



**M-211-18**

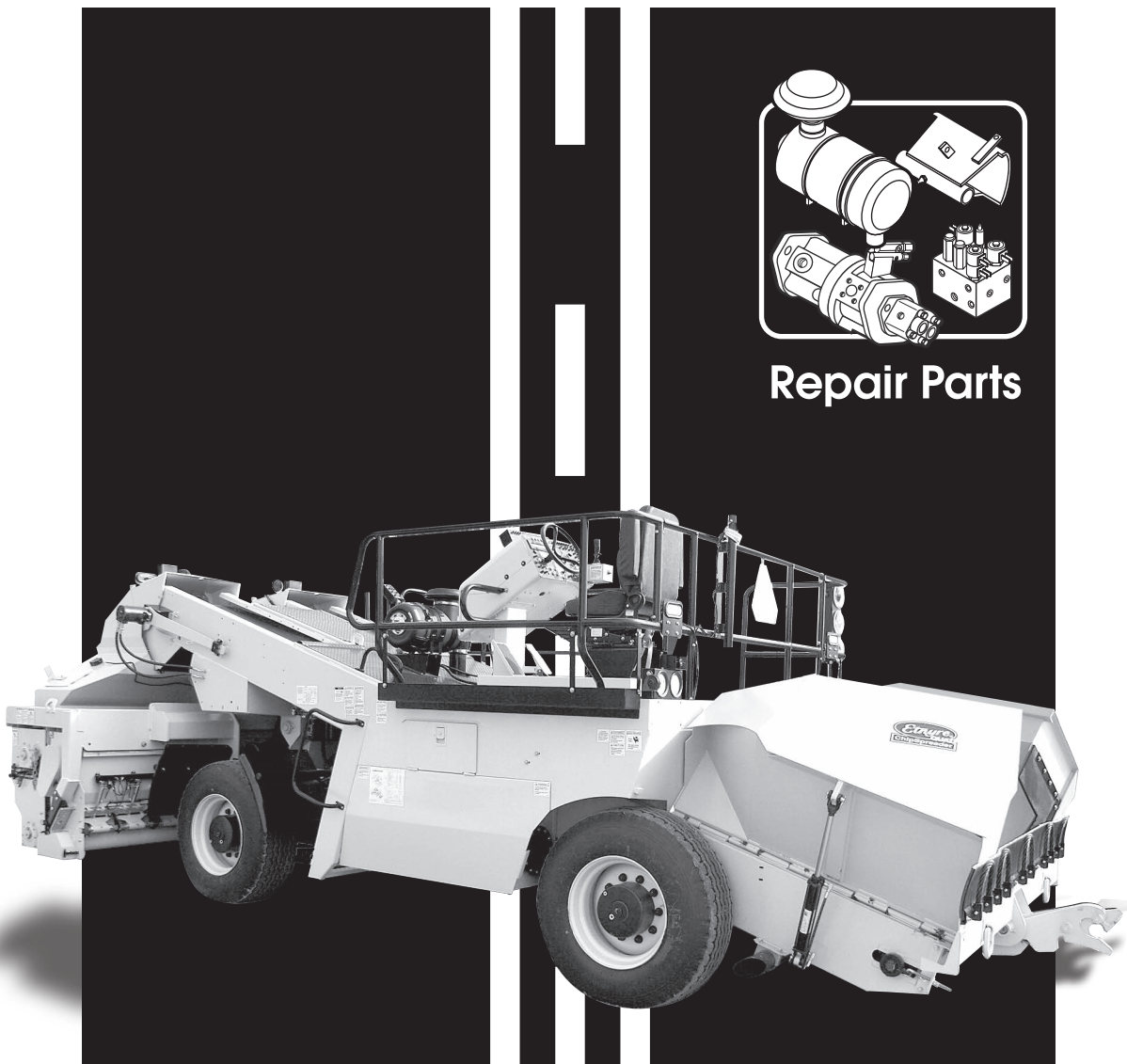
Updated May 16, 2023

Units with **RC28 Controller**: Serial Numbers K7085, K7157, K7158, K7162, K7170, K7227, K7228, K7232 thru K7235, K7237 and Up

Units with **RC36 Controller**: Serial Numbers K7226, K7229 thru K7231, K7236

**2WD & 4WD Hydrostatic Drive  
with Variable Width Spread Hopper**

# ChipSpreader



**E.D. ETNYRE & CO. 1333 S. Daysville Road, Oregon, Illinois 61061**

Phone: 815•732•2116 or 800•995•2116 • Fax: 800-521-1107 • [www.etnyre.com](http://www.etnyre.com)

**PARTS / SERVICE: 888-586-1899 • [CustomerService@etnyre.com](mailto:CustomerService@etnyre.com)**

## M-211-18

Updated May 16, 2023

# VARIABLE WIDTH HOPPER CHIPSREADER PARTS MANUAL

Units with **RC28 Controller**: Serial Numbers K7085, K7157, K7158, K7162, K7170, K7227, K7228, K7232 thru K7235, K7237 and Up

Units with **RC36 Controller**: Serial Numbers K7226, K7229 thru K7231, K7236

### HOW TO ORDER PARTS

To assure prompt delivery when ordering parts, please furnish the following information: **1)** Complete name and address of consignee. **2)** Method of shipment preferred. **3)** Is shipment to be prepaid or collect? **4)** Serial numbers of units to which parts apply. **5)** Complete part numbers and descriptions. **6)** Any special instructions. Part numbers beginning with 9250000 are category numbers and must include descriptive term to complete the order (such as, length, color, etc.). These items when listed in the parts manual will indicate what information must be included.

***Specify unit serial number when ordering parts!***

### WARRANTY

E.D. Etnyre & Co. warrants to the original Purchaser, its new product to be free from defects in material and workmanship for a period of twelve (12) months after date of delivery to original Purchaser. The obligation of the Company is limited to repairing or replacing any defective part returned to the Company and will not be responsible for consequential damages or any further loss by reason of such defect.

The company excludes all implied warranties of merchantability and fitness for a particular purpose. There are no warranties, express or implied, which extend beyond the description of the goods contained in this contract.

This warranty does not obligate the Company to bear the cost of machine transportation in connection with the replacement or repair of defective parts, nor does it guarantee repair or replacement of any parts on which unauthorized repairs or alterations have been made or for components not manufactured by the Company except to the extent of the warranty given by the original Manufacturer.

This warranty does not apply to:

- (1) Normal start-up services, normal maintenance services or adjustments usually performed by the selling dealer, factory service representative or customer personnel.
- (2) Any product manufactured by E.D. Etnyre & Co. purchased or subjected to rental use.
- (3) Any product or part thereof which shows improper operation, improper maintenance, abuse, neglect, damage or modification after shipment from factory.
- (4) Any product or part thereof damaged or lost in shipment. Inspection for damage should be made before acceptance or signing any delivery documents releasing responsibility of the delivering carrier.

This warranty and foregoing obligations are in lieu of all other obligations and liabilities including negligence and all warranties of merchantability or otherwise, express or implied in fact or by law.



**E. D. ETNYRE & CO. , Oregon, Illinois 61061-9778**

1333 S. Daysville Road Phone: 815-732-2116 or 800-995-2116

Fax: Main Office 815-732-4277 Fax: Sales and Service 815-732-7400 Fax: Parts Dept Only 800-521-1107

E Mail: sales@etnyre.com Web Site: www.etnyre.com

## Reporting Safety Defects

If you believe that your vehicle has a defect which could cause a crash, injury, or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying E.D. Etnyre & Co.

If NHTSA receives similar complaints, it may open an investigation. If it finds a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or E.D. Etnyre & Co.

To contact NHTSA, you may call the Auto Safety Hotline toll-free at 1-800-424-9393 (or 366-0123 in the Washington, D.C. area). Or, you may write to: U.S. Department of Transportation, Washington, D.C. 20696. You may also obtain other information about motor vehicle safety from the Auto Safety Hotline.

E.D. Etnyre & Co., Oregon, Illinois 61061, Phone Area Code 815-732-2116, Cable Address "EDECO". CALIFORNIA

**! WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information, go to: [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

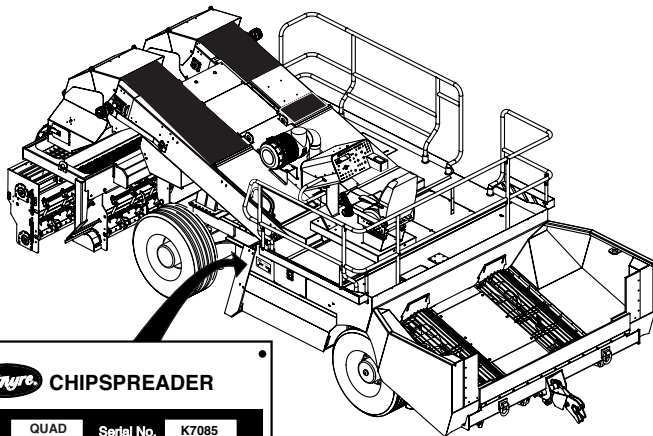
6322159

Please note this warning and remember -

Always start and operate the engine in a well-ventilated area;

If in an enclosed area, vent the exhaust to the outside;

Do not modify or tamper with the exhaust



Serial Number Plate Location



## WARNING

### Fluoroelastomer handling

Some "O" rings and seals used in this vehicle are made from fluoroelastomers. When used under design conditions, fluoroelastomers do not require special handling. However, when fluoroelastomers are heated to temperatures beyond their design temperature (around 600 degrees Fahrenheit), decomposition may occur with the formation of hydrofluoric acid. Hydrofluoric acid can be extremely corrosive to human tissue if not handled properly.

A degraded seal may appear as a charred or black sticky mass. Do not touch either the seal or the surrounding equipment without wearing neoprene or PVC gloves if degradation is suspected. Wash parts and equipment with 10% lime water (calcium hydroxide solution) to neutralize any hydrofluoric acid.

If contact with the skin occurs, wash the affected areas immediately with water. Then rub a 2.5 calcium gluconate gel into the skin until there is no further irritation, while seeking prompt medical attention.

Note to physicians: For advice or treatment of HF Burns, call the DuPont Medical Emergency Number 1-800-441-3637.

This manual covers standard features and options. If your unit incorporates custom features, some of the information contained in this manual may not apply. If you have any questions regarding this manual or your unit, contact your dealer or the E. D. Etnyre Service Department at 1-800-995-2116.



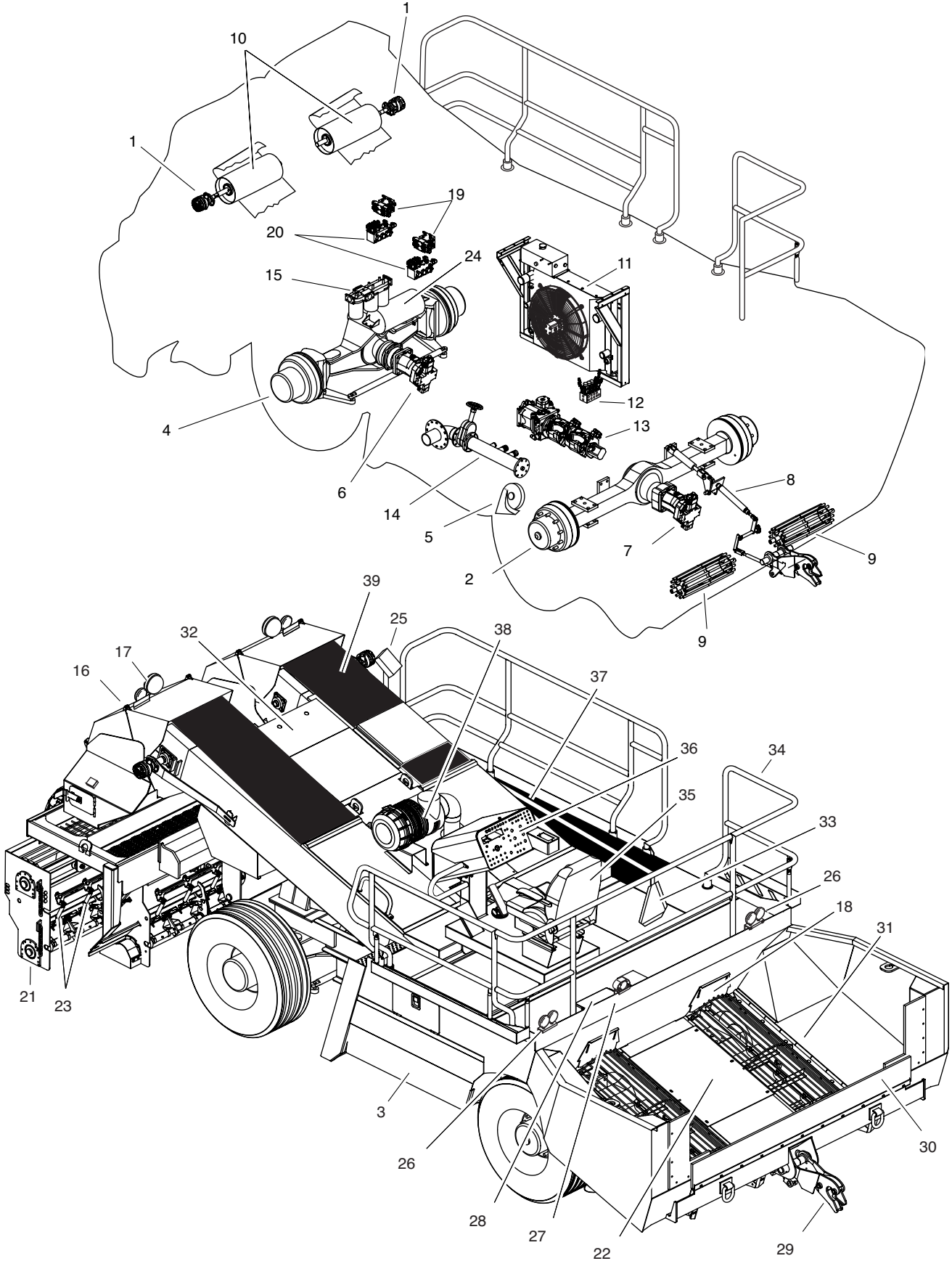
## CAUTION

Before breaking the seal on all hydraulic fittings, fill caps, etc. be sure to clean around the connection. Failure to do so may cause contaminants to enter the hydraulic system causing damage to pumps, motors, etc.

# Table Of Contents

<p>HOW TO ORDER PARTS ..... 1</p> <p>WARRANTY ..... 1</p> <p><b>GENERAL</b></p> <p>Reporting Safety Defects..... 2</p> <p>Fluoroelastomer handling ..... 2</p> <p><b>DECALS &amp; ID</b></p> <p>General Identification..... 4</p> <p>Caution And Instruction Plates ..... 6</p> <p>Variable Width Front Control Box ..... 7</p> <p>Control Console Assembly ..... 8</p> <p>Console/Seat Assembly..... 10</p> <p>Power Seat ..... 12</p> <p>Hitch Assembly &amp; Controls ..... 14</p> <p>Traction Boost Hitch Assembly &amp; Controls ..... 16</p> <p><b>OPTIONAL CAB</b></p> <p>Optional Cab &amp; Accessories ..... 18</p> <p>Optional Cab Harness Assembly Diagram ..... 20</p> <p>Optional Cab Harness Wiring Diagram ..... 22</p> <p>Hydraulic Schematic - Optional Cab Power Seat Diagram 24</p> <p><b>FRONT HOPPER</b></p> <p>Hopper Assembly Install..... 26</p> <p><i>Left Hopper Assembly - Auger &amp; Extending Cylinder</i> ..... 28</p> <p><i>Left Hopper Assembly - Spreadroll</i>..... 30</p> <p><i>Left Hopper Assembly - Gate Cylinders</i> ..... 31</p> <p><i>Left Hopper Assembly - Gates</i>..... 32</p> <p>Left Hopper Hydraulic Hoses..... 34</p> <p><i>Right Hopper Assembly - Auger &amp; Extending Cylinder</i>... 36</p> <p><i>Right Hopper Assembly - Spreadroll</i> ..... 38</p> <p><i>Right Hopper Assembly - Gate Cylinders</i> ..... 39</p> <p><i>Right Hopper Assembly - Gates</i> ..... 40</p> <p>Right Hopper Hydraulic Hoses ..... 42</p> <p>Hood Assemblies..... 44</p> <p>Hopper Lift Mechanism..... 46</p> <p><b>REAR HOPPER &amp; CONVEYOR</b></p> <p>Rear Hopper ..... 47</p> <p>Conveyor Arrangement..... 48</p> <p><b>ENGINE</b></p> <p>Radiator - Cooler - Motor Mounts ..... 50</p> <p>Radiator/Oil Cooler/ Charge Air Cooler ..... 52</p> <p>Axle Connections..... 53</p> <p>Air Intake Assembly - Tier III - Thru S/N K7231 ..... 54</p> <p>Exhaust Assembly - Tier III - Thru S/N K7231 ..... 55</p>	<p><b>ENGINE (cont)</b></p> <p>Air Intake Assembly - Tier IV - S/N K7232 thru K7356 ... 56</p> <p>Tier IV Aftertreatment - S/N K7232 thru K7356 ..... 57</p> <p>Tier V Aftertreatment - S/N K7357 &amp; Up..... 58</p> <p><b>Service Bulletin for Diesel Exhaust Fluid (DEF), Tier V60</b></p> <p><b>HYDRAULIC</b></p> <p>Hydraulic Plumbing - Front Manifolds..... 66</p> <p>Hydraulic Plumbing - Rear Manifolds ..... 68</p> <p>Hydraulic Pumps And Rear Motor - 4WD ..... 70</p> <p>Hydraulic Pumps - 2WD ..... 72</p> <p>Chassis / Brake Manifold..... 74</p> <p>Hydraulic Tank Plumbing - S/N K7233 thru K7273..... 76</p> <p>Hydraulic Tank Plumbing - S/N K7279 &amp; Up ..... 77</p> <p>Conveyor Motors Plumbing ..... 78</p> <p>Hydraulic Filters..... 79</p> <p>Suction Lines ..... 80</p> <p>Front Motor Installation..... 81</p> <p><b>CHASSIS</b></p> <p>Engine &amp; Conveyor Covers &amp; Decking..... 82</p> <p>Handrails And Ladders ..... 83</p> <p>Power Buss Bar Assembly ..... 84</p> <p>Carrier Assembly - Rear ..... 85</p> <p>Carrier Assembly - Front..... 86</p> <p>Rear Axle - Kessler..... 87</p> <p>Front Axle - Kessler ..... 88</p> <p>Planetary Wheel End - Kessler..... 89</p> <p>Axle, Hub &amp; Drum Assembly ..... 90</p> <p><b>BRAKES</b></p> <p>Brake Assembly - Kessler..... 91</p> <p>Brake Assembly &amp; S-Cam Major Overhaul Kit ..... 92</p> <p>Brake and Steering Hoses 4WD..... 93</p> <p>Brake and Steering Hoses 2WD..... 94</p> <p><b>AIR SYSTEM</b></p> <p>Air Reservoir..... 95</p> <p><b>WHEELS &amp; TIRES</b></p> <p>Tires And Wheels - Kessler ..... 96</p> <p><b>NUMERICAL INDEX</b>..... 97</p>
--	--

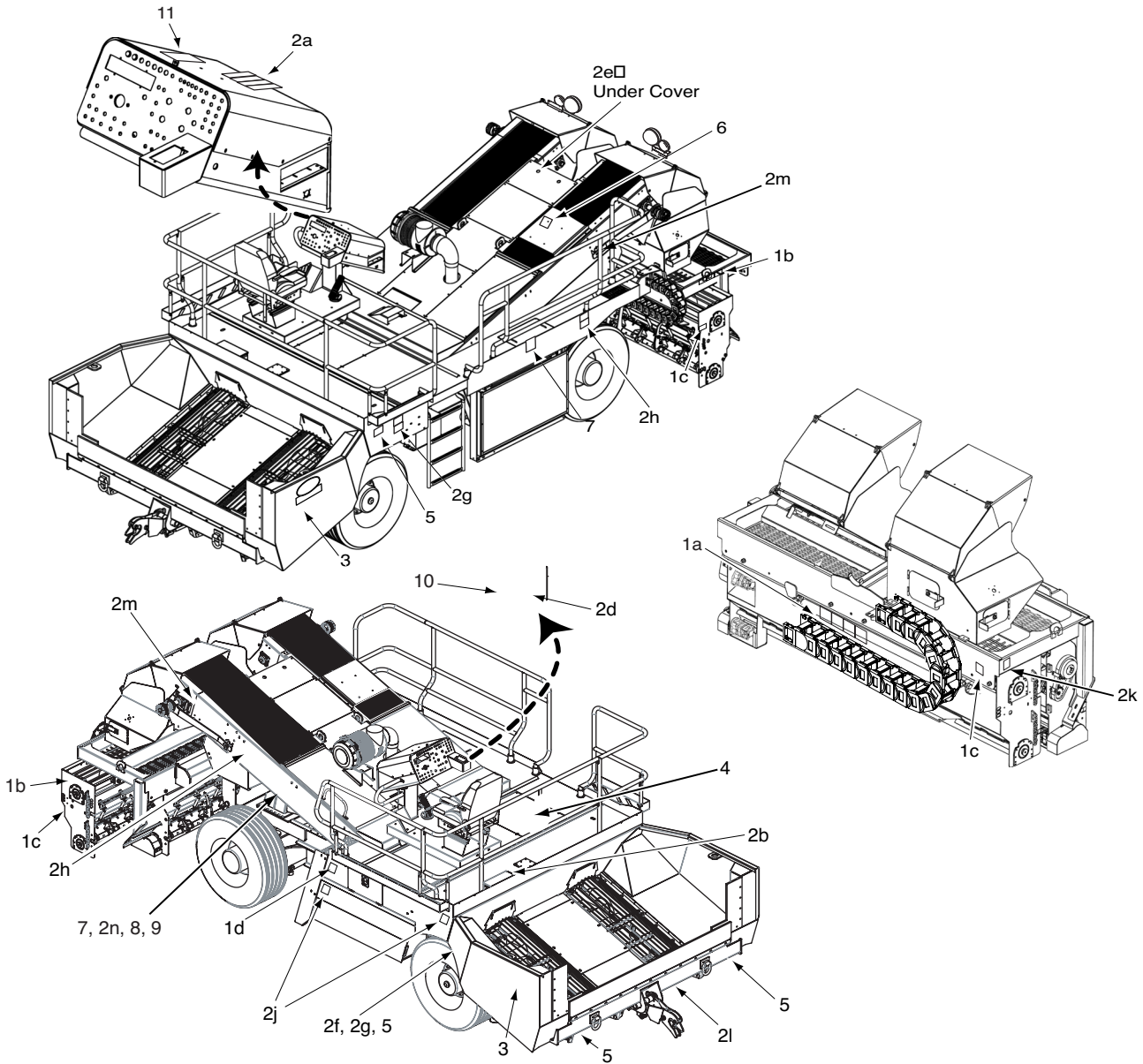
### General Identification



## General Identification

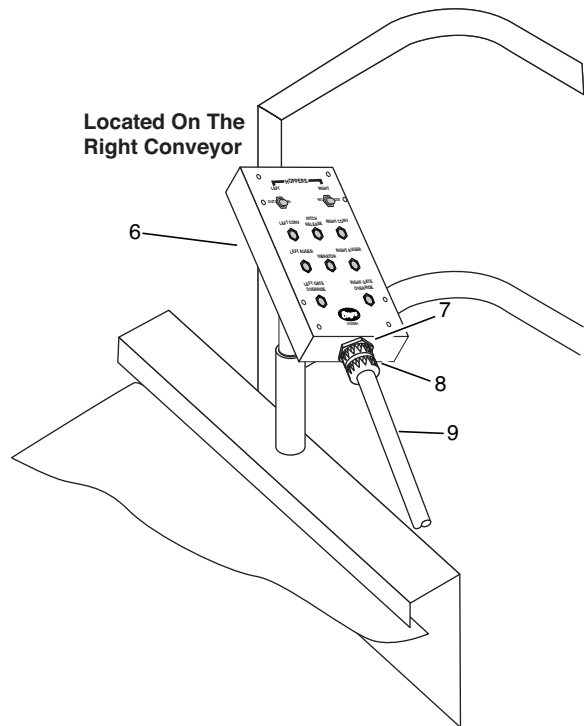
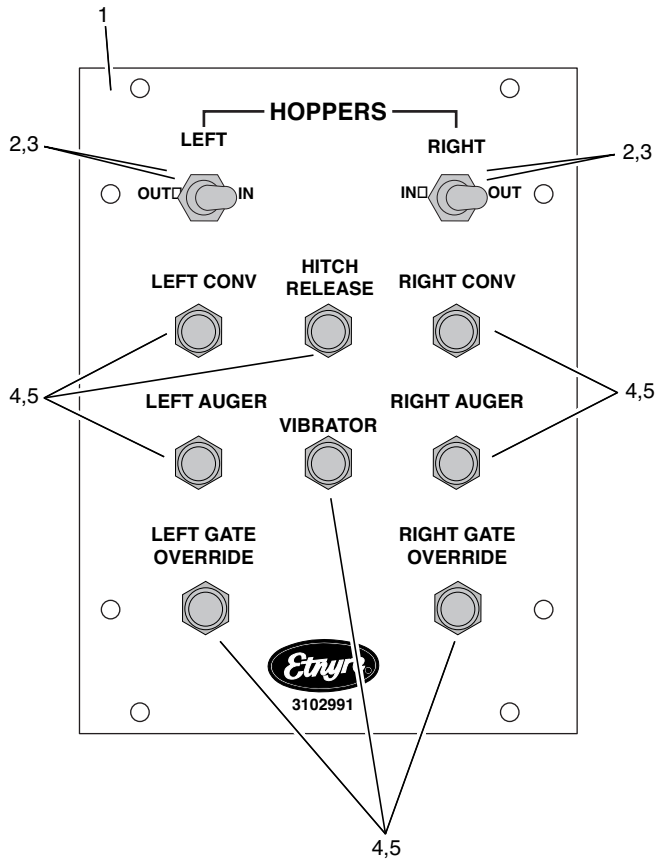
REF	PART NO.	QTY	DESCRIPTION
1	6604218	2	Conveyor Drive Motors
	7050985		Seal Kit for Motor
2	3111573	1	Rear Drive Axle
3		1	Hydraulic Reservoir
4	3111604	1	Front Drive Axle
5	3161154	1	Horn
6	6604026	1	Hydrostatic Motor
7	6603520	1	Rear Hydrostatic Motor
8		1	Hitch Position Linkage
9	3130829	2	Tail Pulley Asm
10	3130814	2	Head Pulley Asm
11	6400661	1	Radiator
		1	Cooler
12	3182305	1	Manifold-Chassis / Brake
13		4	Hydraulic Pumps
14		1	Suction Line to Pumps
15	6604235	1	Return Filter Head
	7420244	3	Element-Hyd Filter
16		2	Hoods
17	3160874	1	Left Head Light Asm
	3160875	1	Right Head Light Asm
18	3130503	2	Rear Hopper Flow Gate
19		2	Gate / Hopper Manifold
20		2	Conveyor /Auger / Spreadroll Manifold
21		1	Left Spread Hopper
22	3121729	1	Rear Motor Access Panel
23	6602338	1	Individual Gate Cylinder
24	6450357	1	Air Reservoir
25		1	Front Control Box Asm
26	3161203	1	Right Taillight Asm
	3161202	1	Left Taillight Asm
27	S165302	1	Back Up Alarm
28		1	Fuel Tank
29		1	Hitch
30		AR	Rear Lining
31		AR	Flashing
32			Engine/Conveyor Covers/Decking
33		1	Slow Moving Emblem
34		4	Handrails
35		1	Seat Assembly
36		1	Control Console Asm
37		AR	Rough Tread
38		1	Air Intake Asm
39		2	Conveyor Belt
			AR - As Required

### Caution And Instruction Plates



REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3102067	1	Decal Set, Chips Hopper Var.	2	3102065-K	1	Warning: Clear, Caution: Shields
	3102067-A	1	Warning: Auger,read,Caution: Shield		3102065-L	1	Caution: Towing
	3102067-B	2	Warning: Auger, Clear, Caution: Shields		3102065-M	2	Grease Daily
	3102067-C	6	Warning: Auger		3102065-N	1	Caution: Valve
	3102067-D	1	Lubrication Chart	3	3101999	2	Decal-Chipsreader, Fwd
2	3102065	1	Decal Set, Chipsreader Body		3102000	2	Decal-Chipsreader, Quad
	3102065-A	1	Warning: Injury, Read, Brake	4	6000758	1	Emblem-Vehicle, Slow Moving
	3102065-B	1	Warning: Fuel Tank, Fill	5	3102176	4	Decal-Warning, Pinch Point
	3102065-C	1	Warning: No Drill	6	3101717	1	Warning-Hoppers,Stay Off
	3102065-D	1	Warning: No Shift	7	3102205	2	Warning-No Passengers, No Handrails
	3102065-E	1	Anti-Freeze	8	3102346	1	Important-Hydraulic Bleed Valve
	3102065-F	1	Proposition 65 Warning	9	3103230	1	Notice-Emission Control Information
	3102065-G	2	Warning: No Drill, Caution: Towing	10	3102268	1	Warning-Ignition Switch
	3102065-H	2	Warning: Clear, Caution: Towing	11	3190516	1	Caution-Traction Boost
	3102065-J	2	Warning: Hydraulic Tank				

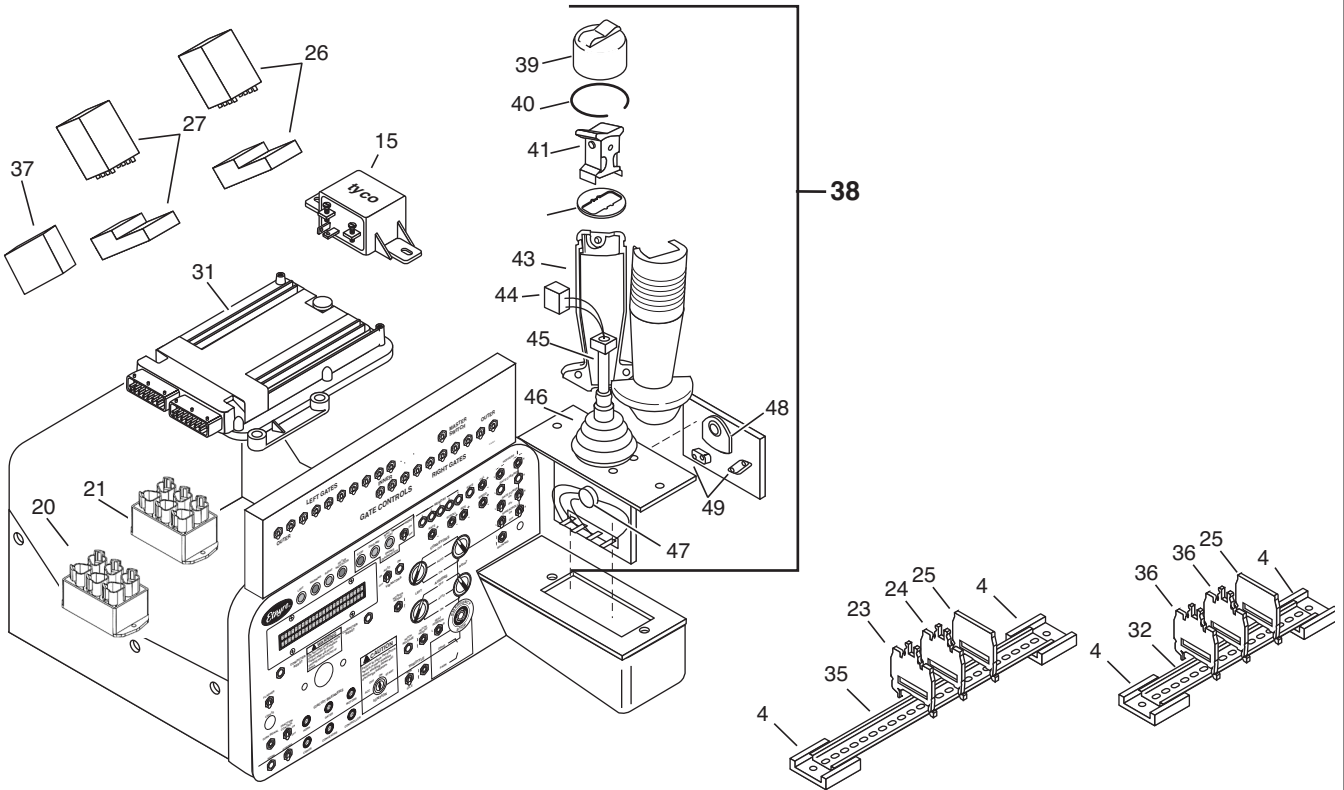
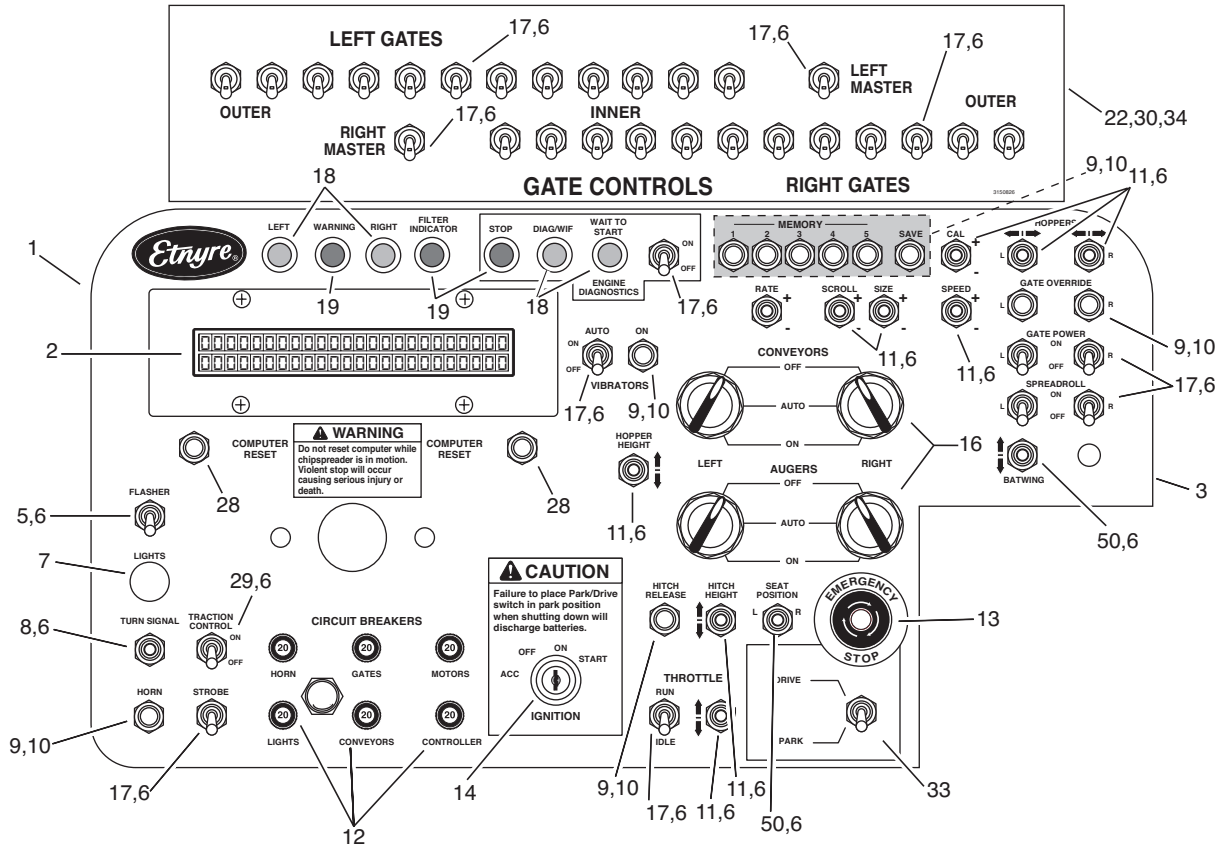
### Variable Width Front Control Box



REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3102991	1	Var Hop Inst. Panel-Elec Box				
2	6700161	2	Switch-Toggle, SPDT, 3 Pos, MOM				
3	6700164	2	Seal-Toggle Sw, 34B37AL/RADIO				
4	6701467	8	Switch-Push Button, MOM. N.O.				
5	6701468	8	Seal-Push Button, 1.68 x 0.62 Bush				
6	3160685	1	Control Box Asm-Hand Held				
7	6700581	1	Nut-Conduit, 0.75				
8	6700959	1	Cord Grip-Fitting, 0.75 x 0.75				
9	3160686	1	Harness-Front Control Box V/H				



## Control Console Assembly



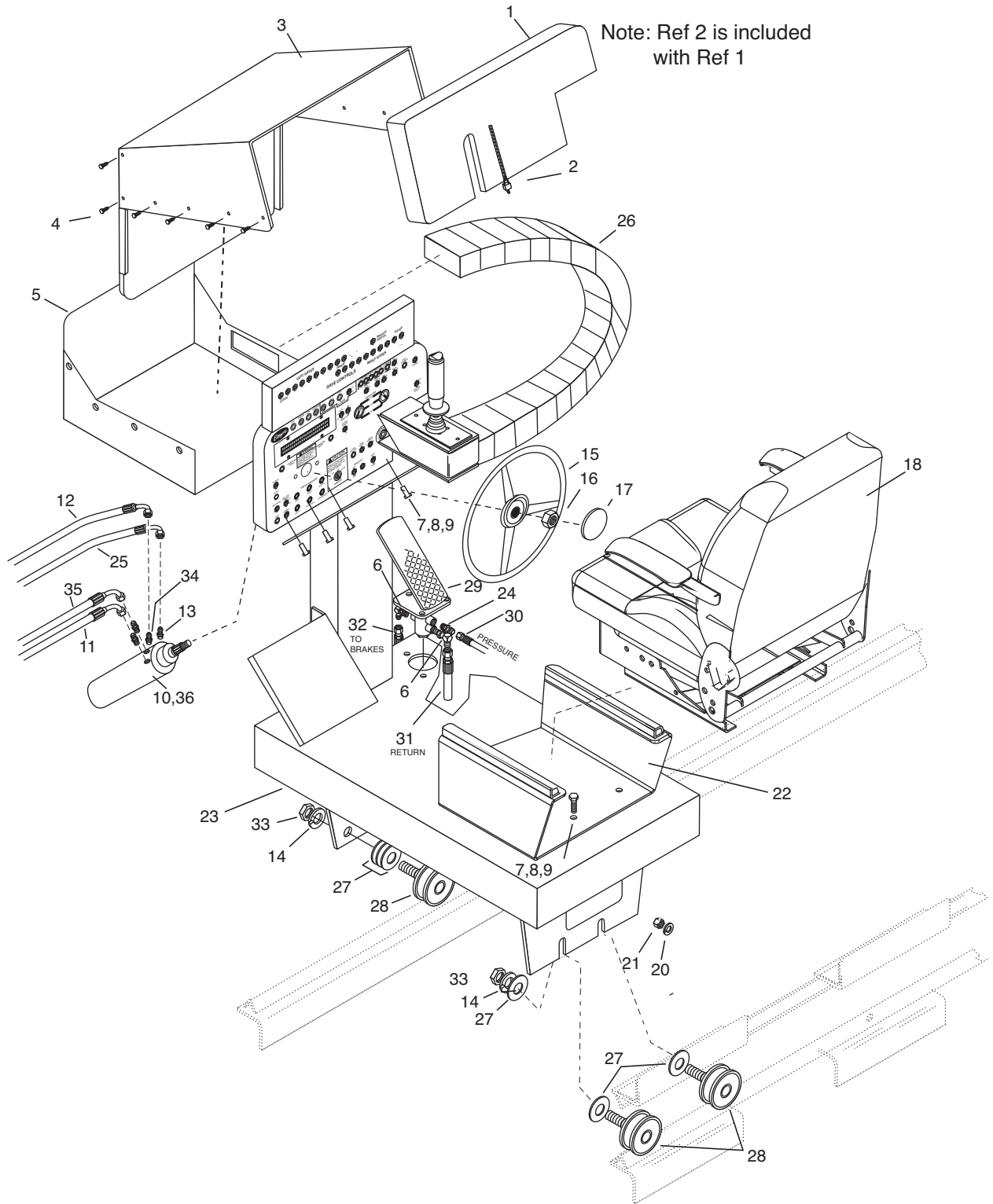
## Control Console Assembly

CONTROLS

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3150875	1	Overlay-Control Panel, V/H	44	PD10434	1	Rocker Microswitch
2	6703851	1	Display-Digital, 2 x 24 Can	45	PD10267	1	Handle Shaft
	3370609	1	Harness-Display/Computer	46	7050157	1	Shaft Boot
3	6703093	1	Cigarette Lighter	47	7050150	1	Potentiometer, 10K
4	3160828	4	Mount-DIN Rail	48	PD10448	1	Gear For Potentiometer
5	6700772	1	Switch-Toggle, DPST, 2 Pos, Maint.	49	7050149	2	Position Microswitch
6	6703277	AR	Seal-Toggle Switch, 34B370AL/Radio	50	6702230	2	Switch-Toggle, DPDT, 3 Pos, Mom
7	6700188	1	Switch-Push/Pull				
8	6700771	1	Switch-Toggle, SPDT, 3 Pos,Maint.	3160856		1	Harness-Lights, Main Branch (Not Shown)
9	6701467	AR	Switch-Push Button, Mon, N.O.	3161023		1	Harness-Control Box Grnd (Not Shown)
10	6701468	AR	Seal-Push Button, 1.68 x 0.62 Bush	3161027		1	Harness-Sonic Bin Switches (Not Shown)
11	6700161	AR	Switch-Toggle, SPDT, MOM	3161028		1	Harness-Speed Sensor (Not Shown)
12	6703139	6	Circuit Breaker-20 Amp	3161029		1	Harness-V/H, R Hopper Functions (Not Shwn)
	6703153	6	Seal-Pushbutton, Clear	3161030		1	Harness-V/H, L Hopper Function (Not Shwn)
13	6703408	1	Emergency Stop Switch	3161031		1	Harness-V/H, Hopper Conn (Not Shown)
14	6704781	1	Switch-Ign, Off, Ign, Start	3161032		1	Harness-Frt, Ctrls, V/H (Not Shown)
	7051305	1	Key-Ignition	3161033		1	Harness-Pump & Motors (Not Shown)
15	6704470	1	Relay-SPST, NO, 75A, 12VDC	3161034		1	Harness-Htch, Prk, Seat, Wings (Not Shown)
16	6704029	2	Switch-Rotary, 4 Pos., 8 Contact	3161213		1	Harness-Engine Controls, Tier 4 (Not Shown)
17	6702241	AR	Switch-Toggle, SPST, 2 Pos, Maint.	3161036		1	Harness-V/H, Hopper Funct (Not Shown)
18	6703502	3	Light-Pilot, Amber, No. PL-20	3161037		1	Harness-Bkup, Fuel, Strb,Hyd (Not Shown)
19	6703503	3	Light-Pilot, Red, No. PL-20	3161038		1	Harness-Starter, Computer Gnd (Not Shown)
20	6704271	1	Can Ports-3 Device and 2 Hub	3161039		2	Harness-Motor Extension (Not Shown)
21	6704088	1	Can Ports-4 Device and 2 Hub	3161040		1	Harness-Hopper Height Ext (Not Shown)
22	3150826	1	Gate Control Box	3161041		1	Harness-Control Box Pwr (Not Shown)
23	6703379	AR	Terminal Block-16/22 Ga	3161193		1	Harness-Ignition Plug (Not Shown)
24	6703380	AR	Terminal Block-14/16 Ga	3161153		1	Harness-Can, Scr/Doc/Def Sensors (Not Shwn)
25	6703381	AR	End Cap	6701540		1	Resistor-1000 Ohm,1/2 W (Not Shown)
26	6704147	1	Relay-5PDT	6703385		1	Marker-0 to 100 (Not Shown)
	6704148	1	Relay Base	6703387		4	End Clamp (Not Shown)
27	6703300	1	Relay-4PDT	6702024		1	Alarm-Elec,Hydro (Not Shown)
	6703301	1	Relay Base	6703386	AR	Markers-0/100 Gnd Term (Not Shown)	
28	6703571	2	Switch-Pushbutton, N.C., Mom				
29	6700772	1	Switch-Toggle, 2 Pos, DPDT, Maint				
30	6703299	1	Cord Grip-Fitting, 0.75 x 0.75				
31	6704664	1	Controller-Chip, Rexroth RC28				AR = As Required
			<i>See Cover for Serial Number Break</i>				
	6704070	1	Controller-Chip, Rexroth RC36				
			<i>See Cover for Serial Number Break</i>				
	6703188	1	Fuse Holder-Inline				
	6703096	1	Fuse-Inline, 20A				
32	3160830	1	DIN Rail				
33	6703274	1	Switch-Toggle, 2 Pos, 3 Pole, Lcking				
34	6001601	2	Isolator-Vibration, w/Stud				
35	3161143	1	DIN Rail				
36	6703382	1	Terminal Block-Gnd, 4 ga				
	6703383	AR	Terminal Block-16/22 ga				
37	6702399	1	Flasher-12 Volt, Neg. Ground				
38	3160655	1	Controller-Joystick				
			<i>(Includes Ref 39-49)</i>				
39	PD10411	1	Rocker Switch Boot				
40	PD10412	1	Rocker Switch Ring				
41	PD11043	1	Rocker Switch-Metal				
42	PD11044	1	Retaining Ring-Boot, Rocker Switch				
43	PD10568	1	Handle				

### Console/Seat Assembly

Note: Ref 2 is included with Ref 1

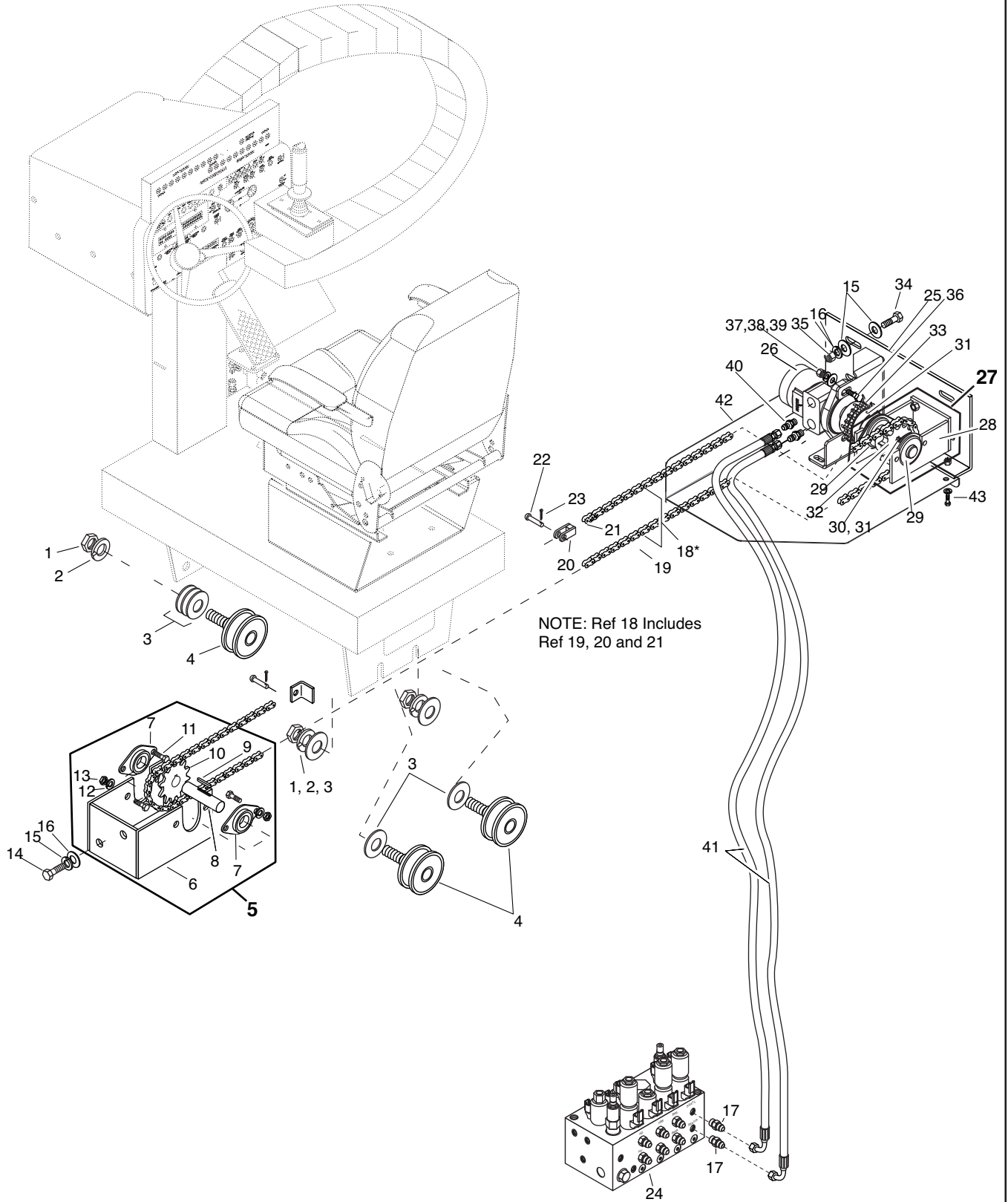


## Console/Seat Assembly

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3150812	1	Cover Asm-Driver Control Panel				
2	6000544	1	Padlk-Mstr. Lk, w/ Chain & Key				
3	3121601	1	Rear & Upper Console Asm				AR = As Required
4	6100174	10	Screw-Tap, HXSL, 0.25 x 0.75, B, PD				
5	3121577	1	Lower Control Panel Asm				
6	9410976	2	Elbow-Hyd, 90, 06MB-06MJ				
7	0120233	10	Screw-Hex, 0.38NC x 1.00, GR2, PD				
8	0120382	10	Washer-Lock, 0.38, Spring, PD				
9	0120377	10	Nut-Hex, 0.38NC, PD				
10	6604770	1	Steering Unit				
11	3181949	1	Hose-Pressure to Left Steering Cyl				
12	3182439	1	Hose-Pressure to Steering Motor				
13	6602133	4	Adapter-Hyd, ST, 08MB-06MJ				
14	0131046	4	Washer-Lock, 0.75, Spring, PD				
15	6601704	1	Wheel-Steering w/ Hub, 15" Dia.				
16	6601122	1	Nut-Steering Wheel, .812-20UNEF				
17	6001054	1	Cap-Steering Wheel				
18	6001423	1	Seat Asm-Suspension w/ Arm Rests				
	7050391	1	Shock- Suspension Seat				
19	0446363	4	Washer-Flat, 0.31A(0.38 x 0.88), PD				
20	0120214	4	Washer-Lock, 0.31, Spring, PD				
21	0120376	4	Nut-Hex, 0.31NC, PD				
22	3102406	1	Pedestal-Seat, for 6001423 Seat				
23	3121579	1	Seat Base Asm				
24	6602134	1	Adapter-Hyd, ST, 06MB-04MJ				
25	3182434	1	Hose-Return from Steering Motor				
26	6603378	1	E-Chain, Enclosed, 7.5 Ft. Long				
	7050413	AR	E-Chain Hinged Cover				
	7050414	AR	E-Chain Fixed Cover				
	7050410	1	E-Chain Mounting Kit				
	7050415	AR	LH Side Piece				
	7050416	AR	RH Side Piece				
	7050417	AR	1 Ft Replacement Section				
	7050411	AR	Male Mount				
	7050412	AR	Female Mount				
27	0131000	11	Washer-Flat, 0.75A(0.81 x 2.00), PD				
28	6435459	4	Roller-V Grooved Load Runner				
29	6603987	1	Valve-Brake Actuating w/ Pedal				
	7430261	1	Seal Kit				
	7430260	1	Pedal				
	7430259	1	Cam				
	7430258	1	Pin				
	7430257	4	E-Ring				
	7430256	1	Pin				
	7430255	1	Base				
	7430254	2	Cap Screw				
	7430253	2	Washer				
30	3181947	1	Hose-Pressure to Brake Pedal				
31	3181948	1	Hose-Return from Brake Pedal				
32	3181946	1	Hose-Brake Pedal to Brakes				
33	9429292	4	Nut-Hex, 0.75NF, PD				
34	9410203	1	Adapter-08MB-08MJ				
35	3182278	1	Hose-Pressure to Right Steering Cyl				
36	6604771	1	Steering Column				

