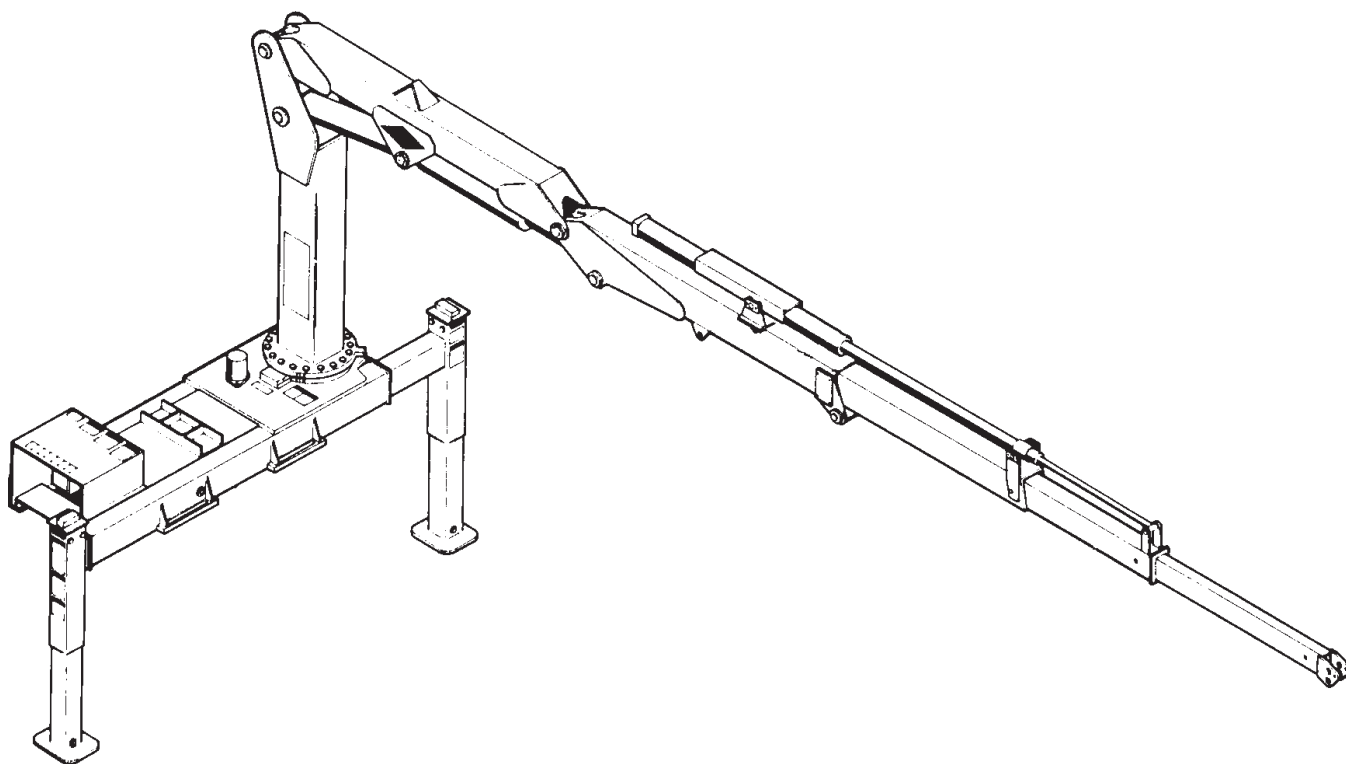




Model 425 Crane

Volume 2 - PARTS AND SPECIFICATIONS

Section 1	SPECIFICATIONS
Section 2	CRANE REFERENCE
Section 3	REPLACEMENT PARTS
Section 4	GENERAL REFERENCE



IOWA MOLD TOOLING CO., INC.

BOX 189, GARNER, IA 50438-0189

TEL: 641-923-3711

TECHNICAL SUPPORT FAX: 641-923-2424

MANUAL PART NUMBER 99900268

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

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REVISIONS LIST

DATE	LOCATION	DESCRIPTION OF CHANGE
20020318	3-4,5,43	ADDED MOBILTAC NOTE
	3-31	ECN 8886 - ADDED 31717516 CAP ALERT KIT
20020722	3-31	ECN 8975 - REMOVED 31705698 - REPLACED WITH 31733333, REMOVED 31717516
	3-25	ECN 8969 - ADDED OPERATOR & PO DECALS TO DECAL KIT - 95708809
20051107	3-43-45	ECN 9832 - CYLINDER 71411814 REPL. 3B221850
20060720	3-43-48	ECN 9832-2 - CYLINDER 3B221850 REPLACED 71411814
20061020	1-1	UPDATED WITH OWNERSHIP STATEMENT.
20090427	3-13,15	EXTENSION BOOM ASM HOOK 52701716 REPL BY 70734177.
20111219	1-3,4; 2-5,6;	ECN 11628 - UPDATED STABILIZER WORDING.
	3-28	ECN 11606 - ADDED TWO-BLOCK PREVENTION SYSTEM.
20120410	3-48	ADDED REMOTE POTENTIOMETER ADJUSTMENT PROCEDURE
	3-6,12	ECN 11581, 11615 - CYLINDER UPDATES

INTRODUCTION

This volume deals with information applicable to your particular crane. For operating, maintenance and repair instructions, refer to Volume 1, OPERATION, MAINTENANCE AND REPAIR.

We recommend that this volume be kept in a safe place in the office.

This manual is provided to assist you with ordering parts for your IMT truck-mounted articulating crane. It also contains additional instructions regarding your particular installation.

It is the user's responsibility to maintain and operate this unit in a manner that will result in the safest working conditions possible.

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

In addition, it is also the user's responsibility to be aware of existing Federal, State and Local codes and regulations governing the safe use and maintenance of this unit. Listed below is a publication that the user should thoroughly read and understand.

ANSI/ASME B30.5A-1984
ARTICULATING BOOM CRANES
The American Society of Mechanical Engineers
United Engineering Center
345 East 47th Street
New York, NY 10017

Three means are used throughout this manual to gain the attention of personnel. They are NOTE's, CAUTION's and WARNING's and are defined as follows:

NOTE

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

CAUTION

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

WARNING

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

Treat this equipment with respect and service it regularly. These two things can add up to a safer working environment.

**Read and familiarize yourself with the
IMT OPERATOR'S CRANE SAFETY MANUAL
before operating or performing any maintenance
on your crane.**

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NOTES

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SECTION 1. 425 CRANE SPECIFICATIONS

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NOTES



425 CRANE SPECIFICATIONS

GENERAL SPECIFICATIONS

CRANE RATING	39,000 ft-lbs (5.39 ton-m)
REACH - FROM CENTERLINE OF ROTATION	25'-2" (7.67m)
HYDRAULIC EXTENSIONS	45"/51" (114.3cm/129.5cm)
MANUAL EXTENSION	45" (114.3cm)
* LIFTING HEIGHT	34'-5" (10.49m)
CRANE WEIGHT	3200 lbs (1452 kg)
STABILIZER SPAN	10'-10" (3.30m)
* STORAGE HEIGHT	10'-6" (3.2m)
** MOUNTING SPACE REQUIRED	30" (76.2cm)
OPTIMUM PUMP CAPACITY	7 U.S. GPM (26.5 liters/min)
OIL RESERVOIR CAPACITY	15 U.S. GAL. (56.7 liters)
DESIGN FACTORS (PINS & HYDRAULICS)	4/1

* Based on 39" (99 cm) truck frame height.

** Add approximately 3" (7.62 cm) for truck cab clearance.

LIFTING CAPACITY (FROM CENTERLINE OF ROTATION)

9'-3" (2.82m)	4200 lbs (1905 kg)
13'-5" (4.09m)	2900 lbs (1315 kg)
17'-2" (5.23m)	2250 lbs (1020 kg)
21'-5" (6.53m)	1800 lbs (816 kg)
25'-2" (7.67m)	1350 lbs (612 kg)

Deduct the weight of load handling devices from the capacities listed above.

PERFORMANCE CHARACTERISTICS

ROTATION	370o (6.46 Rad.)	30 seconds
INNER BOOM ELEVATION	-20o TO +72o (-0.35 Rad. to +1.26 Rad.)	15 seconds
OUTER BOOM ARTICULATION	125o (2.18 Rad.)	17 seconds
TWO-STAGE EXTENSION		
1ST STAGE	45" (114.3cm)	21 seconds
2ND STAGE	51" (129.5CM)	10 seconds
POWER DOWN STABILIZER CYLINDER	21" (53cm)	8 seconds
POWER OUT STABILIZER CYLINDER	34" (86.4cm)	5 seconds

POWER SOURCE

Integral-mounted hydraulic pump and PTO application. Other standard power sources may be utilized - minimum power required is 12 horsepower.

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

CYLINDER HOLDING VALVES

The holding sides of all cylinders are equipped with integral-mounted holding and/or counter-balance valves to prevent sudden cylinder collapse in case of hose or other hydraulic failure. The stabilizer cylinders have positive, pilot-operated holding valves that open only upon command.

The inner, outer and extension cylinders have counter-balance valves. The counter-balance valve serves several functions. First, it is a holding valve. Secondly, it is so constructed that it will control the lowering function and allow that motion to be feathered while under load. Finally, if a hose breaks, the only oil loss will be that in the hose.

ROTATION SYSTEM

Turntable bearing powered with a high-torque hydraulic motor through a ring-and-pinion type spur gear train (total gear reduction is 43.1 to 1).

HYDRAULIC SYSTEM

Open-centered, full-pressure system that requires 7 GPM (26.5 liters/min.) optimum oil flow at 2,350 PSI (165.2 kg/cm²). Six-spool, stack-type control valve with dual operational handles located at both sides of the base for convenient operation. System includes hydraulic oil reservoir, suction-line filter, pump, 6-section valvebank, return-line filter and all hoses and fittings.

CYLINDERS

	BORE	STROKE
INNER CYLINDER	5" (12.7cm)	19-1/4" (48.9cm)
OUTER CYLINDER	5" (12.7cm)	21-1/2" 54.6cm)
TWO-STAGE EXTENSION CYLINDER		
1ST STAGE	4" (10.2cm)	45" (114.3cm)
2ND STAGE	2-1/2" (6.4cm)	51" (129.5cm)
POWER DOWN STABILIZER CYLINDER	2-1/2" (6.4cm)	21" (53.3cm)
POWER OUT STABILIZER CYLINDER	2" (5.1cm)	34" (86.4cm)

MINIMUM CHASSIS SPECIFICATIONS

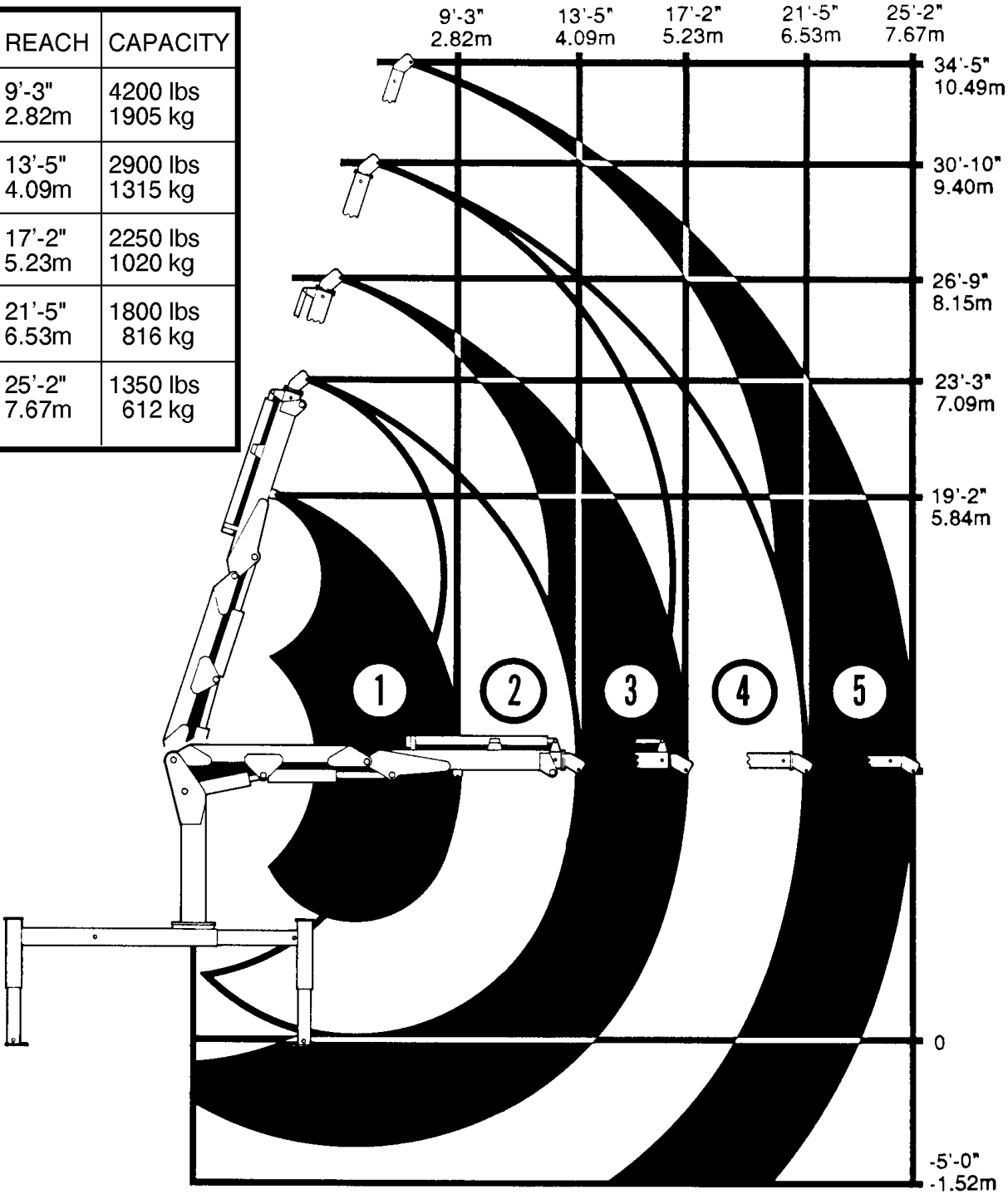
BODY STYLE	CONVENTIONAL CAB
WHEEL BASE	175" (444.5cm)
CAB TO AXLE	102" (259.1cm)
* FRAME SECTION MODULUS	14 cubic inches (229.5cc)
RBM	680,000 in-lbs (7837 kg-m)
FRONT AXLE RATING	7000 lbs (3175 kg)
REAR AXLE RATING	15,000 lbs (6804 kg)
TRANSMISSION	4-SPEED

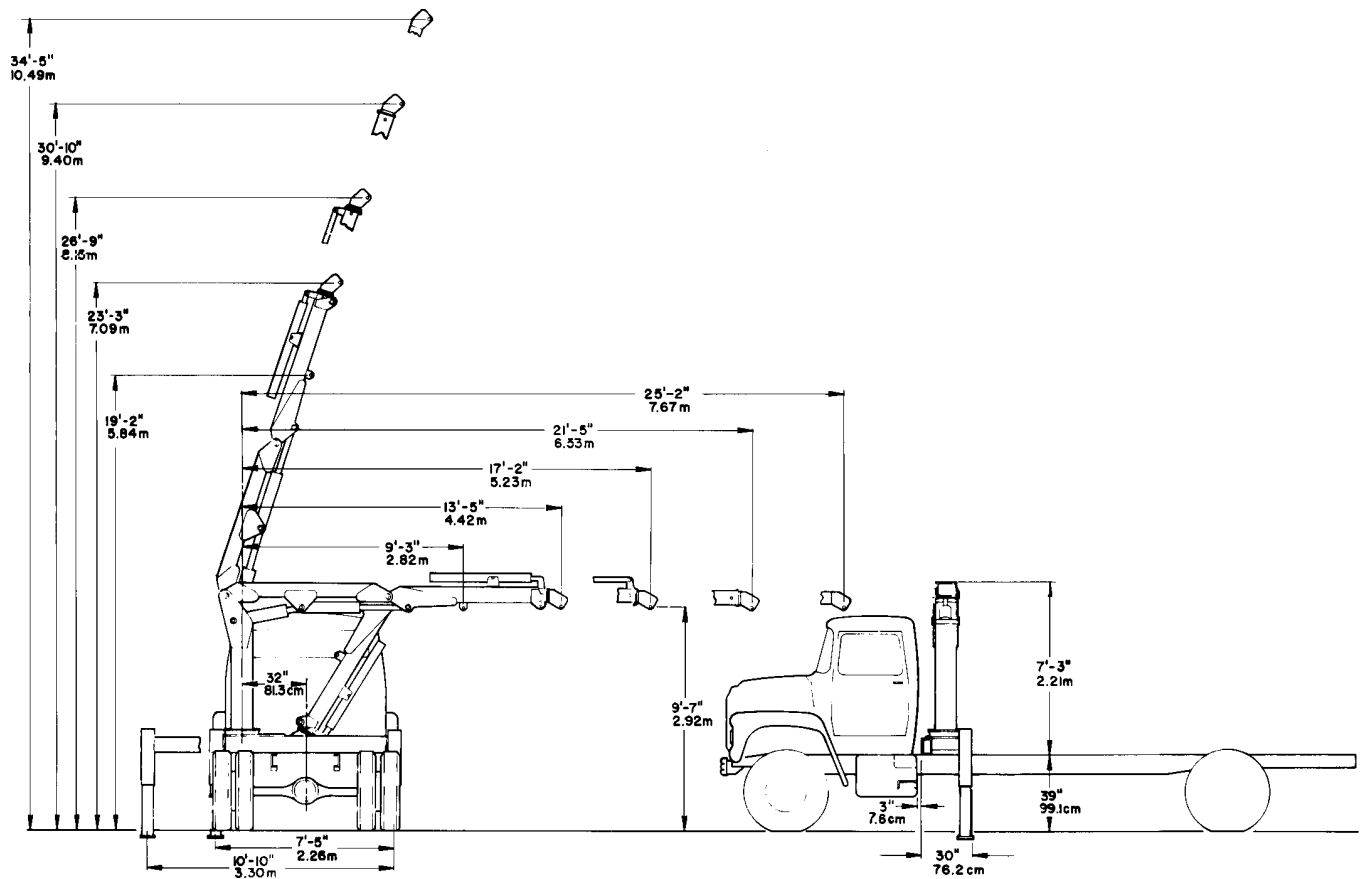
* Frame material is 50,000 PSI minimum.

In addition to these specifications, heavy-duty electrical and cooling systems and dual rear wheels are required. It is recommended that the vehicle be equipped with an electric tachometer, auxiliary brake lock, power steering and 5-speed transmission in lieu of a 4-speed transmission.

1-5
CAPACITY CHART

RANGE	REACH	CAPACITY
①	9'-3" 2.82m	4200 lbs 1905 kg
②	13'-5" 4.09m	2900 lbs 1315 kg
③	17'-2" 5.23m	2250 lbs 1020 kg
④	21'-5" 6.53m	1800 lbs 816 kg
⑤	25'-2" 7.67m	1350 lbs 612 kg



GEOMETRIC CONFIGURATION

SECTION 2. 425 CRANE REFERENCE

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WELDMENT PART NUMBER LOCATIONS 3

GREASE ZERK LOCATIONS & LUBRICANT REQUIREMENTS 4

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RECOMMENDED SPARE PARTS LIST (CONT.) 6

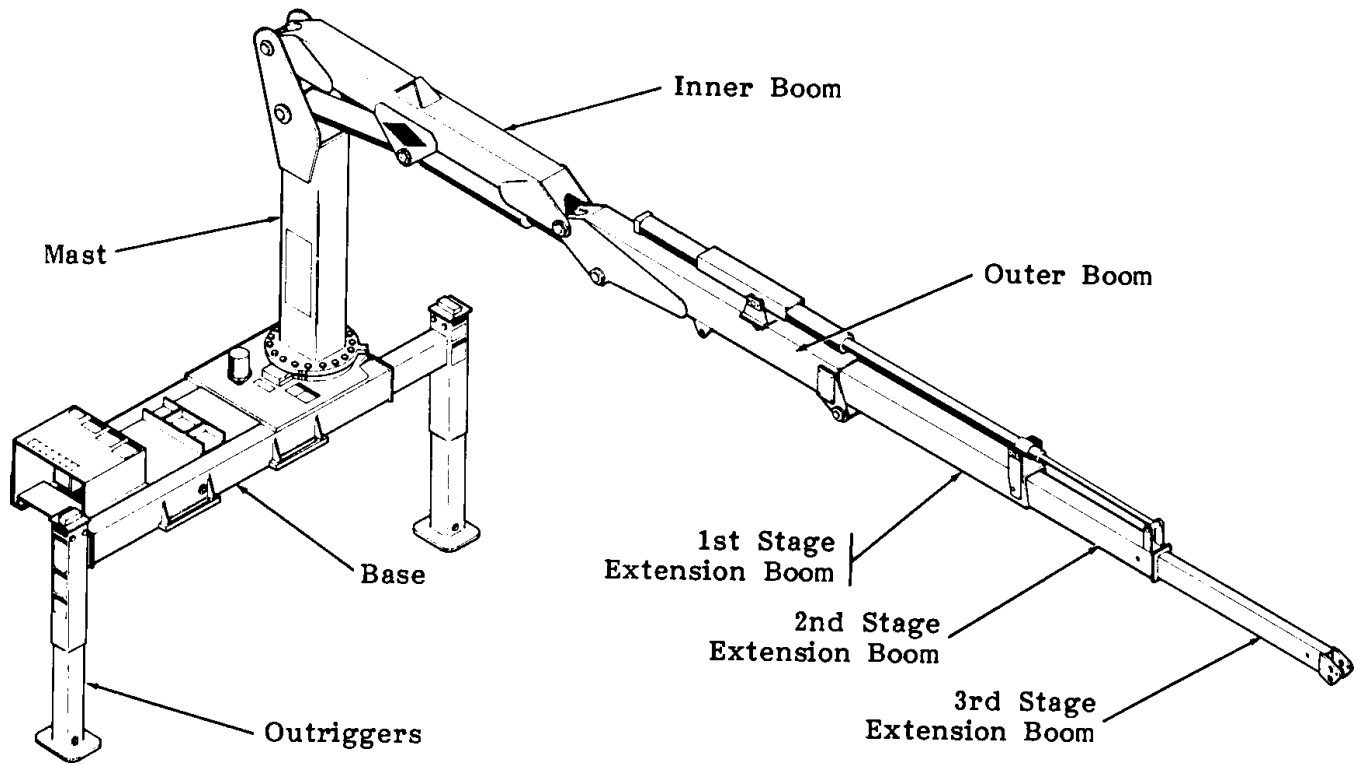
INSTALLATION 7

CRANE MOUNTING 7

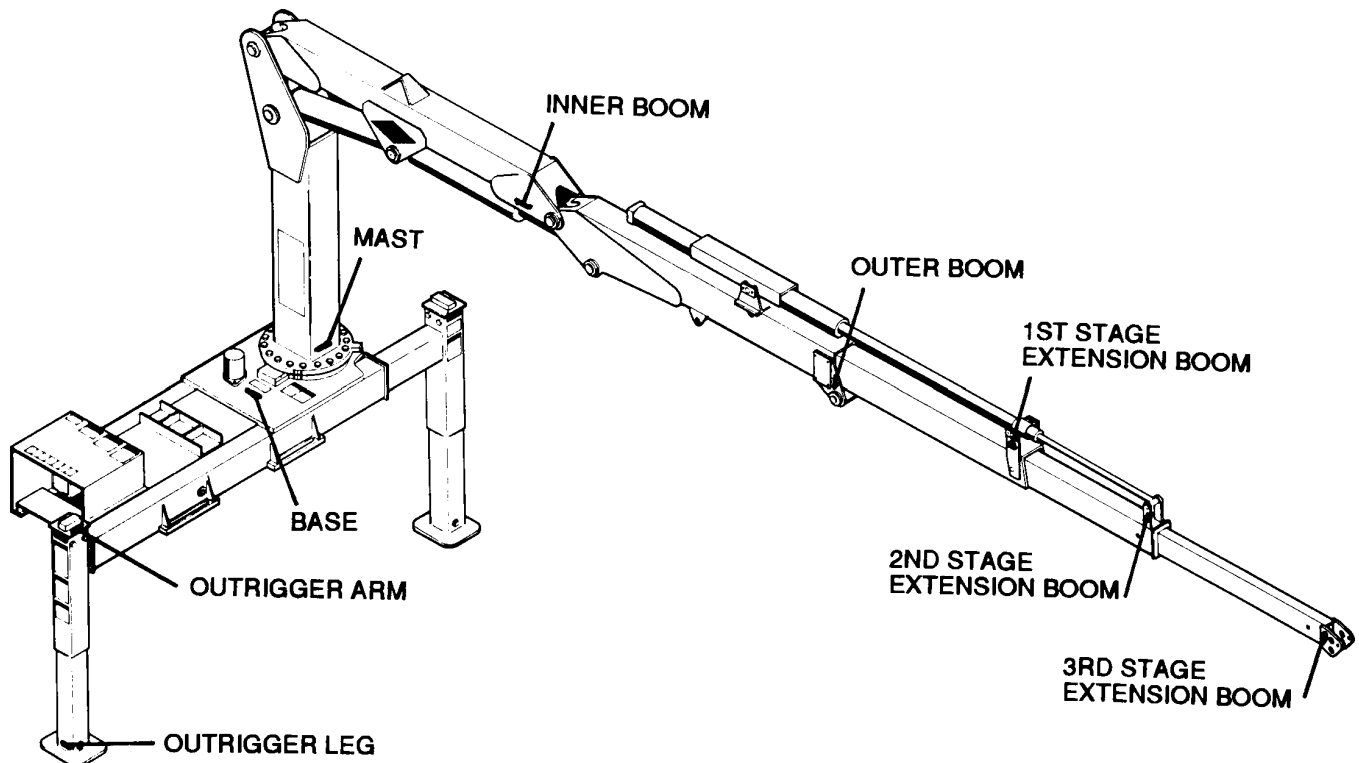
HYDRAULIC INSTALLATION 8

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NOTES

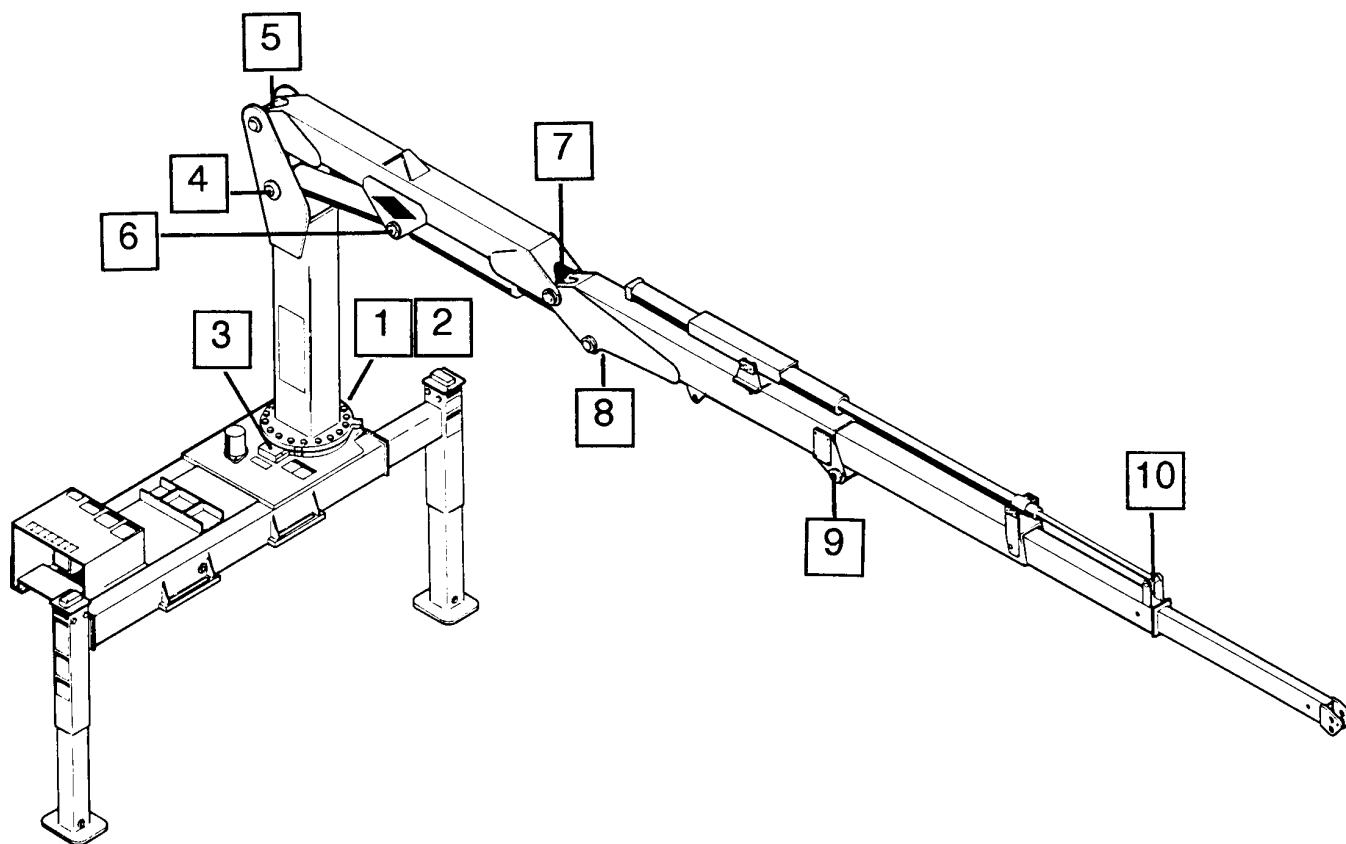


MAJOR CRANE ASSEMBLIES



WELDMENT PART NUMBER LOCATIONS

GREASE ZERK LOCATIONS & LUBRICANT REQUIREMENTS



ITEM	LOCATION DESCRIPTION	LUBRICANT	FREQUENCY
1.	DRIVE GEAR GREASE EXTENSION	SHELL ALVANIA 2EP OR SHELL RETINAX "A"	WEEKLY
2.	TURNTABLE/BEARING GREASE EXTENSION *ROTATE CRANE WHILE GREASING		
3.	PINION GEAR		
4.	MAST/INNER CYLINDER HINGE PIN		
5.	MAST/INNER BOOM HINGE PIN		
6.	INNER CYLINDER ROD/INNER BOOM HINGE PIN		
7.	INNER BOOM/OUTER BOOM HINGE PIN		
8.	OUTER CYLINDER ROD		
9.	OUTER BOOM TRUNNION PIN		
10.	EXTENSION CYLINDER ROD		

NOTE: All application points must be greased weekly under normal work loads and moderate weather conditions. Under severe operating conditions, lubrication should be performed more frequently. See Volume 1; Operation, Maintenance and Repair for additional lubrication requirements.

RECOMMENDED SPARE PARTS LIST**1 YEAR SUPPLY****425 CRANE****FOR MANUAL: 99900268**

This spare parts list does not necessarily indicate that the items can be expected to fail in the course of a year. It is intended to provide the user with a stock of parts sufficient to keep the unit operating with the minimal down-time waiting for parts. There may be parts failures not covered by this list. Parts not listed are considered as not being Critical or Normal Wear items during the first year of operations and you need to contact the distributor or manufacturer for availability.

ASSEMBLY DESIGNATION	ITEM NO.	PART NO.	DESCRIPTION	QTY	CODE	SHELF LIFE (MO)	ORDER QTY
41703487.01.19950510	BASE & STABILIZER ASM						
	5	60020114	BUSHING	1	W		
	6	60020115	BUSHING	1	W		
	7	60020116	BUSHING	1	W		
	8	60020154	BUSHING	1	W		
	21	71056010	PINION GEAR	1	W		
3B166820.01.19940609	POWER DOWN STAB CYLINDER						
	5	73054004	VALVE	2	C		
	9	9B101214	SEAL KIT	2	W		
3B241801.01.19920227	POWER OUT STAB CYLINDER						
	14	9B081012	SEAL KIT	1	W		
41701135.01.19970113	INNER BOOM ASM						
	13	60020131	BUSHING	2	W		
3C078712.01.19950510	INNER BOOM CYLINDER						
	3	6H050025	HEAD	1	W		
	4	6I050181	PISTON	1	W		
	6	73054242	VALVE	1	C		
	7	9C202029	SEAL KIT	1	W		
	18	7BF81220	BUSHING	4	W		
	19	7BF81020	BUSHING	2	W		
41705247.01.19951205	OUTER BOOM-TO 11-17-95						
41711600.01.19951205	OUTER BOOM-FROM 11-17-95						
	3	60020131	BUSHING	2	W		
	4	60030015	WEAR PAD	2	W		
	9	60020126	BUSHING	4	W		
3C081712.01.19990127	OUTER BOOM CYLINDER						
	3	6H050025	HEAD	1	W		
	4	6I050181	PISTON	1	W		
	6	73054242	VALVE	1	C		
	7	9A202029	SEAL KIT	1	W		
	18	7BF81220	BUSHING	2	W		
	19	7BF81520	BUSHING	2	W		
41705246.01.19950510	EXTENSION BOOM ASM						
	8	60030007	WEAR PAD	2	W		
	9	60030064	WEAR PAD	1	W		
	10	60030145	WEAR PAD	1	W		
	25	60030127	WEAR PAD	1	W		
3K095850.01.19970719	EXTENSION BOOM CYLINDER						
	4	6H271511	HEAD	1	W		
	5	6H112820	HEAD	1	W		
	6	6I025087	PISTON	1	W		
	7	6I095850	PISTON	1	W		
	11	73054242	VALVE	1	C		
	13	9X095850	SEAL KIT	1	W		
95707756.01.19930707	CONVERSION KIT-WINCH-MANUAL CTRLS						
	25	52070705	PIN	1	W		
	27	60103165	CABLE	1	W		
	28	70034204	SHEAVE	1	W		
	29	70055024	ROLLER BRG	1	W		
	30	70055025	INNER RACE	1	W		
95707757.01.19940112	CONVERSION KIT-WINCH-REMOTE CTRLS						
	27	60103165	CABLE	1	W		
	28	70034204	SHEAVE	1	W		
	29	70055024	ROLLER BRG	1	W		
	30	70055025	INNER RACE	1	W		

(CONTINUED)

RECOMMENDED SPARE PARTS LIST (CONT.)

