

CHALLENGER[®]



OWNER'S MANUAL

EXPRESS - 4300 SERIES

INSTALLATION, OPERATION, MAINTENANCE & PARTS

NOTE: MANUAL including SPECIFICATIONS, subject to change without notice
All ratings specified are based on structural factors only,
not vehicle capacities or capabilities.

CHALLENGER[®]

Miller Industries Towing Equipment Inc.
8503 Hilltop Drive
Ooltewah, Tennessee 37363

FORM NO. 0500983
03 / 98

Phone (423) 238-4171 • FAX (423) 238-5371

PRICE \$25.00

LIMITED WARRANTY

MILLER INDUSTRIES TOWING EQUIPMENT INC., hereinafter referred to as MILLER, warrants to the original purchaser that each new MILLER wrecker or other MILLER products will be free from defects in material and workmanship for a period of twelve (12) months from date placed in service, but in no event shall such warranty period exceed twenty-four (24) months from date of manufacture by MILLER. The purchaser must promptly notify MILLER in writing of any failure in material or workmanship. In no event shall MILLER accept such notification later than twenty-four (24) months from date of delivery or twelve (12) months from date placed in service, whichever is earlier.

MILLER's obligation under this warranty, statutory or otherwise, is limited to the repair or replacement at the MILLER factory, or at a point designated by MILLER, of such part or parts as shall appear upon inspection by MILLER to be defective in material or workmanship. New or remanufactured parts will be used for any replacement at MILLER's option. This warranty is not transferable. This warranty does not obligate MILLER to bear the cost of labor or transportation charges in connection with the repair or replacement of any parts found to be defective, nor shall it apply to a product upon which repairs or alterations have been made unless authorized by MILLER.

EXCEPT AS EXPRESSLY SET FORTH IN THIS WARRANTY, MILLER MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND HEREBY DISCLAIMS ALL OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. MILLER shall in no event be liable for claimed downtime, claimed loss of profits or goodwill, or any other special, incidental, indirect, or consequential damages concerning or relating to any product or parts, whether based on negligence, strict liability, breach of contract, breach of warranty, misrepresentation or any other legal theory, regardless of whether the loss resulted from any general or particular requirement which MILLER knew or had reason to know about at the time of sale.

MILLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE FINISHED PRODUCTS MANUFACTURED OR SUPPLIED BY ANOTHER MANUFACTURER AND SUPPLIED BY MILLER TO PURCHASER, including, but not limited to, any vehicle to which a MILLER product may be affixed or any accessories or wire rope, and MILLER EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AS TO SUCH EQUIPMENT OR PRODUCTS. This language shall in no way affect or diminish the rights of the purchaser to rely on such warranties as are extended by such manufacturers or suppliers. MILLER shall, to the extent permitted under applicable law, pass on to the purchaser such manufacturer's or seller's warranty.

MILLER, whose policy is one of continuous improvement, reserves the right to improve its products through changes in design or materials as it may deem desirable without being obligated to incorporate such changes in products previously sold. This warranty is not intended to cover or include the following items, which are set forth by way of example and not limitation:

- A. Normal deterioration of trim, paint, lettering, and appearance items due to wear or exposure to weather, road conditions, road treatments, etc.
- B. Any damage or defect due to accident, misuse, abuse, improper or unauthorized repairs, failure to provide reasonable and necessary maintenance, or uses for which the equipment was not designed or intended.
- C. Alterations or modifications that affect performance, operation or reliability.
- D. Normal maintenance parts including, but not limited to, wear pads, bushings, wire rope, mud flaps, fenderettes, light bulbs, hydraulic oil, filters, and tow sling belts.

IT IS EXPRESSLY UNDERSTOOD THAT MILLER MAKES NO IMPLIED WARRANTY THAT MILLER PRODUCTS SHALL BE FIT FOR THE PURPOSE OF LIFTING OR MOVING PEOPLE OR FOR ANY OTHER IMPROPER USE.



Miller Industries Towing Equipment Inc.
8503 Hilltop Drive
Ooltewah, Tennessee 37363

SERIAL NUMBER

Telephone (423) 238-4171

Section VI - PARTS

This Section is provided by the manufacturer for the purpose of ordering any component part of the **CHALLENGER Express 4300 Series Wrecker** that may be required when part replacement is necessary. Be certain to use only original equipment replacement parts for warranty purposes as well as for keeping your **CHALLENGER Express 4300 Series Wrecker** in its original state and optimum operating capacities.

When ordering replacement or spare parts be sure to provide the following information to the manufacturer's **Parts Department**.

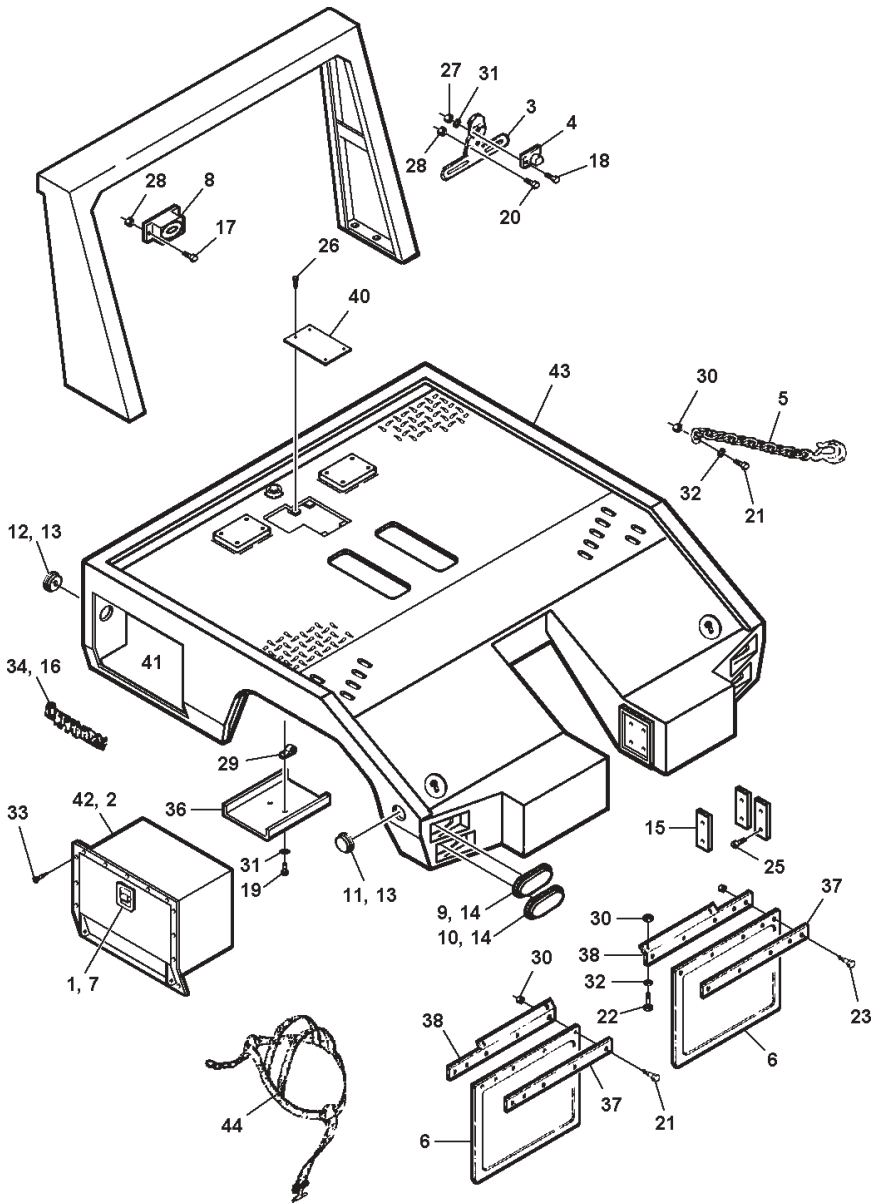
1. **Manual Number & Date of Publication**
2. **Manual Page Number**
3. **Page Title**
4. **Reference Number of Part Desired**
5. **Part Number**
6. **Part Description**
7. **Quantity of Part Desired**

Providing this information will help ensure that the correct parts will be delivered to you in an expedient manner without delay. Should additional information be required for repair or replacement of certain components, contact your Wrecker Manufacturer Authorized Representative.

The Manufacturer reserves the right, without notice or obligation, to improve or modify their products, which may change the specifications, models and feature availability.

Section VI - PARTS (cont'd)

BODY ASSEMBLY



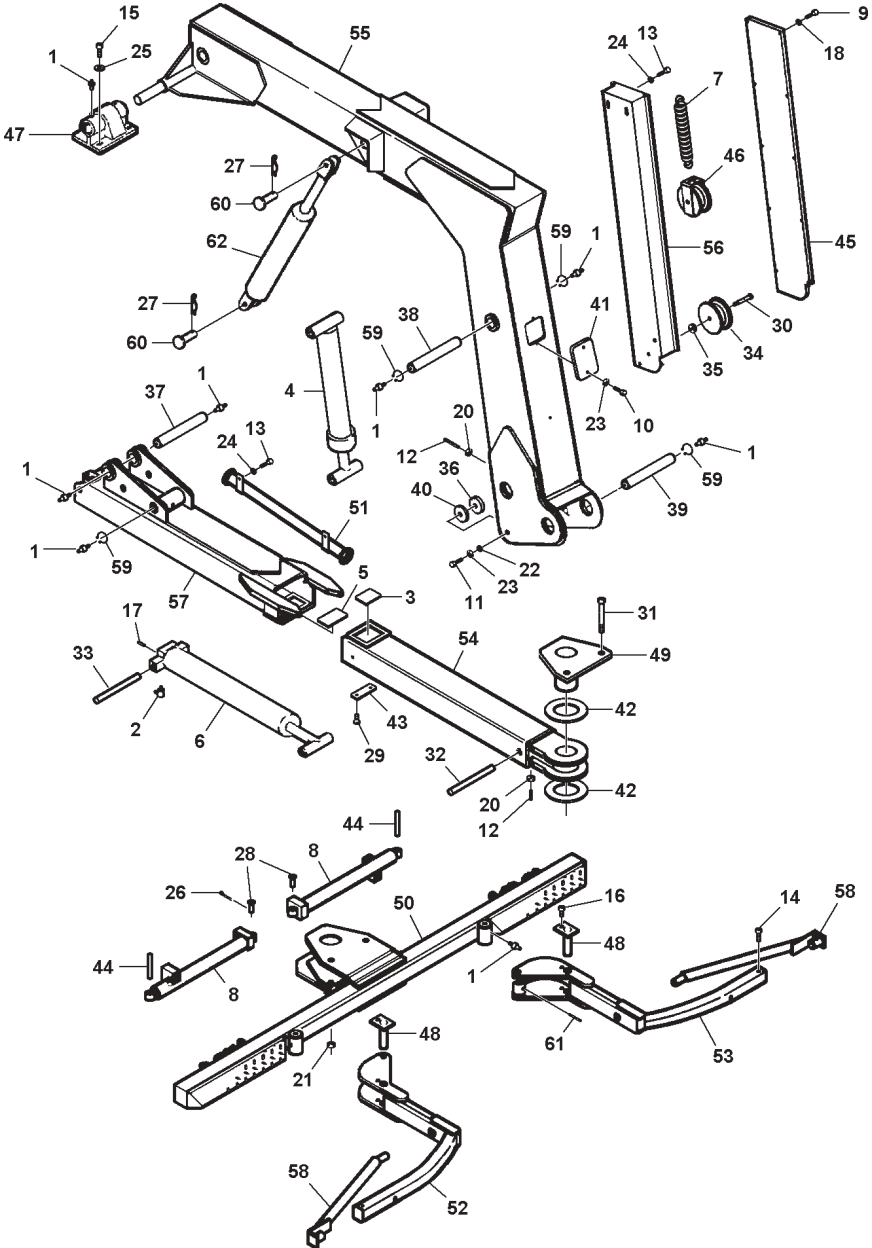
Section VI - PARTS (cont'd)

BODY ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0300028	STRIKER, TOOL COMPARTMENT
2	1	0300032	HOLE PLUG, 1"
3	1	0300076	LICENSE PLATE BRACKET
4	1	0300273	LICENSE PLATE ILLUMINATOR
5	2	0301932	SAFETY CHAIN, 5/16" ht x 12"
6	2	VA0587	MUD FLAP
7	1	0302855	LATCH, TOOL COMPARTMENT, PLAIN
8	1	0303061	BACK UP ALARM
9	2	0303123	LIGHT, RED STOP & TURN
10	2	0303124	LIGHT, CLEAR BACKUP
11	2	0303125	MARKER, SEALED RED
12	2	0303126	MARKER, SEALED AMBER
13	4	0303127	GROMMET, MARKER LIGHT
14	4	0303128	GROMMET, TAIL LIGHT
15	3	0303481	SLIDE PAD, BUMPER
16	6	0400035	SCREW, #10-24 x 1/2" OVAL HD SELF TAP
17	2	0400057	SCREW, 1/4"-20 X 1-1/4" HEX HD CAP
18	2	0400061	SCREW, 1/4"-20 X 3/4" PAN HD
19	4	0400066	SCREW, 1/4"-20 X 3/4" HEX HD CAP GR5 ZP
20	2	0400070	SCREW, 1/4"-20 X 1" HEX HD CAP
21	11	0400122	SCREW, 3/8"-16 X 1-1/4" HEX HD CAP GR5 ZP
22	4	0400126	SCREW, 3/8"-16 X 1" HEX HD CAP GR5 ZP
23	2	0400132	SCREW, 3/8"-16 X 1-1/2" HEX HD CAP GR5 ZP
24	4	0400141	SCREW, 3/8"-16 X 7/8" HEX HD CAP GR5 ZP
25	6	0400223	SCREW, 3/8"-16 X 7/8" fl skt HD
26	4	0400233	SCREW, 5/16"-18 X 1/2" HEX HD CAP GR5 ZP
27	2	0400366	NUT, 1/4"-20 HEX
28	2	0400367	NUT, 1/4"-20 HEX NYLOK
29	4	0400370	CLIP, 1/4" "U" TINNERMAN
30	17	0400392	NUT, 3/8"-16 HEX NYLOK
31	4	0400452	LOCKWASHER, 1/4" HELICAL
32	12	0400480	WASHER, 3/8" FLAT
33	16	0400567	RIVET, 1/8" X 1/4"
34	2	DE0186	CHALLENGER NAME PLATE
35	1	0703792	MIRACLE SEAL, 3/4" x 1/8" x 100"
36	2	0704516	GUARD, CONTROL STATION
37	2	0705092	BAR, MUD FLAP
38	1	0708809	MUD FLAP MOUNTING ANGLE, RIGHT
39	1	0708810	MUD FLAP MOUNTING ANGLE, LEFT
40	1	0708931	ACCESS COVER
41	1	0710127	JUNCTION BOX
42	1	0801258	TOOLBOX, 32"
43	1	0803940	BODY WELDMENT, 60 C.A.
44	2	0902382	TIE DOWN STRAP ASSEMBLY

