

EFFECTIVE SERIAL NO. 480XXX-001-GO-01-93

OWNERS MANUAL

8005H

REVISION 8/94

PART NO. 999939

SERIAL NO. _____

AUTO CRANE COMPANY

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WARNINGS



READ THIS PAGE!

- ♦ **WARNING!** Federal law (49 cfr part 571) requires that the Final Stage Manufacturer of a vehicle certify that the vehicle complies with all applicable federal regulations. Any modifications performed on the vehicle prior to the final stage are also considered intermediate stage manufacturing and must be certified as to compliance. The installer of this crane and body is considered one of the manufacturers of the vehicle. As such a manufacturer, the installer is responsible for compliance with all applicable federal and state regulations, and is required to certify that the vehicle is in compliance.
- ♦ **WARNING!** It is the further responsibility of the installer to comply with the OSHA Truck Crane Stability Requirements as specified by 29 CFR part 1910.180 (C) (1).
- ♦ **WARNING! NEVER OPERATE THE CRANE NEAR ELECTRICAL POWER LINES!** Auto Crane Company recommends that a crane never be moved any closer than 10 feet (3.05m) from power lines at any point. SEE DANGER DECAL (P/N 040529) in this Owner's Manual.
- ♦ **WARNING! NEVER**
 - **EXCEED** load chart capacities (centerline of rotation to hoist hook).
 - un-reel last 5 wraps of cable from drum!
 - wrap cable around load!
 - attempt to lift or drag a load from the side! The boom can fail far below its' rated capacity.
 - weld, modify, or use unauthorized components on any Auto Crane unit! This will void any warranty or liability. Also failure of the crane may result.
 - place a chain link on the tip of the hook and try to lift a load!
 - use a sling bar or anything larger than the hook throat that could prevent the hook latch from closing, thus negating the safety feature!
 - hold on any pendant Select Switch that will cause unsafe operating conditions!
- ♦ **WARNING!** In using a hook with latch, **ALWAYS** make sure that the hook throat is closed before lifting a load! Proper attention and common sense applied to the use of the hoist hook and various slings will prevent possible damage to material being hoisted and may prevent injury to personnel.
- ♦ **WARNING!** Failure to correctly plumb and wire crane can cause inadvertent operation and damage to crane and/or personnel!
- ♦ **WARNING!** Auto Crane Company remote controlled, stiff boom cranes are not designed or intended to be used for any applications involving the lifting or moving of personnel.
- ♦ **WARNING! ALWAYS** operate the crane in compliance with the load capacity chart. Do not use the overload shutdown device to determine maximum rated loads, if your crane is equipped with this type of device.



8005H SERIES - OWNER'S MANUAL
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INTRODUCTION

8005H SERIES

Auto Crane products are designed to provide many years of safe, trouble-free, dependable service when properly used and maintained.

To assist you in obtaining the best service from your crane and to avoid untimely crane and/or vehicle failure, this manual provides the following operating and service instructions. It is **specifically recommended** that all operating and service personnel consider this manual as mandatory material for reading and study before operating or servicing Auto crane products. It is **highly recommended** that crane owners, equipment managers and supervisors also read this manual.

Auto Crane has incorporated several safety features in the 8005H series cranes for your protection. The choice of materials and the design of the electrical system minimizes weight and lengthens durability. The hydraulic components meet or exceed a **3.5:1 safety factor**. Holding valves prevent the load from dropping if a hose should fail. A **10u filter** in the return line of the hydraulic system removes dirt and grit that may cause erratic operation. The reservoir has a **15u air filter** in the filler cap. The pump has a **40 mesh strainer** in the suction line.

For your convenience the overall dimensions of the 8005H series crane are on the General Dimension Drawing. Maximum turning radius at both the hoist motor and the rotation motor are also on that drawing.

Remember, the crane adds weight to the vehicle. Adding weight may change the driving and riding characteristics of the vehicle unless the appropriate overload spring(s) are installed on the truck. The payload of the vehicle is reduced by the weight of the crane. The operator should exercise care when loading the vehicle. Distributing the payload on the vehicle evenly will greatly improve the driving and riding characteristics of the vehicle. A minimum G.V.W. of **20,500 lbs.** is recommended for mounting the 8005H series cranes.

It has always been Auto Crane Company policy to handle all warranty claims we receive as promptly as

Auto Crane Company issues a limited warranty certificate with each unit sold. See last page for warranty policy.

possible. If a warranty claim involves discrepant material or workmanship, Auto Crane will take immediate corrective action. It is understandable that Auto Crane company cannot assume responsibility of liability when it is obvious that our products have been abused,

mis-used, overloaded or otherwise damaged by inexperienced persons trying to operate the equipment without reading the manual.

Auto Crane will not assume responsibility or liability for any modifications or changes made to unit, or installation of component parts done without authorization.

Auto Crane maintains a strong distributor network and a knowledgeable Customer Service Department. In most cases, an equipment problem is solved via phone conversation with our customer service department. The customer service department also has the ability to bring a local distributor, a regional sales manager, or a factory serviceman into the solution of an equipment problem. If, through no fault of Auto crane company, it is necessary to send an experienced factory serviceman on a field service call, the rates stated in the Auto Crane Distributor's Flat Rate Manual will apply.

Auto Crane Company's extensive Research and Development Program allow our customers to use the best equipment on the market. Our Engineering Staff and our knowledgeable sales people, are always available to our customers in solving crane and winch-type application problems. When in doubt, call the Auto Crane factory.

DISTRIBUTOR ASSISTANCE:

Should you require any assistance not given in this manual, we recommend that you consult your nearest Auto Crane Distributor. Our distributors sell authorized parts and have service departments that can solve almost any needed repair.

***NOTE: THIS MANUAL
SHOULD REMAIN WITH
THE CRANE AT ALL TIMES.***

This manual does not cover all maintenance, operating, or repair instructions pertinent to all possible situations. If you require additional information, please contact the Auto Crane Company at the following telephone number: **(918) 438-2760**. The information contained in the manual is in effect at the time of this printing. Auto Crane Company reserves the right to update this material without notice or obligation.

--- IMPORTANT ---

SAFETY TIPS AND PRECAUTIONS

1. Make certain the vehicle meets minimum chassis requirements. (These requirements do not guarantee unit stability)
2. Make certain the crane is installed per factory specifications. Contact your local Distributor or the Auto Crane factory if any questions arise.
3. Keep the vehicle in as level a position as possible while loading or unloading.
4. **ALWAYS** set the vehicle emergency brake before beginning crane operations.
5. **ALWAYS** use outriggers from vehicle to the ground during crane operation. Make sure they are firmly positioned on solid footings.
6. All load ratings are based on crane capacity, **NOT** truck/crane stability.
7. Keep objects and personnel clear of crane path during operation.
8. Keep hoist cable pulled tight at all times.
9. **REMEMBER**, in lifting a heavy load, the weight can create enough tipping moment to overturn the vehicle.
10. **ALWAYS** keep load as close to ground as possible.
11. Oil gears as required.
12. Periodic adjustment of hoist worm brake may be required (see automatic safety brake drawing in this manual).
13. Hydraulic hoses need to be inspected frequently for signs of deterioration, and be replaced as required.
14. The hoist hook is an important item that an operator should consider and use properly. It should be checked on a daily basis for distortion or cracks.
15. **ALWAYS** store outriggers before road travel.
16. **NEVER OPERATE THE CRANE NEAR ELECTRICAL POWER LINES!** Auto Crane Company recommends that a crane never be moved any closer than 10 feet (3.05m) from power lines at any point. SEE DANGER DECAL (P/N 040529) in this Owner's Manual.
17. **NEVER** un-reel last 5 wraps of cable from drum!
18. **NEVER** wrap cable around load!
19. **NEVER** attempt to lift or drag a load from the side! The boom can fail far below its' rated capacity.
20. **NEVER** weld, modify, or use unauthorized components on any Auto Crane unit! This will void any warranty or liability. Also failure of the crane may result.
21. **NEVER** place a chain link on the tip of the hook and try to lift a load!
22. **NEVER** use a sling bar or anything larger than the hook throat that could prevent the hook latch from closing, thus negating the safety feature!
23. In using a hook with latch, **ALWAYS** insure that the hook throat is closed before lifting a load! Proper attention and common sense applied to the use of the hoist hook and various slings will prevent possible damage to material being hoisted and may prevent injury to personnel.
24. **NEVER** hold any pendant Select Switch on that will cause unsafe operating conditions!
25. **NEVER EXCEED** load chart capacities (centerline of rotation to hoist hook).

--- IMPORTANT --- OPERATION OF UNIT

1. Make sure this manual has been thoroughly read by all crane operating personnel and supervisors.
2. A routine inspection of the crane should be mandatory before each operating day. Any defects should be corrected immediately.
3. At a job site the vehicle should be positioned so that the crane can adequately reach the load within the rated capacity (centerline of rotation to hoist hook).
4. Keep the vehicle as level as possible during operation.
5. For electric cranes, **engage emergency brake** and leave ignition on with transmission in neutral (or in park for automatic transmissions). Activate any crane power switches. For Auto Crane units requiring battery and hydraulic operation, **engage emergency brake**, place gear selector in neutral, press clutch, activate PTO, release clutch and after hydraulic fluid is warm, set throttle control to proper engine speed.
6. Always use outriggers from the truck to the ground. Be sure these are firm and adequately positioned. When rotating, **keep load as low to the ground as possible**.
7. Remove pendant control from cab or storage area. On smaller units, plug pendant into receptacle on crane. On larger units, remove pendant control from guard and unwrap cable from boom. Do not operate crane until cable is unwound completely. On all cranes, detach hook from dead man. Crane is now ready for operation.
8. Always boom up before rotating so the boom will clear the required boom support.
9. When extending the boom, always maintain clearance between the boom crown and the traveling block or hoist hook.
10. Always observe safe and practical operation to avoid possible accidents. Refer to Safety Tips and Precautions.
11. After completing lifting operations, return the boom to stowed position on the boom support. Avoid unneeded pressure on the boom support.
12. Store pendant control on proper location (in cab or on crane).
13. Return outriggers to stowed position. Make sure they are pinned in place or jacklegs are returned to compartment.
14. Check work area for any tools or equipment not stored.
15. Release throttle control, depress clutch and disengage PTO. Deactivate any crane power switches.
16. Report any unusual occurrence during crane operation that may indicate required maintenance or repair.
17. NEVER use two cranes to support a load too large for either crane.
18. Spray all electrical equipment with special corrosion resistant coating. This eliminates rust or corrosion due to melting and freezing action of condensation.

OPERATION OF OUTRIGGERS

Prior to operating outriggers, detach crane hook from dead man.

For hydraulic outriggers:

1. Shift crane/outrigger selector valve to "outrigger" position.
2. While operating the outrigger control valves (located on the outrigger cylinders), simultaneously operate the boom-up control switch. This will allow the hydraulic system to build pressure.
3. After outriggers are positioned, return crane/outrigger selector valve to "crane" position.
4. Crane is now ready to operate.

For manual outriggers:

1. Pull lock pins to release jack leg or drop down outrigger and move to outermost lock position.
2. Make sure lock pins are reinstalled properly.
3. Lower outrigger pad to firm ground and adjust foot to take out slack.
4. Crane is now ready to operate.

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MOUNTING and INSTALLATION 8005H

1. CHECK TO MAKE SURE THE FOLLOWING ITEMS ARE WITH YOUR CRANE:

ITEM	PART NO.	DESCRIPTION
1.	360603000	SWIVEL BLOCK
2.	480157000	VENTED RELIEF VALVE
3.	480022000	PUMP ASSEMBLY (OPTIONAL)
4.	999939000	OWNERS MANUAL
5.	015104000	BOLT - 7/8 NF x 5", GRD 8, (4 REQ'D)

2. PRESSURE AND RETURN HOSES ARE NOT FURNISHED WITH THIS CRANE. THE HOSES MUST BE PROVIDED BY THE INSTALLER AND THE LENGTHS DETERMINED AT INSTALLATION.

REQUIREMENTS FOR INSTALLATION USING 8 GALLON RESERVOIR W/INTEGRAL RELIEF VALVE AND AUTO CRANE PROVIDED PUMP

(REF. DWG AW-017 & AW-480150)

A. RETURN LINE FROM CRANE TO RESERVOIR (IN COMPARTMENT): -8 SAE 100R2 (OR EQUIVALENT). HOSE LENGTH IS DETERMINED BY INSTALLER. RETURN LINES LONGER THAN 6 FEET SHOULD BE SIZE -12. HOSE END FITTINGS ARE -8 JIC FEMALE SWIVEL (CRANE END) AND -10 JIC FEMALE SWIVEL (RESERVOIR END).

B. PRESSURE LINE FROM VENTED RELIEF VALVE TO CRANE: -8 SAE 100R2 (OR EQUIVALENT). HOSE LENGTH IS DETERMINED BY INSTALLER. HOSE END FITTINGS ARE BOTH -8 JIC FEMALE SWIVEL. NOTE: CRANE MUST USE RELIEF VALVE P/N 480157, WHICH IS PROVIDED.

C. SUCTION HOSE FROM PUMP TO RESERVOIR: -16 HYDRAULIC SUCTION HOSE WITH TOW (2) -16 HOSE CLAMPS ON EACH END.

D. PRESSURE LINE FROM PUMP TO VENTED RELIEF VALVE (LOCATED ON RESERVOIR) : -12 SAE 100R2 (OR EQUIVALENT). HOSE LENGTH IS DETERMINED BY INSTALLER. HOSE END FITTINGS ARE BOTH -10 JIC FEMALE SWIVEL.

NOTE:

REFER TO OWNERS MANUAL FOR ADDITIONAL INSTALLATION INFORMATION, AND OTHER RESERVOIR AND PUMP COMBINATIONS.

3. CRANE MUST BE PROVIDED WITH A FLOW OF 8 GALLONS PER MINUTE. EXCESS FLOW WILL CAUSE ERRATIC OPERATION, AND TOO LITTLE FLOW WILL CAUSE POOR CRANE OPERATION.

4. MAKE SURE MOUNTING SURFACE IS PROPERLY REINFORCED TO WITHSTAND 50,000 FT-LB CAPACITY LOADING OF CRANE AND THAT OUTRIGGERS ARE USED TO PROVIDE TOTAL STABILITY FOR THE TRUCK.

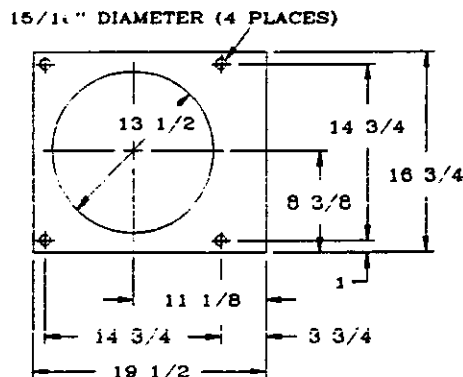
5. MAKE SURE THE MOUNTING BOLTS ARE 7/8x5, GRADE 8. TORQUE BOLTS TO 440 FT-LBS (DRY).

6. WHEN CRANE IS NOT IN OPERATION, A BOOM SUPPORT SHOULD ALWAYS BE USED. TRAVELING BLOCK SHOULD BE CONNECTED TO HOOK LOOP.

7. ALWAYS USE CABLE LOOPS ON SIDE OF BOOM AND PENDANT GUARD ON SIDE OF PEDESTAL TO STORE PENDANT ASSEMBLY, IF THIS TYPE OF STORAGE APPLIES.