ASSEMBLY DESIGNATION	ITEM NO.	PART NO.	DESCRIPTION	QTY	CODE	SHELF LIFE (MO)	ORDER QTY
41712822.01.19950426	BASE & STAB ASM-RH MOUNT						
	5	60020114	BUSHING	1	W		
	6	60020115	BUSHING	1	W		
	7	60020116	BUSHING	1	W		
	8	60020154	BUSHING	1	W		
	21	71056010	PINION GEAR	1	W		
	49	73054538	COUNTERBALANCE VALVE	2	C		
3B221850.01.19950324	POWER DOWN CYLINDER-RH MOUNT						
	5	73054004	COUNTERBALANCE VALVE	2	C		
	9	9B101214	SEAL KIT	2	W		
90713576.01.19960827	PROPORTIONAL REMOTE CONTROL KIT-6 FUNCTION						
	1	77041390	AMP DRIVER	1	C		
	10	77041251	RELAY	2	W		
	11	77041237	SOLENOID 12V	1	W		
51713430.01.19960726	REMOTE HANDLE ASM-6 FUNCTION						
	11	51708800	POTENTIOMETER	1	W		
	16	77040371	TOGGLE SWITCH SPST	1	W		
	17	77040372	TOGGLE SWITCH SPDT	6	W		
	18	77040373	TOGGLE SWITCH SPST	2	W		
51713570.01.19960827	CABLE ASM-JIC BOX 50"						
	3	77041345	TOGGLE SWITCH ST	2	W		
	4	77041354	TOGGLE SWITCH DT	1	W		
	REF	73052006	RETURN FILTER ELEMENT	6	P		
	REF	70048149	SUCTION FILTER ELEMENT	6	P		

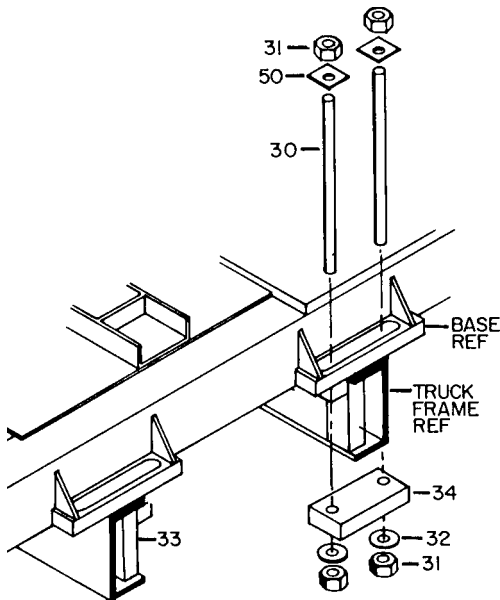
INSTALLATION

GENERAL

This section contains specific instructions for the installation of your crane. Prior to installing the crane and hydraulic components, make sure the chassis is ready to receive the crane (refer to VOLUME 1, Installation).

CRANE MOUNTING

- 1. See SPECIFICATIONS in Section 1 for crane weight. Using an overhead hoist and fabric slings of adequate capacity, lift the crane about a foot to see if the crane is adequately balanced. If not, lower hoist and adjust slings. Re-check balance and re-position crane until mounting surface is level.
- 2. Install the truck frame support so that the tie-down studs pass through the supports (figure below). Cut the support to the inside dimensions of the truck frame. Allow about 1/16" extra. Grind the end of the support to fit inside the frame channel. Use a hammer to drive it into position if necessary.



ITEM	DESCRIPTION	QTY
30.	TIE DOWN STUD	8
31.	LOCK NUT	16
32.	WASHER	8
33.	FRAME SUPPORT	4
34.	CLAMP PLATE	4
50.	SQUARE WASHER	8

3. Allow sufficient clearance between the cab and crane base, at least 3" (7.6cm). Position the crane on the chassis per the applicable installation drawing, centering the mounting slots over the truck frame rails. While holding crane with hoist, start mounting hardware per figure below. Note position of support weldments on truck frame. Hand tighten nuts. Observe underside of crane base. No clearance between base and frame is allowed.

4. Torque the 1"-8 UNC Grade 5 mounting hardware to 442 ft-lbs (62 kg-m). When torquing the mounting hardware the following precautions must be followed:

- A. Never use lock washers.
- B. Hardened washers must be used, and under the turning element, whether the turning element is the nut or the head of the bolt.
- C. Torque values specified are with residual oils or without special lubricants applied to the threads. If special lubricants are used, such as Never-Seize compound graphite and oil, molybdenum disulphite collodial copper or white lead, reduce torque values 10%. Torque values for threaded fasteners are not affected with the use of Loctite.
- D. Do not use rusty fasteners, the rust will alter torque values significantly.
- E. Touch-up paint around mounting anchor plates.

CAUTION

Do not attempt to apply the same torque to the tie rod and self-locking nuts as shown in the Torque Data Chart. Do not exceed 442 ft. lbs. (62 kg-m). Exceeding this torque value could damage either the chassis or crane base.

Power wrenching is not recommended until the lead thread of the nut insert is engaged by hand turning.

CRANE INSTALLATION

HYDRAULIC INSTALLATION

To install the hydraulic hoses, fittings, etc.:

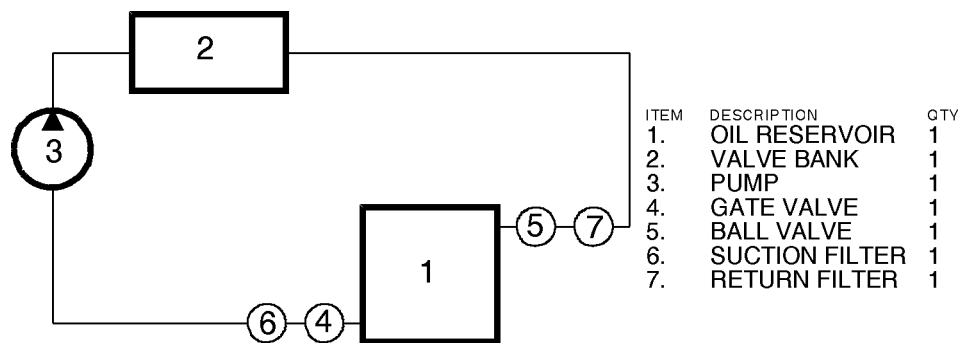
- 1. Plumb the suction line filter as shown in figure below.
- 2. Install the suction hose between the suction-line filter and the pump inlet. Tighten the hose clamps.
- 3. Install the pressure hose between the pump outlet and the inlet port on the valve bank.
- 4. Install the return line between the reservoir return line filter and valvebank (if applicable).
- 5. Fill the hydraulic oil reservoir.

- 6. Open the gate valve at the suction line filter.

CAUTION

FAILURE TO OPEN THE GATE VALVE WILL RESULT IN A DRY RUNNING PUMP WHICH MAY DAMAGE THE PUMP.

- 7. Open the return gate valve.
- 8. Start the vehicle engine and engage the PTO. Allow the system to run for about five minutes and then check the vacuum gauge on the suction line filter (it should read 8" or less of mercury). If the vacuum reading is too high, check to make certain that the gate valve is open. If the valve is open, check for a collapsed or restricted suction line.
- 9. Check for leaks and repair if necessary.



HYDRAULIC INSTALLATION

SECTION 3. REPLACEMENT PARTS 425 CRANE

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BASE & STABILIZER ASM (41703487)	4
BASE & MNL OUT STABILIZER ASM (41709085)	5
PWR-DN STABILIZER CYLINDER (3B166820)	6
PWR-OUT STABILIZER CYLINDER (3B241801)	7
MAST ASM (41701134)	8
INNER BOOM ASM (41701135)	9
INNER CYLINDER (3C078712)	10
OUTER BOOM ASM (41711600)	11
OUTER CYLINDER (3C081712)	12
EXTENSION BOOM (41705246)	13
EXTENSION CYLINDER (3K095850)	14
EXTENSION BOOM- 2H (41706332)	15
HOLDING VALVE (73054004)	16
HYDRAULIC KIT-7 SECT W/PWR OUT (91705025)	17
HYDRAULIC KIT-7 SECT W/WINCH (91705024)	18
HYDRAULIC KIT-6 SECT (91705076)	19
HYDRAULIC KIT-8 SECT W/PWR OUT & WINCH (91705255)	20
VALVEBANK ASM-7 SECT MNL (51705074)	21
VALVEBANK (51705073)	21
CONTROL KIT-7F (90705295)	22
INSTALLATION KIT-MNL (93706364)	23
INSTALLATION KIT-remote (93708810)	24
DECAL KIT-REMOTE (95708809)	25
CONVERSION KIT-WINCH-MNL CTRLS (95707756)	26
CONVERSION KIT-WINCH-RMT CTRLS (95707757)	27
TWO-BLOCK DAMAGE PREVENTION KIT (51724350 / DWG 99905344)	28
OPTION-LIGHT KIT (31701759)	30
CAPACITY ALERT KIT - 3100 (31713333)	31
OPTION-CABLE & HOOK KIT (31705637)	32
VALVEBANK ASM-8 SECT MNL (51705254)	33
VALVEBANK ASM-8 SECT MNL (51705253)	33
VALVEBANK (73731768)	33
VALVEBANK ASM-6 SECT MNL (51705075)	34

VALVEBANK (73731386)	34
REMOTE HANDLE ASM-5F PTO W/SPD (51704715)	35
REMOTE HANDLE ASM-4F PTO W/SPD (51704714)	36
VALVEBANK ASM-4R2M (51705068)	37
VALVEBANK (51705067)	37
VALVEBANK-4R3M W/PO (51705071)	38
VALVEBANK ASM-4R3M W/PO (51705072)	38
VALVEBANK ASM-5R2M (51705070)	39
VALVEBANK (51705069)	39
DBL HOSE REEL KIT (31711972)	40
MAST ASM-RH MNT (41712823)	42
BASE & STABILIZER ASM-RH MNT (41712822)	43
PWR DN CYLINDER-RH MNT (3B221850)	44
PROP'L RMT CTRL KIT-6F (90713576)	45
RMT HANDLE ASM-6F (51713430)	46
CABLE ASM-JIC BOX 50" (51713570)	47
TETHERED PROPORTIONAL REMOTE POTENTIOMETER ADJUSTMENT	48

PARTS INFORMATION

GENERAL

This section contains the exploded parts drawings and accompanying parts lists for the assemblies used on this crane. These drawings are intended to be used in conjunction with the instructions found in the REPAIR section in Volume 1. For optional equipment such as winches and remote controls, refer to the appropriate service manual.

WARNING

DO NOT ATTEMPT TO REPAIR ANY COMPONENT WITHOUT READING THE INFORMATION CONTAINED IN THE REPAIR SECTION IN VOLUME 1. PAY PARTICULAR ATTENTION TO STATEMENTS MARKED WARNING, CAUTION, OR NOTE IN THAT SECTION. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN DAMAGE TO THE EQUIPMENT, PERSONAL INJURY, OR DEATH.

CRANE IDENTIFICATION

Every IMT crane has an identification placard (see figure) attached to the mast. When ordering parts, communicating warranty information, or referring to the unit in correspondence, always include the serial number and model numbers. All inquiries should be addressed to:

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

 IOWA MOLD TOOLING CO., INC. BOX 189, GARNER, IA 50438-0189	
MODEL NUMBER	
SERIAL NUMBER	
MFG DATE	
70029119	

SERIAL NUMBER PLACARD

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.

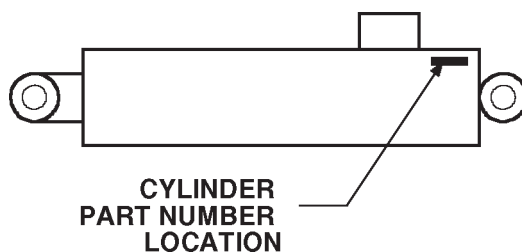
WELDMENT IDENTIFICATION

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 Section 2.

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.



CYLINDER PART NUMBER LOCATION

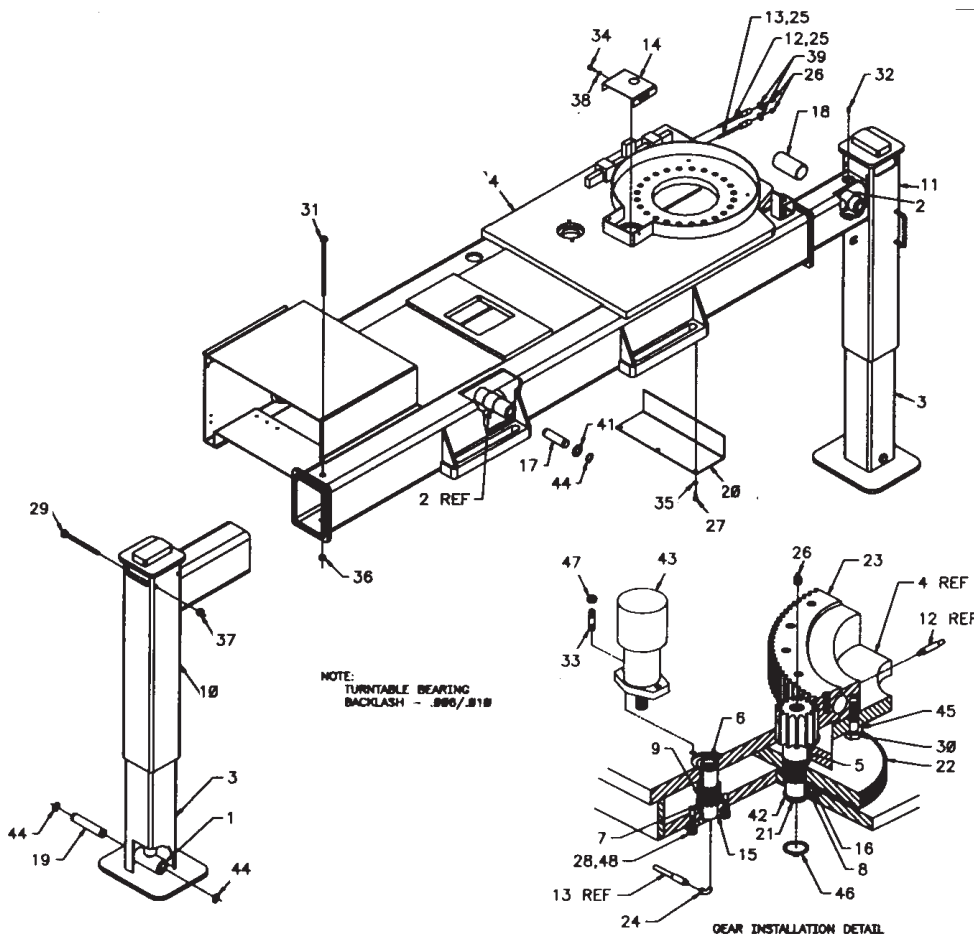
BASE & STABILIZER ASM (41703487)

ITEM	PART NO.	DESCRIPTION	QTY
1.	3B166820	CYLINDER - POWER DOWN	2
2.	3B241801	CYLINDER - POWER OUT	1
3.	52704868	STABILIZER LEG	2
4.	52705008	BASE (INCL: 5-9)	1
5.	60020114	BUSHING (PART OF 4)	1REF
6.	60020115	BUSHING (PART OF 4)	1REF
7.	60020116	BUSHING (PART OF 4)	1REF
8.	60020154	BUSHING (PART OF 4)	1REF
9.	71056011	DRIVE GEAR (PART OF 4)	1REF
10.	52705010	STABILIZER ARM - STAT	1
11.	52705011	STABILIZER ARM - ADJ	1
12.	53000702	GREASE EXT 17"	1
13.	53000711	GREASE EXT 23"	1
14.	60010235	PINION COVER	1
15.	60010844	GREASE PLATE	1
16.	60104694	PINION SPACER	1
17.	60106065	PIN	1
18.	60106066	PIN	1
19.	60106968	PIN	2
20.	60107167	GEAR COVER	1
21.	71056010	PINION GEAR	1
22.	71056012	INTERMEDIATE GEAR	1
23.	71056062	TURNTABLE GEAR BEARING	1
24.	72053281	STREET ELBOW 1/8NPT 90°	1
25.	72053301	COUPLING 1/8 NPT	2
26.	72053508	ZERK 1/8NPT	3

27.	72060046	CAP SCR 3/8-16X1 HHGR5	3
28.	72060092	CAP SCR 1/2-13X1-1/4 HHGR5	2
29.	72060102	CAP SCR 1/2-13X5-1/2 HHGR5	4
30.	72060151	CAP SCR 5/8-11X2 HHGR8	23
31.	72060164	CAP SCR 5/8-11X8 HHGR5	1
32.	72060579	SET SCR 3/8-16X1/2 SH	1
33.	60106032	STUD 1/2-13 X 2	2
34.	72060833	SCR 5/16-18X3/4 SLFTPG	2
35.	72063051	WASHER 3/8 LOCK	3
36.	72062091	NUT 5/8-11 LOCK	1
37.	72062107	NUT 1/2-13 CTR LOCK	4
38.	72063002	WASHER 5/16 WRT	2
39.	72063003	WASHER 3/8 WRT	2
41.	72063034	MACH BUSHING 1X10GA	2
42.	72063035	MACH BUSHING 1-1/4X10GA	1
43.	73051384	MOTOR	1
44.	72066125	RETAINING RIG 1" HD	6
45.	72063119	WASHER 5/8 HARDENED	23
46.	72066084	RETAINING RING 1-1/4 STD	1
47.	72062080	NUT 1/2-13 LOCK	2
48.	72063053	WASHER 1/2-13 LOCK	2

WARNING

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



NOTE:
APPLY MOBILTAC 375NC
LUBRICANT (OR EQUIVALENT)
TO THE EXTERNAL TEETH OF
THE TURNTABLE BEARING AND
PINION GEAR.

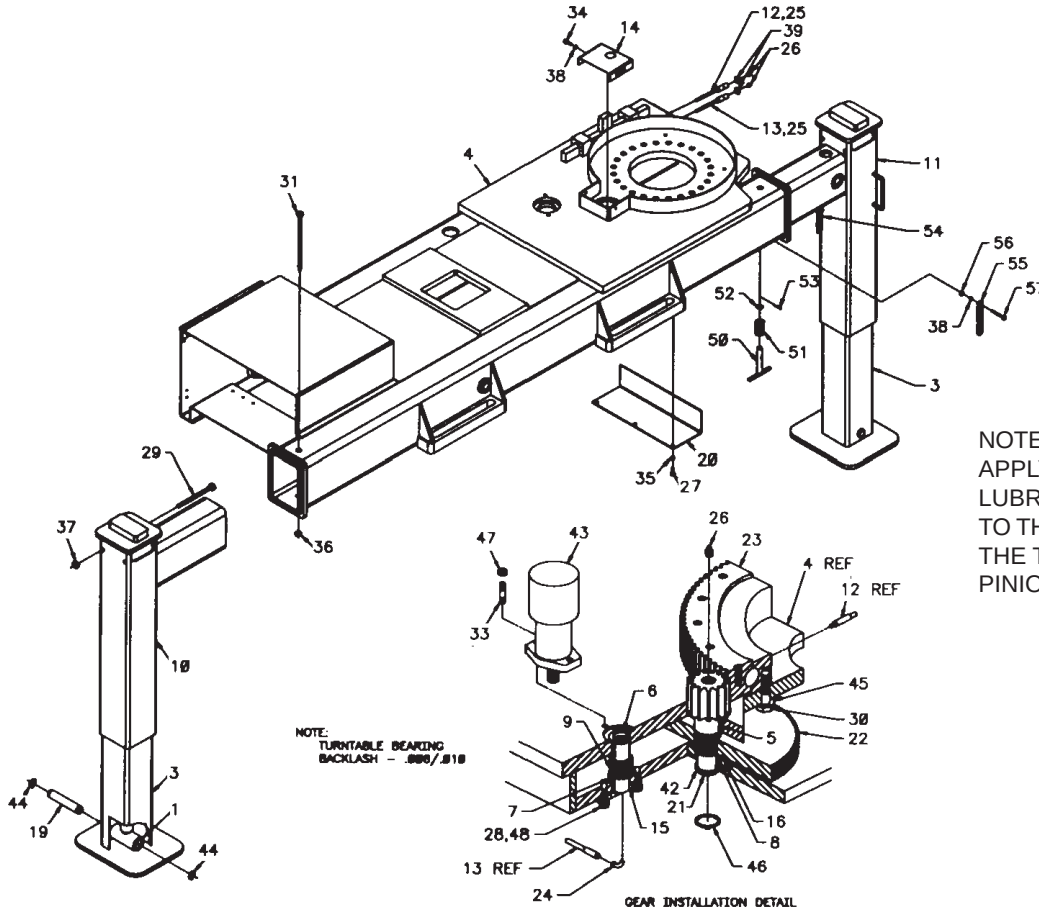
BASE & MNL OUT STABILIZER ASM (41709085)

ITEM	PART NO.	DESCRIPTION	QTY
1.	3B166820	CYLINDER - POWER DOWN	2
3.	52704868	STABILIZER LEG	2
4.	52709084	BASE (INCL: 5-9)	1
5.	60020114	BUSHING (PART OF 4)	1REF
6.	60020115	BUSHING (PART OF 4)	1REF
7.	60020116	BUSHING (PART OF 4)	1REF
8.	60020154	BUSHING (PART OF 4)	1REF
9.	71056011	DRIVE GEAR (PART OF 4)	1REF
10.	52709082	STABILIZER ARM - STAT	1
11.	52709083	STABILIZER ARM - ADJ	1
12.	53000702	GREASE EXT 17"	1
13.	53000711	GREASE EXT 23"	1
14.	60010235	PINION COVER	1
15.	60010844	GREASE PLATE	1
16.	60104694	PINION SPACER	1
19.	60106968	PIN	2
20.	60107167	GEAR COVER	1
21.	71056010	PINION GEAR	1
22.	71056012	INTERMEDIATE GEAR	1
23.	71056062	TURNTABLE GEAR BEARING	1
24.	72053281	STREET ELBOW 1/8NPT 90°	1
25.	72053301	COUPLING 1/8 NPT	2
26.	72053508	ZERK 1/8NPT	3
27.	72060046	CAP SCR 3/8-16X1 HHGR5	3
28.	72060092	CAP SCR 1/2-13X1-1/4 HHGR5	2
29.	72060102	CAP SCR 1/2-13X5-1/2 HHGR5	4
30.	72060151	CAP SCR 5/8-11X2 HHGR8	23

31.	72060164	CAP SCR 5/8-11X8 HHGR5	1
33.	60106032	STUD 1/2-13X2	2
34.	72060833	SCR 5/16-18X3/4 SLFTPG	2
35.	72063051	WASHER 3/8 LOCK	3
36.	72062091	NUT 5/8-11 LOCK	1
37.	72062107	NUT 1/2-13 CTR LOCK	4
38.	72063002	WASHER 5/16 WRT	3
39.	72063003	WASHER 3/8 WRT	2
42.	72063035	MACH BUSHING 1-1/4X10GA	1
43.	73051384	MOTOR	1
44.	72066125	RETAINING RIG 1" HD	4
45.	72063119	WASHER 5/8 HARDENED	23
46.	72066084	RETAINING RING 1-1/4 STD	1
47.	72062080	NUT 1/2-13 LOCK	2
48.	72063053	WASHER 1/2-13 LOCK	2
50.	52070138	"T" PIN	1
51.	60010351	SPRING	1
52.	72063027	MACH BUSHING 5/8X14GA	1
53.	72066185	COTTER PIN .16 X 1	1
54.	70058060	LINK - COLD SHUT	1
55.	60102556	CHAIN	1
56.	72062109	NUT 5/16-18 LOCK	1
57.	72060026	CAP SCR 5/16-18X1-1/4 HHGR5	1

WARNING

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



NOTE:
APPLY MOBILTAC 375NC
LUBRICANT (OR EQUIVALENT)
TO THE EXTERNAL TEETH OF
THE TURNTABLE BEARING AND
PINION GEAR.

GEAR INSTALLATION DETAIL

PWR-DN STABILIZER CYLINDER (3B166820)

ITEM	PART NO.	DESCRIPTION	QTY
1.	4B166820	CASE (INCL:6)	1
2.	4G166820	ROD	1
3.	6I025087	PISTON	1
4.	6H025015	HEAD	1
5.	73054004	VALVE	1
6.	7PNPXT02	PIPE PLUG 1/8 (PART OF 1)	3REF
7.	6C075015	STOP TUBE	1
8.	72060708	CAP SCR 1/4-20 X 1-1/4 SH	6
9.	9B101214	SEAL KIT (INCL:10-18)	1
10.	7Q072137	O-RING (PART OF 9)	1REF
11.	7T66P025	PISTON SEAL (PART OF 9)	1REF
12.	7T61N087	LOCK RING SEAL (PART OF 9)	1REF
13.	7T2N8015	WEAR RING (PART OF 9)	1REF
14.	60138272	STOP TUBE (PART OF 9) (WAS 6A025015)	1REF
15.	7Q072228	O-RING (PART OF 9)	1REF
16.	7Q10P228	BACK-UP RING (PART OF 9)	1REF
17.	7R546015	ROD SEAL (PART OF 9)	1REF
18.	7R14P015	ROD WIPER (PART OF 9)	1REF
19.	60125699	PIN-LOCK TUBE (PART OF 9)	1REF

NOTE

IT IS RECOMMENDED THAT ALL COMPONENTS OF THE SEAL KIT BE REPLACED WHENEVER THE CYLINDER IS DISASSEMBLED. THIS WILL REDUCE FUTURE DOWNTIME.

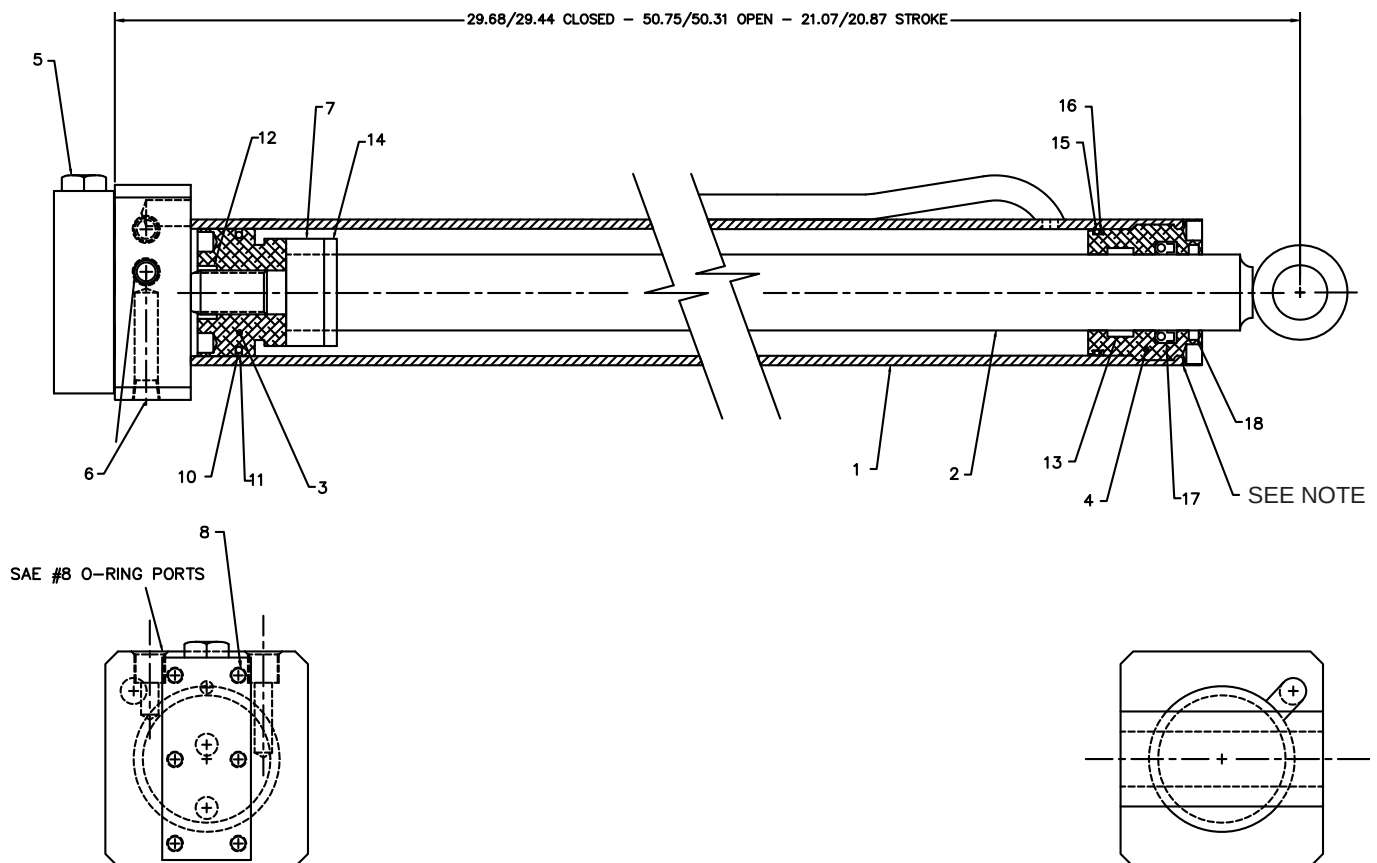
APPLY "LUBRIPLATE #630-2" MEDIUM HEAVY, MULTI-PURPOSE LUBRICANT OR EQUIVALENT TO ALL PISTON AND HEAD GLANDS, LOCK RING AND ROD THREADS BEFORE ASSEMBLY.

USE "NEVER-SEEZ" OR EQUIVALENT BETWEEN THE HEAD AND THE CASE WHEN ASSEMBLING THE CYLINDER.

ITEM #14, STOP TUBE, REPLACES 6A025015 WAFER LOCK. USE STOP TUBE INSTEAD OF WAFER LOCK WHEN RESEALING CYLINDER.

PRESS LOCKING PIN (ITEM #19) INTO #15 HOLE DRILLED 0.188" DEEP.

TORQUE PISTON TO 100-130 FT-LB, HEAD TO 288 FT-LB, AND CARTRIDGE TO 30-35 FT-LB.



PWR-OUT STABILIZER CYLINDER (3B241801)

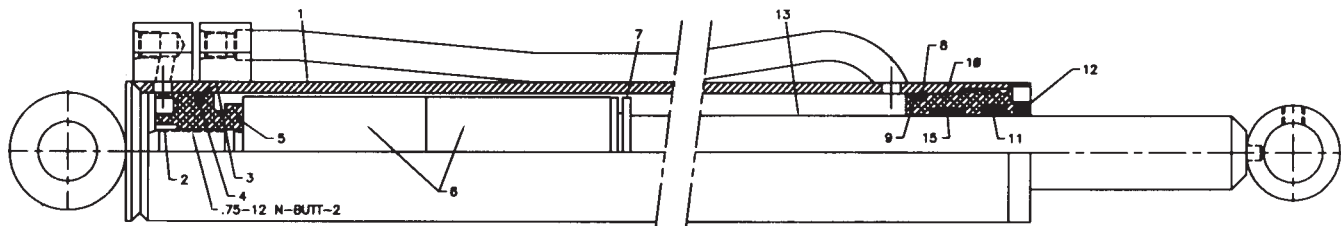
ITEM	PART NO.	DESCRIPTION	QTY
1.	4B241801	CASE	1
2.	7T61N075	LOCK RING SEAL (PART OF 14)	1REF
3.	7T66P020	PISTON SEAL (PART OF 14)	1REF
4.	7Q072129	O-RING (PART OF 14)	1REF
5.	6I020075	PISTON	1
6.	6C300012	STOP TUBE	2
7.	6A025012	WAFER LOCK (PART OF 14)	1REF
8.	7Q10P224	BACK-UP RING (PART OF 14)	1REF
9.	7Q072224	O-RING (PART OF 14)	1REF
10.	6H020012	HEAD	1
11.	7R546012	ROD SEAL (PART OF 14)	1REF
12.	7R14P012	ROD WIPER (PART OF 14)	1REF
13.	4G241800	ROD	1
14.	9B081012	SEAL KIT (INCL:2-4,7-9,11,12,15)	1
15.	7T2N8012	WEAR RING (PART OF 14)	1REF

NOTE

IT IS RECOMMENDED THAT ALL COMPONENTS OF THE SEAL KIT BE REPLACED WHENEVER THE CYLINDER IS DISASSEMBLED. THIS WILL REDUCE FUTURE DOWNTIME.

APPLY "LUBRIPLATE #630-2" MEDIUM HEAVY, MULTI-PURPOSE LUBRICANT OR EQUIVALENT TO ALL PISTON AND HEAD GLANDS, LOCK RING AND ROD THREADS BEFORE ASSEMBLY.

USE "NEVER-SEEZ" OR EQUIVALENT BETWEEN THE HEAD AND THE CASE WHEN ASSEMBLING THE CYLINDER.

