
Manual Part # 99905182

9500 25-foot Parts & Specifications Manual

Revised: May 8, 2017



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Revisions

DATE	LOCATION	DESCRIPTION
20111031	77441481	ECN 11624 - Harness change
20120815	99904971 73734727	ECN 11774 - Added cable guide. ECN 11783 – 7374727 was 73734635
20130228	99904971	ECN 11913 - Single proportional system available
20130412	99904971	ECN 11945 - Cable guide changed
20130417	99904971	ECN 11952 - A2B bracket change
20130417	99904971	ECN 11959 - Horn controls added
20130522	99904971	ECN 11940 - Hook stow and pin changes
20131114	77441481 77441537 99905614	Added nailboard and circuit charts Added circuit chart Added horn circuit schematic
20140415	99905067 99904971 99905087 99905289	ECN 12147 – move limit switch, update crane assembly within drawings
20140508	71570825	Corrected/Added part numbers per 9/11 drawing from vendor.
20140813	51723605	ECN 12216 – changed width of pin boss from 4.88" to 4.75"
20141001	Greasing Instructions	ECN 12264 – Molub Alloy 882 was Molub Alloy 936
	99905595	ECN 12266 – Added
	73734472	ECN 12253 – Delete 72534560, Add 72532699 & 72532674
20150924	99904971	Crane & Winch Assembly
20151110	51723637	ECN11723-6: CHANGED 91723603 TO 91725602
20151228	51723605	CN 262-Counterbalance valve 73054807 was incorrect. Corrected to 73540565.
20160318	71570825	Added Part No. 71416303 to BOM.
20160318	99904971	ECN12427-6 CHANGE FROM 71570825 TO 70570771
20160324	Braden Winch	ECN12427-6-Changed to Braden Winches.
20160504	CN277-1	REMOVED VALUE BOXES, ADDED GRID LINES TO CAPACITY CHARTS.
20160531	INTRODUCTION	ADDED PERSONAL FALL/TIE-OFF PROTECTION INFORMATION
20160614	70570771	ADDED P/N 73540372 TO BOM.
20170227	77441481	Replaced incorrect harness-tele radio remote series III with correct electrical drawing.

CHAPTER 1

Introduction

This volume includes specifications, installation information, and spare parts drawings applicable to your particular crane. For operating, maintenance and repair instructions, see the Telescopic Crane Operation, Maintenance and Repair Manual (IMT part number 99905190).

It is your responsibility to operate and maintain this unit in a manner that will result in the safest working conditions possible. You must be aware of existing Federal, State and Local codes and regulations governing the safe use and maintenance of this IMT crane. The crane was designed and built to meet the standards of ANSI/ASME B30.5, Mobile & Locomotive Cranes. Contact the American Society of Mechanical Engineers (www.asme.org) for more information on ANSI/ASME B30.5.

Misuse of the crane through overloading, abuse, lack of maintenance and unauthorized modifications will void the warranty on any part of the unit subjected to this misuse. No warranty - verbal, written or implied - other than the official, published IMT new machinery and equipment warranty will be valid with this unit.

Throughout the manual, NOTES, CAUTIONS and WARNINGS are used to draw the attention of personnel. They are defined as follows:

NOTE

A NOTE is used to either convey additional information or to provide further emphasis for a previous point.

CAUTION

A CAUTION is used when there is the very strong possibility of damage to the equipment or premature equipment failure.

WARNING

A WARNING is used when there is the potential for personal injury or death.

For a safe work environment, treat this equipment with respect and service it regularly.

Personal Fall/Tie-Off Protection

When using IMT products for the purpose of personal fall protection, users shall read, understand, and follow the personal fall protection provisions of OSHA 29 CFR 1926.1423, paragraphs (g) *Anchorage criteria*; (j) *Anchoring to the load line*; (k) *Training*. Note OSHA sections, 1926.502(d)(15)* and 1926.502(e)(2)*, are cross-referenced in this section and is up to the user to read, understand, and follow these regulations. The above-referenced provisions within OSHA address specific personal fall protection requirements; however, users of IMT products are required to read, understand and follow all OSHA, industry, workplace, and employer-created regulations governing the use of this product, which includes, but is not limited to, 29 CFR 1926.1423. The user is also required to read, understand, and follow IMT's warnings and instructions. Nothing within this letter should be interpreted to limit or excuse non-compliance with the above requirements in their entirety.

When using IMT products with personal fall protection as described above, users shall utilize a two-part line with the snatch block installed on the winch load line. The personal fall protection shall be attached to the hook on the snatch block. The personal fall protection device shall be connected to the hook on the snatch block only if the hook has the original safety latch on the hook. At no time shall anyone use the hook on the snatch block for purposes of attaching personal fall protection if the safety latch is not original to the hook, or is missing or damaged, and/or if the safety latch is not properly functioning. At no time shall anyone use the winch wire-rope as a tie-off point for personal fall protection. The failure to follow the above regulations and strict adherence to all applicable OSHA, industry, workplace, employer-created, and IMT warnings and instructions can lead to personal injury or death.

These OSHA regulations can be found at:

https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=67

* In order to use this method, the hook must have a safety latch, the crane must be capable of supporting 5,000 pounds (refer to the load chart affixed to the crane), limit the fall to less than 6-feet, and not allow a swinging fall. Crane hooks should be used only where there is no other suitable anchor point.

CHAPTER 2

Specifications

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Model 9500 25' Specifications

GENERAL SPECIFICATIONS	
CRANE RATING (Crane rating (ft-lb) is the rated load (lb) multiplied by the respective distance (ft) from centerline of rotation with all extensions retracted and lower boom in horizontal position.)	67,000 ft-lb (9.3 tm)
HORIZONTAL REACH - FLIP SHEAVE UP (From centerline of rotation)	24'-9" (7.5 m)
HORIZONTAL REACH - FLIP SHEAVE DOWN (From centerline of rotation)	23'-10" (7.3 m)
HYDRAULIC EXTENSIONS (2)	75" & 75" (191 cm & 191 cm)
LIFTING HEIGHT (From base of crane)	26'-0" (7.9 m)
CRANE WEIGHT	2,260 lb (1,025 kg)
CRANE STORAGE HEIGHT	41.2" (104.7 cm)
MOUNTING SPACE REQUIRED (Crane base)	20" x 21" (50.8 cm x 53.3 cm)
OPTIMUM PUMP CAPACITY	10 -12 U.S gpm (37.9 - 45.4 l/min)
SYSTEM OPERATING PRESSURE	3200 psi (221 bar)
CENTER OF GRAVITY	
▪ Horizontal from Centerline of Rotation	43.8" (111.3 cm)
▪ Vertical from Bottom of Crane Base	21.38" (54.3 cm)
TIE-DOWN BOLT PATTERN (8 bolts)	14.75" x 14.75" (37.5 cm x 37.5 cm)
ROTATIONAL TORQUE	9,000 ft-lb (1.2 tm)

PERFORMANCE CHARACTERISTICS		
	SPECIFICATIONS	SPEED
ROTATION	400° (7.0 rad.)	30 seconds
LOWER BOOM ELEVATION	-10° to +80° (-0.17 to +1.4 rad)	12 seconds to raise or lower
EXTENSION CYLINDERS (2)	102" & 102" (259 cm & 259 cm)	33 seconds to extend or retract
WINCH SPEED (single line)		60 feet per minute

POWER SOURCE

Hydraulic power is provided by an integral mounted hydraulic pump and PTO application. Other standard power sources may be used. Minimum power required is 23.5 horsepower based on 10-12 GPM (37.9 - 45.4 liters/min) at 3200 PSI (221 bar).

CYLINDER HOLDING VALVES

The holding sides of all cylinders are equipped with integral-mounted counterbalance valves or load-holding check valves to prevent sudden cylinder collapse in case of hose failure.

ROTATION SYSTEM

Rotation of the crane is accomplished through a turntable gear bearing powered by a high-torque hydraulic motor through worm gear reduction. Standard rotation is 400° (6.98 rad).

HYDRAULIC SYSTEM (PTO DRIVEN)

The hydraulic system is an open-centered, full-pressure system that requires 10-12 GPM (37.9 - 45.4 liters/min.) optimum oil flow at 3200 psi (221 bar). It is equipped with a four-section, stack-type, electric, remote control valve with an RF remote-control system with a 40' (9.1 m) radio elimination cable. The system includes a separate hydraulic oil reservoir, suction line filter, return-line filter and control valve.

OVERLOAD PROTECTION SYSTEM

Overloading of the crane is prevented by the overload protection system. A pressure transducer mounted on the lower cylinder senses overload conditions. When in an overload situation, the winch-up, extension-out, and boom-down functions are stopped. To relieve the situation, raise the boom, retract the extensions, or lower the winch.

WINCH

The 5,500 lb (2,495 kg) planetary winch is powered using a high-torque hydraulic motor. The lifting capacity of the winch is 5,500 lb (2,495 kg) one-part line. Maximum two-part line capacity is based on the maximum crane capacity. The winch is equipped with 100 ft (30.5 m) of 7/16" (1.1 cm) 6X25 wire rope. A compact, anti-two block device is included to prevent the lower block or hook assembly from coming in contact with the boom sheave assembly. The winch meets ANSI B30.5 standards.

9500 25' Minimum Chassis Specifications

CRANE MODEL	9500 - 25'
CHASSIS STYLE	Conventional Cab
BODY STYLE	Dominator™ II minimum

CAB-TO-AXLE (1)	84 - 120" (213 - 305 cm)
RESISTANCE TO BENDING MOMENT	1,200,000 in-lb (138,255 kg-m)
FRAME SECTION MODULUS	14.2 cubic inches (232.7 cc)
RATED MOMENT	67,000 ft-lb (8295 kg-m)
GROSS VEHICLE WEIGHT RATING (2)	26,000 lb (11,793 kg) minimum

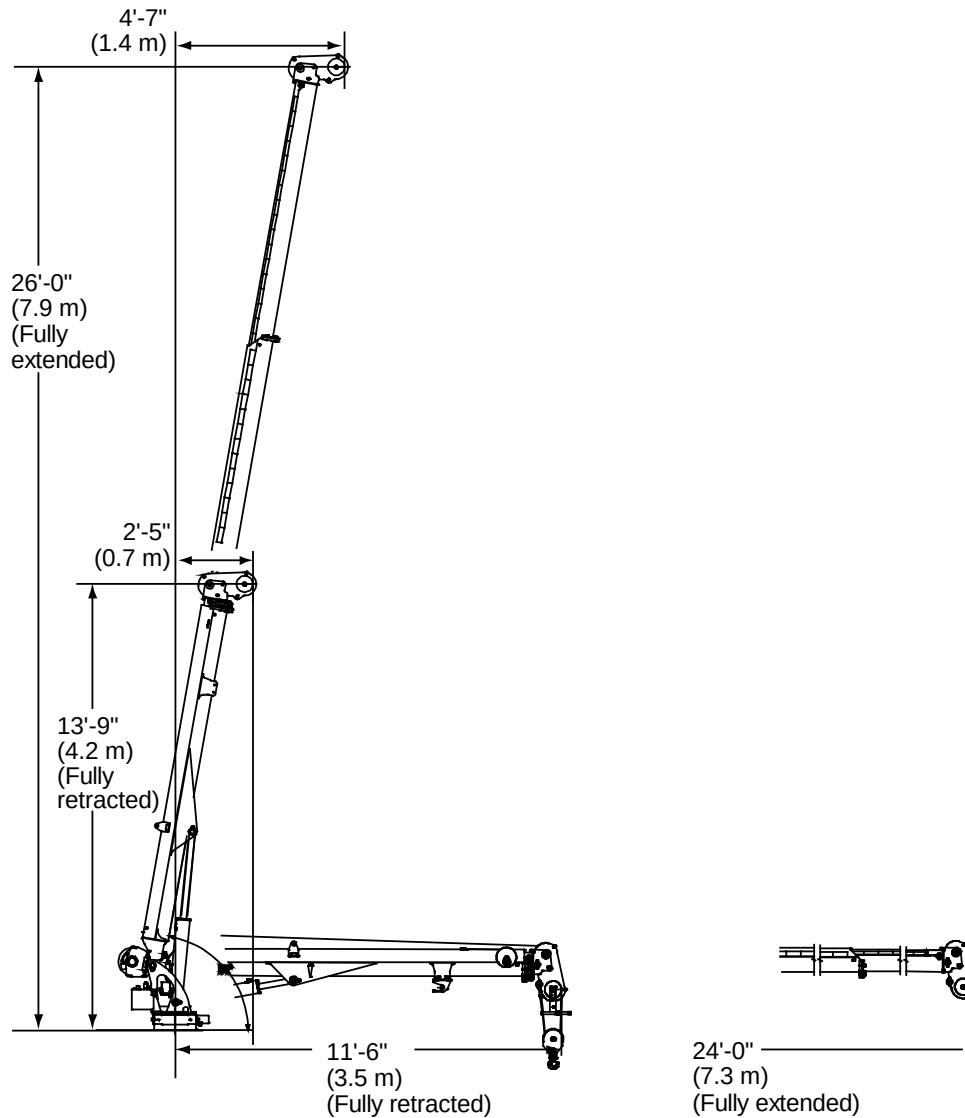
NOTES:

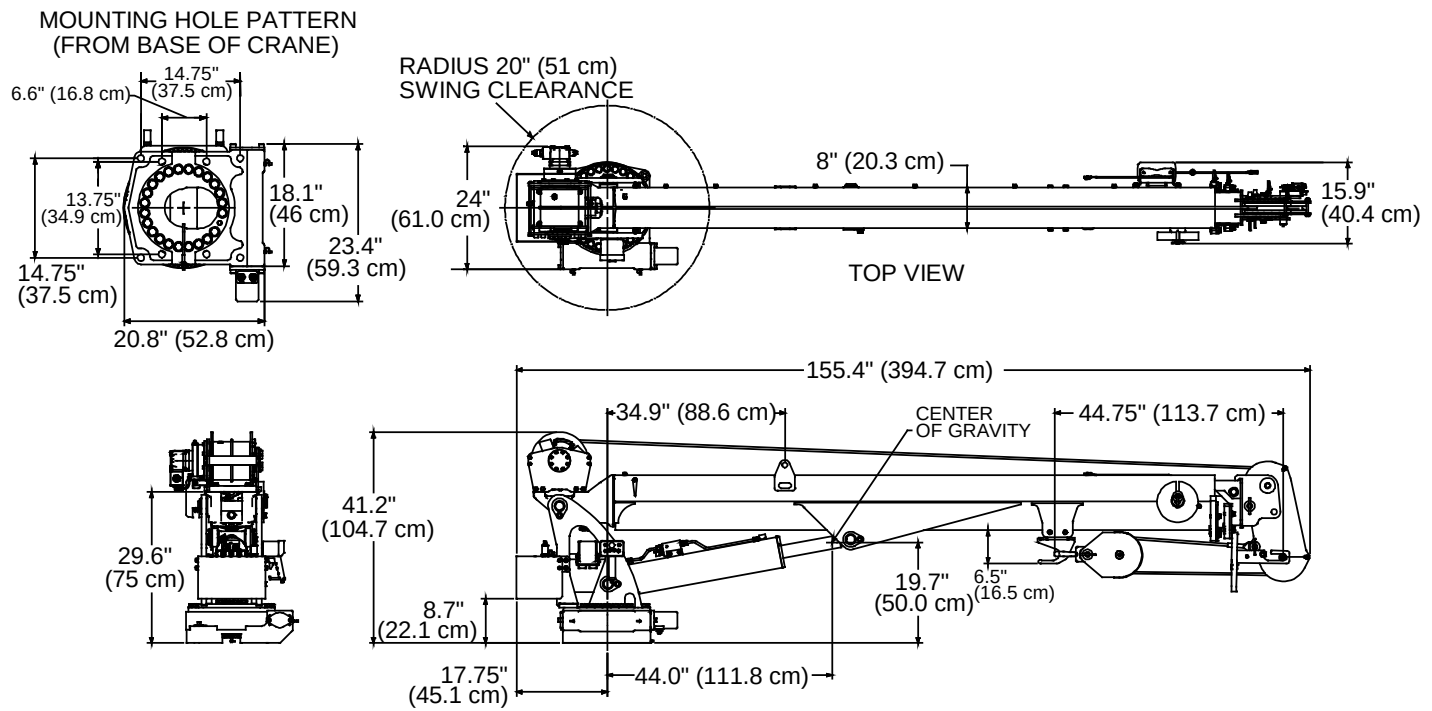
- 1** The Cab to Axle (CA) dimension varies based on the configuration of the body, crane, and auxiliary equipment including welder decks. Make sure the CA is free and clear from obstructions everywhere except between the frame rails.
- 2** The Gross Vehicle Weight Rating (GVW) is a minimum guideline. Contact IMT if you have questions regarding your particular installation.
- 3** In addition to these specifications, heavy duty electrical and cooling systems are required. It is recommended that the vehicle be equipped with an engine tachometer, auxiliary brake lock, and power steering.
- 4** Weight distribution calculations are required to determine final axle loading.
- 5** All chassis, crane and body combinations must be stability-tested to ensure stability per ANSI B30.5

Iowa Mold Tooling Co., Inc. reserves the right to change specifications and design without notice.

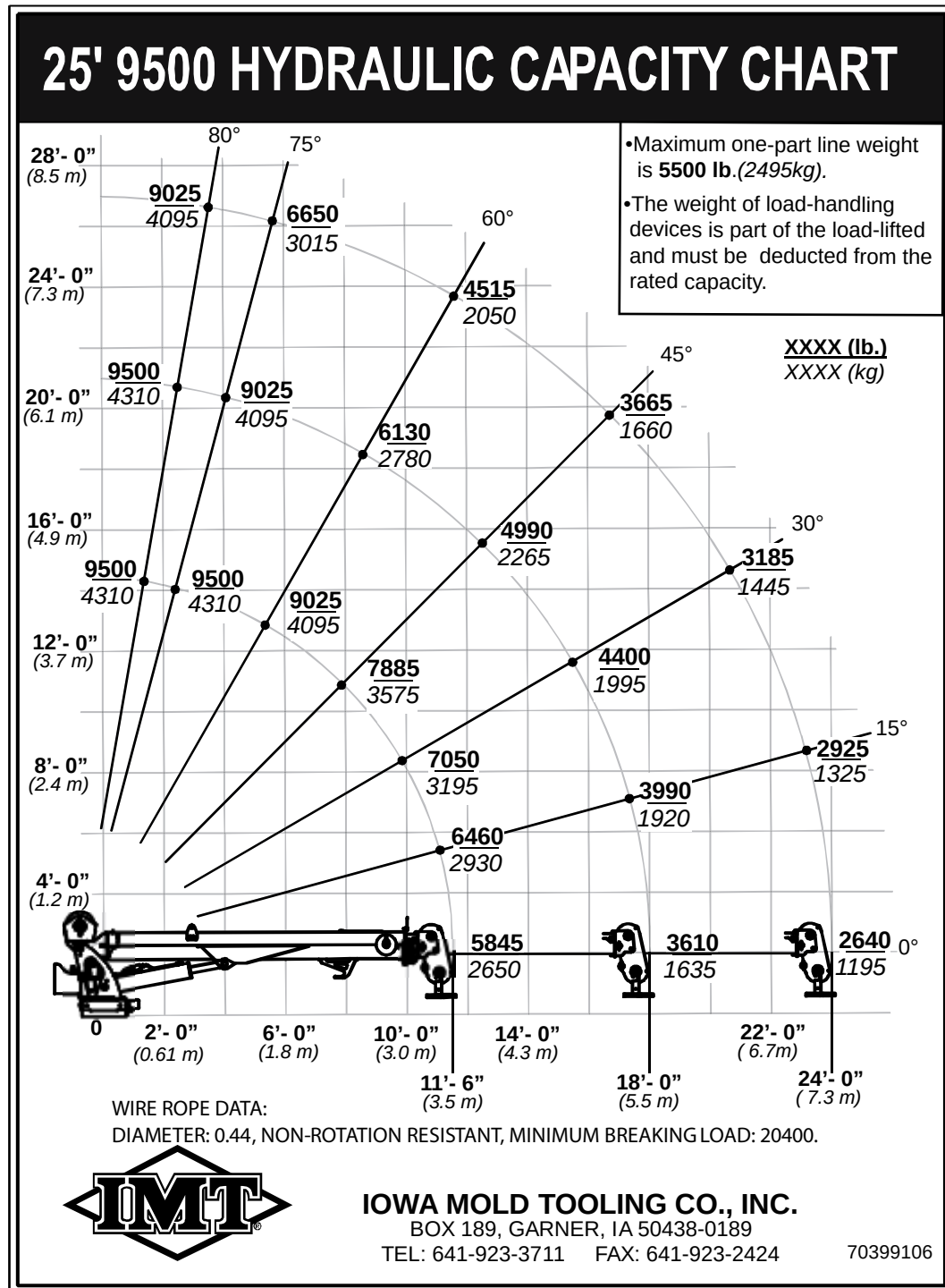
Dimensional Drawings

Dimensions for 25' 9500 and 10000 Crane





25' 9500 Capacity Chart



CHAPTER 3

Crane Reference

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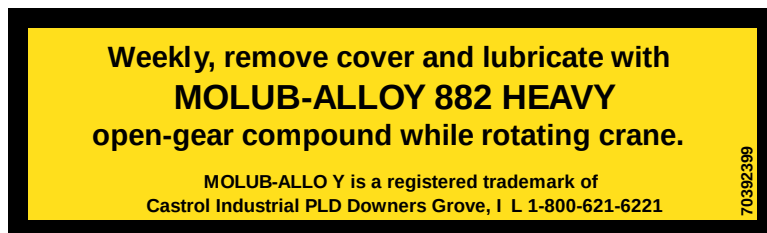
Greasing Instructions

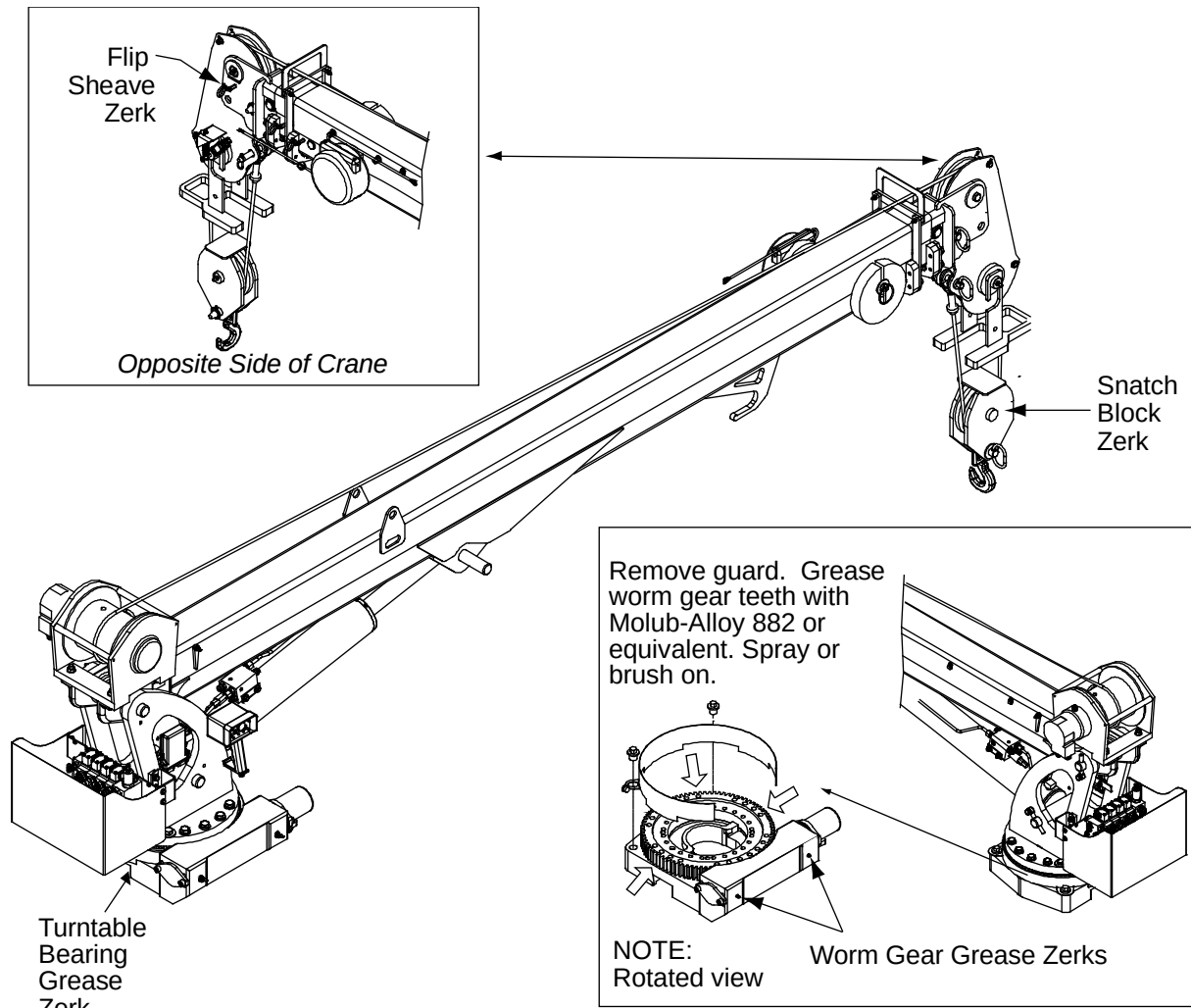
Different lubricants are required for different sections of your crane. Contact your lubricant supplier for specific product information. Follow the grease and lubricant specifications and intervals listed in this manual for best results.

Crane grease zerks must be greased on a weekly basis during normal operating conditions. Under severe operating conditions the zerks must be greased more frequently. Each grease zerk is marked with a decal, "Grease Weekly", as shown. Rotate the worm gear bearing when greasing the worm gear bearing grease zerks.



Crane worm gear bearing teeth must be lubricated weekly with Molub-Alloy 936 or equivalent, applied with a grease gun or brush. Cover all teeth with grease and leave no exposed metal surfaces showing.





LOCATION	LUBRICANT	APPLICATION METHOD	FREQUENCY
Base - Turntable Bearing Grease Zerk	Extreme Pressure Lithium Grease such as Shell Alvania 2EP, Shell Retinax "A", Mobilgrease XHP 462, Cenex ML 365, Xtreme True-Flo MP EP2 Lithium Grease or equivalent.	Apply with hand or pneumatic pressure grease gun.	Weekly
Flip Sheave Pin			
Snatch Block Pin			
Worm Gear Bearings Grease Zerks (*Rotate crane while greasing)			
Rotation Worm Gear Teeth	Molub-Alloy 882 Heavy or equivalent	Brush or spray on.	Weekly

9500 25-foot Crane Recommended Spare Parts

This parts list is intended to provide the user with a stock of parts sufficient to keep the unit operating with the minimal down-time waiting for parts, but it does not indicate these items will fail within a year. In addition, there may be parts failures not covered by this list. Parts not listed are considered as not being Critical or Normal Wear items during the first year of operations.

BASE & MAST ASSEMBLY		
73051919	HYDRAULIC MOTOR	1
72601949	CAP SCREW 0.50-13 X 1.25 SHZC	2
72601629	CAP SCREW .75-10 X 4.00 HEX HEAD GR8 Z	4
72601817	CAP SCREW .75-10 X 3.25 HEX HEAD GR8 Z	16
BOOM ASSEMBLY		
60030336	WEAR PAD-RC	1
60030337	WEAR PAD-ROUND	2
60030421	WEAR PAD-RD	1
60030422	WEAR PAD-ROUND	1
60030423	WEAR PAD-RC	4
60030424	CAP- ANTI-TWO BLOCK PIN (effective through 04/17/13)	2
60030428	WEAR PAD-ROUND	4
60030425	WEAR PAD-ROUND	2
ANTI-TWO-BLOCK ASSEMBLY		
77041863	LIMIT SWITCH	1
CRANE & WINCH ASSEMBLY		
52718741	PIN (effective through 05/22/13)	2
52723036	PIN (effective through 05/22/13)	1
60140915	PIN-TYPE NN 2.0 X 13.75 (effective from 05/22/13)	2
60140916	PIN-TYPE NN 2.0 X 9.5 (effective from 05/22/13)	1
70732882	HOOK, 5.9 TON (effective through 04/26/13)	1
71073035	HOOK-SWIVEL W/O BEARING (effective from 04/26/13)	A/R
70734176	HOOK-SWIVEL W/BEARING (effective from 04/26/13)	A/R
70580168	WIRE ROPE ASSEMBLY 100'	1
60030255	SHEAVE	1
LOWER CYLINDER (51723136)		
94399130	SEAL KIT	1
51723932 CYLINDER (PART OF 51723605 EXT. CYLINDER ASSEMBLY)		
94399160	SEAL KIT	1
51723930 CYLINDER (PART OF 51723605 EXT. CYLINDER ASSEMBLY)		
94399162	SEAL KIT	1
WINCH (70570771)		
94744147	SEAL KIT	1
71411143	BALL BEARING	1
73540344	DUAL COUNTERBALANCE VALVE ASSEMBLY	1
VALVE BANK (73734727)		
94399213	SEAL KIT, CONNECTION BLOCK	1
94399214	SEAL KIT, VALVE SECTIONS	1
77041898	SOLENOID, 12V	1

Installation Introduction

GENERAL

This section contains instructions for the installation of your crane. Prior to installing the crane and hydraulic components, make sure that the chassis is ready to receive the crane (see the Installation Section of the IMT Telescopic Crane Operation & Safety Manual, 99905190).

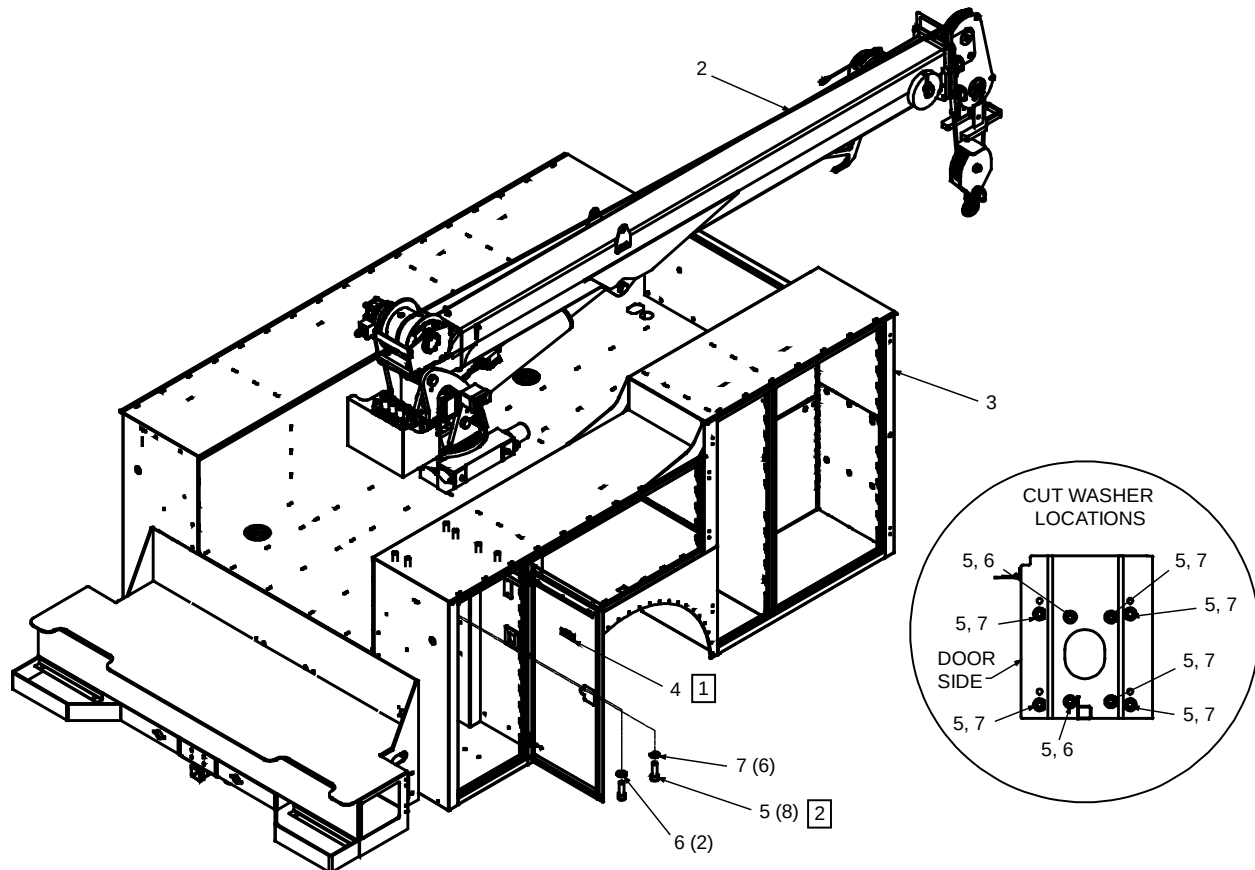
Reinforce the chassis frame, as necessary, and install the PTO and pump.

Each installation may vary in components used. It is important to use hoses of proper length, pumps of correct size, and PTO's of adequate speed. Study the applicable installation kit in the parts section before attempting any installation.

CRANE INSTALLATION

In addition to meeting Minimum Chassis Specifications, there must be sufficient room to mounting the crane and the platform must be strong enough to support the crane and rated load. Install the crane only on an IMT designed and approved truck body. The body must be designed to sustain the forces imposed by the crane when lifting the full rated load. In addition, an IMT designed body is designed to take full advantage of the standard reservoir placement. This reservoir is installed in the cargo area of the body. Before attempting to install the crane, the body must be installed.

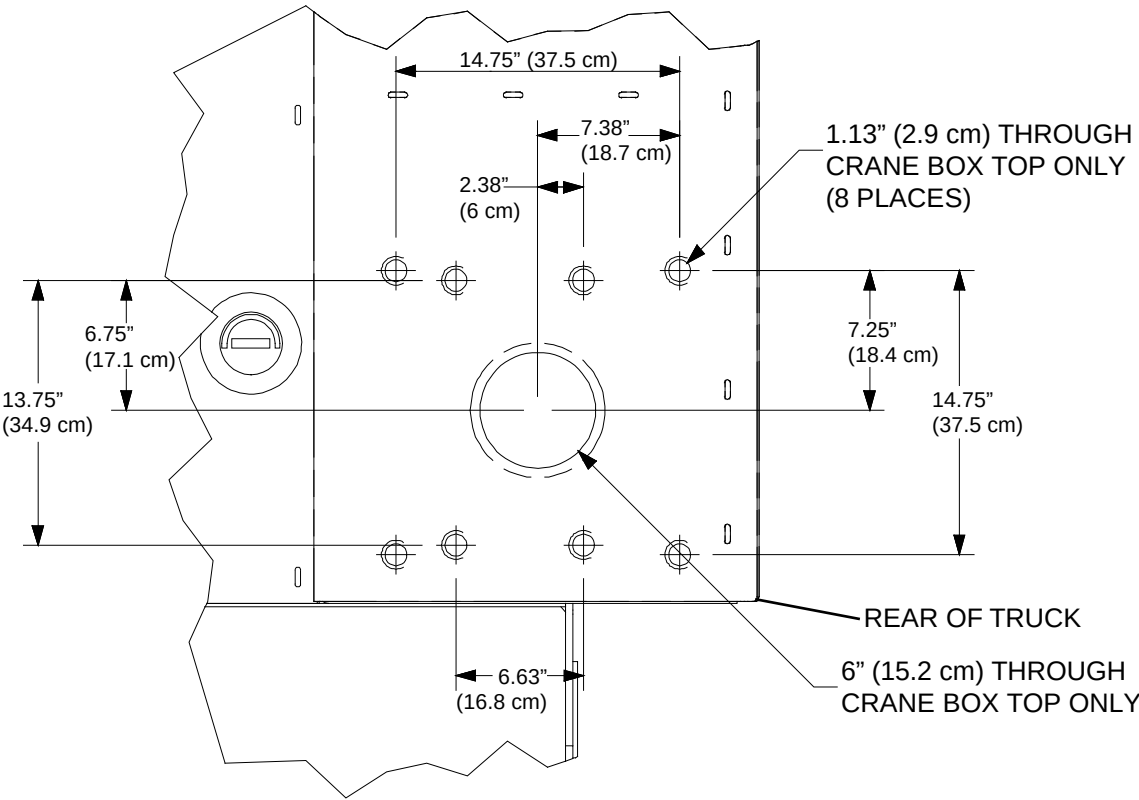
Dominator II - 8600 - 10000 Crane Installation Kit (99905067)



NOTES (SEE REFERENCE NUMBER IN BOX):

- 1 INSTALL THE LEVEL INDICATOR (72042097) PARALLEL TO THE DOOR REINFORCEMENTS.
- 2 TORQUE MOUNTING BOLTS TO 680 FT-LB (94 KG-M). (8 PLACES) USE THE SUPPLIED 3" (7.6 cm) BOLTS WITH A CRANE BOX TOP PLATE THICKNESS OF 1/2" TO 5/8" (1.3 cm TO 1.6 cm) ONLY. DETERMINE THE THICKNESS OF THE CRANE BOX TOP PLATE PRIOR TO MOUNTING. IF DIFFERENT LENGTH BOLTS ARE REQUIRED, THEY MUST BE 1-8, GRADE 8, ZINC COATED, OF PROPER LENGTH. FAILURE TO USE PROPER LENGTH BOLTS MAY CAUSE THE BOLTS UNDER THE CRANE SWING BEARING TO BOTTOM OUT BEFORE TORQUING. INSURE A MINIMUM OF 1-1/2" (3.8 cm) THREAD ENGAGEMENT.

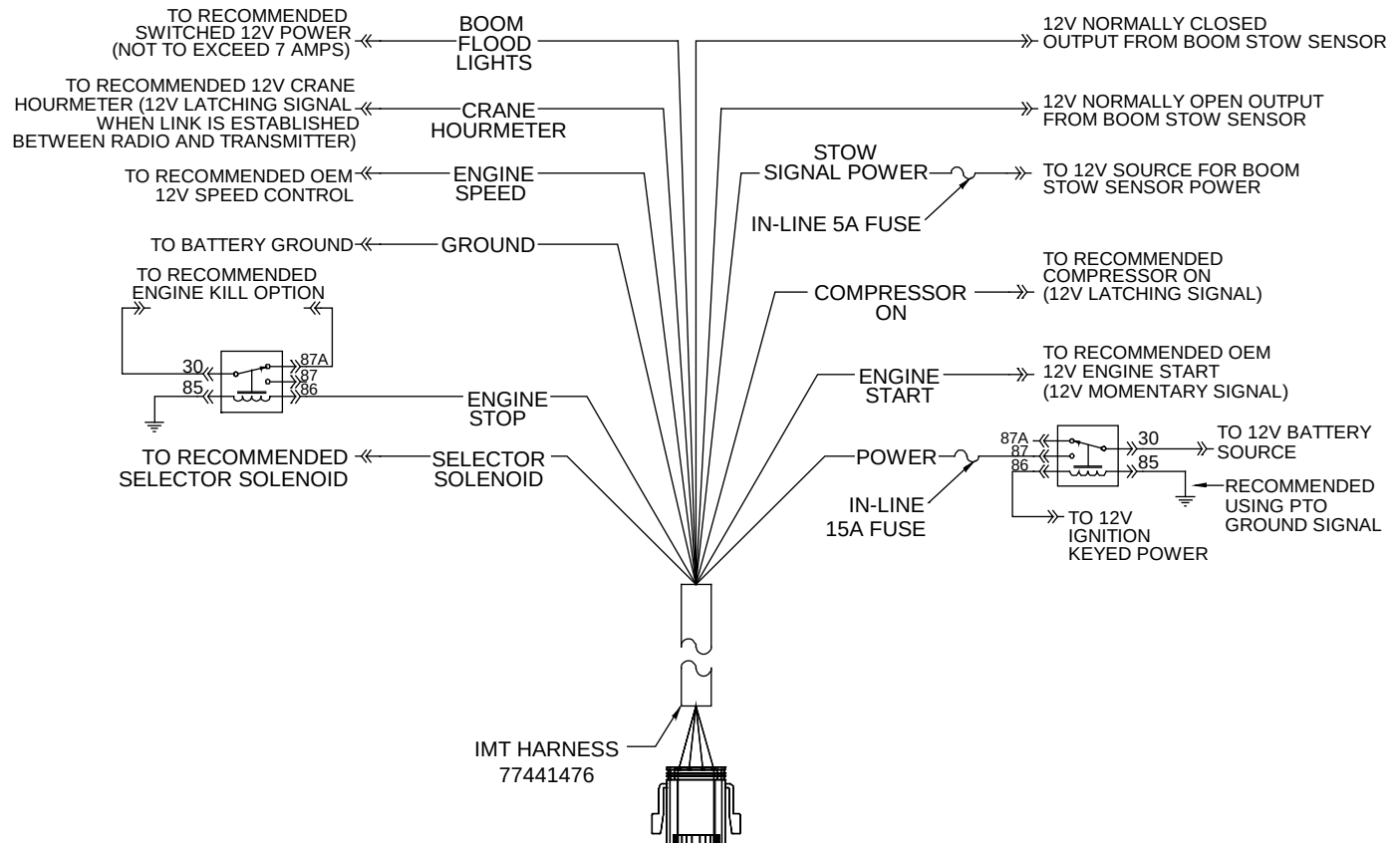
CRANE MOUNTING HOLE LOCATIONS



99905067 PARTS					
ITEM	PART #	DESCRIPTION	DETAILS	KIT #	QUANTITY
1.	93713669	INSTALLATION KIT	7500-10000		1
2.	CRANE	CRANE ASSEMBLY			1
3.	BODY	DOMINATOR BODY			1
4.	72042097	LEVEL INDICATOR LEVEL		#1	1
5.	72601748	CAP SCREW	1.00- 8X 3.00 SH GR8	#1	8
6.	72063066	WASHER	1.00 FLAT HI STR	#1	2
7.	72063286	WASHER	FLAT 1.00 H ASTM F436 Z-CUT	#1	6
REV E 20140211					

Additional Installation Components, Non-IMT Body (93713748)

Chassis Wiring Harness (77441476 / 99905212)

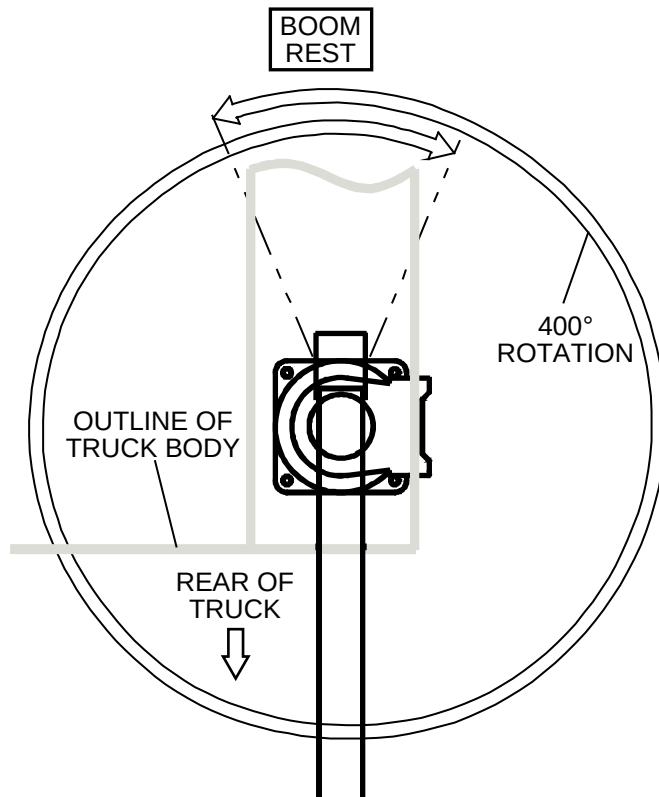


Filter (10 micron) (73052091)

Used on ship-out IMT telescopic cranes.