CONTROLS

# Power Seat



NOTE: Ref 18 Includes  
Ref 19, 20 and 21

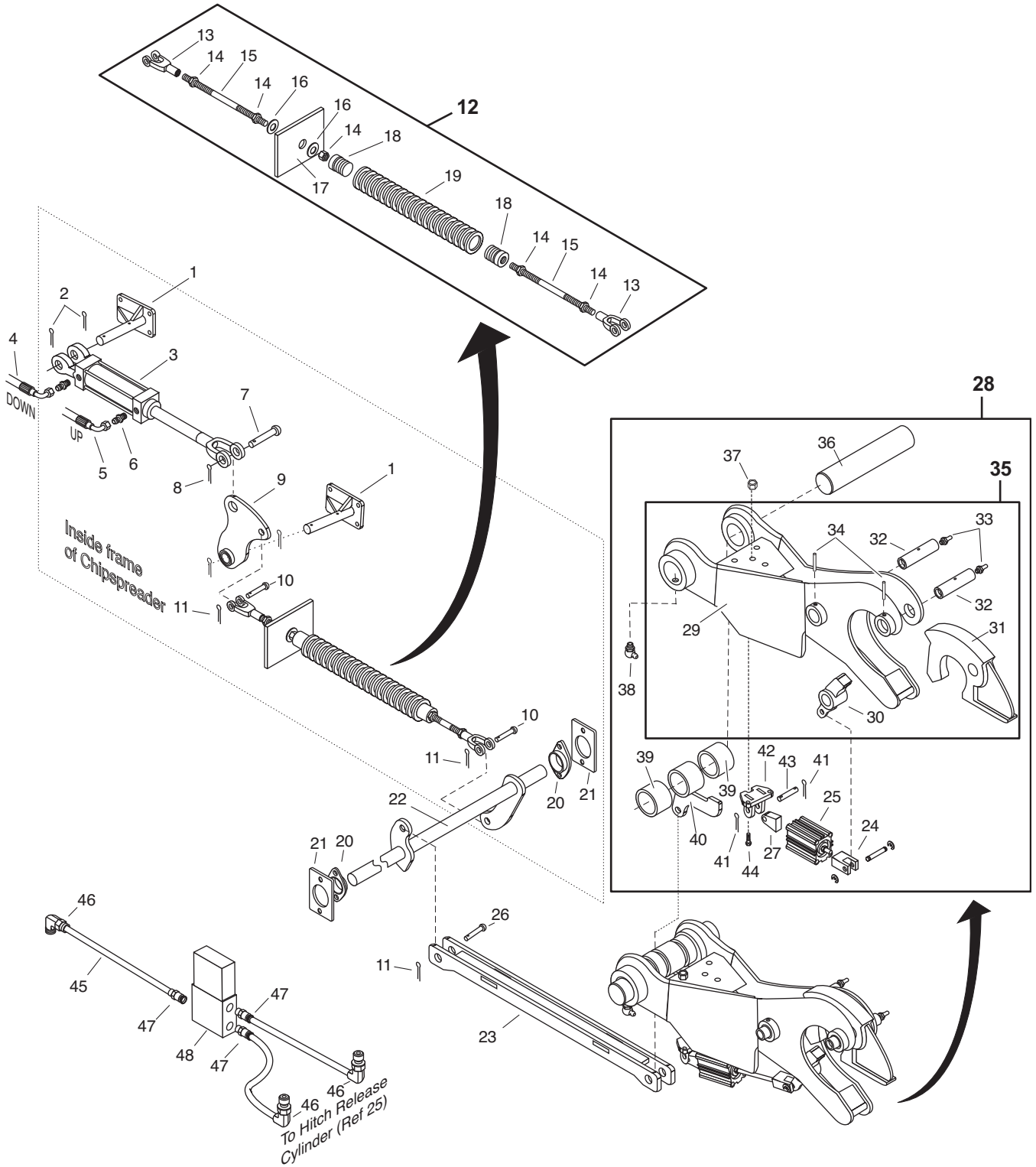
## Power Seat

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	9429292	4	Nut-Hex, 0.75NF, PD				
2	0131046	4	Washer-Lock, 0.75, Spring, PD				
3	0131000	10	Washer-Flat, 0.75A(0.81 x 2.00), PD				
4	6435459	4	Roller-V Grooved Load Runner				
5	3102439	1	Bracket Asm-Idler, Power <i>(Includes Ref 6-13)</i>				
6	3102456	1	Idler Shaft Support Asm				
7	6420105	4	Flange Brg-Ball, 2 Blt.0.75STMP				
8	3102471	1	Idler Shaft-Power Seat				
9	6000196	3	Key-0.19 x 0.19CR x 1.00 Rd End				
10	3102440	1	Sprocket-0.75 Bore				
11	6100277	4	Screw-RdSqNk, 0.31NC x 1.00, GR5				
12	0120214	4	Washer-Lock, 0.31, Spring, PD				
13	0120376	4	Nut-Hex, 0.31NC, PD				
14	0180122	2	Screw-Hex, 0.38 x 1.00, GR2, PD				
15	0120388	6	Washer-Flat,0.375,Wide				
16	0120382	6	Washer-Lock, 0.38, Spring, PD				
17	9410200	2	Adapter-Hyd, 04MB-04MJ				
18	3102469	1	Roller Chain Asm-Long				
	3320616	1	Chain, Dbl Strand				
19	6430222	AR	Chain-Roller, RC40				
	6430013	2	Link-Conn.RC40				
20	3102470	2	End-Adjustable Chain				
21	3350231	2	Male End-Adjustable Chain				
22	6001764	2	Pin, Clevis				
23	0103389	2	Pin-Cotter, 0.09 x 1.00, PD				
24	3182305	1	Hyd Manifold				
25	3102551	1	Motor Mtg. Bracket Chip Seat				
26	6604222	1	Motor-Hyd, LSHT, 6.9 Cu In.				
	7050986		Seal Kit for Motor				
27	3103122	1	Bracket Assy- Drive Sprocket <i>(Includes Ref 28-32)</i>				
28	3102546	1	Drive Shaft Support Asm, Seat				
29	6420106	2	Flange Brg-Ball, 2 Blt, 1.00 STMP				
30	3103123	1	Shaft				
31	3100163	3	Key				
32	3102476	1	Sprocket				
33	3102068	2	Sprocket-RC40, 20T, 1" Bore				
34	0122145	4	Screw-Hex, 0.38NC x 1.25, GR2, PD				
35	0120377	6	Nut-Hex, 0.38NC, PD				
36	0120426	2	Screw-Hex, 0.50NC x 1.25, GR2, PD				
37	0120390	2	Washer-Flat, 0.50A, PD				
38	0120384	2	Washer-Lock, 0.50, Spring, PD				
39	0120378	2	Nut-Hex, 0.50NC, PD				
40	6602860	2	Adapter-Hyd, ST, 10MB-04MJ				
41	3181962	2	Hose-Power Seat				
42	3103121	1	Cover-Pwr Seat Motor, 11 Chip				
43	0120706	2	Screw-Hex, 0.25NC x 0.50, GR2, PD				

AR - As Required

CONTROLS

### Hitch Assembly & Controls



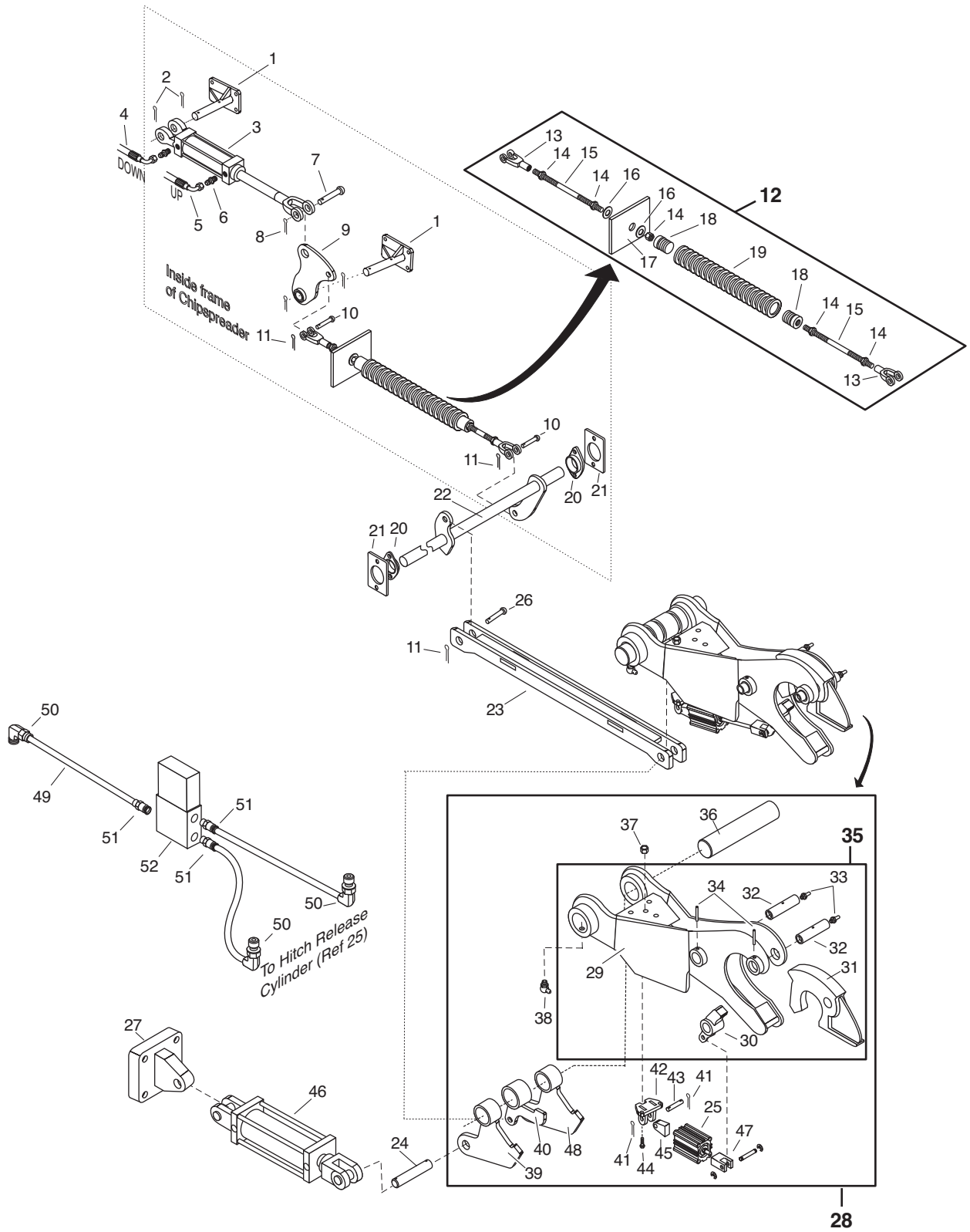
## Hitch Assembly & Controls

CONTROLS

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3102574	2	Mount Asm-cyl. RR Hitch, Hydro 30				
2	0103386	2	Pin-Cotter, 0.12 x 1.25, PD				
3	6604362	1	Cylinder-Hyd, 2.5" x 6.0"				
	7051444	1	Kit-Repair, Cyl, 2.5"				
4	3181968	1	Hose-Hitch Down				
5	3181969	1	Hose-Hitch Up				
6	6602751	2	Adapter-Hyd, ST, 06MP-04MJ				
7	6000401	1	Rivet-RdHd, 0.50 x 1.62, Drilled, PD				
8	0103386	1	Pin-Cotter, 0.12 x 1.25, PD				
9	3103571	1	Arm, Hitch Linkage				
10	6000401	2	Rivet-RdHd, 0.50 x 1.62, Drilled, PD				
11	0103386	4	Pin-Cotter, 0.12 x 1.25, PD				
12	3130441	1	Linkage-Hook, Car,Hydro CS <i>(Includes Ref 13-19)</i>				
13	3140117	2	Clevis-0.50 Spck 2708-6A Cleve				
14	0120238	5	Nut-Hex, Jam, 0.50NC				
15	3130440	2	Rod-Conn., Hydro C.S.				
16	0120390	2	Washer-Flat ,0.50A, W, PD				
17	3150665	1	Bumper-Hitch Linkage				
18	3130059	2	Screw-Thd, Spring				AR = As Required
19	3100078	1	Sprg-Est. 1.5 ID x 13 Lg. No Loops				
20	6420106	2	Flange-Brg, Ball, 2 Blt., 1.00STMP				
21	3130237	2	Spacer-Bearing Mounting				
22	3130924	1	Lever-Actuator, Hitch, Hydro CS				
23	3130998	1	Linkage Bar-Hitch, 26-3/8" long				
	3131001	1	Linkage Bar-Hitch, Short, 22-3/4" (Shipped Loose)				
24	6604231	1	Clevis-Rod, 3/8-24, 5/16 Jaw				
25	6604230	1	Cylinder-Air, 40mm x 2", Compact				
	7051445	1	Seal Kit				
26	6000403	2	Rivet-RdHd, 0.50 x 2.00, Drilled				
27	3103408	1	Mount-Air Cylinder, Hitch Release				
28	3130926	1	Hitch Asm-Rear Chips, Hydraulic <i>(Includes Assembly 35 &amp; Ref 36-47)</i>				
29	3130922	1	Body-Hitch				
30	3130419	1	Dog Latch				
31	3130364	1	Latch-Locking, Hitch				
32	3130007	1	Shaft-Latch				
33	9411027	2	Fitting-Lub, Stgt x 1/2 Typ C				
34	0457008	2	Pin-Spring, 0.19 x 1.50, HV, PN				
35	3130923	1	Hitch Sub Asm <i>(Includes Ref 29-34)</i>				
36	3130004	1	Shaft-Hitch Pivot				
37	9411638	3	Nut-Hex, Lock, 0.31NC, PD				
38	0109462	2	Elbow-Lube, 90, 0.13PTF x 0.84, PN				
39	3130936	2	Hub-Lever Dog				
40	3130905	1	Arm-Lifting Asm				
41	0103384	2	Pin-Cotter, 0.12" x 0.75", PD				
42	3130907	1	Mtg Asm-Rear Cylinder, Hitch Release				
43	3130773	1	Pin-Hitch Release, Air Cylinder				
44	0180085	2	Screw-Hex, 0.31"NC x 1.75", GR5, PD				
45	Q444884	AR	Tube-Nylon, Air, 1/4"				
46	6603831	3	Adapter-Air, 90, 04Tube-02MPX, PD				
47	6603832	3	Adapter-Air, ST, 04Tube-02MPX, PD				
48	6602901	1	Valve-Air, Sol, 1/4", 4 Way, 2 Pos				



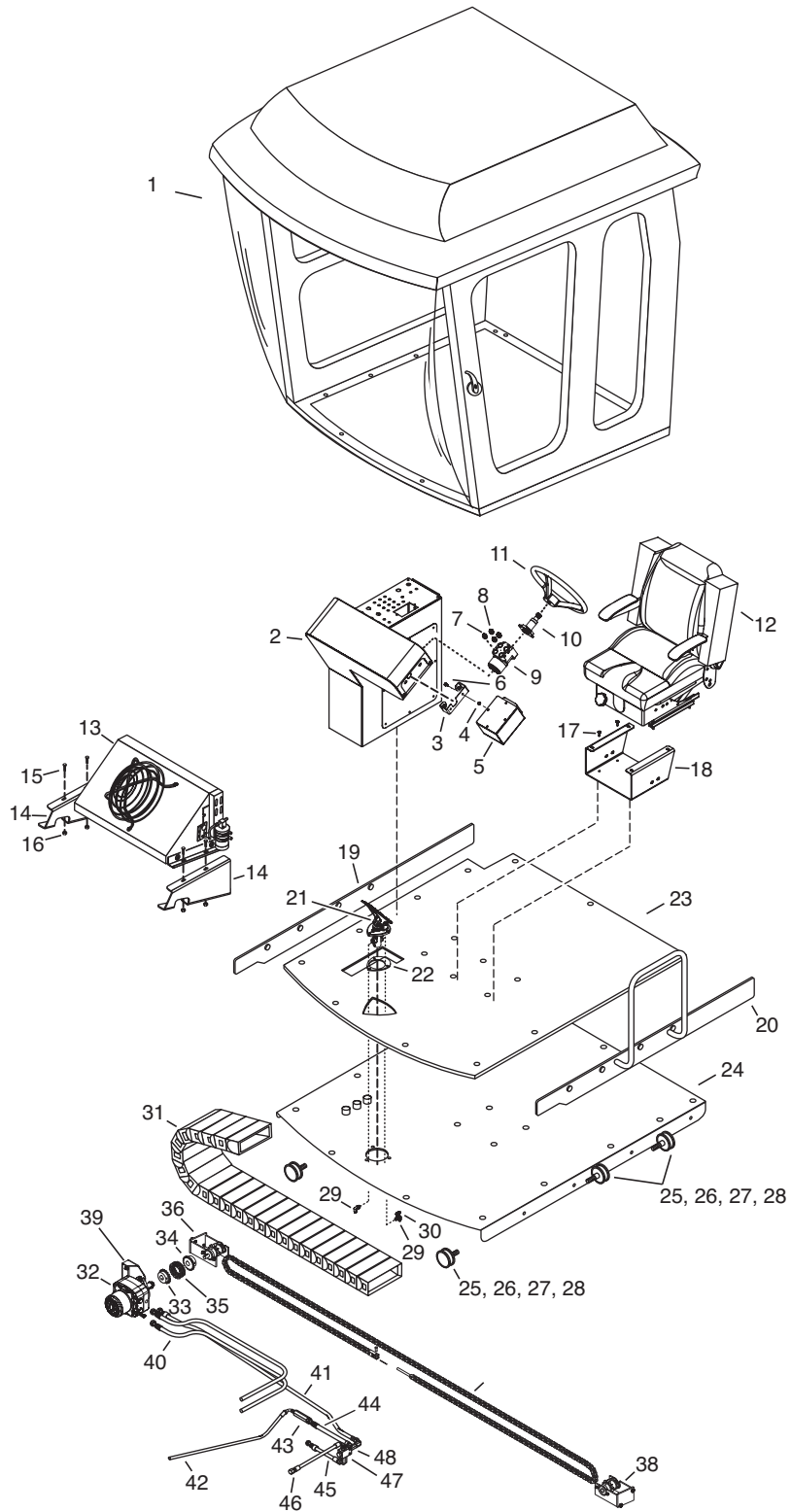
### Traction Boost Hitch Assembly & Controls



## Traction Boost Hitch Assembly & Controls

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3102574	2	Mount Asm-cyl. RR Hitch, Hydro 30	48	3130900	1	Arm Asm-RH
2	0103386	2	Pin-Cotter, 0.12 x 1.25, PD	49	Q444884	AR	Tube-Nylon, Air, 1/4"
3	6604362	1	Cylinder-Hyd, 2.5" x 6.0"	50	6603831	3	Adapter-Air, 90, 04Tube-02MPX, PD
	7051444	1	Kit-Repair, Cyl, 2.5"	51	6603832	3	Adapter-Air, ST, 04Tube-02MPX, PD
4	3181968	1	Hose-Hitch Down	52	6602901	1	Valve-Air, Sol, 1/4", 4 Way, 2 Pos.
5	3181969	1	Hose-Hitch Up				
6	6602751	2	Adapter-Hyd, ST, 06MP-04MJ				
7	6000401	1	Rivet-RdHd, 0.50 x 1.62, Drilled, PD				
8	0103386	1	Pin-Cotter, 0.12 x 1.25, PD				
9	3103571	1	Arm, Hitch Linkage				
10	6000401	2	Rivet-RdHd, 0.50 x 1.62, Drilled, PD				
11	0103386	4	Pin-Cotter, 0.12 x 1.25, PD				
12	3130441	1	Linkage-Hook, Car, Hydro CS (Includes Ref 13-19)				
13	3140117	2	Clevis-0.50 Spck 2708-6A Cleve				
14	0120238	5	Nut-Hex, Jam, 0.50NC				
15	3130440	2	Rod-Conn., Hydro C.S.				
16	0120390	2	Washer-Flat, 0.50A, W, PD				
17	3150665	1	Bumper-Hitch Linkage				
18	3130059	2	Screw-Thd, Spring				
19	3100078	1	Sprg-Est. 1.5 ID x 13 Lg. No Loops				
20	6420106	2	Flange-Brg, Ball, 2 Blt., 1.00STMP				
21	3130237	2	Spacer-Bearing Mounting				
22	3130924	1	Lever-Actuator, Hitch, Hydro CS				
23	3130998	1	Linkage Bar-Hitch, 26-3/8" long				
	3131001	1	Linkage Bar-Hitch, Short, 22-3/4" (Shipped Loose)				
24	6604231	1	Clevis-Rod, 3/8-24, 5/16 Jaw				
25	6604230	1	Cylinder-Air, 40mm x 2", Compact				
	7051445	1	Seal Kit				
26	6000403	2	Rivet-RdHd, 0.50 x 2.00, Drilled				
27	3103408	1	Mount-Air Cylinder, Hitch Release				
28	3130926	1	Hitch Asm-Rear Chips, Hydraulic (Includes Assembly 35 & Ref 36-47)				
29	3130922	1	Body-Hitch				
30	3130419	1	Dog Latch				
31	3130364	1	Latch-Locking, Hitch				
32	3130007	1	Shaft-Latch				
33	9411027	2	Fitting-Lub, Stgt x 1/2 Typ C				
34	0457008	2	Pin-Spring, 0.19 x 1.50, HV, PN				
35	3130923	1	Hitch Sub Asm (Includes Ref 29-34)				
36	3130004	1	Shaft-Hitch Pivot				
37	9411638	3	Nut-Hex, Lock, 0.31NC, PD				
38	0109462	2	Elbow-Lube, 90, 0.13PTF x 0.84, PN				
39	3130936	2	Hub-Lever Dog				
40	3130905	1	Arm-Lifting Asm				
41	0103384	2	Pin-Cotter, 0.12" x 0.75", PD				
42	3130907	1	Mtg Asm-Rear Cylinder, Hitch Release				
43	3130773	1	Pin-Hitch Release, Air Cylinder				
44	0180085	2	Screw-Hex, 0.31"NC x 1.75", GR5, PD				
45	3103408	1	Mount-Air Cylinder, Hitch Release				
46	6604357	1	Cylinder-Hyd, 3x6, 2500PSI, Side, Traction Boost				
47	6604231	1	Clevis-Rod, 3/8-24, 5/16 Jaw				

### Optional Cab & Accessories



## Optional Cab & Accessories

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	*	1	Cab Enclosure				
2	3122715	1	Console-Cab, Tier IV				
3	3122712	1	Display Mount Asm-Tier IV, IFM				
4	0120377	8	Nut-Hex, 0.375"NC				
5	3150918	1	Control Box-Tier IV, IFM				
6	9428638	2	Capscrew-Gr5, 0.375"UNC x 0.63"				
7	9410203	1	Adapter-Hyd, ST, 08MB-08MJ				
8	6602133	3	Adapter-Hyd, ST, 8MB-06MJ				
9	6604770	1	Steering Unit-Hyd, Open Center				
10	6604771	1	Steering Column				
11	6601704	1	Wheel-Steering, w/ Hub, 15" Dia				
12	6001423	1	Seat-Mechanical Suspension				
13	6400604	1	Condenser				
14	3103478	1	Brace Mount-Condensor, Cab				
15	0180120	4	Capscrew-Gr5, 0.375"UNC x 0.75"				
16	0120377	4	Nut-Hex, 0.38"NC, PD				
17	Q018496	4	Capscrew-Gr5, 0.313"UNC x 0.88"				
18	3102406	1	Plate-Formed, Seat Mount				
19	3103945	1	Guard-Cab Base Asm-RH				
20	3122476	1	Handle-Cab Entry Asm				
21	6603987	1	Valve-Brake w/ Pedal, 800 PSI				
22	3121175	1	Spacer-Foot Pedal, 1/4"				
23	3103695	1	Floormat-Cab, Precut				
24	3122473	1	Mount-Sliding Cab				
25	6435459	6	Roller-V Grooved Load Runner				
26	0121574	6	Washer-Lock, Spring, 0.63"				
27	0131000	12	Washer-Flat, 0.75A (0.81" x 2.0"), PD				
28	0220086	6	Nut-Hex, 0.75"NC				
29	9410976	2	Elbow-Hyd, 90, 06MB-06MJ				
30	6602134	1	Adapter-Hyd, ST, 06MB-04MJ				
31	6603776	1	E-Chain, Enclosed, R18840, w/ Mnt				
32	6604993	1	Motor-Hyd, LSHT, 8.6 CIR, Bg				
33	3104249	1	Sprocket-RC 40 x 1.20T, B, 1.25"				
34	3102068	1	Sprocket-RC 40, 20T, 1" Bore				
35	3320616	1	Chain-1/2 x 5/16, Double Strand, 19LK				
36	3103122	1	Bracket Asm-Drive Sprocket				
37	3103569	1	Roller Chain Asm-Power Seat				
38	3103565	1	Bracket Asm-Idler Sprocket				
39	3104251	1	Plate, Motor-Mtg Chip Seat, Cab				
40	3181716	2	Hose Asm-04 x 84, 04FJX-04FJX				
41	3181839	1	Hose Asm-04 x 74, 04FJX-04FJX, 90				
42	3182514	1	Hose Asm-04 x 109, 04FJX-04FJX, 90				
43	6604064	1	Valve-Check, Inline, 7PSI, Crack				
44	3182515	1	Hose Asm-04 x 12, 04FJX-04FJX				
45	3182513	1	Hose Asm-04 x 8, 04FJX-04FJX, 90				
46	3181834	1	Hose Asm-06 x 17, 06FJX-06FJX, 90				
47	3181843	1	Manifold Asm-Brake Valve, Cab				
48	6602140	1	Tee-Hyd, 04MJ-04FJX-04MJ				

\*Order by illustration reference number. Specify this Parts Manual number, page number and your unit's Serial Number.

OPTIONAL CAB

# Optional Cab Harness Assembly Diagram

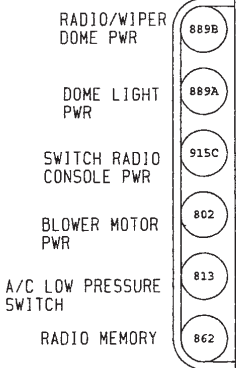
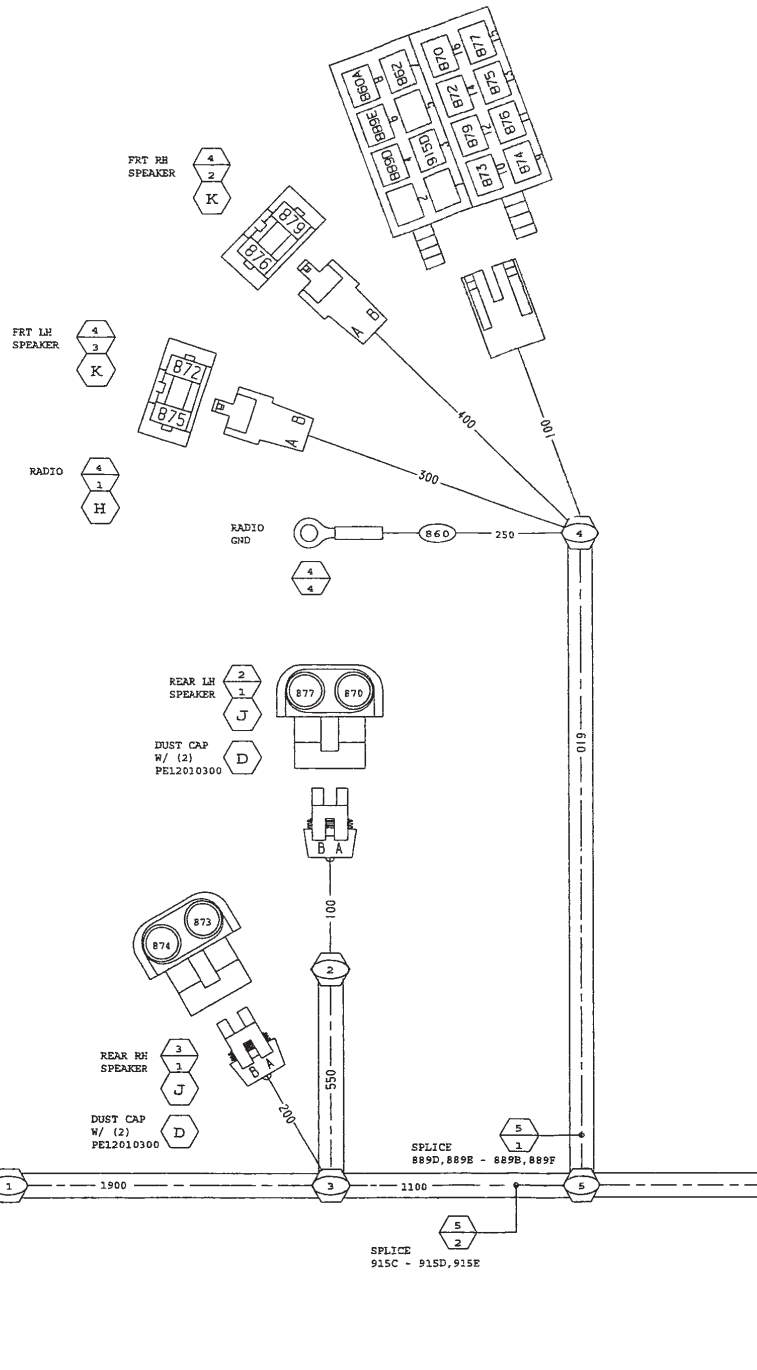
7051440

1 of 2

OPTIONAL CAB

ITEM	DESCRIPTION	QTY
K	2F PAC/ON 1 SHROUD PE08900444	2
J	TWO WAY TOWER PE12015792	2
H	FCI 17401600	1
G	THREE WAY 56 SERIES PE2973386	1
F	TWO WAY MOLDED SOCKET PE6294015	1
E	THREE WAY 56 SERIES MALE PE2984887	1
D	TWO WAY SHROUD PE12010973	3
C	ONE WAY 56 SERIES FEMALE PE2977253	8
A	SIX WAY SHROUD PE12010975	1

QTY	DESCRIPTION	QTY	DESCRIPTION	QTY	DESCRIPTION	QTY	DESCRIPTION	QTY	DESCRIPTION	QTY	DESCRIPTION	QTY	DESCRIPTION	QTY	DESCRIPTION	QTY	DESCRIPTION	QTY	DESCRIPTION	
879	1	WHITE	FCI 60012841	4/1	PE08911640	4/2														
876	1	BLUE	FCI 60012841	4/1	PE08911640	4/2														
872	1	RED	FCI 60012841	4/1	PE08911640	4/3														
875	1	GREEN	FCI 60012841	4/1	PE08911640	4/3														
877	1	PURPLE	PE12124580 PE12015284 SEAL	3/3	FCI 60012841	4/2														
870	1	BLACK	PE12124580 PE12015284 SEAL	3/2	FCI 60012841	4/2														
874	1	YELLOW	PE12124580 PE12015284 SEAL	2/3	FCI 60012841	4/3														
873	1	ORANGE	PE12124580 PE12015284 SEAL	2/1	FCI 60012841	4/1														
817	1	PINK	PE2965142	10/2	PE2965470	11/1	3													
809A	2	RED	PE2965467	10/5	PE2965142	11/3														
809	2	RED	PE2965142	9/4	PE2965467	10/5														
804	2	YELLOW	PE2965142	9/4	PE2965142	10/3														
805	2	GREEN	PE2965142	9/4	PE2965142	10/4														
816	1	DK BLUE	PE12124582 PE12015323 SEAL	6/2	PE2965470	11/2	3													
813	1	ORANGE	PE12124582 PE12015323 SEAL	1/1	PE12124582 PE12015323 SEAL	6/1														
889F	1	WHITE	SPLICE 889B, D, E, F	5/1	PE2965142	9/3														
889E	1	WHITE	FCI 60012841	4/3	SPLICE 889B, D, E, F	5/1														
889D	1	WHITE	FCI 60012841	4/3	SPLICE 889B, D, E, F	5/1														
889B	2	WHITE	PE12124582 PE12010293 SEAL	1/3	SPLICE 889B, D, E, F	5/1														
862	3	RED	PE12124582 PE12015323 SEAL	1/2	FCI 60012841	4/2														
802	2	RED	PE12015323 SEAL	1/1	PE2965142	10/1														
915E	8	DK GREEN	SPLICE 915C, D, E	5/2	PE6294014	7/2														
915D	1	DK GREEN	FCI 60012841	4/1	SPLICE 915C, D, E	5/2														
915C	8	DK GREEN	PE12124582 PE12015323 SEAL	1/3	SPLICE 915C, D, E	5/2														
860E	2	BLACK	PE6288634	9/2	PE2965142	11/4														
860D	2	BLACK	SPLICE 860, A, B, C, D	9/2	PE6288634	9/2														
860C	1	BLACK	SPLICE 860, A, B, C, D	9/2	PE6294014	7/2														
860B	1	BLACK	SPLICE 860, A, B, C, D	9/2	PE2971962	7/1														
860A	2	BLACK	FCI 60012841	4/3	SPLICE 860, A, B, C, D	9/1														
860	2	BLACK	PE2973849	4/4	3	SPLICE 860, A, B, C, D	9/1													
889A	1	WHITE	PE12124582 PE12015323 SEAL	1/1	PE2971962	7/1														
CIP NO.	HTP	COLOR	TERM @ LTP	LTP	PLT INS	TERM @ HTP	HTP	PLT INS												

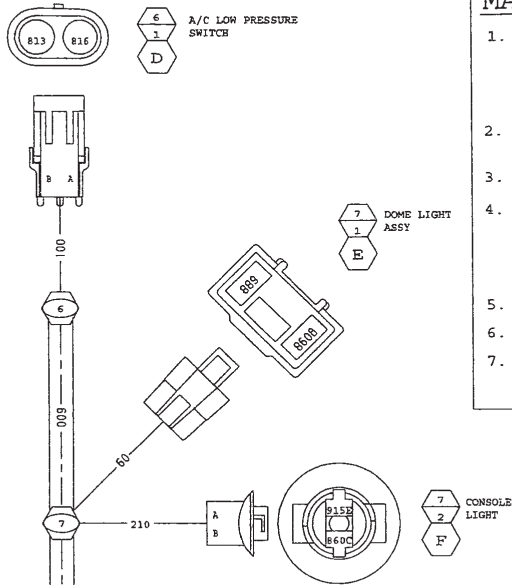


# Optional Cab Harness Assembly Diagram

7051440




2 of 2

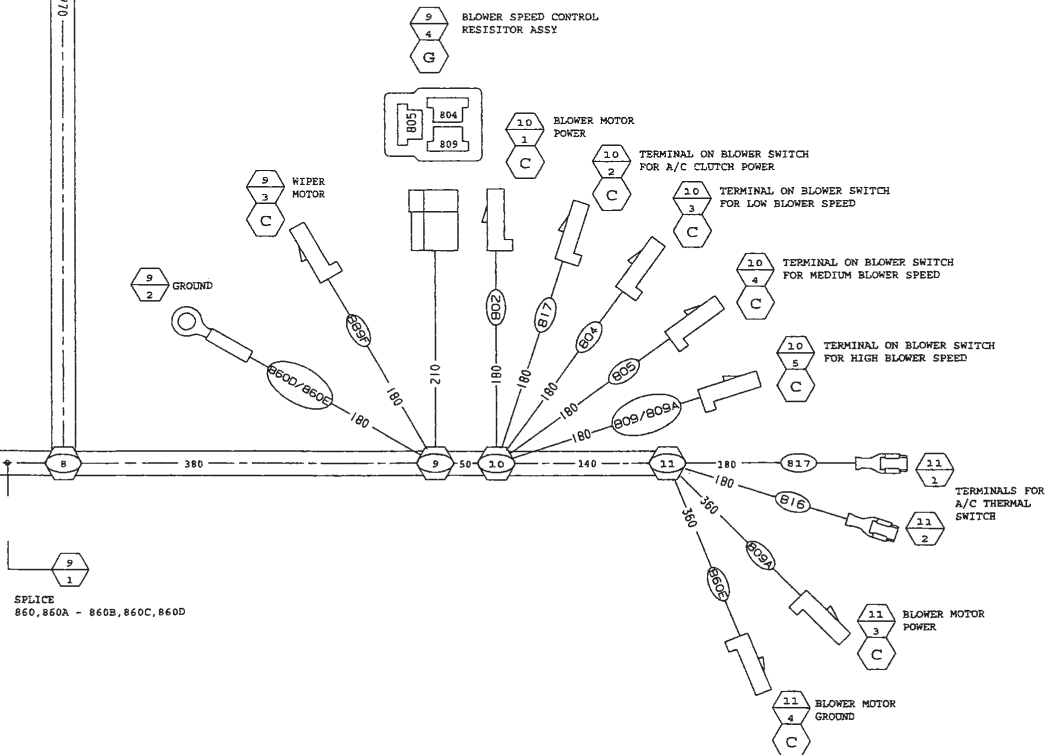
OPTIONAL CAB



### MANUFACTURING NOTES

- MUST CONFORM TO JDS-G153, INCLUDING:
 

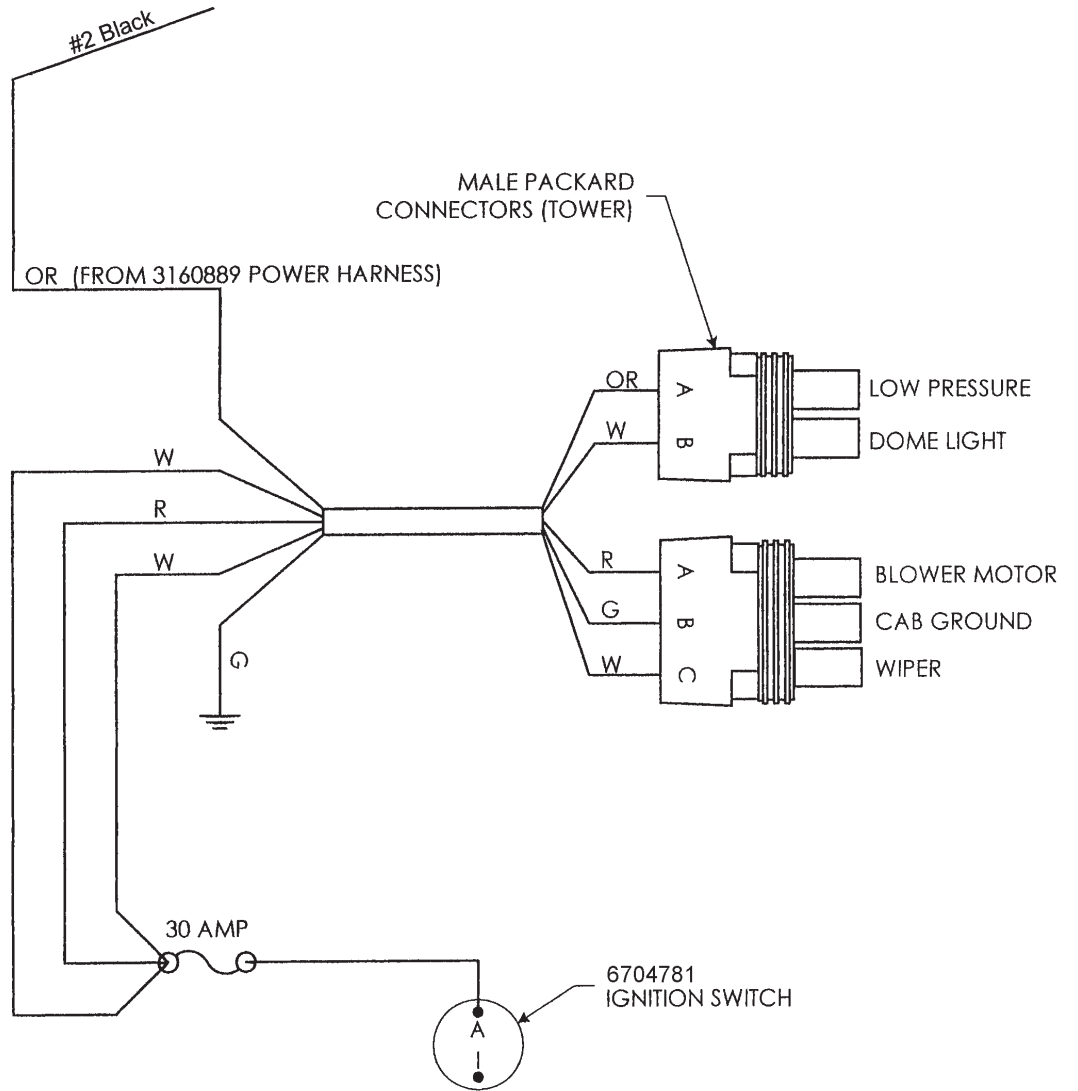
 SAE J1128 TYPE GXL	 BLACK POLYETHYLENE	
--	--	---
- BOTH CRIMP AND SOLDER REQUIRED FOR ALL TERMINALS IN UNSEALED CONNECTORS, RING TERMINALS OR SPLICES.
- PLUG EMPTY CAVITIES IN ALL SEALED CONNECTOR BODIES.
- TIE-BAND CONDUIT:
  - \* AT ALL OUTLETS AND JUNCTIONS.
  - \* AT APPROX. 250mm INTERVALS BETWEEN JUNCTIONS.
 CONDUIT MUST BE HELD TIGHT TO HARNESS. CONDUIT MUST START WITHIN APPROX. 25mm OF JUNCTIONS.
- 100% CIRCUIT CONTINUITY CHECK REQUIRED.
- ALL TERMINALS TIN PLATED UNLESS OTHERWISE SPECIFIED.
- LOOSE PIECE, REEL, STRIP OR MYLAR FORMS OF OTHERWISE IDENTICAL TERMINALS OR SEALS ARE INTERCHANGABLE.



### Optional Cab Harness Wiring Diagram

9305875

1 of 2



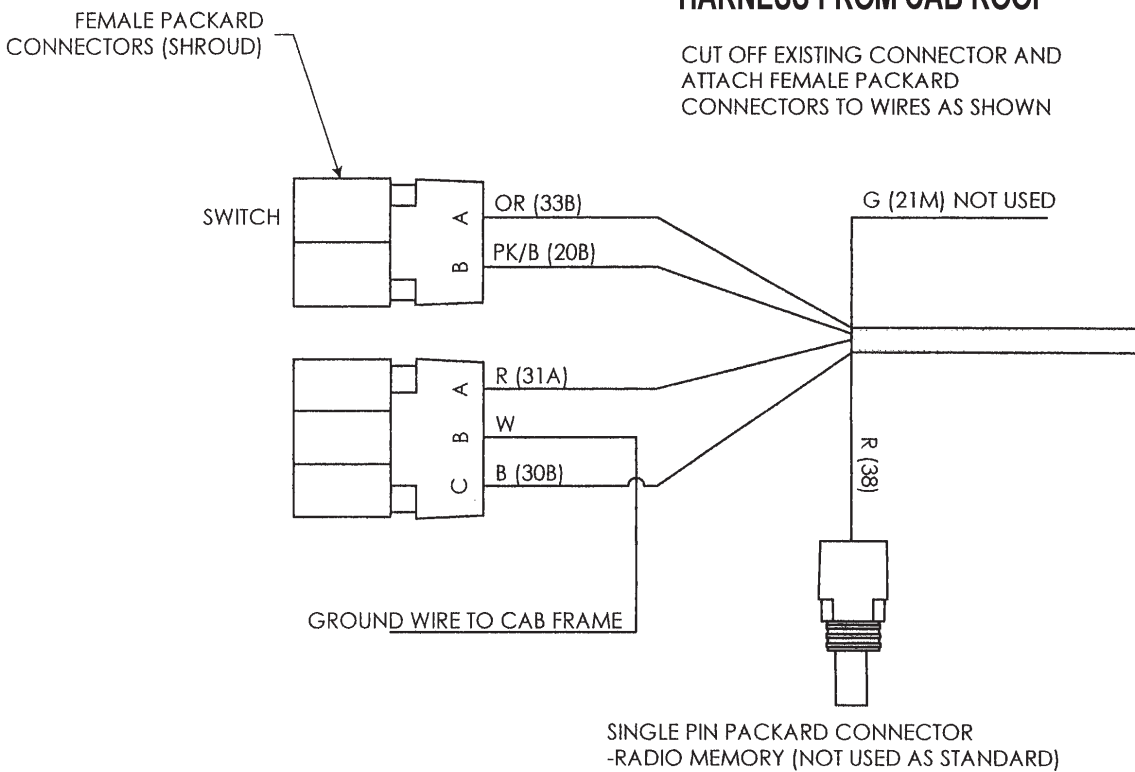
# Optional Cab Harness Wiring Diagram

9305875

2 of 2

## HARNESS FROM CAB ROOF

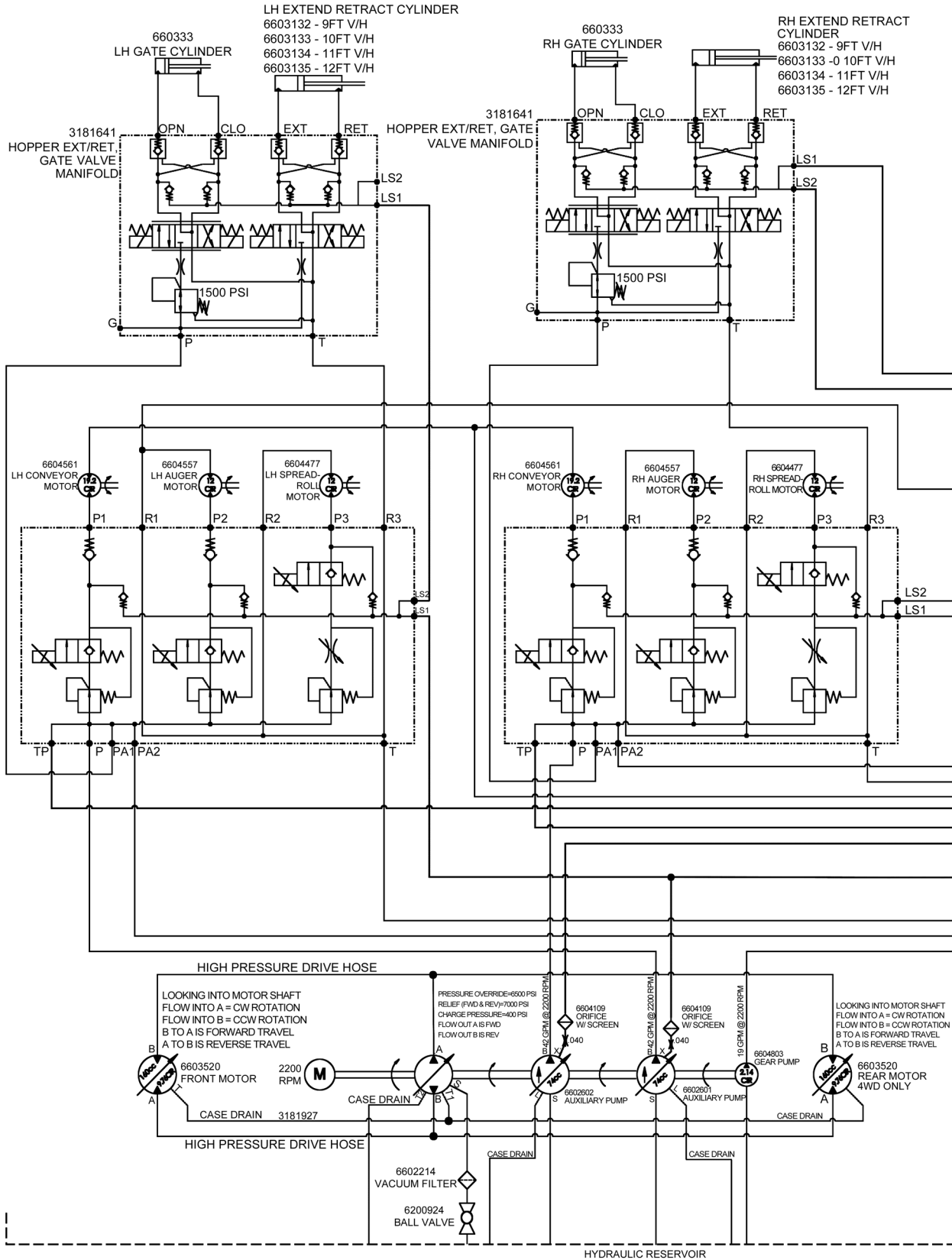
CUT OFF EXISTING CONNECTOR AND ATTACH FEMALE PACKARD CONNECTORS TO WIRES AS SHOWN





# Hydraulic Schematic - Optional Cab Power Seat Diagram

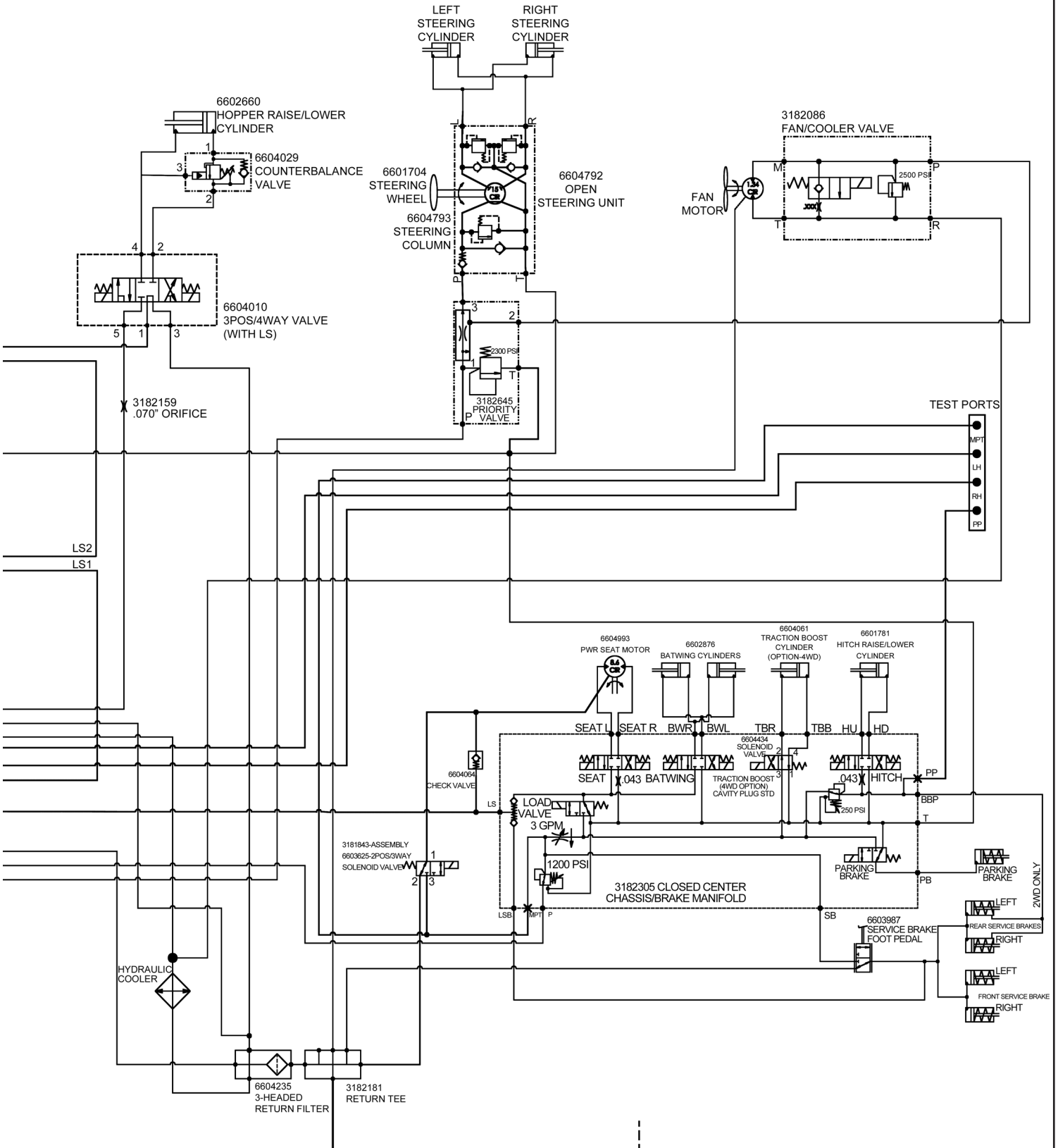
9307031  
1 of 2



# Hydraulic Schematic - Optional Cab Power Seat Diagram

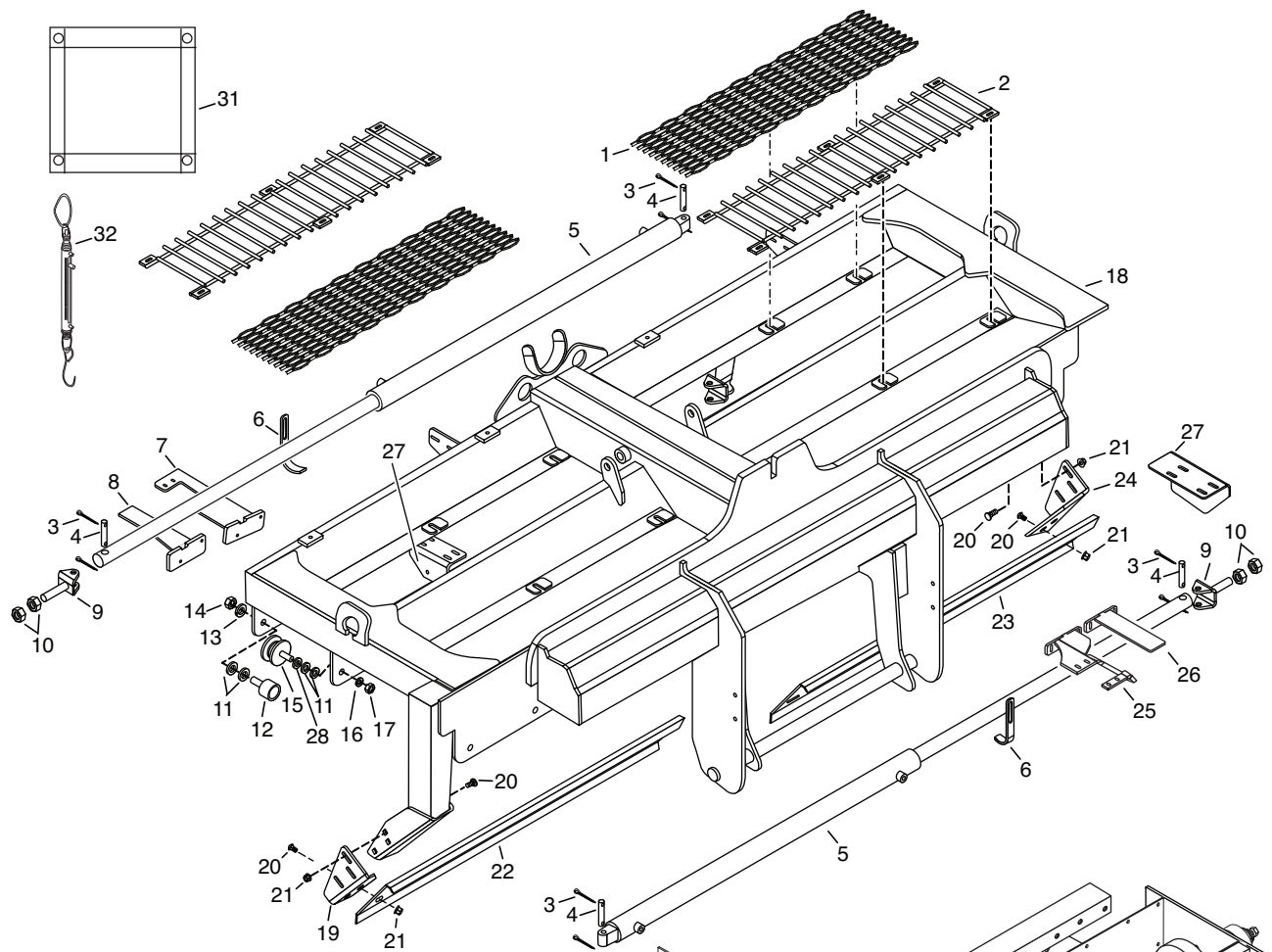
9307031  
2 of 2

OPTIONAL CAB

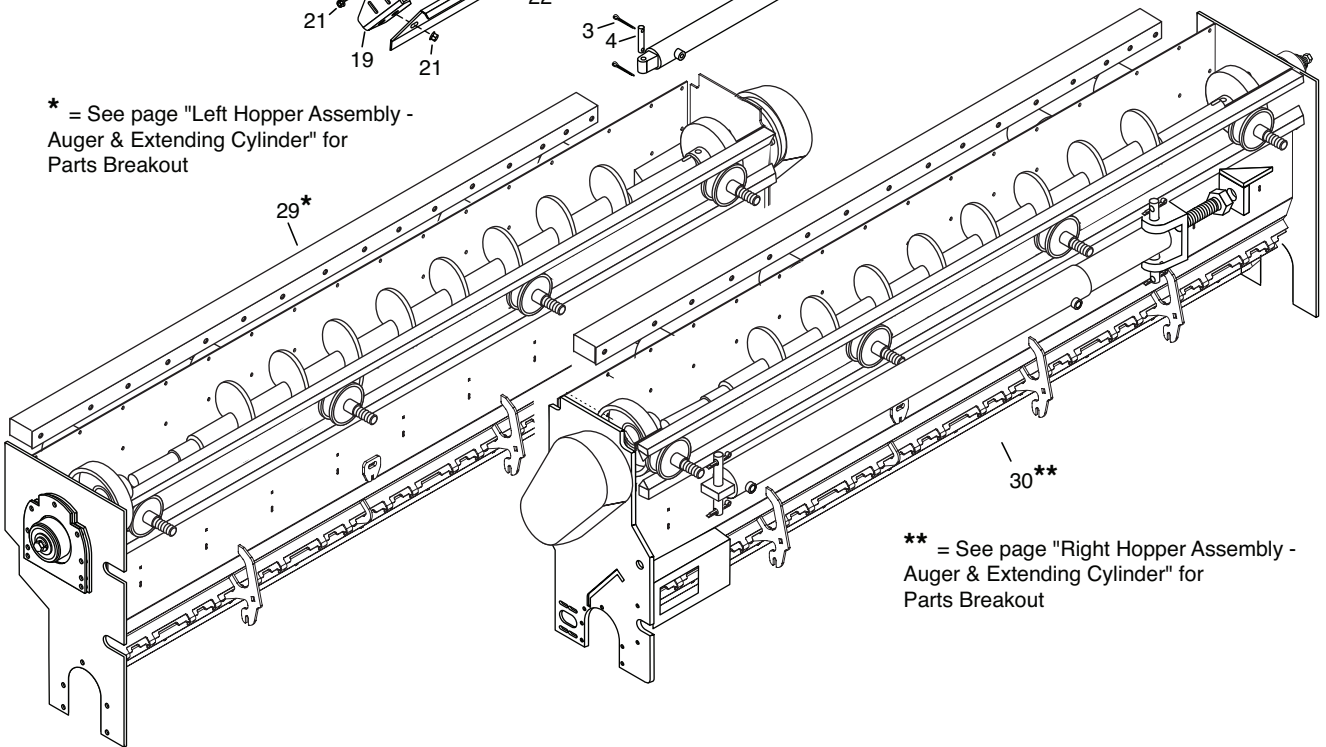


# Hopper Assembly Install

FRONT HOPPER



\* = See page "Left Hopper Assembly - Auger & Extending Cylinder" for Parts Breakout



