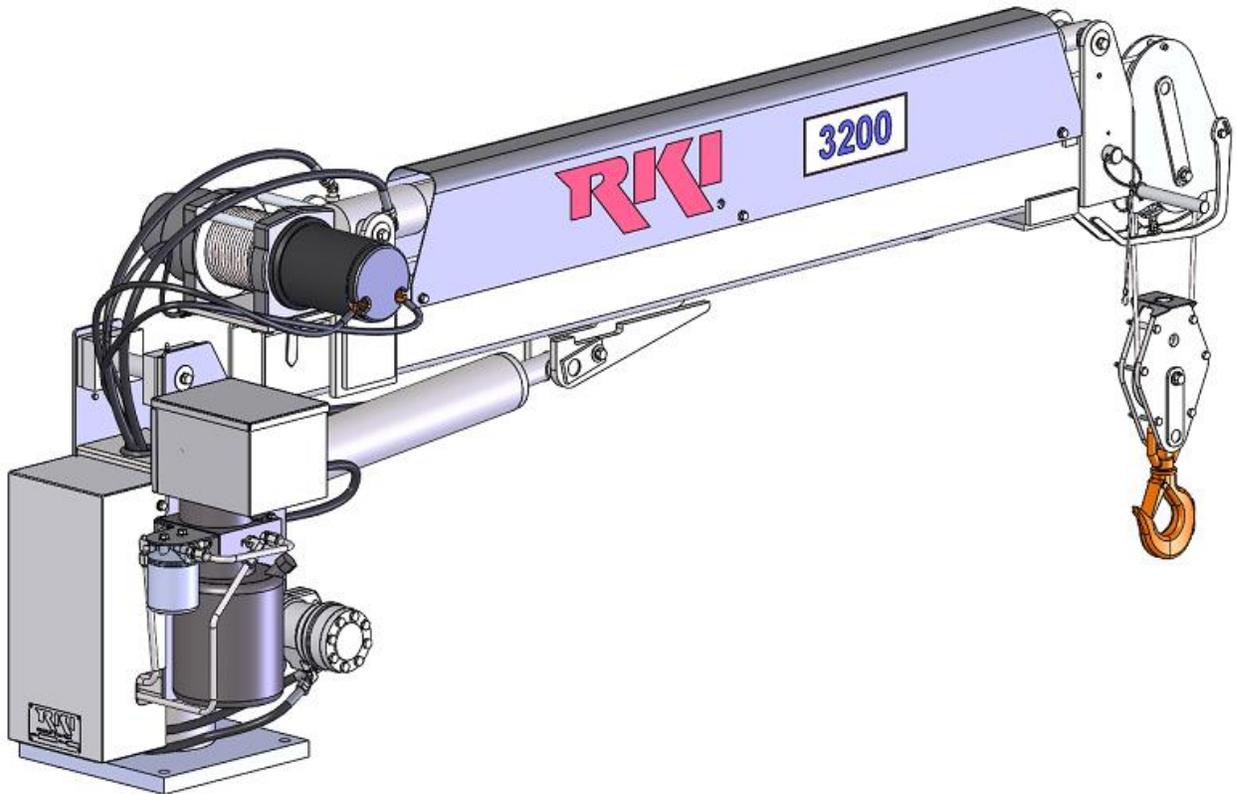


3200 SERIES CRANES  
Models: 3200-3ER15, 3200-3ERX15

USER MANUAL

Effective Serial Number: 5271



Serial Number: \_\_\_\_\_

Date: \_\_\_\_\_

**RKI, Inc.**

2301 Central Parkway  
Houston, TX. 77092  
Phone: 713-688-4414  
Fax: 713-688-8982  
[www.rkius.com](http://www.rkius.com)

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## PACKING LIST

The following items are included with your RKI 3200 Series crane:

1 – Crane Assembly

1 – Crane User Manual (W0053)

1 – Carton with Mounting Kit (43746), including the following contents:

1 – “Hot” Quill Power Cable (45157): 12in #2ga Wire Assembly from Master Switch to Crane Quill

1 – “Hot” Battery Power Cable (45158): 25ft #2ga Wire Assembly from Vehicle Battery to Master Switch

1 –Master Cutoff Switch (45156)

1 –Master Cutoff Switch Bracket (45155)

1 –Ground Cable (43738): 3ft #2ga Wire Assembly from Service Body to Vehicle Frame

6 –Cable Retaining Clips (43512)

4 –Mounting Bolts (43739): 5/8-11 x 3” Grade 8

8 –Flat Washers (07892): 5/8”

4 –Lock Washers (03032): 5/8”

4 –Hex Nuts (43740): 5/8-11 Grade 8

1 – Remote Control:

- ER models (44671): 18ft with Emergency Stop
- ERX models (44451): 18ft with Emergency Stop

## IMPORTANT NOTICE

RKI, Inc. cannot possibly know or even anticipate all of the varied uses and applications that may be found for its crane products. For that reason, the company expressly disclaims any and all responsibility for the manner and methods used by the installer of these products. The company recommends that the installer of its crane products follow sound engineering principles and comply fully with each and every applicable ANSI, OSHA or other safety standard.

**Safety Warning:** RKI, Inc. cranes are not intended to be used, or incorporated as a component of any other equipment which may be used for the lifting or moving of people. Any such use is absolutely and categorically contrary to RKI, Inc.'s recommendation.

### **INTRODUCTION:**

RKI cranes are designed and manufactured to provide you years of safe, dependable performance.

This manual has been provided to give you specific information regarding the safe operation and upkeep of your crane.

It is very important that all who operate or service the crane should begin by thoroughly reading this manual. In addition, the supervisor, and others concerned with the operation of the crane, should read this manual.

Remember that an uninformed or careless operator can make the operation of any equipment dangerous.

The information in this manual helps to insure that your RKI crane is installed properly and operated safely.

However it is not a definitive guide to every possible situation or circumstance. If you have any questions or require additional information, please contact RKI.

## SPECIFICATIONS

### Models:

3200-3ER15      3200-3ERX15

### Moment Rating:

10,000 ft. lbs

### Lift Capacities:

3,200 lbs. @ 3 ft.

2,000 lbs. @ 5 ft.

1,429 lbs. @ 7 ft.

1,111 lbs. @ 9 ft.

909 lbs. @ 11 ft.

769 lbs. @ 13 ft.

667 lbs. @ 15 ft.

### Boom:

The boom angle varies from -5° to +75°.

1<sup>st</sup> stage telescoping boom extension ranges from 7' to 11' (Manual on ER model, Power on ERX model).

2<sup>nd</sup> stage telescoping boom extension ranges from 11' to 15' (Manual on both models).

**Line Speed:** Approximately 7 feet per minute (first rope layer, double line).

**Multi-Functions:** The crane configuration allows multiple electric and hydraulic functions to be performed simultaneously, however, multiple hydraulic functions are limited.

### Load Sensor:

A load sensor is standard to automatically protect overload.

### Anti Two-Block:

Per OSHA 29 CFR Part 1926.1416(d)(3), An anti two-block feature is incorporated into the crane to prevent damage from contact between the travel block and the boom tip.

### Winch Cable and Block:

62ft of 1/4" galvanized aircraft cable is supplied with traveling block for double line operation.

### Electrical:

12 VDC required to operate the electrical solenoid valves control all the hydraulic functions and the contactor for the hoist winch.

### Hydraulic:

Self-contained unit with 2500 psi, 0.5 GPM pump and 10 micron serviceable oil filter

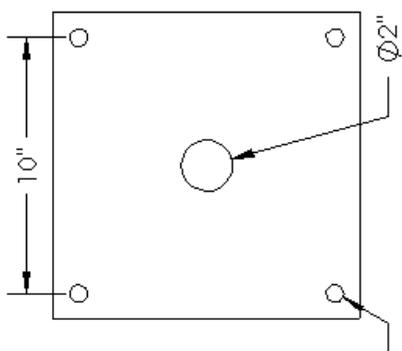
### Safety Standards:

Meets OSHA 1910.180 requirements.

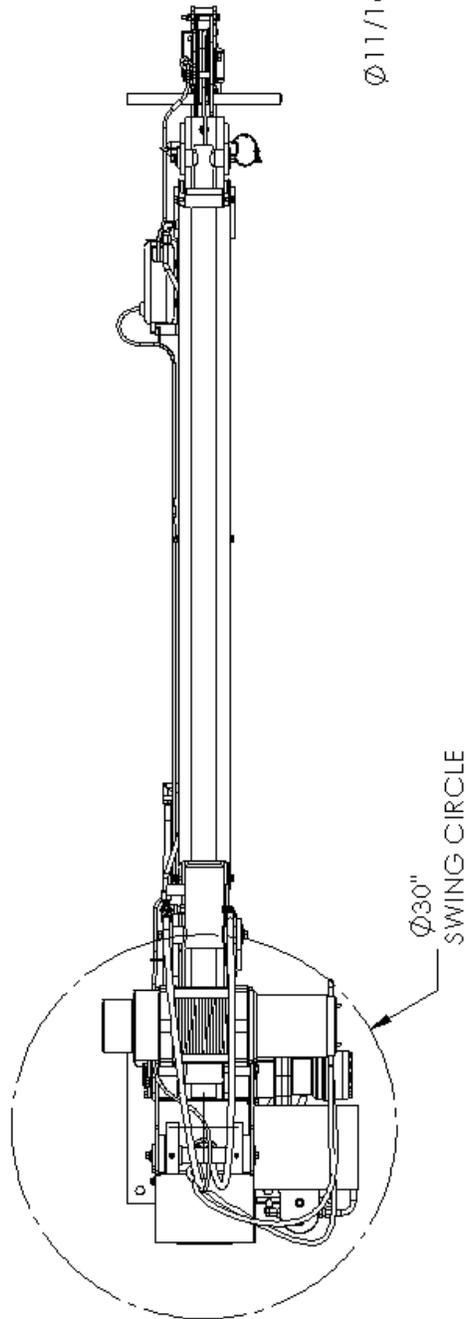
### Specifications:

- Weights: 710 lbs. (ERX model)  
571 lbs. (ER model)
- Length: 8' 1" (retracted), 12' 1" (extended)
- Width: 1' 8"
- Height: 2' 10-1/4"
- Base Plate Dimensions: 12" x 12"
- Truck Requirements: 10,000 lbs. GVWR (Minimum)
- Jack Leg: p/n JKL1 or equivalent (sold separately)

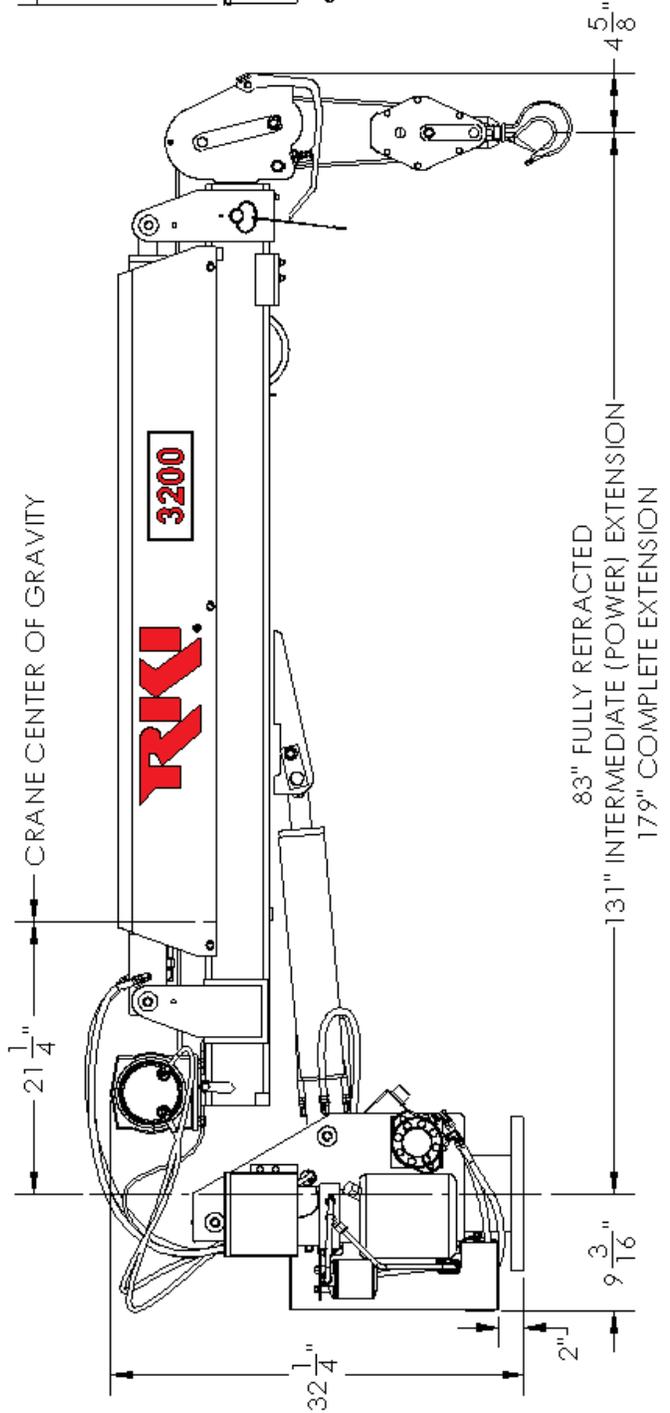
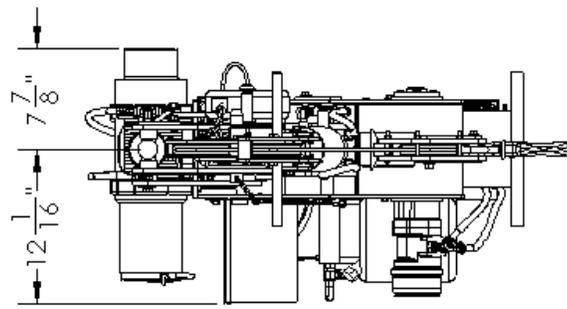
OVERALL DIMENSIONS



