



IOWA MOLD TOOLING CO., INC.

P.O. Box 189
Garner, IA 50438
Tel: 641.923.3711
Fax: 641.923.2424
www.imt.com

Manual # 99906193

Series III Telescopic Cranes 12000 Parts & Specifications

Revised 12-28-2021

Copyright © 2021 Iowa Mold Tooling Co., Inc.
All rights reserved

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior written permission of Iowa Mold Tooling Co., Inc.

Iowa Mold Tooling Co., Inc. is an Oshkosh Corporation Company

Table of Contents

Introduction	1
Equipment Safety.....	2
Specifications	5
12000 - 30' Specifications	6
12000 - 30' Dimensional Drawings	7
12000 - 30' Crane Capacity Load Chart.....	8
12000 - 25' Dimensional Drawings	10
12000 - 25' Crane Capacity Load Chart.....	11
Crane References	13
12000 Greasing Instructions	14
12000 Greasing Locations	15
12000 Crane Recommended Spare Parts List	16
12000 Installation Introduction	17
12000 Crane Installation Kit (99906227)	18
12000 Harness, Non IMT Body (77441476)	20
12000 Chassis Wiring Harness (77441476 / 99905212)	21
12000 Telescopic Crane Orientation.....	22
SIII Telescopic Fully Proportional Radio Remote System.....	23
SIII Telescopic Single Proportional Radio Remote System	24
Parts	25
12000 Parts Information.....	26
12000 - 25' Crane Base Assembly (99906198)	28
12000 - 30' Crane Base Assembly (99906198) EFFECTIVE AFTER S/N 12000181027	32
12000 - 30' Crane Rotation Motor Installation (99906199)	38
12000 - 30' Crane Rotation Motor Installation (99906199)	44
12000 - 25' Crane Assembly (99906225).....	52
12000 - 30' Extension Boom Assembly (99906197)	58
12000 - 30' Extension Boom Assembly (99906197)	60
Base Assembly (99906224)	62
Base Assembly (99906224) Effective After S/N: 12000181027	66
Base Assembly (99906224) Effective After S/N: 12000181027	70
12000 - 25' Crane Assembly (99906225)	74
12000 - 25' Crane Extension Boom Assembly (99906223)	82
12000 - 25' Crane Extension Boom Assembly (99906223)	84
12000 - 30' & 25' Crane Gear Rotator (71056704)	86
12000 - 30' & 25' Crane Gear Rotator (71056704) EFFECTIVE AFTER S/N 12000181027.....	87
12000 - 30' & 25' Lower Cylinder (51727172).....	88
12000 - 30' Extension Cylinder Assembly (51722961)	90
12000 - 25' Extension Cylinder Assembly (51722968)	92
12000 - 30' CYL-2.75/1.75 102.00S 139.94CC C (51723927)	94
12000 - 25' CYL-2.75/1.75 75.00S 120.25CC C (51723930)	96
12000 - 30' CYL-2.5/1.75 102.00S 143.62CC C (51723928)	98
12000 - 25' CYL-2.5/1.75 75.00S 123.93CC C (51723929)	100
12000 Winch Oil Specifications	102
12000 Winch Dimensions (70571196).....	103
12000 Winch Parts (70571196-1)	104
12000 Fully Proportional Valve Bank Assembly (99906280)	106
12000 Fully Proportional Valve Bank Assembly (99906280)	108
12000 Single Proportional Valve Bank Assembly (99906279).....	110

! WARNING

Operating, servicing and maintaining this vehicle or equipment can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, service your vehicle or equipment in a well-ventilated area and wear gloves or wash your hands frequently when servicing. For more information go to www.P65Warnings.ca.gov.

70490167

12000 Single Proportional Valve Bank Assembly (99906279).....	112
12000 Valve Bank - Single Proportional (73734472).....	114
12000 Valve Bank - Fully Proportional (73734727)	116
12000 Connection Block Seal Kit for 73734727 (94399213).....	118
12000 Seal Kit for 73734727 (94399214)	120
12000 Plumbing Diagram - Single Proportional (99906216)	122
12000 Plumbing Diagram - Single Proportional (99906216)	126
12000 Plumbing Diagram - Fully Proportional (99906215).....	130
12000 Plumbing Diagram - Fully Proportional (99906215).....	134

Electrical & Lighting 139

12000 Boom Tip Light Kit (99905289)	140
Harness-Boom Tip LED Flood Light (77441473)	142
Harness-Boom Tip LED Flood Light (77441473) - continued	143
12000 Radio Remote Harness (77441481)	144
12000 Radio Remote Harness (77441481-1)	145
12000 Radio Remote Harness (77441537)	146
12000 Radio Remote Harness (77441537-1).....	147

General Information 149

12000 Decal Placement (99906208)	150
Thread Torque Charts - Imperial	152
Thread Torque Charts - Metric	153
Turntable Bearing Thread Tightening Sequence	154

Section - 1

Introduction

Equipment Safety

PERSONNEL REQUIREMENTS

Certain inherent risks are associated with heavy equipment. Personnel working in the area of these vehicles are subject to certain hazards that cannot be guarded against by mechanical means, but only by the exercise of intelligence, care, and common sense. It is therefore essential for the owner of this equipment to have personnel involved in the use and operation of these vehicles who are competent, careful, physically and mentally qualified, and trained in the safe operation of this equipment.

TRAINING

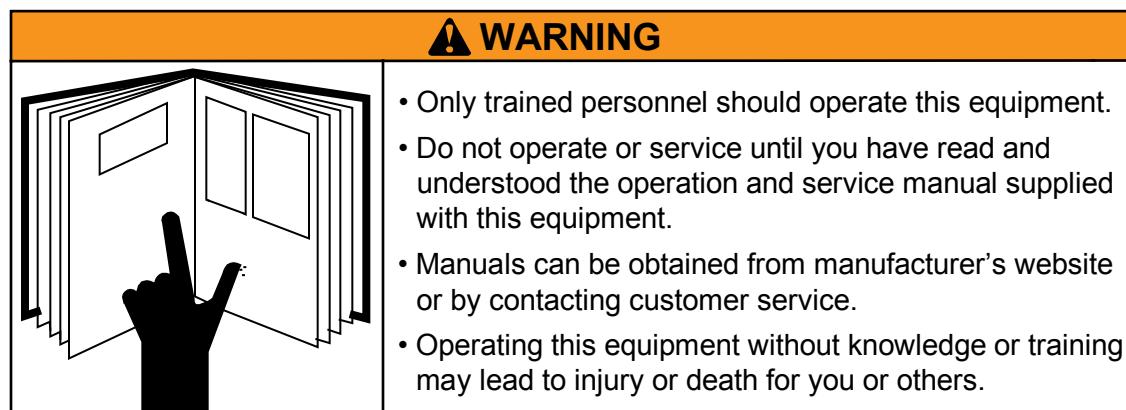
Prior to using any of the equipment installed on or incorporated in the IMT Crane Body Mechanics Truck, you must:

- Have already been fully trained to operate the vehicle and equipment.
- Have demonstrated the effectiveness of your training and the extent of your knowledge.

BEFORE operating this vehicle and any associated equipment, you, the operator or maintainer, must read, understand, and follow the instructions found in the operator and maintenance manuals from the manufacturers of major components used on this vehicle or equipment

Proper tools and service equipment must be used taking appropriate precautions as required by accepted safety practices to prevent personal injury and / or equipment damage

If you are uncertain about the safe operation of any aspect of this vehicle or equipment, stop immediately and seek further training.



www.imt.com/service-manuals

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, NOTE, CAUTION and WARNING are used to draw the attention of personnel. They are defined as follows:

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

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

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

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 regulations can be found here: 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.

Section - 2**Specifications**

12000 - 30' Specifications

GENERAL SPECIFICATIONS		
	30'	25'
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.)		81,000 ft-lb (11.2 tm)
HORIZONTAL REACH - FLIP SHEAVE UP (From centerline of rotation)	30'-10" (9.4 m)	24'-8" (7.5 m)
HORIZONTAL REACH - FLIP SHEAVE DOWN (From centerline of rotation)	29' 11" (9.11 m)	23'-10" (7.3 m)
FULLY RETRACTED LENGTH	11'- 6" (3.5 m)	13'- 0" (4 m)
HYDRAULIC EXTENSIONS (2)	102" & 102" (259 cm & 259 cm)	75" & 75" (191 cm & 191 cm)
LIFTING HEIGHT (From base of crane)	31'-5" (9.57 m)	25'- 5" (7.7 m)
CRANE WEIGHT	2720 lb (1,233 kg)	2610 lb (1,184 kg)
CRANE STORAGE HEIGHT	43.6" (110.7 cm)	
MOUNTING SPACE REQUIRED (Crane base)	24" x 23.75" (61.0 cm x 60.32 cm)	
OPTIMUM PUMP CAPACITY	10 U.S. gpm (37.9 L/min)	
SYSTEM OPERATING PRESSURE	3200 psi (221 bar)	
CENTER OF GRAVITY Horizontal from centerline of rotation. Vertical from bottom of crane base.	43.8" (111.25 cm) 23.2" (58.9 cm)	42.1" (107 cm) 24.0" (61 cm)
TIE-DOWN BOLT PATTERN (8 bolts)	14.75" x 14.75" (37.46 cm x 37.46 cm)	

PERFORMANCE CHARACTERISTICS		
	SPECIFICATIONS	TIME / SPEED
ROTATION	400°	22 s
LOWER BOOM ELEVATION	-10° TO 80°	18 s (Raise) 20 s (Lower)
EXTENSION CYLINDERS (2)	102" & 102"	28 s (Extend) 16 s (Retract)
WINCH SPEED (single line)		50 FPM (2nd wrap) (15.2 m/min.)

12000 MINIMUM CHASSIS SPECIFICATIONS

CHASSIS STYLE	CONVENTIONAL CAB
BODY STYLE	DOMINATOR™ III
FRAME YIELD STRENGTH - MINIMUM	81,000 FT-LB
FRAME SECTION MODULUS- MINIMUM	14.8 CU.IN.
GROSS VEHICLE WEIGHT RATING (SEE NOTE 2) MINIMUM	33,000 lb (14,970 kg) -12000 30' 26000 lb (11,793 kg) - 12000 25'

POWER SOURCE

A PTO-driven hydraulic pump delivering 22 hydraulic horsepower.

CYLINDER HOLDING VALVES

The holding sides of all cylinders are equipped with integral-mounted counterbalance 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°.

HYDRAULIC SYSTEM (PTO DRIVEN)

The hydraulic system is an open-center, fixed displacement system delivering an optimal flow rate of 10-12 gpm (37.9 - 45.4 L/min.) at up to 3200 psi (221 bar). It is equipped with a four-section, stack-type, electro hydraulic valve commanded by a wireless remote control system, and includes a 33' (10.0 m) radio elimination cable.

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 6000 lb (2721 kg) planetary winch is powered using a high-torque hydraulic motor. The lifting capacity of the winch is 6000 lb (2721 kg) one-part line. Maximum two-part line capacity is based on the maximum crane capacity. The winch is equipped with 120 ft (36.57 m) of 7/16" (.98 cm) XXIPS 6x25 wire rope. A compact, anti-two block device is included to prevent the lower block or hook assembly from coming in contact with the boom sheave assembly. The winch meets ANSI B30.5 requirements.

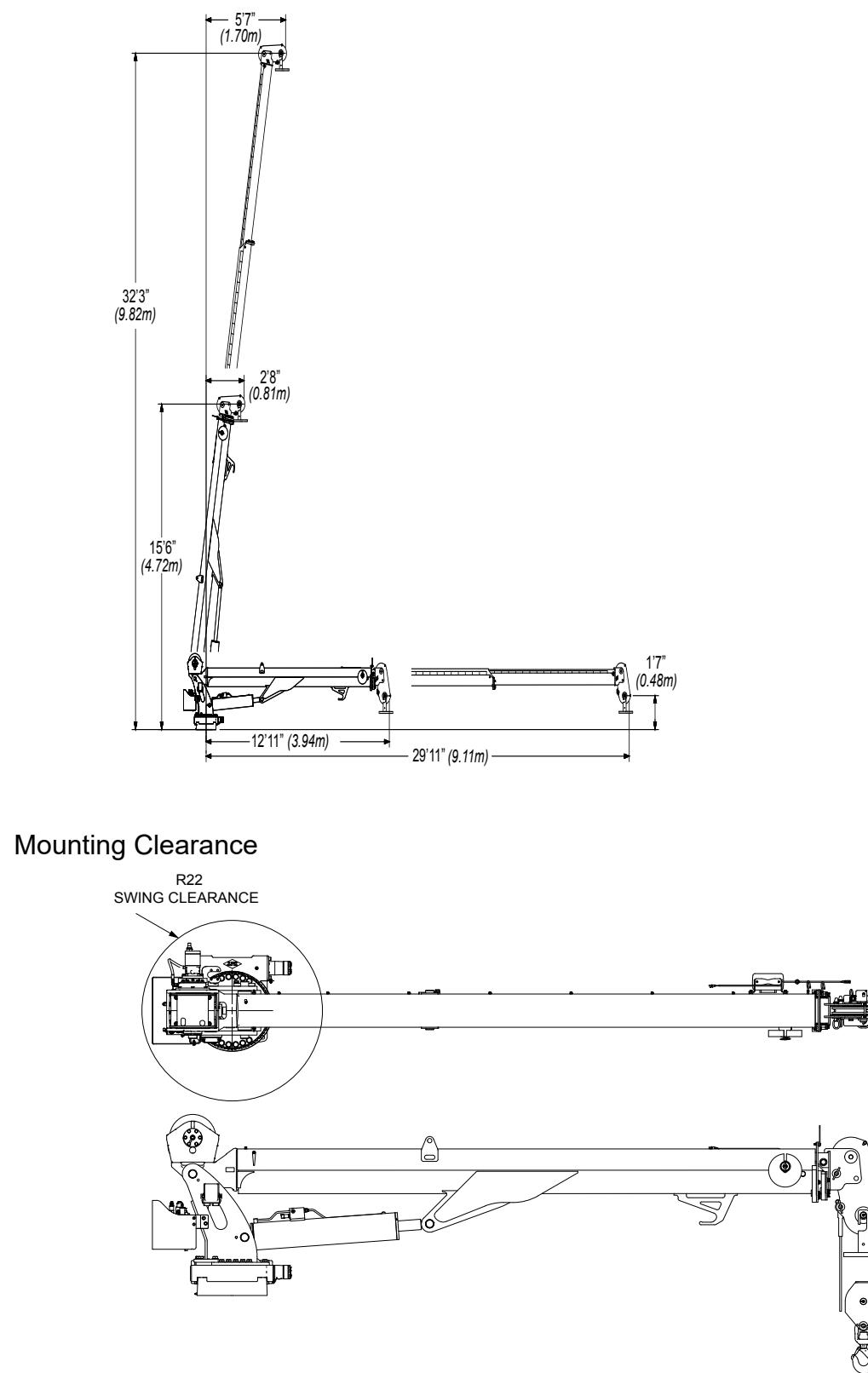
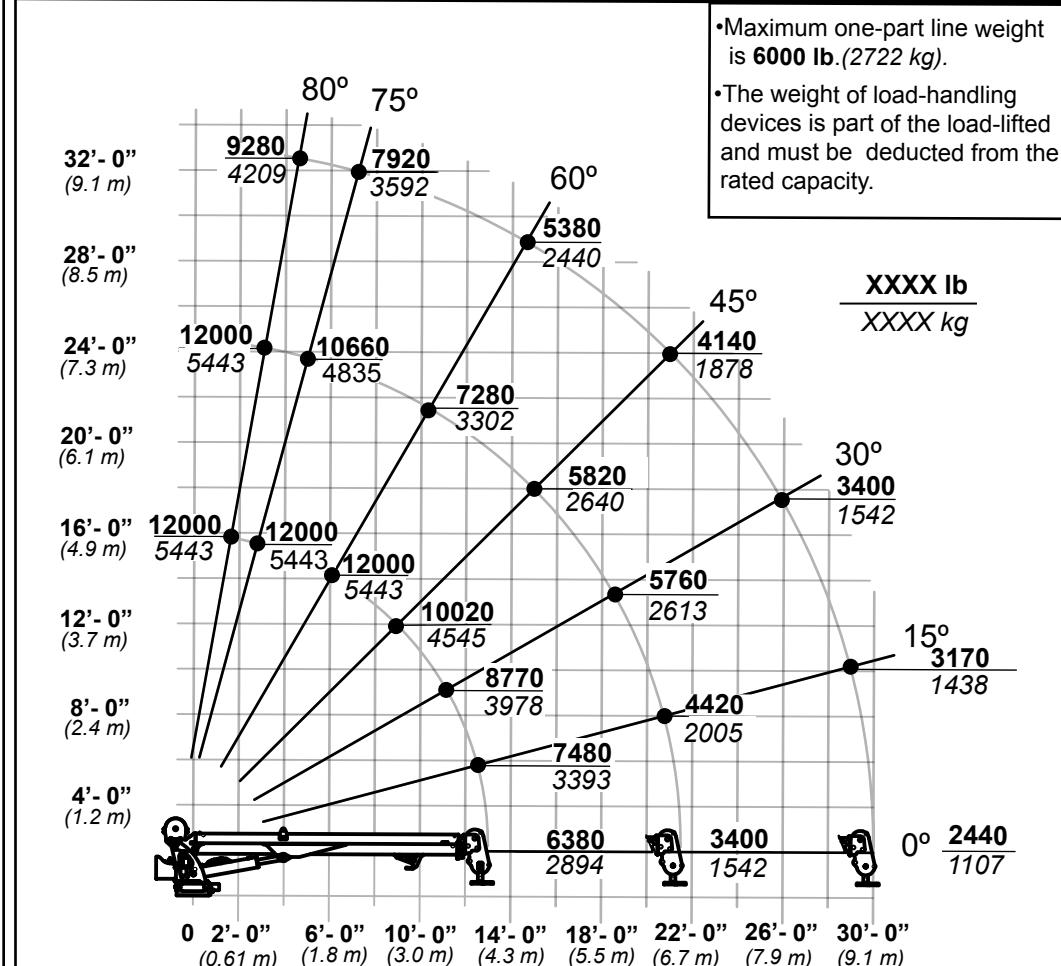
NOTES:

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 PER ANSI B30.5 REQUIREMENTS.

Iowa Mold Tooling Co., Inc. Reserves The Right To Change Specifications And Design Without Notice.

12000 - 30' Dimensional Drawings

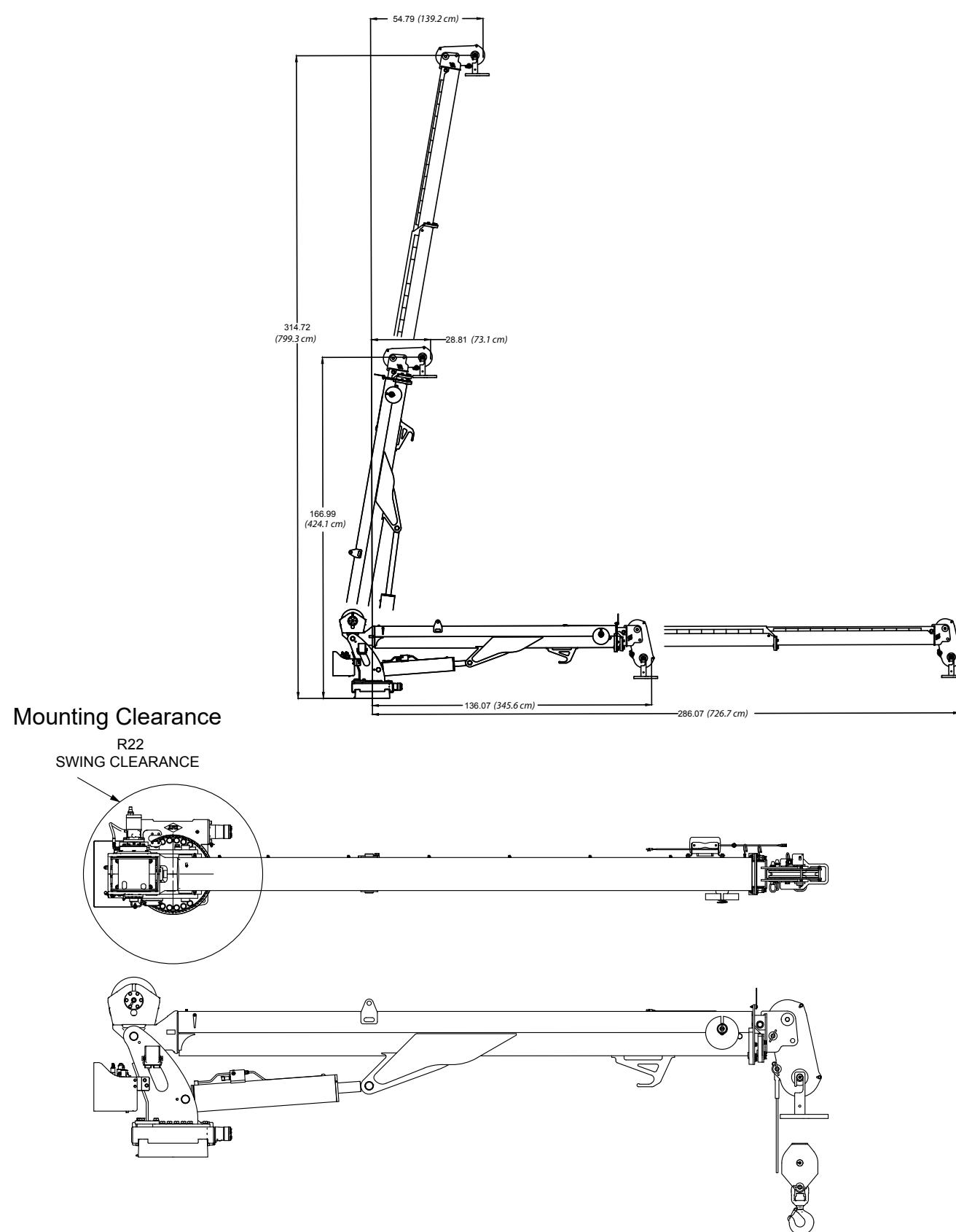
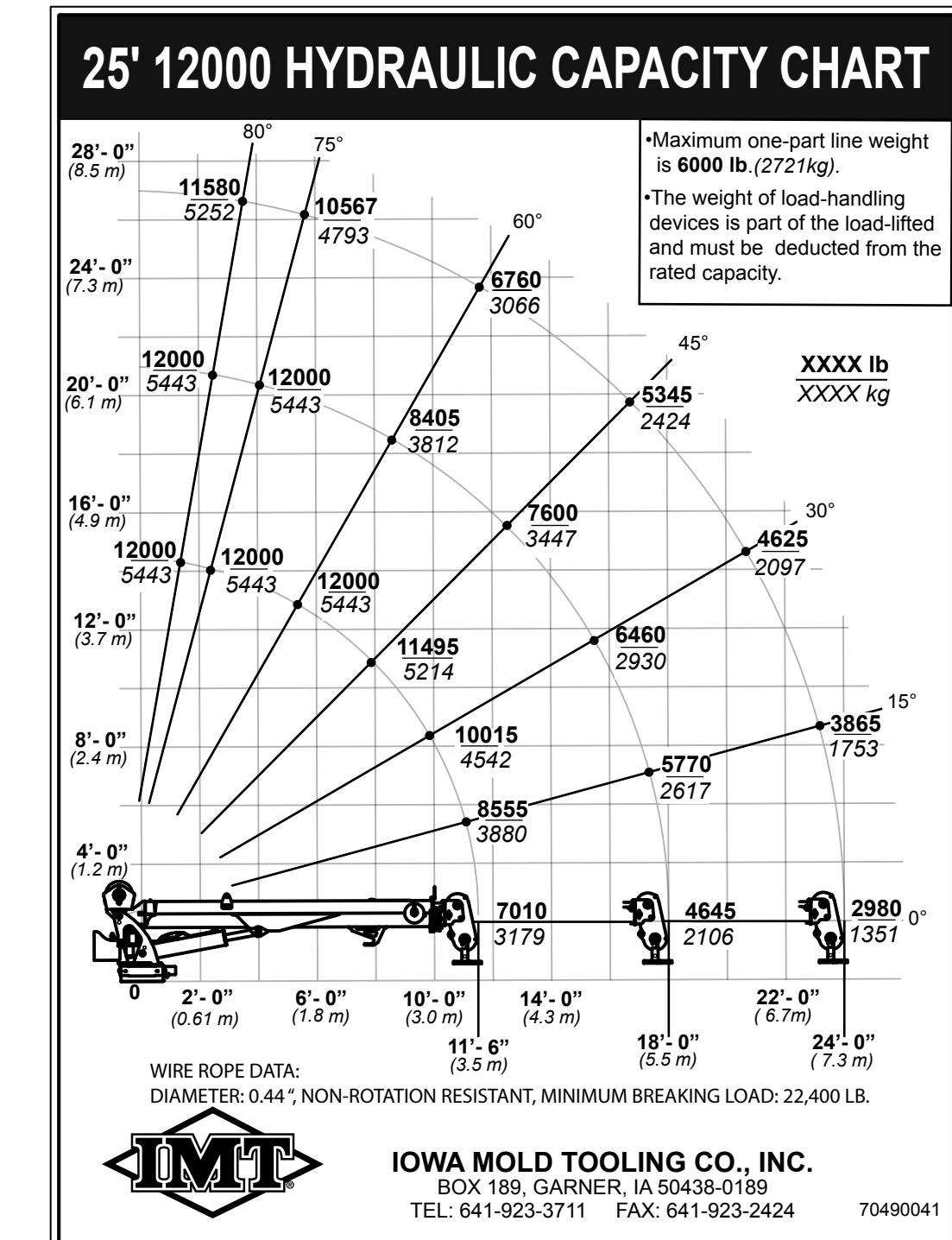
Dimensions -12000-30' crane.

**12000 - 30' Crane Capacity Load Chart****12000-30' HYDRAULIC CAPACITY CHART**

- Maximum one-part line weight is **6000 lb.** (2722 kg).
- The weight of load-handling devices is part of the load-lifted and must be deducted from the rated capacity.

Wire Rope Data:
Diameter: 0.44 In, Non-Rotation Resistant, Minimum Breaking Load: 22,400 lb.

**IOWA MOLD TOOLING CO., INC.**BOX 189, GARNER, IA 50438-0189
TEL: 641-923-3711 FAX: 641-923-2424 70490023

12000 - 25' Dimensional Drawings**12000 - 25' Crane Capacity Load Chart**

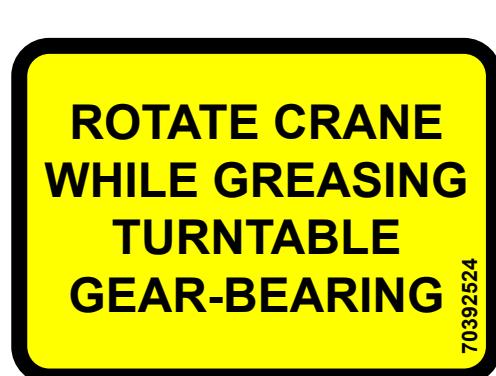
Section - 3**Crane References**

This page left intentionally blank

12000 - 30' & 25' 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.

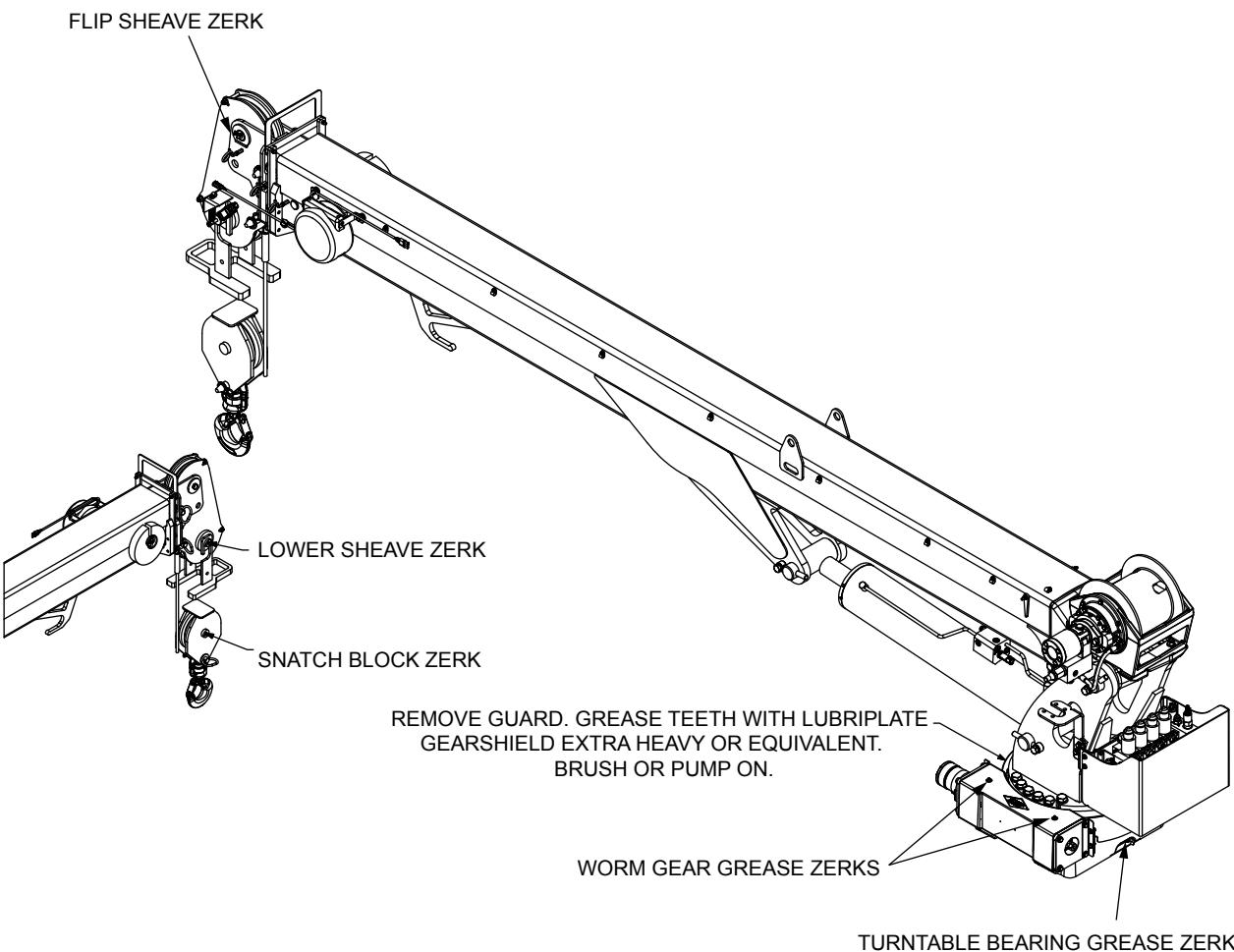


Crane worm gear bearing teeth must be lubricated weekly with lubriplate gear shield extra-heavy or equivalent, applied with a grease gun, caulk gun or brush. Cover all teeth with grease and leave no exposed metal surfaces showing.

**Weekly, remove cover and lubricate with
IMT recommended
open-gear compound while rotating crane.
IMT part number: 89086247**

70392399

12000 - 30' & 25' Greasing Locations



LOCATION	LUBRICANT	APPLICATION METHOD	FREQUENCY
Base - Turntable Bearing Grease Zerks	Extreme Pressure Lithium grease such as: Shell Alvania 2EP, Shell Retinax A, Mobilgrease XHP 462, Cenex ML 365®, Xtreme True-Flo EP2 Lithium grease or equivalent	Apply with hand or pneumatic pressure grease gun	Weekly
Snatch Block Pin			
Lower Sheave			
Worm Bearings Grease Zerks (*Rotate crane while greasing)			
Upper Sheave			
Gear Teeth	GearMate® Super Heavy or equivalent	Brush	Weekly
Worm Gear	GearMate® Super Heavy or equivalent	Apply with hand or pneumatic pressure grease gun	

12000 Crane Recommended Spare Parts List

BASE & MAST		
PART NO.	DESCRIPTION	QTY
73511391	HYDRAULIC MOTOR	1
72601949	CAP SCREW 0.50-13 X 1.25 SHZC	4
72601031	CAP SCREW .75-10 X 4.00 HEX HEAD GR8 Z	4
72601629	CAP SCREW .75-10 X 4.00 HEX HEAD GR8 Z	7
72601817	CAP SCREW .75-10 X 3.25 HEX HEAD GR8 Z	12
WEAR PADS		
60030336	WEAR PAD-RC	1
60030421	WEAR PAD-ROUND	1
60030422	WEAR PAD-ROUND	1
60030423	WEAR PAD-RC	4
60030442	WEAR PAD-RND 0.25X .100X .50X .38	2
60030427	WEAR PAD-RND 0.19X 2.00X 1.25X .44	2
60030425	CAP- ANTI-TWO BLOCK PIN	2
60030428	WEAR PAD-ROUND	2
60030438	WEAR PAD-ROUND	2
60030486	SPACER - A2B BRACKET	2
ANTI-TWO-BLOCK ASSEMBLY		
77041863	LIMIT SWITCH	1
51727982	KIT-A2B LIMIT SWITCH NO TOP PIN DEUTSCH	
RIGGING COMPONENTS		
70735082	HOOK-SWIVEL 7T BBRG	1
60030255	SHEAVE- 9.00 POLYMER	1
71414205	DOWN HAUL WEIGHT-(20#) .50 WIRE ROPE	1
RIGGING COMPONENTS 12000 30 FT		
70580235	WIRE ROPE ASM-GALV.44X120FT XXIPS	1
70190007	PIN-TYPE AB 2.00 X 11.88 SS	2
70190008	PIN-TYPE AB 2.00 X 11.88 SS	1
70034582	BEARING MRP 2.00X2.25X2.00 POLYGON	4
RIGGING COMPONENTS 12000 25 FT		
70580233	WIRE ROPE ASM-GALV.44 X 100FT XXIPS	1
70190008	PIN-TYPE AB 2.00 X 7.63 SS	1
70190007	PIN-TYPE AB 2.00 X 11.88 SS	2
70034581	BEARING MRP 2.00X2.25X1.00 POLYGON	4

LOWER CYLINDER (51727889)		
74490054	SEAL KIT	1
51723927 CYLINDER (PART OF 51727883 EXT. CYLINDER ASSEMBLY) 12000 30'		
94399162	SEAL KIT	1
51223930 CYLINDER (PART OF 51727882 EXT. CYLINDER ASSEMBLY) 12000 25'		
94399162	SEAL KIT	1
51223929 CYLINDER (PART OF 51727882 EXT. CYLINDER ASSEMBLY) 12000 25'		
94399161	SEAL KIT	1
51723928 CYLINDER (PART OF 51727883 EXT. CYLINDER ASSEMBLY) 12000 30'		
94399161	SEAL KIT	1
WINCH (70571196)		
94744147	SEAL KIT	1
71411143	BALL BEARING	1
71734007	VALVE-CBAL BRADEN - CART FOR 70570771	2
VALVE BANK (73734727)		
73052158	ELEMENT-FILTER 10 MIC HP FOR 73052156	1
94399213	SEAL KIT, CONNECTION BLOCK	1
94399214	SEAL KIT, VALVE SECTIONS	1
77041898	SOLENOID, 12V	1
VALVE BANK (73734472)		
90744198	KIT - COIL REPAIR FOR 73540375 12V	1
77041930	SOLENOID TUBE USED ON 73540375	1

12000 - 30' & 25' Installation Introduction

GENERAL

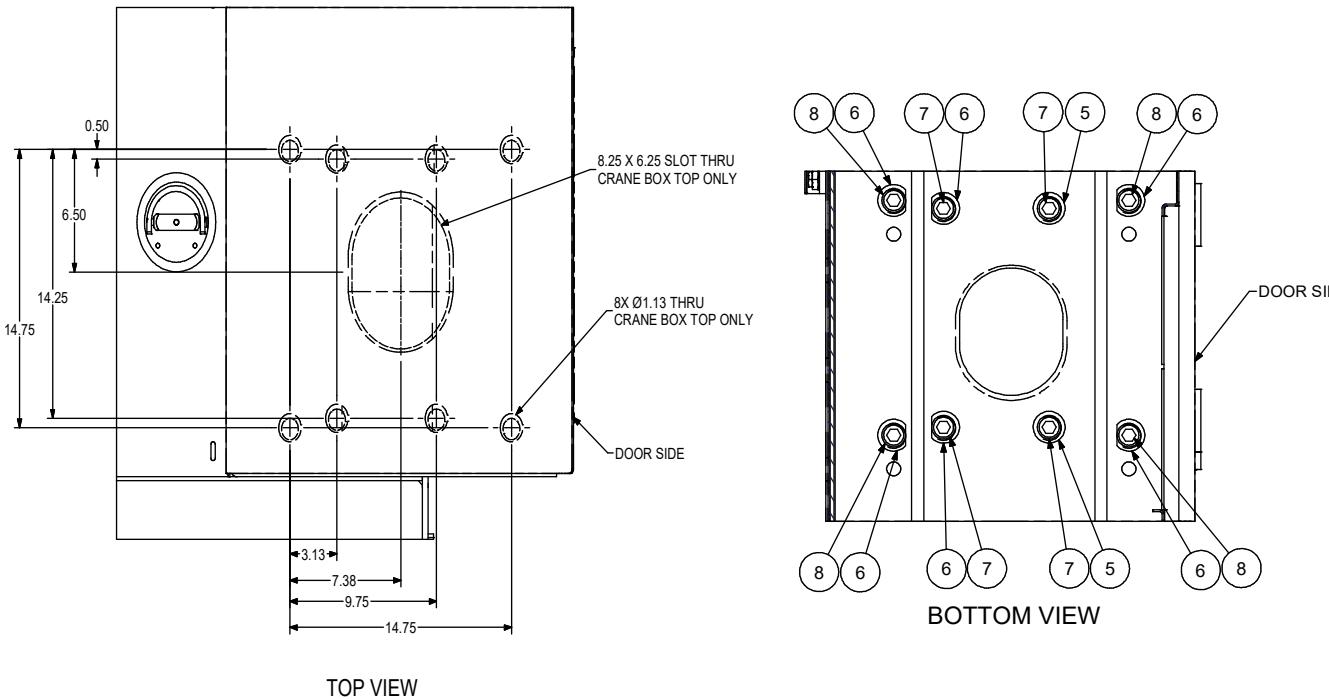
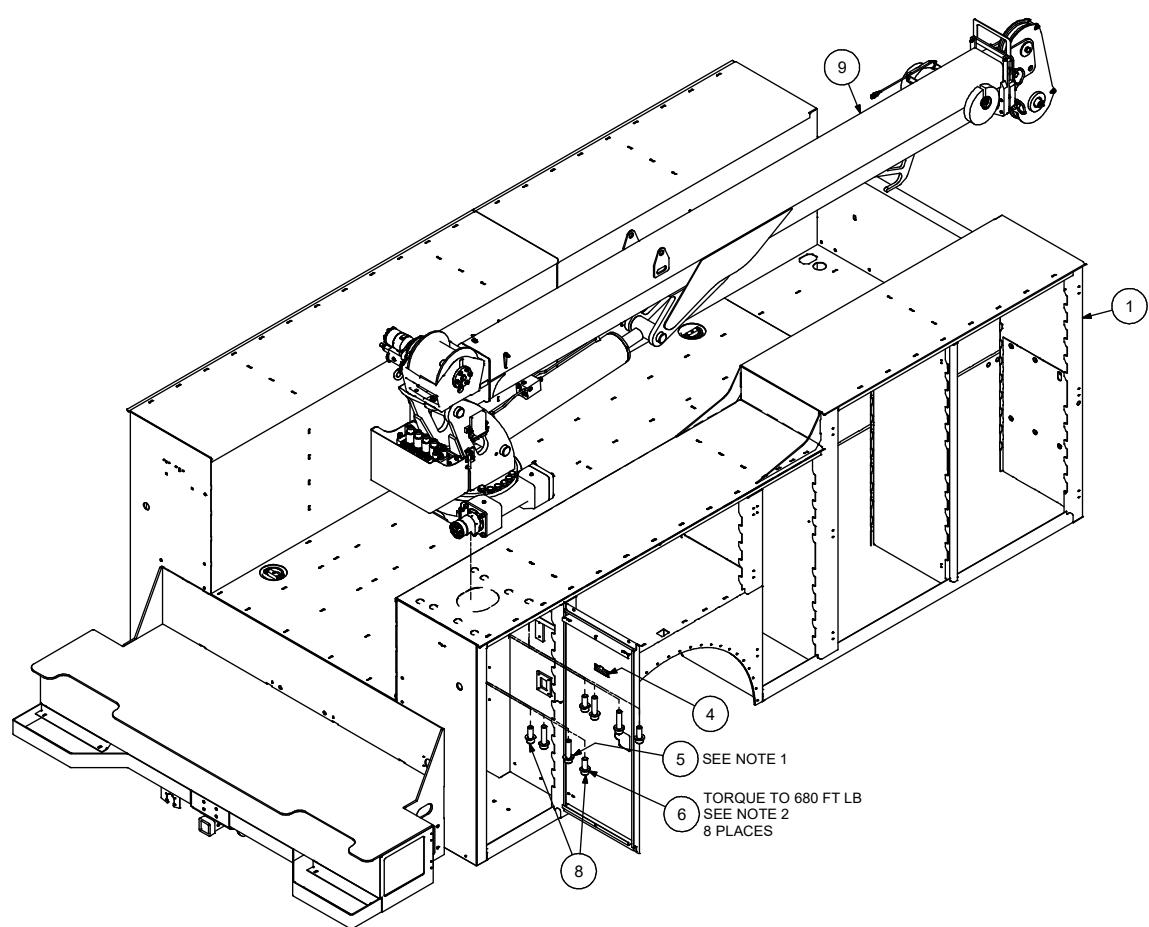
This section contains instructions for the installation of your crane. Prior to installing the crane and hydraulic components, make sure that the chassis is ready to receive the crane (see the Installation Section of the IMT *Telescopic Crane Operation & Safety Manual*, 99905190).

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 mount 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 on the chassis.

12000 - 30' & 25' Crane Installation Kit (99906227)**99906227 PARTS LIST**

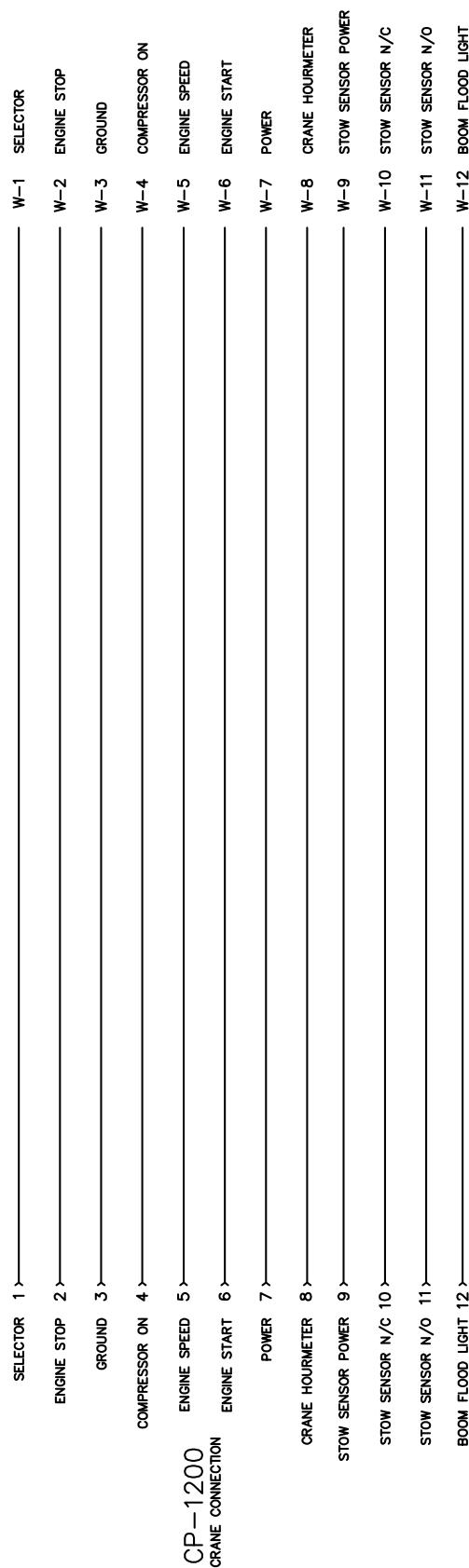
ITEM NO.	PART NO.	DESCRIPTION	QTY.	KIT.
1	BODY	DOM 3	REF	
2	DOOR	DOOR-WLDMT	REF	
3	93727679	INSTL-KIT DS3 -DOM III 12000	1	
4	72042097	LEVEL INDICATOR LEVEL	1	3
5	72063066	WASHER 1.00 FLAT HI STR	2	3
6	72063286	WASHER-FLAT 1.00 H ASTM F436 Z-CUT	6	3
7	72601816	CAP SCR 1.00-8X 3.00 SH PLAIN	4	3
8	72602151	CAP SCR 1.00-8X 2.50 SH GR8	4	3
9	CRANE	CRANE ASM 12000	REF	

REV. B CN880

NOTES:

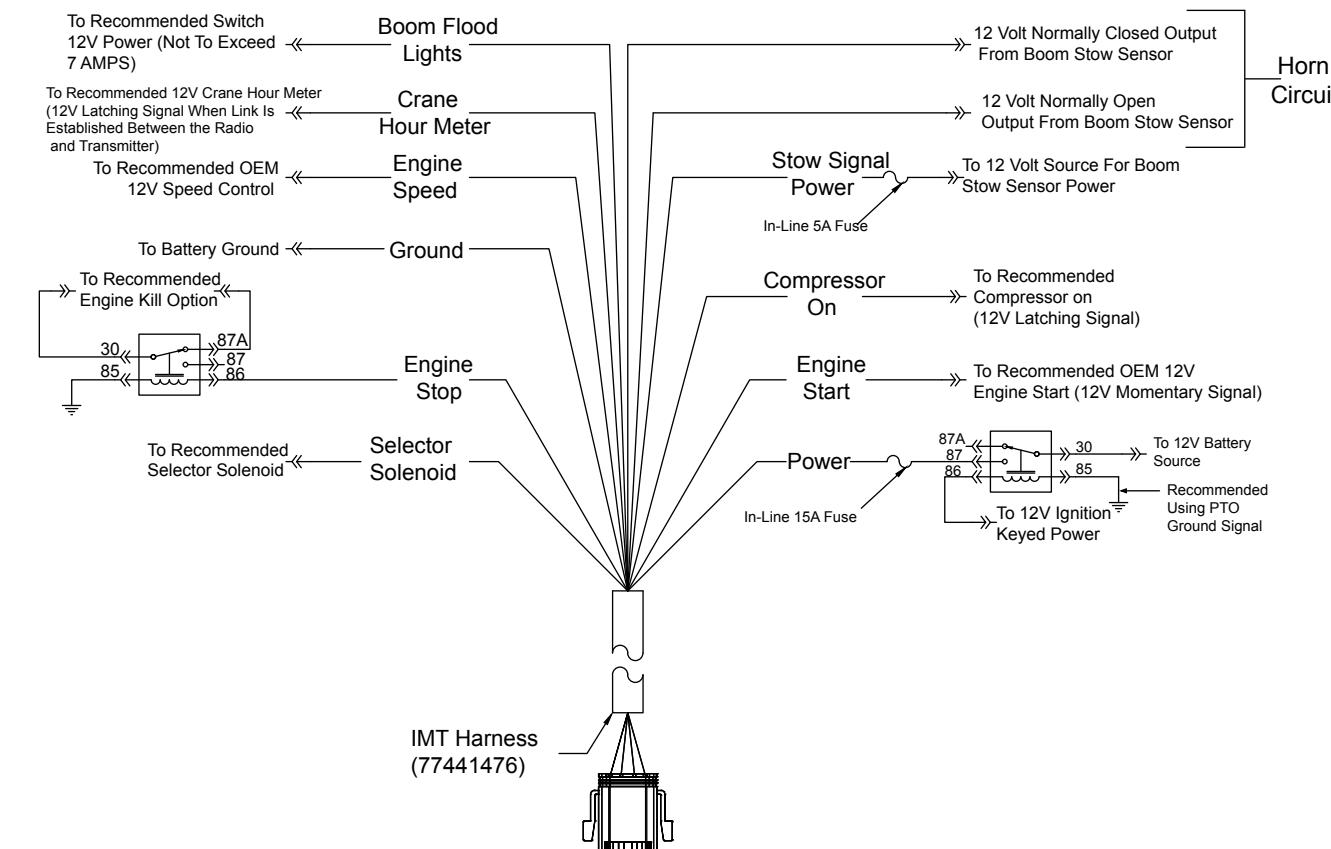
1. LEVEL INDICATOR TO BE INSTALLED PARALLEL TO DOOR REINFORCEMENTS.
2. THE 3.00" BOLTS SUPPLIED ARE FOR USE ON BODIES WITH A CRANE BOX TOP PLATE THICKNESS OF 7/8" TO 1.00" ONLY. DETERMINE THE CRANE BOX TOP PLATE THICKNESS PRIOR TO MOUNTING. IF DIFFERENT LENGTH BOLTS ARE REQUIRED, THEY MUST BE 1-8, GRADE 8, ZINC COATED, OF PROPER LENGTH. FAILURE TO USE PROPER LENGTH BOLTS MAY CAUSE THE BOLTS UNDER THE CRANE ROTATION BEARING TO BOTTOM OUT DURING TIGHTENING. ENSURE A MINIMUM OF 1-1/2" THREAD ENGAGEMENT.

12000 - 30' & 25' Harness, Non IMT Body (77441476)

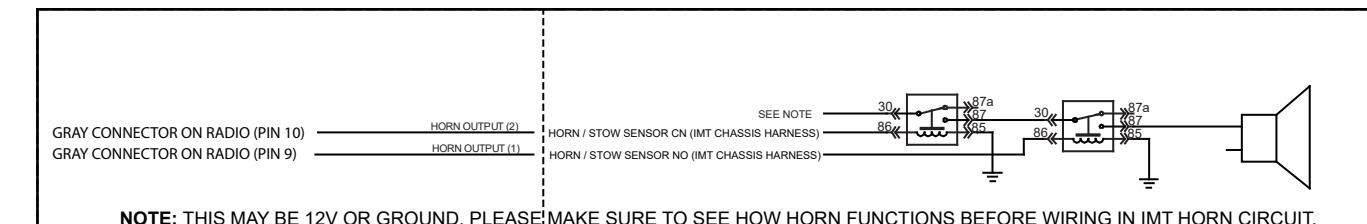


12000 - 30' & 25' Chassis Wiring Harness (77441476 / 99905212)

Additional installation components, non-IMT body (93713748)



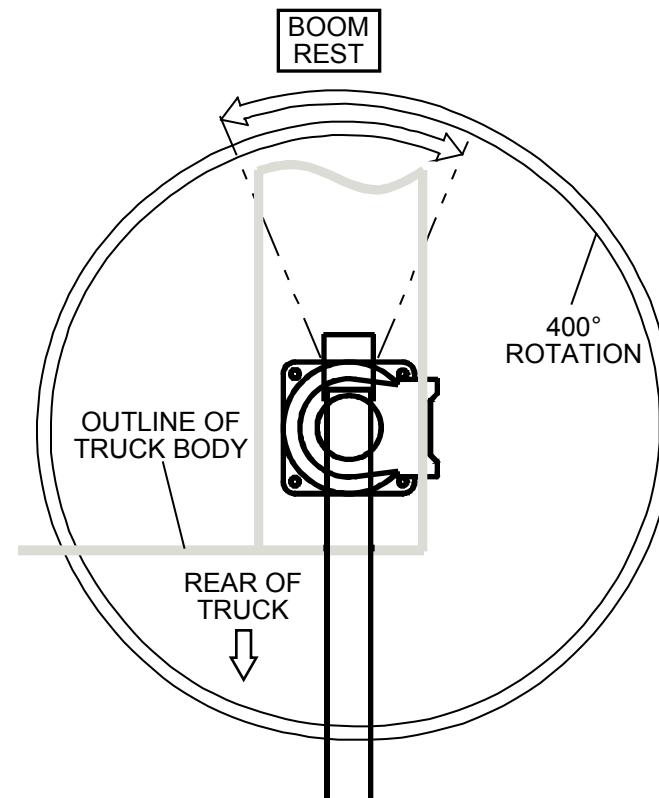
HORN CIRCUIT



NOTE: THIS MAY BE 12V OR GROUND. PLEASE MAKE SURE TO SEE HOW HORN FUNCTIONS BEFORE WIRING IN IMT HORN CIRCUIT.

12000 - 30' & 25' 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° to the boom rest.



SIII Telescopic Fully Proportional Radio Remote System

IMT telescopic cranes are controlled by radio remote controls. See the *TSIII Telescopic Fully Propotional Crane Radio Remote System* manual, IMT part number 99906209, for complete details.



REMOTE



RECEIVER

QTY.	PART NO.	DESCRIPTION
1.	70734957	TRANSM-RAD REM TELE S3 FP NON-G FHSS 240
1.	70734958	TRANSM-RAD REM TELE S3 FP GATED FHSS 241
1.	70734960	RECEIVER-RAD REM TELE S3 FP FHSS 2400

SIII Telescopic Single Proportional Radio Remote System

IMT telescopic cranes are controlled by radio remote controls. See the *Series III Telescopic Single Proportional Radio Remote System*, IMT part number 99906210, for complete details.



REMOTE



RECEIVER

Section - 4

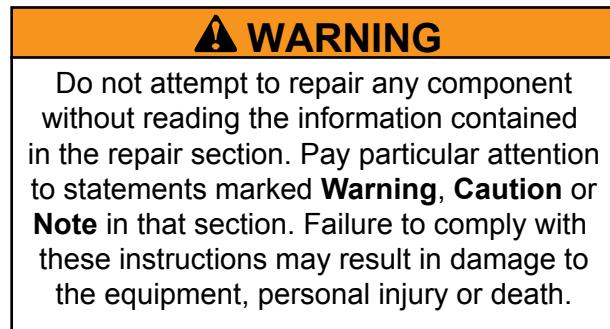
Parts

QTY.	PART NO.	DESCRIPTION
1.	70735093	TRANSM-RAD S3 SP EM 5LED FHSS 2400
1.	70735094	RECEIVER-RAD S3 SP 5LED FHSS 2400

12000 - 30' & 25' Parts Information

GENERAL

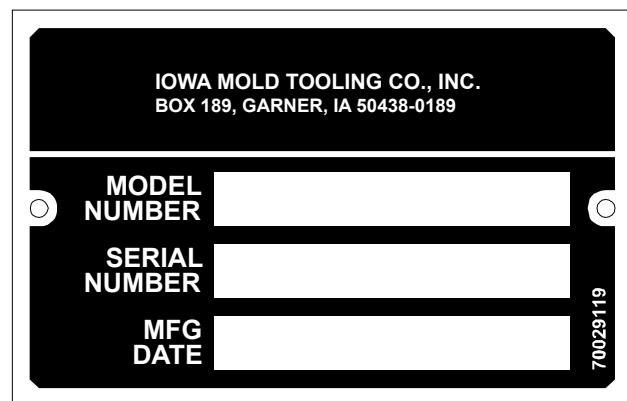
This section contains the exploded parts drawings and accompanying parts lists for the assemblies used on this crane. For optional equipment such as winches and remote controls, refer to the appropriate options manual.



CRANE IDENTIFICATION

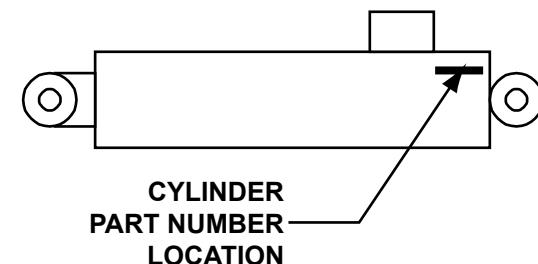
Every IMT crane has an identification placard (see figure below). This placard is attached to the inner boom, mast, or crane base. When ordering parts, communicating warranty information, or referring to the unit in correspondence, always include the serial number and model numbers. Address all inquiries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

Iowa Mold Tooling Co., Inc.
Box 189, Garner, IA 50438-0189
Telephone: 800-554-4421



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.



