

# **GRADALL®**

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## ***Illustrated Parts Manual***

***Model***  
***544C-10***

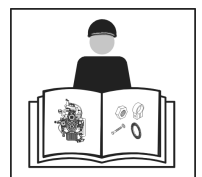
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***JLG®***



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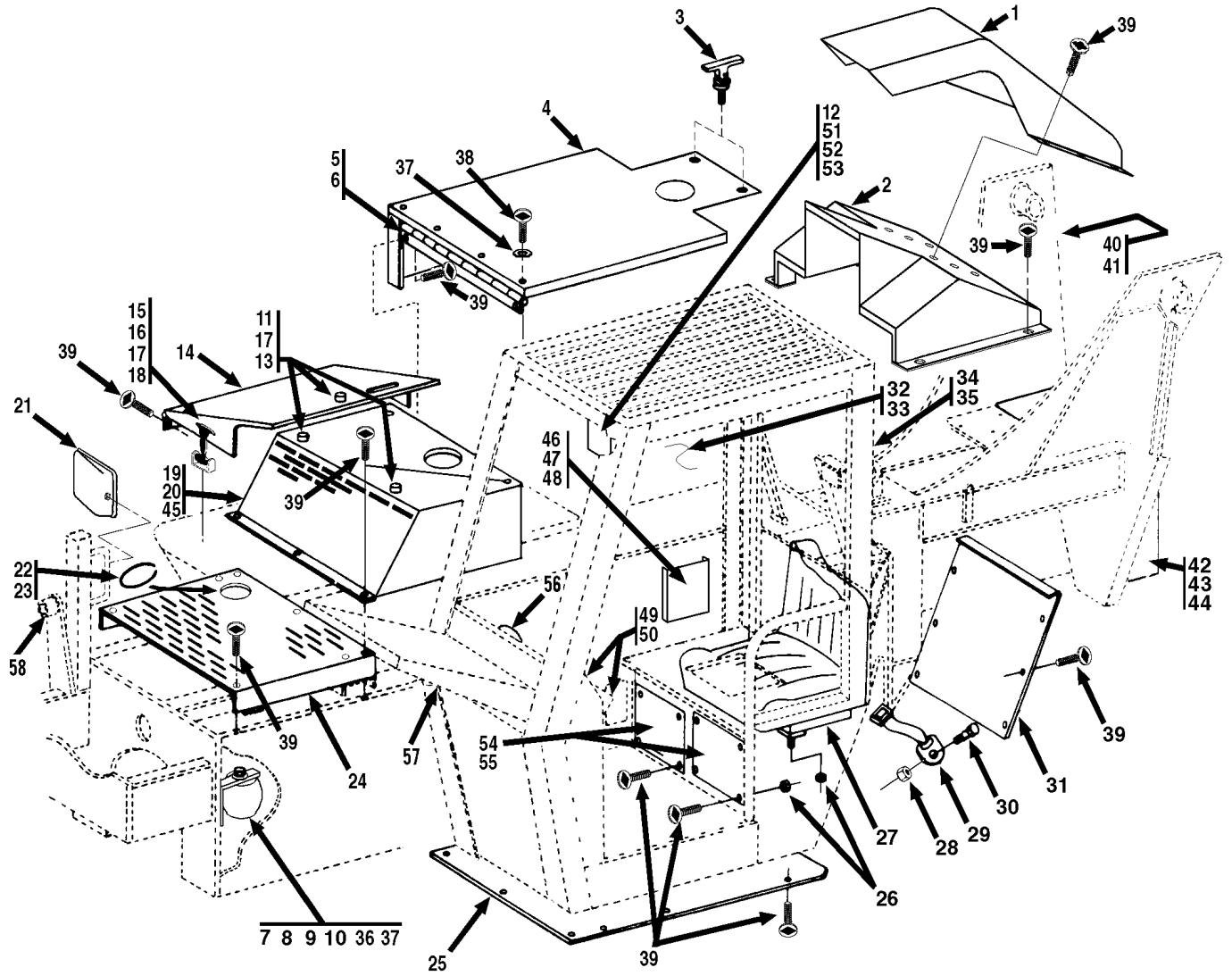
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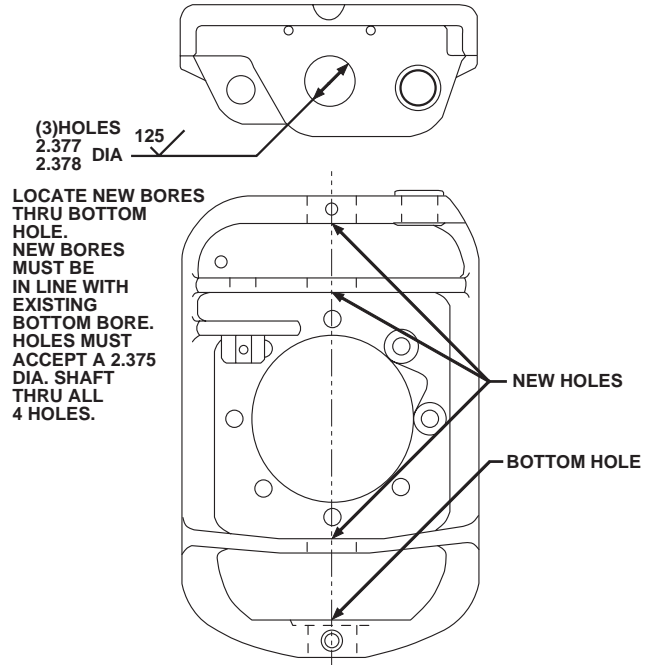
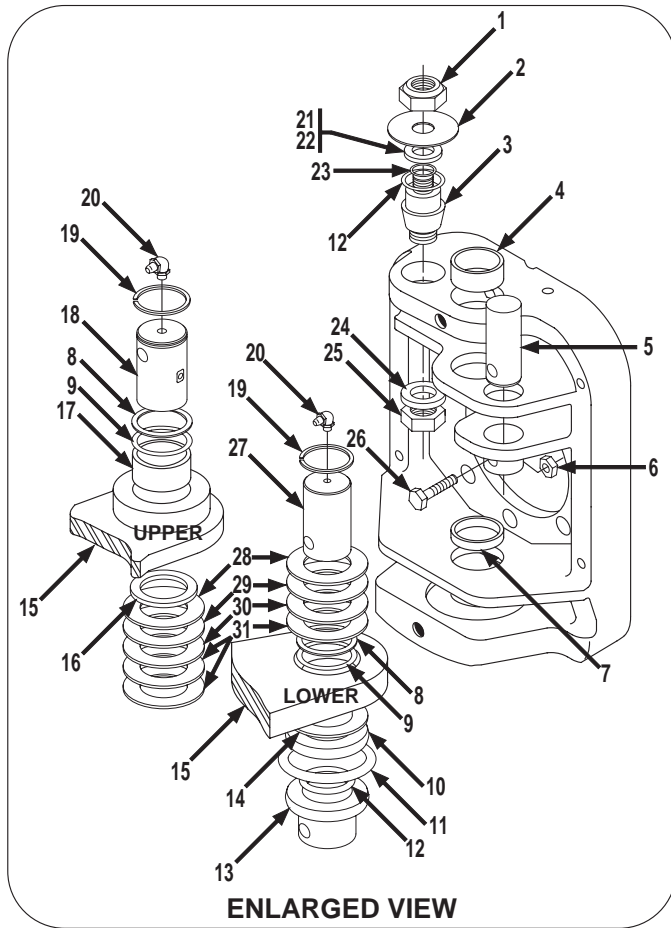


**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

**CHASSIS & ATTACHING PARTS**  
**Frame Shrouding & Trim**  
 Starting Serial No. 0255001  
 Original Issue 6-96  
 Revised 2-10-97

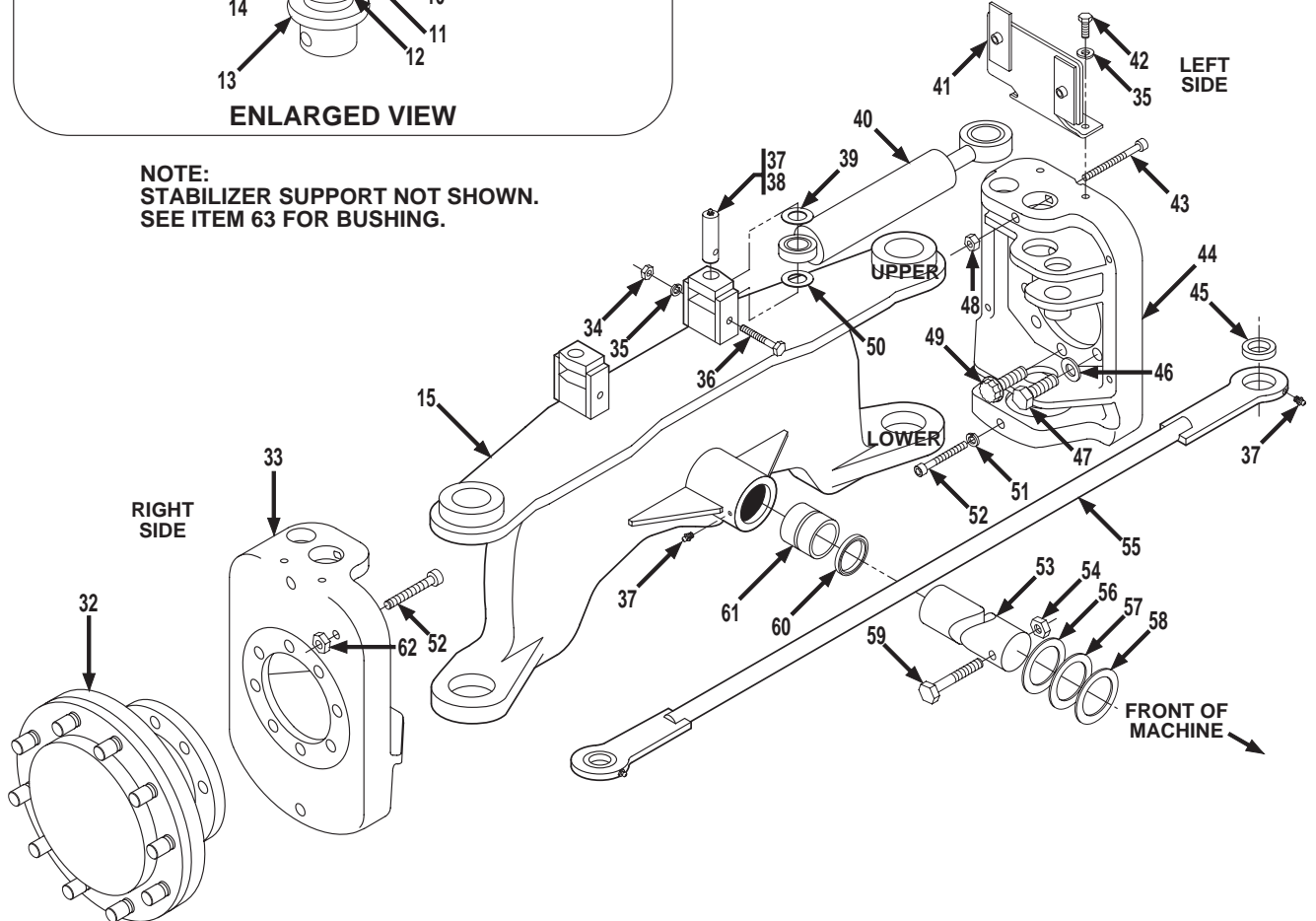


Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9116-6001	Ref	FRAME WELDMENT	30	8820-1050	2	HEX HD CAPSCREW, 7/16-14X1
	9114-6012	Ref	CAB WELDMENT	31	9114-1198	1	REAR CAB COVER
1	9114-6048	1	REAR COVER CENTER	32		Ref	RIGHT SIDE WINDOW (see page 2-4 for details)
2	9114-6050	1	REAR COVER WELDMENT	33	9108-3161	1	WEATHER STRIPPING
3	9130-3021	2	T-HANDLE	34		Ref	REAR WINDOW (see page 2-4 for details)
4	9114-6049	1	REAR ENGINE COVER	35	9108-3159	1	WEATHER STRIPPING
5	9114-1218	1	HINGE	36	8855-1010	1	LOCKWASHER, 5/16
6	9114-1254	1	FLAT BAR	37	8856-1003	1	FLAT WASHER, 5/16
7	2492-1393	1	HORN	38	9112-3124	4	WHIZ-LOC SCREW, 5/16-18X1/2
8	2492-1394	1	HORN BRACKET	39	7714-3003	49	WHIZ-LOC SCREW, 5/16-18X5/8
9	2492-1395	1	NUT	40	9123-3012	1	BACKUP ALARM
10	8820-1017	1	HEX HD CAPSCREW, 5/16-18X5/8	41	8821-2224	2	SOCKET HD CAPSCREW, 5/16-18X5/8
11	9108-3173	5	RUBBER HD. SCREW BUMPER	42	9114-0001	1	COUNTERWEIGHT
12	9103-3320	1	TILT GAGE	43	8820-1142	4	HEX HD CAPSCREW, 1-8 x 4-1/2, (hand torque to 545-595 ft.lb.)
13	8850-1612	5	HEX NUT, #10-24	44	8856-1011	4	WASHER, 1"
14	9114-6060	1	TANK COVER WELDMENT	45	9020-0755	24"	WEATHER STRIPPING
15	9020-7458	2	DRAW LATCH	46	9103-3102	1	MANUAL HOLDER
16	8830-1193	8	RD.HD. MACHINESCREW, #10-32X1/2	47	8832-1030	4	SELF TAPPING SCREW
17	8855-1007	13	LOCK WASHER, #10	48	8855-4900	4	INTERNAL TOOTH WASHER
18	8850-1613	4	HEX NUT, #10-32	49	9116-3136	1	SERIAL NUMBER & ATTACH PLATE
19	9116-6043	1	FRONT ENGINE COVER	50	8834-1022	4	DRIVE SCREW
20	9114-3148	1	RUBBER AIR DAM	51	8820-4912	1	HEX HD CAPSCREW, 1/4-20 x 1
21	8368-3291	1	MIRROR	52	8856-1107	1	FLAT WASHER
22	9020-6194	48"	TRIM-LOK	53	8852-1204	1	LOCK NUT, 1/4-20
23	1440-2248	AR	ADHESIVE	54	9108-1475	1	HEATER COVER PLATE
24	9114-1211	1	DECK COVER	55	9114-1329	1	VALVE ACCESS COVER
25	9108-1709	1	BELLY PAN	56	9116-3087	2	LOAD CHART BRACKET
26	7714-3006	8	WHIZ-LOC NUT, 5/16-18		8826-1017	2	BUTTON HD HEX SOCKET CAPSCREW, 1/4-20X7/8"
27	9103-3485	1	SEAT W/ARMREST (STD)	57	9114-1048	1	FENDER
	9112-4107	1	SLIDE ADJ. KIT (use with std. seat)	*58	9114-3051	1	BUSHING
	9104-3237	1	GRAMMER SEAT (OPTIONAL)				
28	8850-1007	2	HEX NUT, 7/16-14				
29	9103-3029	1	SEAT BELT (not used with optional seat)				



**KNUCKLE LAYOUT FOR BORING OUT HOLES FOR BUSHINGS**  
 SEE NOTE #3 ON NEXT PAGE FOR DETAILS  
 (R.H. KNUCKLE SHOWN)

**NOTE:**  
 STABILIZER SUPPORT NOT SHOWN.  
 SEE ITEM 63 FOR BUSHING.



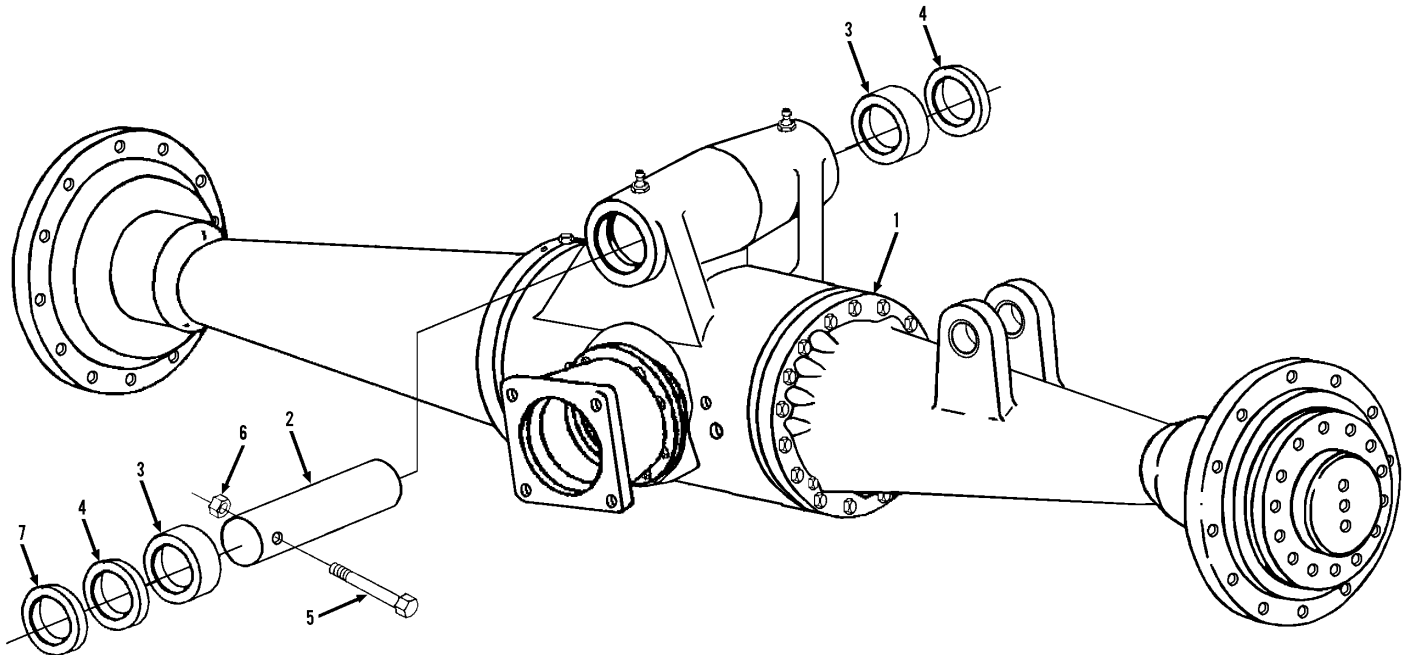
**NOTE #1:** Cylinder base end must be free to rotate. Shim steer cylinder base end as required to maintain a total max. gap of 1/16".

**NOTE #2:** Shim bottom knuckles as required to maintain no more than 1/32" movement. Shim top knuckles as required to maintain no more than 1/16" gap. Must have a minimum of one shim.

**NOTE #3:** All machines need to bore Steering Knuckles to use items 4 & 7. See diagram on previous page. Unless you have purchased new Steering Knuckles part number, 9112-0003 & 9112-0004.

**NOTE #4:** See option section for details on the Rear Axle Rework Kit and the Rear Axle Advantage Kit.

Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9114-5099	1	STEERING KNUCKLE KIT, (includes items 2, 4, 7, 8, 9, 11 thru 14, 16, 18 thru 23, 27 thru 31, 51 & two of item 52, one kit does both sides)	32		Ref	DRIVE HUB, (see page 6-6 for details)
	9104-5152	AR	STEERING CYLINDER PIN KIT, (includes one each of items 1, 2, 3, 12, 21 thru 25, one kit needed for each side)	33	9112-0004	1	R.H. STEERING KNUCKLE, (see note #3)
1	8852-1312	2	HEX LOCK NUT, 3/4-10, (torque to 160-175 ft. lbs.)	34	8850-1006	2	HEX NUT, 3/8-16
2	9108-1415	2	DIRT SHIELD	35	8855-1011	6	LOCKWASHER, 3/8
3	9104-1481	2	STEERING CYLINDER PIN	36	8320-1144	2	HEX HDCAPSCREW, 3/8-16X5-3/4, GR8
4	9112-1239	2	BUSHING, (see note #3)	37	8867-1001	6	LUBE FITTING, STRAIGHT, 1/8
5	9104-1439	2	TIE ROD PIN	38	9108-1695	2	STEERING CYLINDER PIVOT PIN
6	8852-1306	2	LOCK NUT, 3/8-16	39	9104-1598	AR	SHIM, (.060 thick, see note #1)
7	9112-1240	4	BUSHING, (see note #3)	40		Ref	STEERING CYLINDER ASSY, (see page 10-6 for details)
8	9112-3030	4	BACK-UP RING	41	9116-6056	1	L.H. TUBE SUPPORT
9	8859-1032	4	O-RING		9116-6055	1	R.H. TUBE SUPPORT
10	9112-3027	2	BUSHING	42	8820-1035	4	HEX HDCAPSCREW, 3/8-16X1, GR5
11	9112-3029	2	O-RING	43	8821-1121	2	SOCKET HD CAPSCREW, 1/2-13X6-1/2, GR8
12	8859-1104	4	O-RING	44	9112-0003	1	L.H. STEERING KNUCKLE, (see note #3)
13	9112-1091	2	THRUST BUSHING	45	9104-3247	2	SELF-ALIGNING BUSHING
14	9104-1733	AR	SHIM	46	8668-1572	12	HARDENED WASHER, 3/4
15	9116-6013	1	REAR AXLE WELDMENT, (includes items 10, 17, 61, & 63)	47	8320-1006	12	HEX HD CAPSCREW, 3/4-10X2, GR8, (torque to 270-290 ft. lbs.)
16	8692-1268	2	LIP SEAL	48	8852-1208	2	HEX LOCKNUT, 1/2-13
17	9112-3028	2	BUSHING	49	9104-3222	4	CAPSCREW 12PT, 3/410X2, GR8, (torque to 270-290 ft. lbs.)
18	9108-1693	2	UPPER KING PIN	50	9020-1918	AR	SHIM, (10 gauge, see note #1)
19	8858-1323	4	RETAINING RING	51	8855-1153	2	LOCKWASHER, 5/8
20	8867-1022	4	LUBE FITTING, 90 DEGREES, 1/8	52	8821-2321	4	SOCKET HD CAPSCREW, 5/8-11X3-3/4, GR8
21	9104-1732	2	SPACER, (3/16 thick)	53	9108-1177	1	REAR AXLE MOUNTING PIN
22	9104-1438	2	SPACER	54	8510-1098	1	HEX NUT, 1-1/4-7
23	8859-1019	2	O-RING	55	9116-6063	1	TIE ROD, (includes item 45)
24	9104-1459	2	WASHER	56	9116-1066	AR	SHIM, (.0598 thick)
25	8850-1416	2	HEX JAM NUT, 1-14, (torque to 225-250 ft. lbs.)	57	9116-1067	AR	SHIM, (.1046 thick)
26	8320-1140	2	HEX HD CAPSCREW, 3/8-16X2-3/4, GR8	58	9116-1068	AR	SHIM, (.1345 thick)
27	9114-1424	2	LOWER KING PIN	59	9002-0247	1	HEX HD CAPSCREW, 1-1/4-7X6, GR5
28	9104-1449	4	SHIM, (.060 thick, see note #2)	60	2460-1570	2	LIP SEAL
29	9104-1450	4	SHIM, (.0478 thick, see note #2)	61	9112-3031	2	BUSHING
30	9104-1451	6	SHIM, (.106 thick, see note #2)	62	8850-1110	2	HEX NUT, 5/8-11
31	9104-1596	4	SHIM, (20 gauge, see note #2)	63	9116-3019	2	BUSHING, (stabilizer support, not shown)

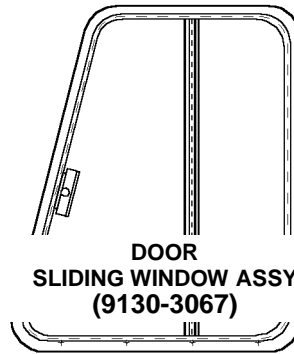
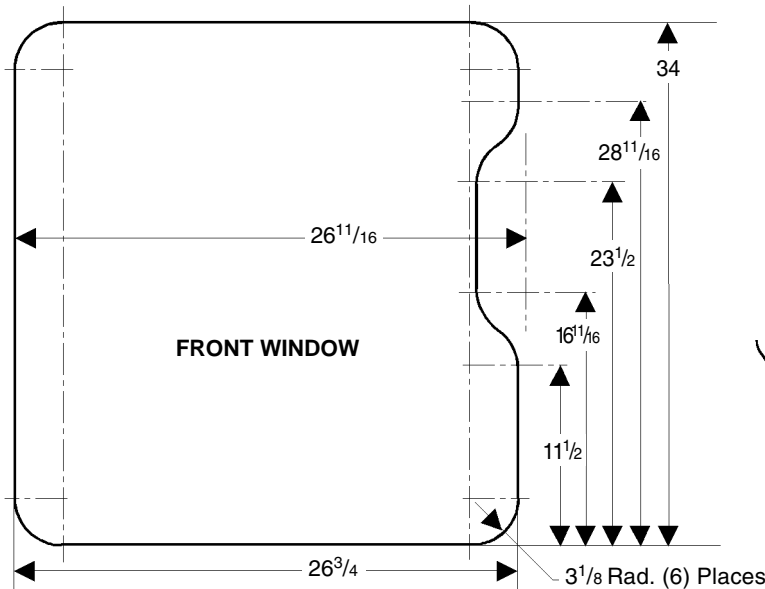
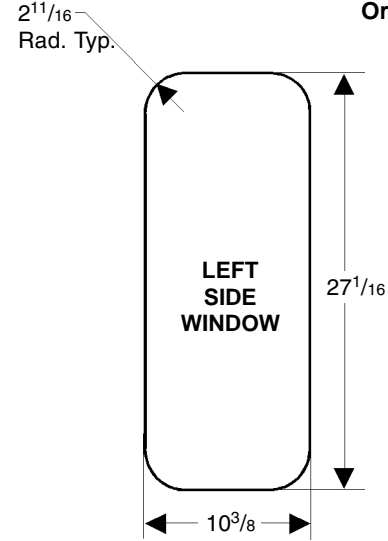
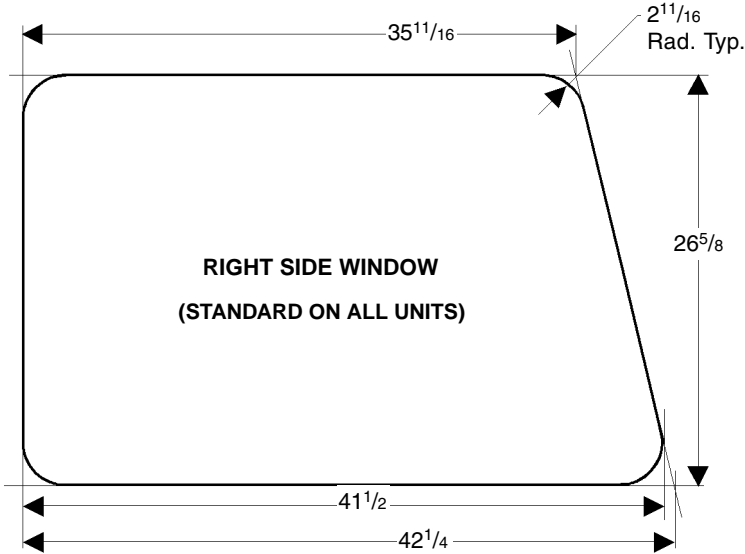


Item	Part No.	Qty.	Description Of Part
1		Ref	FRONT AXLE ASSY (see page 6-1 for details)
2	9108-1176	1	FRONT SWAY PIN
3	9020-5891	2	SPACER
4	9103-1014	2	SHIM WASHER
5	8320-1031	1	HEX HD CAPSCREW, 1-8 x 5
6	8852-1016	1	HEX LOCK NUT, 1-8
7	9108-3480	1	SHIM WASHER

**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

**CHASSIS & ATTACHING PARTS**  
**CAB GLASS**

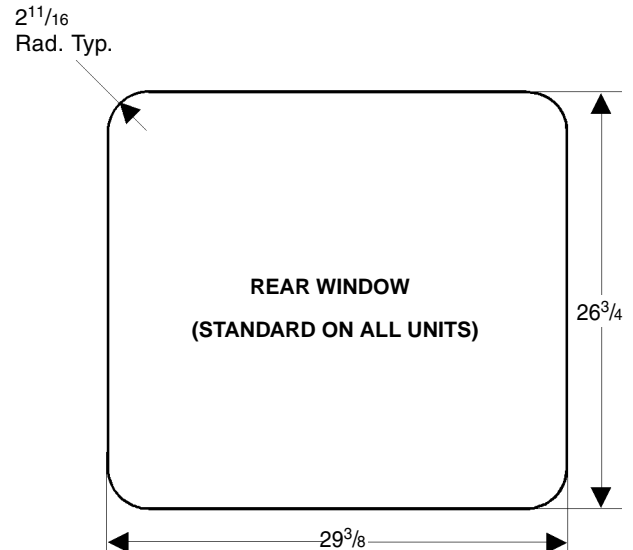
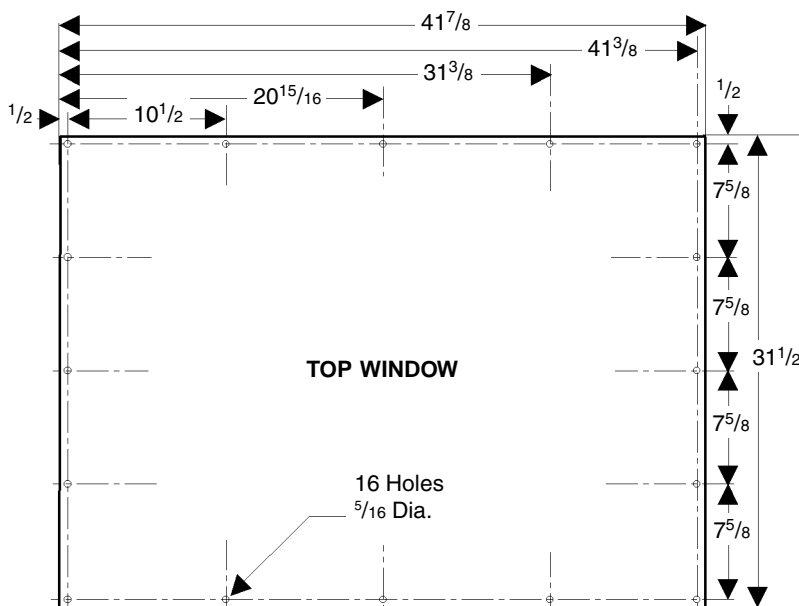
Starting Serial No. 0255001  
 Original Issue 6-96



NOTE 1: CAB GLASS CAN ONLY BE SHIPPED WITH THE COMPLETE CAB ENCLOSURE OPTION. IF GLASS BREAKAGE OCCURS IN THE FIELD, IT MUST BE REPLACED LOCALLY USING THE DIMENSIONS GIVEN. WITH THE EXCEPTION OF THE SLIDING DOOR WINDOW ASSY WHICH MAY BE PURCHASED THROUGH THE PARTS DEPARTMENT.

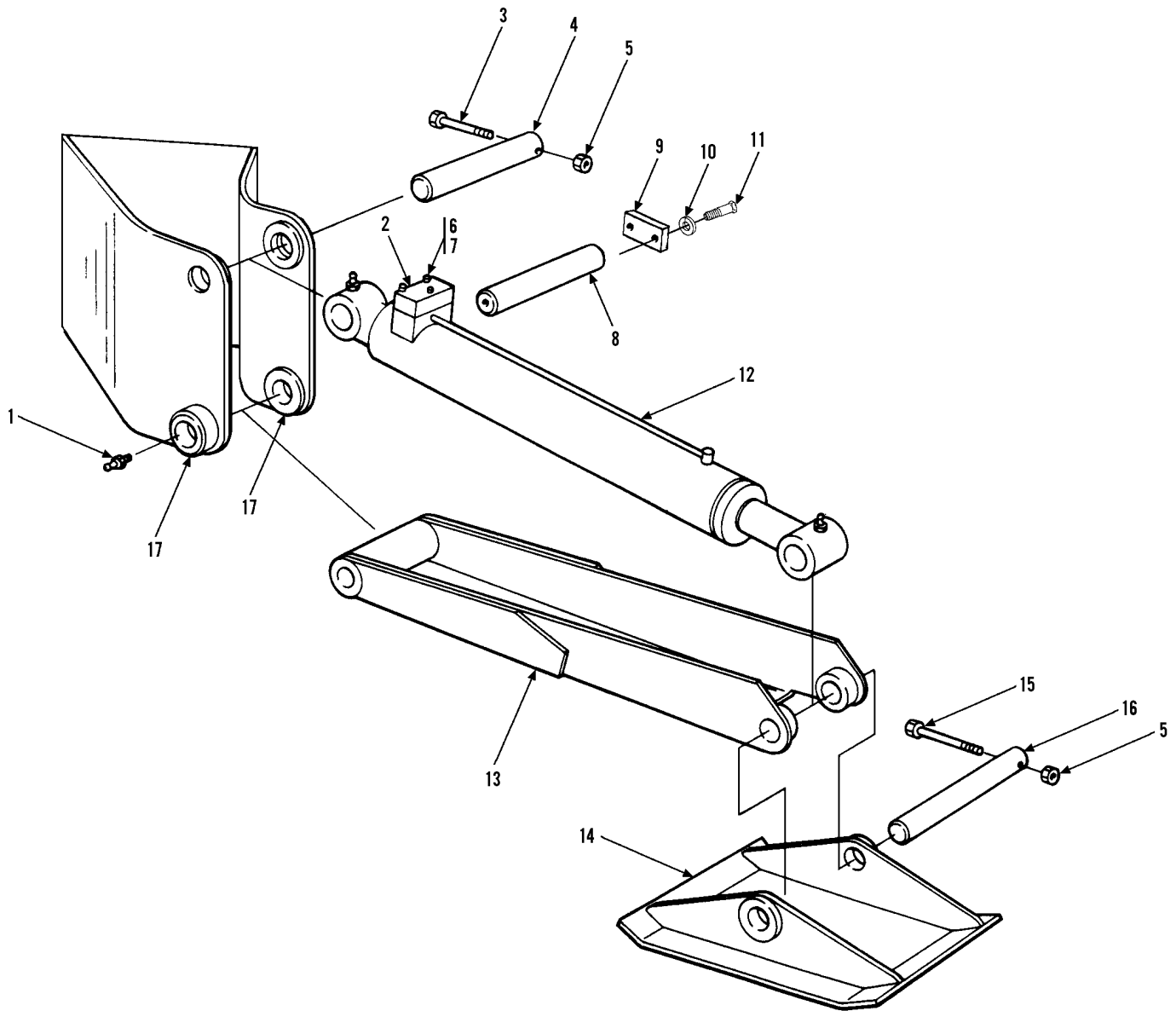
NOTE 2: ALL LAMINATED SAFETY GLASS (EXCEPT FOR TOP WINDOW). TINTED FOR 73% LIGHT TRANSMISSION. SEAMED EDGES. 7/32 THICK.

NOTE 3: TOP WINDOW IS LEXAN MR50T4-112. 1/4 THICK.



**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

**CHASSIS & ATTACHING PARTS**  
**Outrigger Mounting**  
 Starting Serial No. 0255001  
 Original Issue 6-96  
 Revised 2-4-97



Item	Part No.	Qty.	Description Of Part
1	8867-1001	4	LUBE FITTING, STRAIGHT, 1/8
2		Ref	DUAL P.O. CHECK VALVE (see 13-12 for details)
3	8821-1083	2	SOCKET HD CAPSCREW, 3/8-16X4-1/2
4	9116-1016	2	OUTRIGGER CYLINDER PIN
5	8852-1206	4	HEX LOCKNUT, 3/8-16
6	8820-1047	6	HEX HD CAPSCREW, 3/8-16X4, GR5
7	8855-1011	6	LOCKWASHER, 1/2

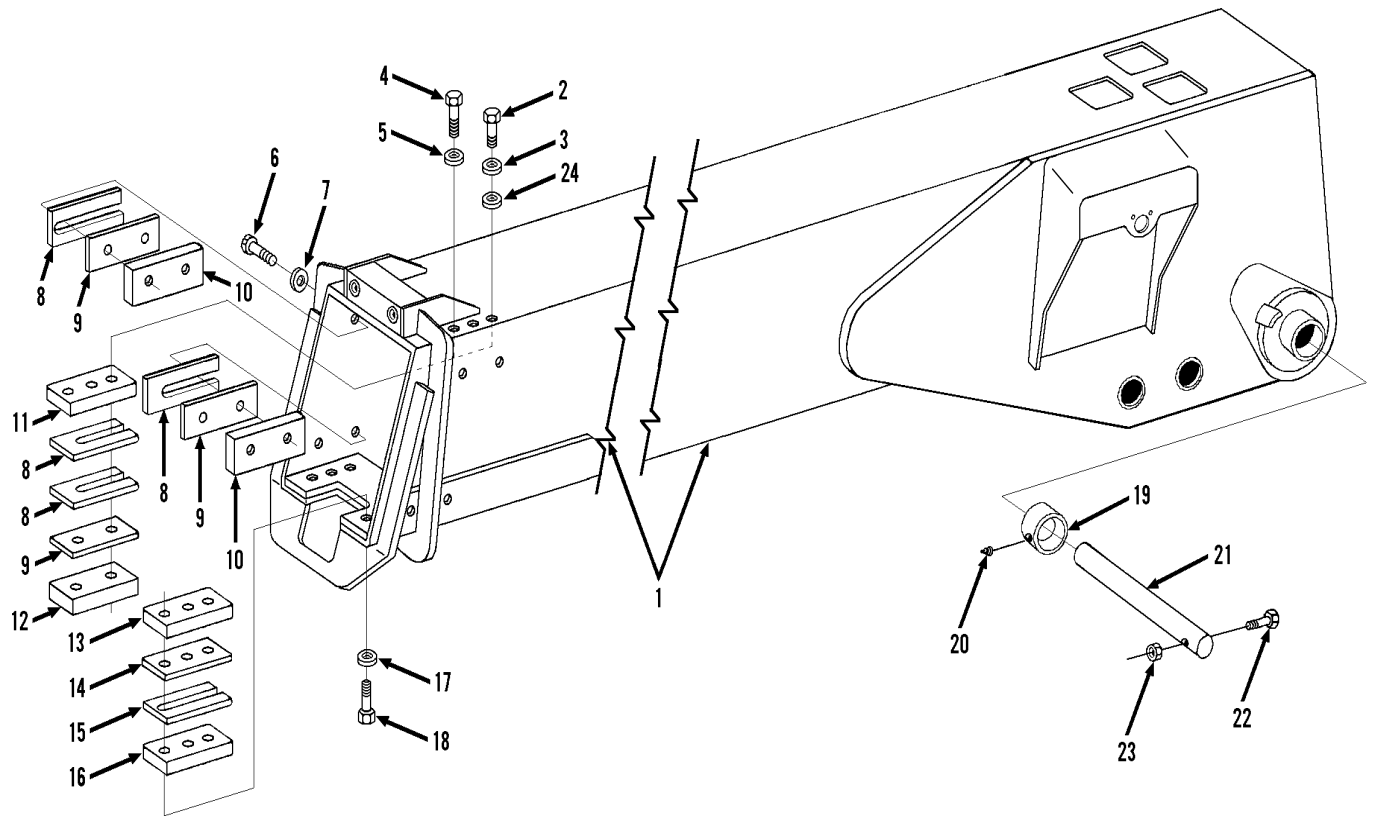
Item	Part No.	Qty.	Description Of Part
8	9116-1069	2	ARM PIN
9	9108-1313	2	KEEPER
10	8855-1013	4	LOCKWASHER, 3/8
11	8820-1065	4	HEX HD CAPSCREW, 1/2-13X1
12		Ref	OUTRIGGER CYLINDER ASSY (see page 10-8 for details)
13	9116-6008	2	ARM WELDMENT
14	9116-6011	2	OUTRIGGER SHOE
15	8379-3054	2	HEX HD CAPSCREW, 3/8-16X4-1/2
16	9116-1080	2	SHOE PIN
*17	9116-3014	4	BUSHING

**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

**BOOM**  
**First Boom Section**  
 Starting Serial No. 0255001  
 Original Issue 6-96  
 Revised 2-4-97

**SERVICE NOTES:**

- 1). Add bearing pad shims & spacers as required to shim boom to within 1/16" of a tight fit. Amounts of shims can vary at each shim point. Whenever a shim is used with a pad, a spacer must be inserted between pad & shim. No pads shall sit directly on slotted surface of shims.
- 2). Add 1440-4595 Union 76 Mega Plex to all bearing pads and bearing slide areas.
- 3). The length of pad bolts depend on the amount of shims used. Bolt cannot extend past chamfer on bearing.
- 4). Bearing pad bolt torques; 3/8" bolts = 32-37 ft.lbs., 1/2" bolts = 76-86 ft.lbs.



Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
1	9116-6014	1	BOOM, FIRST SECTION	12	9103-3189	2	BEARING PAD
* 2	8820-1066	2	HEX HD CAPSCREW, 1/2-13X1-1/4, GR5	* 13	9116-3187	2	BEARING PAD
3	8855-1013	2	LOCKWASHER, 1/2	14	9116-1183	2	SHIM SPACER
* 4	8820-1536	4	HEX HD CAPSCREW, 3/8-24X1-1/2, GR5	15	9116-1184	2	SHIM
5	9002-7470	4	HARDENED WASHER, 3/8	16	9116-1167	2	BEARING PAD SUPPORT
6	8820-1532	8	HEX HD CAPSCREW, 3/8-24X3/4, GR5	17	9002-7471	6	HARDENED WASHER, 1/2
7	8856-1109	8	FLAT WASHER, 3/8	18	8820-1570	6	HEX HD CAPSCREW, 1/2-20X2-1/2, GR5
8	9020-5870	8	SHIM	19	9114-1301	2	BUSHING
9	9103-1236	6	SHIM SPACER	20	8867-1022	2	LUBE FITTING, 90 DEGREES, 1/8
10	9103-3186	4	BEARING PAD	21	9114-1122	1	BOOM BASE PIN
11	9116-1171	2	BEARING PAD SUPPORT	22	8348-1645	1	HEX HD CAPSCREW, 5/8-11X6, GR8
				23	8852-1010	1	HEX NUT, 5/8-11
				* 24	8856-1111	2	FLAT WASHER, 1/2

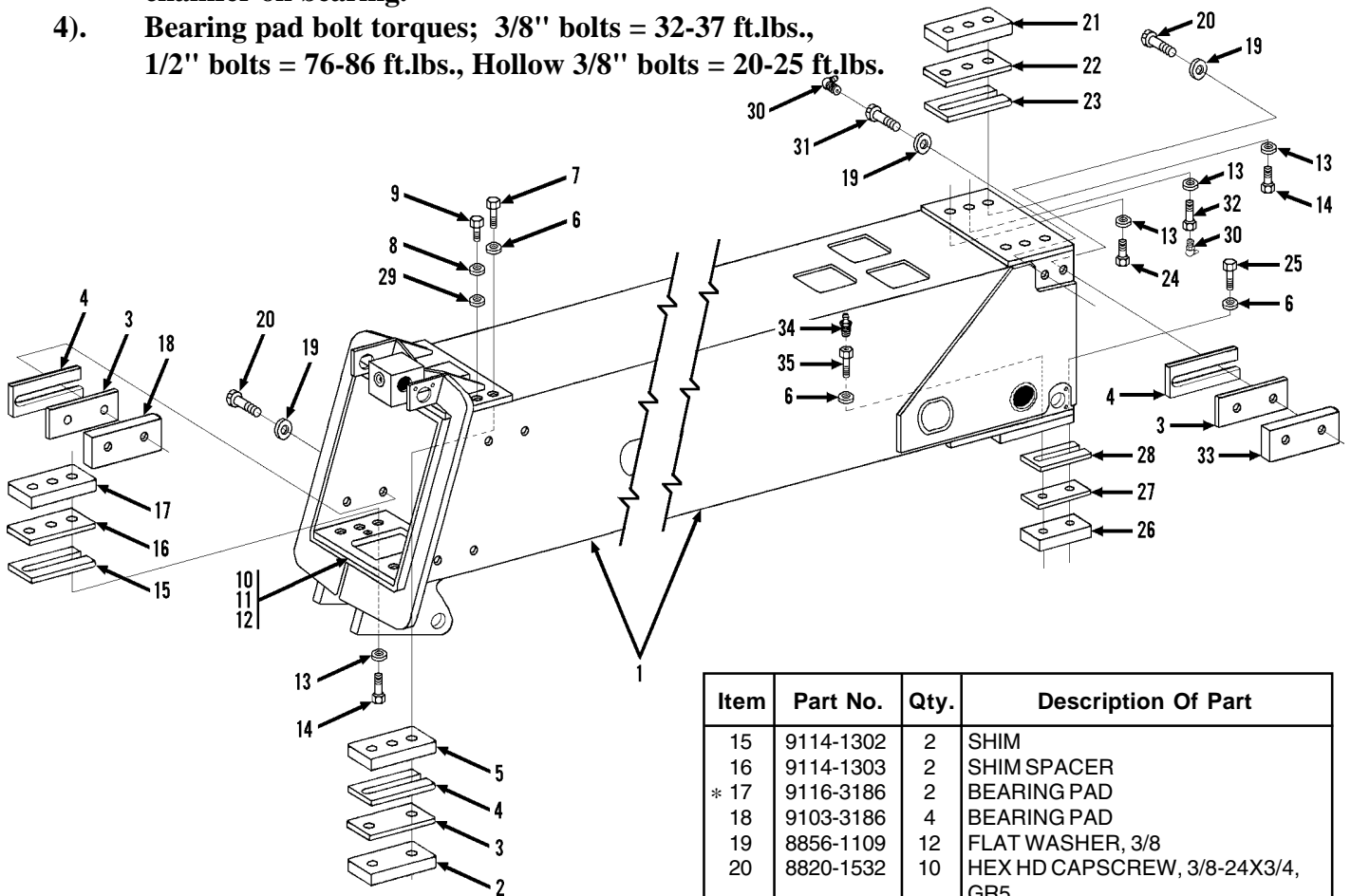


**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

**SERVICE NOTES:**

**BOOM**  
**Second Boom Section**  
**Starting Serial No. 0255001**  
**Original Issue 6-96**  
**Revised 5-12-97**

- 1). Add bearing pad shims & spacers as required to shim boom to within 1/16" of a tight fit. Amounts of shims can vary at each shim point. Whenever a shim is used with a pad, a spacer must be inserted between pad & shim. No pads shall sit directly on slotted surface of shims.
- 2). Add 1440-4595 Union 76 Mega Plex to all bearing pads and bearing slide areas.
- 3). The length of pad bolts depend on the amount of shims used. Bolt cannot extend past chamfer on bearing.
- 4). Bearing pad bolt torques; 3/8" bolts = 32-37 ft.lbs.,  
 1/2" bolts = 76-86 ft.lbs., Hollow 3/8" bolts = 20-25 ft.lbs.



Item	Part No.	Qty.	Description Of Part
1	9116-6015	1	BOOM, SECOND SECTION
2	9103-3189	2	BEARING PAD
3	9103-1236	8	SHIM SPACER
4	9020-5870	10	SHIM
5	9116-1170	2	BEARING PAD SUPPORT
6	9002-7470	8	HARDENED WASHER, 3/8
7	8820-1539	4	HEX HD CAPSCREW, 3/8-24X2-1/4, GR5
8	8855-1013	4	LOCKWASHER, 1/2
9	8820-1066	2	HEX HD CAPSCREW, 1/2-13X1-1/4, GR5
10	9116-1168	1	BEARING PAD SUPPORT
11	9002-7473	2	HARDENED WASHER, 3/4
12	8820-1108	2	HEX HD CAPSCREW, 3/4-10X1-1/4, GR5
13	9002-7471	12	HARDENED WASHER, 1/2
14	8820-1566	8	HEX HD CAPSCREW, 1/2-20X1-1/2, GR5

Item	Part No.	Qty.	Description Of Part
15	9114-1302	2	SHIM
16	9114-1303	2	SHIM SPACER
* 17	9116-3186	2	BEARING PAD
18	9103-3186	4	BEARING PAD
19	8856-1109	12	FLAT WASHER, 3/8
20	8820-1532	10	HEX HD CAPSCREW, 3/8-24X3/4, GR5
21	9116-3187	2	BEARING PAD
22	9116-1183	2	SHIM SPACER
23	9116-1184	2	SHIM
24	8820-1564	2	HEX HD CAPSCREW, 1/2-20X1, GR5
25	8820-1538	2	HEX HD CAPSCREW, 3/8-24X2, GR5
26	9116-3214	2	BEARING PAD
27	9112-1083	2	SHIM SPACER
28	9112-1082	4	SHIM
29	8856-1111	2	FLAT WASHER, 1/2
30	8867-1027	4	GREASE FITTING, 90 DEGREES
31	9116-1248	2	HOLLOW HEX HD CAPSCREW, 3/8-24X3/4 (torque to 20-25 ft.lbs.)
32	9116-1222	2	HOLLOW HEX HD CAPSCREW, 1/2-20X1-1/2 (torque to 20-25 ft.lbs.)
33	9116-3188	2	BEARING PAD
34	8867-1008	2	GREASE FITTING, STRAIGHT
35	9116-1278	2	HOLLOW HEX HD CAPSCREW, 3/8-24X3/4 (torque 20-25 ft.lbs.)

# GRADALL®

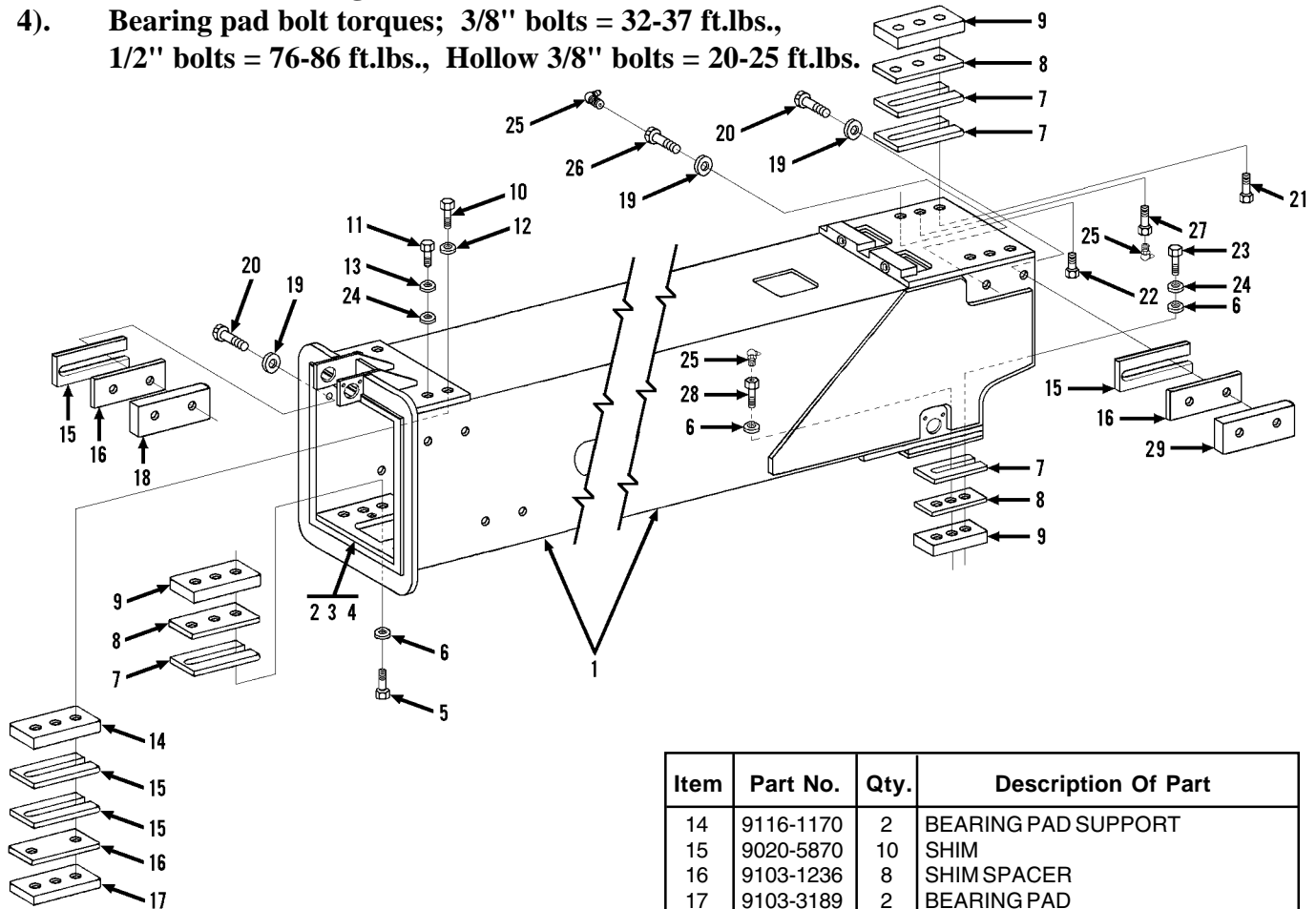
## MATERIAL HANDLER

### 544C

#### SERVICE NOTES:

**BOOM**  
**Third Boom Section**  
 Starting Serial No. 0255001  
 Original Issue 6-96  
 Revised 2-1-97

- 1). Add bearing pad shims & spacers as required to shim boom to within 1/16" of a tight fit. Amounts of shims can vary at each shim point. Whenever a shim is used with a pad, a spacer must be inserted between pad & shim. No pads shall sit directly on slotted surface of shims.
- 2). Add 1440-4595 Union 76 Mega Plex to all bearing pads and bearing slide areas.
- 3). The length of pad bolts depend on the amount of shims used. Bolt cannot extend past chamfer on bearing.
- 4). Bearing pad bolt torques; 3/8" bolts = 32-37 ft.lbs., 1/2" bolts = 76-86 ft.lbs., Hollow 3/8" bolts = 20-25 ft.lbs.

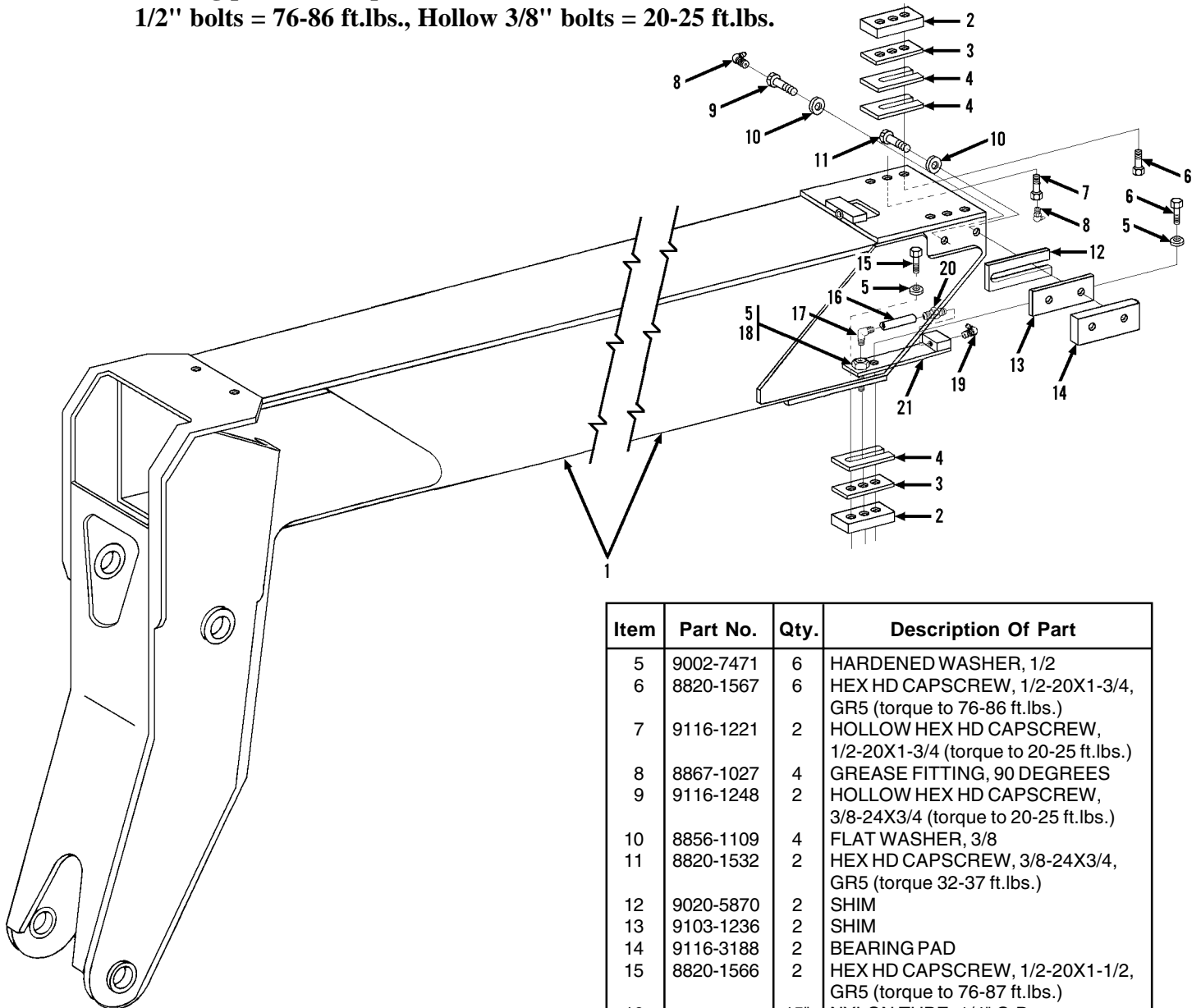


Item	Part No.	Qty.	Description Of Part
1	9116-6016	1	BOOM, THIRD SECTION
2	9116-1169	1	BEARING PAD SUPPORT
3	8820-1093	2	HEX HD CAPSCREW, 5/8-11X1, GR5
* 4	7714-1077	2	HARDENED WASHER, 5/8
5	8820-1564	6	HEX HD CAPSCREW, 1/2-20X1, GR5
6	9002-7471	12	HARDENED WASHER
7	9114-1302	8	SHIM
8	9114-1303	6	SHIM SPACER
* 9	9116-3186	6	BEARING PAD
10	8820-1539	4	HEX HD CAPSCREW, 3/8-24X2-1/4, GR5
11	8820-1066	2	HEX HD CAPSCREW, 1/2-13X1-1/4, GR5
12	9002-7470	4	HARDENED WASHER, 3/8
13	8855-1013	2	LOCKWASHER, 1/2

Item	Part No.	Qty.	Description Of Part
14	9116-1170	2	BEARING PAD SUPPORT
15	9020-5870	10	SHIM
16	9103-1236	8	SHIM SPACER
17	9103-3189	2	BEARING PAD
* 18	9103-3186	4	BEARING PAD
* 19	8856-1109	8	FLAT WASHER, 3/8
* 20	8820-1532	10	HEX HD CAPSCREW, 3/8-24X3/4, GR5
* 21	8820-1567	2	HEX HD CAPSCREW, 1/2-20X1-3/4, GR5
22	8820-1565	2	HEX HD CAPSCREW, 1/2-20X1-1/4, GR5
* 23	8820-1568	4	HEX HD CAPSCREW, 1/2-20X2, GR5
24	8856-1111	6	FLAT WASHER, 1/2
25	8867-1027	6	GREASE FITTING, 90 DEGREES
26	9116-1248	2	HOLLOW HEX HD CAPSCREW, 3/8-24X3/4 (torque to 20-25 ft.lbs.)
27	9116-1221	2	HOLLOW HEX HD CAPSCREW, 1/2-20X1-3/4 (torque to 20-25 ft.lbs.)
28	9116-1277	2	HOLLOW HEX HD CAPSCREW, 1/2-20X2 (torque to 20-25 ft.lbs.)
29	9116-3188	2	BEARING PAD

SERVICE NOTES:

- 1). Add bearing pad shims & spacers as required to shim boom to within 1/16" of a tight fit. Amounts of shims can vary at each shim point. Whenever a shim is used with a pad, a spacer must be inserted between pad & shim. No pads shall sit directly on slotted surface of shims.
- 2). Add 1440-4595 Union 76 Mega Plex to all bearing pads and bearing slide areas.
- 3). The length of pad bolts depend on the amount of shims used. Bolt cannot extend past chamfer on bearing.
- 4). Bearing pad bolt torques; 3/8" bolts = 32-37 ft.lbs., 1/2" bolts = 76-86 ft.lbs., Hollow 3/8" bolts = 20-25 ft.lbs.

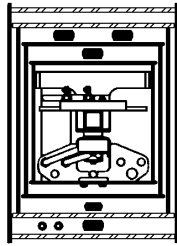


Item	Part No.	Qty.	Description Of Part
1	9116-6017	1	BOOM, FOURTH SECTION
2	9116-3186	4	BEARING PAD
3	9114-1303	4	SHIM SPACER
4	9114-1302	4	SHIM

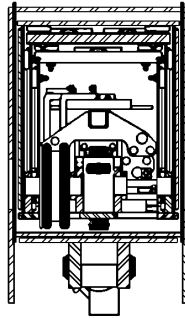
Item	Part No.	Qty.	Description Of Part
5	9002-7471	6	HARDENED WASHER, 1/2
6	8820-1567	6	HEX HD CAPSCREW, 1/2-20X1-3/4, GR5 (torque to 76-86 ft.lbs.)
7	9116-1221	2	HOLLOW HEX HD CAPSCREW, 1/2-20X1-3/4 (torque to 20-25 ft.lbs.)
8	8867-1027	4	GREASE FITTING, 90 DEGREES
9	9116-1248	2	HOLLOW HEX HD CAPSCREW, 3/8-24X3/4 (torque to 20-25 ft.lbs.)
10	8856-1109	4	FLAT WASHER, 3/8
11	8820-1532	2	HEX HD CAPSCREW, 3/8-24X3/4, GR5 (torque 32-37 ft.lbs.)
12	9020-5870	2	SHIM
13	9103-1236	2	SHIM
14	9116-3188	2	BEARING PAD
15	8820-1566	2	HEX HD CAPSCREW, 1/2-20X1-1/2, GR5 (torque to 76-87 ft.lbs.)
16		15"	NYLON TUBE, 1/4" O.D.
17	8688-1276	2	ELBOW, 90 DEGREES
18	9116-1274	2	HOLLOW HEX HD CAPSCREW, 1/2-20X1-3/4 (torque to 20-25 ft.lbs.)
19	8867-1022	2	GREASE FITTING, 90 DEGREES
20	8688-1273	2	STRAIGHT THREAD CONNECTOR
21	9116-6065	2	BRACKET

**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

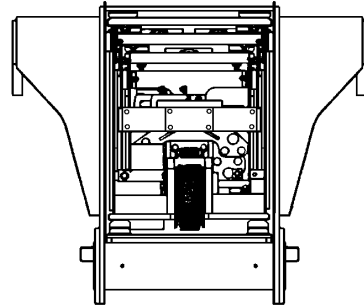
**BOOM**  
**Boom Cross Section**  
Starting Serial No. 0255001  
Original Issue 7-96



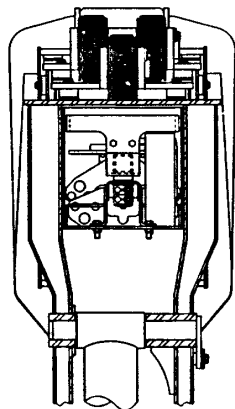
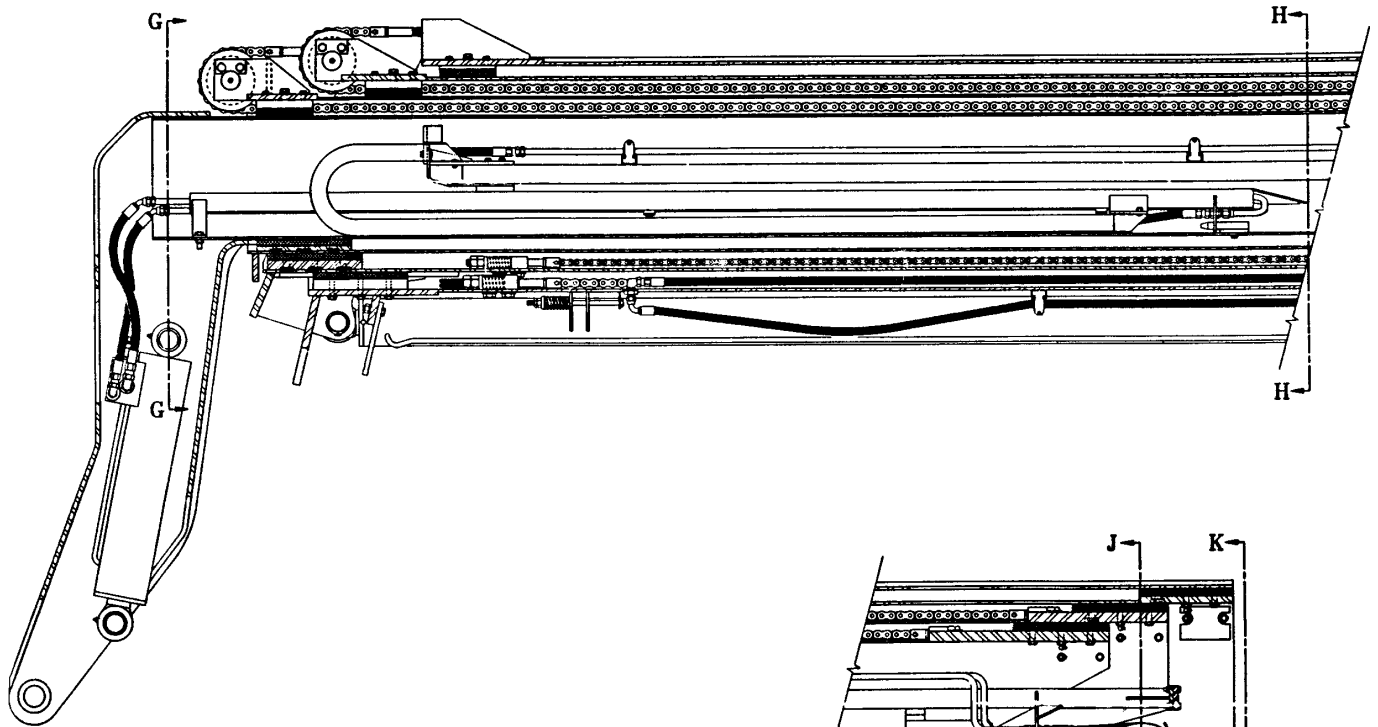
SECTION H-H



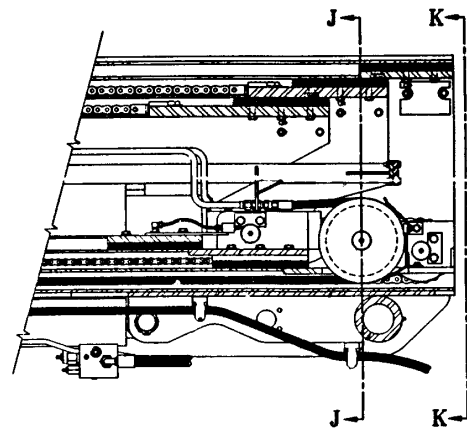
SECTION J-J



VIEW K-K



SECTION G-G



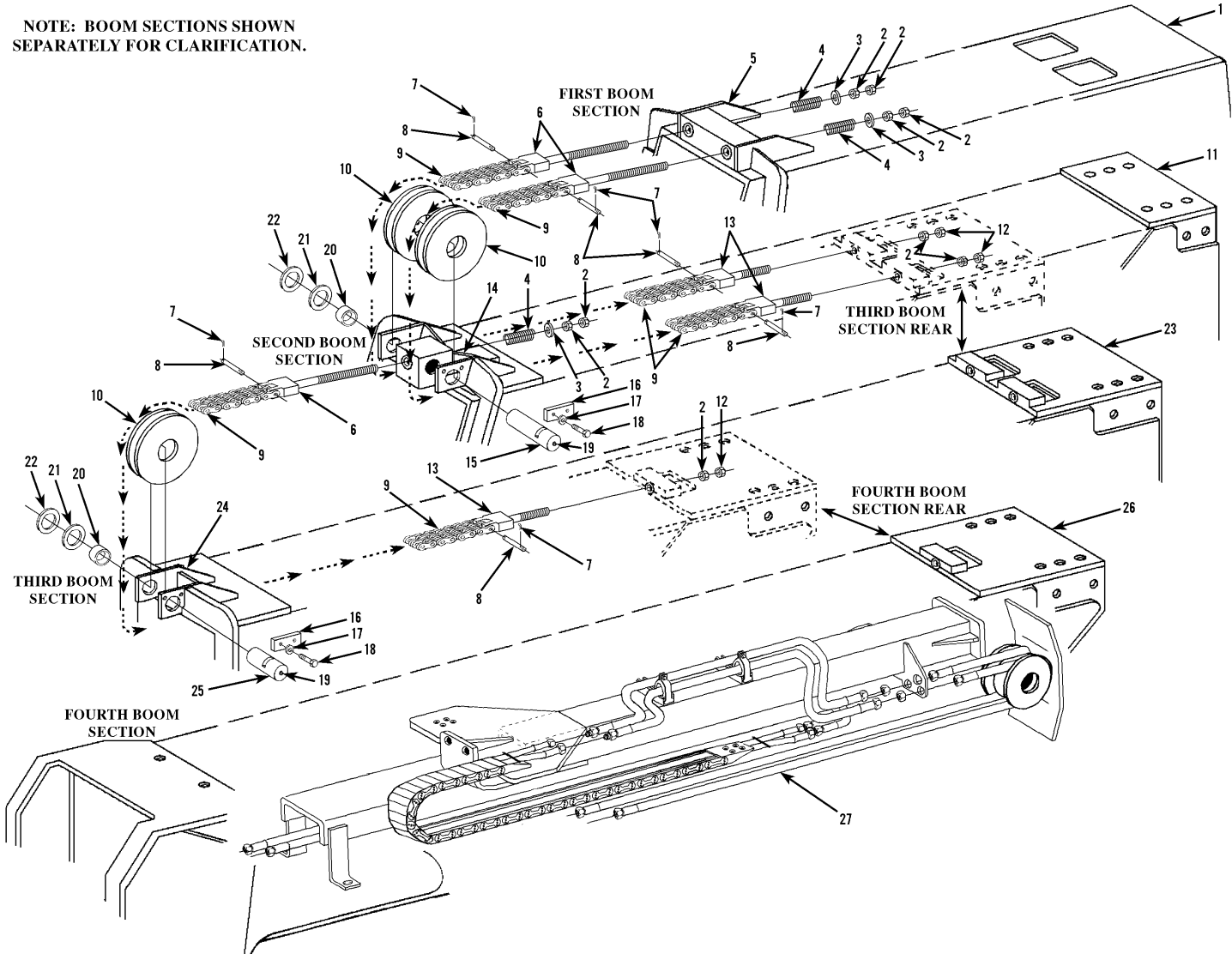
# GRADALL® MATERIAL HANDLER 544C

**BOOM  
Extension Chains**  
Starting Serial No. 0255001  
Original Issue 11-96  
Revised 5-7-97

## SERVICE NOTES:

- 1). A chain wear gage, part number 9116-4084, is now available to check if your boom chain has been stretched beyond spec.

NOTE: BOOM SECTIONS SHOWN SEPARATELY FOR CLARIFICATION.

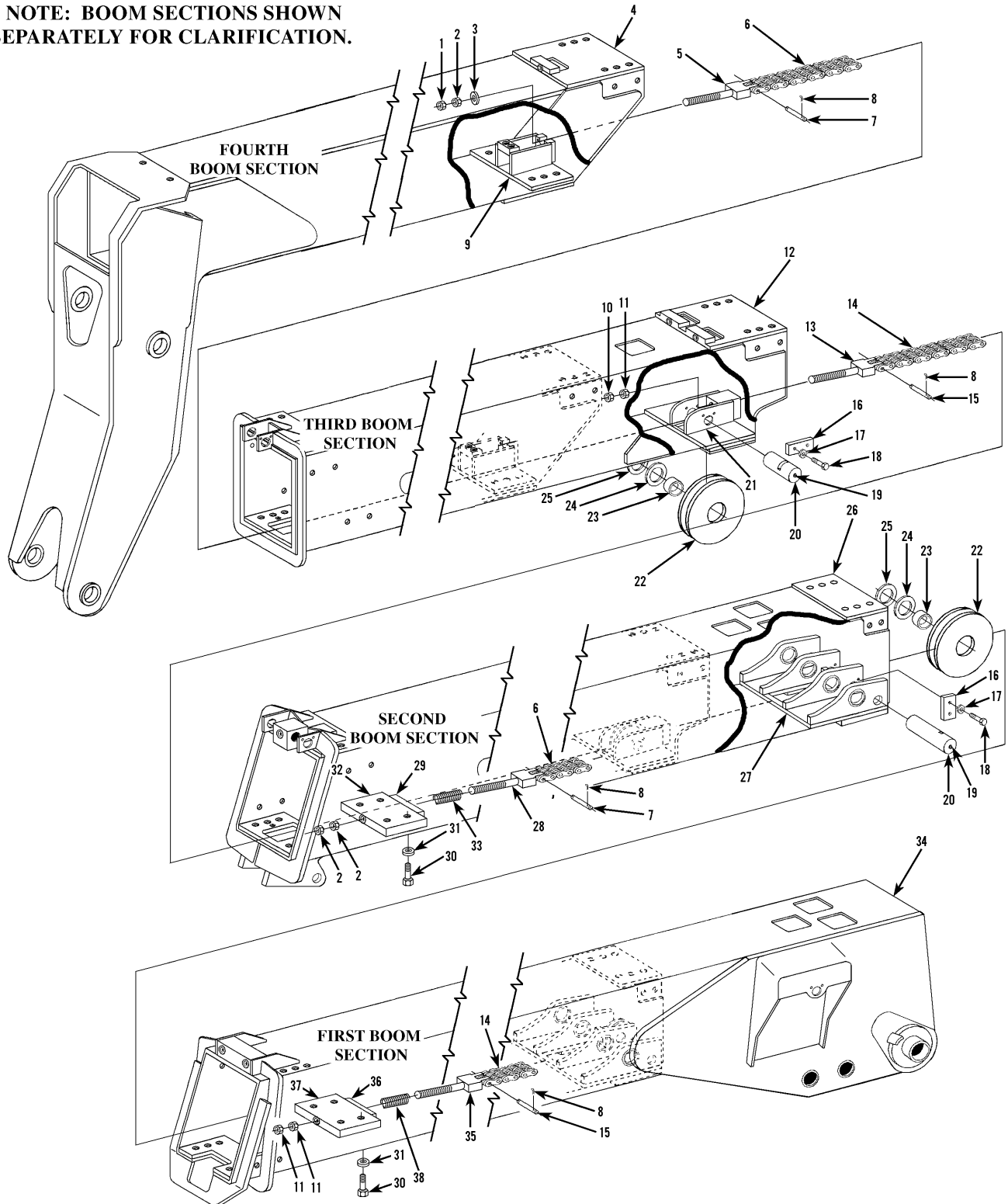


Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
1		Ref	FIRST BOOM SECTION (see page 3-1 for details)	16	9108-1313	2	PIN KEEPER
2	8850-1314	9	HEX NUT, 7/8-14 (torque to 100 ft.lbs.)	17	8855-1013	4	LOCKWASHER, 1/2
3	9116-1218	3	SPECIAL WASHER	18	8820-1065	4	HEX HD CAPSCREW, 1/2-13X1, GR5
4	9116-3163	3	SPRING	19	8867-1001	2	GREASE FITTING
5	9116-6044	1	CHAIN ANCHOR	20	9116-3204	3	BUSHING
6	9116-3170	3	CHAIN CLEVIS	21	8692-1268	6	SEAL
7	8863-1302	12	COTTER PIN	22	9104-1451	6	THRUSTWASHER (.106" thick)
8	9116-3123	6	CHAIN PIN		9104-1450	AR	THRUSTWASHER (.0478" thick)
9	9116-3036	3	CHAIN, 1"		9104-1449	AR	THRUSTWASHER (.060" thick)
10	9116-5022	3	CHAIN ROLLER (includes items 20 & 21)		9104-1596	AR	THRUSTWASHER (.0359" thick)
11		Ref	SECOND BOOM SECTION (see page 3-2 for details)	23		Ref	THIRD BOOM SECTION (see page 3-3 for details)
12	8850-1414	3	JAM NUT (torque to 100 ft.lbs.)	24	9114-6025	1	ROLLER BRACKET
13	9116-3171	3	CHAIN CLEVIS	25	9116-1267	1	CHAIN SHEAVE PIN
14	9116-6045	1	ROLLER BRACKET	26		Ref	FOURTH BOOM SECTION (see page 3-4 for details)
15	9116-1266	1	CHAIN SHEAVE PIN	27		Ref	BOOM HYD. SUB ASSY (see page 9-5 for details)

**SERVICE NOTES:**

- 1). A chain wear gage, part number 9116-4084, is now available to check if your boom chain has been stretched beyond spec.

**NOTE: BOOM SECTIONS SHOWN SEPARATELY FOR CLARIFICATION.**

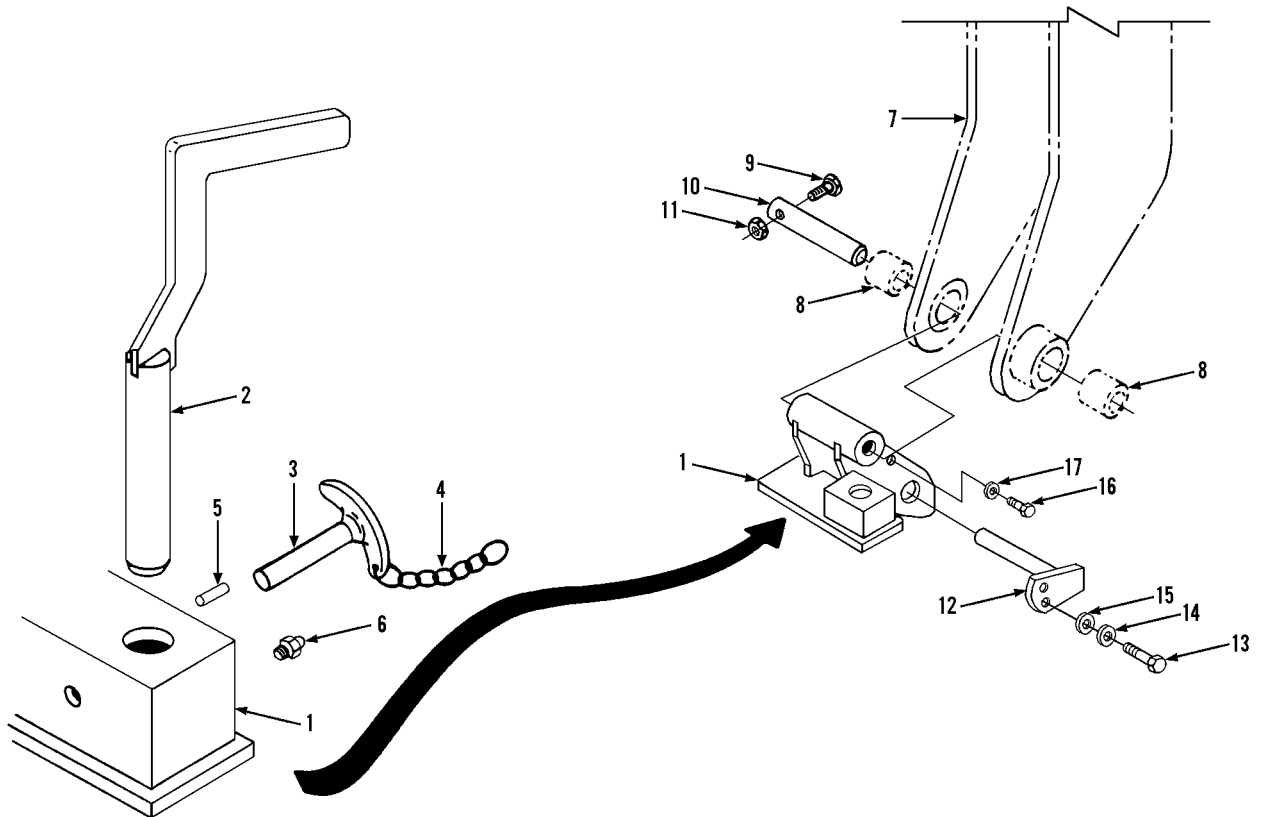


**SERVICE NOTES:**

- 1). A chain wear gage, part number 9116-4084, is now available to check if your boom chain has been stretched beyond spec.

