 AWG .....	4
10	2060555	Wire Seal .....	4
11	1534282	Clip .....	1
12	.....	Connector Assembly (Park Brake Diode) .....	1
12	1330421	Connector (4 Soc) .....	1
12	137852	Strap Clamp .....	1
12	1489657	Connector .....	1
12	1597773	Terminal .....	4
13	.....	Connector Assembly (RH Traction Motor Temperature Sensor) .....	1
13	1508206	Connector (2 Way) .....	1
13	1597839	Receptacle Contact 20-22 AWG .....	2

**WIRE HARNESS**  
**MAIN LIGHTS CHASSIS WITH OUTDOOR PROTECTION PACKAGE (10/2013 →)**

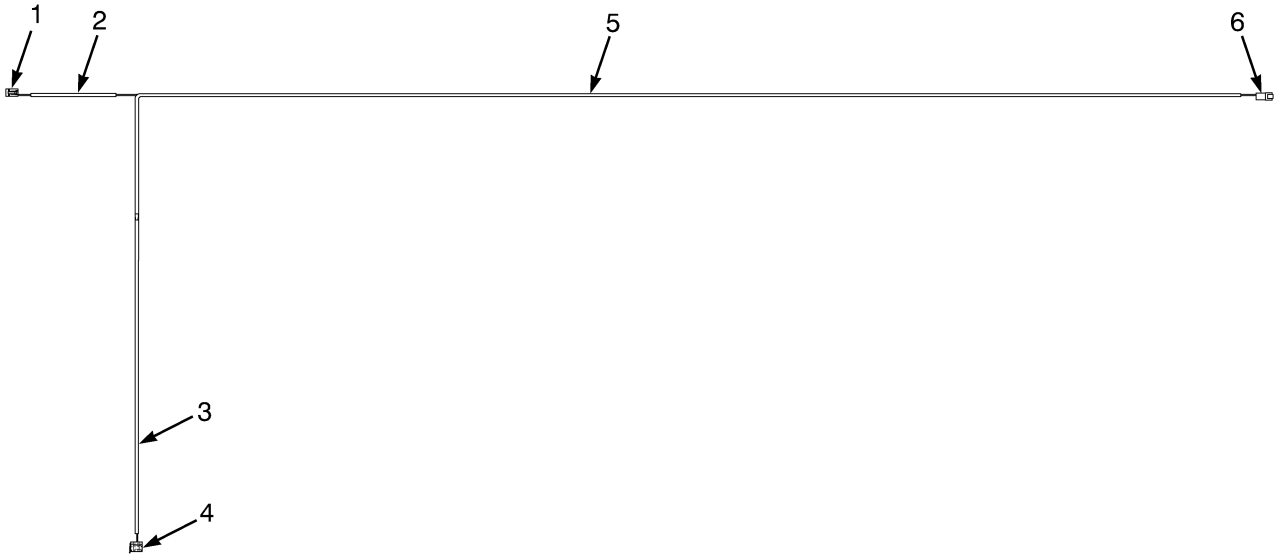
ITEM	PART NO.	DESCRIPTION	QTY
	4617156	Wire Harness (Main Lights Chassis) .....	1
1	.....	Connector Assembly (Display Harness) .....	1
1	1330421	Connector (4 Soc) .....	1
1	1330438	Terminal (Socket) .....	3
1	1330439	Plug .....	1
1	1330427	Connector (Secondary Lock) .....	1
2	1402816	Clip .....	3
3	275496	Conduit .....	AR
4	1655195	Conduit .....	AR
5	.....	Connector Assembly (Main Harness) .....	1
5	1330413	Connector (8 Pin) .....	1
5	1531312	Terminal .....	4
5	1330439	Plug .....	2
5	1330438	Terminal (Socket) .....	2
5	1330418	Connector .....	1
6	1402624	Clip .....	2
7	275494	Conduit .....	AR
8	1500900	Clip .....	3
9	.....	Connector Assembly (Light Switch Harness) .....	1
9	1330422	Connector .....	1
9	1330438	Terminal (Socket) .....	5
9	1330439	Plug .....	1
9	1330428	Connector (Socket Terminal) .....	1
10	.....	Connector Assembly (Light Option Harness) .....	1
10	1330423	Connector (8 Socket) .....	1
10	1330438	Terminal (Socket) .....	8
10	1330429	Connector (Secondary Lock) .....	1
11	.....	Connector Assembly (DC-DC Converter) .....	1
11	1554879	Connector .....	1
11	1554877	Terminal .....	2
11	1682736	Terminal .....	2
12	1301784	E-Spade .....	1
13	.....	Connector Assembly (Backup Alarm) .....	1
13	1330419	Connector .....	1
13	1330438	Terminal (Socket) .....	2
13	1330424	Connector (Secondary Lock) .....	1
14	.....	Connector Assembly (Fan) .....	1
14	1490242	Connector (2 Way) .....	1
14	1330438	Terminal (Socket) .....	2
14	1490243	Connector .....	1
15	1655195	Conduit .....	AR
16	.....	Connector Assembly (Main Harness-Fan) .....	1
16	1493465	Connector (2 Pin) .....	1
16	1531312	Terminal .....	1
16	1330439	Plug .....	1
16	1330414	Connector (Secondary Lock) .....	1
17	.....	Connector Assembly (Fan) .....	1
17	1490242	Connector (2 Way) .....	1
17	1330438	Terminal (Socket) .....	2
17	1490243	Connector .....	1



**WIRE HARNESS****RH LIGHT WITH FREEZER DISPLAY – LOW MOUNT WITH TURN SIGNALS (→ 10/2013)**

ITEM	PART NO.	DESCRIPTION	QTY
	2109673	Wire Harness (RH Lights) (Freezer Option) .....	1
1	.....	Connector Assembly (Front Marker RH) .....	1
1	1330420	Connector .....	1
1	1330426	Connector .....	1
1	1330438	Terminal (Socket) .....	3
2	275493	Conduit .....	AR
3	275496	Conduit .....	AR
4	.....	Connector Assembly (Front Work Light RH) .....	1
4	1330419	Connector .....	1
4	1330424	Connector (Secondary Lock) .....	1
4	1330438	Terminal (Socket) .....	2
5	.....	Connector Assembly (Main Lights Harness) .....	1
5	1330411	Connector .....	1
5	1330416	Connector .....	1
5	1330437	Terminal (Pin) .....	4
6	.....	Connector Assembly (Main Harness) .....	1
6	1541988	Connector (8 Pin) .....	1
6	1541989	Connector .....	1
6	1463140	Terminal (Pin) .....	7
6	1484377	Plug .....	1
7	2108466	Wire Harness (Temperature Sensor) .....	1
8	.....	Connector Assembly (Wire harness Temperature Sensor) .....	1
8	1484557	Connector (2 Socket) .....	1
8	1484558	Connector .....	1
8	1463141	Terminal (Socket) .....	2
9	1655195	Conduit .....	AR
10	.....	Connector Assembly (Display w/ Key Switch) .....	1
10	2069414	Connector (Plug) .....	1
10	1561019	Connector (Socket Female) .....	8
11	2101546	Buzzer .....	1
12	275495	Conduit .....	AR