8. THE VEHICLE MUST BE EQUIPPED WITH AN ENGINE SPEED CONTROL AND TACHOMETER.

9. CHECK FOR PROPER PRESSURE AND RETURN LINE HOOK-UP TO CRANE: PRESSURE PORT IS ON RIGHT SIDE AS VIEWED FROM THE REAR OF THE CRANE.



FORWARD 

MOUNTING and INSTALLATION 8005H

(CONTINUED)

10. ELECTRICAL HOOK-UP: RUN THE FOLLOWING WIRES THROUGH HOLE IN BASE ASSEMBLY OF CRANE AND SEAL WITH SILICONE RUBBER TO PREVENT WIRE CHAFING AND LEAKS.

A. CONNECT WIRE FROM DIRECTIONAL VALVE SOLENOID (P/N 480137) TO WHITE WIRE W/TRACER AT PENDANT CABLE END (REF. AW-480093).

B. CONNECT POWER CONDUCTOR FROM STARTER SOLENOID TO BLACK WIRE AT BASE OF CRANE, PASSING THROUGH THE MAIN POWER RELAY. USE THE IN-LINE FUSE PROVIDED.

WARNING! FAILURE TO CORRECTLY PLUMB AND WIRE CRANE CAN CAUSE INADVERTENT OPERATION AND DAMAGE TO CRANE AND/OR PERSONNEL!

11. ONCE CRANE AND PLUMBING ARE INSTALLED ON THE TRUCK, FILL THE RESERVOIR TO TOP OF SIGHT GLASS (MOBIL DTE 13 or EQUAL). BEFORE OPERATING CRANE CONNECT TOGETHER THE PRESSURE AND RETURN HOSES GOING TO BASE OF CRANE USING -8 JIC UNION AND ENGAGE PTO WITH ENGINE RUNNING. ALLOW OIL TO CIRCULATE FOR 15 TO 20 MINUTES. THIS WILL FLUSH CONTAMINANTS FROM THE SYSTEM BACK TO THE RETURN LINE FILTER.

CAUTION - FAILURE TO USE CLEAN HYDRAULIC HOSES AND COMPONENTS MAY CONTAMINATE THE CRANE AND HYDRAULIC SYSTEM AND VOID WARRANTY.

OPERATE ALL CYLINDERS TO FULL EXTENSION AND RETRACTION A MINIMUM OF SIX TIMES, TO BLEED AIR FROM SYSTEM. RETURN ALL CYLINDERS TO THE STORED POSITION AND DISENGAGE PTO. REFILL RESERVOIR TO TOP SIGHT GLASS. TO ENSURE 8 GALLONS PER MINUTE (GPM), INSTALL AN IN-LINE FLOW METER BETWEEN THE CRANE AND THE RESERVOIR IN THE RETURN HOSE, OR CONFIRM PUMP SPEED IS CORRECT. THE PROPER SPEED FOR AUTO CRANE GEAR PUMP P/N 480022 IS 1000 RPM, FOR P/N 360030 IT IS 1265 RPM.

12. PROPER PRESSURE SETTING CAN BE ACHIEVED BY, WITH THE PTO DISENGAGED, REMOVING THE PIPE PLUG ON THE VENTED RELIEF VALVE OR PROPORTIONAL VALVE AND INSTALLING A 2500 PSI PRESSURE GAUGE. EXTEND THE BOOM "IN" ALL THE WAY AND CONTINUE HOLDING THE SWITCH ON. FOR PROPORTIONAL SYSTEMS, THE TRIGGER SHOULD BE PULLED COMPLETELY BACK (ON). READ THE PRESSURE GAUGE AND ADJUST RELIEF VALVE TO READ 2000 PSI. RECHECK PRESSURE SETTING TO VERIFY ADJUSTMENT.

13. LOAD TEST THE CRANE TO ENSURE PROPER FUNCTIONING AND TRUCK STABILITY.

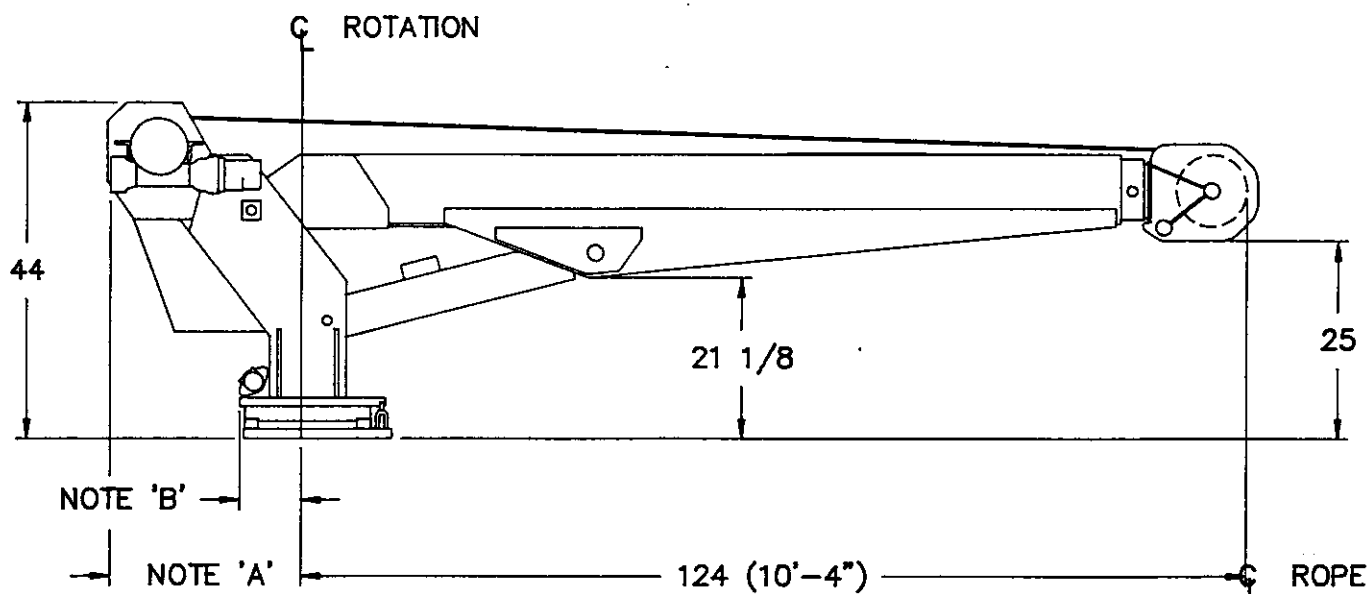
14. MAKE CERTAIN THE OWNER'S MANUAL IS DELIVERED TO THE CUSTOMER.

15. FOR ADDITIONAL HELP: CALL THE SERVICE DEPARTMENT AT THE AUTO CRANE COMPANY.
(918) 836-0463 (TULSA, OKLAHOMA)

WARNING

FEDERAL LAW (49 CFR PART 571) REQUIRES THAT THE FINAL STAGE MANUFACTURER OF A VEHICLE CERTIFY THAT THE VEHICLE COMPLIES WITH ALL APPLICABLE FEDERAL REGULATIONS. ANY MODIFICATIONS PERFORMED ON THE VEHICLE PRIOR TO THE FINAL STAGE ARE ALSO CONSIDERED INTERMEDIATE STAGE MANUFACTURING AND MUST BE CERTIFIED AS TO COMPLIANCE. THE INSTALLER OF THIS CRANE AND BODY IS CONSIDERED ONE OF THE MANUFACTURERS OF THE VEHICLE. AS SUCH A MANUFACTURER, THE INSTALLER IS RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE FEDERAL AND STATE REGULATIONS, AND IS REQUIRED TO CERTIFY THAT THE VEHICLE IS IN COMPLIANCE.

IT IS THE FURTHER RESPONSIBILITY OF THE INSTALLER OF THE CRANE TO COMPLY WITH THE OSHA TRUCK CRANE STABILITY REQUIREMENTS AS SPECIFIED BY 29 CFR PART 1910.180 (C) (1).

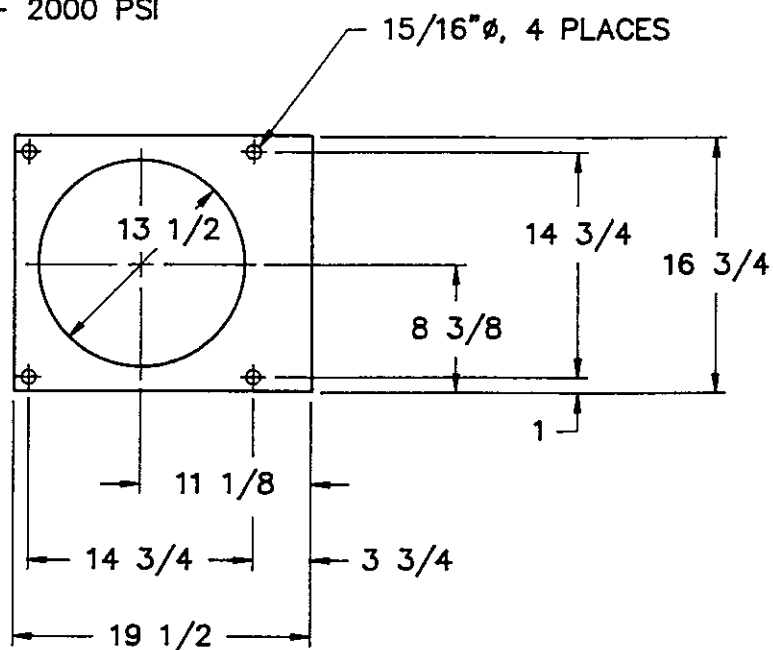


NOTES:

- A. MAX. TURNING RADIUS AT HOIST 26 5/8
- B. MAX. TURNING RADIUS AT SWING DRIVE 13 1/2

SPECIFICATIONS:

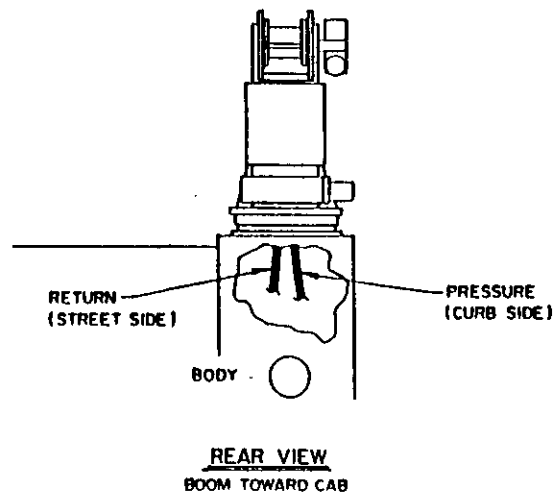
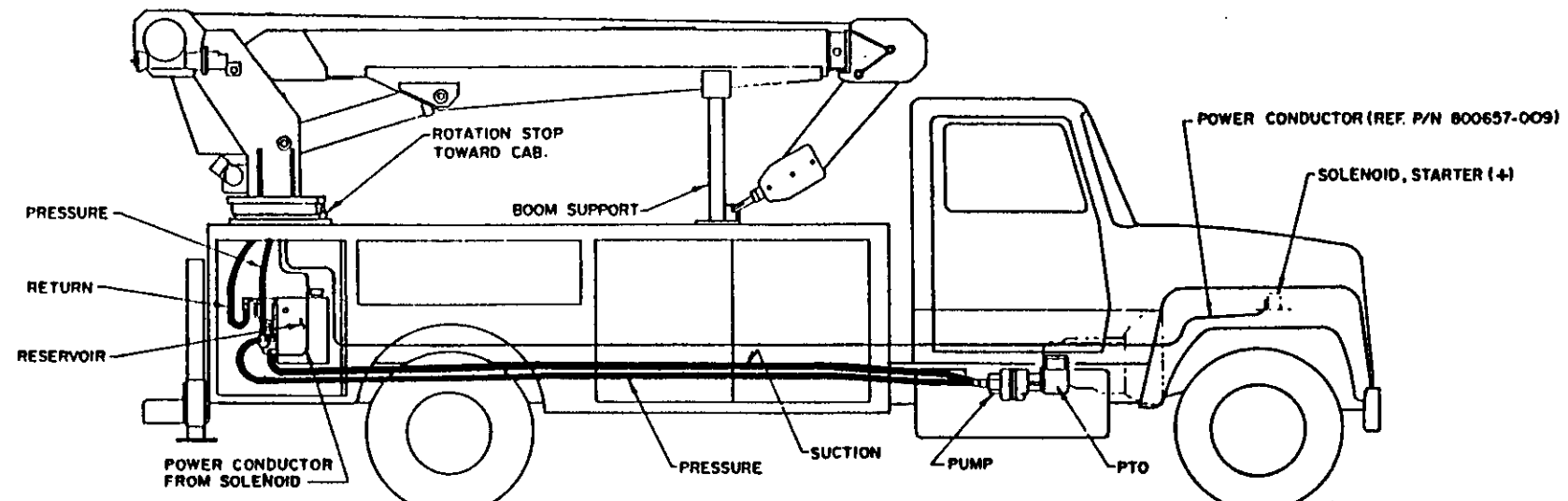
WEIGHT - 1500 LBS
 OPERATING PRESSURE - 2000 PSI
 OIL FLOW - 8 GPM



AW-085
GENERAL DIMENSIONS, 8005H

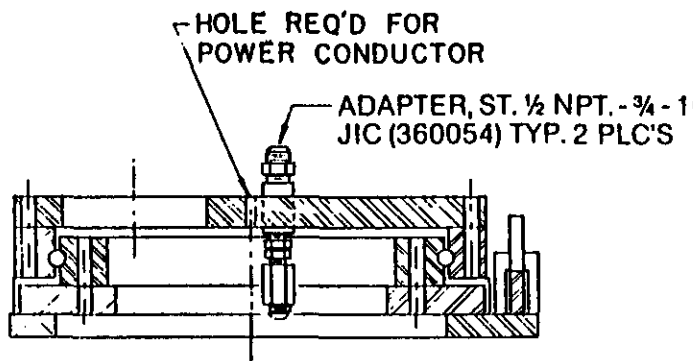
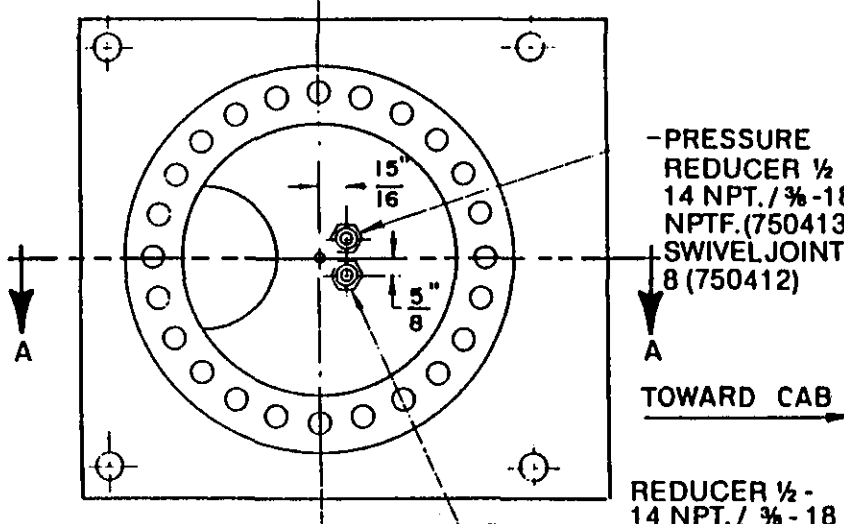
FIGURE NO	FINISH NO