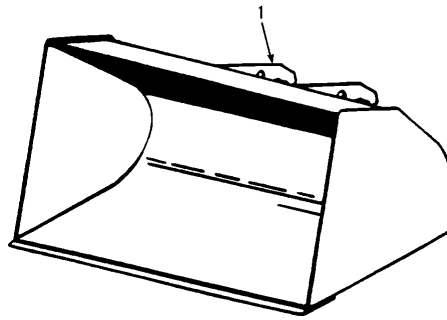
Item	Part No.	Qty.	Description Of Part
1	8850-1412	1	HEX JAM NUT, 3/4-16 (torque to 100 ft.lbs.)
2	8850-1312	3	HEX NUT, 3/4-16 (torque to 100 ft.lbs.)
3	9002-7473	2	HARDENED WASHER, 3/4
4		Ref	FOURTH BOOM SECTION (see page 3-4 for details)
5	9116-3173	1	CHAIN CLEVIS
6	9116-3037	1	CHAIN, 3/4"
7	9116-3124	2	CHAIN PIN
8	8863-1302	8	COTTER PIN
9	9116-6027	1	ANCHOR BRACKET
10	8850-1414	1	HEX JAM NUT, 7/8-14 (torque to 100 ft.lbs.)
11	8850-1314	3	HEX NUT, 7/8-14 (torque to 100 ft.lbs.)
12		Ref	THIRD BOOM SECTION (see page 3-3 for details)
13	9116-3171	1	CHAIN CLEVIS
14	9116-3036	1	CHAIN, 1"
15	9116-3123	2	CHAIN PIN
16	9108-1313	2	PIN KEEPER
17	8855-1013	4	LOCKWASHER, 1/2
18	8820-1065	4	HEX HD CAPSCREW, 1/2-13X1, GR5
19	8867-1001	2	GREASE FITTING
20	9116-1267	2	CHAIN SHEAVE PIN
21	9116-6026	1	ROLLER BRACKET
22	9116-5022	2	CHAIN ROLLER (includes items 23 & 24)
23	9116-3204	2	BUSHING
24	8692-1268	4	SEAL
25	9104-1451	4	THRUSTWASHER
	9104-1450	AR	THRUSTWASHER
	9104-1449	AR	THRUSTWASHER
	9104-1596	AR	THRUSTWASHER
26		Ref	SECOND BOOM SECTION (see page 3-2 for details)
27	9116-6022	1	ROLLER BRACKET
28	9116-3172	1	CHAIN CLEVIS
29	9116-1214	1	STOP BAR
30	8320-1061	8	HEX HD CAPSCREW, 3/4-10X1-3/4, GR5 (torque to 340-365 ft.lbs.)
31	9002-7473	8	HARDENED WASHER, 3/4
32	9116-1212	1	CABLE ADJUSTMENT BLOCK
33	9116-3162	1	SPRING
34		Ref	FIRST BOOM SECTION (see page 3-1 for details)
35	9116-3170	1	CHAIN CLEVIS
36	9116-1213	1	STOP BAR
37	9116-1211	1	CABLE ADJUSTMENT BLOCK
38	9116-3161	1	SPRING

\* Added service note.



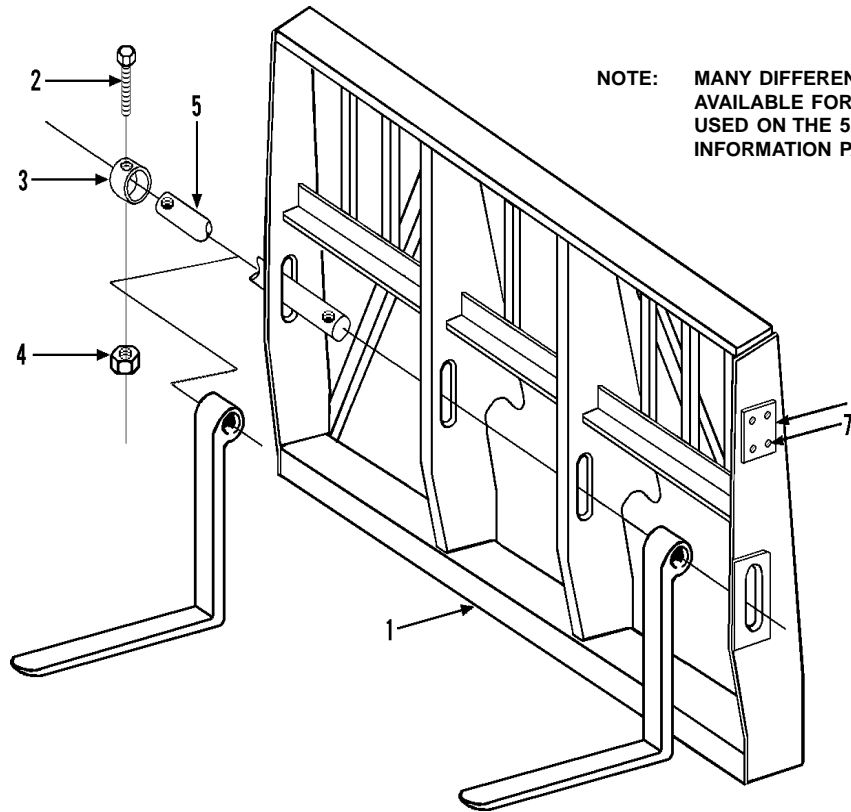
Item	Part No.	Qty.	Description Of Part
	9108-5091	1	QUICK SWITCH ASSY (includes items 1 thru 6, 16 & 17)
1	9108-6152	1	QUICK SWITCH WELDMENT
2	9108-6151	1	PLUNGER WELDMENT
3	9020-7902	1	QUICK RELEASE PIN
4	9103-3038	1	JACK CHAIN, 7" LONG, SIZE 12
5	8863-1509	1	ROLL PIN, 1/4X2
6	8867-1008	1	LUBE FITTING, STRAIGHT, 1/4-28
7		Ref	FOURTH BOOM SECTION (see page 3-4 for details)
8	9103-1136	Ref	BUSHING
9	8820-1107	1	HEX HD CAPSCREW, 5/8-11X5, GR5
10	9104-1365	1	PIN
11	8852-1010	1	HEX LOCKNUT, 5/8-11
12	9116-6062	1	TILT CYLINDER PIN
13	8820-1065	2	HEX HD CAPSCREW, 1/2-13X1, GR5
14	8855-1013	2	LOCKWASHER, 1/2
15	8856-1111	2	FLAT WASHER, 1/2
16	8830-1193	1	ROUND HD MACHINE SCREW, #10-32X1/2
17	8856-1105	1	FLAT WASHER, #10





Item	Part No.	Qty.	Description Of Part
1	9045-5049	1	60" BUCKET (3/4 yard capacity)

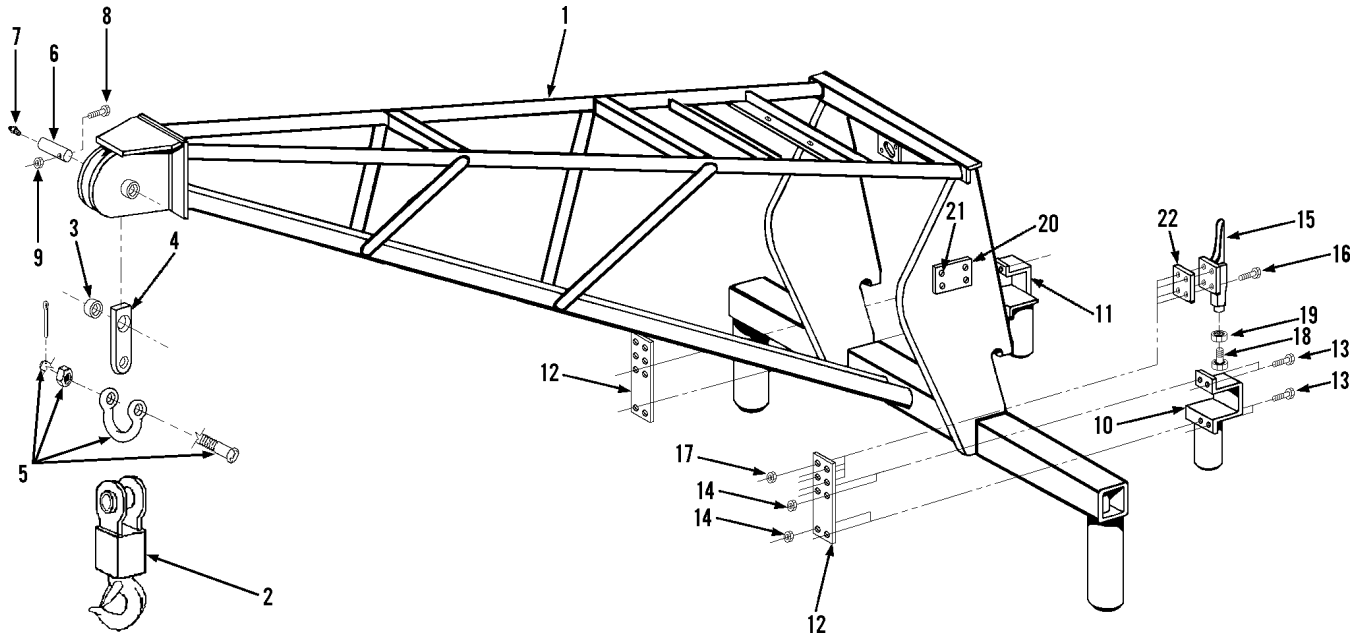
Item	Part No.	Qty.	Description Of Part
1	9055-5020	1	74" BUCKET (1-1/4 yard capacity)



**NOTE: MANY DIFFERENT FORK ASSEMBLIES ARE AVAILABLE FOR THE CARRIAGE ASSEMBLIES USED ON THE 544C. PLEASE SEE FORK INFORMATION PAGE, (4-14) FOR LIST OF FORKS.**

Item	Part No.	Qty.	Description Of Part
	9045-5051	1	48" CARRIAGE ASSY, (includes all items)
1	9045-6009	1	48" CARRIAGE WELDMENT
2	8820-1105	2	HEX HD CAPSCREW, 5/8-11X4, GR5
3	9020-0003	2	COLLAR
4	8852-1310	2	HEX LOCKNUT, 5/8-11
* 5	9045-1058	1	FORK PIN
6	9015-3001	1	SERIAL NUMBER PLATE
7	8834-1022	4	DRIVE SCREW, #10X3/8

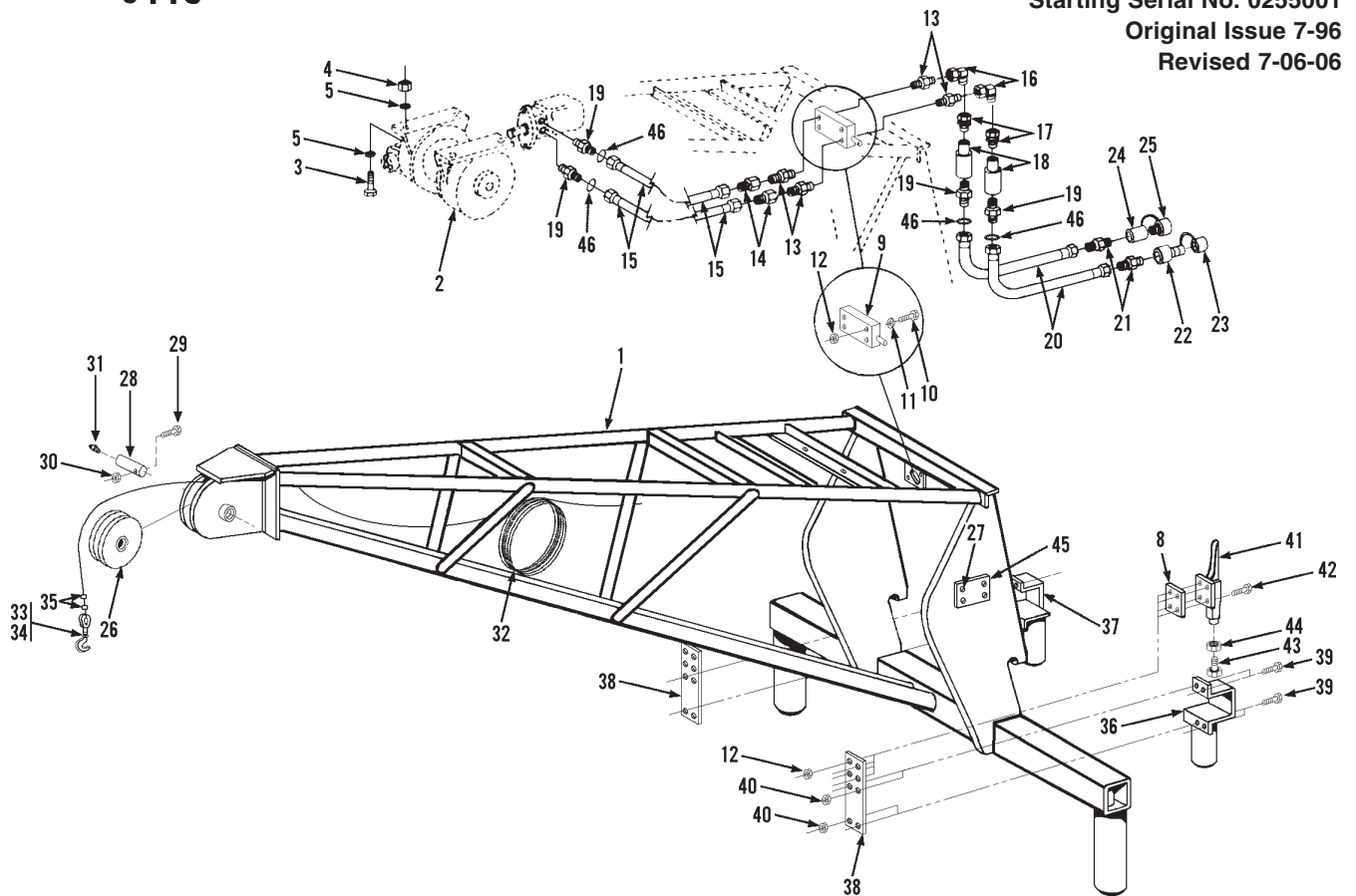
Item	Part No.	Qty.	Description Of Part
	9045-5052	1	66" CARRIAGE ASSY, (includes all items)
1	9045-6010	1	66" CARRIAGE WELDMENT
2	8820-1105	2	HEX HD CAPSCREW, 5/8-11X4, GR5
3	9020-0003	2	COLLAR
4	8852-1310	2	HEX LOCKNUT, 5/8-11
5	9040-2478	1	FORK PIN
6	9015-3001	1	SERIAL NUMBER PLATE
7	8834-1022	4	DRIVE SCREW, #10X3/8



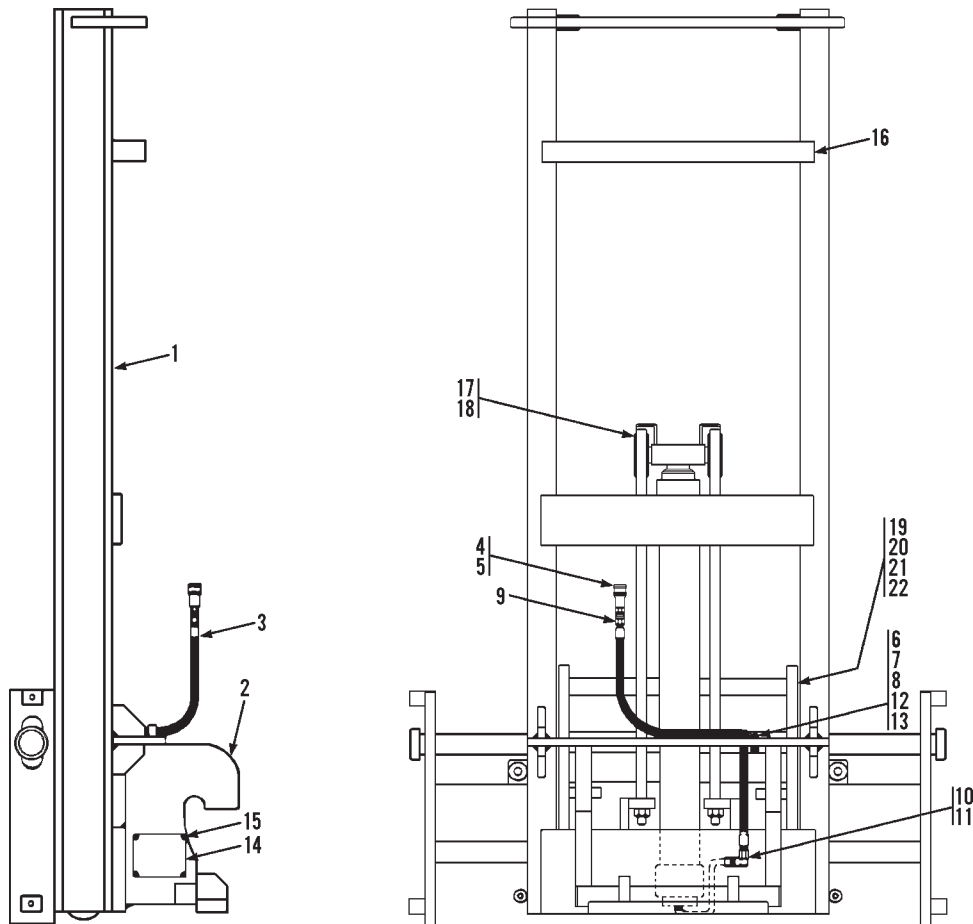
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9045-5011	1	TRUSS BOOM, (includes all items)	11	9060-2904	1	SLIDER BRACKET
1	9080-1353	1	TRUSS BOOM WELDMENT	12	9040-3437	2	SLIDER BAR
2	9045-3040	1	SWIVEL HOOK	13	8820-1036	8	HEX HD CAPSCREW, 3/8-16X1-1/4, GR5
3	9020-6046	1	BUSHING	14	8850-1006	8	HEX NUT, 3/8-16
4	9045-1053	1	HANGER	15	9020-7884	2	LOCKING CLAMP
5	9045-3041	1	SHACKLE, (includes attachment hardware)	16	8820-1021	8	HEX HD CAPSCREW, 5/16-18X1-1/4, GR5
		1	BOLT	17	8850-1005	8	HEX NUT, 5/16-18
		1	NUT	18	8820-1035	2	HEX HD CAPSCREW, 3/8-16X1, GR5
		1	COTTER PIN	19	8850-1106	2	HEAVY HEX JAM NUT, 3/8-16
6	9040-2948	1	PIN	20	9015-3001	1	SERIAL NO. PLATE
7	8867-1001	1	LUBE FITTING, STRAIGHT, 1/8	21	8834-1022	4	DRIVE SCREW, #10X3/8
8	8820-1073	1	HEX HD CAPSCREW, 1/2-13X3, GR5	22	9045-1047	2	SPACER
9	8850-1008	1	HEX NUT, 1/2-13				
10	9060-2905	1	SLIDER BRACKET				

**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

**ATTACHMENTS**  
**(9045-5012) Truss Boom W/Winch**  
**Starting Serial No. 0255001**  
**Original Issue 7-96**  
**Revised 7-06-06**



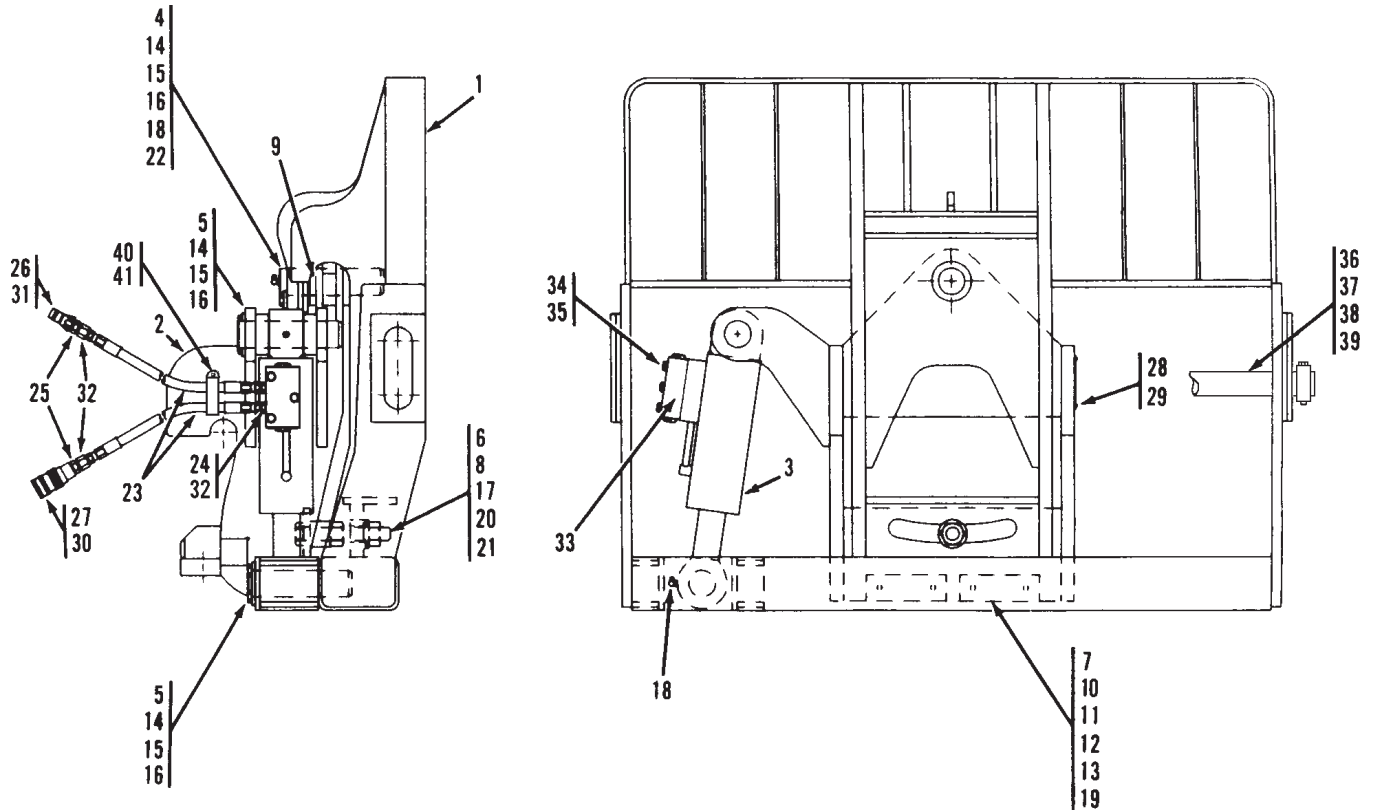
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9045-5012	1	TRUSS BOOM ASSY W/WINCH, (includes all items)	22	9140-3414	1	MALE TIP COUPLER, (S/N 2005283-01 & After)
1	9080-1353	1	TRUSS BOOM WELDMENT	23	9104-3126	1	DUST CAP
2		Ref	WINCH W/MOTOR, (see page 13-16 & 13-17 for details)	24	9116-3139	1	FEMALE COUPLER, (Before S/N 2005283-01 & After)
3	8820-1096	4	HEX HD CAPSCREW, 5/8-11X1-3/4, GR5		9140-3413	1	FEMALE COUPLER, (S/N 2005283-01 & After)
4	8850-1010	4	HEX NUT, 5/8-11	25	9104-3125	1	DUST PLUG
5	8856-1113	8	FLAT WASHER, 5/8	26	9040-3056	1	SHEAVE
6	Not Used			27	8834-1022	4	DRIVE SCREW, #10X3/8
7	Not Used			28	9040-2948	1	PIN
8	9045-1047	2	SPACER	29	8820-1073	1	HEX HD CAPSCREW, 1/2-13X3, GR5
9		Ref	CROSSOVER VALVE, (see page 13-18 for details)	30	8850-1008	1	HEX NUT, 1/2-13
10	8820-1027	2	HEX HD CAPSCREW, 5/16-18X2-3/4, GR5	31	8867-1001	1	LUBE FITTING, STRAIGHT, 1/8
11	8856-1108	2	FLAT WASHER, 5/16	32	9020-7882	1	WIRE ROPE, 3/8" DIAMETER
12	8850-1005	10	HEX NUT, 5/16-18	33	9140-3448	1	SWIVEL HOOK
13	8345-1104	4	ADAPTER	34	9002-6965	1	THIMBLE
14	9002-9935	2	TUBE REDUCER, 7/8X3/4	35	9002-8990	2	WIRE ROPE CLIP
15	9020-5121	2	HOSE ASSY	36	9060-2905	1	SLIDER BRACKET
16	8866-2107	2	ELBOW, 90 DEGREES, (swivel nut)	37	9060-2904	1	SLIDER BRACKET
17	9045-3016	2	ADAPTER	38	9040-3437	2	SLIDER BAR
18	9020-7880	2	FLOW LIMITER	39	8820-1036	8	HEX HD CAPSCREW, 3/8-16X1-1/4, GR5
19	8866-2019	4	CONNECTOR, (includes item 46)	40	8850-1006	8	HEX NUT, 3/8-16
20	8471-7644	2	HOSE ASSY	41	9020-7884	2	LOCKING CLAMP
21	8866-1013	2	MALE CONNECTOR, 1/2X1/2, (Before S/N 2005283-01 & After)	42	8820-1021	8	HEX HD CAPSCREW, 5/16-18X1-1/4, GR5
	8866-2006	2	CONNECTOR, (includes 8859-1205 o-ring), (S/N 2005283-01 & After)	43	8820-1035	2	HEX HD CAPSCREW, 3/8-16X1, GR5
22	9116-3138	1	MALE TIP COUPLER, (Before S/N 2005283-01 & After)	44	8850-1106	2	HEAVY HEX JAM NUT, 3/8-16
				45	9015-3001	1	SERIAL NO. PLATE
				46	8859-1206	4	O-RING



Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9045-5035	1	6 FT. MAST ASSY, (48" carriage), (includes all items)	9	8866-2006	1	CONNECTOR, (includes 8859-1205 o-ring), (S/N 2005283-01 & After)
	9045-5037	1	6 FT. MAST ASSY, (66" carriage), (includes all items)	10	8866-1016	1	MALE CONNECTOR, 5/8X1/2 TUBE
1	9045-3031	1	CARRIAGE WELDMENT - 48"	11	8866-1180	1	FEMALE ELBOW, 90 DEGREES, 1/2X1/2 TUBE
	9045-3032	1	CARRIAGE WELDMENT - 66"	12	8850-1006	2	HEX NUT, 3/8-16
2	9045-6002	1	ADAPTER WELDMENT	13	8855-1011	2	LOCKWASHER, 3/8
3	8471-7640	1	HOSE ASSY	14	9015-3001	1	SERIAL NO. PLATE
4	9116-3138	1	MALE HYDRAULIC COUPLING, (Before S/N 2005283-01)	15	8834-1022	4	DRIVE SCREW, #10X3/8
	9140-3414	1	MALE HYDRAULIC COUPLING, (S/N 2005283-01 & After)	16	9045-1039	1	STOP TUBE
5	9104-3126	1	DUST CAP	17	9103-4372	2	RETAINING RING
6	2443-1386	2	CLAMP	18	9103-4373	2	CHAIN ROLLER
7	8820-1037	2	HEX HD CAPSCREW, 3/8-16X1-1/2, GR5	19	9103-4374	6	LOAD ROLLER, (inside carriage frame)
8	8856-1004	2	FLAT WASHER, 3/8	20	9103-4375	AR	SHIM
9	8866-1013	1	MALE CONNECTOR, 1/2X1/2 TUBE, (Before S/N 2005283-01)	21	9103-4376	4	SIDE THRUST ROLLER, (small outside roller)
				22	9103-4377	2	SCREW

**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

**ATTACHMENTS**  
**(9108-5058) 48" Slope Piler Carriage**  
 Starting Serial No. 0255001  
 Original Issue 7-96  
 Revised 6-19-06



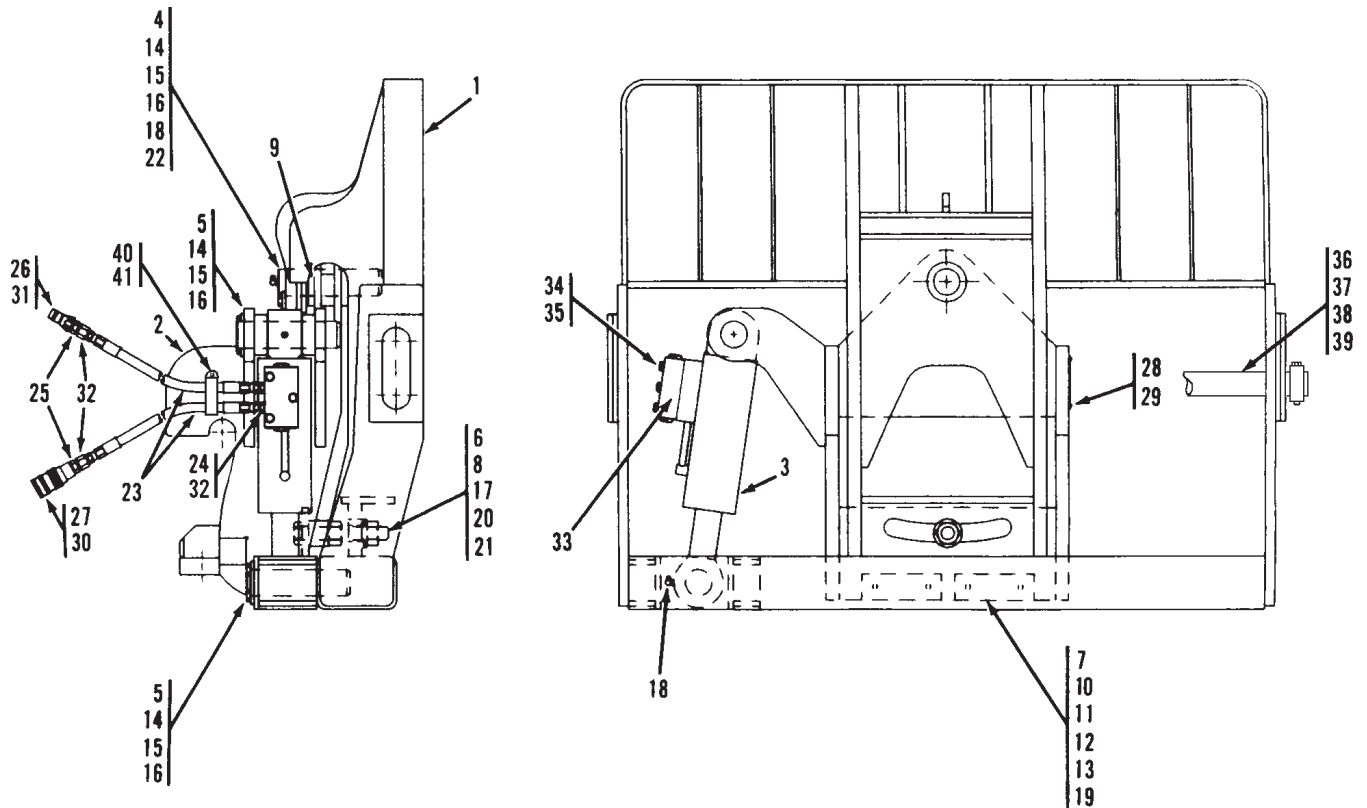
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9108-5058	Ref	48" SLOPE PILER CARRIAGE, (includes all items)	*25	8866-1010	2	CONNECTOR, (Before S/N 2005283-01)
		1	CAPACITY DECAL, 544C-10, (not shown)		8866-2018	2	CONNECTOR, (S/N 2005283-01 & After)
1	9108-6121	1	CARRIAGE WELDMENT	*26	9116-3138	1	MALE QUICK DISCONNECT, (Before S/N 2005283-01)
2	9108-6122	1	ADAPTER WELDMENT		9140-3414	1	MALE QUICK DISCONNECT, (S/N 2005283-01 & After)
3		Ref	SWAY CYLINDER, (see page 13-11 for details)	*27	9116-3139	1	FEMALE QUICK DISCONNECT, (Before S/N 2005283-01)
4	9108-3248	1	BUSHING		9140-3413	1	FEMALE QUICK DISCONNECT, (S/N 2005283-01 & After)
*5	3423263	2	PIN	28	8834-1022	4	DRIVE SCREW, #10X3/8
6	9020-4007	1	TUBE	29	9015-3001	1	SERIAL NUMBER PLATE
7	9103-3186	2	BEARING PAD	30	9104-3125	1	DUST PLUG
8	9108-1577	1	TAP BOLT	31	9104-3126	1	DUST CAP
9	9108-1594	1	THRUST WASHER	*32	8866-2105	2	ELBOW, 90 DEGREES, (swivel nut)
*10	9020-5870	AR	SHIM	33		Ref	DUAL P.O. CHECK VALVE, (see page 13-12 for details)
11	9103-1236	2	SPACER	34	8820-1040	3	HEX HD CAPSCREW, 3/8-16X2-1/4, GR5
*12	8820-1535	4	HEX HD CAPSCREW, 3/8-24X1-1/4, GR5	35	8855-1011	3	LOCKWASHER, 3/8
*13	8820-1534	4	HEX HD CAPSCREW, 3/8-24X1, GR5	*36	9045-1058	1	FORK PIN
14	9108-1313	3	KEEPER PLATE	37	9020-0003	2	COLLAR
15	8820-1065	6	HEX HD CAPSCREW, 1/2-13X1, GR5	38	8820-1105	2	HEX HD CAPSCREW, 5/8-11X4, GR5
16	8855-1013	6	LOCKWASHER, 1/2	39	8852-1310	2	LOCKNUT, 5/8-11
17	8852-1016	1	HEX LOCKNUT, 1-8	*40	8452-1062	1	SUPPORT CLAMP
18	8867-1022	2	LUBE FITTING, 90 DEGREES, 1/8	*41	7714-3015	1	WHIZ-LOK NUT, 3/8-16
19	8856-1109	4	FLAT WASHER, 3/8				
20	8850-1016	1	HEX NUT, 1-8				
21	0510-1441	1	WASHER, 1-1/16				
22	9108-1622	1	PIN				
23	8471-6434	2	HOSE ASSY				
24	8366-1316	2	CONNECTOR				

ER 46361, 48269, 49530,  
 49939, 50170 LK

\* Revised illustration and parts list.

**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

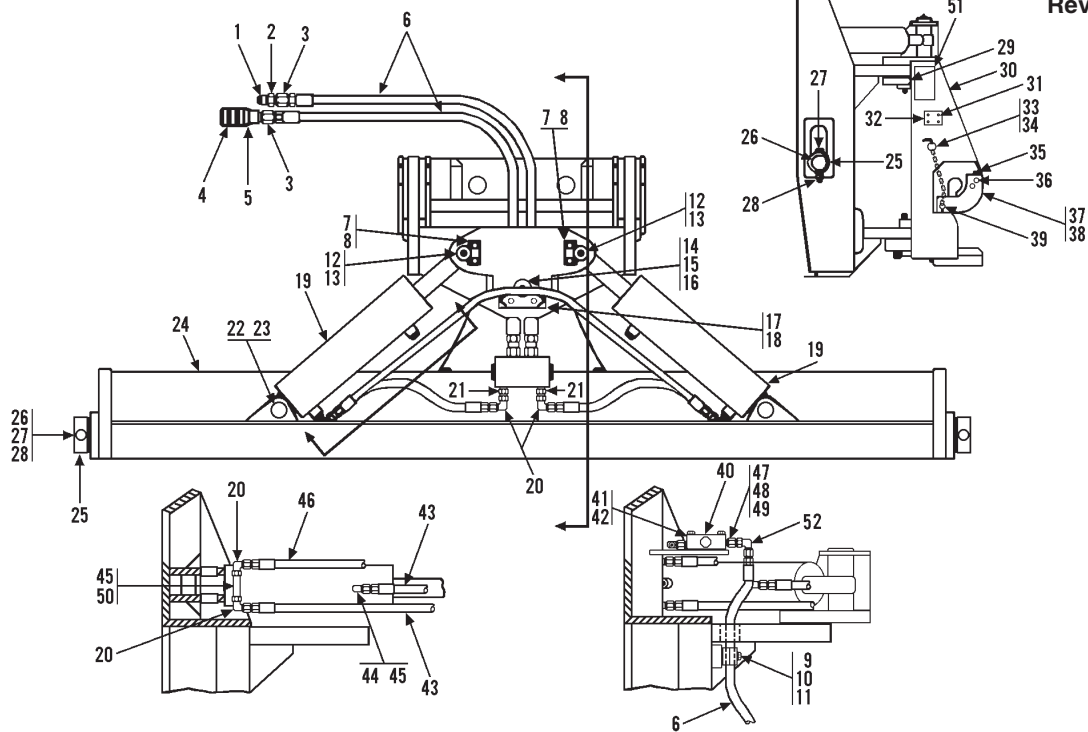
**ATTACHMENTS**  
**(9130-5016) 66" Slope Piler Carriage**  
 Starting Serial No. 0255001  
 Original Issue 7-96  
 Revised 6-19-06



Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9130-5016	Ref	66" SLOPE PILER CARRIAGE, (includes all items)	*25	8866-1010	2	CONNECTOR, (Before S/N 2005283-01)
		1	CAPACITY DECAL, 544C-10, (not shown)		8866-2018	2	CONNECTOR, (S/N 2005283-01 & After)
1	9130-6030	1	CARRIAGE WELDMENT	*26	9116-3138	1	MALE QUICK DISCONNECT, (Before S/N 2005283-01)
2	9108-6122	1	ADAPTER WELDMENT		9140-3414	1	MALE QUICK DISCONNECT, (S/N 2005283-01 & After)
3		Ref	SWAY CYLINDER, (see page 13-11 for details)	*27	9116-3139	1	FEMALE QUICK DISCONNECT, (Before S/N 2005283-01)
4	9108-3248	1	BUSHING		9140-3413	1	FEMALE QUICK DISCONNECT, (S/N 2005283-01 & After)
*5	3423263	2	PIN	28	8834-1022	4	DRIVE SCREW, #10X3/8
6	9020-4007	1	TUBE	29	9015-3001	1	SERIAL NUMBER PLATE
7	9103-3186	2	BEARING PAD	30	9104-3125	1	DUST PLUG
8	9108-1577	1	TAP BOLT	31	9104-3126	1	DUST CAP
9	9108-1594	1	THRUST WASHER	*32	8866-2105	2	ELBOW, 90 DEGREES, (swivel nut)
*10	9020-5870	AR	SHIM	33		Ref	DUAL P.O. CHECK VALVE, (see page 13-12 for details)
11	9103-1236	2	SPACER	34	8820-1040	3	HEX HD CAPSCREW, 3/8-16X2-1/4, GR5
*12	8820-1535	4	HEX HD CAPSCREW, 3/8-24X1-1/4, GR5	35	8855-1011	3	LOCKWASHER, 3/8
*13	8820-1534	4	HEX HD CAPSCREW, 3/8-24X1, GR5	36	9130-1083	1	FORK PIN
14	9108-1313	3	KEEPER PLATE	37	9020-0003	2	COLLAR
15	8820-1065	6	HEX HD CAPSCREW, 1/2-13X1, GR5	38	8820-1105	2	HEX HD CAPSCREW, 5/8-11X4, GR5
16	8855-1013	6	LOCKWASHER, 1/2	39	8852-1310	2	LOCKNUT, 5/8-11
17	8852-1016	1	HEX LOCKNUT, 1-8	*40	8452-1062	1	SUPPORT CLAMP
*18	8867-1022	2	LUBE FITTING, 90 DEGREES, 1/8	*41	7714-3015	1	WHIZ-LOK NUT, 3/8-16
19	8856-1109	4	FLAT WASHER, 3/8				
20	8850-1016	1	HEX NUT, 1-8				
21	0510-1441	1	WASHER, 1-1/16				
22	9108-1622	1	PIN				
23	8471-6434	2	HOSE ASSY				
24	8366-1316	2	CONNECTOR				

ER 46361, 48269, 49530,  
 49939, 50170 LK

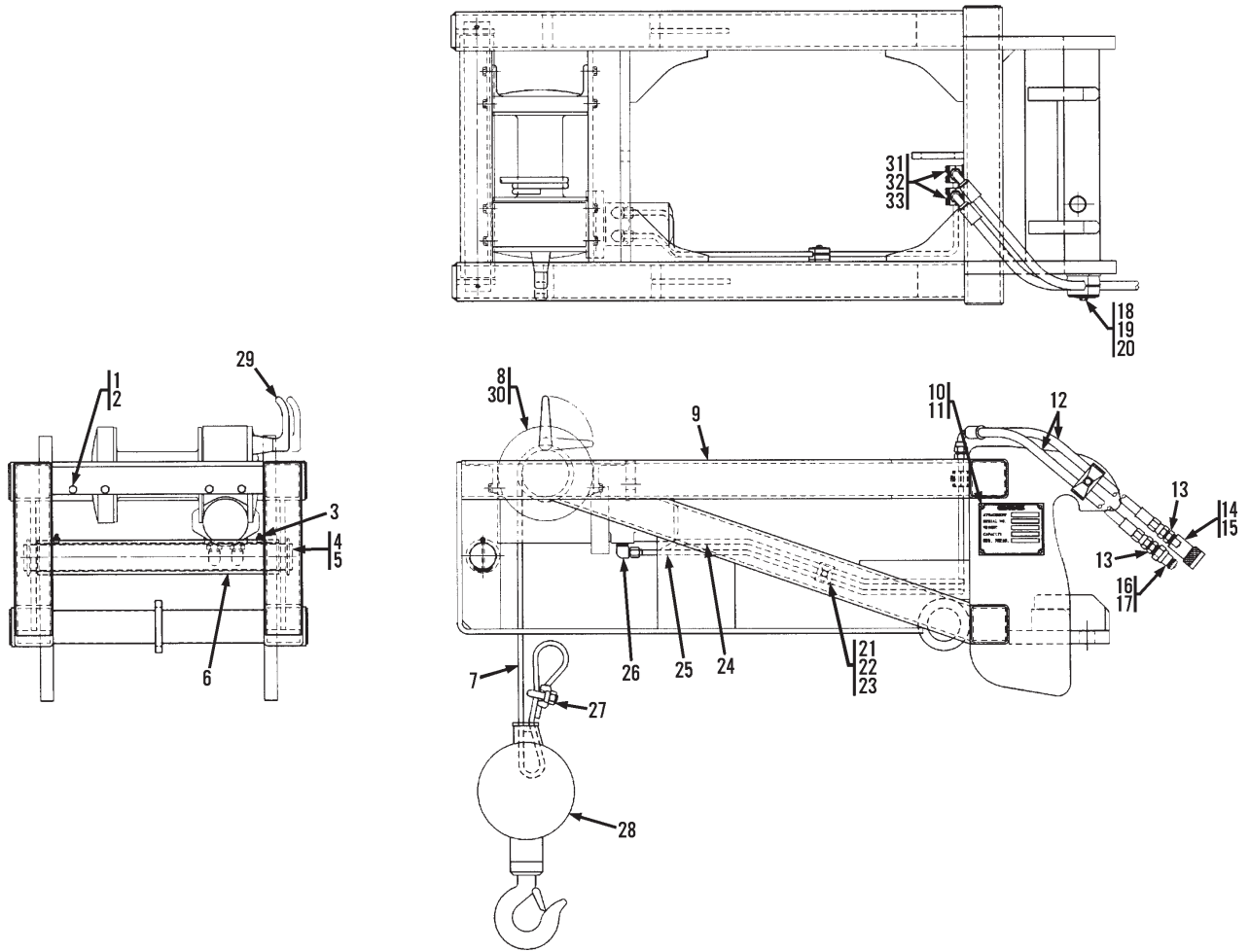
\* Revised illustration and parts list.



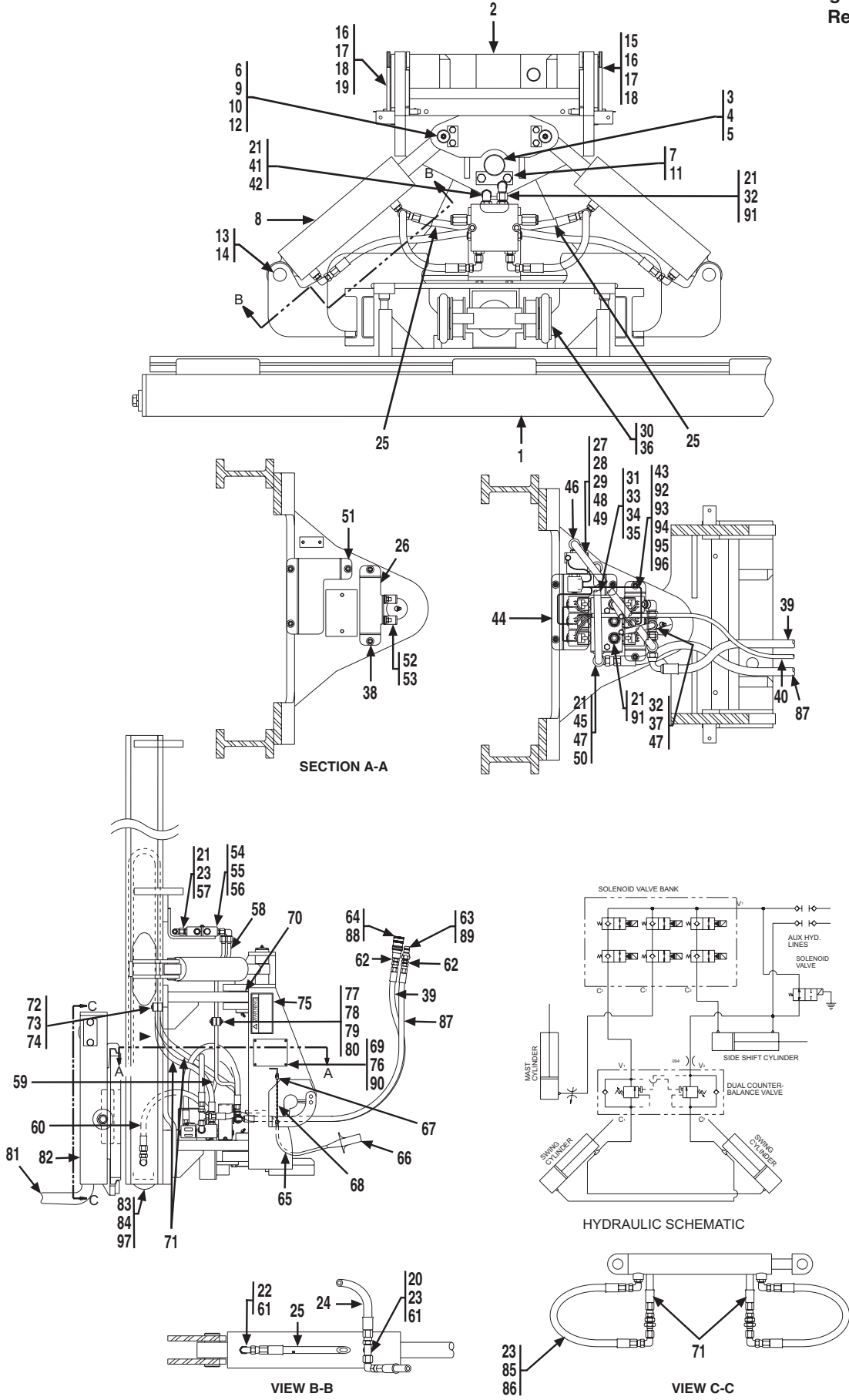
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9045-5044	Ref	100 DEGREE SWING FORK ASSY, (includes all items)	20	8866-2105	6	ELBOW, 90 DEGREE, (swivel nut)
		1	544C-10 CAPACITY DECAL, (located in cab)	21	8866-2018	2	CONNECTOR, (includes item 45)
1	9104-3126	1	DUST CAP	22	9104-1326	2	PIVOT PIN
2	9116-3138	1	MALE QUICK DISCONNECT, ( <b>Before S/N 2005283-01</b> )	23	8858-1136	4	RETAINING RING
	9140-3414	1	MALE QUICK DISCONNECT, ( <b>S/N 2005283-01 &amp; After</b> )	24	9104-6061	1	CARRIAGE WELDMENT
3	8866-1013	2	MALE CONNECTOR, 1/2X1/2 TUBE, ( <b>Before S/N 2005283-01</b> )	25	9020-0003	2	COLLAR
	8866-2006	2	CONNECTOR, (includes 8859-1205 o-ring), ( <b>S/N 2005283-01 &amp; After</b> )	26	9055-1013	1	FORK PIN
4	9104-3125	1	DUST CAP	27	8820-1105	2	HEX HD CAPSCREW, 5/8-11X4, GR5
5	9116-3139	1	FEMALE QUICK DISCONNECT, ( <b>Before S/N 2005283-01</b> )	28	8852-1310	2	LOCKNUT
	9140-3413	1	FEMALE QUICK DISCONNECT, ( <b>S/N 2005283-01 &amp; After</b> )	29	9104-1356	6	SPACER
6	8471-8067	2	HOSE ASSY	30	9104-6062	1	PIVOT WELDMENT
7	9141-1073	2	LOCKING PLATE	31	8834-1022	4	DRIVE SCREW
8	8320-1024	4	HEX HD CAPSCREW, 3/8-16X1, SELF-LOCKING (nylok), GR8	32	9015-3001	1	SERIAL NO. PLATE
9	9108-3249	1	CLAMP SET	33	9103-3039	2	CHAIN CONNECTOR
10	7713-3140	1	COVER PLATE	34	9103-3038	24"	CHAIN
11	7713-3177	1	HEX HD CAPSCREW, 5/16X1-3/8	35	8866-1449	2	ROLL PIN, 1/8X1-1/2
12	9104-1324	2	PIVOT PIN	36	9114-1350	2	PIN
13	8867-1008	2	LUBE FITTING, STRAIGHT, 1/4-28	37	9114-6053	1	L.H. SUPPORT BRACKET
14	9104-1325	2	PIVOT PIN	38	9114-6054	1	R.H. SUPPORT BRACKET
15	8867-1022	2	LUBE FITTING, 90 DEGREES	39	9104-3221	2	DETENT PIN
16	9104-1327	2	BUSHING	40	9104-3186	1	DOUBLE PILOT CHECK VALVE
17	9104-1322	2	LOCKING PLATE	41	8856-1002	2	FLAT WASHER
18	8320-1026	4	HEX HD CAPSCREW, 1/2-13X1-1/2, GR8	42	8820-1008	2	HEX HD CAPSCREW, 1/4-20X1-3/4, GR5
19		Ref	SWING CYLINDER, (see page 13-13 for details)	43	9020-4097	2	HOSE ASSY
				44	8866-2084	2	ELBOW, 45 DEGREES, (includes item 45)
				45	8859-1204	4	O-RING
				46	7713-3201	2	HOSE ASSY
				47	9104-1361	2	FITTING
				48	8859-1205	2	O-RING
				49	9104-1362	2	ORIFICE FITTING
				50	8866-2152	2	BRANCH TEE, (includes item 45)
				51	9114-3282	2	PINCH POINT DECAL
				52	8866-2106	2	ELBOW, 90 DEGREES, (swivel nut)

\* Revised parts list.

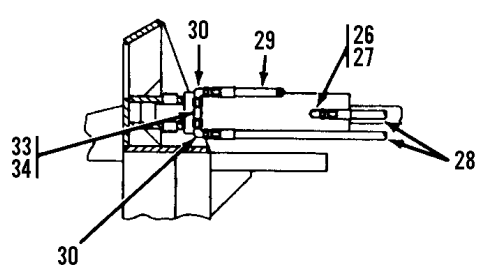
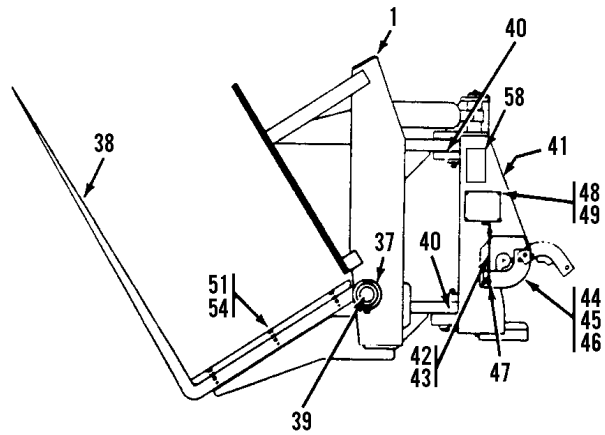
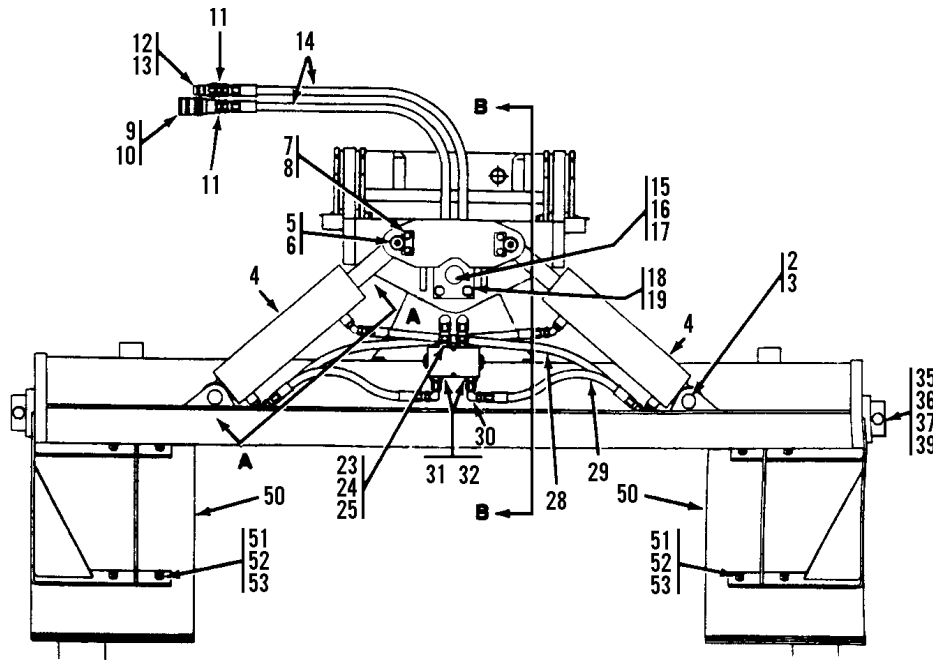




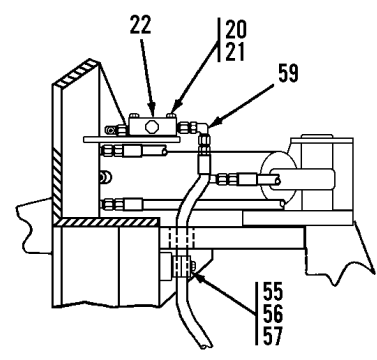
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9108-5056	Ref	QUICK HOOK ASSY, (includes all items)	16	9104-3126	1	DUST CAP
1	8855-1011	8	LOCKWASHER, 3/8	17	9116-3138	1	MALE HYDRAULIC COUPLING, (Before S/N 2005283-01)
2	8820-1034	8	HEX HD CAPSCREW, 3/8-16X7/8, GR5		9140-3414	1	MALE HYDRAULIC COUPLING, (S/N 2005283-01 & After)
3	8867-1001	2	LUBE FITTING, STRAIGHT, 1/8	18	7713-3136	1	STAUFF CLAMP SET
4	9108-1574	1	PIN	19	7713-3137	1	STAUFF COVER PLATE
5	8863-1343	2	COTTER PIN	20	8820-1023	1	HEX BOLT
6	9108-1573	1	ROLLER	21	7713-3270	1	STAUFF CLAMP SET
7	9108-3368	1	WIRE ROPE, (7/16" Dia.)	22	8856-1002	1	STAUFF COVER PLATE
8	9108-3367	1	WINCH	23	8820-1005	1	HEX BOLT
9	9108-6119	1	QUICK HOOK WELDMENT	24	9114-3276	1	TUBE ASSY
10	9015-3001	1	SERIAL NO. PLATE	25	9114-3275	1	TUBE ASSY
11	8834-1022	4	ROUND HD DRIVE SCREW, #10X3/8	26	8866-1110	2	MALE ELBOW, 90 DEGREES, 3/8X1/2 TUBE
12	9020-5126	2	HOSE ASSY	27	9002-9999	1	WIRE ROPE CLAMP, 7/16
13	7736-3079	2	STRAIGHT THREAD CONNECTOR, (Before S/N 2005283-01)	28	9020-1443	1	HOOK & BALL
	8866-2006	2	CONNECTOR, (includes 8859-1205 o-ring), (S/N 2005283-01 & After)	29	9114-3277	1	L-HANDLE
14	9104-3125	1	DUST CAP	30	9108-1737	1	WEDGE
15	9116-3139	1	FEMALE HYDRAULIC COUPLING, (Before S/N 2005283-01)	31	9106-3040	2	CLAMP SET
	9140-3413	1	FEMALE HYDRAULIC COUPLING, (S/N 2005283-01 & After)	32	9106-3039	2	COVER PLATE
				33	8820-1006	4	HEX BOLT



Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	90455047	Ref	6' SWING MAST W/SIDE SHIFT, (includes all items)	52	8067-3023	2	SUPPORT CLAMP
1	9045-6007	1	MAST WELDMENT	53	7714-3006	2	WHIZ-LOCKNUT, 5/16-18
2	9104-6062	1	SWING FORK PIVOT WELDMENT	54	9045-3018	1	DUAL COUNTERBALANCE VALVE
3	9104-1325	2	PIVOT PIN	55	8820-1008	2	HEX HD CAPSCREW, 1/4-20X1-3/4, GR5
4	8867-1018	2	LUBE FITTING, 45 DEGREES, 1/8	56	8856-1002	2	FLAT WASHER, 1/4
5	9104-1327	2	BUSHING	57	8866-2018	2	CONNECTOR, (includes item 21)
6	9141-1073	2	LOCKING PLATE	58	9045-3021	1	TUBE ASSY
7	8320-1026	4	HEX HD CAPSCREW, 1/2-13X1-1/2, GR8	59	9045-3020	1	TUBE ASSY
8		Ref	HYDRAULIC CYLINDER, (see page 13-13 for details)	60	8471-1778	1	HOSE ASSY
9	9104-1324	2	PIVOT PIN	61	8859-1204	4	O-RING
10	8867-1008	2	LUBE FITTING, STRAIGHT, 1/4-28	62	8866-1013	2	MALE CONNECTOR, 1/2X1/2 TUBE, (Before S/N 2005283-01)
11	9104-1322	2	LOCKING PLATE		8866-2006	2	CONNECTOR, (includes 8859-1205 o-ring), (S/N 2005283-01 & After)
12	8320-1024	4	HEX HD CAPSCREW, 3/8-16X1, GR8	63	9116-3138	1	HYD COUPLING, MALE TIP, (Before S/N 2005283-01)
13	9104-1326	2	PIVOT PIN		9140-3414	1	HYD COUPLING, MALE TIP, (S/N 2005283-01 & After)
14	8858-1136	4	SNAP RING	64	9103-3125	1	DUST CAP
15	9114-6053	1	LH SUPPORT BRACKET	65	9045-3046	1	WIRING HARNESS
16	9114-1350	2	PIN	66	9020-7662	1	6 CONTACT PLUG
17	8863-1449	2	ROLL PIN, 1/8X1-1/2	67	9103-3039	2	CHAIN CONNECTION
18	9104-3221	2	DETENT PIN	68	9103-3038	24"	CHAIN
19	9114-6054	1	RH SUPPORT BRACKET	69	8834-1022	4	DRIVE SCREW, #10X3/8
20	8866-2152	2	BRANCH TEE, (includes item 61)	70	9104-1356	6	SPACER
21	8859-1205	7	O-RING	71	8471-7871	2	HOSE ASSY
22	8866-2064	2	ELBOW, 90 DEGREES, (includes item 61)	72	7713-3497	2	CLAMP
23	88662105	6	ELBOW, 90 DEGREES, (swivel nut)	73	7713-3498	2	COVER PLATE
24	7713-3201	2	HOSE ASSY	74	7713-3499	4	HEX HD CAPSCREW, 1/4-20X1-5/16
25	9020-4097	2	HOSE ASSY	75	9114-3282	2	PINCH POINT DECAL
26	9045-1060	1	FRONT COVER, (solenoid valve)	76	9134-3053	1	ATTENTION DECAL
27	9045-3043	1	SOLENOID VALVE	77	7713-3168	1	CLAMP SET
28	8820-1007	2	HEX HD CAPSCREW, 1/4-20X1-1/2, GR5	78	7713-3140	2	COVER PLATE
29	8855-1009	2	LOCKWASHER, 1/4	79	8820-1024	1	HEX HD CAPSCREW, 5/16-18X2, GR5
30	9103-4399	2	HOSE SHEAVE	80	8850-1005	1	HEX NUT, 5/16-18
31	8855-1010	2	LOCKWASHER, 5/16	81		Ref	FORKS, (see page 4-14 for details)
32	8866-2106	2	ELBOW, 90 DEGREES, (swivel nut)	82	9045-3033	1	66" S.S. CARRIAGE
33	9045-3019	1	SOLENOID VALVE BANK		9045-4003	2	BRONZE GUIDE
	9114-4449	6	CARTRIDGE & COIL		9045-4001	1	CYLINDER
	9120-4190	6	SEAL KIT, (used on cartridge & coil)		9045-4002	1	PACKING KIT
34	8820-1025	2	HEX HD CAPSCREW, 5/16-18X2-1/4, GR5	83	9103-4374	6	LOAD ROLLER
35	8856-1108	2	FLAT WASHER, 5/16	84	9103-4375	12	SHIM
36	9103-4400	2	SHOULDER BOLT	85	8471-7537	2	HOSE ASSY
37	8866-1306	1	UNION TEE, 1/2 TUBE	86	8866-1084	2	BULKHEAD UNION, 9/16-18X3/8 TUBE
38	7714-3013	5	WHIZ-LOCKNUT, 1/4-20	87	7713-3146	1	HOSE ASSY
39	7713-3269	1	HOSE ASSY	88	9116-3139	1	HYD COUPLING, FEMALE, (Before S/N 2005283-01)
40	9045-3023	1	WIRING HARNESS		9140-3413	1	HYD COUPLING, FEMALE, (S/N 2005283-01 & After)
41	9020-3384	2	ADAPTER	89	9104-3126	1	DUST CAP
42	9104-1362	1	ORIFICE FITTING	90	9015-3001	1	SERIAL NO. PLATE
43	9134-5026	1	DIODE ASSY, (includes items 92 thru 96)	91	8866-2006	4	CONNECTOR, (includes item 21)
44	9045-3044	1	WIRING HARNESS	92	7738-5131	1	DIODE ASSY
45	8471-8047	1	HOSE ASSY	93	9104-3440	2	PIGGYBACK CONNECTOR
46	7713-3458	1	HOSE ASSY	94	8666-1147	3"	BLACK WIRE, 16GA.
47	8866-2240	2	SWIVEL NUT RUN TEE, 1/2 TUBE	95	8668-3480	1	BUTT CONNECTOR
48	7713-1088	2	ELBOW, 90 DEGREES	96	8368-3549	AR	HEAT SHRINK TUBING
49	9020-7719	1	JUMPER WIRE	97	9103-4377	2	SCREW
50	8866-2065	1	ELBOW, 90 DEGREES, (includes item 21)				
51	90451061	1	BACK COVER, (solenoid valve)				



SECTION A-A

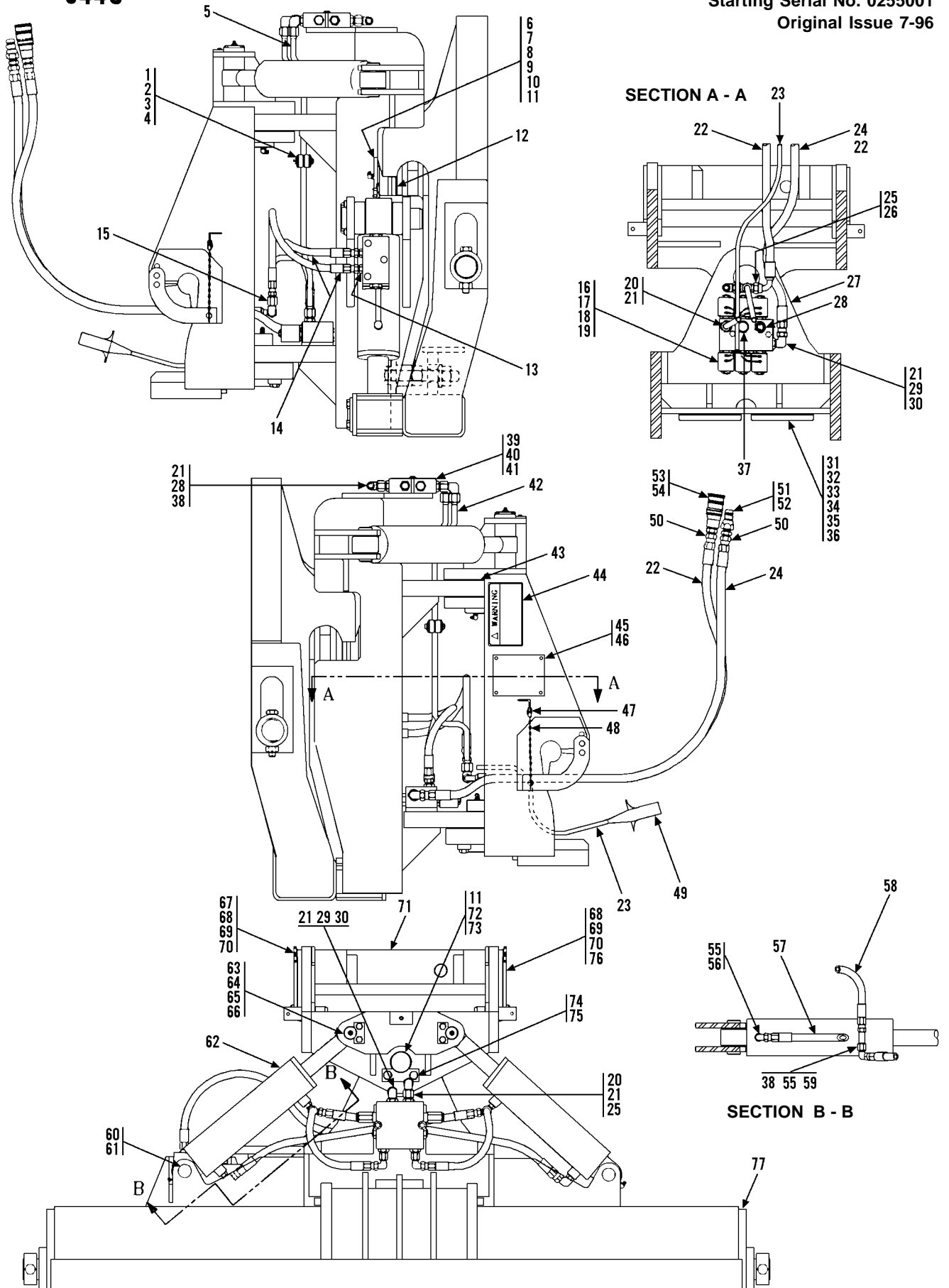


SECTION B-B

Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9055-5013	1	100 DEGREE DRYWALL SWING FORK ASSY, (includes all items)	26	8866-2084	2	ELBOW, 45 DEGREES, (includes item 27)
1	9055-6004	1	DRYWALL CARRIAGE WELDMENT	27	8859-1204	2	O-RING
2	9104-1326	2	PIVOT PIN	28	9020-4097	2	HOSE ASSY
3	8858-1136	4	EXTERNAL RETAINING RING	29	7713-3201	2	HOSE ASSY
4	9045-3034	2	HYDRAULIC CYLINDER ASSY	30	8866-2105	6	ELBOW, 90 DEGREES, (swivel nut)
5	9104-1324	2	PIVOT PIN	31	8866-2018	2	CONNECTOR, (includes item 32)
6	8867-1008	2	LUBE FITTING, STRAIGHT, 1/4-28	32	8859-1205	2	O-RING
7	9141-1073	2	LOCKING PLATE	33	8866-2152	2	BRANCH TEE, (includes item 34)
8	8320-1024	4	HEX HD CAPSCREW, 3/8-16X1, GR8	34	8859-1204	2	O-RING
9	9104-3125	1	DUST CAP	35	8820-1105	4	HEX HD CAPSCREW, 5/8-11X4, GR5
10	9116-3139	1	HYDRAULIC COUPLER, FEMALE, (Before S/N 2005283-01)	36	8852-1310	4	HEX LOCKNUT, 5/8-11
	9140-3413	1	HYDRAULIC COUPLER, FEMALE, (S/N 2005283-01 & After)	37	9020-0003	4	COLLAR
11	8866-1013	2	MALE CONNECTOR, 1/2X1/2 TUBE, (Before S/N 2005283-01)	38	9045-3013	2	DRYWALL FORK
	8866-2006	2	CONNECTOR, (includes 8859-1205 o-ring), (S/N 2005283-01 & After)	39	9045-1020	2	FORK PIN
12	9104-3126	1	DUST CAP	40	9104-1356	6	SPACER
13	9116-3138	1	HYDRAULIC COUPLER, MALE, (Before S/N 2005283-01)	41	9104-6062	1	PIVOT WELDMENT
	9140-3414	1	HYDRAULIC COUPLER, MALE, (S/N 2005283-01 & After)	42	9103-3038	1	CHAIN, 24"
14	8471-8067	2	HOSE ASSY	43	9103-3039	2	CHAIN CONNECTION
15	9104-1325	2	PIVOT PIN	44	8863-1449	2	ROLL PIN, 1/8X1-1/2
16	9104-1327	2	BUSHING	45	9114-1350	2	PIN
17	8867-1022	2	LUBE FITTING, 90 DEGREES, 1/8	46	9114-6053	1	SUPPORT BRACKET, L.H.
18	9104-1322	2	LOCKING PLATE		9114-6054	1	SUPPORT BRACKET, R.H.
19	8320-1026	4	HEX HD CAPSCREW, 1/2-13X1-1/2, GR8	47	9104-3221	2	DETENT PIN
20	8820-1008	2	HEX HD CAPSCREW, 1/4-20X1-3/4, GR5	48	9015-3001	1	SERIAL NO. PLATE
21	8856-1002	2	FLAT WASHER, 1/4	49	8834-1022	4	DRIVE SCREW, #10X3/8
22	9104-3186	1	DOUBLE PILOT CHECK VALVE	50	9055-3012	2	SIDE DRYWALL GUARD
23	9104-1361	2	FITTING	51	8824-1053	14	SOCKET FLAT HD CAPSCREW, 3/8-16X1-1/2
24	9104-1362	2	ORIFICE FITTING	52	8855-1011	8	LOCKWASHER, 3/8
25	8859-1205	2	O-RING	53	8850-1006	8	HEX NUT, 3/8-16
				54	9055-3013	2	BOTTOM DRYWALL GUARD
				55	9108-3249	1	CLAMP SET
				56	7713-3140	1	COVER PLATE
				57	7713-3177	1	HEX HD CAPSCREW, 5/16-18X1-3/8
				58	9114-3282	2	PINCH POINT DECAL
				59	8866-2106	2	ELBOW, 90 DEGREES, (swivel nut)

**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

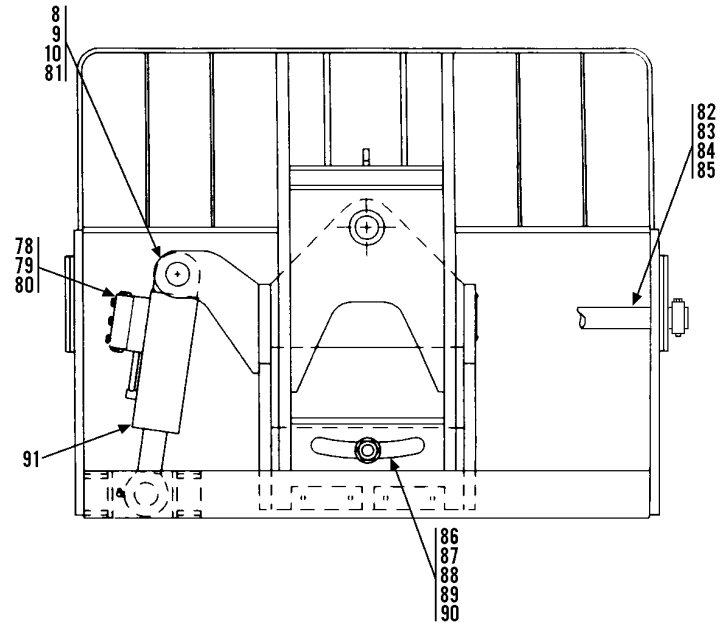
**ATTACHMENTS**  
**(9130-5021) Swinging Slope Piler**  
 Starting Serial No. 0255001  
 Original Issue 7-96



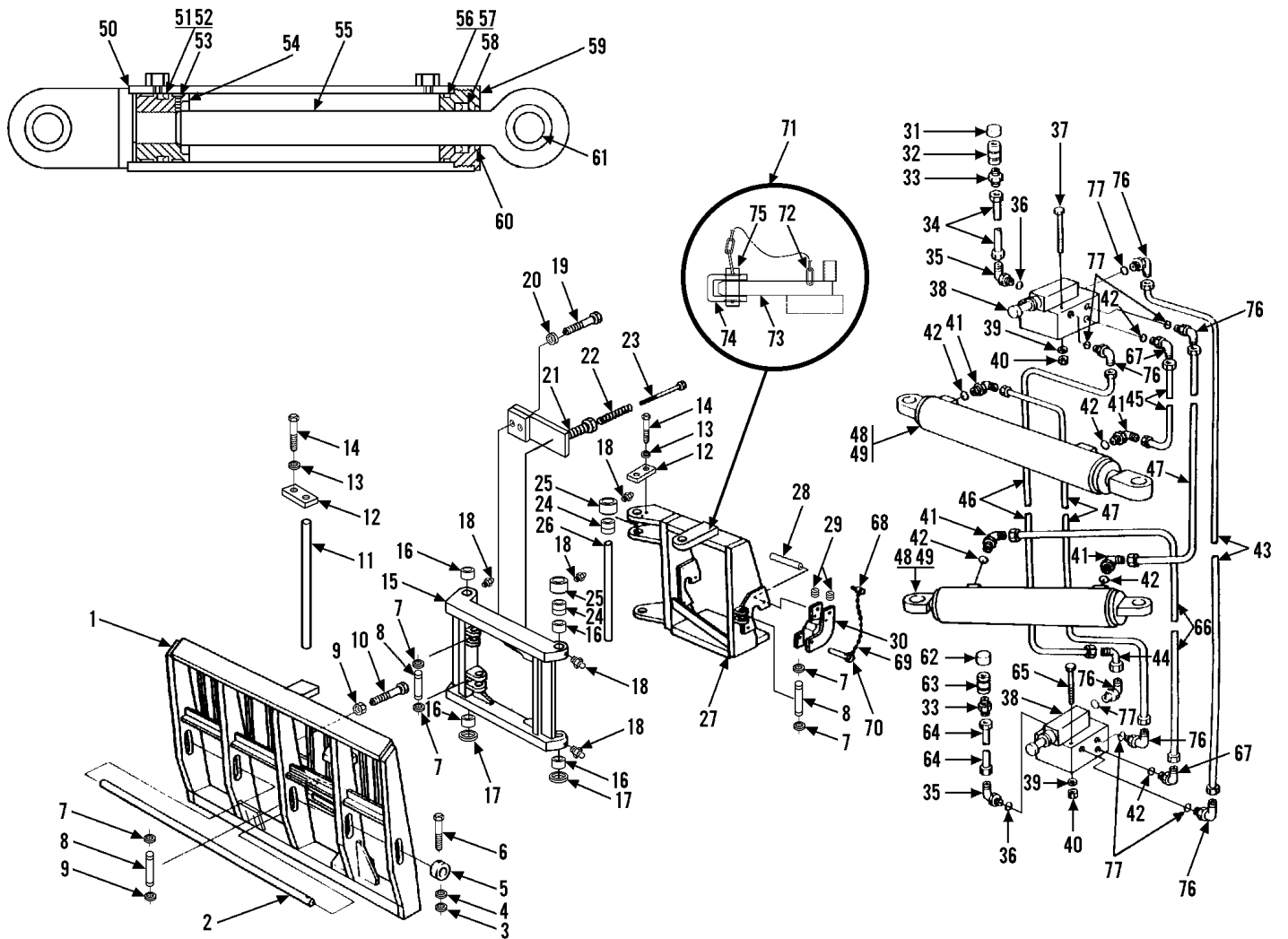
**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

**ATTACHMENTS**  
**(9130-5021) Swinging Slope Piler**  
 Starting Serial No. 0255001  
 Original Issue 7-96

Item	Part No.	Qty.	Description Of Part
	9130-5021	1	SWINGING SLOPE PILER ASSY (includes all items)
1	7713-3168	1	CLAMP SET
2	7713-3140	2	COVER PLATE
3	8820-1024	1	HEX HD CAPSCREW, 5/16-18X2, GR5
4	8850-1005	1	HEX NUT, 5/16-18
5	9045-3020	1	TUBE ASSY
6	9108-3248	1	BUSHING
7	9108-1622	1	PIN
8	8820-1065	6	HEX HD CAPSCREW, 1/2-13X1, GR5
9	8855-1013	6	LOCKWASHER, 1/2
10	9108-1313	3	KEEPER PLATE
11	8867-1022	4	LUBE FITTING, 90 DEGREES, 1/8
12	9108-1594	1	THRUSTWASHER
13	8366-1316	2	STRAIGHT THREAD CONNECTOR, 3/8 TUBE
14	8471-7955	2	HOSE ASSY
15	8688-3469	1	TUBE END REDUCER, 1/2-3/8 TUBE
16	9045-3019	1	SOLENOID VALVE BANK
17	8820-1025	2	HEX HD CAPSCREW, 5/16-18X2-1/4, GR5
18	8856-1108	2	WASHER, 5/16
19	8855-1010	2	LOCKWASHER, 5/16
20	8866-2006	2	CONNECTOR (includes item 21)
21	8859-1205	5	O-RING
22	7713-3269	1	HOSE ASSY
23	9130-3064	1	WIRING HARNESS
24	7713-3146	1	HOSE ASSY
25	8866-2106	2	ELBOW, 90 DEGREES (swivel nut)
26	8866-1306	1	UNION TEE, 1/2 TUBE
27	9130-6032	1	INTERMEDIATE MEMBER
28	8866-2018	3	CONNECTOR (includes item 21)
29	9020-3384	2	ADAPTER
30	9104-1362	2	ORIFICE FITTING
31	9020-5870	4	SHIM (16 Ga.)
32	9103-1236	2	SPACER (.06 thick)
33	8820-1537	4	HEX HD CAPSCREW, 3/8-24x1-3/4, GR5
34	8820-1536	4	HEX HD CAPSCREW, 3/8-24X1-1/2, GR5
35	8856-1109	4	FLAT WASHER, 3/8
36	9103-3186	2	BEARING PAD
37	8866-2175	1	HEX HD PLUG (includes item 21)
38	8866-2105	4	ELBOW, 90 DEGREES (swivel nut)
39	9045-3018	1	DUAL COUNTERBALANCE VALVE
40	8820-1008	2	HEX HD CAPSCREW, 1/4-20X1-3/4, GR5
41	8856-1002	2	WASHER, 1/4
42	9045-3021	1	TUBE ASSY
43	9104-1356	6	SPACER
44	9104-3209	2	PINCH POINT DECAL
45	9015-3001	1	SERIAL NUMBER PLATE
46	8834-1022	4	DRIVE SCREW, #10X3/8
47	9103-3039	1	CHAIN CONNECTOR
48	9103-3038	1	CHAIN, 24"
49	9020-7662	1	6 CONTACT PLUG
50	8866-1013	2	MALE CONNECTOR, 1/2X1/2 TUBE
51	9020-4244	1	MALE TIP HYDRAULIC COUPLING
52	9104-3126	1	DUST CAP
53	9020-4245	1	FEMALE HYDRAULIC COUPLING
54	9104-3125	1	DUST CAP
55	8859-1204	4	O-RING
56	8866-2064	2	ELBOW, 90 DEGREES (includes item 55)

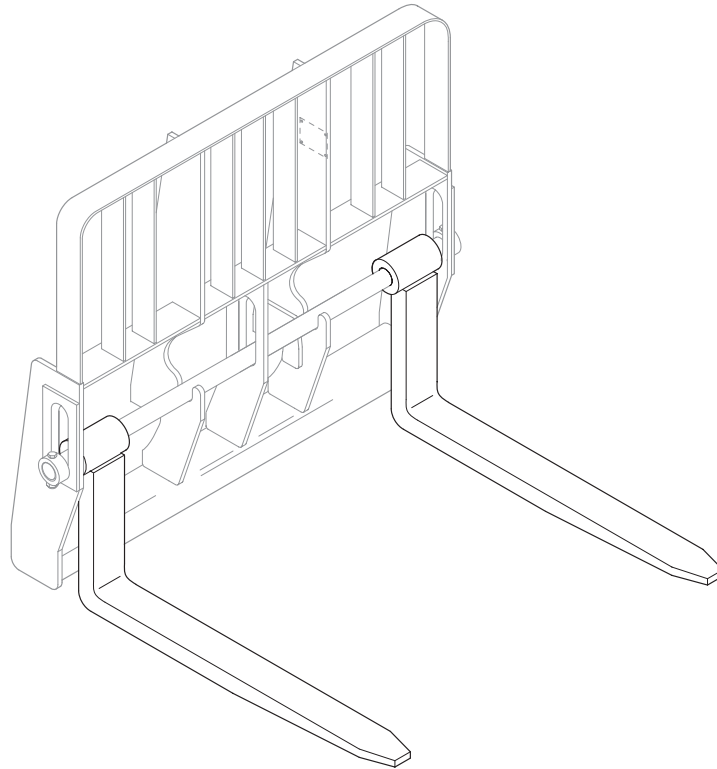


Item	Part No.	Qty.	Description Of Part
57	9020-4097	2	HOSE ASSY
58	7713-3201	2	HOSE ASSY
59	8866-2152	2	BRANCH TEE (includes item 55)
60	9104-1326	2	PIVOT PIN
61	8858-1136	4	SNAP RING
62		Ref	SWING CYLINDER (see page 13-13 for details)
63	9104-1324	2	PIVOT PIN
64	8867-1008	2	LUBE FITTING, STRAIGHT, 1/4-28
65	9104-1322	2	LOCKING PLATE
66	8320-1024	4	HEX HD CAPSCREW, 3/8-16X1, GR8
67	9114-6054	1	R.H. SUPPORT BRACKET
68	9114-1350	2	PIN
69	8863-1449	2	ROLL PIN, 1/8X1-1/2
70	9104-3221	2	DETENT PIN
71	9104-6062	1	PIVOT WELDMENT
72	9104-1325	2	PIVOT PIN
73	9104-1327	2	BUSHING
74	9104-1323	2	LOCKING PLATE
75	8320-1026	4	HEX HD CAPSCREW, 1/2-13X1-1/2, GR8
76	9114-6053	1	L.H. SUPPORT BRACKET
77	9130-6030	1	66" CARRIAGE WELDMENT
78		Ref	DUAL P.O. CHECK VALVE (see page 13-12 for details)
79	8820-1040	3	HEX HD CAPSCREW, 3/8-16X2-1/4, GR5
80	8855-1011	3	LOCKWASHER, 3/8
81	9108-1554	2	PIN
82	9130-1083	1	FORK PIN
83	9020-0003	2	COLLAR
84	8820-1105	2	HEX HD CAPSCREW, 5/8-11X4, GR5
85	8852-1310	2	LOCKNUT, 5/8-11
86	9020-4007	1	TUBE
87	9108-1577	1	TAP BOLT
88	8852-1016	1	STOVER LOCKNUT 1"
89	8850-1016	1	HEX NUT, 1"-8
90	0510-1441	1	WASHER, 1-1/16"
91		Ref	SWAY CYLINDER (see page 13-11 for details)





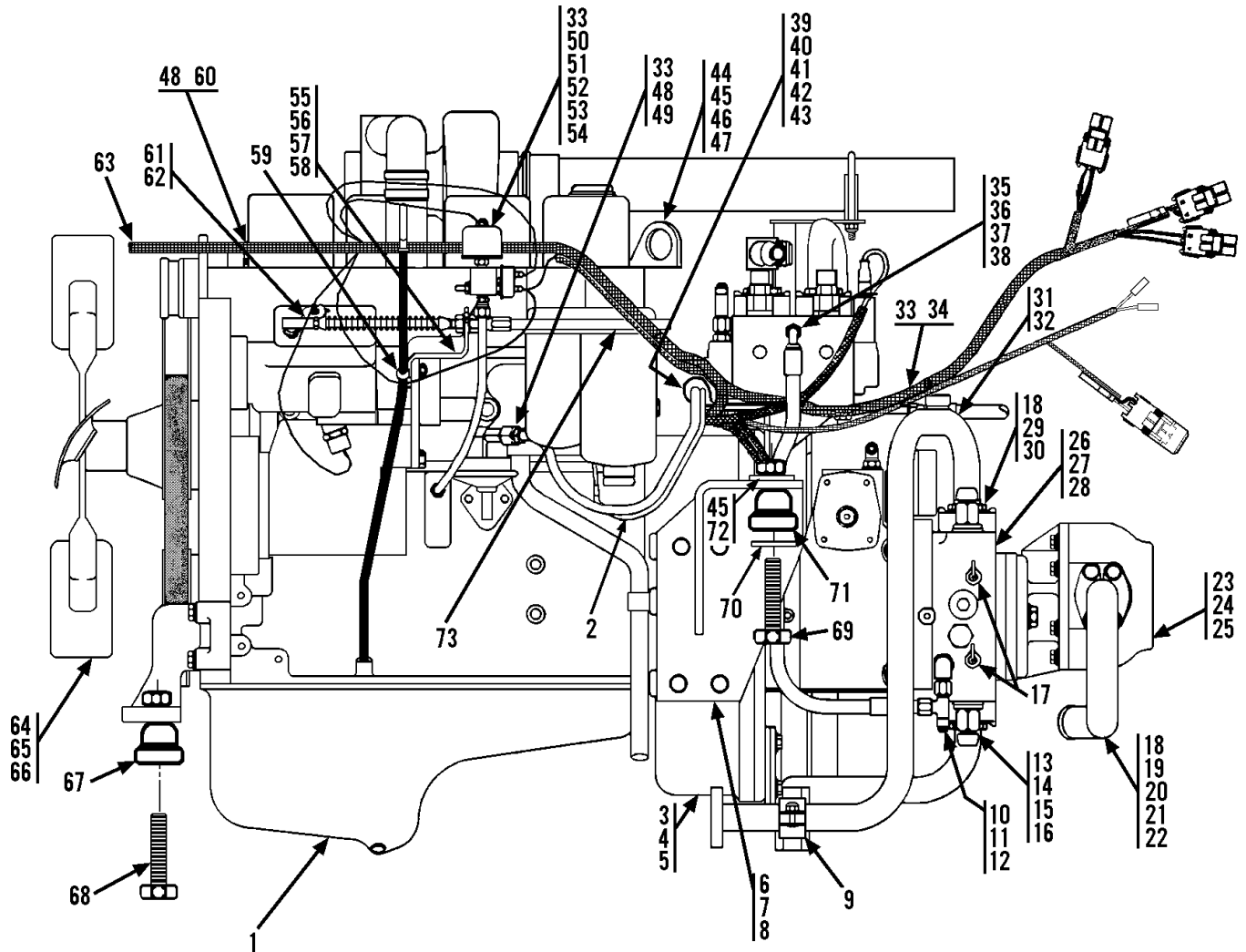
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9055-3011	1	SWING FRAME ASSY, 180 DEGREE, (includes all items)	40	9114-4225	2	HEX NUT, 5/16
	9114-4203	Ref	HOSE KIT, (includes items 34, 43, 45, 46, 47, 64 & 66)	41	8866-2064	4	ELBOW, 90 DEGREES, (includes item 42)
1	9114-4204	1	FORKBASE WELDMENT	42	8859-1204	6	O-RING
2	9114-4205	1	FORK PIN	43	9114-4226	1	HOSE ASSY
3	9114-4206	2	HEX NUT, 1/2	44	9114-4227	1	ELBOW, (swivel nut)
4	9120-4400	2	LOCKWASHER, 1/2	45	9114-4228	1	HOSE ASSY
5	9114-4207	2	COLLAR	46	9114-4229	1	HOSE ASSY
6	9114-4208	2	HEX HD CAPSCREW, 1/2X3-1/4, GR5	47	9114-4230	2	HOSE ASSY
7	9114-4209	8	SNAP RING	48	9104-4262	2	CYLINDER ASSY, (includes items 50 thru 60)
8	9114-4210	4	PIN	49	9114-4231	AR	CYLINDER SEAL KIT, (includes items 51, 52, 56, 57, 58 & 60)
9	9114-4211	1	HEAVY HEX JAM NUT, 3/4	50	9114-4232	1	TUBE ASSY
10	9114-4212	1	HEX HD CAPSCREW, 3/4X2, GR5	51		1	PIP RING
11	9104-4251	1	SHAFT	52		1	PISTON SEAL
12	9104-4242	2	PIN RETAINER	53	9114-4233	1	LOCKING SET SCREW
13	9120-4368	4	LOCKWASHER, 5/8	54	9114-4234	1	PISTON
14	9114-4213	4	HEX HD CAPSCREW, 5/8X1-1/4, GR5	55	9114-4235	1	ROD ASSY
15	9104-4243	1	INTERMEDIATE FRAME	56		1	O-RING
16	9104-4244	4	BRONZE BUSHING	57		1	BACK-UP RING
17	9104-4245	AR	SHIM	58		1	ROD SEAL
18	9114-4214	10	LUBE FITTING, STRAIGHT, 1/4	59	9114-4236	1	GLAND
19	9114-4215	2	HEX HD CAPSCREW, 1/4X3/4, GR5	60		1	ROD WIPER
20	9114-4216	2	LOCKWASHER, 1/4	61	9114-4237	4	SPERICAL BEARING
21	?	2	DRILLED SHIM, 20 GAGE	62	9104-3125	1	DUST CAP, MALE
22	9114-4217	2	STEEL SPRING	63	9020-4244	1	QUICK DISCONNECT HYDRAULIC FITTING, MALE
23	9114-4219	1	FLAT HD CAPSCREW, 2X1/4	64	9114-4238	1	HOSE ASSY
24	9104-4249	2	THRUST BEARING	65	9114-4239	2	HEX HD CAPSCREW, 5/16X3-1/4, GR5
25	9104-4250	2	LUBRICATION COLLAR	66	9114-4240	1	HOSE ASSY
26	9104-4241	1	SHAFT	67	8697-1355	2	ELBOW, 90 DEGREES, LONG, (includes item 42)
27	9114-4220	1	FIXED FRAME	68		2	CHAIN CONNECTION
28	9114-1350	2	PIN	69	9114-4241	1	CHAIN, 18"
29	9114-4221	4	SOCKET SET SCREW, (cup point), 1/4x3/8	70	9114-4242	2	DETENT PIN
30	9114-6053	1	PIN SUPPORT, L.H.	71	9114-4243	1	LOCK-LINK ASSY, (includes items 72 thru 75)
	9114-6054	1	PIN SUPPORT, R.H.	72	9114-4244	1	CHAIN, 7"
31	9104-3126	1	DUST CAP, FEMALE	73	9114-4245	1	LOCK-LINK WELDMENT
32	9020-4245	1	QUICK DISCONNECT HYDRAULIC FITTING, FEMALE	74	9114-4246	1	CLEVIS
33	8866-1013	2	STRAIGHT FITTING	75	9114-4247	1	DETENT PIN
34	9114-4222	1	HOSE ASSY	76	8866-2062	6	ELBOW, 90 DEGREES, (includes item 77)
35	9120-4563	2	ELBOW, 90 DEGREES, (includes item 36)	77	8859-1203	6	O-RING
36		2	O-RING				
37	9114-4223	2	HEX HD CAPSCREW, 5/16X3, GR5				
38		Ref	SWING VALVE ASSY, (see page 13-15 for details)				
39	9114-4224	4	LOCKWASHER, 5/16				NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.



