

CHALLENGER®



OWNER'S MANUAL

CH-35

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

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

FORM NO. 0501062
01 / 2001
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

Telephone (423) 238-7227

SERIAL NUMBER

OWNER, USER AND OPERATOR:

Challenger appreciates your choice of our towing and recovery unit for your application. Our number one priority is user safety which is best achieved by our joint efforts. We feel that you can make a major contribution to safety if you, as the equipment owner and operator:

- 1. Comply with Federal, State, and Local Regulations.**
- 2. Read, Understand, and Follow the Instructions in this Manual.**
- 3. Use Good, Safe Work Practices in a Common Sense Way.**
- 4. Only have Authorized and Trained Operators running the Towing and Recovery Unit.**

Also contained in this manual is a Parts Section for your Recovery Unit. Use of other than Factory or Factory Authorized Parts will render the Warranty void.

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Section VI - PARTS

This Section is provided by the manufacturer for the purpose of ordering any component part of the **CHALLENGER CH-35** 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 CH-35** 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**.

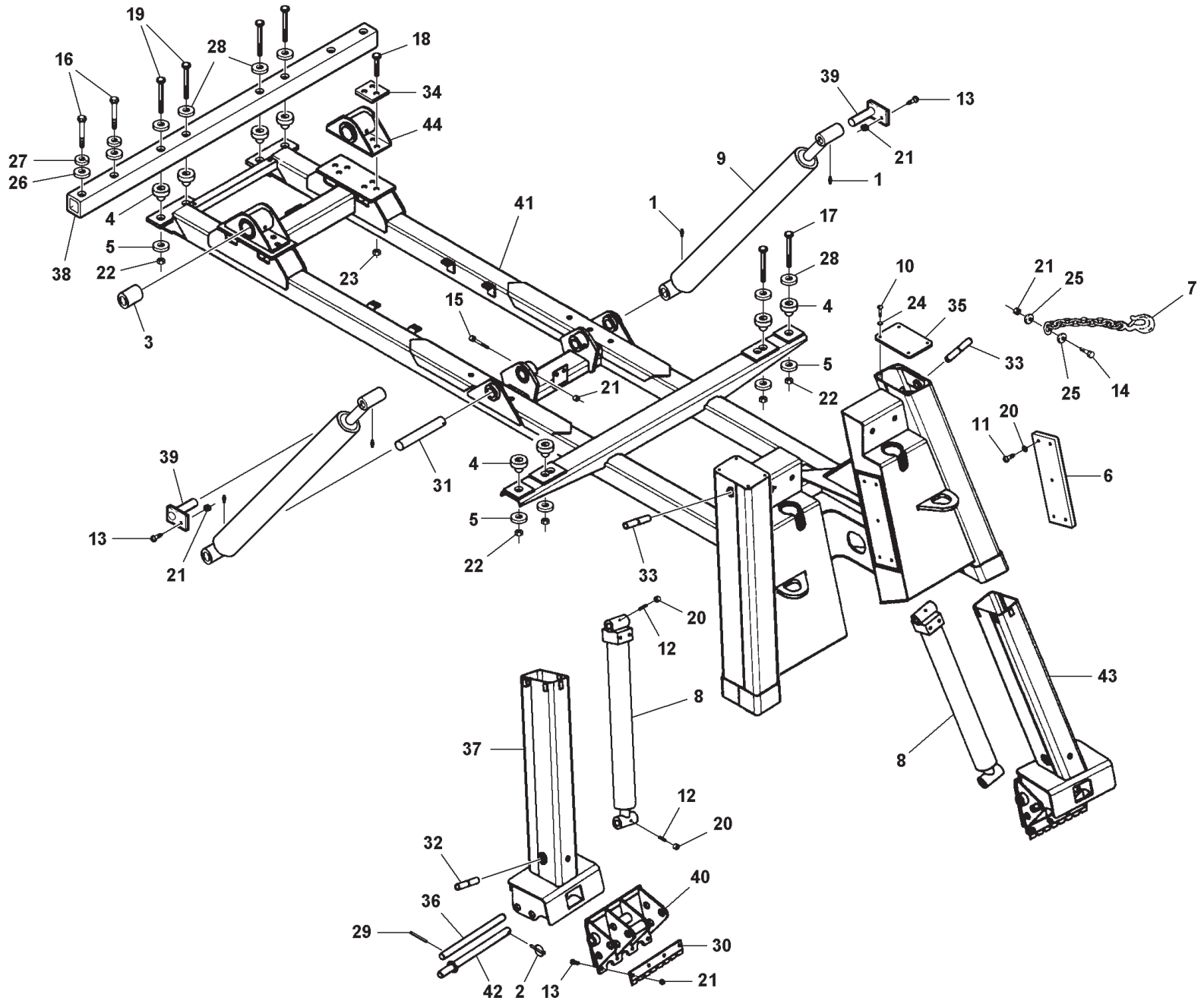
1. **Manual Number & Date of Publication**
2. **Manual Page Number**
3. **Page Title**
4. **Reference Number of Part Desired**
5. **Part Number**
6. **Part Description**
7. **Quantity of Part Desired**

Providing this information will help ensure that the correct parts will be delivered to you in an expedient manner. Should additional information be required for repair or replacement of certain components, contact your 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)

