



## OWNER'S MANUAL

# SP 850-XP

### 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.**



8503 Hilltop Drive  
Ooltewah, Tennessee 37363

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

FORM NO. 0501673

11 / 2008

## 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:**

**Miller Industries 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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The operator must read and understand all instructions in this manual before operating the recovery unit.

It is assumed by MILLER INDUSTRIES that the Owner/Operator has a thorough knowledge of the accepted and lawful retrieval and towing methods as dictated by his city, county or state. MILLER INDUSTRIES rejects any liability claim that may result from the incorrect or unlawful application of its equipment.

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# Section I - SPECIFICATIONS

1.1 The SP 850-XP is available with the Century 7035 and Century 9055 basic units. Standard features offered in these models are identical.

## 1.2 STANDARD FEATURES

(a) Two 35,000 lb. 2 speed planetary winches with air free spool and air tensioners, directional sheave heads and recovery D-rings (1 each per leg).

(b) Cable

Diameter and Length (Each Drum) . . . . . 5/8" dia. x 200 ft.

Type. . . . . 6 x 25 IWRC, XIPS

Working Limit, Each Line. . . . . 11,700 lbs.

## 1.3 OPTIONAL FEATURES

- Rear Stabilizers with Horizontal Extension
- Side Pull Stabilizer (For conventional rear jacks)
- XP Leg Spade Attachment
- Recovery Lights
- Additional D-Rings

## 1.4 CHASSIS RECOMMENDATIONS (MINIMUM)

Front Axle GAWR (Minimum) . . . . . 14,600 lbs.

Rear Axle GAWR (Minimum) . . . . . 40,000 lbs. (Tandem)

Minimum GVW . . . . . 54,600 lbs.

C.T. (Cab to Tandem) Dimension . . . . . 204"

Frame Length (Behind Centerline of Axle) . . . . . 40"

RBM Each Frame Rail . . . . . 2,750,000 in.-lbs. (7035)

RBM Each Frame Rail . . . . . 3,000,000 in.-lbs. (9055)

The outside frame rails of chassis extending behind cab must be free of fuel tanks, air tanks, battery boxes, exhaust stacks, etc.

Note: Specifications Subject to Change without Notification.



## Section II - OPERATIONAL FUNCTIONS

### SP 850-XP

- 2.1** The SP 850-XP option provides the operator with hydraulic pivoting stiff legs to maximize the recovery unit in side pull applications by adding to the stability of the platform.
- 2.2** Each function of the SP 850-XP can be controlled from the Control Stations located in the rear compartments on either side of the body. See Figures 2.1 & 2.2. Each leg can be swung only from the same side control station, but both downstrokes can be controlled from either control station.



**FIGURE 2.1**



**FIGURE 2.2**

## Section II - OPERATIONAL FUNCTIONS (cont'd)

- 2.3** The Control Handles are clearly marked as to their functions and directions. Movement of the control handles meters the flow of oil through valves to control the speed of each function. Each valve is equipped with a pressure gauge to monitor the hydraulic pressure during the operation.
- 2.4** The SP 850-XP legs can be swung out to approximately 92° to allow the operator to select the angle from the winch to the recovery area to make a straight line pull and optimize the cable wrap on the winch. The stiff legs are swung out and extended by means of double-acting cylinders. See Figure 2.3.



**FIGURE 2.3**

- 2.5** The self-locking planetary winches are powered by hydraulic motors attached directly to the winch drum shafts. See Figure 2.4.

### **NOTE**

**CHECK OIL LEVEL IN WINCHES BEFORE ANY OPERATION.  
FILL TO PROPER LEVEL WITH REQUIRED GEAR LUBRICANT.  
REFER TO WINCH MANUAL FOR PROPER PROCEDURES.**



## Section II - OPERATIONAL FUNCTIONS (cont'd)



**FIGURE 2.4**

- 2.6** The Winch Air Free Spool Switches are located at the Control Stations located in the rear compartments. When activated, the winch clutch is disengaged and the drum will free spool. Refer to Figures 2.1 & 2.2.

**NOTE**  
**THE CONTROL SWITCH ON THE SWITCH PANEL IN THE TRUCK CAB MUST BE ON FOR THE FREE SPOOL SWITCHES TO OPERATE.**

- 2.7** The swivel feet on the stiff legs may be used as a flat pad for stability on hard packed surfaces, or the operator may flip a plunger pin and lock the pad into a spade position for more holding power on softer terrain. See Figures 2.4 & 2.5.

## Section II - OPERATIONAL FUNCTIONS (cont'd)



**STAND CLEAR WHILE OPERATING STIFF LEGS  
TO AVOID CRUSHING INJURY.**



**FIGURE 2.5**



**FIGURE 2.6**

## **Section II - OPERATIONAL FUNCTIONS (cont'd)**

- 2.8** A D-ring is provided that can be used at the top or bottom of the stiff legs for use with multiple part lines.
- 2.9** For additional holding power on rear pulls, the operator can lower the front stiff legs while in the closed position in conjunction with the rear jack legs for increased holding power on hard pulls to the rear.
- 2.10** The SP 850-XP legs are equipped with mechanical lockouts to keep them in the stowed position when travelling.



## Section III - MAINTENANCE

**3.1** The following SP 850-XP maintenance requirements should be included in the recovery unit's preventive maintenance program.

### **3.2 LUBRICATION & PREVENTIVE MAINTENANCE**

The following general lubrication and preventive maintenance should be performed at least once per month for moderate usage, or more often as required, for heavy usage.

- (a) Inspect, repair or replace any worn, cracked, leaking, otherwise damaged components including, but not limited to, the following:
  - 1. **Hydraulic Hoses and Fittings**
  - 2. **Cables and Fittings**
  - 3. **Cylinders**
  - 4. **Controls**
  - 5. **Winches**
  - 6. **Pivot Bearing Surfaces and Pins**
  
- (b) Inspect all bolts for tightness and re-tighten as necessary. Vibration and stress may loosen even properly torqued bolts.
  
- (c) Lubricate all grease fittings on the SP 850-XP weekly including:
  - 1. **Cylinder Pivots**
  - 2. **Fairleads**
  - 3. **Winch Clutches**
  - 4. **Stiff Leg Pivot**
  
- (d) Check oil level of winches and fill to level of oil plug located in side plate of gear housing Use SAE 140 general purpose gear oil. Lubricate grease fittings on clutches.
  
- (e) Lubricate winch cables using an oily rag while respooling onto drum. Other special cable lubricants are available which have better penetrating qualities. Consult your local oil company for a list of these.



## Section IV - PARTS

This Section is provided by the manufacturer for the purpose of ordering any component part of the **SP 850-XP** 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 **SP 850-XP** 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**.