CHG	REVISIONS	DATE	APP'D
LTR	DESCRIPTION		



QUANTITY	ITEM D/S	PART NO.	DESCRIPTION
UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE IN INCHES. TOLERANCES UNLESS OTHERWISE SPECIFIED			
DRAWN BY: <i>[Signature]</i> DATE: 7-6-84			
CHECKED BY: <i>[Signature]</i> DATE: <i>[Blank]</i>			
ENGR BY: <i>[Signature]</i> DATE: <i>[Blank]</i>			
TOLERANCES NOT SHOWN ABOVE ARE PER ANSI Y14.5 1973			
THIS PRINT IS THE PROPERTY OF AUTO CRANE CO AND MUST NOT BE USED IN ANY MANNER DETRIMENTAL TO THEIR INTERESTS			
NEXT ASS'Y		LIST OF MATERIAL	
		AUTO CRANE COMPANY	
		TITLE: ORIENTATION, MOUNTING - 8005H	
		SCALE: ~	SIZE: C
		DRAWING NO: AW-017	REVISION: 1
		WEIGHT: <i>[Blank]</i>	SHEET 1 OF 1

2-3.0.0

FIXTURE NO.	FINISH NO.	CHG LTR	REVISIONS	DATE	APP'D	
		DESCRIPTION				
 <p style="text-align: center;">SECTION A-A</p>		<p>-- 3 3/4" -- REF.</p>  <p style="text-align: center;">BOTTOM VIEW</p>				
		ITEM	QTY	D/S	PART NO.	DESCRIPTION
		LIST OF MATERIAL				
		AUTO CRANE COMPANY				
		TITLE				
		BASE ASSEMBLY - 8005H				
		SCALE	SIZE	DRAWING NO.	REVISION	
		WEIGHT	B	AW - 019		
		SHEET 1 OF 1				

UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE IN INCHES. TOLERANCES UNLESS OTHERWISE SPECIFIED:

ANGLES ± 1/2°	XX ± .040
FRACTIONAL ± 1/16	XXX ± .010

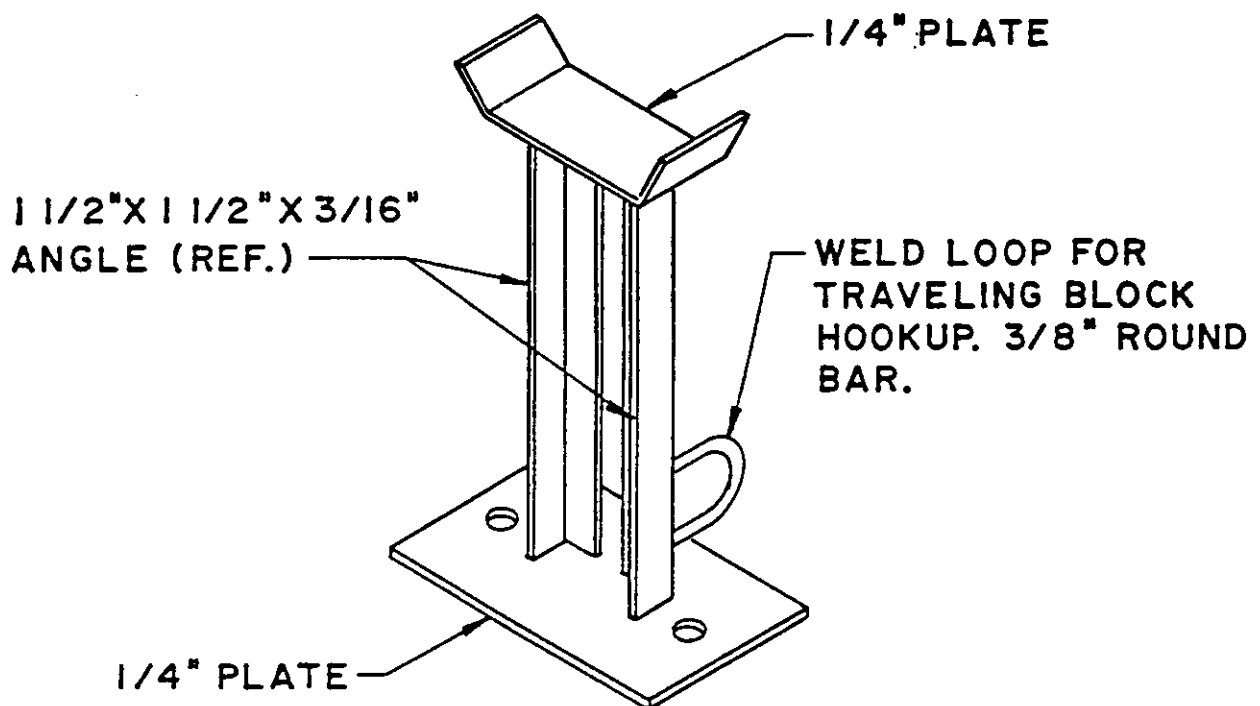
REMOVE ALL BURRS AND SHARP EDGES. DO NOT SCALE THIS DRAWING. TOLERANCES NOT SHOWN ABOVE ARE PER ANSI Y14.5-1973

THIS PRINT IS THE PROPERTY OF AUTO CRANE CO. AND MUST NOT BE USED IN ANY MANNER DETRIMENTAL TO THEIR INTERESTS.

12/86 NEXT ASS'Y

AUTO CRANE'S SUGGESTED BOOM SUPPORT

LEAVE $\frac{3}{4}$ " CLEARANCE ON EACH SIDE OF BOOM



BOOM SUPPORT IS REQUIRED.

AUTO CRANE COMPANY

P.O. BOX 580697 TULSA OKLAHOMA 74158-0697
4707 N. MINGO ROAD 918-836-0463



INSTALLATION AND SETUP PROCEDURE DIGITAL PULSE WIDTH AMPLIFIER

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INSTALLATION:

1. Install amplifier at a convenient location near the proportional crane terminal strip (ref.: Owner's Manual, PROPORTIONAL CRANE WIRING DIAGRAMS) using two screws and lock nuts provided.
2. At the 12 station terminal block, disconnect all power to the system.
3. Connect the din connector plug to the proportional valve, making sure the gasket seals properly. Secure the plug to the proportional valve coil with screw. Attach wires per applicable wiring diagram.

ATTACH WIRES IN THIS ORDER: (numbers are on 22 station terminal strip)

1. Attach the **BLACK** wire to terminal "N" (#13)
2. Attach the **RED** wire to terminal "T" (#10)
3. Attach the **WHITE** wire to terminal "M" (#12)
4. Attach the **GREEN** wire to the **BROWN** wire from the proportional din connector plug using the bullet connector supplied

CAUTION: FAILURE TO DO SO MAY CAUSE PREMATURE AMPLIFIER FAILURE AND VOID WARRANTY.

- ♦ **Observe all connections for proper installation before connecting power to the terminal block. Proceed to the set-up procedure.**

SETUP:

1. Remove four screws on front plate of amplifier and remove front plate.
2. With power on, pull pendant trigger to full on position. Adjust potentiometer adjustment screw located next to the red light (see Figure 1) until light just turns off, then turn trim pot back until the light just comes on. The light should stay on during full trigger movement. Clockwise rotation of the trim pot will turn light off. Counter-clockwise rotation will turn the light on. This "tunes" the amplifier to the trigger potentiometer.
3. After warming the hydraulic system oil, determine which function should be used to set the low position switch (ROTATE USES THE LEAST AMOUNT OF PRESSURE). Activate that function with trigger released, and turn the lower range setting dial (REF. FIG 1: MARKED WITH "L" ON CIRCUIT BOARD) until the desired speed is reached. The "Zero" and the "F" on the dial are opposite ends of the switch. To adjust the low set point, turn **CLOCKWISE DIRECTION** for **INCREASED FLOW**, **COUNTER CLOCKWISE DIRECTION** for **DECREASED FLOW**. This adjusts the "Threshold Speed" for the trigger in the released position.



INSTALLATION AND SETUP PROCEDURE DIGITAL PULSE WIDTH AMPLIFIER

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Cont.

4. Operate the boom up function with trigger pulled back to the maximum position. Turn the high range setting dial (REF. FIG 1, MARKED WITH "H" ON CIRCUIT BOARD) until there is a noticeable decrease in speed, then back up one or two notches as desired. "Zero" is the maximum speed setting and "F" is the most reduced speed setting. To set the high range dial, turn **CLOCKWISE DIRECTION** for **DECREASED FLOW**, **COUNTER CLOCKWISE DIRECTION** for **INCREASED FLOW**. This operation adjusts the trigger "Dead Band" at the fully pulled position.
5. Replace cover and install screws. Make sure the amplifier wiring is secured and does not interfere with rotating hoses and electrical wiring.

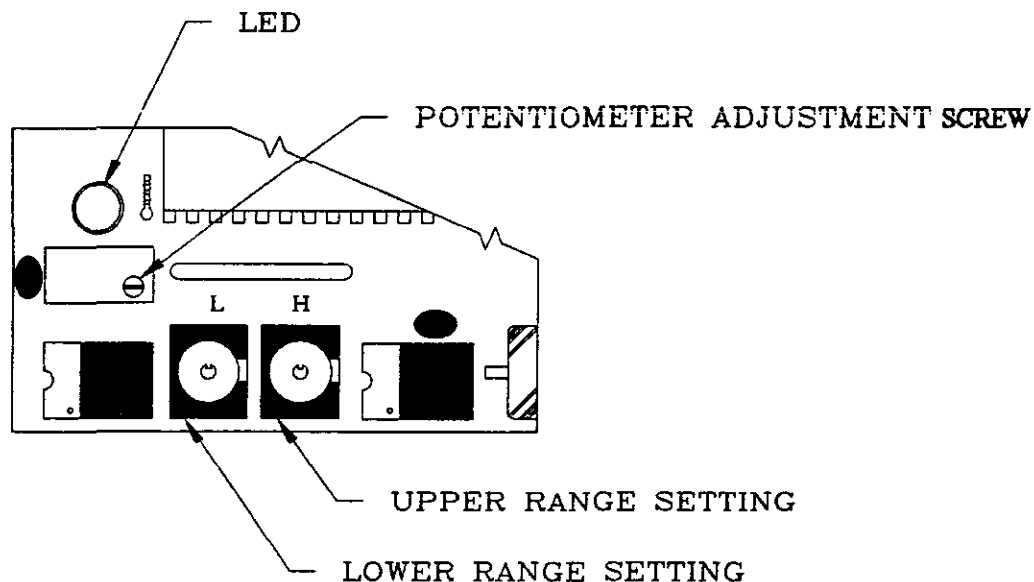


Figure 1

NOTES

The THREE functions included in both the Overload System and the Anti-2-block system are BOOM DOWN, HOIST UP AND EXTEND OUT. If these three are NOT working and most other functions are, an investigation of the Overload System and the Anti-2-block System should be made.

An easy check of the OLS can be made in this order:

1) LOAD SENSOR (Pressure Switch)

Remove spade terminal from tab 6 or 7 on time delay relay (or unplug weather pack connector on load sensor wire). If the three functions begin to work, replace the Load Sensor. If they don't, clean the Time Delay Relay around the terminals #6 and #7 to remove dirt and moisture. If the three functions STILL do NOT work, proceed to number two.

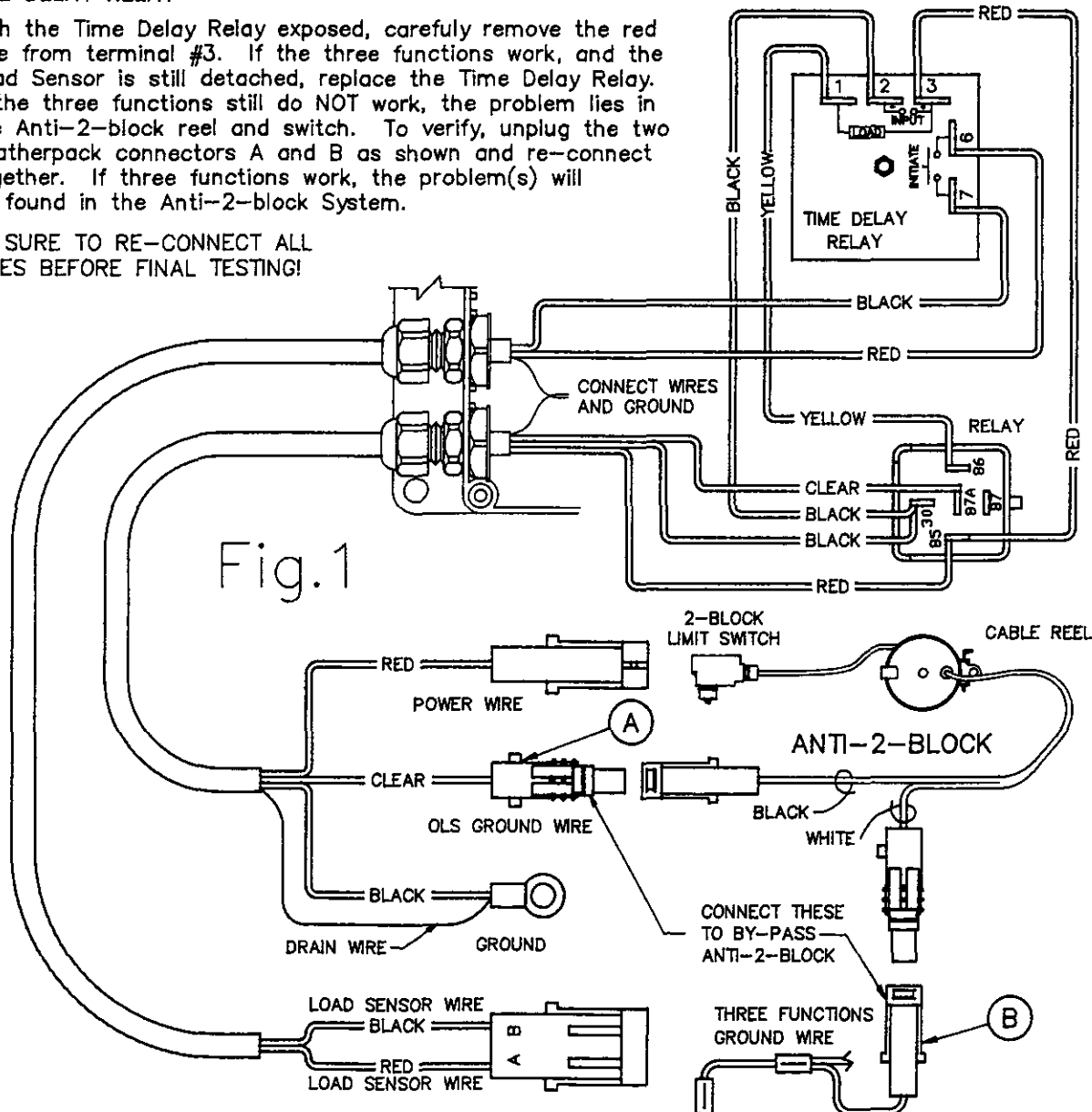
2) RELAY

With the Time Delay Relay exposed, carefully remove the yellow wire terminal from tab #1. If the three functions work, the Time Delay Relay is probably at fault. If they do not work, check the ground connection shown in Fig.1. If this doesn't help, replace the Relay. Re-attach yellow wire to terminal #1.

