
Manual Part # 99903289

5525-6025-6625 Parts & Specifications

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Revisions

DATE	LOCATION	DESCRIPTION
20040830	PARTS	NEW MANUAL RELEASE WITH 2004 RADIO REMOTE.
20050314	71056577	ECN 9671 - ITEM #1 ON 71056577 IS 71056607, WAS 70056527
20050323	41716517	ECN 9715 - IMPROVED BOOM WELDMENT. MOVED WINCH/CABLE/HOOK KIT TO BOOM ASM SECTION.
20050628	WINCH	MOVED WINCH -CABLE-HOOK KIT AND WINCH DRAWINGS TO BASE AND MAST ASSEMBLY SECTION
	CONTROLS	ECN 9563-UPDATED TO 90717156, 90717396, AND 99903629 CONTROL DRAWINGS
20050915	DECAL KITS	ECN 9877 - 5525 DECAL KIT 99903731 REPLACED 95717305; 99903732 REPLACED 95717028; 99903733 REPLACED 95716800.
20051115	41716517	ECN 9934 - REVERSAL OF ECN 9715.
20060111	41716514	ECN 9942 - 73051919 REPL BY 73511070.
20060712	70146319	ADDED PARTS LIST
20060926	70392982	ECN 10200 - ADDED 70392982 TO DECAL PLACEMENT DRAWINGS 99903731, 99903732, 99903733

CHAPTER 1

Introduction

This volume deals with information applicable to your particular crane. For operating, maintenance and repair instructions, refer to Telescopic Crane Volume 1: OPERATION, MAINTENANCE AND REPAIR. (IMT part number 99903514.)

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 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. This crane was designed and built to meet the standards of ANSI/ASME B30.5, Mobile & Locomotive Cranes. Contact the American Society of Mechanical Engineers (www.asme.org) for more information.

Throughout this manual, three means are used to draw the attention of personnel. They are NOTES, CAUTIONS and WARNINGS 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.

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

CHAPTER 2

Specifications

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General Specifications

GENERAL SPECIFICATIONS	
CRANE RATING	Model 5525 - 55,000 ft-lb (7.6 tm) Model 6025 - 60,000 ft-lb (8.3 tm) Model 6625 - 66,000 ft-lb (9.1 tm)
HORIZONTAL REACH (From centerline of rotation)	25'-4" (7.7 m)
HYDRAULIC EXTENSIONS (2)	78" & 78" (198.1 cm & 198.1 cm)
LIFTING HEIGHT (From base of crane)	26'-7" (8.1 m)
CRANE WEIGHT	2,350 lb (1,066 kg)
OUTRIGGER SPAN (Required option)	
▪ Crane Side (From centerline of chassis)	90" (228.6 cm)
▪ Opposite Crane Side (From centerline of chassis)	48" (121.0 cm)
CRANE STORAGE HEIGHT	40" (101.6 cm)
MOUNTING SPACE REQUIRED (Crane base)	20" x 21" (50.8 cm x 53.3 cm)
OPTIMUM PUMP CAPACITY	10 U.S gpm (37.9 l/min)
SYSTEM OPERATING PRESSURE	3,000 psi (206.8 bar)
CENTER OF GRAVITY	
▪ Horizontal from Centerline of Rotation	41" (104.1 cm)
▪ Vertical from Bottom of Crane Base	22" (55.9 cm)
TIE-DOWN BOLT PATTERN (8 bolts)	14-3/4" x 14-3/4" (37.5 cm x 37.5 cm)
ROTATIONAL TORQUE	9,000 ft-lb (1.2 tm)

* Crane rating (ft-lb) is the rated load (lb) multiplied by the respective distance (ft) from centerline of rotation with all extensions retracted and lower boom in horizontal position.

PERFORMANCE CHARACTERISTICS		
	SPECIFICATIONS	SPEED
ROTATION	400° (7.0 rad.)	33 seconds
LOWER BOOM ELEVATION	-5° to +75° (-0.09 to +1.31 rad)	Model 6025 - 11 seconds Model 6625 - 12 seconds
EXTENSION CYLINDERS (2)	78" & 78" (198.1 cm & 198.1 cm)	27 seconds total
PLANETARY GEAR LINE SPEED	Models 6025 & 6625	60 feet per minute
WORM GEAR LINE SPEED	Model 5525	First layer - 25 ft/min. Second layer - 27 ft/min. Third layer - 30 ft/min.

System Specifications

POWER SOURCE

PTO DRIVEN - Integral mounted hydraulic pump and PTO application. Other standard power sources may be used. Minimum power required is 23.5 horsepower based on 10 GPM (37.9 liters/min) at 3,000 PSI (207 bar).

CYLINDER HOLDING VALVES

The base ends (extend sides) of the lower boom and extension cylinders are equipped with integral-mounted counterbalance valves to prevent sudden cylinder collapse in case of hose or other hydraulic failure. The extend side of the lower boom cylinder is equipped with a 10 gpm counterbalance valve. The counterbalance valve serves several functions. First, it is a holding valve. Secondly, it is designed to control the speed at which the lowering function operates, and allows that motion to be metered under load. Finally, it prevents the loss of an excess amount of oil in the event of a hose failure. Only the oil in the hose, at the time of the failure, will be lost.

ROTATION SYSTEM

Turntable bearing with external worm gear powered with a high-torque hydraulic motor through a self-locking worm. Standard rotation is 400°.

HYDRAULIC SYSTEM (PTO DRIVEN)

The hydraulic system is an open-centered, full-pressure system that requires 10 GPM (37.85 liters/min.) optimum oil flow at 3000 psi (207 bar). It is equipped with a four-section, stack-type, electric, remote control valve with 40-foot control cable. The system includes a separate hydraulic oil reservoir, suction line filter, and return-line filter.

EXCESSIVE LOAD LIMIT SYSTEM (ELLS)

Overloading of the crane is limited by the ELLS system. The system consists of a pressure switch which is mounted on the extend side of the lower boom cylinder and connected electrically to the lift side of the winch, the extend side of the extension boom, and the down side of the lower boom. If the operator attempts to lift a load exceeding the rated capacity of the crane, the winch lift, extension out and lower boom down functions will not operate. To relieve the situation, the operator may set the load down (winch down) or retract the extension boom (extension in).

WINCH - 5525 MODEL

The winch is powered using a hydraulic motor driving a 27:1 worm gear arrangement with a mechanical brake. Maximum single line lifting capacity of the winch, achieved on the second layer of wire rope, is 5500 lb (2495 kg). Maximum two-part line winch capacity is 10,400 lb (4717 kg). The winch is equipped with 100 ft (30.5 m) of 7/16" (1.1 cm) 6 x 25 FW PRF RRL IWRC XIPS wire rope. Nylon sheaves are located at the tip of the extension boom. An anti-two block device is included to prevent the lower block or hook assembly from coming in contact with the boom sheave assembly. The winch meets ANSI B30.5 standards.

WINCH - 6025 & 6625 MODELS

The 5,500 lb planetary winch is powered using a high-torque hydraulic motor. The lifting capacity of the winch is 5,500 lb (2,495 kg) one-part line. Maximum two-part line winch capacity is 10,500 lb (4,762 kg). The winch is equipped with 100 ft (30.5 m) of 7/16" (1.1 cm) 6x25 FW PRF RRL IWRC XIPS wire rope. A compact, anti-two block device is included to prevent the lower block or hook assembly from coming in contact with the boom sheave assembly. The winch meets ANSI B30.5 standards.

MINIMUM CHASSIS SPECIFICATIONS

CHASSIS STYLE	Conventional Cab
WHEELBASE	154" (391 cm)
CAB-TO-AXLE	84" (213 cm)
RESISTANCE TO BENDING MOMENT	800,000 in-lb (9,217 kg-m)
FRAME SECTION MODULUS	16 cubic inches (262.2 cc)
FRAME YIELD STRENGTH	50,000 psi (3,447 bar)
FRONT AXLE RATING (GAWR)	9,000 lb (4,082 kg)
REAR AXLE RATING (GAWR)	17,000 lb (7,711 kg)
GROSS VEHICLE RATING	26,000 lb (11,793 kg)
TRANSMISSION	5 speed

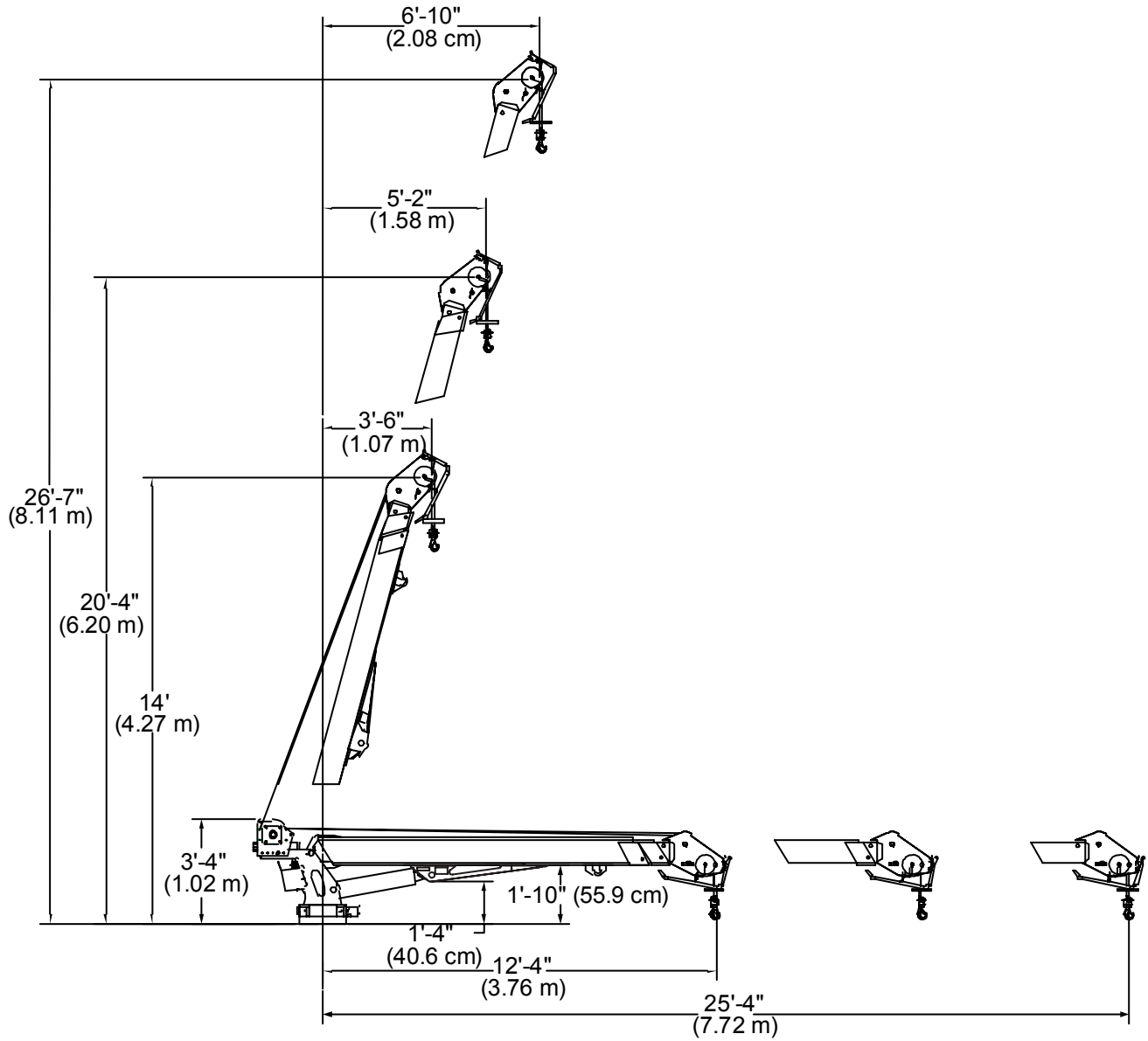
In addition to these specifications, heavy duty electrical and cooling systems are required. It is recommended that the vehicle be equipped with an engine tachometer, auxiliary brake lock, and power steering.

NOTES:

- 1 GAWR means Gross Axle Weight Rating. GAWR is dependent on all vehicle components including axles, tires, wheels, springs, brakes, steering and frame strength meeting the manufacturer's recommendations. Always specify GAWR when purchasing a truck.
- 2 Minimum axle requirements may increase with use of diesel engines, longer wheelbase or service bodies. Contact the factory for more information.
- 3 Weight distribution calculations are required to determine final axle loading.

All chassis, crane and body combinations must be stability-tested to ensure stability per ANSI B30.5

Geometric Configuration, 5525-6025-6625



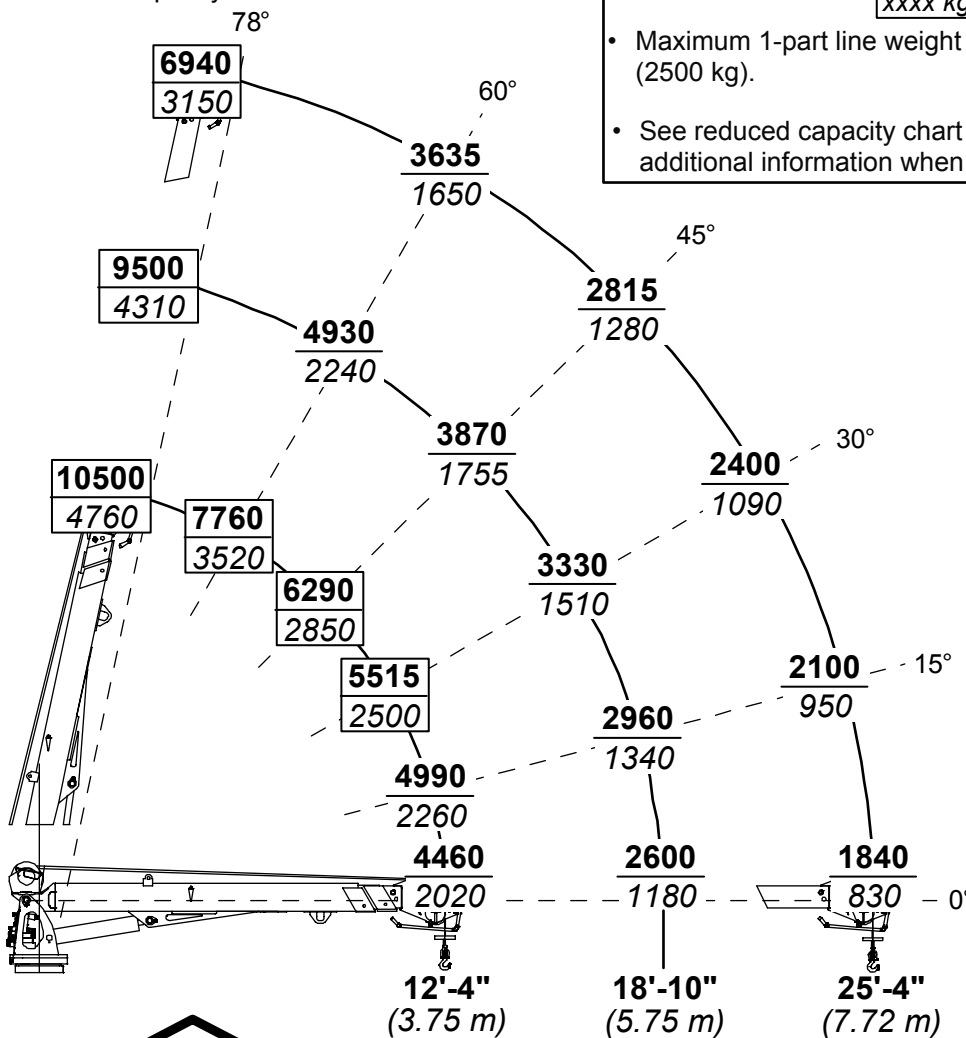
Capacity Chart, 5525

5525 HYDRAULIC CAPACITY CHART

The weight of load-handling devices is part of the load lifted and must be deducted from the rated capacity.

- Values in the box indicate the use of 2-part line is required.

xxxx lb
xxxx kg
- Maximum 1-part line weight is 5500 lb (2500 kg).
- See reduced capacity chart for additional information when applicable.



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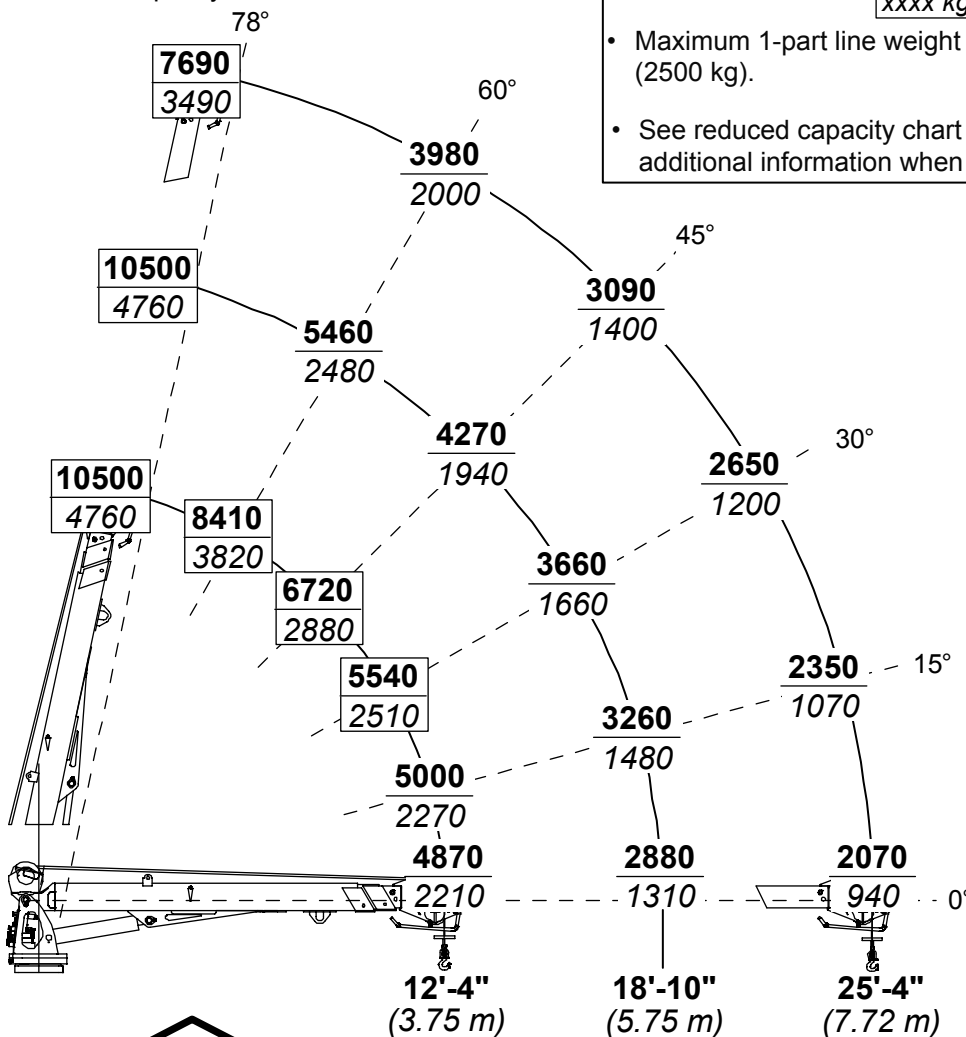
Capacity Chart, 6025

6025 HYDRAULIC CAPACITY CHART

The weight of load-handling devices is part of the load lifted and must be deducted from the rated capacity.

- Values in the box indicate the use of 2-part line is required.

xxxx lb
xxxx kg
- Maximum 1-part line weight is 5500 lb (2500 kg).
- See reduced capacity chart for additional information when applicable.



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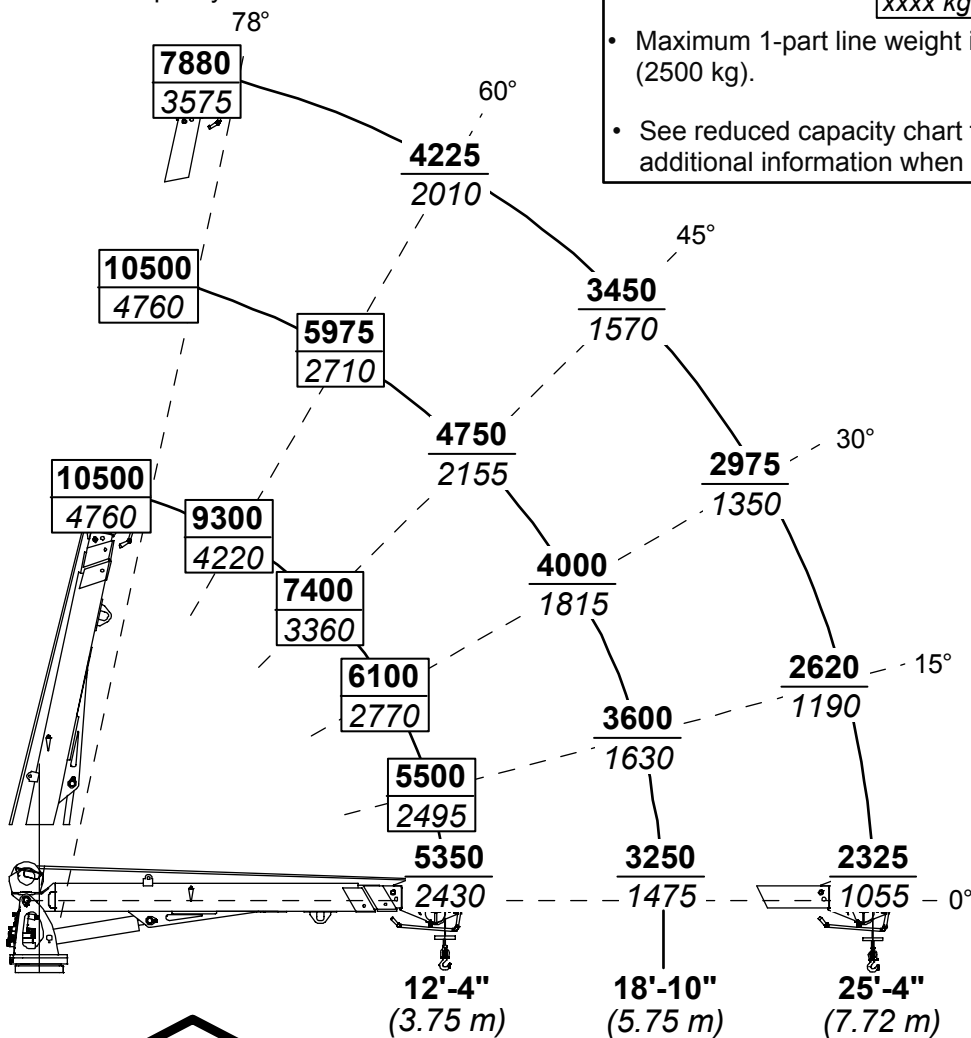
Capacity Chart, 6625

6625 HYDRAULIC CAPACITY CHART

The weight of load-handling devices is part of the load lifted and must be deducted from the rated capacity.

- Values in the box indicate the use of 2-part line is required.

xxxx lb
xxxx kg
- Maximum 1-part line weight is 5500 lb (2500 kg).
- See reduced capacity chart for additional information when applicable.



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Reduced Capacity Lift Charts

The Reduced Capacity Lift Chart system was conceived to inform the end user of the allowable loads which can be lifted off the sides of a mechanics truck. IMT devised a color-coded chart defining the sectors where less than hydraulic crane capacity can be lifted. The color-coded chart (Reduced Capacity Lift Chart or RCLC) corresponds to a visual indicator on the base of the crane. The RCLC displays the percentage of the hydraulic crane capacity to be lifted in each sector. The visual indicator on the crane base gives the operator a reference of the sectors. With this information the end user can more safely use the mechanics truck. Stability confirmation yields data to produce a Reduced Capacity Lift Chart if necessary. Some units may not require de-rating over the sides, but a majority will.

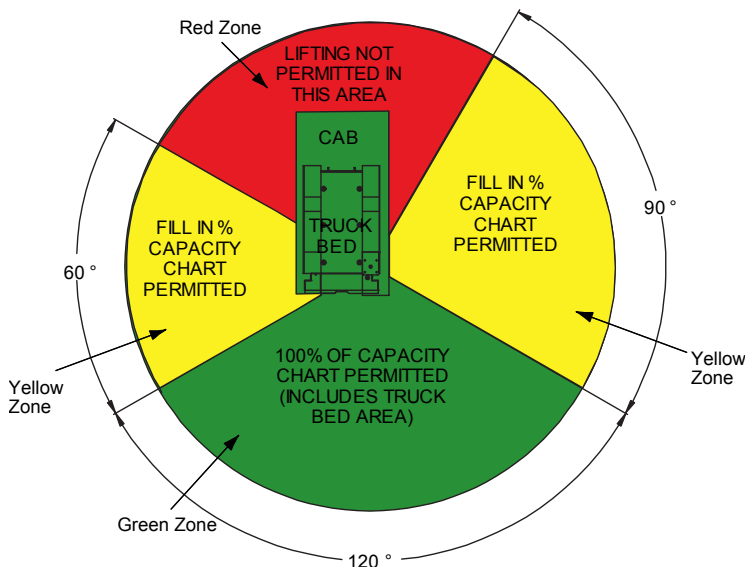
If the IMT crane is installed by an IMT distributor, the distributor is responsible for stability confirmation. IMT supplies a generic RCLC decal for dealer installation.

CAUTION

CHASSIS WEIGHT, SUSPENSION, AND UNIT SET UP, INCLUDING NUMBER AND TYPE OF OUTRIGGERS, LIFTING SURFACE, ETC., HAVE A SIGNIFICANT IMPACT ON STABILITY.

The basic illustration shows full crane capacity off the rear of the truck and reduced capacity when lifting over the sides. Lifting over the front of the truck is not permitted.

For an IMT 5525 crane with a standard IMT Dominator® II body, the derated percentage is 80% in the yellow quadrants. For an IMT 6025 crane with a standard Dominator II body, the derated percentage is 70% in the yellow quadrants.



Stability Confirmation Process

To confirm stability,

- 1 Set up unit on a hard, flat surface which meets SAE J765 requirements. Use all recommended equipment such as outriggers, etc.
- 2 Position the crane at full, horizontal reach. For a 5525 crane, use a $2,172 \pm 10$ lb test weight suspended over the rear of the truck. For a 6025 crane, use a $2,443 \pm 10$ lb test weight suspended over the rear of the truck. Rotate the test weight up to the point where the pointer on the crane base meets the yellow bands on both sides of the unit. If the unit keeps at least one rear tire firmly touching the ground, the test can be continued for the capacity on the sides. If the criterion is not met for the rear of the unit, a custom RCLC is required. Please contact IMT for assistance in this situation.

NOTE

THE TIRE IS TOUCHING THE GROUND WHEN AT LEAST 90% OR MORE OF THE TREAD SURFACE IS CONTACTING THE GROUND.

Once stability is verified over the rear section of the truck, test the stability on the sides of the truck. Again, using the test weight in a fully extended, horizontal position, rotate the crane around the sides of the truck. If the test weight passes the sides with at least one rear tire firmly touching the ground, a standard Hydraulic Capacity Chart may be used rather than a Reduced Capacity Lift Chart.

CAUTION

THE UNIT MAY TILT SEVERELY!

If the unit does not pass the side load test, you must begin retracting the booms to find the usable percentage of the crane capacity.

For a 5525 crane, retract the booms 42" for a capacity derating to 80%. For a 6025 crane, retract the booms 63" for a capacity derating to 70%. Measure from a fixed point on the boom tip horizontally to a fixed point on the main boom to verify how far the booms have been retracted. See table.

CRANE MODEL	TEST WEIGHT	PERCENT RATED LOAD (%)	DISTANCE BOOMS ARE RETRACTED FROM FULL EXTENSION (INCHES)
5525	$2,172 \pm 10$ lb	80%	42"
6025	$2,443 \pm 10$ lb	70%	63"

Once the booms are retracted, re-check stability by again rotating the crane around the sides of the truck, making sure the weight passes by the yellow region marked on the crane base with at least one rear tire firmly touching the ground.

Test both sides of the truck. If the crane cannot rotate through the yellow zone with at least one rear tire firmly touching the ground, you must work with IMT for a custom Reduced Capacity Lift Chart. In this situation, please contact IMT for assistance.

CAUTION

DO NOT LIFT IN THE “NO LIFTING ZONE.”

Follow safe crane practices throughout the testing. Keep the load as close to the ground as possible.

The minimum 90° “No Lifting Zone” over the cab must be on ALL Reduced Capacity Load Charts. The zone may need to be increased if front outriggers are not used. In addition, the stability may be greater on one side of the unit than the other, but IMT has chosen to keep both ratings the same. Thus, the lowest stability percentage is reported for each side.

Install the RCLC decal on the inside of the crane compartment door.

Keep a record of the reduced stability test to verify the decals in case replacement is necessary.

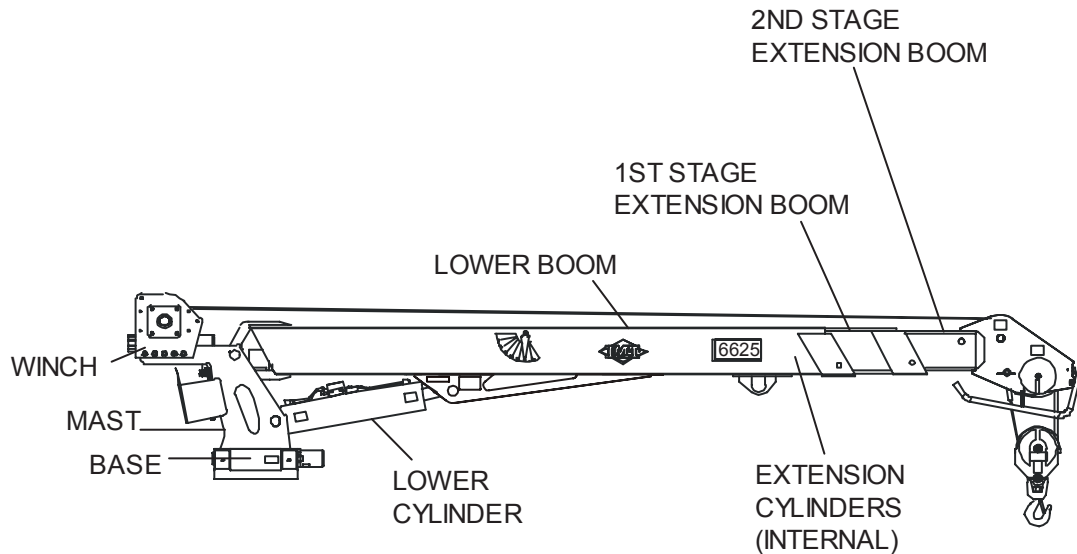
CHAPTER 3

Crane Reference

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5525-6025-6625 Assemblies & Grease Zerk Locations



NOTE

The descriptions indicate major crane assemblies, and the numbers indicate grease zerk locations.

LOCATION DESCRIPTION	LUBRICANT	FREQUENCY
Turntable/Bearing Grease *Rotate crane while greasing	Shell Alvania 2EP or Shell Retinax "A"	Weekly
Lower Cylinder		
Lower Cylinder Rod		
Upper Sheave Pin		
Lower Sheave Pin		
Snatch Block Pin		

* Apply 3 'pumps', then rotate crane fully.

Recommended Spare Parts List

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.

5525-6025-6625 RECOMMENDED SPARE PARTS LIST			
	IMT PART #	NAME	QUANTITY
BASE ASSEMBLY (41716514)			
ALL MODELS	73511070	HYDRAULIC MOTOR	1
MAST ASSEMBLY (41716515)			
ALL MODELS	72601629	CAP SCREW 3/4-10X4	8
	72060209	CAP SCREW 3/4-10 X 2-3/4	14
LOWER BOOM ASSEMBLY			
ALL MODELS	70146462	LOWER CYLINDER-5525	1
	70146427	LOWER CYLINDER-6025	1
	70146304	LOWER CYLINDER-6625	1
	73540094	BLOCK, C'BAL W/ PRESS SWITCH	1
	73540052	VALVE, C'BAL	1
	77041625	PRESSURE SWITCH, 3100 PSI	1
	77041626	PRESSURE SWITCH, 3500 PSI	1
	70145753	PORT TUBE, BASE	1
	70145927	PORT TUBE, ROD	1
	60122982	WEAR PAD	1
	60122985	WEAR PAD, MUSHROOM	2
	70055203	BUSHING, GARLOCK	2
	77041251	RELAY	1
LOWER CYLINDER (70146462)			
5525	075TC0064	ROD WELDMENT	1
	060KT0007	HEAD	1
	050KE0008	PISTON	1
	092KT0010	SEAL KIT	1
	70055225	BUSHING, GARLOCK	4
LOWER CYLINDER (70146427)			
6025	075TC0058	ROD WELDMENT	1
	060LT0007	HEAD	1
	050LE0013	PISTON	1
	092LT0059	SEAL KIT	1
	70055225	BUSHING, GARLOCK	4
LOWER CYLINDER (70146304)			
6625	075TC0058	ROD WELDMENT	1
	060LT0008	HEAD	1

5525-6025-6625 RECOMMENDED SPARE PARTS LIST			
	050LE0011	PISTON	1
	092LT0056	SEAL KIT	1
	70055225	BUSHING, GARLOCK	4
EXTENSION BOOM ASSEMBLY (41716517)			
ALL MODELS	51716461	EXTENSION CYLINDER ASM	1
	60122981	WEAR PAD	1
	60122984	WEAR PAD, CYLINDER	1
	60122980	WEAR PAD	1
	60122983	WEAR PAD	1
	60122985	WEAR PAD, MUSHROOM	2
	60030255	SHEAVE	2
EXTENSION CYLINDER ASSEMBLY (51716461)			
ALL MODELS	001EE0006	PORT TUBE	2
	075RD0015	ROD WELDMENT, 1ST STAGE	1
	075RC0059	ROD WELDMENT, 2ND STAGE	1
	060FR0007	HEAD, 1ST STAGE	1
	060FR0006	HEAD, 2ND STAGE	1
	050FE0016	PISTON, 1ST STAGE	1
	050FE0015	PISTON, 2ND STAGE	1
	092FR0012	SEAL KIT, 1ST STAGE	1
	092FR0013	SEAL KIT, 2ND STAGE	1
	114BB0024	VALVE, C-BAL	1
WINCH/CABLE/HOOK KIT			
ALL MODELS	70580168	CABLE ASSEMBLY	1
	51713168	CORD REEL	1
	77041459	LIMIT SWITCH	1
	60030313	SHEAVE, SNATCH BLOCK	1
	71073035	HOOK	1
	70732882	HOOK	1
	70074004	SAFETY LATCH	1
	60122358	DOWNHAUL WEIGHT	1
	72661367	PIN	1
	73733171	PIN	1
WINCH ASSEMBLY, WORM GEAR (70570198)			
5525	73051513	MOTOR	1
	70055117	PILLOW BLOCK	1
	76393419	OIL SEAL	1
	70143948	BUSHING	1
	70143949	BUSHING	1
	76393420	O-RING	1
	76394300	GASKET	1
	76393171	GASKET	1
WINCH ASSEMBLY, PLANETARY (70146319)			
6025-6625	70146399	MOTOR	1
	70146400	SEAL KIT	1
	70146402	VALVE, COUNTERBALANCE	1

5525-6025-6625 RECOMMENDED SPARE PARTS LIST			
HYDRAULIC KIT (91716519)			
6025-6625	73540090	SOLENOID VALVE, BRAKE	1
VALVE BANK, TETHERED (73733395)			
ALL	73054934	PROPORTIONAL VALVE	1
	73054935	RELIEF VALVE	1
	77041518	COIL SECTIONS	4
	77041556	COIL, PROPORTIONAL VALVE	1
PROPORTIONAL REMOTE HANDLE ASSEMBLY (51716562)			
	51716562	PROP. REMOTE HANDLE ASSEMBLY	1
	70394183	TRIGGER ASSEMBLY	1
	77040371	TOGGLE SWITCH SPST	1
	77040372	TOGGEL SWITCH SPDT	2
	77040373	TOGGLE SWITCH SPST	1
	77040374	TOGGLE SWITCH SPDT	1
INSTALLATION KIT (93716522)			
ALL	73052006	FILTER ELEMENT, 10 MICRON	1

Crane Installation

GENERAL

This section contains instructions for the installation of your crane. Prior to installing the crane and hydraulic components, make sure that the chassis is ready to receive the crane (see the Installation Section of the IMT Telescopic Crane Operation & Safety Manual, 99903514).