SUBFRAME ASSEMBLY

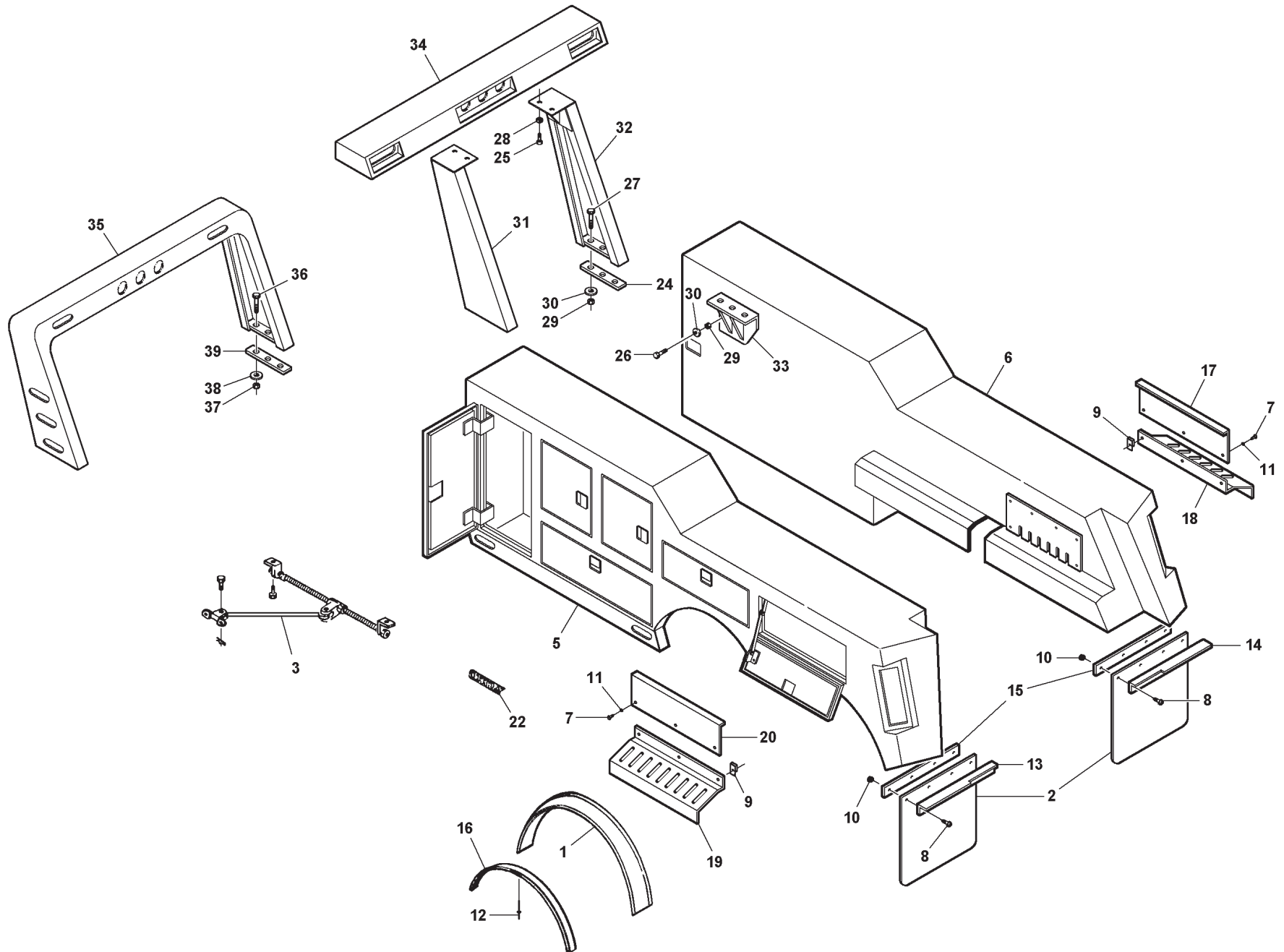


Section VI - PARTS (cont'd)
SUBFRAME ASSEMBLY

Section VI - PARTS (cont'd)
BODY ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	6	0300113	GREASE FITTING
2	2	0301861	QUICK PIN
3	2	0302538	BUSHING, 3-1/2" X 2-1/2" INTERNAL
4	8	0302540	CENTER BONDED MOUNT
5	12	0302541	SPECIAL WASHER
6	2	0303089	RAMP PAD
7	2	0303445	SAFETY CHAIN, SYSTEM 10
8	REF.	0303691	SPADE CYLINDER
9	REF.	0306747	LIFT CYLINDER
10	8	0400066	SCREW, 1/4"-20 X 3/4" HEX HD CAP
11	10	0400128	SCREW, 3/8"-16 X 1-1/4" FL HD SKT
12	4	0400139	SCREW, 3/8"-16 X 1-1/2" HEX SKT SET
13	10	0400181	SCREW, 1/2"-13 X 1-1/2" HEX HD CAP
14	2	0400211	SCREW, 1/2"-13 X 1-3/4" HEX HD CAP
15	2	0400219	SCREW, 1/2"-13 X 4-1/2" HEX HD CAP
16	4	0400276	SCREW, 5/8"-11 X 4-1/2" HEX HD CAP
17	4	0400281	SCREW, 3/4"-10 X 3-1/2" HEX HD CAP
18	12	0400286	SCREW, 3/4"-10 X 2-3/4" HEX HD CAP
19	4	0400294	SCREW, 3/4"-10 X 6-1/2" HEX HD CAP
20	20	0400392	NUT, 3/8"-16 NYLOK HEX
21	14	0400408	NUT, 1/2"-13 NYLOK HEX
22	4	0400430	NUT, 3/4"-10 NYLOK HEX
23	12	0400431	NUT, 3/4"-10 NYLOK HEX
24	8	0400452	LOCKWASHER, 1/4" HELICAL
25	4	0400492	WASHER, 1/2" FLAT
26	8	0400506	WASHER, 5/8" FLAT
27	4	0400508	LOCKWASHER, 5/8" HELICAL
28	8	0400510	WASHER, 3/4" FLAT
29	2	0400563	ROLL PIN, 5/32" X 2-1/2"
30	2	0705485	SPADE BLADE
31	2	0708094	PIN, LIFT CYLINDER
32	2	0713128	SHAFT, LOWER SPADE
33	2	0713129	SHAFT, UPPER SPADE
34	4	0714581	BOLTING PLATE
35	2	0715584	COVER PLATE, REAR SPADE
36	2	0715694	PIN, SPADE PIVOT
37	1	0802201	RIGHT INNER SPADE WELDMENT
38	1	0802211	FRONT BODY MOUNTING TUBE
39	2	0802463	PIVOT PIN, LIFT CYLINDER
40	2	0804286	LOWER SPADE PAD WELDMENT
41	1	0804305	SUBFRAME WELDMENT
42	2	0804334	PIN, MULTI-POSITION
43	1	0804335	LEFT INNER SPADE WELDMENT
44	2	0804405	BRACKET, BOOM PIVOT

Section VI - PARTS (cont'd) BODY ASSEMBLY



Section VI - PARTS (cont'd)

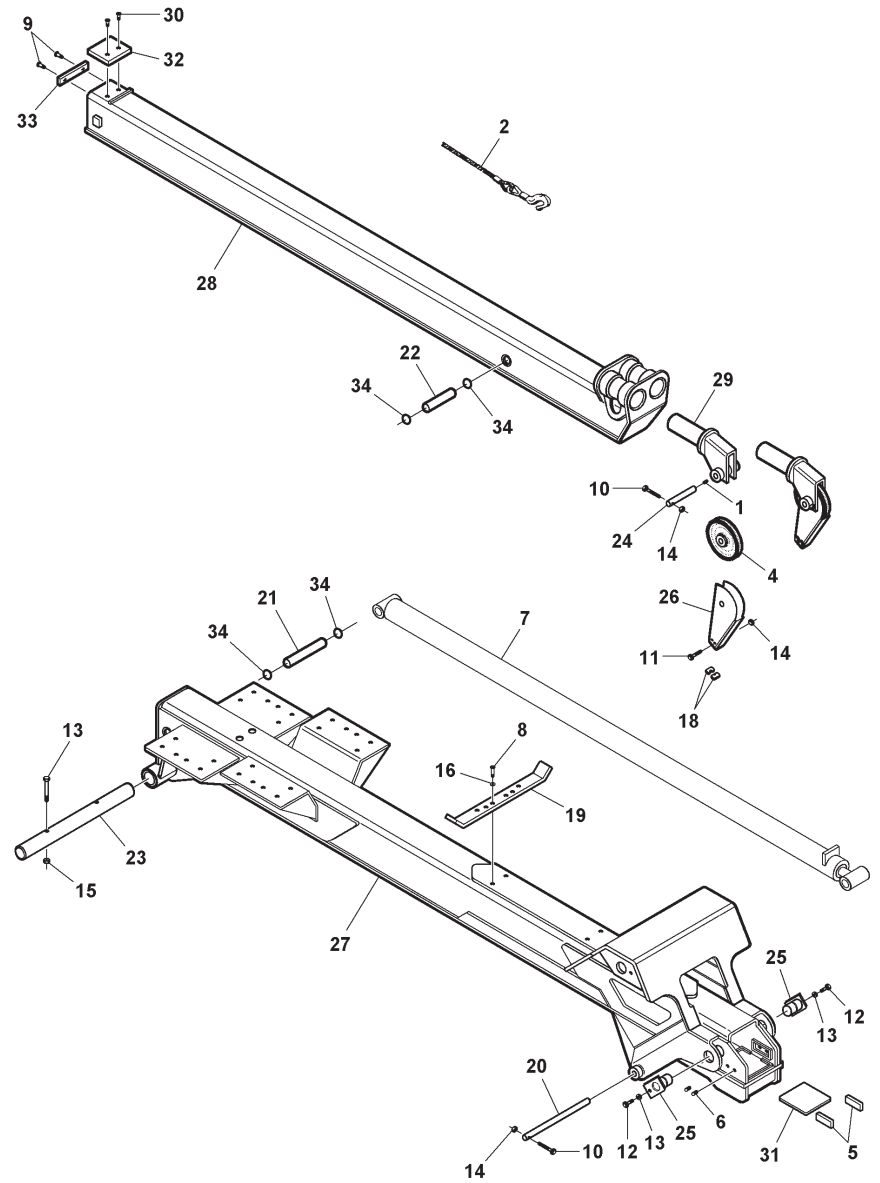
BODY ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	14 FT.	0300345	RUBBER FENDER
2	2	VA0588	MUDFLAP
3	6	0301912	DOOR CHECK, 11"
4	1	0303061	BACKUP ALARM
5	1	0302978	TOOL BOX, 156" C.A. LEFT
6	1	0302979	TOOL BOX, 156" C.A. RIGHT
7	6	0400066	SCREW, 1/4"-20 X 3/4" HEX HD CAP
8	8	0400122	SCREW, 3/8"-16 X 1-1/4" HEX HD CAP
9	6	0400369	CLIP, 1/4" TINNEMAN
10	8	0400392	NUT, 3/8"-16 NYLOK HEX
11	6	0400451	WASHER, 1/4" FLAT
12	40	0400566	RIVET, 1/4"
13	1	0705090	MUDFLAP MTG ANGLE, LEFT
14	1	0705091	MUDFLAP MTG ANGLE, RIGHT
15	2	0705092	BAR, MUDFLAP
16	2	0706609	RETAINING STRIP, RUBBER FENDER
17	1	0711289	PANEL, SWITCH
18	1	0711290	PANEL, CONTROL
19	1	0711292	PANEL, CONTROL
20	1	0711344	PANEL, GAUGE
21	1	0803036	CROSSMEMBER, ALUMINUM BODY
22	1	0902286	CHALLENGER NAMEPLATE KIT
--	6	0400035	SCREW, #10-24 X 1/2" OVAL HD SS
--	2	DE0186	CHALLENGER NAMEPLATE
23	--	0902328	BODY MOUNTING KIT (NOT SHOWN)
--	28	0400288	SCREW, 3/4"-10 X 2-1/2" HEX HD CAP
--	28	0400431	NUT, 3/4"-10 NYLOK HEX
--	2	0707174	ANGLE, TAILGATE MOUNTING
--	2	0711256	MOUNTING PLATE
--	2	0711286	SPACER, REAR FRAME BRACKET

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
--	--	124001720	LIGHT BAR, STANDARD
24	2	0301706	GASKET, LIGHT BAR
25	4	0400126	SCREW, 3/8"-16 X 1" HEX HD CAP
26	12	0400177	SCREW, 1/2"-13 X 1-1/4" HEX HD CAP
27	6	0400181	SCREW, 1/2"-13 X 1-1/2" HEX HD CAP
28	4	0400392	NUT, 3/8"-16 NYLOK HEX
29	18	0400408	NUT, 1/2"-13 NYLOCK HEX
30	12	0400492	WASHER, 1/2" FLAT
31	1	0802224	SUPPORT, L.H. VERTICAL
32	1	0802225	SUPPORT, R.H. VERTICAL
33	2	0802226	MOUNTING BRACKET
34	1	0802260	TOP CHANNEL
--	--	124001708	AERODYNAMIC LIGHT PYLON
35	1	0302562	LIGHT RACK
36	6	0400157	SCREW, 3/8"-16 X 1-3/4" HEX HD CAP
37	6	0400392	NUT, 3/8"-16 NYLOK HEX
38	6	0400480	WASHER, 3/8" FLAT
39	2	0706972	LIGHT PYLON, MOUNTING RUBBER

Section VI - PARTS (cont'd)