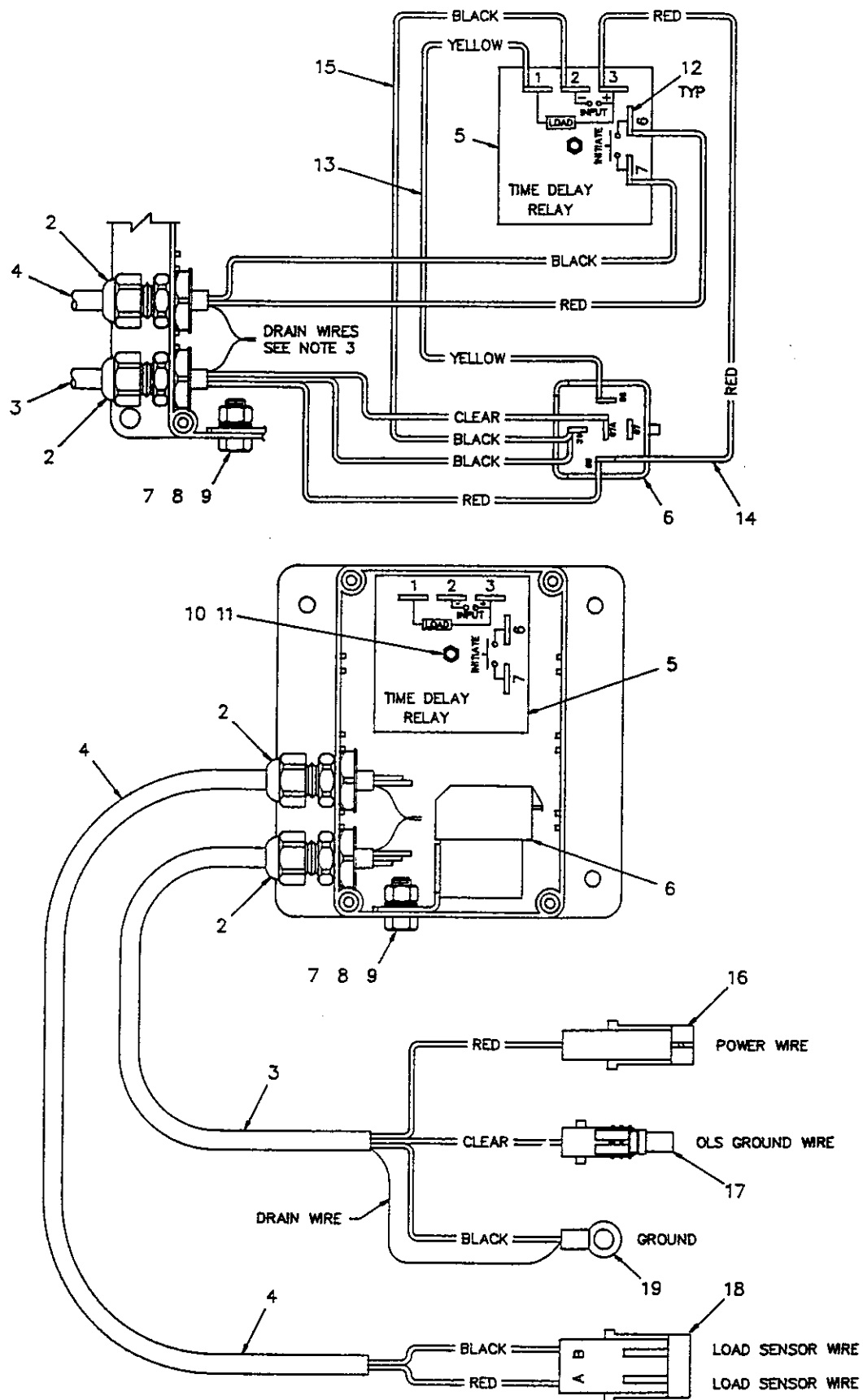
3) TIME DELAY RELAY

With the Time Delay Relay exposed, carefully remove the red wire from terminal #3. If the three functions work, and the Load Sensor is still detached, replace the Time Delay Relay. If the three functions still do NOT work, the problem lies in the Anti-2-block reel and switch. To verify, unplug the two weatherpack connectors A and B as shown and re-connect together. If three functions work, the problem(s) will be found in the Anti-2-block System.

4) BE SURE TO RE-CONNECT ALL WIRES BEFORE FINAL TESTING!



OVERLOAD SYSTEM, ANTI 2-BLOCK TROUBLE SHOOTING GUIDE



AW-366986
RELAY BOX ASSEMBLY

AW-366986, RELAY BOX ASSEMBLY

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	366985	ENCLOSURE, PLASTIC
2	2	366968	CONNECTOR, CORD
3	5'	366967	CORD, 3-WIRE 18 AWG WITH DRAIN
4	5'	366966	CORD, 2-WIRE 22 AWG WITH DRAIN
5	1	320351	RELAY, SOLID STATE TIMING
6	1	320355	RELAY, DROP OUT
7	1	005901	SCREW, HX HD 1/4-20NC X 1/2 LG.
8	1	020200	WASHER, SP LK 1/4
9	1	015900	NUT, HX 1/4-20NC
10	1	000602	SCREW, ROUND HD #6-32NC X 1 LG.
11	2	015400	NUT, HX #6-32NC
12	7	000405	TERMINAL FLAG
13	1	366978	CONDUCTOR ASSEMBLY (YELLOW)
14	4"	800566	WIRE, RED 18 AWG 600V
15	4"	800568	WIRE, BLACK 18 AWG 600V
16	1	366248	CONN. ASSY WEATHER PACK 1-WAY MALE 18-20
17	1	366249	CONN. ASSY WEATHER PACK 1-WAY FEMALE 18-20
18	1	366250	CONN. ASSY WEATHER PACK 2-WAY MALE 18-20
19	1	000601	TERMINAL, RING 10-3/8
20	3	750737	TIE, CABLE

HYDRAULIC STIFF BOOM
OPTIMETER TROUBLE SHOOTING GUIDE

TRouble SHOOTING SEQUENCE:

1. OBTAIN THE PROPER WIRING DIAGRAM AND CHECK WIRING.
2. WITH TRUCK RUNNING, CHECK TERMINAL "L" VOLTAGE.
IF 12 - 13.75 VOLTS, PROCEED.
IF NOT, CHECK FOR BLOWN FUSE OR BROKEN WIRES.
- 2.5 INSTALL PENDANT, TURN SYSTEM POWER ON (EIGHT (8) SWITCH PENDANTS ONLY), AND CHECK TERMINAL "T" FOR TRUCK VOLTAGE.
 - * IF TRUCK VOLTAGE, PROCEED.
 - * IF NO VOLTAGE OR LOW VOLTAGE(LESS THAN TRUCK VOLTAGE), MAKE SURE THE POWER SWITCH ON THE EIGHT (8) SWITCH PENDANT IS IN THE "ON" POSITION. (DOES NOT APPLY TO FOUR (4) SWITCH PENDANT.
THEN, CHECK FOR LOOSE CONNECTION IN THE PENDANT OR A BROKEN WIRE IN THE PENDANT CABLE.
3. DISCONNECT BULLET CONNECTOR ON LINE CONNECTING GREEN WIRE FROM AMPLIFIER TO BROWN WIRE FROM PROPORTIONAL VALVE DIN CONNECTOR. THEN GROUND BROWN WIRE TO A CHASSIS GROUND. THIS WILL SEND MAXIMUM CURRENT THRU PROPORTIONAL VALVE AND SHOULD CLOSE IT COMPLETELY.
or
DEPRESS THE MANUAL OPERATOR PIN ON TOP OF THE VALVE WITH AN ALLEN WRENCH TILL VALVE CLOSES COMPLETELY.
4. CHECK FOR PROPER CRANE OPERATION.
IF CRANE OPERATES PROPERLY, PROCEED.
IF NOT,
CHECK COIL RESISTANCE FROM PIN TO PIN (SHOULD BE 5.0 OHMS) AND FROM PIN TO GROUND RING ON COIL (SHOULD BE INFINITE RESISTANCE). IF RESISTANCE IS MUCH DIFFERENT THAN ABOVE, REPLACE COIL, THEN PROCEED.
RE-CONNECT BROWN AND GREEN WIRE.
5. CHECK TERMINAL "M" FOR 0.5 VOLTS W/TRIGGER RELEASED
 - * SOLID TRUCK VOLTAGE AT TERMINAL "M" MEANS A LOSS OF GROUND. SEARCH THE GROUND WIRE FOR BAD CONNECTIONS OR BREAKS AND REPAIR.
 - * IF MORE THAN 0.7 VOLTS OR LESS THAN 0.2 VOLTS W/TRIGGER RELEASED, READJUST TRIGGER ON POT SHAFT. (NOTE: CARE MUST BE TAKEN WHEN HANDLING THE POT ASSEMBLY TO KEEP FROM BREAKING THE WIRES AT THEIR ATTACHMENT POINTS.)

OPTIMETER TROUBLE SHOOTING GUIDE

5. (cont)

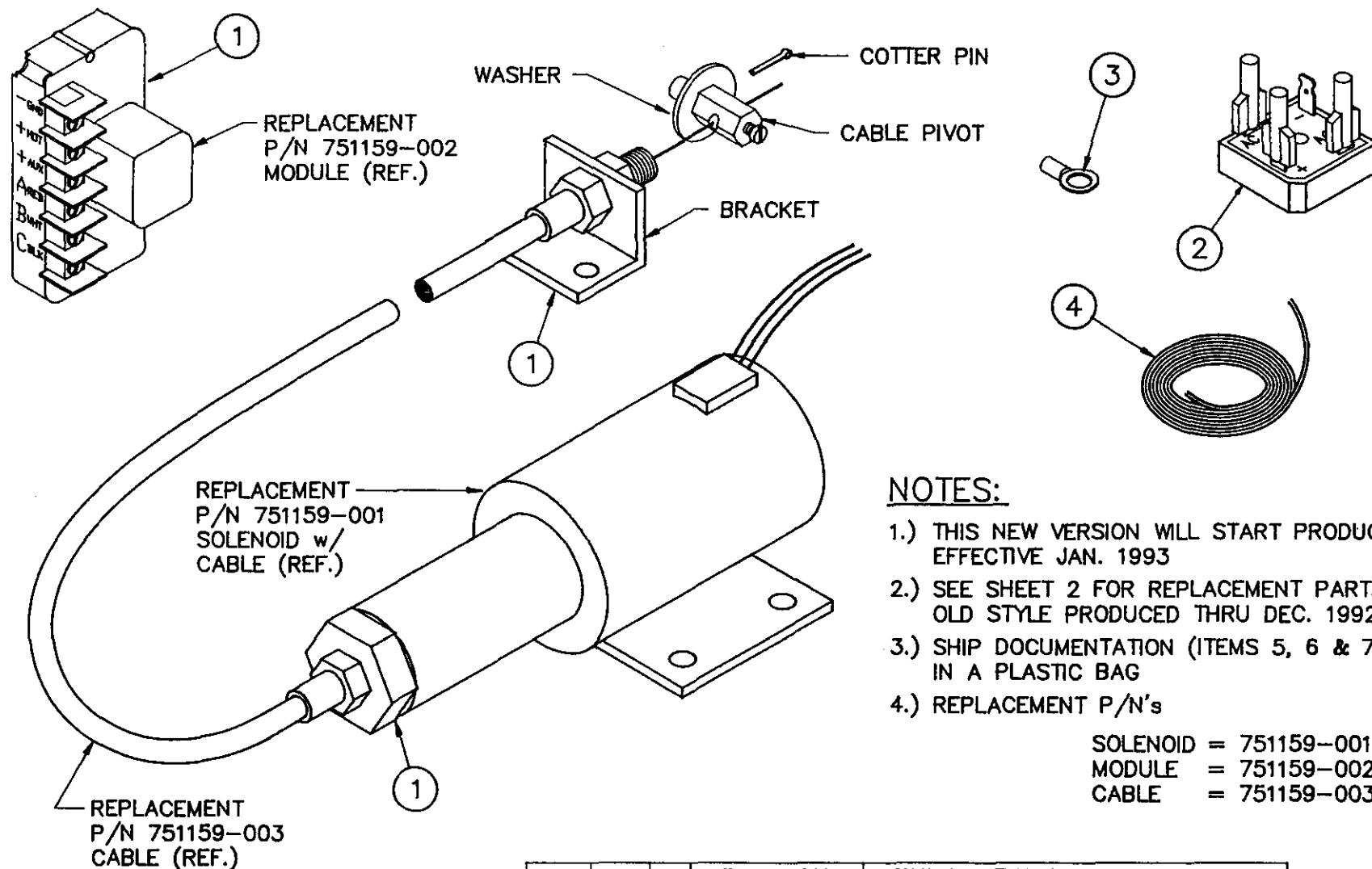
- * IF VOLTAGE IS CORRECT W/TRIGGER RELEASED, SMOOTHLY ACTIVATE TRIGGER LOOKING FOR A SMOOTH, GRADUAL INCREASE OF VOLTAGE TO NEAR 5.0 VOLTS AT MAXIMUM PULLED POSITION (3.5 TO 7 VOLTS IS OK).
 - * IF VOLTAGE IS ERRATIC AND JUMPS UP TO TRUCK VOLTAGE AND BACK DOWN DURING THE TRIGGER MOVEMENT, REPLACE POTENTIOMETER ASSEMBLY.
6. PULL TRIGGER AND CHECK FOR RED LIGHT INSIDE AMPLIFIER THEN PERFORM THE FOLLOWING ADJUSTMENTS WITH THE TRIGGER PULLED TO THE MAXIMUM POSITION:
- * LIGHT OFF
TURN SMALL TRIM POT SCREW CCW "LEFT"
TILL LIGHT JUST GETS BRIGHT, THEN STOP.
(IF 10 TURNS DO NOT TURN LIGHT ON,
LOOK FOR MORE THAN 9 VOLTS AT TERM "M")
 - * LIGHT ON
TURN SMALL TRIM POT SCREW CW "RIGHT"
TILL LIGHT JUST TURNS OFF, THEN TURN CCW
"LEFT" TILL LIGHT JUST GETS BRIGHT, THEN STOP.
(IF 10 TURNS DO NOT TURN LIGHT OFF,
LOOK FOR LESS THAN 1 VOLT AT TERM "M")
7. RELEASE TRIGGER
8. SET TWO ADJUSTMENT SWITCHES (HI & LO) TO NUMBER "4".
(ONE SIDE OF THE SWITCH KNOB HAS AN INDICATOR)
9. THE LO SWITCH TAKES THE "DEAD SPACE" OUT OF THE BEGINNING TRIGGER ACTIVATION, AND WILL CONTINUE TO RAISE THE LOW SIGNAL TO GIVE HALF FLOW WITH THE TRIGGER AT FULL RELEASED POSITION. THE HIGHER THE NUMBER OR LETTER (O THRU F), THE HIGHER THE FLOW TO THE CRANE WITH THE TRIGGER IN THE FULLY RELEASED POSITION.
10. THE HI SWITCH TAKES THE "DEAD SPACE" OUT OF THE FULL TRIGGER POSITION, AND WILL CONTINUE TO LOWER THE HIGH SIGNAL TO HALF THE FLOW AT THE MAXIMUM TRIGGER PULLED POSITION. THE HIGHER THE NUMBER OR LETTER (O THRU F), THE LOWER THE FLOW TO THE CRANE WITH THE TRIGGER IN THE FULLY PULLED POSITION.
11. A GOOD STARTING POSITION WOULD BE TO HAVE BOTH SWITCHES ON THE NUMBER "4".
- * NOTE: BOTH SWITCHES ON "F" WILL LIMIT FLOW TO A MEDIAN VALUE AND NOT ALLOW ANY CHANGE.