Telescopic Crane Orientation

When an IMT telescopic crane is not factory-installed on a body, the crane is packed with the boom oriented as it is built on a test stand to facilitate handling. Install the crane on the body with boom pointing backward. Once the crane is bolted down, it can be rotated 180° (3.14 radians) to the boom rest.



Crane Controls

IMT's telescopic cranes are controlled by radio remote controls. See the *Telescopic Crane Radio Remote System* manual, IMT # 99905114, for complete details on the radio remote system.

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Parts

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Parts Information

GENERAL

This section contains the exploded parts drawings and accompanying parts lists for the assemblies used on this crane. These drawings are intended to be used in conjunction with the instructions found in the maintenance and repair manuals for this crane family. For optional equipment such as winches and remote controls, refer to the appropriate service manual.

WARNING

Do not attempt to repair any component without reading the information contained in the repair section. Pay particular attention to statements marked Warning, Caution or Note in that section. Failure to comply with these instructions may result in damage to the equipment, personal injury or death.

CRANE IDENTIFICATION

Every IMT crane has an identification placard (see figure). This placard is attached to the inner boom, mast, or crane base. When ordering parts, communicating warranty information, or referring to the unit in correspondence, always include the serial number and model numbers. Address all inquiries to your authorized IMT distributor or to:

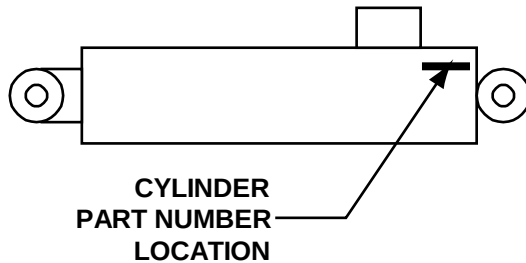
Iowa Mold Tooling Co., Inc.
Box 189, Garner, IA 50438-0189
Telephone: 641-923-3711
Technical Support Fax: 641-923-2424

IOWA MOLD TOOLING CO., INC. BOX 189, GARNER, IA 50438-0189	
MODEL NUMBER	
SERIAL NUMBER	
MFG DATE	

70029119

CYLINDER IDENTIFICATION

To insure proper replacement parts are received, it is necessary to specify the complete number/letter sequence for any part requested. Part numbers may be cross checked by comparing the stamped identification on the cylinder case (See figure below) against the information contained in the service manual. You must include the part number stamped on the cylinder case when ordering parts.



WELDMENT IDENTIFICATION

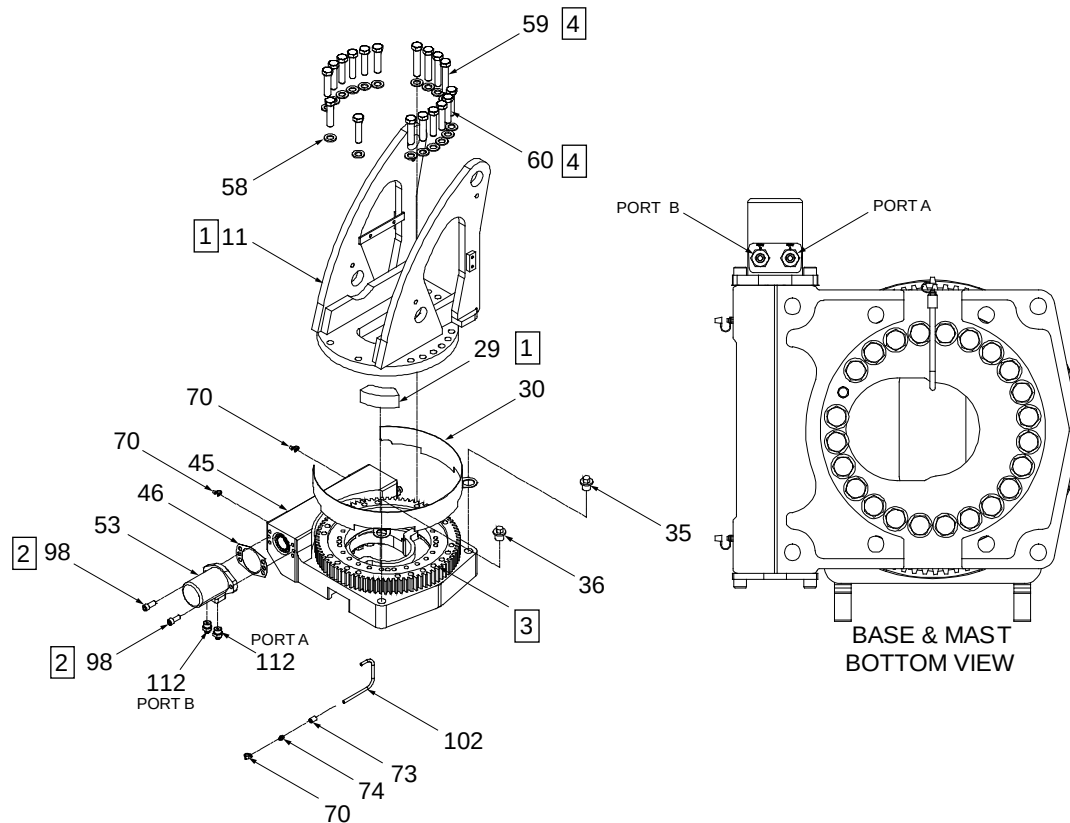
Each of the major weldments - base, mast, inner boom, outer boom, extension boom and stabilizer weldments bear a stamped part number. Any time a major weldment is replaced, you must specify the complete part number as stamped on the weldment. The locations of the part numbers are shown in the Crane Reference Section.

ORDERING REPAIR PARTS

When ordering replacement parts:

- 1 Give the model number of the unit.
- 2 Give the serial number of the unit.
- 3 Specify the complete part number. When ordering cylinder parts, or one of the main weldments, always give the stamped part number.
- 4 Give a complete description of the part.
- 5 Specify the quantity required.

Base & Mast Assembly, Test Stand (99904971) Effective 04/25/2016



NOTES:

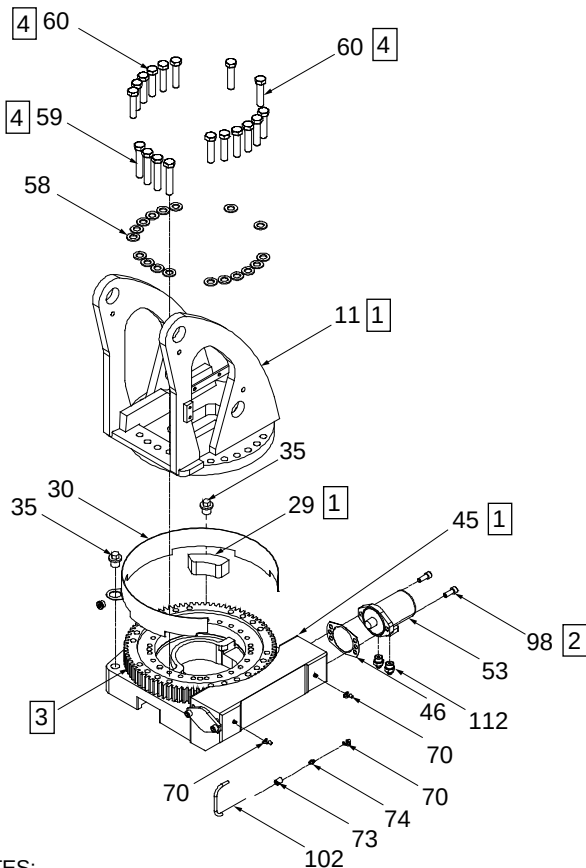
1. USE RUST PREVENTATIVE ON SLIDE STOP, BEARING RACE, BOTTOM OF MAST & TOP OF GEAR BEARRING.
2. APPLY BLUE THREAD LOCKER
3. APPLY GEAR LUBE ON GEAR TEETH.
4. TORQUE TO 280 FT-LB.

BASE ANDMAST ASSEMBLY SHOWN AS MOUNTED ON TEST STAND.

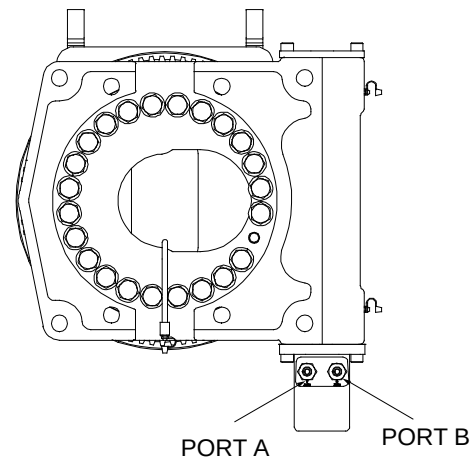
99904971-2 PARTS LIST (Effective 04/25/2016)				
ITEM	PARTS NO.	DESCRIPTION	KIT	QTY
11	52725172	MAST WLDMNT-SERIES III		1
29	60120138	SLIDE-ROTATION STOP 3816		1
30	60128849	GEAR GUARD 6025 SII		1
35	70029595	THREADED PLUG 1.00-8 (3816)		2
36	70145121	COLLAR-SHAFT 2 PIECE 7/8 in.		1
45	71056577	GEAR ROTATOR-6025/6625 0.75 BOLTS		1
46	76039295	GASKET-GEA19 008-10056-1	#45	1

99904971-2 PARTS LIST (Effective 04/25/2016)				
53	73051919	MOTOR-HYD (101-2638-009)		1
58	72063116	WASHER .75 N FLAT H ASTM F436Z	#1	22
59	72601629	CAP SCR .75-10X 4.00 HH GR8 Z	#1	4
60	72601817	CAP SCR .75-10X 3.25 HH GR8 Z	#1	14
70	70034382	CAP-GREASE PRO20 GC-RED	#5	6
73	72053301	COUPLING-GLV .12 SCH 40	#5	1
74	72053508	ZERK-NPT .12	#5	4
98	72601949	CAP SCR .50-13X 1.25 SH ZC	#5	2
102	51395121	HOSE-AA .13 X 13.50 OAL (2-2)	#6	1
112	72533613	ADPTR-M STR/M JIC 10 6	#6	2
REV. DF 20160322				

Base & Mast assembly, Truck Mount (99904971) Effective 04/25/2016



BASE & MAST
BOTTOM VIEW



NOTES:

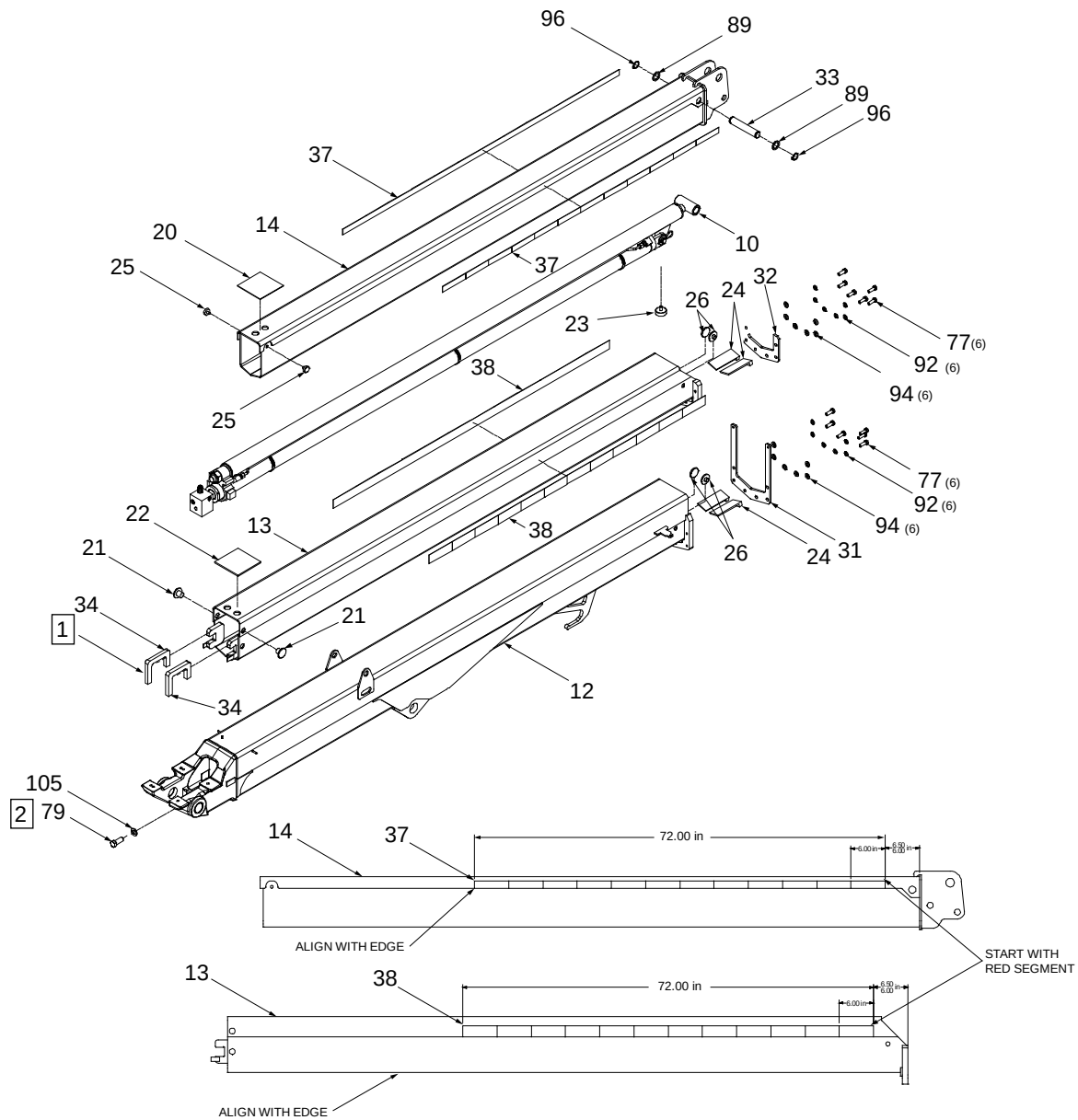
1. USE RUST PREVENTATIVE ON SLIDE STOP, BEARING RACE, BOTTOM OF MAST, AND TOP OF GEAR BEARING.
2. APPLY BLUE THREAD LOCKER.
3. APPLY GEAR LUBE ON GEAR TEETH.
4. TORQUE TO 280 FT-LB.

BASE AND MAST ASSEMBLY SHOWN AS MOUNTED ON TRUCK

99904971-1 PARTS LIST (Effective 04/25/2016)				
ITEM	PART NO.	DESCRIPTION	KIT	QTY
11	52725172	MAST WLD MNT-SERIES III		1
29	60120138	SLIDE-ROTATION STOP 3816		1
30	60128849	GEAR GUARD 6025 SII		1
35	70029595	THREADED PLUG 1.00-8 (3816)		2
45	71056577	GEAR ROTATOR-6025/6625 0.75 BOLTS		1
46	76039295	GASKET-GEA19 008-10056-1	#45	1
53	73051919	MOTOR-HYD (101-2638-009)		1

99904971-1 PARTS LIST (Effective 04/25/2016)				
ITEM	PART NO.	DESCRIPTION	KIT	QTY
58	72063116	WASHER .75 N FLAT H ASTM F436Z	#1	22
59	72601629	CAP SCR .75-10X 4.00 HH GR8 Z	#1	4
60	72601817	CAP SCR .75-10X 3.25 HH GR8 Z	#1	14
70	70034382	CAP-GREASE PRO20 GC-RED	#5	6
73	72053301	COUPLING-GLV .12 SCH 40	#5	1
74	72053508	ZERK-NPT .12	#5	4
98	72601949	CAP SCR .50-13X 1.25 SH ZC	#5	2
102	51395121	HOSE-AA .13 X 13.50 OAL (2-2)	#6	1
112	72533613	ADPTR-M STR/M JIC 10 6	#6	2
REV. DF 20160322				

Boom Assembly (99904971) Effective 04/25/2016



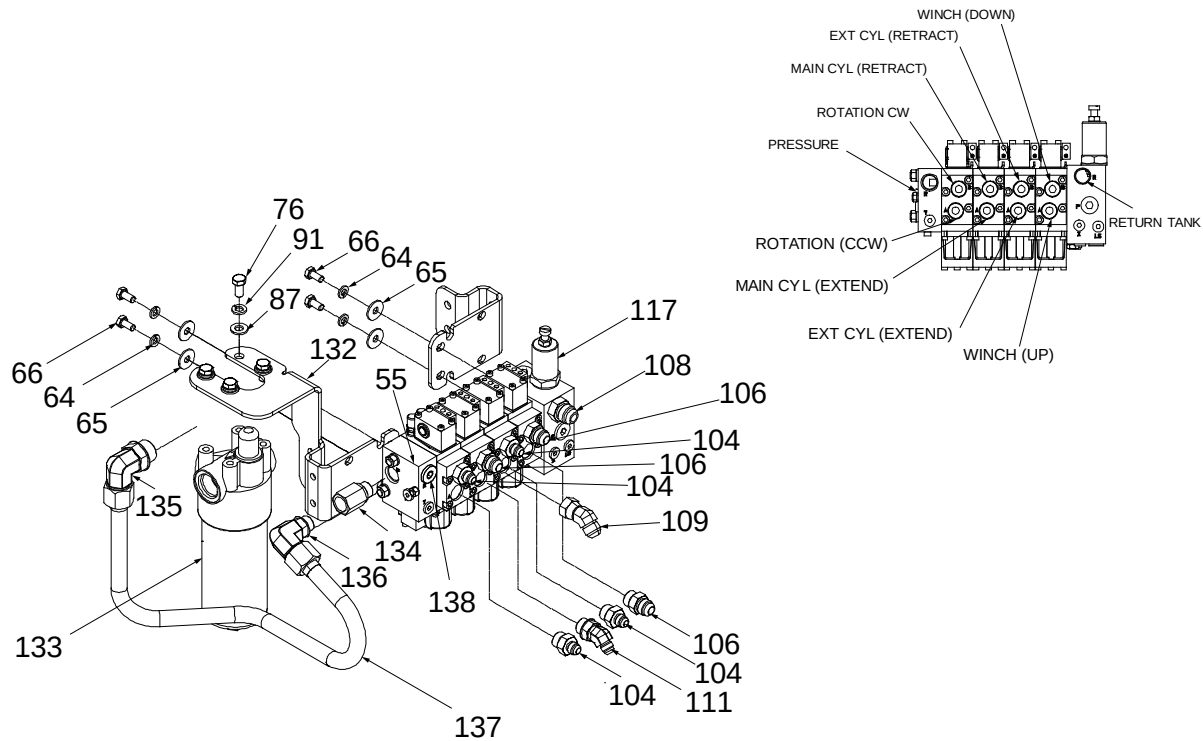
NOTES:

1. INSTALL EXTENSION CYLINDERS FIRST, ADD RESTRAINERS NEXT, INSTALL WEAR PADS LAST.
2. TORQUE TO 280 FT-LB.

99904971-3 PARTS LIST (Effective 04/25/2016)				
ITEM	PART NO.	DESCRIPTION	KIT	QTY

99904971-3 PARTS LIST (Effective 04/25/2016)				
ITEM	PART NO.	DESCRIPTION	KIT	QTY
10	51723605	CYL ASM-2.50/1.50 2.75/1.75 150.0S 125.0		1
12	52725162	WLDMNT-LOWER BOOM 9500/10000S		1
13	52725163	WLDMNT-1st STAGE EXT BOOM 9500/10000S		1
14	52723221	WLDMNT-2nd STAGE EXT BOOM 9500/10000S		1
20	60030336	WEAR PAD-RC .19 X 6.00 X 6.00		1
21	60030337	WEAR PAD-RND 0.19X 2.00X 1.00X 1.00		2
22	60030421	WEAR PAD-RC 0.25X 6.00X 6.00		1
23	60030422	WEAR PAD-RND SIII EXT CYL		1
24	60030423	WEAR PAD-RND 0.44X 1.25X .50X .50		4
25	60030425	WEAR PAD-RND 0.44X 1.25X .50X .50		2
26	60030428	WEAR PAD-RND 0.25X 2.00X .75X .44		4
31	60140899	CAP-LOWER BOOM CABLE GUIDE 9500-14000	#113	1
32	60135668	CAP-FIRST STAGE		1
33	60135669	PIN-TYPE A 1.25X 6.89 (6.46)		1
34	60135833	RETAINER-1st STAGE EXT CYL		2
37	70399053	TAPE-REFLECTIVE RED/SILVER 1.25X72.00		2
38	70396734	TAPE-REFLECTIVE RED/SILVER 2.00X72.00		2
77	72060093	CAP SCR .50-13X 1.50 HH GR5 Z	#5	12
79	72060206	CAP SCR .75-10X 2.00 HH GR8 Z	#5	1
89	72063035	MACHY BUSHING 1.25X10 GA NR	#5	2
92	72063053	WASHER .50 LOCK	#5	12
94	72063132	WASHER .50 FLAT ASTM F436	#5	17
96	72066129	RETAINING RING-EXT 1.25 HD	#5	2
105	72532357	ADPTR-M STR/M JIC 6 8	#6	1
REV. DF 20160322				

Valve Bank Assembly (99904971) Effective 04/25/2016



FULLY PROPORTIONAL VALVE BANK ASSEMBLY

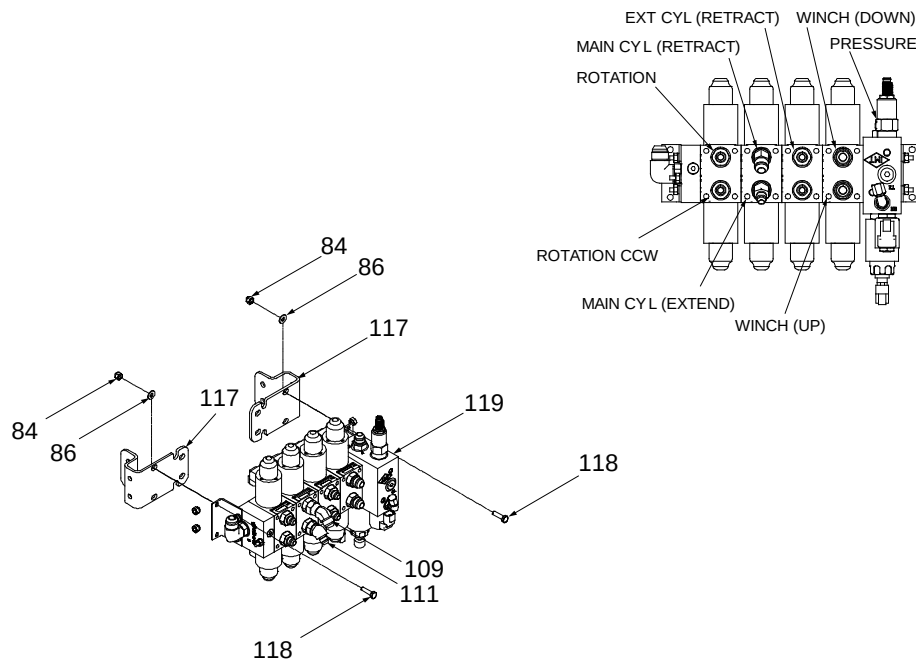
NOTES:

INSTALL WIRE HARNESS TO VALVE BANK PRIOR TO INSTALLING VALVE BANK BRACKET.

99904971-4 PARTS LIST (Effective 04/25/2016)				
ITEM	PART NO.	DESCRIPTION	KIT	QTY
55	73734727	VALVE BANK-4SEC 4R 10GPM TELE PROP 12V G		A/R
64	72601797	WASHER-LOCK 8MM	#3	4
65	72602065	WASHER-FLAT M 8	#3	4
66	72602052	CAP SCR M 8-1.25X 16 HHZ	#3	4
76	72060044	CAP SCR .38-16X .75 HH GR5 Z	#5	8
87	72063003	WASHER .38 FLAT	#5	12
91	72063051	WASHER .38 LOCK	#5	8
104	72532356	ADPTR-M STR/M JIC 8 6	#6	4
106	72532358	ADPTR-M STR/M JIC 8 8	#6	3
108	72532361	ADPTR-M STR/M JIC 8 10	#6	1

99904971-4 PARTS LIST (Effective 04/25/2016)				
ITEM	PART NO.	DESCRIPTION	KIT	QTY
109	72532670	ELBOW-M JIC/45/F JIC 8 8	#6	1
111	72533583	ELBOW-M STR/45/M JIC 8 6	#6	1
117	60140840	BRKT-MAST VB 7500-10000L		2
132	60143076	BRKT-MAST VB 7500-10000L FP		1
133	73052156	FILTER-PRES 4000PSI 25GPM 10MIC -12		1
134	72534898	O-RING EXTENDER 08-08		1
135	72053767	ELBOW-M STR/90/M JIC 12 12		1
136	72533623	ELBOW-M STR/90/M JIC 8 12		1
137	71415691	TUBE ASM-PRESSURE FILTER S3FP LARGE MAST		1
138	72532686	PLUG-STR SOC HD STL 8 (.75 THD)	#6	1
REV. DF 20160322				

Valve Bank Assembly – Single Proportional (99904971) Effective 04/25/2016

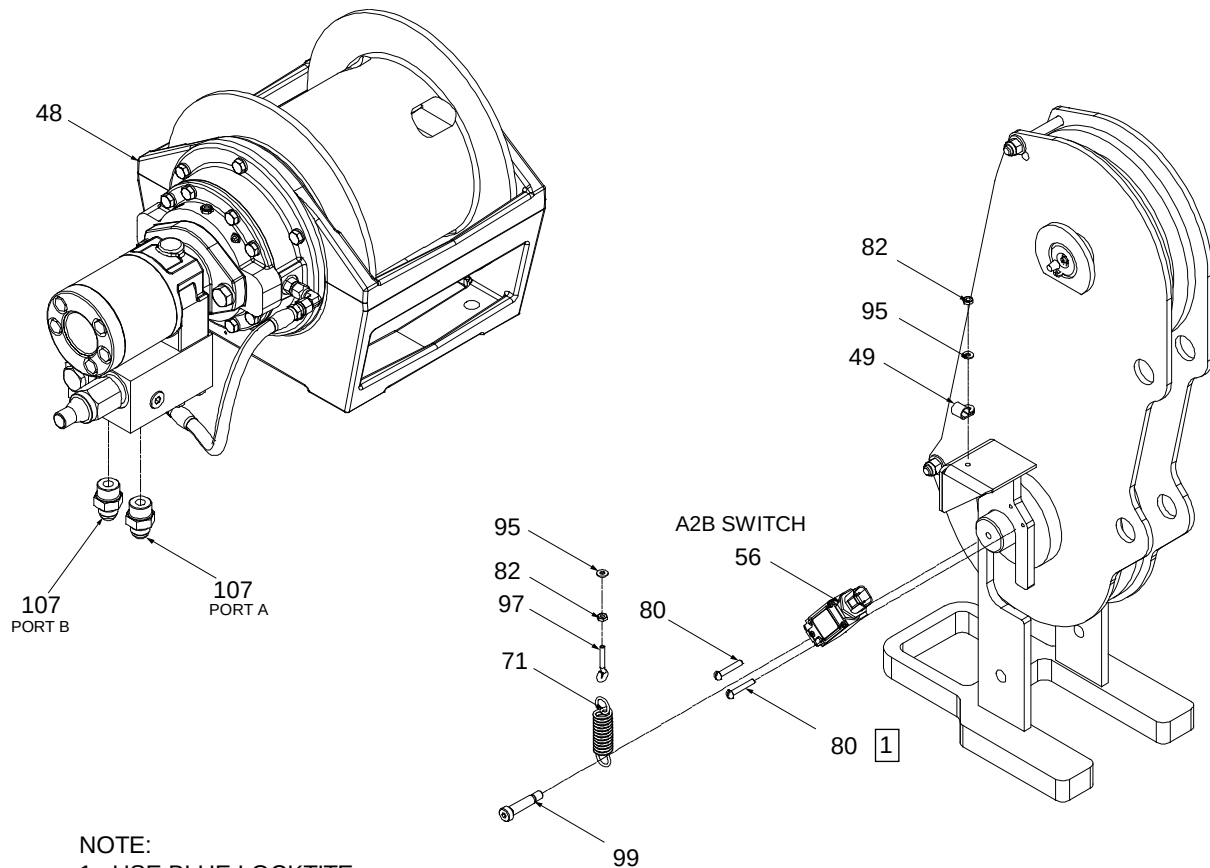


NOTES:
INSTALL WIRE HARNESS TO VALVE BANK PRIOR TO INSTALLING VALVE BANK BRACKET.

SINGLE PROPORTIONAL VALVE BANK ASSEMBLY

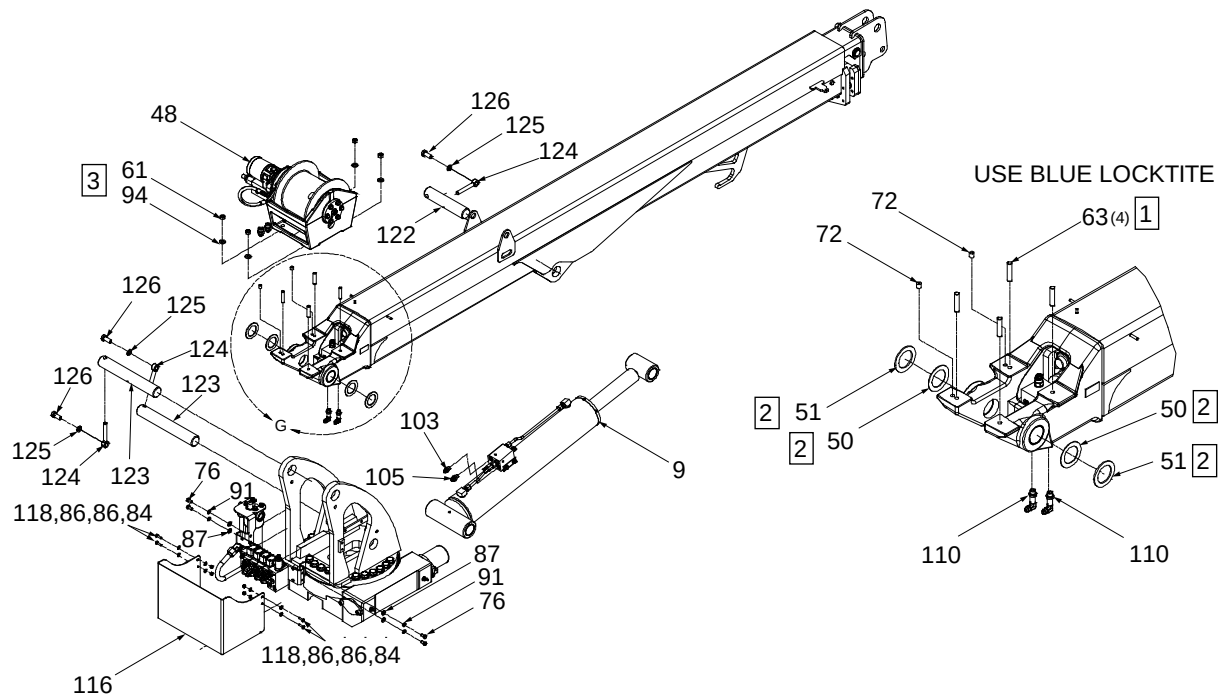
99904971 PARTS LIST (Effective 04/25/2016)				
ITEM	PART NO.	DESCRIPTION	KIT	QTY
84	72062104	NUT .25-20 HEX NYLOCK	#5	6
86	72063001	WASHER .25 FLAT	#5	16
109	72532670	ELBOW-M JIC/45/F JIC 8 8	#6	1
111	72533583	ELBOW-M STR/45/M JIC 8 6	#6	1
117	60140840	BRKT-MAST VB 7500-10000L		2
118	72060004	CAP SCR .25-20X 1.00 HH GR5 Z	#5	6
119	73734472	VALVE BANK-MOD.INLET (PW) 12VDC IP69		A/R
REV. DF 20160322				

Anti-Two-Block & Winch Assembly (99904971) Effective 04/25/2016



99904971-6 (Effective 04/25/2016)				
ITEM	PART NO.	DESCRIPTION	KIT	QTY
48	70570771	WINCH-PLANETARY 6000LB LINE PULL		1
49	72034485	CLAMP-PLASTIC 1/4" CABLE		8
56	77041863	SWITCH-LIMIT DT04-4P CONN		1
71	71413185	SPRING-.105WIRE 0.75OD 2.875 LG	#5	1
80	72060639	SCR-MACH 10-24X 1.25 RDH	#5	2
82	72062093	NUT # 8-32 HEX ZINC	#5	2
95	72063271	WASHER # 8 W FLAT ANSI B27.2Z	#5	2
97	72601938	BOLT-EYE # 8-32X 1.125	#5	1
99	72602085	BOLT-SHLDR .38X 1.25 (5/16 thds) SS	#5	1
107	72532359	ADPTR-M STR/M JIC 10 8	#6	2
REV. DF 20160322				

Crane & Winch Assembly (99904971) Effective 04/25/2016



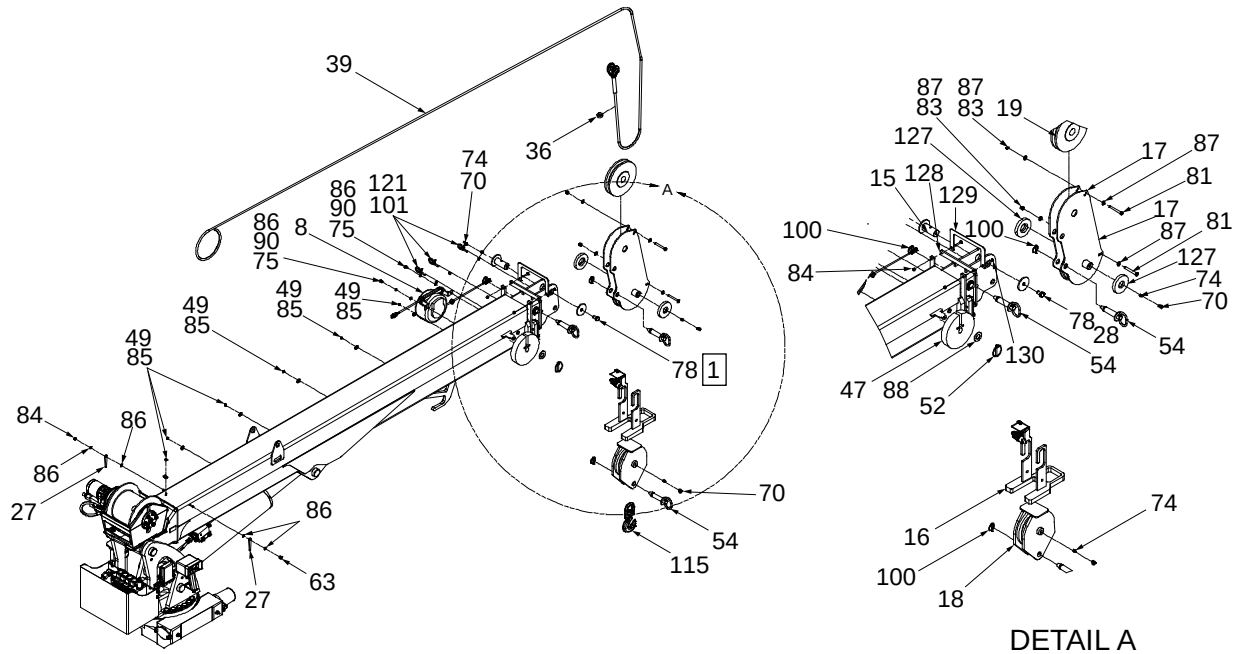
NOTES:

1. APPLY ANTI-SEIZ TO BOOM AND CYLINDER MOUNTING PINS.
DO NOT ALLOW ANTI-SEIZ TO COME IN CONTACT WITH BOOM
OR CYLINDER PIN BOSS BEARINGS.
2. IF REQUIRED, USE 72063038 OR 72063039 MACHNY BUSHINGS BETWEEN MAST AND LOWER
BOOM.
3. TORQUE TO 84 LB-FT.

99904971-7 PARTS LIST (Effective: 04/25/2016)				
ITEM	PART NO.	DESCRIPTION	KIT	QTY
9	51723136	CYL-5.0/2.5 25.07S 45.52CC C		1
48	70570771	WINCH-PLANETARY 6000LB LINE PULL		1
50	72063038	MACHY BUSHING 2.00X14 GA NR		A/R
51	72063039	MACHY BUSHING 2.00X10 GA NR		A/R
61	72062108	NUT .50-20 HEX GRC Z TOP LOCK	#2	4
63	72602138	STUD .50-20X 2.25 DBL .50-13 GR8 STL	#2	4
72	72034479	PLUG-PLSTC .50-13X .50 UNC-2B		2
76	72060044	CAP SCR .38-16X .75 HH GR5 Z	#5	8
86	72063001	WASHER .25 FLAT	#5	16
87	72063003	WASHER .38 FLAT	#5	12
91	72063051	WASHER .38 LOCK	#5	8

99904971-7 PARTS LIST (Effective: 04/25/2016)				
ITEM	PART NO.	DESCRIPTION	KIT	QTY
94	72063132	WASHER .50 FLAT ASTM F436	#5	17
103	72532355	ADPTR-M STR/M JIC 6 6	#6	1
105	72532357	ADPTR-M STR/M JIC 6 8	#6	1
110	72532700	ELBOW-M STR/90/M JIC XLG 6 6	#6	2
116	60144215	COVER-VALVE BANK SIII		1
118	72060004	CAP SCR .25-20X 1.00 HH GR5 Z	#5	6
122	60140916	PIN-TYPE NN 2.00X 9.50		1
123	60140915	PIN-TYPE NN 2.00X13.75		2
124	71415016	KEEPER-PIN .62		3
125	72063055	WASHER .62 LOCK		3
126	72060149	CAP SCR .62-11X 1.50 HH GR5 Z		3
REV. DF 20160322				

Flip Sheave Assembly (99904971) Effective 04/25/2016



NOTES:
1. USE BLUE LOCKTITE

99904971-8 PARTS LIST (Effective 04/25/2016)				
ITEM	PART NO.	DESCRIPTION	KIT	QTY
8	51723610	CORD REEL ASM- 30FT W/PACKARD W/DEUTSCH		1
16	52725155	WLDMT- A2B BRKT		1
18	52725066	WLDMT- SNATCH BLOCK 9500/10000		1
27	70034490	PLATE-ANGLE PLASTIC 3.50"		2
36	70145121	COLLAR-SHAFT 2 PIECE 7/8 in.		1
39	70580168	WIRE ROPE ASM-.44(6X25)X100' LH LAY		1
49	72034485	CLAMP-PLASTIC 1/4" CABLE		8
54	73734565	PIN-LOCK W/HANDLE 1.00 X 3.50 W/HAIRPIN		3
63	72602138	STUD .50-20X 2.25 DBL .50-13 GR8 STL	#2	4
70	70034382	CAP-GREASE PRO20 GC-RED	#5	6
74	72053508	ZERK-NPT .12	#5	4
75	72060000	CAP SCR .25-20X .50 HH GR5 Z	#5	2
78	72060147	CAP SCR .62-11X 1.00 HH GR5 Z	#5	1

99904971-8 PARTS LIST (Effective 04/25/2016)				
ITEM	PART NO.	DESCRIPTION	KIT	QTY
84	72062104	NUT .25-20 HEX NYLOCK	#5	6
85	72062106	NUT 10-24 HEX NYLOCK	#5	7
86	72063001	WASHER .25 FLAT	#5	16
90	72063049	WASHER .25 LOCK	#5	2
100	72661543	PIN-QUICK 316-10QP	#5	3
101	72661694	BRIDLE RING 1-1/12ID X 1/4-20	#5	3
115	70734176	HOOK-SWVL L-322B-5T W/LATCH		A/R
121	72062000	NUT .25-20 HEX		3
17	52725152	WLDMT-FLIP SHEAVE 9500/10000		1
19	60030255	SHEAVE- 9.00 POLYMER		1
28	60109337	RETAINER PLT-PIN 3.00 DIA		1
47	71414205	PLATE-SINGLE SHEAVE (20#) .50 WIRE ROPE		1
52	72661641	PIN-QUICK 5/16-2-1/16 ZINC YELLOW		1
81	72060893	CAP SCR .38-16X 3.25 HH GR5 Z	#5	2
83	72062103	NUT .38-16 HEX NYLOCK	#5	3
87	72063003	WASHER .38 FLAT	#5	12
88	72063010	WASHER 1.00 FLAT	#5	1
127	60030486	SPACER-A2B BRACKET		2
128	60140935	GUIDE - CABLE WEAR (WIDE)	#113	1
129	60140938	BRKT - CABLE GUIDE (WIDE)	#113	1
130	72060006	CAP SCR .25-20X 1.50 HH GR5 Z	#113	2
REV. DF 20160322				

99904971 Complete Parts List

99904971 COMPLETE PARTS LIST (Effective 04/25/2016)				
ITEM	PART NO.	DESCRIPTION	KIT	QTY
1	91723059	KIT-HRDW BASE & MAST 7500-10000		1
2	91726834	KIT-HRDW WINCH MNT BG4-BG6		1
3	91723543	KIT-HRDW VB MNT HAWK		1
4	51719413	KIT-HRDW TELE CRANE RADIO CONTROLS		1
5	91725205	KIT-HRDW SERIES III		1
6	91726825	KIT-HYD BG4-BG6 SERIES III FP		A/R
7	91726824	KIT-HYD BG4-BG6 SERIES III SP		A/R
8	51723610	CORD REEL ASM- 30FT W/PACKARD W/DEUTSCH		1
9	51723136	CYL-5.0/2.5 25.07S 45.52CC C		1
10	51723605	CYL ASM-2.50/1.50 2.75/1.75 150.0S 125.0		1
11	52725172	MAST WLDMNT-SERIES III		1
12	52725162	WLDMNT-LOWER BOOM 9500/10000S		1
13	52725163	WLDMNT-1st STAGE EXT BOOM 9500/10000S		1
14	52723221	WLDMNT-2nd STAGE EXT BOOM 9500/10000S		1
15	52723030	PIN-TYPE M 1.50X 3.38		1
16	52725155	WLDMT- A2B BRKT		1
17	52725152	WLDMT-FLIP SHEAVE 9500/10000		1
18	52725066	WLDMT- SNATCH BLOCK 9500/10000		1
19	60030255	SHEAVE- 9.00 POLYMER		1
20	60030336	WEAR PAD-RC .19 X 6.00 X 6.00		1
21	60030337	WEAR PAD-RND 0.19X 2.00X 1.00X 1.00		2
22	60030421	WEAR PAD-RC 0.25X 6.00X 6.00		1
23	60030422	WEAR PAD-RND SIII EXT CYL		1
24	60030423	WEAR PAD-RND 0.44X 1.25X .50X .50		4
25	60030425	WEAR PAD-RND 0.44X 1.25X .50X .50		2
26	60030428	WEAR PAD-RND 0.25X 2.00X .75X .44		4
27	70034490	PLATE-ANGLE PLASTIC 3.50"		2
28	60109337	RETAINER PLT-PIN 3.00 DIA		1
29	60120138	SLIDE-ROTATION STOP 3816		1
30	60128849	GEAR GUARD 6025 SII		1
31	60140899	CAP-LOWER BOOM CABLE GUIDE 9500-14000	#113	1
32	60135668	CAP-FIRST STAGE		1
33	60135669	PIN-TYPE A 1.25X 6.89 (6.46)		1
34	60135833	RETAINER-1st STAGE EXT CYL		2
35	70029595	THREADED PLUG 1.00-8 (3816)		2
36	70145121	COLLAR-SHAFT 2 PIECE 7/8 in.		1