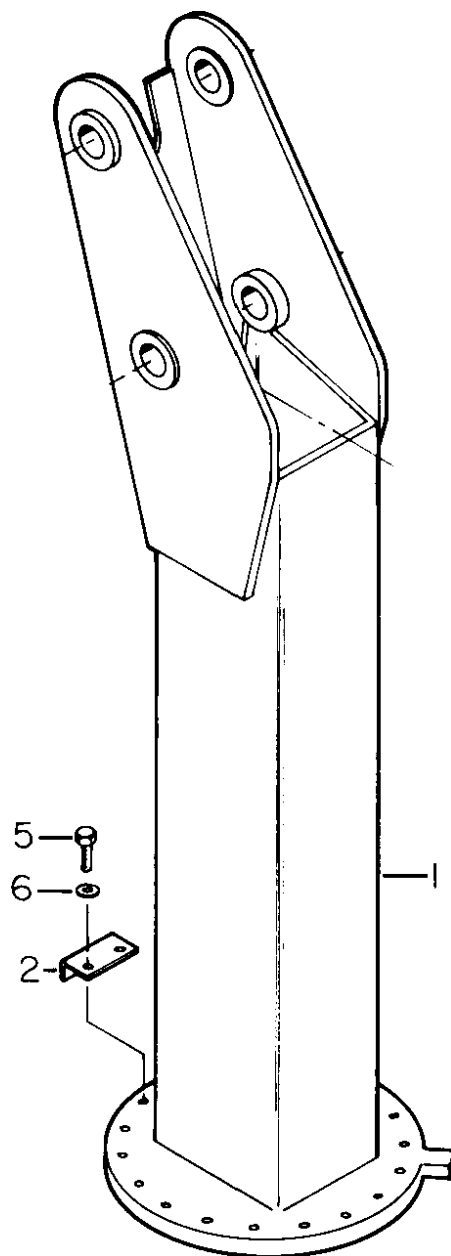


MAST ASM (41701134)

ITEM	PART NO.	DESCRIPTION	QTY
1.	52701152	MAST	1
2.	60104540	PINION COVER	1
3.	70029119	SERIAL NO. PLACARD	1
5.	72060151	CAP SCR 5/8-11 X 2 HH GR8	18
6.	72063119	WASHER 5/8 HARDENED	18
7.	72066340	POP RIVET 1/8	2

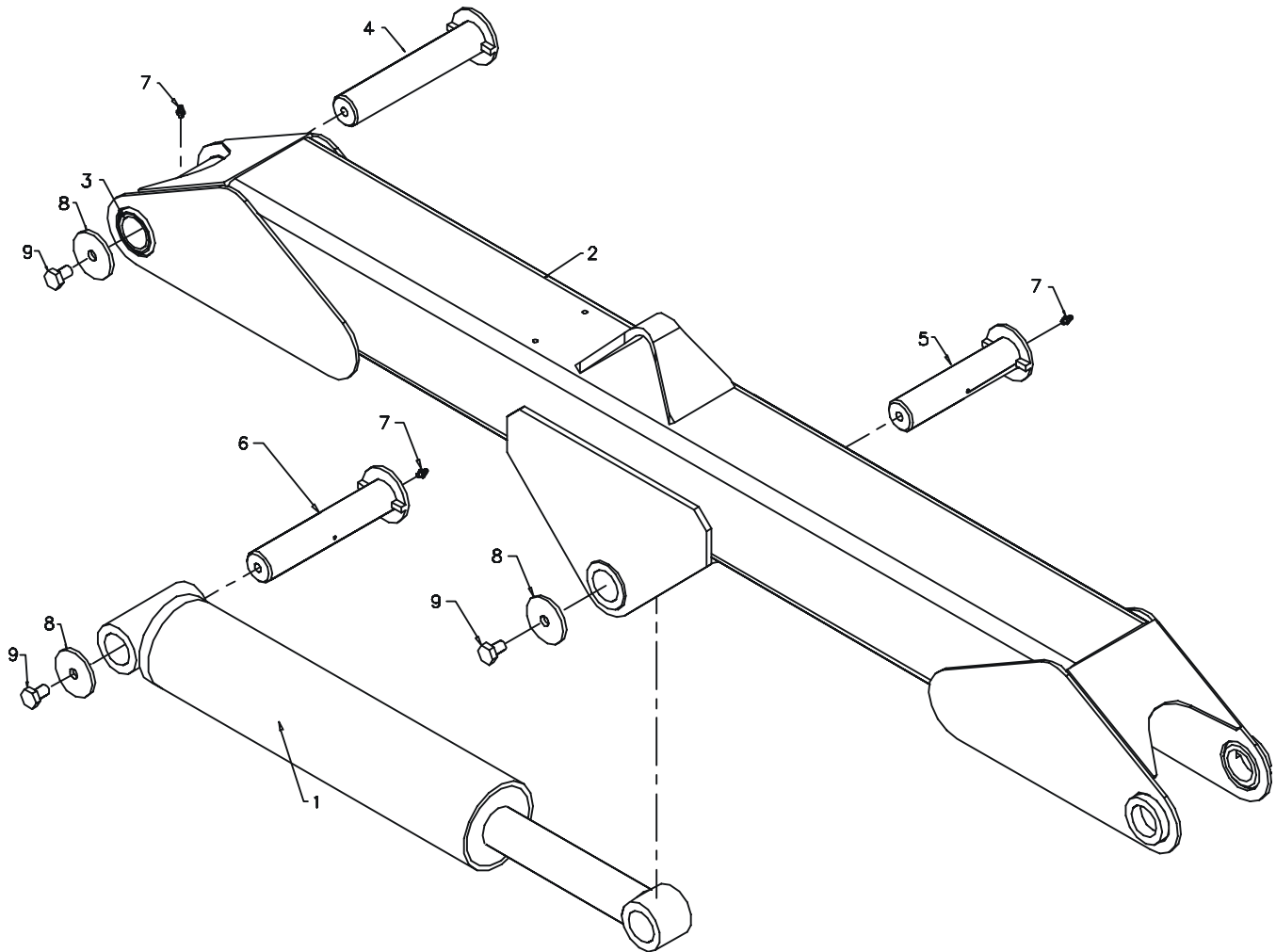
WARNING

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



INNER BOOM ASM (41701135)

ITEM	PART NO.	DESCRIPTION	QTY
1.	3C078712	INNER CYLINDER	1
2.	52701155	INNER BOOM (INCL:3)	1
3.	60020131	BUSHING (PART OF 2)	2REF
4.	52703711	PIN	1
5.	52703758	PIN	1
6.	52715936	PIN	1
7.	72053508	ZERK 1/8NPT	3
8.	60109337	PIN RETAINER PLT 3"	3
9.	72060147	CAP SCR 5/8-11X1 HHGR5	3



INNER CYLINDER (3C078712)

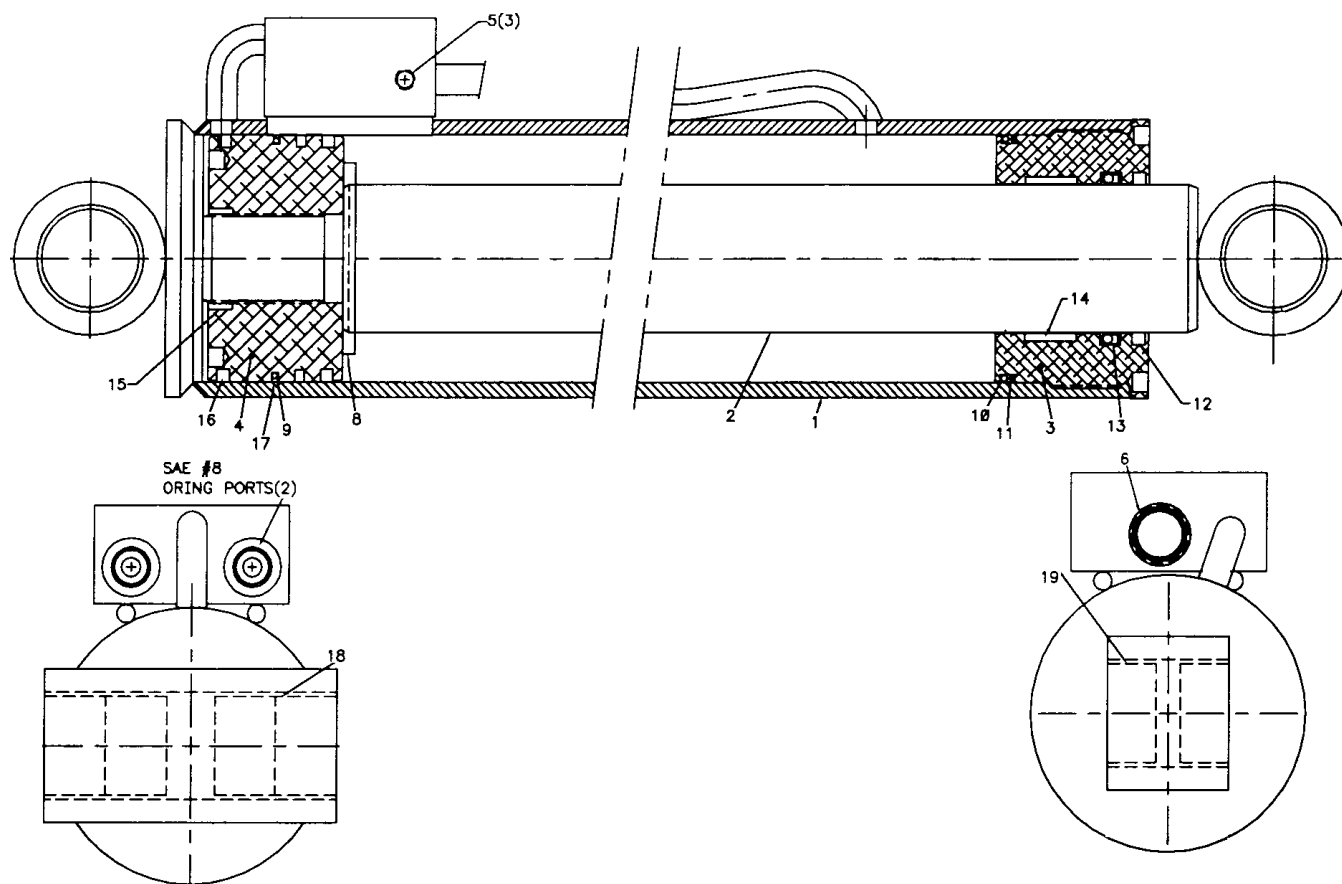
ITEM	PART	DESCRIPTION	QTY
1.	4C078711	CASE (INCL:5&18)	1
2.	4G078710	ROD (INCL:19)	1
3.	6H050025	HEAD	1
4.	6I050181	PISTON	1
5.	7PNPXT02	PIPE PLUG 1/8 (PART OF 1)	3REF
6.	73054242	VALVE - 25GPM	1
7.	9C202029	SEAL KIT (INCL:8-173)	1
8.	6A025025	WAFFER LOCK (PART OF 7)	1REF
9.	7Q072157	O-RING (PART OF 7)	1REF
10.	7Q072350	O-RING (PART OF 7)	1REF
11.	7Q10P350	BACK-UP RING (PART OF 7)	1REF
12.	7R14P025	ROD WIPER (PART OF 7)	1REF
13.	7R546025	ROD SEAL (PART OF 7)	1REF
14.	7T2N8027	WEAR RING (PART OF 7)	1REF
15.	7T61N181	LOCK RING SEAL (PART OF 7)	1REF
16.	7T65I050	PISTON RING (PART OF 7)	2REF
17.	7T66P050	PISTON SEAL (PART OF 7)	1REF
18.	7BF81220	BUSHING (PART OF 1)	4REF
19.	7BF81020	BUSHING (PART OF 2)	2REF

NOTE

IT IS RECOMMENDED THAT ALL COMPONENTS OF THE SEAL KIT BE REPLACED WHENEVER THE CYLINDER IS DISASSEMBLED. THIS WILL REDUCE FUTURE DOWNTIME.

APPLY "LUBRIPLATE #630-2" MEDIUM HEAVY, MULTI-PURPOSE LUBRICANT OR EQUIVALENT TO ALL PISTON AND HEAD GLANDS, LOCK RING AND ROD THREADS BEFORE ASSEMBLY.

USE "NEVER-SEEZ" OR EQUIVALENT BETWEEN THE HEAD AND THE CASE WHEN ASSEMBLING THE CYLINDER. KEEP AWAY FROM ALL SEALS.

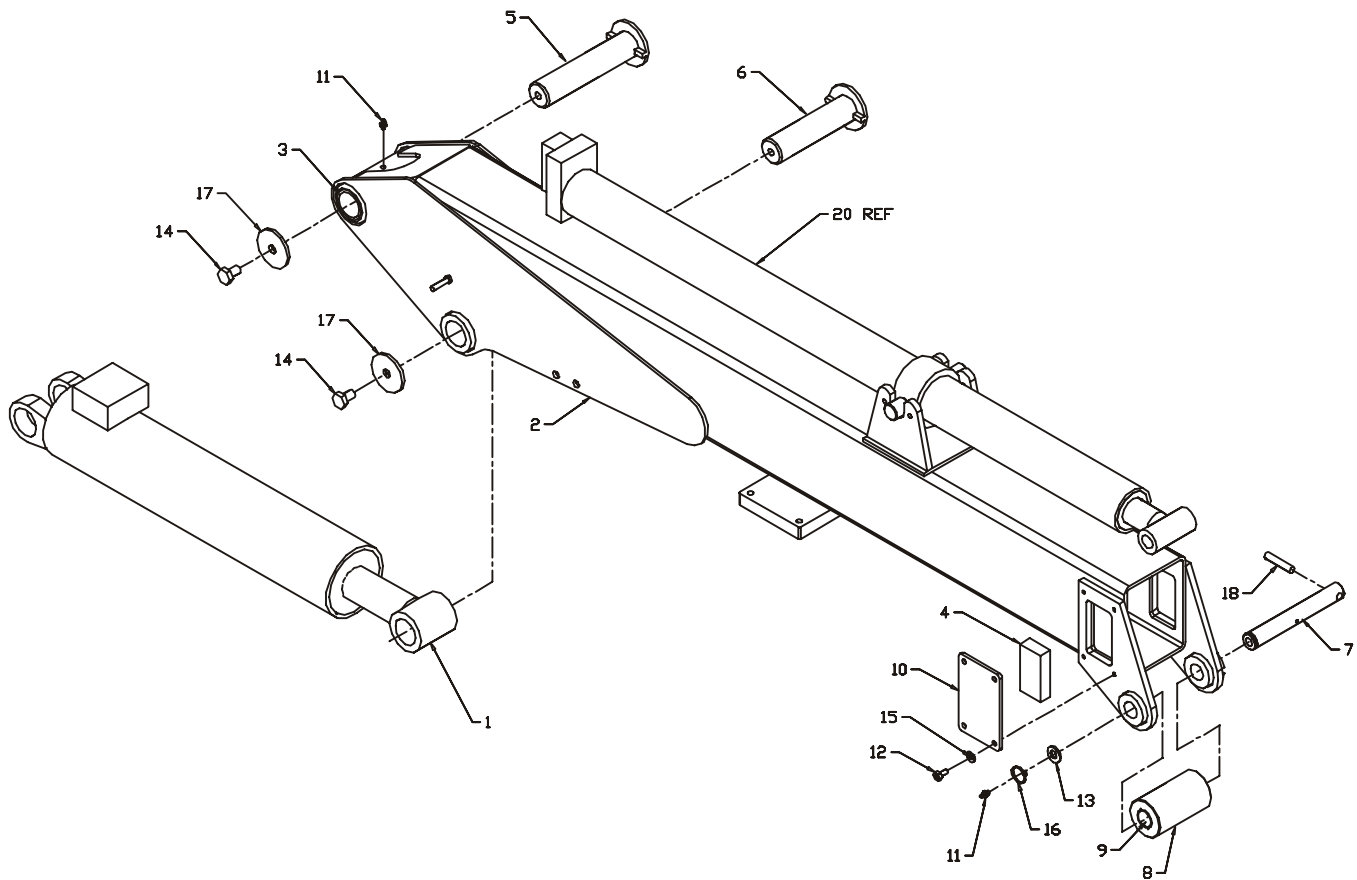


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3-11

OUTER BOOM ASM (41711600)

1. 3C081712	OUTER CYLINDER	1	10. 60103463	RETAINING PLATE	2
2. 52711599	OUTER BOOM (INCL:3)	1	11. 72053508	ZERK 1/8NPT	2
3. 60020131	BUSHING (PART OF 2)	2REF	12. 72060023	CAP SCR 5/16-18X3/4 HHGR5	8
4. 60030015	WEAR PAD	2	13. 72063035	MACH BUSHING 1-1/4X10GA	1
5. 52703767	PIN	2	14. 72060147	CAP SCR 5/8-11X1 HHGR5	2
6. 52703710	PIN	1	15. 72063050	WASHER 5/16 LOCK	8
7. 60102558	PIN	1	16. 72066129	RETAINING RING 1-1/4 HD	1
8. 60102559	ROLLER (INCL:9)	1	17. 60109337	RETAINER PLATE 3"	2
9. 60020126	BUSHING (PART OF 8)	4REF	18. 72661157	GROOVE PIN 1/2 X 2-1/2	1
			20.	EXTENSION CYLINDER	REF



OUTER CYLINDER (3C081712)

ITEM	PART	DESCRIPTION	QTY
1.	4C081711	CASE (INCL:5&18)	1
2.	4G081710	ROD (INCL:8&19)	1
3.	6H050025	HEAD	1
4.	6I050181	PISTON	1
5.	7PNPXT02	PIPE PLUG 1/8 (PART OF 1)	3REF
6.	73054242	VALVE 25GPM	1
7.	9A202029	SEAL KIT (INCL:9-17)	1
8.	72053507	ZERK 1/4-28 (PART OF 2)	1REF
9.	7Q072157	O-RING (PART OF 7)	1REF
10.	7Q072350	O-RING (PART OF 7)	1REF
11.	7Q10P350	BACK-UP RING (PART OF 7)	1REF
12.	7R14P025	ROD WIPER (PART OF 7)	1REF
13.	7R546025	ROD SEAL (PART OF 7)	1REF
14.	7T2N8027	WEAR RING (PART OF 7)	1REF
15.	7T61N181	LOCK RING SEAL (PART OF 7)	1REF
16.	7T65I050	PISTON RING (PART OF 7)	2REF
17.	7T66P050	PISTON SEAL (PART OF 7)	1REF
18.	7BF81220	BUSHING (PART OF 1)	2REF
19.	7BF81520	BUSHING (PART OF 2)	2REF
20.	60125699	PIN-LOCK TUBE (PART OF 7)	1REF

NOTE

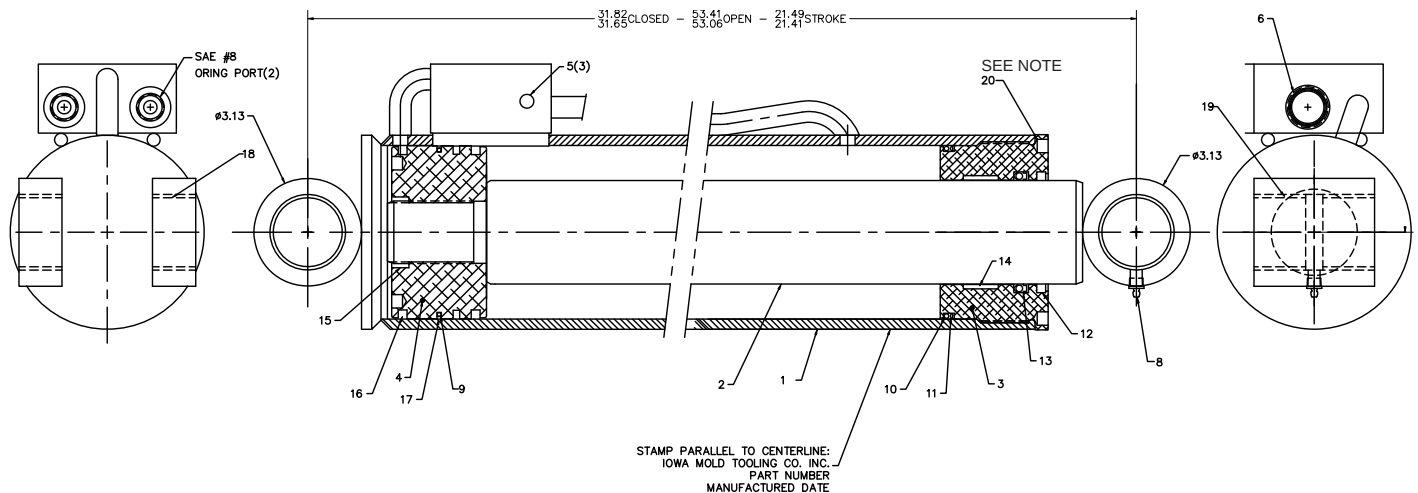
IT IS RECOMMENDED THAT ALL COMPONENTS OF THE SEAL KIT BE REPLACED WHENEVER THE CYLINDER IS DISASSEMBLED. THIS WILL REDUCE FUTURE DOWNTIME.

APPLY "LUBRIPLATE #630-2" MEDIUM HEAVY, MULTI-PURPOSE LUBRICANT OR EQUIVALENT TO ALL PISTON AND HEAD GLANDS, LOCK RING AND ROD THREADS BEFORE ASSEMBLY.

USE "NEVER-SEEZ" OR EQUIVALENT BETWEEN THE HEAD AND THE CASE WHEN ASSEMBLING THE CYLINDER. KEEP AWAY FROM ALL SEALS.

PRESS LOCKING PIN (ITEM #20) INTO #15 HOLE DRILLED 0.188" DEEP.

TORQUE PISTON TO 710-740 FT-LB, HEAD TO 500 FT-LB, CARTRIDGE TO 65 FT-LB.

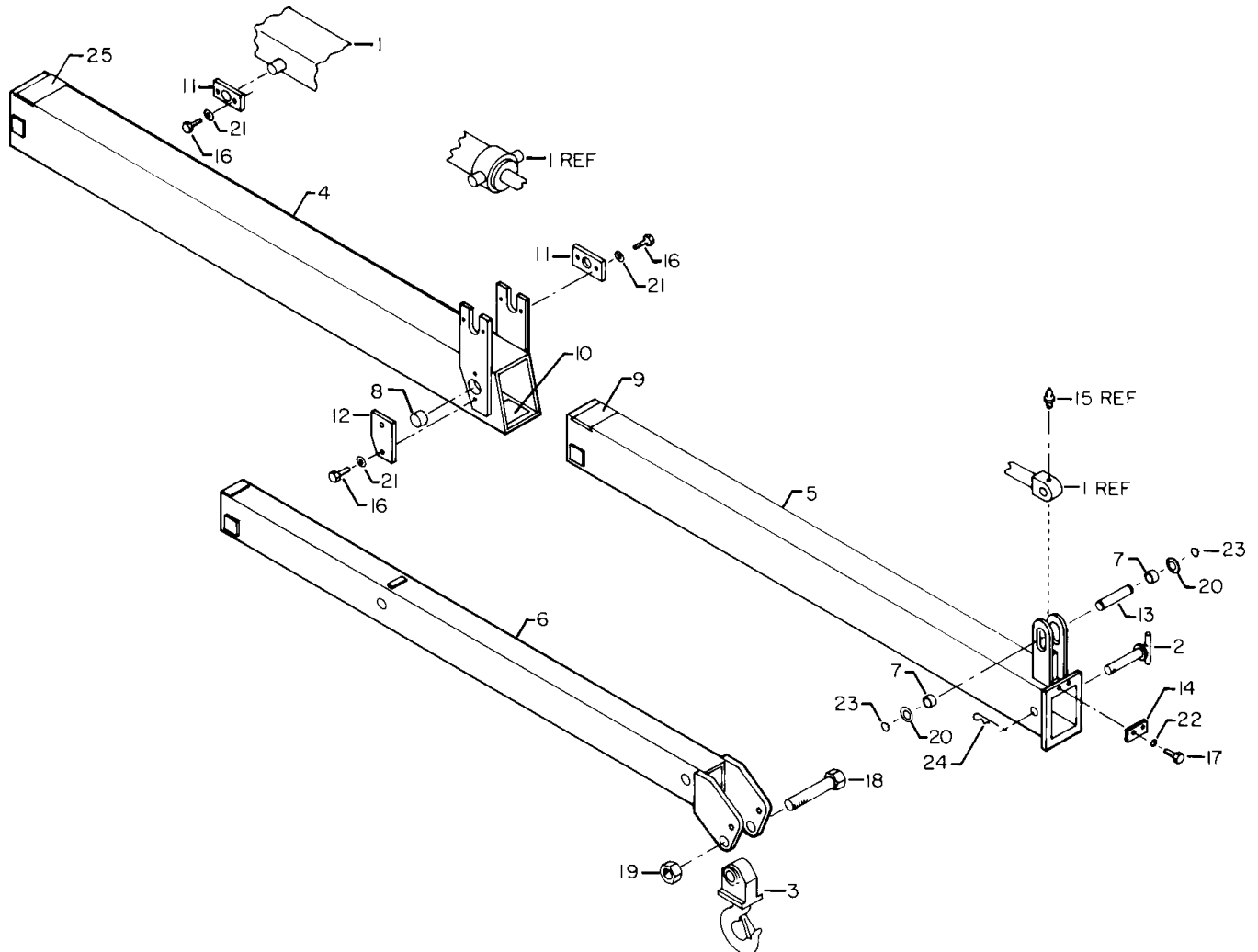


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3-13

EXTENSION BOOM (41705246)

ITEM	PART NO.	DESCRIPTION	QTY	14.	60107294	STROKE STOP	1
1.	3K095850	EXTENSION CYLINDER	1	15.	72053507	ZERK 1/4-28 (PART OF 1)	REF
2.	52070151	PIN	1	16.	72060046	CAP SCR 3/8-16 X 1 HHGR5	12
3.	52701716	HOOK - 5-TON SWVL	1	17.	72060092	CAP SCR 1/2-13 X 1-1/4 HHGR5	2
4.	52705249	EXT BOOM - 1ST STAGE	1	18.	72060238	CAP SCR 1-1/4-7 X 6 HH GR5	1
5.	52705250	EXT BOOM - 2ND STAGE	1	19.	7206073	NUT 1-1/4-7 LOCK	1
6.	52705251	EXT BOOM - 3RD STAGE	1	20.	72063010	WASHER 1" WRT	2
7.	60020197	ROLLER	2	21.	72063051	WASHER 3/8 LOCK	12
8.	60030007	WEAR PAD	2	22.	72063053	WASHER 1/2 LOCK	2
9.	60030064	WEAR PAD	1	23.	72066125	RETAINING RING 1"	2
10.	60030145	WEAR PAD	1	24.	72066145	HAIR PIN 3/16	1
11.	60102341	LOCK PLATE	4	25.	60030127	WEAR PAD	1
12.	60102649	RETAINING PLATE	2	26.	72060915	CAP SCR 3/8-16X1 FLTHDSOC	2



EXTENSION CYLINDER (3K095850)

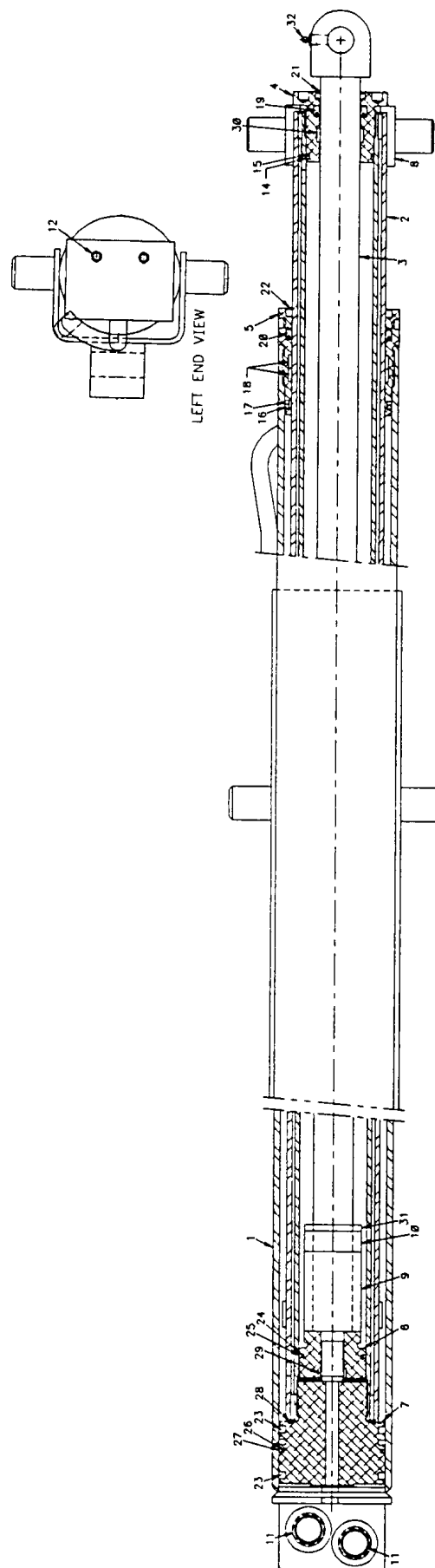
ITEM	PART	DESCRIPTION	QTY
1.	4K095850	CASE (INCL: 12)	1
2.	4H095850	INNER CASE	1
3.	4G095850	ROD	1
4.	6H271511	HEAD	1
5.	6H112820	HEAD	1
6.	6I025087	PISTON	1
7.	6I095850	PISTON	1
8.	4FG12085	MOUNTING RING	1
9.	6C300015	STOP TUBE	1
10.	6C075015	STOP TUBE	1
11.	73054242	VALVE	2
12.	7PNPXT02	PIPE PLUG 1/8NPT (PART OF 1)	8
13.	9X095850	SEAL KIT	1
14.	7Q072228	O-RING (PART OF 13)	1REF
15.	7Q10P228	BACK-UP RING (PART OF 13)	1REF
16.	7Q072342	O-RING (PART OF 13)	1REF
17.	7Q10P342	BACK-UP RING (PART OF 13)	1REF
18.	7T2N4037	WEAR RING (PART OF 13)	1REF
19.	7R546015	ROD SEAL (PART OF 13)	1
20.	7R546035	ROD SEAL (PART OF 13)	1REF
21.	7R14P015	ROD WIPER (PART OF 13)	1REF
22.	7R14P035	ROD WIPER (PART OF 13)	1REF
23.	7T65I040	PISTON RING (PART OF 13)	2REF
24.	7Q072137	O-RING (PART OF 13)	1REF
25.	7T66P025	PISTON SEAL (PART OF 13)	1REF
26.	7Q072153	O-RING (PART OF 13)	1REF
27.	7T66P040	PISTON SEAL (PART OF 13)	1REF
28.	7Q072147	O-RING (PART OF 13)	1REF
29.	7T61N087	LOCK-RING SEAL	1REF
30.	7T2N8015	ROD WEAR RING (PART OF 13)	1
31.	6A025015	WAFFER LOCK (PART OF 13)	1REF
32.	72053507	ZERK 1/4-28	1

NOTE

IT IS RECOMMENDED THAT ALL COMPONENTS OF THE SEAL KIT BE REPLACED WHENEVER THE CYLINDER IS DISASSEMBLED. THIS WILL REDUCE FUTURE DOWNTIME.

APPLY "LUBRIPLATE #630-2" MEDIUM HEAVY, MULTI-PURPOSE LUBRICANT OR EQUIVALENT TO ALL PISTON AND HEAD GLANDS, LOCK RING AND ROD THREADS BEFORE ASSEMBLY.

USE "NEVER-SEEZ" OR EQUIVALENT BETWEEN THE HEAD AND THE CASE WHEN ASSEMBLING THE CYLINDER.