Section VI - PARTS (cont'd)

BOOM ASSEMBLY - MODEL 4300



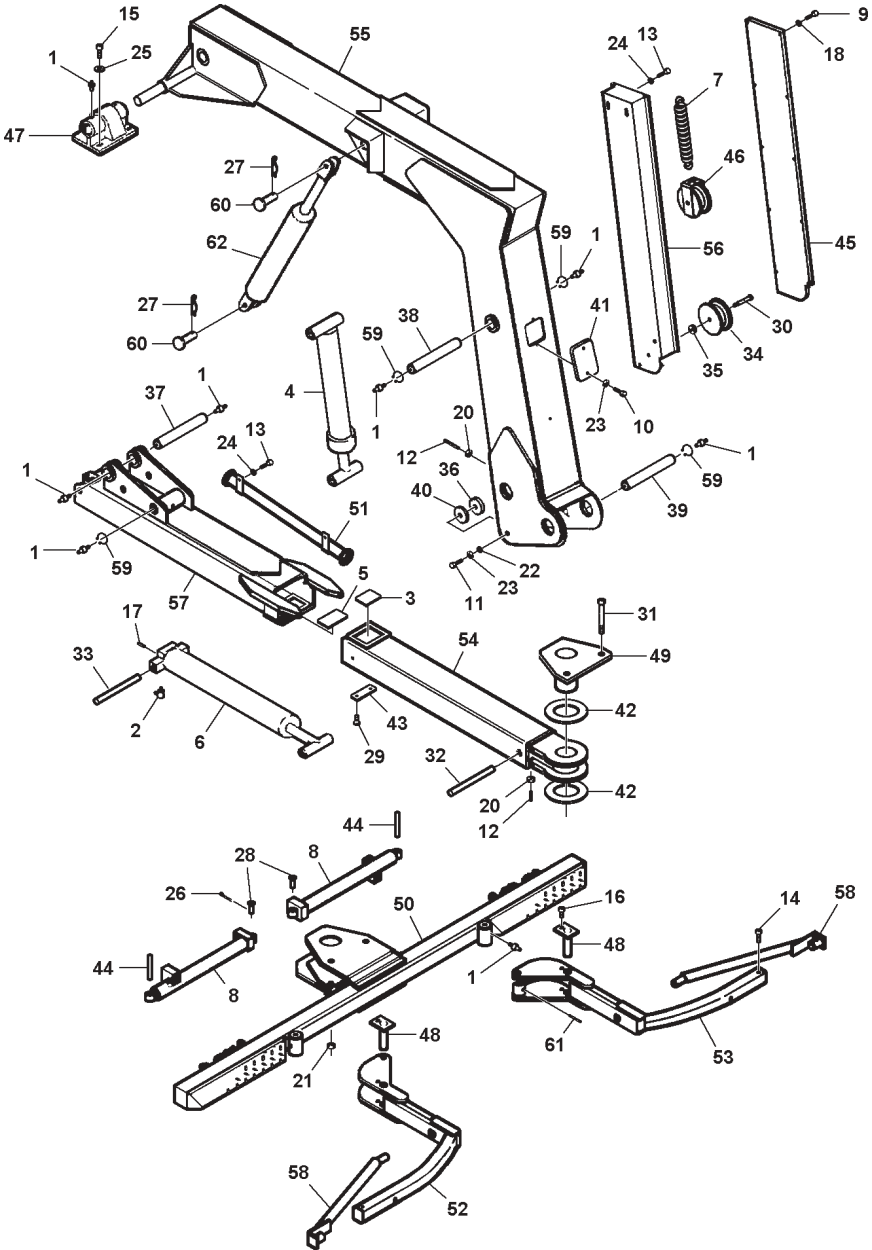
Section VI - PARTS (cont'd)

BOOM ASSEMBLY - MODEL 4300

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	12	0300113	GREASE FITTING
2	2	0301397	GREASE FITTING, 90°
3	1	0301850	SLIDE PAD, NYLATRON
4	REF.	0302919	CYLINDER, UNDERLIFT FOLD
5	1	0303018	SLIDE PAD, NYLATRON
6	REF.	0303020	CYLINDER, EXTEND
7	1	0303521	SPRING, HOSE TENSION
8	REF.	0303844	CYLINDER, SWING L-ARM
9	10	0400059	SCREW, 1/4"-20 X 5/8" HEX HD CAP GR5 ZP
10	2	0400066	SCREW, 1/4"-20 X 3/4" HEX HD CAP GR5 ZP
11	2	0400070	SCREW, 1/4"-20 X 1" HEX HD CAP GR5 ZP
12	2	0400139	SCREW, 3/8"-16 X 1-1/2" HEX SKT SET
13	6	0400154	SCREW, 3/8"-16 X 1/2" HEX HD CAP GR5 ZP
14	2	0400181	SCREW, 1/2"-13 X 1-1/2" HEX HD CAP GR5 ZP
15	8	0400249	SCREW, 5/8"-11 X 1-1/4" SKT HD CAP
16	2	0400349	SCREW, 3/8"-16 X 3/4" FL SKT HD
17	1	0400353	SCREW, 3/8" X 1/2" ALLEN HD SET
18	10	0400367	NUT, 1/4"-20 HEX NYLOK
19	1	0400392	NUT, 3/8"-16 HEX NYLOK ZP
20	2	0400398	NUT, 3/8"-16 HEX NYLOK HALF ZP
21	2	0400426	NUT, 5/8"-11 HEX NYLOK GR8
22	2	0400451	WASHER, 1/4" FLAT
23	6	0400452	LOCKWASHER, 1/4" HELICAL ZP
24	6	0400482	LOCKWASHER, 3/8" HELICAL ZP
25	8	0400508	LOCKWASHER, 5/8" HELICAL ZP
26	2	0400546	COTTER PIN, 1/8" X 1-1/4"
27	4	0400586	HITCH PIN, #2
28	2	0400590	CLEVIS PIN, 5/8" X 1-1/4"
29	2	0400593	SCREW, 1/4"-20 X 1/2" FL SKT HD
30	1	0400635	SCREW, 1/2" X 2-1/2" SHOULDER X 3/8"-16
31	2	0400637	SCREW, 5/8"-11 X 5-1/2" HEX HD CAP GR8 ZP

Section VI - PARTS (cont'd)

BOOM ASSEMBLY - MODEL 4300 (cont'd)



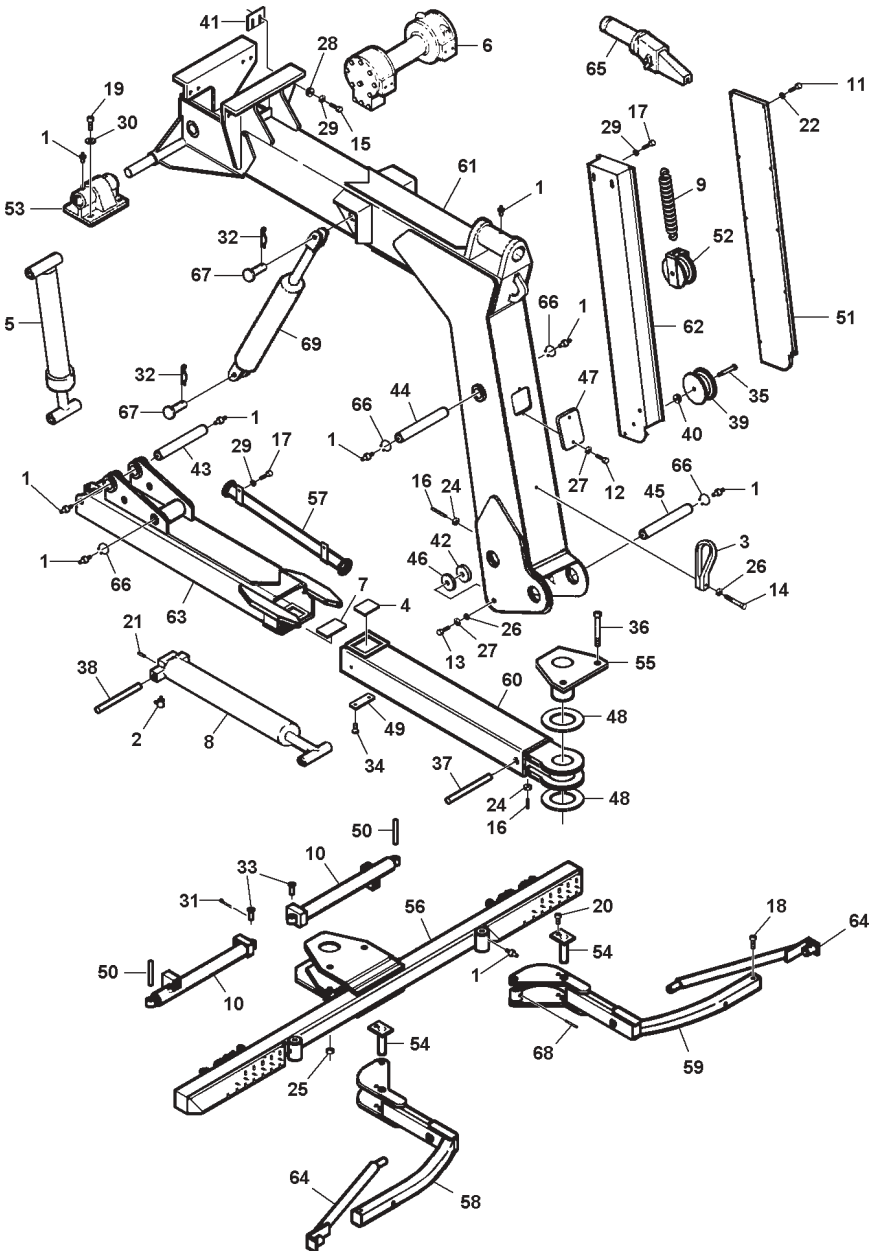
Section VI - PARTS (cont'd)

BOOM ASSEMBLY - MODEL 4300 (cont'd)

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
32	1	0702131	SHAFT, INNER TUBE CYLINDER
33	1	0703345	SHAFT, EXTEND CYLINDER
34	1	0703484	PULLY, HOSE TENSION
35	1	0703488	WASHER, HOSE TENSION PULLEY
36	2	0708406	GUIDE PAD
37	1	0708407	SHAFT, LOWER-TILT CYLINDER
38	1	0708408	SHAFT, UPPER-TILT CYLINDER
39	1	0708409	SHAFT, BOOM PIVOT
40	6	0708410	SHIM, GUIDE PAD
41	1	0708519	PLATE, COVER-BOOM UPPER
42	2	0710092	WASHER, THRUST
43	1	0711334	STOP PAD
44	2	0713885	CYLINDER PIN, L-ARM END
45	1	0713937	COVER, HOSE TENSION TRACK
46	1	0803135	BRACKET WELDMENT, HOSE TENSION PULLEY
47	2	0803194	TRUNION PIVOT WELDMENT
48	2	0803915	PIN WELDMENT, SWING L-ARM
49	1	0803916	PIVOT PIN WELDMENT
50	1	0803917	CROSSBAR WELDMENT
51	1	0803919	HOSE TUBE WELDMENT
52	1	0803926	L-ARM WELDMENT, LEFT
53	1	0803927	L-ARM WELDMENT, RIGHT
54	1	0803928	INNER BOOM WELDMENT
55	1	0803931	MAIN BOOM WELDMENT
56	1	0803936	HOSE TENSION TRACK WELDMENT
57	1	0803942	OUTER BOOM WELDMENT-UNDERLIFT
58	2	0803949	TIRE ADAPTER WELDMENT
59	4	AWS-3022-A	SNAP RING
60	4	BK-518	CLEVIS PIN, BOOM CYLINDER
61	2	HD0106	SPRING PIN, 1/4" X 1-3/4" ZP
62	REF.	IT-27B	CYLINDER, BOOM ELEVATION

Section VI - PARTS (cont'd)

BOOM ASSEMBLY - MODEL 4301



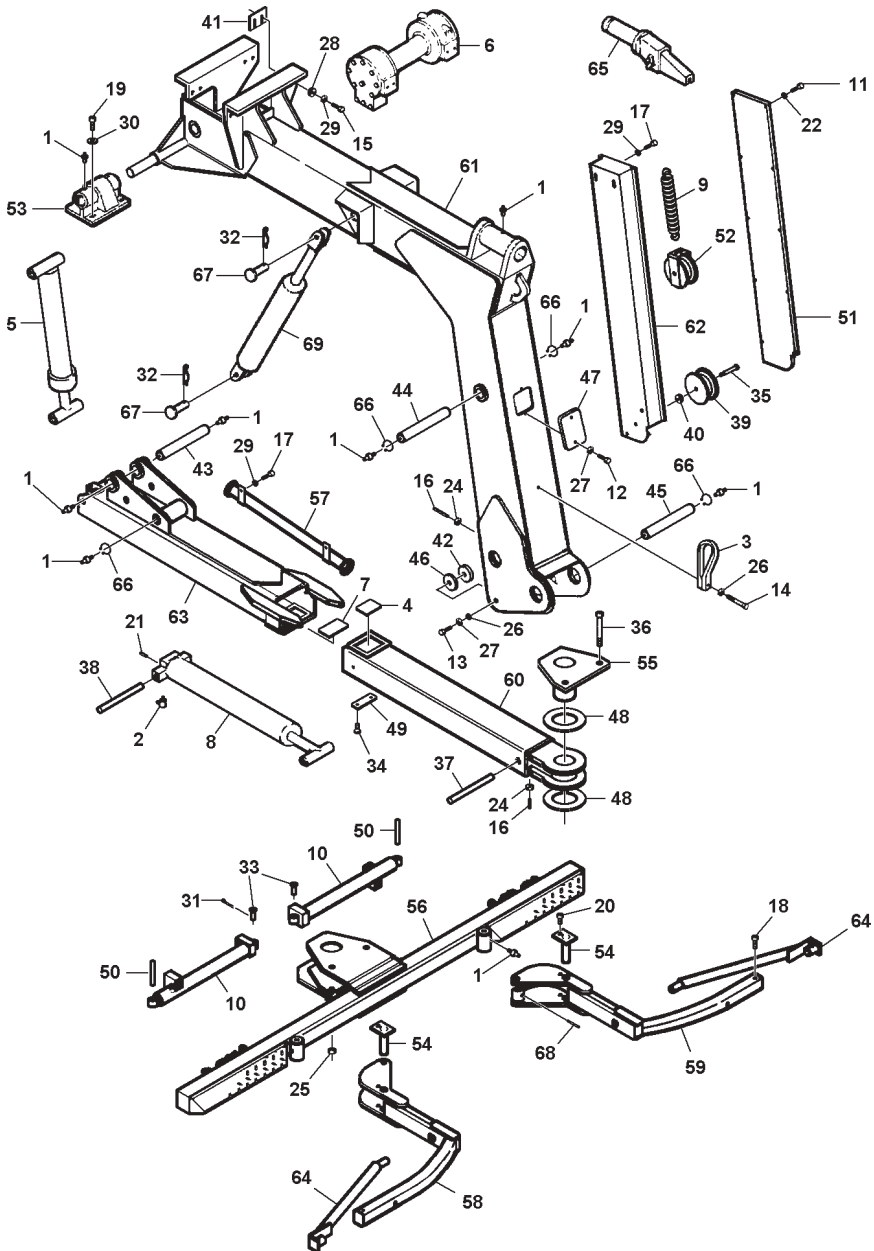
Section VI - PARTS (cont'd)