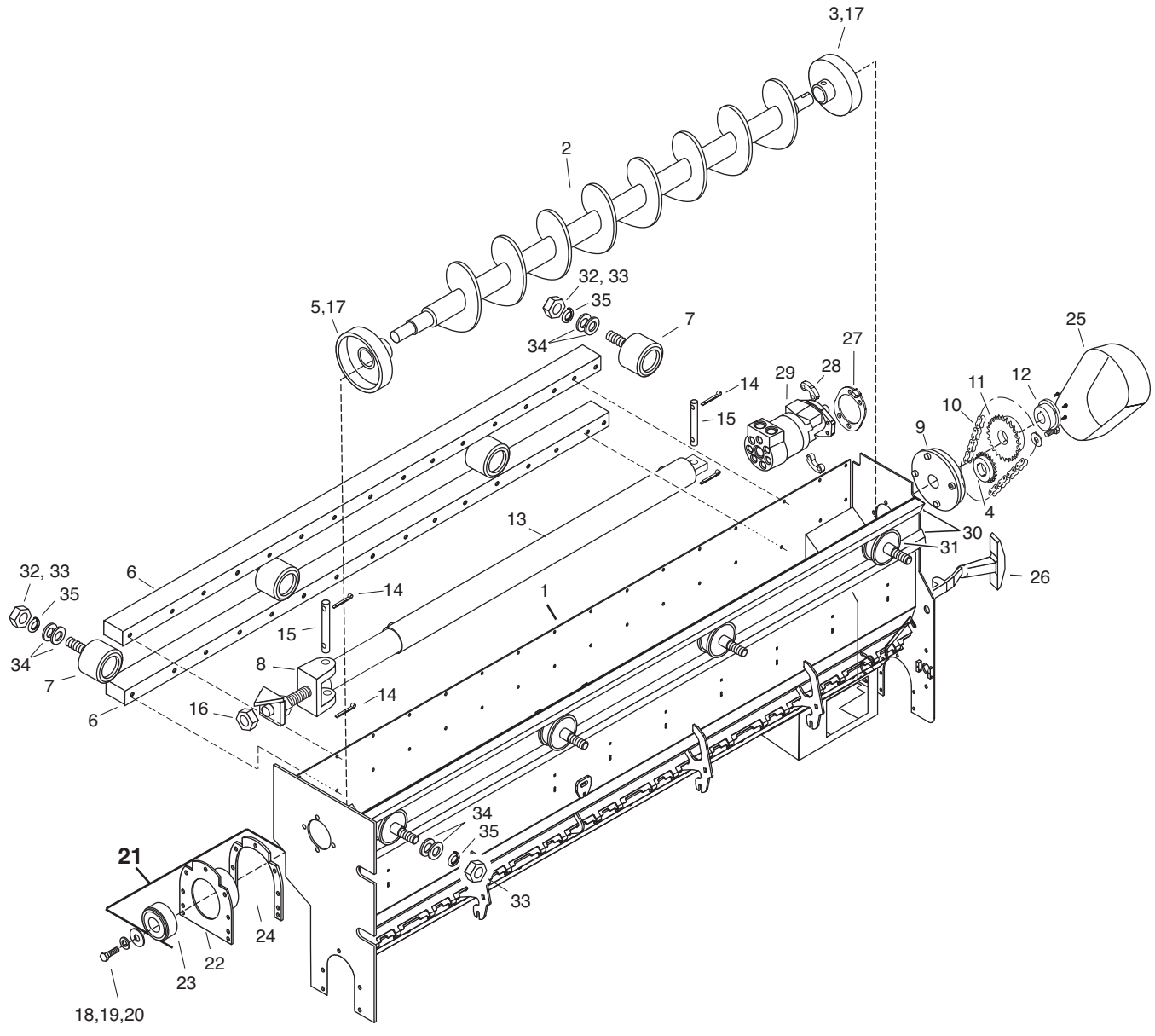
\*\* = See page "Right Hopper Assembly - Auger & Extending Cylinder" for Parts Breakout

## Hopper Assembly Install

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3144058	2	Screen Asm-9'/18'				
	3143645	2	Screen Asm-10'/20'				
	3143958	2	Screen Asm-11'/22'				
	3143689	2	Screen Asm-12'/24'				
2	3143550	2	Grate Asm-Hopper Frame, 9'/18'				
	3143199	2	Grate Asm-Hopper Frame, 10'/20'				
	3143519	2	Grate Asm-Hopper Frame, 11'/22'				
	3143157	2	Grate Asm-Hopper Frame, 12'/22'				
3	0103409	8	Pin-Cotter, 0.19" x 1.50", PD				
4	3140918	4	Pin-Cylinder, Long, Hopper Extend				
5	6603132	2	Cylinder-Hyd, 2.5" x 55.13", 2" Dia. Rod				
	6603133	2	Cylinder-Hyd, 2.5" x 61.25", 2" Dia. Rod				
	6603134	2	Cylinder-Hyd, 2.5" x 67.375", 2" Dia. Rod				
	6603135	2	Cylinder-Hyd, 2.5" x 73.5", 2" Dia. Rod				
6	3143460	2	Support-Extend / Retract Cylinder				
7	3144318	1	Brkt Weldment-EChain, Hopper, Front				
8	3144319	1	Support Weldment-EChain, Hopper				
9	3141811	2	Cylinder Mount Assembly				
10	0220088	4	Nut-Hex, 1.0"NC				
11	3142368	32	Spacer-0.25", V-Groove Roller				
12	6425066	8	Roller-Smooth, 2.5" OD				
13	0131048	8	Washer-Lock, Spring, 1.0"				
14	0426099	8	Nut-Hex, 0.75"NF, PD				
15	6435459	8	Roller-V Grooved, Load Runner				
16	0131046	8	Washer-Lock, Spring, 0.75"				
17	0271506	8	Nut-Hex, 0.44"NF, PD				
18	3145412	1	Frame Weldment-9'/18' Hopper				
	3145416	1	Frame Weldment-10'/20' Hopper				
	3145422	1	Frame Weldment-11'/22' Hopper				
	3145428	1	Frame Weldment-12'/24' Hopper				
19	3144496	1	Bracket-Cutoff Plate, LH, Adj				
20	6100841	10	Bolt-Carriage, Gr5, 0.50"NC x 1.0", PD				
21	6100276	10	Nut-Flanged, 1/2-13NC, 29LF1213				
22	3143541	1	Cutoff Plate, RH, 9'/18'				
	3143480	1	Cutoff Plate, RH, 10'/20'				
	3143518	1	Cutoff Plate, RH, 11'/22'				
	3143497	1	Cutoff Plate, RH, 12'/24'				
23	3143540	1	Cutoff Plate, LH, 9'/18'				
	3143481	1	Cutoff Plate, LH, 10'/20'				
	3143517	1	Cutoff Plate, LH, 11'/21'				
	3143496	1	Cutoff Plate, LH, 12'/24'				
24	3144497	1	Bracket-Cutoff Plate, RH				
25	3144310	1	Bracket Wldmnt-EChain,Hopper, Lower				
26	3144313	1	Support Weldment-EChain, Hopper				
27	3144316	2	Brkt-EChain, Hopper Frame, Upper				
28	3141381	8	Spacer-0.25", V-Groove Roller				
29	*	1	Hopperette Asm- LH, 2018				
30	*	1	Hopperette Asm- RH, 2018				
31	6001287	1	Canvas, 1 Sq Yd, w/ .75" Grommets				
	6001193	1	Canvas, 1 Sq M, w/ .75" Grommets				
32	6001194	1	Scale, 50Lb/25Kg, Spring, Brass * Call with Serial Number				

FRONT HOPPER

### Left Hopper Assembly - Auger & Extending Cylinder



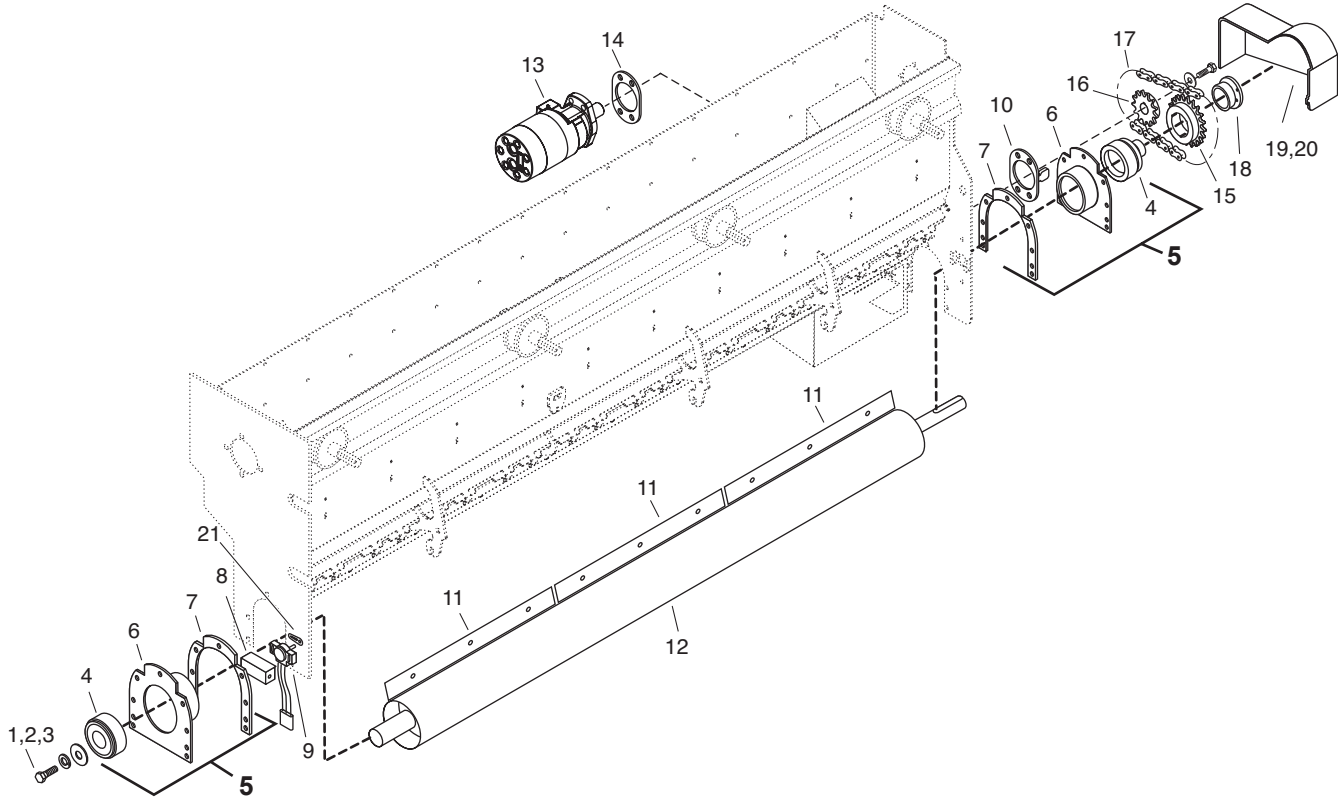
## Left Hopper Assembly - Auger & Extending Cylinder

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	*	1	Hopper Weldment- Left Hopper				
2	3142669	1	Auger Asm-9 Ft, Left Hopper	31	6435459	4	Roller-V Grooved Load Runner
	3142670	1	Auger Asm-10 Ft, Left Hopper	32	6002724	4	Nut-Hex, 1"-14 Thread, UNF, G5 <i>Use with Ref 7, P/N 6425066</i>
	3142671	1	Auger Asm-11 Ft, Left Hopper				
	3142672	1	Auger Asm-12 Ft, Left Hopper	33	0426099	8	Nut-Hex, 0.75"NF, PD <i>Use with Ref 7, P/N 6420318 and Ref 31</i>
3	3141194	1	Housing Asm- Flange Bearing				
4	3141346	1	Sprocket-Hyd Motor, 12" Auger	34	3142368	32	Spacer-0.25", V-Groove Roller
5	3141190	1	Housing Asm-Bell	35	0131048	8	Washer-Lock, Spring, 1.0"
6	3145020	2	Flat-Support, Roller Track-9 Ft.				
	3145019	2	Flat-Support, Roller Track-10 Ft.				
	3145018	2	Flat-Support, Roller Track-11 Ft.				
	3145143	2	Flat-Support, Roller Track-12 Ft.				
7	6425066	4	Roller-Smooth, 2-1/2				
	6420318	4	Roller-Smooth, 1-7/8"				
8	3141811	1	Cylinder Mount Asm				
9	6420192	1	Brg-Flange, Ball, 4 Bolt, 1.94				
10	3142565	1	Chain Asm-Auger Drive				
11	6430359	1	Sprocket-RC80-1, 23T, TLB				
12	6435460	1	Bushing-Taperlock, 2517, 1.5				
13	6603132	1	Cyl-Hyd, 2.5 B x 55 1/8 St, 2" Rod- 9'				
	6603133	1	Cyl-Hyd, 2.5 B x 61 1/4 St, 2" Rod-10'				
	6603134	1	Cyl-Hyd, 2.5 B x 67 3/8 St, 2" Rod-11'				
	6603135	1	Cyl-Hyd, 2.5 B x 73 1/2 St, 2" Rod-12'				
	7215229	1	Seal Kit, SAE #6 Port				
14	0103409	4	Pin-Cotter, 0.19 x 1.50, PD				
15	3140918	2	Pin-Cyl., Long, Hop, Extend, Var				
16	0220088	2	Nut				
17	0102582	2	Screw-Sock, 0.31NC x 0.50, CUP, PN				
18	3140404	1	Disc-Shaft End Hopper				
19	0120384	1	Washer-Lock, 0.50, Spring, PD				
20	0180175	1	Screw-Hex, 0.50NC x 1.25, GR5, PD				
21	3142547	1	Bearing/Housing Asm <i>(Includes Ref 22-24)</i>				
22	3142548	1	Housing Asm-Bearing				
23	3140083	1	Bearing-Agitator & Spreadroll				
24	3142549	1	Plate-Spacer, Bearing Housing				
25	3144523	1	Guard Asm-Auger Drive				
26	6001161	2	Latch-T Handle				
27	3143914	1	Spacer-Auger Motor Mt, RH				
28	3103452	2	Fastener-Motor				
29	6604557	1	Motor-Hyd, LSHT, 12.0 CIR,				
	7051151		Seal Kit for Motor				
30	3142302	2	Roller Track Asm-9 Ft.				
	3142303	2	Roller Track Asm-10 Ft.				
	3142304	2	Roller Track Asm-11 Ft.				

\* - Call w/ Serial Number

FRONT HOPPER

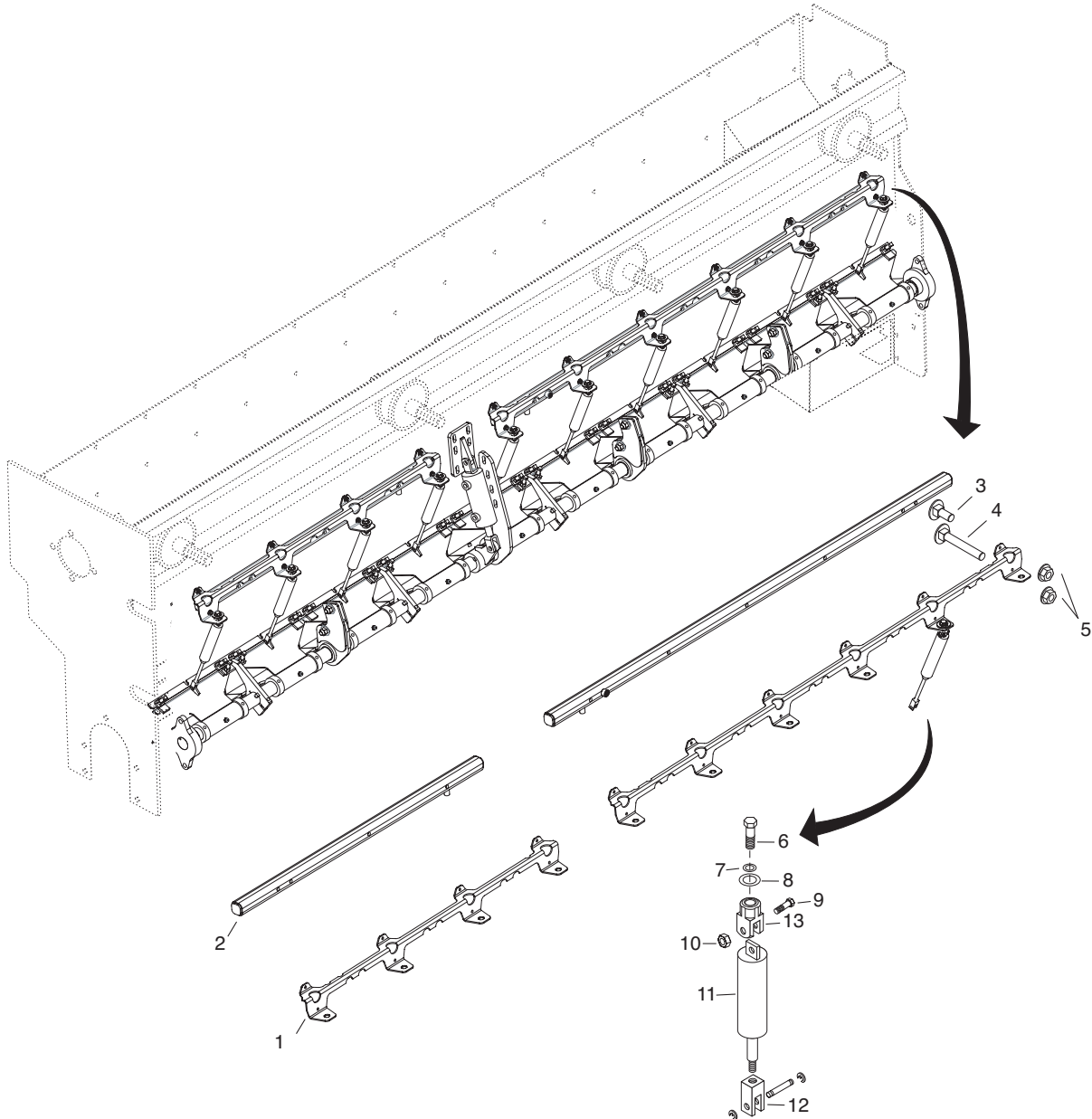
### Left Hopper Assembly - Spreadroll



REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3140404	1	Disc-Shaft End Hopper	14	3142517	1	Spacer-Spreadroll Motor Mt.
2	0120384	1	Washer-Lock, 0.50, Spring, PD	15	6435466	1	Sprocket-RC60, 1.20T, TLB
3	0180175	1	Screw-Hex, 0.50NC x 1.25, GR5, PD	16	3142539	1	Sprocket-Drive, Spreadroll-Agitator
4	3140083	2	Bearing-Agitator & Spreadroll	17	3142564	1	Chain Asm-Spreadroll
5	3142547	2	Bearing/Housing Asm (Includes Ref 4, 6, 7, does not include 10)	18	6435467	1	Bushing-Taperlock, 2012, 1.56"
6	3142548	2	Housing Asm-Bearing	19	3144668	1	Guard Asm-Spreadroll, LH
7	3142549	2	Plate-Spacer, Bearing Housing	20	6001161	2	Latch-T Handle
8	3142397	1	Guard-Transducer	21	3142167	1	Transducer Arm
9	6703101	1	Transducer				
10	3143922	1	Spacer-Sprl Motor Tension Mt.				AR = As Required
11	3143779	AR	Plate-Wear, Spread Roll, 36.75"				
	3143780	AR	Plate-Wear, Spread Roll, 24.5"				
12	3142518	1	Spreadroll Asm- 9 Ft.				
	3142610	1	Spreadroll Asm-10 Ft.				
	3142609	1	Spreadroll Asm-11 Ft.				
	3142608	1	Spreadroll Asm-12 Ft.				
13	6604477	1	Motor-Hyd, LSHT, 12.0 Cir				
	7051151		Seal Kit for Motor				

## Left Hopper Assembly - Gate Cylinders

FRONT HOPPER

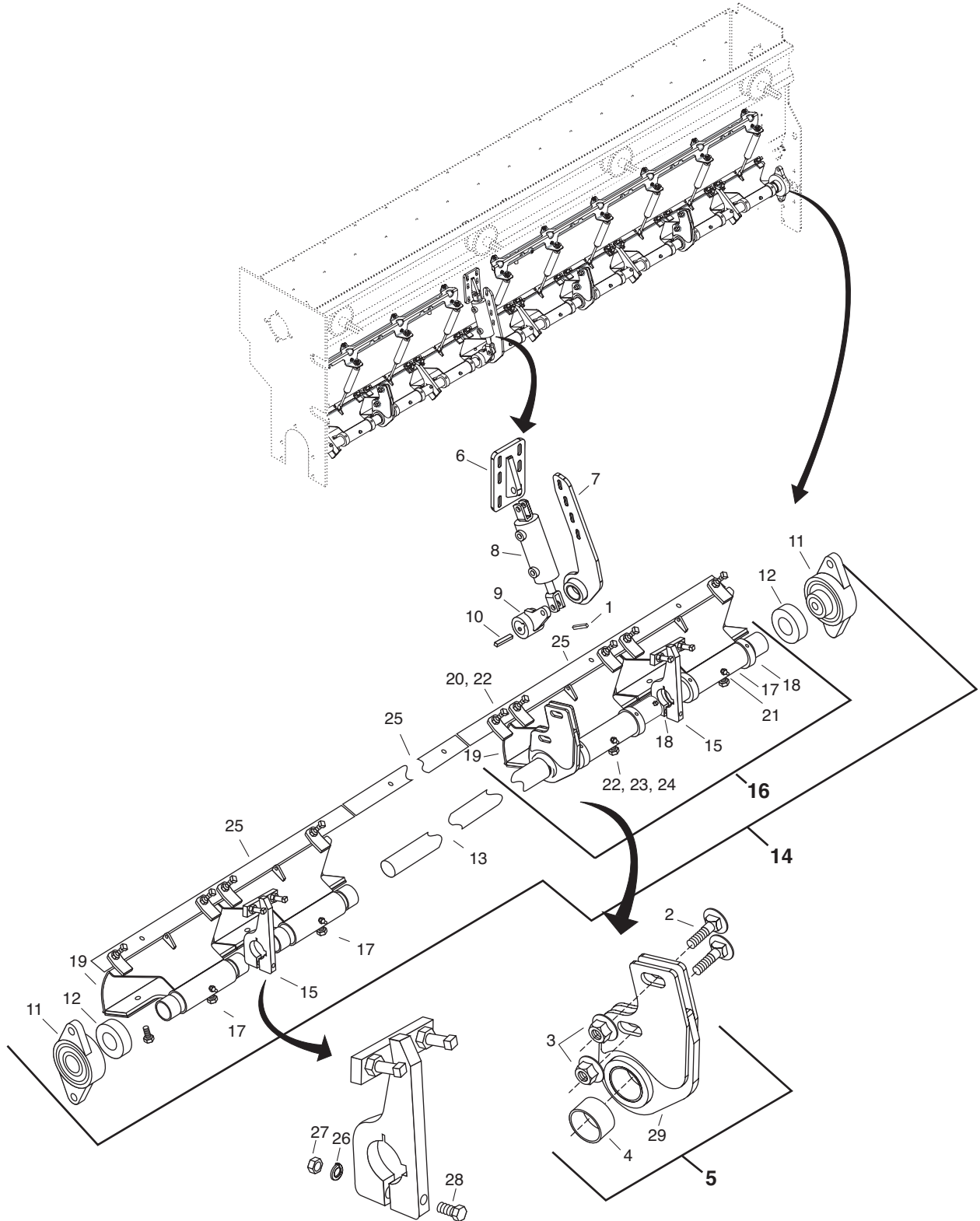


REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3143526	AR	Bracket- 4 Cyl Air Header	7	0120388	AR	Washer-Flat, 0.38
	3143548	AR	Bracket- 5 Cyl Air Header	8	0130999	AR	Washer-Flat, 0.625
	3143525	AR	Bracket- 6 Cyl Air Header	9	6100354	AR	Screw-Hex, 0.25NC x 1.00, GR8
2	3143190	AR	Header Weldment-4 Air Cyl	10	9413946	AR	Nut-Hex, Lock, 0.25NC
	3143515	AR	Header Weldment-5 Air Cyl	11	6602338	AR	Cylinder-Air, 1.06 x 3, Dbl Acting
	3143118	AR	Header Weldment-6 Air Cyl	12	6602339	AR	Clevis-Rod, Cyl
3	6100710	AR	Bolt-Carriage, GR5, 0.25NC x .625	13	6603799	AR	Clevis-Base, Cyl
4	6100711	AR	Bolt-Carriage, GR5, 0.25NC x 2.25				
5	6100713	AR	Nut-Flanged, 1/4-20NC				
6	0454903	AR	Screw-Hex, 0.38NC x 0.63, GR8				

AR = As Required



### Left Hopper Assembly - Gates



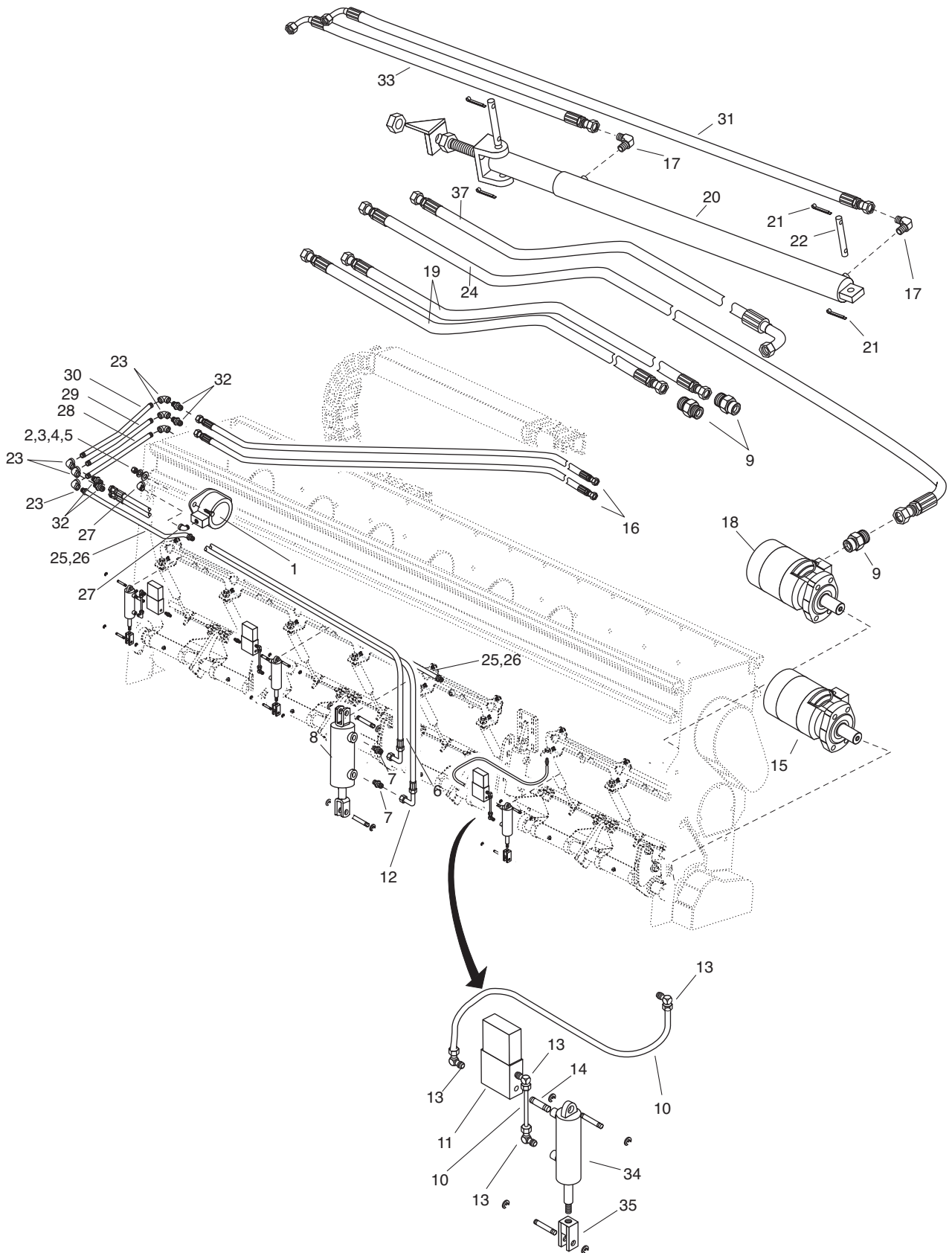
## Left Hopper Assembly - Gates

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3102236	AR	Key- 3/8 x 3/8 x 1" Long				
2	6100712	AR	Bolt-Carriage, 0.5NC x 1.5				
3	6100276	AR	Nut-Flanged, 1/2-13NC				
4	6420223	AR	Bearing-Shaft Pivot				
5	3143114	AR	Shaft Support Asm-Gate Bus <i>(Includes Ref 4, 29. Does not include 2,3)</i>				
6	3144307	1	Weldment-Cylinder Mount				
7	3144294	1	Center Support Asm, LH				
8	6603333	1	Cylinder-Hyd, 2" B x 3" Stroke				
9	3142784	1	Arm-Gate Cylinder				
10	3102237	1	Key-3/8 x 3/8 x 2" Long				
11	6420225	2	Flange Brg.-Ball, 2 Bolt, 1.50 Bore				
12	6420224	AR	Set Collar-1 1/2				
13	3142786	1	Shaft- Buss, 9 Ft.				
	3142787	1	Shaft- Buss, 10 Ft.				
	3142788	1	Shaft- Buss, 11 Ft.				
	3142789	1	Shaft- Buss, 12 Ft.				
14	3143546	1	Gate Busbar Asm, 9' <i>(Includes Assembly 16, &amp; Ref 1, 9-13, 15, 20, 22)</i>				
	3143188	1	Gate Busbar Asm, 10' <i>(Includes Assembly 16, &amp; Ref 1, 9-13, 15, 20, 22)</i>				
	3143514	1	Gate Busbar Asm, 11' <i>(Includes Assembly 16, &amp; Ref 1, 9-13, 15, 20, 22)</i>				
	3143113	1	Gate Busbar Asm, 12' <i>(Includes Assembly 16, &amp; Ref 1, 9-13, 15, 20, 22)</i>				
15	3142782	AR	Buss Arm Asm				
16	3142774	AR	Gate Asm <i>(Includes Ref 15, 17-24)</i>				
17	3142772	AR	Gate Weldment				
18	6420222	AR	Bearing-Gate Pivot				
19	3142297	2	Plate-12 In, Scraper				
20	0187870	AR	Screw-Sq Hd, 3/8NC x 1.5, Cup, PD				
21	9411027	1	Fitting-Lube, Stgt, x 1/4				
22	0120377	AR	Nut-Hex, 3/8NC, PD				
23	3100475	AR	Screw-cap, Hex, 3/8NC x 3/4				
24	0120388	AR	Washer-Flat, 3/8				
25	3142316	AR	Plate-Adjust, Seal, Gate, 36 3/4				
	3142365	AR	Plate-Adjust, Seal, Gate, 24 1/2				
26	0120214	AR	Washer-Lock, 0.31, Spring				
27	0120368	AR	Nut-Hex, 0.31NF				
28	9418684	AR	Screw-Hex, 0.31NF x 3.25, GR8, PD				
29	3143124	AR	Shaft Sup Weldment, Gate Bus, 11 Chip				
			AR - As Required				

FRONT HOPPER

# Left Hopper Hydraulic Hoses

FRONT HOPPER



## Left Hopper Hydraulic Hoses

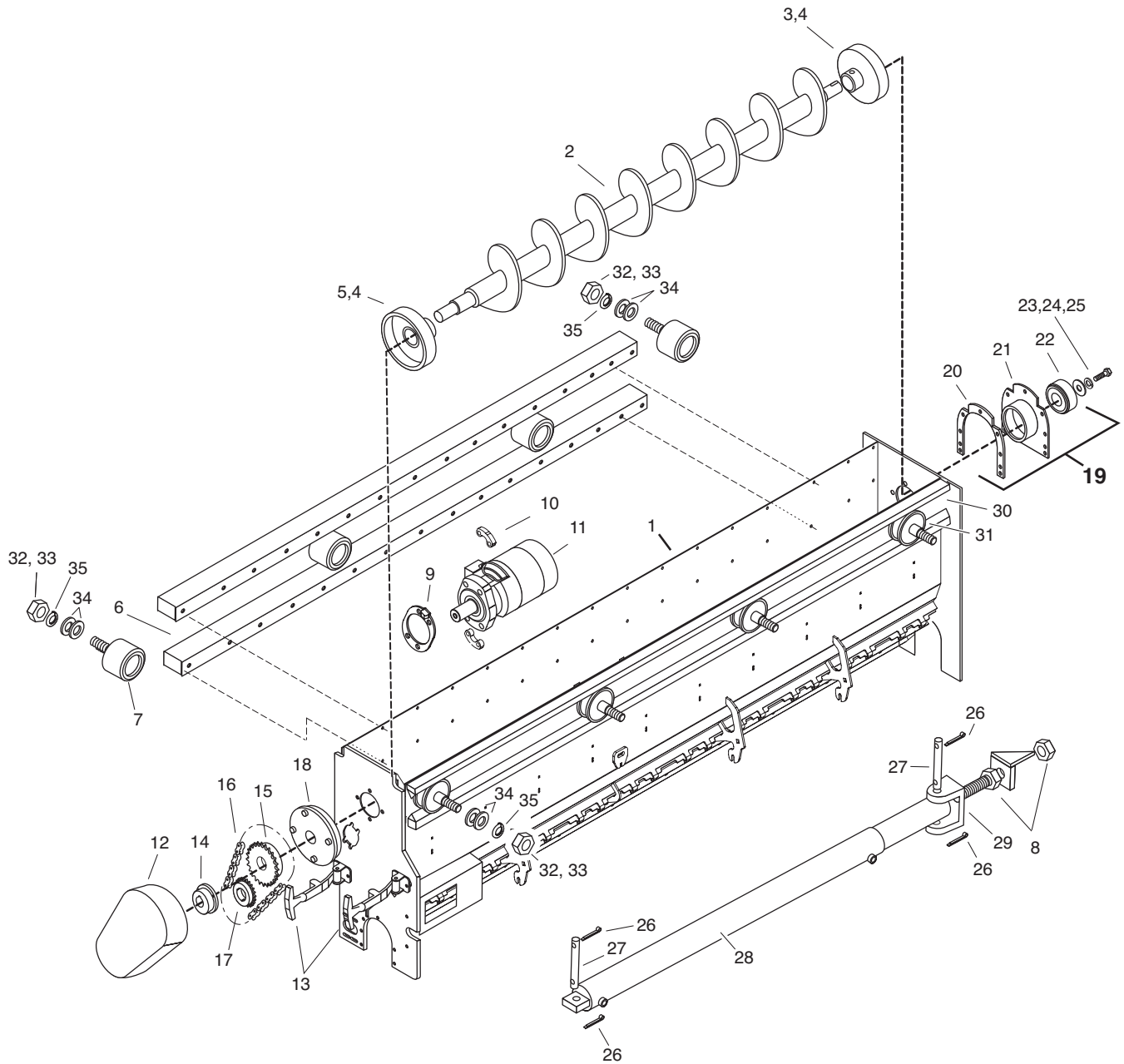
REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3160691	1	Switch Asm-Auto Auger	31	3182121	1	Hose-Left Hopper, Extend
	7530041	1	Diaphragm-Silicone, Switch	32	6601381	4	Adapter-Hyd, ST, 04MP-04MJ
	6703126	1	Spring-Comp. Bin Switch	33	3182173	1	Hose-Left Hopper, Retract, 9'
2	0122017	2	Screw-Hex, 5/16NC x 1, GR2, PD		3181977	1	Hose-Left Hopper, Retract, 10'
3	0120376	2	Nut-Hex, 5/16NC, PD		3181977	1	Hose-Left Hopper, Retract, 11'
4	0120214	2	Washer-Lock, 5/16, Spring, PD		3182048	1	Hose-Left Hopper, Retract, 12'
5	0446363	4	Washer-Flat, 5/16, PD	34	6603150	AR	Cylinder-Air, 1.06x3, Dbl Acting
6	3182136	1	Hose-Left Gate Open at Cylinder, 9'	35	6602339	AR	Clevis-Rod, Cyl
	3181974	1	Hose-Left Gate Open at Cylinder, 10'	36	3161050	1	Harness-Lt Hopper, 9 Ft, (NS)
	3182136	1	Hose-Left Gate Open at Cylinder, 11'		3160972	1	Harness-Lt Hopper, 10 Ft, (NS)
	3182045	1	Hose-Left Gate Open at Cylinder, 12'		3160976	1	Harness-Lt Hopper, 11 Ft, (NS)
7	6602134	2	Adapter-Hyd, ST, 06MB-04MJ		3161012	1	Harness-Lt Hopper, 12 Ft, (NS)
8	6603333	1	Cylinder-Hyd, 2" Bore x 3" Stroke	37	3182598	1	Hose-Left Auger, 9'
9	6604815	5	Adapter-Hyd, ST, 08MFS-10MB		3182590	1	Hose-Left Auger, 10'
10	Q444884	AR	Tube-Nylon, Air, 1/4		3182583	1	Hose-Left Auger, 11'
11	6602901	AR	Valve-Air, Sol, 4Way, 2Pos		3182575	1	Hose-Left Auger, 12'
	7050421	1	Herschman Connector				
	6602906	1	Breather				
12	3182169	1	Hose-Left Gate Closed at Cylinder, 9'				
	3181975	1	Hose-Left Gate Closed at Cylinder, 10'				
	3182169	1	Hose-Left Gate Closed at Cylinder, 11'				
	3181556	1	Hose-Left Gate Closed at Cylinder, 12'				
13	6603831	AR	Adapter-Air, 90, 04Tube-02MPX				
14	0192042	AR	Nipple-Pipe, Sch 40, 1/8 x 1 1/2				
15	6604477	1	Motor-Hyd, LSHT, 12.0 CIR				
	7051151		Seal Kit for Motor				
16	3182170	2	Hose-Left Gate Thru Hood, 9'				
	3181973	2	Hose-Left Gate Thru Hood, 10'				
	3182015	2	Hose-Left Gate Thru Hood, 11'				
	3182044	2	Hose-Left Gate Thru Hood, 12'				
17	9410976	2	Elbow-Hydr, 90, 06MB-06MJ				
18	6604557	1	Motor-Hyd, LSHT, 12.0 CIR				
	7051151	1	Seal Kit for Motor				
19	3182596	2	Hose-Left Spreadroll, 9'				
	3182589	2	Hose-Left Spreadroll, 10'				
	3182578	2	Hose-Left Spreadroll, 11'				
	3182570	2	Hose-Left Spreadroll, 12'				
20	6603132	1	Cyl-Hyd, 2.5 B x 55 1/8 St, 2" Rod- 9'				
	6603133	1	Cyl-Hyd, 2.5 B x 61 1/4 St, 2" Rod-10'				
	6603134	1	Cyl-Hyd, 2.5 B x 67 3/8 St, 2" Rod-11'				
	6603135	1	Cyl-Hyd, 2.5 B x 73 1/2 St, 2" Rod-12'				
	7215229	1	Seal Kit, SAE #6 Port				
21	3140918	2	Pin-Cyl., Long, Hop, Extend, Var				
22	0103409	4	Pin-Cotter, 0.19 x 1.50, PD				
23	0105413	6	Elbow-Pipe, 90, 0.25NPT, PN				
24	3182597	1	Hose-Left Auger, 9'				
	3182591	1	Hose-Left Auger, 10'				
	3182584	1	Hose-Left Auger, 11'				
	3182576	1	Hose-Left Auger, 12'				
25	6600324	AR	Hose-Air, Push On, 3/8				
26	6600305	AR	Hose End-Air, Push On				
27	0108686	2	Elbow-Pipe, 90, ST, 0.50NPT, PN				
28	3182070	1	Pipe-Hyd, LH Hopper, Lower				
29	3182068	1	Pipe-Air, LH Hopper, Mid				
30	3182066	1	Pipe-Hyd, LH Hopper, Upper				

AR - As Required  
(NS) = Not Shown

FRONT HOPPER

# Right Hopper Assembly - Auger & Extending Cylinder

FRONT HOPPER

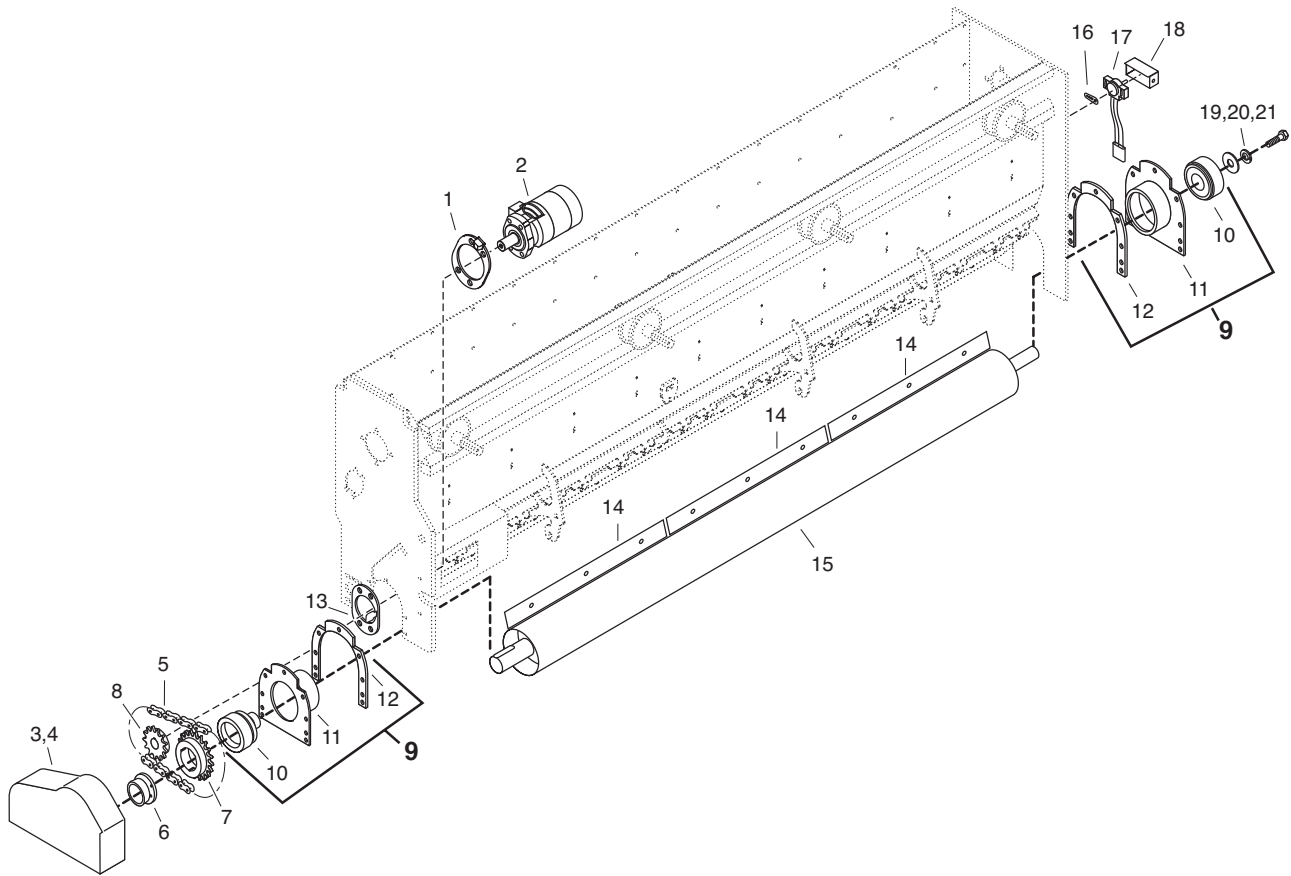


## Right Hopper Assembly - Auger & Extending Cylinder

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	*	1	Hopper Weldment- Right Hopper	34	3142368	32	Spacer-0.25", V-Groove Roller
2	3142665	1	Auger Asm-9 Ft, Right Hopper	35	0131048	8	Washer-Lock, Spring, 1.0"
	3142666	1	Auger Asm-10 Ft, Right Hopper				
	3142667	1	Auger Asm-11 Ft, Right Hopper				
	3142668	1	Auger Asm-12 Ft, Right Hopper				
3	3141194	1	Housing Asm-Flange Bearing				* - Call w/ Serial Number
4	0102582	2	Screw-Sock, 0.31NC x 0.50, CUP, PN				
5	3141190	1	Housing Asm-Bell				
6	3145020	2	Flat-Support, Roller Track-9 Ft.				
	3145019	2	Flat-Support, Roller Track-10 Ft.				
	3145018	2	Flat-Support, Roller Track-11 Ft.				
	3145143	2	Flat-Support, Roller Track-12 Ft.				
7	6425066	4	Roller-Smooth, 2-1/2				
	6420318	4	Roller-Smooth, 1-7/8"				
8	0220088	2	Nut				
9	3143914	1	Spacer-Auger Motor Mt, RH				
10	3103452	2	Fastener-Motor				
11	6604557	1	Motor-Hyd, LSHT, 12.0 CIR				
	7051151		Seal Kit for Motor				
12	3144523	1	Guard Asm-Auger				
13	6601161	2	Latch-T Handle				
14	6435460	1	Bushing-Taperlock, 2517, 1.5				
15	6430359	1	Sprocket-RC80-1, 23T, TLB				
16	3142565	1	Chain Asm-Auger Drive				
17	3141346	1	Sprocket-Hyd Motor, 12" Auger				
18	6420192	1	Brg-Flange, Ball, 4 Bolt, 1.94				
19	3142547	1	Bearing/Housing Asm (Includes Ref 20-22)				
20	3142549	1	Plate-Spacer, Bearing Housing				
21	3142548	1	Housing Asm-Bearing				
22	3140083	1	Bearing-Agitator & Spreadroll				
23	3140404	1	Disc-Shaft End Hopper				
24	0120384	1	Washer-Lock, 0.50, Spring, PD				
25	0180175	1	Screw-Hex, 0.50NC x 1.25, GR5, PD				
26	0103409	4	Pin-Cotter, 0.19 x 1.50, PD				
27	3140918	2	Pin-Cyl., Long.Hop, Extend, Var				
28	6603133	1	Cyl-Hyd, 2.5 B x 61 1/4 St, 2" Rod-10'				
	6603134	1	Cyl-Hyd, 2.5 B x 67 3/8 St, 2" Rod-11'				
	6603135	1	Cyl-Hyd, 2.5 B x 73 1/2 St, 2" Rod-12'				
	7215229	1	Seal Kit, SAE #6 Port				
29	3141811	1	Cylinder Mount Asm				
30	3142302	2	Roller Track Asm-9 Ft.				
	3142303	2	Roller Track Asm-10 Ft.				
	3142304	2	Roller Track Asm-11 Ft.				
	3142305	2	Roller Track Asm-12 Ft.				
31	6435459	4	Roller-V Grooved Load Runner				
32	6002724	4	Nut-Hex, 1"-14 Thread, UNF, G5 Use with Ref 7, P/N 6425066				
33	0426099	8	Nut-Hex, 0.75"NF, PD Use with Ref 7, P/N 6420318 and Ref 31				

FRONT HOPPER

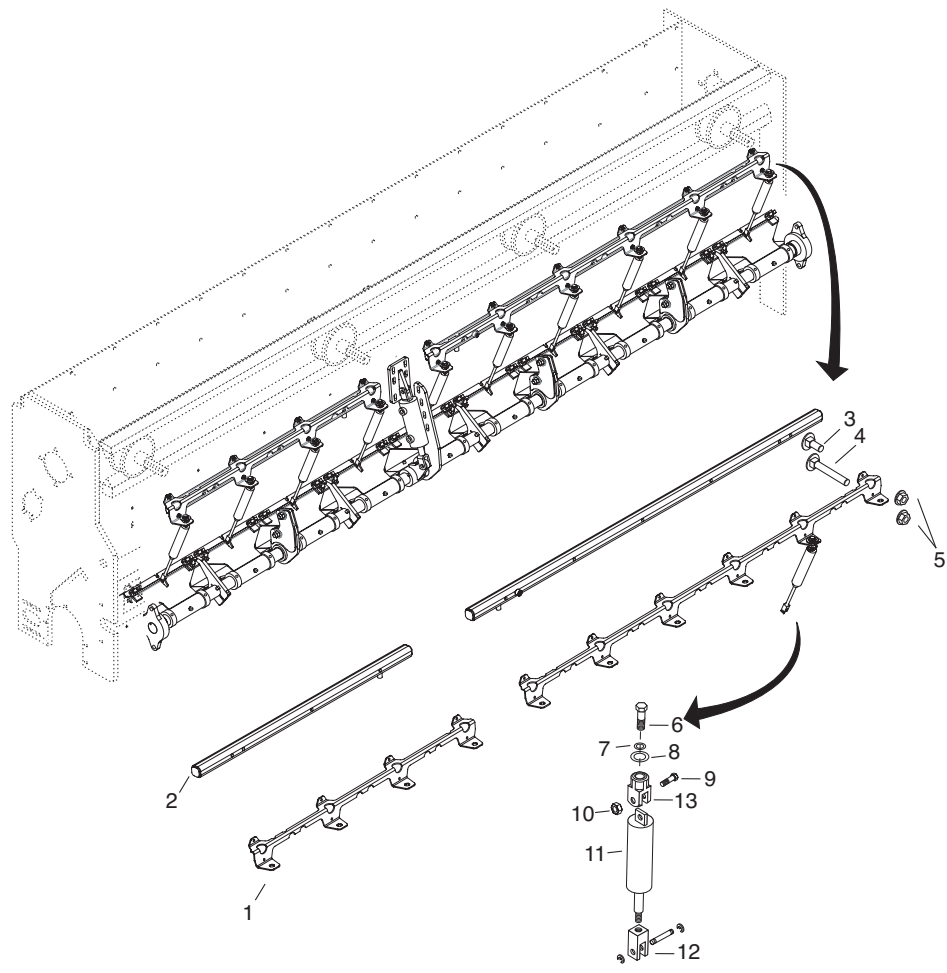
### Right Hopper Assembly - Spreadroll



REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3142517	1	Spacer-Spreadroll Motor Mt.	14	3142317	AR	Plate-Wear, Spread Roll, 36 3/4
2	6604477	1	Motor-Hyd, LSHT, 12.0 CIR		3142366	AR	Plate-Wear, Spread Roll, 24 1/2
	7051151		Seal Kit for Motor	15	3142610	1	Spreadroll Asm-10 Ft.
3	3144527	1	Guard Asm-Spreadroll, RH		3142609	1	Spreadroll Asm-11 Ft.
4	6601161	2	Latch-T Handle		3142608	1	Spreadroll Asm-12 Ft.
5	3142564	1	Chain Asm-Spreadroll	16	3142167	1	Transducer Arm
6	6435467	1	Bushing-Taperlock, 2012, 1.56"	17	6703101	1	Transducer
7	6435466	1	Sprocket-RC60, 1.20T, TLB	18	3142397	1	Guard-Transducer
8	3142539	1	Sprocket-Drive, Spreadroll-Agitator	19	3140404	1	Disc-Shaft End Hopper
9	3142547	2	Bearing/Housing Asm (Includes Ref 10-12)	20	0120384	1	Washer-Lock, 0.50, Spring, PD
10	3140083	2	Bearing-Agitator & Spreadroll	21	3181987	1	Hose-Auger, At Motor
11	3142548	2	Housing Asm-Bearing	22	0180175	5	Screw-Hex, 0.50NC x 1.25, GR5, PD
12	3142549	2	Plate-Spacer, Bearing Housing				
13	3143922	1	Spacer-Sprl Motor Tension Mt				AR = As Required