RECOVERY BOOM ASSEMBLY



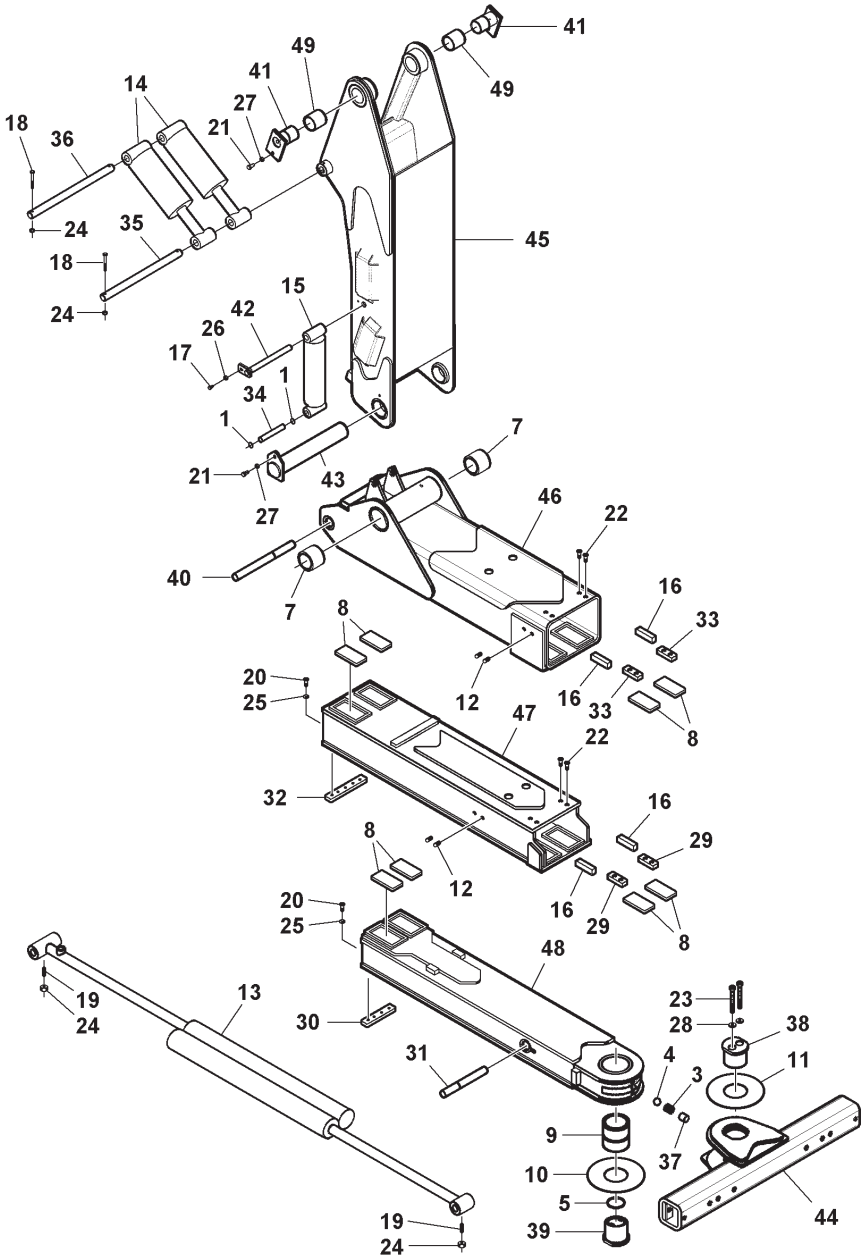
Section VI - PARTS (cont'd)

RECOVERY BOOM ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	6	0300113	GREASE FITTING
2	2	0302880	WIRE ROPE, 6 X 37 IWRC, 3/4" X 200'
3	2	0301895	GREASE FITTING, STR 1/8"
4	2	0303441	SHEAVE, 10"
5	2	0303490	WEAR PAD
6	4	0306585	SCREW
7	REF.	0306743	EXTEND CYLINDER
8	2	0400121	SCREW, 3/8"-16 X 3/4" HEX HD CAP
9	1	0400126	SCREW
10	3	0400133	SCREW, 3/8"-16 X 3" HEX HD CAP
11	4	0400150	SCREW, 3/8"-16 X 2-1/2" HEX HD CAP
12	2	0400176	SCREW, 1/2"-13 X 1" HEX HD CAP
13	1	0400220	SCREW, 1/2"-13 X 5-1/2" HEX HD CAP
14	3	0400392	NUT, 3/8"-16 NYLOK HEX
15	1	0400408	NUT, 1/2"-13 NYLOK HEX
16	2	0400482	LOCKWASHER, 3/8" HELICAL
17	2	0400491	LOCKWASHER, 1/2" HELICAL
18	4	0700801	CABLE GUIDE, BOTTOM
19	1	0705104	PLATE, WINCH CABLE SUPPORT
20	1	0707793	PIN, TILT CYLINDER BASE
21	1	0715951	PIN
22	1	0715952	PIN
23	1	0715953	PIVOT PIN, BOOM
24	2	0716134	SHAFT, SHEAVE
25	2	0802365	PIN, TOWER PIVOT
26	2	0803313	CABLE GUIDE
27	1	0804402	OUTER BOOM WELDMENT
28	1	0804403	INNER BOOM WELDMENT
29	1	0804449	SWIVEL WELDMENT
30	1	9044434	SCREW
31	1	930100002	SLIDE PAD
32	1	945030004	SLIDE PAD
33	1	945030001	SLIDE PAD RETAINER
34	4	HD0151	SNAP RING

Section VI - PARTS (cont'd)

UNDERLIFT & TOWER ASSEMBLY



Section VI - PARTS (cont'd)

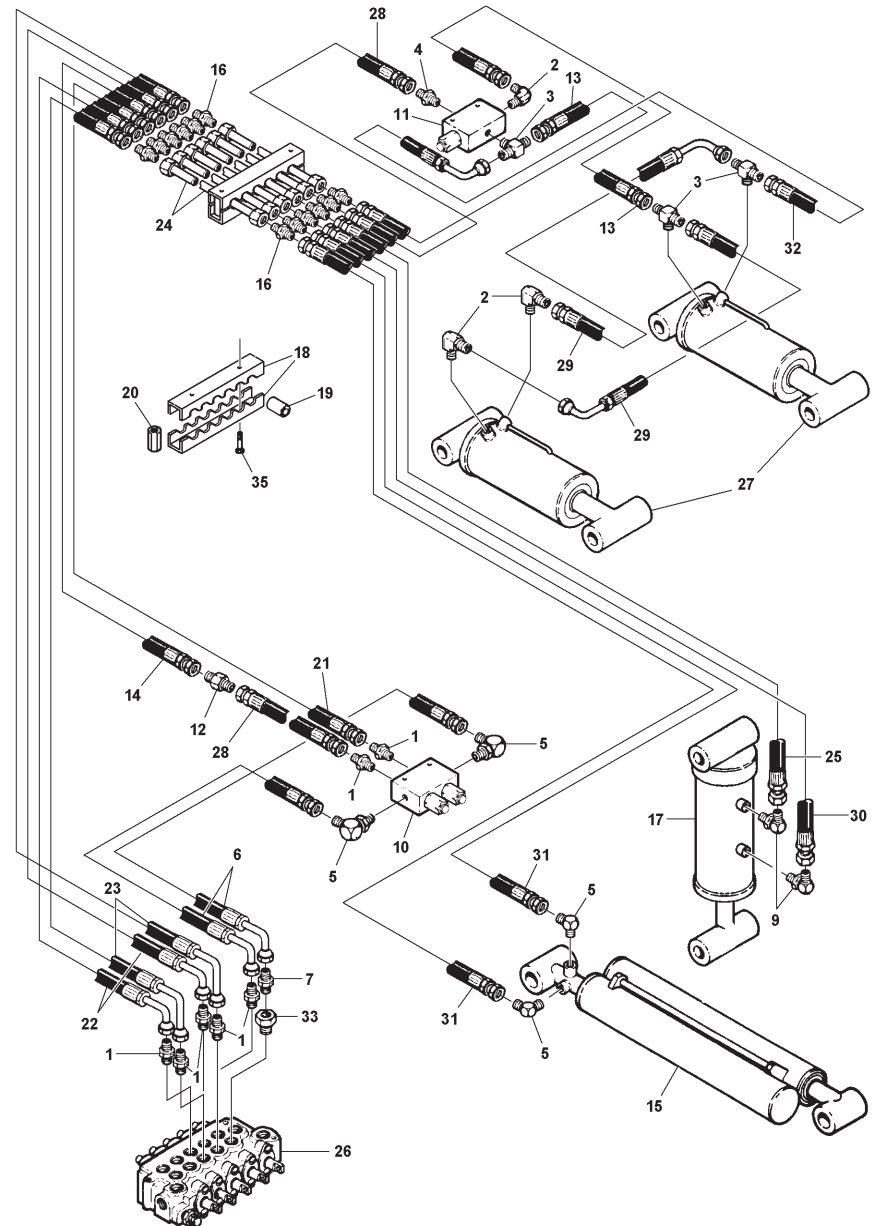
UNDERLIFT & TOWER ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	2	0300110	SNAP RING 1"
2	10	0300113	GREASE FITTING
3	1	0301197	COMPRESSION SPRING, CROSS BAR
4	1	0301398	DETENT BALL, 1-3/16"
5	1	0301822	"O" RING, PIVOT PIN
6	4	0301895	GREASE FITTING, 1/8" STR
7	2	0302538	SPRING BUSHING
8	8	0302561	SLIDE PAD
9	1	0303088	BUSHING, PIVOT PIN
10	2	0303097	THRUST WASHER, 1/8"
11	2	0303098	THRUST WASHER, 1/16"
12	8	0306585	PIPE PLUG, 4 AL PLUG
13	1	0306744	EXTEND CYLINDER
14	2	0306745	TILT CYLINDER
15	1	0306746	FOLD CYLINDER
16	4	0306825	WEAR PAD
17	1	0400121	SCREW, 3/8"-16 X 3/4" HEX HD CAP
18	2	0400133	SCREW, 3/8"-16 X 3" HEX HD CAP
19	2	0400139	SCREW, 3/8"-16 X 1-1/2" HEX SKT SET
20	9	0400147	SCREW, 3/8"-24 X 5/8" HEX HD CAP
21	2	0400176	SCREW, 1/2"-13 X 1" HEX HD CAP
22	8	0400228	SCREW, 3/8"-24 X 5/8" BUTTON HD SKT
23	2	0400271	SCREW, 5/8"-11 X 4-1/2" SKT HD CAP
24	10	0400392	NUT, 3/8"-16 NYLOK HEX
25	9	0400481	LOCKWASHER, 3/8" EXTERNAL TOOTH
26	1	0400482	LOCKWASHER, 3/8" HELICAL
27	2	0400491	LOCKWASHER, 1/2" HELICAL
28	2	0400508	LOCKWASHER, 5/8" HELICAL

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
29	1	0706995	BOLT-ON SPACER PAD
30	1	0706996	BOLT-ON SPACER PAD
31	1	0707019	EXTEND CYLINDER SHAFT
32	1	0707028	BOLT-ON BEARING PAD
33	2	0707034	STOP BLOCK
34	1	0707179	PIN, FOLD CYLINDER ROD END
35	1	0707792	PIN, TILT CYLINDER BASE END
36	1	0707793	PIN, TILT CYLINDER ROD END
37	1	0708470	SPACER, DETENT BALL SPRING
38	1	0710051	PIVOT PIN, TOP HALF
39	1	0710052	PIVOT PIN, BOTTOM HALF
40	1	0716033	EXTEND CYLINDER SHAFT
41	2	0802365	TOWER PIVOT PIN WELDMENT
42	1	0802459	PIN, FOLD CYLINDER BASE
43	1	0802461	PIN, UNDERLIFT PIVOT
44	1	0802914	CROSSBAR WELDMENT
45	1	0804421	TOWER WELDMENT
46	1	0804422	OUTER BOOM WELDMENT
47	1	0804423	2ND STAGE BOOM WELDMENT
48	1	0804424	3RD STAGE BOOM WELDMENT
49	2	RB0205	SPLIT, BUSHING
--	--	0901716	STOW KIT, WINCH CABLE
50	2	0301691	MASTER LINK, OBLONG
51	2	0302273	SPRING, WINCH CABLE TIE-BACK
52	2	0400205	SCREW, 1/2"-13 X 3" HEX HD CAP
53	2	0400408	NUT, 1/2"-13 NYLOK HEX