**NOTE: FORKS RATED LESS THAN THE ATTACHMENT OR MACHINE'S CAPACITY DECREASE CAPACITY OF THE ATTACHMENT OR MACHINE TO THAT OF THE FORKS. FORKS RATED MORE THAN THE ATTACHMENT OR MACHINE'S CAPACITY DO NOT INCREASE ATTACHMENT OR MACHINE'S CAPACITY.**

**NOTE: PLEASE CONSULT THE GRADALL PARTS DEPARTMENT TO DETERMINE THE CORRECT FORKS APPLICABLE TO YOUR SPECIFIC CARRIAGE ASSEMBLY AND APPLICATION.**

Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9060-0390	2	48" CUBING FORK, 2X2, 3000 lbs., (B, C & D series)		9055-3018	2	72" PALLET FORK, 2X6, 10,000 lbs., (B, C & D series)
	9060-1819	2	48" PALLET FORK, 1-3/4X6, 9000 lbs., (B, C & D series)		9112-3132	2	72" PALLET FORK, 2X6, 10,000 lbs., (B, C & D series)
	9045-3002	2	48" PALLET FORK, 2X4, 8000 lbs., (B, C & D series)		9060-0832	2	48" PALLET FORK, 2-1/4X8, 16,000 lbs., (used on the 542, 552, & 554)
	9055-3005	2	48" PALLET FORK, 2X6, 10,000 lbs., (B, C & D series)		9060-1873	2	48" PALLET FORK, 2-1/4X7, 15,000 lbs., (used on the 542, 552, & 554)
	9055-3008	2	48" PALLET FORK, 1-3/4X4, 5000 lbs., (used on 6' swing mast only, P/N 9045-5047)		9060-0833	2	60" PALLET FORK, 2-1/4X8, 16,000 lbs., (used on the 542, 552 & 554)
	9060-1015	2	60" PALLET FORK, 2X6, 10,000 lbs., (B, C & D series)		9060-1219	2	60" PALLET FORK, 2-1/2X8, 16,000 lbs., (used on the 542, 552 & 554)
	9116-3269	2	60" PALLET FORK, 2X6, 11,300 lbs., (B, C & D series)		9060-1874	2	60" PALLET FORK, 2-1/4X7, 15,000 lbs., (used on the 542, 552 & 554)
	9045-3045	2	60" PALLET FORK, 2X6, 11,300 lbs., (used on 6' swing mast only, P/N 9045-5054)		H045-3002	2	96" PALLET FORK, 2X6, 7500 lbs. loaded center, (B, C & D series)
					9055-3018	2	72" PALLET FORK, 2X6, 10,000 lbs., (B, C & D series)



# 544C-10

(9116-3001 CUMMINS ENGINE)

Part No.	Description Of Part
9116-5020	ENGINE FILTER KIT, (includes the following items)
9115-4001	AIR FILTER
9108-4001	OIL FILTER
7738-3202	FUEL FILTER, (primary)
7738-3203	FUEL FILTER, (secondary)
9108-3218	FUEL FILTER, (I/L)

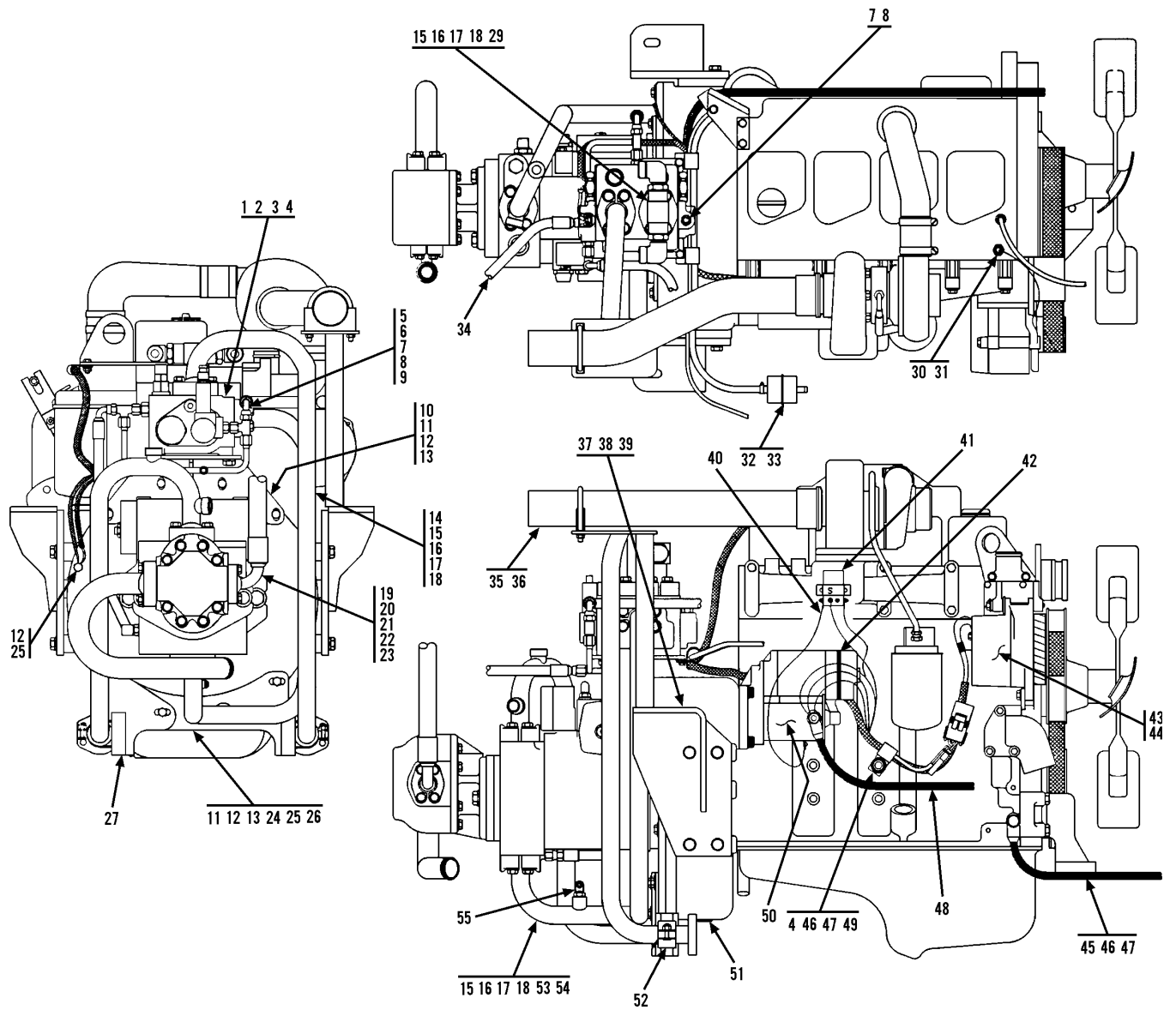
**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

**ENGINE & ATTACHING PARTS**  
**(9116-5003) Engine Left Side View**  
**Starting Serial No. 0255001**  
**Original Issue 7-96**  
**Revised 5-16-00**

Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9116-5003	1	ENGINE ASSY, (includes all items on page 5-1 except two of item 45, and items 67 thru 72, plus all items on page 5-2)	34	9116-3049	1	STABILIZER HARNESS
1	9116-3001	1	CUMMINS 4BTA3.9 ENGINE	35	7713-3447	1	HOSE ASSY
2		56"	FUEL LINE HOSE, 7/32"	36	8859-1206	1	O-RING
3	9116-3011	1	PUMP MOUNT & FLYWHEEL COUPLING	37	9108-3306	1	STRAIGHT THREAD CONNECTOR, (includes item 36)
4	8821-1068	8	SOCKET HD CAPSCREW, 3/8-16X5/8, (torque to 40-45 ft.lbs.)	38	8866-2239	1	SWIVEL NUT RUN TEE, 3/8 TUBE
5	8855-1011	8	LOCKWASHER, 3/8	39	8594-1017	2	SUPPORT CLAMP
6	9114-6021	1	L.H. ENGINE MOUNT	40	8820-1020	2	HEX HD CAPSCREW, 5/16-18X1, GR5
7	8319-1032	4	HEX HD CAPSCREW, M12X1.75X35, (torque to 58-68 ft.lbs.)	41	8850-1005	2	HEX NUT, 5/16-18
8	8319-1010	4	LOCKWASHER, M12	42	8855-1010	2	LOCKWASHER, 5/16
9	9020-5792	1	CUSHION CLAMP	43	2486-1170	2	SUPPORT CLAMP
10	9108-3222	1	STRAIGHT THREAD REDUCING CONNECTOR	44	8820-1065	1	HEX HD CAPSCREW, 1/2-13X1, GR5
11	8866-2239	1	SWIVEL NUT RUN TEE, 3/8 TUBE	45	8856-1111	3	WASHER, 1/2
12	7713-3447	1	HOSE ASSY	46	8850-1008	1	HEX NUT, 1/2-13
13	8866-2011	1	CONNECTOR, (includes o-ring)	47	9114-3122	1	SUPPORT CLAMP
	8859-1210	1	O-RING	48		59"	FUEL LINE HOSE, 5/16"
14	9114-3087	1	INTAKE TUBE	49	9003-0271	1	HOSE NIPPLE
15	9114-3143	1	HOSE	50	2474-1047	1	PRESSURE SWITCH
16	9002-8695	2	BAND CLAMP	51	9103-3246	1	OIL PRESSURE SENDER
17	9105-3020	2	TEST COUPLING	52	9108-1388	1	TAPPED BAR
18	8855-1012	8	LOCKWASHER, 7/16	53	8688-3075	2	TUBE FITTING
19	8859-1027	1	O-RING	54		18"	NYLON TUBE, 3/8
20	9114-3121	1	SUCTION TUBE	55	9114-1317	1	THROTTLE CABLE BRACKET
21	8471-1334	2	FLANGE CLAMP	56	8820-1005	2	HEX HD CAPSCREW, 1/4-20X1, GR5
22	8820-1051	4	HEX HD CAPSCREW, 7/16-14X1-1/4, GR5	57	8855-1009	2	LOCKWASHER, 1/4
23		Ref	MAIN PUMP, (see page 10-17 for details)	58	8850-1616	2	HEX NUT, 1/4-20
24	8820-1095	2	HEX HD CAPSCREW, 7/16-14X1-1/2, GR5	59	8584-1094	1	SUPPORT CLAMP
25	9002-7472	2	HARDENED WASHER, 5/8	60	8688-3106	2	HOSE CLAMP
26		Ref	HYDROSTATIC TRANSMISSION, (see page 10-18 for details)	61	8850-1613	1	HEX NUT, #10-32
27	8820-1112	2	HEX HD CAPSCREW, 3/4-10X2-1/4, GR5	62	9002-7908	1	BALL JOINT
28	9002-7473	2	HARDENED WASHER, 3/4	63	9114-3192	1	WIRING HARNESS
29	8471-2738	2	SPLIT FLANGE CLAMP	64	9114-3043	1	FAN ASSY
30	8320-1135	4	HEX HD CAPSCREW, 7/16-14X1-1/2, GR8	65	8319-1039	4	HEX HD CAPSCREW, M8X1.25X80
31	9116-3122	1	TUBE ASSY	66	8856-1108	4	WASHER, 5/16
32	9108-3106	1	O-RING	67	9114-3030	1	SHOCK MOUNT
33	9002-7187	7	TIEWRAP	68	9114-3131	1	HEX HD CAPSCREW, M12X1.75X90
				69	8820-1075	2	HEX HD CAPSCREW, 1/2-13X3-1/2, GR5
				70	9114-3032	2	REBOUND WASHER
				71	9114-3031	2	SHOCK MOUNT
				72	8852-1008	2	HEX LOCKNUT, 1/2-13unc
				73	9108-3404	1	THROTTLE CABLE
				*74	9112-4125	1	DIPSTICK, (not shown)
							NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.

**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

**ENGINE & ATTACHING PARTS**  
**(9116-5003) Engine Right Side View**  
Starting Serial No. 0255001  
Original Issue 7-96



**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

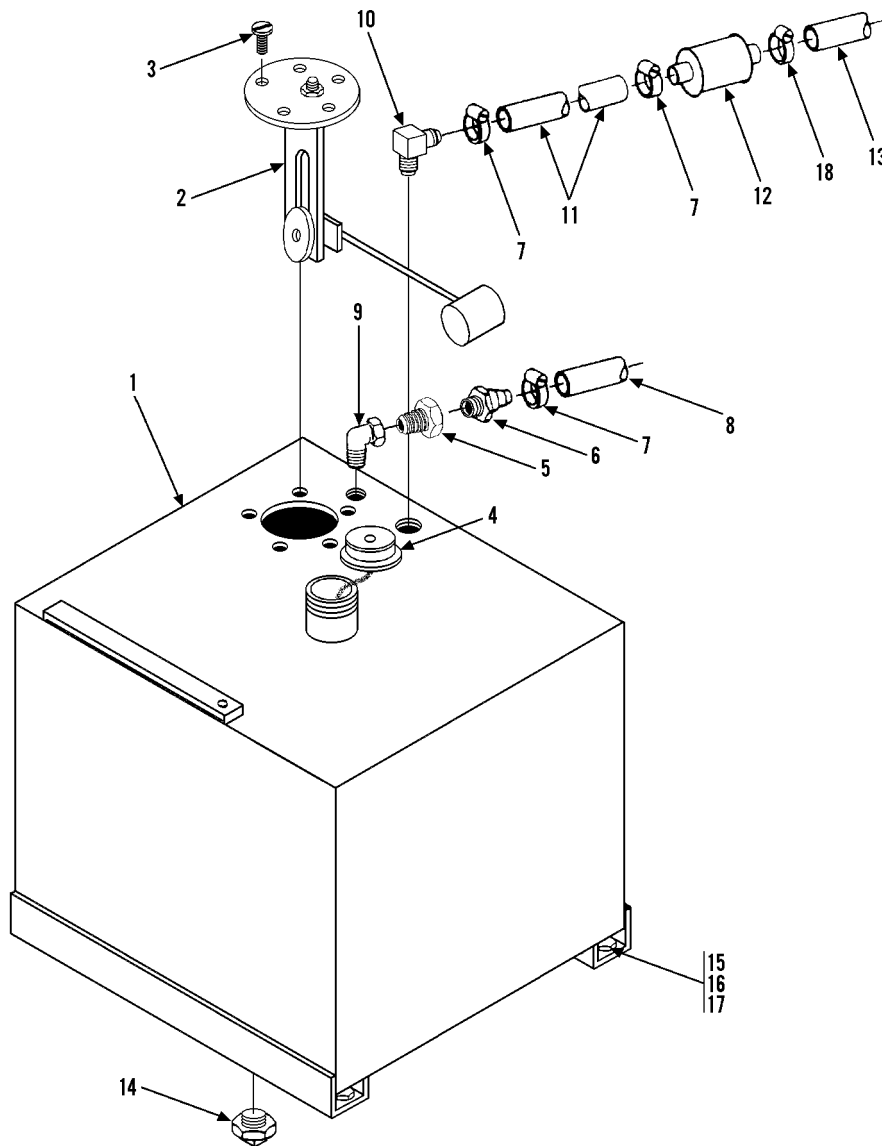
**ENGINE & ATTACHING PARTS**  
**(9116-5003) Engine Right Side View**  
**Starting Serial No. 0255001**  
**Original Issue 7-96**

Item	Part No.	Qty.	Description Of Part
1	9116-5003	1	ENGINE ASSY, (includes all items on page 5-1 except two of item 45, and items 67 thru 72, plus all items on page 5-2)
		Ref	TRACTION LOCK VALVE, (see page 10-21 for details)
2	8820-1006	2	HEX HD CAPSCREW, 1/2-13X1-1/4, GR5
3	8855-1013	2	LOCKWASHER
4	8856-1111	3	FLAT WASHER, 1/2
5	9116-3098	1	TUBE ASSY
6	8866-2224	1	SWIVEL NUT BRANCH TEE, 3/8 TUBE
7	8866-2005	2	CONNECTOR, (includes item 8)
8	8859-1204	2	O-RING
9	8471-8700	1	HOSE ASSY
10	9114-6058	1	FLOW DIVIDER BRACKET
11	8319-1006	5	HEX HD CAPSCREW, M10X1.5X40
12	8319-1013	12	LOCKWASHER, M10
13	8856-1109	7	WASHER, 3/8
14	9108-3418	1	TUBE ASSY
15	9108-3106	4	O-RING
16	8471-2738	8	SPLIT FLANGE CLAMP
17	8320-1155	12	HEX HD CAPSCREW, 7/16-14X1-3/4
18	8855-1012	16	LOCKWASHER, 7/16
19	8471-8639	1	HOSE ASSY
20	8471-1333	2	SPLIT FLANGE CLAMP
21	8859-1024	1	O-RING
22	8820-1036	4	HEX HD CAPSCREW, 3/8-16X1-1/4, GR5
23	8855-1011	4	LOCKWASHER
24	9108-6130	1	TUBE SUPPORT
25	8319-1021	5	HEX HD CAPSCREW, M10X1.5X30
26	8319-1005	2	HEX HD CAPSCREW, M10X1.5X45

Item	Part No.	Qty.	Description Of Part
27	9108-6131	1	TUBE SUPPORT
28	9108-3266	1	TUBE ASSY
29	8866-2332	2	CONNECTOR, 90 DEGREES, (includes o-ring)
	8859-1207	2	O-RING
30	9020-6124	1	WATER TEMP. SENDER
31	8871-1384	1	REDUCER BUSHING
32	8348-3497	1	HOSE CLAMP
33	9108-3218	1	STRAINER
34	8471-8425	1	HOSE ASSY
35	9114-6037	1	EXHAUST TUBE
36	8368-3175	1	MUFFLER CLAMP
37	9114-6056	1	R.H. ENGINE MOUNT
38	8319-1032	4	HEX HD CAPSCREW, M12X1.75X35
39	8319-1010	4	LOCKWASHER, M12
40	9020-5205	1	JUMPER WIRE
41	9040-2427	1	STARTER SOLENOID
42	9002-7187	1	TY-RAP
43	9108-3503	1	ALTERNATOR, (includes item 44)
44	9108-3504	1	REGULATOR, (included with item 43)
45	9114-3124	1	NEGATIVE BATTERY CABLE
46	8319-1004	2	HEX HD CAPSCREW, M12X1.75X30
47	8319-1010	2	LOCKWASHER, M12
48	9114-3099	1	POSITIVE BATTERY CABLE
49	9114-3122	1	SUPPORT CLAMP
50	9108-3456	1	STARTER
51	8871-1284	1	PIPE PLUG, 3/4
52	9020-5792	1	CUSHION CLAMP
53	8320-1135	4	HEX HD CAPSCREW, 7/16-14X1-1/2
54	9116-3201	1	TUBE ASSY
55	9002-7906	1	ELBOW, 90 DEGREES, (includes o-ring)
	8859-1204	1	O-RING

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**544C**

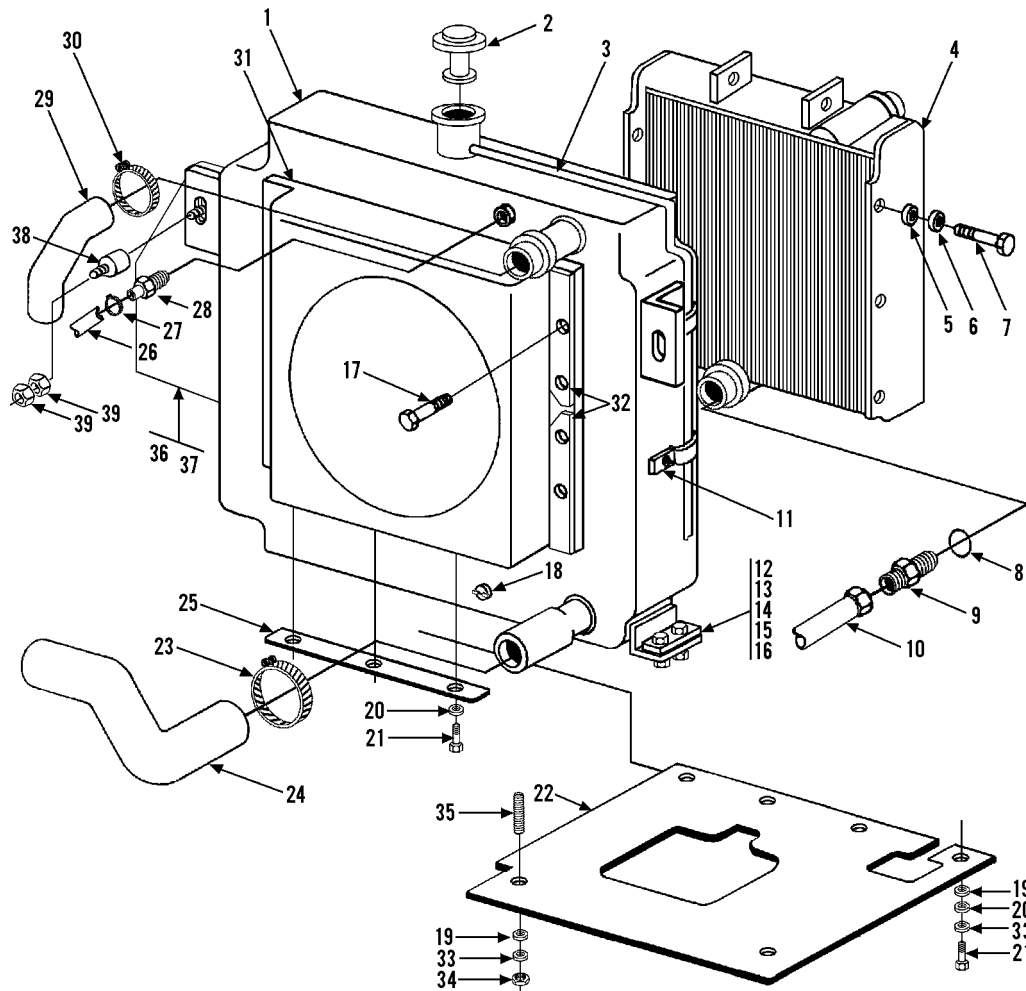
**ENGINE & ATTACHING PARTS**  
**Fuel Tank & Lines**  
 Starting Serial No. 0255001  
 Original Issue 7-96  
 Revised 6-22-01



Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
*	9108-5016	1	FUEL TANK ASSY, (includes items 1 thru 6, 9, 10 & 14)	11	8"	8"	FUEL LINE HOSE, 3/8 I.D.
1	9108-3501	1	FUEL TANK, (includes items 4 & 14)	12	9108-3218	1	FUEL FILTER, (1/L)
2	9040-0654	1	FUEL LEVEL SENDER, (includes item 3)	13		41"	FUEL LINE HOSE, 5/16 I.D.
3		5	SCREW	14	8871-1283	1	HEX SOCKET PIPE PLUG, 1/2
4	8654-1381	1	FUEL TANK CAP, (w/chain)	15	8820-1095	4	HEX HD CAPSCREW, 5/8-11X1-1/2, GR5
5	8871-1385	1	REDUCING BUSHING, 1/2X1/8	16	8856-1008	4	WASHER, 5/8
6	8874-1805	1	HOSE NIPPLE	17	8855-1015	4	LOCKWASHER, 5/8
7	8688-3106	3	HOSE CLAMP	18	8348-3497	1	HOSE CLAMP
8		52"	FUEL LINE HOSE, 7/32 I.D.				NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.
9	8871-2011	1	STREET ELBOW, 90 DEGREES, 1/8				
10	8471-2746	1	HOSE NIPPLE, 90 DEGREES, 1/2X3/8				

**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

**ENGINE & ATTACHING PARTS**  
**(9116-5019) Radiator Assembly**  
 Starting Serial No. 0255001  
 Original Issue 7-96

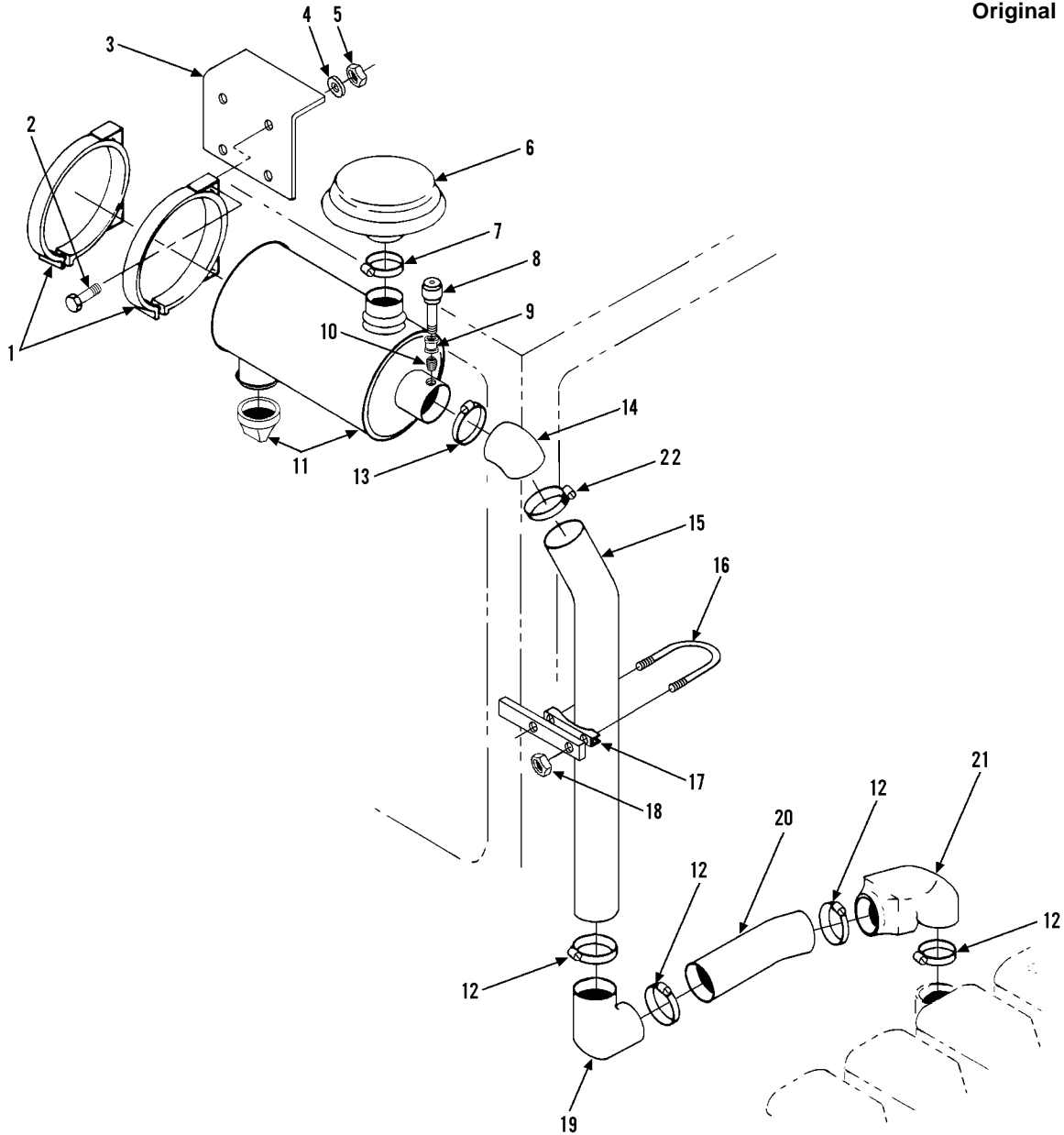


Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9116-5019	1	RADIATOR ASSY (includes items 1 thru 9, 11, 17, 18 & 31)	21	8820-1020	4	HEX HD CAPSCREW, 5/16-18X1, GR5
1	9114-3028	1	RADIATOR (includes item 2)	22	9114-3139	1	DUST SHIELD
2	9114-4008	1	RADIATOR CAP	23	8688-3327	2	HOSE CLAMP
3		38"	HOSE, 5/16 I.D.	24	9114-3045	1	LOWER RADIATOR HOSE
4	9114-3029	1	OIL COOLER	25	9114-1231	1	FLAT BAR
5	8855-1011	6	LOCKWASHER, 3/8	26		14"	HOSE, 5/16 I.D.
6	8856-1109	4	FLAT WASHER, 3/8	27	8688-3106	1	HOSE CLAMP
7	8820-1034	6	HEX HD CAPSCREW, 3/8-16X7/8, GR5	28	9003-0271	1	FITTING
8	8859-1210	1	O-RING	29	9115-3012	1	UPPER RADIATOR HOSE
9	8866-2028	1	CONNECTOR (includes item 8)	30	8507-1128	2	HOSE CLAMP
10	8471-8945	1	HOSE ASSY	31	9114-1104	1	RADIATOR SHROUD
11	8594-1016	2	SUPPORT CLAMP	32	9114-1322	4	CLAMP BAR
12	8368-3308	4	MOUNTING PAD	33	8856-1111	3	FLAT WASHER, 1/2
13	9020-5918	4	WASHER	34	8850-1005	2	HEX NUT
14	8820-1037	4	HEX HD CAPSCREW, 3/8-16X1-1/2, GR5	35	7714-3004	2	WHIZ LOCK SCREW, 5/16-18X1-3/4
15	8856-1109	4	FLAT WASHER, 3/8	36	9114-1103	1	L.H. RADIATOR MOUNT
16	8852-1206	4	LOCKNUT		9114-1102	1	R.H. RADIATOR MOUNT
17	7714-3003	8	WHIZ-LOK SCREW, 5/16-18X5/8	37	8561-1278	2	WELD STUD
18	8452-1056	1	DRAIN COCK	38	9103-3137	2	SHOCK MOUNT
19	8856-1003	3	FLAT WASHER, 5/16	39	7714-3006	4	WHIZ LOCK NUT, 5/16-18
20	8855-1010	4	LOCKWASHER, 5/16				NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.

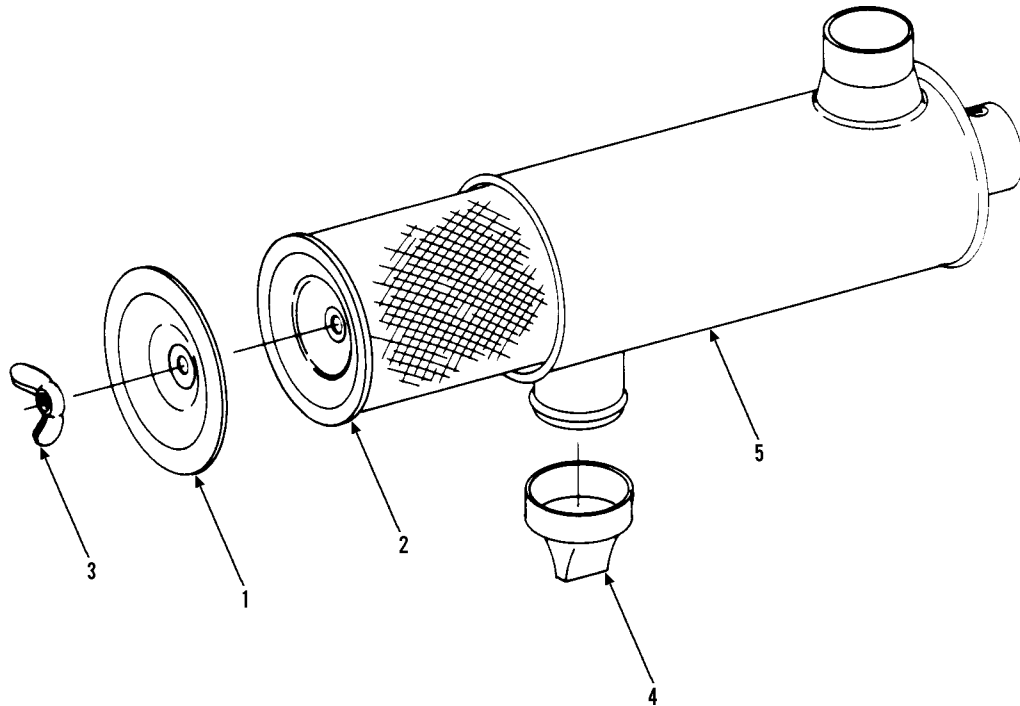


**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

**ENGINE & ATTACHING PARTS**  
**Air Cleaner Piping**  
 Starting Serial No. 0255001  
 Original Issue 7-96



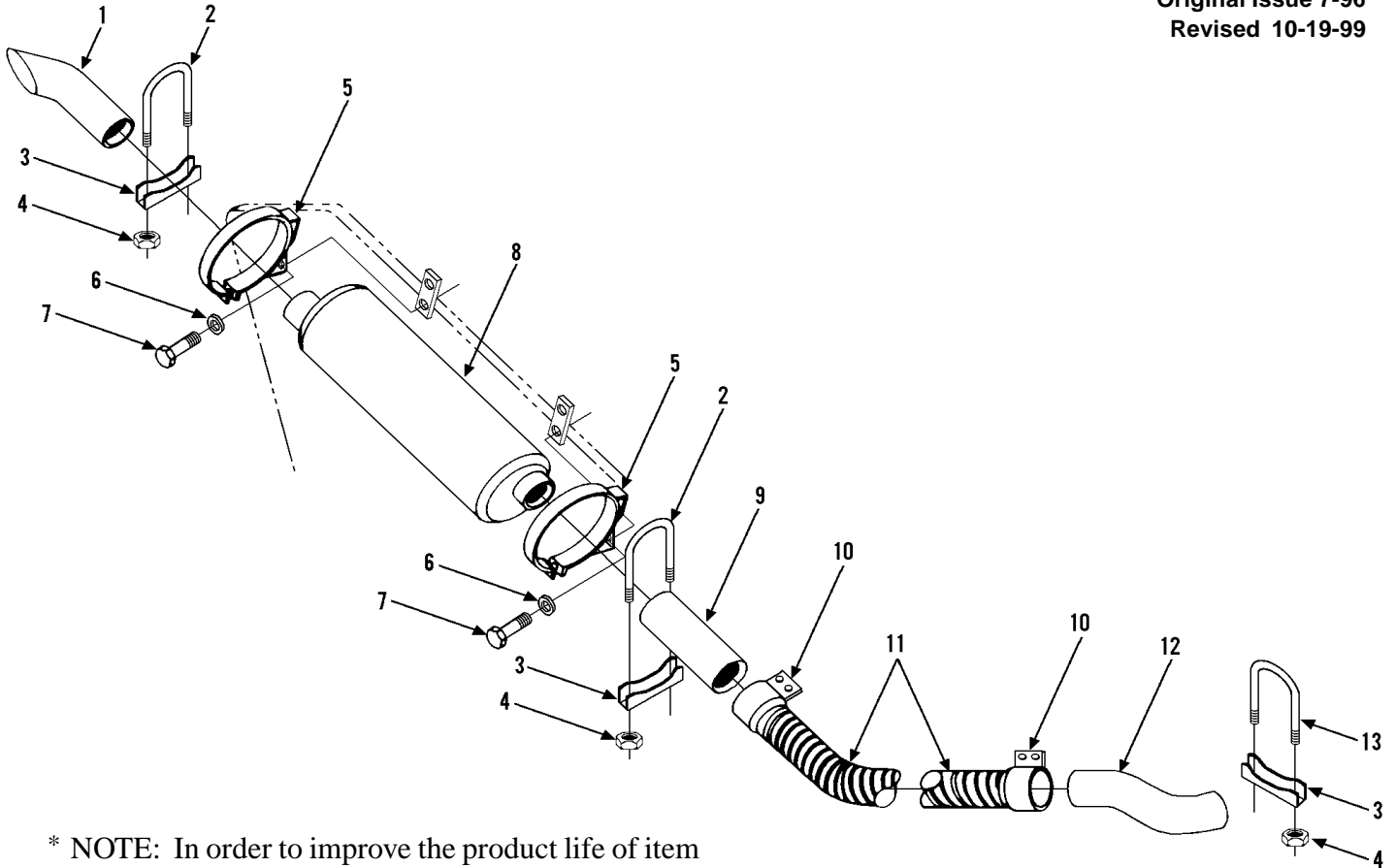
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
1	8698-1533	2	MOUNTING BAND	14	9115-3007	1	REDUCING ELBOW
2	8820-1035	4	HEX HD CAPSCREW, 3/8-16x1, GR5	15	9114-3126	1	AIR INTAKE TUBE
3	9115-1002	1	BRACKET	16	2492-1332	1	MUFFLER CLAMP (includes items 17 & 18)
4	8856-1109	4	FLAT WASHER, 3/8	17		1	BRIDGE
5	8852-1306	4	HEX LOCKNUT, 3/8-16	18		2	NUT
6	9115-3005	1	INLET CAP (includes item 7)	19	9108-3128	1	AIR INTAKE ELBOW
7		1	CLAMP	20	9115-3011	1	AIR INTAKE TUBE
8	7738-3154	1	SERVICE INDICATOR	21	9115-1003	1	AIR INTAKE ELBOW
9	8871-1210	1	PIPE COUPLING, 1/8"	22	7738-3790	1	HOSE CLAMP
10	8870-1023	1	CLOSE NIPPLE, 1/8X3				
11		1	AIR CLEANER (see page 5-6 for details)				
12	9116-3129	4	HOSE CLAMP				
13	9002-8631	1	HOSE CLAMP				
							NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.



Item	Part No.	Qty.	Description Of Part
	9115-3006	1	AIR CLEANER (includes items 1 thru 5)
1	9115-4005	1	COVER
2	9115-4001	1	ELEMENT
3	9020-1414	1	WING NUT
4	9020-0807	1	VACUATOR
5		1	BODY (not sold separately, order P/N 9115-3006)

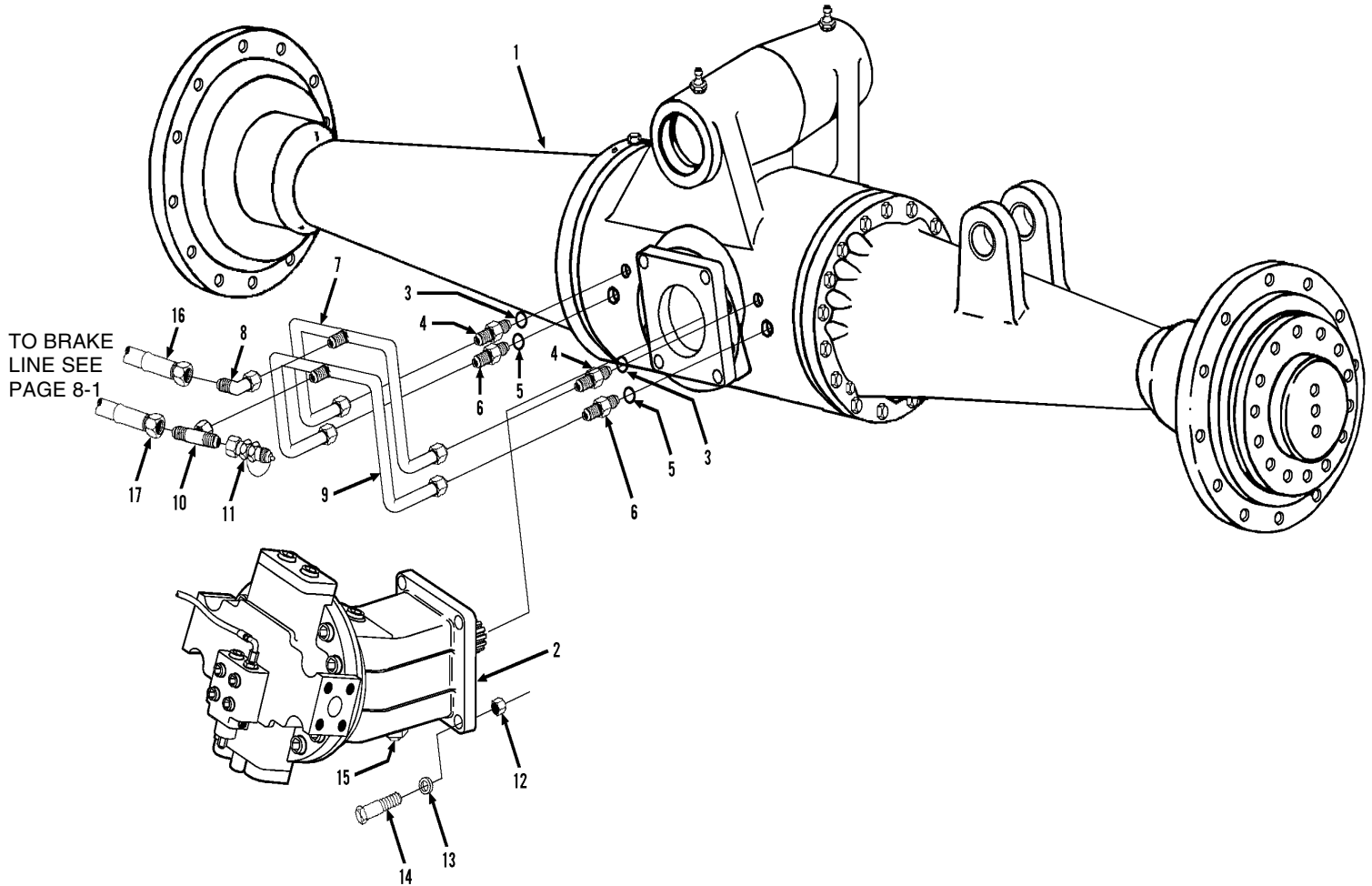
**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

**ENGINE & ATTACHING PARTS**  
**Exhaust System**  
 Starting Serial No. 0255001  
 Original Issue 7-96  
 Revised 10-19-99

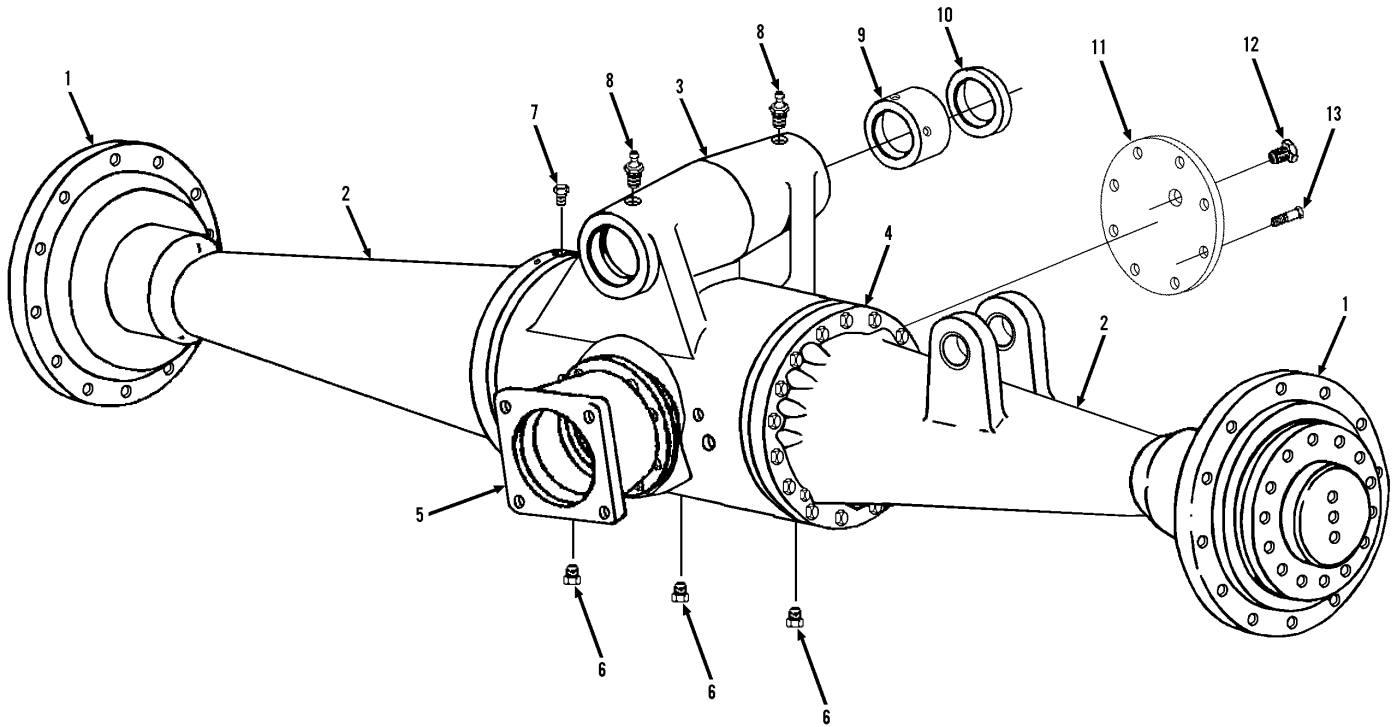


\* NOTE: In order to improve the product life of item 5, we have developed a muffler mounting kit for service replacement. Order part number 9116-5045 which includes two 9116-1290 muffler mounts and two 2492-1332 muffler clamps.

Item	Part No.	Qty.	Description Of Part
1	9116-3189	1	TAIL PIPE
2	2492-1332	2	MUFFLER CLAMP (includes items 3 & 4)
3		3	BRIDGE
4		6	NUT
5	8027-3011	2	MUFFLER BRACKET (see note)
	9116-3196	2	WHIZ-LOCK SCREW, 3/8-16
	7714-3015	2	WHIZ-LOCK NUT, 3/8-16
6	8855-1010	4	LOCKWASHER, 5/16
7	8820-1016	4	HEX HD CAPSCREW, 5/16-18X1/2, GR5
8	9116-3035	1	MUFFLER
* 9	9116-3234	1	EXHAUST TUBE
10	7721-3031	2	CLAMP (includes hardware)
* 11	9104-3150	1	FLEXIBLE TUBING
12	9114-6037	1	EXHAUST TUBE
13	8368-3175	1	MUFFLER CLAMP (includes items 3 & 4)
			NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.



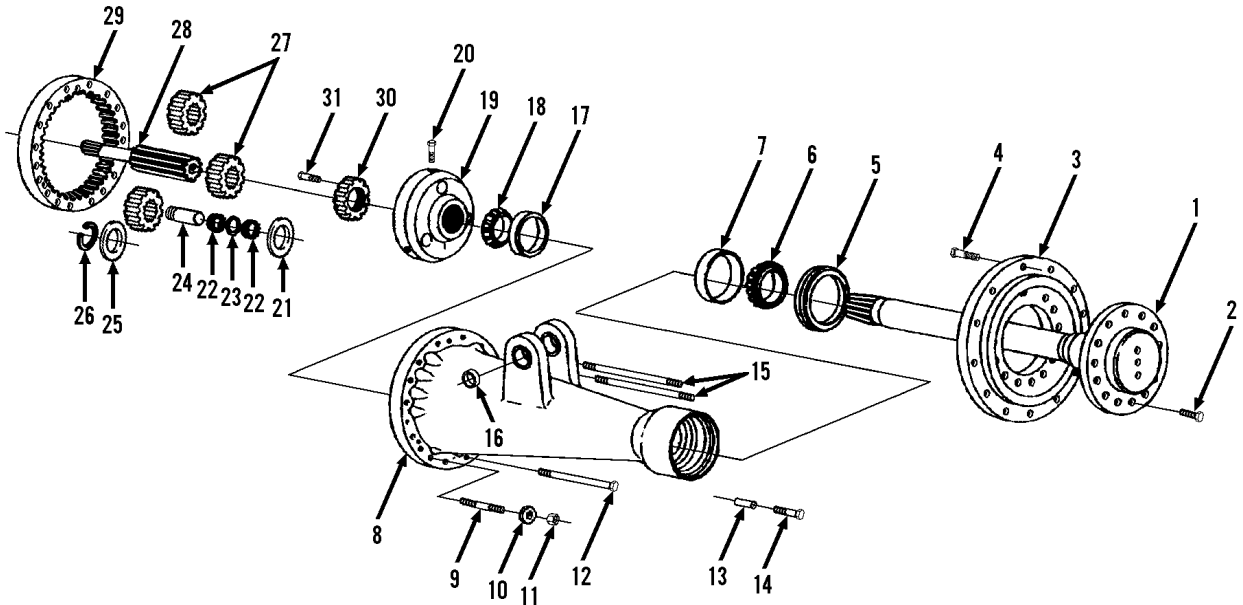
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
1	9116-5004	1	FRONT AXLE ASSY (includes items 1 thru 15)	9	9112-3127	1	SERVICE BRAKE TUBE LINE
	Ref		FRONT AXLE (see page 6-2 for details)	10	8866-2224	1	SWIVEL NUT BRANCH TEE, 3/8 TUBE
2	Ref		FRONT DRIVE MOTOR (see page 10-16 for details)	11	9114-3172	1	MINI CHECK VALVE
3	8859-1205	2	O-RING	12	8850-1012	4	HEX NUT, 3/4-10
4	8866-2006	2	CONNECTOR (includes item 3)	13	9002-7473	4	HARD WASHER, 3/4
5	8859-1204	2	O-RING	14	8320-1058	4	HEX HD CAPSCREW, 3/4-10X3-3/4, GR8
6	8866-2005	2	CONNECTOR (includes item 5)	15	8866-2194	1	HEX SOCKET HD PLUG, (includes o-ring)
7	9112-3130	1	PARK BRAKE TUBE LINE		8859-1206	1	O-RING
8	8866-2106	1	ELBOW, 90 DEGREES (swivel nut)	16	8471-8759	1	HOSE ASSY
				17	8471-8753	1	HOSE ASSY



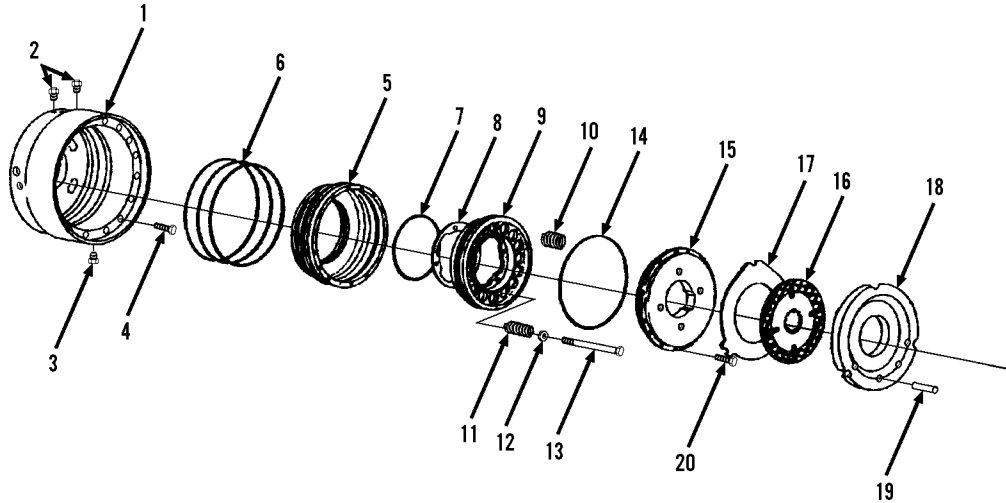
**SERVICE NOTE:** When servicing this axle, it is recommended that on machines with starting serial numbers prior to 0255070, that you:

- 1). Replace the old style cover plate with the new cover plate kit, p/n 9114-5130.
- 2). Then refill the axle with 40 pints of mobil 424 fluid instead of 33 pints.

Item	Part No.	Qty.	Description Of Part
	9136-3015	1	FRONT AXLE, (includes all items on pages 6-2, 6-3, 6-4 & 6-5)
	9114-5130	1	COVER PLATE KIT, (includes new style items 11 and 12)
1	Ref		WHEEL FLANGE ASSY, (see page 6-5 for details)
2	Ref		LEFT & RIGHT HOUSING ASSY, (see page 6-5 for details)
3	9114-4326	1	CENTER HOUSING ASSY, (includes item 9)
4	Ref		BRAKE ASSY, (see page 6-4 for details)
5	Ref		CARRIER ASSY, (see page 6-3 for details)
6	9114-4327	3	DRAIN PLUG
7	9114-4328	1	VENT PLUG
8	9114-4329	2	LUBE FITTING
9	9108-4046	2	BUSHING
10	9108-4047	2	TRUNNION OIL SEAL
* 11		1	COVER-OLD STYLE, (starting S/N 0255001), NO LONGER AVAILABLE
	9114-1511	1	COVER-NEW STYLE, (starting S/N 0255070)
* 12	9114-4331	1	LEVEL PLUG-OLD STYLE, (starting S/N 055001)
	8871-1284	1	LEVEL PLUG-NEW STYLE, (starting S/N 0255070)
13	9114-4332	8	CAPSCREW, M8X1.25X16.0



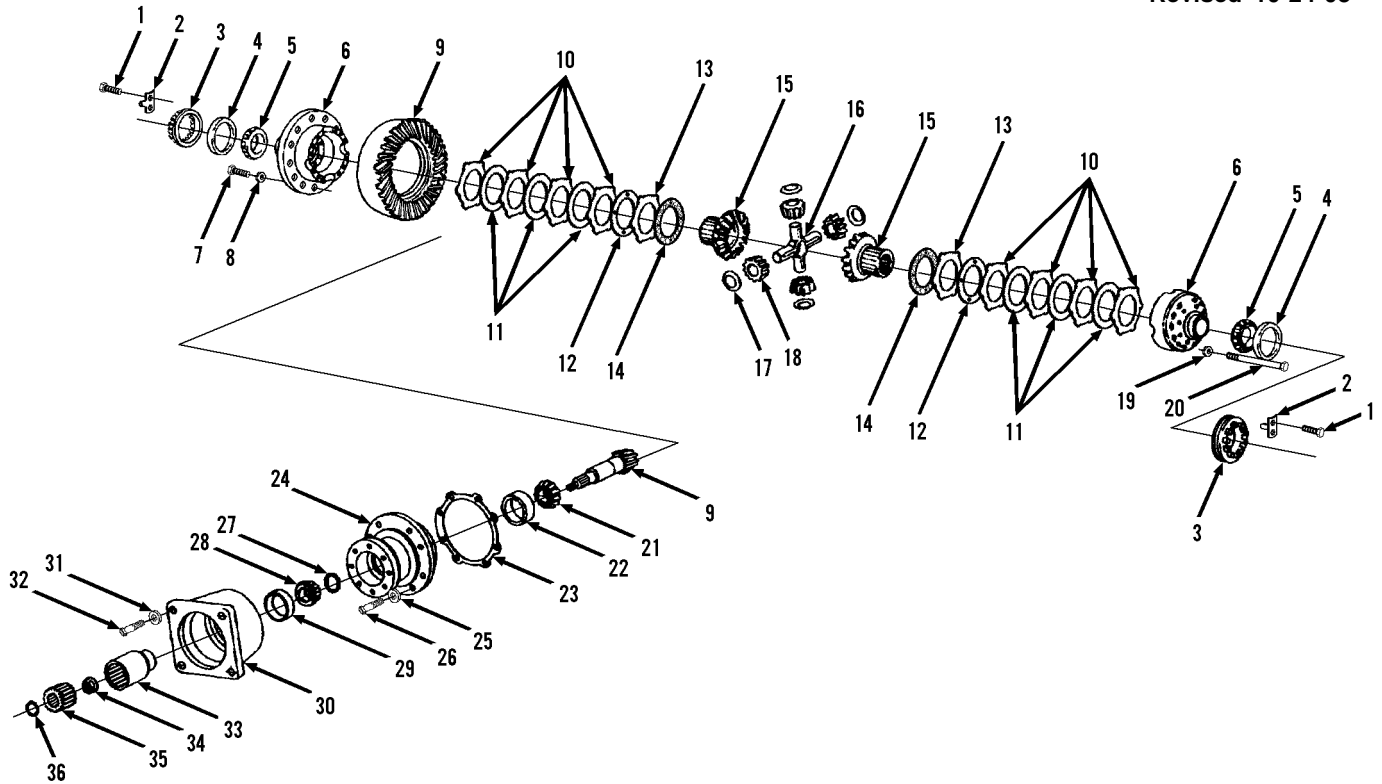
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
1	9114-4333	2	AXLE SHAFT ASSY (includes items 2, 3, 4 & 5)	*14	9114-4348	4	CAPSCREW - USE W/26mm SPACER, M14X1.5X85 (position at 7 & 5 o'clock)
2	9114-4334	28	CAPSCREW, M20X1.5X50.0		9114-4349	2	CAPSCREW - USE W/19mm SPACER, M14X1.5X78 (position at 12 o'clock)
3	9114-4335	2	WHEEL FLANGE ASSY (includes item 4)	*15	9114-4350	2	STUD - RIGHT SIDE, M14X1.5X232.0
4	9020-3543	24	WHEEL BOLT		9114-4351	2	STUD - LEFT SIDE, M14X1.5X112.0
5	9114-4336	2	SHAFT OIL SEAL	16	9114-4352	2	BUSHING
6	8698-4451	2	BEARING CONE	17	9114-4353	2	BEARING CUP
7	8698-4452	2	BEARING CUP	18	9114-4354	2	BEARING CONE
8	9114-4337	1	HOUSING ASSY - RIGHT SIDE (shown)(includes items 7, 16 & 17)	19	9116-4008	2	SPIDER ASSY (includes items 20 & 24)
	9116-4006	Ref	RING GEAR & HOUSING ASSY - RIGHT SIDE (shown) (includes items 7, 16, 17 & 29)	20	9114-4356	6	CAPSCREW, M10X23.0
	9114-4339	1	HOUSING ASSY - LEFT SIDE (not shown) (includes items 7 & 17)	21	9114-4357	6	THRUSTWASHER
	9116-4007	Ref	RING GEAR & HOUSING ASSY - LEFT SIDE (not shown) (includes items 7, 17 & 29)	22	9114-4358	6	KIT ROLLER
9	9114-4341	4	SET SCREW	23	9114-4359	6	SPACER
10	9114-4342	32	WASHER	24	9114-4360	6	PLANETARY PINION SHAFT
11	9114-4343	8	NUT, M14X1.5-6H	25	9114-4361	6	WASHER
12	9114-4344	14	CAPSCREW - RIGHT SIDE, M14X1.5X212.0	26	9114-4362	6	SNAP RING
	9114-4345	14	CAPSCREW - LEFT SIDE, M14X1.5X120.0	*27	9114-4363	8	PLANETARY PINION
*13	9114-4346	2	SPACER - 19mm	28	9114-4364	1	SUN GEAR (287.0mm) - RIGHT SIDE (shown)
	9114-4347	4	SPACER - 26mm		9114-4365	1	SUN GEAR (247.0mm) - LEFT SIDE (not shown)
				29	9116-4009	2	RING GEAR
				30	9114-4367	2	ADJUSTING NUT
				31	9114-4368	2	CAPSCREW (adjusting nut lock)
							NOTE: QUANTITIES SHOWN ARE FOR BOTH SIDES.



Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
*	9114-4442	Ref	BRAKE SEAL KIT, (includes items 6, 7, & 14), <b>(services both sides)</b>	8		8	SHIM, (0.075), (included in shim kit)
*	9116-4081	Ref	BRAKE PISTON PLATE KIT, (includes items 15, 16, 17 & 18), <b>(services one side)</b>	8		8	SHIM, (0.125), (included in shim kit)
*	9116-4082	Ref	BRAKE PLATE & SEAL KIT, (includes items 6, 7, 14, 15, 16, 17 & 18), <b>(services one side)</b>	8		8	SHIM, (0.255), (included in shim kit)
*	9114-4371	Ref	PISTON BRAKE SHIM KIT (includes item 8), <b>(services one side)</b>	8		8	SHIM, (0.555), (included in shim kit)
1	9114-4372	1	BRAKE HOUSING (right side only - left side included in center housing)	2		2	BRAKE PISTON
2	9114-4373	4	HYDRAULIC LINE BLEEDER	9	9114-4376	2	BRAKE ACTUATING PLATE
3		Ref	DRAIN PLUG, (see page 6-2 for details)	10	9114-4377	32	SPRING
4	9114-4374	3	CAPSCREW - RIGHT SIDE ONLY, M8X1.25X40.0	11	9114-4378	16	SPRING
5	9114-4375	2	BRAKE PISTON & PLATE ASSY, (includes items 6, 7, 9, 10, 14, 15, & 20)	12	8688-1421	16	WASHER
6	9112-4110	6	O-RING	13	9114-4379	16	RETURN SPRING BOLT
7	9112-4111	2	O-RING	14	9112-4112	2	O-RING
				15		2	BRAKE ACTUATING PLATE
				16		10	FRICTION DISC
				17		10	STATIONARY DISC
				18		2	BRAKE REACTION PLATE
				19	9114-4380	6	BRAKE DISC LOCKPIN
				20	9114-4381	42	CAPSCREW, M6X1.0X12.0, (allen)
							NOTE: QUANTITIES SHOWN ARE FOR BOTH SIDES.
							NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.

**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

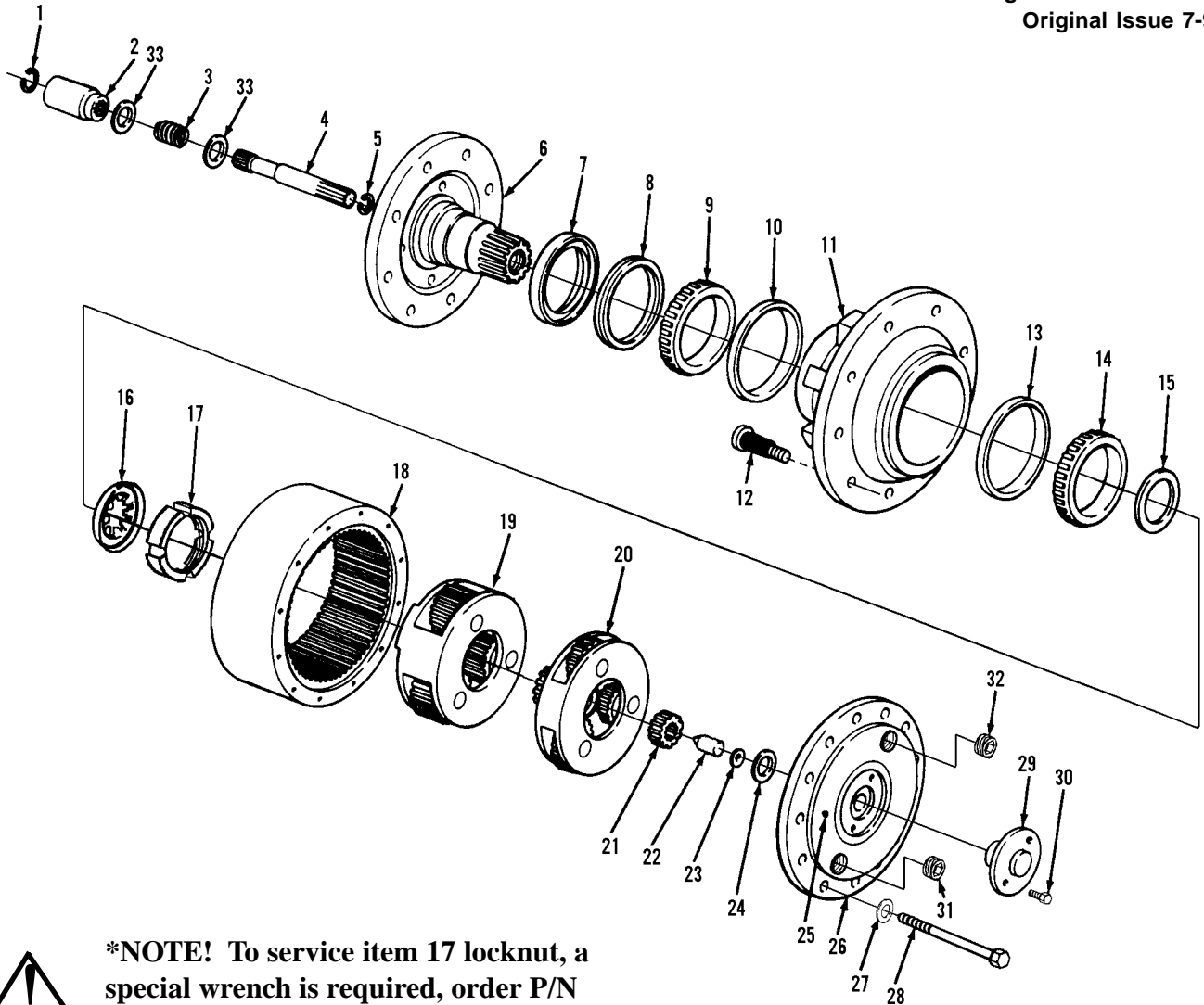
**DRIVE TRAIN**  
**Carrier Assembly**  
 Starting Serial No. 0255001  
 Original Issue 6-96  
 Revised 10-24-03



Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9114-4382	Ref	LIMITED SLIP PLATE STACK KIT (includes items 10, 11, 12, 13 & 14)	20	9114-4397	12	CAPSCREW, M10X1.5X80.0
	9114-4383	Ref	PINION CAGE SHIM KIT (includes item 23)	21	9020-7204	1	BEARING CONE
	9114-4384	Ref	DRIVE PINION SHIM KIT (includes item 27)	22	9020-0440	1	BEARING CUP
	9114-4385	Ref	LIMITED SLIP SHIM KIT (includes item 12)	23		4	SHIM (0.05) (included in shim kit)
1	9114-4386	4	CAPSCREW			2	SHIM (0.125) (included in shim kit)
2	9114-4387	2	ADJUSTER RING LOCK			3	SHIM (0.20) (included in shim kit)
3	9114-4388	2	ADJUSTER RING			1	SHIM (0.50) (included in shim kit)
4	8307-3828	2	BEARING CUP	24	9114-4398	1	PINION CAGE ASSY (includes items 22 & 29)
5	9114-4389	2	BEARING CONE	25	9114-4399	8	WASHER
* 6	9114-4390	1	DIFFERENTIAL CASE	26	9114-4400	8	CAPSCREW, M12X1.75X40.0
7	9114-4391	12	CAPSCREW, M10X1.0X30.0	27		1	SHIM (1.20) (included in shim kit)
8	8348-3584	12	WASHER			1	SHIM (1.25) (included in shim kit)
9	9114-4392	1	SPIRAL GEAR & PINION			1	SHIM (1.30) (included in shim kit)
10		8	DRIVE FRICTION DISC (included in 9114-4382 kit)			1	SHIM (1.35) (included in shim kit)
11		6	DRIVEN FRICTION DISC (included 9114-4382 kit)			1	SHIM (1.40) (included in shim kit)
12		2	SHIM (0.33) (included in shim kit)			1	SHIM (1.45) (included in shim kit)
		2	SHIM (0.38) (included in shim kit)	28	9114-4401	1	BEARING CONE
		2	SHIM (0.25) (included in shim kit)	29	9114-4402	1	BEARING CUP
		2	SHIM (0.13) (included in shim kit)	30	9114-4403	1	MOTOR ADAPTER FLANGE
13		2	COMPRESSION DISC (included in 9114-4382 kit)	31	8348-3584	8	WASHER
14		2	THRUSTWASHER (included in 9114-4382 kit)	32	9114-4404	8	CAPSCREW, .3750-16UNC-2AX1.25
15	9114-4393	2	SIDE GEAR	33	9114-4405	1	DRIVEN SLEEVE
16	9114-4394	1	SPIDER	34	9114-4406	1	PINION NUT, M24X1.5
17	9114-4395	4	THRUSTWASHER	35	9114-4407	1	DRIVE SLEEVE
18	9114-4396	4	PINION GEAR	36	9114-4408	1	SNAP RING
19	8348-3584	12	WASHER				

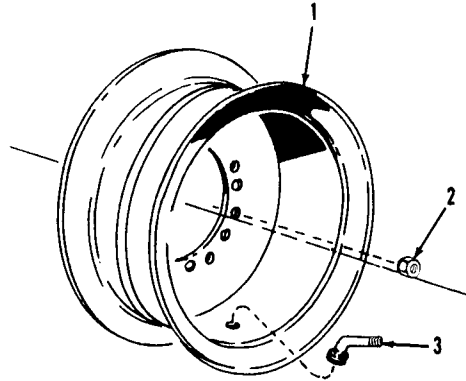
NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.