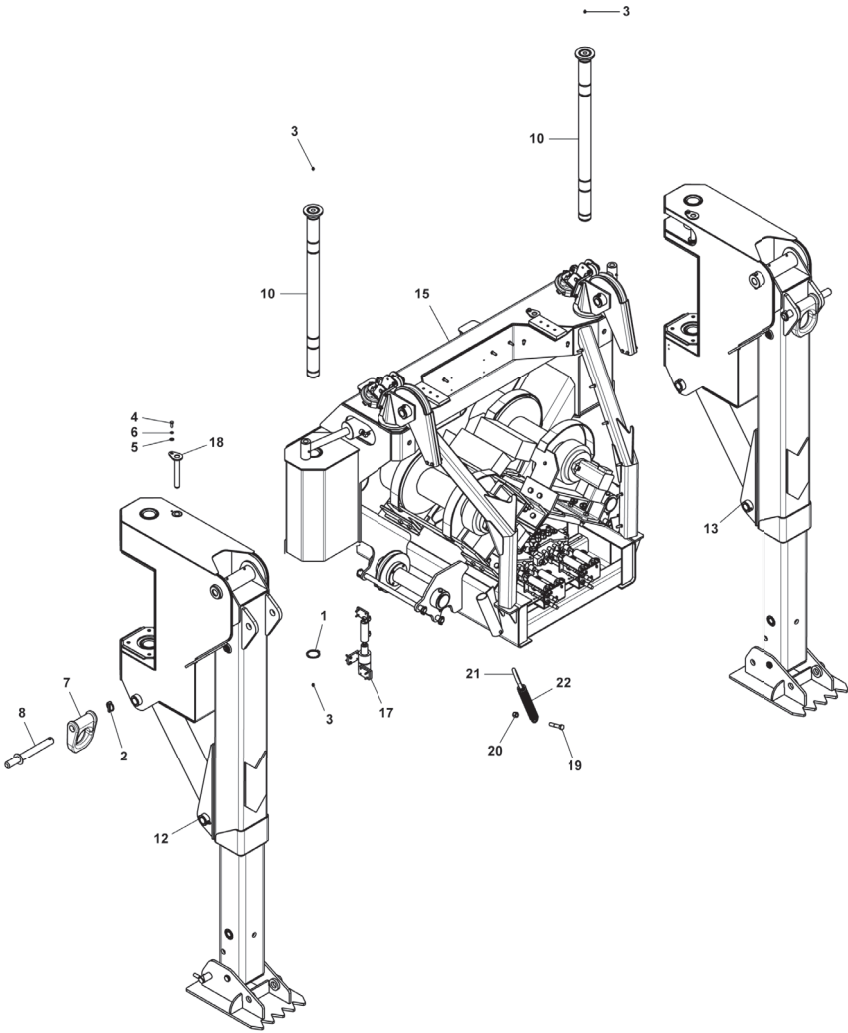
1. **Manual Number & Date of Publication**
2. **Manual Page Number**
3. **Page Title**
4. **Reference Number of Part Desired**
5. **Part Number**
6. **Part Description**
7. **Quantity of Part Desired**

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 IV - PARTS (cont'd)

## SP 850-XP ASSEMBLY





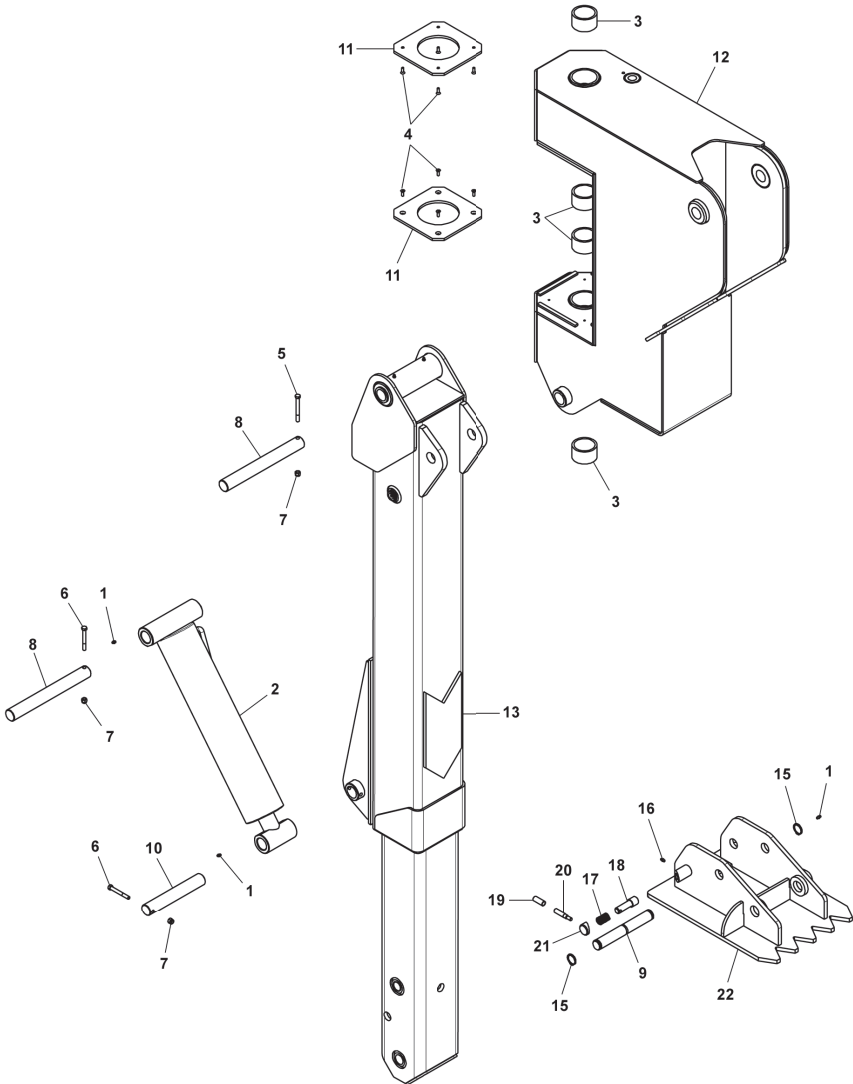
## Section IV - PARTS (cont'd)