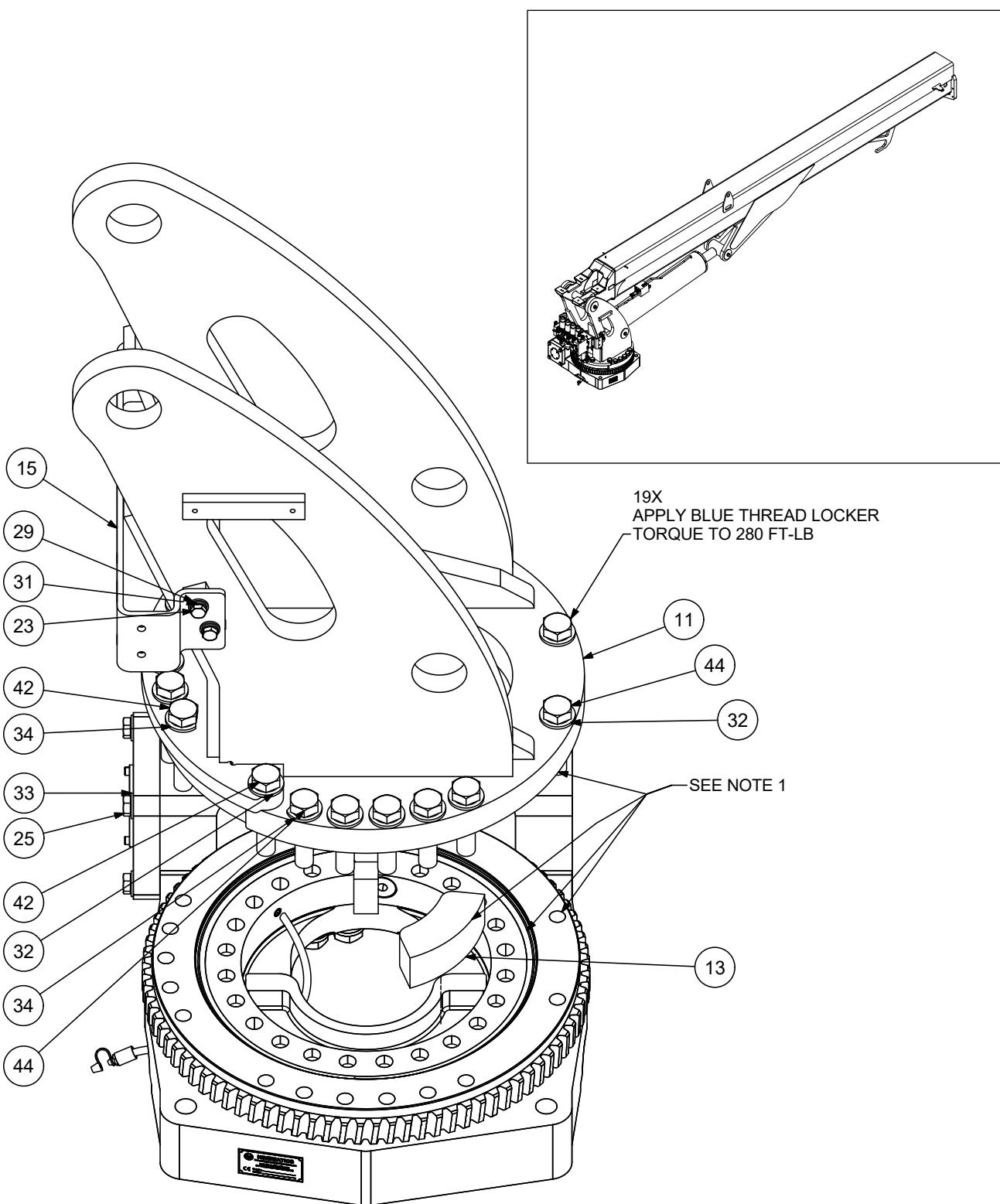
WELDMENT IDENTIFICATION

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.

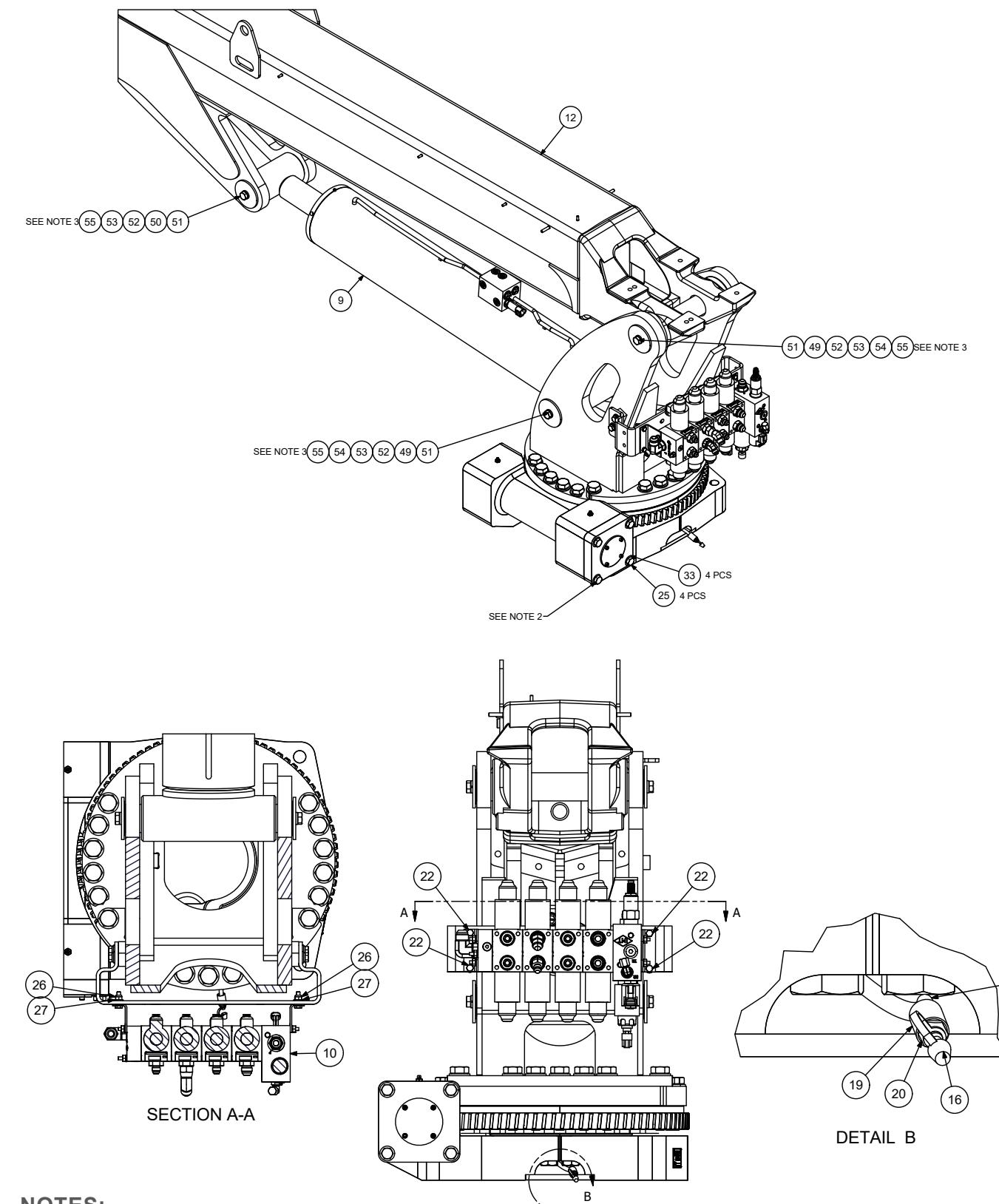
ORDERING REPAIR PARTS

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.

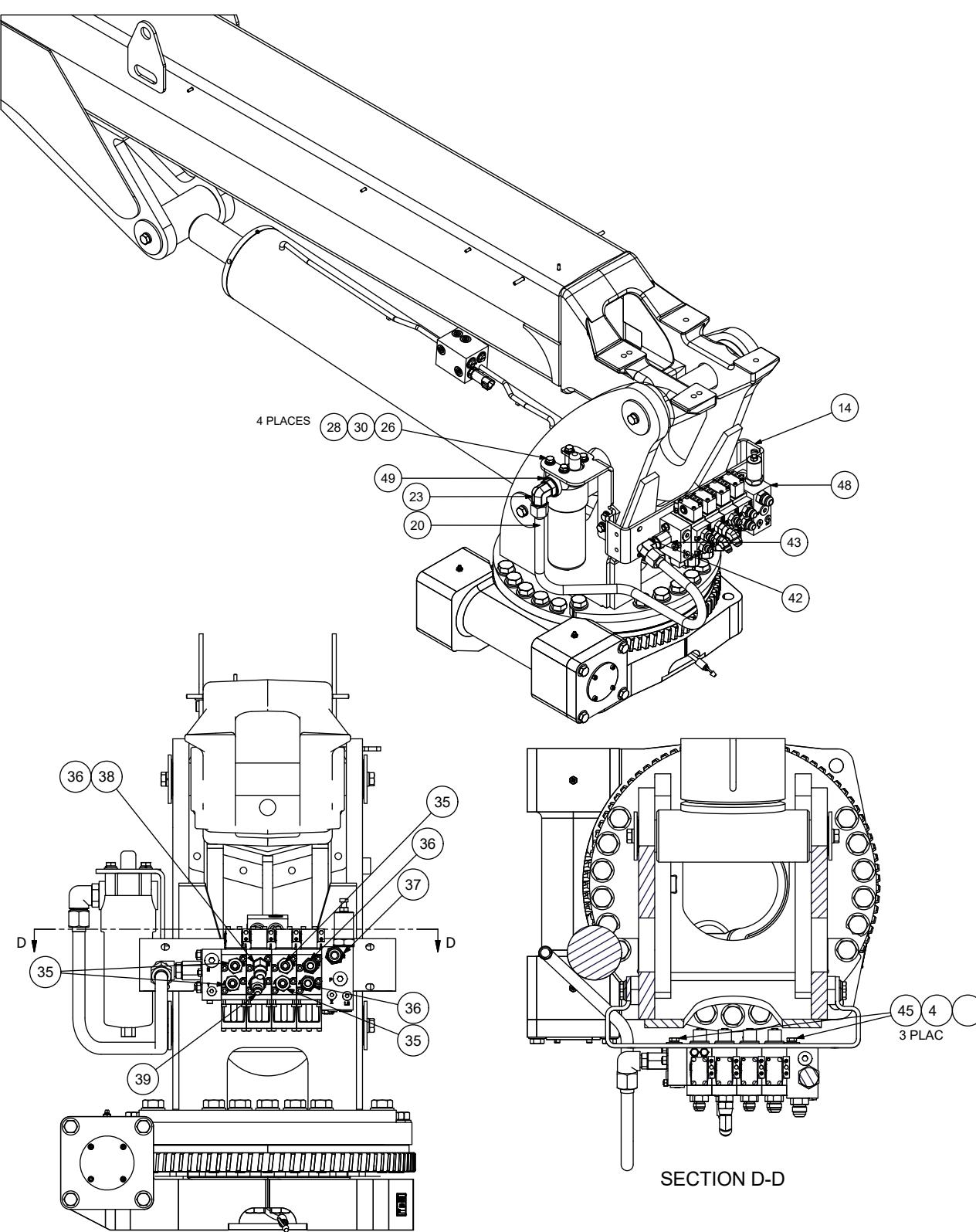
12000 - 30 Crane Base Assembly (99906198)**NOTES:**

1. USE RUST PREVENTATIVE ON SLIDE STOP, BEARING RACE, BOTTOM OF MAST, AND TOP OF GEAR BEARING.
2. APPLY BLUE THREAD LOCKER.
3. APPLY GEAR GREASE TO GEAR TEETH.
4. BASE AND MAST ASSEMBLY SHOWN AS ASSEMBLED.

99906198 - CRANE BASE ASSEMBLY, CONTINUED**NOTES:**

1. IF REQUIRED USE 72063038 OR 72063039 MACHY BUSHINGS BETWEEN MAST AND LOWER BOOM.
2. REPLACE SUPPLIER HARDWARE WITH 72060118 AND 72063132.
3. TORQUE TO 60 LB-FT.

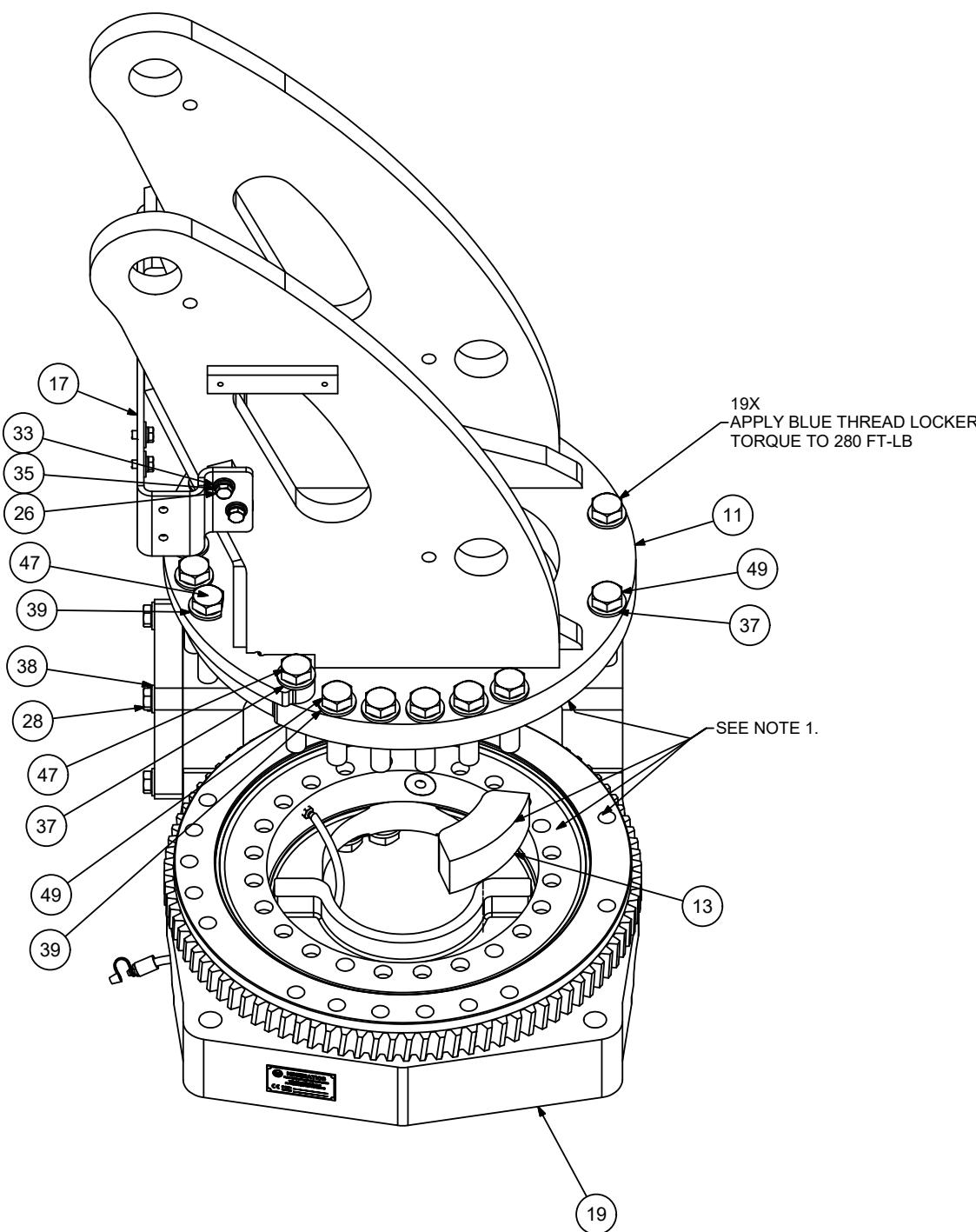
99906198 - CRANE BASE ASSEMBLY, CONTINUED



99906198 PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	QTY	KIT
1.	91723543	KIT-HRDW VB MNT HAWE	A/R	
2.	91725205	KIT-HRDW SERIES III	1	
3.	91725679	KIT-PRESSURE FILTER S3FP 12K 14K MAST	A/R	
4.	91727211	KIT-HRDW BASE & MAST 12000	1	
5.	91727214	KIT-HYD 12000 SERIES III SP BG6	A/R	
6.	91727230	KIT-HYD 12000 SERIES III FP BG6	A/R	
7.	93727759	KIT-HRDW 12000 KIN GEAR GUARD	1	
8.	51395121	HOSE-AA .13 X 13.50 OAL (2-2)	1	5 & 6
9.	51727889	CYL-5.75/2.50 27.86S 42.05CC	1	
10.	51727215	VALVE BANK ASM- SP 12000	A/R	
11.	52727810	MAST WLDMNT-12000	1	
12.	52727872	WLDMNT-LOWER BOOM 12000	1	
13.	60120138	SLIDE-ROTATION STOP 3816	1	
14.	60251821	BRKT-MAST VB 12000 FP	A/R	
15.	60251822	BRKT-MAST VB 12000	A/R	
16.	70034382	CAP-GREASE PRO20 GC-RED	1	2
17.	71056704	GEAR ROTATOR-10900 FTLB 0.75 BOLTS KIN	1	
18.	71415692	TUBE ASM-PRESSURE FILTER S3FP 12K 14K MA	1	3
19.	72053301	COUPLING-GLV .12 SCH 40	1	2
20.	72053508	ZERK-NPT .12	1	2
21.	72053767	ELBOW-M STR/90/M JIC 12 12	1	3
22.	72060004	CAP SCR .25-20X 1.00 HH GR5 Z	4	2
23.	72060044	CAP SCR .38-16X .75 HH GR5 Z	4	2
24.	72060044	CAP SCR .38-16X .75 HH GR5 Z	4	3
25.	72060118	CAP SCR .50-13X 2.00 HH GR8 Z	4	7
26.	72062104	NUT .25-20 HEX NYLOCK	4	2
27.	72063001	WASHER .25 FLAT	4	2
28.	72063003	WASHER-FLAT .38 W ANSI B27.2 Z	4	3
29.	72063003	WASHER .38 FLAT	4	2
30.	72063051	WASHER-LOCK .38 ZINC	4	3
31.	72063051	WASHER .38 LOCK	4	2
32.	72063116	WASHER .75 N FLAT H ASTM F436Z	15	4
33.	72063132	WASHER .50 FLAT ASTM F436	4	7
34.	72063285	WASHER-FLAT .75 H ASTM F436 Z-CUT	4	4
35.	72532356	ADPTR-M STR/M JIC 8 6	4	6
36.	72532358	ADPTR-M STR/M JIC 8 8	3	6
37.	72532361	ADPTR-M STR/M JIC 8 10	1	6
38.	72532670	ELBOW-M JIC/45/F JIC 8 8	1	6
39.	72533583	ELBOW-M STR/45/M JIC 8 6	1	6
40.	72533623	ELBOW-M STR/90/M JIC 8 12	1	3
41.	72534898	O-RING EXTENDER 08-08 1.75	1	3
42.	72601629	CAP SCR .75-10X 4.00 HH GR8 Z	7	4
43.	72601797	WASHER-LOCK 8MM	3	1
44.	72601817	CAP SCR .75-10X 3.25 HH GR8 Z	12	4
45.	72602052	CAP SCR M 8-1.25X 16 HHZ	3	1
46.	72602065	WASHER-FLAT M 8	3	1
47.	73052156	FILTER-PRES 4000PSI 25GPM 10MIC -12	1	3
48.	73734727	VALVE BANK-4-SECT PSL2 W OC INLT	A/R	
49.	70190007	PIN-TYPE AB 2.00 X 11.88 SS	2	
50.	70190008	PIN-TYPE AB 2.00 X 7.63 SS	1	
51.	72602168	CAP SCR .50-13X .88 HH SS	6	
52.	72063144	WASHER-SS .50 LOCK TYPE 304	6	
53.	70190004	RETAINER PLT-PIN 0.50 X 3.00 DIA SS	6	
54.	70034581	BEARING MRP 2.00X2.25X1.00 POLYGON	4	
55.	60030590	WEAR PAD-RND 0.56X 2.44X .03	6	

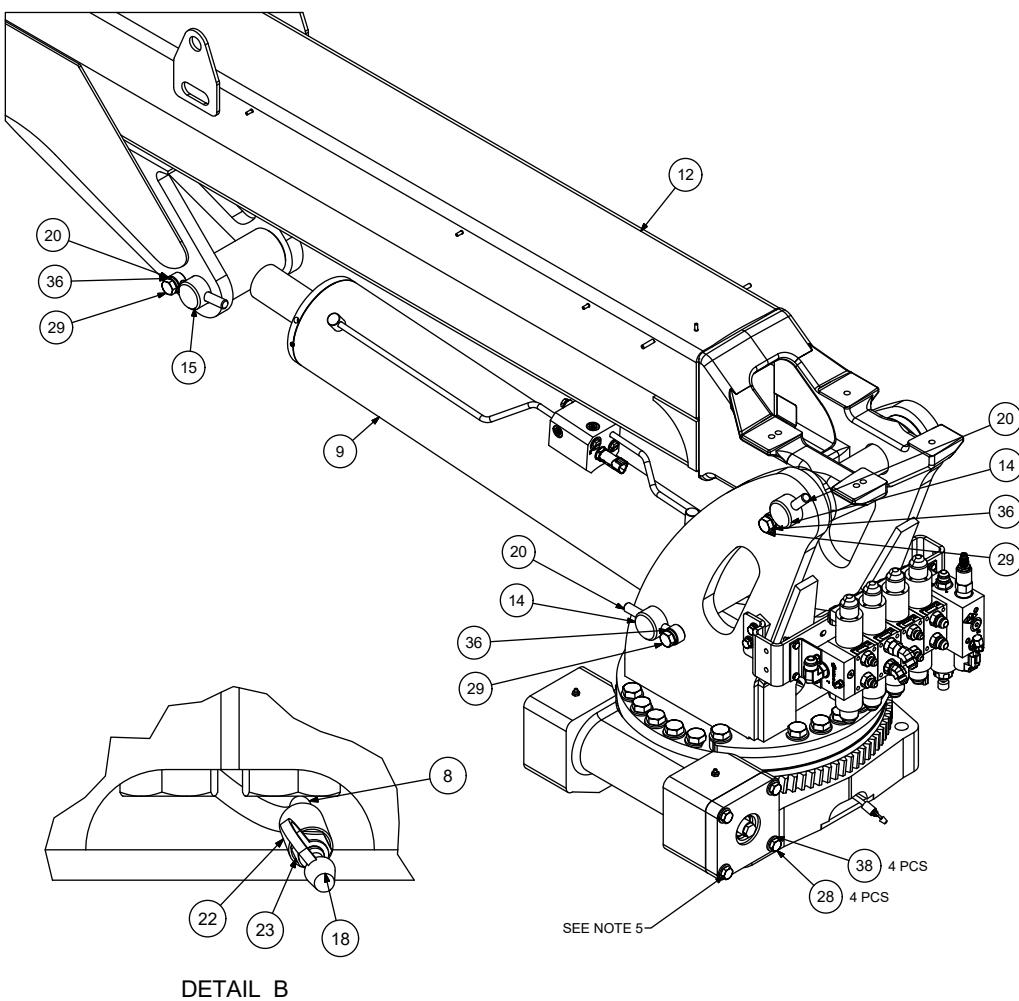
REV. E CN1009-3

12000 - 30' Crane Base Assembly (99906198) EFFECTIVE AFTER S/N 12000181027**99906198 PARTS LIST**

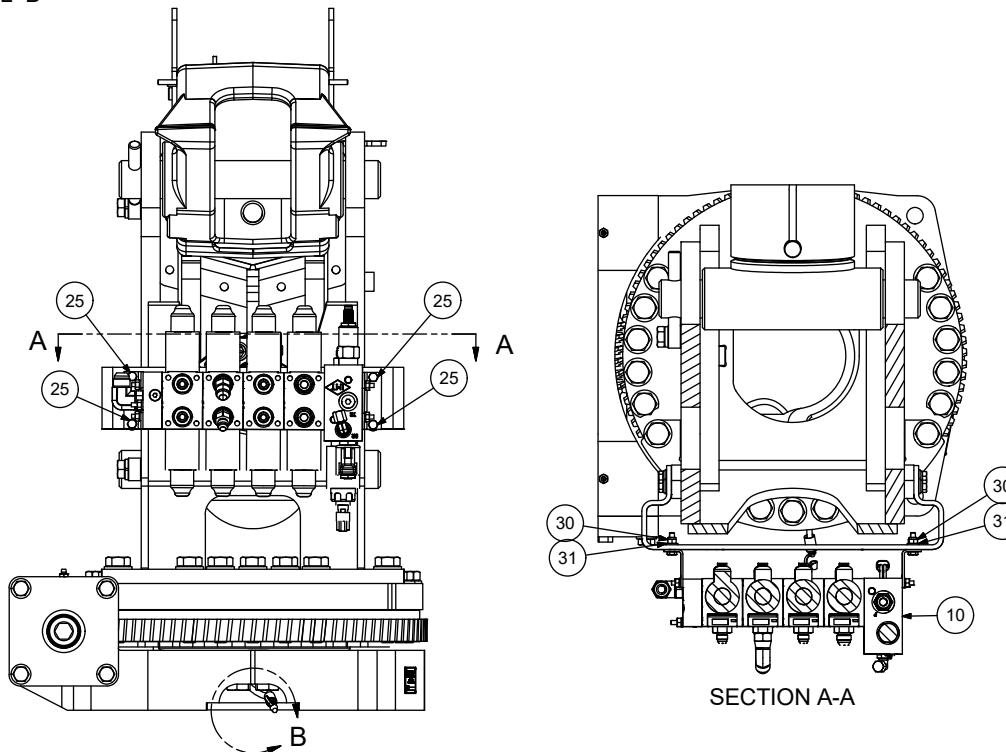
ITEM NO.	PART NO.	DESCRIPTION	QTY.	KIT NO.
2	91725205	KIT-HRDW SERIES II	1	
4.	91727211	KIT-HRDW BASE & MAST 12000	1	
7.	93727759	KIT-HRDW 12000 KIN GEAR GUARD	1	
11.	52726915	MAST WLDMNT-12000	1	
13.	60120138	SLIDE-ROTATION STOP 3816	1	
17.	60251822	BRKT-MAST VB 12000	A/R	
19.	71056704	GEAR ROTATOR-109000 FTLB 0.75 BOLTS KIN	1	
26.	72060044	CAP SCR .38-16X .75 HH GR5 Z	4	2
33.	72063003	WASHER .38 FLAT	4	2
35.	72063051	WASHER .38 LOCK	4	2
37.	72063116	WASHER .75 N FLAT H ASTM F436Z	15	4
39.	72063285	WASHER-FLAT .75 H ASTM F436 Z-CUT	4	4
47.	72601629	CAP SCR .75-10X 4.00 HH GR8 Z	7	4
49.	72601817	CAP SCR .75-10X 3.25 HH GR8 Z	12	4
28.	72060118	CAP SCR .50-13X 2.00 HH GR8 Z	4	7
38.	72063132	WASHER .50 FLAT ASTM F436	4	7
REV. B CN880-2 EFFECTIVE AFTER S/N 12000181027				

NOTE:

1. USE RUST PREVENTATIVE ON SLIDE STOP, BEARING RACE, BOTTOM OF MAST & TOP OF GEAR BEARING.
2. APPLY BLUE THREAD LOCKER.
3. APPLY GEAR GREASE TO GEAR TEETH.
4. BASE AND MAST ASSEMBLY SHOWN AS ASSEMBLED.

99906198-1, EFFECTIVE AFTER S/N 12000181027

DETAIL B

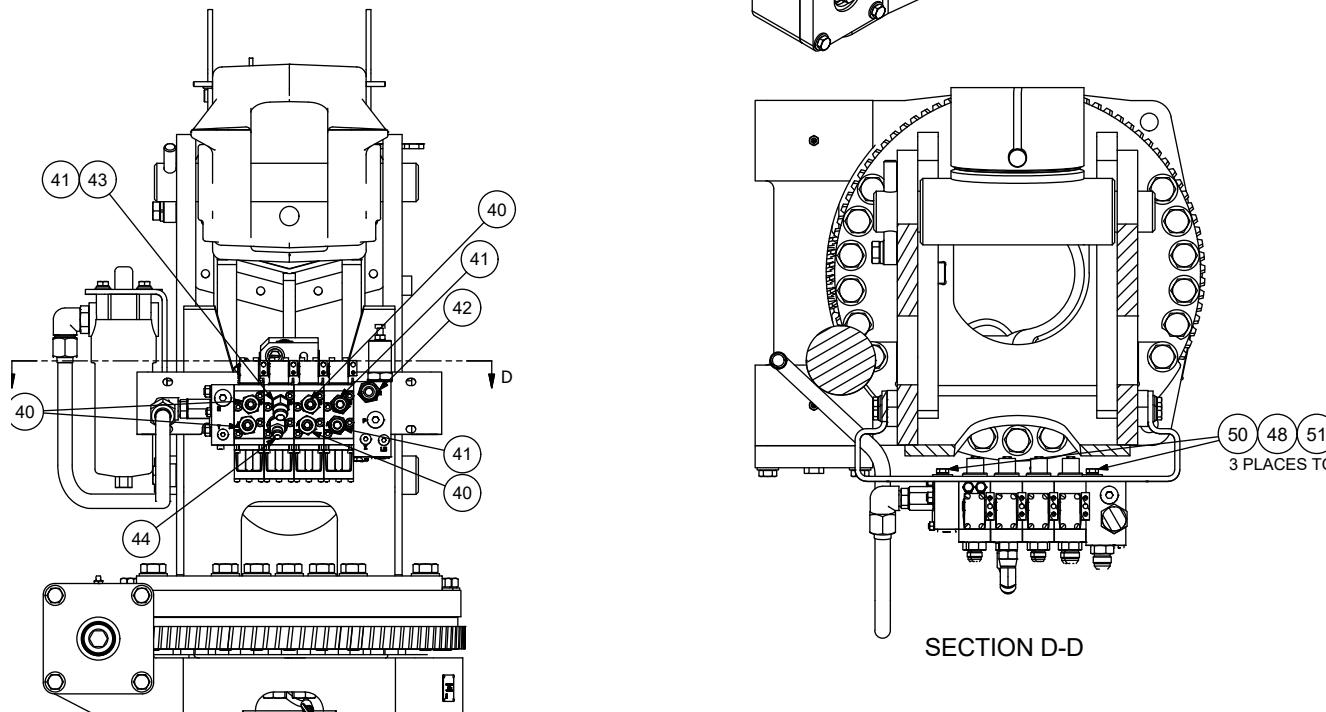
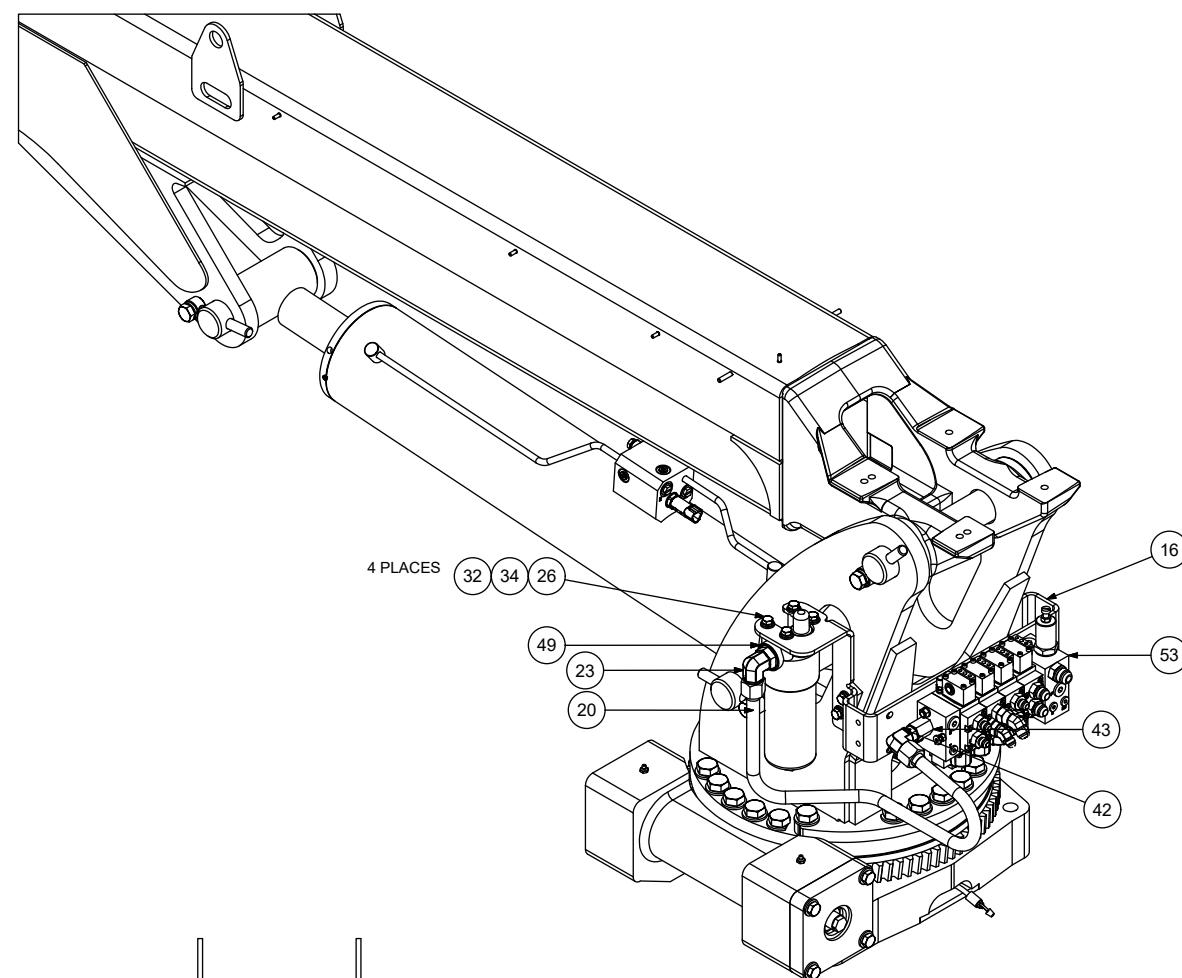
**99906198-1 PARTS LIST**

ITEM NO.	PART NO.	DESCRIPTION	QTY	KIT NO.
1.	91723543	KIT-HRDW VB MNT HAWE	A/R	
2.	91725205	KIT-HRDW SERIES III	1	
3.	91725679	KIT-PRESSURE FILTER S3FP 12K 14K MAST	A/R	
4.	91727211	KIT-HRDW BASE & MAST 12000	1	
5.	91727214	KIT-HYD 12000 SERIES III SP BG6	A/R	
6.	91727230	KIT-HYD 12000 SERIES III FP BG6	A/R	
7.	93727759	KIT-HRDW 12000 KIN GEAR GUARD	1	
8.	51395121	HOSE-AA .13 X 13.50 OAL (2-2)	1	5 & 6
9.	51727172	CYL-5.75/2.5 27.86S 42.05CC C	1	
10.	51727215	VALVE BANK ASM- SP 12000	A/R	
12.	52726916	WLDMNT-LOWER BOOM 12000	1	
14.	60140915	PIN-TYPE NN 2.00X13.75	2	
15.	60140916	PIN-TYPE NN 2.00X 9.50	1	
18.	70034382	CAP-GREASE PRO20 GC-RED	1	2
20.	71415016	KEEPER-PIN .62	3	
22.	72053301	COUPLING-GLV .12 SCH 40	1	2
23.	72053508	ZERK-NPT .12	1	2
25.	72060004	CAP SCR .25-20X 1.00 HH GR5 Z	4	2
28.	72060118	CAP SCR .50-13X 2.00 HH GR8 Z	4	7
29.	72060149	CAP SCR .62-11X 1.50 HH GR5 Z	3	2
30.	72062104	NUT .25-20 HEX NYLOCK	4	2
31.	72063001	WASHER .25 FLAT	4	2
36.	72063055	WASHER .62 LOCK	3	2
38.	72063132	WASHER .50 FLAT ASTM F436	4	7

REV. B CN880-2 EFFECTIVE AFTER S/N 12000181027

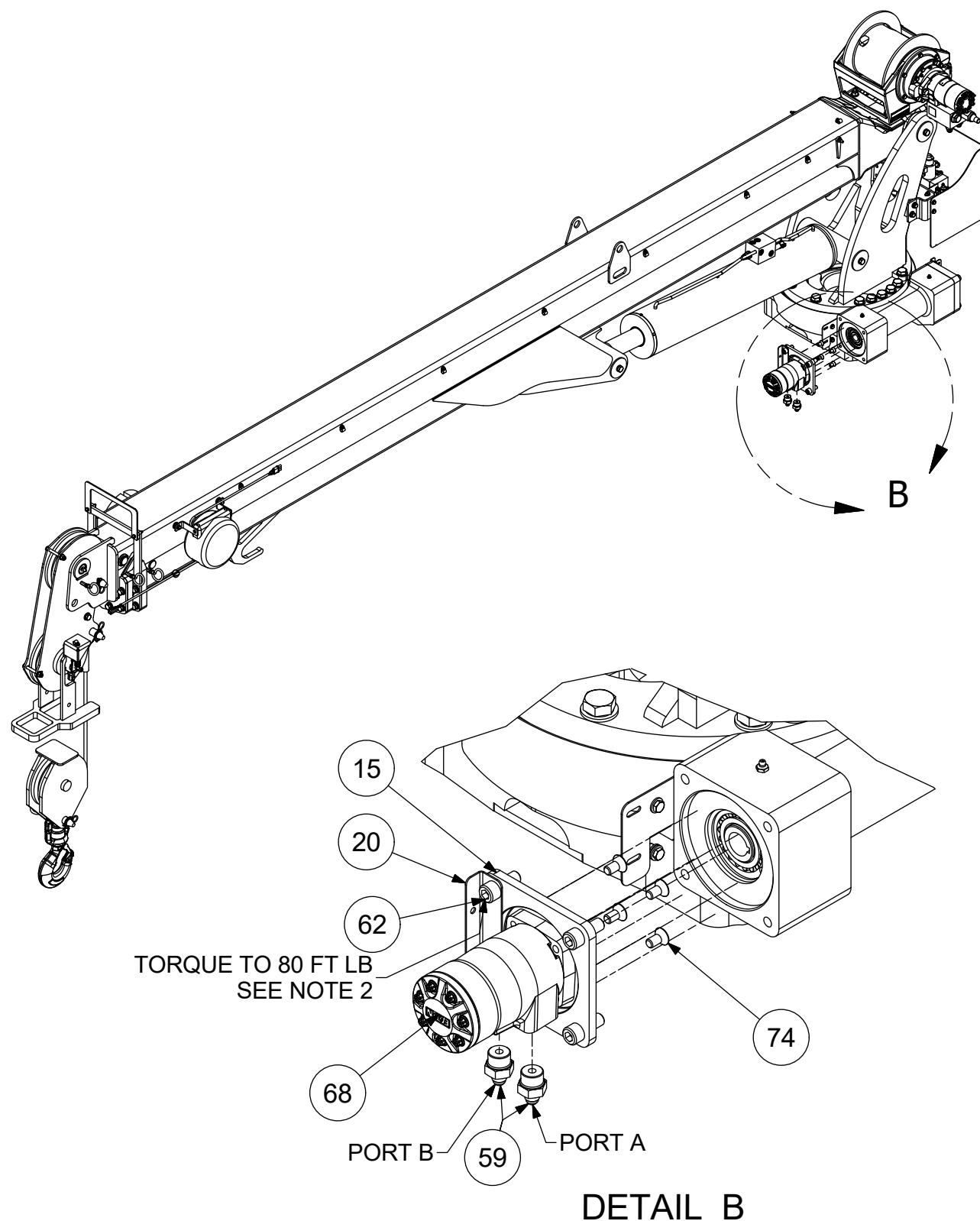
NOTES:

1. IF REQUIRED USE 72063038 OR 72063039 MACHY BUSHINGS BETWEEN MAST AND LOWER BOOM.
2. APPLY ANTI SIEZE TO BOOM AND CYLINDER MOUNTING PINS.
3. APPLY ANTI SIEZE TO BUSHINGS IN LOWER BOOM CASTING.
4. DO NOT ALLOW ANTI SIEZE TO COME IN CONTACT WITH CYLINDER BUSHINGS.
5. REPLACE SUPPLIER HARDWARE WITH 72060118 AND 72063132.

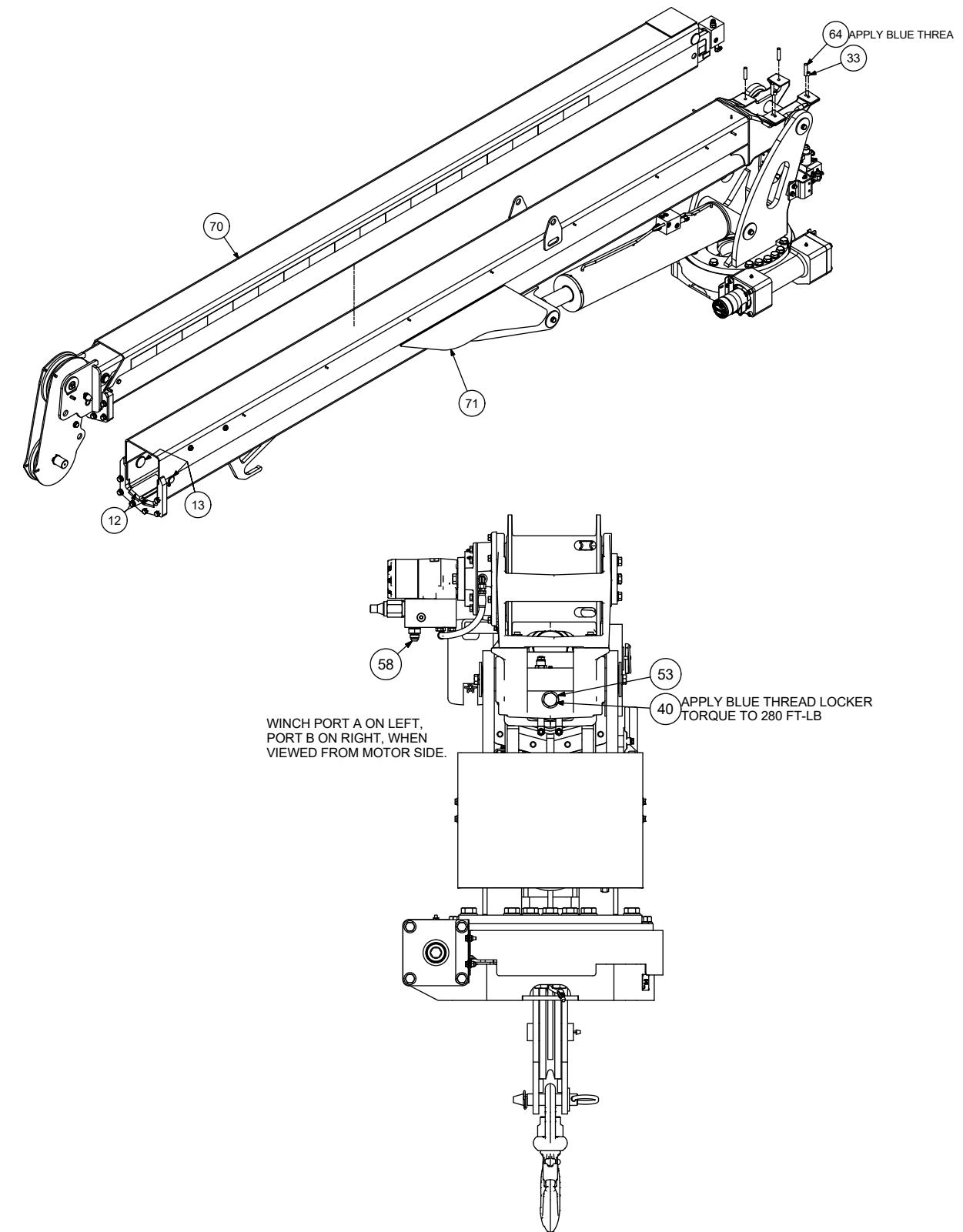
99906198-2, EFFECTIVE AFTER S/N 12000181027**99906198-2**

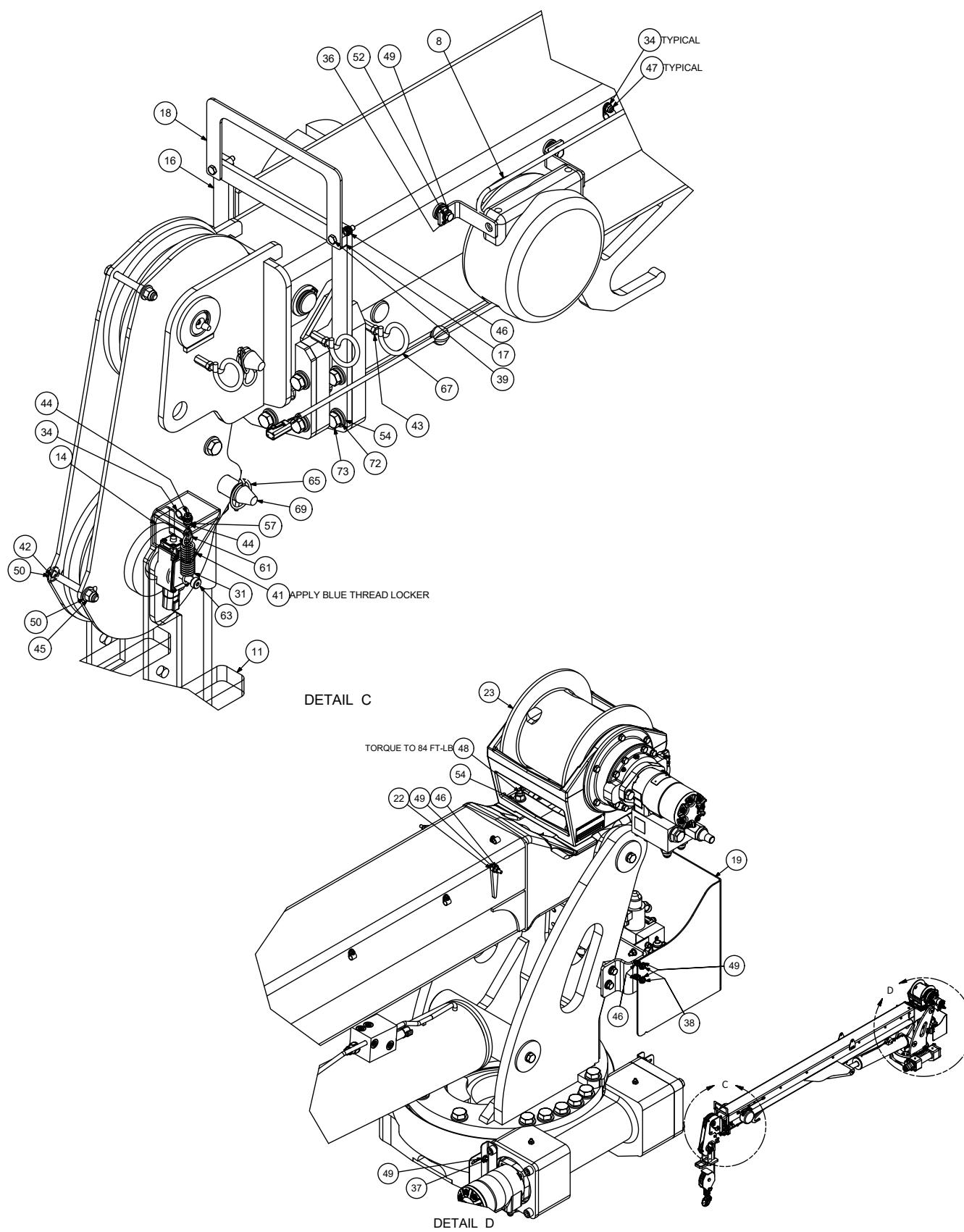
ITEM NO.	PART NO.	DESCRIPTION	QTY.	KIT NO.
1.	91723543	KIT-HRDW VB MNT HAWE	A/R	
2.	91725205	KIT-HRDW SERIES III	1	
3.	91725679	KIT-PRESSURE FILTER S3FP 12K 14K MAST	A/R	
4.	71727211	KIT-HRDW BASE & MAST 12000	1	
5.	91727214	KIT-HYD 12000 SERIES III SP BG6	A/R	
6.	91727230	KIT-HYD 12000 SERIES III FP BG6	A/R	
7.	93727759	KIT-HRDW 12000 KIN GEAR GUARD	1	
16.	60251821	BRKT-MAST VB 12000 FP	A/R	
20.	71415016	KEEPER-PIN .62	3	
23.	72053508	ZERK-NPT .12	1	2
26.	72060044	CAP SCR .38-16X .75 HH GR5 Z	4	2
32.	72063003	WASHER-FLAT .38 W ANSI B27.2 Z	4	3
34.	72063051	WASHER-LOCK .38 ZINC	4	3
40.	72532356	ADPTR-M STR/M JIC 8 6	4	6
41.	72532358	ADPTR-M STR/M JIC 8 8	3	6
42.	72532361	ADPTR-M STR/M JIC 8 10	1	6
43.	72532670	ELBOW-M JIC/45/F JIC 8 8	1	6
44.	72533583	ELBOW-M STR/45/M JIC 8 6	1	6
48.	72601797	WASHER-LOCK 8MM	3	1
49.	72601817	CAP SCR .75-10X 3.25 HH GR8 Z	12	4
50.	72602052	CAP SCR M 8-1.25X 16 HHZ	3	1
51.	72602065	WASHER-FLAT M 8	3	1
53.	73734727	VALVE BANK-4-SECT PSL2 W OC INLT	A/R	

REV. B CN880-2 EFFECTIVE AFTER S/N 12000181027

12000 - 30' Crane Rotation Motor Installation (99906199)**NOTES:**

1. INSTALL GASKET SUPPLIED WITH ROTATOR
2. APPLY BLUE THREAD LOCKER

99906199 - CRANE ROTATION MOTOR INSTALLATION, CONTINUED

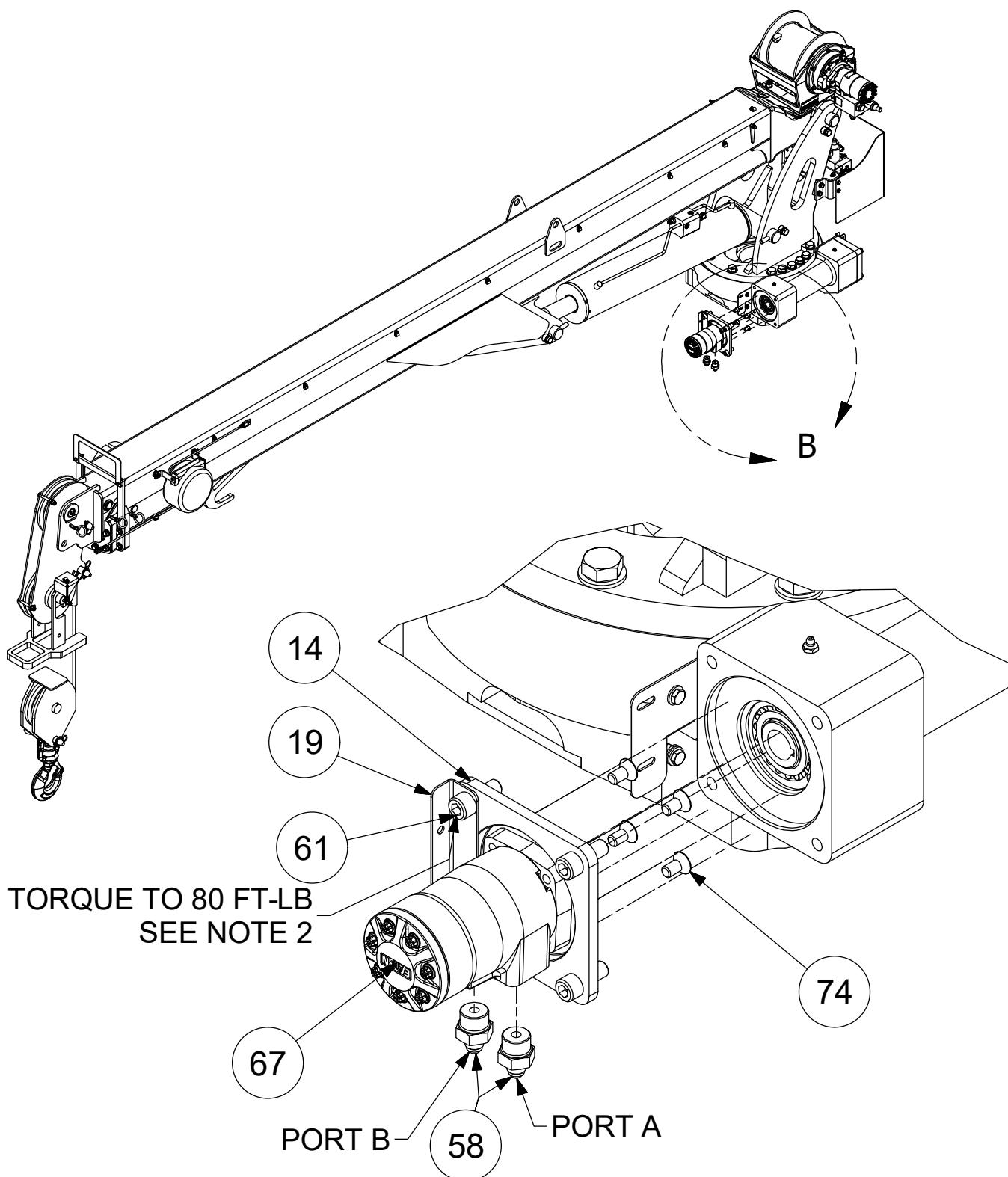
99906199 - CRANE ROTATION MOTOR INSTALLATION, CONTINUED

99906199 PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	QTY.	KIT NO.
1.	91723583	KIT-HRDW SIII RADIO CONTROLS	1	
2.	91725205	KIT-HRDW SERIES III	1	
3.	91726834	KIT-HRDW WINCH MNT	1	
4.	91727214	KIT-HYD 12000 SERIES III SP	1	
5.	91727246	KIT-HRDW SIII MOTOR MNT	1	
6.	93725207	KIT-CABLE GUIDE	1	
7.	93727759	KIT-HRDW 12000 KIN GEAR GUARD	1	
8.	51723610	CORD REEL ASM- 30FT W/PACKARD W/DEUTSCH	1	
9.	51727982	KIT-A2B LIMIT SWITCH NO TOP PIN DEUTSCH	1	
10.	52725066	WLDMT- SNATCH BLOCK 9500/10000	1	
11.	52725155	WLDMT- A2B BRKT	1	
12.	60030423	WEAR PAD-RC 0.25X 6.00X 2.25	2	
13.	60030427	WEAR PAD-RND 0.19X 2.00X 1.25X .44	2	
14.	60030486	SPACER-A2B BRACKET	2	
15.	60145972	FLANGE ADAPTOR KINEMATICS	1	
16.	60140899	CAP-LOWER BOOM CABLE GUIDE 9500-14000	1	6
17.	60140935	GUIDE - CABLE WEAR (WIDE)	1	6
18.	60140938	BRKT - CABLE GUIDE (WIDE)	1	6
19.	60144215	COVER-VALVE BANK SIII	1	
20.	60144346	BRKT-GEAR GUARD 12000	2	
21.	70034382	CAP-GREASE PRO20 GC-RED	2	2
22.	70034490	PLATE-ANGLE PLASTIC 3.50"	2	
23.	70571196	WINCH-PLANETARY 7000 LB LINE PULL	1	
24.	70580235	WIRE ROPE ASM - .44 (6X25) X 120 FT RH LAY XXIPS	1	
25.	70734956	TRANSM-RAD REM TELE S3 SP & EM FHSS 2400	A/R	
26.	70734957	TRANSM-RAD REM TELE S3 FP NON-G FHSS 240	A/R	
27.	70734958	TRANSM-RAD REM TELE S3 FP GATED FHSS 240	A/R	
28.	70734959	RECEIVER-RAD REM TELE S3 SP FHSS 2400	A/R	
29.	70734960	RECEIVER-RAD REM TELE S3 FP FHSS 2400	A/R	
30.	70735082	HOOK-SWVL 7T BBRG	1	
31.	71413185	SPRING-.105WIRE 0.75OD 2.875 LG	1	2
32.	71414205	PLATE-SINGLE SHEAVE (20#) .50 WIRE ROPE	1	
33.	72034479	PLUG-PLSTC .50-13X .50 UNC-2B	2	2
34.	72034485	CLAMP-PLASTIC 1/4" CABLE	9	
35.	72053508	ZERK-NPT .12	2	2
36.	72060000	CAP SCR .25-20X .50 HH GR5 Z	2	2
37.	72060002	CAP SCR .25-20X .75 HH GR5 Z	8	2,7
38.	72060004	CAP SCR .25-20X 1.00 HH GR5 Z	4	2
39.	72060006	CAP SCR .25-20X 1.50 HH GR5 Z	2	6
40.	72060206	CAP SCR .75-10X 2.00 HH GR8 Z	1	2
41.	72060639	SCR-MACH 10-24X 1.25 RDH	2	2
42.	72060893	CAP SCR .38-16X 3.25 HH GR5 Z	2	2
43.	72062000	NUT .25-20 HEX	3	2
44.	72062093	NUT # 8-32 HEX ZINC	2	2
45.	72062103	NUT .38-16 HEX NYLOCK	2	2
46.	72062104	NUT .25-20 HEX NYLOCK	12	2,6,7
47.	72062106	NUT 10-24 HEX NYLOCK	8	2
48.	72062108	NUT .50-20 HEX CENTER LOCKING	4	2
49.	72063001	WASHER .25 FLAT	20	2,7
50.	72063003	WASHER .38 FLAT	4	2
51.	72063010	WASHER 1.00 FLAT	1	2
52.	72063049	WASHER .25 LOCK	2	2
53.	72063116	WASHER .75 N FLAT H ASTM F436Z	1	2
54.	72063132	WASHER .50 FLAT ASTM F436	10	2,3
55.	72063142	WASHER-SS .25 LOCK TYPE 304	2	1
56.	72063166	WASHER-FLAT .25 R WRT 18-8 .620D SS	2	1
57.	72063271	WASHER # 8 W FLAT ANSI B27.2Z	2	2
58.	72532359	ADPTR-M STR/M JIC 10 8	2	4
59.	72533613	ADPTR-M STR/M JIC 10 6	2	4