**WIRE HARNESS (FIGURE 2-62)  
REAR WIPER — WITH OUTDOOR PROTECTION PACKAGE**



BP080745

ITEM	PART NO.	DESCRIPTION	QTY
	4625392	Wire Harness (Rear Wiper) .....	1
1	.....	Connector Assembly (Rear Wiper) .....	1
1	1330421	Connector (4 Soc) .....	1
1	1330438	Terminal (Socket) .....	4
1	1489657	Connector (Secondary Lock) .....	1
2	381919	Braiding .....	AR
3	275494	Conduit .....	AR
4	.....	Connector Assembly (Switch) .....	1
4	4616998	Connector .....	1
4	1560116	Terminal .....	5
4	1502919	Plug .....	5
4	1479109	Seal .....	4
4	1562649	Seal .....	1
5	275493	Conduit .....	AR
6	.....	Connector Assembly (Front Wiper Harness) .....	1
6	1463191	Connector .....	1
6	1463138	Terminal Pin .....	4
6	4046440	.....	.....
	1463193	Connector (Secondary Lock) .....	1

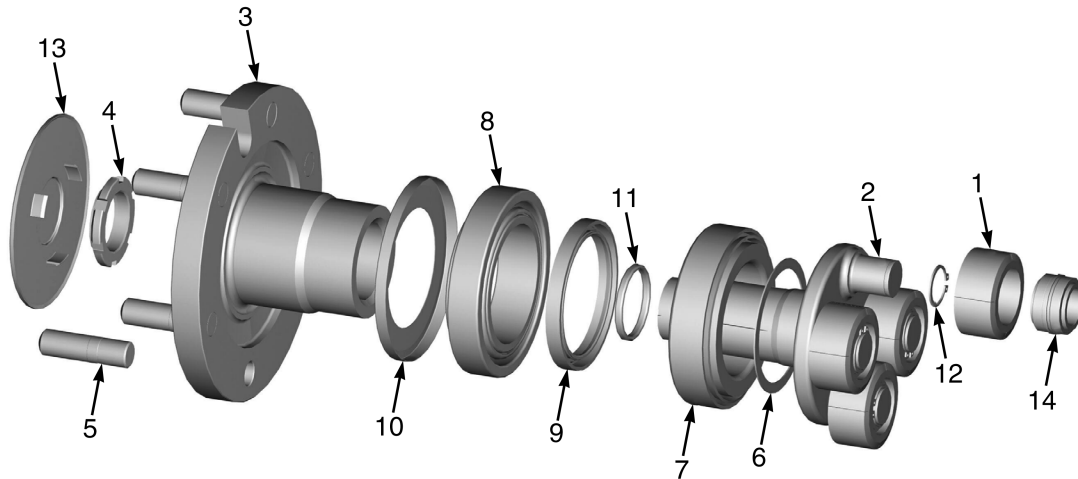
**WIRE HARNESS  
HEATER - 80V**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
	2111044	Wire Harness (Heater) .....	1
1	1402620	Ring Terminal .....	2
1	148611	E-Ring (Alternate Part) .....	2
2	1704495	Insulator (Fuse Holder) .....	2
3	1707015	Fuse Holder .....	1
4	1707298	Fuse (25 Amp) .....	1
5	1402849	Connector Body .....	4
6	1704828	Connector (Heater) .....	1
7	129888	E-Ring .....	2

**SECTION 3  
DRIVE UNIT**

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**TRANSAXLE OUTPUT ASSEMBLY (FIGURE 3-7)**



BP070091

ITEM	PART NO.	DESCRIPTION	QTY
1	.....	Planet Gear .....	4
2	.....	Planet Carrier .....	1
3	.....	Wheel Shaft .....	1
4	.....	Slotted Nut .....	1
5	4008788	Bolt (Wheel) .....	6
6	.....	Washer .....	1
7	.....	Tapered Roller Bearing .....	1
8	.....	Tapered Roller Bearing .....	1
9	.....	Shaft Seal .....	1
10	.....	Ring .....	1
11	.....	O-Ring .....	1
12	.....	Retaining Ring .....	4
13	4008789	Cup (Protective) .....	1
14	.....	Roll Bearing .....	4
	4008777	Kit-Repair Output (LH) .....	1
	4036718	Kit-Repair Output (RH) .....	1

**TRACTION MOTOR HOUSING  
RIGHT HAND (→ 10/2013)**

ITEM	PART NO.	DESCRIPTION	QTY
	<b>b</b> 2094746	Motor (RH) .....	1
	<b>d</b> 4607345	Traction Motor (RH) .....	1
1	.....	Housing .....	1
2	<del>4052563</del> 1658900	Sensor (Speed) .....	1
3	296073	Capscrew .....	13
4	<b>a</b> 326479	Dowel .....	4
4	<b>c</b> 1684506	Pin .....	4
5	293774	Capscrew .....	1
6	296042	Capscrew .....	10
7	4008762	O-Ring .....	1

**FOOTNOTES:**

**a** → PENDING PER ECN 155062  
**b** → S/N A276B02201J

**c** PENDING PER ECN 155062 →  
**d** S/N A276B02202J →

**PARK BRAKE ACTUATOR**  
(PENDING PER ECN 155062 →)

ITEM	PART NO.	DESCRIPTION	QTY
	4087615	Actuator (Park Brake Complete) .....	1
1	.....	Piston .....	1
2	.....	Seal .....	1
3	.....	Filter .....	1
4	.....	Cylinder .....	1
5	.....	Filter (Breather) .....	1
6	.....	Capscrew .....	2
7	.....	Snap Ring .....	1
8	.....	O-Ring .....	1
9	.....	U-Ring .....	1
10	.....	Piston .....	1
11	.....	Cover .....	1
12	.....	O-Ring .....	1
13	.....	U-Ring .....	1
14	.....	Snap Ring .....	1
15	.....	Compression Spring .....	1
16	.....	Cover .....	1
17	.....	Snap Ring .....	1
18	.....	O-Ring .....	1