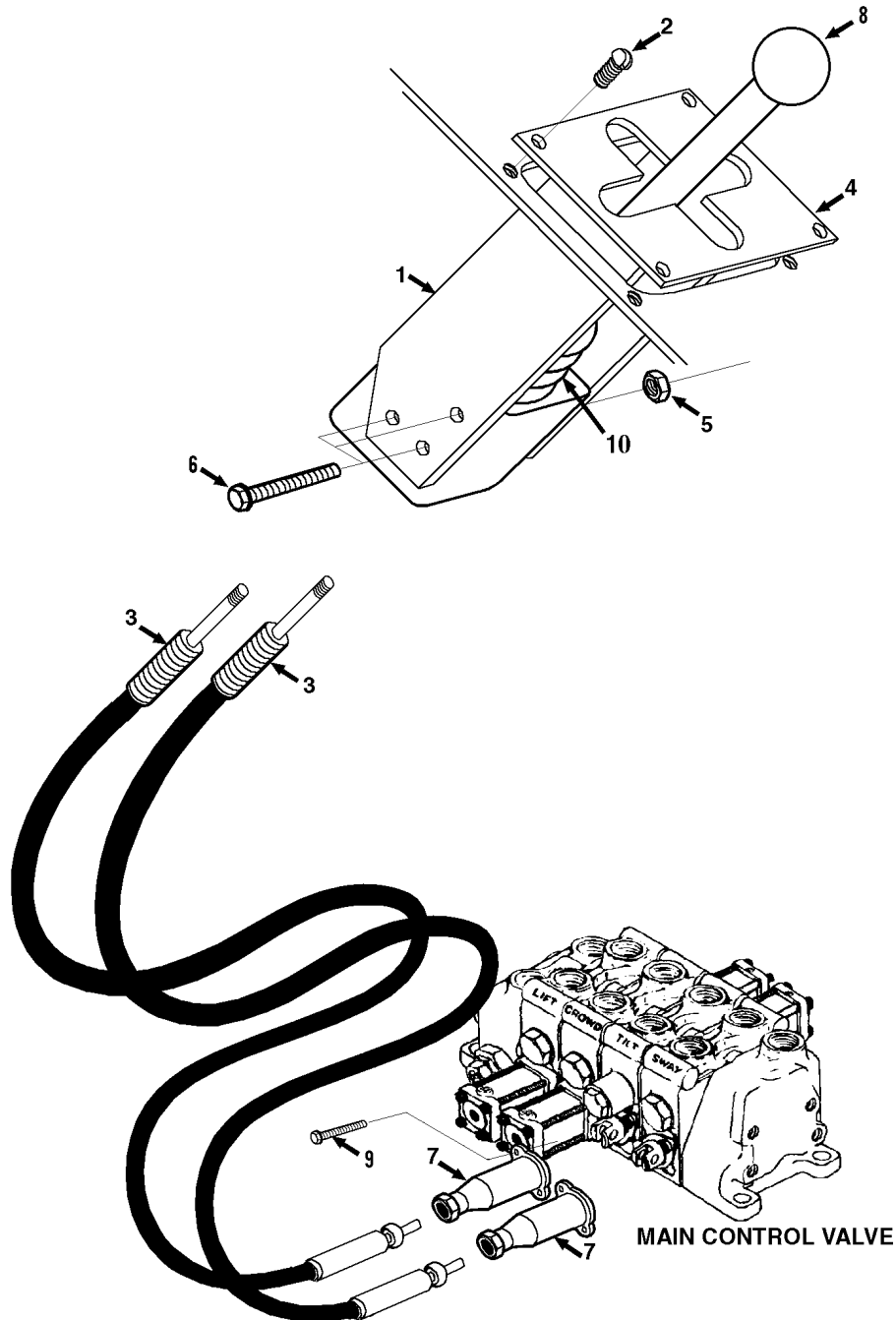


**\*NOTE!** To service item 17 locknut, a special wrench is required, order P/N 9114-4325 wrench.

Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9104-3472	2	REAR STEERING AXLE DRIVE HUB	19	9114-4185	1	SECONDARY CARRIER ASSY
	9104-4462	Ref	REPAIR KIT (includes items 7, 8 and 30)	20	9114-4186	1	PRIMARY CARRIER ASSY
1	9104-4276	1	RETAINING RING	21	9114-4187	1	PRIMARY SUN GEAR
2	9104-4277	1	COUPLING	22	9104-4106	1	PLUNGER
3	9114-4175	1	SPRING	23	9104-4107	1	O-RING
4	9114-4176	1	INPUT SHAFT	24	9104-4105	1	THRUST WASHER
5	9104-4099	2	RETAINING RING	25	9104-4361	1	PIPE PLUG
6	9114-4177	1	SPINDLE	26	9114-4188	1	COVER
7		1	SEAL	27	9104-4110	12	FLAT WASHER
8		1	OIL SEAL	28	9114-4189	12	HEX HD BOLT
9	9020-2501	1	OUTER BEARING CONE	29	9104-4112	1	DISENGAGE COVER
10	9020-2500	1	OUTER BEARING CUP	30		1	LOCK SCREW
11	9114-4178	1	HUB	31	9104-4101	1	MAGNETIC PLUG
12	9104-4311	12	WHEEL BOLT	32	9103-4389	1	PIPE PLUG
13	9114-4179	1	INNER BEARING CUP	33	9103-4390	2	THRUSTWASHER
14	9114-4180	1	INNER BEARING CONE				NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.
15	9114-4181	1	THRUST WASHER				NOTE: QUANTITIES SHOWN ARE FOR ONE HUB ASSY ONLY.
16	9114-4182	1	LOCKWASHER				
17	9114-4183	1	LOCK NUT				
18	9114-4184	1	RING GEAR				

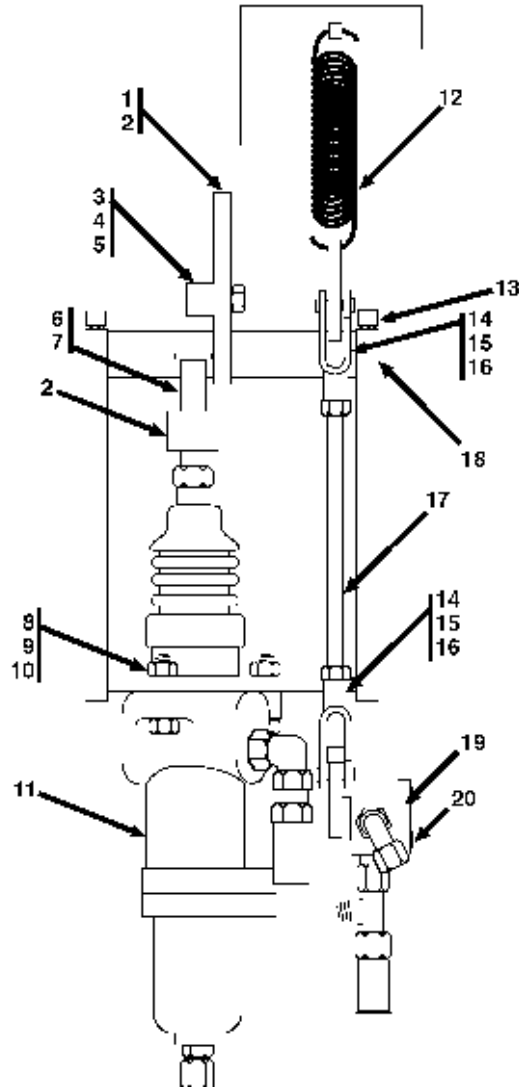


Item	Part No.	Qty.	Description Of Part
	9116-5024	1	R.H. TIRE ASSY(includes items 1, 3 and 4)
	9116-5025	1	L.H. TIRE ASSY(includes items 1, 3 and 4)
1	9104-3298	2	RIM
2	9104-3146	48	LUG NUT (lubricate and torque to 350-400 ftlbs.)
3	9108-3385	2	VALVE
4	9104-3084	2	TIRE (not shown) 14.00 x 24, 12 ply, G-2 grader, tubeless

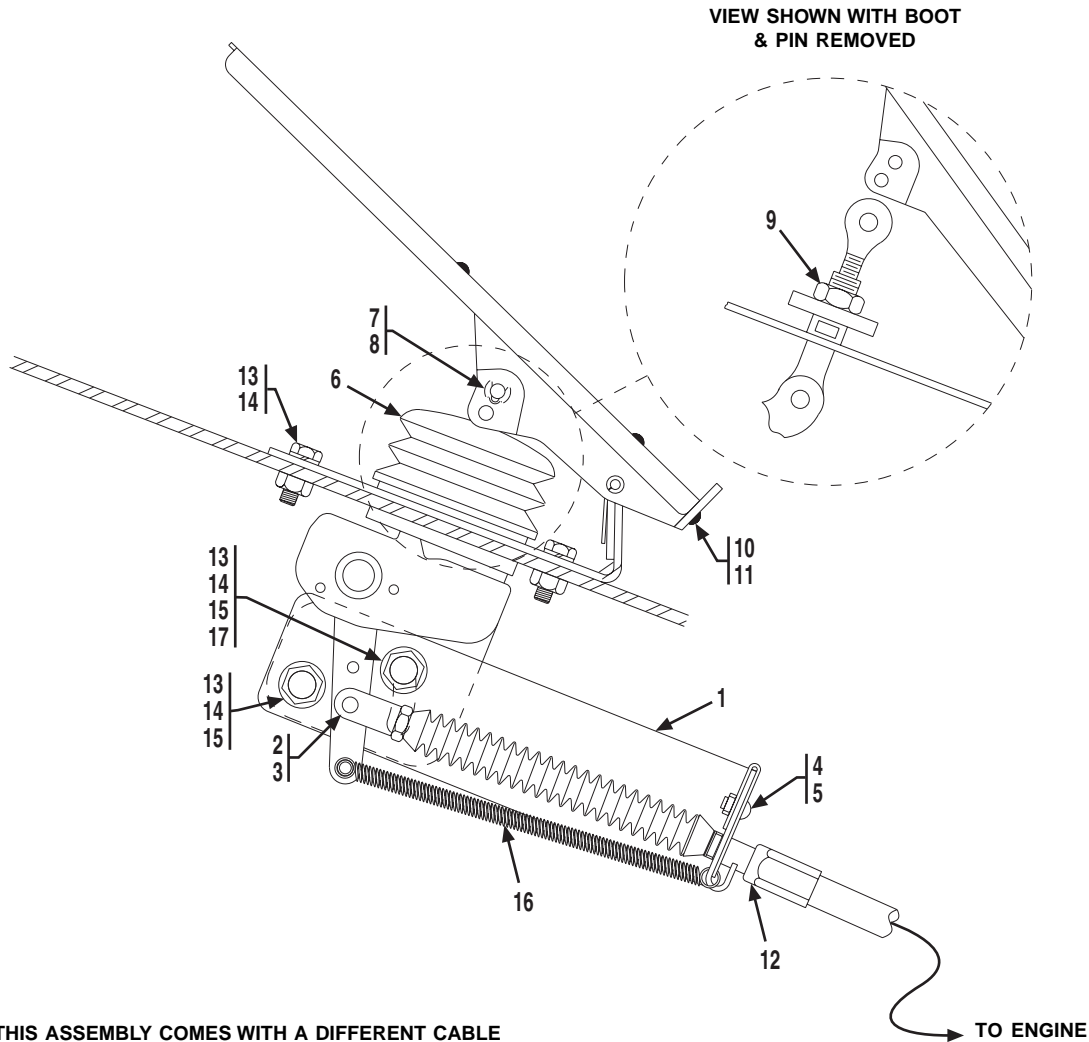


**MAIN CONTROL VALVE**

Item	Part No.	Qty.	Description Of Part
* 1	9108-3107	1	REMOTE CONTROL VALVE, (includes item 10)
2	8826-1022	4	HEX SOC. BUT. HDCAPSCREW, 5/16-18X3/4
3	9116-3132	2	CONTROL CABLE
4	9108-6089	1	BRACKET
5	8852-1304	3	HEX LOCKNUT, 1/4-20
6	9114-3191	3	HEX HD CAPSCREW, 1/4-20X4-1/2
7	9112-3062	2	CABLE ADAPTER
8	9108-4282	1	KNOB
9	8821-1044	4	SOCKET HD CAPSCREW, 1/4-20X1-1/2
*10	9108-4359	1	BOOT

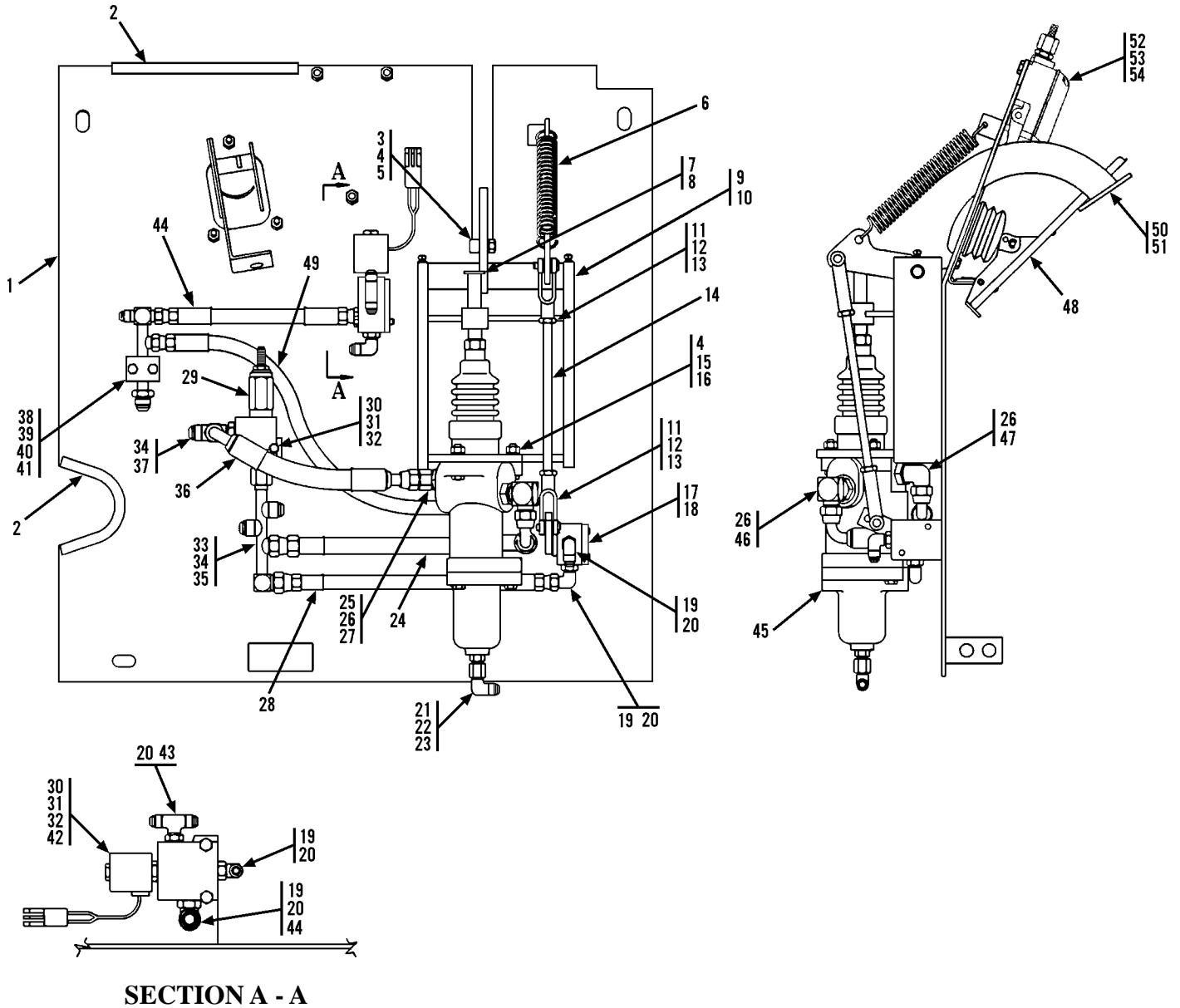


Item	Part No.	Qty.	Description Of Part
1	9114-6059	1	BRAKE PEDAL
2	9108-3136	4	BUSHING
3	9108-3312	1	CAM ROLLER
4	8855-1010	1	LOCKWASHER, 5/16
5	8850-1405	1	JAM NUT, 5/16-24
6	9108-1445	1	PUSH ROD
7	8850-1408	1	JAM NUT, 1/2-20
8	8820-1022	3	HEX HD CAPSCREW, 5/16-18 x 1 1/2, GR5
9	8855-1010	3	LOCKWASHER, 5/16
10	8850-1005	3	HEX NUT, 5/16-18
11		Ref	BRAKE VALVE (see page 10-10 for details)
12	9104-3214	1	SPRING
13	8844-1001	2	SQUARE HD SETSCREW, 1/4-20X1/2"
14	8850-1406	2	JAM NUT, 3/8-24
15	8882-1004	2	YOKE END
16	9002-7987	2	CLEVIS PIN
17	9108-1332	1	LINKAGE ROD
18	9020-0284	2	SHAFT
19		Ref	INCHING VALVE (see page 10-13 for details)
20	8821-2228	2	SOCKET HD CAPSCREW



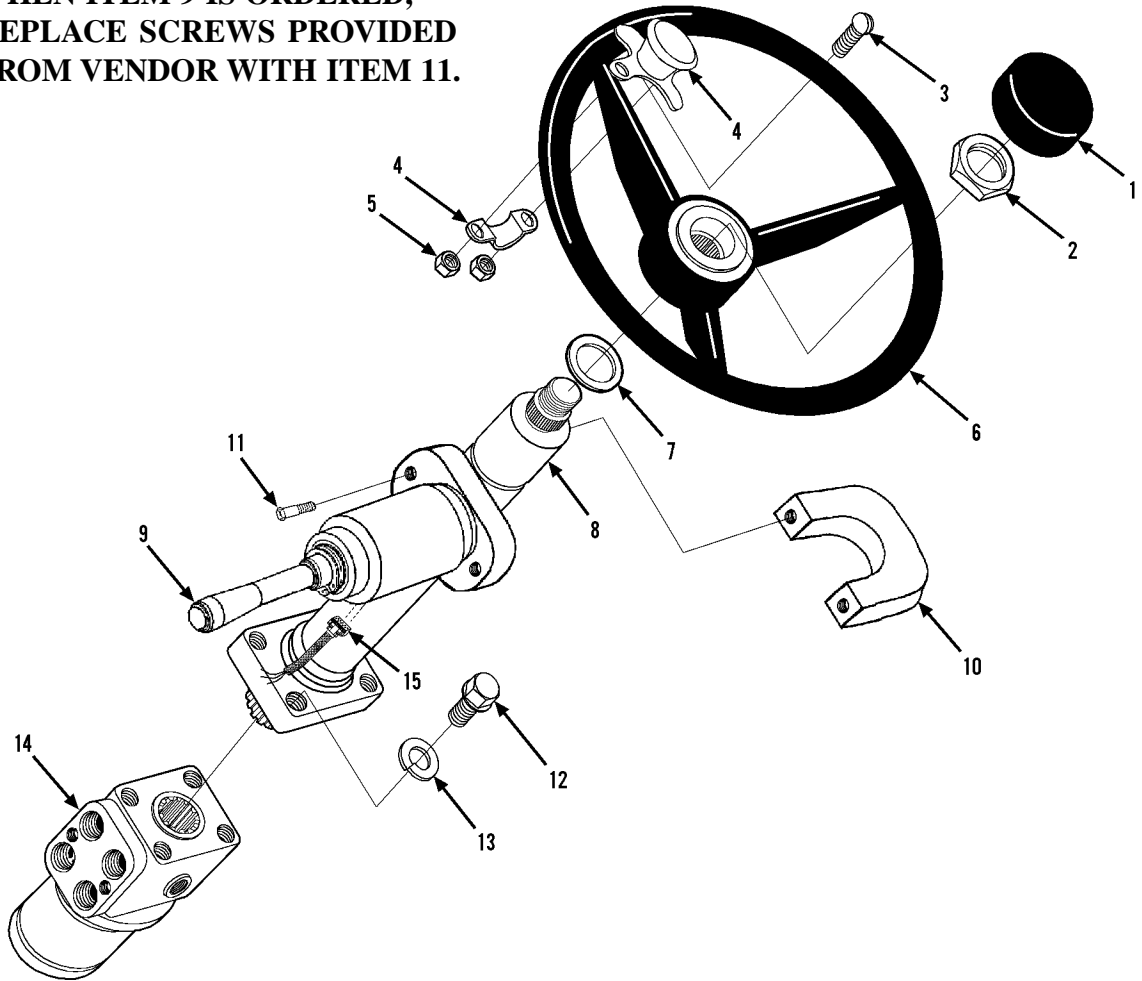
THIS ASSEMBLY COMES WITH A DIFFERENT CABLE SUPPORT, (item 1, not shown). THE CABLE SUPPORT SHOWN IS THE PROPER REPLACEMENT AND NEEDS TO BE ORDERED SEPARATELY.

Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9114-3118	1	ACCELERATOR PEDAL ASSY, (includes items 2 thru 11)	8		1	HAIRPIN COTTER
	9114-4196	1	CABLE ATTACH KIT, (includes items 2 thru 5)	9		1	JAM NUT
	9114-4197	1	BOOT KIT, (includes items 6 thru 9)	10		1	HEEL REST
	9114-4198	1	HEEL REST KIT, (includes items 10 and 11)	11		2	SCREW, (self tapping)
1	9112-1210	1	CABLE SUPPORT, (order separately)	12		Ref	THROTTLE CABLE, (see page 5-1 for details)
2		1	CLEVIS	*13	8820-1003	5	HEX HD CAPSCREW, 1/4-20X3/4, GR5
3		1	PIN	*14	8855-1009	5	LOCKWASHER, 1/4
		1	HAIRPIN COTTER, (not shown)	*15	8850-1004	2	HEX NUT, 1/4-20
4		1	LOCK PLATE	16	9020-7801	1	SPRING
5		1	CAPSCREW	*17	8856-1107	1	FLAT WASHER, 1/4
6		1	BOOT				NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.
7		1	PIN				



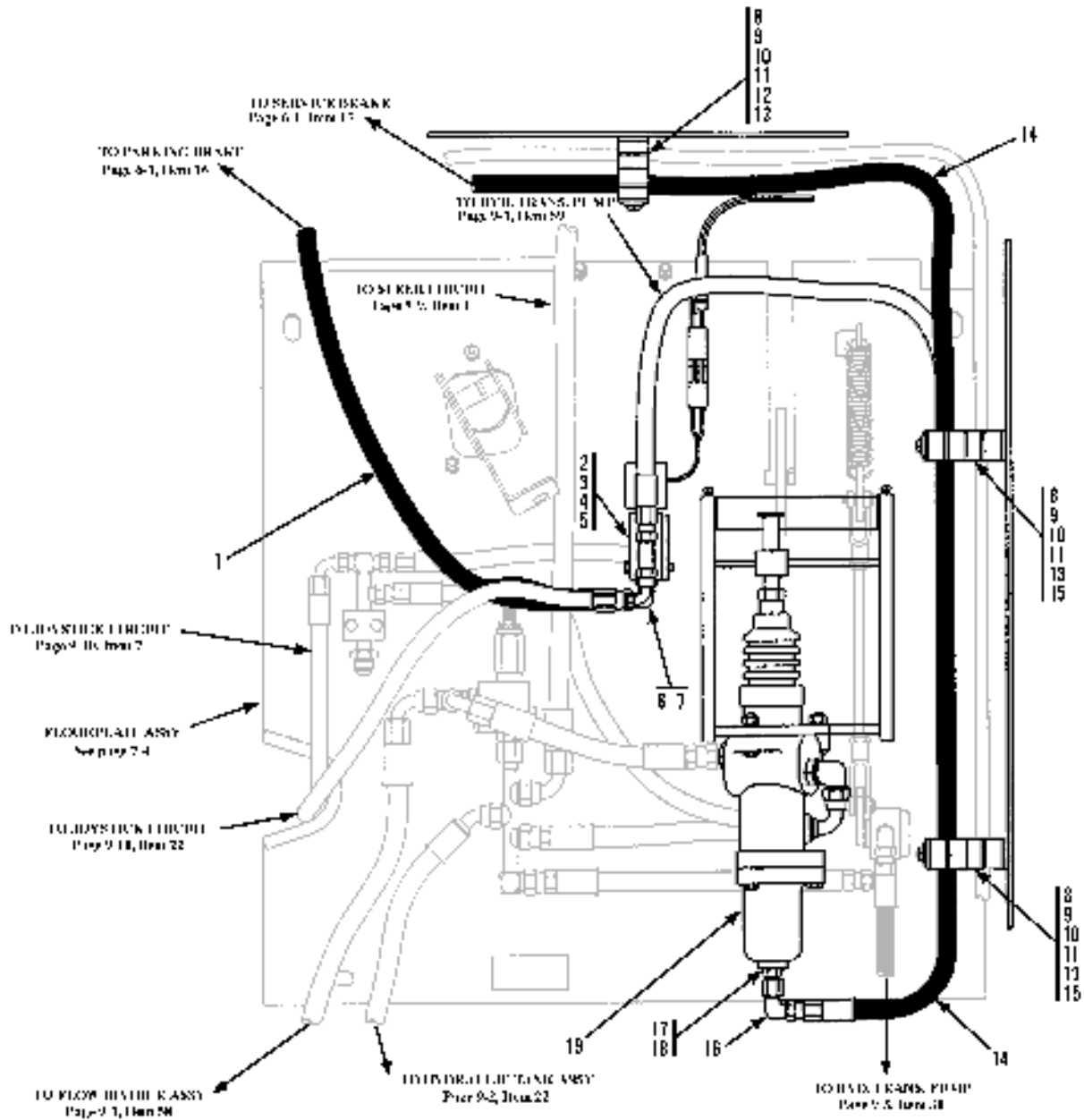
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9116-5103	1	FLOOR PLATE ASSY, (includes all items except 52 thru 54)	28	8471-8691	1	HOSE ASSY
1	9116-6041	1	FLOOR PLATE WELDMENT	29	9114-3200	1	RELIEF VALVE
2	9020-6198	16"	TRIM-LOK	30	8820-1008	4	HEX HD CAPSCREW, 1/4-20X1-3/4, GR5
3	9108-3312	1	CAM ROLLER	31	8856-1107	4	FLAT WASHER, 1/4
4	8855-1010	4	LOCKWASHER, 5/16	*32	8855-1009	4	LOCKWASHER, 1/4
* 5	8850-1405	1	HEX JAM NUT, 5/16-24	33	8866-2006	1	CONNECTOR, (includes item 34)
6	9104-3214	1	SPRING	34	8859-1205	2	O-RING
7	9108-1445	1	PUSH ROD	35	9116-3110	1	HYDRAULIC TUBE
* 8	8850-1408	1	HEX JAM NUT, 1/2-20	36	8471-8687	1	HOSE ASSY
9	9020-0284	1	SHAFT	37	8866-2140	1	RUN TEE, (includes item 34)
* 10	8844-1001	2	SQUARE HD SET SCREW, CUP POINT, 1/4-20X1/2"	38	9116-3109	1	HYDRAULIC TUBE
* 11	8850-1406	2	HEX JAM NUT, 3/8-24	39	9103-3138	1	TUBE CLAMP
12	8882-1004	2	YOKE END	40	7713-3498	1	CLAMP COVER
13	9002-7987	2	CLEVIS PIN	41	7713-3499	2	HEX HD CAPSCREW
14	9108-1332	1	LINKAGE ROD	42		Ref	SOLENOID VALVE, (see page 10-11 for details)
15	8820-1022	3	HEX HD CAPSCREW, 5/16-18X1-1/2, GR5	43	8866-2152	1	BRANCH TEE, (includes item 20)
16	8850-1005	3	HEX NUT, 5/16-18	44	8471-8689	1	HOSE ASSY
17		Ref	INCHING VALVE, (see page 10-13 for details)	45		Ref	BRAKE VALVE ASSY, (see page 10-10 for details)
* 18	8821-2228	2	SOCKET HD CAPSCREW, 5/16-18X 1-1/4, GR8	46	8866-2059	1	ELBOW, 90 DEGREES, (includes item 26)
* 19	8866-2064	4	ELBOW, 90 DEGREES, (includes item 20)	47	9108-3310	1	ELBOW, 90 DEGREES, (includes item 26)
20	8859-1204	5	O-RING	48		Ref	ACCELERATOR PEDAL ASSY, (see page 7-3 for details)
21	8866-2105	1	ELBOW, 90 DEGREES, (swivel nut)	*49	8471-8688	1	HOSE ASSY
22	8363-3002	1	STRAIGHT THREAD CONNECTOR	50	9114-6059	1	BRAKE PEDAL
23	9020-7856	1	COPPER GASKET	51	9108-3136	4	BUSHING
24	8471-8690	1	HOSE ASSY	52	9116-3093	1	FOOT SWITCH
25	8866-2019	1	CONNECTOR, (includes item 26)	53	8820-1005	3	HEX HD CAPSCREW, 1/4-20X1, GR5
26	8859-1206	3	O-RING	54	8856-1107	3	FLAT WASHER, 1/4
27	8866-2120	1	ELBOW, 45 DEGREES, (swivel nut)				

**NOTE: WHEN ITEM 9 IS ORDERED,  
 REPLACE SCREWS PROVIDED  
 FROM VENDOR WITH ITEM 11.**

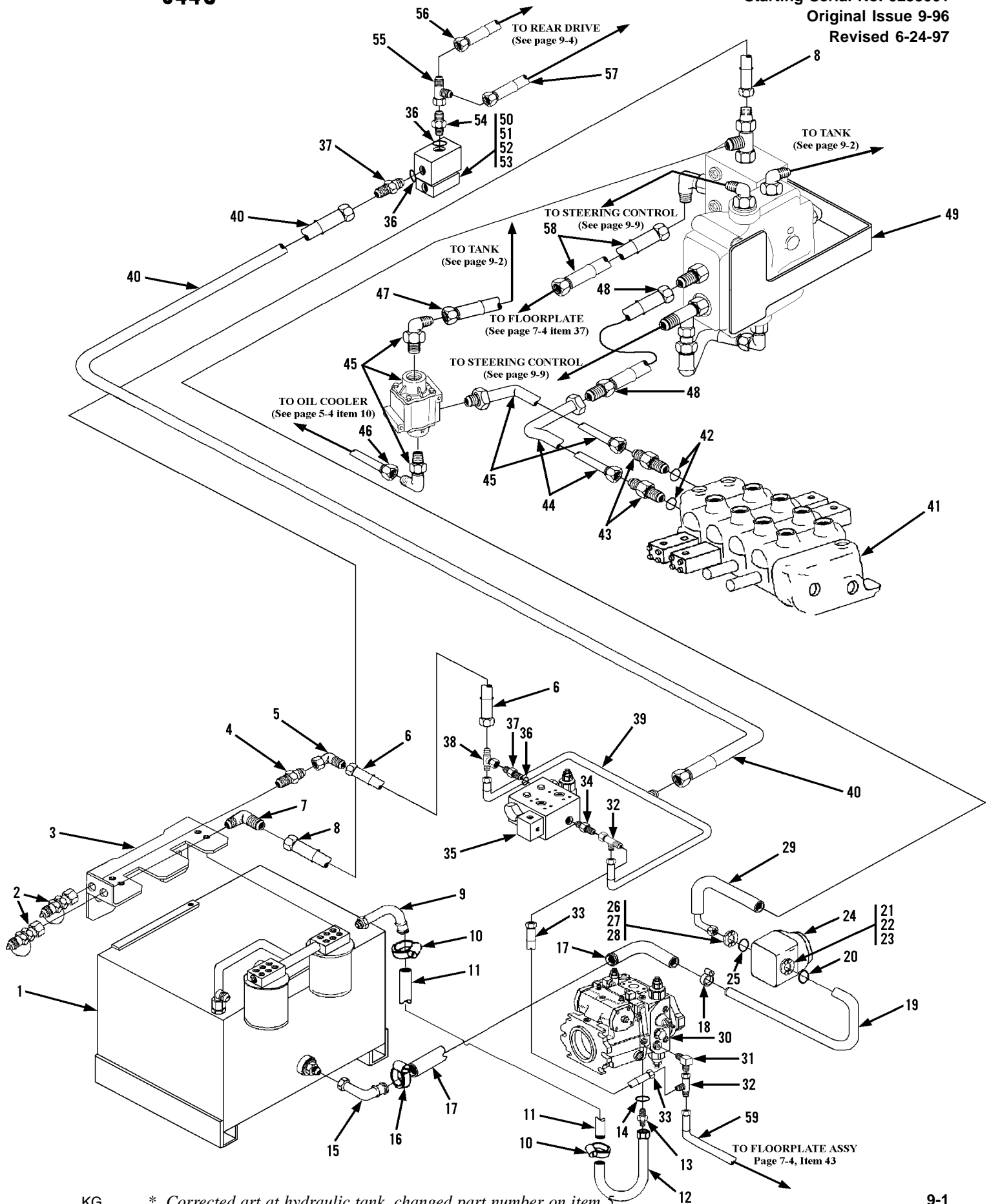


Item	Part No.	Qty.	Description Of Part
	9114-4190	Ref	STEERING CONTROL UNIT SEAL KIT
1	9060-0274	1	STEERING CAP
2	9114-4191	1	STEERING WHEEL NUT
3	8830-1311	2	FLAT HD MACHINE SCREW, 1/4-20 x 1
4	9020-2230	1	SPINNER KNOB
5	8850-1616	2	HEX NUT, 1/4-20
6	9060-0273	1	STEERING WHEEL
7	9114-4192	1	WASHER
8	9116-3012	1	STEERING COLUMN (includes items 2 & 7)
9	9116-3013	1	F/N/R SHIFTER (includes item 10)
* 10	9114-4458	1	CLAMP SET
11	8319-1059	2	HEX HD CAPSCREW, M5X0.8, (torque to 30-35 in.lbs.)
12	8820-1035	2	HEX HD CAPSCREW, 3/8-16 x 1
13	8855-1011	2	LOCKWASHER, 3/8
14	9114-3020	1	STEERING CONTROL UNIT
15	9116-3020	1	DASH WIRING HARNESS
			NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.

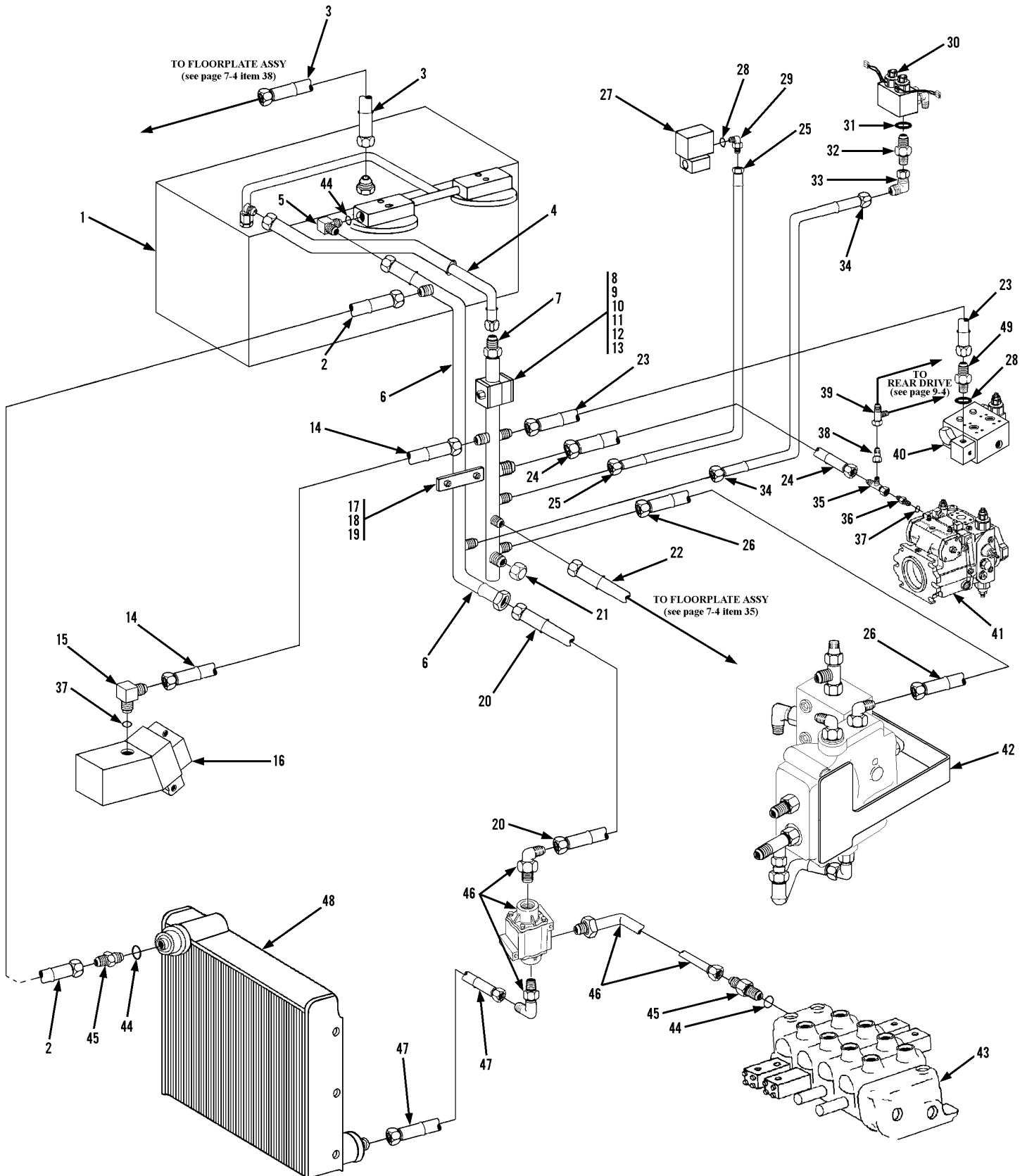




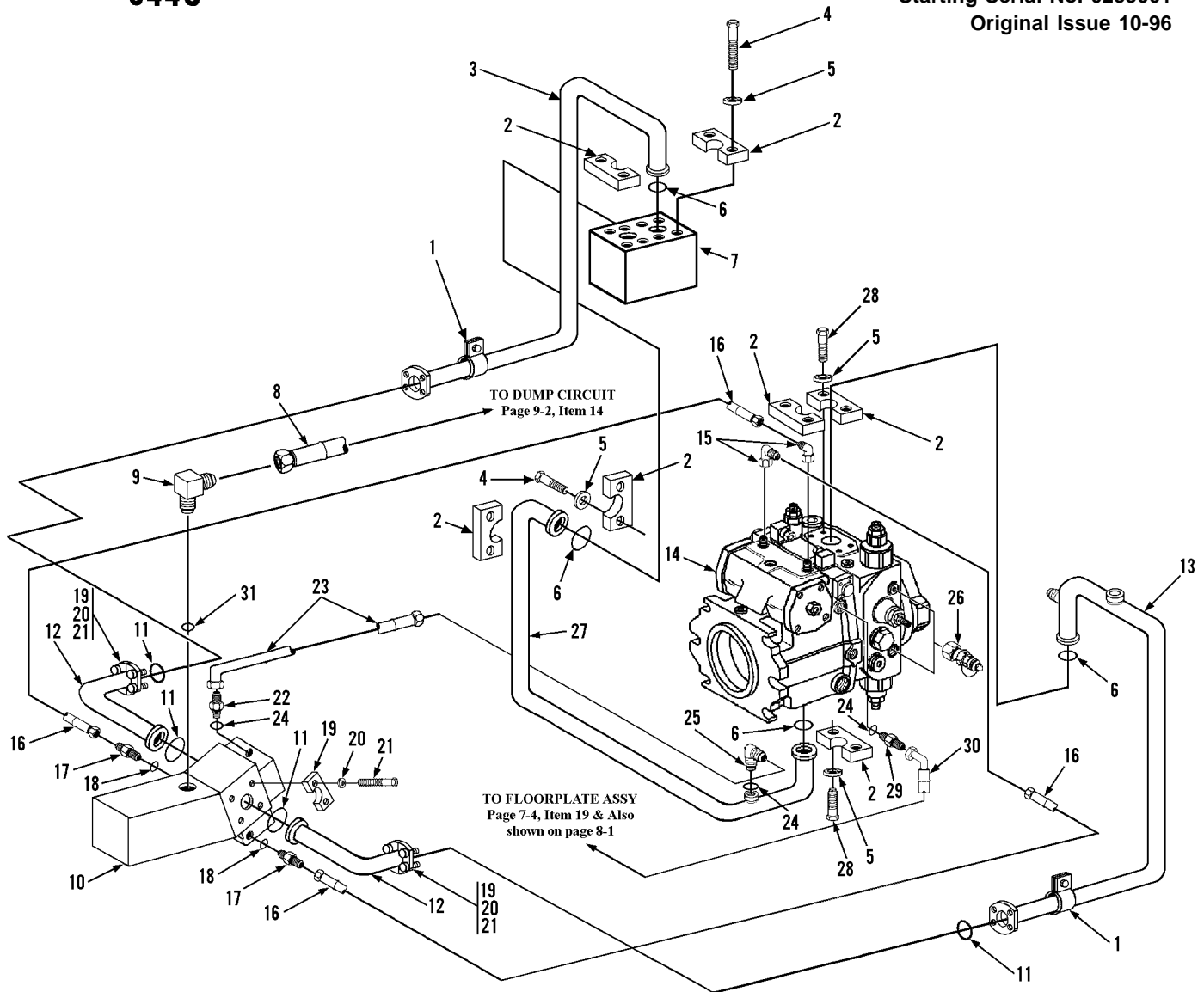
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
1	8471-8759	1	HOSE ASSY	10	8820-1023	1	HEX HD CAPSCREW, 5/16-18X1 3/4, GR5
2		Ref	SOLENOID VALVE (see page 10-11 for details)	11	7713-3168	3	CLAMP SET, 1/2-1/2
3	8820-1008	2	HEX HD CAPSCREW, 1/4-20X1 3/4, GR5	12	7713-3389	1	STACK BOLT
4	8855-1009	2	LOCKWASHER, 1/4	13	7713-3390	1	SAFETY CLIP
5	8856-1107	2	FLAT WASHER, 1/4	14	8471-8753	1	HOSE ASSY
6	8866-2064	1	ELBOW, 90 DEGREES (includes item 7)	15	7713-3306	2	STACK BOLT
7	8859-1204	1	O-RING	16	8866-2105	1	ELBOW, 90 DEGREES (swivel nut)
8	7713-3136	3	CLAMP SET, 3/4-3/4	17	8363-3002	1	STRAIGHT THREAD CONNECTOR
9	7713-3137	3	COVER PLATE	18	9020-7856	1	COPPER GASKET
				19		Ref	BRAKE VALVE (see page 10-10 for details)



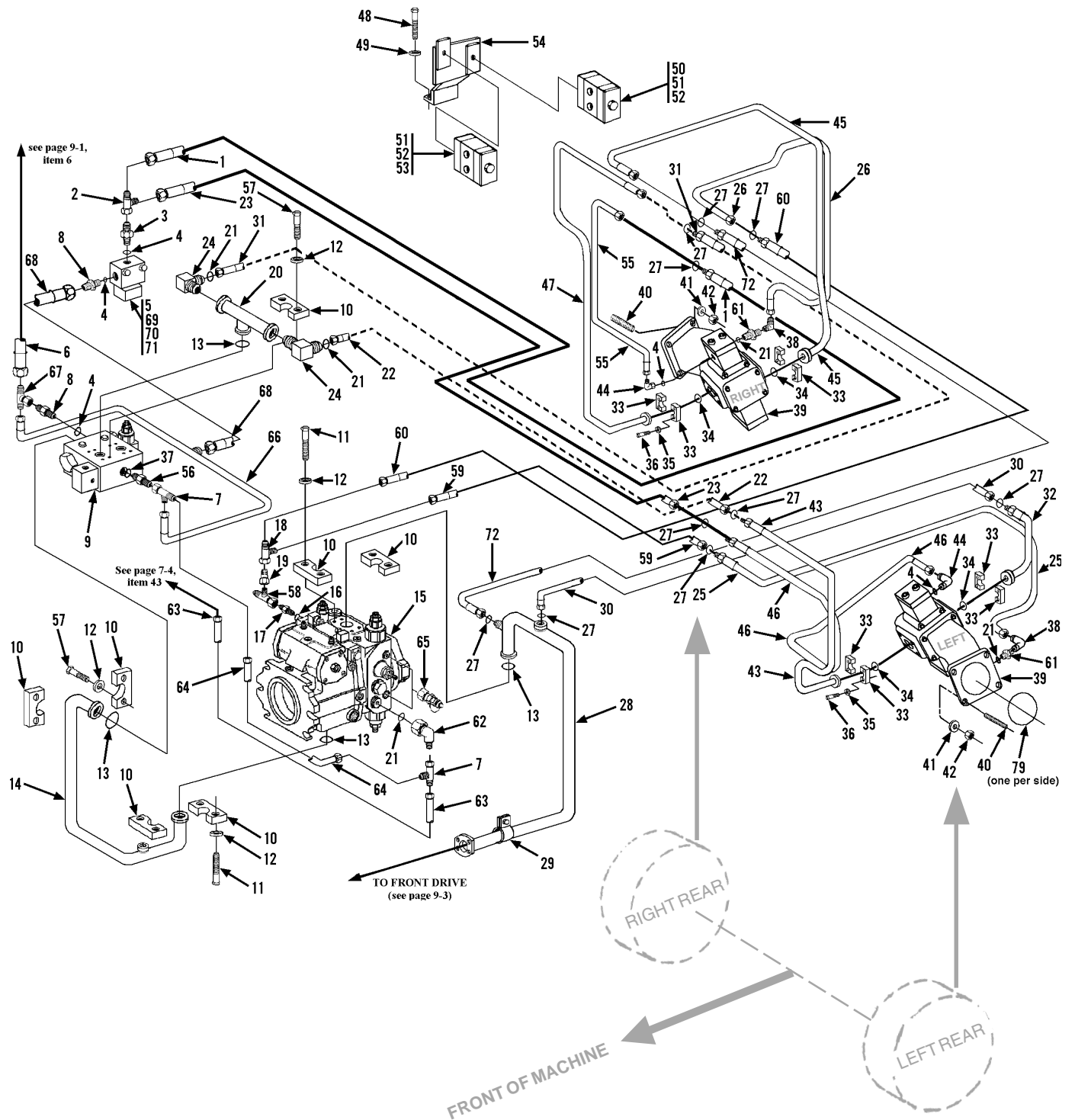
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
1		Ref	HYDRAULIC RESERVOIR ASSY (see page 10-15 for details)	31	9108-3222	1	REDUCING CONNECTOR, 90 DEGREE
2	9114-3172	2	MINI CHECK COUPLING	32	8866-2239	2	SWIVEL NUT RUN TEE, 3/8 TUBE
3		Ref	FILTER SUPPORT (see page 10-15 for details)	33	7713-3447	1	HOSE ASSY
4	8866-1084	1	BULKHEAD UNION	34	9108-3306	1	CONNECTOR (includes o-ring)
* 5	8866-2105	1	ELBOW, 90 DEGREE (swivel nut)		8859-1206	1	O-RING
6	8471-8700	1	HOSE ASSY	35		Ref	TRACTION LOCK VALVE (see page 10-21 for details)
7	9002-7179	1	BULKHEAD UNION - 90 DEGREE	36	8859-1204	3	O-RING
8	8471-8701	1	HOSE ASSY	37	8866-2005	2	CONNECTOR (includes item 36)
9	8067-3009	1	90 DEGREE BEADED INSERT	38	8866-2224	1	SWIVEL NUT BRANCH TEE
10	9002-8695	2	BAND CLAMP	39	9116-3098	1	TUBE ASSY
11	9114-3143	1	HOSE ASSY	40	8471-8425	1	HOSE ASSY
12	9114-3087	1	INTAKE TUBE	41		Ref	MAIN CONTROL VALVE (see page 10-14 for details)
13	8866-2011	1	CONNECTOR (includes item 14)	42	8859-1210	2	O-RING
14	8859-1210	1	O-RING	43	8866-2028	2	CONNECTOR (includes item 42)
15	9114-3059	1	TUBE ASSY	44	9114-3058	1	TUBE ASSY
16	9002-8482	1	HOSE CLAMP	45		Ref	THERMAL BYPASS VALVE ASSY (see page 10-12 for details)
17	7736-3128	1	HOSE ASSY	46	8471-8945	1	HOSE ASSY
18	8093-3070	1	BAND CLAMP	47	8471-8947	1	HOSE ASSY
19	9114-3121	1	SUCTION TUBE	48	8471-8625	1	HOSE ASSY
20	8859-1027	1	O-RING	49		Ref	FLOW DIVIDER ASSY (see page 10-9 for details)
21	8471-1334	2	FLANGE CLAMP	50		Ref	SOLENOID VALVE (see page 10-11 for details)
22	8820-1051	4	HEX HD CAPSCREW, 7/16-14X1 1/4, GR5	51	8820-1008	2	HEX HD CAPSCREW, 1/4-20X1 3/4, GR5
23	8855-1012	4	LOCKWASHER, 7/16	52	8856-1001	2	FLAT WASHER, 1/4
24		Ref	MAIN HYDRAULIC PUMP (see page 10-17 for details)	53	8855-1009	2	LOCKWASHER, 1/4
25	8859-1024	1	O-RING	54	8866-2017	1	CONNECTOR (includes item 36)
26	8471-1333	4	FLANGE CLAMP	55	8866-2237	1	SWIVEL NUT RUN TEE, 1/4 TUBE
27	8820-1036	4	HEX HD CAPSCREW, 3/8-16X1 1/4, GR5	56	8471-8752	1	HOSE ASSY
28	8855-1011	4	LOCKWASHER, 3/8	57	8471-8751	1	HOSE ASSY
29	8471-8639	1	HOSE ASSY	58	8471-8201	1	HOSE ASSY
30		Ref	HYDROSTATIC TRANSMISSION (see page 10-18 for details)	59	8471-8699	1	HOSE ASSY



Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
1		Ref	HYDRAULIC RESERVOIR ASSY (see page 10-15 for details)	27		Ref	SOLENOID VALVE (see page 10-11 for details)
2	8471-8979	1	HOSE ASSY	28	8859-1204	2	O-RING
3	8471-8748	1	HOSE ASSY	29	8866-2064	1	ELBOW, 90 DEGREES (includes item 28)
* 4	8471-8968	1	HOSE ASSY	30		Ref	STABILIZER VALVE ASSY (see page 10-23 for details)
5	8866-2070	1	ELBOW, 90 DEGREES (includes item 44)	31	8859-1206	1	O-RING
6	9114-3273	1	DUMP TUBE	32	8866-2019	1	CONNECTOR (includes item 31)
7	9116-3140	1	TUBE ASSY	33	8866-2120	1	ELBOW, 45 DEGREES (swivel nut)
8	7713-3053	1	CLAMP SET	34	8471-8287	1	HOSE ASSY
9	7713-3052	1	COVER PLATE	35	8866-2242	1	SWIVEL NUT RUN TEE, 3/4 TUBE
10	8820-1010	2	HEX HD CAPSCREW, 1/4-20X2 1/4, GR5	36	8866-2008	1	CONNECTOR (includes item 37)
11	8850-1004	2	HEX NUT, 1/4-20	37	8859-1207	2	O-RING
12	8855-1009	2	LOCKWASHER, 1/4	38	8365-1133	1	REDUCER W/ADAPTER
13	8856-1107	2	FLAT WASHER, 1/4	39	8866-2239	1	SWIVEL NUT RUN TEE, 3/8 TUBE
14	8471-8999	1	HOSE ASSY	40		Ref	TRACTION LOCK VALVE (see page 10-21 for details)
15	9105-3450	1	REDUCER ELBOW (includes item 37)	41		Ref	HYDROSTATIC TRANSMISSION (see page 10-18 for details)
16		Ref	FRONT DRIVE MOTOR (see page 10-16 for details)	42		Ref	FLOW DIVIDER ASSY (see page 10-9 for details)
17	7713-3076	1	CLAMP	43		Ref	MAIN CONTROL VALVE (see page 10-14 for details)
18	7713-3075	1	COVER PLATE	44	8859-1210	3	O-RING
19	8820-1011	2	HEX HD CAPSCREW, 1/4-20X2 1/2, GR5	45	8866-2028	2	CONNECTOR (includes item 44)
20	8471-8947	1	HOSE ASSY	46		Ref	THERMAL BYPASS VALVE ASSY (see page 10-12 for details)
21	8866-1364	1	CAP	47	8471-8945	1	HOSE ASSY
22	8471-8635	1	HOSE ASSY	48		Ref	OIL COOLER ASSY (see page 5-4 for details)
23	8471-8745	1	HOSE ASSY	49	8866-2005	1	CONNECTOR (includes item 28)
24	8471-8956	1	HOSE ASSY				
25	8471-8746	1	HOSE ASSY				
26	8471-8743	1	HOSE ASSY				

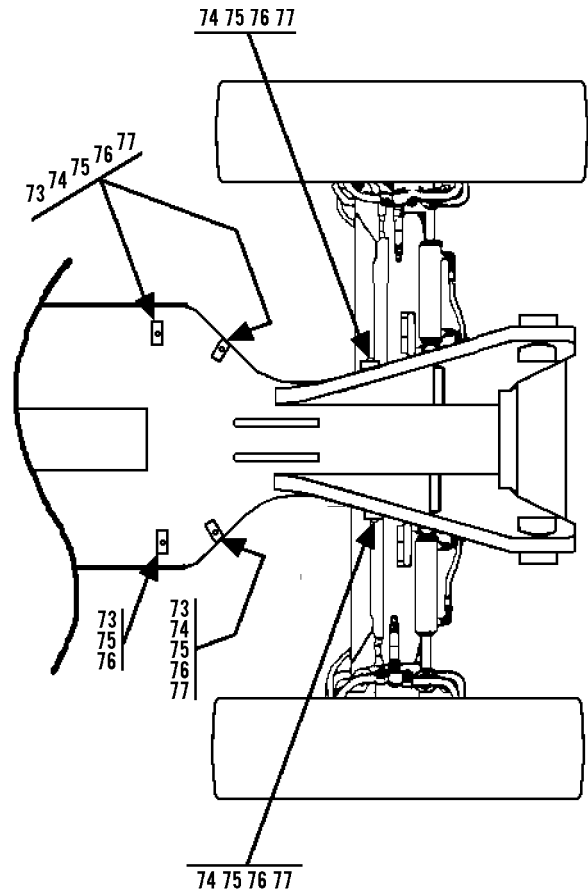


Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
1	9020-5792	2	CUSHION CLAMP	16	8471-8406	2	HOSE ASSY
2	8471-2738	8	SPLIT FLANGE CLAMP	17	8866-2003	2	CONNECTOR (includes item 18)
3	9108-3418	1	TUBE ASSY	18	8859-1202	2	O-RING
4	8320-1155	8	HEX HD CAPSCREW, 7/16-14X1-3/4, GR8	19	8471-2739	8	SPLIT FLANGE CLAMP
5	8855-1012	16	LOCKWASHER, 7/16	20	8855-1013	16	LOCKWASHER, 1/2
6	9108-3106	4	O-RING	21	8320-1120	16	HEX HD CAPSCREW, 1/2-13X1-3/4, GR5
7		Ref	TRACTION LOCK VALVE (see page 10-21 for details)	22	8866-2017	1	CONNECTOR (includes item 24)
8	8471-8999	1	HOSE ASSY	23	8471-8929	1	HOSE ASSY
9	9105-3450	1	ELBOW, 90 DEGREES (includes item 31)	24	8859-1204	3	O-RING
10		Ref	FRONT DRIVE MOTOR (see page 10-16 for details)	25	9002-7906	1	ELBOW, 90 DEGREES (includes item 24)
11	9108-3339	4	O-RING	26	9105-3020	2	TEST COUPLING
12	8471-8845	2	HOSE ASSY	27	9116-3201	1	TUBE ASSY
13	9116-3122	1	TUBE ASSY	28	8320-1135	8	HEX HD CAPSCREW, 7/16-14X1-1/2, GR8
14		Ref	HYDROSTATIC TRANSMISSION (see page 10-18 for details)	29	8866-2005	1	CONNECTOR (includes item 24)
15	9002-7906	2	ELBOW, 90 DEGREES (includes o-ring)	30	8471-8478	1	HOSE ASSY
	8859-1204	2	O-RING	31	8859-1207	1	O-RING



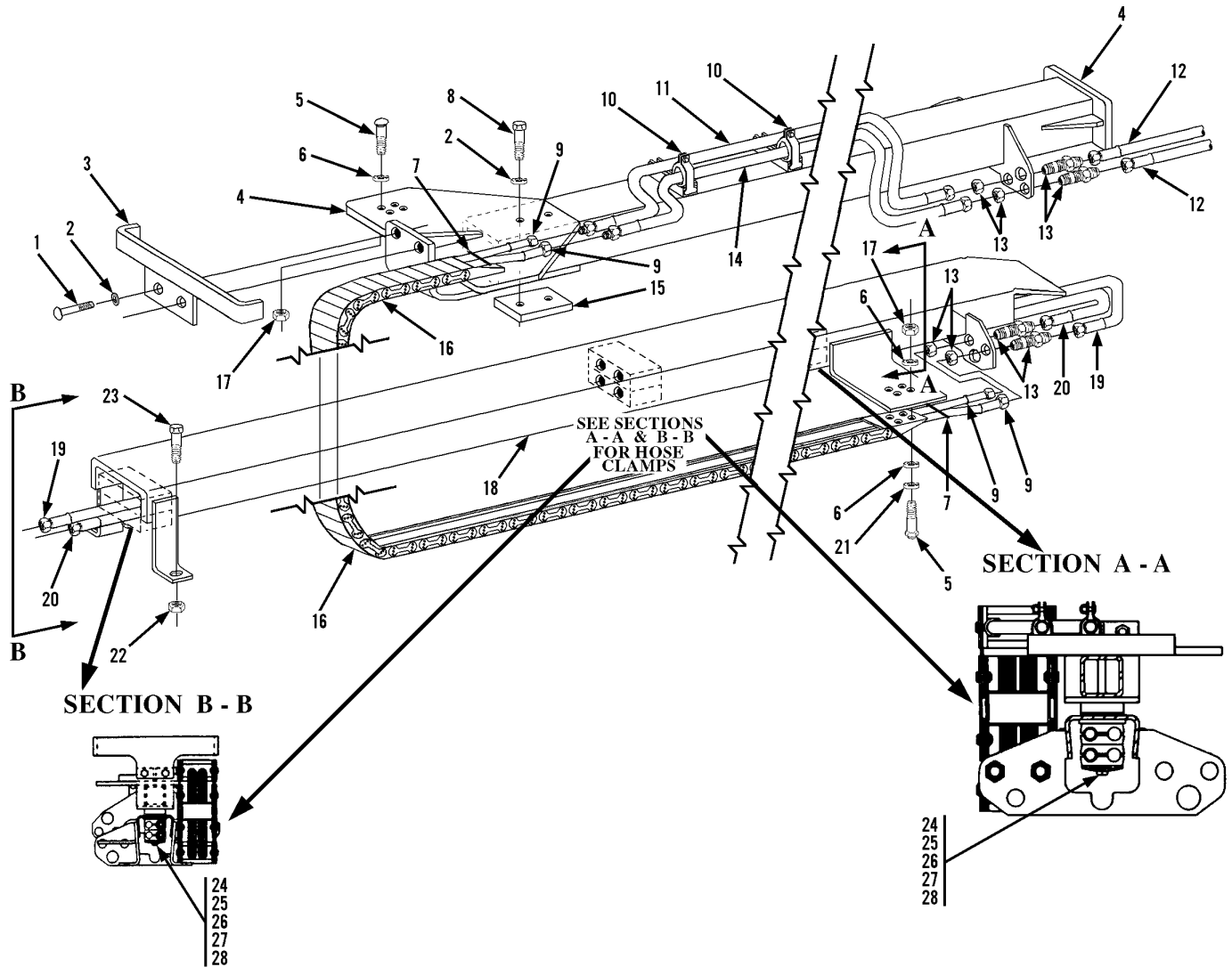
**REAR DRIVE HOSE CLAMP LOCATIONS**

Item	Part No.	Qty.	Description Of Part
* 1	8471-8752	1	HOSE ASSEMBLY
2	8866-2237	1	SWIVEL NUT RUN TEE, 1/4 TUBE
3	8366-2017	1	CONNECTOR (includes item 4)
4	8859-1204	5	O-RING
5		Ref	SOLENOID VALVE (see page 10-11 for details)
6	8471-8700	1	HOSE ASSY
7	8866-2239	2	SWIVEL NUT RUN TEE, 3/8 TUBE
8	8866-2005	2	CONNECTOR (includes item 4)
9		Ref	TRACTION LOCK VALVE (see page 10-21 for details)
10	8471-2738	8	SPLIT FLANGE CLAMP
11	8320-1135	8	HEX HD CAPSCREW, 7/16-14X1-1/2
12	8855-1012	16	LOCKWASHER, 7/16
13	9108-3106	4	O-RING
14	9116-3201	1	TUBE ASSY
15		Ref	HYDROSTATIC TRANSMISSION (see page 10-18 for details)
16	8859-1207	1	O-RING
17	8866-2008	1	CONNECTOR (includes item 16)
18	8866-2240	1	SWIVEL NUT RUN TEE, 1/2 TUBE
19	8365-1133	1	REDUCER W/ADAPTER
20	9108-3266	1	TUBE ASSY
21	8859-1207	5	O-RING
22	8471-8739	1	HOSE ASSY
* 23	8471-8751	1	HOSE ASSY
24	8866-2332	2	ELBOW, 90 DEGREES (includes item 21)
25	9116-3053	1	TUBE ASSY
26	9116-3052	1	TUBE ASSY
27	8859-1508	6	O-RING
28	9116-3122	1	TUBE ASSY
29	9020-5792	1	CUSHION CLAMP
30	8471-8740	1	HOSE ASSY
31	8471-8741	1	HOSE ASSY
32	9116-3133	1	TUBE ASSY
33	8471-2737	8	SPLIT FLANGE CLAMP
34	8093-3066	4	O-RING
35	8855-1011	16	LOCKWASHER
36	8320-1115	16	HEX HD CAPSCREW, 3/8-16X1-1/4
37	8859-1206	1	O-RING
38	8866-2106	2	ELBOW, 90 DEGREES (swivel nut)
39		Ref	REAR DRIVE MOTOR (see page 10-22 for details)
40	9112-3092	8	STUD
41	8540-1340	8	HARDENED WASHER
42	9108-3449	8	HEX NUT
43	9116-3042	1	TUBE ASSY
44	8866-2064	2	ELBOW, 90 DEGREES (includes item 4)
45	9116-3134	1	TUBE ASSY
46	9116-3055	1	TUBE ASSY
47	9116-3041	1	TUBE ASSY
48	8820-1035	4	HEX HD CAPSCREW, 3/8-16X1, GR5
49	8855-1011	4	LOCKWASHER, 3/8
50	9121-3002	2	CLAMP SET
51	8820-1023	4	HEX HD CAPSCREW, 3/8-16X1-3/4
52	7713-3137	4	COVER PLATE
53	9116-3069	2	CLAMP HALF
54	9116-6055	1	R.H. TUBE SUPPORT (shown)
	9116-6056	1	L.H. TUBE SUPPORT

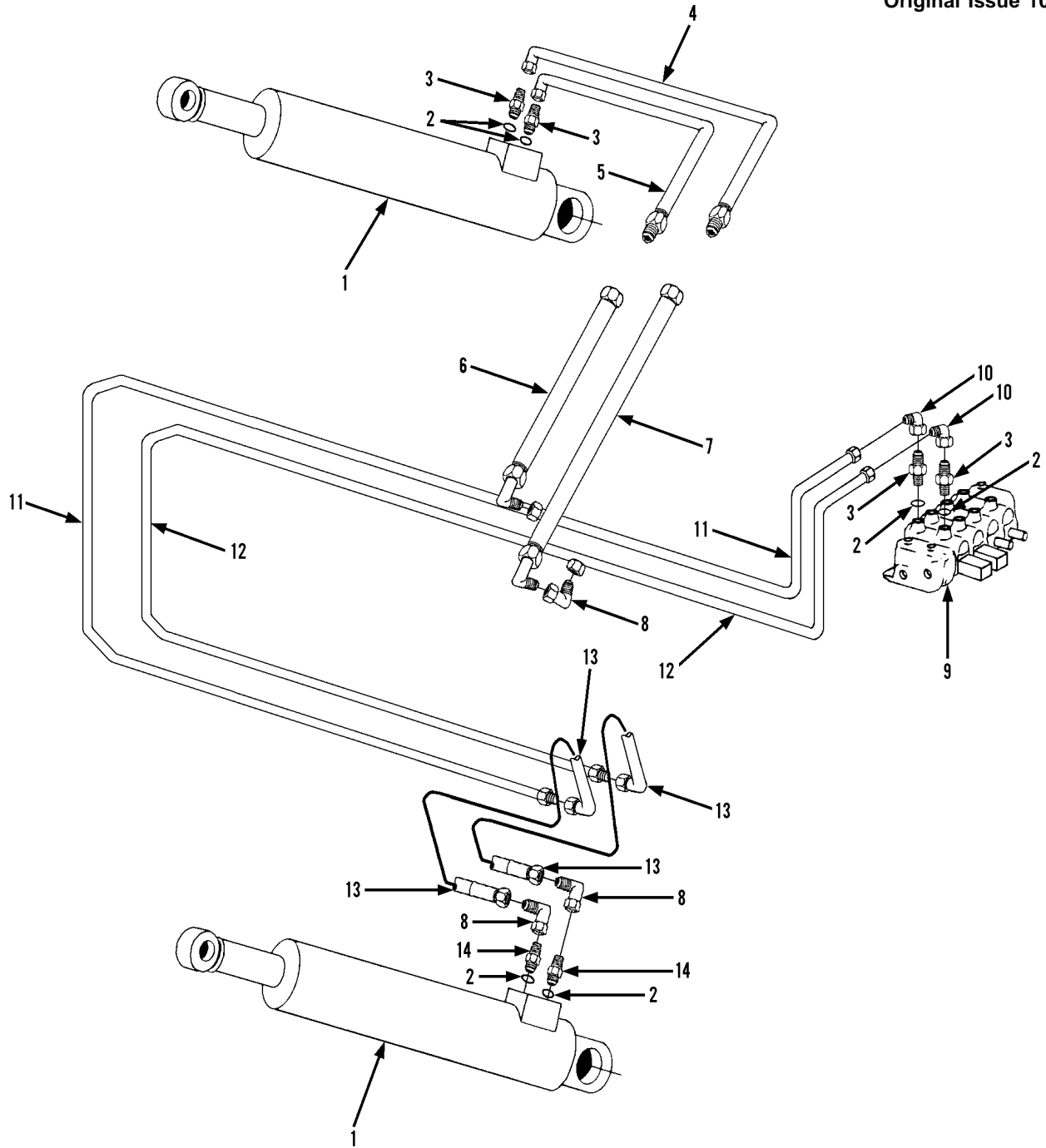


Item	Part No.	Qty.	Description Of Part
55	9116-3054	1	TUBE ASSY
56	9108-3306	1	CONNECTOR (includes item 37)
57	8320-1155	8	HEX HD CAPSCREW, 7/16-14X3/4
58	8866-2242	1	SWIVEL NUT RUN TEE, 3/4 TUBE
59	8471-8615	1	HOSE ASSY
60	8471-8614	1	HOSE ASSY
61	8866-2020	2	CONNECTOR (includes item 21)
62	9108-3222	1	REDUCING CONNECTOR (includes item 21)
63	8471-8699	1	HOSE ASSY
64	7713-3447	1	HOSE ASSY
65	9105-3020	2	TEST COUPLING
66	9116-3098	1	TUBE ASSY
67	8866-2224	1	SWIVEL NUT BRANCH TEE, 3/8 TUBE
68	8471-8425	1	HOSE ASSY
69	8856-1001	2	FLAT WASHER, 1/4
70	8820-1008	2	HEX HD CAPSCREW, 1/4-20X1-3/4
71	8855-1009	2	LOCKWASHER, 1/4
72	8471-8355	1	HOSE ASSY
73	7713-3279	7	CLAMP SET
74	7713-3306	3	STACK BOLT
75	8820-1023	4	HEX HD CAPSCREW, 5/16-18X1-3/4, GR5
76	7713-3137	4	COVER PLATE
77	7713-3390	4	SAFETY CLIP
78	9002-7187	12	NYLON TIE (not shown)(six needed per side for rear drive hoses)
79	9002-3159	2	O-RING (one each side)

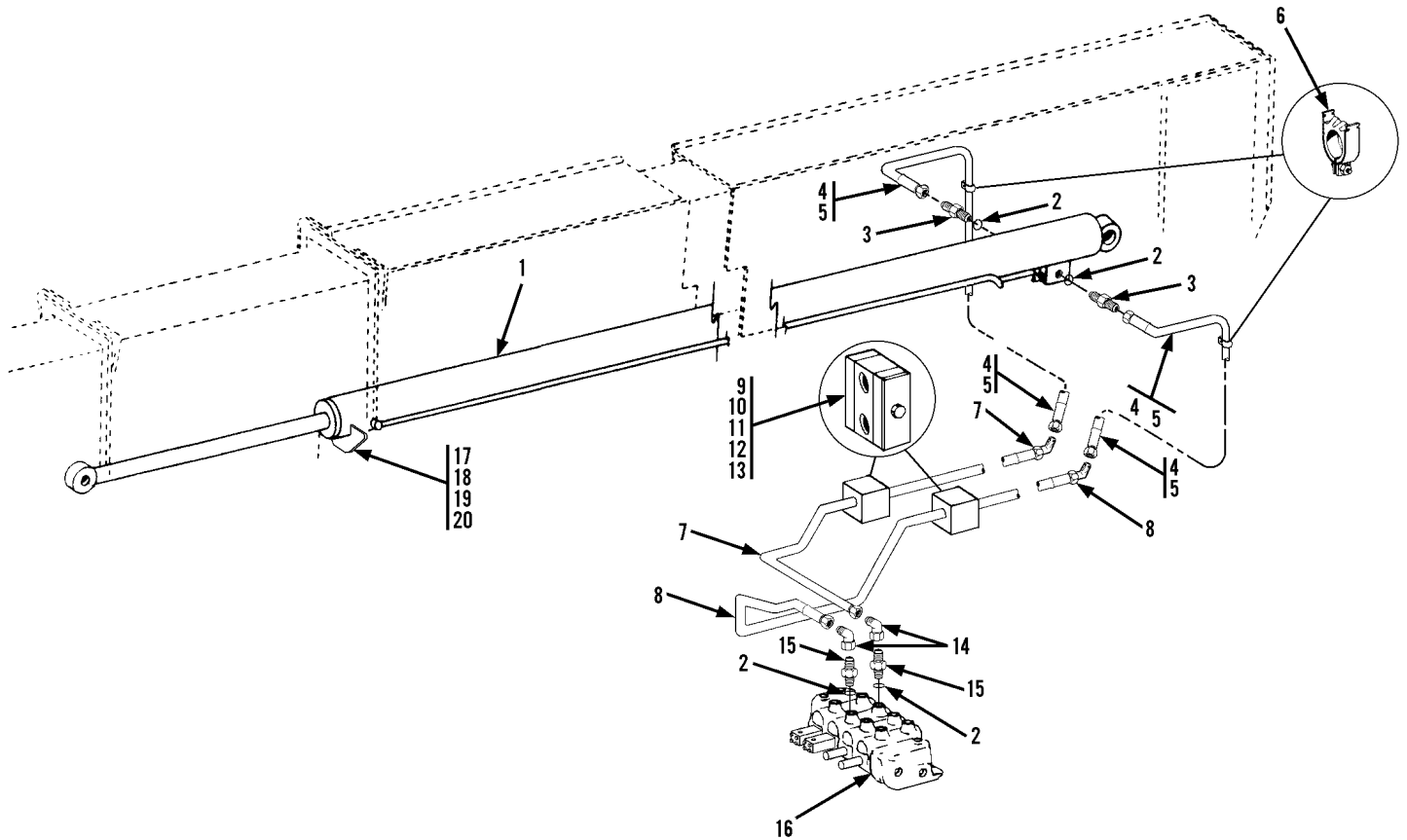




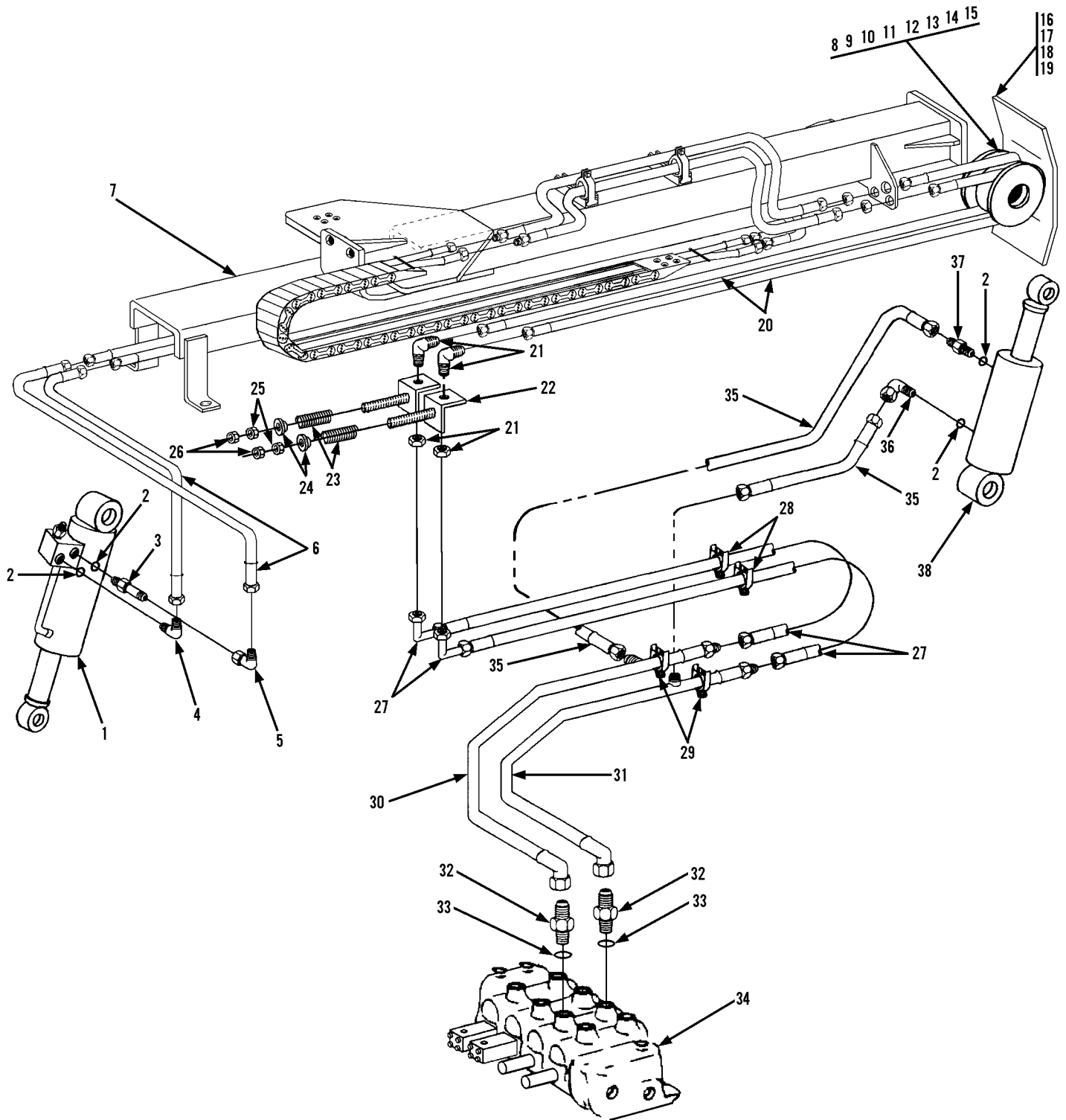
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9116-5007	1	BOOM HYDRAULICS SUB - ASSY (includes all items except 12, 22 & 23)	14	9116-3057	2	TUBE ASSY
1	8820-1035	2	HEX SOCKET CAPSCREW, 3/8-16X1	15	9103-3187	1	BEARING PAD
2	8855-1011	4	LOCKWASHER, 3/8	16	9116-3174	1	HOSE CARRIER
3	9116-1172	1	GUIDE BRACKET	17	8852-1306	8	LOCKNUT, 3/8-16
4	9116-6032	1	HYDRAULICS CARRIER	18	9116-6067	1	HYDRAULICS CARRIER
5	8826-1030	8	RND HD CAPSCREW, 3/8-16X1-1/4	19	9116-3059	1	TUBE ASSY
6	8856-1004	12	FLAT WASHER, 3/8	20	9116-3060	1	TUBE ASSY
7	9002-7187	4	TY-RAP	21	8856-1109	4	FLAT WASHER, 3/8
8	8820-1543	2	HEX HD CAPSCREW, 3/8-24X3-1/4, GR5	22	8852-1408	2	LOCKNUT, 1/2-20
9	8471-8959	2	HOSE ASSY	23	8320-1104	2	HEX HD CAPSCREW, 1/2-20X1-1/2, GR5
10	9108-3217	6	TUBE CLAMP	24	7713-3139	6	CLAMP SET
11	9116-3058	1	TUBE ASSY	25	7713-3140	3	COVER PLATE
*12	8471-9455	2	HOSE ASSY	26	7713-3389	3	STACK BOLT
13	8866-1085	4	BULKHEAD FITTING	27	7713-3390	3	SAFETY CLIP
				28	7713-3177	3	HEX HD CAPSCREW, 5/16-18X1-3/8



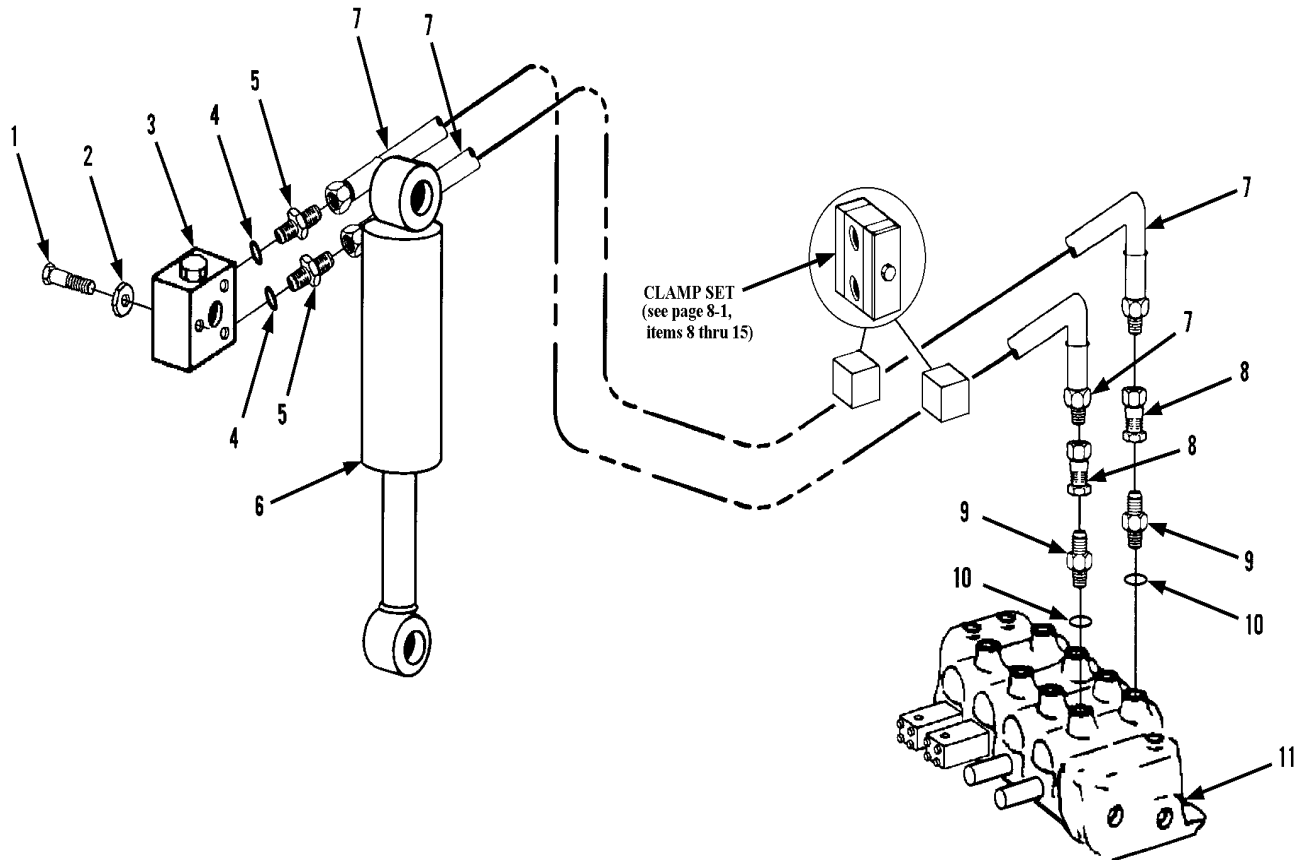
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
1		Ref	LIFT CYLINDER ASSY (see page 10-3 for details)	8	8866-2107	3	ELBOW, 90 DEGREES (swivel nut)
2	8859-1207	6	O-RING	9		Ref	MAIN CONTROL VALVE (see page 10-14 for details)
3	8866-2008	4	CONNECTOR (includes item 2)	10	8866-2108	2	ELBOW, 90 DEGREES (swivel nut)
4	9116-3220	1	TUBE ASSY	11	9116-3218	1	TUBE ASSY
5	9116-3219	1	TUBE ASSY	12	9116-3217	1	TUBE ASSY
6	8471-8893	1	HOSE ASSY	13	8471-8948	2	HOSE ASSY
7	8471-8894	1	HOSE ASSY	14	8866-2022	2	CONNECTOR (includes item 2)



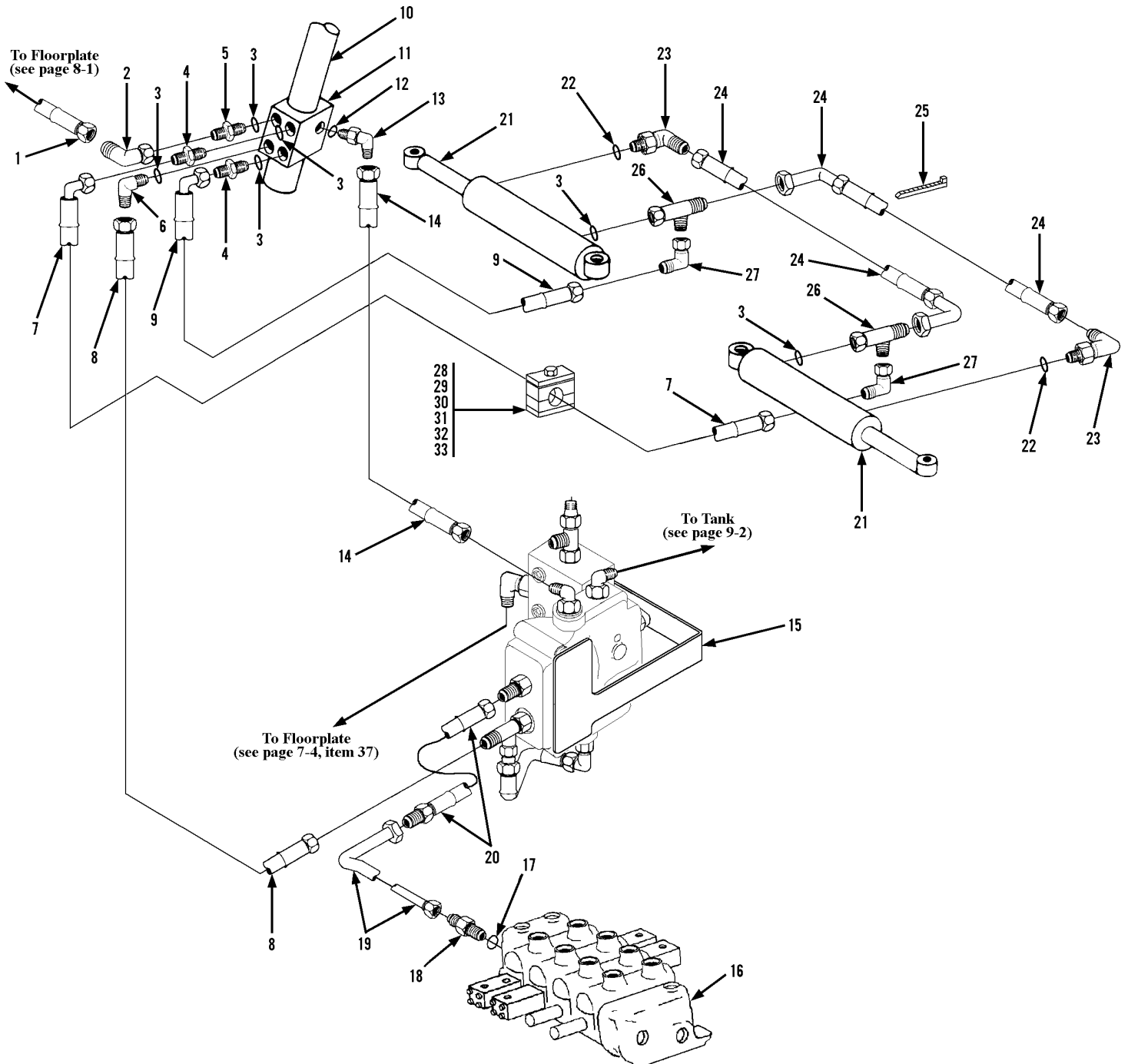
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
1		Ref	CROWD CYLINDER ASSY (see page 10-2 for details)	11	7713-3390	2	SAFETY CLIP
2	8859-1207	4	O-RING	12	7713-3137	2	COVER PLATE
3	8866-2022	2	CONNECTOR (includes item 2)	13	7713-3306	2	STACK BOLT
4	8471-8684	2	HOSE ASSY	14	8866-2108	2	ELBOW, 90 DEGREES (swivel nut)
5	9020-7464	2	HOSE SUPPORT	15	8866-2038	2	CONNECTOR (includes item 2)
6	9020-7463	2	CUSHION CLAMP	16		Ref	MAIN CONTROL VALVE (see page 10-14 for details)
7	9116-3095	1	TUBE ASSY	17	9116-1197	1	CROWD CYLINDER SUPPORT
8	9116-3094	1	TUBE ASSY	18	8820-1069	2	HEX HD CAPSCREW, 1/2-13X2, GR5
9	8820-1023	2	HEX HD CAPSCREW, 5/16-18X1-3/4, GR5	19	8855-1013	2	LOCKWASHER, 1/2
10	7713-3136	4	CLAMP SET	20	8850-1008	2	HEX NUT, 1/2-13



