
Manual Part # 99905180

Model 8600 22-foot Parts & Specifications

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IOWA MOLD TOOLING CO., INC.

PO Box 189

Garner, IA 50438

Tel: 641-923-3711 FAX: 641-923-2424

Website: <http://www.imt.com>

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Revisions

DATE	LOCATION	DESCRIPTION
20111031	77441481	ECN 11624 - Harness change
20120313	DECALS	ECN 11712 - Replace 70396787 with 70399345
20120328	99904970	ECN 11717 - Added larger pin 72661641 to downhaul weight.
20120430	Specifications	ECN 11739 – Fully extended dimension on cap chart and drawing
20120815	99904970	ECN 11774 - Added cable guide.
	73734727	ECN 11783 - 73734727 was 73734635
20130612	99905067	Engineering Mark-up – Added table
20130228	99904970	ECN 11913 - Single proportional system available.
20130412	99904970	ECN 11945 - Cable guide changed.
20130417	99904970	ECN 11952 - A2B bracket changed.
20130417	99904970	ECN 11959 - Horn controls added.
20130522	99904970	ECN 11940 - Hook stow and pin change.
20130315	99904970	ECN 11933 - Double line pin change.
20131106	99904970	Engineering Mark-up – updated table in 99905067
20131114	77441481	Added nailboard and circuit charts
	77441537	Added circuit chart
	99905614	Added horn circuit schematic
20140414	99905067 99904970 99905086 99905289	ECN12147 – move limit switch, update crane assembly within drawings
20141001	Greasing Instructions	ECN 12264 – Molub Alloy 882 Heavy was Molub Alloy 936
	99905595	ECN 12266 – Added
	73734472	ECN 12253 – Delete 72534560, Add 72532699 & 72532674
20151110		
50151223	51723174	CN262-Counterbalance valve 73054807 was incorrect. Corrected to 73540565.
20160208	BRADEN WINCHES	ECN12427-1, SWITCHING WINCHES FROM DINAMIC TO BRADEN
20160504	CN277-1	REMOVED VALUE BOXES, ADDED GRID LINES TO LOAD CAPACITY CHART
20160523		Added Dinamc Part numbers: 025110129, 421000600, 400023000 per Service.
20160531	INTRODUCTION	ADDED FALL PROTECTION/TIE-OFF INFORMATION
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 8600 22' 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.)	52,000 ft-lb (7.2 tm)
HORIZONTAL REACH - FLIP SHEAVE UP (From centerline of rotation)	22'-6" (6.9 m)
HORIZONTAL REACH - FLIP SHEAVE DOWN (From centerline of rotation)	21'-8" (6.6 m)
FULLY RETRACTED LENGTH	11'-11" (3.6 m)
HYDRAULIC EXTENSIONS (2)	60" (152 cm) & 57" (145 cm)
LIFTING HEIGHT (From base of crane)	23'-10" (7.3 m)
CRANE WEIGHT	1,825 lb (828 kg)
CRANE STORAGE HEIGHT	40.6" (103 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	42" (106.7 cm)
▪ Vertical from Bottom of Crane Base	19.6" (49.8 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)	60" & 57" (152 cm & 145 cm)	33 seconds to extend or retract
WINCH SPEED (single line)		60 feet per minute

POWER SOURCE

PTO DRIVEN - 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 30' (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 4,300 lb (1,950 kg) planetary winch is powered using a high-torque hydraulic motor. The lifting capacity of the winch is 4,300 lb (1,950 kg) one-part line. Maximum two-part line capacity is based on the maximum crane capacity. The winch is equipped with 85 ft (25.9 m) of 3/8" (9.5 mm), 6X25 FW PRF RRL IWRC XIPS 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.

8600 22' Minimum Chassis Specifications

CRANE MODEL	8600 - 22'
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	52,000 ft-lb (7190 kg-m)
GROSS VEHICLE WEIGHT RATING (2)	26,000 lb (11,793 kg) minimum

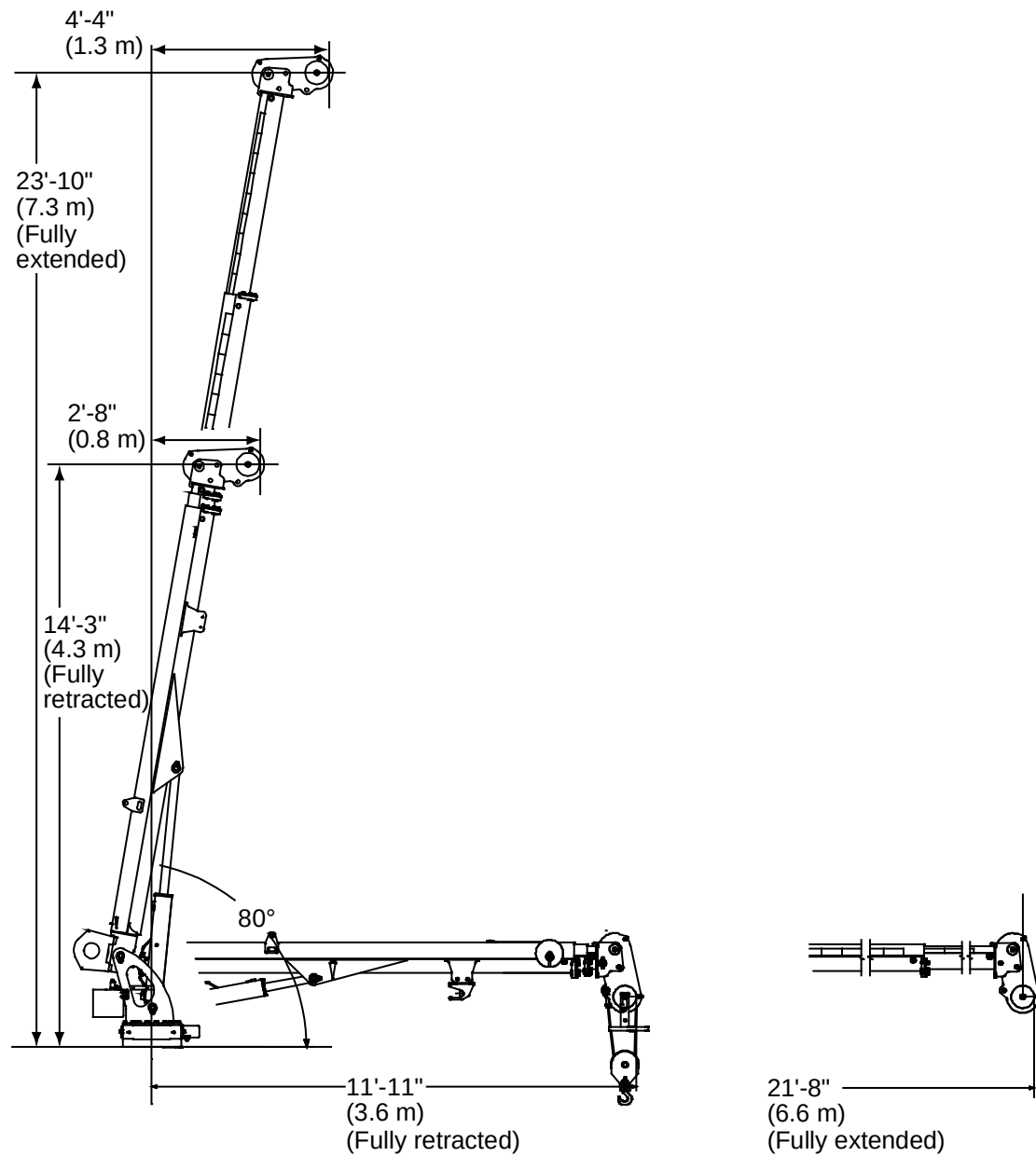
NOTES:

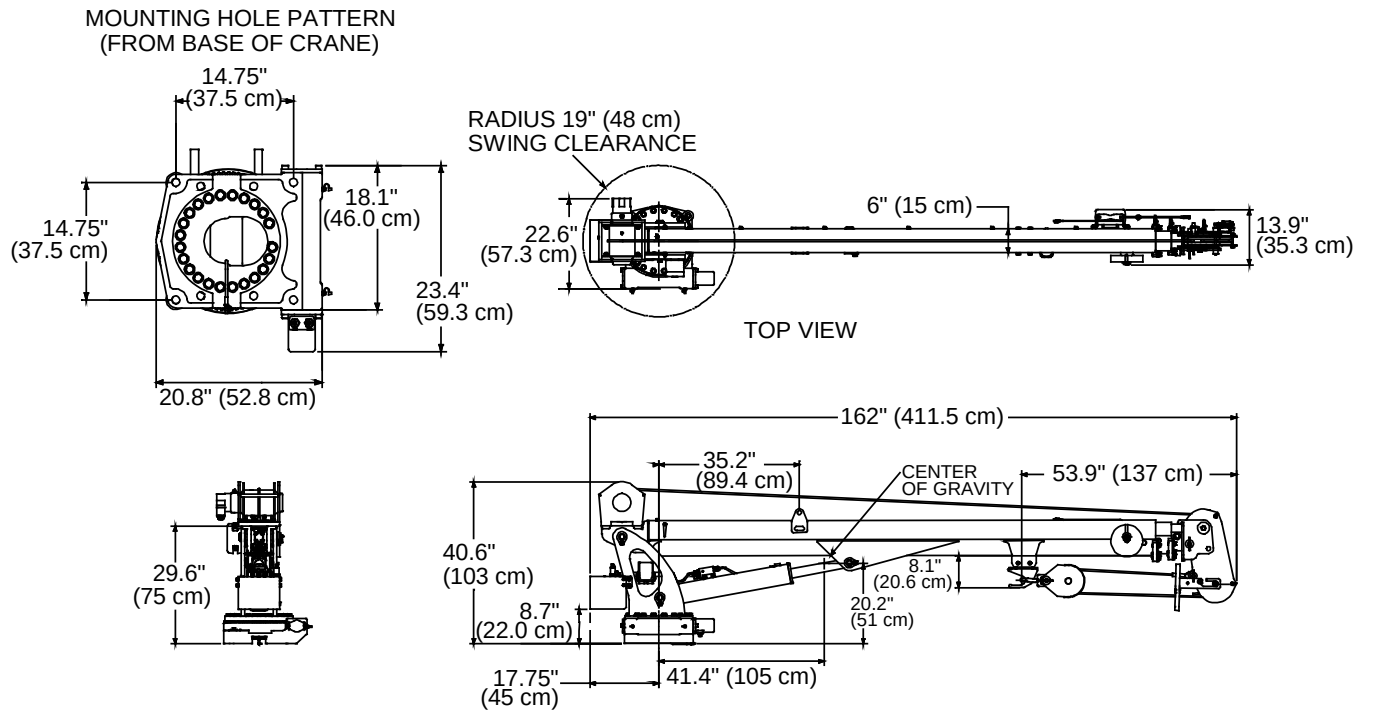
- 1** The Cab to Axle (CA) dimension varies based on the configuration of the body, crane, and auxiliary equipment including welder decks. Make sure the CA is free and clear from obstructions everywhere except between the frame rails.
- 2** The Gross Vehicle Weight Rating (GVW) is a minimum guideline. 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.

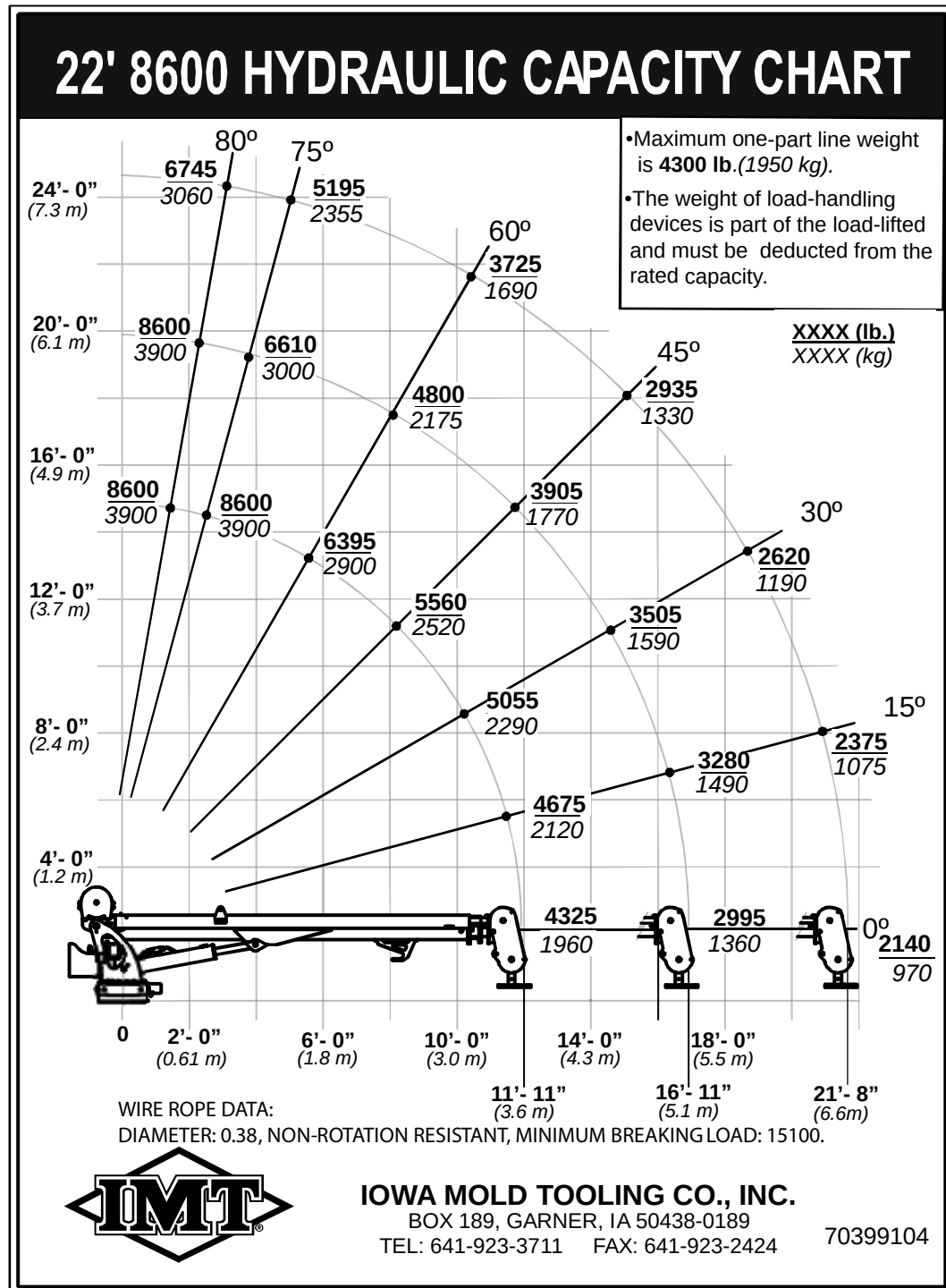
Dimensional Drawing

Dimensions for 22' 6000, 7500 and 8600 Crane





22' 8600 Capacity Chart



CHAPTER 3

Crane Reference

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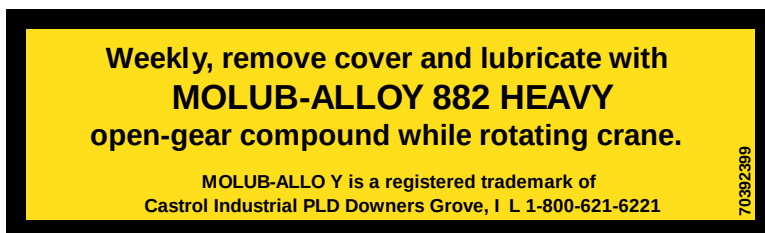
Greasing Instructions

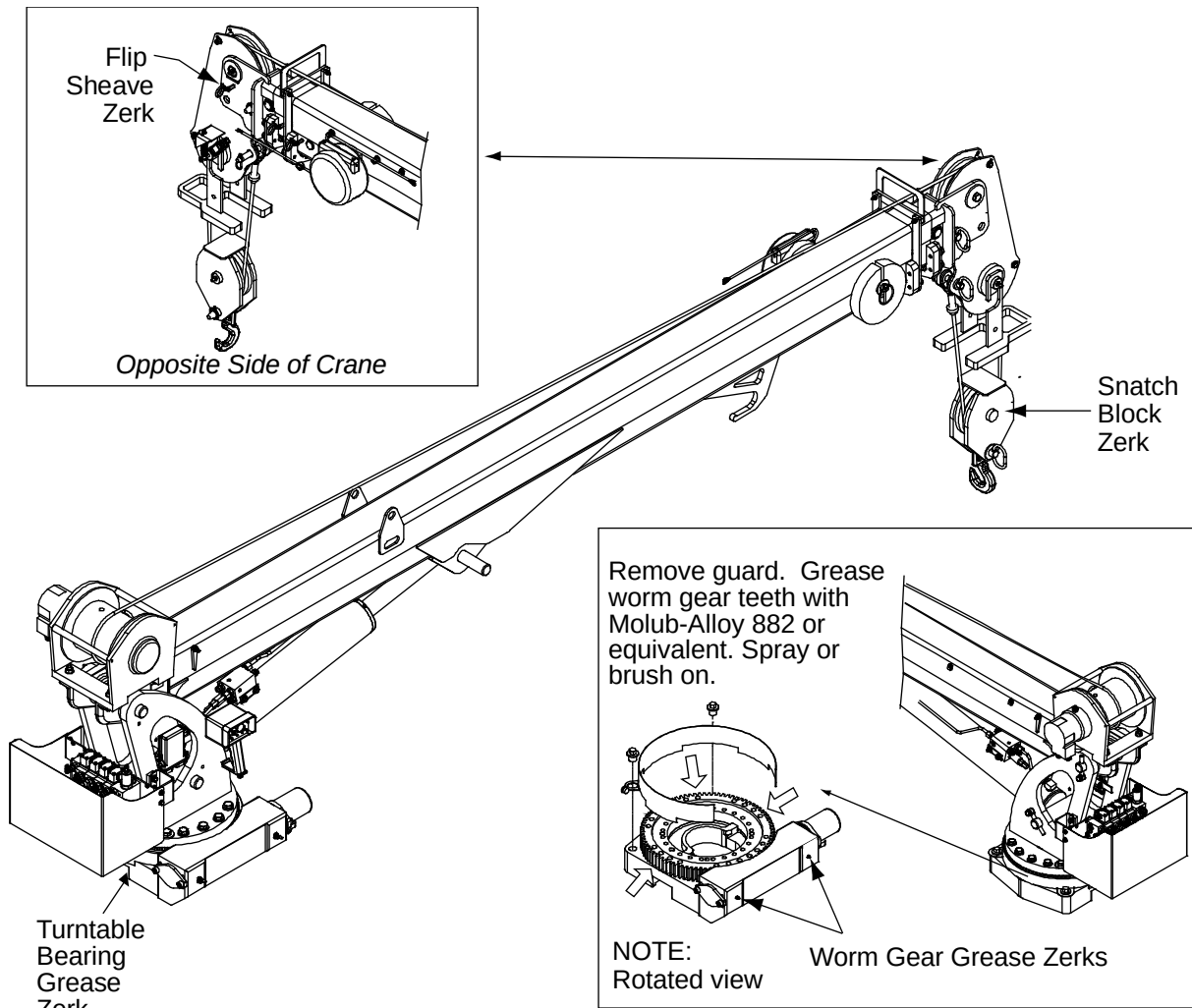
Different lubricants are required for different sections of your crane. Contact your lubricant supplier for specific product information. Follow the grease and lubricant specifications and intervals listed in this manual for best results.

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 882 Heavy 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

8600 22' 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
72060177	CAP SCREW .62-11X 3.00 HH GR8 Z	19
BOOM ASSEMBLY		
60030433	WEAR PAD-RC	1
60030339	WEAR PAD-ROUND	2
60030432	WEAR PAD-RC	1
60030431	WEAR PAD-RC	4
60030425	WEAR PAD-ROUND	2
60030427	WEAR PAD-ROUND	4
ANTI-TWO-BLOCK ASSEMBLY		
77041863	LIMIT SWITCH	1
CRANE & WINCH ASSEMBLY		
52719629	PIN (effective through 05/22/13)	2
52723197	PIN (effective through 05/22/13)	1
60140913	PIN - TYPE NN 1.5 X 7.25 (effective from 05/22/13)	1
60140914	PIN - TYPE NN 1.5 X 10.75 (effective from 05/22/13)	2
71073035	HOOK, 5.0 TON	1
70580182	WIRE ROPE ASSEMBLY	1
60030134	SHEAVE	1
LOWER CYLINDER (51723170)		
94399128	SEAL KIT	1
EXTENSION CYLINDER (51723174)		
94399126	SEAL KIT	1
WINCH (70570761)		
IN PROCESS		
VALVE BANK (73734635)		
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).

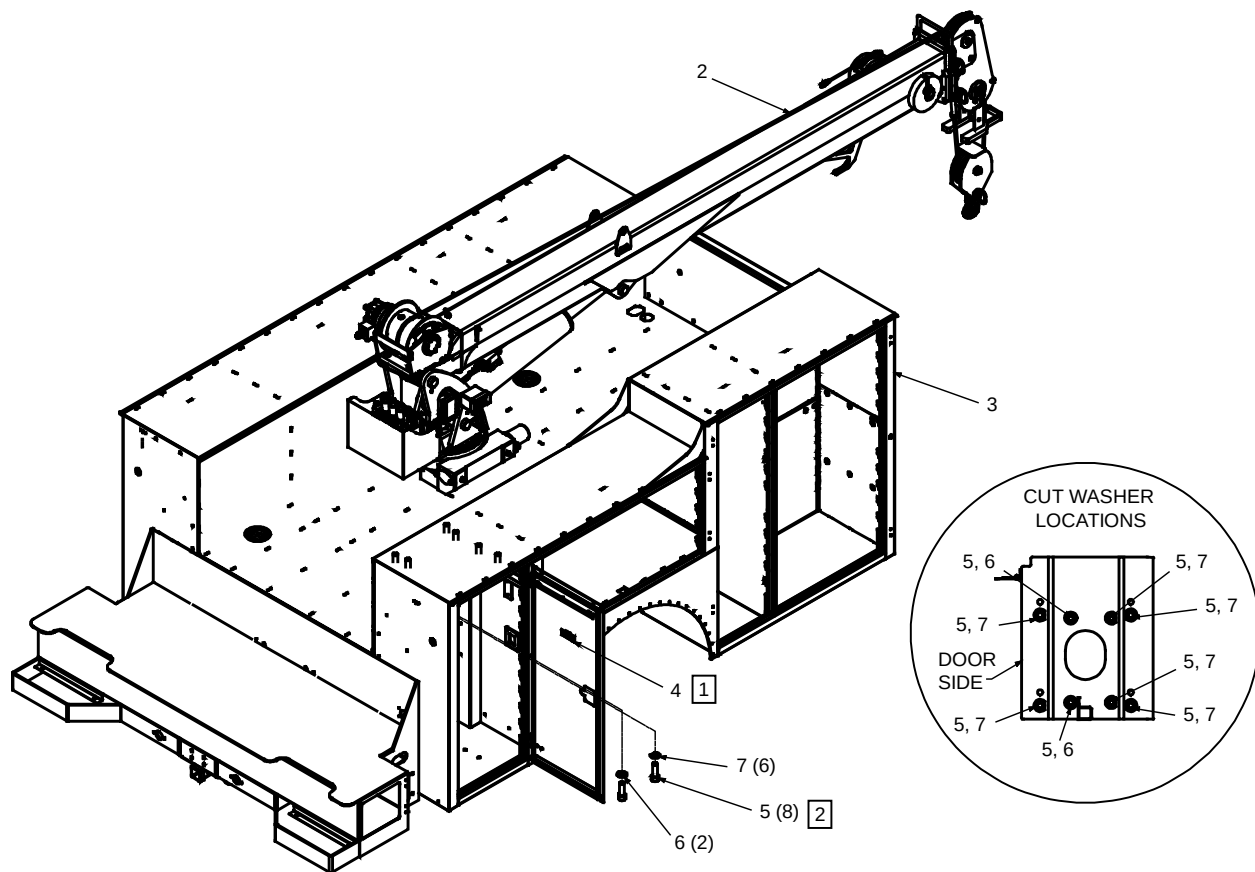
Reinforce the chassis frame, as necessary, and install the PTO and pump.

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)

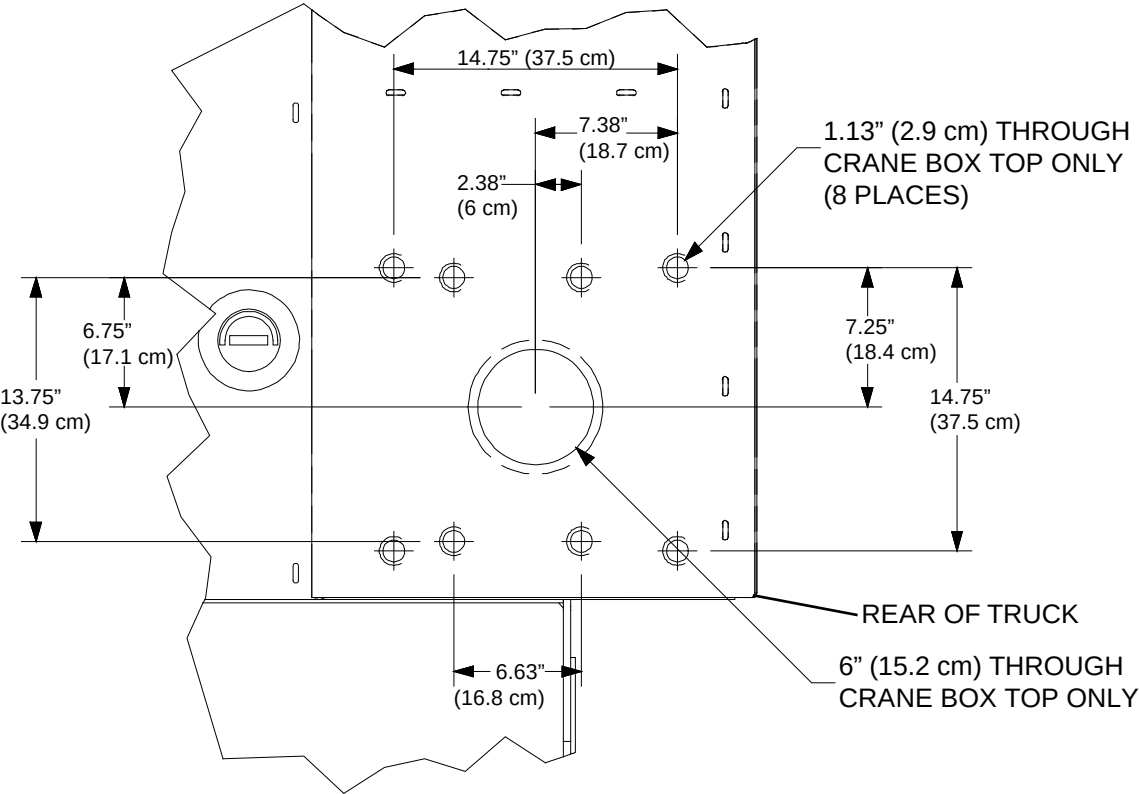


NOTES (SEE REFERENCE NUMBER IN BOX):

- 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 Model	Boom Length	Number of Mounting Bolts
8600	22'	4
	30'	8

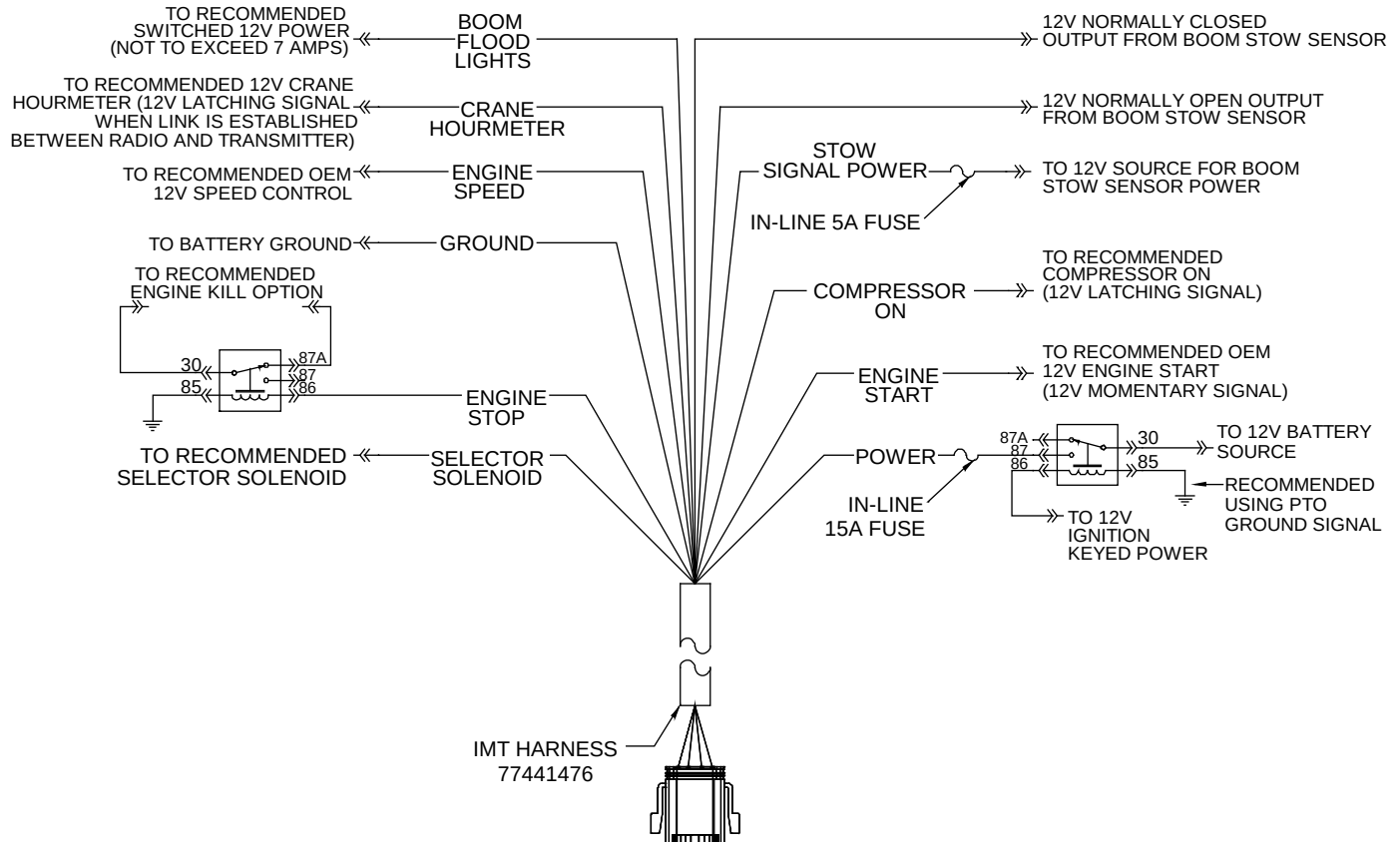
CRANE MOUNTING HOLE LOCATIONS



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 D 20120523					

Additional Installation Components, Non-IMT Body (93713748)

Chassis Wiring Harness (77441476 / 99905212)



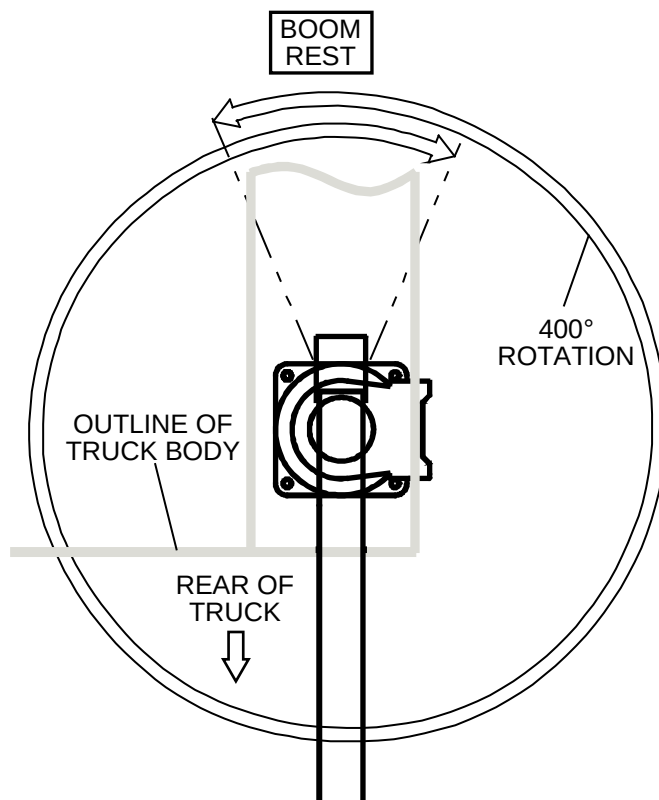
Filter (10 micron) (73052091)

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.

With non-factory-installed cranes, a loose hose sleeve is included in the box with the installation kit. After the crane is installed, rotated and placed in the boom support, wrap the hose sleeve around the hoses, then slide sleeve toward the fittings to protect the hoses during rotation.



Sleeve 60350105



Viewed looking up from crane box. The pressure, return, and rotation hoses are wrapped in the 60350105 hose sleeve.