**STEERING AXLE**

ITEM	PART NO.	DESCRIPTION	QTY
	1644975	Steering Axle (Assembly) .....	1
1	1643976	Steering Axle .....	1
2	2103891	Steering Cylinder (Assembly) (☞ Figure 4-2).....	1
3	293686	Capscrew .....	8
4	69029	Cap .....	2
5	1644934	Hub (Assembly) .....	2
6	1644425	Hub .....	1
7	317075	Bearing Cup .....	1
8	317076	Bearing Cone .....	1
9	183614	Bearing Cup .....	1
10	183615	Bearing Cone .....	1
11	164639	Wear Sleeve .....	1
12	1502276	Wheel Stud .....	6
13	1383777	Nut .....	2
14	15227	Cotter Pin .....	2
15	44542	Seal .....	2
16	1695111	Spindle (LH) .....	1
17	185860	Plug .....	1
18	135657	Bearing Cone .....	4
19	135658	Bearing Cup .....	4
20	153717	Wear Sleeve .....	2
21	153716	Seal .....	2
22	13957	Grease Fitting .....	6
23	58903	Snap Ring .....	8
24	300751	Bushing .....	4
25	1643531	Tie Rod .....	2
26	300752	Spherical Washer .....	8
27	1568271	Pin .....	4
28	266733	Seal .....	2
29	39678	O-Ring .....	2
30	13963	Grease Fitting .....	2
31	185858	Shim (0.020 in.) .....	2
32	185857	Shim (0.007 in.) .....	2
33	185856	Shim (0.005 in.) .....	2
34	293628	Capscrew .....	6
35	369812	Bearing Cap .....	2
36	1509888	Clip .....	2
37	296144	Capscrew .....	1
38	2089058	Magnet .....	1
39	1694787	Cap .....	1
40	2044515	Capscrew .....	4
41	1668356	Sensor (Steering) .....	1
42	1674512	Cover .....	1
43	1694831	Spindle (RH) .....	1
44	1525354	Rubber Mount .....	2
45	1647823	Plate .....	1
46	296427	Washer .....	6
47	293686	Capscrew .....	4
48	1388838	Rubber Mount .....	2
49	1517836	Wheel Nut .....	12

**STEERING COLUMN ASSEMBLY**  
**FIXED (10/2013 →)**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
	4619561	Steering Column (Fixed) .....	1
1	1562492	Kit-Nut .....	1
2	4071613	Kit (Upper) .....	1
3	1707407	Kit-Sensor .....	1
4	4071547	Kit (Gas Spring-Big) .....	1
5	4038677	Kit Pivot (Lower) .....	1

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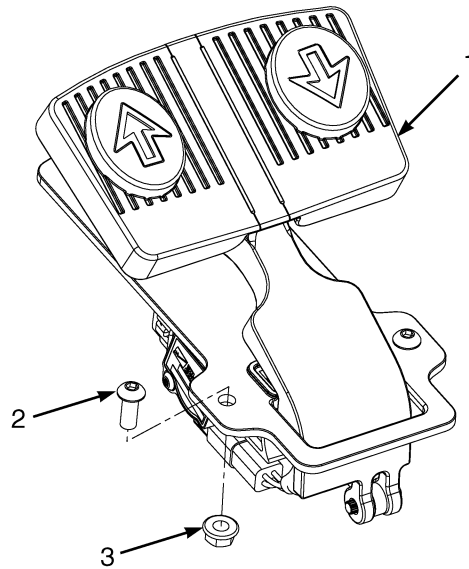
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**ACCELERATOR PEDAL ASSEMBLY (MONOTROL) (FIGURE 5-2)**



BP040141

ITEM	PART NO.	DESCRIPTION	QTY
1	4652183		
	4050140	Accelerator Pedal .....	1
2	369242	Capscrew .....	3
3	313828	Nut .....	3



**HYDRAULIC HOSES  
HOIST, TILT AND MAST**

ITEM	PART NO.	DESCRIPTION	QTY
1	2096710	Hose Assy (Third Function) .....	2
2	1477996	Hose Clamp .....	2
3	1481229	Clamp .....	2
4	1605479	Hose Clamp (Dual Hose) .....	2
5	1510116	Capscrew .....	2
6	1480237	Nut .....	2
7	2096714	Hose Assy (Fourth Function) .....	2
8	4604277	Hose Assy (Hoist) (Without Load Weight Option) .....	1
8	4604278	Hose Assy (Hoist) (With Load Weight Option) .....	1
9	1384699	Clamp .....	1
10	1398062	Nut (Fold Over) .....	1
11	1510113	Capscrew .....	1
12	320158	Washer .....	1
13	4606586	Hose Assy (Tilt Line) .....	1
14	2096699	Hose Assy (Tilt Line) .....	2
15	4603124	Hose Assy (Tilt Line) .....	1
16	4603125	Hose Assy (Tilt Line) .....	2
17	1644602	Fitting .....	2
17	265787	O-Ring .....	2
18	1487058	Fitting .....	4
18	1527813	O-Ring .....	1
18	16481	O-Ring .....	1

**HYDRAULIC PUMP  
19 CC**

ITEM	PART NO.	DESCRIPTION	QTY
	2106668	Hydraulic Pump .....	1
1	1701713	Gear Set .....	1
1	.....	Gear - Driven .....	1
1	.....	Drive Gear .....	1
2	.....	Seal (Plate) .....	2
3	.....	Back-Up .....	2
4	.....	Seal .....	1
5	1578672	Dowel .....	4
6	1622216	Screw .....	4
7	1622215	Side Plate .....	2
8	1675590	Cover Plate .....	1
9	1701714	Flange .....	1
10	.....	Plate (Gear) .....	1
	1675593	Kit-Seal .....	1

**MANUAL CONTROL LEVERS****KEY:****A: Three Function****B: Four Function**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	2111173	Cover (Upper Rear) .....	1	1
2	2104011	Handle (Palm Side Blank Half) .....	3	4
3	2104014	Handle (Clamp Switch Blank Half) .....	1	1
4	2100705	Wire Harness (Manual Interlock) .....	1	1
4	1671887	Push Button Switch (Included with Manual Interlock Wire Harness) .....	1	1
5	2104012	Handle (Finger Side Blank Half) (Finger Side Blank Half) .....	1	2
6	2104012	Handle (Finger Side Blank Half) .....	1	1
7	2109136	Handle (Forward / Reverse Switch Half) (Fwd/Rev Switch Half) .....	1	1
8	2109137	Cup .....	1	1
9	2101896	Switch .....	1	1
10	1696034	Retainer .....	1	1
11	1694830	Capscrew .....	11	14
12	227132	Screw .....	2	2
13	1699347	Lever .....	..	1
14	1699348	Lever .....	1	1
15	1699349	Lever .....	1	1
16	2107320	Push Button Switch (Emergency Disconnect) .....	1	1
17	1699350	Lever .....	1	1
18	<b>a</b> 1695937	Bracket Wldmt (Valve Mounting) (Low Hood) .....	1	1
18	<b>c</b> 4018085	Bracket Wldmt (Valve Mounting) (Low Hood) .....	1	1
18	<b>b</b> 4001848	Bracket Wldmt (Valve Mounting) (High Hood) .....	1	1
18	<b>d</b> 4018088	Bracket Wldmt (Valve Mounting) (High Hood) .....	1	1
19	1527881	Capscrew .....	1	1
20	2107661	Wire Harness (Manual Hydraulics) .....	1	1
21	1528482	Capscrew .....	3	3
22	1346752	Washer .....	3	3
23	2063991	Isolator .....	3	3
24	1593335	Nut .....	4	4
25	1510113	Capscrew .....	1	1
26	.....	Clip .....	1	1
27	1582464	Fastener .....	1	1
28	1393879	Nut .....	1	1
29	1527878	Capscrew .....	3	3
30	1530971	E-Ring .....	2	2
31	1682764	Washer .....	AR	AR
32	1657021	Spacer .....	1	..
33	1657016	Bushing .....	6	8
34	1657013	Pin .....	1	1
35	1517361	Locking Ring Cotter Pin .....	6	8
36	1657014	Pin .....	3	4
37	1674167	Latch .....	1	1
38	1593334	Nut .....	1	1
39	1694731	Handle .....	1	1
40	1688737	Link (Low Hood) .....	3	4
40	1688738	Link (High Hood) .....	3	4
41	2062718	Capscrew .....	4	4