BOOM ASSEMBLY - MODEL 4301

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	13	03000113	GREASE FITTING
2	2	0301397	GREASE FITTING, 90°
3	1	0301533	STRAP, 15" TIE DOWN
4	1	0301850	SLIDE PAD, NYLATRON
5	REF.	0302919	CYLINDER, UNDERLIFT FOLD
6	1	0302936	WINCH ASS'Y, RAMSEY HY246
7	1	0303018	SLIDE PAD, NYLATRON
8	REF.	0303020	CYLINDER, EXTEND
9	1	0303521	SPRING, HOSE TENSION
10	REF.	0303844	CYLINDER, SWING L-ARM
11	10	0400059	SCREW, 1/4"-20 X 5/8" HEX HD CAP GR5 ZP
12	2	0400066	SCREW, 1/4"-20 X 3/4" HEX HD CAP GR5 ZP
13	2	0400070	SCREW, 1/4"-20 X 1" HEX HD CAP GR5 ZP
14	1	0400078	SCREW, 1/4"-20 X 2" HEX HD CAP GR5 ZP
15	7	0400122	SCREW, 3/8"-16 X 1-1/2" HEX HD CAP GR5 ZP
16	2	0400139	SCREW, 3/8"-16 X 1-1/2" HEX SKT SET
17	6	0400154	SCREW, 3/8"-16 X 1/2" HEX HD CAP GR5 ZP
18	2	0400181	SCREW, 1/2"-13 X 1-1/2" HEX HD CAP GR5 ZP
19	8	0400249	SCREW, 5/8"-11 X 1-1/4" SKT HD CAP
20	2	0400349	SCREW, 3/8"-16 X 3/4" FL SKT HD
21	1	0400353	SCREW, 3/8" X 1/2" ALLEN HD SET
22	10	0400367	NUT, 1/4"-20 HEX NYLOK
23	1	0400392	NUT, 3/8"-16 HEX NYLOK ZP
24	2	0400398	NUT, 3/8"-16 HEX NYLOK HALF ZP
25	2	0400426	NUT, 5/8"-11 HEX NYLOK GR8
26	3	0400451	WASHER, 1/4" FLAT
27	6	0400452	LOCKWASHER, 1/4" HELICAL ZP
28	8	0400480	WASHER, 3/8" FLAT
29	12	0400482	LOCKWASHER, 3/8" HELICAL ZP
30	8	0400508	LOCKWASHER, 5/8" HELICAL ZP
31	2	0400546	COTTER PIN, 1/8" X 1-1/4"
32	4	0400586	HITCH PIN, #2
33	2	0400590	CLEVIS PIN, 5/8" X 1-1/4"
34	2	0400593	SCREW, 1/4"-20 X 1/2" FL SKT HD
35	1	0400635	SCREW, 1/2" X 2-1/2" SHOULDER X 3/8"-16

Section VI - PARTS (cont'd)

BOOM ASSEMBLY - MODEL 4301 (cont'd)



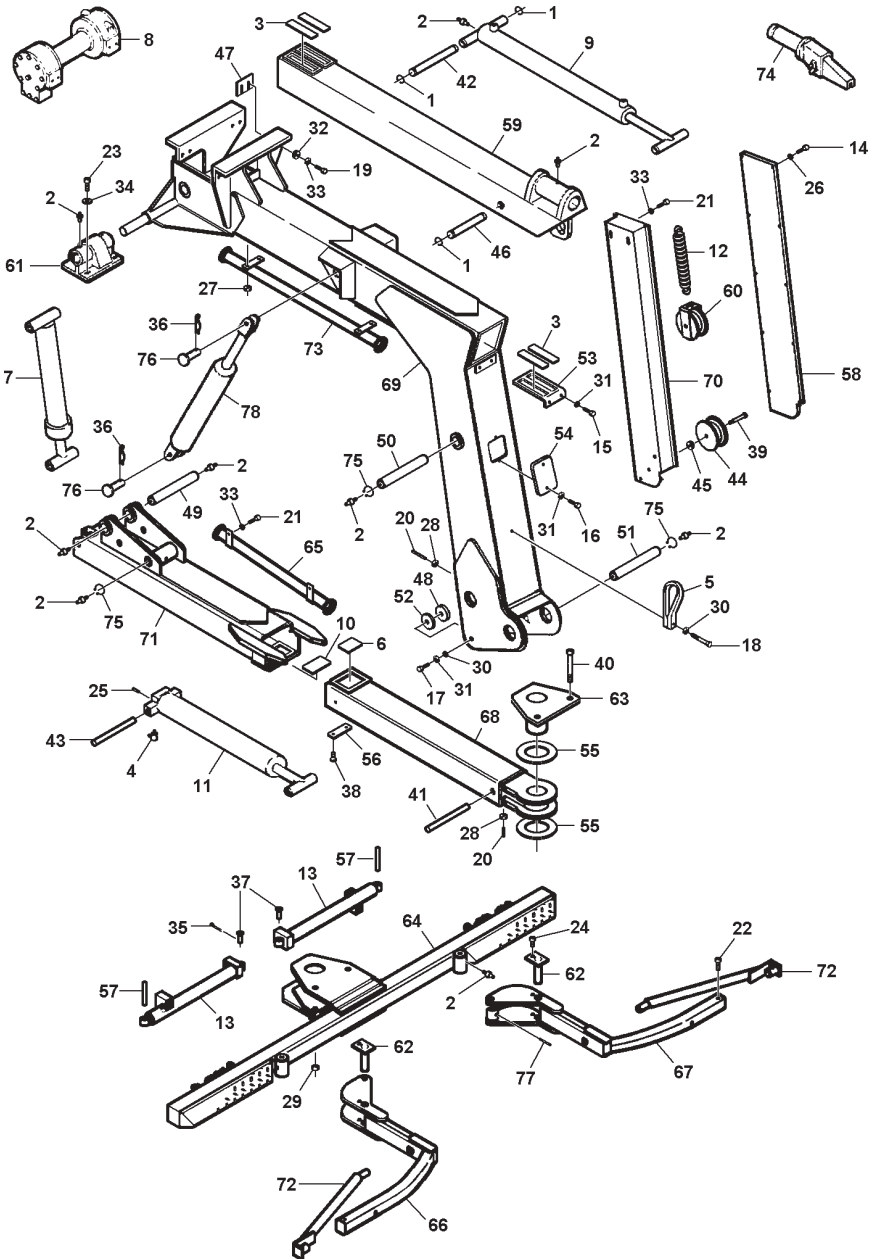
Section VI - PARTS (cont'd)

BOOM ASSEMBLY - MODEL 4301 (cont'd)

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
36	2	0400637	SCREW, 5/8"-11 X 5-1/2" HEX HD CAP GR8 ZP
37	1	0702131	SHAFT, INNER TUBE CYLINDER
38	1	0703345	SHAFT, EXTEND CYLINDER
39	1	0703484	PULLY, HOSE TENSION
40	1	0703488	WASHER, HOSE TENSION PULLEY
41	2	0706668	SHIM, WINCH MOUNTING
42	2	0708406	GUIDE PAD
43	1	0708407	SHAFT, LOWER-TILT CYLINDER
44	1	0708408	SHAFT, UPPER-TILT CYLINDER
45	1	0708409	SHAFT, BOOM PIVOT
46	6	0708410	SHIM, GUIDE PAD
47	1	0708519	PLATE, COVER-BOOM UPPER
48	2	0710092	WASHER, THRUST
49	1	0711334	STOP PAD
50	2	0713885	CYLINDER PIN, L-ARM END
51	1	0713937	COVER, HOSE TENSION TRACK
52	1	0803135	BRACKET WELDMENT, HOSE TENSION PULLEY
53	2	0803194	TRUNION PIVOT WELDMENT
54	2	0803915	PIN WELDMENT, SWING L-ARM
55	1	0803916	PIVOT PIN WELDMENT
56	1	0803917	CROSSBAR WELDMENT
57	1	0803919	HOSE TUBE WELDMENT
58	1	0803926	L-ARM WELDMENT, LEFT
59	1	0803927	L-ARM WELDMENT, RIGHT
60	1	0803928	INNER BOOM WELDMENT
61	1	0803932	MAIN BOOM WELDMENT
62	1	0803936	HOSE TENSION TRACK WELDMENT
63	1	0803942	OUTER BOOM WELDMENT-UNDERLIFT
64	2	0803949	TIRE ADAPTER WELDMENT
65	1	0900007	BOOM END SWIVEL ASSEMBLY
66	4	AWS-3022-A	SNAP RING
67	4	BK-518	CLEVIS PIN, BOOM CYLINDER
68	2	HD0106	SPRING PIN, 1/4" X 1-3/4" ZP
69	REF.	IT-27B	CYLINDER, BOOM ELEVATION

Section VI - PARTS (cont'd)

BOOM ASSEMBLY - MODEL 4311



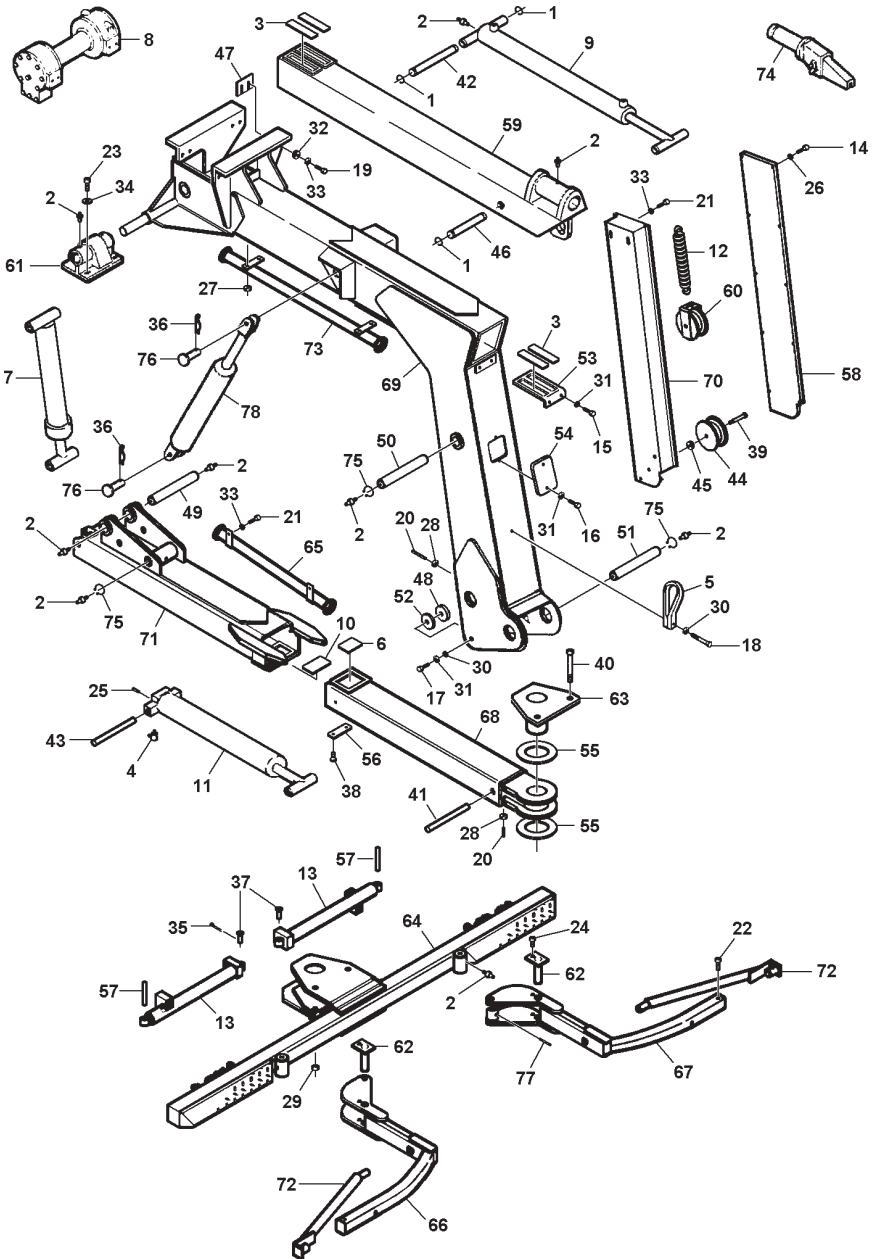
Section VI - PARTS (cont'd)