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:

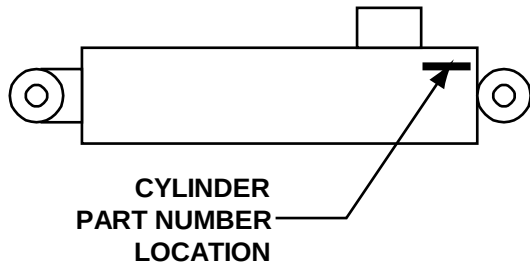
Iowa Mold Tooling Co., Inc.
Box 189, Garner, IA 50438-0189
Telephone: 641-923-3711
Technical Support Fax: 641-923-2424

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

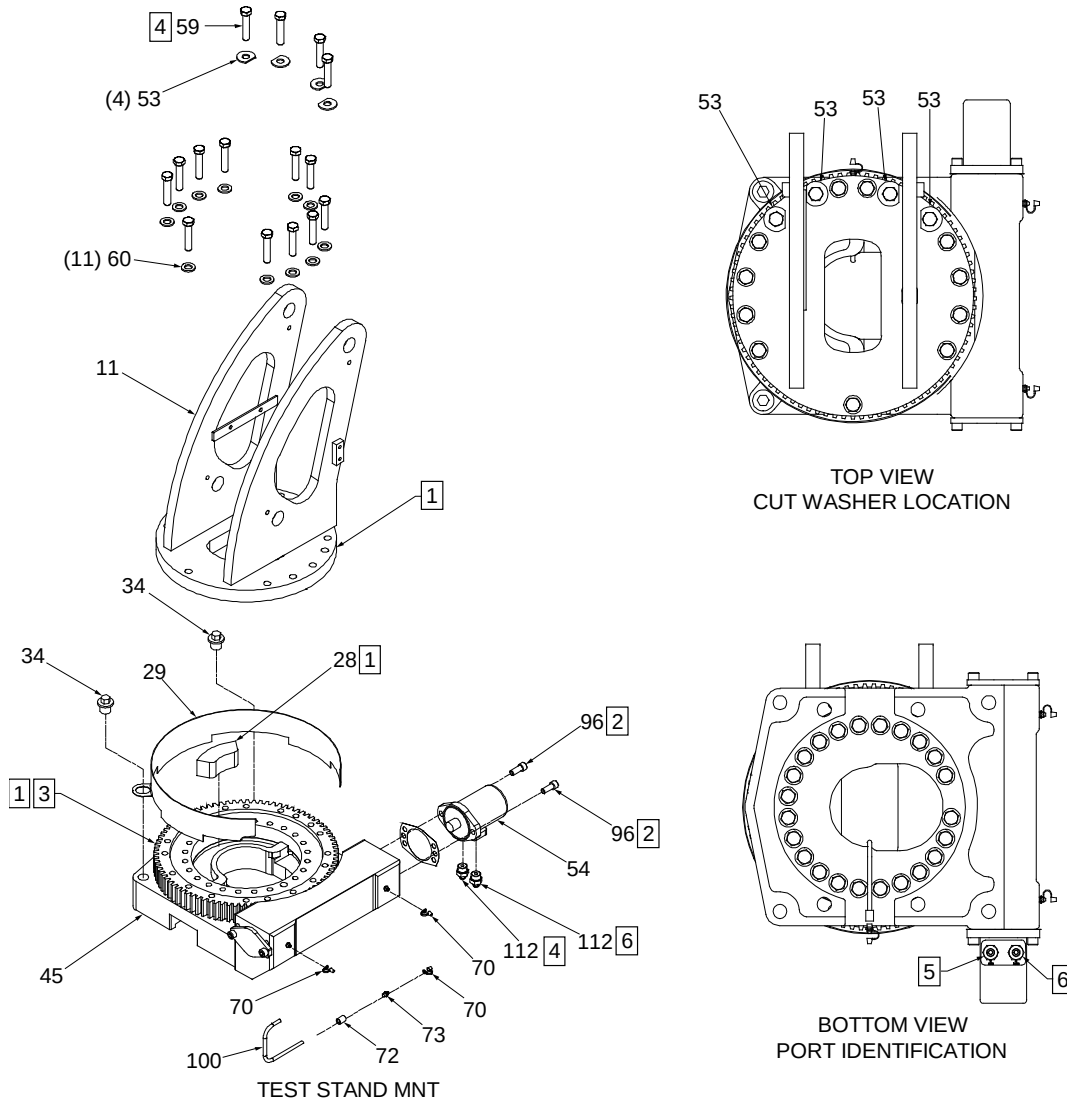
When ordering replacement parts:

- 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 (99904970)

(See Parts List for Effectivity Dates)

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



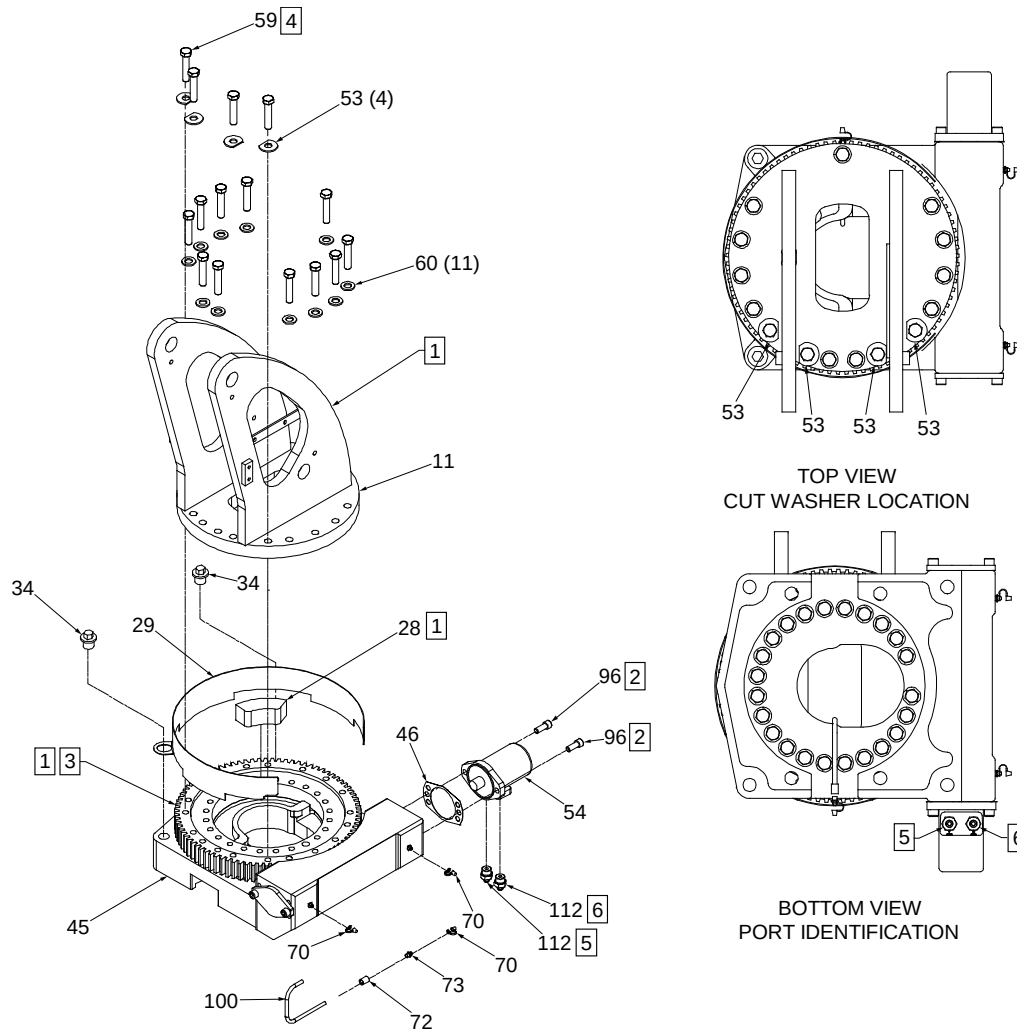
NOTES (SEE REFERENCE NUMBER IN BOX):

- 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 160 FT LB.
- 5 PORT A.
- 6 PORT B.

Base & Mast Assembly, Test Stand Parts List (99904970)				
ITEM	PART #	DESCRIPTION	KIT #	QTY
1.	91723654	KIT-HRDW BASE & MAST 7500/8600S		1
5.	91725204	KIT-HRDW SERIES III 7500/8600S (eff. from 05/22/13)		1
6.	91723656	KIT-HYD A40 SERIES III 7500/8600S		A/R
7.	91725087	KIT-HYD A40 SERIES III SP 7500/8600S		A/R
11.	52725122	MAST WLDMNT-SERIES III S (eff. from 4/3/13)		1
28.	60120138	SLIDE-ROTATION STOP 3816		1
29.	60128849	GEAR GUARD 6025 SII		1
34.	70029595	THREADED PLUG 1.00-8 (3816)		2
45.	71056543	GEAR ROTATOR 5020 170-00012-1		1
53.	72063216	WASHER .62 N FLAT-CUT 3816 (eff. from 02/14/13)		4
54.	73051919	MOTOR-HYD (101-2638-009)		1
59.	72060177	CAP SCR .62-11X 3.00 HH GR8 Z (eff. from 02/04/13)	#1	15
60.	72063119	WASHER .62 FLAT ASTM F436 (eff. from 02/04/13)	#1	11
70.	70034382	CAP-GREASE PRO20 GC-RED	#5	6
72.	72053301	COUPLING-GLV .12 SCH 40	#5	1
73.	72053508	ZERK-NPT .12	#5	4
96.	72601949	CAP SCR .50-13X 1.25 SH ZC	#5	2
100.	51395121	HOSE-AA .13 X 13.50 OAL (2-2)	#5	1
112.	72533613	ADPTR-M STR/M JIC 10 6	#6,#7	2
REV CC 20150909				

Base & Mast Assembly, Truck Mount (99904970) (See Parts List for Effectivity Dates)

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

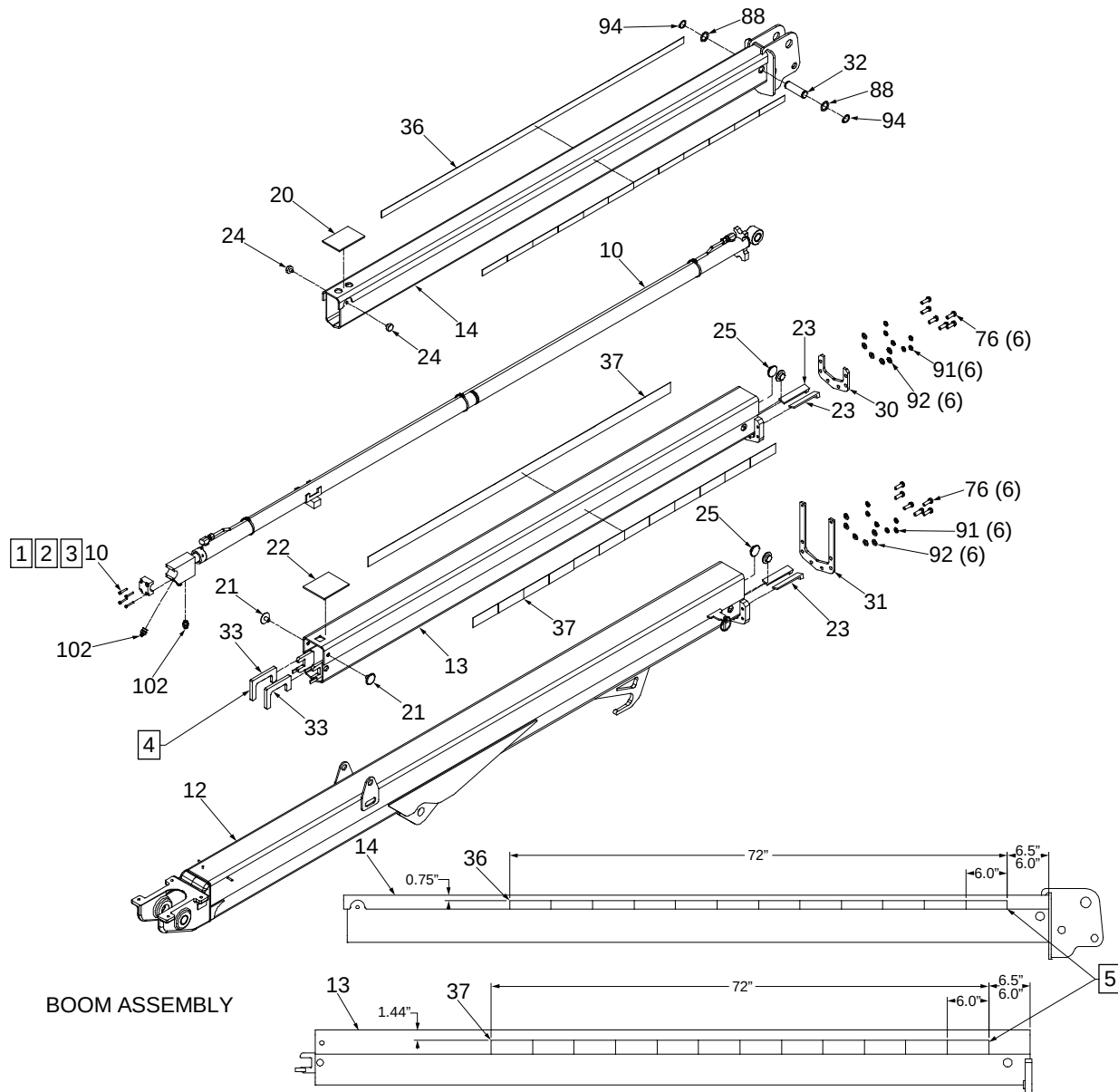


NOTES (SEE REFERENCE NUMBER IN BOX):

- 1 USE RUST 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 160 FT LB.
- 5 PORT A.
- 6 PORT B.

Base & Mast Assembly, Truck Mount Parts List (99904970)				
ITEM	PART #	DESCRIPTION	KIT #	QTY
1.	91723654	KIT-HRDW BASE & MAST 7500/8600S		1
5.	91725204	KIT-HRDW SERIES III 7500/8600S (eff. from 05/22/13)		1
6.	91723656	KIT-HYD A40 SERIES III 7500/8600S		A/R
7.	91725087	KIT-HYD A40 SERIES III SP 7500/8600S		A/R
11.	52725122	MAST WLDMNT-SERIES III S (eff. from 4/3/13)		1
28.	60120138	SLIDE-ROTATION STOP 3816		1
29.	60128849	GEAR GUARD 6025 SII		1
34.	70029595	THREADED PLUG 1.00-8 (3816)		2
45.	71056543	GEAR ROTATOR 5020 170-00012-1		1
46.	76039295	GASKET-GEA19 008-10056-1	#50	1
53.	72063216	WASHER .62 N FLAT-CUT 3816 (eff. from 02/14/13)		4
54.	73051919	MOTOR-HYD (101-2638-009)		1
59.	72060177	CAP SCR .62-11X 3.00 HH GR8 Z (eff. from 02/04/13)	#1	15
60.	72063119	WASHER .62 FLAT ASTM F436 (eff. from 02/04/13)	#1	11
70.	70034382	CAP-GREASE PRO20 GC-RED	#5	6
72.	72053301	COUPLING-GLV .12 SCH 40	#5	1
73.	72053508	ZERK-NPT .12	#5	4
96.	72601949	CAP SCR .50-13X 1.25 SH ZC	#5	2
100.	51395121	HOSE-AA .13 X 13.50 OAL (2-2)	#5	1
112.	72533613	ADPTR-M STR/M JIC 10 6	#6,#7	2
REV CC 20150909				

Boom Assembly (99904970) (See Parts List for Effectivity Dates)

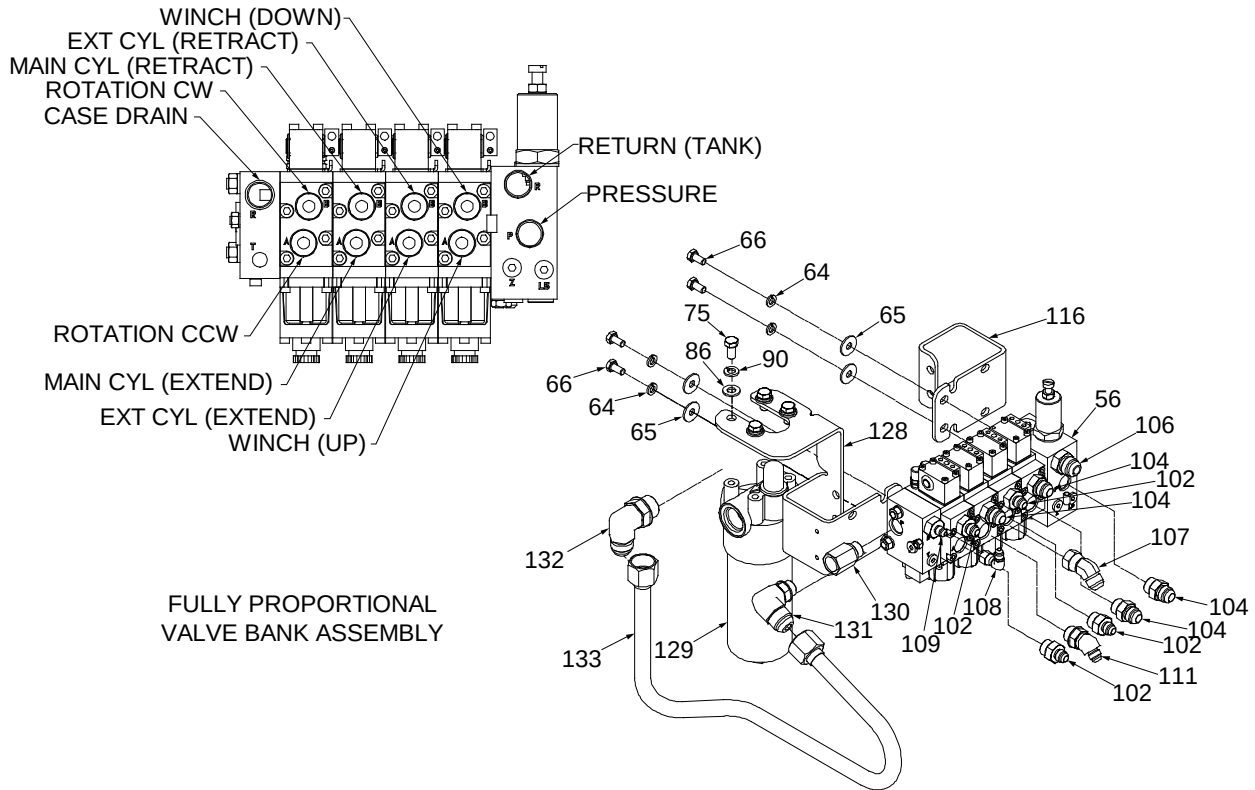


NOTES (SEE REFERENCE NUMBER IN BOX):

- 1 CYLINDER CAP & CAP SCREWS ARE INCLUDED WITH THE EXTENSION CYLINDER.
- 2 USE BLUE THREAD LOCKER.
- 3 TORQUE 6-7 FT-LB.
- 4 INSTALL EXTENSION CYLINDER FIRST, ADD RETAINERS NEXT, INSTALL WEAR-PADS LAST.
- 5 START WITH RED SEGMENT. ALIGN WITH PLATE EDGE.

Boom Assembly Parts List (99904970)				
ITEM	PART #	DESCRIPTION	KIT #	QTY
5.	91725204	KIT-HRDW SERIES III 7500/8600S (eff. from 05/22/13)		1
6.	91723656	KIT-HYD A40 SERIES III 7500/8600S		A/R
7.	91725087	KIT-HYD A40 SERIES III SP 7500/8600S		A/R
10.	51723174	CYL-2.0/1.5 117.00S 139.11CC C		1
12.	52725158	WLDMNT-LOWER BOOM 7500-8600S (eff. from 05/22/13)		1
13.	52725159	WLDMNT-1st STAGE EXT BOOM 7500S (eff. from 05/22/13)		1
14.	52723169	WLDMNT-2ND STAGE EXT BOOM 7500/8600		1
20.	60030433	WEAR PAD-RC 0.19 X 6.00X 4.00		1
21.	60030339	WEAR PAD-RND 0.19X 2.00X .60X .81		2
22.	60030432	WEAR PAD-RC 0.25 X 6.00X 5.00		1
23.	60030431	WEAR PAD-RC 0.25X 6.00X 1.25		4
24.	60030425	WEAR PAD-RND 0.44X 1.25X .50X .50		2
25.	60030427	WEAR PAD-RND 0.19X 2.00X 1.25X .44		4
31.	60140900	CAP-LOWER BOOM (eff. from 04/12/13)	#129	1
32.	60136309	PIN-TYPE A 1.25X 4.27 (3.83)		1
33.	60127979	PLATE-EXT CYL C-CLIP		2
36.	70399053	TAPE-REFLECTIVE RED/SILVER 1.25X72.00		2
37.	70396734	TAPE-REFLECTIVE RED/SILVER 2.00X72.00		2
76.	72060093	CAP SCR .50-13X 1.50 HH GR5 Z (eff. from 04/10/13)	#5	15
88.	72063035	MACHY BUSHING 1.25X10 GA NR	#5	2
91.	72063053	WASHER .50 LOCK (eff. from 05/22/13)	#5	15
92.	72063132	WASHER .50 FLAT ASTM F436	#5	17
94.	72066129	RETAINING RING-EXT 1.25 HD	#5	2
102.	72532356	ADPTR-M STR/M JIC 8 6	#6, #7	6
129.	73052156	FILTER-PRES 4000PSI 25GPM 10MIC -12		1
REV CC 20150909				

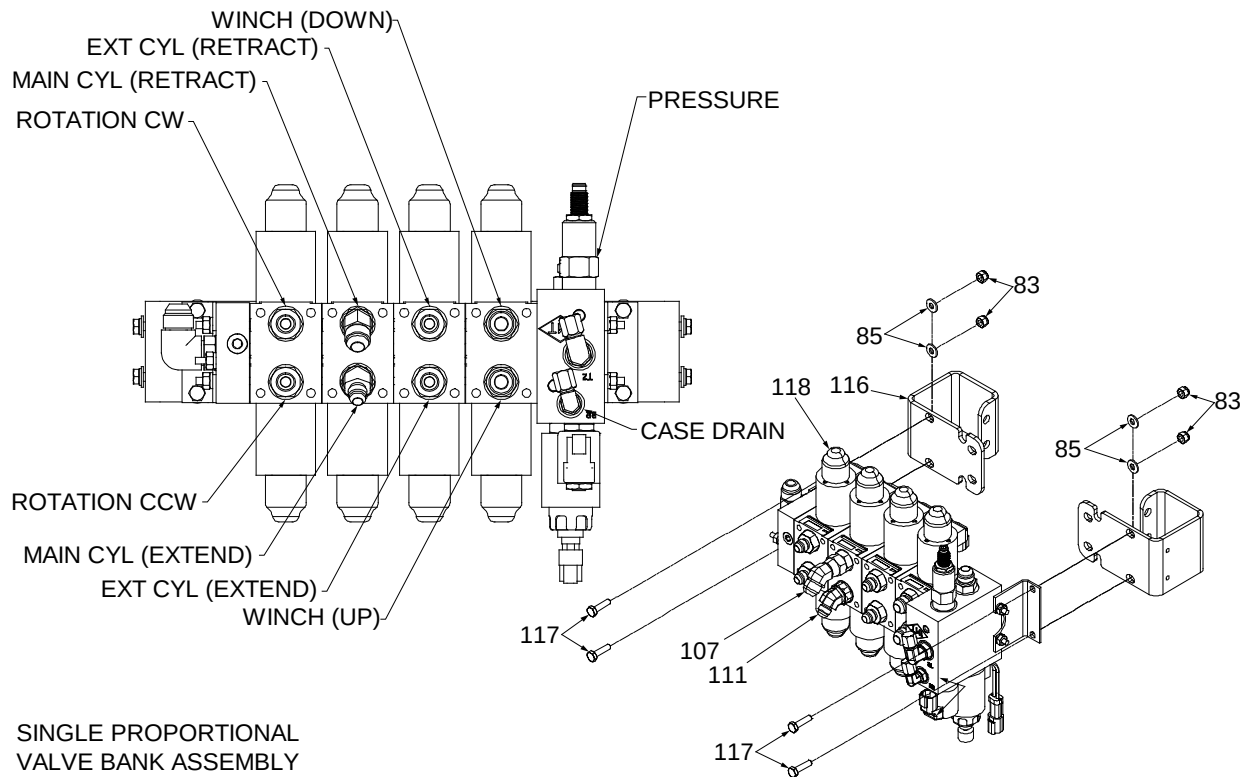
Valvebank Assembly - Fully Proportional (99904970)



Valvebank Assembly - Fully Proportional Parts List (99904970)				
ITEM	PART #	DESCRIPTION	KIT #	QTY
3.	91723543	KIT-HRDW VB MNT HAWE		1
5.	91725204	KIT-HRDW SERIES III 7500/8600S (eff. from 05/22/13)		1
6.	91723656	KIT-HYD A40 SERIES III 7500/8600S		A/R
7.	91725087	KIT-HYD A40 SERIES III SP 7500/8600S		A/R
56.	73734727	VALVE BANK-4SEC 4R 10GPM TELE PROP 12V G (eff. from 7/23/12)		A/R
64.	72601797	WASHER-LOCK 8MM (eff. from 9/18/2014)	#3	4
65.	72602065	WASHER-FLAT M 8 (eff. from 9/18/2014)	#3	4
66.	72602052	CAP SCR M 8-1.25X 16 HHZ (eff. from 9/18/2014)	#3	4
75.	72060044	CAP SCR .38-16X .75 HH GR5 Z	#5	8
86.	72063003	WASHER .38 FLAT (eff. from 04/10/13)	#5	12
90.	72063051	WASHER .38 LOCK	#5	8
102.	72532356	ADPTR-M STR/M JIC 8 6	#6,#7	6
104.	72532358	ADPTR-M STR/M JIC 8 8	#6,#7	4
106.	72532361	ADPTR-M STR/M JIC 8 10	#6,#7	1
107.	72532670	ELBOW-M JIC/45/F JIC 8 8	#6,#7	1
108.	72532690	ELBOW-M JIC/90/F JIC SW 4 4	#6,#7	1
109.	72532792	ADPTR-M STR/M JIC 8 4	#6,#7	1
111.	72533583	ELBOW-M STR/45/M JIC 8 6	#6,#7	1
116.	60140839	BRKT-MAST VB 6000-8600S (effective from 03/05/13)		2

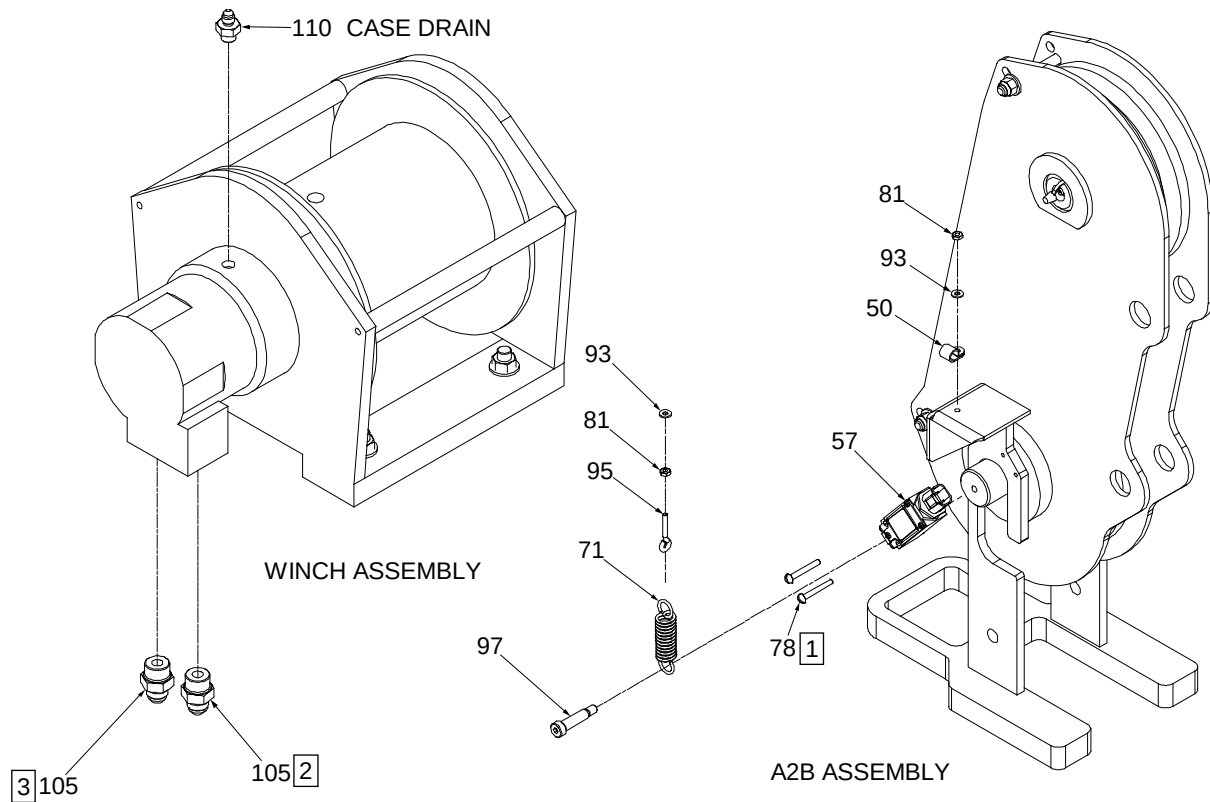
Valvebank Assembly - Fully Proportional Parts List (99904970)				
ITEM	PART #	DESCRIPTION	KIT #	QTY
128.	60143075	BRKT-MAST VB 6000-8600S FP		1
129.	73052156	FILTER-PRES 4000PSI 25GPM 10MIC -12		1
130.	72534898	O-RING EXTENDER 08-08		1
131.	72533623	ELBOW-M STR/90/M JIC 8 12		1
132.	72053767	ELBOW-M STR/90/M JIC 12 12		1
133.	71415690	TUBE ASM-PRESSURE FILTER S3FP SMALL MAST		1
REV CC 20150909				

Valvebank Assembly - Single Proportional (99904970)



Valvebank Assembly - Single Proportional Parts List (99904970)				
ITEM	PART #	DESCRIPTION	KIT #	QTY
5.	91725204	KIT-HRDW SERIES III 7500/8600S (eff. from 05/22/13)		1
6.	91723656	KIT-HYD A40 SERIES III 7500/8600S		A/R
7.	91725087	KIT-HYD A40 SERIES III SP 7500/8600S		A/R
83.	72062104	NUT .25-20 HEX NYLOCK (eff. from 04/12/13)	#5	6
85.	72063001	WASHER .25 FLAT (eff. from 02/28/13)	#5	14
107.	72532670	ELBOW-M JIC/45/F JIC 8 8	#6, #7	1
111.	72533583	ELBOW-M STR/45/M JIC 8 6	#6, #7	1
116.	60140839	BRKT-MAST VB 6000-8600S (effective from 03/05/13)		2
117.	72060004	CAP SCR .25-20X 1.00 HH GR5 Z	#5	4
118.	73734472	VALVE BANK-MOD.INLET (PW) 12VDC IP69		A/R
REV CC 20150909				

Winch & Anti-Two-Block Assembly (99904970)



NOTES (SEE REFERENCE NUMBER IN BOX):

- 1 USE BLUE THREAD LOCKER.
- 2 PORT A.
- 3 PORT B.