## Right Hopper Assembly - Gate Cylinders

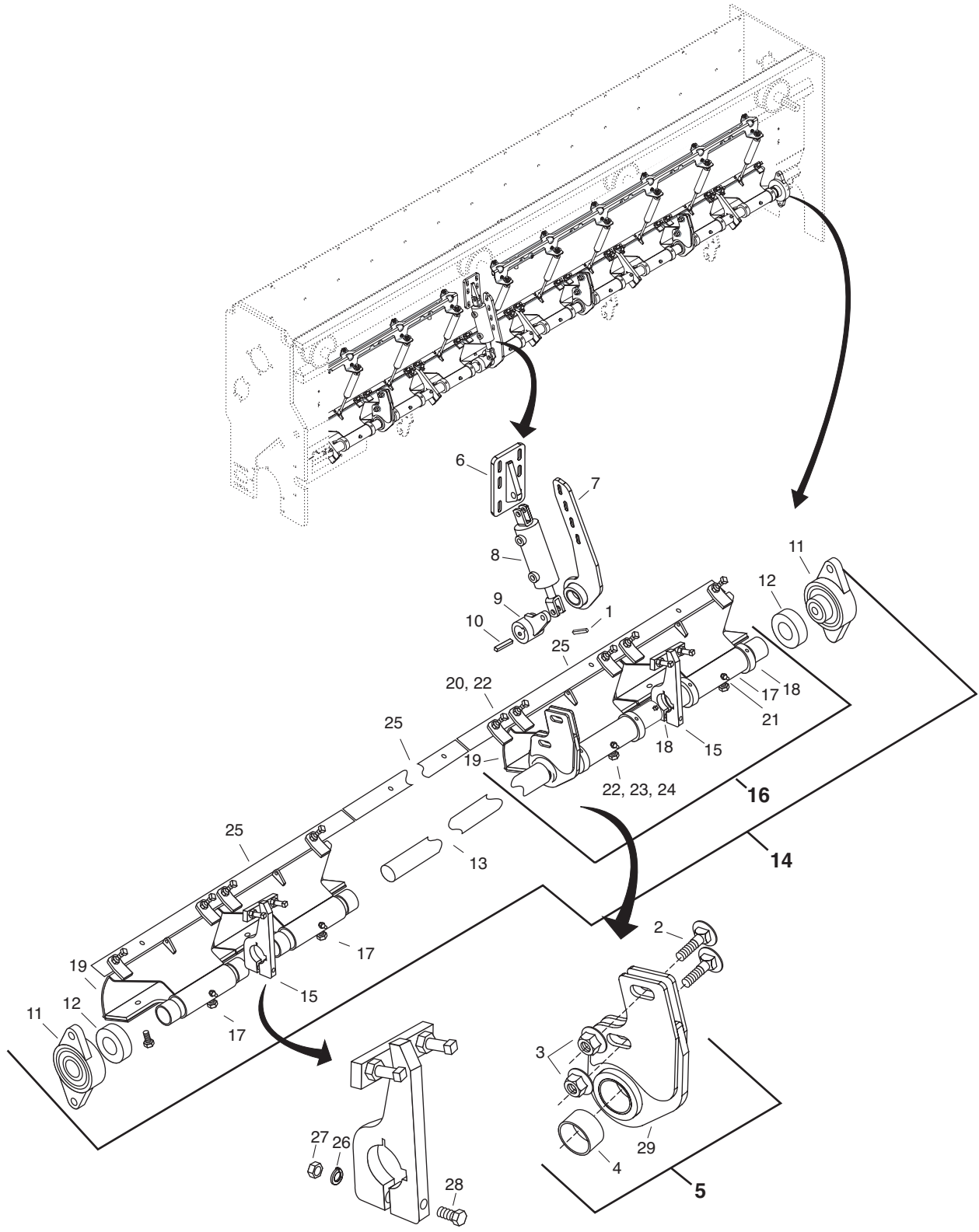
FRONT HOPPER



REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3143526	AR	Bracket- 4 Cyl Air Header	7	0120388	AR	Washer-Flat, 0.38
	3143548	AR	Bracket- 5 Cyl Air Header	8	0130999	AR	Washer-Flat, 0.625
	3143525	AR	Bracket- 6 Cyl Air Header	9	6100354	AR	Screw-Hex, 0.25NC x 1.00, GR8
2	3143190	AR	Header Weldment-4 Air Cyl	10	9413946	AR	Nut-Hex, Lock, 0.25NC
	3143515	AR	Header Weldment-5 Air Cyl	11	6602338	AR	Cylinder-Air, 1.06 x 3, Dbl Acting
	3143118	AR	Header Weldment-6 Air Cyl	12	6602339	AR	Clevis-Rod, Cyl
3	6100710	AR	Bolt-Carriage, GR5, 0.25NC x .625	13	6603799	AR	Clevis-Base, Cyl
4	6100711	AR	Bolt-Carriage, GR5, 0.25NC x 2.25				AR = As Required
5	6100713	AR	Nut-Flanged, 1/4-20NC				
6	0454903	AR	Screw-Hex, 0.38NC x 0.63, GR8				



### Right Hopper Assembly - Gates



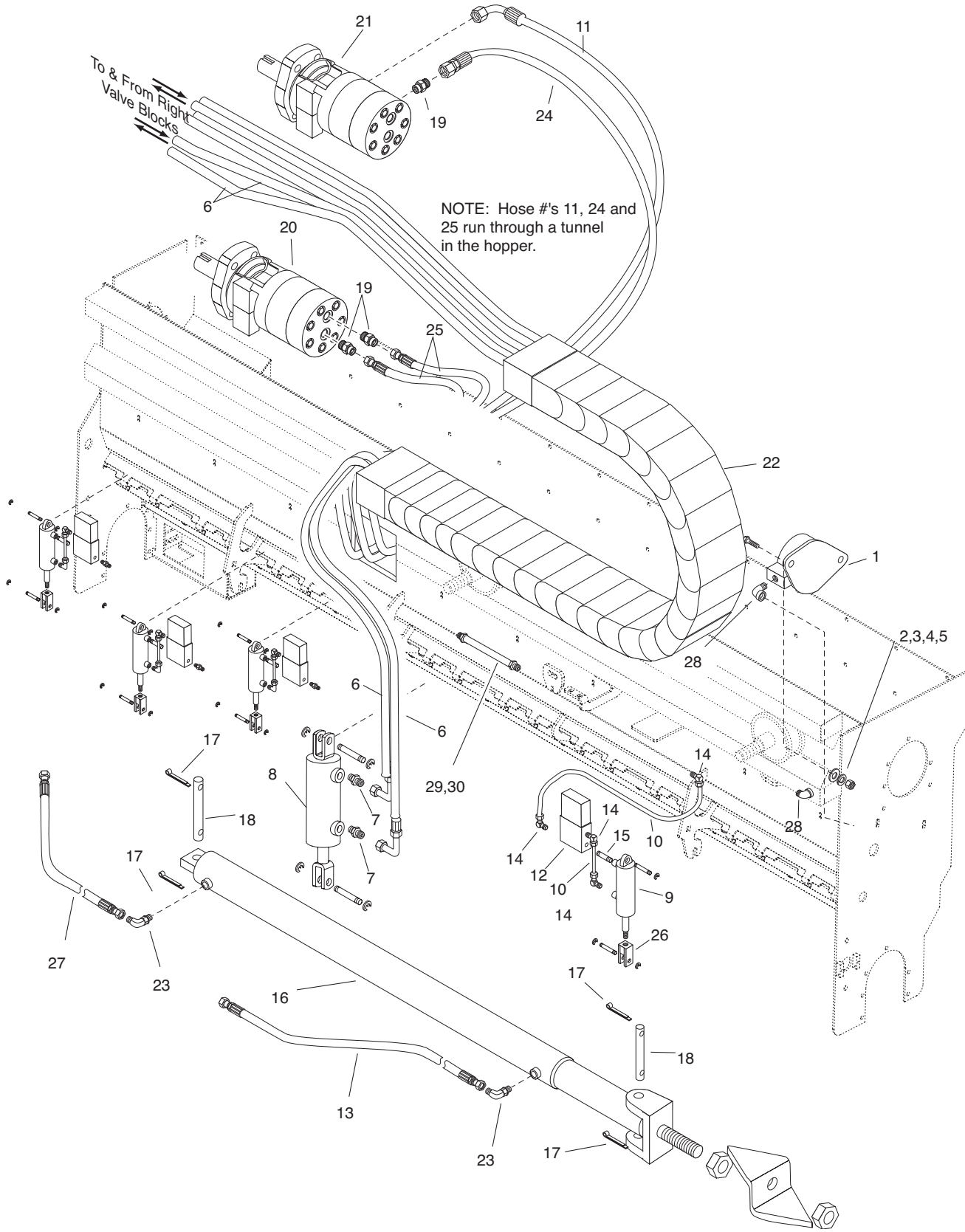
## Right Hopper Assembly - Gates

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3102236	AR	Key- 3/8 x 3/8 x 1" Long				
2	6100712	AR	Bolt-Carriage, 0.5NC x 1.5				
3	6100276	AR	Nut-Flanged, 1/2-13NC				
4	6420223	AR	Bearing-Shaft Pivot				
5	3143114	AR	Shaft Support Asm-Gate Bus <i>(Includes Ref 4, 29. Does not include 3,4)</i>				
6	3144307	1	Weldment-Cylinder Mount				
7	3144294	1	Center Support Asm, LH				
8	6603333	1	Cylinder-Hyd, 2" B x 3" Stroke				
9	3142784	1	Arm-Gate Cylinder				
10	3102237	1	Key-0.375" x 0.375" x 2" Long				
11	6420225	2	Flange Brg-Ball, 2 Bolt, 1.50 Bore				
12	6420224	AR	Set Collar-1.5"				
13	3142787	1	Shaft- Buss, 10 Ft.				
	3142788	1	Shaft- Buss, 11 Ft.				
	3142789	1	Shaft- Buss, 12 Ft.				
14	3144022	1	Gate Busbar Asm, 10' <i>(Includes Assembly 16 &amp; Ref 1, 9-13, 15, 20, 22)</i>				
	3143981	1	Gate Busbar Asm, 11' <i>(Includes Assembly 16 &amp; Ref 1, 9-13, 15, 20, 22)</i>				
	3143573	1	Gate Busbar Asm, 12' <i>(Includes Assembly 16 &amp; Ref 1, 9-13, 15, 20, 22)</i>				
15	3142782	AR	Buss Arm Asm				
16	3143013	AR	Gate Asm <i>(Includes Ref 15, 17-24)</i>				
17	3143014	AR	Gate Weldment				
18	6420222	AR	Bearing-Gate Pivot				
19	3142297	1	Plate-12 In, Scraper				
20	0187870	AR	Screw-Sq Hd, 3/8NC x 1.5,Cup, PD				
21	9411027	1	Fitting-Lube, Stgt x 1/4				
22	0120377	AR	Nut-Hex, 3/8NC, PD				
23	3100475	AR	Screw-cap, Hex, 3/8NC x 3/4				
24	0120388	AR	Washer-Flat, 3/8				
25	3142316	AR	Plate-Adjust, Seal, Gate, 36 3/4				
	3142365	AR	Plate-Adjust, Seal, Gate, 24 1/2				
26	0120214	AR	Washer-Lock, 0.31", Spring				
27	0120368	AR	Nut-Hex, 0.31" NF				
28	9418684	AR	Screw-Hex, 0.31NF x 3.25, GR8, PD				
29	3143124	AR	Shaft Sup Weldment, Gate Bus, 11 Chip				

AR - As Required

FRONT HOPPER

### Right Hopper Hydraulic Hoses



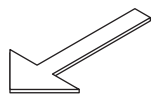
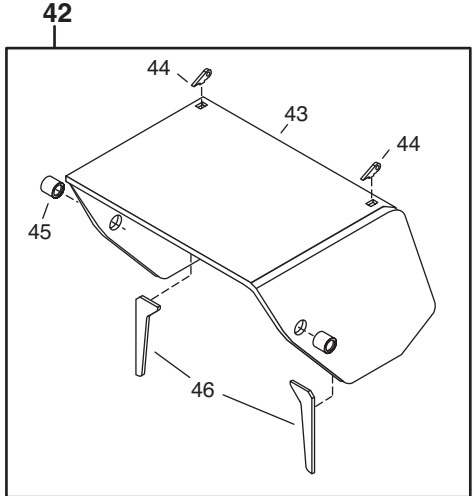
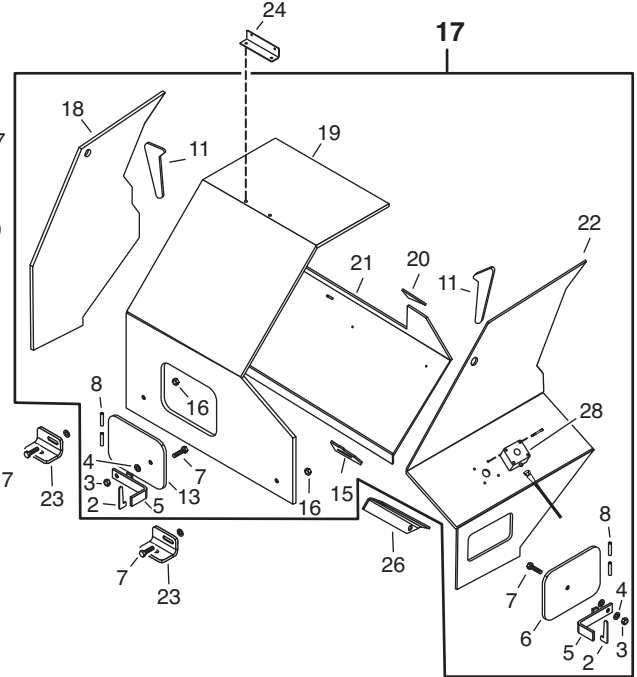
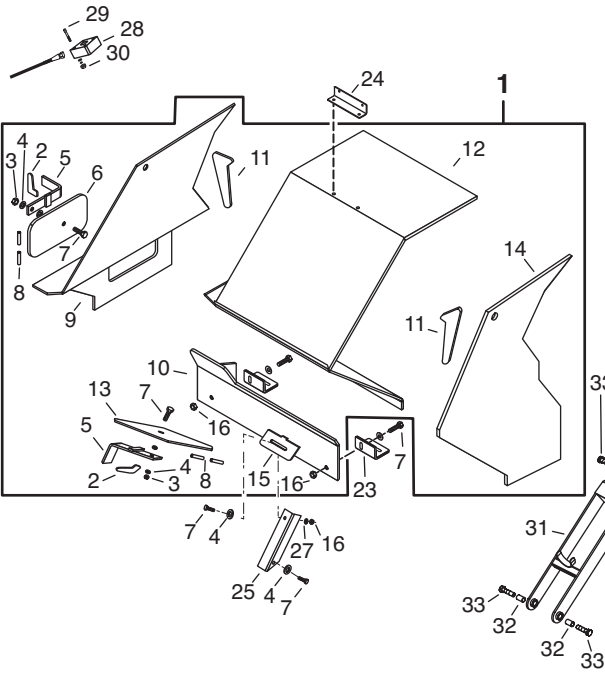
## Right Hopper Hydraulic Hoses

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3160691	1	Switch Asm-Auto Auger	23	9410976	2	Elbow-Hydr, 90, 06MB-06MJ
	7530041	1	Diaphragm-Silicone, Switch	24	3182595	1	Hose-Right Auger Pressure, 9'
	6703126	1	Spring-Comp. Bin Switch		3182588	1	Hose-Right Auger Pressure, 10'
	6702238	1	Switch-Diaphragm		3182582	1	Hose-Right Auger Pressure, 11'
2	0122017	2	Screw-Hex, 5/16NC x 1, GR2, PD		3182574	1	Hose-Right Auger Pressure, 12'
3	0120376	2	Nut-Hex, 5/16NC, PD	25	3182593	2	Hose-Right Spreadroll at Motor, 9'
4	0120214	2	Washer-Lock, 5/16, Spring, PD		3182586	2	Hose-Right Spreadroll at Motor, 10'
5	0446363	4	Washer-Flat, 5/16, PD		3182580	2	Hose-Right Spreadroll at Motor, 11'
6	3182168	2	Hose-Right Gate Open / Close, 9'		3182572	2	Hose-Right Spreadroll at Motor, 12'
	3182043	2	Hose-Right Gate Open / Close, 10'	26	6602339	AR	Clevis-Rod, Cyl
	3182143	2	Hose-Right Gate Open / Close, 11'	27	3181980	1	Hose-Right Hopper, Extend
	3182198	2	Hose-Right Gate Open / Close, 12'	28	0108686	2	Elbow-Pipe, 90, ST, 0.50NPT, PN
7	6602134	2	Adapter-Hyd, ST, 06MB-04MJ	29	6600324	AR	Hose-Air, Push On, 3/8
8	6603333	1	Cylinder-Hyd, 2" Bore x 3" Stroke	30	6600305	AR	Hose End-Air, Push On
9	6602338	AR	Cylinder-Air, 1.06x3, Dbl Acting	31	7050677	1	Harness-Rt Hopper, 9 Ft, (NS)
10	Q444884	AR	Tube-Nylon, Air, 1/4		7050678	1	Harness-Rt Hopper, 10 Ft, (NS)
11	3182594	1	Hose-Right Auger Return, 9'		7050679	1	Harness-Rt Hopper, 11 Ft, (NS)
	3182587	1	Hose-Right Auger Return, 10'		7050680	1	Harness-Rt Hopper, 12 Ft, (NS)
	3182581	1	Hose-Right Auger Return, 11'				
	3182573	1	Hose-Right Auger Return, 12'				AR - As Required
12	6602901	AR	Valve-Air, Sol, 4Way, 2Pos				(NS) = Not Shown
	7050421	1	Herschman Connector				
	6602906	1	Breather				
13	3182174	2	Hose-Right Hopper, Retract, 9'				
	3182036	2	Hose-Right Hopper, Retract, 10'				
	3182136	2	Hose-Right Hopper, Retract, 11'				
	3182054	2	Hose-Right Hopper, Retract, 12'				
14	6603831	AR	Adapter-Air, 90, 04Tube-02MPX				
15	0192042	AR	Nipple-Pipe, Sch 40, 1/8 x 1 1/2				
16	6603132	1	Cyl-Hyd, 2.5 B x 55 1/8 St, 2" Rod- 9'				
	6603133	1	Cyl-Hyd, 2.5 B x 61 1/4 St, 2" Rod-10'				
	6603134	1	Cyl-Hyd, 2.5 B x 67 3/8 St, 2" Rod-11'				
	6603135	1	Cyl-Hyd, 2.5 B x 73 1/2 St, 2" Rod-12'				
	7215229	1	Seal Kit, SAE #6 Port				
17	0103409	4	Pin-Cotter, 0.19 x 1.50, PD				
18	3140918	2	Pin-Cyl., Long, Hop, Extend, Var				
19	6604815	5	Adapter-Hyd, ST, 08MFS-10MB				
20	6604477	1	Motor-Hyd, LSHT, 12.0 CIR				
	7051151	1	Seal Kit				
21	6604557	1	Motor Hyd, LSHT, 12.0 Cir				
	7051151		Seal Kit for Motor				
22	6603567	1	E-Chain- 9 Ft Hopper				
	6603568	1	E-Chain-10 Ft Hopper				
	6603569	1	E-Chain-11 Ft Hopper				
	6603570	1	E-Chain-12 Ft Hopper				
	7050574	1	E-Chain Mount-Moving End				
	7050573	1	E-Chain Mount-Fixed End				
	7050575	1	Inner Side Plate				
	7050576	1	Outer Side Plate				
	7050577	1	CrossBar				
	7050578	1	Separator				
	7050579	1	Complete Link/Section				

FRONT HOPPER

# Hood Assemblies

FRONT HOPPER



FRONT

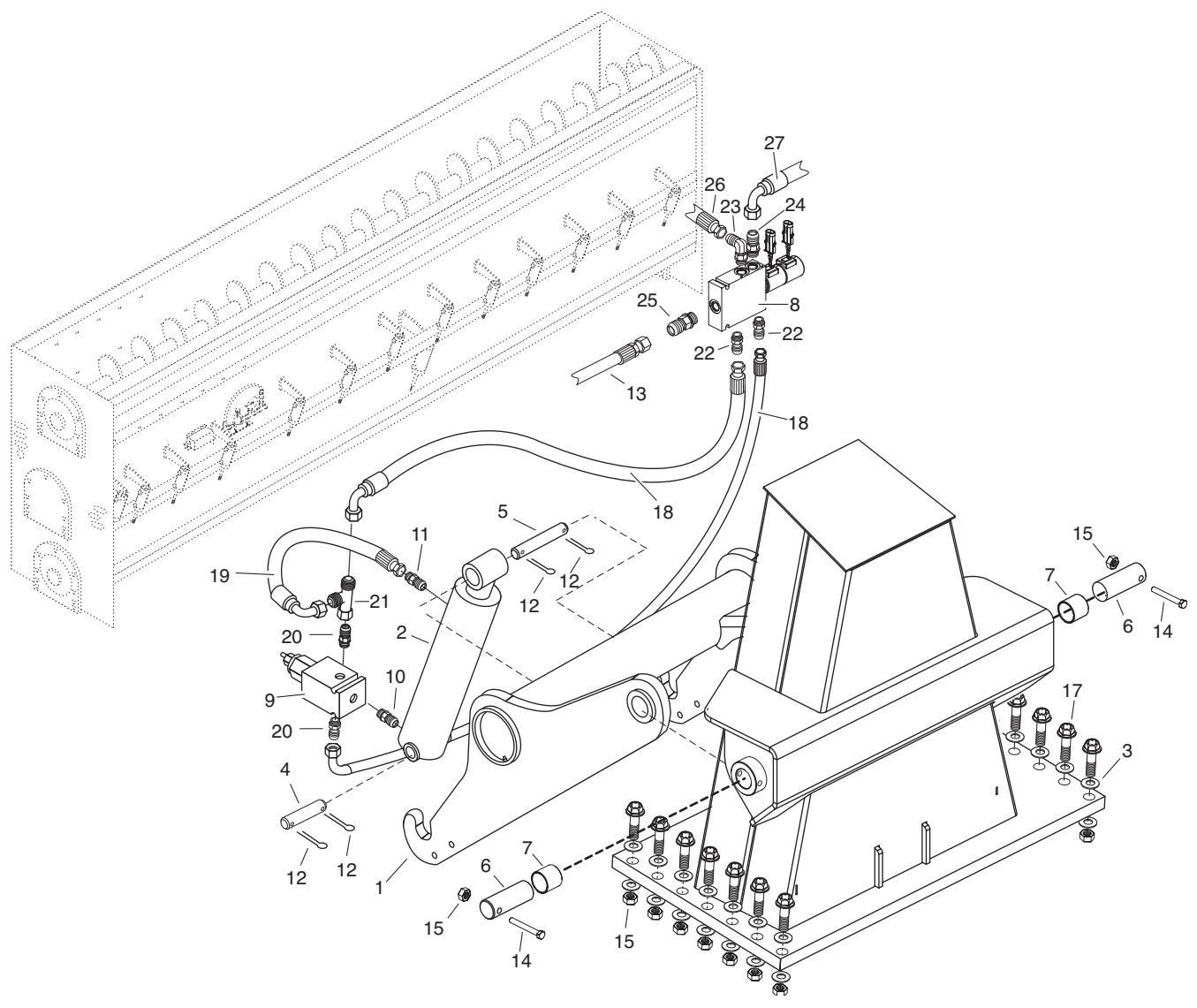
## Hood Assemblies

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3144360	1	Hood-Lower RH, 11/12, V/H, Fixed <i>(Includes Ref 2-16)</i>				
2	3143389	4	Catch-Hood Door Latch				
3	9411727	4	Nut-Hex, Lock, 0.50"NC, EA,PD				
4	0120390	12	Washer-Flat, 0.50A, W. PD				
5	3141613	4	Plate-Pivoting Latch, Hood Release				
6	3144083	2	Panel-Door, Hood, Side				
7	0180177	12	Capscrew-0.50"UNC x 1.50", Gr5, PD				
8	6001737	8	Hinge-Weld On, 3-3/16" Long				
9	3144375	1	Plate-Outside, RH Hood, 9/10				
10	3144374	1	Plate-Rear, RH Hood, 9/10				
11	3143831	4	Stiffener-RH, Top Hood				
12	3144370	1	Plate-Front, RH Hood, 9/10				
13	3143893	2	Panel-Door, Hood				
14	3144362	1	Plate-Inside, RH Hood, Fixed Ht				
15	3141718	2	Mount-LH Hood, Rear				
16	0120378	8	Nut-Hex, 0.50"NC				
17	3144361	1	Hood-Lower LH, 9/10, V/H, Fixed <i>(Includes Ref 2-8, 11, 13, 15, 16, 18-22 Does not include 28)</i>				
18	3144369	1	Plate-Inside, LH Hood, Fixed Ht				
19	3144371	1	Plate-Front, LH Hood, 9/10				
20	3143942	1	Stiffener-LH Hood, 11/12 FT. Hood				
21	3144372	1	Plate-Rear, LH Hood, 9/10				
22	3144373	1	Plate-Outside, LH Hood, 9/10				
23	3144357	4	Mount-Angle, Hood, Fixed Ht				
24	3103407	2	Bar-Light Bracket, 3 Piece Hood				
25	3143891	1	Bar-Mount, LH Hood, Rear				
26	3143892	1	Bar-Mount, RH Hood, Front				
27	0120384	4	Washer-Lock, 0.50", Spring, PD				
28	6704045	2	Sensor-Adj Prox, Ultrasonic				
29	0147117	8	Screw-Hex, Sock, 10NC x 2.0", PD				
30	0120631	8	Nut-Hex, #10NC, PD				
31	3143882	1	Lift Arm-Hopper				
32	6420260	3	Bearing-Sleeve, 1 x 1-1/4 x 2				
33	0223562	3	Screw-Hex, 1.0"NC x 4.0", Gr8, PD				
34	9416331	1	Nut-Hex, Lock, 1.0"NC, PD				
35	3143408	1	Clevis Weldment-Hood Adjustment				
36	3143414	1	Washer-Hood Adjustment Screw				
37	0220095	2	Nut-Hex, 1.25"NC, Gr5, PD				
38	3143413	1	Strap-Clevis Mount				
39	0180179	4	Screw-Hex, 0.50"NC x 1.75", Gr5, PD				
40	9411727	4	Nut-Hex, Lock, 0.50"NC, EA, PD				
41	6704046	2	Cable-5 Conductor, 10M, w/ Conn.				
42	3144076	1	Hood-Top, 2011 Chipper <i>(Includes Ref 43-46)</i>				
43	3144077	1	Wrapper-Hood, Top, 2011 Chipper				
44	3144078	2	Lug-Hood, Top, 2011 Chipper				
45	3143833	2	Hub-Top Hood, 2011 Chipper				
46	3143831	2	Stiffener-RH, Top Hood, 2011 Chipper				

FRONT HOPPER

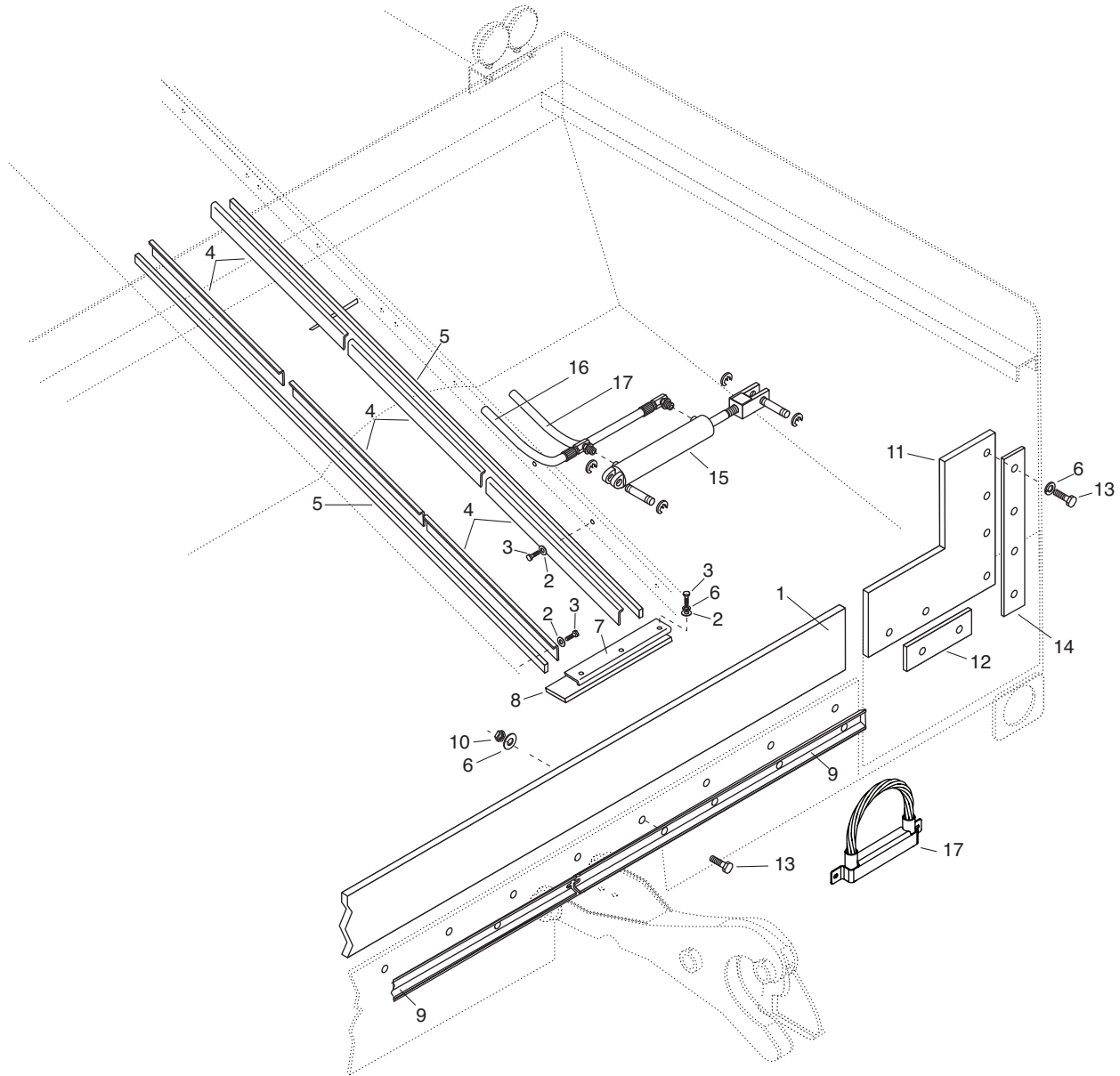
## Hopper Lift Mechanism

FRONT HOPPER



REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3143593	1	Lift Arm Weldment-Frt Hopper	18	3181991	2	Hose-Hopper Raise / Lower
2	6602660	1	Cylinder-Hyd., 4.0 x 8.0	19	3181992	1	Hose-Hopper R/L Retract to C/B Valve
3	9411417	28	Washer-Flat, 0.53" x 1.06", HD	20	6602133	2	Adapter-Hyd., ST, 06MB-06MJ
4	3144282	1	Pin-1.25 Dia x 7.125 Long	21	9410332	1	Tee-Hyd., 06MJ-06FJX-06MJ
5	3144281	1	Pin-1.25 Dia x 9.5 Long	22	6602133	2	Adapter-Hyd., ST, 08MB-06MJ
6	3143288	2	Pin-2.0 x 5.5	23	9410977	1	Elbow-Hyd., 90, 08MB-08MJ
7	6420077	2	Bushing-Brz., 2.0 x 2.25 x 2.0 LG	24	3182159	1	Adapter-08MB-08MJ, 0.07" Orifice
8	6604010	1	Valve-Sol., 3 Pos / 4 Way, LS, Check	25	6602363	1	Adapter-Hyd., ST, 04FJX-08MB
9	6604870	1	Valve-Counterbalance, 5GPM	26	3182244	1	Hose-Hopper Raise/Lower Return
10	6604864	1	Adapter-Hyd., ST, 06MB-08MP	27	3182262	1	Hose-Hopper Raise/Lower Pressure
11	6601491	1	Adapter-Hyd., ST, 06MJ-08MP				
12	0103411	4	Pin-Cotter, 0.19 x 2.00				
13	3182261	1	Hose-Hopper Raise/Lower LS				
14	6100339	2	Screw-Hex, 0.50NC x 4.0, GR5, PD				
15	9411727	16	Nut-Hex, Lock, 0.50NC, EA, PD				
16	0180181	4	Screw-Hex, 0.50NC x 2.0, GR5, PD				
17	0186646	14	Screw-Hex, 0.5"NC x 1.75", GR8, PD				

## Rear Hopper



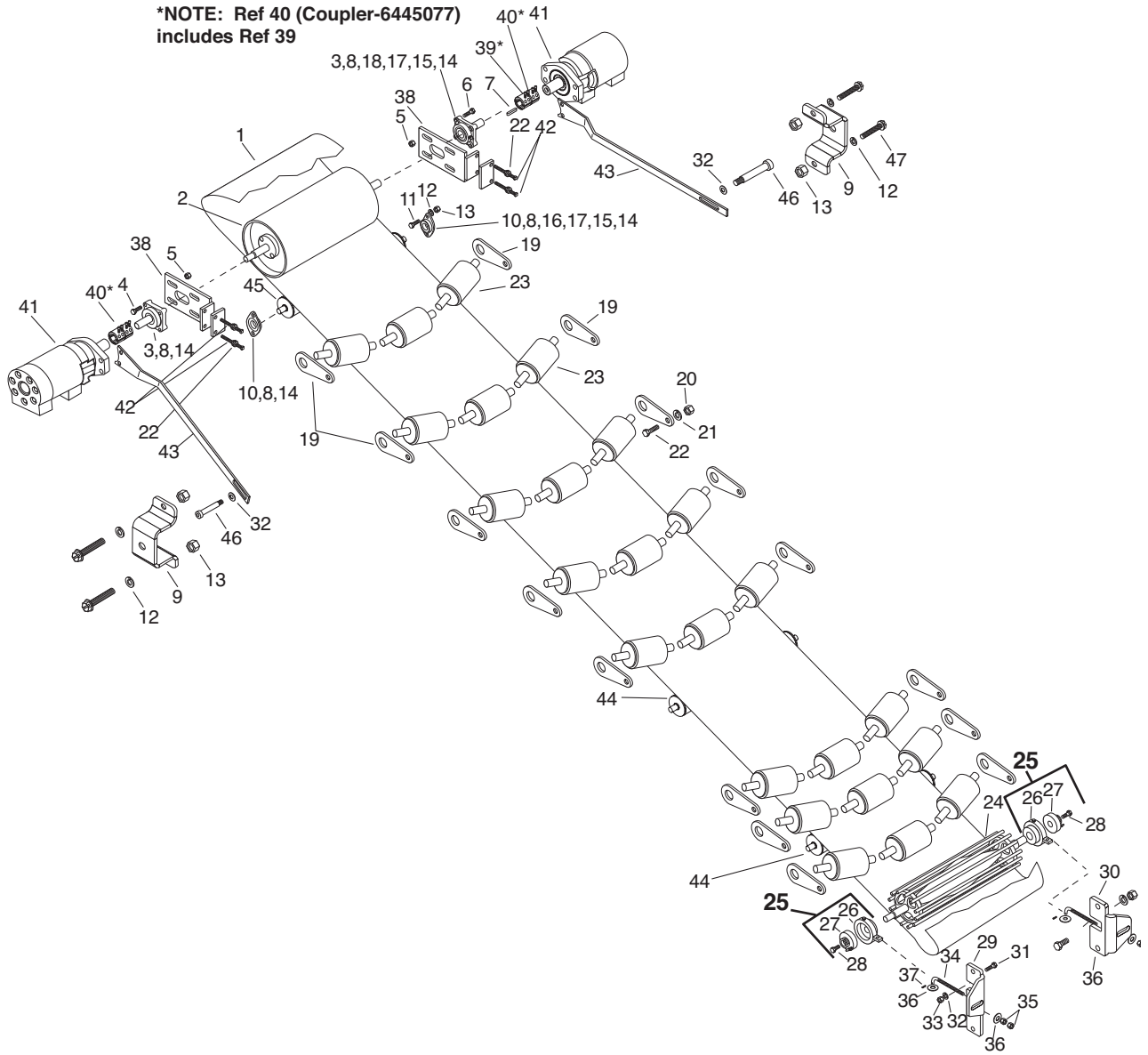
REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3130780	1	Rubber-Rear, 0.75" x 9" x 111"	12	3130505	2	Support-Chute Lining
2	0120388	42	Washer-Flat, 0.38, Wide	13	0122188	17	Screw-Hex, 0.38NC x 2.25, GR2, PD
3	0122145	42	Screw-Hex, 0.38NC x 1.25, GR2, PD	14	3130504	2	Support-Chute Lining
4	3130889	12	Retainer-Flashing, Side	15	6602876	2	Cylinder-Hyd, 2 x 14
5	3130891	4	Flashing-Conveyor, Rear Hopper		6603009	AR	Pin-Cylinder
6	0120382	63	Washer-Lock, 0.38, Spring, PD		6603010	AR	Pin-Hair Cotter
7	3130890	2	Retainer-Flashing, Rear, Conveyor		7420230	AR	Seal Kit
8	3130892	2	Flashing-Conveyor, End	16	3181964	2	Hose-Batwing Raise
9	3131099	1	Bracket-Rear Skirtboard		3181965	2	Hose-Batwing Lower
10	0120377	9	Nut-Hex, 0.38NC, PD	17	3131097	AR	Bracket-Wire Flashing Asm
11	3130760	1	Rubber-Side, Left				
	3130761	1	Rubber-Side, Right				

AR = As Required



# Conveyor Arrangement

**\*NOTE: Ref 40 (Coupler-6445077)  
includes Ref 39**



REAR HOPPER & CONVEYOR

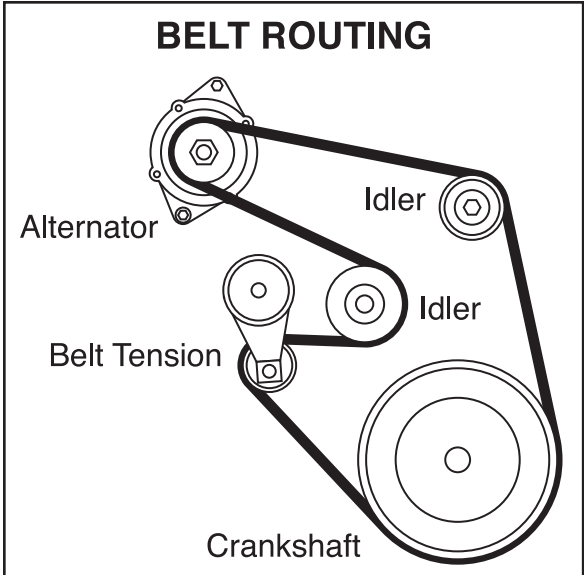
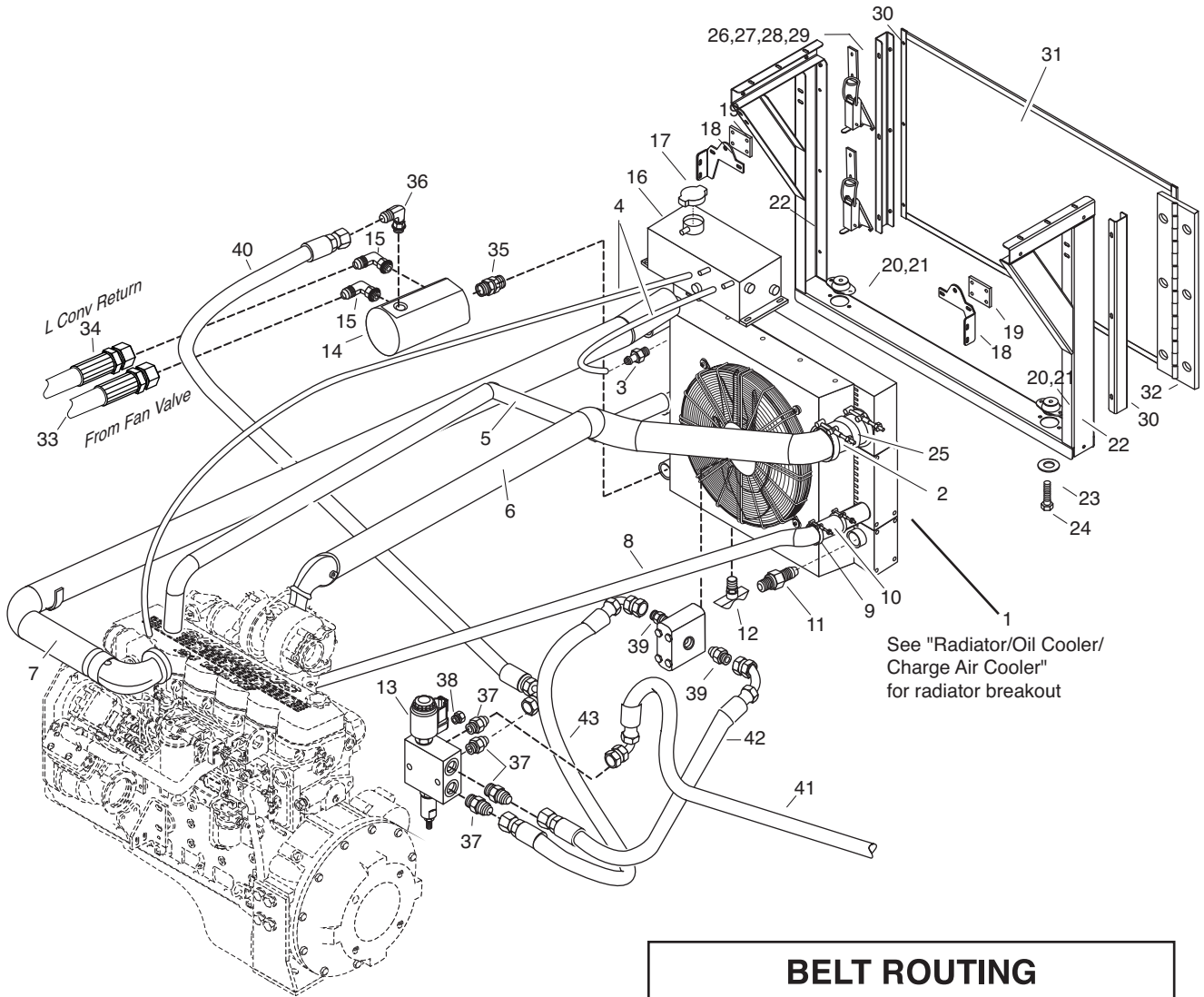
## Conveyor Arrangement

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3130817	2	Belt-Conv, 24", w/ Fastener				
	7050128	2	Hinge Pin-24" Belt Splice				
	7050127	2	Splice-24", Complete Kit				
2	3130814	2	Head Pulley Asm-Conv				
3	3140094	4	Flange Brg-Ball, 4 Bolt, 1.562				
4	0186646	8	Screw-Hex, 0.50NC x 1.75, GR8, PN				
5	9411727	8	Nut-Hex, Lock, 0.50NC, EA, PD				
6	0223513	8	Screw-Hex, 0.50NC x 2.25, GR5, PD				
7	6002017	2	Key-0.31 x 0.31CR x 1.00				
8	6420195	8	Adapter-Grease Fitting				
9	3121885	2	Plate-Torque Arm Cover				
10	6420086	4	Flange Brg-Ball, 2 Blt., 1.00				
11	6100277	24	Screw-Carr Blt., 0.31NC x 1, GR5, PD				
12	0120214	8	Washer-Lock, 0.31, Spring, PD				
13	0120376	8	Nut-Hex, 0.31NC, PD				
14	0109462	8	Elbow-Lube, 90, 0.12NPT				
15	0192086	4	Coupling-Pipe, 0.12NPT, PD				
16	0127960	4	Elbow-Pipe, 90, ST, 0.12NPT, PD				
17	0192042	2	Nipple-Pipe, Sch 40, 0.12 x 1.50, PD				
18	0142868	2	Nipple-Pipe, Sch 40, 0.12 x 0.75, PD				
19	3130883	96	Clip-Idler Mount				
20	0120233	64	Screw-Hex, 0.38NC x 1.00, GR2, PD				
21	0120382	85	Washer-Lock, 0.38, Spring, PD				
22	0120377	68	Nut-Hex, 0.38NC, PD				
23	6435519	48	Roller-Trough, 24" Conveyor				
24	3130829	2	Pulley Asm-Tail, Conveyor CS				
25	3130095	4	Bearing & Hsg Asm-Tail Pulley (Includes Ref 26, 27)				
26	3130055	4	Housing-RR Pull Brg				
27	3100096	4	Brg-Cartridge, SC-22, 1.38 Dia.				
28	6000550	4	Screw-Hex, 0.25-14 x 0.75, Tek 3, PD				
29	3103177	1	Alignment Bracket-LH				
30	3103178	1	Alignment Bracket-RH				
31	3100174	12	Screw-Rear Pulley				
32	0120384	12	Washer-Lock, 0.50, Spring, PD				
33	0120378	12	Nut-Hex, 0.50NC, PD				
34	3130083	4	Screw-Tail Pulley Adj.				
35	0124589	8	Nut-Hex, 0.62NC, PD				
36	0130999	4	Washer-Flat, 0.62A(0.69 x 1.75)PD				
37	0457008	4	Pin-Spring, 0.19 x 1.50, HV, PN				
38	3180945	2	Plate-Bearing, Adjustment				
39	*****	4	Capscrews (Included w/ Ref 40)				
40	6445077	2	Coupler-1.25				
41	6604561	2	Motor-Hyd, 18.9 Cir, LSHT				
	7051151		Seal Kit for Motor				
42	0191966	4	Screw-SqHd, 0.38NC x 3.00, Oval, PD				
43	3130818	2	Torque Arm-Conv Motor Mount				
44	6435479	4	Roller-Return, 24" Conveyor				
45	3130398	2	Roller Asm-Front Idler				
46	6001892	2	Bolt-Shoulder, Socket Head, 0.625" x 0.75"				
47	0180079	4	Screw-Hex, 0.31NC x 1.00, GR5, PD				

REAR HOPPER & CONVEYOR

# Radiator - Cooler - Motor Mounts

ENGINE



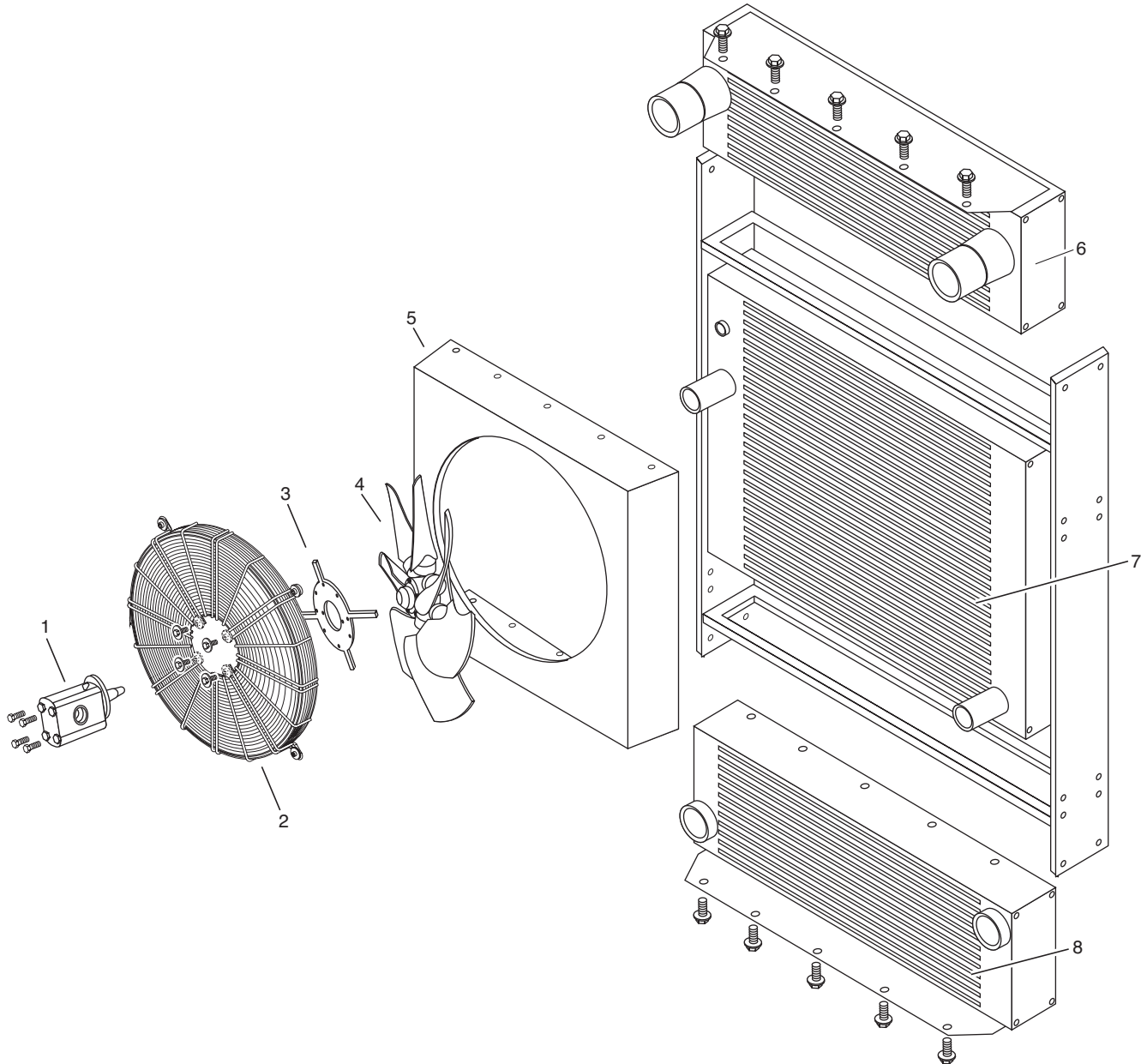
## Radiator - Cooler - Motor Mounts

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	6400661	1	Radiator/Oil Cooler/Charge Air Cooler, Tier 4	43	3182154	1	Hose Asm-08 x 36', 08FJX90-08FJX
2	7050348	8	Clamp-TBolt, Spring Type, 3"	44	3160975	1	Engine Comm Harness (NS)
3	6603377	1	Hose End-05-04MP, St, LPSP	45	7050527	1	Oil Filter (NS)
4	6603376	AR	Hose-5/16, Water	46	7050525	1	Fuel Filter (NS)
5	3111623	1	Tube-Radiator, Upper, Tier 4	47	7050526	1	PreFilter (NS)
6	3111621	1	Tube-Charge Air, RH, Tier 4	48	7050524	1	Serpentine Belt (NS)
7	3111657	1	Tube-Charge Air, LH, Tier 4	49	3160842	1	Engine Power Harness (NS)
8	3111666	1	Tube-Radiator, Lower, Tier 4	50	3103652	1	Plate-RH Side Shroud, Cooler (NS)
9	6001163	8	Clamp-TBolt, 2.66"				
10	3111441	4	Hose-Rad. 2.25 x 5				AR = As Required
11	9400207	1	Adapter-Hyd, ST, 16MB-16MJ				(NS) = Not Shown
12	6600162	1	Cock-Drain, 0.25 In Spanco Brs				
13	3182086	1	Manifold-Hydraulic, Fan Drive, 15 GPM				
	7050913	1	Coil Only				
	7050912	1	Cartridge and Coil				
	7050925	1	Relief Valve				
	7420293	1	O-Ring for Cartridge and Coil & Relief Vlv				
14	3182637	1	Manifold-Return Hoses				
15	9410977	2	Elbow-Hyd, 90, 08MB-08MJ				
16	6400615	1	Surge Tank Rad-QSL engine				
17	7050990	1	Cap-Radiator				
18	3103648	1	Bracket-Top, Cooler Mount, LH				
	3103649	1	Bracket-Top, Cooler Mount, RH				
19	3103015	2	Rubber-Radiator Mount				
20	6000999	2	Mount-Cushion, Front, Perkins				
21	0120233	12	Screw-Hex, 0.38NC x 1.00, GR2, PD				
22	3103697	1	Frame Asm-Cooler Mount, Front				
	3103696	1	Frame Asm-Cooler Mount, Rear				
23	0120383	2	Washer-Lock, 0.44, Spring, PD				
24	0122333	2	Screw-Hex, 0.44 x 3.00NPT, PD				
25	7050346	4	Hose Hump-3" ID, High Temp				
26	0121841	8	Washer-Lock, No. 8, Spring, PD				
27	0120622	8	Nut-Hex, Mach, 8NC, PD				
28	6002165	2	Draw Clamp				
29	0436695	8	Screw-Mach, PNSL, 8NC x 0.50, PD				
30	3103729	2	Channel-Cover Mount				
31	3103609	1	Cover Asm-Cooler				
32	3103399	1	Hinge-Piano, 2" W x 29" L				
33	3182634	1	Hose-Left Bulkhead to Cooler				
34	3182152	1	Hose-Fan Valve to Cooler				
35	6604826	1	Adapter-Hyd, Adj, ST, 16MB-16MB				
36	9410977	1	Elbow-Hyd, 90, 08MB-08MJ				
37	9410203	4	Adapter-Hyd, ST, 08MB-08MJ				
38	9410356	1	Plug-Hydraulic, 4MB				
39	6600903	2	Adapter-Hyd, ST, 08MJ-10MB				
40	3182511	1	Hose Asm-08 x 33', 08FJX-08FJX90				
41	3182510	1	Hose Asm-08 x 100', 08FJX-08FJX90				
42	3182512	1	Hose Asm-08 x 45.5', 08FJX90-08FJX				