ITEM NO.	PART NO.	DESCRIPTION	QTY.	KIT NO.
60.	72601330	CAP SCR .25-20X 1.00 HH SS	2	1
61.	72601938	BOLT-EYE # 8-32X 1.125	1	2
62.	72601949	CAP SCR .50-13X 1.25 SH ZC	4	5
63.	72602085	BOLT-SHLDR .38X 1.25 (5/16 THDS) SS	1	2
64.	72602138	STUD .50-20X 2.25 DBL .50-13 GR8 STL	4	3
65.	72661543	PIN-QUICK 316-10QP	2	
66.	72661641	PIN-QUICK 5/16-2-1/16 ZINC YELLOW	1	2
67.	72661694	BRIDLE RING 1-1/12ID X 1/4-20	3	2
68.	73511391	MOTOR-HYD 101 1013 009	1	
69.	73734565	PIN-LOCK W/HANDLE 1.00 X 3.50 W/HAIRPIN	2	
70.	99906197	DWG-EXT BOOM ASM 12000	1	
71.	99906198	DWG-BASE ASM 12000	1	
72.	72602160	WASHER- LOCK .50 YZ	6	2
73.	72602158	CAP SCR .50-13X 1.75 HH GR5 YZ	6	2
74.	72601043	SCR-MACH .38-16X .75 FLH SOCZ	4	
75.	60145985	GEAR GUARD 12000 FOR KINEMATICS	1	

REV. G CN1066

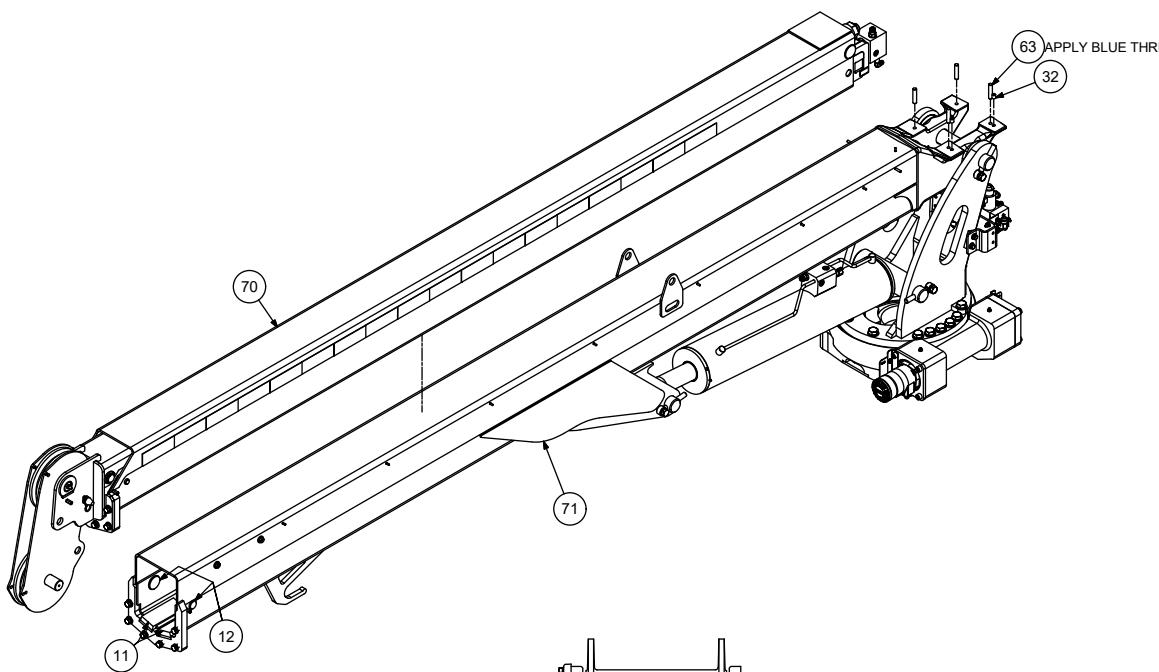
12000 - 30' Crane Rotation Motor Installation (99906199)**EFFECTIVE AFTER S/N 12000181027****DETAIL B****99906199 PARTS LIST**

ITEM NO.	PART NO.	DESCRIPTION	QTY.	KIT NO.
1.	91723583	KIT-HRDW SIII RADIO CONTROLS	1	
2.	91725205	KIT-HRDW SERIES III	1	
3.	91726834	KIT-HRDW WINCH MNT	1	
4.	91727214	KIT-HYD 12000 SERIES III SP	1	
5.	91727246	KIT-HRDW SIII MOTOR MNT	1	
6.	93725207	KIT-CABLE GUIDE	1	
19.	60144346	BRKT-GEAR GUARD 12000	2	
58.	72533613	ADPTR-M STR/M JIC 10 6	2	4
61.	72601949	CAP SCR .50-13X 1.25 SH ZC	4	5
67.	73511391	MOTOR-HYD 101 1013 009	1	
74.	72601043	SCR-MACH .38-16X .75 FLH SOCZ	4	

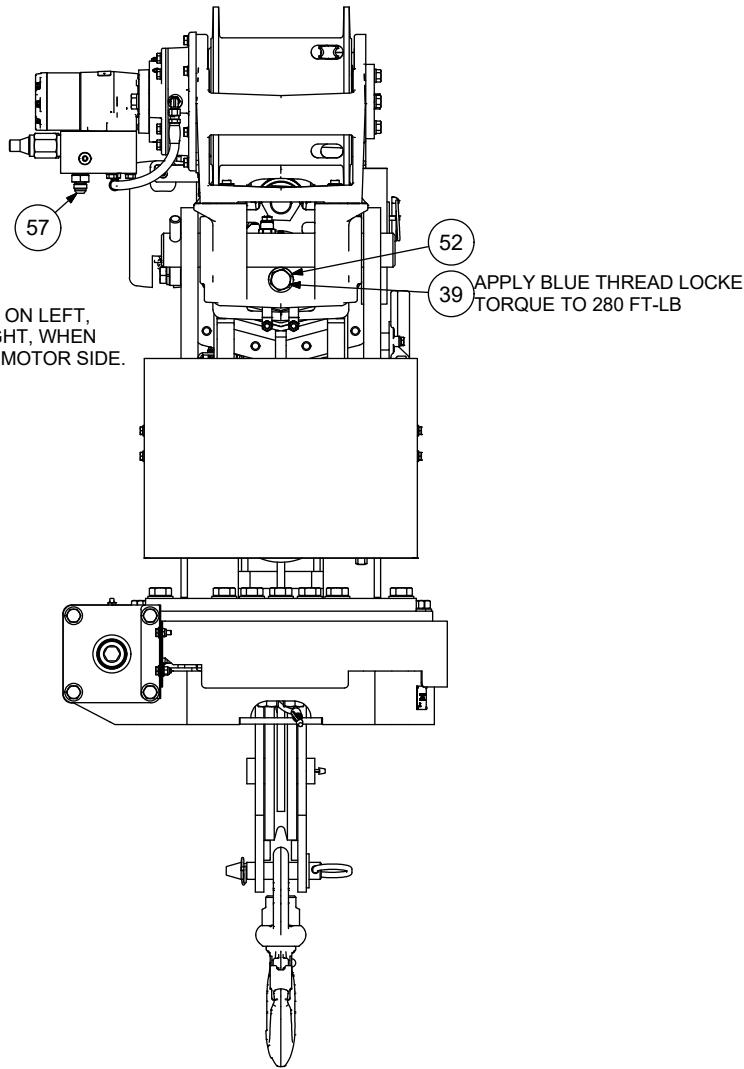
REV. D CN880-2 EFFECTIVE AFTER S/N 12000181027

NOTES:

1. INSTALL GASKET SUPPLIED WITH ROTATOR.
2. APPLY BLUE THREAD LOCKER.

12000 - 30' CRANE ASSEMBLY (99906199-1)

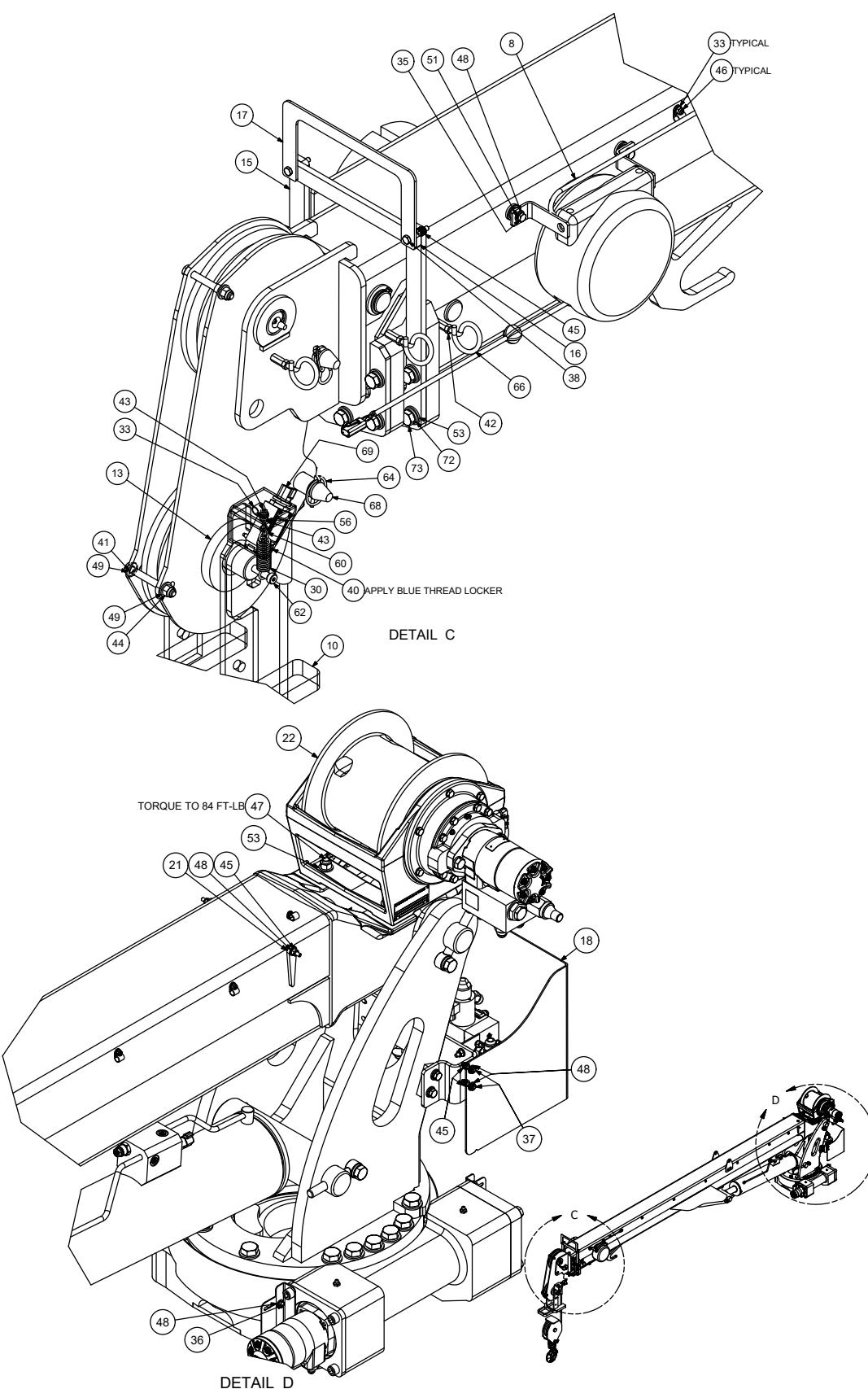
WINCH PORT A ON LEFT,
PORT B ON RIGHT, WHEN
VIEWED FROM MOTOR SIDE.

**99906199-1 PARTS LIST**

ITEM NO.	PART NO.	DESCRIPTION	QTY.	KIT NO.
2.	91725205	KIT-HRDW SERIES III	1	
3.	91726834	KIT-HRDW WINCH MNT	1	
4.	91727214	KIT-HYD 12000 SERIES III SP1	1	
11.	60030423	1WEAR PAD-RC 0.25X 6.00X 2.25	2	
12.	60030427	WEAR PAD-RND 0.19X 2.00X 1.25X .44	2	
32.	72034479	PLUG-PLSTC .50-13X .50 UNC-2B	2	2
39.	72060206	CAP SCR .75-10X 2.00 HH GR8 Z	1	2
52.	72063116	WASHER .75 N FLAT H ASTM F436Z	1	2
57.	72532359	ADPTR-M STR/M JIC 10 8	2	4
63.	72602138	STUD .50-20X 2.25 DBL .50-13 GR8 STL	4	3
70.	99906197	DWG-EXT BOOM ASM 12000	1	
71.	99906198	DWG-BASE ASM 12000	1	

REV. D CN880-2 EFFECTIVE AFTER S/N 12000181027

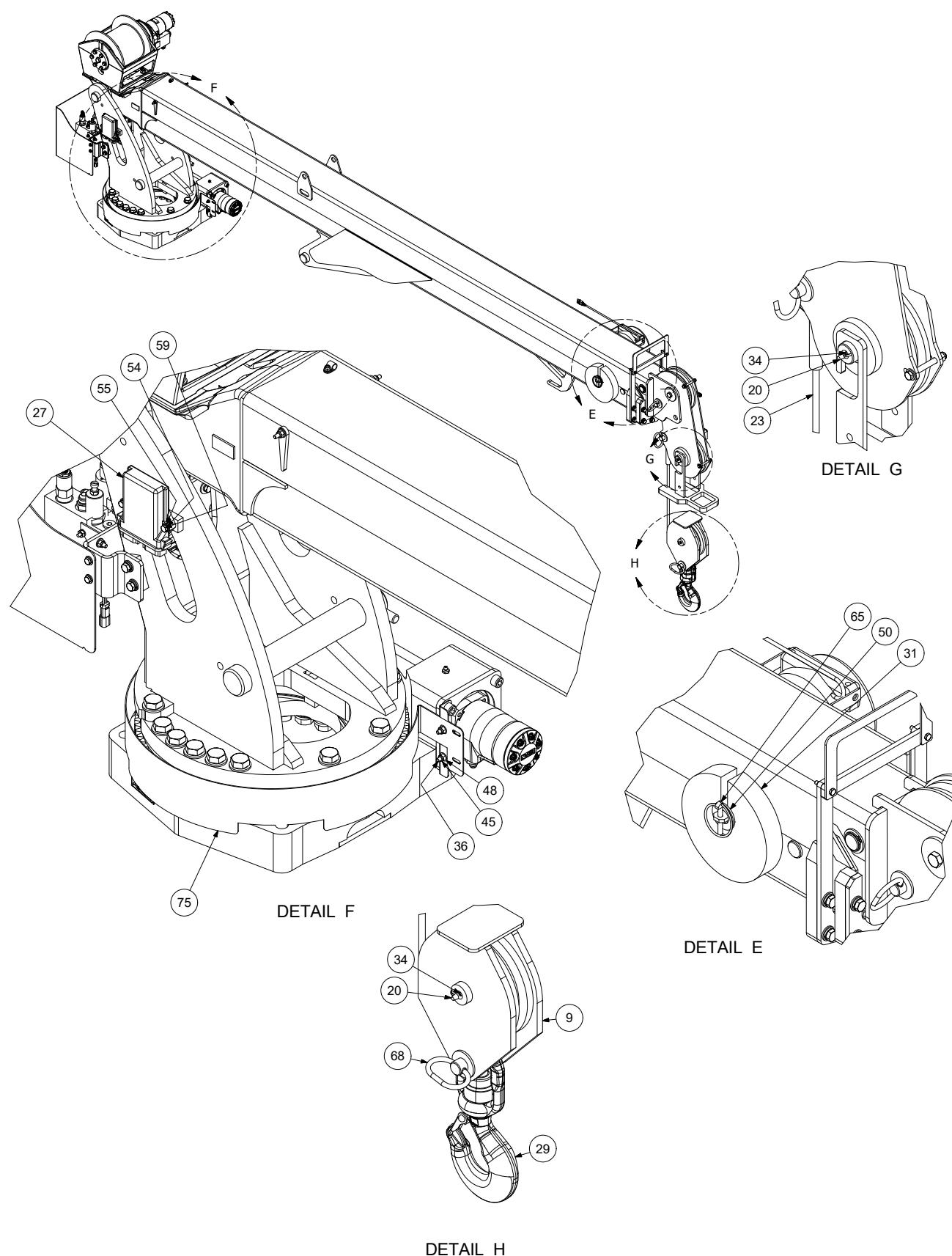
12000 - 30' CRANE ASSEMBLY (99906199-2)



99906199-2 PARTS LIST

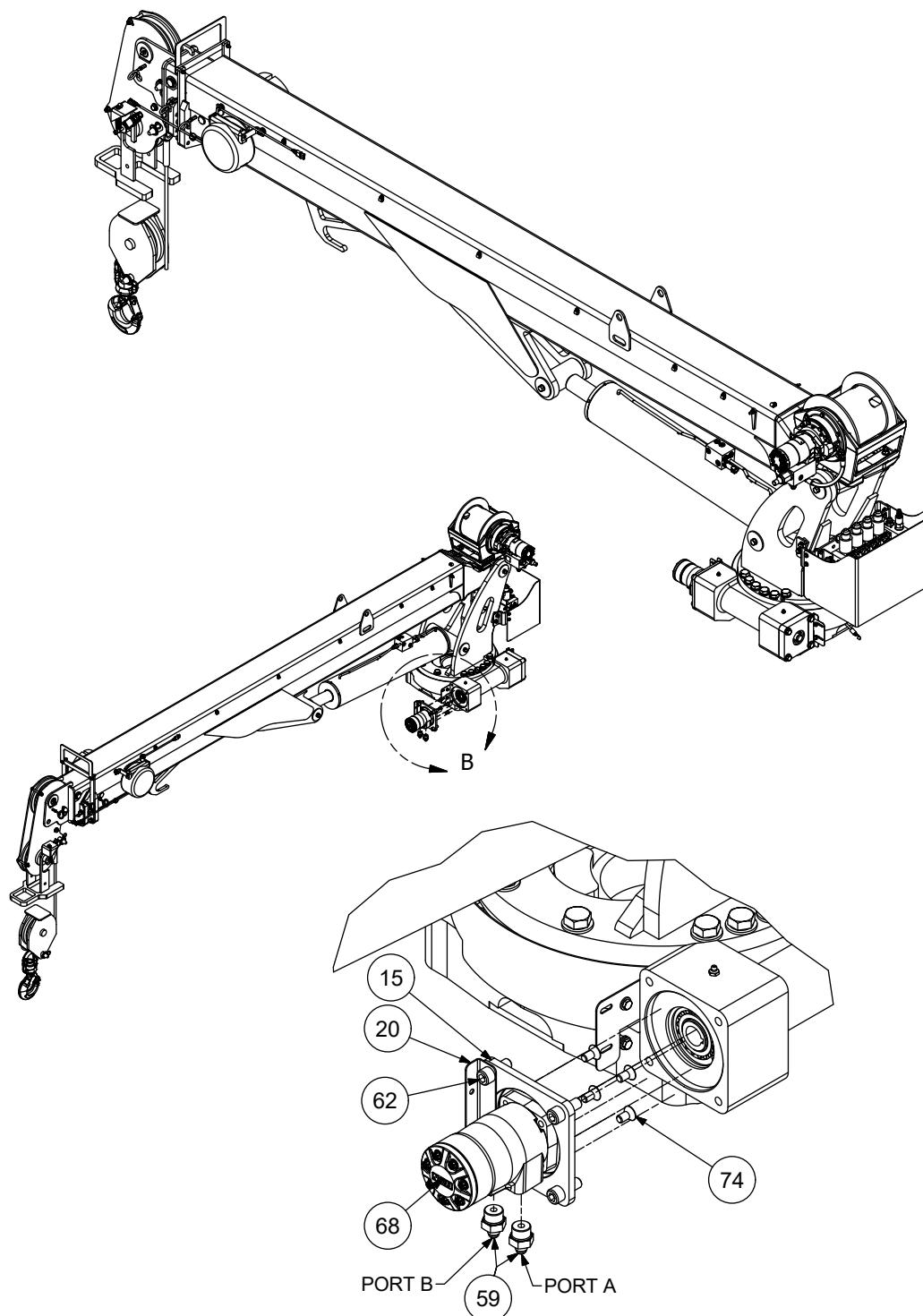
ITEM NO.	PART NO.	DESCRIPTION	QTY.	KIT NO.
1.	91723583	KIT-HRDW SIII RADIO CONTROLS	1	
2.	91725205	KIT-HRDW SERIES III	1	
3.	91726834	KIT-HRDW WINCH MNT	1	
4.	91727214	KIT-HYD 12000 SERIES III SP	1	
5.	91727246	KIT-HRDW SIII MOTOR MNT	1	
6.	93725207	KIT-CABLE GUIDE	1	
7.	93727759	KIT-HRDW 12000 KIN GEAR GUARD	1	
8.	51723610	CORD REEL ASM- 30FT W/PACKARD W/DEUTSCH	1	
10.	52725155	WLDMT-A2B BRKT	1	
13.	60030486	SPACER-A2B BRACKET	2	
15.	60140899	CAP-LOWER BOOM CABLE GUIDE 9500-14000	1	6
16.	60140935	GUIDE - CABLE WEAR (WIDE)	1	6
17.	60140938	BRKT - CABLE GUIDE (WIDE)	1	6
18.	60144215	COVER-VALVE BANK SIII	1	
21.	70034490	PLATE-ANGLE PLASTIC 3.50"	2	
22.	70571196	WINCH-PLANETARY 7000 LB LINE PULL	1	
30.	71413185	SPRING-.105WIRE .75OD 2.875 LG	1	2
33.	72034485	CLAMP-PLASTIC 1/4" CABLE	9	
35.	72060000	CAP SCR .25-20X .50 HH GR5 Z	2	2
36.	72060002	CAP SCR .25-20X .75 HH GR5 Z	8	2,7
37.	72060004	CAP SCR .25-20X 1.00 HH GR5 Z	4	2
38.	72060006	CAP SCR .25-20X 1.50 HH GR5 Z	2	6
40.	72060639	SCR-MACH 10-24X 1.25 RDH	2	2
41.	72060893	CAP SCR .38-16X 3.25 HH GR5 Z	2	2
42.	72062000	NUT .25-20 HEX	3	2
43.	72062093	NUT # 8-32 HEX ZINC	2	2
44.	72062103	NUT .38-16 HEX NYLOCK	2	2
45.	72062104	NUT .25-20 HEX NYLOCK	12	2,6,7
46.	72062106	NUT 10-24 HEX NYLOCK	8	2
47.	72062108	NUT .50-20 HEX CENTER LOCKING	4	2
48.	72063001	WASHER .25 FLAT	20	2,7
49.	72063003	WASHER .38 FLAT	4	2
51.	72063049	WASHER .25 LOCK	2	2
53.	72063132	WASHER .50 FLAT ASTM F436	10	2 &3
56.	72063271	WASHER # 8 W FLAT ANSI B27.2Z	2	2
60.	72601938	BOLT-EYE # 8-32X 1.125	1	2
62.	72602085	BOLT-SHLDR .38X 1.25 (5/16 THDS) SS	1	2
64.	72661543	PIN-QUICK 316-10QP	2	
66.	72661694	BRIDLE RING 1-1/12ID X 1/4-20	3	2
68.	73734565	PIN-LOCK W/HANDLE 1.00 X 3.50 W/HAIRPIN	2	
69.	77041863	SWITCH-LIMIT DT04-4P CONN	1	
72.	72602160	WASHER- LOCK .50 YZ	6	2
73.	72602158	CAP SCR .50-13X 1.75 HH GR5 YZ	6	2

REV. D CN880-2 EFFECTIVE AFTER S/N 12000181027

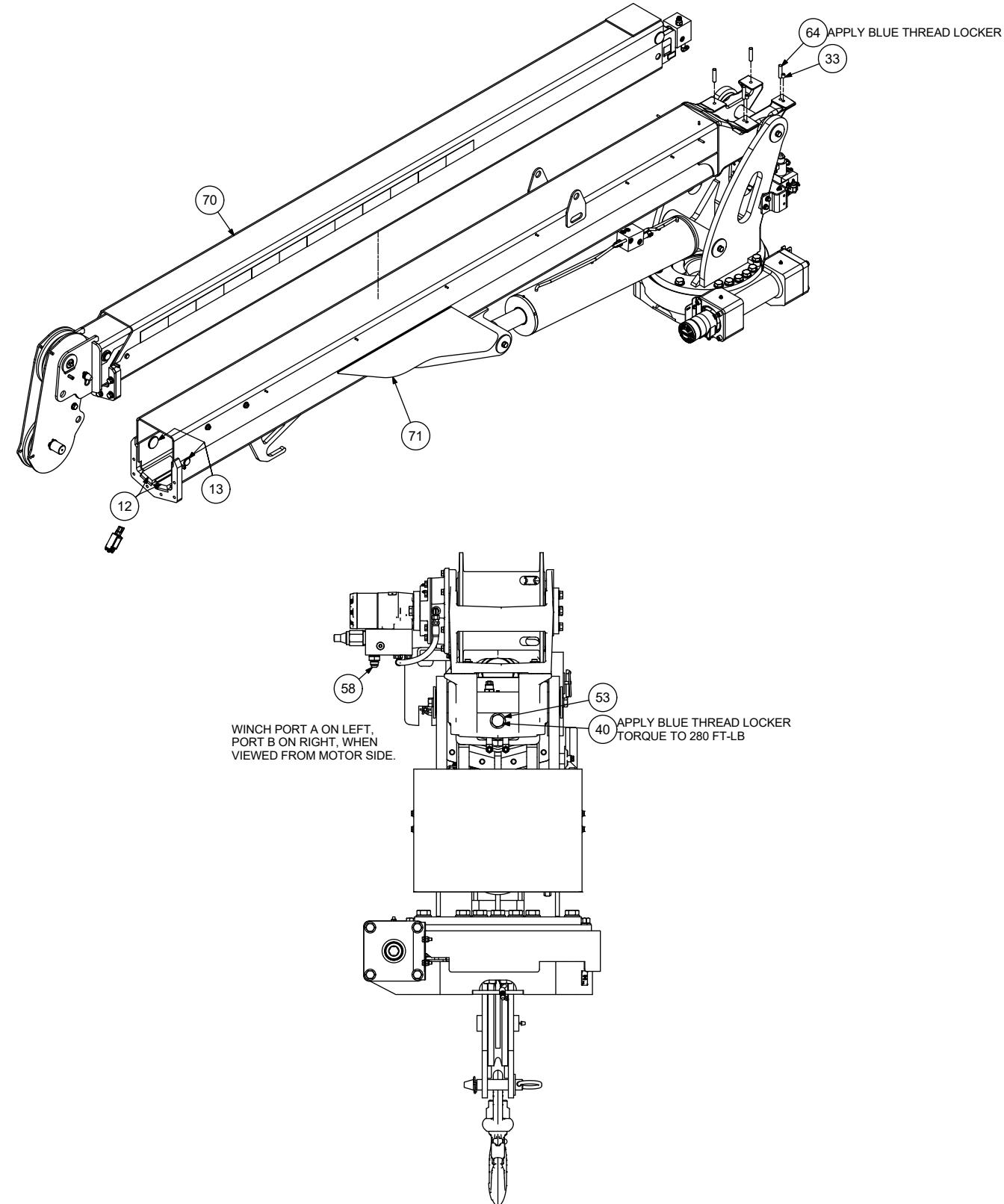
12000 - 30' CRANE ASSEMBLY (99906199-3)**99906199-4 PARTS LIST**

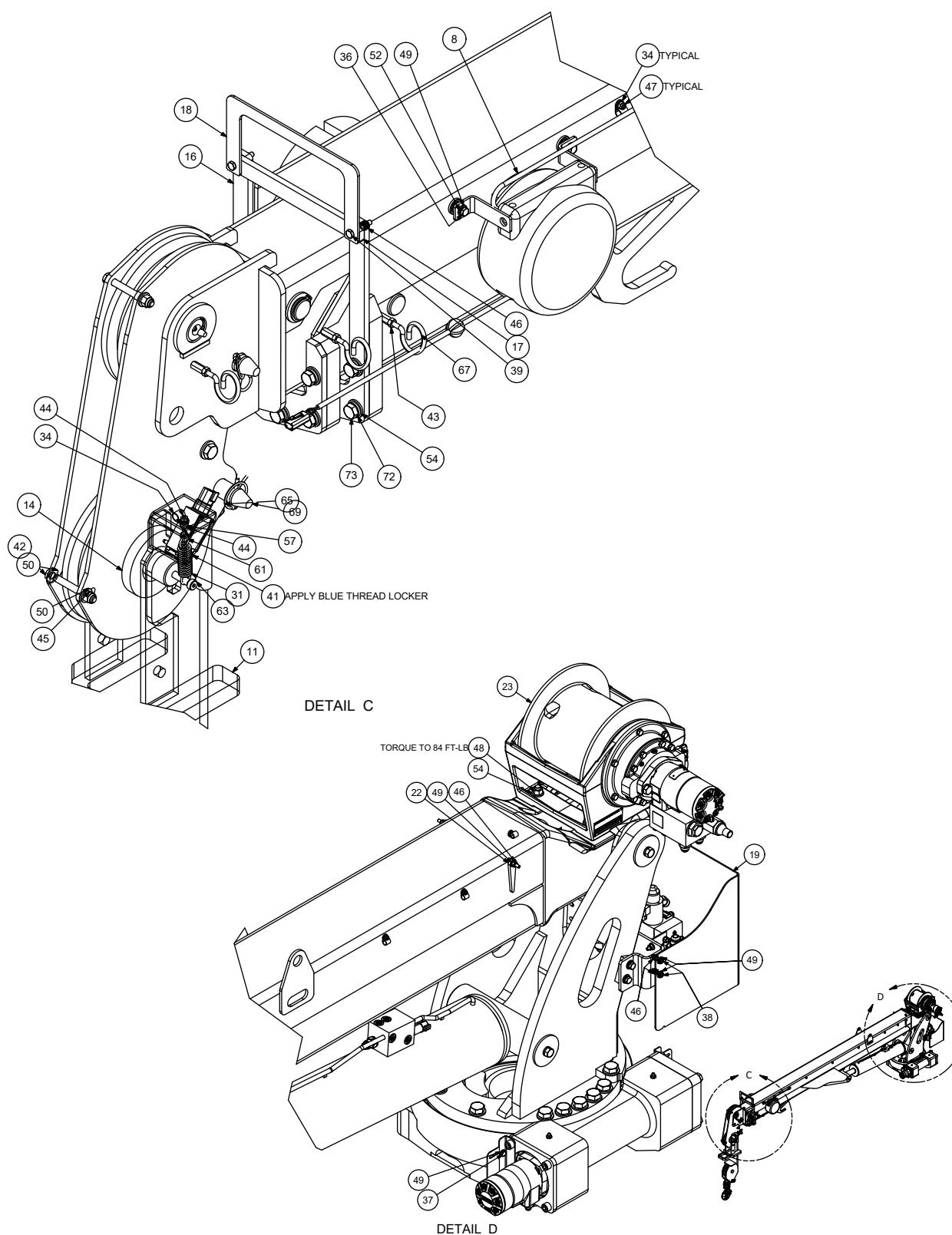
ITEM NO.	PART NO.	DESCRIPTION	QTY.	KIT NO.
1.	91723583	KIT-HRDW SIII RADIO CONTROLS	1	
2.	91725205	KIT-HRDW SERIES III	1	
3.	91726834	KIT-HRDW WINCH MNT	1	
4.	91727214	KIT-HYD 12000 SERIES III SP	1	
5.	91727246	KIT-HRDW SIII MOTOR MNT	1	
6.	93725207	KIT-CABLE GUIDE	1	
7.	93727759	KIT-HRDW 12000 KIN GEAR GUARD	1	
9.	52725066	WLDMT- SNATCH BLOCK 9500/10000	1	
20.	70034382	CAP-GREASE PRO20 GC-RED	2	2
23.	70580224	WIRE ROPE ASM - .44 (6X25) X 120 FT RH LAY XXIPS	1	
27.	70734959	RECEIVER-RAD REM TELE S3 SP FHSS 2400	A/R	
29.	70735082	HOOK-SWVL 7T BBRG	1	
31.	71414205	PLATE-SINGLE SHEAVE (20#) .50 WIRE ROPE	1	
34.	72053508	ZERK-NPT .12	2	2
36.	72060002	CAP SCR .25-20X .75 HH GR5 Z	8	2,7
45.	72062104	NUT .25-20 HEX NYLOCK	12	2,6,7
48.	72063001	WASHER .25 FLAT	20	2,7
50.	72063010	WASHER 1.00 FLAT	1	2
54.	72063142	WASHER-SS .25 LOCK TYPE 304	2	1
55.	72063166	WASHER-FLAT .25 R WRT 18-8 .620D SS	2	1
59.	72601330	CAP SCR .25-20X 1.00 HH SS	2	1
65.	72661641	PIN-QUICK 5/16-2-1/16 ZINC YELLOW	1	2
68.	73734565	PIN-LOCK W/HANDLE 1.00 X 3.50 W/HAIRPIN	2	
75.	60145985	GEAR GUARD 12000 FOR KINEMATICS	1	

REV. D CN880-2 EFFECTIVE AFTER S/N 12000181027

12000 - 25' Crane Assembly (99906225)**NOTES:**

1. INSTALL GASKET SUPPLIED WITH ROTATOR
2. APPLY BLUE THREAD LOCKER

99906225 - CRANE ASSEMBLY, CONTINUED

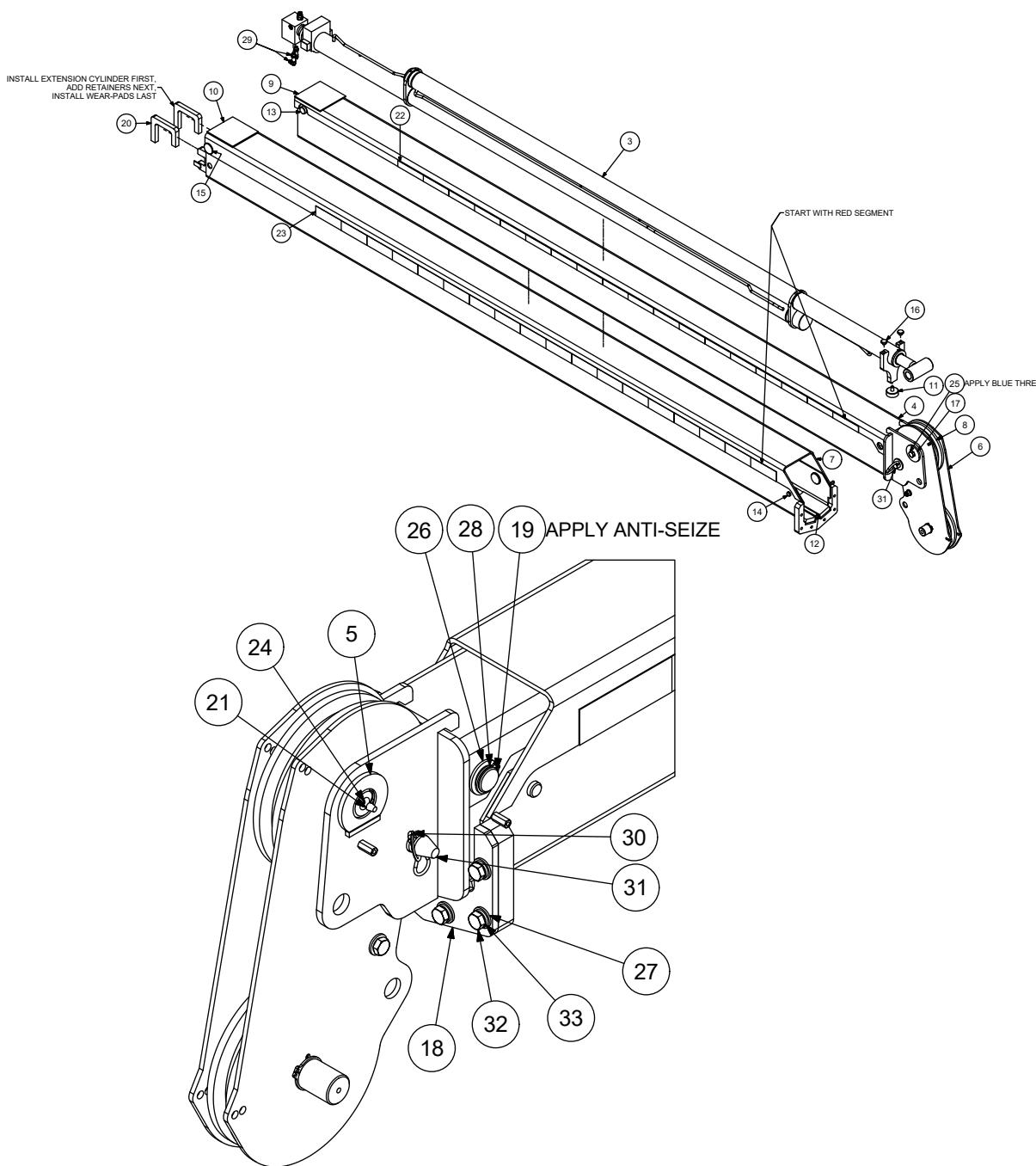
99906225 - CRANE ASSEMBLY, CONTINUED

99906225 PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	QTY.	KIT NO.
1.	91723583	KIT-HRDW SIII RADIO CONTROLS	1	
2.	91725205	KIT-HRDW SERIES III	1	
3.	91726834	KIT-HRDW WINCH MNT	1	
4.	91727214	KIT-HYD 12000 SERIES III SP	1	
5.	91727246	KIT-HRDW SIII MOTOR MNT	1	
6.	93725207	KIT-CABLE GUIDE	1	
7.	93727759	KIT-HRDW 12000 KIN GEAR GUARD	1	
8.	51723610	CORD REEL ASM- 30FT W/PACKARD W/DEUTSCH	1	
9.	51727982	KIT-A2B LIMIT SWITCH NO TOP PIN DEUTSCH	1	
10.	52725066	WLDMT- SNATCH BLOCK 9500/10000	1	
11.	52725155	WLDMT- A2B BRKT	1	
12.	60030423	WEAR PAD-RC 0.25X 6.00X 2.25	2	
13.	60030427	WEAR PAD-RND 0.19X 2.00X 1.25X .44	2	
14.	60030486	SPACER-A2B BRACKET	2	
15.	60145972	FLANGE ADAPTOR KINEMATICS	1	
16.	60140899	CAP-LOWER BOOM CABLE GUIDE 9500-14000	1	6
17.	60140935	GUIDE - CABLE WEAR (WIDE)	1	6
18.	60140938	BRKT - CABLE GUIDE (WIDE)	1	6
19.	60144215	COVER-VALVE BANK SIII	1	
20.	60144346	BRKT-GEAR GUARD 12000	2	
21.	70034382	CAP-GREASE PRO20 GC-RED	2	2
22.	70034490	PLATE-ANGLE PLASTIC 3.50"	2	
23.	70571196	WINCH-PLANETARY 7000 LB LINE PULL	1	
24.	70580233	WIRE ROPE ASM-GALV.44 X 100FT XXIPS	1	
25.	70734956	TRANSM-RAD REM TELE S3 SP & EM FHSS 2400	A/R	
26.	70734957	TRANSM-RAD REM TELE S3 FP NON-G FHSS 240	A/R	
27.	70734958	TRANSM-RAD REM TELE S3 FP GATED FHSS 240	A/R	
28.	70734959	RECEIVER-RAD REM TELE S3 SP FHSS 2400	1	
29.	70734960	RECEIVER-RAD REM TELE S3 FP FHSS 2400	A/R	
30.	70735082	HOOK-SWVL 7T BBRG	1	
31.	71413185	SPRING-.105WIRE 0.75OD 2.875 LG	1	2
32.	71414205	PLATE-SINGLE SHEAVE (20#).50 WIRE ROPE	1	
33.	72034479	PLUG-PLSTC .50-13X .50 UNC-2B	2	2
34.	72034485	CLAMP-PLASTIC 1/4" CABLE	8	
35.	72053508	ZERK-NPT .12	2	2
36.	72060000	CAP SCR .25-20X .50 HH GR5 Z	2	2
37.	72060002	CAP SCR .25-20X .75 HH GR5 Z	4	7
38.	72060004	CAP SCR .25-20X 1.00 HH GR5 Z	4	2
39.	72060006	CAP SCR .25-20X 1.50 HH GR5 Z	2	6
40.	72060206	CAP SCR .75-10X 2.00 HH GR8 Z	1	2
41.	72060639	SCR-MACH 10-24X 1.25 RDH	2	2
42.	72060893	CAP SCR .38-16X 3.25 HH GR5 Z	2	2
43.	72062000	NUT .25-20 HEX	3	2
44.	72062093	NUT # 8-32 HEX ZINC	2	2
45.	72062103	NUT .38-16 HEX NYLOCK	2	2
46.	72062104	NUT .25-20 HEX NYLOCK	12	2,6,7
47.	72062106	NUT 10-24 HEX NYLOCK	7	2
48.	72062108	NUT .50-20 HEX CENTER LOCKING	4	2
49.	72063001	WASHER .25 FLAT	20	2,7
50.	72063003	WASHER .38 FLAT	4	2
51.	72063010	WASHER 1.00 FLAT	1	2
52.	72063049	WASHER .25 LOCK	2	2
53.	72063116	WASHER .75 N FLAT H ASTM F436Z	1	2
54.	72063132	WASHER .50 FLAT ASTM F436	10	2,3
55.	72063142	WASHER-SS .25 LOCK TYPE 304	2	1
56.	72063166	WASHER-FLAT .25 R WRT 18-8 .62OD SS	2	1
57.	72063271	WASHER # 8 W FLAT ANSI B27.2Z	2	2
58.	72532359	ADPTR-M STR/M JIC 10 8	2	4
59.	72533613	ADPTR-M STR/M JIC 10 6	2	4
60.	72601330	CAP SCR .25-20X 1.00 HH SS	2	1

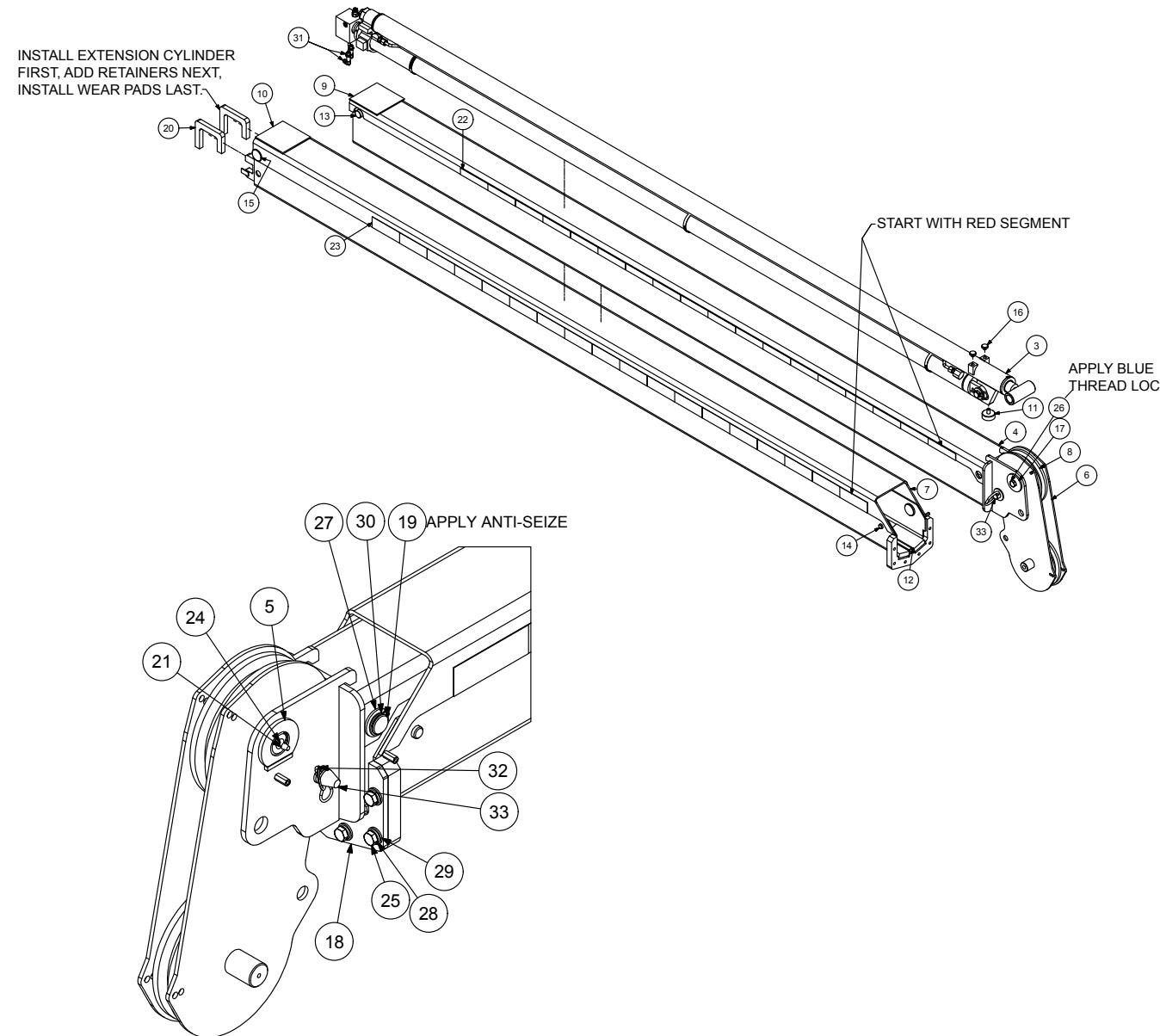
ITEM NO.	PART NO.	DESCRIPTION	QTY.	KIT NO.
61.	72601938	BOLT-EYE # 8-32X 1.125	1	2
62.	72601949	CAP SCR .50-13X 1.25 SH ZC	4	5
63.	72602085	BOLT-SHLDR .38X 1.25 (5/16 THDS) SS	1	2
64.	72602138	STUD .50-20X 2.25 DBL .50-13 GR8 STL	4	3
65.	72661543	PIN-QUICK 316-10QP	2	
66.	72661641	PIN-QUICK 5/16-2-1/16 ZINC YELLOW	1	2
67.	72661694	BRIDLE RING 1-1/12ID X 1/4-20	3	2
68.	73511391	MOTOR-HYD 101 1013 009	1	
69.	73734565	PIN-LOCK W/HANDLE 1.00 X 3.50 W/HAIRPIN	2	
70.	99906223	DWG-EXT BOOM ASM 12000	1	
71.	99906224	DWG-BASE ASM 12000	1	
72.	72602160	WASHER- LOCK .50 YZ	6	2
73.	72602158	CAP SCR .50-13X 1.75 HH GR5 YZ	6	2
74.	72601043	SCR-MACH .38-16X .75 FLH SOCZ	4	
75.	60145985	GEAR GUARD 12000 FOR KINEMATICS	1	

REV G CN1066

12000 - 30' Extension Boom Assembly (99906197)**99906197 PARTS LIST**

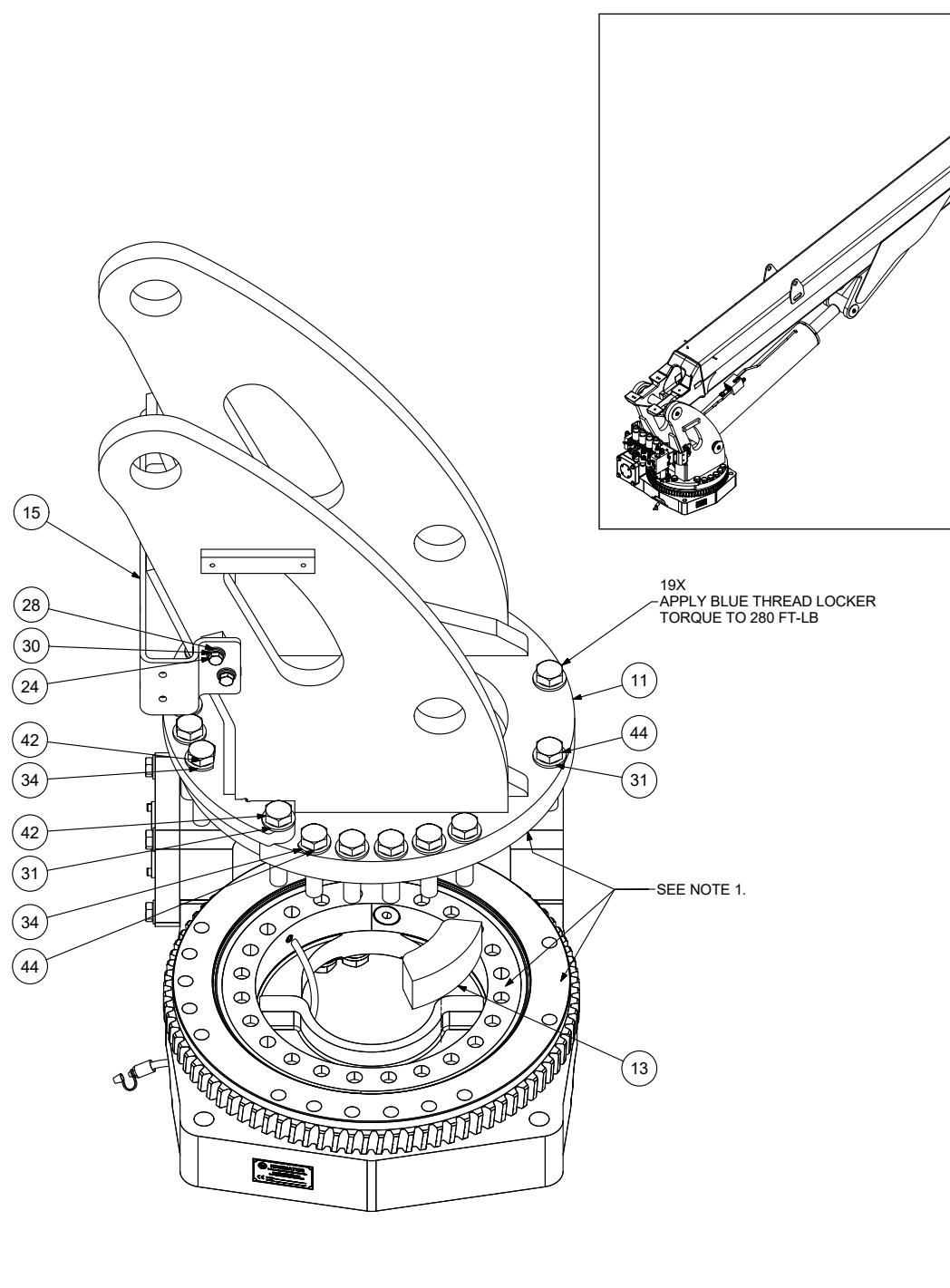
ITEM NO.	PART NO.	DESCRIPTION	QTY.	KIT NO.
1.	91725205	KIT-HRDW SERIES III	1	
2.	91727214	KIT-HYD 12000 SERIES III SP BG6	1	
3.	51727883	CYL-2.75/1.75 2.50/1.75 204.00S 144.69CC	1	
4.	52723024	WLDMNT-2ND STAGE EXT BOOM 7500/10000	1	
5.	52723030	PIN-TYPE M 1.50X 3.38	1	
6.	51727744	FLIP SHEAVE ASM 10000/12000	1	
7.	52727068	WLDMNT-1ST STAGE EXT BOOM 12000	1	
8.	60030255	SHEAVE- 9.00 POLYMER	1	
9.	60030336	WEAR PAD-RC .19 X 6.00 X 6.00	1	
10.	60030421	WEAR PAD-RC 0.25X 6.00X 6.00	1	
11.	60030422	WEAR PAD-RND SIII EXT CYL	1	
12.	60030423	WEAR PAD-RC 0.25X 6.00X 2.25	2	
13.	60030425	WEAR PAD-RND 0.44X 1.25X .50X .50	2	
14.	60030428	WEAR PAD-RND 0.25X 2.00X .75X .44	2	
15.	60030438	WEAR PAD-RND 0.12X 2.00X 1.00X 1.00	2	
16.	60030442	WEAR PAD-RND 0.25X 1.00X .50X .38	2	
17.	60109337	RETAINER PLT-PIN 3.00 DIA	1	
18.	60135668	CAP-FIRST STAGE	1	
19.	60135669	PIN-TYPE A 1.25X 6.89 (6.46)	1	
20.	60135833	RETAINER-1ST STAGE EXT CYL	2	
21.	70034382	CAP-GREASE PRO20 GC-RED	1	1
22.	7039044	TAPE-REFLECTIVE RED/SILVER 1.25X108.00	2	
23.	7039045	TAPE-REFLECTIVE RED/SILVER2.00X108.00	2	
24.	72053508	ZERK-NPT .12	1	1
25.	72060147	CAP SCR .62-11X 1.00 HH GR5 Z	1	1
26.	72063035	MACHY BUSHING 1.25X10 GA NR	2	1
27.	72063132	WASHER .50 FLAT ASTM F436	6	1
28.	72066129	RETAINING RING-EXT 1.25 HD	2	1
29.	72532700	ELBOW-M STR/90/M JIC XLG 6 6	2	2
30.	72661543	PIN-QUICK 316-10QP	1	
31.	73734565	PIN-LOCK W/HANDLE 1.00 X 3.50 W/HAIRPIN	1	
32.	72602158	CAP SCR .50-13X 1.75 HH GR5 YZ	6	1
33.	72602160	WASHER- LOCK .50 YZ	6	1