### SP 850-XP ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
--	--	0908278	SP 850-XP SIDEWINDER ASSEMBLY, 2-SPD
1	2	0300108	SNAP RING, 2.5" 5100-250
2	2	0301861	QUICK PIN, LYNCH -B7932 PL 7/16
3	4	0301895	GREASE FITTING, STR 1/8" PTF
4	2	0400126	3/8"-16 X 1" HHCS GR5 ZP
5	2	0400480	3/8" FLAT WASHER ZP
6	2	0400482	3/8" HELICAL LOCKWASHER ZP
7	2	0719585	D-RING, TOWING
8	2	0803923	PIN WELDMENT, D-RING
9	2	0804483	CABLE TIE BACK WELDMENT
10	2	0806727	PIVOT PIN WELDMENT
11	2	0906572	WINCH CABLE STOW KIT
12	1	0908052	LH LEG ASSEMBLY
13	1	0908053	RH LEG ASSEMBLY
14	1	0908274	HOUSE LOCK KIT, MANUAL SP 850-XP
15	1	0908277	FRAME ASSEMBLY, 2-SPD
16	1	0908306	LIMIT SWITCH KIT, SP 850-XP
17	1	0909110	PIVOT MOUNTING HOUSE LOCK ASSEMBLY
18	2	805352500	PIN WELDMENT UPPER TILT CYL
--	--	0906572	WINCH CABLE STOW KIT
19	1	0400257	5/8"-11 X 3.25" HHCS GR5 ZP
20	1	0400421	5/8"-11 NYLOK HEX NUT ZP
21	1	9048800	5/8" WELDLESS CHAIN LINK
22	1	945030007	CABLE TIE BACK SPRING-1

# Section IV - PARTS (cont'd)

## SP 850-XP LH LEG ASSEMBLY



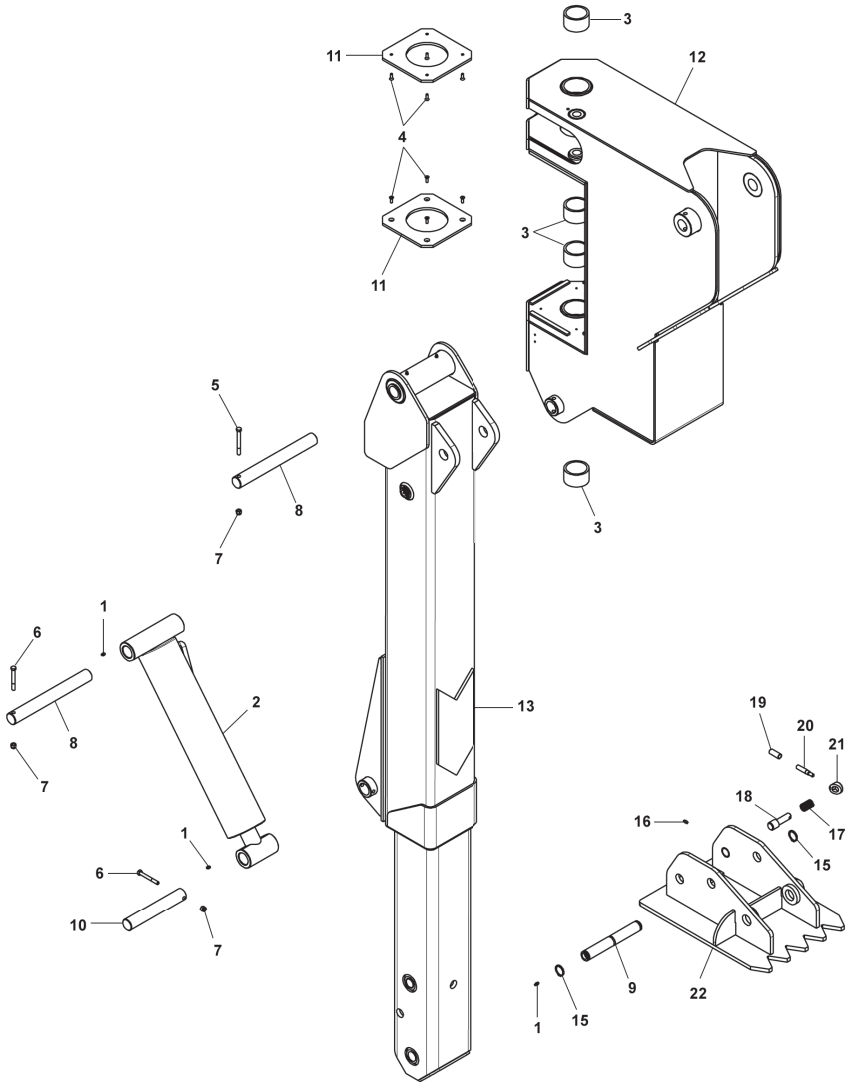
## Section IV - PARTS (cont'd)

### SP 850-XP LH LEG ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
--	--	0908052	LH LEG ASSEMBLY
1	3	0300113	GREASE FITTING, 1/4"-28 STRAIGHT
2	1	0302357	CYLINDER, HYD BOOM LIFT 500SER
3	4	0303839	BUSHING, PIVOT REDESIGN
4	8	0400079	1/4"-20 X 3/4" FL SKT SCR GR5
5	1	0400130	3/8"-16 X 3.5" HHCS GR5 ZP
6	2	0400133	3/8"-16 X 3" HHCS GR5 ZP
7	3	0400392	3/8"-16 NYLOK HEX NUT ZP
8	2	0705488	SHAFT, LIFT CYL.
9	1	0713510	PIN, CYLINDER SIDEWINDER
10	1	0717796	PIN, LEG FOLD CYLINDER (ROD)
11	2	0717797	PAD, THRUST SIDEWINDER LEG
12	1	0806729	LEG FRAME WELDMENT (LH)
13	1	0908056	LEG ASSEMBLY
14	1	0908440	FOOT ASSEMBLY, LH SIDEWINDER
15	2	9056125	1.25" NOM HVY DUTY RET RING EXT
--	--	0908440	FOOT ASSEMBLY, LH SIDEWINDER
16	1	0300113	GREASE FITTING, 1/4"-28 STRAIGHT
17	1	0304653	1" CAM LOCK SPRING
18	1	0304654	1" CAM LOCK PLUNGER PIN
19	1	0304658	1/2" VINYL HANDLE GRIP
20	1	0304659	1/2" CAM LOCK HANDLE PIN
21	1	0307618	CAMLOCK BARREL CAP 1"
22	1	0806875	FOOT WELDMENT (LH)