Section VI - PARTS (cont'd)

UNDERLIFT HYDRAULICS



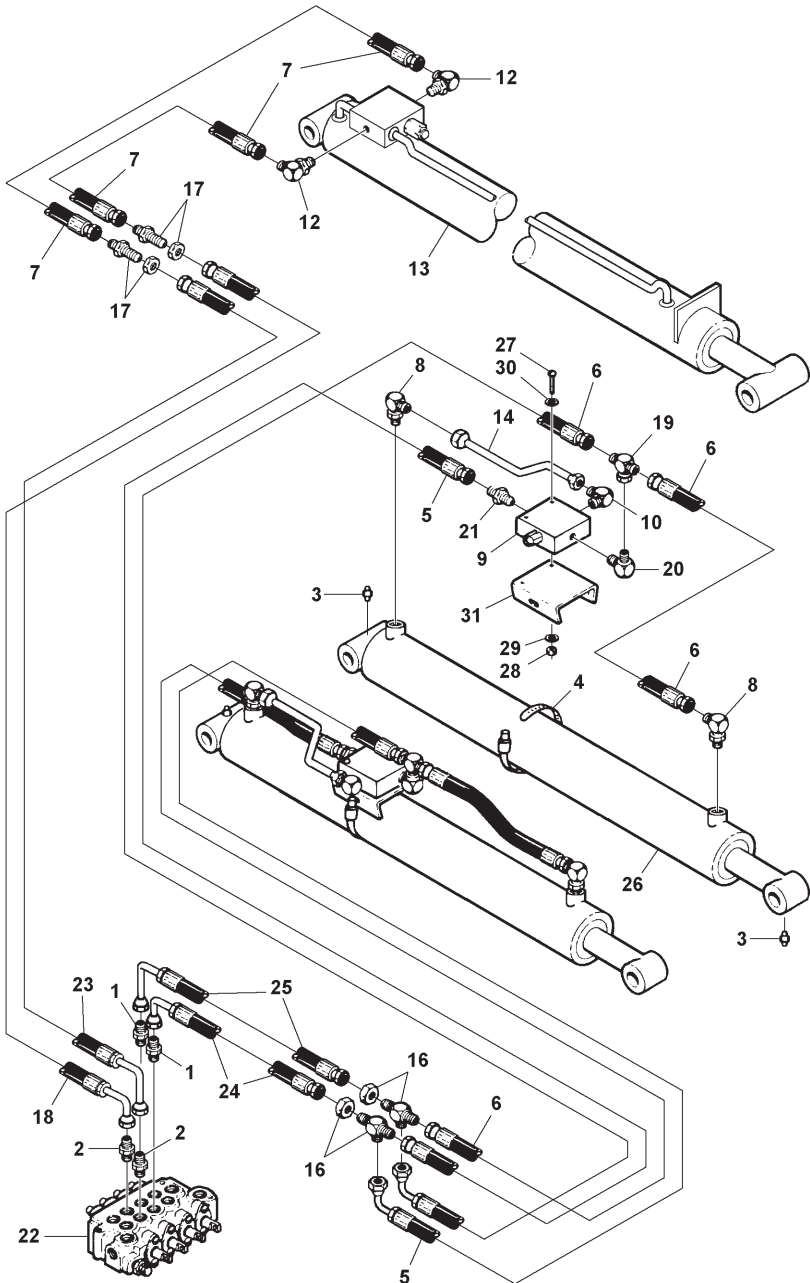
Section VI - PARTS (cont'd)

UNDERLIFT HYDRAULICS

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	7	0300044	CONNECTOR, 6MJ-8MB
2	3	0300142	ELBOW, 6MJ-4MP90
3	3	0300206	BRANCH TEE, 6MJ-6MJ-4MP
4	1	0301424	CONNECTOR, 6MJ-4MP
5	5	0301470	ELBOW, 6MJ-8MP90
6	2	0301473	HOSE ASSEMBLY, 18"
7	1	0301522	CONNECTOR, 6MJ-6MB
8	4	0301601	HOSE CLAMP, INSULATED 5/8"
9	2	0301620	ELBOW, 6MJ-6MB90
10	1	0301730	DOUBLE HOLDING VALVE
11	1	0301731	HOLDING VALVE
12	1	0301837	IN-LINE ORIFICE
13	2	0302035	HOSE ASSEMBLY, 18"
14	1	0302036	HOSE ASSEMBLY, 26"
15	1	0306744	EXTEND CYLINDER
16	12	0302514	ADAPTER, 8MJ-6MJ
17	1	0306746	FOLD CYLINDER
18	8	0302548	CLAMPING UNIT
19	24	0302549	SPLIT BUSHING, 1/2"
20	8	0302551	STACKING NUT, SKT HD
21	1	0302596	HOSE ASSEMBLY, 34"
22	2	0302604	HOSE ASSEMBLY, 44"
23	2	0302605	HOSE ASSEMBLY, 44"
24	6	0302624	TUBE ASSEMBLY
25	1	0302637	HOSE ASSEMBLY, 78"
26	1	0303094	CONTROL VALVE, VDP11CDDDC53
27	2	0306745	TILT CYLINDER
28	2	0302805	HOSE ASSEMBLY, 10"
29	2	0302808	HOSE ASSEMBLY, 18"
30	1	0302812	HOSE ASSEMBLY, 108"
31	2	0302813	HOSE ASSEMBLY, 72"
32	1	0302815	HOSE ASSEMBLY, 32"
33	1	0303017	CONNECTOR, 8MB-6FB
34	2	0400078	SCREW, 1/4"-20 X 2" HEX HD CAP
35	6	0400118	SCREW, 5/16-18 X 3/4 HEX HD CAP
36	2	0400367	NUT, 1/4"-20 NYLOK HEX

Section VI - PARTS (cont'd)

RECOVERY BOOM HYDRAULICS



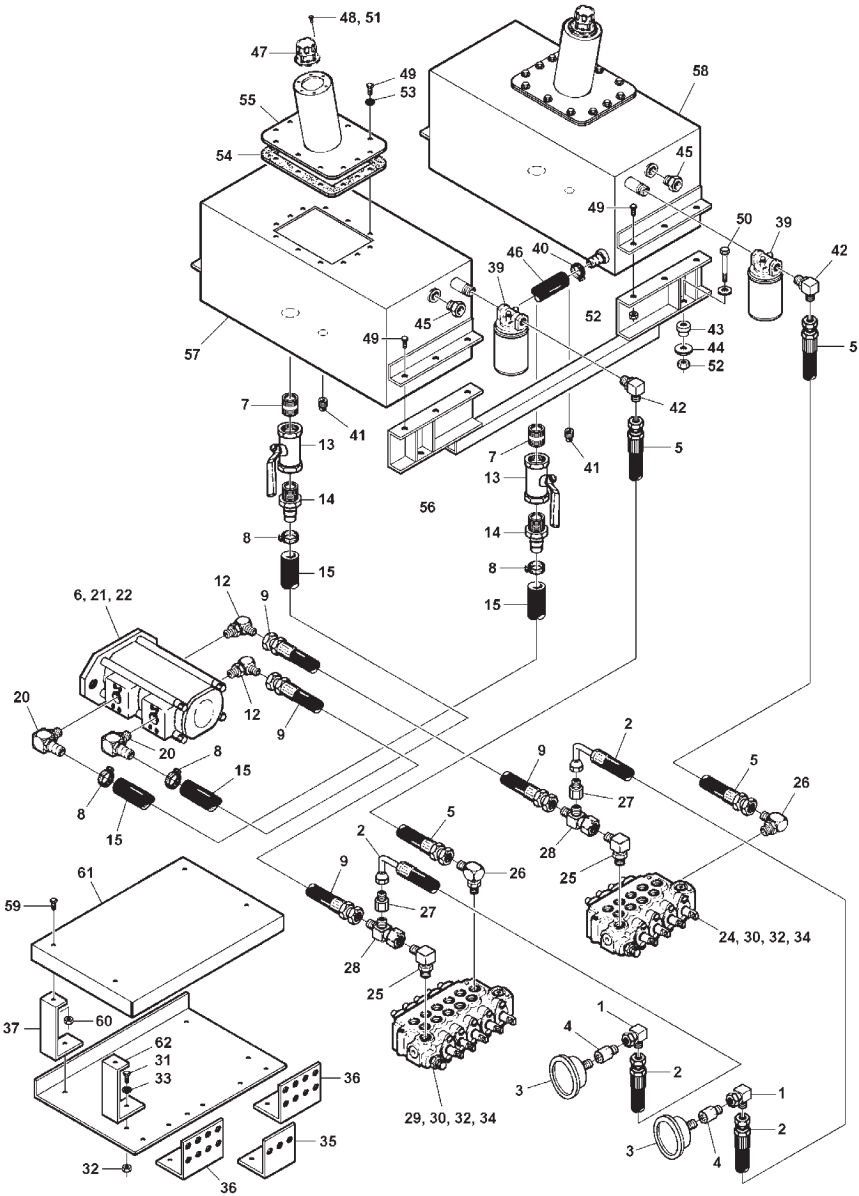
Section VI - PARTS (cont'd)

