



OWNER'S MANUAL

810 POWER TILT

PARTS

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



Miller Industries Towing Equipment Inc.
8503 Hilltop Drive
Ooltewah, Tennessee 37363
Phone (423) 238-7227 • FAX (423) 238-7237

FORM NO. 0501704
09 / 2009
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

OWNER, USER AND OPERATOR:

We appreciate your choice of our wrecker 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 Wrecker.**

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Section I - PARTS

This Section is provided by the manufacturer for the purpose of ordering any component part of the **Vulcan 810 Power Tilt** 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 **Vulcan 810 Power Tilt** 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**.

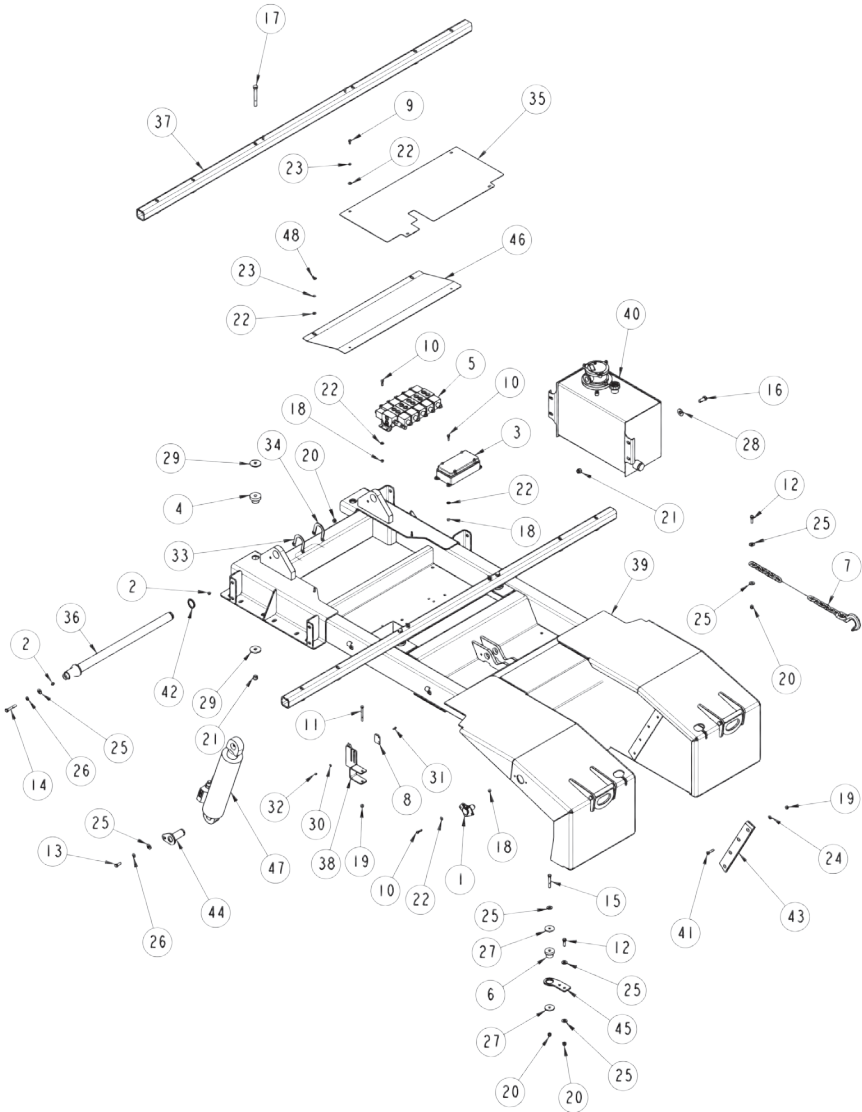
1. **Manual Number & Date of Publication**
2. **Manual Page Number**
3. **Page Title**
4. **Reference Number of Part Desired**
5. **Part Number**
6. **Part Description**
7. **Quantity of Part Desired**

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 I - PARTS (cont'd)