# Section IV - PARTS (cont'd)

## SP 850-XP RH LEG ASSEMBLY



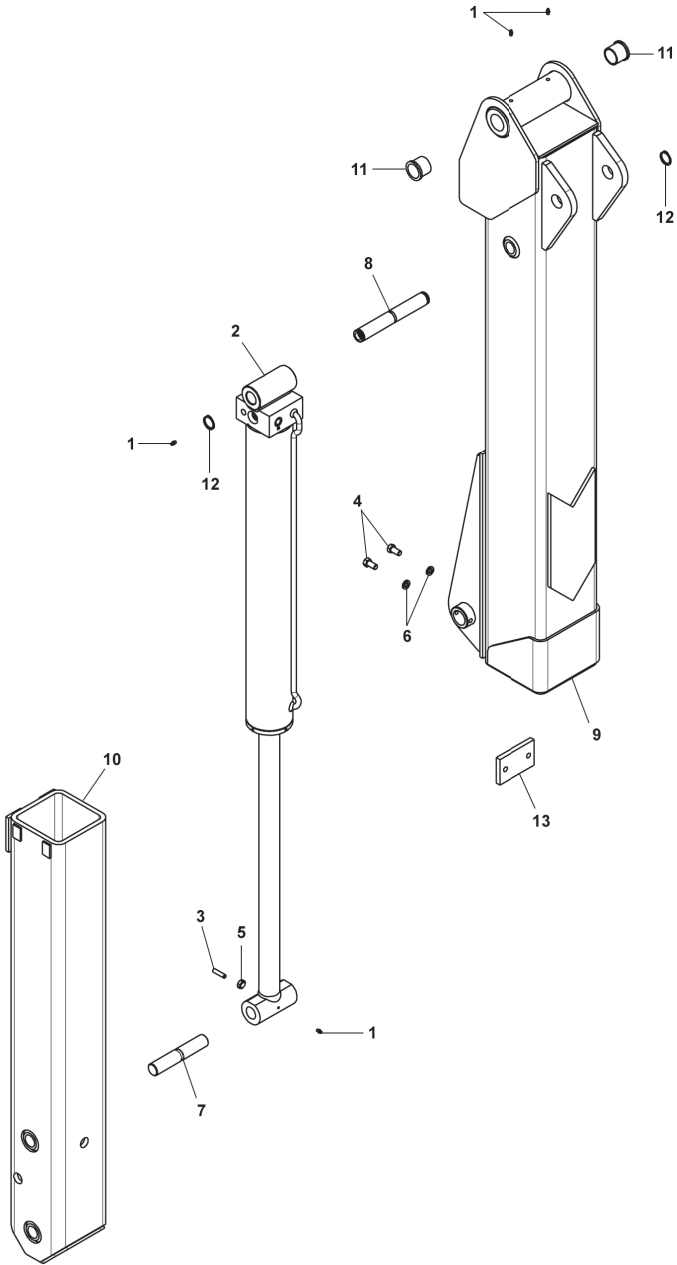
## Section IV - PARTS (cont'd)

### SP 850-XP RH LEG ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
--	--	0908053	RH LEG ASSEMBLY
1	2	0300113	GREASE FITTING, 1/4"-28 STRAIGHT
2	1	0302357	CYLINDER, HYD BOOM LIFT 500SER
3	4	0303839	BUSHING, PIVOT REDESIGN
4	8	0400079	1/4"-20 X 3/4" FL SKT SCR GR5
5	1	0400130	3/8"-16 X 3.5" HHCS GR5 ZP
6	2	0400133	3/8"-16 X 3" HHCS GR5 ZP
7	3	0400392	3/8"-16 NYLOK HEX NUT ZP
8	2	0705488	SHAFT, LIFT CYL.
9	1	0713510	PIN, CYLINDER SIDEWINDER
10	1	0717796	PIN, LEG FOLD CYLINDER (ROD)
11	2	0717797	PAD, THRUST SIDEWINDER LEG
12	1	0806730	LEG FRAME WELDMENT (RH)
13	1	0908056	LEG ASSEMBLY
14	1	0908441	FOOT ASSEMBLY, RH SIDEWINDER
15	2	9056125	1.25" NOM HVY DUTY RET RING EXT
--	--	0908441	FOOT ASSEMBLY, RH SIDEWINDER
16	1	0300113	GREASE FITTING, 1/4"-28 STRAIGHT
17	1	0304653	1" CAM LOCK SPRING
18	1	0304654	1" CAM LOCK PLUNGER PIN
19	1	0304658	1/2" VINYL HANDLE GRIP
20	1	0304659	1/2" CAM LOCK HANDLE PIN
21	1	0307618	CAMLOCK BARREL CAP 1"
22	1	0806876	FOOT WELDMENT (RH)

# Section IV - PARTS (cont'd)

## SP 850-XP LEG ASSEMBLY



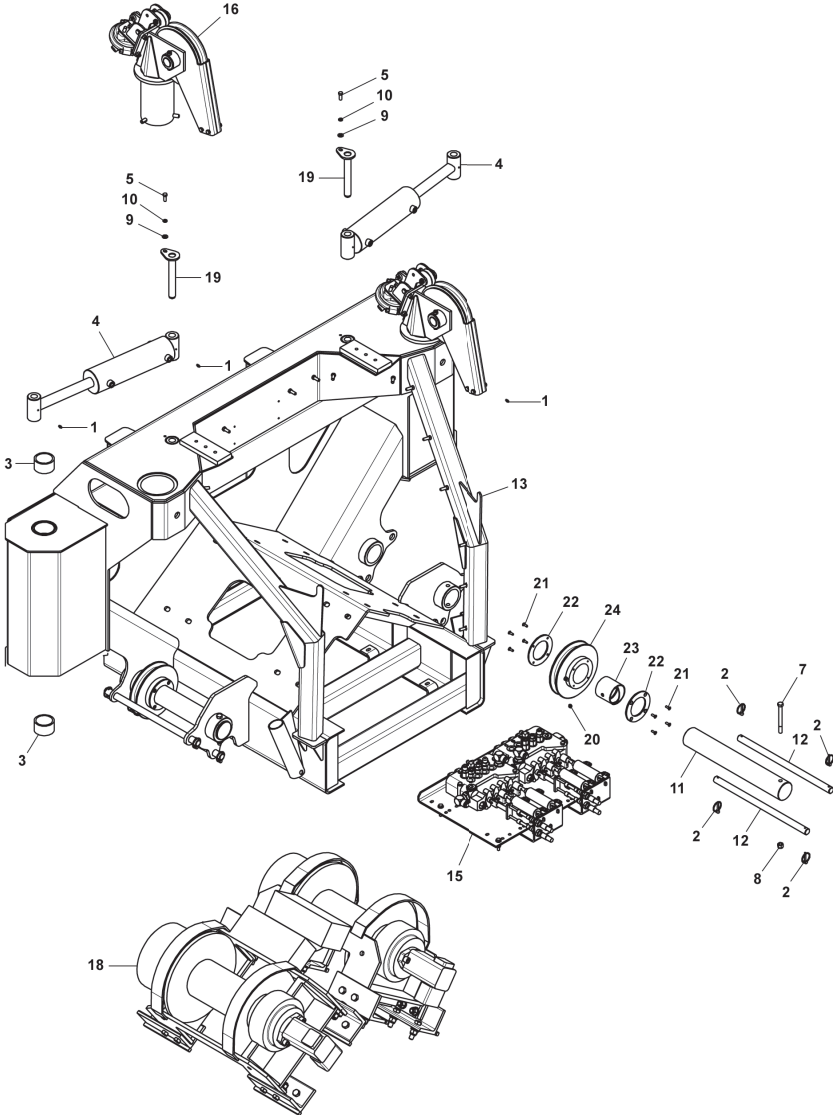
## Section IV - PARTS (cont'd)