99904971 COMPLETE PARTS LIST (Effective 04/25/2016)				
ITEM	PART NO.	DESCRIPTION	KIT	QTY
37	70399053	TAPE-REFLECTIVE RED/SILVER 1.25X72.00		2
38	70396734	TAPE-REFLECTIVE RED/SILVER 2.00X72.00		2
39	70580168	WIRE ROPE ASM-.44(6X25)X100' LH LAY		1
40	70734761	TRANSMITTER-RAD REM TELE S3 NON-G W-HORN		A/R
41	70734748	TRANSMITTER-S3 TELE SINGLE PROP		A/R
42	70734762	TRANSMITTER-RAD REM TELE S3 GATED W-HORN		A/R
43	70734763	RECEIVER-RADIO REMOTE TELE SIII W-HORN		A/R
44	70734750	RECEIVER-S3 TELE SINGLE PROP		A/R
45	71056577	GEAR ROTATOR-6025/6625 0.75 BOLTS		1
46	76039295	GASKET-GEA19 008-10056-1	#45	1
47	71414205	PLATE-SINGLE SHEAVE (20#) .50 WIRE ROPE		1
48	70570771	WINCH-PLANETARY 6000LB LINE PULL		1
49	72034485	CLAMP-PLASTIC 1/4" CABLE		8
50	72063038	MACHY BUSHING 2.00X14 GA NR		A/R
51	72063039	MACHY BUSHING 2.00X10 GA NR		A/R
52	72661641	PIN-QUICK 5/16-2-1/16 ZINC YELLOW		1
53	73051919	MOTOR-HYD (101-2638-009)		1
54	73734565	PIN-LOCK W/HANDLE 1.00 X 3.50 W/HAIRPIN		3
55	73734727	VALVE BANK-4SEC 4R 10GPM TELE PROP 12V G		A/R
56	77041863	SWITCH-LIMIT DT04-4P CONN		1
57	77441481	HARNESS-TELE RADIO REMOTE SERIES III		1
58	72063116	WASHER .75 N FLAT H ASTM F436Z	#1	22
59	72601629	CAP SCR .75-10X 4.00 HH GR8 Z	#1	4
60	72601817	CAP SCR .75-10X 3.25 HH GR8 Z	#1	14
61	72062108	NUT .50-20 HEX GRC Z TOP LOCK	#2	4
62	72063132	WASHER-FLAT .50 N H ASTM F436	#2	4
63	72602138	STUD .50-20X 2.25 DBL .50-13 GR8 STL	#2	4
64	72601797	WASHER-LOCK 8MM	#3	4
65	72602065	WASHER-FLAT M 8	#3	4
66	72602052	CAP SCR M 8-1.25X 16 HHZ	#3	4
67	72062194	NUT-SS .25-20 NYLOC	#4	2
68	72063166	WASHER-FLAT .25 R WRT 18-8 .62OD SS	#4	2
69	72601846	CAP SCR .25-20X 1.25 HH SS	#4	2
70	70034382	CAP-GREASE PRO20 GC-RED	#5	6
71	71413185	SPRING-.105WIRE 0.75OD 2.875 LG	#5	1
72	72034479	PLUG-PLSTC .50-13X .50 UNC-2B		2
73	72053301	COUPLING-GLV .12 SCH 40	#5	1
74	72053508	ZERK-NPT .12	#5	4
75	72060000	CAP SCR .25-20X .50 HH GR5 Z	#5	2

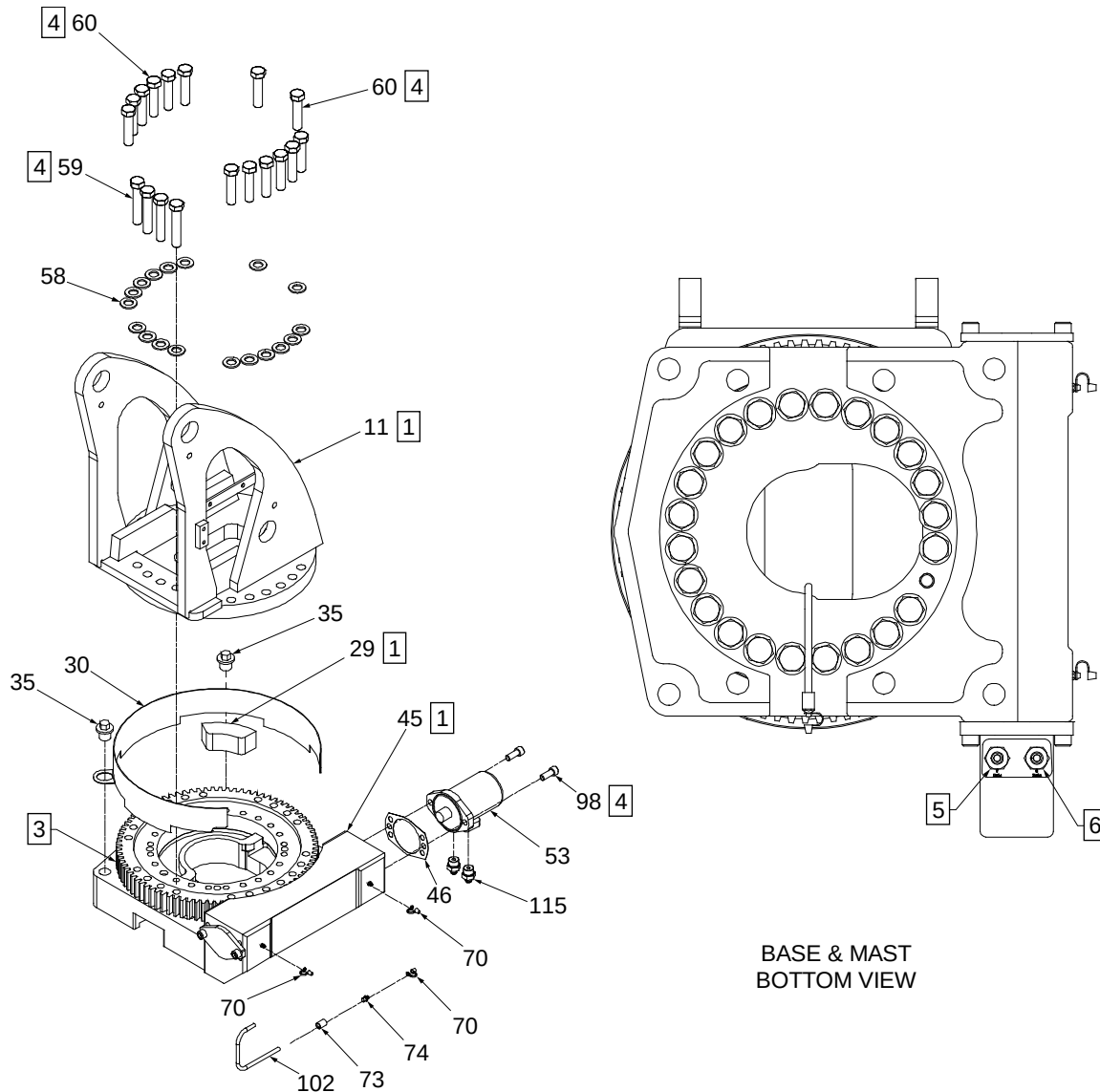
99904971 COMPLETE PARTS LIST (Effective 04/25/2016)				
ITEM	PART NO.	DESCRIPTION	KIT	QTY
76	72060044	CAP SCR .38-16X .75 HH GR5 Z	#5	8
77	72060093	CAP SCR .50-13X 1.50 HH GR5 Z	#5	12
78	72060147	CAP SCR .62-11X 1.00 HH GR5 Z	#5	1
79	72060206	CAP SCR .75-10X 2.00 HH GR8 Z	#5	1
80	72060639	SCR-MACH 10-24X 1.25 RDH	#5	2
81	72060893	CAP SCR .38-16X 3.25 HH GR5 Z	#5	2
82	72062093	NUT # 8-32 HEX ZINC	#5	2
83	72062103	NUT .38-16 HEX NYLOCK	#5	3
84	72062104	NUT .25-20 HEX NYLOCK	#5	6
85	72062106	NUT 10-24 HEX NYLOCK	#5	7
86	72063001	WASHER .25 FLAT	#5	16
87	72063003	WASHER .38 FLAT	#5	12
88	72063010	WASHER 1.00 FLAT	#5	1
89	72063035	MACHY BUSHING 1.25X10 GA NR	#5	2
90	72063049	WASHER .25 LOCK	#5	2
91	72063051	WASHER .38 LOCK	#5	8
92	72063053	WASHER .50 LOCK	#5	12
93	72063116	WASHER .75 N FLAT H ASTM F436Z	#5	1
94	72063132	WASHER .50 FLAT ASTM F436	#5	17
95	72063271	WASHER # 8 W FLAT ANSI B27.2Z	#5	2
96	72066129	RETAINING RING-EXT 1.25 HD	#5	2
97	72601938	BOLT-EYE # 8-32X 1.125	#5	1
98	72601949	CAP SCR .50-13X 1.25 SH ZC	#5	2
99	72602085	BOLT-SHLDR .38X 1.25 (5/16 thds) SS	#5	1
100	72661543	PIN-QUICK 316-10QP	#5	3
101	72661694	BRIDLE RING 1-1/12ID X 1/4-20	#5	3
102	51395121	HOSE-AA .13 X 13.50 OAL (2-2)	#6	1
103	72532355	ADPTR-M STR/M JIC 6 6	#6	1
104	72532356	ADPTR-M STR/M JIC 8 6	#6	4
105	72532357	ADPTR-M STR/M JIC 6 8	#6	1
106	72532358	ADPTR-M STR/M JIC 8 8	#6	3
107	72532359	ADPTR-M STR/M JIC 10 8	#6	2
108	72532361	ADPTR-M STR/M JIC 8 10	#6	1
109	72532670	ELBOW-M JIC/45/F JIC 8 8	#6	1
110	72532700	ELBOW-M STR/90/M JIC XLG 6 6	#6	2
111	72533583	ELBOW-M STR/45/M JIC 8 6	#6	1
112	72533613	ADPTR-M STR/M JIC 10 6	#6	2
113	93725207	KIT-CABLE GUIDE 9500/14000		1
114	71073035	HOOK-SWVL L322AN-5T W/LATCH		A/R

99904971 COMPLETE PARTS LIST (Effective 04/25/2016)				
ITEM	PART NO.	DESCRIPTION	KIT	QTY
115	70734176	HOOK-SWVL L-322B-5T W/LATCH		A/R
116	60144215	COVER-VALVE BANK SIII		1
117	60140840	BRKT-MAST VB 7500-10000L		2
118	72060004	CAP SCR .25-20X 1.00 HH GR5 Z	#5	6
119	73734472	VALVE BANK-MOD.INLET (PW) 12VDC IP69		A/R
120	77441537	HARNESS-S3 TELE S-PROP VALVE BANK CERVIS		A/R
121	72062000	NUT .25-20 HEX		3
122	60140916	PIN-TYPE NN 2.00X 9.50		1
123	60140915	PIN-TYPE NN 2.00X13.75		2
124	71415016	KEEPER-PIN .62		3
125	72063055	WASHER .62 LOCK		3
126	72060149	CAP SCR .62-11X 1.50 HH GR5 Z		3
127	60030486	SPACER-A2B BRACKET		2
128	60140935	GUIDE - CABLE WEAR (WIDE)	#113	1
129	60140938	BRKT - CABLE GUIDE (WIDE)	#113	1
130	72060006	CAP SCR .25-20X 1.50 HH GR5 Z	#113	2
131	72062104	NUT .25-20 HEX NYLOCK	#113	2
132	60143076	BRKT-MAST VB 7500-10000L FP		1
133	73052156	FILTER-PRES 4000PSI 25GPM 10MIC -12		1
134	72534898	O-RING EXTENDER 08-08		1
135	72053767	ELBOW-M STR/90/M JIC 12 12		1
136	72533623	ELBOW-M STR/90/M JIC 8 12		1
137	71415691	TUBE ASM-PRESSURE FILTER S3FP LARGE MAST		1
138	72532686	PLUG-STR SOC HD STL 8 (.75 THD)	#6	1
REV. DF 20160322				

Base & Mast Assembly, Test Stand (99904971)

(See Parts List for Effectivity Dates)

NOTE: This base and mast assembly is shown as it if it were mounted on a test stand.



BASE & MAST
BOTTOM VIEW

NOTES (SEE REFERENCE NUMBER IN BOX):

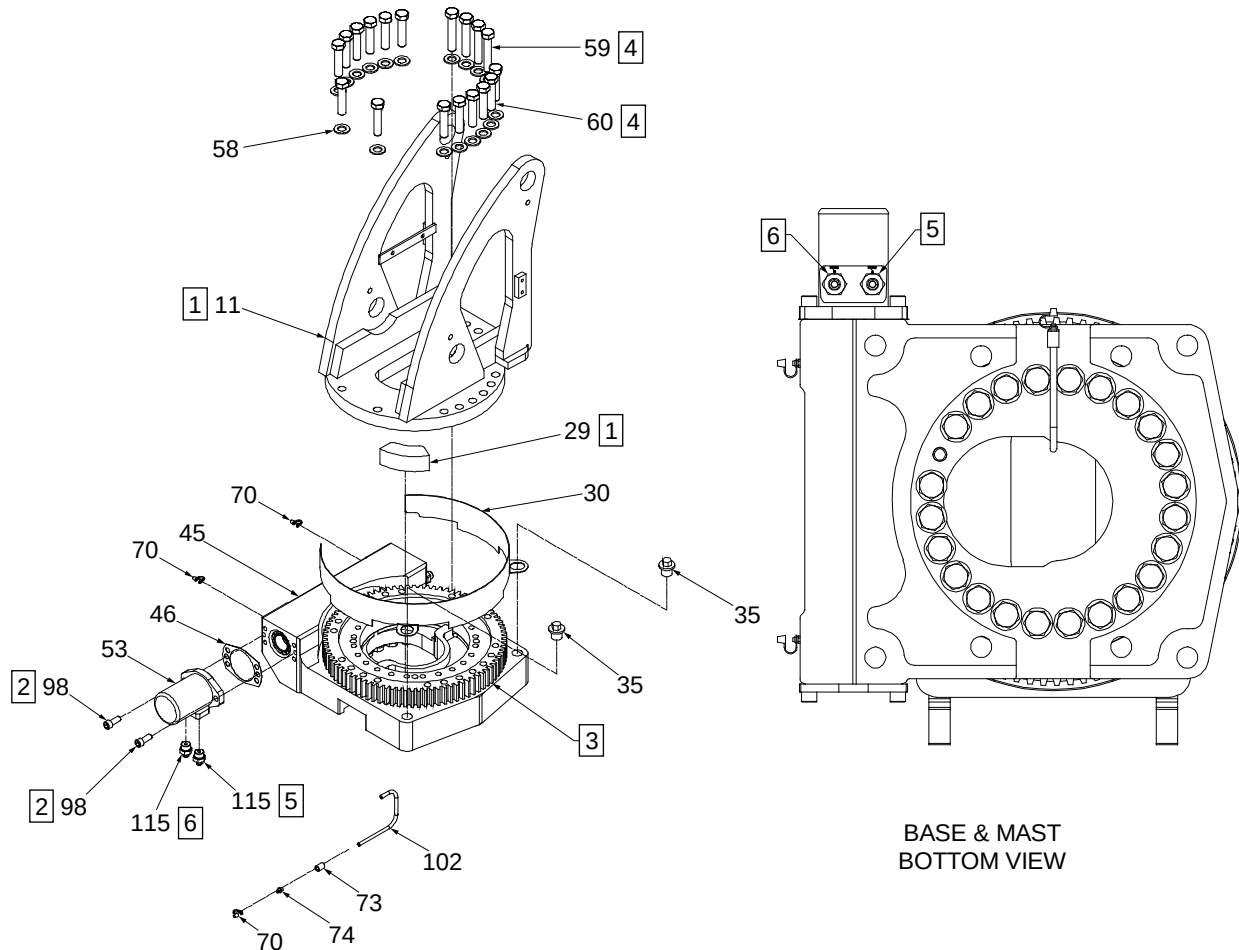
- 1 USE RUST PREVENTANTIVE ON SLIDE STOP, BEARING RACE, BOTTOM OF MAST & TOP OF GEAR BEARING.
- 2 APPLY BLUE THREAD LOCKER.
- 3 APPLY GEAR LUBE ON GEAR TEETH.
- 4 TORQUE TO 280 FT-LB (38.7 KG-M).
- 5 PORT A.

6 PORT B.

99904971-2 PARTS LIST				
ITEM	PART#	DESCRIPTION	KIT #	QTY
1.	91723059	KIT-HRDW BASE & MAST 7500-10000		1
5.	91725205	KIT-HRDW SERIES III (effective from 05/22/13)		1
6.	91723601	KIT-HYD A40-60 SERIES III		A/R
7.	91725088	KIT-HYD A40-60 SP SERIES III		A/R
11.	52725172	MAST WLDMNT-SERIES III (effective from 05/22/13)		1
29.	60120138	SLIDE-ROTATION STOP 3816		1
30.	60128849	GEAR GUARD 6025 SII		1
35.	70029595	THREADED PLUG 1.00-8 (3816)		2
45.	71056577	GEAR ROTATOR-6025/6625 0.75 BOLTS		1
46.	76039295	GASKET-GEA19 008-10056-1	#45	1
53.	73051919	MOTOR-HYD (101-2638-009)		1
58.	72063116	WASHER .75 N FLAT H ASTM F436Z	#1	22
59.	72601629	CAP SCR .75-10X 4.00 HH GR8 Z	#1	4
60.	72601817	CAP SCR .75-10X 3.25 HH GR8 Z (effective through 02/14/13)	#1	14
70.	70034382	CAP-GREASE PRO20 GC-RED	#5	6
73.	72053301	COUPLING-GLV .12 SCH 40	#5	1
74.	72053508	ZERK-NPT .12	#5	4
98.	72601949	CAP SCR .50-13X 1.25 SH ZC	#5	2
102.	51395121	HOSE-AA .13 X 13.50 OAL (2-2)	#6,#7	1
115.	72533613	ADPTR-M STR/M JIC 10 6	#6,#7	2
REV BB 20150910				

Base & Mast Assembly, Truck Mount (99904971)_(See Parts List for Effectivity Dates)

NOTE: This base and mast assembly is shown as it if it were mounted on a truck.

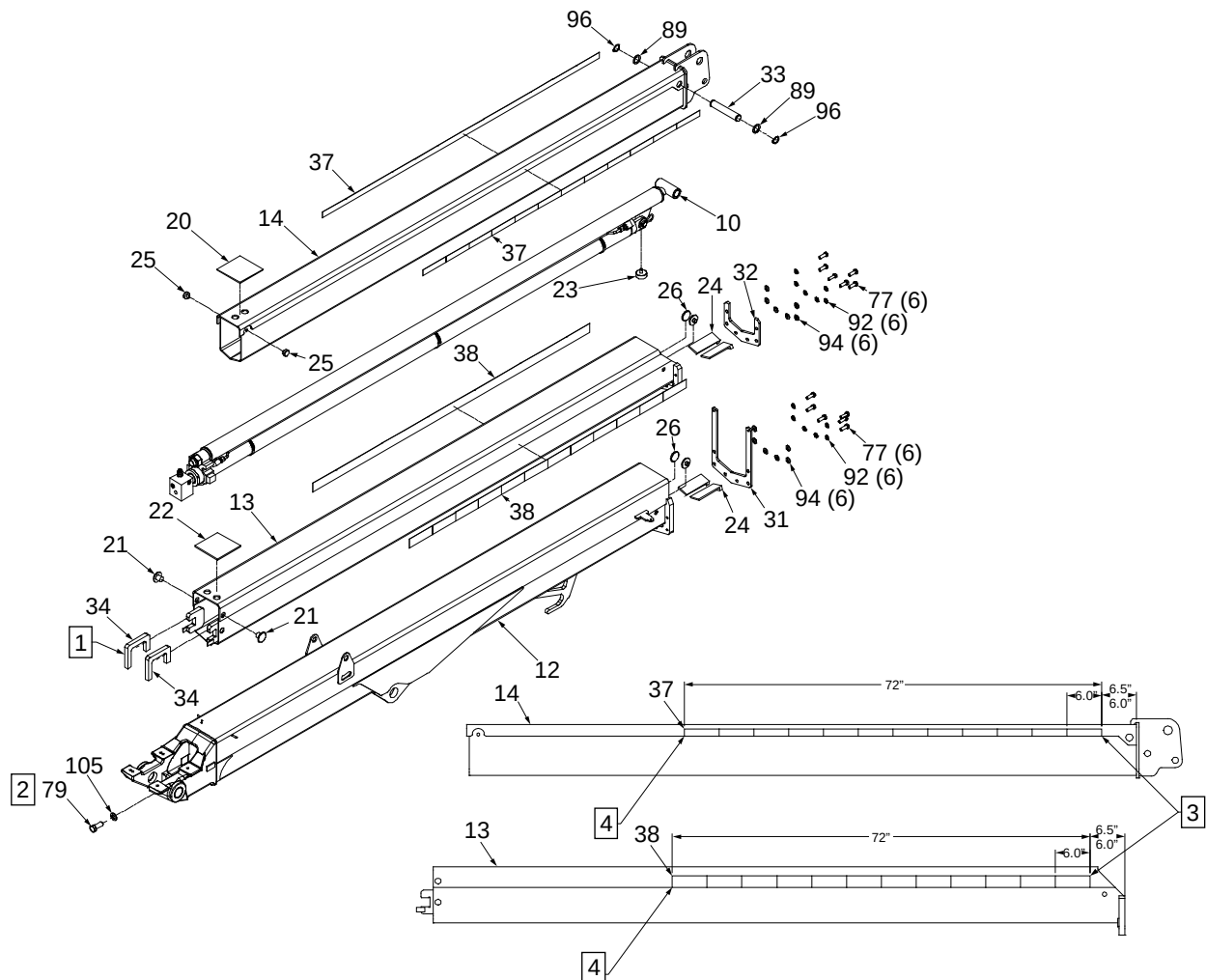


NOTES (SEE REFERENCE NUMBER IN BOX):

- 1 USE RUST PREVENTATIVE ON SLIDE STOP, BEARING RACE, BOTTOM OF MAST AND TOP OF GEAR BEARING.
- 2 APPLY BLUE THREAD LOCKER.
- 3 APPLY GEAR LUBE ON GEAR TEETH.
- 4 TORQUE TO 280 FT-LB (38.7 KG-M)
- 5 PORT A
- 6 PORT B

99904971-3 PARTS LIST				
ITEM	PART#	DESCRIPTION	KIT #	QTY
1.	91723059	KIT-HRDW BASE & MAST 7500-10000		1
5.	91725205	KIT-HRDW SERIES III (effective from 05/22/13)		1
6.	91723601	KIT-HYD A40-60 SERIES III		A/R
7.	91725088	KIT-HYD A40-60 SP SERIES III		A/R
11.	52725172	MAST WLDMNT-SERIES III (effective from 05/22/13)		1
29.	60120138	SLIDE-ROTATION STOP 3816		1
30.	60128849	GEAR GUARD 6025 SII		1
35.	70029595	THREADED PLUG 1.00-8 (3816)		2
45.	71056577	GEAR ROTATOR-6025/6625 0.75 BOLTS		1
46.	76039295	GASKET-GEA19 008-10056-1	#45	1
53.	73051919	MOTOR-HYD (101-2638-009)		1
58.	72063116	WASHER .75 N FLAT H ASTM F436Z	#1	22
59.	72601629	CAP SCR .75-10X 4.00 HH GR8 Z	#1	4
60.	72601817	CAP SCR .75-10X 3.25 HH GR8 Z (effective through 02/14/13)	#1	14
70.	70034382	CAP-GREASE PRO20 GC-RED	#5	6
73.	72053301	COUPLING-GLV .12 SCH 40	#5	1
74.	72053508	ZERK-NPT .12	#5	4
98.	72601949	CAP SCR .50-13X 1.25 SH ZC	#5	2
102.	51395121	HOSE-AA .13 X 13.50 OAL (2-2)	#6,#7	1
115.	72533613	ADPTR-M STR/M JIC 10 6	#6,#7	2
REV BB 20150910				

Boom Assembly (99904971) (See Parts List for Effectivity Dates)

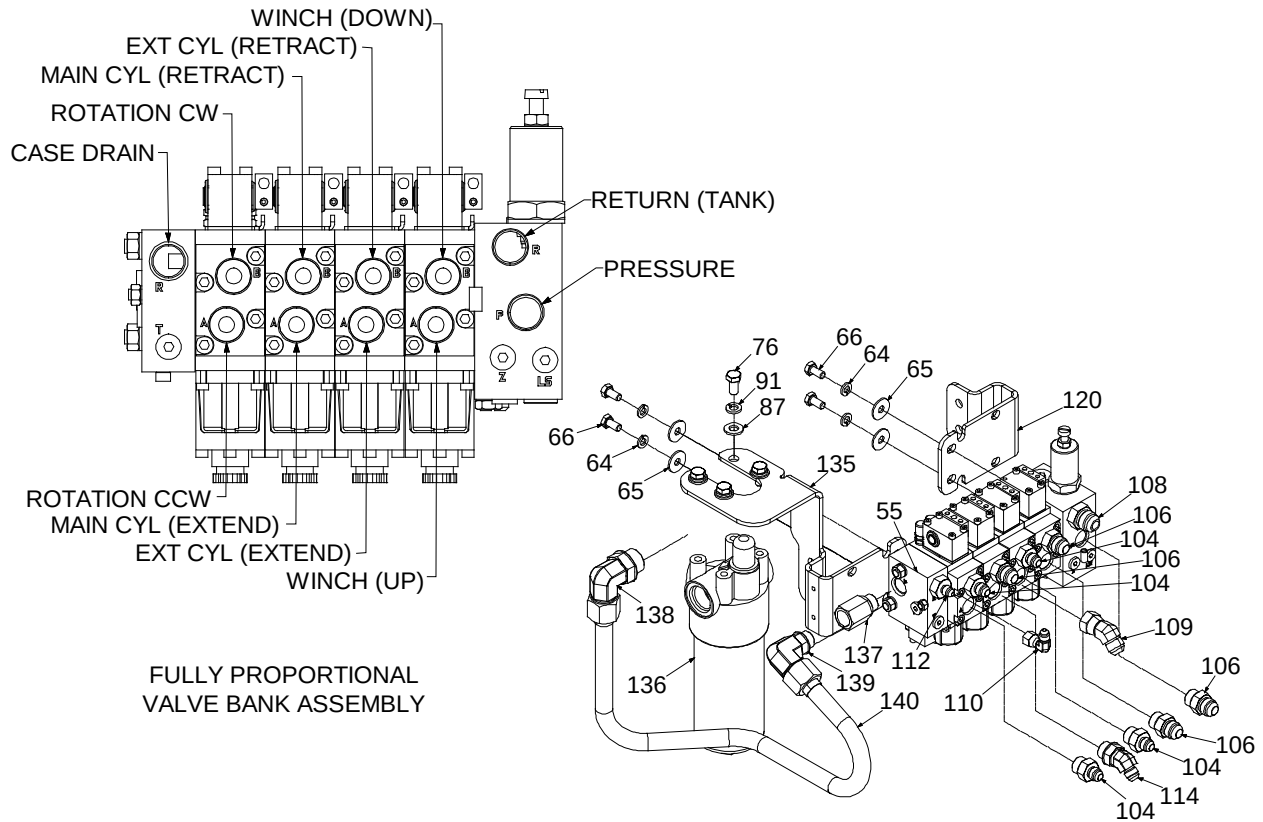


NOTES (SEE REFERENCE NUMBER IN BOX):

- 1 INSTALL EXTENSION CYLINDERS FIRST, ADD RETAINERS NEXT, AND INSTALL WEAR PADS LAST.
- 2 TORQUE TO 280 FT-LB (38.7 KG-M). USE BLUE THREAD LOCKER.
- 3 START WITH RED SEGMENT.
- 4 ALIGN WITH EDGE.

99904971-4 PARTS LIST				
ITEM	PART #	DESCRIPTION	KIT #	QTY
5.	91725205	KIT-HRDW SERIES III (effective from 05/22/13)		1
6.	91723601	KIT-HYD A40-60 SERIES III		A/R
7.	91725088	KIT-HYD A40-60 SP SERIES III		A/R
10.	51723605	CYL ASM-2.50/1.50 2.75/1.75 150.0S 125.0		1
12.	52725162	WLDMNT-LOWER BOOM 9500/10000S (effective from 05/22/13)		1
13.	52725163	WLDMNT-1st STAGE EXT BOOM 9500/10000S (effective from 05/22/13)		1
14.	52723221	WLDMNT-2nd STAGE EXT BOOM 9500/10000S		1
20.	60030336	WEAR PAD-RC .19 X 6.00 X 6.00		1
21.	60030337	WEAR PAD-RND 0.19X 2.00X 1.00X 1.00		2
22.	60030421	WEAR PAD-RC 0.25X 6.00X 6.00		1
23.	60030422	WEAR PAD-RND SIII EXT CYL		1
24.	60030423	WEAR PAD-RND 0.44X 1.25X .50X .50		4
25.	60030425	WEAR PAD-RND 0.44X 1.25X .50X .50		2
26.	60030428	WEAR PAD-RND 0.25X 2.00X .75X .44		4
31.	60140899	CAP-LOWER BOOM CABLE GUIDE 9500-14000 (eff. from 04/12/13)	#116	1
32.	60135668	CAP-FIRST STAGE		1
33.	60135669	PIN-TYPE A 1.25X 6.89 (6.46)		1
34.	60135833	RETAINER-1st STAGE EXT CYL		2
37.	70399053	TAPE-REFLECTIVE RED/SILVER 1.25X72.00		2
38.	70396734	TAPE-REFLECTIVE RED/SILVER 2.00X72.00		2
77.	72060093	CAP SCR .50-13X 1.50 HH GR5 Z	#5	12
79.	72060206	CAP SCR .75-10X 2.00 HH GR8 Z	#5	1
89.	72063035	MACHY BUSHING 1.25X10 GA NR	#5	2
92.	72063053	WASHER .50 LOCK (effective from 05/22/13)	#5	12
94.	72063132	WASHER .50 FLAT ASTM F436	#5	17
96.	72066129	RETAINING RING-EXT 1.25 HD	#5	2
105.	72532357	ADPTR-M STR/M JIC 6 8	#6,#7	1
116.	93725207	KIT-CABLE GUIDE 9500/14000 (effective from 04/12/13)		1
REV BB 20150910				

ValveBank Assembly (99904971)



NOTES:

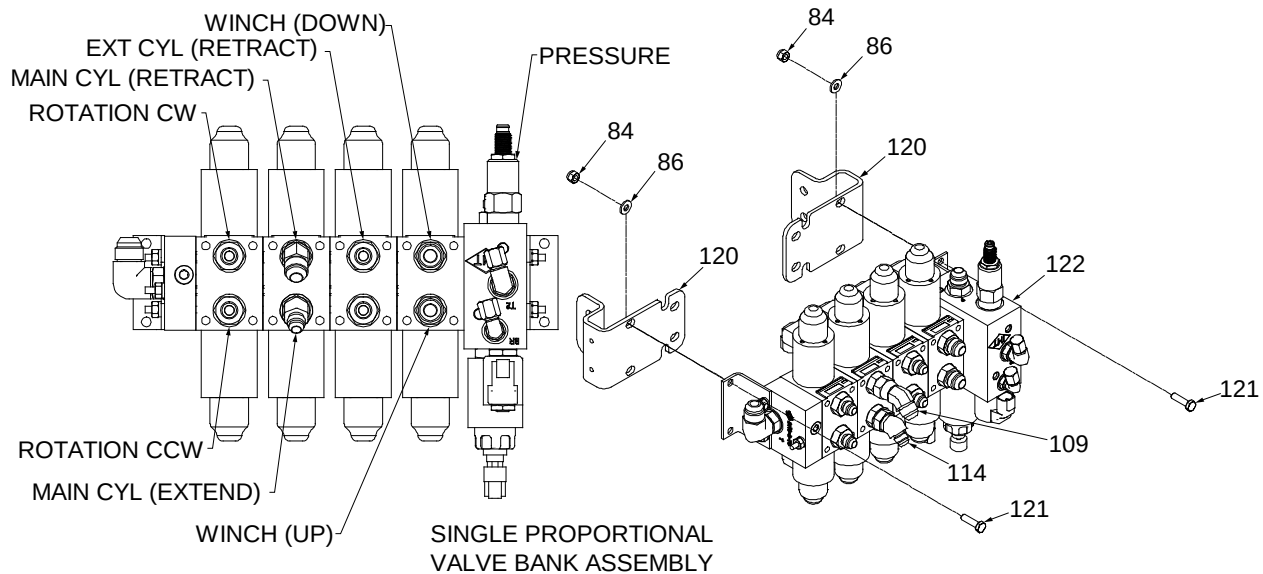
- 1 INSTALL WIRE HARNESS TO VALVE BANK PRIOR TO INSTALLING VALVE BANK BRACKET.

99904971-5 PARTS LIST

ITEM	PART #	DESCRIPTION	KIT #	QTY
3.	91723543	KIT-HRDW VB MNT HAWE		1
5.	91725205	KIT-HRDW SERIES III (effective from 05/22/13)		1
6.	91723601	KIT-HYD A40-60 SERIES III		A/R
7.	91725088	KIT-HYD A40-60 SP SERIES III		A/R
55.	73734727	VALVE BANK-4SEC 4R 10GPM TELE PROP 12V G		A/R
64.	72601797	WASHER-LOCK 8MM (effective from 9/18/14)	#3	4
65.	72602065	WASHER-FLAT M 8 (effective from 9/18/14)	#3	4
66.	72602052	CAP SCR M 8-1.25X 16 HHZ (effective from 9/18/14)	#3	4
76.	72060044	CAP SCR .38-16X .75 HH GR5 Z	#5	8
87.	72063003	WASHER .38 FLAT (effective from 04/10/13)	#5	12
91.	72063051	WASHER .38 LOCK	#5	8
104.	72532356	ADPTR-M STR/M JIC 8 6	#6,#7	4
106.	72532358	ADPTR-M STR/M JIC 8 8	#6,#7	4
108.	72532361	ADPTR-M STR/M JIC 8 10	#6,#7	1
109.	72532670	ELBOW-M JIC/45/F JIC 8 8	#6,#7	1
110.	72532690	ELBOW-M JIC/90/F JIC SW 4 4	#6,#7	1
112.	72532792	ADPTR-M STR/M JIC 8 4	#6,#7	1
114.	72533583	ELBOW-M STR/45/M JIC 8 6	#6,#7	1

99904971-5 PARTS LIST				
ITEM	PART #	DESCRIPTION	KIT #	QTY
120.	60140840	BRKT-MAST VB 7500-10000L (effective from 03/05/13)		2
135.	60143076	BRKT-MAST VB 7500-10000L FP		1
136.	73052156	FILTER-PRES 4000PSI 25GPM 10MIC -12		1
137.	72534898	O-RING EXTENDER 08-08		1
138.	72053767	ELBOW-M STR/90/M JIC 12 12		1
139.	72533623	ELBOW-M STR/90/M JIC 8 12		1
140.	71415691	TUBE ASM-PRESSURE FILTER S3FP LARGE MAST		1
REV BB 20150910				

ValveBank Assembly – Single Proportional (99904971)

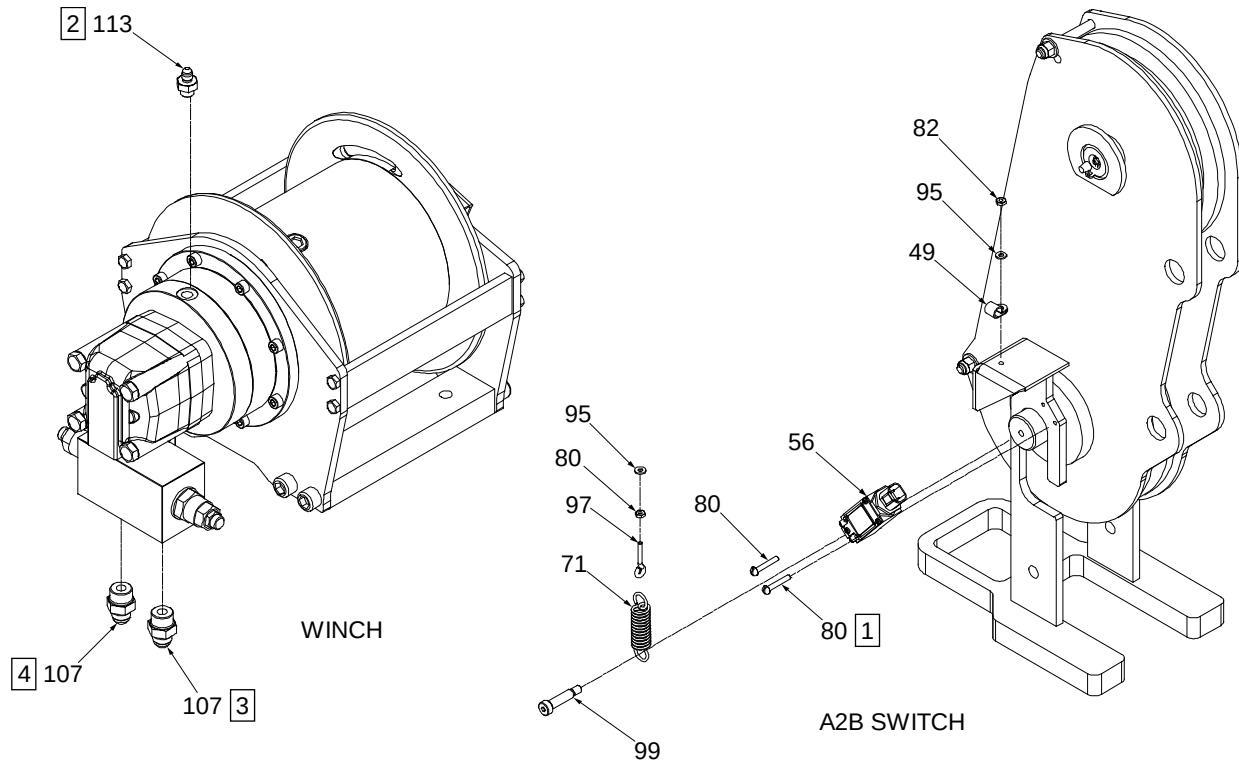


NOTES:

- 1 INSTALL WIRE HARNESS TO VALVE BANK PRIOR TO INSTALLING VALVE BANK BRACKET.