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

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

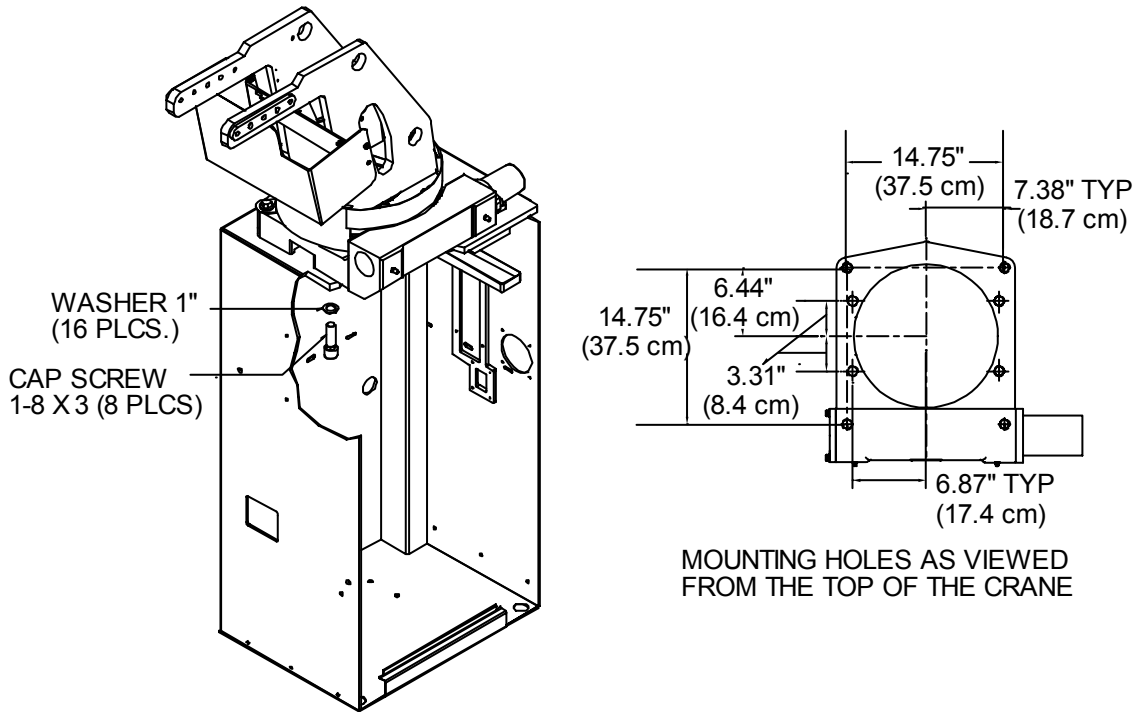
CRANE INSTALLATION

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

To install the crane:

- 1 Use a lifting device capable of lifting the weight of the crane, up to 1625 lb (737 kg). Attach fabric slings to the crane lower boom, centered approximately 18 inches from the mast hinge. Make certain the crane is well balanced on the slings by slowly lifting approximately 6" off the ground. Lift the crane, apply a bead of waterproof compound, such as silicon based caulk, to the bottom of the base. Move the chassis under the crane and lower the crane into the desired position.

- 2 Install the 1-8x3" mounting cap screws and 1" washers to secure the crane base to the truck body (see figure). Torque the cap screws to 680 ft-lb (94 kg-m).



CAUTION

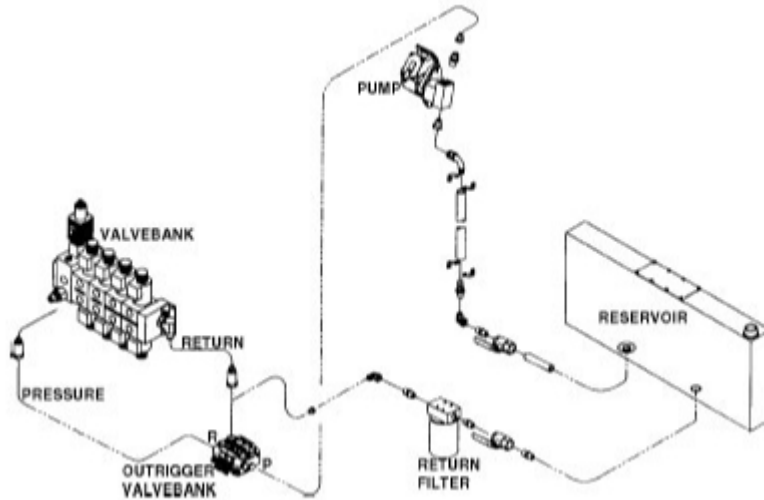
THE 3" BOLTS SUPPLIED ARE FOR USE ON BODIES WITH A CRANE BOX TOP PLATE THICKNESS OF 7/8" TO 1" ONLY. DETERMINE THE CRANE BOX TOP PLATE THICKNESS PRIOR TO MOUNTING. IF DIFFERENT LENGTH BOLTS ARE REQUIRED, THEY MUST BE 1-8, GRADE 8, ZINC COATED, OF THE PROPER LENGTH. FAILURE TO USE PROPER LENGTH BOLTS MAY CAUSE THE BOLTS UNDER THE WORM HOUSING TO BOTTOM OUT BEFORE TORQUEING. INSURE A MINIMUM OF 1-1/2" THREAD ENGAGEMENT.

Hydraulic Installation

Before installation, familiarize yourself with the installation kit drawing in the parts section for specific hydraulic components used. The figure below is used to show major components and general hose routings only.

- 1 Plumb the hydraulic components as shown in the applicable installation kit in the parts section. Make certain all fittings are securely tightened and that hoses are free of possible chafing or contact with hot or sharp edges which could cause damage.
- 2 Refer to Volume 1 for hydraulic oil specifications. Fill the hydraulic reservoir.
- 3 Check all connections for leaks.

- 4 Start the vehicle engine and test each crane function individually. Conduct a visual inspection to make certain that there are no leaks and that everything is operating properly.
- 5 Check oil level in the reservoir and add oil if necessary.



Crane Control

IMT's telescopic cranes are controlled by radio or tethered remote controls. This telescopic crane includes a tethered remote control with a radio remote control option. For complete details on operating your telescopic crane, refer to the IMT Telescopic Crane Operation & Safety Manual (part number 99903514).

CHAPTER 4

Parts

In This Chapter

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Parts Information

GENERAL

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

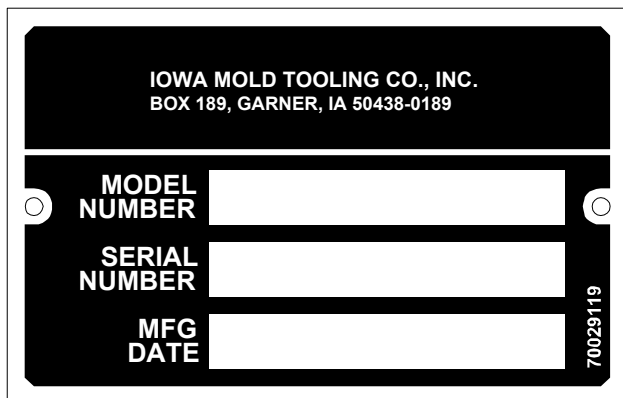
WARNING

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

CRANE IDENTIFICATION

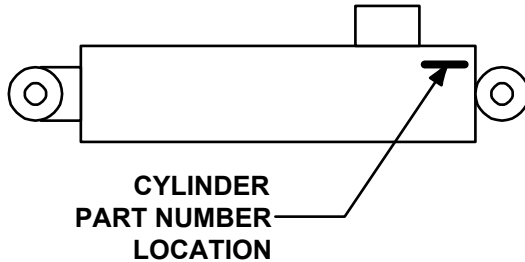
Every IMT crane has an identification placard (see figure). This placard is attached to the inner boom, mast, or crane base. When ordering parts, communicating warranty information, or referring to the unit in correspondence, always include the serial number and model numbers. All inquiries should be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

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



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 outrigger weldments bear a stamped part number. Any time a major weldment is replaced, you must specify the complete part number as stamped on the weldment. The locations of the part numbers are shown in the Crane Reference Section.

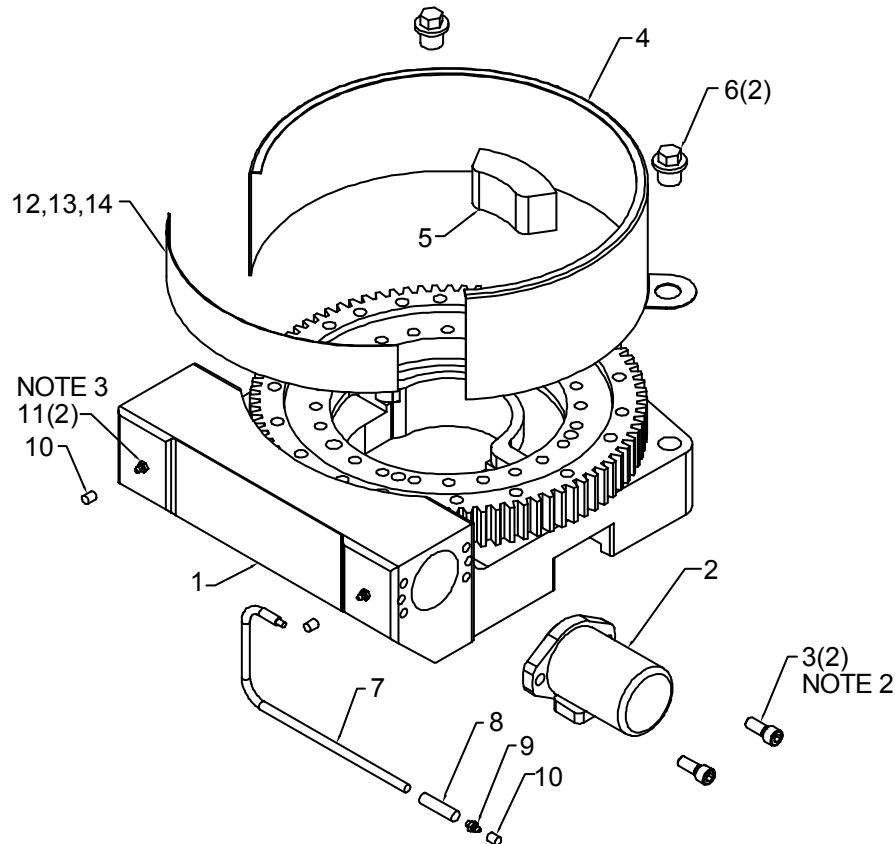
ORDERING REPAIR PARTS

When ordering replacement parts:

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

Base and Mast Assemblies

Base Assembly (41716514)



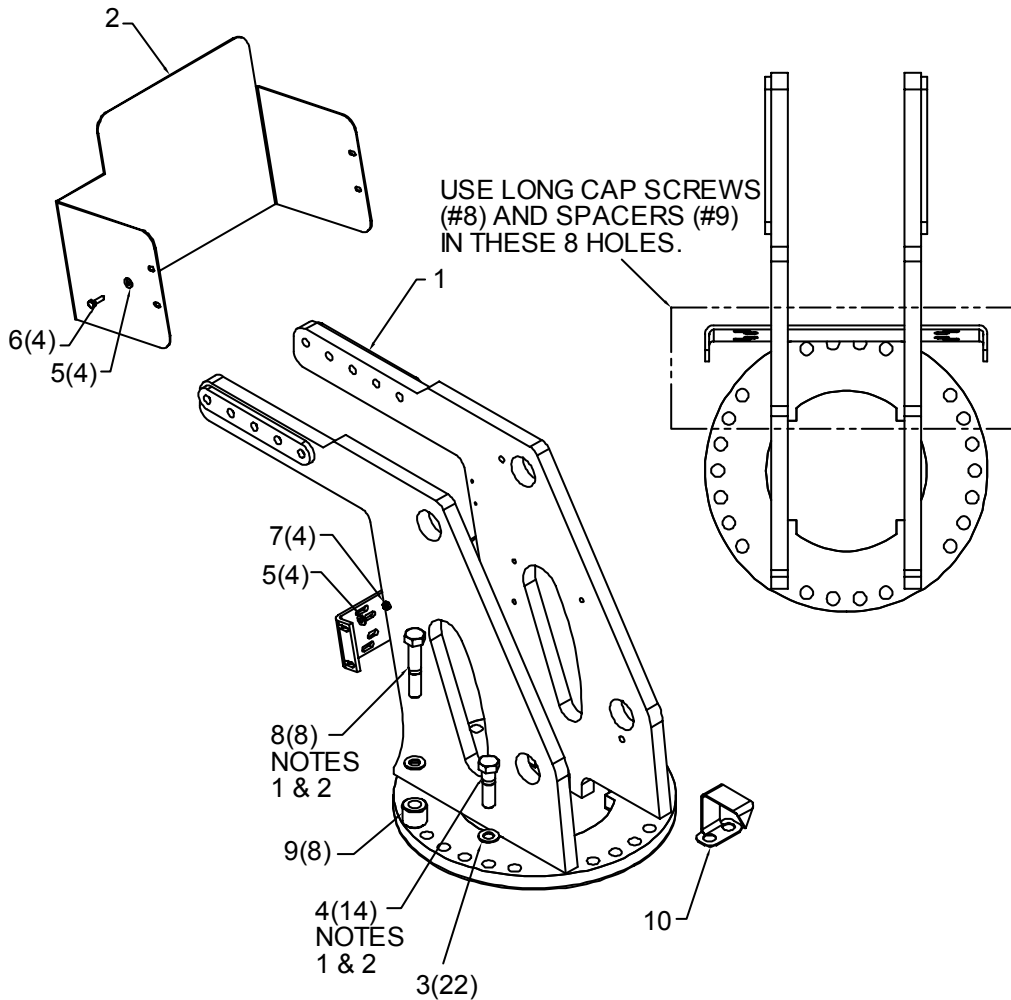
NOTES:

- 1 APPLY MOLUB-ALLOY 936F TO TURNABLE BEARING AND WORM TEETH AT ASSEMBLY.
- 2 USE SERVICEABLE THREAD LOCK.
- 3 APPLY 3 PUMPS OF EXTREME PRESSURE (EP2) GREASE TO GREASE WORM BEARINGS. ROTATE CRANE FULLY AFTER APPLYING GREASE.

41716514 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	71056577	GEAR ROTATOR (INCL. 11)	1
2.	73511070	MOTOR, HYDRAULIC (WAS 73051919)	1
3.	72060795	CAP SCR 1/2-13X1.5 SH PLAIN	2
4.	60123611	GEAR GUARD	1
5.	60120138	SLIDE, ROTATION STOP	1
6.	70029595	THREADED PLUG 1.00-8	2
7.	51395121	HOSE-AA 0.13 X 13.5 OAL (2-2)	1REF
8.	72053301	COUPLING, BLK 0.12	1
9.	72053508	ZERK 0.12	1
10.	70034382	GREASE CAP, RED	3
11.	72533605	GREASE ZERK	2REF
12.	60123612	GEAR GUARD	1
13.	72601647	MACHINE SCREW #10-24 X 1/2 FLH	2
14.	72062106	NUT #10-24 HEX NYLOC ZINC	2

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Mast Assembly (41716515)



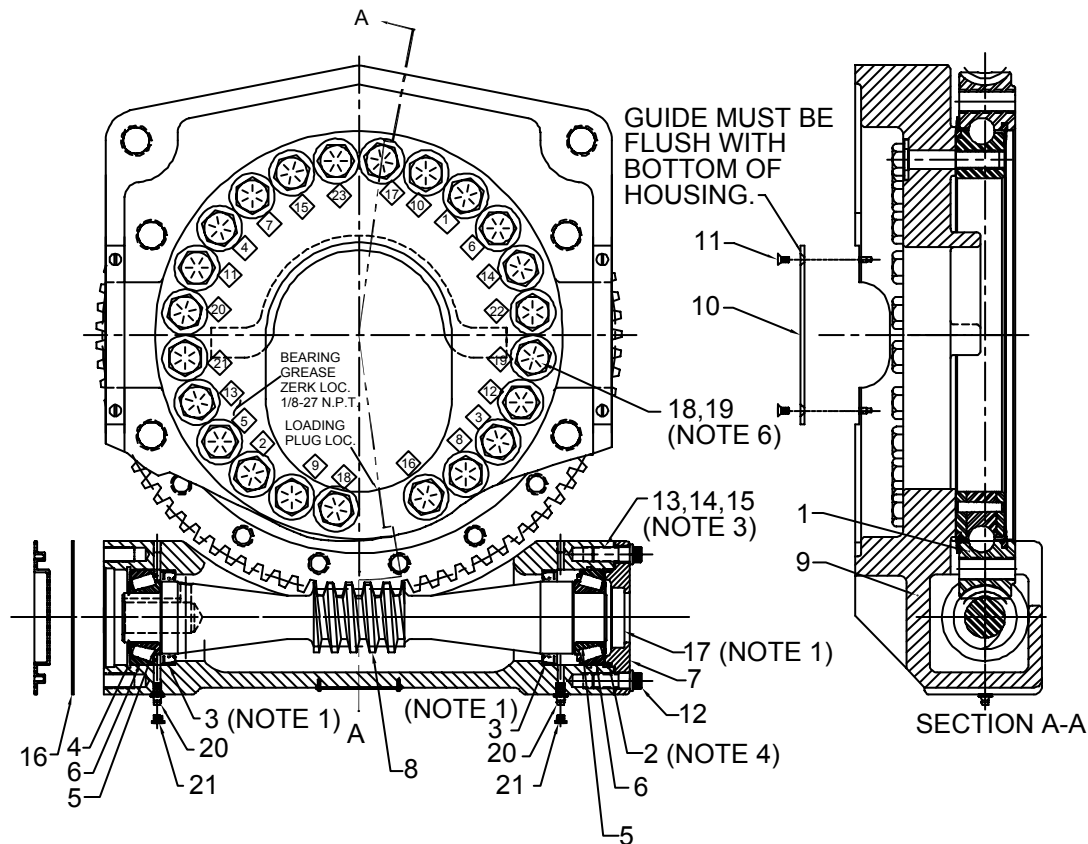
NOTES:

- 1 TORQUE ITEM #4 TO 280 FT-LB.
- 2 DO NOT USE PERMANENT THREAD LOCK ON ITEM #4.

41716515 PARTS LIST

ITEM	PART #	DESCRIPTION	QUANTITY
1.	52716466	MAST-WELDMENT	1
2.	60119128	COVER-VALVE BANK	1
3.	72063116	WASHER 3/4 FLAT H ASTM F436Z	22
4.	72060209	CAP SCR 3/4-10X 2.75 HH GR8 Z	14
5.	72063001	WASHER-1/4 WRT Z	8
6.	72060004	CAP SCR 1/4-20 X 1.00 HH GR5 Z	4
7.	72062104	NUT 1/4-20 HEX NYLOC ZINC	4
8.	72601629	CAP SCR 3/4-10X 4.00 HH GR8 Z	8
9.	60123540	SPACER 1.50 OD X 0.78 ID X 1.25 LG	8
10.	60123610	POINT-GEAR GUARD	1

Gear Rotator (71056577) (Primary configuration)



NOTES

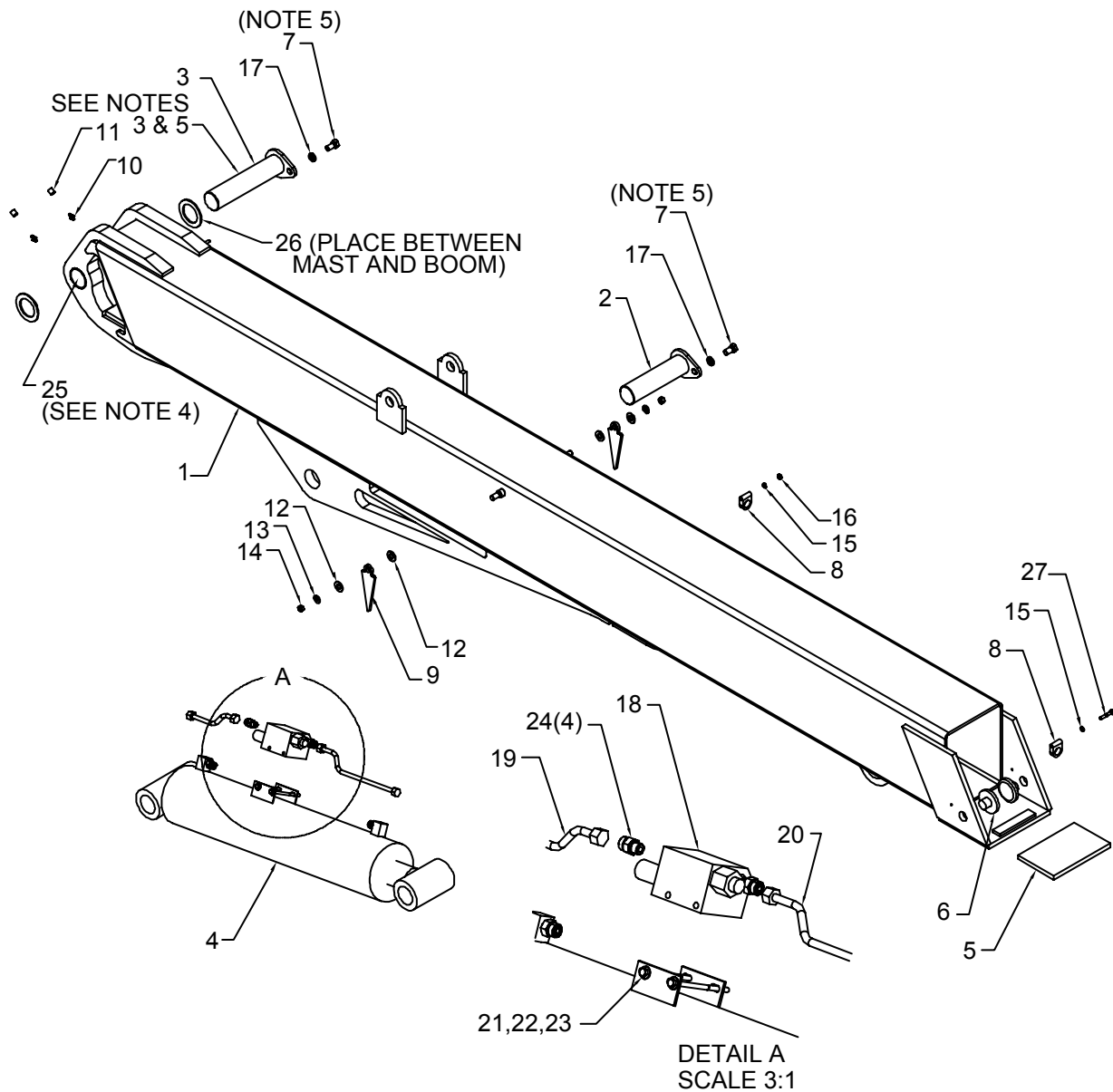
- 1 Install seals #3 and #17 with Loctite plastic gasket on O.D. Lubricate seal surface before assembly.
- 2 Pack cavities with EPO grease.
- 3 Shim to obtain 0.000/0.004 end play on worm shaft.
- 4 Lubricate o-ring #2 with worm gear oil before installing.
- 5 Set backlash between worm and rotation bearing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

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

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Boom Assemblies & Cylinders

Boom Assembly, Lower, 5525 (41717301)



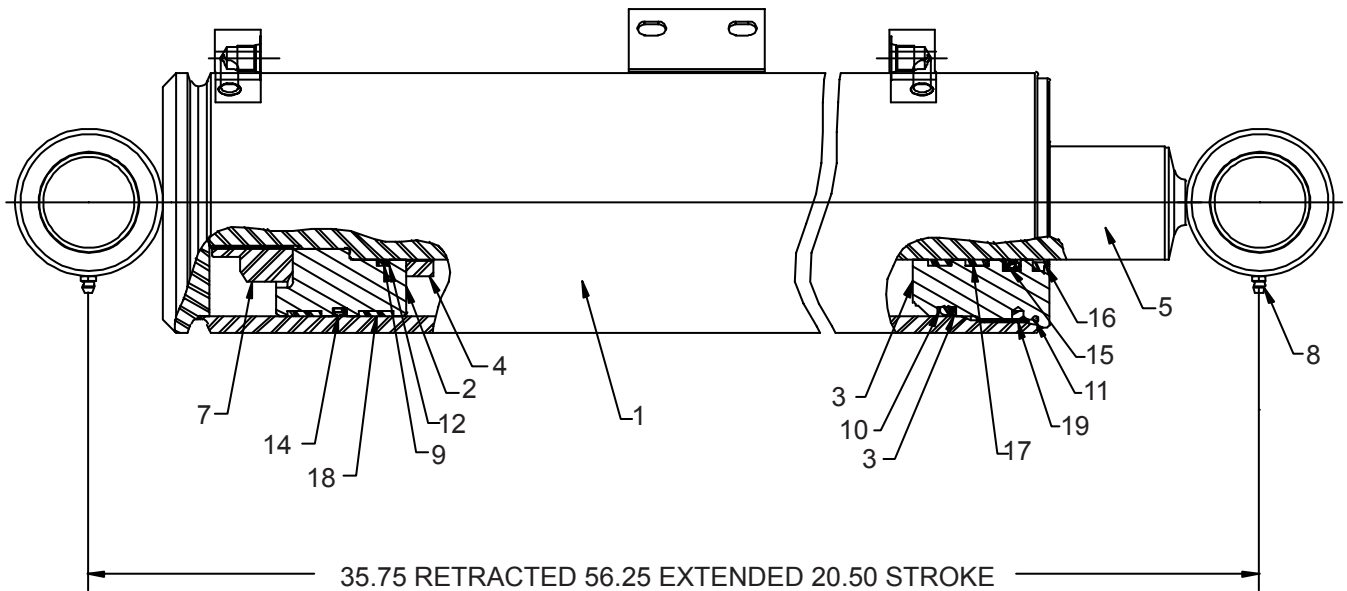
NOTES:

- 1 INSTALL #5 WEAR PAD, THEN #6 ROUND WEAR PAD, THEN EXTENSION BOOMS.
- 2 PIN #3 MUST GO THROUGH THE LOWER BOOM AND MAST ASSEMBLIES.
- 3 APPLY NEVER-SEEZ TO COLLAR I.D.

- 4 APPLY NEVER-SEEZ TO PIN, NOT TO EXCEED THE WIDTH OF THE COLLAR ID.
 5 ADD SERVICEABLE THREAD LOCKER TO ITEM #7.

41717301 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	52716469	LOWER BOOM WLDMT (INCL. 25)	1
2.	52716486	PIN	1
3.	52716487	PIN	2
4.	70146462	LOWER CYLINDER	1
5.	60122982	WEAR PAD – 0.50 x 5.00 x 7.88	1
6.	60122985	WEAR PAD	2
7.	72060091	CAP SCR 1/2 – 13X 1.00	3
8.	70034381	SUPPORT	2
9.	60105544	PLATE – ANGLE PLASTIC	2
10.	72053508	ZERK – NPT .12	2
11.	70034382	GREASE CAP – RED	2
12.	72063005	WASHER 1/2 W FLAT	4
13.	72063003	WASHER 3/8 W FLAT ANSI B27.2	2
14.	72062103	NUT 3/8-16 HEX NYLOC ZINC	2
15.	72063001	WASHER 1/4 LOCK ZINC	4
16.	72062104	NUT 1/4-20 HEX NYLOC ZINC	1
17.	72063053	WASHER 1/2 LOCK ZINC	3
18.	73540094	PRESSURE SWITCH VALVE	1
19.	70145753	TUBE ASM	1
20.	70145927	TUBE ASM	1
21.	72060037	CAP SCR 5/16–18X 4.00 HHGR5Z	2
22.	72063002	WASHER 5/16 W FLAT ANSI B27.2	4
23.	72062109	NUT 5/16-18 HEX NYLOC ZINC	2
24.	72533186	ADPTR-#6 M FACE/#6 M STR	4
25.	70055203	BEARING-GAR DX 2.00X2.19X1.5	2 REF
26.	72063039	MACH BUSING 2.00X10 GA NR	2
27.	72060006	CAP SCR 1/4-20 X 1.5 HHGR5	1

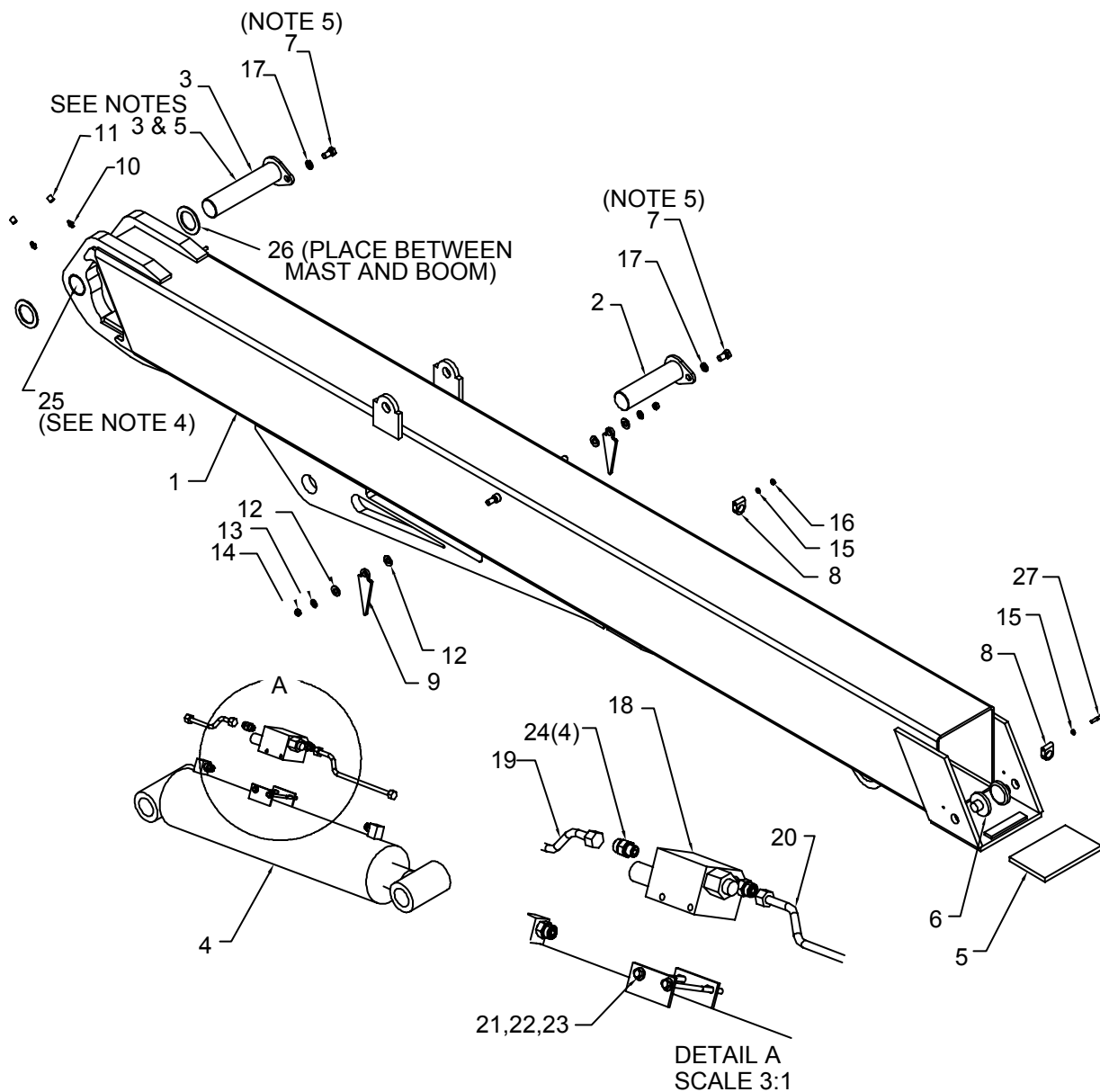
Cylinder, Lower, 5525 (70146462)



70146462 PARTS LIST

ITEM	PART #	DESCRIPTION	QUANTITY
1.	015KC0045	TUBE WELDMENT	1
2.	050KE0008	PISTON	1
3.	060KT0007	HEAD GLAND	1
4.	065TB0001	ROD SPACER	1
5.	075TC0064	ROD WELDMENT	1
6.	107KS0011	BUSHING	4
7.	108BL0004	LOCK NUT 2-12	1
8.	109BA0001	GREASE ZERK	2
9.	120FZ0006	O-RING	1REF
10.	120KZ0004	O-RING	1REF
11.	120LZ0002	O-RING	1REF
12.	123FZ0011	BACKUP RING	2REF
13.	123KZ0005	BACKUP RING	1REF
14.	128KZ0003	DISC	1REF
15.	134GZ0003	DEEP Z-SEAL W/ROD BACKUP	1REF
16.	156FZ0002	ROD WIPER	1REF
17.	166FZ0005	PRECISION WEARBAND	2REF
18.	166KZ0006	PRECISION WEARBAND	2REF
19.	174CZ0002	LOCKING INSERT	2REF
20.	092KT0010	SEAL KIT (INCL. 9-19)	1

Boom Assembly, Lower, 6025 (41717027)



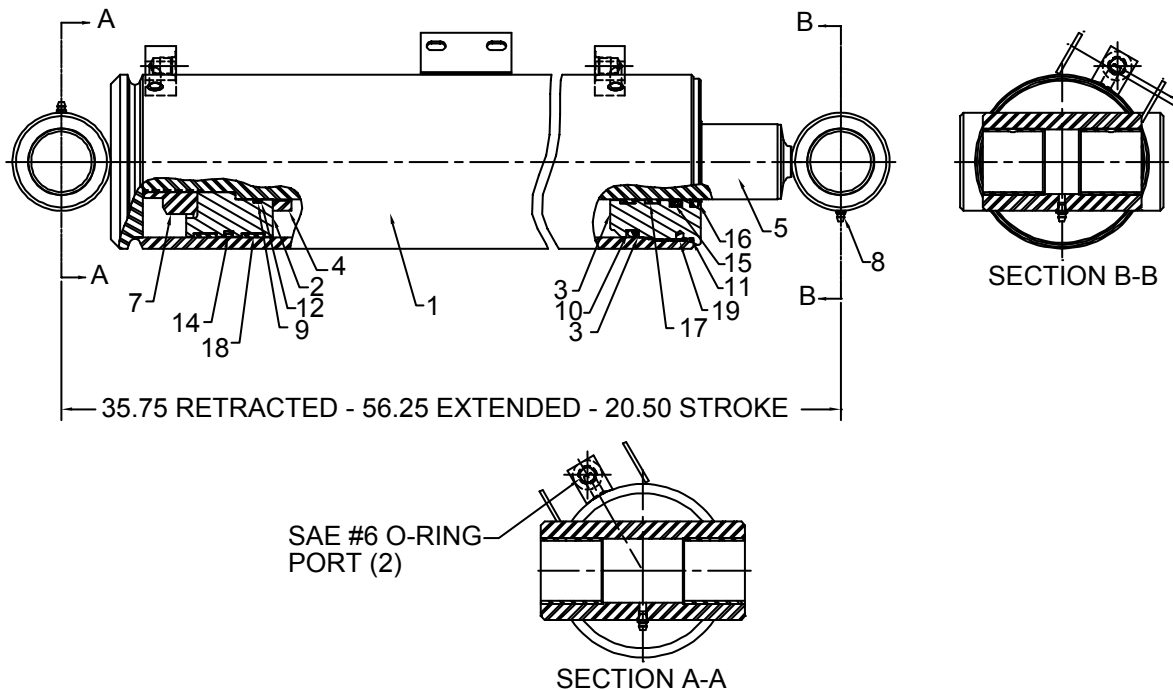
NOTES:

- 1 INSTALL #5 WEAR PAD, THEN #6 ROUND WEAR PAD, THEN EXTENSION BOOMS.
- 2 PIN #3 MUST GO THROUGH THE LOWER BOOM AND MAST ASSEMBLIES.
- 3 APPLY NEVER-SEEZ TO COLLAR I.D.
- 4 APPLY NEVER-SEEZ TO PIN, NOT TO EXCEED THE WIDTH OF THE COLLAR I.D.
- 5 ADD SERVICEABLE THREAD LOCKER TO ITEM #7.