### SP 850-XP LEG ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
--	--	0908056	LEG ASSEMBLY
1	4	0300113	GREASE FITTING, 1/4"-28 STRAIGHT
2	1	0307843	CYLINDER, HYD TI-S40030032PPBZ
3	1	0400139	3/8"-16 X 1.5" HEX SKT SET
4	2	0400176	1/2"-13 X 1" HHCS GR5 ZP
5	1	0400392	3/8"-16 NYLOK HEX NUT ZP
6	2	0400491	1/2" HELICAL LOCKWASHER ZP
7	1	0713129	SHAFT, UPPER SPADE
8	1	0713510	PIN, CYLINDER SIDEWINDER
9	1	0806731	OUTER LEG TUBE WELDMENT
10	1	0806732	INNER LEG TUBE WELDMENT
11	2	9053713	FLG BEARING 1.5" ID OILITE
12	2	9056125	1.25" NOM HVY DUTY RET RING EXT
13	1	930020001	SPACER PLATE STIFFLEG SU

# Section IV - PARTS (cont'd)

## SP 850-XP FRAME ASSEMBLY





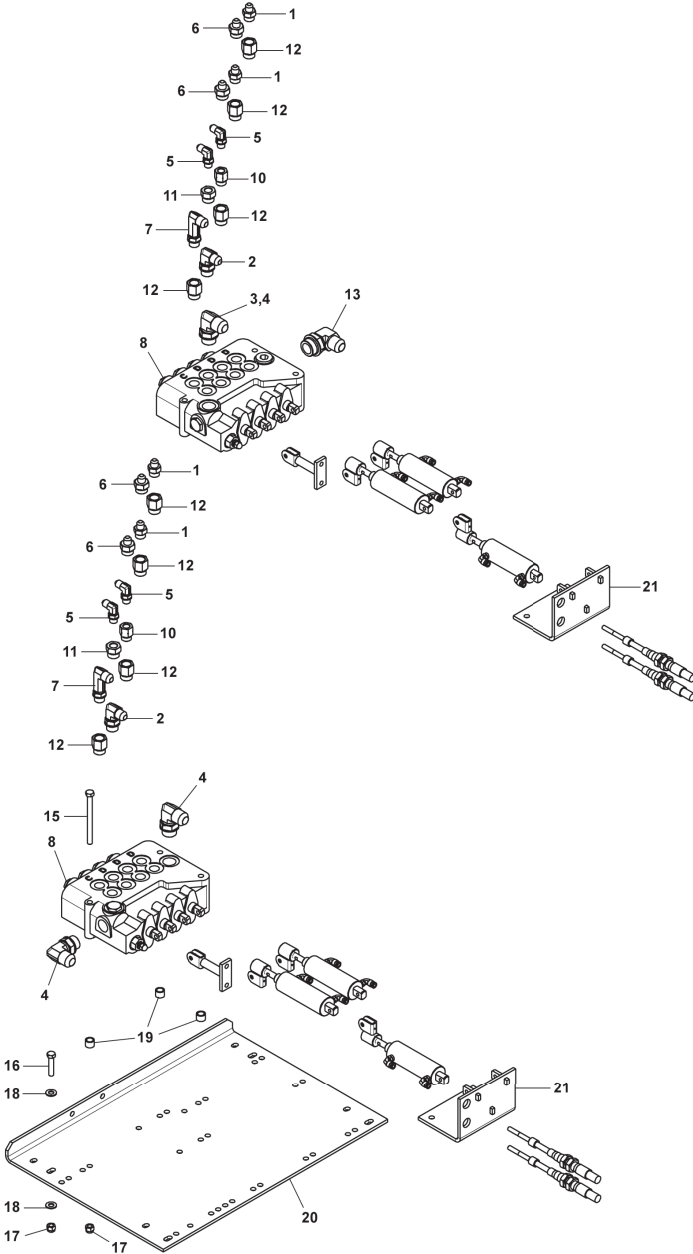
## Section IV - PARTS (cont'd)

### SP 850-XP FRAME ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
--	--	0908277	FRAME ASSEMBLY, 2-SPD
1	6	0300113	GREASE FITTING, 1/4"-28 STRAIGHT
2	4	0301861	QUICK PIN, LYNCH - B7932 PL 7/16
3	4	0303839	BUSHING, PIVOT REDESIGN
4	2	0306746	CYLINDER HYD, FOLD
5	2	0400126	3/8"-16 X 1" HHCS GR5 ZP.
6	2	0400206	1/2"-13 X 5" HHCS GR5 ZP
7	4	0400392	3/8"-16 NYLOK HEX NUT ZP
8	2	0400408	1/2"-13 NYLOK HEX NUT ZP
9	6	0400480	3/8" FLAT WASHER ZP
10	2	0400482	3/8" HELICAL LOCKWASHER ZP
11	2	0717763	PIN, FLEET SHEAVE
12	4	0717843	PIN, CABLE RETAINER
13	1	0806728	FRAME WELDMENT
14	2	0908055	REVERSING SHEAVE SUB-ASSEMBLY
15	1	0908060	VALVE PAN ASSEMBLY
16	2	0908062	CABLE SHEAVE & TENSIONER ASSEMBLY
17	1	0908259	HOSE ASSEMBLY KIT, SIDEWINDER
18	1	0908279	WINCH ASSEMBLY, SIDEWINDER 2-SPD
19	2	805352500	PIN WELDMENT, UPPER TILT CYL
--	--	0908055	REVERSING SHEAVE SUB-ASSEMBLY
20	1	0301895	GREASE FITTING, STR 1/8" PTF
21	8	0400079	1/4"-20 X 3/4" FL SKT SCR GR5
22	2	0717748	PLATE, SHEAVE COVER
23	1	0718059	BUSHING, WITH HOLE (0306748)
24	1	0806736	FLEET SHEAVE WELDMENT/MACH DRW