REV. C CN1077

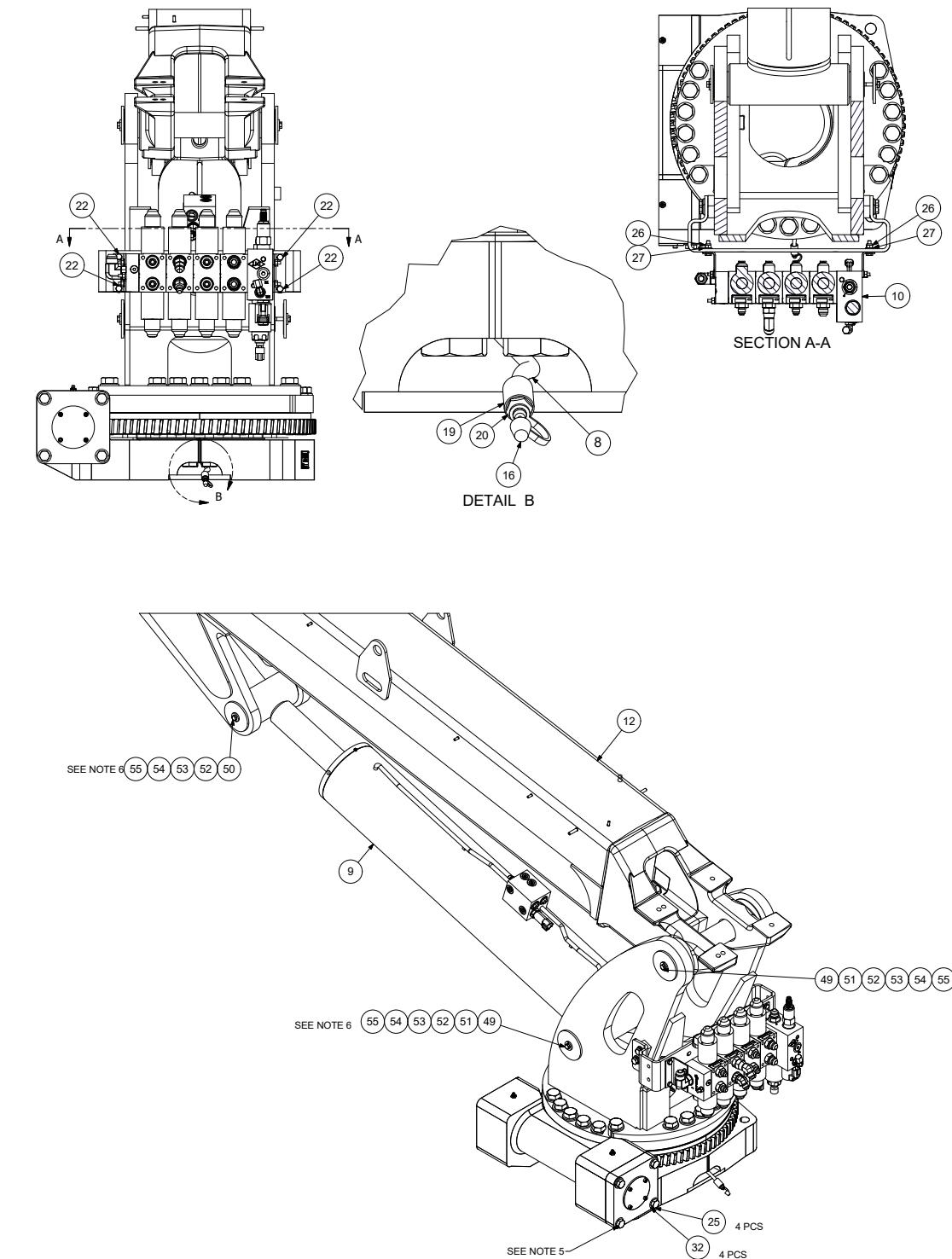
12000 - 30' Extension Boom Assembly (99906197)**99906197 PARTS LIST**

ITEM NO.	PART NO.	DESCRIPTION	KIT NO.	QTY.
1.	91725205	KIT-HRDW SERIES III		1
2.	91727214	KIT-HYD 12000 SERIES III SP BG6		1
7.	52727068	WLDMNT-1st STAGE EXT BOOM 12000		1
8.	60030255	SHEAVE- 9.00 POLYMER		1
9.	60030336	WEAR PAD-RC .19 X 6.00 X 6.00		1
10.	60030421	WEAR PAD-RC .25X 6.00X 6.00		1
11.	60030422	WEAR PAD-RND SIII EXT CYL		1
12.	60030423	WEAR PAD-RC .25X 6.00X 2.25	2	2
13.	60030425	WEAR PAD-RND .44X 1.25X .50X .50	2	2
14.	60030428	WEAR PAD-RND .25X 2.00X .75X .44	2	2
15.	60030438	WEAR PAD-RND .12X 2.00X 1.00X 1.00	2	2
16.	60030442	WEAR PAD-RND .25X 1.00X .50X .38	2	2
17.	60109337	RETAINER PLT-PIN 3.00 DIA		1
18.	60135668	CAP-FIRST STAGE		1
19.	60135669	PIN-TYPE A 1.25X 6.89 (6.46)		1
20.	60135833	RETAINER-1st STAGE EXT CY	1	2
21.	70034382	CAP-GREASE PRO20 GC-RED		1
22.	70399044	TAPE-REFLECTIVE RED/SILVER 1.25X108.00		2
23.	70399045	TAPE-REFLECTIVE RED/SILVER2.00X108.00		2
24.	72053508	ZERK-NPT .12	1	1
25.	72060093	CAP SCR .50-13X 1.50 HH GR5 Z	1	6
26.	72060147	CAP SCR .62-11X 1.00 HH GR5 Z	1	1
27.	72063035	MACHY BUSHING 1.25X10 GA NR	1	2
28.	72063053	WASHER .50 LOCK	1	6
29.	72063132	WASHER .50 FLAT ASTM F436	1	6
30.	72066129	RETAINING RING-EXT 1.25 HD	1	2
31.	72532700	ELBOW-M STR/90/M JIC XLG 6 6	2	2
32.	72661543	PIN-QUICK 316-10QP		1
33.	73734565	PIN-LOCK W/HANDLE 1.00 X 3.50 W/HAIRPIN		1

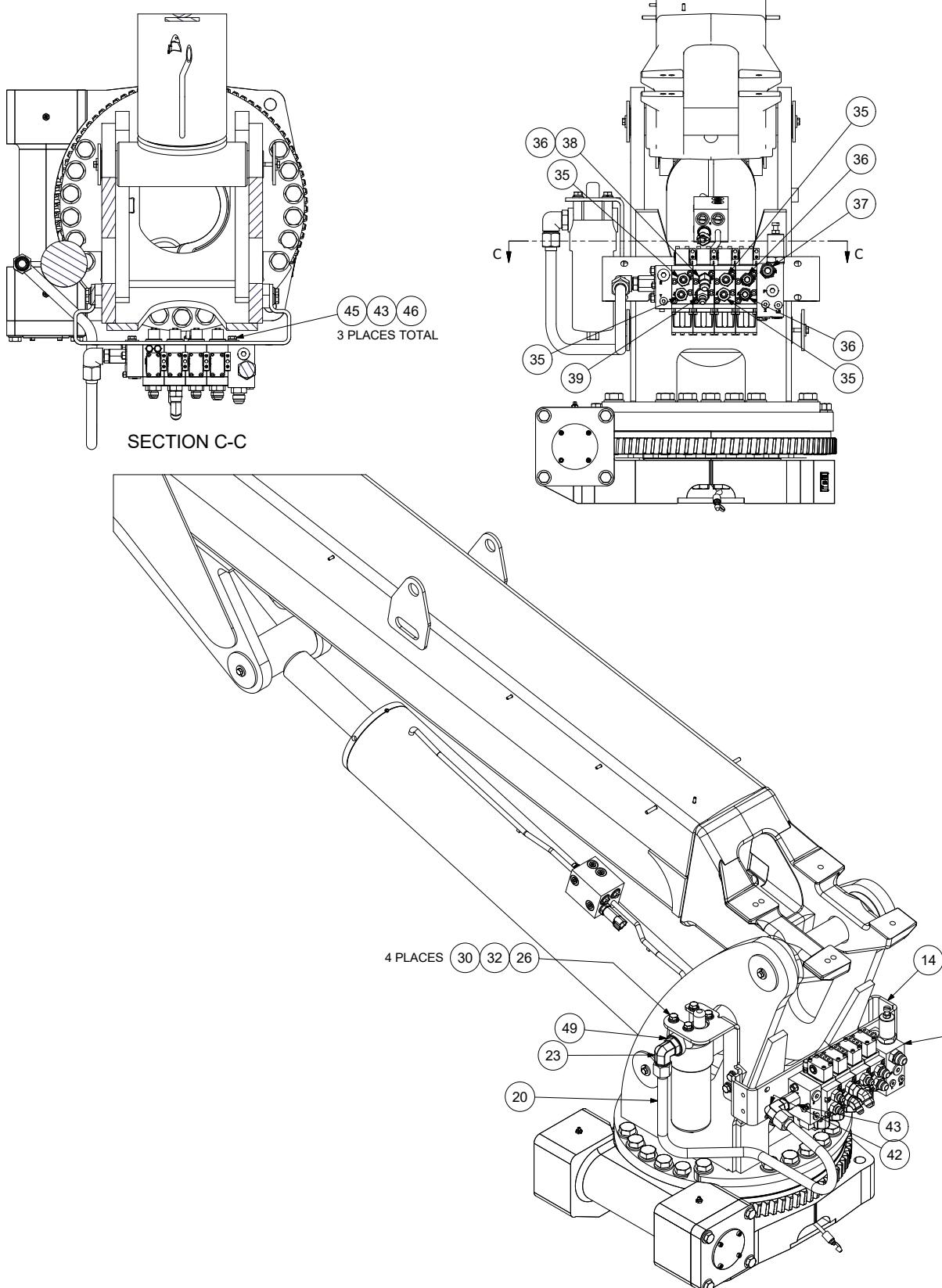
REV. INITIAL RELEASE

Base Assembly (99906224)**NOTES:**

- USE RUST PREVENTATIVE ON SLIDE STOP, BEARING RACE, BOTTOM OF MAST & TOP OF GEAR BEARING.
- APPLY BLUE THREAD LOCKER.
- APPLY GEAR GREASE TO GEAR TEETH.
- BASE AND MAST ASSEMBLY SHOWN AS ASSEMBLED.

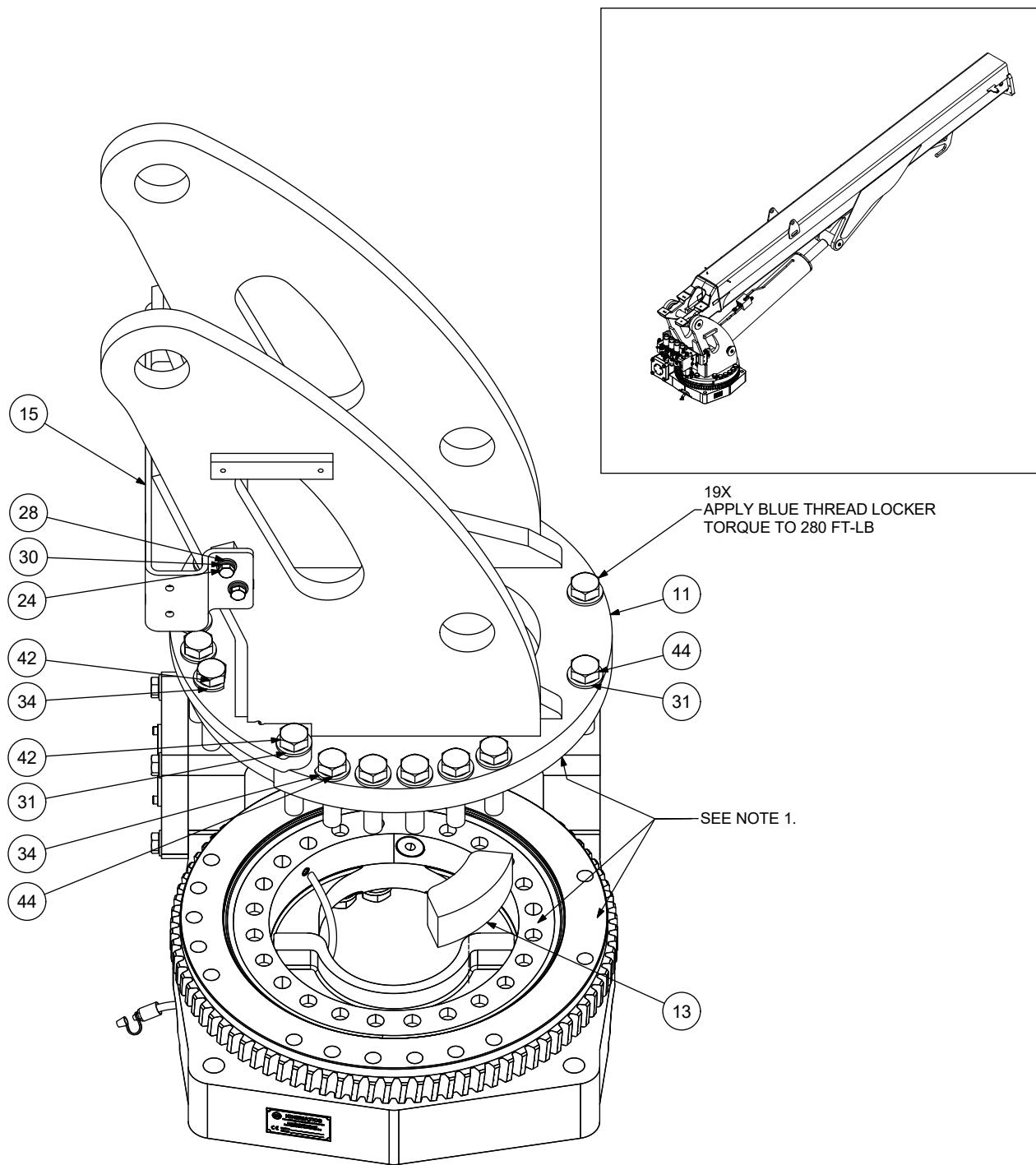
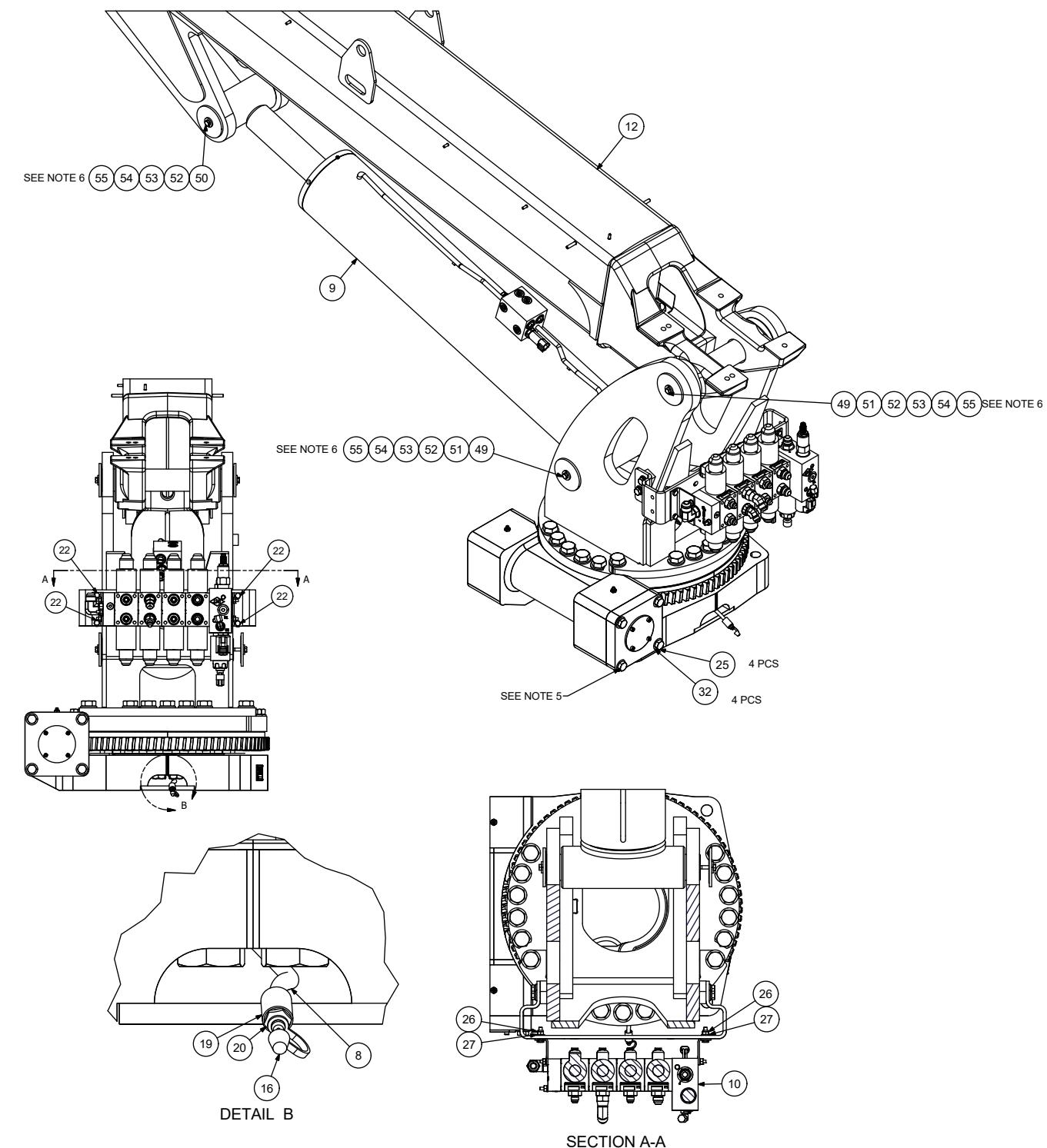
BASE ASSEMBLY (99906224) CONTINUED**NOTES:**

1. IF REQUIRED USE 72063038 OR 72063039 MACHY BUSHINGS BETWEEN MAST AND LOWER BOOM.
2. APPLY ANTI SIEZE TO BOOM AND CYLINDER MOUNTING PINS.
3. APPLY ANTI SIEZE TO BUSHINGS IN LOWER BOOM CASTING.
4. DO NOT ALLOW ANTI SIEZE TO COME IN CONTACT WITH CYLINDER BUSHINGS.
5. REPLACE GEAR ROTATOR SUPPLIED HARDWARE WITH 72060118 AND 725063132 AS SHOWN IN SHEET 2 ZONE B3.
6. TORQUE TO 60 LB-FT.

BASE ASSEMBLY (99906224) CONTINUED**99906224 PARTS LIST**

ITEM NO.	PART NO.	DESCRIPTION	QTY.	KIT NO.
1.	91723543	KIT-HRDW VB MNT HAWE	A/R	
2.	91725205	KIT-HRDW SERIES III	1	
3.	91725679	KIT-PRESSURE FILTER S3FP 12K 14K MAST	1	
4.	91727211	KIT-HRDW BASE & MAST 12000	1	
5.	91727214	KIT-HYD 12000 SERIES III SP BG6	A/R	
6.	91727230	KIT-HYD 12000 SERIES III FP BG6	A/R	
7.	93727759	KIT-HRDW 12000 KIN GEAR GUARD	1	
8.	51395121	HOSE-AA .13 X 13.50 OAL (2-2)	1	5&6
9.	51727889	CYL-5.75/2.50 27.86S 42.05CC	1	
10.	51727215	VALVE BANK ASM- SP 12000	A/R	
11.	52727810	MAST WLDMNT-12000	1	
12.	52727816	WLDMNT-LOWER BOOM 12000S	1	
13.	60120138	SLIDE-ROTATION STOP 3816	1	
14.	60251821	BRKT-MAST VB 12000 FP	A/R	
15.	60251822	BRKT-MAST VB 12000	A/R	
16.	70034382	CAP-GREASE PRO20 GC-RED	1	2
17.	71056704	GEAR ROTATOR-109000 FTLB 0.75 BOLTS KIN	1	
18.	71415692	TUBE ASM-PRESSURE FILTER S3FP 12K 14K MA	1	3
19.	72053301	COUPLING-GLV .12 SCH 40	1	2
20.	72053508	ZERK-NPT .12	1	2
21.	72053767	ELBOW-M STR/90/M JIC 12 12	1	3
22.	72060004	CAP SCR .25-20X 1.00 HH GR5 Z	4	2
23.	72060044	CAP SCR .38-16X .75 HH GR5 Z	4	2
24.	72060044	CAP SCR .38-16X .75 HH GR5 Z	4	3
25.	72060118	CAP SCR .50-13X 2.00 HH GR8 Z	4	7
26.	72062104	NUT .25-20 HEX NYLOCK	4	2
27.	72063001	WASHER .25 FLAT	4	2
28.	72063003	WASHER .38 FLAT	4	2
29.	72063051	WASHER-LOCK .38 ZINC	4	3
30.	72063051	WASHER .38 LOCK	4	2
31.	72063116	WASHER .75 N FLAT H ASTM F436Z	15	4
32.	72063132	WASHER .50 FLAT ASTM F436	4	7
33.	72063186	WASHER-FLAT .38 N H ASTM F436	4	3
34.	72063285	WASHER-FLAT .75 H ASTM F436 Z-CUT	4	4
35.	72532356	ADPTR-M STR/M JIC 8 6	4	6
36.	72532358	ADPTR-M STR/M JIC 8 8	3	6
37.	72532361	ADPTR-M STR/M JIC 8 10	1	6
38.	72532670	ELBOW-M JIC/45/F JIC 8 8	1	6
39.	72533583	ELBOW-M STR/45/M JIC 8 6	1	6
40.	72533623	ELBOW-M STR/90/M JIC 8 12	1	3
41.	72534898	O-RING EXTENDER 08-08 1.75	1	3
42.	72601629	CAP SCR .75-10X 4.00 HH GR8 Z	7	4
43.	72601797	WASHER-LOCK 8MM	3	1
44.	72601817	CAP SCR .75-10X 3.25 HH GR8 Z	12	4
45.	72602052	CAP SCR M 8-1.25X 16 HHZ	3	1
46.	72602065	WASHER-FLAT M 8	3	1
47.	73052156	FILTER-PRES 4000PSI 25GPM 10MIC -12	1	3
48.	73734727	VALVE BANK-4-SECT PSL2 W OC INLT	A/R	
49.	70190007	PIN-TYPE AB 2.00 X 11.88 SS	2	
50.	70190008	PIN-TYPE AB 2.00 X 7.63 SS	1	
51.	70034581	BEARING MRP 2.00X2.25X1.00 POLYGON	4	
52.	70190004	RETAINER PLT-PIN 0.50 X 3.00 DIA SS	6	
53.	72063144	WASHER-LOCK 1/2 SS	6	
54.	72602161	CAP SCR HH 1/4-20 UNC - 1.75 SS 18-8	6	
55.	60030590	WEAR PAD-RND 0.56X 2.44X .03	6	

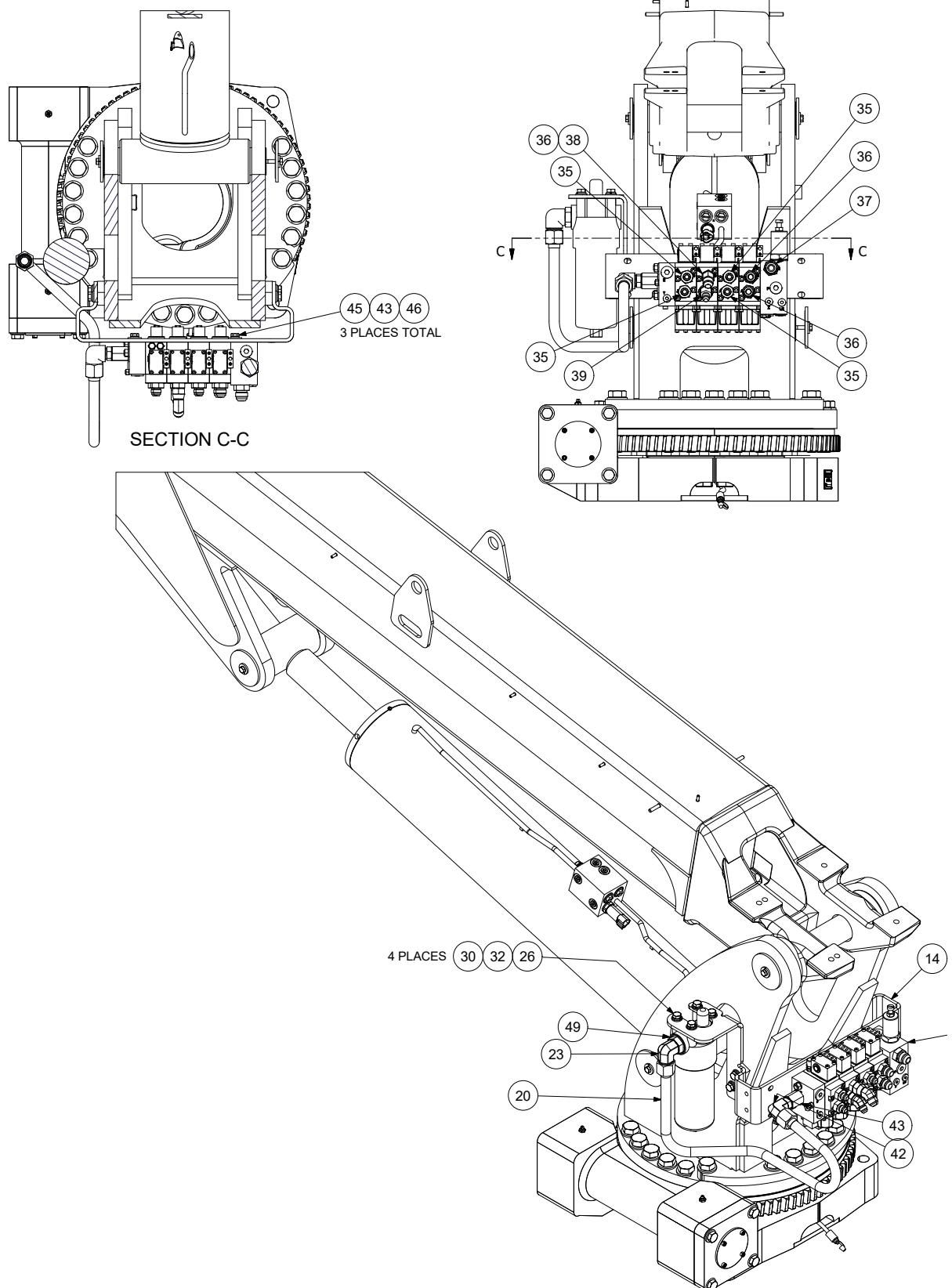
REV. G CN1066

Base Assembly (99906224) Effective After S/N: 12000181027**99906224-CONTINUED****NOTES:**

1. IF REQUIRED USE 72063038 OR 72063039 MACHY BUSHINGS BETWEEN MAST AND LOWER BOOM.
2. APPLY ANTI SIEZE TO BOOM AND CYLINDER MOUNTING PINS.
3. APPLY ANTI SIEZE TO BUSHINGS IN LOWER BOOM CASTING.
4. DO NOT ALLOW ANTI SIEZE TO COME IN CONTACT WITH CYLINDER BUSHINGS.
5. REPLACE GEAR ROTATOR SUPPLIED HARDWARE WITH 72060118 AND 725063132 AS SHOWN IN SHEET 2 ZONE B3
6. TORQUE TO 60 LB-FT.

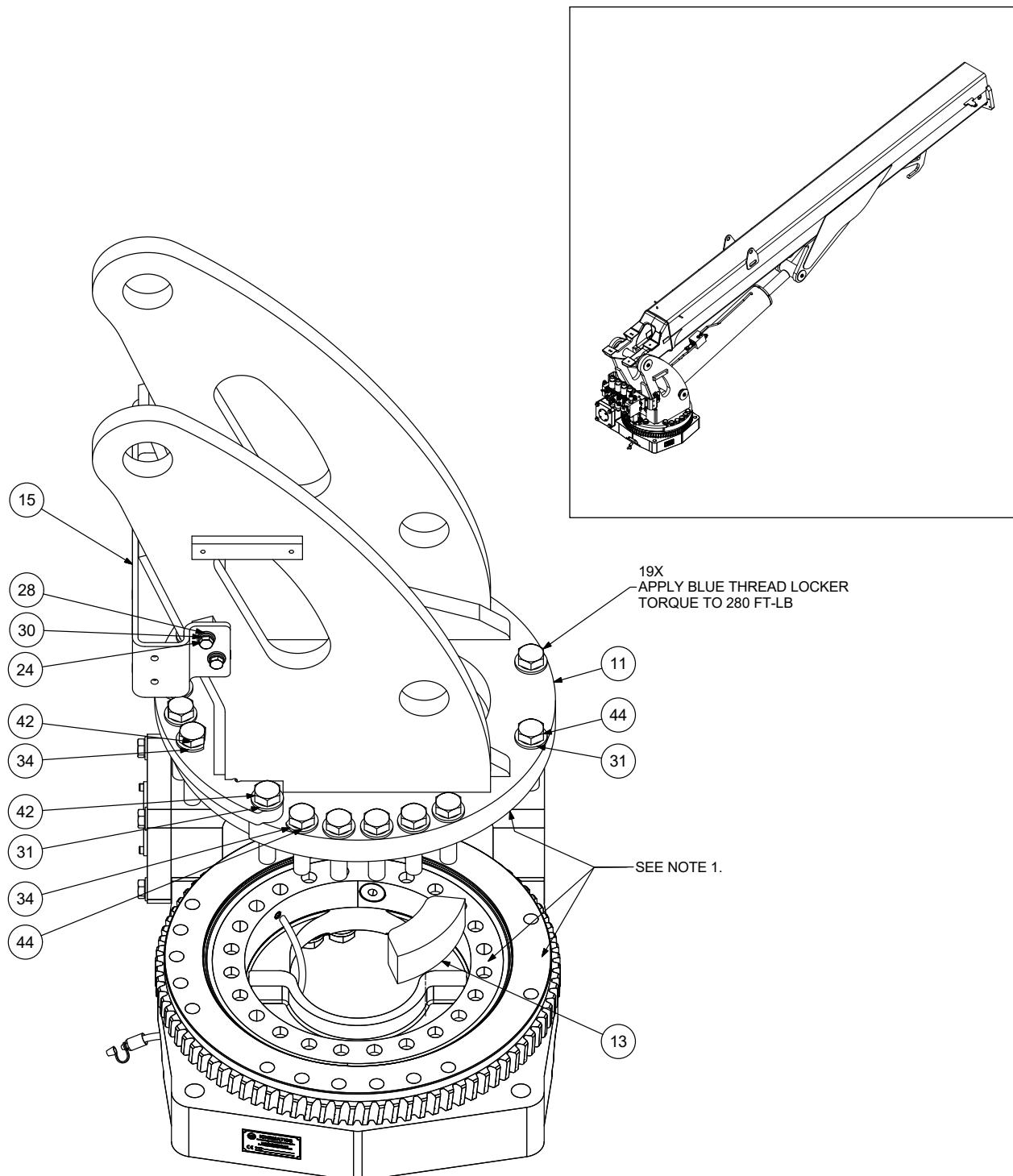
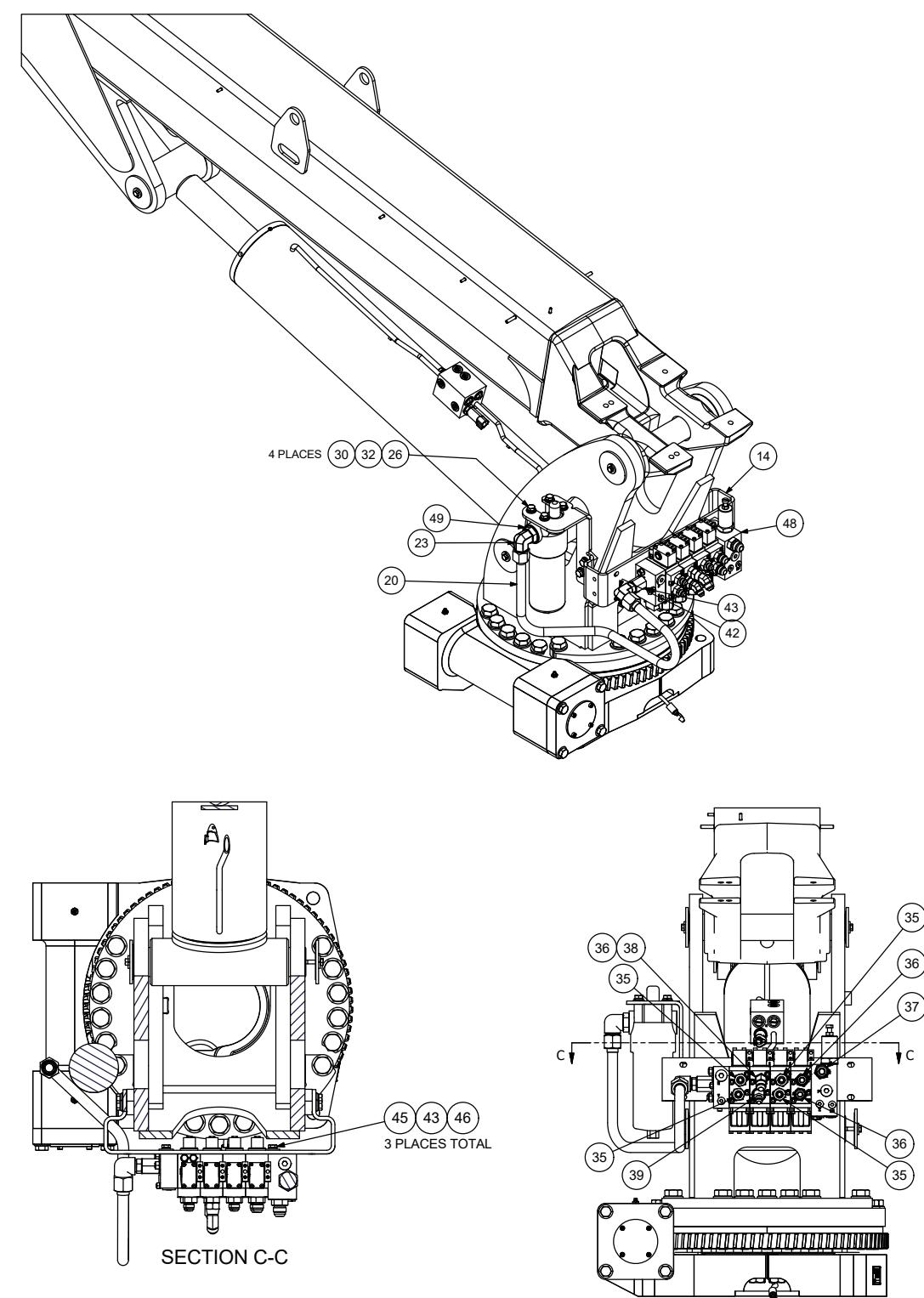
NOTES:

1. USE RUST PREVENTATIVE ON SLIDE STOP, BEARING RACE, BOTTOM OF MAST, AND TOP OF GEAR BEARING.
2. APPLY BLUE THREAD LOCKER.
3. APPLY GEAR GREASE TO GEAR TEETH.
4. BASE AND MAST ASSEMBLY SHOWN AS ASSEMBLED.

99906224 CONTINUED**99906224 PARTS LIST**

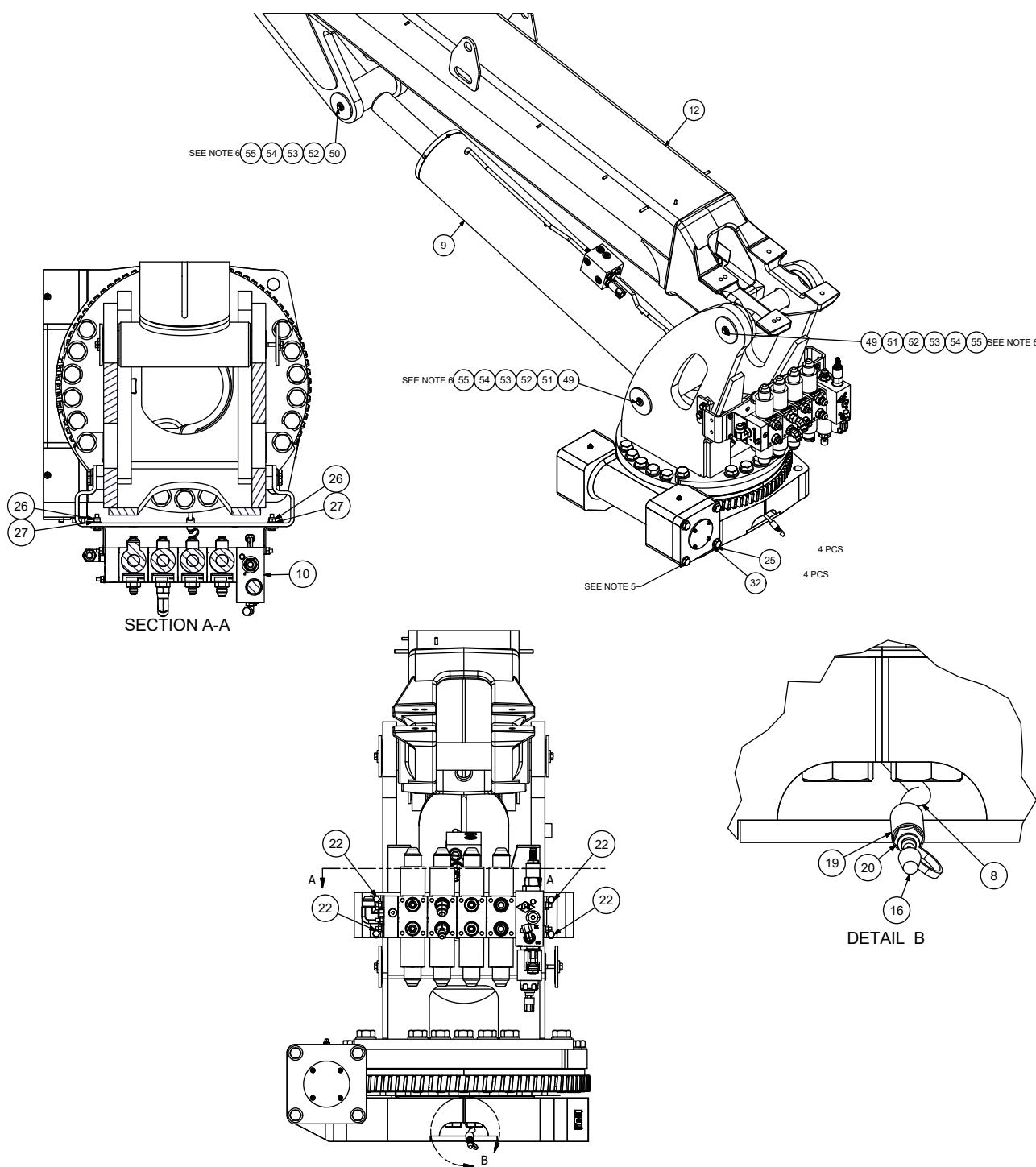
ITEM NO.	PART NO.	DESCRIPTION	QTY.	KIT.
1.	911723543	KIT-HRDW VB MNT HAWE	A/R	
2.	911725205	KIT-HRDW SERIES III	1	
3.	911725679	KIT-PRESSURE FILTER S3FP 12K 14K MAST	1	
4.	911727211	KIT-HRDW BASE & MAST 12000	1	
5.	911727214	KIT-HYD 12000 SERIES III SP BG6	A/R	
6.	911727230	KIT-HYD 12000 SERIES III FP BG6	A/R	
7.	93727759	KIT-HRDW 12000 KIN GEAR GUARD	1	
8.	51395121	HOSE-AA .13 X 13.50 OAL (2-2)	1	5&6
9.	51727889	CYL-5.75/2.50 27.86S 42.05CC	1	
10.	51727215	VALVE BANK ASM- SP 12000	A/R	
11.	52727810	MAST WLDMNT-12000	1	
12.	52727816	WLDMNT-LOWER BOOM 12000S	1	
13.	60120138	SLIDE-ROTATION STOP 3816	1	
14.	60251821	BRKT-MAST VB 12000 FP	A/R	
15.	60251822	BRKT-MAST VB 12000	A/R	
16.	70034382	CAP-GREASE PRO20 GC-RED	1	2
17.	71056704	GEAR ROTATOR-109000 FTLB 0.75 BOLTS KIN	1	
18.	71415692	TUBE ASM-PRESSURE FILTER S3FP 12K 14K MA	1	3
19.	72053301	COUPLING-GLV .12 SCH 40	1	2
20.	72053508	ZERK-NPT .12	1	2
21.	72053767	ELBOW-M STR/90/M JIC 12 12	1	3
22.	72060004	CAP SCR .25-20X 1.00 HH GR5 Z	4	2
23.	72060044	CAP SCR .38-16X .75 HH GR5 Z	4	2
24.	72060044	CAP SCR .38-16X .75 HH GR5 Z	4	3
25.	72060118	CAP SCR .50-13X 2.00 HH GR8 Z	4	7
26.	72062104	NUT .25-20 HEX NYLOCK	4	2
27.	72063001	WASHER .25 FLAT	4	2
28.	72063003	WASHER .38 FLAT	4	2
29.	72063051	WASHER-LOCK .38 ZINC	4	3
30.	72063051	WASHER .38 LOCK	4	2
31.	72063116	WASHER .75 N FLAT H ASTM F436Z	15	4
32.	72063132	WASHER .50 FLAT ASTM F436	4	7
33.	72063186	WASHER-FLAT .38 N H ASTM F436	4	3
34.	72063285	WASHER-FLAT .75 H ASTM F436 Z-CUT	4	4
35.	72532356	ADPTR-M STR/M JIC 8 6	4	6
36.	72532358	ADPTR-M STR/M JIC 8 8	3	6
37.	72532361	ADPTR-M STR/M JIC 8 10	1	6
38.	72532670	ELBOW-M JIC/45/F JIC 8 8	1	6
39.	72533583	ELBOW-M STR/45/M JIC 8 6	1	6
40.	72533623	ELBOW-M STR/90/M JIC 8 12	1	3
41.	72534898	O-RING EXTENDER 08-08 1.75	1	3
42.	72601629	CAP SCR .75-10X 4.00 HH GR8 Z	7	4
43.	72601797	WASHER-LOCK 8MM	3	1
44.	72601817	CAP SCR .75-10X 3.25 HH GR8 Z	12	4
45.	72602052	CAP SCR M 8-1.25X 16 HHZ	3	1
46.	72602065	WASHER-FLAT M 8	3	1
47.	73052156	FILTER-PRES 4000PSI 25GPM 10MIC -12	1	3
48.	73734727	VALVE BANK-4-SECT PSL2 W OC INTL	A/R	
49.	70190007	PIN-TYPE AB 2.00 X 11.88 SS	2	
50.	70190008	PIN-TYPE AB 2.00 X 7.63 SS	1	
51.	70034581	BEARING MRP 2.00X2.25X1.00 POLYGON	4	
52.	70190004	RETAINER PLT-PIN 0.50 X 3.00 DIA SS	6	
53.	72063144	WASHER-LOCK 1/2 SS	6	
54.	72602161	CAP SCR HH 1/4-20 UNC - 1.75 SS 18-8	6	
55.	60030590	WEAR PAD-RND 0.56X 2.44X .03	6	

REV. G CN1009-3

Base Assembly (99906224) Effective After S/N: 12000181027

99906224 - CONTINUED
**NOTE:**

1. USE RUST PREVENTATIVE ON SLIDE STOP, BEARING RACE, BOTTOM OF MAST & TOP OF GEAR BEARING.
2. APPLY BLUE THREAD LOCKER.
3. APPLY GEAR GREASE TO GEAR TEETH.
4. BASE AND MAST ASSEMBLY SHOWN AS ASSEMBLED.

99906224 - CONTINUED

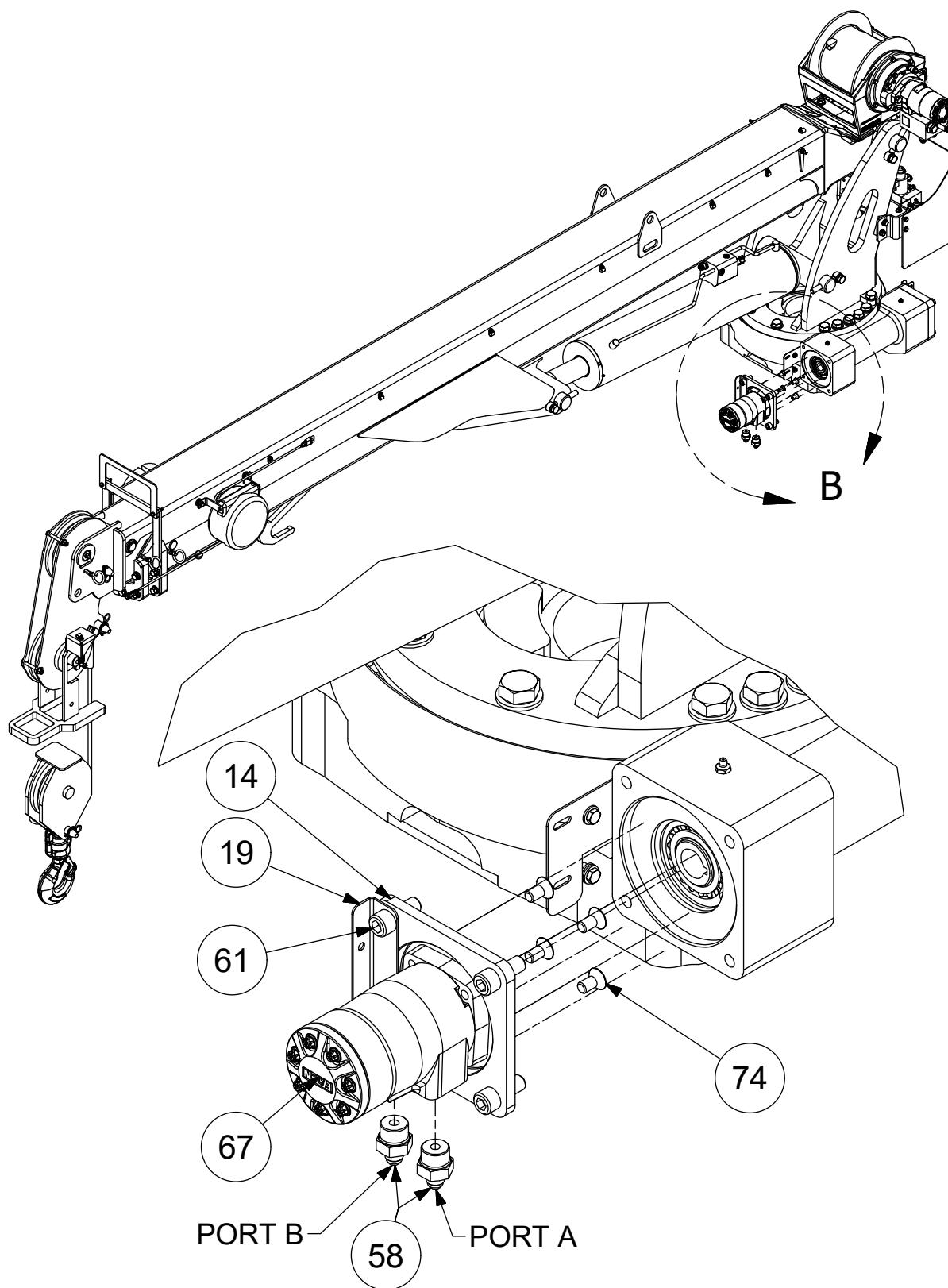
**NOTE:**

1. IF REQUIRED USE 72063038 OR 72063039 MACHY BUSHINGS BETWEEN MAST AND LOWER BOOM.
2. APPLY ANTI SIEZE TO BOOM AND CYLINDER MOUNTING PINS.
3. APPLY ANTI SIEZE TO BUSHINGS IN LOWER BOOM CASTING.
4. DO NOT ALLOW ANTI SIEZE TO COME IN CONTACT WITH CYLINDER BUSHINGS.
5. REPLACE GEAR ROTATOR SUPPLIED HARDWARE WITH 72060118 AND 725363132 AS SHOWN IN SHEET 2 ZONE B3.
6. TORQUE TO 60 LB-FT.