**VALVE ASSEMBLY**  
**LIFT, TILT, AND AUXILIARY – MANUAL HYDRAULIC**

ITEM	PART NO.	DESCRIPTION	QTY
	1701661	Valve Section (End Aux) (Without Clamping) .....	1
	1703684	Valve Section (End Aux) (With Clamping) .....	1
	1701666	Valve Section (Dual Aux Section) .....	1
	<b>a</b> 1701660	Valve Section (Tilt) (J45-50XN) .....	1
	<b>b</b> 4037961		
	4068229	Valve Section (Tilt) (J45-50XN) .....	1
	<b>a</b> 1701663	Valve Section (Tilt) (J60-70XN) .....	1
	<b>b</b> 4037962		
	4068230	Valve Section (Tilt) (J60-70XN) .....	1
	1701659	Valve Section (Lift) .....	1
1	<del>1579809</del>		
	222443	Fitting .....	2
1	16483	O-Ring .....	1
2	1696312	Lowering Control Valve .....	5
3	1696296	O-Ring .....	1
4	233693	Fitting .....	1
4	16485	O-Ring .....	1
5	1701825	Seal .....	2
6	1701829	O-Ring .....	1
7	288474	Plug .....	1
8	1696296	O-Ring .....	2
9	1696299	O-Ring .....	1
10	1696300	Back-Up Ring .....	2
11	1696297	O-Ring .....	4
12	1701855	Spool (Solenoid) .....	1
13	.....	Plug (Lift Section Only) .....	1
14	<del>1696304</del>		
	<del>1703511</del>		
	4069956	Relief Valve (Tilt Section Only) .....	1
15	1701654	Kit-Sensor .....	1
15	.....	Sensor .....	1
15	18096	Capscrew .....	4
15	18089	Capscrew .....	4
15	1703512	Spring .....	1
15	4011177	Retainer .....	1
16	.....	Spool .....	1
17	.....	Clevis .....	1
	1696316	Kit-Seal .....	1

**FOOTNOTES:****a** → S/N A276B01534H**b** S/N A276B01535H →

**TILT CYLINDER AND MAST INSTALLATION**

(→ 10/2013)

**KEY:****A: J45-50XN****B: J60-70XN**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1514269	Pin (Mast Mounting) .....	2	2
2	1520290	Capscrew .....	4	4
3	1510117	Capscrew .....	2	2
4	1533493	Pin .....	4	4
5	1533494	Pin Anchor .....	2	2
6	16041	Grease Fitting .....	2	2
7	<b>ab</b> 1529929	Rod End .....	2	..
7	<b>ab</b> 1529931	Rod End .....	..	2
8	<b>a</b> 134675	Shim .....	AR	..
8	<b>a</b> 142247	Shim .....	..	AR
9	<b>a</b> 1325119	Shim .....	AR	..
9	<b>a</b> 1325120	Shim .....	..	AR
10	<b>a</b> 1527899	Spacer (Tilt) .....	2	..
10	<b>b</b> 332929	Spacer (Tilt) .....	2	..
10	<b>a</b> 378177	Spacer (Tilt) .....	..	2
10	<b>b</b> 349269	Spacer (Tilt) .....	..	2
11	<b>a</b> 55434	O-Ring .....	2	..
11	<b>a</b> 60563	O-Ring .....	..	2
12	1581848	Nut .....	2	2
13	1581852	Washer .....	2	2
14	1597381	Capscrew .....	2	2
15	.....	Tilt Cylinder (☞ Figure 6-22, ☞ Figure 6-23).....	2	2

**FOOTNOTES:****a** 5° Forward/5° Back**b** 5° Forward/6° Back

## SECTION 7

### MAST-TWO STAGE LIMITED FREE-LIFT

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**MAIN LIFT CYLINDER  
TWO STAGE LIMITED FREE-LIFT – D507/D562****J45-50 XN (LEFT HAND)**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3352 mm (132.0 in.)	3552 mm (139.8 in.)
	<b>Mast Group Number</b>	<b>D507 3352</b>	<b>D507 3552</b>
	<b>Cylinder Group Number</b>	<b>8517710</b>	<b>8517712</b>
	Cylinder Assy	2064143	2064145
8	Tube Wldmt- Cylinder	2064203	2064205
9	Cylinder Rod	1355162	1355170

**J45-50 XN (RIGHT HAND)**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3352 mm (132.0 in.)	3552 mm (139.8 in.)
	<b>Mast Group Number</b>	<b>D507 3352</b>	<b>D507 3552</b>
	<b>Cylinder Group Number</b>	<b>8517760</b>	<b>8517762</b>
	Cylinder Assy	2064167	2064169
8	Tube Wldmt- Cylinder	2064240	2064242
9	Cylinder Rod	1355162	1355170

**J60-70 XN (LEFT HAND)**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3159 mm (124.4 in.)	3359 mm (132.2 in.)
	<b>Mast Group Number</b>	<b>D562 3159</b>	<b>D562 3359</b>
	<b>Cylinder Group Number</b>	<b>8518010</b>	<b>8518012</b>
	Cylinder Assy	2064353	2064355
8	Tube Wldmt- Cylinder	2064279	2064281
9	Cylinder Rod	1355371	1355379
10	Spacer	1355711	1355711

**OUTER MAST  
TWO STAGE LIMITED FREE-LIFT – F507-F562**

**J45-50 XN**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3352 mm (132.0 in.)	3552 mm (139.8 in.)
		Mast Group Number	F507 3352
	Mast Assy	4627976	4627978
1	Outer Mast	4053748	4053750