41717027 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	52716469	LOWER BOOM WLDMT (INCL. 25)	1
2.	52716486	PIN	1
3.	52716487	PIN	2
4.	70146427	CYL – 6025 LOWER	1
5.	60122982	WEAR PAD – 0.50 x 5.00 x 7.88	1
6.	60122985	WEAR PAD – RND	2
7.	72060091	CAP SCR 1/2 – 13X 1.00	3
8.	70034381	SUPPORT	2
9.	60105544	PLATE – ANGLE PLASTIC	2
10.	72053508	ZERK – NPT .12	2
11.	70034382	GREASE CAP – RED	2
12.	72063005	WASHER 1/2 W FLAT	4
13.	72063003	WASHER 3/8 W FLAT ANSI B27.2	2
14.	72062103	NUT 3/8-16 HEX NYLOC ZINC	2
15.	72063001	WASHER 1/4 LOCK ZINC	4
16.	72062104	NUT 1/4-20 HEX NYLOC ZINC	1
17.	72063053	WASHER 1/2 LOCK ZINC	3
18.	73540094	PRESSURE VALVE, DUAL CONTROL	1
19.	70145753	TUBE ASM	1
20.	70145927	TUBE ASM	1
21.	72060037	CAP SCR 5/16–18X 4.00 HHGR5Z	2
22.	72063002	WASHER 5/16 W FLAT ANSI B27.2	4
23.	72062109	NUT 5/16-18 HEX NYLOC ZINC	2
24.	72533186	ADPTR-#6 M FACE/#6 M STR	4
25.	70055203	BEARING-GAR DX 2.00X2.19X1.5	2 REF
26.	72063039	MACH BUSING 2.00X10 GA NR	2
27.	72060006	CAP SCR 1/4-20 X 1.5 HH GR5Z	1

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Cylinder, Lower, 6025 (70146427)



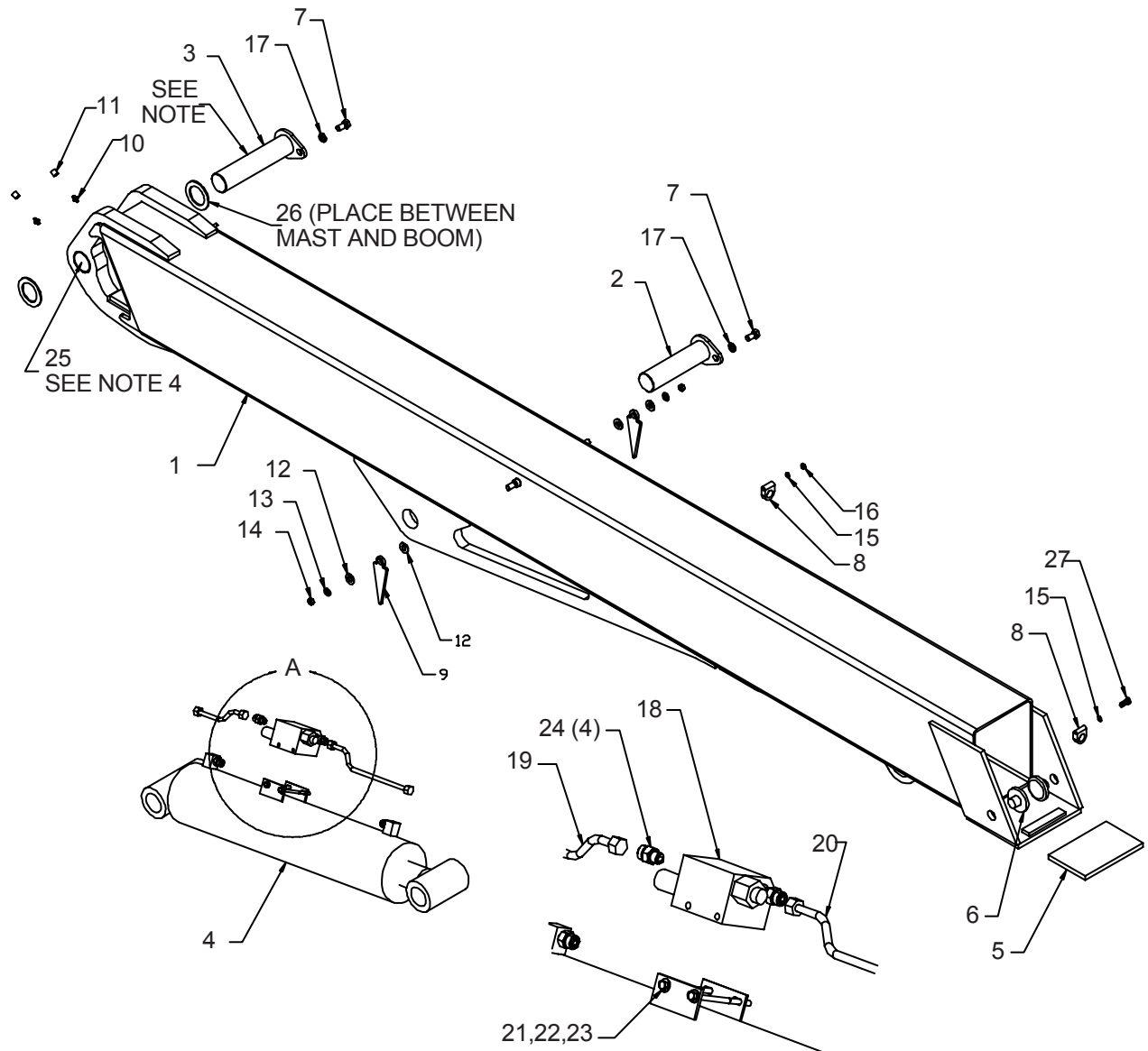
NOTES:

- 1 OPERATING PRESSURE - 3000 PSI; TEST PRESSURE - 3500 PSI.
- 2 TORQUE ITEM #6, LOCKNUT, WITH THREADLOCKING COMPOUND TO 2,000 - 2,200 FT-LB. USE LOCTITE GRADE 271 OR EQUIVALENT.
- 3 TORQUE ITEM #3, HEAD GLAND, TO 300 - 400 FT-LB.

70146427 PARTS LIST

ITEM	PART #	DESCRIPTION	QUANTITY
1.	015LC0063	TUBE WELDMENT	1
2.	050LE0013	PISTON	1
3.	060LT0007	HEAD GLAND	1
4.	065TB0001	ROD SPACER	1
5.	075TC0058	ROD WELDMENT	1
6.	107KS0011	BUSHING	4
7.	108BL0006	LOCK NUT 2-12	1
8.	109BA0001	GREASE ZERK	2
9.	120FZ0006	O-RING	1REF
10.	120LZ0001	O-RING	1REF
11.	120LZ0003	O-RING	1REF
12.	123FZ0011	BACKUP RING	2REF
13.	123LZ0002	BACKUP RING	1REF
14.	128KZ0003	DISC	1REF
15.	134GZ0003	DEEP Z-SEAL W/ROD BACKUP	1REF
16.	156FZ0002	ROD WIPER	1REF
17.	166FZ0005	PRECISION WEARBAND	2REF
18.	166LZ0001	PRECISION WEARBAND	2REF
19.	174CZ0002	LOCKING INSERT	2REF
20.	092LT0059	SEAL KIT (INCL. 9-19)	1

Boom Assembly, Lower, 6625 (41716516)



DETAIL A
SCALE 3:1

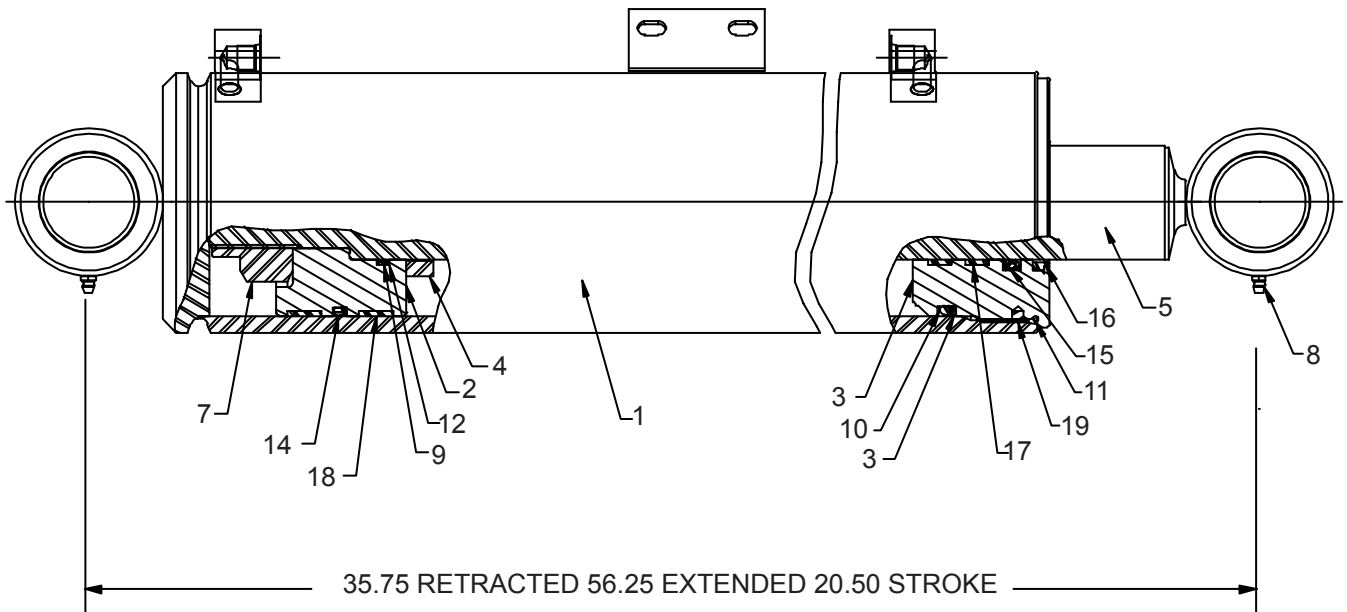
NOTES:

- 1 INSTALL #5 WEAR PAD, THEN #6 ROUND WEAR PAD, THEN EXTENSION BOOMS.
- 2 PIN #3 MUST GO THROUGH THE LOWER BOOM AND MAST ASSEMBLIES.
- 3 APPLY NEVER-SEEZ TO COLLAR I.D.
- 4 APPLY NEVER-SEEZ TO PIN, NOT TO EXCEED THE WIDTH OF THE COLLAR I.D.
- 5 ADD SERVICEABLE THREAD LOCKER TO ITEM #7.

41716516 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	52716469	LOWER BOOM WLDMT (INCL. 25)	1
2.	52716486	PIN	1
3.	52716487	PIN	1
4.	70146304	LOWER CYLINDER	1
5.	60122982	WEAR PAD	1
6.	60122985	WEAR PAD – RND	2
7.	72060091	CAP SCR 1/2 – 13X 1.00	3
8.	70034381	SUPPORT	2
9.	60105544	PLATE – ANGLE PLASTIC	2
10.	72053508	ZERK – NPT 1/8	2
11.	70034382	GREASE CAP – RED	2
12.	72063005	WASHER 1/2 FLAT	4
13.	72063003	WASHER 3/8 FLAT	2
14.	72062103	NUT 3/8-16 HEX NYLOC ZINC	2
15.	72063001	WASHER 1/4 LOCK ZINC	4
16.	72062104	NUT 1/4-20 HEX NYLOC ZINC	1
17.	72063053	WASHER 1/2 LOCK ZINC	3
18.	73540094	VALVE – DUAL CTRL PRESS SW	1
19.	70145753	TUBE ASM	1
20.	70145927	TUBE ASM	1
21.	72060037	CAP SCR 5/16 – 18X 4.00 HHGR5	2
22.	72063002	WASHER 5/16 FLAT	4
23.	72062109	NUT 5/16-18 HEX NYLOC ZINC	2
24.	72533186	ADPTR-#6 M FACE/#6 M STR	4
25.	70055203	BEARING-GAR DX 2.00X2.19X1.5	2 REF
26.	72063039	MACH BUSHING 2.00 X 10GA	2
27.	72060006	CAP SCR 1/4-20 X 1.5 HH GR5Z	1

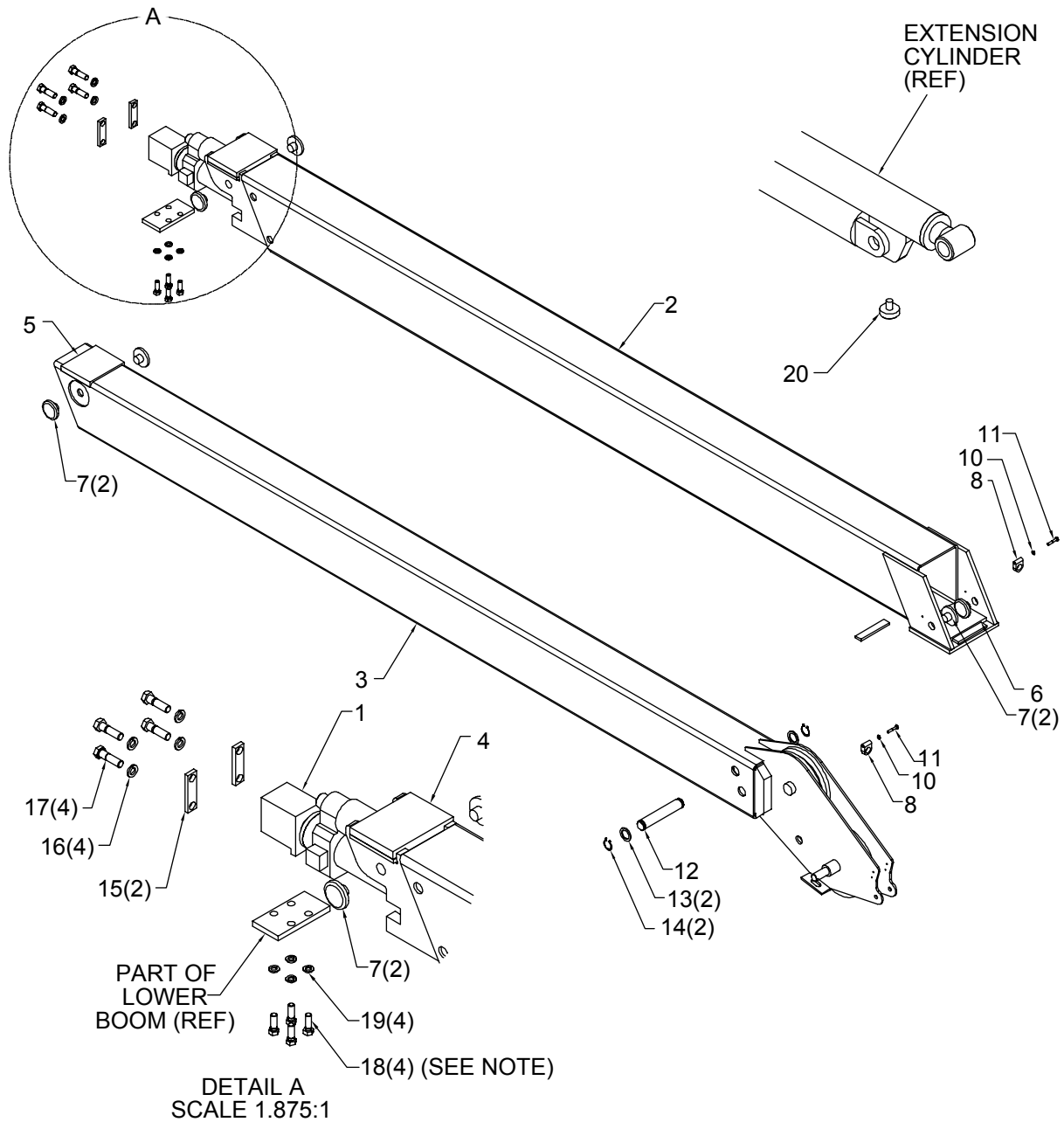
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Cylinder, Lower, 6625 (70146304)



70146304 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	015LC0055	TUBE WELDMENT	1
2.	050LE0011	PISTON	1
3.	060LT0008	HEAD GLAND	1
4.	065TB0001	ROD SPACER	1
5.	075TC0058	ROD WELDMENT	1
6.	107KS0011	BUSHING	4
7.	108BL0006	LOCK NUT 2-12	1
8.	109BA0001	GREASE ZERK	2
9.	120FZ0006	O-RING	1REF
10.	120LZ0009	O-RING	1REF
11.	120MZ0005	O-RING	1REF
12.	123FZ0011	BACKUP RING	2REF
13.	123LZ0008	BACKUP RING	1REF
14.	128LZ0005	DISC	1REF
15.	134GZ0003	DEEP Z-SEAL W/ROD BACKUP	1REF
16.	156FZ0002	ROD WIPER	1REF
17.	166FZ0005	PRECISION WEARBAND	2REF
18.	166LZ0006	PRECISION WEARBAND	2REF
19.	174CZ0002	LOCKING INSERT	2REF
20.	092LT0059	SEAL KIT (INCL. 9-19)	1

Boom Assembly, Extension (41716517)

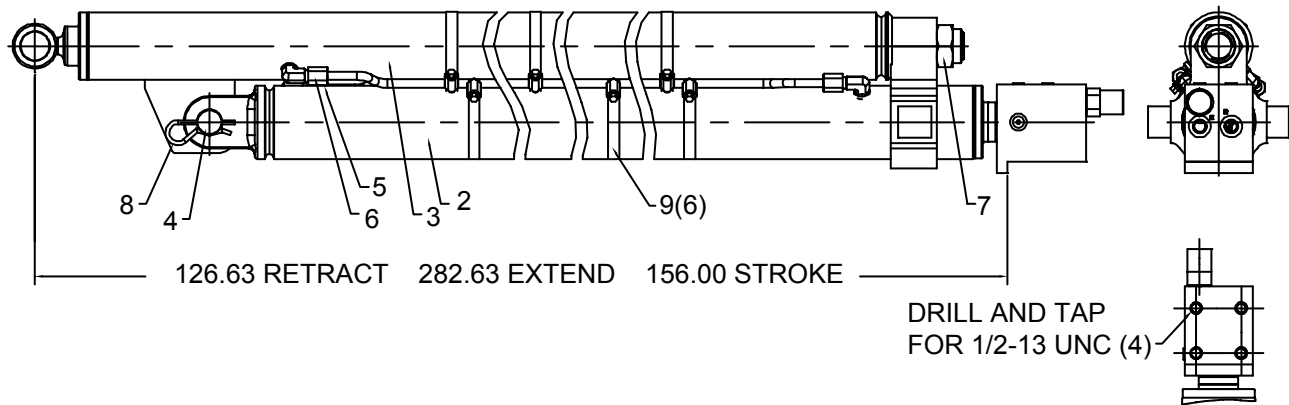


NOTE:
ADD SERVICEABLE THREAD LOCK TO ITEMS #17 AND #18.

41716517 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	51716461	EXTENSION CYLINDER ASM	1
2.	52716467	BOOM – EXT WLDMT 1ST STAGE	1
3.	52716473	BOOM – EXT WLDMT STINGER	1
4.	60122980	WEAR PAD	1
5.	60122981	WEAR PAD	1
6.	60122983	WEAR PAD	1
7.	60122985	WEAR PAD –RND BOOM	6
8.	70034381	SUPPORT – WIRE GUIDE	2
10.	72063001	WASHER 1/4 FLAT ZINC	2
11.	72060006	CAP SCR 1/4–20 X 1.50 HH GR5	2
12.	60122986	PIN	1
13.	72063035	MACH BUSHING 1.25 X 7.00	2
14.	72066129	RETAINING RING–EXT 1.25 HD	2
15.	60122977	RETAINER PLATE–EXT 1.25 HD	2
16.	72063055	WASHER 5/8 LOCK ZINC	4
17.	72060149	CAP SCR 5/8-11 X 1.50 HHGR5Z	4
18.	72060093	CAP SCR 1/2 – 13X 1.50 HHGR5Z	4
19.	72063053	WASHER 1/2 LOCK ZINC	4
20.	60122984	WEAR PAD – RND CYLINDER	1

REV. D 20051115

Cylinder Assembly, Extension (51716461)



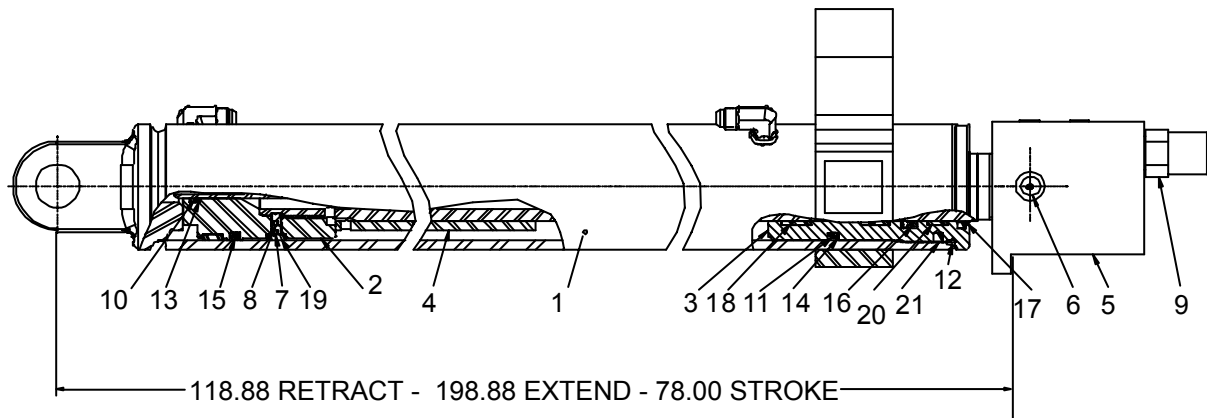
NOTES:

- 1 OPERATING PRESSURE: 3000 PSI; TEST PRESSURE: 3500 PSI
- 2 TORQUE ITEM #7 (LOCKNUT) WITH THREADLOCK COMPOUND TO 325 TO 380 FT-LB. USE LOCKTITE GRADE 271 OR EQUIVALENT.

51716461 PARTS LIST

ITEM	PART #	DESCRIPTION	QUANTITY
1.	001EE0006	HYDRAULIC LINE	2
2.	70146296	CYLINDER	1
3.	70146297	CYLINDER	1
4.	103MG006	CLEVIS PIN	1
5.	106EA0006	NUT, FLARELESS TUBE 6	4
6.	106EB0007	FERRELE, FLARELESS TUBE 6	4
7.	108BL0002	LOCK NUT 1.25-12 UNF	1
8.	108LZ0002	HITCH PIN CLIP	2
9.	108NZ0005	HOSE CLAMP	6

Cylinder, Extension (70146296)



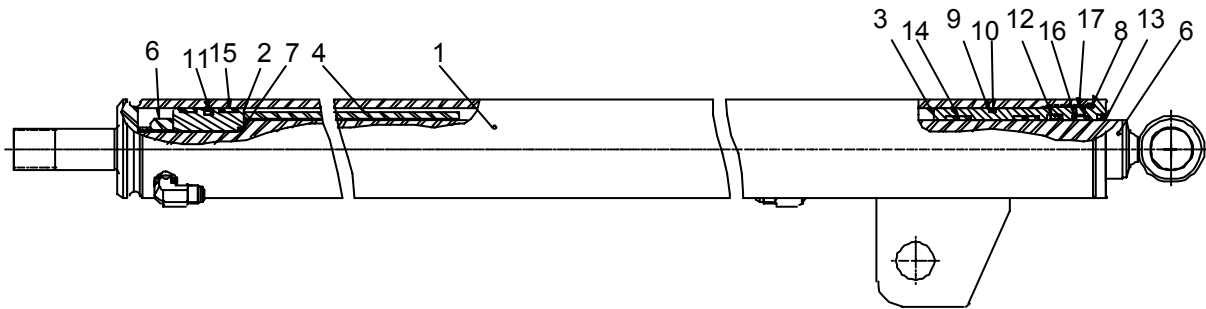
NOTES:

- 1 OPERATING PRESSURE - 3000 PSI; TEST PRESSURE - 3500 PSI
- 2 TORQUE PISTON #2 WITH THREADLOCKING COMPOUND TO 150 TO 200 FT-LB. USE LOCTITE GRADE 271 OR EQUIVALENT.
- 3 TORQUE THE FOLLOWING ITEMS WITH THREADLOCKING COMPOUND. USE LOCTITE GRADE 243 OR EQUIVALENT: O-RING BOSS PLUG (#6) TO 55-65 IN-LB, SET SCREWS (#7 & #8) TO 60-70 IN-LB.
- 4 TORQUE HEAD GLAND (#3) TO 200-250 FT-LB.
- 5 TORQUE COUNTERBALANCE VALVE (#8) TO 30-35 FT-LB.

70146296 PARTS LIST

ITEM	PART #	DESCRIPTION	QUANTITY
1.	015FC0032	TUBE WELDMENT	1
2.	050FE0016	PISTON	1
3.	060FR0007	HEAD GLAND	1
4.	065RY0004	ROD SPACER	1
5.	075RD0015	ROD WELDMENT	1
6.	106CJ0007	PLUG, SAE 3 HOLE HEX	5
7.	108FB0006	SET SCR 1/4-20X1/4	1
8..	108FB0030	SET SCR 1/4-20X5/16	1
9.	114BB0029	VALVE-CBAL	1
10.	120BZ0021	O-RING	1REF
11.	120FZ0009	O-RING	1REF
12.	120GZ0003	O-RING	1REF
13.	123BZ0013	BACKUP RING	2REF
14.	123FZ0006	BACKUP RING	1REF
15.	128FZ0004	DISO-PAC	1REF
16.	134EZ0007	DEEP Z-SEAL	1REF
17.	156DZ0001	HD ROD WIPER	1REF
18.	165EZ0005	WEARBAND	2REF
19.	165FZ0005	WEARBAND	2REF
20.	167EZ0001	WEARBAND, 15% PTFE IMPREG.	1REF
21.	174CZ0002	LOCKING INSERT	2REF
22.	092FR0012	SEAL KIT (INCL. 10-21)	1

Cylinder, Extension (70146297)

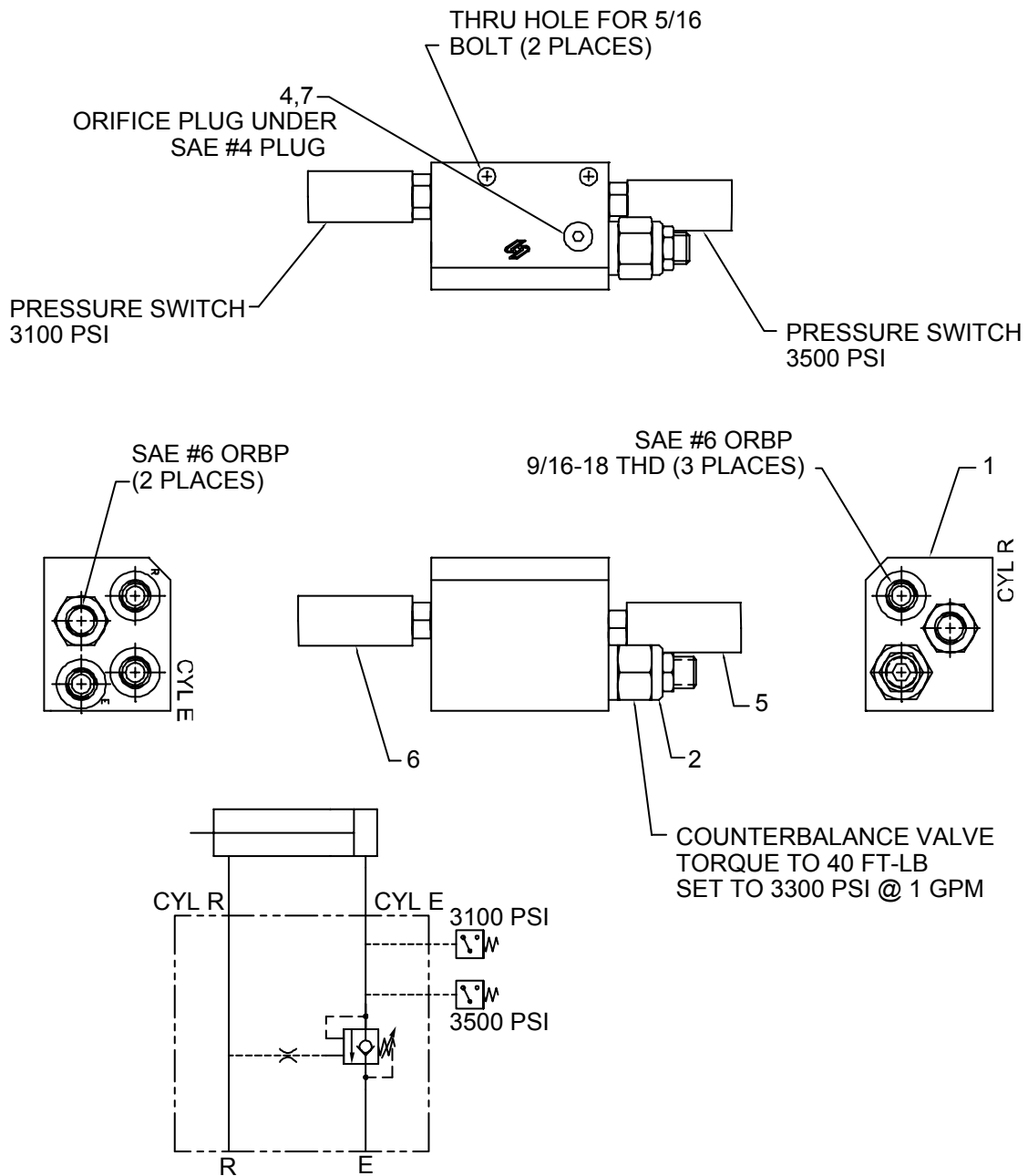


NOTES:

- 1 OPERATING PRESSURE - 3000 PSI; TEST PRESSURE - 3500 PSI
- 2 TORQUE LOCKNUT #6 WITH THREADLOCKING COMPOUND TO 330 TO 380 FT-LB. USE LOCTITE GRADE 271 OR EQUIVALENT.
- 3 TORQUE HEAD GLAND #3 TO 200 - 250 FT-LB.