99906224 PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	QTY.	KIT NO.
1.	91723543	KIT-HRDW VB MNT HAWE	A/R	
2.	91725205	KIT-HRDW SERIES III	1	
3.	91725679	KIT-PRESSURE FILTER S3FP 12K 14K MAST	1	
4.	91727211	KIT-HRDW BASE & MAST 12000	1	
5.	91727214	KIT-HYD 12000 SERIES III SP BG6	A/R	
6.	91727230	KIT-HYD 12000 SERIES III FP BG6	A/R	
7.	93727759	KIT-HRDW 12000 KIN GEAR GUARD	1	
8.	51395121	HOSE-AA .13 X 13.50 OAL (2-2)	1	5&6
9.	51727889	CYL-5.75/2.50 27.86S 42.05CC	1	
10.	51727215	VALVE BANK ASM- SP 12000	A/R	
11.	52727810	MAST WLDMNT-12000	1	
12.	52727816	WLDMNT-LOWER BOOM 12000S	1	
13.	60120138	SLIDE-ROTATION STOP 3816	1	
14.	60251821	BRKT-MAST VB 12000 FP	A/R	
15.	60251822	BRKT-MAST VB 12000	A/R	
16.	70034382	CAP-GREASE PRO20 GC-RED	1	2
17.	71056704	GEAR ROTATOR-10900 FTLB 0.75 BOLTS KIN	1	
18.	71415692	TUBE ASM-PRESSURE FILTER S3FP 12K 14K MA	1	3
19.	72053301	COUPLING-GLV .12 SCH 40	1	2
20.	72053508	ZERK-NPT .12	1	2
21.	72053767	ELBOW-M STR/90/M JIC 12 12	1	3
22.	72060004	CAP SCR .25-20X 1.00 HH GR5 Z	4	2
23.	72060044	CAP SCR .38-16X .75 HH GR5 Z	4	2
24.	72060044	CAP SCR .38-16X .75 HH GR5 Z	4	3
25.	72060118	CAP SCR .50-13X 2.00 HH GR8 Z	4	7
26.	72062104	NUT .25-20 HEX NYLOCK	4	2
27.	72063001	WASHER .25 FLAT	4	2
28.	72063003	WASHER .38 FLAT	4	2
29.	72063051	WASHER-LOCK .38 ZINC	4	3
30.	72063051	WASHER .38 LOCK	4	2
31.	72063116	WASHER .75 N FLAT H ASTM F436Z	15	4
32.	72063132	WASHER .50 FLAT ASTM F436	4	7
33.	72063186	WASHER-FLAT .38 N H ASTM F436	4	3
34.	72063285	WASHER-FLAT .75 H ASTM F436 Z-CUT	4	4
35.	72532356	ADPTR-M STR/M JIC 8 6	4	6
36.	72532358	ADPTR-M STR/M JIC 8 8	3	6
37.	72532361	ADPTR-M STR/M JIC 8 10	1	6
38.	72532670	ELBOW-M JIC/45/F JIC 8 8	1	6
39.	72533583	ELBOW-M STR/45/M JIC 8 6	1	6
40.	72533623	ELBOW-M STR/90/M JIC 8 12	1	3
41.	72534898	O-RING EXTENDER 08-08 1.75	1	3
42.	72601629	CAP SCR .75-10X 4.00 HH GR8 Z	7	4
43.	72601797	WASHER-LOCK 8MM	3	1
44.	72601817	CAP SCR .75-10X 3.25 HH GR8 Z	12	4
45.	72602052	CAP SCR M 8-1.25X 16 HHZ	3	1
46.	72602065	WASHER-FLAT M 8	3	1
47.	73052156	FILTER-PRES 4000PSI 25GPM 10MIC -12	1	3
48.	73734727	VALVE BANK-4-SECT PSL2 W OC INLT	A/R	
49.	70190007	PIN-TYPE AB 2.00 X 11.88 SS	2	
50.	70190008	PIN-TYPE AB 2.00 X 7.63 SS	1	
51.	70034581	BEARING MRP 2.00X2.25X1.00 POLYGON	4	
52.	70190004	RETAINER PLT-PIN 0.50 X 3.00 DIA SS	6	
53.	72063144	WASHER-LOCK 1/2 SS	6	
54.	72602161	CAP SCR HH 1/4-20 UNC - 1.75 SS 18-8	6	
55.	60030590	WEAR PAD-RND 0.56X 2.44X .03	6	

REV. G CN1009-3

12000 - 25' Crane Assembly (99906225)**DETAIL B****99906225 PARTS LIST**

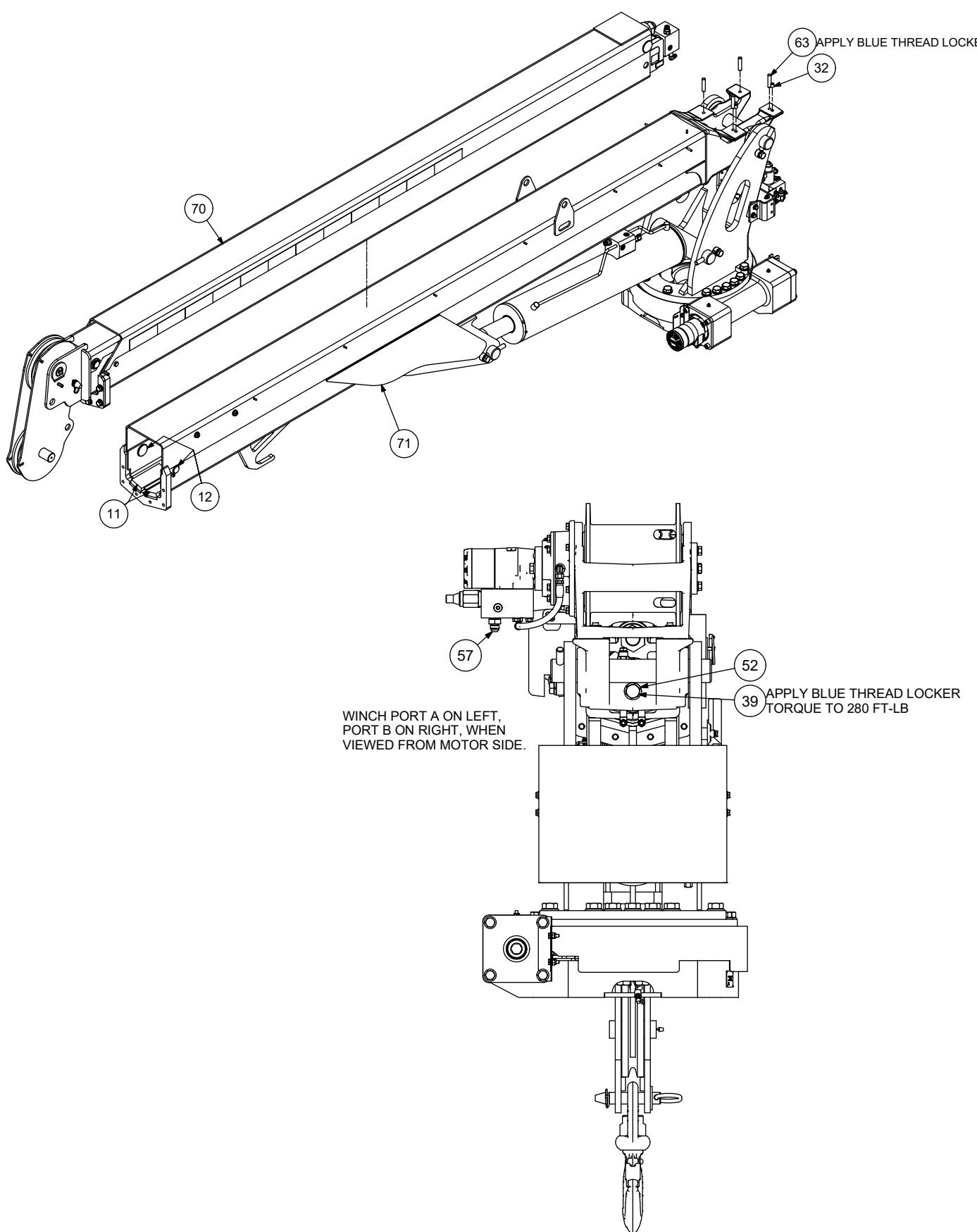
ITEM NO.	PART NO.	DESCRIPTION	QTY.	KIT NO.
4.	91727214	KIT-HYD 12000 SERIES III SP	1	
5.	91727246	KIT-HRDW SIII MOTOR MNT	1	
14.	60145972	FLANGE ADAPTOR KINEMATICS	1	
19.	60144346	BRKT-GEAR GUARD 12000	2	
58.	72533613	ADPTR-M STR/M JIC 10 6	2	4
61.	72601949	CAP SCR .50-13X 1.25 SH ZC	4	5
67.	73511391	MOTOR-HYD 101 1013 009	1	
74.	72601043	SCR-MACH .38-16X .75 FLH SOCZ	4	

REV. D-S CN880-2 EFFECTIVE AFTER S/N: 12000181027

NOTE:

1. INSTALL GASKET SUPPLIED WITH ROTATOR.
2. APPLY BLUE THREAD LOCKER.

(99906225-1 EFFECTIVITY AFTER S/N: 12000181027

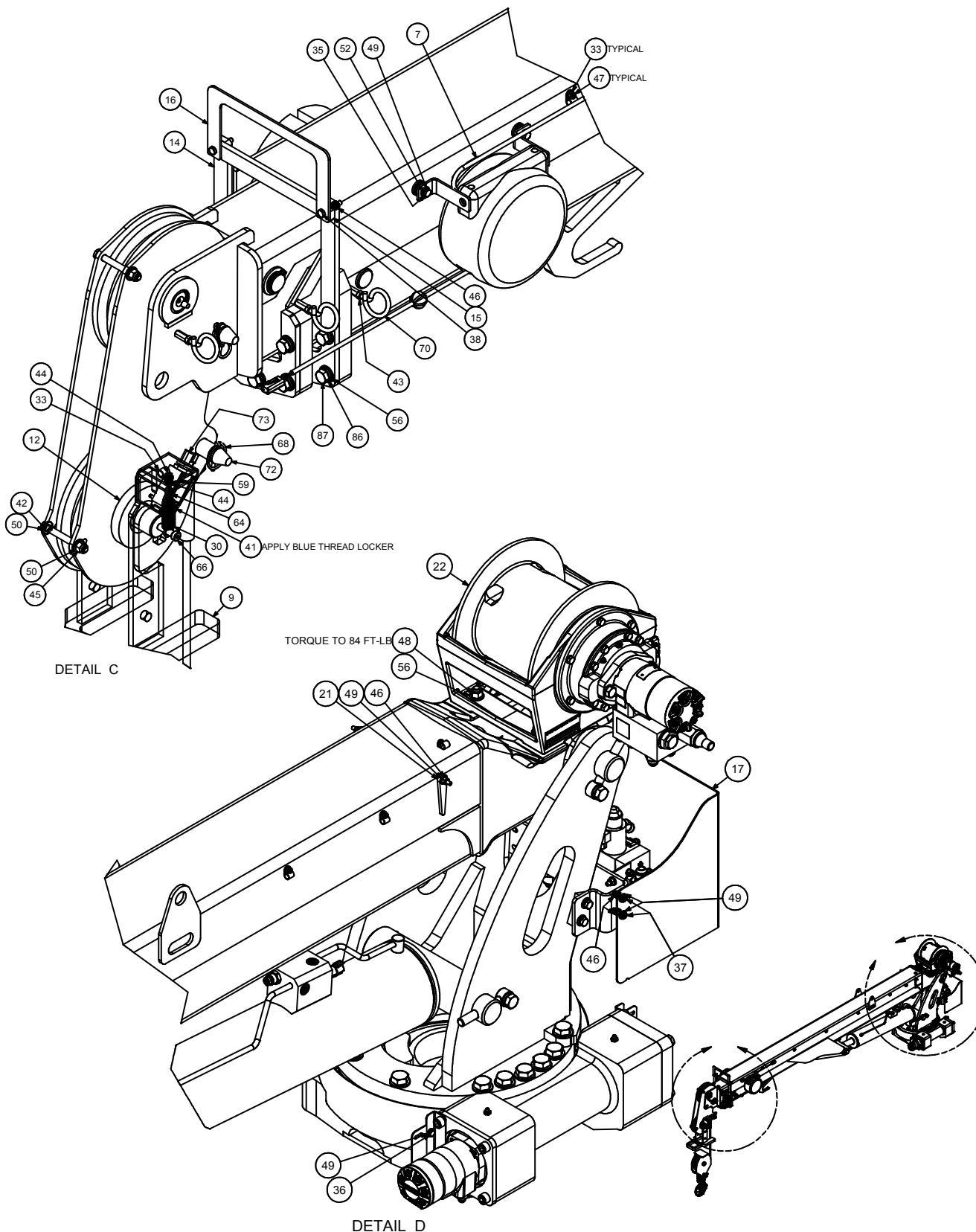


99906225-1 PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	QTY.	KIT NO.
2.	91725205	KIT-HRDW SERIES III	1	
3.	91726834	KIT-HRDW WINCH MNT	1	
4.	91727214	KIT-HYD 12000 SERIES III SP	1	
11.	60030423	WEAR PAD-RC 0.25X 6.00X 2.25	2	
12.	60030427	WEAR PAD-RND 0.19X 2.00X 1.25X .44	2	
32.	72034479	PLUG-PLSTC .50-13X .50 UNC-2B	2	2
39.	72060206	CAP SCR .75-10X 2.00 HH GR8 Z	1	2
52.	72063116	WASHER .75 N FLAT H ASTMF436Z	1	2
57.	72532359	ADPTR-M STR/M JIC 10 8	2	4
63.	72602138	STUD .50-20X 2.25 DBL .50-13 GR8 STL	4	3
70.	99906223	DWG-EXT BOOM ASM 12000	1	
71.	99906224	DWG-BASE ASM 12000	1	

REV. D-S CN880-2 EFFECTIVE AFTER S/N: 12000181027

99906225-2 EFFECTIVE AFTER S/N 12000181027

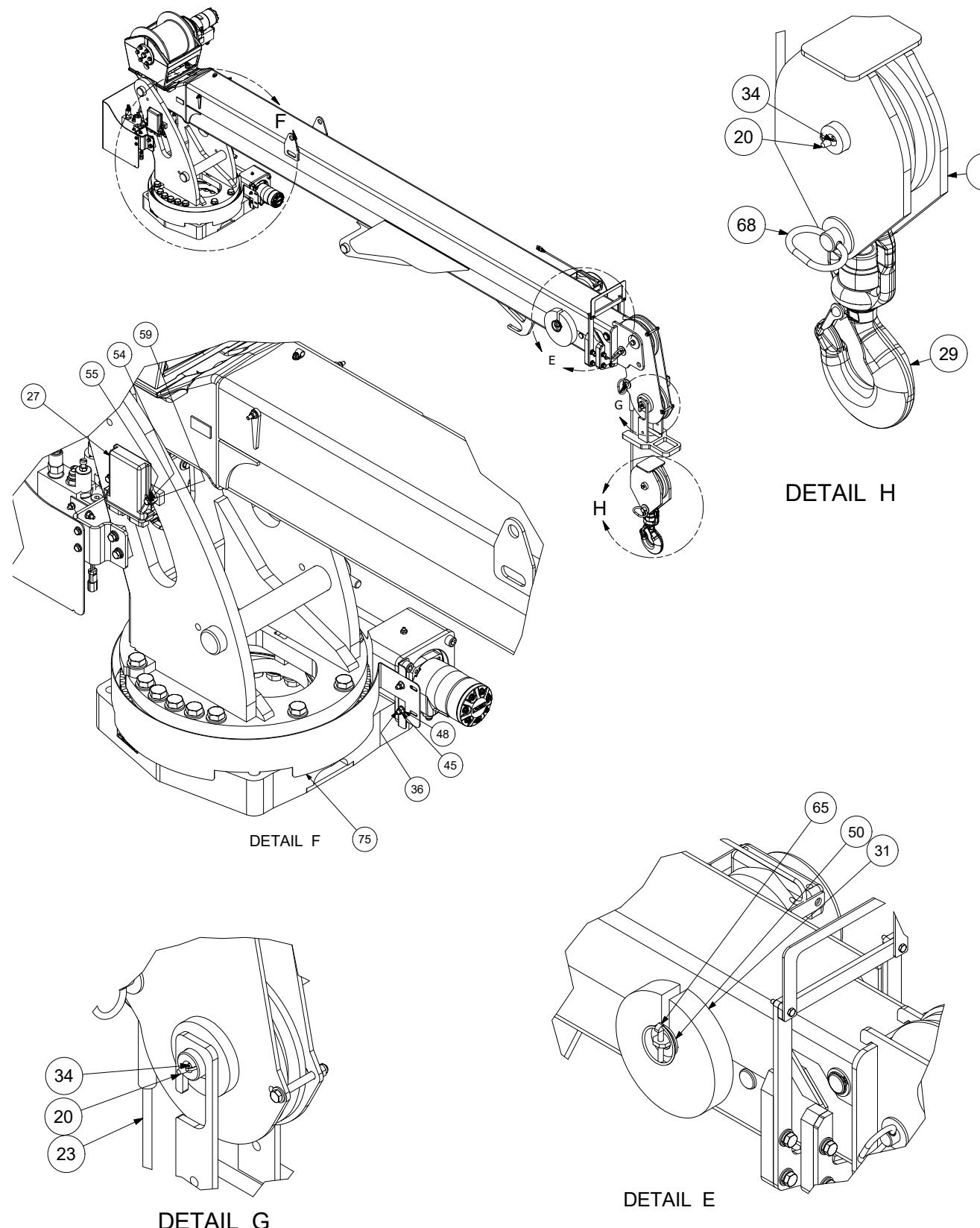


99906225-2 PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	QTY.	KIT NO.
1.	91723583	KIT-HRDW SIII RADIO CONTROLS	1	
2.	91725205	KIT-HRDW SERIES III	1	
3.	91726834	KIT-HRDW WINCH MNT	1	
4.	91727214	KIT-HYD 12000 SERIES III SP	1	
5.	91727246	KIT-HRDW SIII MOTOR MNT	1	
6.	93725207	KIT-CABLE GUIDE	1	
7.	93727759	KIT-HRDW 12000 KIN GEAR GUARD	1	
8.	51723610	CORD REEL ASM- 30FT W/PACKARD W/DEUTSCH	1	
10.	52725155	WLDMT- A2B BRKT	1	
13.	60030486	SPACER-A2B BRACKET	2	
15.	60140899	CAP-LOWER BOOM CABLE GUIDE 9500-14000	1	6
16.	60140935	GUIDE - CABLE WEAR (WIDE)	1	6
17.	60140938	BRKT - CABLE GUIDE (WIDE)	1	6
18.	60144215	COVER-VALVE BANK SIII	1	
21.	70034490	PLATE-ANGLE PLASTIC 3.50"	2	
22.	70571196	WINCH-PLANETARY 7000 LB LINE PULL	1	
30.	71413185	SPRING-.105WIRE 0.75OD 2.875 LG	1	2
33.	72034485	CLAMP-PLASTIC 1/4" CABLE	8	
35.	72060000	CAP SCR .25-20X .50 HH GR5 Z	2	2
36.	72060002	CAP SCR .25-20X .75 HH GR5 Z	4	7
37.	72060004	CAP SCR .25-20X 1.00 HH GR5 Z	4	2
38.	72060006	CAP SCR .25-20X 1.50 HH GR5 Z	2	6
40.	72060639	SCR-MACH 10-24X 1.25 RDH	2	2
41.	72060893	CAP SCR .38-16X 3.25 HH GR5 Z	2	2
42.	72062000	NUT .25-20 HEX	3	2
43.	72062093	NUT # 8-32 HEX ZINC	2	2
44.	72062103	NUT .38-16 HEX NYLOCK	2	2
45.	72062104	NUT .25-20 HEX NYLOCK	12	2,6,7
46.	72062106	NUT 10-24 HEX NYLOCK	7	2
47.	72062108	NUT .50-20 HEX CENTER LOCKING	4	2
48.	72063001	WASHER .25 FLAT	20	2,7
49.	72063003	WASHER .38 FLAT	4	2
51.	72063049	WASHER .25 LOCK	2	2
53.	72063132	WASHER .50 FLAT ASTM F436	10	2,3
56.	72063271	WASHER # 8 W FLAT ANSI B27.2Z	2	2
60.	72601938	BOLT-EYE # 8-32X 1.125	1	2
62.	72602085	BOLT-SHLDR .38X 1.25 (5/16 THDS) SS	1	2
64.	72661543	PIN-QUICK 316-10QP	2	
66.	72661694	BRIDLE RING 1-1/12ID X 1/4-20	3	2
68.	73734565	PIN-LOCK W/HANDLE 1.00 X 3.50 W/HAIRPIN	2	
69.	77041863	SWITCH-LIMIT DT04-4P CONN	1	
72.	72602160	WASHER- LOCK .50 YZ	6	2
73.	72602158	CAP SCR .50-13X 1.75 HH GR5 YZ	6	2

REV. D-S CN880-2 EFFECTIVE AFTER S/N: 12000181027

99906225-3 EFFECTIVE AFTER S/N 12000181027



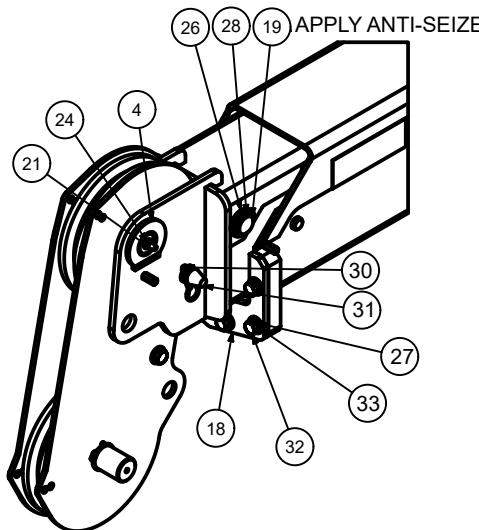
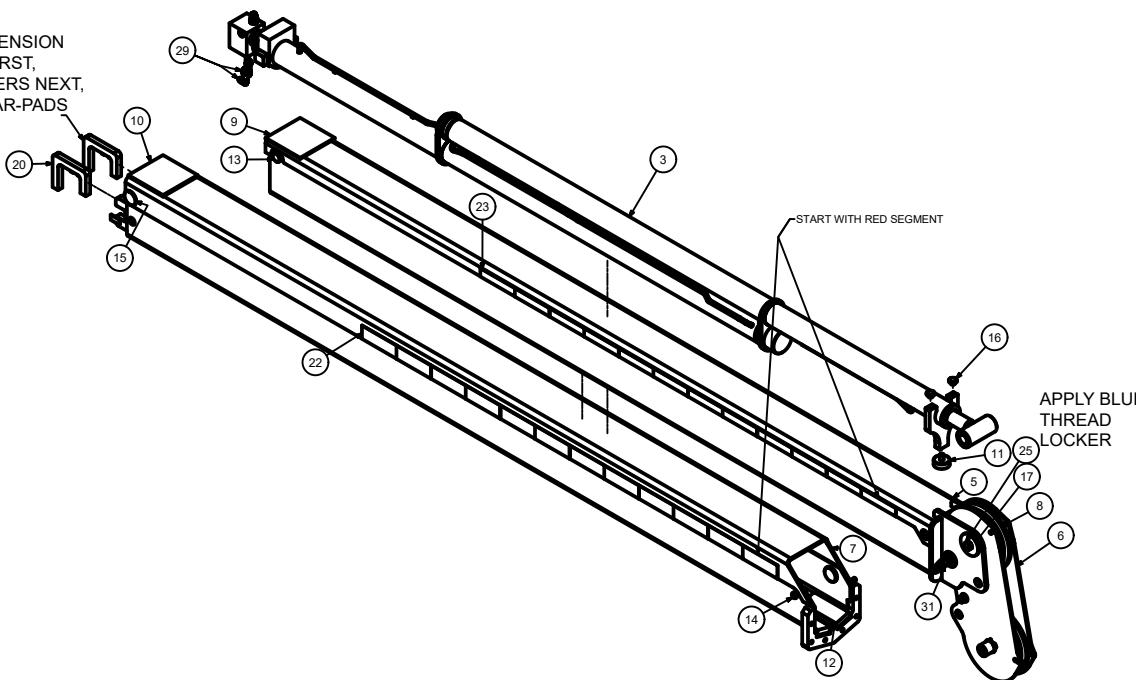
99906225-3 PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	QTY.	KIT NO.
1.	91723583	KIT-HRDW SIII RADIO CONTROLS	1	
2.	91725205	KIT-HRDW SERIES III	1	
3.	91726834	KIT-HRDW WINCH MNT	1	
4.	91727214	KIT-HYD 12000 SERIES III SP	1	
5.	91727246	KIT-HRDW SIII MOTOR MNT	1	
6.	93725207	KIT-CABLE GUIDE	1	
7.	93727759	KIT-HRDW 12000 KIN GEAR GUARD	1	
8.	51723610	CORD REEL ASM- 30FT W/PACKARD W/DEUTSCH	1	
9.	52725066	WLDMT- SNATCH BLOCK 9500/10000	1	
20.	70034382	CAP-GREASE PRO20 GC-RED	2	2
23.	70580225	WIRE ROPE ASM - .44 (6X25) X 100 FT RH LAY XXIPS	1	
29.	70735082	HOOK-SWVL 7T BBRG	1	
31.	71414205	PLATE-SINGLE SHEAVE (20#) .50 WIRE ROPE	1	
34.	72053508	ZERK-NPT .12	2	2
36.	72060002	CAP SCR .25-20X .75 HH GR5 Z	4	7
45.	72062104	NUT .25-20 HEX NYLOCK	12	2,6,7
48.	72063001	WASHER .25 FLAT	20	2,7
50.	72063010	WASHER 1.00 FLAT	1	2
65.	72661641	PIN-QUICK 5/16-2-1/16 ZINC YELLOW	1	2
68.	73734565	PIN-LOCK W/HANDLE 1.00 X 3.50 W/HAIRPIN	2	
75.	60145985	GEAR GUARD 12000 FOR KINEMATICS	1	

REV. D-S CN880-2 EFFECTIVE AFTER S/N: 12000181027

12000 - 25' Crane Extension Boom Assembly (99906223)

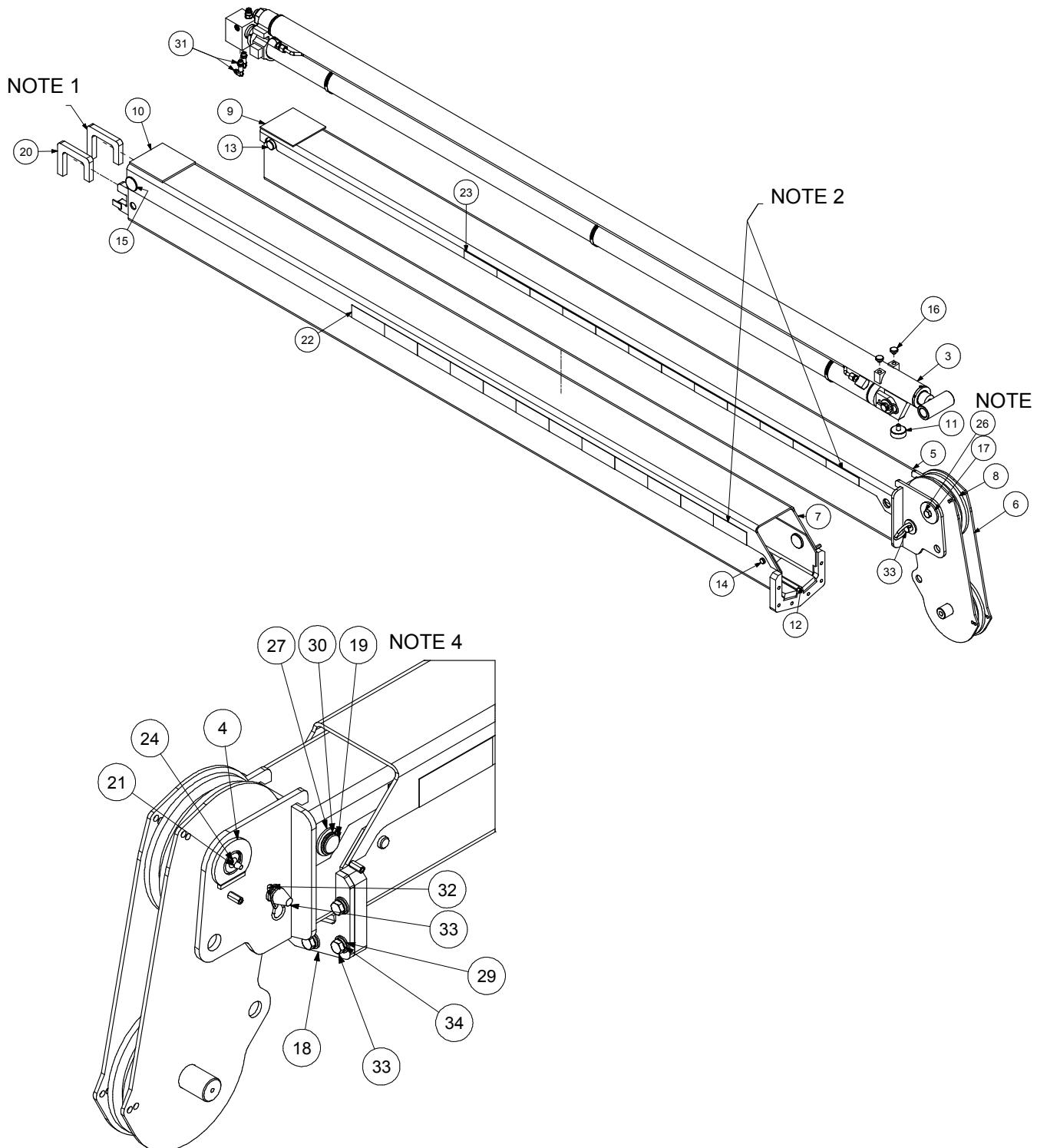
INSTALL EXTENSION CYLINDER FIRST,
ADD RETAINERS NEXT,
INSTALL WEAR-PADS LAST.

**99906223 PARTS LIST**

ITEM NO.	PART NO.	DESCRIPTION	QTY.	KIT NO.
1.	91725205	KIT-HRDW SERIES III	1	
2.	91727214	KIT-HYD 12000 SERIES III SP BG6	1	
3.	51727882	CYL-2.75/1.75 2.50/1.75 150.00S 125.00CC	1	
4.	52723030	PIN-TYPE M 1.50X 3.38	1	
5.	52723221	WLDMNT-2ND STAGE EXT BOOM 9500/10000S	1	
6.	51727744	FLIP SHEAVE ASM 10000/12000	1	
7.	52727229	WLDMNT-1ST STAGE EXT BOOM 12000S	1	
8.	60030255	SHEAVE- 9.00 POLYMER	1	
9.	60030336	WEAR PAD-RC .19 X 6.00 X 6.00	1	
10.	60030421	WEAR PAD-RC 0.25X 6.00X 6.00	1	
11.	60030422	WEAR PAD-RND SIII EXT CYL	1	
12.	60030423	WEAR PAD-RC 0.25X 6.00X 2.25	2	
13.	60030425	WEAR PAD-RND 0.44X 1.25X .50X .50	2	
14.	60030428	WEAR PAD-RND 0.25X 2.00X .75X .44	2	
15.	60030438	WEAR PAD-RND 0.12X 2.00X 1.00X 1.00	2	
16.	60030442	WEAR PAD-RND 0.25X 1.00X .50X .38	2	
17.	60109337	RETAINER PLT-PIN 3.00 DIA	1	
18.	60135668	CAP-FIRST STAGE	1	
19.	60135669	PIN-TYPE A 1.25X 6.89 (6.46)	1	
20.	60135833	RETAINER-1ST STAGE EXT CYL	2	
21.	70034382	CAP-GREASE PRO20 GC-RED	1	1
22.	70396734	TAPE-REFLECTIVE RED/SILVER 2.00X72.00	2	
23.	70399053	TAPE-REFLECTIVE RED/SILVER 1.25X72.00	2	
24.	72053508	ZERK-NPT .12	1	1
25.	72060147	CAP SCR .62-11X 1.00 HH GR5 Z	1	1
26.	72063035	MACHY BUSHING 1.25X10 GA NR	2	1
27.	72063132	WASHER .50 FLAT ASTM F436	6	1
28.	72066129	RETAINING RING-EXT 1.25 HD	2	1
29.	72532700	ELBOW-M STR/90/M JIC XLG 6 6	2	2
30.	72661543	PIN-QUICK 316-10QP	1	
31.	73734565	PIN-LOCK W/HANDLE 1.00 X 3.50 W/HAIRPIN	1	
32.	72602158	CAP SCR .50-13X 1.75 HH GR5 YZ	6	1
33.	72602160	WASHER- LOCK .50 YZ	6	1

REV. D CN1077

12000 - 25' Crane Extension Boom Assembly (99906223)



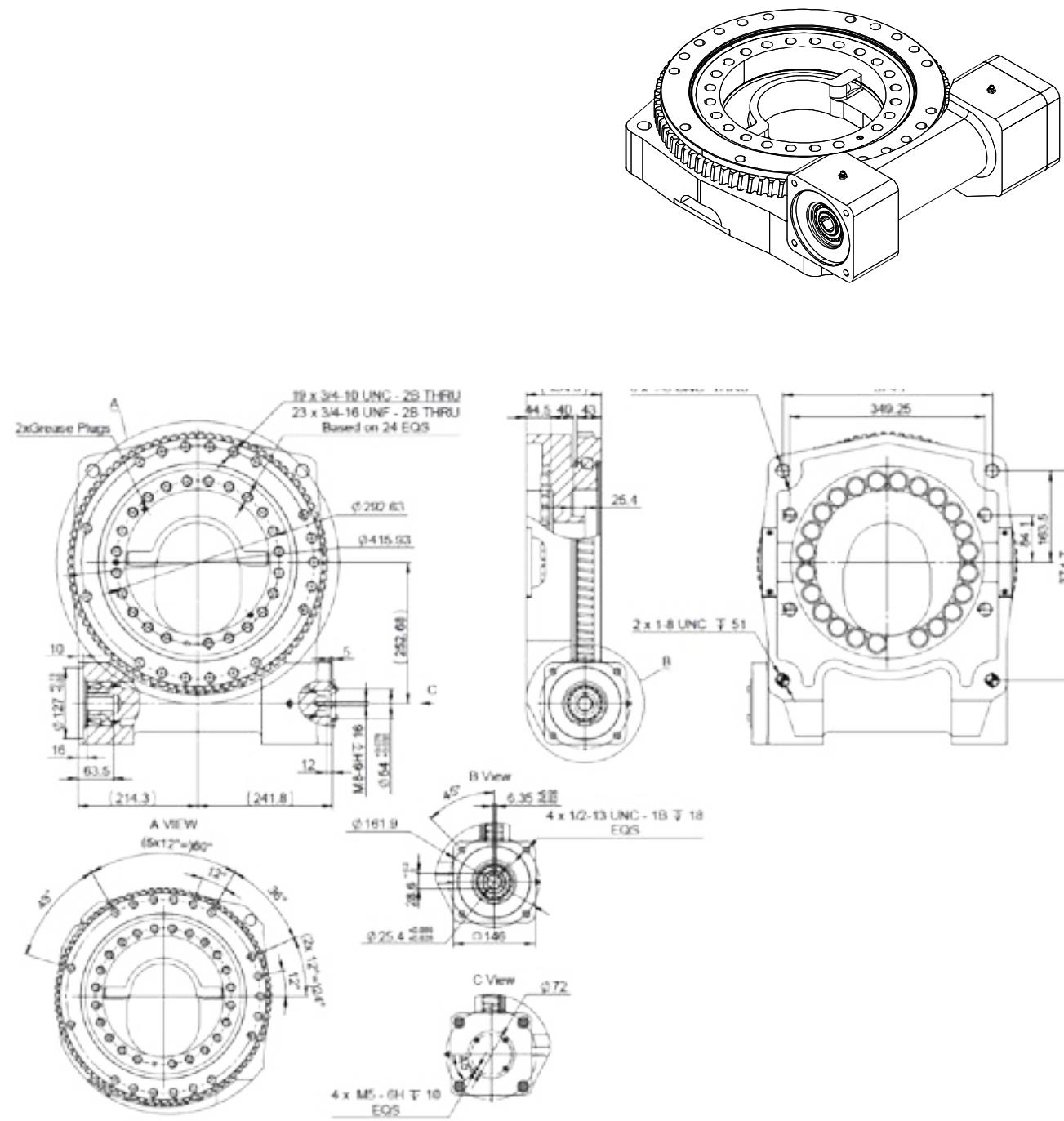
99906223 PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	KIT NO.	QTY.
1.	91725205	KIT-HRDW SERIES III		1
2.	91727214	KIT-HYD 12000 SERIES III SP BG6		1
3.	51722968	CYL ASM-2.50/1.75 2.75/1.75 150S 125.0CC		1
4.	52723030	PIN-TYPE M 1.50X 3.38		1
5.	52723221	WLDMNT-2ND STAGE EXT BOOM 9500/10000S		1
6.	52725152	WLDMT-FLIP SHEAVE 9500/10000		1
7.	52727229	WLDMNT-1ST STAGE EXT BOOM 12000S		1
8.	60030255	SHEAVE- 9.00 POLYMER		1
9.	60030336	WEAR PAD-RC .19 X 6.00 X 6.00		1
10.	60030421	WEAR PAD-RC .25X 6.00X 6.00		1
11.	60030422	WEAR PAD-RND SIII EXT CYL		1
12.	60030423	WEAR PAD-RC .25X 6.00X 2.25		2
13.	60030425	WEAR PAD-RND .44X 1.25X .50X .50		2
14.	60030428	WEAR PAD-RND .25X 2.00X .75X .44		2
15.	60030438	WEAR PAD-RND .12X 2.00X 1.00X 1.00		2
16.	60030442	WEAR PAD-RND .25X 1.00X .50X .38		2
17.	60109337	RETAINER PLT-PIN 3.00 DIA		1
18.	60135668	CAP-FIRST STAGE		1
19.	60135669	PIN-TYPE A 1.25X 6.89 (6.46)		1
20.	60135833	RETAINER-1ST STAGE EXT CYL		2
21.	70034382	CAP-GREASE PRO20 GC-RED	1	1
22.	70396734	TAPE-REFLECTIVE RED/SILVER 2.00X72.00		2
23.	70399053	TAPE-REFLECTIVE RED/SILVER 1.25X72.00		2
24.	72053508	ZERK-NPT .12	1	1
26.	72060147	CAP SCR .62-11X 1.00 HH GR5 Z	1	1
27.	72063035	MACHY BUSHING 1.25X10 GA NR	1	2
29.	72063132	WASHER .50 FLAT ASTM F436	1	6
30.	72066129	RETAINING RING-EXT 1.25 HD	1	2
31.	72532700	ELBOW-M STR/90/M JIC XLG 6 6	2	2
32.	72661543	PIN-QUICK 316-10QP		1
33.	73734565	PIN-LOCK W/HANDLE 1.00 X 3.50 W/HAIRPIN		1
33.	72602158	CAP SCR .50-13X 1.75 HH GR5 YZ	1	6
34.	72602160	WASHER- LOCK .50 YZ	1	6

NOTES

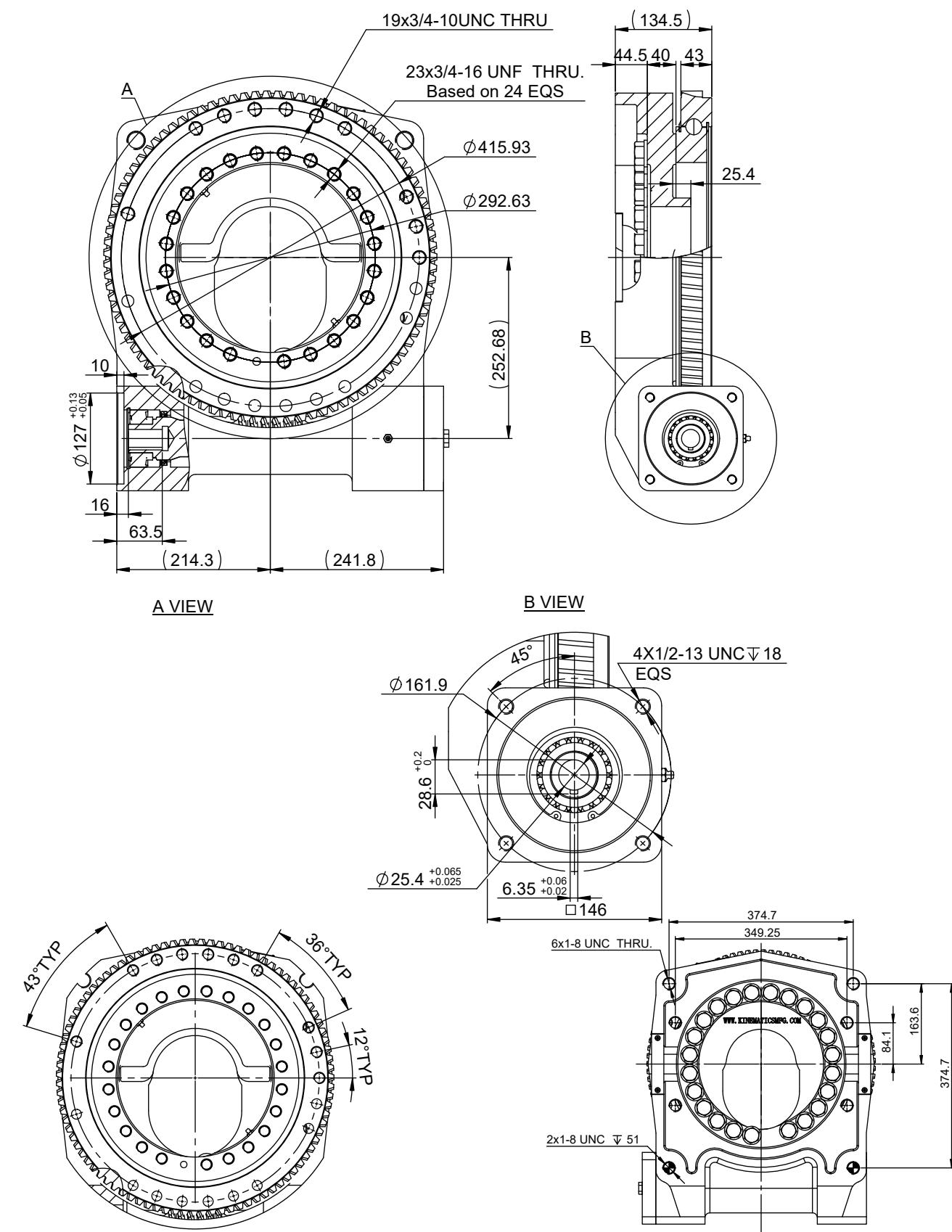
1. ALL EXTENSION CYLINDER FIRST, ADD RETAINERS NEXT, INSTALL WEAR-PADS LAST.
 2. START WITH RED SEGMENT.
 3. APPLY BLUE THREAD LOCKER.
 4. APPLY ANTI-SEIZE.

12000 - 30' & 25' Crane Gear Rotator (71056704)

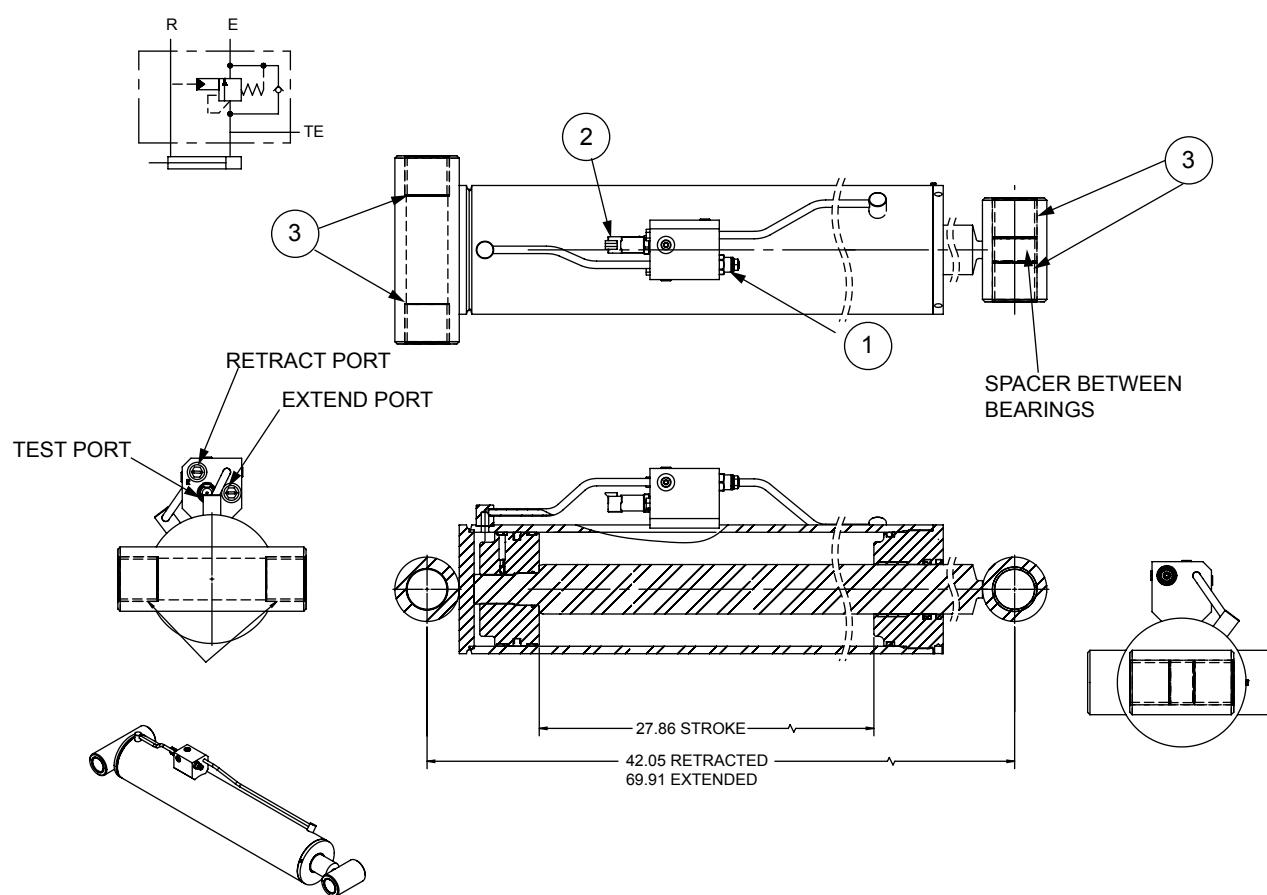


REV. A CN1194

12000 - 30' & 25' Crane Gear Rotator (71056704) EFFECTIVE AFTER S/N 12000181027



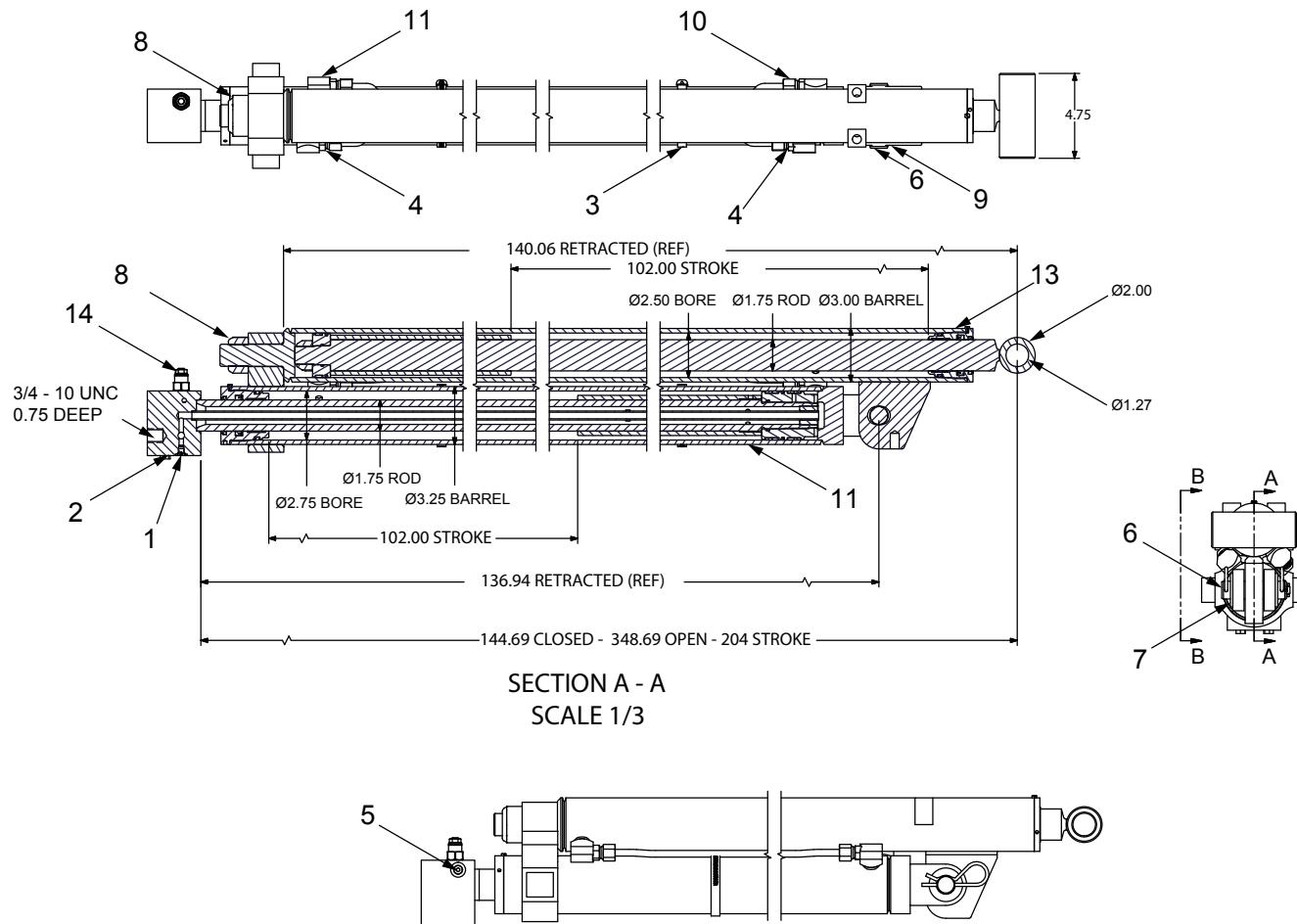
Series III - Manual # 99906193

12000 - 30' & 25' Lower Cylinder (51727172)**NOTES:**

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

51727172 PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1.	73540490	COUNTER BALANCE VALVE	1
2.	77041866	PRESSURE TRANSDUCER	1
3.	70055368	BEARING-POLYGON PWR32M36-32	4
		SEAL KIT P/N: 74490054	
		REV. P1	

12000 - 30' Extension Cylinder Assembly (51722961)**NOTE:**

Torque nut #8 (1.25-12 UNF) to 810 ft-lb (112 kg-m)

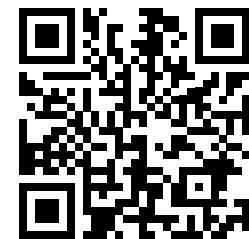
51722961 PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1.		SAE O-RING PLUG #2	1
2.		PLASTIC PLUG SAE O-RING #6	2
3.	71415730	#56 HOSE CLAMP	3
4.	71415731	FITTING ADAPTER	4
5.		STEEL SAE O-RING #6	3
6.		PIN	1
7.		WASHER	2
8.		1.25-12 SELF-LOCKING NUT	1
9.		HAIRPIN, COTTER	2
10.	71414720	TUBE LINE	2
11.	51723927	CYL-2.5/1.75 102.00S 143.62CC C	1
13.	51723928	CYL-2.5/1.75 102.00S 143.62CC C	1
14.	73540565	VALVE-CBAL 15 GPM 4.5:1 T11-A @ 4000PSI	1

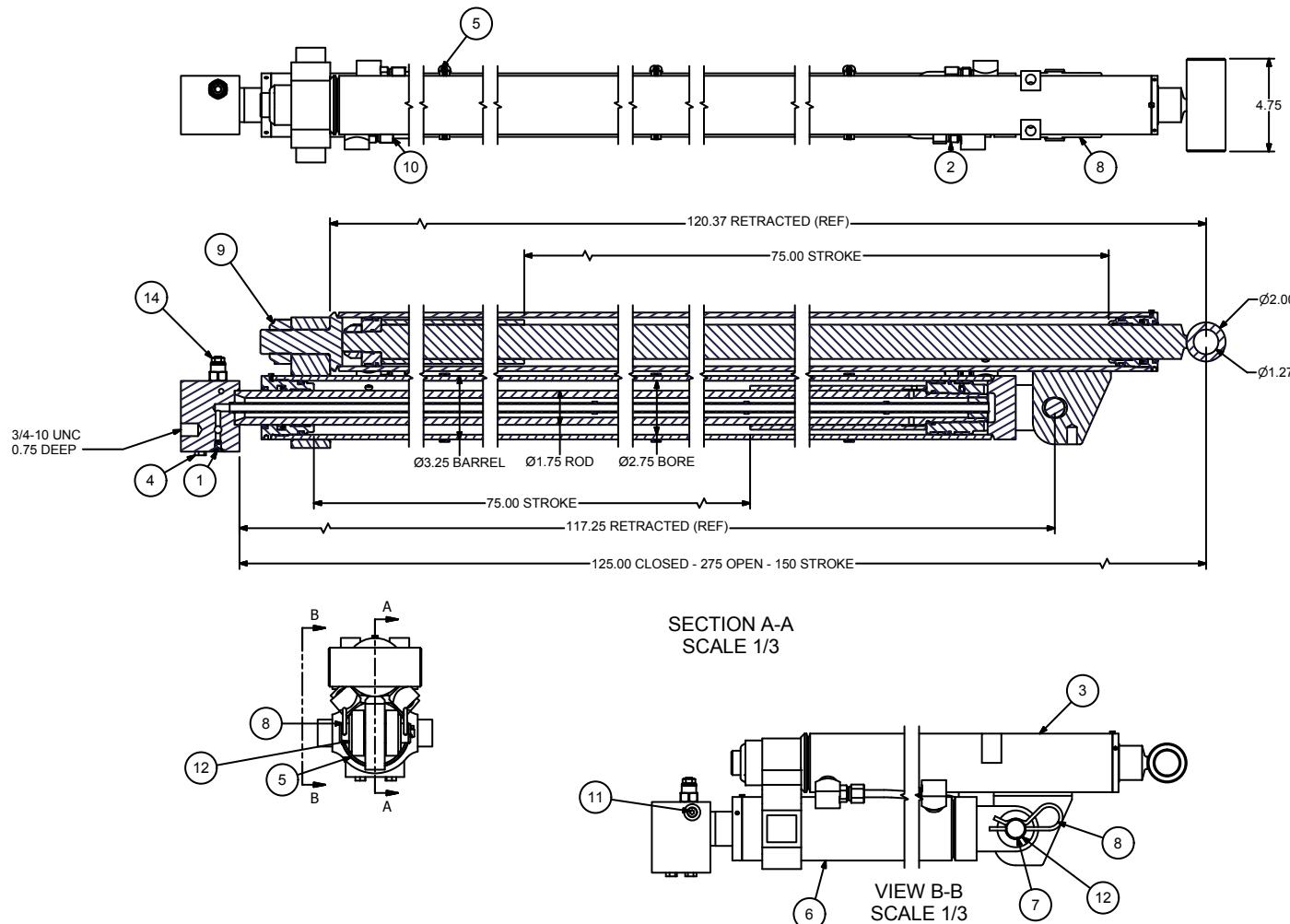
REV E.

NOTE: Items shown are common service items, for part numbers not assigned contact:

IOWA MOLD TOOLING CO., INC.
TECHNICAL SUPPORT TEAM
TELEPHONE: 800-554-4421



imt.com/parts-services

12000 - 25' Extension Cylinder Assembly (51722968)**51722968 PARTS LIST**

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1		SAE O-RING PLUG #2	1
2		FITTING ADAPTER	4
3	51723929	CYL-2.5/1.75 75.00S 123.93CC C	1
4		PLASTIC PLUG SAE O-RING #6	2
5		#56 HOSE CLAMP	3
6	51723930	CYL-2.75/1.75 75.00S 120.25CC C	1
7		PIN	1
8		COTTER HAIR PIN	2
9		1.25-12 SELF-LOCKING NUT	1
10	71414721	TUBE LINE	2
11		STEEL SAE O-RING PLUG #4	3
12		WASHER	2
14	73540565	VALVE-CBAL 15 GPM 4.5:1 T11-A @4000 PSI	1

REV. E

NOTES:

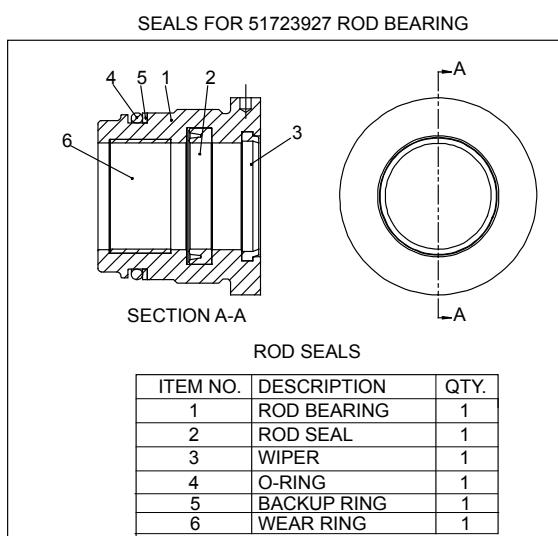
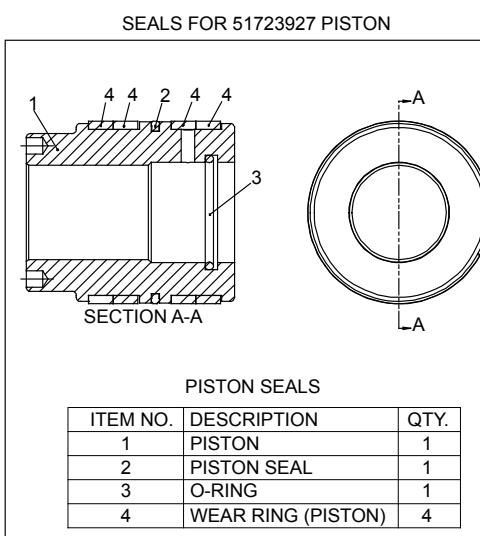
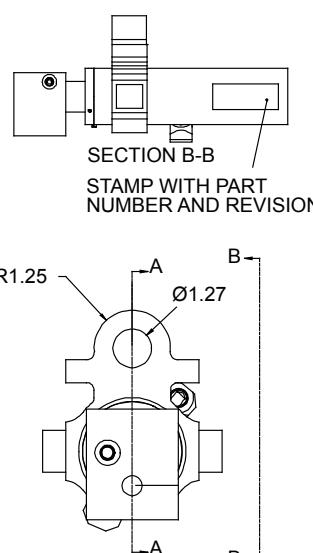
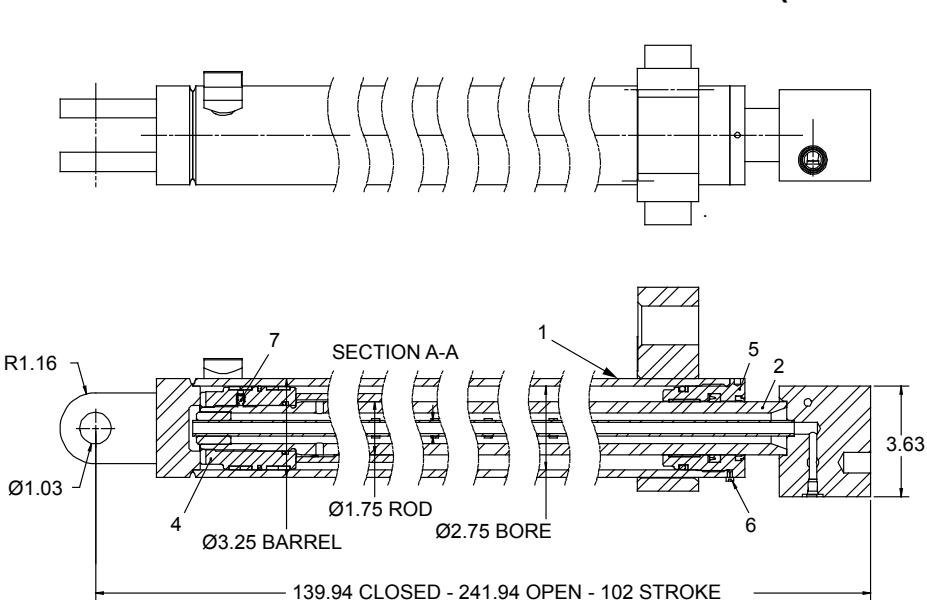
1. TEST CYLINDER AT 3500 PSI.
2. TORQUE NUT # 9 (1.25-12 UNF) TO 810.7 FT-LB (112 KG-M).
3. PAINT BLACK SEMI-GLOSS.
4. INSTALL HOSE CLAMPS AFTER PAINT.

NOTE: Items shown are common service items, for part numbers not assigned contact:

IOWA MOLD TOOLING CO., INC.
TECHNICAL SUPPORT TEAM
TELEPHONE: 800-554-4421



imt.com/part-services

12000 - 30' CYL-2.75/1.75 102.00S 139.94CC C (51723927)

PART OF SEAL KIT # 94399162, WHICH INCLUDES ALL ROD AND PISTON SEALS FOR 51723927. SEALS CANNOT BE PURCHASED INDIVIDUALLY.