MOUNTING HOLE PATTERN



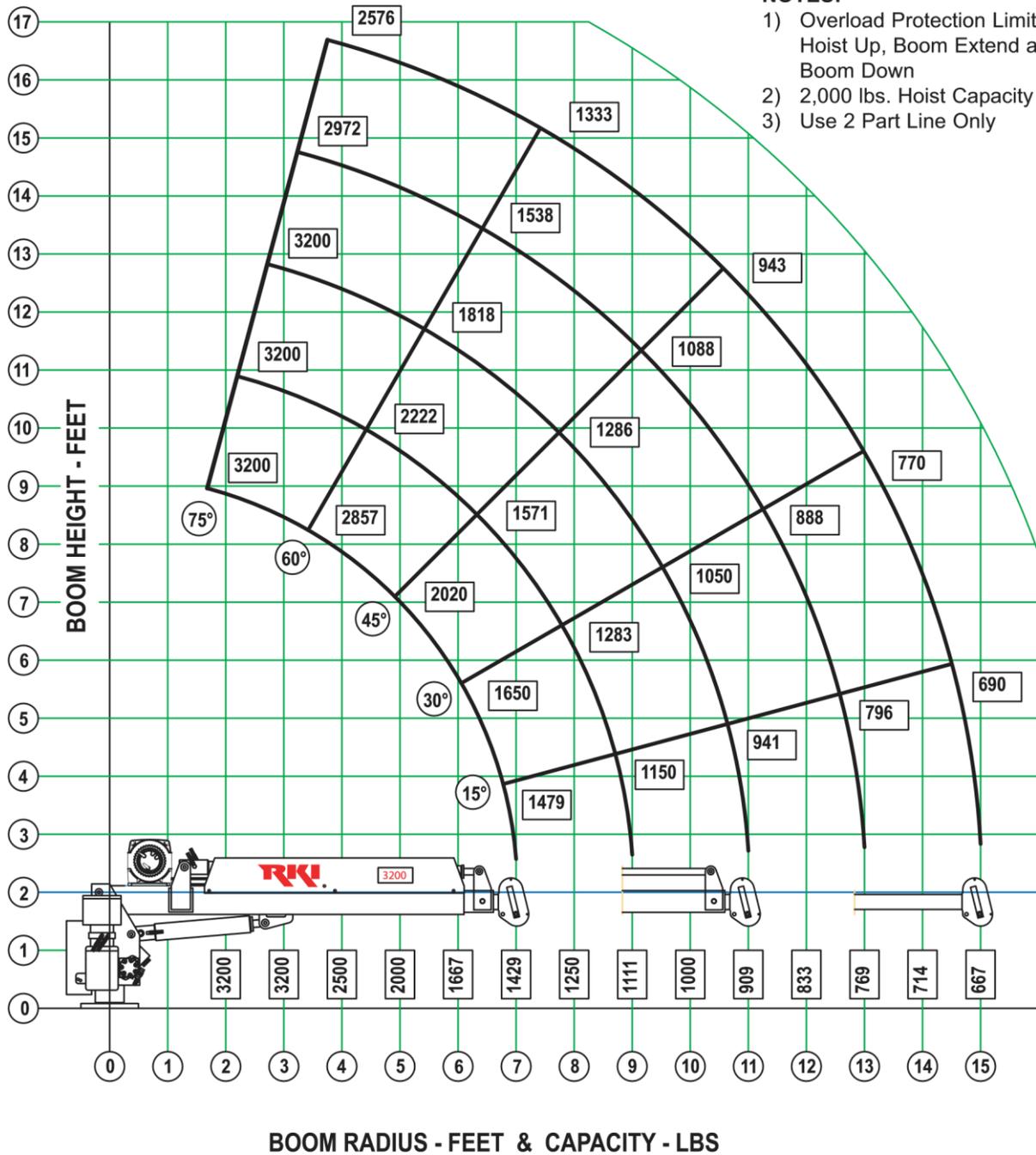
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### 3200 SERIES CAPACITY CHART

**NOTES:**

- 1) Overload Protection Limits:  
Hoist Up, Boom Extend and  
Boom Down
- 2) 2,000 lbs. Hoist Capacity
- 3) Use 2 Part Line Only



## INSTALLATION INSTRUCTIONS

1. Vehicle should meet minimum GVW rating of 10,000 lbs.
2. The crane mounting base must be capable of safely supporting the crane assembly and its maximum capacity of 10,000 ft-lbs loading. The support structure for the mounting base must be tied directly to the main frame members of the vehicle.
3. The vehicle must be equipped with jacklegs extending out at least 42" from the centerline of vehicle.
4. Disconnect the ground cable from the vehicle's battery(ies).
5. Drill 4 holes (11/16" diameter on 10" square pattern) and a center hole (2" diameter), centered on the crane mounting location.
6. Install crane boom support in place and adjust to its lowest position. To prevent damage, do not support the crane under the hydraulic cylinders, support the crane's main boom directly.
7. Grind both the crane lower mounting base and the service body's top mounting plate, removing any paint, primer, or sealants. The crane is electrically grounded through the base plate, thus it is important that there is a good metal-to-metal contact between the crane and the mounting location.
8. Lift crane in place and install Grade 8 mounting bolts with nuts and washers. **Note: use only bolts, nuts, and washers provided with crane.** Do not substitute and do not reuse bolts that have been previously torqued.
9. Install master cutoff switch bracket. Line up bracket with the two rear bolts so that the bracket is along the far side of the crane compartment. Install the master cutoff switch to the bracket and set to "OFF" position.
10. Tighten Grade 8 bolts in a criss-cross pattern, alternating until all are torqued to 200 ft-lbs (dry bolt).
11. If crane is being installed on a service or utility body, seal around all holes and bolts with silicone or equivalent sealer. Also seal around crane mounting plate.
12. Adjust the boom support to contact with the main boom and secure the crane hook to the hook ring.
13. Attach the 12" power cord between the crane's quill to either terminal of the master cutoff switch. Connect the 25ft power cord to the other terminal of the master cutoff switch then route the cord along the vehicle's frame rail to the vehicle's battery. Care must be taken so that the power cable is not positioned against burrs, sharp edges or anything that would chafe or cut the cable insulation. The cable should be supported at intervals to prevent sagging or dragging. Use rubber grommets when cable passes through bulkheads.
14. Cut cable to the minimum required length and connect it to the positive post of the vehicle's battery with the appropriate lug or clamp connection.
15. Use the supplied 3ft ground cable to ground the crane base, mounting base, or service body to the truck chassis. Use rubber grommets where the cable passes through bulkheads.
16. If the vehicle's negative ground cable is grounded only to the vehicle's engine, then install a second ground cable from the negative post of the battery to the vehicle's frame.
17. The vehicle should be equipped with a minimum 125-amp alternator, but a larger capacity is highly recommended. Note: alternator performance is significantly affected by vehicle RPM and temperature. At standard truck idle speeds, the alternator output can be as low as half of rated capacity.
18. The vehicle should be running during crane operation, and it is recommended that it run at an elevated idle.
19. A 150-amp circuit breaker is required for all crane installations (not included).

## BATTERY

Adequate battery power is a necessity for satisfactory crane operation. Most original equipment vehicle batteries are designed for relatively light service of vehicle operation.

On vehicles with longer distances between battery and crane, or if heavy or extended periods of operation are anticipated, a heavy duty battery may be installed in the vehicle, or a second 12 volt battery added to the vehicle system, in order to increase available amperage. The vehicle charging system should be functioning properly. The battery charging system should supply a minimum of 13 volts DC at the crane with the vehicle engine running. The voltage should not drop below 9 volts when any function of the crane is actuated.

It should also be noted that the performance of vehicle's alternators drops significantly with running idle speed and ambient temperature. At standard truck idle speeds, the alternator output can be as low as half of the rated capacity. So it is recommended that the vehicle be running at an elevated idle during crane operation.

Normal operation of the crane should not require a second battery. However, if a second battery is used, it should be connected to the first battery in parallel; positive post-to-post and negative post-to-post.

## GROUNDING

Proper and adequate grounding of the crane is necessary to prevent poor performance or malfunction. The 3200 Series cranes are grounded through the bottom mounting plate. A good ground must be established between the crane's lower mounting base and the vehicle battery. For service or utility body mounting, this grounding typically goes through the service body mounting plate, to the service or utility body, and then to the vehicle frame. Ensure that a good metal-to-metal contact is made between the crane's lower base and the service body mounting plate. If the body is mounted to the truck on wood runners, or rubber mounts, a # 2 gauge ground cable must be added between the body and the chassis frame.

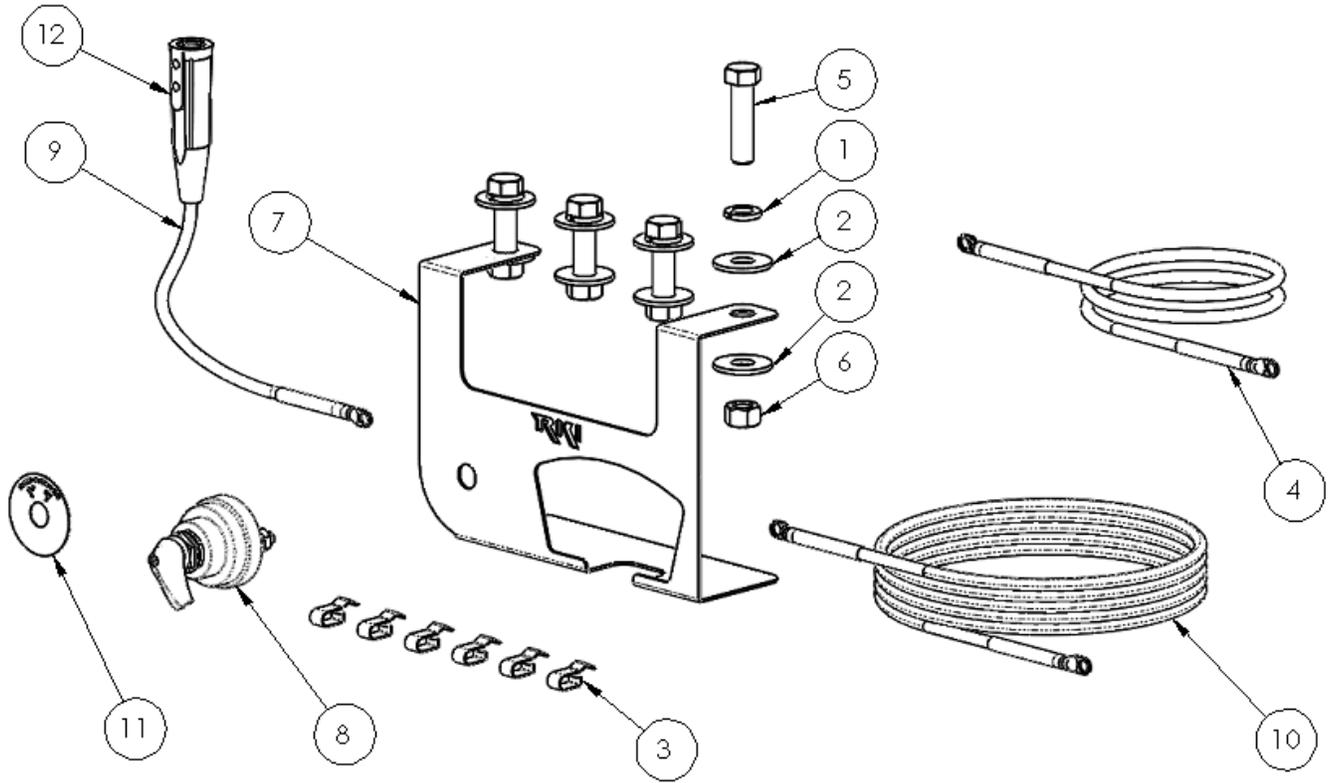
The vehicle battery, and second battery if used, must be grounded directly to the chassis frame. If the vehicle battery is grounded to the engine block, a second # 2 gauge minimum ground cable must be added from the battery to the chassis frame or the engine to the chassis frame. .

Maintain a regular schedule to ensure that the battery remains in good working condition. Clean all connections, check electrolyte levels, check for loose belts and make sure that your vehicle charging system is operating properly.

### WARNING:

1. **FEDERAL LAW (49 CFR PART 571) REQUIRES THAT THE FINAL STAGE MANUFACTURER OF A VEHICLE CERTIFY THAT THE VEHICLE COMPLIES WITH ALL APPLICABLE REGULATIONS. ANY MODIFICATIONS OF THE VEHICLE PRIOR TO THE FINAL STAGE ARE ALSO CONSIDERED INTERMEDIATE STAGE MANUFACTURING AND MUST BE CERTIFIED AS TO COMPLIANCE. THE INSTALLER IS RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE FEDERAL AND STATE REGULATIONS AND REQUIRED TO CERTIFY THAT THE VEHICLE IS IN COMPLIANCE.**
2. **THE INSTALLER OF THE CRANE IS RESPONSIBLE TO COMPLY WITH THE OSHA TRUCK CRANE STABILITY REQUIREMENTS AS SPECIFIED BY 29 CFR PART 1910.180(c)(i).**

**MOUNTING KIT (P/N 43746) (ALL MODELS)**



ITEM	PART #	QTY	DESCRIPTION
1	03032	4	WASHER-LOCK 5/8
2	07892	8	WASHER-FLT 5/8 W
3	43512	6	CLIP-BODY F/BATTERY CABL
4	43738	1	WIRE ASY-#02 36.0 GRND
5	43739	4	BOLT-HX 5/8-11X3 G8
6	07863	4	NUT-HX 5/8-11
7	45155	1	BRKT-3200 SWITCH MSTR
8	45156	1	SWITCH-MSTR CUTOFF
9	45157	1	WIRE ASY-PWR CRANE 12"
10	45158	1	WIRE ASY-PWR BATTERY 25'
11	45174	1	FACEPLATE-SWITCH MSTR
12	*43211	1	CONNECTOR-CABLE FEM.SKT

\* INCLUDED IN CRANE POWER WIRE ASY (ITEM 9)

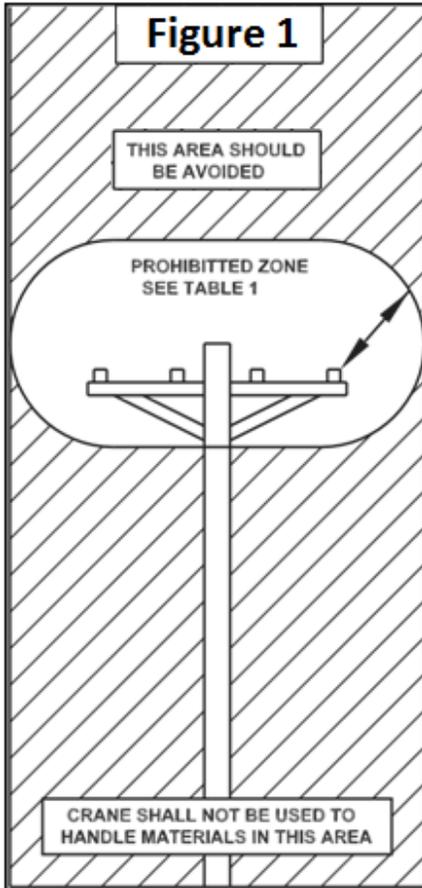


SWITCH ASSEMBLED TO BRACKET

**OPERATING INSTRUCTIONS (Page 1 of 3)**

1. Do not operate this crane unless you have thoroughly read and understand the information in this manual.
2. Cranes shall be operated only by the following qualified personnel, and crane operator certification per OSHA 29 CFR Part 1926.1427-1430 is available from local and national certifiers:
  - a. Designated persons
  - b. Trainees under the direct supervision of a designated person
  - c. Inspectors, maintenance and test personnel (when it is necessary in the performance of their duty)
3. No one other than the personnel specified in (2) above shall enter the crane's operating area, with the exception of persons such as supervisors, signal persons, and those specific persons authorized by supervisors whose duties require them to do so, and then only in the performance of their duties and with the knowledge of the operator or other appointed persons.
4. The operator shall be familiar with the equipment and its proper care. If adjustments or repairs are necessary, the operator shall promptly report this to an appointed person, and notify the next operator.
5. The operator at the start of each shift shall test all controls. If any controls do not operate properly, they shall be adjusted or repaired before operations are begun.
6. Seek the best possible work site for the operation when parking the crane-mounted vehicle. The parking location should be firm, dry and level ground or pavement, which can adequately reach the load by the rated capacity of the crane.
7. The crane-mounted vehicle shall not be parked on uneven, rocky or muddy terrain, steep grades, or overhead-obstructed locations.
8. Fully extend the outriggers or jacklegs out at least 42" from the centerline of vehicle and to the ground to provide firm support and keep the crane-mounted vehicle as level as possible during the operation. When operating on soft terrain use wider pads or boards under the outrigger feet. Blocking under the outrigger feet shall be of sufficient strength to prevent crushing, bending, or shear failure.
9. After the vehicle has been properly positioned, engage the emergency brake and start the engine.
10. Vehicle should be running during all crane operations, and it is recommended that it run at an elevated idle.
11. Turn the master cutoff switch to the "ON" position to provide power to the crane.
12. Lower the winch to detach the crane hook from the tie-down eye on the boom support.
13. Always boom up to clear the boom support and truck before you rotate or extend boom to desired position.
14. When operating near electric power lines, comply with the requirements of OSHA 29 CFR Part 1426.1408. Summarized in Figure 1 and Table 1, no part of the crane or load may enter the danger zone.
15. For power lines rate 50 kV or below, minimum clearance between the lines and any part of the crane or load (including handling appendages) shall be 10 ft (3 m). For higher voltages, see Table 1.
16. Caution shall be exercised when working near overhead power lines because they can move horizontally or vertically due to wind, moving the danger zone to new position.
17. While in transit with no load and boom lowered, the clearance shall be as specified in Table 1.
18. The crane is now in operating position and ready for handling the load.
19. No crane shall be loaded beyond the specifications of the load rated chart.
20. The load to be lifted is to be within the rated capacity of the crane (refer to the crane load capacity chart).