# Section IV - PARTS (cont'd)

## SP 850-XP VALVE PAN ASSEMBLY



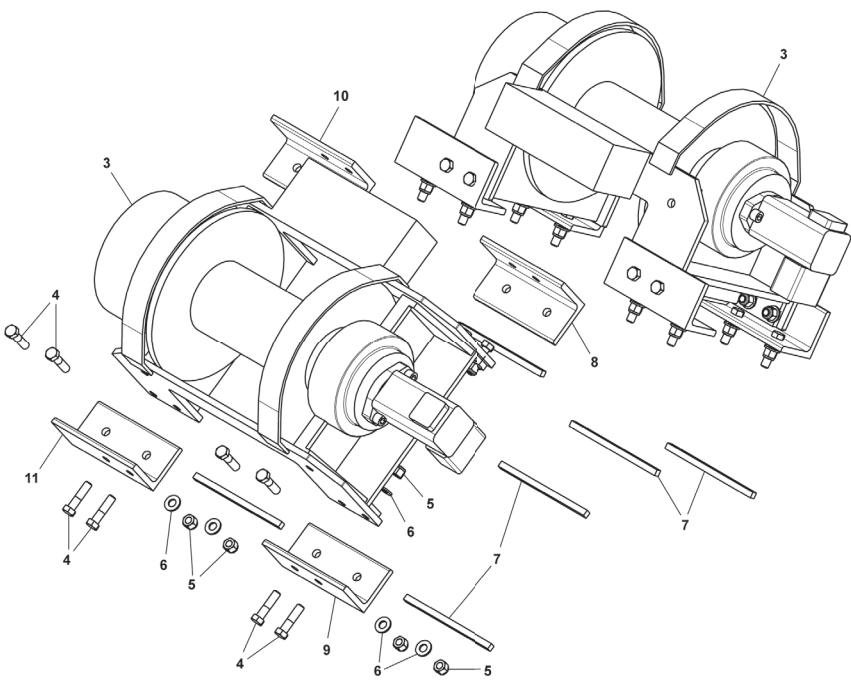
## Section IV - PARTS (cont'd)

### SP 850-XP VALVE PAN ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
--	--	0908060	VALVE PAN ASSEMBLY
1	4	0300044	FITT, HYD CONN. 6MJ-8MB
2	2	0300052	FITTING, ELB 8MJ-10MB
3	1	0301372	FITTING, CONNECTOR 12FJ-8MJ
4	3	0301545	FITTING, ELB 12MJ-12MB90
5	4	0301620	FITTING, HYD. 6MJ-6MB90
6	4	0301778	6MJ-10MB STRAIGHT CONNECTOR
7	2	0302508	FITTING, ELB 8MJ-8MB
8	2	0302511	VALVE, 4 SPOOL
9	1	0302850	PLUG 16MB
10	2	0303017	FITTING, CONNECTOR
11	2	0303174	FITTING, CONNECTOR
12	8	0303176	FITTING, CONNECTOR
13	1	0303948	FTG-90DEG ELL 12MJ-16MB90
14	1	0306901	PLUG, 3/4" SAE O-RING HEX SOC
15	6	0400135	3/8"-16 X 4.5" HHCS GR5 ZP
16	4	0400157	3/8"-16 X 1.75" HHCS GR5 ZP
17	10	0400392	3/8"-16 NYLOK HEX NUT ZP
18	8	0400480	3/8" FLAT WASHER ZP
19	6	0707045	SPACER, CONTROL VALVE
20	1	0717827	PLATE, VALVE MOUNTING
21	2	0806737	CABLE BRACKET WELDMNT

# Section IV - PARTS (cont'd)

## SP 850-XP WINCH ASSEMBLY



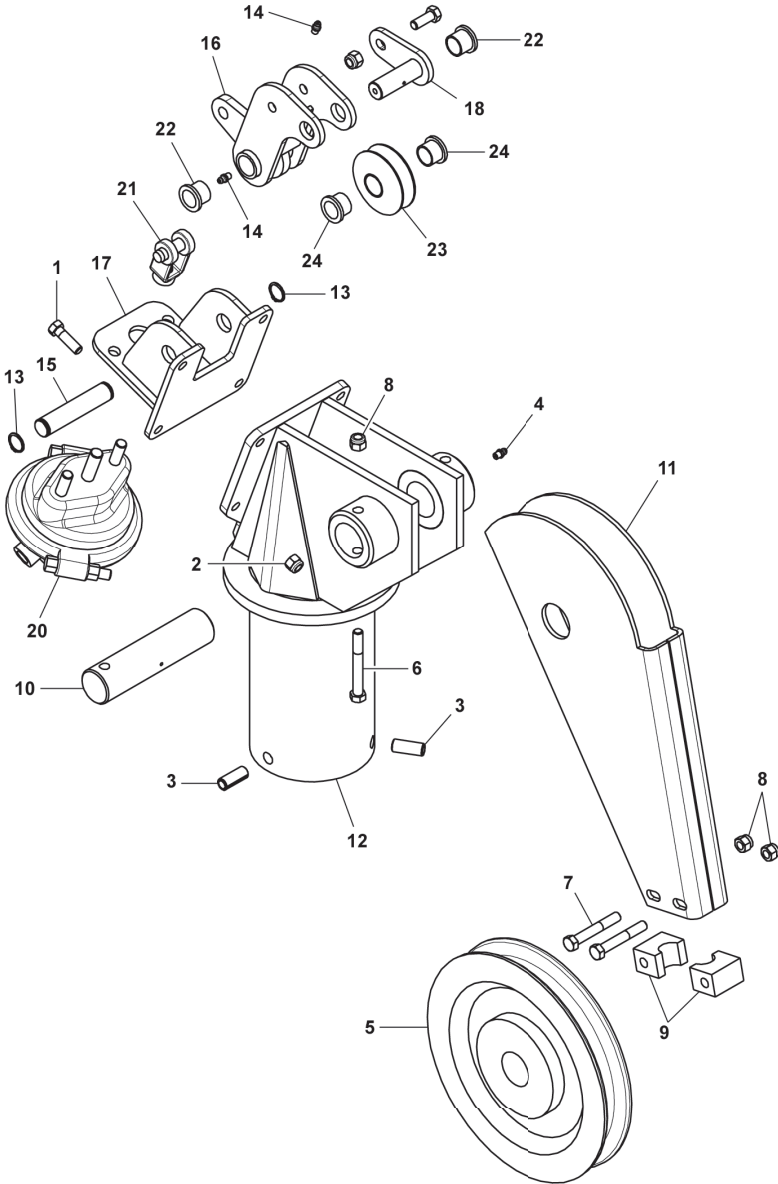
## Section IV - PARTS (cont'd)