70146297 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	015FC0033	TUBE WELDMENT	1
2.	050FE0015	PISTON	1
3.	060FR0008	HEAD GLAND	1
4.	065RY0005	ROD SPACER	1
5.	075RC0059	ROD WELDMENT	1
6.	108BL0001	LOCK NUT	1
7.	120CZ0020	O-RING	1REF
8.	120FZ0006	O-RING	1REF
9.	120FZ0013	O-RING	1REF
10.	123FZ0003	BACKUP RING	1REF
11.	128FZ0003	DISO-PAC	1REF
12.	134EZ0007	DEEP Z-SEAL	1REF
13.	156DZ0001	HD ROD WIPER, SEALED	1REF
14.	165EZ0005	WEARBAND	2REF
15.	165FZ0002	WEARBAND	2REF
16.	167EZ0001	WEARBAND, 15% PTFE IMPREG.	1REF
17.	174CZ0002	LOCKING INSERT	2REF
18.	092FR0013	SEAL KIT (INCL. 7-17)	1

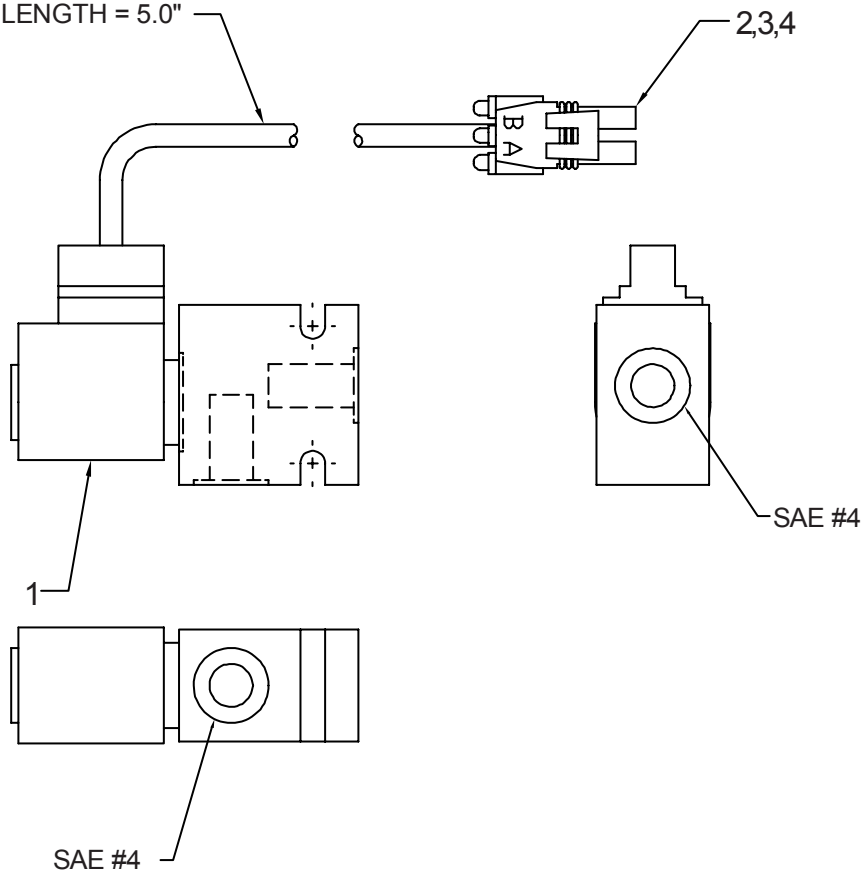
Valve, Counterbalance (73540094)



73540094 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	73540051	VALVE, C-BAL	1
2.	73540052	VALVE, C-BAL	1
4.	70145750	ORIFICE	1
5.	77041626	PRESSURE SWITCH	1
6.	77041625	PRESSURE SWITCH	1
7.	72533477	PLUG, STR HOL HEX STL 7/16 THD	2

Valve, Dump, 6025-6625 (51717338)

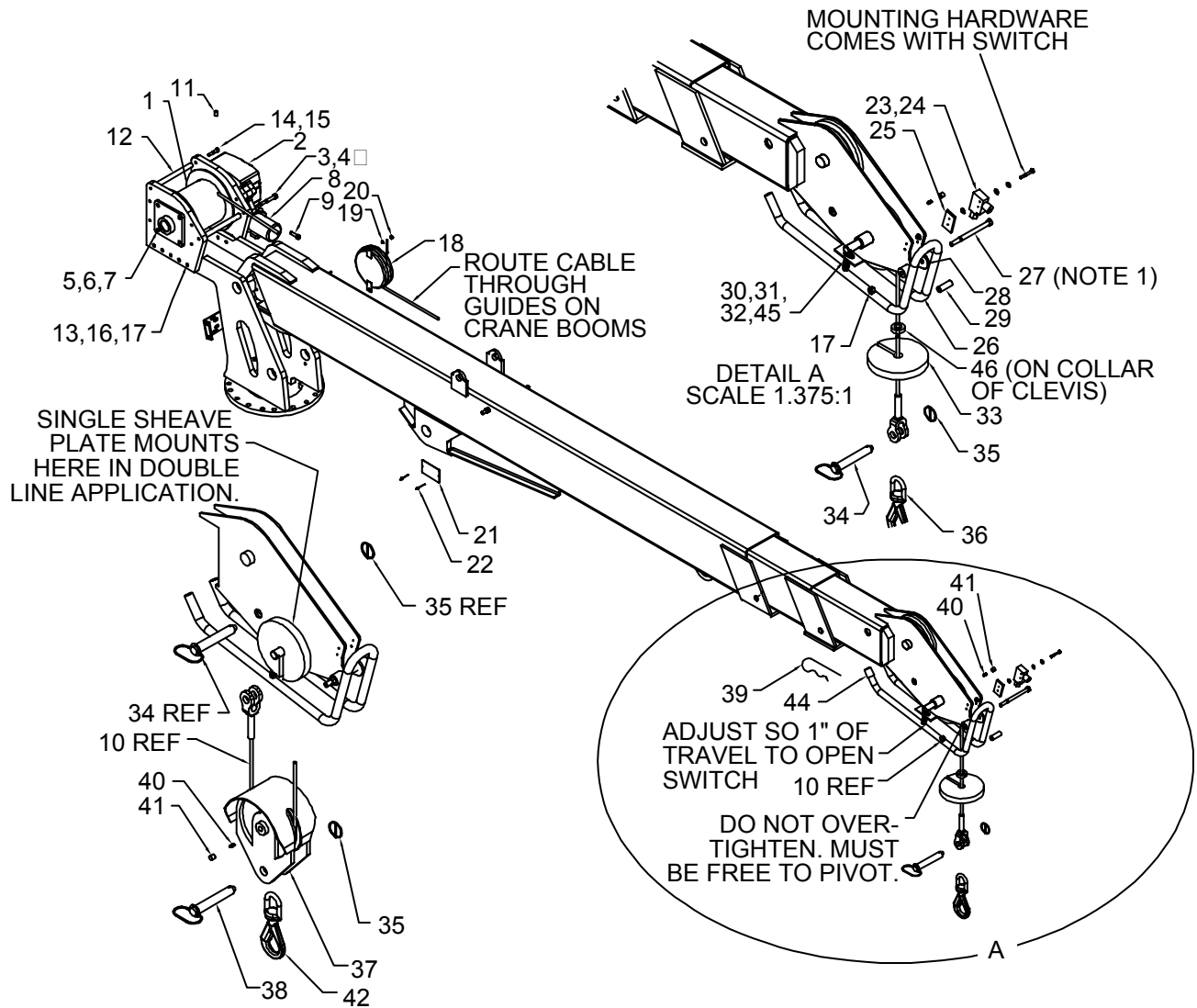
CABLE LENGTH = 5.0"



51717338 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	73540090	VALVE, SOLENOID	1
2.	77044573	CONNECTOR, 2 CAVITY MALE W/SHROUD	1
3.	77044552	TERMINAL, 18-20 GA MALE	2
4.	70394069	CABLE SEAL, 16 GA GREEN	2

REV. A 20040610

Winch / Cable / Hook Kit, 5525 (31716518)



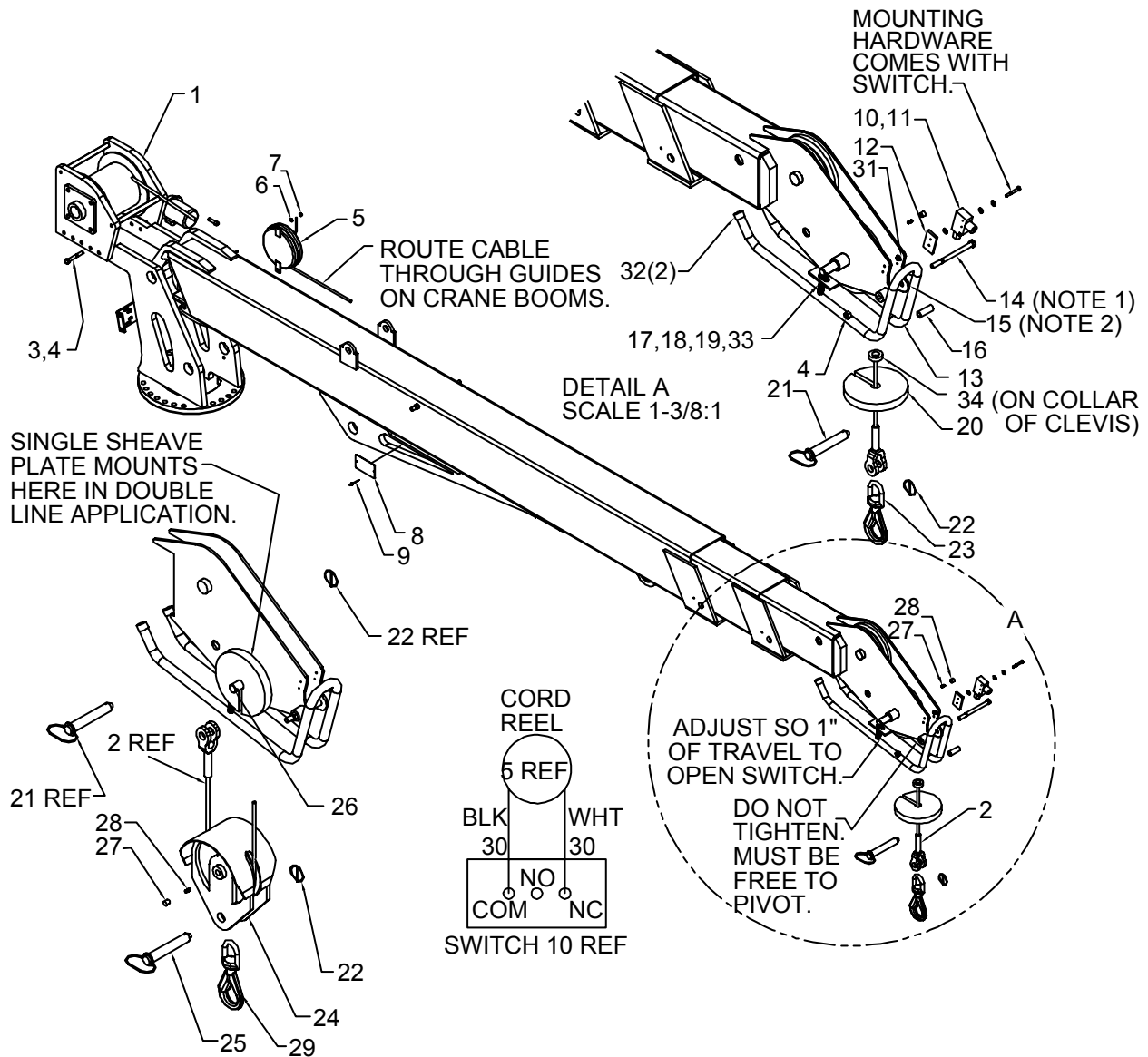
NOTES:

- 1 ADD NEVER-SEEZ TO BOLT, SPACER, AND PIVOT POINTS.
- 2 LOCATE WASHER ON EITHER SIDE TO POSITION WELDED STUDS IN CENTER OF SLOTS.

31716518 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	52712162	WINCH DRUM	1
2.	70570198	WINCH	1
3.	72060921	CAP SCR 1/2-13X3.75 HHGR5	4
4.	72063053	WASHER 1/2 LOCK	4
5.	70055117	BEARING, FLANGE BLOCK	1
6.	72060148	CAP SCREW 5/8-11 X 1.25	4
7.	72063055	WASHER 5/8 LOCK	4
8.	73051513	HYDRAULIC MOTOR	1
9.	72060064	CAP SCREW 7/16-4 X 1.5 HH	2

31716518 PARTS LIST			
10.	70580168	WIRE ROPE ASM	1
11.	72060596	SET SCR 1/2-13X 3/4 SH-PL	1
12.	60122978	SPACER-WINCH MTG	2
13.	52717294	WINCH MTG PLATE	2
14.	72060050	CAP SCR 3/8-16 X 2 HHGR5	4
15.	72063051	WASHER 3/8 LOCK	4
16.	72060096	CAP SCR 1/2-13X2.5 HHGR5	10
17.	72062004	NUT 1/2-13 HEX ZINC	11
18.	51713168	CORD REEL ASM	1
19.	72063001	WASHER 1/4 FLAT	2
20.	72062104	NUT 1/4-20 HEX NYLOC	2
21.	70029119	SERIAL NUMBER PLACARD	1
22.	72066340	POP RIVET 1/8X 3/8	1
23.	77041459	LIMIT SWITCH	1
24.	77044468	CONNECTOR 1/2 STR RELIEF	1
25.	60122311	SPACER	1
26.	52715833	GUARD, BOOM TIP	1
27.	72060104	CAP SCR 1/2-13X6.5	1
28.	72063005	WASHER 1/2 FLAT	2
29.	60122329	SPACER 1/2 BLK PIPE	1
30.	70146096	SPRING 5/8 X 2.5 X 14 GA	2
31.	72063003	WASHER 3/8 FLAT	4
32.	72062103	NUT 3/8-16 HEX NYLOC	2
33.	60122358	PLATE	1
34.	72661514	PIN	1
35.	72661543	PIN-QUICK	2
36.	71073035	SWIVEL HOOK	1
37.	52715896	GUARD, SNATCH BLOCK	1
38.	73733171	LOCK PIN	1
39.	72066145	HAIR PIN 3/16 ZINC	1
40.	72053508	ZERK 1/8 NPT	2
41.	70034382	GREASE CAP	2
42.	70732882	SWIVEL HOOK, 5.9 TON	1
43.	77040051	TERMINAL	2
44.	70396121	PLASTIC CAP	2
45.	72063117	WASHER 9/16 FLAT	2
46.	70145121	COLLAR, LOCKING	1

Winch / Cable / Hook Kit, Planetary, 6025-6625 (31716521)



NOTES:

- 1 ADD NEVER-SEEZ TO BOLT, SPACER AND PIVOT POINTS.
- 2 LOCATE WASHER ON EACH SIDE TO POSITION WELDED STUDS IN CENTER OF SLOTS.

31716521 PARTS LIST

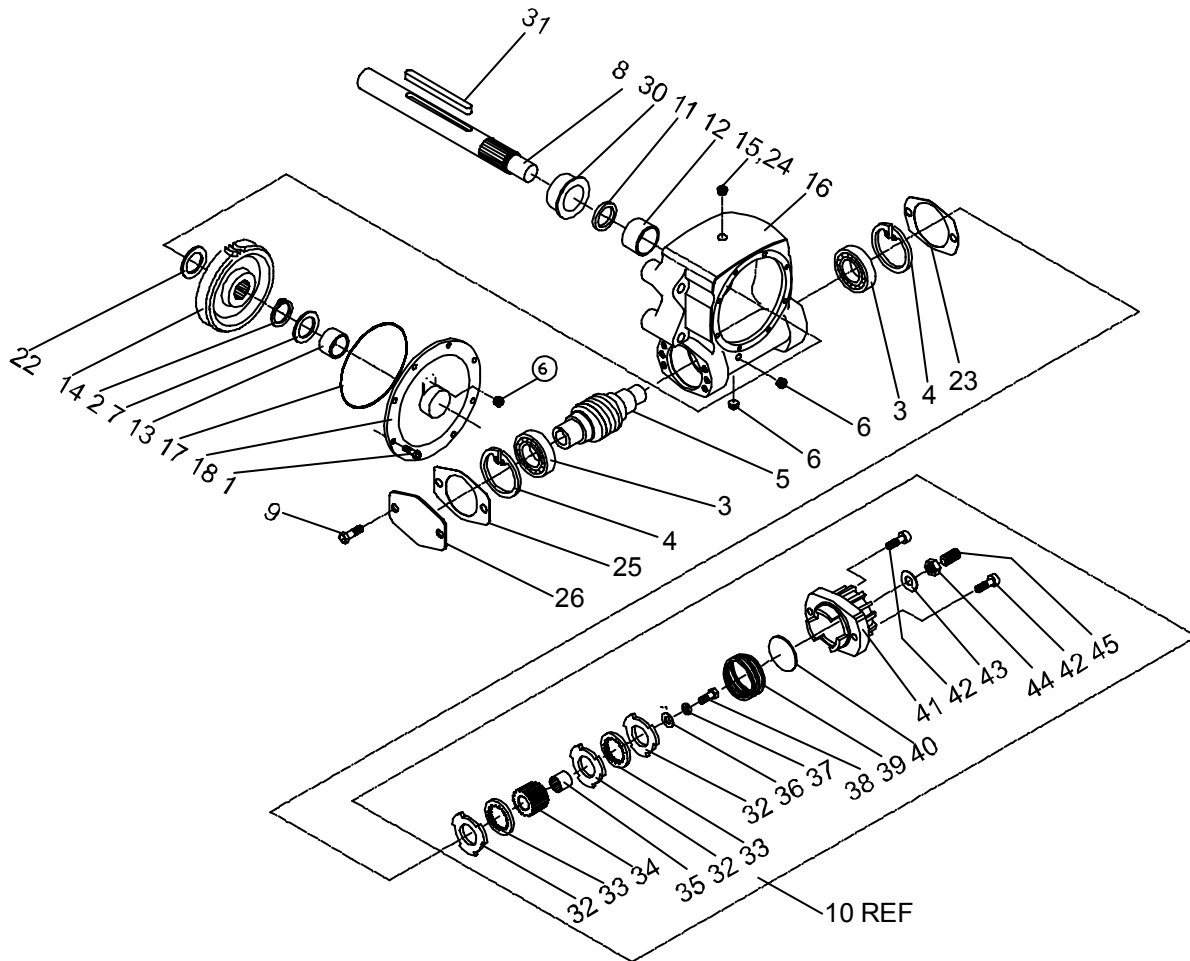
ITEM	PART #	DESCRIPTION	QUANTITY
1.	70146319	WINCH-PLANETARY	1
2.	70580168	WIRE ROPE ASM, LH	1
3.	72060096	CAP SCR 1/2-13X2.50 HHGR5Z	10
4.	72062080	NUT 1/2-13 HEX NYLOC ZINC	11
5.	51713168	CORD REEL ASM	1

31716521 PARTS LIST			
6.	72063001	WASHER 1/4 FLAT	2
7.	72062104	NUT 1/4-20 HEX NYLOC	2
8.	70029119	PLACARD	1
9.	72066340	POP RIVET 1/8 X 3/8 GRIP	2
10.	77041459	LIMIT SWITCH	1
11.	77044468	CONNECTOR-1/2 STR RLF	1
12.	60122311	SPACER-SINGLE SHEAVE SW	1
13.	52715833	GUARD WELDMENT	1
14.	72060104	CAP SCR 1/2-13 X 6.5 HHGR5Z	1
15.	72063005	WASHER 1/2 FLAT	1
16.	60122329	SPACER 1/2 BLACK PIPE X 2.00	1
17.	70146096	SPRING 5/8 X 2.5 X 14GA	2
18.	72063003	WASHER 3/8 FLAT	4
20.	60122358	PLATE-SINGLE SHEAVE	1
21.	72661514	PIN-LOCK W/ HANDLE	1
22.	72661543	QUICK PIN	2
23.	71073035	SWIVEL HOOK	1
24.	52715896	GUARD WELDMENT	1
25.	73733171	LOCK PIN 1X6 W/HAIRPIN	1
26.	72066145	HAIR PIN .19 ZINC	1
27.	72053508	GREASE ZERK 1/8 NPT	3
28.	70034382	GREASE CAP, RED	3
29.	70732882	SWIVEL HOOK	1
30.	77040051	TERMINAL, SPRSPADE 8STUD	2
31.	72601726	NUT #6-32 HEX NYLOC	2
32.	70396121	PLASTIC CAP	2
33.	72063117	WASHER 9/16 FLAT	2
34.	70145121	SHAFT COLLAR	1

REV. D 20040524

NOTE: UNITS WITH S/N 6025021111 TO PRESENT HAVE WIRE ROPE ASSEMBLY 70580168. EARLIER UNITS HAVE WIRE ROPE ASSEMBLY 70280089.

Winch, 5525 (70570198)

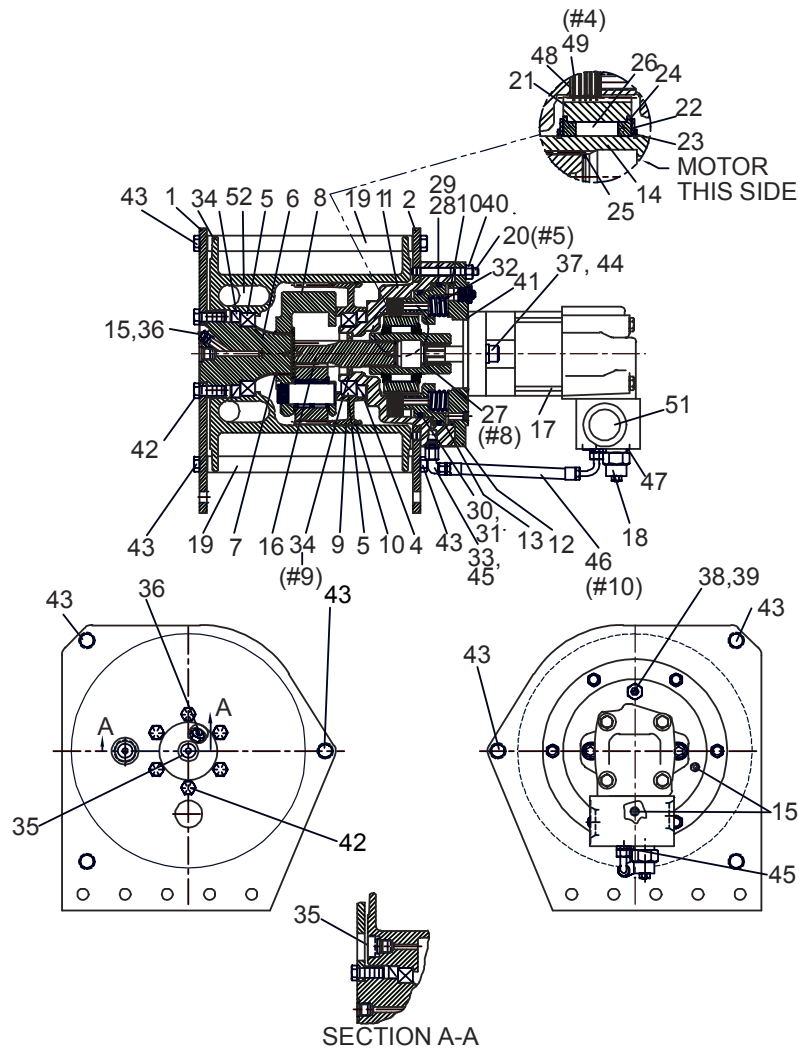


70570198 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	72601568	CAP SCREW	8
2.	70143945	SNAP RING	1
3.	70055220	BALL BEARING	2
4.	72661403	RETAINING RING	2
5.	70056522	WORM-SR	1
6.	70143865	PIPE PLUG	2
7.	70143946	THRUST WASHER	1
8.	70145384	OUTPUT SHAFT	1
9.	72601567	CAP SCREW	2
10.	70733135	BRAKE KIT	1
11.	76393419	OIL SEAL	1
12.	70143948	BUSHING	1
13.	70143949	BUSHING	1
14.	70056521	WORM GEAR	1
15.	70048156	BREATHER	1
16.	70143940	HOUSING	1
17.	76393420	O-RING	1
18.	70143951	COVER	1

70570198 PARTS LIST			
19.	70029559	NAMEPLATE	1
22.	70143952	WASHER	1
23.	76394300	GASKET	1
24.	70143861	PIPE BUSHING	1
25.	76393171	GASKET	1
26.		PROTECTOR	
30.	70145383	SPACER	1
31.	70145382	KEY	1
32.	70145381	STATOR PLATE	3REF
33.	70145380	FRICTION DISC	2REF
34.	70145379	BRAKE HUB	1REF
35.	70143662	CAM CLUTCH	1REF
36.	70145377	WASHER	1REF
37.	72063188	LOCK WASHER	1REF
38.	72601724	CAP SCREW	1REF
39.	70145376	BRAKE SPRING	1REF
40.	70143660	THRUST WASHER	1REF
41.	70143666	BRAKE HOUSING	1REF
42.	72601721	CAP SCREW	2REF
43.	76293172	WASHER SEAL	1REF
44.	72601722	LOCKNUT SEAL	1REF
45.	72601723	SET SCREW	8REF

REV. C 20040421

Winch, Planetary, 6025-6625 (70146319)



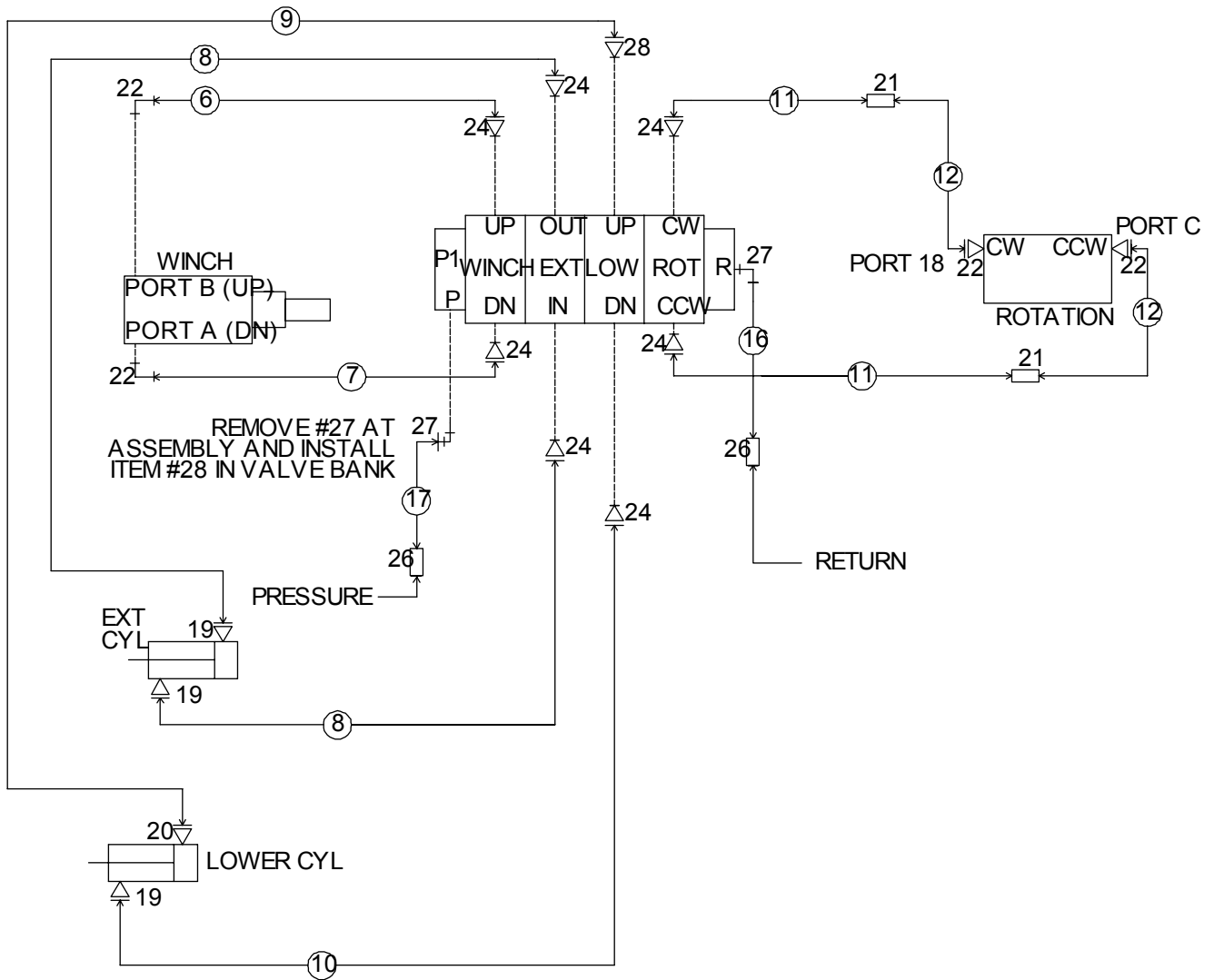
NOTES:

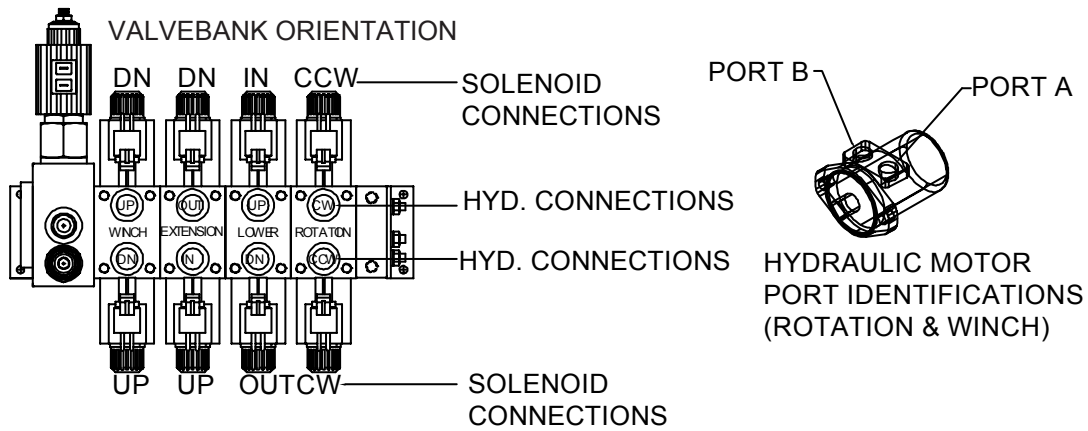
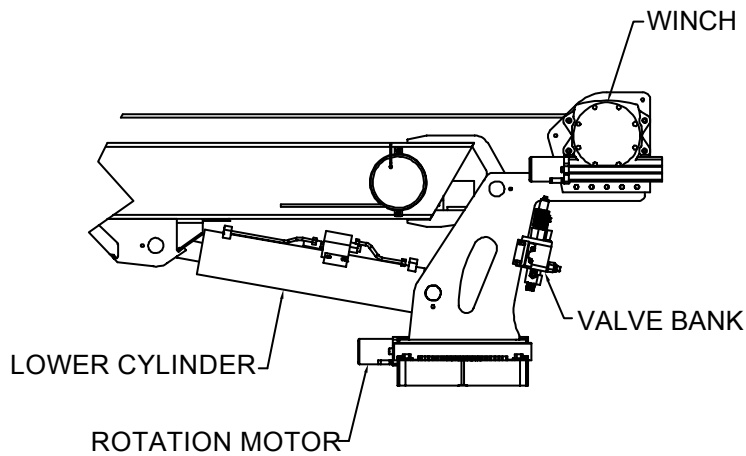
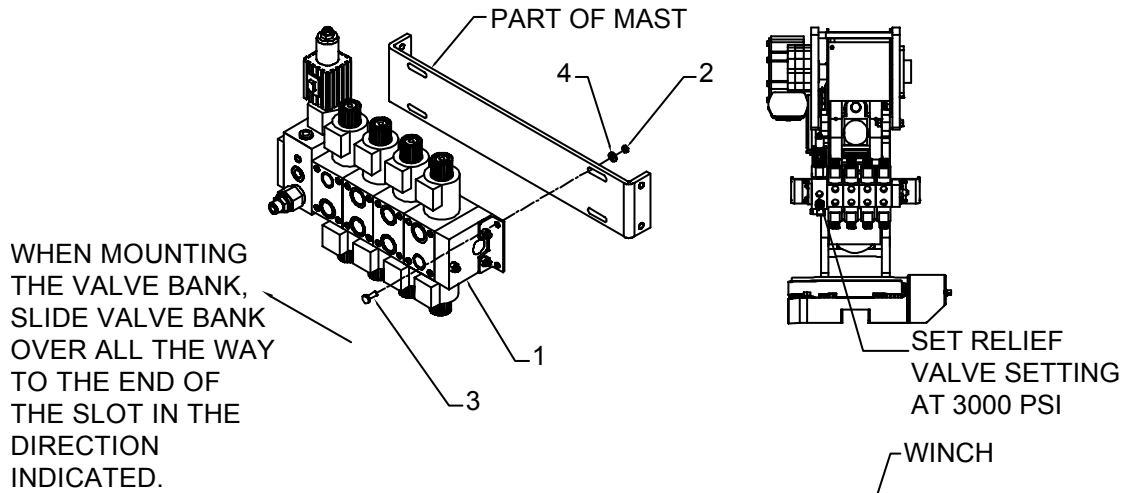
- 1 FILL GEARBOX WITH EP 90 WT. OIL.
- 2 FILL BRAKE END WITH AUTOMATIC TRANSMISSION FLUID.
- 3 BRAKE TORQUE: 0-10 FT-LB AT 320-340 PSI; 95-115 FT-LB AT 280 PSI
- 4 SOAK FRICTION DISKS (ITEM 49) BEFORE ASSEMBLY.
- 5 APPLY LOCKTITE TO SHORT THREAD OF STUD (ITEM 20) BEFORE MOUNTING TO SIDE PLATE.
- 6 PLUG BREATHER AND BUSHING ITEM (38) WITH PIPE PLUG ITEM (39). SHIP BREATHER AND BUSHING LOOSE IN BAG.
- 7 PLUG BREATHER ITEM (36) WITH PIPE PLUG ITEM. SHIP BREATHER LOOSE IN BAG.
- 8 ITEM 27 (RETAINING RING) IS TO BE INSTALLED IN THE SECOND RING GROOVE OF ITEM 14 (DRIVER).
- 9 SEAL MUST BE PRESSED DOWN TO SHOULDER AS SHOWN.
- 10 ITEM 46 WILL BE REMOVED FOR INSTALLATION.

70146319 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	73734105	SIDE PLATE	1
2.	73734106	SIDE PLATE	1
3.	73734107	DRUM	1
4.	73734108	SEAL KIT	1
5.	73734109	BEARING	2
6.	73734110	SHAFT	1
7.	73734111	RETAINING RING	1
8.	73734112	PLANETARY GEAR SET	1
9.	73734113	CARRIER BEARING	1
11.	73734114	BRAKE HOUSING	1
12.	73734115	BRAKE COVER	1
13.	73734116	BRAKE PISTON	1
14.	73734117	BRAKE DRIVER	1
15.	73734118	PIPE PLUG	3
16.	73734119	SUN INPUT GEAR	1
17.	73734120	HYDRAULIC MOTOR	1
18.	73734121	COUNTER BALANCE VALVE	1
19.	73734122	SUPPORT ROD	3
20.	73734123	STUD	6
21.	73734124	BRAKE DRIVER	1
22.	73734125	RACE 707W 1200W	2
23.	73734126	RETAINING RING	2
24.	73734127	BUSHING 707W 1200W	2
25.	73734128	RETAINING RING 707W 1200W	1
26.	73734129	CLUTCH 707W 1200W	1
27.	73734130	RETAINING RING 2025S	1
32.	73734131	BRAKE SPRING 707W 1200W	12
33.	73734132	SWIVEL ADAPTER 90 DEG	1
35.	73734133	O-RING PLUG	2
36.	73734134	BREATHER	2
37.	73734135	SOCKET HEAD CAP SCREW	2
38.	73734136	PIPE BUSHING	1
39.	73734137	PIPE PLUG	1
40.	73734138	NUT	6
42.	73734139	CAP SCREW	6
43.	73734140	CAP SCREW	6
44.	73734141	LOCK WASHER HI COLLAR	2
45.	73734142	STRAIGHT ADAPTER	2
46.	73734143	HOSE ASSY	1
47.	73734144	SOCKET HEAD CAP SCREW	3
48.	73734145	STATOR PLATE 2707S 707W	6
49.	73734146	FRICITION DISC	5
51.	73734147	CAPLUG	2
52.	73734148	WEDGE	52

Hydraulics

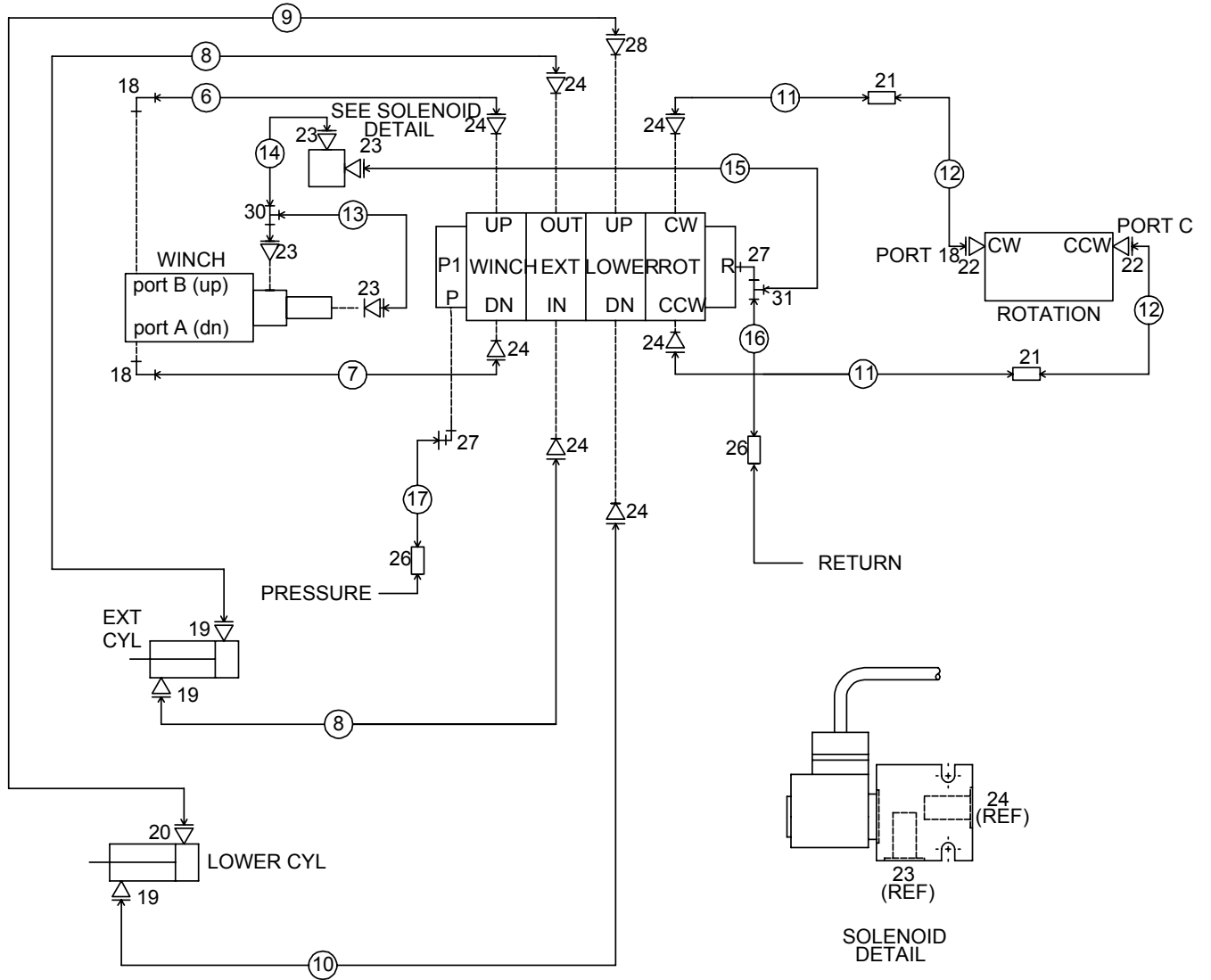
Hydraulic Kit, 5525 Tethered (91717399) & Radio (91717400)