**OPERATING INSTRUCTIONS (Page 2 of 3)**



<b>Table 1</b>	
<b>Normal Voltage, kV (Phase to Phase)</b>	<b>Minimum Required Clearance feet (meters)</b>
<b>Operation near High Voltage Power Line</b>	
Up to 50	10 (3.05)
Over 50 to 200	15 (4.57)
Over 200 to 350	20 (6.10)
Over 350 to 500	25 (7.62)
Over 500 to 750	35 (10.67)
Over 750 to 1000	45 (13.72)
<b>Operation in Transit With No Load and Boom Lowered</b>	
Up to 0.75	4 (1.22)
Over 0.75 to 50	6 (1.83)
Over 50 to 350	10 (3.05)
Over 345 to 750	16 (4.88)
Over 750 to 1000	20 (6.10)

21. When loads, which are not accurately known, are to be lifted, the person responsible for the job lift shall ascertain that the weight of the load does not exceed the crane ratings at the maximum radius at which the load is to be handled.
22. The hoist rope shall not be wrapped around the load.
23. The load shall be attached to the hook by means of slings or other devices of sufficient capacity.
24. The operator shall not leave the controls while the load is suspended.
25. No person should be permitted to stand or pass under a suspended load.
26. Before starting to lift, the following conditions should be noted:
  - a. The hoist rope shall not be kinked.
  - b. Part lines shall not be twisted around each other.
  - c. The hook shall be brought over the load in such a manner as to minimize swinging.
  - d. The effect of ambient wind on the load and on crane stability.
27. The person directing the lift shall see that:
  - a. The crane is level and, where necessary, blocked.
  - b. The load is well secured and balanced in the sling or lifting device before it is lifted more than a few inches.
  - c. The lift and swing path is clear of obstructions.

## **OPERATING INSTRUCTIONS (Page 3 of 3)**

28. During lifting operations, care shall be taken that:
  - a. There is no sudden acceleration or deceleration of the moving load.
  - b. Load, boom, or other parts of the machine do not contact any obstruction.
29. Side loading of boom shall be limited to freely suspended loads. Crane shall not be used for dragging loads sideways.
30. The operator should never carry loads over people.
31. Neither the load nor boom shall be lowered below the point where less than five full wraps of rope remain on the winch drum.
32. When rotating the crane, sudden starts and stops shall be avoided. Rotating speed shall be such that the load does not swing out beyond the radius at which it can be controlled. A tag or restraint line should be used during rotation to control the load.
33. Personnel shall not be permitted to ride the bare hook or a load of material suspended from the hook.
34. Do not move the vehicle when the crane is being used.
35. The crane shall be in stowed position before traveling.
36. Make sure the remote control is properly stored in a dry area.

## INSPECTION & MAINTENANCE SCHEDULE

COMPONENT	DAILY	WEEKLY	MONTHLY	EVERY 3 MONTHS	YEARLY	NOTES
Motor Brushes				X		Check
Cable Drum	X					Make sure the cable is wound evenly on the drum
Cable	X					Check for cut or broken strands, kinking etcetera *
Load Hook	X					Check for any cracks or deformation of the hook or latch
Sheaves and Bearings				X		Inspect for any damage and add grease to bearings. Make sure the sheaves turn freely
Rotational Bearing				X Or more often under severe conditions		Add grease to the bearing
Base Mounting Bolts & Other Bolts		X				Check the bolt torque for the four mounting bolts and tighten other bolts as required
Hydraulic Hoses	X					Inspect for any damage or leakage at fittings
Hydraulic Fluid	X					Check fluid level at the reservoir before each shift
Hydraulic Reservoir					X	Drain, flush, and refill with hydraulic fluid
Hydraulic Oil Filter					X	Replace Spin-On Oil Filter
Boom Wear Pads				X		Inspect pads and replace as required
Boom Pivots				X Or more often under severe conditions		Add grease to fittings **

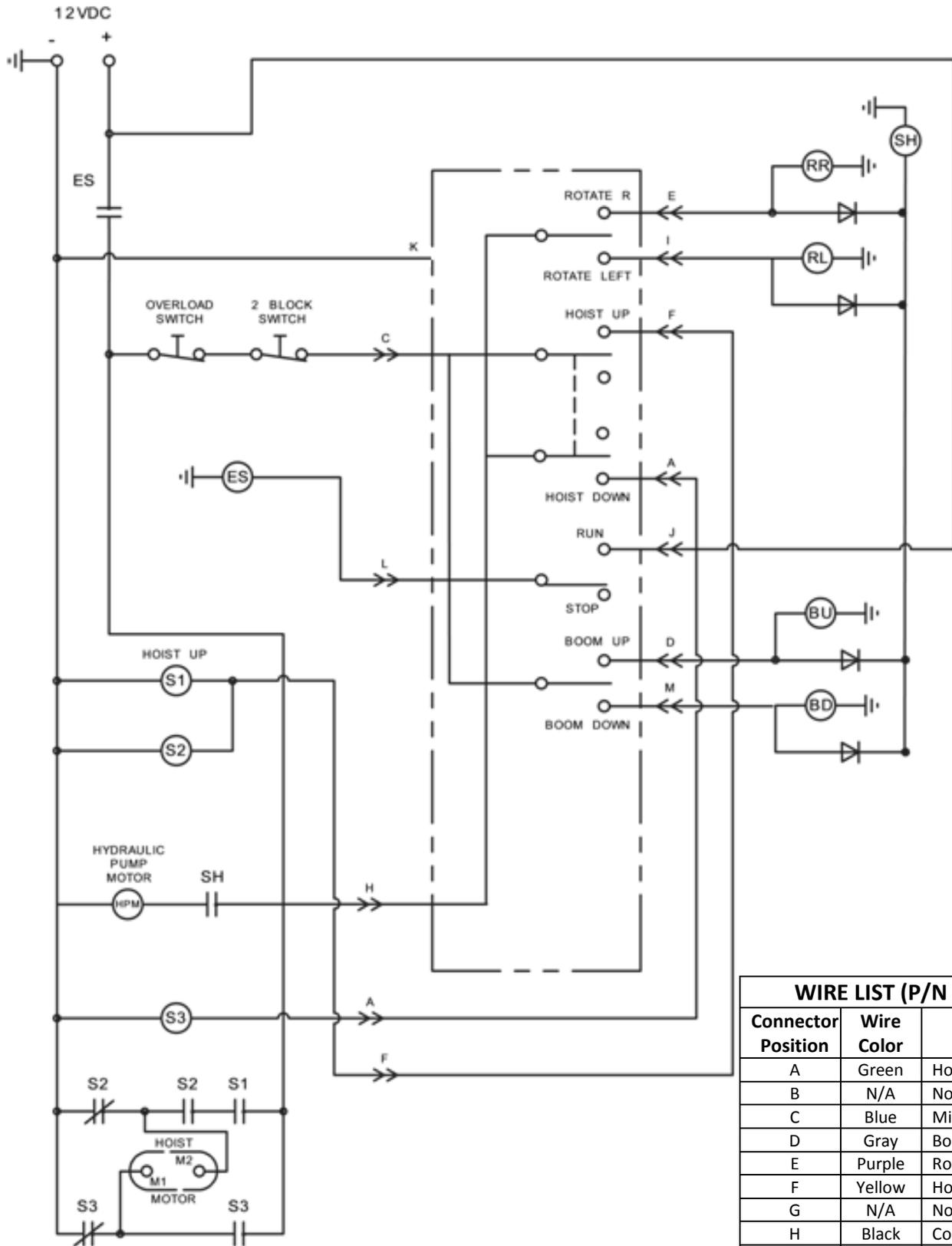
\* To extend the life of cable, clean it periodically with a wire brush and lubricate it lightly with oil.

\*\* All other bushings used are made of brass impregnated with an oil and graphite compound and require no maintenance. Other parts may be lubricated with a few drops of oil as needed.

## LUBRICATION & HYDRAULIC FLUID SPECIFICATIONS

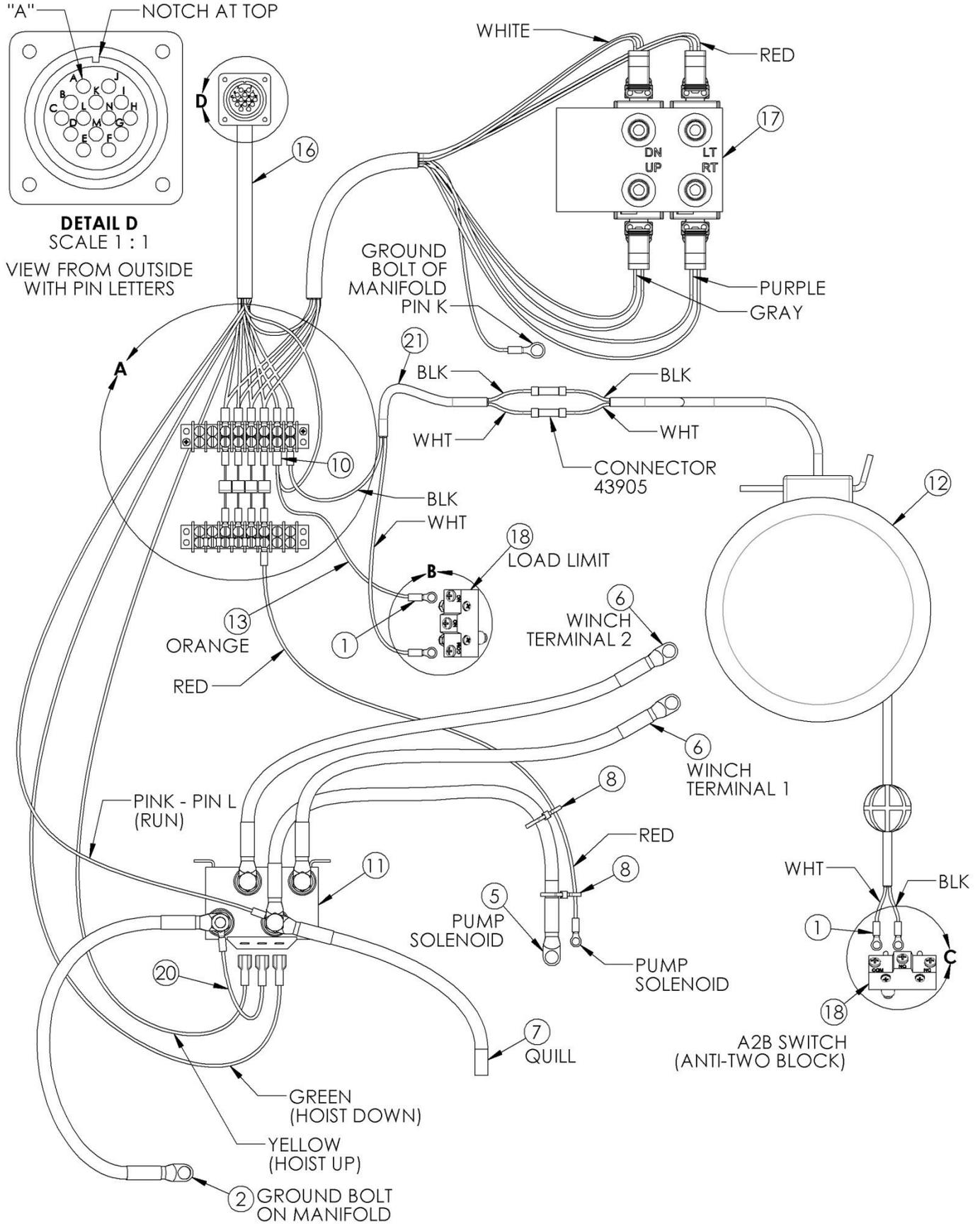
1. Rotational Bearings: Mobil grease CM-S or equivalent
2. Hydraulic Fluid: Mobil DTE26 or equivalent premium grade hydraulic fluid

**WIRING SCHEMATIC (ER MODEL)**



WIRE LIST (P/N 45180)		
Connector Position	Wire Color	Usage
A	Green	Hoist Down
B	N/A	Not Used
C	Blue	Microswitch
D	Gray	Boom Up (BU)
E	Purple	Rotate Right (RR)
F	Yellow	Hoist Up
G	N/A	Not Used
H	Black	Common (+)
I	Red	Rotate Left (RL)
J	Orange	Emergency Stop
K	No wire	Ground
L	Pink	Emergency Stop
M	White	Boom Down (BD)

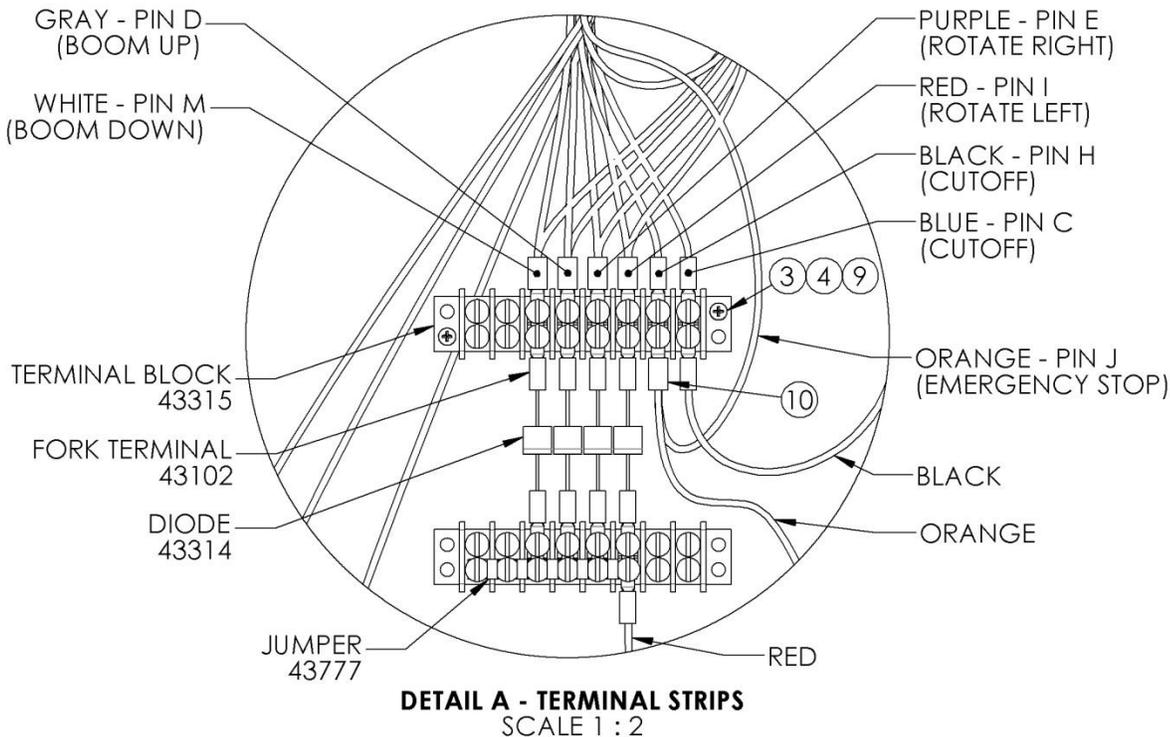
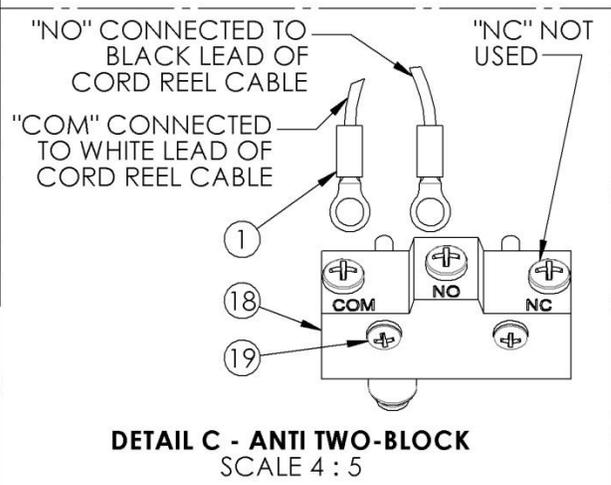
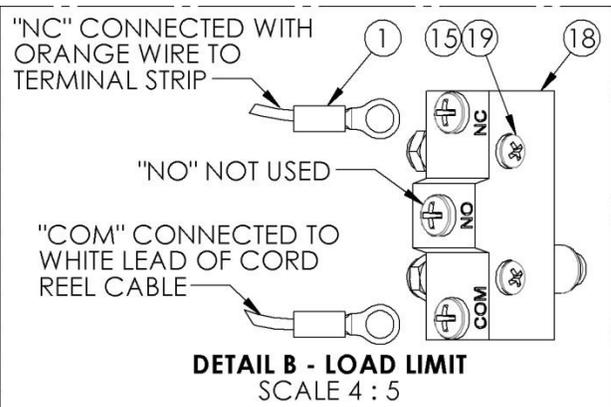
**ELECTRICAL LAYOUT (ER MODEL) (W0181) (Page 1 of 2)**