BOOM ASSEMBLY - MODEL 4311

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	4	0300110	SNAP RING, 1"
2	14	0300113	GREASE FITTING
3	4	0300679	BEARING PAD, NYLATRON
4	2	0301397	GREASE FITTING, 90°
5	1	0301533	STRAP, 15" TIE DOWN
6	1	0301850	SLIDE PAD, NYLATRON
7	REF.	0302919	CYLINDER, UNDERLIFT FOLD
8	1	0302936	WINCH ASS'Y, RAMSEY HY246
9	REF.	0302948	CYLINDER, BOOM EXTEND
10	1	0303018	SLIDE PAD, NYLATRON
11	REF.	0303020	CYLINDER, EXTEND
12	1	0303521	SPRING, HOSE TENSION
13	REF.	0303844	CYLINDER, SWING L-ARM
14	10	0400059	SCREW, 1/4"-20 X 5/8" HEX HD CAP GR5 ZP
15	2	0400060	SCREW, 1/4"-20 X 1/2" HEX HD CAP GR5 ZP
16	2	0400066	SCREW, 1/4"-20 X 3/4" HEX HD CAP GR5 ZP
17	2	0400070	SCREW, 1/4"-20 X 1" HEX HD CAP GR5 ZP
18	1	0400078	SCREW, 1/4"-20 X 2" HEX HD CAP GR5 ZP
19	7	0400122	SCREW, 3/8"-16 X 1-1/2" HEX HD CAP GR5 ZP
20	2	0400139	SCREW, 3/8"-16 X 1-1/2" HEX SKT SET
21	6	0400154	SCREW, 3/8"-16 X 1/2" HEX HD CAP GR5 ZP
22	2	0400181	SCREW, 1/2"-13 X 1-1/2" HEX HD CAP GR5 ZP
23	8	0400249	SCREW, 5/8"-11 X 1-1/4" SKT HD CAP
24	2	0400349	SCREW, 3/8"-16 X 3/4" FL SKT HD
25	1	0400353	SCREW, 3/8" X 1/2" ALLEN HD SET
26	10	0400367	NUT, 1/4"-20 HEX NYLOK
27	5	0400392	NUT, 3/8"-16 HEX NYLOK ZP
28	2	0400398	NUT, 3/8"-16 HEX NYLOK HALF ZP
29	2	0400426	NUT, 5/8"-11 HEX NYLOK GR8
30	3	0400451	WASHER, 1/4" FLAT
31	8	0400452	LOCKWASHER, 1/4" HELICAL ZP
32	8	0400480	WASHER, 3/8" FLAT
33	12	0400482	LOCKWASHER, 3/8" HELICAL ZP
34	8	0400508	LOCKWASHER, 5/8" HELICAL ZP
35	2	0400546	COTTER PIN, 1/8" X 1-1/4"
36	4	0400586	HITCH PIN, #2
37	2	0400590	CLEVIS PIN, 5/8" X 1-1/4"
38	2	0400593	SCREW, 1/4"-20 X 1/2" FL SKT HD
39	1	0400635	SCREW, 1/2" X 2-1/2" SHOULDER X 3/8"-16

Section VI - PARTS (cont'd)

BOOM ASSEMBLY - MODEL 4311 (cont'd)



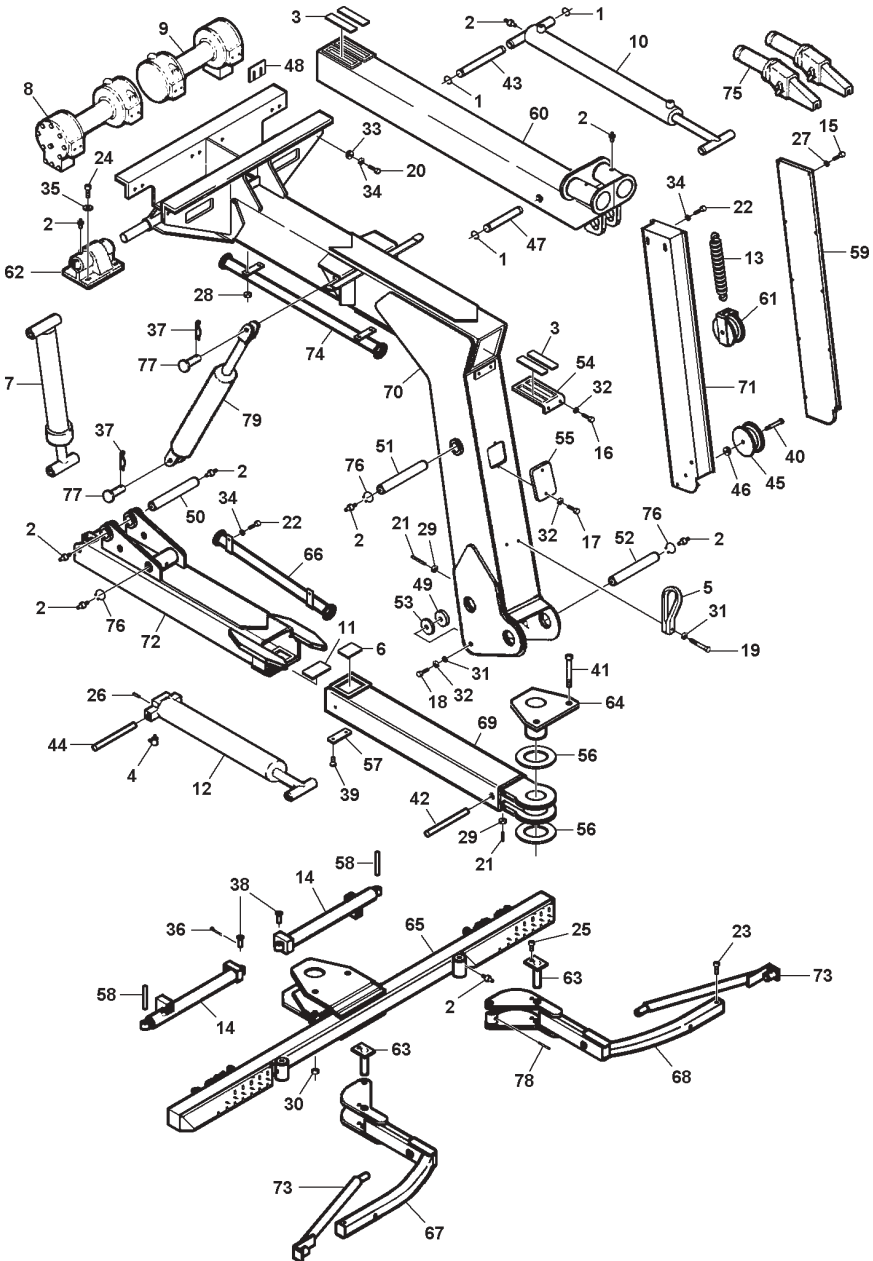
Section VI - PARTS (cont'd)

BOOM ASSEMBLY - MODEL 4311 (cont'd)

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
40	2	0400637	SCREW, 5/8"-11 X 5-1/2" HEX HD CAP GR8 ZP
41	1	0702131	SHAFT, INNER TUBE CYLINDER
42	1	0703082	PIN, EXTEND CYLINDER PIVOT
43	1	0703345	SHAFT, EXTEND CYLINDER
44	1	0703484	PULLY, HOSE TENSION
45	1	0703488	WASHER, HOSE TENSION PULLEY
46	1	0705499	SHAFT, BOOM CYLINDER
47	2	0706668	SHIM, WINCH MOUNTING
48	2	0708406	GUIDE PAD
49	1	0708407	SHAFT, LOWER-TILT CYLINDER
50	1	0708408	SHAFT, UPPER-TILT CYLINDER
51	1	0708409	SHAFT, BOOM PIVOT
52	6	0708410	SHIM, GUIDE PAD
53	1	0708507	PAD RETAINER, BOLT-ON
54	1	0708519	PLATE, COVER-BOOM UPPER
55	2	0710092	WASHER, THRUST
56	1	0711334	STOP PAD
57	2	0713885	CYLINDER PIN, L-ARM END
58	1	0713937	COVER, HOSE TENSION TRACK
59	1	080255	WRECKER INNER BOOM WELDMENT
60	1	0803135	BRACKET WELDMENT, HOSE TENSION PULLEY
61	2	0803194	TRUNION PIVOT WELDMENT
62	2	0803915	PIN WELDMENT, SWING L-ARM
63	1	0803916	PIVOT PIN WELDMENT
64	1	0803917	CROSSBAR WELDMENT
65	1	0803919	HOSE TUBE WELDMENT
66	1	0803926	L-ARM WELDMENT, LEFT
67	1	0803927	L-ARM WELDMENT, RIGHT
68	1	0803928	INNER BOOM WELDMENT
69	1	0803932	MAIN BOOM WELDMENT
70	1	0803936	HOSE TENSION TRACK WELDMENT
71	1	0803942	OUTER BOOM WELDMENT-UNDERLIFT
72	2	0803949	TIRE ADAPTER WELDMENT
73	1	0803957	BOOM HOSE TUBE WELDMENT
74	1	0900007	BOOM END SWIVEL ASSEMBLY
75	4	AWS-3022-A	SNAP RING
76	4	BK-518	CLEVIS PIN, BOOM CYLINDER
77	2	HD0106	SPRING PIN, 1/4" X 1-3/4" ZP
78	REF.	IT-27B	CYLINDER, BOOM ELEVATION

Section VI - PARTS (cont'd)

BOOM ASSEMBLY - MODEL 4312



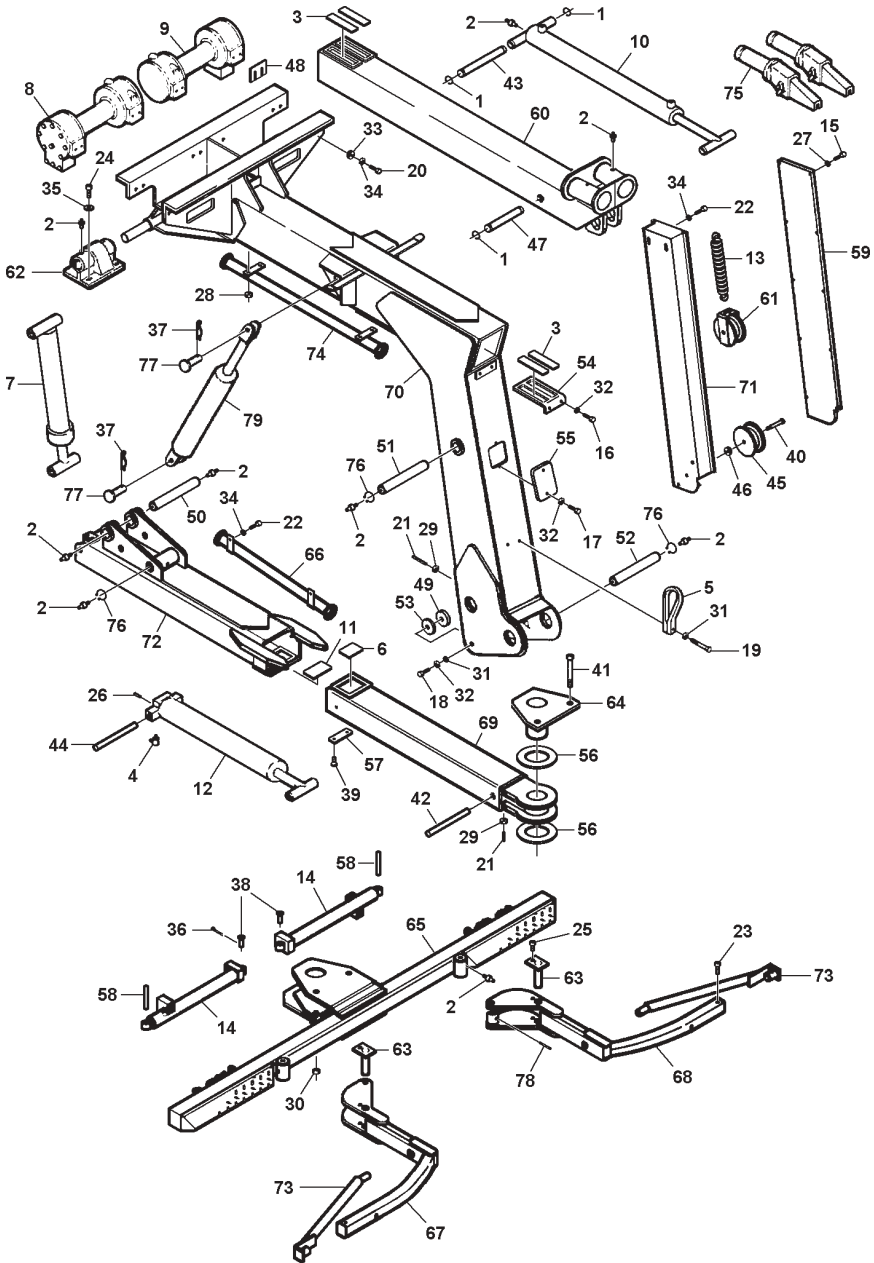
Section VI - PARTS (cont'd)

BOOM ASSEMBLY - MODEL 4312

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	4	0300110	SNAP RING, 1"
2	15	0300113	GREASE FITTING
3	4	0300679	BEARING PAD, NYLATRON
4	2	0301397	GREASE FITTING, 90°
5	1	0301533	STRAP, 15" TIE DOWN
6	1	0301850	SLIDE PAD, NYLATRON
7	REF.	0302919	CYLINDER, UNDERLIFT FOLD
8	1	0302936	WINCH ASS'Y, RAMSEY HY246 RIGHT
9	1	0302937	WINCH ASS'Y, RAMSEY HY246 LEFT
10	REF.	0302948	CYLINDER, BOOM EXTEND
11	1	0303018	SLIDE PAD, NYLATRON
12	REF.	0303020	CYLINDER, EXTEND
13	1	0303521	SPRING, HOSE TENSION
14	REF.	0303844	CYLINDER, SWING L-ARM
15	10	0400059	SCREW, 1/4"-20 X 5/8" HEX HD CAP GR5 ZP
16	2	0400060	SCREW, 1/4"-20 X 1/2" HEX HD CAP GR5 ZP
17	2	0400066	SCREW, 1/4"-20 X 3/4" HEX HD CAP GR5 ZP
18	2	0400070	SCREW, 1/4"-20 X 1" HEX HD CAP GR5 ZP
19	1	0400078	SCREW, 1/4"-20 X 2" HEX HD CAP GR5 ZP
20	14	0400122	SCREW, 3/8"-16 X 1-1/2" HEX HD CAP GR5 ZP
21	2	0400139	SCREW, 3/8"-16 X 1-1/2" HEX SKT SET
22	6	0400154	SCREW, 3/8"-16 X 1/2" HEX HD CAP GR5 ZP
23	2	0400181	SCREW, 1/2"-13 X 1-1/2" HEX HD CAP GR5 ZP
24	8	0400249	SCREW, 5/8"-11 X 1-1/4" SKT HD CAP
25	2	0400349	SCREW, 3/8"-16 X 3/4" FL SKT HD
26	1	0400353	SCREW, 3/8" X 1/2" ALLEN HD SET
27	10	0400367	NUT, 1/4"-20 HEX NYLOK
28	5	0400392	NUT, 3/8"-16 HEX NYLOK ZP
29	2	0400398	NUT, 3/8"-16 HEX NYLOK HALF ZP
30	2	0400426	NUT, 5/8"-11 HEX NYLOK GR8
31	3	0400451	WASHER, 1/4" FLAT
32	8	0400452	LOCKWASHER, 1/4" HELICAL ZP
33	15	0400480	WASHER, 3/8" FLAT
34	19	0400482	LOCKWASHER, 3/8" HELICAL ZP
35	8	0400508	LOCKWASHER, 5/8" HELICAL ZP
36	2	0400546	COTTER PIN, 1/8" X 1-1/4"
37	4	0400586	HITCH PIN, #2
38	2	0400590	CLEVIS PIN, 5/8" X 1-1/4"
39	2	0400593	SCREW, 1/4"-20 X 1/2" FL SKT HD
40	1	0400635	SCREW, 1/2" X 2-1/2" SHOULDER X 3/8"-16