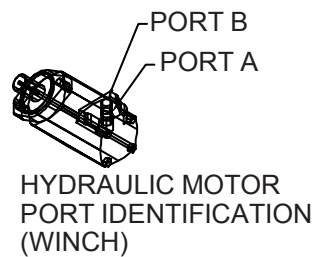
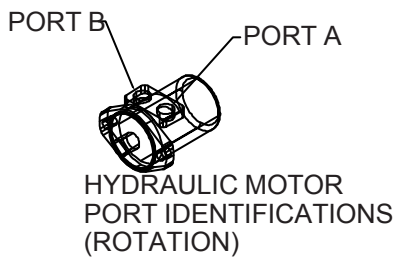
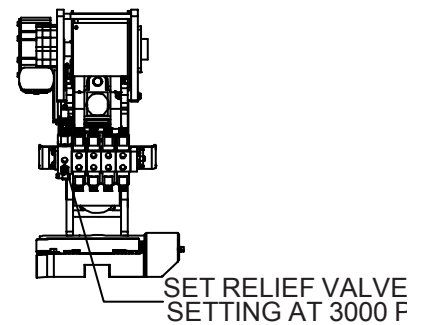
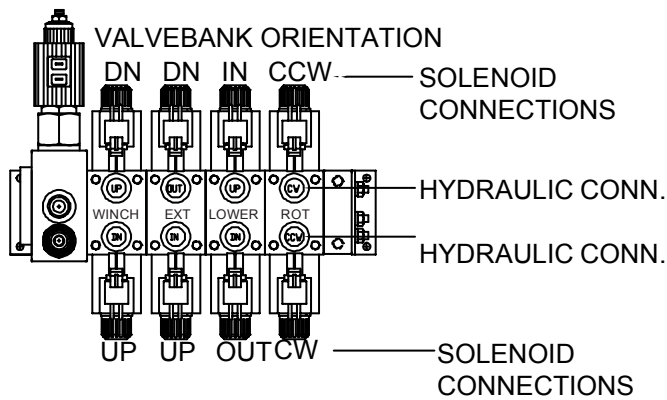
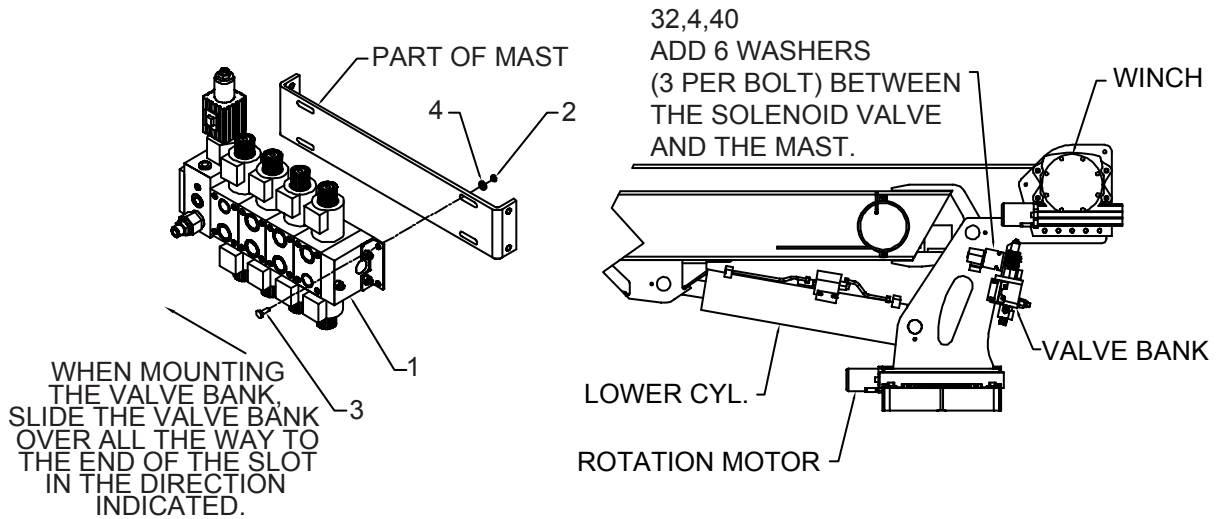




91717399 (TETHERED) & 91717400 (RADIO) PARTS LISTS			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	73733395	VALVEBANK (INCL. 24,27,28) (USED ON 91717399)	1
	73733941	VALVEBANK (INCL. 24,27,28) (USED ON 91717400)	1
2.	72062104	NUT 1/4-20 X 1-1/4 HHGR5	4
3.	72060005	CAP SCR 1/4-20X1-1/4 HHGR5	4
4.	72063001	WASHER 1/4 FLAT	12
5.	51717397	HOSE/ADPTR KIT (INCL. 6-12,16,17,19- 22,26,28,39)	1
6.	51396170	HOSE 3/8 X 13 OAL (6-4)	1REF
7.	51396171	HOSE 3/8 X 15 OAL (6-4)	1REF
8.	51396043	HOSE 3/8 X 32 OAL (4-6)	2REF
9.	51396044	HOSE 1/2 X 34-1/2 OAL (8-8)	1REF
10.	51396045	HOSE 3/8 X 32-1/2 OAL (6-4)	1REF
11.	51395557	HOSE 1/4 X 34-1/2 OAL (4-4)	2REF
12.	51396046	HOSE 1/4 X 19-1/2 OAL (4-6)	2REF
16.	51396050	HOSE 5/8 X 25 OAL (8-8)	1REF
17.	51396172	HOSE 1/2 X 26 OAL (8-8)	1REF
19.	72533186	ADPTR #6MFACE #6MSTR	3REF
20.	72533423	ADPTR #8MFACE #6MSTR	1REF
21.	72533540	SWIVEL #4MFACE #4MFACE 90° (5525 ONLY)	2REF
22.	72533296	ADPTR #6MFACE #10MSTR	4REF
24.	72533425	ADPTR #4MFACE #8MSTR	7REF
26.	72534368	SWIVEL, HOSE #8FACE #8JIC	2REF
27.	72533162	ELBOW #8MSTR #8MFACE 90°	2REF
28.	72533166	ADPTR #8MFACE #8MSTR	1REF
34.	60350075	SLEEVE, HOSE	1
35.	60350085	SLEEVE, HOSE	1
39.	72532675	CAP 3/4 THD JIC STL	2REF

Hydraulic Kit, 6025-6625 Tethered (91716519) & Radio Remote (91717393)





NOTES:

- 1 ROUTE EXTENSION AND LOWER HOSES THROUGH PROTECTIVE SLEEVE (#35).
- 2 ROUTE ROTATION HOSES THROUGH PROTECTIVE SLEEVE (#34).

91716519 (TETHERED) & 91717393 (RADIO) PARTS LISTS			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	73733395	VALVEBANK (INCL. 24,27,28) (USED ON 91717519)	1
	73733941	VALVEBANK (INCL. 24,27,28) (USED ON 91717393)	1
2.	72062104	NUT 1/4-20 X 1-1/4 HHGR5	4
3.	72060005	CAP SCR 1/4-20X1-1/4 HHGR5	4
4.	72063001	WASHER 1/4 FLAT	12

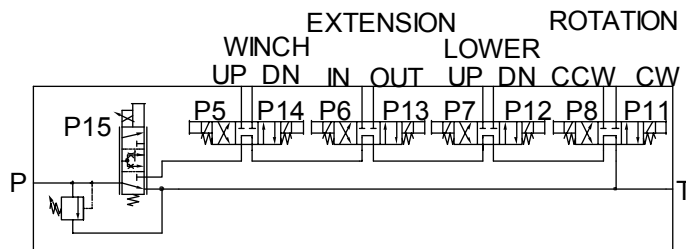
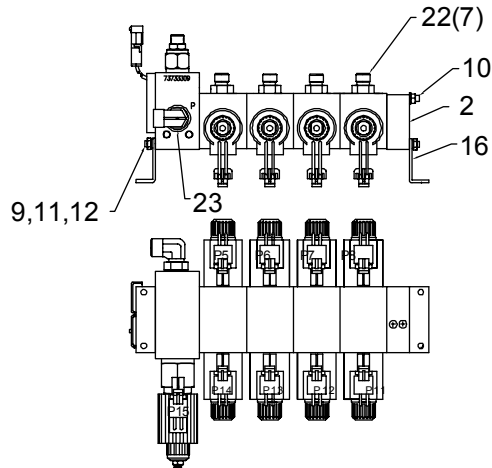
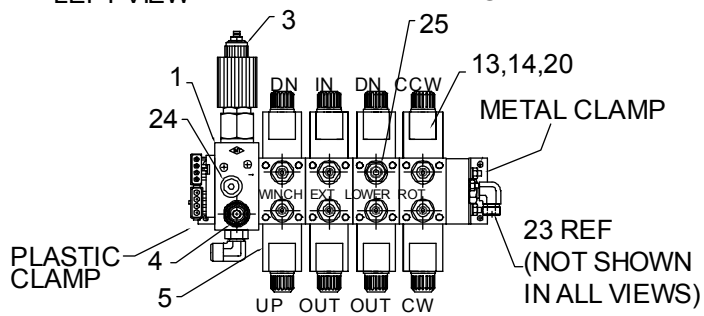
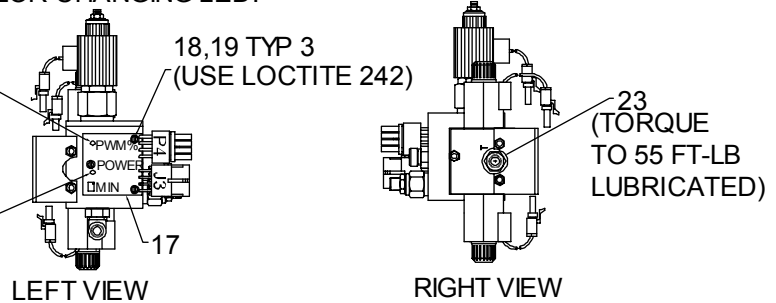
91716519 (TETHERED) & 91717393 (RADIO) PARTS LISTS			
5.	51716788	HOSE/ADPTR KIT (INCL. 6-24,26,30-31,39)	1
6.	51396041	HOSE 3/8 X 20-1/2 OAL (8-4)	1REF
7.	51396042	HOSE 3/8 X 18-1/2 OAL (8-4)	1REF
8.	51396043	HOSE 3/8 X 32 OAL (4-6)	2REF
9.	51396044	HOSE 1/2 X 34-1/2 OAL (8-8)	1REF
10.	51396045	HOSE 3/8 X 32-1/2 OAL (6-4)	1REF
11.	51395557	HOSE 1/4 X 34-1/2 OAL (4-4)	2REF
12.	51396046	HOSE 1/4 X 19-1/2 OAL (4-6)	2REF
13.	51396047	HOSE 1/4 X 7-1/2 OAL (4-4)	1REF
14.	51396048	HOSE 1/4 X 10-1/2 OAL (4-4)	1REF
15.	51396049	HOSE 1/4 X 18 OAL (4-8)	1REF
16.	51396050	HOSE 5/8 X 25 OAL (8-8)	1REF
17.	51396051	HOSE 1/2 X 26 OAL (8-8)	1REF
18.	72533156	ELBOW #12 MSTR #8MFACE 90°	2REF
19.	72533186	ADPTR #6MFACE #6MSTR	3REF
20.	72533423	ADPTR #8MFACE #6MSTR	1REF
21.	72533540	SWIVEL #4MFACE #4MFACE 90°	2REF
22.	72533296	ADPTR #6MFACE #10MSTR	2REF
23.	72533376	ADPTR #4MFACE #4MSTR	4REF
24.	72533425	ADPTR #4MFACE #8MSTR	7REF
26.	72534368	SWIVEL, HOSE #8FACE #8JIC	2REF
27.	72533162	ELBOW #8MSTR #8MFACE 90°	2REF
28.	72533166	ADPTR #8MFACE #8MSTR	1REF
30.	72533411	TEE #4 FACE SWVL NUT RUN	1REF
31.	72533413	TEE #8FACE SWVL NUT RUN	1REF
32.	51717338	VALVE, DUMP	1
33.	72063049	WASHER 1/4 LOCK	2
34.	60350075	SLEEVE, HOSE	1
35.	60350085	SLEEVE, HOSE	1
39.	72532675	CAP 3/4 THD JIC STL	2REF
40.	72060008	CAP SCR 1/4-20 X 2 HHGR5Z	2
91716519 REV E 20040810; 91716393 REV D 20050517			

Valvebank, Tethered Remote (73733395)

PERCENT OF SIGNAL INDICATOR COLOR-CHANGING LED:

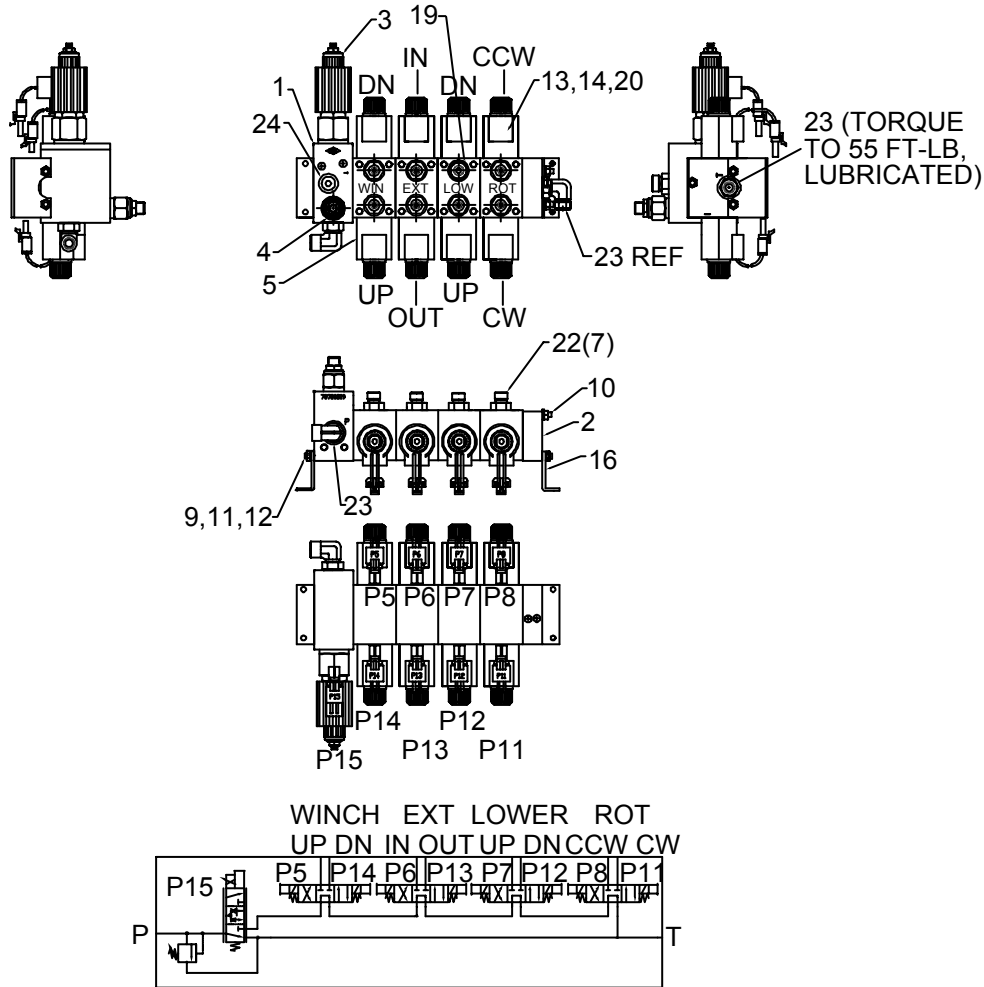
RED = OFF, ZERO % TRIGGER
 GREEN = FULL ON, 100% TRIGGER
 SHORTENED COIL OR OTHER WILL
 SHOW AS RED WITH 100% TRIGGER.

POWER INDICATOR LED:
 OFF = BLANK
 ON = RED LIGHT



73733395 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	73540028	INLET BLOCK	1
2.	73540027	END CAP	1
3.	73054934	FLOW CTRL VALVE	1
	77041556	PROPL VALVE-COIL ONLY	REF
4.	73054935	RELIEF VALVE	1
5.	73540044	VALVE SECT	4
	77041518	COIL-SOLENOID	REF
6.	7Q072013	O-RING	10
7.	72533477	PLUG 7/16STR HOLHEX	1
8.	70145829	EXPANDER PLUG	4
9.	60119363	THRD'D ROD 1/4-20X12-1/2	2
10.	60119364	THRD'D ROD 1/4-20X10-9/16	1
11.	72062000	NUT 1/4-20 HEX	5
12.	72063047	WASHER #10 LOCK	5
13.	77044574	CONNECTOR 2-WAY	9
14.	77044550	TERMINAL-F	18
15.	70394069	CABLE SEAL	2
16.	70145830	MTG BRKT	2
17.	77044595	VALVE DRIVER	1
18.	72601704	MACH SCR #6-32X3/4 RDHD	3
19.	72061705	WASHER #6 WRT	3
20.	77044594	CABLE SEAL	16
21.	70733394	CABLE ASM	1
22.	72533425	ADAPTER #4MFACE #8MSTR	7
23.	72533162	ELBOW #8MSTR #8MFACE 90°	2
24.	72533603	PLUG 9/16STR HOLHEX	1
25.	72533166	ADAPTER #8MFACE #8MSTR	1
26.	73733602	VALVE BANK (INCL. 1-21,24)	1
	70733875	PLASTIC NUT W/O-RING SEAL (APPLIED TO COIL)	8REF

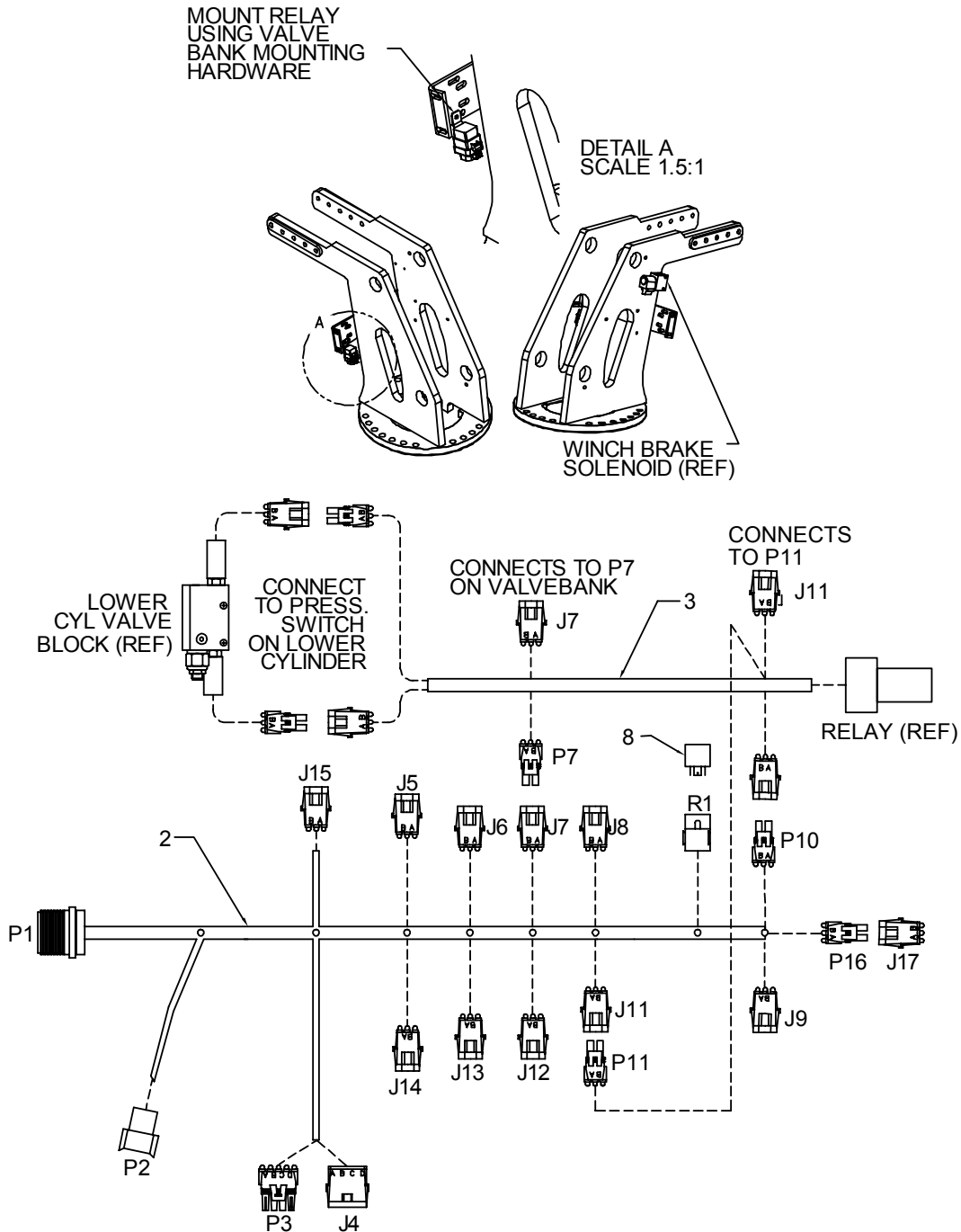
Valvebank (73733941)



73733941 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	73540028	VALVE BLOCK	1REF
2.	73540027	END CAP	1REF
3.	73054934	SOLENOID VALVE	1REF
4.	73054935	RELIEF VALVE	1REF
5.	73540044	VALVE SECTION	4REF
6.	7Q072013	O-RING	10REF
7.	72533477	PLUG, STR HOL HEX 7/16 THD	1REF
8.	70145829	EXPANDER PLUG	4REF
9.	60119363	ROD, THREADED 1/4-20 X 12-1/2	2REF
10.	60119364	ROD, THREADED 1/4-20 X 10-9/16	1REF
11.	72062000	NUT 1/4-20 HEX ZINC	5REF
12.	72063047	WASHER #10 LOCK ZINC	5REF
13.	77044574	CONNECTOR, 2-WAY	9REF
14.	77044550	TERMINAL, FEMALE, 18-20 GA	18REF
15.	70394069	CABLE SEAL	2REF
16.	70145830	BRACKET, MOUNTING, EXTRA LONG	2REF
19.	72533166	ADAPTER, #8MFACE #8MSTR	1
20.	77044594	CABLE SEAL, RED	16REF
21.	77441101	CABLE ASM	1REF
22.	72533425	ADAPTER, #4MFACE #8MSTR	7
23.	72533162	ELBOW #8MSTR #8MFACE 90°	2
24.	72533603	PLUG, STR HOL HEX 7/16 STL	1REF
25.	73733933	VALVE BANK (INCL. 1-16,20,21,24)	1

Controls

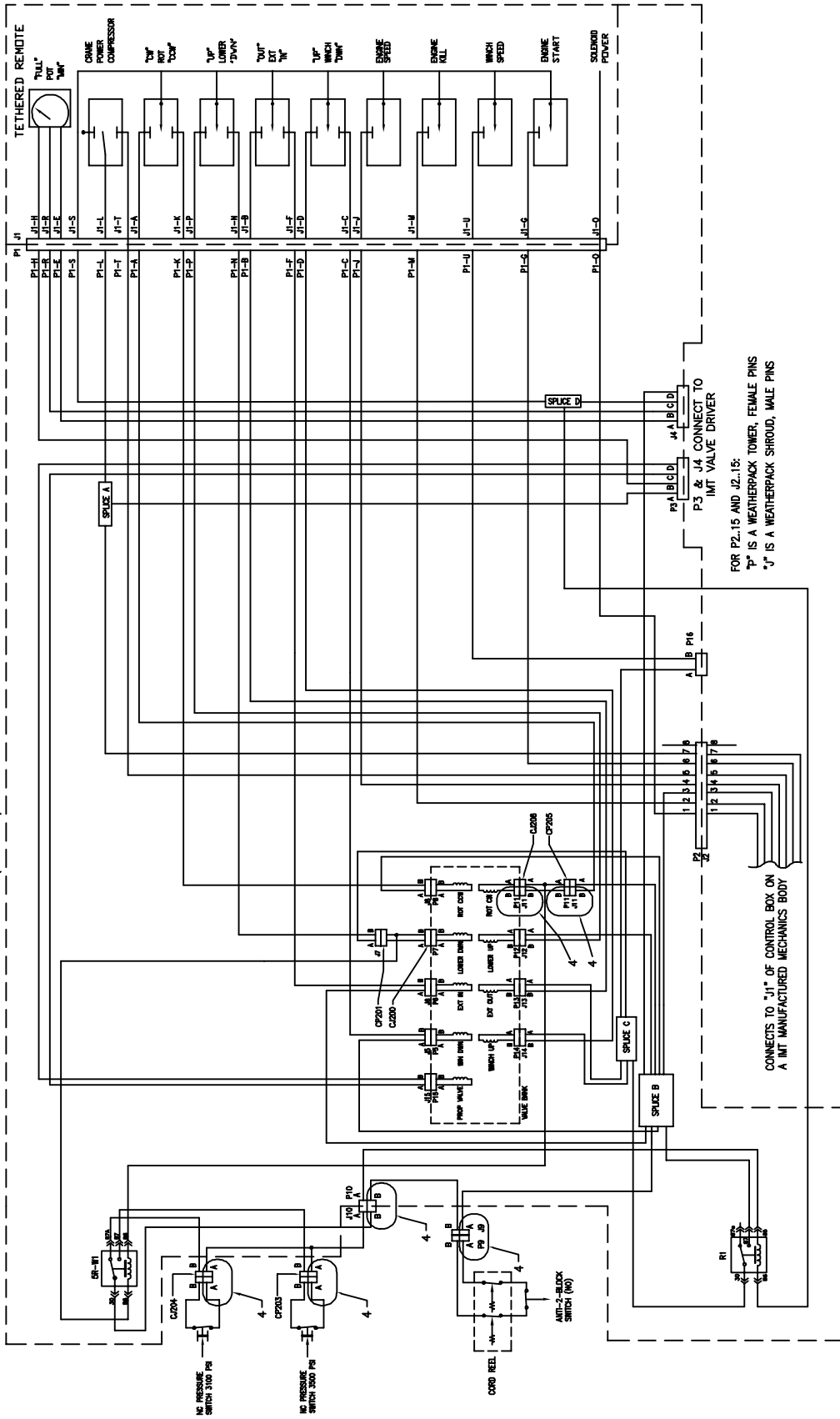
Control Kit, Tethered, 5525 (90717396)



90717396 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	51716562	HANDLE ASSEMBLY	1
2.	70733394	CABLE ASSEMBLY	REF
3.	77441006	HARNESS, DUAL PRESSURE	1
4.	70034439	LOCK WIRE, LEAD SEAL	5
5.	60119299	BRACKET, MOUNTING	1
6.	77044645	NUT	1
7.	77044646	WASHER, LOCK	1
8.	77041383	RELAY	1

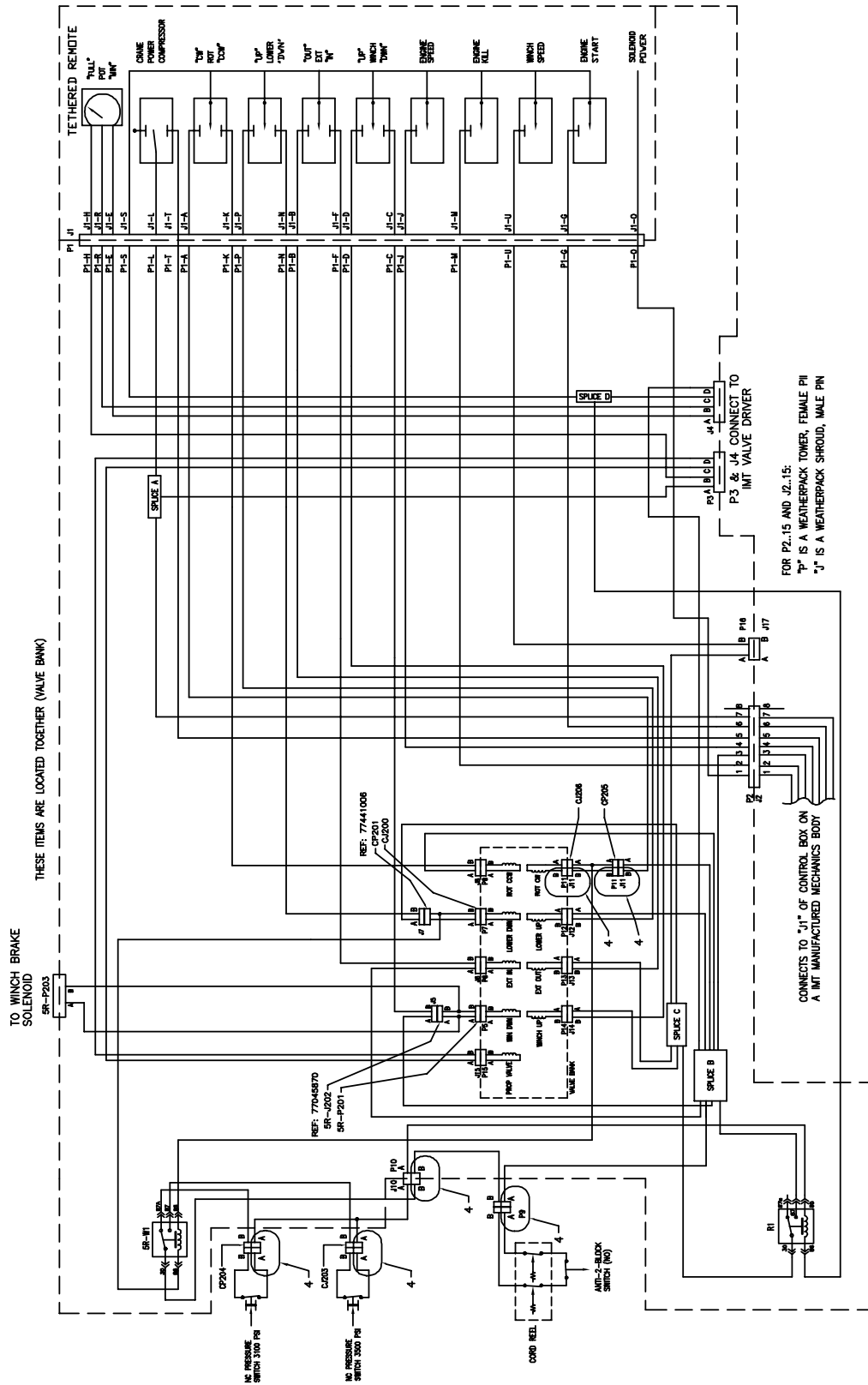
REV. D 20050628

THESE ITEMS ARE LOCATED TOGETHER (VALVE BANK)

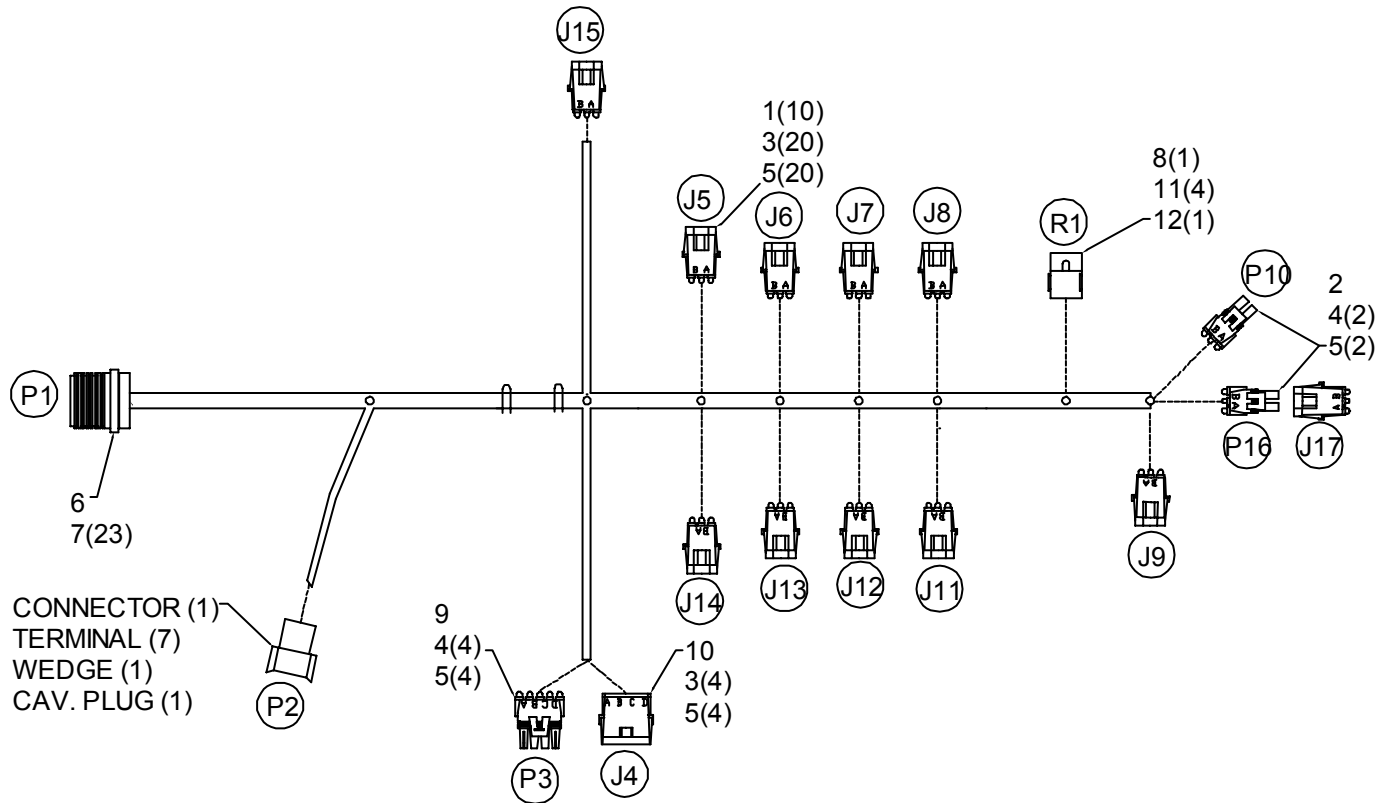


90716520 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	51716562	HANDLE ASSEMBLY	1
2.	77045870	WINCH BRAKE HARNESS	1
3.	77441006	HARNESS, DUAL PRESSURE SWITCH	1
4.	70034439	WIRE, LOCK, LEAD SEAL 8"	5
5.	60119299	BRACKET	1
6.	77044645	NUT	1
7.	77044646	WASHER	1
8.	70733394	CABLE ASSEMBLY, TETHERED	REF

REV. D 20050628

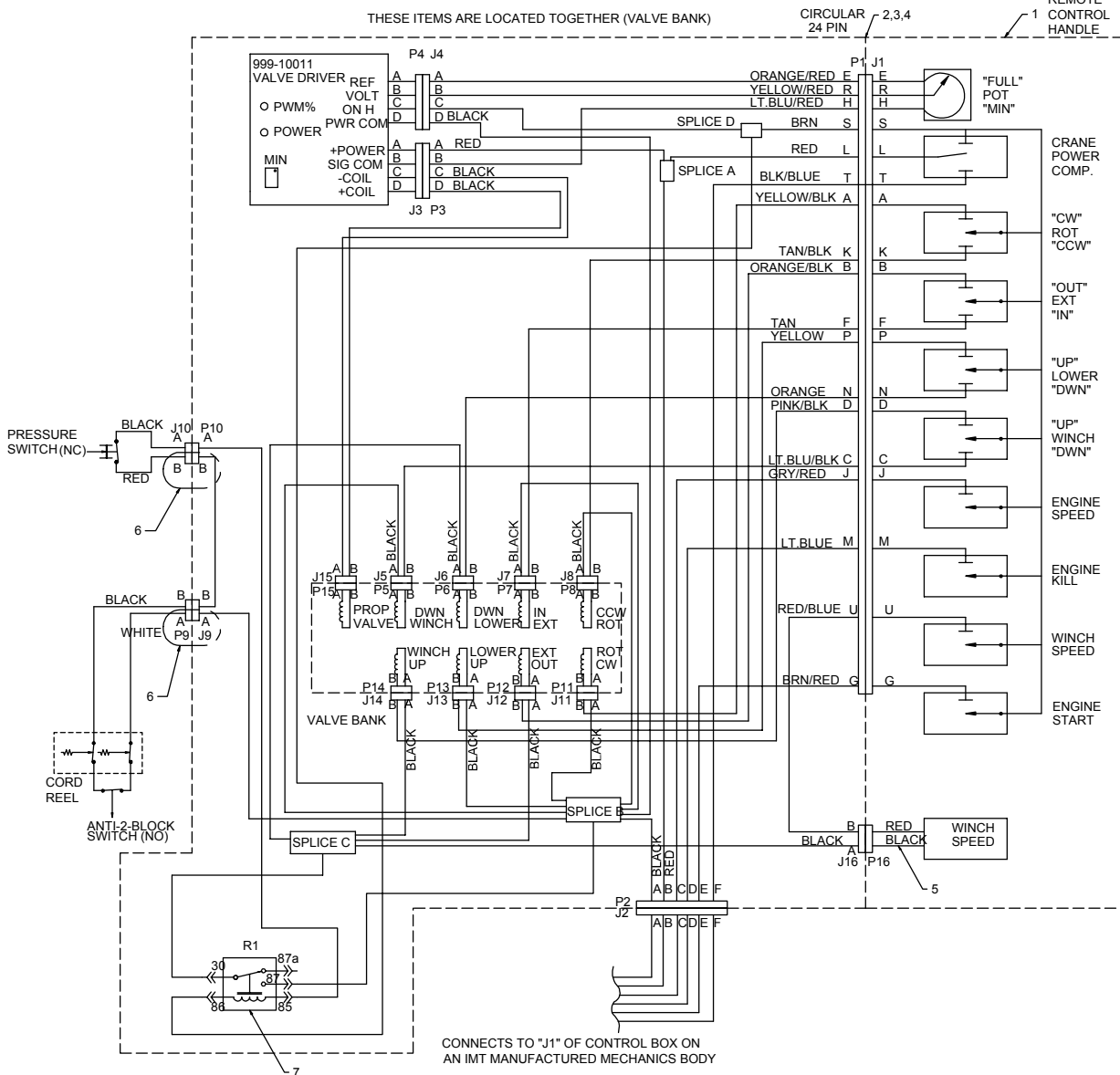


Cable Assembly, Tethered Remote (70733394)