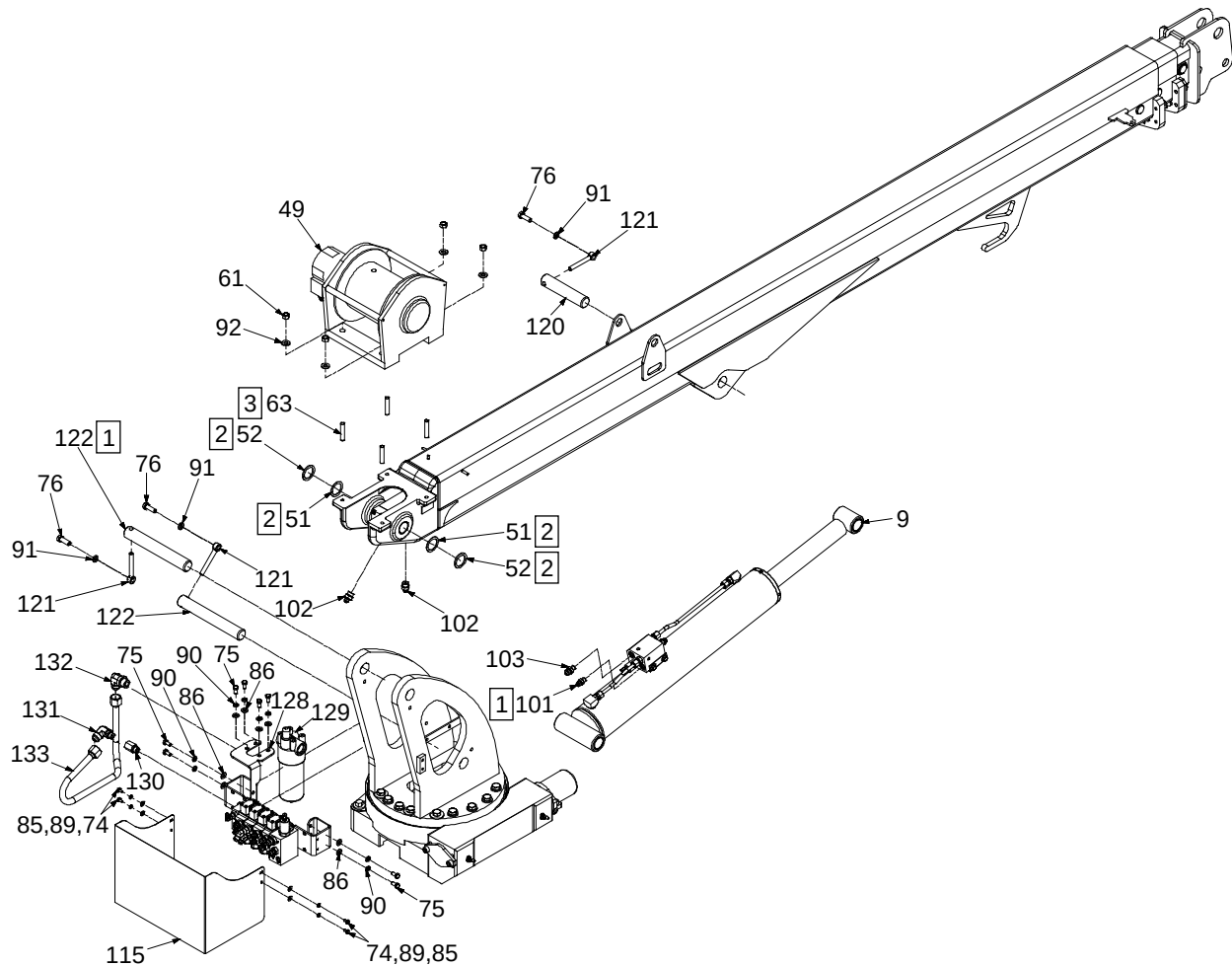
Winch & Anti-Two-Block Assembly Parts List (99904970)

ITEM	PART #	DESCRIPTION	KIT #	QTY
5.	91725204	KIT-HRDW SERIES III 7500/8600S (eff. from 05/22/13)		1
6.	91723656	KIT-HYD A40 SERIES III 7500/8600S		A/R
7.	91725087	KIT-HYD A40 SERIES III SP 7500/8600S		A/R
50.	72034485	CLAMP-PLASTIC 1/4" CABLE		8
57.	77041863	SWITCH-LIMIT DT04-4P CONN		1
71.	71413185	SPRING-.105WIRE 0.75OD 2.875 LG	#5	1
78.	72060640	SCR-MACH 10-24X 1.50 RDH	#5	2
81.	72062093	NUT # 8-32 HEX ZINC	#5	2
93.	72063271	WASHER # 8 W FLAT ANSI B27.2Z	#5	2
95.	72601938	BOLT-EYE # 8-32X 1.125	#5	1
97.	72602085	BOLT-SHLDR .38X 1.25 (5/16 thds) SS	#5	1
105.	72532359	ADPTR-M STR/M JIC 10 8	#6, #7	2
110.	72533490	ADPTR-M BSPP/M JIC 4 4	#6, #7	1

REV CC 20150909

Crane & Winch Assembly (99904970)

(See Parts List for Effectivity Dates)



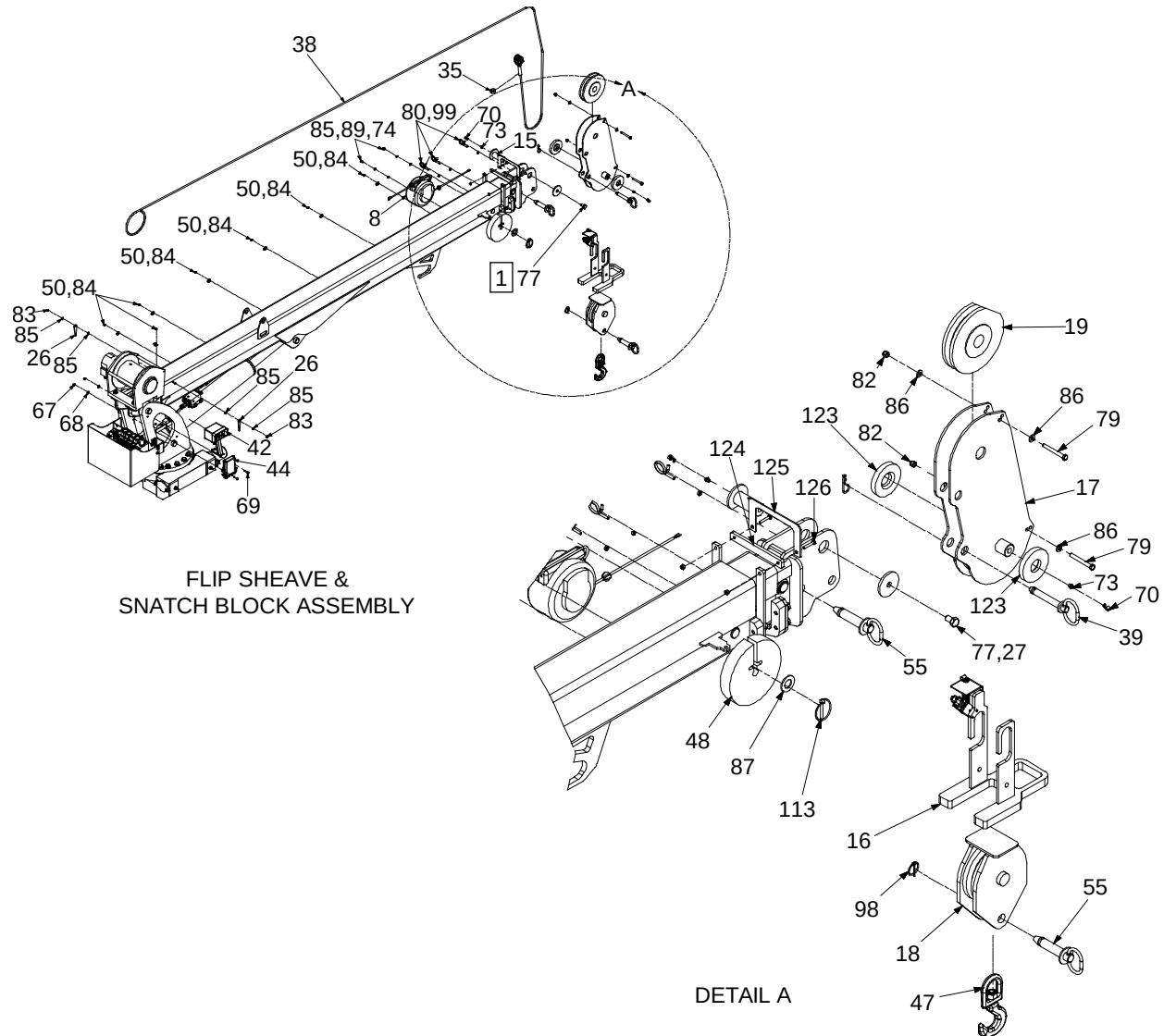
NOTES (SEE REFERENCE NUMBER IN BOX):

- 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 72063036 OR 72063037 MACHY BUSHINGS BETWEEN MAST AND LOWER BOOM.
- 3 APPLY BLUE LOCTITE.

Crane & Winch Assembly Parts List (99904970)				
ITEM	PART #	DESCRIPTION	KIT #	QTY
2.	91723579	KIT-HRDW WINCH A40-60		1
5.	91725204	KIT-HRDW SERIES III 7500/8600S (eff. from 05/22/13)		1
6.	91723656	KIT-HYD A40 SERIES III 7500/8600S		A/R
7.	91725087	KIT-HYD A40 SERIES III SP 7500/8600S		A/R
49.	71570968	WINCH-PLANETARY 4400 LINE PULL (A41)		1
51.	72063036	MACHY BUSHING 1.50X14 GA NR		A/R
52.	72063037	MACHY BUSHING 1.50X10 GA NR		A/R
61.	72062108	NUT .50-20 HEX CENTER LOCKING	#2	4
63.	72602061	STUD .50-13(20)X 2.50 NC(NF) GR8 STL	#2	4
74.	72060000	CAP SCR .25-20X .50 HH GR5 Z	#5	6
75.	72060044	CAP SCR .38-16X .75 HH GR5 Z	#5	8
76.	72060093	CAP SCR .50-13X 1.50 HH GR5 Z (eff. from 04/10/13)	#5	15
85.	72063001	WASHER .25 FLAT (eff. from 02/28/13)	#5	14
86.	72063003	WASHER .38 FLAT (eff. from 04/10/13)	#5	12
89.	72063049	WASHER .25 LOCK (eff. from 02/28/13)	#5	6
90.	72063051	WASHER .38 LOCK	#5	8
91.	72063053	WASHER .50 LOCK (eff. from 05/22/13)	#5	15
92.	72063132	WASHER .50 FLAT ASTM F436	#5	17
101.	72532355	ADPTR-M STR/M JIC 6 6	#6, #7	1
102.	72532356	ADPTR-M STR/M JIC 8 6	#6, #7	6
103.	72532357	ADPTR-M STR/M JIC 6 8	#6, #7	1
115.	60140838	COVER-VALVE BANK SIII (eff. from 03/05/13)		1
120.	60140913	PIN-TYPE NN 1.50X 7.25 (effective from 05/22/13)		1
121.	71415015	KEEPER-PIN .50 (effective from 05/22/13)		3
122.	60140914	PIN-TYPE NN 1.50X10.75 (effective from 05/22/13)		2
128.	60143075	BRKT-MAST VB 6000-8600S FP		1
129.	73052156	FILTER-PRES 4000PSI 25GPM 10MIC -12		1
130.	72534898	O-RING EXTENDER 08-08		1
131.	72533623	ELBOW-M STR/90/M JIC 8 12		1
132.	72053767	ELBOW-M STR/90/M JIC 12 12		1
133.	71415690	TUBE ASM-PRESSURE FILTER S3FP SMALL MAST		1
REV CC 20150909				

Flip Sheave Assembly (99904970)

(See Parts List for Effectivity Dates)



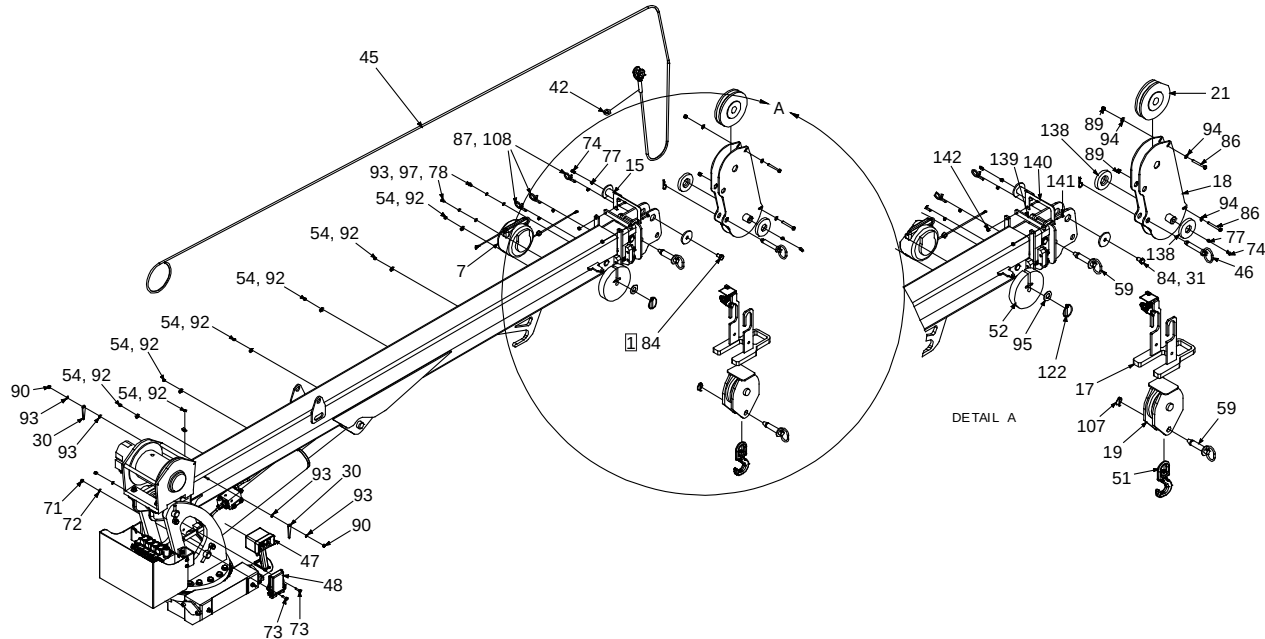
NOTES (SEE REFERENCE NUMBER IN BOX):

- 1 USE BLUE THREAD LOCKTITE.

Flip Sheave Assembly Parts List (99904970)				
ITEM	PART #	DESCRIPTION	KIT #	QTY
5.	91725204	KIT-HRDW SERIES III 7500/8600S (eff. from 05/22/13)		1
8.	51723610	CORD REEL ASM- 30FT W/PACKARD W/DEUTSCH		1
15.	52723030	PIN-TYPE M 1.50X 3.38		1
16.	52725155	WLDMT- A2B BRKT (eff. from 04/17/13)		1
18.	52725065	WLDMT- SNATCH BLOCK 7500/8600		1
19.	60030134	SHEAVE- 8.00 POLYMER		1

Flip Sheave Assembly Parts List (99904970)				
ITEM	PART #	DESCRIPTION	KIT #	QTY
26.	70034490	PLATE-ANGLE PLASTIC 3.50"		2
27.	60109337	RETAINER PLT-PIN 3.00 DIA		1
35.	70149793	COLLAR-SHAFT 2 PIECE 11/16 IN		1
38.	70580182	CABLE ASM-1020in .38 6X25 FW IWRC XIPS		1
39.	73734752	PIN-LOCK W/HANDLE 0.75 X 4.00 W/HAIRPIN (eff. from 03/15/13)		1
42.	70734761	TRANSMITTER-RAD REM TELE S3 NON-G W-HORN (eff. from 04/17/13)		A/R
44.	70734763	RECEIVER-RADIO REMOTE TELE SIII W-HORN (eff. from 04/17/13)		A/R
47.	71073035	HOOK-SWVL L322 AN 5.0T W/LATCH (eff. from 4/11/13)		1
48.	71414204	PLATE-SINGLE SHEAVE (20#) .38 WIRE ROPE		1
50.	72034485	CLAMP-PLASTIC 1/4" CABLE		8
55.	73734565	PIN-LOCK W/HANDLE 1.00 X 3.50 W/HAIRPIN		2
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
73.	72053508	ZERK-NPT .12	#5	4
74.	72060000	CAP SCR .25-20X .50 HH GR5 Z	#5	6
77.	72060147	CAP SCR .62-11X 1.00 HH GR5 Z	#5	1
79.	72060893	CAP SCR .38-16X 3.25 HH GR5 Z	#5	2
80.	72062000	NUT .25-20 HEX	#5	3
82.	72062103	NUT .38-16 HEX NYLOCK	#5	2
83.	72062104	NUT .25-20 HEX NYLOCK (eff. from 04/12/13)	#5	6
84.	72062106	NUT 10-24 HEX NYLOCK	#5	7
85.	72063001	WASHER .25 FLAT (eff. from 02/28/13)	#5	14
86.	72063003	WASHER .38 FLAT (eff. from 04/10/13)	#5	12
87.	72063010	WASHER 1.00 FLAT	#5	1
89.	72063049	WASHER .25 LOCK (eff. from 02/28/13)	#5	6
98.	72661543	PIN-QUICK 316-10QP (eff. from 03/15/13)	#5	2
99.	72661694	BRIDLE RING 1-1/12ID X 1/4-20	#5	3
113.	72661641	PIN-QUICK 5/16-2-1/16 ZINC YELLOW	#5	1
123.	60030486	SPACER-A2B BRACKET (effective from 05/22/13)		2
124.	60140934	GUIDE - CABLE WEAR (NARROW) (effective from 04/12/13)		1
125.	60140937	BRKT - CABLE GUIDE (NARROW) (effective from 04/12/13)		1
126.	72060006	CAP SCR .25-20X 1.50 HH GR5 Z (effective from 04/12/13)		2
REV CC 20150909				

Flip Sheave Assembly (99904970)



NOTES (SEE REFERENCE NUMBER IN BOX):

1. USE BLUE THREAD LOCKTITE.

FLIP SHEAVE ASSEMBLY PARTS LIST (99904970)					
ITEM	PART #	DESCRIPTION	DETAILS	KIT #	QUANTITY
4.	51719413	KIT-HARDWARE TELE CRANE RADIO CONTROLS			1
5.	91723655	KIT-HARDWARE SERIES III 7500/8600S			1
7.	51723610	CORD REEL ASSEMBLY	30 FOOT		1
15.	52723030	PIN	1.50X 3.38		1
17.	52723058	WELDMENT- ANTI-TWO-BLOCK BRACKET			1
18.	52723062	WELDMENT-FLIP SHEAVE 7500/8600			1
19.	52723063	WELDMENT- SNATCH BLOCK 7500/8600			1
21.	60030134	SHEAVE	8.00 NYLATRON GSM		1
26.	60030424	CAP- ANTI-TWO-BLOCK PIN			2
29.	60030429	WEAR PAD- ANTI-TWO-BLOCK BRACKET			2
30.	70034490	PLATE-ANGLE PLASTIC	3.5"		2
31.	60109337	RETAINER PLATE-PIN	3.00 DIA		1
37.	52723625	HOOK HOLDER-WELDMENT			1
41.	70034517	SPLIT SHEAVE PROTECTOR			1
42.	70149793	COLLAR-SHAFT 2 PIECE	11/16 IN		1
45.	70580182	CABLE ASSEMBLY	85FT .38 6X25 FW IWRC XIPS		1

FLIP SHEAVE ASSEMBLY PARTS LIST (99904970)					
ITEM	PART #	DESCRIPTION	DETAILS	KIT #	QUANTITY
46.	72661514	PIN-LOCK W/HANDLE	.875 X 4.25		1
47.	70734559	TRANSMITTER-RADIO REMOTE			1
48.	70734560	RECEIVER-RADIO REMOTE			1
51.	71073035	HOOK-SWIVEL	L322 AN 5.0T W/LATCH		1
52.	71414204	PLATE-SINGLE SHEAVE	(20#) .38 WIRE ROPE		1
54.	72034485	CLAMP-PLASTIC	1/4" CABLE		8
59.	73734565	PIN-LOCK W/HANDLE	1.00 X 3.50 W/HAIRPIN		2
71.	72062194	NUT-SS	.25-20 NYLOC	#4	2
72.	72063166	WASHER-FLAT	.25 R WRT 18-8 .62OD SS	#4	2
73.	72601846	CAP SCREW	.25-20X 1.25 HH SS	#4	2
74.	70034382	CAP-GREASE		#5	6
77.	72053508	ZERK	NPT 0.12	#5	4
78.	72060000	CAP SCREW	.25-20X .50 HH GR5 Z	#5	2
81.	72060064	CAP SCREW	.44-14X 1.50 HH GR5 Z	#5	4
82.	72060091	CAP SCREW	.50-13X 1.00 HH GR5 Z	#5	5
84.	72060147	CAP SCREW	.62-11X 1.00 HH GR5 Z	#5	1
86.	72060893	CAP SCREW	.38-16X 3.25 HH GR5 Z	#5	2
87.	72062000	NUT	.25-20 HEX	#5	3
89.	72062103	NUT	.38-16 HEX NYLOCK	#5	2
90.	72062104	NUT	.25-20 HEX NYLOCK	#5	2
91.	72062105	NUT	.44-14 HEX NYLOCK	#5	4
92.	72062106	NUT	10-24 HEX NYLOCK	#5	7
93.	72063001	WASHER	.25 FLAT	#5	10
94.	72063003	WASHER	.38 FLAT	#5	16
95.	72063010	WASHER	1.00 FLAT	#5	1
97.	72063049	WASHER	.25 LOCK	#5	6
99.	72063053	WASHER	.50 LOCK	#5	17
100.	72063132	WASHER	.50 FLAT ASTM F436	#5	17
107.	72661543	PIN-QUICK		#5	3
108.	72661694	BRIDLE RING	1-1/12ID X 1/4-20	#5	3
122.	72661641	PIN-QUICK		#5	1
REV G 20120815					

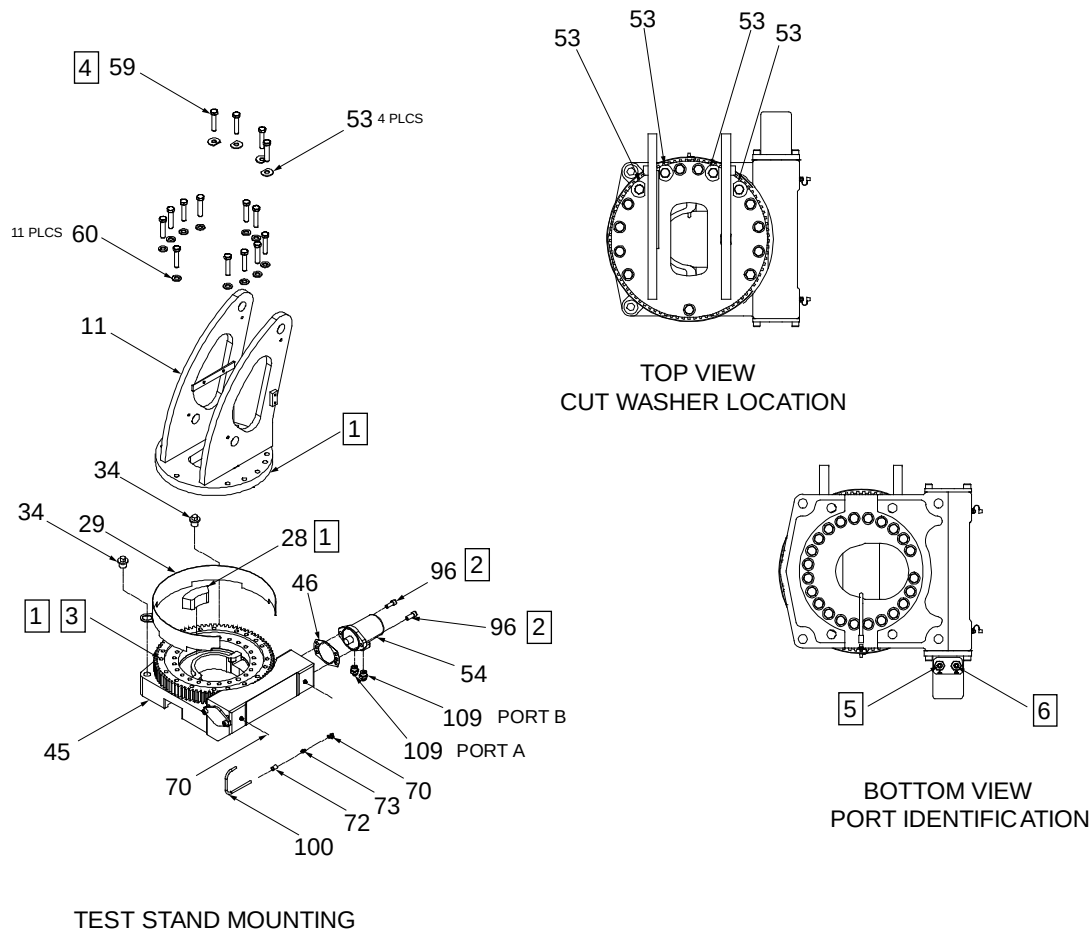
22' Model 8600 Crane Parts List, Complete (99904970)
(See Parts List for Effectivity Dates)

22' Model 8600 Crane Parts List, Complete (99904970)				
ITEM	PART #	DESCRIPTION	KIT #	QTY
1.	91723654	KIT-HRDW BASE & MAST 7500/8600S		1
2.	91723579	KIT-HRDW WINCH A40-60		1
3.	91723543	KIT-HRDW VB MNT HAWK		1
4.	51719413	KIT-HRDW TELE CRANE RADIO CONTROLS		1
5.	91725204	KIT-HRDW SERIES III 7500/8600S (eff. from 05/22/13)		1
6.	91723656	KIT-HYD A40 SERIES III 7500/8600S		A/R
7.	91725087	KIT-HYD A40 SERIES III SP 7500/8600S		A/R
8.	51723610	CORD REEL ASM- 30FT W/PACKARD W/DEUTSCH		1
9.	51723170	CYL-4.50/2.2 25.06S 45.52CC C		1
10.	51723174	CYL-2.0/1.5 117.00S 139.11CC C		1
11.	52725122	MAST WLDMNT-SERIES III S (eff. from 4/3/13)		1
12.	52725158	WLDMNT-LOWER BOOM 7500-8600S (eff. from 05/22/13)		1
13.	52725159	WLDMNT-1st STAGE EXT BOOM 7500S (eff. from 05/22/13)		1
14.	52723169	WLDMNT-2ND STAGE EXT BOOM 7500/8600		1
15.	52723030	PIN-TYPE M 1.50X 3.38		1
16.	52725155	WLDMT- A2B BRKT (eff. from 04/17/13)		1
17.	52725153	WLDMT-FLIP SHEAVE 7500/8600 (eff. from 04/17/13)		1
18.	52725065	WLDMT- SNATCH BLOCK 7500/8600		1
19.	60030134	SHEAVE- 8.00 POLYMER		1
20.	60030433	WEAR PAD-RC 0.19 X 6.00X 4.00		1
21.	60030339	WEAR PAD-RND 0.19X 2.00X .60X .81		2
22.	60030432	WEAR PAD-RC 0.25 X 6.00X 5.00		1
23.	60030431	WEAR PAD-RC 0.25X 6.00X 1.25		4
24.	60030425	WEAR PAD-RND 0.44X 1.25X .50X .50		2
25.	60030427	WEAR PAD-RND 0.19X 2.00X 1.25X .44		4
26.	70034490	PLATE-ANGLE PLASTIC 3.50"		2
27.	60109337	RETAINER PLT-PIN 3.00 DIA		1
28.	60120138	SLIDE-ROTATION STOP 3816		1
29.	60128849	GEAR GUARD 6025 SII		1
30.	60136129	CAP-FIRST STAGE		1
31.	60140900	CAP-LOWER BOOM (eff. from 04/12/13)		1
32.	60136309	PIN-TYPE A 1.25X 4.27 (3.83)		1
33.	60127979	PLATE-EXT CYL C-CLIP		2
34.	70029595	THREADED PLUG 1.00-8 (3816)		2
35.	70149793	COLLAR-SHAFT 2 PIECE 11/16 IN		1
36.	70399053	TAPE-REFLECTIVE RED/SILVER 1.25X72.00		2
37.	70396734	TAPE-REFLECTIVE RED/SILVER 2.00X72.00		2
38.	70580182	CABLE ASM-1020in .38 6X25 FW IWRC XIPS		1
39.	73734752	PIN-LOCK W/HANDLE 0.75 X 4.00 W/HAIRPIN (eff. from 03/15/13)		1
40.	70734748	TRANSMITTER-S3 TELE SINGLE PROP (eff. from 04/17/13)		A/R
41.	70734762	TRANSMITTER-RAD REM TELE S3 GATED W-HORN (eff. from 04/17/13)		A/R
42.	70734761	TRANSMITTER-RAD REM TELE S3 NON-G W-HORN (eff. from 04/17/13)		A/R
43.	70734750	RECEIVER-S3 TELE SINGLE PROP (eff. from 04/17/13)		A/R
44.	70734763	RECEIVER-RADIO REMOTE TELE SIII W-HORN (eff. from 04/17/13)		A/R

22' Model 8600 Crane Parts List, Complete (99904970)				
ITEM	PART #	DESCRIPTION	KIT #	QTY
45.	71056543	GEAR ROTATOR 5020 170-00012-1		1
46.	76039295	GASKET-GEA19 008-10056-1	#49	1
47.	71073035	HOOK-SWVL L322 AN 5.0T W/LATCH (eff. from 4/11/13)		1
48.	71414204	PLATE-SINGLE SHEAVE (20#) .38 WIRE ROPE		1
49.	71570968	WINCH-PLANETARY 4400 LINE PULL (A41)		1
50.	72034485	CLAMP-PLASTIC 1/4" CABLE		8
51.	72063036	MACHY BUSHING 1.50X14 GA NR		A/R
52.	72063037	MACHY BUSHING 1.50X10 GA NR		A/R
53.	72063216	WASHER .62 N FLAT-CUT 3816 (eff. from 02/14/13)		4
54.	73051919	MOTOR-HYD (101-2638-009)		1
55.	73734565	PIN-LOCK W/HANDLE 1.00 X 3.50 W/HAIRPIN		2
56.	73734727	VALVE BANK-4SEC 4R 10GPM TELE PROP 12V G (eff. from 7/23/12)		A/R
57.	77041863	SWITCH-LIMIT DT04-4P CONN		1
58.	77441481	HARNESS-TELE RADIO REMOTE SERIES III		A/R
59.	72060177	CAP SCR .62-11X 3.00 HH GR8 Z (eff. from 02/04/13)	#1	15
60.	72063119	WASHER .62 FLAT ASTM F436 (eff. from 02/04/13)	#1	11
61.	72062108	NUT .50-20 HEX CENTER LOCKING	#2	4
62.	72063132	WASHER .50 FLAT ASTM F436	#2	4
63.	72602061	STUD .50-13(20)X 2.50 NC(NF) GR8 STL	#2	4
64.	72601797	WASHER-LOCK 8MM (eff. from 9/18/2014)	#3	4
65.	72602065	WASHER-FLAT M 8 (eff. from 9/18/2014)	#3	4
66.	72602052	CAP SCR M 8-1.25X 16 HHZ (eff. from 9/18/2014)	#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.	72053301	COUPLING-GLV .12 SCH 40	#5	1
73.	72053508	ZERK-NPT .12	#5	4
74.	72060000	CAP SCR .25-20X .50 HH GR5 Z	#5	6
75.	72060044	CAP SCR .38-16X .75 HH GR5 Z	#5	8
76.	72060093	CAP SCR .50-13X 1.50 HH GR5 Z (eff. from 04/10/13)	#5	15
77.	72060147	CAP SCR .62-11X 1.00 HH GR5 Z	#5	1
78.	72060640	SCR-MACH 10-24X 1.50 RDH	#5	2
79.	72060893	CAP SCR .38-16X 3.25 HH GR5 Z	#5	2
80.	72062000	NUT .25-20 HEX	#5	3
81.	72062093	NUT # 8-32 HEX ZINC	#5	2
82.	72062103	NUT .38-16 HEX NYLOCK	#5	2
83.	72062104	NUT .25-20 HEX NYLOCK (eff. from 04/12/13)	#5	6
84.	72062106	NUT 10-24 HEX NYLOCK	#5	7
85.	72063001	WASHER .25 FLAT (eff. from 02/28/13)	#5	14
86.	72063003	WASHER .38 FLAT (eff. from 04/10/13)	#5	12
87.	72063010	WASHER 1.00 FLAT	#5	1
88.	72063035	MACHY BUSHING 1.25X10 GA NR	#5	2
89.	72063049	WASHER .25 LOCK (eff. from 02/28/13)	#5	6
90.	72063051	WASHER .38 LOCK	#5	8

22' Model 8600 Crane Parts List, Complete (99904970)				
ITEM	PART #	DESCRIPTION	KIT #	QTY
91.	72063053	WASHER .50 LOCK (eff. from 05/22/13)	#5	15
92.	72063132	WASHER .50 FLAT ASTM F436	#5	17
93.	72063271	WASHER # 8 W FLAT ANSI B27.2Z	#5	2
94.	72066129	RETAINING RING-EXT 1.25 HD	#5	2
95.	72601938	BOLT-EYE # 8-32X 1.125	#5	1
96.	72601949	CAP SCR .50-13X 1.25 SH ZC	#5	2
97.	72602085	BOLT-SHLDR .38X 1.25 (5/16 thds) SS	#5	1
98.	72661543	PIN-QUICK 316-10QP (eff. from 03/15/13)	#5	2
99.	72661694	BRIDLE RING 1-1/12ID X 1/4-20	#5	3
100.	51395121	HOSE-AA .13 X 13.50 OAL (2-2)	#5	1
101.	72532355	ADPTR-M STR/M JIC 6 6	#6, #7	1
102.	72532356	ADPTR-M STR/M JIC 8 6	#6, #7	6
103.	72532357	ADPTR-M STR/M JIC 6 8	#6, #7	1
104.	72532358	ADPTR-M STR/M JIC 8 8	#6, #7	4
105.	72532359	ADPTR-M STR/M JIC 10 8	#6, #7	2
106.	72532361	ADPTR-M STR/M JIC 8 10	#6, #7	1
107.	72532670	ELBOW-M JIC/45/F JIC 8 8	#6, #7	1
108.	72532690	ELBOW-M JIC/90/F JIC SW 4 4	#6, #7	1
109.	72532792	ADPTR-M STR/M JIC 8 4	#6, #7	1
110.	72533490	ADPTR-M BSPP/M JIC 4 4	#6, #7	1
111.	72533583	ELBOW-M STR/45/M JIC 8 6	#6, #7	1
112.	72533613	ADPTR-M STR/M JIC 10 6	#6, #7	2
113.	72661641	PIN-QUICK 5/16-2-1/16 ZINC YELLOW	#5	1
114.	93725208	KIT-CABLE GUIDE 7500/8600S (eff. from 04/12/13)		1
115.	60140838	COVER-VALVE BANK SIII (eff. from 03/05/13)		1
116.	60140839	BRKT-MAST VB 6000-8600S (effective from 03/05/13)		2
117.	72060004	CAP SCR .25-20X 1.00 HH GR5 Z	#5	4
118.	73734472	VALVE BANK-MOD.INLET (PW) 12VDC IP69		A/R
119.	77441537	HARNESS-S3 TELE S-PROP VALVE BANK CERVIS		A/R
120.	60140913	PIN-TYPE NN 1.50X 7.25 (effective from 05/22/13)		1
121.	71415015	KEEPER-PIN .50 (effective from 05/22/13)		3
122.	60140914	PIN-TYPE NN 1.50X10.75 (effective from 05/22/13)		2
123.	60030486	SPACER-A2B BRACKET (effective from 05/22/13)		2
124.	60140934	GUIDE - CABLE WEAR (NARROW) (effective from 04/12/13)		1
125.	60140937	BRKT - CABLE GUIDE (NARROW) (effective from 04/12/13)		1
126.	72060006	CAP SCR .25-20X 1.50 HH GR5 Z (effective from 04/12/13)		2
127.	72062104	NUT .25-20 HEX NYLOCK (effective from 04/12/13)		2
128.	60143075	BRKT-MAST VB 6000-8600S FP		1
129.	73052156	FILTER-PRES 4000PSI 25GPM 10MIC -12		1
130.	72534898	O-RING EXTENDER 08-08		1
131.	72533623	ELBOW-M STR/90/M JIC 8 12		1
132.	72053767	ELBOW-M STR/90/M JIC 12 12		1
133.	71415690	TUBE ASM-PRESSURE FILTER S3FP SMALL MAST		1
REV CC 20150909				

Base & Mast Assembly, Test Stand (99904970) (Effective 01/04/16)



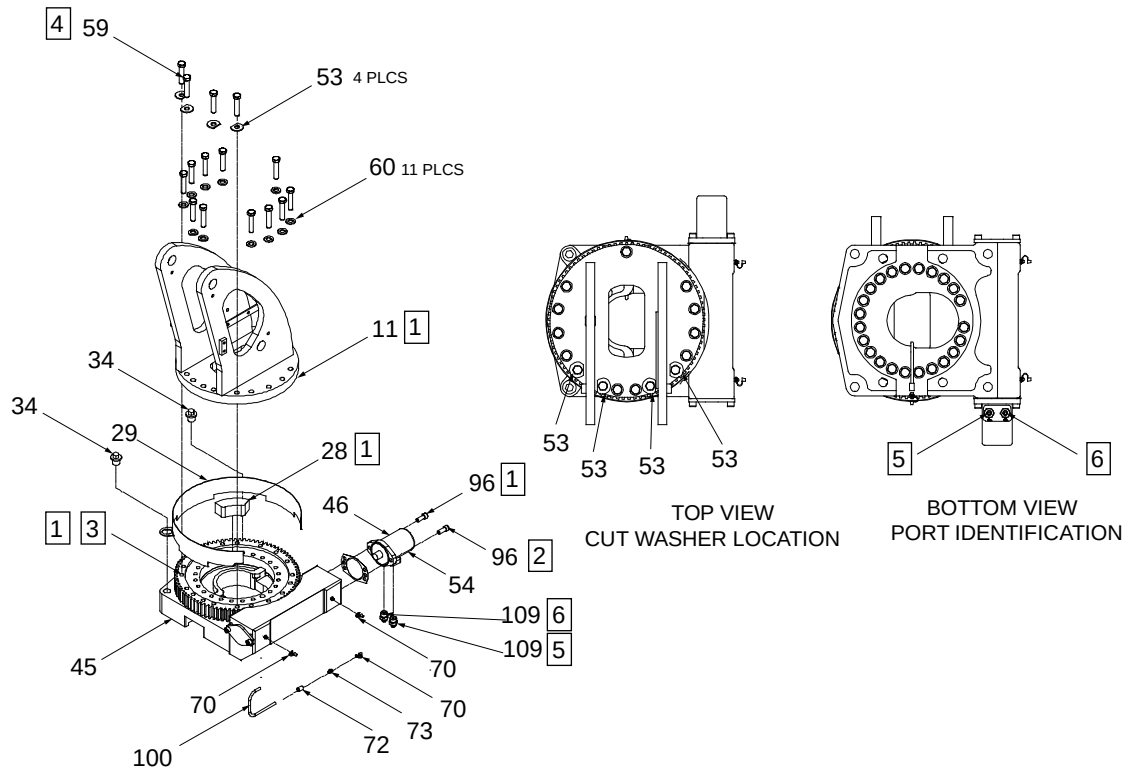
NOTES:

1. USE RUST PREVENTATIVE 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 160 FT-LB
5. PORT A
6. PORT B

BASE AND MAST ASSEMBLY SHOWN AS MOUNTED ON TEST STAND.