Section VI - PARTS (cont'd)

BOOM ASSEMBLY - MODEL 4312 (cont'd)



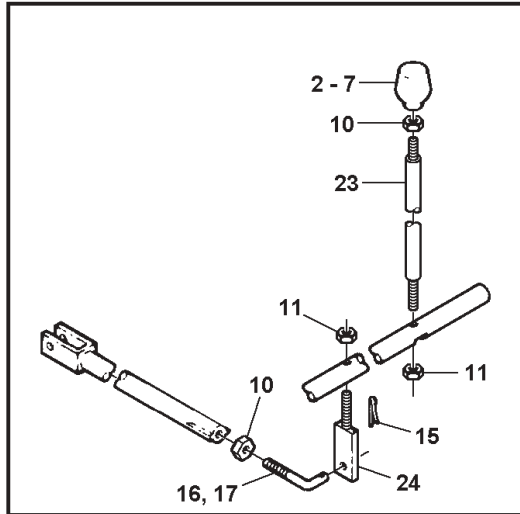
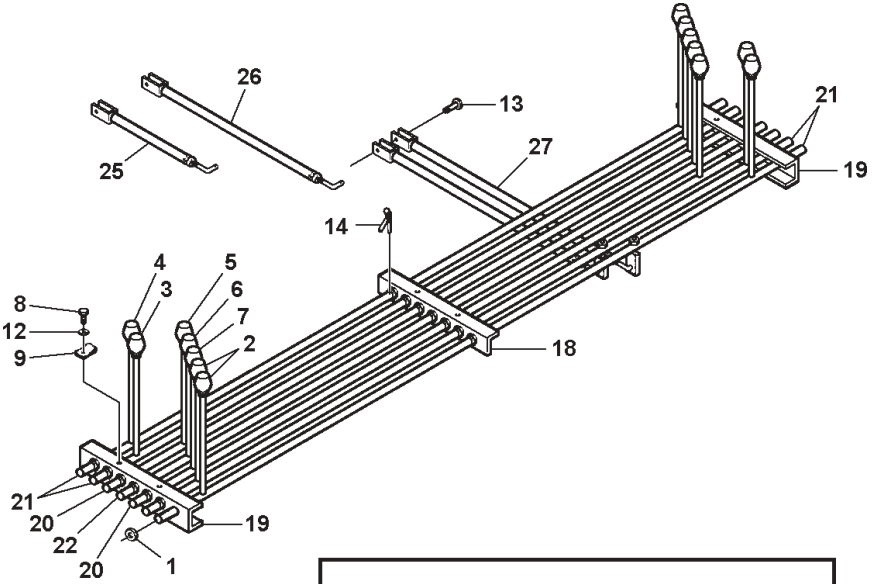
Section VI - PARTS (cont'd)

BOOM ASSEMBLY - MODEL 4312 (cont'd)

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
41	2	0400637	SCREW, 5/8"-11 X 5-1/2" HEX HD CAP GR8 ZP
42	1	0702131	SHAFT, INNER TUBE CYLINDER
43	1	0703082	PIN, EXTEND CYLINDER PIVOT
44	1	0703345	SHAFT, EXTEND CYLINDER
45	1	0703484	PULLY, HOSE TENSION
46	1	0703488	WASHER, HOSE TENSION PULLEY
47	1	0705499	SHAFT, BOOM CYLINDER
48	4	0706668	SHIM, WINCH MOUNTING
49	2	0708406	GUIDE PAD
50	1	0708407	SHAFT, LOWER-TILT CYLINDER
51	1	0708408	SHAFT, UPPER-TILT CYLINDER
52	1	0708409	SHAFT, BOOM PIVOT
53	6	0708410	SHIM, GUIDE PAD
54	1	0708570	PAD RETAINER, BOLT-ON
55	1	0708519	PLATE, COVER-BOOM UPPER
56	2	0710092	WASHER, THRUST
57	1	0711334	STOP PAD
58	2	0713885	CYLINDER PIN, L-ARM END
59	1	0713937	COVER, HOSE TENSION TRACK
60	1	0802553	WRECKER INNER BOOM WELDMENT
61	1	0803135	BRACKET WELDMENT, HOSE TENSION PULLEY
62	2	0803194	TRUNION PIVOT WELDMENT
63	2	0803915	PIN WELDMENT, SWING L-ARM
64	1	0803916	PIVOT PIN WELDMENT
65	1	0803917	CROSSBAR WELDMENT
66	1	0803919	HOSE TUBE WELDMENT
67	1	0803926	L-ARM WELDMENT, LEFT
68	1	0803927	L-ARM WELDMENT, RIGHT
69	1	0803928	INNER BOOM WELDMENT
70	1	0803934	MAIN BOOM WELDMENT
71	1	0803936	HOSE TENSION TRACK WELDMENT
72	1	0803942	OUTER BOOM WELDMENT-UNDERLIFT
73	2	0803949	TIRE ADAPTER WELDMENT
74	1	0803957	BOOM HOSE TUBE WELDMENT
75	2	0800007	BOOM END SWIVEL ASSEMBLY
76	4	AWS-3022-A	SNAP RING
77	4	BK-518	CLEVIS PIN, BOOM CYLINDER
78	2	HD0106	SPRING PIN, 1/4" X 1-3/4" ZP
79	REF.	IT-27B	CYLINDER, BOOM ELEVATION

Section VI - PARTS (cont'd)

CONTROL & CROSSROD ASSEMBLY



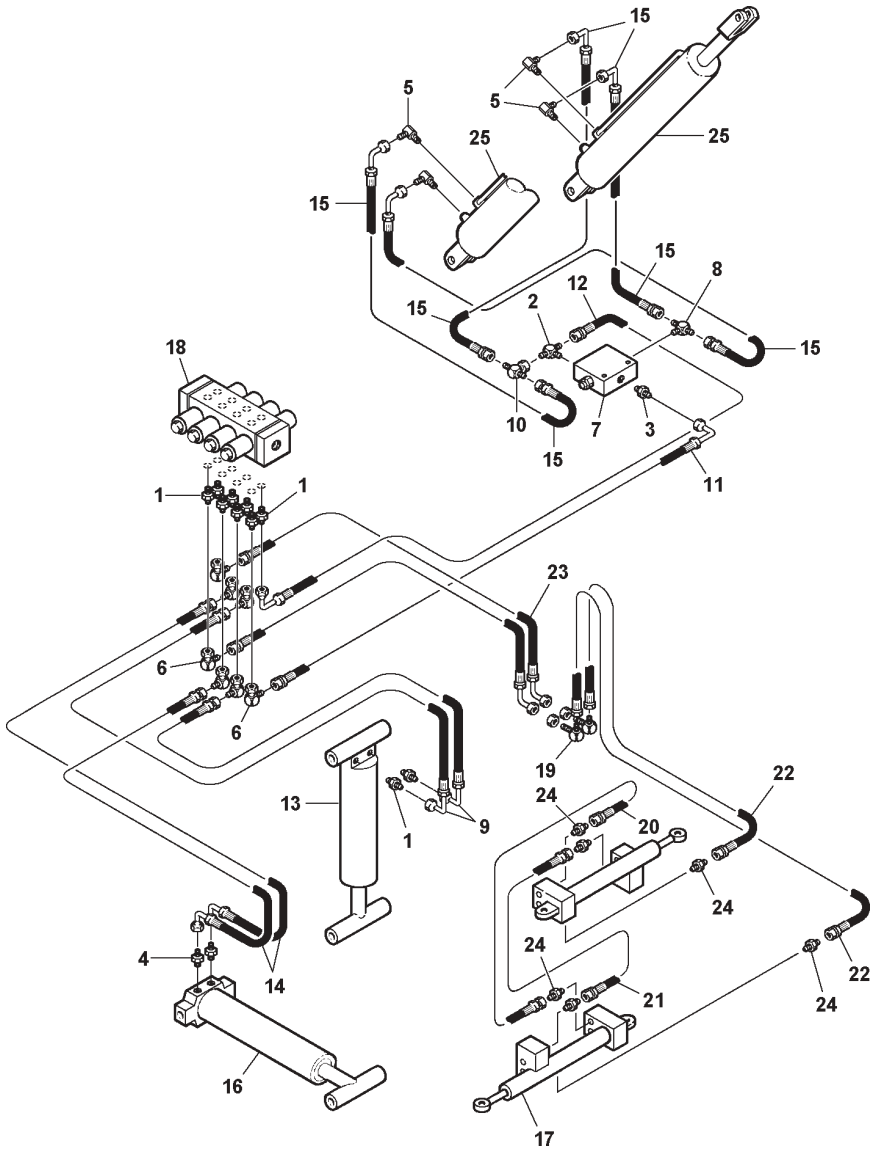
Section VI - PARTS (cont'd)

CONTROL & CROSSROD ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	21	0300122	GROMMET, SPLIT PLASTIC
2	4	0300834	KNOB, CABLE "IN/OUT" (RED)
3	2	0300835	KNOB, BOOM "UP/DOWN" (BLACK)
4	2	0300837	KNOB, BOOM "IN/OUT" (BLACK)
5	2	0302856	KNOB, W/L "TILT" (GREY)
6	2	0302917	KNOB, W/L "IN/OUT" (GREY)
7	2	0303283	KNOB, CLAW "OPEN/CLOSE" (GREY)
8	6	0400066	SCREW, 1/4"-20 X 3/4" HEX HD CAP
9	6	0400370	CLIP, 1/4" TINNEMAN
10	21	0400393	NUT, 3/8"-16 HEX JAM
11	21	0400398	NUT, 3/8"-16 HEX NYLOK HALF
12	6	0400452	LOCKWASHER, 1/4" HELICAL
13	7	0400527	CLEVIS PIN, 5/16" X 5/8" COTTERLESS
14	14	0400539	COTTER PIN, 3/16" X 1-1/2" S.S.
15	7	0400543	COTTER PIN, 1/8" X 3/4" S.S.
16	5	0701099	CONTROL ROD EXTENSION, LONG
17	2	0701927	CONTROL ROD EXTENSION, SHORT
18	1	0703501	ANGLE, CROSSROD BEARING
19	2	0704517	CHANNEL, CROSSROD BEARING
20	2	0704528	CROSSROD - WHEEL LIFT
21	4	0704529	CROSSROD - WRECKER
22	1	0704530	CROSSROD - WHEEL LIFT
23	14	0705494	CONTROL LEVER
24	7	0800604	ARM, CROSS CONTROL
25	2	0801309	SHIFTER, SHORT
26	3	0801310	SHIFTER, MEDIUM
27	2	0801311	SHIFTER, LONG

Section VI - PARTS (cont'd)

WHEEL LIFT HYDRAULICS - MODEL 4300



Section VI - PARTS (cont'd)

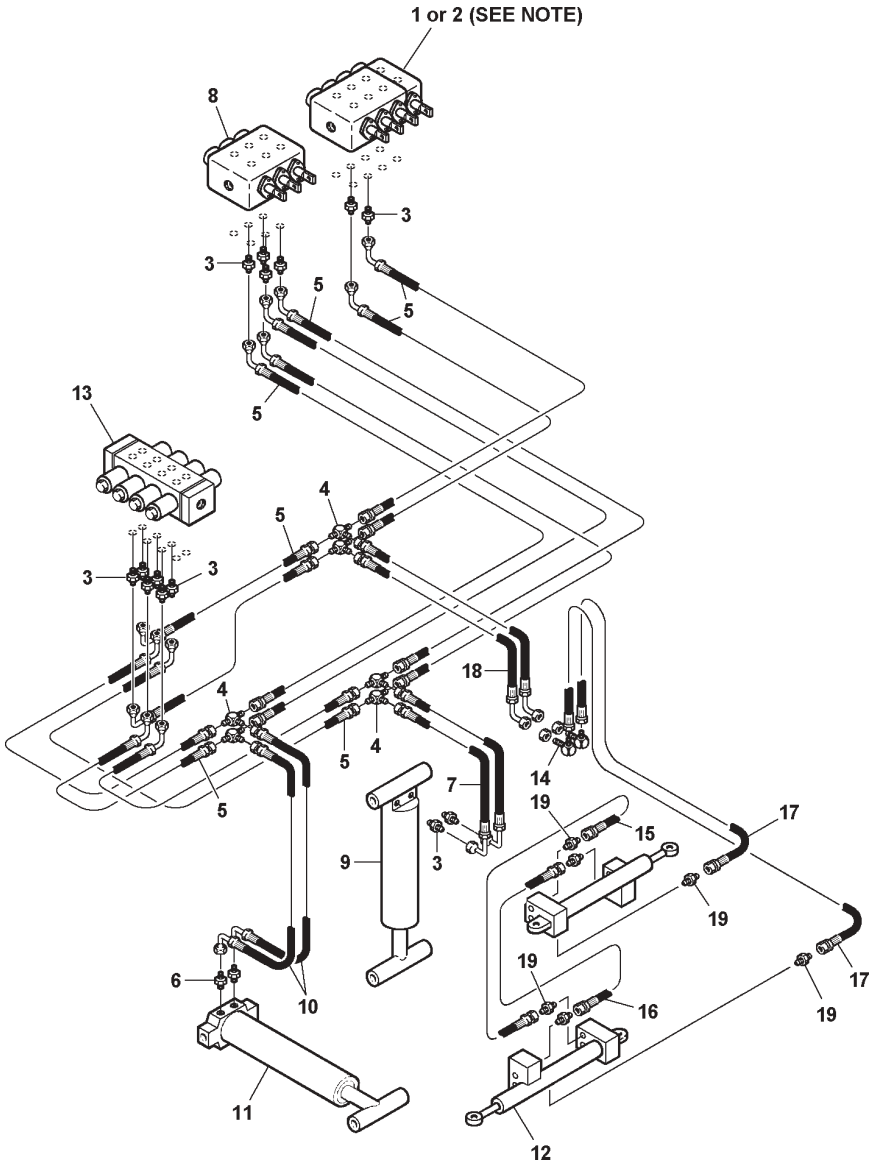
WHEEL LIFT HYDRAULICS - MODEL 4300

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	10	0300044	CONNECTOR, 6MJ-8MB
2	1	0300206	BRANCH TEE, 6MJ-6MJ-4MP
3	1	0301425	MALE CONNECTOR, 6MJ-6MP
4	2	0301522	CONNECTOR, 6MJ-6MB
5	4	0301620	ELBOW, 6MJ-6MB90
6	7	0301696	ELBOW, 6MJ-6FJX90
7	1	0301731	HOLDING VALVE
8	1	0301855	MALE TEE, 6MJ-6MJ-6MP
9	2	0301921	HOSE ASSEMBLY, 128"
10	1	0302573	TEE, 6MJ-6MJ-6FJX
11	1	0302807	HOSE ASSEMBLY, 38"
12	1	0302814	HOSE ASSEMBLY, 32"
13	1	0302919	FOLD CYLINDER
14	2	0302922	HOSE ASSEMBLY, 170"
15	4	0302926	HOSE ASSEMBLY, 29"
16	1	0303020	EXTEND CYLINDER
17	2	0303844	SWING ARM CYLINDER
18	1	0303851	SOLENOID VALVE, 4 SPOOL
19	2	0303858	ELBOW, 4MJ-BULKHEAD 90 W/ NUT
20	1	0303860	HOSE ASSEMBLY, 10"
21	1	0303861	HOSE ASSEMBLY, 17"
22	2	0303862	HOSE ASSEMBLY, 112"
23	2	0303863	HOSE ASSEMBLY, 170"
24	6	HC 1291	CONNECTOR, 4MJ-4MB
25	2	IT-27B	BOOM ELEVATION CYLINDER