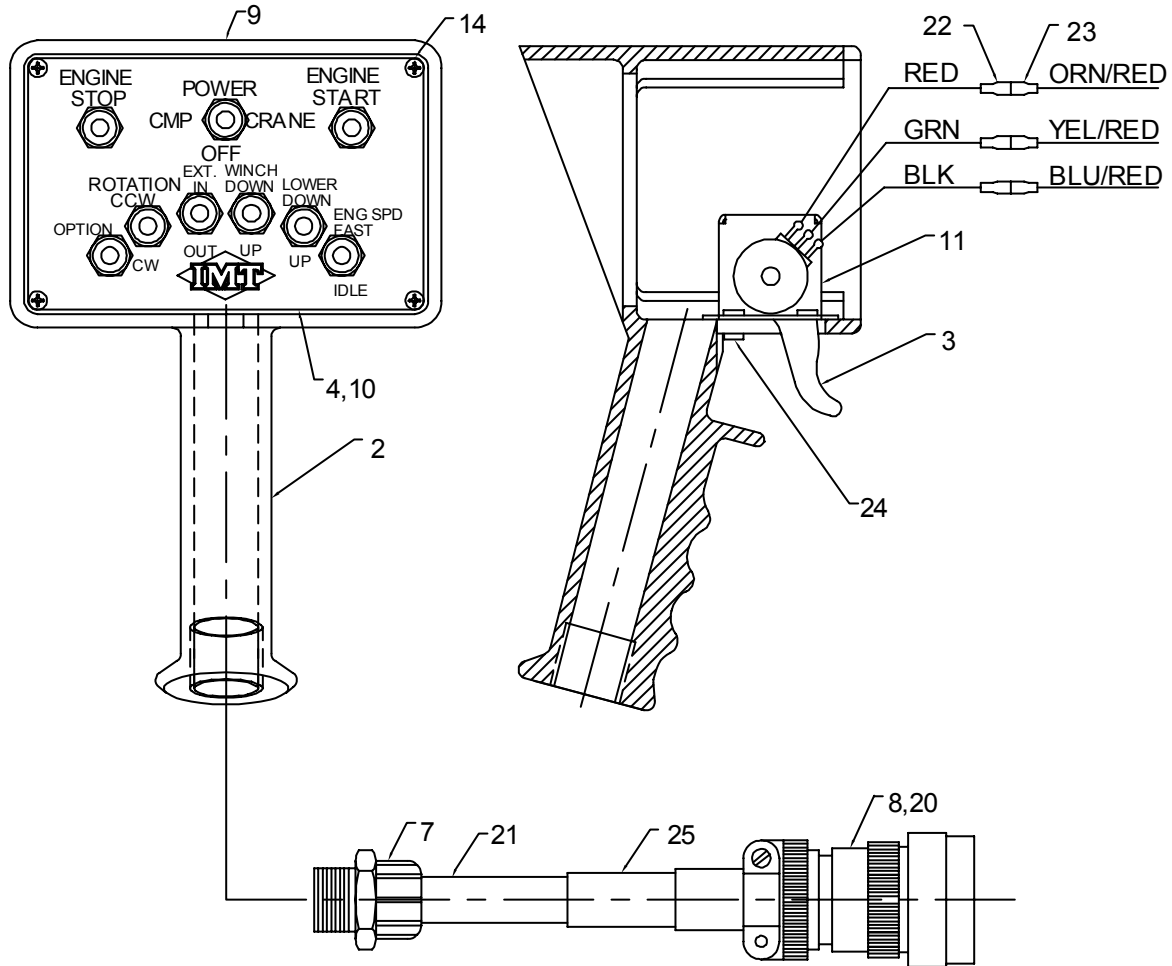
70733394 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	77044573	SHROUD CONN 2-CONTACT	10REF
2.	77044574	TOWER CONN	2REF
3.	77044576	TERMINAL-M	24REF
4.	77044577	TERMINAL-F	8REF
5.	77044578	CABLE SEAL	32REF
6.	77044620	CONN RCPT	1REF
7.	77044580	SOCKET	23REF
8.		SOCKET, RELAY	1REF
9.	77044623	TOWER CONN 4-CONTACT	1REF
10.	77044624	SHROUD CONN 4-CONTACT	1REF
11.		TERMINAL	4REF
12.		RELAY	1REF

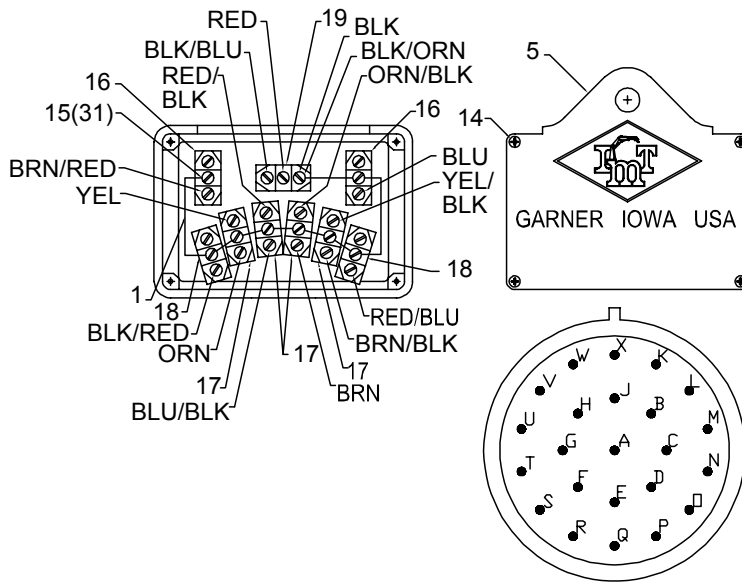
Electrical Schematic, Tethered Remote (99900855)



99900855 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	51713182	HANDLE ASM	1
2.	60119299	BRACKET	1
3.	77044645	NUT	1
4.	77044646	LOCK WASHER	1
5.	51713343	CABLE ASM, 14GA 2 WIRE	1
6.	70034439	LOCK WIRE LEAD SEAL, 8"	2
7.	77041597	RELAY	1

Handle Assembly, Tethered Remote w/Engine Start (51716562)



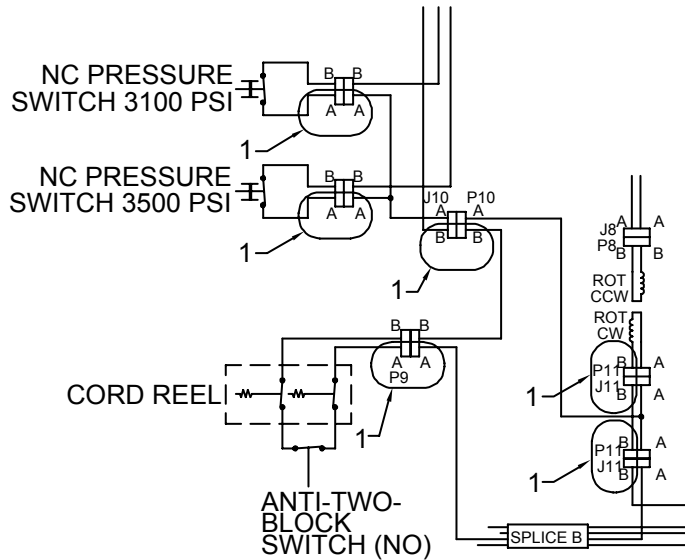
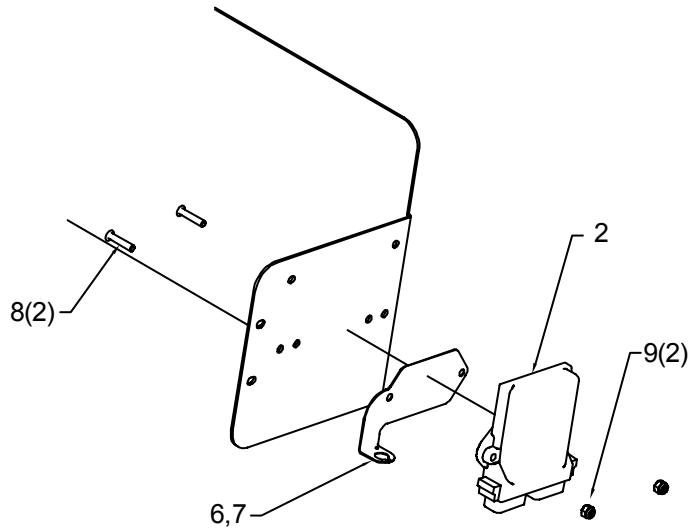
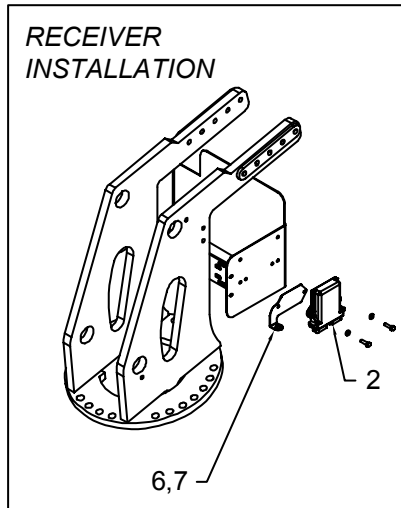


51716562 HANDLE ASSEMBLY WIRE FUNCTIONS

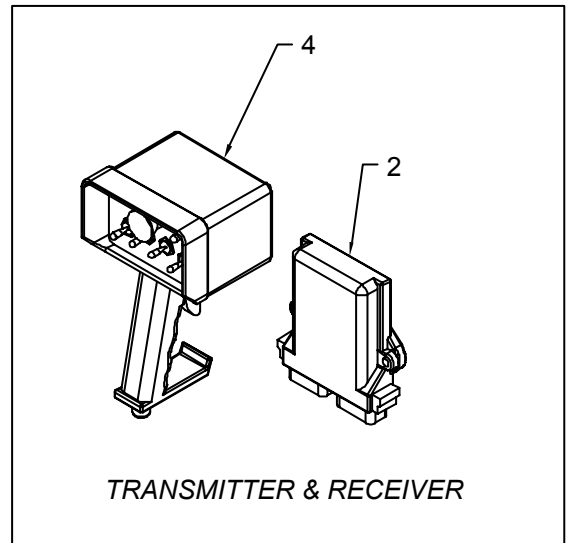
SOLID/STRIPE	FUNCTION	
A	YEL/BLK	ROT CW
B	ORN/BLK	EXT OUT
C	BLU/BLK	WINCH DN
D	RED/BLK	WINCH UP
E	ORN/RED	-
F	BRN	EXT IN
G	BRN/RED	ENG START
H	BLU/RED	-
J	BLK/RED	ENG SPEED
K	BRN/BLK	ROT CCW
L	RED	POWER
M	BLU	ENG STOP
N	ORN	LOWER DN
O	BLK/ORN	SOL POWER
P	YEL	LOWER UP
Q	BRN/BLU	-
R	YEL/RED	-
S	BLK	CRANE
T	BLK/BLU	CPRSR
U	RED/BLU	OPTION
V	BLU/ORN	-
W	ORN/BLU	-
X	YEL/BLU	-
-	RED/ORN	-

51716562 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	89044214	WIRE 18GA GRN	1.61 FT
2.	60119335	CONTROL HANDLE	1
3.	60111141	TRIGGER (PART OF 11)	1REF
4.	60119277	COVER	1
5.	70034306	BACK COVER	1
7.	77044196	STRAIN RELIEF 3/4	1
8.	77044621	PIN	23
9.	70394447	DECAL-DGR RC ELECTRO SM	1
10.	70394142	DECAL-CTRL	1
11.	70394183	TRIGGER ASM (INCL 3)	1
14.	72061009	SHT MTL SCR #6X3/4 PH	8
15.	77040051	TERM-SPRSPD #8 16-14GA	31
16.	77040371	TOGGLE SWITCH SPST	2
17.	77040372	TOGGLE SWITCH SPDT	4
18.	77040373	TOGGLE SWITCH SPST	2
19.	77040374	TOGGLE SWITCH SPDT	1
20.	77044579	CONNECTOR	1
21.	89044100	CABLE 18GA 24WIRE	40 FT
22.	77040147	TERM-FSLPON 1/4TAB 22-18	3
23.	77040047	TERM-MSLPON 1/4TAB 16-14	3
24.	72060602	MACH SCR #6-32X3/8 RDHD	4
25.	70145495	TUBING-HEAT SHRINK	.5 FT

Control Kit, Radio, 5525 (90718832) & 6025-6625 (90718834) (Ref. Dwg. 99903629)

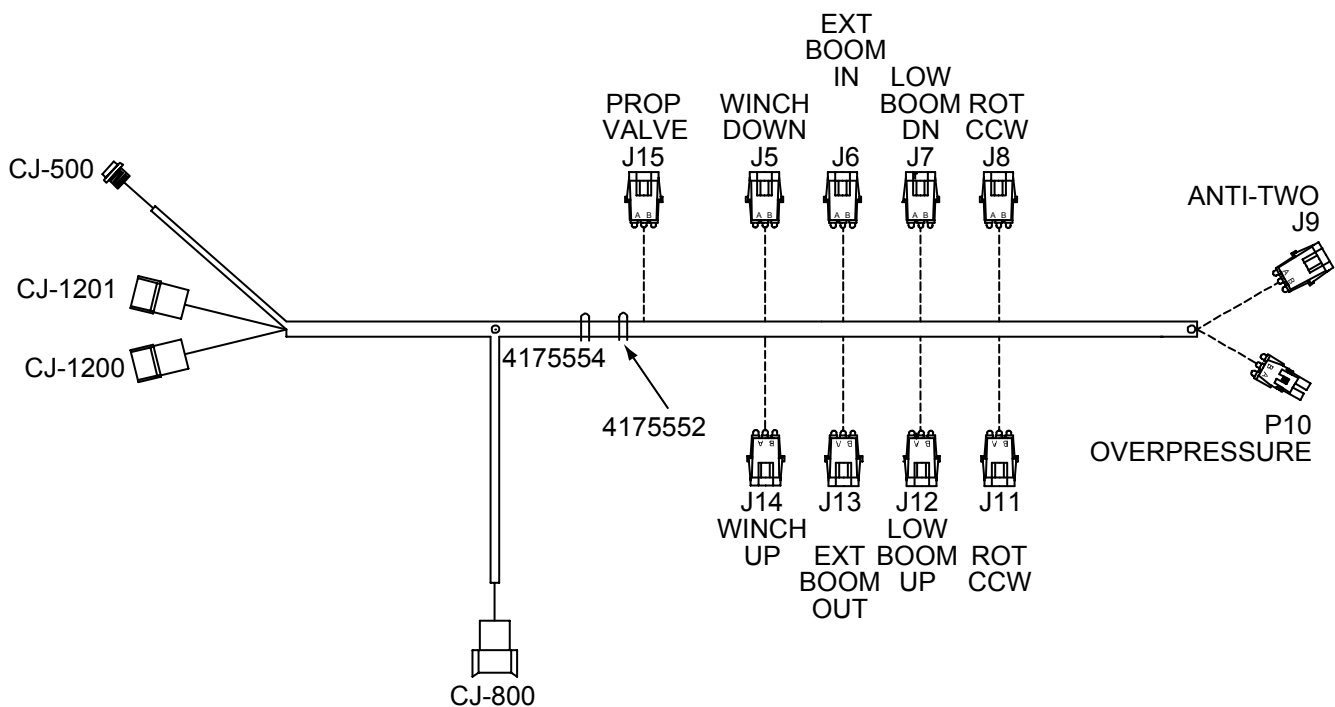


ANTI-TWO-BLOCK ASSEMBLY

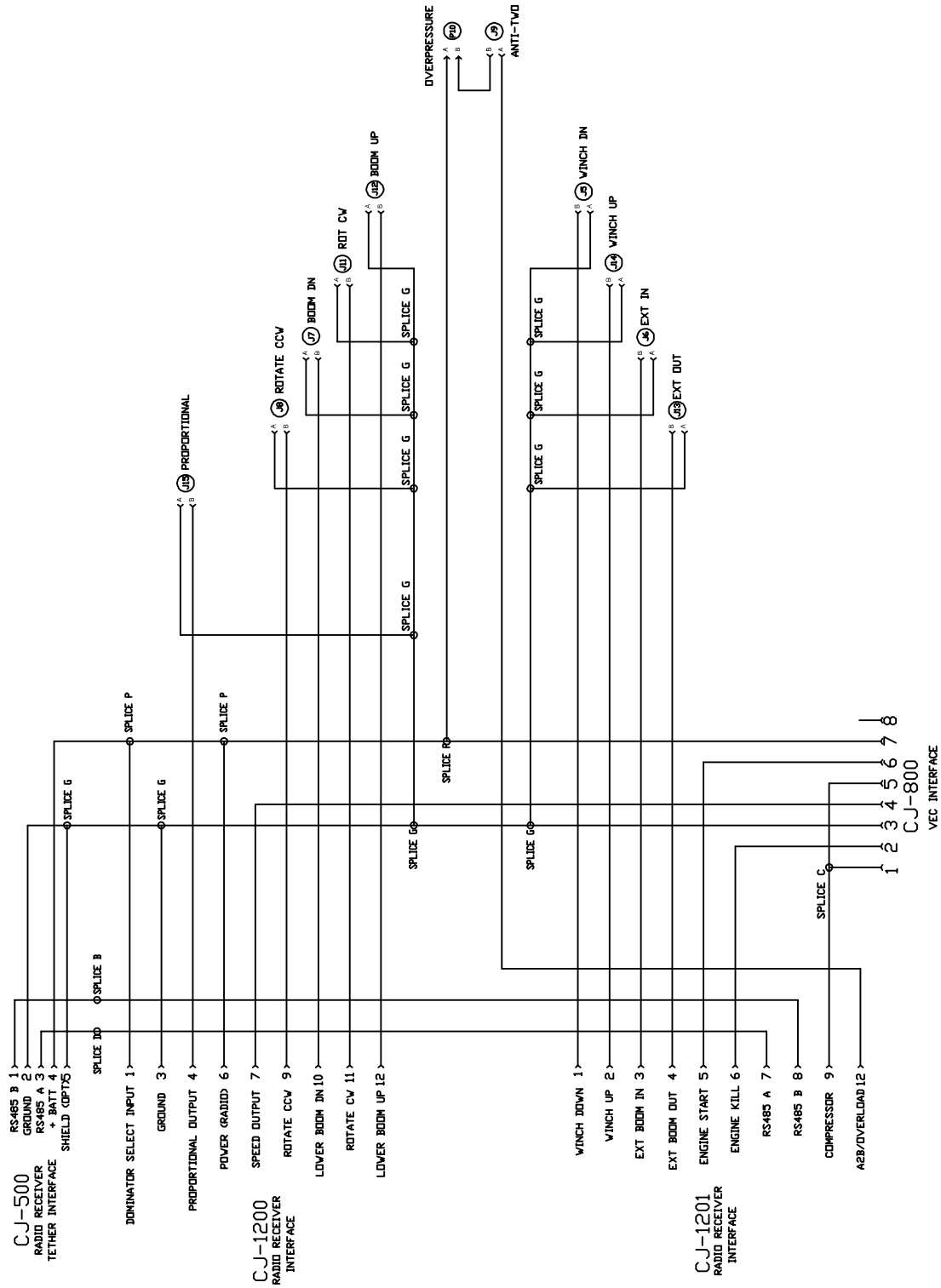


90718832 (5525) AND 90718834 (6025-6625) PARTS LISTS			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	70034439	LOCK WIRE, LEAD SEAL, 8"	6
2.	70733921	RECEIVER RADIO REMOTE	1
4.	70733883	TRANSMITTER, RADIO REMOTE	1
6.	60125959	BRACKET, TETHER CONNECTOR	1
7.	72066340	RIVET, POP AL 1/8X3/8 GRIP	1
8.	72601846	CAP SCREW, SS 1/4-20X1-1/4 HH	2
9.	72062194	NUT, SS 1/4-20 NYLOC	2
10.	99903628	INSTRUCTIONS, RADIO REMOTE	1
13.	99903629	INSTALLATION DWG, RADIO REMOTE	1
14.	77441006	HARNESS, DUAL PRESSURE SWITCH	1
15.	99903630	INSTALLATION DWG, DUAL PRESSURE	1
20.	77045870	HARNESS, WINCH BRAKE PIGTAIL (6025-6625 ONLY)	1
21.	99903631	INSTALLATION DWG, WINCH BRK HARN. (6025-6625 ONLY)	1

Cable Assembly, Radio Remote (77441101)



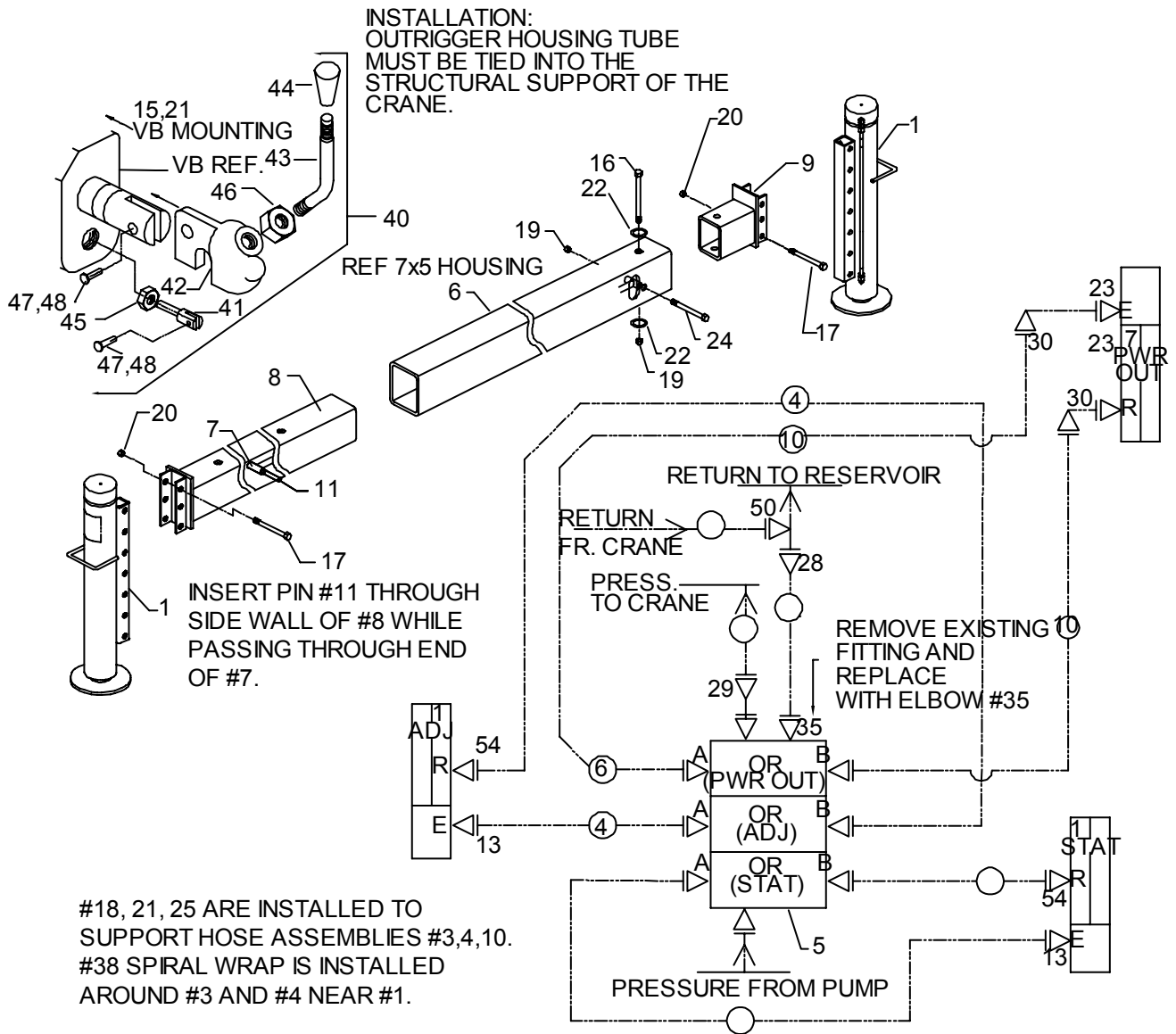
Electrical Schematic, Radio Remote (77441101)



Auxiliary Outrigger Assemblies and Valvebanks

The IMT telescopic cranes have a variety of outrigger options, depending on the body on which the crane is installed and the crane lifting application. Refer to the IMT Outrigger Manual for complete details on the applicable outriggers.

Outrigger, Power Out/Power Down, 7x5 (31712739)



DECAL PLACEMENT	
ITEM	LOCATION
36	AT P/O CONTROL HANDLE
37	AT P/D CONTROL HANDLES
51	O/R HOUSING
52	ADJUSTABLE SIDE
53	

31712739 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	3B205010	CYLINDER	2
2.	51396184	HOSE-FF 1/2X159 OAL (8-8)	1REF
3.	51395164	HOSE-FJ 1/4X135 OAL (4-4)	2REF
4.	51396280	HOSE-FJ 1/4X96 OAL (4-4)	2REF
5.	51714812	VALVEBANK ASM	1

31712739 PARTS LIST			
6.	60118680	TUBE-OUTRIGGER HOUSING POWER OUT	1REF
7.	71411797	CYLINDER, POWER OUT (WAS 3B142860)	1
8.	52712735	ARM, ADJUSTABLE	1
9.	52712736	ARM, STATIONARY	1
10.	51396281	HOSE-FJ 1/4X107 OAL (4-4) (PART OF #55)	2REF
11.	72661472	PIN-SPRING 1/2X4	1
12.	51396282	HOSE-FF 3/4 X51 OAL (12-12) (PART OF #55)	1REF
13.	72053758	ELBOW #4MSTR #4MJIC 90°	2
15.	72060025	CAP SCR 5/16-18X1 HHGR5Z	3
16.	72060107	CAP SCR 1/2-13X8 HHGR5	1
17.	72060155	CAP SCR 5/8-11X3.5 HHGR5	4
18.	72060833	SCR-THD CUT 5/16-18X3/4 HWH-1 (SEE NOTE)	2
19.	72062080	NUT 1/2-13 HEX NYLOC	2
20.	72062091	NUT 5/8-11 HEX NYLOC	4
21.	72063002	WASHER 5/16 FLAT	5
22.	72063005	WASHER 1/2 FLAT	2
23.	72532351	ADPTR #4MSTR #4MJIC	4
24.	72601297	CAP SCR 1/2-13 X 5.75 HH GR5	1
25.	72066582	CLAMP-UMP 20 (SEE NOTE)	2
28.	72531205	TEE-MALE JIC 3/4-16 1/2 TUBE	1
29.	72532658	ELBOW #8MJIC #8FJIC SW	1
30.	72532690	ELBOW #4MJIC #4FJIC SW	2
35.	72533623	ELBOW #8MSTR #12MJIC 90°	1
36.	71392277	DECAL-OUTRIGGER POWER OUT	1
37.	76391511	DECAL-UP & DOWN STAB. R&L	1
38.	89034049	SPIRAL WRAP, BLK (SEE NOTE)	4'
39.	99900644	MANUAL-AUX OUTRIGGER	1
40.	51731580	HANDLE ASM (INCL. 34-41) (PART OF 5)	2REF
41.	70142648	PIVOT-LEVER (PART OF #40)	2REF
42.	70142650	LEVER SUPPORT (PART OF #40)	2REF
43.	70142651	LEVER-CONTROL HANDLE (PART OF #40)	2REF
44.	71392269	KNOB-CONTROL HANDLE (PART OF #40)	2REF
45.	72062021	NUT 5/16-18 HEX JAM (PART OF #40)	2REF
46.	72062024	NUT 1/2-13 HEX JAM (PART OF #40)	2REF
47.	72066162	COTTER PIN (PART OF #40)	4REF
48.	72661204	CLEVIS PIN (PART OF #40)	4REF
49.	51395431	HOSE-FF 1/2X96 OAL (8-8) (PART OF #55)	1REF
50.	72532972	ADPTR #8MJIC #12FJIC	1
51.	70392864	DECAL-DANGER O/R STAND CLEAR	2
52.	70392867	DECAL-DANGER O/R MOVING	1
53.	71392257	DECAL-DANGER POWER DOWN SS	1
54.	72533567	ELBOW #4MSTR #4MJIC XLG	2
55.	51717834	HOSE KIT - O/R PO/PD (7X5)	1

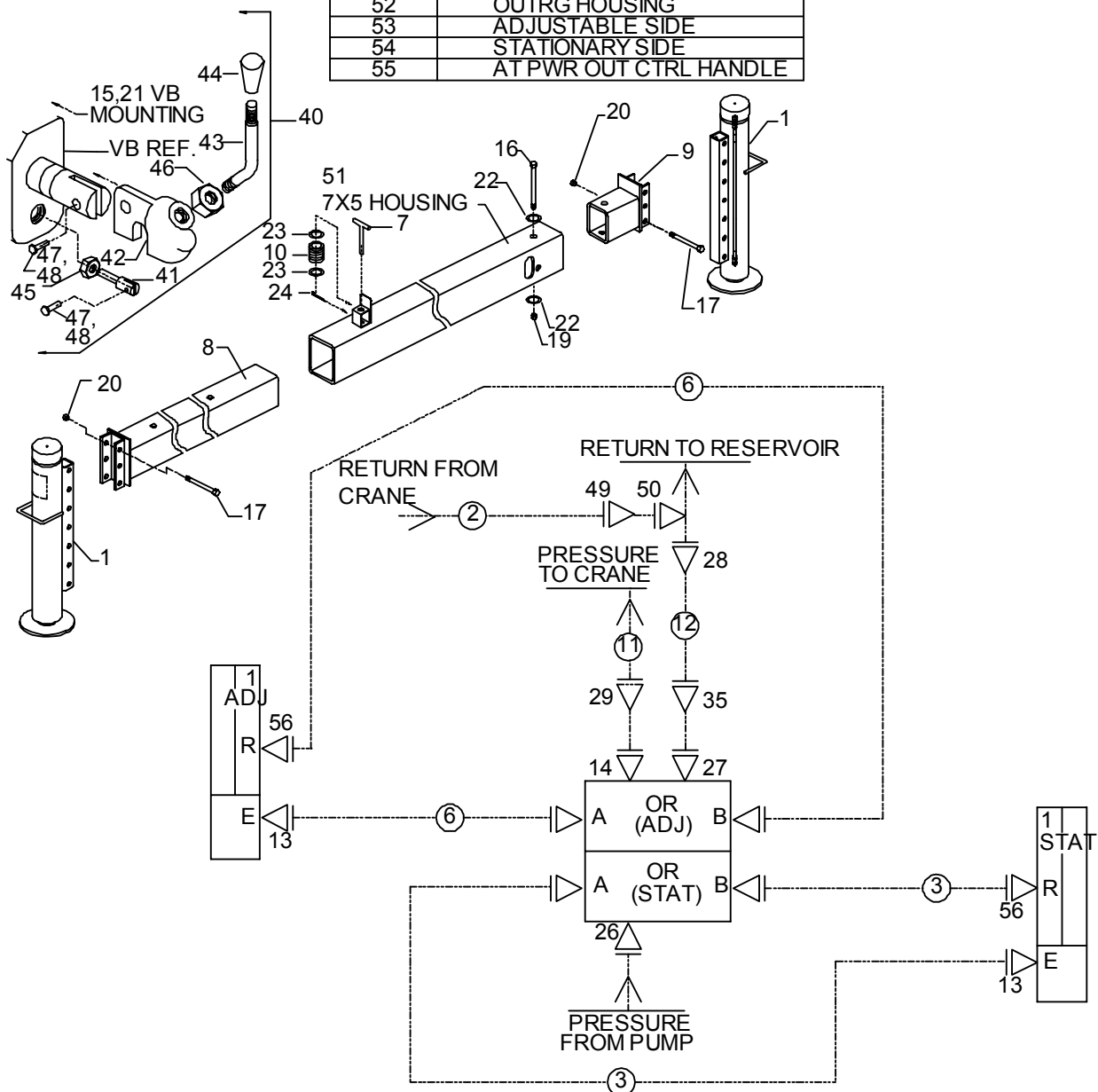
Outrigger, Manual Out/Power Down, 7x5 (31712740)

INSTALLATION NOTE: TIE OUTRIGGER HOUSING TUBE INTO STRUCTURAL SUPPORT OF CRANE.

#18, 25, AND 1 OF #21 ARE INSTALLED BEHIND BACK WALL OF CRANE BOX TO SUPPORT HOSE ASSEMBLY #2 AS IT PASSES BEHIND CRANE BOX AND UNDER BELLY PAN OF FLOOR TO SUPPORT HOSE ASSEMBLY #3 AS IT PASSES UNDER BELLY PAN.

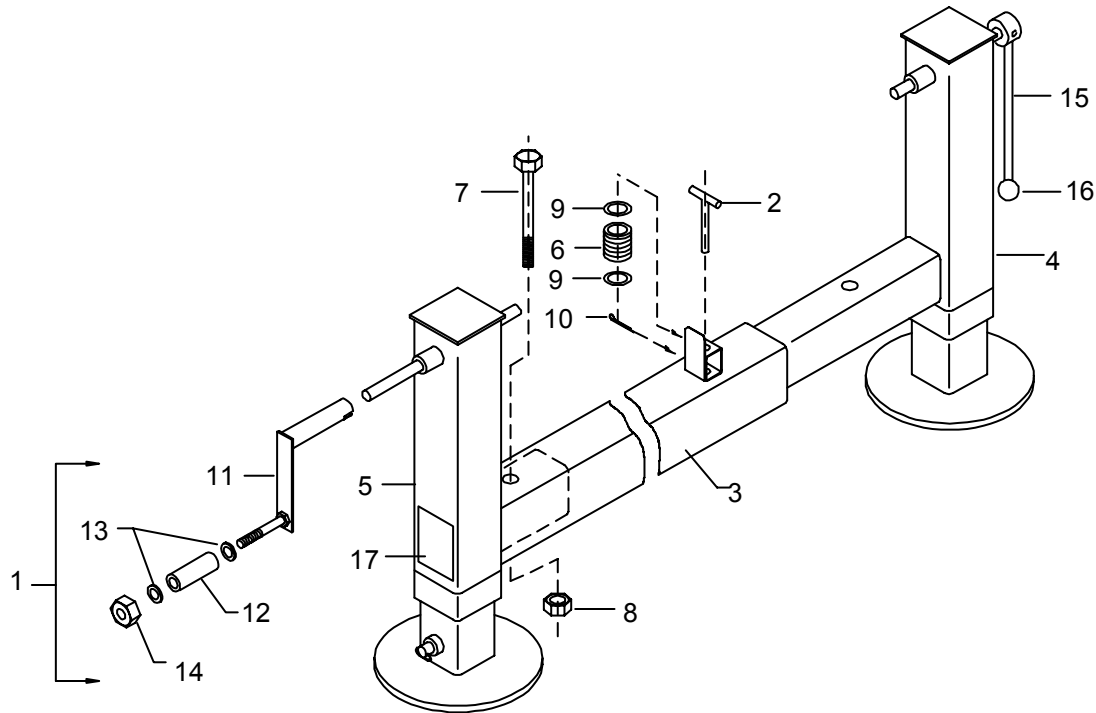
#38 SPIRAL WRAP IS INSTALLED AROUND #3 AND #4.

