

CHALLENGER®



OWNER'S MANUAL **ALUMINUM & STEEL** **CAR CARRIERS** **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. 0500801
01 / 02
PRICE \$25.00

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

This manual has been prepared for the owner and operators of CHALLENGER equipment.

Its purpose, aside from operating and maintenance instructions, is to promote safety through the use of accepted operating procedures.

Read all instructions thoroughly before operating the carrier.

Also, contained in this manual is a parts section for your CHALLENGER equipment. Use of other than factory or factory-authorized parts will render the warranty void.

LIMITED WARRANTY

CHALLENGER warrants the original purchaser that each new CHALLENGER Carrier will be free from defects in material and workmanship for a period of one (1) year from the date of purchase. The purchaser must promptly notify CHALLENGER in writing of any failure in material or workmanship. In no event shall such notification be received by CHALLENGER later than 13 months from date of delivery.

The obligation under this warranty, statutory or otherwise, is limited to the repair or replacement at our factory or at a point designated by us, of such part or parts as shall appear to us upon inspection to be defective in material or workmanship. New or remanufactured parts will be used for any replacement.

This warranty does not obligate CHALLENGER to bear the cost of labor or transportation charges in connection with the replacement or repair 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 us.

CHALLENGER shall in no event be liable for any incidental or consequential damages or contingent liabilities arising out of the failure of any parts or products to operate properly. NO IMPLIED, EXPRESS, OR STATUTORY WARRANTY OTHER THAN STATED HEREIN IS MADE OR AUTHORIZED TO BE MADE BY OR FOR US, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

CHALLENGER makes no warranty, express or implied, as to finished products manufactured or supplied by another manufacturer or supplier by CHALLENGER to purchaser, including, but not limited to, any vehicle to which a CHALLENGER Carrier may be affixed or accessories or wire rope (cable), and 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 purchaser to rely on such warranties as are extended by such manufacturers or suppliers.

CHALLENGER, whose policy is one of continuous improvement, reserves the right to improve its product through changes in design or materials as it may deem desirable without being obligated to incorporate such changes in products of prior manufacture.

It is expressly understood that there is no implied warranty that CHALLENGER Carriers shall be fit for the purpose of lifting or moving persons or other improper use. This warranty is not transferable.

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Ooltewah, Tennessee 37363

Telephone (423) 238-4171

SERIAL NUMBER

Section VI - PARTS

This Section is provided by the manufacturer for the purpose of ordering any component part of the Car Carrier 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 Car Carrier 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.

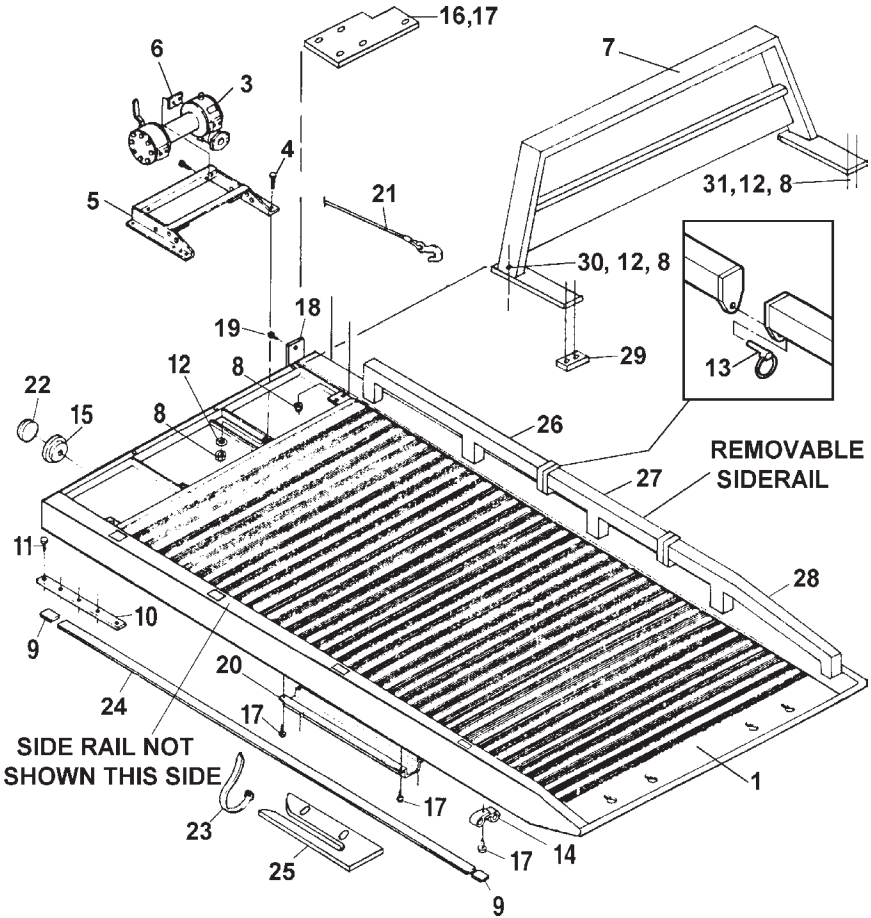
- 1. Manual Number & Date of Publication**
- 2. Manual Page Number**
- 3. Page Title**
- 4. Reference Number of Part Desired**
- 5. Part Number**
- 6. Part Description**
- 7. Quantity of Part Desired**

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 Car Carrier 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)

ALUMINUM BED ASSEMBLY



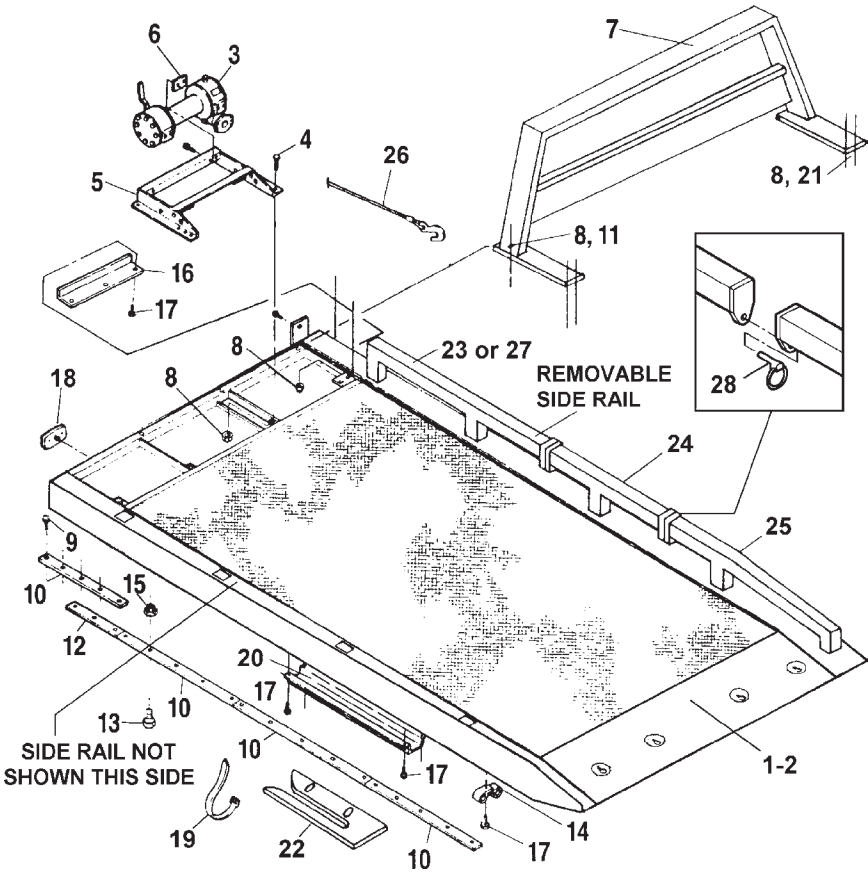
Section VI - PARTS (cont'd)