Section VI - PARTS (cont'd)

WHEEL LIFT HYDRAULICS

MODELS 4301, 4311, 4312



Section VI - PARTS (cont'd)

WHEEL LIFT HYDRAULICS

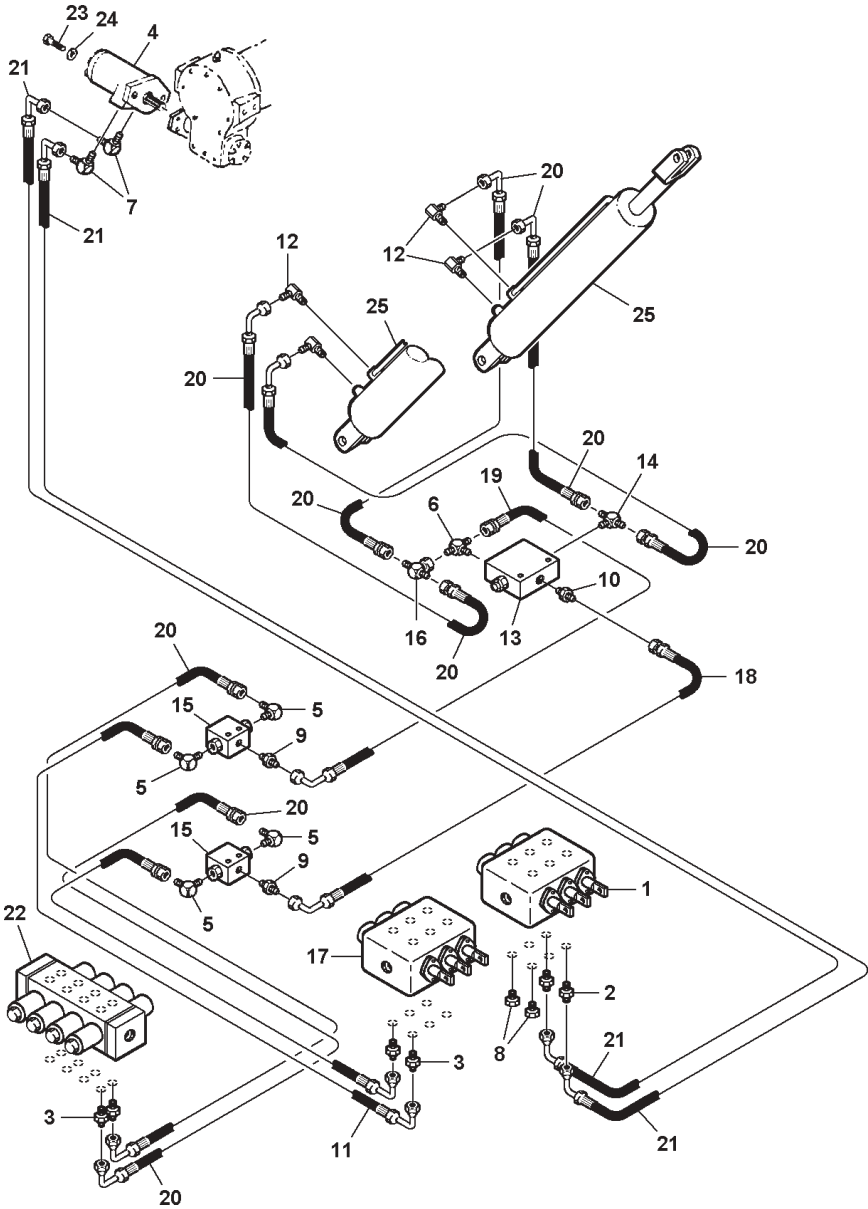
MODELS 4301, 4311, 4312

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	REF.	0300010	CONTROL VALVE, VDP11DDD108
2	REF.	0300011	CONTROL VALVE, VDP11DDDD83
3	14	0300044	CONNECTOR, 6MJ-8MB
4	6	0301377	TEE, 6MJ-6MJ-6MJ
5	12	0301473	HOSE ASSEMBLY, 18"
6	2	0301522	CONNECTOR, 6MJ-6MB
7	2	0301921	HOSE ASSEMBLY, 128"
8	REF.	0302798	CONTROL VALVE, VDP11DDC132
9	1	0302919	FOLD CYLINDER
10	2	0302922	HOSE ASSEMBLY, 170"
11	1	0303020	EXTEND CYLINDER
12	2	0303844	SWING ARM CYLINDER
13	1	0303851	SOLENOID VALVE, 4 SPOOL
14	2	0303858	ELBOW, 4MJ-BULKHEAD 90 W/ NUT
15	1	0303860	HOSE ASSEMBLY, 10"
16	1	0303861	HOSE ASSEMBLY, 17"
17	2	0303862	HOSE ASSEMBLY, 112"
18	2	0303863	HOSE ASSEMBLY, 170"
19	6	HC 1291	CONNECTOR, 4MJ-4MB

Note: Refer to Wrecker Hydraulics on pages VI-18 through VI-23 for specific control valve applications.

Section VI - PARTS (cont'd)

WRECKER HYDRAULICS - MODEL 4301



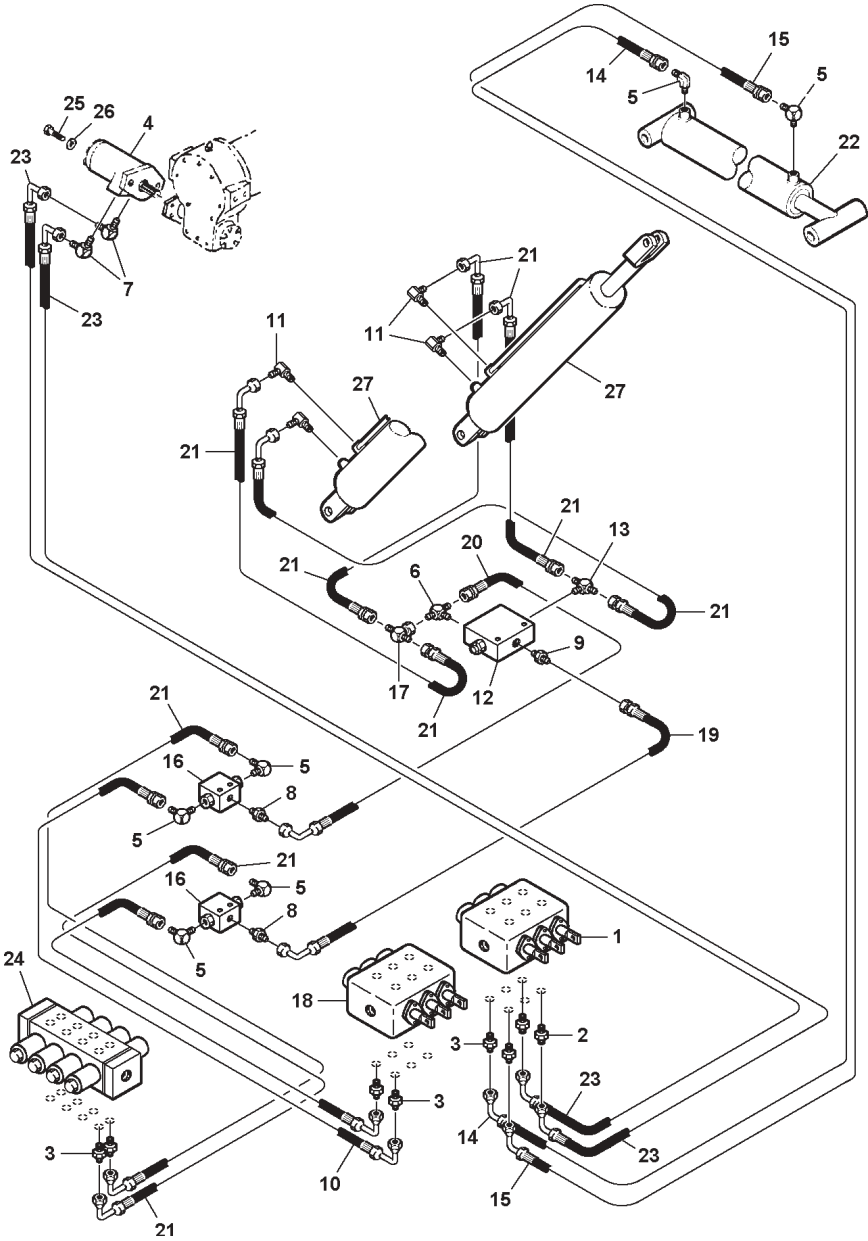
Section VI - PARTS (cont'd)

WRECKER HYDRAULICS - MODEL 4301

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0300010	CONTROL VALVE, VDP11DDD108
2	2	0300041	CONNECTOR, 8MJ-8MB
3	4	0300044	CONNECTOR, 6MJ-8MB
4	1	0300090	HYDRAULIC MOTOR
5	4	0300142	ELBOW, 6MJ-4MP90
6	1	0300206	BRANCH TEE, 6MJ-6MJ-4MP
7	2	0300229	ELBOW, 8MJ-8MP90
8	2	0300387	PLUG, 1/2" SAE O-RING
9	2	0301424	MALE CONNECTOR, 6MJ-4MP
10	1	0301425	MALE CONNECTOR, 6MJ-6MP
11	2	0301473	HOSE ASSEMBLY, 18"
12	4	0301620	ELBOW, 6MJ-6MB90
13	1	0301731	HOLDING VALVE
14	1	0301855	MALE TEE, 6MJ-6MJ-6MP
15	2	0302226	SHUTTLE VALVE
16	1	0302573	TEE, 6MJ-6MJ-6FJX
17	1	0302798	CONTROL VALVE, VDP11DDC132
18	1	0302807	HOSE ASSEMBLY, 38"
19	1	0302814	HOSE ASSEMBLY, 32"
20	6	0302926	HOSE ASSEMBLY, 29"
21	2	0303014	HOSE ASSEMBLY, 80"
22	1	0303851	SOLENOID VALVE, 4 SPOOL
23	2	0400177	SCREW, 1/2"-13 X 1-1/4" HEX HD CAP
24	2	0400491	LOCKWASHER, 1/2" HELICAL
25	2	IT-27B	BOOM ELEVATION CYLINDER

Section VI - PARTS (cont'd)

WRECKER HYDRAULICS - MODEL 4311



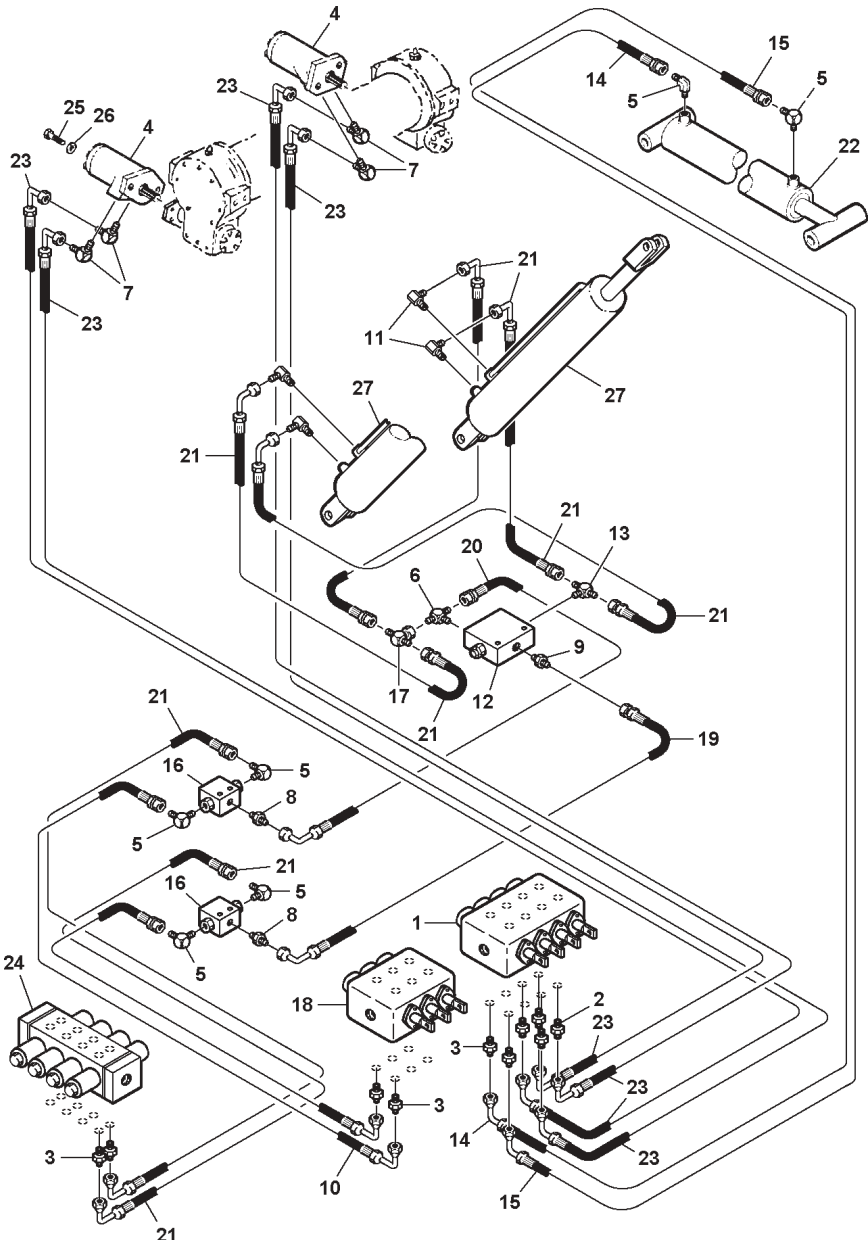
Section VI - PARTS (cont'd)