810 POWER TILT SUBFRAME ASSEMBLY



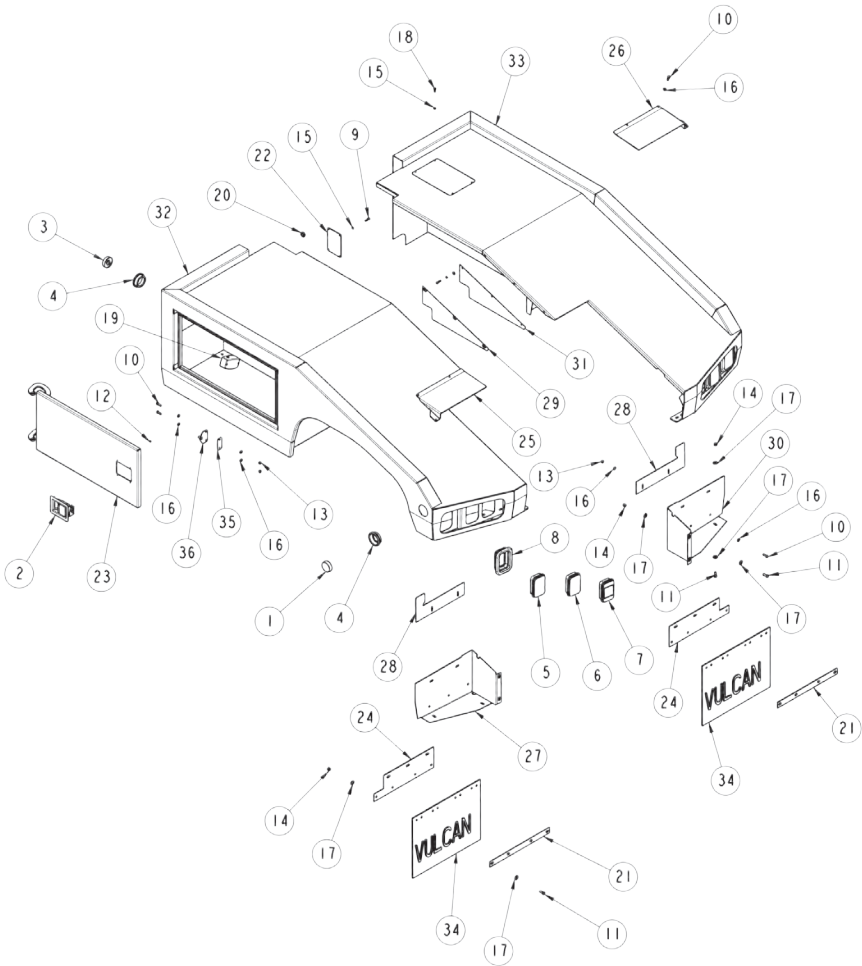
Section I - PARTS (cont'd)

810 POWER TILT SUBFRAME ASSEMBLY

BILL OF MATERIAL			
ITEM	PART NO	DESCRIPTION	QTY
1	0301671	TOW SOCKET	1
2	0301895	GREASE FITTING, 1/8 NPT STRAIGHT	2
3	0303385	JUNCTION BOX	1
4	0306680	RUBBER "T" MOUNTS	4
5	0307088	VALVE 5-SPOOL PARKER DIR. CONTROL	1
6	0307114	RUBBER "T" MOUNTS	3
7	0307383	CHAIN ASSEMBLY, 5/16" G7 X 12'	2
8	0310795	TBD	1
9	0400059	1/4-20 x 5/8 HHCS GR 5 ZP	2
10	0400070	1/4-20 x 1 HHCS GR5 ZP	8
11	0400114	5/16-18 x 3 HHCS GR 5 ZP	1
12	0400122	3/8-16 X 1 1/4 HHCS GR.5,ZP	6
13	0400126	3/8-16 X 1 HHCS GR.5,ZP	1
14	0400146	3/8-16 x 2-1/4 HHCS GR.5 ZP	1
15	0400150	3/8-16 x 2-1/2 HHCS GR5 ZP	2
16	0400177	1/2-13 X 1 1/4 HHCS GR. 5, ZP	4
17	0400237	1/2-13 x 4 HHCS GR 5 ZP	4
18	0400367	1/4-20 NYLOCK HEX NUT ZP	8
19	0400382	5/16-18 NYLOCK HEX NUT ZP	9
20	0400392	3/8-16 NYLOCK HEX NUT ZP	9
21	0400408	1/2-13 NYLOCK HEX NUT ZP	8
22	0400451	1/4 FLAT WASHER ZP	14
23	0400452	1/4 HELICAL LOCK WASHER ZP	6
24	0400463	5/16 FLAT WASHER ZP	8
25	0400480	3/8 FLAT WASHER ZP	16
26	0400482	3/8 HELICAL LOCK WASHER ZP	2
27	0400484	3/8 x 1-3/4 x 1/8 THICK FLAT WASHER ZP	4
28	0400492	1/2 FLAT WASHER ZP	4
29	0400498	WASHER, 1/2" ID X 2" OD X .150	8
30	0400816	#10 FLAT WASHER SS	2
31	0402011	#10-32 x 5/8" PAN HEAD PHILLIPS	2
32	0402100	#10-32 NYLOCK HEX NUT SS	2
33	0719519	SHIM - BOOM PIVOT (.0747 THICK)	1
34	0719520	SHIM- BOOM PIVOT (.1196 THK)	1
35	0723146	D.C.V. REAR PANEL	1
36	0807183	BOOM PIVOT PIN WELDMENT	1
37	0807232	FRONT BODY MTG.TUBE WELD'T	2
38	0807641	PROX MTG. BRACKET WELD'T	1
39	0807649	SUBFRAME WELDMENT	1
40	0910008	HYDRAULIC TANK ASSEMBLY ~ CONVENTIONAL	1
41	9043973	SCREW, 5/16"-16 X 1-1/2" FL HD SKT	8
42	9056150	RETAINING RING, 1-1/2"	1
43	805040011	VERTICAL BOOM GUIDE	2
44	805351000	PIN WELDMENT	1
45	810030005	BODY REAR MTG. PLATE- (T MTG.)	2
46	810032000	D.C.V. FRONT PANEL WELD'T	1
47	810710000	LIFT CYLINDER	1
48	HDI447	1/4 - 20 WING NUT ZP	4

Section I - PARTS (cont'd)