OPTIMETER TROUBLE SHOOTING GUIDE
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2-8.0.0

R 11/93

AW-180 THROTTLE SOLENOID ASSY



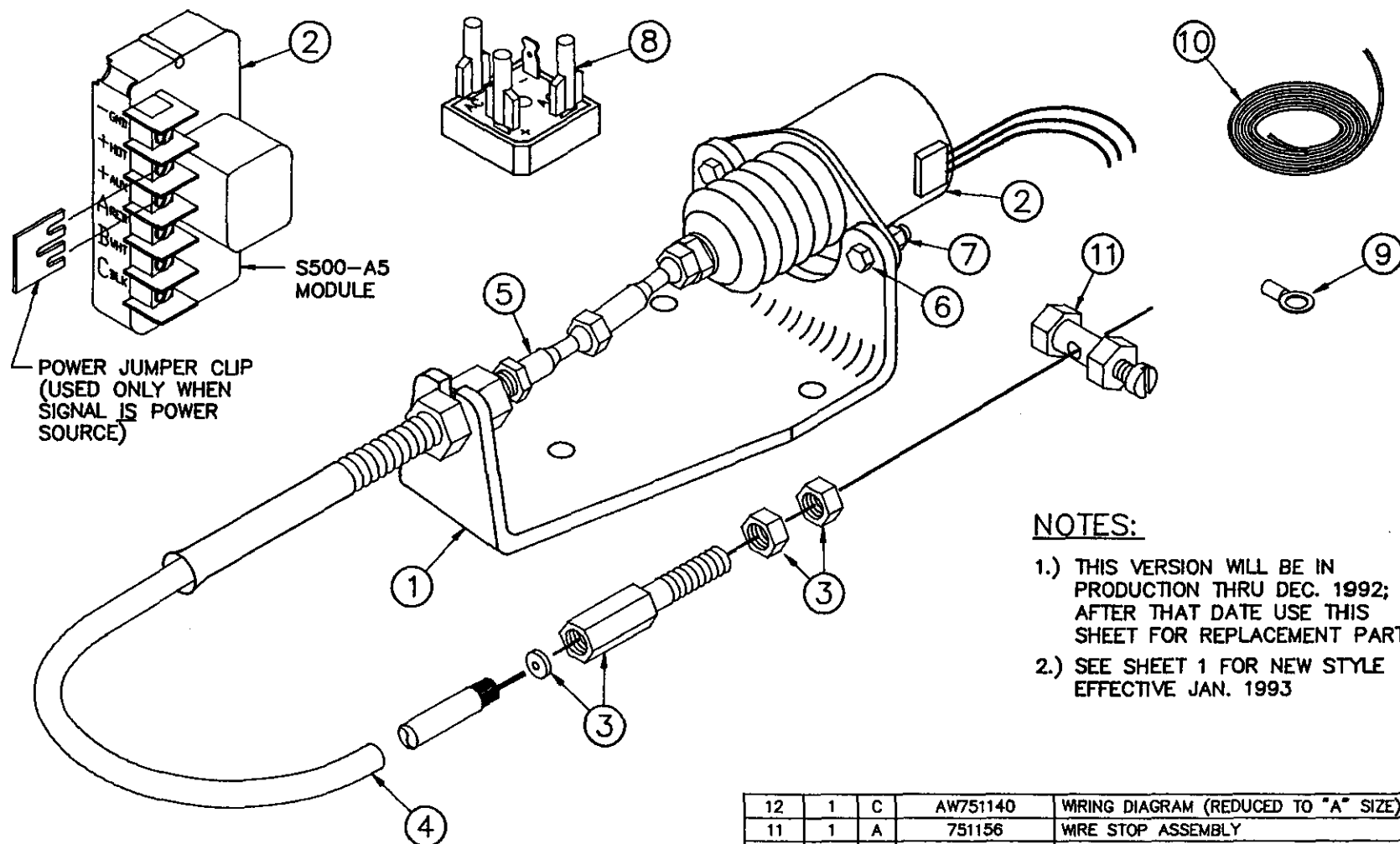
NOTES:

- 1.) THIS NEW VERSION WILL START PRODUCTION EFFECTIVE JAN. 1993
- 2.) SEE SHEET 2 FOR REPLACEMENT PARTS OF OLD STYLE PRODUCED THRU DEC. 1992
- 3.) SHIP DOCUMENTATION (ITEMS 5, 6 & 7) IN A PLASTIC BAG
- 4.) REPLACEMENT P/N's

SOLENOID = 751159-001
MODULE = 751159-002
CABLE = 751159-003

7	1	D	751140-999	TROUBLESHOOTING HINTS
6	1	D	751140-999	INSTALLATION INSTRUCTIONS (2 PAGES)
5	1	D	751140-999	WIRING DIAGRAM (AW751140)
4	15'	A	800603-009	WIRE, 16 Ga WHT w/ BLK TRACER x 15' LG
3	8	A	000101	TERMINAL, RING #6
2	1	A	751143-001	ISOLATOR MODULE ASSEMBLY
1	1	B	751159	12 VDC SOLENOID w/ CONTROL MODULE
ITEM	QTY	D/S	PART No.	DESCRIPTION

AW-180 THROTTLE SOLENOID ASSY



NOTES:

- 1.) THIS VERSION WILL BE IN PRODUCTION THRU DEC. 1992; AFTER THAT DATE USE THIS SHEET FOR REPLACEMENT PARTS
- 2.) SEE SHEET 1 FOR NEW STYLE EFFECTIVE JAN. 1993

12	1	C	AW751140	WIRING DIAGRAM (REDUCED TO "A" SIZE)
11	1	A	751156	WIRE STOP ASSEMBLY
10	15'	A	800603-009	WIRE, 16ga WHITE w/ BLACK TRACER
9	8	A	000101	TERMINAL WIRE #6
8	1	A	751143-001	ISOLATOR MODULE ASSY
7	2	A	016300	NUT, HX-LOCK 1/4-20NC
6	2	A	005500	SCREW, HX HD 1/4-20NC x 3/4 LG
5	2	A	751137	BALL JOINT, STRAIGHT
4	1	A	751148	THROTTLE CABLE
3	1	A	751149	BULKHEAD FITTING
2	1	B	751141	12 VDC SOLENOID w/ CONTROL MODULE
1	1	C	751146	BRACKET, THROTTLE SOLENOID
ITEM	QTY	D/S	PART No.	DESCRIPTION

INSTALLING YOUR THROTTLE CONTROL SOLENOID

LOCATION

Follow these simple rules to properly locate your throttle control kit:

- * Mount the solenoid off the engine but within 46 inches of the throttle lever, to avoid engine vibration and high temperature components (more than 257° F [125° C]).
- * Mount control module out of the engine compartment if possible. If not possible, mount the module as far away from high temperature components as possible. Maximum temperature range is 185° F (85° C).
- * Route the flexible cable away from high temperature (220° F [105° C]) components such as exhaust manifolds.
- * Avoid sharp bends in flexible cable. Bends should form a smooth arc (360° maximum) with a radius of 5 inches minimum.

CONTROLLING THE SOLENOID THROTTLE KIT

The throttle kit can be controlled remotely by applying a low current 12 VDC signal to the module "AUX" terminal.

Examples of activating signals are an air compressor pressure switch or a crane "dump valve" coil.

MOUNTING PROCEDURES

Use the following procedure to mount your throttle controller:

1. Mount the solenoid and control module according to the recommendations in the "LOCATION" instructions.
2. Electrically connect the solenoid to the control module and power source according to the wiring diagram.
3. Mount the cable bracket and fasten the cable sheath to the bracket using the collar nut so the sheath does not turn during idle adjustment.

INSTALLING YOUR THROTTLE CONTROL SOLENOID

cont'd

SET HIGH ENGINE IDLE SPEED

NOTE: Do not leave the aluminum adjustment nut tight against the solenoid body since this does not allow the cable to float.

1. Make sure the jam nut is loose and turn the aluminum adjustment nut clockwise until the high engine idle speed is reached.
2. Tighten the jam nut.
3. Check the throttle speed controller operation by rechecking the "normal" engine idle speed with the solenoid de-activated and the high engine idle speed with the solenoid activated.

SYSTEM OPERATION

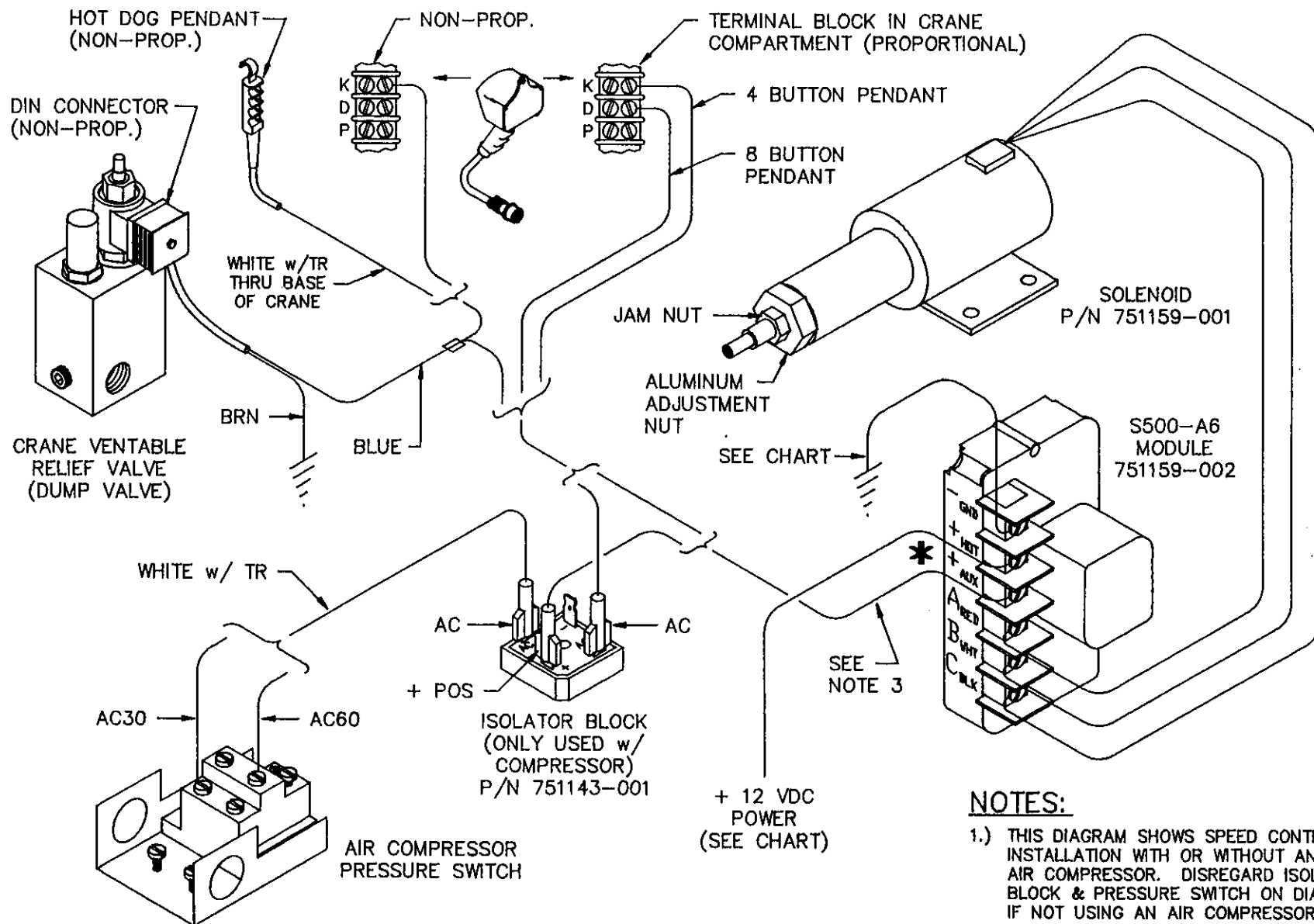
The control module allows the solenoid to operate as a continuous duty device. When the module is wired as recommended, applying 12 VDC to the "AUX" terminal applies voltage to the hold-in and pull-in coil of the solenoid. After 0.5 to 0.75 seconds, power is automatically removed from the pull-in coil. Power will remain at the hold-in coil until the 12 VDC signal is removed from the "AUX" terminal.

CAUTION !!

To avoid control module damage, always disconnect the module when you jump-start the vehicle with voltages that exceed 32 VDC.

AW751140 SPEED CONTROL KIT

2-8.4.0



NOTES:

- 1.) THIS DIAGRAM SHOWS SPEED CONTROL INSTALLATION WITH OR WITHOUT AN AIR COMPRESSOR. DISREGARD ISOLATOR BLOCK & PRESSURE SWITCH ON DIAGRAM IF NOT USING AN AIR COMPRESSOR.
- 2.) REMOVE METAL JUMPER CLIP FROM CONTROL MODULE IF SO EQUIPPED (S500-A5)
- 3.) THE WIRE SIZE AND LENGTH TO "AUX" TERMINAL OF THE CONTROL MODULE IS NOT CRITICAL BECAUSE OF LOW CURRENT; 16-18 GAGE WIRE MAY BE USED.

*

MAXIMUM TOTAL WIRE LENGTH (ft)				
Total of "-GND" and "+HOT" wire length plus "B WHT" and "C BLK" wire length.				
	12 Ga	10 Ga	8 Ga	6 Ga
12VDC	10 ft	16 ft	25 ft	40 ft

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TROUBLESHOOTING HINTS

If solenoid will not engage, check the following:

1. Check the stranded pull cable for damage (e.g., melted or crimped sheath)
2. Check the stranded pull cable for binding.
3. Check system voltage at the "+HOT" and "+AUX" terminals.
4. Check module terminals for proper voltage and operation.
If the module does not meet the specifications shown below, replace it.