51723927 PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1.	52724028	CASE	1
2.	52724030	ROD ASSEMBLY	1
3.	73050200	STROKE LIMITER	1
4.	71414724	PISTON ASSEMBLY	1
5.	71414722	ROD BEARING ASSEMBLY	1
6.		LOCKING SCREW	1
7.		SELF-LOCKING NUT	1
8.	94399162	SEAL KIT	1

REV A

NOTES:

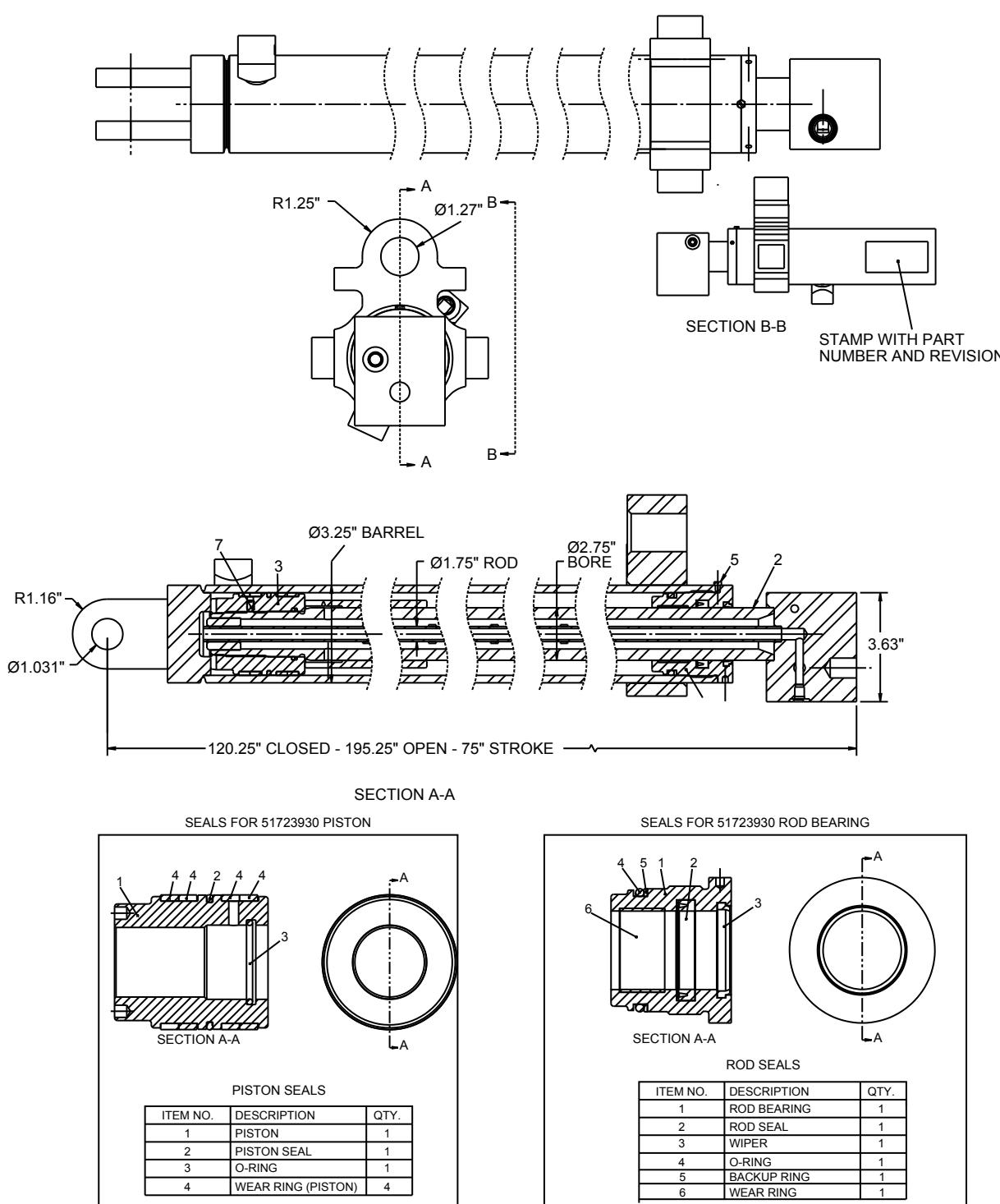
7. SEE PART NUMBER AND REVISION STAMPED ON CYLINDER.
8. REPLACE ALL COMPONENTS OF THE SEAL KIT WHENEVER THE CYLINDER IS DISASSEMBLED.
9. APPLY LUBRIPLATE # 630-2 MEDIUM HEAVY, MULTI-PURPOSE LUBRICANT TO ALL PISTONS, ROD BEARINGS AND HOLDING VALVE SEALS.
10. TORQUE ROD BEARING TO 200-300 FT-LB. (27.6 - 41.5 KG-M).
11. TORQUE PISTON 200 - 300 FT-LBS (27.6 - 41.5 KG-M).
12. TO LOCK THE ROD BEARING ON THE CYLINDER, DRILL A #26 HOLE 0.25 - 0.30" DEEP IN A SEAM BETWEEN THE ROD BEARING AND THE CASE. INSTALL THE LOCKING SCREW (ITEM #6, SELF-TAPPING #8 - 32 X 0.25" SET SCREWS) IN THE HOLE UNTIL SEADED.
13. SEAL KIT, 94399162, INCLUDES ALL SEALS FOR CYLINDER 51723937. SEALS CANNOT BE PURCHASED INDIVIDUALLY.

NOTE: Items shown are common service items, for part numbers not assigned contact:

IOWA MOLD TOOLING CO., INC.
TECHNICAL SUPPORT TEAM
TELEPHONE: 800-554-4421



imt.com/part-services

12000 - 25' CYL-2.75/1.75 75.00S 120.25CC C (51723930)**51723930 PARTS LIST**

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	52723925	CASE	1
2	52724036	ROD ASSEMBLY	1
3	71414725	PISTON ASSEMBLY	1
4	71414726	ROD BEARING ASSEMBLY	1
5		LOCKING SCREW	1
6	73050204	STROKE LIMITER	1
7		0.25-20 UNC NYLON TIP SET SCR	1
REF	94399162	SEAL KIT	1
		REV. INITIAL RELEASE	

NOTES:

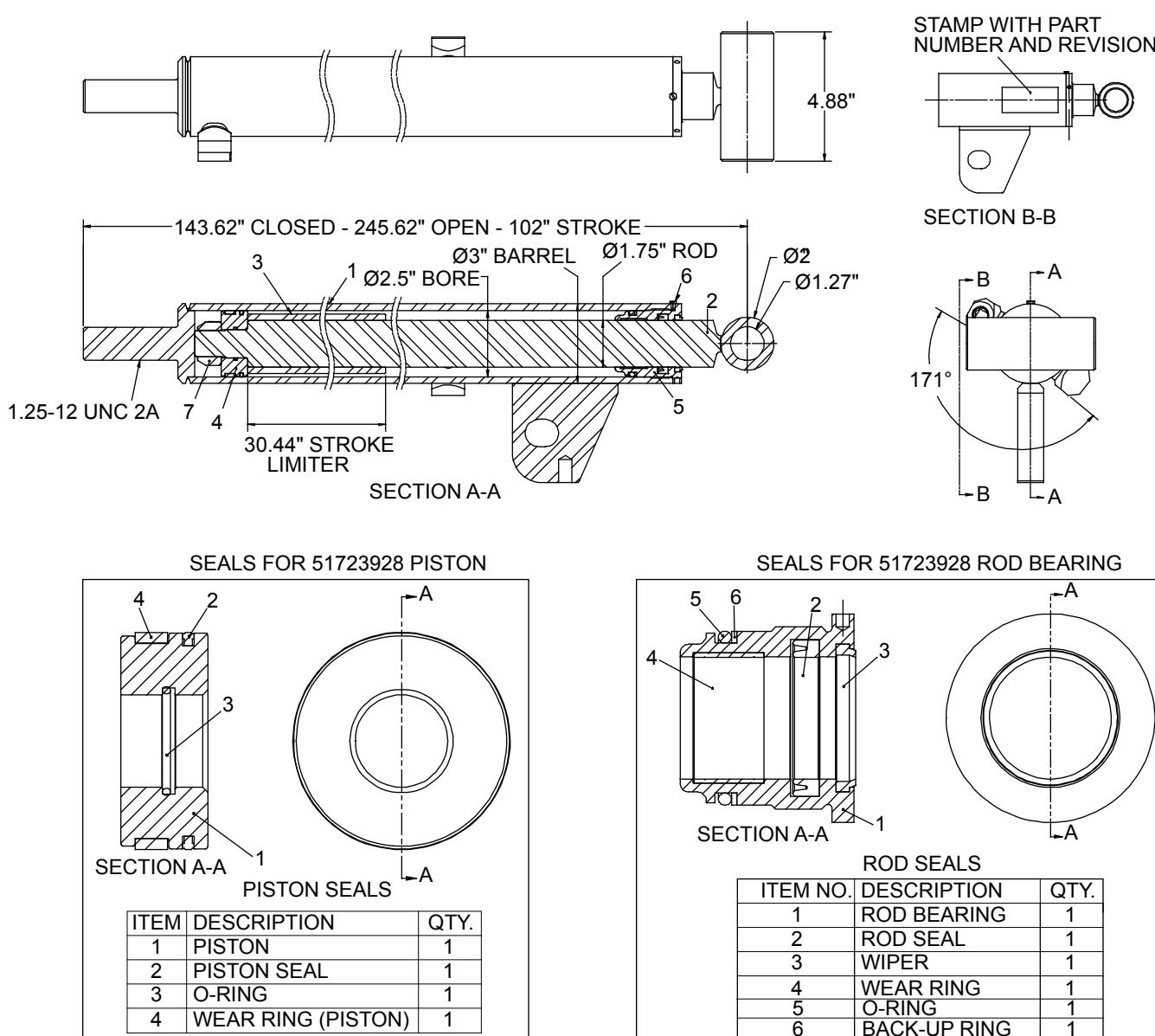
- SEE PART NUMBER AND REVISION STAMPED ON CYLINDER.
- REPLACE ALL COMPONENTS OF THE SEAL KIT WHENEVER THE CYLINDER IS DISASSEMBLED TO REDUCE DOWNTIME.
- APPLY "LUBRIPLATE" NO. 630-2 MEDIUM HEAVY, MULTI-PURPOSE LUBRICANT, TO ALL PISTON, HEAD GLAND, AND HOLDING VALVE SEALS.
- TORQUE ROD BEARING TO 200-300 FT-LB (27.7-41.5 KG-M).
- TORQUE PISTON TO 200-300 FT-LB (27.7-41.5 KG-M).
- TO LOCK THE ROD BEARING ASSEMBLY ON THE CYLINDER, DRILL A #26 HOLE 0.25-0.30" DEEP IN A SEAM BETWEEN THE ROD BEARING AND THE CASE. INSTALL LOCKING SCREW (ITEM #6, SELF-TAPPING #8-32X.25" SET SCREW) IN THE HOLE UNTIL SEATED.
- SEAL KIT, 94399162, INCLUDES ALL SEALS FOR CYLINDERS 51723930.

NOTE: Items shown are common service items, for part numbers not assigned contact:

IOWA MOLD TOOLING CO., INC.
TECHNICAL SUPPORT TEAM
TELEPHONE: 800-554-4421



imt.com/part-services

12000 - 30' CYL-2.5/1.75 102.00S 143.62CC C (51723928)**51723928 PARTS LIST**

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1.	52724028	CASE	1
2.	52724030	ROD ASSEMBLY	1
3.	73050200	STROKE LIMITER	1
4.	71414724	PISTON ASSEMBLY	1
5.	71414722	ROD BEARING ASSEMBLY	1
6.		LOCKING SCREW	1
7.		SELF-LOCKING NUT	1
8.	94399161	SEAL KIT	1

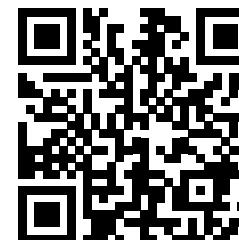
REV. INITIAL RELEASE

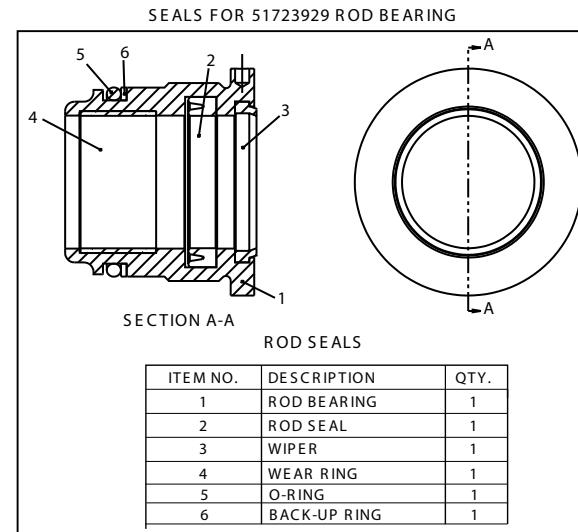
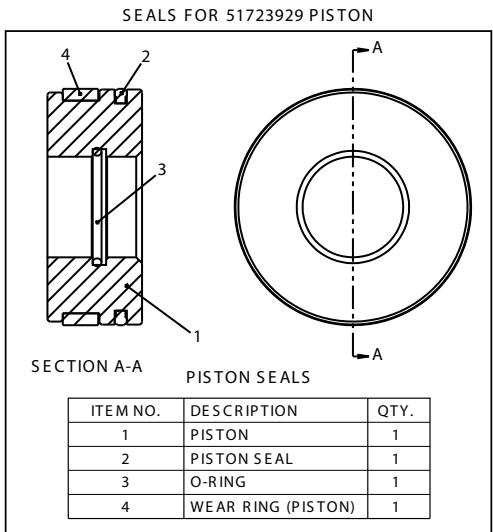
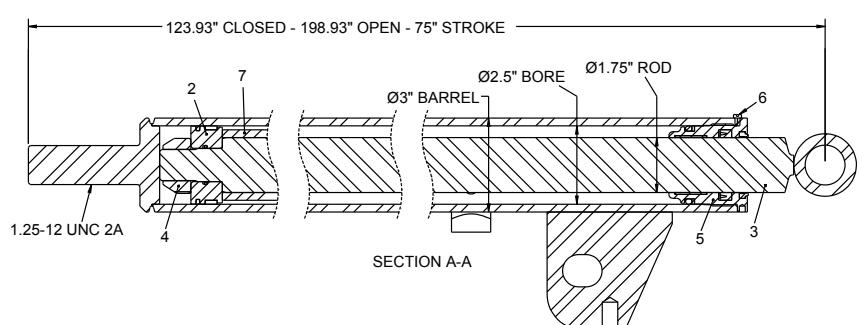
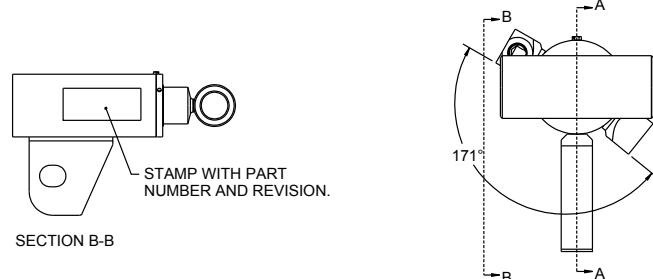
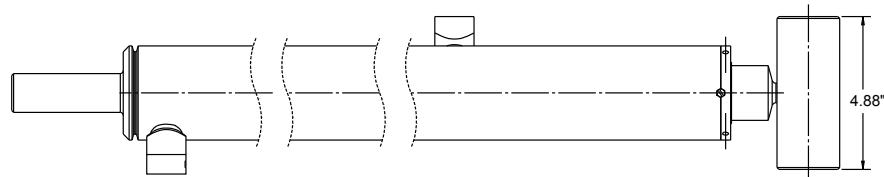
NOTES:

- SEE PART NUMBER AND REVISION STAMPED ON CYLINDER.
- REPLACE ALL COMPONENTS OF THE SEAL KIT WHENEVER THE CYLINDER IS DISASSEMBLED TO REDUCE DOWNTIME.
- APPLY "LUBRIPLATE" NO. 630-2 MEDIUM HEAVY, MULTI-PURPOSE LUBRICANT, TO ALL PISTON, HEAD GLAND, AND HOLDING VALVE SEALS.
- TORQUE ROD BEARING TO 200-300 FT-LB (27.7-41.5 KG-M).
- TORQUE PISTON NUT (#7) TO 412.3 FT-LB (57 KG-M).
- TO LOCK THE ROD BEARING ASSEMBLY ON THE CYLINDER, DRILL A #26 HOLE 0.25-0.30" DEEP IN A SEAM BETWEEN THE ROD BEARING AND THE CASE. INSTALL LOCKING SCREW (ITEM #6, SELF-TAPPING #8-32X.25" SET SCREW) IN THE HOLE UNTIL SEATED.
- SEAL KIT, 94399161, INCLUDES ALL SEALS FOR CYLINDERS 51723928

NOTE: Items shown are common service items, for part numbers not assigned contact:

**IOWA MOLD TOOLING CO., INC.
TECHNICAL SUPPORT TEAM
TELEPHONE: 800-554-4421**

*imt.com/part-services*

12000 - 25' CYL-2.5/1.75 75.00S 123.93CC C (51723929)

PART OF SEAL KIT # 94399161, WHICH INCLUDES ALL ROD AND PISTON SEALS FOR 51723929. SEALS CANNOT BE PURCHASED INDIVIDUALLY.

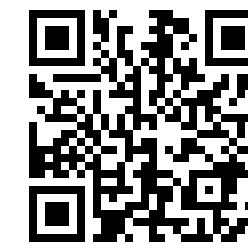
51723929 PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	51723925	CASE	1
2	52724036	ROD ASSEMBLY	1
3	71414725	PISTON ASSEMBLY	1
4	71414726	ROD BEARING ASSEMBLY	1
5		LOCKING SCREW	1
6	73050204	STROKE LIMITER	1
7		0.25-20 UNC NYLON TIP SET SCR	1
REF	94399161	SEAL KIT	1
		REV. INITIAL RELEASE	

NOTES:

- SEE PART NUMBER AND REVISION STAMPED ON CYLINDER.
- REPLACE ALL COMPONENTS OF THE SEAL KIT WHENEVER THE CYLINDER IS DISASSEMBLED TO REDUCE DOWNTIME.
- APPLY "LUBRIPLATE" NO. 630-2 MEDIUM HEAVY, MULTI-PURPOSE LUBRICANT, TO ALL PISTON, HEAD GLAND, AND HOLDING VALVE SEALS.
- TORQUE ROD BEARING TO 200-300 FT-LB (27.7-41.5 KG-M).
- TORQUE PISTON TO 200-300 FT-LB (27.7-41.5 KG-M).
- TO LOCK THE ROD BEARING ASSEMBLY ON THE CYLINDER, DRILL A #26 HOLE 0.25-0.30" DEEP IN A SEAM BETWEEN THE ROD BEARING AND THE CASE. INSTALL LOCKING SCREW (ITEM #6, SELF-TAPPING #8-32X.25" SET SCREW) IN THE HOLE UNTIL SEATED.
- SEAL KIT, 94399161, INCLUDES ALL SEALS FOR CYLINDERS 51723930.

NOTE: Items shown are common service items, for part numbers not assigned contact:
IOWA MOLD TOOLING CO., INC.
TECHNICAL SUPPORT TEAM
TELEPHONE: 800-554-4421



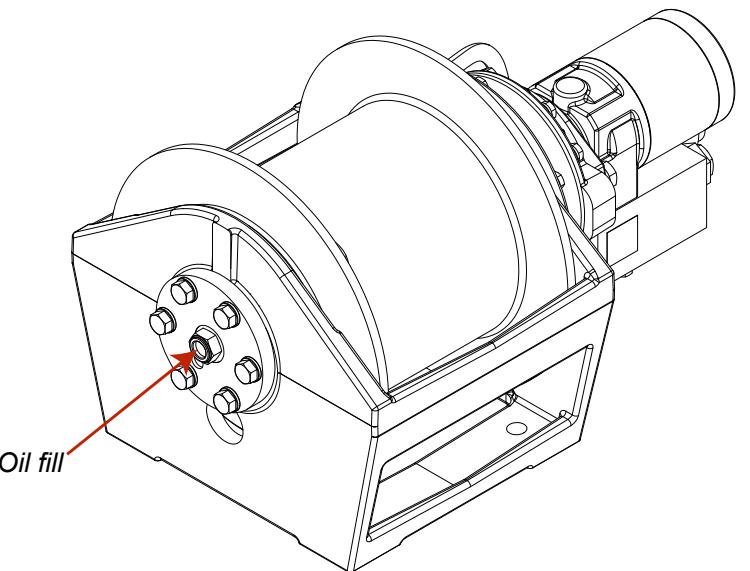
imt.com/part-services

12000 - 30' & 25' Winch Oil Specifications

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

OIL CHANGE FREQUENCY

Gear oil should be changed after the first 100 hours or 90 days of machine operation, and then every 1000 hours or 12 months, whichever occurs first. Gear oil should also be changed whenever the ambient temperature changes significantly, and an oil from a different temperature range would be more appropriate. Check and drain the oil using the fill plug in the winch. The winch should be at least 1/2 full.



WARM-UP PROCEDURE

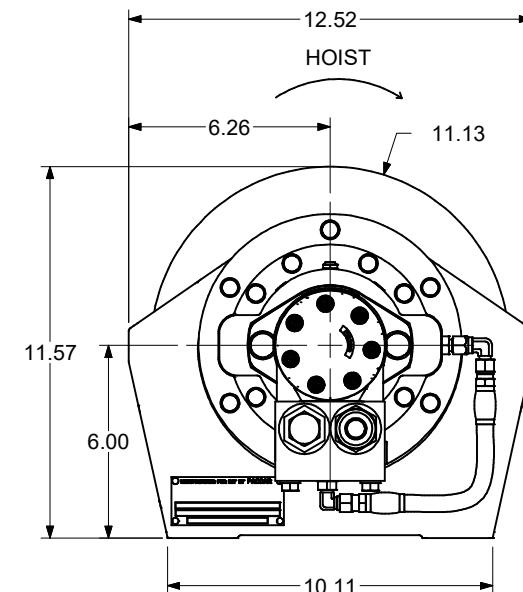
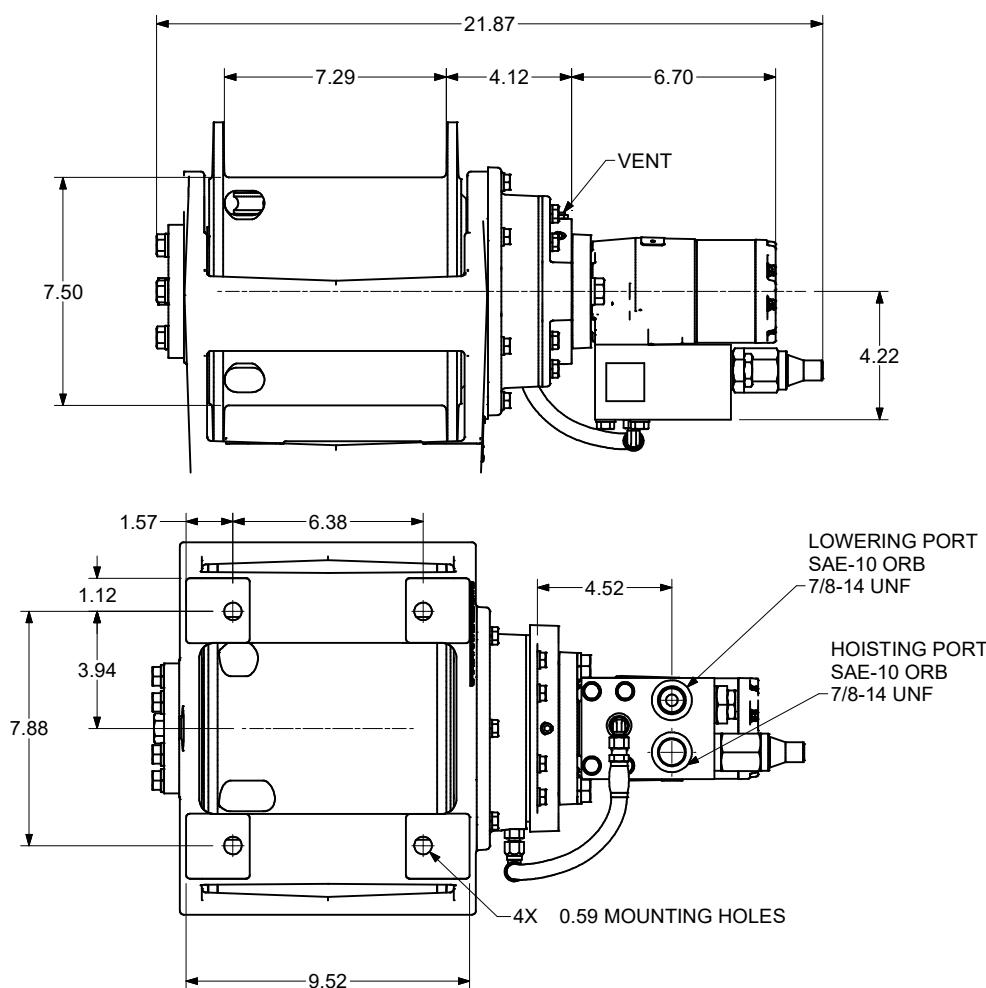
Warming up the winch is recommended at start-up and at ambient temperatures below 40 °F (4 °C). Run the prime mover at its lowest recommended RPM with the hydraulic winch control valve in neutral, allowing sufficient time to warm up the system. Operate the winch at low speeds, forward and reverse, several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

LUBRICANTS

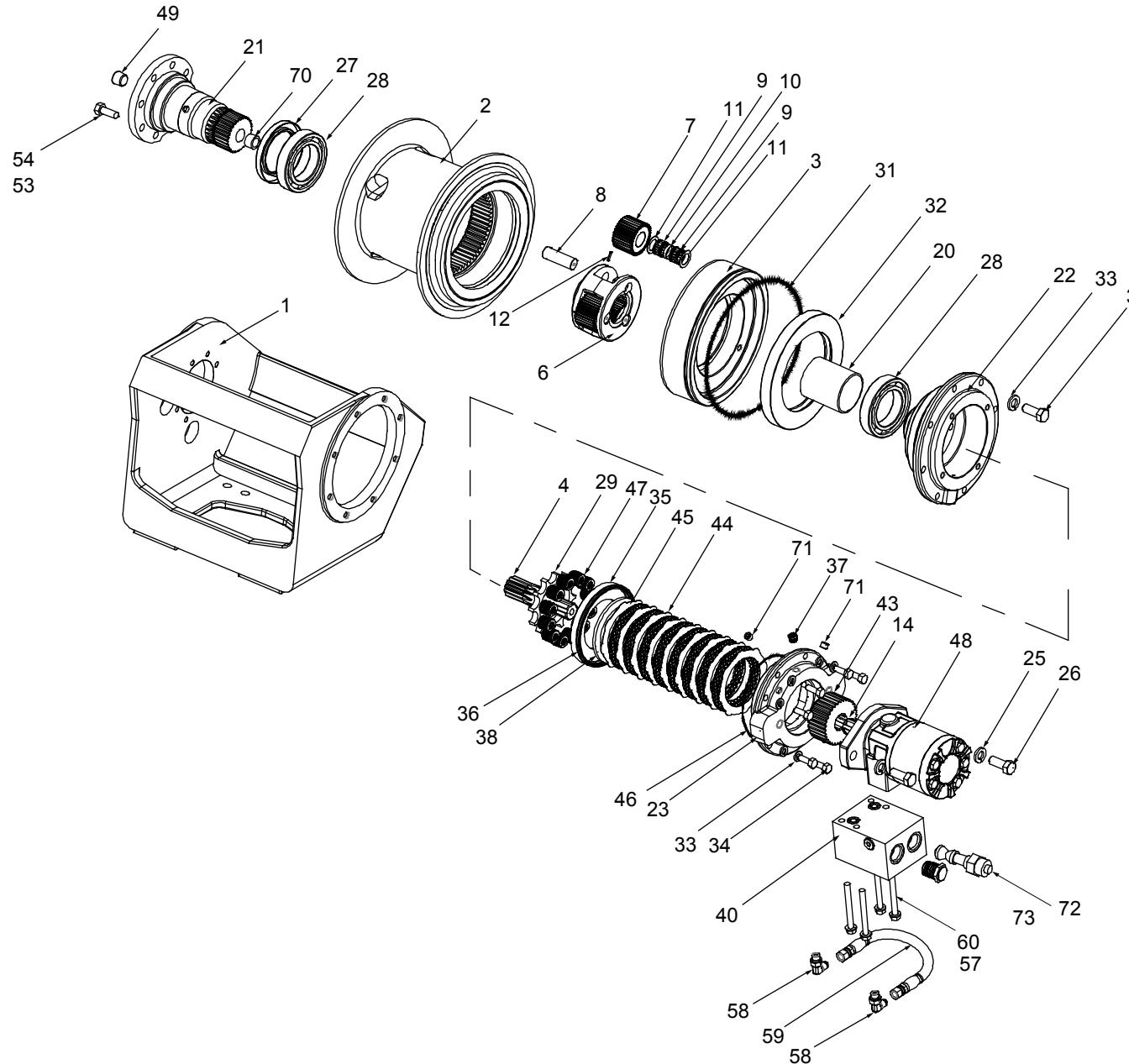
The following lubricants are recommended based on ambient temperature. Other lubricants may work equally as well. We suggest you work with your lubricant supplier to find an equivalent product if needed. The winch is initially filled with Mobilgear 600 XP150 or equivalent.

PREVAILING AMBIENT TEMPERATURE	RECOMMENDED LUBRICANT
25 -130 °F (-4 - 54 °C)	Mobilgear 600 XP220 or equivalent (AGMA 5 EP, ISO VG 200)
10 - 100 °F (-12 - 38 °C)	Mobilgear 600 XP150 or equivalent (AGMA 4 EP, ISO VG 150) Note: Avoid using Mobilgear 600 XP150 above 80 °F (27 °C) in severe applications such as offshore lifting, sustained fast duty cycles, or frequent lifting.
-25 - 130 °F (-32 - 54 °C)	Mobil SHC 150 synthetic or equivalent

12000 Winch Dimensions (70571196)



12000 - 30' & 25' Winch Parts (70571196-1)

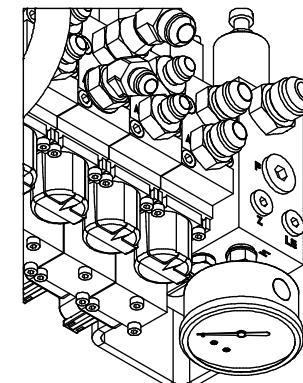
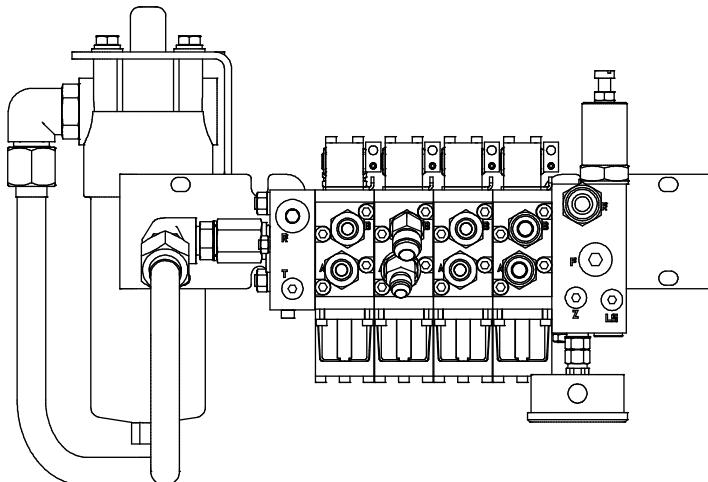
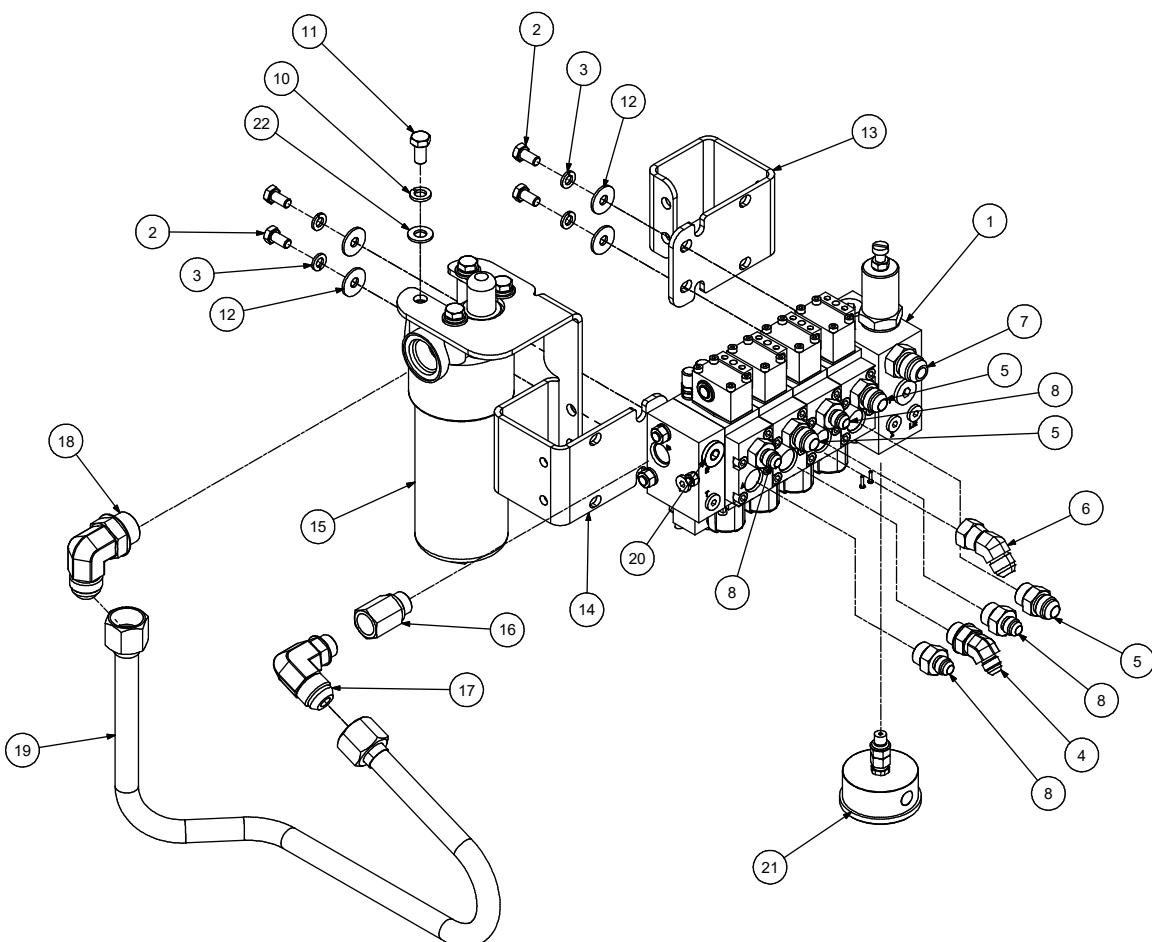


70571196-1 PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	QTY.
24.	71411826	MOTOR GASKET (NOT SHOWN)	1 REF
28.	71411143	BALL BEARING	2
40.	73540372	VALVE, BRAKE (INCLUDES 72 & 73)	1
44.	71411147	FRICTION DISC	8
45.	71411827	BRAKE DISC	9
47.	71411146	SPRING	12
48.	73511407	HYDRAULIC MOTOR	1
55.	71411150	CABLE WEDGE (NOT SHOWN)	1
72.	71734007	COUNTERBALANCE VALVE CARTRIDGE	1
73.	71733944	CHECK VALVE	1
74.	94744147	SEAL KIT (INCLUDE ITEMS #24,27,31,32,36,46 & 49)	1

NOTE: Items shown are common service items, for part numbers not assigned contact:

**IOWA MOLD TOOLING CO., INC.
TECHNICAL SUPPORT TEAM
TELEPHONE: 800-554-4421**

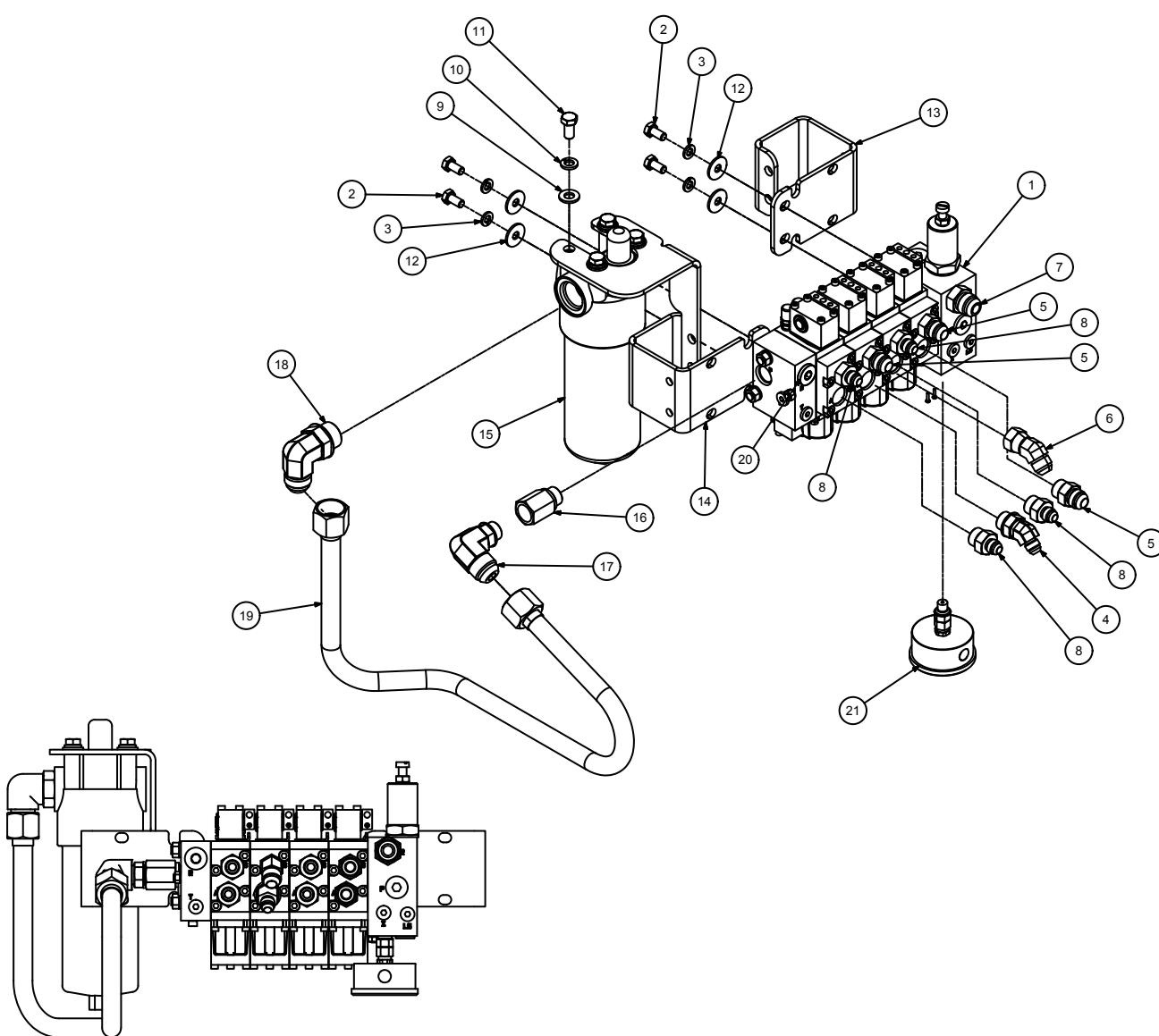
12000 - 30' & 25' - Fully Proportional Valve Bank Assembly (99906280)

NOTE ORIENTATION OF GAUGE.

99906280 PARTS LIST

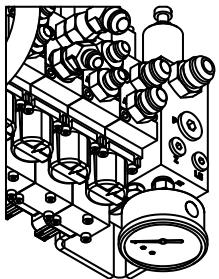
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1.	73734727	VALVE BANK-4-SECT PSL2 W OC INLT	1
2.	72602052	CAP SCR M 8-1.25X 16 HHZ	4
3.	72601797	WASHER-LOCK 8MM	4
4.	72533583	ELBOW-M STR/45/M JIC 8 6	1
5.	72532358	ADPTR-M STR/M JIC 8 8	3
6.	72532670	ELBOW-M JIC/45/F JIC 8 8	1
7.	72532361	ADPTR-M STR/M JIC 8 10	1
8.	72532356	ADPTR-M STR/M JIC 8 6	4
10.	72063051	WASHER .38 LOCK	4
11.	72060044	CAP SCR .38-16X .75 HH GR5 Z	4
12.	72602065	WASHER-FLAT M 8	4
13.	60140839	BRKT-MAST VB 6000-8600S	1
14.	60143075	BRKT-MAST VB 6000-8600S FP	1
15.	73052156	FILTER-PRES 4000PSI 25GPM 10MIC -12	1
16.	72534898	O-RING EXTENDER 08-08	1
17.	72533623	ELBOW-M STR/90/M JIC 8 12	1
18.	72053767	ELBOW-M STR/90/M JIC 12 12	1
19.	71415690	TUBE ASM-PRESSURE FILTER S3FP SMALL MAST	1
20.	72532686	PLUG-STR SOC HD STL 8 (.75 THD)	1
21.	73050225	GAUGE-5000 PSI 2.5IN CB MOUNT -4 MORB	1
22.	72063186	WASHER-FLAT .38 N H ASTM F436	4

REV. A CN854

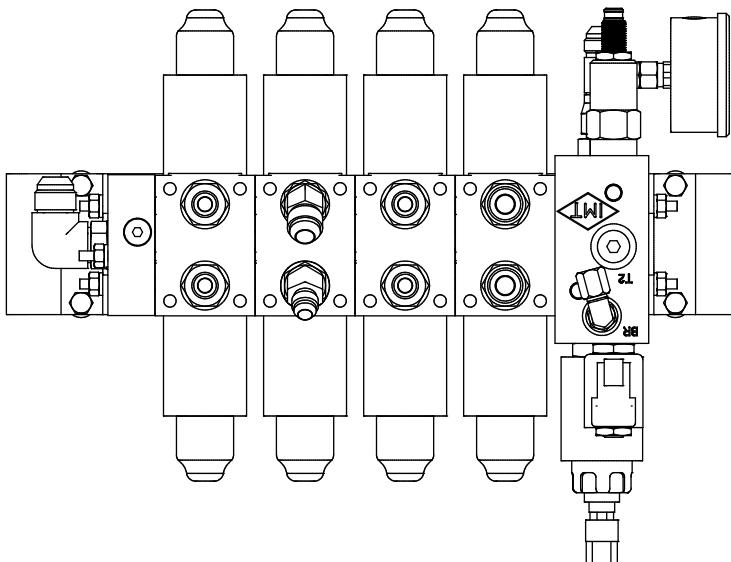
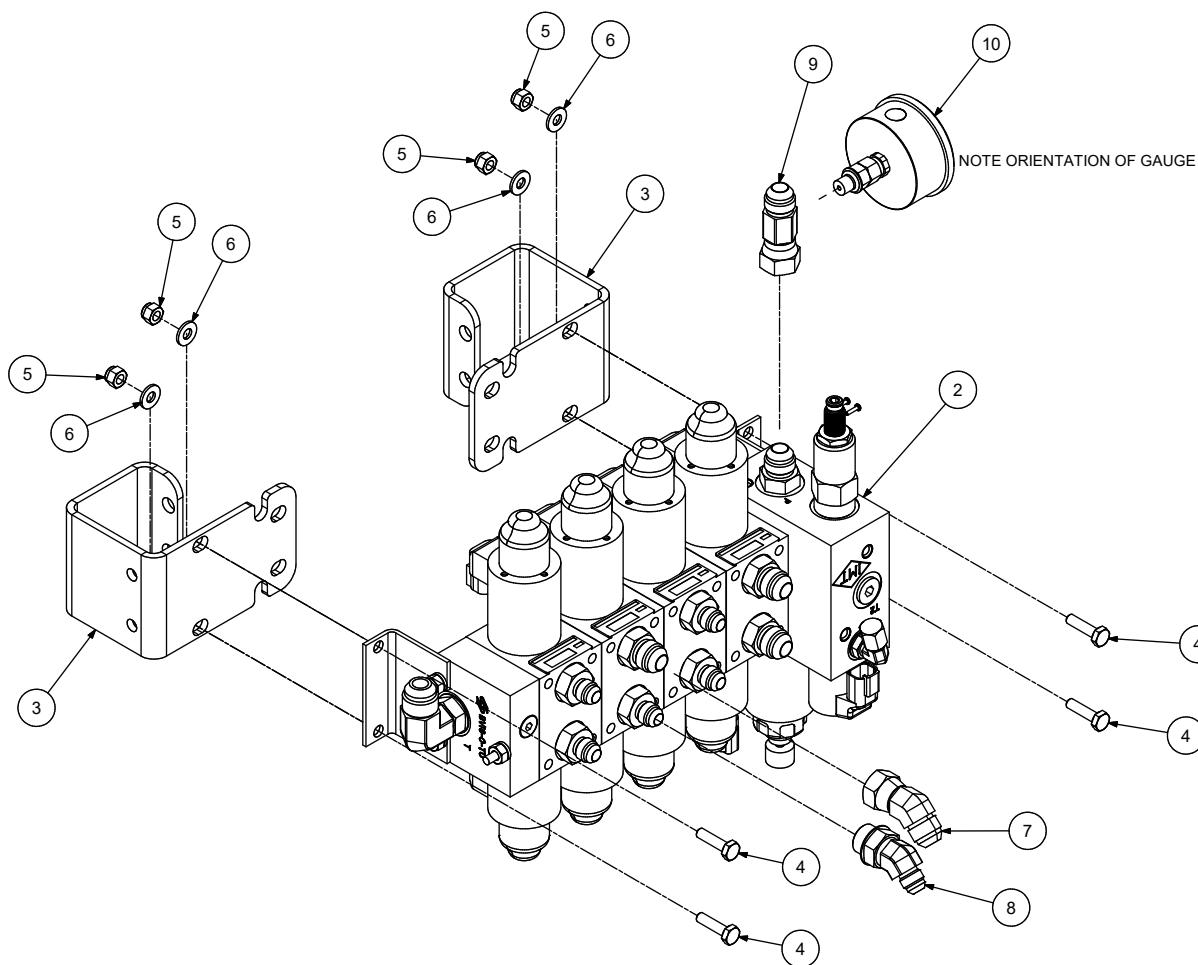
12000 - 30' & 25' - Fully Proportional Valve Bank Assembly (99906280)**99906280 PARTS LIST**

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1.	73734727	VALVE BANK-4-SECT PSL2 W OC INLT	1
2.	72602052	CAP SCR M 8-1.25X 16 HHZ	4
3.	72601797	WASHER-LOCK 8MM	4
4.	72533583	ELBOW-M STR/45/M JIC 8 6	1
5.	72532358	ADPTR-M STR/M JIC 8 8	3
6.	72532670	ELBOW-M JIC/45/F JIC 8 8	1
7.	72532361	ADPTR-M STR/M JIC 8 10	1
8.	72532356	ADPTR-M STR/M JIC 8 6	4
9.	72063186	WASHER .38 FLAT	4
10.	72063051	WASHER .38 LOCK	4
11.	72060044	CAP SCR .38-16X .75 HH GR5 Z	4
12.	72602065	WASHER-FLAT M 8	4
13.	60140839	BRKT-MAST VB 6000-8600S	1
14.	60143075	BRKT-MAST VB 6000-8600S FP	1
15.	73052156	FILTER-PRES 4000PSI 25GPM 10MIC -12	1
16.	72534898	O-RING EXTENDER 08-08	1
17.	72533623	ELBOW-M STR/90/M JIC 8 12	1
18.	72053767	ELBOW-M STR/90/M JIC 12 12	1
19.	71415690	TUBE ASM-PRESSURE FILTER S3FP SMALL MAST	1
20.	72532686	PLUG-STR SOC HD STL 8 (.75 THD)	1
21.	73050225	GAUGE-5000 PSI 2.5IN CB MOUNT -4 MORB	1

REV. INITIAL RELEASE

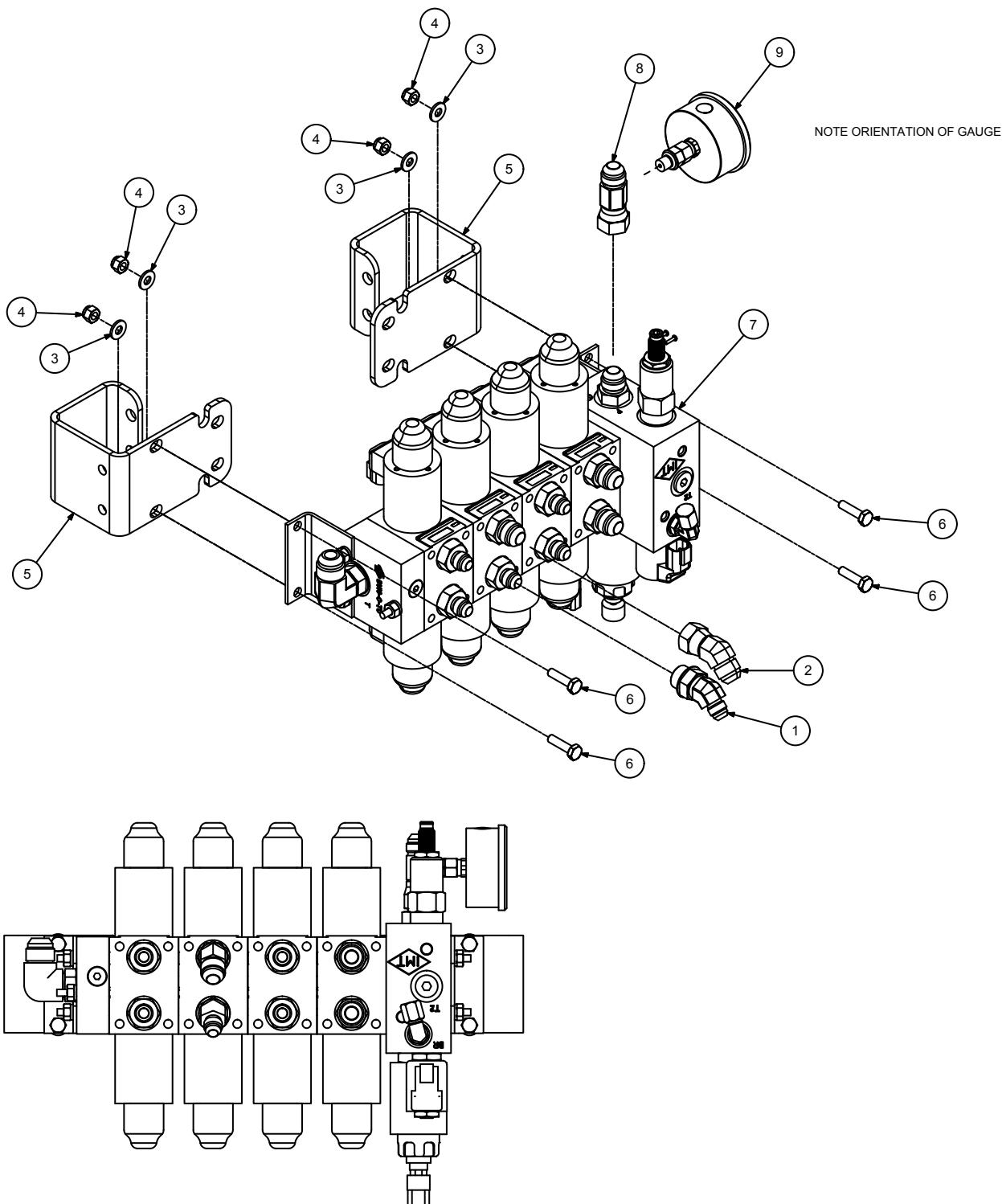


NOTE ORIENTATION OF GAUGE

12000 - 30' & 25' - Single Proportional Valve Bank Assembly (99906279)**99906279 PARTS LIST**

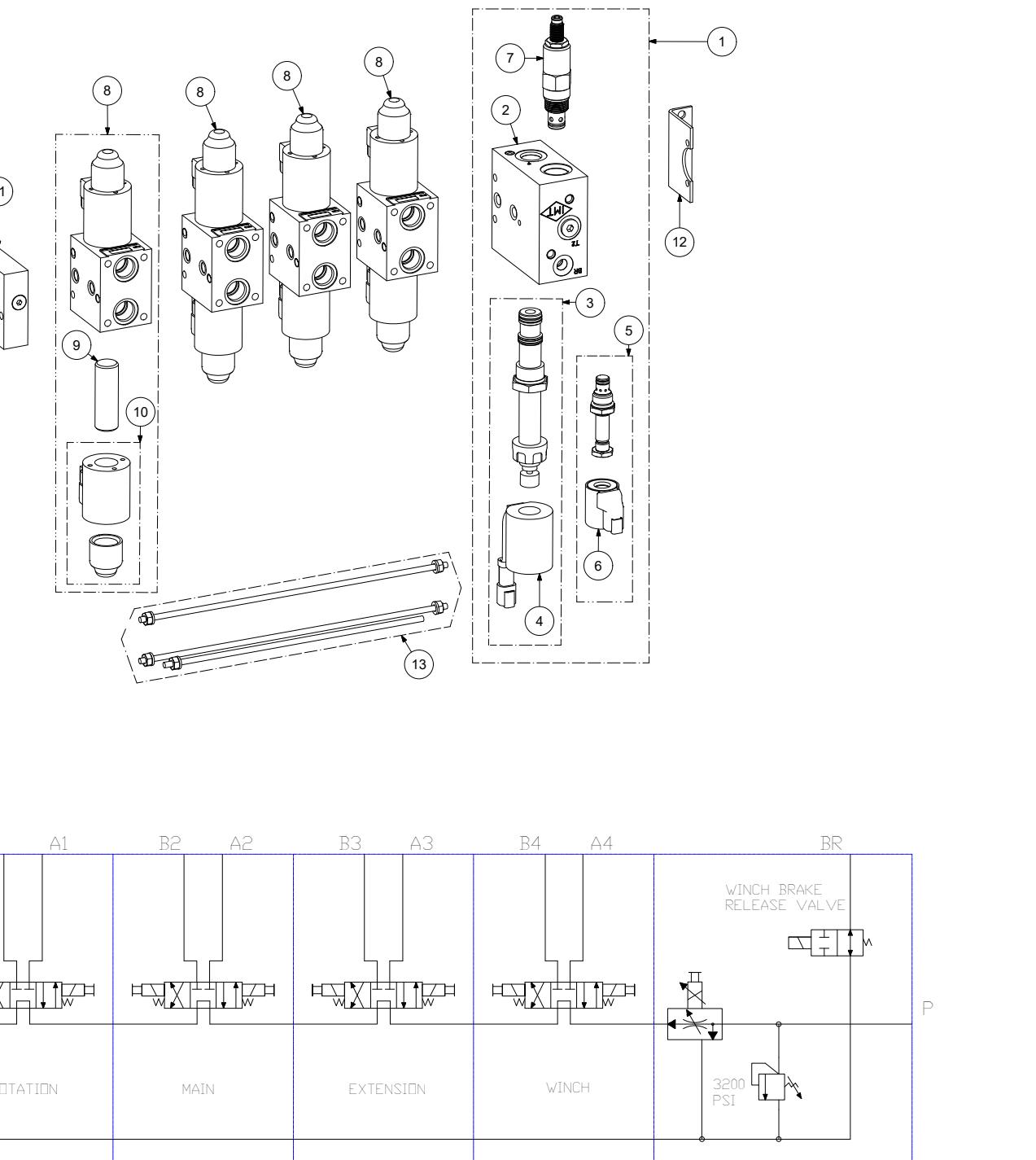
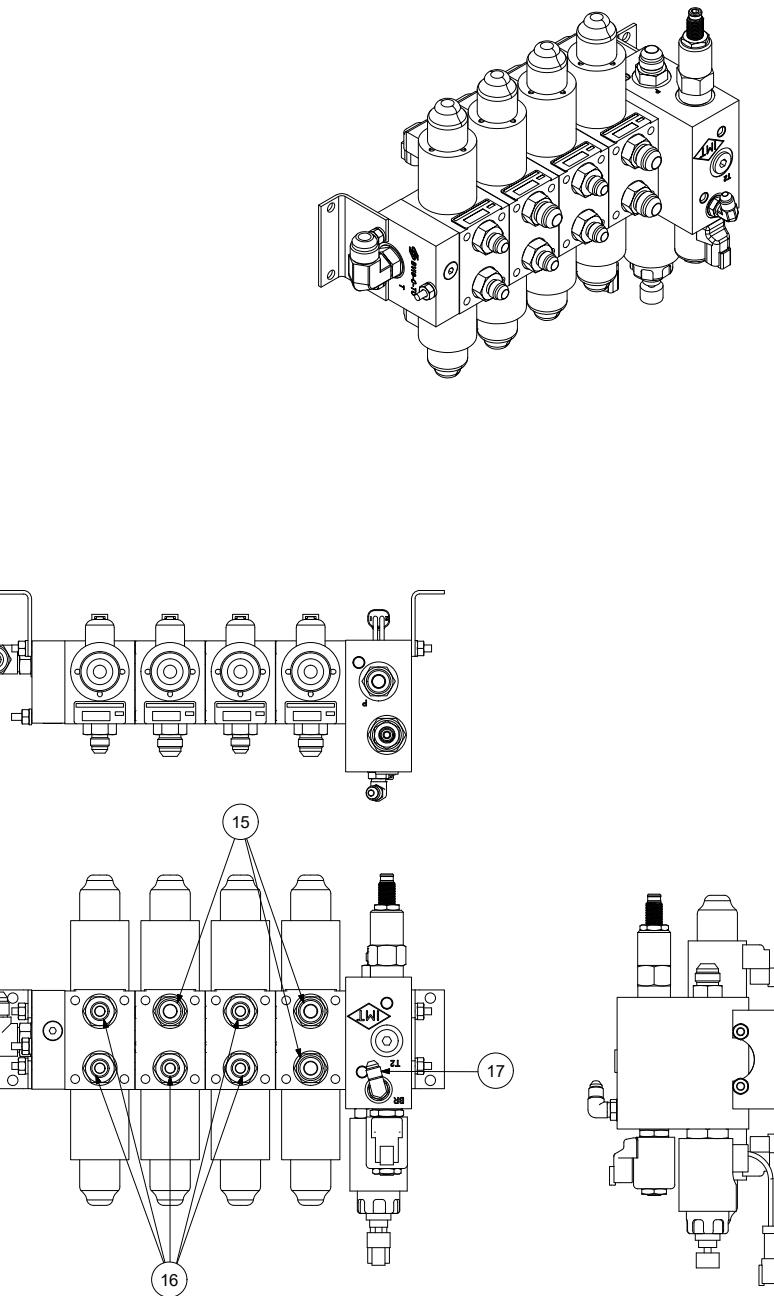
ITEM NO.	PART NO.	DESCRIPTION	QTY.	MODEL NO.	KIT NO.
1.	51728093	KIT-HRDW SERIES 3 SP VALVE BANK	1		
2.	73734472	VALVE BANK-MOD.INLET (PW) 12VDC IP69	1		
3.	60140839	BRKT-MAST VB 6000-8600S	2	7500/8600S	
3.	60140840	BRKT-MAST VB 7500-10000L	2	7500/10000	
3.	60140857	BRKT-MAST VB 12000-14000	1	14000	
3.	60251822	BRKT-MAST VB 12000	1	12000	
4.	72060004	CAP SCR .25-20X 1.00 HH GR5 Z	4		1
5.	72062104	NUT .25-20 HEX NYLOCK	4		1
6.	72063001	WASHER .25 FLAT	4		1
7.	72532670	ELBOW-M JIC/45/F JIC 8 8	1		
8.	72533583	ELBOW-M STR/45/M JIC 8 6	1		
9.	72534847	ADPTR-M JIC/F JIC 8 8 DIAGNOSTIC TEE	1		
10.	73050225	GAUGE-5000 PSI 2.5IN CB MOUNT -4 MORB	1		