# Radiator/Oil Cooler/ Charge Air Cooler

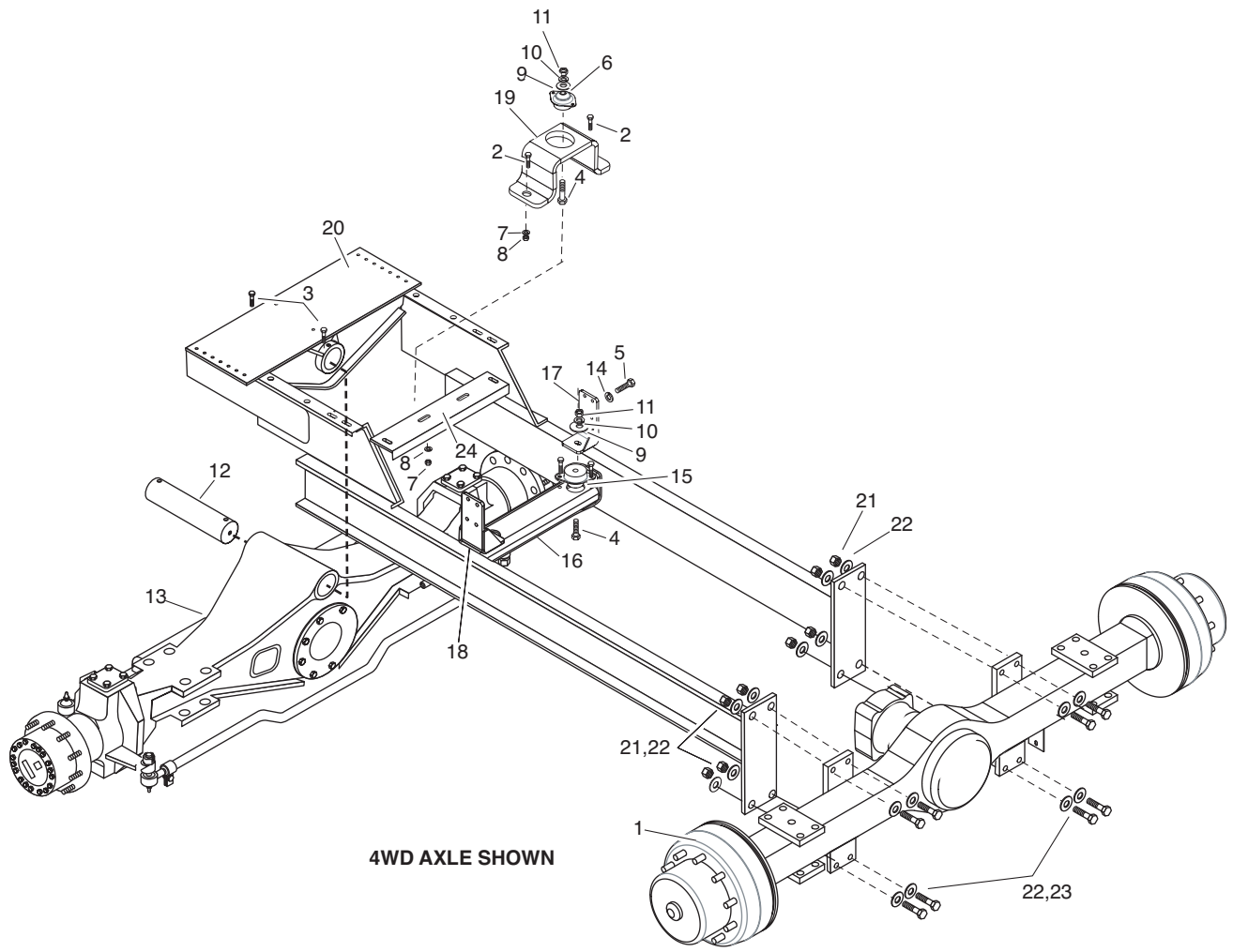
6400661

ENGINE



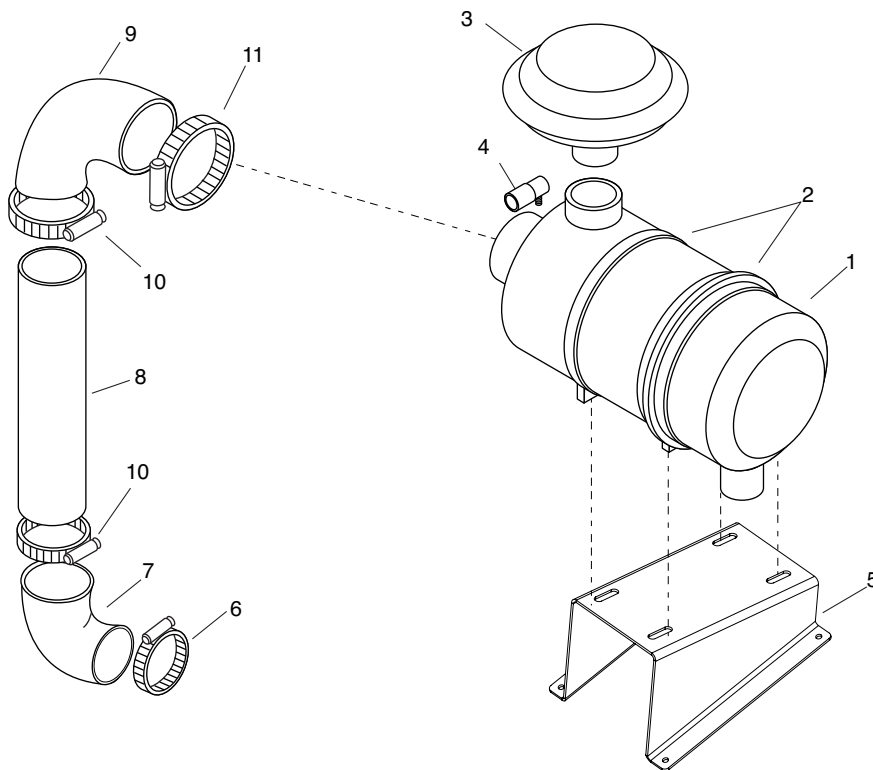
REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	7050916	1	Motor-Hyd, 19CC, Fan Drive	7	7051285	1	Heat Exchanger-Water
2	7050937	1	Grill-Cooler Fan	8	7051284	1	Heat Exchanger-Oil
3	7051298	1	Bracket-Motor, Cooler				
4	7050938	1	Fan-Cooler				
5	-	1	Housing-Fan, Hydac # 2589508				
6	7051286	1	Heat Exchanger-Air				

## Axle Connections



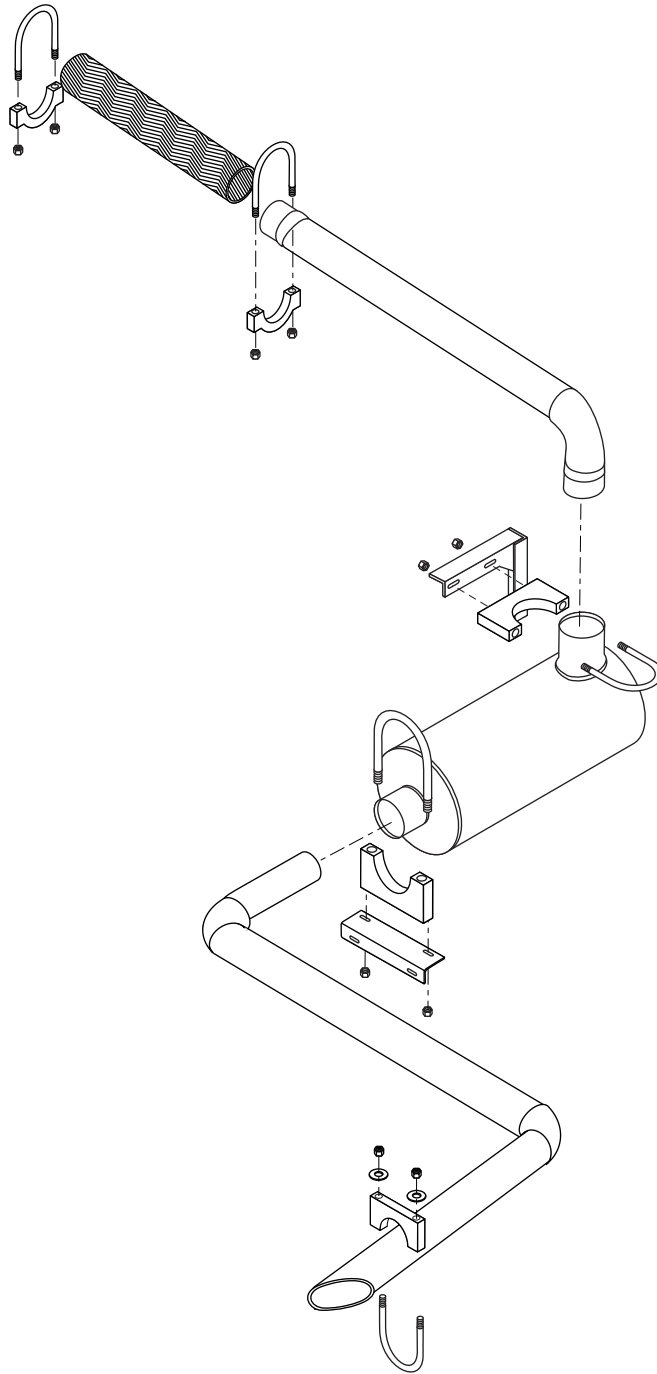
REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3111573	1	Axle-Rear Drive, 80" Track (4WD)	15	6001049	2	Mount-Cushion, Rear Eng.
2	0120233	12	Screw-Hex, 0.38NC x 1.00, GR2, PD	16	3110993	1	Channel-Rear Eng. Mt. Chips
3	6100086	2	Screw-SqHd, 0.50NC x 1.0, H/DG, LK	17	3111462	1	Mount Asm-RT Rear, Cummins
4	0428715	4	Screw-Hex, 0.62 x 4.00NPT, PD	18	3111464	1	Mount Asm-LT Rear, Cummins
5	6001081	16	Bolt-Metric, M12-1.75 x 4.00	19	3111459	1	Mount Asm-Front, Cummins
6	6000916	1	Mount-Cushion, Front Eng.	20	3122663	1	Frame-Lower
7	0120377	12	Nut-Hex, 0.38NC, PD	21	9414000	8	Nut-Hex, Lock, 0.75NC, GR, PD
8	0120382	12	Washer-Lock, 0.38, Spring, PD	22	9437244	16	Washer-Flat, 0.75A(0.81 x 2.00), HN
9	9422850	6	Washer-Flat, 0.62A(0.65 x 1.31)PN	23	6100267	8	Screw-Hex, 0.75NC x 3.00, GR8, PN
10	0121574	4	Washer-Lock, 0.62, Spring, PD	24	3111572	1	Channel-Front Engine Mount
11	0124589	4	Nut-Hex, 0.62NC, PD				
12	3102336	1	Shaft-Frt Axle/Pyramid				
*	3102105	AN	Washer-Thrust, 3.016"ID x 5"OD				AN - As Needed
13	3111604	1	Axle-Front, Drive, 81.25" Track				
14	6001082	16	Washer-Lock, Metric, Chips				

## Air Intake Assembly - Tier III - Thru S/N K7231



REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	6400589	1	Filter-Air, Intake, 2 Element, 7"	9	6400593	1	Elbow-Rubber, 90, 7" to 5"
	7050504	1	Element-Primary	10	6001763	2	Clamp-T-Bolt 5.25" to 5.56"
	7050505	1	Element-Safety	11	6001764	1	Clamp-T-Bolt 7.25" to 7.75"
	7050506	1	Dust Ejection Valve				
2	6400590	2	Band-Mounting				
3	6400591	1	Hood-Inlet, 7.00 In				
4	6400592	1	Indicator-Air Restriction				
5	3111550	1	Mount-Air Intake				
6	6001480	1	Clamp-T-Bolt 4.53" to 4.83"				
7	6400567	1	Elbow-Rubber, 90, 5" to 4"				
8	3111580	1	Tube-Air Intake, 5"				

### Exhaust Assembly - Tier III - Thru S/N K7231

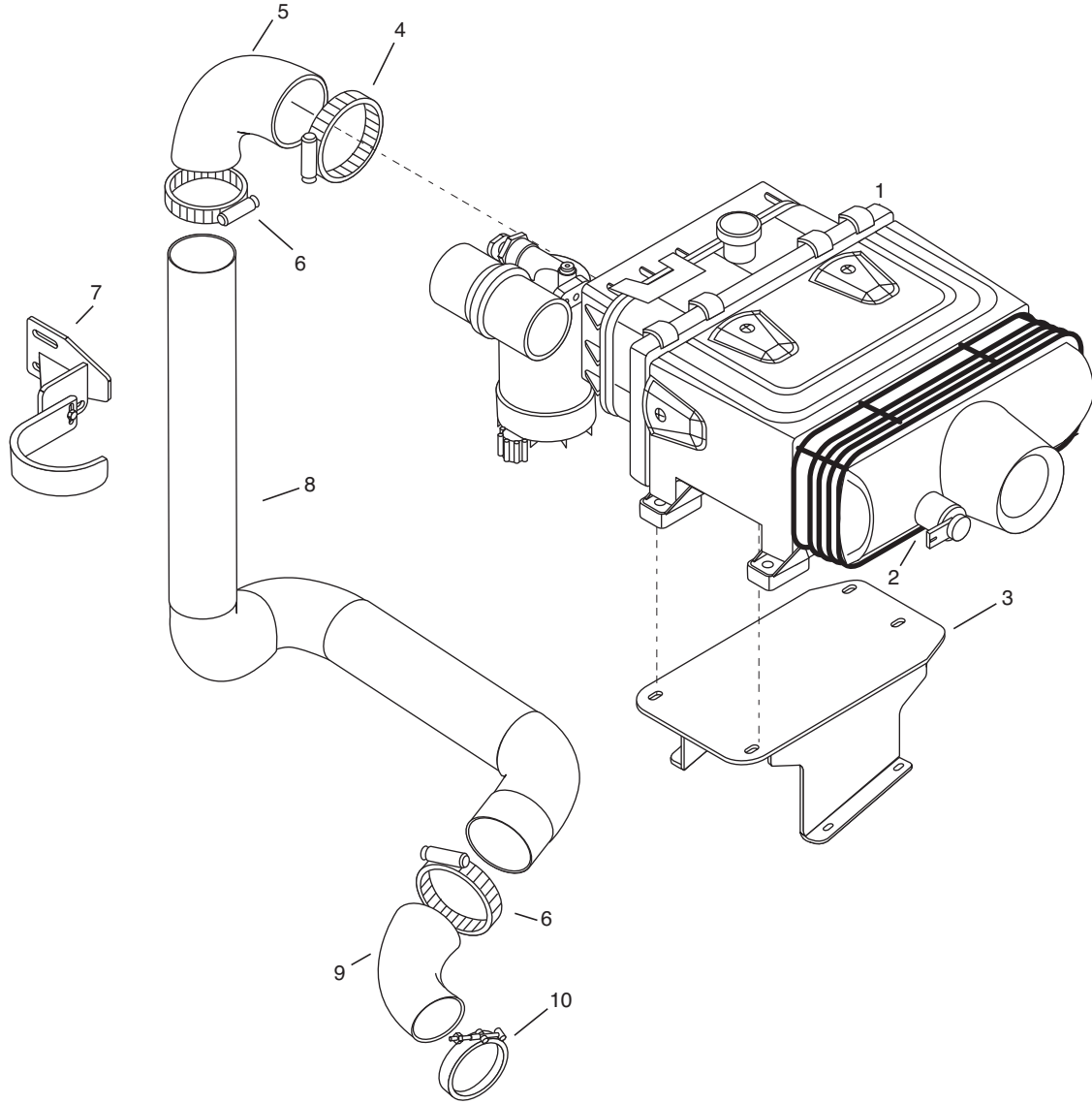


ENGINE

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3103464	1	Mount-Muffler Inlet	7	3111579	1	Exhaust Tube-Muffler Out
2	6000937	2	Clamp-Tube, Exh, 3.5" ID, TBG	8	3121751	1	Mount-Muffler Outlet
3	3103188	1	Tubing-Exh, Flex, SS, 3.5" x 12"	9	0127993	10	Nut-Hex, Lock, 0.38NC, EA, PD
4	6000938	3	Clamp-Tube Exhaust 4" ID, TBG	10	0274517	10	Washer-Flat, 0.375, B, PD
5	3103187	1	Exhaust Tube-To Muffler				
6	6400637	1	Muffler-4" IN/OUT				



### Air Intake Assembly - Tier IV - S/N K7232 thru K7356

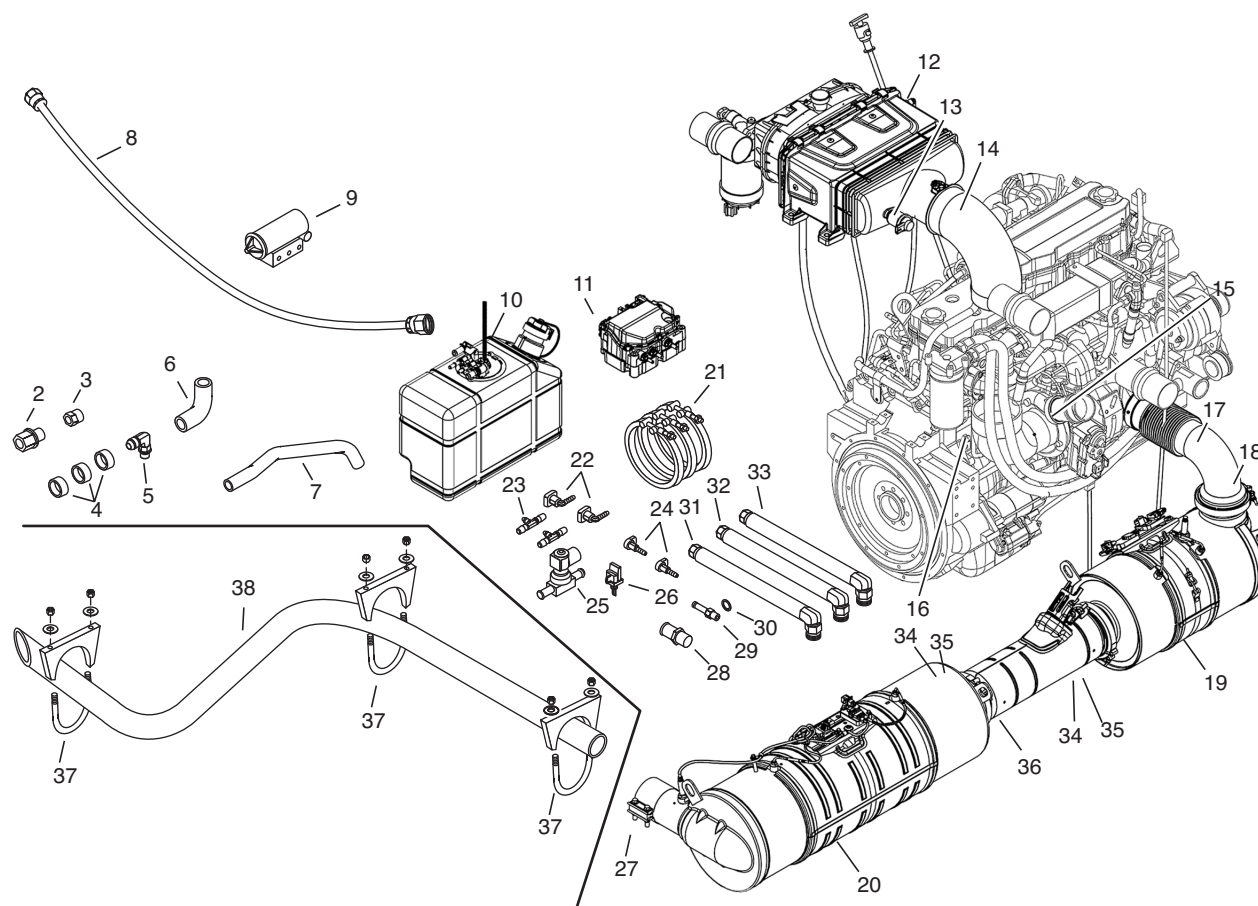


REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	7051362	1	Cleaner-Air, DF600-Series	9	6400567	1	Elbow-Rubber,90,5" to 4"
	7051031	1	Filter-Primary, Air, Tier 4	10	6001480	1	Clamp-T-Bolt 4.53" to 4.83"
	7051032	1	Filter-Secondary, Air, Tier 4				
	7051219	1	Dust Ejection Valve				
2	7051350	1	Indicator-Air Restriction				
3	3111648	1	Mount-Air Intake				
4	6001764	1	Clamp-T-Bolt 7.25" to 7.75"				
5	6400593	1	Elbow-Rubber, 90, 7" to 5"				
6	6001763	2	Clamp-T-Bolt 5.25" to 5.56"				
7	3111670	1	Support-Intake Tube				
8	3111624	1	Tube-Air Intake, 5"				

## Tier IV Aftertreatment - S/N K7232 thru K7356

6400652

1

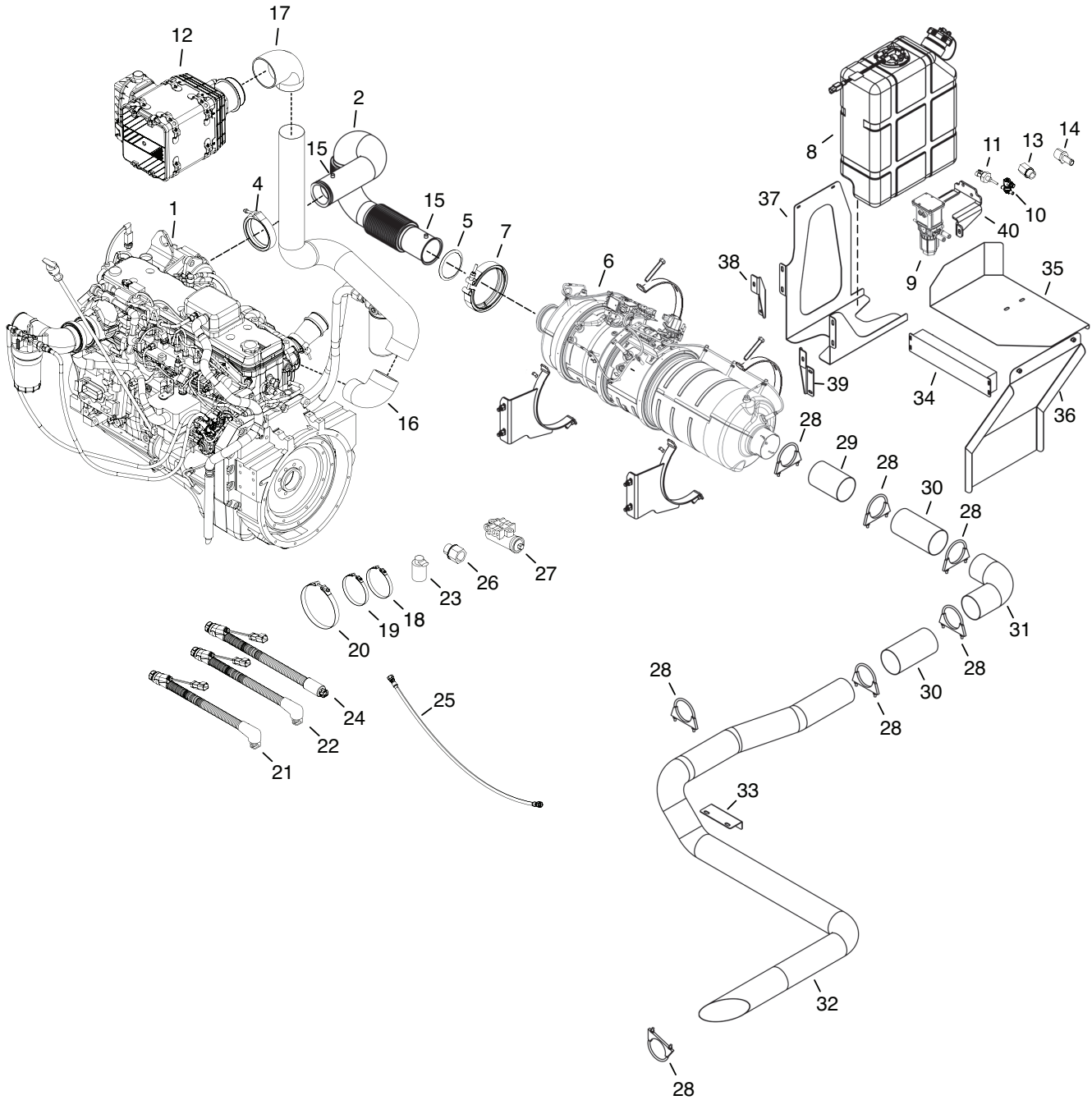


ENGINE

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	6400652	1	Engine Asm-Cummins, QSB-260, Tier 4 <i>(Includes Ref 1-36)</i>	24	7051338	2	Ftg, ST, 3/8" SAE J2044
2	7051331	1	Ftg, Str, M27-ORR-X-12FNPT	25	7051336	1	Valve-Coolant Control
3	7051344	1	Connector-Female	26	7051356	1	Sensor-Fluid Level, Casco
4	7051342	3	Clamp-Spring Hose	27	7051364	1	Clamp-Exhaust, 4.0", Easyseal
5	7051348	1	Coupling-Hose-Elbow	28	7051341	1	Coupling-Plain Hose
6	7051346	1	Hose-Elbow	29	7051347	1	Coupling-Plain Hose
7	7051345	1	Tube-Compressor Air Inlet	30	7051343	1	Washer-Sealing
8	7051325	1	Hose Asm-08 x 42, 08FJ-08FJ	31	7051328	1	Hose-Def, Return, 12V, 1.0M
9	7051363	1	Governor, D-2, Bendix, Valve	32	7051327	1	Hose-Def, Suction, 12V, 1.0M
10	7051337	1	Tank-Def Reservoir, 5 Gal, Blk	33	7051329	1	Hose-Def, Pressure, 12V, 2.5M
11	7051360	1	Def Supply Module, 12V	34	7051354	2	Gasket-5.0", Marmon
12	7051362	1	Cleaner, Air, DF600-Series	35	7051353	2	Clamp-V Band, 5.0", Marmon
13	7051350	1	Restriction Indicator	36	7051359	1	Drt, Tier IV, A-Treatment
14	7051349	1	Elbow-Rubber, 5.0"	37	6000938	3	Clamp-Tube, Exhaust, 4.0" ID, Tbg
15	7051340	1	Clamp-V Band, Exhaust Outlet	38	3111676	1	Exhaust Tube-Thru Frame
16	7051351	1	Elbow-Reducing	39	3102942	1	Box Asm-Wood, Filter Kit
17	7051335	1	Tube-Exhaust, Flex, 5 x 4, Flare/Marmon	40	7051213	1	Belt-Alt, QSF260, Tier IV (No Fan)
18	7051355	1	Clamp-V Band, 5.0", Std Marmon	41	7051214	1	Filter-Oil, QSB Tier IV
19	7051358	1	Doc, Tier IV, A-Treatment	42	7051215	1	Pre-Filter-Fuel, Tier IV
20	7051361	1	Scr, Tier IV, A-Treatment	43	7051216	1	Filter-Fuel, Primary, Tier IV
21	7051332	3	Clamp, T-Bolt, 5.28-5.59	44	7051217	1	Filter-Primary, Fleetguard Air
22	7051339	2	Ftg-90, 3/8" SAE J2044	45	7051218	1	Filter-Safety, Fleetguard Air
23	7051357	2	Hose-Barb, Tee, 08-08-06				

# Tier V Aftertreatment - S/N K7357 & Up

ENGINE



### Tier V Aftertreatment - S/N K7357 & Up

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	6400735	1	Engine-Base, B6.7, Stage 5				
2	7051430	1	Tube-Exhaust, Transfer, Downpipe				
3	7051431	1	Blanket-Exhaust Tube (NS)				
4	7051340	1	Clamp-V Band, Exhaust Outlet				
5	7051432	1	Gasket-4.0", Standart Marmon				
6	7051519	1	Device-Aftertreatment				
7	7051422	1	Clamp-V Band, 4.0", Standard Marmon				
8	7051426	1	DEF Tank-Black, 10 Gallon Portrait				
9	7051428	1	Supply Module-12V/24V				
10	7051336	1	Valve-Coolant Control				
11	7051423	1	Switch-Sensor, Coolant Level				
12	7051433	1	Air Cleaner-6.0"ID, Direct Flow w/ Pre Cleaner				
13	7051413	1	Fitting-STR, M18 ORR x 06 FNPT				
14	7051414	1	Fitting-STR, 06 Bead x 06 NPT				
15	7051418	2	Plug-Pipe, 02NPT				
16	7051421	1	Elbow-Reducer, 90°, 5.0" x 4.0", Rubber				
17	7051420	1	Elbow-Reducer, 90°, 6.0" x 5.0"				
18	7051415	1	Clamp-T Bolt, 4.53-4.84				
19	7051416	2	Clamp-T Bolt, 5.50-5.81				
20	7051417	1	Clamp-T Bolt, 6.50-6.81				
21	7051425	1	Hose-3/8" 90 DEG X1.0M 3/8" Straight, DEF, Suction, 12V				
22	7051424	1	Hose-5/16" 90 DEG X2.5M 5/16" Straight, DEF, Suction, 12V				
23	7051350	1	Restriction Indicator				
24	7051454	1	Hose-1/4" Straight x 5/16" Straight x 2.0M DEF Pressure, 12V				
25	7051325	1	Hose-0.5" OD x -8 JIC Swivel, 42" L				
26	7051331	1	Fitting-STR, M27 ORR x -12 FNPT				
27	7051336	1	Govenor-D2 Bendix, Unloader Valve				
28	6000938	7	Clamp-Tube Exhaust, 4.0" ID, TBG				
29	3111754	1	Exhaust Tube-Short, At Outlet				
30	3111755	2	Flex-Tube, CS, 4.0" x 8.375", Exhaust				
31	3111756	1	Exhaust Tube-Middle, Elbow				
32	3111757	1	Exhaust Tube-Out, Stage V				
33	3121751	1	Lower Muffler Mount-Outlet				
34	6705112	1	Aftertreatment Module-Stage V				
35	3104797	1	Cover-Power Seat Motor				
36	3104299	1	Plate-Rear Fender, 14 Ga				
37	3111706	1	Shelf-DEF Tank Bracket, Stage V				
38	3122885	1	Plate-RH Bracket, DEF Tank				
39	3122886	1	Plate-LH Bracket, DEF Tank				
40	3122884	1	Bracket-Supply Module, Bolt On				
41	7051435	1	Decal: Information, QSB 6.7, 7-TAAE (NS)				

(NS) = Not Shown

ENGINE

## Service Bulletin for Diesel Exhaust Fluid (DEF), Tier V



# Service Bulletin

Service Bulletin Number: 4021566

Released Date: 27-aug-2012

Diesel Exhaust Fluid (DEF) Specifications for Cummins® Selective Catalytic Reduction (SCR) Systems

## Diesel Exhaust Fluid (DEF) Specifications for Cummins® Selective Catalytic Reduction (SCR) Systems

This document provides specifications, usage, and handling requirements of Diesel Exhaust Fluid (DEF). Other names for DEF are listed below.

- UreaAqueous
- Aqueous Urea Solution (AUS 32)
- AdBlue™
- NOx Reduction Agent
- Catalyst Solution
- Stabeguard™ 32

The following topics are included in this document:

1. DEF Characteristics and Specifications
2. Handling, Storage, and Shelf Life of DEF
3. DEF Cleanliness Practices
4. Contamination and Incorrect Fluid
5. Testing
6. Disposal and Cleaning of DEF
7. First Aid

DEF used on Cummins® engines **must** meet the requirements as outlined in the specifications section of this document.

For further information, reference the DEF manufacturer's Material Safety Data Sheet.

**Note** : Cummins Inc. is **not** responsible for failures or damage resulting from what Cummins Inc. determines to be abuse or neglect, including but **not** limited to: operation without correctly specified DEF, lack of maintenance of the aftertreatment system, improper storage or shutdown practices, and unauthorized modifications of the engine and aftertreatment system. Cummins Inc. is also **not** responsible for failures caused by incorrect DEF or by water, dirt, or other contaminants in the DEF.

### 1. DEF Characteristics and Specifications

#### ⚠ WARNING ⚠

Diesel exhaust fluid (DEF) contains urea. Do not get the substance in your eyes. In case of contact, immediately flush eyes with large amounts of water for a minimum of 15 minutes. Do not swallow internally. In the event the diesel exhaust fluid is ingested, contact a physician immediately.

Reference the Materials Safety Data Sheet (MSDS) for additional information.

**⚠ CAUTION ⚠**

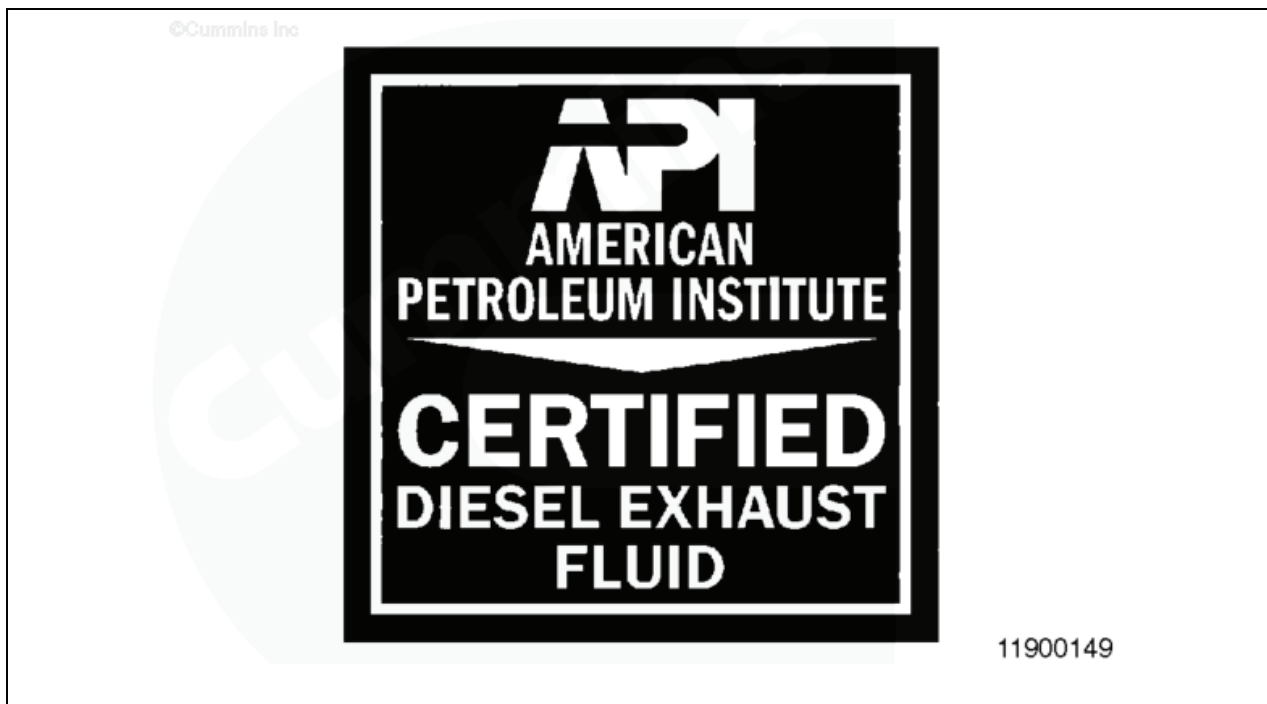
**Never attempt to create DEF by mixing agricultural grade urea with water. Agricultural grade urea does not meet the necessary specifications required and the aftertreatment system may be damaged.**

DEF has the following characteristics:

- Nontoxic and nonpolluting
- Nonflammable
- Stable and colorless
- Odor of slight ammonia
- Composed of urea and water
- Biodegradable

The urea content of DEF solution **must** be 32.5 percent  $\pm$  0.7 percent by weight. It **must** meet the International Standard ISO 22241-1 for diesel engines. There is no acceptable substitute.

For engines using SCR operating in the United States and Canada, DEF certified by the American Petroleum Institute (API) is recommended for use. A symbol on the container or dispensing system will indicate certification. See image below.



**Never** add water, or any other unauthorized fluid, to the DEF tank. The Aftertreatment system may be damaged and the DEF solution quality will be compromised.

**⚠ CAUTION ⚠**

**Do not add any chemicals/additives to the diesel exhaust fluid in an effort to prevent freezing. If chemicals/additives are added to the diesel exhaust fluid, the aftertreatment system may be damaged.**

DEF freezes at approximately  $-11^{\circ}\text{C}$  [  $12^{\circ}\text{F}$  ]. The DEF system is designed to accommodate these temperatures and does **not** require any intervention by the owner or operator.

## 2. Handling, Storage, and Shelf Life of DEF

---

For detailed information on handling, transportation, and storage of DEF, reference ISO 22241-3.

### Handling:

DEF is **not** hazardous but short-term exposure can cause acute irritation. Proper personal protective equipment should be utilized when handling DEF. For more information, refer to the First Aid section of this document.

Select materials may become corroded if contact with DEF occurs for an extended period of time. See the list of materials below.

- Carbon steel, zinc coated carbon steel, and mild iron
- Nonferrous metals and alloys: copper, copper alloys, zinc, and lead
- Solder containing lead, silver, zinc, or copper
- Aluminum alloys
- Magnesium and magnesium alloys
- Plastics or metals coated with nickel

If material contact with DEF occurs, clean the surface immediately. Reference the Disposal, Cleaning and Contamination/ Incorrect Fluid of DEF section of this document for additional information.

### Storage:

**Only** approved containers should be utilized to transport and store DEF. Containers made of polyethylene, polypropylene and stainless steel (Grade 316) are recommended.

Some DEF containers include a paper seal under the cap. The seal will degrade over time and will contribute to DEF contamination. These containers **must** be identified and inspected regularly once opened to prevent contamination.

### Shelf Life:

Many factors effect DEF shelf life. Temperature and duration are major contributors. **Always** check the concentration of DEF or replace DEF with new if DEF quality or expiration are questionable.

DEF has an expected shelf life of 18 months minimum when stored under the following conditions.

- Storage temperature between  $-5^{\circ}\text{C}$  to  $25^{\circ}\text{C}$  [  $23^{\circ}\text{F}$  to  $77^{\circ}\text{F}$  ]
- Sealed containers
- Avoiding direct sunlight

Shelf life is reduced by 6 months for each  $5^{\circ}\text{C}$  [  $9^{\circ}\text{F}$  ] increment above recommended temperatures. For example,  $30^{\circ}\text{C}$  [  $86^{\circ}\text{F}$  ] = 12 month shelf life,  $35^{\circ}\text{C}$  [  $95^{\circ}\text{F}$  ] = 6 month shelf life, etc.

Long term storage in a vehicle (in excess of 6 months) is **not** recommended. If long term storage is necessary, periodic testing of the DEF is recommended to make sure the concentration does **not** fall out of specification. See the Testing section of this document.

### 3. DEF Cleanliness Practices

---

Materials that come into contact with DEF **must** be free from any contamination, oil, fuel, dust, detergents, and any other chemicals.

Containers, funnels, and other equipment that will handle or store DEF should be cleaned before use. Wash thoroughly and rinse with distilled water. If distilled water is unavailable, rinse with tap water then rinse with DEF.

Follow these recommended practices to avoid contaminating DEF during routine maintenance tasks.

- Clean the DEF tank prior to opening the DEF tank for filling.
- Clean the dispensing nozzle prior to filling the DEF tank.
- Ensure the dispensing nozzle is kept in the DEF tank during filling to minimize drops and mishandling.
- Ensure proper filtration is used for DEF tank venting to atmosphere.
- Close DEF ports during operation or repair.
- Clean out dust and debris before using a coupler/insert connection.
- Ensure a proper DEF storage container is being utilized and inspected as necessary. Refer to Handling, Storage and Transporting of DEF section of this document.
- Conduct periodic inspections and eliminate areas where DEF has crystallized.

### 4. Contamination and Incorrect Fluid

---

**Never** add water, or any other unauthorized fluid, to the DEF tank. The Aftertreatment system may be damaged and the DEF solution quality will be compromised. This may effect DEF in the following ways.

- Change the DEF concentration levels
- Introduce contaminants
- Change DEF chemical properties
- Alter the freeze point of DEF
- Alter characteristics of the DEF solution

If an unauthorized fluid is added to the DEF tank, contact a local Cummins® Authorized Repair location to determine the appropriate repair direction.

If water has been added to the DEF tank perform the following steps.

- Drain the DEF tank
- Flush with distilled water
- Refill the DEF tank with new or quality DEF
- Check the DEF concentration

### 5. Testing

---

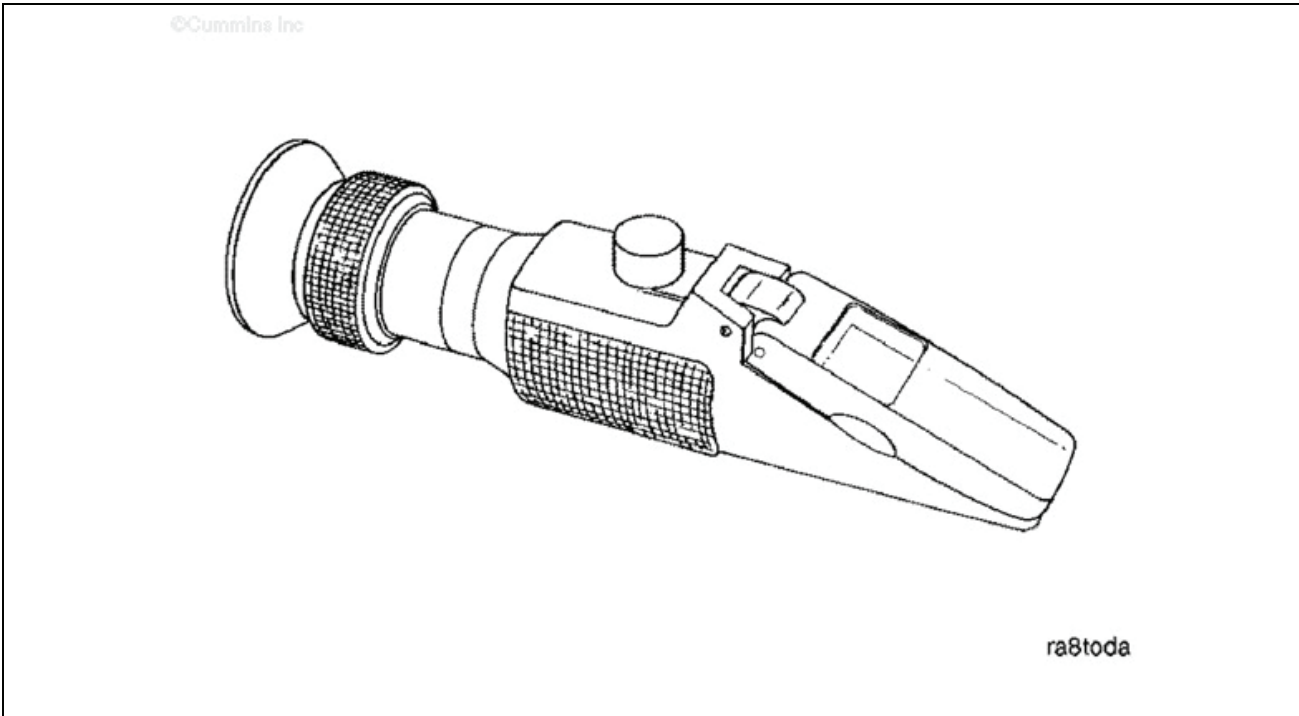
The correct concentration of DEF is critical to engine and aftertreatment system health and performance.

To test the concentration of DEF, use Cummins® DEF refractometer, Part Number 4919554. Follow the instructions provided with the service tool.

For detailed instructions on testing DEF, reference ISO 22241-2.



**Note :** When using the Cummins® DEF refractometer service tool, the acceptable DEF measurement specification is 32.5 +/- 0.7 percent. This specification takes into consideration the refractometer tool tolerances, variability, and calibration when measuring DEF concentration.



## 6. Disposal and Cleaning of DEF

If a small amount of DEF is spilled, rinse and clean immediately with water. Spilled DEF, if left to dry or wiped away with a cloth, will leave a white residue. Failure to clean spilled DEF from a surface may result in an incorrectly diagnosed leak of the DEF dosing system.

If a large amount of DEF is spilled, perform one of the following.

- Transfer it into a suitable container. Label the container correctly.
- Cover it using an absorbent material.

Dispose of DEF according to local environmental regulations. Do **not** empty into the drainage system. Do **not** empty/release into surface water.

## 7. First Aid

Follow these recommended practices when working with DEF. For additional information regarding the proper handling of DEF, refer to the manufacturer's Material Safety Data Sheet.

DEF is **not** hazardous but short-term exposure can cause acute irritation.

- Avoid breathing vapor or mist.
- Protect eyes. In case of contact with eyes, flush with water for a minimum of 15 minutes.
- Protect skin. In case of contact with skin, wash with soap and water.
- Do **not** ingest. If ingested, contact a physician immediately.

## Document History

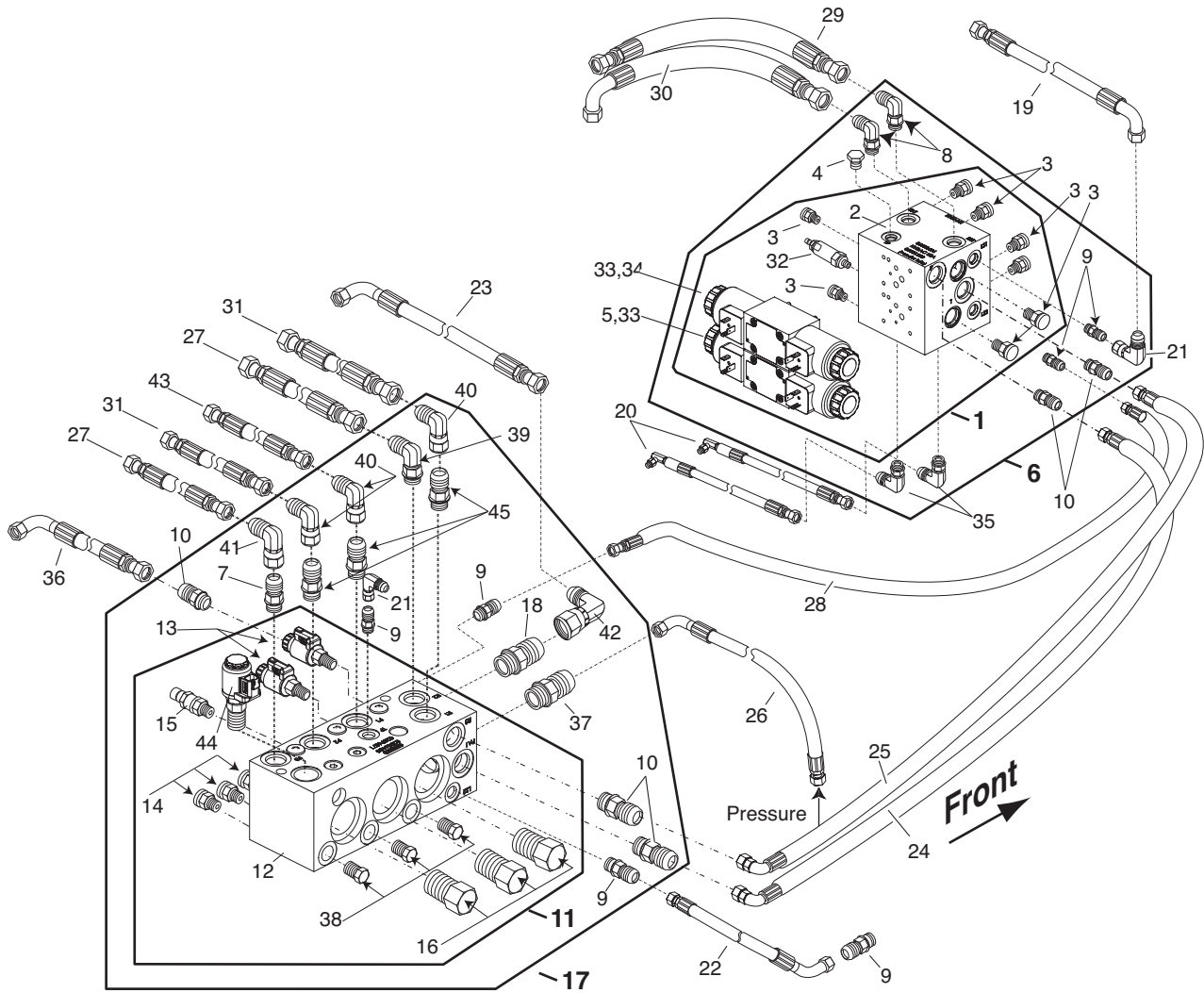
Date	Details
xxxx-xx-xx	Module Created
2012-3-5	QSOL Quick Fix Reason: Spelling Error Notes: none
2012-8-27	Urea content spec change
2015-1-8	Reformatted. Updated DEF cleanliness practices.
2015-2-5	none
2016-9-13	Updated Urea Solution (AUS 32) to Aqueous Urea Solution (AUS 32)
2021-1-22	Quick Fix application:

---

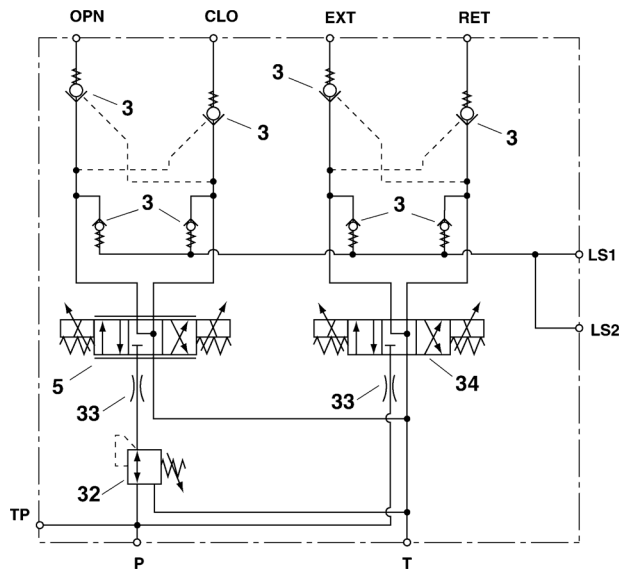
**Last Modified: 22-Jan-2021**

---

### Hydraulic Plumbing - Front Manifolds



### Hydraulic Schematic 3181641

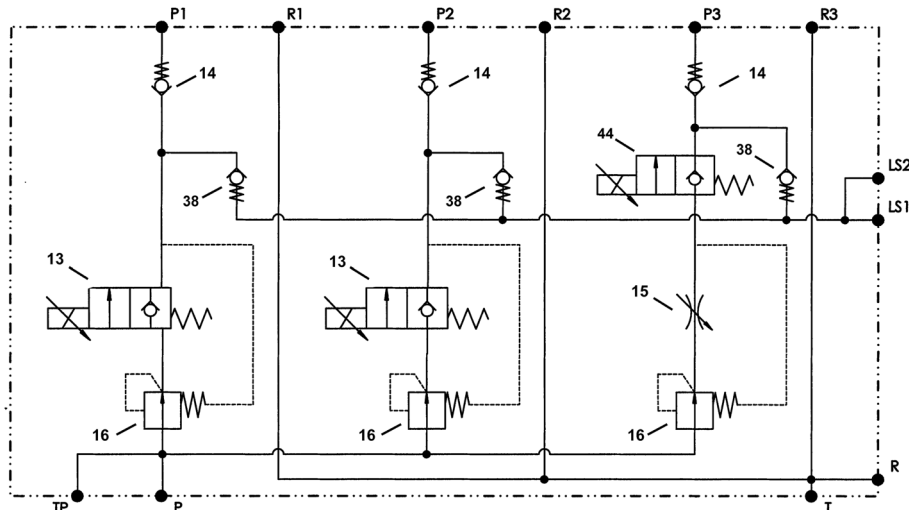


## Hydraulic Plumbing - Front Manifolds

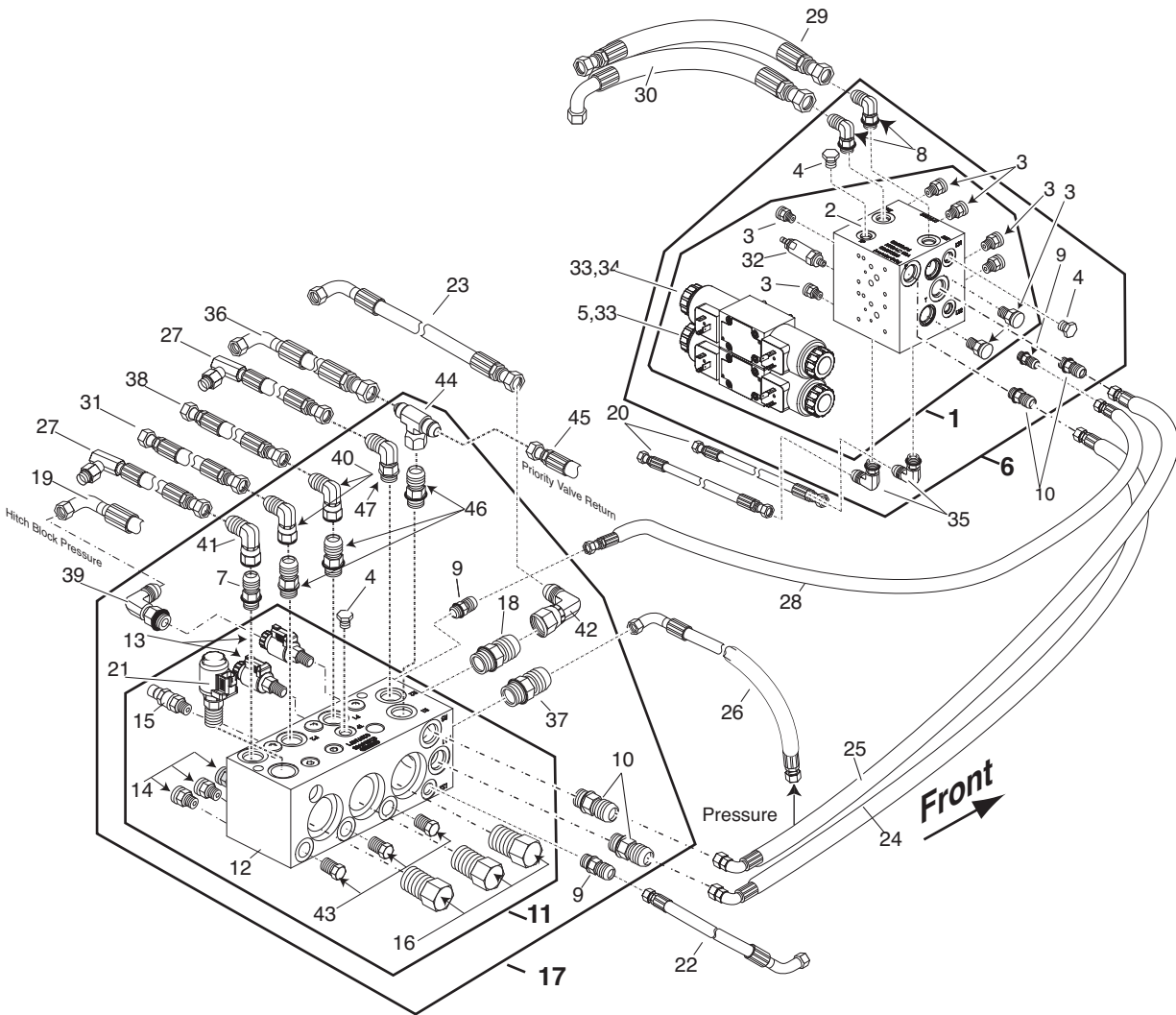
REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3181641	1	Manifold-Hopper <i>(Includes Ref 2, 3, 5, 32-34)</i>	26	3182095	1	Hose-RH Motor Block Pressure
2	7050369	1	Manifold Block	27	3182593	2	Hose-Rt Spreadroll Pressure / Return, 9'
3	7050367	8	Valve-Cartridge, Check, Pilot Operated	3182586	2	Hose-Rt Spreadroll Pressure / Return, 10'	
4	9410356	1	Plug-Hyd, 04MB	3182580	2	Hose-Rt Spreadroll Pressure / Return, 11'	
5	6603343	1	Valve-4Way-3Pos, Sol Op, Proportional	3182572	2	Hose-Rt Spreadroll Pressure / Return, 12'	
	7050154	2	Coil	28	3182102	1	Hose-Gate Block LS to Motor Block LS
6	3182260	1	Manifold Asm-RH Cylinders <i>(Includes Asm 1 &amp; Ref 1, 4, 8-10, 21, 35)</i>	29	3182174	1	Hose-Right Hopper Retract, 9'
				3182036	1	Hose-Right Hopper Retract, 10'	
7	6604654	1	Adapter-Hyd, ST, 08MB-06MORFS	3182036	1	Hose-Right Hopper Retract, 11'	
8	9410976	2	Elbow-Hyd, 90, 06MB-06MJ	3182054	1	Hose-Right Hopper Retract, 12'	
9	6603038	6	Adapter-Hyd, ST, 04MB-08MJ	30	3182049	1	Hose-Right Hopper Extend, 9'
10	9410203	8	Adapter-Hyd, ST, 08MB-08MJ	3181980	1	Hose-Right Hopper Extend, 10'	
11	3182085	1	Manifold-Motors <i>(Includes Ref 12-16, 38, 44)</i>	3181980	1	Hose-Right Hopper Extend, 11'	
				3182049	1	Hose-Right Hopper Extend, 12'	
12	7050915	1	Manifold Block	31	3182595	1	Hose-Rt Auger Pressure / Return, 9'
13	7050910	2	Valve-Cartridge, Proportional Flow Ctl	3182588	1	Hose-Rt Auger Pressure / Return, 10'	
	7050911	2	Coil	3182582	1	Hose-Rt Auger Pressure / Return, 11'	
14	7050263	3	Valve-Cartridge, Check	3182574	1	Hose-Rt Auger Pressure / Return, 12'	
15	7050373	1	Valve-Cartridge, Needle Valve	32	7050264	1	Valve-Reducing, Relief
16	7050909	3	Valve-Cartridge, Compensator Valve	33	7050269	2	Plug-Orifice, 0.070
17	3182612	1	Manifold Asm-RH Motors <i>(Includes Assembly 11 &amp; Ref 7, 9, 10, 18, 21, 37, 39-42)</i>	34	6603344	1	Valve-4Way-3Pos, Sol Op
				7050375	2	Coil	
18	9410205	1	Adapter-Hyd, 12MB-12MJ	35	6603039	2	Elbow-Hyd, 90, 04MB-04MJ
19	3182261	1	Hose-Hopper Raise Block LS	36	3182262	1	Hose-Hopper Raise Block Pressure
20	3182168	2	Hose-Right Hand Gate Open / Close, 9'	37	9410207	1	Adapter-Hyd, 16MB-16MJ
	3182043	2	Hose-Right Hand Gate Open / Close, 10'	38	7050914	3	Valve-Cartridge, Check
	3182143	2	Hose-Right Hand Gate Open / Close, 11'	39	6604656	1	Elbow-Hyd, 90, 08MB-06MORFS
	3182198	2	Hose-Right Hand Gate Open / Close, 12'	40	6604664	3	Elbow-Hyd, 90, 08MORFS-08FORFSX
21	9410278	2	Elbow-Hyd, 90, 04FJX-04MJ	41	6604659	1	Elbow-Hyd, 90, 06MORFS-06FORFSX
22	3182763	1	Hose-RH Motor Block LS to Pump	42	9410283	1	Elbow-Hyd, 90, 12FJX-12MJ
23	3182263	1	Hose-RH Motor Block Return	43	3182606	1	Motor Block P1 to RH Bulkhead
24	3182185	1	Hose-Motor Block to Gate Block Pressure	44	7050912	1	Valve-Cartridge, 2 Pos-2 Way, Sol
25	3182101	1	Hose-Gate Block to Motor Block Return	7050913	1	Coil	
				45	6604658	3	Adapter-Hyd, ST, 08MB-08MORFS