RECOVERY BOOM HYDRAULICS

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	2	0300041	CONNECTOR, 8MJ-8MB
2	2	0300044	CONNECTOR, 6MJ-8MB
3	4	0300113	GREASE FITTING
4	2	0300365	CLAMP, CHECK VALVE RETAINING, 7"
5	2	0300657	HOSE ASSEMBLY, 46"
6	4	0300659	HOSE ASSEMBLY, 45"
7	2	0301529	HOSE ASSEMBLY, 58"
8	4	0301547	ELBOW, 8MJ-12MB90
9	2	0301731	HOLDING VALVE
10	2	0302051	ELBOW, 8MJ-6MP90
11	5	0302062	WIRE TIE, 21" (NOT SHOWN)
12	2	0302276	ELBOW, 8MJ-6MB90
13	1	0306743	CYLINDER, EXTEND
14	2	0302568	TUBING, HYDRAULIC
15	4	0302569	WIRE TIE, 29-3/4" (NOT SHOWN)
16	2	0302575	BULKHEAD RUN TEE W/NUT
17	2	0302576	BULKHEAD UNION
18	1	0302584	HOSE ASSEMBLY, 50"
19	2	0302796	BRANCH TEE, 8MJ-8MJ-8FJX
20	2	0302797	ELBOW, 8MJ-4MP90
21	2	0302930	CONNECTOR, 8MJ-6MP
22	1	0303093	CONTROL VALVE, VDP11DDDC110
23	1	0303343	HOSE ASSEMBLY, 45"
24	1	0303354	HOSE ASSEMBLY, 33"
25	1	0303355	HOSE ASSEMBLY, 33"
26	2	0306747	CYLINDER, BOOM LIFT
27	6	0400064	SCREW, 1/4"-20 X 2-1/4" RD HD SLOTTED
28	6	0400366	NUT, 1/4"-20 HEX
29	6	0400408	WASHER, 1/4" FLAT
30	6	0400452	LOCKWASHER, 1/4" HELICAL
31	2	0703001	BRACKET, CHECK VALVE MOUNTING

Section VI - PARTS (cont'd)

PUMP, VALVE & FILTER HYDRAULICS



Section VI - PARTS (cont'd)

PUMP, VALVE & FILTER HYDRAULICS

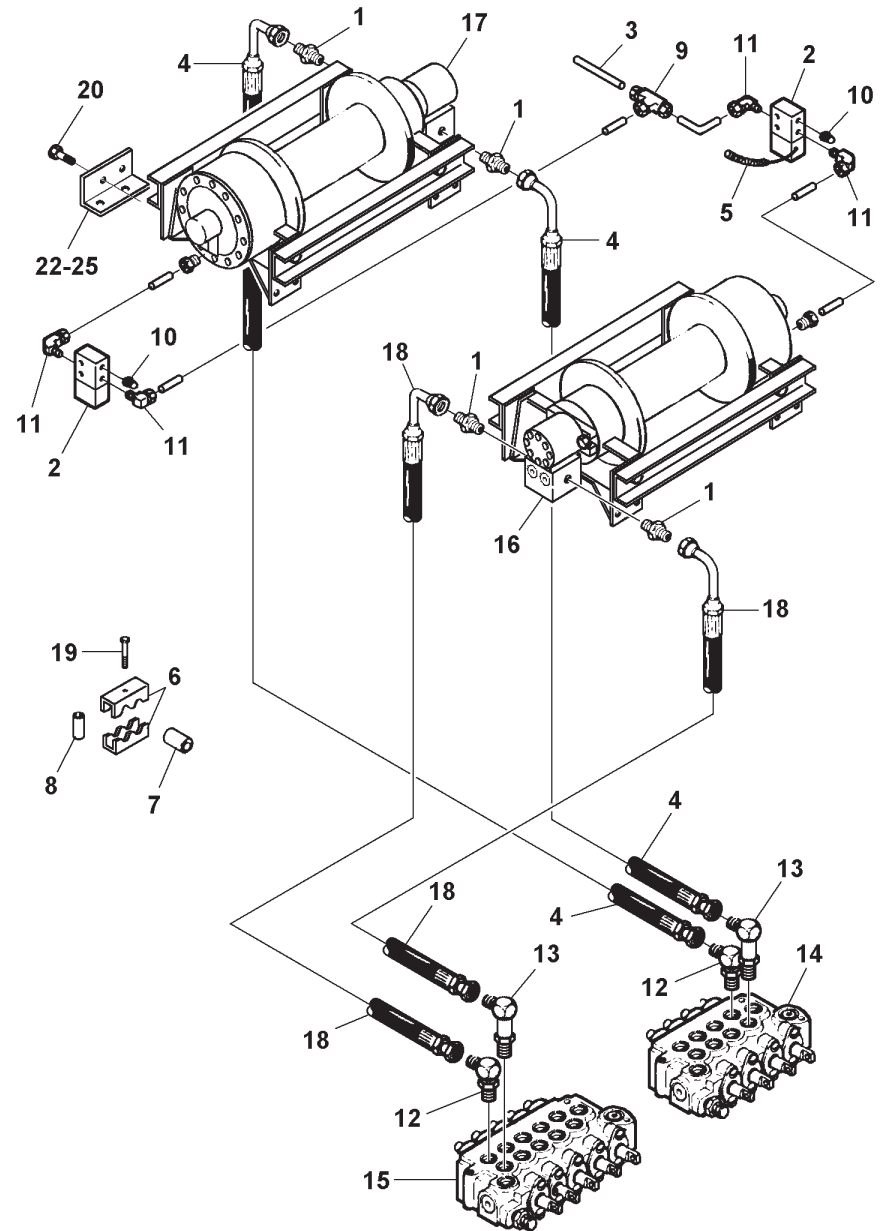
REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	2	0301696	ELBOW, 6MJ-6FJX90
2	2	0301965	HOSE ASSEMBLY, 131"
3	2	0302205	GAUGE, FLUSH MOUNT 6000 PSI
4	2	0302577	CONNECTOR, 6MJ-4FP
5	2	0303392	HOSE ASSEMBLY 73"
6	1	0303867	PUMP, BI-ROTATIONAL
--	--	0903017	PUMP KIT
7	2	0300348	PIPE NIPPLE, 1-1/2" X 5"
8	8	0300364	CLAMP HOSE, 1" - 2-1/4"
9	2	0300660	HOSE ASSEMBLY, 120"
10	2	0300865	CONNECTOR, 8MJ-8MJ (NOT SHOWN)
11	2	0301529	HOSE ASSEMBLY 58" (NOT SHOWN)
12	2	0301547	ELBOW, 8MJ-12MB90
13	2	0302088	BALL VALVE, BRONZE
14	2	0302698	HOSE BARB, 20HOSE-20MP
15	24 FT.	0302756	SUCTION HOSE, 1-1/4"
16	2	0302906	ADAPTER, 16MB-12FB (NOT SHOWN)
17	2	0302983	STREET ELBOW, 45° 1-1/2" (NOT SHOWN)
18	12	0303290	CLAMP, 2-1/2" INSULATED (NOT SHOWN)
19	2	0303463	BUSHING, 24MP-20FP (NOT SHOWN)
20	2	0306539	HOSE BARB, 20HOSE-16MB90
21	4	0400181	SCREW, 1/2"-13 X 1-1/2" HEX HD CAP
22	4	0400491	LOCKWASHER, 1/2" HELICAL
23	6	0711438	HOSE BRACKET (NOT SHOWN)
--	--	0903535	VALVE PAN ASSEMBLY
24	1	0303093	CONTROL VALVE, VDP11DDDC110
25	2	0300052	ELBOW, 8MJ-10MB90
26	2	0301545	ELBOW, 12MJ-12MB90
27	2	0301995	STRAIGHT ADAPTER, 8FJ-6MJ
28	2	0302052	RUN TEE, 8MJ-8FJX-8MJ
29	1	0303094	CONTROL VALVE, VDP11CDDDC53
30	6	0400135	SCREW, 3/8"-16 X 4-1/2" HEX HD CAP
31	4	0400157	SCREW, 3/8"-16 X 1-3/4" HEX HD CAP

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
32	10	0400392	NUT, 3/8"-16 NYLOK HEX
33	4	0400480	WASHER, 3/8" FLAT
34	6	0704045	SPACER, CONTROL VALVE
35	1	0711250	PLATE, CONTROL BULKHEAD
36	2	0711251	PLATE, CONTROL BULKHEAD
37	1	0711561	PLATE VALVE MOUNTING
38	1	0711696	PLATE VALVE MOUNTING
--	--	0904199	RESERVOIR ASSEMBLY
39	2	0300136	RETURN LINE FILTER ASSEMBLY
40	2	0300364	CLAMP HOSE, 1" - 2-1/4"
41	2	0300446	PIPE PLUG, 3/4" NPT MALE
42	2	0300615	ELL, 12MJ-12MP90
43	4	0302227	CENTER BONDED MOUNT
44	4	0302228	SPECIAL WASHER
45	2	0302570	SIGHT GAUGE
46	2.25 FT.	0302756	SUCTION HOSE, 1-1/4"
47	2	0305006	FILLER CAP
48	12	0400036	SCREW, #10-32 X 1" RD HD MACH
49	32	0400122	SCREW, 3/8"-16 X 1-1/4" HEX HD CAP
50	4	0400150	SCREW, 3/8"-16 X 2-1/2" HEX HD CAP
51	12	0400357	NUT, #10-32 NYLOK HEX
52	12	0400392	NUT, 3/8"-16 NYLOK HEX
53	24	0400482	LOCKWASHER, 3/8"HELICAL
54	2	0706114	GASKET, CLEAN OUT & FILLER COVER
55	2	0802747	FILLER PIPE WELDMENT
56	2	0803193	RESERVOIR SUPPORT WELDMENT
57	1	0803662	RESERVOIR WELDMENT, LEFT
58	1	0804109	RESERVOIR WELDMENT, RIGHT
--	--	0903696	COVER KIT
59	4	0400121	SCREW, 3/8"-16 X 3/4" HEX HD CAP
60	4	0400392	NUT, 3/8"-16 NYLOK HEX
61	1	0711322	COVER, VALVE
62	4	0711575	SUPPORT, COVER

Section VI - PARTS (cont'd)