99904971-6 PARTS LIST				
ITEM	PART #	DESCRIPTION	KIT #	QTY
5.	91725205	KIT-HRDW SERIES III (effective from 05/22/13)		1
6.	91723601	KIT-HYD A40-60 SERIES III		A/R
7.	91725088	KIT-HYD A40-60 SP SERIES III		A/R
84.	72062104	NUT .25-20 HEX NYLOCK (effective from 04/12/13)	#5	6
86.	72063001	WASHER .25 FLAT (effective from 7/2/13)	#5	12
109.	72532670	ELBOW-M JIC/45/F JIC 8 8	#6,#7	1
114.	72533583	ELBOW-M STR/45/M JIC 8 6	#6,#7	1
120.	60140840	BRKT-MAST VB 7500-10000L (effective from 03/05/13)		2
121.	72060004	CAP SCR .25-20X 1.00 HH GR5 Z (effective from 03/05/13)	#5	2
122.	73734472	VALVE BANK-MOD.INLET (PW) 12VDC IP69		A/R
REV BB 20150910				

Anti-Two-Block & Winch Assembly (99904971)



NOTES:

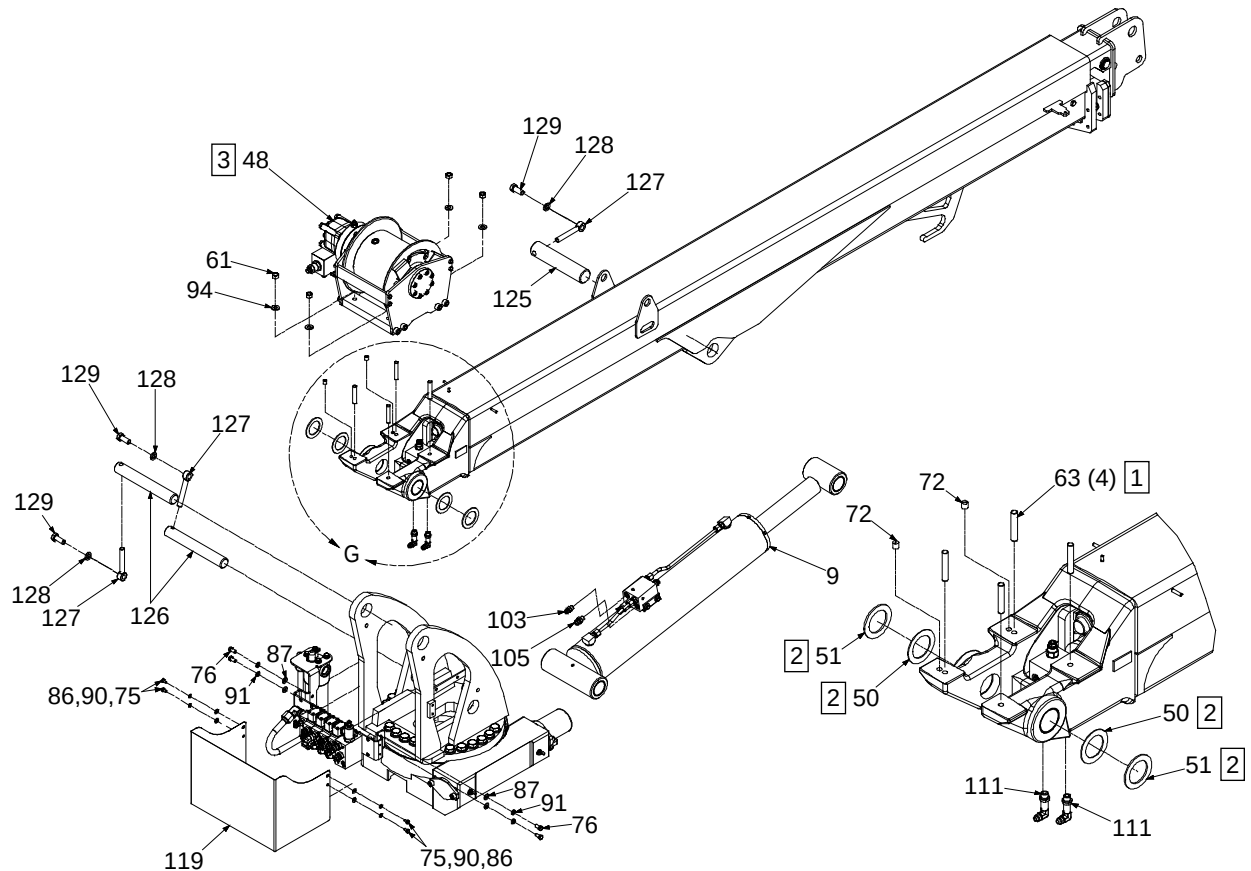
- 1 USE BLUE LOCKTITE
- 2 CASE DRAIN
- 3 PORT A
- 4 PORT B

99904971-7 PARTS LIST

ITEM	PART #	DESCRIPTION	KIT #	QTY
5.	91725205	KIT-HRDW SERIES III (effective from 05/22/13)		1
6.	91723601	KIT-HYD A40-60 SERIES III		A/R
7.	91725088	KIT-HYD A40-60 SP SERIES III		A/R
49.	72034485	CLAMP-PLASTIC 1/4" CABLE		8
56.	77041863	SWITCH-LIMIT DT04-4P CONN		1
71.	71413185	SPRING-.105WIRE 0.75OD 2.875 LG	#5	1
80.	72060639	SCR-MACH 10-24X 1.25 RDH	#5	2
82.	72062093	NUT # 8-32 HEX ZINC	#5	2
95.	72063271	WASHER # 8 W FLAT ANSI B27.2Z	#5	2
97.	72601938	BOLT-EYE # 8-32X 1.125	#5	1
99.	72602085	BOLT-SHLDR .38X 1.25 (5/16 thds) SS	#5	1
107.	72532359	ADPTR-M STR/M JIC 10 8	#6,#7	2
113.	72533490	ADPTR-M BSPP/M JIC 4 4	#6,#7	1
REV BB 20150910				

Crane & Winch Assembly (99904971)

(See Parts List for Effectivity Dates)



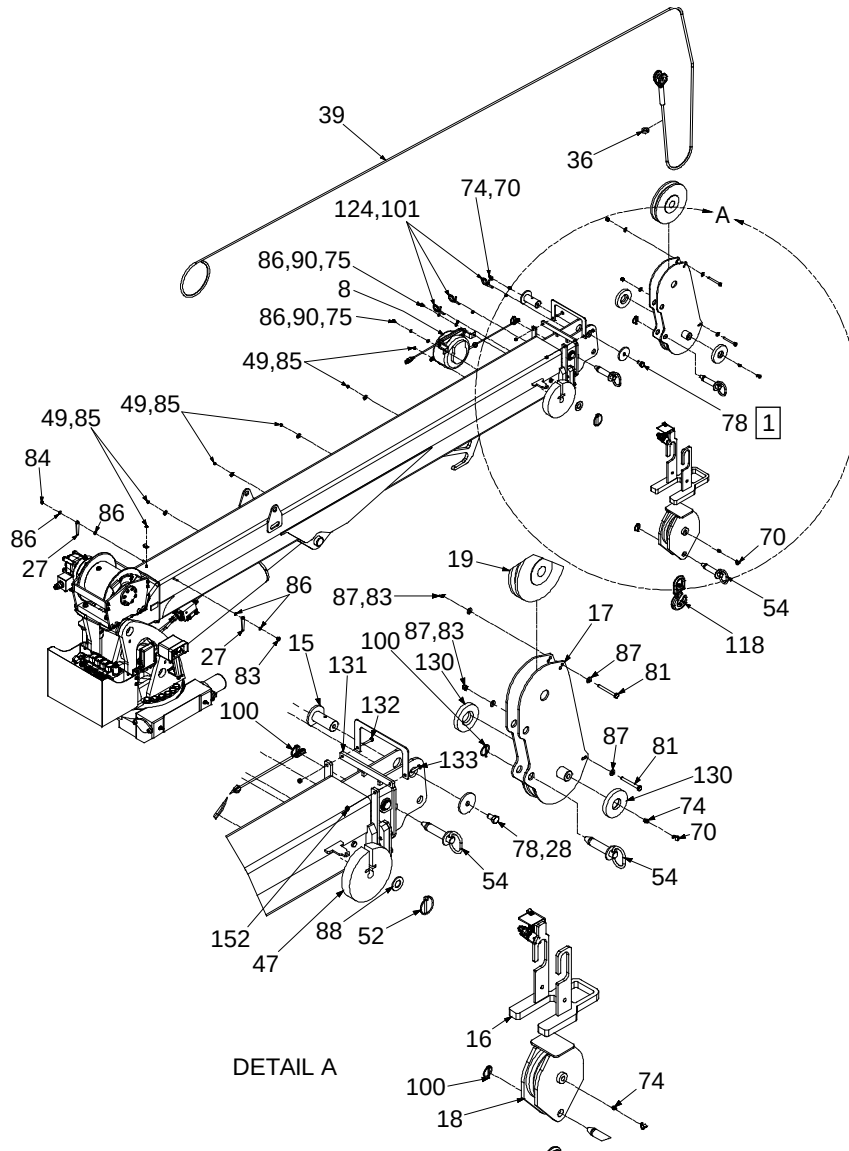
NOTES (SEE REFERENCE NUMBER IN BOX):

- 1 APPLY ANTI-SEEZ TO BOOM AND CYLINDER MOUNTING PINS. DO NOT ALLOW ANTI-SEEZ TO CONTACT BOOM OR CYLINDER PIN BOSS BEARINGS.
- 2 IF REQUIRED, USE 72063038 OR 72063039 MACHINERY BUSHINGS BETWEEN MAST AND LOWER BOOM.
- 3 USE BLUE LOCTITE.
- 4 TORQUE TO 84 FT-LB (11.6 KG-M)

99904971-8 PARTS LIST				
ITEM	PART #	DESCRIPTION	KIT #	QTY
2.	91723579	KIT-HRDW WINCH MNT A40-60		1
5.	91725205	KIT-HRDW SERIES III (effective from 05/22/13)		1
6.	91723601	KIT-HYD A40-60 SERIES III		A/R
7.	91725088	KIT-HYD A40-60 SP SERIES III		A/R
48.	71570825	WINCH-PLANETARY 6000 LB LINE PULL (A60)		1
50.	72063038	MACHY BUSHING 2.00X14 GA NR		A/R
51.	72063039	MACHY BUSHING 2.00X10 GA NR		A/R
61.	72062108	NUT .50-20 HEX GRC Z TOP LOCK	#2	4
63.	72602082	STUD .50-20X 2.75 DBL .50-13 GR8 STL		4
72.	72034479	PLUG-PLSTC .50-13X .50 UNC-2B		2
75.	72060000	CAP SCR .25-20X .50 HH GR5 Z	#5	6
76.	72060044	CAP SCR .38-16X .75 HH GR5 Z	#5	8
86.	72063001	WASHER .25 FLAT (effective from 7/2/13)	#5	12
87.	72063003	WASHER .38 FLAT (effective from 04/10/13)	#5	12
90.	72063049	WASHER .25 LOCK (effective from 02/28/13)	#5	6
91.	72063051	WASHER .38 LOCK	#5	8
94.	72063132	WASHER .50 FLAT ASTM F436	#5	17
103.	72532355	ADPTR-M STR/M JIC 6 6	#6,#7	1
105.	72532357	ADPTR-M STR/M JIC 6 8	#6,#7	1
111.	72532700	ELBOW-M STR/90/M JIC XLG 6 6	#6,#7	2
119.	60140838	COVER-VALVE BANK SIII (effective from 03/05/13)		1
125.	60140916	PIN-TYPE NN 2.00X 9.50 (effective from 05/22/13)		1
126.	60140915	PIN-TYPE NN 2.00X13.75 (effective from 05/22/13)		2
127.	71415016	KEEPER-PIN .62 (effective from 05/22/13)		3
128.	72063055	WASHER .62 LOCK (effective from 05/22/13)		3
129.	72060149	CAP SCR .62-11X 1.50 HH GR5 Z (effective from 05/22/13)		3
REV BB 20150910				

Flip Sheave Assembly (99904971)

(See Parts List for Effectivity Dates)



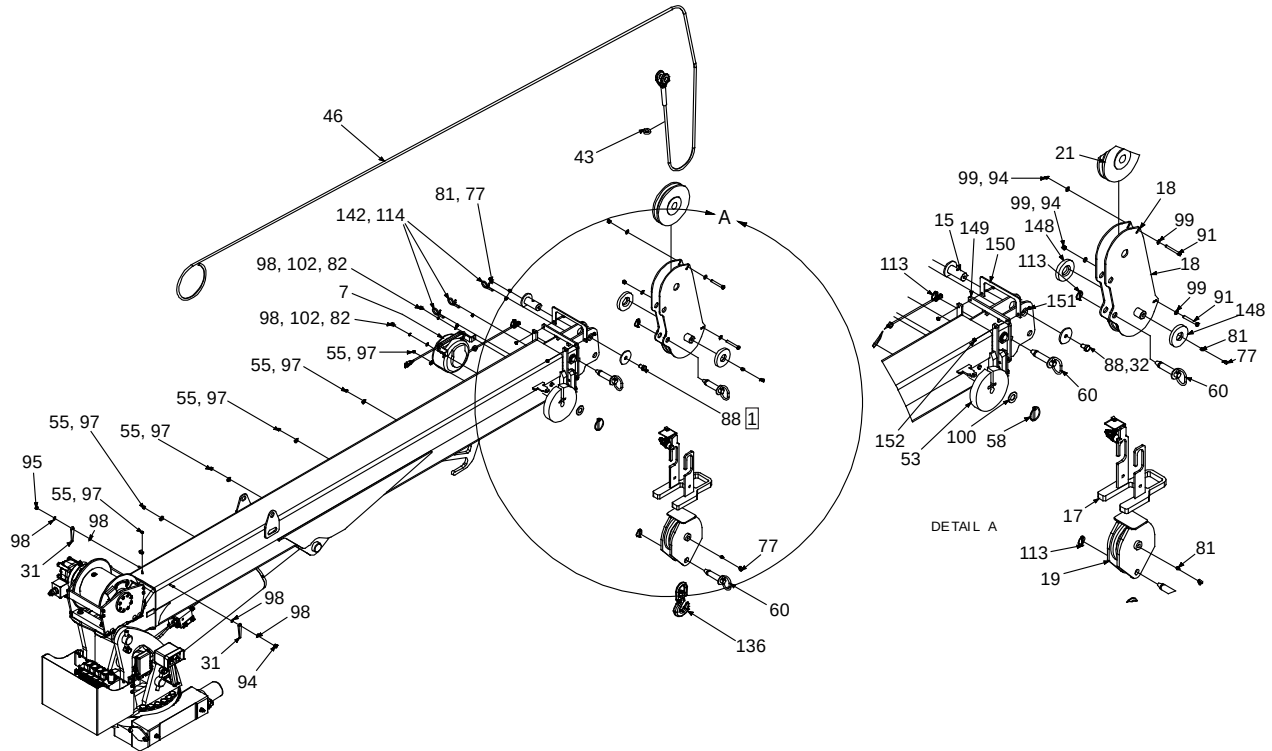
NOTES (SEE REFERENCE NUMBER IN BOX):

1 USE BLUE LOCTITE

99904971-9 PARTS LIST				
ITEM	PART #	DESCRIPTION	KIT #	QTY
5.	91725205	KIT-HRDW SERIES III (effective from 05/22/13)		1
15.	52723030	PIN-TYPE M 1.50X 3.38		1
16.	52725155	WLDMT- A2B BRKT (effective from 04/17/13)		1
17.	52725152	WLDMT-FLIP SHEAVE 9500/10000 (effective from 04/17/13)		1
18.	52725066	WLDMT- SNATCH BLOCK 9500/10000 (effective from 03/04/13)		1

99904971-9 PARTS LIST				
ITEM	PART #	DESCRIPTION	KIT #	QTY
19.	60030255	SHEAVE- 9.00 POLYMER		1
27.	70034490	PLATE-ANGLE PLASTIC 3.50"		2
28.	60109337	RETAINER PLT-PIN 3.00 DIA		1
36.	70145121	COLLAR-SHAFT 2 PIECE 7/8 in.		1
39.	70580168	WIRE ROPE ASM-.44(6X25)X100' LH LAY		1
47.	71414205	PLATE-SINGLE SHEAVE (20#) .50 WIRE ROPE		1
49.	72034485	CLAMP-PLASTIC 1/4" CABLE		8
52.	72661641	PIN-QUICK 5/16-2-1/16 ZINC YELLOW		1
54.	73734565	PIN-LOCK W/HANDLE 1.00 X 3.50 W/HAIRPIN		3
70.	70034382	CAP-GREASE PRO20 GC-RED	#5	6
74.	72053508	ZERK-NPT .12	#5	4
75.	72060000	CAP SCR .25-20X .50 HH GR5 Z	#5	6
78.	72060147	CAP SCR .62-11X 1.00 HH GR5 Z	#5	1
81.	72060893	CAP SCR .38-16X 3.25 HH GR5 Z	#5	2
83.	72062103	NUT .38-16 HEX NYLOCK	#5	3
84.	72062104	NUT .25-20 HEX NYLOCK (effective from 04/12/13)	#5	6
85.	72062106	NUT 10-24 HEX NYLOCK	#5	7
86.	72063001	WASHER .25 FLAT (effective from 7/2/13)	#5	12
87.	72063003	WASHER .38 FLAT (effective from 04/10/13)	#5	12
88.	72063010	WASHER 1.00 FLAT	#5	1
90.	72063049	WASHER .25 LOCK (effective from 02/28/13)	#5	6
100.	72661543	PIN-QUICK 316-10QP	#5	3
101.	72661694	BRIDLE RING 1-1/12ID X 1/4-20	#5	3
116.	93725207	KIT-CABLE GUIDE 9500/14000 (effective from 04/12/13)		1
118.	70734176	HOOK-SWVL L-322B-5T W/LATCH (effective from 04/26/13)		A/R
124.	72062000	NUT .25-20 HEX (effective from 05/22/13)		3
130.	60030486	SPACER-A2B BRACKET (effective from 05/22/13)		2
131.	60140935	GUIDE - CABLE WEAR (WIDE) (effective from 04/12/13)	#116	1
132.	60140938	BRKT - CABLE GUIDE (WIDE) (effective from 04/12/13)	#116	1
133.	72060006	CAP SCR .25-20X 1.50 HH GR5 Z (effective from 04/12/13)	#116	2
REV BB 20150910				

Flip Sheave Assembly (99904971)



NOTES (SEE REFERENCE NUMBER IN BOX):

1 USE BLUE LOCTITE.

FLIP SHEAVE ASSEMBLY (99904971)					
ITEM	PART #	DESCRIPTION	DETAILS	KIT #	QUANTITY
5.	91723584	HARDWARE KIT (effective through 05/22/13)			1
6.	91723601	HYDRAULIC KIT			1
7.	51723610	CORD REEL ASSEMBLY	30' WITH CONNECTOR		1
15.	52723030	PIN	M 1.50X 3.38		1
17.	52723058	WELDMENT- ANTI-TWO BLOCK BRACKET (effective through 04/17/13)			1
18.	52723060	WELDMENT-FLIP SHEAVE (effective through 04/17/13)	9500/ 10000		1
19.	52723061	WELDMENT- SNATCH BLOCK (effective through 03/04/13)	9500/ 10000		1
21.	60030255	SHEAVE	9.00 NYLATRON GSM		1
27.	60030424	CAP- ANTI-TWO BLOCK PIN (effective through 04/17/13)			2
30.	60030429	WEAR PAD- ANTI-TWO BLOCK BRACKET (effective through 04/17/13)			2
31.	70034490	PLATE-ANGLE PLASTIC	3.5"		2
32.	60109337	PIN RETAINER PLATE	3.00 DIA		1

38.	52723623	HOOK HOLDER-WELDMENT (effective through 05/22/13)			1
FLIP SHEAVE ASSEMBLY (99904971)					
ITEM	PART #	DESCRIPTION	DETAILS	KIT #	QUANTITY
42.	70034517	SPLIT SHEAVE PROTECTOR (effective through 05/22/13)			1
43.	70145121	COLLAR-SHAFT 2 PIECE	7/8 in.		1
46.	70580168	WIRE ROPE ASSEMBLY	0.44 (6X25)X100 ft LH LAY		1
47.	70732882	HOOK-SWIVEL POS LOCK (effective through 04/26/13)	5.9 TON		1
52.	71073035	HOOK-SWIVEL (effective through 04/26/13)	5.0T W/LATCH		1
53.	71414205	PLATE-SINGLE SHEAVE	(20 #) .50 WIRE ROPE		1
55.	72034485	CLAMP-PLASTIC	1/4 " CABLE		8
58.	72661641	PIN-QUICK	5/16-2-1/16 ZINC YELLOW		1
60.	73734565	PIN-LOCK WITH HANDLE	1.00 X 3.50 WITH HAIRPIN		3
77.	70034382	CAP-GREASE		#5	6
81.	72053508	ZERK	NPT 0.12	#5	4
82.	72060000	CAP SCREW	.25-20 X .50 HEX HEAD GR5 Z	#5	2
85.	72060064	CAP SCREW (effective through 04/17/13)	.44-14 X 1.50 HEX HEAD GR5 Z	#5	4
86.	72060091	CAP SCREW (effective through 05/22/13)	.50-13 X 1.00 HEX HEAD GR5 Z	#5	5
88.	72060147	CAP SCREW	.62-11 X 1.00 HEX HEAD GR5 Z	#5	1
91.	72060893	CAP SCREW	.38-16 X 3.25 HEX HEAD GR5 Z	#5	2
92.	72062001	NUT (effective through 04/10/13)	.31-18 HEX	#5	3
94.	72062103	NUT	.38-16 HEX NYLOCK	#5	3
95.	72062104	NUT (effective through 04/12/13)	.25-20 HEX NYLOCK	#5	1
96.	72062105	NUT (effective through 04/17/13)	.44-14 HEX NYLOCK	#5	4
97.	72062106	NUT	10-24 HEX NYLOCK	#5	7
98.	72063001	WASHER (effective through 02/28/13)	.25 FLAT	#5	10
99.	72063003	WASHER (effective through 04/10/13)	.38 FLAT	#5	16
100.	72063010	WASHER	1.00 FLAT	#5	1
102.	72063049	WASHER (effective through 02/28/13)	.25 LOCK	#5	6
104.	72063053	WASHER (effective through 05/22/13)	.50 LOCK	#5	17
106.	72063132	WASHER	.50 FLAT ASTM F436	#5	17
113.	72661543	PIN-QUICK		#5	3
114.	72661694	BRIDLE RING	1-1/12 ID X 1/ 4-20	#5	3
REV E 20110920					

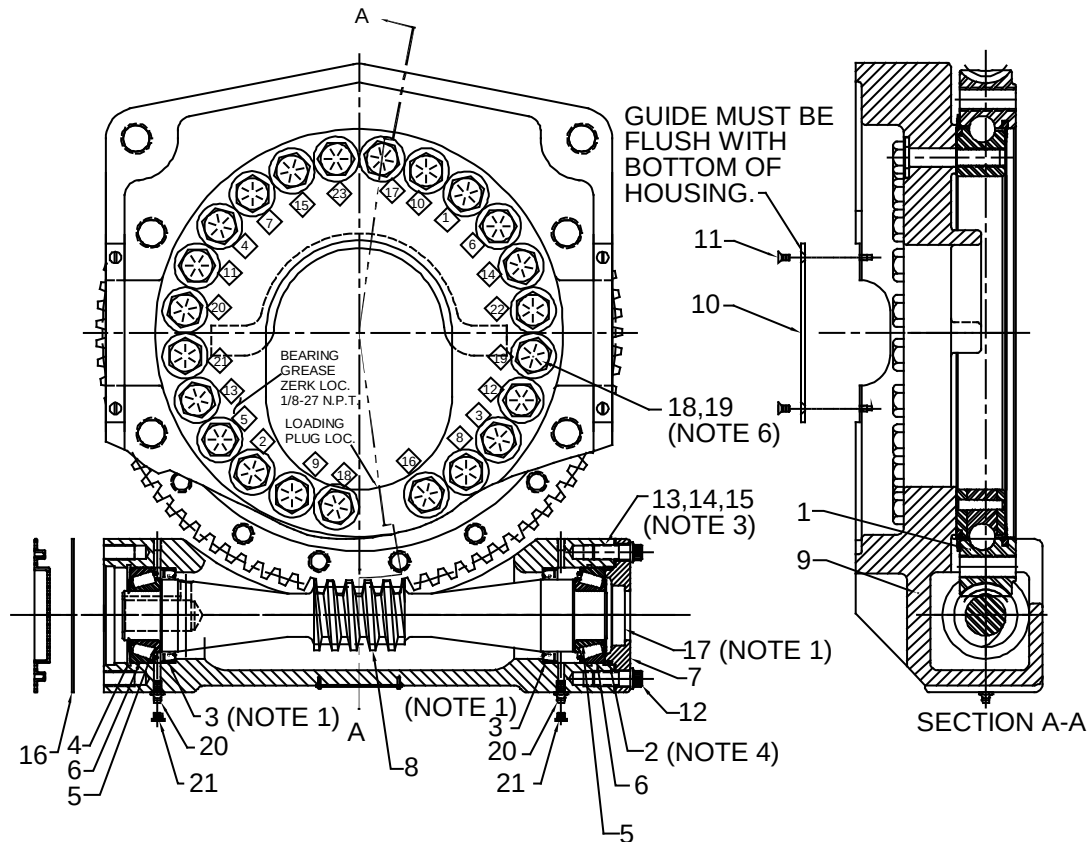
99904971 9500 25-foot Crane Parts List, Complete

99904971 COMPLETE PARTS LIST				
ITEM	PART#	DESCRIPTION	KIT #	QTY
1.	91723059	KIT-HRDW BASE & MAST 7500-10000		1
2.	91723579	KIT-HRDW WINCH MNT A40-60		1
3.	91723543	KIT-HRDW VB MNT HAWK		1
4.	51719413	KIT-HRDW TELE CRANE RADIO CONTROLS		1
5.	91725205	KIT-HRDW SERIES III (effective from 05/22/13)		1
6.	91723601	KIT-HYD A40-60 SERIES III		A/R
7.	91725088	KIT-HYD A40-60 SP SERIES III		A/R
8.	51723610	CORD REEL ASM- 30FT W/PACKARD W/DEUTSCH		1
9.	51723136	CYL-5.0/2.5 25.07S 45.52CC C		1
10.	51723605	CYL ASM-2.50/1.50 2.75/1.75 150.0S 125.0		1
11.	52725172	MAST WLDMNT-SERIES III (effective from 05/22/13)		1
12.	52725162	WLDMNT-LOWER BOOM 9500/10000S (effective from 05/22/13)		1
13.	52725163	WLDMNT-1st STAGE EXT BOOM 9500/10000S (effective from 05/22/13)		1
14.	52723221	WLDMNT-2nd STAGE EXT BOOM 9500/10000S		1
15.	52723030	PIN-TYPE M 1.50X 3.38		1
16.	52725155	WLDMT- A2B BRKT (effective from 04/17/13)		1
17.	52725152	WLDMT-FLIP SHEAVE 9500/10000 (effective from 04/17/13)		1
18.	52725066	WLDMT- SNATCH BLOCK 9500/10000 (effective from 03/04/13)		1
19.	60030255	SHEAVE- 9.00 POLYMER		1
20.	60030336	WEAR PAD-RC .19 X 6.00 X 6.00		1
21.	60030337	WEAR PAD-RND 0.19X 2.00X 1.00X 1.00		2
22.	60030421	WEAR PAD-RC 0.25X 6.00X 6.00		1
23.	60030422	WEAR PAD-RND SIII EXT CYL		1
24.	60030423	WEAR PAD-RND 0.44X 1.25X .50X .50		4
25.	60030425	WEAR PAD-RND 0.44X 1.25X .50X .50		2
26.	60030428	WEAR PAD-RND 0.25X 2.00X .75X .44		4
27.	70034490	PLATE-ANGLE PLASTIC 3.50"		2
28.	60109337	RETAINER PLT-PIN 3.00 DIA		1
29.	60120138	SLIDE-ROTATION STOP 3816		1
30.	60128849	GEAR GUARD 6025 SII		1
31.	60140899	CAP-LOWER BOOM CABLE GUIDE 9500-14000 (eff. from 04/12/13)	#116	1
32.	60135668	CAP-FIRST STAGE		1
33.	60135669	PIN-TYPE A 1.25X 6.89 (6.46)		1
34.	60135833	RETAINER-1st STAGE EXT CYL		2
35.	70029595	THREADED PLUG 1.00-8 (3816)		2
36.	70145121	COLLAR-SHAFT 2 PIECE 7/8 in.		1
37.	70399053	TAPE-REFLECTIVE RED/SILVER 1.25X72.00		2
38.	70396734	TAPE-REFLECTIVE RED/SILVER 2.00X72.00		2
39.	70580168	WIRE ROPE ASM-.44(6X25)X100' LH LAY		1
40.	70734761	TRANSMITTER-RAD REM TELE S3 NON-G W-HORN (eff. from 04/17/13)		A/R
41.	70734748	TRANSMITTER-S3 TELE SINGLE PROP		A/R
42.	70734762	TRANSMITTER-RAD REM TELE S3 GATED W-HORN (eff. from 4/15/13)		A/R
43.	70734763	RECEIVER-RADIO REMOTE TELE SIII W-HORN (eff. from 04/17/13)		A/R
44.	70734750	RECEIVER-S3 TELE SINGLE PROP		A/R
45.	71056577	GEAR ROTATOR-6025/6625 0.75 BOLTS		1
46.	76039295	GASKET-GEA19 008-10056-1	#45	1
47.	71414205	PLATE-SINGLE SHEAVE (20#) .50 WIRE ROPE		1
48.	71570825	WINCH-PLANETARY 6000 LB LINE PULL (A60)		1
49.	72034485	CLAMP-PLASTIC 1/4" CABLE		8
50.	72063038	MACHY BUSHING 2.00X14 GA NR		A/R
51.	72063039	MACHY BUSHING 2.00X10 GA NR		A/R
52.	72661641	PIN-QUICK 5/16-2-1/16 ZINC YELLOW		1
53.	73051919	MOTOR-HYD (101-2638-009)		1
54.	73734565	PIN-LOCK W/HANDLE 1.00 X 3.50 W/HAIRPIN		3

99904971 COMPLETE PARTS LIST				
ITEM	PART#	DESCRIPTION	KIT #	QTY
55.	73734727	VALVE BANK-4SEC 4R 10GPM TELE PROP 12V G		A/R
56.	77041863	SWITCH-LIMIT DT04-4P CONN		1
57.	77441481	HARNESS-TELE RADIO REMOTE SERIES III		1
58.	72063116	WASHER .75 N FLAT H ASTM F436Z	#1	22
59.	72601629	CAP SCR .75-10X 4.00 HH GR8 Z	#1	4
60.	72601817	CAP SCR .75-10X 3.25 HH GR8 Z (effective through 02/14/13)	#1	14
61.	72062108	NUT .50-20 HEX GRC Z TOP LOCK	#2	4
62.	72063132	WASHER-FLAT .50 N H ASTM F436	#2	4
63.	72602082	STUD .50-20X 2.75 DBL .50-13 GR8 STL		4
64.	72601797	WASHER-LOCK 8MM (effective from 9/18/14)	#3	4
65.	72602065	WASHER-FLAT M 8 (effective from 9/18/14)	#3	4
66.	72602052	CAP SCR M 8-1.25X 16 HHZ (effective from 9/18/14)	#3	4
67.	72062194	NUT-SS .25-20 NYLOC	#4	2
68.	72063166	WASHER-FLAT .25 R WRT 18-8 .620D SS	#4	2
69.	72601846	CAP SCR .25-20X 1.25 HH SS	#4	2
70.	70034382	CAP-GREASE PRO20 GC-RED	#5	6
71.	71413185	SPRING-.105WIRE 0.750D 2.875 LG	#5	1
72.	72034479	PLUG-PLSTC .50-13X .50 UNC-2B		2
73.	72053301	COUPLING-GLV .12 SCH 40	#5	1
74.	72053508	ZERK-NPT .12	#5	4
75.	72060000	CAP SCR .25-20X .50 HH GR5 Z	#5	6
76.	72060044	CAP SCR .38-16X .75 HH GR5 Z	#5	8
77.	72060093	CAP SCR .50-13X 1.50 HH GR5 Z	#5	12
78.	72060147	CAP SCR .62-11X 1.00 HH GR5 Z	#5	1
79.	72060206	CAP SCR .75-10X 2.00 HH GR8 Z	#5	1
80.	72060639	SCR-MACH 10-24X 1.25 RDH	#5	2
81.	72060893	CAP SCR .38-16X 3.25 HH GR5 Z	#5	2
82.	72062093	NUT # 8-32 HEX ZINC	#5	2
83.	72062103	NUT .38-16 HEX NYLOCK	#5	3
84.	72062104	NUT .25-20 HEX NYLOCK (effective from 04/12/13)	#5	6
85.	72062106	NUT 10-24 HEX NYLOCK	#5	7
86.	72063001	WASHER .25 FLAT (effective from 7/2/13)	#5	12
87.	72063003	WASHER .38 FLAT (effective from 04/10/13)	#5	12
88.	72063010	WASHER 1.00 FLAT	#5	1
89.	72063035	MACHY BUSHING 1.25X10 GA NR	#5	2
90.	72063049	WASHER .25 LOCK (effective from 02/28/13)	#5	6
91.	72063051	WASHER .38 LOCK	#5	8
92.	72063053	WASHER .50 LOCK (effective from 05/22/13)	#5	12
93.	72063116	WASHER .75 N FLAT H ASTM F436Z	#5	1
94.	72063132	WASHER .50 FLAT ASTM F436	#5	17
95.	72063271	WASHER # 8 W FLAT ANSI B27.2Z	#5	2
96.	72066129	RETAINING RING-EXT 1.25 HD	#5	2
97.	72601938	BOLT-EYE # 8-32X 1.125	#5	1
98.	72601949	CAP SCR .50-13X 1.25 SH ZC	#5	2
99.	72602085	BOLT-SHLDR .38X 1.25 (5/16 thds) SS	#5	1
100.	72661543	PIN-QUICK 316-10QP	#5	3
101.	72661694	BRIDLE RING 1-1/12ID X 1/4-20	#5	3
102.	51395121	HOSE-AA .13 X 13.50 OAL (2-2)	#6,#7	1
103.	72532355	ADPTR-M STR/M JIC 6 6	#6,#7	1
104.	72532356	ADPTR-M STR/M JIC 8 6	#6,#7	4
105.	72532357	ADPTR-M STR/M JIC 6 8	#6,#7	1
106.	72532358	ADPTR-M STR/M JIC 8 8	#6,#7	4
107.	72532359	ADPTR-M STR/M JIC 10 8	#6,#7	2
108.	72532361	ADPTR-M STR/M JIC 8 10	#6,#7	1
109.	72532670	ELBOW-M JIC/45/F JIC 8 8	#6,#7	1

99904971 COMPLETE PARTS LIST				
ITEM	PART#	DESCRIPTION	KIT #	QTY
110.	72532690	ELBOW-M JIC/90/F JIC SW 4 4	#6,#7	1
111.	72532700	ELBOW-M STR/90/M JIC XLG 6 6	#6,#7	2
112.	72532792	ADPTR-M STR/M JIC 8 4	#6,#7	1
113.	72533490	ADPTR-M BSPP/M JIC 4 4	#6,#7	1
114.	72533583	ELBOW-M STR/45/M JIC 8 6	#6,#7	1
115.	72533613	ADPTR-M STR/M JIC 10 6	#6,#7	2
116.	93725207	KIT-CABLE GUIDE 9500/14000 (effective from 04/12/13)		1
117.	71073035	HOOK-SWVL L322AN-5T W/LATCH (effective from 04/26/13)		A/R
118.	70734176	HOOK-SWVL L-322B-5T W/LATCH (effective from 04/26/13)		A/R
119.	60140838	COVER-VALVE BANK SIII (effective from 03/05/13)		1
120.	60140840	BRKT-MAST VB 7500-10000L (effective from 03/05/13)		2
121.	72060004	CAP SCR .25-20X 1.00 HH GR5 Z (effective from 03/05/13)	#5	2
122.	73734472	VALVE BANK-MOD.INLET (PW) 12VDC IP69		A/R
123.	77441537	HARNESS-S3 TELE S-PROP VALVE BANK CERVIS		A/R
124.	72062000	NUT .25-20 HEX (effective from 05/22/13)		3
125.	60140916	PIN-TYPE NN 2.00X 9.50 (effective from 05/22/13)		1
126.	60140915	PIN-TYPE NN 2.00X13.75 (effective from 05/22/13)		2
127.	71415016	KEEPER-PIN .62 (effective from 05/22/13)		3
128.	72063055	WASHER .62 LOCK (effective from 05/22/13)		3
129.	72060149	CAP SCR .62-11X 1.50 HH GR5 Z (effective from 05/22/13)		3
130.	60030486	SPACER-A2B BRACKET (effective from 05/22/13)		2
131.	60140935	GUIDE - CABLE WEAR (WIDE) (effective from 04/12/13)	#116	1
132.	60140938	BRKT - CABLE GUIDE (WIDE) (effective from 04/12/13)	#116	1
133.	72060006	CAP SCR .25-20X 1.50 HH GR5 Z (effective from 04/12/13)	#116	2
134.	72062104	NUT .25-20 HEX NYLOCK	#116	2
135.	60143076	BRKT-MAST VB 7500-10000L FP		1
136.	73052156	FILTER-PRES 4000PSI 25GPM 10MIC -12		1
137.	72534898	O-RING EXTENDER 08-08		1
138.	72053767	ELBOW-M STR/90/M JIC 12 12		1
139.	72533623	ELBOW-M STR/90/M JIC 8 12		1
140.	71415691	TUBE ASM-PRESSURE FILTER S3FP LARGE MAST		1
REV BB 20150910				

Gear Rotator (71056577)

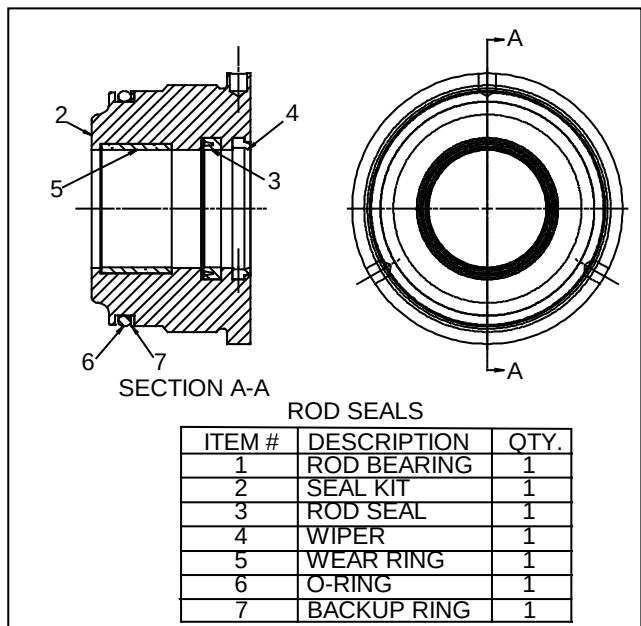
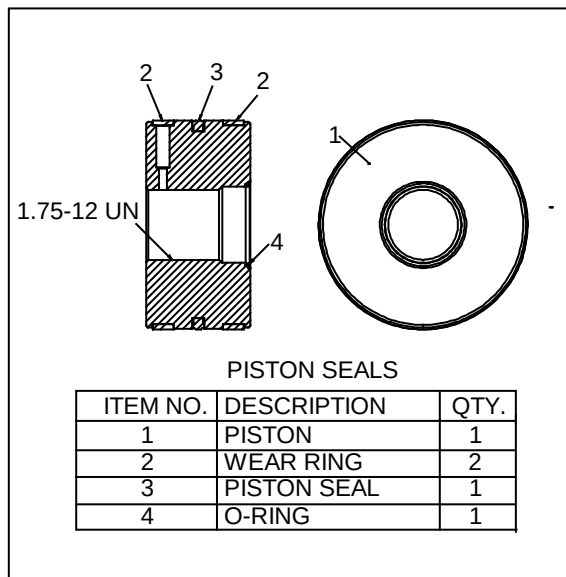
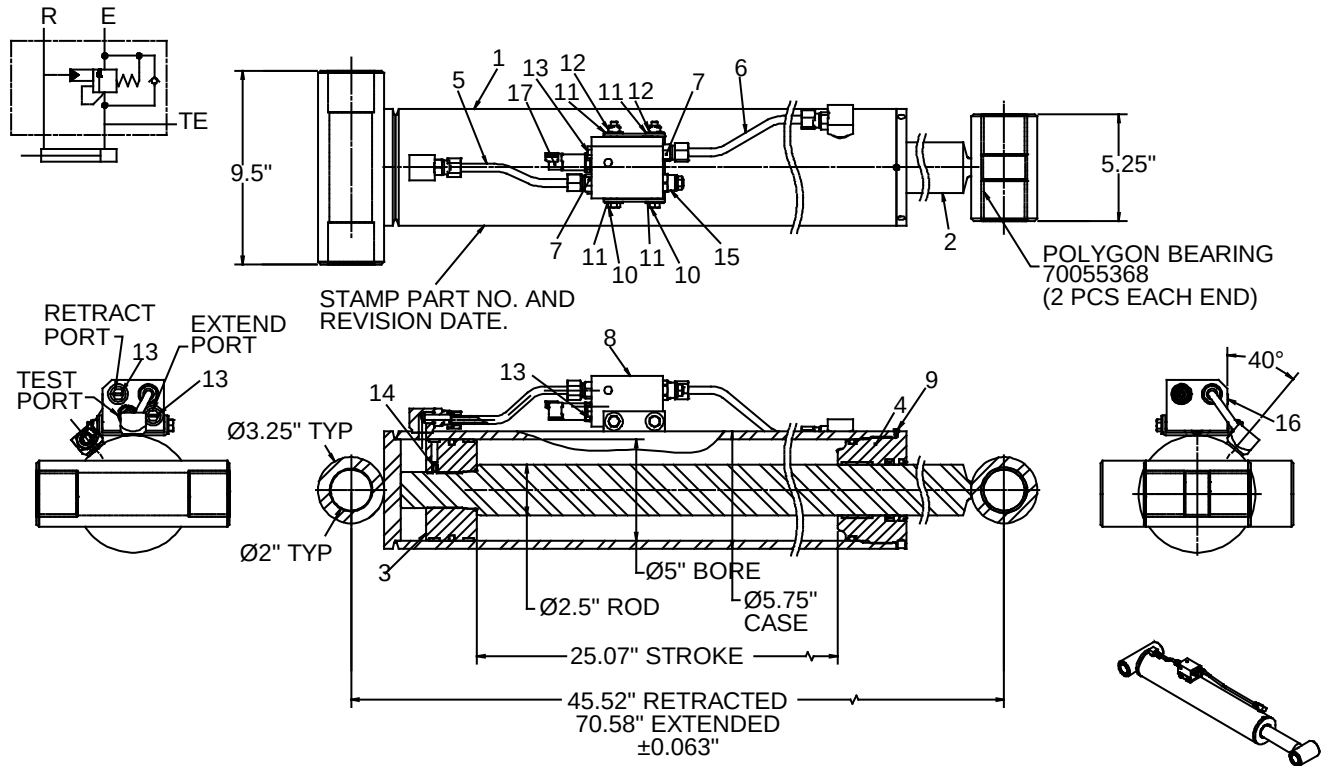


NOTES

- 1 Install seals #3 and #17 with Loctite plastic gasket on O.D. Lubricate seal surface before assembly.
- 2 Pack cavities with EPO grease.
- 3 Shim to obtain 0.000/0.004" end play on worm shaft.
- 4 Lubricate o-ring #2 with worm gear oil before installing.
- 5 Set backlash between worm and rotation bearing 0.005 - 0.012". Tighten bolts numbered 1, 2, 3, 4.
- 6 Tighten 3/4-10UNC Grade 8 mounting bolts as follows:
 - a) Tightening must be progressive and at 180 degree intervals. First interval at 130 ft-lb. Second interval at 280 ft-lb. Third interval at 380 ft-lb.
 - b) Tighten bolts in order shown in diamonds.
- 7 *Do not* use Loctite on mounting bolts.

71056577 PARTS LIST				
ITEM	PART #	DESCRIPTION	DETAILS	QUANTITY
1.	71056607	GEAR BEARING		1
2.	70395074	O-RING		1
3.	70395076	SEAL		2
4.	70145786	SNAP RING		1
5.	70055271	CONE BEARING		2
6.	70055281	CUP BEARING		2
7.	70145501	RETAINER, BEARING		1
8.	70056550	WORM		1
9.	70146322	MAIN HOUSING		1
10.	70145848	HOSE GUIDE		1
11.	72601754	SCREW	SLT FH1.25-20 NC X 1/2	2
12.	72601733	CAP SCREW	FERRY 1/2NCX1-1/4	4
13.	73145506	SHIM, METAL (0.005)		2
14.	73145505	SHIM, METAL (0.015)		1
15.	73145504	SHIM, METAL (0.030)		1
16.	76039295	GASKET		1
17.	72533604	PLUG		1
18.	72601817	CAP SCREW	3/4-10X3-1/4 HHGR8	23
19.	72063116	WASHER	3/4 FLAT	23
20.	72533605	ZERK		2
21.	72533439	VENT PLUG		2
REV B 20050314				

Lower Cylinder (51723136)



SEAL KIT # 94399130.

INCLUDES ALL SEALS. SEALS CANNOT BE PURCHASED INDIVIDUALLY.

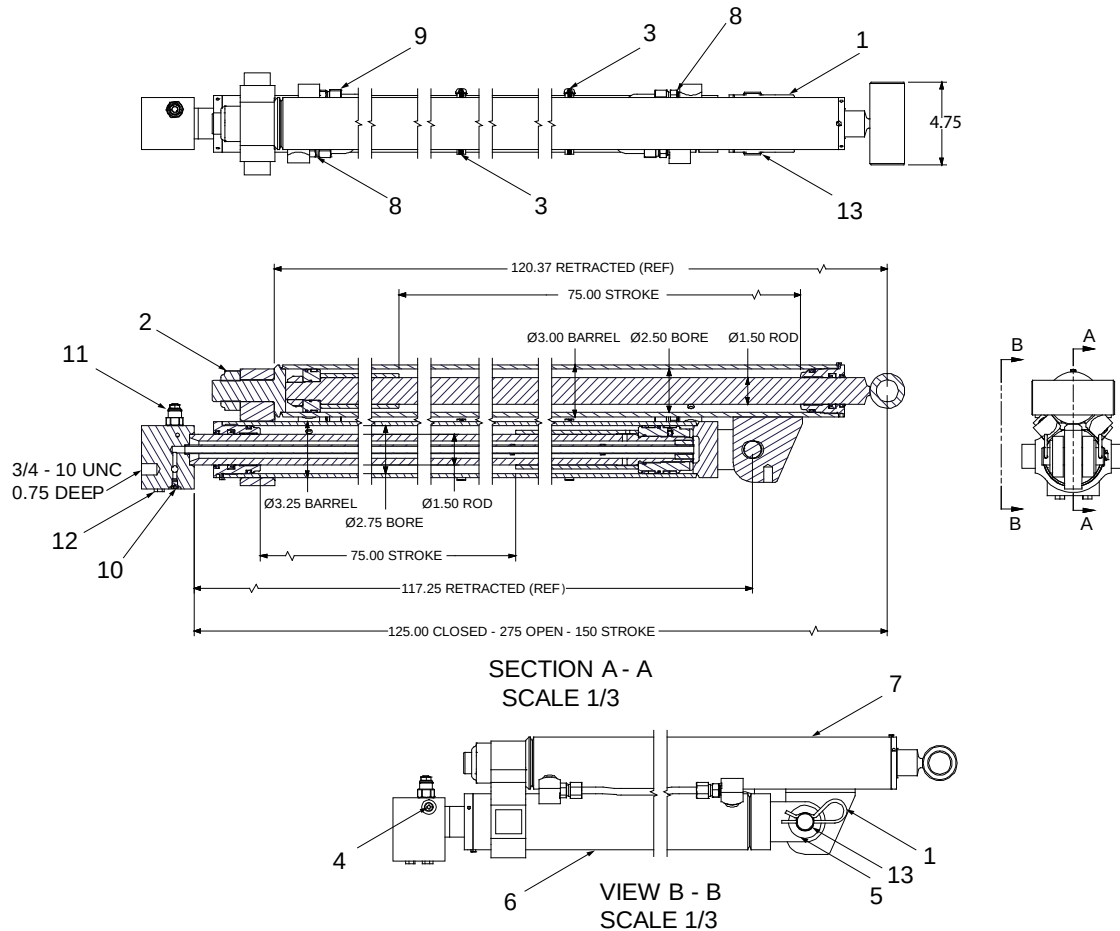
NOTES:

- 1 SEE PART NUMBER AND REVISION STAMPED ON CYLINDER.
- 2 REPLACE ALL COMPONENTS OF THE SEAL KIT WHENEVER THE CYLINDER IS DISASSEMBLED TO REDUCE DOWNTIME.
- 3 APPLY "LUBRIPLATE" NO. 630-2 MEDIUM-HEAVY, MULTI-PURPOSE LUBRICANT TO ALL PISTON, ROD BEARING AND HOLDING VALVE SEALS.
- 4 TORQUE ROD BEARING TO 500-600 FT-LB (69-83 KG-M); PISTON SET SCREW TO 12-18 FT-LB (1.7-2.5 KG-M) AND PISTON TO 200-300 FT-LB (27.6 - 41.5 KG-M).
- 5 USE BLUE LOCTITE ON PISTON.
- 6 TO LOCK THE ROD BEARING ON THE CYLINDER, DRILL A #26 HOLE 0.25-0.30" DEEP IN A SEAM BETWEEN THE ROD BEARING AND THE CASE. INSTALL THE LOCKING SCREW (ITEM #9, SELF-TAPPING #8-32 X 0.25" SET SCREW) IN THE HOLE UNTIL SEATED.