810 POWER TILT BODY ASSEMBLY



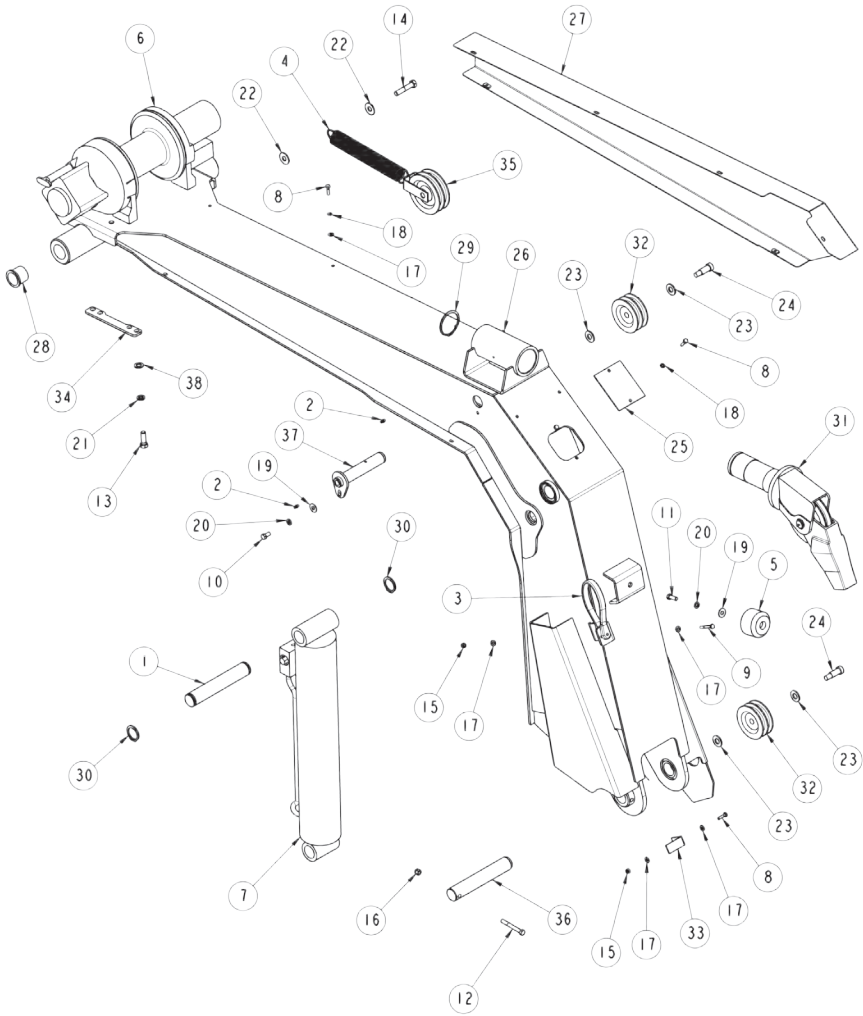
Section I - PARTS (cont'd)

810 POWER TILT BODY ASSEMBLY

BILL OF MATERIAL			
ITEM	PART NO	DESCRIPTION	QTY
1	0301741	MARKER LAMP, RED 2-1/2" ROUND	2
2	0303120	PADDLE LATCH W/GASKET	2
3	0303126	LIGHT, MARKER AMBER	2
4	0303127	GROMMET, MARKER LIGHT	4
5	0306682	TAIL LIGHT / RED/TAIL/MARK/CLEARANCE	2
6	0306683	TAIL LIGHT / STOP-TURN	2
7	0306684	LIGHT, BACKUP	2
8	0306685	GROMMET, LED LIGHT 45 STT	6
9	0400070	1/4-20 x 1 HHCS GR5 ZP	14
10	0400109	5/16-18 x 1 HHCS GR.5,ZP	14
11	0400126	3/8-16 X 1 HHCS GR.5,ZP	22
12	0400351	#8-32 HEX NUT w/ STAR WASHER, ZP	8
13	0400382	5/16-18 NYLOCK HEX NUT ZP	14
14	0400392	3/8-16 NYLOCK HEX NUT ZP	22
15	0400452	1/4 HELICAL LOCK WASHER ZP	18
16	0400463	5/16 FLAT WASHER ZP	28
17	0400480	3/8 FLAT WASHER ZP	44
18	0402020	1/4-20 x 3/4 HHCS SS	4
19	9025049	INTERIOR COMPARTMENT LIGHT w/ SWITCH	1
20	9032053	GROMMET	2
21	804500001	MUD FLAP BACK-UP STRIP	2
22	805040005	COVER PLATE- BOOM END	2
23	806160600	DOOR WLMT (16 1/2 X 16 1/2)	1
24	810010001	BRACKET-MUD FLAP	2
25	810010006	PANEL- LH REAR SLOPE	1
26	810017006	PANEL- RH REAR SLOPE	1
27	810030015	PANEL - LT LIGHT COVER	1
28	810030016	PLATE - GUARD FILLER (SS)	2
29	810031100	LH INSIDE SKIRT WELD'T	1
30	810037015	S.S. PANEL- RH LIGHT COVER	1
31	810038100	RH INSIDE SKIRT WELD'T	1
32	810150000	LT BOX WELDMENT - 810	1
33	810157000	RH BOX WELDMENT - 810	1
34	891000001	MUDFLAP	2
35	945400518	WASHER PLATE	2
36	945400800	STRIKER PIN WELD'T	2

Section I - PARTS (cont'd)