**J60-70 XN**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3159 mm (124.4 in.)	3359 mm (132.2 in.)
		Mast Group Number	F562 3159
	Mast Assy	4627957	4627959
1	Outer Mast	4053748	4053750

ITEM	PART NO.	DESCRIPTION	QTY
	<b>a</b> . . . . .	Mast Assy .....	1
1	<b>a</b> . . . . .	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
9	. . . . .	Inner Mast (☞Figure 8-13).....	1
10	. . . . .	Chain (☞Figure 7-8).....	1
11	1514866	Pin .....	2
12	15211	Cotter Pin .....	2
13	297649	Ring .....	2
14	4031973	Nut .....	2
15	4051079	Restraint .....	2
16	4082846	Capscrew .....	2
17	4072717	Chain Anchor (J45-50XN) .....	2
17	4072704	Chain Anchor (J60-70XN) .....	2
18	1581557	Washer .....	2
19	1581566	Nut .....	4

**FOOTNOTES:**

**a** Refer to Table

**HEADER HOSE AND ATTACHING PARTS  
TWO STAGE LIMITED FREE-LIFT – F507-F562**

**J45-50 XN**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3352 mm (132.0 in.)	3552 mm (139.8 in.)
		Mast Group Number	F507 3352
1	Header Hose	4628136	4628138

**J60-70 XN**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3159 mm (124.4 in.)	3559 mm (140.1 in.)
		Mast Group Number	F562 3159
1	Header Hose	4628136	4628140

**KEY:**

**A:** Three Function

**B:** Four Function

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	a . . . . .	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
6	4013268	Stubshaft .....	1	2
7	4051293	Spacer .....	1	2
8	1581591	Capscrew .....	1	2
9	4043636	Capscrew .....	2	4
10	4013273	Spacer (Thin Wall) .....	1	2
11	1581583	Capscrew .....	1	2
12	4058930	Bracket Wldmt .....	1	1
13	4058935	Bracket Wldmt .....	..	1
14	1581582	Capscrew .....	2	4
15	4059830	Clamp .....	2	4
16	1581581	Capscrew .....	6	12
17	1581566	Nut .....	4	8
18	4093657	Plate Wldmt (LH) .....	1	1
19	4093656	Plate Wldmt (RH) .....	..	1
20	1477996	Hose Clamp .....	1	2
21	369804	Clamp .....	1	2
22	292508	Capscrew .....	2	4
23	1345348	Clamp .....	1	2

**OUTER MAST  
THREE STAGE FULL FREE-LIFT – D508/D563**

**J45-50XN**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4610 mm (181.5 in.)	4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)
		Mast Group Number	D508 4610	D508 4760	D508 4910
	Mast Assy	2065453	2065455	2065457	2065459
1	Outer Mast	1524753	1524754	1524755	1524757

**J45-50XN**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		5210 mm (205.1 in.)	5360 mm (211.0 in.)
		Mast Group Number	D508 5210
	Mast Assy	2065461	2065463
1	Outer Mast	1524758	1524759

**J60-70XN**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4568 mm (179.8 in.)	4718 mm (185.7 in.)	4868 mm (191.7 in.)	5168 mm (203.5 in.)	5468 mm (215.3 in.)
		Mast Group Number	D563 4568	D563 4718	D563 4868	D563 5168
	Mast Assy	2065397	2065399	2065400	2065404	2065408
1	Outer Mast	1524755	1524757	1524758	1524760	1524762

ITEM	PART NO.	DESCRIPTION	QTY
	<b>a</b> . . . . .	Mast Assy .....	1
1	<b>a</b> . . . . .	Outer Mast .....	1
2	1345216	Stubshaft .....	2
3	104506	O-Ring .....	4
4	131715	Shim (0.007 in.) .....	4
4	131716	Shim (0.020 in.) .....	4
5	215211	Wear Strip .....	2
6	<b>b</b> 1395168	Load Roller ("A") (111.10/110.84) .....	2
6	1333396	Load Roller ("B") (111.48/111.22) .....	2
6	1333397	Load Roller ("C") (112.62/112.36) .....	2
7	129387	Shim (0.020 in.) .....	AR
8	58901	Snap Ring .....	2
9	300982	Bushing .....	2
10	16001	Grease Fitting .....	2
11	1502811	Bushing .....	2

**MAIN LIFT  
THREE STAGE FULL FREE-LIFT – D508/D563  
J45-50XN**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4610 mm (181.5 in.)	4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)
		Mast Group Number	D508 4610	D508 4760	D508 4910
18	Chain	986559	135634	337174	129361

**J45-50XN**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		5210 mm (205.1 in.)	5360 mm (211.0 in.)
		Mast Group Number	D508 5210
18	Chain	320076	177352

**J60-70XN**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4568 mm (179.8 in.)	4718 mm (185.7 in.)	4868 mm (191.7 in.)	5168 mm (203.5 in.)	5468 mm (215.3 in.)
		Mast Group Number	D563 4568	D563 4718	D563 4868	D563 5168
18	Chain	1342124	1342384	1342127	1342129	1342130

ITEM	PART NO.	DESCRIPTION	QTY
1	131358	Snap Ring .....	2
2	1333382	Washer (0.060 in.) .....	2
2	1354915	Washer (0.010 in.) .....	AR
2	1354916	Washer (0.030 in.) .....	AR
2	1354917	Washer (0.060 in.) .....	AR
3	.....	Main Lift Cylinders (☞ Figure 8-5).....	2
4	2062686	Hyd Velocity Fuse (J45-50XN) .....	2
4	2062687	Hyd Velocity Fuse (J60-70XN) .....	2
4	16485	O-Ring .....	1
4	252729	O-Ring .....	1
5	1481097	Hose Assy .....	2
6	1532650	Fitting .....	1
6	16485	O-Ring .....	1
6	1527818	O-Ring .....	2
7	1581835	Capscrew .....	2
8	1581556	Washer .....	2
9	1581566	Nut .....	2
10	1333392	Housing (Lowering Control) .....	1
11	2062651	Lowering Control Valve (J45-50XN) .....	1
11	2062652	Lowering Control Valve (J60-70XN) .....	1
12	1480747	Fitting .....	1

**FREE-LIFT**  
**THREE STAGE FULL FREE-LIFT – D508/D563****KEY:****A: J45-50XN****B: J60-70XN**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
37	1343989	Hose Sheave .....	1	1
37	1354901	Bushing .....	1	1
38	1360534	Stubshaft .....	1	1
39	1581829	Capscrew .....	1	1
40	131358	Snap Ring .....	1	1