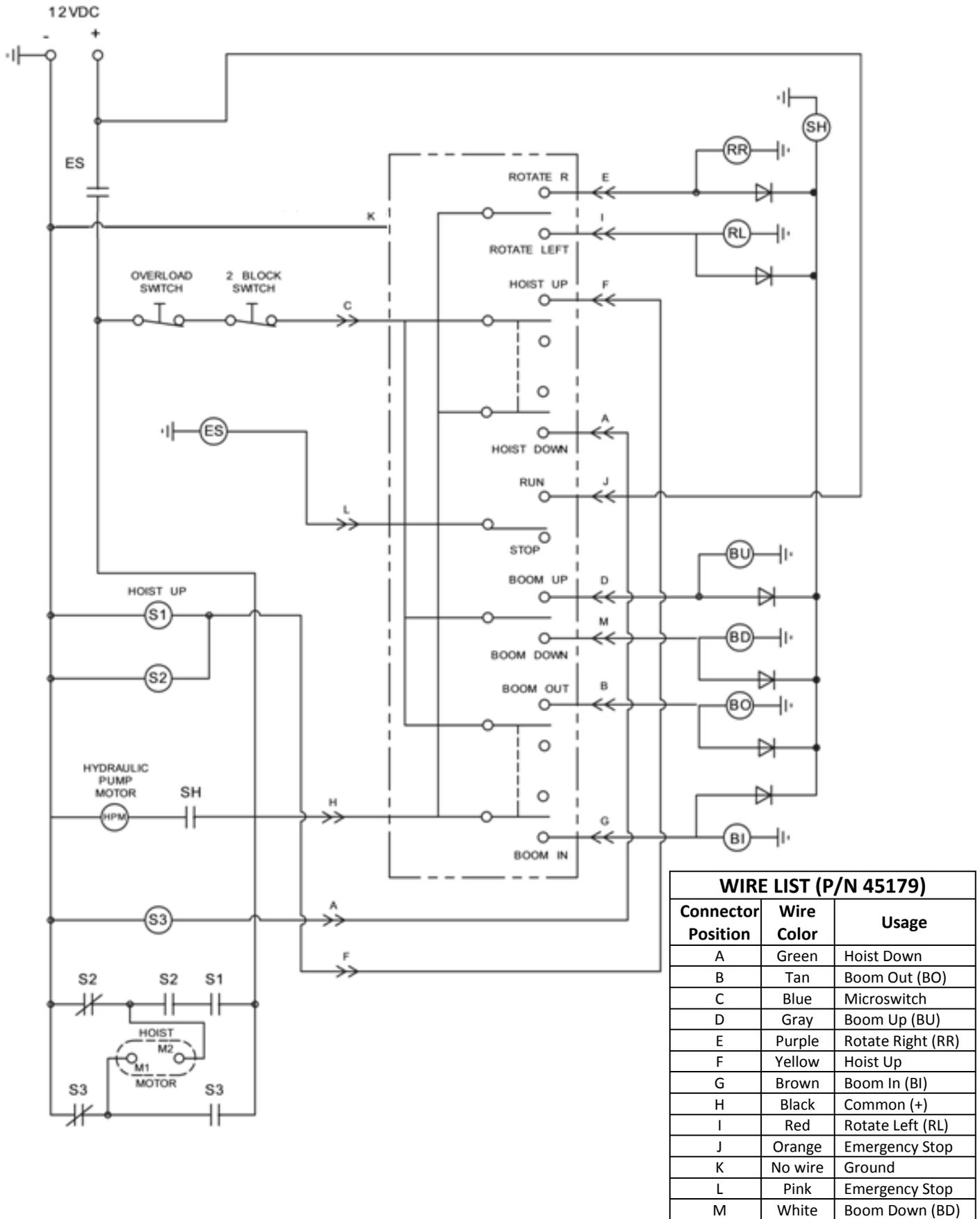
**ELECTRICAL LAYOUT (ER MODEL) (W0181) (Page 2 of 2)**

ITEM	PART #	QTY	DESCRIPTION
1	41155	3	TERMINAL-18GA #10 RING
2	43263	1	WIRE ASY-#02 16.0 GRND
3	43362	2	SCRW-PAN #4-40X3/4
4	43363	2	NUT-HX #4-40
5	43452	1	WIRE ASY-#02 18.5 PUMP
6	43738	2	WIRE ASY-#02 36.0 BLK
7	43804	1	WIRE ASY-#02 13.5 QUILL
8	43816	2	TIE-CABLE 03.9L BLK NYL
9	43916	2	WASHER-LOCK INTERNAL #4
10	43999	1	TERMINAL-14GA #6 FORK
11	44239	1	CONTACTOR-3200 WARN34440
12	44248	1	REEL-CORD 20FT 18/3
13	44457	0.75	WIRE-#18 BULK ORG FEET
14	*44671	1	CONTROL-3200 ER W/ E-STOP
15	44719	2	NUT-HX #6-32 NYLK
16	45180	1	HARNESS-3200 ER 5195+
17	45193	1	MANIFOLD PKG-3200ER VER2
18	45204	2	SWITCH-PLUNGER SPDT BZ
19	45205	4	SCRW-PAN #6-32X1
20	45238	1	WIRE ASY-CONTACTOR GRND
21	45241	1	WIRE ASY-CORD REEL EXT

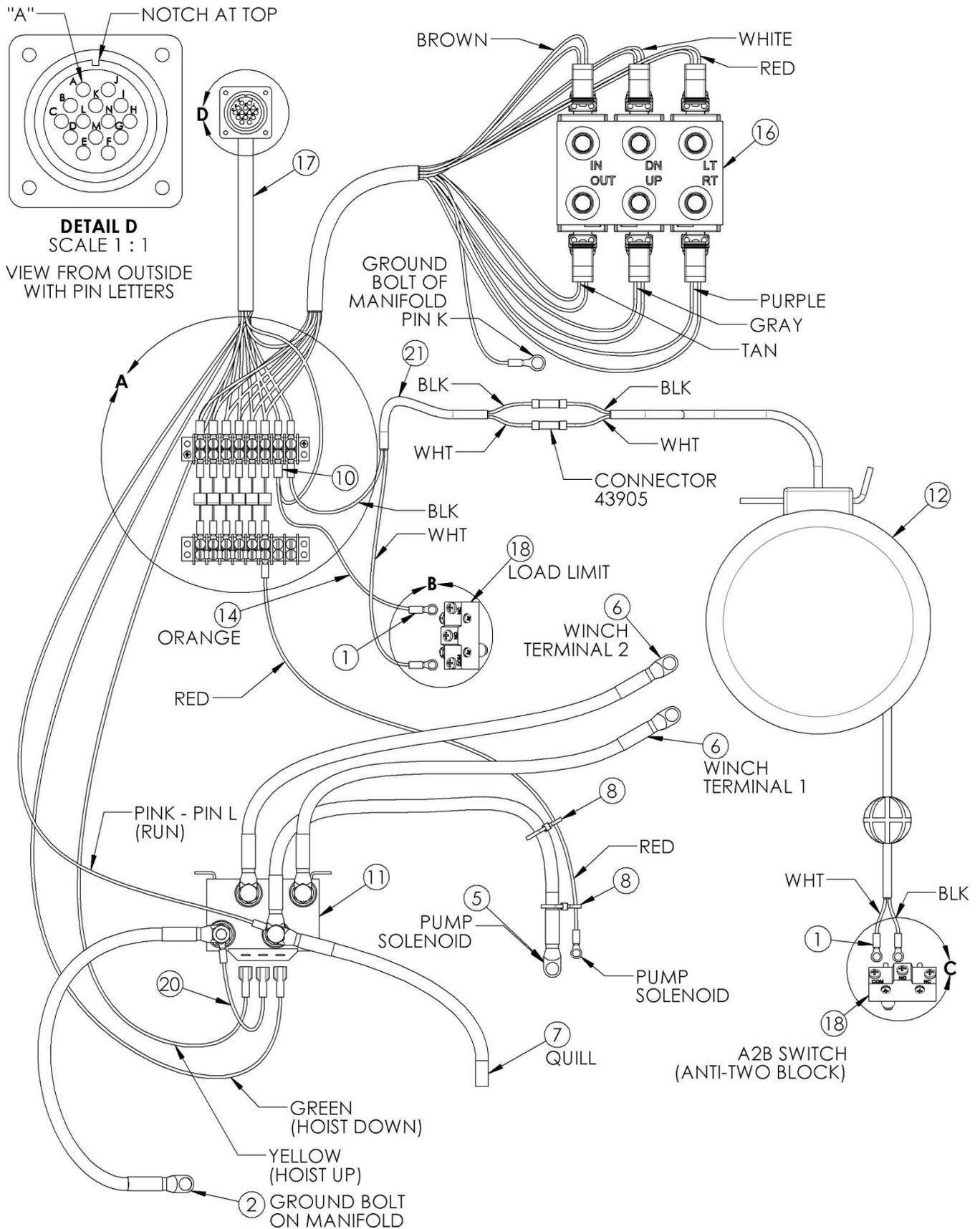
\* REMOTE CONTROL, 44671, NOT SHOWN



### WIRING SCHEMATIC (ERX MODEL)



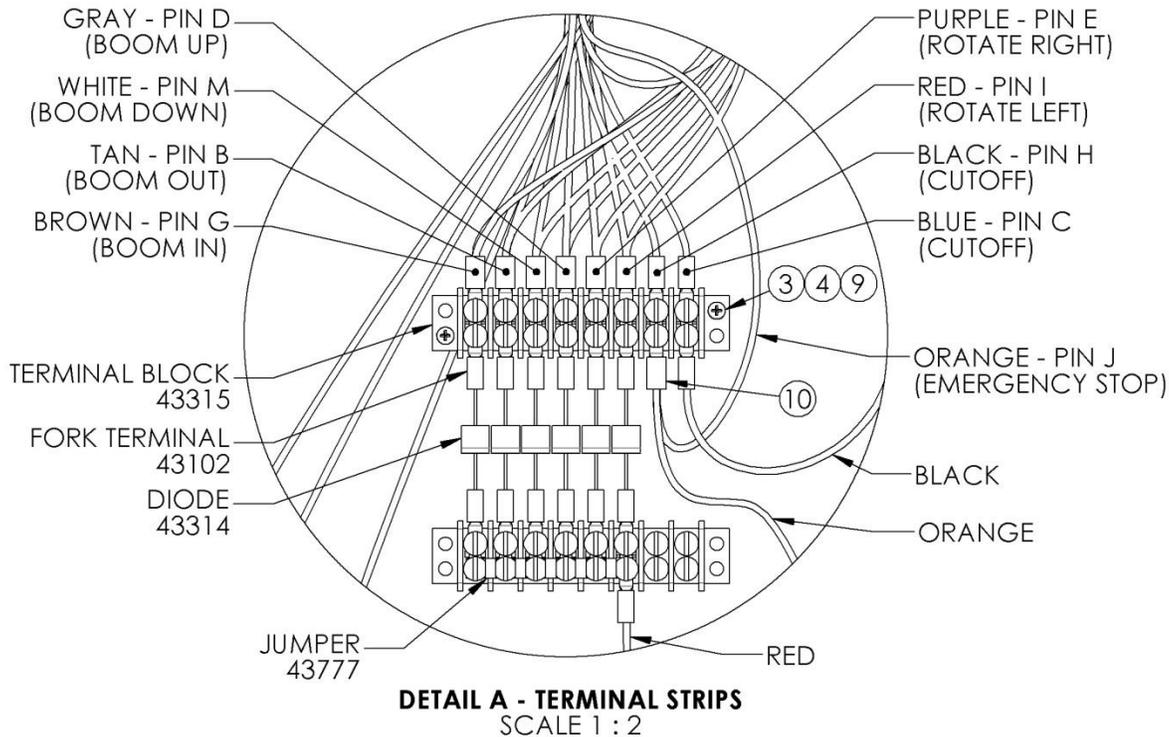
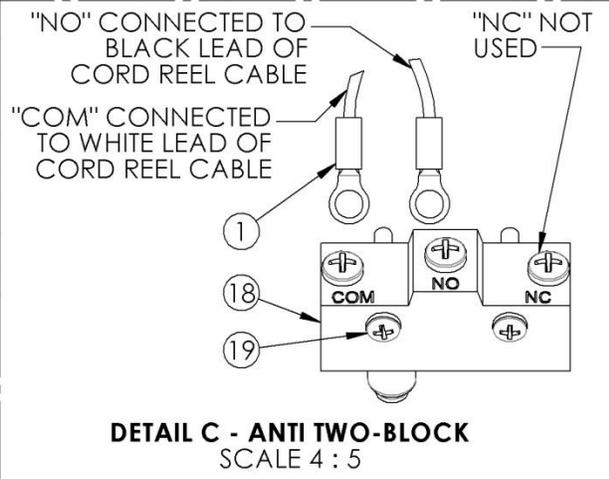
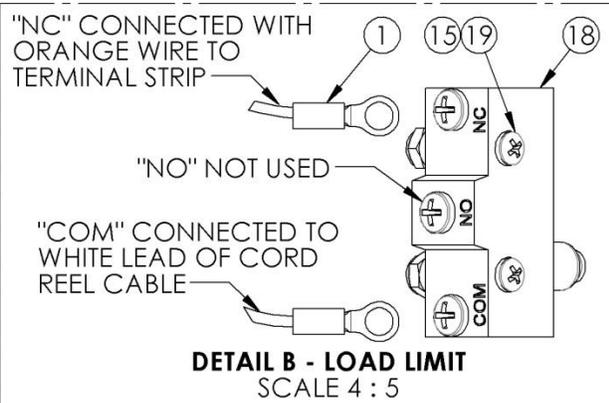
**ELECTRICAL LAYOUT (ERX MODEL) (W0180) (Page 1 of 2)**