### SP 850-XP WINCH ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
--	--	0908279	WINCH ASSEMBLY, SIDEWINDER 2-SPD
1	80	0301577	1/4" O.D. PLASTIC TUBING BLK (NOT SHOWN)
2	80	0302495	CONVOLUTED LOOM 1/4" (NOT SHOWN)
3	2	0307061	WINCH, 35K dp 2-SP N. DRUM W/TEN
4	32	0400262	5/8"-11 X 2.5" HHCS GR 8 ZP
5	32	0400426	5/8"-11 GR 8 NYLOK NUT YZ
6	32	0400503	5/8" FLAT WASHER GR8 YZ
7	8	0711164	BLOCK - SHEAR
8	2	0715947	ANGLE, WINCH MOUNTING
9	2	0715948	ANGLE, WINCH MOUNTING
10	2	0715949	ANGLE, WINCH MOUNTING
11	2	0715950	ANGLE, WINCH MOUNTING
12	1	9010030	FITT, BRASS ELB 1/4T-1/8MPX (NOT SHOWN)
13	2	9011053	FITTING, BRASS 1/4TUBE-1/4MP (NOT SHOWN)
14	1	9011071	FITT, BRASS TEE 1/4T-1/4T-1/4T (NOT SHOWN)
15	3	9012575	LEGRIS- 3108-56-11 1/8NP (NOT SHOWN)

# Section IV - PARTS (cont'd)

## SP 850-XP CABLE SHEAVE AND TENSIONER ASSEMBLY



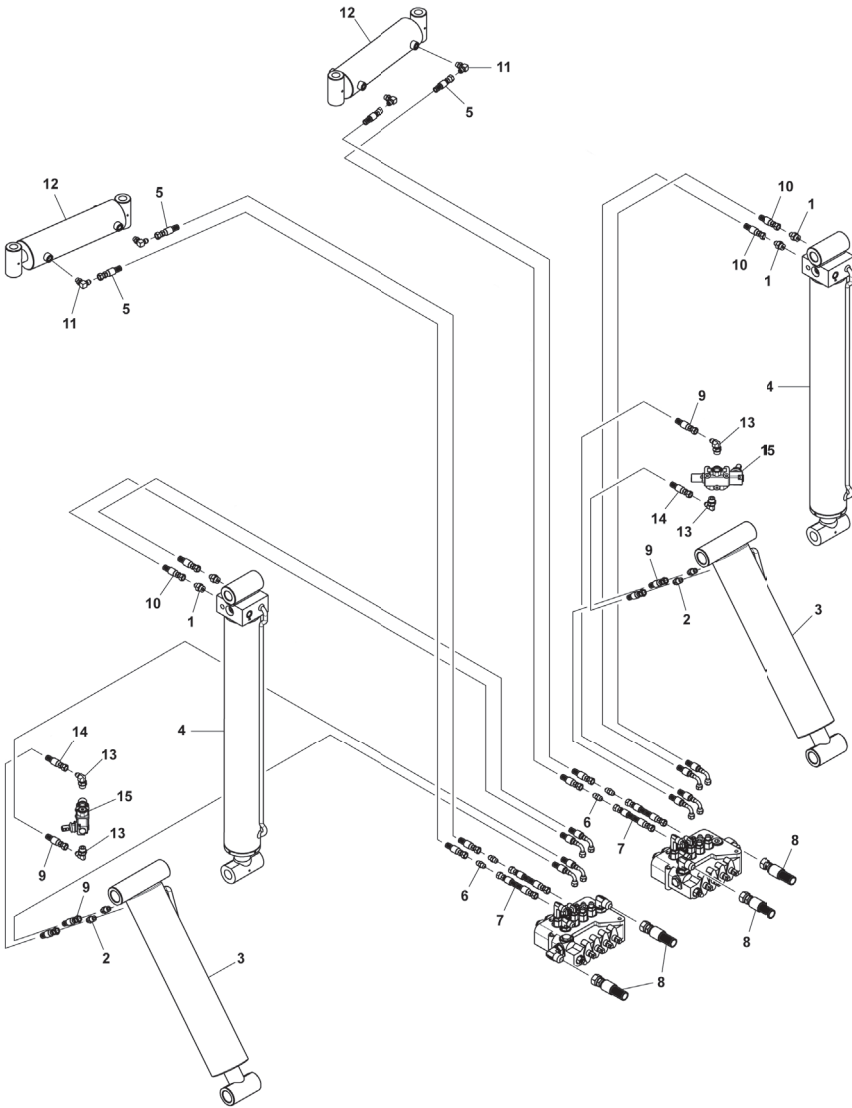
## Section IV - PARTS (cont'd)

### SP 850-XP CABLE SHEAVE AND TENSIONER ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
--	--	0908062	CABLE SHEAVE & TENSIONER ASSEMBLY
1	4	0400122	3/8"-16 X 1.25" HHCS GR5 ZP
2	4	0400392	3/8"-16 NYLOK HEX NUT ZP
3	3	0400557	1/2" X 1-1/4" ROLL PIN ZP
4	1	0908054	CABLE SHEAVE SWIVEL ASSEMBLY
5	1	0908063	TENSIONER ASSEMBLY
--	--	0908054	CABLE SHEAVE SWIVEL ASSEMBLY
6	1	0300113	GREASE FITTING, 1/4"-28 STRAIGHT
7	1	0303441	SHEAVE-10" DIA X 1.5" BORE
8	1	0400133	3/8"-16 X 3" HHCS GR5 ZP
9	2	0400150	3/8"-16 X 2.5" HHCS GR5 ZP
10	3	0400392	3/8"-16 NYLOK HEX NUT ZINC
11	2	0700801	GUIDE, BOTTOM CABLE
12	1	0716134	SHAFT, SHEAVE
13	1	0803313	GUIDE, CABLE WELDMENT
14	1	0806735	SWIVEL, CABLE GUIDE
--	--	0908063	TENSIONER ASSEMBLY
15	2	HD0160	SNAP RING, 3/4" EXTERNAL
16	2	0300113	GREASE FITTING, 1/4"-28 STRAIGHT
17	1	0717832	PIN, TENSIONER PIVOT
18	1	0806740	TENSIONER ARM WELDMENT
19	1	0806741	TENSIONER MOUNTING BRACKET
20	1	0806742	PIN, TENSIONER ROLLER
21	1	9012553	BRASS ELBOW LEGRIS 3109- (NOT SHOWN)
22	1	9018141	DIAPHRAM CYL. KN36090
23	1	9048450	YOKE GREEN BAY B-371 1/
24	2	9053524	BEARING BR. FLG.752 X .879x.75
--	--	0908064	TENSIONER ROLLER
25	1	0717831	ROLLER, TENSIONER
26	2	0717833	BUSHING, BRASS