Item	Part No.	Qty.	Description Of Part
1		Ref	TILT CYLINDER ASSY (see page 10-1 for details)
2	8859-1206	4	O-RING
3	8866-2037	1	CONNECTOR (includes item 2)
4	8866-2066	1	ELBOW, 90 DEGREES (includes item 2)
5	8866-2107	1	ELBOW, 90 DEGREES (swivel nut)
6	8471-8632	2	HOSE ASSY
7		Ref	BOOM HYDRAULICS SUB-ASSY (see page 9-5 for details)
8	9114-3024	1	HOSE SHEAVE
9	9116-1138	1	HOSE SHEAVE PIN
10	8820-1074	1	HEX HD CAPSCREW, 1/2-13X3-1/4, GR5
11	8855-1013	1	LOCKWASHER, 1/2
12	9104-1449	AR	THRUSTWASHER
13	9104-1450	AR	THRUSTWASHER
14	9104-1451	2	THRUSTWASHER
15	9104-1596	AR	THRUSTWASHER
16	9116-6037	1	HOSE GUIDE BRACKET
17	8820-1032	3	HEX HD CAPSCREW, 3/8-16X5/8, GR5
18	8856-1004	3	FLAT WASHER, 3/8
19	8855-1011	3	LOCKWASHER, 3/8
*20	8471-9455	2	HOSE ASSY
21	9002-7180	2	BULKHEAD FITTING, 90 DEGREES
22	9116-6068	2	HOSE TAKE-UP WELDMENT
23	9112-3054	2	COMPRESSION SPRING
24	9112-1134	2	SPRING RETAINER
25	8850-1008	2	HEX NUT, 1/2-13
26	8850-1108	2	JAM NUT, 1/2-13
27	8471-9018	2	HOSE ASSY
28	9020-7464	8	CUSHION CLAMP
29	9020-7463	2	CUSHION CLAMP
30	9116-3166	1	TUBE ASSY
31	9116-3167	1	TUBE ASSY
32	8866-2008	2	CONNECTOR (includes item 33)
33	8859-1207	2	O-RING
34		Ref	MAIN CONTROL VALVE (see page 10-14 for details)
35	8471-8728	2	HOSE ASSY
36	8866-2086	1	CONNECTOR, 45 DEGREES (includes item 2)
37	8866-2007	1	CONNECTOR (includes item 2)
38		Ref	COMPENSATING CYLINDER (see page 10-4 for details)



Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
1	8820-1040	3	HEX HD CAPSCREW, 3/8-16X2-1/4, GR5	6		Ref	SWAY CYLINDER (see page 10-5 for details)
2	8855-1011	3	LOCKWASHER, 3/8	7	8471-8675	2	HOSE ASSY
3		Ref	SWAY CYLINDER VALVE (see page 10-19 for details)	8	8866-1341	2	TUBE END REDUCER (1/2x1/4)
4	8859-1012	2	O-RING		8866-1406	2	NUT
5	8866-2082	2	CONNECTOR (includes item 4)	9	8866-2020	2	CONNECTOR (includes item 10)
				10	8859-1207	2	O-RING
				11		Ref	MAIN CONTROL VALVE ASSY (see page 10-14 for details)

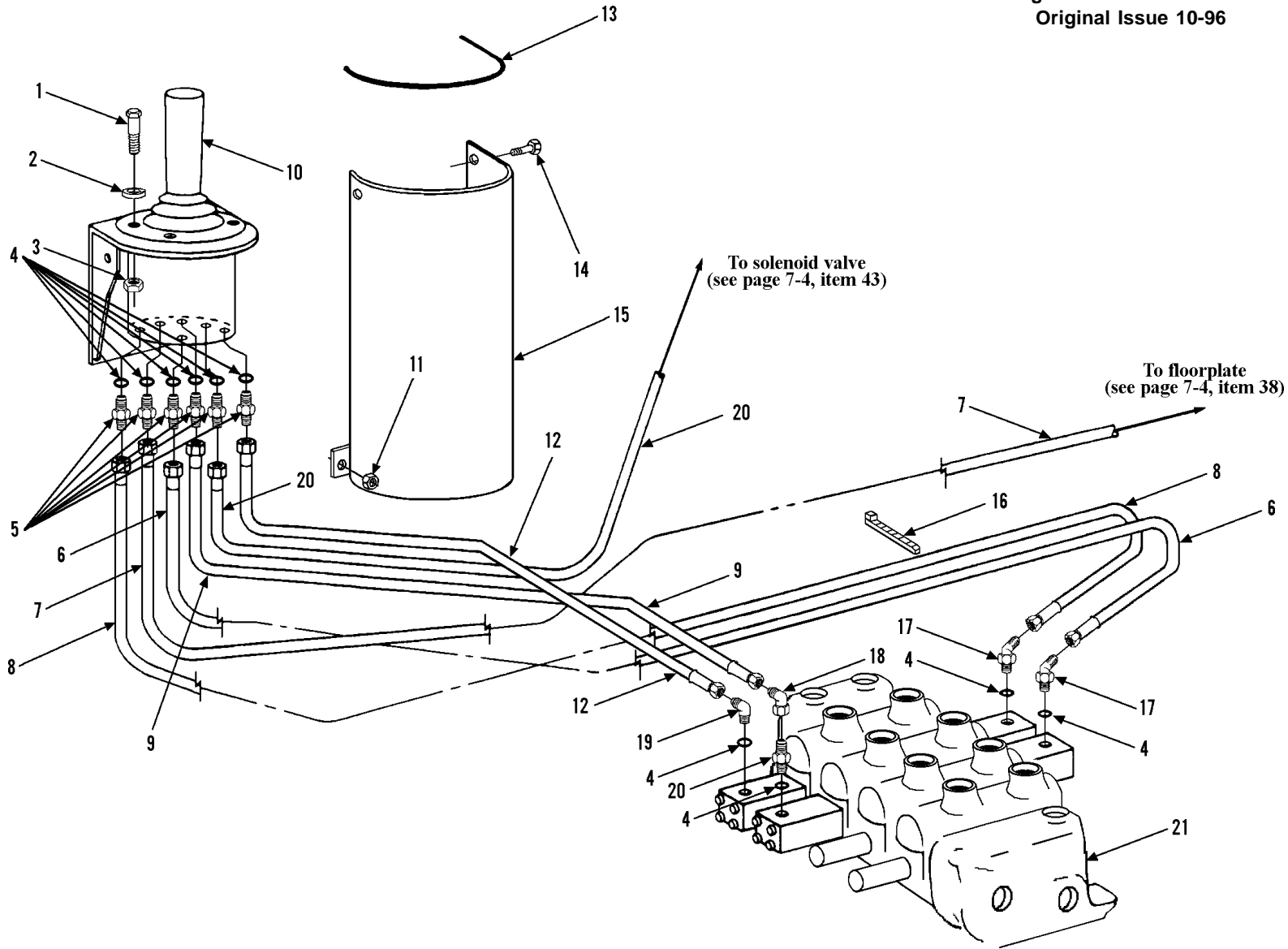


Item	Part No.	Qty.	Description Of Part
1	8471-8672	1	HOSE ASSY
2	8866-2105	1	ELBOW, 90 DEGREES (swivel nut)
3	8859-1205	5	O-RING
4	8866-2006	2	CONNECTOR (includes item 3)
5	8866-2018	1	CONNECTOR (includes item 3)
6	8866-2065	1	ELBOW, 90 DEGREES (includes item 3)
7	8471-8432	1	HOSE ASSY
8	8471-8671	1	HOSE ASSY
9	8471-8676	1	HOSE ASSY
10		Ref	STEERING COLUMN (see page 7-5 for details)
11		Ref	STEERING CONTROL UNIT (see page 7-5 for details)
12	8859-1202	1	O-RING
13	8866-2062	1	ELBOW, 90 DEGREES (includes item 12)
14	8471-8673	1	HOSE ASSY
15		Ref	FLOW DIVIDER ASSY (see page 10-9, item 18 for details)
16		Ref	MAIN CONTROL VALVE (see page 10-14 for details)
17	8859-1210	1	O-RING
18	8866-2028	1	CONNECTOR (includes item 17)
19	9114-3058	1	TUBE ASSY
20	8471-8625	1	HOSE ASSY
21		Ref	STEERING CYLINDER (see page 10-6 for details)
22	8859-1204	2	O-RING
23	8866-2064	2	ELBOW, 90 DEGREES (includes item 22)
24	8471-8202	2	HOSE ASSY
25	9002-7187	12	TIE WRAP
26	8866-2140	2	RUN TEE (includes item 3)
27	8866-2106	2	ELBOW, 90 DEGREES (swivel nut)
28	7713-3390	1	SAFETY CLIP
29	8820-1023	1	HEX HD CAPSCREW, 5/16-18X1-3/4, GR5
30	7732-3029	1	CLAMP SET
31	8366-3119	1	CLAMP SET
32	7713-3306	1	STACK BOLT
33	7713-3137	1	COVER PLATE

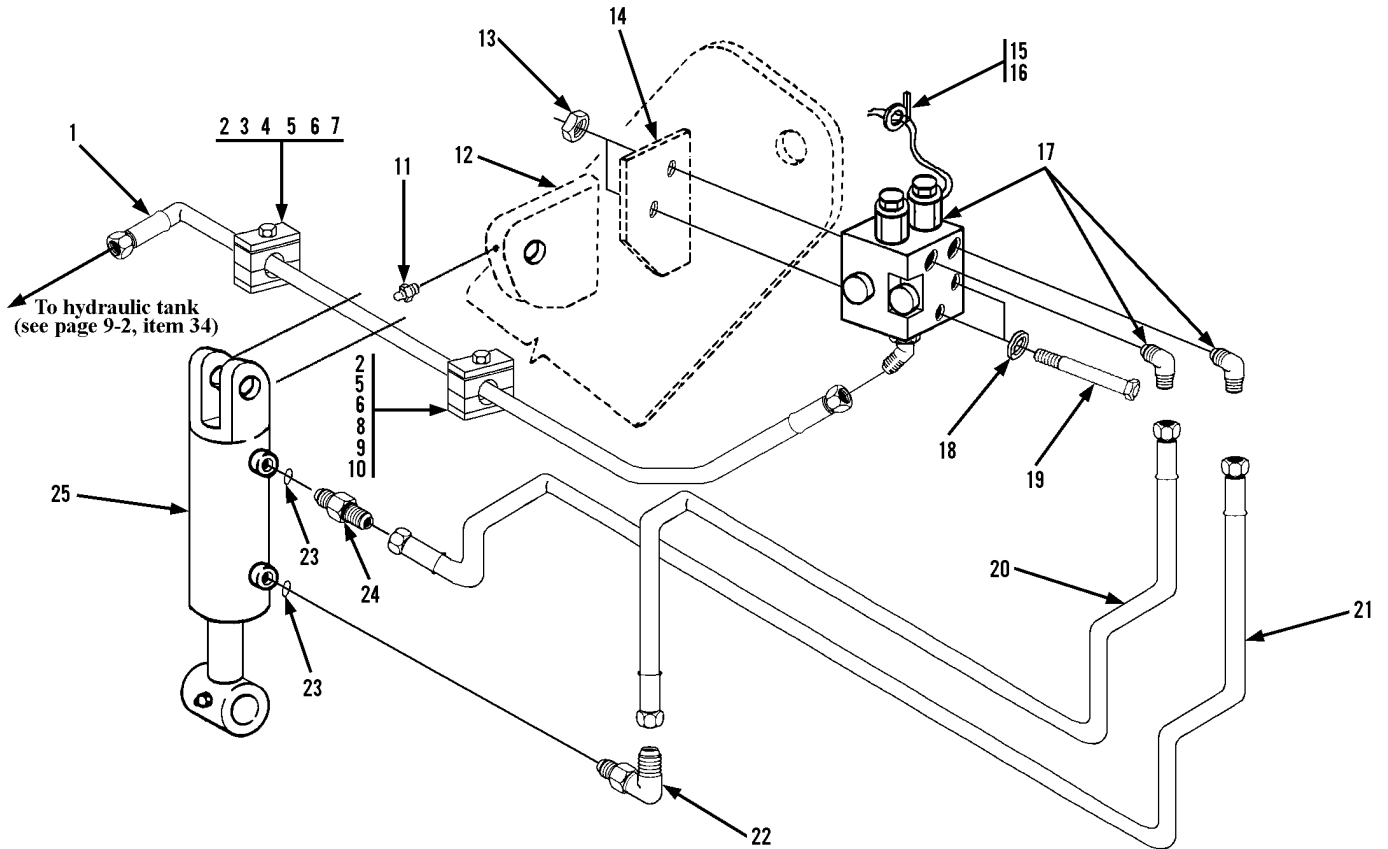


**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

**HYDRAULIC CIRCUITS**  
**Joystick Circuit**  
 Starting Serial No. 0255001  
 Original Issue 10-96



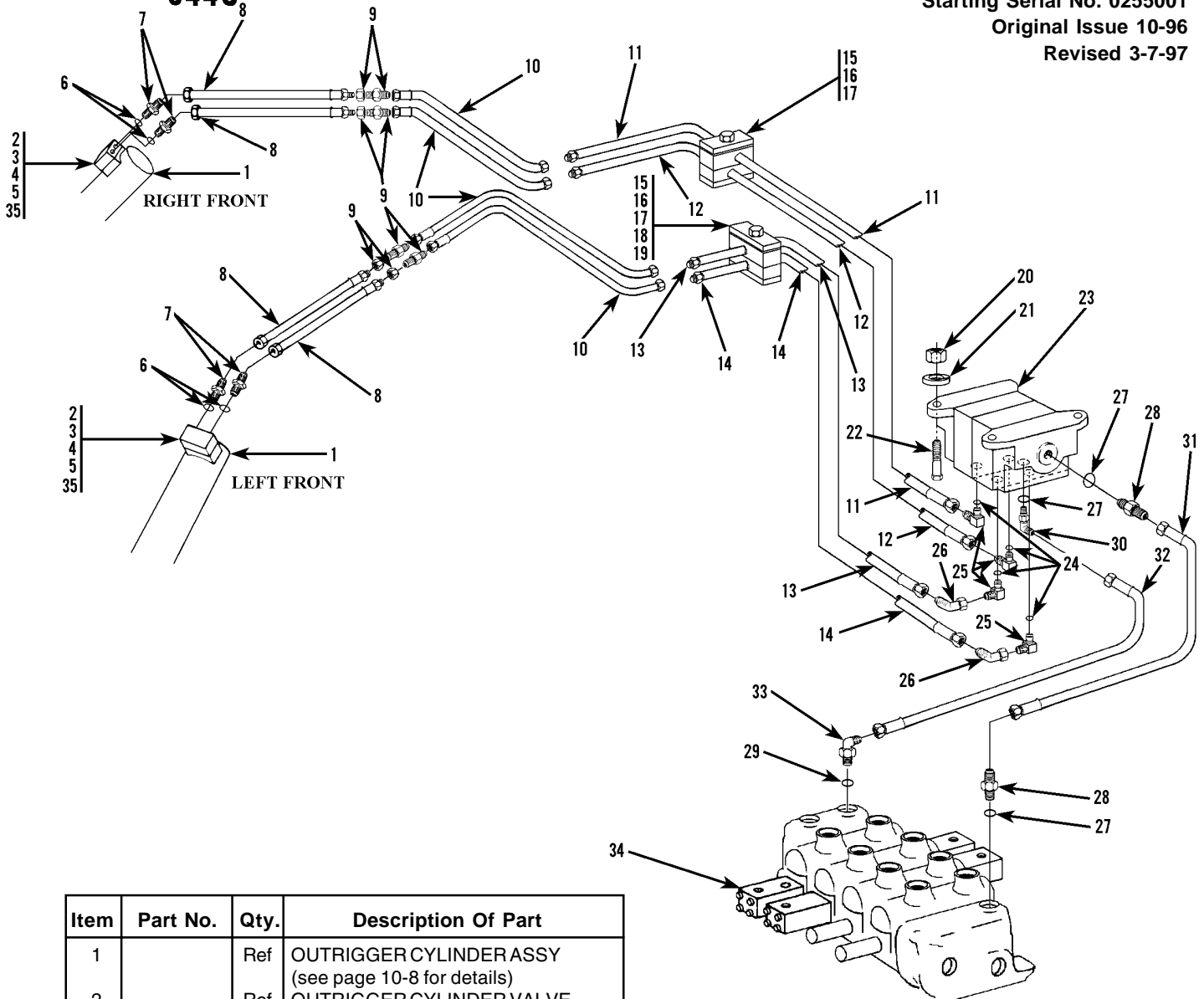
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
1	8826-1017	4	SOCKET BUTTON HD CAPSCREW, 1/4-20X7/8, GR5	12	7736-3126	1	HOSE ASSY (lift up)
2	8855-1009	4	LOCKWASHER, 1/4	13	9020-6199	AR	TRIM LOK
3	8850-1004	4	HEX NUT, 1/4-20	14	7714-3003	2	WHIZ SCREW, 5/16-18X5/8
4	8859-1204	10	O-RING	15	9114-6047	1	COVER
5	8866-2005	7	CONNECTOR (includes item 4)	16	9002-7187	AR	TIE WRAP
6	8471-7519	1	HOSE ASSY (crowd in)	17	8866-2084	2	ELBOW, 45 DEGREES (includes item 4)
7	8471-8735	1	HOSE ASSY (return)	18	8866-2105	1	ELBOW, 90 DEGREES (swivel nut)
8	7713-3197	1	HOSE ASSY (lift down)	19	8866-2064	1	ELBOW, 90 DEGREES (includes item 4)
9	8471-8377	1	HOSE ASSY (crowd out)	20	8471-8736	1	HOSE ASSY (pressure)
10		Ref	JOYSTICK (see page 10-20 for details)	21		Ref	MAIN CONTROL VALVE (see page 10-14 for details)
11	7714-3006	2	WHIZ LOCKNUT, 5/16-18				



Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
1	8471-9000	1	HOSE ASSY	14	9116-1379	1	VALVE MOUNT PLATE
2	9121-3002	2	CLAMP SET, 3/4-1/2	15	8662-1230	2	SUPPORT CLAMP
3	9108-3240	1	CLAMP SET, 5/8-1/2	16	7714-3006	2	WHIZ LOCK NUT, 5/16
4	7713-3140	1	COVER PLATE	17		Ref	STABILIZER VALVE ASSY (see page 10-23 for details)
5	7713-3306	2	STACK BOLT	18	8855-1011	2	LOCKWASHER, 3/8
6	7713-3390	2	SAFETY CLIP	19	8820-1047	2	HEX HD CAPSCREW, 3/8-16X4, GR5
7	7713-3177	1	HEX HD CAPSCREW, 5/16-18X1-3/8, GR5	20	7713-3145	1	HOSE ASSY
8	7713-3136	1	CLAMP SET, 3/4-3/4	21	8471-7560	1	HOSE ASSY
9	7713-3137	1	COVER PLATE	22	8866-2065	1	ELBOW, 90 DEGREES (includes item 23)
10	8820-1023	2	HEX HD CAPSCREW, 5/16-18X1-3/4, GR5	23	8859-1205	2	O-RING
11	8867-1008	1	LUBE FITTING, STRAIGHT 1/4-28	24	8866-2006	1	CONNECTOR (includes item 23)
12	9116-1083	1	STABILIZER LUG	25		Ref	STABILIZER CYLINDER ASSY (see page 10-7 for details)
13	8850-1006	2	HEX NUT, 3/8-16				

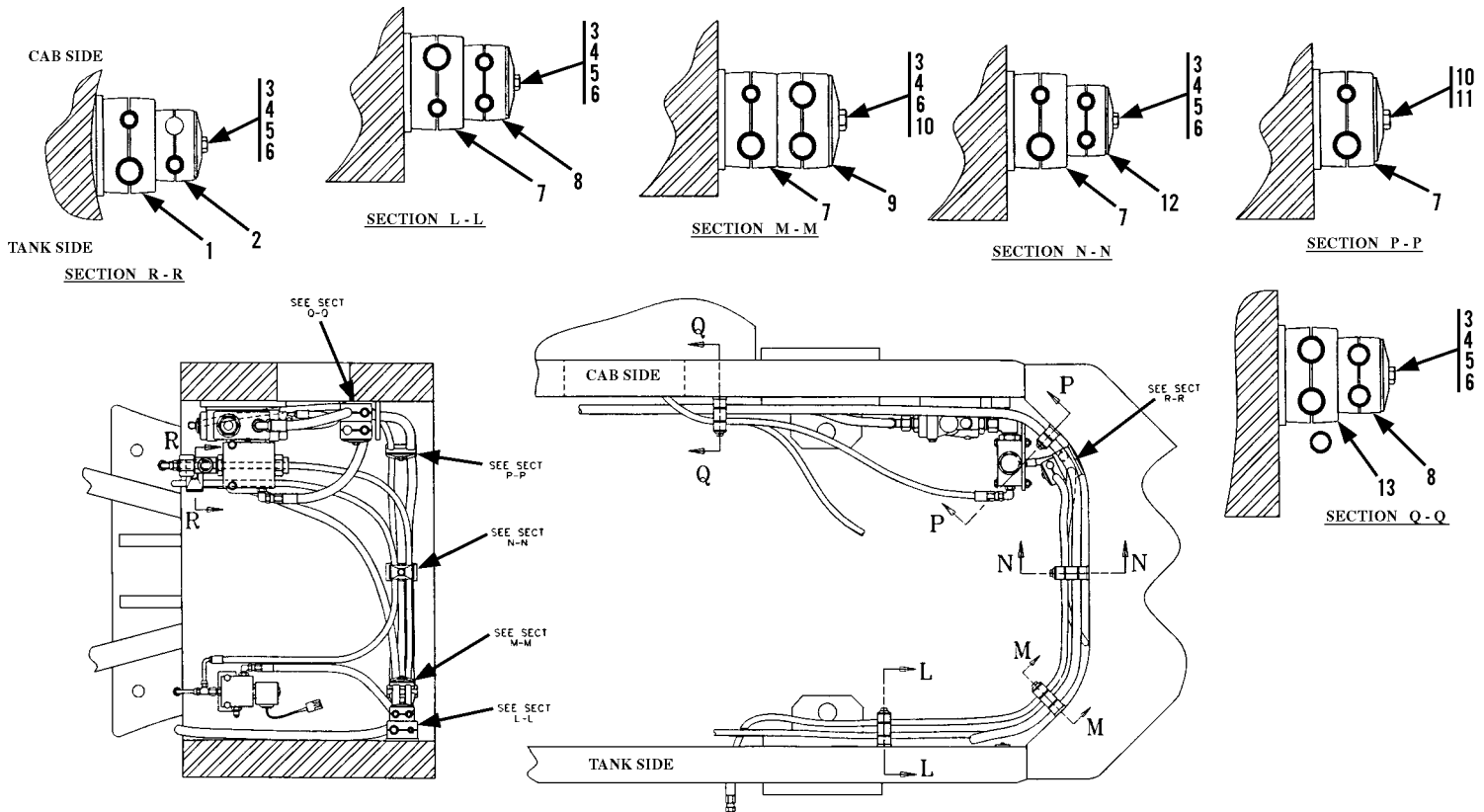
**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

**HYDRAULIC CIRCUITS**  
**Outrigger Cylinder**  
 Starting Serial No. 0255001  
 Original Issue 10-96  
 Revised 3-7-97



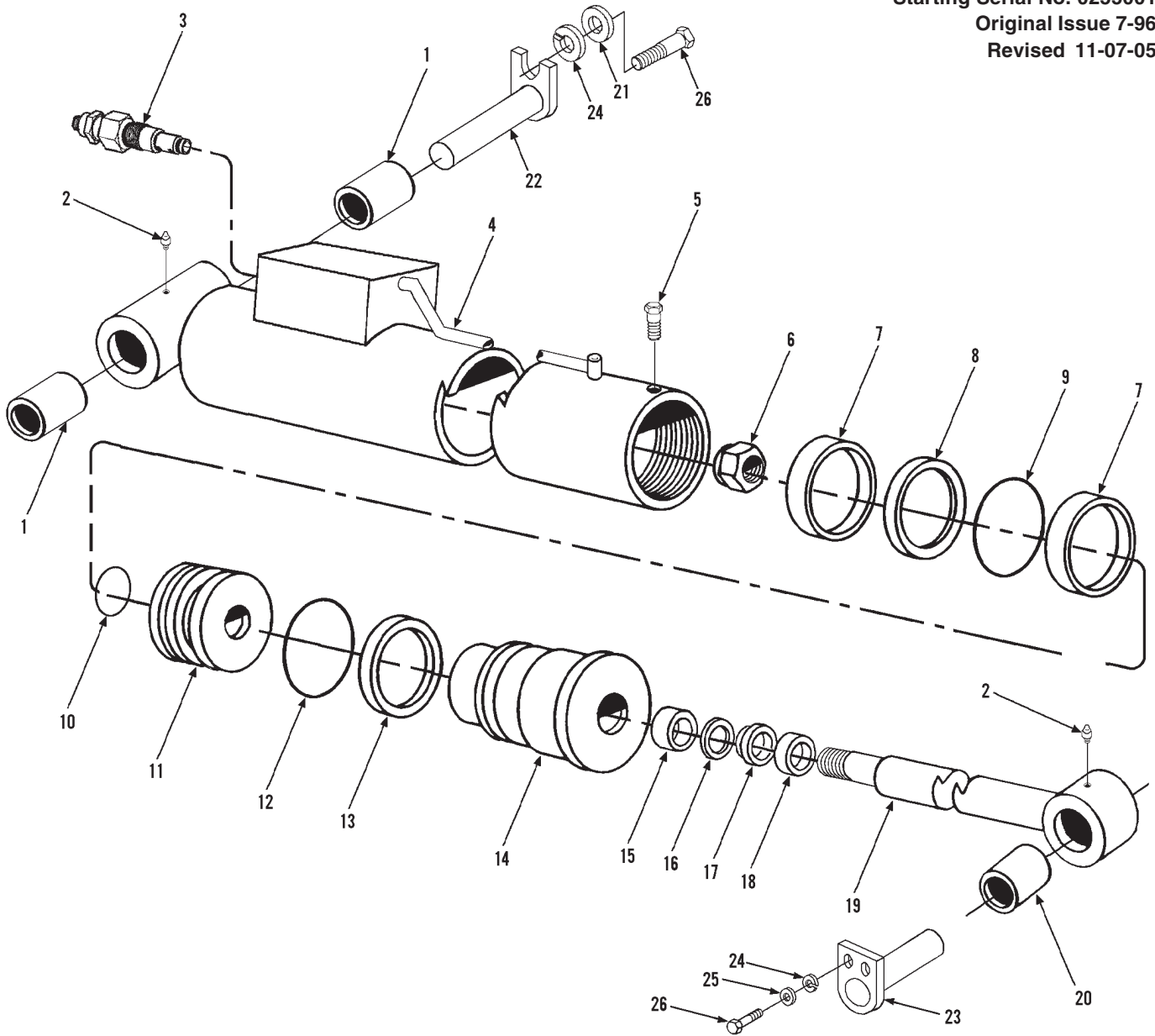
Item	Part No.	Qty.	Description Of Part
1		Ref	OUTRIGGER CYLINDER ASSY (see page 10-8 for details)
2		Ref	OUTRIGGER CYLINDER VALVE (see page 10-19 for details)
* 3	8820-1040	6	HEX HD CAPSCREW, 3/8-16X2-1/4, GR5
4	8855-1011	6	LOCKWASHER, 3/8
5	8859-1012	4	O-RING
* 6	8859-1204	4	O-RING
* 7	8866-2005	4	CONNECTOR (includes item 6)
8	8471-8737	4	HOSE ASSY
9	8866-1084	4	BULKHEAD UNION, 9/16-18X3/8, TUBE
10	8471-8738	4	HOSE ASSY
11	9116-3128	1	TUBE ASSY
12	9116-3127	1	TUBE ASSY
13	9116-3126	1	TUBE ASSY
14	9116-3125	1	TUBE ASSY
15	7713-3168	7	CLAMP SET (4 not illustrated)
16	7713-3140	4	COVER PLATE (2 not illustrated)
17	7713-3177	4	HEX HD CAPSCREW, 5/16-18X1-3/8, (2 not illustrated)
18	7713-3390	3	SAFETY CLIP (2 not illustrated)
19	7713-3389	3	STACK BOLT (2 not illustrated)
20	8850-1008	3	HEX NUT, 1/2-13
21	8855-1013	3	LOCKWASHER, 1/2

Item	Part No.	Qty.	Description Of Part
22	8820-1070	3	HEX HD CAPSCREW, 1/2-13X2-1/4, GR5
23		Ref	OUTRIGGER CONTROL VALVE, (see page 10-24 for details)
24	8859-2020	4	O-RING
25	9105-3450	4	ELBOW, 90 DEGREES (includes item 24)
26	8866-2105	2	ELBOW, 90 DEGREES (swivel nut)
27	8859-1209	3	O-RING
28	8866-2025	2	CONNECTOR (includes item 27)
29	8859-1207	1	O-RING
30	8866-2061	1	ELBOW, 90 DEGREES (includes item 27)
31	8471-8668	1	HOSE ASSY
32	8471-8680	1	HOSE ASSY
33	8866-2067	1	ELBOW, 90 DEGREES (includes item 29)
34		Ref	MAIN CONTROL VALVE (see page 10-14 for details)
35	9116-3246	2	ORIFICE FITTING (port "c")

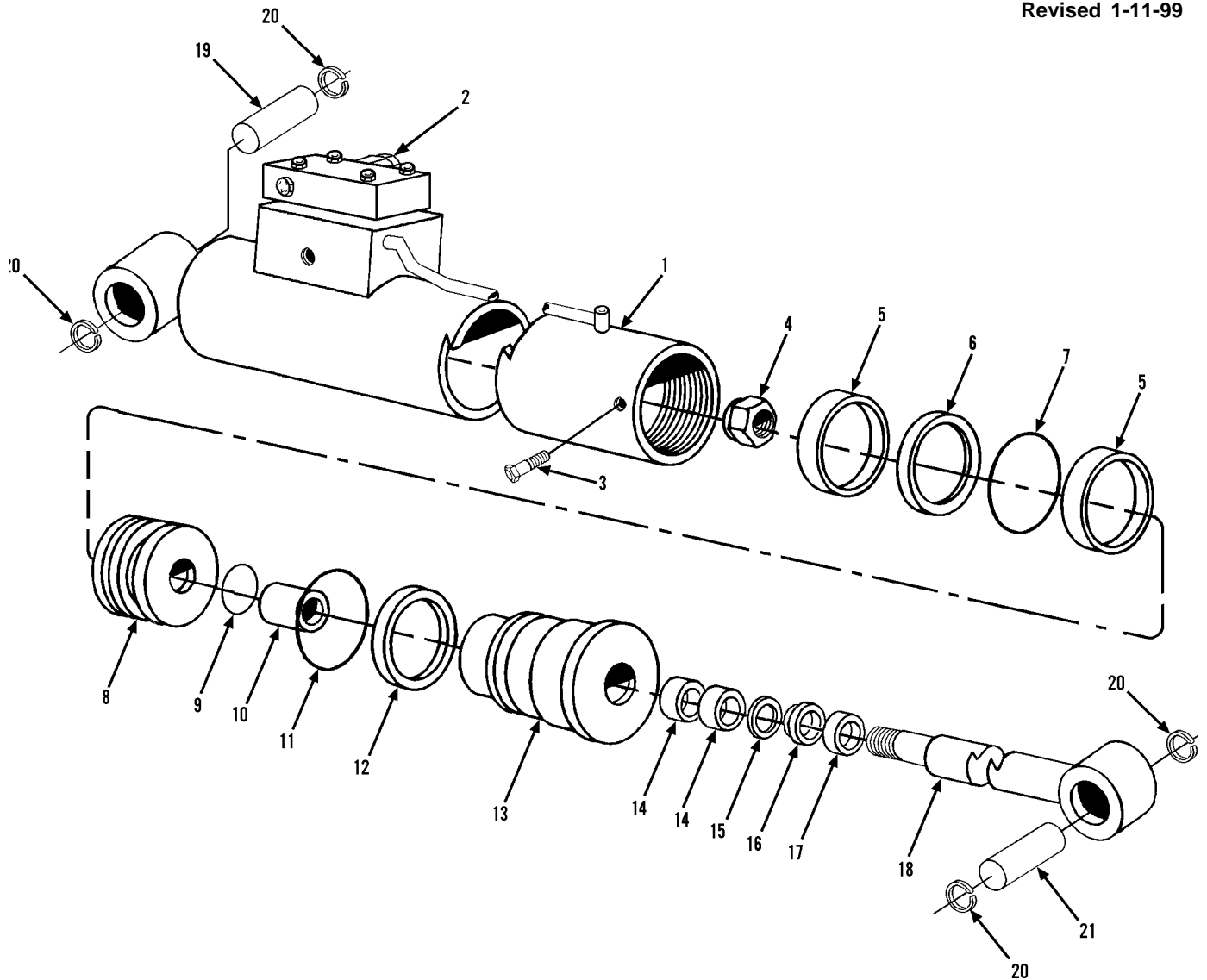


**VIEW SHOWN LOOKING UP AT  
 FRAME FROM UNDER MACHINE**

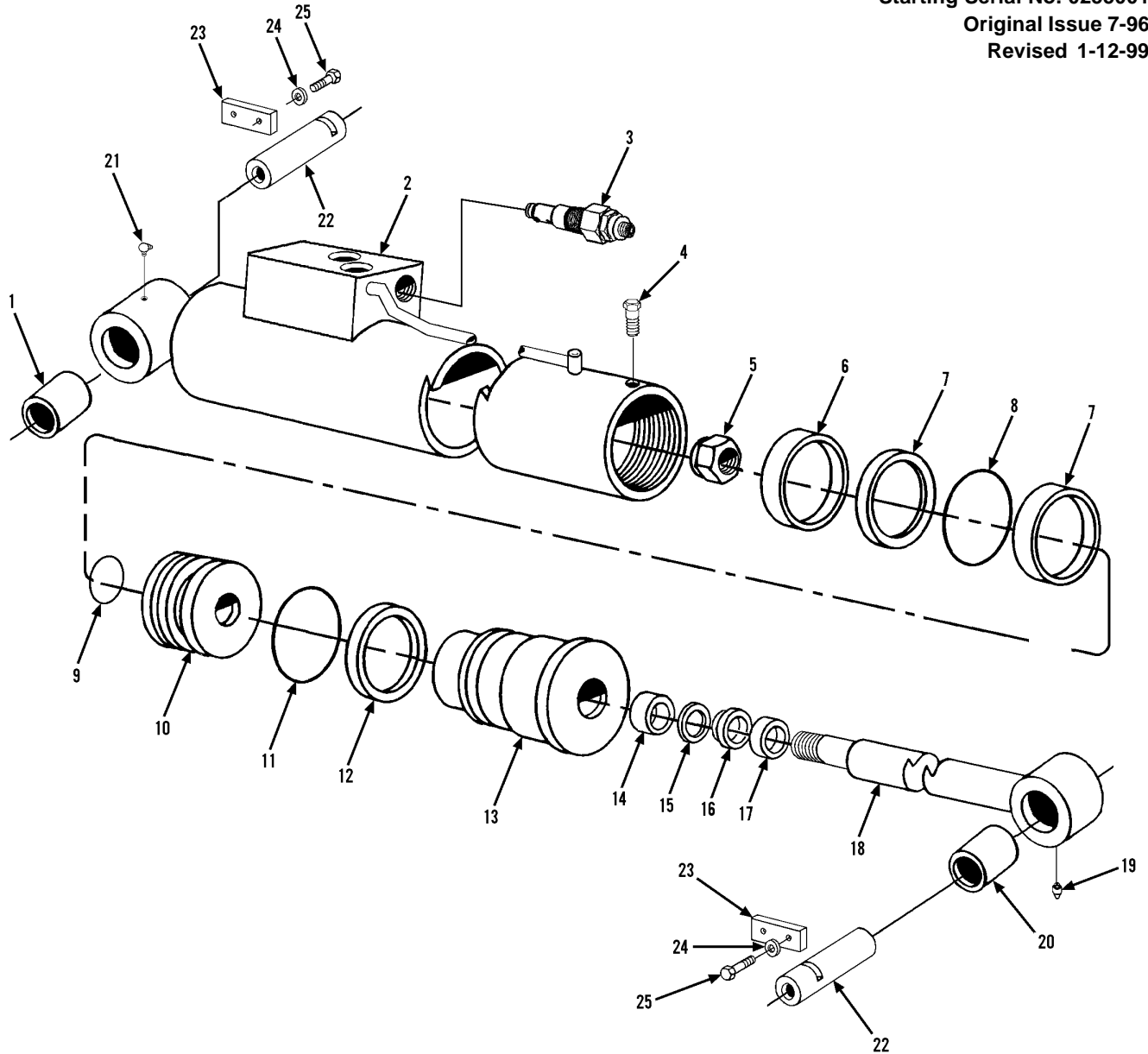
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
1	8093-3140	1	CLAMP SET, 13/16 - 1-1/4	8	7713-3139	2	CLAMP SET, 5/8-5/8
2	7713-3168	1	CLAMP SET, 1/2-1/2	9	7713-3136	1	CLAMP SET, 3/4-3/4
3	7713-3306	5	STACK BOLT	10	7713-3137	2	COVER PLATE
4	7713-3140	4	COVER PLATE	11	8820-1023	2	BOLT
5	7713-3177	4	BOLT	12	9108-3240	1	CLAMP SET, 5/8 - 1/2
6	7713-3390	5	SAFETY CLIP	13	7713-3279	1	CLAMP SET, 1-1
7	9121-3002	4	CLAMP SET, 3/4-1/2				



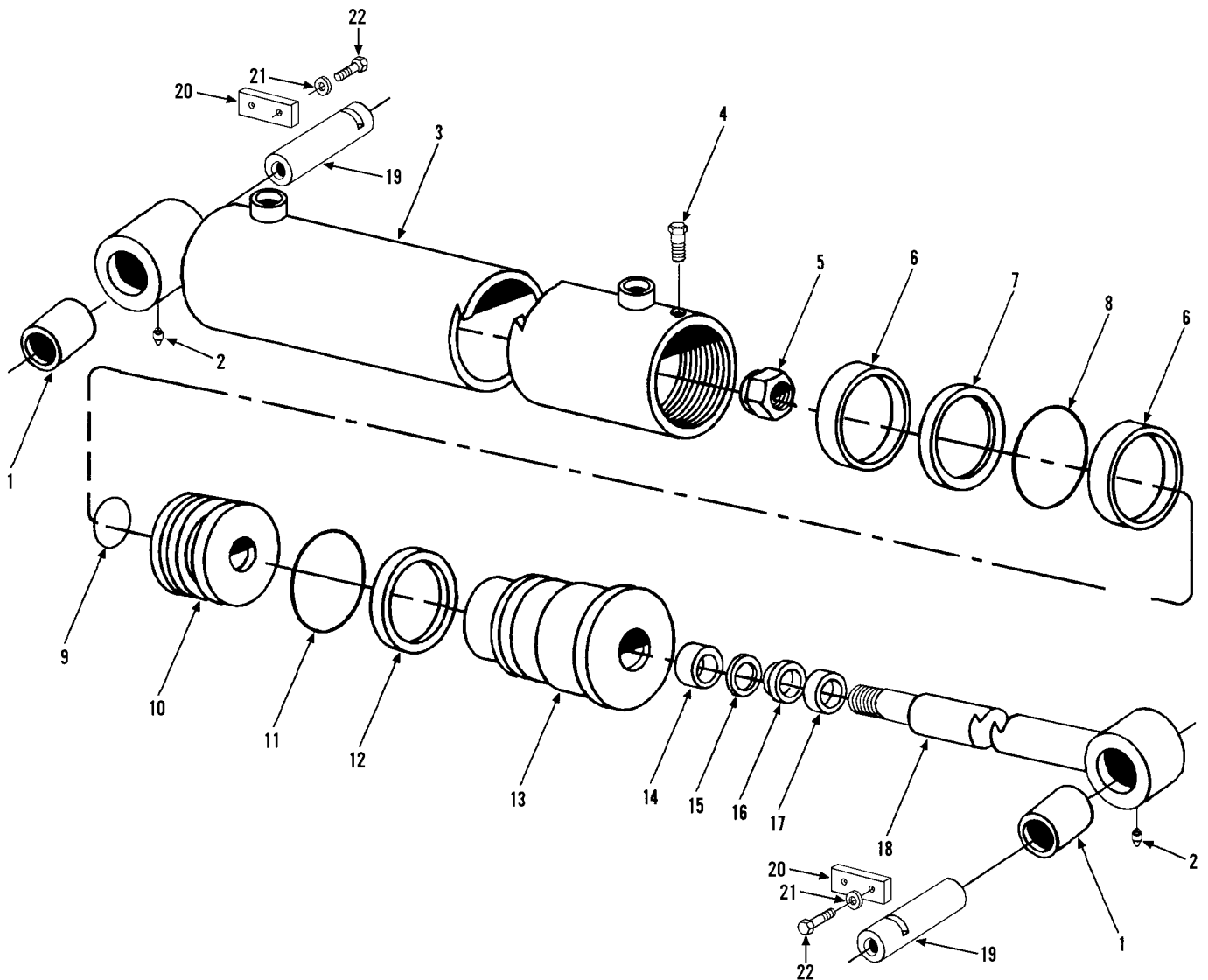
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
*	9114-3214	1	TILT CYLINDER ASSY (includes items 1 thru 20)	13		1	BACK-UP RING
	9114-4004	1	SEAL KIT (includes items 7, 8, 9, 10, 12, 13 & 15 thru 18)	14	9114-4024	1	GLAND
* 1	9106-4016	2	BUSHING	15		1	WEAR RING
2	8867-1001	2	GREASE FITTING	16		1	STEP SEAL
3	9112-3089	1	COUNTERBALANCE VALVE	17		1	U-CUP
	9103-4276	1	COUNTERBALANCE VALVE SEAL KIT	18		1	WIPER
4	9114-4023	1	CASE ASSY	19	9114-4025	1	ROD ASSY
5	9114-4017	1	CAPSCREW, #8X32X.375	*20	91144479	1	BUSHING
6	9103-4153	1	LOCKNUT (torque 1300-1350 ft.lbs.)	*21	8362-1283	1	SPECIAL WASHER
7		2	WEAR RING	*22	9114-6052	1	PIN WELDMENT
8		1	PISTON SEAL	*23	9116-6062	1	PIN WELDMENT
9		1	O-RING	*24	8855-1013	3	LOCKWASHER, 1/2
10		1	O-RING	*25	8856-1111	2	FLAT WASHER, 1/2
11	9103-4139	1	PISTON	*26	8820-1065	3	HEX HD CAPSCREW, 1/2-13X1, GR5
12		1	O-RING				NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.



Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9116-3225	1	CROWDCYLINDERASSY (includes items 1 thru 19)	11		1	O-RING
*	9116-4004	Ref	SEAL KIT (includes items 5, 6, 7, 9, 11, 12, 14 thru 17)	12		1	BACK-UP RING
1	9116-4013	1	CASE ASSY	13	9116-4016	1	CYLINDER HEAD
* 2	9116-4052	1	RELIEF VALVE (4600 PSI) (includes valve block)	14		2	WEAR RING
3	9112-4096	1	CAPSCREW	15		1	STEP SEAL
4	9103-4153	1	LOCKNUT	16		1	U-CUP
5		2	WEAR RING	17		1	WIPER
6		1	PISTON SEAL	18	9116-4048	1	SHAFT ASSY
7		1	O-RING	19	9116-1136	1	CYLINDER PIN
8	9116-4046	1	PISTON	20	8858-1149	4	RETAINING RING
9		1	O-RING	21	9116-1137	1	CYLINDER PIN
10	9116-4047	1	SPACER				NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.

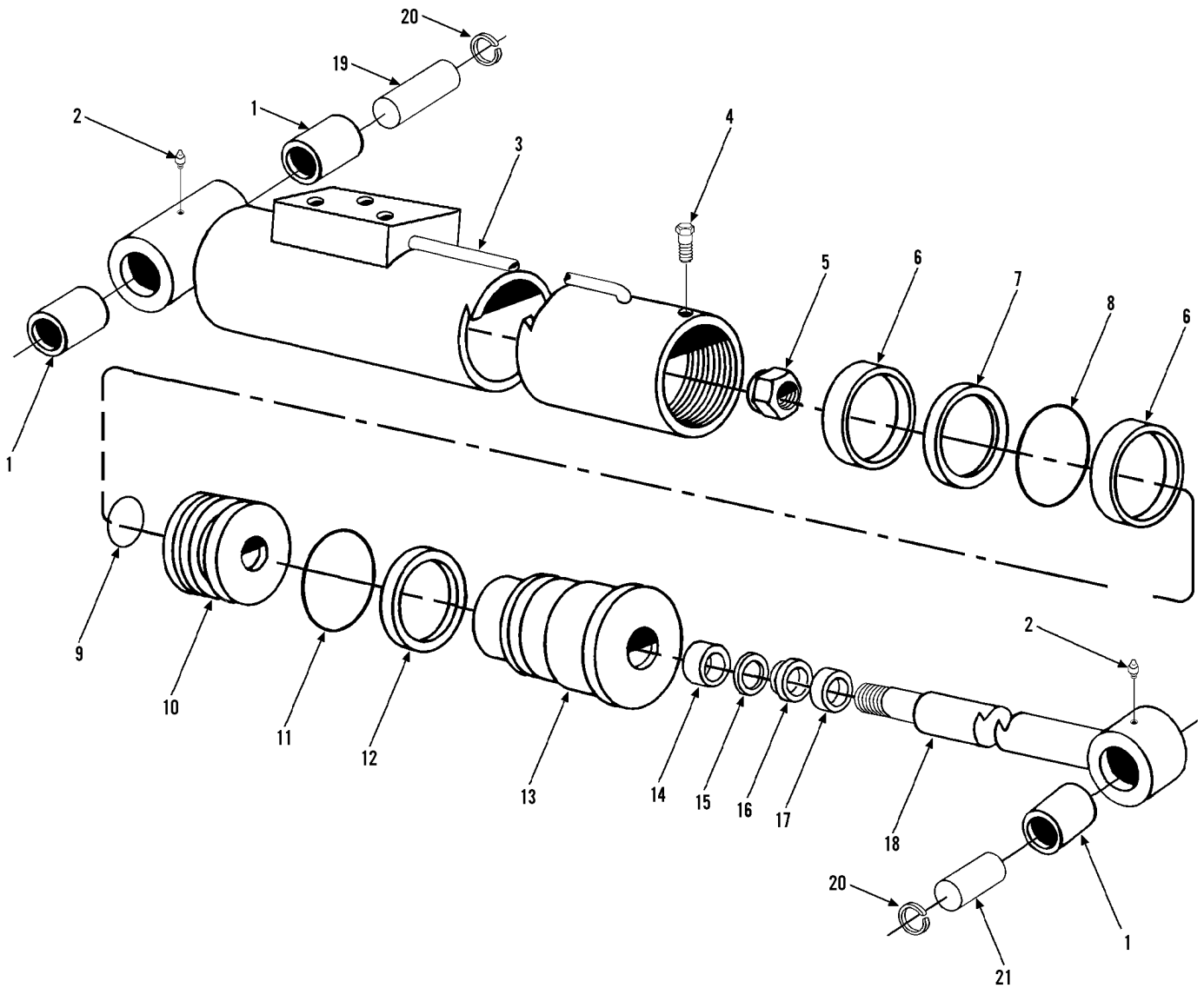


Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
*	9116-3008	2	LIFT CYLINDER ASSY (includes items 1 thru 21)	14		1	WEAR RING
*	9116-4005	Ref	SEAL KIT (includes items 6, 7, 8, 9, 11, 12, 14, 15, 16 & 17)	15		1	STEP SEAL
	9116-4037	Ref	LOAD CONTROL VALVE SEAL KIT	16		1	U-CUP
1	9116-4038	1	BUSHING	17		1	WIPER
2	9116-4039	1	CASE ASSY	18	9116-4042	1	SHAFT ASSY
3	9116-4011	1	LOAD CONTROL VALVE	19	9114-4128	1	GREASE FITTING
4	9114-4017	1	CAPSCREW	20	9116-4043	1	BUSHING
* 5	9103-4153	1	LOCKNUT (torque to 1475-1525 ft. lbs.)	21	8867-1022	1	GREASE FITTING, 90 DEGREES
6		2	WEAR RING	22	9116-1140	2	CYLINDER PIN
7		1	PISTON SEAL	23	9108-1313	2	PIN KEEPER
8		1	O-RING	24	8855-1013	4	LOCKWASHER, 1/2
9		1	O-RING	25	8820-1065	4	HEX HD CAPSCREW, 1/2-13X1
10	9116-4040	1	PISTON				NOTE: QUANTITIES SHOWN ARE FOR ONE CYLINDER ASSY ONLY.
11		1	O-RING				NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.
12		1	BACK - UP RING				
*13	9116-4041	1	CYLINDER HEAD (torque to 100-400 ft.lbs.)				

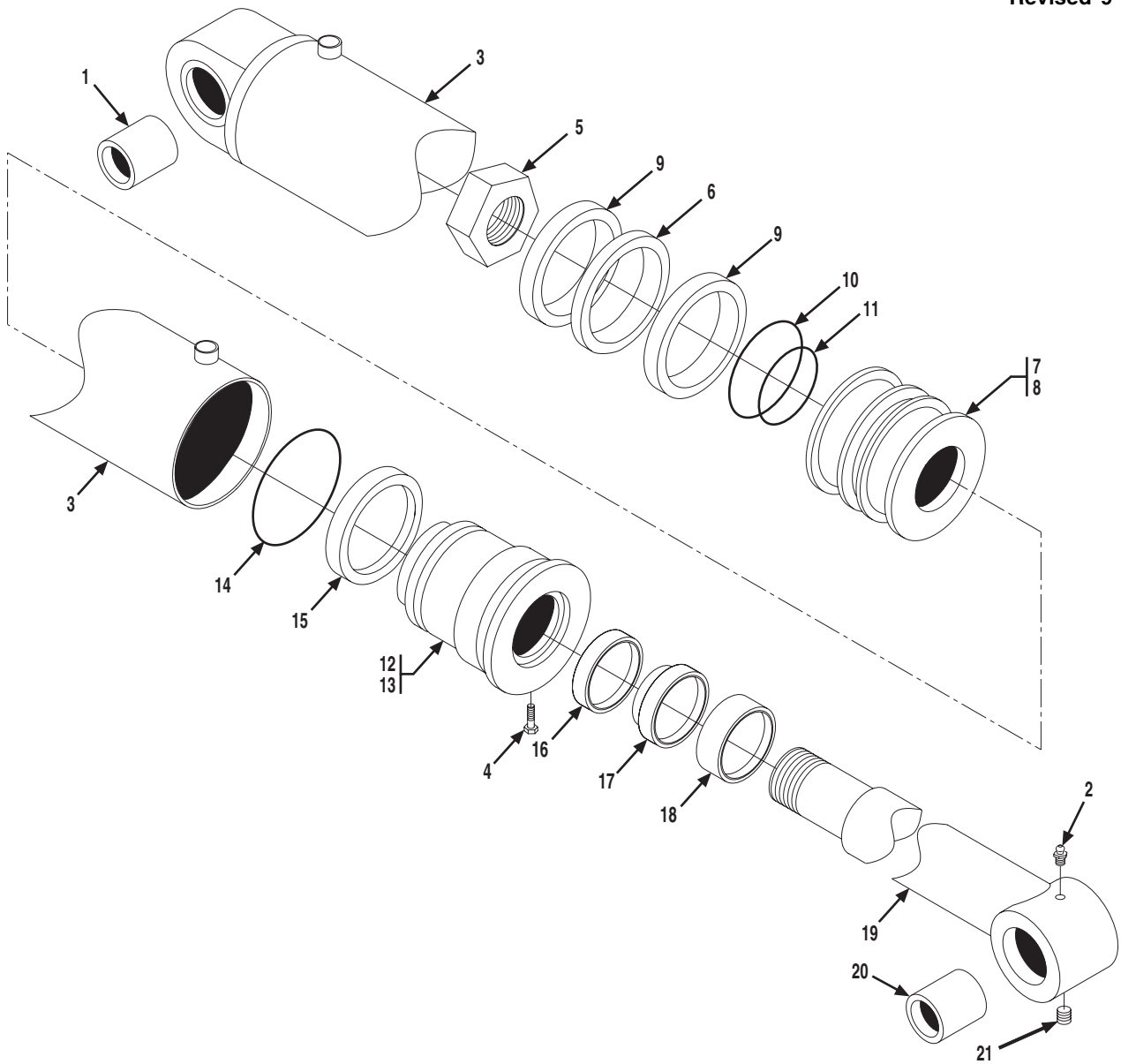


Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9114-3003	1	COMPENSATING CYLINDER ASSY (includes items 1 thru 18)	12		1	BACK-UP RING
	9114-4004	1	SEAL KIT (includes items 6, 7, 8, 9, 11, 12 & 14 thru 17)	13	9114-4024	1	CYLINDER HEAD
1	9114-4026	2	BUSHING	14		1	WEAR RING
2	8867-1001	2	GREASE FITTING	15		1	STEP SEAL
3	9114-4027	1	CASE ASSY	16		1	U-CAP
4	9114-4017	1	CAPSCREW, #8X32X.375	17		1	WIPER
5	9103-4153	1	LOCKNUT (torque 1300-1350 ft.lbs.)	18	9114-4028	1	ROD ASSY
6		2	WEAR RING	19	9108-1432	2	PIN
7		1	PISTON SEAL	20	9108-1313	2	PIN KEEPER
8		1	O-RING	21	8855-1013	4	LOCKWASHER, , 1/2
9		1	O-RING	22	8820-1065	4	HEX HD CAPSCREW, 1/2-13X1, GR5
10	9103-4139	1	PISTON				NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.
11		1	O-RING				

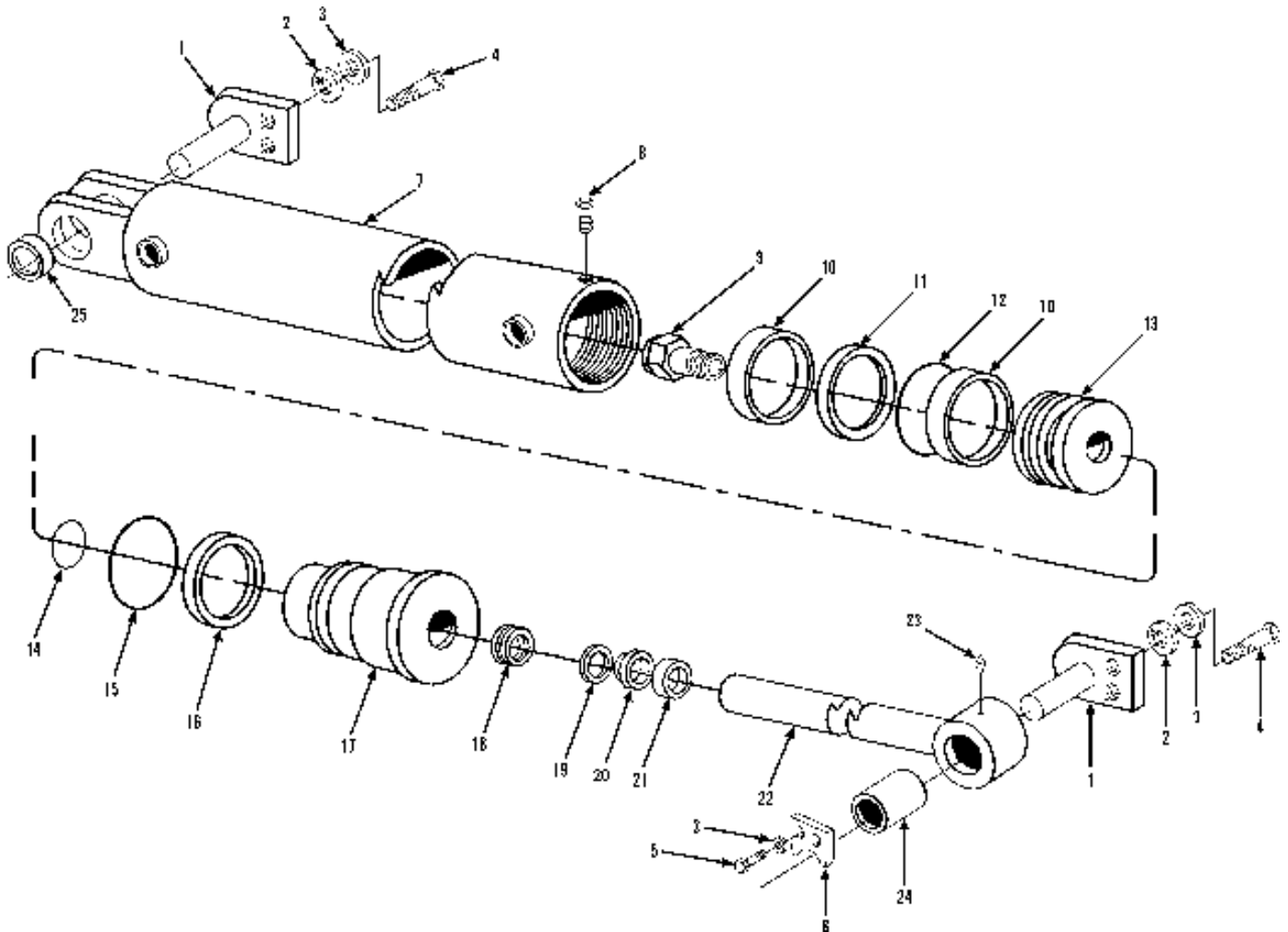




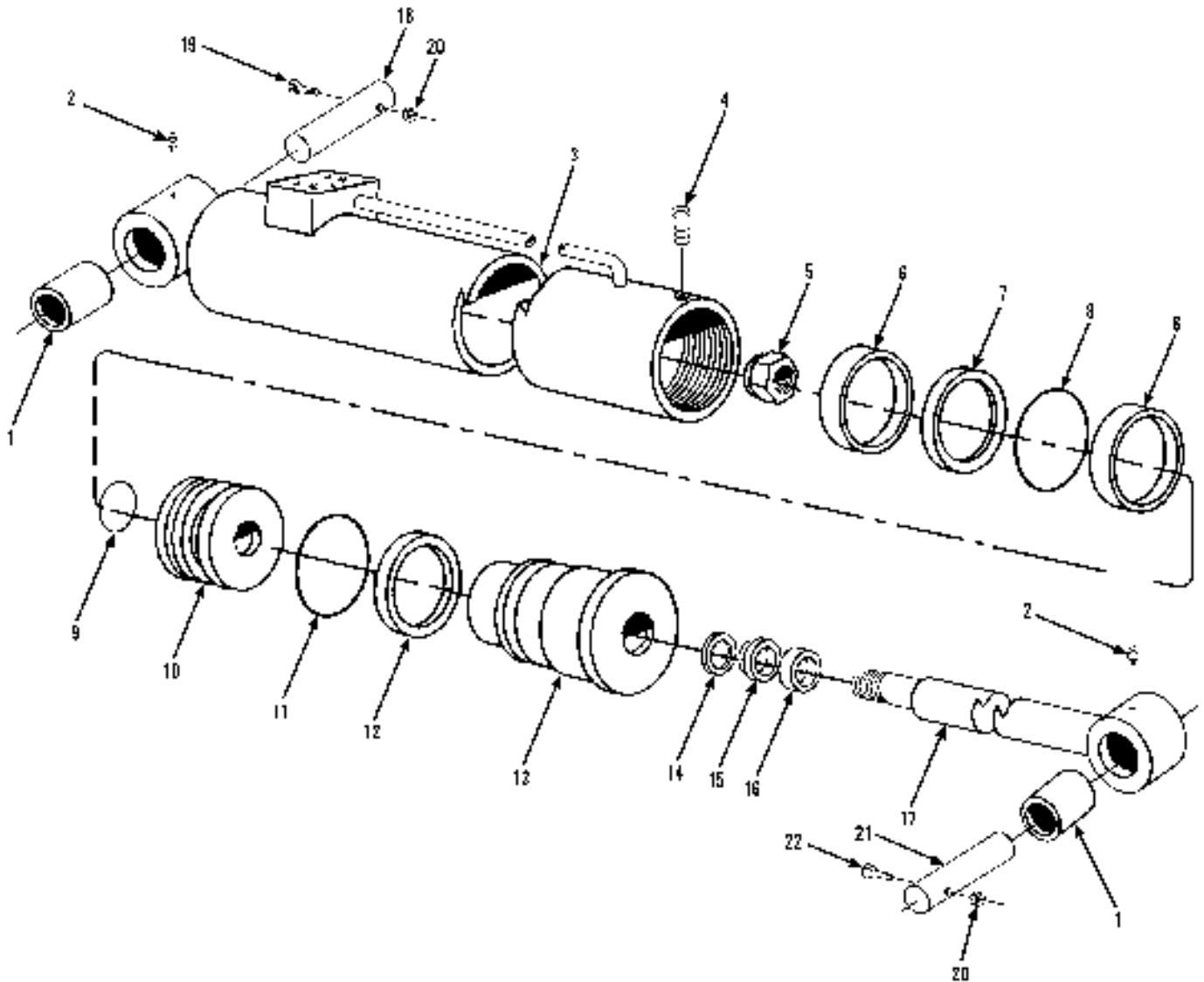
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9114-3007	1	SWAY CYLINDER (includes items 1 thru 18)	11		1	O-RING
	9114-4005	1	SEAL KIT (includes items 6, 7, 8, 9, 11, 12 & 14 thru 17)	12		1	BACK-UP RING
1	9106-4016	3	BUSHING	13	9114-4034	1	CYLINDER HEAD
2	8867-1001	2	GREASE FITTING	14		1	WEAR RING
3	9114-4032	1	CASE ASSY	15		1	STEP SEAL
4	9114-4017	1	CAPSCREW, #8X32X.375	16		1	U-CUP
5	9106-4017	1	LOCKNUT (torque 650-700 ft.lbs.)	17		1	WIPER
6		2	WEAR RING	18	9114-4035	1	ROD ASSY
7		1	PISTON SEAL	19	9114-1316	1	PIN
8		1	O-RING	20	9002-8935	4	RETAINING RING
9		1	O-RING	21	9020-7352	1	PIN
10	9114-4033	1	PISTON				NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.



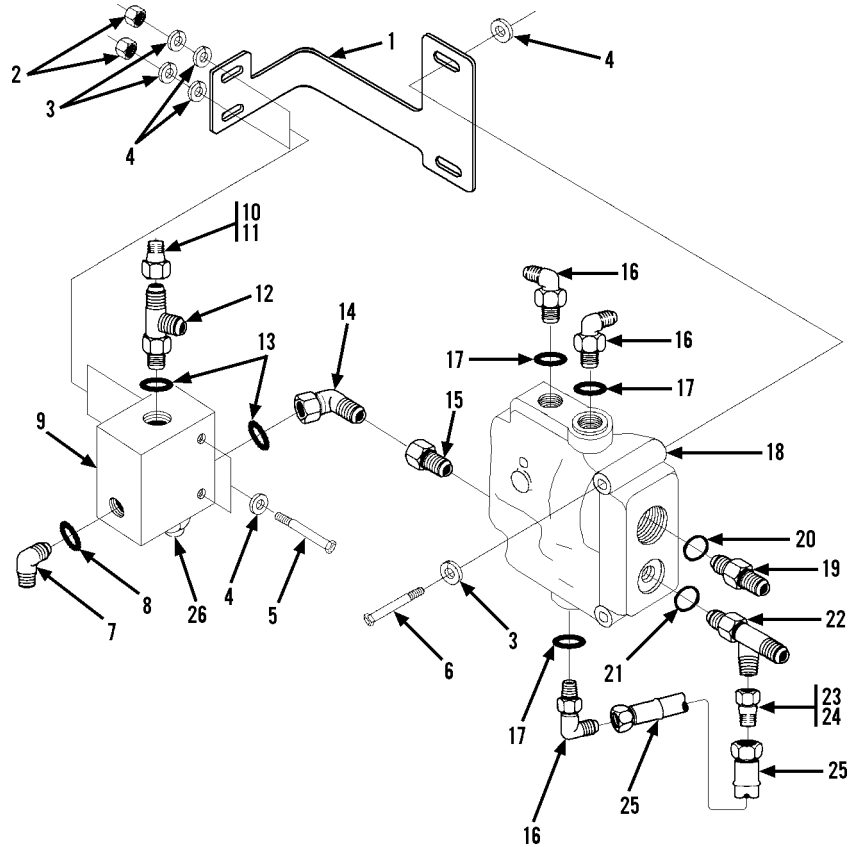
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9116-3178	2	STEERING CYLINDER, (includes all items)	12	9155-4035	1	CYLINDER HEAD ASSY, (includes items 13 thru 18)
	9114-4006	1	SEAL KIT, (includes items 6, 9, 10, 11 & 14 thru 18)	13	9114-4040	1	CYLINDER HEAD, (torque to 100-400 ft. lbs.)
1	9116-4018	1	BUSHING	14		1	O-RING
2	9114-4128	1	GREASE FITTING	15		1	BACK-UP RING
3	9114-4037	1	CASE ASSY	16		1	STEP SEAL
4	9112-4096	1	SELF-TAPPING SCREW	17		1	U-CUP
5	9114-4038	1	LOCKNUT, (torque 400-425 ft.lbs.)	18		1	WIPER
6		1	PISTON SEAL	19	9116-4027	1	ROD ASSY
7	9155-4035	1	PISTON ASSY, (includes items 8 thru 11)	20	9104-3246	1	BUSHING
8	9114-4039	1	PISTON	21		1	HEX PLUG, 1/8-27 NPT
9		2	WEAR RING				
10		1	O-RING				
11		1	O-RING				
							NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.



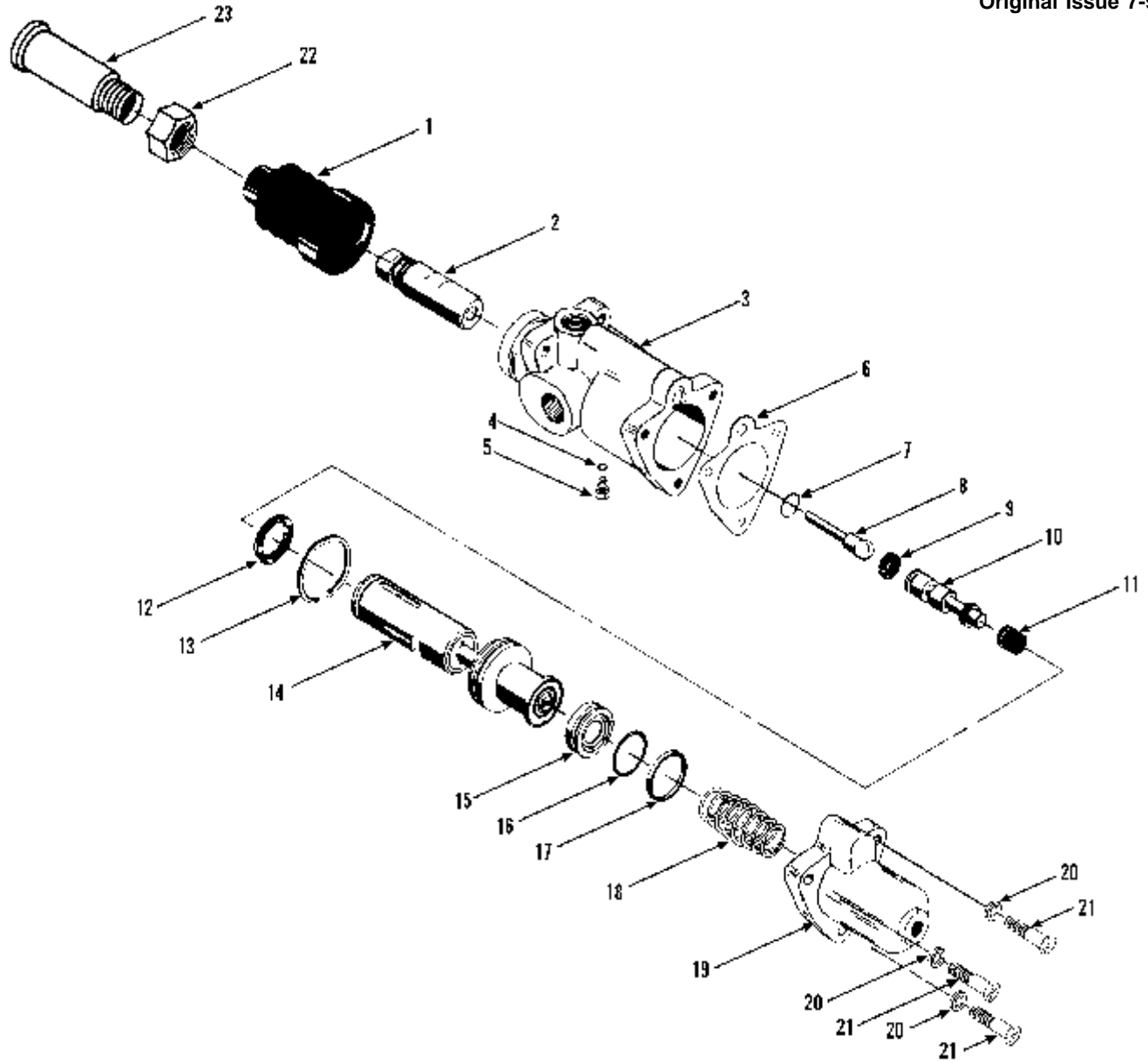
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9116-3045	1	STABILIZER CYLINDER (includes all items except 1 thru 5)	13	9104-4033	1	PISTON
	9114-4005	Ref	SEAL KIT (includes items 10, 11, 12, 14, 15, 16, 18, 19 & 20)	14		1	O-RING
1	9116-6062	2	CYLINDER PIN	15		1	O-RING
2	8855-1013	4	LOCKWASHER, 1/2"	16		1	BACK-UP RING
3	8856-1111	6	FLAT WASHER, 1/2"	17	9114-4034	1	CYLINDER HEAD
4	8820-1066	4	HEX HD CAPSCREW, 1/2-13X1-1/4, GR5	18		1	WEAR RING
5	8820-1065	2	HEX HD CAPSCREW, 1/2-13X1, GR5	19		1	STEP SEAL
6	9116-1269	2	PIN KEEPER	20		1	U-CUP
7	9116-4028	1	CASE ASSY	21	9112-4103	1	WIPER
8	9112-4096	1	CAPSCREW	22	9116-4029	1	SHAFT ASSY
9	9106-4017	1	LOCKNUT	23	9114-4128	1	GREASE FITTING
10		2	WEAR RING	24	9116-4030	1	BUSHING
11		1	PISTON SEAL	25	9116-4031	2	BUSHING
12		1	O-RING				NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.



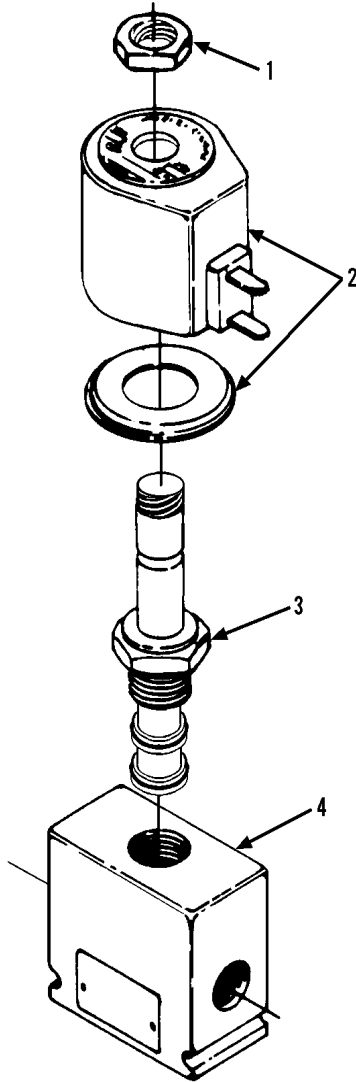
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9116-3016	2	OUTRIGGER CYLINDER (includes items 1 thru 17)	13	9116-4035	1	CYLINDER HEAD
	9114-4004	Ref	SEAL KIT (includes items 6, 7, 8, 9, 11, 12, 14, 15 & 16)	14		1	STEP SEAL
1	9116-4032	2	BUSHING	15		1	U-CUP
2	9114-4128	2	GREASE FITTING	16		1	WIPER
3	9116-4033	1	CASE ASSY	17	9116-4036	1	SHAFT ASSY
4	9114-4017	1	CAPSCREW	18	9116-1016	1	OUTRIGGER CYLINDER PIN
5	9103-4153	1	LOCKNUT (lubricate & torque to 1300-1350 ft.lbs.)	19	8821-1083	1	SOCKET HD CAPSCREW, 3/8-16X4-1/2
6		2	WEAR RING	20	8852-1206	2	HEX LOCKNUT, 3/8-16 (nylok)
7		1	PISTON SEAL	21	9116-1080	1	SHOE PIN
8		1	O-RING	22	8379-3054	1	HEX HD CAPSCREW, 3/8-16X4-1/4
9		1	O-RING				NOTE: QUANTITIES SHOWN ARE FOR ONE CYLINDER ASSY ONLY.
10	9116-4034	1	PISTON				NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.
11		1	O-RING				
12		1	BACK-UP RING				



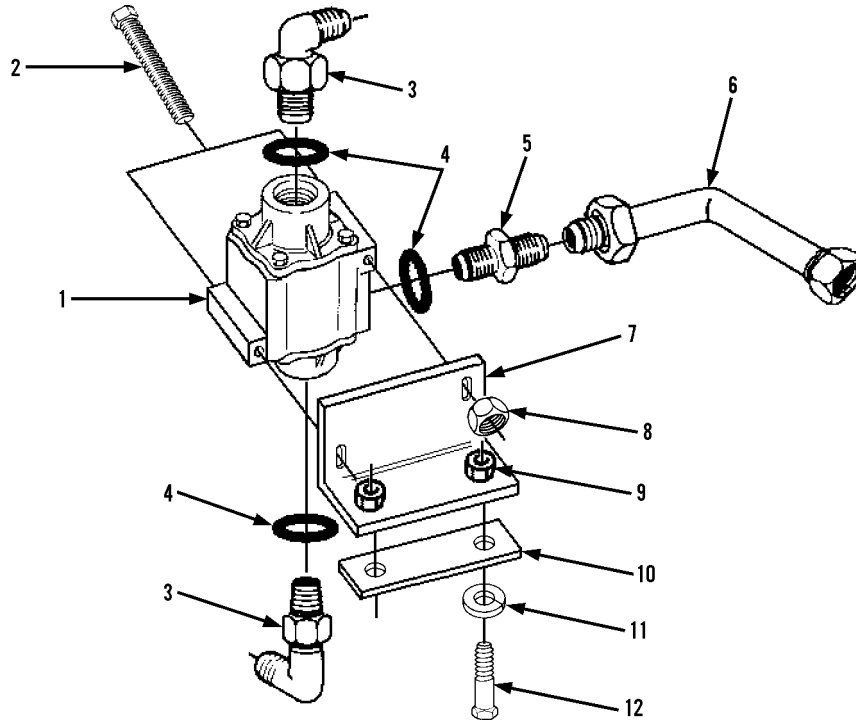
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9116-5023	1	FLOW DIVIDER ASSY (includes all items except item 6 & two of items 3 & 4)	13	8859-1209	2	O-RING
1	9116-1272	1	FLOW DIVIDER BRACKET	14	8866-2061	1	ELBOW, 90 DEGREES (includes item 13)
2	8850-1005	2	HEX NUT, 5/16-18	15	9116-3121	1	SWIVEL NUT ADAPTER
3	8855-1010	4	LOCKWASHER, 5/16	16	8866-2062	3	ELBOW, 90 DEGREES (includes item 17)
4	8856-1003	6	WASHER, 5/16	17	8859-1202	3	O-RING
5	8820-1027	2	HEX HD CAPSCREW, 5/16-18X2-3/4, GR5	18	9116-3071	1	FLOW DIVIDER
6	8820-1029	2	HEX HD CAPSCREW, 5/16-18X3-1/4, GR5		9114-4062	AR	FLOW DIVIDER SEAL KIT
7	8866-2064	1	ELBOW, 90 DEGREES (includes item 8)	19	8866-2027	1	CONNECTOR (includes item 20)
8	8859-1204	1	O-RING	20	8859-1207	1	O-RING
9	9116-3211	1	FLOW DIVIDER	21	8859-1205	1	O-RING
10	9132-3007	1	REDUCER	22	8866-2140	1	RUN TEE (includes item 21)
11	8866-1408	1	NUT	23	8866-1341	1	REDUCER
12	8866-2144	1	RUN TEE (includes item 13)	24	8866-1406	1	NUT
				25	8471-8692	1	HOSE ASSY
				*26	9116-4103	1	CARTRIDGE
				*	9116-4106	AR	CARTRIDGE SERVICE KIT



Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9114-3201	1	POWER BRAKE VALVE (includes items 1 thru 21)	12		1	CUP
	9108-4043	1	REPAIR KIT (includes items 1, 4, 6, 9, 12, 13, 15, 16 & 17 )	13		1	PISTON RING
1	9108-4042	1	BOOT	14		1	SLEEVE & PISTON ASSY
2		1	PRESSURE REGULATING SPRING ASSY	15		1	PISTON & POPPET ASSY
3		1	HOUSING	16		1	O-RING
4		1	O-RING	17		1	RING SEAL
5		1	CAPSCREW	18		1	SPRING
6		1	GASKET	19		1	END CAP
7		1	RETAINING RING	20		3	LOCKWASHER
8		1	PUSH ROD	21		3	HEX HD CAPSCREW
9		1	CUP	22	8850-1408	1	HEX JAM NUT, 1/2-20
10		1	SPOOL (not available for service, order 9114-3201)	23	9108-1445	1	PUSH ROD
11		1	SPRING				NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.