810 POWER TILT BOOM ASSEMBLY



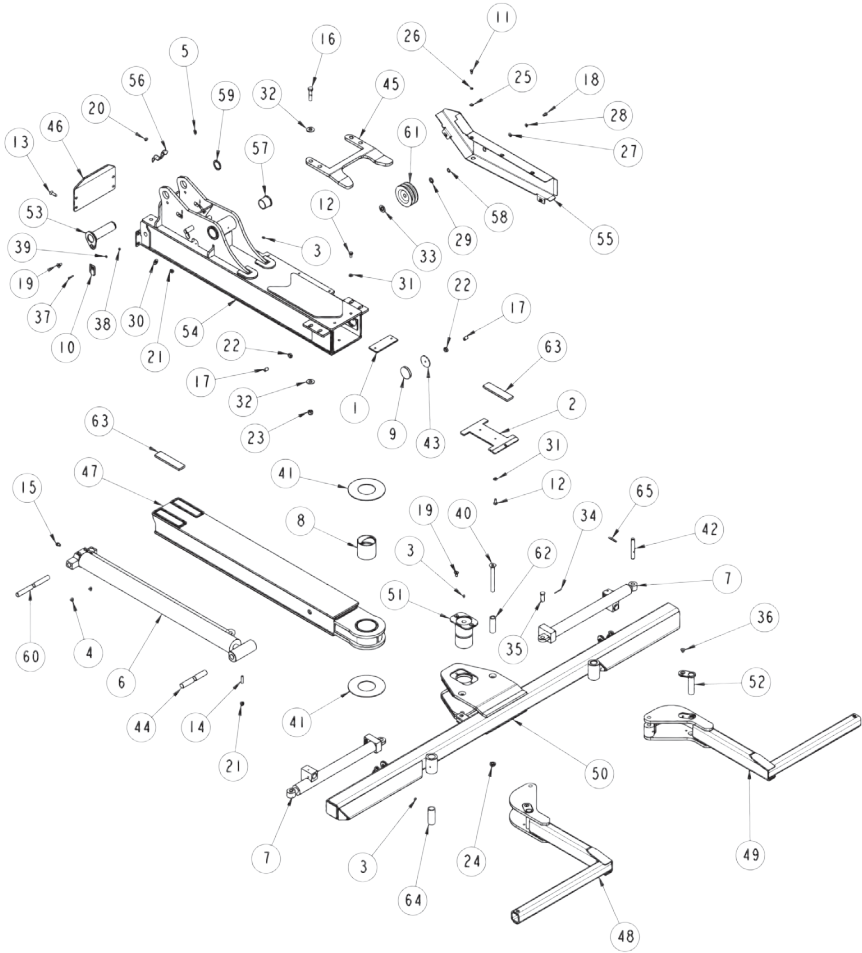
Section I - PARTS (cont'd)

810 POWER TILT BOOM ASSEMBLY

BILL OF MATERIAL			
ITEM	PART NO	DESCRIPTION	QTY
1	3014-700002	PIN - FOLD (BASE)	1
2	0300113	GREASE FITTING, 1/4-28 STRAIGHT	2
3	0301533	TIE DOWN STRAP, 15"	1
4	0303521	SPRING, HOSE TENSIONER	1
5	0306688	TIMBREN SPRING	1
6	0306691	WINCH, RAMSEY 4-TON PLANETARY	1
7	0310579	CYLINDER-810/405 FOLD	1
8	0400070	1/4-20 x 1 HHCS GR5 ZP	10
9	0400078	1/4-20 x 2 HHCS GR5 ZP	1
10	0400121	3/8-16NC X 3/4 HHCS GR. B	1
11	0400126	3/8-16 X 1 HHCS GR.5,ZP	1
12	0400133	3/8-16 X 3 HHCS GR.5,ZP	1
13	0400181	1/2-13 x 1-1/2 HHCS GR 5 ZP	8
14	0400185	HHCS 1/2-13 x 2-1/2 GRADE 5 ZP	1
15	0400367	1/4-20 NYLOCK HEX NUT ZP	3
16	0400392	3/8-16 NYLOCK HEX NUT ZP	1
17	0400451	1/4 FLAT WASHER ZP	12
18	0400452	1/4 HELICAL LOCK WASHER ZP	8
19	0400480	3/8 FLAT WASHER ZP	2
20	0400482	3/8 HELICAL LOCK WASHER ZP	2
21	0400491	1/2 HELICAL LOCK WASHER ZP	8
22	0400492	1/2 FLAT WASHER ZP	2
23	0400505	5/8 FLAT WASHER SAE	4
24	0400606	5/8 x 1-1/4 SHOULDER BOLT	2
25	0708519	PLATE, ACCESS COVER	1
26	0807559	BOOM	1
27	0807675	COVER WELDMENT - TENSIONER	1
28	9053713	FLANGE BEARING, 1-1/2" I.D. OILITE	2
29	9055275	SNAP RING, 2-3/4" EXTERNAL	1
30	9056150	RETAINING RING, 1-1/2"	2
31	805180000	SHEAVE HOUSING ASSEMBLY	1
32	810040004	SHEAVE, SMALL GROOVED	2
33	810040006	HOSE RETAINING ANGLE	1
34	810040007	WINCH SPACER PLATE	2
35	810041500	TENSIONER BRACKET WELDMENT	1
36	810350001	PIN, STINGER PIVOT	1
37	810351000	PIN WELD'T UPPER LIFT CYLINDER	1
38	DE1381	1/2" FLAT WASHER	8

Section I - PARTS (cont'd)