# Section IV - PARTS (cont'd)

## SP 850-XP LEG HYDRAULICS





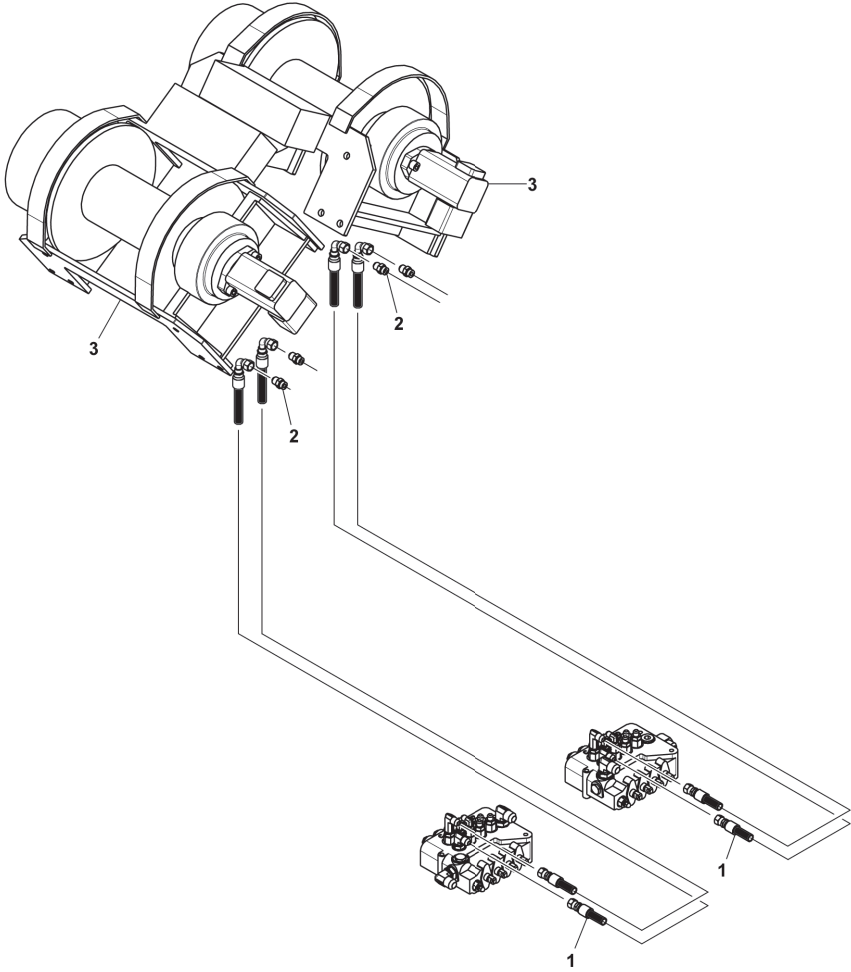
## Section IV - PARTS (cont'd)

### SP 850-XP LEG HYDRAULICS

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
--	--	--	LEG ASSEMBLY
1	4	0300044	FITT, HYD CONN. 6MJ-8MB
2	4	0301425	FITTING, CONNECTOR
3	2	0302357	CYLINDER, HYD BOOM LIFT 500SER
4	2	0307843	CYLINDER, HYD TI-S40030032PPBZ
--	--	0908259	HOSE ASSEMBLY KIT, SIDEWINDER
5	4	0301403	HOSE HYD, 80.5"
6	4	0301837	INLINE ORIFICE
7	4	0302805	HOSE HYD, 10"
8	4	0302901	HOSE HYD, 120" 12C12
9	4	0303866	HOSE HYD, 68"
10	4	0307452	HOSE, HYD 146" LG
--	--	0908277	FRAME ASSEMBLY, 2-SPD
11	4	0301620	FITTING, HYD. 6MJ-6MB90
12	2	0306746	CYLINDER HYD, FOLD
--	--	0910340	KIT - SP-850XP LEG VALVE
13	4	0301470	FITTING, 90ELB 6MJ-8MB90
14	2	0302000	HOSE HYD, 24"
15	2	0310397	VALVE, DIVERTER WALVOIL

# Section IV - PARTS (cont'd)

## SP 850-XP WINCH HYDRAULICS



## Section IV - PARTS (cont'd)

### SP 850-XP WINCH HYDRAULICS

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
-- 1	-- 4	0908259 0302313	HOSE ASSEMBLY KIT, SIDEWINDER HOSE HYD, 25"
-- 2 3	-- 4 2	0908279 0300041 0307061	WINCH ASSEMBLY, SIDEWINDER 2-SPD FITT, HYD CONN. 8MJ-8MB WINCH, 35K dp 2-SP N. DRUM W/TEN

## Section IV - PARTS (cont'd)

### SP 850-XP MISCELLANEOUS KITS

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
--	--	0908274	HOUSE LOCK KIT, MANUAL SP850XP
1	2	0300341	KNOB, BLACK (BLANK)
2	2	0400133	3/8"-16 X 3" HHCS GR5 ZP
3	2	0718061	PIN, RETAINER
--	--	0908306	KIT, LIMIT SWITCH SP-850XP
4	2	HE0239	SWITCH, LIMIT (DOOR)
5	2	HE0240	SWITCH, ARM-LIMIT (DOOR)
6	4	0300134	CLAMP, 1" HOSE INSULATED
7	60	0307513	CABLE WIRE 2/18GA SOOW
8	2	0307514	CONNECTOR, DOME-CAP STRAIN REL
9	4	0400126	3/8"-16 X 1" HHCS GR5 ZP.
10	4	0400392	3/8"-16 NYLOK HEX NUT ZINC
11	4	0402020	1/4"-20NC X 3/4" HEX HD SS
12	4	0402110	1/4" SS FLAT WASHER
13	4	0402111	1/4" SS LOCKWASHER 316
14	2	0719573	BAR, LIMIT SWITCH CAM
15	4	9042312	10-32 X 1-1/4" R.H.S.M. SC
--	--	0909110	PIVOT MTG HOUSE LOCK ASSEMBLY
16	2	0306698	AIR CYLINDER-1.5BORE/1.71STROK
17	8	0400057	1/4"-20 X 1.25" HHCS
18	6	0400084	1/4"-20 X 1.5" HHCS GR5 ZP
19	2	0400367	1/4"-20 NYLOK HEX NUT ZP
20	2	0400401	7/16"-20 HEX JAM NUT PL
21	12	0400452	1/4" HELICAL LOCKWASHER ZP
22	2	0400522	1-1/16" X 2" X 1/8"
23	4	0719678	PLATE, MTG HOUSE LOCK
24	2	0719679	PIN, RETAINER
25	4	0807224	MTG, PIVOT - HOUSE LOCK WELDT
26	4	9010030	FITT, BRASS ELB 1/4T-1/8MPX
27	1	512-021001	VALVE, CHECK 1/8 NPT
28	1	512-021201	VALVE, SOLENOID 5/2-WAY 1/8NPT
29	1	512-022401	VALVE, SOLENOID 5/2-WAY 1/8NPT
--	--	0910340	KIT - SP-850XP LEG VALVE
30	2	0310398	HANDLE, DIVERTER VALVE
31	6	0400367	1/4-20 NYLOK HEX NUT ZP
32	6	0400451	1/4 FLATWASHER ZP
33	6	9041011	1/4 NC X 2 1/2 HHCS PL G





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