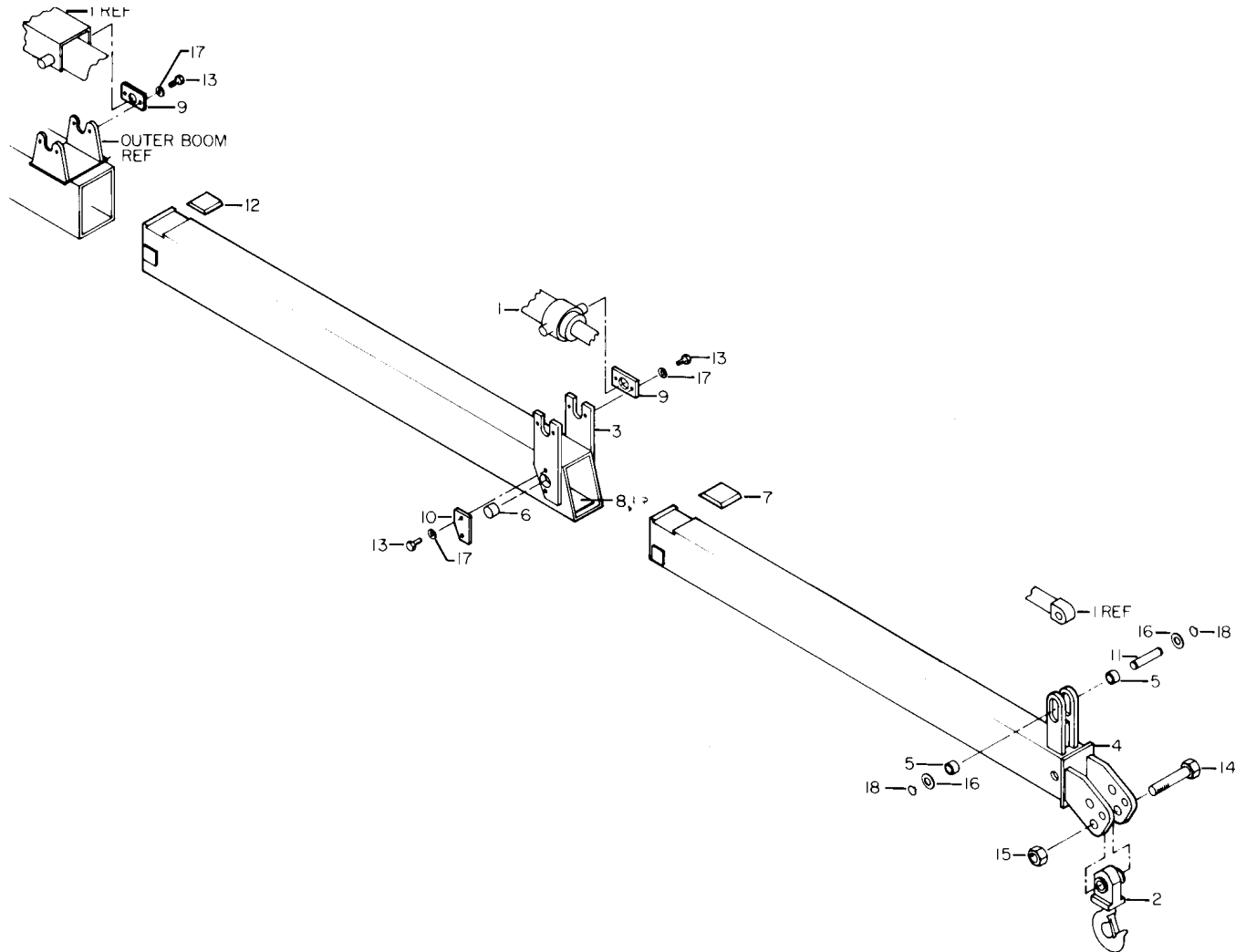
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3-15

EXTENSION BOOM- 2H (41706332)

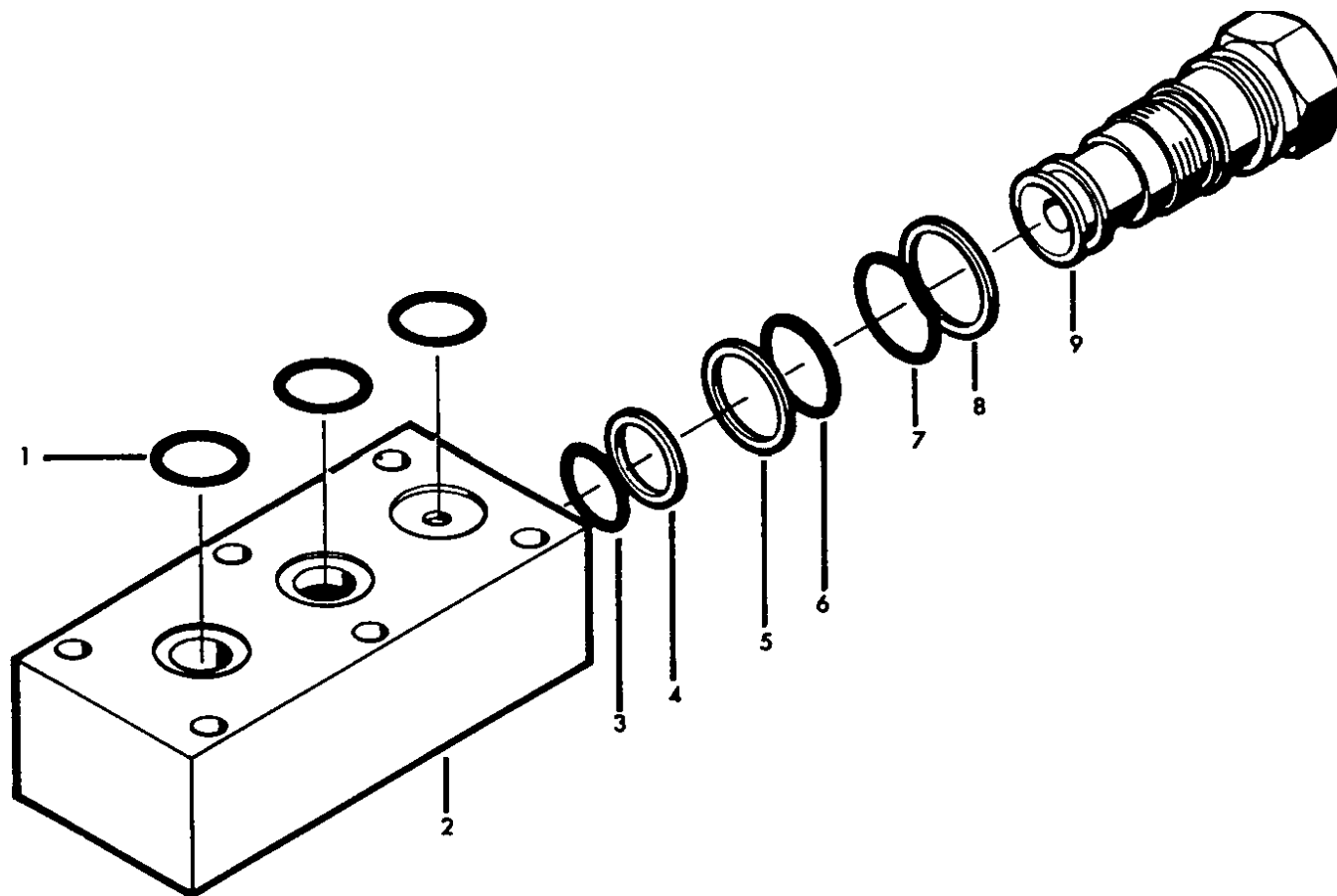
ITEM	PART NO.	DESCRIPTION	QTY
1.	3K095850	EXTENSION CYLINDER	1
2.	52701716	HOOK - 5-TON SWVL	1
3.	52705249	EXT BOOM - 1ST STAGE	1
4.	52705712	EXT BOOM - 2ND STAGE	1
5.	60020197	ROLLER	2
6.	60030007	WEAR PAD	2
7.	60030064	WEAR PAD	1
8.	60030145	WEAR PAD	1
9.	60102341	LOCK PLATE	4

10.	60102649	RETAINING PLATE	2
11.	60104028	PIN	1
12.	60030127	WEAR PAD	1
13.	72060046	CAP SCR 3/8-16 X 1 HH GR5	12
14.	72060238	CAP SCR 1-1/4-7 X 6 HH GR5	1
15.	72062073	NUT 1-1/4-7 LOCK	1
16.	72063010	WASHER 1" WRT	2
17.	72063051	WASHER 3/8 LOCK	12
18.	72066125	RETAINING RING 1" HD EXT	2
19.	72060915	CAP SCR 3/8-16 X 1 FLTHDSOC	2



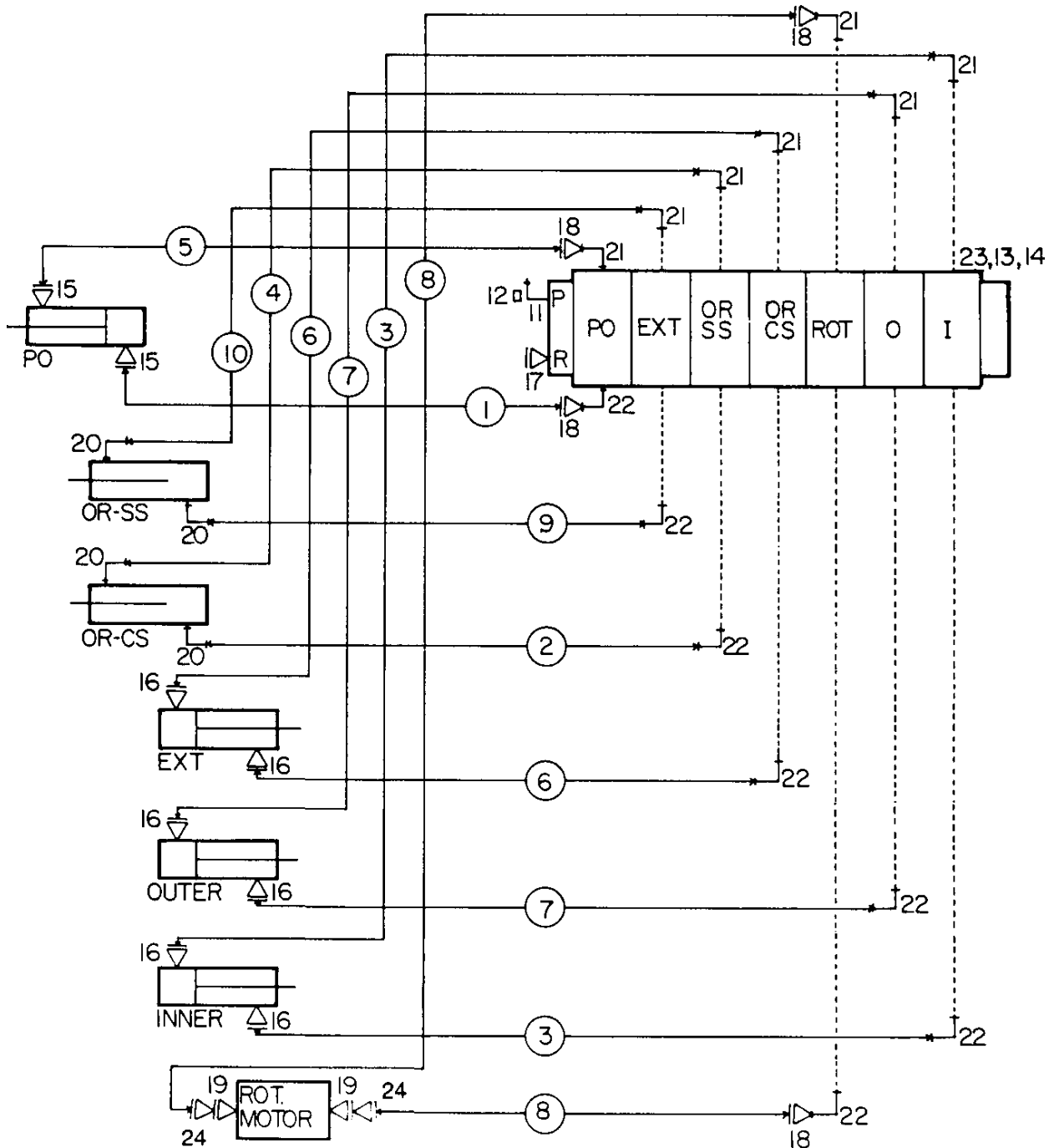
HOLDING VALVE (73054004)

ITEM	PART NO.	DESCRIPTION	QTY
1.	7Q072014	O-RING	3
2.		BLOCK (NOT SOLD SEPARATELY)	1
3.	7Q072015	O-RING	1
4.	7Q10P015	RING, BACK-UP	1
5.	7Q10P017	RING, BACK-UP	1
6.	7Q072017	O-RING	1
7.	7Q072018	O-RING	1
8.	7Q10P018	RING, BACK-UP	1
9.		BODY (NOT SOLD SEPARATELY)	1
10.	73054004	VALVE (INCL. 1-9)	1



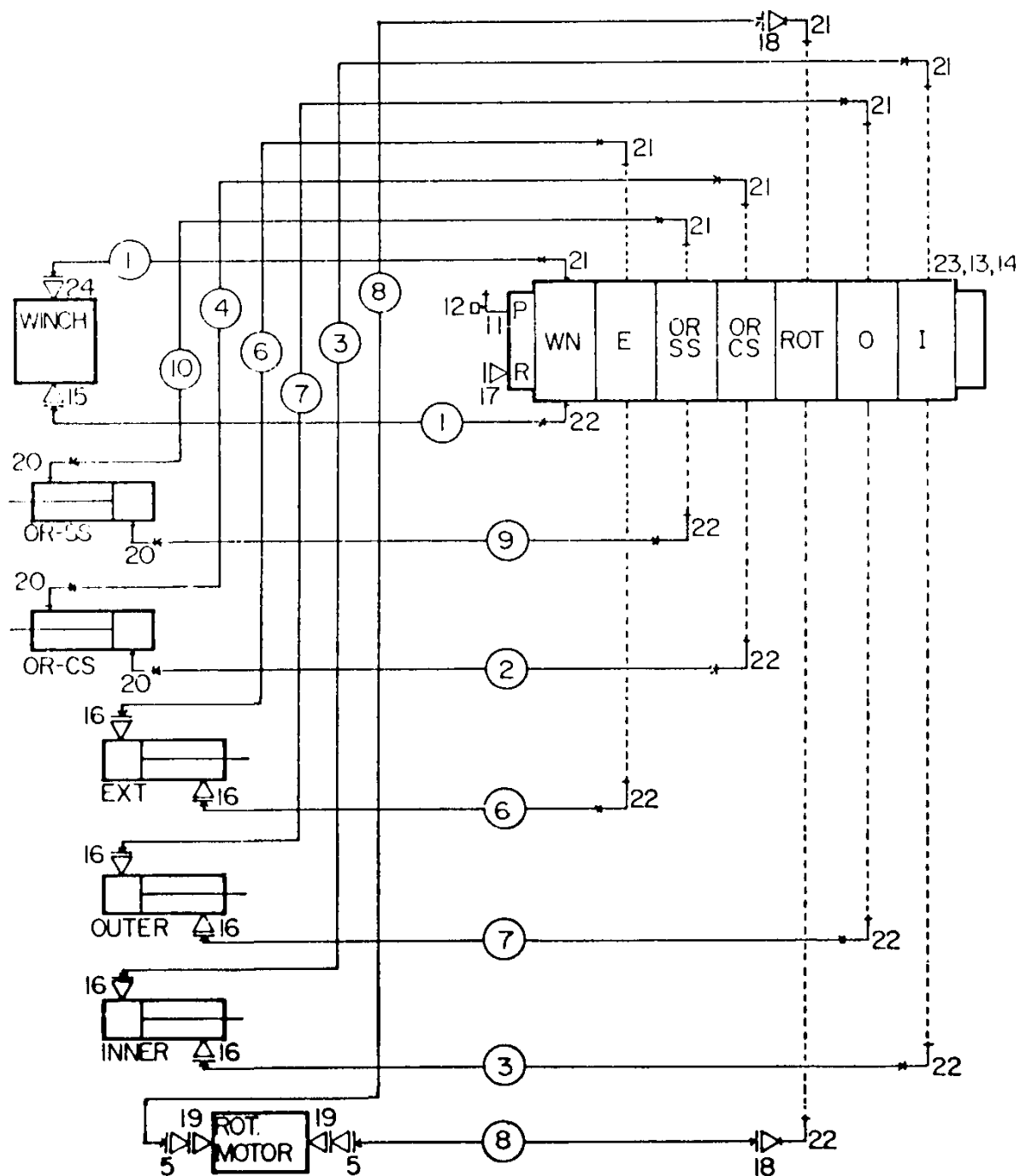
HYDRAULIC KIT-7 SECT W/PWR OUT (91705025)

ITEM	PART NO.	DESCRIPTION	QTY			
1.	51704625	HOSE ASM 1/4 X 38	1	12.	72053245	PIPE PLUG 1/4NPT 1
2.	51705085	HOSE ASM 3/8 X 132	1	13.	72060033	CAP SCR 5/16-18 X 3 HHGR5 3
3.	51705256	HOSE ASM 3/8 X 150	2	14.	72062109	NUT5/16-18 LOCK 3
4.	51705258	HOSE ASM 3/8 X 126	1	15.	72532351	ADAPTER 7/16MSTR 7/16MJIC 2
5.	51705263	HOSE ASM 1/4 X 34	1	16.	72532358	ADAPTER 3/4MSTR 3/4MJIC 6
6.	51706023	HOSE ASM 3/8 X 264	2	17.	72532366	ADPTR 1-1/16MSTR 1-1/16MJIC 1
7.	51706024	HOSE ASM 3/8 X 210	2	18.	72532665	ADAPTER 7/16MJIC 3/4FJIC 4
8.	51706025	HOSE ASM 1/4 X 56	2	19.	72532722	ADAPTER 7/8MSTR 9/16FSTR 2
9.	51706026	HOSE ASM 3/8 X 36	1	20.	72532779	ELBOW 9/16MSTR3/4MJIC 90°XL 4
10.	51706027	HOSE ASM 3/8 X 32	1	21.	72053763	ELBOW 3/4MSTR3/4MJIC 90° 7REF
11.	60106322	MODIFIED ELBOW	1	22.	72532666	ELBOW 3/4MSTR3/4MJIC 90°XL 7REF
				23.	51705074	VALVEBANK (INCL:21 & 22) 1
				24.	72532353	ADAPTER 9/16MSTR 7/16MJIC 2



HYDRAULIC KIT-7 SECT W/WINCH **(91705024)**

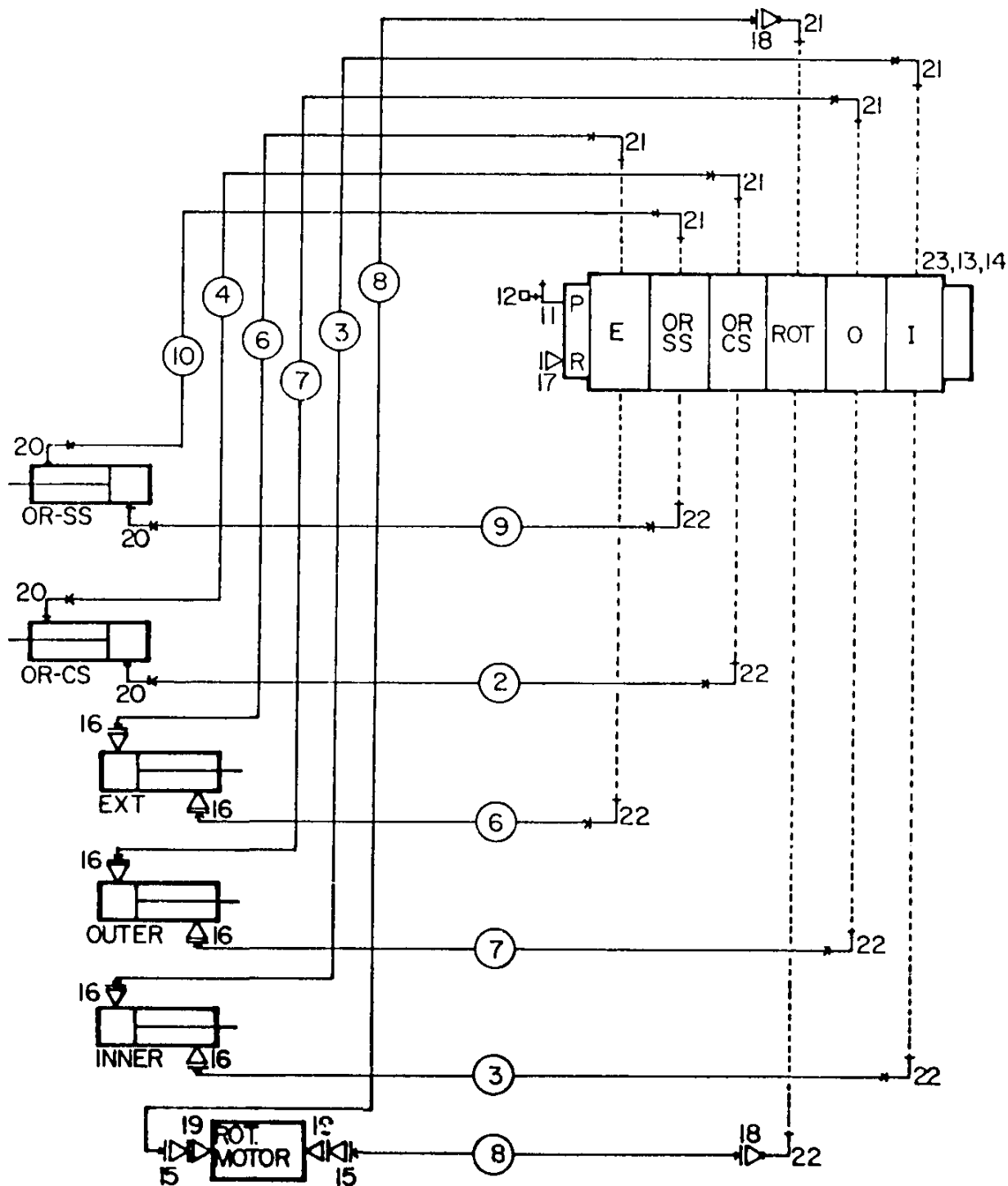
ITEM	PART NO.	DESCRIPTION	QTY			
1.	51705260	HOSE ASM 3/8 X 294	2	12.	72053245	PIPE PLUG 1/4NPT 1
2.	51705085	HOSE ASM 3/8 X 132	1	13.	72060033	CAP SCR 5/16-18 X 3 H GR5 3
3.	51705256	HOSE ASM 3/8 X 150	2	14.	72062109	NUT5/16-18 LOCK 3
4.	51705258	HOSE ASM 3/8 X 126	1	15.	72053670	ADAPTER 3/8MPT 3/4MJIC 1REF
5.	72532353	ADAPTER 9/16MSTR 7/16MJIC	2	16.	72532358	ADAPTER 3/4MSTR 3/4MJIC 6
6.	51706023	HOSE ASM 3/8 X 264	2	17.	72532366	ADPTR 1-1/16MSTR 1-1/16MJIC 1
7.	51706024	HOSE ASM 3/8 X 210	2	18.	72532665	ADAPTER 7/16MJIC 3/4FJIC 2
8.	51706025	HOSE ASM 1/4 X 56	2	19.	72532722	ADAPTER 7/8MSTR 9/16FSTR 2
9.	51706026	HOSE ASM 3/8 X 36	1	20.	72532779	ELBOW 9/16MSTR3/4MJIC 90°XL 4
10.	51706027	HOSE ASM 3/8 X 32	1	21.	72053763	ELBOW 3/4MSTR 3/4MJIC 90° 7REF
11.	60106322	MODIFIED ELBOW	1	22.	72532666	ELBOW 3/4MSTR 3/4MJIC 90°XL 7REF
				23.	51705074	VALVEBANK (INCL:21 & 22) 1REF
				24.	72053497	ADAPTER 1/2MPT 3/4MJIC 1REF



HYDRAULIC KIT-6 SECT (91705076)

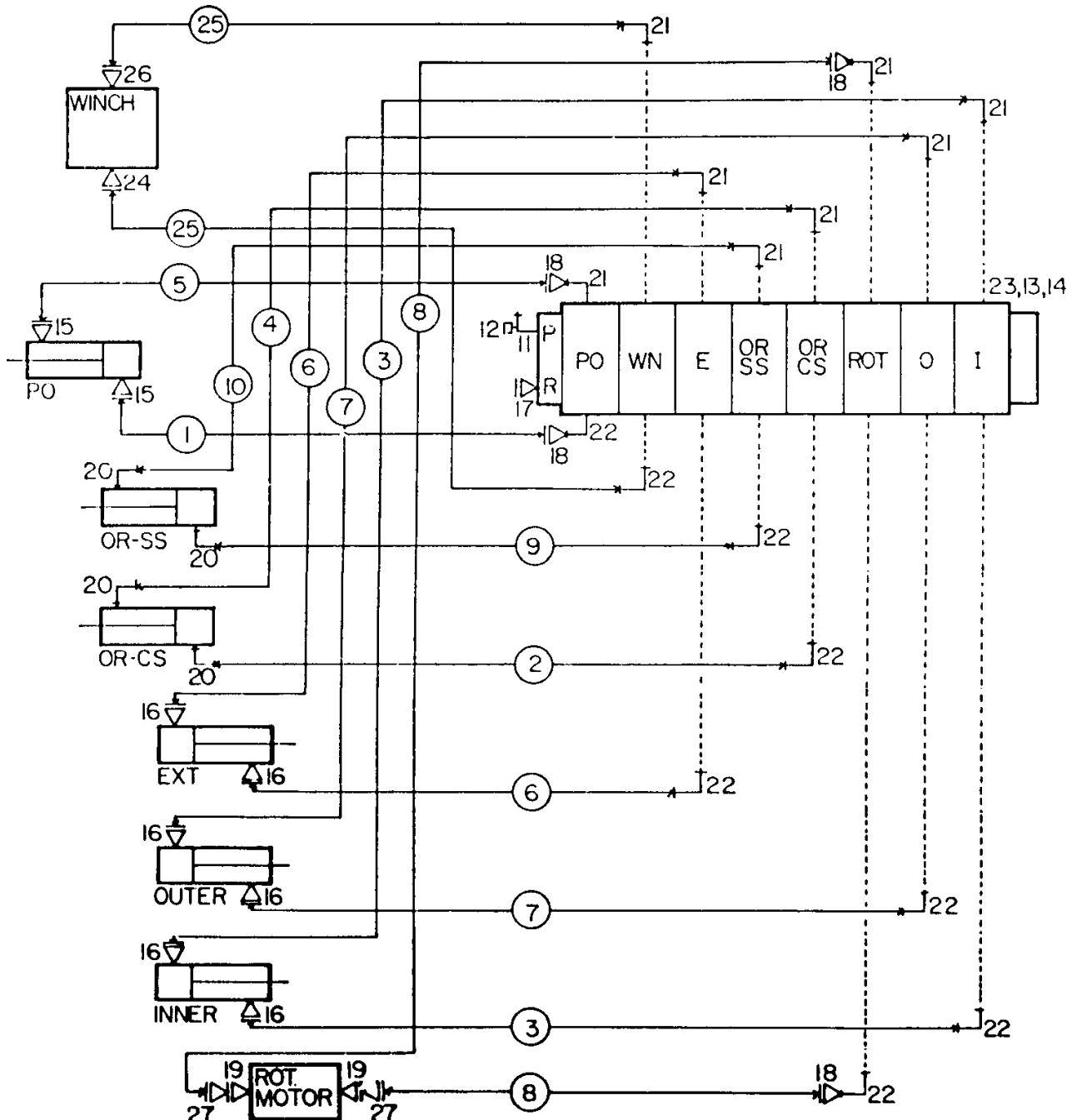
ITEM	PART NO.	DESCRIPTION	QTY
2.	51705085	HOSE ASM 3/8 X 132	1
3.	51705256	HOSE ASM 3/8 X 150	2
4.	51705258	HOSE ASM 3/8 X 126	1
6.	51706023	HOSE ASM 3/8 X 264	2
7.	51706024	HOSE ASM 3/8 X 210	2
8.	51706025	HOSE ASM 1/4 X 56	2
9.	51706026	HOSE ASM 3/8 X 36	1
10.	51706027	HOSE ASM 3/8 X 32	1
11.	60106322	MODIFIED ELBOW	1
12.	72053245	PIPE PLUG 1/4NPT	1

13.	72060033	CAP SCR 5/16-18 X 3 HH GR5	3
14.	72062109	NUT5/16-18 LOCK	3
15.	72532353	ADAPTER 9/16MSTR 7/16MJIC	2
16.	72532358	ADAPTER 3/4MSTR 3/4MJIC	6
17.	72532366	ADPTR 1-1/16MSTR 1-1/16MJIC	1
18.	72532665	ADAPTER 7/16MJIC 3/4FJIC	2
19.	72532722	ADAPTER 7/8MSTR 9/16FSTR	2
20.	72532779	ELBOW 9/16MSTR3/4MJIC 90°XL	4
21.	72053763	ELBOW 3/4MSTR 3/4MJIC 90°	6REF
22.	72532666	ELBOW 3/4MSTR 3/4MJIC 90°XL	6REF
23.	51705075	VALVEBANK (INCL:21 & 22)	1REF



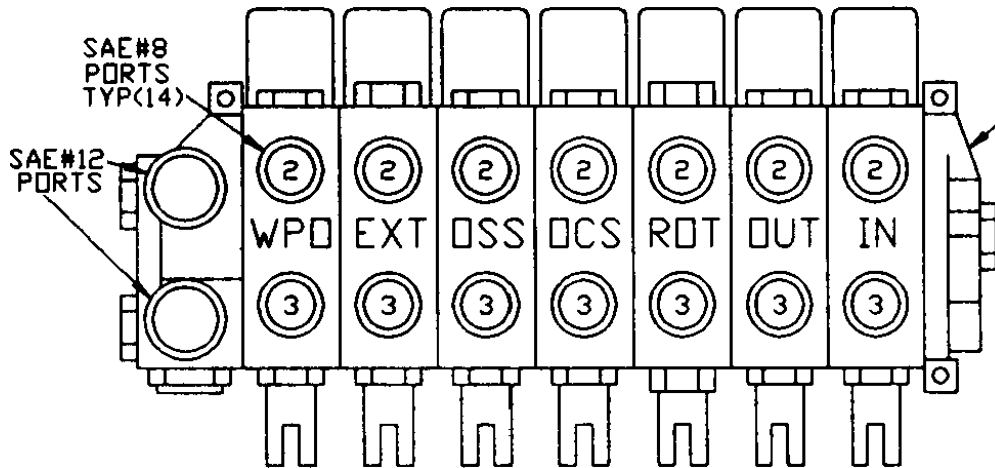
HYDRAULIC KIT-8 SECT W/PWR OUT & WINCH (91705255)

ITEM	PART NO.	DESCRIPTION	QTY				
1.	51704625	HOSE ASM 1/4 X 38	1	13.	72060033	CAP SCR 5/16-18 X 3 HH GR5	3
2.	51705085	HOSE ASM 3/8 X 132	1	14.	72062109	NUT5/16-18 LOCK	3
3.	51705256	HOSE ASM 3/8 X 150	2	15.	72532351	ADAPTER 7/16MSTR 7/16MJIC	2
4.	51705258	HOSE ASM 3/8 X 126	1	16.	72532358	ADAPTER 3/4MSTR 3/4MJIC	6
5.	51705263	HOSE ASM 1/4 X 34	1	17.	72532366	ADPTR 1-1/16MSTR 1-1/16MJIC	1
6.	51706023	HOSE ASM 3/8 X 264	2	18.	72532665	ADAPTER 7/16MJIC 3/4FJIC	4
7.	51706024	HOSE ASM 3/8 X 210	2	19.	72532722	ADAPTER 7/8MSTR 9/16FSTR	2
8.	51706025	HOSE ASM 1/4 X 56	2	20.	72532779	ELBOW 9/16MSTR3/4MJIC 90°XL	4
9.	51706026	HOSE ASM 3/8 X 36	1	21.	72053763	ELBOW 3/4MSTR 3/4MJIC 90°	8REF
10.	51706027	HOSE ASM 3/8 X 32	1	22.	72532666	ELBOW 3/4MSTR 3/4MJIC 90°XL	8REF
11.	60106322	MODIFIED ELBOW	1	23.	51705255	VALVEBANK (INCL:21 & 22)	1REF
12.	72053245	PIPE PLUG 1/4NPT	1	24.	72053670	ADAPTER 3/8MPT 3/4MJIC	1REF
				25.	51705260	HOSE ASM 3/8 X 294	2
				26.	72053497	ADAPTER 1/2MPT 3/4MJIC	1REF
				27.	72532353	ADAPTER 9/16MSTR 7/16MJIC	2



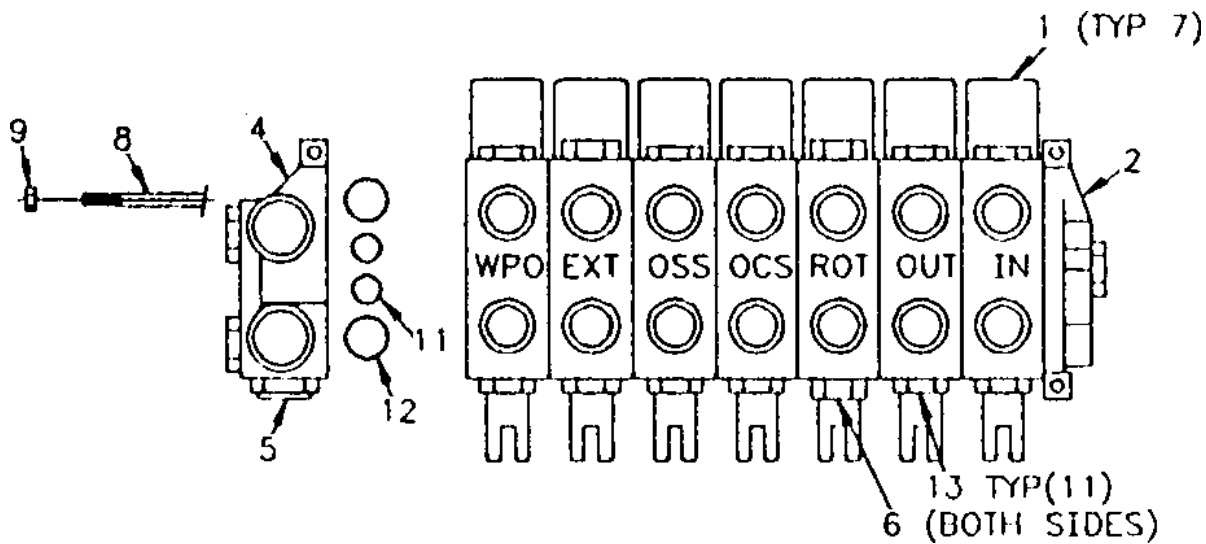
VALVEBANK ASM-7 SECT MNL (51705074)

ITEM	PART NO.	DESCRIPTION	QTY
1.	51705073	VALVEBANK 7-SECT	1
2.	72053763	ELBOW #8MSTR #8MJIC 90°	7
3.	72532666	ELBOW #8MSTR #8MJIC XLG	7



VALVEBANK (51705073)