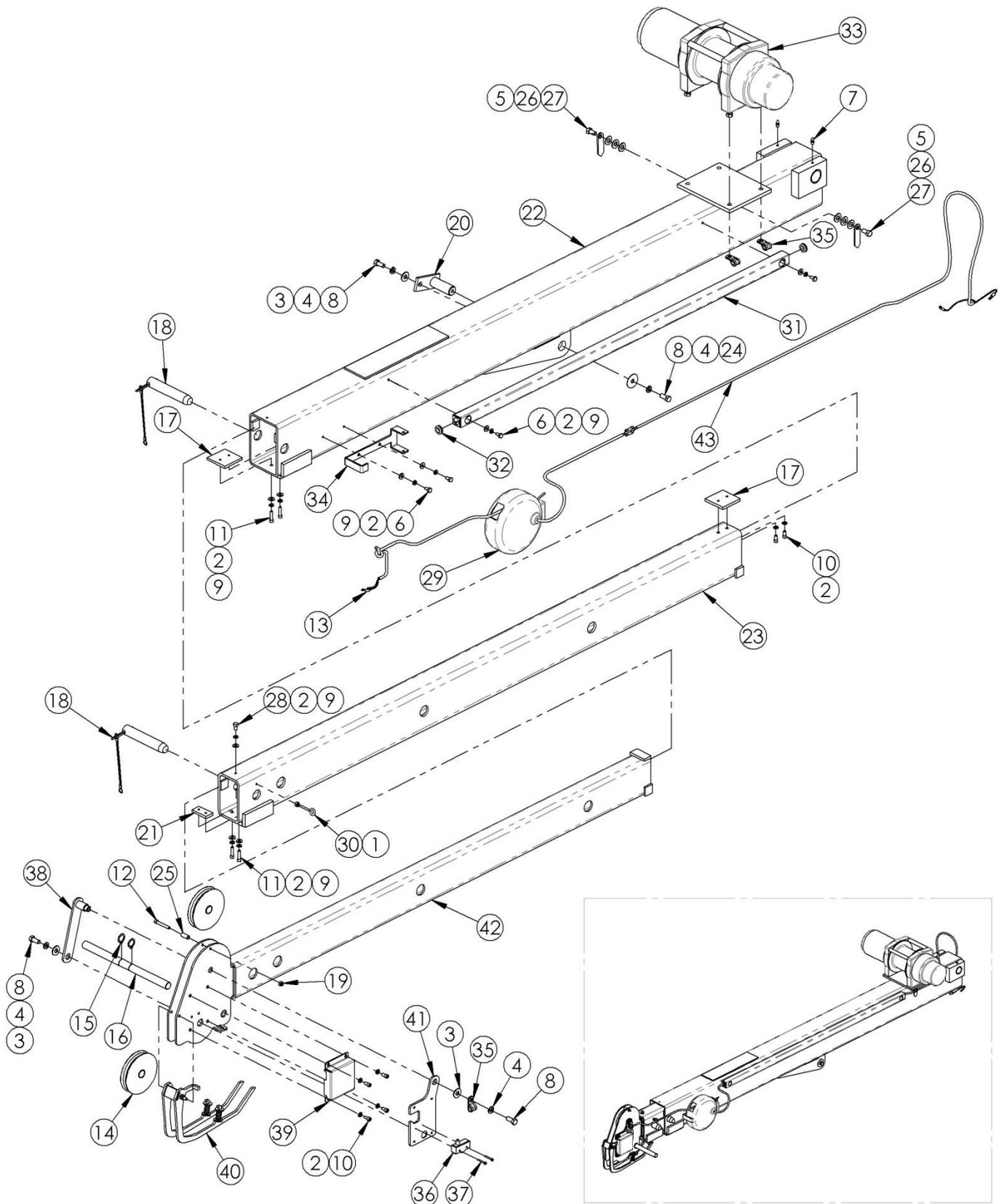
**ELECTRICAL LAYOUT (ERX MODEL) (W0180) (Page 2 of 2)**

ITEM	PART #	QTY	DESCRIPTION
1	41155	3	TERMINAL-18GA #10 RING
2	43263	1	WIRE ASY-#02 16.0 GRND
3	43362	2	SCRW-PAN #4-40X3/4
4	43363	2	NUT-HX #4-40
5	43452	1	WIRE ASY-#02 18.5 PUMP
6	43738	2	WIRE ASY-#02 36.0 BLK
7	43804	1	WIRE ASY-#02 13.5 QUILL
8	43816	2	TIE-CABLE 03.9L BLK NYL
9	43916	2	WASHER-LOCK INTERNAL #4
10	43999	1	TERMINAL-14GA #6 FORK
11	44239	1	CONTACTOR-3200 WARN34440
12	44248	1	REEL-CORD 20FT 18/3
13	*44451	1	CONTROL-3200 ERX W/ E-STOP
14	44457	0.75	WIRE-#18 BULK ORG FEET
15	44719	2	NUT-HX #6-32 NYLK
16	45176	1	MANIFOLD PKG-3200ERX 5195+
17	45179	1	HARNESS-3200 ERX 5195+
18	45204	2	SWITCH-PLUNGER SPDT BZ
19	45205	4	SCRW-PAN #6-32X1
20	45238	1	WIRE ASY-CONTACTOR GRND
21	45241	1	WIRE ASY-CORD REEL EXT

\* REMOTE CONTROL, 44451, NOT SHOWN

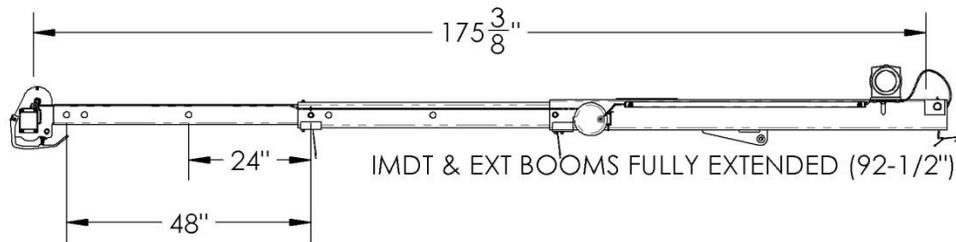
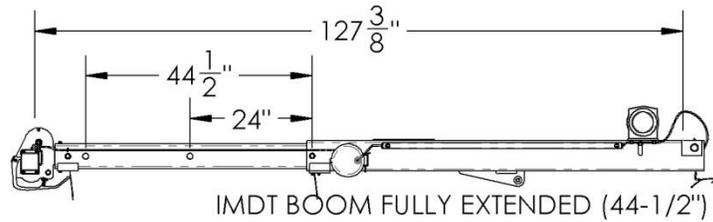
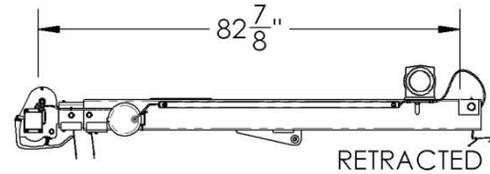


**BOOM ASSEMBLY (ER MODEL) (P/N 43785) (Page 1 of 2)**

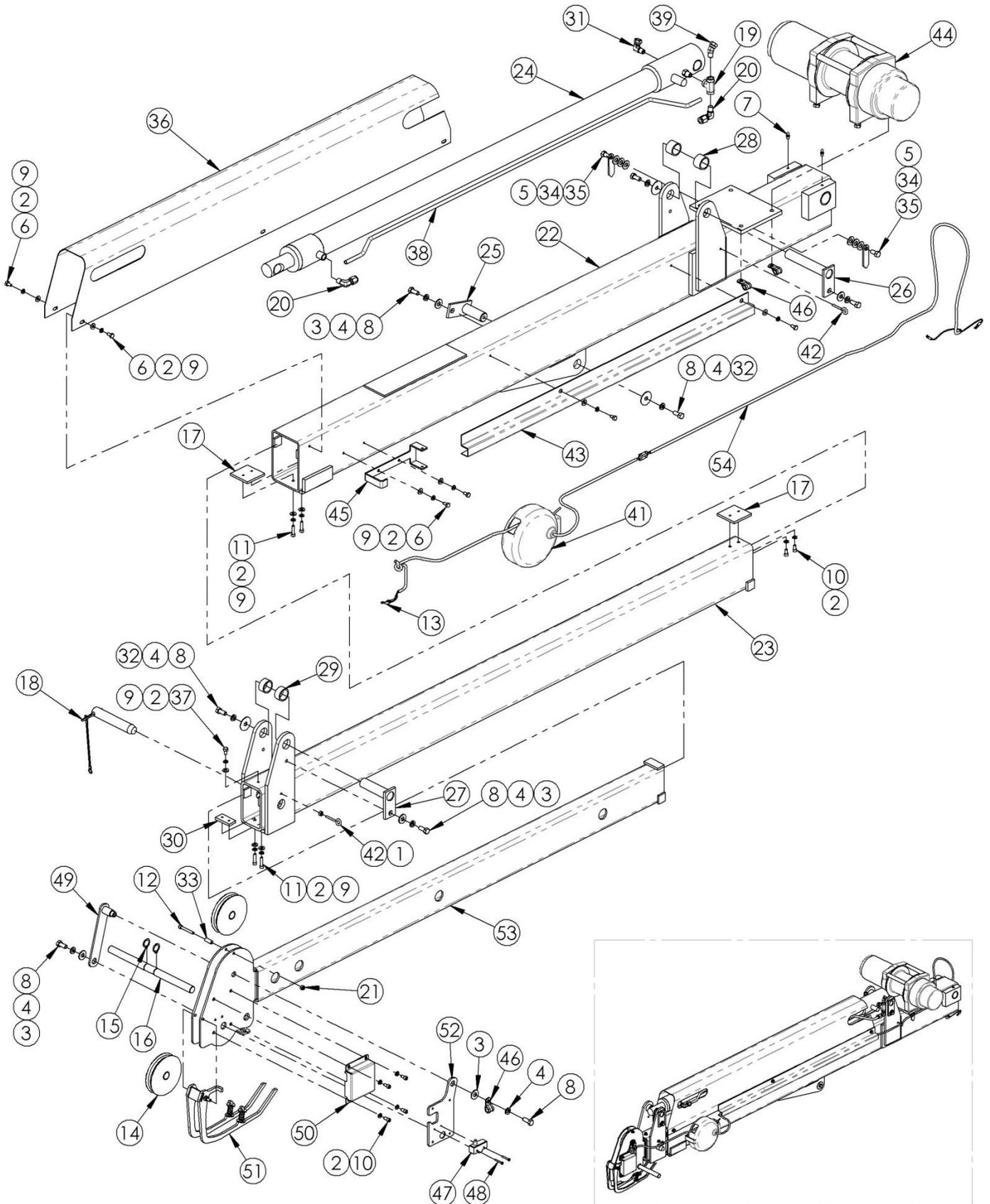


**BOOM ASSEMBLY (ER MODEL) (P/N 43785) (Page 2 of 2)**

ITEM	PART #	QTY	DESCRIPTION	ITEM	PART #	QTY	DESCRIPTION
1	07843	1	NUT-HX 1/4-20	23	43821	1	BOOM ASY-3200ER IMDT
2	07882	15	WASHER-LOCK 1/4	24	43831	1	WASHER-FLT 3/8 FENDER
3	07885	3	WASHER-FLT 3/8 W	25	43909	1	SPACER-TB RD 3/8OD 7/8L
4	07886	4	WASHER-LOCK 3/8	26	44009	2	POINTER-DEGREE INDICATOR
5	07887	6	WASHER-FLT 7/16 N	27	44031	2	BOLT-HX 3/8-16X3/4 LK
6	07916	4	BOLT-HX 1/4-20X1/2	28	44102	1	SCREW-CPHEX 0.25X.50 THD
7	40080	2	FITTING-GREASE .25NF	29	44248	1	REEL-CORD 20FT 18/3
8	40911	4	BOLT-HX 3/8-16X7/8	30	44249	1	EYE BOLT .25-20UNC
9	40986	9	WASHER-FLT 1/4 N (40986)	31	44444	1	CORD REEL GUARD
10	41013	6	SCRW-CPSKT 1/4-20X1/2	32	44445	2	GROMMET-CORD REEL
11	41015	4	SCRW-CPSKT 1/4-20X1	33	44617	1	WINCH-WARN DC2000
12	41016	1	SCRW-CPSKT 1/4-20X1 3/4	34	44640	1	BRACKET - CABLE REEL
13	41155	2	TERMINAL-18GA #10 RING	35	44798	3	CLAMP-LOOM 3/8 MTG
14	43041	2	PULLEY-4.0 OD .75BORE	36	45204	1	SWITCH-PLUNGER SPDT BZ
15	43139	2	RING-RTNG EXT 0.750 1P	37	45205	2	SCRW-PAN #6-32X1
16	43166	1	PIN-GRVD. 0.75 1.37	38	45209	1	PIN-W/KPR 0.75 1.13 5.75
17	43331	2	SPACER-BOOM 3200	39	45219	1	COVER-CRANE A2B
18	43345	2	PIN-QUICK 1.00 4.00 W/L	40	45220	1	RAIL PKG-CRANE A2B
19	43425	1	NUT-HEX .250NC FLEX	41	45233	1	PIN-W/KPR A2B 3200
20	43753	1	PIN-W/KPR 1.00 2.44/3200	42	45237	1	BOOM-3200 EXT
21	43783	1	SPACER-3200 EXT BOOM	43	45241	1	WIRE ASY-CORD REEL EXT
22	43820	1	BOOM ASY-3200ER MAIN				

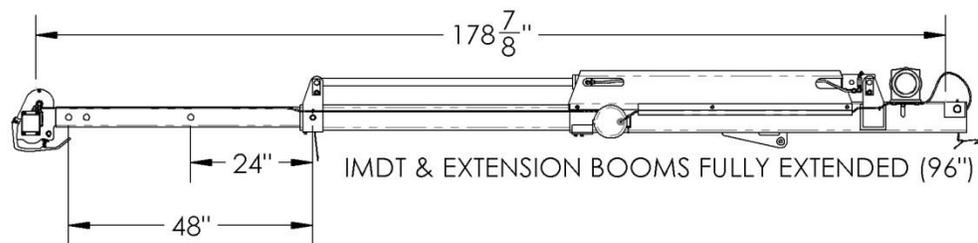
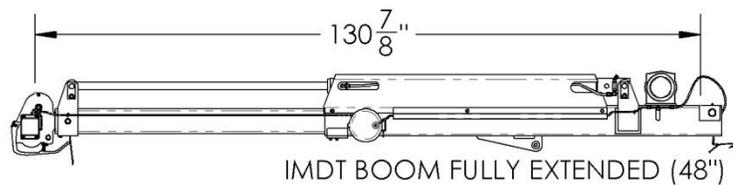
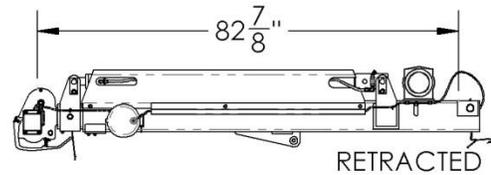