WRECKER HYDRAULICS - MODEL 4311

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0300010	CONTROL VALVE, VDP11DDD108
2	2	0300041	CONNECTOR, 8MJ-8MB
3	4	0300044	CONNECTOR, 6MJ-8MB
4	1	0300090	HYDRAULIC MOTOR
5	4	0300142	ELBOW, 6MJ-4MP90
6	1	0300206	BRANCH TEE, 6MJ-6MJ-4MP
7	2	0300229	ELBOW, 8MJ-8MP90
8	2	0301424	MALE CONNECTOR, 6MJ-4MP
9	1	0301425	MALE CONNECTOR, 6MJ-6MP
10	2	0301473	HOSE ASSEMBLY, 18"
11	4	0301620	ELBOW, 6MJ-6MB90
12	1	0301731	HOLDING VALVE
13	1	0301855	MALE TEE, 6MJ-6MJ-6MP
14	1	0301964	HOSE ASSEMBLY, 65"
15	1	0301965	HOSE ASSEMBLY, 131"
16	2	0302226	SHUTTLE VALVE
17	1	0302573	TEE, 6MJ-6MJ-6FJX
18	1	0302798	CONTROL VALVE, VDP11DDC132
19	1	0302807	HOSE ASSEMBLY, 38"
20	1	0302814	HOSE ASSEMBLY, 32"
21	6	0302926	HOSE ASSEMBLY, 29"
22	1	0302948	BOOM EXTEND CYLINDER
23	2	0303014	HOSE ASSEMBLY, 80"
24	1	0303851	SOLENOID VALVE, 4 SPOOL
25	2	0400177	SCREW, 1/2"-13 X 1-1/4" HEX HD CAP
26	2	0400491	LOCKWASHER, 1/2" HELICAL
27	2	IT-27B	BOOM ELEVATION CYLINDER

Section VI - PARTS (cont'd)

WRECKER HYDRAULICS - MODEL 4312



Section VI - PARTS (cont'd)

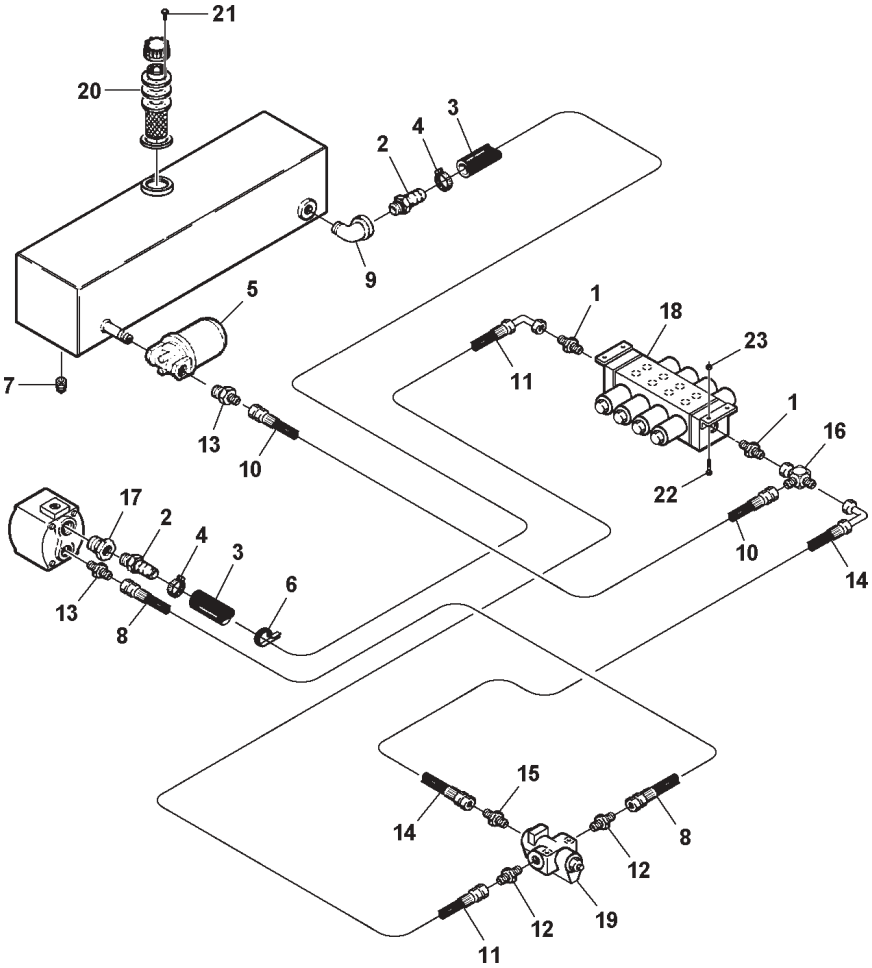
WRECKER HYDRAULICS - MODEL 4312

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0300011	CONTROL VALVE, VDP11DDDD83
2	4	0300041	CONNECTOR, 8MJ-8MB
3	6	0300044	CONNECTOR, 6MJ-8MB
4	2	0300090	HYDRAULIC MOTOR
5	6	0300142	ELBOW, 6MJ-4MP90
6	1	0300206	BRANCH TEE, 6MJ-6MJ-4MP
7	4	0300229	ELBOW, 8MJ-8MP90
8	2	0301424	MALE CONNECTOR, 6MJ-4MP
9	1	0301425	MALE CONNECTOR, 6MJ-6MP
10	2	0301473	HOSE ASSEMBLY, 18"
11	4	0301620	ELBOW, 6MJ-6MB90
12	1	0301731	HOLDING VALVE
13	1	0301855	MALE TEE, 6MJ-6MJ-6MP
14	1	0301964	HOSE ASSEMBLY, 65"
15	1	0301965	HOSE ASSEMBLY, 131"
16	2	0302226	SHUTTLE VALVE
17	1	0302573	TEE, 6MJ-6MJ-6FJX
18	1	0302798	CONTROL VALVE, VDP11DDC132
19	1	0302807	HOSE ASSEMBLY, 38"
20	1	0302814	HOSE ASSEMBLY, 32"
21	6	0302926	HOSE ASSEMBLY, 29"
22	1	0302948	BOOM Extend CYLINDER
23	4	0303014	HOSE ASSEMBLY, 80"
24	1	0303851	SOLENOID VALVE, 4 SPOOL
25	4	0400177	SCREW, 1/2"-13 X 1-1/4" HEX HD CAP
26	4	0400491	LOCKWASHER, 1/2" HELICAL
27	2	IT-27B	BOOM ELEVATION CYLINDER

Section VI - PARTS (cont'd)

PUMP, VALVE & FILTER HYDRAULICS

MODEL 4300



Section VI - PARTS (cont'd)

PUMP, VALVE & FILTER HYDRAULICS

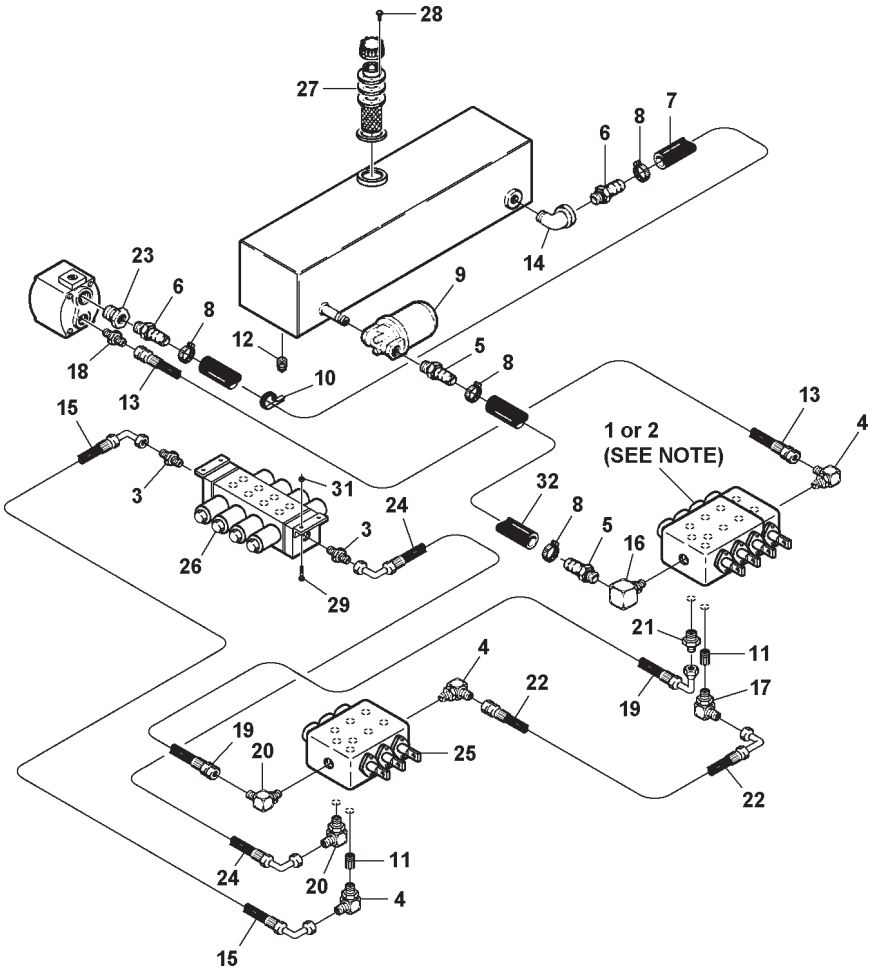
MODEL 4300

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	2	0300041	CONNECTOR, 8MJ-8MB
2	2	0300056	BARB, 16C4-16MP
3	9 FT.	0300058	HOSE, 1" SUCTION
4	2	0300071	HOSE CLAMP, 1"
5	1	0300136	RETURN LINE FILTER ASSEMBLY
6	1	0300188	HOSE CLAMP, 1-1/2" INSULATED
7	1	0300446	PIPE PLUG, 3/4" MALE
8	1	0300660	HOSE ASSEMBLY, 120"
9	1	0300692	STREET ELBOW, 1" 90°
10	11	0300750	HOSE ASSEMBLY, 15"
11	1	0300787	HOSE ASSEMBLY, 53"
12	2	0301376	CONNECTOR, 8MJ-10MB
13	2	0301391	CONNECTOR, 8MJ-12MP
14	1	0301471	HOSE ASSEMBLY, 30"
15	1	0301780	CONNECTOR, 8MJ-12MB
16	1	0302052	RUN TEE, 8MJ-8FJX-8MJ
17	1	0302108	REDUCER BUSHING
18	1	0303851	SOLENOID VALVE, 4 SPOOL
19	11	0303868	RELIEF VALVE
20	1	0305006	FILLER CAP ASSEMBLY
21	6	0400045	SCREW, #10-32 X 1/2" RD HD PHILLIPS
22	4	0400122	SCREW, 3/8"-16 X 1-1/4" HEX HD CAP
23	4	0400392	NUT, 3/8"-16 HEX NYLOK

Section VI - PARTS (cont'd)

PUMP, VALVE & FILTER HYDRAULICS

MODELS 4301, 4311 & 4312



Section VI - PARTS (cont'd)