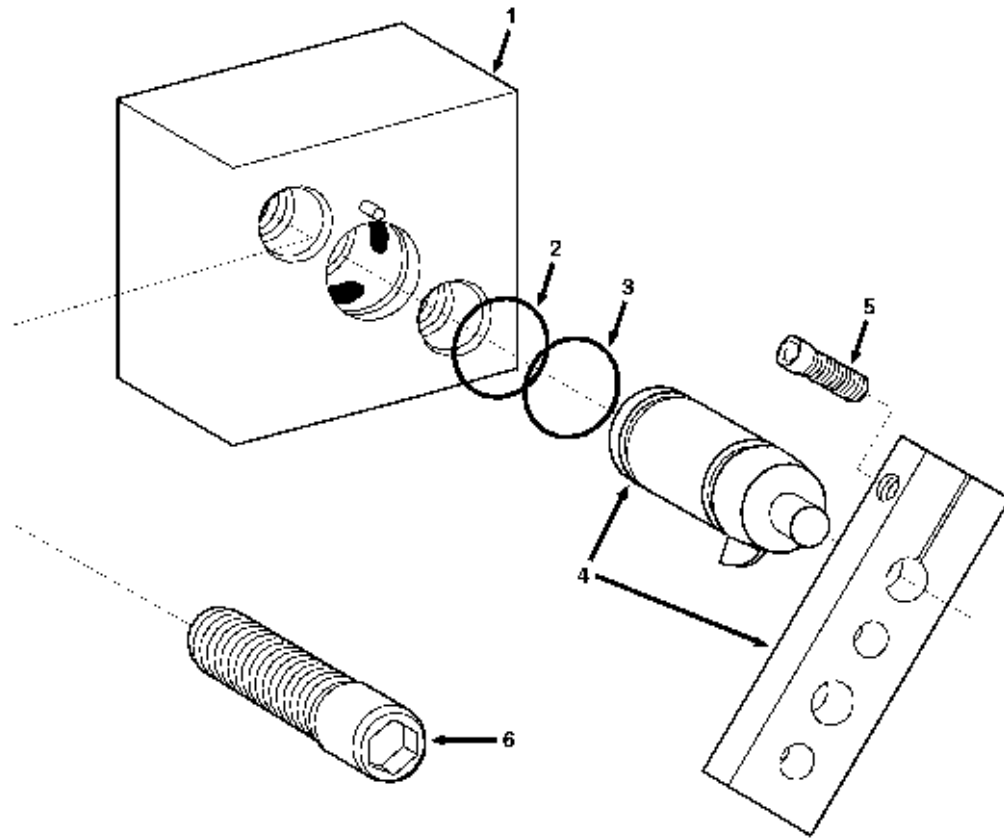


Item	Part No.	Qty.	Description Of Part
	9104-3446	1	3-WAY SOLENOID VALVE(includes all items)
1	9020-8066	1	NUT
2	9114-4158	1	COIL
3	9114-4159	1	CORE ASSY (3-way, 2-position)
4	8093-4035	1	VALVE BODY

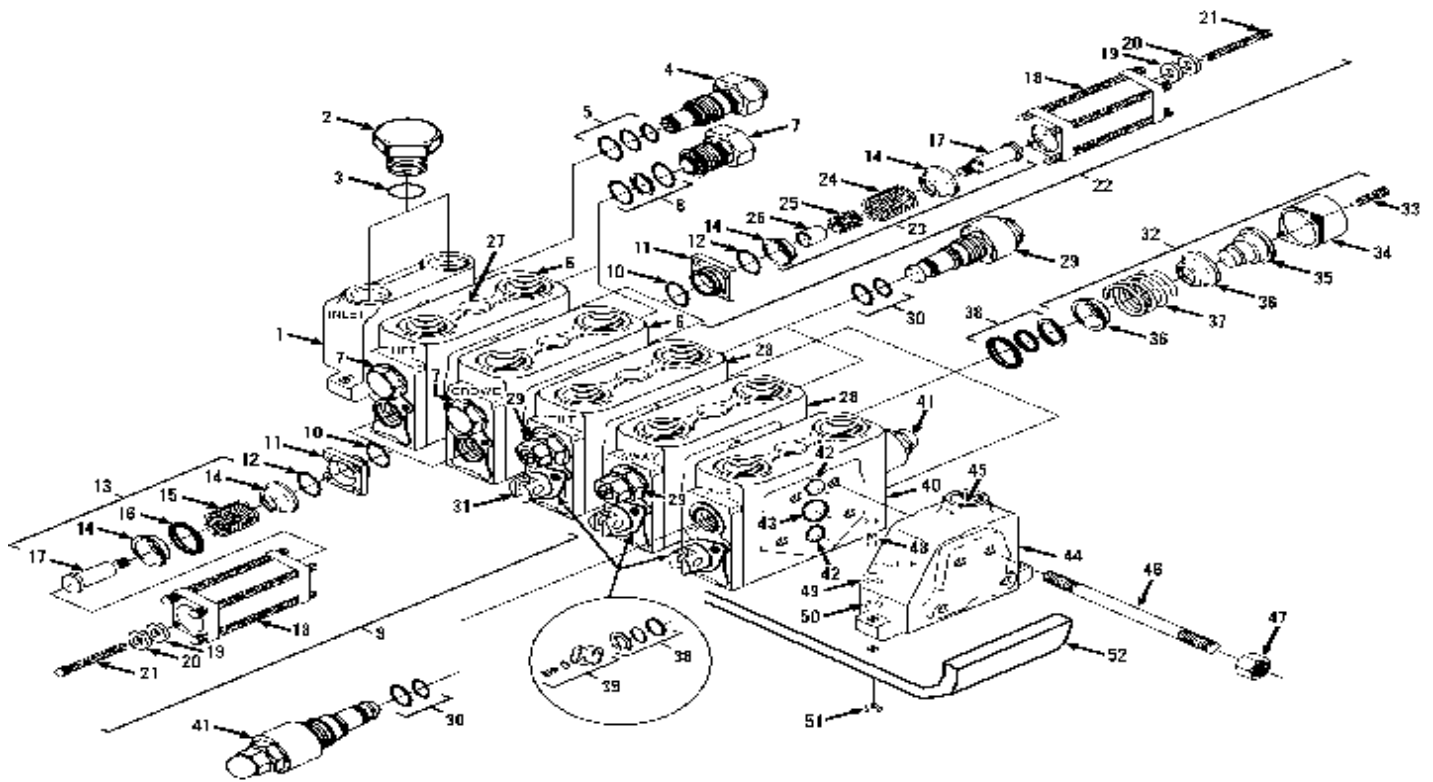


Item	Part No.	Qty.	Description Of Part
	9114-5067	1	THERMAL BYPASS VALVE ASSY (includes all items except 10, 11 & 12)
1	8097-3010	1	BYPASS VALVE
	8097-4021	1	ELEMENT KIT
2	8820-1045	2	HEX HD CAPSCREW, 3/8-16X3 1/2, GR5
3	8866-2069	2	ELBOW, 90 DEGREES (includes item 4)
4	8859-1209	3	O-RING
5	8866-2010	2	CONNECTOR (includes item 4)
6	9114-3274	1	TUBE ASSY
7	9114-6087	1	BRACKET (includes item 9)
8	7714-3015	2	WHIZ LOK NUT
9	8897-1004	2	WELD NUT
10	9114-1432	1	RECTANGULAR WASHER
11	8855-1011	2	LOCKWASHER, 3/4
12	8820-1036	2	HEX HD CAPSCREW, 3/8-16X1 1/4, GR5

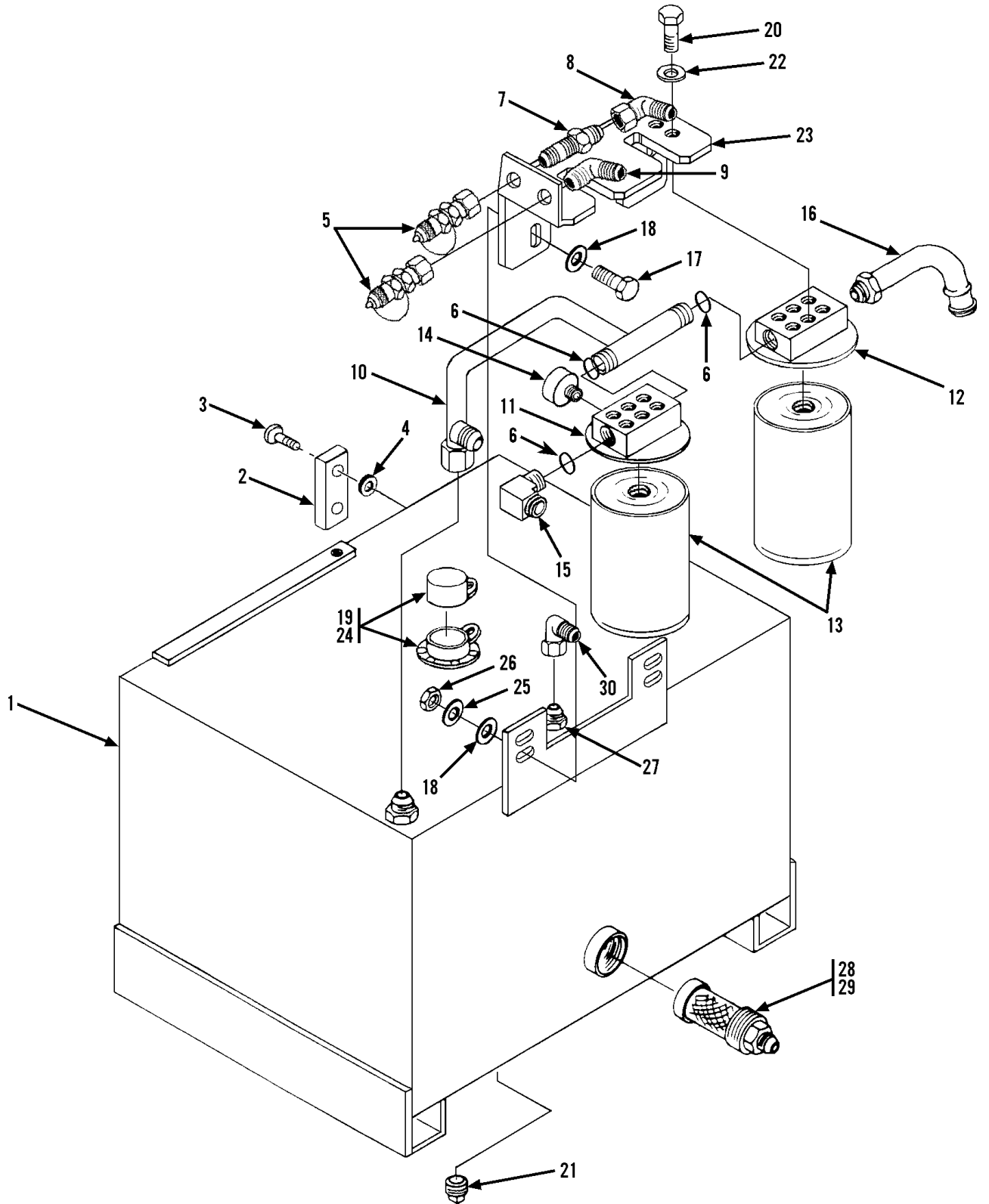




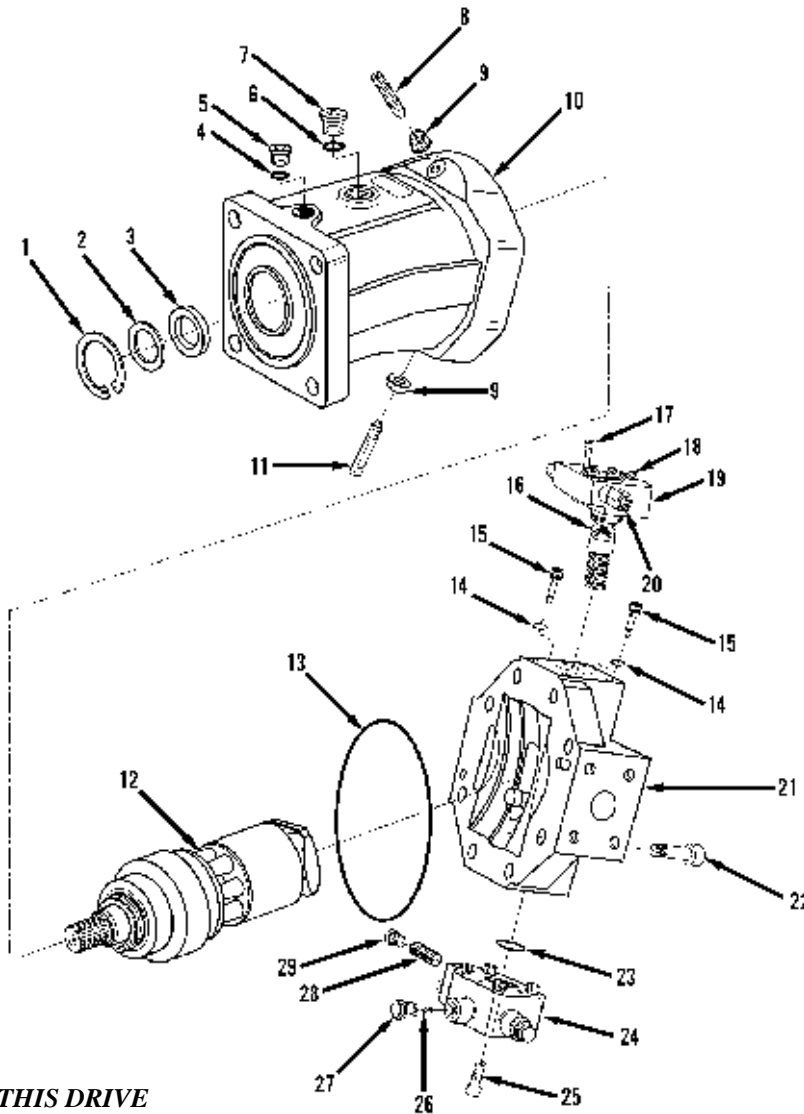
Item	Part No.	Qty.	Description Of Part
1	9114-3140	1	INCHING VALVE (includes all items)
2	8093-4423	1	O-RING
3	8093-4202	1	O-RING
4		1	ACTIVATING LEVER
5		1	SOCKET HD CAPSCREW
6	8821-2228	2	SOCKET HD CAPSCREW
			NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.



Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9116-3222	1	MAIN CONTROL VALVE ASSY (includes all items except items 48 thru 52)	25		2	SPRING
	9103-4070	1	STUD KIT (includes four each of items 46 & 47)	26		2	STOP COLLAR
	9116-4064	AR	SECTION SEAL KIT (one kit needed per valve section) (includes two of item 42 and one of item 43, plus two spool seals per kit)	27	9116-4071	5	LOAD CHECK PLUG (one needed per section)
	9114-4254	AR	WORK SECTION SEAL KIT (includes all seals needed to service tilt, sway, & aux. sections only) (one kit needed per section)	28	9116-4072	2	TILT & SWAY SECTIONS (includes items 29 & 30, two of items 31 & 32)
1	9114-4162	1	L.E. INLET COVER ASSY (includes items 2 thru 5)	29	9116-4073	4	RELIEF VALVE - 3000 P.S.I. (includes item 30)
2	9108-4017	2	PLUG (includes item 3)	30	9104-4527	6	RELIEF VALVE SEAL KIT (note: only external seal can be serviced in in the field)
3		1	O-RING	31		5	4-WAY SPOOL (not available for service, order individual work sections as needed)
4	9114-4255	1	MAIN RELIEF VALVE - 3500 P.S.I. (includes item 5)	32	9114-4265	3	SPOOL POSITIONER KIT (includes items 33 thru 36)
5	9116-4065	1	MAIN RELIEF SEAL KIT (note: only external seals can be serviced in the field)	33		6	SCREW
6	9116-4066	2	LIFT & CROWD SECTIONS (includes four of item 7, plus two of items 9, 22 & 31)	34		3	BONNET
7	9116-4067	4	NO RELIEF PLUG KIT (includes item 8)	35		3	SPOOL COLLAR
8	9104-4527	4	NR PLUG SEAL KIT	36		6	SPRING COLLAR
9	9114-4258	2	HR POSITIONER ASSY 'A' END (includes items 10 thru 21)	37		3	SPRING
10		4	O-RING	38	9114-4263	6	SPOOL SEAL KIT
11		4	SPACER	39	9114-4264	3	SPOOL RETAINER KIT
12		4	O-RING	40	9116-4076	1	AUXILIARY SECTION (includes one each of items 31 & 32, plus two of item 41)
13	9116-4068	4	SPRING ASSY (includes items 14, 15, 16 & 17)	41	9116-4074	2	RELIEF VALVE - 2000 P.S.I. (includes item 30)
14		8	STOP COLLAR	42		12	O-RING (included in section seal kit, six kits required to service entire valve)
15		2	SPRING	43		6	O-RING (included in section seal kit, six kits required to service entire valve)
16		2	SPACER	44	9114-4163	1	R.E. OUTLET COVER (includes item 45)
17		4	SPUD	45	9116-4075	1	INTERNAL PLUG, 3/4-18 NPT
18	9116-4069	4	BONNET ASSY (includes items 19, 20 & 21)	46		4	STUD (included in 9103-4070)
19		16	BEARING PLATE	47		4	NUT (included in 9103-4070)
20		16	LOCKWASHER	48	8820-1038	2	HEX HD CAPSCREW, 3/8-16X1-3/4, GR5 (outlet end only)
21		16	SCREW		8820-1040	1	HEX HD CAPSCREW, 3/8-16X2-1/4, GR5 (inlet end only)
22	9114-4259	2	HR POSITIONER ASSY 'B' END (includes items 10, 11, 12, 14, 17 thru 21, 24, 25 & 26)	49	8855-1011	3	LOCKWASHER, 3/8
23	9116-4070	2	SPRING ASSY (includes items 14, 17, 24, 25 & 26)	50	8856-1004	6	FLAT WASHER, 3/8
24		2	SPRING	51	8850-1006	3	HEX NUT, 3/8-16
				52	9116-1209	1	VALVE SUPPORT (partially illustrated)
							NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.

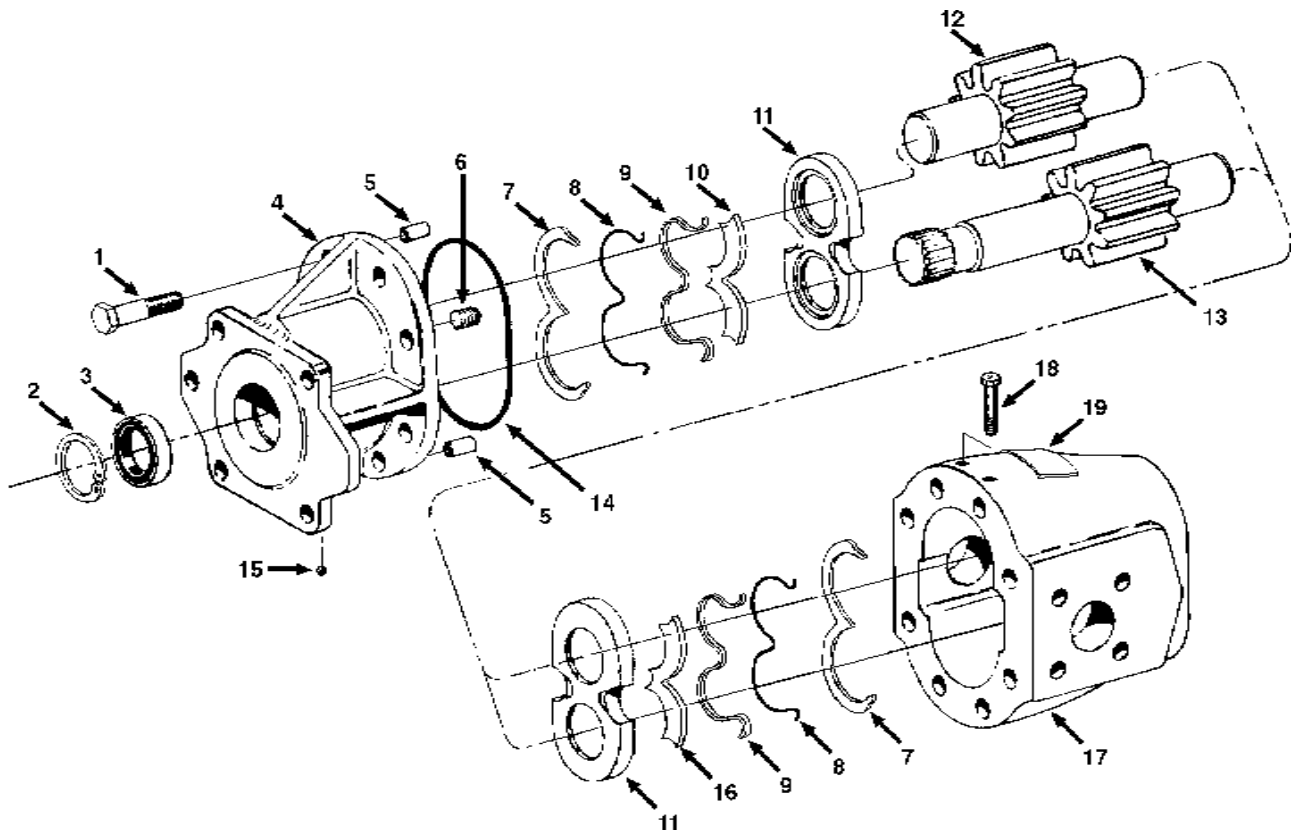


Item	Part No.	Qty.	Description Of Part
	9116-5013	1	HYDRAULIC RESERVOIR ASSY (includes all items)
1	9114-3133	1	HYDRAULIC OIL TANK (includes item 21)
2	9108-3070	1	FLUID LEVEL GAUGE (includes items 3 & 4)
3		2	SCREW
4		2	WASHER
5	9114-3172	2	MINI CHECK COUPLING
6	8859-1210	3	O-RING
7	8866-1084	1	BULKHEAD UNION, 9/16-18X3/8 TUBE
8	8866-2105	1	ELBOW, 90 DEGREES (swivel nut)
9	9002-7179	1	BULKHEAD UNION, 90 DEGREES
10	9116-3141	1	TUBE ASSY
11	9114-3218	1	RETURN FILTER (includes one of item 13 and item 14)
12	9108-3518	1	SUCTION FILTER (includes one of item 13)
13	9114-3144	2	FILTER ELEMENT
14	9108-4022	1	COLOR CODED GAUGE
15	8866-2070	1	ELBOW, 90 DEGREES (includes item 6)
16	8067-3009	1	ADAPTER, 90 DEGREES
17	8820-1036	4	HEX HD CAPSCREW, 3/8-16X1-1/4, GR5
18	8856-1004	8	WASHER, 3/8
19	8832-1039	6	SELF TAPPING SCREW, #10-32X1/2"
20	8820-1020	4	HEX HD CAPSCREW, 5/16-18X1, GR5
21		1	PLUG
22	8856-1003	4	WASHER, 5/16
23	9116-1210	1	FILTER SUPPORT
24	9108-3069	1	FILLER BREATHER
25	8855-1011	4	LOCKWASHER, 3/8
26	8850-1006	4	HEX NUT, 3/8-16
27	8866-1013	1	MALE CONNECTOR
28	9108-3301	1	TANK FILTER
29	9108-3200	1	STRAIGHT CONNECTOR
30	8866-2106	1	ELBOW, 90 DEGREES, (swivel nut)
			NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.

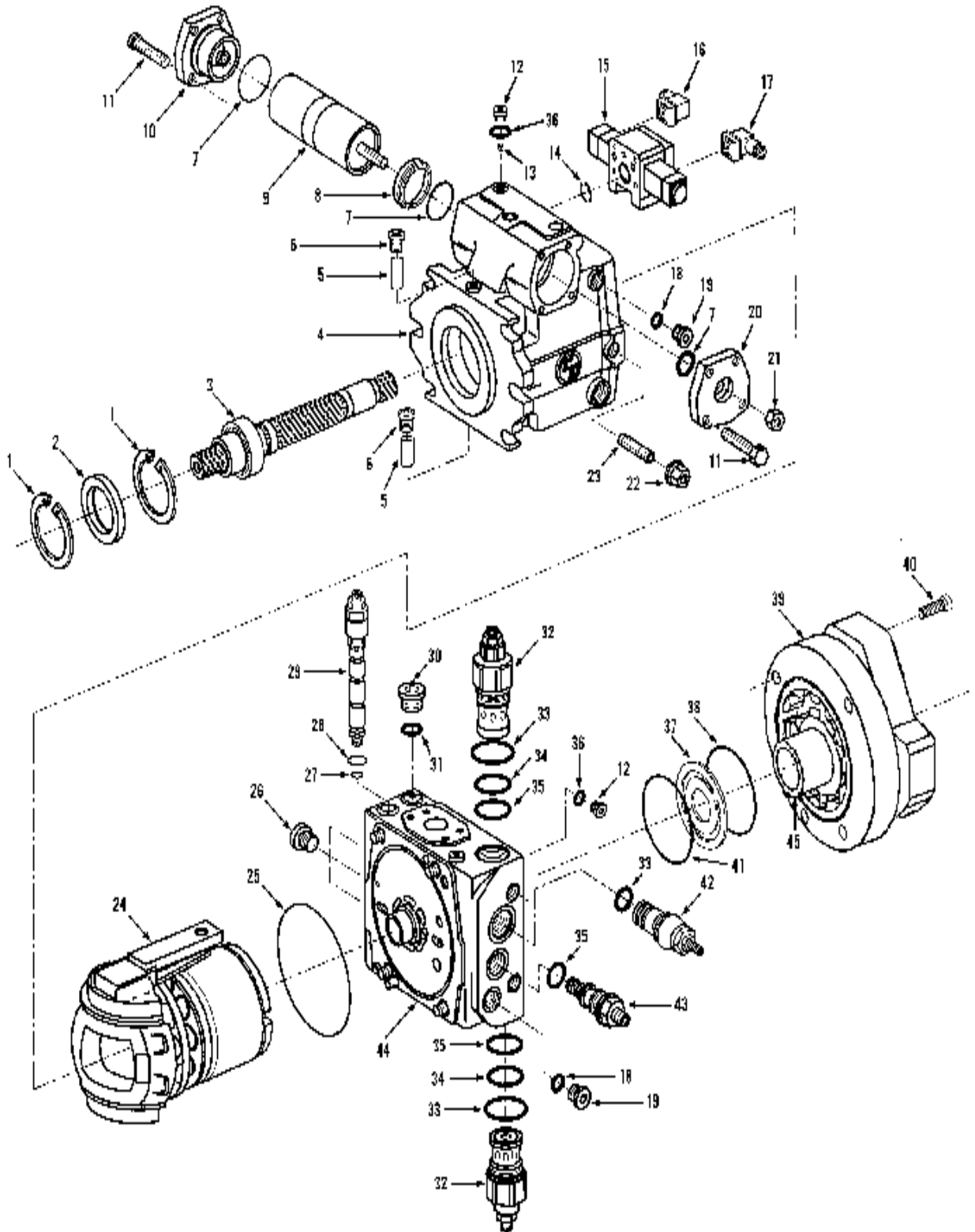


**FOR OUR APPLICATION THIS DRIVE MOTOR IS UTILIZED IN A 180 DEGREE INVERSION.**

Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9116-3044	1	FRONT DRIVE MOTOR ASSY (includes all items)	17	8093-4080	4	CAPSCREW
	9109-4025	AR	SEAL KIT (includes items 3,4, 6, 9, 13, 14, 16, 18, 23)	18		1	SEAL NUT
1	9109-4026	1	SNAP RING	19	9109-4033	1	DA1 CONTROL KIT (includes items 16, 17, 18 & 20)
2	9109-4027	1	SHIM	20	9114-4248	2	FITTING
3		1	SHAFT SEAL	21	9109-4034	1	REAR COVER ASSY (includes item 22)
4		1	O-RING	22	9109-4035	8	CAPSCREW, M16X45
5	9109-4028	1	PLUG (includes item 5)	23		1	O-RING
6		1	O-RING	24	9116-4017	1	FLUSHING VALVE ASSY (includes items 23, 25, 26, 27 & 29)
7	9109-4029	1	PLUG (includes item 6)	25	9109-4037	4	CAPSCREW, M8X50
8	8091-4241	1	STOP SCREW, M12X90	26	9109-4038	1	FLUSHING ORIFICE
9		2	SEAL NUT	27	9109-4039	1	PLUG
10	9109-4030	1	HOUSING	28	8392-4123	1	SWIVEL TIME ORIFICE
11	9109-4031	1	STOP SCREW, M12X80	29	9109-4040	2	PLUG
12	9109-4032	1	ROTARY GROUP				
13		1	O-RING				
14		6	O-RING				
15	8091-4235	2	CHECK VALVE KIT (includes o-rings)				
16		1	O-RING				
							NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.



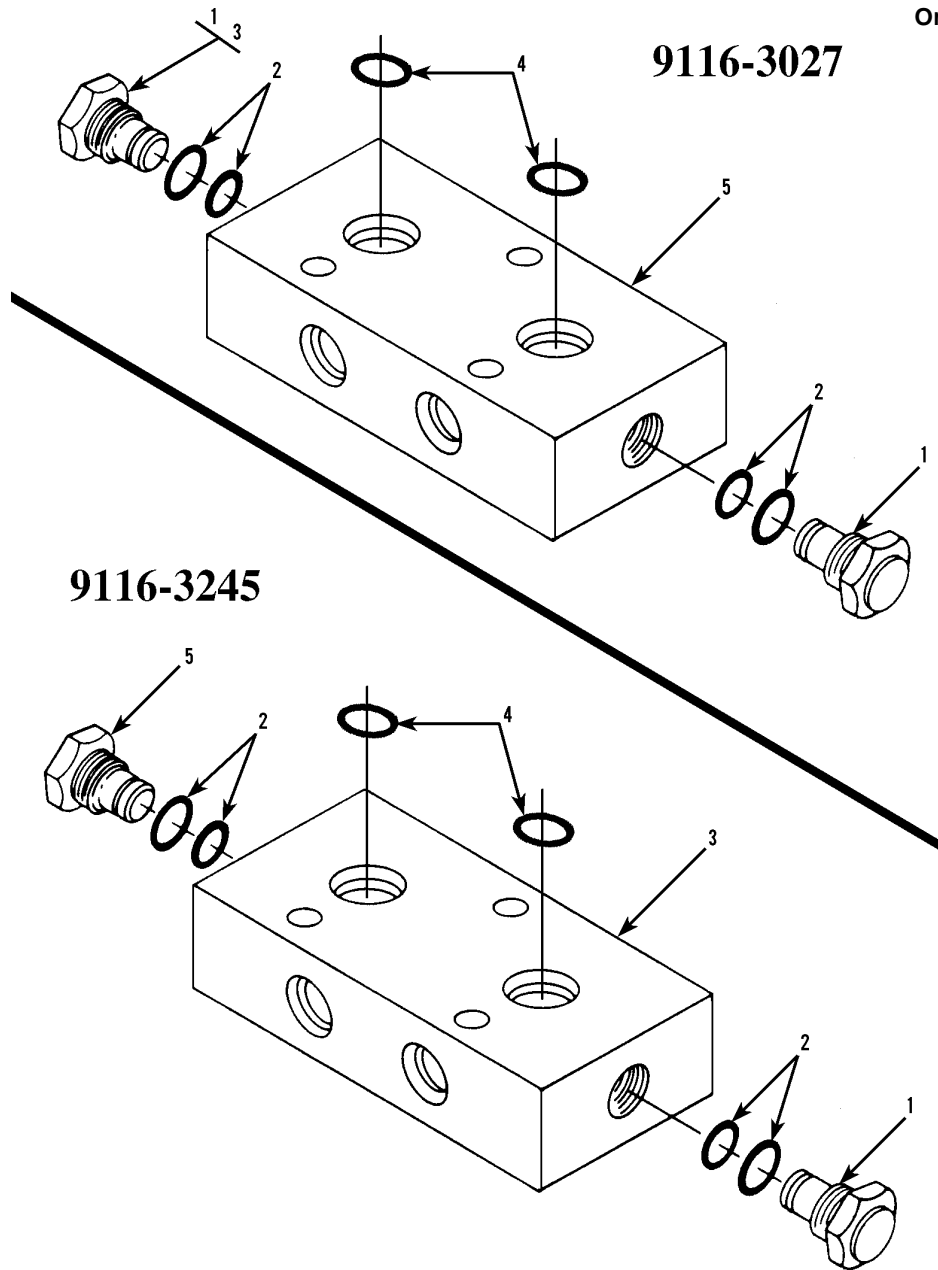
Item	Part No.	Qty.	Description Of Part
	9116-3068	1	MAIN HYDRAULIC PUMP ASSY (includes all items)
	9101-4058	AR	SHAFT SEAL KIT (includes items 2, 3 and 14)
	9114-4174	AR	SEAL KIT (includes items 2, 3, 7, 8, 9 and 14)
1	9106-4021	8	CAPSCREW
2	9020-2372	1	SNAP RING
3	9020-2371	1	SHAFT SEAL
4	9114-4169	1	FLANGE
5	9020-2376	2	DOWEL
6	9114-4171	1	PIPE PLUG
7	9020-2405	2	RING RETAINER
8	9020-2403	2	O-RING
9	9020-2404	2	BACKUP RING
10	9020-2406	1	ISOLATION PLATE, (UPPER)
11	9020-2399	2	PRESSURE PLATE
12	9020-7061	1	IDLER GEAR
13	9116-4049	1	DRIVE GEAR
14	9020-2379	1	O-RING
15	9116-4050	1	BALL
16	9020-2407	1	ISOLATION PLATE (LOWER)
17	9116-4051	1	BODY
18	9114-4172	2	DRIVE SCREW
19	9114-4173	1	LABEL





Item	Part No.	Qty.	Description Of Part
	9116-3048	1	HYDROSTATIC TRANSMISSION PUMP (includes all items)
	9108-4317	AR	SEAL KIT (includes items 2, 6, 7, 14, 15, 22, 25, 27, 28, 31, 32, 33, 34, 35, 36, 38, 41 plus additional items not illustrated)
1	8093-4052	2	SNAP RING
2		1	SHAFT SEAL
3	9114-4413	1	SHAFT ASSY
4	9108-4319	1	HOUSING ASSY
5	9108-4320	2	PIN
6		4	PLUG
7		4	O-RING
8	9108-4321	2	BUSHING
9	9108-4322	1	STROKING PISTON ASSY
10	9108-4323	1	STROKING PISTON COVER KIT (includes items 7 & 11)
11	8093-4077	8	CAPSCREW, M8X20
12	8093-4084	5	PLUG (includes item 36)
13	9114-4093	2	STROKING ORIFICE
14		1	O-RING
15	9108-4324	1	DA CONTROL ASSY (includes items 16 & 17)
16	9108-4038	1	HERSHMAN CONNECTOR (black)
17	9108-4039	1	HERSHMAN CONNECTOR (gray)
18		2	O-RING
19	8093-4082	2	PLUG (includes item 18)
20	9108-4325	1	STROKING PISTON COVER KIT (includes items 7 & 11)
21	9114-4094	1	JAM NUT
22		1	SEAL NUT

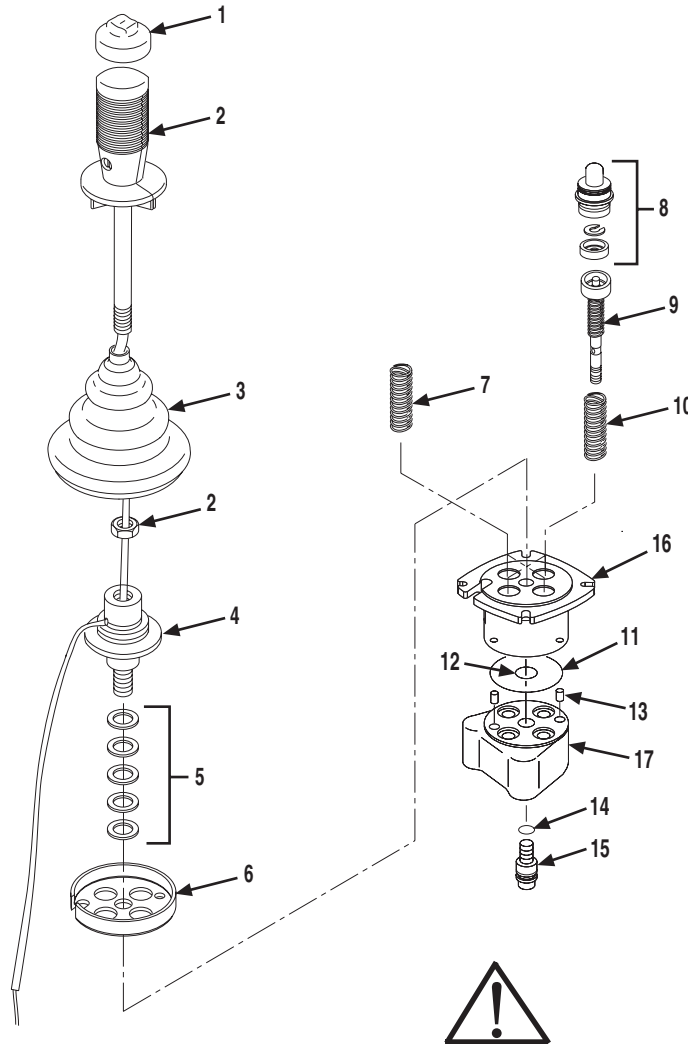
Item	Part No.	Qty.	Description Of Part
23	9114-4095	1	ECCENTRIC SCREW
24	9108-4326	1	ROTARY GROUP ASSY
25		1	O-RING
26	9108-4327	3	PLUG
27		1	O-RING
28		1	O-RING
29	9108-4328	1	POR ASSY (includes items 27 & 28)
30	8093-4340	1	PLUG (includes item 31)
31		1	O-RING
32	9108-4032	2	RELIEF VALVE (includes one each of items 33 thru 35)
33		3	O-RING
34		2	O-RING
35		3	O-RING
36		5	O-RING
37	9108-4329	1	WEARPLATE
38		1	O-RING
*39	9116-4098	1	CHARGE PUMP ASSY (includes items 37, 38, 40 & 41)
40	9108-4331	4	CAPSCREW, M12X35
41		1	O-RING
42	9114-4099	1	DA CARTRIDGE ASSY
43	9114-4098	1	CHARGE PRESSURE RELIEF VALVE (includes item 35)
44	9108-4332	1	PORT BLOCK ASSY (includes items 25, 26, 27, 28 & 29)
45	9114-4002	1	SEAL (located between transmission & main pump)
			NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.



Item	Part No.	Qty.	Description Of Part
	9116-3027	1	SWAY CYLINDER VALVE (includes items 1, 2, 3 & 5)
1	9116-4061	2	VALVE CARTRIDGE
2	9116-4056	2	VALVE SEAL KIT
3	9116-4062	1	PISTON
4	8859-1012	2	O-RING
5		1	VALVE BODY (not sold separately, order P/N 9116-3027)
			NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.

Item	Part No.	Qty.	Description Of Part
	<del>9116-3026</del>	2	<del>OUTRIGGER CYLINDER VALVE (no longer available - no service parts, see superceding valve below)</del>
	9116-3245	2	OUTRIGGER CYLINDER VALVE (includes all items)
* 1	9103-4107	1	THERMAL RELIEF VALVE
2	9116-4083	2	VALVE SEAL KIT
* 3		1	VALVE BODY (not sold separately, order P/N 9116-3245)
4	9103-4118	2	O-RING
* 5	9116-4107	1	CHECK CARTRIDGE
			NOTE: QUANTITIES SHOWN ARE FOR ONE VALVE ASSY ONLY.

\* Revised items included in Outrigger Cylinder Valve (9116-3245) - revised quantity on item 1; removed part number from item 3; added item 5; revised illustration.

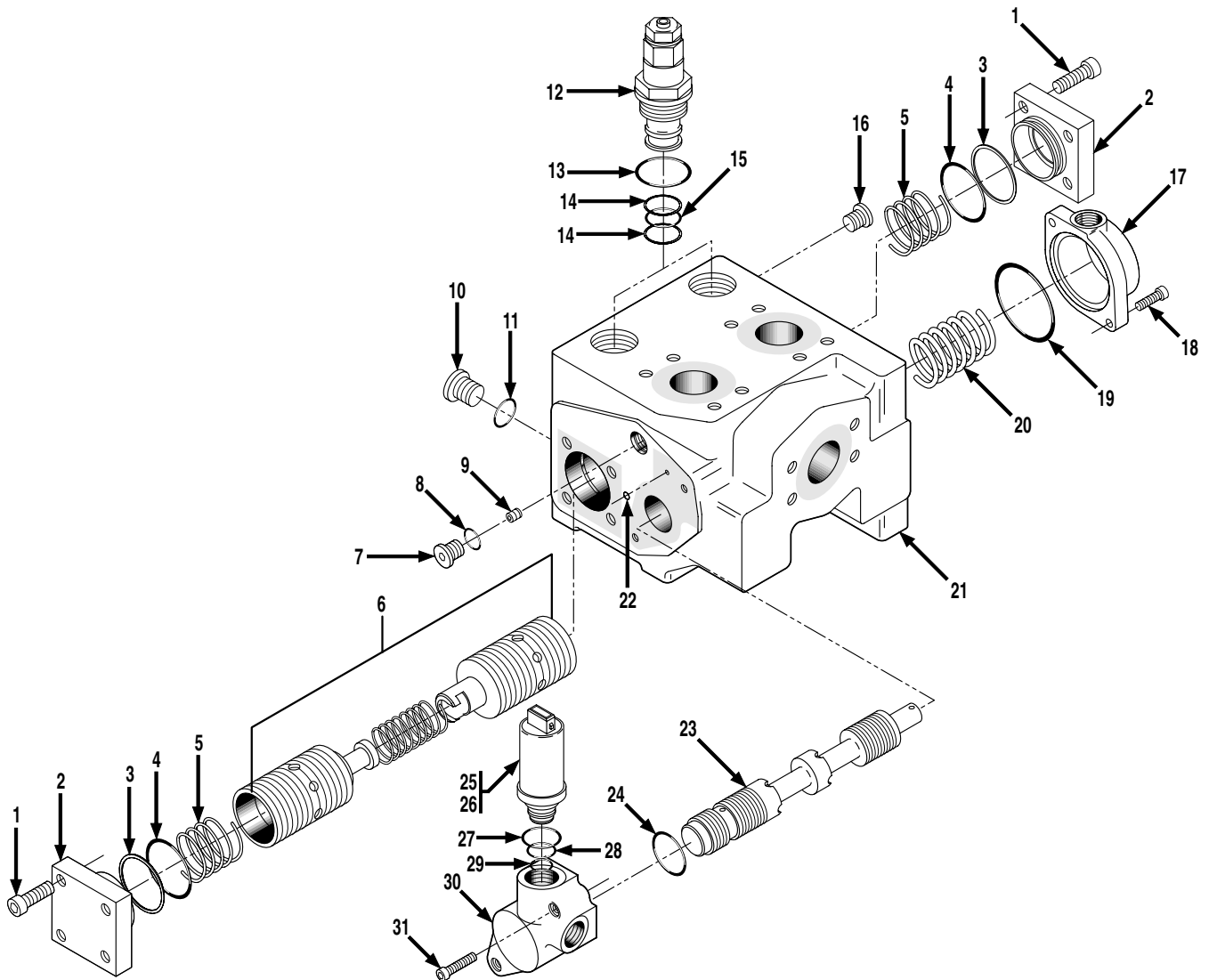


**NOTE: THE BOSCH REXROTH CORPORATION JOYSTICK HANDLE SWITCH IS NOT A FIELD SERVICEABLE COMPONENT. ANY ATTEMPT BY NON-FACTORY AUTHORIZED PERSONNEL TO REPAIR OR REPLACE THE SWITCH WILL VOID THE WARRANTY AND CAN RESULT IN A JOYSTICK MALFUNCTION.**

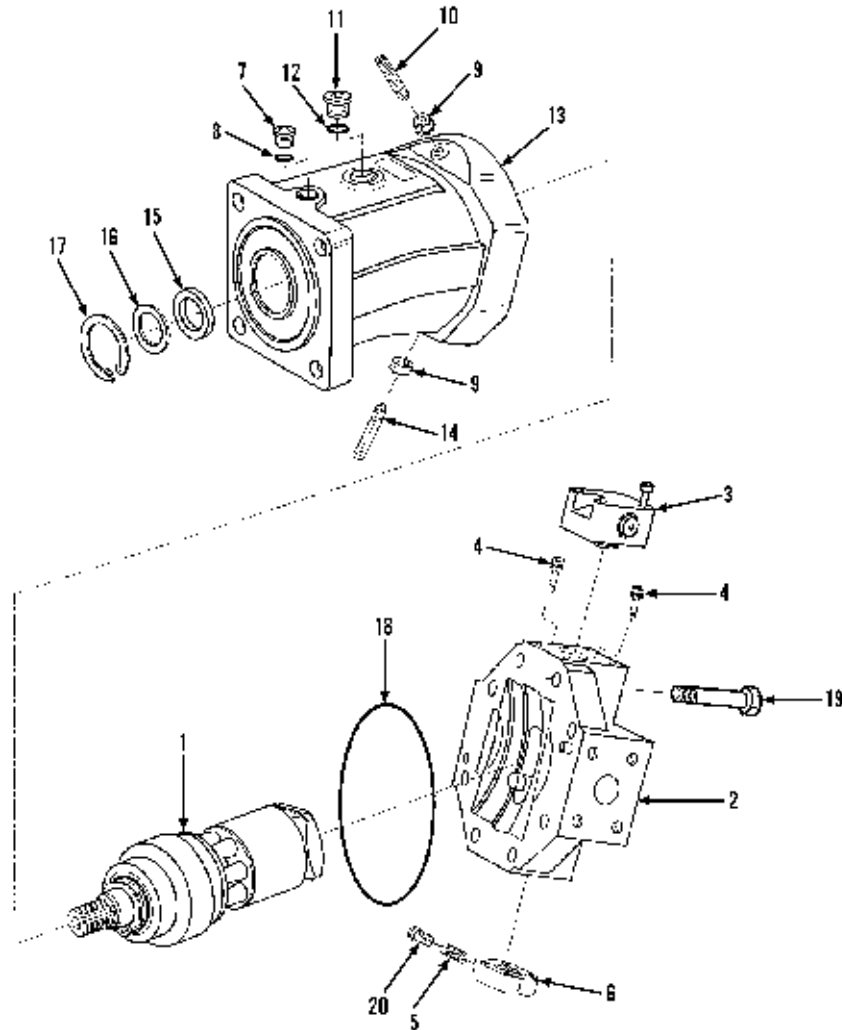
Item	Part No.	Qty.	Description Of Part
	9130-3037	1	JOYSTICK ASSY, (includes all items)
	9140-4326	1	SEAL KIT, (includes items 11 thru 15)
1	8093-4658	1	CAP
2	8093-4656	1	HANDLE GRIP KIT
3	8093-4241	1	BOOT
4	8026-4140	1	CARDAN KIT, (includes item 5)
5		AR	SHIM
6	9130-4026	1	RETAINING PLATE
* 7	9150-4029	1	STANDARD SPRING, (pack of two), (port 2 & 4)
8	8093-4498	4	PLUNGER & GUIDE KIT
9	9140-4327	4	REGULATING KIT
10	9150-4028	1	HEAVY SPRING, (pack of two), (port 1 & 3)

Item	Part No.	Qty.	Description Of Part
11		1	O-RING
12		1	O-RING
13		2	PIN
14		1	O-RING
15		1	SCREW
16		1	UPPER BODY
17		1	LOWER BODY

NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.

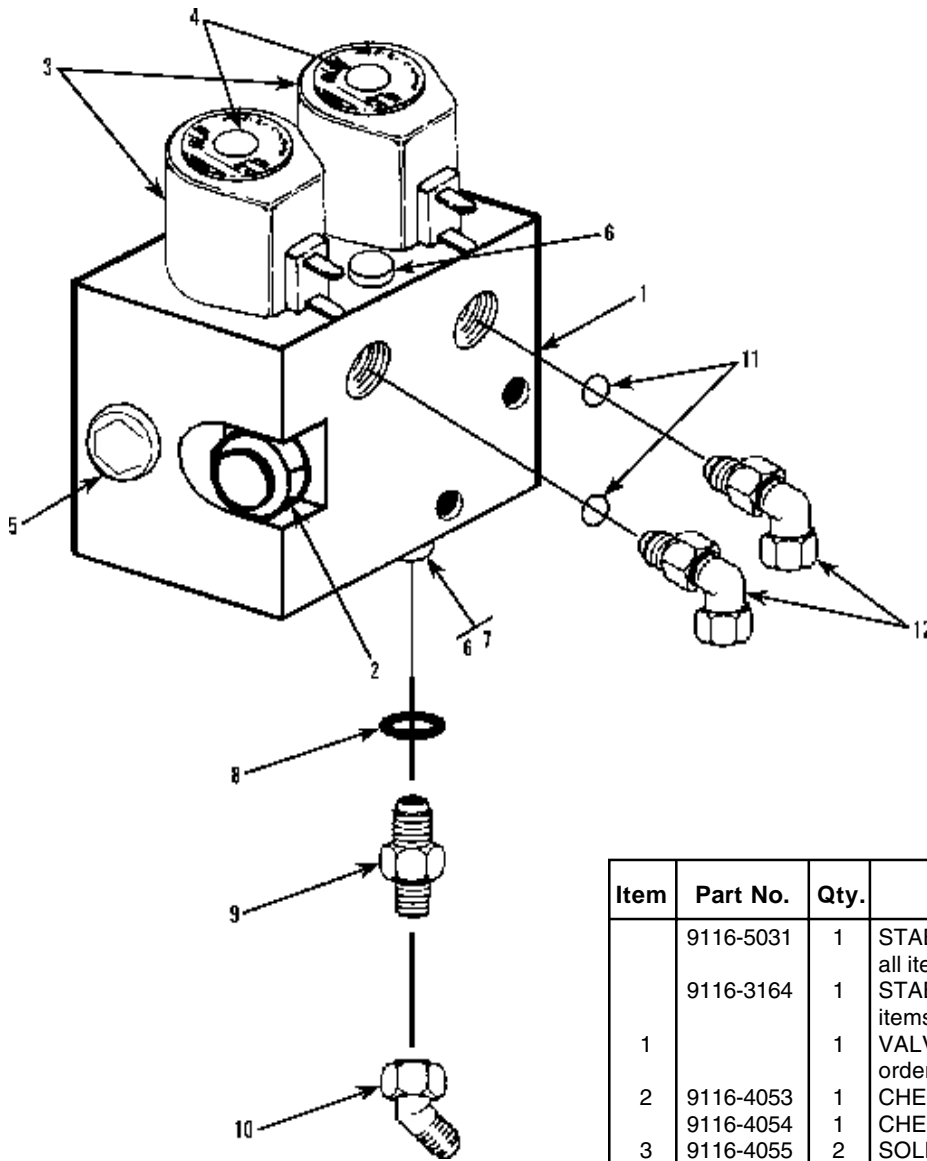


Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9114-3049	1	TRACTION LOCK VALVE, (includes all items)	15	8381-4054	2	O-RING
	9108-4284	Ref	SEAL KIT, (includes items 3, 4, 8, 11, 13, thru 16, 19, 22, 24, 27, 28, 29)	16	9108-4363	1	PLUG
1	9108-4285	8	HEX HD CAPSCREW, M10X30	17	9114-4475	1	COVER
2	9108-4286	2	COVER	18	9108-4291	2	HEX HD CAPSCREW, M6X16
3	9108-4287	2	BACK-UP RING	19	9108-4293	1	O-RING
4	9108-4288	2	O-RING	20	9108-4294	1	SPRING
5	9108-4289	2	SPRING	21		1	VALVE BODY, (not sold separately, order P/N 9114-3049)
6		1	SPOOL, (not sold separately, order P/N 9114-3049)	22	9108-4303	1	O-RING
7	9108-4298	1	PLUG, (includes item 8)	23		1	SPOOL, (not sold separately, order P/N 9114-3049)
8	9114-4011	1	O-RING	24	9108-4300	1	O-RING
9	9108-4299	1	ORIFICE	25	9108-4302	1	SOLENOID VALVE, (include items 27, 28 & 29)
10	9108-4290	2	PLUG, (includes item 11)	26	9114-4015	1	CONNECTOR
11	9114-4009	2	O-RING	27	9114-4012	1	O-RING
12	9108-4362	2	RELIEF VALVE CARTRIDGE, (set at 6800 PSI), (includes items 13, 14 & 15)	28	9114-4013	1	O-RING
13	8381-4056	2	O-RING	29	9114-4014	1	O-RING
14	9114-4010	4	BACK-UP RING	30	9114-4474	1	COVER
				31	8093-4205	2	HEX HD CAPSCREW, M6X30

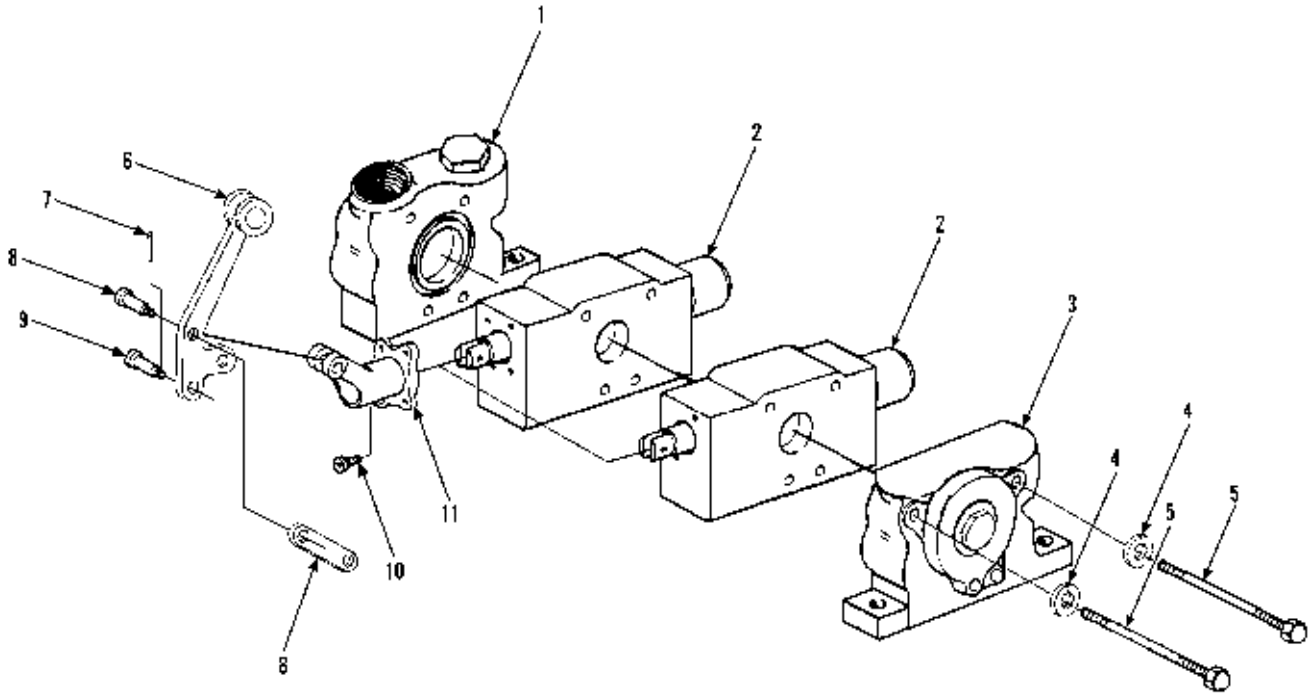


Item	Part No.	Qty.	Description Of Part
	9116-3023	Ref	REAR DRIVE MOTOR ASSY (includes all items)
	9114-4414	AR	SEAL KIT (includes items 8, 9, 12, 15, 18, plus items not illustrated)
1	9114-4415	1	ROTARY GROUP
2	9114-4416	1	REAR COVER ASSY (includes item 19)
3	9114-4417	1	HZ CONTROL KIT
4	9114-4418	2	CHECK VALVE KIT (includes o-rings)
5	9114-4419	1	SWIVEL TIME ORIFICE
6	9114-4420	1	STROKING PISTON ASSY (includes item 20)
7	9109-4028	1	PLUG (includes item 8)
8		1	O-RING
9		2	SEAL NUT, M10

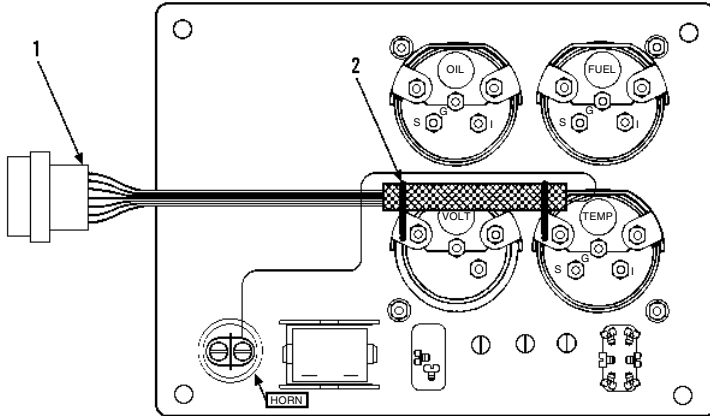
Item	Part No.	Qty.	Description Of Part
10	8392-4121	1	STOP SCREW (min. disp.)
11	9109-4029	1	PLUG (includes item 12)
12		1	O-RING
13	9114-4421	1	HOUSING
14	8392-4121	1	STOP SCREW (max. disp.)
15		1	SHAFT SEAL
16	9114-4422	1	SHIM
17	9114-4423	1	SNAP RING
18		1	O-RING
19	9114-4424	8	CAPSCREW, M10X60
20	9114-4425	1	PLUG (includes o-ring)
			NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.



Item	Part No.	Qty.	Description Of Part
	9116-5031	1	STABILIZER VALVE ASSY (includes all items)
	9116-3164	1	STABILIZER VALVE (includes items 1 thru 7)
1		1	VALVE BODY (not sold separately, order P/N 9116-3164)
2	9116-4053	1	CHECK VALVE
	9116-4054	1	CHECK VALVE SEAL KIT
3	9116-4055	2	SOLENOID VALVE ASSY (includes item 4)
	9116-4056	2	SOLENOID VALVE SEAL KIT
4	9114-4158	2	COIL
5	9116-4057	1	PORT PLUG
	9116-4058	1	PORT PLUG SEAL
6	9116-4059	2	PORT PLUG
	9116-4060	2	PORT PLUG SEAL
7	9116-4063	1	ORIFICE PLUG
8	8859-1206	1	O-RING
9	8866-2019	1	CONNECTOR (includes item 7)
10	8866-2120	1	ELBOW, 45 DEGREES (swivel nut)
11	8859-1205	2	O-RING
12	8866-2065	2	ELBOW, 90 DEGREES (includes item 11)
			NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.



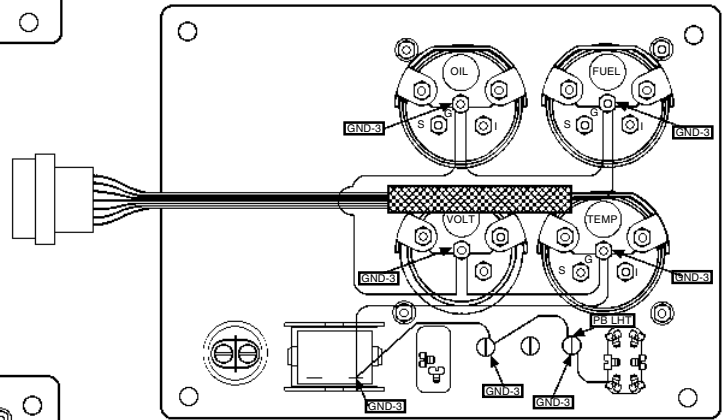
Item	Part No.	Qty.	Description Of Part
	9114-3161	1	OUTRIGGER CONTROL VALVE ASSY (includes all items)
	9115-4006	2	HANDLE KIT (includes items 6 thru 11)
	9020-6417	AR	VALVE SECTION SEAL KIT (one kit per section)
1	9114-4132	1	LEFT END COVER ASSY
2	9114-4133	2	VALVE SECTION & SPOOL ASSY (not sold separately)
3	9114-4134	1	RIGHT END COVER ASSY
4	9114-4131	4	LOCKWASHER
5	9114-4130	4	BOLT
6	9115-4007	2	VERTICAL HANDLE
7	9114-4136	6	COTTER PIN
8	9114-4137	2	MOUNTING PLATE & PINS
9	9114-4138	2	HANDLE PIN
10	9114-4139	8	FILLISTER HD MACHINE SCREW
11	9114-4140	2	HANDLE BRACKET



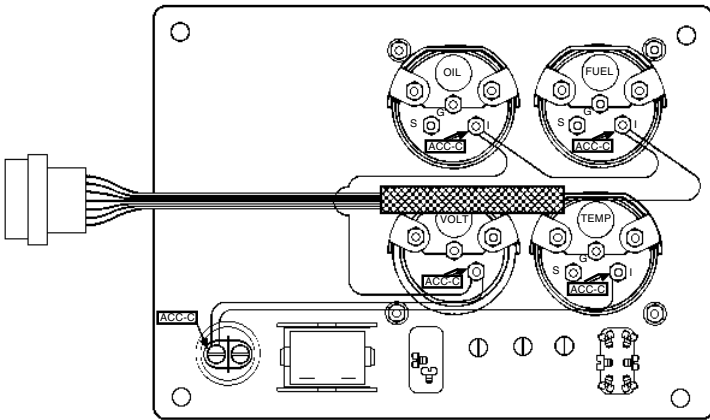
SEQUENCE #1



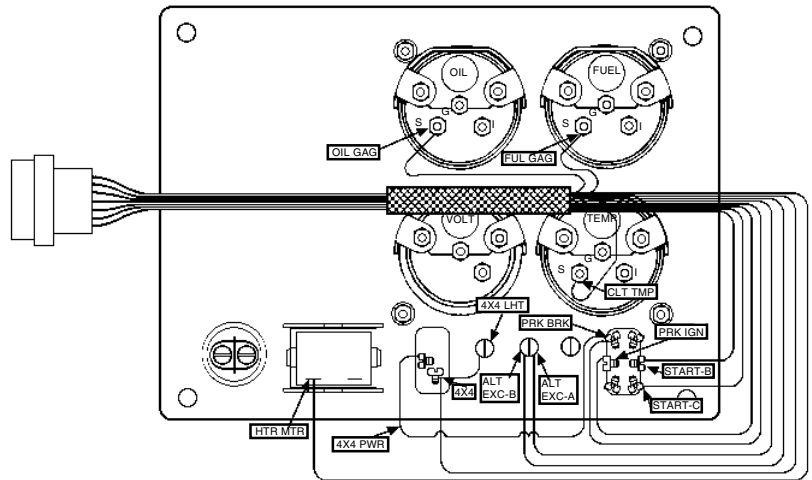
**NOTE: INSTALL HARNESS IN THE SEQUENCE SHOWN**



SEQUENCE #2

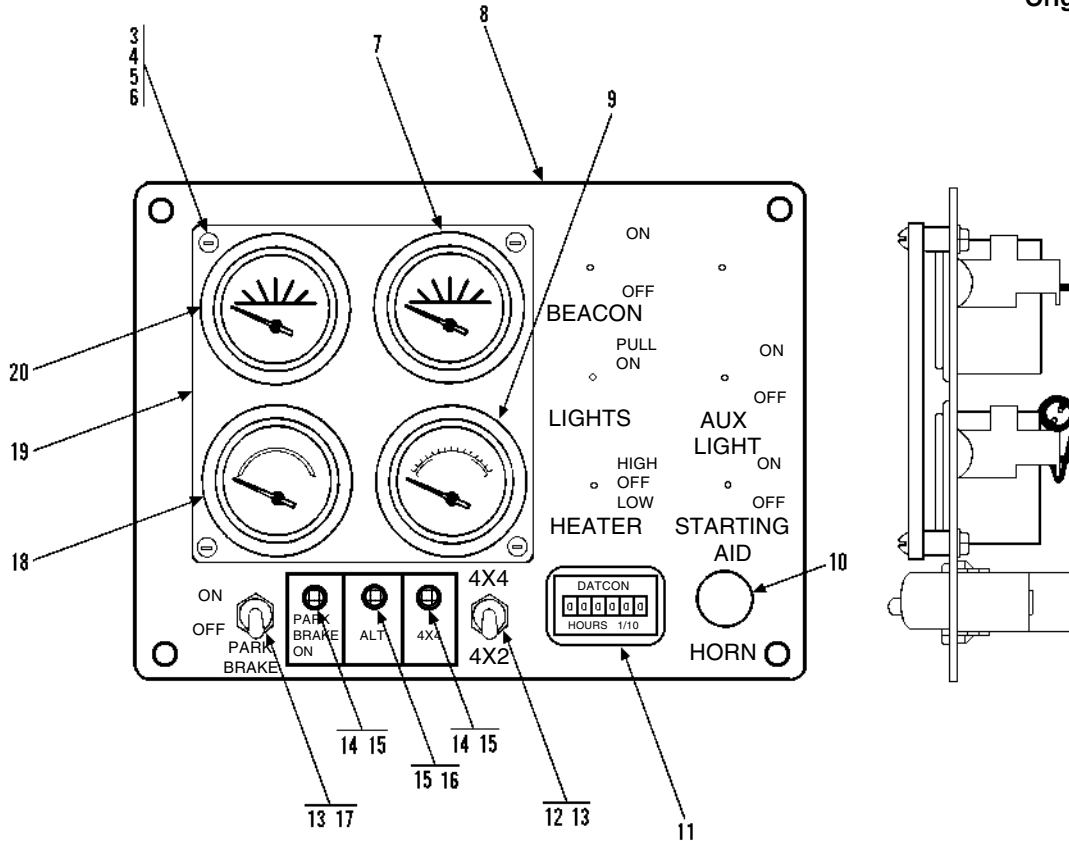


SEQUENCE #3

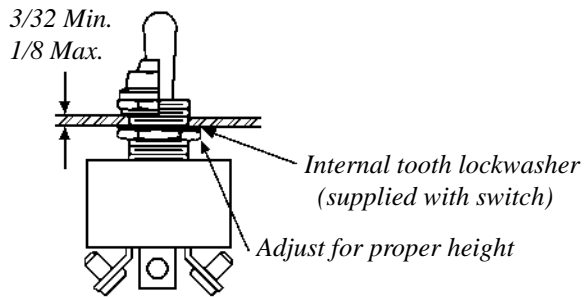


SEQUENCE #4





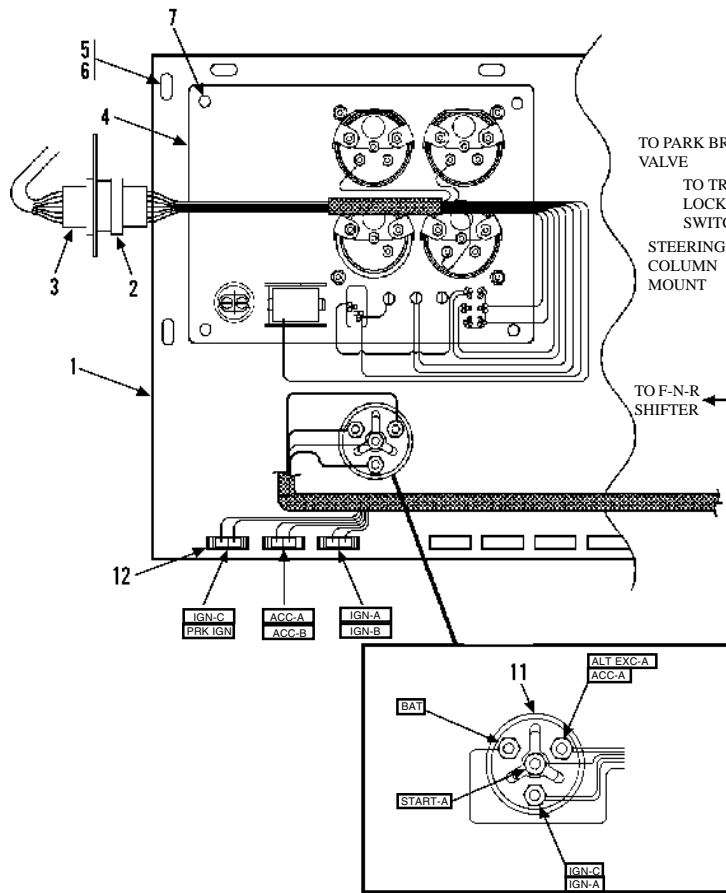
*With lockwasher under panel, bushing extension above panel must not exceed .125" or the seal may be cut.*



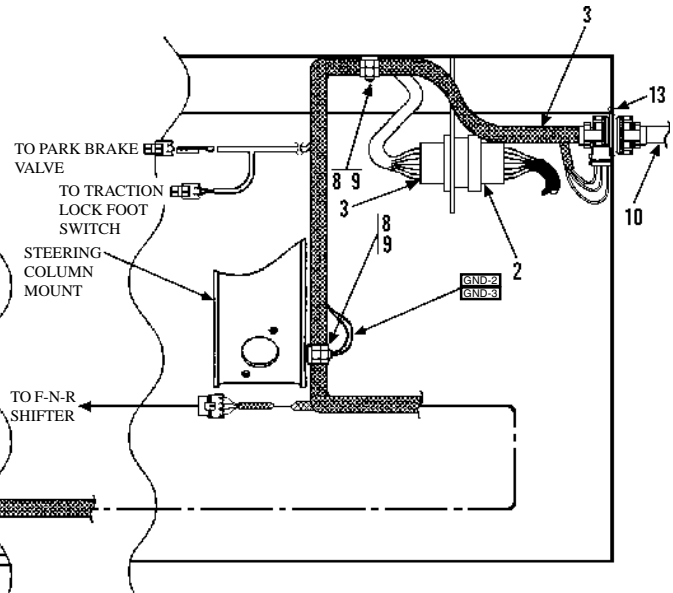
**TYPICAL SWITCH  
 AND BOOT  
 INSTALLATION**

Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9114-5031	1	GAUGE PANEL ASSY (includes all items)	10	2477-1004	1	BUTTON
1	9114-3137	1	PANEL WIRING HARNESS	11	9114-3130	1	HOUR METER
2	9105-3419	2	TIE WRAP	12	7738-3467	1	TOGGLE - SPST
3	9114-3227	4	RUBBER SPACER	13	7738-3470	2	BOOT
4	8830-1077	4	MACHINE SCREW, #8-32X1-1/4"	14	9114-3128	2	AMBER DASH LIGHT
5	8856-1104	4	STEEL PUNCHED WASHER	15	9114-3129	3	TINNERMAN NUT
6	8850-1610	4	HEX NUT, #8-32	16	9114-3127	1	RED DASH LIGHT
7	9103-3247	1	OIL PRESSURE GAUGE	17	9114-3114	1	TOGGLE - DPDT
8	9114-3138	1	FORMICA DASH PANEL	18	9020-5687	1	WATER TEMP. GAUGE
9	7738-3709	1	VOLTMETER	19	9114-3221	1	GAUGE PROTECTOR
				20	9020-5686	1	FUEL GAUGE

*PARTIAL VIEW FROM UNDER DASH*



*PARTIAL VIEW FROM ABOVE DASH WITH PANEL REMOVED FOR CLARITY*

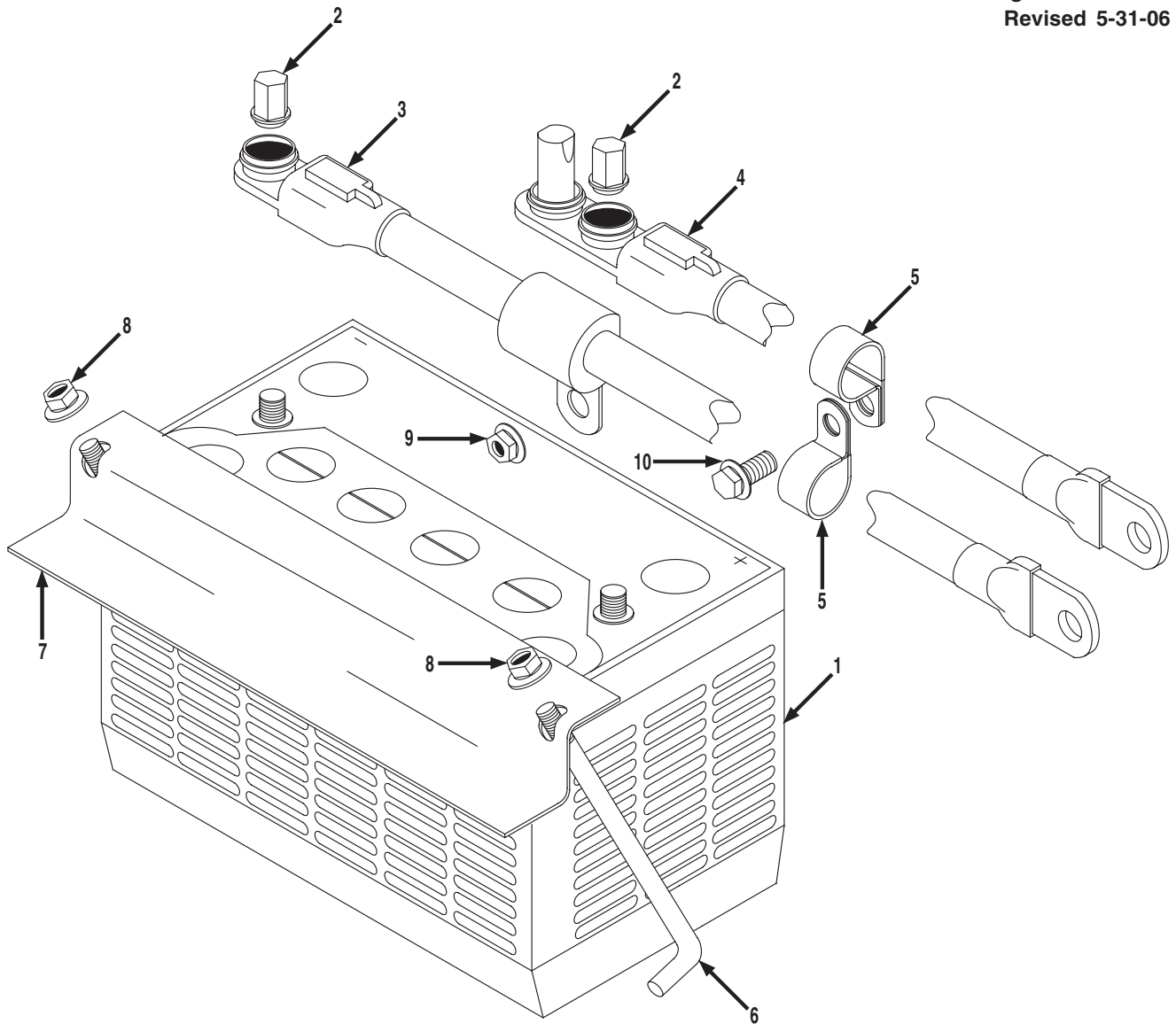


*ENLARGED VIEW OF IGNITION SWITCH CONNECTION*

Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
1	9116-1208	1	DASH PANEL	7	8826-1022	4	HEX SOC. BUT. HD. MACHINE SCREW, 5/16-18X3/4
2		Ref	GAUGE PANEL WIRING HARNESS (see page 11-1 for details)	8	2486-1120	2	CLAMP
3	9116-3020	1	DASH PANEL WIRING HARNESS	9	8850-1006	3	HEX NUT, 3/8-16
4		Ref	GAUGE PANEL (see page 11-1 for details)	10		Ref	ENGINE WIRING HARNESS (see page 5-1 for details)
5	7714-3003	7	WHIZ-LOC SCREW	11	9103-3317	1	IGNITION SWITCH
6	7714-3006	4	WHIZ-LOC NUT	12	7736-3268	3	15 AMP FUSE
				13	8832-1029	1	SELF-TAPPING SCREW, 10-24X3/8

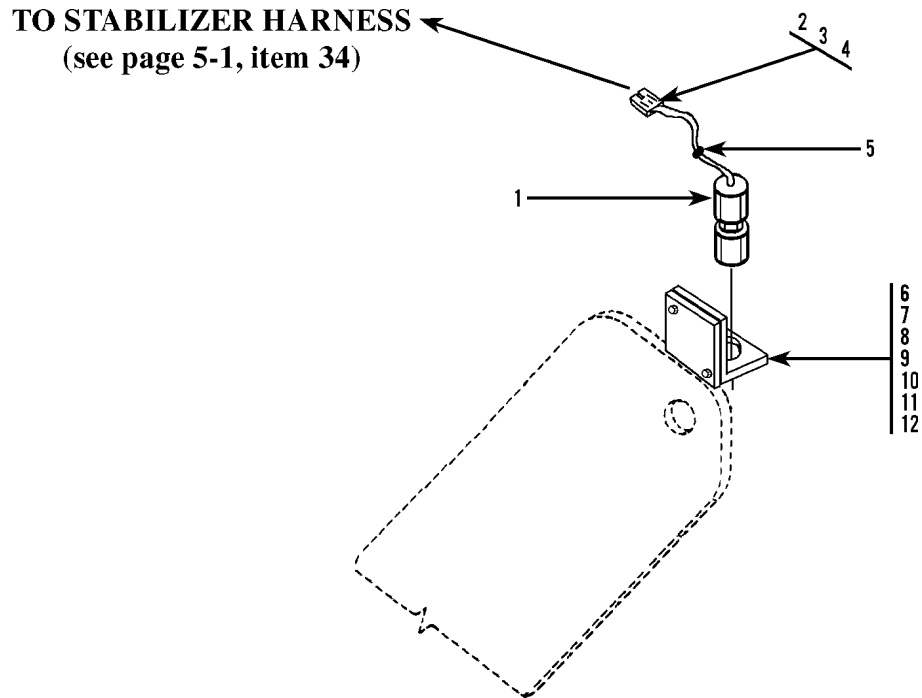
**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

**ELECTRICAL**  
**Battery & Cables**  
 Starting Serial No. 0255001  
 Original Issue 8-96  
 Revised 5-31-06

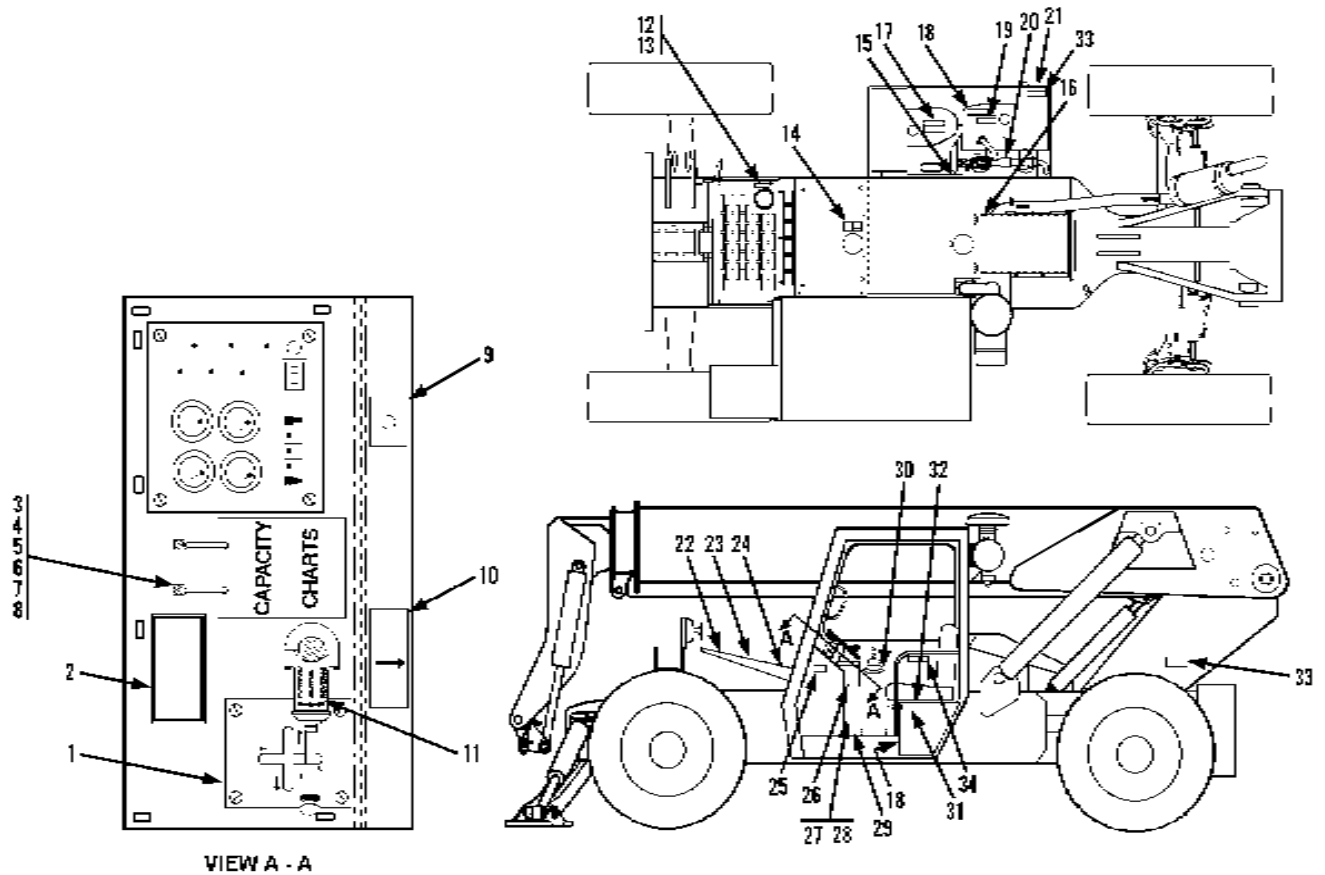


Item	Part No.	Qty.	Description Of Part
* 1	9108-3483	1	BATTERY, (12 volt, 1000 amps), TOP STUD, 3/8-16 UNC THREAD, BCI GROUP 31
2	7738-3567	2	BATTERY POST TERMINAL
3	9114-3124	1	NEGATIVE BATTERY CABLE
4	9114-3099	1	POSITIVE BATTERY CABLE
5	8594-1017	4	SUPPORT CLAMP
6	9108-1640	2	HOLD DOWN STUD
7	9114-1429	1	BATTERY HOLD DOWN
8	7714-3006	2	WHIZ LOCKNUT, 5/16-18
9	7714-3015	1	WHIZ LOCKNUT, 3/8-16
10	7714-3003	2	WHIZ LOCK SCREW, 5/16-18X5/8
	1440-3416	AR	DI-ELECTRIC GREASE (add to caps of jump terminals on battery cables)
			NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.