**BOOM ASSEMBLY (ERX MODEL) (P/N 43784) (Page 1 of 2)**

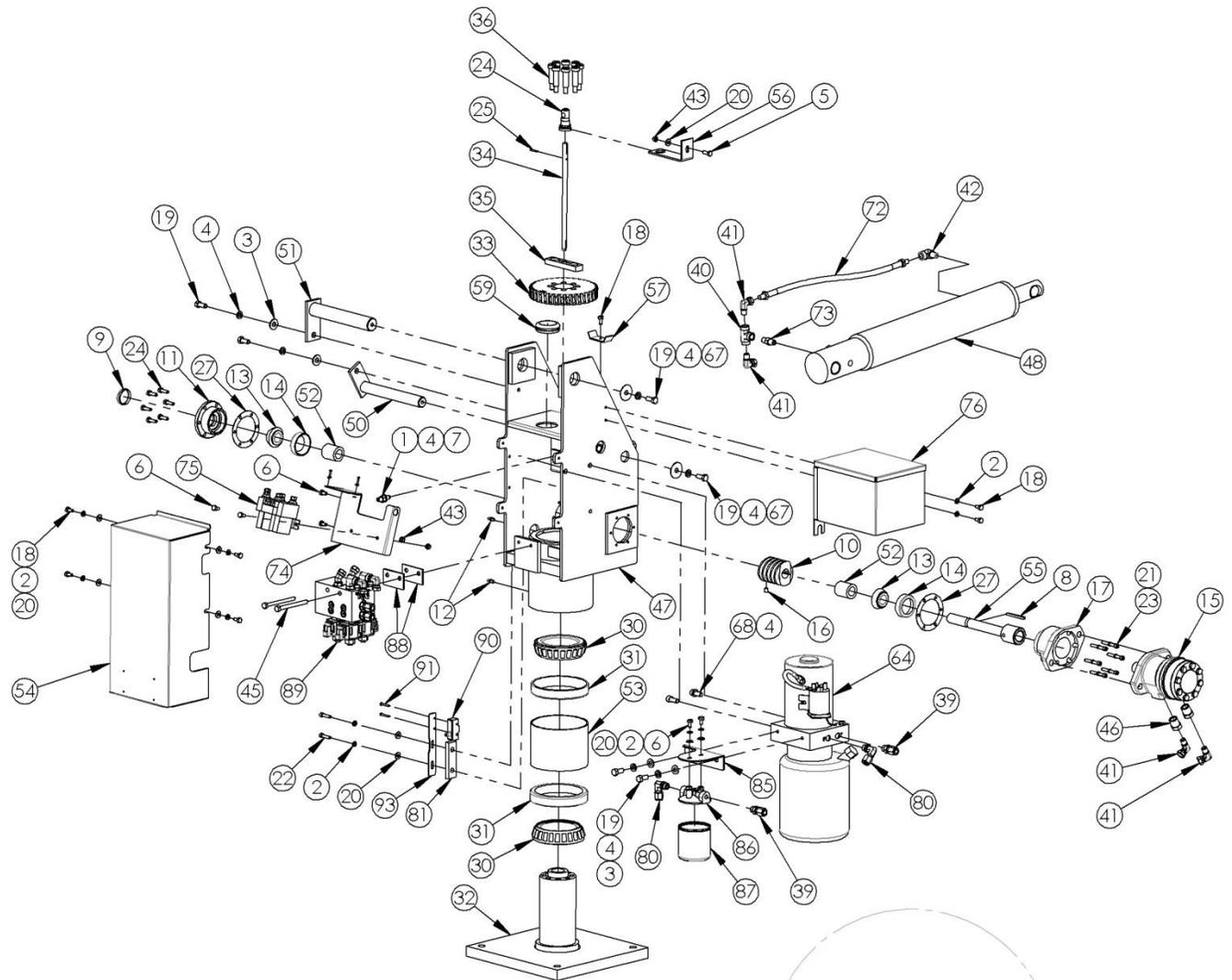


**BOOM ASSEMBLY (ERX MODEL) (P/N 43784) (Page 2 of 2)**

ITEM	PART #	QTY	DESCRIPTION	ITEM	PART #	QTY	DESCRIPTION
1	07843	1	NUT-HX 1/4-20	28	43758	2	SPACER-3200 EXT CYL HEAD
2	07882	19	WASHER-LOCK 1/4	29	43759	2	SPACER-3200 EXT CYL ROD
3	07885	5	WASHER-FLT 3/8 W	30	43783	1	SPACER-3200 EXT BOOM
4	07886	8	WASHER-LOCK 3/8	31	43801	1	FITTG-.25MP .25FPS ORF
5	07887	6	WASHER-FLT 7/16 N	32	43831	3	WASHER-FLT 3/8 FENDER
6	07916	8	BOLT-HX 1/4-20X1/2	33	43909	1	SPACER-TB RD 3/8OD 7/8L
7	40080	2	FITTING-GREASE .25NF	34	44009	2	POINTER-DEGREE INDICATOR
8	40911	8	BOLT-HX 3/8-16X7/8	35	44031	2	BOLT-HX 3/8-16X3/4 LK
9	40986	13	WASHER-FLT 1/4 N (40986)	36	44093	1	COVER-3200ERX EXTEND CYL
10	41013	6	SCRW-CPSKT 1/4-20X1/2	37	44102	1	SCREW-CPHEX 0.25X.50 THD
11	41015	4	SCRW-CPSKT 1/4-20X1	38	44126	1	TUBE-3200 HYD CYL EXT
12	41016	1	SCRW-CPSKT 1/4-20X1 3/4	39	44184	1	FITTING-.25MP .25FPS45
13	41155	2	TERMINAL-18GA #10 RING	40	44232	1	NIPPLE-HEX .25MP .25MP
14	43041	2	PULLEY-4.0 OD .75BORE	41	44248	1	REEL-CORD 20FT 18/3
15	43139	2	RING-RTNG EXT 0.750 1P	42	44249	2	EYE BOLT .25-20UNC
16	43166	1	PIN-GRVD. 0.75 1.37	43	44258	1	CORD GUIDE-3200 CRANE
17	43331	2	SPACER-BOOM 3200	44	44617	1	WINCH-WARN DC2000
18	43345	1	PIN-QUICK 1.00 4.00 W/L	45	44640	1	BRACKET - CABLE REEL
19	43374	1	FITTG-.25FP TEE	46	44798	3	CLAMP-LOOM 3/8 MTG
20	43375	2	FITTG-.25MP .37TBC 90	47	45204	1	SWITCH-PLUNGER SPDT BZ
21	43425	1	NUT-HEX .250NC FLEX	48	45205	2	SCRW-PAN #6-32X1
22	43705	1	BOOM-3200-3ERX-15 MAIN	49	45209	1	PIN-W/KPR 0.75 1.13 5.75
23	43706	1	BOOM ASY-3200ERX IMDT	50	45219	1	COVER-CRANE A2B
24	43708	1	CYL-HYD 2.00B 48.00S	51	45220	1	RAIL PKG-CRANE A2B
25	43753	1	PIN-W/KPR 1.00 2.44/3200	52	45233	1	PIN-W/KPR A2B 3200
26	43754	1	PIN-W/KPR 1.00 5.81/3200	53	45237	1	BOOM-3200 EXT
27	43755	1	PIN-W/KPR 1.00 3.81/3200	54	45241	1	WIRE ASY-CORD REEL EXT

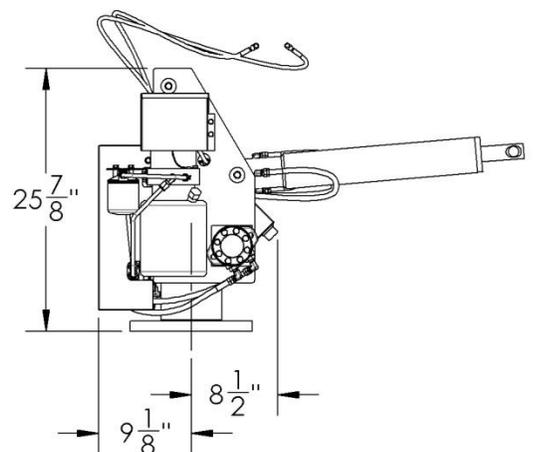
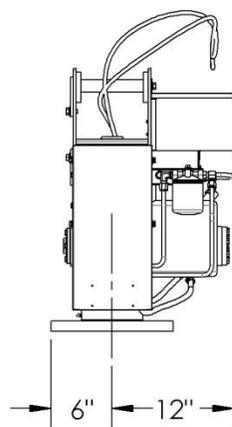


**TURRET ASSEMBLY (ER MODEL) (P/N 44953) (Page 1 of 2)**



NOTE:  
 1. SEVERAL ELECTRICAL AND HYDRAULIC COMPONENTS ARE NOT SHOWN FOR CLARITY.  
 2. ALL DIMENSIONS ARE FOR REFERENCE ONLY

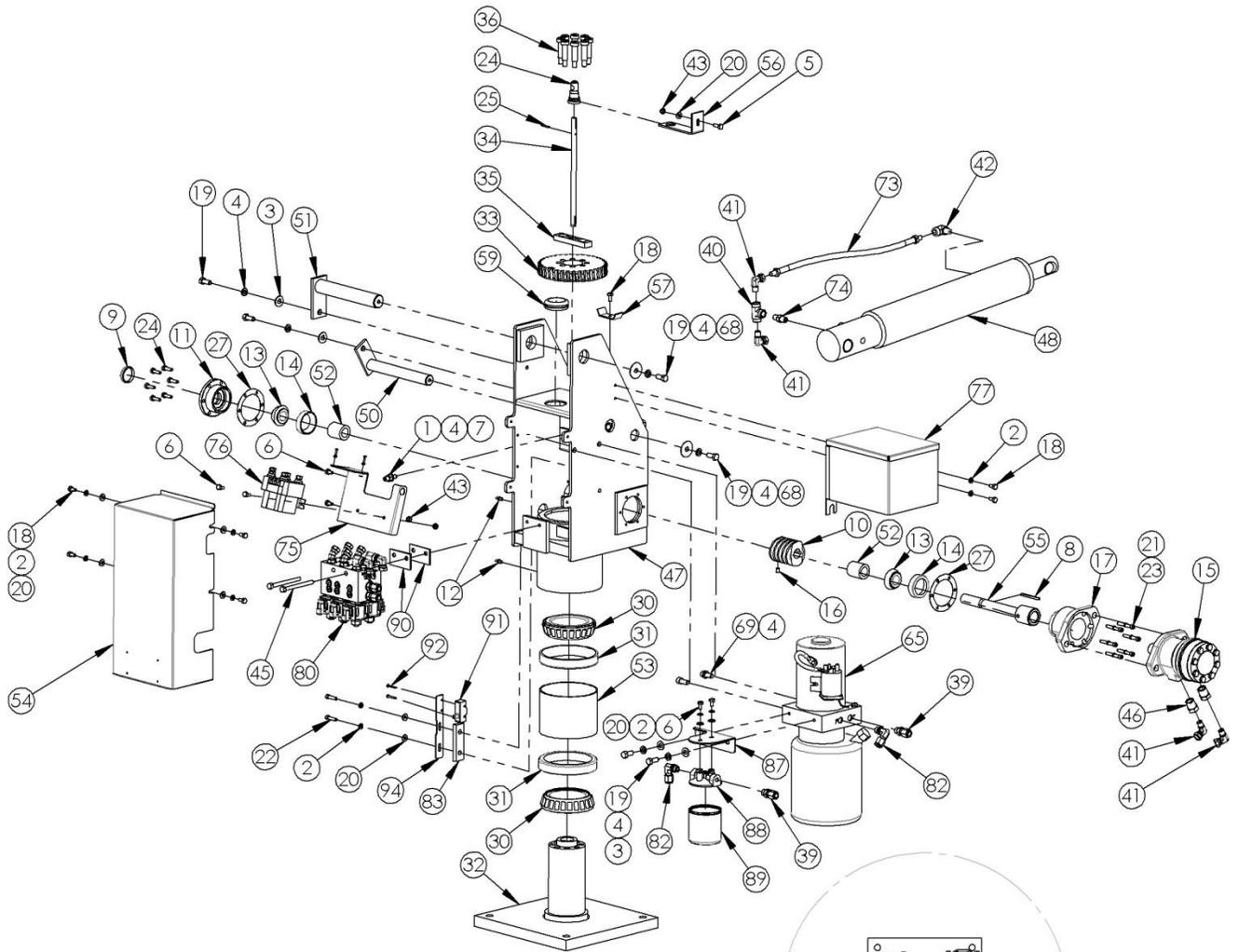
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**TURRET ASSEMBLY (ER MODEL) (P/N 44953) (Page 2 of 2)**

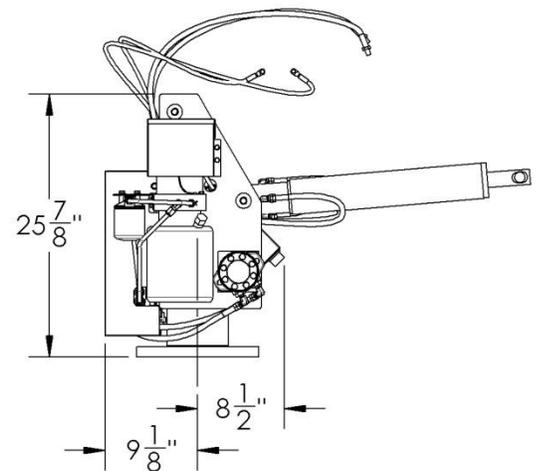
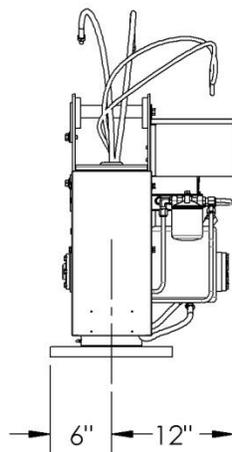
ITEM	PART #	QTY	DESCRIPTION	ITEM	PART #	QTY	DESCRIPTION
1	07850	1	NUT-HX 3/8-16	48	43715	1	CYL-HYD 3.00B 14.50S
2	07882	10	WASHER-LOCK 1/4	49	43738	2	WIRE ASY-#02 36.0 WINCH
3	07885	4	WASHER-FLT 3/8 W	50	43752	1	PIN-W/KPR 1.00 7.69/3200
4	07886	8	WASHER-LOCK 3/8	51	43756	1	PIN-W/KPR 1.25 7.69/3200
5	07898	1	BOLT-HX 1/4-20X3/4	52	43760	2	SPACER-3200 WORM 1.57
6	07916	6	BOLT-HX 1/4-20X1/2	53	43761	1	SPACER-3200 TUR ROT BRG
7	14938	1	SCRW-STSKT 3/8CX1.50 DOG	54	43762	1	COVER-TURRET REAR 3200
8	40006	1	KEY-08 WORM 0.18 2.37	55	43763	1	SHAFT-08 WORM 3200 ROT
9	40014	1	PLUG-08 BRG COVER	56	43767	1	BRKT-3200 CONT ROT MT
10	40034	1	WORM-08 36:1 LH	57	43774	1	BRKT-3200 HOSE RING
11	40078	1	BEARING HOLDER	58	43775	2	FITTING-.56MS .25FPS45
12	40080	2	FITTING-GREASE .25NF	59	43776	1	GROMMET-1.63 ID 2.00 OD
13	40156	2	BEARING-CONE 08 0.87ID	60	43779	2	HOSE-HYD 0.25D .25MP 17.2L
14	40157	2	BEARING-CUP 08 2.12OD	61	43780	2	HOSE-HYD 0.25D .25MP 34.0L
15	40341	1	MOTOR-HYD 103-1028	62	43799	2	FITG-.56MS .25FP 90
16	40605	1	SCREW-STSKT 0.37 0.4 OVL	63	43801	1	FITG-.25MP .25FPS ORF
17	40816	1	ADAPTOR-HYD 08 2 BOLT A	64	43802	1	PUMP ASY-12V HYD 3200
18	40900	7	BOLT-HX 1/4-20X9/16 (40900)	65	43804	1	WIRE ASY-#02 13.5 QUILL
19	40911	6	BOLT-HX 3/8-16X7/8	66	43816	1	TIE-CABLE 03.9L BLK NYL
20	40986	9	WASHER-FLT 1/4 N (40986)	67	43831	2	WASHER-FLT 3/8 FENDER
21	40992	6	WASHER-LOCK HI COLLAR .2	68	43833	2	SCRW-CPSKT 3/8-16X7/8
22	41015	2	SCRW-CPSKT 1/4-20X1	69	43916	2	WASHER-LOCK INTERNAL #4
23	41016	6	SCRW-CPSKT 1/4-20X1 3/4	70	43999	1	TERMINAL-14GA #6 FORK
24	41095	6	BOLT-HX 1/4-20X7/8	71	44014	1	LOOM-SPIRAL CUT 1/2" BLK
25	41124	1	PIN-SPRNG 0.12 1.00	72	44231	1	HOSE-HYD 0.25D .25MP 20.0L
26	41155	1	TERMINAL-18GA #10 RING	73	44232	1	NIPPLE-HEX .25MP .25MP
27	41967	2	GASKET-08 BRG COVER	74	44234	1	BRKT-3200 ELE ASY MTG
24	43201	1	CONNECTOR-CABLE PANEL	75	44239	1	CONTACTOR-3200 WARN
29	43263	1	WIRE ASY-#04 18.0 GRND	76	44343	1	COVER-PUMP 3200 CRANE
30	43297	2	BEARING-CONE 3.375X5.375	77	44457	0.75	WIRE-#18 BULK ORG FEET
31	43298	2	BEARING-CUP 3.375X5.375	78	44719	2	NUT-HX #6-32 NYLK
32	43305	1	BASE ASY-3200 TURRET	79	45180	1	HARNESS-3200ER 5195+
33	43327	1	GEAR-3200 36:1 LH	80	45182	2	FITG-.56MS .38TBC 90
34	43336	1	ROD-3200 ELEC ROD CONNEC	81	45183	1	SPACER-3200 LIMIT SWITCH
35	43346	1	PAD-MTG CONNECTING ROD	82	45184	1	TUBE-3200 HYD MAN/FLTR
36	43360	8	SCREW - SHLDR - 0.5" x 1.5"	83	45185	1	TUBE-3200 HYD FLTR/PUMP
37	43362	2	SCRW-PAN #4-40X3/4	84	45186	1	TUBE-3200 HYD PRESSURE
38	43363	2	NUT-HX #4-40	85	45189	1	BRKT-3200 FILTER
39	43370	4	FITG-.56MS .37TB ST	86	45190	1	FILTER HEAD-HYD BF-06-0
40	43374	1	FITG-.25FP TEE	87	45191	1	FILTER-HYD BE-10-18
41	43376	6	FITG-.25MP .25FPS 90	88	45192	2	SPACER-3200 MANIFOLD
42	43379	1	FITTING-.25MP .25FP 90	89	45193	1	MANIFOLD PKG-3200ER VER2
43	43425	3	NUT-HEX .250NC FLEX	90	45204	1	SWITCH-PLUNGER SPDT BZ
44	43452	1	WIRE ASY-#02 18.5 PUMP	91	45205	2	SCRW-PAN #6-32X1
45	43469	2	BOLT-HX 5/16-18X3-3/4	92	45238	1	WIRE ASY-CONTACTOR GRND
46	43541	2	FITG-.50MP .25FP ST	93	45239	1	BRKT-3200 SWITCH MTG
47	43704	1	TURRET ASY- 3200 WELDMENT				