**FOOTNOTES:****a** Refer to Table**b** → S/N D508B24531J**c** → S/N D563B20447J**d** S/N D508B24532J →**e** S/N D563B20448J →



**INTERMEDIATE MAST  
THREE STAGE FULL FREE-LIFT – F508-F563**

**J45-50XN**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4610 mm (181.5 in.)	4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)
		Mast Group Number	F508 4610	F508 4760	F508 4910
	Mast Assy	4623099	4623100	4623101	4623102
1	Intermediate Mast	4053807	4053808	4053809	4053810
9	Chain	337174	180137	129361	88446

**J45-50XN**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		5210 mm (205.1 in.)	5360 mm (211.0 in.)
		Mast Group Number	F508 5210
	Mast Assy	4623103	4623104
1	Intermediate Mast	4053811	4053812
9	Chain	135588	255548

**J60-70XN**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4568 mm (179.8 in.)	4718 mm (185.7 in.)	4868 mm (191.7 in.)	5168 mm (203.5 in.)	5468 mm (215.3 in.)
		Mast Group Number	F563 4568	F563 4718	F563 4868	F563 5168
	Mast Assy	4623081	4623082	4623083	4623085	4623087
1	Intermediate Mast	4053809	4053810	4053811	4053813	4053815
9	Chain	1342384	1342385	1342129	1342387	1342132

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 .....	8
4	1374797	Snap Ring (Optional) .....	8
5	129387	Shim (0.020 in.) .....	AR
6	4054944	Chain Sheave Assembly (Assembly) J45-50XN .....	2
6	4048508	Chain Sheave Assembly (Assembly) J60-70XN .....	2
6	4054945	Chain Sheave (J45-50XN) .....	1
6	4046499	Chain Sheave (J60-70XN) .....	1



**FREE-LIFT CYLINDER  
THREE STAGE FULL FREE-LIFT – F508-F563**

**J45-50XN**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4610 mm (181.5 in.)	4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)
		<b>Mast Group Number</b>	<b>F508 4610</b>	<b>F508 4760</b>	<b>F508 4910</b>
	<b>Cylinder Group Number</b>	<b>8607256</b>	<b>8607257</b>	<b>8607258</b>	<b>8607260</b>
	Free Lift Cylinder	4617960	4617961	4617962	4617964
1	Cylinder Rod	4046236	4046237	4046238	4046240
2	Tube Wldmt- Cylinder	4046206	4046207	4046208	4046210

**J45-50XN**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		5210 mm (205.1 in.)	5360 mm (211.0 in.)
		<b>Mast Group Number</b>	<b>F508 5210</b>
	<b>Cylinder Group Number</b>	<b>8607261</b>	<b>8607262</b>
	Free Lift Cylinder	4617965	4617966
1	Cylinder Rod	4046241	4046242
2	Tube Wldmt- Cylinder	4046211	4046212

**J60-70XN**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		4568 mm (179.8 in.)	4718 mm (185.7 in.)	4868 mm (191.7 in.)	5168 mm (203.5 in.)	5468 mm (215.3 in.)
		<b>Mast Group Number</b>	<b>F563 4568</b>	<b>F563 4718</b>	<b>F563 4868</b>	<b>F563 5168</b>
	<b>Cylinder Group Number</b>	<b>8607358</b>	<b>8607360</b>	<b>8607361</b>	<b>8607363</b>	<b>8607366</b>
	Free Lift Cylinder	4618057	4618059	4618060	4618062	4618065
1	Cylinder Rod	4046308	4046310	4046311	4046313	4046316
2	Tube Wldmt- Cylinder	4046268	4046270	4046271	4046273	4046276



**MAIN LIFT CYLINDER  
RIGHT HAND – TWO STAGE FULL FREE-LIFT (D509-D564)**

**D564**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3160 mm (124.4 in.)	3360 mm (132.3 in.)
	<b>Mast Group Number</b>	<b>D564 3160</b>	<b>D564 3360</b>
	<b>Cylinder Group Number</b>	<b>8518660</b>	<b>8518662</b>
	Cylinder Assy	2060423	2060425
1	Tube Wldmt- Cylinder	2058537	2058539
6	Cylinder Rod	1358941	1358943
7	Spacer	2073159	2073159

**KEY:**

**A: J45-50XN**

**B: J60-70XN**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	<b>a . . . . .</b>	Cylinder Assy .....	1	1
1	<b>a . . . . .</b>	Tube Wldmt-Cylinder .....	1	1
2	295649	Screw .....	1	1
3	190887	Sealing Ring .....	1	1
4	1356748	Piston Ring .....	1	1
5	1356747	Wear Ring .....	1	1
6	<b>a . . . . .</b>	Cylinder Rod .....	1	1
7	<b>a . . . . .</b>	Spacer .....	..	1
8	1381095	Rod Seal .....	1	1
9	59229	O-Ring .....	1	1
10	147972	Back-Up Ring .....	1	1
11	1319668	Rod Wiper .....	1	1
12	1355713	Gland .....	1	1
	1496922	Kit-Seal .....	1	1

**FOOTNOTES:**

**a** Refer to Table



**MAIN LIFT**  
**TWO STAGE FULL FREE- LIFT – E509-E564**

ITEM	PART NO.	DESCRIPTION	QTY
1	.....	Main Lift Cylinder (LH) (☞Figure 9-13).....	1
2	1486749	Fitting .....	1
2	16485	O-Ring .....	1
2	252729	O-Ring .....	1
3	1481097	Hose Assy .....	2
4	1532650	Fitting .....	1
4	16485	O-Ring .....	1
4	252729	O-Ring .....	1
5	1581566	Nut .....	2
6	1379687	Housing (Lowering Control) .....	1
7	14603	Plug .....	1
7	16486	O-Ring .....	1
8	2062651	Lowering Control Valve (J45-50XN) .....	1
8	2062652	Lowering Control Valve (J60-70XN) .....	1
8	280154	O-Ring .....	1
8	252729	O-Ring .....	1
9	1486773	Fitting .....	1
9	252729	O-Ring .....	2
10	2062686	Hyd Velocity Fuse (J45-50XN) .....	1
10	2062687	Hyd Velocity Fuse (J60-70XN) .....	1
11	1581849	Nut .....	2
12	1581852	Washer .....	4
13	323090	Spacer .....	2
14	1581829	Capscrew .....	2
15	.....	Main Lift Cylinder (RH) (☞Figure 9-12).....	1
16	1354915	Washer (0.010 in.) .....	AR
16	1354916	Washer (0.030 in.) .....	AR
16	1354917	Washer (0.060 in.) .....	AR
17	1333382	Washer (0.060 in.) .....	1
18	131358	Snap Ring .....	1
19	1581835	Capscrew .....	2
20	1581556	Washer .....	2