PUMP, VALVE & FILTER HYDRAULICS

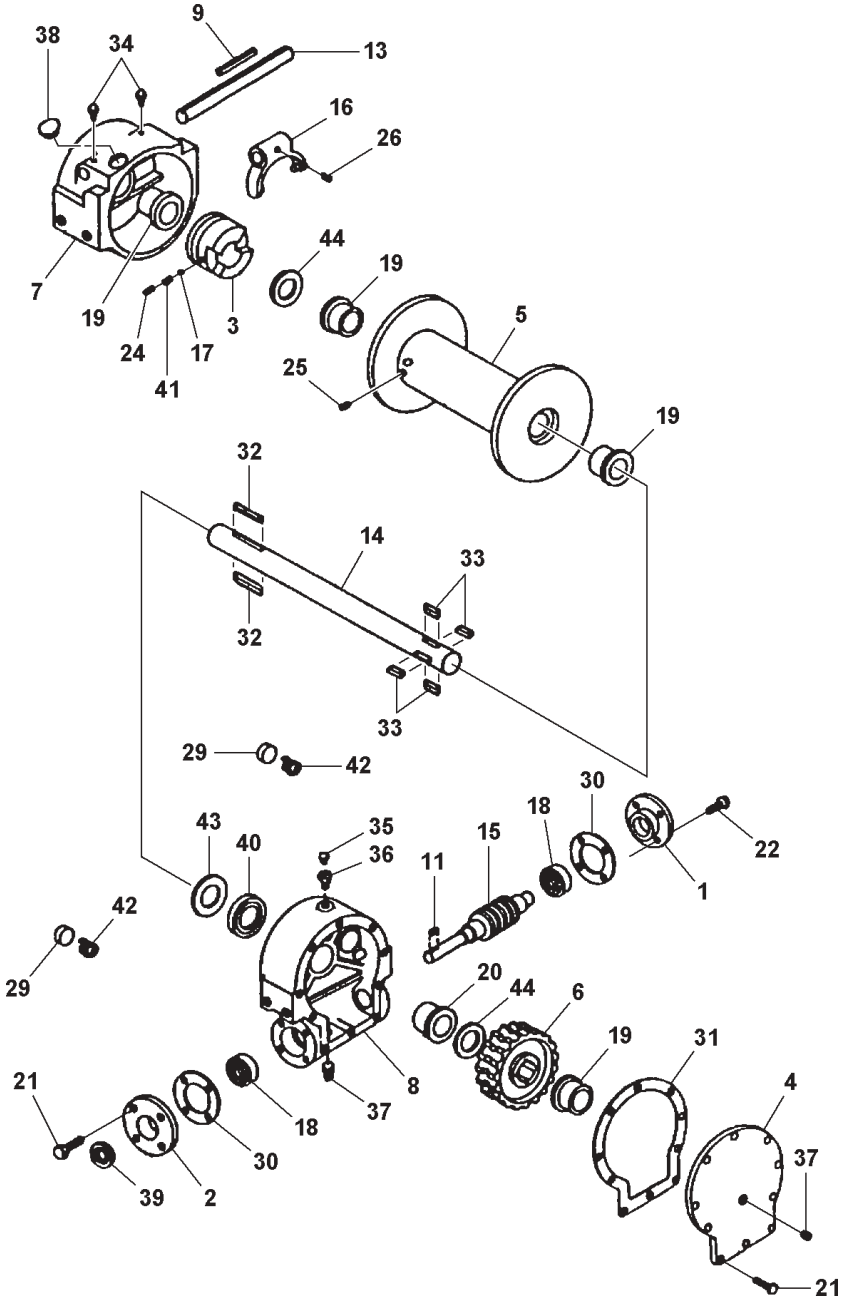
MODELS 4301, 4311 & 4312

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0300010	CONTROL VALVE, VDP11DDD108
2	1	0300011	CONTROL VALVE, VDP11DDDD83
3	2	0300041	CONNECTOR, 8MJ-8MB
4	3	0300052	ELBOW, 8MJ-10MB90
5	2	0300055	BARB, 12C4-12MP
6	2	0300056	BARB, 16C4-16MP
7	9 FT.	0300058	HOSE, 1" SUCTION
8	4	0300071	HOSE CLAMP, 1"
9	1	0300136	RETURN LINE FILTER ASSEMBLY
10	1	0300188	HOSE CLAMP, 1-1/2" INSULATED
11	2	0300286	FITTING, H.P.C.O.
12	1	0300446	PIPE PLUG, 3/4" MALE
13	1	0300660	HOSE ASSEMBLY, 120"
14	1	0300692	STREET ELBOW, 1" 90°
15	1	0300787	HOSE ASSEMBLY, 53"
16	1	0301375	ELBOW, 12MB-12Fp90
17	1	0301388	ELBOW, 8MJ-8MB90
18	1	0301391	CONNECTOR, 8MJ-12MP
19	1	0301471	HOSE ASSEMBLY, 30"
20	2	0301547	ELBOW, 8MJ-12MB90
21	1	0301780	CONNECTOR, 8MJ-12MB
22	1	0301790	HOSE ASSEMBLY, 15"
23	1	0302108	REDUCER BUSHING
24	1	0302610	HOSE ASSEMBLY, 36"
25	1	0302798	CONTROL VALVE, VDP11DDC132
26	1	0303851	SOLENOID VALVE, 4 SPOOL
27	1	0305006	FILLER CAP ASSEMBLY
28	6	0400045	SCREW, #10-32 X 1/2" RD HD PHILLIPS
29	4	0400122	SCREW, 3/8"-16 X 1-1/4" HEX HD CAP
30	6	0400140	SCREW, 3/8"-16 X 4" HEX HD CAP
31	10	0400392	NUT, 3/8"-16 HEX NYLOK
32	1	0708529	RETURN HOSE, 3/4" X 36"

Note: Refer to Wrecker Hydraulics on pages VI-18 through VI-23 for specific control valve applications.

Section VI - PARTS (cont'd)

WINCH ASSEMBLY - HY-246



Section VI - PARTS (cont'd)

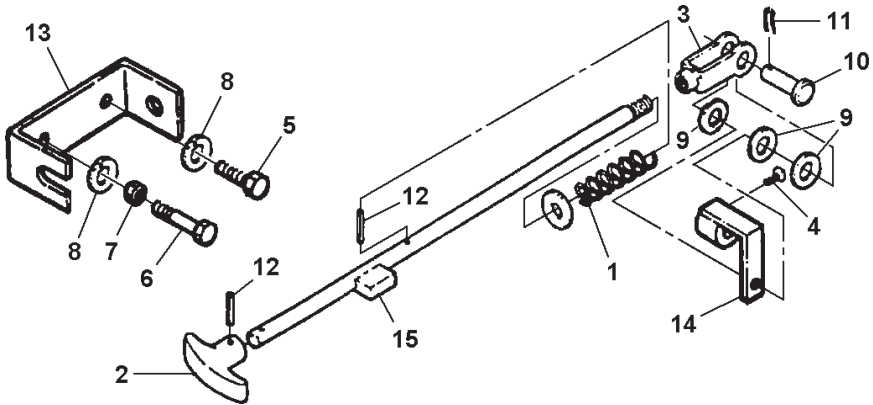
WINCH ASSEMBLY - HY-246

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	316083	BEARING CAP
2	1	316084	BEARING CAP
3	1	324161	JAW CLUTCH
4	1	328134	COVER
5	1	332007	DRUM "Y"
6	1	334163	GEAR R.H. 46:1
	1	334164	GEAR L.H. 46:1
7	1	338003	HOUSING - CLUTCH
8	1	338273	HOUSING - GEAR
9	1	342018	KEY
10	1	342024	KEY
11	1	342027	KEY
12	1	344008	LEVER - SHIFTER
13	1	356902	SHAFT - SHIFTER
14	1	357480	SHAFT - DRUM "Y"
15	1	368002	WORM R.H. 46:1
	1	368009	WORM L.H. 46:1
16	1	370001	YOKE
17	1	400001	BALL - POPPET
18	2	402002	BEARING - BALL
19	4	412003	BUSHING
20	1	412045	BUSHING
21	10	414038	CAPSCREW 1/4-20 NC X 3/4 LG hX HD GR5
22	8	414045	CAPSCREW 1/4-20 NC X 7/8 LG HX HD GR5
23	4	414282	CAPSCREW 3/8-16NC X 3/4 LG HX HD GR5
24	1	416040	SET SCREW 1/4-20NC X 1-1/4 SOC HD LESS
25	1	416059	SET SCREW 3/8-16NC X 3/8 SOC HD LESS
26	1	416084	SET SCREW 1/4-20NC X 1/2 LG SQ HD
27	1	416109	SET SCREW 5/16-18NC X 1/2 LG SQ HD
28	4	418177	LOCK WASHER 3/8" MED SECT CP
29	2	438014	DRAG BRAKE
30	2	442184	GASKET
31	1	442205	GASKET
32	2	450006	KEY - BARTH
33	4	450016	KEY - BARTH
34	2	456006	FITTING - LUBE
35	1	456008	FITTING - RELIEF
36	1	468002	REDUCER
37	2	468011	PIPE PLUG
38	1	472013	PLASTIC PLUG
39	1	486009	OIL SEAL
40	1	486017	OIL SEAL
41	1	494001	SPRING - POPPET
42	2	494002	SPRING
43	1	518014	THRUST WASHER
44	2	518015	THRUST WASHER

Section VI - PARTS (cont'd)

WINCH CLUTCH CONTROL

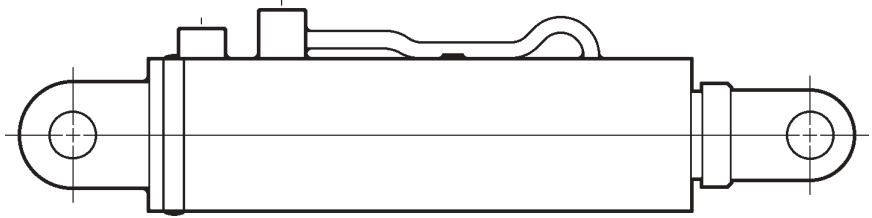
2 ASSEMBLIES REQ'D FOR DUAL WINCH WRECKER



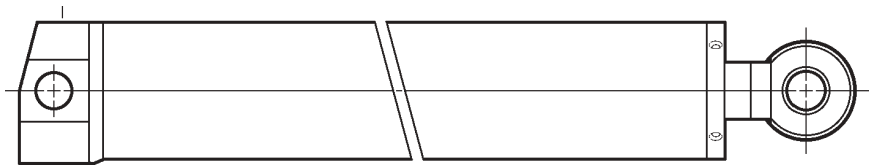
REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0300845	SPRING, COMPRESSION
2	1	0301532	"T" HANDLE
3	1	0301588	ADJUSTING YOKE
4	1	0400116	SCREW, 5/16"-18 X 1/2" SQ HD SET
5	1	0400126	SCREW, 3/8"-16 X 1" HEX HD CAP
6	1	0400150	SCREW, 3/8"-16 X 2-1/2" HEX HD CAP
7	1	0400393	NUT, 3/8" - 16 HEX JAM
8	2	0400482	LOCKWASHER, 3/8" HELICAL
9	4	0400492	WASHER, 1/2" FLAT
10	1	0400537	CLEVIS PIN, 1/2" X 1-1/2"
11	1	0400546	COTTER PIN, 1/8" X 1-1/4"
12	2	0400560	ROLL PIN, 5/32" X 1"
13	1	0702408	MOUNTING CHANNEL
14	1	0800779	BELL CRANK WELDMENT
15	1	0802613	CONTROL ROD, SINGLE WINCH
	1	0802614	CONTROL ROD, DUAL WINCH

Section VI - PARTS (cont'd)

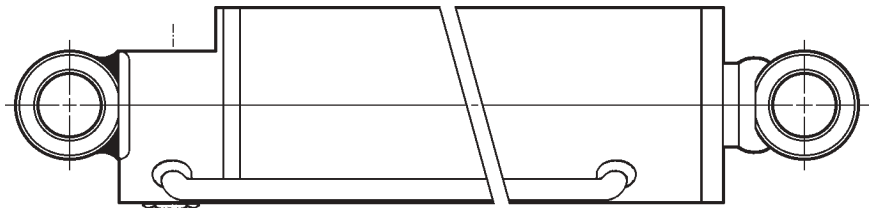
HYDRAULIC CYLINDERS



REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	2	IT-27B	BOOM ELEVATION CYLINDER (COMPLETE)
2	1	IT-97	SEAL KIT, BOOM ELEVATION CYLINDER



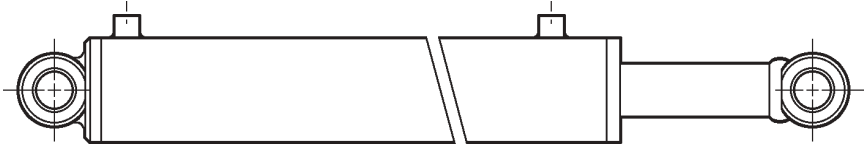
REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0303020	UNDERLIFT EXTEND CYLINDER (COMPLETE)
2	1	0304086	SEAL KIT, UNDERLIFT EXTEND CYLINDER



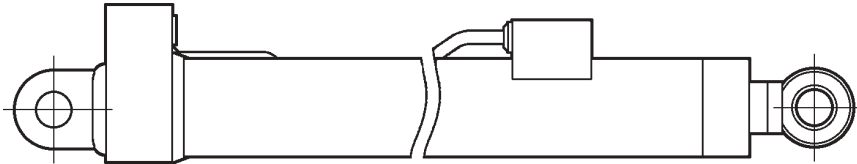
REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0302919	UNDERLIFT FOLD CYLINDER (COMPLETE)
2	1	0300830	SEAL KIT, UNDERLIFT FOR CYLINDER

Section VI - PARTS (cont'd)

HYDRAULIC CYLINDERS



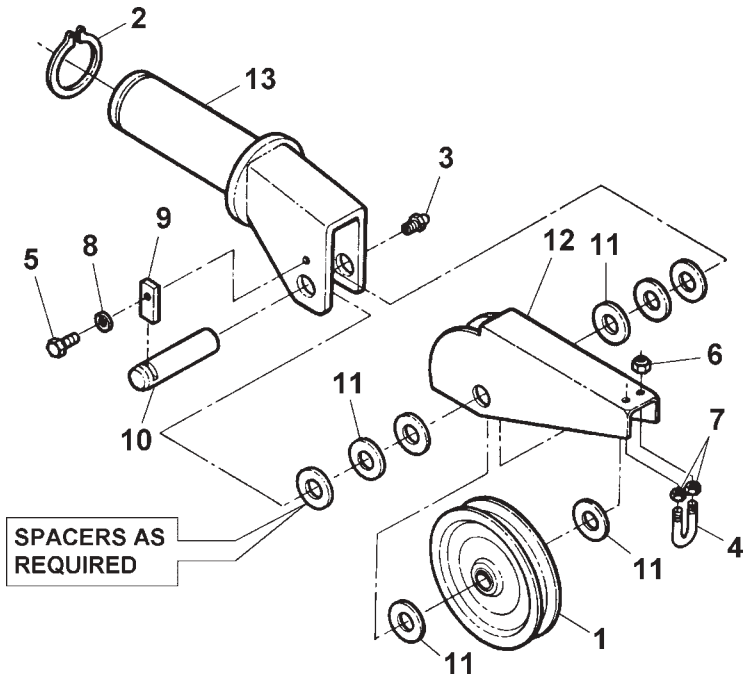
REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0302948	BOOM EXTEND CYLINDER (COMPLETE)
2	1	0304491	SEAL KIT, BOOM EXTEND CYLINDER



REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	2	0303844	SWING L-ARM CYLINDER (COMPLETE)
2	1	SK16371	SEAL KIT, SWING L-ARM CYLINDER

Section VI - PARTS (cont'd)

BOOM END SWIVEL ASSEMBLY



REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0300022	6" SHEAVE
2	1	0300108	SNAP RING, 2-1/2" DIA EXT
3	1	0300113	GREASE FITTING
4	1	0301531	"U" BOLT, 3/8"
5	1	0400060	SCREW, 1/4"-20 X 1/2" HEX HD CAP
6	1	0400392	NUT, 3/8"-16 HEX NYLOK
7	2	0400393	NUT, 3/8"-16 HEX JAM
8	2	0400452	LOCKWASHER, 1/4" HELICAL
9	1	0700032	SHAFT RETAINER
10	1	0700056	SHAFT
11	--	0700166	WASHER-SPACER
12	1	0702285	CABLE GUIDE
13	1	0800003	BOOM END SWIVEL

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