ALUMINUM BED ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0805033	CAR CARRIER 19' ALUMINUM
3	1	0300250	WINCH ASSEMBLY
4	4	0400181	SCREW, 1/2"-13 X 1-1/2" HEX HD CAP
5	1	0801482	WINCH MOUNTING BRACKET
6	2	0701172	SPACER WINCH BRACKET
7	1	0805000-32	CAB PROTECTOR - 32"
		0805000-34	CAB PROTECTOR - 34"
		0805020-36	CAB PROTECTOR - 36"
		0805020-45	CAB PROTECTOR - 45"
		0805020-48	CAB PROTECTOR - 48"
		0805020-54	CAB PROTECTOR - 54"
8	10	0400408	NUT, 1/2"-13 NYLON LOCK
9	4	0702517	BEARING PAD STOP BAR
10	2	0302027	BEARING PAD
11	8	0400088	SCREW, 1/4"-20 X 5/8" BRASS
12	16	0400492	WASHER, 1/2" FLAT
13	4	0301861	PIN, LYNCH
14	2	0300134	HOSE CLAMP
15	2	0301740	GROMMET, LIGHT ASSEMBLY MOUNTING
16	1	0709868	COVER PLATE (BOTTOM)
17	15	0400077	SCREW, SELF-DRILLING
18	2	0306122	CAP, END
19	6	0400044	SCREW, DRIVE
20	1	0805096	TRAY, HOSE (SPECIFY BODY LENGTH)
21	1	0301669	CABLE ASSEMBLY, WINCH
22	2	0301742	LIGHT ASSEMBLY, AMBER
23	8	0300132	WIRE TIE
24	2	0302180	BEARING PAD (SPECIFY BODY LENGTH)
25	1	0708913	ANTI TILT PLATE
26	2	0802660	FRONT REMOVABLE SIDE RAIL (19' CARRIER)
27	2	0802661	CENTER REMOVABLE SIDE RAIL
28	2	0802662	REAR REMOVABLE SIDE RAIL
29	2	0709870	CAB PROTECTOR REINFORCEMENT PLATE
30	2	0400181	SCREW, 1/2"-13 X 1-1/2" HEX HD CAP
31	4	0400237	SCREW, 1/2"-13 X 4" HEX HD CAP

Section VI - PARTS (cont'd)

STEEL BED ASSEMBLY



Section VI - PARTS (cont'd)

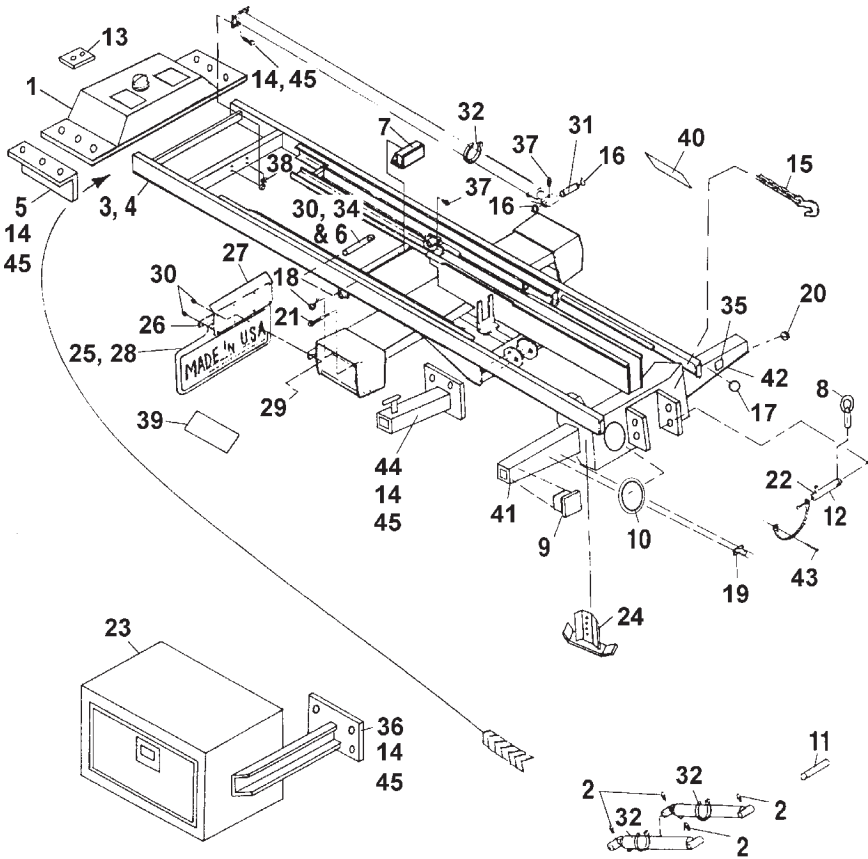
STEEL BED ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0805047	CAR CARRIER 19' STEEL
2	1	0805048	CAR CARRIER 21' STEEL
3	1	030250	WINCH ASSEMBLY
4	4	0400181	SCREW, 1/2"-13 X 1-1/2" HEX HD CAP
5	1	0801482	WINCH MOUNTING BRACKET
6	2	0701172	SPACER, WINCH BRACKET
7	1	0805000-32	CAB PROTECTOR - 32"
		0805000-34	CAB PROTECTOR - 34"
		0805000-36	CAB PROTECTOR - 36"
		0805000-45	CAB PROTECTOR - 45"
		0805000-48	CAB PROTECTOR - 48"
		0805000-54	CAB PROTECTOR - 54"
8	10	0400408	NUT, 1/2"-13 NYLON LOCK
9	8	0400088	SCREW, 1/4"-20 X 5/8" BRASS
10	8	0302027	BEARING PAD
11	2	0400177	SCREW, 1/2"-13 X 1-1/4" HEX HD CAP
12	2	0302200	BEARING PAD
13	38	0400089	SCREW, 1/4"-20 X 1" BRASS
14	2	0300134	HOSE CLAMP
15	38	0400361	NUT, 1/4"-20 NYLON LOCK
16	1	0705332	COVER PLATE, BOTTOM
17	13	0400077	SCREW, SELF-DRILLING
18	2	0301887	LIGHT ASSEMBLY, AMBER
19	8	0300132	WIRE TIE
20	1	0805096	TRAY, HOSE (SPECIFY BODY LENGTH)
21	4	0400211	SCREW, 1/2"-13 X 1-3/4" HEX HEAD CAP
22	1	0708913	ANTI TILT PLATE
23	2	0802660	FRONT REMOVABLE SIDE RAIL (19' CARRIER)
24	2	0802661	CENTER REMOVABLE SIDE RAIL
25	2	0802662	REAR REMOVABLE SIDE RAIL
26	1	0301669	CABLE ASSEMBLY, WINCH
27	2	0805039	FRONT REMOVABLE SIDE RAIL (21' CARRIER)
28	4	0301861	PIN, LYNCH

Section VI - PARTS (cont'd)

MOUNTING & TILT FRAME ASSEMBLY

(Continued on Page VI-8)



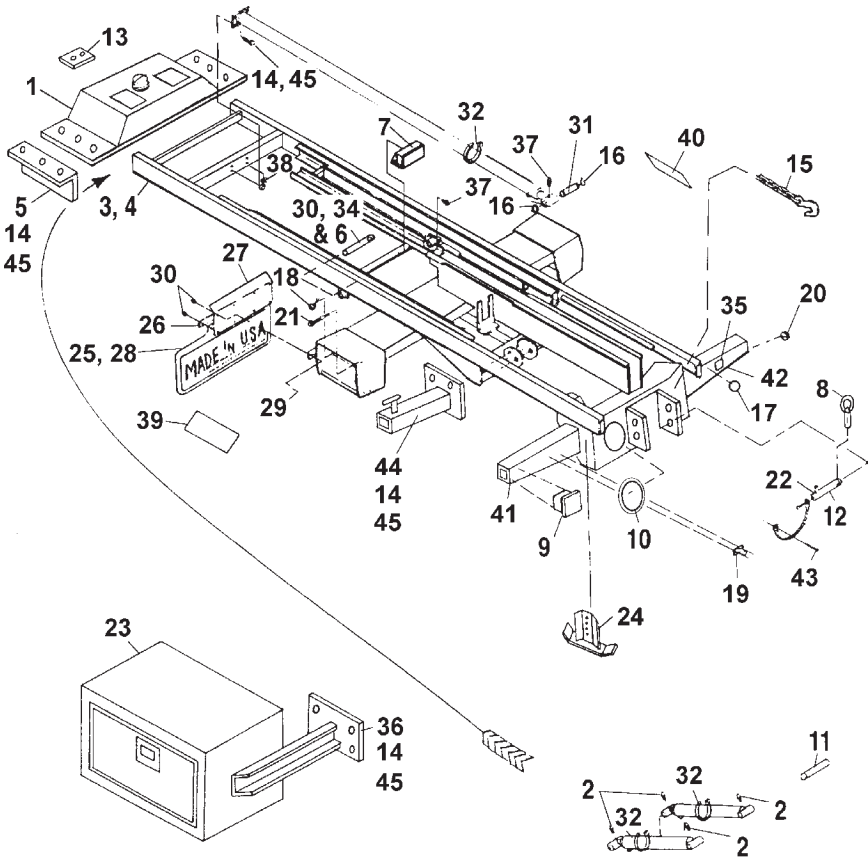
Section VI - PARTS (cont'd)
MOUNTING & TILT FRAME ASSEMBLY
(Continued on Page VI-9)