810 POWER TILT WHEEL LIFT ASSEMBLY



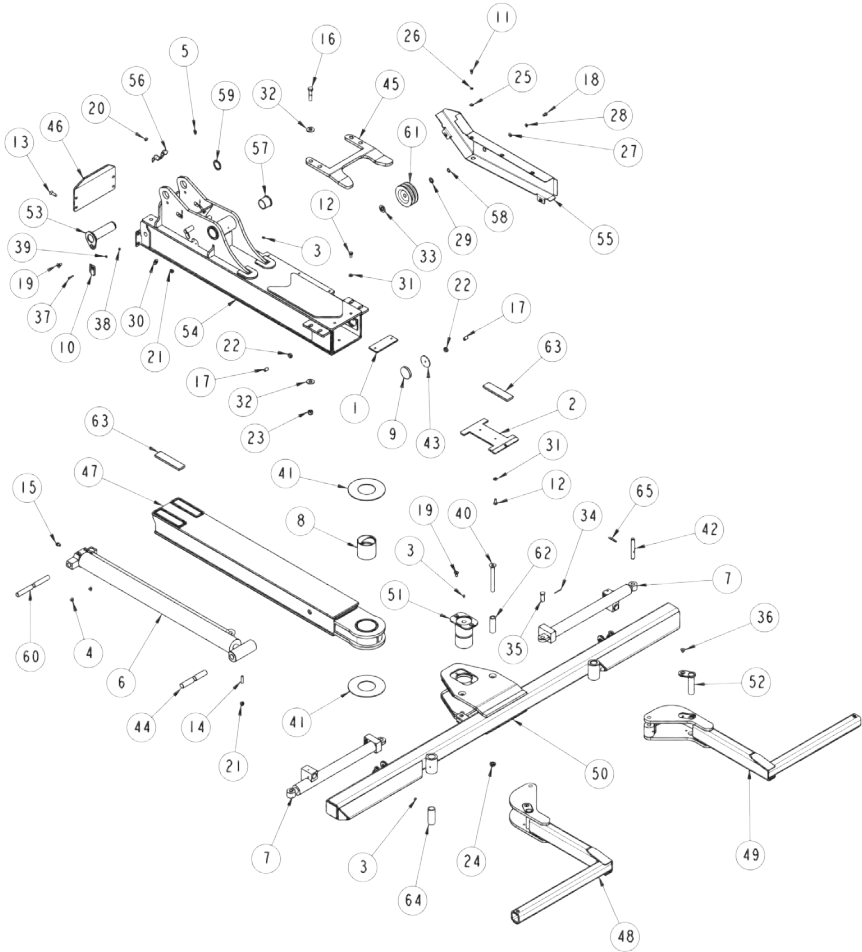
Section I - PARTS (cont'd)

810 POWER TILT WHEEL LIFT ASSEMBLY

BILL OF MATERIAL			
ITEM	PART NO	DESCRIPTION	QTY
1	3012-794003	BAR - SPACER	1
2	3012-794004	PLATE - UL PAD CAGE	1
3	0300113	GREASE FITTING, 1/4-28 STRAIGHT	4
4	0301397	GREASE FITTING, 90 DEG	2
5	0302726	GREASE FITTING, 1/4"-28 X 45°	2
6	0303020	CYLINDER, WHEEL LIFT EXTEND	1
7	0303844	CYLINDER, SWING L-ARM	2
8	0306748	BUSHING	1
9	0306819	PAD, SLIDE	2
10	0310795	PROXIMITY SWITCH	1
11	0400059	1/4-20 x 5/8 HHCS GR 5 ZP	5
12	0400121	3/8-16NC X 3/4 HHCS GR. B	4
13	0400128	3/8-16X1.25 FLAT HD SOC	4
14	0400139	SCREW, 3/8"-16 X 1-1/2" HEX SKT SET	1
15	0400154	3/8-16 X 1/2 HHCS GR.5,ZP	1
16	0400184	1/2-13 x 2-1/4 HHCS GR 8 ZP	4
17	0400204	1/2-13X3/4 SKT HD SET	2
18	0400233	5/16-18 x 1/2 HHCS GR5 ZP	1
19	0400349	SCREW, 3/8"-16 X 3/4" FL HD SKT	3
20	0400382	5/16-18 NYLOCK HEX NUT ZP	1
21	0400392	3/8-16 NYLOCK HEX NUT ZP	5
22	0400410	NUT, 1/2"-13 HEX JAM ZP	2
23	0400416	1/2-13 NYLOCK HEX NUT GR.8, ZP	4
24	0400428	5/8-11 FLEXLOC THIN HIGH	2
25	0400451	1/4 FLAT WASHER ZP	5
26	0400452	1/4 HELICAL LOCK WASHER ZP	5
27	0400463	5/16 FLAT WASHER ZP	1
28	0400464	5/16 HELICAL LOCK WASHER ZP	1
29	0400476	5/8 (.635) x .062 SHIM WASHER	1
30	0400480	3/8 FLAT WASHER ZP	4
31	0400482	3/8 HELICAL LOCK WASHER ZP	4
32	0400492	1/2 FLAT WASHER ZP	8

Section I - PARTS (cont'd)