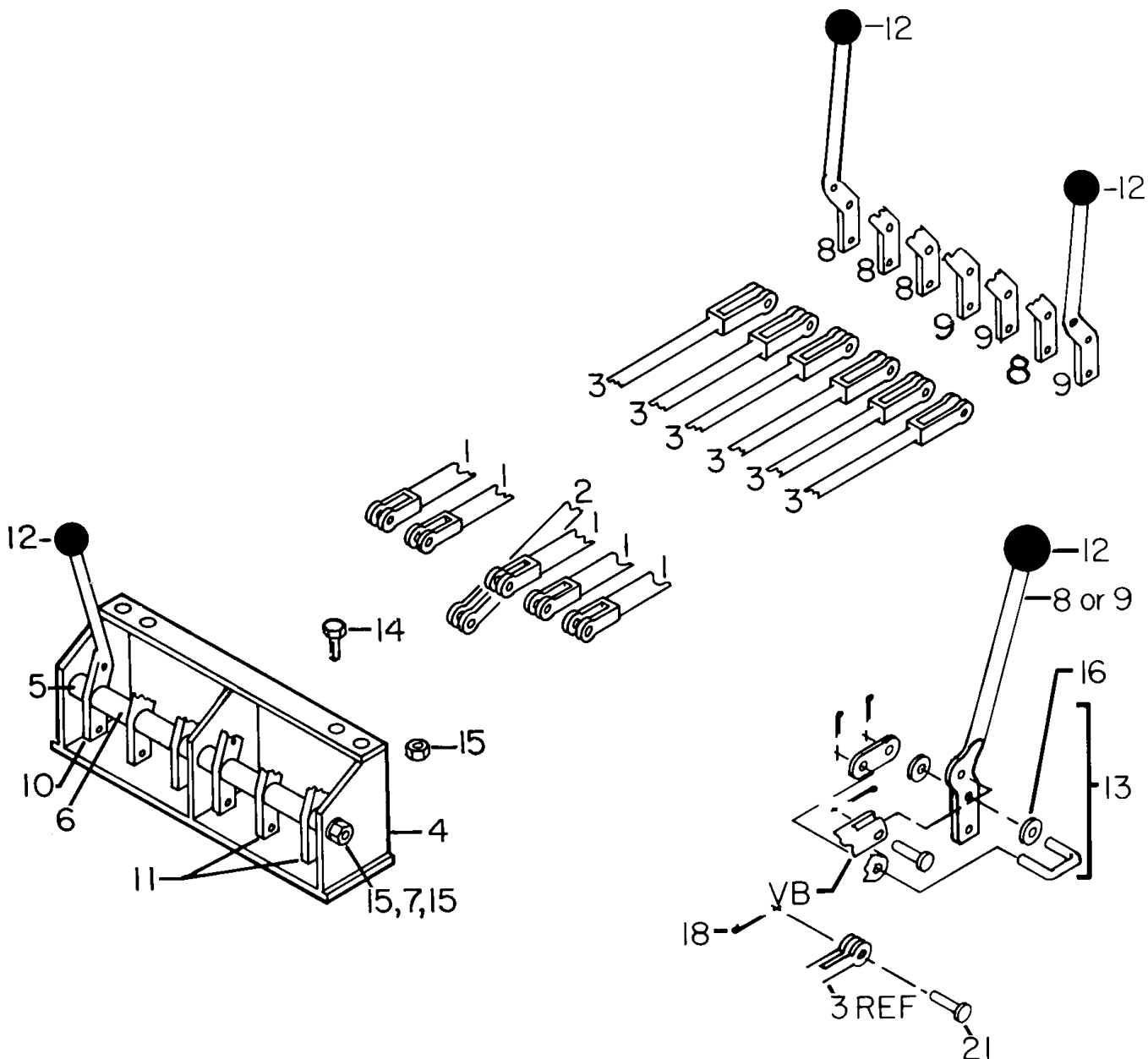
ITEM	PART NO.	DESCRIPTION	QTY
1.	73054432	VALVE SECT V20 4WAY	7
2.	73731241	END COVER RH W/CONV PLUG	1
4.	73731424	END COVER LH (INCL:5)	1
5.	73054673	RELIEF VALVE (PART OF 4)	1REF
6.	73054516	RELIEF 1300PSI NON-ADJ	2
7.	73054007	RELIEF 1800PSI NON-ADJ	1
8.	73014596	STUD 3/8X15-1/4	3
9.	72062037	NUT 3/8-24 HEX	6
10.	51393494	O-RING KIT	REF
11.	7Q072117	O-RING	16
12.	7Q072119	O-RING	16
13.	73054010	LOAD CHECK PLUG	11



CONTROL KIT-7F (90705295)

ITEM	PART NO.	DESCRIPTION	QTY
1.	52702016	CONTROL ROD - F	5
2.	52702017	CONTROL ROD - BENT F	1
3.	52702018	CONTROL ROD - M	6
4.	52702740	DUMMY VALVEBANK	1
5.	60030045	SPACER .62	4
6.	60030046	SPACER 1-1/2	4
7.	60105502	DUMMY VB ROD	1
8.	70141982	CONTROL HANDLE-VB LONG	4

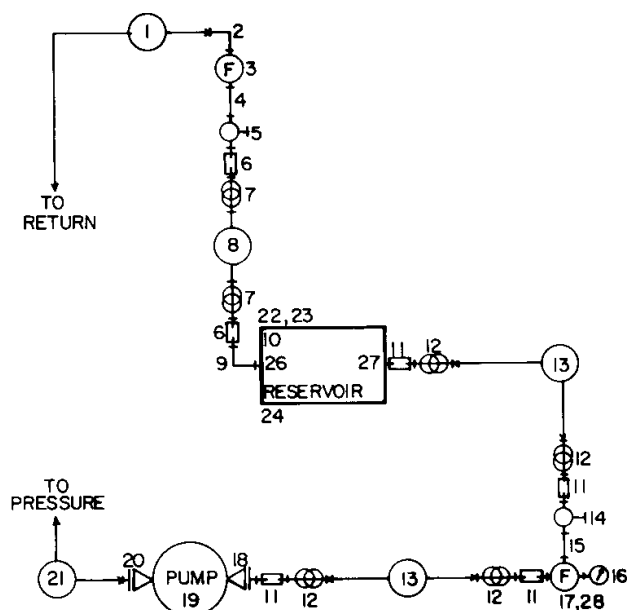
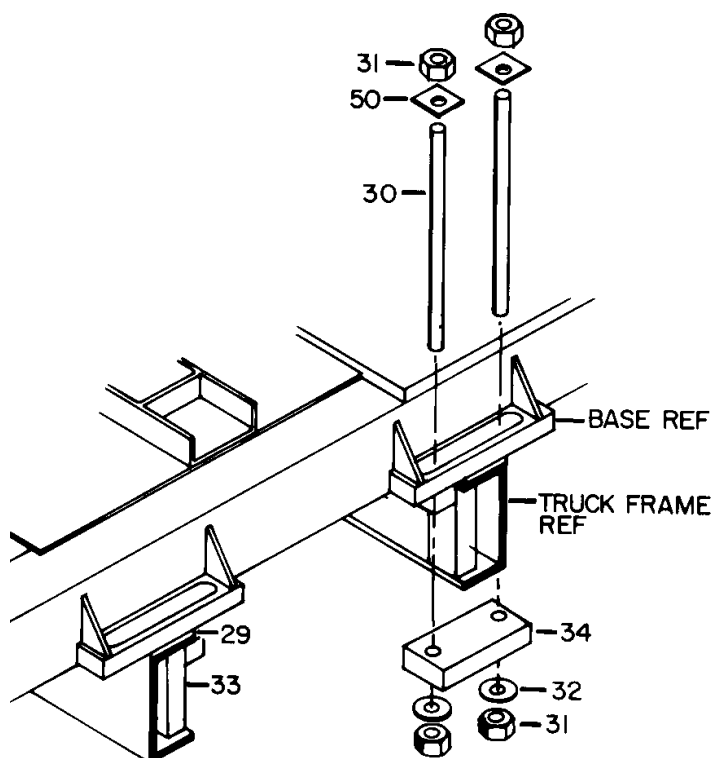
9.	70141983	CONTROL HANDLE-VB SHORT	3
10.	70141984	CONTROL HANDLE-DVB LONG	4
11.	70141985	CONTROL HANDLE-DVB SHORT	2
12.	71039096	KNOB	13
13.	94731839	LINK AND PIN KIT	7
14.	72060025	CAP SCR 5/16-18 X 1 HH GR5	2
15.	72062109	NUT 5/16-18 LOCK	4
16.	72063001	WASHER 1/4 WRT	28
18.	72066168	COTTER PIN .09 X 3/4	12
21.	72066338	CLEVIS PIN 5/16 X 1	12



INSTALLATION KIT-MNL (93706364)

ITEM	PART	DESCRIPTION	QTY
1.	51703945	HOSE ASM 3/4 X 17	1
2.	72532507	ELBOW 3/4MPT 1-1/16MJIC XLG	1
3.	73052000	FILTER	1
4.	72053141	PIPE NIPPLE 3/4 X CLOSE	1
5.	73054129	GATE VALVE 3/4	1
6.	72053458	BARB NIPPLE 3/4MPT X 3/4	2
7.	72066000	HOSE CLAMP 1/2-1-1/4 SAE12	2
8.	60035820	HOSE 3/4 100R4 X 108	1
9.	72053556	STRT ELBOW 3/4 X 90°	1
10.	52701834	RESERVOIR	1
11.	72531550	BARB NIPPLE 1-1/4MPT X 1-1/4	4
12.	72066516	HOSE CLAMP 1-1/4 2-BOLT	4
13.	60035829	HOSE 1-1/4 100R4 X 48	2
14.	73054130	GATE VALVE 1-1/4	1
15.	72053211	PIPE NIPPLE 1-1/4 X CLOSE	1
16.	70048031	VACUUM GAUGE	1

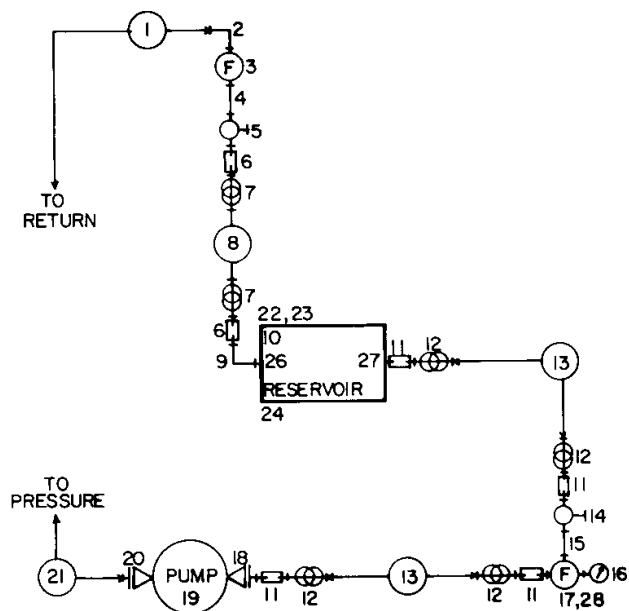
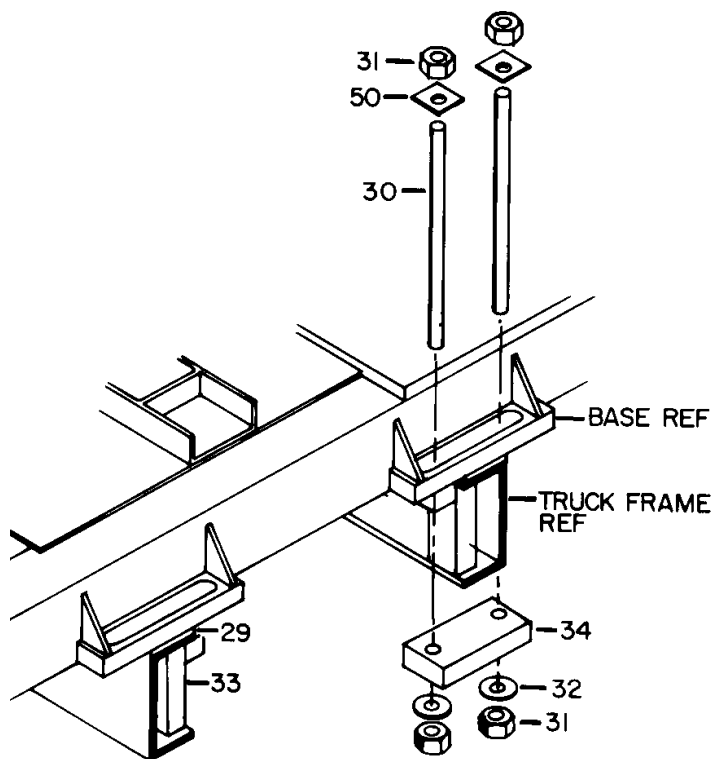
17.	73052012	SUCTION FILTER	1
18.		PUMP ADAPTER	1
19.		PUMP	1
20.		PUMP ADAPTER	1
21.	51704812	HOSE ASM 1/2 X 96	1
22.	73141276	FILL NECK SCREEN	1
23.	73014671	FILL CAP	1
24.	73052001	PIPE PLUG 3/4 MAGNETIC	1
26.	95708808	DECAL KIT	1
28.	60103870	OIL FILTER BRACKET	1
30.	60107829	TIE DOWN STUD 1-8 X 18	8
31.	72062141	NUT 1-8 LOCK	16
32.	72063066	WASHER 1" HI-STRGTH	8
33.	52706660	SUPPORT	4
34.	60010354	CLAMP PLATE	4
50.	60107478	SQUARE WASHER	8
51.	72532261	SIGHT GAUGE 3/4	1



INSTALLATION KIT-REMOTE (93708810)

ITEM	PART	DESCRIPTION	QTY
1.	51703945	HOSE ASM 3/4 X 17	1
2.	72532507	ELBOW 3/4MPT 1-1/16MJIC XLG	1
3.	73052000	FILTER	1
4.	72053141	PIPE NIPPLE 3/4 X CLOSE	1
5.	73054129	GATE VALVE 3/4	1
6.	72053458	BARB NIPPLE 3/4MPT X 3/4	2
7.	72066000	HOSE CLAMP 1/2-1-1/4 SAE12	2
8.	60035820	HOSE 3/4 100R4 X 108	1
9.	72053556	STRT ELBOW 3/4 X 90°	1
10.	52701834	RESERVOIR	1
11.	72531550	BARB NIPPLE 1-1/4MPT X 1-1/4	4
12.	72066516	HOSE CLAMP 1-1/4 2-BOLT	4
13.	60035829	HOSE 1-1/4 100R4 X 48	2
14.	73054130	GATE VALVE 1-1/4	1
15.	72053211	PIPE NIPPLE 1-1/4 X CLOSE	1
16.	70048031	VACUUM GAUGE	1

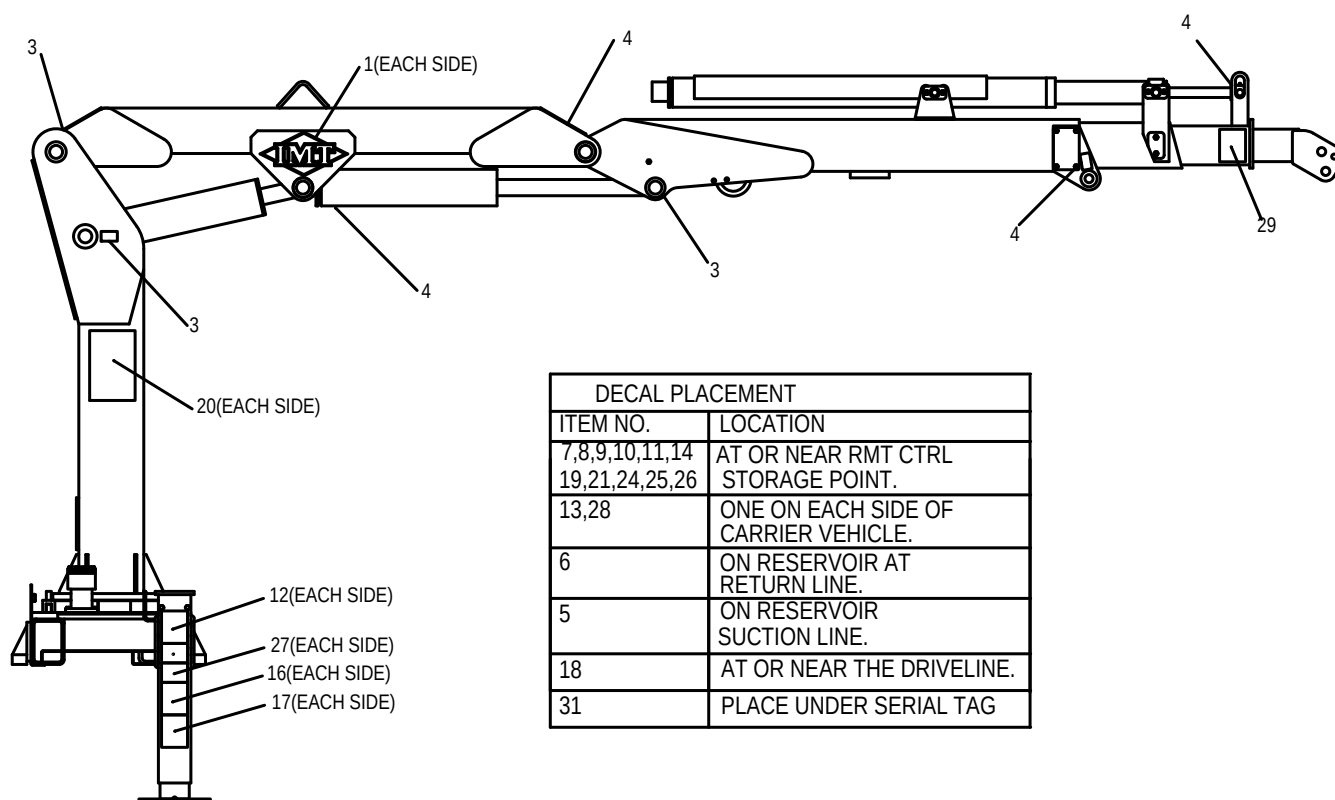
17.	73052012	SUCTION FILTER	1
18.		PUMP ADAPTER	1
19.		PUMP	1
20.		PUMP ADAPTER	1
21.	51704812	HOSE ASM 1/2 X 96	1
22.	73141276	FILL NECK SCREEN	1
23.	73014671	FILL CAP	1
24.	73052001	PIPE PLUG 3/4 MAGNETIC	1
26.	95708809	DECAL KIT	1
28.	60103870	OIL FILTER BRACKET	1
30.	60107829	TIE DOWN STUD 1-8 X 18	8
31.	72062141	NUT 1-8 LOCK	16
32.	72063066	WASHER 1" HI-STRGTH	8
33.	52706660	SUPPORT	4
34.	60010354	CLAMP PLATE	4
50.	60107478	SQUARE WASHER	8
51.	72532261	SIGHT GAUGE 3/4	1



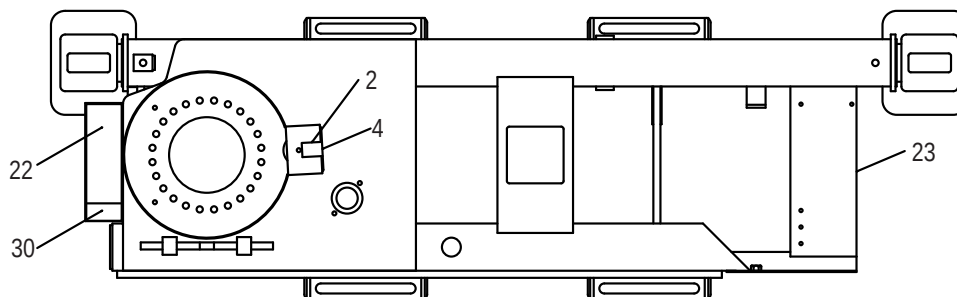
DECAL KIT-REMOTE (95708809)

1. 70029251	PLACARD - IMT DIAMOND	2
2. 70391583	DECAL-SETUP/STOW	1
3. 70391612	DECAL-GREASE WKLY LEFT	3
4. 70391613	DECAL-GREASE WKLY RIGHT	5
5. 70392108	DECAL-SUCTION LINE	1
6. 70392109	DECAL-RETURN LINE	1
7. 70392213	DECAL-CAUTION WASH/WAX	1
8. 70392524	DECAL-ROTATE/GREASE	1
9. 70392813	DECAL-DNGR ELECTROCUT'N	2
10. 70392814	DECAL-WARN OPER TRAINING	2
11. 70392815	DECAL-WARN OPERATION	2
12. 70392864	DECAL-WARN STAB STD CLR	2
13. 70392865	DECAL-DANGER ELECT HZD	4
14. 70392866	DECAL-DANGER OPER COND	2

16. 70392888	DECAL-WARN OPER RESTRICT	2
17. 70392890	DECAL-DANGER FOLD/STOW	2
18. 70392891	DECAL-DANGER DRIVELINE	2
19. 70392982	DECAL-CONTACT IMT	1
20. 71029159	CAPACITY PLACARD	2
21. 71039134	DECAL-CAUTION OIL LEVEL	2
22. 70395031	DECAL-CTRL CS	1
23. 70395030	DECAL-CTRL SS	1
24. 71392365	DECAL-ALIGN CRANE	1
25. 70392889	DECAL-DANGER RC ELECTRO	2
26. 70394189	DECAL-RECOMMEND HYD OIL	1
27. 70392863	DECAL-DGR HOIST PERS	1
28. 70392868	DECAL-DGR CR LOADLINE	4
29. 70394443	DECAL-DGR FREEFALLG BOOM	1
30. 70394448	DECAL-PWR OUT BOT IN TOP	1
31. 70395323	DECAL-ASME/ANSI B30.22	1
32. 72042097	LEVEL	2



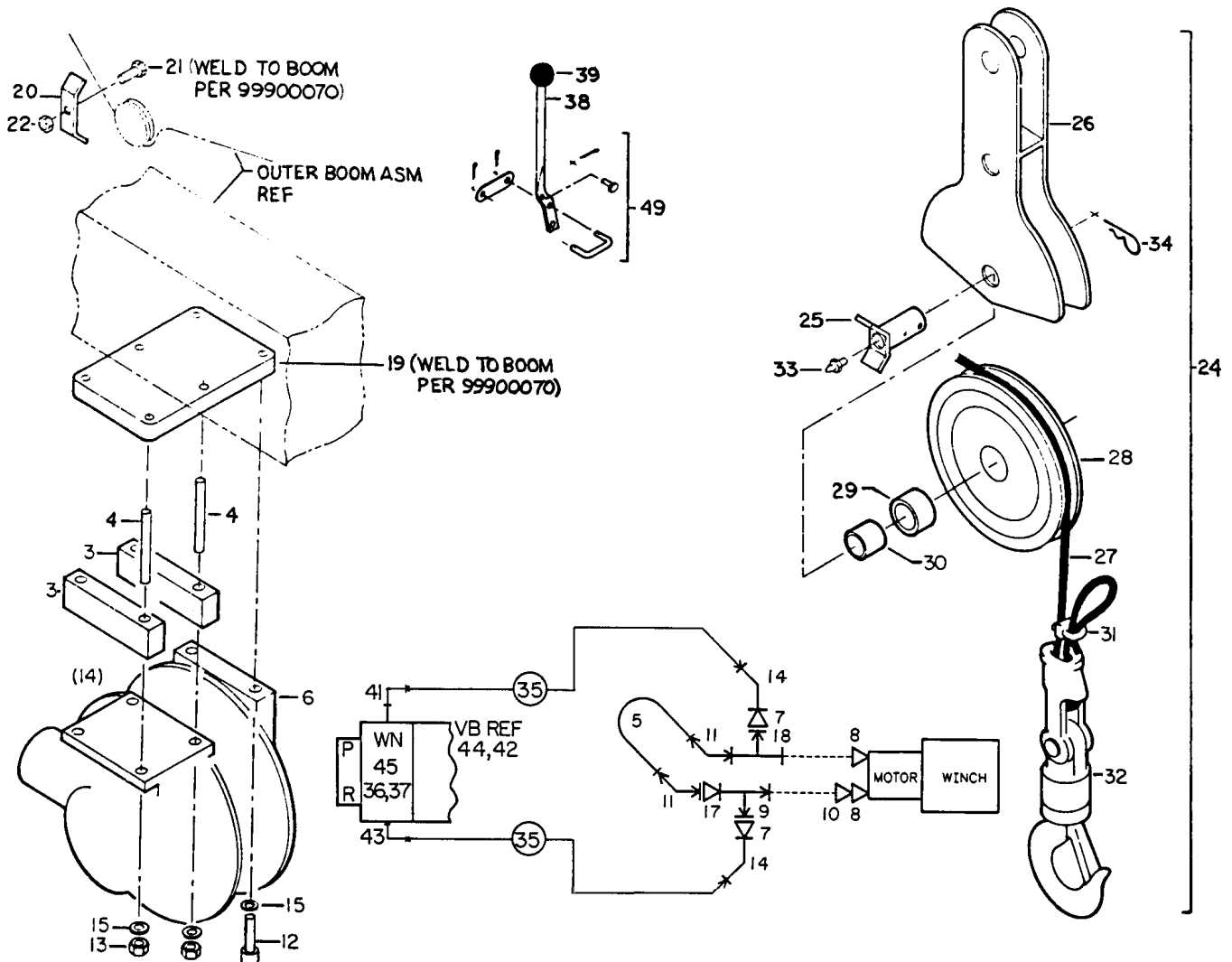
DECAL PLACEMENT	
ITEM NO.	LOCATION
7,8,9,10,11,14 19,21,24,25,26	AT OR NEAR RMT CTRL STORAGE POINT.
13,28	ONE ON EACH SIDE OF CARRIER VEHICLE.
6	ON RESERVOIR AT RETURN LINE.
5	ON RESERVOIR SUCTION LINE.
18	AT OR NEAR THE DRIVELINE.
31	PLACE UNDER SERIAL TAG



NOTE: PLACE ITEM #32, LEVEL, ON FRONT AND SIDE OF CRANE BASE.

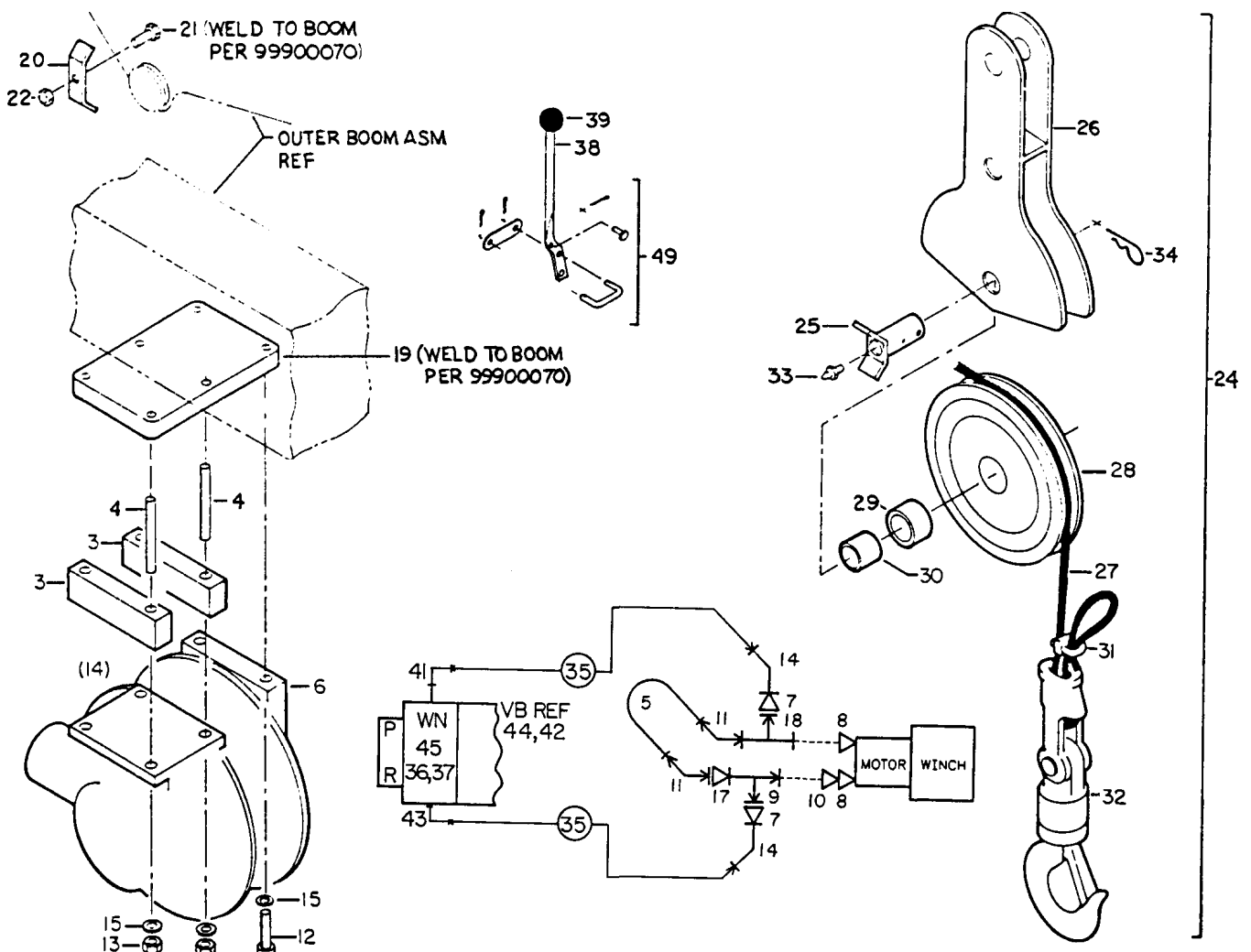
CONVERSION KIT-WINCH-MNL CTRLS (95707756)

ITEM	PART NO.	DESCRIPTION	QTY			
1.	31705081	WINCH KIT 4000# BLOOM (2-23)	1			
2.	31904001	WINCH KIT 4000# NAR DRUM (INCL:3-18,40)	1REF			
3.	60010868	SPACER (PART OF 2)	2REF			
4.	60010869	STUD (PART OF 2)	4REF			
5.	60101420	U-TUBE (PART OF 2)	1REF			
6.	71057607	WINCH (PART OF 2)	1REF			
7.	72053497	ADAPTER (PART OF 2)	1REF			
8.	72053744	ADAPTER (PART OF 2)	2REF			
9.	72053611	TEE 3/8 (PART OF 2)	1REF			
10.	72053629	ADAPTER (PART OF 2)	1REF			
11.	72533342	FLRLS (PART OF 2)	2REF			
12.	72060797	CAP SCR 1/2 (PART OF 2)	2REF			
13.	72062004	NUT 1/2 LOCK (PART OF 2)	4REF			
14.	72532670	ELBOW 45° (PART OF 2)	2REF			
15.	72063053	WASHER 1/2 LOCK (PART OF 2)	6REF			
17.	72532138	REDUCER BUSH (PART OF 2)	1REF			
18.	73054006	CHECK VALVE (PART OF 2)	1REF			
19.	60010383	MTG PLATE (PART OF 1)	1REF			
20.	60107648	HOSE CLAMP (PART OF 1)	1REF			
21.	72060048	CAP SCR 3/8X1-1/2 (PART OF 1)	1REF			
22.	72062103	NUT 3/8 LOCK (PART OF 1)	1REF			
23.	99900070	BOOM MOD DWG (PART OF 1)	1REF			
24.	31705638	CABLE/HOOK KIT (INCL:25-34)	1			
25.	52070705	PIN (PART OF 24)	1REF			
26.	52704143	YOKE (PART OF 24)	1REF			
27.	60103165	CABLE (PART OF 24)	1REF			
28.	70034204	(PART OF 24)	1REF			
29.	70055024	ROLLER BRG (PART OF 24)	1REF			
30.	70055025	INNER RACE (PART OF 24)	1REF			
31.	70058033	CABLE CLAMP (PART OF 24)	1REF			
32.	70731716	3-TON HOOK (PART OF 24)	1REF			
33.	72053508	ZERK (PART OF 24)	1REF			
34.	72066145	HAIR PIN (PART OF 24)	1REF			
35.	51705260	HOSE ASM 3/8 X 294	2			
36.	7Q072019	O-RING	4			
37.	7Q072021	O-RING	4			
38.	70141982	CTRL HANDLE	1			
39.	71039096	KNOB	1			
41.	72053763	ELBOW 3/4MSTR 3/4MJIC	1			
42.	72062037	NUT 3/8-24 HEX	6			
43.	72532666	ELBOW 3/4MSTR 3/5MJIC XLG	1			
44.	73014596	STUD	3			
45.	73054432	VALVE SECTION	1			
49.	94731839	LINK & PIN KIT	1			