Base & Mast Assembly, Test Stand Parts List (99904970-3) (EFFECTIVE 01/04/16)				
ITEM	PART #	DESCRIPTION	KIT #	QTY
11	52725122	MAST WLDMNT-SERIES III S		1
28	60120138	SLIDE-ROTATION STOP 3816		1
29	60128849	GEAR GUARD 6025 SII		1
34	70029595	THREADED PLUG 1.00-8 (3816)		2
45	71056543	GEAR ROTATOR 5020 170-00012-1		1
53	72063216	WASHER .62 N FLAT-CUT 3816		4
54	73051919	MOTOR-HYD (101-2638-009)		1
59	72060177	CAP SCR .62-11X 3.00 HH GR8 Z	1	15
60	72063119	WASHER .62 FLAT ASTM F436	1	11
70	70034382	CAP-GREASE PRO20 GC-RED	5	6
72	72053301	COUPLING-GLV .12 SCH 40	5	1
73	72053508	ZERK-NPT .12	5	4
96	72601949	CAP SCR .50-13X 1.25 SH ZC	5	2
100	51395121	HOSE-AA .13 X 13.50 OAL (2-2)	5	1
REV. AG 20160210				

Base & Mast Assembly, Truck Mount (99904970) (Effective 01/04/16)



NOTES:

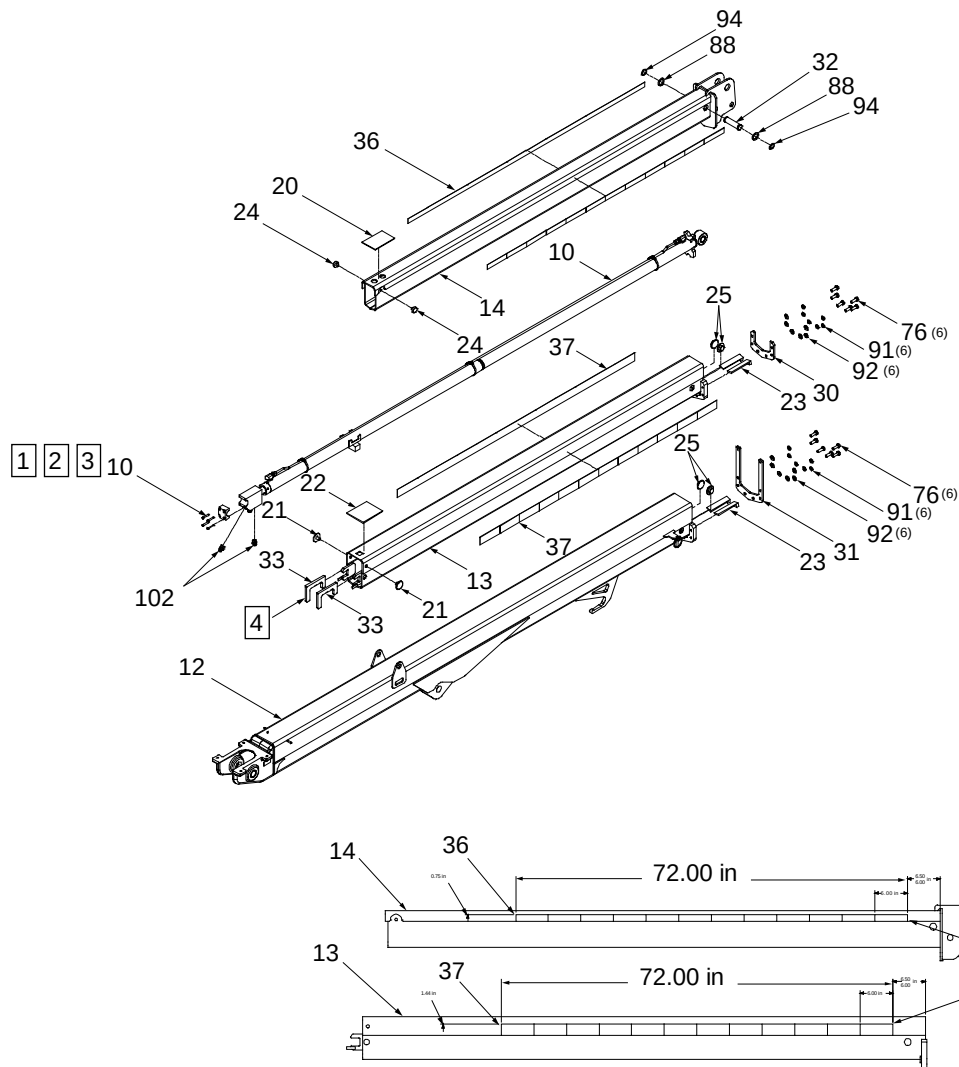
1. USE RUST PREVENTATIVE ON SLIDE STOP, BEARING RACE, BOTTOM EOF MAST & TOP OF GEAR BEARING RACE, BOTTOM OF MAST & TOP OF GEAR BEARING.
2. APPLY BLUE THREAD LOCKER.
3. APPLY GEAR LUBE ON GEAR TEETH.
4. TORQUE TO 160 FT-LB.
5. PORT A.
6. PORT B.

BASE AND MAST ASSEMBLY SHOWN AS MOUNTED ON TRUCK

Base & Mast Assembly, Truck Mount Parts List (99904970-4) (Effective 01/04/16)				
ITEM	PART #	DESCRIPTION	KIT #	QTY
11	52725122	MAST WLDMNT-SERIES III S		1
28	60120138	SLIDE-ROTATION STOP 3816		1
29	60128849	GEAR GUARD 6025 SII		1
34	70029595	THREADED PLUG 1.00-8 (3816)		2
45	71056543	GEAR ROTATOR 5020 170-00012-1		1
46	76039295	GASKET-GEA19 008-10056-1	#50	1
53	72063216	WASHER .62 N FLAT-CUT 3816		4

Base & Mast Assembly, Truck Mount Parts List (99904970-4) (Effective 01/04/16)				
ITEM	PART #	DESCRIPTION	KIT #	QTY
54	73051919	MOTOR-HYD (101-2638-009)		1
59	72060177	CAP SCR .62-11X 3.00 HH GR8 Z	#1	15
60	72063119	WASHER .62 FLAT ASTM F436	#1	11
70	70034382	CAP-GREASE PRO20 GC-RED	#5	6
71	71413185	SPRING-.105WIRE 0.75OD 2.875 LG	#5	1
72	72053301	COUPLING-GLV .12 SCH 40	#5	1
96	72601949	CAP SCR .50-13X 1.25 SH ZC	#5	2
100	51395121	HOSE-AA .13 X 13.50 OAL (2-2)	#5	1
109	72533613	ADPTR-M STR/M JIC 10 6	#6	2
REV. AG 20160210				

Boom Assembly (99904970) (Effective 01/04/16)



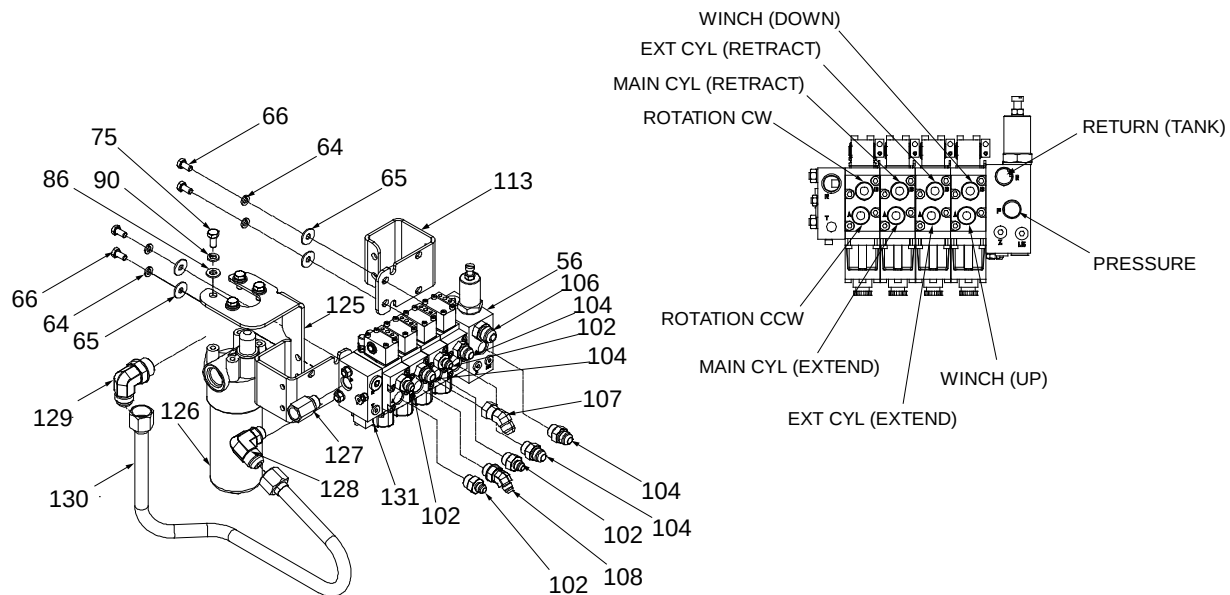
BOOM ASSEMBLY

NOTES:

1. CYLINDER CAP & CAP SCREWS ARE INCLUDED WITH THE EXTENSION CYLINDER.
2. USE BLUE THREAD LOCKER.
3. TORQUE TO 6-7 FT-LB.
4. INSTALL EXTENSION CYLINDER FIRST. ADD RETAINERS NEXT, INSTALL WEAR-PADS LAST.
5. START WITH RED SEGMENT, ALIGN WITH PLATE EDGE.

99904970-6 PARTSL LIST (EFFECTIVE 01/04/16)				
ITEM	PART NO.	DESCRIPTION	KIT NO.	QTY
10	51723174	CYL-2.0/1.5 117.00S 139.11CC C		1
12	52725158	WLDMNT-LOWER BOOM 7500-8600S		1
13	52725159	WLDMNT-1st STAGE EXT BOOM 7500S		1
14	52723169	WLDMNT-2ND STAGE EXT BOOM 7500/8600		1
20	60030433	WEAR PAD-RC 0.19 X 6.00X 4.00		1
21	60030339	WEAR PAD-RND 0.19X 2.00X .60X .81		2
23	60030431	WEAR PAD-RC 0.25X 6.00X 1.25		4
24	60030425	WEAR PAD-RND 0.44X 1.25X .50X .50		2
31	60140900	CAP-LOWER BOOM	111	1
32	60136309	PIN-TYPE A 1.25X 4.27 (3.83)		1
33	60127979	PLATE-EXT CYL C-CLIP		2
36	70399053	TAPE-REFLECTIVE RED/SILVER 1.25X72.00		2
37	70396734	TAPE-REFLECTIVE RED/SILVER 2.00X72.00		2
76	72060093	CAP SCR .50-13X 1.50 HH GR5 Z	5	15
88	72063035	MACHY BUSHING 1.25X10 GA NR	5	2
91	72063053	WASHER .50 LOCK	5	15
92	72063132	WASHER .50 FLAT ASTM F436	5	17
94	72066129	RETAINING RING-EXT 1.25 HD	5	2
102	72532356	ADPTR-M STR/M JIC 8 6	6	6
REV. AG 20160210				

Valve Bank Assembly – Fully Proportional (99904970) (Effective 01/04/16)

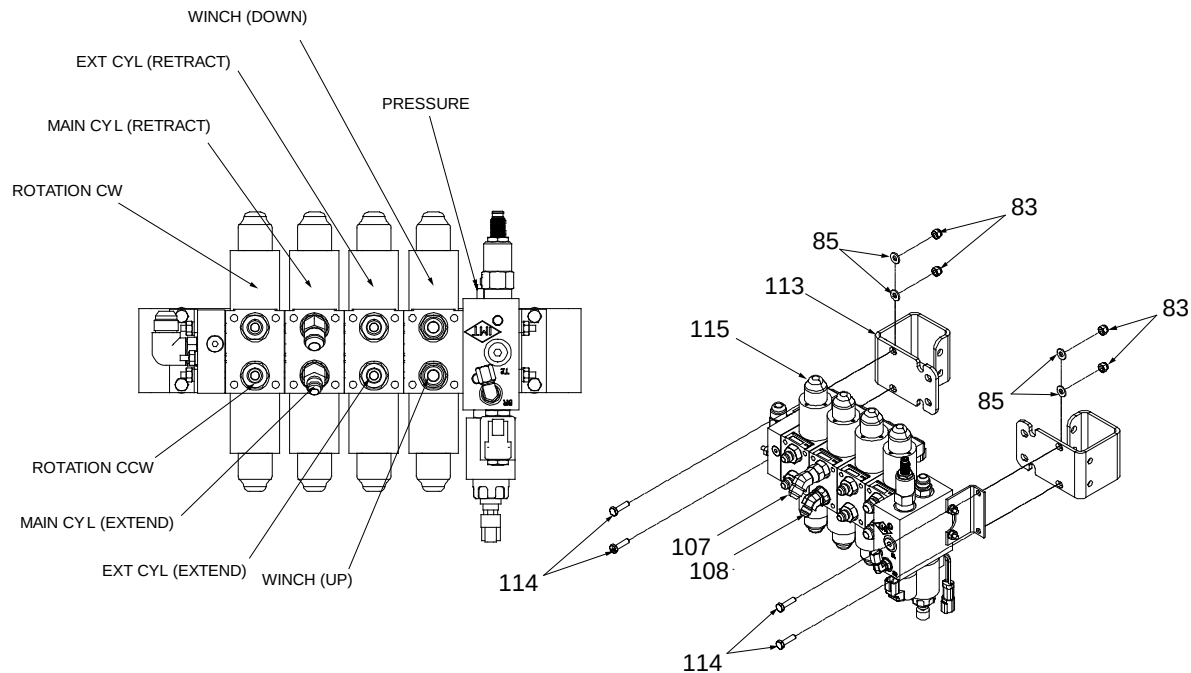


FULLY PROPORTIONAL VALVE BANK ASSEMBY

99904970-5 PARTS LIST (EFFECTIVE 01/04/16)				
ITEM	PART NO.	DESCRIPTION	KIT NO.	QTY
56	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
75	72060044	CAP SCR .38-16X .75 HH GR5 Z	5	8
86	72063003	WASHER .38 FLAT	5	12
90	72063051	WASHER .38 LOCK	5	8
102	72532356	ADPTR-M STR/M JIC 8 6	6	6
104	72532358	ADPTR-M STR/M JIC 8 8	6	4
106	72532361	ADPTR-M STR/M JIC 8 10	6	1
107	72532670	ELBOW-M JIC/45/F JIC 8 8	6	1
108	72533583	ELBOW-M STR/45/M JIC 8 6	6	1
113	60140839	BRKT-MAST VB 6000-8600S		2
125	60143075	BRKT-MAST VB 6000-8600S FP		1

126	73052156	FILTER-PRES 4000PSI 25GPM 10MIC -12		1
127	72534898	O-RING EXTENDER 08-08		1
128	72533623	ELBOW-M STR/90/M JIC 8 12		1
129	72053767	ELBOW-M STR/90/M JIC 12 12		1
130	71415690	TUBE ASM-PRESSURE FILTER S3FP SMALL MAST		1
131	72532686	PLUG-STR SOC HD STL 8 (.75 THD)	6	1
REV. AG 20160210				

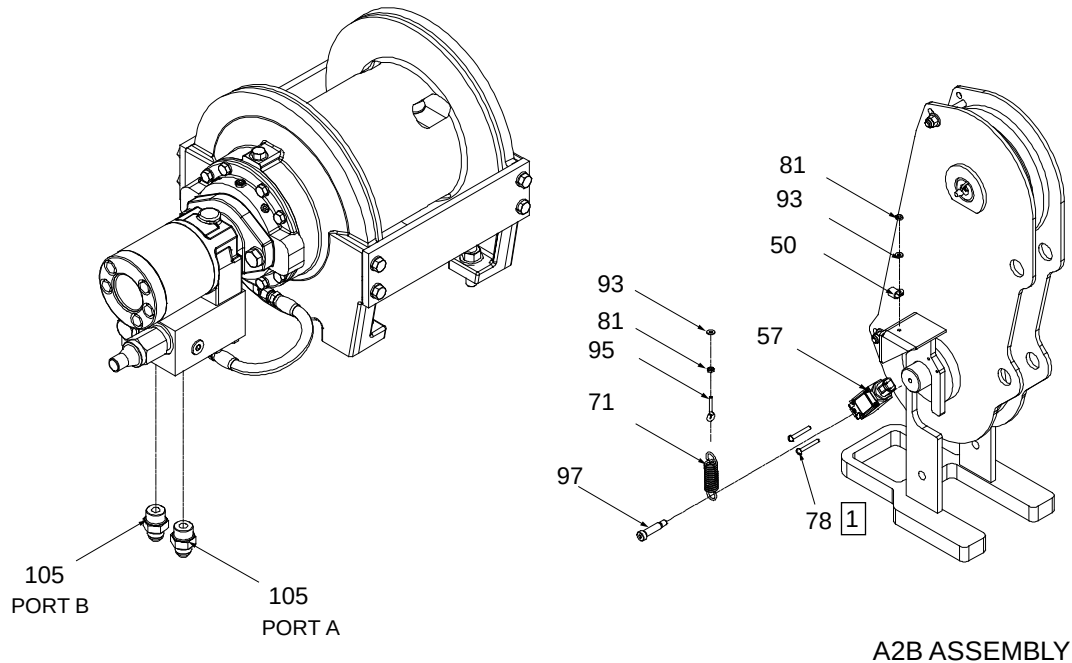
Valve Bank – Single Proportional (99904970) (Effective 01/04/16)



SINGLE PROPORTIONAL VALVE BANK ASSEMBLY

99904970-7 PARTS LIST (EFFECTIVE 01/04/16)				
ITEM	PART NO.	DESCRIPTION	KIT NO.	QTY
83	72062104	NUT .25-20 HEX NYLOCK	5	6
85	72063001	WASHER .25 FLAT	5	18
107	72532670	ELBOW-M JIC/45/F JIC 8 8	6	1
108	72533583	ELBOW-M STR/45/M JIC 8 6	6	1
113	60140839	BRKT-MAST VB 6000-8600S		2
114	72060004	CAP SCR .25-20X 1.00 HH GR5 Z	5	8
115	73734472	VALVE BANK-MOD.INLET (PW) 12VDC IP69		A/R
REV. AG 20160210				

Winch & A2B Assembly (99904970) (Effective 01/04/16)



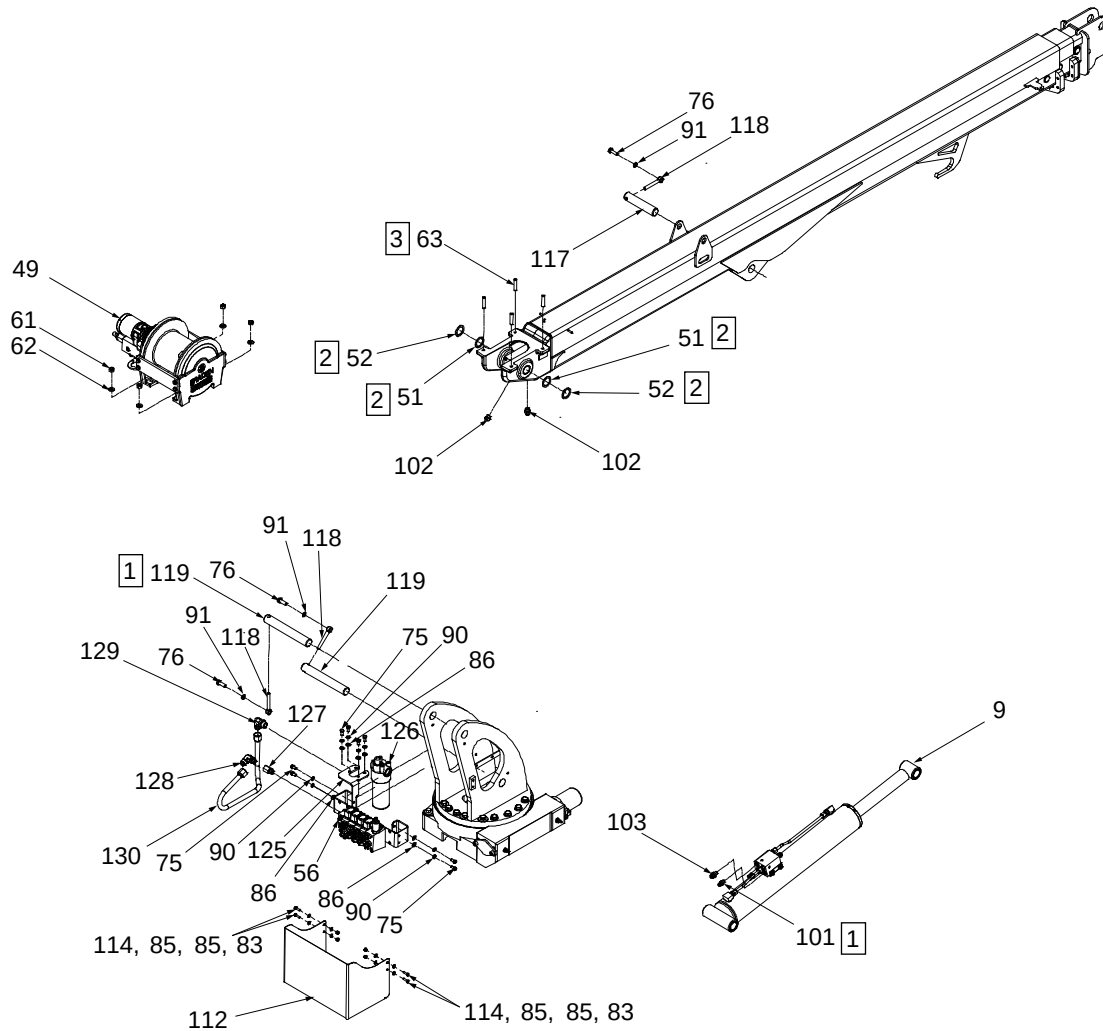
NOTES:

1. APPLY BLUE LOCKTITE.

99904970-9 PARTS LIST (EFFECTIVE 01/04/16)

ITEM	PART NO.	DESCRIPTION	KIT NO.	QTY
50	72034485	CLAMP-PLASTIC 1/4" CABLE		8
57	77041863	SWITCH-LIMIT DT04-4P CONN		1
71	71413185	SPRING-.105WIRE 0.75OD 2.875 LG	5	1
78	72060640	SCR-MACH 10-24X 1.50 RDH	5	2
81	72062093	NUT # 8-32 HEX ZINC	5	2
93	72063271	WASHER # 8 W FLAT ANSI B27.2Z	5	2
95	72601938	BOLT-EYE # 8-32X 1.125	5	1
97	72602085	BOLT-SHLDR .38X 1.25 (5/16 thds) SS	5	1
105	72532359	ADPTR-M STR/M JIC 10 8	6	2

Crane & Winch Assembly (99904970) (Effective 01/04/16)



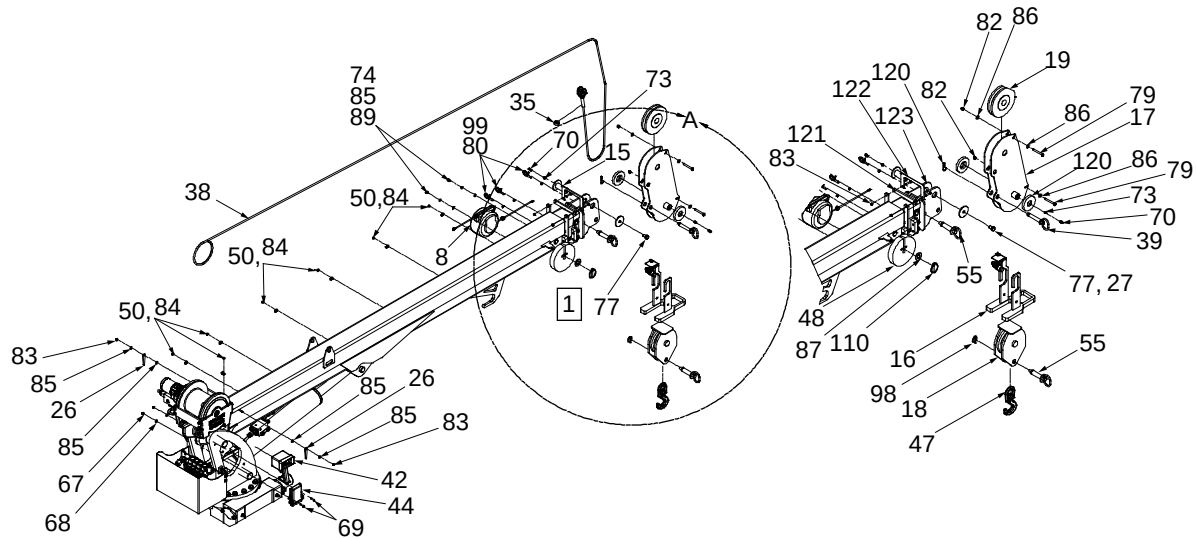
NOTES:

1. APPLY ANTI-SEEZ TO BOOM AND CYLINDER MOUNTIN PINS. DO NOT ALLOW ANTI-SEEZ TO COME IN CONTACT WITH BOOM OR CYLINDER PIN BOSS BEARINGS.
2. IF REQUIRED, USE 72063036 OR 72063037 MACHY BUSHINGS BETWEEN MAST AND LOWER BOOM.
3. APPLY BLUE LOCKTITE.