PLANETARY WINCH

HYDRAULICS & AIR FREE SPOOL



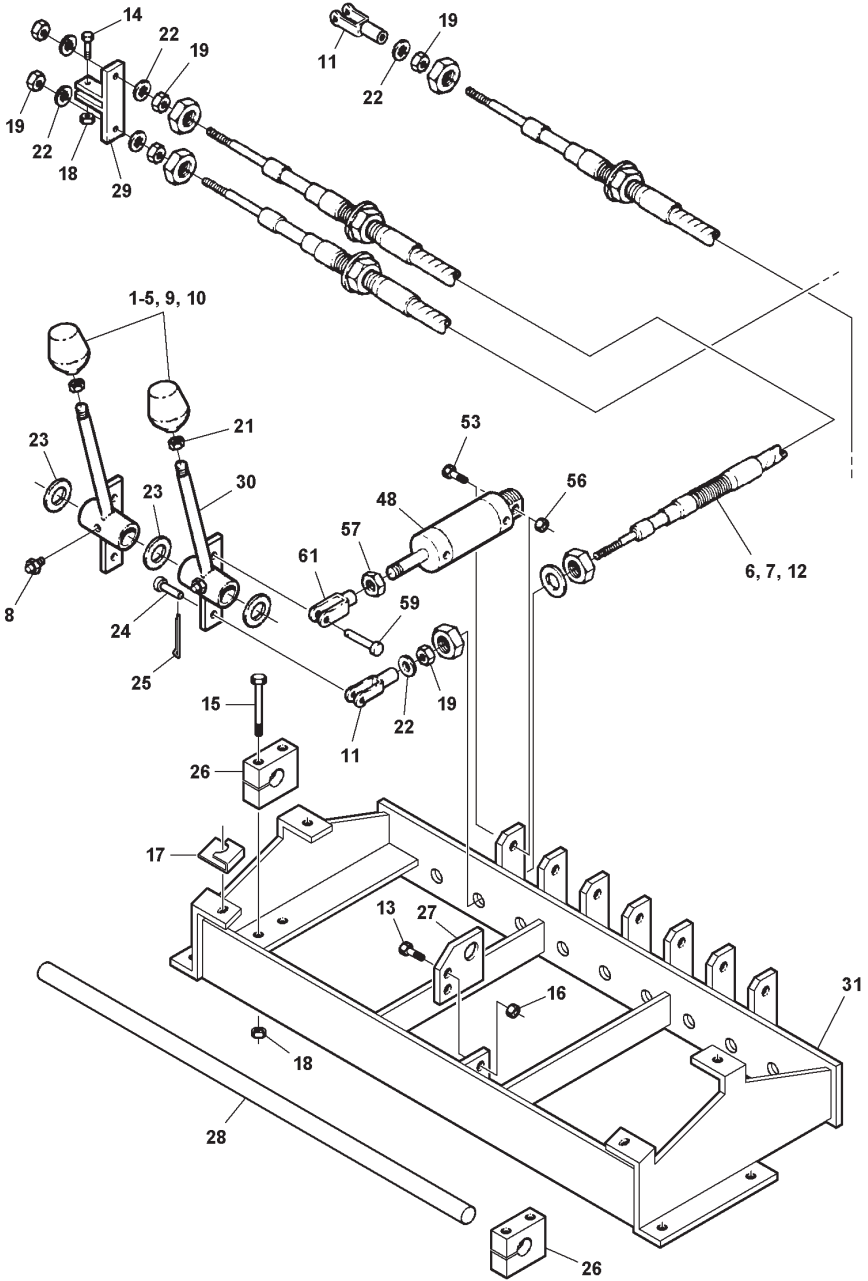
Section VI - PARTS (cont'd)

PLANETARY WINCH

HYDRAULICS & AIR FREE SPOOL

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	4	0300041	CONNECTOR, 8MJ-8MB
2	2	0300324	SOLENOID VALVE, AIR CONTROL
3	18 FT.	0301577	AIR HOSE, 1/4" O.D.
4	2	0301893	HOSE ASSEMBLY, 84"
5	7 FT.	0302431	CONVOLUTED LOOM, 3/8"
6	4	0302546	CLAMPING UNIT
7	4	0302550	SPLIT BUSHING, 3/4"
8	2	0302551	STACKING NUT, SKT HD
9	1	0302607	TEE UNION, 4TB-4TB-4TB
10	2	0302677	BREATHER VENT, 1/8" MP
11	4	0302678	ELBOW, 4TB-2MP90
12	2	0302827	CONNECTOR, 10MJ-10MB
13	2	0302828	CONNECTOR, 10MJ-10MBL
14	1	0303093	CONTROL VALVE, VDP11DDDC110
15	1	0303094	CONTROL VALVE, VDP11CDDDC53
16	1	0303095	WINCH, LEFT
17	1	0303096	WINCH, RIGHT
18	2	0303391	HOSE ASSEMBLY, 110"
19	2	0400118	SCREW, 5/16"-18 x 3/4" HEX HD CAP
20	16	0400264	SCREW, 5/8"-11 x 2-1/4" HEX HD CAP
21	16	0400421	NUT, 5/8"-11 HEX NYLOK
22	2	0710086	ANGLE - WINCH MOUNTING
23	2	0710087	ANGLE - WINCH MOUNTING
24	2	0710088	ANGLE - WINCH MOUNTING
25	2	0710089	ANGLE - WINCH MOUNTING

Section VI - PARTS (cont'd) LEFT CONTROL ASSEMBLY



Section VI - PARTS (cont'd)

LEFT CONTROL ASSEMBLY

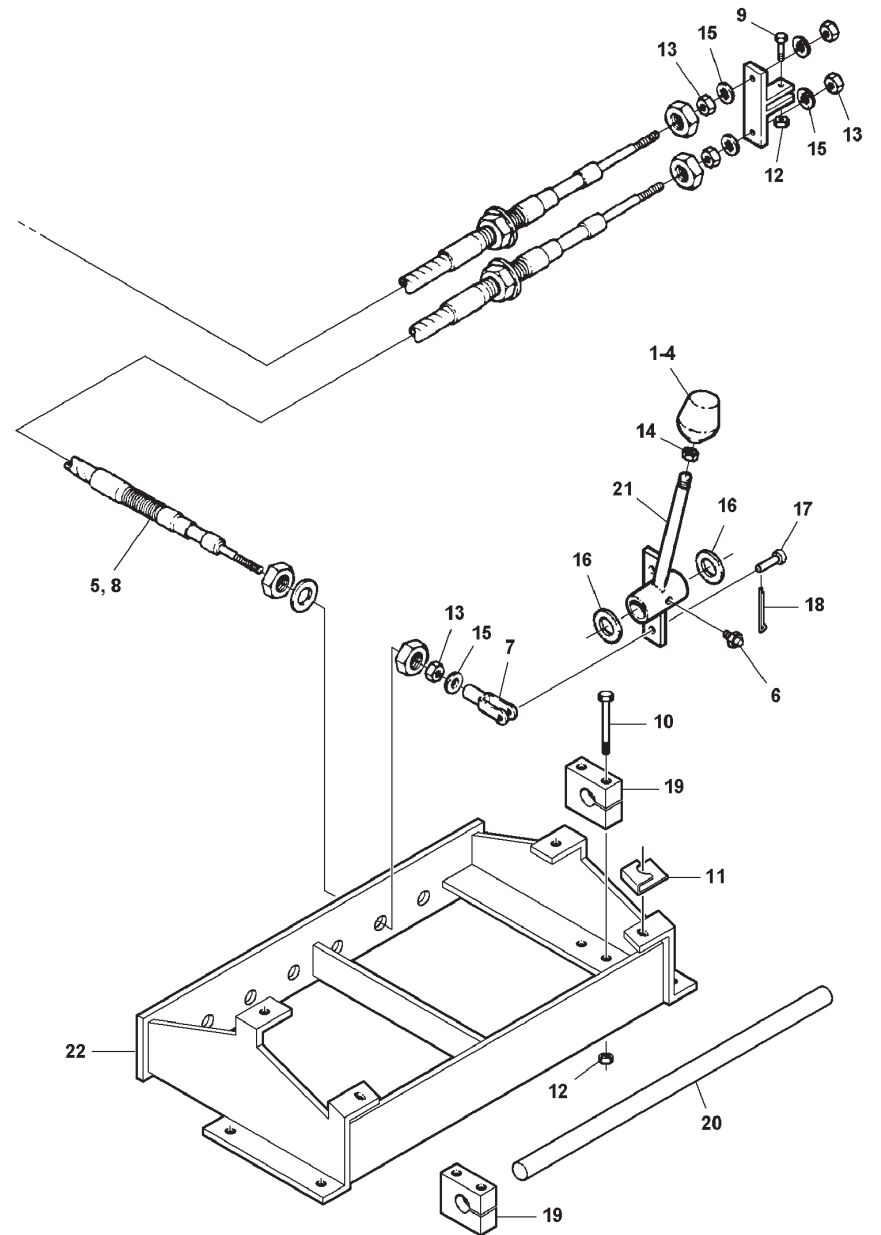
REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0300341	CONTROL KNOB, W/L (UP/DOWN)
2	2	0300834	CONTROL KNOB, (IN/OUT)
3	1	0300835	CONTROL KNOB, BOOM (UP/DOWN)
4	2	0300836	CONTROL KNOB, JACK (UP/DOWN)
5	1	0300837	CONTROL KNOB, BOOM (IN/OUT)
6	1	0301884	CONTROL CABLE, 96"
7	4	0302457	CONTROL CABLE, 104"
8	9	0302726	GREASE FITTING, 1/4"-28 X 45°
9	1	0302856	CONTROL KNOB, TILT (UP/DOWN)
10	1	0302917	CONTROL KNOB, W/L EXTEND (IN/OUT)
11	12	0303008	ADJUSTABLE CLEVIS
12	4	0303427	CONTROL CABLE, 114"
13	2	0400066	SCREW, 1/4"-20 X 3/4" HEX HD CAP
14	9	0400103	SCREW, 5/16"-18 X 1-1/4" HEX HD CAP
15	4	0400107	SCREW, 5/16"-18 X 2-1/2" HEX HD CAP
16	2	0400367	NUT, 1/4"-20 HEX NYLOK
17	4	0400379	NUT, 5/16"-18 "J" TINNERMAN
18	9	0400382	NUT, 5/16"-18 HEX NYLOK
19	36	0400383	NUT, 5/16"-24 HEX
20	6	0400392	NUT, 3/8"-16 HEX NYLOK
21	9	0400393	NUT, 3/8"-16 HEX JAM
22	24	0400466	WASHER, 5/16" INTERNAL TOOTH
23	10	0400512	WASHER, 3/4" FLAT (SPECIAL)
24	9	0400532	CLEVIS PIN, 5/16" X 1"
25	9	0400540	COTTER PIN, 3/32" X 1"
26	2	0711235	CLAMP, SHAFT CONTROL BOX
27	1	0711245	PLATE, SHAFT SUPPORT
28	1	0711246	PIN, CONTROL BOX
29	6	0801054	CONTROL CABLE CONNECTOR
30	9	0803294	CONTROL HANDLE WELDMENT
31	1	0804060	LEFT CONTROL FRAME WELDMENT