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0805093	RESERVOIR ASSEMBLY
2	4	0300113	GREASE FITTING
3	1	0805019	SUB-FRAME, INDEPENDENT WHEEL LIFT
4	1	0805035	SUB-FRAME, INDEPENDENT TOW BAR
5	2	0802668	OIL TANK MTG. BRACKETS (SPECIFY FRAME WIDTH)
6	1	0704792	PIN, PIVOT
7	1	0301800	JUNCTION BOX
8	1	0302474	PIN, LYNCH
9	2	0302986	TAIL LIGHT (CHASSIS TAKE OFF)
10	2	0304147	WORK LIGHT
11	4	0702434	SHAFT, LIFT CYLINDER
12	1	0709867	PIN, SAFETY
13	2	0709878	WEAR PAD
14	20	0400211	SCREW, 1/2"-13 X 1-3/4" HEX HD CAP
15	2	0301932	SAFETY CHAIN WITH HOOKS 10'
16	10	0301642	SNAP RING, 1-1/4"
17	1	0301671	SOCKET, TOW LIGHT
18	2	0300867	ILLUMINATOR, CONTROL PANEL
19	1	0300273	ILLUMINATOR, LICENSE PLATE
20	2	0302987	LIGHT, SEALED RED MARKER
21	1	0300686	THROTTLE ASSEMBLY (25 FT.)
22	1	0400564	PIN, ROLL

Section VI - PARTS (cont'd)

MOUNTING & TILT FRAME ASSEMBLY

(Continued from Page VI-6)



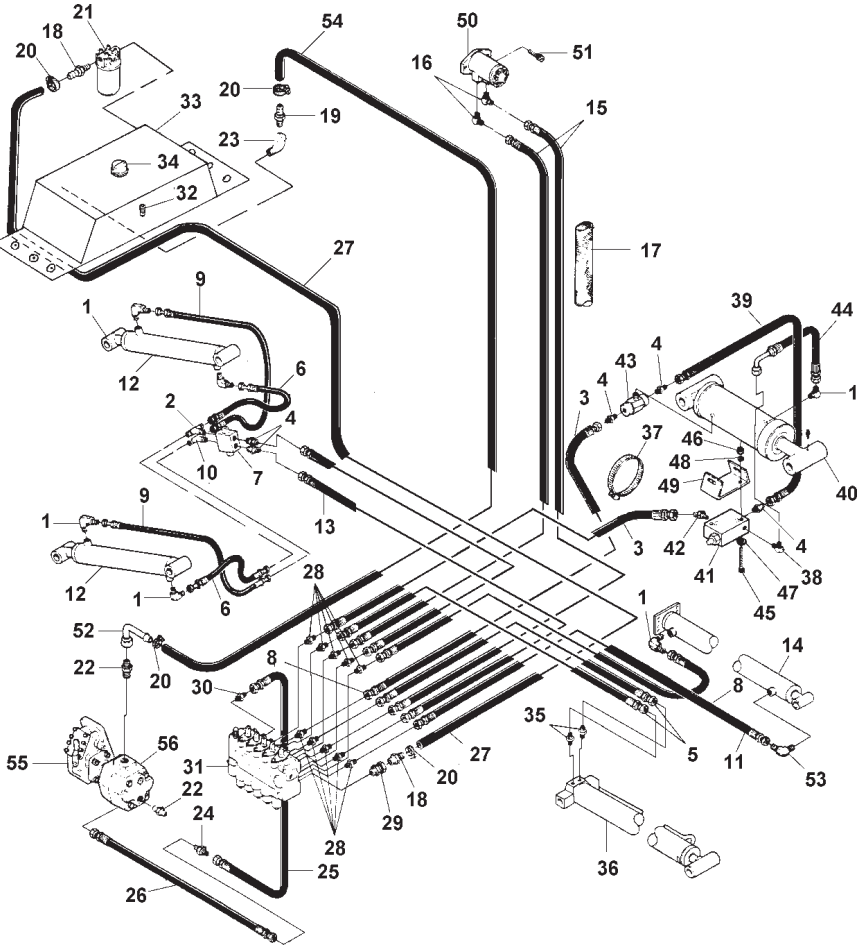
Section VI - PARTS (cont'd)
MOUNTING & TILT FRAME ASSEMBLY
(Continued from Page VI-7)

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
23	1	0302988	TOOL BOX
24	2	0802666	EXTENSION STAND (WHEN NEEDED)
25	2	0306001	MUD FLAP
26	2	0705092	BAR, MUD FLAP
27	2	0704793	BRACKET, MUD FLAP MOUNTING
28	9	0400122	SCREW, 3/8"-16 X 1-1/4" HEX HD CAP
29	8	0400121	SCREW, 3/8"-16 X 3/4" HEX HD CAP
30	20	0400392	NUT, 3/8"-16 HEX NYLOK
31	1	0703960	PIN, EXTEND CYLINDER
32	18	0300132	CABLE TIE
33	8	0301601	CLAMP, INSULATED WIRE
34	1	0400150	SCREW, 3/8"-16 X 2-1/2" HEX HD CAP
35	1	0303061	BACK-UP ALARM
36	2	0802667	TOOL BOX MOUNTING BRACKET
37	3	0301397	GREASE FITTING, 90°
38	4	0300134	CLAMP, INSULATED WIRE
39	1	0500805	DECAL, CONTROL STATION (L.H.)
40	1	0500806	DECAL, CONTROL STATION (R.H.)
41	1	0802664	TAIL LAMP HOUSING, LEFT
42	1	0802665	TAIL LAMP HOUSING, RIGHT
43	1	0700584	CHAIN, 12" SASH
44	2	0802663	L-ARM STORAGE TUBE BRACKET
45	20	0400408	NUT, 1/2"-13 NYLON LOCK

Section VI - PARTS (cont'd)

HYDRAULICS

(Continued on Page VI-12)



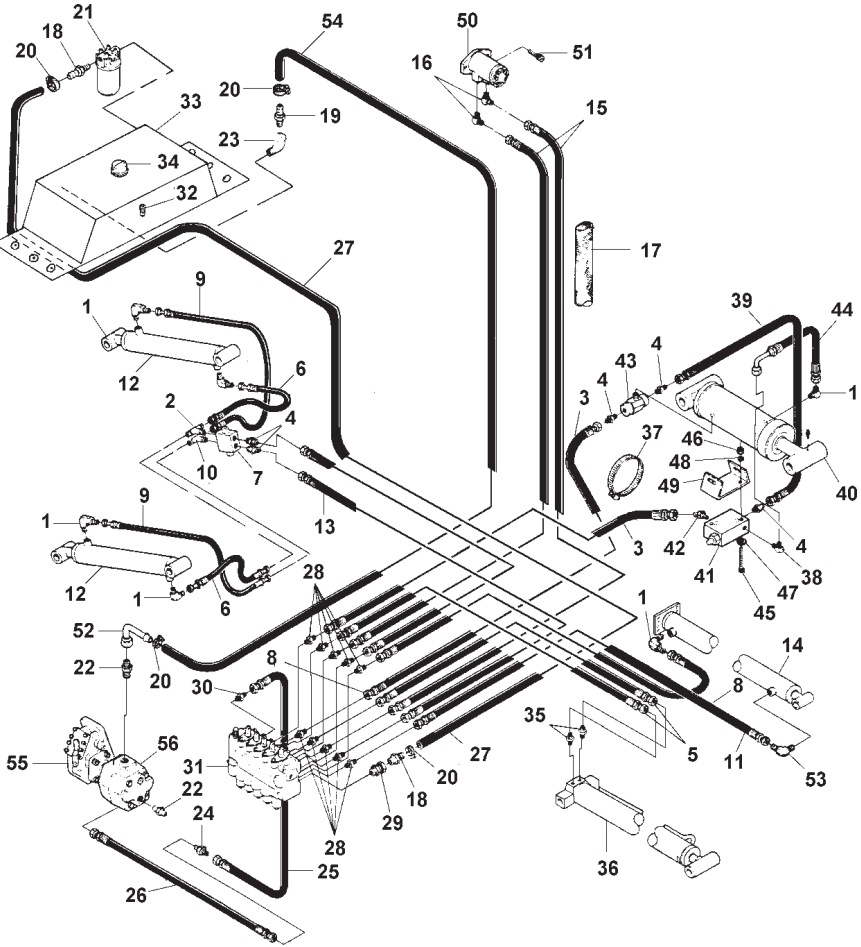
Section VI - PARTS (cont'd)
HYDRAULICS
(Continued on Page VI-13)