99904970-10 PARTS LIST (EFFECTIVE 01/04/16)				
ITEM	PART NO.	DESCRIPTION	KIT NO.	QTY
9	51723170	CYL-4.50/2.2 25.06S 45.52CC C		1
49	70570761	WINCH-PLANETARY 5500 LB LINE PULL		1
51	72063036	MACHY BUSHING 1.50X14 GA NR		A/R
52	72063037	MACHY BUSHING 1.50X10 GA NR		A/R
61	72062108	NUT .50-20 HEX CENTER LOCKING	2	4

62	72063132	WASHER .50 FLAT ASTM F436	2	4
63	72602138	STUD .50-20X 2.25 DBL .50-13 GR8 STL	2	4
75	72060044	CAP SCR .38-16X .75 HH GR5 Z	5	8
76	72060093	CAP SCR .50-13X 1.50 HH GR5 Z	5	15
83	72062104	NUT .25-20 HEX NYLOCK	5	6
85	72063001	WASHER .25 FLAT	5	18
86	72063003	WASHER .38 FLAT	5	12
90	72063051	WASHER .38 LOCK	5	8
91	72063053	WASHER .50 LOCK	5	15
101	72532355	ADPTR-M STR/M JIC 6 6	6	1
102	72532356	ADPTR-M STR/M JIC 8 6	6	6
103	72532357	ADPTR-M STR/M JIC 6 8	6	1
112	60144215	COVER-VALVE BANK SIII		1
114	72060004	CAP SCR .25-20X 1.00 HH GR5 Z	5	8
117	60140913	PIN-TYPE NN 1.50X 7.25		1
118	71415015	KEEPER-PIN .50		3
119	60140914	PIN-TYPE NN 1.50X10.75		2
125	60143075	BRKT-MAST VB 6000-8600S FP		1
126	73052156	FILTER-PRES 4000PSI 25GPM 10MIC -12		1
127	72534898	O-RING EXTENDER 08-08		1
128	72533623	ELBOW-M STR/90/M JIC 8 12		1
129	72053767	ELBOW-M STR/90/M JIC 12 12		1
130	71415690	TUBE ASM-PRESSURE FILTER S3FP SMALL MAST		1
REV. AG 20160210				

Flip Sheave Assembly (99904970) (Effective 01/04/16)



NOTES:

1. USE BLUE THREAD LOCKTITE.

99904970-11 PARTS LIST (EFFECTIVE 01/04/16)				
ITEM	PART NO.	DESCRIPTION	KIT NO.	QTY
7	91726823	KIT-HYD BG4 SERIES III SP 7500/8600S		A/R
8	51723610	CORD REEL ASM- 30FT W/PACKARD W/DEUTSCH		1
15	52723030	PIN-TYPE M 1.50X 3.38		1
16	52725155	WLDMT- A2B BRKT		1
17	52725153	WLDMT-FLIP SHEAVE 7500/8600		1
18	52725065	WLDMT- SNATCH BLOCK 7500/8600		1
19	60030134	SHEAVE- 8.00 POLYMER		1
26	70034490	PLATE-ANGLE PLASTIC 3.50"		2
27	60109337	RETAINER PLT-PIN 3.00 DIA		1
35	70149793	COLLAR-SHAFT 2 PIECE 11/16 IN		1
39	73734752	PIN-LOCK W/HANDLE 0.75 X 4.00 W/HAIRPIN		1
42	70734761	TRANSMITTER-RAD REM TELE S3 NON-G W-HORN		A/R
44	70734763	RECEIVER-RADIO REMOTE TELE SIII W-HORN		A/R
47	71073035	HOOK-SWVL L322 AN 5.0T W/LATCH		1
48	71414204	PLATE-SINGLE SHEAVE (20#) .38 WIRE ROPE		1
50	72034485	CLAMP-PLASTIC 1/4" CABLE		8

55	73734565	PIN-LOCK W/HANDLE 1.00 X 3.50 W/HAIRPIN		2
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
73	72053508	ZERK-NPT .12	5	4
74	72060000	CAP SCR .25-20X .50 HH GR5 Z	5	2
77	72060147	CAP SCR .62-11X 1.00 HH GR5 Z	5	1
79	72060893	CAP SCR .38-16X 3.25 HH GR5 Z	5	2
80	72062000	NUT .25-20 HEX	5	3
82	72062103	NUT .38-16 HEX NYLOCK	5	2
83	72062104	NUT .25-20 HEX NYLOCK	5	6
84	72062106	NUT 10-24 HEX NYLOCK	5	7
85	72063001	WASHER .25 FLAT	5	18
86	72063003	WASHER .38 FLAT	5	12
87	72063010	WASHER 1.00 FLAT	5	1
89	72063049	WASHER .25 LOCK	5	2
98	72661543	PIN-QUICK 316-10QP	5	2
99	72661694	BRIDLE RING 1-1/12ID X 1/4-20	5	3
110	72661641	PIN-QUICK 5/16-2-1/16 ZINC YELLOW	5	1
120	60030486	SPACER-A2B BRACKET		2
121	60140934	GUIDE - CABLE WEAR (NARROW)	111	1
122	60140937	BRKT - CABLE GUIDE (NARROW)	111	1
123	72060006	CAP SCR .25-20X 1.50 HH GR5 Z	111	2
REV. AG 20160210				

22' Model 8600 Crane Parts List, Complete (99904970) (Effective 01/04/16)

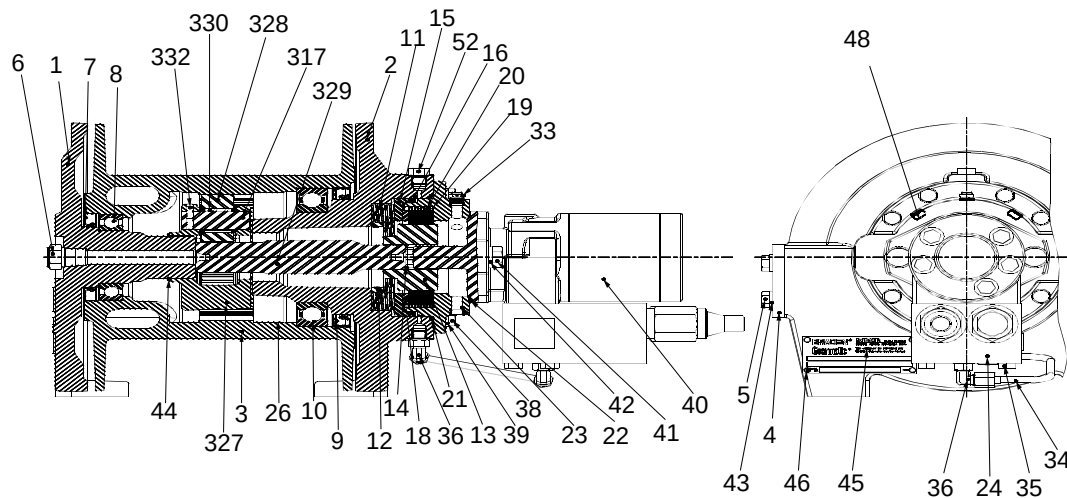
99904970 COMPLETE PARTS LIST (EFFECTIVE 01/04/16)				
ITEM	PART NO.	DESCRIPTION	KIT NO.	QTY
1	91723654	KIT-HRDW BASE & MAST 7500/8600S		1
2	91726834	KIT-HRDW WINCH MNT BG4-BG6		1
3	91723543	KIT-HRDW VB MNT HAWK		1
4	51719413	KIT-HRDW TELE CRANE RADIO CONTROLS		1
5	91725204	KIT-HRDW SERIES III 7500/8600S		1
6	91726822	KIT-HYD BG4 SERIES III FP 7500/8600S		A/R
7	91726823	KIT-HYD BG4 SERIES III SP 7500/8600S		A/R
8	51723610	CORD REEL ASM- 30FT W/PACKARD W/DEUTSCH		1
9	51723170	CYL-4.50/2.2 25.06S 45.52CC C		1
10	51723174	CYL-2.0/1.5 117.00S 139.11CC C		1
11	52725122	MAST WLDMNT-SERIES III S		1
12	52725158	WLDMNT-LOWER BOOM 7500-8600S		1
13	52725159	WLDMNT-1st STAGE EXT BOOM 7500S		1
14	52723169	WLDMNT-2ND STAGE EXT BOOM 7500/8600		1
15	52723030	PIN-TYPE M 1.50X 3.38		1
16	52725155	WLDMT- A2B BRKT		1
17	52725153	WLDMT-FLIP SHEAVE 7500/8600		1
18	52725065	WLDMT- SNATCH BLOCK 7500/8600		1
19	60030134	SHEAVE- 8.00 POLYMER		1
20	60030433	WEAR PAD-RC 0.19 X 6.00X 4.00		1
21	60030339	WEAR PAD-RND 0.19X 2.00X .60X .81		2
22	60030432	WEAR PAD-RC 0.25 X 6.00X 5.00		1
23	60030431	WEAR PAD-RC 0.25X 6.00X 1.25		4
24	60030425	WEAR PAD-RND 0.44X 1.25X .50X .50		2
25	60030427	WEAR PAD-RND 0.19X 2.00X 1.25X .44		4
26	70034490	PLATE-ANGLE PLASTIC 3.50"		2
27	60109337	RETAINER PLT-PIN 3.00 DIA		1
28	60120138	SLIDE-ROTATION STOP 3816		1
29	60128849	GEAR GUARD 6025 SII		1
30	60136129	CAP-FIRST STAGE		1
31	60140900	CAP-LOWER BOOM	111	1
32	60136309	PIN-TYPE A 1.25X 4.27 (3.83)		1
33	60127979	PLATE-EXT CYL C-CLIP		2
34	70029595	THREADED PLUG 1.00-8 (3816)		2
35	70149793	COLLAR-SHAFT 2 PIECE 11/16 IN		1

36	70399053	TAPE-REFLECTIVE RED/SILVER 1.25X72.00		2
37	70396734	TAPE-REFLECTIVE RED/SILVER 2.00X72.00		2
38	70580182	CABLE ASM-1020in .38 6X25 FW IWRC XIPS		1
39	73734752	PIN-LOCK W/HANDLE 0.75 X 4.00 W/HAIRPIN		1
40	70734748	TRANSMITTER-S3 TELE SINGLE PROP		A/R
41	70734762	TRANSMITTER-RAD REM TELE S3 GATED W-HORN		A/R
42	70734761	TRANSMITTER-RAD REM TELE S3 NON-G W-HORN		A/R
43	70734750	RECEIVER-S3 TELE SINGLE PROP		A/R
44	70734763	RECEIVER-RADIO REMOTE TELE SIII W-HORN		A/R
45	71056543	GEAR ROTATOR 5020 170-00012-1		1
46	76039295	GASKET-GEA19 008-10056-1	50	1
47	71073035	HOOK-SWVL L322 AN 5.0T W/LATCH		1
48	71414204	PLATE-SINGLE SHEAVE (20#) .38 WIRE ROPE		1
49	70570761	WINCH-PLANETARY 5500 LB LINE PULL		1
50	72034485	CLAMP-PLASTIC 1/4" CABLE		8
51	72063036	MACHY BUSHING 1.50X14 GA NR		A/R
52	72063037	MACHY BUSHING 1.50X10 GA NR		A/R
53	72063216	WASHER .62 N FLAT-CUT 3816		4
54	73051919	MOTOR-HYD (101-2638-009)		1
55	73734565	PIN-LOCK W/HANDLE 1.00 X 3.50 W/HAIRPIN		2
56	73734727	VALVE BANK-4SEC 4R 10GPM TELE PROP 12V G		A/R
57	77041863	SWITCH-LIMIT DT04-4P CONN		1
58	77441481	HARNESS-TELE RADIO REMOTE SERIES III		A/R
59	72060177	CAP SCR .62-11X 3.00 HH GR8 Z	1	15
60	72063119	WASHER .62 FLAT ASTM F436	1	11
61	72062108	NUT .50-20 HEX CENTER LOCKING	2	4
62	72063132	WASHER .50 FLAT 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	72053301	COUPLING-GLV .12 SCH 40	5	1
73	72053508	ZERK-NPT .12	5	4
74	72060000	CAP SCR .25-20X .50 HH GR5 Z	5	2
75	72060044	CAP SCR .38-16X .75 HH GR5 Z	5	8
76	72060093	CAP SCR .50-13X 1.50 HH GR5 Z	5	15

77	72060147	CAP SCR .62-11X 1.00 HH GR5 Z	5	1
78	72060640	SCR-MACH 10-24X 1.50 RDH	5	2
79	72060893	CAP SCR .38-16X 3.25 HH GR5 Z	5	2
80	72062000	NUT .25-20 HEX	5	3
81	72062093	NUT # 8-32 HEX ZINC	5	2
82	72062103	NUT .38-16 HEX NYLOCK	5	2
83	72062104	NUT .25-20 HEX NYLOCK	5	6
84	72062106	NUT 10-24 HEX NYLOCK	5	7
85	72063001	WASHER .25 FLAT	5	18
86	72063003	WASHER .38 FLAT	5	12
87	72063010	WASHER 1.00 FLAT	5	1
88	72063035	MACHY BUSHING 1.25X10 GA NR	5	2
89	72063049	WASHER .25 LOCK	5	2
90	72063051	WASHER .38 LOCK	5	8
91	72063053	WASHER .50 LOCK	5	15
92	72063132	WASHER .50 FLAT ASTM F436	5	17
93	72063271	WASHER # 8 W FLAT ANSI B27.2Z	5	2
94	72066129	RETAINING RING-EXT 1.25 HD	5	2
95	72601938	BOLT-EYE # 8-32X 1.125	5	1
96	72601949	CAP SCR .50-13X 1.25 SH ZC	5	2
97	72602085	BOLT-SHLDR .38X 1.25 (5/16 thds) SS	5	1
98	72661543	PIN-QUICK 316-10QP	5	2
99	72661694	BRIDLE RING 1-1/12ID X 1/4-20	5	3
100	51395121	HOSE-AA .13 X 13.50 OAL (2-2)	5	1
101	72532355	ADPTR-M STR/M JIC 6 6	6	1
102	72532356	ADPTR-M STR/M JIC 8 6	6	6
103	72532357	ADPTR-M STR/M JIC 6 8	6	1
104	72532358	ADPTR-M STR/M JIC 8 8	6	4
105	72532359	ADPTR-M STR/M JIC 10 8	6	2
106	72532361	ADPTR-M STR/M JIC 8 10	6	1
107	72532670	ELBOW-M JIC/45/F JIC 8 8	6	1
108	72533583	ELBOW-M STR/45/M JIC 8 6	6	1
109	72533613	ADPTR-M STR/M JIC 10 6	6	2
110	72661641	PIN-QUICK 5/16-2-1/16 ZINC YELLOW	5	1
111	93725208	KIT-CABLE GUIDE 7500/8600S		1
112	60144215	COVER-VALVE BANK SIII		1
113	60140839	BRKT-MAST VB 6000-8600S		2
114	72060004	CAP SCR .25-20X 1.00 HH GR5 Z	5	8
115	73734472	VALVE BANK-MOD.INLET (PW) 12VDC IP69		A/R
116	77441537	HARNESS-S3 TELE S-PROP VALVE BANK CERVIS		A/R
117	60140913	PIN-TYPE NN 1.50X 7.25		1

118	71415015	KEEPER-PIN .50		3
119	60140914	PIN-TYPE NN 1.50X10.75		2
120	60030486	SPACER-A2B BRACKET		2
121	60140934	GUIDE - CABLE WEAR (NARROW)	111	1
122	60140937	BRKT - CABLE GUIDE (NARROW)	111	1
123	72060006	CAP SCR .25-20X 1.50 HH GR5 Z	111	2
124	72062104	NUT .25-20 HEX NYLOCK	111	2
125	60143075	BRKT-MAST VB 6000-8600S FP		1
126	73052156	FILTER-PRES 4000PSI 25GPM 10MIC -12		1
127	72534898	O-RING EXTENDER 08-08		1
128	72533623	ELBOW-M STR/90/M JIC 8 12		1
129	72053767	ELBOW-M STR/90/M JIC 12 12		1
130	71415690	TUBE ASM-PRESSURE FILTER S3FP SMALL MAST		1
131	72532686	PLUG-STR SOC HD STL 8 (.75 THD)	6	1
REV. AG 20160210				

Winch, Planetary (70570761) (Effective 01/04/16)

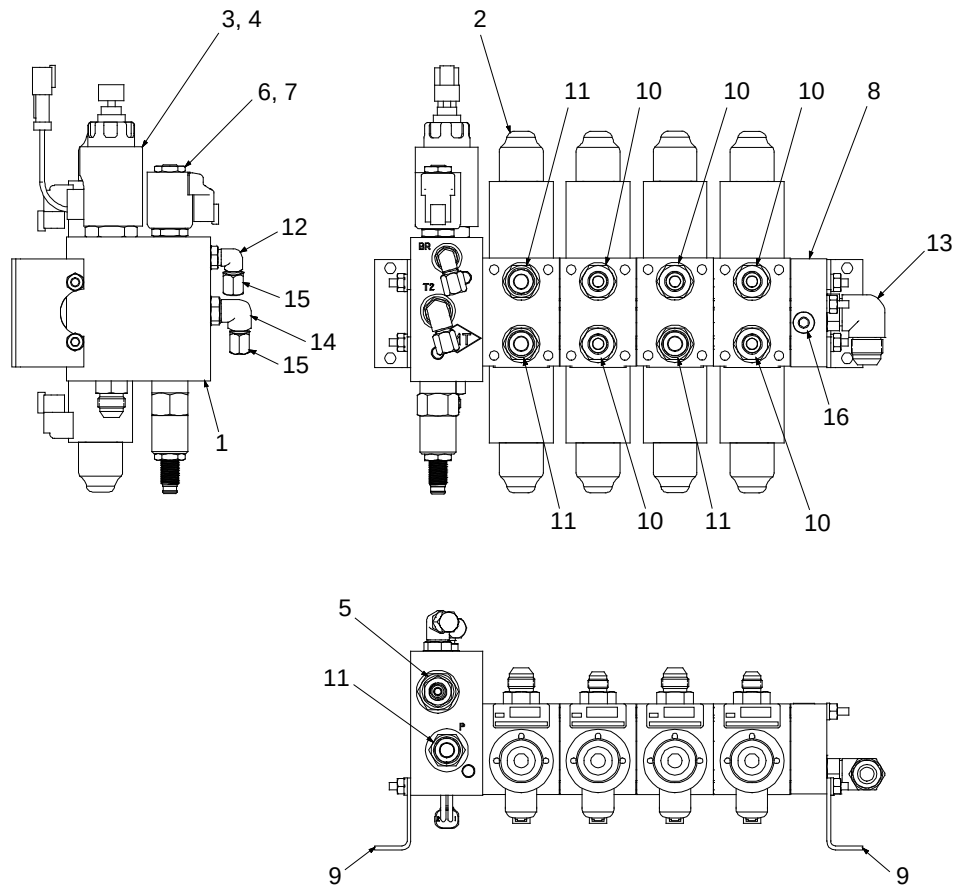


70570761 PARTS LIST (EFFECTIVE 01/04/16)			
PART NO	DESCRIPTION	QTY	ITEM
	BRAKE SUB-ASSY BG4B-01H *	1	000
	PRIMARY PLANET CARRIER ASSY	1	000
71411150	CABLE WEDGE	1	000
	BEARING SUPPORT ENDPLATE	1	001
	BRAKE CYLINDER ENDPLATE	1	002
	CABLE DRUM	1	003
	TIEPLATE	2	004
	CAPSCREW	8	005
	SIGHT GAUGE	1	006
	OIL SEAL	1	007
71411143	BALL BEARING	1	008
	OIL SEAL	1	009
71411144	BALL BEARING	1	010
71411146	SPRING	12	011
	SPRING LOCATOR	1	012
	BRAKE COUPLING	1	013
	SNAP RING	1	014
	SPRING PLATE	1	015
	U-CUP SEAL	1	016
	THRUST RACE	6	017
	BRAKE PLATE SPACER	1	018

71411147	FRICTION DISC	8	019
	BRAKE DISC	9	020
	O-RING	1	021
	GASKET - MOTOR 2B A MOUNT	1	022
	MOTOR ADAPTER	1	023
	VALVE,BRAKE	1	024
	WASHER *	4	025
	SUN GEAR	1	026
	PRIMARY PLANET CARRIER	1	027
	PLANET GEAR	3	028
	PRIMARY PLANET GEAR SHAFT	3	029
71411145	ROLLER BEARING	3	030
	SHIPPING PLUG	2	031
	ROLLPIN	3	032
	RELIEF VALVE 7.5-15 PSI	1	033
	HOSE ASSY	1	034
	CAPSCREW *	4	035
	ELBOW FITTING	1	036
	ELBOW FITTING	1	036
	CAPSCREW *	8	038
	LOCKWASHER *	8	039
73511057	HYD MOTOR	1	040
	CAPSCREW *	2	041
	LOCKWASHER *	2	042
	LOCKWASHER	8	043
	21-B3-1 SNAP RING	1	044
	NAMEPLATE, GH5, PD5 WINCHES	1	045
	DRIVE SCREW	4	046
	PIPE PLUG	3	048
	HEX HEAD PLUG (-4SAE)	1	052

REV. AG 20160210

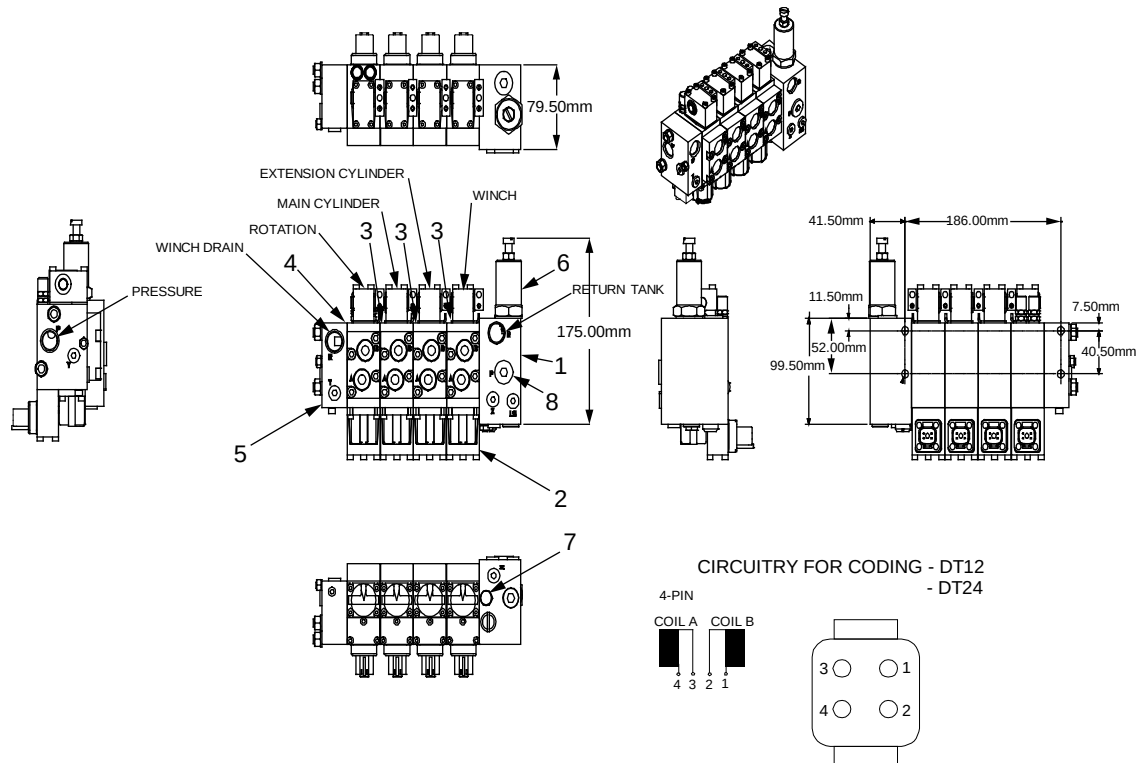
Valve Bank (73734472) (Effective 01/04/16)



73734472 PARTS LIST (EFFECTIVE 01/04/16)			
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	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

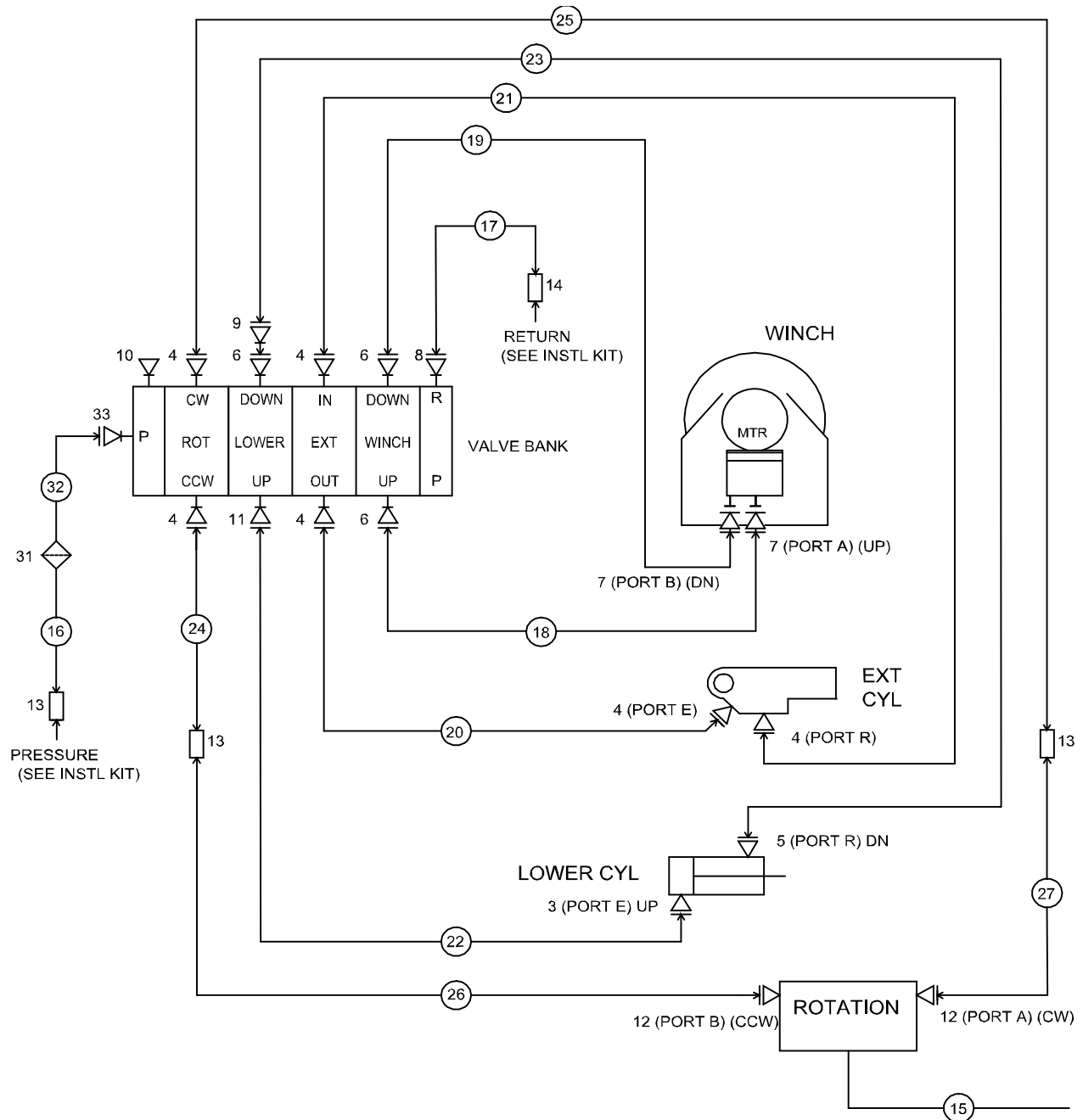
13	72533507	ELBOW-M STR/90/M JIC 8 10	1
14	72532674	CAP-JIC STL 4 (.44 THD)	2
15	72534560	PLUG-STR SOC HD STL 4 ZERO LEAK	1
16	72534561	PLUG-STR SOC HD STL 6 ZERO LEAK	1
REV. D 20160204			

Valve Bank (73734727) (Effective 01/04/16)

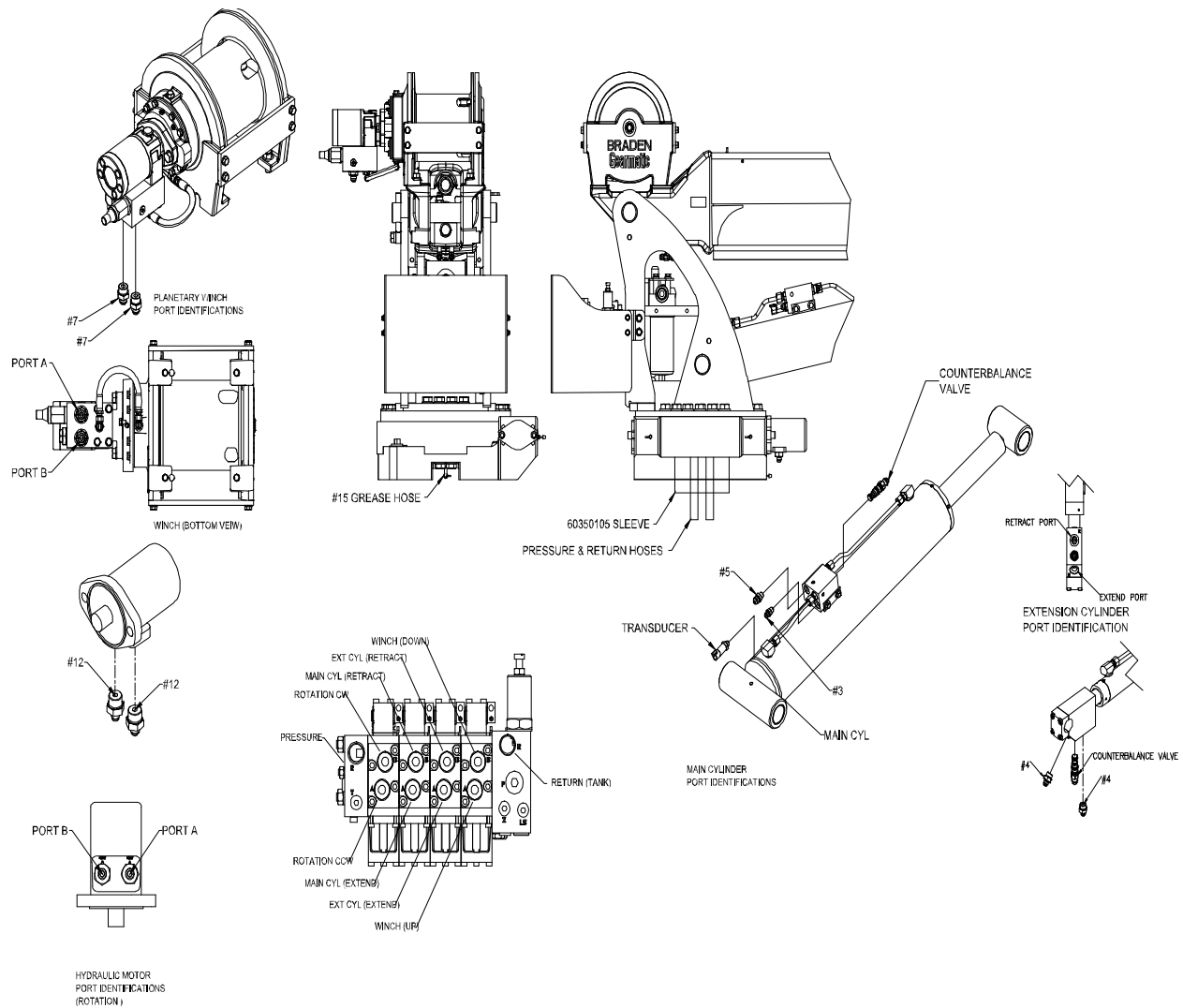


73734727 PARTS LIST (Effective 01/04/16)			
ITEM	PART NO	DESCRIPTION	QTY
1	73540534	SECTION-VALVE BANK W PR VALVE	1
2	77040598	COIL-12V DEUTSCH FOR 73734635	1
3	73540535	SECTION-VALVE BANK 10 GPM	1
4	73540536	SECTION-VALVE BANK 10 GPM ADJ	1
5	73540537	SECTION-VALVE BANK WO PR VALVE	1
6	73540538	VALVE-PRESSURE RELIEF	1
7	73734728	SCREW-DAMPENING VALVE G	1
8	72532686	PLUG-STR HOL HEX STL 8 (.75 THD)	1
REV. D 20160128			

Hydraulic Schematic, Fully Proportional (99906025) (Effective 01/04/16)



99906025-2

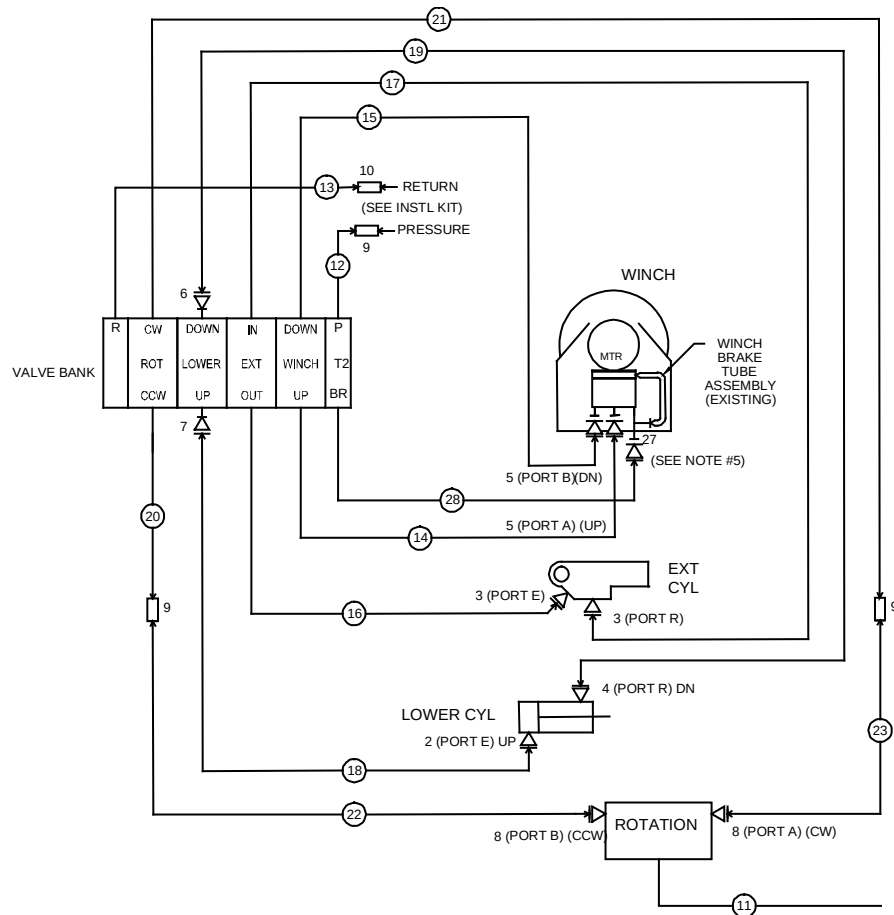
**NOTES:**

1. INSTALL SLEEVE #29, 60350141, ON EXTENSION CYLINDER, LOWER CYLINDER, AND ROTATION HOSES.
2. INSTALL SLEEVE #30, 60350142, ON WINCH, PRESSURE AND RETURN VALVE BANK HOSES.
3. INSTALL SLEEVE #31, 60350105, ON PRESSURE AND RETURN HOSES, AND ROTATION HOSES ROUTED THROUGH MAST.