-GND	Chassis Ground
+HOT	12 VDC at all times
+AUX	12 VDC required to activate solenoid
A RED	12 VDC when signal is present at "AUX" terminal
B WHT	12 VDC for 0.5 to 0.75 seconds after signal at "AUX" terminal is present
C BLK	Common for solenoid

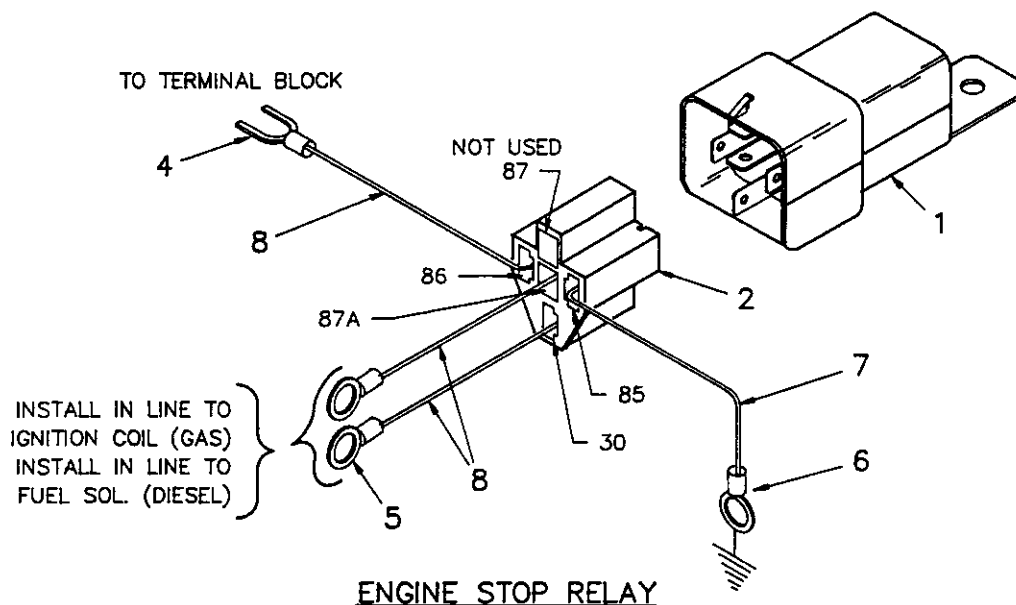
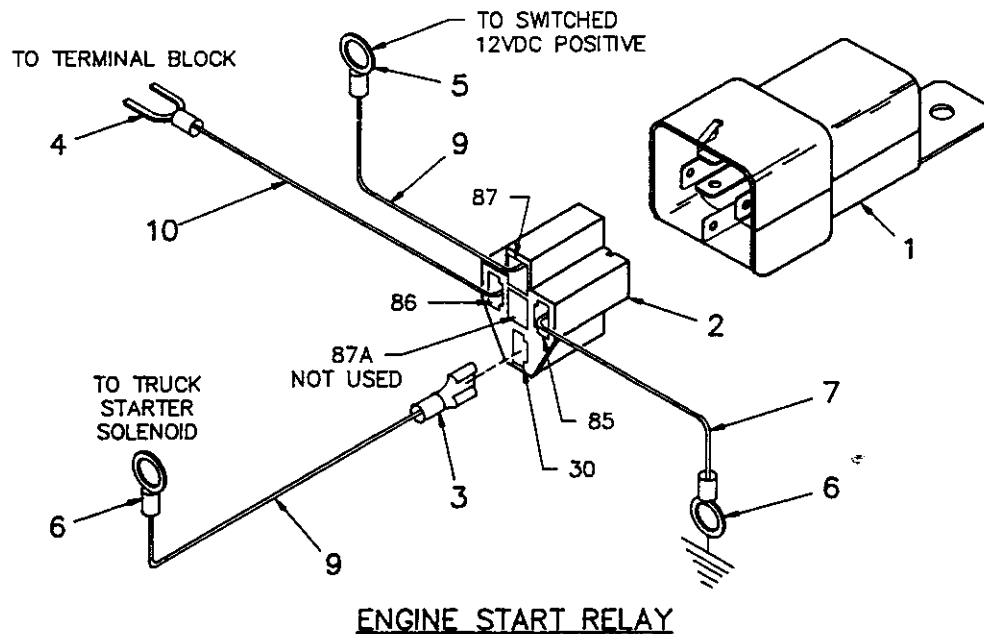
CONTROL MODULE VOLTAGE MEASUREMENTS

5. Check solenoid resistance (remove wires from module).
If resistance is not within specifications listed below, replace the solenoid.

White to Black wire – 0.17 ohms

Red to Black wire – 13 ohms

6. Make sure you have used the recommended wire length and gage (refer to the chart on AW751140)
7. Be sure cable is not bent beyond guidelines.
8. Check for proper adjustments.
9. Contact Auto Crane Company if you are unable to resolve the problem.



ITEM	QTY	P/N	DESCRIPTION	ITEM	QTY	P/N	DESCRIPTION
1	2	320355	RELAY, 12V	6	3	000501	TERMINAL, RING 5/16
2	2	320363	PLUG, RELAY	7	6'	800595	WIRE, 16GA, GREEN
3	10	320357	CONN., FEM SPD LOCK	8	49'	800590	WIRE, 16GA, BLACK
4	2	480495	TERMINAL, FLG'D SPADE	9	17'	800593	WIRE, 16GA, RED
5	3	000402	TERMINAL, RING 1/4	10	35'	800594	WIRE, 16GA, BLUE

**AW-480533
RELAY KIT
ENGINE START/STOP**



AW-480534
RELAY KIT
AUXILIARY

NOTES

WIRE LINE LUBRICATION

Lubrication of the wire line serves two important purposes: (1) helps to prevent corrosion; (2) lubricates the cable strands to reduce wear due to flexing and abrasion caused by contact with the sheaves, rollers and cable on the drum.

PREPARATION:

Remove rust and foreign matter with a wire brush and wipe clean. Be sure cable is dry.

APPLICATION:

Two methods are illustrated in figures 1 and 2. A light weight motor oil may be used, as in figure 1; or a heavier lubricant such as grease gun lubricant, as in figure 2.

Illustrated in figure 1 is one easy and effective method of applying lubrication. Dip the brush into the lubricant and apply. In some cases a rag or piece of sheepskin is dipped in the lubricant and used to swab the lubricant on to the rope.

Another simple method is shown in figure 2. Leather gloves are preferred to canvas because of greater protection and less penetration of the grease.



Fig. 1

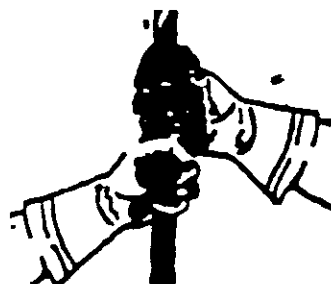


Fig. 2

"LIFE OF WIRE LINE"

So many variable factors can cause the deterioration of wire line cable that it is not possible to determine a definite life expectancy.

Some of these factors are:

1. Load being handled.
2. Corrosive conditions.
3. Maintenance of the unit.
 - a. Keep the sheaves turning freely.
 - b. Maintain tension on cable to insure proper spooling.
 - c. Lubricate line. (See above)
 - d. Avoid kinks in cable.
 - e. Avoid abrasive action and contact with sharp corners.
4. Frequency of use.

Auto Crane units, with 8000 pound ratings, use 3/8 inch diameter galvanized preformed 7 x 19 aircraft cable which, when new, has a minimum strength of 14,400 pounds. It is recommended when 4,000 pound loads are exceeded to use a two-part line with a traveling block. It can be seen that there is a safety factor of 3.6 to 1 when the cable is new.

Keeping the above factor of safety in mind and knowing the kind of loads that will be handled, the user can determine by inspection of the cable as to when it should be replaced.

Items to look for while inspecting the cables are:

1. Broken strands.
2. Kinks and flattened sections.
3. Corrosion and abrasion.

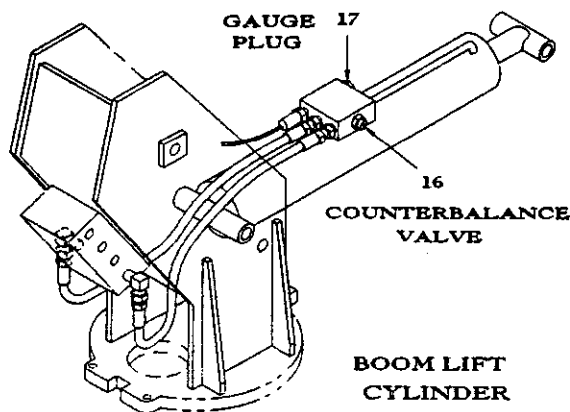
HYDRAULICS - 8005H

Issue Date:

February, 1994

Counterbalance Valve Adjustment

- ♦ With PTO disengaged and boom properly supported, remove O-ring plug (item 17) shown on Boom-Up illustration. Install a pressure gauge (0-2500 psi) into the port.
- ♦ Engage PTO and insure pump flow is 8 to 9 GPM and main relief is set to 2000 psi. With no load on boom, boom up to an angle of 70 de-



grees. Boom down and note pressure. If pressure reading is not approximately 1000 PSI, the counterbalance valve requires adjustment.

- To increase the CB valve setting, loosen nut and turn Allen head screw counter clockwise. (Reference item 16, located on the side of the CB valve block towards the right side of the boom.)
- To reduce the CB valve setting, loosen nut and turn Allen head screw clockwise.
- ♦ Tighten nut on adjustment screw and repeat procedure if needed to obtain the proper pressure setting.
- ♦ Disengage PTO, remove the pressure gauge and install -6 plug. Crane is now ready for operation.

Notice:

- ♦ In an EMERGENCY situation when it becomes necessary to lower the boom without flow present, the CB valve adjustment can be turned in until the boom begins to descend. Make sure the boom will lower onto a proper support. Loosen the lock nut and carefully turn adjustment screw clockwise! Count the number of turns. Turn slowly until the boom just begins to lower, and remove hand/arm/fingers from crane while boom is lowering.
- ♦ Turning adjustment screw too far will cause valve to come apart on the inside. This condition is not repairable.
- ♦ After boom is lowered, turn adjustment screw counter clockwise the approximate number of turns made during lowering procedure. After the problem is corrected, re-adjust the counterbalance valve using the procedure in this manual.

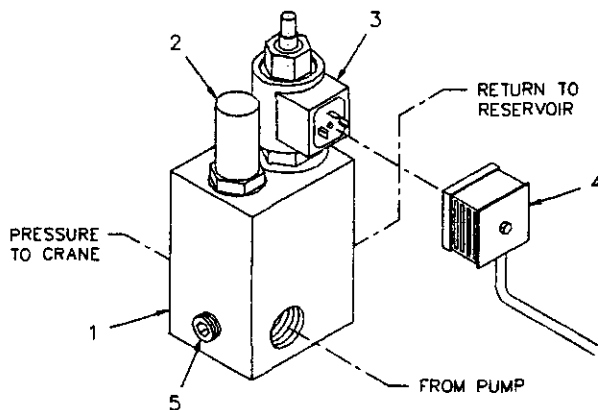
HYDRAULICS - 8005H

Issue Date:

February, 1994

Vented Relief Valve Setting

- ♦ The crane must receive 8 to 9 Gallons Per Minute (GPM) and 2000 psi. To insure proper flow, install an in-line flow meter between the crane and the reservoir in the return hose, or confirm correct pump speed (or engine speed w/ PTO ratio multiplier). Proper pressure setting for units without proportional control can be achieved by disengaging the PTO, removing the plug, item 5, and installing a 2500 psi gauge. Test the pressure by fully retracting the cylinder and holding Boom-In function while reading the gauge.
- ♦ The boom can now be retracted fully and the



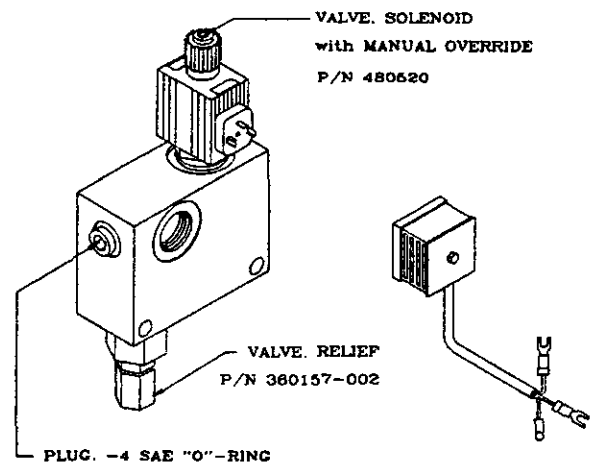
NON-PROPORTIONAL "DUMP VALVE"

switch held in retract position until full pressure is reached and the pressure gauge is checked. If the gauge is not 2000 PSI, adjust the vented relief valve (P/N 480135). Verify this setting by operating the retract switch a few times and checking the pressure setting.

- ♦ Disengage PTO. Remove gauge and re-install the pipe plug. Crane is now ready for use.

Proportional Relief Valve Setting

- ♦ The crane must receive 8 to 9 Gallons Per Minute (GPM) and 2000 PSI. To insure proper flow, install an in-line flow meter between the crane and the reservoir in the return hose, or confirm correct pump speed (or engine speed w/PTO rotation multiplier).
- ♦ Proper pressure setting for the proportional control relief valve can be achieved by, with PTO disengaged, removing the -4 SAE plug,



HYDRAULIC MANIFOLD ASSEMBLY
PROPORTIONAL

and installing a 2500 PSI gauge. Test the pressure by pulling the trigger all the way back towards the handle and operating the boom down switch while reading the gauge. Double check the setting by operating the manual override located on the top of the proportional valve (using an Allen wrench or something similar to press the steel button) and simultaneously operate the boom retract function. If the reading is higher, check the proportional system troubleshooting section of this manual to find out why the valve was not fully closing.

- ♦ If it is the same, with PTO disengaged, remove the gauge and re-install the plug. The crane is now ready for use.

HYDRAULIC TROUBLESHOOTING 8005H

Issue Date:

February, 1994

CAUTION: Never check for hydraulic leaks by feeling around hoses, fittings, or any other components. High pressure oil can be injected through the skin causing severe injury, or death.

The hydraulic system of the 8005H power version is electrically operated and requires a minimum of 12V for satisfactory performance. The hydraulic pump is bi-rotational with a pressure relief setting of 2000 psi (Ref.). Standard pump speed is 1000 RPM (Ref. Pump P/N 480018). This pump is for direct flange mounting only. It is not to be shaft driven unless an outboard bearing is installed, Auto Crane Kit P/N 480006 (Ref. page 6-5.0.0).

PROBLEM

SOLUTION

FLOW PRESENT BUT FUNCTION WILL NOT WORK

Remove valve cover (P/N 480160, Item 7, Page 4-1.0.0) to gain access to the manual override on the end of the valve cartridge (Ref. AW-480184). If the pump is operating, operate the relief valve manual override or the proportional valve override and push and twist (CCW) the directional control valve manual override to unlock, then pull to operate the function. If the function does operate, check for loose wire, low voltage or bad ground. If the problem is traced to no voltage at the valve cartridge, remove pendant and with the switch engaged, check for an open circuit with an ohmmeter. If the circuit is open, check for broken wiring or bad switch. If the function does not operate, see the "NO FLOW" paragraph in this section.

HYDRAULIC "CHATTER"

When a hydraulic function is engaged and causes the crane to "chatter", check for loose wire, low voltage at valve cartridge, low pump pressure, or air in the system.

NO FLOW OR LIMITED FLOW TO CRANE

Check for adequate oil supply in reservoir. Check operation of bypass system by pressing manual override on solenoid valve operator on vented relief valve or proportional valve while operating crane. If crane functions, check for 12V at vented relief valve solenoid when operating a function, or follow proportional trouble shooting procedure for the proportional valve. If low flow condition continues to exist when the manual override is operated, remove relief valve cartridge and check for dirt. Other possible causes for a low flow condition are:

1. Engine speed is too slow.
2. A blocked pressure hose from pump. This condition can be identified by excessive lugging of engine and rapid overheating of oil.
3. Collapsed or blocked suction hose to pump. This condition is usually identified by pump cavitation noise.
4. Bad pumps: a bad pump will usually have some flow but the flow will drop off rapidly as pressure increases. This condition will cause overheating of the system. A drop of four (4) or more GPM from Zero (0) PSI to Two Thousand (2000) PSI is cause for pump investigation

HYDRAULIC TROUBLESHOOTING 8005H

Issue Date:

February, 1994

NO PRESSURE OR TOO LOW PRESSURE

Check to maintain adequate oil in reservoir (approx. 8 gal.), using the sight gauge. Make sure pressure gauge is functioning correctly. Possible relief valve stuck open. Check for excessive leakage and correct. Check to ensure that pressure limit switch is correctly set.