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	6	0300142	ELBOW, 1/2" MJ X 1/4" MP X 90°
2	2	0300208	TEE, 3/8" MJ X 3/8" MJ X 1/4" MP
3	2	0301403	HOSE, ASSEMBLY
4	5	0301424	CONNECTOR, 3/8" MJ X 1/4" MP
5	2	0301478	HOSE ASSEMBLY, 54" (W/L EXT CYLINDER)
6	2	0301524	HOSE ASSEMBLY, 14" (BED LIFT CYLINDER)
7	1	0301640	VALVE, BED TILT CYLINDER LOCK
8	1	0301658	HOSE ASSEMBLY, 128" (BED EXT CYLINDER)
9	2	0301660	HOSE ASSEMBLY, 21" (BED LIFT CYLINDER)
10	1	0301694	ORIFICE TEE
11	1	0301769	HOSE ASSEMBLY, 52" (BED EXT. CYLINDER)
12	2	0302867	CYLINDER, BED LIFT
13	2	0301878	HOSE ASSEMBLY, 137" (BED LIFT LOCK VLV)
14	1	0301970	CYLINDER, 108" STROKE BED EXTEND
15	2	0301663	HOSE ASSEMBLY, 204" (WINCH MOTOR)
16	2	0301665	ELBOW, 3/8" MJ X 1/2" MP X 90°
17	1	0705296	SKUFF JACKET
18	3	0300055	HOSE BARB, 3/4" HOSE X 3/4" MP
19	1	0300056	HOSE BARB, 1" HOSE X 1" MP
20	4	0300071	CLAMP, 1" HOSE
21	1	0300136	FILTER ASSEMBLY
22	1	REF.	PTO CONNECTOR
23	1	0300692	ELBOW, 1" X 90° STREET
24	1	0300865	CONNECTOR, 1/2 MJ X 1/2" MB
25	1	0301659	HOSE ASSEMBLY, 150" (VALVE TO PUMP)
26	1	0300165	HOSE ASSEMBLY, 91" HI-PRESSURE
27	1	0704802	HOSE, 192" RETURN FILTER TO CONTROL VALVE
28	10	0300044	CONNECTOR, 3/8" MJ X 1/2" MB
29	1	0300065	SWIVEL, 3/4" MB X 3/4" FPX PIPE

Section VI - PARTS (cont'd)

HYDRAULICS

(Continued from Page VI-10)



Section VI - PARTS (cont'd)

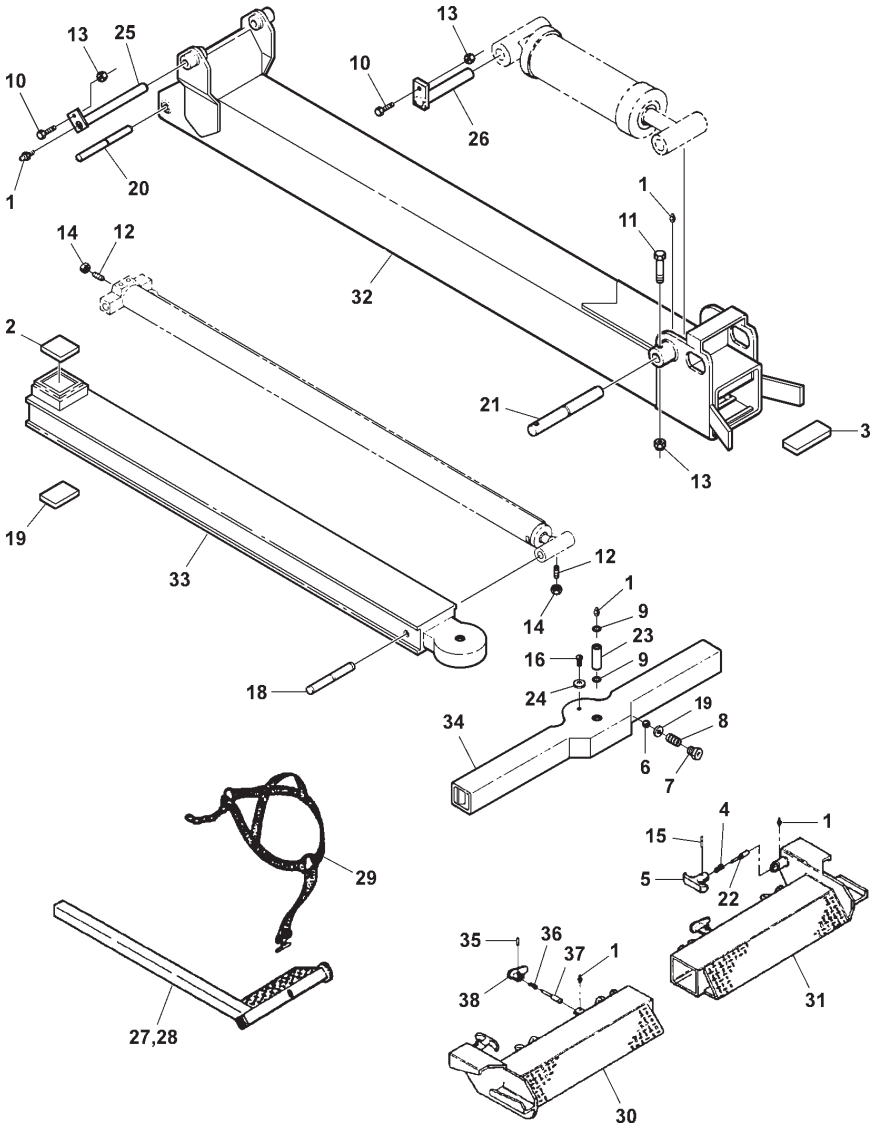
HYDRAULICS

(Continued from Page VI-11)

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
30	1	0300789	CONNECTOR, 5/8" SAE X 1/2" JIC STRAIGHT
31	1	0302179	VALVE, 5 SPOOL CONTROL
32	1	0300347	PLUG, 1/2" SQ HD BLACK
33	1	0805093	RESERVOIR
34	1	0709871	OIL TANK TOP CAP
35	2	0301522	CONNECTOR, 3/8" MJ X 3/8" MB STRAIGHT
36	1	0302178	CYLINDER, WHEEL LIFT HYDRAULIC EXTEND
37	1	0300133	CLAMP, 3"-4" HOLDING VALVE RETAINER
38	1	0300209	ELBOW, 3/8" MJ X 3/8" MP X 90°
39	1	0301473	HOSE ASSEMBLY, 18" (W/L HOLDING VALVE TO TEE)
40	1	0301484	CYLINDER, 8-1/4" STROKE WHEEL LIFT TILT
41	1	0301731	VALVE, WHEEL LIFT CYLINDER HOLDING
42	1	0301848	ELBOW, 3/8" JIC X 3/8" NPT X 45°
43	1	0301868	TEE, 1/4" FP X 1/4" FP X 1/4" MALE RUN
44	1	0301900	HOSE ASSEMBLY, 18" (W/L CYL. TO W/L HOLDING VALVE)
45	2	0400064	SCREW, 1/4"-20 X 2-1/4" RD HD SLOTTED
46	2	0400366	NUT, 1/4"-20 HEX
47	2	0400451	FLAT WASHER, 1/4"
48	2	0400452	LOCK WASHER, 1/4" HELICAL
49	1	0703001	BRACKET, W/L HOLDING VALVE MOUNTING
50	1	0306157	MOTOR, WINCH
51	2	0400196	SCREW, 1/2"-13 X 1-1/4" SOCKET HD CAP
52	1	0302170	SWIVEL, 90° BENT TUBE
53	1	0302160	ELBOW, 90°, 6MJ-4MP90L
54	1	0300058	HOSE, 1" DIA. SUCTION PUMP TO RESERVOIR
55	1	0302037	PTO
56	1	0303485	PUMP, HIGH PRESSURE HYDRAULIC