99906025 COMPLETE PARTS LIST (EFFECTIVE 01/04/16)				
ITEM	PART NO	DESCRIPTION	KIT NO.	QTY
1	91726822	KIT-HYD BG4 SERIES III FP 7500/8600S		1
2	73734727	VALVE BANK-4SEC 4R 10GPM TELE PROP 12V G		1 REF
3	72532355	ADPTR-M STR/M JIC 6 6	1	1
4	72532356	ADPTR-M STR/M JIC 8 6	1	6
5	72532357	ADPTR-M STR/M JIC 6 8	1	1
6	72532358	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	72533583	ELBOW-M STR/45/M JIC 8 6	1	1
12	72533613	ADPTR-M STR/M JIC 10 6	1	2
13	72533648	SWIVEL-M JIC/90/M JIC 8 8	1	3
14	72534412	SWIVEL-M JIC/90/M JIC 10 10	1	1
15	51395121	HOSE-AA .13 X 13.50 (2-2) 100R17	1	1
16	51399890	HOSE-FJJ .50 X 40.00 (8-8) 100R17	1	1
17	51397080	HOSE-FJ .62 X 30.00 (10-10) 100R17	1	1
18	51397081	HOSE-FZ .50 X 31.50 (8-8) 100R17	1	1
19	51397082	HOSE-FJ .50 X 31.00 (8-8) 100R17	1	1
20	51396810	HOSE-JZ .38 X 21.50 (6-6) 100R17 180	1	1
21	51396811	HOSE-JJ .38 X 23.00 (6-6) 100R17 180	1	1
22	51399077	HOSE-FJ .38 X 30.00 (6-6) 100R17	1	1
23	51399078	HOSE-FZ .50 X 32.00 (8-8) 100R17	1	1
24	51399072	HOSE-FJ .38 X 22.50 (8-6) 100R17	1	1
25	51399073	HOSE-FZ .38 X 25.00 (8-6) 100R17	1	1
26	51399228	HOSE-FJ .38 X 18.00 (8-6) 100R17	1	1
27	51399229	HOSE-FJ .38 X 22.00 (8-6) 100R17	1	1
28	60350141	SLEEVE-HOSE NHS-159 X 12 CUT & SEALED	1	3
29	60350142	SLEEVE-HOSE NHS-254 X 15 CUT & SEALED	1	2
30	60350105	HOSE SLEEVE-WRAP AROUND 4in DIA		1
31	73052156	FILTER-PRES 4000PSI 25GPM 10MIC -12		1
32	71415690	TUBE ASM-PRESSURE FILTER S3FP SMALL MAST		1
33	72534898	O-RING EXTENDER 08-08		1
REV. X 20160128				

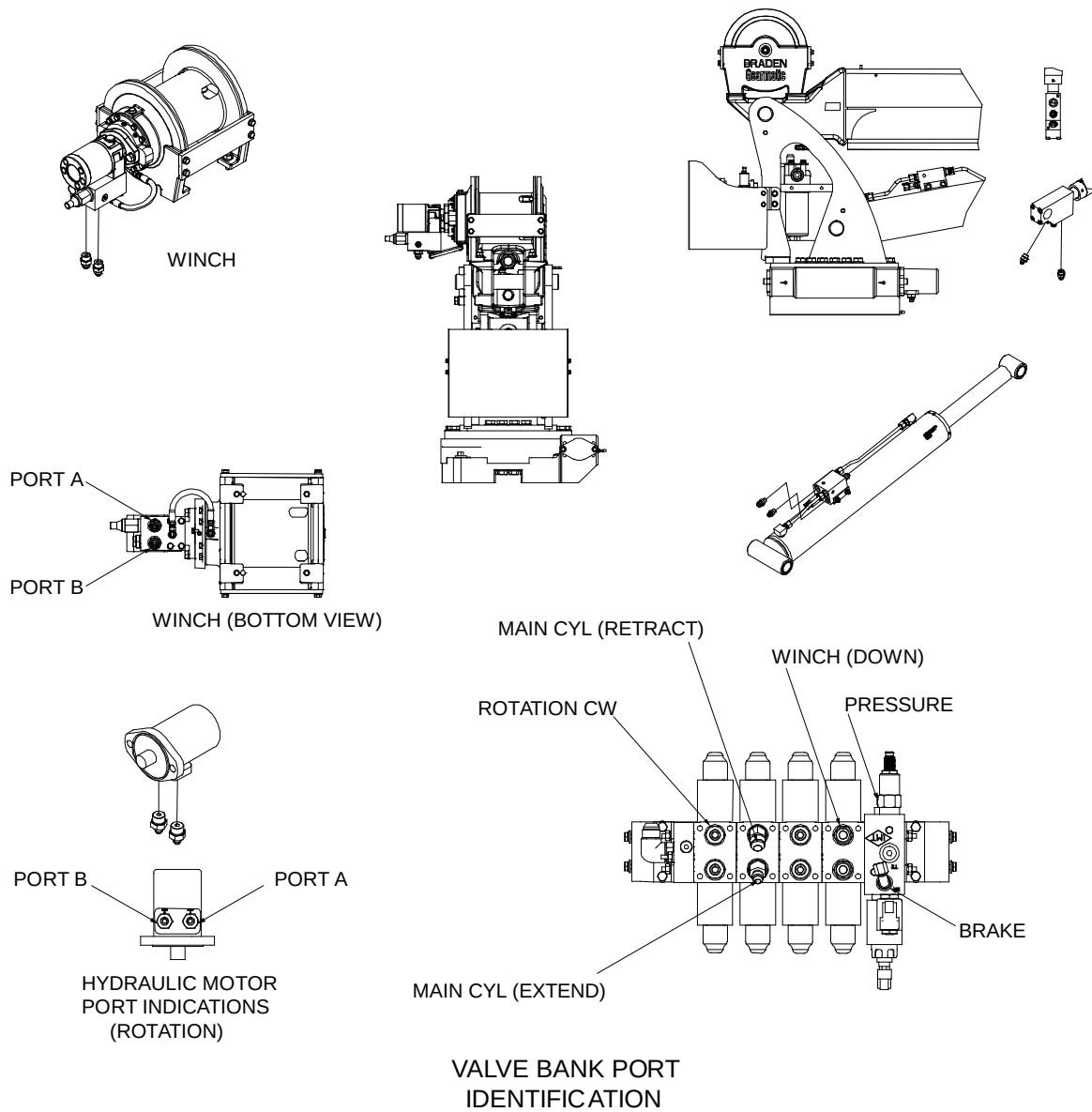
Hydraulic Schematic, Single Proportional (99906026) (Effective 01/04/16)



NOTES:

1. SEE 99906026-2 (PAGE 70) FOR WINCH HYDRAULIC MOTOR, LOWER, AND EXTENSION CYLINDER.
2. INSTALL 60350141 ON EXTENSION CYLINDER, MAIN CYLINDER HOSES, AND ROTATION HOSES.
3. INSTALL 60350142 ON WINCH HOSES AND PRESSURE AND RETURN VALVE BANK HOSES.
4. INSTALL 60350105 ON PRESSURE 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). REINSTALL HOSE ONTO TEE.

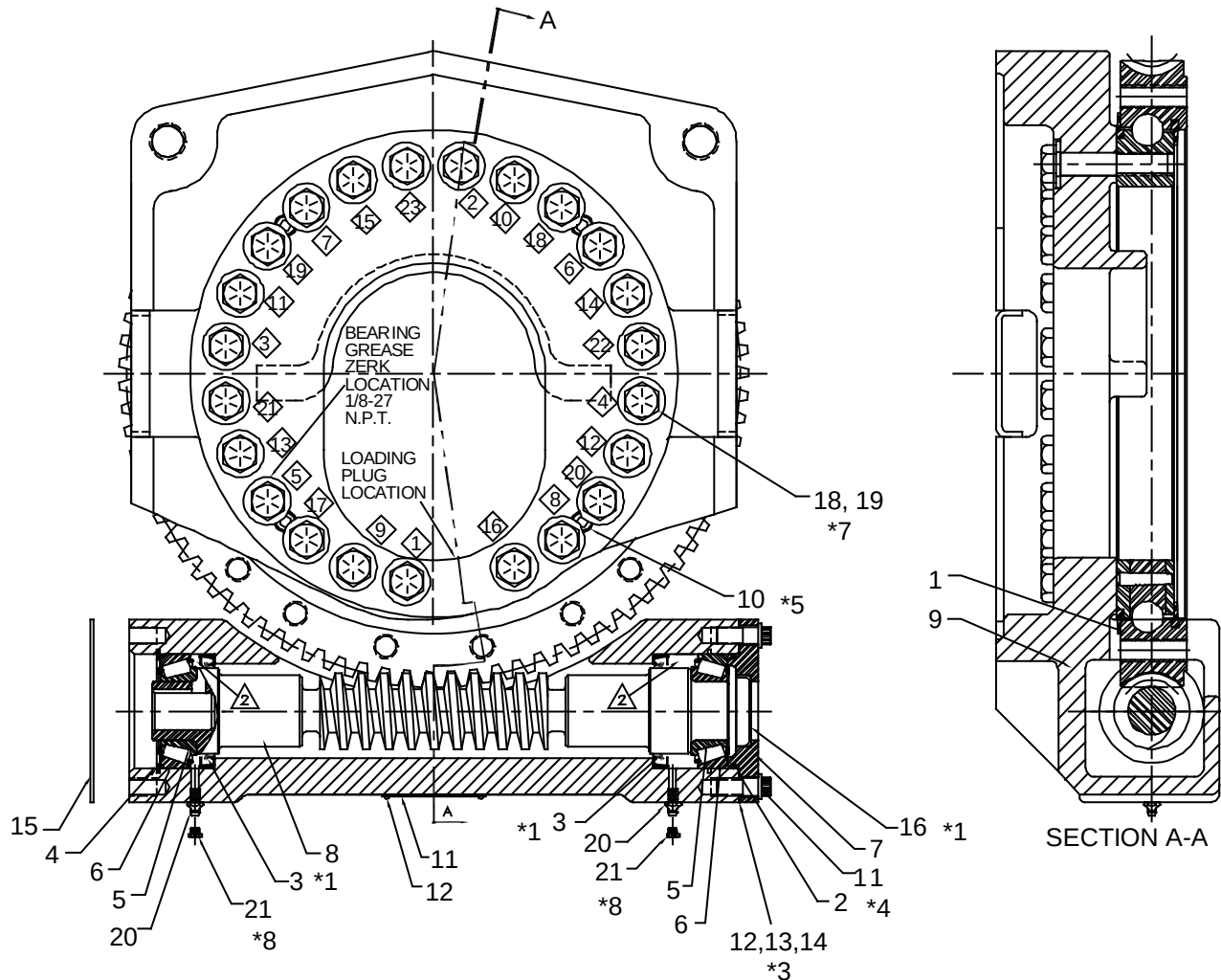
99906026-2



1. INSTALL SLEEVE #24, 60350141 ON EXTENSION CYLINDER, LOWER CYLINDER, AND ROTATION HOSES.
2. INSTALL SLEEVE #25, 60350142 ON WINCH AND PRESSURE AND RETURN VALVE BANK HOSES.
3. INSTALL SLEEVE #26, 60350105 ON PRESSURE AND RETURN HOSES, AND ROTATION HOSES ROUTED THROUGH MAST.

99906026 COMPLETE PARTS LIST (EFFECTIVE 01/04/16)				
ITEM	PART NO.	DESCRIPTION	KIT NO.	QTY
1	91726823	KIT-HYD BG4 SERIES III SP 7500/8600S		1
2	72532355	ADPTR-M STR/M JIC 6 6	1	1
3	72532356	ADPTR-M STR/M JIC 8 6	1	6
4	72532357	ADPTR-M STR/M JIC 6 8	1	1
5	72532359	ADPTR-M STR/M JIC 10 8	1	2
6	72532670	ELBOW-M JIC/45/F JIC 8 8	1	1
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
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	51396810	HOSE-JZ .38 X 21.50 (6-6) 100R17 180	1	1
17	51396811	HOSE-JJ .38 X 23.00 (6-6) 100R17 180	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	60350141	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. D 20160204				

Gear Rotator (71056543) (Primary)



NOTES (*)

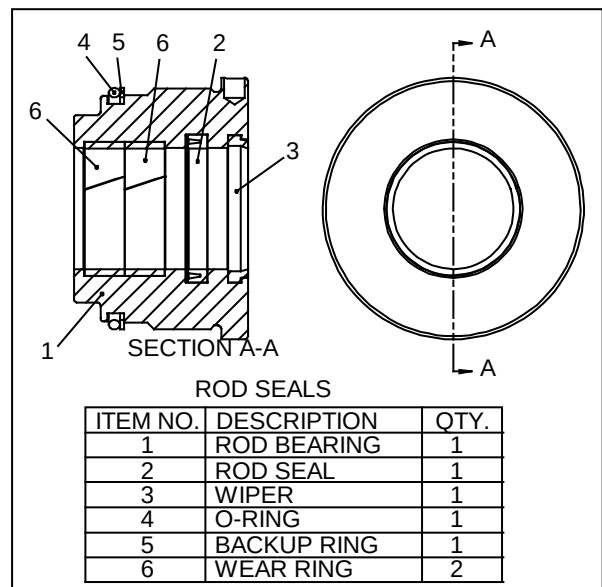
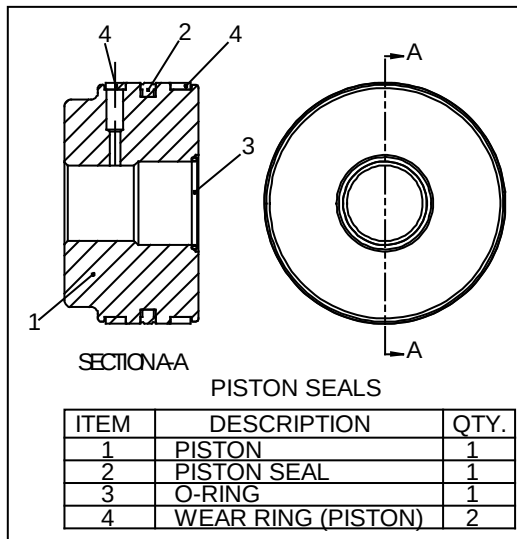
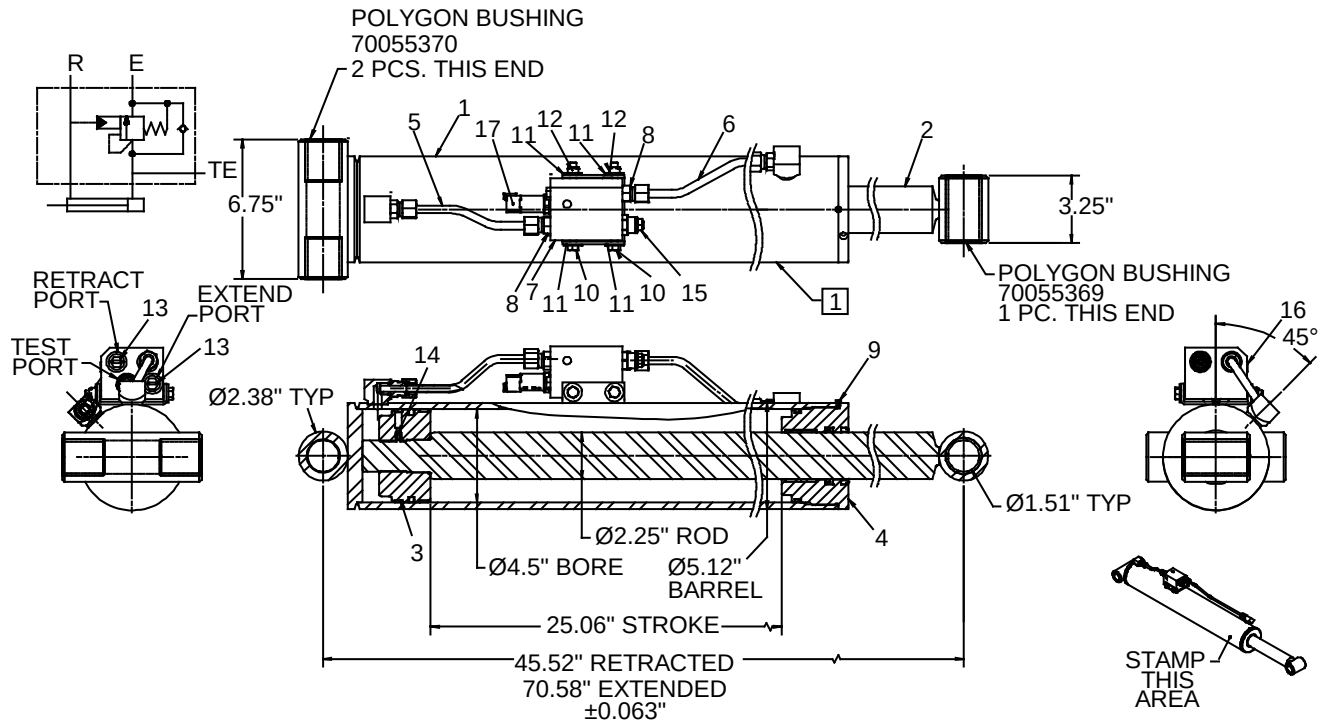
- 1 INSTALL SEALS #3 AND #16 WITH LOCTITE PLASTIC GASKET ON O.D. LUBRICATE SEAL SURFACE BEFORE ASSEMBLY.
- 2 PACK CAVITIES WITH EPO GREASE
- 3 SHIM TO OBTAIN 0.000 / 0.004 END PLAY ON WORM SHAFT.
- 4 LUBRICATE O-RING #2 WITH WORM GEAR OIL BEFORE INSTALLING.
- 5 INSTALL BOLTS #10 WITH LOCTITE #242.
- 6 SET BACKLASH BETWEEN WORM AND ROTATION BEARING 0.005 - 0.012.
- 7 TIGHTEN 5/8-11 UNC GRADE 8 MOUNTING BOLTS AS FOLLOWS: TIGHTEN PROGRESSIVELY AND AT 180° INTERVALS. FIRST INTERVAL AT 70 FT-LB. SECOND INTERVAL AT 140 FT-LB. THIRD INTERVAL AT 210 FT-LB. TIGHTEN BOLTS IN ORDER SHOWN IN DIAMONDS (<>). DO NOT USE LOCTITE ON MOUNTING BOLTS.
- 8 ITEM #20 SHIPS LOOSE. INSTALL ITEM #21 FOR SHIPPING.

⚠ WARNING

Anytime the gear-bearing bolts have been removed, they must be replaced with new bolts of identical grade and size. Failure to replace gear-bearing bolts may result in bolt failure due to metal fatigue, causing death or serious injury.

71056543 PARTS LIST				
ITEM	PART #	DESCRIPTION	DETAILS	QUANTITY
1.	70056527	ROTATION BEARING		1
2.	70395074	O-RING		1
3.	70395076	SEAL		2
4.	70145786	SNAP RING		1
5.	70055271	BEARING-CONE		2
6.	70055281	BEARING-CUP		2
7.	70145501	BEARING RETAINER		1
8.	70056550	WORM		1
9.	70145787	HOUSING		1
10.	72601734	CAP SCREW	3/8-16X1-1/4 SH	4
11.	72601733	CAP SCREW	1/2-13X1-1/4 FERRY	4
12.	73145506	SHIM	.005" THICK	2
13.	73145505	SHIM	.015" THICK	2
14.	73145504	SHIM	.030" THICK	2
15.	76395075	GASKET		1
16.	72533604	PLUG		1
17.	72661504	PIN	3/8X1	2
18.	72601751	CAP SCREW	5/8-11X2-3/4 HHGR8	23
19.	72063219	WASHER	5/8 FLAT HARD	23
20.	72533605	ZERK		2
21.	72533439	VENT PLUG		2

Lower Cylinder (51723170)



SEAL KIT # 94399128

INCLUDES ALL SEALS. SEALS CANNOT BE PURCHASED INDIVIDUALLY.

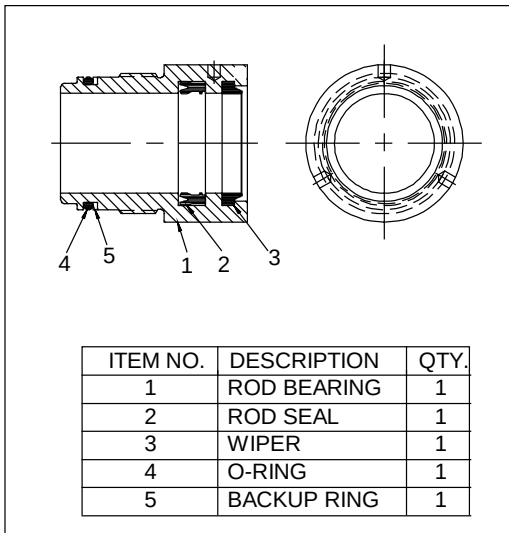
NOTES (SEE REFERENCE NUMBER IN BOX):

- 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.

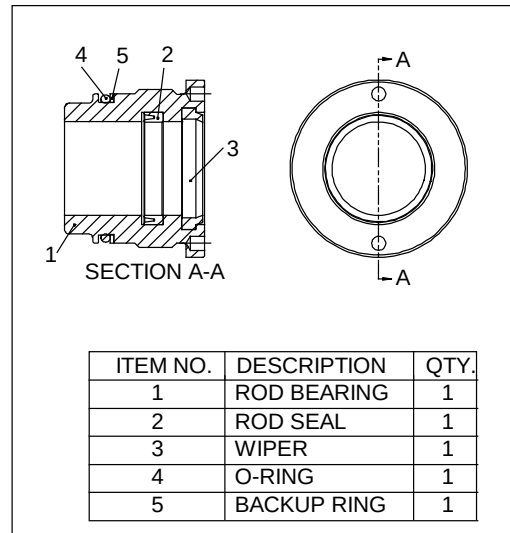
- 3 APPLY "LUBRIPLATE" NO 630-2 MEDIUM-HEAVY, MULTI-PRO LUBRICANT TO ALL PISTON, HEAD GLAND AND HOLDING VALVE SEALS.
- 4 TORQUE ROD BEARING TO 500-600 FT-LB (69-83 KG-M); PISTON TO 200-300 FT-LB (27.6-41.5 KG-M); AND PISTON SET SCREW TO 12-18 FT-LB (1.7-2.5 KG-M).
- 5 USE BLUE LOCKTITE ON PISTON.
- 6 TO LOCK THE HEAD GLAND ON THE CYLINDER, DRILL A #26 HOLE 0.25-0.30" (6-7.6 mm) DEEP IN A SEAM BETWEEN THE ROD BEARING AND THE CASE. INSTALL LOCKING SCREW (ITEM #9, SELF-TAPPING #8-32 X .25" SET SCREW) IN THE HOLE UNTIL SEATED.

51723170 PARTS LIST				
ITEM	PART #	DESCRIPTION	DETAILS	QUANTITY
1.	52723914	CASE		1
2.	52723915	ROD		1
3.	71414681	PISTON		1
4.	71414682	ROD BEARING ASSEMBLY		1
5.	71414693	TRANSFER TUBE		1
6.	71414694	TRANSFER TUBE		1
7.	73540444	VALVE BLOCK ASSEMBLY		1
8.		FITTING ADAPTER		4
9.		LOCKING SCREW		1
10.		BOLT	5/16"-18 X 4.00 HEX GRADE 5	2
11.		WASHER	.31 FLAT	4
12.		NUT	.31-18 NYLOC	2
13.		PLASTIC PLUG	SAE O-RING #6	3
14.		SET SCREW	.250-20 UNC NYLON TIP	1
15.	73540490	COUNTERBALANCE VALVE	3300 PSI	1
16.		PLUG	STEEL SAE O-RING #4	1
17.	77041866	PRESSURE TRANSDUCER		1
REF	94399128	SEAL KIT		1
REV B 20120712				

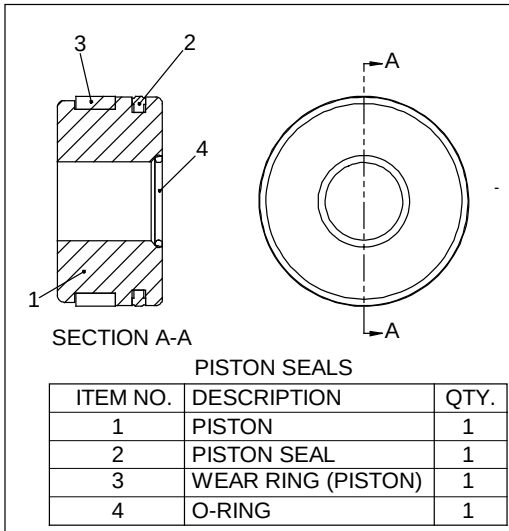
ROD SEALS FOR 71414676 ROD



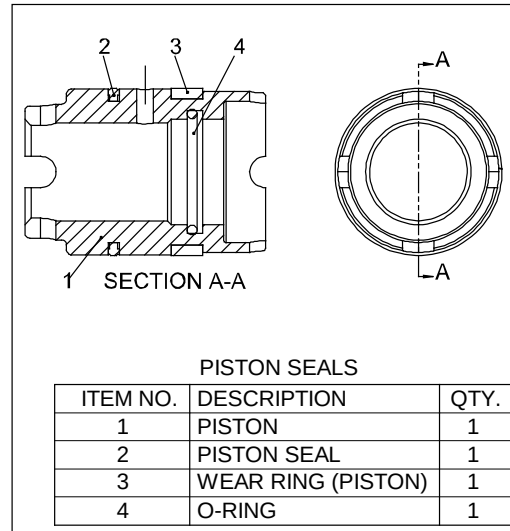
ROD SEALS FOR 71414677 ROD



PISTON SEALS FOR 71414674 PISTON



PISTON SEALS FOR 71414675 PISTON



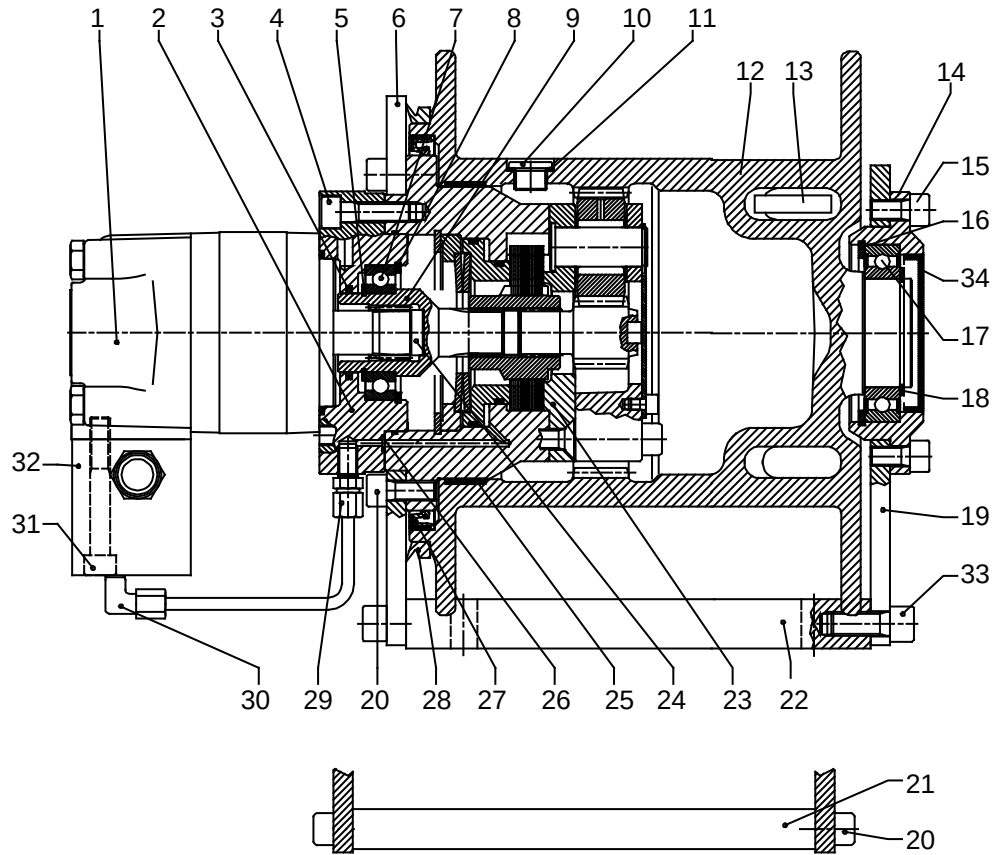
PART OF SEAL KIT # 94399126, WHICH INCLUDES ALL SEAL AND PISTON SEALS.
SEALS CANNOT BE PURCHASED INDIVIDUALLY.

NOTES (SEE REFERENCE NUMBER IN BOX):

- 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, HEAD GLAND, AND HOLDING VALVE SEALS, NYLON LOCK RING, CAST IRON PISTON RINGS, AND ROD STINGER THREADS.
- 4 TORQUE PISTON TO 200 FT-LB (27.6 KG-M). TORQUE PISTON NUT (3/4-16 UNF) PER SPEC.
- 5 USE BLUE LOCKTITE ON PISTON.
- 6 TO LOCK THE HEAD GLAND ON THE CYLINDER, DRILL A #26 HOLE 0.25-0.30" DEEP IN SEAMS BETWEEN THE ROD BEARING AND THE CASE. INSTALL LOCKING SCREWS (ITEM #16, SELF-TAPPING #8-32X0.25" SET SCREWS) IN THE HOLES UNTIL SEATED.