51723136 PARTS LIST

ITEM	PART #	DESCRIPTION	DETAILS	QUANTITY
1.	52723920	CASE		1
2.	52723919	ROD ASSEMBLY		1
3.	71414685	PISTON ASSEMBLY		1
4.	71414686	ROD BEARING ASSEMBLY		1
5.	71414693	TRANSFER TUBE		1
6.	71414694	TRANSFER TUBE		1
7.		FITTING ADAPTER		4
8.	73540444	VALVE BLOCK ASSEMBLY		1
9.		LOCKING SCREW		1
10.		HEX BOLT	5/16"-18 X 4.00 GR5	2
11.		WASHER	.31 FLAT	4
12.		NYLOC NUT	.31-18	2
13.		PLASTIC PLUG SAE O-RING	#6	3
14.		NYLON TIP SET SCREW	.250-20 UNC	1
15.	73540490	COUNTERBALANCE VALVE		1
16.		STEEL SAE O-RING PLUG	#4	1
17.	77041866	PRESSURE TRANSDUCER		1
REF	94399130	SEAL KIT		
REV C 20120712				

Extension Cylinder Assembly (51723605)



NOTES:

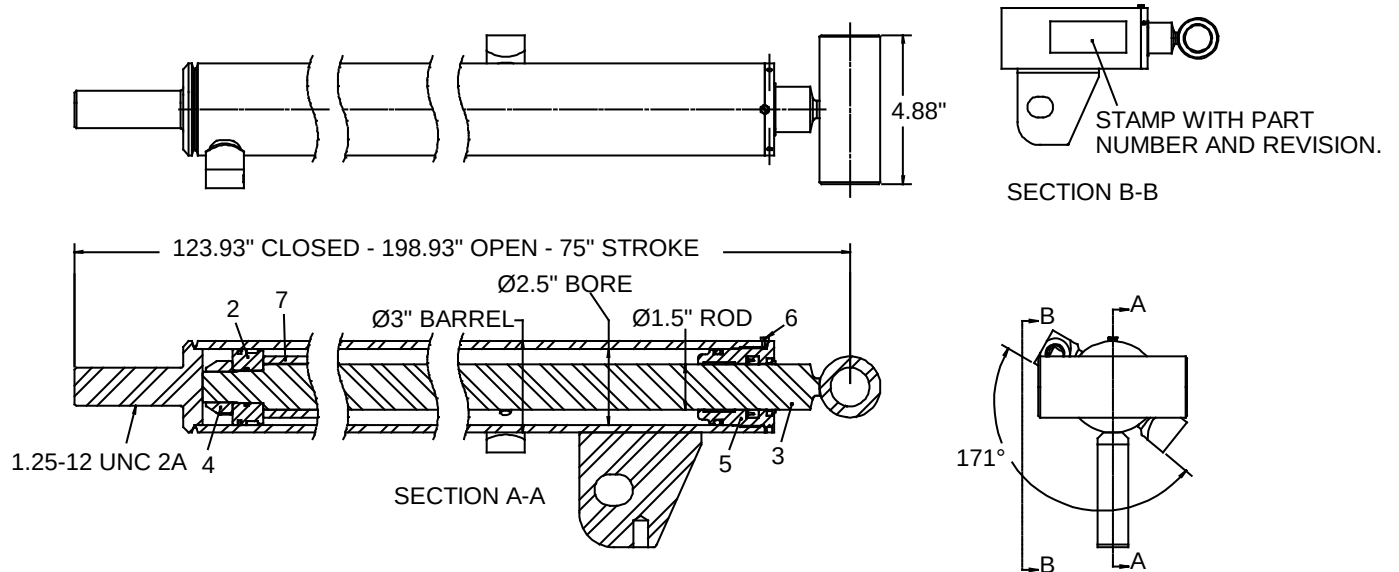
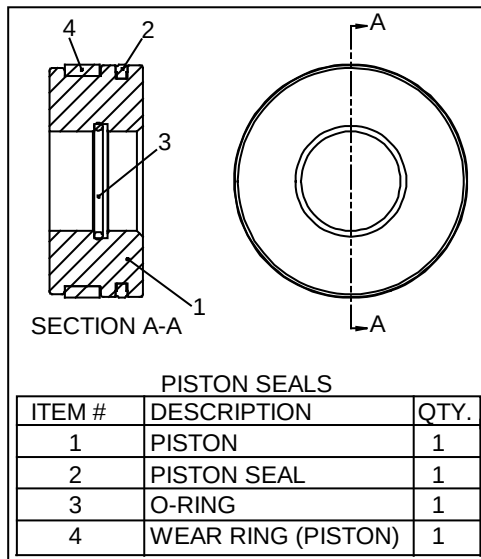
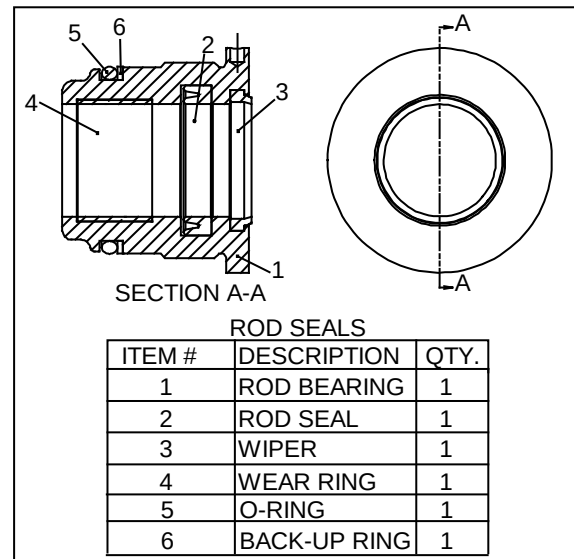
- 1 TEST CYLINDER AT 3500 PSI.
- 2 TORQUE NUT #3 (1.25-12 UNF) TO 810.7 FT-LB (112 KG-M).
- 3 PAINT BLACK SEMI-GLOSS.
- 4 INSTALL HOSE CLAMPS AFTER PAINTING.

51723605 PARTS LIST

ITEM	PART #	DESCRIPTION	DETAILS	QUANTITY
1.		COTTER HAIR PIN		2
2.		1.25 - 12 SELF - LOCKING NUT		1
3.		#56 HOSE CLAMP		3
4.		STEEL SAE O - RING PLUG #4		3
5.		WASHER		2
6.	51723930	CYL - 2.75/1.75 75.00 120.25 CC C		1
7.	51723932	CYL - 2.75/1.75 75.00S 120.25CC C		1
8.		FITTING ADAPTER		4
9.	71414721	TUBE LINE		2

51723605 PARTS LIST

ITEM	PART #	DESCRIPTION	DETAILS	QUANTITY
10.		SAE O –RING PLUG #2		1
11.	73540565	VALVE –CBAL 15 GPM 4.5:1 T11 – A @ 4000PSI		1
12.		PLASTIC PLUG SAE O – RING #6		2
13.		PIN		1
REV. D 20151228				

Cylinder (51723932)**SEALS FOR 51723932 PISTON****SEALS FOR 51723932 ROD BEARING**

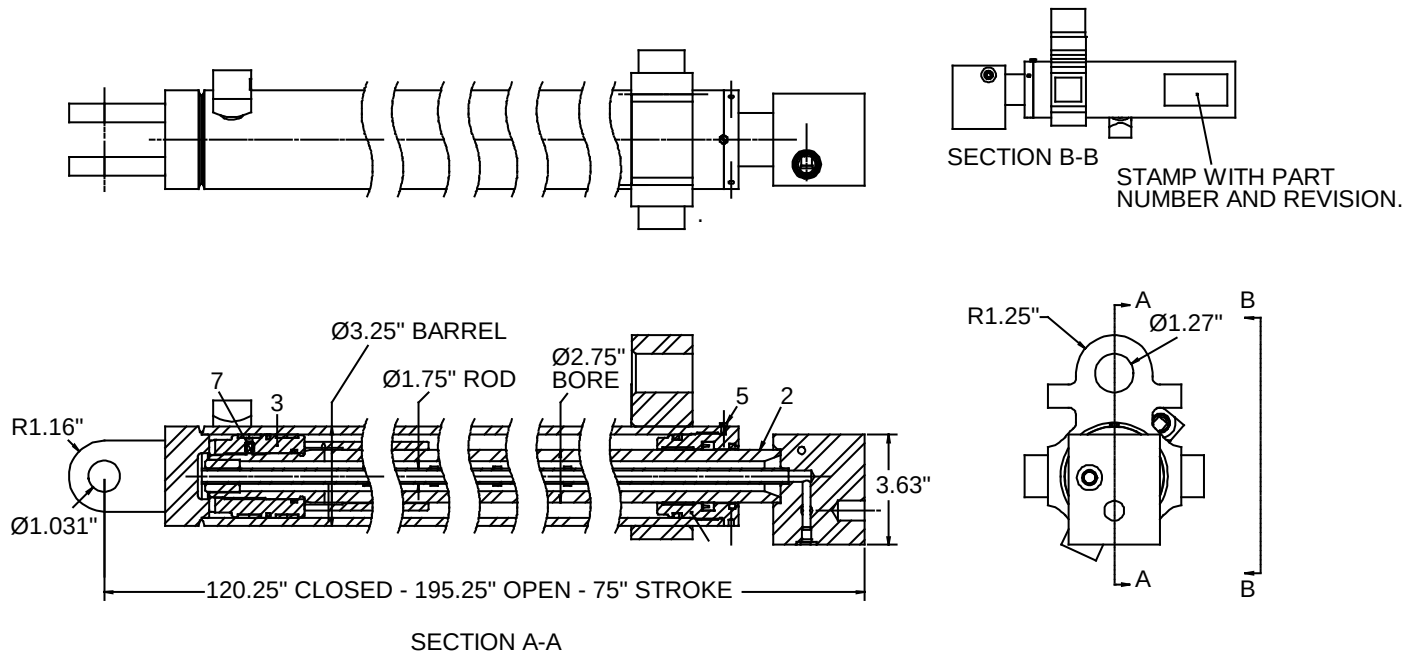
PART OF SEAL KIT # 94399160, WHICH INCLUDES ALL ROD AND PISTON SEALS FOR CYLINDER 51723932. SEALS CANNOT BE PURCHASED INDIVIDUALLY.

NOTES:

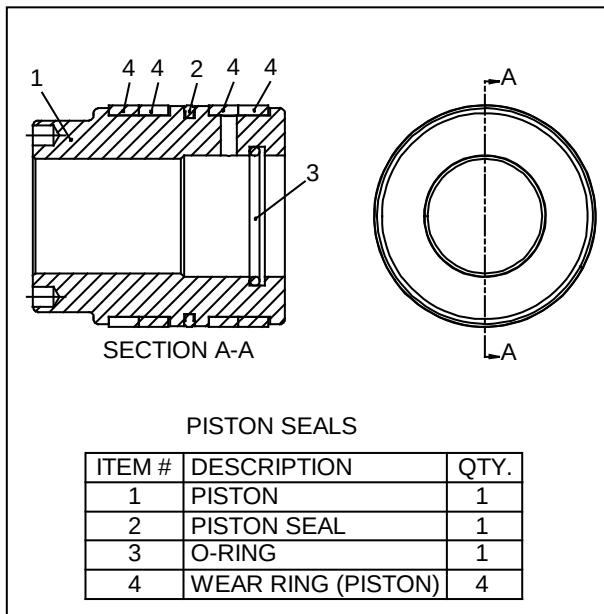
- 1 SEE PART NUMBER AND REVISION STAMPED ON CYLINDER.
- 2 REPLACE ALL COMPONENTS OF THE SEAL KIT WHENEVER THE CYLINDER IS DISASSEMBLED TO REDUCE DOWNTIME.
- 3 APPLY "LUBRIPLATE" NO. 630-2 MEDIUM-HEAVY, MULTI-PURPOSE LUBRICANT TO ALL PISTON, ROD BEARING AND HOLDING VALVE SEALS.
- 4 TORQUE ROD BEARING TO 200-300 FT-LB (27.6 - 41.5 KG-M).
- 5 TORQUE PISTON NUT (#4) TO 412.3 FT-LB (57 KG-M).
- 6 TO LOCK THE ROD BEARING ON THE CYLINDER, DRILL A #26 HOLE 0.25-0.30" DEEP IN A SEAM BETWEEN THE ROD BEARING AND THE CASE. INSTALL THE LOCKING SCREW (ITEM #9, SELF-TAPPING #8-32 X 0.25" SET SCREW) IN THE HOLE UNTIL SEATED.
- 7 SEAL KIT 94399160 INCLUDES ALL SEALS FOR CYLINDER 51723932.

51723932 PARTS LIST				
ITEM	PART #	DESCRIPTION	DETAILS	QUANTITY
1.	52724032	CASE		1
2.	71414724	PISTON ASSEMBLY		1
3.	52724033	ROD ASSEMBLY		1
4.		SELF-LOCKING NUT	1.00-14 UNF	1
5.	71414723	ROD BEARING ASSEMBLY		1
6.		LOCKING SCREW		1
7.	73050202	STROKE LIMITER		1
REF	94399160	SEAL KIT		1
NEW 20110407				

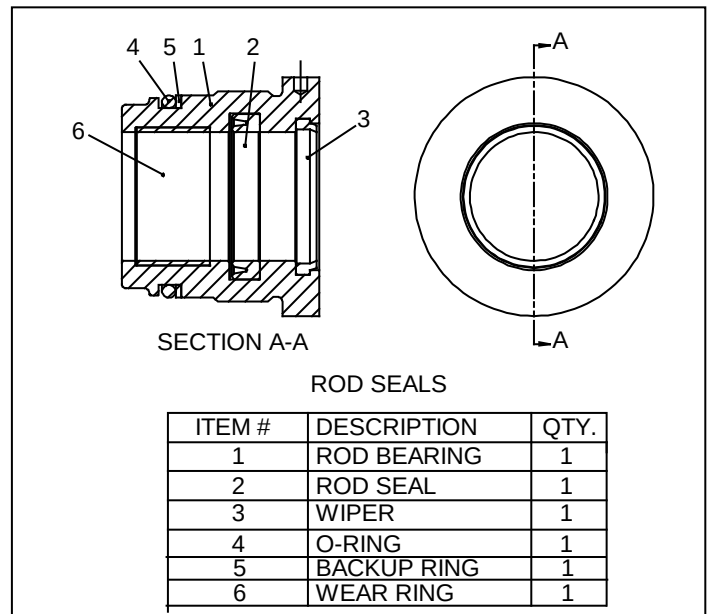
Cylinder (51723930)



SEALS FOR 51723930 PISTON



SEALS FOR 51723930 ROD BEARING



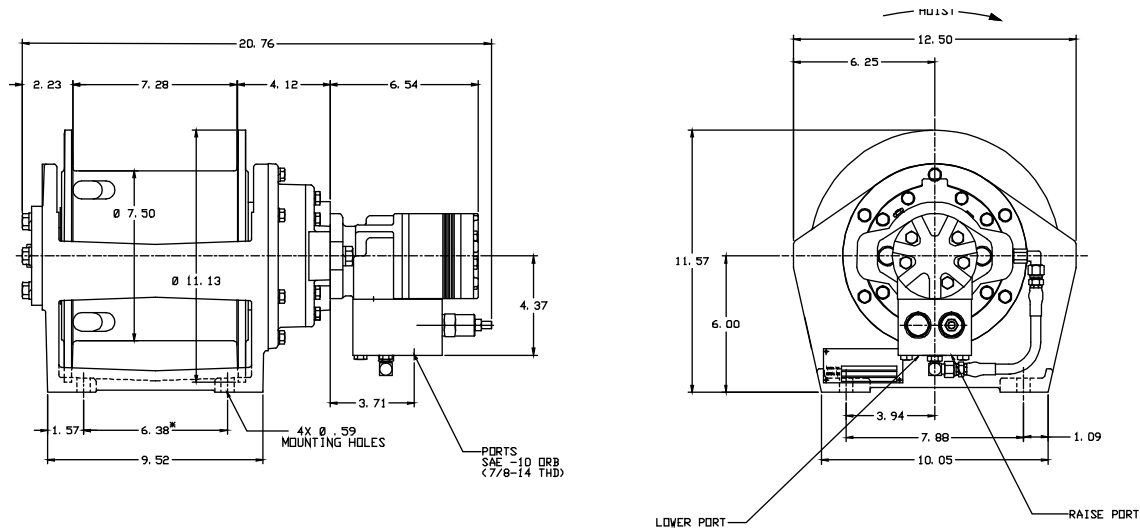
PART OF SEAL KIT # 94399162, WHICH INCLUDES ALL ROD AND PISTON SEALS FOR 51723930. SEALS CANNOT BE PURCHASED INDIVIDUALLY.

NOTES:

- 1 SEE PART NUMBER AND REVISION STAMPED ON CYLINDER.
- 2 REPLACE ALL COMPONENTS OF THE SEAL KIT WHENEVER THE CYLINDER IS DISASSEMBLED TO REDUCE DOWNTIME.
- 3 APPLY "LUBRIPLATE" NO. 630-2 MEDIUM-HEAVY, MULTI-PURPOSE LUBRICANT TO ALL PISTON, ROD BEARING AND HOLDING VALVE SEALS.
- 4 TORQUE ROD BEARING TO 200-300 FT-LB (27.6 - 41.5 KG-M).
- 5 TORQUE PISTON TO 200-300 FT-LB (27.7 - 41.5 KG-M).
- 6 TO LOCK THE ROD BEARING ON THE CYLINDER, DRILL A #26 HOLE 0.25-0.30" DEEP IN A SEAM BETWEEN THE ROD BEARING AND THE CASE. INSTALL THE LOCKING SCREW (ITEM #9, SELF-TAPPING #8-32 X 0.25" SET SCREW) IN THE HOLE UNTIL SEATED.
- 7 SEAL KIT 94399162 INCLUDES ALL SEALS FOR CYLINDER 51723930.

51723930 PARTS LIST				
ITEM	PART #	DESCRIPTION	DETAILS	QUANTITY
1.	52723925	CASE		1
2.	52724036	ROD ASSEMBLY		1
3.	71414725	PISTON ASSEMBLY		1
4.	71414726	ROD BEARING ASSEMBLY		1
5.		LOCKING SCREW		1
6.	73050204	STROKE LIMITER		1
7.		SET SCREW	.25-20 UNC NYLON TIP	1
REF	94399162	SEAL KIT		1
NEW 20110407				

Winch Specifications (70570771) Effective 04/25/2016



70570771 WINCH SPECIFICATIONS

LAYER	LINE PULL (POUNDS)	LINE SPEED (FPM) (AT 10 GAL/MIN FLOW)	CAPACITY (FT) (7/16" WIRE ROPE DIA.)
1	6000	50	34
2	5400	55	72
3	4920	60.6	114
4	4510	72	160

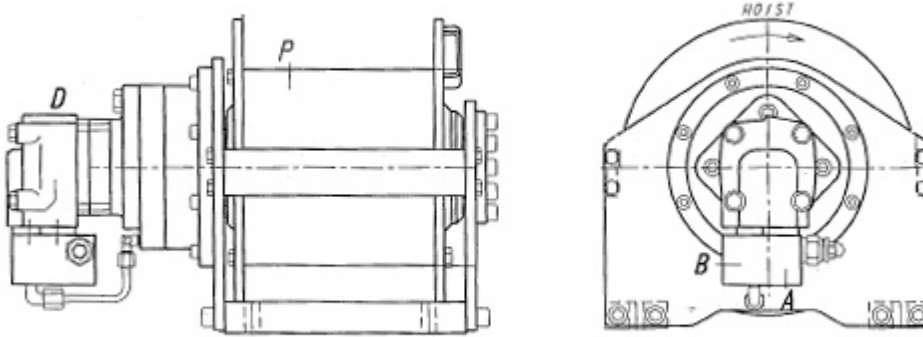
PERFORMANCE ESTIMATE

PRESSURE	3000 PSI
SYSTEM VOLUME	20 GPM MAXIMUM; 1.5 GPM MINIMUM
MOTOR DISPLACEMENT	11.9 CI/REV
GEAR RATIO	7.25:1

DRUM SPECIFICATIONS

DRUM DIAMETER	7.50 INCHES
FLANGE DIAMETER	11.125 INCHES
WIDTH	7.28 INCHES
ROPE	0.44" DIAMETER

Winch Specifications (71570825)



71570825 WINCH SPECIFICATIONS

LAYER	LINE PULL (POUNDS)	LINE SPEED (FPM) (AT 10 GAL/MIN FLOW)	CAPACITY (FT) (7/16" WIRE ROPE DIA.)
1	6000	60	34
2	5400	67	72
3	4900	74	113
4	4500	80	159

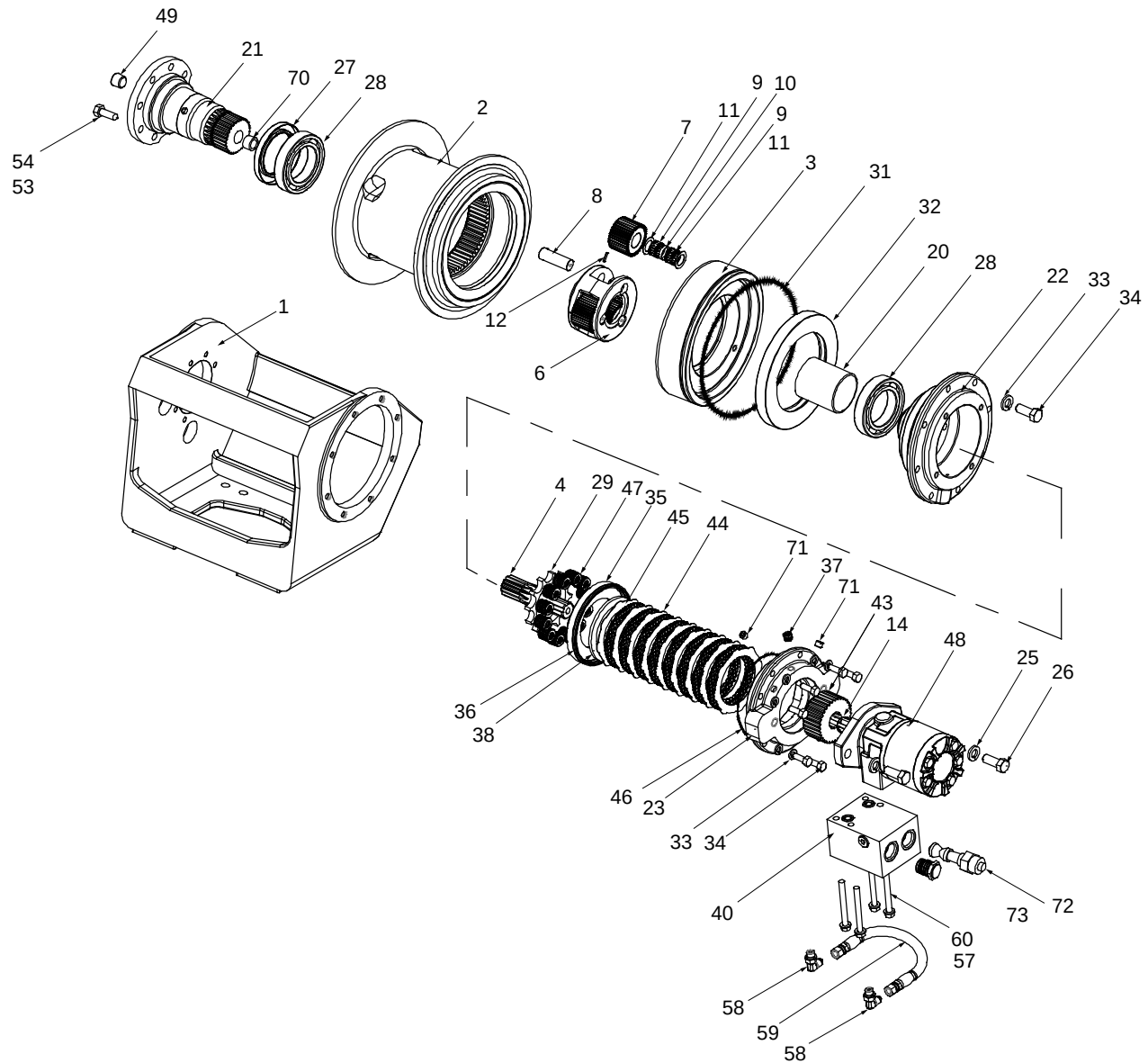
PERFORMANCE ESTIMATE

PRESSURE	3000 PSI
SYSTEM VOLUME	20 GPM MAXIMUM; 1.5 GPM MINIMUM
MOTOR DISPLACEMENT	4.88 CI/REV
GEAR RATIO	15.7:1

DRUM SPECIFICATIONS

DRUM DIAMETER	7.50 INCHES
FLANGE DIAMETER	11.125 INCHES
WIDTH	7.28 INCHES
ROPE	0.44" DIAMETER

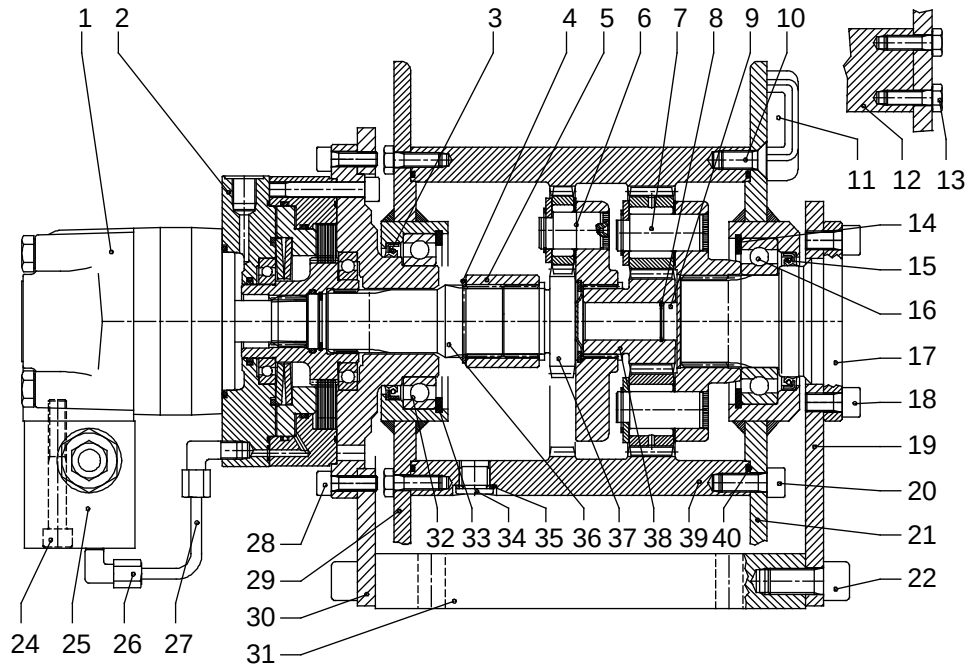
Winch Parts (70570771) Effective 04/25/2016



70570771 PART LIST (Effective 04/25/2016)			
ITEM	PART NO.	DESCRIPTION	QTY
1		BASE	1
2		CABLE DRUM CLOSURE	1
3		CABLE DRUM CLOSURE	1
4		SUN GEAR	1
5			
6		OUTPUT PLANET CARRIER	1
7		OUTPUT PLANET GEAR	3
8		OUTPUT PLANET GEAR SHAFT	3
9		ROLLER BEARING	6
10		BEARING SPACER	3
11		THRUST WASHER	6
12		ROLLPIN	3
13			
14		RETAINER RING	1
15			
16			
17			
18			
19			
20		SPACER, CARRIER	1
21		BEARING SUPPORT	1
22		BRAKE CYLINDER	1
23		MOTOR ADAPTER	1
24	71411826	MOTOR GASKET (NOT SHOWN)	1 REF
25		LOCK WASHER (1/2 Z)	2
26		CAPSCREW (1/2 NC X 1-1/4 G8 Z)	2
27		OIL SEAL (PART OF #74 SEAL KIT	1 REF
28	71411143	BALL BEARING	2
29		SPRING LOCATOR	1
30			
31		O-RING (PART OF #74 SEAL KIT)	1 REF
32		OIL SEAL (PART OF #74 SEAL KIT	1 REF
33		LOCK WASHER (5/16 Z)	6
34		CAPSCREW (5/16 NC X 1 G8 Z)	6
35		SPRING PLATE	1
36		U-CUP SEAL (PART OF #74 SEAL KIT)	1 REF
37		VENT PLUG	1
38		BRAKE PLATE SPACER	1
39			

70570771 PART LIST (Effective 04/25/2016)			
ITEM	PART NO.	DESCRIPTION	QTY
40	73540372	VALVE, BRAKE (INCLUDES 72 & 73)	1
41			
42			
43		BRAKE COUPLING	1
44	71411147	FRICTION DISC	8
45	71411827	BRAKE DISC	9
46		O-RING (PART OF #74 SEAL KIT	1 REF
47	71411146	SRPING	12
48	73511057	HYD MOTOR	1
49		PLUG (PART OF #74 SEAL KIT	1
50		NAME PLATE FOR IMT (NOT SHOWN)	1
51		DRIVE SCREW (NOT SHOWN)	4
52			
53		LOCK WASHER (7/16 Z)	6
54		CAPSCREW (7/16 NC X 1 G8 Z)	6
55	71411150	CABLE WEDGE (NOT SHOWN)	1
56			
57		CAPSCREW (5/16 NC X 3 G8 Z)	4
58		ELBOW FITTING	2
59		HOSE ASSY	1
60		WASHER, HARDENED (5/16 Z)	4
70		SUN GEAR THRUST BUTTON	1
71		PIPE PLUG	2
72	71734007	COUNTERBALANCE VALVE CARTRIDGE	1
73	71733944	CHECK VALVE	1
74	94744147	SEAL KIT (INCLUDE ITEMS # 24, 27, 31, 32, 36, 46 & 49)	1

Winch Parts (71570825)



71570825 PARTS LIST

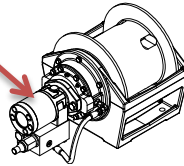
ITEM	PART #	DESCRIPTION	KIT #	QUANTITY
1.	73511107	MOTOR - 100CC (eff. thru 3/23/15)		1
1.	73511341	MOTOR - 125CC (eff. from 3/24/15)		1
2.	73511108	BRAKE UNIT		1
3.	73534498	OIL RETAINER SEAL	41	1
4.		SEAL		1
5.		SLEEVE		1
6.		REDUCTION GEAR UNIT		1
7.		REDUCTION GEAR UNIT		1
8.		SEAL		1
9.		WEDGE-WINCH CABLE		1
10.		SCREW		2
11.	70580215	THIMBLE		1
12.	71415752	CROSS MEMBER		2
13.	71415753	HEX SCREW		16
14.		SEAL		1
15.	73534499	OIL RETAINER SEAL	41	1
16.	73534500	BALL BEARING		1
17.		ANTI-ROTATION FLANGE		1
18.		CAP SCREW, SOCKET HEAD		8
19.		GEAR SIDE SUPPORT		1
20.		CAP SCREW, SOCKET HEAD		4

71570825 PARTS LIST				
ITEM	PART #	DESCRIPTION	KIT #	QUANTITY
21.		REDUCTION GEAR SIDE BODY		1
22.		CAP SCREW, SOCKET HEAD		8
24.		CAP SCREW, SOCKET HEAD		1
25.	73540344	COUNTERBALANCE VALVE ASSEMBLY		1
26.		90° CONNECTION (CONICAL)		2
27.		BRAKE PIPE		1
28.		CAP SCREW, SOCKET HEAD		8
29.		SIDE PANEL, MOTOR SIDE		1
30.	71416303	MOTOR SIDE SUPPORT		1
31.		PLATE		2
32.	73534501	BALL BEARING		1
33.		RETAINING RING		1
34.		PLUG		1
35.		COPPER WASHER	41	1
36.		PROPELLER SHAFT		1
37.		SUN GEAR		1
38.		SUN GEAR		1
39.		WINCH DRUM		1
40.		O-RING JOINT	41	2
41.	94397459	SEAL KIT		1REF
REV. 20110124				

Winch Oil Specifications

The use of proper gear oil and regular preventive maintenance will help extend gear train life and reliable winch brake performance.

Oil Change Frequency (Remove motor to add oil)



Gear oil should be changed after the first 100 hours or 90 days of machine operation, and then every 1000 hours or 6 months, whichever occurs first. Gear oil should also be changed whenever the ambient temperature changes significantly and an oil from a different temperature range would be more appropriate. Check and drain the oil using the fill plug in the winch. The winch should be at least 1/2 full.

Warm-Up Procedure

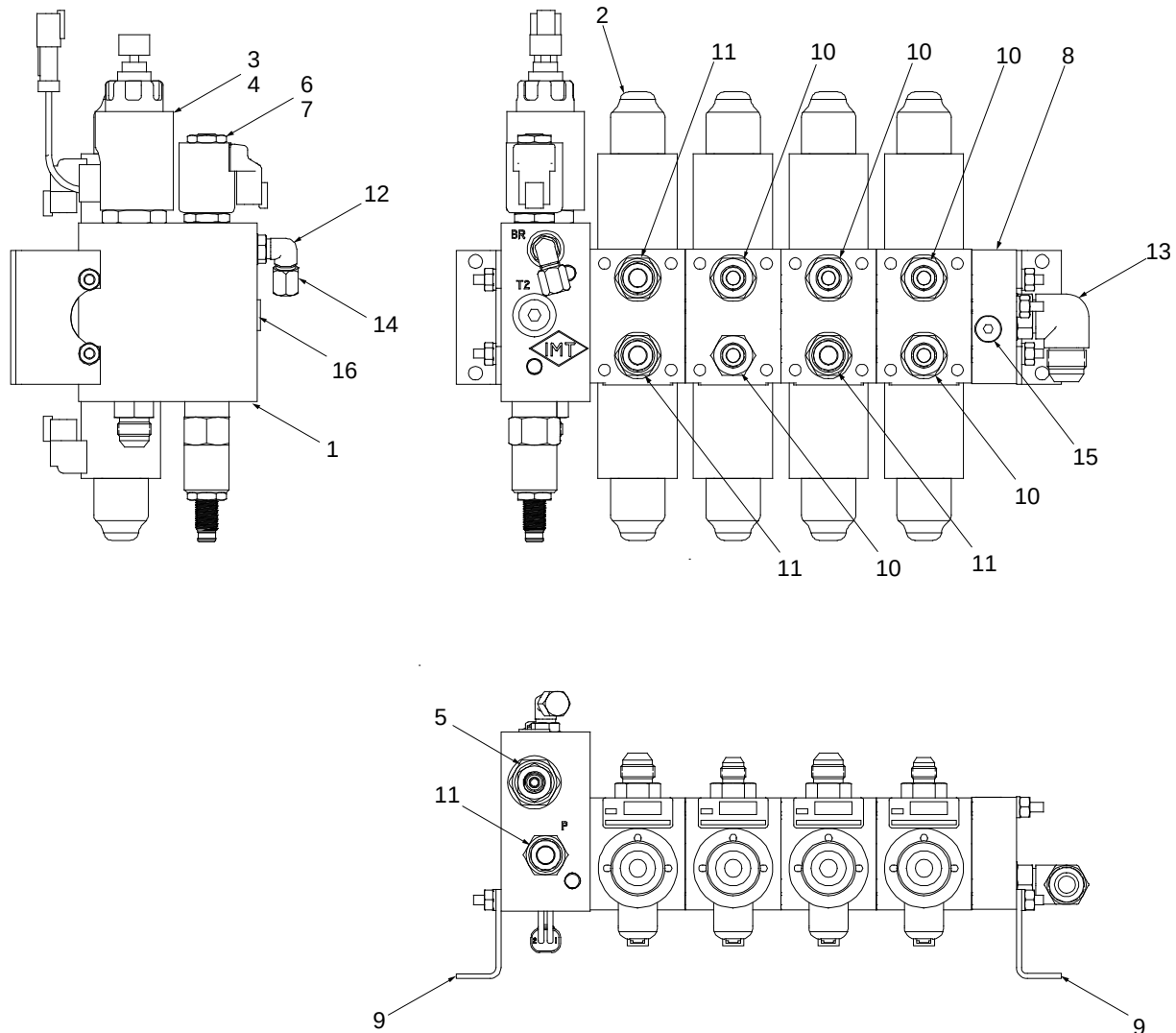
Warming up the winch is recommended at start-up and at ambient temperatures below 40 °F (4 °C). Run the prime mover at its lowest recommended RPM with the hydraulic winch control valve in neutral, allowing sufficient time to warm up the system. Operate the winch at low Aspeeds, forward and reverse, several times to prime all lines with warm hydraulic oil and to circulate gear oil through the planetary gear sets.

Lubricants

The following lubricants are recommended based on ambient temperature. Other lubricants may work equally as well. We suggest you work with your lubricant supplier to find an equivalent product if needed. The winch is initially filled with MobilGear 600 XP150 or equivalent.