**FREE-LIFT  
TWO STAGE FULL FREE- LIFT – E509-E564**

**E509**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3362 mm (132.4 in.)	3562 mm (140.2 in.)
		Mast Group Number	E509 3362
1	Tube Assy	1480952	1481745
21	Chain	161029	180029

**E564**

ITEM	DESCRIPTION 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3160 mm (124.4 in.)	3360 mm (132.3 in.)
		Mast Group Number	E564 3160
1	Tube Assy	1480952	1481745
21	Chain	1342378	1342379

ITEM	PART NO.	DESCRIPTION	QTY
1	a . . . . .	Tube Assy .....	1
2	1481090	Fitting .....	1
2	16485	O-Ring .....	1
2	244167	O-Ring .....	1
3	131358	Snap Ring .....	1
4	1395285	Chain Guard .....	2
5	1378690	Crosshead .....	1
6	1354902	Spacer (J60-70XN) .....	4
7	1581828	Capscrew .....	2
8	1465504	Tie Down .....	1
9	1354967	Bracket Wldmt .....	1
10	1581559	Washer .....	4
11	1581849	Nut .....	4
12	356505	Washer .....	1
13	154355	Spring .....	1
14	1481096	Fitting .....	1
15	1581827	Capscrew .....	2
16	1581567	Nut .....	2
17	178119	Clamp .....	2
18	1581587	Capscrew .....	1
19	1581557	Washer .....	3
20	1581841	Capscrew .....	1
21	a . . . . .	Chain .....	2
22	1379683	Chain Sheave Assembly (J60-70XN) .....	2
22	1379682	Chain Sheave Assembly (J45-55XN) .....	2
22	1378693	Chain Sheave .....	1
22	37752	Snap Ring .....	1



**ACCUMULATOR**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
1	1629185	Accumulator (Uncharged) .....	1
1	1695807	Accumulator (With Pre-pressure, Optional) .....	1
2	4031653	Strap Clamp .....	2
3	1609864	Spacer .....	2
4	2073766	Hose Assy .....	1
5	1487096	Fitting .....	1



**INTEGRAL SIDE-SHIFT CARRIAGE  
THREE STAGE FULL FREE-LIFT – F508/F563****KEY:****A: J45-50XN (F508)****B: J60-70XN (F563)**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	4621635	Side-Shift Carriage (42 in.) .....	1	..
	4617797	Side-Shift Carriage (42 in.) .....	..	1
1	4055426	Carriage Wldmt (42 in.) .....	1	..
1	4046469	Carriage Wldmt (42 in.) .....	..	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 10-16).....	1	..
15	2043529	Sideshift Cylinder Assembly (☞Figure 10-16).....	..	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
	<b>a</b> 4611880	Carriage (42 in.) (Fork Positioner) (☞Figure 10-17).....	1	..
	<b>a</b> 4611882	Carriage (42 in.) (Fork Positioner) (☞Figure 10-17).....	..	1

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



**AUXILIARY HOSES  
WITH ELECTRO-HYDRAULIC VALVE**

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

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	1529016	Fitting .....	2	4
2	1556897	Fitting .....	2	4
3	1481229	Clamp .....	1	2
4	1477996	Hose Clamp .....	1	2
5	2089166	Hose Assy .....	1	2
6	2089162	Hose Assy .....	1	2
7	1633113	Plate .....	1	1
8	239503	Nut .....	3	6
9	292681	Lockwasher .....	2	4
10	320158	Washer .....	1	2
11	16925	Fitting .....	2	4
12	292509	Capscrew .....	2	4
13	1345348	Clamp .....	2	4

**AUXILIARY TUBE EXTENSIONS**  
**TWO STAGE LIMITED FREE-LIFT – E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS**  
(S/N D507V02973H →) (S/N D562V02054H →)

**KEY:**

**A: D507 3 Function**  
**B: D507 4 Function**  
**C: D562 3 Function**  
**D: D562 4 Function**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1487097	Fitting .....	2	4	2	4
2	4604683	Hose Assy .....	..	1	..	1
3	4604565	Hose Assy .....	..	1	..	1
4	1486737	Fitting .....	2	4	2	4
5	4016313	Hook .....	2	2	2	2
6	292505	Capscrew .....	2	2	2	2
7	4013928	Bracket .....	1	1	1	1
8	2111754	Valve (Single Auxiliary) .....	1	..	1	..
8	2111755	Valve (Dual Auxiliary) .....	..	1	..	1
9	4604566	Hose Assy .....	1	1	1	1
10	4604564	Hose Assy .....	1	1	1	1
11	<del>1512440</del>					
	302399	Nut .....	4	4	4	4
12	1673754	Washer .....	2	2	2	2
13	17221	Fitting .....	1	1	1	1
14	1581836	Capscrew .....	2	2	2	2
15	1486740	Fitting .....	2	4	2	4
16	1483664	Fitting (Quick Disconnect) .....	2	4	2	4
17	1483663	Quick Disconnect Fitting .....	2	4	2	4
18	1483661	Dust Cap .....	2	4	2	4
19	1708364	Bulkhead (Fitting) .....	2	4	2	4
20	1550070	Bracket .....	1	2	1	2
21	1658934	Capscrew .....	1	2	1	2
22	<b>b</b> 2074400	Tube Assy .....	1	1	..	..
22	<b>b</b> 2074404	Tube Assy .....	..	..	1	1
23	<b>b</b> 2074401	Tube Assy .....	1	1	..	..
23	<b>b</b> 2074405	Tube Assy .....	..	..	1	..
24	85767	Hose .....	1	1	1	1
25	1644398	Clamp (Swivel) .....	1	1	1	1
26	1606544	Clamp .....	1	1	1	1
27	222500	Fitting .....	1	1	1	1
28	.....	Fitting .....	1	1	1	1
29	1688347	Adapter .....	1	1	1	1
30	<b>a</b> 2074403	Tube Assy .....	..	1	..	..
30	<b>a</b> 2074407	Tube Assy .....	..	..	..	7
31	<b>a</b> 2074402	Tube Assy .....	..	1	..	..
31	<b>a</b> 2074406	Tube Assy .....	..	..	..	1
32	1569616	Hose Clamp .....	2	2	2	2