REV B CN9000

12000 - 30' & 25' - Single Proportional Valve Bank Assembly (99906279)**99906279 PARTS LIST**

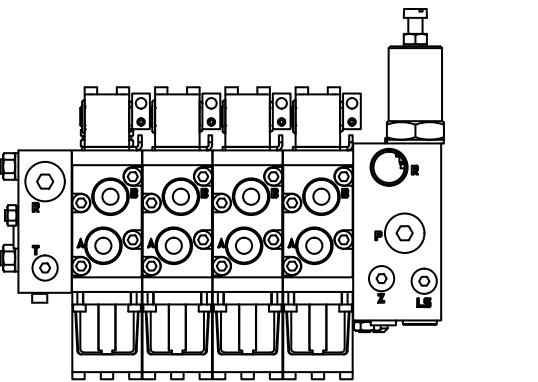
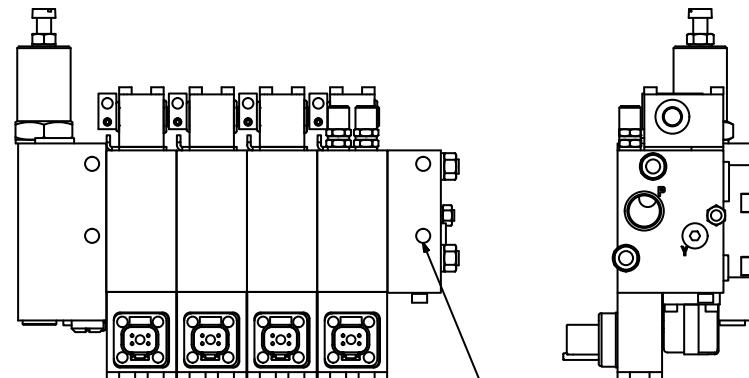
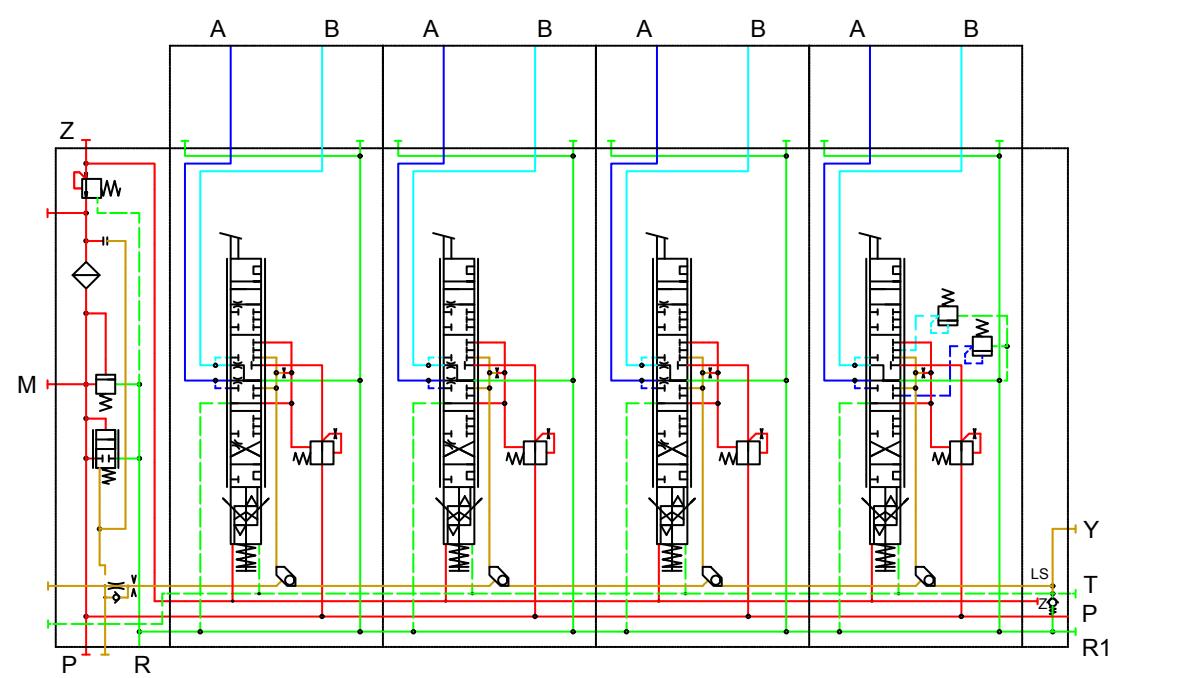
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1.	72533583	ELBOW-M STR/45/M JIC 8 6	1
2.	72532670	ELBOW-M JIC/45/F JIC 8 8	1
3.	72063001	WASHER .25 FLAT	4
4.	72062104	NUT .25-20 HEX NYLOCK	4
5.	60140839	BRKT-MAST VB 6000-8600S	2
6.	72060004	CAP SCR .25-20X 1.00 HH GR5 Z	4
7.	73734472	VALVE BANK-MOD.INLET (PW) 12VDC IP69	1
8.	72534847	ADPTR-M JIC/F JIC 8 8 DIAGNOSTIC TEE	1
9.	73050225	GAUGE-5000 PSI 2.5IN CB MOUNT -4 MORB	1

REV. INITIAL RELEASE

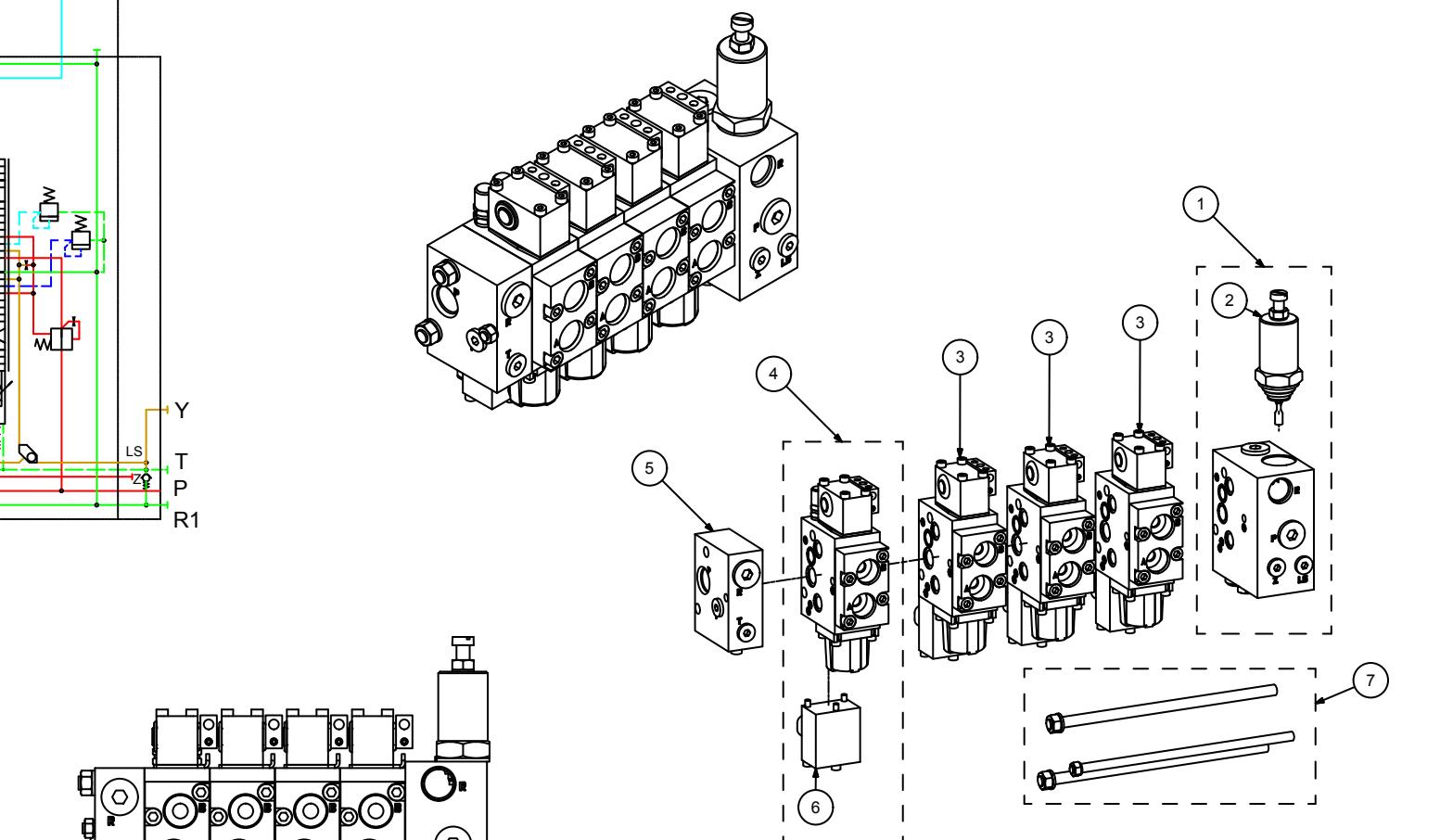
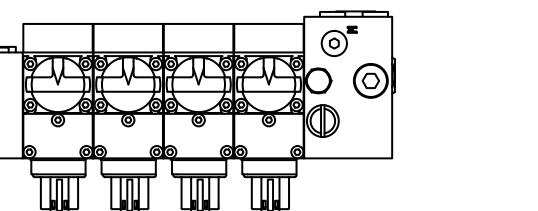
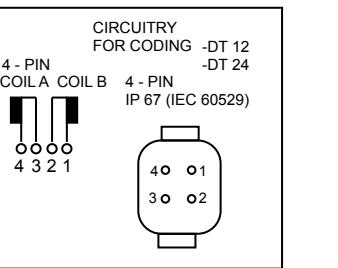
12000 - 30' & 25' Valve Bank - Single Proportional (73734472)**73734472 PARTS LIST**

ITEM NO.	PARTS NO.	DESCRIPTION	QTY.
1.	73540617	SECT-BV18 INLET ASM S3SP W RELIEF @ 3200	1
2.	73540394	SECT-BV18 INLET BODY S3SP	1
3.	73540252	VALVE-CART-P FLOW CTRL 12 VDC W MNL OVRD	1
4.	73540253	COIL-FOR 73540252 12VDC DEUTSCH	1
5.	73540397	VALVE-BRAKE RELEASE NO 12VDC DEUTSCH	1
6.	73540256	COIL-S SERIES FOR 73540397 12VDC DEUTSCH	1
7.	73540396	RELIEF VALVE-FOR 73734472 @ 3200 PSI	1
8.	73540375	SECT-BV18 S3SP 12VDC DEUTSCH	4
9.	77041930	SOLENOID TUBE USED ON 73540375	8
10.	90744198	KIT-COIL REPAIR FOR 73540375 12V	8
11.	73540027	BRKT-MOUNTING EXTRA LONG	
12.	70145830	BRKT-MOUNTING EXTRA LONG	1
13.	73540618	TIE ROD KIT-BV18 4-SECTION	2
14.	72533507	ELBOW-M STR/90/M JIC 8 10	1
15.	72532358	ADPTR-M STR/M JIC 8 8	1
16.	72532356	ADPTR-M STR/M JIC 8 6	4
17.	72053758	ELBOW-M STR/90/M JIC 4 4	5
REV. E			

12000 - 30' & 25' Valve Bank - Fully Proportional (73734727)



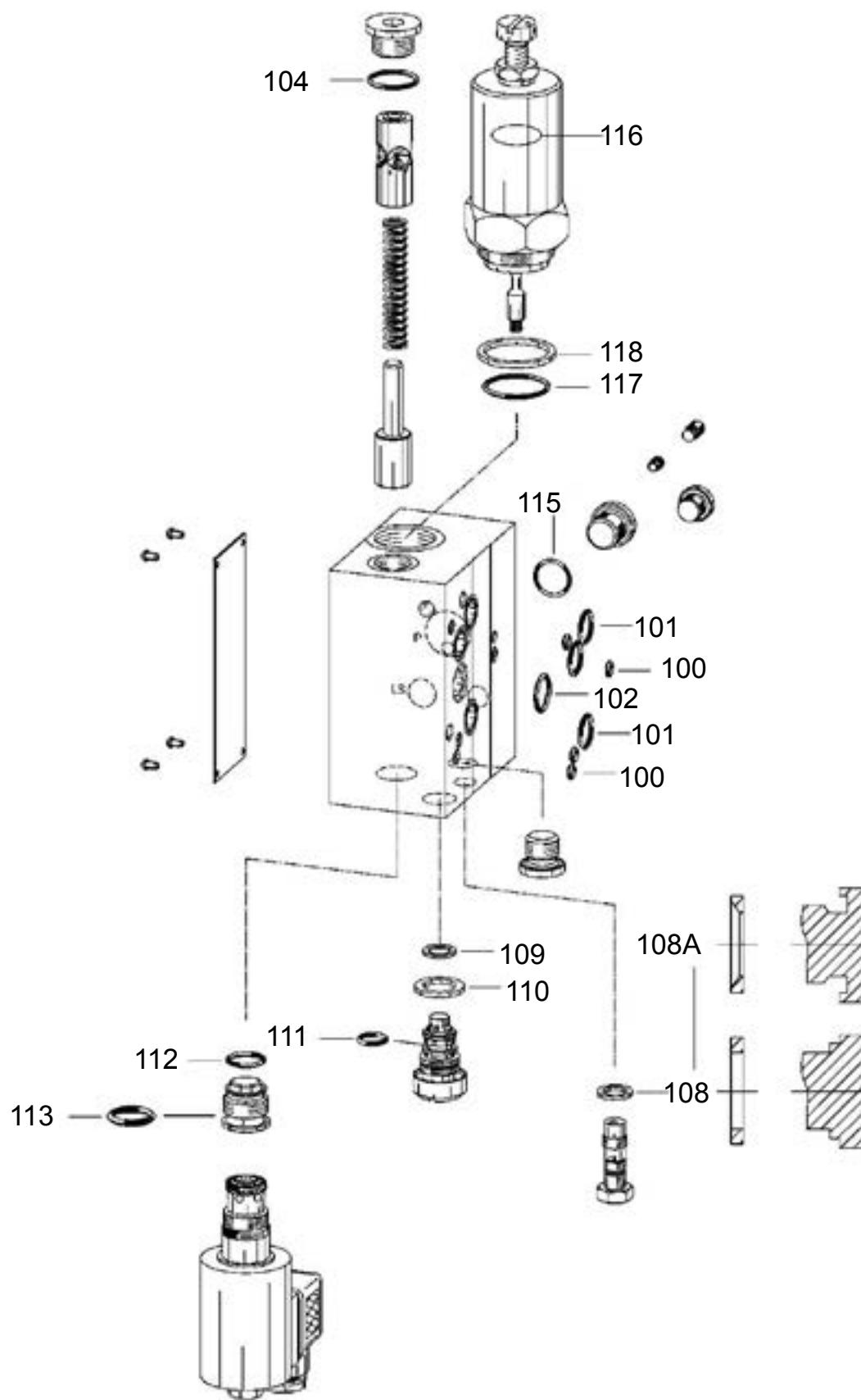
POTS:
P,R,A,B = SAE-8
M = SAE-4



73734727 PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1.	73540534	SECT-PSL2 S3FP INLET OPEN CENTER COMP	1
2.	73540538	RELIEF VALVE-PSL2 FOR 73734727 @ 3200PSI	1
3.	73540535	SECT-PSL2 S3FP WINCH/EXT/MAIN 12VDC	3
4.	73540536	SECT-PSL2 S3FP ROTATION 12VDC	1
5.	73540537	SECT-PSL2 S3FP END PLATE	1
6.	77040598	COIL-PSL 12VDC DEUTSCH	4
7.	73540616	TIE ROD KIT-PSL2 4-SECTION	1
8.	94399213	SEAL KIT-73734727 CONNECTION BLOCK (NOT SHOWN)	1
9.	94399214	SEAL KIT - 73734727 SECTIONS (NOT SHOWN)	1

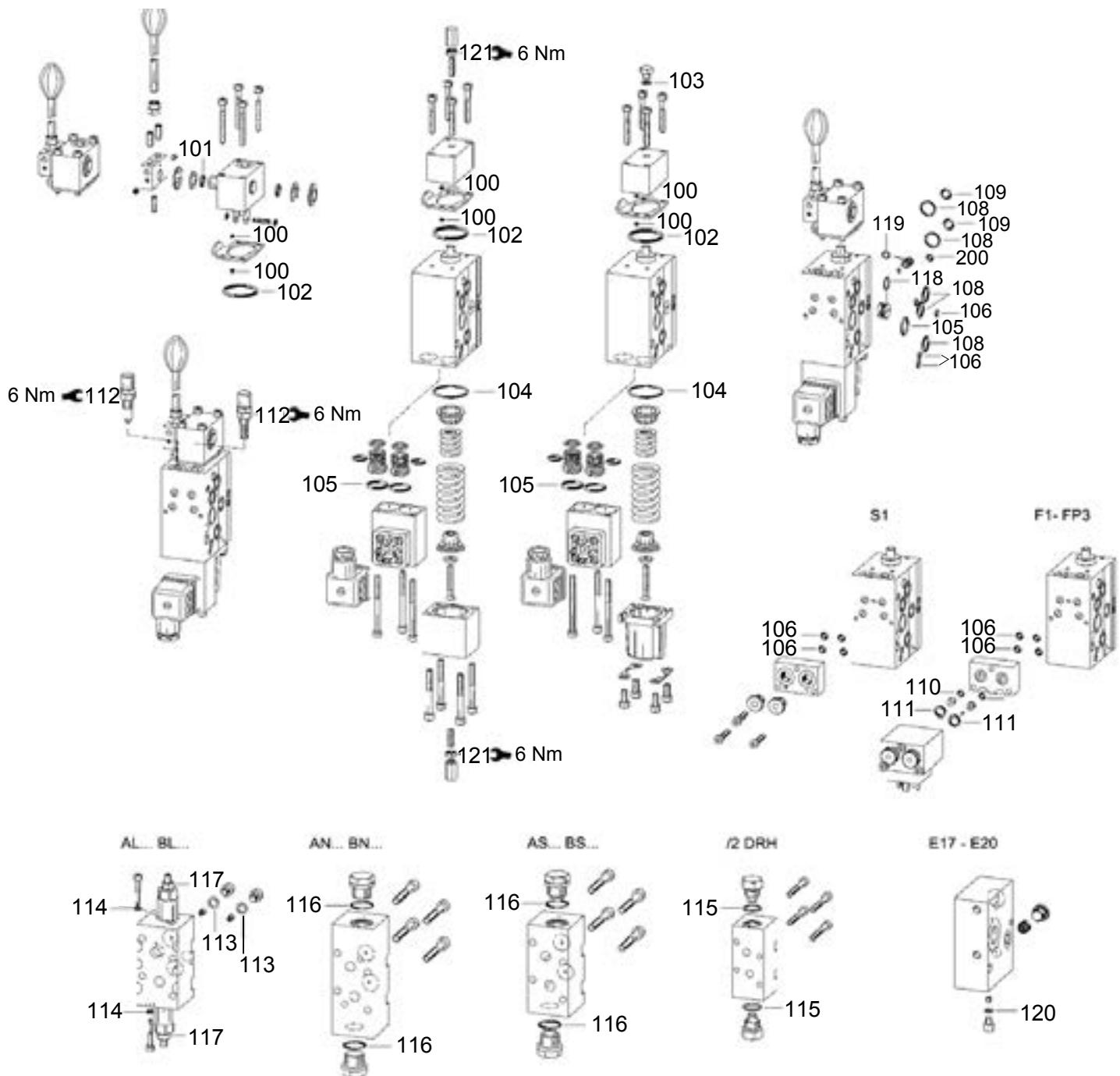
REV. D

12000 - 30' & 25' Connection Block Seal Kit for 73734727 (94399213)**94399213 PARTS LIST**

ITEM NO.	DESCRIPTION	QTY.
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
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 PART OF KIT NO. 94399213, AND CANNOT BE PURCHASED INDIVIDUALLY.

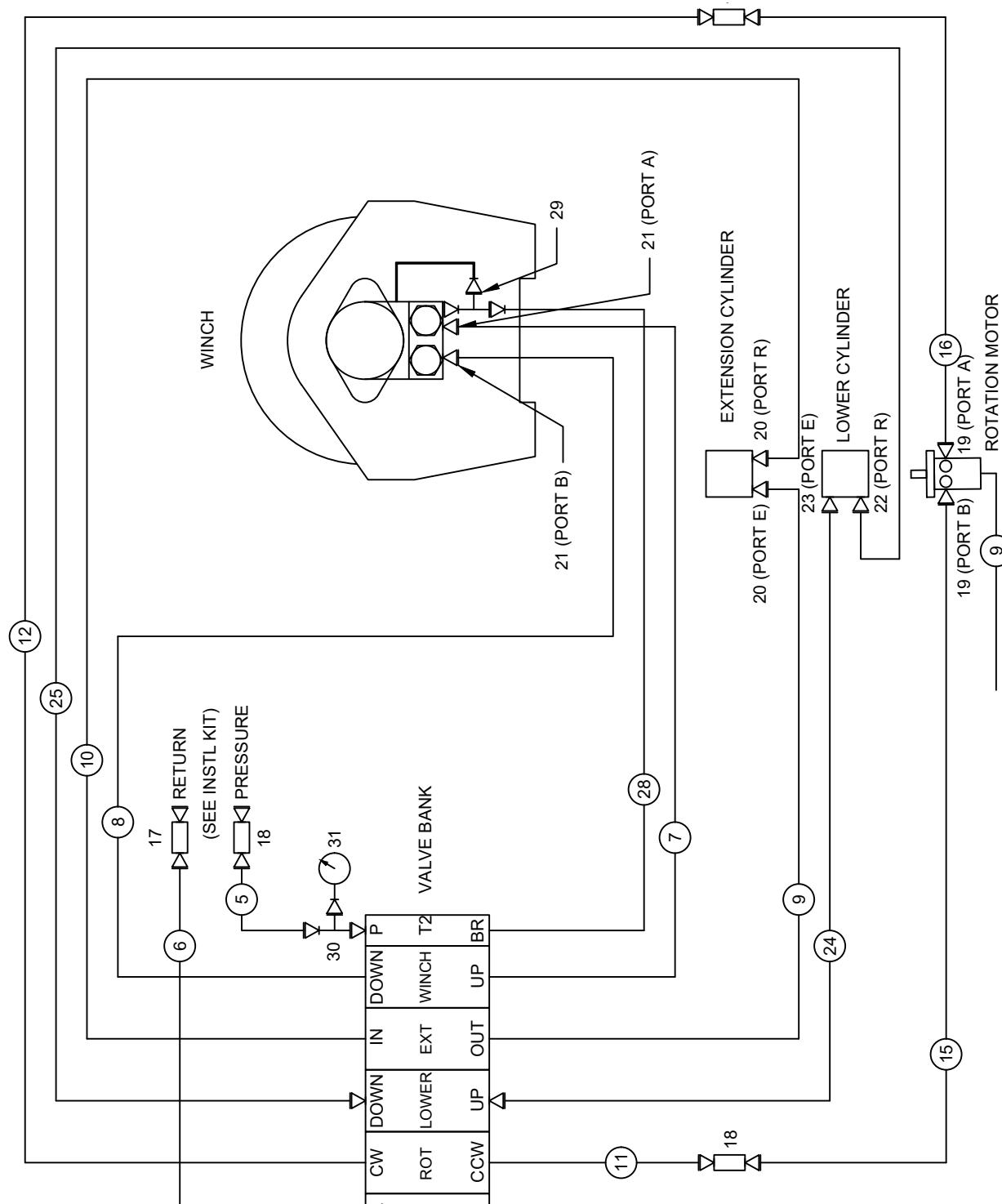
12000 - 30' & 25' Seal Kit for 73734727 (94399214)**94399214 PARTS LIST**

ITEM NO.	DESCRIPTION	QTY.
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	6
108.	O-RING - 10.82 x 1.78mm P5001	6
109.	O-RING - 6.07 x 1.78 mm P5001	4
110.	O-RING - 3 x 1.5 mm	2
111.	O-RING - 6.75 x 1.78 mm P5001	2
112.	SEAL NUT	2
113.	USIT-RING - ST 37 STANDARD	2
114.	COPPER RING - 4 x 8 x 1 mm	2
115.	SOFT IRON SEAL RING -	2
116.	O-RING - 17.17 x 1.78 mm P5001	2
117.	SEAL- LOCK COLLAR NUT - M6 12 x 1	2
118.	O-RING - 10.00 x 1.00 mm P5001	1
119.	O-RING - 5.00 x 1.00 mm P5001	2
120.	COPPER RING - 5 x 7.5 x 1 mm	1
121.	SEAL NUT	2

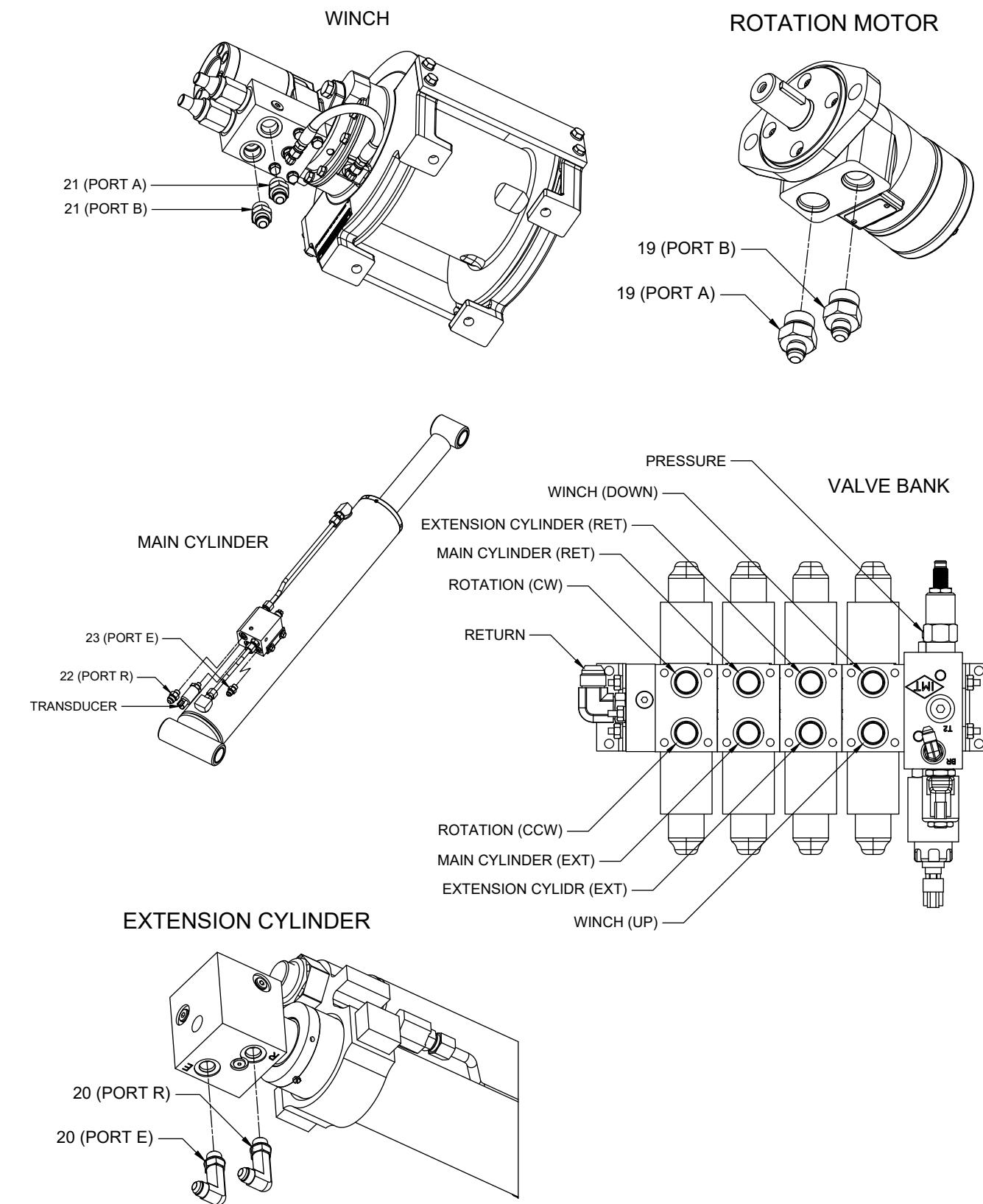
NOTE:

THESE SEALS ARE PART OF KIT NO. 94399214, AND CANNOT BE PURCHASED INDIVIDUALLY.

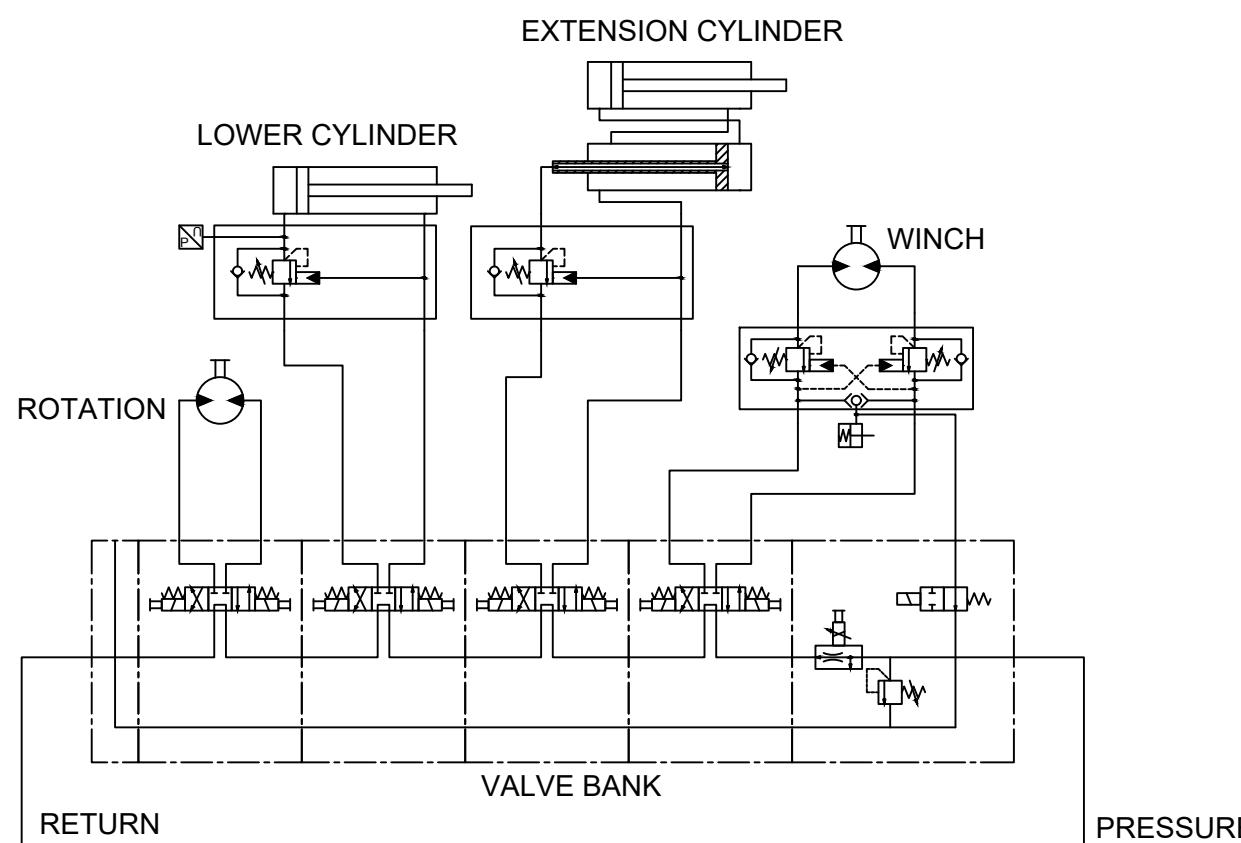
12000 - 30' & 25' Plumbing Diagram - Single Proportional (99906216)



99906216 - PLUMBING DIAGRAM - SINGLE PROPORTIONAL, CONTINUED



99906216 - PLUMBING DIAGRAM - SINGLE PROPORTIONAL, CONTINUED

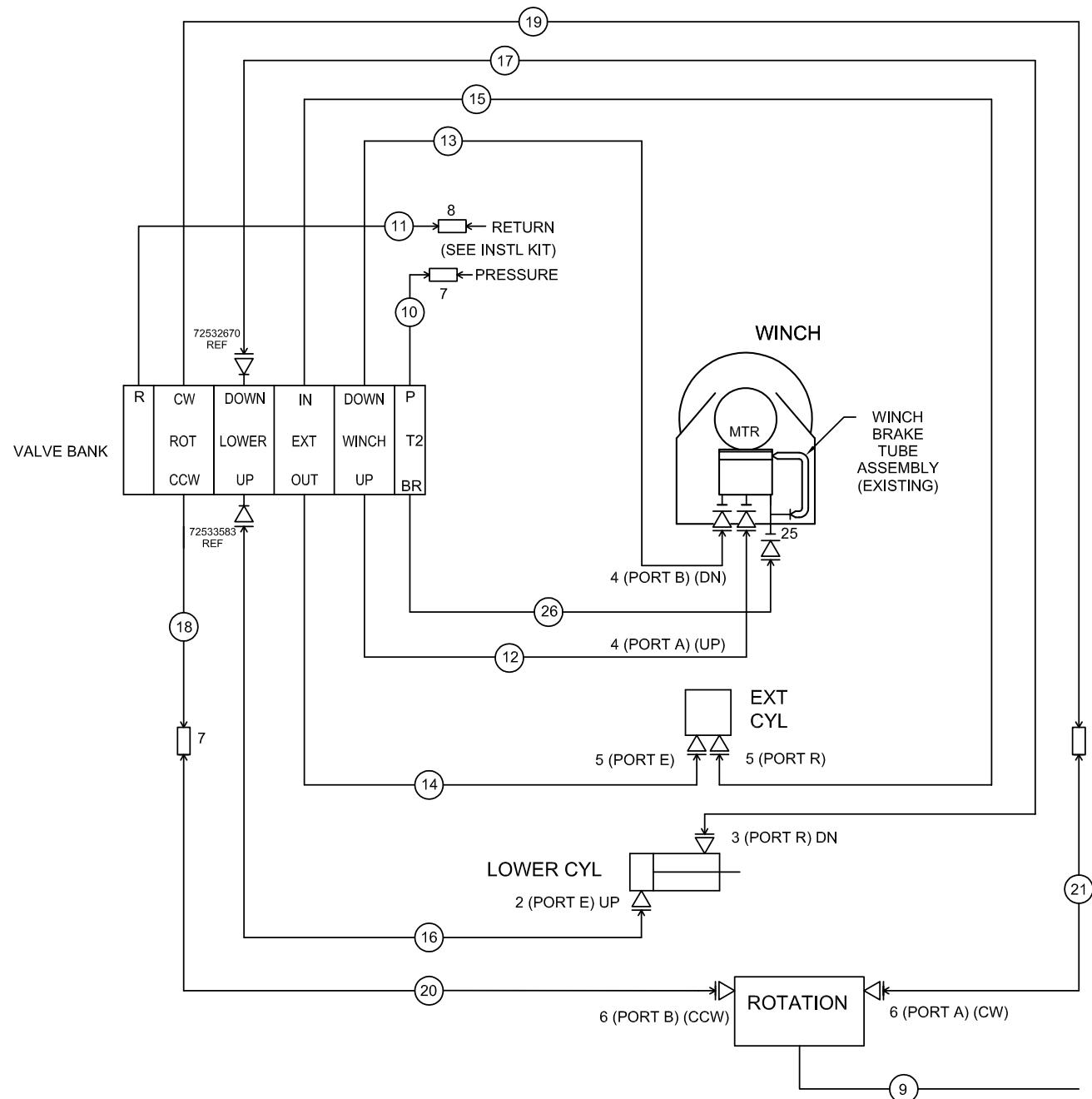


99906216 PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	KIT NO.	QTY.
1.	91727214	KIT-HYD 12000 SERIES III SP BG6	REF	1
2.	51726820	KIT-BRADEN WINCH BRAKE RELEASE	REF	1
3.	73734472	VALVE BANK-4-SECT BV18 S3SP 12VDC	1	1
4.	51395121	HOSE-AA .13 X 13.50 (2-2) 100R17	1	1
5.	51396017	HOSE-FJ .50 X 30.00 (8-8) 100R16	1	1
6.	51397080	HOSE-FJ .62 X 30.00 (10-10) 100R17	1	1
7.	51397081	HOSE-FZ .50 X 31.50 (8-8) 100R17	1	1
8.	51397082	HOSE-FJ .50 X 31.00 (8-8) 100R17	1	1
9.	51396886	HOSE-FZ .38 X 25.00 (6-6) 100R17	1	1
10.	51396887	HOSE-FJ .38 X 24.50 (6-6) R10017	1	1
11.	51399072	HOSE-FJ .38 X 22.50 (8-6) 100R17	1	1
12.	51399073	HOSE-FZ .38 X 25.00 (8-6) 100R17	1	1
13.	60350141	SLEEVE-HOSE NHS-159 X 12 CUT & SEALED	1	3
14.	60350142	SLEEVE-HOSE NHS-254 X 15 CUT & SEALED	1	2
15.	51399228	HOSE-FJ .38 X 18.00 (8-6) 100R17	1	1
16.	51399229	HOSE-FJ .38 X 22.00 (8-6) 100R17	1	1
17.	72534412	SWIVEL-M JIC/90/M JIC 10 10	1	1
18.	72533648	SWIVEL-M JIC/90/M JIC 8 8	1	3
19.	72533613	ADPTR-M STR/M JIC 10 6	1	2
20.	72532700	ELBOW-M STR/90/M JIC XLG 6 6	1	2
21.	72532359	ADPTR-M STR/M JIC 10 8	1	2
22.	72532357	ADPTR-M STR/M JIC 6 8	1	1
23.	72532355	ADPTR-M STR/M JIC 6 6	1	1
24.	51396387	HOSE-FJ .38 X 35.00 (6-6) 100R17	1	1
25.	51396878	HOSE-FZ .50 X 37.00 (8-8) 100R17	1	1
26.	72532670	ELBOW-M JIC/45/F JIC 8 8	1	1
27.	72533583	ELBOW-M STR/45/M JIC 8 6	1	1
28.	51399908	HOSE-FF .25 X 32.00 (4-4) 100R17	1	1
29.	72534582	TEE-STL STR/JIC/JIC 4 4 4 RUN	1	1
30.	72534847	ADPTR-M JIC/F JIC 8 8 DIAGNOSTIC TEE	1	1
31.	73050225	GAUGE-5000 PSI 2.5IN CB MOUNT -4 MORB	1	1

REV. A CN1155

12000 - 30' & 25' Plumbing Diagram - Single Proportional (99906216)

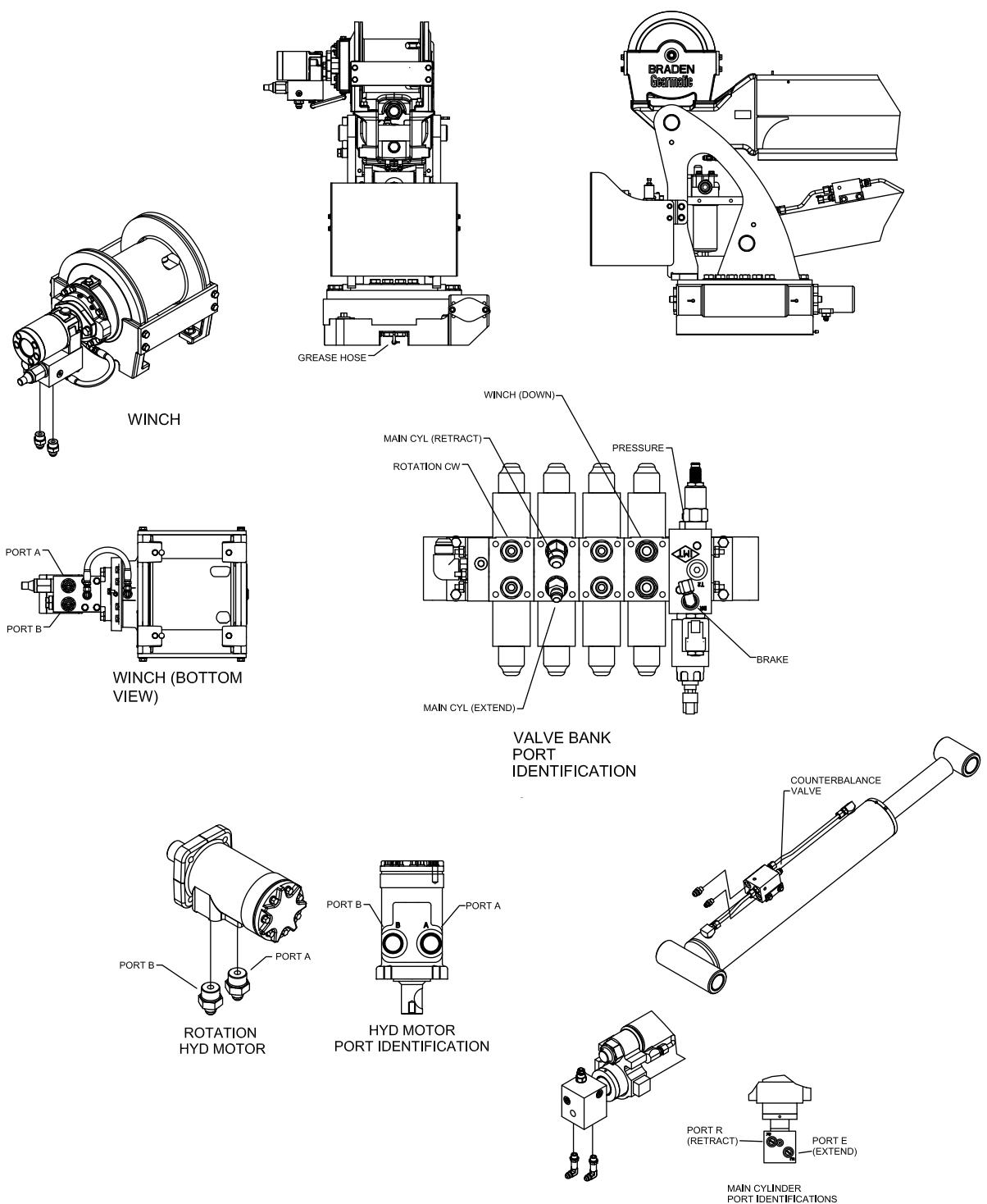


99906216 PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	KIT NO.	QTY.
1.	91727214	KIT-HYD 12000 SERIES III SP BG6		1
2.	72532355	ADPTR-M STR / M JIC 6 6	1	1
3.	72532357	ADPTR-M STR / M JIC 6 8	1	1
4.	72532359	ADPTR-M STR / M JIC 10 8	1	2
5.	72532700	ELBOW-M STR / 90 / M JIC XLG 6 6	1	2
6.	72533613	ADPTR-M STR / M JIC 10 6	1	2
7.	72533648	SWIVEL-M JIC / 90 / M JIC 8 8	1	3
8.	72534412	SWIVEL-M JIC / 90 / M JIC 10 10	1	1
9.	51395121	HOSE-AA .13 X 13.50 (2-2) 100R17	1	1
10.	51396017	HOSE-FJ .50 X 30.00 (8-8) 1OOR16	1	1
11.	51397080	HOSE-FJ .62 X 30.00 (10-10) 100R17	1	1
12.	51397081	HOSE-FZ .SO X 31.50 (8-8) 100R17	1	1
13.	51397082	HOSE-FJ .50 X 31.00 (8-8) 1OOR17	1	1
14.	51396886	HOSE-FZ .38 X 25.00 (6-6) 100R17	1	1
15.	51396887	HOSE-FJ .38 X 24.50 (6-6) R10017	1	1
16.	51490029	HOSE-FJ .38 X 33.00 (6-6) 1OOR17	1	1
17.	51396905	HOSE-FZ .50 X 35.00 (8-8) 100R17	1	1
18.	51399072	HOSE-FJ .38 X 22.50 (8-6) 1OOR17	1	1
19.	51399073	HOSE-FZ .38 X 25.00 (8-6) 100R17	1	1
20.	51399228	HOSE-FJ .38 X 18.00 (8-6) 1OOR17	1	1
21.	51399229	HOSE-FJ .38 X 22.00 (8-6) 1OOR17	1	1
22.	60350141	SLEEVE-HOSE NHS-159 X 12 CUT & SEALED	1	3
23.	60350142	SLEEVE-HOSE NHS-254 X 15 CUT & SEALED	1	2
24.	51726820	KIT-BRADEN WINCH BRAKE RELEASE		1
25.	72534582	TEE-STL STR / JIC / JIC 4 4 4 RUN	24	1
26.	51399908	HOSE-FF .25 X 32.00 (4-4) 100R17	24	1

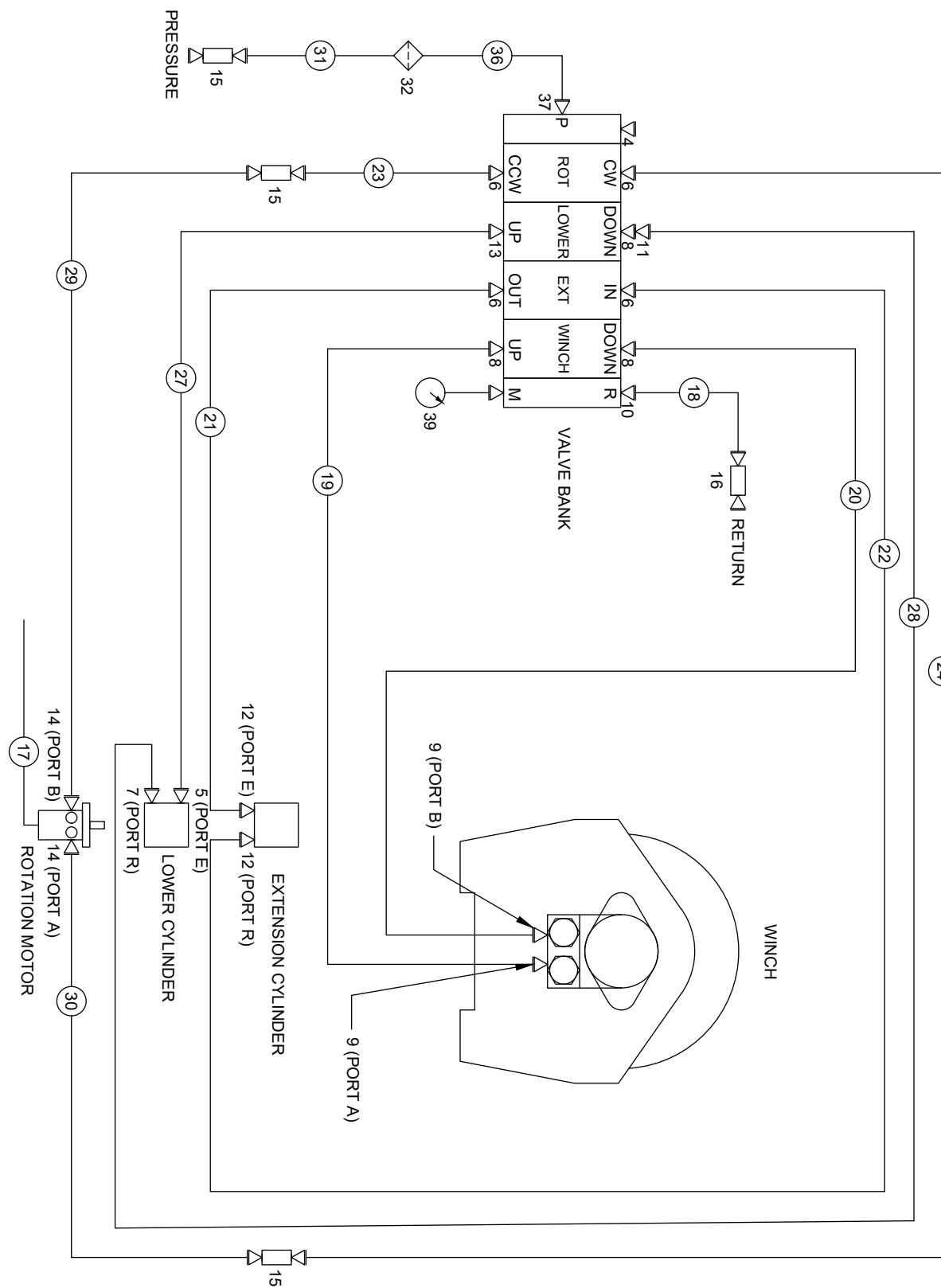
NOTES:

1. SEE SHEET 2 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 THRU MAST.
 5. REMOVE BRAKE HOSE FROM FITTING IN WINCH MOTOR BLOCK. REMOVE AND REPLACE FITTING WITH TEE (ITEM #27). REINSTALL HOSE ONTO TEE.