Prevailing Ambient Temperature	Recommended Lubricant
25 -130 °F (-4 - 54 °C)	MobilGear 600 XP 220
10 - 100 °F (-12 - 38 °C)	MobilGear 600 XP 150 or equivalent (AGMA 4 EP, ISO VG 150) <i>Note: Avoid using MobilGear 600 XP 150 above 80 °F (27 °C) in severe applications such as offshore lifting, sustained fast duty cycles, or frequent lifting.</i>
-25 - 130 °F (-32 - 54 °C)	Mobil SHC150 synthetic or equivalent

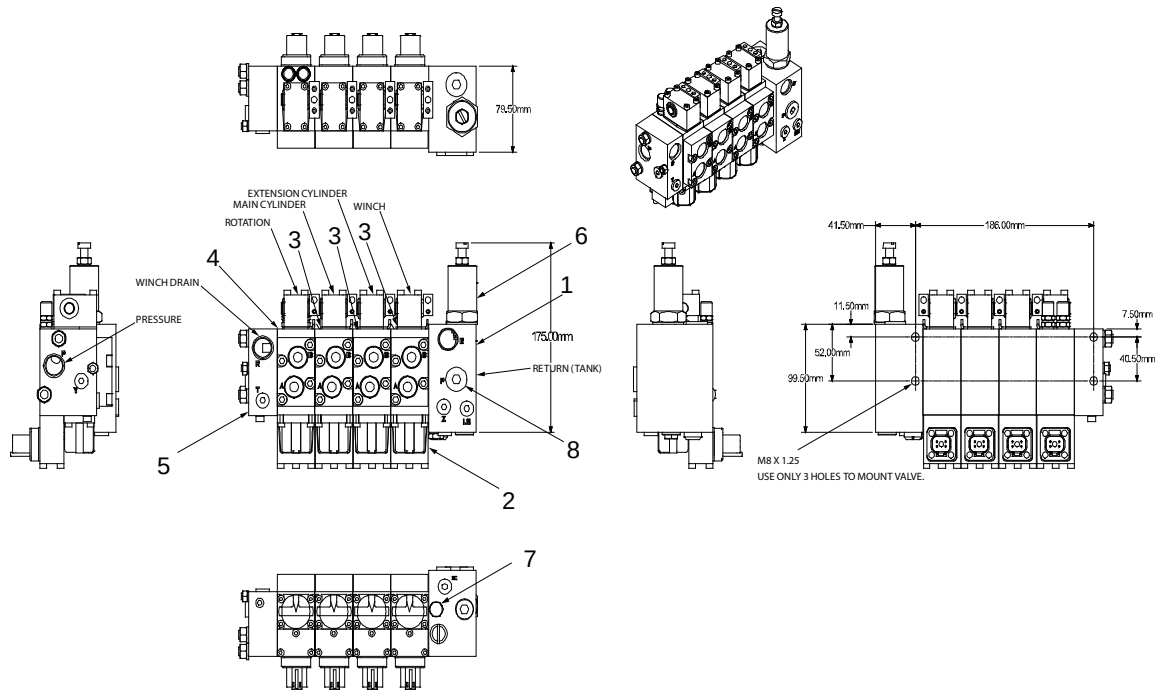
Valve Bank (73734472) Effective 04/25/2016



73734472 PARTS LIST (Effective 04/25/2016)			
ITEM	PART NO.	DESCRIPTION	QTY
1	73540394	VALVE BODY	1
2	73540375	VALVE SECTION	4
3	73540252	VALVE-P. FLOW CONTROL	1
4	73540253	COIL (PART OF #3)	1
5	73540396	RELIEF VALVE	1
6	73540397	VALVE-SPOOL	1
7	73540256	COIL-S SERIES 12VDC DEUTSCH	2
8	73540027	END PLATE	1

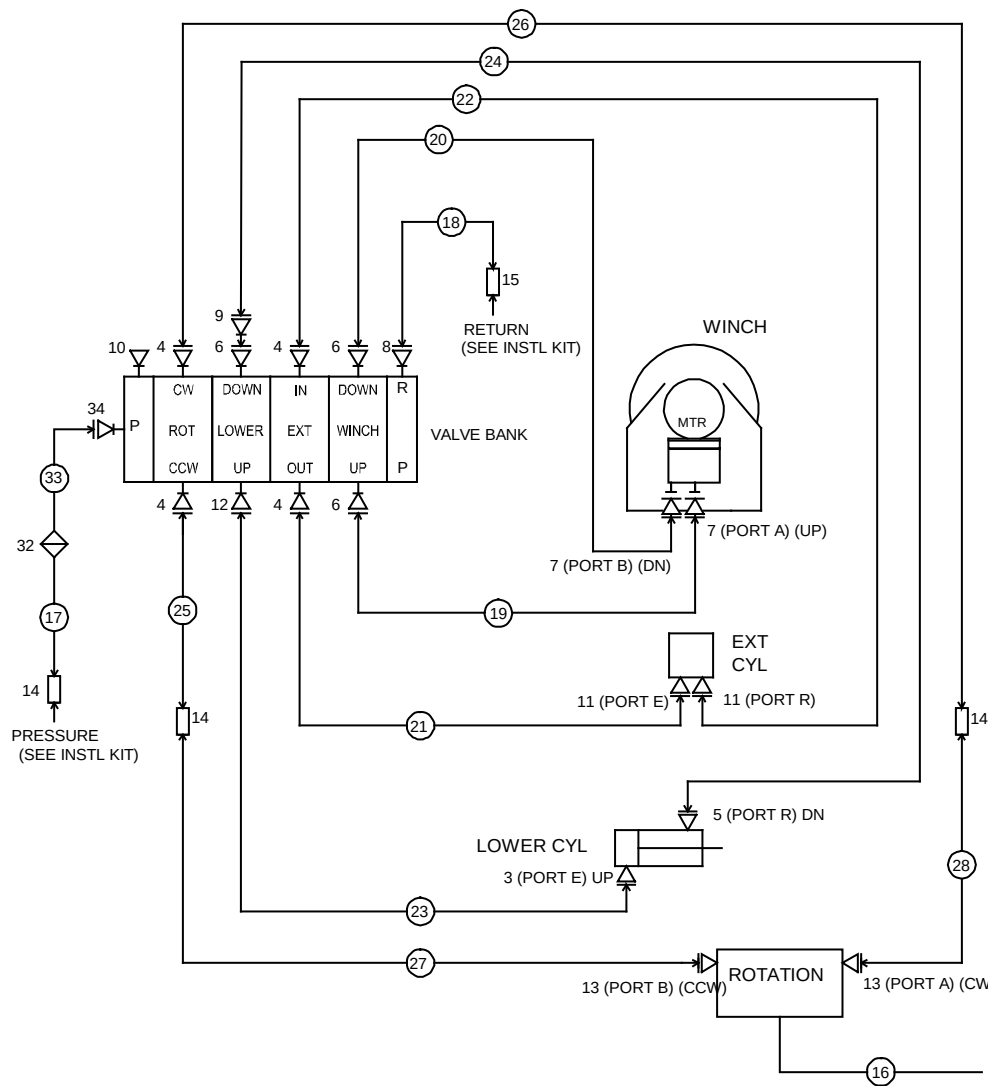
73734472 PARTS LIST (Effective 04/25/2016)			
ITEM	PART NO.	DESCRIPTION	QTY
9	70145830	MOUNTING FOOT	2
10	72532356	ADPTR-M STR/M JIC 8 6	5
11	72532358	ADPTR-M STR/M JIC 8 8	4
12	72053758	ELBOW-M STR/90/M JIC 4 4	1
13	72533507	ELBOW-M STR/90/M JIC 8 10	1
14	72532674	CAP-JIC STL 4 (.44 THD)	2
15	72534560	PLUG-STR SOC HD STL 4 ZERO LEAK	1
16	72534561	PLUG-STR SOC HD STL 6 ZERO LEAK	1
REV. D 20160322			

Valve Bank (73734727) Effective 04/25/2016

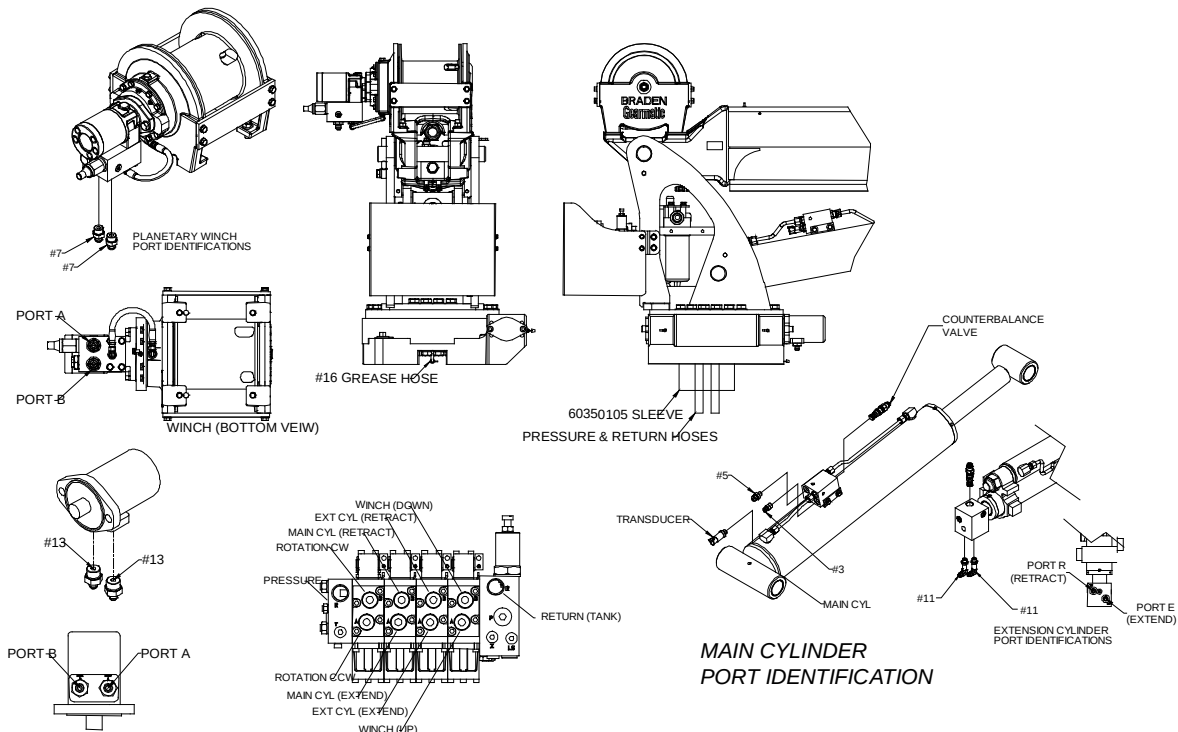


73734727 PARTS LIST (Effective 04/25/2016)			
ITEM	PART NO.	DESCRIPTION	QTY
1	73540534	SECTION-VALVE BANK W PR VALVE	1
2	77040598	COIL-12V DEUTSCH FOR 73734635	4
3	73540535	SECTION-VALVE BANK 10 GPM	3
4	73540536	SECTION-VALVE BANK 10 GPM ADJ	1
5	73540537	SECTION-VALVE BANK WO PR VALVE	1
6	73540538	VALVE-PRESSURE RELIEF	1
7	73734728	SCREW-DAMPENING VALVE G	1
8	72532686	PLUG-STR HOL HEX STL 8 (.75 THD)	1
REV. C 20160322			

Hydraulic Schematic Fully Proportional (99906028) Effective 04/25/2016



99906028-1 Effective 04/25/2016



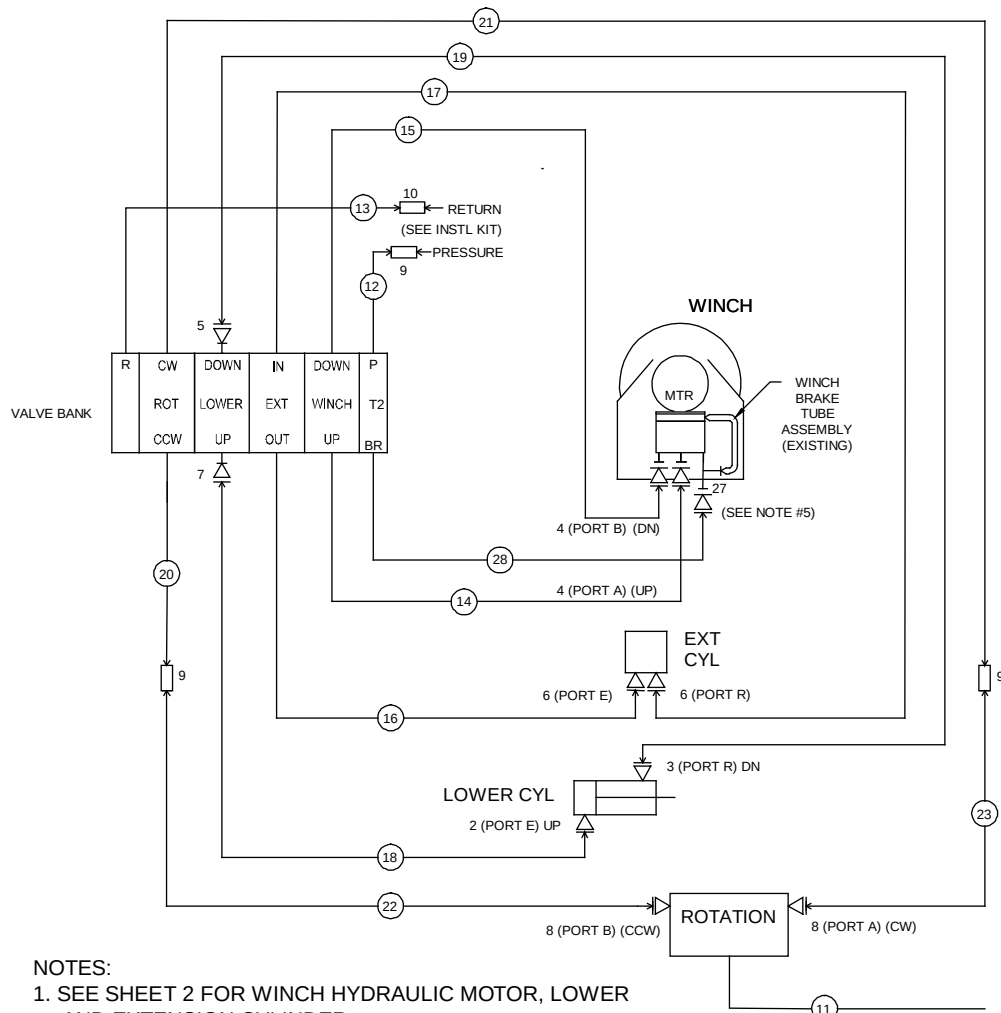
**HYDRAULIC MOTOR
PORT IDENTIFICATIONS
(ROTATION)**
NOTES:

1. INSTALL SLEEVE #29, 60350141, ON EXTENSION CYLINDER, LOWER CYLINDER AND ROTATION HOSES.
2. INSTALL SLEEVE #30, 603520142, ON WINCH HOSES, PRESSURE AND RETURN VALVE BANK HOSES.
3. INSTALL SLEEVE #31, 60350105, ON PRESSURE AND RETURN HOSES, ROTATION HOSES THROUGH THE MAST.

99906028 PARTS LIST (Effective 04/25/2016)				
ITEM	PART NO	DESCRIPTION	KIT	QTY
1	91726825	KIT-HYD BG4-BG60 SERIES III FP	1	1
2	73734727	VALVE BANK-4SEC 4R 10GPM TELE PROP 12V G	1	1 ref
3	72532355	ADPTR-M STR/M JIC 6 6	1	1
4	72532356	ADPTR-M STR/M JIC 8 6	1	4
5	72532357	ADPTR-M STR/M JIC 6 8	1	1
6	52532358	ADPTR-M STR/M JIC 8 8	1	4
7	72532359	ADPTR-M STR/M JIC 10 8	1	2
8	72532361	ADPTR-M STR/M JIC 8 10	1	1
9	72532670	ELBOW-M JIC/45/F JIC 8 8	1	1
10	72532686	PLUG-STR SOC HD STL 8 (.75 THD)	1	1
11	72532700	ELBOW-M STR/90/M JIC XLG 6 6	1	2

99906028 PARTS LIST (Effective 04/25/2016)				
ITEM	PART NO	DESCRIPTION	KIT	QTY
12	72533583	ELBOW-M STR/45/M JIC 8 6	1	1
13	72533613	ADPTR-M STR/M JIC 10 6	1	2
14	72533648	SWIVEL-M JIC/90/M JIC 8 8	1	3
15	72534412	SWIVEL-M JIC/90/M JIC 10 10	1	1
16	51395121	HOSE-AA .13 X 13.50 (2-2) 100R17	1	1
17	51399890	HOSE-FJJ .50 X 40.00 (8-8) 100R17	1	1
18	51397080	HOSE-FJ .62 X 30.00 (10-10) 100R17	1	1
19	51397081	HOSE-FZ .50 X 31.50 (8-8) 100R17	1	1
20	51397082	HOSE-FJ .50 X 31.00 (8-8) 100R17	1	1
21	51396886	HOSE-FZ .38 X 25.00 (6-6) 100R17	1	1
22	51396887	HOSE-FJ .38 X 24.50 (6-6) R10017	1	1
23	51399077	HOSE-FJ .38 X 29.00 (6-6) 100R17	1	1
24	51399078	HOSE-FZ .50 X 30.00 (8-8) 100R17	1	1
25	51399072	HOSE-FJ .38 X 22.50 (8-6) 100R17	1	1
26	51399073	HOSE-FZ .38 X 25.00 (8-6) 100R17	1	1
27	51399228	HOSE-FJ .38 X 18.00 (8-6) 100R17	1	1
28	51399229	HOSE-FJ .38 X 22.00 (8-6) 100R17	1	1
29	60350141	SLEEVE-HOSE NHS-159 X 12 CUT & SEALED	1	3
30	60350142	SLEEVE-HOSE NHS-254 X 15 CUT & SEALED	1	2
31	60350105	SLEEVE-HOSE NHS-254 X 15 CUT & SEALED		1
32	73052156	FILTER-PRES 4000PSI 25GPM 10MIC -12		1
33	71415691	TUBE ASM-PRESSURE FILTER S3FP SMALL MAST		1
34	72534898	O-RING EXTENDER 08-08		1
REV. A 20160322				

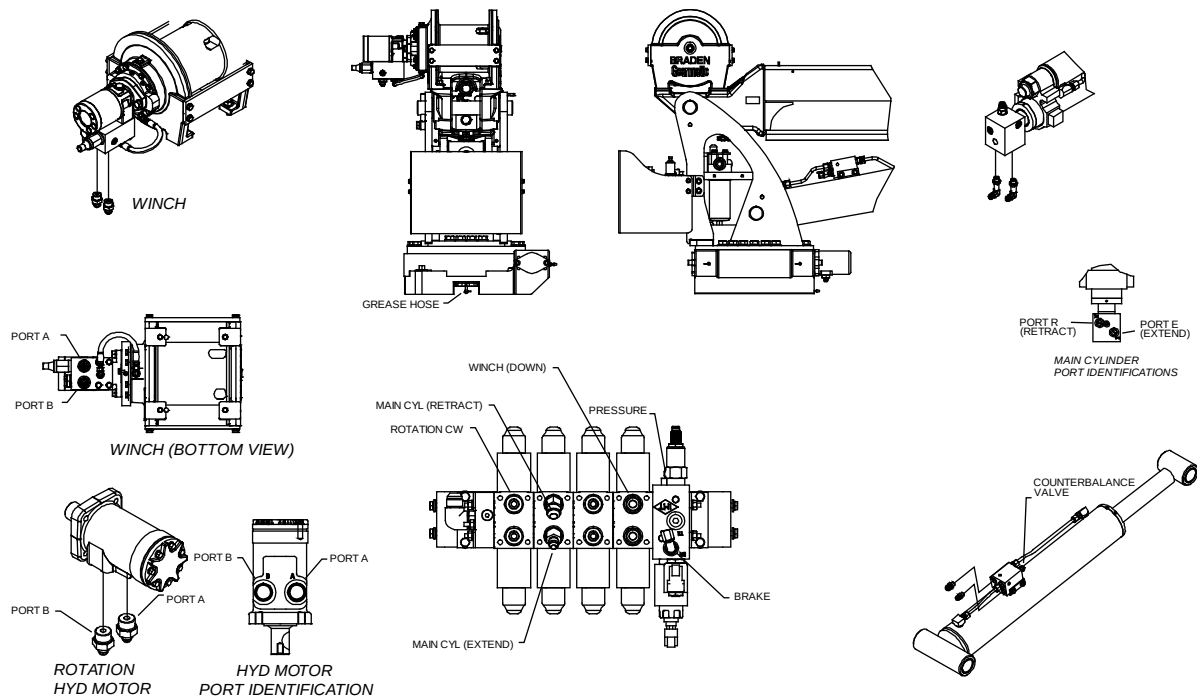
Hydraulic Schematic Single Proportional (99906029) Effective 04/25/2016



NOTES:

1. SEE SHEET 2 FOR WINCH HYDRAULIC MOTOR, LOWER AND EXTENSION CYLINDER.
2. INSTALL 603050141 ON EXTENSION CYLINDER, MAIN CYLINDER HOSES AND ROTATION HOSES.
3. INSTALL 60350142 ON WINCH HOSES , PRESSURE AND RETURN VALVE BANK HOSES.
4. INSTALL 60350105 ON PRESURE AND RETURN HOSES AND ROTATION HOSES THROUGH MAST.
5. REMOVE BRAKE HOSE FROM FITTING IN WINCH MOTOR BLOCK. REMOVE AND REPLACE FITTING WITH TEE (ITEM #27). RE-INSTALL HOSE ONTO TEE.

99906029-1 Effective 04/25/2016



VALVE BANK
PORT IDENTIFICATION

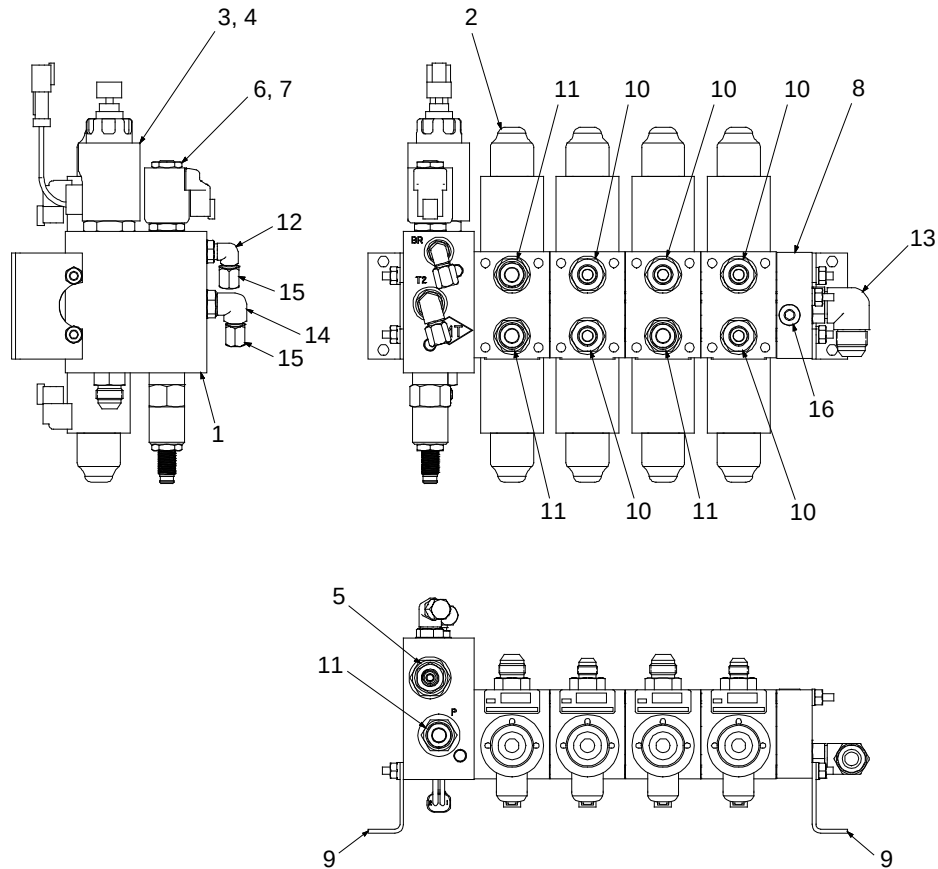
NOTES:

1. INSTALL SLEEVE #29, 60350141, ON EXTENSION CYLINDER, LOWER CYLINDER AND ROTATION HOSES.
2. INSTALL SLEEVE #30, 603520142, ON WINCH HOSES, PRESSURE AND RETURN VALVE BANK HOSES.
3. INSTALL SLEEVE #31, 60350105, ON PRESSURE AND RETURN HOSES, ROTATION HOSES THROUGH THE MAST.

99906029 PARTS LIST (Effective 04/25/2016)				
ITEM	PART NO.	DESCRIPTION	KIT	QTY
1	91726824	KIT-HYD BG4-BG6 SERIES III SP		1
2	72532355	ADPTR-M STR/M JIC 6 6	1	1
3	73532357	ADPTR-M STR/M JIC 6 8	1	1
4	72532359	ADPTR-M STR/M JIC 10 8	1	2
5	72532670	ELBOW-M JIC/45/F JIC 8 8	1	1
6	72532700	ELBOW-M STR/90/M JIC XLG 6 6	1	2
7	72533583	ELBOW-M STR/45/M JIC 8 6	1	1
8	72533613	ADPTR-M STR/M JIC 10 6	1	2
9	72533648	SWIVEL-M JIC/90/M JIC 8 8	1	3
10	72534412	SWIVEL-M JIC/90/M JIC 10 10	1	1

99906029 PARTS LIST (Effective 04/25/2016)				
ITEM	PART NO.	DESCRIPTION	KIT	QTY
11	51395121	HOSE-AA .13 X 13.50 (2-2) 100R17	1	1
12	51396017	HOSE-FJ .50 X 30.00 (8-8) 100R16	1	1
13	51397080	HOSE-FJ .62 X 30.00 (10-10) 100R17	1	1
14	51397081	HOSE-FZ .50 X 31.50 (8-8) 100R17	1	1
15	51397082	HOSE-FJ .50 X 31.00 (8-8) 100R17	1	1
16	51396886	HOSE-FZ .38 X 25.00 (6-6) 100R17	1	1
17	51396887	HOSE-FJ .38 X 24.50 (6-6) R10017	1	1
18	51399462	HOSE-FJ .38 X 31.00 (6-6) 100R17	1	1
19	51399463	HOSE-FZ .50 X 32.00 (8-8) 100R17	1	1
20	51399072	HOSE-FJ .38 X 22.50 (8-6) 100R17	1	1
21	51399073	HOSE-FZ .38 X 25.00 (8-6) 100R17	1	1
22	51399228	HOSE-FJ .38 X 18.00 (8-6) 100R17	1	1
23	51399229	HOSE-FJ .38 X 22.00 (8-6) 100R17	1	1
24	60350142	SLEEVE-HOSE NHS-159 X 12 CUT & SEALED	1	3
25	60350142	SLEEVE-HOSE NHS-254 X 15 CUT & SEALED	1	2
26	51726820	KIT-BRADEN WINCH BRAKE RELEASE		1
27	72534582	TEE-STL STR/JIC/JIC 4 4 4 RUN	26	1
28	51399908	HOSE-FF .25 X 32.00 (4-4) 100R17	26	1
REV. A 20160324				

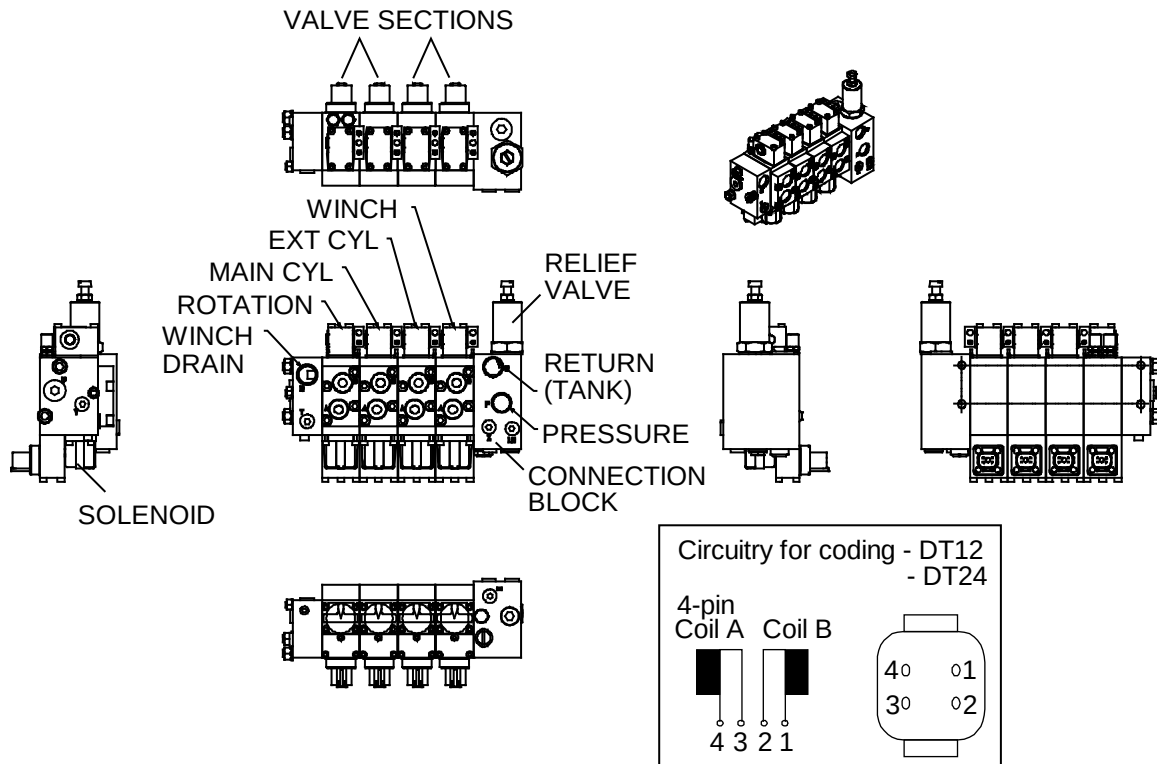
Valve Bank (73734472)



73734472 PARTS LIST			
ITEM	PART #	DESCRIPTION	QTY
1.	73540394	VALVE BODY	1
2.	73540375	VALVE SECTION	4
3.	73540252	VALVE-P. FLOW CONTROL	1
4.	73540253	COIL (PART OF #3)	1
5.	73540396	RELIEF VALVE	1
6.	73540397	VALVE-SPOOL	1
7.	73540256	COIL-S SERIES 12VDC DEUTSCH	1
8.	73540027	END PLATE	1
9.	70145830	MOUNTING FOOT	2
10.	72532356	ADPTR-M STR/M JIC 8 6	5
11.	72532358	ADPTR-M STR/M JIC 8 8	4
12.	72053758	ELBOW-M STR/90/M JIC 4 4	1
13.	72533507	ELBOW-M STR/90/M JIC 8 10	1
14.	72532699	ELBOW-M STR/90/M JIC 6 4	1
15.	72532674	CAP-JIC STL 4 (.44 THD)	2
16.	72534561	PLUG-STR SOC HD STL 6 ZERO LEAK	1
REV C 20140908			

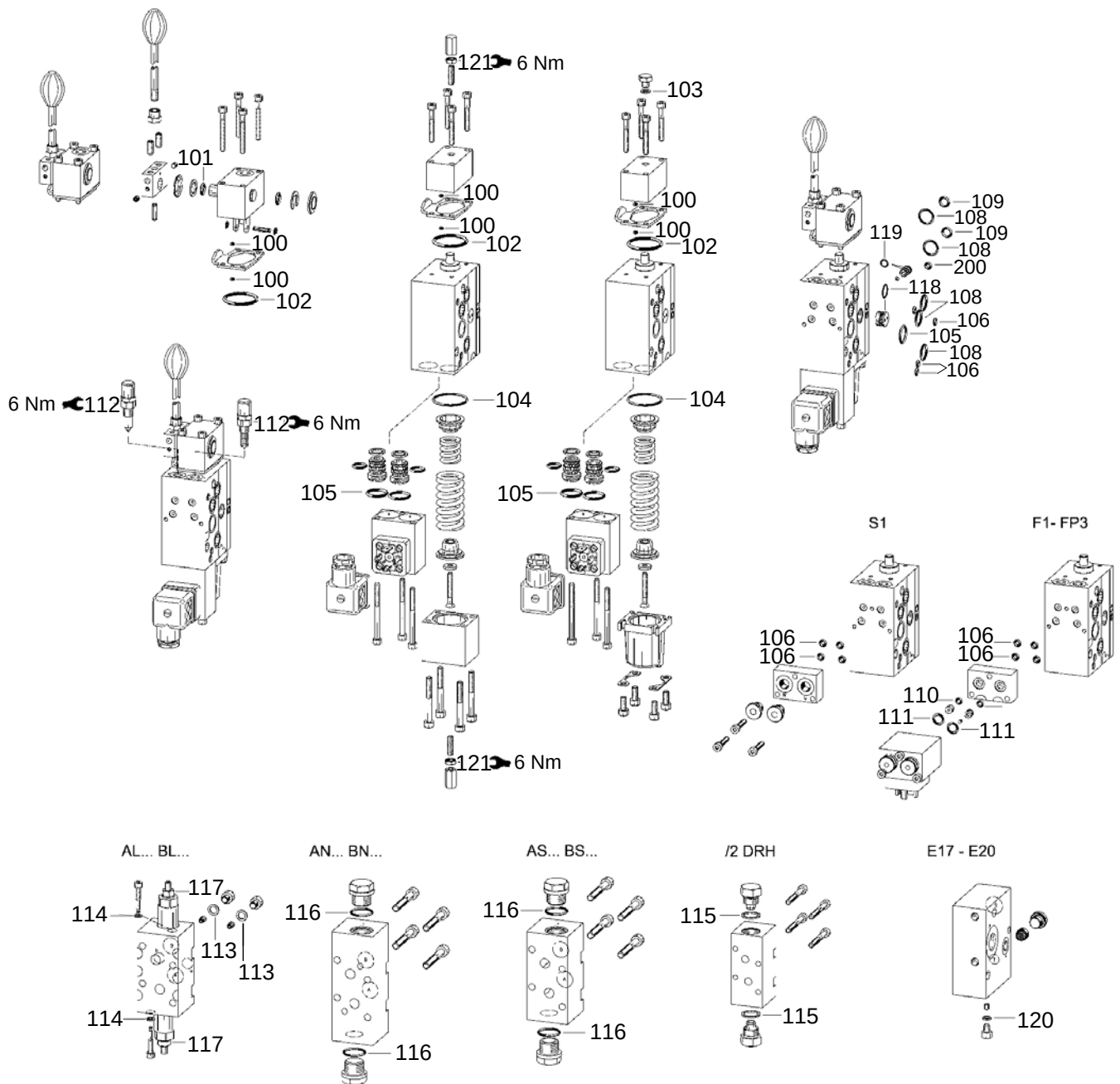
Valve Bank (73734727)

WAS 73734635 THROUGH S/N 9500121008.



73734727 PARTS LIST		
PART #	DESCRIPTION	QUANTITY
94399213	SEAL KIT, CONNECTION BLOCK	1
94399214	SEAL KIT, SEALS BETWEEN SECTIONS	1
77041898	SOLENOID, 12V	4
77040598	12V COIL FOR 77041898 SOLENOID	

Seal Kit for 73734727 (94399214)



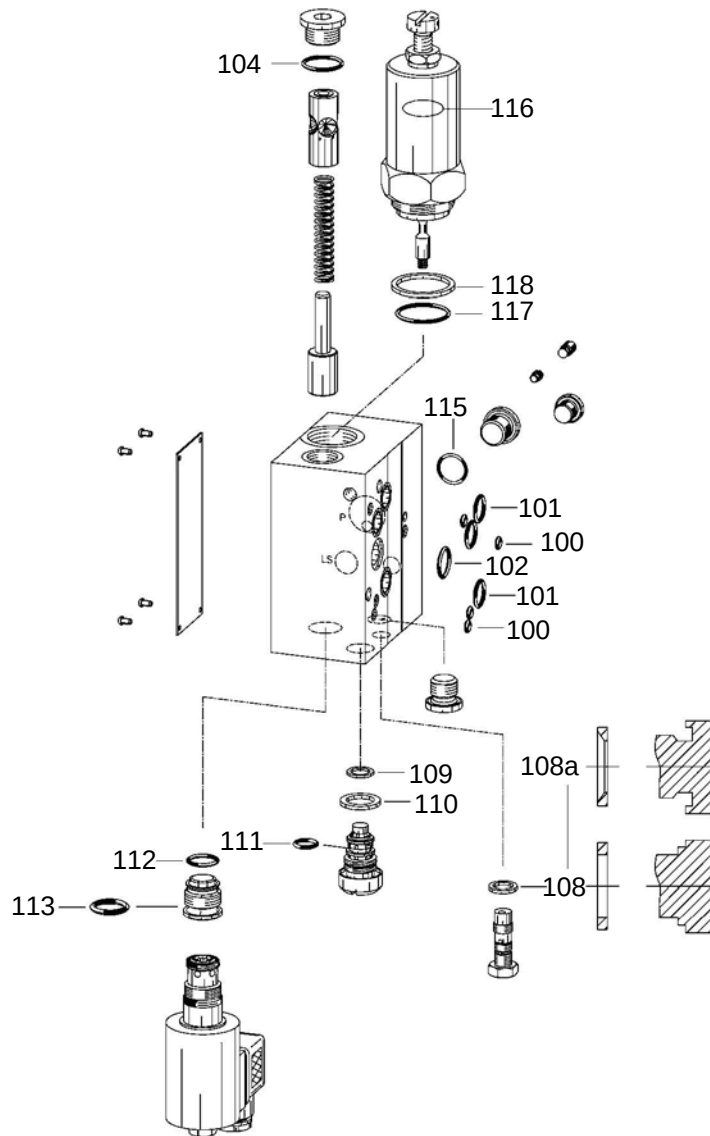
94399214 SEAL KIT PARTS

ITEM	DESCRIPTION	DETAILS	QUANTITY
100.	O-RING	1.78 x 1.02 mm	2
101.	O-RING	6.75 x 1.75 mm P5001	2
102.	O-RING	25.07 x 2.62 mm Z24	1
103.	USIT-RING	ST 37 STANDARD	1

94399214 SEAL KIT PARTS			
ITEM	DESCRIPTION	DETAILS	QUANTITY
104.	O-RING	26.7 x 1.78 mm Z24	1
105.	O-RING	12.42 x 1.78 mm P5001	3
106.	O-RING	2.90 x 1.78 mm Z24	8
108.	O-RING	10.82 x 1.78mm P5001	6
109.	O-RING	6.07 x 1.78 mm P5001	4
110.	O-RING	3 x 1.5 mm	2
111.	O-RING	6.75 x 1.78 mm P5001	2
112.	SEAL NUT		2
113.	USIT-RING	ST 37 STANDARD	2
114.	COPPER RING	4 x 8 x 1 mm	2
115.	SOFT IRON SEAL RING		2
116.	O-RING	17.17 x 1.78 mm P5001	2
117.	SEAL-LOCK COLLAR NUT	M6 12 x 1	2
118.	O-RING	10.00 x 1.00 mm P5001	1
119.	O-RING	5.00 x 1.00 mm P5001	2
120.	COPPER RING	5 x 7.5 x 1 mm	1
121.	SEAL NUT		2

NOTE: These seals are all part of 94399214, and cannot be purchased individually.

Connection Block Seal Kit for 73734727 (94399213)

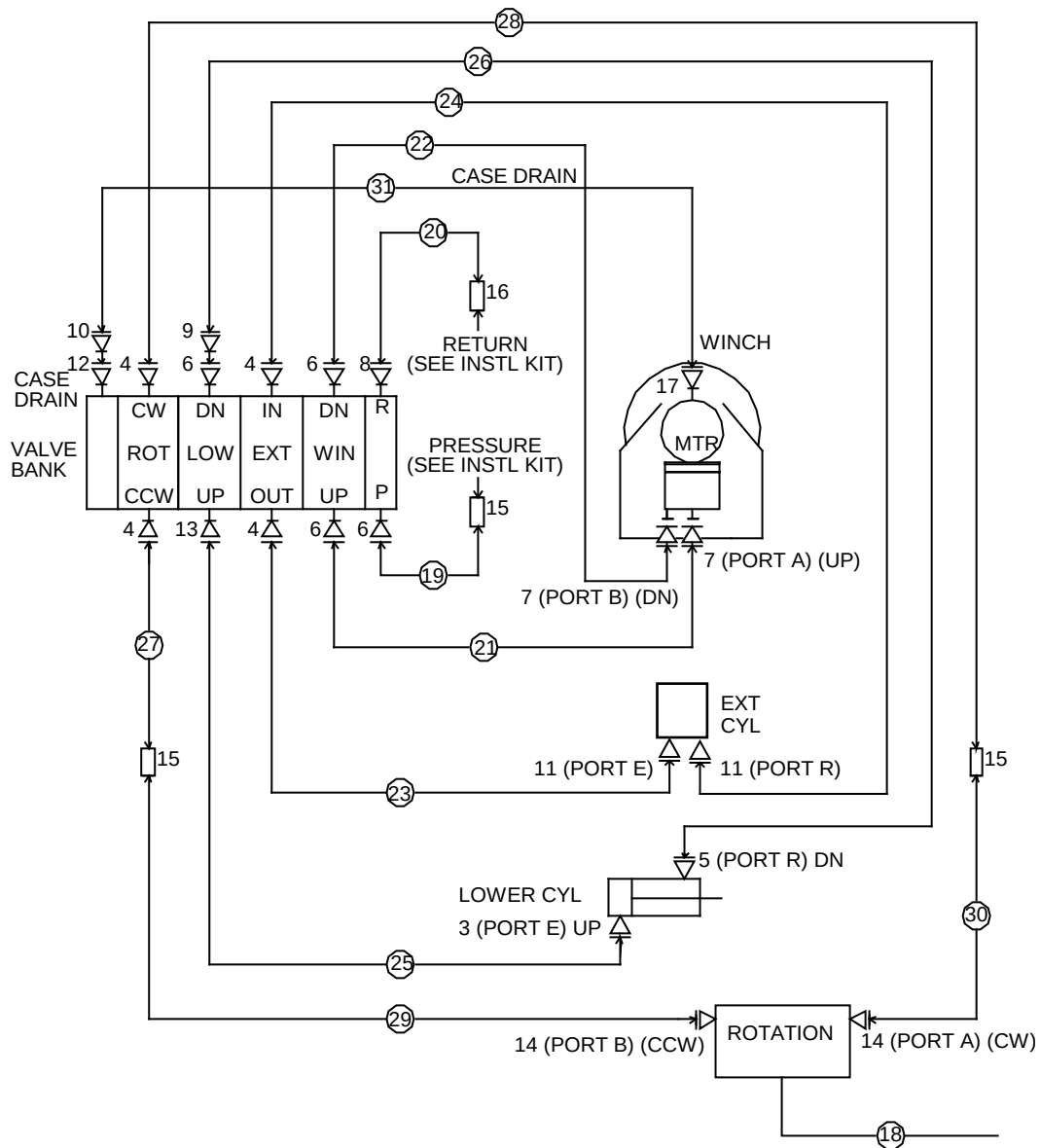


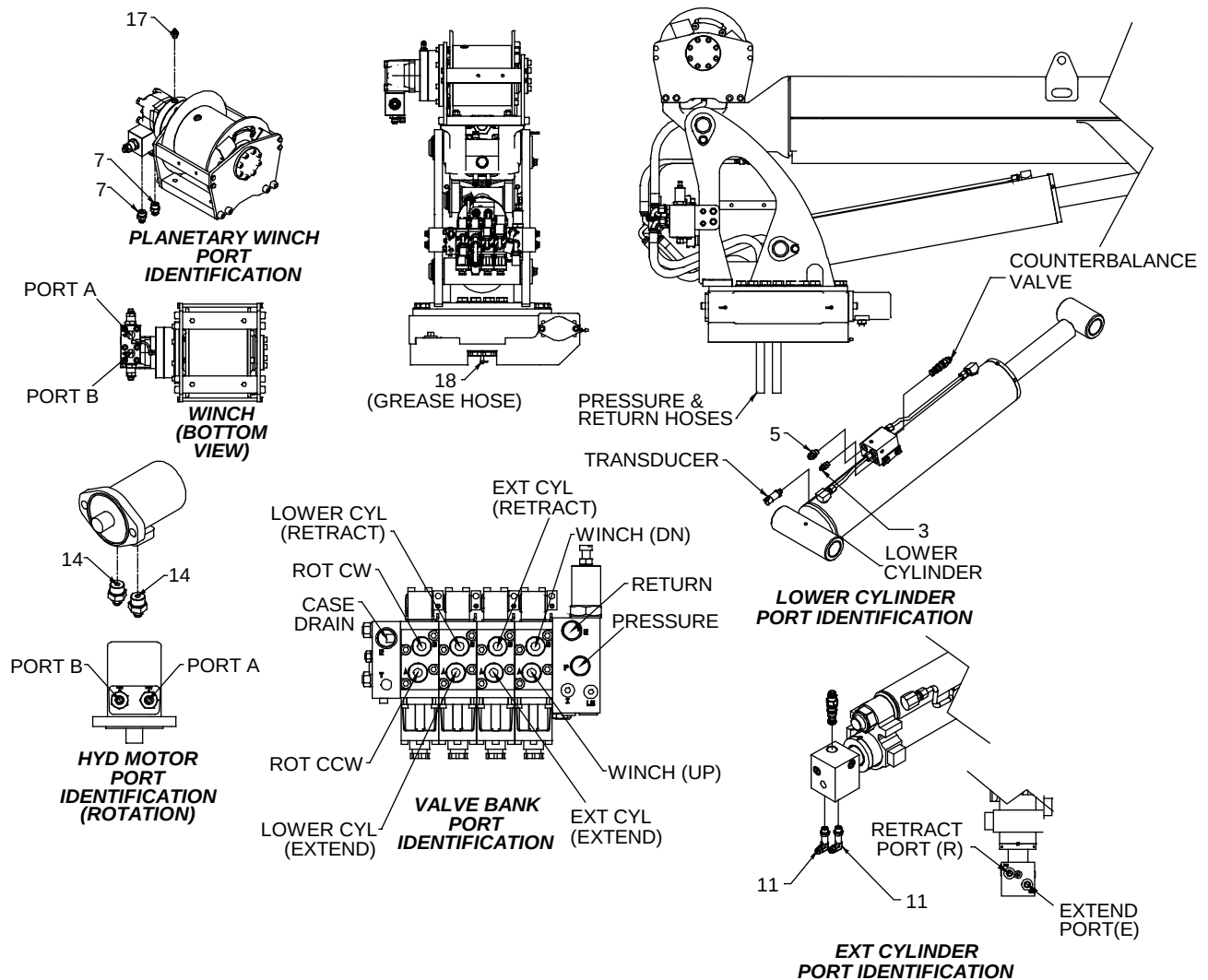
CONNECTION BLOCK SEAL KIT FOR 73734727 (94399213)			
ITEM	DESCRIPTION	DETAILS	QUANTITY
100.	O-RING	2.90x1.78 Z24	4
101.	O-RING	10.82x1.78 P5001	3
102.	O-RING	12.42x1.78 P5001	1
104.	O-RING	17.17 x 1.78 P 5001	1
108.	COPPER RING	SHAPE A DIN 7603 10X14X1.5-Cu	1
108a.	FITTING SEAL		1
109.	SEAL RING	8.3X11X1.15 PTFE 7625 109/1	1
110.	SEAL	1/4" DRV	1
111.	O-RING	9X1.5 NBR 90 SH	1

CONNECTION BLOCK SEAL KIT FOR 73734727 (94399213)			
ITEM	DESCRIPTION	DETAILS	QUANTITY
112.	O-RING	12.42x1.78 P5001	1
113.	O-RING	14.03x2.61 P5001 94 Sh A	1
115.	SEAL	G 1/4" DRV 100116-NB 650 NBR	2
116.	O-RING	15X2 HNBR 90 SH RED SPOT	1
117.	O-RING	23.52X1.78 HNBR 90 SH RED SPOT	1
118.	SEAL RING	27X32X2 ST	1

NOTE: These seals are all part of 94399213, and cannot be purchased individually.