DECAL PLACEMENT	
ITEM NO	LOCATION
37	AT PWR DN CTRL HANDLES
52	OUTRG HOUSING
53	ADJUSTABLE SIDE
54	STATIONARY SIDE
55	AT PWR OUT CTRL HANDLE



31712740 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	3B205010	CYLINDER	2
2.	51394931	HOSE-FF 1/2X98 OAL	1
3.	51395552	HOSE-FJ 1/4X135 OAL	2
5.	51714813	VALVE BANK, 2 SECT (INCLUDES #40)	1
6.	51396280	HOSE-FJ 1/4X96	2
7.	52070138	PIN WELDMENT	1
8.	52712735	ARM, ADJUSTABLE	1
9.	52712736	ARM, STATIONARY	1
10.	60010351	SPRING "T" PIN	1
11.	51396184	HOSE-FF 1/2X159 OAL (8-8) (PART OF #51)	1
12.	51396282	HOSE-FF 3/4 X51 OAL (12-12) (PART OF #51)	1
13.	72053758	ELBOW #4MSTR #4MJIC 90°	2
14.	72053764	ELBOW #10MSTR #8MJIC 90°	1
15.	72060025	CAP SCR 5/16-18X1 HHGR5Z	3
16.	72060107	CAP SCR 1/2-13X8 HHGR5	1
17.	72060155	CAP SCR 5/8-11X3.5 HHGR5	4
18.	72060833	SCR-THD CUT 5/16-18X3/4 HWH-1 (SEE NOTE)	2
19.	72062080	NUT 1/2-13 HEX NYLOC	1
20.	72062091	NUT 5/8-11 HEX NYLOC	4
21.	72063002	WASHER 5/16 FLAT	5
22.	72063005	WASHER 1/2 FLAT	2
23.	72063027	MACHY BUSHING 5/8X14 GA NR	2
24.	72066185	COTTER PIN	1
25.	72066582	CLAMP-UMP 20 (SEE NOTE)	2
26.	72532358	ADPTR #8MSTR #8MJIC	1
27.	72532365	ADPTR #10MSTR #12MJIC	1
28.	72531205	TEE-MALE JIC 3/4-16 1/2 TUBE	1
29.	72532658	ELBOW #8MJIC #8FJIC SW	1
35.	72532696	ELBOW #12MJIC #12FJIC SW	1
37.	76391511	DECAL-UP & DOWN STAB. R&L	1
38.	89034049	SPIRAL WRAP, BLK (SEE NOTE)	4'
39.	99900644	MANUAL-AUX OUTRIGGER	1
40.	51731580	HANDLE ASM (INCL. 34-41) (PART OF 5)	2REF
41.	70142648	PIVOT-LEVER (PART OF #40)	2REF
42.	70142650	LEVER SUPPORT (PART OF #40)	2REF
43.	70142651	LEVER-CONTROL HANDLE (PART OF #40)	2REF
44.	71392269	KNOB-CONTROL HANDLE (PART OF #40)	2REF
45.	72062021	NUT 5/16-18 HEX JAM (PART OF #40)	2REF
46.	72062024	NUT 1/2-13 HEX JAM (PART OF #40)	2REF
47.	72066162	COTTER PIN (PART OF #40)	4REF
48.	72661204	CLEVIS PIN (PART OF #40)	4REF
49.	72532972	ADPTR #8MJIC #12FJIC	1
50.	72532980	ADPTR PR SW IN-LINE JIC 3/4	1
51.	52712734	O/R HOUSING 7X5	1
52.	70392864	DECAL-DANGER O/R STAND CLEAR	2
53.	70392867	DECAL-DANGER O/R (MOVING)	1
54.	71392257	DECAL-O/R POWER DOWN SS	1
55.	71392277	DECAL-O/R POWER OUT	1
56.	72533567	ELBOW #4MSTR #4MJIC XLG	2

Outrigger, Manual Out/Crank Down, 7x5 (31712741)

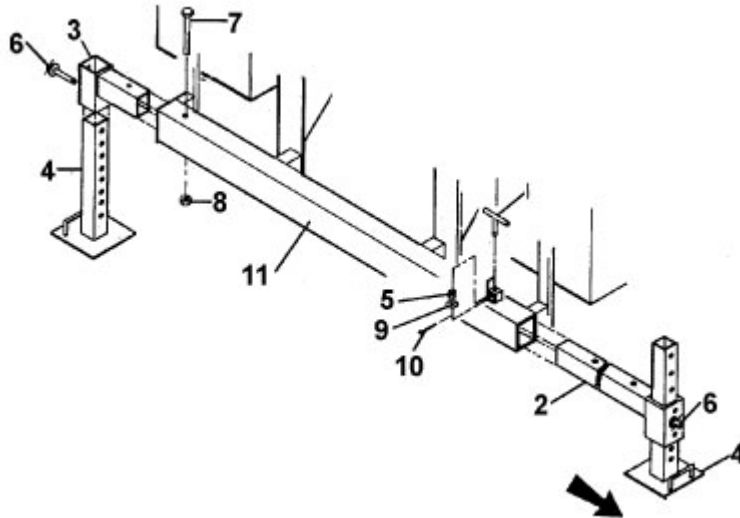


NOTE:

- 1 TIE OUTRIGGER HOUSING TUBE INTO STRUCTURAL SUPPORT OF CRANE.

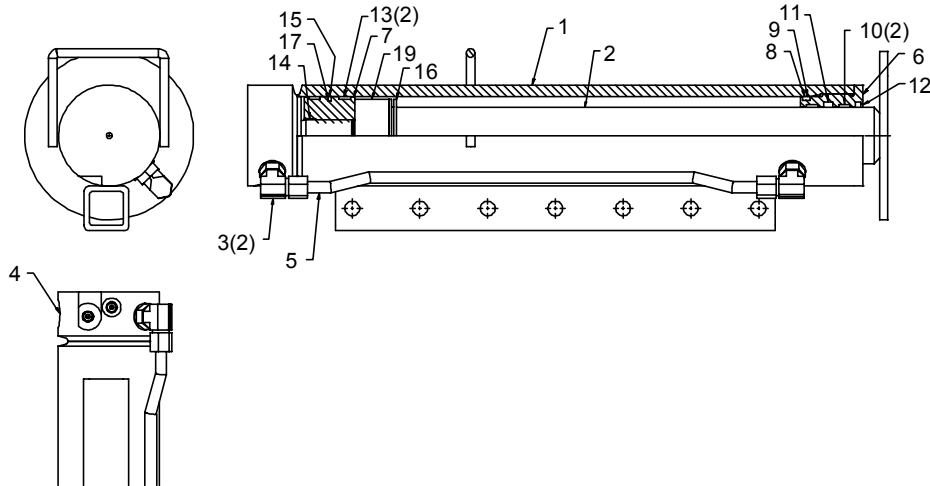
31712741 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	51705040	CRANK ASM (INCL. 11-14)	1
2.	52070138	PIN WELDMENT - "T"	1
3.	52712734	O/R HOUSING 7X5	1
4.	52712737	ARM-O/R ADJ. MAN OUT/CRANK DOWN	1
5.	52712738	ARM-STAT MAN OUT/CRANK DOWN	1
6.	60010351	SPRING-"T" PIN	1
7.	72060107	CAP SCR 1/2-13X8 HHGR5	1
8.	72062080	NUT 1/2-13 HEX NYLOC	1
9.	72063007	WASHER 5/8 FLAT	2
10.	72066185	COTTER PIN	1
11.	52705039	CRANK WELDMENT (PART OF #1)	1REF
12.	60030099	ROLLER (PART OF #1)	1REF
13.	72063003	WASHER 3/8 WRT (PART OF #1)	2REF
14.	72062103	NUT 3/8-16 HEX SELF-LOCK (PART OF #1)	1REF
15.	52703319	CRANK HANDLE	1
16.	71039096	CONTROL KNOB	1
17.	70392864	DECAL-DANGER O/R STAND CLEAR	2

Outrigger, Manual Out/Manual Down, 7x5 (31712902)



31712902 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	52070138	PIN WELDMENT "T"	1
2.	52712889	ADJUSTABLE ARM	1
3.	52712890	STATIONARY ARM	1
4.	52703353	OUTRIGGER LEG	2
5.	60010351	SPRING	1
6.	71731361	QUICK RELEASE "T" PIN	2
7.	72060107	CAP SCR 1/2-13X8 HHGR5	1
8.	72062080	NUT 1/2-13 NYLOC	1
9.	72063007	WASHER 5/8 WRT	1
10.	72066185	COTTER PIN	1
11.	52712734	O/R HOUSING 7X5	1

Cylinder, Power Down (3B205010)



NOTES:

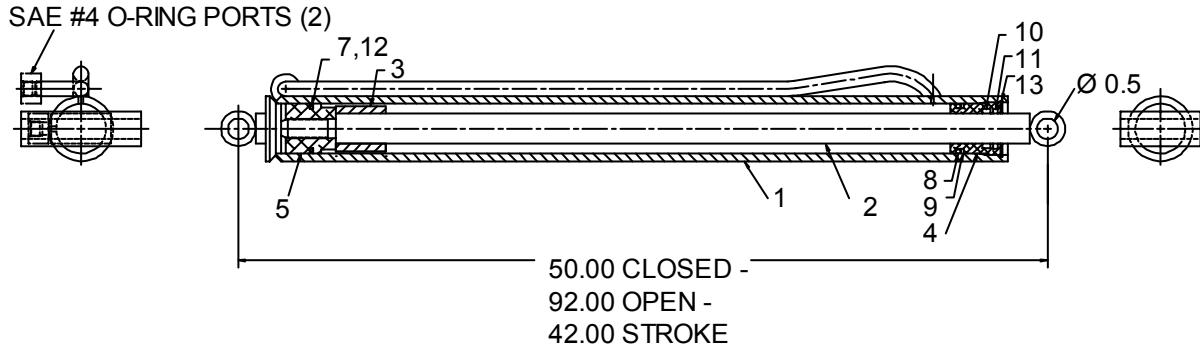
- 1 TO REDUCE DOWNTIME, REPLACE ALL COMPONENTS OF THE SEAL KIT WHENEVER THE CYLINDER IS DISASSEMBLED.
- 2 APPLY "LUBRIPLATE #630-2" MEDIUM HEAVY, MULTI-PURPOSE LUBRICANT OR EQUIVALENT TO ALL PISTON AND HEAD GLANDS, LOCK RING AND ROD THREADS BEFORE ASSEMBLY.
- 3 USE ANTI-SEIZE LUBRICATING COMPOUND OR EQUIVALENT BETWEEN THE HEAD AND THE CASE WHEN ASSEMBLING THE CYLINDER.

3B205010 PARTS LIST

ITEM	PART #	DESCRIPTION	QUANTITY
1.	4B205010	CASE ASY	1
2.	4G048870	ROD ASY	1
3.	72053763	ELL #8MSTR #8MJIC 90°	1
4.	73054681	CHECK VALVE	1
5.	5P288970	PORT TUBE	1
6.	6HD35025	HEAD	1
7.	6ID35125	PISTON	1
8.	7Q072338	O-RING	1REF
9.	7Q10P338	BACKUP RING	1REF
10.	7T2NX427	WEAR RING	2REF
11.	7R546025	U-CUP SEAL	1REF
12.	7R14P025	ROD WIPER	1REF
13.	7T2NX435	PISTON RING	2REF
14.	7T61N125	NYLON LOCK RING	1REF
15.	7T66P035	PISTON SEAL	1REF
16.	6A025025	WAFER LOCK	1REF
17.	7Q072151	O-RING	1REF
18.	9D142020	SEAL KIT (INCL. 8-17)	1
19.	6C015025	STOP TUBE	1

REV. A 20040115

Cylinder, Power Out (3B142860) (Thru 8-05)



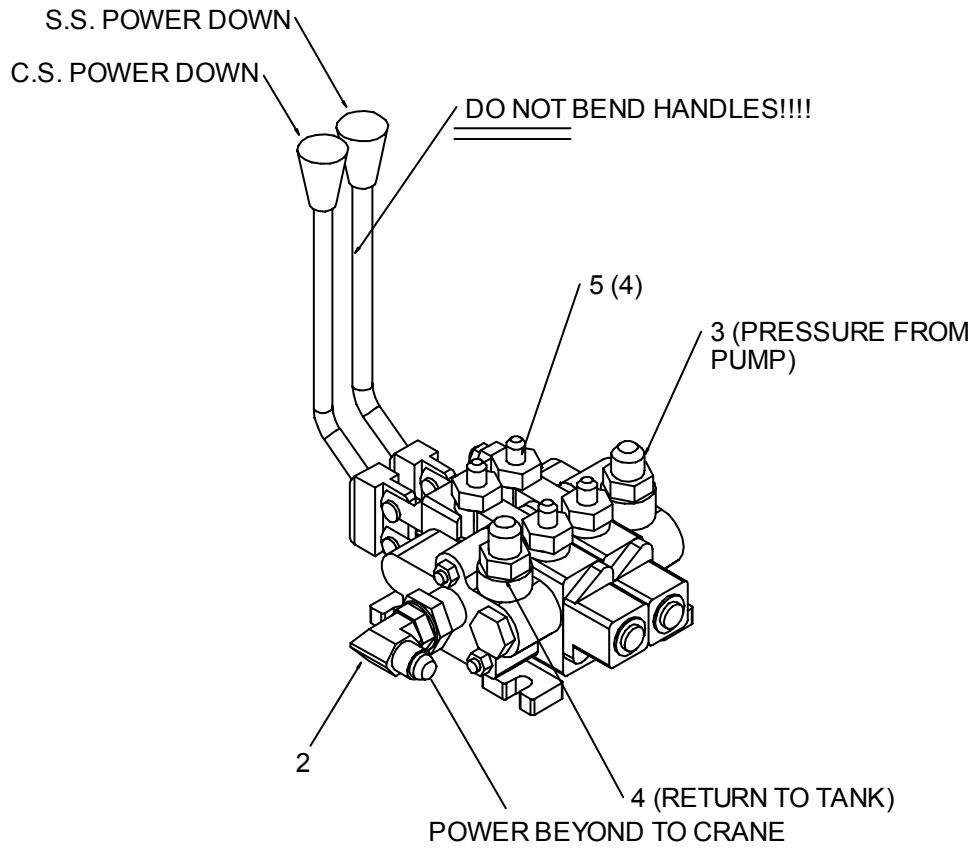
NOTES:

- 1 REPLACE ALL COMPONENTS OF THE SEAL KIT WHENEVER THE CYLINDER IS DISASSEMBLED. THIS WILL REDUCE FUTURE DOWNTIME.
- 2 APPLY REGULAR GRADE ANTI-SEIZE AND LUBRICATING COMPOUND TO THE THREADS ON THE CYLINDER HEAD ONLY. KEEP AWAY FROM ALL SEALS.
- 3 APPLY "LUBRIPLATE" NO. 630-2 MEDIUM HEAVY, MULTI-PURPOSE LUBRICANT, TO ALL PISTON HEAD GLAND AND HOLDING VALVE SEALS, NYLON LOCK RING, CAST IRON PISTON RINGS, AND ROD STINGER THREADS.

3B142860 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	4B142860	CASE ASM	1
2.	4G142860	ROD ASM	1
3.	6C125007	STOP TUBE	1
4.	6H012007	HEAD	1
5.	6I012050	PISTON	1
6.	9B050608	SEAL KIT	REF
7.	7Q072021	O-RING	1
8.	7Q072214	O-RING	1
9.	7Q10P214	BACKUP RING	1
10.	7R100750	U-CUP SEAL	1
11.	7R13P007	ROD WIPER	1
12.	7T66P012	PISTON SEAL	1
13.	72066029	RETAINING RING	1

REV. B 20040202

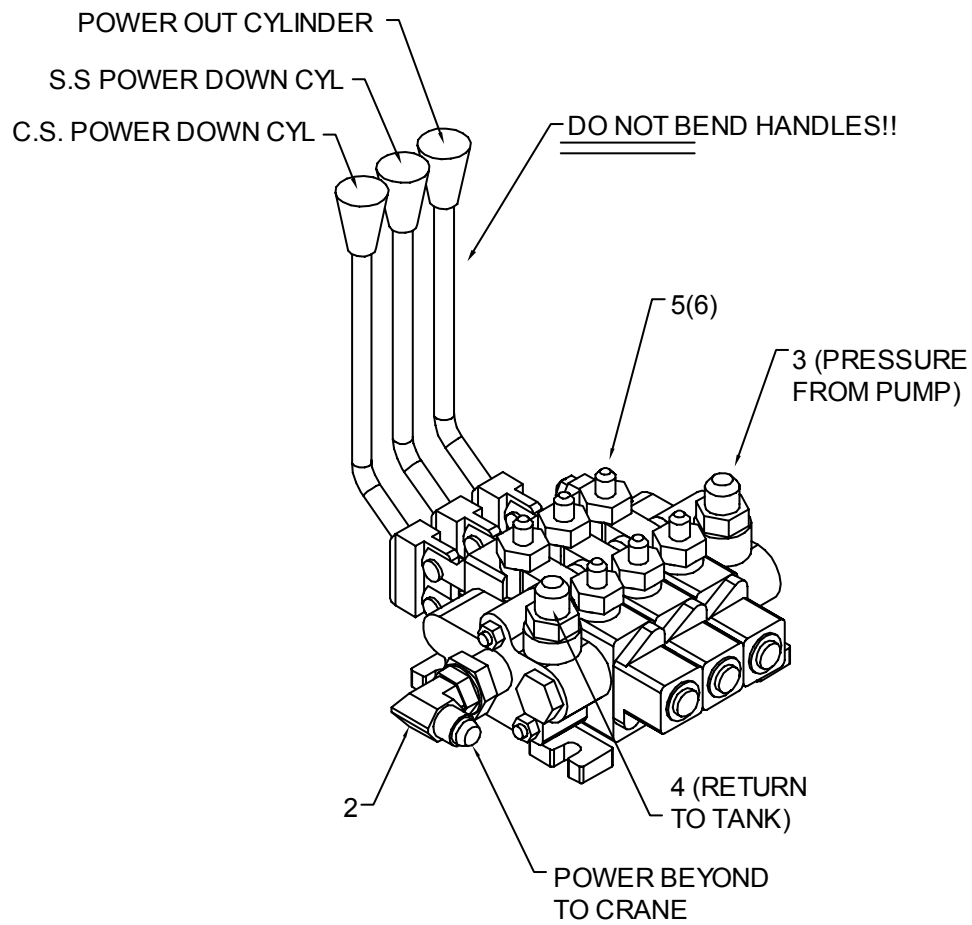
Valve Bank, 2-Section (51714813)



51714813 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	51705983	VALVEBANK	1
2.	72053764	ELBOW #10MSTR #8MJIC 90°	1
3.	72532358	ADAPTER #8MSTR #8MJIC	1
4.	72532359	ADAPTER #10MSTR #8MJIC	1
5.	72533589	ADAPTER #10MSTR #4MJIC	4

REV. A 20040204

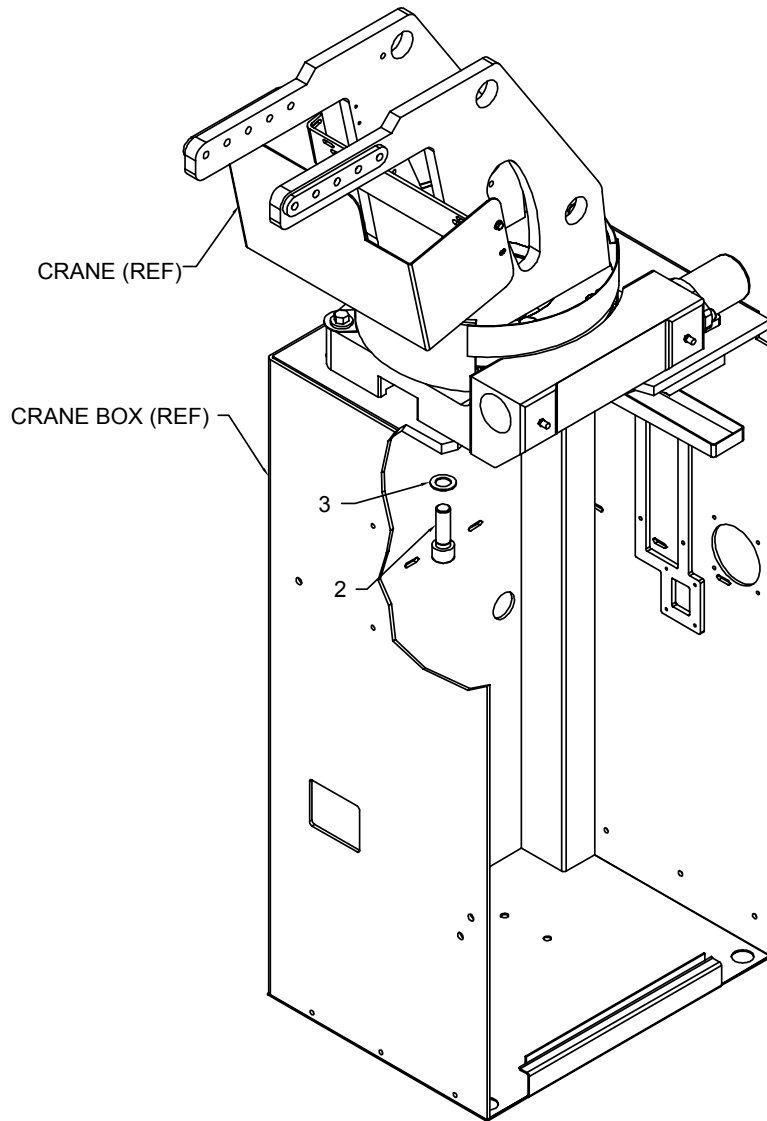
Valve Bank, 3-Section (51714812)



51714812 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	51705984	VALVEBANK	1
2.	72053764	ELBOW #10MSTR #8MJIC 90°	1
3.	72532358	ADAPTER #8MSTR #8MJIC	1
4.	72532359	ADAPTER #10MSTR #8MJIC	1
5.	72533589	ADAPTER #10MSTR #4MJIC	6

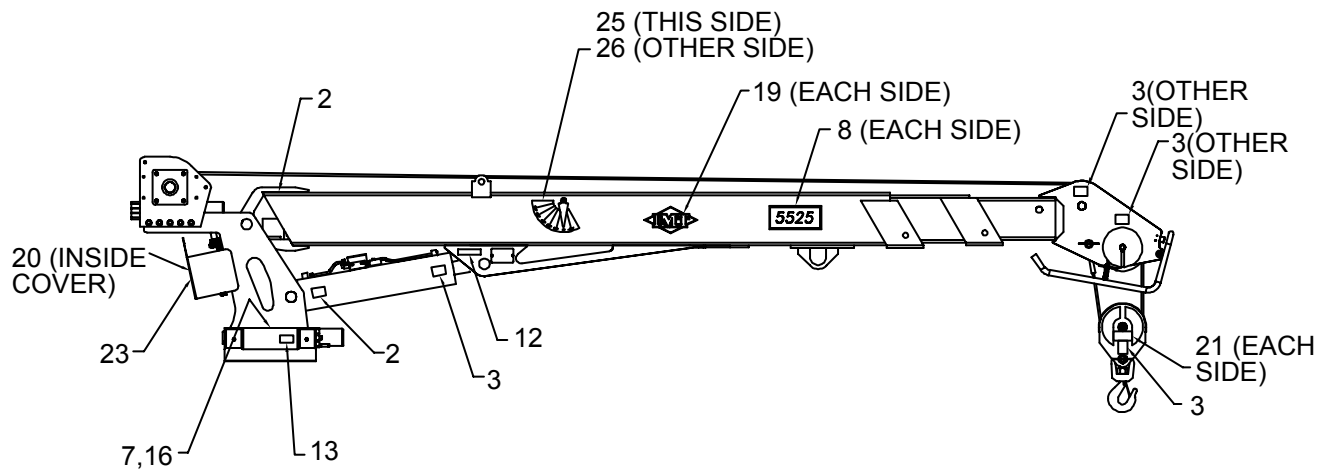
Miscellaneous

Installation Kit (93716522)



93716522 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
2.	72601748	CAP SCR 1-8 X 3 SH GR8	8
3.	72063066	WASHER 1 HI-STR ZINC YELLOW	8
4.	73052091	FILTER, HYD RET 10 MIC 1-1/4 NPTF	1
5.	73052092	ELEMENT, HYD FILTER (PART OF 4)	1REF

Decal Placement, 5525 (99903731)

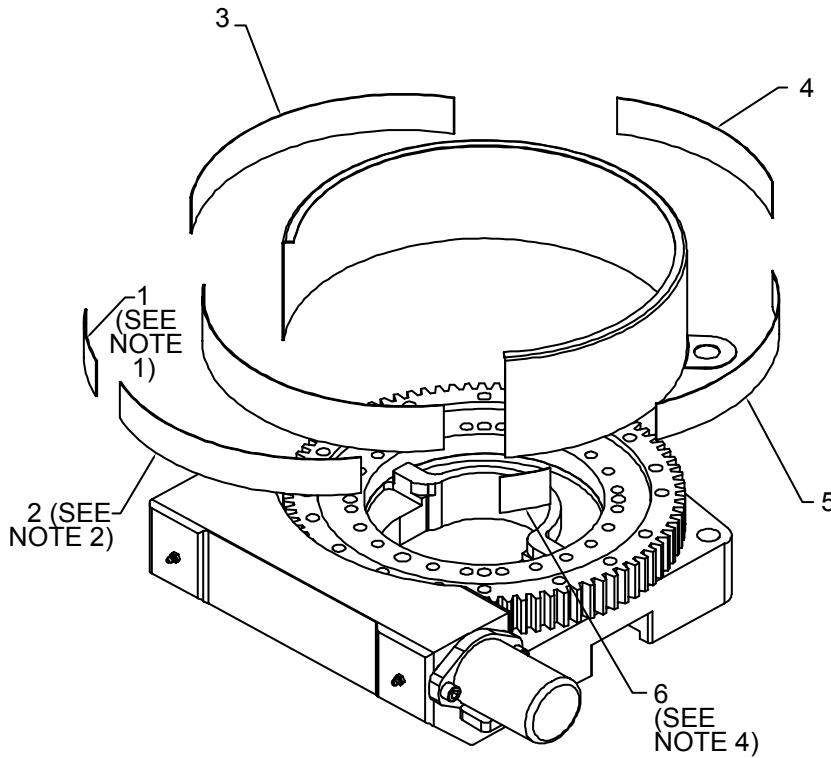


DECAL PLACEMENT	
ITEM NUMBER	LOCATION
6,10,24,27	AT OR NEAR REMOTE CONTROL STORAGE POINT
1	ONE ON EACH OUTRIGGER
15,18	ONE ON EACH SIDE OF CARRIER VEHICLE
14	2 ON FRONT SIDEPACKS, 2 ON REAR OUTRIGGERS
17	AT OR NEAR HYDRAULIC RESERVOIR
22	AT OR NEAR DRIVELINE

99903731 PARTS LIST				
ITEM	PART #	DESCRIPTION	QUANTITY	KIT #
1.	70391598	DECAL-WARNING 315A OUT	2	PART OF #5
2.	70391612	DECAL-GREASE WEEKLY (LEFT)	4	PART OF #4
3.	70391613	DECAL-GREASE WEEKLY (RT)	4	PART OF #4
4.	95719347	DECAL KIT- TELE COMMON	1	
5.	95719348	DECAL KIT - BODY COMMON	1	
6.	70392213	DECAL-CAUTION WASH/WAX	1	PART OF #4
7.	70392524	DECL-ROTATE CRANE WHILE GREASING	1	PART OF #4
8.	70396148	DECAL-5525 IDENTIFICATION	2	PART OF #9
9.	95719355	DECAL KIT-5525 MODEL SPECIFIC	1	
10.	70396613	DECAL-CRANE SAFETY & OPERATION	1	PART OF #5
11.	70395670	DECAL-CAUTION DOWNHAUL WT	2	PART OF #4
12.	70395324	DECAL-ASME/ANSI B30.5	1	PART OF #4
13.	70395090	DECAL-GREASE WORM DRIVE BRNGS	1	PART OF #4
14.	70392864	DECAL-DANGER OUTRG, STAND CLEAR	4	PART OF #5
15.	70394445	DECAL-DANGER ELEC HZD, LG, TELE	4	PART OF #5
16.	70392399	DECAL-LUBRICATE WORM	1	PART OF #4
17.	70394189	PLACARD-MOBIL OIL RESERVOIR	1	PART OF #5
18.	70392868	DECAL-DANGER CR LOADLINE	4	PART OF #5
19.	70029251	DECAL-DIAMOND IMT	2	PART OF #9
20.	70394166	DECAL-INSTRUCTIONS-MANUAL OPER	1	PART OF #4
21.	70393860	DECAL-LOAD BLOCK RATINGS, 5.5 TONS	2	PART OF #9
22.	70392891	DECAL-DANGER DRIVELINE	1	PART OF #5
23.	70396149	DECAL-5525 CAPACITY PLACARD	1	PART OF #9
24.	71039134	DECAL-CAUTION OIL LEVEL	1	PART OF #5
25.	71391522	DECAL-ANGLE INDICATOR RH	1	PART OF #4
26.	71391523	DECAL-ANGLE INDICATOR LH	1	PART OF #4
27.	70392982	DECAL-SERVICE & REPAIR	1	PART OF #5

REV. A 20060926

99903731 Tape Application



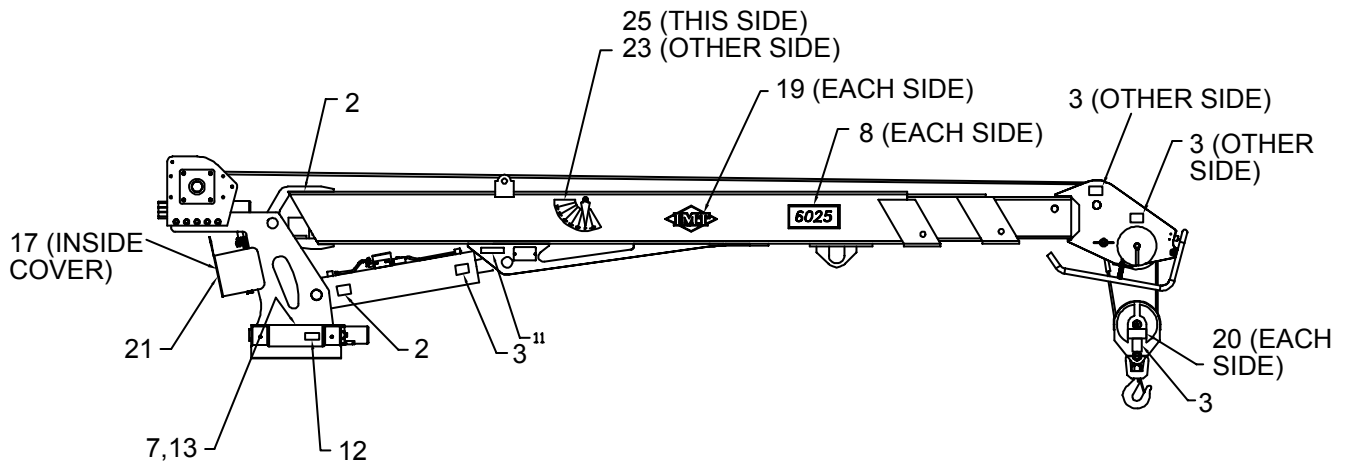
NOTES:

- 1 INSTALL ITEM #1 (GREEN TAPE) STARTING FROM THE FAR EDGE OF THE GEAR GUARD, CENTERING TAPE FROM TOP TO BOTTOM.
- 2 INSTALL ITEM #2 (YELLOW TAPE) WITH ONE EDGE TOUCHING THE GREEN TAPE AND THE OTHER END RUNNING TO THE EDGE OF THE PART.
- 3 INSTALL ITEM #3 (GREEN) APPROXIMATELY 1/4" DOWN FROM THE TOP EDGE OF THE ROLLED GUARD AND BUTTED TO THE EDGE OF THE LARGE GEAR GUARD. NOW INSTALL ITEMS #4 - 6 WITH THE EDGES OF THE TAPE BUTTED UP AGAINST EACH OTHER.
- 4 ITEM #6 MAY EXTEND PAST THE EDGE OF THE GUARD.