Section VI - PARTS (cont'd)

WHEEL LIFT & TIRE RESTRAINT ASSEMBLY



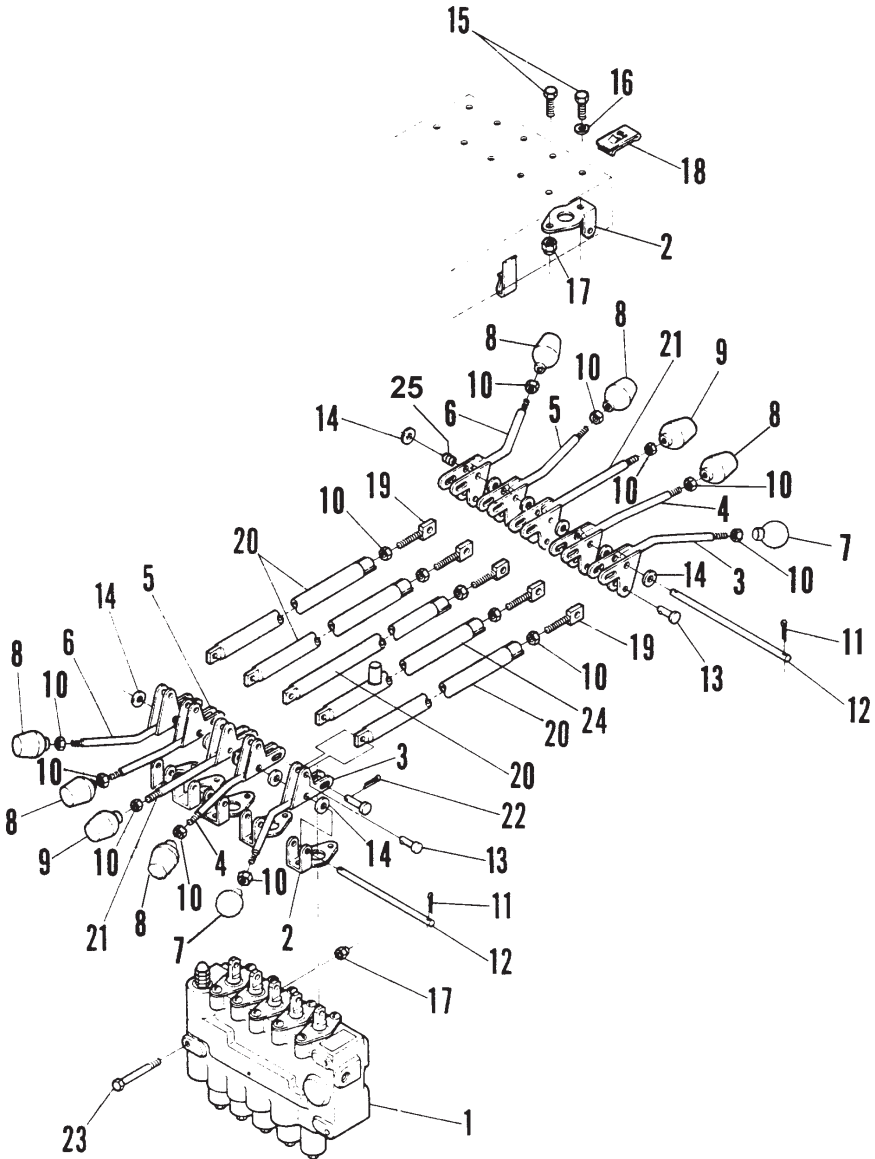
Section VI - PARTS (cont'd)

WHEEL LIFT & TIRE RESTRAINT ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	7	0300113	GREASE FITTING
2	1	0301850	BEARING PAD
3	1	0302183	BEARING PAD
4	2	0302641	SPRING, PLUNGER PIN
5	2	0302648	"T" HANDLE
6	1	0308129	DETENT BALL
7	1	0308130	PIPE PLUG
8	1	0308131	DETENT SPRING
9	2	0308132	"O" RING
10	2	0400148	SCREW, 3/8"-16 X 1-1/4" HEX HD CAP
11	1	0400150	SCREW, 3/8"-16 X 2-1/2" HEX HD CAP
12	2	0400221	SCREW, 3/8"-16 X 1" CUP POINT ALLEN HD
13	3	0400392	NUT, 3/8"-16 HEX NYLOK
14	2	0400393	NUT, 3/8"-16 HEX JAM
15	2	0400560	ROLL PIN, 5/32" X 1"
16	1	0403004	SCREW, 3/8"-16 X 3/4" BUTTON ALLEN HD
17	2	0500241	DECAL, SAFETY CHAIN WARNING
18	1	0702131	SHAFT, INNER TUBE CYLINDER
19	1	0703277	SLIDER, PAD
20	1	0705524	SHAFT, EXTEND CYLINDER
21	1	0705238	PIVOT PIN
22	2	0707505	PIN, PLUNGER
23	1	0720460	PIN, CROSSBEAM PIVOT
24	1	0720463	WASHER, 1" O.D. X 3/8" I.D. FLAT
25	1	0801009	SHAFT, PIN ASSEMBLY, UPPER BOOM
26	1	0801012	SHAFT, LIFT CYLINDER
27	1	0802196	TIRE RESTRAINT, LEFT
28	1	0802197	TIRE RESTRAINT, RIGHT
29	2	0902382	1" NYLON POLY COAT STRAP
30	1	0902786	"L" ARM RECEIVER WELDMENT, LEFT
31	1	0902787	"L" ARM RECEIVER WELDMENT, RIGHT
32	1	0805149	OUTER BOOM
33	1	0805245	INNER BOOM
34	1	0805434	INNER CROSSTUBE WELDMENT
35	2	HD0125	SPRING PIN, 5/32" X 1-3/8"
36	2	HD1203	SPRING, PLUNGER PIN
37	2	RB0296	PIN, PLUNGER PULL LOCK
38	2	RB0357	HANDLE, PULL GRIP

Section VI - PARTS (cont'd)

CONTROL & CROSSROD ASSEMBLY



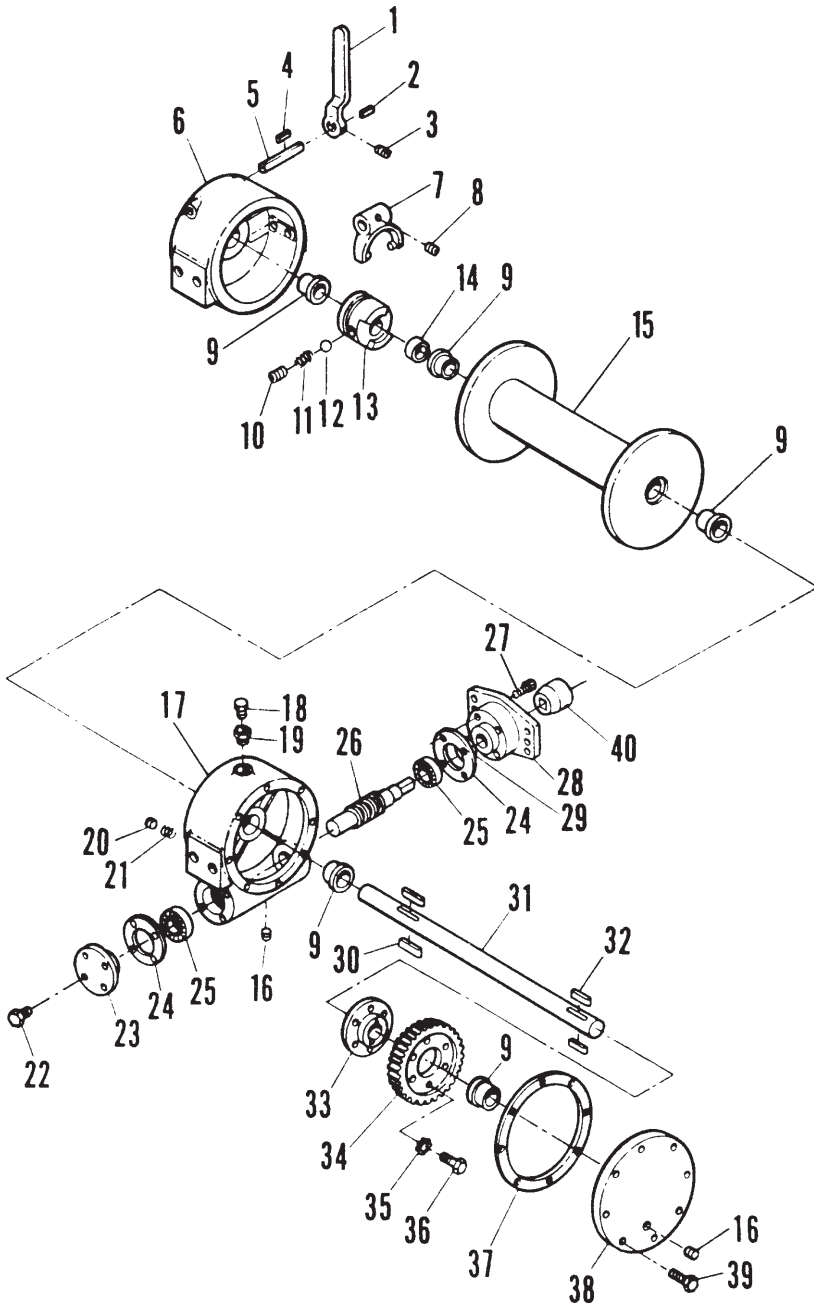
Section VI - PARTS (cont'd)