810 POWER TILT WHEEL LIFT ASSEMBLY (cont'd)

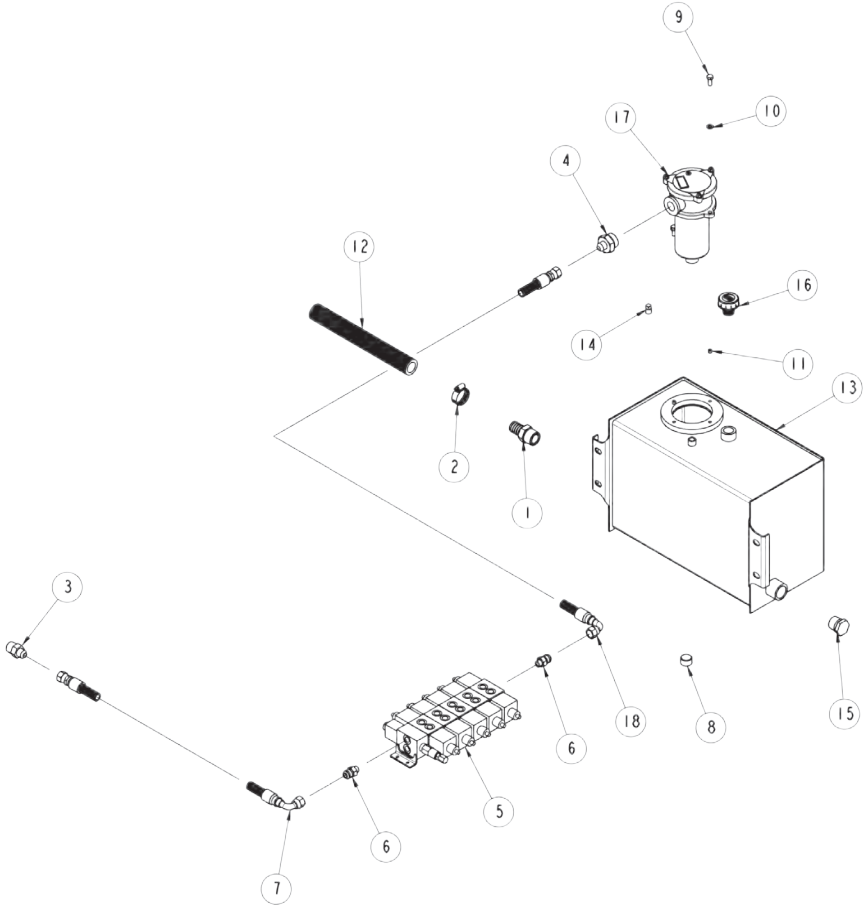


Section I - PARTS (cont'd)
810 POWER TILT
WHEEL LIFT ASSEMBLY (cont'd)

BILL OF MATERIAL			
ITEM	PART NO	DESCRIPTION	QTY
33	0400505	5/8 FLAT WASHER SAE	1
34	0400546	COTTER PIN, 1/8" X 1-1/4"	2
35	0400590	CLEVIS PIN	2
36	0400667	3/8-16X1/2 FLT SOC HD THREAD LOCK	2
37	0400686	#10-24 x 1" PAN HEAD PHILLIPS	2
38	0400688	#10-24 NYLOCK HEX NUT SS	2
39	0400816	#10 FLAT WASHER SS	2
40	0401006	3/8"-16 X 1" FL HD SKT CAP SCREW	2
41	0710092	THRUST WASHER	2
42	0713885	PIN - CYLINDER (L-ARM END)	2
43	0717674	SHIM - PAD SPACER	2
44	0718216	SHAFT- INNER TUBE CYLINDER	1
45	0718217	PLATE - XBAR POSITIONING	1
46	0719100	PLATE, END COVER	1
47	0806840	BOOM INNER STINGER EXPRESS WELDMENT	1
48	0806978	LEFT L ARM WLDT	1
49	0806979	RIGHT L-ARM WLDT	1
50	0806980	CROSSBAR WELDMENT	1
51	0806981	PIN PIVOT WLDT-XBAR	1
52	0806982	PIN L ARM PIVOT	2
53	0807553	PIN WELDMENT LOWER TILT CYLINDER	1
54	0807632	BOOM OUTER STINGER WELD'T	1
55	0807633	HOSE COVER WELD'T	1
56	9048166	TUBE CLAMP, DOUBLE	1
57	9053713	FLANGE BEARING, 1-1/2" I.D. OILITE	2
58	9055062	SNAP RING, 5/8" EXTERNAL	1
59	9056150	RETAINING RING, 1-1/2"	1
60	807500001	PIN - EXTEND	1
61	810040004	SHEAVE, SMALL GROOVED	1
62	810050001	SLEEVE CROSSBAR ASSEMBLY	2
63	896040002	NYLATRON PAD	4
64	E300002	BEARING - CLAW PIVOT	2
65	HD0106	1/4 x 1-3/4 ROLL PIN ZP	2

Section I - PARTS (cont'd)