HYDRAULIC

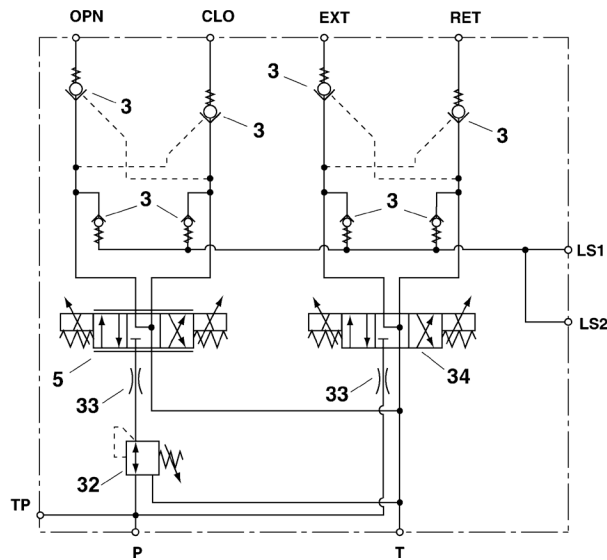
### Hydraulic Schematic 3182085



### Hydraulic Plumbing - Rear Manifolds



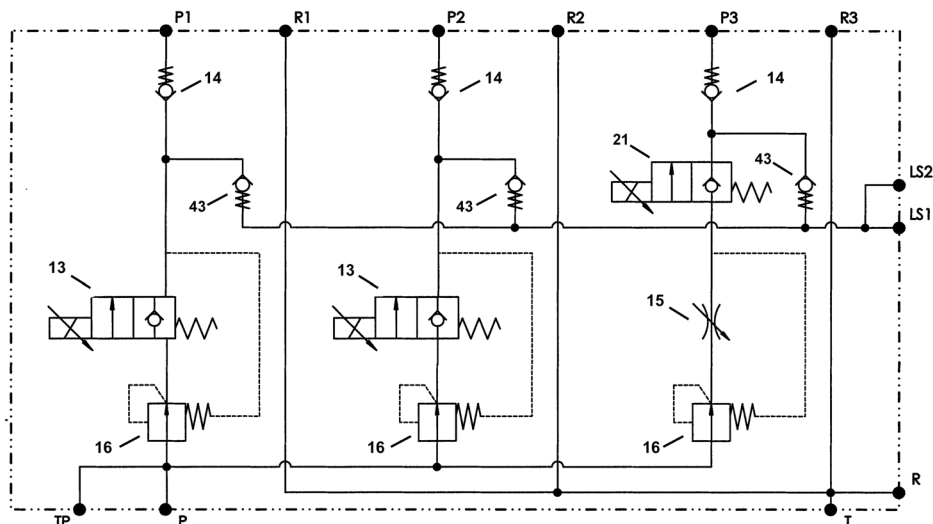
### Hydraulic Schematic 3181641



## Hydraulic Plumbing - Rear Manifolds

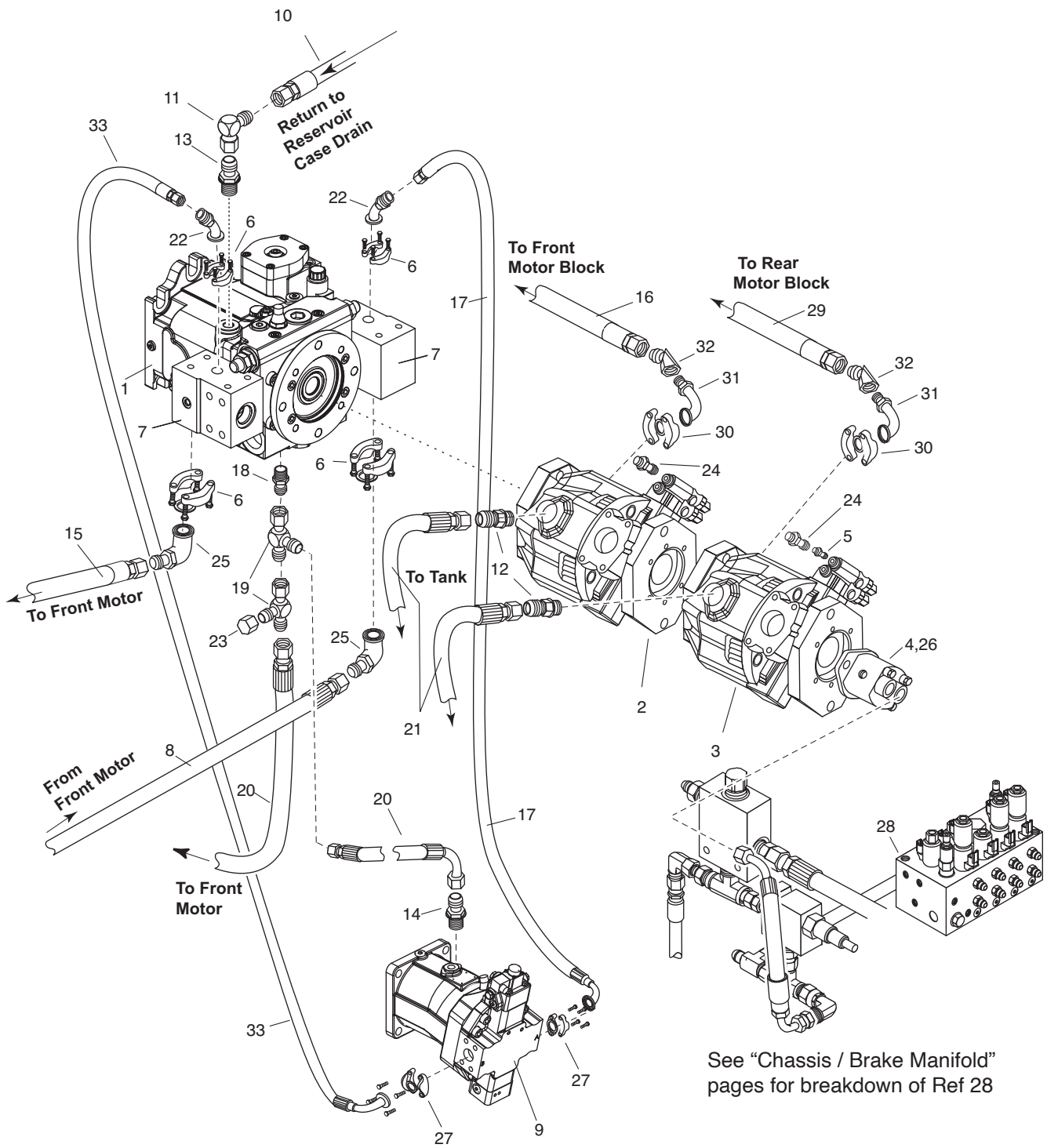
REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3181641	1	Manifold-Hopper <i>(Includes Ref 2, 3, 5, 32-34)</i>	26	3182096	1	Hose-LH Motor Block Pressure
2	7050369	1	Manifold Block	27	3182596	2	Hose-Lt Spreadroll Pressure / Return, 9'
3	7050367	8	Valve-Cartridge, Check, Pilot Operated	3182589	2	Hose-Rt Spreadroll Pressure / Return, 10'	
4	9410356	3	Plug-Hyd, 04MB	3182578	2	Hose-Rt Spreadroll Pressure / Return, 11'	
5	6603343	1	Valve-4Way-3Pos, Sol Op, Proportional	3182570	2	Hose-Rt Spreadroll Pressure / Return, 12'	
	7050154	2	Coil	28	3182102	1	Hose-Gate Block LS to Motor Block LS
6	3182182	1	Manifold Asm-LH Cylinders <i>(Includes Assembly 1 &amp; Ref 1, 4, 8-10, 35)</i>	29	3182173	1	Hose-Left Hopper Retract, 9'
				3181977	1	Hose-Left Hopper Retract, 10'	
7	6604654	1	Adapter-Hyd, ST, 08MB-06MORFS	3181977	1	Hose-Left Hopper Retract, 11'	
8	9410976	2	Elbow-Hyd, 90, 06MB-06MJ	3182048	1	Hose-Left Hopper Retract, 12'	
9	6603038	2	Adapter-Hyd, ST, 04MB-08MJ	30	3182049	1	Hose-Left Hopper Extend
10	9410203	4	Adapter-Hyd, ST, 08MB-08MJ	31	3182165	1	Hose-Lt Auger Pressure, 9'
11	3182085	1	Manifold-Motors <i>(Includes Ref 12-16, 21, 43)</i>	3182591	1	Hose-Lt Auger Pressure, 10'	
				3182584	1	Hose-Lt Auger Pressure, 11'	
12	7050915	1	Manifold Block	3182576	1	Hose-Lt Auger Pressure, 12'	
13	7050910	2	Valve-Cartridge, Proportional Flow Ctl	32	7050264	1	Valve-Reducing, Relief
	7050911	2	Coil	33	7050269	2	Plug-Orifice, 0.070
14	7050263	3	Valve-Cartridge, Check	34	6603344	1	Valve-4Way-3Pos, Sol Op
15	7050373	1	Valve-Cartridge, Needle Valve	7050375	2	Coil	
16	7050909	3	Valve-Cartridge, Compensator Valve	35	6603039	2	Elbow-Hyd, 90, 04MB-04MJ
17	3182613	1	Manifold Asm-LH Motors <i>(Includes Assembly 11 &amp; Ref 4, 7, 9, 10, 18, 19, 37, 39-42, 44, 46, 47)</i>	36	3182598	1	Hose-LH Auger Return, 9'
				3182590	1	Hose-LH Auger Return, 10'	
18	9410205	1	Adapter-Hyd, 12MB-12MJ	3182583	1	Hose-LH Auger Return, 11'	
19	3182463	1	Hose-Hitch Block Pressure	3182575	1	Hose-LH Auger Return, 12'	
20	3182170	2	Hose-Left Hand Gate Open / Close, 9'	37	9410207	1	Adapter-Hyd, 16MB-16MJ
	3181973	2	Hose-Left Hand Gate Open / Close, 10'	38	3182601	1	LH Motor Block P1 to LH Bulkhead
	3182015	2	Hose-Left Hand Gate Open / Close, 11'	39	6604263	1	Elbow-Hyd, 90, 08MB-06MJ
	3182044	2	Hose-Left Hand Gate Open / Close, 12'	40	6604664	2	Elbow-Hyd, 90, 08MORFS-08FORFSX
21	7050912	1	Valve-Cartridge, 2 Pos - 2 Way, Sol	41	6604659	1	Elbow-Hyd, 90, 06MORFS-06FORFSX
	7050913	1	Coil	42	9410283	1	Elbow-Hyd, 90, 12FJX-12MJ
22	3182762	1	Hose-LH Motor Block LS to Pump	43	7050914	3	Valve-Cartridge, Check
23	3182264	1	Hose-LH Motor Block Return	44	6604663	1	Tee-08MORFS-08MORFS-08FORFSX
24	3182185	1	Hose-Motor Block to Gate Block Pressure	45	3182436	1	Hose-Priority Valve Return
25	3182101	1	Hose-Gate Block to Motor Block Return	46	6604658	3	Adapter-Hyd, ST, 08MB-08MORFS
				47	6604656	1	Elbow-Hyd, 90, 08MB-06MORFS

### Hydraulic Schematic 3182085



# Hydraulic Pumps And Rear Motor - 4WD

HYDRAULIC



## Hydraulic Pumps And Rear Motor - 4WD

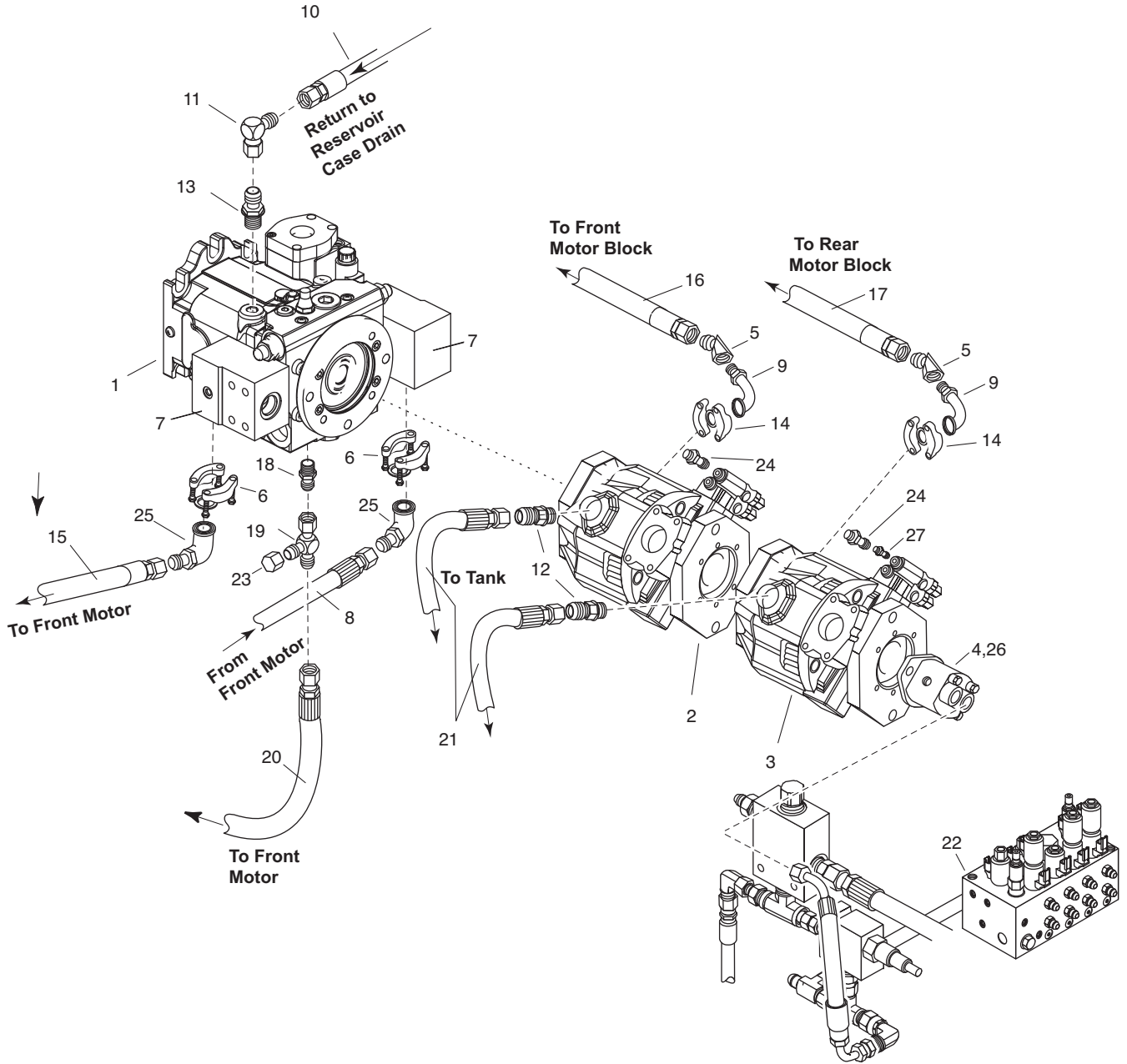
REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3181072	1	Pump-125CC Var Disp.,5800 PSI	30	6600236	2	Flange Kit-1.00,4 Bolt, Split
	7050056	1	Pump Stroker		0274253	2	O-Ring-16OR
	7050492	1	Filter Bowl	31	6601045	2	Elbow-Hyd,90,16FL-16MJ
	7050160	1	Filter Indicator	32	6602021	2	Elbow-Hyd,45,16MJ-16FJX
	7050136	1	Filter Assembly	33	6604071	1	Hose-Left Rear Drive
	7050137	1	Filter Element				
	7050138	1	O-Ring-Filter Housing/Pump				
	7050493	1	O-Ring-Bowl				
2	6602602	1	Pump-Var Disp, 4.52 CID, C Pad				
	7050088	1	O-Ring-Pump 1/Pump 2				
	7050406	1	Compensator				
	7050491	1	O-Ring-Compensator				
	7050447	1	Seal-Adjustment Screw				
3	6602601	1	Pump-Var Disp.,4.52 CID,A Pad				
	7050089	1	O-Ring-Pump 2/Pump 3				
	7050406	1	Compensator				
	7050491	1	O-Ring-Compensator				
	7050447	1	Seal-Adjustment Screw				
4	6603436	1	Pump-1.403 Cir, RH, 9Tooth, SAE A				
	7050090	1	O-Ring-Pump 3/Pump 4				
5	9410200	1	Adapter-Hyd, ST, 04MB-04MJ				
6	6602624	4	Split Flange Kit-1" Code 62				
	0274253	4	O-Ring-16OR				
7	3181996	2	Tee-20FLH-16FLH-16FLH				
	7420292	2	O-Ring,20OR				
	6001426	8	Screw-Socket Head,1/2 x 3 3/4,Gr 8,PD				
	0120384	8	Washer-Lock,1/2, Spring				
8	6604177	1	Hose-Right Front Drive				
9	6603520	1	Motor-Hyd,160CC W/O Speed Sens				
	7050649	1	Coil				
	7050189	1	Seal Kit				
	7050191	1	Shaft Seal				
10	3181936	1	Hose-Drive Pump Case Drain				
11	9410285	1	Elbow-Hyd,90,16FJX-16MJ				
12	9410205	2	Adapter-Hyd, ST, 12MB-12MJ				
13	9410207	1	Adapter-Hyd,ST,16MB-16MJ				
14	9410202	1	Adapter-Hyd, 6MB-6MJ				
15	6604176	1	Hose-Left Front Drive				
16	3182095	1	Hose-Frt Aux Pump to Frt Motor Block P				
17	6604151	1	Hose-Right Rear Drive Hose				
18	6601418	1	Adapter-Hyd,ST,12MJ-16MB				
19	9410335	2	Tee-Hyd,12MJ-12FJX-12MJ				
20	3181927	2	Hose-Motor Drain				
21	3181889	2	Hose-Aux Pump Case Drain				
22	6603269	2	Elbow-45,16FLH-16MJ				
23	9403374	1	Cap-Hyd,12FJ				
24	6604109	2	Orifice-Hyd, 4MB-4MJ, .040, Screen				
25	6602261	3	Elbow-90, 16FL-16MJ				
26	6600921	1	Adapter-Hydr,St,08MJ-12MB				
27	6603559	2	Split Flange Kit-1 1/4 Metric				
	7420292	2	O-Ring				
28	3182305	1	Manifold-Chassis/Brake				
29	3182096	1	Hose-Rear Aux Pump to Rear Motor Block P				

HYDRAULIC



# Hydraulic Pumps - 2WD

HYDRAULIC



See "Chassis / Brake Manifold" pages for breakdown of Ref 22

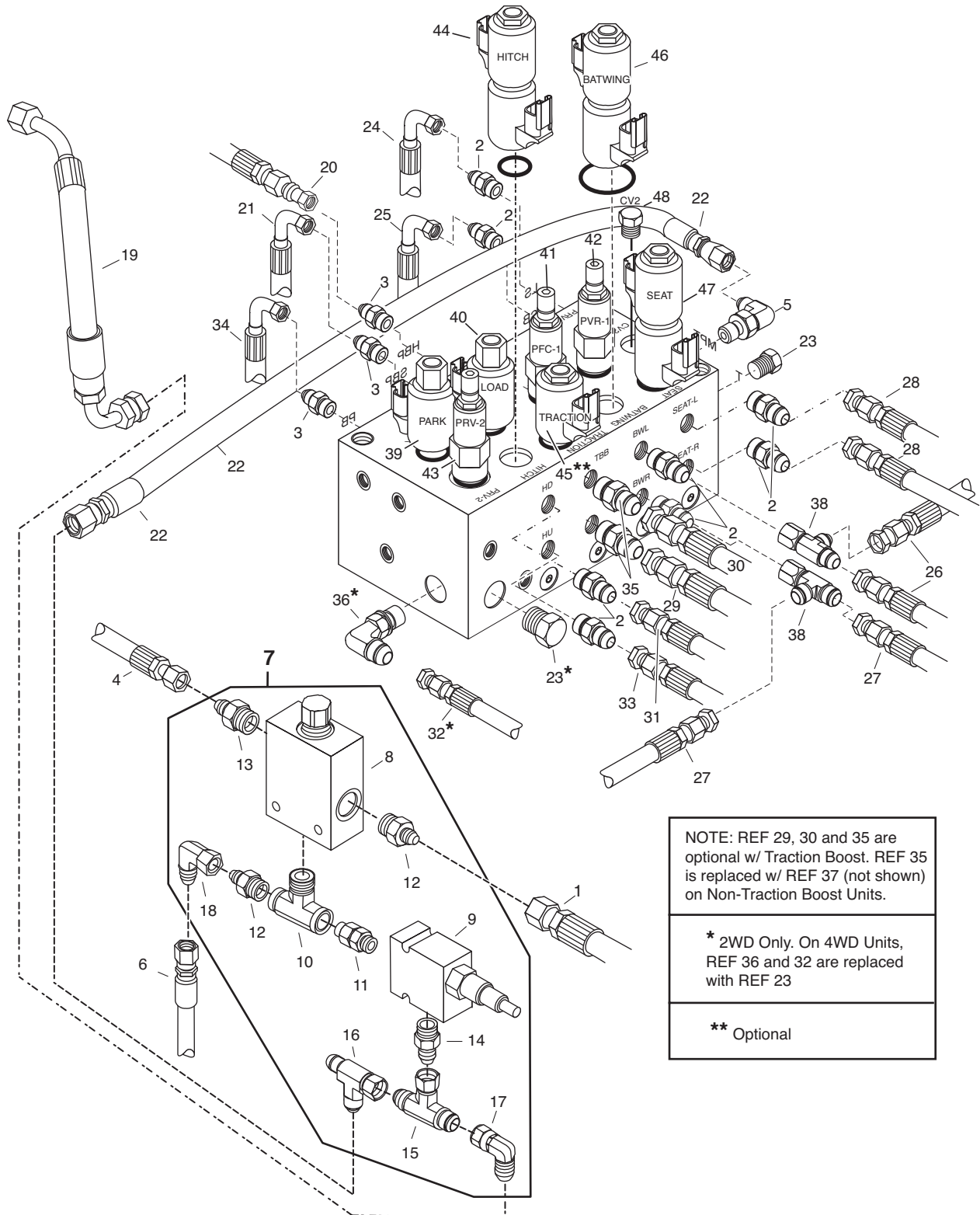
## Hydraulic Pumps - 2WD

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3181072	1	Pump-125CC Var Disp., 5800 PSI				
	7050056	1	Pump Stroker				
	7050492	1	Filter Bowl				
	7050160	1	Filter Indicator				
	7050136	1	Filter Assembly				
	7050137	1	Filter Element				
	7050138	1	O-Ring-Filter Housing/Pump				
	7050493	1	O-Ring-Bowl				
2	6602602	1	Pump-Var Disp, 4.52 CID, C Pad				
	7050088	1	O-Ring-Pump 1/Pump 2				
	7050406	1	Compensator				
	7050491	1	O-Ring-Compensator				
	7050447	1	Seal-Adjustment Screw				
3	6602601	1	Pump-Var Disp., 4.52 CID, A Pad				
	7050089	1	O-Ring-Pump 2/Pump 3				
	7050406	1	Compensator				
	7050491	1	O-Ring-Compensator				
	7050447	1	Seal-Adjustment Screw				
4	6603436	1	Pump-1.403 Cir, RH, 9Tooth, SAE A				
	7050090	1	O-Ring-Pump 3/Pump 4				
5	6602021	2	Elbow-Hyd, 45, 16MJ-16FJX				
6	6602679	2	Split Flange Kit-1.25" Code 62				
	7420292	2	O-Ring-20				
7	3182237	2	Elbow-Hyd, offset, 20FLH-20FLH				
	7420292	2	O-Ring, 20OR				
	6001426	8	Screw-Socket Head, 1/2 x 3 3/4, Gr 8, PD				
	0120384	8	Washer-Lock, 1/2, Spring				
8	6604260	1	Hose-Right Front Drive				
9	6601045	2	Elbow-Hyd, 90, 16FL-16MJ				
10	3181936	1	Hose-Drive Pump Case Drain				
11	9410285	1	Elbow-Hyd, 90, 16FJX-16MJ				
12	9410205	2	Adapter-Hyd, ST, 12MB-12MJ				
13	9410207	1	Adapter-Hyd,ST,16MB-16MJ				
14	6600236	2	Flange Kit-1.00, 4 Bolt, Split				
	0274253	2	O-Ring-16OR				
15	6604241	1	Hose-Left Front Drive				
16	3182095	1	Hose-Frt Aux Pump to Frt Motor Block P				
17	3182096	1	Hose-Rear Aux Pump to Rear Motor Block P				
18	6601418	1	Adapter-Hyd, ST, 12MJ-16MB				
19	9410335	1	Tee-Hyd, 12MJ-12FJX-12MJ				
20	3181927	1	Hose-Motor Drain				
21	3181889	2	Hose-Aux Pump Case Drain				
22	3182305	1	Manifold-Chassis/Brake				
23	9403374	1	Cap-Hyd, 12FJ				
24	6604109	2	Orifice-Hyd, 4MB-4MJ, .040, Screen				
25	6602678	2	Elbow-90, 20FLH-20MJ				
26	6600921	1	Adapter-Hydr, St, 08MJ-12MB				
27	9410200	1	Adapter-Hyd, ST, 04MB-04MJ				

HYDRAULIC

# Chassis / Brake Manifold

3182305



NOTE: REF 29, 30 and 35 are optional w/ Traction Boost. REF 35 is replaced w/ REF 37 (not shown) on Non-Traction Boost Units.

\* 2WD Only. On 4WD Units, REF 36 and 32 are replaced with REF 23

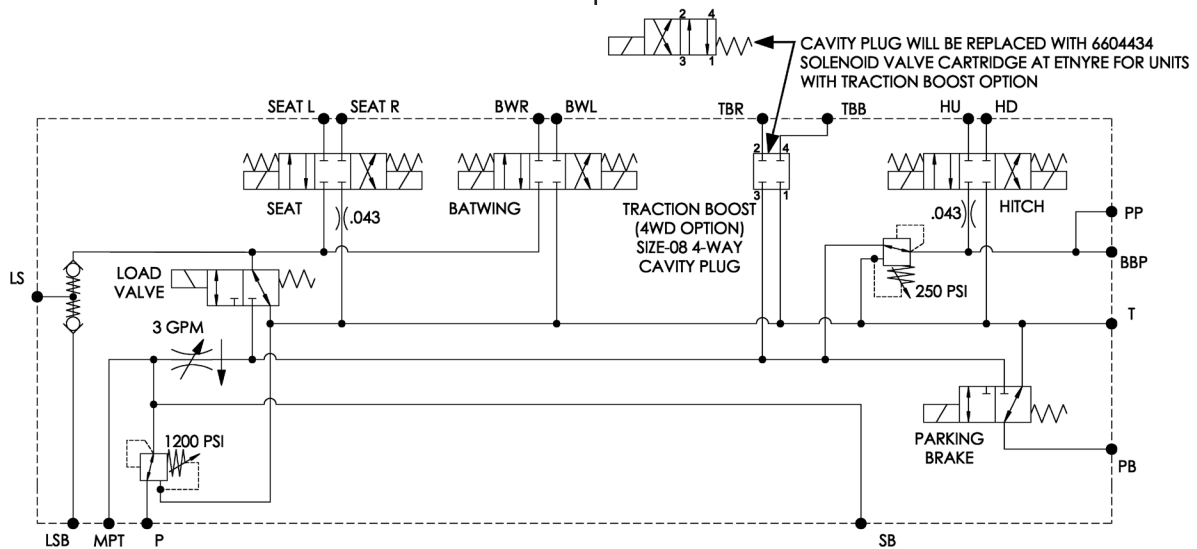
\*\* Optional

HYDRAULIC

## Chassis / Brake Manifold

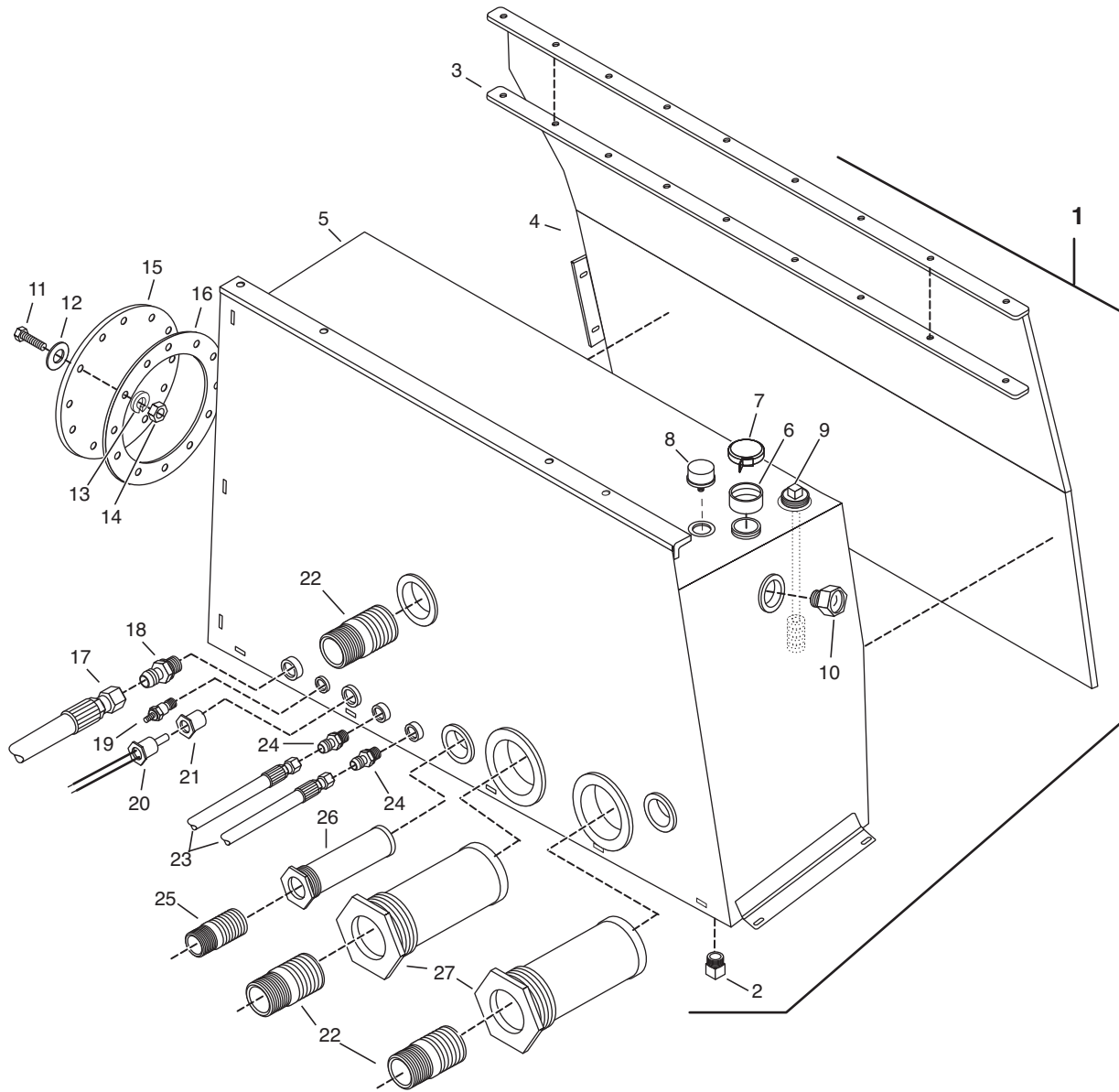
3182305

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3182438	1	Hose-Fan Valve Pressure	33	3181969	1	Hose-Hitch Raise
2	9410200	8	Adapter-Hydr, St, 04MB-04MJ	34	3182443	1	Hose-Hitch Block to Parking Brake
3	9410202	3	Adapter-Hydr, St, 06MB-06MJ	35	6602134	2	Adapter-Hyd, ST, 06MB-04MJ
4	3182439	1	Hose-Steering Motor Pressure	36	6603039	1	Elbow-Hyd, 90, 04MB-04MJ
5	9410976	1	Elbow-Hydr, 90, 06MB-06MJ	37	4470260	2	Plug-Hyd, 06MB (Not Shown)
6	3182440	1	Hose-Priority Valve, Pressure	38	6602140	2	Tee-Hyd, 04MJ-04FJX-04MJ
7	3182645	1	Valve Asm-Steering Priority (Includes Ref 8-18)	39	7051181	1	Valve-Solenoid, Parking Brake
8	6604869	1	Valve-Priority, 34 GPM IN, 6CF		7051183	1	Coil only
9	6604868	1	Valve-Hyd, Relief, 0-3KPSI, 32 GPM		7050394	1	O Ring- SAE 08
10	6604874	1	Tee-Hyd, 10MB-08FB-08FB	40	7051178	1	Valve-Solenoid, Load
11	6604875	1	Adapter-Hyd, ST, 10MB-08MB		7051183	1	Coil only
12	6600903	2	Adapter-Hyd, ST, 08MJ-10MB		7050394	1	O Ring- SAE 08
13	6604537	1	Adapter-Hyd, ST, 06MJ-10MB	41	7051181	1	Valve-Solenoid, Priority Flow (3 GPM)
14	6602133	1	Adapter-Hyd, ST, 08MB-06MJ		7050394	1	O Ring- SAE 08
15	9410332	1	Tee-Hyd, 06MJ-06FJX-06MJ	42	7051176	1	Valve-Solenoid, Relief (1200 PSI)
16	6602984	1	Tee-Hyd, 06FJX-06MJ-06MJ, RUN		7050394	1	O Ring- SAE 08
17	9410280	1	Elbow-Hyd, 90, 06FJX-06MJ	43	7051177	1	Valve-Solenoid, Relief (250 PSI)
18	9410281	1	Elbow-Hyd, 90, 08FJX-08MJ		7050394	1	O Ring- SAE 08
19	3182436	1	Hose-Priority Valve T to Motor Manifold	44	7051184	1	Valve-Solenoid, Hitch Height
20	3182463	1	Hose-Hitch Block Pressure		7051185	1	Coil Only
21	3181947	1	Hose-Service Brake Pressure		7420293	1	O Ring- SAE 10
22	3182435	1	Hose-Hitch Block T to Priority Valve T	45	6604434	1	Valve-Solenoid, Traction Boost (Optional)
23	9410356	3	Plug-Hyd, Socket Hd, 04MB		7050394	1	O Ring- SAE 08
24	3182441	1	Hose-Hitch Block LS		7051186	1	Plug-Cavity, Traction Boost
25	3182442	1	Hose-Hitch Block LSB to Service Brake T	46	7051184	1	Valve-Solenoid, Batwing Raise / Lower
26	3181965	2	Hose-Batwing Lower		7051185	1	Coil Only
27	3181964	2	Hose-Batwing Raise		7420293	1	O Ring- SAE 10
28	3181962	2	Hose-Power Seat, L&R	47	7051184	1	Valve-Solenoid, Seat Position
29	3182450	1	Hose-Traction Boost, Rod End		7051185	1	Coil Only
30	3182449	1	Hose-Traction Boost, Base End		7050394	1	O Ring- SAE 08
31	3181968	1	Hose-Hitch Lower	48	7051180	1	Valve-Ball Check (5 PSI)
32	3181357	1	Hose-2WD Brake, Hitch Block to Cyl Tee		7050392	1	O Ring- SAE 04



HYDRAULIC

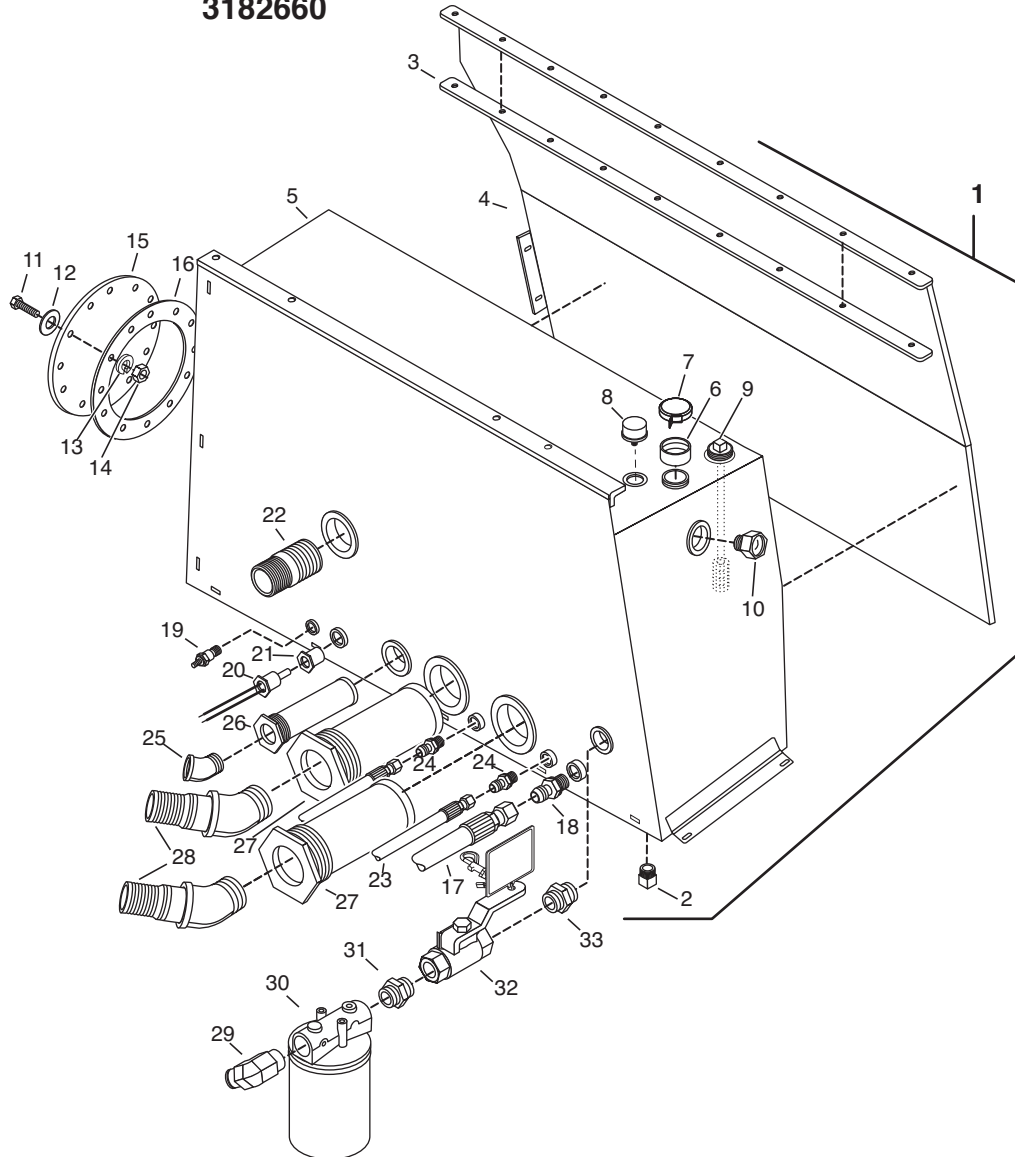
## Hydraulic Tank Plumbing - S/N K7233 thru K7273 3182638



HYDRAULIC

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3182618	1	Reservoir-Hyd, 70 Gal, Bolt on (Includes Ref 2-7 Only)	14	0120377	12	Nut-Hex, 0.38"NC, PD
2	0219302	1	Plug-Pipe, SqHd, 0.75"NPT, PD	15	3182286	1	Flange-Blind, Hyd Tank, 11.0" Diameter
3	3121910	1	Plate-Tank Mount, Tapped, Long	16	3180749	1	Gasket-Reservoir, Clean-out, Hyd
4	3121860	1	Wall-Outer, Hyd Reservoir	17	3181936	1	Hose-Drive Pump Case Drain to Tank
5	3182619	1	Hyd Tank-Stage 2 Weldment	18	9410207	1	Adapter-Hyd., ST, 16MB-16MJ
6	6604328	1	Fill Neck-Locking, 4.0" Weld On	19	6700400	1	Sender-Temp 12V, 0.50NPT
7	6604329	1	Fill Cap-Locking, 4.0"	20	S352703	1	Switch-Temp, 140°, 1/2NPT, N.O.
8	6601125	1	Breather-Hyd Rsv. 0.75NPT, 5PSI	21	0144042	1	Bushing-Pipe, 0.75" x 0.50"NPT, PD
	7430221	1	Element	22	6200526	1	Nipple-Comb-2.00, Type SCP
9	6603960	1	Magnet-Hyd Tank, 2.0"NPT, 12" Long	23	3181889	2	Hose-Aux Pump Case Drain to Tank
10	6600224	1	Plug-Oil, Eyesite	24	9410205	2	Adapter-Hyd., ST, 12MB-12MJ
11	0180126	12	Screw-Hex, 0.38"NC x 1.50", Gr5, PD	25	6201210	1	Nipple-Comb-2.00, Type SCP
12	0120388	12	Washer-Flat, SAE, STD, 0.375"	26	6604009	1	Strainer-100 Mesh, 15 GPM, 1.50"NPT
13	0120382	12	Washer-Lock, 0.38", Spring, PD	27	6604008	2	Strainer-100 Mesh, 50 GPM, 3.0" NPT

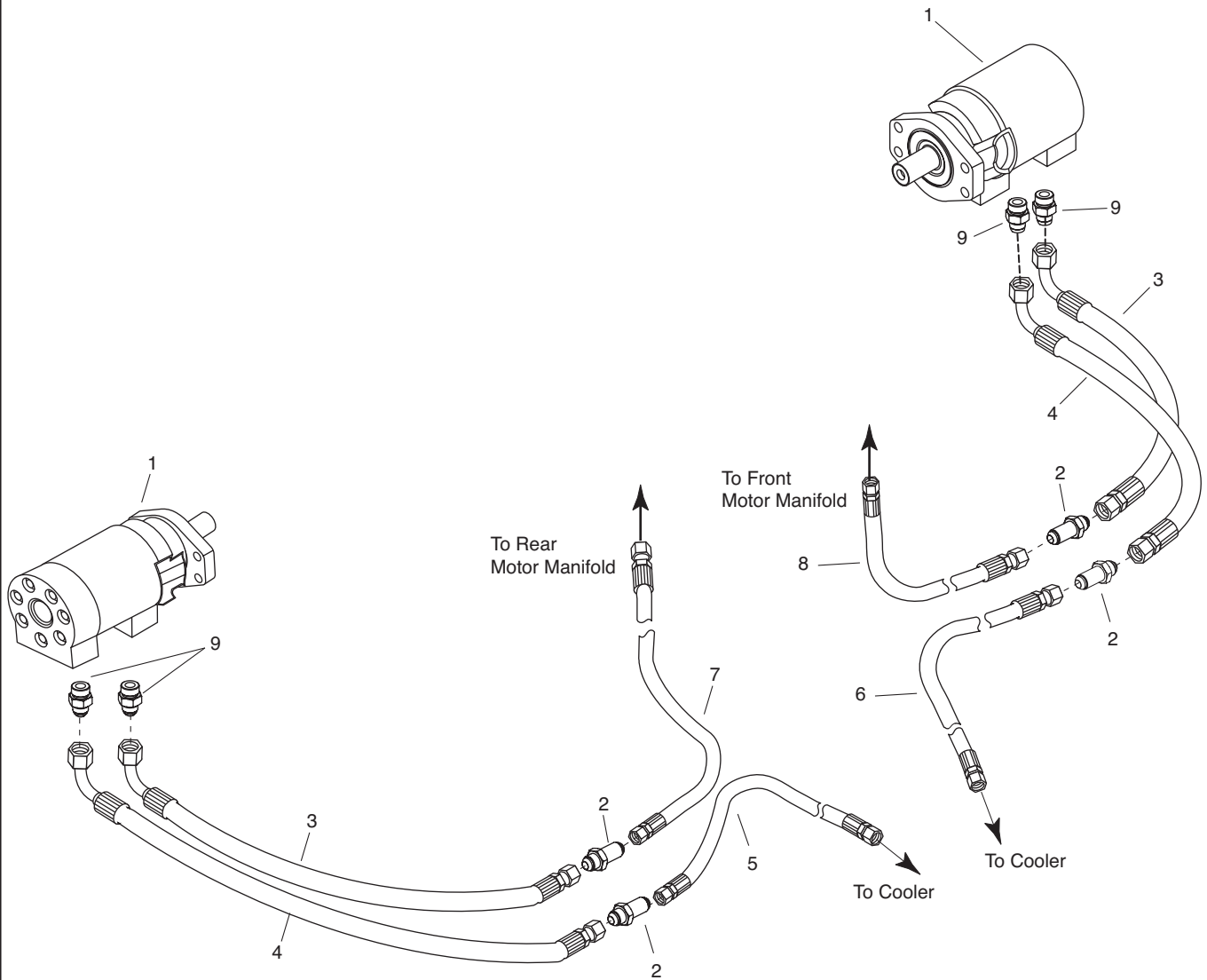
## Hydraulic Tank Plumbing - S/N K7279 & Up 3182660



HYDRAULIC

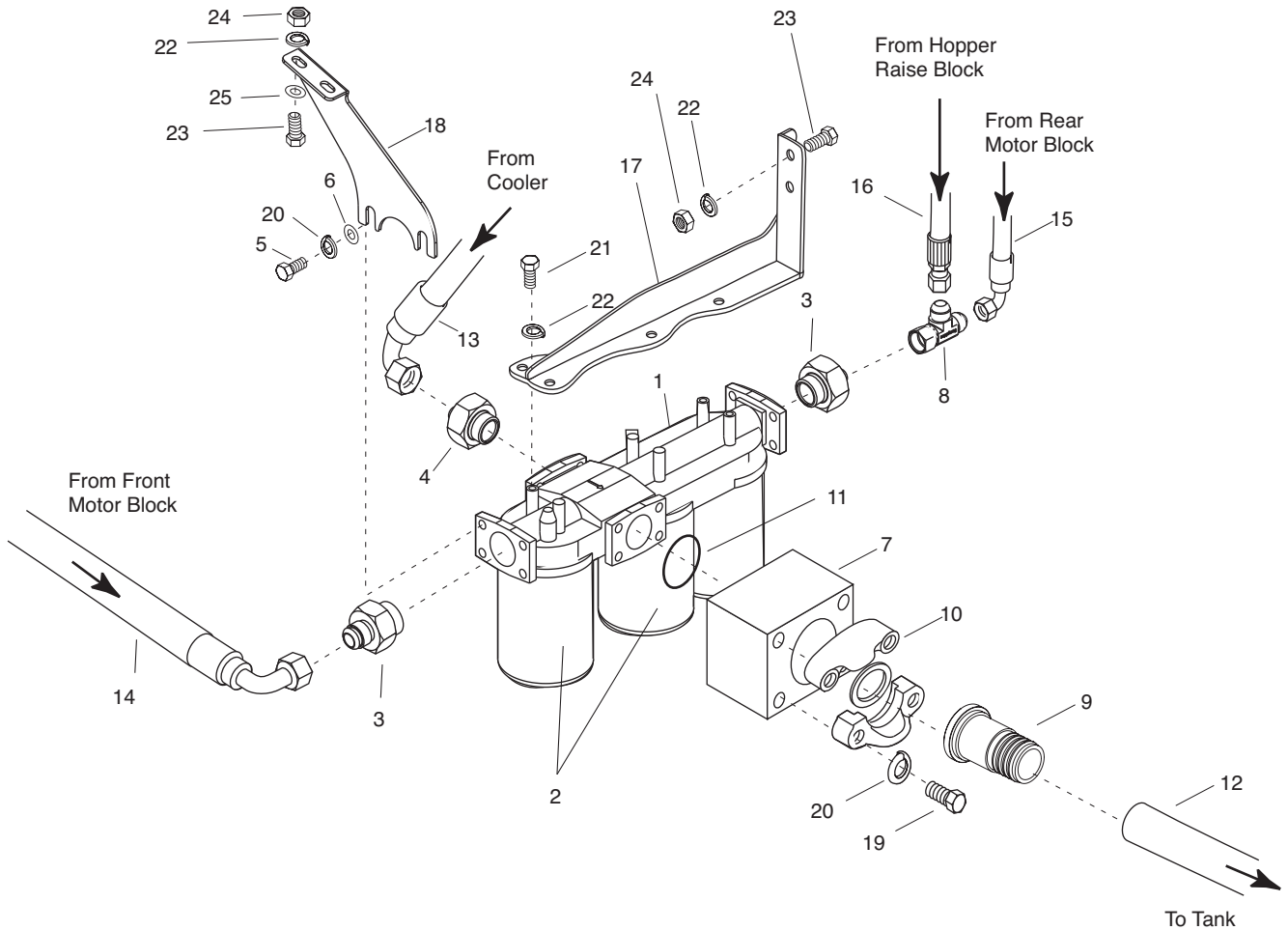
REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3182661	1	Reservoir-Hyd, 70 Gal, Bolt on <i>(Includes Ref 2-7 Only)</i>	17	3181936	1	Hose-Drive Pump Case Drain to Tank
2	0219302	1	Plug-Pipe, SqHd, 0.75"NPT, PD	18	9410207	1	Adapter-Hyd., ST, 16MB-16MJ
3	3121910	1	Plate-Tank Mount, Tapped, Long	19	6700400	1	Sender-Temp 12V, 0.50NPT
4	3121860	1	Wall-Outer, Hyd Reservoir	20	S352703	1	Switch-Temp, 140°, 1/2NPT, N.O.
5	3182662	1	Hyd Tank-Stage 2 Weldment	21	0144042	1	Bushing-Pipe, 0.75" x 0.50"NPT, PD
6	6604328	1	Fill Neck-Locking, 4.0" Weld On	22	6200526	1	Nipple-Comb-2.00, Type SCP
7	6604329	1	Fill Cap-Locking, 4.0"	23	3181889	2	Hose-Aux Pump Case Drain to Tank
8	6601125	1	Breather-Hyd Rsv. 0.75NPT, 5PSI	24	9410205	2	Adapter-Hyd., ST, 12MB-12MJ
	7430221	1	Element	25	6201247	1	Elbow-Pipe, 45, ST, 1.0"NPT, BR
9	6603960	1	Magnet-Hyd Tank, 2.0"NPT, 12" Long	26	6604009	1	Strainer-100 Mesh, 15 GPM, 1.50"NPT
10	6600224	1	Plug-Oil, Eyesite	27	6604008	2	Strainer-100 Mesh, 50 GPM, 3.0" NPT
11	0180126	12	Screw-Hex, 0.38"NC x 1.50", Gr5, PD	28	6201248	2	Elbow-Pipe, 45, ST, 2.0"NPT, BR
12	0120388	12	Washer-Flat, SAE, STD, 0.375"	29	6604972	1	Hose End-90, 24Barb-20MP, LP
13	0120382	12	Washer-Lock, 0.38", Spring, PD	30	6602801	1	Filter Head-Hyd, #1 1/4 Ports
14	0120377	12	Nut-Hex, 0.38"NC, PD		7420244	1	Filter
15	3182286	1	Flange-Blind, Hyd Tank, 11.0" Diameter	31	6604787	1	Adapter-Hyd, ST, 24MP-20MP
16	3180749	1	Gasket-Reservoir, Clean-out, Hyd	32	3182650	1	Safety Valve Asm
				33	6604786	1	Adapter-Hyd, ST, 24MP-24MP