**TURRET ASSEMBLY (ERX MODEL) (P/N 43973) (Page 1 of 2)**



- NOTE:  
 1. SEVERAL ELECTRICAL AND HYDRAULIC COMPONENTS ARE NOT SHOWN FOR CLARITY.  
 2. ALL DIMENSIONS ARE FOR REFERENCE ONLY

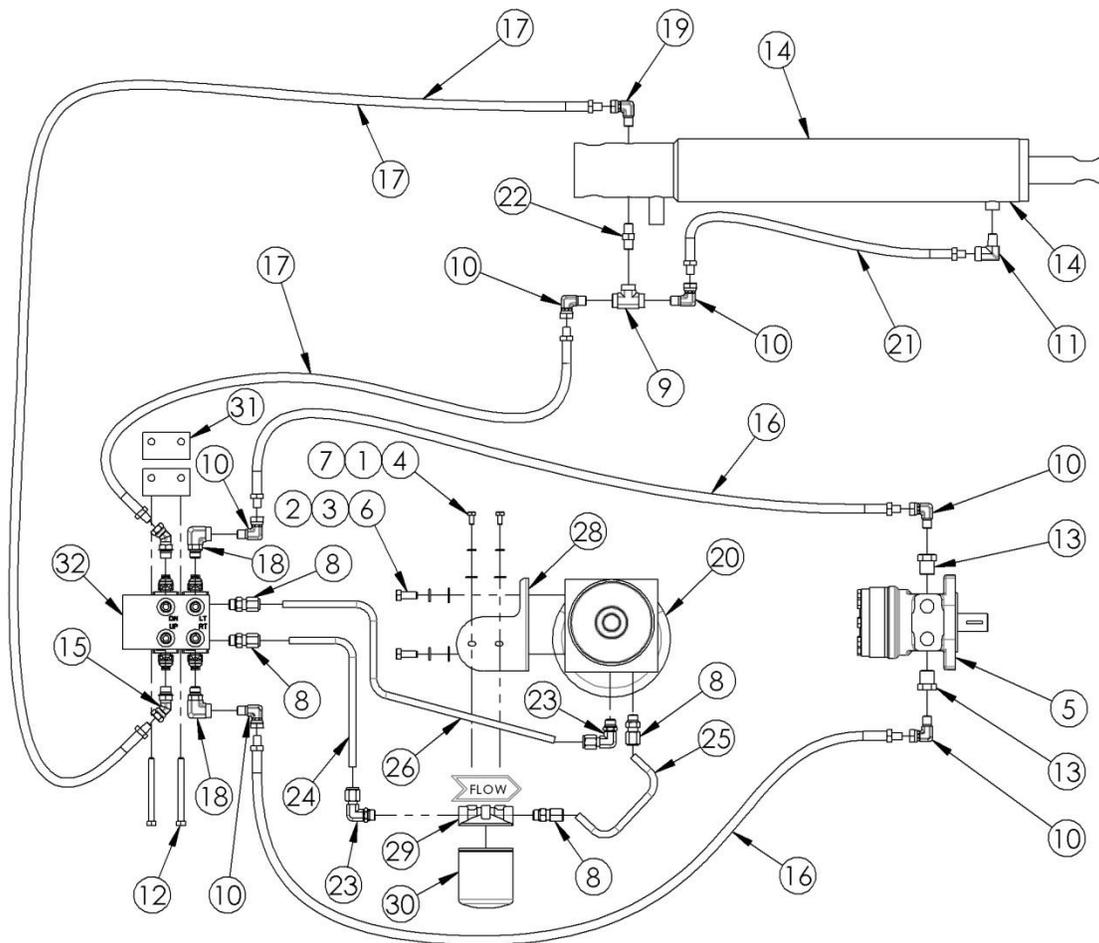
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**TURRET ASSEMBLY (ERX MODEL) (P/N 43793) (Page 2 of 2)**

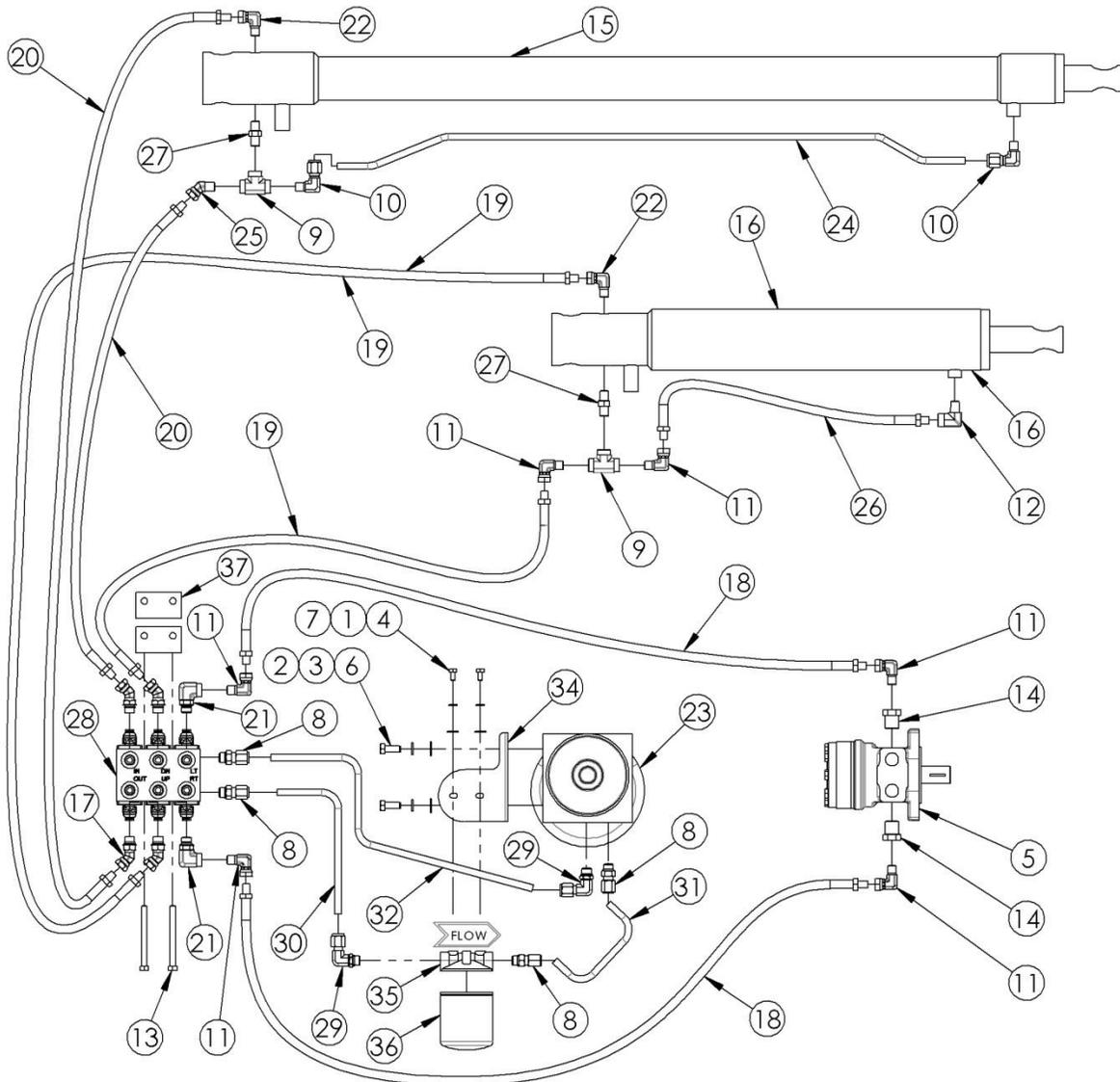
ITEM	PART #	QTY	DESCRIPTION	ITEM	PART #	QTY	DESCRIPTION
1	07850	1	NUT-HX 3/8-16	48	43715	1	CYL-HYD 3.00B 14.50S
2	07882	10	WASHER-LOCK 1/4	49	43738	2	WIRE ASY-#02 36.0 WINCH
3	07885	4	WASHER-FLT 3/8 W	50	43752	1	PIN-W/KPR 1.00 7.69/3200
4	07886	8	WASHER-LOCK 3/8	51	43756	1	PIN-W/KPR 1.25 7.69/3200
5	07898	1	BOLT-HX 1/4-20X3/4	52	43760	2	SPACER-3200 WORM 1.57
6	07916	6	BOLT-HX 1/4-20X1/2	53	43761	1	SPACER-3200 TUR ROT BRG
7	14938	1	SCRW-STSKT 3/8CX1.50 DOG	54	43762	1	COVER-TURRET REAR 3200
8	40006	1	KEY-08 WORM 0.18 2.37	55	43763	1	SHAFT-08 WORM 3200 ROT
9	40014	1	PLUG-08 BRG COVER	56	43767	1	BRKT-3200 CONT ROT MT
10	40034	1	WORM-08 36:1 LH	57	43774	1	BRKT-3200 HOSE RING
11	40078	1	BEARING HOLDER	58	43775	4	FITTING-.56MS .25FPS45
12	40080	2	FITTING-GREASE .25NF	59	43776	1	GROMMET-1.63 ID 2.00 OD
13	40156	2	BEARING-CONE 08 0.87ID	60	43779	2	HOSE-HYD 0.25D .25MP 17.2L
14	40157	2	BEARING-CUP 08 2.12OD	61	43780	2	HOSE-HYD 0.25D .25MP 34.0L
15	40341	1	MOTOR-HYD 103-1028	62	43781	2	HOSE-HYD 0.25D.25MP50.0L
16	40605	1	SCREW-STSKT 0.37 0.4 OVL	63	43799	2	FITTG-.56MS .25FP 90
17	40816	1	ADAPTOR-HYD 08 2 BOLT A	64	43801	1	FITTG-.25MP .25FPS ORF
18	40900	7	BOLT-HX 1/4-20X9/16 (40900)	65	43802	1	PUMP ASY-12V HYD 3200
19	40911	6	BOLT-HX 3/8-16X7/8	66	43804	1	WIRE ASY-#02 13.5 QUILL
20	40986	9	WASHER-FLT 1/4 N (40986)	67	43816	1	TIE-CABLE 03.9L BLK NYL
21	40992	6	WASHER-LOCK HI COLLAR .2	68	43831	2	WASHER-FLT 3/8 FENDER
22	41015	2	SCRW-CPSKT 1/4-20X1	69	43833	2	SCRW-CPSKT 3/8-16X7/8
23	41016	6	SCRW-CPSKT 1/4-20X1 3/4	70	43916	2	WASHER-LOCK INTERNAL #4
24	41095	6	BOLT-HX 1/4-20X7/8	71	43999	1	TERMINAL-14GA #6 FORK
25	41124	1	PIN-SPRNG 0.12 1.00	72	44014	1	LOOM-SPIRAL CUT 1/2" BLK
26	41155	1	TERMINAL-18GA #10 RING	73	44231	1	HOSE-HYD 0.25D .25MP 20.0L
27	41967	2	GASKET-08 BRG COVER	74	44232	1	NIPPLE-HEX .25MP .25MP
24	43201	1	CONNECTOR-CABLE PANEL	75	44234	1	BRKT-3200 ELE ASY MTG
29	43263	1	WIRE ASY-#04 18.0 GRND	76	44239	1	CONTACTOR-3200 WARN
30	43297	2	BEARING-CONE 3.375X5.375	77	44343	1	COVER-PUMP 3200 CRANE
31	43298	2	BEARING-CUP 3.375X5.375	78	44457	0.75	WIRE-#18 BULK ORG FEET
32	43305	1	BASE ASY-3200 TURRET	79	44719	2	NUT-HX #6-32 NYLK
33	43327	1	GEAR-3200 36:1 LH	80	45176	1	MANIFOLD PKG-3200ERX V2
34	43336	1	ROD-3200 ELEC ROD CONNEC	81	45179	1	HARNESS-3200ERX 5195+
35	43346	1	PAD-MTG CONNECTING ROD	82	45182	2	FITTG-.56MS .38TBC 90
36	43360	8	SCREW - SHLDR - 0.5" x 1.5"	83	45183	1	SPACER-3200 LIMIT SWITCH
37	43362	2	SCRW-PAN #4-40X3/4	84	45184	1	TUBE-3200 HYD MAN/FLTR
38	43363	2	NUT-HX #4-40	85	45185	1	TUBE-3200 HYD FLTR/PUMP
39	43370	4	FITTG-.56MS .37TB ST	86	45186	1	TUBE-3200 HYD PRESSURE
40	43374	1	FITTG-.25FP TEE	87	45189	1	BRKT-3200 FILTER
41	43376	6	FITTG-.25MP .25FPS 90	88	45190	1	FILTER HEAD-HYD BF-06-0
42	43379	1	FITTING-.25MP .25FP 90	89	45191	1	FILTER-HYD BE-10-18
43	43425	3	NUT-HEX .250NC FLEX	90	45192	2	SPACER-3200 MANIFOLD
44	43452	1	WIRE ASY-#02 18.5 PUMP	91	45204	1	SWITCH-PLUNGER SPDT BZ
45	43469	2	BOLT-HX 5/16-18X3-3/4	92	45205	2	SCRW-PAN #6-32X1
46	43541	2	FITTG-.50MP .25FP ST	93	45238	1	WIRE ASY-CONTACTOR GRND
47	43704	1	TURRET ASY- 3200 WELDMENT	94	45239	1	BRKT-3200 SWITCH MTG