TOO HIGH FLOW

Make sure pump size is correct and pump speed is not too fast (Consult manufacturer's data sheet). Check or replace flow control. Check components for flow displacements. High flow may cause erratic valve operation.

TOO HIGH PRESSURE

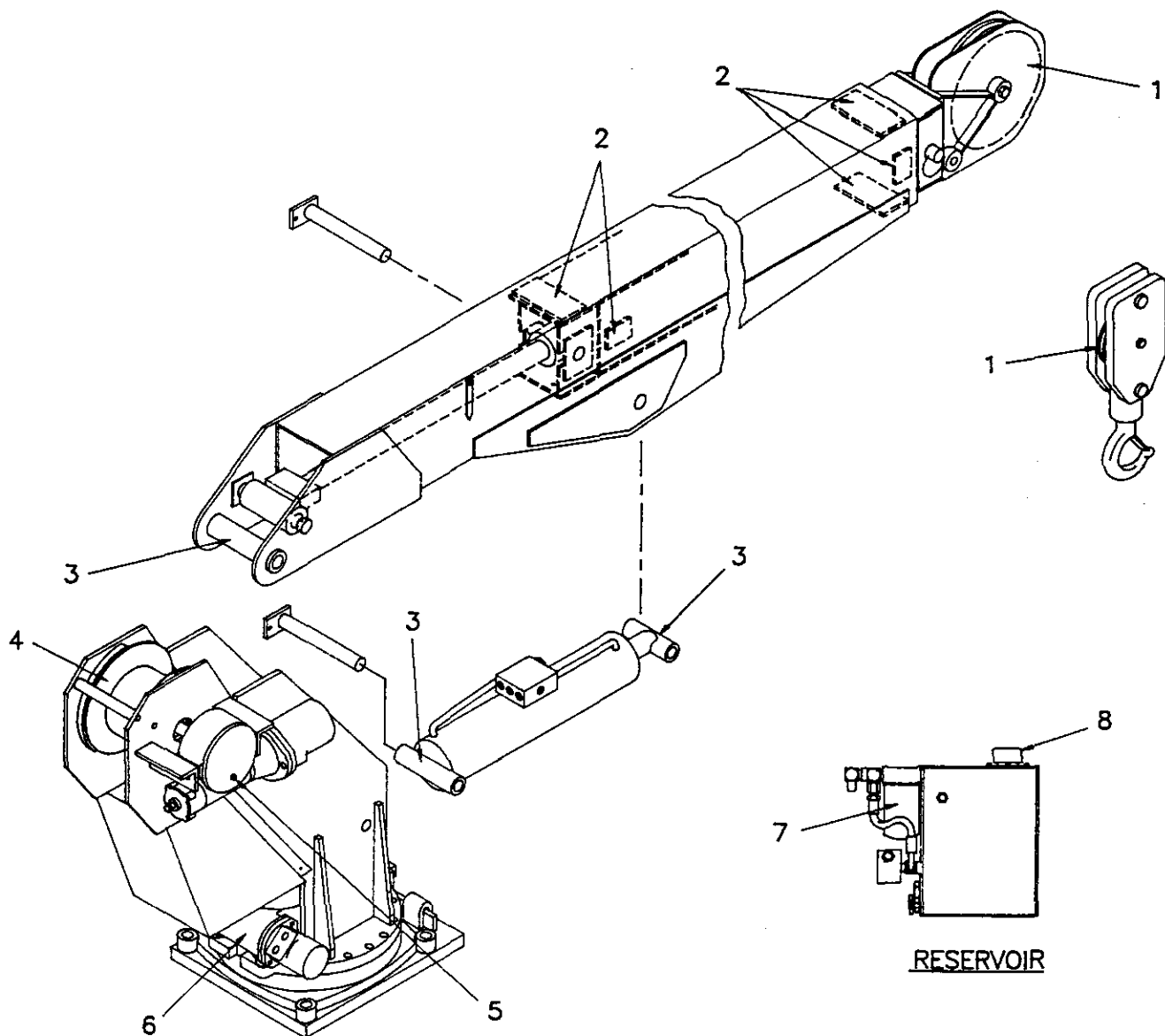
Make sure pressure relief valve is correctly set.

CAUTION

The Auto Crane 8005H series cranes are manufactured with a standard overload protection system to prevent structural damage to the crane. When the crane load rating is exceeded, main boom down, extend out, and hoist up will not function. These operations cannot be used again until the load on the crane is reduced. Also, the main boom elevation will be limited in its operation as the crane becomes overloaded. Attempting to raise the main boom with a load greatly exceeding the crane rating will open the main relief valve resulting in no boom movement. This problem can be resolved by moving the load closer to the crane pedestal, or reducing the load.

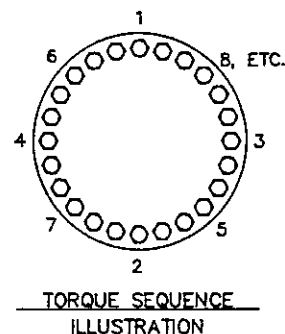
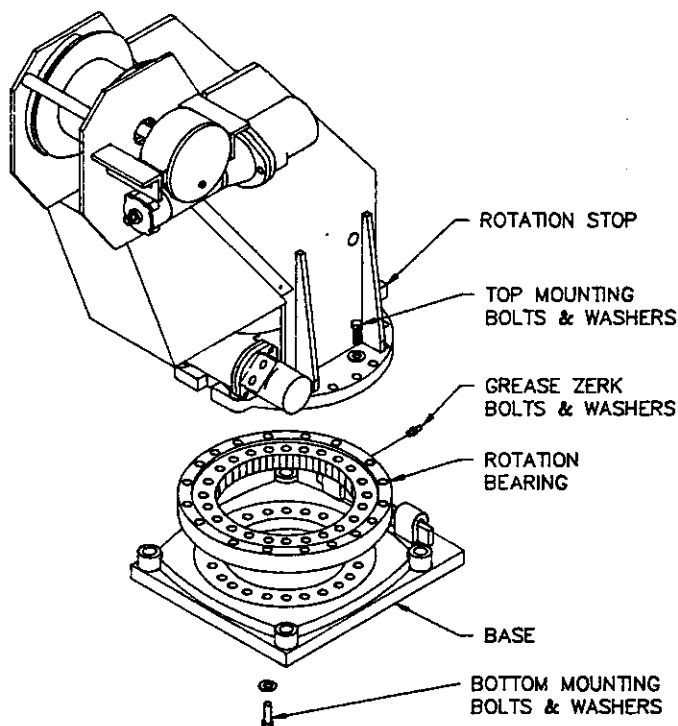
LUBRICATION & MAINTENANCE SCHEDULE 8005H CRANE

SERVICE PERFORMED	DAILY	WEEKLY	3 MONTHS	6 MONTHS	1 YEAR	NOTES
LOAD HOOK	X					INSPECT HOOK & LATCH FOR DEFORMATION, CRACKS, & CORROSION
CABLE DRUM	X					MAKE SURE CABLE IS WOUND EVENLY ON DRUM
HOIST CABLE	X					CHECK FOR FLATTENING, KINKS, & BROKEN STRANDS, SEE MANUAL
HYDRAULIC HOSES	X					VISUAL INSPECTION
HYDRAULIC FLUID	X					CHECK FLUID LEVEL
MOUNTING BOLTS		X				CHECK-TORQUE TO 440 FT-LBS (DRY) AS REQUIRED
ROTATION RING GEAR		X				LUBE WITH MOBILTAC LL, OR LUBRIPLATE P/N 15263, OR EQUIV.
SHEAVE BEARINGS		X				SEALED BEARING, REPLACE IF ROUGH OR LOOSE
ALL OTHER BOLTS		X				CHECK-TIGHTEN AS REQUIRED
BOOM PIVOTS		X				GREASE WITH MOBILPLEX EP-2 OR EQUIV @ ZERKS
BOOM CYLINDER		X				CHECK AROUND CYLINDER ROD FOR EXCESS FLUID LEAKAGE
BOOM CYLINDER PINS		X				GREASE WITH MOBILPLEX EP- 2 OR EQUIV @ ZERKS
EXTENSION DETENT PIN		X				LUBE DETENT SPRING & BALL W/ WD-40
RETURN LINE FILTER			X			REPLACE ELEMENT
HI-PRES. FILTER			X			CLEAN AFTER FIRST WEEK, THEN EVERY 3 MONTHS (OPT EQUIP)
ROTATION BEARING			X			GREASE WITH MOBILPLEX EP-2 OR EQUIV @ ZERKS
ROTATION BRNG BOLTS			X			CHECK-TORQUE TO 150 FT- LBS AS REQUIRED
ROTATION GEAR BOX			X			CHECK-TORQUE TO 85 FT-LBS AS REQUIRED
ROTATION GEAR BOX				X		EP GEAR LUBE SAE 140
HOIST GEARBOX				X		WORM GEAR-EP GEAR LUBE SAE 80-90
HYDRAULIC FLUID					X	DRAIN, FLUSH, & REFILL WITH MOBIL DTE 13, OR EQUIV.
BOOM SLIDE PADS						PADS GREASED WHEN REPLACED
FOR ADDITIONAL INFORMATION SEE:					1) OWNER'S MANUAL 2) OSHA SECTION 1910.180 3) ANSI B30.5-1989	



1. SHEAVE ROLLER BEARINGS:
SEALED TYPE, NO LUBE REQUIRED.
2. BOOM PADS:
IF REPLACED, GREASE UPON INSTALLATION WITH
CHASSIS LUBRICANT.
3. PIVOT POINT GREASE ZERKS:
LUBE ONCE A WEEK WITH MOBILPLEX EP-2
OR EQUIVALENT.
4. HOIST ROLLER BEARINGS:
SEALED TYPE, NO LUBE REQUIRED.
5. HOIST ACTUATOR:
MAINTAIN GEAR BOX LUBRICANT AT FILL PLUG.
USE ONE PINT OF EP GEAR LUBE SAE 80-90.
REPLACE EVERY SIX MONTHS.
6. ROTATION ACTUATOR:
MAINTAIN OIL LEVEL OF 1 1/2 PINTS OF
EP GEAR LUBE, SAE 140.
REPLACE EVERY SIX MONTHS.
7. RESERVOIR FILTER:
10 MICRON SPIN ON FILTER REQUIRED. REPLACE
EVERY THREE MONTHS. SEE RESERVOIR ASSEMBLY
FOR PART NUMBER.
8. HYDRAULIC FLUID:
USE DTE-13 OR EQUIVALENT. KEEP LEVEL AT
SIGHT GAUGE. RESERVOIR SHOULD BE FLUSHED
AND NEW FLUID ADDED ONCE A YEAR, OR IF
A HYDRAULIC FAILURE OCCURS.

AW-015 LUBRICATION MAINTENANCE



LUBRICATION OF ROTATION BEARING

RACE

1. LUBRICATE BEARING RACE AT THE GREASE ZERK LOCATED ON THE OUTSIDE OF THE ROTATION BEARING DIRECTLY UNDER THE ROTATION STOP OF THE PEDESTAL.
2. LISTED IN THE CHART BELOW ARE SEVERAL LUBRICANTS WHICH ARE ACCEPTABLE FOR BOTH RUST INHIBITING AND EXTREME PRESSURE CHARACTERISTICS.
 - A. LUBRICATE THE BEARING DAILY IF THE CRANE IS USED ON A DAILY BASIS.
 - B. LUBRICATE THE BEARING EVERY 30 DAYS IF THE CRANE IS USED INTERMITTENTLY.
 - C. ROTATE THE BEARING THROUGH TWO OR MORE ROTATIONS DURING LUBRICATION PROCCESS.

GEAR

1. THE CHART BELOW LISTS SEVERAL LUBRICANTS FOR THE GEAR. IT IS RECOMMENDED THAT THE TEETH BE LUBRICATED WITH A SMALL AMOUNT OF GREASE EVERY 8 HOURS IF THE CRANE IS USED DAILY. THE GREASE IS PURGED FROM THE TEETH BY THE VERY NATURE OF BEING EXPOSED TO THE ELEMENTS. THEREFORE CLOSE ATTENTION TO THE GEAR LUBRICANT WILL PROVIDE A LONGER TOOTH LIFE. GREASE THE GEAR TEETH AT THE PINION LOCATION.

INSTALLATION OF ROTATION BEARING

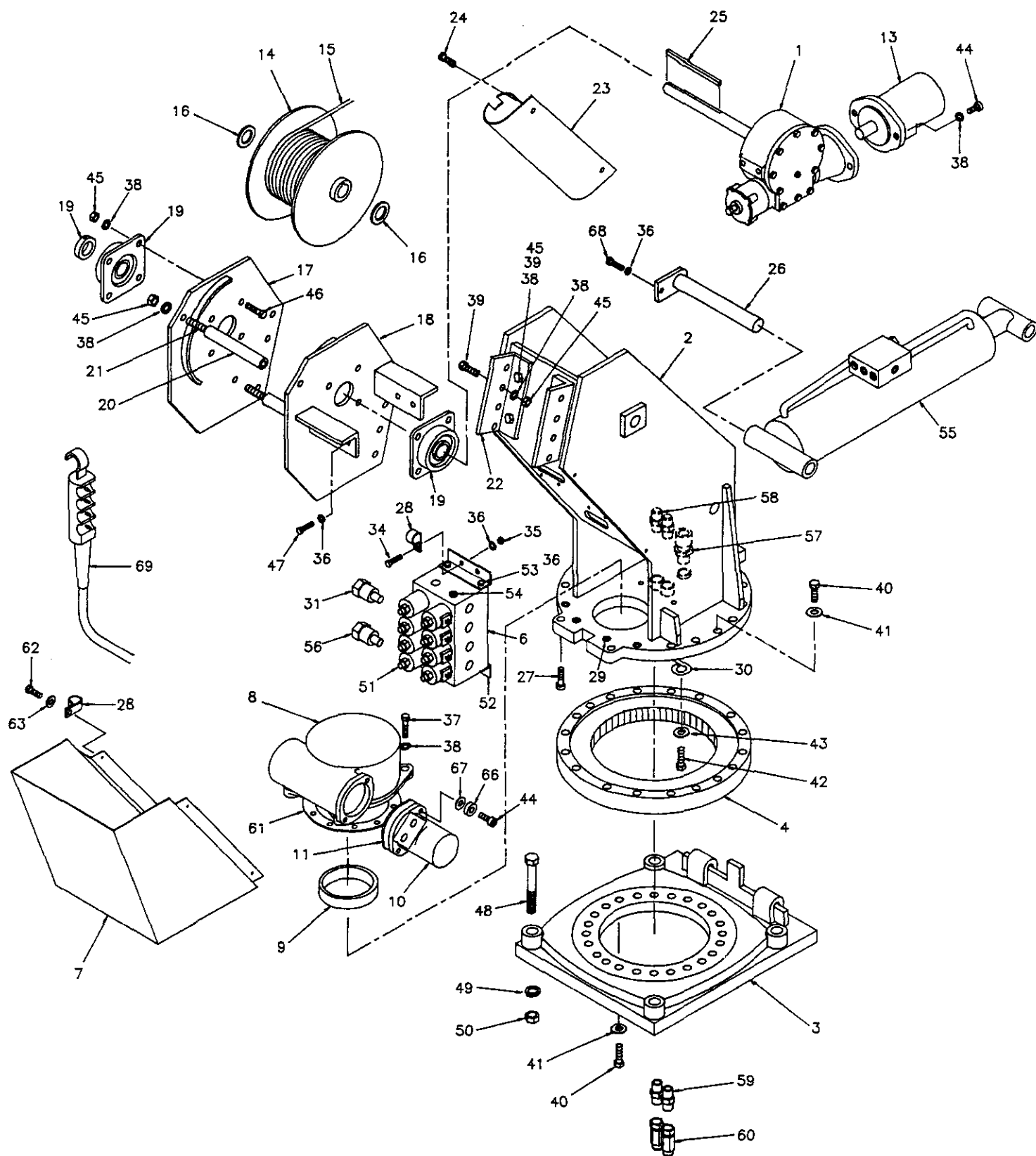
1. MAKE SURE MOUNTING SURFACES ARE FLAT AND CLEAR OF DEBRIS.
2. INSTALL BEARING SUCH THAT THE GREASE ZERK ON THE BEARING IS LOCATED DIRECTLY UNDER THE ROTATION STOP OF THE PEDESTAL.
3. INSTALL TOP AND BOTTOM BOLTS AND FLAT WASHERS. ALL BOLTS MUST BE GRADE 8 AND USED WITH HARDENED FLAT WASHERS. REFER TO PEDESTAL ASSEMBLY FOR PART NUMBERS.
4. SNUG ALL BOLTS , THEN TIGHTEN ACCORDING TO THE TORQUE SEQUENCE ILLUSTRATION UNTIL ALL BOLTS ARE TORQUED TO 150 FT.-LBS (NON-PLATED) OR 110 FT.-LBS (PLATED).