### Conveyor Motors Plumbing



REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	6604561	2	Motor-Hyd,LSHT, 18.9 CIR, OMS				
	7051151		Seal Kit for Motor <b>NEED NEW P/N</b>				
2	6604783	4	Adapter-Hyd, BHD, 08MFS-08MFS				
3	3182602	2	Hose-Bulkhead to Conveyor Motor				
4	3182603	2	Hose-Bulkhead to Conveyor Motor				
5	3182634	1	Hose-LH Bulkhead to Cooler				
6	3182635	1	Hose-RH Bulkhead to Cooler				
7	3182601	1	Rear Motor Block to LH Bulkhead				
8	3182600	1	Front Motor Block to RH Bulkhead				
9	6604815	4	Adapter-Hyd, ST, 08MFS-10MB				

## Hydraulic Filters

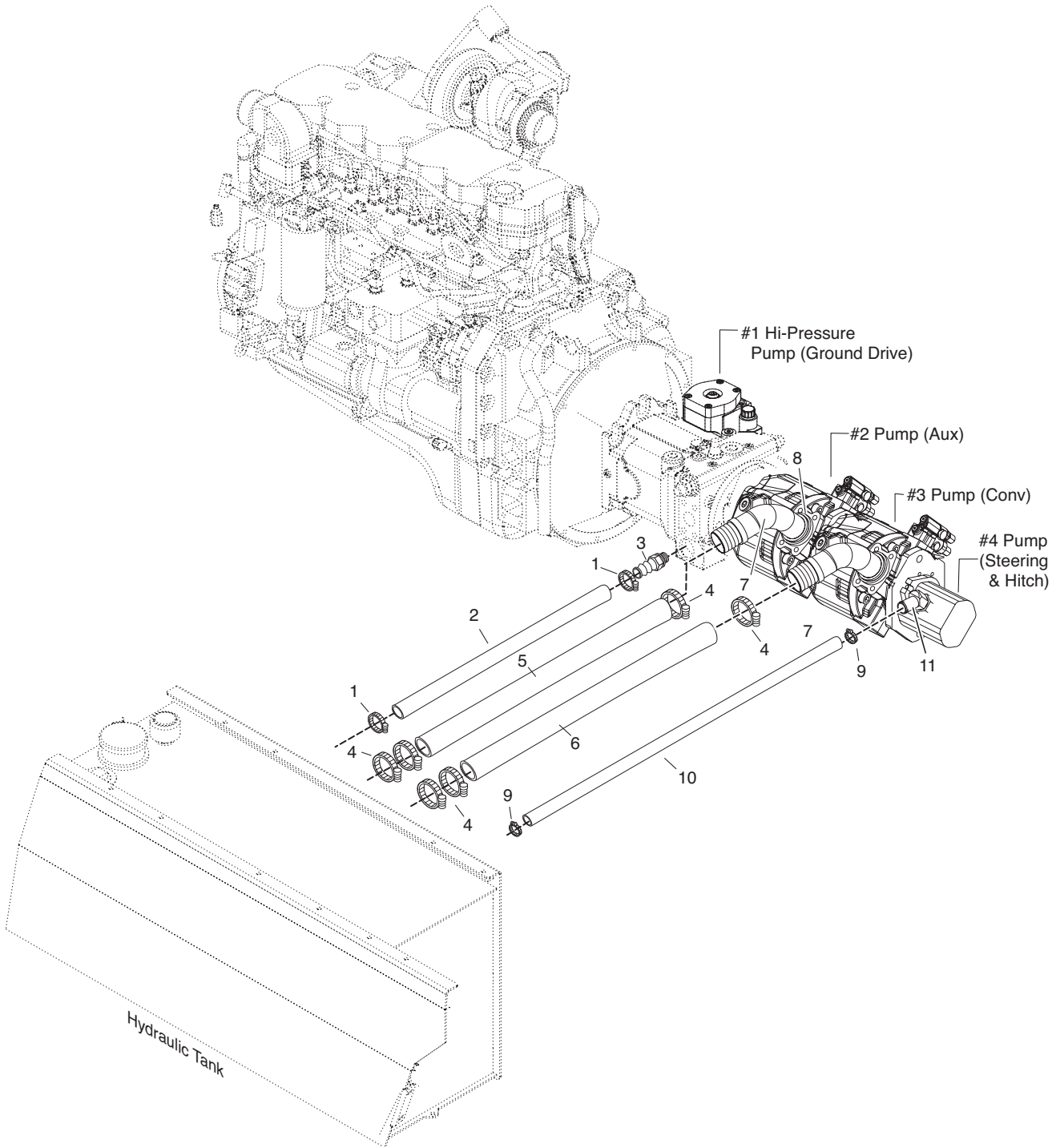


HYDRAULIC

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	6604235	1	Filter Head-3 Element w/ Ind.	15	3182264	1	Hose-Rear Motor Block T to Filter Head
2	7420244	3	Element-Hyd Filter	16	3182244	1	Hose-Hopper Raise Block to Filter Head
3	6604316	2	Adapter-Hyd, 24MP - 12MJ	17	3103427	1	Bracket-Filter
4	6604315	1	Adapter-Hyd, 24MP - 16MJ	18	3103506	1	Bracket-Side, Filter Mount
5	0180173	2	Screw-Hex, 0.50NC x 1.00	19	6100339	4	Screw-Hex, 0.50NC x 4.00
6	0120396	2	Washer-Flat, 0.50	20	0120384	4	Washer-Lock, 0.50, Spring
7	3182181	1	Manifold-Tee, Return Header	21	0180120	4	Screw-Hex, 0.38NC x 0.75
8	9410335	1	Tee-Hydraulic, 12MJ-12FJX-12MJ	22	0120382	8	Washer-Lock, 0.38, Spring
9	6604239	1	Adapter-Hyd, 32 Barb - 32 FL Code 61	23	0180122	4	Screw-Hex, 0.38NC x 1.00
10	6602628	1	Split Flange Kit-2", Code 61	24	0120377	4	Nut-Hex, 0.38NC
11	6604240	1	O-Ring-2.234" x 0.139"	25	0120388	2	Washer-Flat, 0.375
12	3182178	1	Hose-Return, SAE 100R4				
13	3182186	1	Hose-Cooler to Filter Head				
14	3182263	1	Hose-Front Motor Block T to Filter Head				

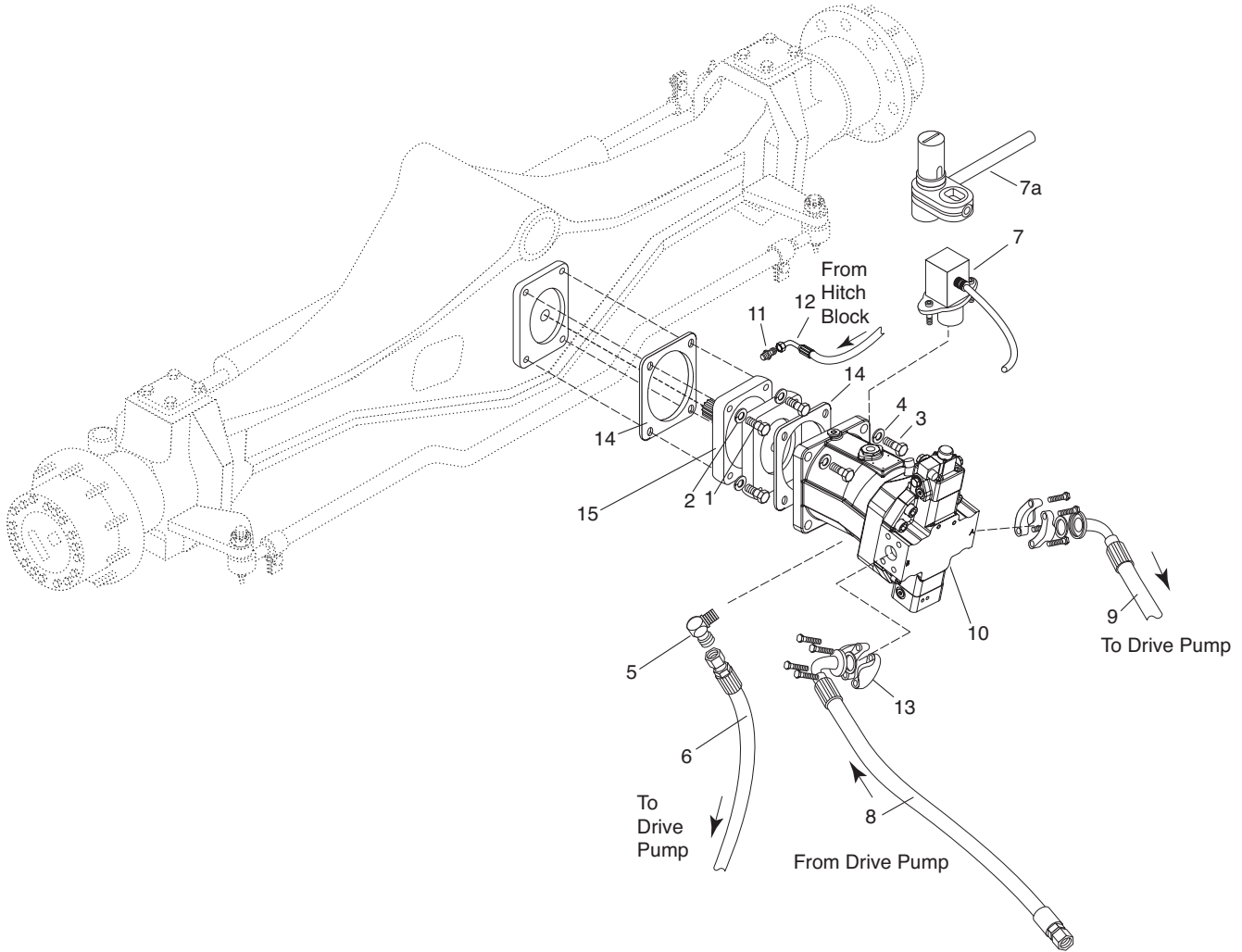


### Suction Lines



REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	6001638	3	Clamp-T-Bolt, 1.91 to 2.22	7	6603167	2	Hose End-45 Deg, 32 Barb-32 Flange
2	3182633	1	Hose-Suction, Drive Pump, 1.5" x 41.0"	8	6603342	2	Split Flange Kit, 2.5"
3	6602736	1	Hose End-ST, 24 Barb-24MB	9	6000792	2	Clamp-Worm Drive, 1.06" to 2.0"
4	6001446	6	Clamp-T Bolt, 2.34" to 2.66"	10	3182627	1	Hose-Suction, Steering Gear Pump, 1" x 51"
5	2182626	1	Hose-Suction, Pump, 2.0" x 45", 74CC	11	6602735	1	Hose End-45 Deg, 16 Barb-16MB
6	3182625	1	Hose-Suction, Pump, 2"ID x 49", 74 CC				

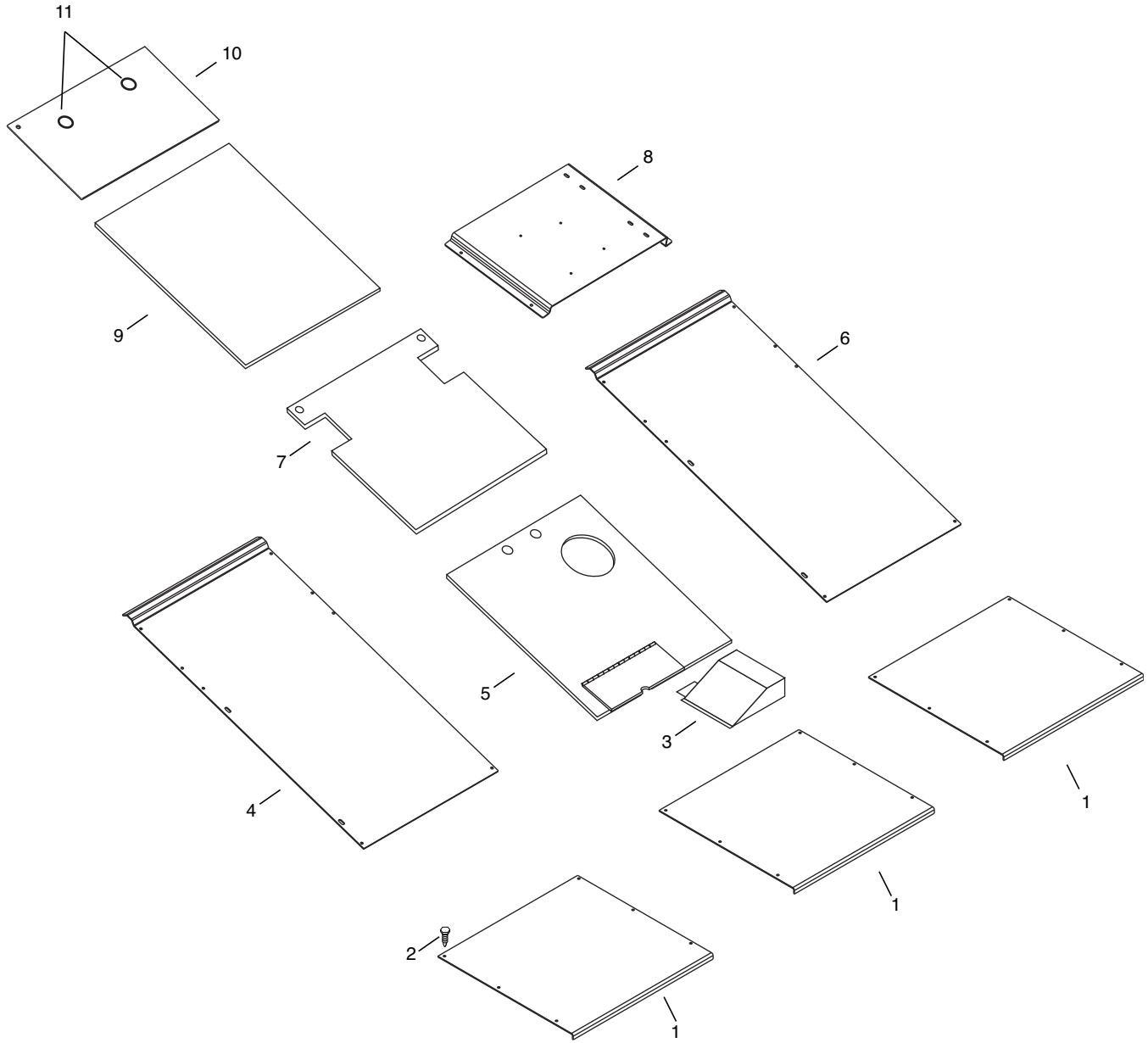
## Front Motor Installation



REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	6100678	4	Screw-Hex, M16x45, Gr 10.9	14	3111492	2	Gasket-Axle Input
2	6100677	4	Washer-Lock, 16mm	15	6603525	1	Brake-Parking, Mico, DIN
3	0223515	4	Screw-Hex, 5/8NCx2 1/2, Gr 8	7050593	1	Seal Kit	
4	0121574	4	Washer-Lock, 5/8	7050594	1	Bearing Kit	
5	6603547	1	Elbow-Hyd, 90, M26-12MJ	7050595	1	Spring Kit	
6	3181927	1	Hose-Front Motor Drain	7050596	1	Lining Kit	
7	7050844	1	Speed Sensor Cable Asm				
7a	7051741	1	Speed Sensor-for Motor 6604749				
8	6604176	1	Hose-Left Front Drive				
9	6604177	1	Hose-Right Front Drive				
10	6604026	1	Motor-Hyd,160CC, DIN				
	7050649	1	Solenoid, Round				
	7050189	1	Seal Kit				
	7050191	1	Shaft Seal				
11	9410200	1	Adapter-Hyd, ST, 04MB-04MJ				
12	3181437	1	Hose-Hitch Block to Parking Brake				
13	6603559	2	Split Flange Kit-1 1/4" Code 62, Metric				

HYDRAULIC

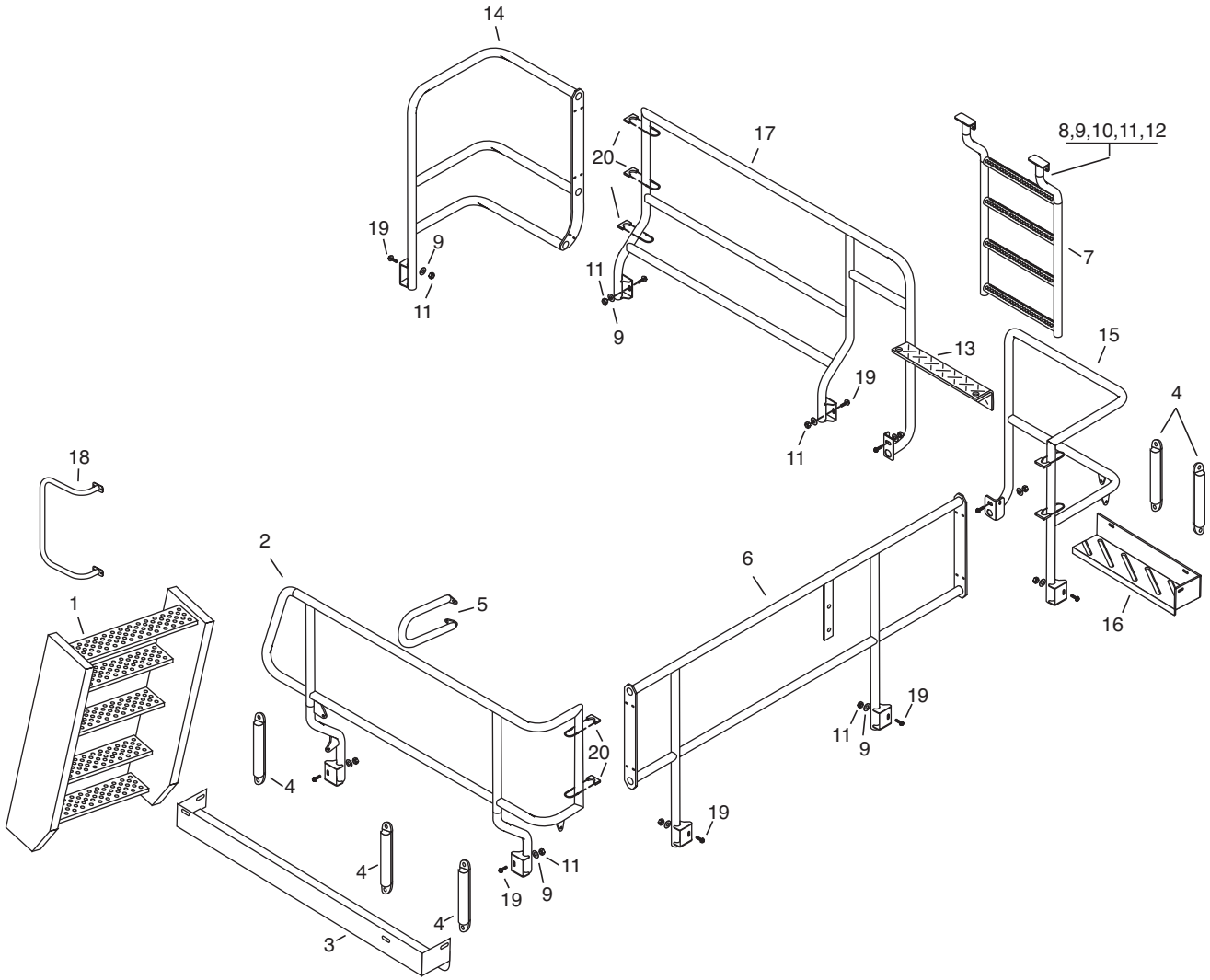
## Engine & Conveyor Covers & Decking



CHASSIS

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3103162	3	Deck-Platform, 11 Chip	8	3103175	1	Cover-Conveyor, Front RH
2	0448445	56	Screw-Hex HD 0.25-20 x 0.50, Selftap	9	3103326	1	Decking-Center, Rear Slope, QSB Eng
3	3102213	1	Cover-Deck, E-Chain	10	3103328	1	Decking-Center, Rear Slope, QSB Eng
4	3103140	1	Cover-Conveyor, Incline, LH	11	Q400153	2	Grommet-Blk Rubber, 1" I.D
5	3103323	1	Decking-Ctr, Rear Slope, QSB Eng				
6	3103176	1	Cover-Conveyor, Incline, RH				
7	3103338	1	Decking-Center, Rear Slope, QSB Eng				

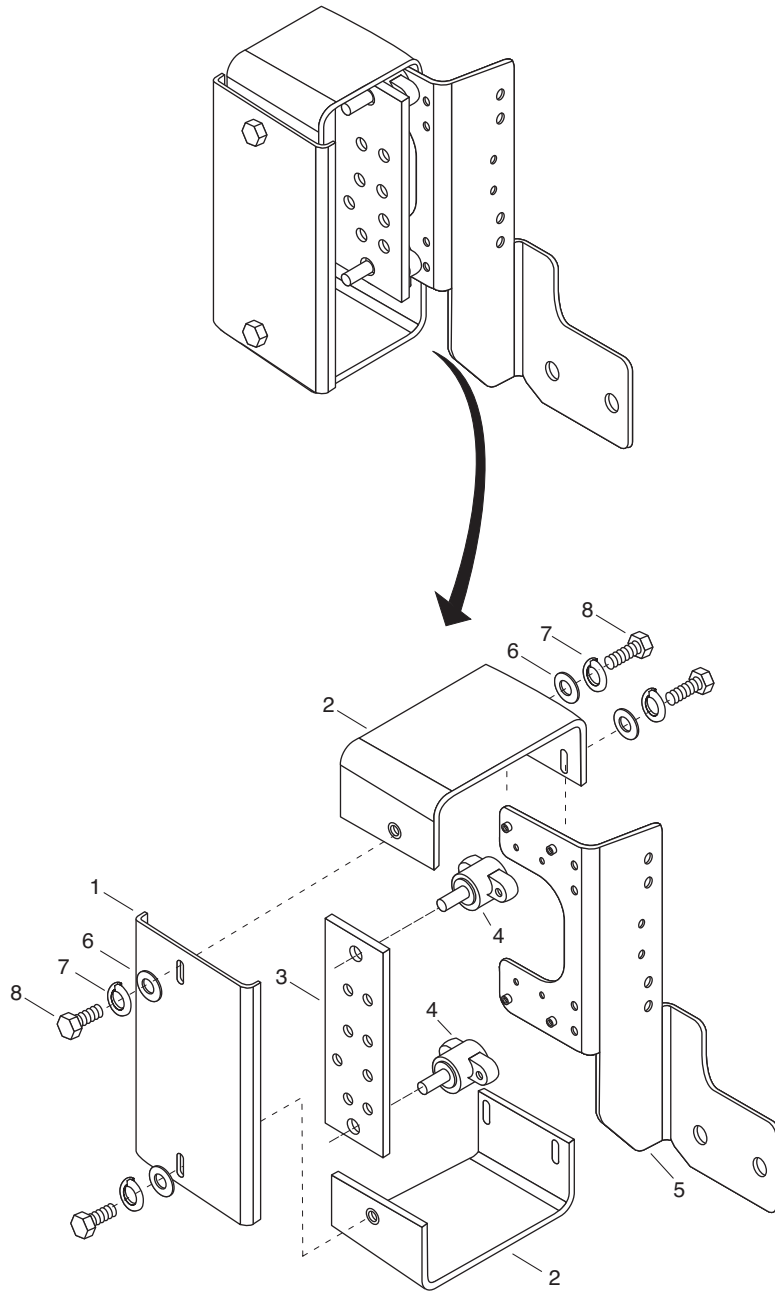
## Handrails And Ladders



CHASSIS

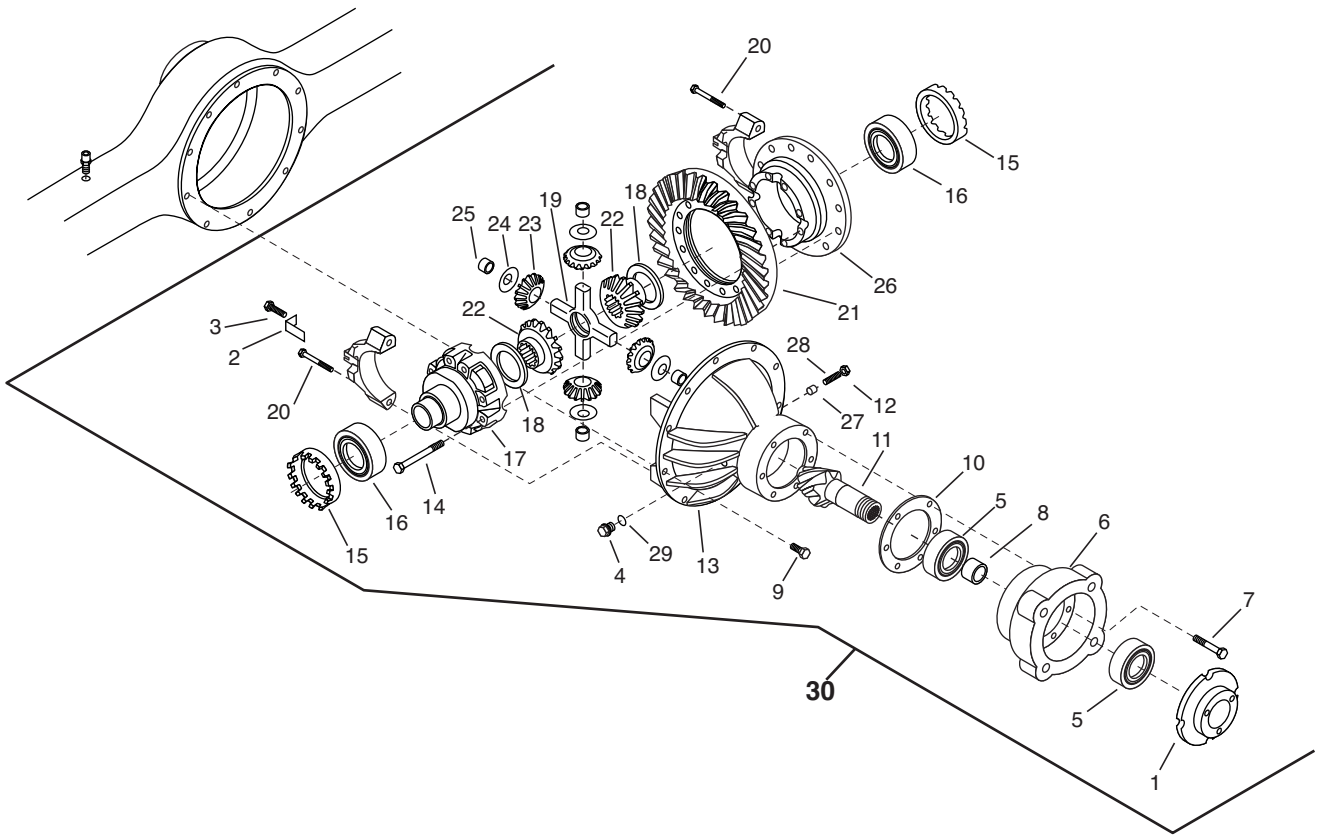
REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3121719	1	Ladder Asm	12	Q496622	2	Pin-Snap, 5/16 x 2-1/2, Useable
2	3103978	1	Handrail Asm-Left Rear	13	3100222	1	Step-Rough Tread
3	3103994	1	Guard-Side, LH Handrail	14	3104022	1	Handrail Asm-Right Front
4	3103335	5	Strut-Handrail Guard	15	3104126	1	Handrail Asm- Right Rear
5	3103193	1	Handrail Asm-Safety Bar	16	3103979	1	Guard-Side, RH Handrail
6	3104023	1	Handrail Asm-Rear Catwalk	17	3122596	1	Handrail Asm-Right Mid
7	3103557	1	Ladder Asm- RH Side, Flip Up	18	3103339	1	Handrail Asm-RH Grab Handle
8	0179892	2	Screw-Hex, 0.50 NC x 2.75, GR5, PD	19	6100881-05	10	Bolt-Wiz, 0.50"UNC x 1.50", Gr5, PD
9	0120396	14	Washer-Flat, 0.50, .531 x 1.062, PD	20	6001482	7	Clamp-Muffler, 1.50", Plated
10	0120384	2	Washer-Lock, 0.50, Spring,PD				
11	0120378	12	Nut-Hex, 0.50NC, PD				

### Power Buss Bar Assembly



REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3102233	1	Cover-Buss Bar Plate				
2	3102232	2	Standoff-Bass Bar Plate Cover				
3	3102235	1	Buss Bar-Copper, QSB Engine				
4	6703402	2	Stud-Junction, Insulated, 3/8-16				
5	3103315	1	Mount-Buss Barr, QSB w/ Insert				
6	0120386	6	Washer-Flat, 0.25A (0.31" x 0.73"), PD				
7	0120380	6	Washer-Lock, 0.25", Spring, PD				
8	0180020	6	Screw-Hex, 0.25"NC x 0.75", GR5, PD				

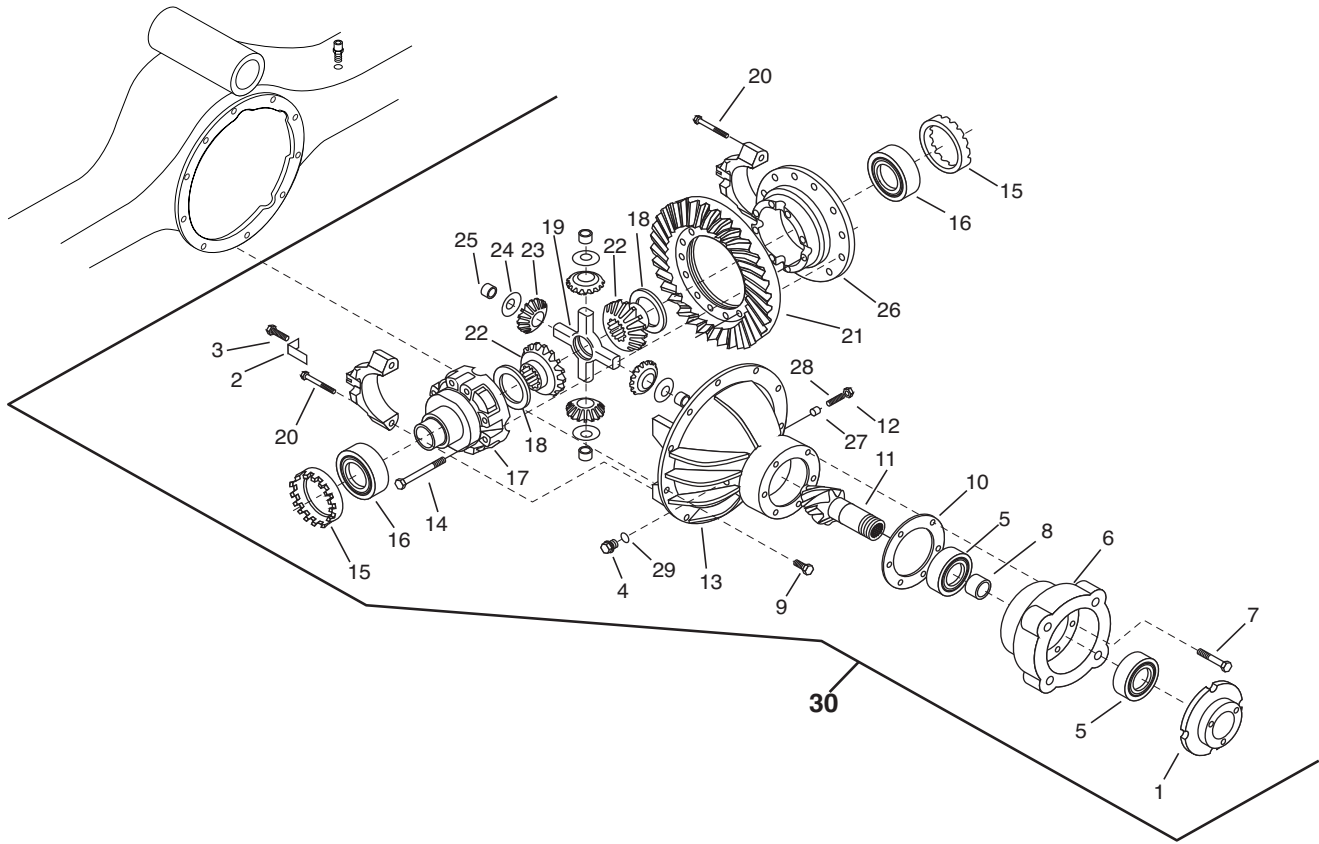
## Carrier Assembly - Rear Axle Asm - 3111475



CHASSIS

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	7050613	1	Nut-Pinion	22	7050572	2	Differential Side Gear
2	7050601	2	Lock Plate	23	7050588	4	Differential Pinion
3	7050602	2	Cap Screw-Hex	24	7050590	4	Thrust Washer
4	7050604	1	Plug	25	7050591	4	Bearing Bushing
5	7050609	2	Tapered Roller Bearing	26	7050569	1	Differential Housing
6	7050611	1	Pinion Housing	27	7050607	1	Cap
7	7050592	8	Bolt-Hex Socket	28	7050606	1	Support Bolt
8	7050610	1	Bushing	29	7050605	1	Sealing Ring
9	7050603	12	Screw-Hex	30	7050566	1	Differential & Carrier Assy (Includes Ref 1-29)
10	7050612	1	Disk				
11	7050567	1	Pinion				
12	7050608	1	Nut-Hex				
13	7050598	1	Differential Carrier				
14	7050592	12	Cap Screw-Socket Head				
15	7050600	2	Setting Ring				
16	7050597	2	Tapered Roller Bearing				
17	7050570	1	Differential Housing				
18	7050589	2	Thrust Washer				
19	7050571	1	Differential Spider				
20	7050599	4	Cap Screw-Hex				
21	7050568	1	Ring Gear				

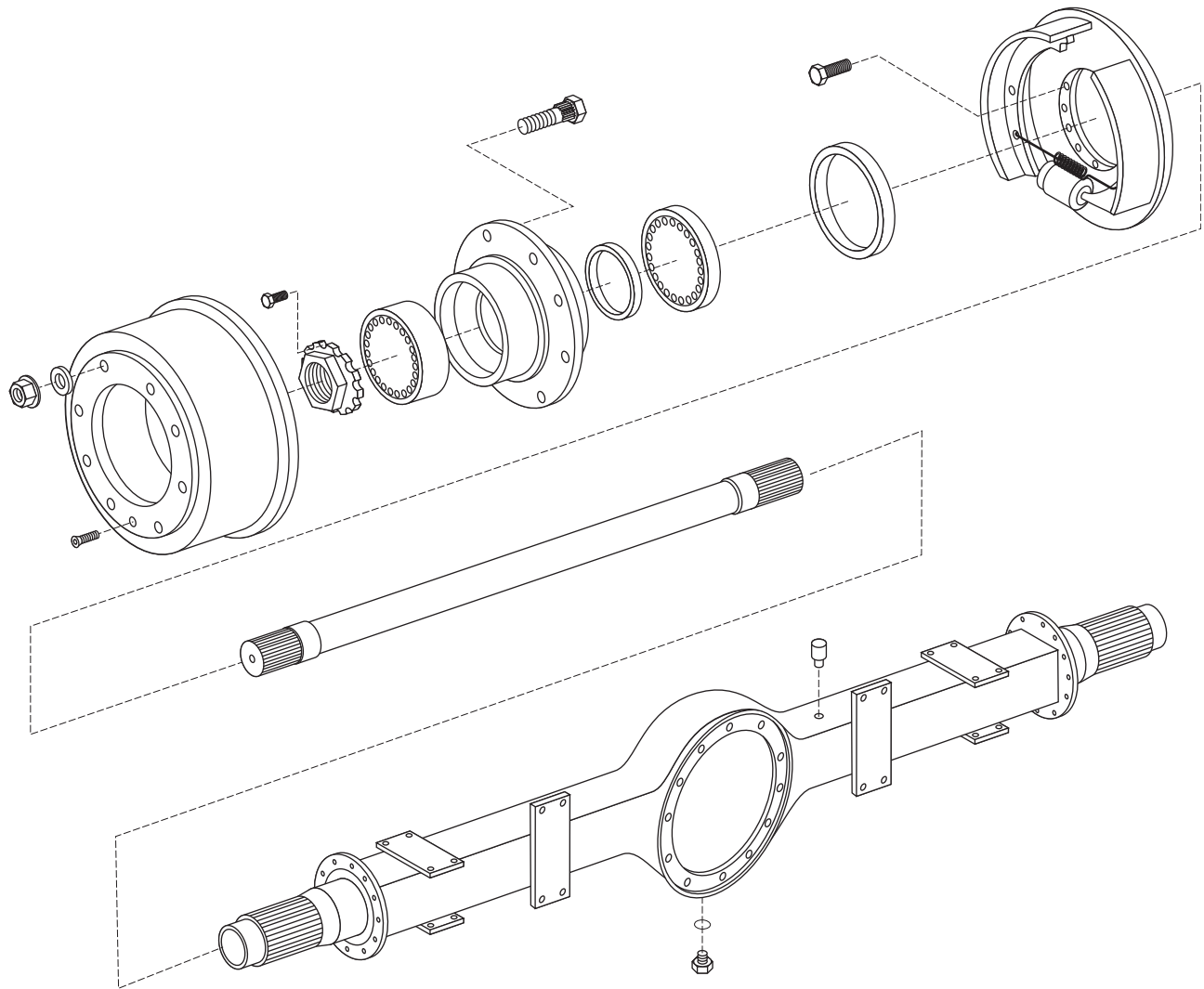
## Carrier Assembly - Front Axle Asm - 3111467



CHASSIS

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	7050613	1	Nut-Pinion	23	7050588	4	Differential Pinion
2	7050601	2	Lock Plate	24	7050590	4	Thrust Washer
3	7050602	2	Cap Screw-Hex	25	7050591	4	Bearing Bushing
4	7050604	1	Plug	26	7050569	1	Differential Housing
5	7050609	2	Tapered Roller Bearing	27	7050607	1	Cap
6	7050611	1	Pinion Housing	28	7050606	1	Support Bolt
7	7050592	8	Bolt-Hex Socket	29	7050605	1	Sealing Ring
8	7050610	1	Bushing	30	7050647	1	Differential & Carrier Assy (Includes Ref 1-29)
9	7050603	12	Screw-Hex				
10	7050612	1	Disk				
11	7050567	1	Pinion				
12	7050608	1	Nut-Hex				
13	7050598	1	Differential Carrier				
14	7050592	12	Cap Screw-Socket Head				
15	7050600	2	Setting Ring				
16	7050597	2	Tapered Roller Bearing				
17	7050570	1	Differential Housing				
18	7050589	2	Thrust Washer				
19	7050571	1	Differential Spider				
20	7050599	4	Cap Screw-Hex				
21	7050568	1	Ring Gear				
22	7050572	2	Differential Side Gear				

## Rear Axle - Kessler

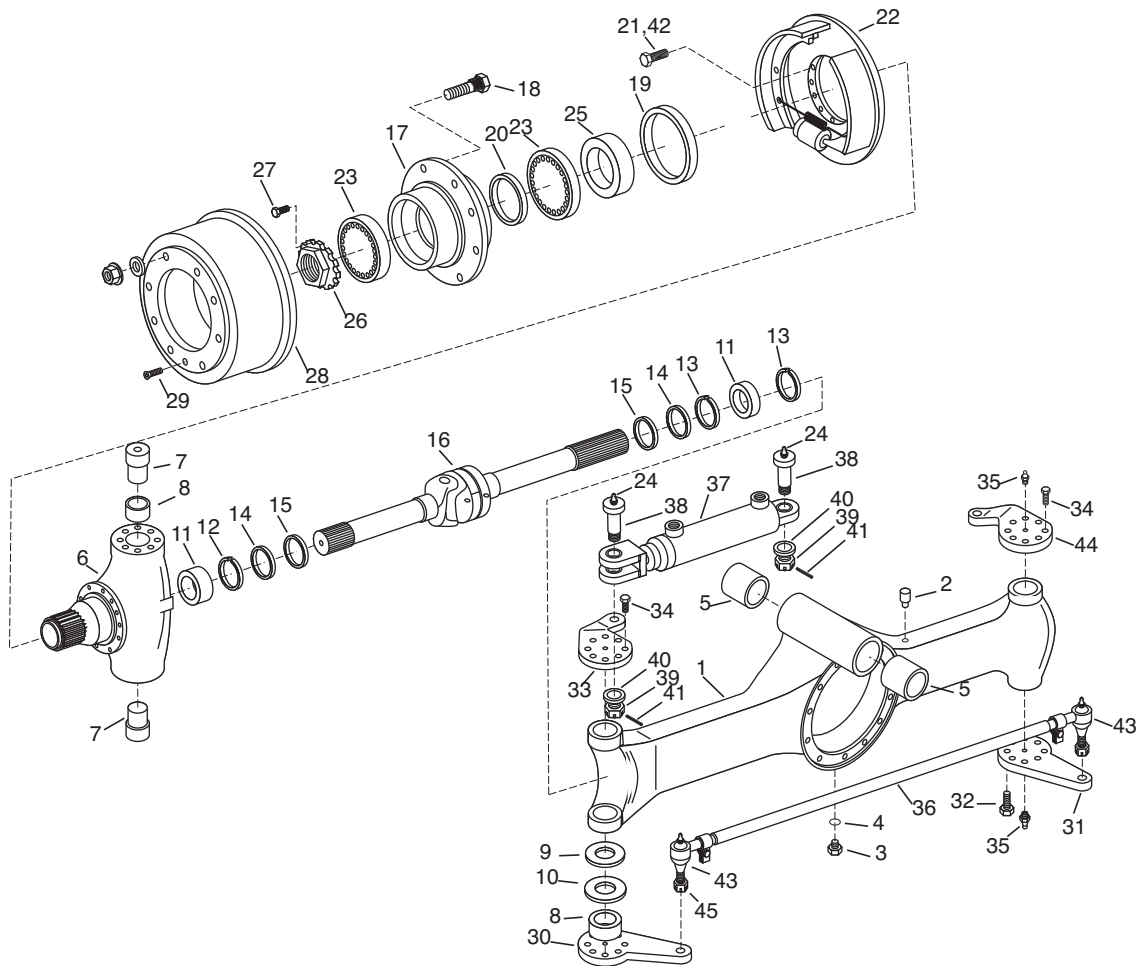


CHASSIS

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3111475	1	Axle Housing				
2	7050518	1	Breather				
3	7050519	1	Plug				
4	7050520	1	Sealing Ring				
5	7050521	2	Axle Shaft				
6	7050522	2	Wheel Hub				
7	7050523	20	Wheel Stud				
8	7050531	2	Radial Seal Ring				
9	7050532	2	Radial Seal Ring				
10	7050533	4	Tapered Roller Bearing				
11	7050534	2	Nut				
12	7050535	2	Hex Socket Screw				
13	7050536	2	Brake Drum				
14	7050537	4	Countersunk Hex Head Screw				
15	7050538	2	Brake Assembly				
16	7050539	34	Hexagon Socket Screw				
17	7050540	8	Hexagon Socket Screw				

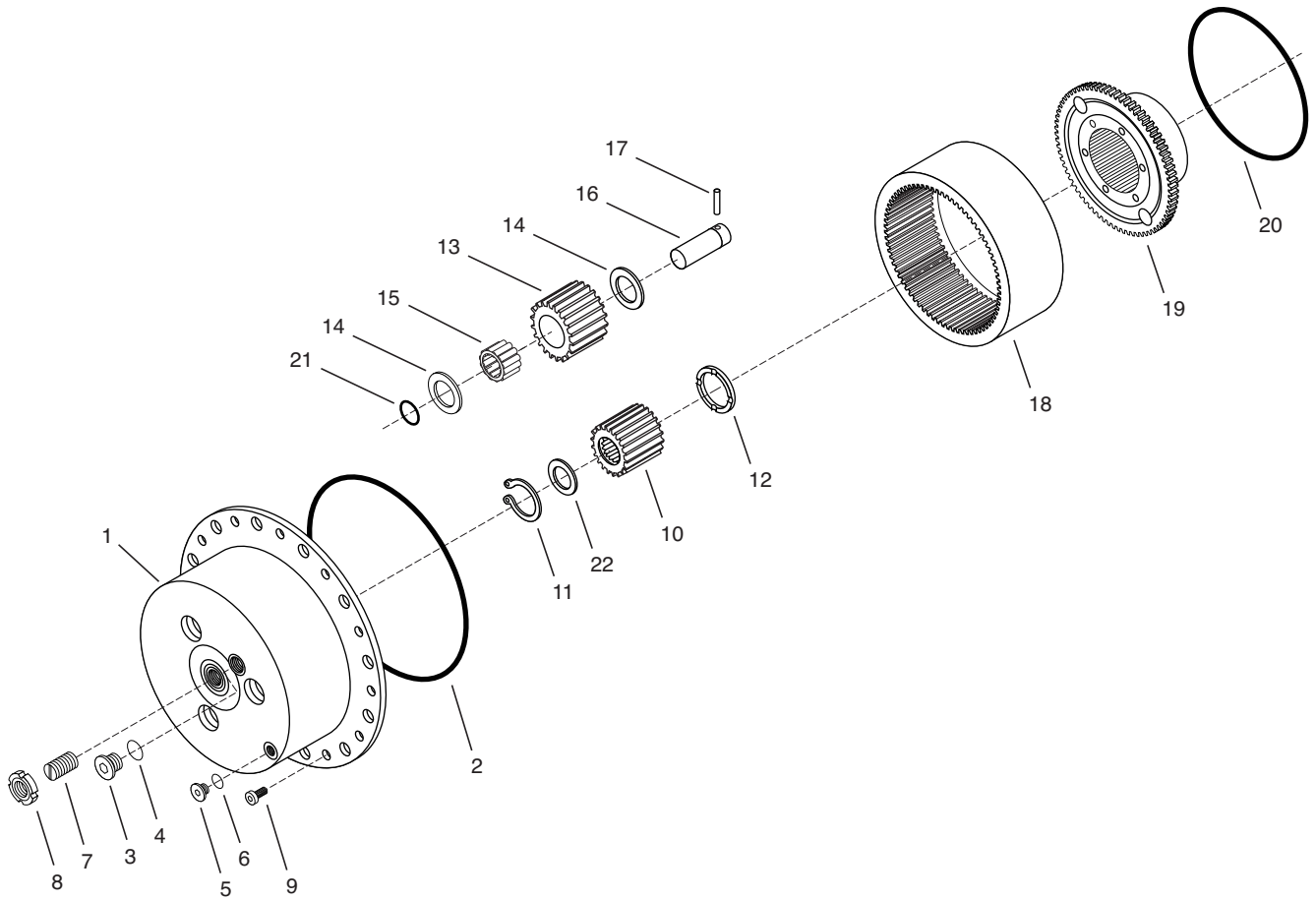


## Front Axle - Kessler



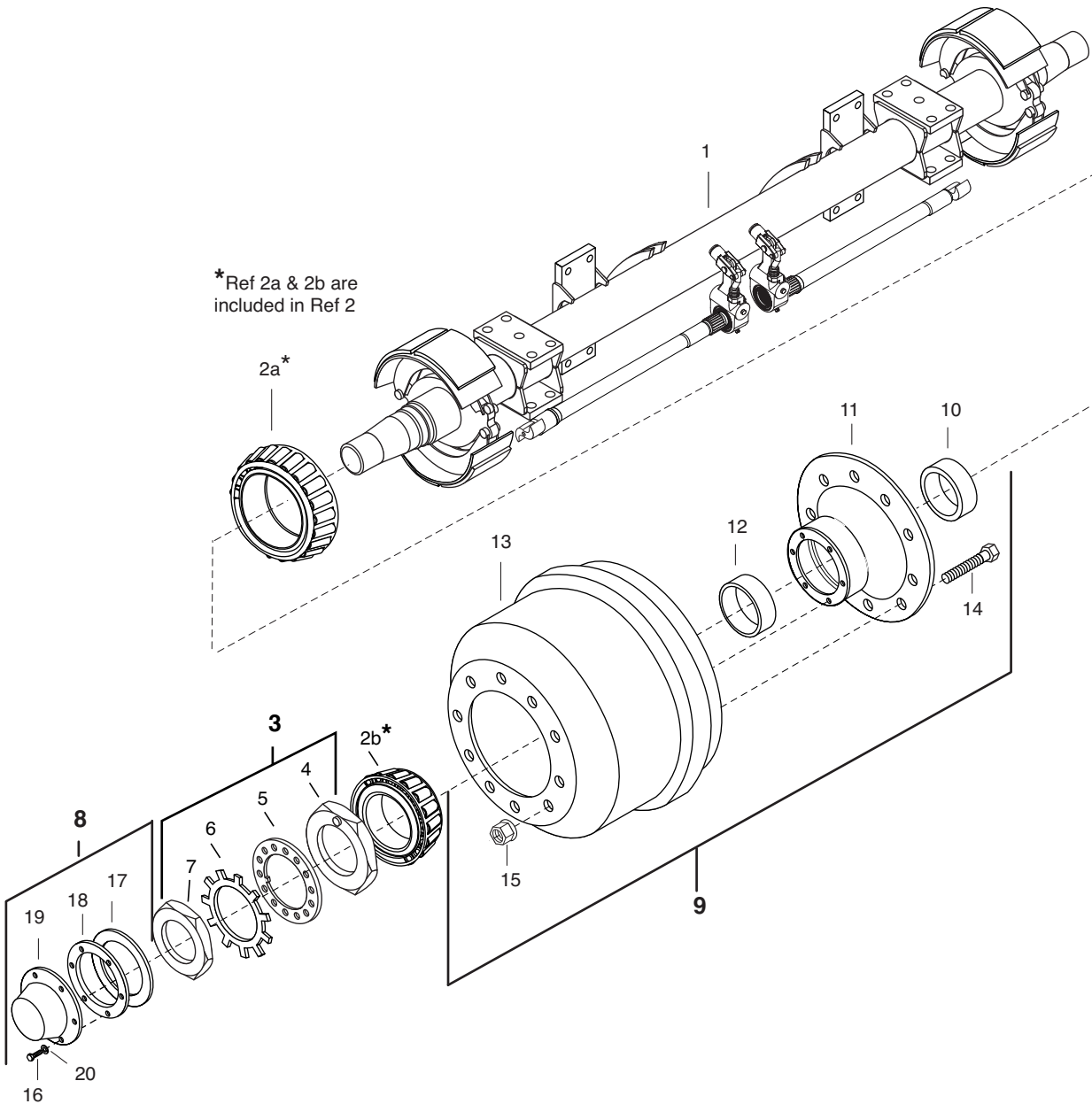
REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	7050618	1	Axle Housing	25	7050632	2	Ring
2	7050518	1	Breather	26	7050534	2	Nut
3	7050519	1	Plug	27	7050535	2	Hex Socket Screw
4	7050520	1	Sealing Ring	28	7050536	2	Brake Drum
5	7050619	2	Bushing	29	7050537	4	Countersunk Hex Head Screw
6	7050620	2	Steering Knuckle	30	7050633	1	Lever
7	7050621	4	King Pin	31	7050634	1	Lever
8	7050622	4	Bearing Bushing	32	7050635	12	Hex Screw
9	7050623	2	Thrust Washer	33	7050654	1	Plate-Cylinder Mt, LH
10	7050624	2	Disk	34	7050655	12	Hex Screw
11	7050625	4	Bushing	35	7050638	4	Grease Zerk
12	7050626	2	Circlip	36	7050639	1	Track Rod
13	7050627	4	Circlip	37	7050640	2	Steering Cylinder
14	7050628	4	Radial Seal Ring		PD11455	AR	Seal Kit
15	7050629	4	Radial Seal Ring	38	7050641	4	Bolt
16	7050630	2	Cardan Joint	39	7050642	4	Castellated Nut
17	7050631	2	Wheel Hub	40	7050643	4	Disk
18	7050523	20	Wheel Stud	41	7050644	4	Roll Pin
19	7050531	2	Radial Seal Ring	42	7050540	8	Hexagon Socket Screw
20	7050532	2	Radial Seal Ring	43	7050651	1	Rod End-Track Arm, RH
21	7050539	34	Hexagon Socket Screw		7050774	1	Rod End-Track Arm, LH
22	7050538	2	Brake Assembly	44	7050652	1	Plate-Cylinder Mt, RH
23	7050533	4	Tapered Roller Bearing	45	7050653	2	Castlellated Nut-Track Arm
24	7050645	4	Grease Zerk				

## Planetary Wheel End - Kessler



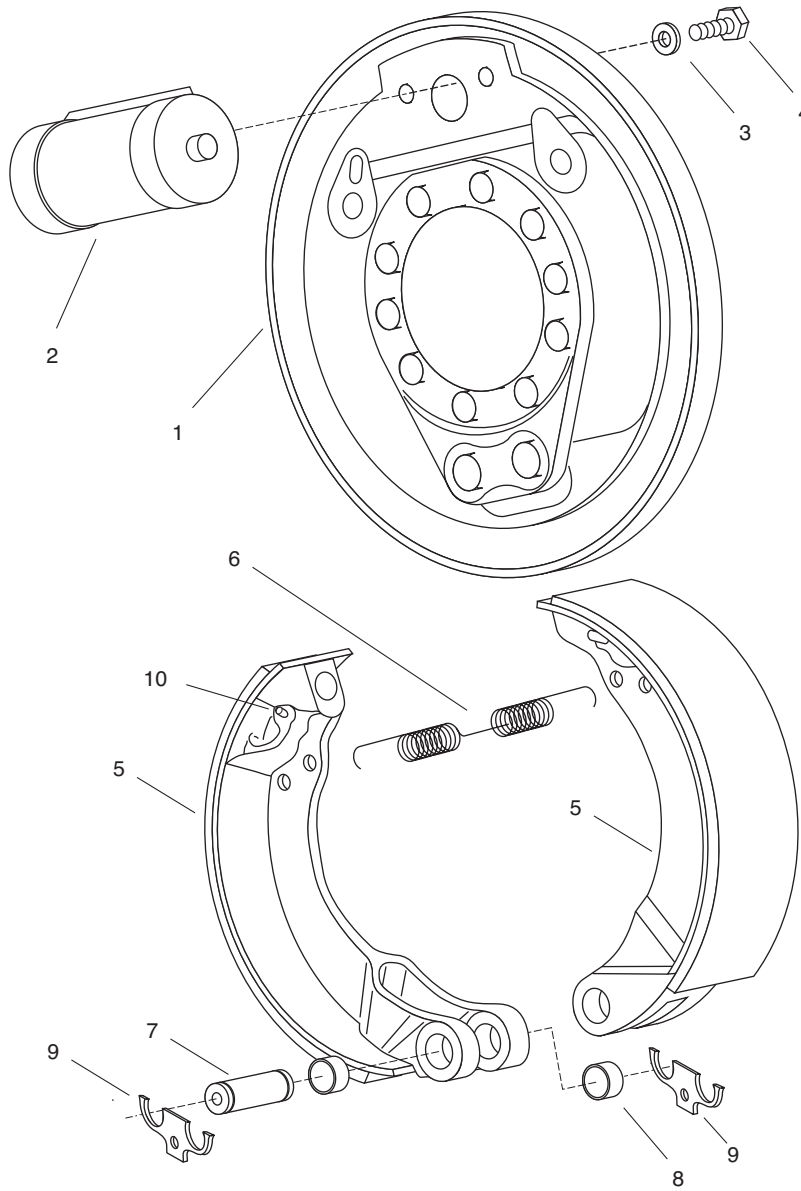
REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	7050547	1	Planetary Housing	13	7050557	3	Planetary Gear
2	7050548	1	O-Ring	14	7050558	6	Thrust Washer
3	7050549	1	Screw Plug	15	7050559	3	Needle Bearing
4	7050550	1	Sealing Ring	16	7050560	3	Planetary Pin
5	7050519	1	Screw Plug	17	7050561	3	Locking Pin
6	7050520	1	Sealing Ring	18	7050562	1	Ring Gear
7	7050551	1	Adjusting Screw	19	7050563	1	Ring Gear Carrier
8	7050552	1	Slotted Nut	20	7050564	1	Circlip
9	7050553	6	Hexagon Adjusting Screw	21	7050565	3	O-Ring
10	7050554	1	Sun Gear	22	7050646	2	Thrust Washer
11	7050555	1	Circlip				
12	7050556	1	Thrust Ring				