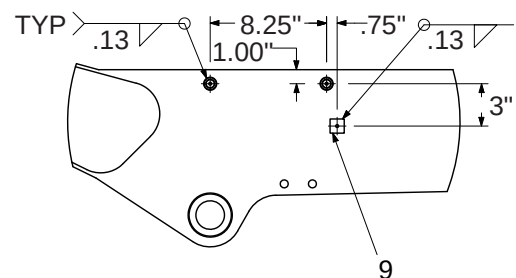
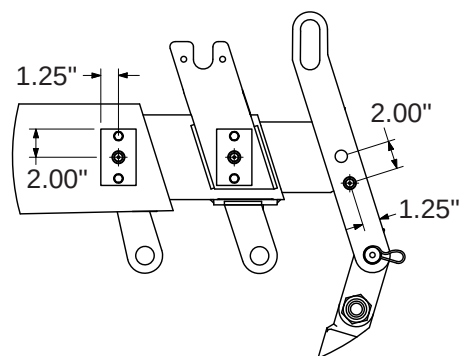
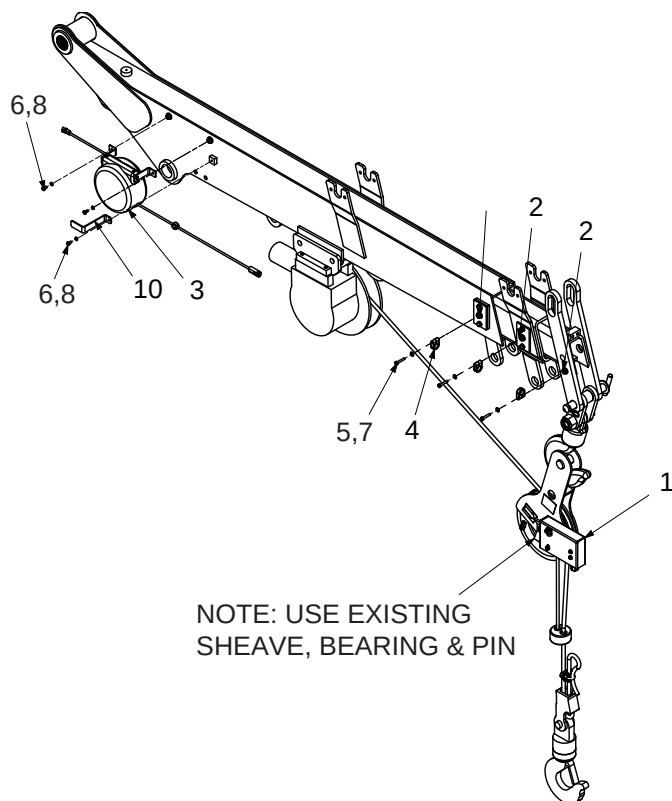
CONVERSION KIT-WINCH-RMT CTRLS (95707757)

ITEM	PART NO.	DESCRIPTION	QTY
1.	31705081	WINCH KIT 4000# BLOOM (2-23)	1
2.	31904001	WINCH KIT 4000# NAR DRUM (INCL:3-18,40)	1REF
3.	60010868	SPACER (PART OF 2)	2REF
4.	60010869	STUD (PART OF 2)	4REF
5.	60101420	U-TUBE (PART OF 2)	1REF
6.	71057607	WINCH (PART OF 2)	1REF
7.	72053497	ADAPTER (PART OF 2)	2REF
8.	72053744	ADAPTER (PART OF 2)	2REF
9.	72053611	TEE 3/8 (PART OF 2)	1REF
10.	72053629	ADAPTER (PART OF 2)	1REF
11.	72533342	FLRLS (PART OF 2)	2REF
12.	72060797	CAP SCR 1/2 (PART OF 2)	2REF
13.	72062004	NUT 1/2 LOCK (PART OF 2)	4REF
14.	72532670	ELBOW (PART OF 2)	2REF
15.	72063053	WASHER 1/2 LOCK (PART OF 2)	6REF
17.	72532138	REDUCER BUSH (PART OF 2)	1REF
18.	73054006	CHECK VALVE (PART OF 2)	1REF
19.	60010383	MTG PLATE (PART OF 1)	1REF
20.	60107648	HOSE CLAMP (PART OF 1)	1REF
21.	72060048	CAP SCR 3/8X1-1/2 (PART OF 1)	1REF
22.	72062103	NUT 3/8 LOCK (PART OF 1)	1REF
23.	99900070	BOOM MOD DWG (PART OF 1)	1REF
24.	31705638	CABLE/HOOK KIT (INCL:25-34)	1
25.	52070705	PIN (PART OF 24)	1REF
26.	52704143	YOKE (PART OF 24)	1REF
27.	60103165	CABLE (PART OF 24)	1REF
28.	70034204	SHEAVE (PART OF 24)	1REF
29.	70055024	ROLLER BRG (PART OF 24)	1REF
30.	70055025	INNER RACE (PART OF 24)	1REF
31.	70058033	CABLE CLAMP (PART OF 24)	1REF
32.	70731716	3-TON HOOK (PART OF 24)	1REF
33.	72053508	ZERK (PART OF 24)	1REF
34.	72066145	HAIR PIN (PART OF 24)	1REF
35.	51705260	HOSE ASM 3/8 X 294	2
36.	7Q072019	O-RING	4
37.	7Q072021	O-RING	4
38.	70141982	CTRL HANDLE	1
39.	71039096	KNOB	1
41.	72053763	ELBOW 3/4MSTR 3/4MJIC	1
42.	72062037	NUT 3/8-24 HEX	6
43.	72532666	ELBOW 3/4MSTR 3/5MJIC XLG	1
44.	73014668	STUD 3/8X17	3
45.	73054468	REMOTE VALVE SECTION	1
46.	77040051	TERMINAL	3
47.	77041346	TOGGLE SWITCH	1
48.	89044214	WIRE 18GA GRN	1
49.	94731839	LINK & PIN KIT	1



TWO-BLOCK DAMAGE PREVENTION KIT (51724350 / DWG 99905344)

ITEM	PART NO.	DESCRIPTION	QTY
1.	51724375	YOKE-TWO-BLK DMG PREV ASM	1
2.	72661693	BLOCK-TPD .25-20X .44X 0.91DIA	5
3.	51724374	CORD REEL ASM	1
4.	70034381	SUPPORT	3
5.	72060006	CAP SCR .25-20X 1.50 HH GR5 Z	3
6.	72060000	CAP SCR .25-20X .50 HH GR5 Z	3
7.	72063001	WASHER .25 FLAT	3
8.	72063049	WASHER .25 LOCK	3
9.	60107237	BLOCK-TPD .25-20 X 1 X 1 X .5	1
10.	60138820	BRACKET	1



00000425: 19980826

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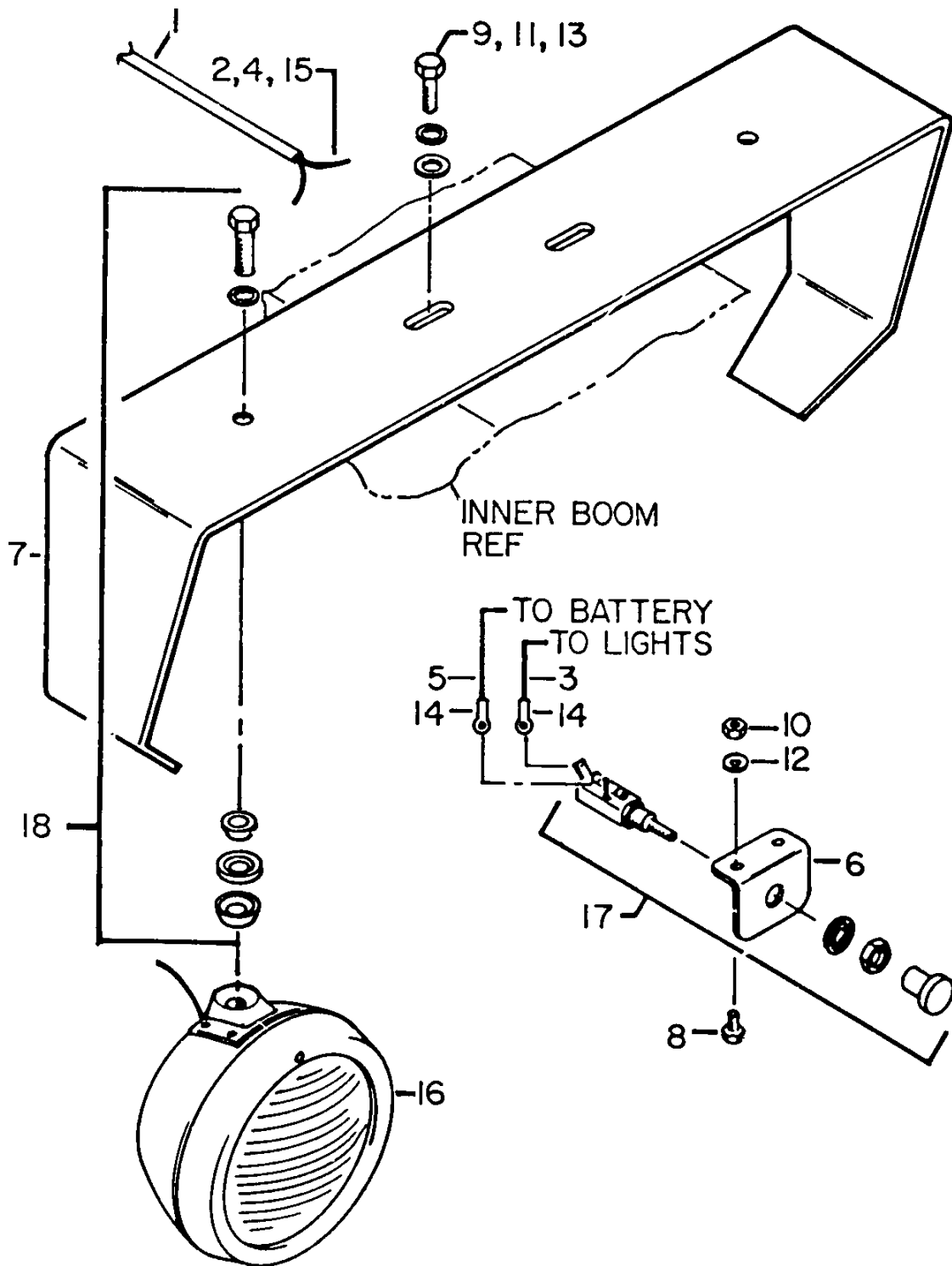
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3-30

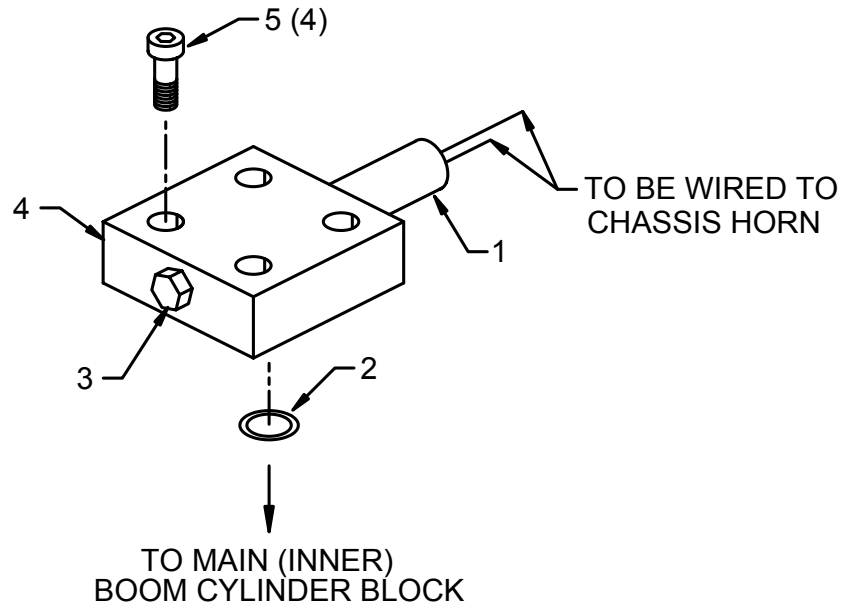
OPTION-LIGHT KIT (31701759)

ITEM	PART NO.	DESCRIPTION	QTY			
1.	60030048	LOOM	1	9.	72060046	CAP SCR 3/8-16 X 1 HH GR5 2
2.	60030049	SPIRAL WRAP	2	10.	72062000	NUT 1/4-20 HEX 2
3.	60045054	WIRE 14GA X 240	1	11.	72063003	WASHER 3/8 WRT 2
4.	60045055	WIRE 14GA X 60 YEL	2	12.	72063049	WASHER 1/4 LOCK 2
5.	60045056	WIRE 14GA X 36 BLK	1	13.	72063051	WASHER 3/8 LOCK 2
6.	60103535	SWITCH BRACKET	1	14.	7704000	TERMINAL 2
7.	60103694	LIGHT GUARD	1	15.	77040048	TERMINAL 2
8.	72060000	CAP SCR 1/4-20 X 1/2 HH GR5	2	16.	77040281	FLOOD LIGHT 12V 2
				17.	77041014	PUSH-PULL SWITCH 1
				18.	77040280	MOUNTING KIT 2REF



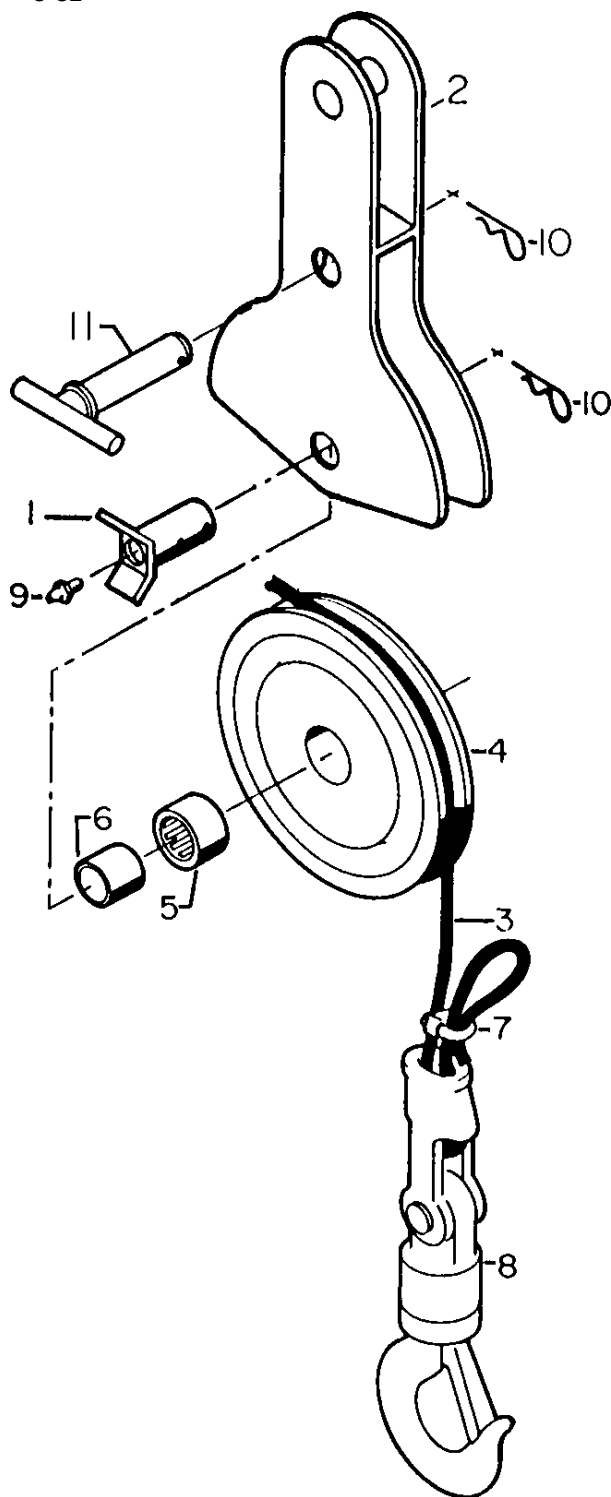
CAPACITY ALERT KIT - 3100 (31713333)

1.	77041476	PRESSURE SWITCH	1
2.	7Q072015	O-RING	1
3.	72532140	PLUG 9/16-18 STR HEX	1
4.	70025221	MANIFOLD	1
5.	72060731	CAP SCR 5/16-18 X 3/4 SH	4



OPTION-CABLE & HOOK KIT (31705637)

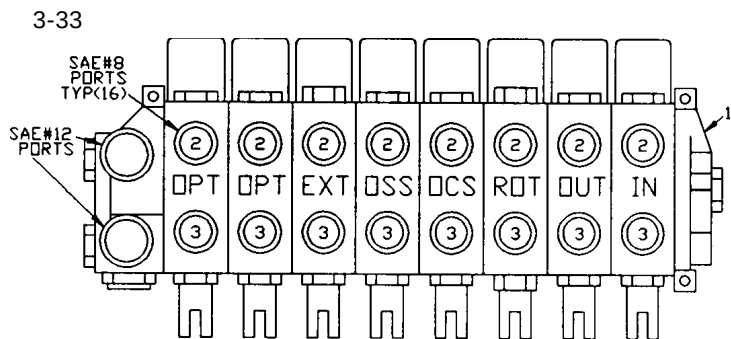
ITEM	PART NO.	DESCRIPTION	QTY
1.	52070705	PIN	1
2.	52704143	YOKE	1
3.	60107592	CABLE 3/8 X 65'	1
4.	70034204	SHEAVE	1
5.	70055024	BEARING	1
6.	70055025	RACE	1
7.	70058033	CABLE CLAMP	1
8.	70731716	SWIVEL HOOK	1
9.	72053508	ZERK 1/8NPT	1
10.	72066145	HAIR PIN	2
11.	52070151	PIN	1



00000425: 51705254.01.19950426

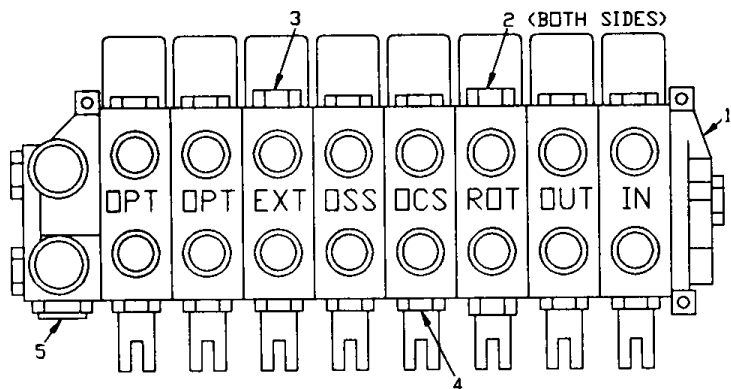
VALVEBANK ASM-8 SECT MNL (51705254)

ITEM	PART NO.	DESCRIPTION	QTY
1.	51705253	VALVEBANK 8-SECT	1
2.	72053763	ELBOW #8MSTR #8MJIC 90°	8
3.	72532666	ELBOW #8MSTR #8MJIC XLG	8



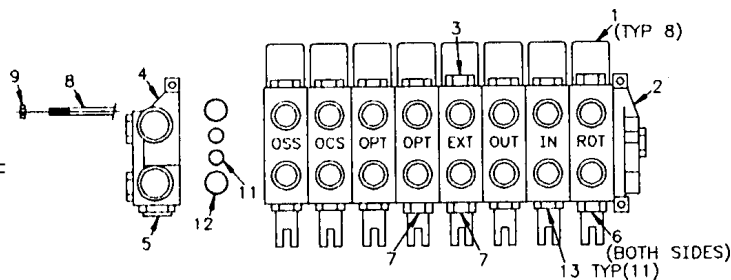
VALVEBANK ASM-8 SECT MNL (51705253)

ITEM	PART NO.	DESCRIPTION	QTY
1.	73731768	VALVEBANK 8-SECT	1
2.	73054516	RELIEF 1300PSI NON-ADJ	REF
3.	73054007	RELIEF 1800PSI NON-ADJ	REF
4.	73054010	LOAD CHECK PLUG	1
5.	73054643	RELIEF VALVE 2300PSI	1



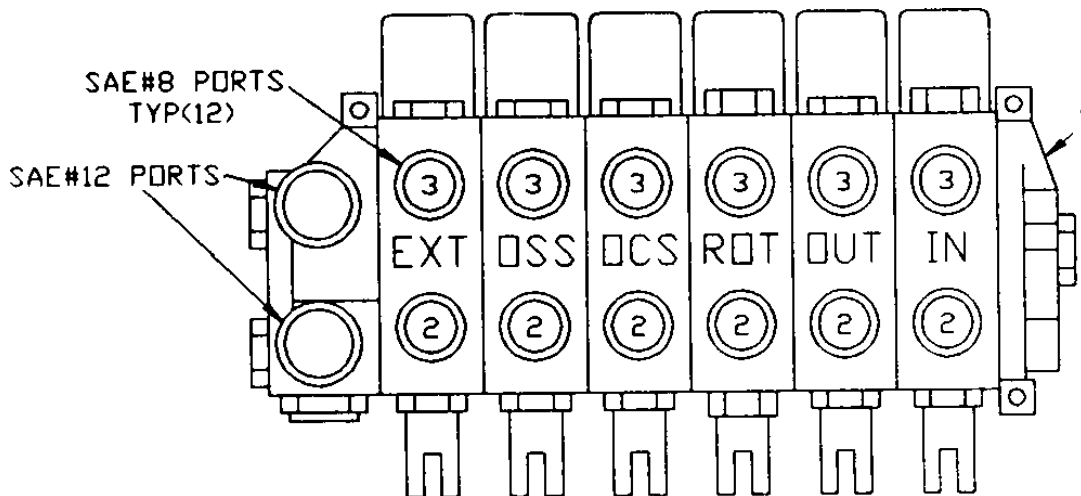
VALVEBANK (73731768)

ITEM	PART NO.	DESCRIPTION	QTY
1.	73054432	VALVE SECT V20 4WAY SAE#8	8
2.	73731241	END COVER RH W/CONV PLUG	1
3.	73054400	RELIEF 2300PSI NON-ADJ	1
4.	73731424	END COVER LH (INCL:5)	1
5.	73054637	RELIEF VALVE (PART OF 4)	1REF
6.	73054516	RELIEF 1300PSI NON-ADJ	2
7.	73054007	RELIEF 1800PSI NON-ADJ	2
8.	73014668	STUD 3/8X17	3
9.	72062037	NUT 3/8-24 HEX	6
10.	51393494	O-RING KIT	REF
11.	7Q072117	O-RING	18
12.	7Q072119	O-RING	18
13.	73054010	LOAD CHECK PLUG	11



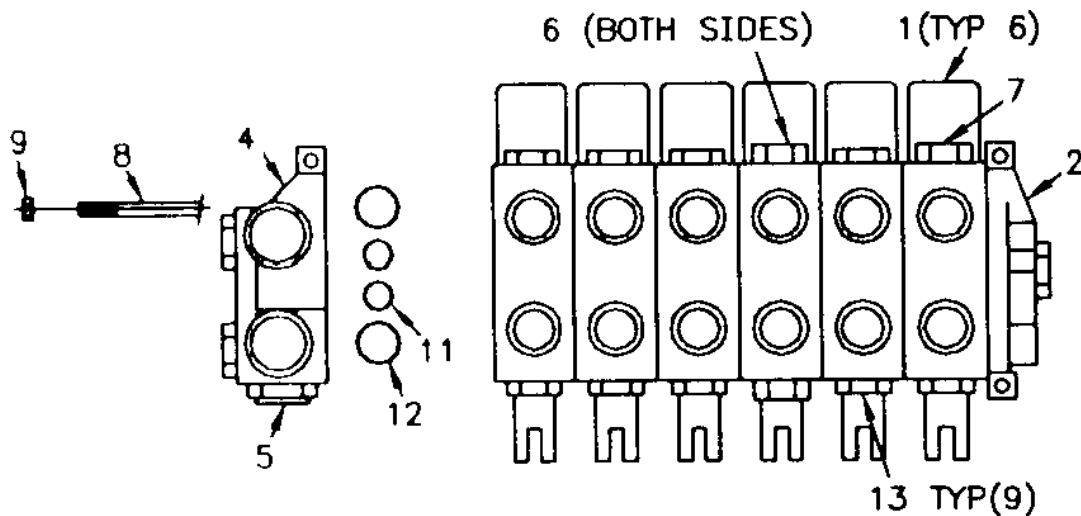
VALVEBANK ASM-6 SECT MNL (51705075)

ITEM	PART NO.	DESCRIPTION	QTY
1.	73731386	VALVEBANK 6-SECT	1
2.	72053763	ELBOW #8MSTR #8MJIC 90°	6
3.	72532666	ELBOW #8MSTR #8MJIC XLG	6



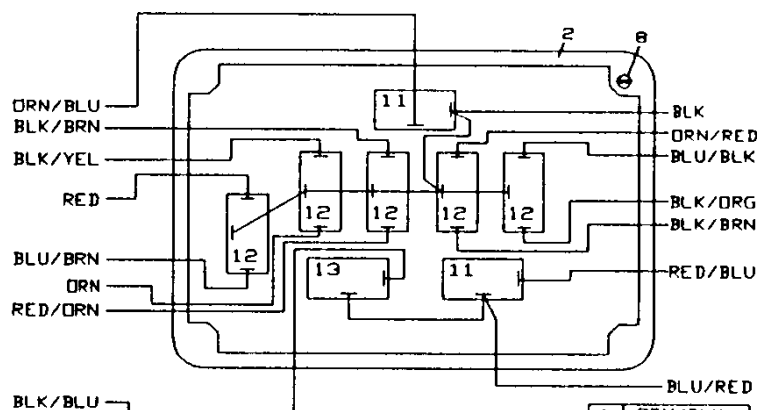
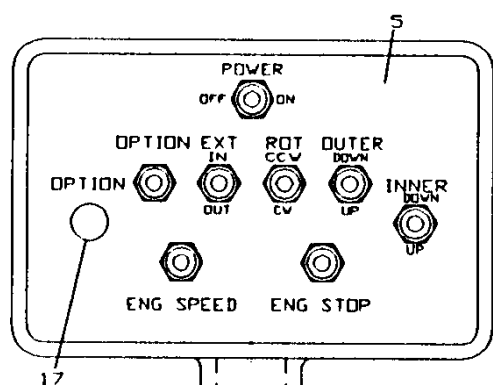
VALVEBANK (73731386)

ITEM	PART NO.	DESCRIPTION	QTY
1.	73054432	VALVE SECT V20 4WAY	6
2.	73731241	END COVER RH W/CONV PLUG	1
4.	73731424	END COVER LH (INCL:5)	1
5.	73054673	RELIEF VALVE (PART OF 4)	1REF
6.	73054516	RELIEF 1300PSI NON-ADJ	2
7.	73054472	RELIEF 2100PSI NON-ADJ	1
8.	73014595	STUD 3/8X13-1/2	3
9.	72062037	NUT 3/8-24 HEX	6
10.	51393494	O-RING KIT	REF
11.	7Q072117	O-RING	14
12.	7Q072119	O-RING	14
13.	73054010	LOAD CHECK PLUG	9

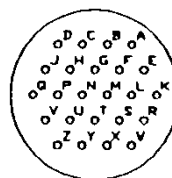


REMOTE HANDLE ASM-5F PTO W/SPD (51704715)

ITEM	PART NO.	DESCRIPTION	QTY
1.	60111140	HANDLE	1
2.	70034306	BACK	1
3.	89044100	CABLE 18GA 24WIRE X 420	1
4.	89044214	WIRE 18GA GRN	1.98"
5.	70393262	DECAL-RMT CTRL	1
6.	70392862	DECAL-DANGER RC ELECTRO	1
7.	70029119	SERIAL NO. PLACARD	1
8.	72061009	SHT MTL SCR #6X3/4 PH	4
9.	72066340	POP RIVET 1/8	2
10.	77040186	TERMINAL	21
11.	77041345	TOGGLE SWITCH ST	2
12.	77041346	TOGGLE SWITCH DT	5
13.	77041347	TOGGLE SWITCH MOMENT.	1
14.	77044196	STRAIN RELIEF 3/4	1
15.	77044146	CONNECTOR 24 PIN	1
16.	77044147	CABLE CLAMP	1
17.	70392785	PLUG 1/2	1



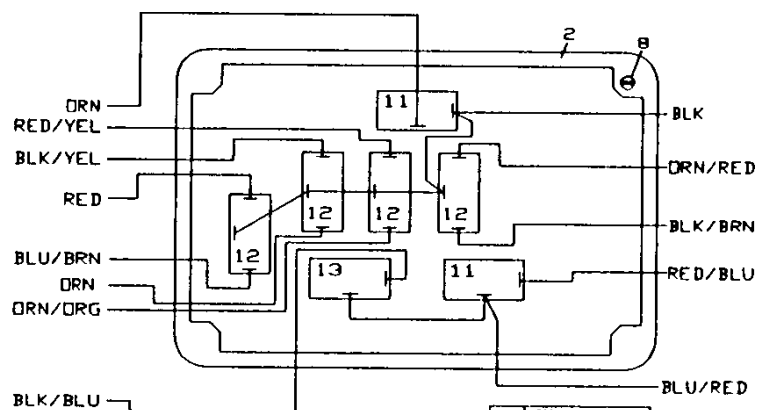
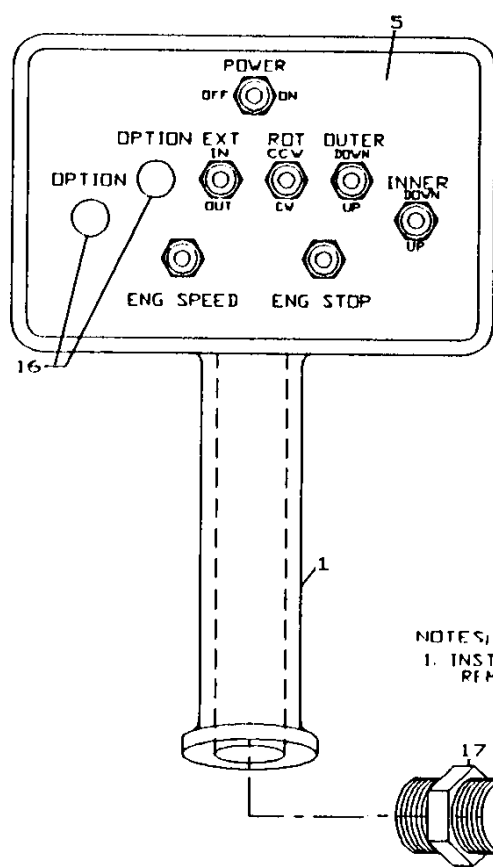
NOTES:
1. INSTALL 70392862 ON
REMOTE CONTROL HANDLE.



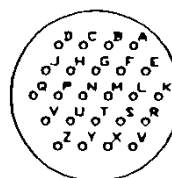
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B	ORN/BLU
C	BLK/BRN
D	ORN/RED
E	RED/BLK
F	RED/BLU
G	RED/ORG
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J	BLK
K	BLU
L	ORN
M	BLK/YEL
N	BRN
P	YEL
Q	BLU/BRN
R	BLU/BLK
S	BLK/ORN
T	BLK/BLU
U	RED/BRN
V	RED
W	BLU/ORN
X	BLU/RED
Y	BLU/YEL
Z	BLK/RED

REMOTE HANDLE ASM-4F PTO W/SPD (51704714)

ITEM	PART NO.	DESCRIPTION	QTY
1.	60111140	HANDLE	1
2.	70034306	BACK	1
3.	89044100	CABLE 18GA 24WIRE X 420	1
4.	89044214	WIRE 18GA GRN	1.62"
5.	70393262	DECAL-RMT CTRL	1
6.	70392862	DECAL-DANGER RC ELECTRO	1
7.	70029119	SERIAL NO. PLACARD	1
8.	72061009	SHT MTL SCR #6X3/4 PH	4
9.	72066340	POP RIVET 1/8	2
10.	77040186	TERMINAL	18
11.	77041345	TOGGLE SWITCH ST	2
12.	77041346	TOGGLE SWITCH DT	4
13.	77041347	TOGGLE SWITCH MOMENT.	1
14.	77044146	CONNECTOR 24 PIN	1
15.	77044147	CABLE CLAMP	1
16.	70392785	PLUG 1/2	2
17.	77044196	STRAIN RELIEF 3/4	1



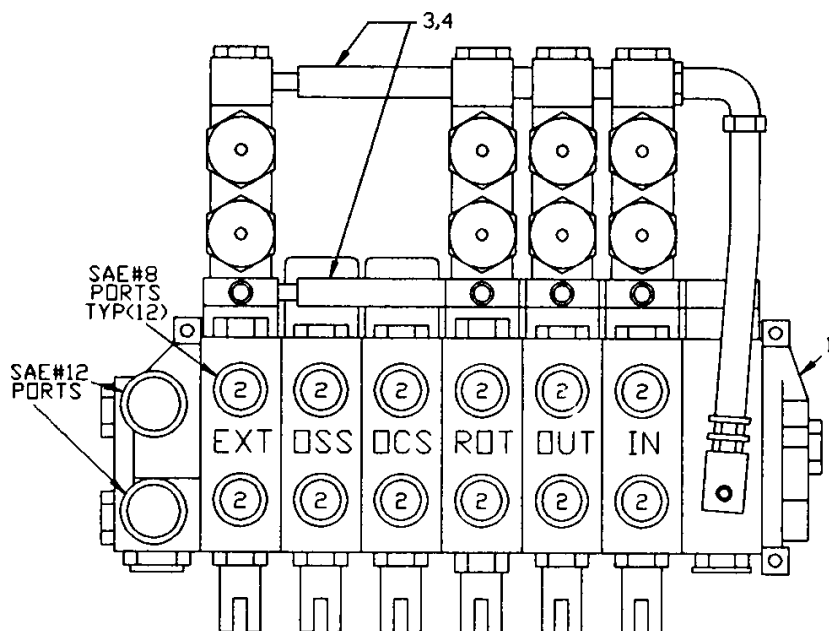
NOTES:
1. INSTALL 70392862 ON
REMOTE CONTROL HANDLE.