810 POWER TILT TANK HYDRAULICS



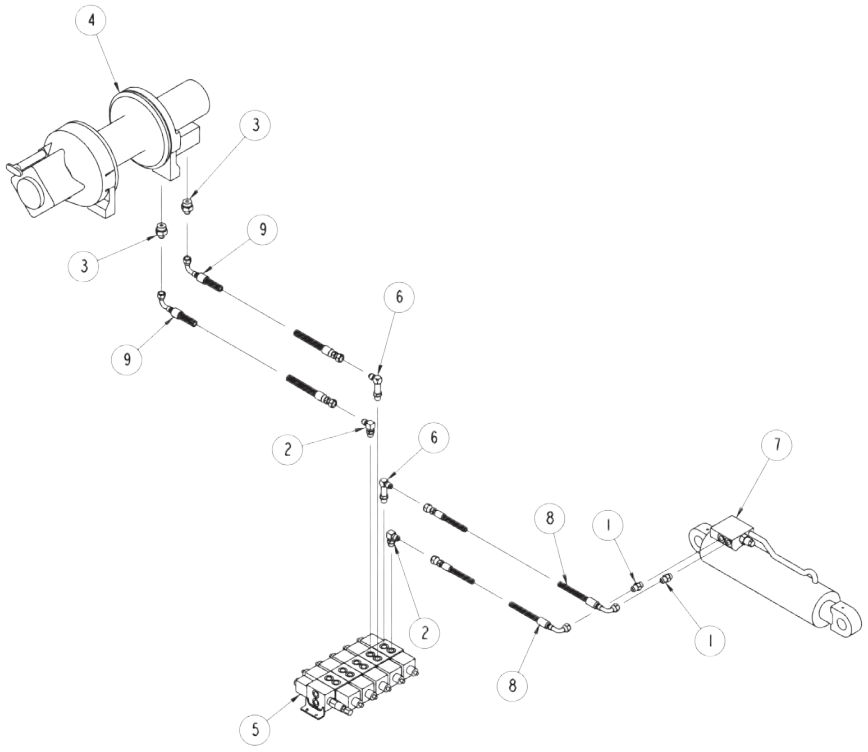
Section I - PARTS (cont'd)

810 POWER TILT TANK HYDRAULICS

BILL OF MATERIAL			
ITEM	PART NO	DESCRIPTION	QTY
1	0300056	BARB, 16C4-16MP	1
2	0300071	HOSE CLAMP, 1"	1
3	0301391	CONNECTOR, 8MJ-12MP	1
4	0302757	CONNECTOR, 8MJ-12MB	1
5	0307088	VALVE 5-SPOOL PARKER DIR. CONTROL	1
6	0307555	CONNECTOR 8MJx6MB	2
7	0307663	HOSE ASSEMBLY, 185"	1
8	0310462	MAGNETIC HEX PLUG ~ 3/4 NPT	1
9	0400118	5/16-18 X 3/4 HHCS GR.5 ZP	2
10	0400464	5/16 HELICAL LOCK WASHER ZP	2
11	0400748	SCREW, 5/16"-18 X 1/4" HEX SKT SET	2
12	0702540	SUCTION HOSE, 12 FT (1" ID)	1
13	0807297	HYDRAULIC TANK WELDMENT	1
14	9011011	PIPE PLUG, 1/4" SQ HD	1
15	9012839	PLUG 1" (HYDRAULIC) HEX HEAD	1
16	9018131	BREATHER CAP	1
17	9018399	IMMERSION FILTER ASSEMBLY	1
18	810770017	HOSE ASSEMBLY, 32"	1

Section I - PARTS (cont'd)

810 POWER TILT BOOM HYDRAULICS



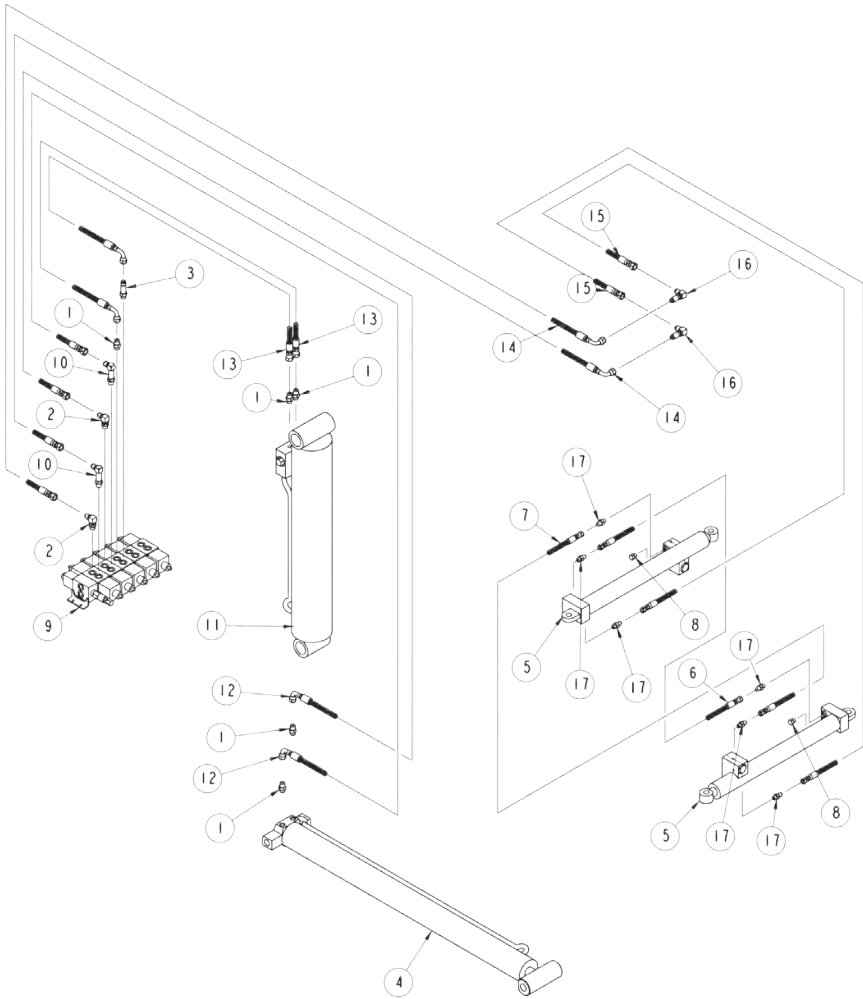
Section I - PARTS (cont'd)