CONTROL & CROSSROD ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0302179	5-SPOOL CONTROL VALVE
2	10	0301638	BRACKET, CONTROL HANDLE
3	2	0800798	REAR, OUTER CONTROL HANDLE
4	2	0800797	REAR, INNER CONTROL HANDLE
5	2	0800795	FWD, INNER CONTROL HANDLE
6	2	0800796	FWD, OUTER CONTROL HANDLE
7	2	0301720	KNOB, BALL
8	6	0300341	KNOB
9	2	0300834	KNOB, "IN-OUT" RED (CABLE)
10	15	0400393	NUT, 3/8"-16 JAM
11	4	0400541	COTTER PIN, 1/16" X 3/4"
12	2	0705242	CONTROL HANDLE PIVOT ROD
13	10	0400532	CLEVIS PIN, 5/16" DIA. X 1"
14	10	0400465	WASHER, 5/16" FLAT
15	10	0400121	SCREW, 3/8"-16 X 3/4" HEX HD
16	5	0400482	LOCK WASHER, 3/8" HELICAL
17	8	0400392	NUT, 3/8"-16 NYLON LOCK
18	5	0400243	NUT, 3/8"-TINNERMAN "J"
19	5	0800800	CONTROL ROD LINK
20	4	0800799	VALVE SHIFTER
21	2	0801566	CONTROL HANDLE, CENTER
22	10	0400543	COTTER PIN, 1/8" X 3/4"
23	3	0400140	SCREW, 3/8"-16 X 4" HEX HD
24	1	0801274	CONTROL ROD LINK, ANTI-TILT
25	10	0306006	SPRING, ANTI-RATTLE

Section VI - PARTS (cont'd)

HYDRAULIC WINCH



Section VI - PARTS (cont'd)

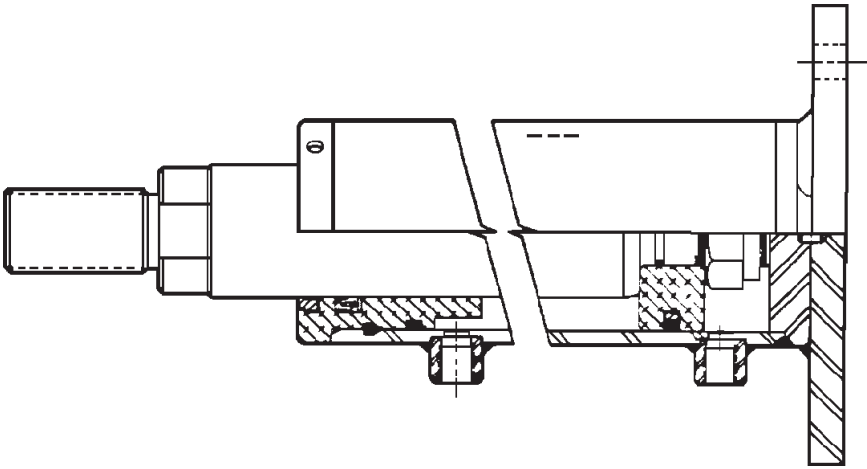
HYDRAULIC WINCH

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	300261	LEVER
2	1	300448	KEY
3	1	300449	SCREW
4	1	300450	KEY
5	1	300451	SHAFT
6	1	300452	CLUTCH HOUSING
7	1	300398	YOKE
8	1	300399	SCREW
9	5	300453	BUSHING
10	1	300454	SCREW
11	1	300455	SPRING
12	1	300456	BALL
13	1	--	CLUTCH
14	1	300458	SPACER
15	1	300381	DRUM
16	2	300459	PLUG
17	1	300460	HOUSING
18	1	300461	PLUG
19	1	300462	REDUCER
20	1	300463	DRAG BRAKE
21	1	300464	SPRING
22	16	300465	SCREW
23	1	300466	CAP
24	2	300447	GASKET
25	2	300467	BEARING
26	1	300468	WORM
27	1	600695	SCREW
28	1	300694	CAP ADAPTER
29	1	300471	SEAL
30*	2	--	KEY
31*	1	--	SHAFT
32*	2	--	KEY
33	1	300472	HUB
34	1	300473	GEAR
35	6	300474	WASHER
36	6	300475	SCREW
37	1	300476	GASKET
38	1	300477	COVER
39	4	300569	SCREW
40	1	300290	COUPLING

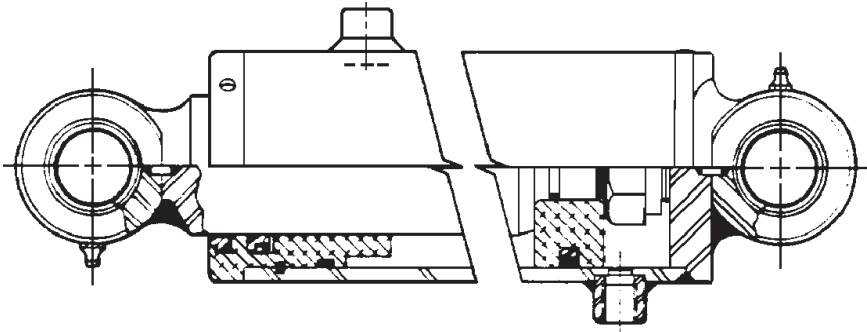
*SPECIFY WINCH SERIAL NUMBER WHEN ORDERING

Section VI - PARTS (cont'd)

CYLINDERS



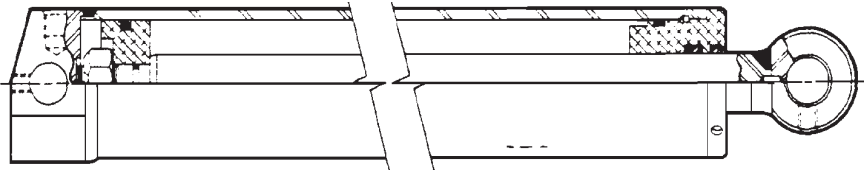
REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0301970	BED EXTEND CYLINDER (COMPLETE)
2	--	0304219	SEAL KIT



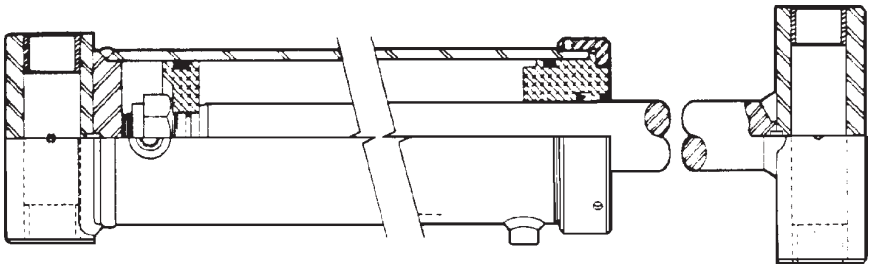
REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	2	0302867	BED TILT CYLINDER (COMPLETE)
2	--	0304219	SEAL KIT

Section VI - PARTS (cont'd)