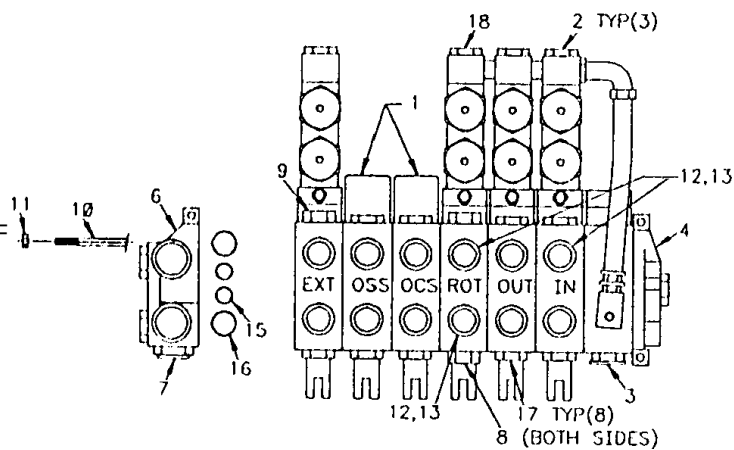
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C	BLK/BRN
D	ORN/RED
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G	RED/ORN
H	RED/YEL
J	BLK
K	BLU
L	ORN
M	BLK/YEL
N	BRN
P	YEL
Q	BLU/BRN
R	BLU/BLK
S	BLK/ORN
T	BLK/BLU
U	RED/BRN
V	RED
W	ORN
X	BLU/RED
Y	BLU/YEL
Z	BLK/RED

VALVEBANK ASM-4R2M (51705068)

ITEM	PART NO.	DESCRIPTION	QTY
1.	51705067	VALVEBANK 6-SECT 4R/2M	1
2.	72053777	ELBOW #8MSTR #8MJIC 45°	12
3.	60025207	SPACER	2
4.	7Q092012	O-RING	2

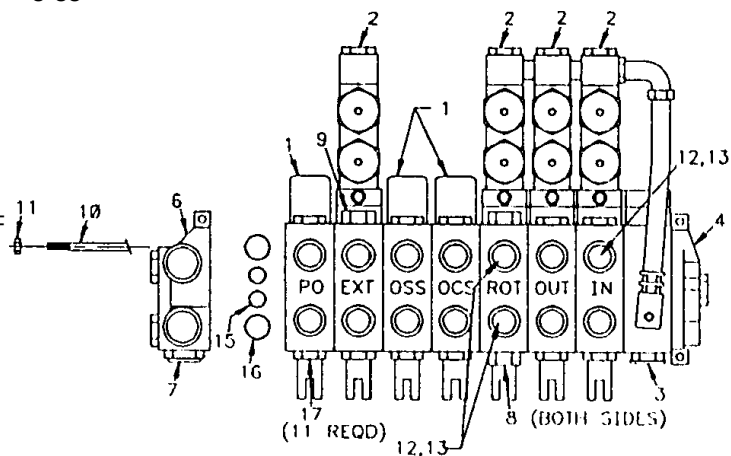
**VALVEBANK (51705067)**

ITEM	PART NO.	DESCRIPTION	QTY
1.	73054432	VALVE SECT V20 4WAY	2
2.	73054468	VALVE SECT V20R 4WAY	3
3.	73054502	VALVE SECT V20R UTIL	1
4.	73731241	END COVER RH W/CONV PLUG	1
6.	73731424	END COVER LH (INCL:7)	1
7.	73054673	RELIEF VALVE (PART OF 6)	1 REF
8.	73054516	RELIEF 1300PSI NON-ADJ	2
9.	73054007	RELIEF 1800PSI NON-ADJ	1
10.	73014668	STUD 3/8X17	3
11.	72062037	NUT 3/8-24 HEX	6
12.	70142402	ORIFICE PLATE	3
13.	70142403	SPRING	3
14.	51393494	O-RING KIT	REF
15.	7Q072117	O-RING	16
16.	7Q072119	O-RING	16
17.	73054010	LOAD CHECK PLUG	9
18.	73054482	VALVE SECT V20R 4WAY W/BS	1

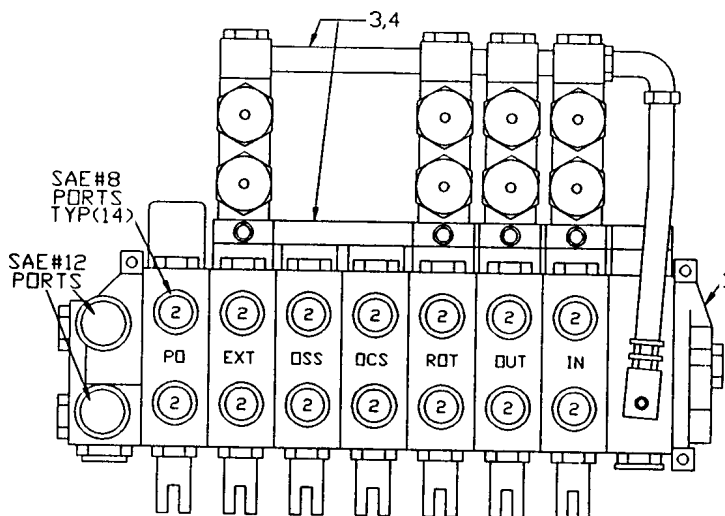


VALVEBANK-4R3M W/PO (51705071)

ITEM	PART NO.	DESCRIPTION	QTY
1.	73054432	VALVE SECT 4-WAY SAE#8	3
2.	73054468	VALVE SECT 4-WAY SAE#8	4
3.	73054502	VALVE SECT UTILITY	1
4.	73731241	END COVER RH W/CONV PLUG	1
6.	73731424	END COVER LH (INCL:7)	1
7.	73054673	RELIEF VALVE (PART OF 6)	1REF
8.	73054516	RELIEF RC NON-ADJ 1300PSI	2
9.	73054007	RELIEF RC NON-ADJ 1800PSI	1
10.	73014668	STUD 3/8-24X17	3
11.	72062037	NUT 3/8-24 HEX	6
12.	70142402	ORIFICE PLATE	3
13.	70142403	ORIFICE SPRING	3
14.	51393494	O-RING KIT (SERVICE PART)	REF
15.	7Q072117	O-RING .81X1X.09	18
16.	7Q072119	O-RING .94X1.12X.09	18
17.	73054010	LOAD CHECK PLUG ASM	11

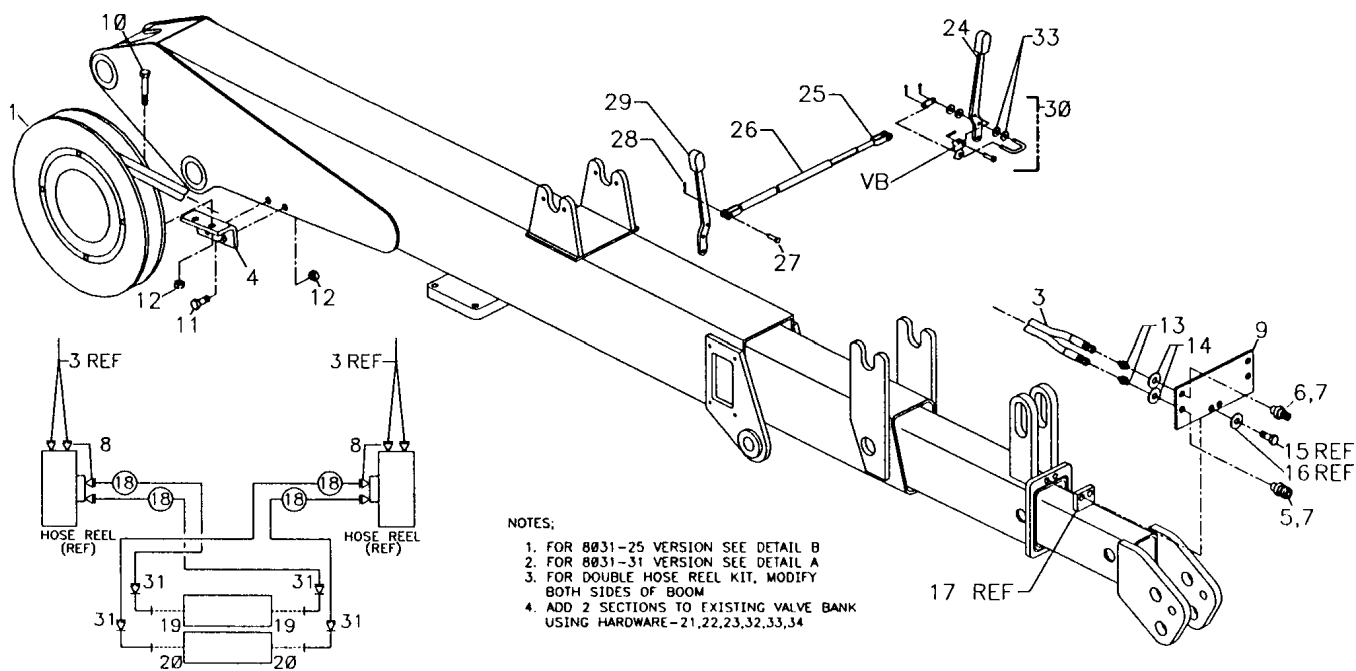
**VALVEBANK ASM-4R3M W/PO (51705072)**

ITEM	PART NO.	DESCRIPTION	QTY
1.	51705071	VALVEBANK 7-SECT 4R/3M	1
2.	72053777	ELBOW #8MSTR #8MJIC 45°	14
3.	60025207	SPACER	2
4.	7Q092012	O-RING .36X.50X.07	2



DBL HOSE REEL KIT (31711972)

ITEM	PART NO.	DESCRIPTION	QTY			
1.	70732863	HOSE REEL-LH	1	17.	60107294	STROKE STOP (PART OF EXT ASM) 1REF
2.	70732864	HOSE REEL-RH	1	18.	51704295	HOSE ASM 1/4X186 FF 4
3.	51393812	HOSE ASM 1/4X300 FF TWIN	2	19.	72532666	ELBOW #8MSTR #8MJIC XLG 2
4.	60117715	HOSE REEL MTG BRKT	2	20.	72066337	ELBOW #8MSTR #8MJIC 90° 2
5.	72533380	DISCONNECT COUPLER 1/4NPT	2	21.	7Q072019	O-RING 4
6.	72533382	DISCONNECT NIPPLE 1/4NPT	2	22.	7Q072021	O-RING 4
7.	72533381	CAP	4	23.	72066337	PIN-SPCL VB 2
8.	72532353	ADAPTER #6MSTR #4MJIC	8	24.	70141982	CONTROL HANDLE-LONG VB 2
9.	60107482	BULKHEAD PLATE	1	25.	52702018	CONTROL ROD-M 2
10.	72060097	CAP SCR 1/2-13X3 HHGR5	4	26.	52702016	CONTROL ROD-F 2
11.	72060093	CAP SCR 1/2-13X1-1/2 HHGR5	4	27.	72066338	CLEVIS PIN 5/16X1 4
12.	72062080	NUT 1/2-13 LOCK	8	28.	72066168	COTTER PIN .09X.75 4
13.	72053499	ADAPTER 1/4MPT #4MJIC	4	29.	70141984	CONTROL HANDLE DUMMYVB 2
14.	72063003	WASHER 3/8 WRT	4	30.	94731839	LINK & PIN KIT 2
15.	72060092	CAP SCR 1/2-13X1-1/4 HHGR5 (PART OF EXT ASM)	2REF	31.	72532665	ADAPTER #4MJIC #8FJIC 4
16.	72063053	WASHER 1/2 LOCK (PART OF EXT ASM)	2REF	32.	72066336	COTTER PIN-SPCL SHORT 4
				33.	73054432	VALVE SECTION 4WAY SAE#8 2
				34.	73014668	STUD 3/8X17 3



00000425: 19980826

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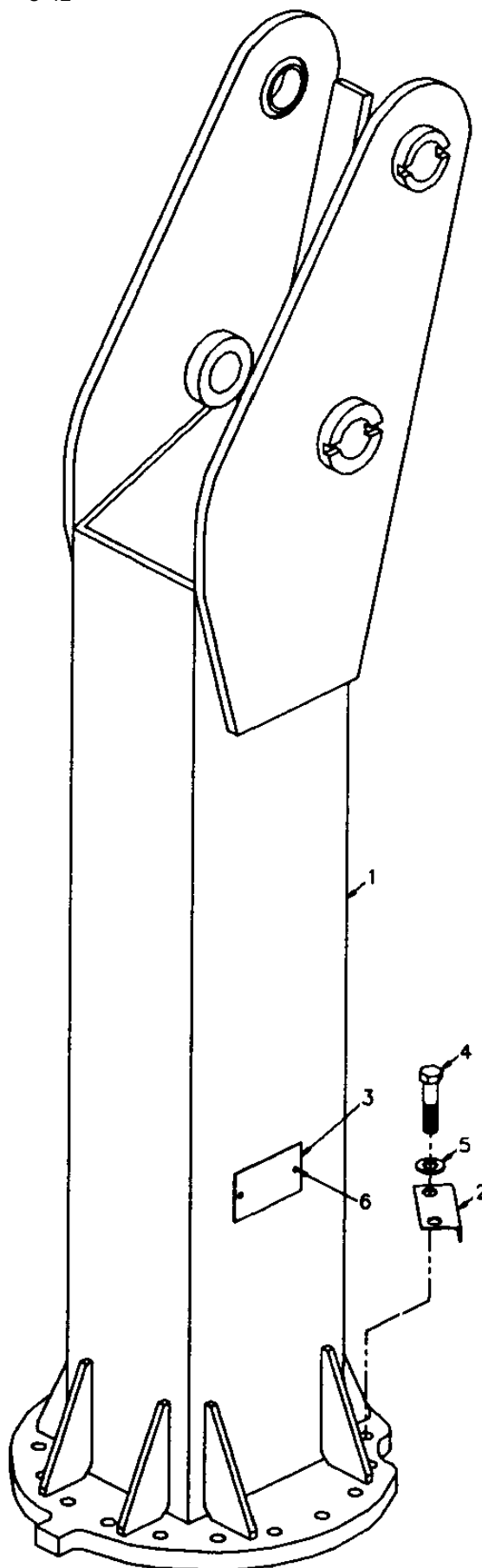
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3-42

MAST ASM-RH MNT (41712823)

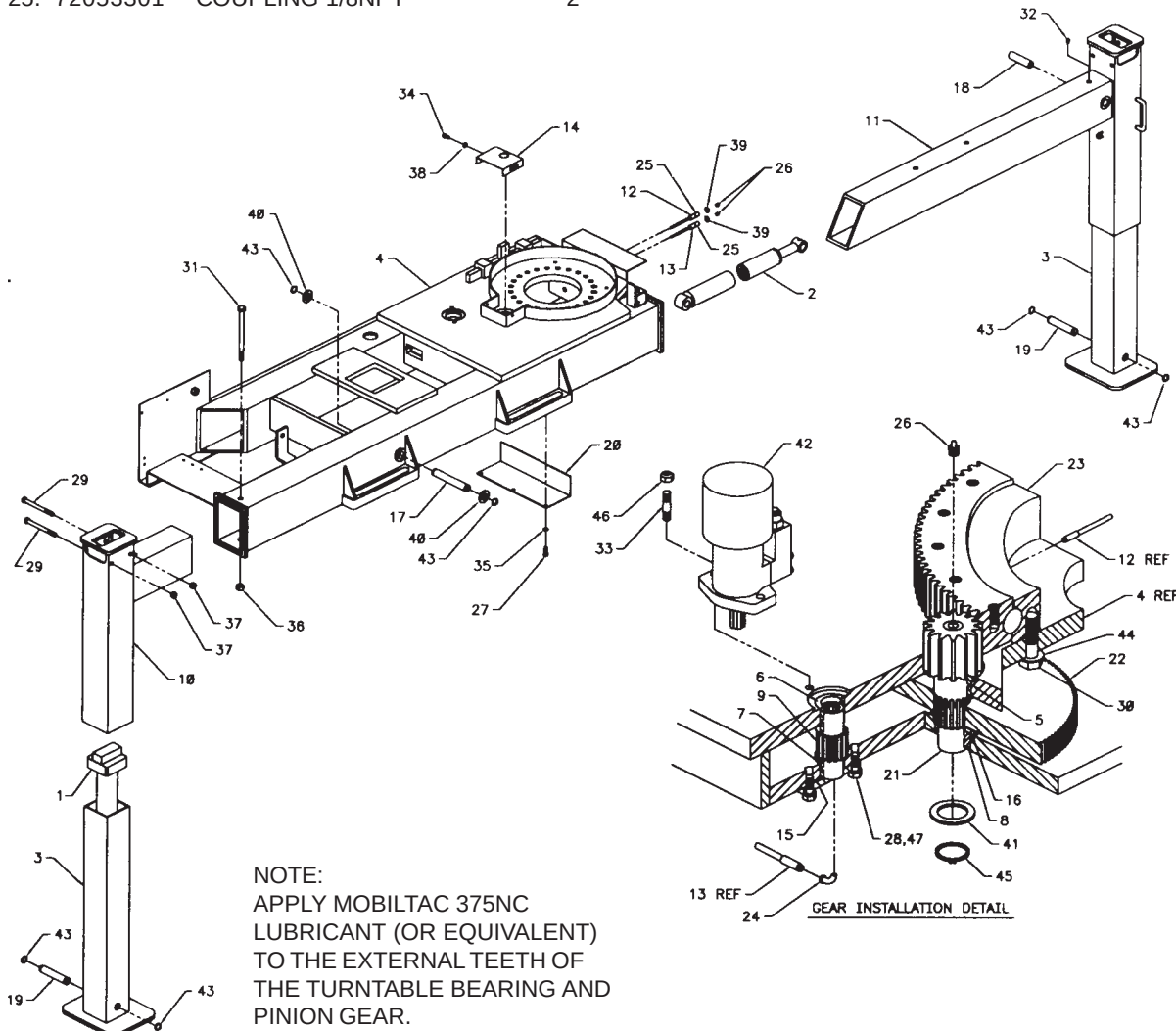
ITEM	PART NO.	DESCRIPTION	QTY
1.	52701152	MAST	1
2.	60104540	PINION COVER	1
3.	70029119	SERIAL NUMBER PLACARD	1
4.	72060931	CAP SCR 5/8-11X2-3/4 HHGR8	18
5.	72063119	WASHER 5/8 FLAT HARD	18
6.	72066340	POP RIVET 1/8 X 3/8 GRIP	2



BASE & STABILIZER ASM-RH MNT (41712822)

ITEM	PART NO.	DESCRIPTION	QTY
1.	3B221850	POWER DOWN CYLINDER	2
2.	3B241801	POWER OUT CYLINDER	1
3.	52711517	STABILIZER LEG	2
4.	52712821	BASE (INCL:5-9)	1
5.	60020114	BUSHING (PART OF 4)	1REF
6.	60020115	BUSHING (PART OF 4)	1REF
7.	60020116	BUSHING (PART OF 4)	1REF
8.	60020154	BUSHING (PART OF 4)	1REF
9.	71056011	DRIVE GEAR (PART OF 1)	1REF
10.	52705010	STABILIZER ARM-STATIONARY	1
11.	52705011	STABILIZER ARM-ADJUSTABLE	1
12.	53000702	GREASE EXT 17"	1
13.	53000711	GREASE EXT 23"	1
14.	60010235	PINION COVER	1
15.	60010844	GREASE PLATE	1
16.	60104694	PINION SPACER	1
17.	60106065	PIN	1
18.	60106066	PIN	1
19.	60106968	PIN	2
20.	60107167	INTERMEDIATE GEAR COVER	1
21.	71056010	PINION GEAR	1
22.	71056012	INTERMEDIATE GEAR	1
23.	71056389	TURNABLE GEAR BEARING	1
24.	72053281	STREET ELBOW 1/8NPT 90°	1
25.	72053301	COUPLING 1/8NPT	2

26.	72053508	ZERK 1/8NPT	3
27.	72060046	CAP SCR 3/8-16X1 HHGR5	3
28.	72060092	CAP SCR 1/2-13X1-1/4 HHGR5	2
29.	72060102	CAP SCR 1/2-13X5-1/2 HHGR5	4
30.	72060931	5/8-11X2-3/4 HHGR8	24
31.	72060164	CAP SCR 5/8-11X8 HHGR5	1
32.	72060579	SET SCR 3/8-16X1/2 SOC PLA	1
33.	60106032	STUD 1/2-13X2	2
34.	72060833	SCR 5/16-18X3/4 THRD CUTTING	2
35.	72063051	WASHER 3/8 LOCK	3
36.	72062091	NUT 5/8-11 LOCK	1
37.	72062107	NUT 1/2-13 CTR LOCK	4
38.	72063002	WASHER 5/16 WRT	2
39.	72063003	WASHER 3/8 WRT	2
40.	72063034	MACH BUSHING 1X10GA NR	2
41.	72063035	MACH BUSH 1-1/4X10GA NR	1
42.	73540004	HYD MOTOR (FROM 5-15-98)	1
	73051004	HYD MOTOR (TO 5-15-98)	1
	5V151830	MOTOR BLOCK (TO 5-15-98)	1
	73054538	C' BALANCE VALVE (TO 5-15-98)	2
	72060738	CAP SCR (TO 5-15-98)	4
	7Q072012	O-RING (TO 5-15-98)	2
43.	72066125	RETAINING RING 1" EXT HD	6
44.	72063119	WASHER 5/8 FLAT HARD	24
45.	72066084	RETAINING RING 1-1/4 EXT STD	1
46.	72062080	NUT 1/2-13 LOCK	2
47.	72063053	WASHER 1/2 LOCK	2



PWR DN CYLINDER-RH MNT (3B221850)

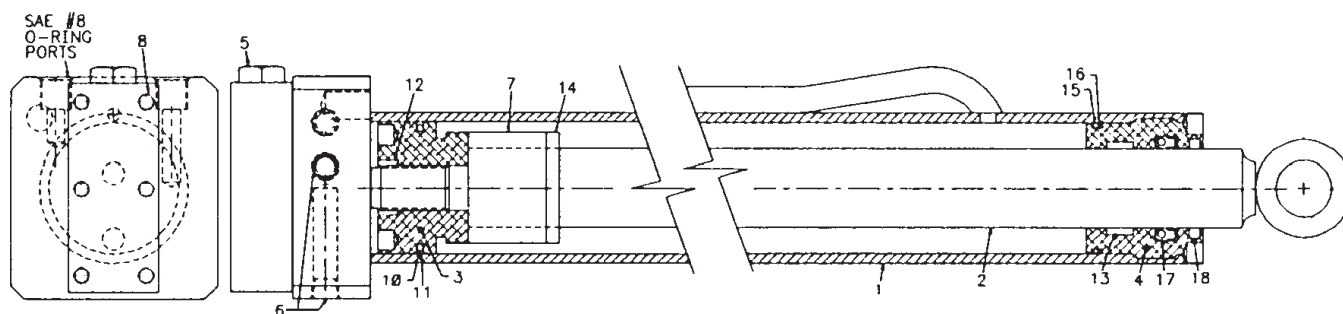
ITEM	PART NO.	DESCRIPTION	QTY
1.	4B221850	CASE (INCL:6)	1
2.	2G221850	ROD	1
3.	6I025087	PISTON	1
4.	6H025015	HEAD	1
5.	73054004	VALVE	1
6.	7PNPXT02	PIPE PLUG 1/8 (PART OF 1)	3REF
7.	6C150015	STOP TUBE	1
8.	72060708	CAP SCR 1/4-20 X 1-1/4 SH	6
9.	9B101214	SEAL KIT (INCL:10-18)	1
10.	7Q072137	O-RING (PART OF 9)	1REF
11.	7T66P025	PISTON SEAL (PART OF 9)	1REF
12.	7T61N087	LOCK RING SEAL (PART OF 9)	1REF
13.	7T2N8015	WEAR RING (PART OF 9)	1REF
14.	6A025015	WAFFER LOCK (PART OF 9)	1REF
15.	7Q072228	O-RING (PART OF 9)	1REF
16.	7Q10P228	BACK-UP RING (PART OF 9)	1REF
17.	7R546015	ROD SEAL (PART OF 9)	1REF
18.	7R14P015	ROD WIPER (PART OF 9)	1REF

NOTE

IT IS RECOMMENDED THAT ALL COMPONENTS OF THE SEAL KIT BE REPLACED WHENEVER THE CYLINDER IS DISASSEMBLED. THIS WILL REDUCE FUTURE DOWNTIME.

APPLY "LUBRIPLATE #630-2" MEDIUM HEAVY, MULTI-PURPOSE LUBRICANT OR EQUIVALENT TO ALL PISTON AND HEAD GLANDS, LOCK RING AND ROD THREADS BEFORE ASSEMBLY.

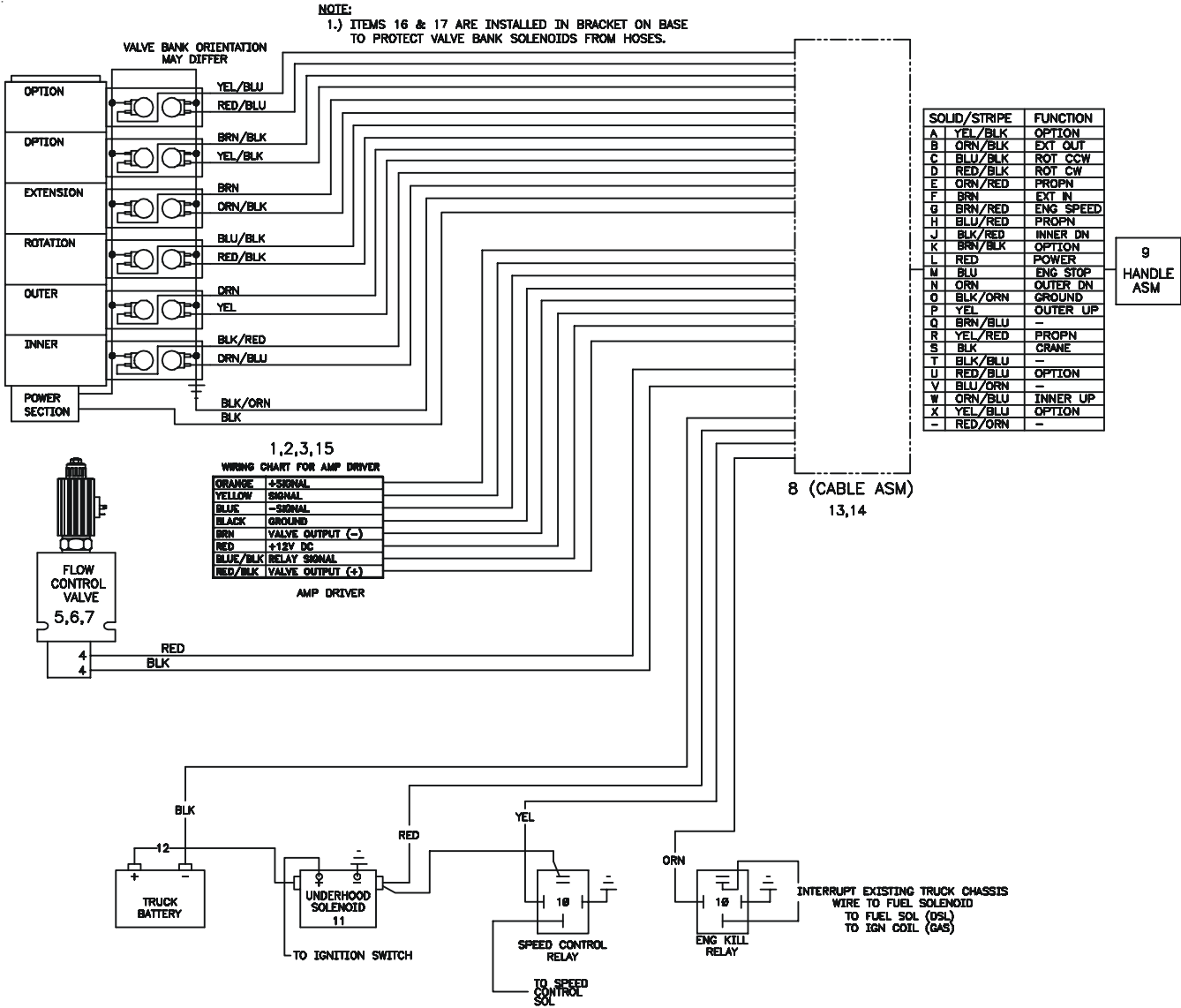
USE "NEVER-SEEZ" OR EQUIVALENT BETWEEN THE HEAD AND THE CASE WHEN ASSEMBLING THE CYLINDER.



PROP'L RMT CTRL KIT-6F (90713576)

ITEM	PART NO.	DESCRIPTION	QTY
1.	77044837	AMP DRIVER	1
2.	72060703	CAP SCR 1/4-20X1/2 SH	2
3.	72063049	WASHER 1/4 LOCK	2
4.	77040186	TERM 1/4 FSLPON 16-14GA	2
5.	73054876	PRIORITY VALVE	1
6.	72060051	CAP SCR 3/8-16X2-1/4 HHGR5	2
7.	72062103	NUT 3/8-16 LOCK	2
8.	51713570	CABLE ASM-JIC BOX	1

9.	51713430	HANDLE ASM	1
10.	77041251	RELAY	2
11.	77041237	SOLENOID 12V	1
12.	51704784	CABLE ASM #1WIRE X 6	1
13.	72060004	CAP SCR 1/4-20X1 HHGR5	4
14.	72062104	NUT 1/4-20 LOCK	4
15.	60112887	MTG PLATE	1
16.	52704397	ROD-CONTROL HANDLE	1
17.	72062006	NUT 5/8-11 HEX	1



RMT HANDLE ASM-6F (51713430)

14.	72061009	SHT MTL SCR #6X3/4 PH	8
15.	77040051	TERM #8 SPRSPD 16-14GA	25
16.	77040371	TOGGLE SWITCH SPST	1
17.	77040372	TOGGLE SWITCH SPDT	6
18.	77040373	TOGGLE SWITCH SPST	2
20.	77044579	CONNECTOR	1
21.	89044100	CABLE 18GA/24WIRE X 30FT	1
22.	77040047	TERMINAL (PART OF 22)	3REF
23.	77040186	TERM 1/4 FSLPON 16-14GA	3
24.	60111142	MTG BRACKET	1
25.	72060669	CAP SCR #10-32X5/8 SH	1
26.	72060636	CAP SCR #10-24X3/4 SH	2
27.	72062106	NUT #10-24 LOCK	2
28.	70143223	SPRING	1
29.	72061000	SHT MTL SCR #6X1/2 PH	1

Technical drawing of a 100T remote control system, showing a control panel, a mounting bracket, a cable assembly, and a receiver unit. The drawing includes detailed views of the control panel, the mounting bracket, the cable assembly, and the receiver unit. It also includes a wiring diagram and a legend for the color coding.

Control Panel (Top Left): Features buttons for ENGINE STOP, POWER, ENGINE SPEED, EXTENSION IN, ROTATION, OUTER DOWN, INNER DOWN, and a 100T logo.

Mounting Bracket (Top Right): Shows a cross-section view with dimensions: DRILL #0.094 (CENTERED), 0.38, 29, 28, 23, 25, 11, 24, 26, 27, 3.

Cable Assembly (Middle): Shows a cable with a connector (13) and a mounting bracket (7, 21, 8.20).

Receiver Unit (Bottom Left): Shows a wiring diagram with terminals labeled 15 (25), 1 (8), 18, RED/BLK, RED, BLK, ORN/BLK, 16, BLU, YEL/BLK, YEL/BLU, 17, BLK/RED, ORN, BLU/BLK, 17, BRN, RED/BLU, 17, BRN/BLK.

Receiver Unit (Bottom Right): Shows a front view with a 100T logo and the text "GARNER IOWA USA".

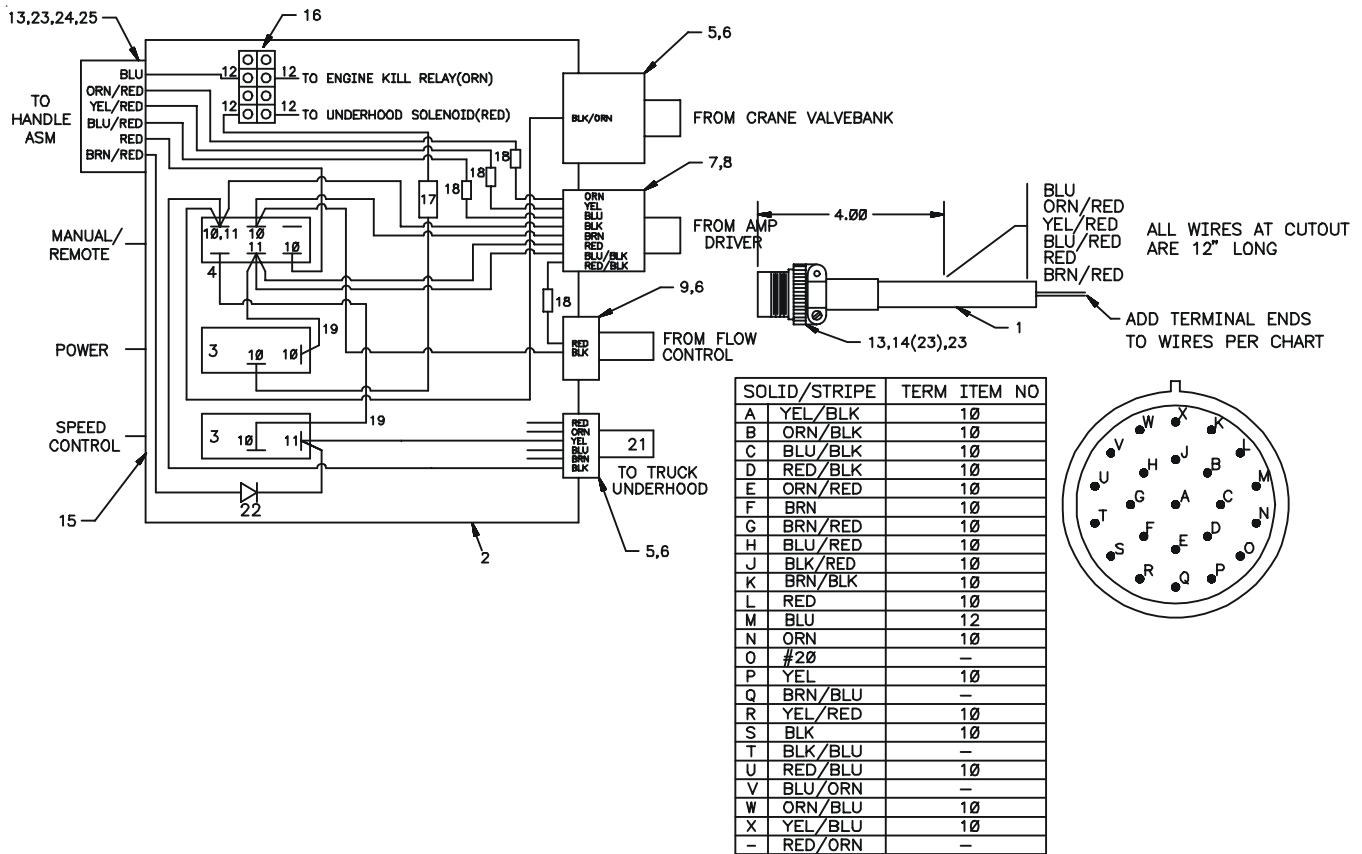
Legend (Bottom Right): A table mapping letters A through X to specific color combinations for the remote control system.