## Axle, Hub & Drum Assembly



REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3111616	1	Axle Asm-2WD, Rear	9	6452552	1	Hub & Drum Asm <i>(Includes Ref 10-15)</i>
2	6452774	1	Kit-Bearing <i>(Includes Ref 2a &amp; 2b)</i>	10	Q435614	1	Cup-Bearing, Inner
2a	Q435613	2	Cone-Bearing, Inner	11	*****	1	Hub
2b	Q401262	2	Cone-Bearing, Outer	12	Q401263	1	Cup-Bearing, Outer
3	Q527019	1	Kit-Spindle Nut <i>(Includes Ref 4 - 7)</i>	13	7050923	1	Drum
4	Q400678	1	Nut	14	Q492965	10	Wheel Stud, EMI5322
5	Q400677	1	Nut-Lock	15	6450758	10	Nut-Flange, 2 Piece, 33mm Hex
6	*****	1	Washer-Lock, Spindle Star	16	Q016836	6	Capscrew-5/16" UNC x 3/4"
7	Q400676	1	Nut	17	Q476230	1	Seal-Oil/Grease
8	6450585	1	Oil Seal Axle Kit <i>(Includes Ref 16-20)</i>	18	Q413458	1	Gasket
				19	Q400485	1	Cap-Hub
				20	Q015155	6	Lockwasher-5/16"

## Brake Assembly - Kessler 7050538

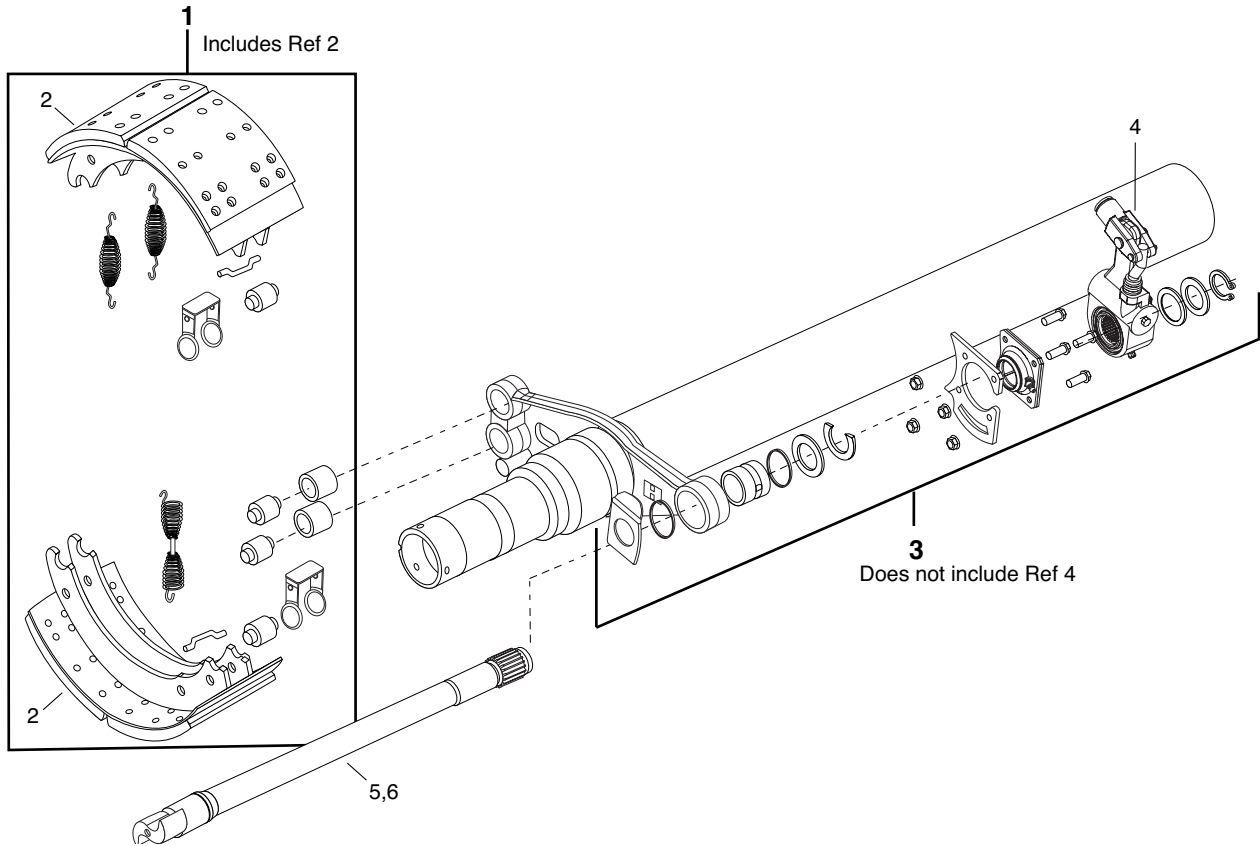


BRAKES

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	7050541	2	Brake Backing Plate				
2	7050542	2	Wheel Cylinder				
	7050957		Seal Kit				
	7050958		Bleeder Screw				
3	7050543	4	Spring Washer				
4	7050544	4	Hex Head Capscrew				
5	7050545	4	Brake Shoe				
6	7050546	2	Shoe Return Spring				
7	7050614	4	Shoe Pivot Pin				
8	7050615	8	Bearing Bushing				
9	7050616	2	Lock Plate				
10	7050617	4	Locking Pin				

Specify Unit Serial No., Part No., & Part Description

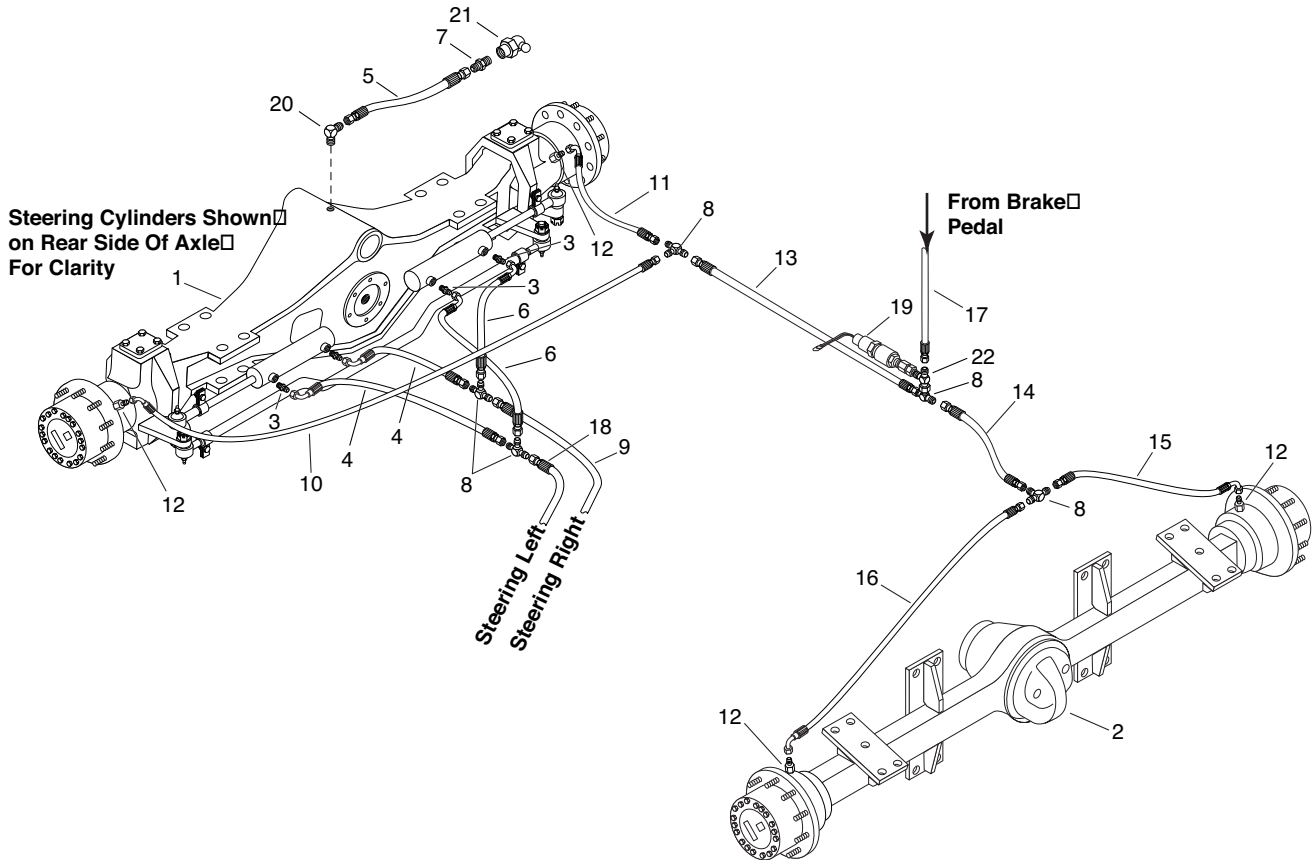
## Brake Assembly & S-Cam Major Overhaul Kit 2WD Rear Axle



BRAKES

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	7050948	1	Kit-Brake Overhaul (Includes Ref 2)				
2	7050944	1	Kit-Brake Shoe				
3	7050956	1	Kit-Major Overhaul, S-Cam (Does not include Ref 4)				
4	6450884	2	Adjuster, Slack				
5	6451152	1	Camshaft-LH				
6	6451153	1	Camshaft-RH				

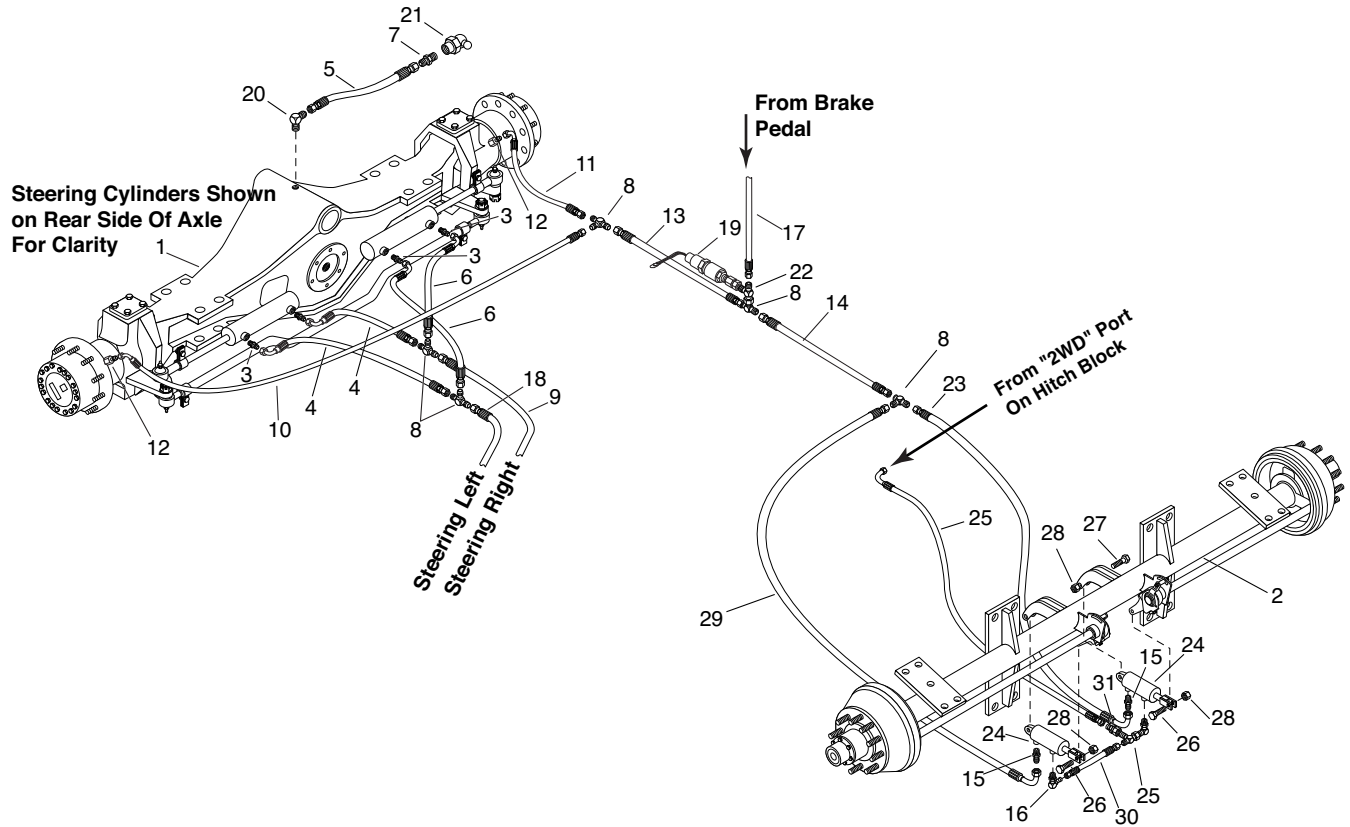
## Brake and Steering Hoses 4WD



BRAKES

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3111604	1	Axle-Front, Drive	17	3181946	1	Hose-A On Brake Pedal to Tee
2	3111573	1	Axle-Rear, Drive	18	3181949	1	Hose-Steering Pressure, Left
3	6603558	4	Adapter-Hyd, St, M18-06MJ	19	3160723	1	Switch Assy-Brake Pressure
4	3181738	2	Hose-Left Steering Cylinder	20	6603554	1	Elbow-Hyd, 90, M10-04MJ
5	3181731	1	Hose-Grease Extension	21	0109462	1	Zerk-90, 0.12NPT
6	3181739	2	Hose-Right Steering Cylinder	22	6602984	1	Tee-Hydr, 06MJ-06MJ-06MJ
7	6601142	1	Adapter-Hyd, ST, 02MP-04MJ				
8	9402981	5	Tee-Hyd, 06MJ-06MJ-06MJ				
9	3182278	1	Hose-Steering Pressure, Right				
10	3181218	1	Hose-Front Left Brake				
11	3181736	1	Hose-Front Right Brake				
12	6603548	4	Adapter-Hyd, ST, M14-06MJ				
13	3182009	1	Hose-Brake, Mid Tee to Front Tee				
14	3181737	1	Hose-Brake, Mid Tee to Rear Tee				
15	3181734	1	Hose-Rear Right Brake				
16	3181735	1	Hose-Rear Left Brake				

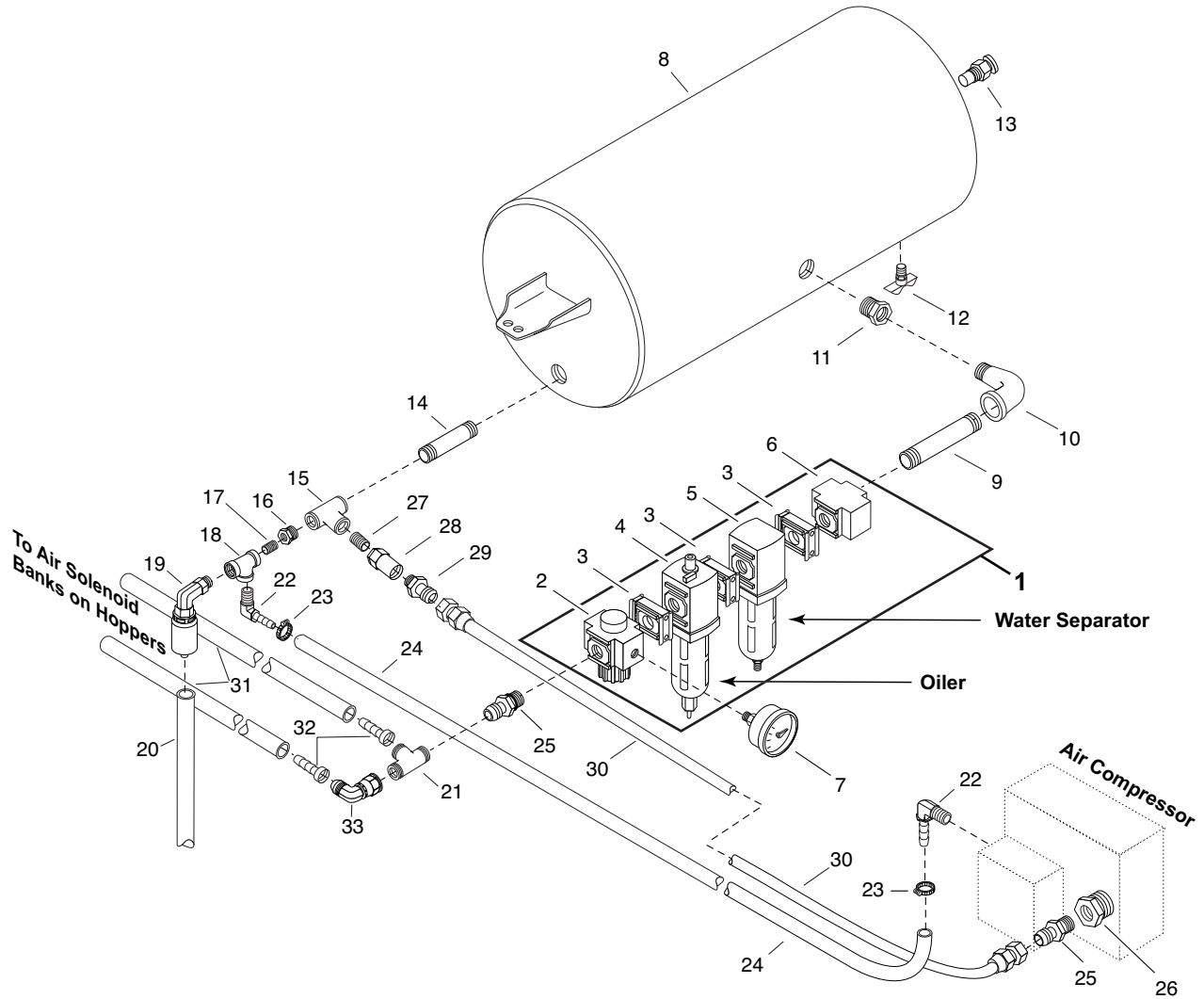
## Brake and Steering Hoses 2WD



BRAKES

REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	3111604	1	Axle-Front, 2WD	18	3181949	1	Hose-Steering Pressure, Left
2	3111499	1	Axle-Rear, 2WD	19	3160723	1	Switch Assy-Brake Pressure
3	6603558	4	Adapter-Hyd, St, M18-06MJ	20	6603554	1	Elbow-Hyd, 90, M10-04MJ
4	3181738	2	Hose-Left Steering Cylinder	21	0109462	1	Zerk-90, 0.12NPT
5	3181731	1	Hose-Grease Extension	22	6602984	1	Tee-Hydr, 06MJ-06FJX-06MJ
6	3181739	2	Hose-Right Steering Cylinder	23	3181278	1	Hose-2WD Brake Line to R Cyl Base End
7	6601142	1	Adapter-Hyd, ST, 02MP-04MJ	24	6602680	2	Cylinder-Hyd, 3" Bore x 2" Stroke
8	9402981	5	Tee-Hyd, 06MJ-06MJ-06MJ	25	3181357	1	Hose-2WD Brake, Hitch Block to Cyl Tee
9	3182278	1	Hose-Steering Pressure, Right	26	0186646	2	Screw-Hex, 0.50NC x 2.00, GR2, PD
10	3181218	1	Hose-Front Left Brake	27	0120236	2	Screw-Hex, 0.540NC x 3.00, GR2, PD
11	3181736	1	Hose-Front Right Brake	28	9413947	4	Nut-Hex, Lock, 0.44NC, PD
12	6603548	2	Adapter-Hyd, ST, M14-06MJ	29	3181356	1	Hose-2WD Brake Line to L Cyl Base End
13	3182009	1	Hose-Brake, Mid Tee to Front Tee	30	3181355	1	Hose-2WD Brake, Rod to Rod
14	3181214	1	Hose-Brake, Mid Tee to Rear Tee	31	6602707	1	Adapter-Hyd, ST, 06FJX-04MJ
15	9410202	2	Adapter-Hyd, ST, 06MJ-06MJ				
16	9410976	2	Elbow-Hyd, 90, 06MB-06MJ				
17	3181946	1	Hose-A On Brake Pedal to Tee				

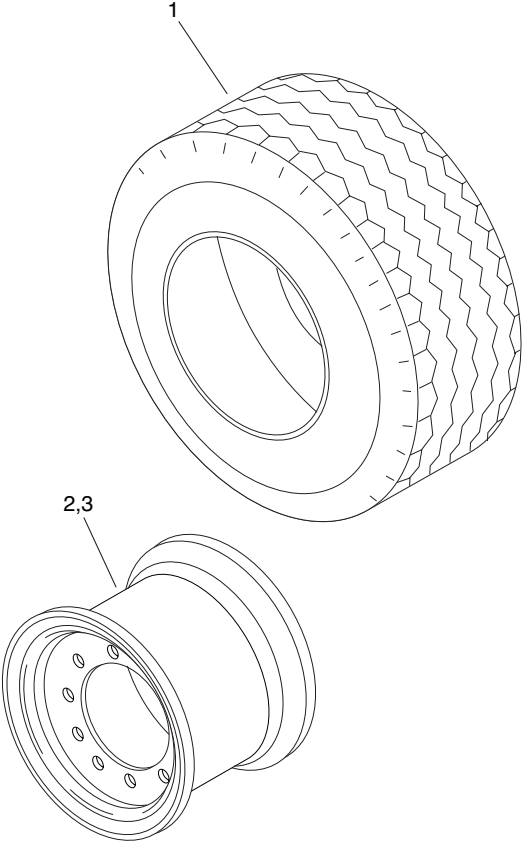
## Air Reservoir



REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	6602982	1	Air Oiler/Water Separater <i>(Includes Ref 2-6)</i>	15	0218240	1	Tee-Pipe, 0.38 x 0.25 x 0.25NPT, PD
2	7050144	1	Regulator-Air, Adj 0-125 PSI	16	0144035	1	Bushing-Pipe, 0.25 x 0.12NPT, PD
3	7050061	3	Joiner, Filter/Lub	17	0142868	1	Nipple-PP, Sch 40, 0.12 x 0.75, PD
4	7050058	1	1/2" Lubricator, Filter/Lub	18	0144082	1	Tee-Pipe, 0.12, Galv
	7050064	1	Lub Bowl/Guard, Filter/Lub	19	6603831	1	Adapter-Air, 90, 04Tube x 02MPX, PD
	7050066	1	O-Ring (Nitrile) Bowl, Filter/Lub	20	Q444884	1	Tube-Nylon, Air, 0.25. SNS
5	7050059	1	1/2" Filter W/A Drain, Filter/Lub	21	9410333	1	Tee-Hyd, 08MJ-08FJX-08MJ
	7050065	1	Filter Bowl/Guard, Filter/Lub	22	6602242	2	Hose End-3/16 Hose x 1/8MPT,90
	7050066	1	O-Ring (Nitrile) Bowl, Filter/Lub	23	6001005	2	Clamp-Hose, Screw Type, M5
	7050067	1	Filter 5 Micron, Filter/Lub	24	6309255	AR	Hose-Fuel, 0.19 ID/FT
6	7050060	1	1/2" Safety Lockout V, Filter/Lub	25	9402709	2	Adapter-Hyd, ST 08MJ-08MP
7	6602992	1	Gage-Air,0-160 PSI, 1/4 NPT	26	0144042	1	Bushing-Pipe, 0.75 x 0.50NPT ,PD
8	6450357	1	Reservoir-Air, 9.69 x 22.5	27	0192050	1	Nipple-Sch 40, 0.25 x 0.87CL, PD
9	0192077	1	Nipple-PP, Sch 40, 0.50 x 2.50, PD	28	6600963	1	Valve-Check, Single, 0.25NPT
10	0127961	1	Elbow-Pipe, 90, ST, 0.50NPT, PD	29	Q6602192	1	Adapter-Hyd, ST, 08MJ-04MP
11	0144042	1	Bushing-Pipe, 0.75 x 0.50NPT, PD	30	6602274	1	Hose Asm-Air, SS, 08FJX-08FJX
12	6600162	1	Cock-Drain, 0.25 In., Spanco	31	6600324	AR	Hose-Fuel/Air, 0.38 ID
13	6600299	1	Vlv-Safety, Midland 110715	32	6604464	2	Hose End, 06 x 08FJX, ST, LPSP
14	0188126	1	Nipple-PP, Sch 40, 0.38 x 2.00	33	9410281	1	Elbow-Hyd, 90, 08FJX-08MJ
							AR = As Required



**Tires And Wheels - Kessler**  
2WD and 4WD



REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	6450767	4	Tire-385/65R22.5, 18 Ply, YOKO				
2	3111469	4	Wheel-22.5 x 12.25, 0" Offset, HD				
3	6450265	4	Valve-Tire, Tubeless, Truck				

**WHEELS & TIRES**

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
0102582	29	0120378	75	0131000	13	0274253	63	3102268	6
0102582	37	0120380	76	0131000	19	0274253	63	3102336	53
0103384	15	0120382	11	0131046	11	0274253	65	3102346	6
0103384	17	0120382	13	0131046	13	0274517	57	3102406	11
0103386	15	0120382	47	0131046	27	0426099	27	3102406	19
0103386	15	0120382	49	0131048	27	0426099	37	3102439	13
0103386	15	0120382	53	0131048	29	0428715	53	3102440	13
0103386	17	0120382	68	0131048	37	0436695	51	3102456	13
0103386	17	0120382	69	0142868	49	0446363	11	3102469	13
0103386	17	0120382	71	0142868	87	0446363	35	3102470	13
0103389	13	0120383	51	0144035	87	0446363	43	3102471	13
0103409	27	0120384	13	0144042	68	0448445	74	3102476	13
0103409	29	0120384	29	0144042	69	0454903	31	3102546	13
0103409	35	0120384	30	0144042	87	0454903	39	3102551	13
0103409	37	0120384	37	0144042	87	0457008	15	3102574	15
0103409	43	0120384	38	0144082	87	0457008	17	3102574	17
0103411	46	0120384	45	0147117	45	0457008	49	3102942	55
0105413	35	0120384	49	0179892	75	2182626	72	3102991	7
0108686	35	0120384	63	0180020	76	3100078	15	3103015	51
0108686	43	0120384	65	0180079	49	3100078	17	3103121	13
0109462	15	0120384	71	0180085	15	3100096	49	3103122	13
0109462	17	0120384	75	0180085	17	3100163	13	3103122	19
0109462	49	0120386	76	0180120	19	3100174	49	3103123	13
0109462	85	0120388	13	0180120	71	3100222	75	3103140	74
0109462	86	0120388	31	0180122	13	3100475	33	3103162	74
0120214	11	0120388	33	0180122	71	3100475	41	3103175	74
0120214	13	0120388	39	0180126	68	3101717	6	3103176	74
0120214	33	0120388	41	0180126	69	3101999	6	3103177	49
0120214	35	0120388	47	0180173	71	3102000	6	3103178	49
0120214	41	0120388	68	0180175	29	3102065	6	3103187	57
0120214	43	0120388	69	0180175	30	3102065-A	6	3103188	57
0120214	49	0120388	71	0180175	37	3102065-B	6	3103193	75
0120233	11	0120390	13	0180175	38	3102065-C	6	3103230	6
0120233	49	0120390	15	0180177	45	3102065-D	6	3103315	76
0120233	51	0120390	17	0180179	45	3102065-E	6	3103323	74
0120233	53	0120390	45	0180181	46	3102065-F	6	3103326	74
0120236	86	0120396	71	0186646	46	3102065-G	6	3103328	74
0120238	15	0120396	75	0186646	49	3102065-H	6	3103335	75
0120238	17	0120426	13	0186646	86	3102065-J	6	3103338	74
0120368	33	0120622	51	0187870	33	3102065-K	6	3103339	75
0120368	41	0120631	45	0187870	41	3102065-L	6	3103399	51
0120376	11	0120706	13	0188126	87	3102065-M	6	3103407	45
0120376	13	0121574	19	0191966	49	3102065-N	6	3103408	15
0120376	35	0121574	53	0192042	35	3102067	6	3103408	17
0120376	43	0121574	73	0192042	43	3102067-A	6	3103408	17
0120376	49	0121841	51	0192042	49	3102067-B	6	3103427	71
0120377	11	0122017	35	0192050	87	3102067-C	6	3103452	29
0120377	13	0122017	43	0192077	87	3102067-D	6	3103452	37
0120377	19	0122145	13	0192086	49	3102068	13	3103464	57
0120377	19	0122145	47	0218240	87	3102068	19	3103478	19
0120377	33	0122188	47	0219302	68	3102105	53	3103506	71
0120377	41	0122333	51	0219302	69	3102176	6	3103557	75
0120377	47	0124589	49	0220086	19	3102205	6	3103565	19
0120377	49	0124589	53	0220088	27	3102213	74	3103569	19
0120377	53	0127960	49	0220088	29	3102232	76	3103571	15
0120377	68	0127961	87	0220088	37	3102233	76	3103571	17
0120377	69	0127993	57	0220095	45	3102235	76	3103609	51
0120377	71	0130999	31	0223513	49	3102236	33	3103648	51
0120378	13	0130999	39	0223515	73	3102236	41	3103649	51
0120378	45	0130999	49	0223562	45	3102237	33	3103652	51
0120378	49	0131000	11	0271506	27	3102237	41	3103695	19

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
3103696	51	3130004	15	3140083	29	3142548	30	3143497	27
3103697	51	3130004	17	3140083	30	3142548	37	3143514	33
3103729	51	3130007	15	3140083	37	3142548	38	3143515	31
3103945	19	3130007	17	3140083	38	3142549	29	3143515	39
3103978	75	3130055	49	3140094	49	3142549	30	3143517	27
3103979	75	3130059	15	3140117	15	3142549	37	3143518	27
3103994	75	3130059	17	3140117	17	3142549	38	3143519	27
3104022	75	3130083	49	3140404	29	3142564	30	3143525	31
3104023	75	3130095	49	3140404	30	3142564	38	3143525	39
3104126	75	3130237	15	3140404	37	3142565	29	3143526	31
3104249	19	3130237	17	3140404	38	3142565	37	3143526	39
3104251	19	3130364	15	3140918	27	3142608	30	3143540	27
3110993	53	3130364	17	3140918	29	3142608	38	3143541	27
3111441	51	3130398	49	3140918	35	3142609	30	3143546	33
3111459	53	3130419	15	3140918	37	3142609	38	3143548	31
3111462	53	3130419	17	3140918	43	3142610	30	3143548	39
3111464	53	3130440	15	3141190	29	3142610	38	3143550	27
3111467	78	3130440	17	3141190	37	3142665	37	3143573	41
3111469	88	3130441	15	3141194	29	3142666	37	3143593	46
3111475	77	3130441	17	3141194	37	3142667	37	3143645	27
3111475	79	3130503	5	3141346	29	3142668	37	3143689	27
3111492	73	3130504	47	3141346	37	3142669	29	3143779	30
3111499	86	3130505	47	3141381	27	3142670	29	3143780	30
3111550	56	3130760	47	3141613	45	3142671	29	3143831	45
3111572	53	3130761	47	3141718	45	3142672	29	3143831	45
3111573	5	3130773	15	3141811	27	3142772	33	3143833	45
3111573	53	3130773	17	3141811	29	3142774	33	3143882	45
3111573	85	3130780	47	3141811	37	3142782	33	3143891	45
3111579	57	3130786	47	3142167	30	3142782	41	3143892	45
3111580	56	3130814	5	3142167	38	3142784	33	3143893	45
3111604	5	3130814	49	3142297	33	3142784	41	3143914	29
3111604	53	3130817	49	3142297	41	3142786	33	3143914	37
3111604	85	3130818	49	3142302	29	3142787	33	3143922	30
3111604	86	3130829	5	3142302	37	3142787	41	3143922	38
3111616	82	3130829	49	3142303	29	3142788	33	3143942	45
3111621	51	3130883	49	3142303	37	3142788	41	3143958	27
3111623	51	3130889	47	3142304	29	3142789	33	3143981	41
3111624	54	3130890	47	3142304	37	3142789	41	3144022	41
3111648	54	3130891	47	3142305	29	3143013	41	3144058	27
3111657	51	3130892	47	3142305	37	3143014	41	3144076	45
3111666	51	3130900	17	3142316	33	3143113	33	3144077	45
3111670	54	3130905	15	3142316	41	3143114	33	3144078	45
3111676	55	3130905	17	3142317	38	3143114	41	3144083	45
3121175	19	3130907	15	3142365	33	3143118	31	3144281	46
3121577	11	3130907	17	3142365	41	3143118	39	3144282	46
3121579	11	3130922	15	3142366	38	3143124	33	3144294	33
3121601	11	3130922	17	3142368	27	3143124	41	3144294	41
3121719	75	3130923	15	3142368	29	3143157	27	3144307	33
3121729	5	3130923	17	3142368	37	3143188	33	3144307	41
3121751	57	3130924	15	3142397	30	3143190	31	3144310	27
3121860	68	3130924	17	3142397	38	3143190	39	3144313	27
3121860	69	3130926	15	3142517	30	3143199	27	3144316	27
3121885	49	3130926	17	3142517	38	3143288	46	3144318	27
3121910	68	3130936	15	3142518	30	3143389	45	3144319	27
3121910	69	3130936	17	3142539	30	3143408	45	3144357	45
3122473	19	3130998	15	3142539	38	3143413	45	3144360	45
3122476	19	3130998	17	3142547	29	3143414	45	3144361	45
3122596	75	3131001	15	3142547	30	3143460	27	3144362	45
3122663	53	3131001	17	3142547	37	3143480	27	3144369	45
3122712	19	3131097	47	3142547	38	3143481	27	3144370	45
3122715	19	3131099	47	3142548	29	3143496	27	3144371	45

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
3144372	45	3161143	9	3181962	67	3182102	61	3182443	67
3144373	45	3161153	9	3181964	47	3182121	35	3182449	67
3144374	45	3161154	5	3181964	67	3182136	35	3182450	67
3144375	45	3161193	9	3181965	47	3182136	35	3182463	61
3144496	27	3161202	5	3181965	67	3182136	43	3182463	67
3144497	27	3161203	5	3181968	15	3182143	43	3182510	51
3144523	29	3161213	9	3181968	17	3182143	59	3182511	51
3144523	37	3180749	68	3181968	67	3182152	51	3182512	51
3144527	38	3180749	69	3181969	15	3182154	51	3182513	19
3144668	30	3180945	49	3181969	17	3182159	46	3182514	19
3145018	29	3181072	63	3181969	67	3182165	61	3182515	19
3145018	37	3181072	65	3181973	35	3182168	43	3182570	35
3145019	29	3181214	86	3181973	61	3182168	59	3182570	61
3145019	37	3181218	85	3181974	35	3182169	35	3182572	43
3145020	29	3181218	86	3181975	35	3182169	35	3182572	59
3145020	37	3181278	86	3181977	35	3182170	35	3182573	43
3145143	29	3181355	86	3181977	35	3182170	61	3182574	43
3145143	37	3181356	86	3181977	61	3182173	35	3182574	59
3145412	27	3181357	67	3181977	61	3182173	61	3182575	35
3145416	27	3181357	86	3181980	43	3182174	43	3182575	61
3145422	27	3181437	73	3181980	59	3182174	59	3182576	35
3145428	27	3181556	35	3181980	59	3182178	71	3182576	61
3150665	15	3181641	59	3181987	38	3182181	71	3182578	35
3150665	17	3181641	60	3181991	46	3182182	61	3182578	61
3150812	11	3181641	61	3181992	46	3182185	59	3182580	43
3150826	9	3181716	19	3181996	63	3182185	61	3182580	59
3150875	9	3181731	85	3182009	85	3182186	71	3182581	43
3150918	19	3181731	86	3182009	86	3182198	43	3182582	43
3160655	9	3181734	85	3182015	35	3182198	59	3182582	59
3160685	7	3181735	85	3182015	61	3182237	65	3182583	35
3160686	7	3181736	85	3182036	43	3182244	46	3182583	61
3160691	35	3181736	86	3182036	59	3182244	71	3182584	35
3160691	43	3181737	85	3182036	59	3182260	59	3182584	61
3160723	85	3181738	85	3182043	43	3182261	46	3182586	43
3160723	86	3181738	86	3182043	59	3182261	59	3182586	59
3160828	9	3181739	85	3182044	35	3182262	46	3182587	43
3160830	9	3181739	86	3182044	61	3182262	59	3182588	43
3160842	51	3181834	19	3182045	35	3182263	59	3182588	59
3160856	9	3181839	19	3182048	35	3182263	71	3182589	35
3160874	5	3181843	19	3182048	61	3182264	61	3182589	61
3160875	5	3181889	63	3182049	59	3182264	71	3182590	35
3160972	35	3181889	65	3182049	59	3182278	11	3182590	61
3160975	51	3181889	68	3182049	61	3182278	85	3182591	35
3160976	35	3181889	69	3182054	43	3182278	86	3182591	61
3161012	35	3181927	63	3182054	59	3182286	68	3182593	43
3161023	9	3181927	65	3182066	35	3182286	69	3182593	59
3161027	9	3181927	73	3182068	35	3182305	5	3182594	43
3161028	9	3181936	63	3182070	35	3182305	13	3182595	43
3161029	9	3181936	65	3182085	59	3182305	63	3182595	59
3161030	9	3181936	68	3182085	61	3182305	65	3182596	35
3161031	9	3181936	69	3182085	61	3182305	67	3182596	61
3161032	9	3181946	11	3182086	51	3182434	11	3182597	35
3161033	9	3181946	85	3182095	59	3182435	67	3182598	35
3161034	9	3181946	86	3182095	63	3182436	61	3182598	61
3161036	9	3181947	11	3182095	65	3182436	67	3182600	70
3161037	9	3181947	67	3182096	61	3182438	67	3182601	61
3161038	9	3181948	11	3182096	63	3182439	11	3182601	70
3161039	9	3181949	11	3182096	65	3182439	67	3182602	70
3161040	9	3181949	85	3182101	59	3182440	67	3182603	70
3161041	9	3181949	86	3182101	61	3182441	67	3182606	59
3161050	35	3181962	13	3182102	59	3182442	67	3182612	59

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
3182613	61	6001737	45	6420192	29	6600921	63	6602876	47
3182618	68	6001763	54	6420192	37	6600921	65	6602901	15
3182619	68	6001763	56	6420195	49	6600963	87	6602901	17
3182625	72	6001764	13	6420222	33	6601045	63	6602901	35
3182627	72	6001764	54	6420222	41	6601045	65	6602901	43
3182633	72	6001764	56	6420223	33	6601122	11	6602906	35
3182634	51	6001892	49	6420223	41	6601125	68	6602906	43
3182634	70	6002017	49	6420224	33	6601125	69	6602982	87
3182635	70	6002165	51	6420224	41	6601142	85	6602984	67
3182637	51	6100086	53	6420225	33	6601142	86	6602984	85
3182638	68	6100174	11	6420225	41	6601161	37	6602984	86
3182645	67	6100267	53	6420260	45	6601161	38	6602992	87
3182650	69	6100276	27	6420318	29	6601381	35	6603009	47
3182660	69	6100276	33	6420318	37	6601418	63	6603010	47
3182661	69	6100276	41	6425066	27	6601418	65	6603038	59
3182662	69	6100277	13	6425066	29	6601491	46	6603038	61
3182762	61	6100277	49	6425066	37	6601704	11	6603039	59
3182763	59	6100339	46	6430013	13	6601704	19	6603039	61
3190516	6	6100339	71	6430222	13	6602021	63	6603039	67
3320616	13	6100354	31	6430359	29	6602021	65	6603132	27
3320616	19	6100354	39	6430359	37	6602133	11	6603132	29
3350231	13	6100677	73	6435459	11	6602133	19	6603132	35
3370609	9	6100678	73	6435459	13	6602133	46	6603132	43
4470260	67	6100710	31	6435459	19	6602133	46	6603133	27
6000196	13	6100710	39	6435459	27	6602133	67	6603133	29
6000401	15	6100711	31	6435459	29	6602134	11	6603133	35
6000401	15	6100711	39	6435459	37	6602134	19	6603133	37
6000401	17	6100712	33	6435460	29	6602134	35	6603133	43
6000401	17	6100712	41	6435460	37	6602134	43	6603134	27
6000403	15	6100713	31	6435466	30	6602134	67	6603134	29
6000403	17	6100713	39	6435466	38	6602140	19	6603134	35
6000544	11	6100841	27	6435467	30	6602140	67	6603134	37
6000550	49	6100881-05	75	6435467	38	6602242	87	6603134	43
6000758	6	6200526	68	6435479	49	6602261	63	6603135	27
6000792	72	6200526	69	6435519	49	6602274	87	6603135	29
6000916	53	6201210	68	6445077	49	6602338	5	6603135	35
6000937	57	6201247	69	6450265	88	6602338	31	6603135	37
6000938	38	6201248	69	6450357	5	6602338	39	6603135	43
6000938	57	6309255	87	6450357	87	6602338	43	6603150	35
6000999	51	6400567	54	6450585	82	6602339	31	6603167	72
6001005	87	6400567	56	6450758	82	6602339	35	6603269	63
6001049	53	6400589	56	6450767	88	6602339	39	6603333	33
6001054	11	6400590	56	6450884	84	6602339	43	6603333	35
6001081	53	6400591	56	6451152	84	6602363	46	6603333	41
6001082	53	6400592	56	6451153	84	6602601	63	6603333	43
6001161	29	6400593	54	6452552	82	6602601	65	6603342	72
6001161	30	6400593	56	6452774	82	6602602	63	6603343	59
6001163	51	6400604	19	6600162	51	6602602	65	6603343	61
6001193	27	6400615	51	6600162	87	6602624	63	6603344	59
6001194	27	6400637	57	6600224	68	6602628	71	6603344	61
6001287	27	6400652	55	6600224	69	6602660	46	6603376	51
6001423	11	6400652	55	6600236	63	6602678	65	6603377	51
6001423	19	6400661	5	6600236	65	6602679	65	6603378	11
6001426	63	6400661	51	6600299	87	6602680	86	6603436	63
6001426	65	6400661	52	6600305	35	6602707	86	6603436	65
6001446	72	6420077	46	6600305	43	6602735	72	6603520	5
6001480	54	6420086	49	6600324	35	6602736	72	6603520	63
6001480	56	6420105	13	6600324	43	6602751	15	6603525	73
6001482	75	6420106	13	6600324	87	6602751	17	6603547	73
6001601	9	6420106	15	6600903	51	6602801	69	6603548	85
6001638	72	6420106	17	6600903	67	6602860	13	6603548	86

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
6603554	85	6604357	17	6701540	9	7050090	63	7050421	43
6603554	86	6604362	15	6702024	9	7050090	65	7050447	63
6603558	85	6604434	67	6702230	9	7050127	49	7050447	63
6603558	86	6604464	87	6702238	43	7050128	49	7050447	65
6603559	63	6604477	30	6702241	9	7050136	63	7050447	65
6603559	73	6604477	35	6702399	9	7050136	65	7050491	63
6603567	43	6604477	38	6703093	9	7050137	63	7050491	63
6603568	43	6604477	43	6703096	9	7050137	65	7050491	65
6603569	43	6604537	67	6703101	30	7050138	63	7050491	65
6603570	43	6604557	29	6703101	38	7050138	65	7050492	63
6603776	19	6604557	35	6703126	35	7050144	87	7050492	65
6603799	31	6604557	37	6703126	43	7050149	9	7050493	63
6603799	39	6604557	43	6703139	9	7050150	9	7050493	65
6603831	15	6604561	49	6703153	9	7050154	59	7050504	56
6603831	17	6604561	70	6703188	9	7050154	61	7050505	56
6603831	35	6604654	59	6703274	9	7050157	9	7050506	56
6603831	43	6604654	61	6703277	9	7050160	63	7050518	79
6603831	87	6604656	59	6703299	9	7050160	65	7050518	80
6603832	15	6604656	61	6703300	9	7050189	63	7050519	79
6603832	17	6604658	59	6703301	9	7050189	73	7050519	80
6603960	68	6604658	61	6703379	9	7050191	63	7050519	81
6603960	69	6604659	59	6703380	9	7050191	73	7050520	79
6603987	11	6604659	61	6703381	9	7050263	59	7050520	80
6603987	19	6604663	61	6703382	9	7050263	61	7050520	81
6604008	68	6604664	59	6703383	9	7050264	59	7050521	79
6604008	69	6604664	61	6703385	9	7050264	61	7050522	79
6604009	68	6604770	11	6703386	9	7050269	59	7050523	79
6604009	69	6604770	19	6703387	9	7050269	61	7050523	80
6604010	46	6604771	11	6703402	76	7050346	51	7050524	51
6604026	5	6604771	19	6703408	9	7050348	51	7050525	51
6604026	73	6604783	70	6703502	9	7050367	59	7050526	51
6604064	19	6604786	69	6703503	9	7050367	61	7050527	51
6604071	63	6604787	69	6703571	9	7050369	59	7050531	79
6604109	63	6604815	35	6703851	9	7050369	61	7050531	80
6604109	65	6604815	43	6704029	9	7050373	59	7050532	79
6604151	63	6604815	70	6704045	45	7050373	61	7050532	80
6604176	63	6604826	51	6704046	45	7050375	59	7050533	79
6604176	73	6604864	46	6704070	9	7050375	61	7050533	80
6604177	63	6604868	67	6704088	9	7050391	11	7050534	79
6604177	73	6604869	67	6704147	9	7050392	67	7050534	80
6604218	5	6604870	46	6704148	9	7050394	67	7050535	79
6604222	13	6604874	67	6704271	9	7050394	67	7050535	80
6604230	15	6604875	67	6704470	9	7050394	67	7050536	79
6604230	17	6604972	69	6704664	9	7050394	67	7050536	80
6604231	15	6604993	19	6704781	9	7050394	67	7050537	79
6604231	17	6700161	7	7050056	63	7050394	67	7050537	80
6604231	17	6700161	9	7050056	65	7050394	67	7050538	79
6604235	5	6700164	7	7050058	87	7050406	63	7050538	80
6604235	71	6700188	9	7050059	87	7050406	63	7050538	83
6604239	71	6700400	68	7050060	87	7050406	65	7050539	79
6604240	71	6700400	69	7050061	87	7050406	65	7050539	80
6604241	65	6700581	7	7050064	87	7050410	11	7050540	79
6604260	65	6700771	9	7050065	87	7050411	11	7050540	80
6604263	61	6700772	9	7050066	87	7050412	11	7050541	83
6604315	71	6700772	9	7050066	87	7050413	11	7050542	83
6604316	71	6700959	7	7050067	87	7050414	11	7050543	83
6604328	68	6701467	7	7050088	63	7050415	11	7050544	83
6604328	69	6701467	9	7050088	65	7050416	11	7050545	83
6604329	68	6701468	7	7050089	63	7050417	11	7050546	83
6604329	69	6701468	9	7050089	65	7050421	35	7050547	81

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
7050548	81	7050600	78	7050649	73	7051183	67	7051445	15
7050549	81	7050601	77	7050651	80	7051184	67	7051445	17
7050550	81	7050601	78	7050652	80	7051184	67	7051741	81
7050551	81	7050602	77	7050653	80	7051184	67	7215229	29
7050552	81	7050602	78	7050654	80	7051185	67	7215229	35
7050553	81	7050603	77	7050655	80	7051185	67	7215229	37
7050554	81	7050603	78	7050677	43	7051185	67	7215229	43
7050555	81	7050604	77	7050678	43	7051186	67	7420230	47
7050556	81	7050604	78	7050679	43	7051213	55	7420244	5
7050557	81	7050605	77	7050680	43	7051214	55	7420244	69
7050558	81	7050605	78	7050774	80	7051215	55	7420244	71
7050559	81	7050606	77	7050844	73	7051216	55	7420292	63
7050560	81	7050606	78	7050909	59	7051217	55	7420292	63
7050561	81	7050607	77	7050909	61	7051218	55	7420292	65
7050562	81	7050607	78	7050910	59	7051219	54	7420292	65
7050563	81	7050608	77	7050910	61	7051284	52	7420293	51
7050564	81	7050608	78	7050911	59	7051285	52	7420293	67
7050565	81	7050609	77	7050911	61	7051286	52	7420293	67
7050566	77	7050609	78	7050912	51	7051298	52	7430221	68
7050567	77	7050610	77	7050912	59	7051305	9	7430221	69
7050567	78	7050610	78	7050912	61	7051325	55	7430253	11
7050568	77	7050611	77	7050913	51	7051326	55	7430254	11
7050568	78	7050611	78	7050913	59	7051327	55	7430255	11
7050569	77	7050612	77	7050913	61	7051328	55	7430256	11
7050569	78	7050612	78	7050914	59	7051329	55	7430257	11
7050570	77	7050613	77	7050914	61	7051331	55	7430258	11
7050570	78	7050613	78	7050915	59	7051332	55	7430259	11
7050571	77	7050614	83	7050915	61	7051335	55	7430260	11
7050571	78	7050615	83	7050916	52	7051336	55	7430261	11
7050572	77	7050616	83	7050923	82	7051337	55	7530041	35
7050572	78	7050617	83	7050925	51	7051338	55	7530041	43
7050573	43	7050618	80	7050937	52	7051339	55	9305875	22
7050574	43	7050619	80	7050938	52	7051340	55	9307031	24
7050575	43	7050620	80	7050944	84	7051341	55	9400207	51
7050576	43	7050621	80	7050948	84	7051342	55	9402709	87
7050577	43	7050622	80	7050956	84	7051343	55	9402981	85
7050578	43	7050623	80	7050957	83	7051344	55	9402981	86
7050579	43	7050624	80	7050958	83	7051345	55	9403374	63
7050588	77	7050625	80	7050985	5	7051346	55	9403374	65
7050588	78	7050626	80	7050986	13	7051347	55	9410200	13
7050589	77	7050627	80	7050990	51	7051348	55	9410200	63
7050589	78	7050628	80	7051031	54	7051349	55	9410200	65
7050590	77	7050629	80	7051032	54	7051350	54	9410200	67
7050590	78	7050630	80	7051151	29	7051350	55	9410200	73
7050591	77	7050631	80	7051151	30	7051351	55	9410202	63
7050591	78	7050632	80	7051151	35	7051353	55	9410202	67
7050592	77	7050633	80	7051151	35	7051354	55	9410202	86
7050592	77	7050634	80	7051151	37	7051355	55	9410203	11
7050592	78	7050635	80	7051151	38	7051356	55	9410203	19
7050592	78	7050638	80	7051151	43	7051357	55	9410203	51
7050593	73	7050639	80	7051151	43	7051358	55	9410203	59
7050594	73	7050640	80	7051151	49	7051359	55	9410203	61
7050595	73	7050641	80	7051151	70	7051360	55	9410205	59
7050596	73	7050642	80	7051176	67	7051361	55	9410205	61
7050597	77	7050643	80	7051177	67	7051362	54	9410205	63
7050597	78	7050644	80	7051178	67	7051362	55	9410205	65
7050598	77	7050645	80	7051180	67	7051363	55	9410205	68
7050598	78	7050646	81	7051181	67	7051364	55	9410205	69
7050599	77	7050647	78	7051181	67	7051440	20	9410207	59
7050599	78	7050649	63	7051183	67	7051444	15	9410207	61
7050600	77								

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
9410207	63	PD10448	9						
9410207	65	PD10568	9						
9410207	68	PD11043	9						
9410207	69	PD11044	9						
9410278	59	PD11455	80						
9410280	67	Q015155	82						
9410281	67	Q016836	82						
9410281	87	Q018496	19						
9410283	59	Q400153	74						
9410283	61	Q400485	82						
9410285	63	Q400676	82						
9410285	65	Q400677	82						
9410332	46	Q400678	82						
9410332	67	Q401262	82						
9410333	87	Q401263	82						
9410335	63	Q413458	82						
9410335	65	Q435613	82						
9410335	71	Q435614	82						
9410356	51	Q444884	15						
9410356	59	Q444884	17						
9410356	61	Q444884	35						
9410356	67	Q444884	43						
9410976	11	Q444884	87						
9410976	19	Q476230	82						
9410976	35	Q492965	82						
9410976	43	Q496622	75						
9410976	59	Q527019	82						
9410976	61	Q6602192	87						
9410976	67	S165302	5						
9410976	86	S352703	68						
9410977	46	S352703	69						
9410977	51								
9410977	51								
9411027	15								
9411027	17								
9411027	33								
9411027	41								
9411417	46								
9411638	15								
9411638	17								
9411727	45								
9411727	45								
9411727	46								
9411727	49								
9413946	31								
9413946	39								
9413947	86								
9414000	53								
9416331	45								
9418684	33								
9418684	41								
9422850	53								
9428638	19								
9429292	11								
9429292	13								
9437244	53								
PD10267	9								
PD10411	9								
PD10412	9								
PD10434	9								





# Something Wrong with this manual?

If you find inaccurate or confusing information in this manual, or just have a suggestion for improvement, please let us know.

Mail or FAX this form to us at: E. D. ETNYRE & CO. 1333 S. Daysville Rd.  
 Oregon, Illinois 61061 • Fax: 800-521-1107 • www.etsyre.com  
 Attn: Service Manager

Recommended changes from: \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Phone \_\_\_\_\_

Date Sent \_\_\_\_\_

**Manual Number** (upper right corner of front cover) \_\_\_\_\_

**Manual Title** \_\_\_\_\_

**Explain the problem in the space below.**

Page Number	Reference Number	Paragraph Number	Figure Number	Problem (please be specific)