**HYDRAULIC LAYOUT (ER MODEL) (W0187)**



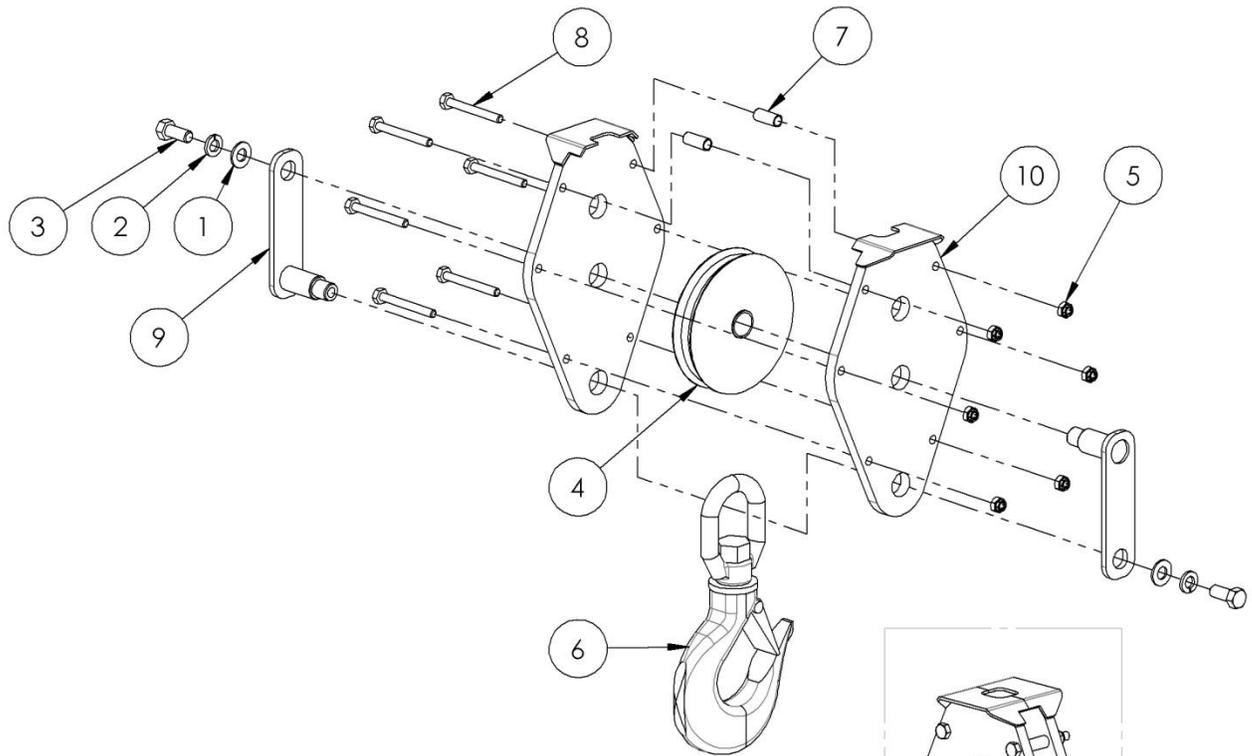
ITEM	PART #	QTY	DESCRIPTION	ITEM	PART #	QTY	DESCRIPTION
1	07882	2	WASHER-LOCK 1/4	17	43780	2	HOSE-HYD 0.25D .25MP 34.0L
2	07885	2	WASHER-FLT 3/8 N	18	43799	2	FITTG-.56MS .25FP 90
3	07886	2	WASHER-LOCK 3/8	19	43801	1	FITTG-.25MP .25FPS ORF
4	07916	2	BOLT-HX 1/4-20X1/2	20	43802	1	PUMP ASY-3200 HYD 12V
5	40341	1	MOTOR-HYD 103-1028	21	44231	1	HOSE-HYD 0.25D .25MP 20.0L
6	40911	2	BOLT-HX 3/8-16X7/8	22	44232	1	NIPPLE-HEX .25MP .25MP
7	40986	2	WASHER-FLT 1/4 N (40986)	23	45182	2	FITTG-.56MS .38TBC 90
8	43370	4	FITTG-.56MS .37TB ST	24	45184	1	TUBE-3200 HYD MAN/FLTR
9	43374	1	FITTG-.25FP TEE	25	45185	1	TUBE-3200 HYD FLTR/PUMP
10	43376	6	FITTG-.25MP .25FPS 90	26	45186	1	TUBE-3200 HYD PRESSURE
11	43379	1	FITTING-.25MP .25FP 90	27	45188	8	HEAT SHRINK-3/4"X1"L CLR
12	43469	2	BOLT-HX 5/16-18X3-3/4	28	45189	1	BRKT-3200 FILTER
13	43541	2	FITTG-.50MP .25FP ST	29	45190	1	FILTER HEAD-HYD BF-06-0
14	43715	1	CYL-HYD 3.00B 14.50S	30	45191	1	FILTER-HYD BE-10-18
15	43775	2	FITTING-.56MS .25FPS45	31	45192	2	SPACER-3200 MANIFOLD
16	43779	2	HOSE-HYD 0.25D .25MP 17.2L	32	45193	1	MANIFOLD PKG-3200ER VER2

**HYDRAULIC LAYOUT (ERX MODEL) (W0186)**

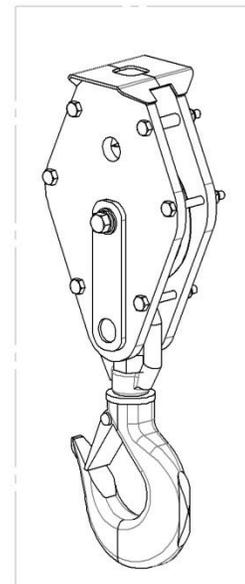


ITEM	PART #	QTY	DESCRIPTION	ITEM	PART #	QTY	DESCRIPTION
1	07882	2	WASHER-LOCK 1/4	20	43781	2	HOSE-HYD 0.25D .25MP 50.0L
2	07885	2	WASHER-FLT 3/8 N	21	43799	2	FITFG-.56MS .25FP 90
3	07886	2	WASHER-LOCK 3/8	22	43801	2	FITFG-.25MP .25FPS ORF
4	07916	2	BOLT-HX 1/4-20X1/2	23	43802	1	PUMP ASY-3200 HYD 12V
5	40341	1	MOTOR-HYD 103-1028	24	44126	1	TUBE-3200 HYD CYL EXT
6	40911	2	BOLT-HX 3/8-16X7/8	25	44184	1	FITTING-.25MP .25FPS45
7	40986	2	WASHER-FLT 1/4 N (40986)	26	44231	1	HOSE-HYD 0.25D .25MP 20.0L
8	43370	4	FITFG-.56MS .37TB ST	27	44232	2	NIPPLE-HEX .25MP .25MP
9	43374	2	FITFG-.25FP TEE	28	45176	1	MANIFOLD PKG-3200ERX V2
10	43375	2	FITFG-.25MP .37TBC 90	29	45182	2	FITFG-.56MS .38TBC 90
11	43376	6	FITFG-.25MP .25FPS 90	30	45184	1	TUBE-3200 HYD MAN/FLTR
12	43379	1	FITTING-.25MP .25FP 90	31	45185	1	TUBE-3200 HYD FLTR/PUMP
13	43469	2	BOLT-HX 5/16-18X3-3/4	32	45186	1	TUBE-3200 HYD PRESSURE
14	43541	2	FITG-.50MP .25FP ST	33	45188	12	HEAT SHRINK-3/4"X1"L CLR
15	43708	1	CYL-HYD 2.00B 48.00S	34	45189	1	BRKT-3200 FILTER
16	43715	1	CYL-HYD 3.00B 14.50S	35	45190	1	FILTER HEAD-HYD BF-06-0
17	43775	4	FITTING-.56MS .25FPS45	36	45191	1	FILTER-HYD BE-10-18
18	43779	2	HOSE-HYD 0.25D .25MP 17.2L	37	45192	2	SPACER-3200 MANIFOLD
19	43780	2	HOSE-HYD 0.25D .25MP 34.0L				

**TRAVEL BLOCK ASSEMBLY (ALL MODELS) (P/N 45215)**



ITEM	PART #	QTY	DESCRIPTION
1	07885	2	WASHER-FLT 3/8 W
2	07886	2	WASHER-LOCK 3/8
3	40911	2	BOLT-HX 3/8-16X7/8
4	43041	1	PULLEY-4.0 OD .75BORE
5	43425	6	NUT-HEX .250NC FLEX
6	43819	1	HOOK-2.0 TON SWIVEL W/L
7	43909	2	SPACER-TB RD 3/8OD 7/8L
8	44002	6	BOLT-HX 1/4-20X2 1/4
9	45212	2	PIN-W/KPR 0.75 1.31 3.50
10	45216	2	PLATE ASY-TRAV BLOCK



## ANTI TWO-BLOCK SYSTEM (ALL MODELS)

Your RKI crane is equipped with an anti two-block system, per OSHA 29 CFR Part 1926.1416(d)(3), to prevent damage from contact between the travel block and the boom tip. If the travel block is allowed to contact the end of the boom, continued operation could result in significant damage to the crane and possibly failure of the wire rope.

When the travel block comes in contact with the rail mechanism at the end of the boom, the crane will disable the hoist up and boom out functions. All other functions will operate as normal.

The microswitch located at the end of the boom head and the rail mechanism that engages it are pre-set at the RKI factory. No adjustment or resetting is necessary. If either of the two conditions exists, then the crane requires service:

- When the travel block compresses the rail mechanism and it comes in contact with the boom head and all the crane functions continue to operate, particularly hoist up and boom out.
- When the travel block is not in contact with the rail mechanism or the boom head and all crane functions fail to operate, particularly hoist up and boom out.

## LOAD SENSOR CALIBRATION (ALL MODELS)

Your RKI crane is equipped with a torque reading load sensor, which prevents overloading. If the crane's load capacity is exceeded, the load sensor deactivates all winch functions except rotation, boom in, and hoist down. Remove the load from the crane and the overload sensor is **AUTOMATICALLY** reset, returning full function to the crane. If the load sensor gets out of adjustment, see instructions for its recalibration below.

**Occasionally it may be necessary to recalibrate the load-sensing device.**

The following is the proper procedure:

1. The load-sensing device is located in the upper right-hand section of the crane turret housing. It consists of a microswitch fastened to a bracket, which in turn is secured to an upright bar welded into the crane turret.
2. The plunger on the microswitch may be adjusted by means of the adjacent set screw.
3. Loosen the nut securing the set screw to the bar across the back of the turret.
4. Adjust the boom elevation and extension until the centerline of hook is at a position exactly 3 feet from the center of rotation, then connect a dynamometer (scale).
5. Raise the hook by operating the "hoist up" switch on the control handle until the dynamometer reads 3,200 lbs.
6. If you do not have a dynamometer please see the note below.
7. Adjust the set screw so that it rests against the end of the plunger. Turning the setscrew counterclockwise increases the load capacity while turning it clockwise decreases capacity.
8. Relieve the pull on the winch line by operating the "hoist down" switch on the control handle until the dynamometer reads 0 (zero) lbs.
9. Again, follow the procedure in #6. When the pull reads 3,200 lbs. the load sensor should stop the winch.
10. If the load sensor engages at the proper pull it is set correctly and the nut securing the set screw should be tightened.
11. If the load sensor does not engage properly follow the procedure in #6 until the proper setting is attained.

\* **NOTE:** If a dynamometer is not available, the same results can be obtained by using a known weight (3,200 lbs.) and a known radius (3 feet). Another example would be 2,000 lbs. @ 5 ft.

## SPARE PARTS

It is recommended that repair parts for your crane be obtained from your local RKI distributor. Please note that unauthorized servicing or alteration of your crane will void the warranty.

Each crane is assigned a serial number, which is a nameplate located near the bottom of the rear cover. The serial number can also be found in the owner's manual that is provided with the crane.

Please record your serial number and retain a copy of your invoice for future reference. If your crane should need service, this information will be required.

Below is a list of miscellaneous parts not previously listed in this manual:

Part Description	Part Number	Comment
Bronze Bushing	40005	Main boom pivots
Cord Reel Package	44193	Includes cord reel, micro switches, cable, and hardware
Counterbalance Valve	44344	Hydraulic cylinder C.B. valve (same for both cylinders)
Decal Kit	44357	Includes all decals for crane
Dipstick	44727	Oil Reservoir
Dust Cap	43507	Cover remote socket, with chain
Manifold (ERX model)	45177	Hydraulic manifold only for ERX model
Manifold (ER model)	45194	Hydraulic manifold only for ER model
Motor-Hydraulic Pump	45015	Motor only of 43802
Motor-Winch	44516	Motor only, 2 post
Oil Filter	45191	Spin-On, 10 micron
Oil Reservoir	44998	Reservoir only, includes o-ring and breather
#2 SAE Plug	45181	O-Ring Plug for hydraulic manifold
Seal Kit-Boom In/Out Cylinder	45159	Seal kit for 43708 extension cylinder
Seal Kit-Boom Up/Down Cylinder	45160	Seal kit for 43715 elevation cylinder
Socket-Remote	43391	Socket only of wiring harness in turret
Solenoid-Hydraulic Pump	45004	Starter solenoid only of 43802 pump
Terminal Boot	41376	Rubber Cap for winch motor terminals
Valve-Hydraulic Solenoid	45178	Cartridge valve only for manifold
#2 SAE Plug	45181	O-Ring Plug for hydraulic manifold

## TROUBLESHOOTING

Problem	Solution
Crane slowly stops while lifting	Check for weak battery or bad connections
Cranes only operable functions are rotation, boom in, or hoist down	<p>Overload sensor may be set off. Lower load to ground and switch will automatically reset.</p> <p>If power boom is extended, check the boom head to determine if wire cage is in contact with microswitch. If there is contact, all functions can be returned by either hoisting down or retracting the boom in.</p>
Load sensor gets out of adjustment	See instructions to recalibrate in this manual.
Microswitch gets out of adjustment	See instructions for traveling block microswitch resetting.
Crane will not lift load	Load may exceed crane capacity. Refer to the load chart. You may need to reposition the truck closer to the load. Check microswitches (in turret and at the end of the boom) by pressing the point on the microswitch. If it does not click, replace the microswitch.
Remote Control will not operate	Check for any loose, exposed or frayed wires. Make sure the switches return freely to the center position and are not sticking or loose. Inspect the plug pins for damage.
Sporadic Functions	Check the hot cable connections from the power source to the crane. (This includes the quick disconnect and the connection to the brass rod in the crane.) Check for proper ground with good clean metal to metal connections (no paint, etc.). With the truck engine running, check the power source to confirm the crane is receiving 13 volts for proper operations. A replacement battery, alternator or adding an additional battery may be necessary.

Always provide the serial number of the crane when contacting RKI for further troubleshooting questions (stamped in the nameplate located near bottom of rear cover).

## **RKI LIFETIME WARRANTY**

This warranty applies to anything we have manufactured.

The warranty applies to the original owner of the product for as long as he or she owns the product.

If something goes wrong which we determine was our fault we will repair or replace your product. The warranty doesn't apply to normal wear and tear.

Be sure to call your local distributor if you have a problem. We need the opportunity to talk to you about it. We may ask you to email us pictures or ship the product back to us for inspection.

Parts that we use but don't manufacture are covered to the extent of the warranty we get from the company that does manufacture them.

No loss of use coverage. No freight coverage. Repairs have to be authorized by us, in writing, in advance. No coverage if the product has been changed in any way.

To qualify for warranty the product must have been treated with respect in regard to normal installation, maintenance, and usage.

Accidents and acts of God aren't covered.

This warranty will be in effect until we decide to change it.