SOLID/ST	
A	YEL/
B	ORN/
C	BLU/
D	RED/
E	ORN/
F	BRN/
G	BRN/
H	BLU/
J	BLK/
K	BRN/
L	RED/
M	BLU/
N	ORN/
O	BLK/
P	YEL/
Q	BRN/
R	YEL/
S	BLK/
T	BLK/
U	RED/
V	BLU/
W	ORN/
X	YEL/
-	RED/

CABLE ASM-JIC BOX 50" (51713570)

1.	89044100	CABLE 18GA/24WIRE	50"
2.	90713575	JIC BOX	1
3.	77041345	TOGGLE SWITCH ST	2
4.	77041354	TOGGLE SWITCH DT	1
5.	77044018	STRAIN RELIEF 1/2	2
6.	77044201	NUT 1/2 ELEC LOCK	3
7.	77044196	STRAIN RELIEF 3/4	1
8.	77044202	NUT 3/4 ELEC LOCK	1
9.	77044468	STRAIN RELIEF 1/8-1/4	1
10.	77040186	TERM 1/4 FSLPON 16-14GA	25
11.	77040282	TERM 1/4 PIGBAC 16-14GA	3
12.	77040051	TERM #8 SPRSPD 16-14GA	4

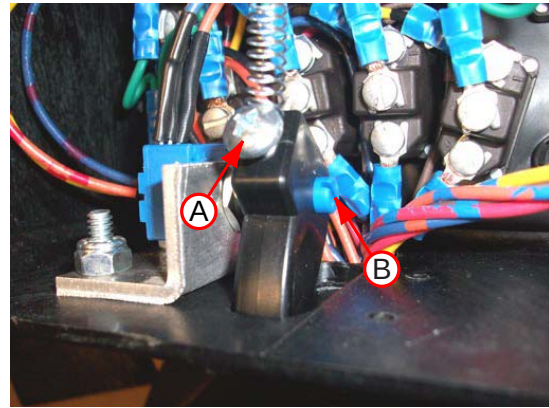
13.	77044620	CONNECTOR	1
14.	77044580	SOCKET	23
15.	70393257	DECAL-JIC BOX	1
16.	77044341	TERMINAL BLOCK-4	1
17.	77041056	FUSE 20A IN-LINE	1
18.	77040048	BUTT CONNECTOR 16-14GA	4
19.	89044232	WIRE 14GA RED X 3	2
20.	77044668	PLUG-SEAL	1
21.	89044354	CABLE 14GA/6WIRE	84"
22.	77041423	DIODE	1
23.	77044667	PLUG-CAP	1
24.	77044645	NUT	1
25.	77044646	WASHER-LOCK	1



TETHERED PROPORTIONAL REMOTE POTENTIOMETER ADJUSTMENT

NOTES: ONLY use this procedure to set the low-end output on the remote handle assembly if crane functions operate without pulling the proportional trigger. You may need a second operator to help with steps 4 and 5.

1. Following proper crane and stabilizer set-up, with the PTO engaged and the truck running, move the crane from the stowed position to a position off to the side of the truck. Unstow the winch cable hook and lower the winch approx (6) six feet.
2. Remove the back cover of the remote control handle.
3. Loosen screw "A" slightly. (Note: Screw style may vary).
4. While holding "WINCH DOWN" function, very slowly, rotate screw "B" clockwise until all movement has stopped.
5. Release "WINCH DOWN" function.
6. Tighten screw "A"
7. Test by operating "WINCH DOWN", "WINCH UP", "ROTATE CCW", and "ROTATE CW" without pulling the trigger. If any of these functions move, repeat steps 2 through 6.
8. Replace control back cover and properly stow the crane and stabilizers.



SECTION 4. GENERAL REFERENCE

INSPECTION CHECKLIST 3

WIRE ROPE INSPECTION 7

HOOK INSPECTION 7

HOLDING VALVE INSPECTION 8

ANTI-TWO BLOCKING DEVICE INSPECTION 8

TORQUE DATA CHART - DOMESTIC 9

TORQUE DATA CHART - METRIC..... 10

TURNTABLE BEARING FASTENER TIGHTENING SEQUENCE 11

TURNTABLE BEARING INSPECTION FOR REPLACEMENT 12

NOTES

[illegible]

NOTICE	
The user of this form is responsible in determining that these inspections satisfy all applicable regulatory requirements	
OWNER/COMPANY	
CONTACT PERSON	
CRANE MAKE & MODEL	
CRANE SERIAL NUMBER	
UNIT I.D. NUMBER	
LOCATION OF UNIT	

Inspection Checklist		1
CRANES		
TYPE OF INSPECTION (check one)		
☐ DAILY (if deficiency found)	☐ QUARTERLY	
☐ MONTHLY	☐ ANNUAL	
DATE INSPECTED		
HOUR METER READING (if applicable)		
INSPECTED BY (print)		
SIGNATURE OF INSPECTOR		

REV: 11-22-11

TYPE OF INSPECTION**NOTES:**

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

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

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

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

Before inspecting and operating crane, crane must be set up away from power lines and leveled with stabilizers deployed according to the crane manufacturer’s directions.

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

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

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

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

FREQUENCY	ITEM	KEY	✓ = SATISFACTORY R = RECOMMENDATION (Should be considered for corrective action) NA = Not Applicable	X = Deficient (Note: If a deficiency is found, an immediate determination must be made as to whether the deficiency constitutes a safety hazard and must be corrected prior to operation.)	STATUS ✓, R, X, NA
			INSPECTION DESCRIPTION		
D	1	Labels	All load charts, safety & warning labels, & control labels are present and legible.		
D	2	Crane	Check all safety devices for proper operation.		
D	3	Controls	Control mechanisms for proper operation of all functions, leaks & cracks.		
D	4	Station	Control and operator's station for dirt, contamination by lubricants, & foreign materials.		
D	5	Hyd System	Hydraulic system (hoses, tubes & fittings) for leakage & proper oil level.		
D	6	Hook	Presence & proper operation of hook safety latches.		
D	7	Wire Rope	Inspect for apparent deficiencies per applicable requirements and manufacturer's specifications.		
D	8	Pins	Proper engagement of all connecting pins & pin retaining devices.		
D	9	General covers.	Overall observation of crane for damaged or missing parts, cracked welds & presence of safety		
D	10	Operation	During operation, observe crane for abnormal performance, unusual wear (loose pins, wire rope damage, etc.). If observed, discontinue use & determine cause & severity of hazard.		
D	11	Remote Ctrl's	Operate remote control devices to check for proper operation.		
D	12	Electrical	Operate all lights, alarms, etc. to check for proper operation.		
D	13	Anti Two-Block or Two-Block Damage Prevention	Operate anti-two-blocking or two-block prevention devices to check for proper operation.		

Inspection Checklist**CRANES****2**

FREQUENCY	ITEM	KEY	✓ = SATISFACTORY R = RECOMMENDATION (Should be considered for corrective action) NA = Not Applicable	X = Deficient (Note: If a deficiency is found, an immediate determination must be made as to whether the deficiency constitutes a safety hazard and must be corrected prior to operation.)	STATUS ✓, R, X, NA
			INSPECTION DESCRIPTION		
D	14	Tires	Check tires (when in use) for proper inflation and condition.		
D	15	Ground conditions around and around stabilizers and supporting foundations, ground water accumulation, or similar.	Ground conditions around the equipment for proper support, including ground settling under and around stabilizers and supporting foundations, ground water accumulation,		
D	16	Level Position	The equipment for level position within tolerances specified by the equipment manufacturer's recommendations, both before each shift and after each move and setup.		
D	17	Operator Cab Windows	Significant cracks, breaks, or other deficiencies that would hamper the operator's view.		
D	18	Rails, rail stops, clamps, supporting surfaces.	Rails, rail stops, rail clamps and supporting surfaces when the equipment has rail traveling.		
D	19	Safety Devices	Safety devices and operational aids for proper operation.		
D	20	Electrical	Electrical apparatus for malfunctioning, signs of apparent excessive deterioration, dirt or moisture accumulation.		
D	21	Other			
D	22	Other			
M	23	Daily	All daily inspection items.		
M	24	Cylinders	Visual inspection of cylinders for leakage at rod, fittings & welds. Damage to rod & case.		
M	25	Valves	Holding valves for proper operation.		
M	26	Valves	Control valve for leaks at fittings & between sections.		
M	27	Valves	Control valve linkages for wear, smoothness of operation & tightness of fasteners. Relief valve for proper pressure settings.		
M	28	General	Bent, broken or significantly rusted/corroded parts.		
M	29	Electrical accumulation.	Electrical apparatus for malfunctioning, signs of apparent excess deterioration, dirt or moisture accumulation. Electrical systems for presence of dirt, moisture and frayed wires.		
M	30	Structure	All structural members for damage.		
M	31	Welds	All welds for breaks & cracks.		
M	32	Pins	All pins for proper installation & condition.		
M	33	Hardware	All bolts, fasteners & retaining rings for tightness, wear & corrosion		
M	34	Wear Pads	Condition of wear pads.		
M	35	Pump & Motor mounting bolts.	Hydraulic pumps & motors for leakage at fittings, seals & between sections. Check tightness of		
M	36	PTO	Transmission/PTO for leakage, abnormal vibration & noise, alignment & mounting bolt torque.		
M	37	Hyd Fluid	Quality of hydraulic fluid and for presence of water.		
M	38	Hyd Lines	Hoses & tubes for leakage, abrasion damage, blistering, cracking, deterioration, fitting leakage & secured properly.		
M	39	Hook	Load hook for abnormal throat distance, twist, wear & cracks.		
M	40	Wire Rope	Condition of load line.		
M	41	Manual	Presence of operator's manuals with unit.		
M	42		Other		
M	43		Other		
Q	44	Daily	All daily inspection items.		
Q	45	Monthly	All monthly inspection items.		
Q	46	Rotation Sys	Rotation bearing for proper torque of all mounting bolts.		
Q	47	Hardware	Base mounting bolts for proper torque.		
Q	48	Structure	All structural members for deformation, cracks & corrosion.		
	49		● Base		
	50		● Stabilizer beams & legs		
	51		● Mast		
	52		● Inner boom		
	53		● Outer boom		
	54		● Extension(s)		
	55		● Jib boom		
	56		● Jib extension(s)		
	57		● Other		
Q	58	Hardware	Pins, bearings, shafts, gears, rollers, & locking devices for wear, cracks, corrosion & distortion.		

<i>Inspection Checklist</i>			CRANES	3
FREQUENCY	ITEM	KEY	✓ = SATISFACTORY R = RECOMMENDATION (Should be considered for corrective action) NA = Not Applicable	STATUS ✓, R, X, NA
			INSPECTION DESCRIPTION	
	59		● Rotation bearing(s)	
	60		● Inner boom pivot pin(s) & retainer(s)	
	61		● Outer boom pivot pin(s) & retainer(s)	
	62		● Inner boom cylinder pin(s) & retainer(s)	
	63		● Outer boom cylinder pin(s) & retainer(s)	
	64		● Extension cylinder pin(s) & retainer(s)	
	65		● Jib boom pin(s) & retainer(s)	
	66		● Jib cylinder pin(s) & retainer(s)	
	67		● Jib extension cylinder pin(s) & retainer(s)	
	68		● Boom tip attachments	
	69		● Other	
Q	70	Hyd Lines	Hoses, fittings & tubing for proper routing, leakage, blistering, deformation & excessive abrasion.	
	71		● Pressure line(s) from pump to control valve	
	72		● Return line(s) from control valve to reservoir	
	73		● Suction line(s) from reservoir to pump	
	74		● Pressure line(s) from control valve to each function	
	75		● Load holding valve pipe(s) and hose(s)	
	76		● Other	
Q	77	Pumps & Motors	Pumps & motors for loose bolts/fasteners, leaks, noise, vibration, loss of performance, heating & excess pressure.	
	78		● Winch motor(s)	
	79		● Rotation motor(s)	
	80		● Other	
Q	81	Valves	Hydraulic valves for cracks, spool return to neutral, sticking spools, proper relief valve setting, relief valve failure.	
	82		● Main control valve	
	83		● Load holding valve(s)	
	84		● Stabilizer or auxiliary control valve(s)	
	85		● Other	
	86		● Other	
Q	87	Cylinders	Hydraulic cylinders for drifting, rod seal leakage & leakage at welds. Rods for nicks, scores & dents. Case for damage. Case & rod ends for damage & abnormal wear.	
	88		● Stabilizer cylinder(s)	
	89		● Inner boom cylinder(s)	
	90		● Outer boom cylinder(s)	
	91		● Extension cylinder(s)	
	92		● Rotation cylinder(s)	
	93		● Jib lift cylinder(s)	
	94		● Jib extension cylinder(s)	
	95		● Other	
Q	96	Winch	Winch, sheaves & drums for damage, abnormal wear, abrasions & other irregularities.	
Q	97	Hyd Filters	Hydraulic filters for replacement per maintenance schedule.	
A	98	Daily	All daily inspection items.	
A	99	Monthly	All monthly inspection items.	
A	100	Quarterly	All quarterly inspection items.	
A	101	Hyd Sys	Hydraulic fluid change per maintenance schedule.	
A	102	Controls	Control valve calibration for correct pressures & relief valve settings	
A	103	Valves	Safety valve calibration for correct pressures & relief valve settings.	
A	104	Valves	Valves for failure to maintain correct settings.	
A	105	Rotation Sys	Rotation drive system for proper backlash clearance & abnormal wear, deformation & cracks.	
A	106	Lubrication	Gear oil change in rotation drive system per maintenance schedule.	
A	107	Hardware	Check tightness of all fasteners and bolts.	
A	108	Wear Pads	Wear pads for excessive wear.	
A	109	Loadline	Loadline for proper attachment to drum.	

Deficiency / Recommendation / Corrective Action Report

4

[illegible]

If additional space is required, reproduce this page and attach to this report.

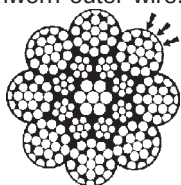
WIRE ROPE INSPECTION

Wire rope with any of the deficiencies shown below shall be removed and replaced immediately.

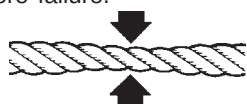
- A. Corrosion can be cause for replacement. Any development of corrosion must be noted and monitored closely.
- B. When there are either 3 broken wires in one strand or a total of six broken wires in all strands in any one rope lay.



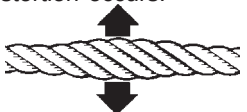
- C. When flat spots on the outer wires appear and those outside wires are less than 2/3 the thickness of the unworn outer wire.



- D. When there is a decrease of diameter indicating a core failure.



- E. When kinking, crushing, birdcaging or other distortion occurs.



- F. When there is noticeable heat damage (discoloration) of the rope by any means.



- G. When the diameter is reduced from nominal size by 1/32" or more.



- H. If a broken wire protrudes or loops out from the core of the rope.

**HOOK INSPECTION**

Hooks having any of the listed deficiencies shall be removed from service unless a qualified person approves their continued use and initiates corrective action. Hooks approved for continued use shall be subjected to periodic inspection.

A. DISTORTION**Bending / Twisting**

A bend or twist exceeding 10° from the plane of the unbent hook.

Increased Throat Opening

HOOK WITHOUT LATCH: An increase in throat opening exceeding 15% (Or as recommended by the manufacturer)

HOOK WITH LATCH: An increase of the dimension between a fully-opened latch and the tip section of the hook exceeding 8% (Or as recommended by the manufacturer)

B. WEAR

If wear exceeds 10% of the original sectional dimension. (Or as recommended by the manufacturer)

C. CRACKS, NICKS, GOUGES

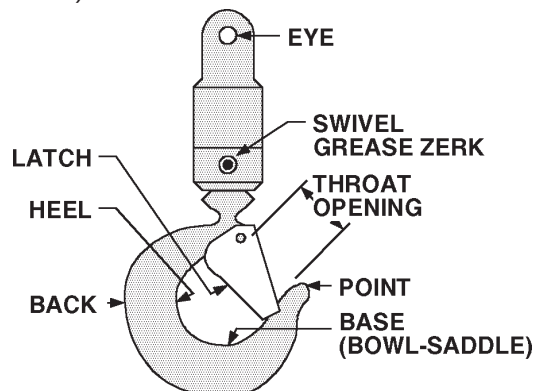
Repair of cracks, nicks, and gouges shall be carried out by a designated person by grinding longitudinally, following the contour of the hook, provided that no dimension is reduced more than 10% of its original value. (Or as recommended by the manufacturer) (A qualified person may authorize continued use if the reduced area is not critical.)

D. LATCH**Engagement, Damage & Malfunction**

If a latch becomes inoperative because of wear or deformation, and is required for the service involved, it shall be replaced or repaired before the hook is put back into service. If the latch fails to fully close the throat opening, the hook shall be removed from service or "moused" until repairs are made.

E. HOOK ATTACHMENTS & SECURING MEANS

If any indication of distortion, wear, cracks, nicks or gouges are present, unless a qualified person authorizes their use. (Or as recommended by the manufacturer)



HOLDING VALVE INSPECTION

The cylinders are equipped with holding valves that prevent sudden movement of the cylinder rods in the event of a hydraulic hose or other hydraulic component failure. The valve is checked in the following manner:

1. With a full rated load, extend the cylinder in question and kill the engine.
2. Operate the control valve to retract the cylinder. If the cylinder "creeps", replace the holding valve. If the cylinder does not "creep", the valve is serviceable.

TWO BLOCK PREVENTION DEVICE INSPECTION

(See Vol. 1, Operation, Maintenance and Repair for a complete description)

The two block prevention system halts the "winch-up" and "extension-out" crane functions before the block contacts the sheave. The two block prevention system should be checked daily as follows:

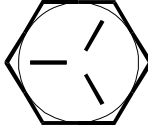
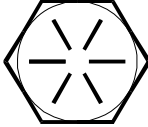
1. Examine flexible rod and weight to insure free unrestricted mechanical operation
2. Examine cord for damage, cuts or breaks. Grasp cord and pull to check operation of cord reel. The cord should retract on reel when released.
3. Start vehicle, engage PTO and slowly winch loadline up until anti-two block weight comes in contact with the hook end of the loadline cable. At the moment the weight is fully supported by the hook end, the winch up function should become non-functioning, because the two-block damage prevention switch will stop further movement.

If operation other than as described occurs, stop immediately and investigate. Failure to do so will risk damage to the cable or the crane.

Then, extend the winch cable to relieve the two-block condition, and actuate the boom extend function slowly. Again, once the weight is fully supported by the hook end, the boom extend function should become non-functioning, because the two-block damage prevention switch will stop further movement. If operation other than described occurs, stop immediately, reverse the function, and check the system.

If the anti two block function appears to be functioning normally, winch the cable down until the sensing weight swings free.

COARSE THREAD BOLTS

SIZE (DIA-TPI)	BOLT DIA (INCHES)	TIGHTENING TORQUE			
		 SAE J429 GRADE 5		 SAE J429 GRADE 8	
		PLAIN (FT-LBS)	PLATED (FT-LBS)	PLAIN (FT-LBS)	PLATED (FT-LBS)
5/16-18	0.3125	17	13	25	18
3/8-16	0.3750	31	23	44	33
7/16-14	0.4375	49	37	70	52
1/2-13	0.5000	75	57	105	80
9/16-12	0.5625	110	82	155	115
5/8-11	0.6250	150	115	220	160
3/4-10	0.7500	265	200	375	280
7/8-9	0.8750	395	295	605	455
1-8	1.0000	590	445	910	680
1 1/8-7	1.1250	795	595	1290	965
1 1/4-7	1.2500	1120	840	1815	1360
1 3/8-6	1.3750	1470	1100	2380	1780
1 1/2-6	1.5000	1950	1460	3160	2370

When using the torque data in the charts above, the following rules should be observed.

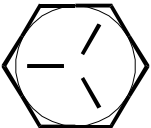
1. Bolt manufacturer's particular specifications should be consulted when provided.
2. Flat washers of equal strength must be used.
3. All torque measurements are given in foot-pounds. To convert to inch-pounds, multiply by 12.
4. Torque values specified are for bolts with residual oils or no special lubricants applied. If special lubricants of high stress ability, such as Never-Seez compound graphite and oil, molybdenum disulphite, 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.
5. Torque values for socket-head capscrews are the same as for Grade 8 capscrews.

WARNING

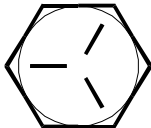
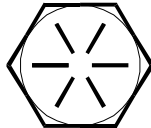
Anytime a gear-bearing bolt is removed, it must be replaced with a new bolt of the identical grade and size. Once a bolt has been torqued to 75% of its proof load and then removed, the torque coefficient may no longer be the same as when the bolt was new thus giving indeterminate clamp loads after torquing.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

TORQUE DATA CHART - DOMESTIC

FINE THREAD BOLTS

SIZE (DIA-TPI)	BOLT DIA (INCHES)	TIGHTENING TORQUE			
		 SAE J429 GRADE 5		 SAE J429 GRADE 8	
		PLAIN (FT-LBS)	PLATED (FT-LBS)	PLAIN (FT-LBS)	PLATED (FT-LBS)
5/16-24	0.3125	19	14	27	20
3/8-24	0.3750	35	26	49	35
7/16-20	0.4375	55	41	78	58
1/2-20	0.5000	90	64	120	90
9/16-18	0.5625	120	90	170	130
5/8-18	0.6250	170	130	240	180
3/4-16	0.7500	300	225	420	315
7/8-11	0.8750	445	325	670	500
1-12	1.0000	645	485	995	745
1 1/8-12	1.1250	890	670	1445	1085
1 1/4-12	1.2500	1240	930	2010	1510
1 3/8-12	1.3750	1675	1255	2710	2035
1 1/2-12	1.5000	2195	1645	3560	2670

COARSE THREAD BOLTS

SIZE (DIA-TPI)	BOLT DIA (INCHES)	TIGHTENING TORQUE			
		 SAE J429 GRADE 5		 SAE J429 GRADE 8	
		PLAIN (FT-LBS)	PLATED (FT-LBS)	PLAIN (FT-LBS)	PLATED (FT-LBS)
5/16-18	0.3125	17	13	25	18
3/8-16	0.3750	31	23	44	33
7/16-14	0.4375	49	37	70	52
1/2-13	0.5000	75	57	105	80
9/16-12	0.5625	110	82	155	115
5/8-11	0.6250	150	115	220	160
3/4-10	0.7500	265	200	375	280
7/8-9	0.8750	395	295	605	455
1-8	1.0000	590	445	910	680
1 1/8-7	1.1250	795	595	1290	965
1 1/4-7	1.2500	1120	840	1815	1360
1 3/8-6	1.3750	1470	1100	2380	1780
1 1/2-6	1.5000	1950	1460	3160	2370

When using the torque data in the charts above, the following rules should be observed.

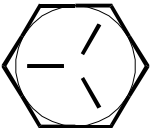
1. Bolt manufacturer's particular specifications should be consulted when provided.
2. Flat washers of equal strength must be used.
3. All torque measurements are given in foot-pounds. To convert to inch-pounds, multiply by 12.
4. Torque values specified are for bolts with residual oils or no special lubricants applied.
If special lubricants of high stress ability, such as Never-Seez compound graphite and oil, molybdenum disulphite, 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.
5. Torque values for socket-head capscrews are the same as for Grade 8 capscrews.

WARNING

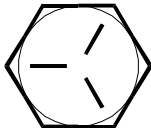
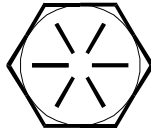
Anytime a gear-bearing bolt is removed, it must be replaced with a new bolt of the identical grade and size. Once a bolt has been torqued to 75% of its proof load and then removed, the torque coefficient may no longer be the same as when the bolt was new thus giving indeterminate clamp loads after torquing.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

TORQUE DATA CHART - METRIC

FINE THREAD BOLTS

SIZE (DIA-TPI)	BOLT DIA (INCHES)	TIGHTENING TORQUE			
		 SAE J429 GRADE 5		 SAE J429 GRADE 8	
		PLAIN (KG-M)	PLATED (KG-M)	PLAIN (KG-M)	PLATED (KG-M)
5/16-24	0.3125	3	2	4	3
3/8-24	0.3750	5	4	7	5
7/16-20	0.4375	8	6	11	8
1/2-20	0.5000	12	9	17	12
9/16-18	0.5625	17	12	24	18
5/8-18	0.6250	24	18	33	25
3/4-16	0.7500	41	31	58	44
7/8-11	0.8750	62	45	93	69
1-12	1.0000	89	67	138	103
1 1/8-12	1.1250	123	93	200	150
1 1/4-12	1.2500	171	129	278	209
1 3/8-12	1.3750	232	174	375	281
1 1/2-12	1.5000	304	228	492	369

COARSE THREAD BOLTS

SIZE (DIA-TPI)	BOLT DIA (INCHES)	TIGHTENING TORQUE			
		 SAE J429 GRADE 5		 SAE J429 GRADE 8	
		PLAIN (KG-M)	PLATED (KG-M)	PLAIN (KG-M)	PLATED (KG-M)
5/16-18	0.3125	2	2	3	2
3/8-16	0.3750	4	3	6	5
7/16-14	0.4375	7	5	10	7
1/2-13	0.5000	10	8	15	11
9/16-12	0.5625	15	11	21	16
5/8-11	0.6250	21	16	30	22
3/4-10	0.7500	37	28	52	39
7/8-9	0.8750	55	41	84	63
1-8	1.0000	82	62	126	94
1 1/8-7	1.1250	110	82	178	133
1 1/4-7	1.2500	155	116	251	188
1 3/8-6	1.3750	203	152	329	246
1 1/2-6	1.5000	270	210	438	328

When using the torque data in the charts above, the following rules should be observed.

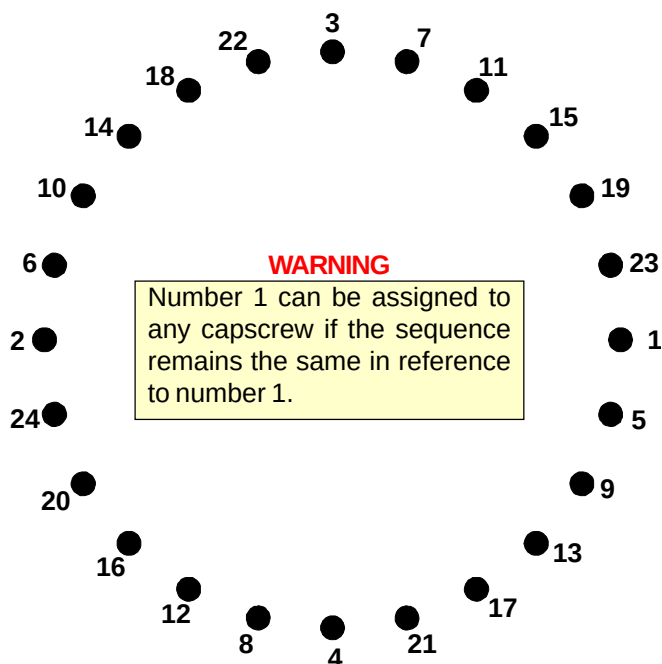
1. Bolt manufacturer's particular specifications should be consulted when provided.
2. Flat washers of equal strength must be used.
3. All torque measurements are given in kilogram-meters.
4. Torque values specified are for bolts with residual oils or no special lubricants applied.
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5. Torque values for socket-head capscrews are the same as for Grade 8 capscrews.

WARNING

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

TURNTABLE BEARING FASTENER TIGHTENING SEQUENCE

Refer to the diagram below 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.



TIGHTENING PROCEDURE:

1. Refer to the Torque Data Chart to determine the proper torque value to apply to the size of capscrew used.
2. Follow the tightening sequence shown in the diagram. Note that 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 capscrews to approximately 40% of the specified torque value, by following the sequence.
(EXAMPLE: $.40 \times 265 \text{ FT-LBS} = 106 \text{ FT-LBS}$)
(EXAMPLE-METRIC: $.40 \times 36 \text{ KG-M} = 14.4 \text{ KG-M}$)
4. Repeat Step 3, but torquing all capscrews to 75% of the specified torque value. Continue to follow the tightening sequence.
(EXAMPLE: $.75 \times 265 \text{ FT-LBS} = 199 \text{ FT-LBS}$)
(EXAMPLE-METRIC: $.75 \times 36 \text{ KG-M} = 27 \text{ KG-M}$)
5. Using the proper sequence, torque all capscrews to the listed torque value as determined from the Torque Data Chart.

TURNTABLE BEARING INSPECTION FOR REPLACEMENT

Before a bearing is removed from a crane for inspection, one of the following conditions should be evident:

1. Metal particles present in the bearing lubricant.
2. Increased drive power required to rotate the crane.
3. Noise emitting from the bearing during crane rotation.
4. Rough crane rotation.
5. Uneven or excessive wear between the pinion gear and turntable gear.

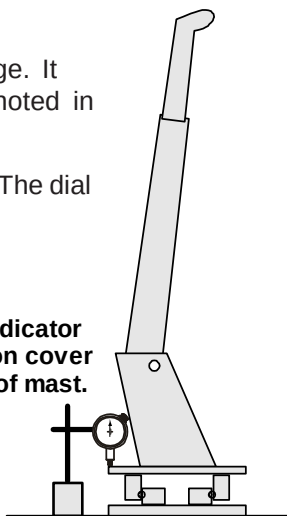
If none of the above conditions exists, the bearing is functioning properly and need not be replaced. But, if one or more of the above conditions exists, inspection may be required. Limits are measured in "TILT" which is dependent on the internal clearances of the bearing. TILT is the most practical determination of a bearings internal clearance once mounted on a crane.

Periodic readings indicating a steady increase in TILT may be an indicator of bearing wear. Note that a bearing found to have no raceway cracks or other structural irregularities should be reassembled and returned to service.

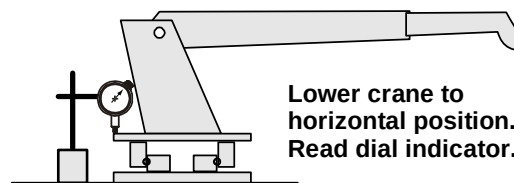
TEST PROCEDURE

1. Place crane in vertical position.
2. Set a dial indicator at 0 on the pinion cover plate at back side of mast.
3. Lower crane to the horizontal position.
4. Check and record the dial indicator change. It should not exceed the tilt measurement noted in the chart below.
5. Return the crane to the vertical position. The dial indicator should return to 0.

Set up dial indicator to 0" on pinion cover at back side of mast.



Lower crane to horizontal position. Read dial indicator.



COMPARISON CHART - MODEL TO MEASURED TILT DIMENSION

NOTE THE FIGURES LISTED IN THIS CHART ARE SERVICE GUIDELINES AND DO NOT, IN THEMSELVES, REQUIRE THAT THE BEARING BE INSPECTED. IF THERE IS REASON TO SUSPECT AN EXCESS OF BEARING WEAR AND THE MEASURED TILT DIMENSION EXCEEDS THE DIMENSION LISTED, REMOVE THE BEARING FOR INSPECTION.	IMT CRANE, LOADER OR TIREHAND MODEL	1007 1014 1014A 1015 2015/2020 2109 3000 3816/3820 3016/3020 421/425 4300 5016/5020 6016/6020 TH7 BODY ROT'N TH1449 BODY ROT'N TH15B CLAMP TH2551B CLAMP TH2557A CLAMP	5200 5200R 5217 5800 7020 7025 7200 7415 9000 TH10 BODY ROT'N TH14 BODY ROT'N	16000 32018 32030 T30 T40	9800 12916 13031 13034 14000 15000 18000 20017 H1200 H1200RR T50 TH2551B BODY ROT'N TH2557B BODY ROT'N TH2557A BODY ROT'N
	BALL DIA. (REF)	.875" (22mm)	1.00" (25mm)	1.18"-1.25" (30-32mm)	1.75" (44mm)
	TILT DIM. (A₁-A₂)	.060" (1.524mm)	.070" (1.778mm)	.075" (1.905mm)	.090" (2.286mm)

The information within this manual has been compiled and checked but errors do occur. To provide our customers with a method of communicating those errors we have provided the Manual Change Request form below. In addition to error reporting, you are encouraged to suggest changes or additions to the manual which would be of benefit to you. We cannot guarantee that these additions will be made but we do promise to consider them. When completing the form, please write or print clearly. Submit a copy of the completed form to the address listed below.

MANUAL CHANGE REQUEST

DATE	PRODUCT MANUAL	MANUAL PART NO.
SUBMITTED BY		
COMPANY		
ADDRESS		
CITY, STATE, ZIP		
TELEPHONE		

☐

ERROR FOUND

LOCATION OF ERROR (page no.):

DESCRIPTION OF ERROR:

☐

ERROR FOUND

DESCRIPTION OF ADDITION:

REASON FOR ADDITION:

MAIL TO:
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GARNER, IA 50438-0189
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