CYLINDERS

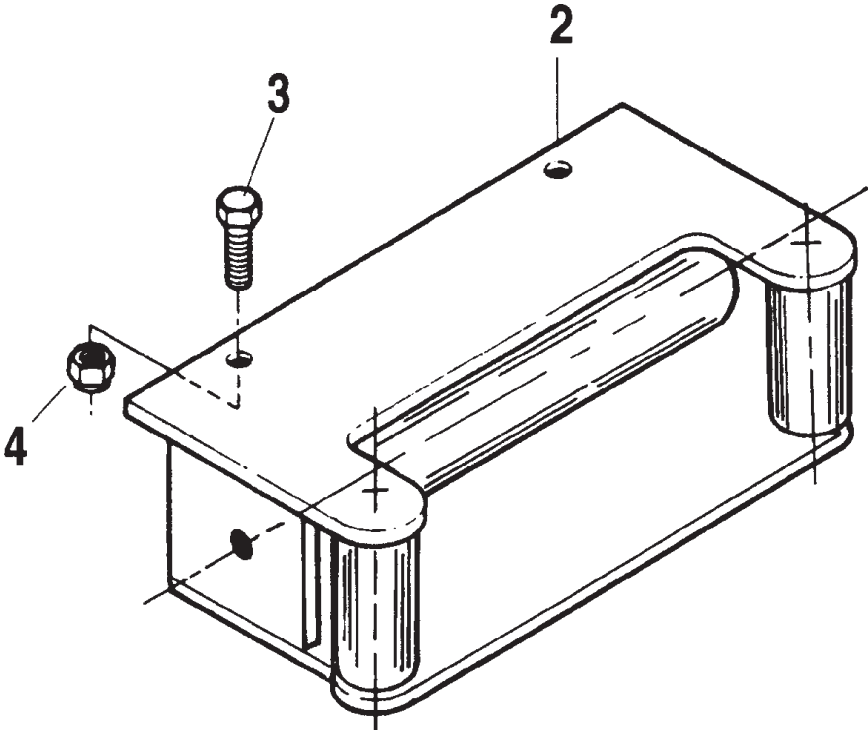


REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0302178	HYDRAULIC CYLINDER, EXTEND (COMPLETE)
2	1	0304086	SEAL KIT, EXTEND CYLINDER



REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0301484	HYDRAULIC CYLINDER, LIFT (COMPLETE)
2	1	0304181	SEAL KIT, LIFT CYLINDER

Section VI - PARTS (cont'd)
OPTIONAL EQUIPMENT
CABLE ROLLER ASSEMBLY

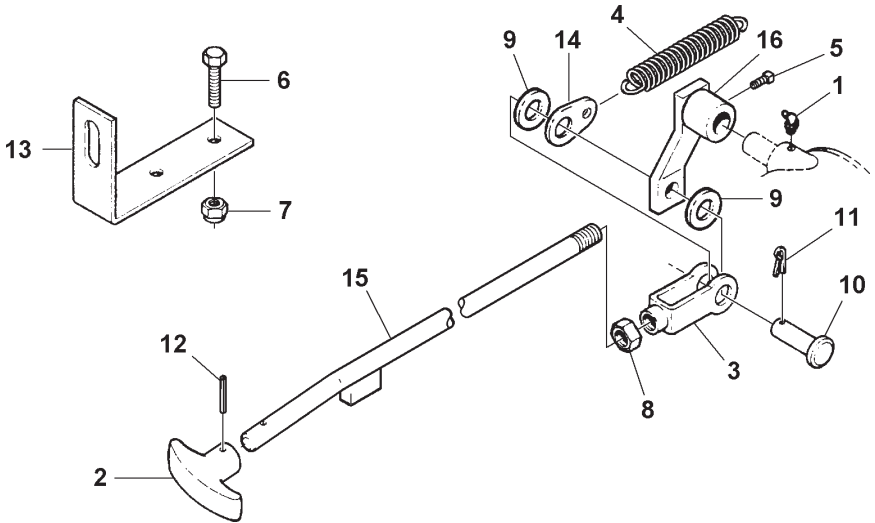


REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	--	0900892	CABLE ROLLER ASSEMBLY
2	1	0805037	CABLE ROLLER GUIDE WELD
3	2	0400177	MENTSREW, 1/2"-13 X 1-1/4" HEX HEAD
4	2	0400408	NUT, 1/2"-13 NYLON LOCK

Section VI - PARTS (cont'd)

OPTIONAL EQUIPMENT

WINCH CLUTCH CONTROL

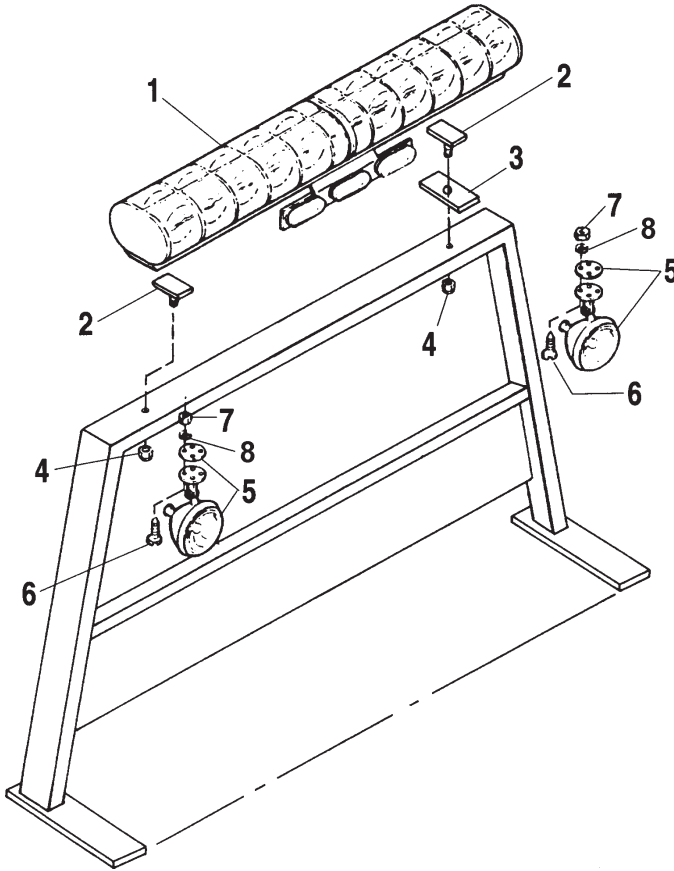


REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0300845	SPRING, COMPRESSION
2	1	0301397	GREASE FITTING 90°
3	1	0301532	"T" HANDLE
4	1	0301588	ADJUSTING YOKE
5	1	0400116	SCREW, 5/16"-18 X 1/2" SQ HD SET
6	1	0400126	SCREW, 3/8"-16 X 1" HEX HD CAP
7	1	0400150	SCREW, 3/8"-16 X 2-1/2" HEX HD CAP
8	2	0400392	NUT, 3/8"-16 NYLON LOCK
9	1	0400393	NUT, 3/8"-16 JAM
10	4	0400492	WASHER, 1/2" FLAT
11	1	0400537	PIN, 1/2" DIA. X 1-1/2" CLEVIS
12	1	0400546	PIN, 1/8" X 1-1/4" COTTER
13	2	0400560	PIN, 5/32" X 1" LG. ROLL
14	1	0702408	MOUNTING CHANNEL
15	1	0800780	CONTROL ROD, SINGLE WINCH
16	1	0801270	WELDMENT, BELL CRANK

Section VI - PARTS (cont'd)