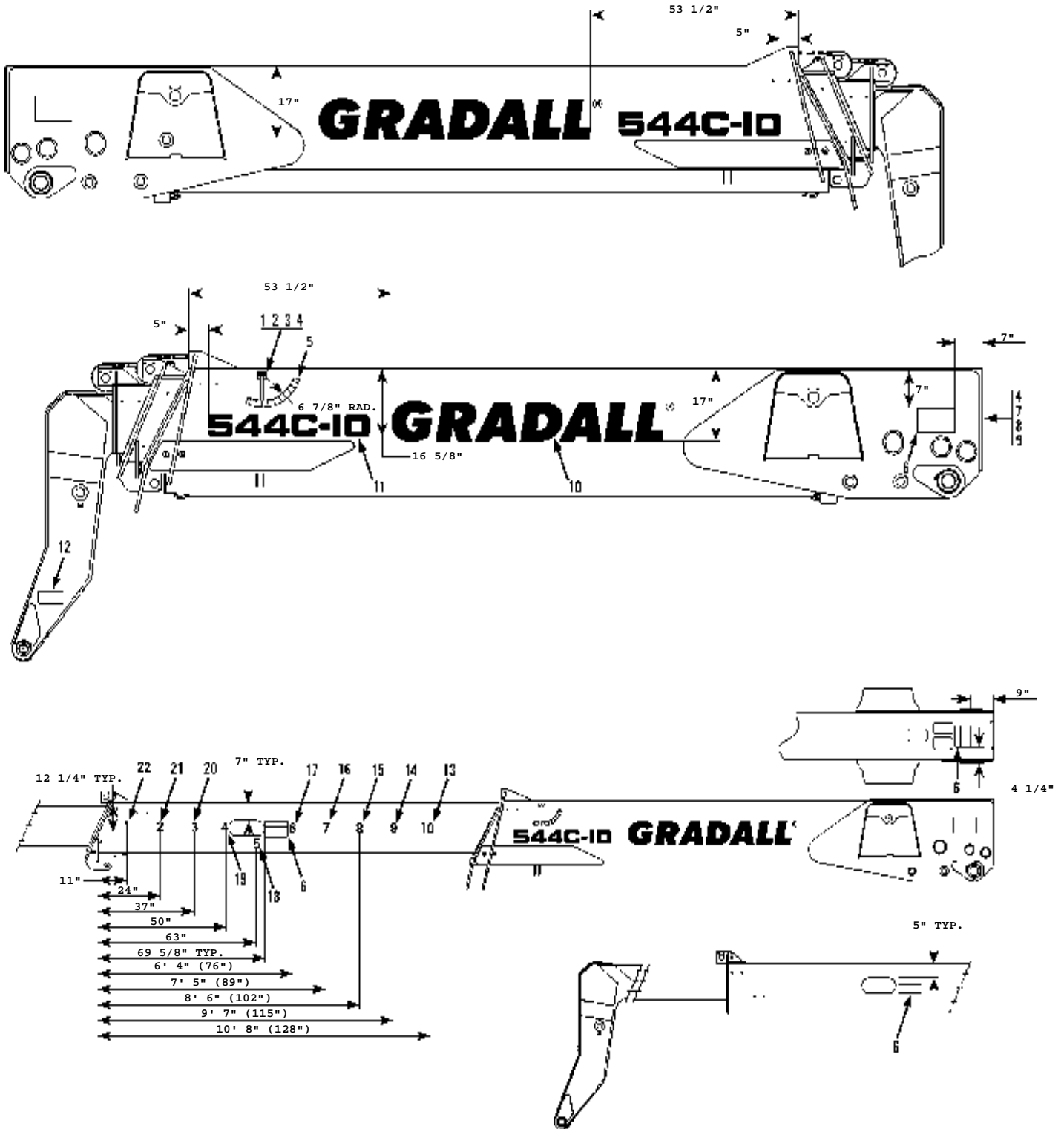
**NOTE: ADJUST STABILIZER  
 SENSOR TO OPERATE WHEN  
 BOOM ANGLE IS 45 ± 2 DEGREES**



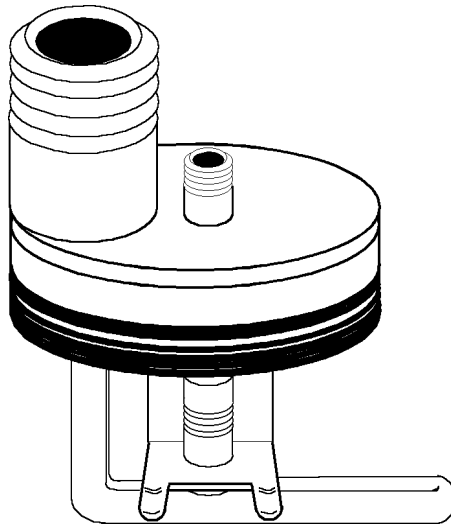
Item	Part No.	Qty.	Description Of Part
	9116-5006	1	STABILIZER PROXIMITY SENSOR ASSY (includes items 1 thru 5)
1	9114-3155	1	PROXIMITY SENSOR SWITCH
2	8096-3062	1	WEATHERPROOF SHROUD (4-wire)
3	8096-3069	4	MALE PIN TERMINAL
4	8096-3066	4	CABLE SEALS
5	9105-3419	1	TIE WRAP
6	9116-1185	1	STABILIZER SENSOR BRACKET
7	8830-1093	2	RD HD MACHINE SCREW, 10-24X3/4
8	8855-1007	2	LOCKWASHER, #10
9	8856-1001	4	FLAT WASHER, 3/16
10	9104-3199	2	SQUARE NUT, #10-24
11	9002-7187	4	TIE WRAP
12	9002-1705	1	SUPPORT CLAMP



Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9116-5037	1	544C-10 DECAL KIT (std. white) (includes items 4 thru 6, 9 thru 26 & 29 thru 33 on page 12-1 and items 5, 6 & 10 thru 22 on page 12-2)	18	9108-3492	2	OIL WARNING DECAL
1	9108-3341	1	TILT/SWAY CONTROL PLATE	19	9114-3288	1	HYDRAULIC OIL PLATE
2	9116-3212	1	WARNING DECAL	20	9114-3162	1	TEST PORT DECAL
3	9116-3087	2	LOAD CHART BRACKET	21	9116-3130	1	OIL LEVEL DECAL
4	9116-3184	1	CAPACITY CHART COVER	22	8360-1011	1	ACCIDENT PREVENTION DECAL
5	9116-3074	1	LOAD CHART STABILIZERS DOWN	23	9104-3215	1	LIFTING PERSONNEL DECAL
6	9116-3075	1	LOAD CHART STABILIZERS UP	24	9116-3224	1	SERVICE INSTRUCTION DECAL
7	8826-1017	2	BUTTON HEAD HEX SOCKET CAPSCREW, 1/4-20X7/8	25	9104-3211	1	RIDERS WARNING DECAL
8	9116-3215	1	LOAD CHART, 180 DEGREE SWING CARRIAGE	26	9106-3047	1	WARNING DECAL
9	9114-3120	1	INSTRUMENT PANEL DECAL	27	9116-3237	1	SERIAL NO. & ATTACHMENT PLATE
10	9108-3314	1	TRACTION DECAL	28	8834-1022	4	DRIVE SCREW
11	9116-3028	1	F-N-R DECAL	29	9100-3030	1	PATENT DECAL
12	9108-3494	1	BATTERY WARNING DECAL	30	9130-3047	1	BOOM OPERATION DECAL
13	9108-3497	1	JUMP START WARNING DECAL	31	7733-3027	1	MADE IN USA DECAL
14	9104-3210	1	COOLING SYSTEM CAUTION DECAL	32	9102-3006	1	STABILIZER DECAL
15	9103-3011	1	WARNING DECAL	33	9104-3209	3	PINCH POINT DECAL
16	7734-3018	1	WARNING DECAL	34	9114-3292	1	DIPSTICK DECAL
17	9108-3510	1	FUEL WARNING DECAL				NOTE: STANDARD DECALS ARE WHITE. OPTIONAL DECALS ARE BLACK. ONLY STANDARD DECALS ARE INCLUDED IN 9116-5037 DECAL KIT.



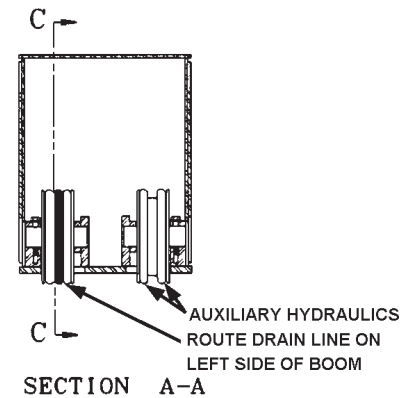
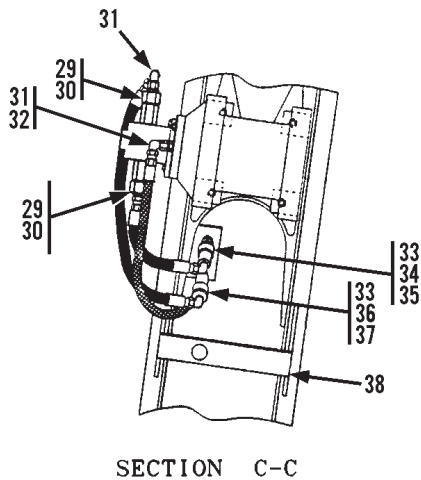
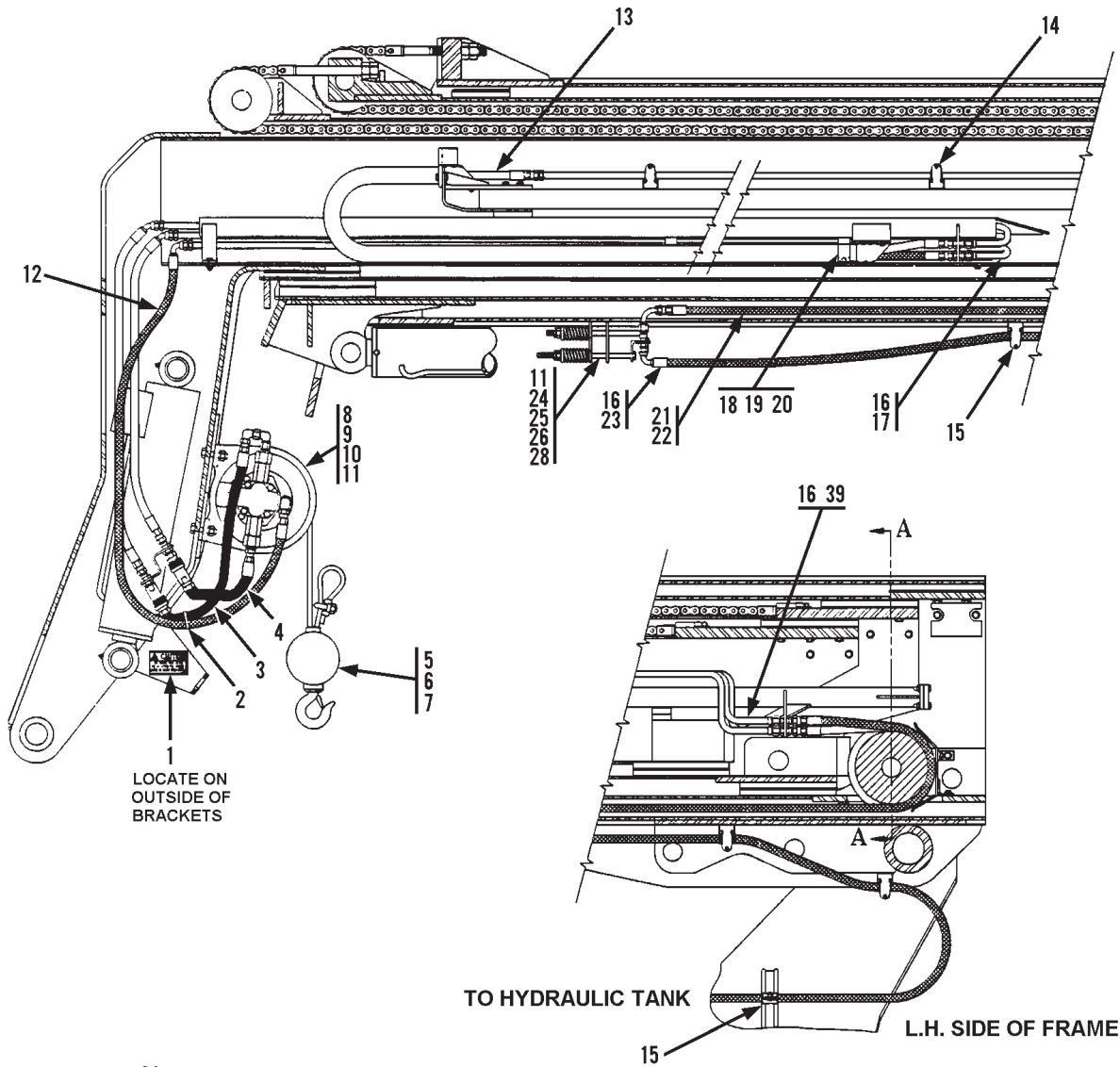
Item	Part No.	Qty.	Description Of Part
	9116-5037	1	544C-10 DECAL KIT (std. white) (includes items 4 thru 6, 9 thru 26 & 29 thru 33 on page 12-1, plus items 5, 6 & 10 thru 22 on page 12-2)
1	9020-0445	1	PENDULUM
2	9020-0688	1	BEARING
3	9002-6491	1	SHOULDER BOLT, 1/4-20
4	8856-1108	1	WASHER, 5/16
5	9100-3031	1	BOOM ANGLE DECAL
6	7702-3009	7	HOLE WARNING DECAL
7	8820-1017	4	HEX HD CAPSCREW, 5/16-18X5/8, GR5
8	9116-1206	1	BOOM END COVER
9	8855-1010	4	LOCKWASHER, 5/16
10	9112-3037	2	GRADALL DECAL (std.)
	9112-3038	2	GRADALL DECAL (opt.)
11	9116-3050	2	544C-10 DECAL (std.)
	9116-3051	2	544C-10 DECAL (opt.)
12	9103-3023	1	QUICK SWITCH DECAL
13	9116-3085	1	"10" DECAL (std.)
	9116-3086	1	"10" DECAL (opt.)
14	9116-3083	1	"9" DECAL (std.)
	9116-3084	1	"9" DECAL (opt.)
15	9116-3081	1	"8" DECAL (std.)
	9116-3082	1	"8" DECAL (opt.)
16	9116-3079	1	"7" DECAL (std.)
	9116-3080	1	"7" DECAL (opt.)
17	9116-3077	1	"6" DECAL (std.)
	9116-3078	1	"6" DECAL (opt.)
18	9112-3044	1	"5" DECAL (std.)
	9112-3045	1	"5" DECAL (opt.)
19	9100-3020	1	"4" DECAL (std.)
	9104-3136	1	"4" DECAL (opt.)
20	9112-3042	1	"3" DECAL (std.)
	9112-3043	1	"3" DECAL (opt.)
21	9100-3018	1	"2" DECAL (std.)
	9104-3135	1	"2" DECAL (opt.)
22	9100-3016	1	"1" DECAL (std.)
	9104-3134	1	"1" DECAL (opt.)
			NOTE: STANDARD DECALS ARE WHITE. OPTIONAL DECALS ARE BLACK. ONLY STANDARD DECALS ARE INCLUDED IN 9116-5037 DECAL KIT.



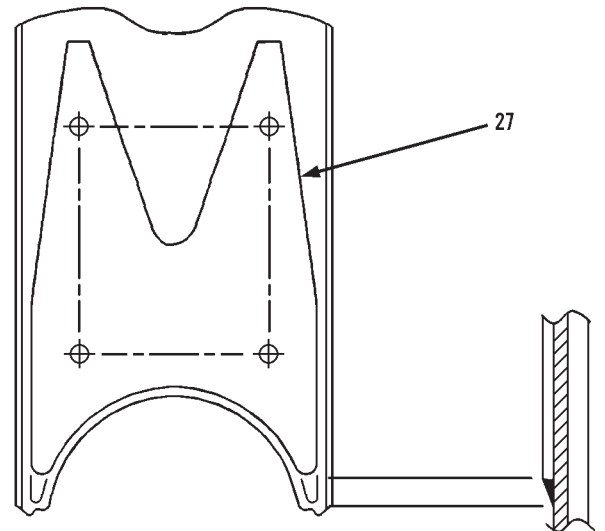
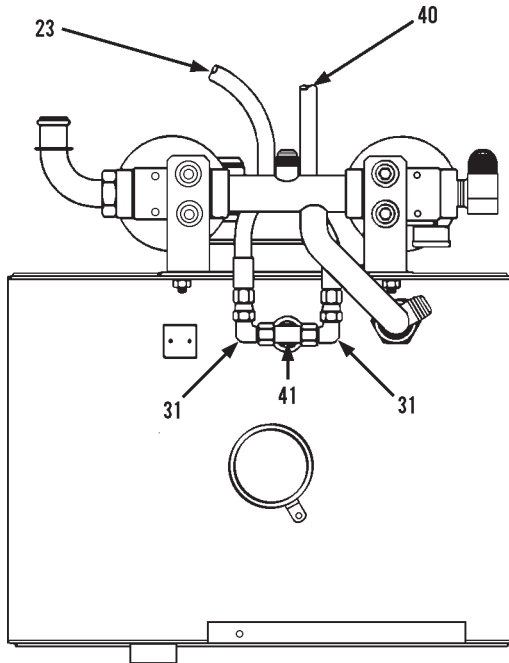
REPLACES FROST PLUG ON RIGHT SIDE OF ENGINE.

Item	Part No.	Qty.	Description Of Part
	9104-3353	1	BLOCK HEATER





**NOTE: RETRACT CHAINS & ROLLERS  
 REMOVED FOR CLARITY.**

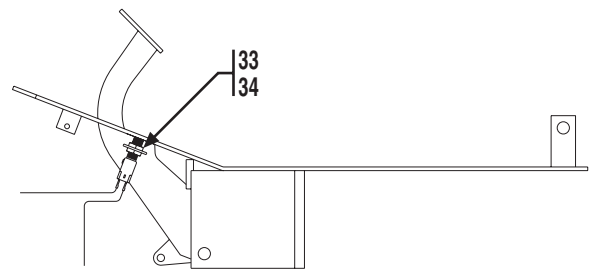
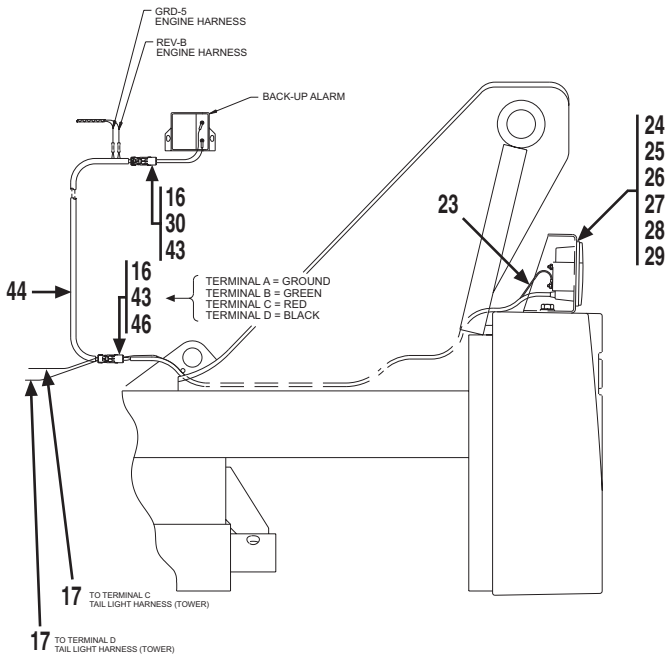
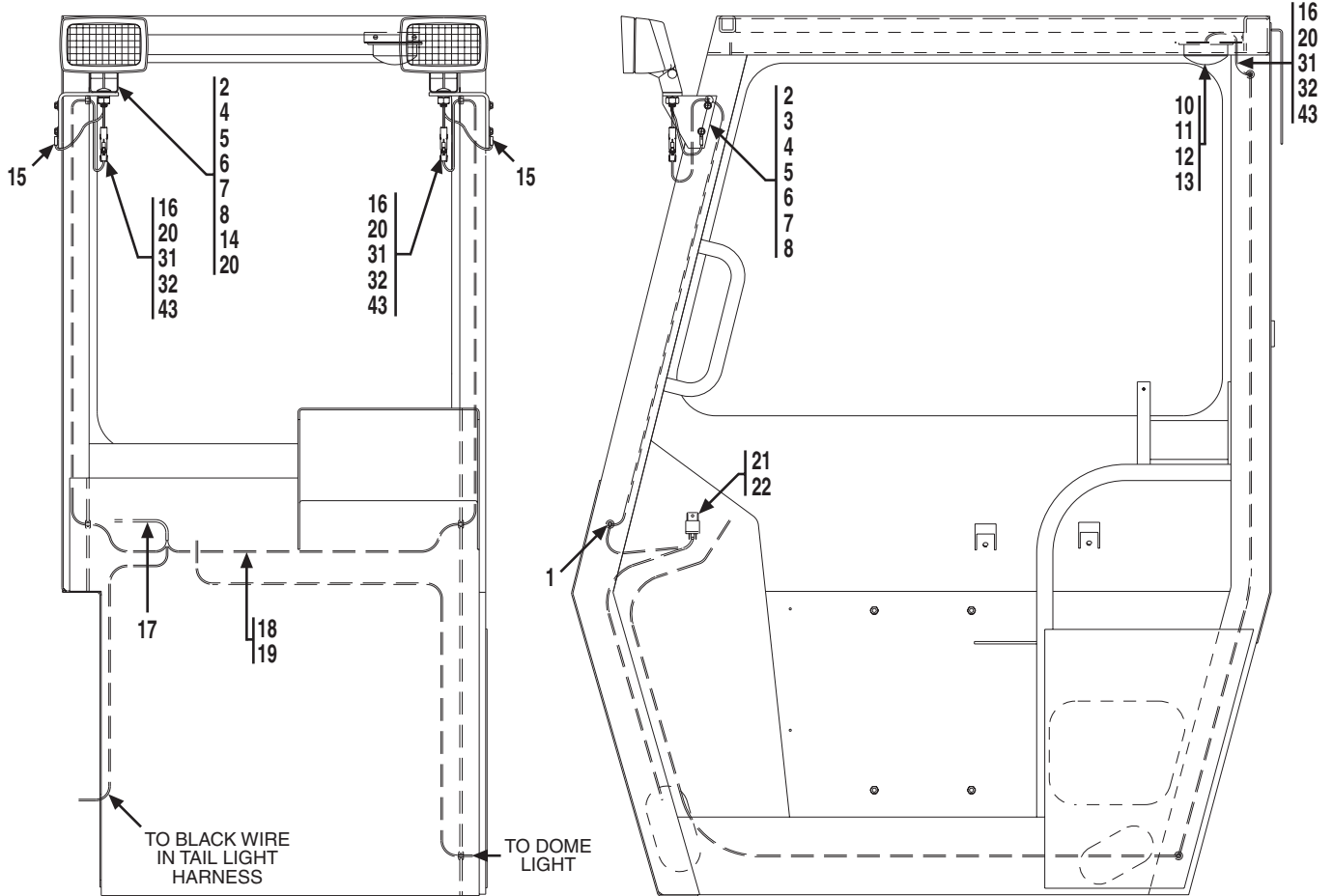
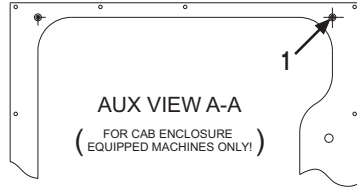


Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9116-5011	Ref	WINCH INSTALLATION, (includes all items except item 40)	20	7713-3390	3	SAFETY CLIP
1	9108-3535	1	CAUTION DECAL	21	8471-9455	1	HOSE ASSY
2	9002-7187	5	TIE WRAP, (locate as required)	22	9114-3145	1	ELBOW, 90 DEGREES, (swivel nut)
3	8471-6148	1	HOSE ASSY	23	8471-8427	1	HOSE ASSY
4	8471-8046	1	HOSE ASSY	24	9112-1134	1	SPRING RETAINER
5	9020-7882	1	CABLE	25	9112-3054	1	COMPRESSION SPRING
6	9020-1443	1	HOOK & BALL	26	9116-6072	1	HOSE TAKE-UP WELDMENT
7	9002-8990	1	WIRE ROPE CLIP	27	9114-1194	1	WINCH MOUNTING PLATE
8	9136-3079	1	WINCH	28	8850-1108	1	HEAVY HEX JAM NUT, 1/2-13
9	8820-1070	4	HEX HD CAPSCREW, 1/2-13X2-1/4, GR5	29	9103-3161	2	FLOW REGULATOR
10	9002-7471	8	HARDENED WASHER, 1/2	30	9103-3230	2	REDUCER, (-16 TO -8)
11	8850-1008	5	HEX NUT, 1/2-13	*31	8866-2106	4	ELBOW, 90 DEGREES, (swivel nut)
12	8471-9474	1	HOSE ASSY	*32	8866-1011	1	MALE CONNECTOR, 1/4X1/2 TUBE
13	8471-8959	1	HOSE ASSY	33	8866-1113	2	ELBOW, 90 DEGREES, 1/2X1/2 TUBE
14	9108-3217	3	CUSHION CLAMP	*34	9116-3139	1	FEMALE COUPLER
15	9020-7463	5	CUSHION CLAMP	35	9104-3125	1	DUST PLUG
*16	8866-1085	3	BULKHEAD UNION, 3/4-16X1/2 TUBE	*36	9116-3138	1	MALE COUPLER
17	9116-3064	1	TUBE ASSY	37	9104-3126	1	DUST CAP
18	7713-3389	3	STACK BOLT	38	9112-1159	1	STOWAGE BRACKET
19	7713-3139	3	TUBE CLAMP	39	9116-3063	1	TUBE ASSY
				40	8471-8748	1	HOSE ASSY
				41	8866-2225	1	SWIVEL NUT BRANCH TEE, 1/2 TUBE

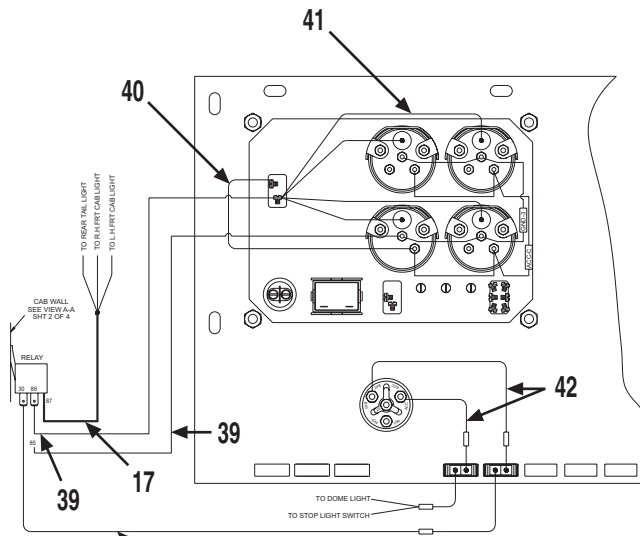
\* Revised illustration, part number on items 16, 34, 36; quantity on items 31, 32; removed item 42.

**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

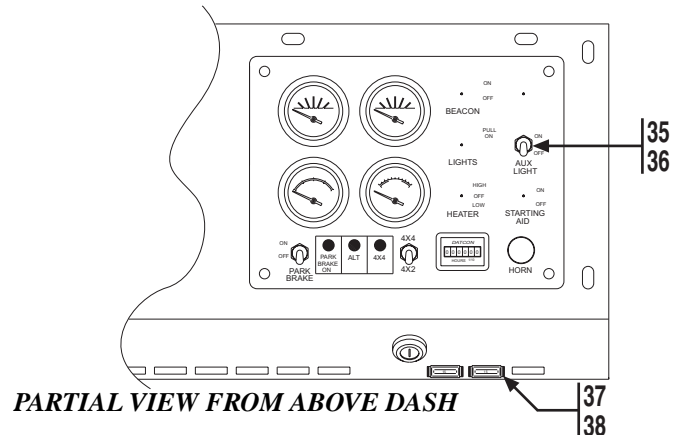
**OPTIONAL EQUIPMENT**  
**(9114-5021) Work Light Package**  
 Starting Serial No. 0255001  
 Original Issue 9-96  
 Revised 10-5-00



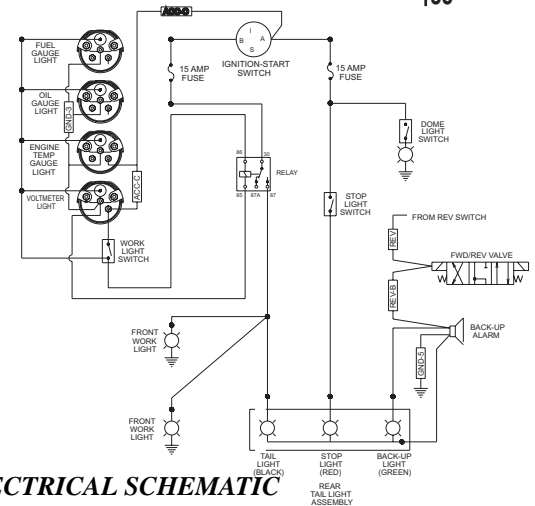
STOPLIGHT SWITCH MOUNTING ON BRAKE PEDAL



**PARTIAL VIEW FROM UNDER DASH**



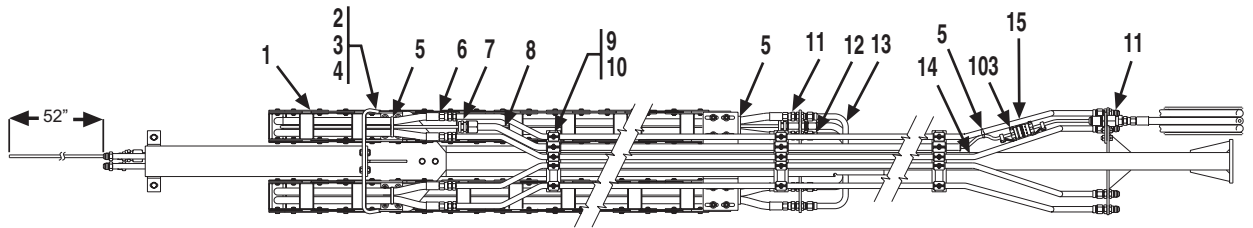
**PARTIAL VIEW FROM ABOVE DASH**



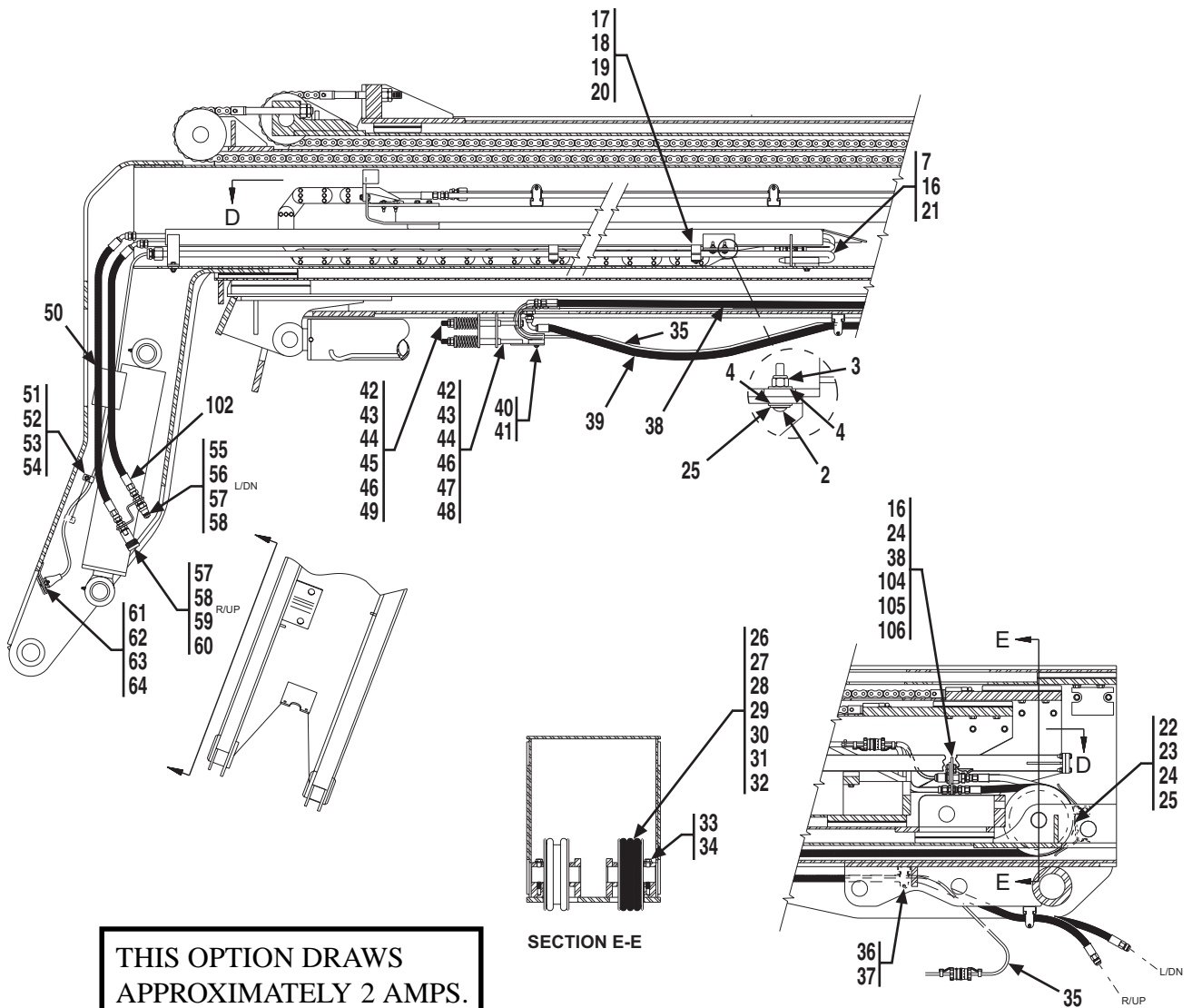
**ELECTRICAL SCHEMATIC**

Item	Part No.	Qty.	Description Of Part
	9114-5021	1	WORK LIGHT PACKAGE, (includes all items)
1	9002-7214	8	RUBBER GROMMET
2	8096-3050	2	UTILITY FLOOD LIGHT
3	9114-1183	1	L.H. LIGHT SUPPORT
4	8820-1035	2	HEX HD CAPSCREW, 3/8-16X1, GR5
5	8856-1109	2	FLAT WASHER, 3/8
6	8855-1011	2	LOCKWASHER, 3/8
7	8850-1006	2	HEX NUT, 3/8-16
8	9002-7319	4	TAP SCREW, 1/4-20X1
9		AR	WIRE LOOM, (use on all wires)
10	9101-1009	1	MOUNTING BRACKET
11	9002-9955	1	RUBBER GROMMET
12	8832-1022	2	SELF TAPPING SCREW, #8-32X3/8
13	2486-1167	1	INTERIOR LIGHT
14	9114-1182	1	R.H. LIGHT SUPPORT
15	8688-3260	2	EYELET
16	8096-3069	9	W. PACK CONNECTOR, (male pin)
17	9114-3270	1	LIGHT HARNESS
18	9105-3419	19	TIE WRAP
19	8668-3122	6	TIE WRAP
20	8096-3055	3	W. PACK CONNECTOR, (tower)
21	7738-3410	1	RELAY, (located on side wall of cab)
22	8832-1039	1	SELF TAPPING SCREW, #10-32X1/2
23	9114-1364	1	JUMPER WIRE
24	8820-1108	1	HEX HD CAPSCREW, 3/4-10X1-1/4, GR5
25	8856-1115	1	FLAT WASHER, 3/4
26	8855-1016	1	LOCKWASHER, 3/4
27	9112-1145	1	TAIL LIGHT HOUSING

Item	Part No.	Qty.	Description Of Part
28	9112-1146	1	TAIL LIGHT BRACKET
29	9136-5045	1	TAIL LIGHT ASSEMBLY, (includes the following seven items)
	9112-3065	1	TAIL LIGHT
	8666-1147	38"	WIRE, 16 GAUGE, (black)
	8666-1149	38"	WIRE, 16 GAUGE, (green)
	8666-1152	38"	WIRE, 16 GAUGE, (red)
	8668-3480	3	BUTT CONNECTOR
	8203-3996	45"	WIRE LOOM
	8668-3122	2	TIE WRAP
30	8096-3058	1	W. PACK CONNECTOR, (shroud)
31	8096-3056	3	W. PACK CONNECTOR, (shroud)
32	8096-3068	3	W. PACK CONNECTOR, (female pin)
33	9114-3117	1	STOP LIGHT SWITCH
34	9114-1197	1	MOUNTING TAB
35	7738-3467	1	LIGHT SWITCH
36	7738-3470	1	BOOT
37	9114-3108	2	FUSE HOLDER
38	7736-3268	2	FUSE, 15 AMP
39	9114-1265	2	JUMPER WIRE
40	9114-1258	1	JUMPER WIRE
41	9103-3360	4	GAUGE LIGHTING KIT
42	9114-1259	2	JUMPER WIRE
43	8096-3066	12	W. PACK CONNECTOR, (cable seal)
44	9114-3210	1	TAIL LIGHT HARNESS
45	9114-1266	1	JUMPER WIRE
46	8096-3062	1	W. PACK CONNECTOR, (shroud)



VIEW D-D

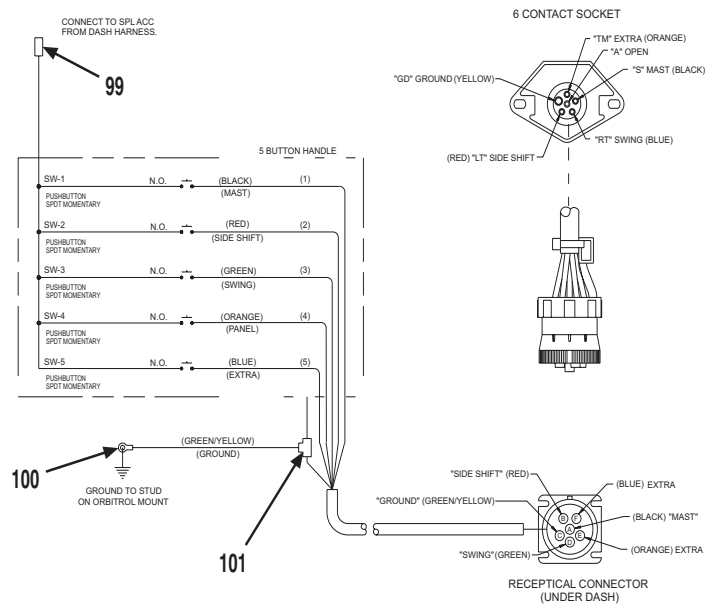
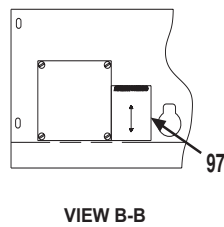
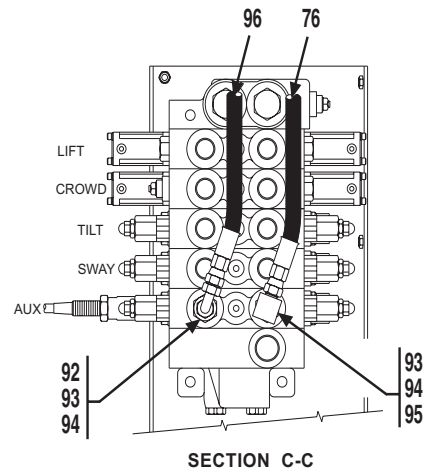
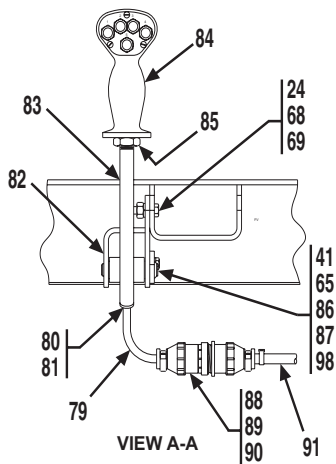
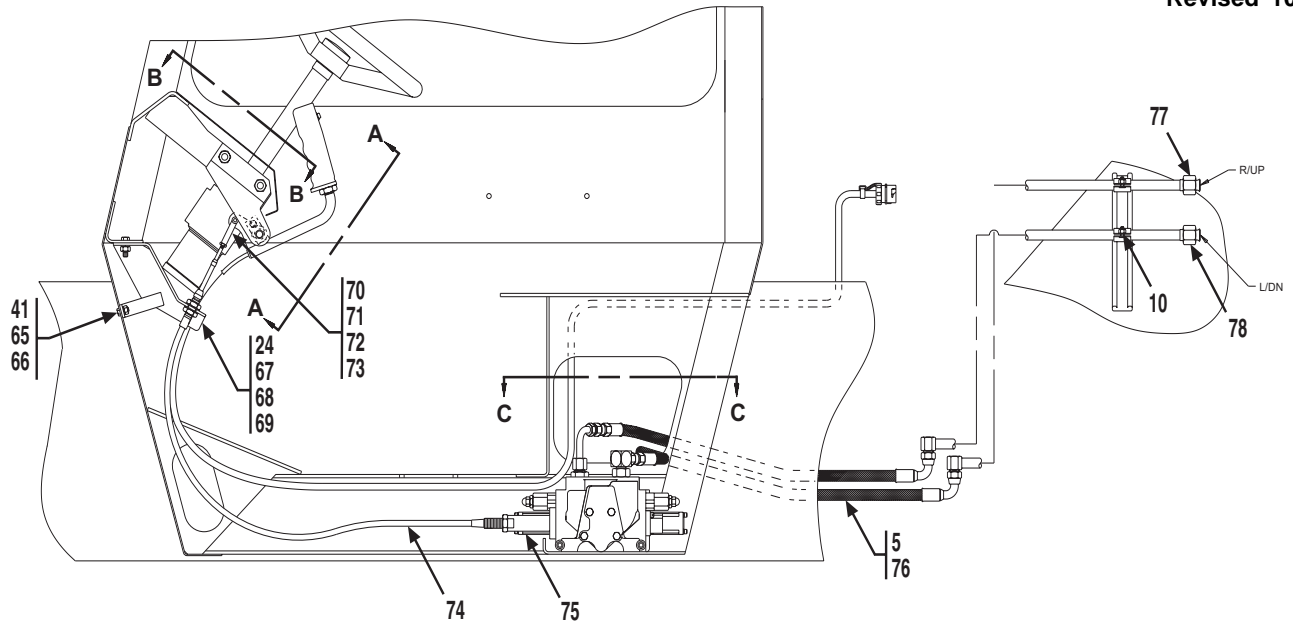


SECTION E-E

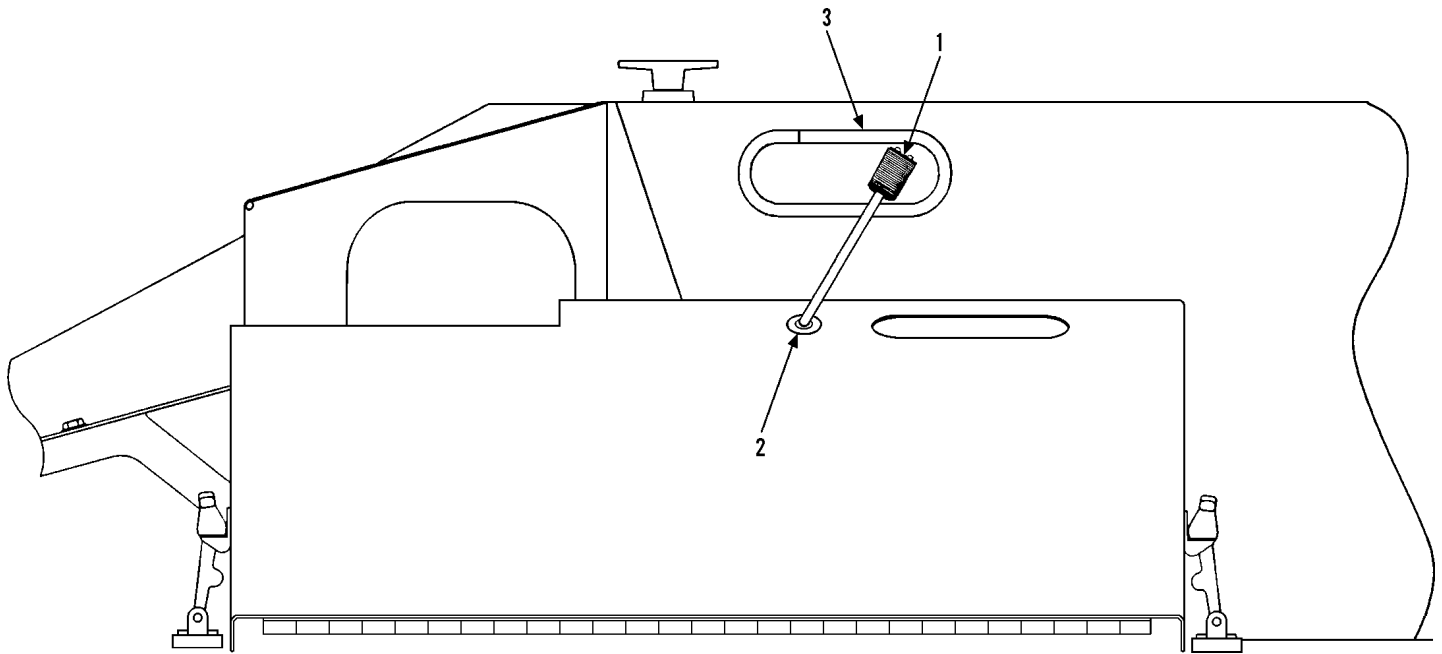
**THIS OPTION DRAWS  
 APPROXIMATELY 2 AMPS.  
 TOTAL.**

**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

**OPTIONAL EQUIPMENT**  
**(9116-5010) Auxiliary Hydraulics W/Electric**  
**Starting Serial No. 0255001**  
**Original Issue 9-96**  
**Revised 10-5-01**



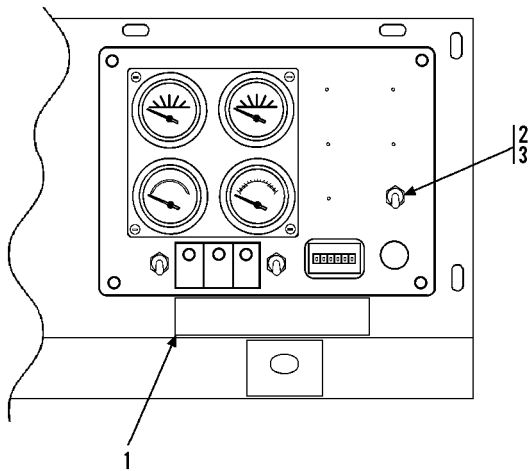
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9116-5010	Ref	AUXILIARY HYDRAULICS	* 54	8850-1004	2	HEX NUT, 1/4-20
1	9116-3174	1	W/ELECTRIC, (includes all items)	55	9020-4244	1	MALE HYDRAULIC COUPLER
* 2	8826-1030	8	HOSE CARRIER	56	9104-3126	1	DUST CAP
3	8852-1306	8	SOCKET BUTTON HD CAPSCREW, 3/8-16X1-1/4	57	9104-3321	2	STRAIGHT THREAD BULKHEAD FITTING
4	8856-1004	12	HEX LOCKNUT, 3/8-16	* 58	8871-2304	2	REDUCING BUSHING, 1/2X3/8
* 5	9002-7187	7	FLAT WASHER, 3/8	59	9020-4245	1	FEMALE HYDRAULIC COUPLER
6	8471-8959	2	TY-RAP	60	9104-3125	1	DUST PLUG
* 7	9114-3141	3	HOSE ASSY	61	9112-1139	1	RECEPTACLE BRACKET
* 8	9136-3068	1	CORD CONNECTOR	62	9020-7661	1	SIX CONTACT RECEPTACLE
9	9108-3217	6	TUBE ASSY	63	8820-1005	2	HEX HD CAPSCREW, 1/4-20X1, GR5
10	9020-7463	5	CUSHION CLAMP, 5/8	64	8852-1304	2	HEX LOCKNUT, 1/4-20
* 11	8866-1085	4	CUSHION CLAMP, 3/4	65	8820-1018	2	HEX HD CAPSCREW, 5/16-18X3/4, GR5
12	9116-3060	1	BULKHEAD UNION, 3/4-16X1/2 TUBE	66	8850-1005	1	HEX NUT, 5/16-18
13	9116-3059	1	TUBE ASSY	67	9112-6023	1	CABLE BRACKET WELDMENT
14	9116-3062	1	TUBE ASSY	68	8820-1036	4	HEX HD CAPSCREW, 3/18-16X1-1/4, GR5
15	9116-3061	1	TUBE ASSY	* 69	8850-1006	4	HEX NUT, 3/8-16
16	9116-3100	2	STRAIGHT THREAD BULKHEAD FITTING	70	8882-1002	1	YOKE END
17	7713-3389	3	STACK BOLT	* 71	8863-3001	1	YOKE PIN, 1/4
18	7713-3136	3	TUBE CLAMP	* 72	8863-1302	1	COTTER PIN, 1/16X3/4
19	7713-3137	3	COVER PLATE	73	8850-1404	1	HEX JAM NUT, 1/4-28
20	8820-1023	3	HEX HD CAPSCREW, 5/16-18X1-3/4, GR5	74	9116-3131	1	PUSH-PULL CABLE
21	9116-3066	1	TUBE ASSY	75	9112-3062	1	CABLE ADAPTER BONNET
22	9116-6038	1	HOSE GUIDE BRACKET	76	8471-8685	1	HOSE ASSY
23	8820-1032	3	HEX HD CAPSCREW, 3/8-16X5/8, GR5	77	9116-3097	1	TUBE ASSY
* 24	8855-1011	9	LOCKWASHER, 3/8	78	9116-3096	1	TUBE ASSY
25	8856-1109	7	FLAT WASHER, 3/8	79		12"	LOOM, 5/16 I.D.
26	9116-1138	1	HOSE SHEAVE PIN	80	9112-3051	1	MOLDED RUBBER BUSHING
27	9114-3024	1	HOSE SHEAVE	81	1440-2248	AR	3M ADHESIVE
28	9104-1451	2	THRUST WASHER	82	9112-6025	1	LEVER BRACKET
29	1440-4793	AR	UNION 76 MEGAPLEX GREASE	83	9112-6024	1	LEVER WELDMENT
30	9104-1449	AR	THRUST WASHER	84		Ref	5 BUTTON HANDLE, (see page 13-21 for details)
31	9104-1450	AR	THRUST WASHER	* 85	8850-1112	1	HEAVY HEX JAM NUT, 3/4-10
32	9104-1596	AR	THRUST WASHER	86	9112-6027	1	PIN WELDMENT
33	8820-1074	1	HEX HD CAPSCREW, 1/2-13X3-1/4, GR5	87	9108-3136	2	BUSHING
34	8855-1013	1	LOCKWASHER, 1/2	88	7736-3232	1	RECEPTACLE CONNECTOR
* 35	9136-3151	1	AUX. BOOM WIRING HARNESS	89	7736-3228	6	PIN CONTACT
36	9020-7464	8	CUSHION CLAMP, 1/2	90	9114-3107	1	STRAIN RELIEF
* 37	9104-3120	4	CUSHION CLAMP	91	9114-3105	1	AUX. WIRING HARNESS
* 38	8471-9455	3	HOSE ASSY	92	9112-3022	1	ELBOW, 90 DEGREES - LONG
39	8471-9018	2	HOSE ASSY	93	8866-2020	2	CONNECTOR, (includes item 94)
40	8820-1017	2	HEX HD CAPSCREW, 5/16-18X5/8, GR5	94	8859-1207	2	O-RING
41	8855-1010	4	LOCKWASHER, 5/16	95	8866-2106	1	ELBOW, 90 DEGREES, (swivel nut)
42	8850-1008	3	HEX NUT, 1/2-13	96	8471-8686	1	HOSE ASSY
* 43	8850-1108	3	HEAVY HEX JAM NUT, 1/2-13	97	9103-3394	1	AUX. CONTROL DECAL
44	9112-3054	3	COMPRESSION SPRING	98	9002-8662	2	WAVE BEND WASHER
45	9002-7180	2	90 DEGREE BULKHEAD FITTING	99	8698-3193	1	MALE BULLET
46	9112-1134	3	SPRING RETAINER	100	9103-3391	1	INSULATED RING TERMINAL
47	9112-6032	1	CABLE TAKE-UP SUPPORT	101	9002-8968	1	CONNECTOR
* 48	9136-6015	1	HOSE TAKE-UP WELDMENT	102	8471-8943	1	HOSE ASSY
49	9116-6068	2	HOSE TAKE-UP WELDMENT	* 103	9136-3185	1	AUX BOOM WIRING HARNESS
50	8471-8637	1	HOSE ASSY	* 104	9136-1032	1	DISCONNECT PLATE
* 51	9120-3039	1	CLAMP SUPPORT	* 105	8866-1014	1	MALE CONNECTOR, 3/4X1/2 TUBE
* 52	8855-1009	2	LOCKWASHER, 1/4	* 106	8820-1035	2	HEX HD CAPSCREW, 3/8-16X1, GR5
* 53	8856-1107	2	FLAT WASHER, 1/4				NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.



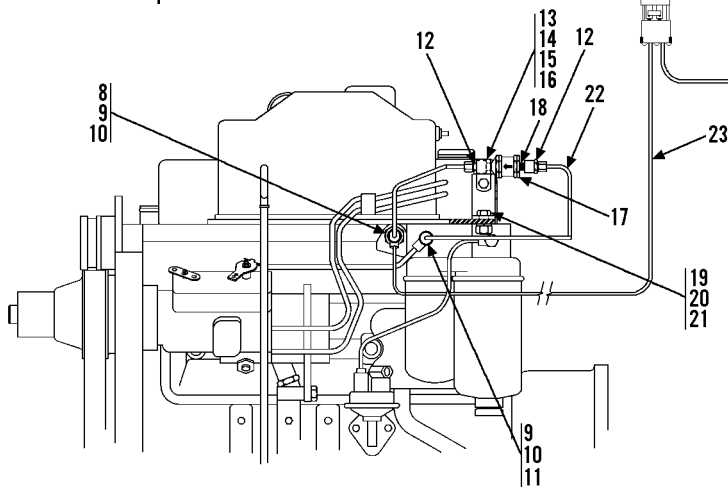
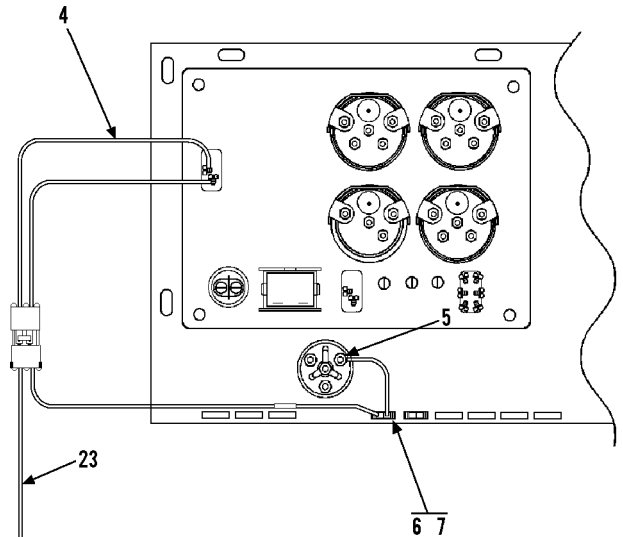
Item	Part No.	Qty.	Description Of Part
	9114-5032	1	VANDAL KIT (includes all items)
1	9108-3365	1	PADLOCK
2	8696-1044	2	RUBBER GROMMET
3	9020-6194	12"	TRIM LOCK



*PARTIAL VIEW FROM ABOVE DASH*



*PARTIAL VIEW FROM UNDER DASH*



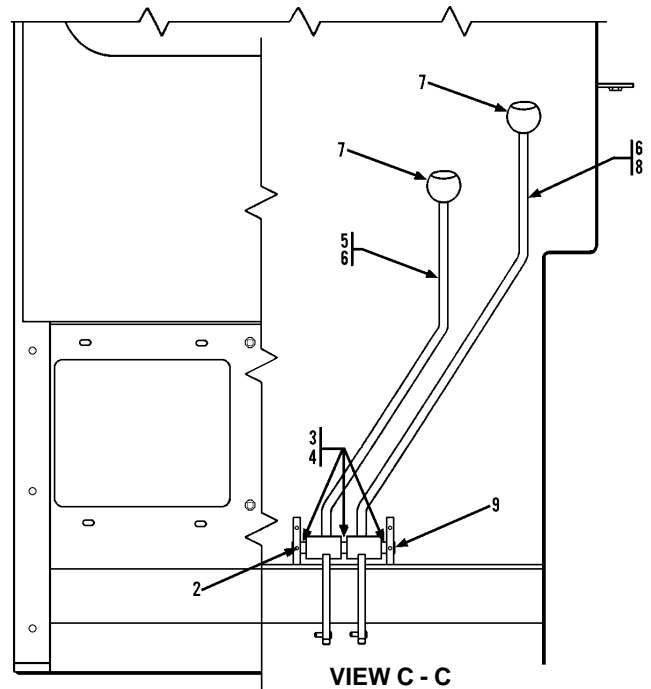
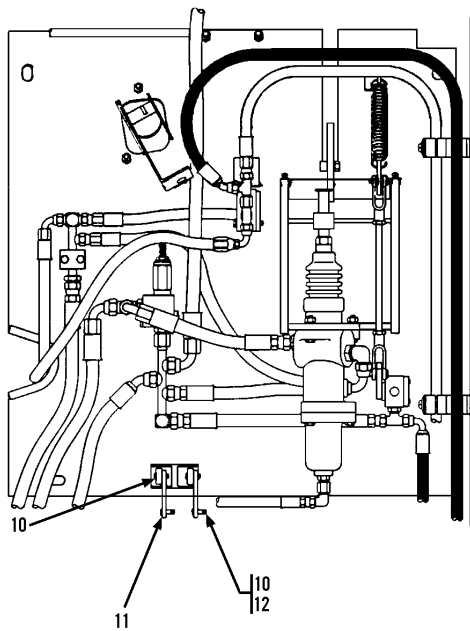
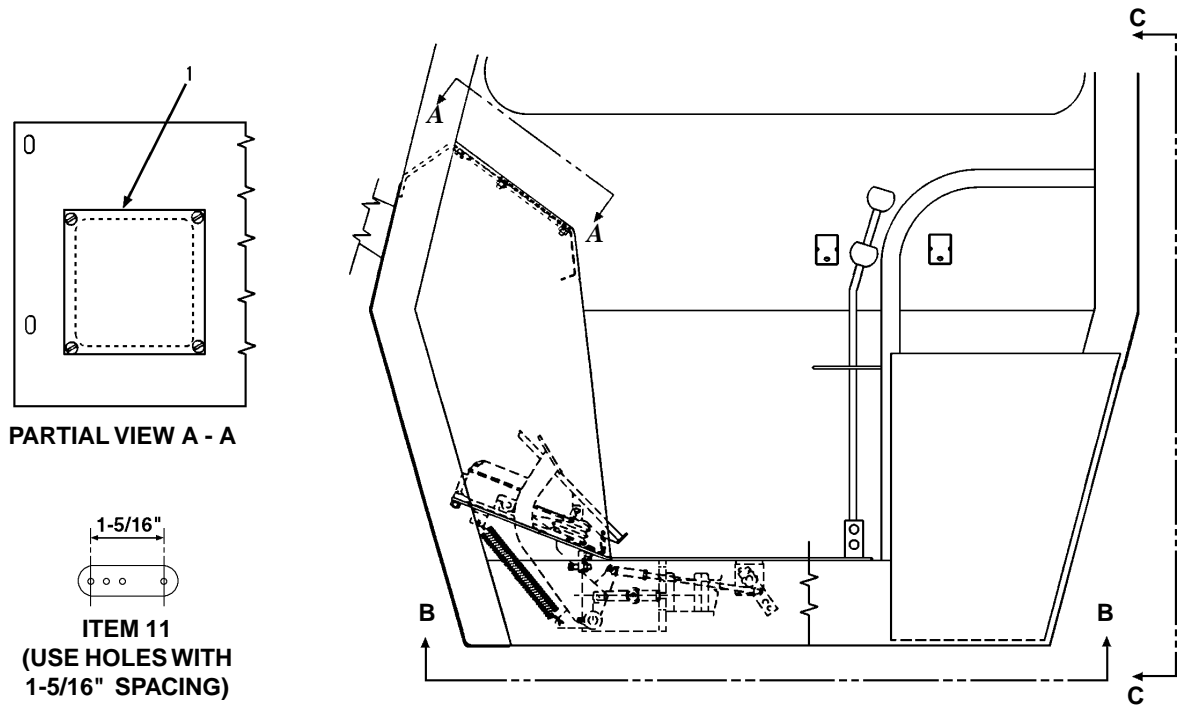
*PARTIAL VIEW - ENGINE LEFT SIDE*

Item	Part No.	Qty.	Description Of Part
	9115-5004	1	GLOW PLUG INSTALLATION (includes all items)
1	9114-3164	1	INSTRUCTION DECAL
2	9114-3163	1	TOGGLE SWITCH
3	7738-3470	1	BOOT
4	9114-5034	1	WIRING HARNESS
5	8698-3190	1	#10 EYELET
6	9114-3108	1	FUSE HOLDER
7	7736-3268	1	15 AMP FUSE
8	9104-3415	1	THERMOSTART
9	9108-3371	2	TUBE NUT
10	9108-3375	2	OLIVE
11	9108-3374	1	BANJO CONNECTOR
12	9108-3380	2	BRASS ADAPTER (includes nut & sleeve)

Item	Part No.	Qty.	Description Of Part
13	9115-1007	1	SUPPORT BRACKET
14	2486-1170	1	CLIP
15	8820-1016	1	HEX HD CAPSCREW, 5/16-18X1/2, GR5
16	8855-1010	1	LOCKWASHER, 5/16
17	8668-3330	1	FUEL CHECK VALVE
18	8870-1002	1	CLOSE NIPPLE, 1/4
19	8820-1050	1	HEX HD CAPSCREW, 7/16-14X1
20	8850-1007	1	HEX NUT, 7/16-14
21	8855-1012	1	LOCKWASHER, 7/16
22	9108-1676	1	STEEL TUBE, 3/16" O.D. (cut & bend as req'd.)
23	9114-5035	1	WIRING HARNESS

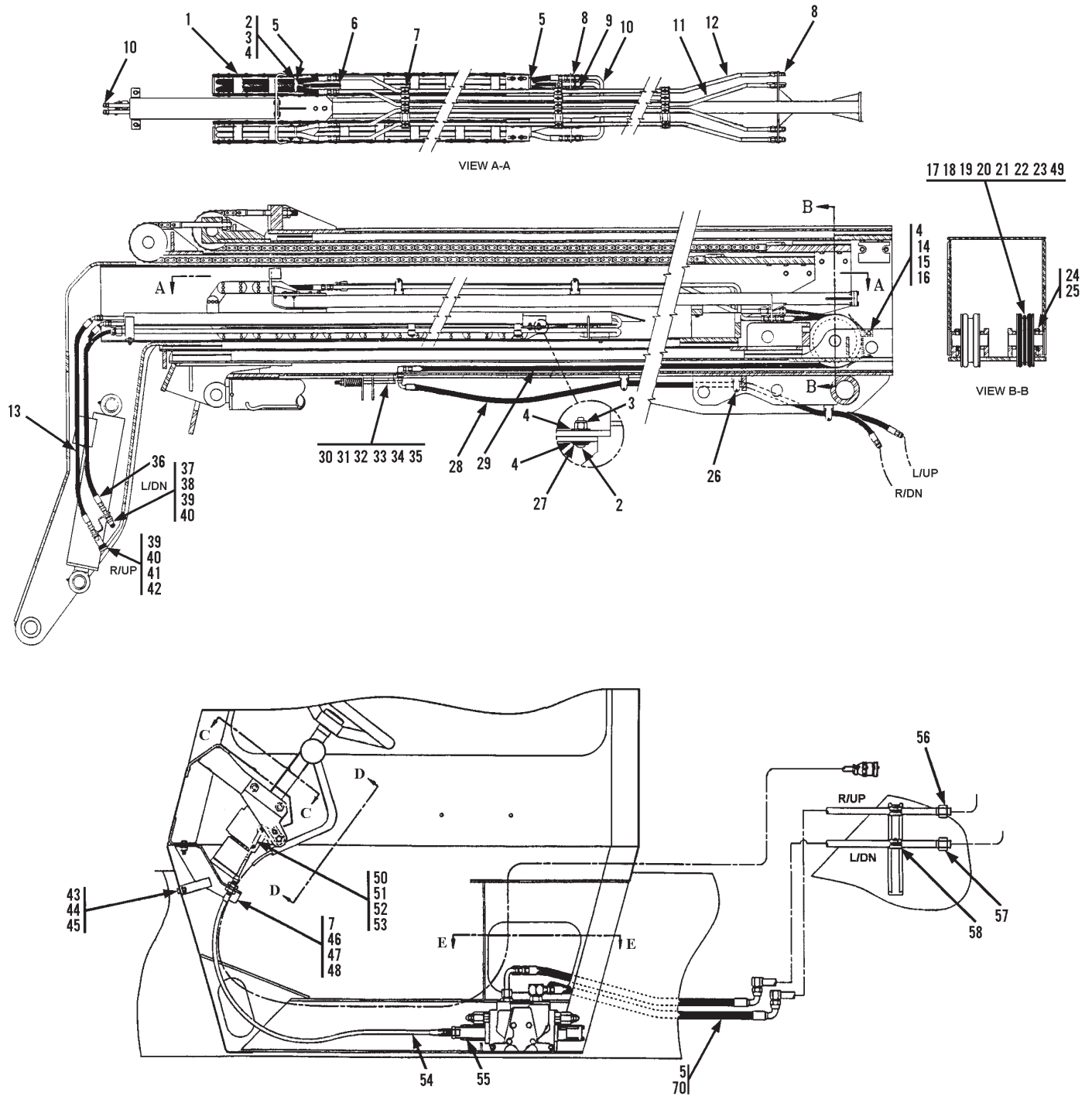
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**MATERIAL HANDLER**  
**544C**

**OPTIONAL EQUIPMENT**  
**(9116-5012) R.H. Tilt/Sway**  
 Starting Serial No. 0255001  
 Original Issue 9-96  
 Revised 6-1-99



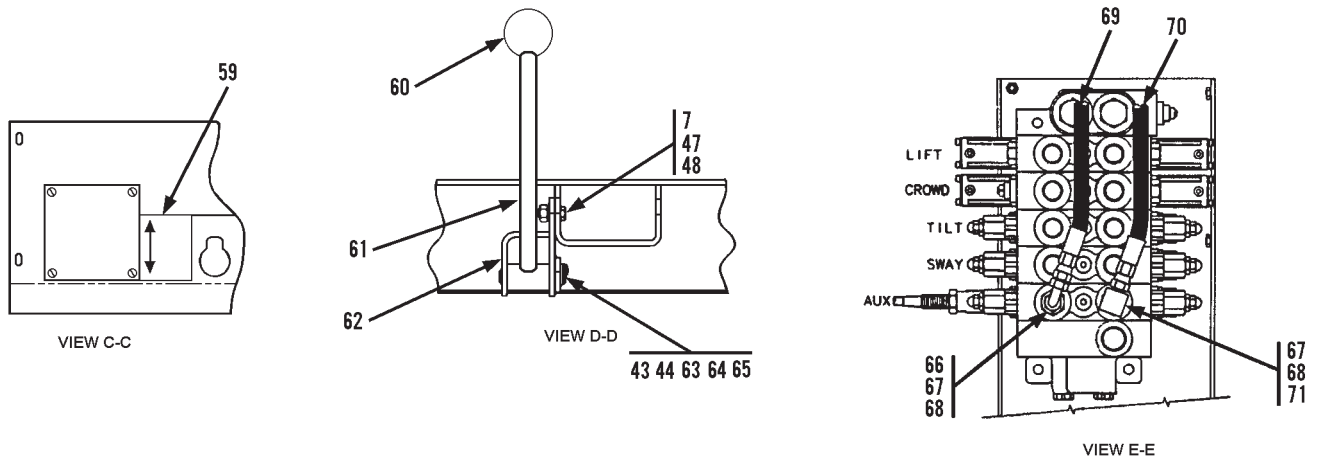
Item	Part No.	Qty.	Description Of Part
	9116-5012	Ref	R.H. TILT/SWAY (includes all items)
1	9108-1480	1	COVER PLATE
2	8863-1338	1	COTTER PIN
3	9002-8662	3	WAVE BEND WASHER
4	8856-1113	9	WASHER, 5/8
5	9114-6043	1	SWAY LEVER
6	9108-3136	4	BUSHING

Item	Part No.	Qty.	Description Of Part
7	9020-0638	2	KNOB
8	9114-6042	1	TILT LEVER
9	9108-1354	1	SHAFT
10	8863-1301	4	COTTER PIN
*11	9136-1023	2	ROD LINKAGE
12	9002-1552	2	CLEVIS PIN



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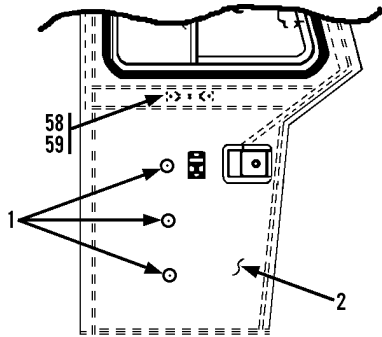
**OPTIONAL EQUIPMENT**  
**(9116-5009) Auxiliary Hydraulics Assembly**  
 Starting Serial No. 0255001  
 Original Issue 9-96  
 Revised 7-25-06



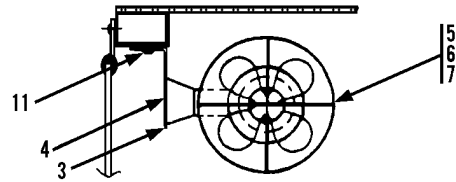
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9116-5009	1	AUXILIARY HYDRAULICS ASSY, (includes all items)	36	8471-8943	1	HOSE ASSY
1	9136-3203	1	HOSE CARRIER	*37	9116-3138	1	MALE HYDRAULIC COUPLER
*2	8826-1030	8	SOCKET BUTTON HD CAPSCREW, 3/8-16X1-1/4	38	9104-3126	1	DUST CAP
3	8852-1306	8	LOCKNUT, 3/8-16	39	9104-3321	2	STRAIGHT BULKHEAD FITTING
4	8856-1004	15	WASHER, 3/8	40	8871-2304	2	PIPE BUSHING, 1/2X3/8
*5	9002-7187	5	TY-RAP	*41	9116-3139	1	FEMALE HYDRAULIC COUPLER
6	8471-8959	2	HOSE ASSY	42	9104-3125	1	DUST PLUG
7	9108-3217	6	TUBE CLAMP	43	8820-1018	2	HEX HD CAPSCREW, 5/16-18X3/4, GR5
8	8866-1085	4	BULKHEAD FITTING	44	8855-1010	2	LOCKWASHER, 5/16
9	9116-3060	1	TUBE ASSY	45	8850-1005	1	HEX NUT, 5/16-18
10	9116-3059	1	TUBE ASSY	46	9112-6023	1	CABLE BRACKET WELDMENT
11	9116-3062	1	TUBE ASSY	47	8820-1036	4	HEX HD CAPSCREW, 3/8-16X1-1/4, GR5
12	9116-3061	1	TUBE ASSY	48	8850-1006	4	HEX NUT, 3/8
13	8471-8637	1	HOSE ASSY	*49	8867-1001	1	LUBE FITTING, STRAIGHT 1/8
*14	8855-1011	7	LOCKWASHER, 3/8	50	8882-1002	1	YOKE END
15	8820-1032	3	HEX HD CAPSCREW, 3/8-16X5/8	51	8863-3001	1	CLEVIS PIN
*16	9156-6043	1	HOSE GUIDE BRACKET	52	8863-1302	1	COTTER PIN
*17	3423301	1	HOSE SHEAVE PIN	53	8850-1404	1	HEX JAM NUT, 1/4-28
18	9114-3024	1	HOSE SHEAVE	54	9116-3131	1	PUSH-PULL CABLE
19	9104-1451	2	THRUST WASHER	*55	9112-3062	1	CABLE ADAPTER BONNET
20	1440-4793	AR	UNION 76, MEGA PLEX GREASE	56	9116-3097	1	TUBE ASSY
21	9104-1449	AR	THRUSTWASHER	57	9116-3096	1	TUBE ASSY
22	9104-1450	AR	THRUSTWASHER	58	9020-7463	2	CUSHION CLAMP
23	9104-1596	AR	THRUSTWASHER	59	9103-3417	1	AUXILIARY CONTROL DECAL
24	8820-1074	1	HEX HD CAPSCREW, 1/2-13X3-1/4, GR5	60	9020-0299	1	KNOB
25	8855-1013	1	LOCKWASHER, 1/2	61	9112-6026	1	HANDLE WELDMENT
26	9020-7464	8	CUSHION CLAMP	62	9112-6025	1	LEVER BRACKET
27	8856-1109	4	FLAT WASHER, 3/8	63	9112-6027	1	PIN WELDMENT
28	8471-9018	2	HOSE ASSY	64	9108-3136	2	BUSHING
29	8471-9455	2	HOSE ASSY	65	9002-8662	2	WAVE BEND WASHER
30	9116-6068	2	HOSE TAKE-UP WELDMENT	66	9112-3022	1	90 DEGREE ELBOW, LONG
31	9112-3054	2	COMPRESSION SPRING	67	8866-2020	2	CONNECTOR, (includes item 68)
32	9112-1134	2	SPRING RETAINER	68	8859-1207	2	O-RING
33	8850-1008	2	HEX NUT, 1/2-13	69	8471-8686	1	HOSE ASSY
34	8850-1108	2	JAM NUT, 1/2-13	70	8471-8685	1	HOSE ASSY
35	9002-7180	2	90 DEGREE BULKHEAD FITTING	71	8866-2106	1	ELBOW, 90 DEGREES, (swivel nut)

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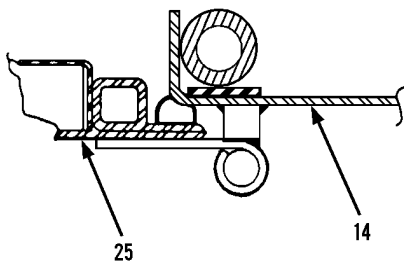
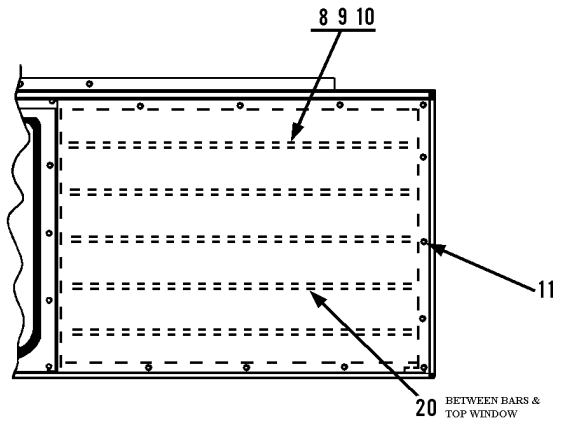
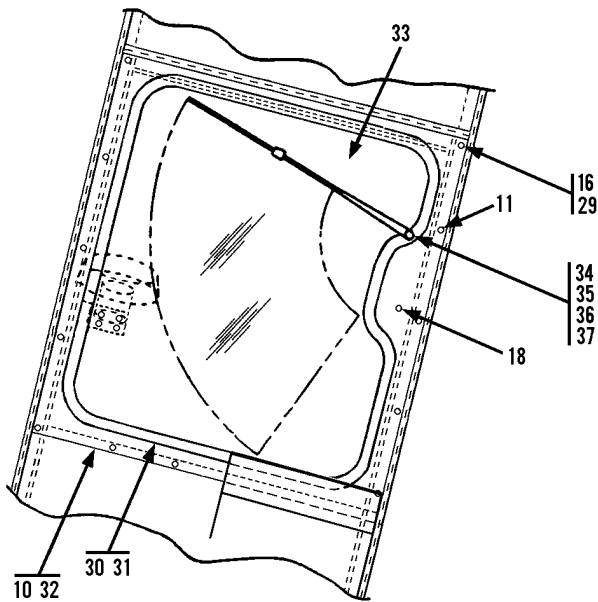
**OPTIONAL EQUIPMENT**  
**(9116-5050) Cab Enclosure**  
 Starting Serial No. 0255001  
 Original Issue 9-96  
 Revised 5-7-97



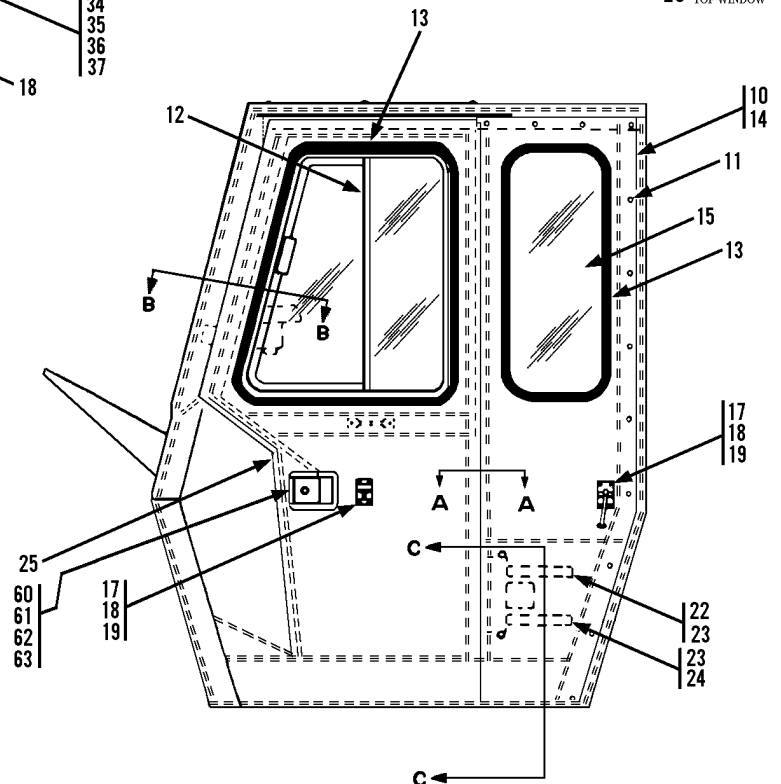
**VIEW OF INSIDE OF CAB DOOR**



**VIEW B-B**

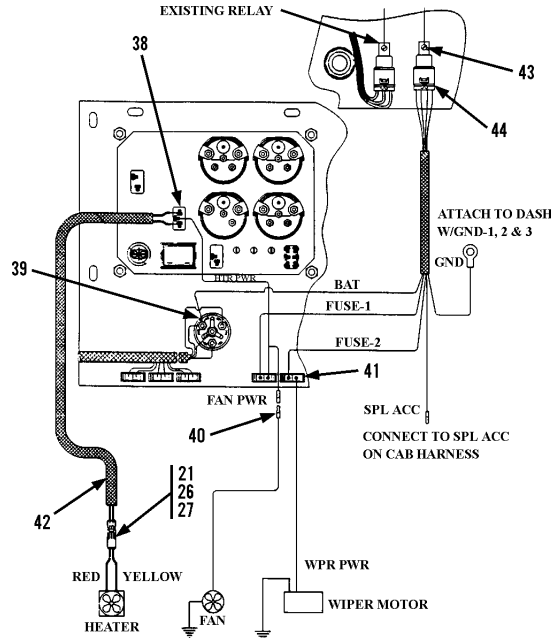


**VIEW A-A**

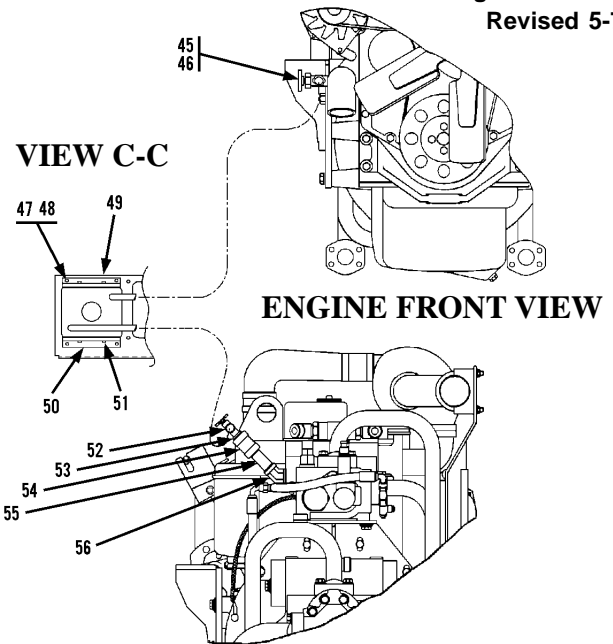


**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

**OPTIONAL EQUIPMENT**  
**(9116-5050) Cab Enclosure**  
**Starting Serial No. 0255001**  
**Original Issue 9-96**  
**Revised 5-7-97**



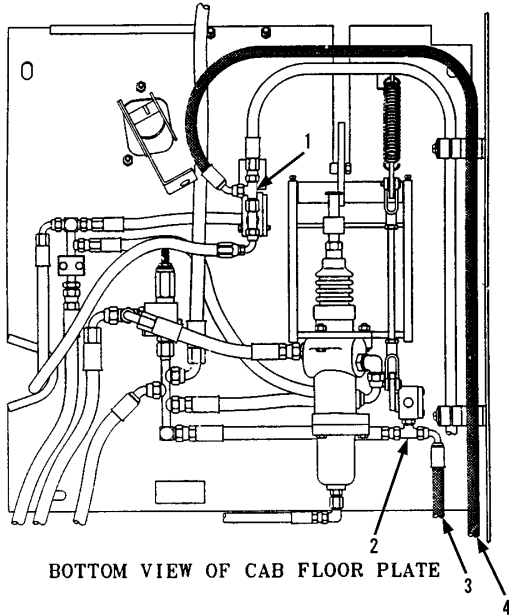
**WIRING SCHEMATIC**



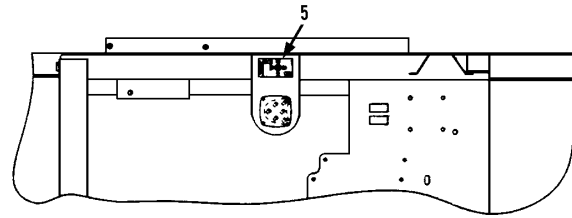
**ENGINE REAR VIEW**

Item	Part No.	Qty.	Description Of Part
	9116-5050	1	CAB ENCLOSURE (includes all items)
1	9105-3559	3	INSULATION CAP
2	9108-3378	1	INSULATION PANEL
3	9002-9955	2	RUBBER GROMMET
4	9108-1499	1	MOUNTING ANGLE
5	9020-0680	1	DEFROSTER FAN
6	8821-1030	4	HEX HD CAPSCREW, 5/16-18X3-1/2 GR5
7	7714-3017	4	WHIZ-LOK NUT, #10-24
8		Ref	TOP WINDOW (see page 2-4 for details)
9	9114-3190	AR	GASKA-TAPE (12.2')
10	1440-3190	AR	VULKEM CAULK
11	9002-7319	43	SELF-TAPPING SCREW, 1/4-20X1
12		Ref	DOOR SLIDING WINDOW (see page 2-4 for details)
13	8366-1145	14'	WEATHER STRIP
14	9108-6115	2	LEFT SIDE WINDOW FRAME
15		Ref	LEFT SIDE WINDOW (see page 2-4 for details)
16	8820-1001	5	HEX HD CAPSCREW, 1/4-20X1/2, GR5
17	9108-1545	1	DOOR HOLDER
18	7714-3016	9	ROUND HD MACHINE SCREW, #10-32X5/8
19	7714-3017	9	HEX NUT, #10-32
20	9114-3220	78"	TRIM LOK
21	8096-3058	1	SHROUD
22	9020-6169	1	HEATER HOSE
23	8668-3193	4	HOSE CLAMP
24	9020-6170	1	HEATER HOSE
25	9108-5057	1	CAB DOOR (includes 58 thru 63)
26	8096-3069	1	MALE PIN TERMINAL
27	8096-3067	2	CABLE SEAL
29	8856-1107	5	WASHER, 1/4
30	9108-3348	10'	CHANNEL MOULDING
31	9108-3392	10'	RELEASE FILLER STRIP (locate release cord just below wiper motor with knot located at loose end of cord)