REMOTE CONTROL ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
--	--	--	REMOTE CONTROL ASSEMBLY
32	10 / 16	0300166	WIRE CONNECTOR, SPADE
33	1	0301574	ELBOW, 4TB-4MP90
34	15 / 25	0301577	AIR HOSE, 1/4" O.D. (FT.)
35	2 / 4	0301610	CONNECTOR, 4TB-4MP
36	2 / 3	0301618	BRASS PLUG, 4MP
37	2	0302048	CABLE SEALING GRIP
38	2	0302340	HEX PIPE BUSHING
39	1	0302431	CONVOLUTED LOOM, 3/8" X 8"
40	35 / 65	0302434	CABLE TIE, 4" 18 LB.
41	1 / 2	0302677	BREATHER VENT, 2MP
42	16 / 28	0302678	ELBOW, 4TB-2MP
43	1	0302844	AIR SOLENOID VALVE (8)
--	1	0303479	AIR SOLENOID VALVE (14)
44	1	0303226	CIRCUIT BREAKER, HI-AMP WATERPROOF
45	1 / 2	0303235	TERMINAL BLOCK
--	1	0303250	POWER PAL, 15 POSITION
46	1	0303251	POWER PAL, 8 POSITION
47	8 / 20	0303322	ELECTRICAL CABLE, 16/10 SO (FT.)
48	4 / 7	0303335	AIR CYLINDER
49	1	0303363	AIR FILTER/REGULATOR
50	1	0303364	AIR LUBRICATOR
51	1	0303365	MOUNTING BRACKET
52	2 / 4	0400025	SCREW, #8-32 X 3/4" RD HD SLOTTED
53	4 / 7	0400057	SCREW, 1/4"-20 X 1-1/4" HEX HD CAP
54	2 / 4	0400078	SCREW, 1/4"-20 X 2" HEX HD CAP
55	2 / 4	0400351	HEX NUT & STAR WASHER, #8-32
56	6 / 11	0400367	NUT, 1/4"-20 HEX NYLOK
57	4 / 7	0400401	NUT, 7/16"-20 HEX JAM
58	2 / 4	0400451	WASHER, 1/4" FLAT
59	4 / 7	0400527	CLEVIS PIN, 5/16" X 5/8" COTTERLESS
60	1	0711277	SUPPORT, SOLENOID VALVE (8)
--	1	0711836	SUPPORT, SOLENOID VALVE (14)
61	4 / 7	0803181	CLEVIS WELDMENT
62	1	HA0132	GAUGE, 0-160 PSI

Section VI - PARTS (cont'd)

RIGHT CONTROL ASSEMBLY



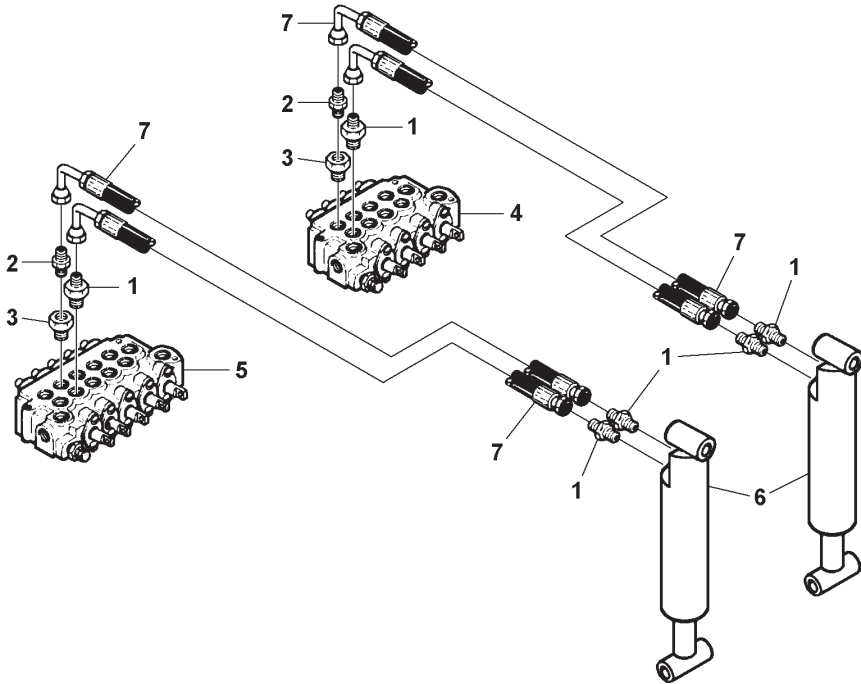
Section VI - PARTS (cont'd)

RIGHT CONTROL ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	2	0300834	CONTROL KNOB, (IN/OUT)
2	1	0300835	CONTROL KNOB, BOOM (UP/DOWN)
3	2	0300836	CONTROL KNOB, JACK (UP/DOWN)
4	1	0300837	CONTROL KNOB, BOOM (IN/OUT)
5	3	0302457	CONTROL CABLE, 104"
6	2	0302726	GREASE FITTING, 1/4"-28 X 45°
7	6	0303008	ADJUSTABLE CLEVIS
8	3	0303427	CONTROL CABLE, 114"
9	6	0400103	SCREW, 5/16"-18 X 1-1/4" HEX HD CAP
10	4	0400107	SCREW, 5/16"-18 X 2-1/2" HEX HD CAP
11	4	0400379	NUT, 5/16"-18 "J" TINNEMAN
12	10	0400382	NUT, 5/16"-18 HEX NYLOK
13	18	0400383	NUT, 5/16"-24 HEX
14	6	0400393	NUT, 3/8"-16 HEX JAM
15	18	0400466	WASHER, 5/16" INTERNAL TOOTH
16	7	0400512	WASHER, 3/4" FLAT (SPECIAL)
17	6	0400532	CLEVIS PIN, 5/16" X 1"
18	6	0400540	COTTER PIN, 3/32" X 1"
19	2	0711235	CLAMP, SHAFT CONTROL BOX
20	1	0711247	PIN, CONTROL BOX
21	6	0803294	CONTROL HANDLE WELDMENT
22	1	0804061	RIGHT CONTROL FRAME WELDMENT

Section VI - PARTS (cont'd)

REAR SPADE HYDRAULICS



REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	6	0300044	CONNECTOR, 6MJ-8MB
2	2	0301522	CONNECTOR, 6MJ-6MB
3	2	0303017	CONNECTOR, 8MB-6FB
4	REF.	0303093	CONTROL VALVE, VDP11DDDC110
5	REF.	0303094	CONTROL VALVE, VDP11CDDDC53
6	2	0303691	HYDRAULIC CYLINDER
7	4	0303748	HOSE ASSEMBLY, 136"

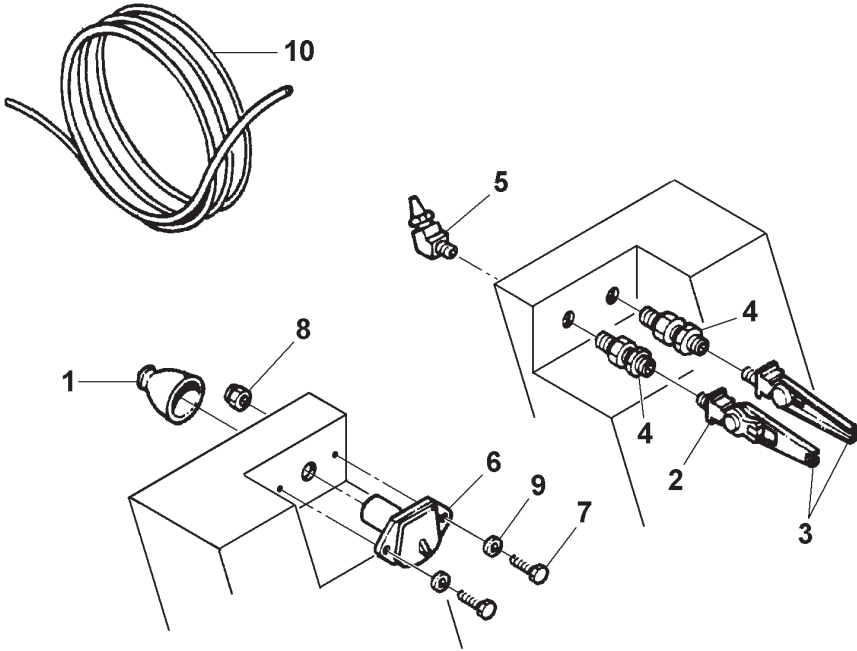
Section VI - PARTS (cont'd)

HYDRAULIC CYLINDERS

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	2	0306747 --	BOOM LIFT CYLINDER (COMPLETE) SEAL KIT, BOOM LIFT CYLINDER
2	1	0306743 --	BOOM EXTEND CYLINDER (COMPLETE) SEAL KIT, BOOM EXTEND CYLINDER
3	2	0306745 --	UNDERLIFT TILT CYLINDER (COMPLETE) SEAL KIT, UNDERLIFT TILT CYLINDER
4	1	0306744 --	UNDERLIFT EXTEND CYLINDER (COMPLETE) SEAL KIT, UNDERIFT EXTEND CYLINDER
5	1	0306746 --	UNDERLIFT FOLD CYLINDER (COMPLETE) SEAL KIT, UNDERLIFT FOLD CYLINDER
6	2	0303691 --	REAR SPADE CYLINDER (COMPLETE) SEAL KIT, REAR SPADE CYLINDER