OPTIONAL EQUIPMENT

LIGHTING ACCESSORIES

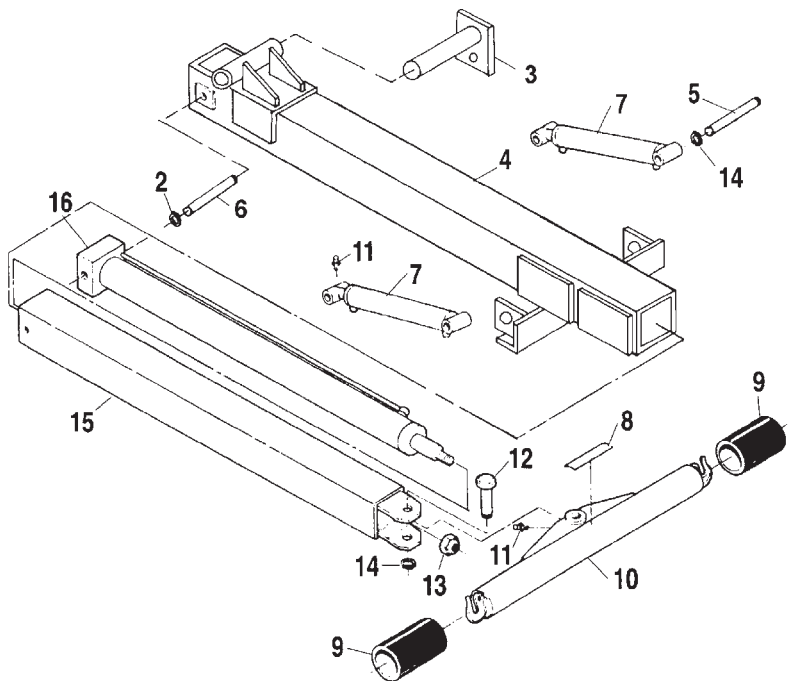


REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0301359	WRECKER SPECIAL LIGHT
2	2	0800539	"T" BOLT ADAPTER
3	2	0709872	RUBBER CUSHION
4	2	0400392	NUT, 3/8"-16 NYLON LOCK
5	2	0300095	SPOTLIGHT WITH GASKET
6	8	0400043	SCREW, #10-24 X 1" MACHINE
7	8	0400356	NUT, #10 NYLON LOCK
8	8	0400520	WASHER, #10 LOCK

Section VI - PARTS (cont'd)

OPTIONAL EQUIPMENT

INDEPENDENT TOW BAR ASSEMBLY

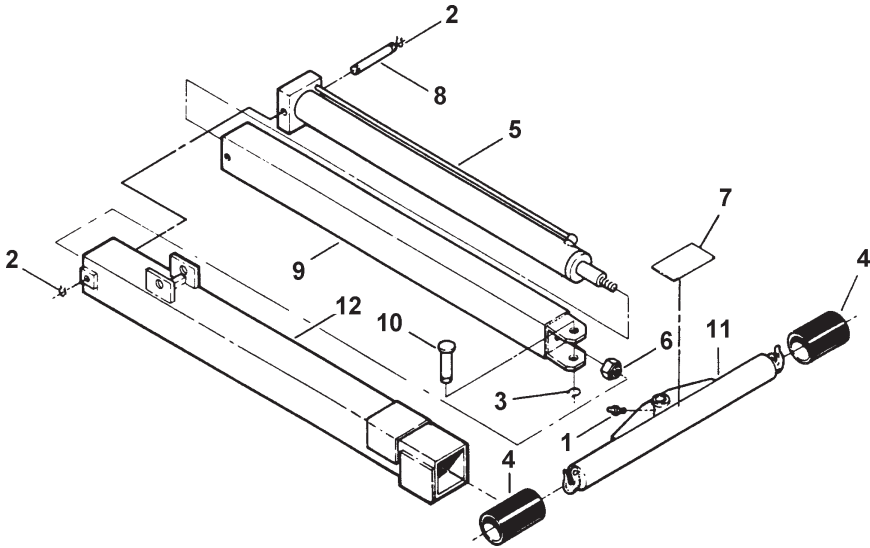


REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	--	--	TOW BAR ASSEMBLY (COMPLETE)
2	2	0301381	SNAP RING, 3/4"
3	1	0805030	SHAFT, TOW BAR PIVOT, PIN W/KEEPER
4	1	0805150	TUBE, TOW BAR OUTER
5	2	0702434	PIN, CYLINDER
6	1	0702418	SHAFT, EXTEND CYLINDER
7	2	0302368	CYLINDER, TOW BAR
8	1	0500241	DECAL, SAFETY CHAIN WARNING
9	2	0301723	GUARD, TOW BAR BUMPER
10	1	0800898	CROSSTUBE, TOW BAR
11	3	0300113	GREASE FITTING
12	1	0800784	PIN, TOW BAR PIVOT
13	1	0400436	NUT
14	5	0301642	SNAP RING, 1-1/4"
15	1	0800777	TUBE, TOW BAR INNER
16	1	0301798	CYLINDER, TOW BAR EXTEND

Section VI - PARTS (cont'd)

OPTIONAL EQUIPMENT

FIXED TOW BAR ASSEMBLY

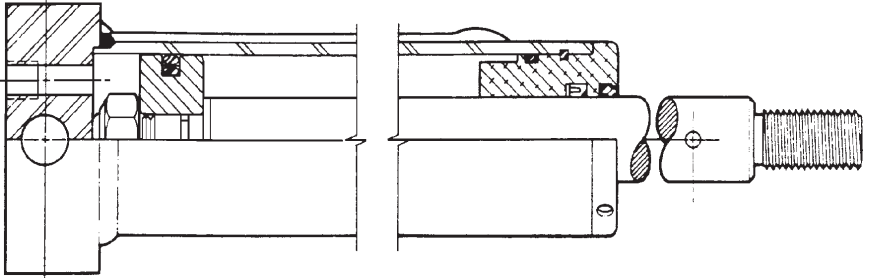


REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
--	--	--	TOW BAR ASSEMBLY (COMPLETE)
1	1	0300113	GREASE FITTING
2	2	0301381	SNAP RING, 3/4"
3	1	0301642	SNAP RING, 1-1/4"
4	2	0301723	GUARD, TOW BAR BUMPER
5	1	0301798	CYLINDER, TOW BAR EXTEND
6	1	0400436	NUT
7	1	0500241	DECAL, SAFETY CHAIN WARNING
8	1	0702418	SHAFT, EXTEND CYLINDER
9	1	0800777	TUBE, TOW BAR INNER
10	1	0800784	PIN, TOW BAR PIVOT
11	1	0800924	CROSSTUBE, TOW BAR
12	1	0801403	TUBE, TOW BAR OUTER

Section VI - PARTS (cont'd)

OPTIONAL EQUIPMENT

TOW BAR CYLINDER

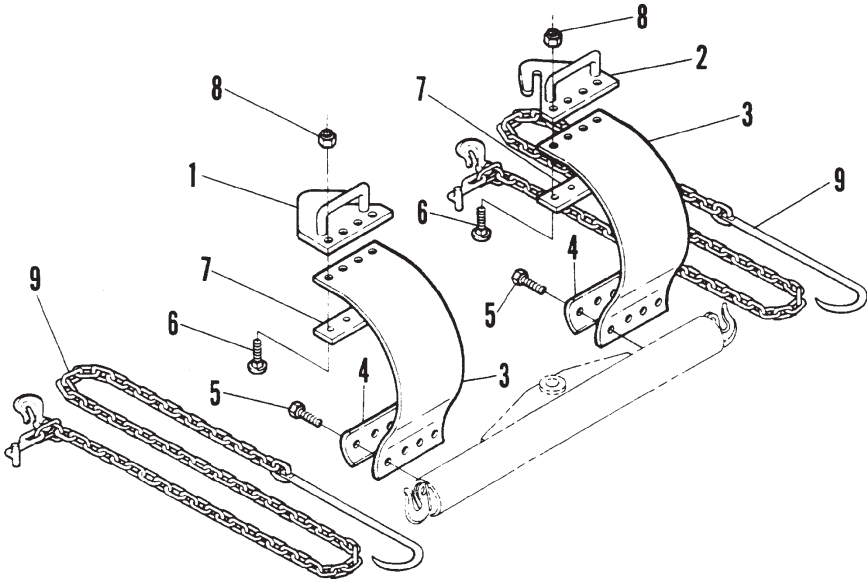


REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0301798	TOW BAR CYLINDER (COMPLETE)
2	--	0304220	SEAL KIT

Section VI - PARTS (cont'd)

OPTIONAL EQUIPMENT

TOW SLING



REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0800608	CHAIN KEEPER, LEFT
2	1	0800609	CHAIN KEEPER, RIGHT
3	2	0701919	TOW SLING BELT
4	2	0800873	BELT RETAINER
5	8	0400105	SCREW, 5/16"-18 X 1-1/4" SELF-TAPPING
6	8	0400156	CARRIAGE BOLT, 3/8"-16 X 1-1/4"
7	2	0701920	GRIP PLATE
8	8	0400392	NUT, 3/8"-16 NYLON LOCK
9	2	0300176	"J" HOOK ASSEMBLY

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