51723174 PARTS LIST				
ITEM	PART #	DESCRIPTION	DETAILS	QUANTITY
1.	52723910	CASE		1
2.	52723911	ROD ASSEMBLY		1
3.	52723912	ROD ASSEMBLY		1
4.	71414674	PISTON ASSEMBLY		1
5.	71414675	PISTON ASSEMBLY		1
6.	71414676	ROD BEARING ASSEMBLY		1
7.	71414677	ROD BEARING ASSEMBLY		1
8.	73540565	C'BALANCE VALVE	4000 PSI	1
9.		PLASTIC PLUG	SAE O-RING #8	2
10.		PLUG	STEEL SAE O-RING #4	1
11.		SELF-LOCKING NUT	.74-16 UNF	1
12.		SET SCREW	.250-20 UNC NYLON TIP	1
13.	73050198	STROKE LIMITER		1
14.		FITTING ADAPTER		2
15.	71414678	TRANSFER TUBE		1
16.		LOCKING SCREW		2
17.		HOSE CLAMP	#48	3
18.	71416609	ROD END CAP		1
19.	71416610	SOCKET HEAD CAP SCREW	.25-20 X 1.50" LG GR8	4
REF	94399126	SEAL KIT		1
Rev. C 20151223				

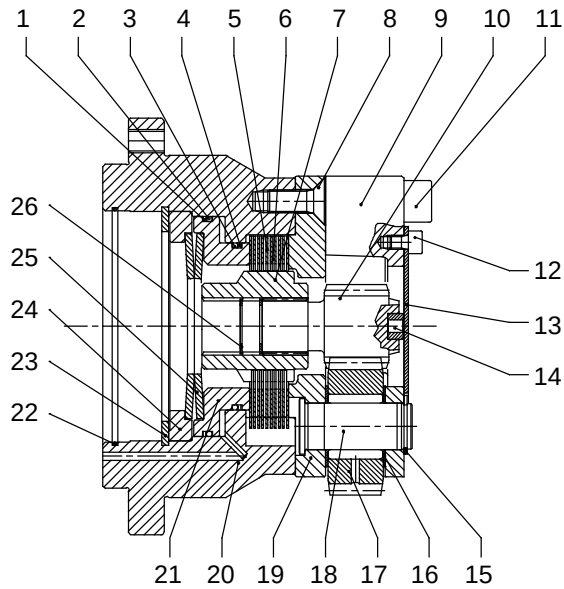
Winch, Planetary (71570968)



71570968 PARTS LIST

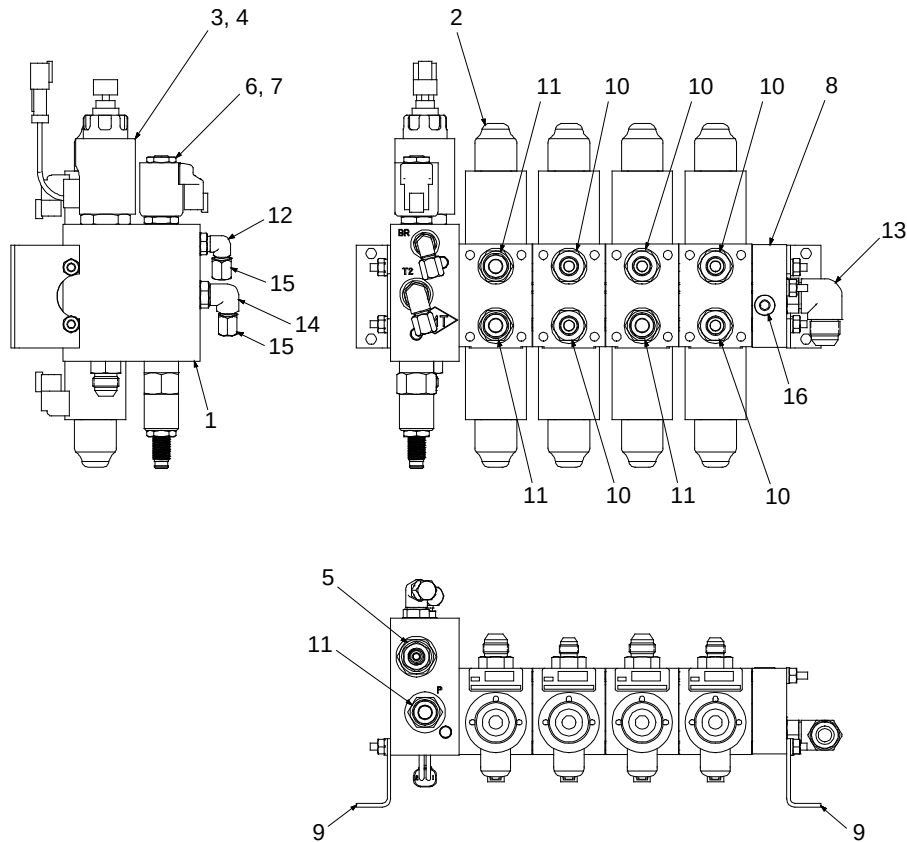
ITEM	PART #	DESCRIPTION	DETAILS
1.	73540453	Hydraulic motor	1
	Part of 94399223	Seal for motor	2REF
2.	025110129	Motor mounting flange	1
3.	Part of 94399223	Seal	1
4.		Hex socket head cap screw	4
5.	421000600	Seeger	1
6.		Engine support	1
7.	400023000	Ball bearing	1
8.	72661702	Retaining ring	1
9.		Sleeve	1
10.		Plug	2
11.	Part of 94399223	Copper washer	2
12.		Winch drum	1
13.	70580214	Wedge, winch cable	1
13.		Thimble	1
14.		Bearing support	1
15.		Hex socket head cap screw	6

71570968 PARTS LIST			
ITEM	PART #	DESCRIPTION	DETAILS
16.		Seeger	1
17.		Ball bearing	1
18.		Seeger	1
19.		Hub side support	1
20.		1 Hex socked head cap screw	1
20.		1 Hex socked head cap screw	1
21.		Cross member	2
22.		Fastening surface plate	2
23.	71056673	Brake unit (Reduction gear unit).	1
24.		Insert	1
25.		Guide	1
26.	Part of 94399223	O-ring joint	1
27.	Part of 94399223	Oil retainer seal	1
28.	Part of 94399223	V-Ring	1
29.		Straight pipe fitting (Conical)	1
30.		90° Connection (Conical)	1
31.		Hex socked head cap screw	2
32.	73540308	Valve	1
	Part of 94399223	Seal for valve	1REF
33.		Hex socked head cap screw	8
34.		Plug	1
	94399223	SEAL KIT	REF

71570968 Winch Brake**71570968 WINCH BRAKE PARTS LIST**

ITEM	PART #	DESCRIPTION	QUANTITY
1.	Part of 94399223	O-ring joint	1
2.	Part of 94399223	Antiextrusion ring	1
3.	Part of 94399223	O-ring joint	1
4.	Part of 94399223	Antiextrusion ring	1
5.		Brake Disk	9
6.		Brake Disk	10
7.		Gear	1
8.		Hex socket countersunk head	3
9.		Flange	1
10.		Sun gear	1
11.		Hex socket head cap screw	6
12.		Hex socket head cap screw	3
13.		Keep plate	1
14.		Insert	1
15.	72661703	Retaining ring	3
16.		Slewing ring	6
17.		Planetary gear	3
18.		Pin	3
19.		Flange	1
20.		Flange	1
21.		Piston	1
22.	Part of 94399223	O-ring joint	1
23.		Retaining ring	1
24.		Support	1
25.		Belleville washer	2
26.		Seeger	2
	94399223	SEAL KIT	REF

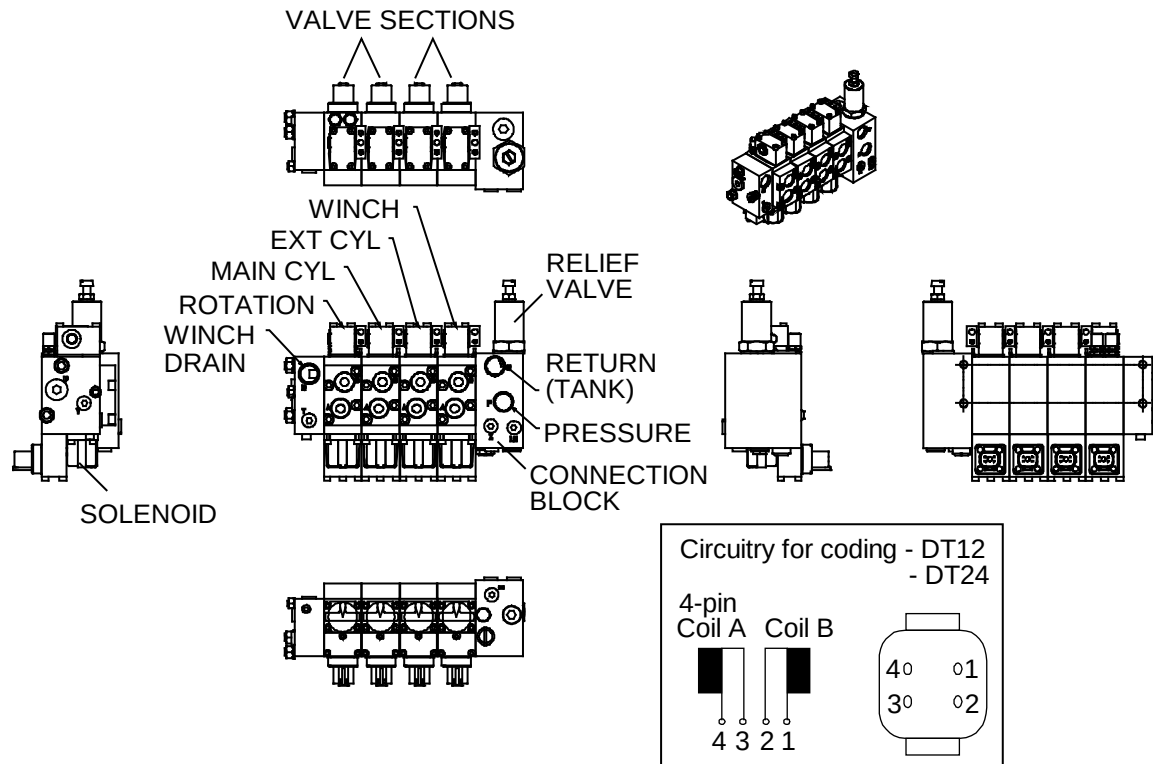
Valvebank (73734472)



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			

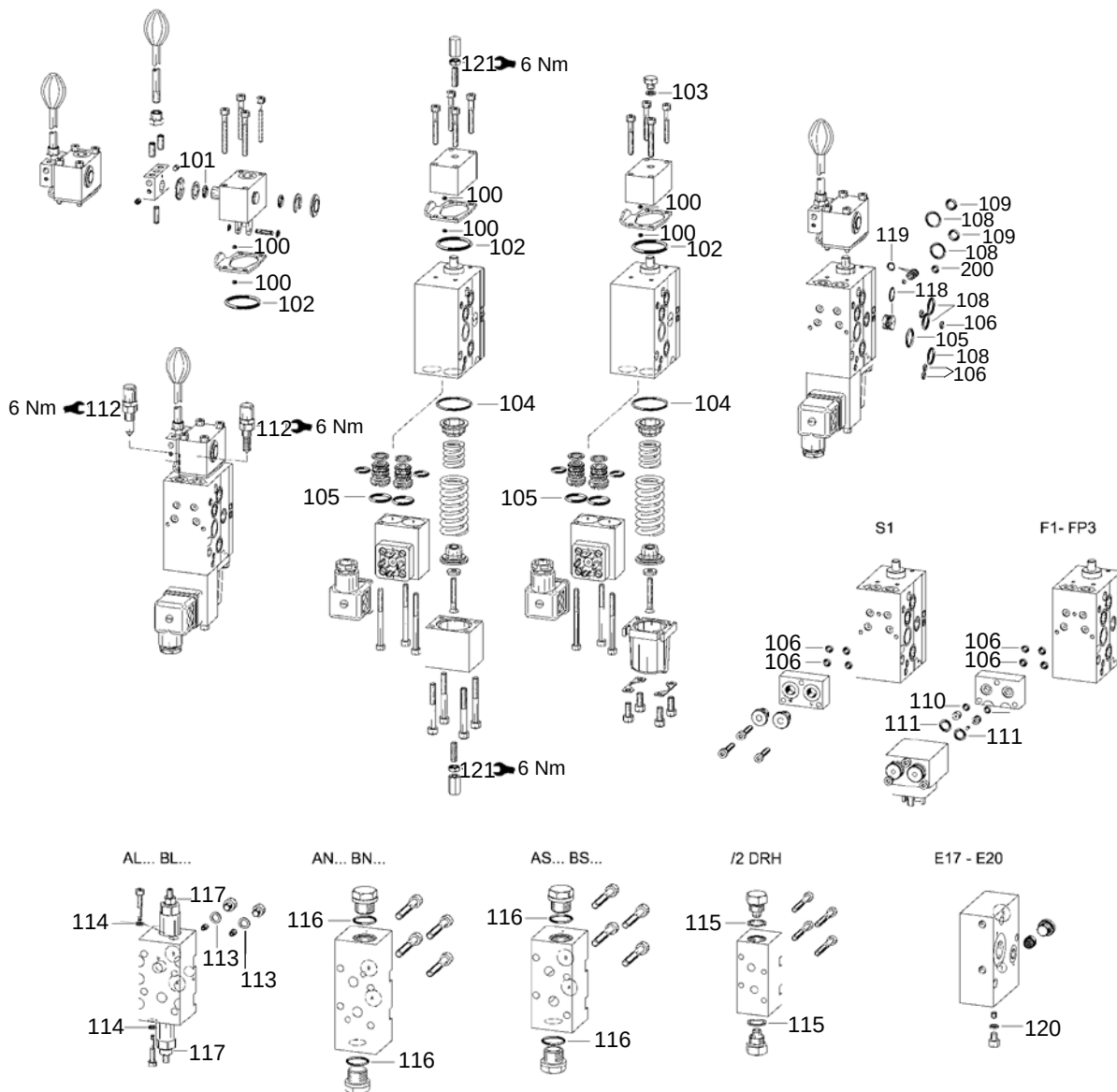
Valvebank (73734727)

WAS 73734635 THROUGH S/N 8600121025.



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)



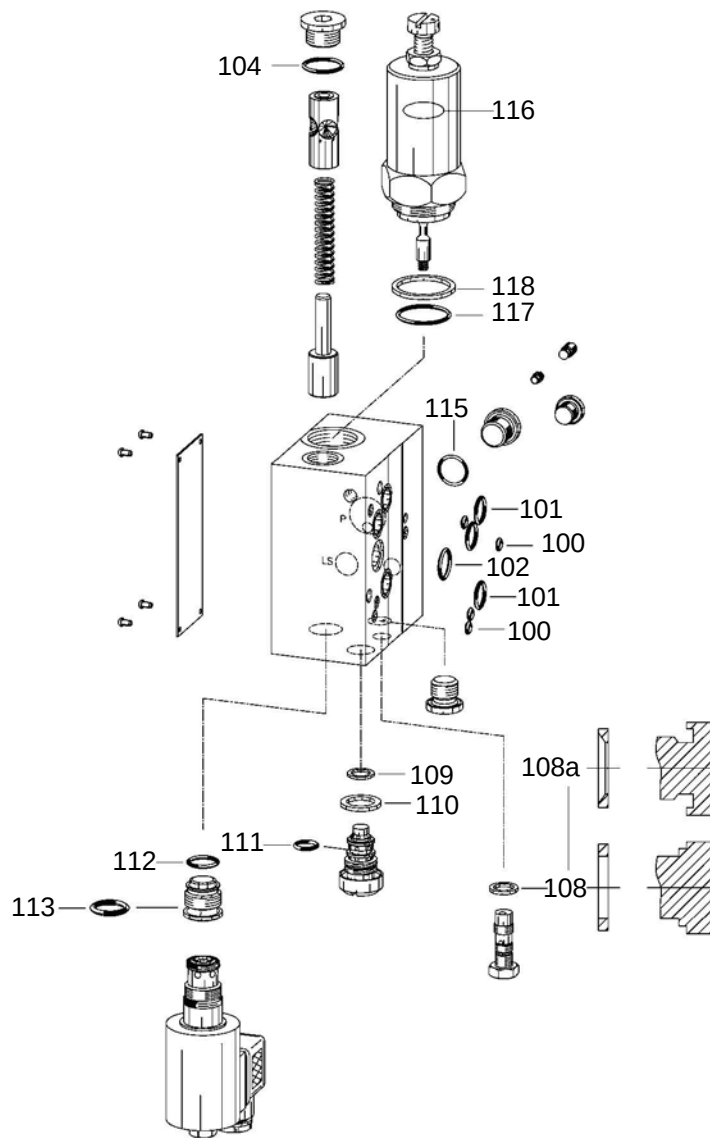
94399214 SEAL KIT PARTS

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
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

94399214 SEAL KIT PARTS			
ITEM	DESCRIPTION	DETAILS	QUANTITY
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.

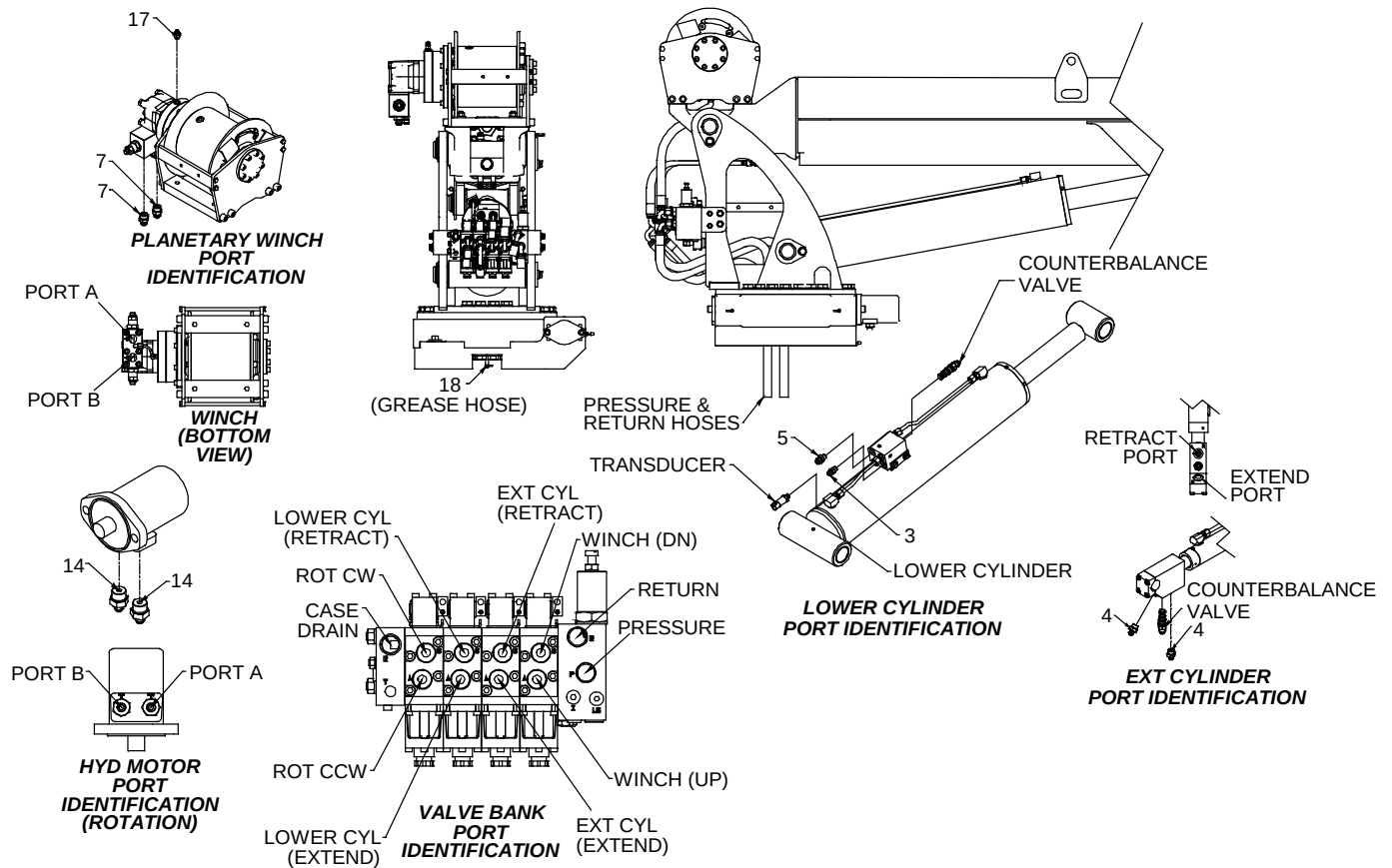
Connection Block Seal Kit for 73734727 (94399213)



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.

**NOTES (SEE REFERENCE NUMBER IN BOX):**

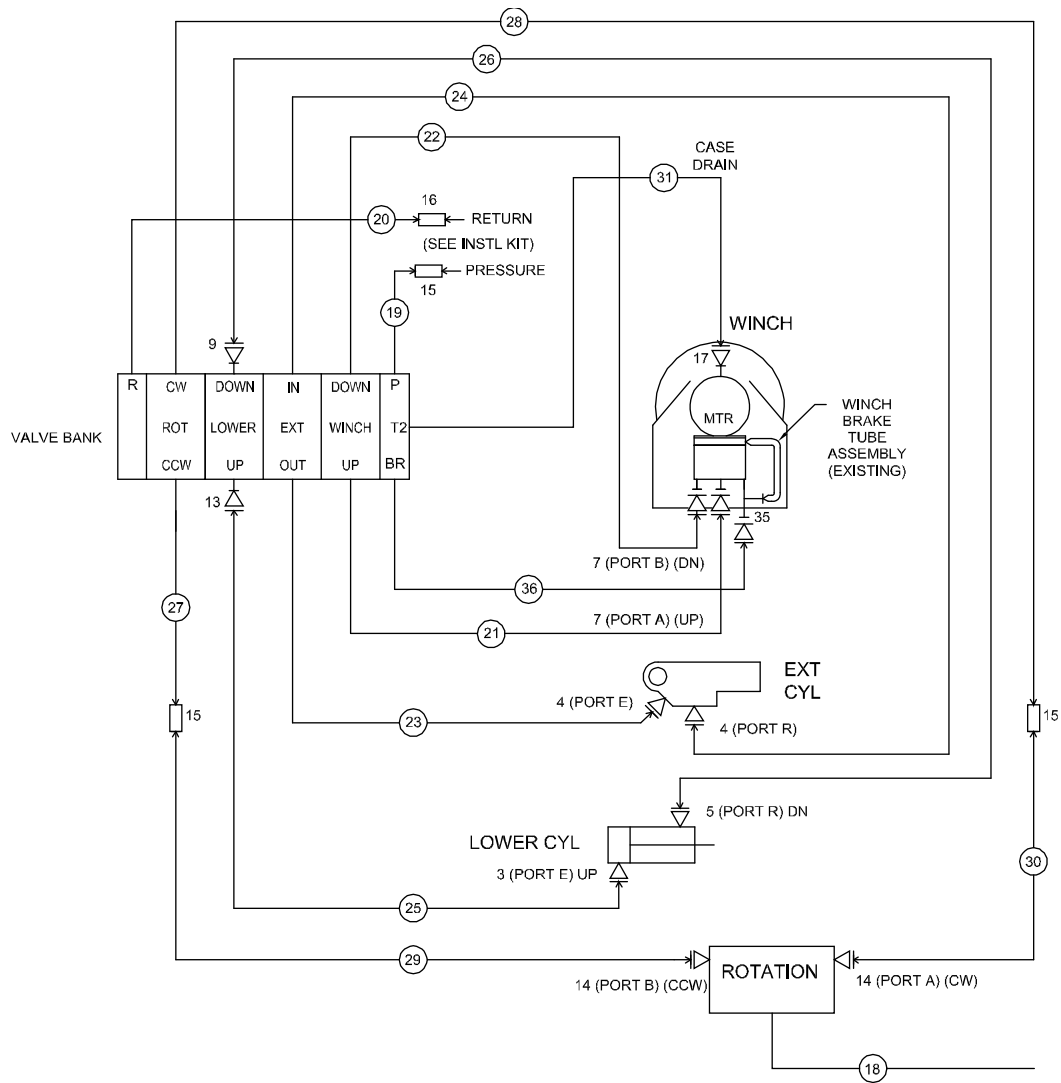
- 1 INSTALL SLEEVE #32, 60350141, ON EXTENSION CYLINDER, LOWER CYLINDER AND ROTATION HOSES.
- 2 INSTALL SLEEVE #33, 60350142, ON WINCH AND PRESSURE & RETURN VALVEBANK HOSES.
- 3 INSTALL SLEEVE #34, 60350105, ON PRESSURE & RETURN HOSES AND ROTATION HOSES ROUTED THROUGH MAST.

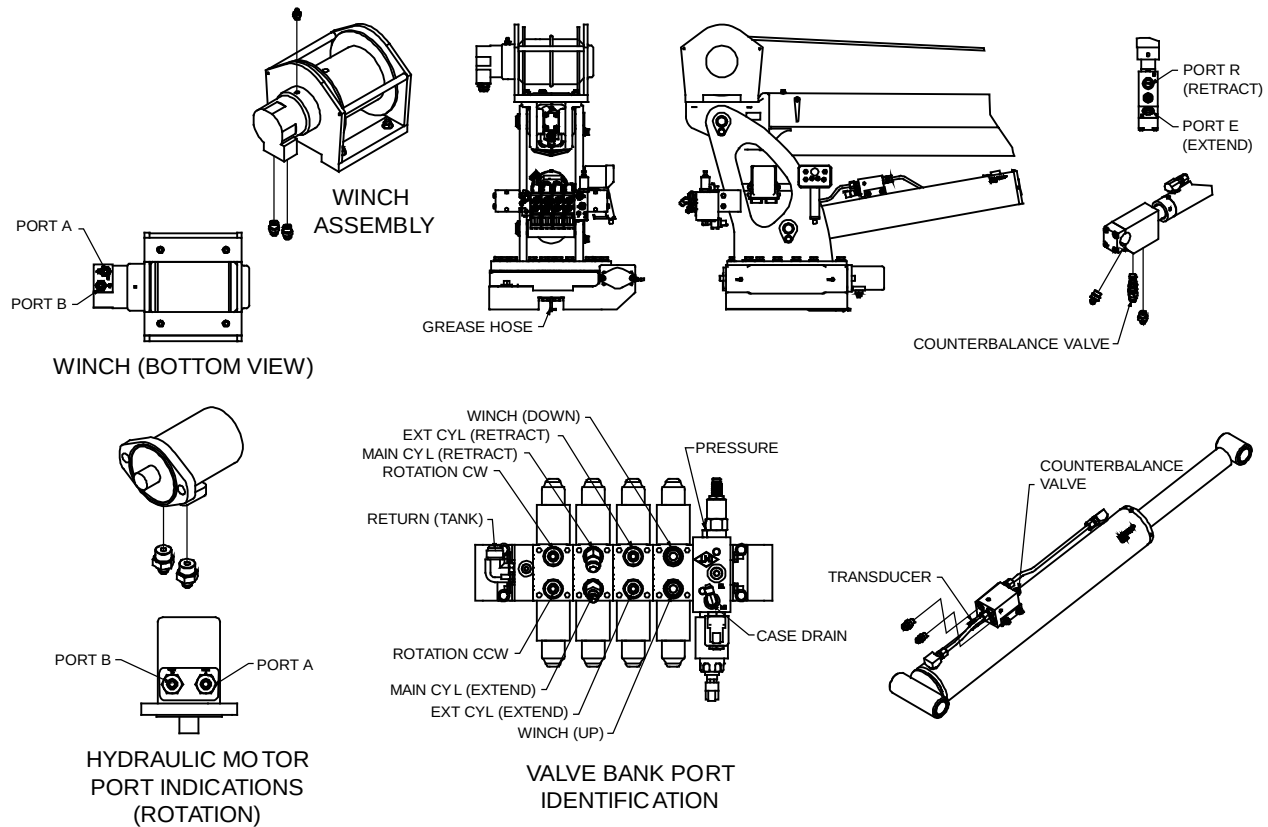
99905061 PARTS LIST

ITEM	PART #	DESCRIPTION	DETAILS	KIT #	QTY
1.	91723656	HYDRAULIC KIT - 7500/8600 SHORT			1
2.	73734727	VALVEBANK (WAS 73734635)	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	6
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 J IC 10 8	#1	2
8.	72532361	ADAPTER	M STR/M J IC 8 10	#1	1
9.	72532670	ELBOW	M JIC/45/F JIC 8 8	#1	1
10.	72532690	ELBOW	M JIC/90/F JIC SW 4 4	#1	1
11.				#1	2
12.	72532792	ADAPTER	M STR/M JIC 8 4	#1	1
13.	72533583	ELBOW	M STR/45/M JIC 8 6	#1	1
14.	72533613	ADAPTER	M STR/M J IC 10 6	#1	2

99905061 PARTS LIST					
ITEM	PART #	DESCRIPTION	DETAILS	KIT #	QTY
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	AA .13 X 13.50 (2-2) 100R17	#1	1
18.	51395121	HOSE		#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.	51396810	HOSE	JZ .38 X 21.50 (6-6) 100R17 180	#1	1
24.	51396811	HOSE	JJ .38 X 23.00 (6-6) 100R17 180	#1	1
25.	51399077	HOSE	FJ .38 X 30.00 (6-6) 100R17	#1	1
26.	51399078	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.	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 (99905595)



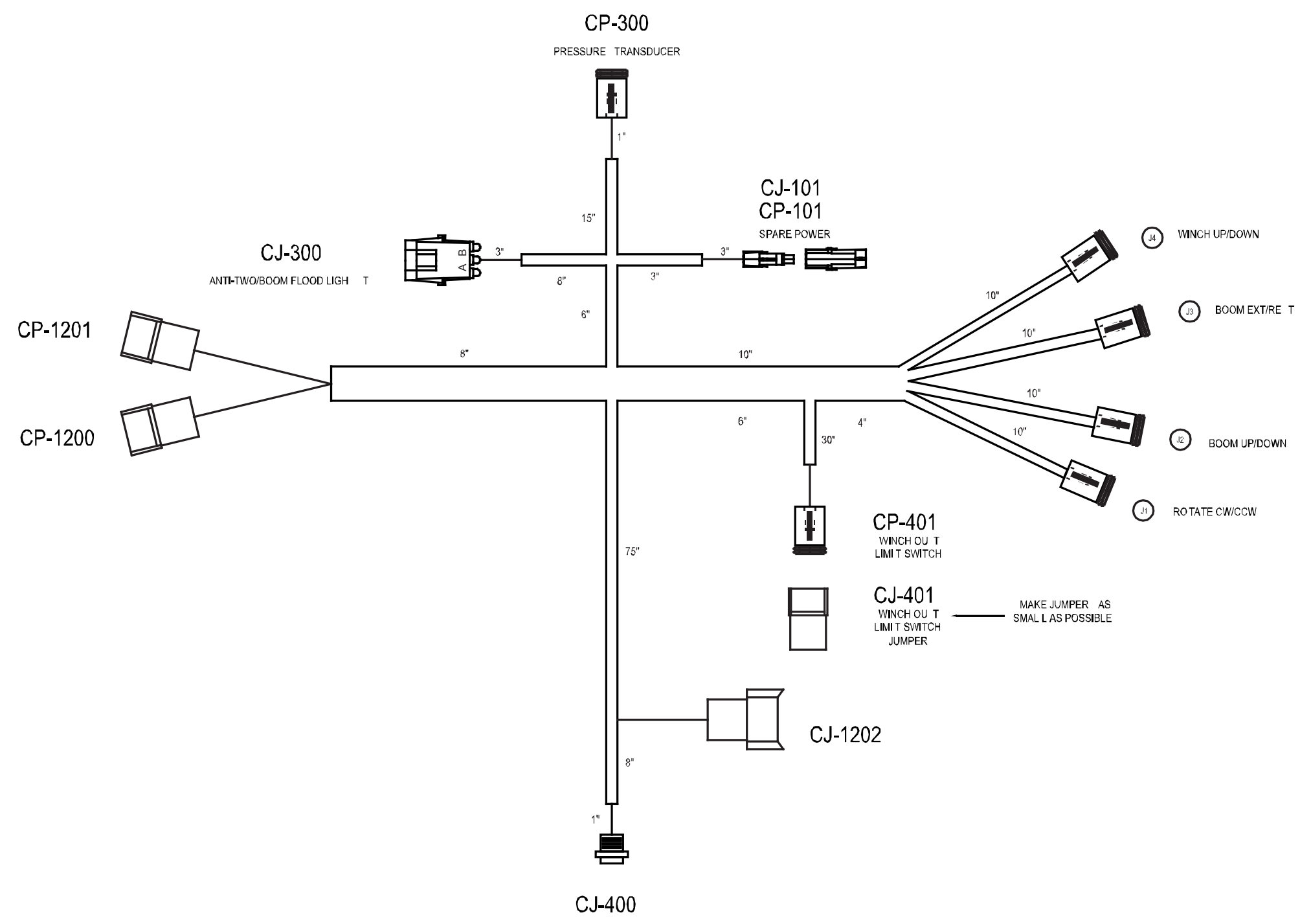
**NOTES (SEE REFERENCE NUMBER IN BOX):**

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

99905595 PARTS LIST					
ITEM	PART #	DESCRIPTION	DETAILS	KIT #	QTY
1.	91725087	HYDRAULIC KIT - 7500/8600 SHORT			1
2.	73734472	VALVE BANK			1 REF
3.	72532355	ADAPTER	M STR/M JIC 6 6	#1	1
4.	72532356	ADAPTER	M STR/M JIC 8 6	#1	6
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
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	AA .13 X 13.50 (2-2) 100R17	#1	1
18.	51395121	HOSE		#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

99905595 PARTS LIST					
ITEM	PART #	DESCRIPTION	DETAILS	KIT #	QTY
23.	51396810	HOSE	JZ .38 X 21.50 (6-6) 100R17 180	#1	1
24.	51396811	HOSE	JJ .38 X 23.00 (6-6) 100R17 180	#1	1
25.	51399462	HOSE	FJ .38 X 31.00 (6-6) 100R17	#1	1
26.	51399463	HOSE	FZ .50X 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.	51399074	HOSE	FJ .25 X 32.00 (4-4) 100R2	#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 MBSTP/MDIN/MDIN 2 6 6 RUN	#34	1
36.	51399668	HOSE	FDF .25 X 32.00 (6-4) 100R17	#34	1
REV B 20140903					

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
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
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
A	WHT	16	TRANS PWR
B	WHT	16	TRANS SIG
C	-	-	-
			TO CP-1200 11

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

LOCATOR CODE: CJ-400		BRAD HARRIS: 8R5F00A18A120	
TERM: 80012		TELETYPE TO HARNESS OR EQUIV	
CAVIT Y	COLOR	GA	PRIN T L ABE L
-	BRN	22	CAN LOW
-	WHT	22	TETHER PWR
-	BLU	22	CAN HIGH
-	BLK	22	GROUND
			TO CP-1201 8

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

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

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

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

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

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
1	WHT	16	POWER
2	-	-	-
3	WHT	16	ENG SPD
4	WHT	16	ENG START
5	WHT	16	ENG STOP
6	WHT	16	COMP ON
7	WHT	16	CRANE HOUR M
8	WHT	16	A2B SIG
9	WHT	16	HORN (1)
10	WHT	16	HORN (2)
11	WHT	16	TRANS SIG
12	WHT	16	GROUND
			TO CP-1202 5

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
1	WHT	16	BOOM UP
2	WHT	16	BOOM DN
3	WHT	16	WINCH IN
4	WHT	16	WINCH OUT
5	BLU	22	CAN HIGH
6	WHT	22	TETHER PWR
7	WHT	16	POWER
8	BRN	22	CAN LOW
9	WHT	16	BOOM EXT
10	WHT	16	BOOM RET
11	WHT	16	ROT CCW
12	WHT	16	ROT CW
			TO J2 4

LOCATOR CODE: CJ-1202		DUETSCH DT04-12PA	
TERM: 0460-215-16141		WEDGE: W12P	
CAVIT Y	COLOR	GA	PRIN T L ABE L
1	WHT	16	SELECTOR
2	WHT	16	ENG STOP
3	WHT	14	GROUND
4	WHT	16	COMP ON
5	WHT	16	ENG SPD
6	WHT	16	ENG START
7	WHT	14	POWER
8	WHT	16	CRANE HOUR M
9	WHT	16	SPARE PWR
10	WHT	16	HORN (2)
11	WHT	16	HORN (1)
12	WHT	14	BOOM FLD LT
			TO CP-1201 4

LOCATOR CODE: -		SPICE B	
CAVIT Y	COLOR	GA	PRIN T L ABE L
-	WHT	16	GND
-	WHT	16	GND
-	WHT	16	GND
			TO J2 2

LOCATOR CODE: -		SPICE C	
CAVIT Y	COLOR	GA	PRIN T L ABE L
-	WHT	16	COMP ON
-	WHT	16	SELECTOR
-	WHT	16	COMP ON
			TO CP-1200 6