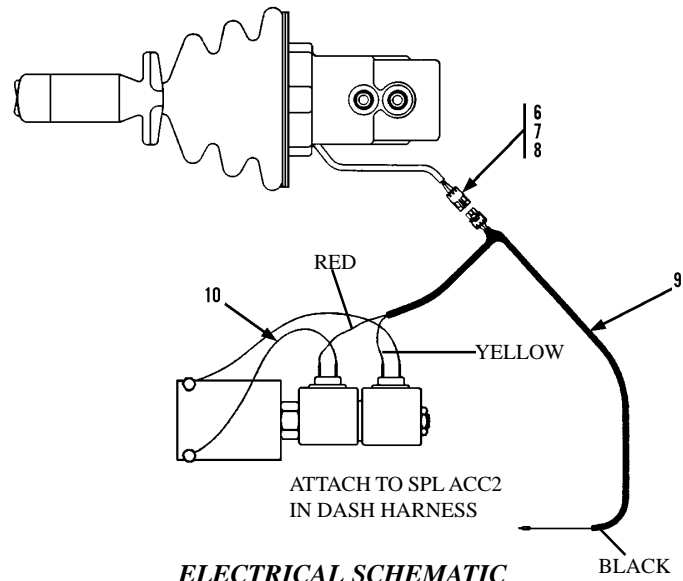
Item	Part No.	Qty.	Description Of Part
32	9114-1332	1	FRONT WINDOW FRAME
33		Ref	FRONT WINDOW (see page 2-4 for details)
34	9020-6023	1	WIPER MOTOR
35	9002-7214	2	BUTTON GROMMET
36	9103-3464	1	WINDSHIELD WIPER ARM
37	9103-3465	1	WIPER BLADE
38	7738-3744	1	HEATER SWITCH
39	8698-3188	1	RING TERMINAL
40	8698-3193	1	MALE CONNECTOR
41	7736-3268	2	15 AMP FUSE
42	9112-3125	1	HEATER HARNESS
43	8832-1029	1	SELF-TAPPING SCREW, 10-24X3/8
44	9116-3183	1	CAB ENCLOSURE HARNESS
45	7738-3540	1	ORIFICE
46	9108-3155	1	TRUCK VALVE
47	7714-3004	4	WHIZ-LOK SCREW
48	7714-3006	4	WHIZ-LOK NUT
49	9104-3429	1	HEATER
50	9103-1521	2	HEATER MOUNTING BRACKET
51	8820-1005	4	HEX HD CAPSCREW, 1/4-20X1, GR5
52	2464-1328	1	SHUT-OFF VALVE
53	8871-1383	1	PIPE BUSHING, 1/2X3/8
54	8871-1213	1	COUPLING, 1/2
55	8870-1070	1	PIPE NIPPLE, 1/2X2 1/2
56	8871-2034	1	STREET ELBOW, 1/2X45
57	9108-3376	1	EMERGENCY EXIT DECAL (not shown)(located on corner post of cab next to emergency release cord)
*58	9020-3840	1	PULL HANDLE (on inside of door)
*59	8832-1039	2	SELF TAPPING SCREW
*60	9108-3263	1	FLUSH LOCK
*61	8830-1070	4	RD.HD. MACHINE SCREW, #8-32X1/2"
*62	8852-1604	4	LOCKNUT, #8-32
*63	8856-1104	4	FLAT WASHER, #8



**BOTTOM VIEW OF CAB FLOOR PLATE**

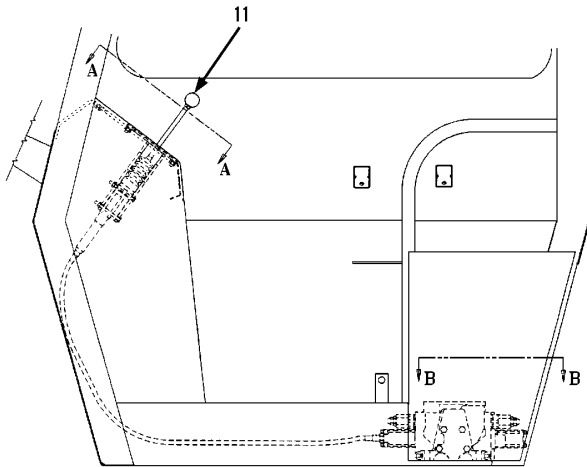


**VIEW INSIDE CAB**



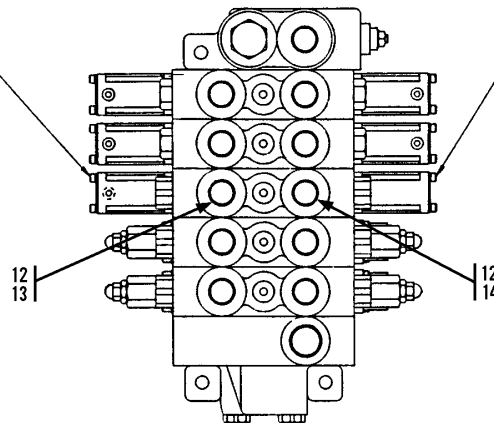
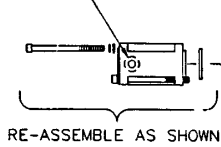
ATTACH TO SPL ACC2  
 IN DASH HARNESS

**ELECTRICAL SCHEMATIC**

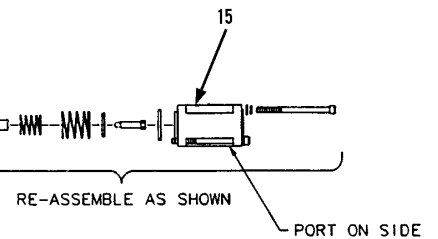


**VIEW INSIDE CAB**

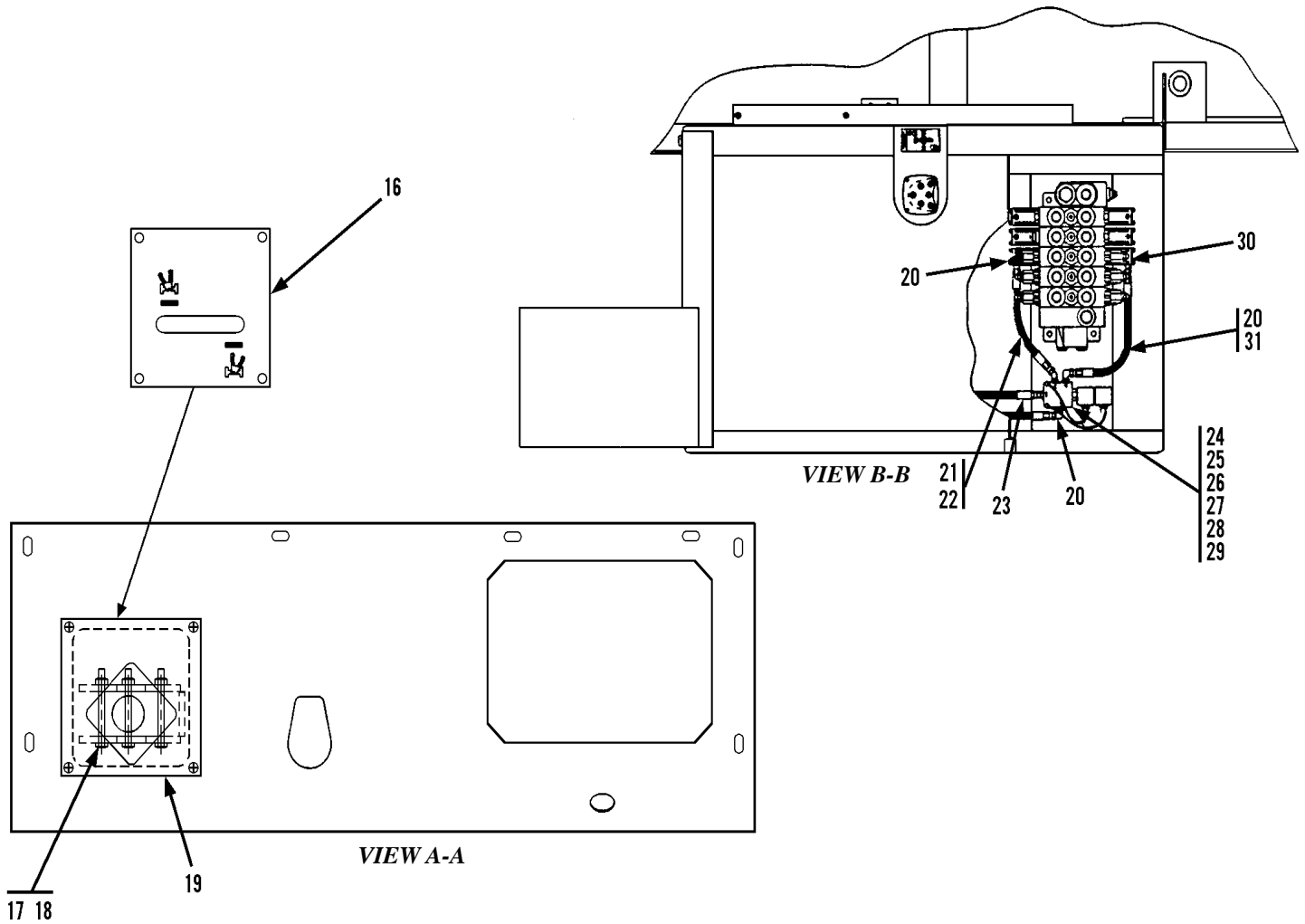
PORT ON BOTTOM



**MAIN CONTROL VALVE**



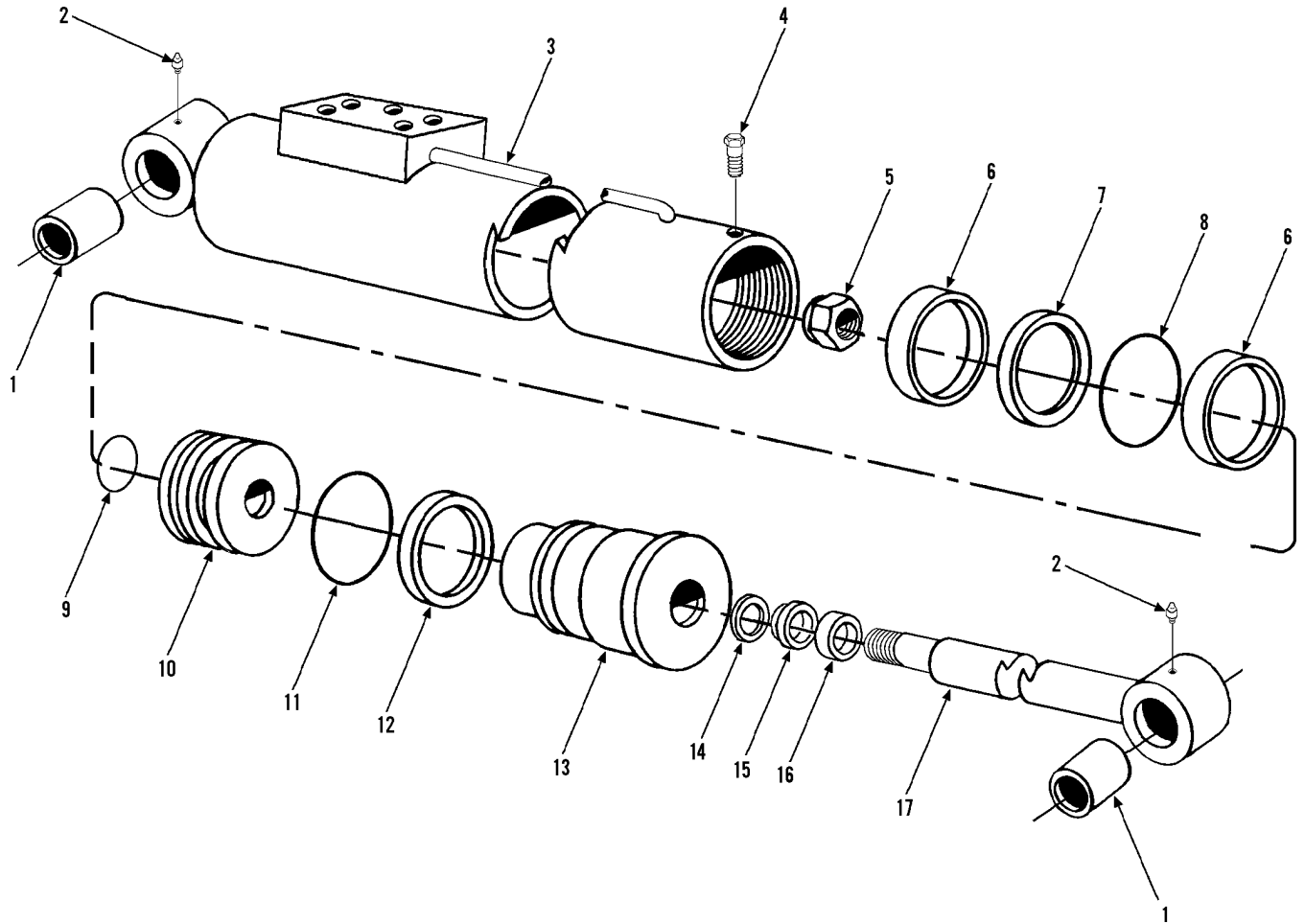
WEATHER PACK SHROUD (3-WIRE) #1201-0717			
PIN DESIGNATION		RED	WIRE DESIGNATION
	B	YELLOW	
	C	GRAY	



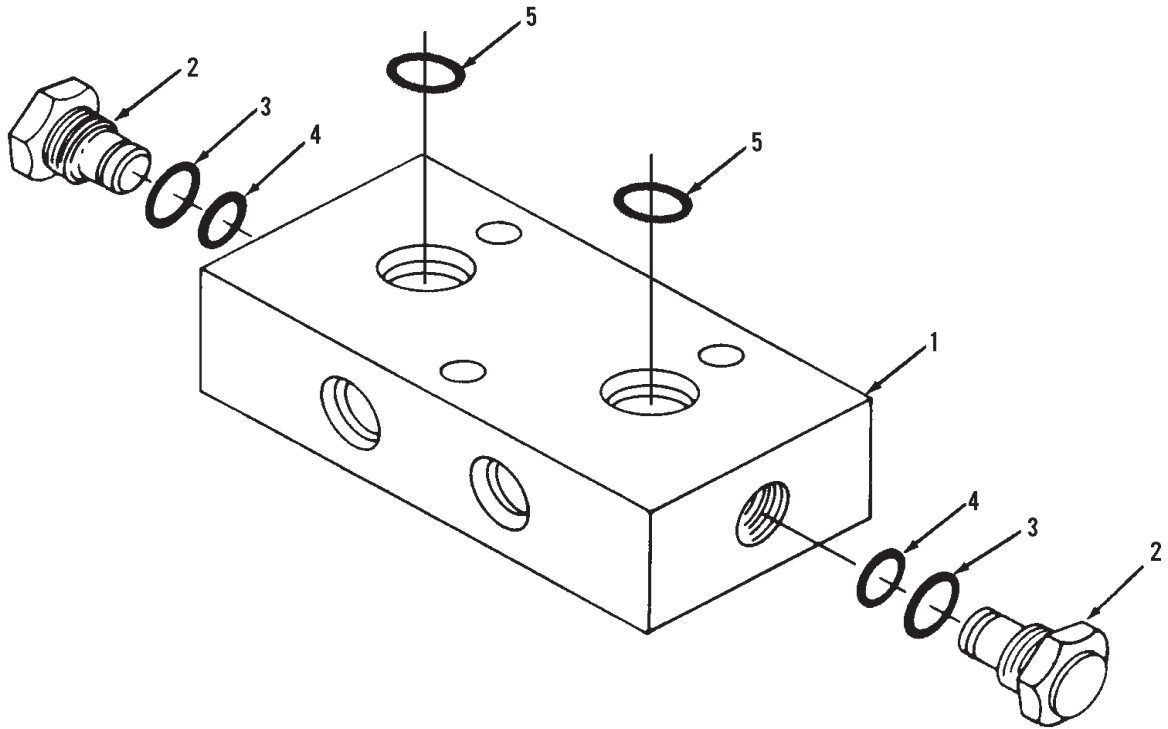
Item	Part No.	Qty.	Description Of Part
	9116-5116	1	TILT ON JOYSTICK (includes all items)
1	8866-2239	1	SWIVEL NUT RUN TEE, 3/8 TUBE
2	8866-2139	1	RUN TEE (includes o-ring)
	8859-1204	1	O-RING
3	8471-7893	1	HOSE ASSY
4	8471-8846	1	HOSE ASSY
5	9130-3041	1	BOOM CONTROL DECAL
6	8096-3060	1	WEATHER PACK SHROUD
7	8096-3069	3	W.P. MALE PIN TERMINAL
8	9114-3187	3	W.P. CABLE SEAL
9	9108-3490	1	JOYSTICK HARNESS
10	9020-7719	2	JUMPER WIRE - GREEN
11	9130-3019	1	REMOTE CONTROL VALVE
12	9103-3487	2	CHECK VALVE PLATE
13	9114-3147	1	ORIFICE PLATE (.095)
14	9114-3146	1	ORIFICE PLATE (.109)
15	9103-3483	1	VALVE POSITIONER KIT
16	9112-3105	1	SWAY CONTROL PLATE
17	8820-1012	3	HEX HD CAPSCREW, 1/4-20X2 3/4, GR5

Item	Part No.	Qty.	Description Of Part
18	8852-1304	3	HEX LOCKNUT, 1/4-20
19	9112-6040	1	L.H. SWAY BRACKET
20	8866-2064	3	ELBOW, 90 DEGREES (includes o-ring)
	8859-1204	3	O-RING
21	8866-2084	1	ELBOW, 45 DEGREES (includes o-ring)
	8859-1204	1	O-RING
22	8471-8847	1	HOSE ASSY
23	9108-5071	1	MODIFIED CONNECTOR
24	9130-3038	1	SOLENOID VALVE
25	9114-1331	1	SPACER
26	8856-1107	2	FLAT WASHER, 1/4
27	8820-1012	2	HEX HD CAPSCREW, 1/4-20X2 3/4, GR5
28	8855-1009	2	LOCKWASHER, 1/4
29	8850-1004	2	HEX NUT, 1/4-20
30	8866-2005	1	CONNECTOR (includes o-ring)
	8859-1204	1	O-RING
31	7713-3201	1	HOSE ASSY

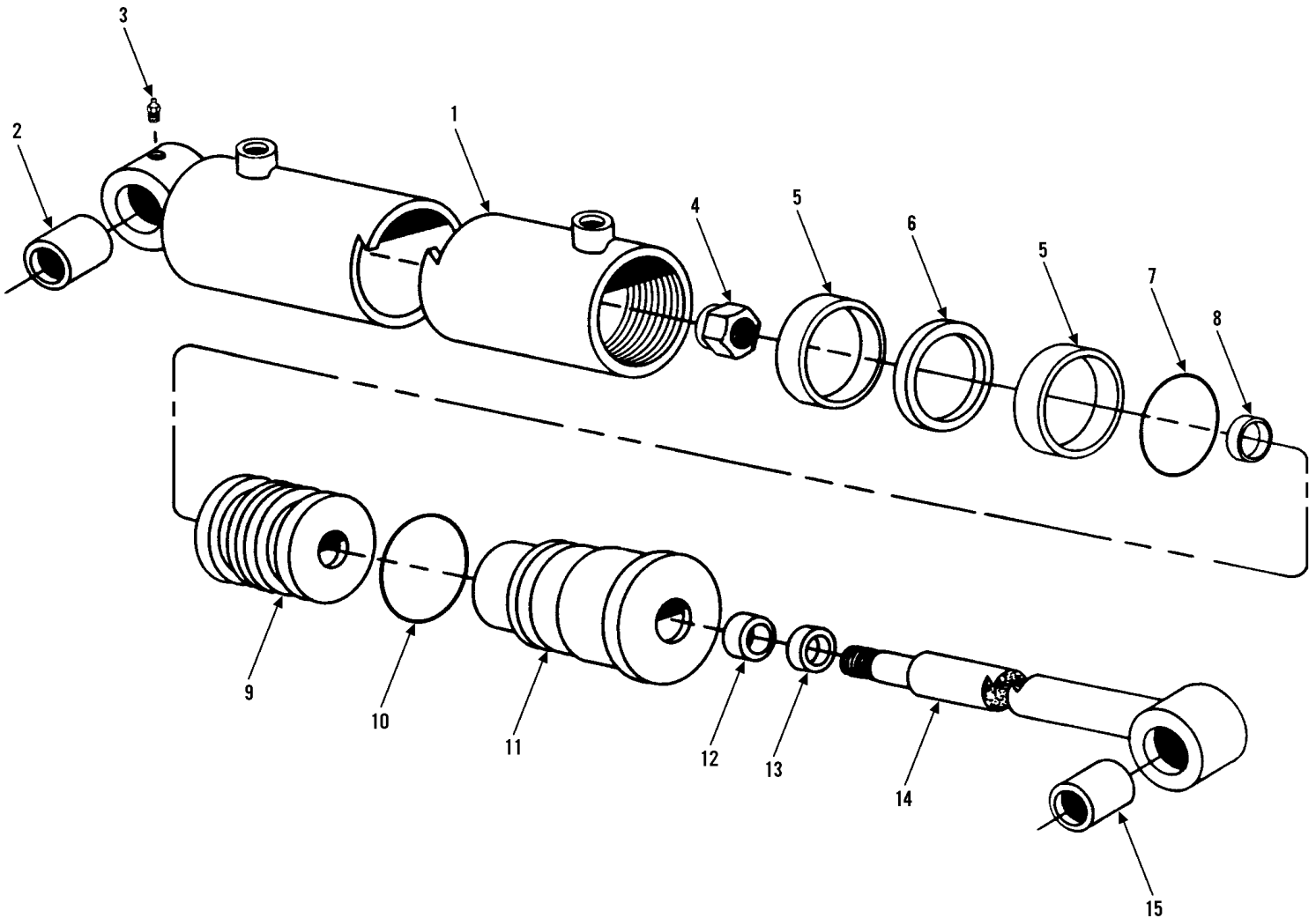




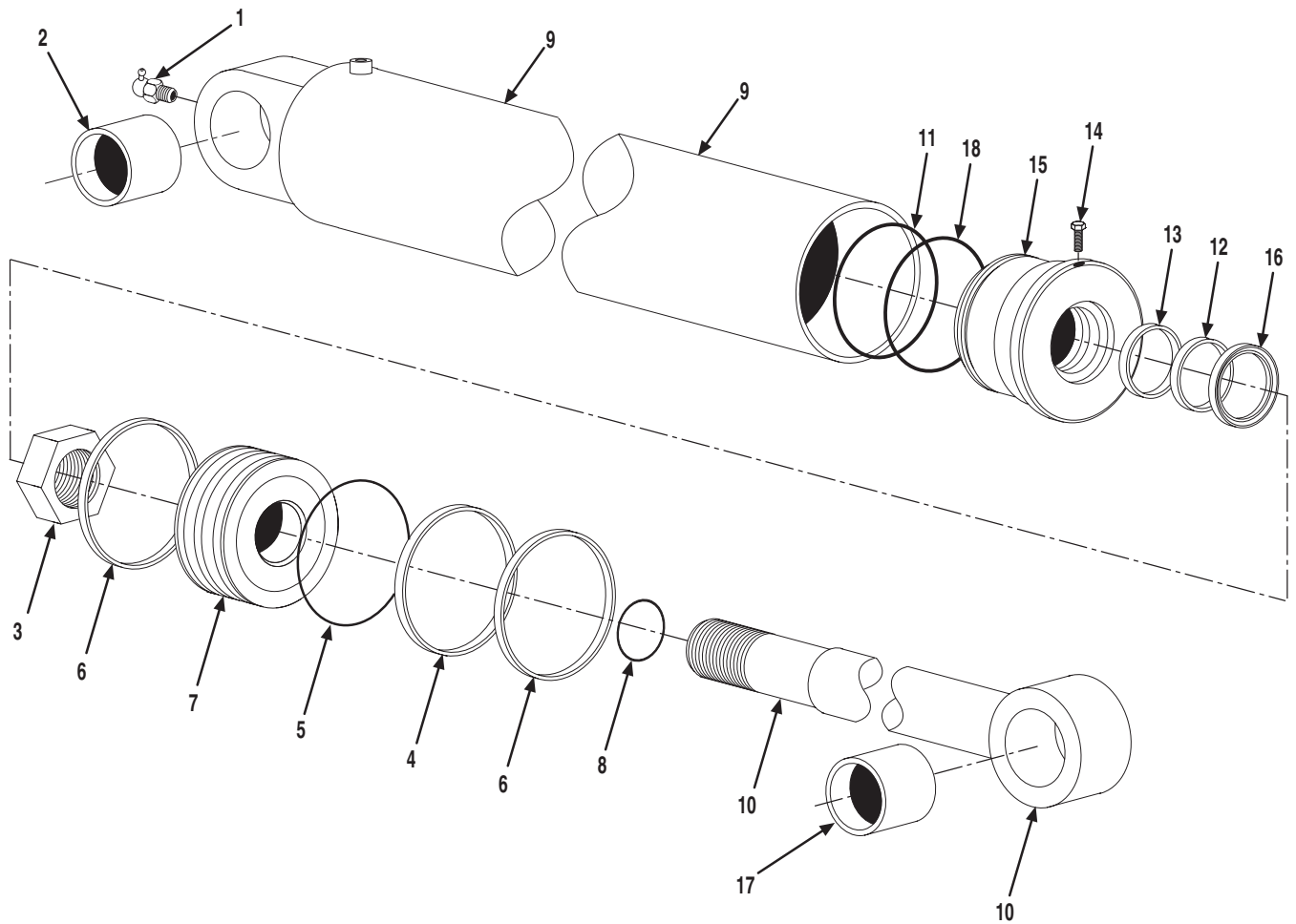
Item	Part No.	Qty.	Description Of Part
	9108-3471	1	SWAY CYLINDER ASSY, (includes all items)
	9108-4308	Ref	SEAL KIT, (includes items 6 thru 9, 11, 12 & 14 thru 16)
1	9106-4016	2	BUSHING
2	9114-4128	2	GREASE FITTING
3	9112-4083	1	CASE ASSEMBLY
4	9114-4017	1	CAPSCREW, #8X32X.375
5	9103-4156	1	LOCKNUT, (lubricate & torque to 350-400 ft. lbs.)
6		2	WEAR RING
7		1	PISTON SEAL
8		1	O-RING
9		1	O-RING
10	9112-4084	1	PISTON
11		1	O-RING
12		1	BACK-UP RING
13	9112-4085	1	CYLINDER HEAD
14		1	STEP SEAL
15		1	U-CUP
16		1	WIPER
17	9112-4086	1	ROD ASSEMBLY
			NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.



Item	Part No.	Qty.	Description Of Part
	9108-3262	1	DUAL P.O. CHECK VALVE ASSY (includes all items)
	9104-4002	Ref	SEAL KIT (includes items 3 & 4)
1		1	BODY
2	7713-3248	2	CHECK VALVE
3	9108-4227	2	O-RING
4	9108-4228	2	O-RING
5	8859-1009	2	O-RING
			NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.



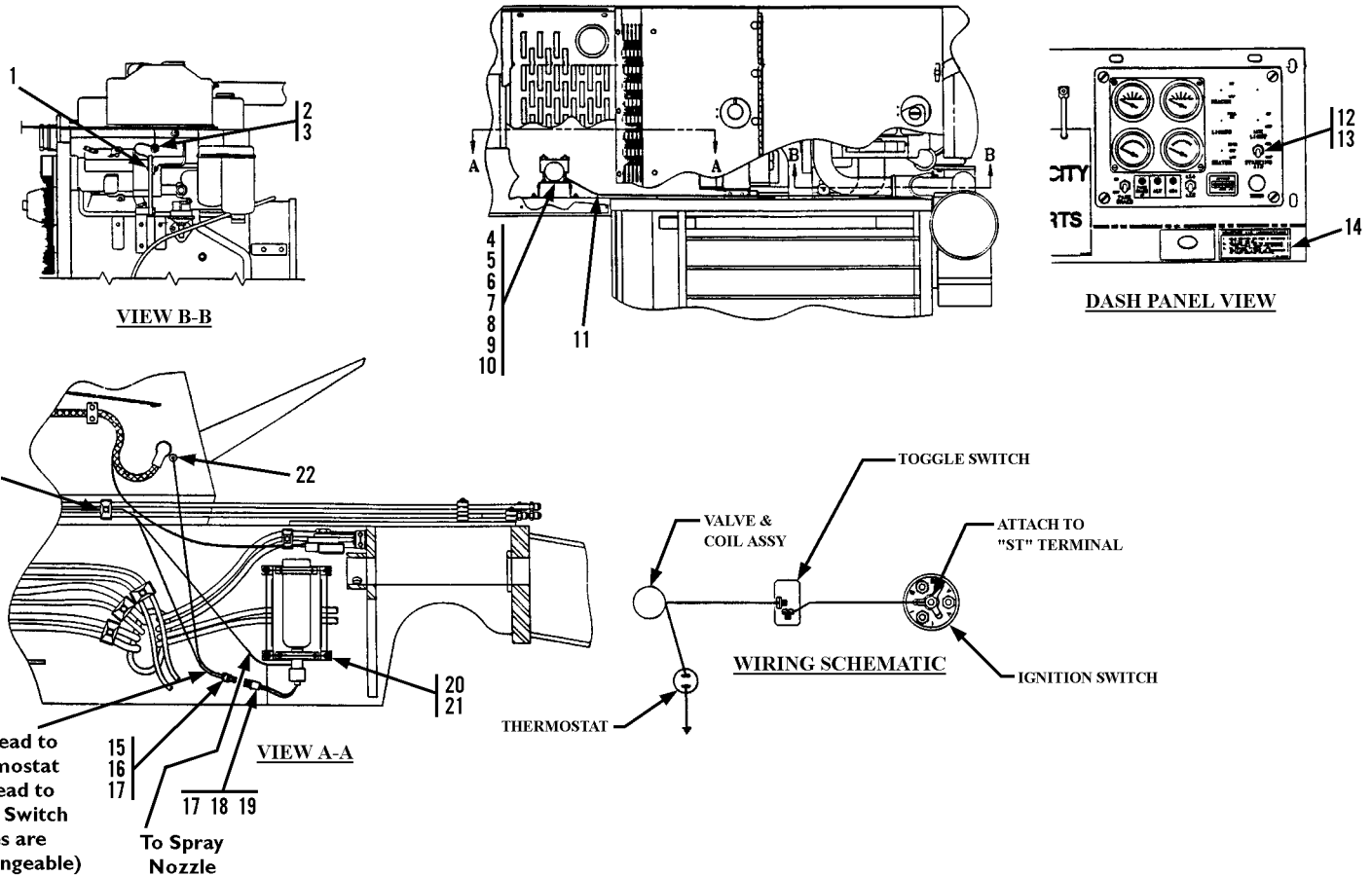
Item	Part No.	Qty.	Description Of Part
	9103-3366	2	SWING CYLINDER ASSY (includes all items)
	9103-4301	Ref	SEAL KIT (includes items 5, 6, 7, 8, 10, 12 & 13)
1	9103-4302	1	TUBE ASSY
2	9108-4194	1	BUSHING
3	8867-1033	1	LUBE FITTING, STRAIGHT, 1/4-28
4	9103-4303	1	LOCKNUT (torque to 235 ft.lbs.)
5	9104-4463	2	WEAR RING
6	9104-4464	1	SEAL
7	9104-4465	1	O-RING
8	9104-4466	1	O-RING
9	9103-4304	1	PISTON
10	9104-4467	1	O-RING
11	9103-4305	1	GLAND
12	9104-4468	1	SEAL
13	9104-4469	1	WIPER
14	9103-4306	1	ROD ASSY
15	9104-4470	1	BUSHING



Item	Part No.	Qty.	Description Of Part
	9045-3034	1	SWING CYLINDER, (includes all items)
	9114-4006	1	SEAL KIT, (includes items 4 thru 6, 8, 11 thru 13, 16 & 18)
1	9114-4125	1	GREASE FITTING
2	9103-4157	1	BUSHING
3	9114-4038	1	LOCKNUT
4	9116-4020	1	PISTON SEAL
5	9116-4021	1	O-RING
6	9116-4019	2	WEAR RING
7	9114-4039	1	PISTON
8	9116-4022	1	O-RING
9	9103-4435	1	BARREL
10	9103-4436	1	PISTON ROD
11	9116-4024	1	BACK-UP RING
12	9120-4468	1	U-CUP
13	9116-4025	1	STEP SEAL
14	9112-4096	1	SELF TAPPING SCREW
15	9114-4040	1	CYLINDER HEAD
16	9120-4469	1	WIPER
17	9112-4087	1	BUSHING
18	9103-4437	1	O-RING
			NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.

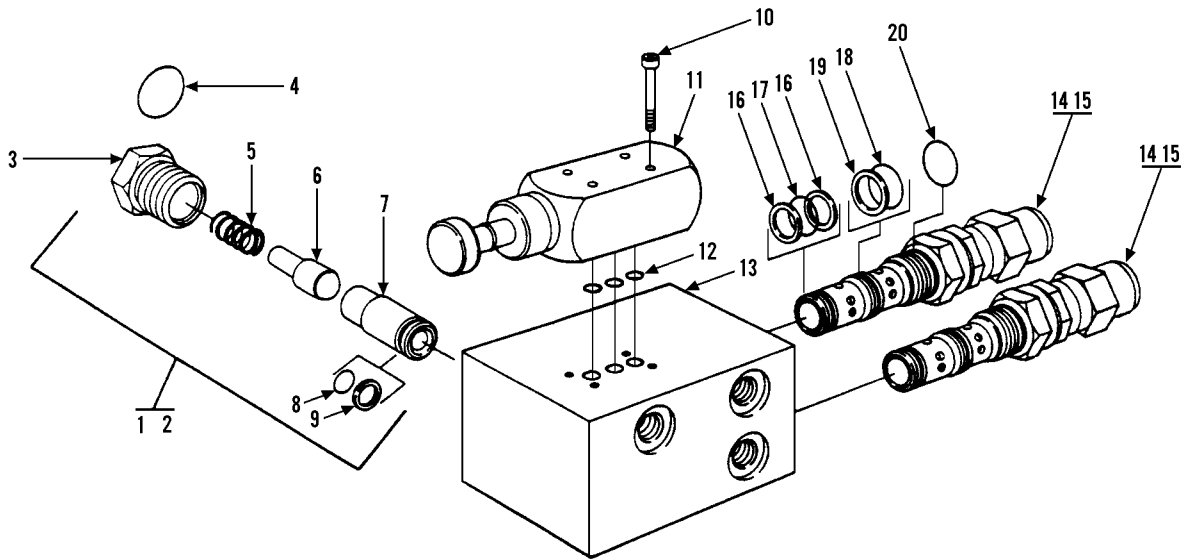
**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

**OPTIONAL EQUIPMENT**  
**(9116-5028) Ether Start**  
**Starting Serial No. 0255001**  
**Original Issue 9-96**  
**Revised 2-5-97**

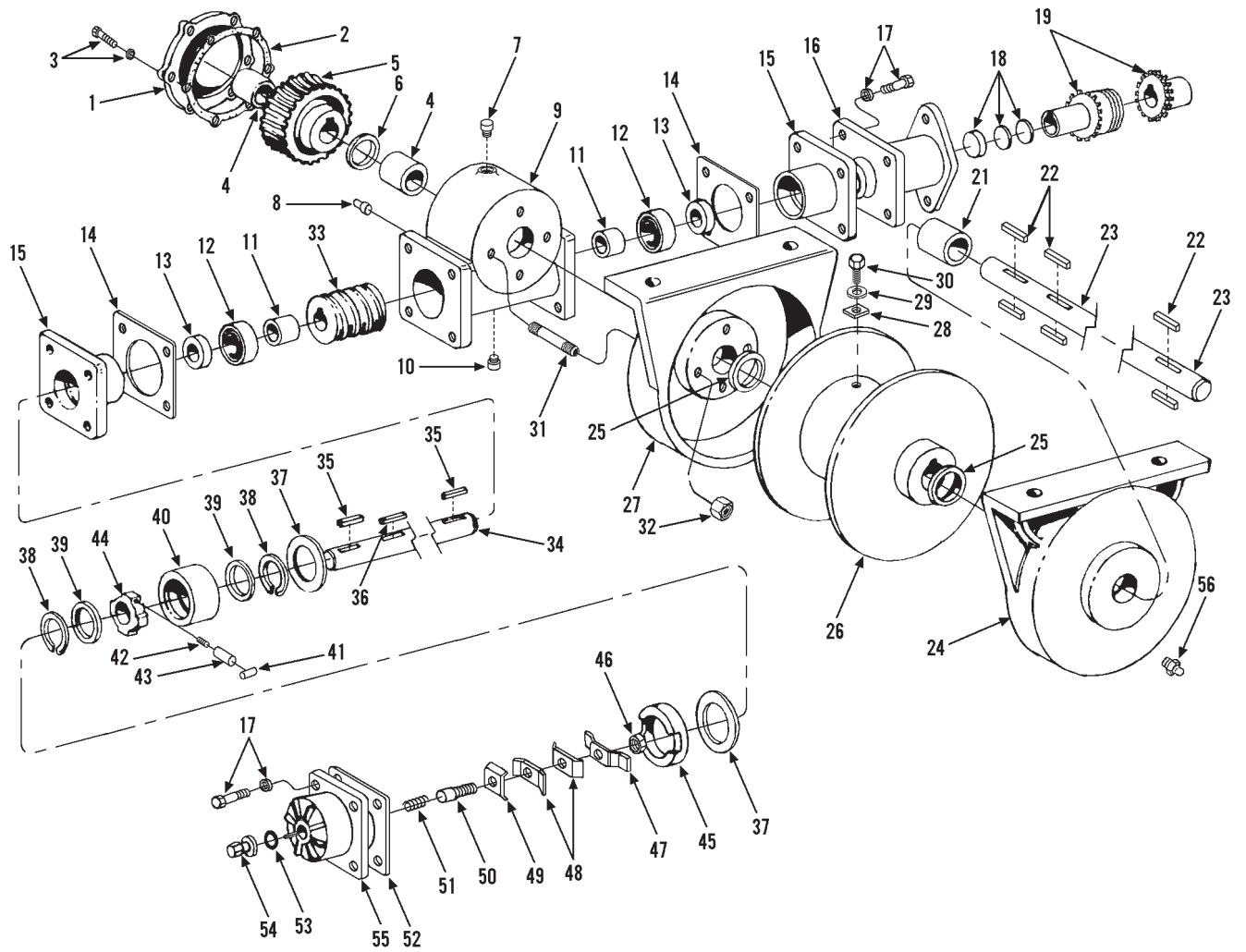


Item	Part No.	Qty.	Description Of Part
*	9116-5028	1	ETHER START OPTION (includes all items except item 20)
1	8698-3202	1	WIRE CONNECTOR
2	8698-3195	2	WIRE CONNECTOR
3	8871-1385	1	PIPE BUSHING, 1/2X1/8
4	9108-3361	1	QUICK START KIT (includes all wire & nylon tubes needed for installation)
5	9116-1283	1	MOUNTING BRACKET
6	8820-1005	2	HEX HD CAPSCREW, 1/4-20X1, GR5
7	8855-1009	2	LOCKWASHER, 1/4
8	8850-1004	2	HEX NUT, 1/4-20
9	9020-6198	15"	TRIM-LOK
10	1440-2248	AR	3M ADHESIVE

Item	Part No.	Qty.	Description Of Part
11	9002-7187	4	TY-RAP
12	9114-3163	1	TOGGLE SWITCH
13	7738-3470	1	BOOT
14	9114-3202	1	INSTRUCTION DECAL
15	8096-3057	1	TOWER CONNECTOR, 2-WAY
16	8096-3068	2	FEMALE PIN TERMINAL
17	8096-3065	4	CABLE SEAL
18	8096-3069	2	MALE PIN TERMINAL
19	8096-3058	1	SHROUD CONNECTOR, 2-WAY
20	8096-3102	4	WELD STUD, 5/16-18X3/4
21	7714-3006	4	WHIZ-LOK NUT, 5/16-18
22	7716-3117	1	RUBBER GROMMET
*23	8662-1230	2	SUPPORT CLAMP



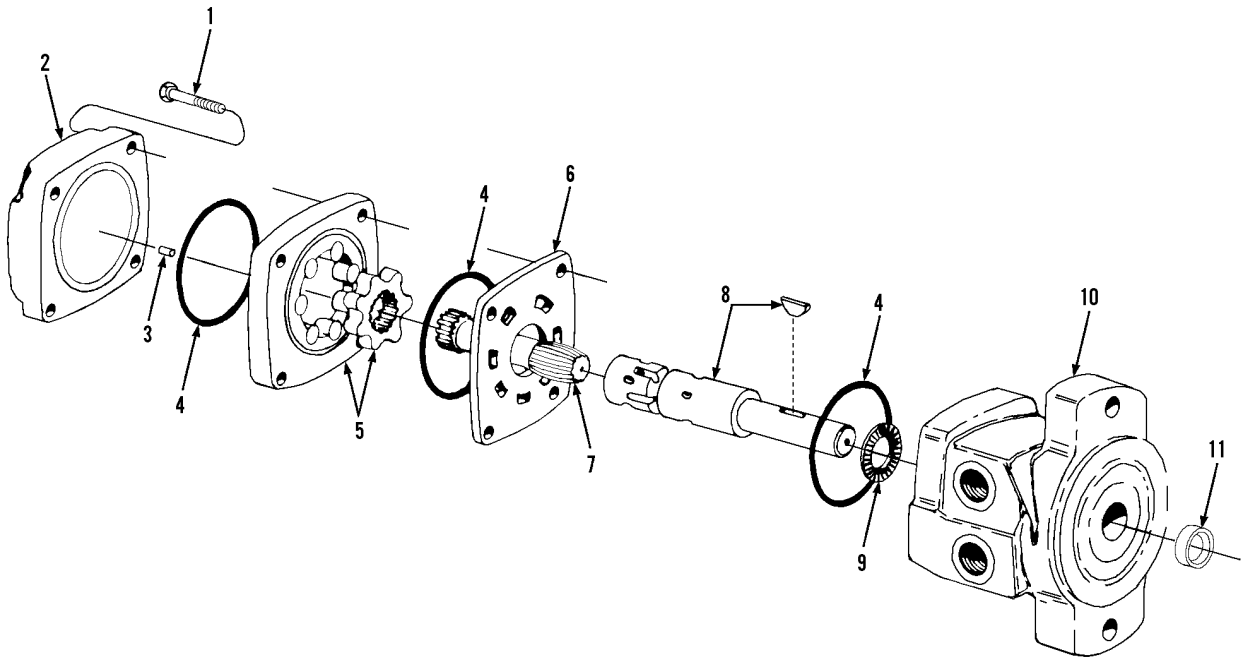
Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9055-3016	2	SWING VALVE ASSY (includes all items except seal kits)	10	8821-1034	4	SOCKET HD CAPSCREW, #10-24X1/2, GR8
	9104-4303	1	SWING VALVE SEAL KIT (includes quantity of (1) Seal Kit, item 2, quantity of (3) O-Rings, item 12, quantity of (2) Seal Kits, item 15)	11	9055-3014	1	PILOT VALVE
1	9104-4284	1	CHECK VALVE ASSY (includes items 3 thru 9)	12		3	O-RING
2	9104-4002	AR	CHECK VALVE SEAL KIT (includes items 4, 8 & 9)	13		1	VALVE BODY
3		1	RETAINER	14	9104-4301	2	COUNTERBALANCE VALVE ASSY (includes items 16 thru 20)
4		1	O-RING	15	9104-4302	AR	COUNTERBALANCE VALVE SEAL KIT (include items 16 thru 20)
5		1	SPRING	16		2	BACK-UP WASHER
6		1	BALL & SPRING GUIDE ASSY	17		1	O-RING
7		1	CAGE	18		1	O-RING
8		1	O-RING	19		1	BACK-UP WASHER
9		1	BACK-UP WASHER	20		1	O-RING
							NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.



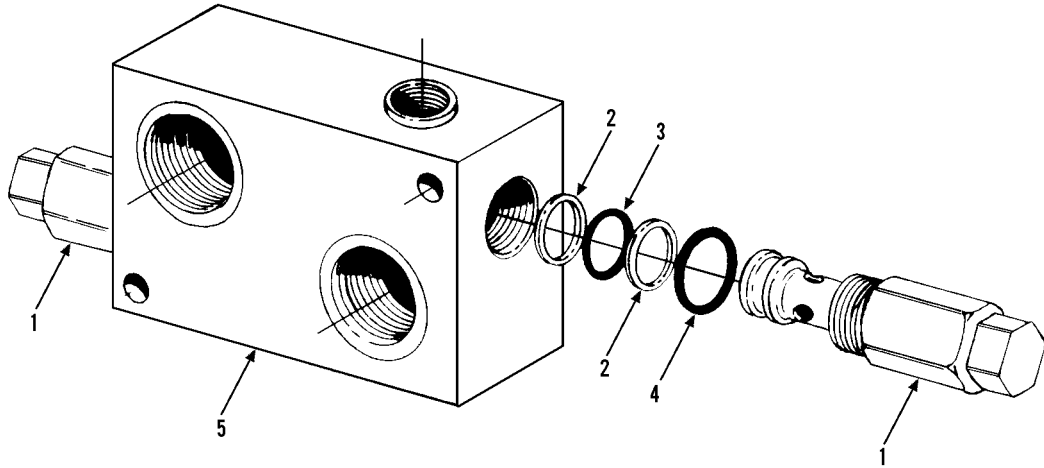
Item	Part No.	Qty.	Description Of Part
*	9045-3050	1	TRUSS BOOM WINCH (includes all items)
1	9020-8147	1	GEAR CASE COVER
2	9020-8171	1	GEAR CASE GASKET
3	8820-1035	6	HEX HD CAPSCREW, 3/8-16X1, GR5
	8855-1011	6	LOCKWASHER, 3/8
4	9020-8154	2	BUSHING
5	9020-8150	1	WORM GEAR
6	9020-8174	1	BUSHING
7	9020-8168	1	OIL FILL PLUG
8	9020-8185	1	OIL LEVEL PLUG
9	9020-8142	1	GEAR CASE
10	9020-8186	1	OIL DRAIN PLUG
11	9020-8156	2	COLLAR
12	9020-8183	2	BEARING
13	9020-8189	2	OIL SEAL
14	9020-8170	2	BEARING HUB GASKET
15	9020-8188	2	BEARING HUB
16	9020-8180	1	MOTOR MOUNT ADAPTER
17	8820-1037	12	HEX HD CAPSCREW, 3/8-16X1-1/2, GR5
	8855-1011	8	LOCKWASHER, 3/8
18	9020-8187	AR	COUPLER SPACER
19	9020-8181	1	COUPLER WINCH SHAFT
*20	Not Used		
21	9020-8153	1	LOCK SEAT BUSHING
22	9020-8152	6	CABLE DRUM SHAFT KEY
23	9020-8148	1	CABLE DRUM SHAFT
*24	9140-4384	1	LOCK SEAT
25	9020-8173	2	WASHER
26	9020-8145	1	CABLE DRUM

Item	Part No.	Qty.	Description Of Part
27	9020-8143	1	LOCK SEAT
28	9020-8169	1	WIRE ROPE LOCK
29	8855-1011	1	LOCKWASHER, 3/8
30	8820-1036	1	HEX HD CAPSCREW, 3/8-16X1-1/4, GR5
31	9020-8155	4	STUD BOLT, 1/2-13X1-1/2
32	8850-1008	4	HEX NUT, 1/2-13
33	9020-8151	1	WORM
34	9020-8149	1	WORM SHAFT
35	9020-8176	2	WORM SHAFT KEY
36	9020-8177	1	WORM SHAFT KEY
37	9020-8164	2	BRAKE LINING
38	9020-8184	2	LOCK RING (V.C. type)
39	9020-8175	2	SEAL
40	9020-8158	1	BRAKE HOUSING
41	9020-8163	1	ROLLER
42	9020-8179	1	BRAKE DRUM HOUSING
43	9020-8162	1	SPRING SEAT
44	9020-8159	1	BRAKE DRUM
45	9020-8157	1	BRAKE PLATE
46	8850-1006	1	HEX NUT, 3/8-16
47	9020-8165	1	BRAKE PLATE
48	9020-8166	2	BRAKE PLATE
49	9020-8167	1	FIXING PLATE
50	9020-8160	1	ADJUSTING BOLT
51	9020-8178	1	SPRING
52	9020-8190	1	BRAKE COVER GASKET
53	9020-8172	1	O-RING
54	9020-8161	1	ADJUSTING NUT
55	9020-8146	1	BRAKE DRUM
56	8867-1001	1	LUBE FITTING, STRAIGHT, 1/8

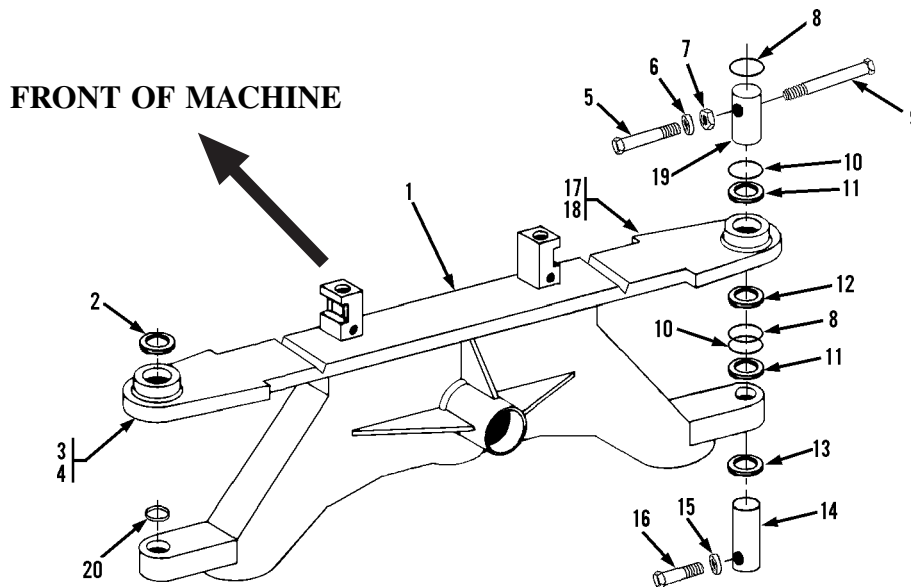




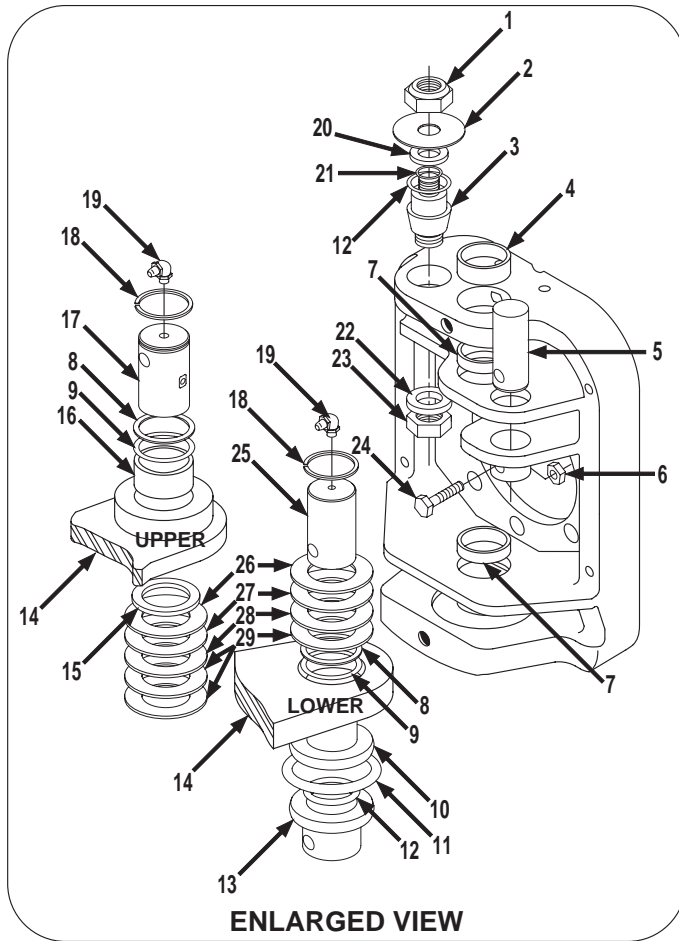
Item	Part No.	Qty.	Description Of Part
	9020-7879	1	WINCH MOTOR (includes all items)
	9020-8212	1	SHAFT SEAL KIT (includes items 4 & 11)
1	8320-1057	4	HEX HD CAPSCREW, 3/8-16X2, GR8
2	9020-8203	1	END COVER
3	9020-8204	1	PIN
4		3	SEAL
5	9020-8206	1	ROLLER-STATOR ASSY
6	9020-8207	1	WEAR PLATE
7	9020-8208	1	DRIVE LINK
8	9020-8209	1	SHAFT
9	9020-8210	1	THRUST BEARING
10	9020-8211	1	FRONT HOUSING
11		1	SHAFT SEAL
			NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.



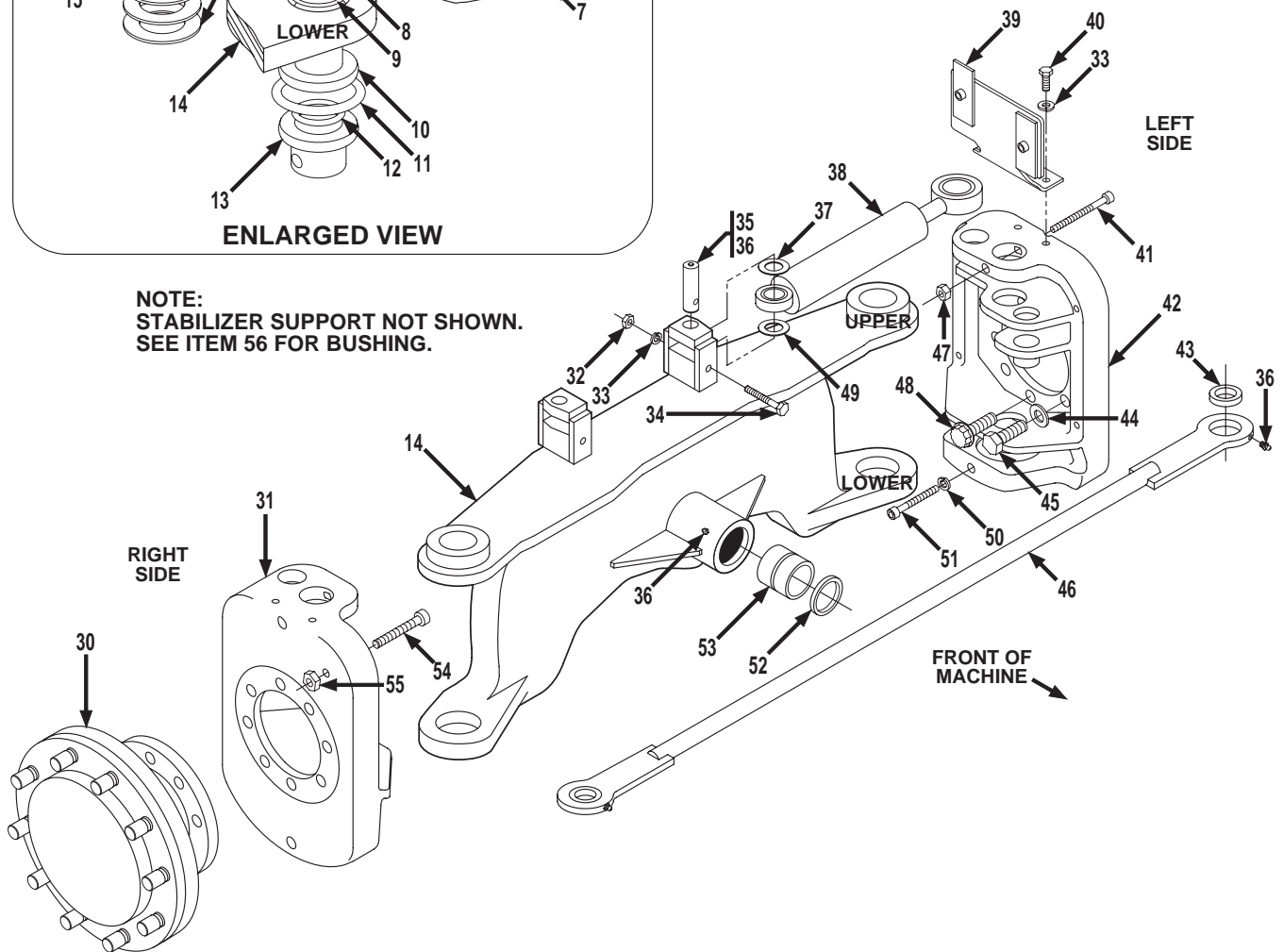
Item	Part No.	Qty.	Description Of Part
	9060-2706	1	CROSSOVER RELIEF VALVE (includes all items)
1	9020-3440	2	RELIEF CARTRIDGE (includes items 2 thru 4)
2	9020-3437	4	BACKUP RING (2/cartridge)
3	9020-3438	2	O-RING (1/cartridge)
4	9020-3439	2	O-RING (1/cartridge)
5		1	BODY
			NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.



Item	Part No.	Qty.	Description Of Part
	9114-5136	1	REAR AXLE REWORK KIT (includes all items)
1		1	REAR AXLE WELDMENT
2	9112-3028	2	BUSHING
3	9114-5134	1	LUG REWORK ASSY (includes items 2 & 4)
4	9114-6111	1	LUG WELD
5	8821-1117	2	SOCKET HEAD CAPSCREW, 1/2-13x4-1/2, GR8
6	8855-1109	2	LOCKWASHER, 1/2
7	8852-1208	2	HEX LOCKNUT, 1/2
8	8858-1323	4	RETAINING RING
9	8821-1121	2	SOCKET HEAD CAPSCREW, 1/2-13x6-1/2, GR8
10	9112-3030	4	BACK-UP RING
11	8859-1032	2	O-RING
12	8692-1268	2	LIP SEAL
13	9112-3029	2	O-RING
14	9114-1424	2	LOWER KING PIN
15	8855-1153	2	LOCKWASHER, 5/8
16	8821-2321	2	SOCKET HEAD CAPSCREW, 5/8-11x3-3/4, GR8
17	9114-5135	1	LUG REWORK ASSY (includes items 2 & 18)
18	9114-6112	1	LUG WELD
19	9108-1693	2	UPPER KING PIN
20	9112-3027	2	BUSHING



**NOTE:**  
 STABILIZER SUPPORT NOT SHOWN.  
 SEE ITEM 56 FOR BUSHING.

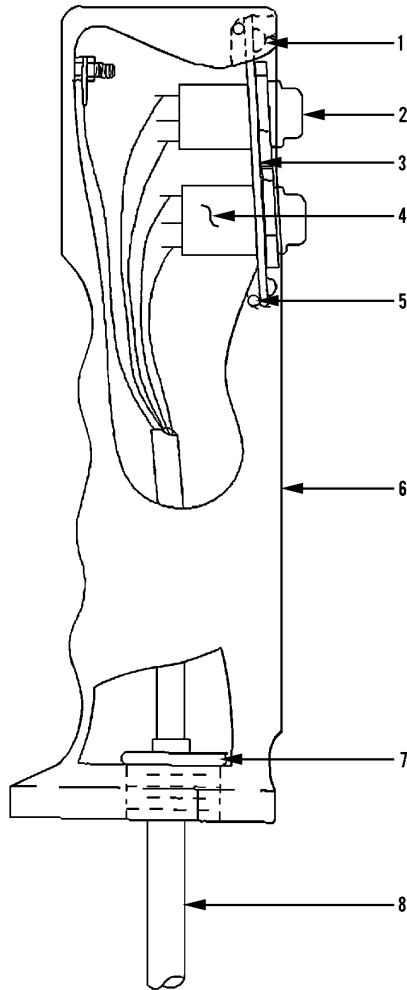


**NOTE #1:** Customer to use existing wheel hubs & hardware, drive motors, drive motor tube assemblies, and drain line hoses or order separately if replacement is required.

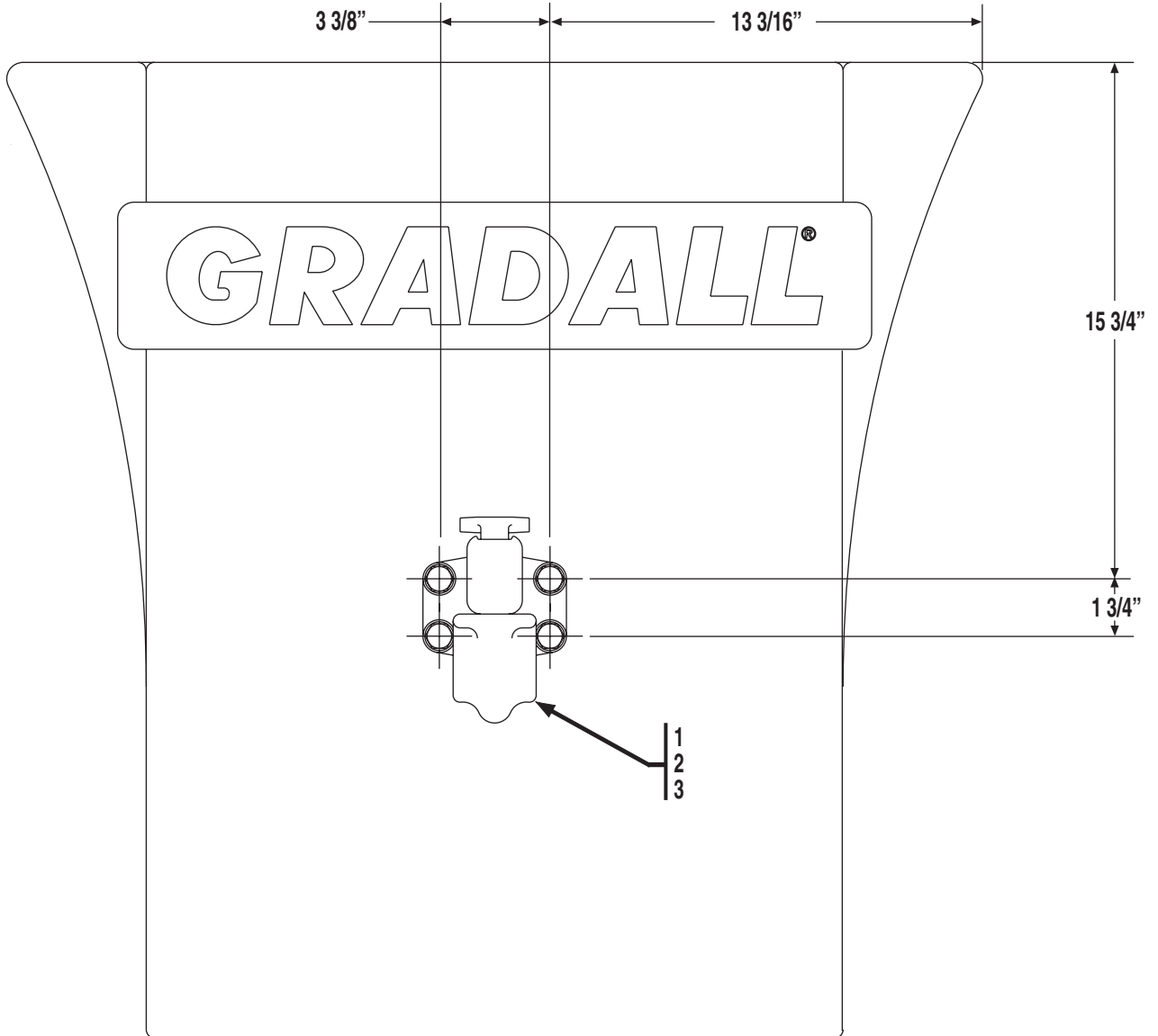
**NOTE #2:** Cylinder base end must be free to rotate. Shim steer cylinder base end as required to maintain a total max. gap of 1/16".

**NOTE #3:** Shim bottom knuckles as required to maintain no more than 1/32" movement. Shim top knuckles as required to maintain no more than 1/16" gap. Must have a minimum of one shim.

Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9114-5042	Ref	REAR AXLE ADVANTAGE KIT (includes all items except 30, 44, 45 & 48)	32	8850-1006	2	HEX NUT, 3/8-16
1	8852-1312	2	HEX LOCKNUT, 3/4-10 (torque to 160-175 ft.lbs.)	33	8855-1011	6	LOCKWASHER, 3/8
2	9108-1415	2	DIRT SHIELD	34	8320-1144	2	HEX HD CAPSCREW, 3/8-16X5-3/4, GR5
3	9104-1481	2	STEERING CYLINDER PIN (knuckle end)	35	9108-1695	2	STEERING CYLINDER PIVOT PIN (axle end)
4	9112-1239	2	BUSHING	36	8867-1001	6	LUBE FITTING, STRAIGHT, 1/8
5	9104-1439	2	TIE ROD PIN	37	9104-1598	AR	SHIM (.060 thick, see note #2)
6	8852-1306	2	LOCKNUT, 3/8-16	38		2	STEERING CYLINDER ASSY (see page 10-6 for details)
7	9112-1240	4	BUSHING	39	9116-6056	1	L.H. TUBE SUPPORT
8	9112-3030	4	BACK-UP RING		9116-6055	1	R.H. TUBE SUPPORT
9	8859-1032	4	O-RING	40	8820-1035	4	HEX HD CAPSCREW, 3/8-16X1, GR5
10	9112-3027	2	BUSHING (lower)	41	8821-1121	2	SOCKET HD CAPSCREW, 1/2-13X6-1/2, GR8
11	9112-3029	2	O-RING	42	9112-0003	1	L.H. STEERING KNUCKLE
12	8859-1104	4	O-RING	43	9104-3247	2	SELF-ALIGNING BUSHING
13	9112-1091	2	THRUST BUSHING	44		12	HARDENED WASHER, 3/4 (use existing hardware, see page 2-2 for details)
14	9116-6013	1	REAR AXLE WELDMENT (includes items 10, 16, 53 & 56)	45		12	HEX HD CAPSCREW, 3/4-10X2 (use existing hardware, see page 2-2 for details)
15	8692-1268	2	LIP SEAL	46	9116-6063	1	TIE ROD (includes item 43)
16	9112-3028	2	BUSHING (upper)	47	8852-1208	2	HEX LOCKNUT, 1/2
17	9108-1693	2	UPPER KING PIN	48		2	CAPSCREW 12 PT., 3/4-10X2, GR8 (use existing hardware, see page 2-2 for details)
18	8858-1323	4	RETAINING RING	49	9020-1918	AR	SHIM (10 gauge, see note #2)
19	8867-1022	4	LUBE FITTING, 30 DEGREES, 1/8	50	8855-1153	2	LOCKWASHER, 5/8
20	9104-1732	AR	SPACER	51	8821-2321	2	SLOT HD CAPSCREW, 5/8-11X3-3/4, GR8
21	8859-1019	2	O-RING	52	2460-1570	2	LIP SEAL
22	9104-1459	2	WASHER	53	9112-3031	2	BUSHING
23	8850-1416	2	HEX JAM NUT, 1-14 (torque to 225-250 ft. lbs.)	54	8821-2321	2	SOCKET HD CAPSCREW, 5/8-11X3-3/4, GR8
24	8320-1140	2	HEX HD CAPSCREW, 3/8-16X2-3/4, GR8	55	8850-1110	2	HEAVY HEX JAM NUT, 5/8-11
25	9114-1424	2	LOWER KING PIN	56	9116-3019	2	BUSHING (stabilizer support, not shown)
26	9104-1596	AR	SHIM (20 gauge, see note #3)				
27	9104-1449	AR	SHIM (.060 thick, see note #3)				
28	9104-1450	AR	SHIM (.0478 thick, see note #3)				
29	9104-1451	AR	SHIM (.106 thick, see note #3)				
30		2	DRIVE HUB (use existing hubs, see page 2-2 & 6-6 for details)				
31	9112-0004	1	R.H. STEERING KNUCKLE				



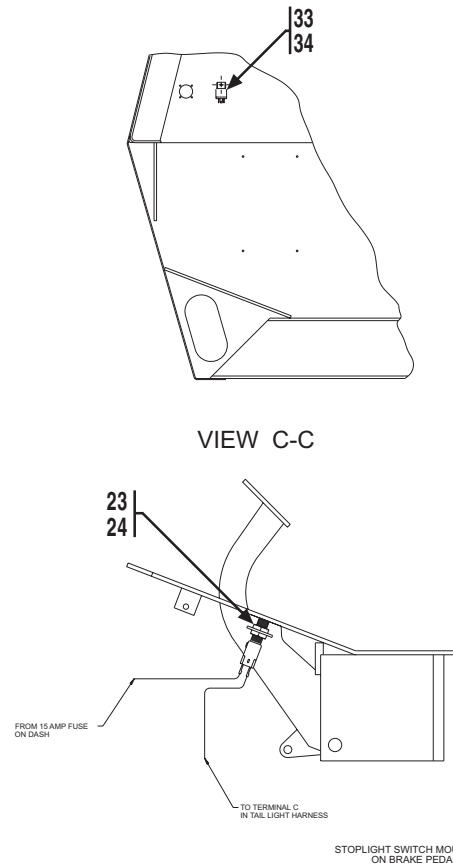
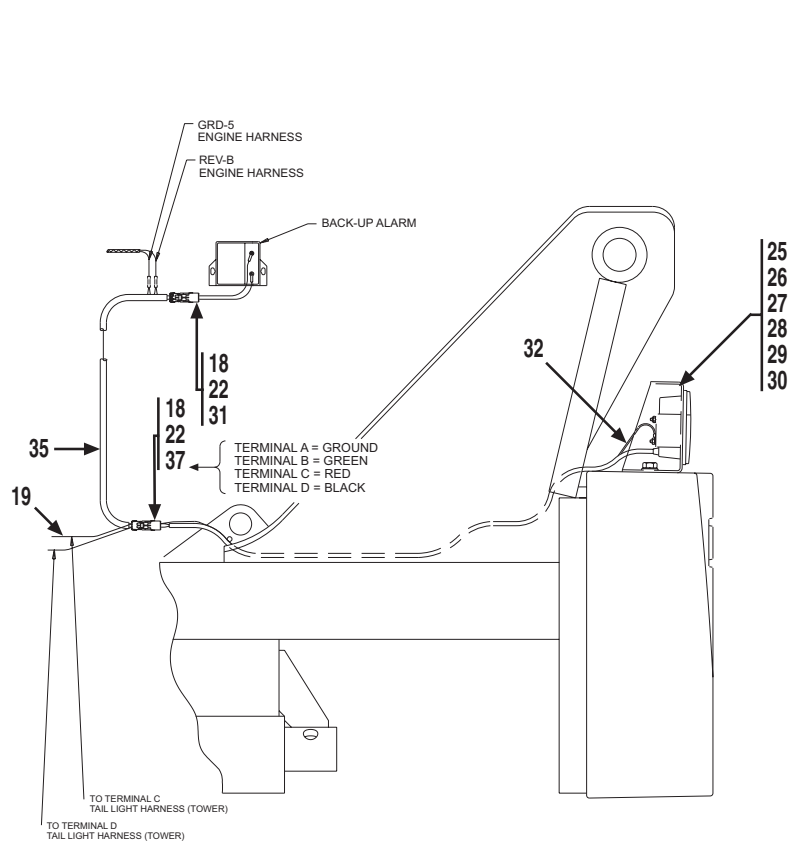
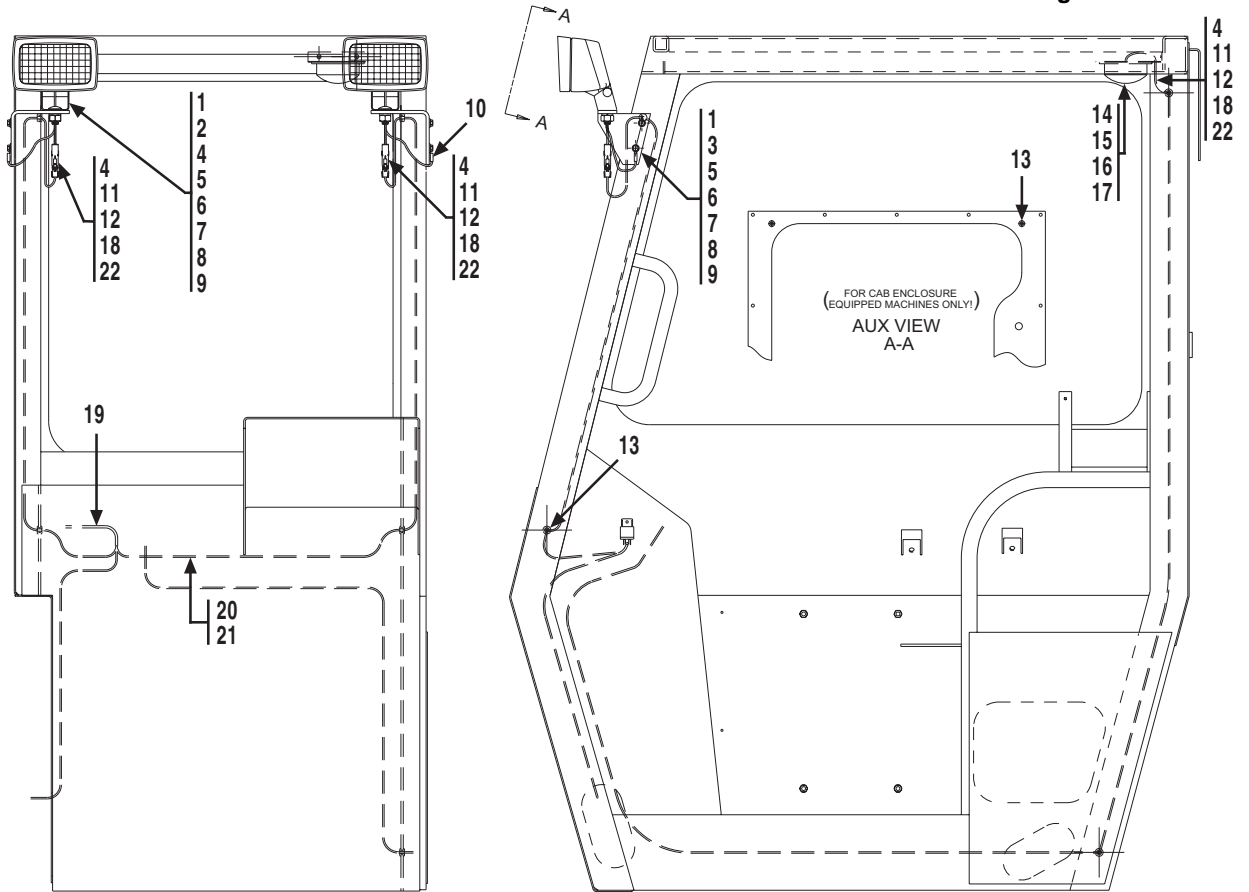
Item	Part No.	Qty.	Description Of Part
	9103-3387	1	5-BUTTON HANDLE (includes all items)
1	9136-4015	3	FACEPLATE SCREW
2	9136-4016	5	PUSHBUTTON BOOT
3	9136-4017	1	FACEPLATE
4	9136-4018	5	PUSHBUTTON SWITCH
5	9136-4019	1	FACEPLATE GASKET
6	9136-4020	1	HOUSING
7	9136-4021	1	CABLE STOP
8	9136-4022	1	CABLE (2.75 ft.)



Item	Part No.	Qty.	Description Of Part
	9103-5101	1	PINTLE HOOK INSTALLATION (includes all items)
1	9020-0602	1	PINTLE HOOK
2	8320-1120	4	HEX HD CAPSCREW, 1-3/4 x 1/2-13, GR8
3	8855-1013	4	LOCKWASHER #2

**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

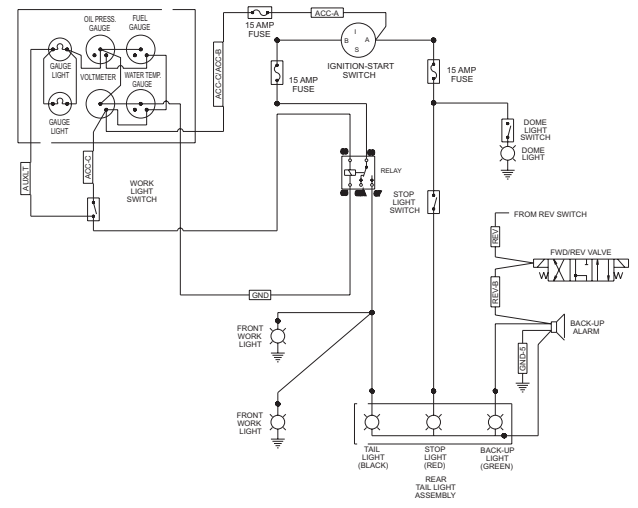
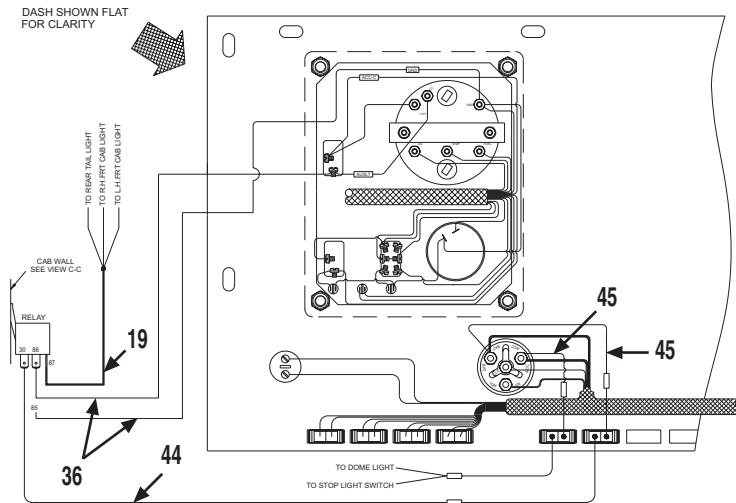
**OPTIONAL EQUIPMENT**  
**(9114-5098) Work Light Package**  
**Starting Serial No. 0255016**  
**Original Issue 10-00**



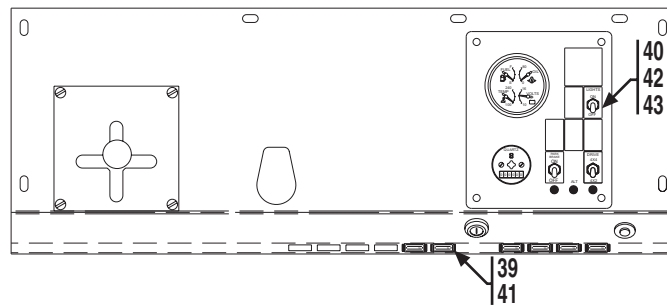


**GRADALL®**  
**MATERIAL HANDLER**  
**544C**

**OPTIONAL EQUIPMENT**  
**(9114-5098) Work Light Package**  
**Starting Serial No. 0255016**  
**Original Issue 10-00**



ELECTRICAL SCHEMATIC



Item	Part No.	Qty.	Description Of Part	Item	Part No.	Qty.	Description Of Part
	9114-5098	1	WORK LIGHT PACKAGE, (includes all items)	27	9136-5045	1	TAIL LIGHT ASSEMBLY, (includes the following seven items)
1	8096-3050	2	UTILITY FLOOD LIGHT		9112-3065	1	TAIL LIGHT
2	9114-1182	1	R.H. LIGHT SUPPORT		8666-1147	38"	WIRE, 16 GAUGE, (black)
3	9114-1183	1	L.H. LIGHT SUPPORT		8666-1149	38"	WIRE, 16 GAUGE, (green)
4	8096-3055	4	W. PACK CONNECTOR, (tower)		8666-1152	38"	WIRE, 16 GAUGE, (red)
5	8820-1035	2	HEX HD CAPSCREW, 3/8-16X1, GR5		8668-3480	3	BUTT CONNECTOR
6	8856-1109	2	FLAT WASHER, 3/8		8203-3996	45"	WIRE LOOM
7	8855-1011	2	LOCKWASHER, 3/8		8668-3122	2	TIE WRAP
8	8850-1006	2	HEX NUT, 3/8-16	28	8820-1108	1	HEX HD CAPSCREW, 3/4-10X1-1/4, GR5
9	9002-7319	4	DR & TAP SCREW, 1/4-20X1	29	8856-1115	1	FLAT WASHER, 3/4
10	8688-3260	2	EYELET	30	8855-1016	1	LOCKWASHER, 3/4
11	8096-3056	3	W. PACK CONNECTOR, (shroud)	31	8096-3058	1	W. PACK CONNECTOR, (shroud)
12	8096-3068	3	W. PACK CONNECTOR, (female pin)	32	9114-1364	1	JUMPER WIRE
13	9002-7214	8	RUBBER GROMMET	33	7738-3410	1	RELAY
14	9101-1009	1	MOUNTING BRACKET	34	8832-1039	1	SELF TAPPING SCREW, #10-32X1/2
15	9002-9955	1	RUBBER GROMMET	35	9114-3210	1	TAIL LIGHT HARNESS
16	8832-1022	2	SELF TAPPING SCREW, #8-32X3/8	36	9114-1265	2	JUMPER WIRE
17	2486-1167	1	INTERIOR LIGHT	37	8096-3062	1	W. PACK CONNECTOR, (shroud)
18	8096-3069	9	W. PACK CONNECTOR, (male pin)	38		AR	WIRE LOOM, (use on all wires)
19	9114-3270	1	LIGHT HARNESS	39	7736-3268	2	FUSE, 15 AMP
20	8668-3122	6	TIE WRAP	40	7738-3467	1	LIGHT SWITCH
21	9105-3419	19	TIE WRAP	41	9114-3108	2	FUSE HOLDER
22	8096-3066	12	W. PACK CONNECTOR, (cable seal)	42	7738-3470	1	BOOT
23	9114-1197	1	MOUNTING TAB	43	9136-3009	1	LIGHTS ON/OFF DECAL
24	9114-3117	1	STOPLIGHT SWITCH	44	9114-1266	1	JUMPER WIRE
25	9112-1145	1	TAIL LIGHT HOUSING	45	9114-1259	2	JUMPER WIRE
26	9112-1146	1	TAIL LIGHT BRACKET				



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