Hydraulic Schematic Fully Proportional (99905018)



**NOTES:**

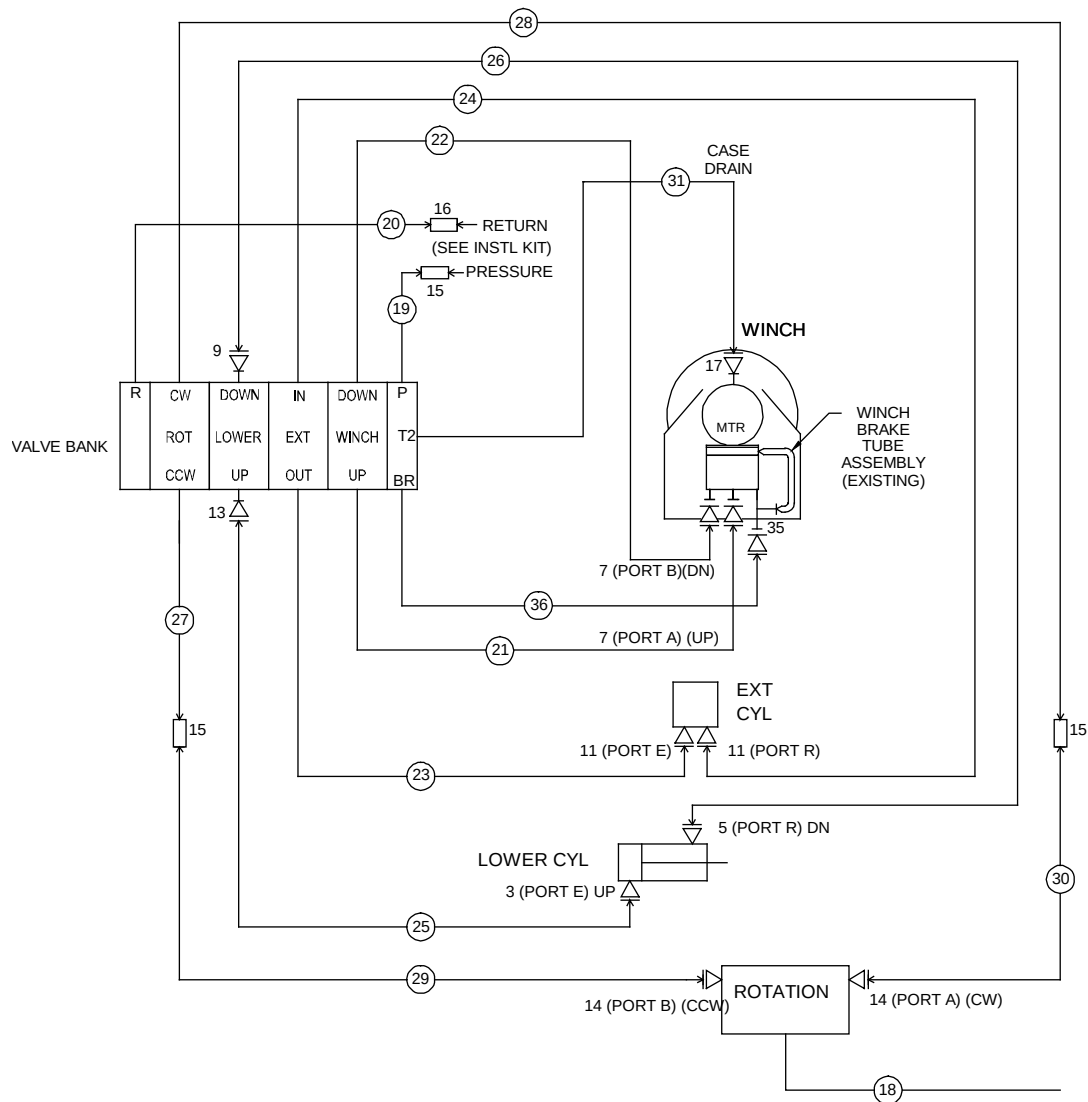
- 1 INSTALL SLEEVE #32, 60350141, ON EXTENSION CYLINDER, LOWER CYLINDER AND ROTATION HOSES.
- 2 INSTALL SLEEVE #33, 60350142, ON WINCH HOSES AND PRESSURE & RETURN VALVE BANK HOSES.
- 3 INSTALL SLEEVE #34, 60350105, ON PRESSURE & RETURN HOSES AND ROTATION HOSES THROUGH THE MAST.

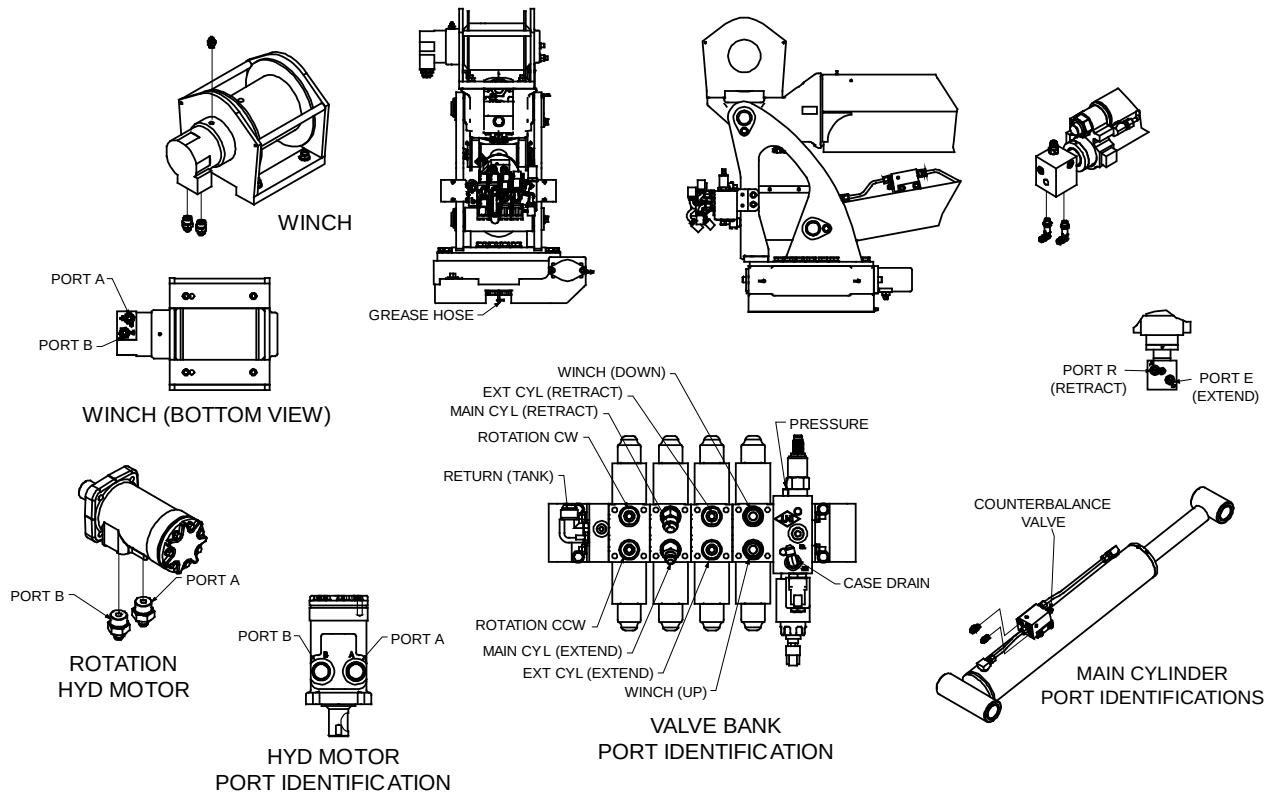
99905018 PARTS LIST

ITEM	PART #	DESCRIPTION	DETAILS	KIT #	QTY
1.	91723601	HYDRAULIC KIT-A40-60			1
2.	73734727	VALVE BANK (WAS 73734635)	4SECTION 10 GPM PROPORTIONAL		1 REF
3.	72532355	ADAPTER	M STR/M JIC 6 6	#1	1
4.	72532356	ADAPTER	M STR/M JIC 8 6	#1	4
5.	72532357	ADAPTER	M STR/M JIC 6 8	#1	1
6.	72532358	ADAPTER	M STR/M JIC 8 8	#1	4
7.	72532359	ADAPTER	M STR/M JIC 10 8	#1	2
8.	72532361	ADAPTER	M STR/M JIC 8 10	#1	1
9.	72532670	ELBO W	M JIC/45/F JIC 8 8	#1	1

99905018 PARTS LIST					
ITEM	PART #	DESCRIPTION	DETAILS	KIT #	QTY
10.	72532690	ELBOW	M JIC/90/F JIC SW 4 4	#1	1
11.	72532700	ELBOW	M STR/90/M JIC XLG 6 6	#1	2
12.	72532792	ADAPTER	M STR/M JIC 8 4	#1	1
13.	72533583	ELBO W	M STR/45/M JIC 8 6	#1	1
14.	72533613	ADAPTER	M STR/M JIC 10 6	#1	2
15.	72533648	SWIVEL	M JIC/90/M JIC 8 8	#1	3
16.	72534412	SWIVEL	M JIC/90/M JIC 10 10	#1	1
17.	72533490	ADAPTER	M BSPP/M JIC 4 4	#1	1
18.	51395121	HOSE-AA	.13 X 13.50 (2-2) 100R17	#1	1
19.	51396017	HOSE-FJ	.50 X 30.00 (8-8) 100R16	#1	1
20.	51397080	HOSE-FJ	.62 X 30.00 (10-10) 100R17	#1	1
21.	51397081	HOSE-FZ	.50 X 31.50 (8-8) 100R17	#1	1
22.	51397082	HOSE-FJ	.50 X 31.00 (8-8) 100R17	#1	1
23.	51396886	HOSE-FZ	.38 X 25.00 (6-6) 100R17	#1	1
24.	51396887	HOSE-FJ	.38 X 24.50 (6-6) R10017	#1	1
25.	51399077	HOSE-FJ	.38 X 29.00 (6-6) 100R17	#1	1
26.	51399078	HOSE-FZ	.50 X 30.00 (8-8) 100R17	#1	1
27.	51399072	HOSE-FJ	.38 X 22.50 (8-6) 100R17	#1	1
28.	51399073	HOSE-FZ	.38 X 25.00 (8-6) 100R17	#1	1
29.	51399228	HOSE-FJ	.38 X 18.00 (8-6) 100R17	#1	1
30.	51399229	HOSE-FJ	.38 X 22.00 (8-6) 100R17	#1	1
31.	51399074	HOSE-FJ	.25 X 32.00 (4-4) 100R2	#1	1
32.	60350141	SLEEVE-HOSE	159 X 12 CUT & SEALED	#1	3
33.	60350142	SLEEVE-HOSE	254 X 15 CUT & SEALED	#1	2
34.	60350105	SLEEVE-HOSE	WRAP AROUND, 4 IN DIA.		1
REV F 20120815					

Hydraulic Schematic Single Proportional (99905596)



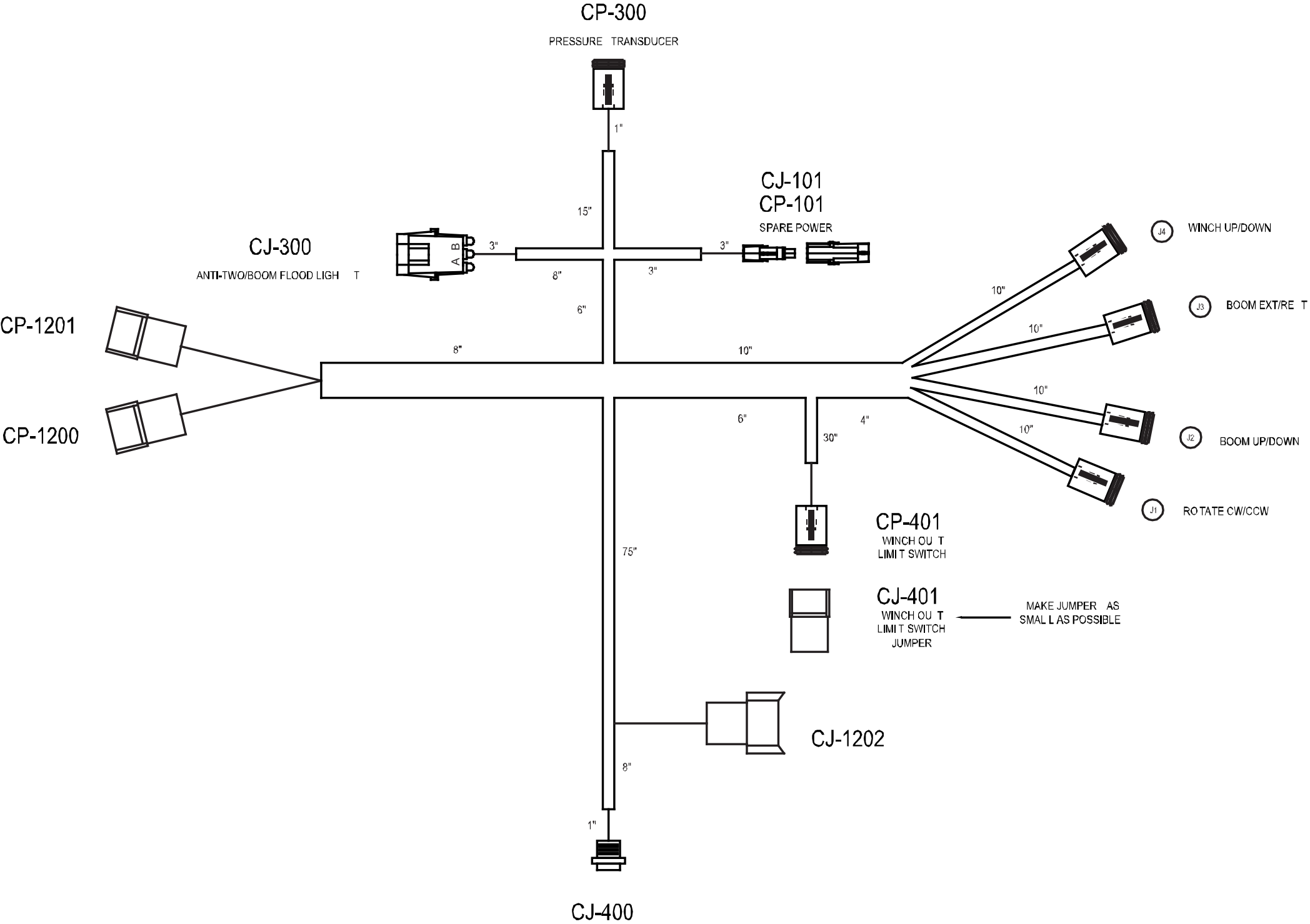
**NOTES:**

- 1 INSTALL SLEEVE #32, 60350141, ON EXTENSION CYLINDER, LOWER CYLINDER AND ROTATION HOSES.
- 2 INSTALL SLEEVE #33, 60350142, ON WINCH HOSES AND PRESSURE & RETURN VALVE BANK HOSES.
- 3 INSTALL SLEEVE #34, 60350105, ON PRESSURE & RETURN HOSES AND ROTATION HOSES THROUGH THE MAST.

99905596 PARTS LIST					
ITEM	PART #	DESCRIPTION	DETAILS	KIT #	QTY
1.	91725088	HYDRAULIC KIT-A40-60			
2.	73734472	VALVE BANK			1 REF
3.	72532355	ADAPTER	M STR/M JIC 6 6	#1	1
5.	72532357	ADAPTER	M STR/M JIC 6 8	#1	1
7.	72532359	ADAPTER	M STR/M JIC 10 8	#1	2
9.	72532670	ELBOW	M JIC/45/F JIC 8 8	#1	1
11.	72532700	ELBOW	M STR/90/M JIC XLG 6 6	#1	2
13.	72533583	ELBOW	M STR/45/M JIC 8 6	#1	1
14.	72533613	ADAPTER	M STR/M JIC 10 6	#1	2
15.	72533648	SWIVEL	M JIC/90/M JIC 8 8	#1	3
16.	72534412	SWIVEL	M JIC/90/M JIC 10 10	#1	1
17.	72533490	ADAPTER	M BSPP/M JIC 4 4	#1	1
18.	51395121	HOSE-AA	.13 X 13.50 (2-2) 100R17	#1	1
19.	51396017	HOSE-FJ	.50 X 30.00 (8-8) 100R17	#1	1
20.	51397080	HOSE-FJ	.62 X 30.00 (10-10) 100R17	#1	1
21.	51397081	HOSE-FZ	.50 X 31.50 (8-8) 100R17	#1	1
22.	51397082	HOSE-FJ	.50 X 31.00 (8-8) 100R17	#1	1
23.	51396886	HOSE-FZ	.38 X 25.00 (6-6) 100R17	#1	1

99905596 PARTS LIST					
ITEM	PART #	DESCRIPTION	DETAILS	KIT #	QTY
24.	51396887	HOSE-FJ	.38 X 24.50 (6-6) 100R17	#1	1
25.	51399462	HOSE-FJ	.38 X 31.00 (6-6) 100R17	#1	1
26.	51399463	HOSE-FZ	.50 X 32.00 (8-8) 100R17	#1	1
27.	51399072	HOSE-FJ	.38 X 22.50 (8-6) 100R17	#1	1
28.	51399073	HOSE-FZ	.38 X 25.00 (8-6) 100R17	#1	1
29.	51399228	HOSE-FJ	.38 X 18.00 (8-6) 100R17	#1	1
30.	51399229	HOSE-FJ	.38 X 22.00 (8-6) 100R17	#1	1
31.	51396344	HOSE-FJ	.25 X 46.00 (4-4) 100R17	#1	1
32.	60350141	SLEEVE-HOSE	NHS-159 X 12 CUT & SEALED	#1	3
33.	60350142	SLEEVE-HOSE	NHS-254 X 15 CUT & SEALED	#1	2
34.	51726252	KIT	DINAMIC WINCH BRAKE RELEASE		1
35.	72534910	TEE-STL	MBSPT/MDIN/MDIN 2 6 6 RUN	#34	1
36.	51399668	HOSE-FDF	.25 X 32.00 (6-4) 100R17	#34	1
REV D 20151008					

Radio Remote Harness (77441481)



Radio Remote Harness (77441481)

LOCATOR CODE: CP-101				WEATHERPACK: 12015791		
TERM: 12124580				SEAL: 12015323		
CAVIT Y	COLOR	GA.	PRIN T L ABE L	TO	CON-SPLC	CAVIT Y
A	WHT	16	SPARE PWR	TO	CJ-1202	9

LOCATOR CODE: CJ-101				WEATHERPACK: 12010996		
TERM: -				PLUG: 12010300		
CAVIT Y	COLOR	GA.	PRIN T L ABE L	TO	CON-SPLC	CAVIT Y
A	-	-	-	TO	-	-

LOCATOR CODE: CP-300				DEUTSCH: DT06-3S		
TERM: 0462-201-16141				WEDGE: W3S PLUG: 114017		
CAVIT Y	COLOR	GA.	PRIN T L ABE L	TO	CON-SPLC	CAVIT Y
A	WHT	16	TRANS PWR	TO	SPL P	-
B	WHT	16	TRANS SIG	TO	CP-1200	11
C	-	-	-	TO	-	-

LOCATOR CODE: CJ-300				PACKARD: 12010717		
TERM: 12124582				SEAL: 12015323/12010293		
CAVIT Y	COLOR	GA.	PRIN T L ABE L	TO	CON-SPLC	CAVIT Y
A	WHT	16	GROUND	TO	SPL G	-
B	WHT	16	A2B SIG	TO	CP-1200	8
C	WHT	14	BOOM FLD LT	TO	CJ-1202	12

LOCATOR CODE: CJ-400				BRND/HARP.S: 8R5400A18A120		
CAP: 80012				TIE TO HARNESS OR EQUIV		
CAVIT Y	COLOR	GA.	PRIN T L ABE L	TO	CON-SPLC	CAVIT Y
-	BRN	22	CAN LOW	TO	CP-1201	8
-	WHT	22	TETHER PWR	TO	CP-1201	6
-	BLU	22	CAN HIGH	TO	CP-1201	5
-	BLK	22	GROUND	TO	SPL G	-

LOCATOR CODE: CP-401				DEUTSCH: DT06-4S		
TERM: 0462-201-16141				WEDGE: W4S		
CAVIT Y	COLOR	GA.	PRIN T L ABE L	TO	CON-SPLC	CAVIT Y
1	WHT	16	WINCH OUT	TO	J4	4
2	-	-	-	TO	-	-
3	-	-	-	TO	-	-
4	WHT	16	WINCH OUT	TO	CP-1201	4

LOCATOR CODE: CJ-401				DEUTSCH: DT04-4P		
TERM: 0460-202-16141				WEDGE: W4P PLUG: 114017		
CAVIT Y	COLOR	GA.	PRIN T L ABE L	TO	CON-SPLC	CAVIT Y
1	WHT	16	WINCH OUT	TO	CJ-401	4
2	-	-	-	TO	-	-
3	-	-	-	TO	-	-
4	WHT	16	WINCH OUT	TO	CJ-401	1

LOCATOR CODE: J1				DEUTSCH: DT06-4S		
TERM: 0462-201-16141				WEDGE: W4S PLUG: 114017		
CAVIT Y	COLOR	GA.	PRIN T L ABE L	TO	CON-SPLC	CAVIT Y
1	WHT	16	ROT CCW	TO	CP-1201	11
2	WHT	16	GND	TO	SPL R	-
3	WHT	16	GND	TO	SPL R	-
4	WHT	16	ROT CW	TO	CP-1201	12

LOCATOR CODE: J2				DEUTSCH: DT06-4S		
TERM: 0462-201-16141				WEDGE: W4S PLUG: 114017		
CAVIT Y	COLOR	GA.	PRIN T L ABE L	TO	CON-SPLC	CAVIT Y
1	WHT	16	BOOM DN	TO	CP-1201	2
2	WHT	16	GND	TO	SPL B	-
3	WHT	16	GND	TO	SPL B	-
4	WHT	16	BOOM UP	TO	CP-1201	1

LOCATOR CODE: J3				DEUTSCH: DT06-4S		
TERM: 0462-201-16141				WEDGE: W4S PLUG: 114017		
CAVIT Y	COLOR	GA.	PRIN T L ABE L	TO	CON-SPLC	CAVIT Y
1	WHT	16	BOOM RET	TO	CP-1201	10
2	WHT	16	GND	TO	SPL E	-
3	WHT	16	GND	TO	SPL E	-
4	WHT	16	BOOM EXT	TO	CP-1201	9

LOCATOR CODE: J4				DEUTSCH: DT06-4S		
TERM: 0462-201-16141				WEDGE: W4S PLUG: 114017		
CAVIT Y	COLOR	GA.	PRIN T L ABE L	TO	CON-SPLC	CAVIT Y
1	WHT	16	WINCH IN	TO	CP-1201	3
2	WHT	16	GND	TO	SPL W	-
3	WHT	16	GND	TO	SPL W	-
4	WHT	16	WINCH OUT	TO	CP-401	1

LOCATOR CODE: CP-1200				DEUTSCH: DTM06-12SA		
TERM: 1062-20-0122				WEDGE: WM12S CAVITY PLUG: 0413-204-2005		
CAVIT Y	COLOR	GA.	PRIN T L ABE L	TO	CON-SPLC	CAVIT Y
1	WHT	16	POWER	TO	SPL P	-
2	-	-	-	TO	-	-
3	WHT	16	ENG SPD	TO	CJ-1202	5
4	WHT	16	ENG START	TO	CJ-1202	6
5	WHT	16	ENG STOP	TO	CJ-1202	2
6	WHT	16	COMP ON	TO	SPL C	-
7	WHT	16	CRANE HOUR M	TO	CJ-1202	8
8	WHT	16	A2B SIG	TO	CJ-300	B
9	WHT	16	HORN (1)	TO	CJ-1202	11
10	WHT	16	HORN (2)	TO	CJ-1202	10
11	WHT	16	TRANS SIG	TO	CP-300	B
12	WHT	16	GROUND	TO	SPL G	-

LOCATOR CODE: CP-1201				DEUTSCH: DTM06-12SB		
TERM: 1062-20-0122				WEDGE: WM12S CAVITY PLUG: 0413-204-2005		
CAVIT Y	COLOR	GA.	PRIN T L ABE L	TO	CON-SPLC	CAVIT Y
1	WHT	16	BOOM UP	TO	J2	4
2	WHT	16	BOOM DN	TO	J2	1
3	WHT	16	WINCH IN	TO	J4	1
4	WHT	16	WINCH OUT	TO	CP-401	4
5	BLU	22	CAN HIGH	TO	CJ-400	-
6	WHT	22	TETHER PWR	TO	CJ-400	-
7	WHT	16	POWER	TO	SPL P	-
8	BRN	22	CAN LOW	TO	CJ-400	-
9	WHT	16	BOOM EXT	TO	J3	4
10	WHT	16	BOOM RET	TO	J3	1
11	WHT	16	ROT CCW	TO	J1	1
12	WHT	16	ROT CW	TO	J1	4

LOCATOR CODE: CJ-1202				DUETSCH DT04-12PA		
TERM: 0460-215-16141				WEDGE: W12P		
CAVIT Y	COLOR	GA.	PRIN T L ABE L	TO	CON-SPLC	CAVIT Y
1	WHT	16	SELECTOR	TO	SPL C	-
2	WHT	16	ENG STOP	TO	CP-1200	5
3	WHT	14	GROUND	TO	SPL G	-
4	WHT	16	COMP ON	TO	SPL C	-
5	WHT	16	ENG SPD	TO	CP-1200	3
6	WHT	16	ENG START	TO	CP-1200	4
7	WHT	14	POWER	TO	SPL P	-
8	WHT	16	CRANE HOUR M	TO	CP-1200	7
9	WHT	16	SPARE PWR	TO	CP-101	A
10	WHT	16	HORN (2)	TO	CP-1200	10
11	WHT	16	HORN (1)	TO	CP-1200	9
12	WHT	14	BOOM FLD LT	TO	CJ-300	C

LOCATOR CODE: -				SPLICE B		
CAVIT Y	COLOR	GA.	PRIN T L ABE L	TO	CON-SPLC	CAVIT Y
-	WHT	16	GND	TO	J2	2
-	WHT	16	GND	TO	J2	3
-	WHT	16	GND	TO	SPL G	-

LOCATOR CODE: -				SPLICE C		
CAVIT Y	COLOR	GA.	PRIN T L ABE L	TO	CON-SPLC	CAVIT Y
-	WHT	16	COMP ON	TO	CP-1200	6
-	WHT	16	SELECTOR	TO	CJ-1202	1
-	WHT	16	COMP ON	TO	CJ-1202	4

LOCATOR CODE: -				SPLICE E		
CAVIT Y	COLOR	GA.	PRIN T L ABE L	TO	CON-SPLC	CAVIT Y
-	WHT	16	GND	TO	J3	2
-	WHT	16	GND	TO	J3	3
-	WHT	16	GND	TO	SPL G	-

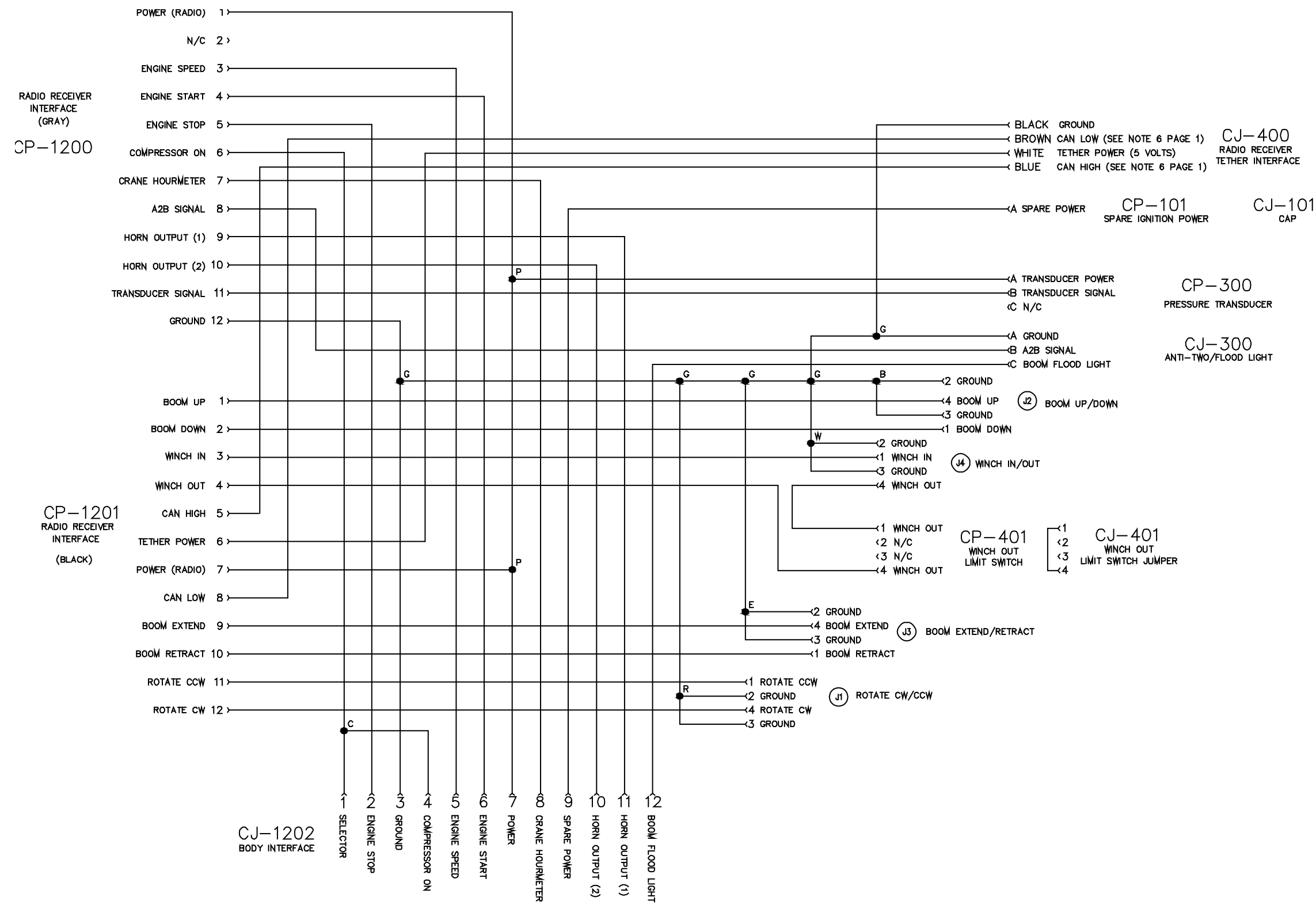
LOCATOR CODE: -				SPLICE G		
CAVIT Y	COLOR	GA.	PRIN T L ABE L	TO	CON-SPLC	CAVIT Y
-	WHT	14	GROUND	TO	CJ-1202	3
-	WHT	16	GROUND	TO	CP-1200	12
-	WHT	16	GROUND	TO	CJ-300	A
-	WHT	16	STOW SEN GND	TO	CJ-401	B
-	WHT	16	GND	TO	SPL B	-
-	WHT	16	GND	TO	SPL E	-
-	WHT	16	GND	TO	SPL R	-
-	WHT	16	GND	TO	SPL W	-
-	BLK	22	GROUND	TO	CJ-400	-

LOCATOR CODE: -				SPLICE P		
CAVIT Y	COLOR	GA.	PRIN T L ABE L	TO	CON-SPLC	CAVIT Y
-	WHT	14	POWER	TO	CJ-1202	7
-	WHT	16	POWER	TO	CP-1200	1
-	WHT	16	POWER	TO	CP-1201	7
-	WHT	16	POWER	TO	CP-300	A

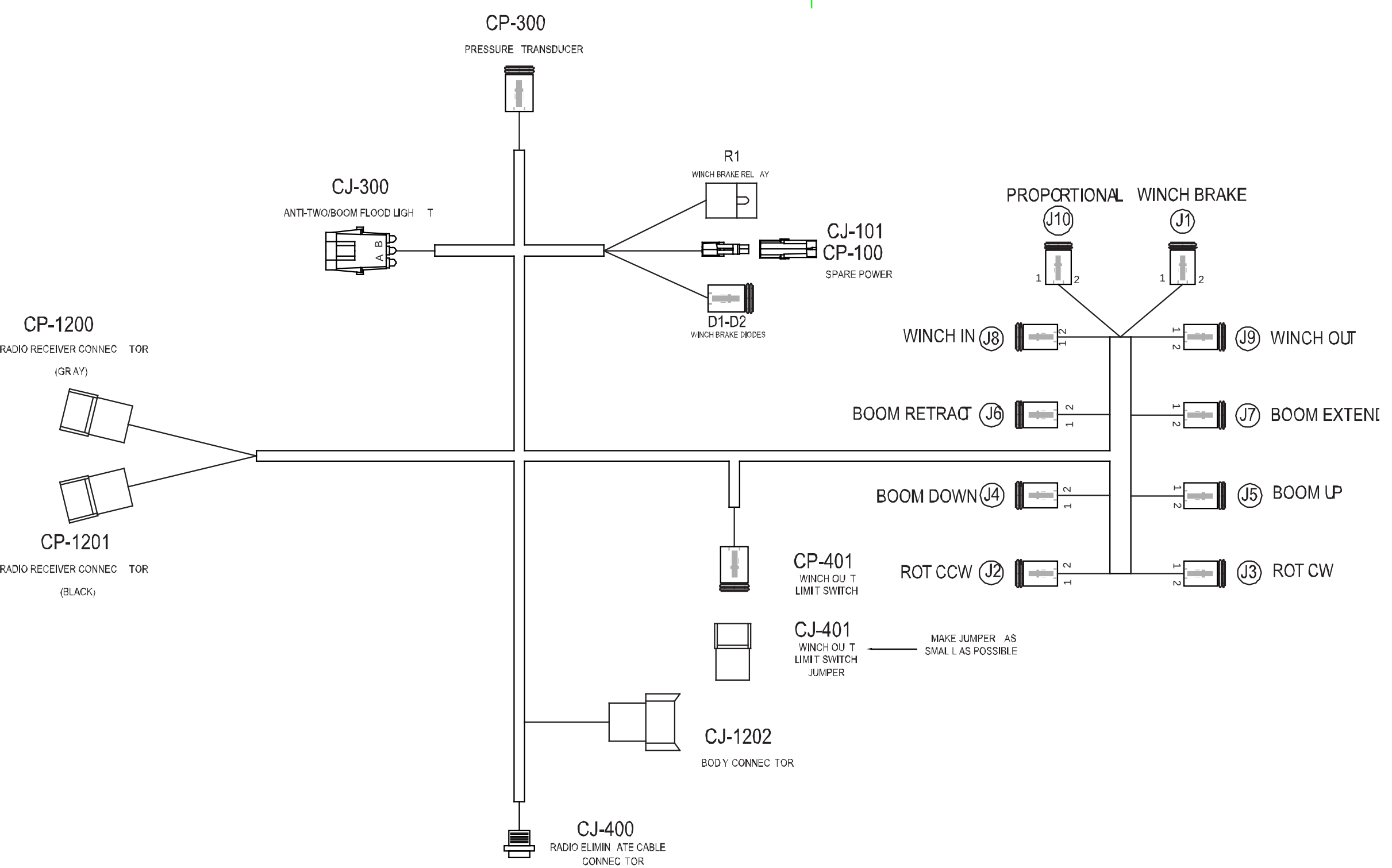
LOCATOR CODE: -				SPLICE R		
CAVIT Y	COLOR	GA.	PRIN T L ABE L	TO	CON-SPLC	CAVIT Y
-	WHT	16	GND	TO	J1	2
-	WHT	16	GND	TO	J1	3
-	WHT	16	GND	TO	SPL G	-

LOCATOR CODE: -				SPLICE W		
CAVIT Y	COLOR	GA.	PRIN T L ABE L	TO	CON-SPLC	CAVIT Y
-	WHT	16	GND	TO	J4	2
-	WHT	16	GND	TO	J4	3
-	WHT	16	GND	TO	SPL G	-

Radio Remote Harness (77441481)



Radio Remote Harness – Single Proportional (77441537)



Radio Remote Harness – Single Proportional (77441537)

LOCATOR CODE: CP-300		DEUTSCH: DT06-3S				
TERM: 0462-201-16141		WEDGE: W3S		PLUG: 114017		
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
A	WHT	16	TRANS PWR	TO	SPL P	-
B	WHT	16	TRANS SIG	TO	CP-1200	11
C	-	-	-	TO	-	-

LOCATOR CODE: CJ-300		PACKARD: 12010717				
TERM: 12124582		SEAL: 12015323/12010293				
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
A	WHT	16	GROUND	TO	SPL G	-
B	WHT	16	A2B SIG	TO	CP-1200	8
C	WHT	14	BOOM FLT	TO	CJ-1202	12

LOCATOR CODE: CJ-400		BRAD/HARRIS: 8R5A00A18A120				
		Cap: 80012TIE TO HARNESS) OR EQUIV				
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
-	BRN	22	CAN LOW	TO	CP-1201	8
-	WHT	22	TETHER PWR	TO	CP-1201	6
-	BLU	22	CAN HIGH	TO	CP-1201	5
-	BLK	22	GROUND	TO	SPL G	-

LOCATOR CODE: CP-401		DEUTSCH: DT06-4S				
TERM: 0462-201-16141		WEDGE: W4S		PLUG: 114017		
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
1	WHT	18	WINCH OUT	TO	SPL D	-
2	-	-	-	TO	-	-
3	-	-	-	TO	-	-
4	WHT	18	WINCH OUT	TO	CP-1201	4

LOCATOR CODE: CJ-401		DEUTSCH: DT04-4P				
TERM: 0460-202-16141		WEDGE: W4P		PLUG: 114017		
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
1	WHT	18	WINCH OUT	TO	CJ-401	4
2	-	-	-	TO	-	-
3	-	-	-	TO	-	-
4	WHT	18	WINCH OUT	TO	CJ-401	1

LOCATOR CODE: J1		DEUTSCH: DT06-2S				
TERM: 0462-201-16141		WEDGE: W2S				
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
1	WHT	18	GND	TO	SPL G	-
2	WHT	18	WINCH BRK	TO	R1	87

LOCATOR CODE: J2		DEUTSCH: DT06-2S				
TERM: 0462-201-16141		WEDGE: W2S				
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
1	WHT	18	GND	TO	SPL R	-
2	WHT	18	ROT CCW	TO	CP-1201	11

LOCATOR CODE: J3		DEUTSCH: DT06-2S				
TERM: 0462-201-16141		WEDGE: W2S				
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
1	WHT	18	GND	TO	SPL R	-
2	WHT	18	ROT CW	TO	CP-1201	12

LOCATOR CODE: J4		DEUTSCH: DT06-2S				
TERM: 0462-201-16141		WEDGE: W2S				
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
1	WHT	18	GND	TO	SPL B	-
2	WHT	18	BOOM DN	TO	CP-1201	2

LOCATOR CODE: J5		DEUTSCH: DT06-2S				
TERM: 0462-201-16141		WEDGE: W2S				
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
1	WHT	18	GND	TO	SPL B	-
2	WHT	18	BOOM UP	TO	CP-1201	1

LOCATOR CODE: J6		DEUTSCH: DT06-2S				
TERM: 0462-201-16141		WEDGE: W2S				
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
1	WHT	18	GND	TO	SPL E	-
2	WHT	18	BOOM RET	TO	CP-1201	10

LOCATOR CODE: J7		DEUTSCH: DT06-2S				
TERM: 0462-201-16141		WEDGE: W2S				
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
1	WHT	18	GND	TO	SPL E	-
2	WHT	18	BOOM EXT	TO	CP-1201	9

LOCATOR CODE: J8		DEUTSCH: DT06-2S				
TERM: 0462-201-16141		WEDGE: W2S				
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
1	WHT	18	GND	TO	SPL W	-
2	WHT	18	WINCH IN	TO	SPL F	-

LOCATOR CODE: J9		DEUTSCH: DT06-2S				
TERM: 0462-201-16141		WEDGE: W2S				
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
1	WHT	18	GND	TO	SPL W	-
2	WHT	18	WINCH OUT	TO	SPL D	-

LOCATOR CODE: J10		DEUTSCH: DT06-2S				
TERM: 0462-201-16141		WEDGE: W2S				
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
1	WHT	18	GND	TO	SPL G	-
2	WHT	18	PROP OUT	TO	CP-1200	2

LOCATOR CODE: CP-1200		DEUTSCH: DTM06-18A				
TERM: 1062-20-0122		WEDGE: WM12S		CAVITY PLUG: 0413-204-2005		
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
1	WHT	16	PWR	TO	SPL P	-
2	WHT	18	PROP OUT	TO	J10	2
3	WHT	16	ENG SPD	TO	CJ-1202	5
4	WHT	16	ENG START	TO	CJ-1202	6
5	WHT	16	ENG STOP	TO	CJ-1202	2
6	WHT	16	COMP ON	TO	SPL C	-
7	WHT	16	CRANE HOUR M	TO	CJ-1202	8
8	WHT	16	A2B SIG	TO	CJ-300	8
9	WHT	16	HORN (1)	TO	CJ-1202	11
10	WHT	16	HORN (2)	TO	CJ-1202	10
11	WHT	16	TRANS SIG	TO	CP-300	8
12	WHT	16	GND	TO	SPL G	-

LOCATOR CODE: CP-1201		DEUTSCH: DTM06-12S				
TERM: 1062-20-0122		WEDGE: WM12S		CAVITY PLUG: 0413-204-2005		
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
1	WHT	18	BOOM UP	TO	J5	2
2	WHT	18	BOOM DN	TO	J4	2
3	WHT	18	WINCH IN	TO	SPL F	-
4	WHT	18	WINCH OUT	TO	CP-401	4
5	BLU	22	CAN HIGH	TO	CJ-400	-
6	WHT	22	TETHER PWR	TO	CJ-400	-
7	WHT	16	POWER	TO	SPL P	-
8	BRN	22	CAN LOW	TO	CJ-400	-
9	WHT	18	BOOM EXT	TO	J7	2
10	WHT	18	BOOM RET	TO	J6	2
11	WHT	18	ROT CCW	TO	J2	2
12	WHT	18	ROT CW	TO	J3	2

LOCATOR CODE: CJ-1202		DEUTSCH: DT04-12A				
TERM: 0460-215-16141		WEDGE: W12P				
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
1	WHT	16	SELECTOR	TO	SPL C	-
2	WHT	16	ENG STOP	TO	CP-1200	5
3	WHT	14	GND	TO	SPL G	-
4	WHT	16	COMP ON	TO	SPL C	-
5	WHT	16	ENG SPD	TO	CP-1200	3
6	WHT	16	ENG START	TO	CP-1200	4
7	WHT	14	PWR	TO	SPL P	-
8	WHT	16	CRANE HOUR M	TO	CP-1200	7
9	WHT	16	SPARE PWR	TO	CP-101	A
10	WHT	16	HORN (2)	TO	CP-1200	10
11	WHT	16	HORN (1)	TO	CP-1200	9
12	WHT	14	BOOM FLT	TO	CJ-300	C

LOCATOR CODE: CP-101		WEATHERPACK: 12015791				
TERM: 12124580		SEAL: 12015323				
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
A	WHT	16	SPARE PWR	TO	CJ-1202	9

LOCATOR CODE: CJ-101		WEATHERPACK: 12010996				
TERM: -		PLUG: 12010300				
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
A	-	-	-	TO	-	-

LOCATOR CODE: D1		DEUTSCH: DT06-2S				
TERM: 0462-209-16141		WEDGE: W2S		DIODE: DT04-2PRT-01		
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
1	WHT	18	WINCH BRK	TO	SPL A	-
2	WHT	18	WINCH IN	TO	SPL F	-

LOCATOR CODE: D2		DEUTSCH: DT06-2S				
TERM: 0462-209-16141		WEDGE: W2S		DIODE: DT04-2PRT-01		
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
1	WHT	18	WINCH BRK	TO	SPL A	-
2	WHT	18	WINCH OUT	TO	SPL D	-

LOCATOR CODE: -		SPLICE A				
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
-	WHT	18	WINCH BRK	TO	D1	1
-	WHT	18	WINCH BRK	TO	D2	1
-	WHT	18	WINCH BRK	TO	R1	86

LOCATOR CODE: -		SPLICE B				
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
-	WHT	18	GND	TO	J4	1
-	WHT	18	GND	TO	J5	1
-	WHT	16	GND	TO	SPL G	-

LOCATOR CODE: -		SPLICE C				
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
-	WHT	16	COMP ON	TO	CP-1200	6
-	WHT	16	SELECTOR	TO	CJ-1202	1
-	WHT	16	COMP ON	TO	CJ-1202	4