99903731 TAPE APPLICATION PARTS LIST

ITEM	PART #	DESCRIPTION	QUANTITY	QUANTITY
1.	60350086	TAPE-GREEN REFLECT 2.0X4.0	1	PART OF #9
2.	60350087	TAPE-YELLOW REFLECT 2.0X12.5	1	PART OF #9
3.	60350088	TAPE-GREEN REFLECT 2.0X16.0	1	PART OF #9
4.	60350089	TAPE-YELLOW REFLECT 2.0X9.5	1	PART OF #9
5.	60350090	TAPE-RED REFLECT 2.0X14.75	1	PART OF #9
6.	60350091	TAPE-YELLOW REFLECT 2.0X2.25	1	PART OF #9
7.	70396193	DECAL-REDUCED CAPACITY 5025	1	PART OF #9

Decal Kit, 6025 (95717028)

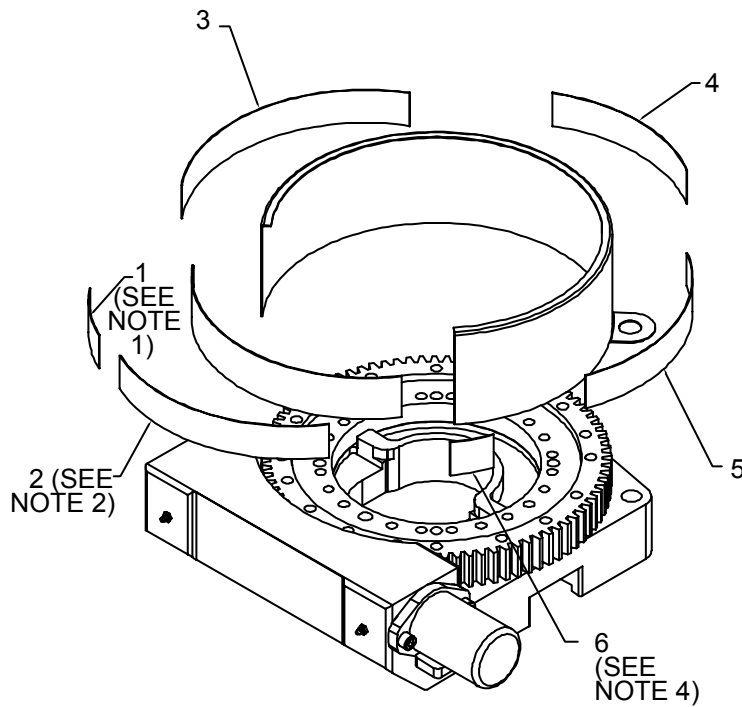


DECAL PLACEMENT	
ITEM NUMBER	LOCATION
6,9,24	AT OR NEAR REMOTE CONTROL STORAGE POINT
1	ONE ON EACH OUTRIGGER
15,18	ONE ON EACH SIDE OF CARRIER VEHICLE
16	AT OR NEAR HYDRAULIC RESERVOIR
22	AT OR NEAR DRIVELINE
14	2 ON FRONT SIDEPACKS, 2 ON REAR OUTRIGGERS

99903732 PARTS LIST				
ITEM	PART #	DESCRIPTION	QUANTITY	KIT #
1.	70391598	DECAL-WARNING OUTRIGGER	2	PART OF #5
2.	70391612	DECAL-GREASE WEEKLY (LEFT)	4	PART OF #4
3.	70391613	DECAL-GREASE WEEKLY (RT)	4	PART OF #4
4.	95719347	DECAL KIT - TELE COMMON	1	
5.	95719348	DECAL KIT - BODY COMMON	1	
6.	70392213	DECAL-CAUTION WASH/WAX	1	PART OF #4
7.	70392524	DECL-ROTATE CRANE WHILE GREASING	1	PART OF #4
8.	70396094	DECAL-6025 IDENTIFICATION	2	PART OF #9
9.	95719356	DECAL KIT - 6025 MODEL SPECIFIC	1	
10.	70395670	DECAL-CAUTION DOWNHAUL WT	2	PART OF #4
11.	70395324	DECAL-ASME/ANSI B30.5	1	PART OF #4
12.	70395090	DECAL-GREASE WORM DRIVE BRNGS	1	PART OF #4
13.	70392399	DECAL-LUBRICATE WORM	1	PART OF #4
14.	70392864	DECAL-DANGER OUTRG, STAND CLEAR	4	PART OF #5
15.	70394445	DECAL-DANGER ELEC HZD, LG, TELE	4	PART OF #5
16.	70394189	PLACARD-MOBIL OIL RESERVOIR	1	PART OF #5
17.	70394166	DECAL-INSTR FOR MANUAL OPERATION	1	PART OF #4
18.	70392868	DECAL-DANGER CRANE LOADLINE	4	PART OF #5
19.	70029251	DECAL-IMT DIAMOND	2	PART OF #9
20.	70393860	DECAL-LOAD BLOCK RATING 5.5 TONS	2	PART OF #9
21.	70396096	DECAL-CAPACITY PLACARD 6025	1	PART OF #9
22.	70392891	DECAL-DANGER DRIVELINE	1	PART OF #5
23.	71391523	DECAL-ANGLE INDICATOR LH	1	PART OF #4
24.	71039134	DECAL-CAUTION OIL LEVEL	1	PART OF #5
25.	71391522	DECAL-ANGLE INDICATOR RH	1	PART OF #4
26.	70392982	DECAL-SERVICE & REPAIR	1	PART OF #5

REV. B 20060926

99903732 Tape Application



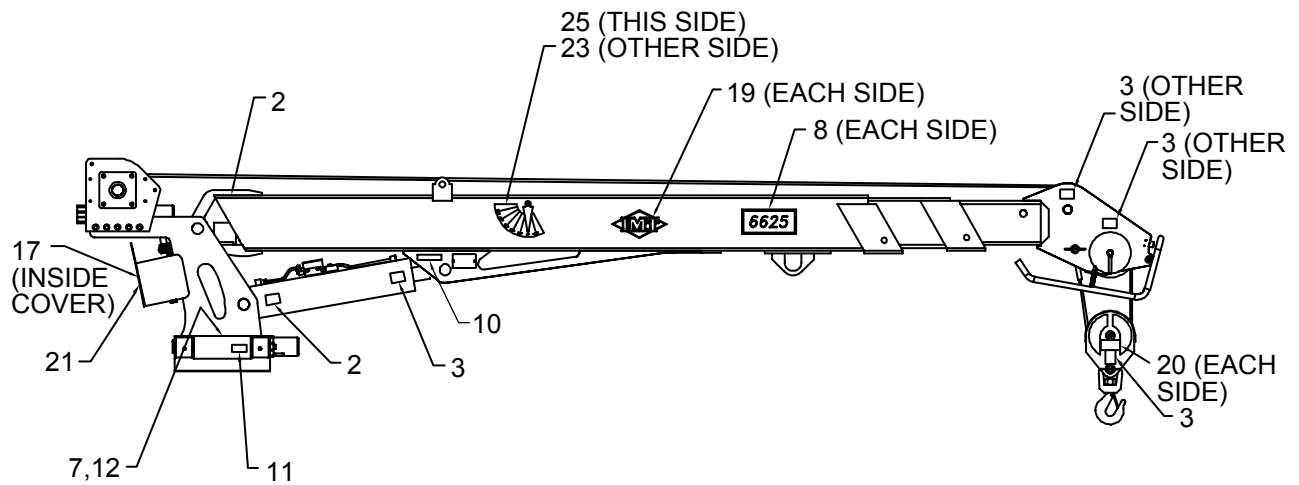
NOTES:

- 1 INSTALL ITEM #1 (GREEN TAPE) STARTING FROM THE FAR EDGE OF THE GEAR GUARD, CENTERING TAPE FROM TOP TO BOTTOM.
- 2 INSTALL ITEM #2 (YELLOW TAPE) WITH ONE EDGE TOUCHING THE GREEN TAPE AND THE OTHER END RUNNING TO THE EDGE OF THE PART.
- 3 INSTALL ITEM #3 (GREEN) APPROXIMATELY 1/4" DOWN FROM THE TOP EDGE OF THE ROLLED GUARD AND BUTTED TO THE EDGE OF THE LARGE GEAR GUARD. NOW INSTALL ITEMS #4 - 6 WITH THE EDGES OF THE TAPE BUTTED UP AGAINST EACH OTHER.
- 4 ITEM #6 MAY EXTEND PAST THE EDGE OF THE GUARD.

99903732 TAPE APPLICATION PARTS LIST

ITEM	PART #	DESCRIPTION	QUANTITY	KIT #
1.	60350086	TAPE-GREEN REFLECT 2.0X4.0	1	PART OF #9
2.	60350087	TAPE-YELLOW REFLECT 2.0X12.5	1	PART OF #9
3.	60350088	TAPE-GREEN REFLECT 2.0X16.0	1	PART OF #9
4.	60350089	TAPE-YELLOW REFLECT 2.0X9.5	1	PART OF #9
5.	60350090	TAPE-RED REFLECT 2.0X14.75	1	PART OF #9
6.	60350091	TAPE-YELLOW REFLECT 2.0X2.25	1	PART OF #9
7.	70396197	DECAL-REDUCED CAPACITY 6025	1	PART OF #9

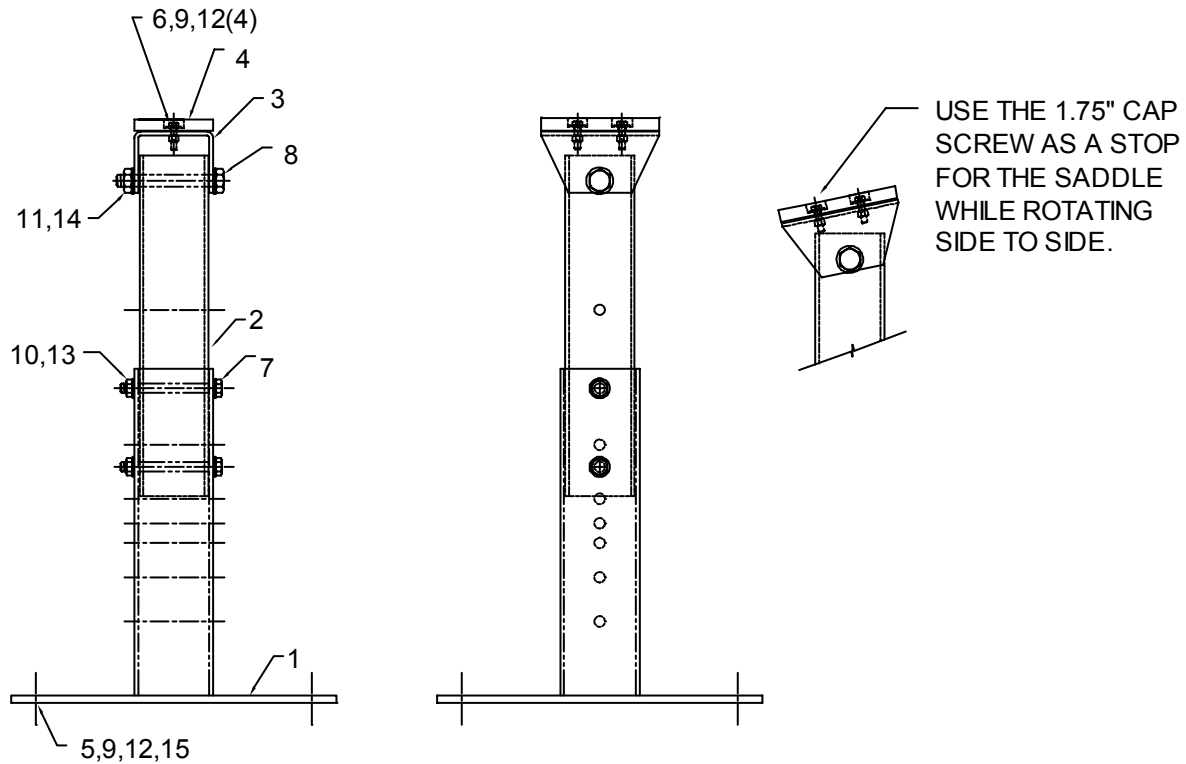
Decal Placement, 6625 (99903733)



DECAL PLACEMENT	
ITEM NUMBER	LOCATION
9,24, 26	AT OR NEAR REMOTE CONTROL STORAGE POINT
1	ONE ON EACH OUTRIGGER
15,18	ONE ON EACH SIDE OF CARRIER VEHICLE
16	AT OR NEAR HYDRAULIC RESERVOIR
22	AT OR NEAR DRIVELINE
14	2 ON FRONT SIDEPACKS, 2 ON REAR OUTRIGGERS

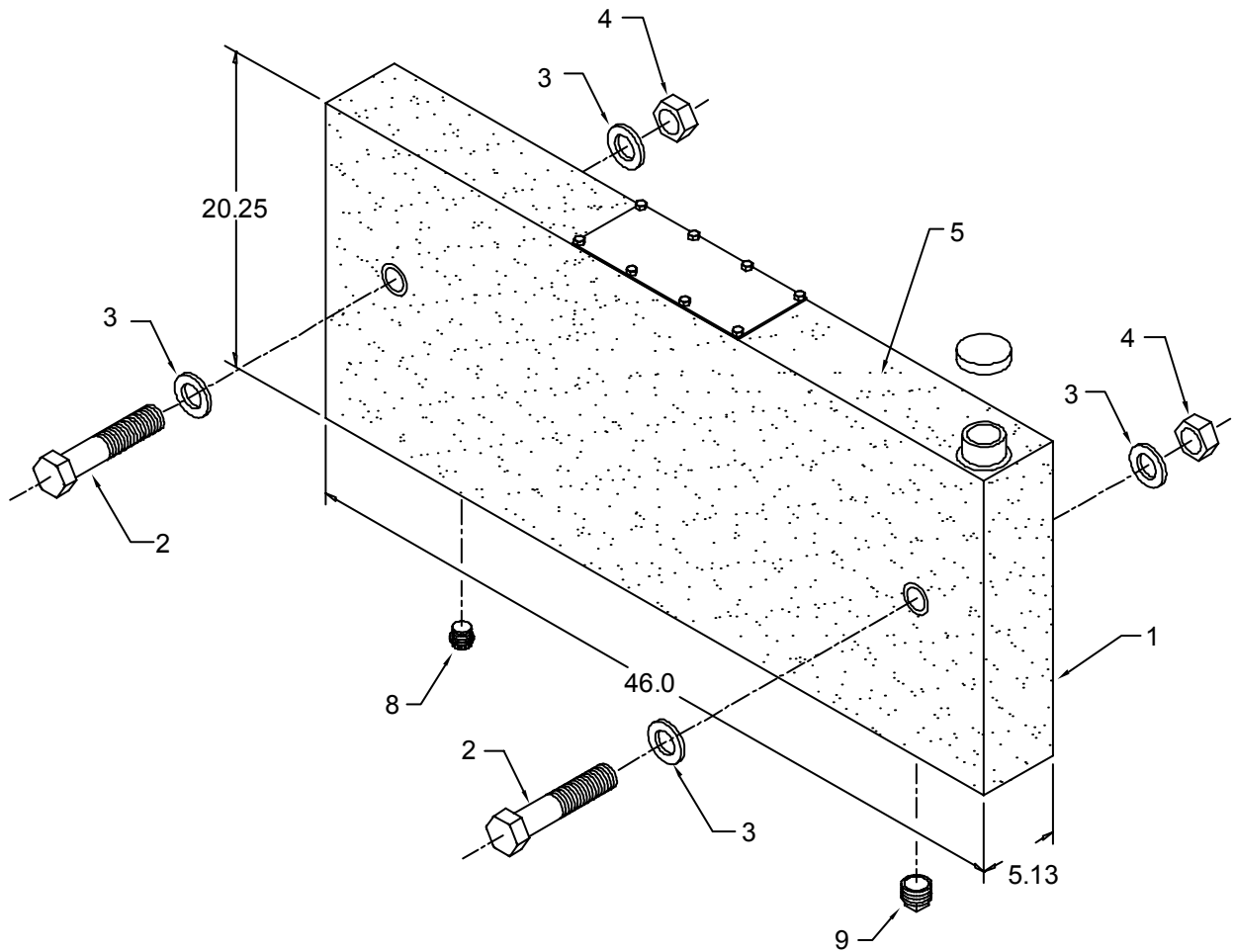
99903733 PARTS LIST				
ITEM	PART #	DESCRIPTION	QUANTITY	KIT #
1.	70391598	DECAL-WARNING OUTRIGGER	2	PART OF #5
2.	70391612	DECAL-GREASE WEEKLY (LEFT)	4	PART OF #4
3.	70391613	DECAL-GREASE WEEKLY (RT)	4	PART OF #4
4.	95719347	DECAL KIT - TELE COMMON	1	
5.	95719348	DECAL KIT - BODY COMMON	1	
6.	70392213	DECAL-CAUTION WASH/WAX	1	PART OF #4
7.	70392524	DECL-ROTATE CRANE WHILE GREASING	1	PART OF #4
8.	95719401	DECAL KIT - 6625 MODEL SPECIFIC	2	
9.	70396613	DECAL-CRANE SAFETY & OPERATION	1	PART OF #5
10.	70395324	DECAL-ASME/ANSI B30.5	1	PART OF #4
11.	70395090	DECAL-GREASE WORM DRIVE BRNGS	1	PART OF #4
12.	70392399	DECAL-LUBRICATE WORM	1	PART OF #4
13.	70395670	DECAL-CAUTION DOWNHAUL WT	2	PART OF #5
14.	70392864	DECAL-DANGER OUTRG, STAND CLEAR	4	PART OF #5
15.	70394445	DECAL-DANGER ELEC HZD, LG, TELE	4	PART OF #5
16.	70394189	PLACARD-MOBIL OIL RESERVOIR	1	PART OF #5
17.	70394166	DECAL-INSTR MANUAL OPERATION	1	PART OF #4
18.	70392868	DECAL-DANGER CR LOADLINE	4	PART OF #5
19.	70029251	DECAL-DIAMOND IMT	2	PART OF #8
20.	70393860	DECAL-LOAD BLOCK RATING 5.5 TONS	2	PART OF #8
21.	70396054	DECAL-CAPACITY PLACARD 6625	2	PART OF #8
22.	70392891	DECAL-DANGER DRIVELINE	1	PART OF #5
23.	71391523	DECAL-ANGLE INDICATOR LH	1	PART OF #4
24.	71039134	DECAL-CAUTION OIL LEVEL	1	PART OF #5
25.	71391522	DECAL-ANGLE INDICATOR RH	1	PART OF #4
26.	70392982	DECAL-SERVICE & REPAIR	1	PART OF #5

Boom Support Assembly (51714181)



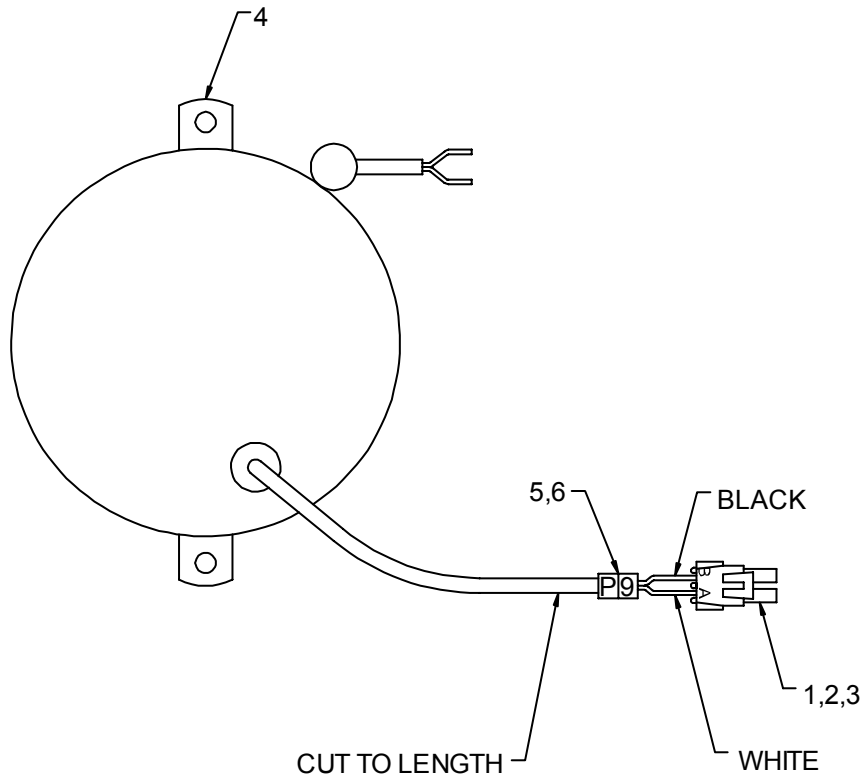
51714181 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	52708159	PEDESTAL	1
2.	60121853	TUBE	1
3.	60120516	SADDLE	1
4.	60030306	WEAR PAD	1
5.	72060048	CAP SCR 3/8-16X1-1/2 HHGR5	4
6.	72060049	CAP SCR 3/8-16X1-3/4 HHGR5	2
7.	72060101	CAP SCR 1/2-13X5 HHGR5	2
8.	72601671	CAP SCR 3/4-10X5-1/2 HHGR5	1
9.	72062103	NUT 3/8-16 LOCK	6
10.	72062080	NUT 1/2-13 LOCK	2
11.	72062114	NUT 3/4-10 LOCK	1
12.	72063003	WASHER 3/8 WRT	12
13.	72063005	WASHER 1/2 WRT	4
14.	72063008	WASHER 3/4 WRT	2
15.	76392821	WASHER-BONDED PLTD	4
16.	51716384	HARDWARE KIT (INCL. 5-15)	1

Reservoir (51707798)



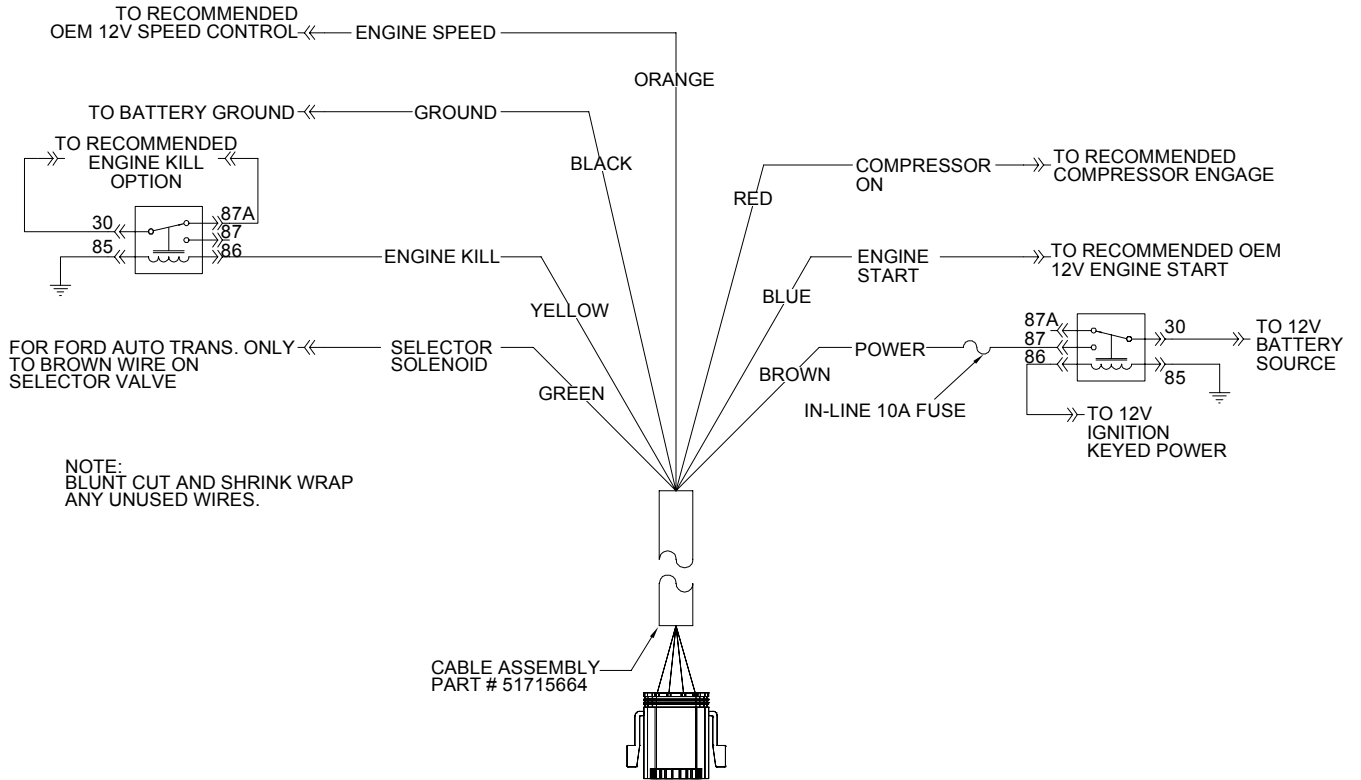
51707798 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	52711432	RESERVOIR WELDMENT	1
2.	72060104	CAP SCR 1/2-13X6-1/2 HHGR5	2
3.	72063005	WASHER 1/2 WRT	8
4.	72062080	NUT 1/2-13 LOCK	2
5.	70394189	DECAL-OIL RECOMMENDED	1
8.	70393233	PLUG 3/4NPT	1
9.	72601004	PLUG 1-1/4NPT SQHD	1

Cord Reel Assembly (51713168) (Through 8-1-06)



51713168 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	77044574	TOWER CONNECTOR	1
2.	77044552	PIN 18-20GA	2
3.	70394069	CABLE SEAL	2
4.	70732193	CORD REEL	1
5.	77041493	WIRE MARKER-PA2-P-YEL	1
6.	77041491	WIRE MARKER-PA2-9-YEL	1

Chassis Wiring Harness (99903340)



Note: Used on all ship-out IMT telescopic cranes.

CHAPTER 5

General Reference

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Inspection Checklist

NOTICE:

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

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

<p>TYPE OF INSPECTION</p> <p>NOTES:</p> <p>Daily and monthly inspections are to be performed by a “designated” person, who has been selected or assigned by the employer or the employer’s representative as being competent to perform specific duties.</p> <p>Quarterly and annual inspections are to be performed by a “qualified” person who, by possession of a recognized degree in an applicable field or certificate of professional standing, or who, by extensive knowledge, training and experience has successfully demonstrated the ability to solve or resolve problems related to the subject matter and work.</p> <p>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.</p> <p>Consult Operator / Service Manual for additional inspection items, service bulletins and other information.</p> <p>Before inspecting and operating crane, crane must be set up away from power lines and leveled with outriggers fully extended.</p> <p>DAILY (D): Before each day of operation, those items designated with a (D) must be inspected. This inspection need not be recorded unless a deficiency (8) is found. If the end user chooses to record all daily inspections and those daily inspections include the monthly inspection requirements, there would be no need for a separate monthly inspection.</p> <p>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.</p> <p>QUARTERLY (Q): Every three to four 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 recorded.</p> <p>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 recorded.</p>

INSPECTION CHECKLIST STATUS KEY:

S = Satisfactory	R = Recommendation (should be considered for corrective action)
X = Deficient (must be corrected prior to operation)	NA = Not Applicable

FREQUENCY	ITEM	KEY	INSPECTION DESCRIPTION	STATUS (S,R,X,NA)
D	1	Labels	All load charts, safety & warning labels, and control labels are present and legible.	
D	2	Crane	Check all safety devices for proper operation.	
D	3	Controls	Control mechanisms for proper operation of all functions, leaks and cracks.	
D	4	Station	Control and operator's station for dirt, contamination by lubricants, and foreign material.	
D	5	Hydraulic System	Hydraulic system (hoses, tubes, fittings) for leakage and proper oil level.	
D	6	Hook	Presence and proper operation of hook safety latches.	
D	7	Rope	Proper reeving of wire rope on sheaves and winch drum.	
D	8	Pins	Proper engagement of all connecting pins and pin retaining devices.	
D	9	General	Overall observation of crane for damaged or missing parts, cracked welds, and presence of safety covers.	
D	10	Operation	During operation, observe crane for abnormal performance, unusual wear (loose pins, wire rope damage, etc.). If observed, discontinue use and determine cause and severity of hazard.	
D	11	Remote Ctrl	Operate remote control devices to check for proper operation.	
D	12	Electrical	Operate all lights, alarms, etc. to check for proper operation.	
D	13	Anti 2-Block	Operate anti 2-block device to check for proper operation.	
D	14		Other (Per customer requirements)	
D	15		Other (Per customer requirements)	
M	16	Daily	All daily inspection items.	
M	17	Cylinders	Visual inspection of cylinders for leakage at rod, fittings, and welds. Damage to rod and case.	
M	18	Valves	Holding valves for proper operation.	
M	19	Valves	Control valves for leaks at fittings and between stations.	
M	20	Valves	Control valve linkages for wear, smoothness of operation, and tightness of fasteners.	
M	21	General	Bent, broken, or significantly rusted/corroded parts.	
M	22	Electrical	Electrical systems for presence of dirt, moisture, and frayed wires.	
M	23	Structure	All structural members for damage.	
M	24	Welds	All welds for breaks and cracks.	
M	25	Pins	All pins for proper installation and condition.	
M	26	Hardware	All bolts, fasteners and retaining rings for tightness, wear and corrosion.	
M	27	Wear Pads	Presence of wear pads.	
M	28	Pump & Motor	Hydraulic pumps and motors for leakage at fittings, seals, and between sections.	
M	29	PTO	Transmission/PTO for leakage, abnormal vibration, and noise.	
M	30	Hyd Fluid	Quality of hydraulic fluid and presence of water.	

FREQUENCY	ITEM	KEY	INSPECTION DESCRIPTION	STATUS (S,R,X,NA)
M	31	Hyd Lines	Hoses & tubes for leakage, abrasion damage, blistering, cracking, deterioration, fitting leakage, and secured properly.	
M	32	Hook	Load hook for abnormal throat distance, twist, wear, and cracks.	
M	33	Rope	Condition of load line.	
M	34	Manual	Presence of operator's manual with unit.	
M	35		Other	
Q	36	Daily	All daily inspection items.	
Q	37	Monthly	All monthly inspection items.	
Q	38	Extensions	Condition of wear pads.	
Q	39	Rotation Sys	Rotation bearing for proper torque of all accessible mounting bolts.	
Q	40	Hardware	Base mounting bolts for proper torque.	
Q	41	Structure	All structural members for deformation, cracks and corrosion.	
	42		• Base	
	43		• Outrigger beams and legs	
	44		• Mast	
	45		• Inner Boom	
	46		• Outer Boom	
	47		• Extension(s)	
	48		• Jib boom	
	49		• Jib extension(s)	
	50		• Other	
Q	51	Hardware	Pins, bearing, shafts, gears, rollers, and locking devices for wear, cracks, corrosion and distortion.	
	52		• Rotation bearing(s)	
	53		• Inner boom pivot pin(s) and retainer(s)	
	54		• Outer boom pivot pin(s) and retainer(s)	
	55		• Inner boom cylinder pin(s) and retainer(s)	
	56		• Outer boom cylinder pin(s) and retainer(s)	
	57		• Extension cylinder pin(s) and retainer(s)	
	58		• Jib boom pin(s) and retainer(s)	
	59		• Jib cylinder pin(s) and retainer(s)	
	60		• Jib extension cylinder pin(s) and retainer(s)	
	61		• Boom tip attachment	
	62		• Other	
Q	63	Hyd Lines	Hoses, fittings and tubing for proper routing, leakage, blistering, deformation and excessive abrasion.	
	64		• Pressure line(s) from pump to control valve	
	65		• Return line(s) from control valve to reservoir	
	66		• Suction line(s) from reservoir to pump	
	67		• Pressure line(s) from control valve to each function	
	68		• Load holding valve pipe(s) and hose(s)	
	69		• Other	
Q	70	Pumps, PTO's & Motors	Pumps, PTO's & motors for loose bolts/fasteners, leaks, noise, vibration, loss of performance, heating & excess pressure.	
	71		• Winch motor(s)	
	72		• Rotation motor(s)	
	73		• Other	
Q	74	Valves	Hydraulic valves for cracks, spool return to neutral, sticking spools, proper relief valve setting, relief valve failure.	
	75		• Main control valve	

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

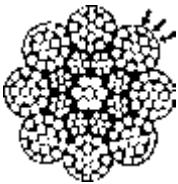
Wire Rope Inspection & Replacement

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

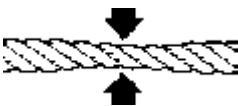
- a Corrosion can be cause for replacement. Any development of corrosion must be noted and monitored closely.
- b When there are either three broken wires in one strand or a total of six broken wires in all strands in any one rope lay.



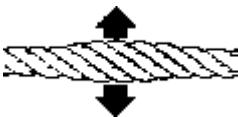
- c When flat spots on the outer wires appear and those outside wires are less than 2/3 the thickness of the unworn outer wire.



- 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).

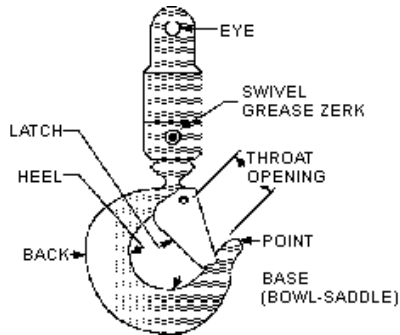
d LATCH

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.

Anti-Two-Block Device Inspection

(See the operation, maintenance, and repair manual for this crane for a complete description.)

The anti-two-block 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, a marked difference in winch operation should be noted. At this point, the winch up function should become very sluggish or non-functioning and have very little pull capability. Slowly increase truck engine speed while simultaneously actuating the winch up function. The winch characteristics should remain sluggish with little or no tensioning of the cable. If operation other than as described occurs, stop immediately and investigate. Failure to do so will risk damage to the cable or the crane. If all is well at this point, actuate the boom extend function slowly, and gradually increase to full actuation. Once again the function should be sluggish or non-existent with no tightening of the winch cable. If operation other than described occurs, stop immediately and reverse the function.
- 4** The final check involves actuating both the winch up and extend functions together and checking for proper operation of the anti-two-blocking circuit. Once again, start slowly and stop if it appears the cable is being tensioned.
- 5** If the anti-two-block function appears to be functioning normally, winch the cable down until the sensing weight swings free.

Thread Torques



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.



When using the torque data in the torque charts, 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.

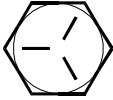
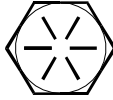
FINE THREAD TORQUE CHART (ENGLISH)

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



COARSE THREAD TORQUE CHART (ENGLISH)

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

FINE THREAD TORQUE CHART (METRIC)

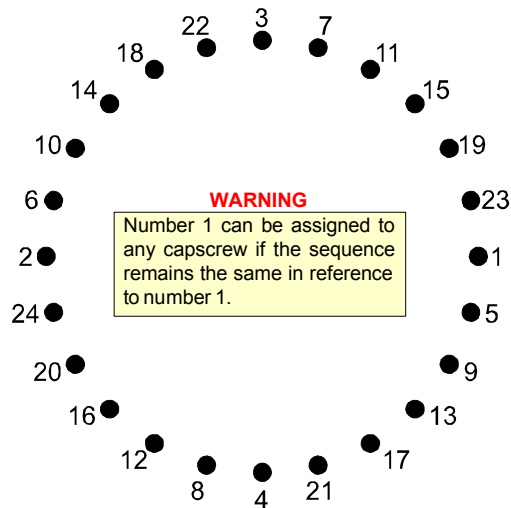
TIGHTENING TORQUE					
SIZE (DIA-TPI)	BOLT DIA. (INCHES)	 SAE J429 GRADE 5		 SAE J429 GRADE 8	
		PLAIN (KG-M)	PLATED (KG-M)	PLAIN (KG-M)	PLATED (KG-M)
5/16-24	0.3125	3	2	4	3
3/8-24	0.375	5	4	7	5
7/16-20	0.4375	8	6	11	8
1/2-20	0.5	12	9	17	12
9/16-18	0.5625	17	12	24	18
5/8-18	0.625	24	18	33	25
3/4-16	0.75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

COARSE THREAD TORQUE CHART (METRIC)

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

Turtable Bearing Thread Tightening Sequence

Refer to the turntable bearing thread tightening diagram below for proper tightening/torqueing 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: $.40 \times 265 \text{ FT-LB} = 106 \text{ FT-LB}$)
 (EXAMPLE-METRIC: $.40 \times 36 \text{ KG-M} = 14.4 \text{ KG-M}$)
- 4 Repeat Step 3, but torqueing all capscrews to 75% of the specified torque value. Continue to follow the tightening sequence.
 (EXAMPLE: $.75 \times 265 \text{ FT-LB} = 199 \text{ FT-LB}$)
 (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.

Turtable Bearing Inspection for Replacement

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

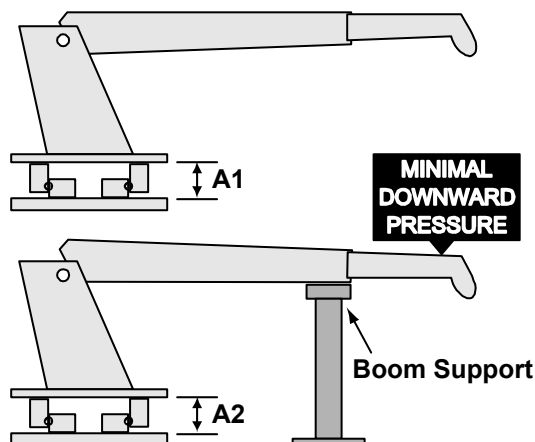
- 1 Metal particles present in the bearing lubricant.
- 2 Increased drive power required to rotate the crane.
- 3 Noise emitting from the bearing during crane rotation.
- 4 Rough crane rotation.
- 5 Uneven or excessive wear between the pinion gear and turntable gear.

If none of the listed 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 bearing's 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.

Turtable Bearing Tilt Test

- 1 With the crane horizontal and fully extended, measure between the top and bottom mounting surfaces of the turntable bearing (A1), using a dial indicator for accuracy.
- 2 Reverse the load by applying minimal downward pressure on the boom while the boom is in the boom support or on a solid surface. Again measure A2.
- 3 Subtract A1 from A2 to determine tilt and compare the result with the accompanying chart.



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 32027 32030 T30 T40	9800 12916 13031 13034 14000 15000 18000 20017 8000L H1200 H1200RR T50 TH2551B BODY ROT'N TH2557B BODY ROT'N TH2557A BODY ROT'N
Ball Dia. (Ref)	.875" (22 mm)	1.00" (25 mm)	1.18 - 1.25" (30-32 mm)	1.75" (44 mm)
Tilt Dim. (A-A)	.060" (1.524 mm)	.070" (1.778 mm)	.075" (1.905 mm)	.090" (2.286 mm)