810 POWER TILT BOOM HYDRAULICS

BILL OF MATERIAL			
ITEM	PART NO	DESCRIPTION	QTY
1	0301522	CONNECTOR 6MJ-6MB	2
2	0301620	FITTING, ELBOW, 6MJ-6MB90	2
3	0301778	CONNECTOR 6MJx10MB	2
4	0306691	WINCH, RAMSEY 4-TON PLANETARY	1
5	0307088	VALVE 5-SPOOL PARKER DIR. CONTROL	1
6	0307460	FITTING, ELBOW, 6MJ-6MB90L	2
7	810710000	LIFT CYLINDER	1
8	810770015	HOSE ASSEMBLY, 29"	2
9	880010003	HOSE ASSEMBLY, 32"	2

Section I - PARTS (cont'd)

810 POWER TILT WHEEL LIFT HYDRAULICS



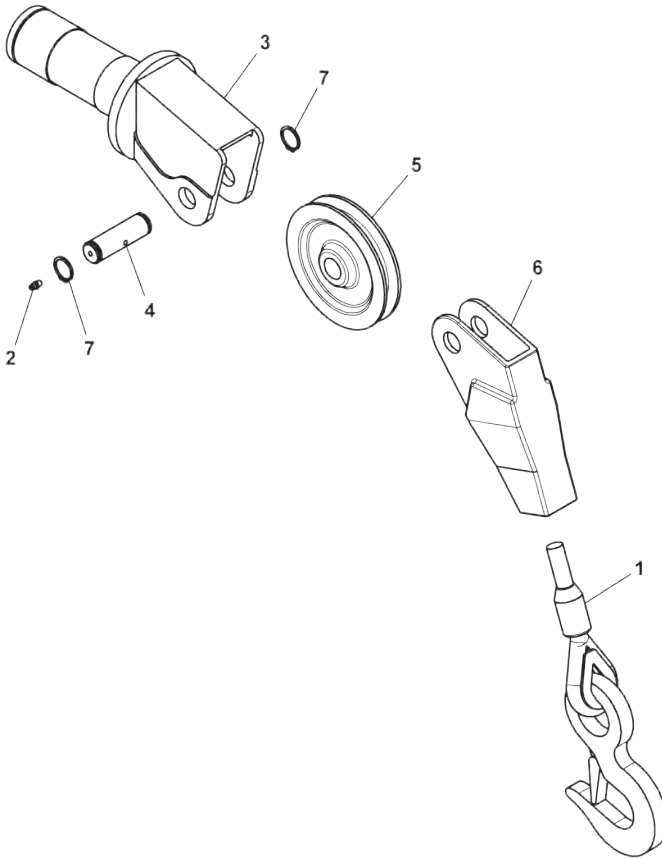
Section I - PARTS (cont'd)

810 POWER TILT WHEEL LIFT HYDRAULICS

BILL OF MATERIAL			
ITEM	PART NO	DESCRIPTION	QTY
1	0301522	CONNECTOR 6MJ-6MB	5
2	0301620	FITTING, ELBOW, 6MJ-6MB90	2
3	0302510	CONNECTOR, 6MJ-6MBL	1
4	0303020	CYLINDER, WHEEL LIFT EXTEND	1
5	0303844	CYLINDER, SWING L-ARM	2
6	0303860	HOSE ASSEMBLY, 10-3/4"	1
7	0303861	HOSE ASSEMBLY, 17"	1
8	0303886	PLUG - 1/4 SAE O-RING	2
9	0307088	VALVE 5-SPOOL PARKER DIR. CONTROL	1
10	0307460	FITTING, ELBOW, 6MJ-6MB90L	2
11	0310579	CYLINDER-810/405 FOLD	1
12	806750108	HOSE ASSEMBLY, 140"	2
13	810770003	HOSE ASSEMBLY, 99"	2
14	810770011	HOSE ASSEMBLY, 77"	2
15	810770012	HOSE ASSEMBLY, 157"	2
16	FC41	ELBOW - BULKHEAD	2
17	HC1291	CONNECTOR, 4MJ-4MB STR	6

Section I - PARTS (cont'd)

BOOM SWIVEL ASSEMBLY



REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0302916	WIRE ROPE, 3/8" X 6 X 19 IPS
--	--	805180000	SHEAVE HOUSING ASSEMBLY
2	1	0300113	GREASE FITTING, 1/4"-28 STRAIGHT
3	1	804181500	SHEAVE HOUSING CASTING
4	1	805180001	SHEAVE SHAFT
5	1	805180002	SHEAVE CASTING (WAS 9050504)
6	1	852060100	CABLE GUIDE ~ CASTING
7	2	9056098	RETAINING RING, EXT 1" NOM. HEAVY DUTY



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