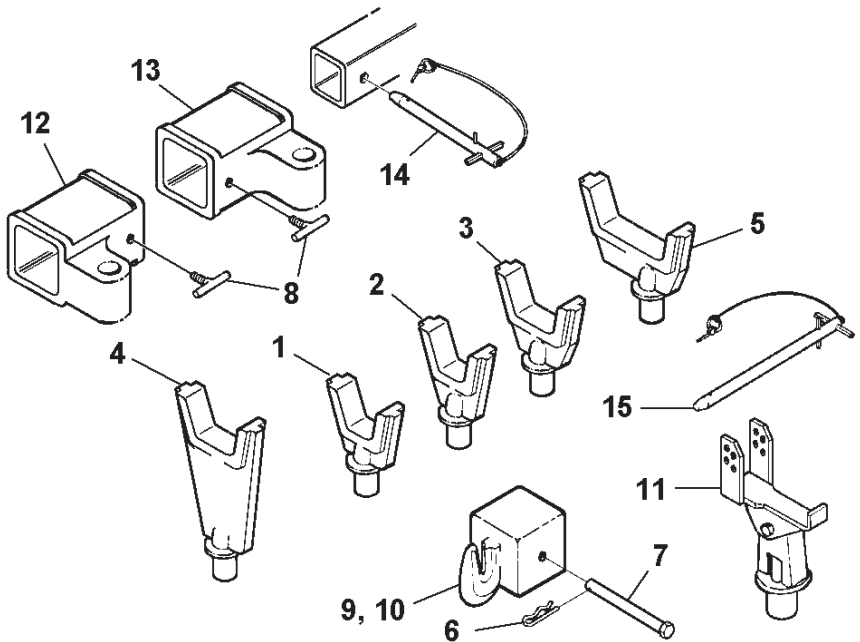
Section VI - PARTS (cont'd)

GLAD HAND KIT



REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0301909	RECEPTACLE BOOT
2	2	0301944	GLAD HAND COUPLING
3	2	0301945	GLAD HAND PLUG
4	2	0301946	BULKHEAD CONNECTOR
5	2	0301947	ADAPTER, 1/4" NPM X 3/8" SYN. HOSE
6	1	0301948	HD 7-WAY TRAILER CONNECTOR
7	2	0400070	SCREW, 1/4"-20 X 1" HEX HD CAP
8	2	0400367	NUT, 1/4"-20 HEX NYLOK
9	2	0400451	WASHER, 1/4" FLAT
10	2	0703795	AIR HOSE, 3/8" X 48" SYN FLEX

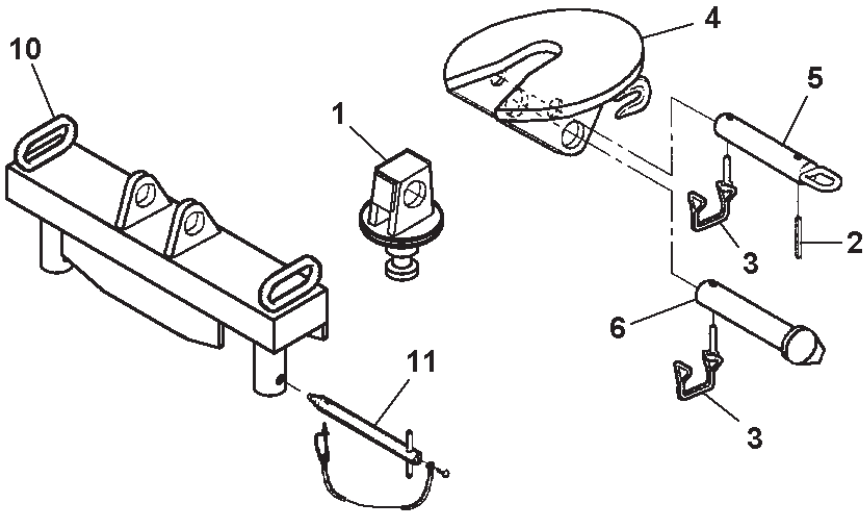
Section VI - PARTS (cont'd) LIFT ADAPTERS



REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	2	0200018	FORK, SHORT (3" OPENING)
2	2	0200020	FORK, MEDIUM (3" OPENING)
3	2	0200021	FORK, MEDIUM (4-1/2" OPENING)
4	2	0200023	FORK, LONG (4-1/2" OPENING)
5	2	0200024	FORK, OFFSET REAR AXLE
6	2	0400585	HAIR PIN COTTER, 1-1/4"
7	2	0711002	BOLT, MODIFIED 5/8"-11 X 6" WITH HOLE
8	2	0800590	TEE HANDLE, FORK ADAPTER
9	1	0801186	CHAIN HOOK ADAPTER, RT
10	1	0801187	CHAIN HOOK ADAPTER, LT
11	2	0802810	PIVOT PIN LIFT BRACKET
12	1	0803591	FORK ADAPTER, LT
13	1	0803592	FORK ADAPTER, RT
14	2	0900900	RETAINER PIN ASSEMBLY
15	2	0902321	RETAINING PIN, SPRING LIFT BRACKET

Section VI - PARTS (cont'd)

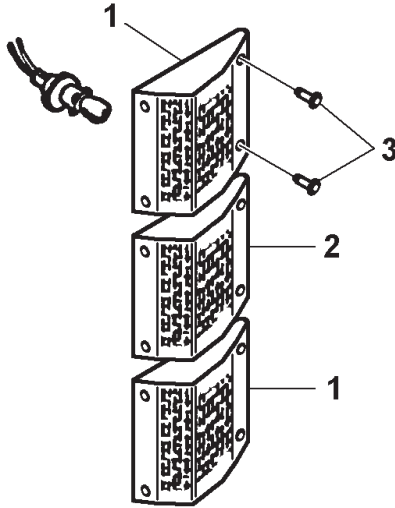
KING PIN ADAPTER



REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0803605	KING PIN ADAPTER WELDMENT
	--	0902782	FIFTH WHEEL ADAPTER (COMPLETE)
2	1	0400555	ROLL PIN, 3/8" X 1-1/2"
3	2	HD1259	SNAPPER PIN
4	1	VA0660	FIFTH WHEEL PIVOT PLATE WELDMENT
5	1	VA0661	PULL PIN WELDMENT
6	1	VA0662	PIVOT PIN WELDMENT
	--	124002211	PINTLE HOOK KIT (COMPLETE)
7	1	0302198	PINTLE HOOK (NOT SHOWN)
8	4	0400176	SCREW, 1/2"-13 X 1" HEX HD CAP
9	4	0400491	LOCKWASHER, 1/2" HELICAL
10	1	0803604	5TH WHEEL, KING PIN ADAPTER & PINTLE HOOK BRACKET WELDMENT
11	2	0902378	RETAINING PIN ASSEMBLY

Section VI - PARTS (cont'd)

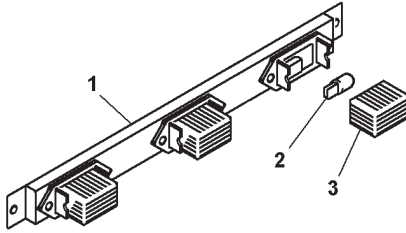
LIGHT KIT



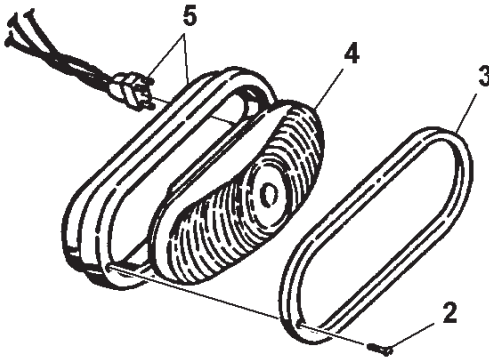
REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	4	0302542	LIGHT, STOP & TURN (COMPLETE)
2	2	0302543	LIGHT, BACK-UP (COMPLETE)
3	24	0400025	SCREW, #8-32 x 3/4" RD HD SLOTTED

Section VI - PARTS (cont'd)

LIGHT KIT



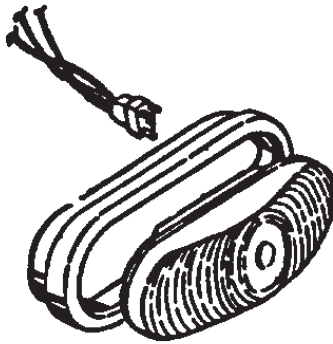
REF. NO.	PART NUMBER	DESCRIPTION
1	0300442	3-LIGHT BAR ASSEMBLY (COMPLETE)
2	0300507	BULB, MARKER LIGHT
3	0200511	LENS, 3-LIGHT BAR



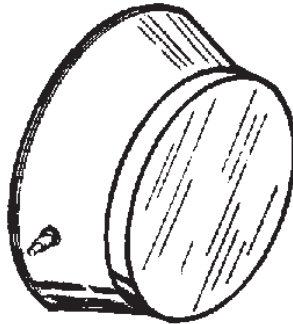
REF. NO.	PART NUMBER	DESCRIPTION
1	0301390	LIGHT, TURN (COMPLETE)
2	0304123	BEZEL MOUNTING SCREW
3	0304124	CHROME BEZEL
4	0304125	LENS & BULB ASSEMBLY
5	0304126	GROMMET & PLUG KIT

Section VI - PARTS (cont'd)

LIGHT KIT



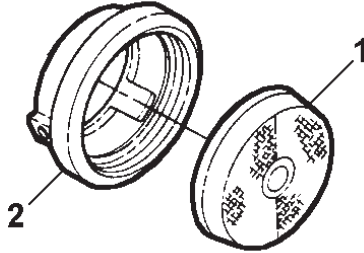
REF. NO.	PART NUMBER	DESCRIPTION
1	0302201	LIGHT, FLOOD (COMPLETE)



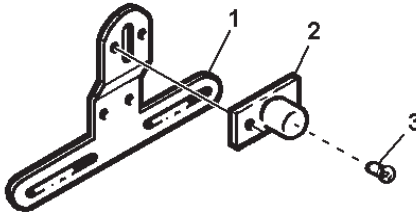
REF. NO.	PART NUMBER	DESCRIPTION
1	0302544	LIGHT, DOME (COMPLETE)

Section VI - PARTS (cont'd)

LIGHT KIT



REF. NO.	PART NUMBER	DESCRIPTION
1	0301740	GROMMET & PLUG, MARKER LIGHT
2	0301741	SEALED MARKER LIGHT, RED
3	0301742	SEALED MARKER LIGHT, AMBER



REF. NO.	PART NUMBER	DESCRIPTION
1	0300076	BRACKET, LICENSE PLATE
2	0300273	LICENSE PLATE ILLUMINATOR (COMPLETE)
3	0300512	BULB, LICENSE PLATE ILLUMINATOR

Section VI - PARTS (cont'd)

LIGHT KIT



REF. NO.	PART NUMBER	DESCRIPTION
1	0302611	LIGHT, AMBER MARKER (COMPLETE)

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