**FOOTNOTES:****a** Used With Integral Side-Shift Carriage**b** Used With Standard Carriage

**AUXILIARY TUBE EXTENSIONS**

**TWO AND THREE STAGE FULL FREE-LIFT (S/N D508V27243H →) (S/N D563V11351H →)  
(S/N D509V02103H →) (S/N D564V02122H →)**

**KEY:****A: D508, D509 Three Function, Class 2****B: D508, D509 Four Function, Class 2****C: D563, D564 Three Function, Class 3****D: D563, D564 Four Function, Class 3**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	<b>b</b> 1486740	Fitting .....	2	4	2	4
2	<b>b</b> 1483664	Fitting .....	2	4	2	4
3	<b>b</b> 1483661	Dust Cap .....	2	4	2	4
4	<b>b</b> 1483663	Quick Disconnect Fitting .....	2	4	2	4
5	<b>b</b> 1708364	Bulkhead (Fitting) .....	2	4	2	4
6	<b>c</b> 1550070	Bracket .....	1	2	1	2
6	<b>a</b> 1549718	Bracket .....	..	1	..	..
6	<b>a</b> 1549724	Bracket .....	..	..	..	1
7	<b>ade</b> 2079987					
	4613400	Tube Assy .....	..	1	..	..
7	<b>cdf</b> 4616325	Tube Assy .....	..	1	..	..
7	<b>ad</b> 2079994					
	4613404	Tube Assy .....	..	..	..	1
8	<b>ad</b> 2079988					
	4613401	Tube Assy .....	..	1	..	..
8	<b>c</b> 4616326	Tube Assy .....	..	1	..	..
8	<b>c</b> 2079992					
	4613405	Tube Assy .....	..	..	..	1
9	<b>a</b> 2079986					
	4613399	Tube Assy .....	1	1	..	..
9	<b>c</b> 4616324	Tube Assy .....	1	1	..	..
9	<b>c</b> 2079990					
	4613403	Tube Assy .....	..	..	1	1
10	<b>a</b> 2079985					
	4613398	Tube Assy .....	1	1	..	..
10	<b>c</b> 4616420	Tube Assy .....	1	1	..	..
10	<b>c</b> 2079989					
	4613402	Tube Assy .....	..	..	1	1
11	<b>d</b> 1528573	Fitting .....	2	4	2	4

**FOOTNOTES:****a** Used With Integral Sideshift Carriage**b** Used With Quick Disconnect Only**c** Used With Standard Carriage**d** Without Quick Disconnect**e** → S/N A276B03930L**f** S/N A286B03931L →

**AUXILIARY TUBES****THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST) – MANUAL AND E-HYDRAULICS VALVE WITH QUICK DISCONNECT****KEY:****A: J45-55XN (F508)****B: J60-70XN (F563)**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	e 4624525	Tube Assy .....	1	..
2	e 4624527	Tube Assy .....	..	1
3	e 4624524	Tube Assy .....	1	..
4	e 4624526	Tube Assy .....	..	1
5	1550070	Bracket .....	2	2
6	1658934	Capscrew .....	2	2
7	b 4624501	Tube Assy .....	1	..
8	b 4624503	Tube Assy .....	..	1
9	b 4624502	Tube Assy .....	1	..
10	b 4624504	Tube Assy .....	..	1
11	c 4060492	Bracket .....	2	..
11	c 4060493	Bracket .....	..	2
12	d 1483661	Dust Cap .....	2	2
12	a 1483661	Dust Cap .....	4	4
13	d 1708364	Bulkhead (Fitting) .....	2	2
13	a 1708364	Bulkhead (Fitting) .....	4	4
14	d 1528602	Locknut .....	2	2
14	a 1528602	Locknut .....	4	4
15	d 1483663	Quick Disconnect Fitting .....	2	2
15	a 1483663	Quick Disconnect Fitting .....	4	4
16	d 1483664	Fitting .....	2	2
16	a 1483664	Fitting .....	4	4
17	d 1486740	Fitting .....	2	2
17	a 1486740	Fitting .....	4	4

**FOOTNOTES:**

**a** Dual Auxiliary  
**b** Four Function  
**c** Integral Side-Shift

**d** Single Auxiliary  
**e** Three Function

**AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES  
THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST) SINGLE AUXILIARY WITH E-HYDRAULICS –  
THREE FUNCTION**

ITEM	PART NO.	DESCRIPTION	QTY
1	4067017	Bracket .....	1
2	2111754	Valve .....	1
3	1487097	Fitting .....	2
4	1487058	Fitting .....	2
5	292505	Capscrew .....	2
6	1512440		
	302399	Nut .....	2
7	222501	Fitting .....	1
8	4626479	Hose Assy .....	1
9	4606305	T-Fitting .....	1
10	1569616	Hose Clamp .....	2
11	4626472	Hose Assy .....	1
12	4626473	Hose Assy .....	1
13	222500	Fitting .....	1

**HEADER HOSE CONVERSION KITS**  
**THREE-STAGE FULL FREE-LIFT (→ S/N D563V11658H) (→ S/N D508V27872H)**

**D508 THREE TO FOUR FUNCTION**

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS			
	4610 mm (181.5 in.)	4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)
<b>Mast Group Number</b>	<b>D508 4610</b>	<b>D508 4760</b>	<b>D508 4910</b>	<b>D508 5060</b>
Kit-Hose Group 3 to 4 Way	4004953	1585190	1585193	1585196

**D508 THREE TO FOUR FUNCTION**

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS	
	5210 mm (205.1 in.)	5360 mm (211.0 in.)
<b>Mast Group Number</b>	<b>D508 5210</b>	<b>D508 5360</b>
Kit-Hose Group 3 to 4 Way	1605310	4005135

**D508 TWO TO FOUR FUNCTION**

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS			
	4610 mm (181.5 in.)	4760 mm (187.4 in.)	4910 mm (193.3 in.)	5060 mm (199.2 in.)
<b>Mast Group Number</b>	<b>D508 4610</b>	<b>D508 4760</b>	<b>D508 4910</b>	<b>D508 5060</b>
Kit-Hose Group 2 to 4 Way	4004954	1585191	1585194	1585197

**D508 TWO TO FOUR FUNCTION**

DESCRIPTION	LIFT HEIGHT TO BOTTOM OF FORKS	
	5210 mm (205.1 in.)	5360 mm (211.0 in.)
<b>Mast Group Number</b>	<b>D508 5210</b>	<b>D508 5360</b>
Kit-Hose Group 2 to 4 Way	4004951	4005136

**BACK-UP ALARM KIT (CONTINUED)**

DESCRIPTION	PART NUMBER
Kit-Back-UP Alarm 81-102 DB	4004178

**REAR DRIVE HANDLE KITS**

DESCRIPTION	PART NUMBER
Kit (Rear Drive Handle)	1704473
Kit (Rear Drive Handle) (Freezer)	1704474

**CAB KITS**

DESCRIPTION	PART NUMBER
Kit (Top Screen)	4005600
Kit (Rear Screen)	4005602
Kit (Steel Doors)	4005611
Kit (PVC Doors)	4005612
Kit (Roof Liner)	4005614
Kit (Front Wiper/Washer)	4005615
Kit (Heater)	4005616
Kit (Dome Light)	4005617
Kit (Rear Wiper Switch)	4005620

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