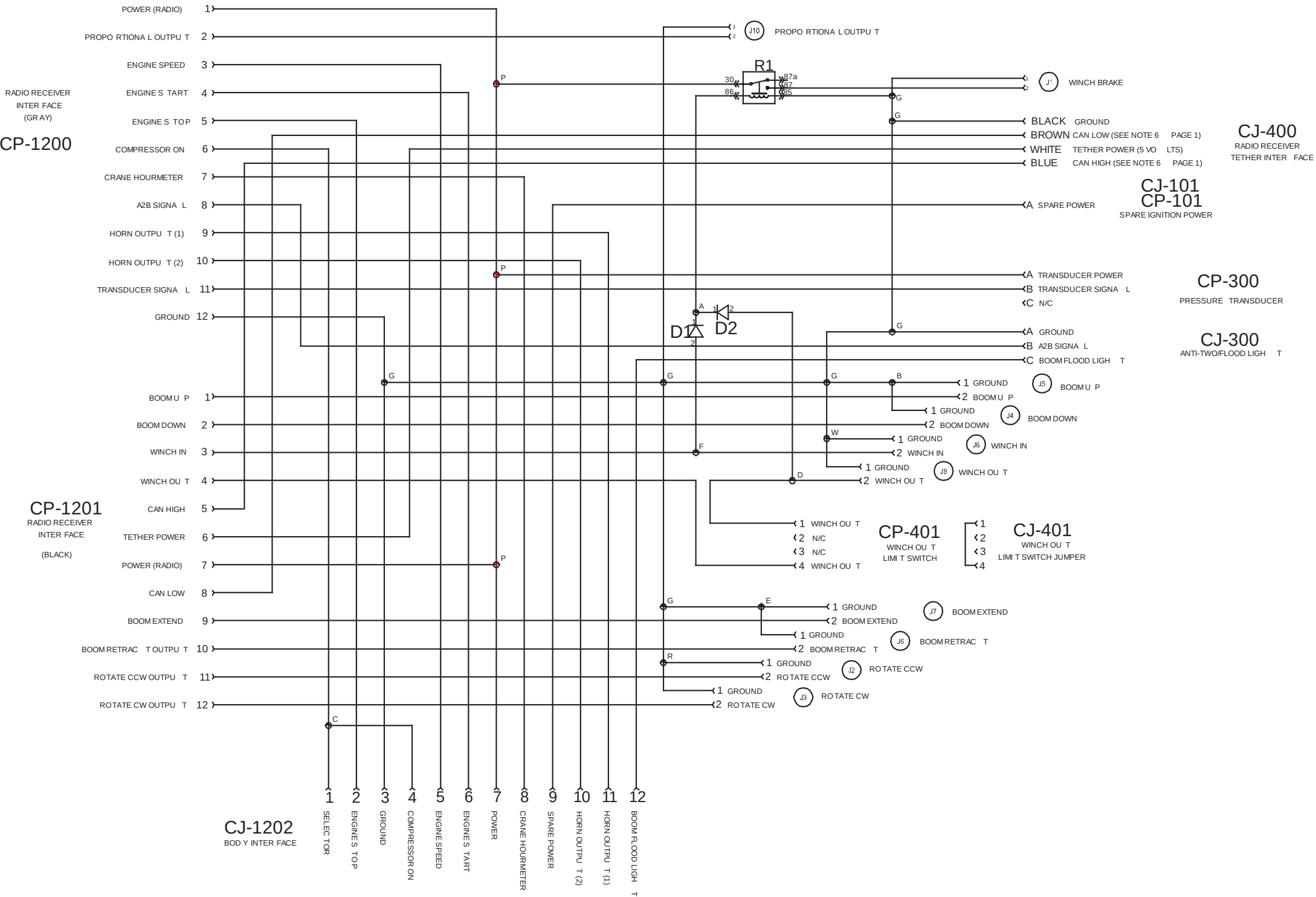
LOCATOR CODE: -		SPLICE D				
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
-	WHT	18	WINCH OUT	TO	CP-401	1
-	WHT	18	WINCH OUT	TO	D2	2
-	WHT	18	WINCH OUT	TO	J9	2

LOCATOR CODE: -		SPLICE E				
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
-	WHT	18	GND	TO	J6	1
-	WHT	18	GND	TO	J7	1
-	WHT	16	GND	TO	SPL G	-

LOCATOR CODE: -		SPLICE F				
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
-	WHT	18	WINCH IN	TO	CP-1201	3
-	WHT	18	WINCH IN	TO	D1	2
-	WHT	18	WINCH IN	TO	J8	2

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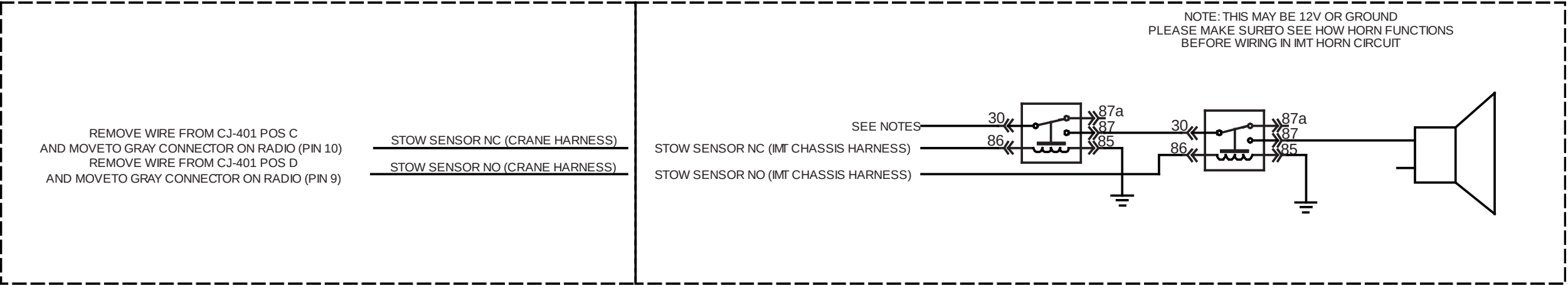
Radio Remote Harness – Single Proportional (77441537)



Horn Circuit (99905614)

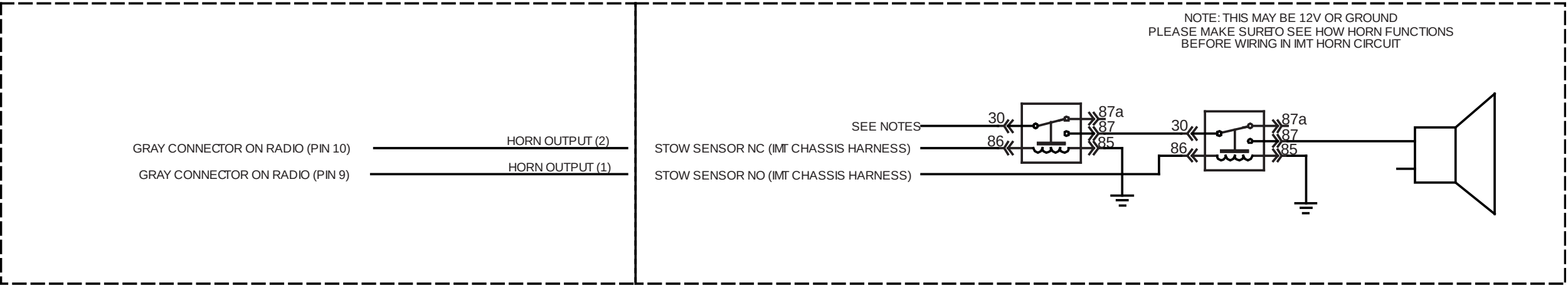
CRANE HARNESS 77441481 REV A

CHASSIS HARNESS - DOM 1-2 (77441444) DOM 3-4 (77441446)

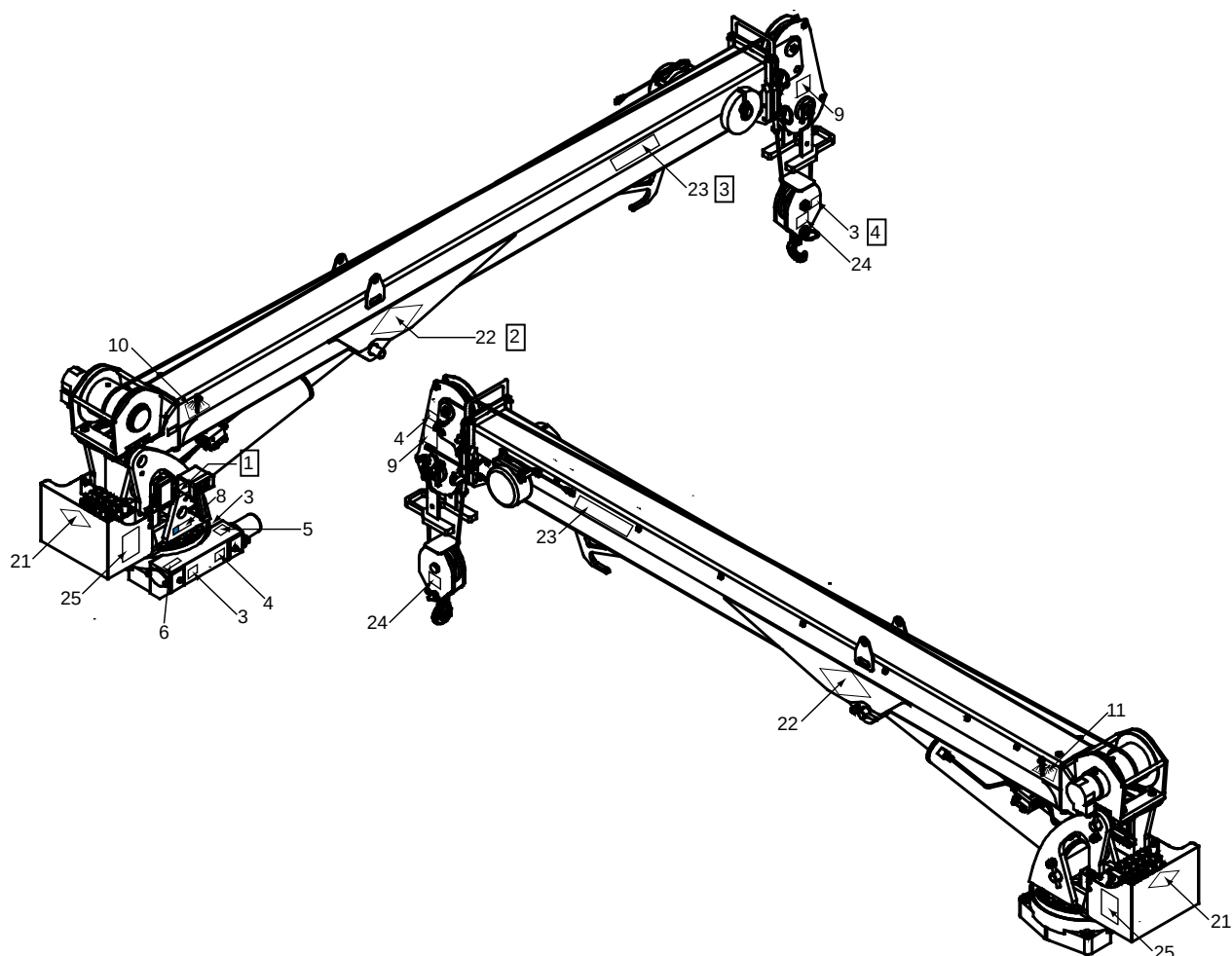


CRANE HARNESS 77441481 REV B

CHASSIS HARNESS - DOM 1-2 (77441444) DOM 3-4 (77441446)



Decal Placement, 9500 25' Crane



NOTES (SEE REFERENCE NUMBER IN BOX):

- 1 SERIAL NUMBER PLACARD. MOUNT STREETSIDE.
- 2 PLACE BOTTOM POINT OF DIAMOND ABOVE END OF CYLINDER PIN.
- 3 CENTER ABOVE HOOK WELDMENT.
- 4 EITHER SIDE.

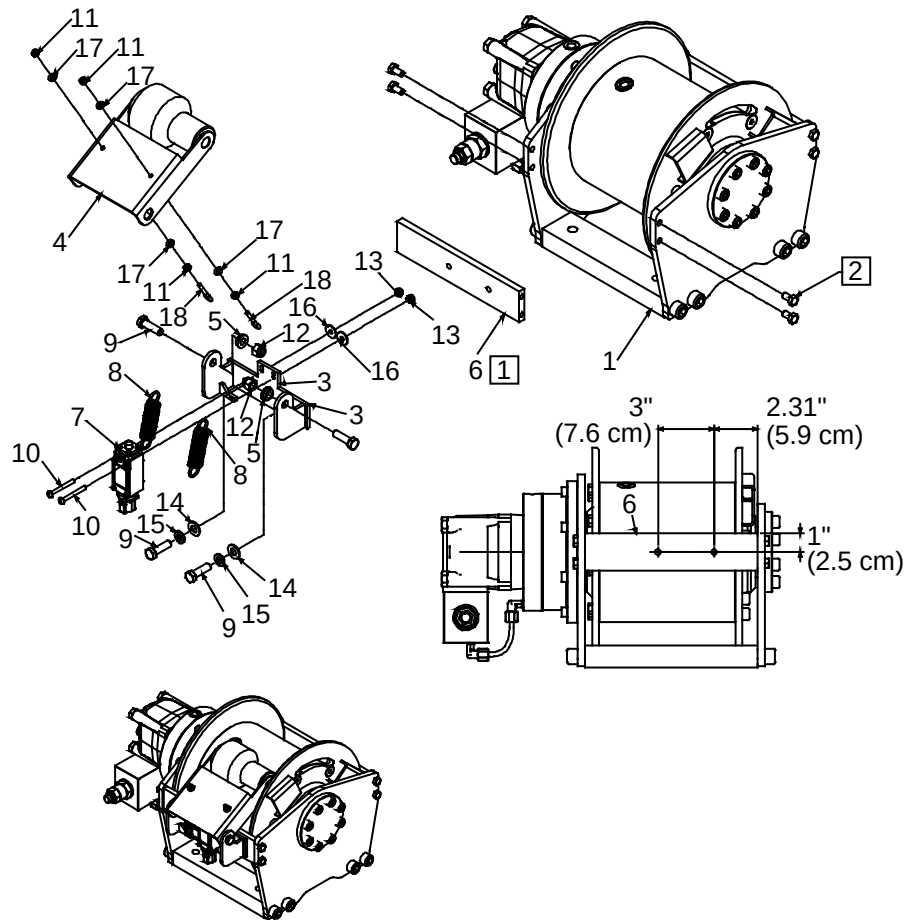
DECAL PLACEMENT (IF NOT SHOWN ON CRANE)

ITEM #	PLACEMENT
12,17,19,20, 25	AT OR NEAR REMOTE HANDLE STORAGE POINT
13	2 ON REAR STABILIZERS, 2 ON SIDEPACK FRONT WALLS
15	AT OR NEAR DRIVELINE
14,16	ON ALL FOUR SIDES OF CARRIER VEHICLE
18	ON TOP OF HYDRAULIC RESERVOIR

DECAL PLACEMENT, 9500 25' CRANES (REF 99905087)					
ITEM	PART #	DESCRIPTION	KIT #	QTY IN KIT	QTY ON CRANE
1.	95724111	DECAL KIT - TELE COMMON SIII (7500-14000)			1
2.	95719348	DECAL KIT - BODY COMMON			1
3.	70391612	DECAL-GREASE WEEKLY (LEFT)	1	3	3
4.	70391613	DECAL-GREASE WEEKLY (RIGHT)	1	2	2
5.	70392524	DECAL-ROTATE CRANE WHILE GREAS	1	1	1
6.	70392399	DECAL-LUBRICATE WORM	1	1	1
8.	70395324	DECAL-ASME/ANSI B30.5-TELESCOP	1	1	1
9.	70395670	DECAL-CAUTION DOWN HAUL WT	1	2	2
10.	71399136	DECAL-ANGLE INDICATOR RH	1	1	1
11.	71399137	DECAL-ANGLE INDICATOR LH	1	1	1
12.	70392213	DECAL-CAUTION DONT WASH/WAX	1	1	1
13.	70392864	DECAL-WARNING STABILIZER STAND CLEAR	2	4	4
14.	70392868	DECAL-WARNING CR LOADLINE (TRK)	2	4	4
15.	70392891	DECAL-DANGER DRIVELINE	2	1	1
16.	70394445	DECAL-DANGER ELEC HZD LG TELES	2	4	4
17.	70396613	DECAL-CRANE SAFETY OPER	2	1	1
18.	70394189	DECAL-MOBILOIL RESERVOIR	2	1	1
19.	71039134	DECAL-CAUTION OIL LEVEL	2	1	1
20.	70392982	DECAL-SERVICE REPAIR	2	1	1
21.	70399195	DECAL-DIAMOND IMT 4 X 8 (REFL)	1	1	1
22.	70399140	DECAL-DIAMOND IMT 6.75X13.50 (REFL)	1	2	2
23.	70399049	DECAL-ID 9500			2REF
24.	70399071	DECAL-LOAD BLOCK RATING 5.25 TONS			2REF
25.	70399106	DECAL-CAP CHART 9500-25'			3REF
REV D 20140414					

Option-Winch Roller (99905055)

Kit 51723637



NOTES (SEE REFERENCE NUMBER IN BOX):

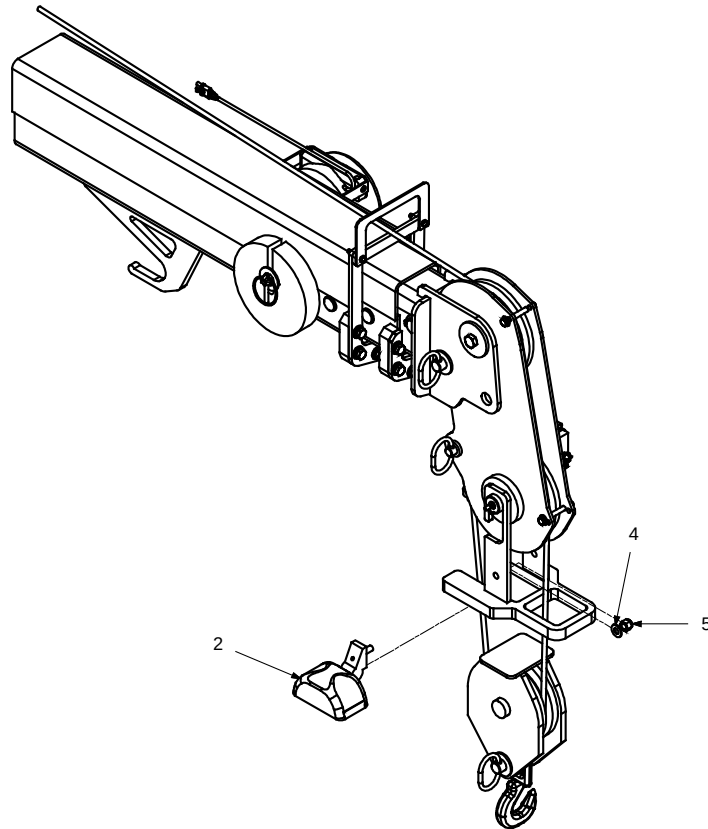
- 1 REPLACE EXISTING BAR ON WINCH WITH 60136607.
- 2 USE EXISTING BOLTS AS SHOWN.

99905055 PARTS LIST

ITEM	PART #	DESCRIPTION	DETAILS	KIT #	QUANTITY
1.	71570825	WINCH-PLANETARY 6000 LB LINE PULL			REF
2.	91725602	HARDWARE KIT-WINCH ROLLER			1
3.	52723094	MOUNTING BRACKET-WINCH SWITCH			1
4.	52723095	ROLLER ASSEMBLY-WINCH SWITCH			1
5.	60030439	SLEEVE-TYPE C	0.38X 0.62X.25		2
6.	60136607	WINCH PLATE-ROLLER BRACKET			1
7.	77041863	SWITCH-LIMIT			1

99905055 PARTS LIST					
ITEM	PART #	DESCRIPTION	DETAILS	KIT #	QUANTITY
8.	71413185	SPRING	0.105WIRE 0.75 OD 2.875 LG	#2	2
9.	72060047	CAP SCREW	.38-16X 1.25 HH G R5 Z	#2	4
10.	72060641	MACHINE SCREW	#10-24X 1.75 ROUND HEAD	#2	2
11.	72062093	NUT	#8-32 HEX ZINC	#2	4
12.	72062103	NUT	.38-16 HEX NYLOCK	#2	2
13.	72062106	NUT	#10-24 HEX NYLOCK	#2	2
14.	72063003	WASHER	.38 FLAT	#2	2
15.	72063051	WASHER	.38 LOCK	#2	2
16.	72063268	WASHER	#10 W FLAT ANSI B27.2Z	#2	2
17.	72063271	WASHER	# 8 W FLAT ANSI B27.2Z	#2	4
18.	72601938	BOLT-EYE	# 8-32X 1.125	#2	2
REV A 20110513					

Option - Boom Tip Light Kit (99905289)

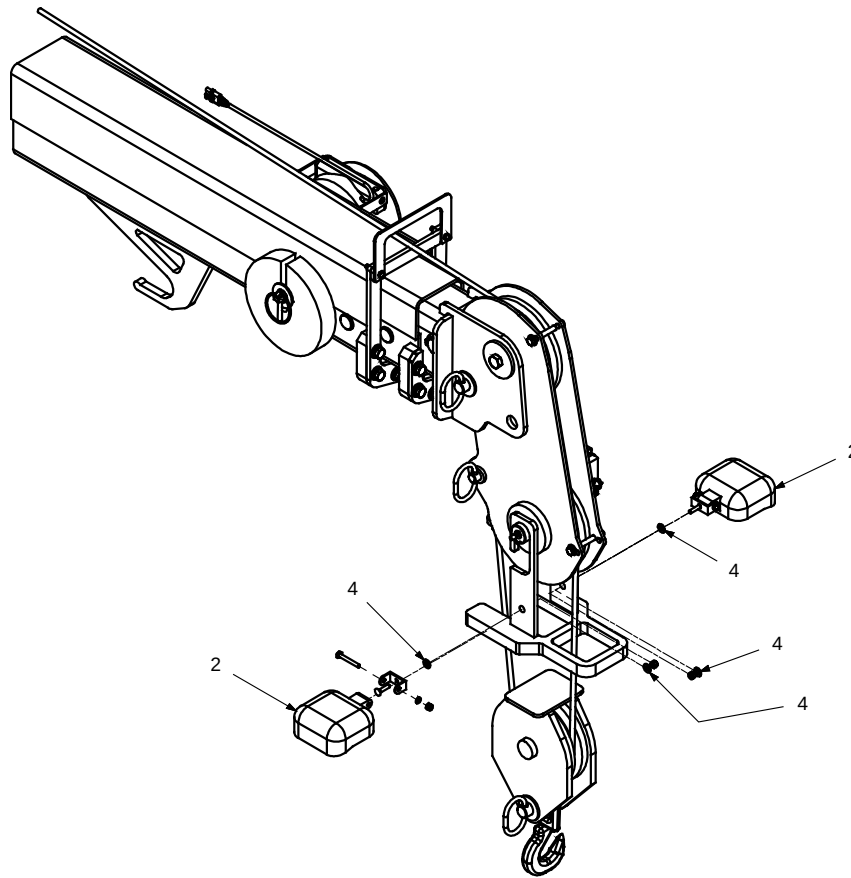


NOTES:

- 1 LIGHT CAN BE PLACED ON EITHER SIDE.
- 2 HARNESS CONNECTS TO CORD REEL AND ANTI-TWO-BLOCK SWITCH.

SINGLE INCANDESCENT LIGHT KIT (12V & 24V) (DWG 99905289)

ITEM	PART #	DESCRIPTION	DETAILS	12V KIT (51723830)		24V KIT (51724606)	
				KIT #	QUANTITY	KIT #	QUANTITY
1.	51723830	ELECTRICAL KIT-BOOM SINGLE FLOOD LIGHT (12V)			1		
1A.	51724606	ELECTRICAL KIT-BOOM SINGLE FLOOD LIGHT (24V)					1
2.	77040424	FLOODLIGHT-COMPOSITE WORK LAMP TOP MTG (12V)		#1	1		1
2A.	77441279	FLOODLIGHT-COMPOSITE WORK LAMP TOP MTG (24V)				#1A	1
3.	77441470	HARNESS-BOOM TIP FLOOD LIGHT JUMPER		#1	1	#1A	1
4.	72063005	WASHER	.50 FLAT	#2	1	#2A	1
5.	72062080	NUT	.50-13 HEX NYLOCK	#2	1	#2A	1
REV C 20140203							

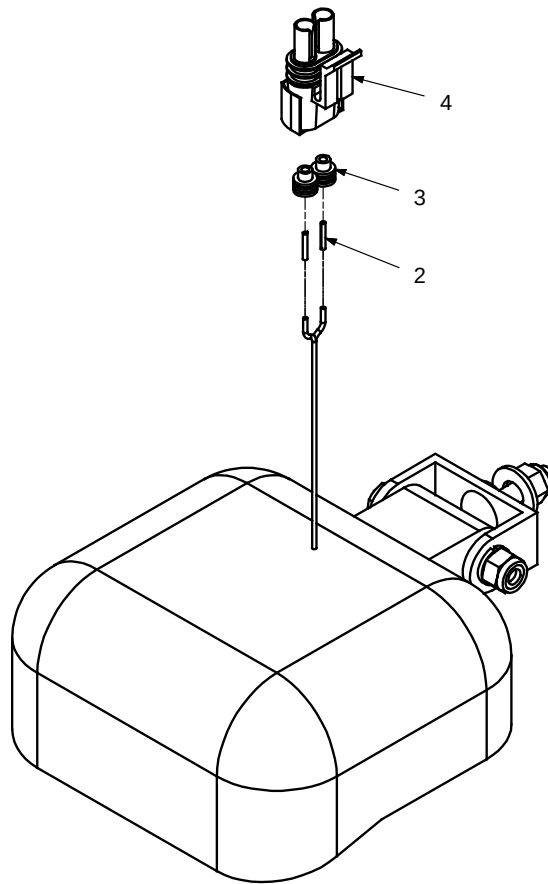
**NOTES:**

1 LIGHT CAN BE PLACED ON EITHER SIDE.

2 HARNESS CONNECTS TO CORD REEL AND ANTI-TWO-BLOCK SWITCH.

DUAL LED LIGHT KIT (KIT 51724116 / DWG 99905289)

ITEM	PART #	DESCRIPTION	DETAILS	KIT #	QUANTITY
1.	51724116	ELECTRICAL KIT-BOOM DUAL LED FLOOD LIGHT			1
2.	77040581	FLOODLIGHT-LED	12-36 VDC	#1	2
3.	77441473	HARNESS-BOOM TIP LED FLOOD LIGHT JUMPER		#1	1
4.	72063002	WASHER	.31 FLAT	#1	4
REV C 20140203					



ELECTRICAL INSTALLATION, LIGHT KITS (99905289)				
ITEM	PART #	DESCRIPTION	DETAILS	QUANTITY
1.	51723830	ELECTRICAL KIT-BOOM SINGLE FLOOD LIGHT		1
1.	51724116	ELECTRICAL KIT-BOOM DUAL LED FLOOD LIGHT		1
1.	51724606	ELECTRICAL KIT-BOOM SINGLE FLOOD LIGHT 24V		1
2.	77045888	TERMINAL	PKRD WP 14-16GA FEM	2
3.	77044927	CABLE SEAL	14GA GRAY	2
4.	77044574	CONNECTOR	PKRD WP 2CAV FEM TOWER	1
REV C 20140203				

CHAPTER 5

General Reference

In This Chapter

Inspection Checklist	117
Deficiency / Recommendation / Corrective Action Report.....	122
Thread Torque Charts	124

Inspection Checklist

NOTICE:

The user of this form is responsible for determining that these inspections satisfy all applicable regulatory requirements.

OWNER/COMPANY:	TYPE OF INSPECTION (circle one):			
CONTACT PERSON:	DAILY	MONTHLY	QUARTERLY	ANNUAL
CRANE MAKE & MODEL:	DATE INSPECTED:			
CRANE SERIAL NUMBER:	HOURMETER READING (if applicable):			
UNIT I.D. NUMBER:	INSPECTED BY (print):			
LOCATION OF UNIT:	SIGNATURE OF INSPECTOR:			

TYPE OF INSPECTION

NOTES:

Daily and monthly inspections are to be performed by a "competent person", who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

Quarterly and annual inspections are to be performed by a "qualified person" who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, successfully demonstrated the ability to solve/resolve problems relating to the subject matter, the work, or the project.

One hour of normal crane operation assumes 20 complete cycles per hour. If operation exceeds 20 cycles per hour, inspection frequency should be increased accordingly.

Consult Operator / Service Manual for additional inspection items, service bulletins and other information.

Before inspecting and operating crane, crane must be set up away from power lines and leveled with stabilizers fully extended.

DAILY (D): Before each shift of operation, those items designated with a (D) must be inspected.

MONTHLY (M): Monthly inspections or 100 hours of normal operation (whichever comes first) includes all daily inspections plus items designated with an (M). This inspection must be recorded and retained for a minimum of 3 months.

QUARTERLY (Q): Every three to four months or 300 hours of normal operation (whichever comes first) includes all daily and monthly inspection items plus items designated with a (Q). This inspection must be documented, maintained, and retained for a minimum of 12 months, by the employer that conducts the inspection.

ANNUAL (A): Each year or 1200 hours of normal operation (whichever comes first) includes all items on this form which encompasses daily, monthly and quarterly inspections plus those items designated by (A). This inspection must be documented, maintained, and retained for a minimum of 12 months, by the employer that conducts the inspection.

INSPECTION CHECKLIST STATUS KEY:

S = Satisfactory

R = Recommendation

(Should be considered for corrective action)

NA = Not Applicable

X = Deficient

(NOTE: If a deficiency is found, an immediate determination must be made as to whether the deficiency constitutes a safety hazard and must be corrected prior to operation.)

FREQUENCY	ITEM	KEY	INSPECTION DESCRIPTION	STATUS (S,R,X,NA)
D	1	Labels	All load charts, safety & warning labels, and control labels are present and legible.	
D	2	Crane	Check all safety devices for proper operation.	
D	3	Controls	Control mechanisms for proper operation of all functions, leaks and cracks.	
D	4	Station	Control and operator's station for dirt, contamination by lubricants, and foreign material.	
D	5	Hydraulic System	Hydraulic system (hoses, tubes, fittings) for leakage and proper oil level.	
D	6	Hook	Presence and proper operation of hook safety latches.	

FREQUENCY	ITEM	KEY	INSPECTION DESCRIPTION	STATUS (S,R,X,NA)
D	7	Wire Rope	Inspect for apparent deficiencies per applicable requirements and manufacturer's specifications.	
D	8	Pins	Proper engagement of all connecting pins and pin retaining devices.	
D	9	General	Overall observation of crane for damaged or missing parts, cracked welds, and presence of safety covers.	
D	10	Operation	During operation, observe crane for abnormal performance, unusual wear (loose pins, wire rope damage, etc.). If observed, discontinue use and determine cause and severity of hazard.	
D	11	Remote Ctrl	Operate remote control devices to check for proper operation.	
D	12	Electrical	Operate all lights, alarms, etc. to check for proper operation.	
D	13	Anti-Two-Block or Two-Block Damage Prevention	Operate anti two-block or two-block damage prevention device to check for proper operation.	
D	14	Tires	Check tires (when in use) for proper inflation and condition.	
D	15	Ground Conditions	Check ground conditions around the equipment for proper support, watching for ground settling under and around stabilizers and supporting foundations, ground water accumulation, or similar conditions.	
D	16	Level	Check the equipment for level position within the tolerances specified by the equipment manufacturer's recommendations, both before each shift and after each move and setup.	
D	17	Operator cab windows	Check windows for cracks, breaks, or other deficiencies which would hamper the operator's view.	
D	18	Rails, rail stops, rail clamps and supporting surfaces	Check rails, rail stops, rail clamps and supporting surfaces when the equipment has rail traveling.	
D	19	Safety devices	Check safety devices and operational aids for proper operation.	
D	20	Electrical	Check electrical apparatus for malfunctioning, signs of apparent excessive deterioration, dirt or moisture accumulation.	
D	21		Other	
D	22		Other	
M	23	Daily	All daily inspection items.	
M	24	Cylinders	Visual inspection of cylinders for leakage at rod, fittings, and welds. Damage to rod and case.	
M	25	Valves	Holding valves for proper operation.	
M	26	Valves	Control valves for leaks at fittings and between stations.	
M	27	Valves	Control valve linkages for wear, smoothness of operation, and tightness of fasteners. Relief valve for proper pressure settings.	
M	28	General	Bent, broken, or significantly rusted/corroded parts.	
M	29	Electrical	Electrical apparatus for malfunctioning, signs of apparent excessive deterioration, dirt or moisture accumulation. Electrical systems for presence of dirt, moisture, and frayed wires.	
M	30	Structure	All structural members for damage.	
M	31	Welds	All welds for breaks and cracks.	
M	32	Pins	All pins for proper installation and condition.	

FREQUENCY	ITEM	KEY	INSPECTION DESCRIPTION	STATUS (S,R,X,NA)
M	33	Hardware	All bolts, fasteners and retaining rings for tightness, wear and corrosion.	
M	34	Wear Pads	Presence of wear pads.	
M	35	Pump & Motor	Hydraulic pumps and motors for leakage at fittings, seals, and between sections. Check tightness of mounting bolts.	
M	36	PTO	Transmission/PTO for leakage, abnormal vibration & noise, alignment, and mounting bolt torque.	
M	37	Hyd Fluid	Quality of hydraulic fluid and presence of water.	
M	38	Hyd Lines	Hoses & tubes for leakage, abrasion damage, blistering, cracking, deterioration, fitting leakage, and secured properly.	
M	39	Hook	Load hook for abnormal throat distance, twist, wear, and cracks.	
M	40	Wire Rope	Condition of load line.	
M	41	Manual	Presence of operator's manual with unit.	
M	42		Other	
M	43		Other	
Q	44	Daily	All daily inspection items.	
Q	45	Monthly	All monthly inspection items.	
Q	46	Rotation Sys	Rotation bearing for proper torque of all mounting bolts.	
Q	47	Hardware	Base mounting bolts for proper torque.	
Q	48	Structure	All structural members for deformation, cracks and corrosion.	
	49		• Base	
	50		• Stabilizer beams and legs	
	51		• Mast	
	52		• Inner Boom	
	53		• Outer Boom	
	54		• Extension(s)	
	55		• Jib boom	
	56		• Jib extension(s)	
	57		• Other	
Q	58	Hardware	Pins, bearing, shafts, gears, rollers, and locking devices for wear, cracks, corrosion and distortion.	
	59		• Rotation bearing(s)	
	60		• Inner boom pivot pin(s) and retainer(s)	
	61		• Outer boom pivot pin(s) and retainer(s)	
	62		• Inner boom cylinder pin(s) and retainer(s)	
	63		• Outer boom cylinder pin(s) and retainer(s)	
	64		• Extension cylinder pin(s) and retainer(s)	
	65		• Jib boom pin(s) and retainer(s)	
	66		• Jib cylinder pin(s) and retainer(s)	
	67		• Jib extension cylinder pin(s) and retainer(s)	
	68		• Boom tip attachment	
	69		• Other	
Q	70	Hyd Lines	Hoses, fittings and tubing for proper routing, leakage, blistering, deformation and excessive abrasion.	
	71		• Pressure line(s) from pump to control valve	
	72		• Return line(s) from control valve to reservoir	
	73		• Suction line(s) from reservoir to pump	
	74		• Pressure line(s) from control valve to each function	
	75		• Load holding valve pipe(s) and hose(s)	

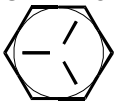
FREQUENCY	ITEM	KEY	INSPECTION DESCRIPTION	STATUS (S,R,X,NA)
	76		• Other	
Q	77	Pumps & Motors	Pumps and Motors for loose bolts/fasteners, leaks, noise, vibration, loss of performance, heating & excess pressure.	
	78		• Winch motor(s)	
	79		• Rotation motor(s)	
	80		• Other	
Q	81	Valves	Hydraulic valves for cracks, spool return to neutral, sticking spools, proper relief valve setting, relief valve failure.	
	82		• Main control valve	
	83		• Load holding valve(s)	
	84		• Stabilizer or auxiliary control valve(s)	
	85		• Other	
	86		• Other	
Q	87	Cylinders	Hydraulic cylinders for drifting, rod seal leakage and leakage at welds. Rods for nicks, scores and dents. Case for damage. Case and rod ends for damage and abnormal wear.	
	88		• Stabilizer cylinder(s)	
	89		• Inner boom cylinder(s)	
	90		• Outer boom cylinder(s)	
	91		• Extension cylinder(s)	
	92		• Rotation cylinder(s)	
	93		• Jib lift cylinder(s)	
	94		• Jib extension cylinder(s)	
	95		• Other	
Q	96	Winch	Winch, sheaves and drums for damage, abnormal wear, abrasions and other irregularities.	
Q	97	Hyd Filters	Hydraulic filters for replacement per maintenance schedule.	
A	98	Daily	All daily inspection items.	
A	99	Monthly	All monthly inspection items.	
A	100	Quarterly	All quarterly inspection items.	
A	101	Hyd Sys	Hydraulic fluid change per maintenance schedule.	
A	102	Controls	Control valve calibration for correct pressure & relief valve settings.	
A	103	Valves	Safety valve calibration for correct pressure & relief valve settings.	
A	104	Valves	Valves for failure to maintain correct settings.	
A	105	Rotation Sys	Rotation drive system for proper backlash clearance & abnormal wear, deformation and cracks.	
A	106	Lubrication	Gear oil change in rotation drive system per maintenance schedule.	
A	107	Hardware	Check tightness of all fasteners and bolts, using torque specifications on component drawings or torque chart.	
A	108	Wear Pads	Wear pads for excessive wear.	
A	109	Loadline	Loadline for proper attachment to drum.	

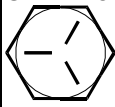
DATE:	OWNER:	UNIT I.D. NUMBER:
GUIDELINES a A deficiency (X) may constitute a hazard. Deficiency must be corrected and/or faulty parts replaced before resuming operation. b Recommendations (R) should be considered for corrective actions. Corrective action for a particular recommendation depends on the facts in each situation. c Corrective actions (CA), repairs, adjustments, parts replacement, etc. are to be performed by a qualified person in accordance with all manufacturer's recommendations, specifications and requirements. NOTE: Deficiencies (X) listed must be followed by the corresponding corrective action taken (CA). X = DEFICIENCY R = RECOMMENDATION CA = CORRECTIVE ACTION TAKEN		

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Thread Torque Charts

FINE THREAD BOLTS (ENGLISH)					
SIZE	BOLT DIA.	 GRADE 5 SAE J429 GRADE 5		 GRADE 8 SAE J429 GRADE 8	
(DIA-TPI)	(INCHES)	PLAIN	PLATED	PLAIN	PLATED
		(FT-LB)	(FT-LB)	(FT-LB)	(FT-LB)
5/16-24	0.3125	19	14	27	20
3/8-24	0.375	35	26	49	35
7/16-20	0.4375	55	41	78	58
1/2-20	0.5	90	64	120	90
9/16-18	0.5625	120	90	170	130
5/8-18	0.625	170	130	240	180
3/4-16	0.75	300	225	420	315
7/8-11	0.875	445	325	670	500
1-12	1	645	485	995	745
1 1/8-12	1.125	890	670	1445	1085
1 1/4-12	1.25	1240	930	2010	1510
1 3/8-12	1.375	1675	1255	2710	2035
1 1/2-12	1.5	2195	1645	3560	2670

COARSE THREAD BOLTS (ENGLISH)					
SIZE	BOLT DIA.	 GRADE 5 SAE J429 GRADE 5		 GRADE 8 SAE J429 GRADE 8	
(DIA-TPI)	(INCHES)	PLAIN	PLATED	PLAIN	PLATED
		(FT-LB)	(FT-LB)	(FT-LB)	(FT-LB)
5/16-18	0.3125	17	13	25	18
3/8-16	0.375	31	23	44	33
7/16-14	0.4375	49	37	70	52
1/2-13	0.5	75	57	105	80
9/16-12	0.5625	110	82	155	115
5/8-11	0.625	150	115	220	160
3/4-10	0.75	265	200	375	280
7/8-9	0.875	395	295	605	455
1-8	1	590	445	910	680
1 1/8-7	1.125	795	595	1290	965
1 1/4-7	1.25	1120	840	1815	1360
1 3/8-6	1.375	1470	1100	2380	1780
1 1/2-6	1.5	1950	1460	3160	2370

NOTES

- 1 Tightening torques provided are midrange.
- 2 Consult bolt manufacturer's particular specifications, when provided.
- 3 Use flat washers of equal strength.
- 4 All torque measurements are given in foot-pounds.
- 5 Torque values specified are for bolts with residual oils or no special lubricants applied. If special lubricants of high stress ability, such as Never-Seez compound graphite and oil, molybdenum disulphide, colloidal copper or white lead are applied, multiply the torque values in the charts by the factor .90. The use of Loctite does not affect the torque values listed above.

WARNING

Anytime a gear-bearing bolt is removed, it must be replaced with a new bolt of the identical grade and size. Once a bolt has been torqued to 75% of its proof load and then removed, the torque coefficient may no longer be the same as when the bolt was new thus giving indeterminate clamp loads after torqueing. Failure to replace gear-bearing bolts may result in bolt failure due to metal fatigue causing death or serious injury.

FINE THREAD TORQUE CHART (METRIC)					
TIGHTENING TORQUE					
SIZE (DIA- TPI)	BOLT DIA. (INCHES)	 SAE J429 GRADE 5		 SAE J429 GRADE 8	
		PLAIN (KG-M)	PLATED (KG-M)	PLAIN (KG-M)	PLATED (KG-M)
5/16-24	0.3125	3	2	4	3
3/8-24	0.375	5	4	7	5
7/16-20	0.4375	8	6	11	8
1/2-20	0.5	12	9	17	12
9/16-18	0.5625	17	12	24	18
5/8-18	0.625	24	18	33	25
3/4-16	0.75	41	31	58	44
7/8-11	0.875	62	45	93	69
1-12	1	89	67	138	103
1 1/8-12	1.125	123	93	200	150
1 1/4-12	1.25	171	129	278	209
1 3/8-12	1.375	232	174	375	281
1 1/2-12	1.5	304	228	492	369

COARSE THREAD TORQUE CHART (METRIC)					
TIGHTENING TORQUE					
SIZE (DIA- TPI)	BOLT DIA (INCHES)	 SAE J429 GRADE 5		 SAE J429 GRADE 8	
		PLAIN (KG-M)	PLATED (KG-M)	PLAIN (KG-M)	PLATED (KG-M)
5/16-18	0.3125	2	2	3	2
3/8-16	0.375	4	3	6	5
7/16-14	0.4375	7	5	10	7
1/2-13	0.5	10	8	15	11
9/16-12	0.5625	15	11	21	16
5/8-11	0.625	21	16	30	22
3/4-10	0.75	37	28	52	39
7/8-9	0.875	55	41	84	63
1-8	1	82	62	126	94
1 1/8-7	1.125	110	82	178	133
1 1/4-7	1.25	155	116	251	188
1 3/8-6	1.375	203	152	329	246
1 1/2-6	1.5	270	210	438	328

NOTES

- 1 Tightening torques provided are midrange.
- 2 Consult bolt manufacturer's particular specifications, when provided.
- 3 Use flat washers of equal strength.
- 4 All torque measurements are given in kilogram-meters.
- 5 Torque values specified are for bolts with residual oils or no special lubricants applied. If special lubricants of high stress ability, such as Never-Seez compound graphite and oil, molybdenum disulphide, colloidal copper or white lead are applied, multiply the torque values in the charts by the factor .90. The use of Loctite does not affect the torque values listed above.

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