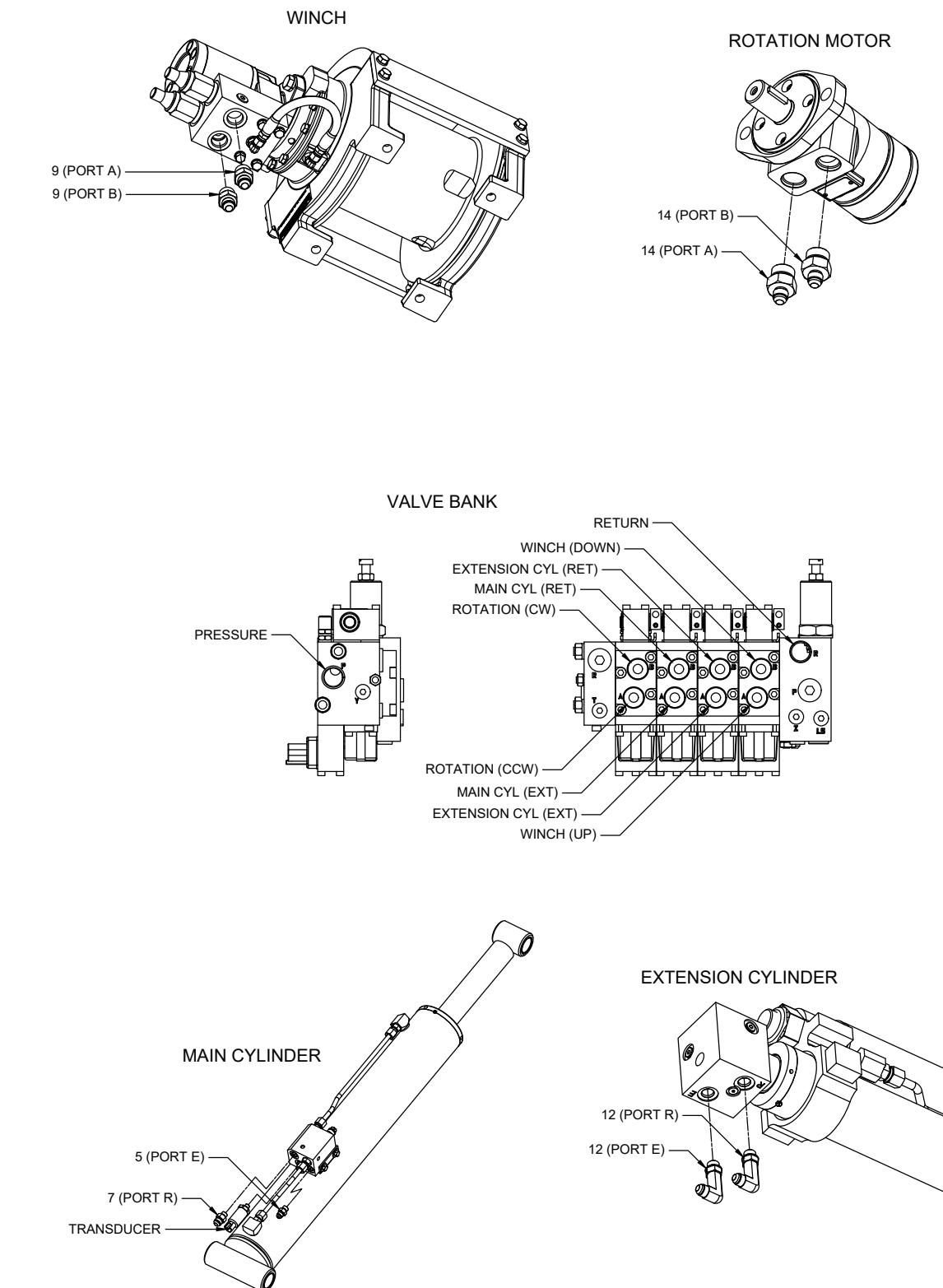
12000 - 30' & 25' SINGLE PROPORTIONAL (99906216-1)

This page left intentionally blank

12000 - 30' & 25' Plumbing Diagram - Fully Proportional (99906215)



99906215 - PLUMBING DIAGRAM - FULLY PROPORTIONAL, CONTINUED

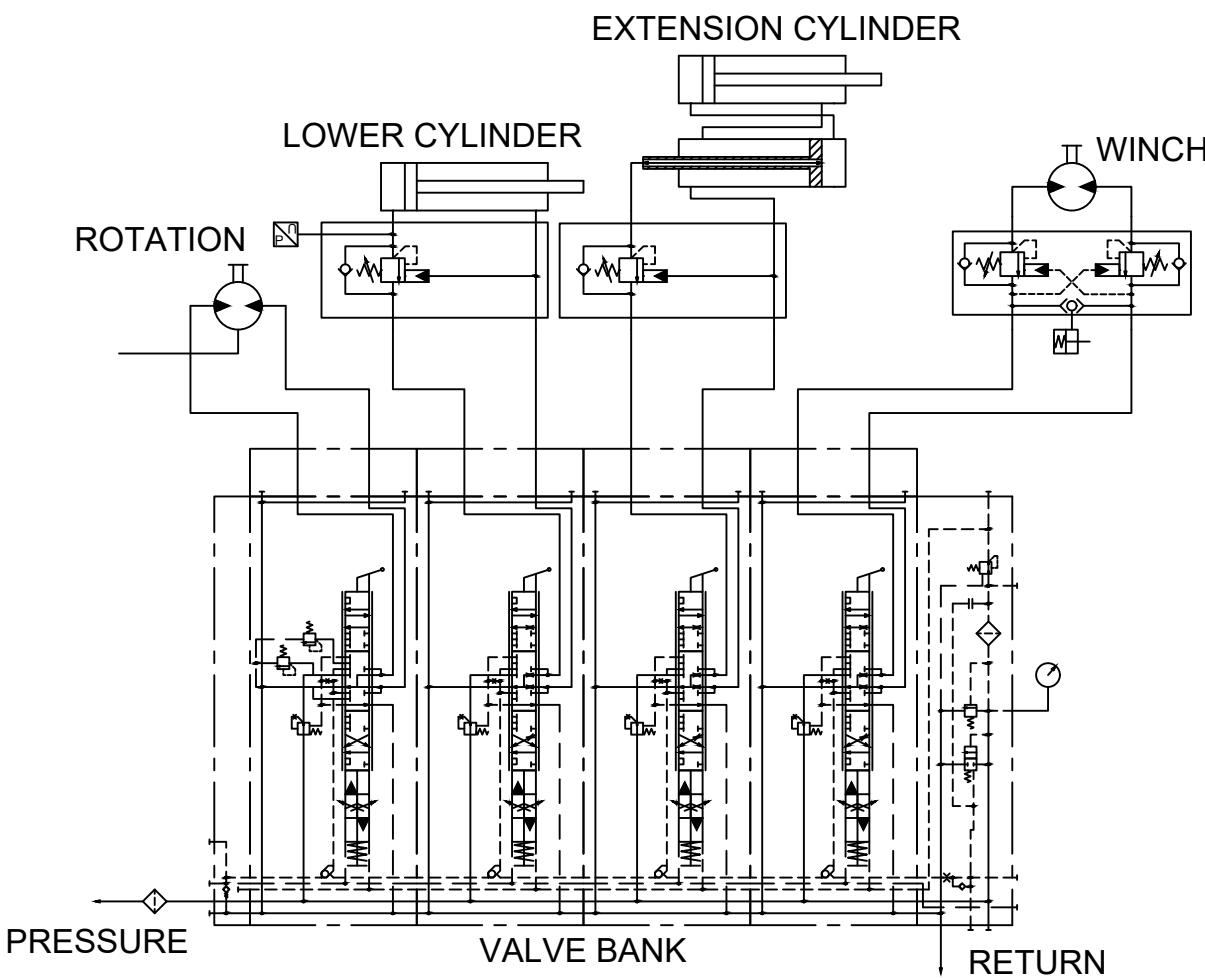


NOTE

- NOTES:**

 1. INSTALL 60350141 ON EXTENSION CYLINDER, MAIN CYLINDER, AND ROTATION MOTOR HOSES.
 2. INSTALL 60350142 ON WINCH AND PRESSURE/RETURN VALVE BANK HOSES.
 3. INSTALL 60350105 ON PRESSURE/RETURN AND ROTATION HOSES THROUGH MAST.

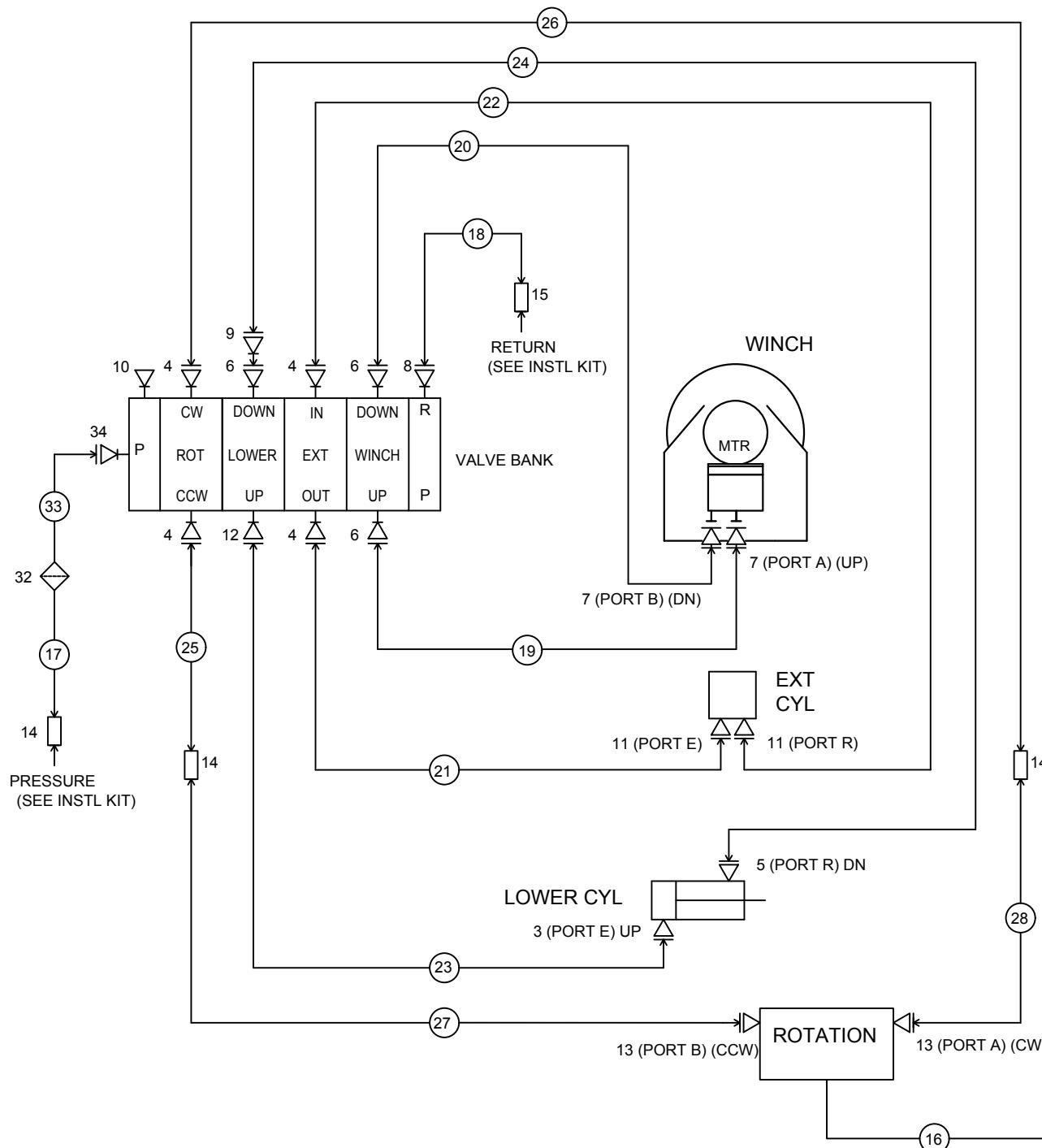
99906215 - PLUMBING DIAGRAM - FULLY PROPORTIONAL, CONTINUED



99906215 PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	KIT NO.	QTY.
1.	91727230	KIT-HYD 12000 SERIES III FP BG6	REF	1
2.	91725679	KIT-PRESSURE FILTER S3FP 12K 14K MAST	REF	1
3.	73734727	VALVE BANK-4-SECT PSL2 W OC INLT		1
4.	72532686	PLUG-STR SOC HD STL 8 (.75 THD)	1	1
5.	72532355	ADPTR-M STR/M JIC 6 6	1	1
6.	72532356	ADPTR-M STR/M JIC 8 6	1	4
7.	72532357	ADPTR-M STR/M JIC 6 8	1	1
8.	72532358	ADPTR-M STR/M JIC 8 8	1	4
9.	72532359	ADPTR-M STR/M JIC 10 8	1	2
10.	72532361	ADPTR-M STR/M JIC 8 10	1	1
11.	72532670	ELBOW-M JIC/45/F JIC 8 8	1	1
12.	72532700	ELBOW-M STR/90/M JIC XLG 6 6	1	2
13.	72533583	ELBOW-M STR/45/M JIC 8 6	1	1
14.	72533613	ADPTR-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.	51395121	HOSE-AA .13 X 13.50 (2-2) 100R17	1	1
18.	51397080	HOSE-FJ .62 X 30.00 (10-10) 100R17	1	1
19.	51397081	HOSE-FZ .50 X 31.50 (8-8) 100R17	1	1
20.	51397082	HOSE-FJ .50 X 31.00 (8-8) 100R17	1	1
21.	51396886	HOSE-FZ .38 X 25.00 (6-6) 100R17	1	1
22.	51396887	HOSE-FJ .38 X 24.50 (6-6) R10017	1	1
23.	51399072	HOSE-FJ .38 X 22.50 (8-6) 100R17	1	1
24.	51399073	HOSE-FZ .38 X 25.00 (8-6) 100R17	1	1
25.	60350141	SLEEVE-HOSE NHS-159 X 12 CUT & SEALED	1	3
26.	60350142	SLEEVE-HOSE NHS-254 X 15 CUT & SEALED	1	2
27.	51490029	HOSE-FJ .38 X 33.00 (6-6) 100R17	1	1
28.	51396878	HOSE-FZ .50 X 37.00 (8-8) 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.	51399890	HOSE-FJJ .50 X 40.00 (8-8) 100R17	1	1
32.	73052156	FILTER-PRES 4000PSI 25GPM 10MIC -12	2	1
33.	72532360	ADPTR-M STR/M JIC 12 8	2	1
34.	72053767	ELBOW-M STR/90/M JIC 12 12	2	1
35.	72533623	ELBOW-M STR/90/M JIC 8 12	2	1
36.	71415692	TUBE ASM-PRESSURE FILTER S3FP 12K 14K MA	2	1
37.	72534898	O-RING EXTENDER 08-08 1.75	2	1
38.	60350105	SLEEVE-HOSE VELCRO CLOSURE 4IN DIA		1
39.	73050225	GAUGE-5000 PSI 2.5IN CB MOUNT -4 MORB		1

REV. B CN1155

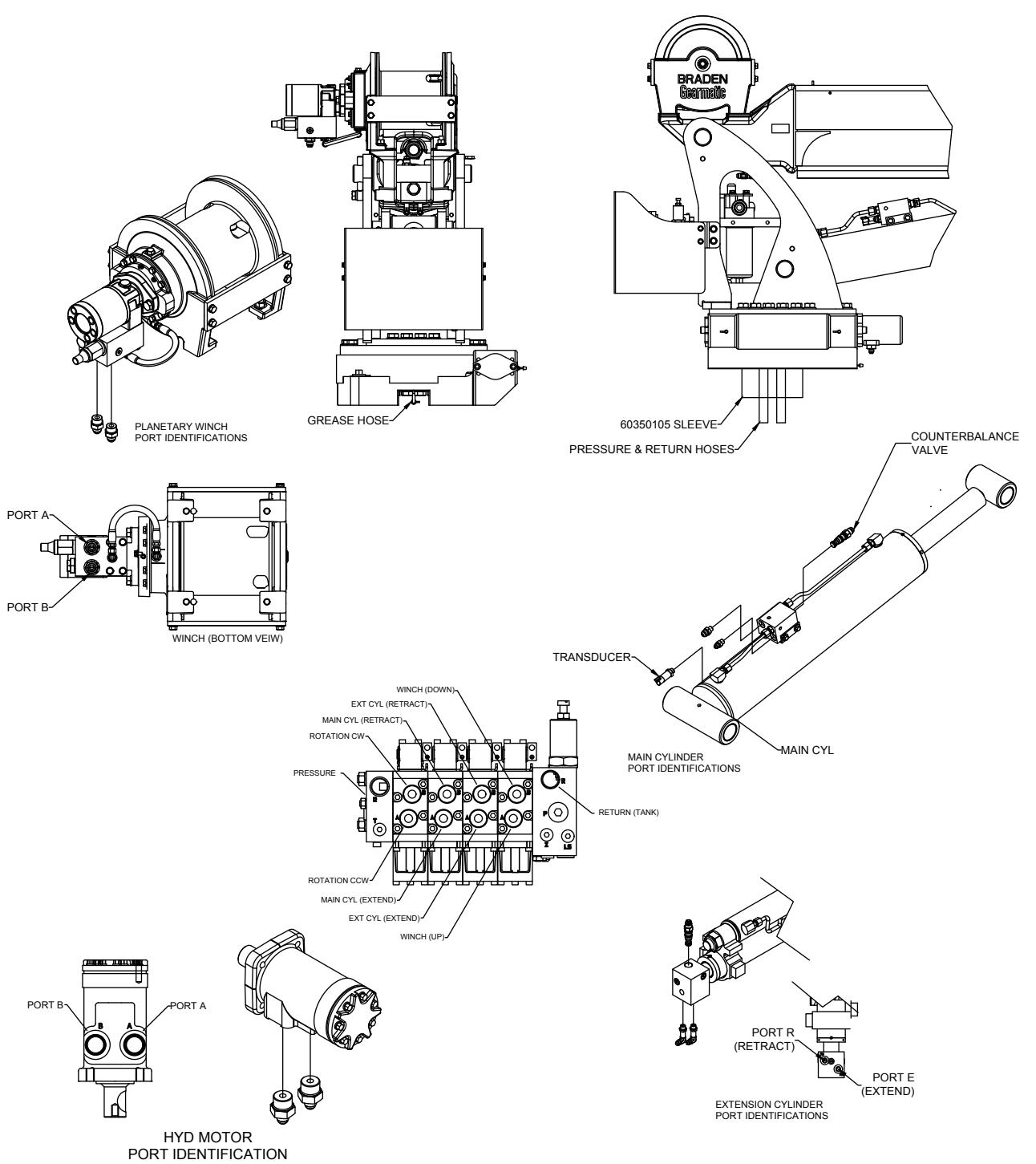
12000 - 30' & 25' Plumbing Diagram - Fully Proportional (99906215)**99906215 PARTS LIST**

ITEM NO.	PART NO.	DESCRIPTION	KIT NO.	QTY.
1.	911727230	KIT-HYD 12000 SERIES III FP BG6		1
2.	73734727	VALVE BANK-4-SECT PSL2 W OC INLT		1 REF
3.	72532355	ADPTR - M STR / M JIC 6 6	1	1
4.	72532356	ADPTR - M STR / M JIC 8 6	1	4
5.	72532357	ADPTR - M STR / M JIC 6 8	1	1
6.	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.	72532700	ELBOW - M STR / 90 / M JIC XLG 6 6	1	2
12.	72533583	ELBOW - M STR / 45 / M JIC 8 6	1	1
13.	72533613	ADPTR - M STR / M JIC 10 6	1	2
14.	72533648	SWIVEL - M JIC / 90 / M JIC 8 8	1	3
15.	72534412	SWIVEL - M JIC / 90 / M JIC 10 10	1	1
16.	51395121	HOSE - AA .13 X 13.50 (2-2) 100R17	1	1
17.	51399890	HOSE - FJ .50 X 40. (8-8) 100R17	1	1
18.	51397080	HOSE - FJ .62 X 30 (10-10) 100R17	1	1
19.	51397081	HOSE - FZ .50 X 31.50 (8-8) 100R17	1	1
20.	51397082	HOSE - JJ .50 X 31.00 (8-8) 100R17	1	1
21.	51396886	HOSE - FZ .38 X 25.00 (6-6) 100R17	1	1
22.	51396887	HOSE - FJ .38 X 24.50 (6-6) R10017	1	1
23.	51399462	HOSE - FJ .38 X 31.00 (6-6) 100R17	1	1
24.	51396905	HOSE -FFZ .50 X 35.00 (8-8) 100R17	1	1
25.	51399072	HOSE - FJ .38 X 22.50 (8-6) 100R17	1	1
26.	51399073	HOSE - FZ .38 X 25.00 (8-6) 100R17	1	1
27.	51399228	HOSE - FJ .38 X 18.00 (8-6) 100R17	1	1
28.	51399229	HOSE -FJ .38 X 22.00 (8-6) 100R17	1	1
29.	60350141	SLEEVE - HOSE NHS - 159 X 12 CUT & SEALED	1	3
30.	60350142	SLEEVE - HOSE NHS - 254 X 15 CUT & SEALED	1	2
31.	60350105	SLEEVE - HOSE NHS - 254 X 15 CUT & SEALED	1	1
32.	73052156	FILTER - PRE 4000PSI 25GPM 10MIC - 12	1	1
33.	71415691	TUBE ASM - PRESSURE FILTER S3FP SMALL MAST	1	1
34.	72534898	O-RING EXTENDER 08-08	1	1

REV. A CN633

NOTES:

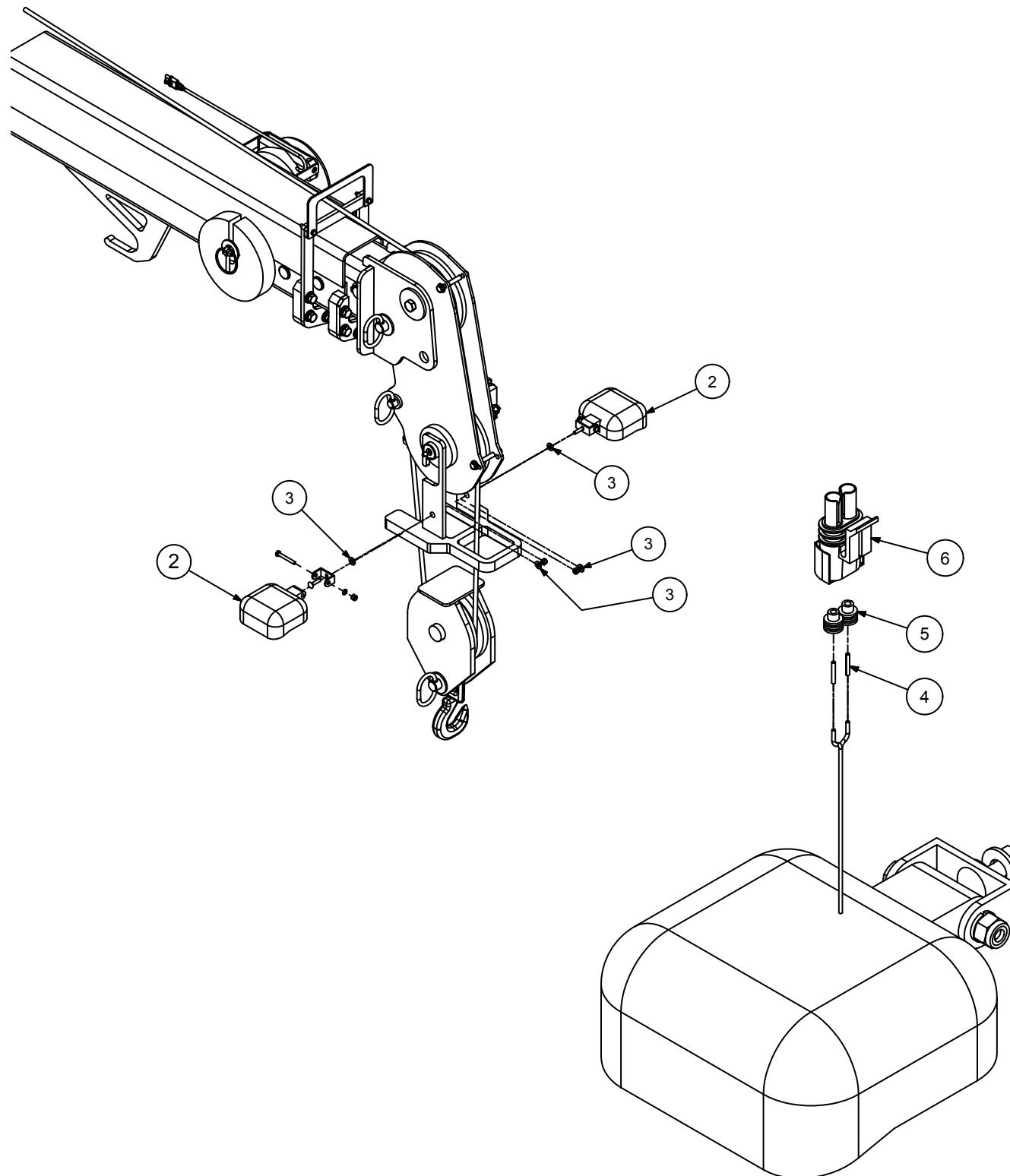
1. SEE SHEET 2 FOR WINCH HYDRAULIC MOTOR, LOWER, AND EXTENSION CYLINDER.
2. INSTALL 60350141 ON EXTENSION CYLINDER, MAIN CYLINDER HOSES, AND ROTATION HOSES.
3. INSTALL 60350142 ON WINCH HOSES AND PRESSURE AND RETURN VALVE BANK HOSES.
4. INSTALL 60350105 ON PRESSURE AND RETURN HOSES, ROTATION HOSES THROUGH THE MAST..

12000 - 30' & 25' FULLY PROPORTIONAL (99906215-1)

This page left intentionally blank

Section - 5**Electrical & Lighting**

This page left intentionally blank

12000 - 30' & 25' Boom Tip Light Kit (99905289)**99905289 PARTS LIST**

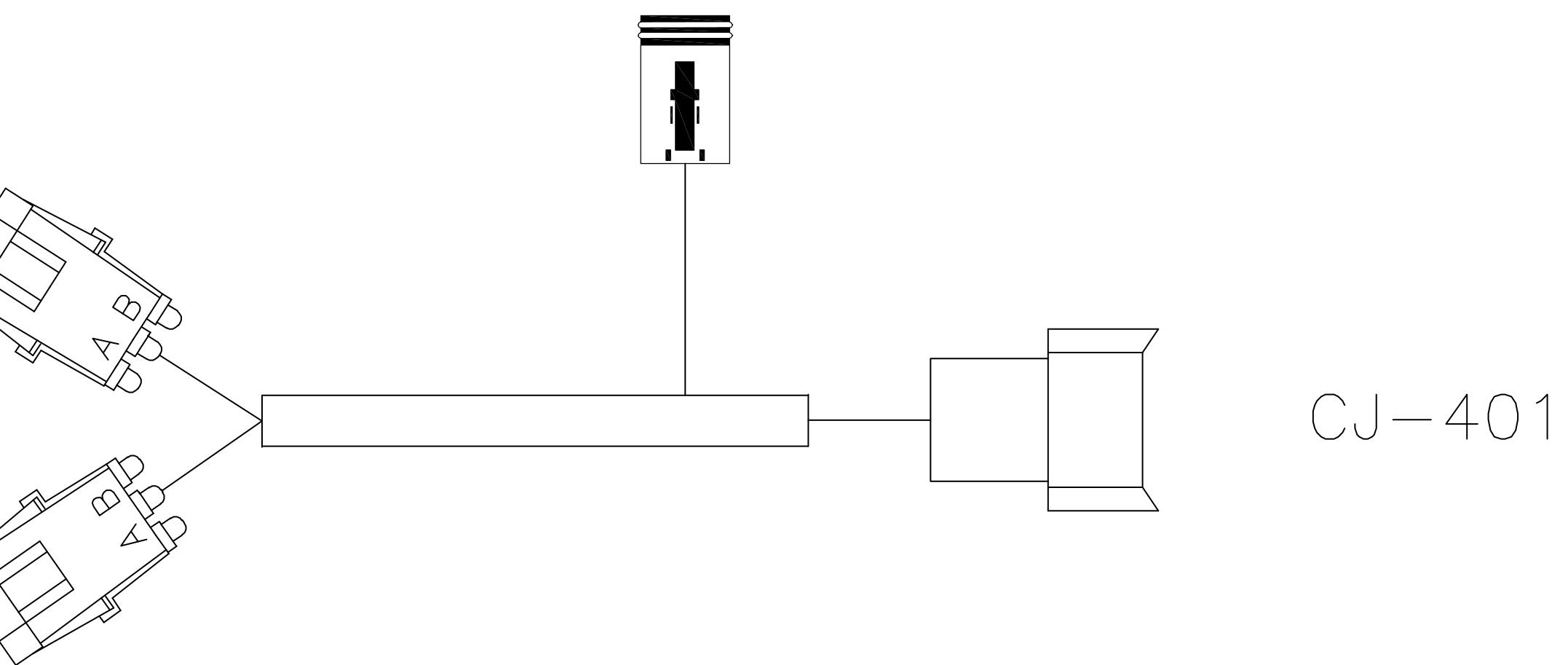
ITEM NO.	PART NO.	DESCRIPTION	KIT NO.	QTY.
1.	51724116	ELECT KIT-S3 BOOM DUAL LED FLOOD LIGHTS		1
1.	77441473	HARNESS-S3 BOOM TIP LED FLD LIGHT JUMPER (Part of Kit 51724116)		1
2.	77040581	FLOODLIGHT-LED 12-36VDC	1	2
3.	72063002	WASHER-FLAT .31 W ANSI B27.2 Z	1	4
4.	77045888	TERM-PKRD WEATHERPACK 14-16GA FEMALE	1	4
5.	77044927	CABLE SEAL-PKRD WP/MP 14 GA GREY	1	4
6.	77044574	CONN-PKRD WEATHERPACK 2 CAV FEMALE/TOWER	1	2
REV. C				

NOTES:

1. LIGHT CAN BE PLACED ON EITHER SIDE
2. HARNESS CONNECTS TO CORD REEL AND A2B SWITCH

Harness-Boom Tip LED Flood Light (77441473)

Kit Number: 57124116



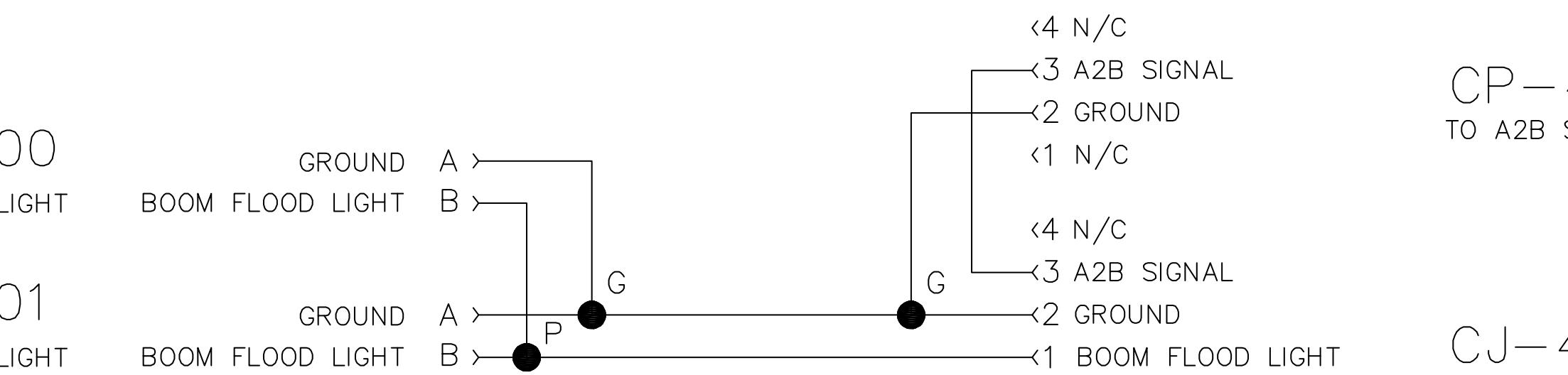
CJ-200

CJ-201

The diagram illustrates a system consisting of two main components: CJ-200 and CJ-401. On the left, a vertical cylinder labeled 'CJ-200' is connected to a horizontal pipe. This pipe splits into two parallel branches, each ending in a vertical cylinder labeled 'B'. From each cylinder 'B', a horizontal pipe extends downwards, each ending in a valve assembly labeled 'A'. The two lower pipes converge at a junction point, which then connects to a long horizontal pipe. This long pipe continues to the right, ending in a vertical cylinder labeled 'CJ-401'. A smaller vertical pipe is also shown branching off from the main horizontal line before the junction with the CJ-401 cylinder.

LED Flood Light (77441473) - continu

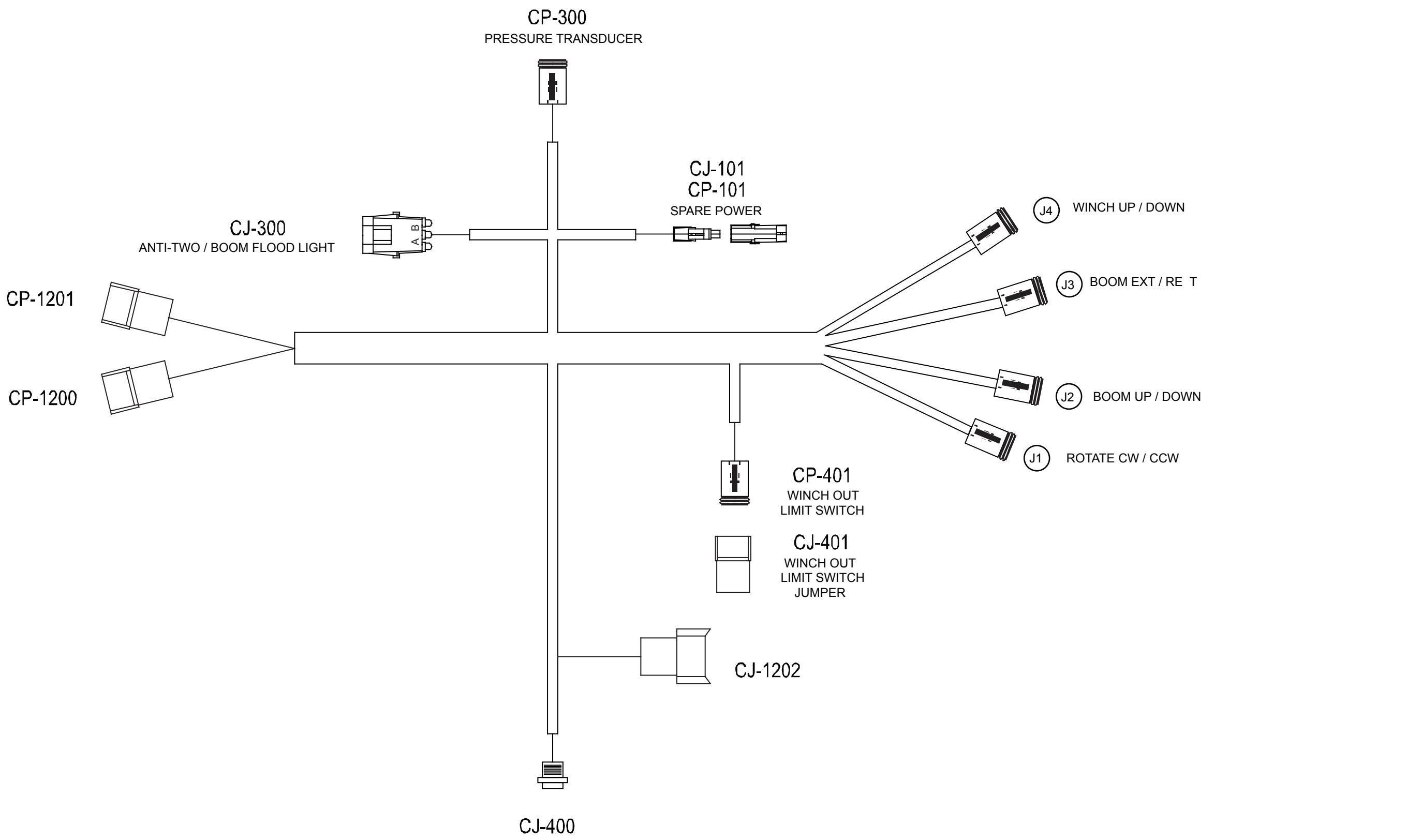
57124116



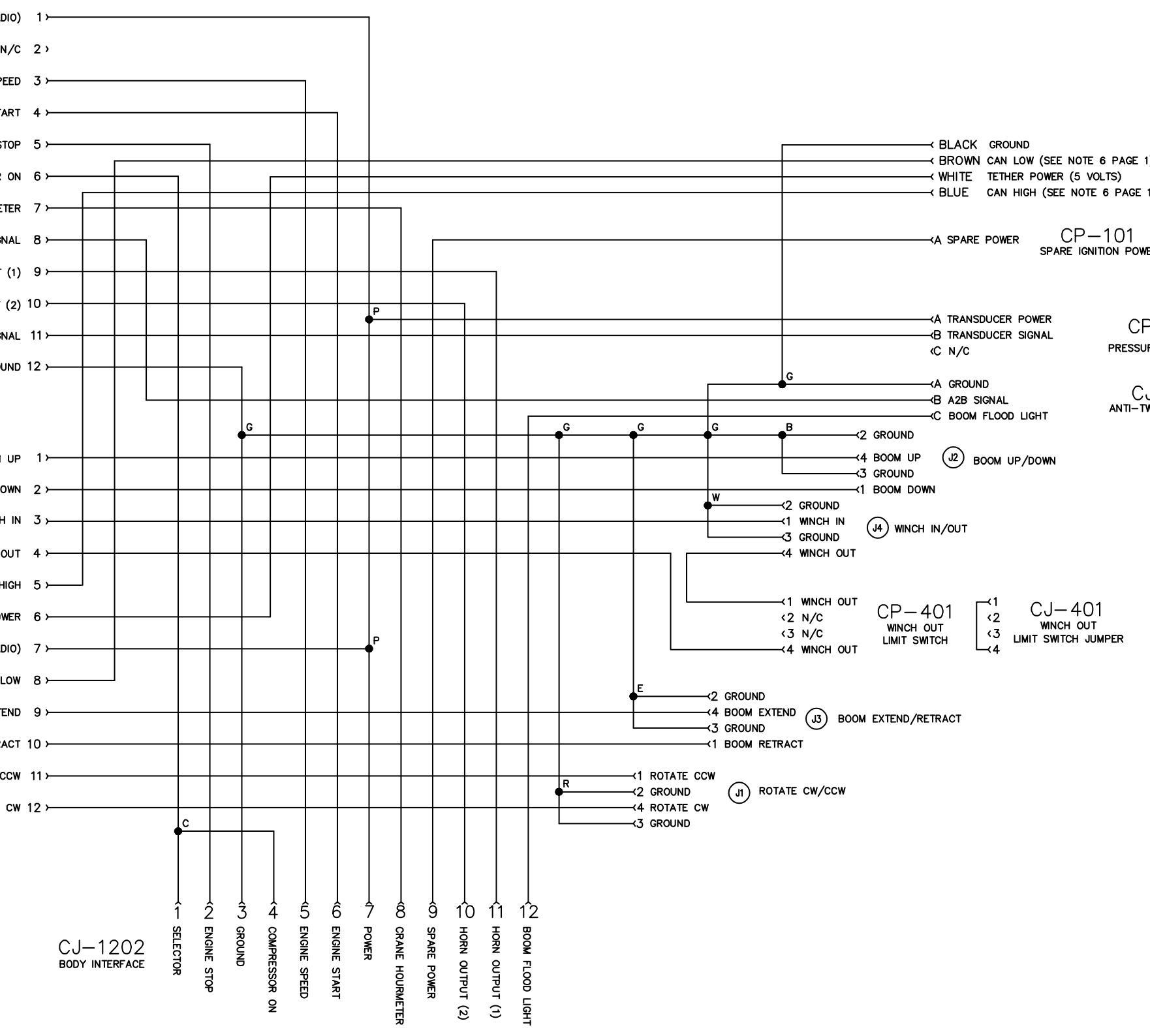
NAL CP –
TO A2B S

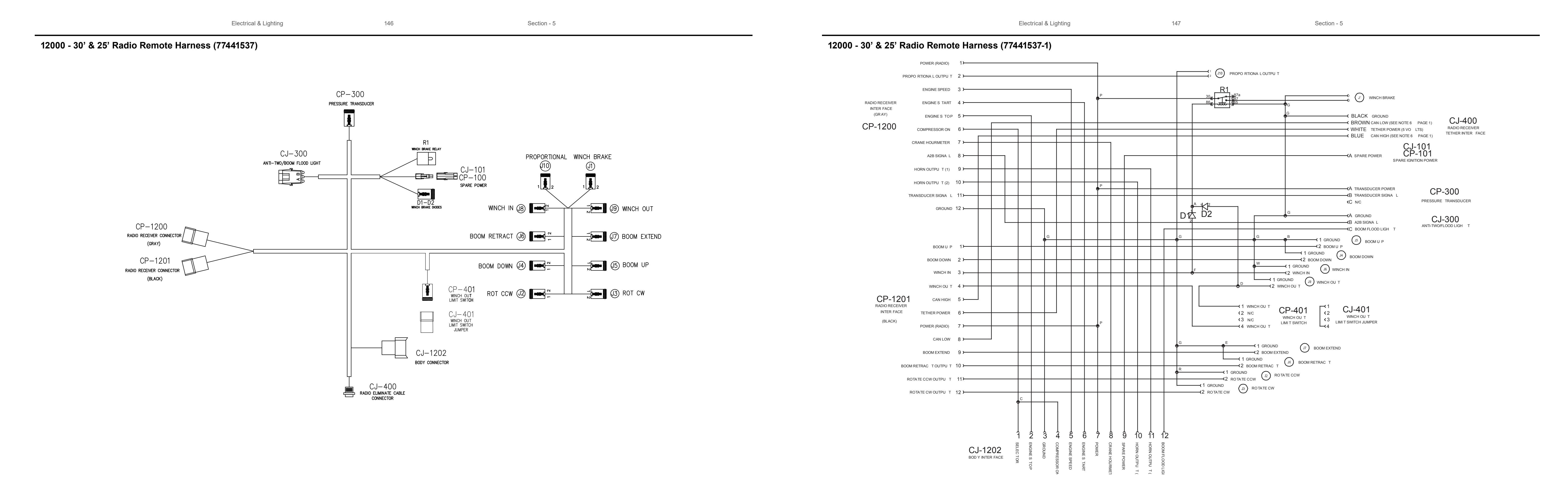
LOAD LIGHT CJ-4
TO CORD

12000 - 30' & 25' Radio Remote Harness (77441481)



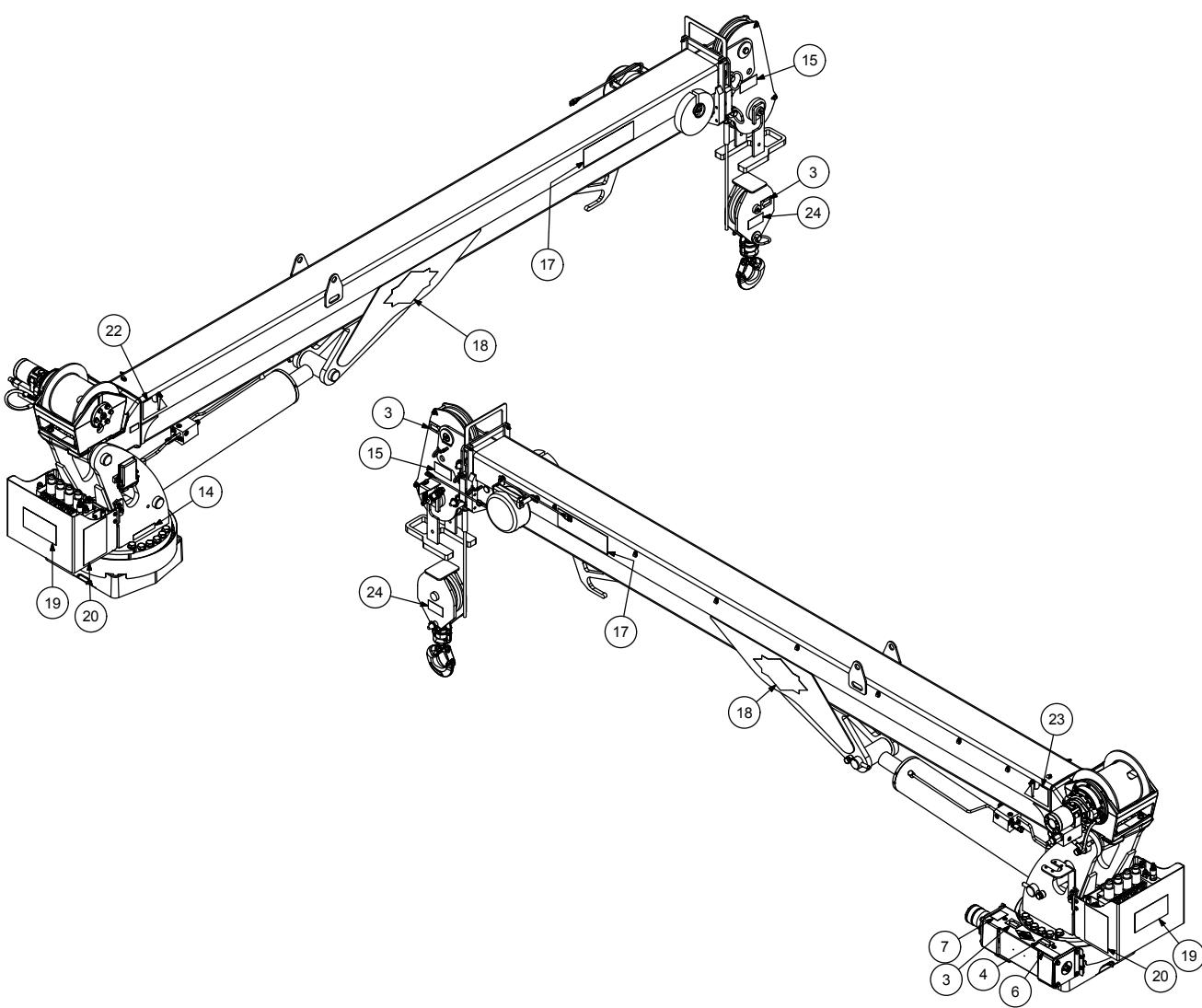
Remote Harness (77441481-1)





Section - 6**General Information**

This page left intentionally blank

12000 - 30' & 25' Decal Placement (99906208)**NOTES:**

1. MOUNT SERIAL NUMBER PLACARD ON STREETSIDE.
2. CENTER I.D. DECAL ABOVE THE HOOK STOW.

99906208 PARTS LIST

DECAL PLACEMENT (IF NOT SHOWN ON CRANE)				
ITEM NO.	PLACEMENT			
5, 16, 21, 11, 20.	PLACE AT, OR NEAR, REMOTE HANDLE STORAGE POINT.			
8.	PLACE TWO ON REAR STABILIZERS, TWO ON SIDE PACK FRONT WALLS.			
10.	PLACE AT, OR NEAR, DRIVELINE.			
9, 13.	PLACE ON ALL FOUR SIDES OF CARRIER VEHICLE.			
12.	PLACE ON TOP OF HYDRAULIC RESERVOIR.			
CAPACITY PLACARD				
ITEM NO.	CRANE LENGTH	PART NO.	DESCRIPTION	
20.	30'	70490023	DECAL - CP 12000 - 30'	
	25'	70490041	DECAL - CP 12000 - 25'	
CAPACITY PLACARD				
ITEM NO.	CRANE LENGTH	PART NO.	DESCRIPTION	
20.	30'	70490023	DECAL - CP 12000 - 30'	
	25'	70490041	DECAL - CP 12000 - 25'	
ITEM NO.	PART NO.	DESCRIPTION	KIT NO.	QTY.
1.	95719348	DECAL KIT-BODY COMMON		1
2.	95724111	DECAL KIT-TELE COMMON 7500-14000		1
3.	70391612	DECAL-GREASE WEEKLY (LEFT)	2	3
4.	70391613	DECAL-GREASE WEEKLY (RIGHT)	2	1
5.	70392213	DECAL-CAUTION DON'T WASH/WAX	2	1
6.	70392399	DECAL-LUBRICATE WORM	2	1
7.	70392524	DECAL-ROTATE CRANE WHILE GREASE	2	1
8.	70392864	DECAL-WARNING STAB STAND CLEAR	1	4
9.	70392868	DECAL-WARNING CR LOAD LINE (TRK)	1	4
10.	70392891	DECAL-DANGER DRIVELINE	1	1
11.	70392982	DECAL-SERVICE & REPAIR	1	1
12.	70394189	DECAL-HYDRAULIC OIL RESERVOIR	1	1
13.	70394445	DECAL-DANGER ELEC HZD LG TELE	1	4
14.	70395324	DECAL-ASME/ANSI B30.5-TELESCOP	2	1
15.	70395670	DECAL-CAUTION DOWN HAUL WT	2	2
16.	70396613	DECAL-CRANE SAFETY & OPER	1	1
17.	70399051	DECAL-ID 12000		2
18.	70399140	DECAL-DIAMOND IMT 6.75X13.50 REFL	2	2
19.	70399195	DECAL-DIAMOND IMT 4.00X8.00 (REFL)	2	1
20.	SEE TABLE	DECAL-CP 12000		3
21.	70139134	DECAL-CAUTION OIL LEVEL	1	1
22.	71399136	DECAL-ANGLE IND RH SIII	2	1
23.	71399137	DECAL-ANGLE IND LH SIII	2	1
24.	71490030	DECAL-LOAD BLOCK RATING 7.0TON		2

REV. INITIAL RELEASE

Thread Torque Charts - Imperial

FINE THREAD TORQUE CHART (IMPERIAL)				COURSE THREAD TORQUE CHART (IMPERIAL)							
SIZE	BOLT DIA.	GRADE 5		GRADE 8		SIZE	BOLT DIA.	GRADE 5		GRADE 8	
		PLAIN	PLATED	SAE J429 GRADE 5	SAE J429 GRADE 8			PLAIN	PLATED	SAE J429 GRADE 5	SAE F429 GRADE 8
(DIA-TPI)	(INCHES)	PLAIN	PLATED	FT-LB	FT-LB	(DIA-TPI)	(INCHES)	PLAIN	PLATED	FT-LB	FT-LB
5/16-24	0.3125	19	14	27	20	5/16-18	0.3125	17	13	25	18
3/8-24	0.375	35	26	49	35	3/8-16	0.375	31	23	44	33
7/16-20	0.4375	55	41	78	58	7/16-14	0.4375	49	37	70	52
1/2-20	0.5	90	64	120	90	1/2-13	0.5	75	57	105	80
9/16-18	0.5625	120	90	170	130	9/16-12	0.5625	110	82	155	115
5/8-18	0.625	170	130	240	180	5/8-11	0.625	150	115	220	160
3/4-16	0.75	300	225	420	315	3/4-10	0.75	265	200	375	280
7/8-11	0.875	445	325	670	500	7/8-9	0.875	395	295	605	455
1-12	1	645	485	995	745	1-8	1	590	445	910	680
1 1/8-12	1.125	890	670	1445	1085	1 1/8-7	1.125	795	595	1290	965
1 1/4-12	1.25	1240	930	2010	1510	1 1/4-7	1.25	1120	840	1815	1360
1 3/8-12	1.375	1675	1255	2710	2035	1 3/8-6	1.375	1470	1100	2380	1780
1 1/2-12	1.5	2195	1645	3560	2670	1 1/2-6	1.5	1950	1460	3160	2370

REV. 20210504

NOTES:

1. TIGHTENING TORQUES PROVIDED ARE MID-RANGE.
2. CONSULT BOLT MANUFACTURER'S PARTICULAR SPECIFICATIONS WHEN PROVIDED.
3. USE FLAT WASHERS OF EQUAL STRENGTH.
4. ALL TORQUE MEASUREMENTS ARE GIVEN IN FT-LB
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 DISULFIDE, 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.

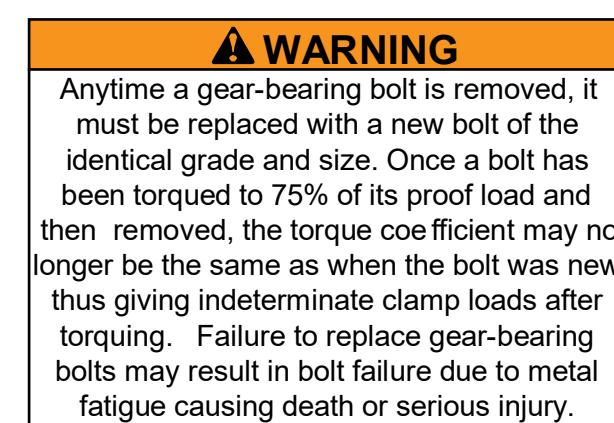
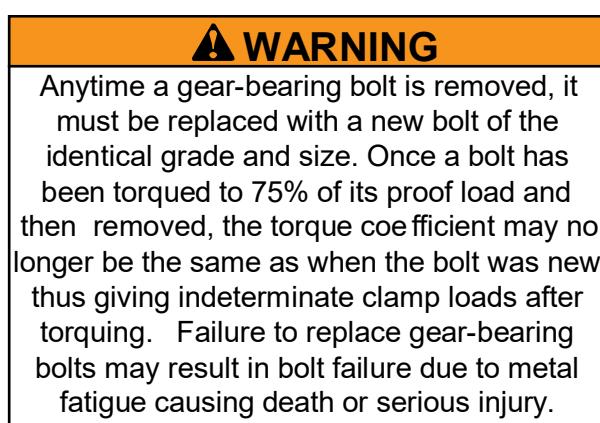
Thread Torque Charts - Metric

FINE THREAD TORQUE CHART (METRIC)				COURSE THREAD TORQUE CHART (METRIC)							
SIZE	BOLT DIA.	GRADE 5		GRADE 8		SIZE	BOLT DIA.	GRADE 5		GRADE 8	
		PLAIN	PLATED	SAE J429 GRADE 5	SAE J429 GRADE 8			PLAIN	PLATED	SAE J429 GRADE 5	SAE F429 GRADE 8
(DIA-TPI)	(INCHES)	PLAIN	PLATED	FT-LB	FT-LB	(DIA-TPI)	(INCHES)	PLAIN	PLATED	FT-LB	FT-LB
5/16-24	0.3125	3	2	4	3	5/16-18	0.3125	2	2	3	2
3/8-24	0.375	5	4	7	5	3/8-16	0.375	4	3	6	5
7/16-20	0.4375	8	6	11	8	7/16-14	0.4375	7	5	10	7
1/2-20	0.5	12	9	17	12	1/2-13	0.5	10	8	15	11
9/16-18	0.5625	17	12	24	18	9/16-12	0.5625	15	11	21	16
5/8-18	0.625	24	18	33	25	5/8-11	0.625	21	16	30	22
3/4-16	0.75	41	31	58	44	3/4-10	0.75	37	28	52	39
7/8-11	0.875	62	45	93	69	7/8-9	0.875	55	41	84	63
1-12	1	89	67	138	103	1-8	1	82	62	126	94
1 1/8-12	1.125	123	93	200	150	1 1/8-7	1.125	110	82	178	133
1 1/4-12	1.25	171	129	278	209	1 1/4-7	1.25	155	116	251	188
1 3/8-12	1.375	232	174	375	281	1 3/8-6	1.375	203	152	329	246
1 1/2-12	1.5	304	228	492	369	1 1/2-6	1.5	270	210	438	328

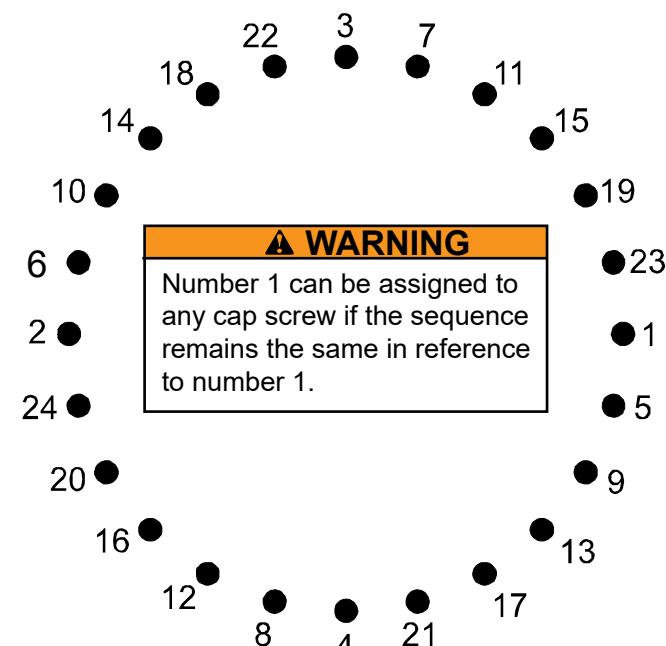
REV. 20210504

NOTES:

1. TIGHTENING TORQUES PROVIDED ARE MID-RANGE.
2. CONSULT BOLT MANUFACTURER'S PARTICULAR SPECIFICATIONS WHEN PROVIDED.
3. USE FLAT WASHERS OF EQUAL STRENGTH.
4. ALL TORQUE MEASUREMENTS ARE GIVEN IN FT-LB
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 DISULFIDE, 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.



Turntable Bearing Thread Tightening Sequence



Revisions

TIGHTENING PROCEDURE

1. REFER TO THE TORQUE DATA CHART TO DETERMINE THE PROPER TORQUE VALUE TO APPLY TO THE SIZE OF CAP SCREW USED.
 2. FOLLOW THE TIGHTENING SEQUENCE SHOWN IN THE DIAGRAM. **NOTE:** THE QUANTITY OF CAPSCREWS MAY DIFFER FROM THE DIAGRAM, BUT THE SEQUENCE MUST FOLLOW THE CRISS-CROSS PATTERN AS SHOWN IN THE DIAGRAM.
 3. TORQUE ALL CAP SCREWS TO APPROXIMATELY 40% OF THE SPECIFIED TORQUE VALUE, BY FOLLOWING THE SEQUENCE.
 - (Example: .40 X 265 ft-lb = 106 ft-lb)
 - (Example-metric: .40 X 36 kg-m = 14.4 kg-m)
 4. REPEAT STEP 3, BUT TORQUING ALL CAP SCREWS TO 75% OF THE SPECIFIED TORQUE VALUE. CONTINUE TO FOLLOW THE TIGHTENING SEQUENCE.
 - (Example: .75 X 265 ft-lb = 199 ft-lb)
 - (Example-metric: .75 X 36 kg-m = 27 kg-m)
 5. USING THE PROPER SEQUENCE, TORQUE ALL CAP SCREWS TO THE LISTED TORQUE VALUE AS DETERMINED FROM THE TORQUE DATA CHART.

NOTE: Refer to the turntable bearing thread tightening diagram for proper tightening-torquing sequence of the turntable bearing to the crane base and crane mast. The total quantity of cap screws varies dependent on crane model.



An Oshkosh Corporation company

IOWA MOLD TOOLING CO., INC.

P.O. Box 189 Garner, IA 50438

Tel: 641.923.3711

Fax: 641.923.2424

www.imt.com



Oshkosh is a registered trademark and the Oshkosh logo is a trademark of Oshkosh.

IMT reserves the right to make changes in engineering, design, specifications, add improvements or discontinue manufacturing at any time without notice or obligation.

IMT and IMT LOGO are registered trademarks of Iowa Mold Tooling Co., Inc., Garner, IA, USA.

© 2021 Iowa Mold Tooling Co., Inc. All Right Reserved.