LOCATOR CODE: -		SPICE E	
CAVIT Y	COLOR	GA	PRIN T L ABE L
-	WHT	16	GND
-	WHT	16	GND
-	WHT	16	GND
			TO J3 2

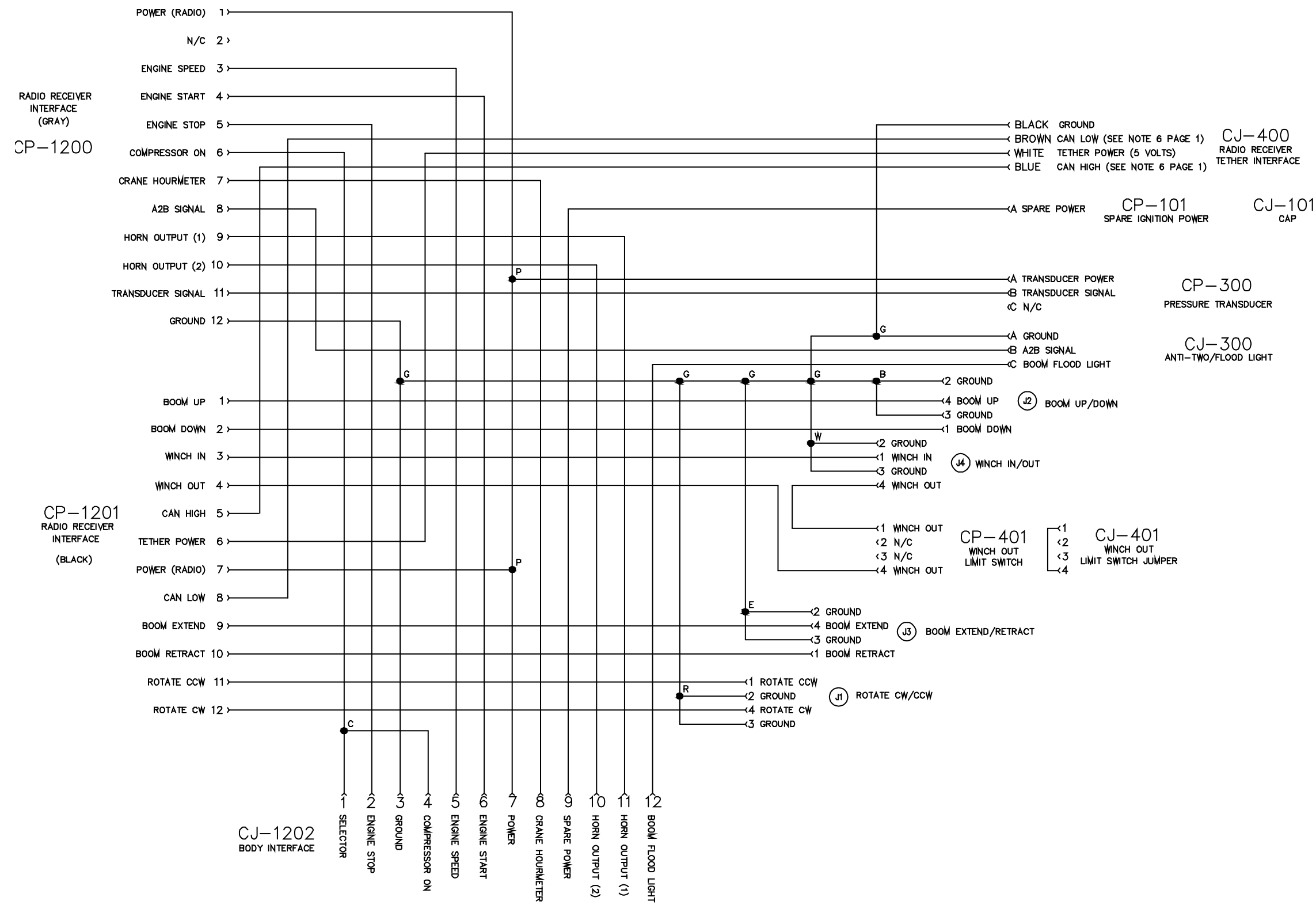
LOCATOR CODE: -		SPICE G	
CAVIT Y	COLOR	GA	PRIN T L ABE L
-	WHT	14	GROUND
-	WHT	16	GROUND
-	WHT	16	GROUND
-	WHT	16	STOW SEN GND
-	WHT	16	GND
-	WHT	16	GND
-	WHT	16	GND
-	BLK	22	GROUND
			TO CJ-1202 3

LOCATOR CODE: -		SPICE P	
CAVIT Y	COLOR	GA	PRIN T L ABE L
-	WHT	14	POWER
-	WHT	16	POWER
-	WHT	16	POWER
-	WHT	16	POWER
			TO CP-1200 1

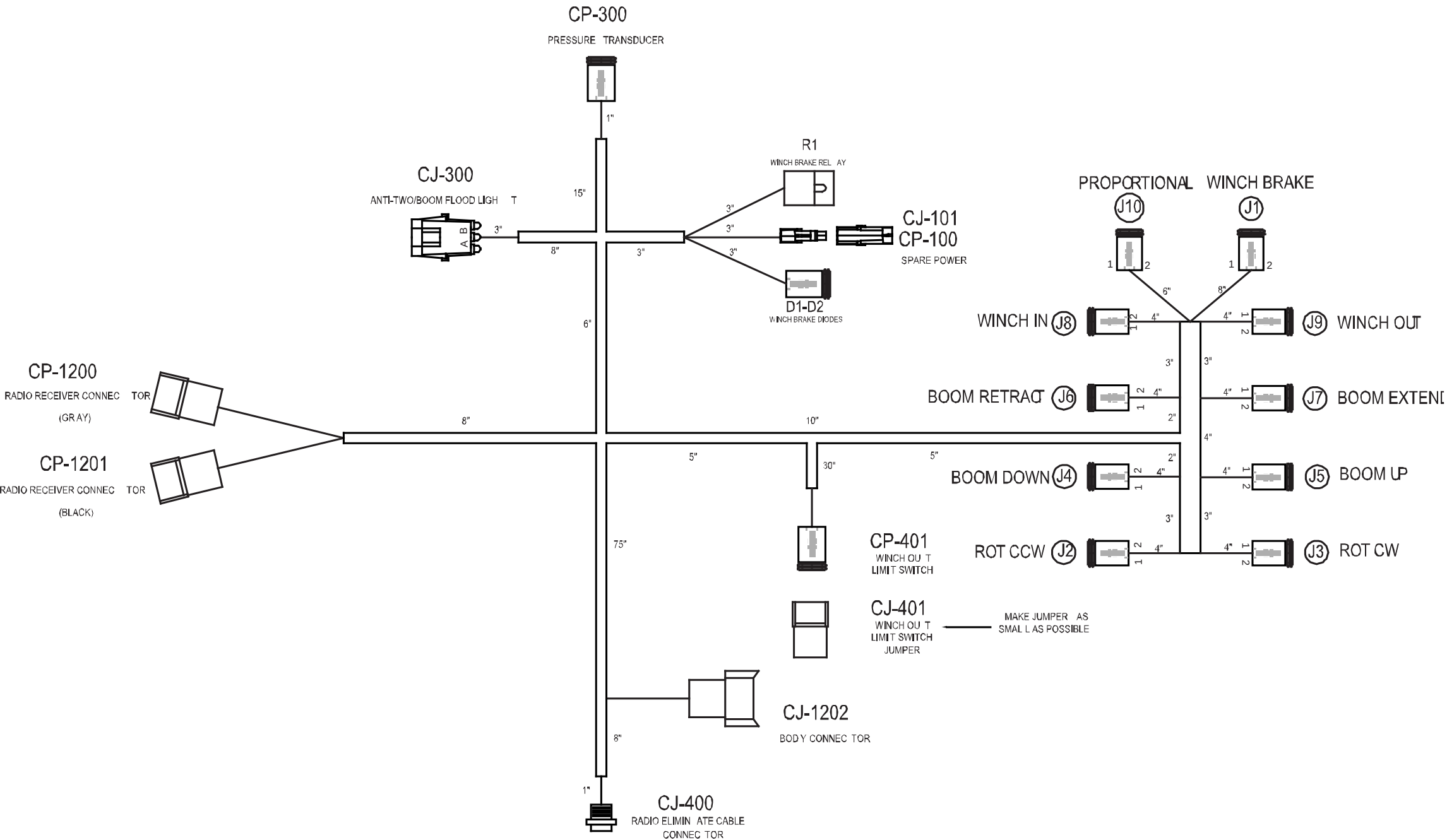
LOCATOR CODE: -		SPICE R	
CAVIT Y	COLOR	GA	PRIN T L ABE L
-	WHT	16	GND
-	WHT	16	GND
-	WHT	16	GND
			TO J1 2

LOCATOR CODE: -		SPICE W	
CAVIT Y	COLOR	GA	PRIN T L ABE L
-	WHT	16	GND
-	WHT	16	GND
-	WHT	16	GND
			TO J4 2

Radio Remote Harness (77441481)



Radio Remote Harness (77441537)



Radio Remote Harness (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			
		AP: 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 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	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

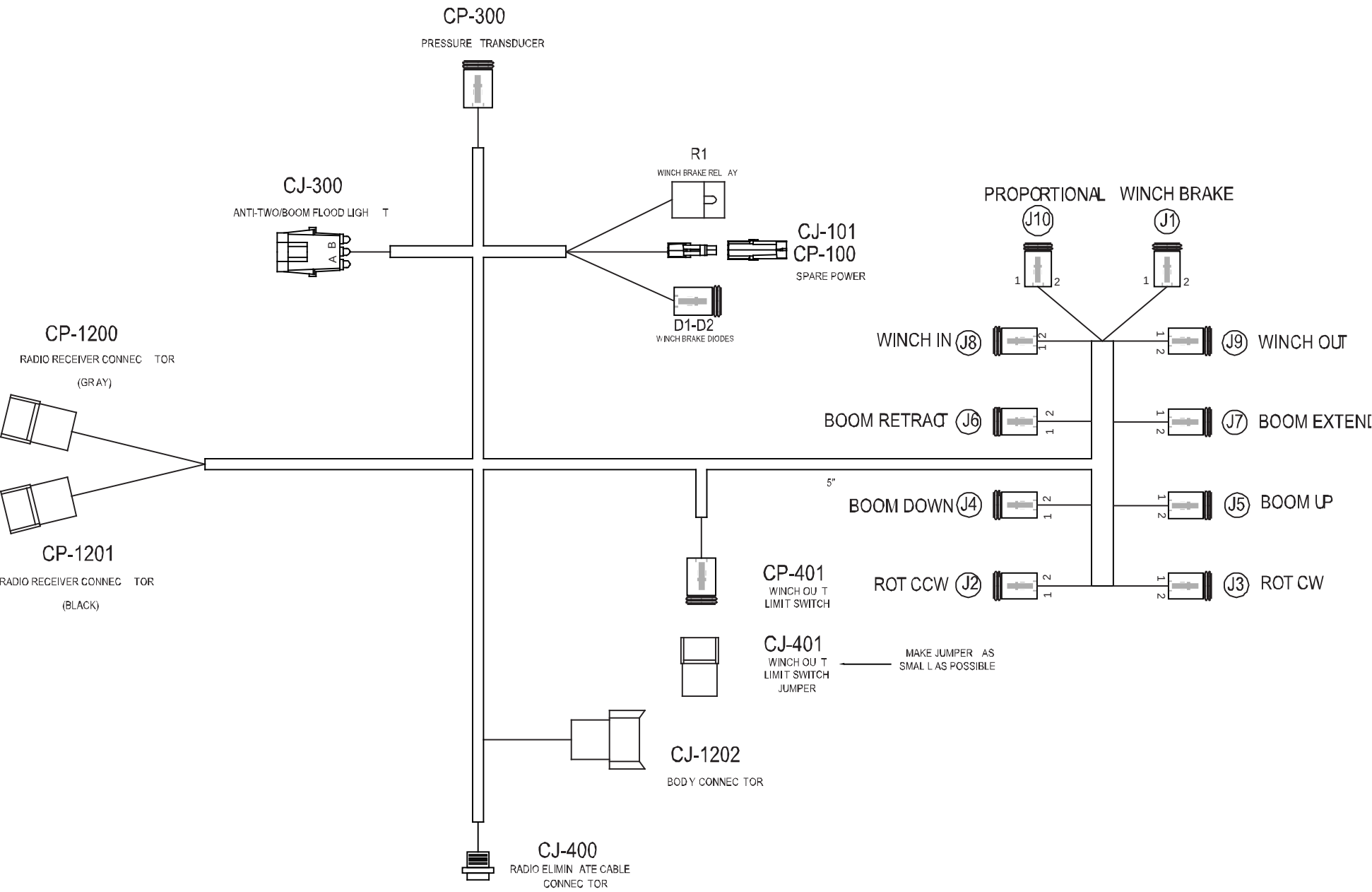
LOCATOR CODE: -		SPLICE E			
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC CAVITY
-	WHT	18	GND	TO	J6 1
-	WHT	18	GND	TO	J7 1
-	WHT	16	GND	TO	SPL G -

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

LOCATOR CODE: -		SPLICE G			
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC CAVITY
-	WHT	14	GND	TO	CJ-1202 3
-	WHT	16	GND	TO	CP-1200 12
-	WHT	16	GND	TO	CJ-300 A
-	WHT	16	GND	TO	SPL B -
-	WHT	16	GND	TO	SPL E -
-	WHT	16	GND	TO	SPL R -
-	WHT	16	GND	TO	SPL W -
-	WHT	18	GND	TO	J1 1
-	WHT	18	GND	TO	J10 1
-	WHT	18	GND	TO	R1 85
-	BLK	22	GND	TO	CJ-400 -

LOCATOR CODE: -			SPLICE P			
CAVITY	COLOR	GA	PRINT LABEL	TO	CON-SPLC	CAVITY
-	WHT	14	PWR	TO	CJ-1202	7
-	WHT	16	PWR	TO	CP-1200	1
-	WHT	16	PWR	TO	CP-1201	7
-	WHT	16	TRANS PWR	TO	CP-300	A
-	WHT	18	PWR	TO	R1	30

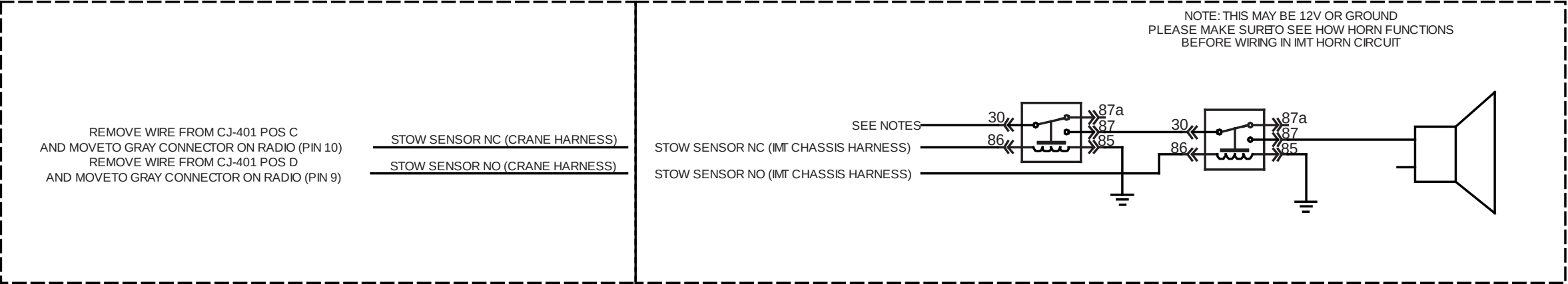
Radio Remote Harness (77441537)



Horn Circuit (99905614)

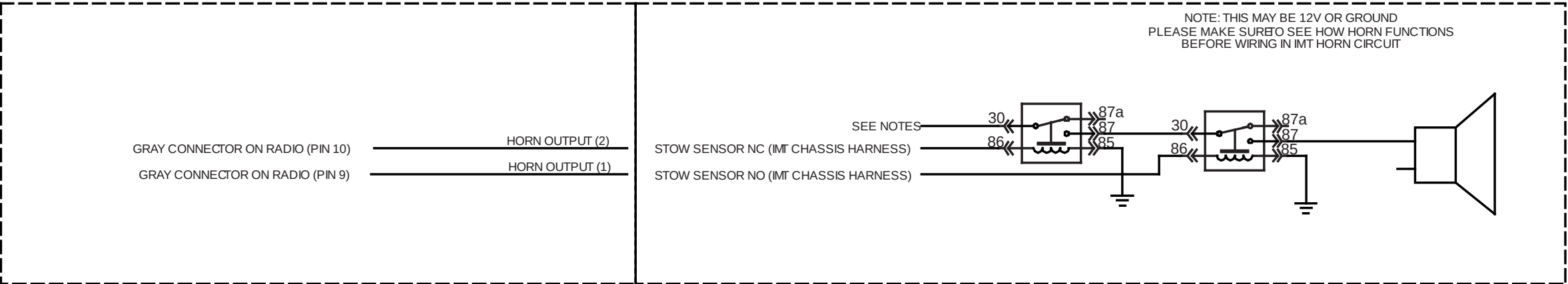
CRANE HARNESS 77441481 REV A

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

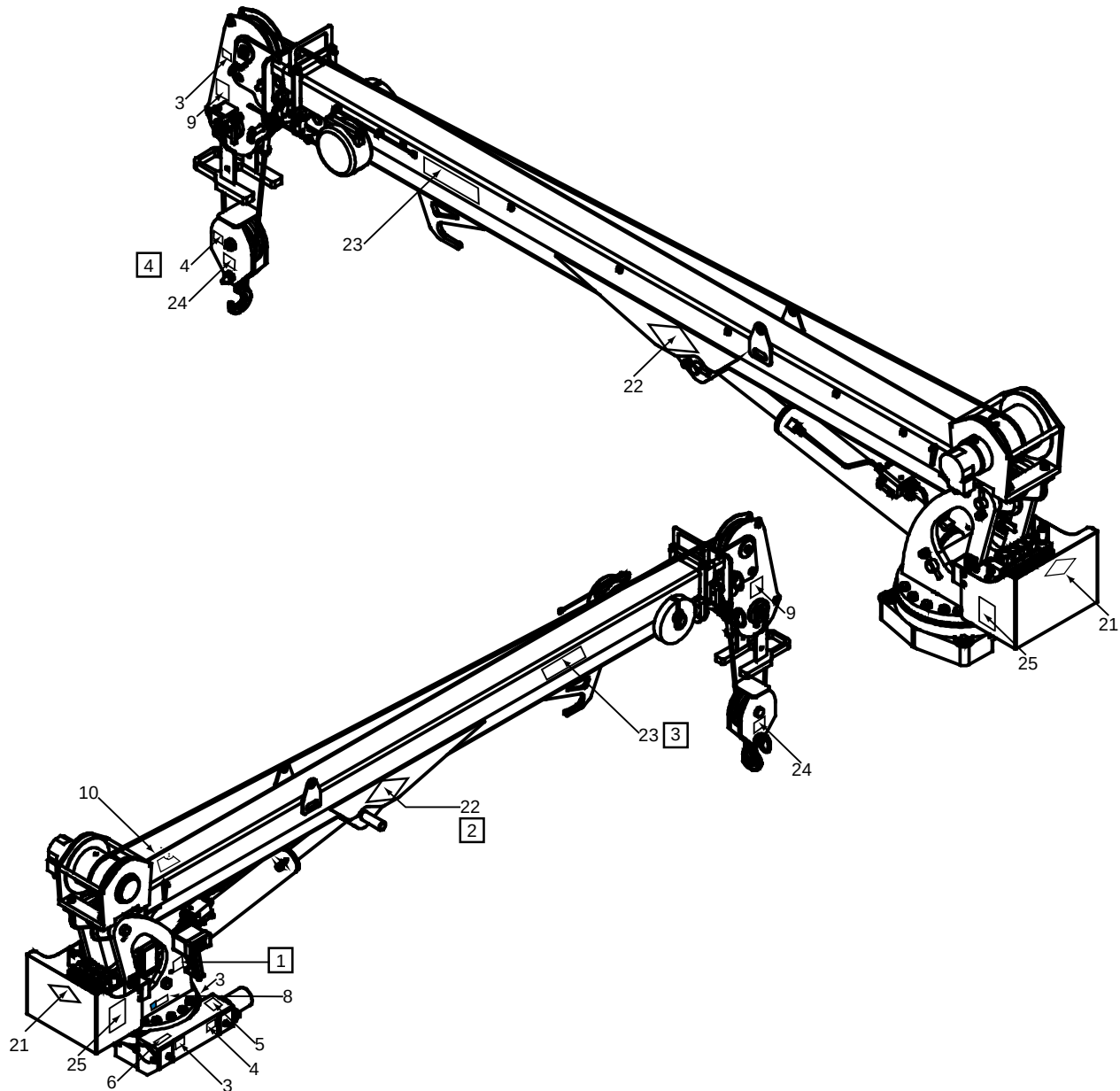


CRANE HARNESS 77441481 REV B

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



Decal Placement, 8600 22-foot



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)

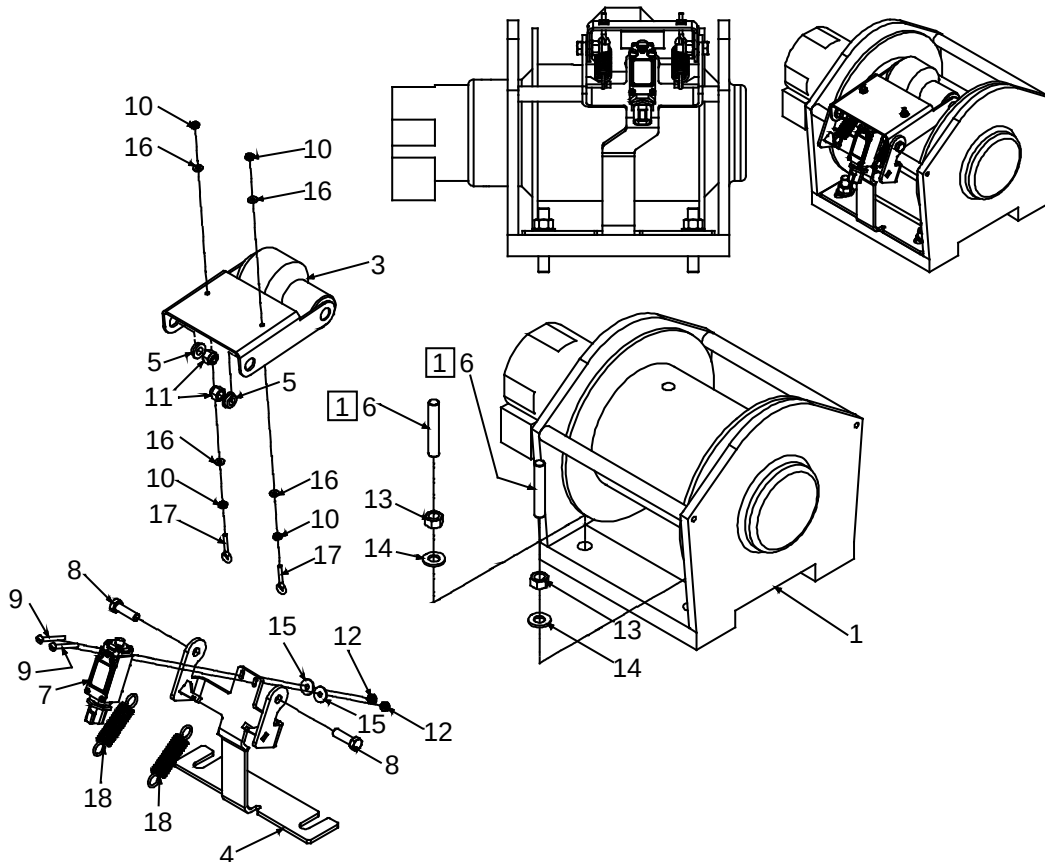
ITEM #	PLACEMENT
12,17,19,20, 25	AT OR NEAR REMOTE HANDLE STORAGE POINT
13	2 ON REAR STABILIZERS, 2 ON SIDEPACK FRONT WALLS
15	AT OR NEAR DRIVELINE
14,16	ON ALL FOUR SIDES OF CARRIER VEHICLE
18	ON TOP OF HYDRAULIC RESERVOIR

DECAL PLACEMENT, 8600 22' CRANES (REF 99905086)

ITEM	PART #	DESCRIPTION	KIT #	QTY IN KIT	QTY ON CRANE
1.	95724101	DECAL KIT - TELE COMMON SIII (7500-8600S)			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-MOBIL OIL 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.	70398903	DECAL-DIAMOND IMT 5X10 (REFL)	1	2	2
23.	70399048	DECAL-ID 8600			2REF
24.	70399345	DECAL-LOAD BLOCK 4.3 T (WAS 70396787)			2REF
25.	70399104	DECAL-CAP CHART 8600-22'			3REF
REV D 20140411					

Option-Winch Roller (99905054)

Kit 51723636



NOTES (SEE REFERENCE NUMBER IN BOX):

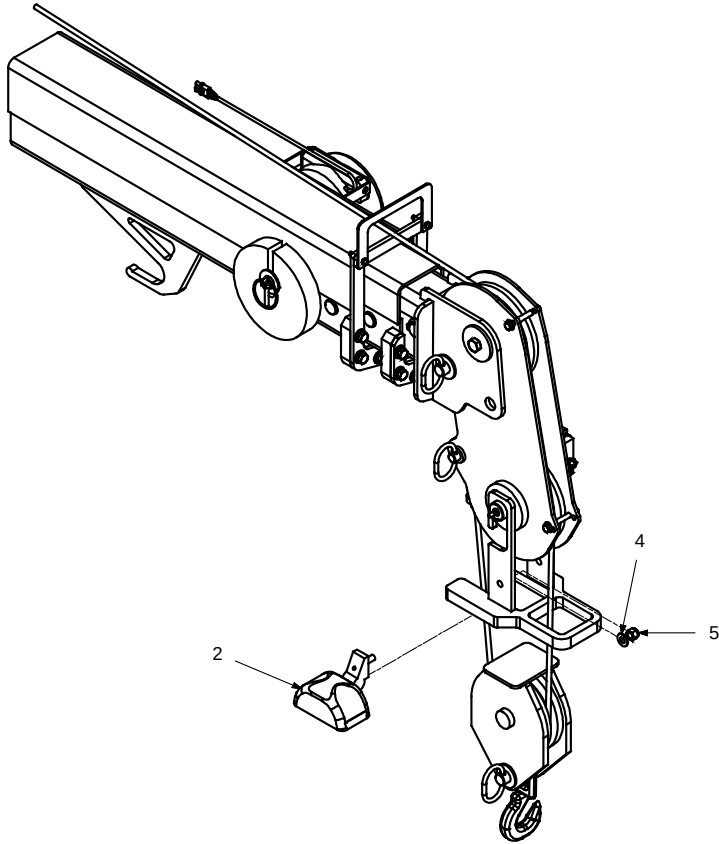
1 APPLY BLUE LOCKTITE WHEN INSTALLING STUDS INTO WINCH MOUNT CASTING.

99905054 PARTS LIST

ITEM	PART #	DESCRIPTION	DETAILS	KIT #	QUANTITY
1.	71570968	WINCH-PLANETARY 4400 LB LINE PULL			REF
2.	91725601	HARDWARE KIT-WINCH ROLLER			1
3.	52723095	ROLLER ASSEMBLY- WINCH SWITCH			1
4.	52723641	WELDMENT-BRACKET			1
5.	60030439	SLEEVE-TYPE C	0.38X 0.62X.25		2
6.	72602058	STUD	0.50-13(20)X3.00 NC GR8STL		2
7.	77041863	SWITCH-LIMIT			1
8.	72060047	CAP SCREW	.38-16X 1.25 HH G R5 Z	#2	2
9.	72060641	MACHINE SCREW	#10-24X 1.75 ROUND HEAD	#2	2
10.	72062093	NUT	#8-32 HEX ZINC	#2	4

99905054 PARTS LIST					
ITEM	PART #	DESCRIPTION	DETAILS	KIT #	QUANTITY
11.	72062103	NUT	.38-16 HEX NYLOCK	#2	2
12.	72062106	NUT	#10-24 HEX NYLOCK	#2	2
13.	72062108	NUT	.50-20 HEX CENTER LOCKING	#2	2
14.	72063132	WASHER	.50 FLAT ASTM F436	#2	2
15.	72063268	WASHER	#10 W FLAT ANSI B27.2Z	#2	2
16.	72063271	WASHER	# 8 W FLAT ANSI B27.2Z	#2	4
17.	72601938	BOLT-EYE	# 8-32X 1.125	#2	2
18.	71413185	SPRING	0.105WIRE 0.75 OD 2.875 LG	#2	2
REV A 20110513					

Option - Boom Tip Light Kit (99905289)

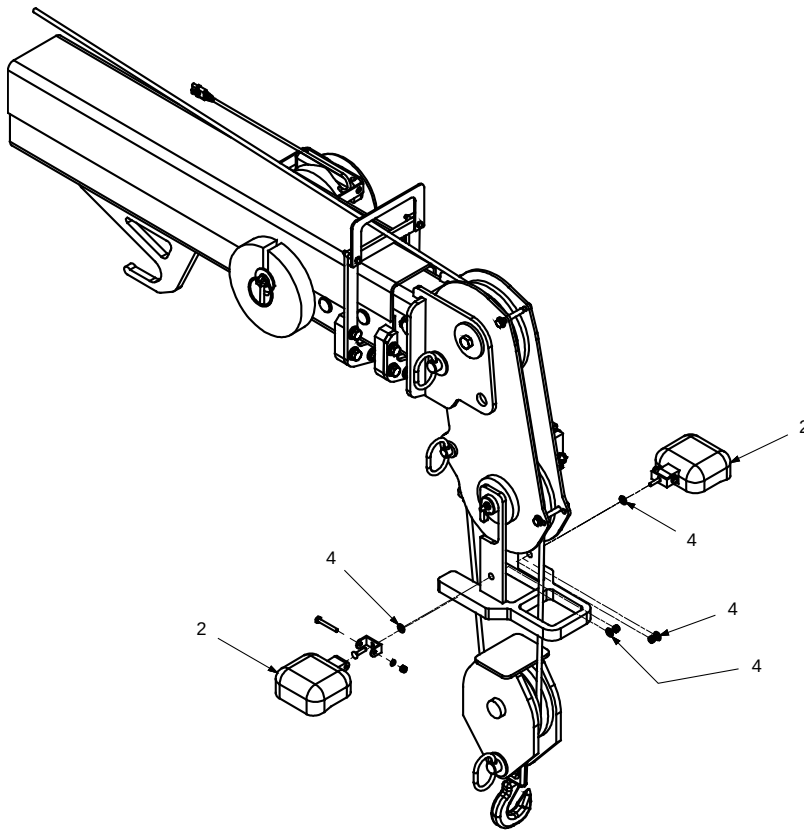


NOTES:

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

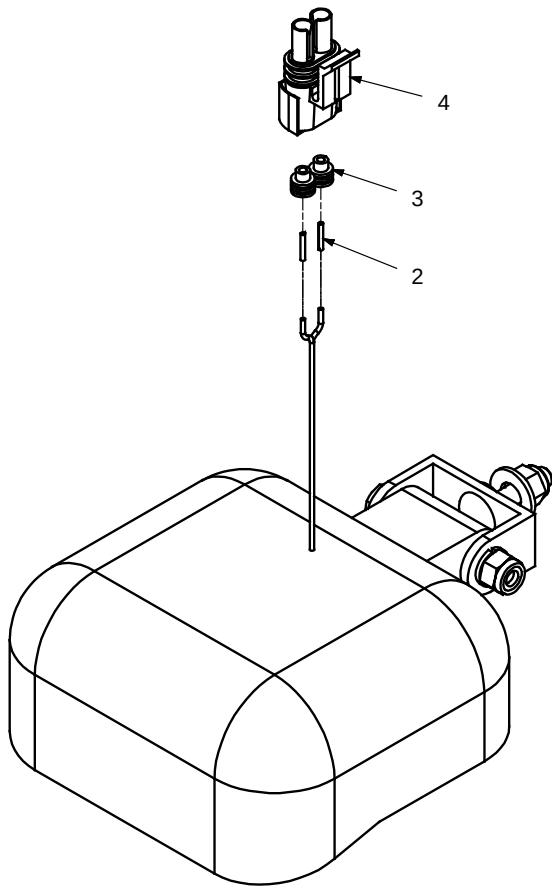
SINGLE INCANDESCENT LIGHT KIT (12V & 24V) (DWG 99905289)

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

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Deficiency / Recommendation / Corrective Action Report.....	116
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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.	
D	7	Wire Rope	Inspect for apparent deficiencies per applicable requirements and manufacturer's specifications.	

FREQUENCY	ITEM	KEY	INSPECTION DESCRIPTION	STATUS (S,R,X,NA)
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.	
M	33	Hardware	All bolts, fasteners and retaining rings for tightness, wear and corrosion.	

FREQUENCY	ITEM	KEY	INSPECTION DESCRIPTION	STATUS (S,R,X,NA)
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)	
	76		• Other	

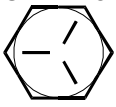
FREQUENCY	ITEM	KEY	INSPECTION DESCRIPTION	STATUS (S,R,X,NA)
Q	77	Pumps & Motors	Pumps and Motors for loose bolts/fasteners, leaks, noise, vibration, loss of performance, heating & excess pressure.	
	78		• Winch motor(s)	
	79		• Rotation motor(s)	
	80		• Other	
Q	81	Valves	Hydraulic valves for cracks, 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.	

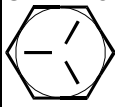
DATE:	OWNER:	UNIT I.D. NUMBER:
GUIDELINES a A deficiency (X) may constitute a hazard. Deficiency must be corrected and/or faulty parts replaced before resuming operation. b Recommendations (R) should be considered for corrective actions. Corrective action for a particular recommendation depends on the 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.
- 3 Consult bolt manufacturer's particular specifications, when provided.
- 4 Use flat washers of equal strength.
- 5 All torque measurements are given in foot-pounds.
- 6 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.

⚠ 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.