NOTE: BOLTS SHOULD BE CHECKED PERIODICALLY AND RETIGHTENED TO PROPER TORQUE.

5. GREASE THE ROTATION BEARING ACCORDING TO LUBRICATION INSTRUCTIONS AT LEFT.
6. SET BACKLASH OF THE ROTATION ACTUATOR AND THE ROTATION BEARING AT THE HIGH POINT OF THE ROTATION BEARING GEAR TEETH. IDENTIFIED BY A YELLOW PAINT MARK ON THE TEETH.

	MOBIL	TEXACO	SUNOCO	PURE	SOHIO
RACE	MOBILPLEX EP #2	MARFAC MP #2	PRESTIGE 742EP	POCO HT EP #2	SOHITRAN EP #1
GEAR	MOBILCOTE-S	CRATER COMPOUND	407 COMPOUND B	POCO GEARSHIELD	SOHITAC #1

AW-172 ROTATION BEARING MAINTENANCE



AW-480000
 PEDESTAL ASSEMBLY, 8005H
 NONREMOVABLE PENDANT

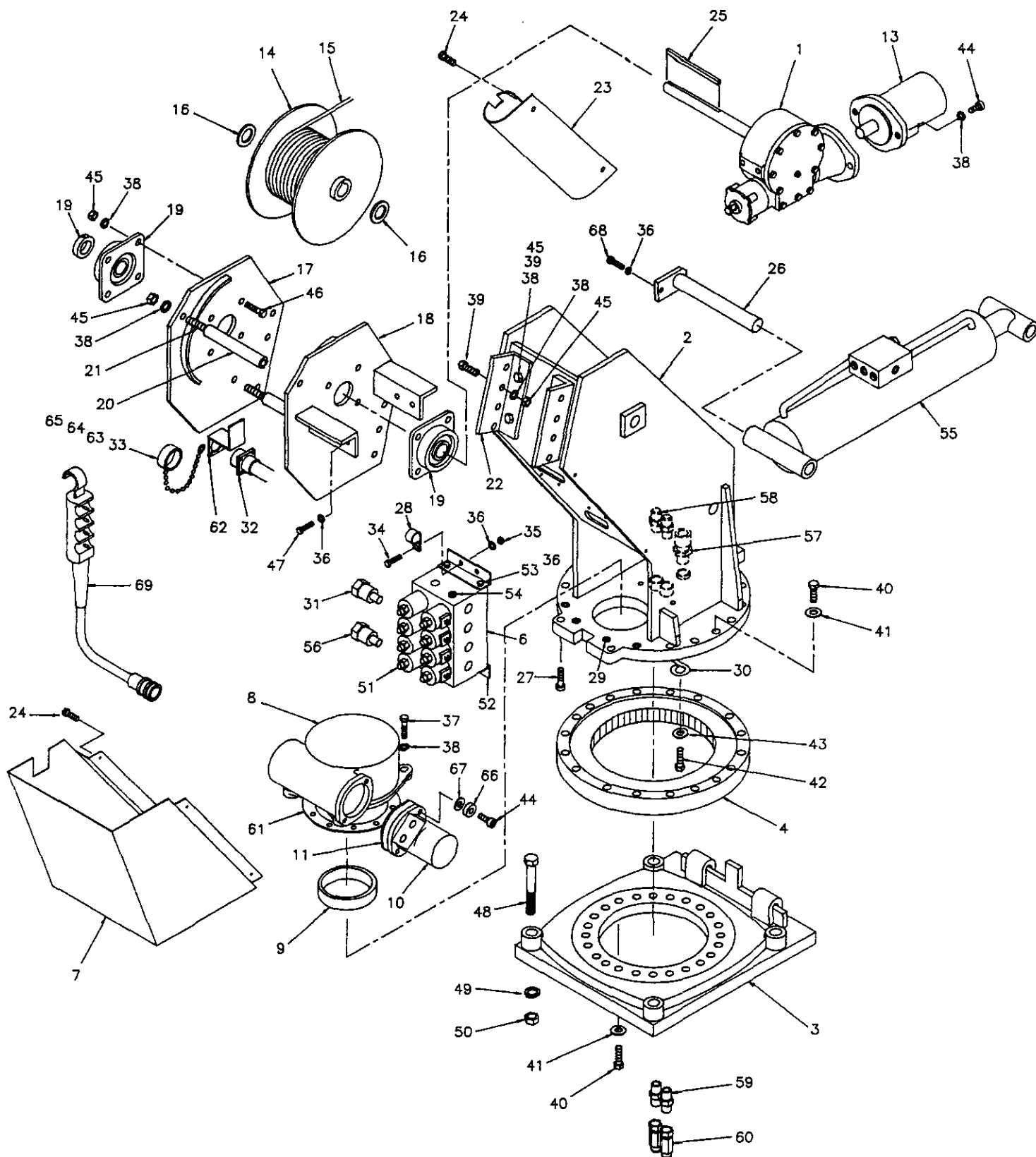
8005H PEDESTAL ASSEMBLY AW-480000

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	480075	ACTUATOR, HOIST
2	1	480050	PEDESTAL WELDMENT ASSEMBLY
3	1	480040	BASE PLATE ASSEMBLY
4	1	480023-002	BEARING, ROTATION
5	-	-	-
6	1	480313	MANIFOLD, BLOCK
7	1	480160	COVER, VALVE
8	1	480028	GEAR BOX, ROTATION
9	1	360162	RING, ECCENTRIC
10	1	480027	MOTOR, HYDRAULIC (ROTATION)
11	1	480019	GASKET, MOTOR
12	-	-	-
13	1	480076	MOTOR, HYDRAULIC (HOIST)
14	1	480066	DRUM, HOIST
15	1	480031	CABLE ASSEMBLY (3/8")
16	2	480073	SPACER, WINCH SHAFT
17	1	480064	SIDE PLATE - LEFT
18	1	480062	SIDE PLATE - RIGHT
19	2	480077	BEARING, 4-BOLT
20	2	480069	SPACER, TUBE
21	2	480070	ROD, SPACER
22	2	480072	BRACKET, MOUNTING
23	1	634000	GUARD, PENDANT
24	5	002615	SCREW, HEX HD. 1/4-20NC x 3/8 LG. SELF TAPPING
25	1	480094	KEY, SQ. 3/8
26	1	366191	PIN, PEDESTAL/CYLINDER
27	2	009118	SCREW, SOC. HD. 1/2-13NC x 2" LG. GR.5
28	2	480024	MOUNT, PENDANT RETAINER
29	4	006205	SCREW, SOC. HD. 5/8-11NC x 1 1/4 LG. GR.5
30	1	360207	RETAINER, ECCENTRIC RING
31	1	480183	CARTRIDGE, FLOW REGULATOR (480183-001, SEAL KIT)
32	1	480597	RECEPTACLE ASSEMBLY
33	1	480547	CAP, PENDANT RECEPTACLE
34	4	008701	SCREW, HEX HD. 3/8-16NC x 1" LG.
35	4	017100	NUT, HEX 3/8-16NC
36	9	021100	WASHER, SP. LK. 3/8
37	2	011608	SCREW, HEX HD. 1/2-13NC x 2" LG. GR.5
38	30	021500	WASHER, SP. LK. 1/2
39	12	010201	SCREW, HEX HD. 1/2-13NC x 1 1/2 LG. GR.5
40	38	012198	SCREW, HEX HD. 5/8-11NC x 1 3/4 LG. GR.8
41	38	023902	WASHER, FL. 5/8 HARDENED
42	1	007402	SCREW, HEX HD. 5/16-18NC x 5/8 LG. GR.5
43	5	020600	WASHER, SP. LK. 5/16
44	4	012197	SCREW, SOC. HD. 1/2-13NC x 1 1/2 LG. GR.5
45	24	017701	NUT, HEX 1/2-13NC
46	8	011605	SCREW, HEX HD. 1/2-13NC x 1 3/4 LG. GR.5
47	4	008601	SCREW, HEX HD. 3/8-16NC x 7/8 LG. GR.5
48	4	015104	SCREW, HEX HD. 7/8-14NF x 5" LG. GR.8

8005H PEDESTAL ASSEMBLY AW-480000

ITEM	QTY.	PART NO.	DESCRIPTION
49	4	022200	WASHER, SP. LK. 7/8
50	4	018900	NUT, HEX 7/8-14NF
51	8	480184	VALVE, CARTRIDGE
52	2	REF.	BRACKET, MANIFOLD
53	4	REF.	SCREW, HEX HD. 3/8-16NC x 3/4 LG.
54	1	000109	PLUG, PIPE 3/8
55	1	480377	CYLINDER, BOOM (COMPLETE)
	1	480377-001	CASE ASSEMBLY
	1	480377-002	SHAFT ASSEMBLY
	1	480377-003	HEAD GLAND
	1	480377-004	PISTON
	1	480376	SEAL KIT
56	1	480314	CARTRIDGE, CHECK VALVE
57	1	370433	CONNECTOR, CORD
58	2	360054	ADAPTER
59	2	750413	REDUCER
60	2	750412	SWIVEL JOINT
61	1	480011	SEAL, ROTATION ACTUATOR
62	1	002608	SCREW, HEX HD. 1/4-20NC x 3/4 LG. SELF TAPPING
63	1	020901	WASHER, FLAT 5/16
64	-	-	-
65	-	-	-
66	2	021502	WASHER, SP. LK. 1/2 (HI-COLLAR)
67	2	021601	WASHER, FLAT 1/2
68	1	366158	SCREW, HEX HD. 3/8-16NC x 3/4 LG. GR.8
69	1	480093	PENDANT ASSEMBLY

NOTES



AW-480000-100
PEDESTAL ASSEMBLY, 8005H
REMOVABLE PENDANT

8005H PEDESTAL ASSEMBLY AW-480000-100

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	480075	ACTUATOR, HOIST
2	1	480050	PEDESTAL WELDMENT ASSEMBLY
3	1	480040	BASE PLATE ASSEMBLY
4	1	480023-002	BEARING, ROTATION
5	-	-	-
6	1	480313	MANIFOLD, BLOCK
7	1	480161	COVER, VALVE (w/ NOTCH)
8	1	480028	GEAR BOX, ROTATION
9	1	360162	RING, ECCENTRIC
10	1	480027	MOTOR, HYDRAULIC (ROTATION)
11	1	480019	GASKET, MOTOR
12	-	-	-
13	1	480076	MOTOR, HYDRAULIC (HOIST)
14	1	480066	DRUM, HOIST
15	1	480031	CABLE ASSEMBLY (3/8")
16	2	480073	SPACER, WINCH SHAFT
17	1	480064	SIDE PLATE - LEFT
18	1	480062	SIDE PLATE - RIGHT
19	2	480077	BEARING, 4-BOLT
20	2	480069	SPACER, TUBE
21	2	480070	ROD, SPACER
22	2	480072	BRACKET, MOUNTING
23	1	634000	GUARD, PENDANT
24	6	002615	SCREW, HEX HD. 1/4-20NC x 3/8 LG. SELF TAPPING
25	1	480094	KEY, SQ. 3/8
26	1	366191	PIN, PEDESTAL/CYLINDER
27	2	009118	SCREW, SOC. HD. 1/2-13NC x 2" LG. GR.5
28	1	480024	MOUNT, PENDANT RETAINER
29	4	006205	SCREW, SOC. HD. 5/8-11NC x 1 1/4 LG. GR.5
30	1	360207	RETAINER, ECCENTRIC RING
31	1	480183	CARTRIDGE, FLOW REGULATOR (480183-001, SEAL KIT)
32	1	480597	RECEPTACLE ASSEMBLY
33	1	480547	CAP, PENDANT RECEPTACLE
34	4	008701	SCREW, HEX HD. 3/8-16NC x 1" LG.
35	4	017100	NUT, HEX 3/8-16NC
36	9	021100	WASHER, SP. LK. 3/8
37	2	011608	SCREW, HEX HD. 1/2-13NC x 2" LG. GR.5
38	30	021500	WASHER, SP. LK. 1/2
39	12	010201	SCREW, HEX HD. 1/2-13NC x 1 1/2 LG. GR.5
40	38	012198	SCREW, HEX HD. 5/8-11NC x 1 3/4 LG. GR.8
41	38	023902	WASHER, FL. 5/8 HARDENED
42	1	007402	SCREW, HEX HD. 5/16-18NC x 5/8 LG. GR.5
43	5	020600	WASHER, SP. LK. 5/16
44	4	012197	SCREW, SOC. HD. 1/2-13NC x 1 1/2 LG. GR.5
45	24	017701	NUT, HEX 1/2-13NC
46	8	011605	SCREW, HEX HD. 1/2-13NC x 1 3/4 LG. GR.5
47	4	008601	SCREW, HEX HD. 3/8-16NC x 7/8 LG. GR.5
48	4	015104	SCREW, HEX HD. 7/8-14NF x 5" LG. GR.8

8005H PEDESTAL ASSEMBLY AW-480000-100

ITEM	QTY.	PART NO.	DESCRIPTION
49	4	022200	WASHER, SP. LK. 7/8
50	4	018900	NUT, HEX 7/8-14NF
51	8	480184	VALVE, CARTRIDGE
52	2	REF.	BRACKET, MANIFOLD
53	4	REF.	SCREW, HEX HD. 3/8-16NC x 3/4 LG.
54	1	000109	PLUG, PIPE 3/8
55	1	480377	CYLINDER, BOOM (COMPLETE)
	1	480377-001	CASE ASSEMBLY
	1	480377-002	SHAFT ASSEMBLY
	1	480377-003	HEAD GLAND
	1	480377-004	PISTON
	1	480376	SEAL KIT
56	1	480314	CARTRIDGE, CHECK VALVE
57	1	370433	CONNECTOR, CORD
58	2	360054	ADAPTER
59	2	750413	REDUCER
60	2	750412	SWIVEL JOINT
61	1	480011	SEAL, ROTATION ACTUATOR
62	1	480801	BRACKET
63	2	000404	SCREW, #6-32NC x 5/8 LG.
64	2	019600	WASHER, SP. LK. #6
65	2	015400	NUT, HEX #6-32NC
66	2	021502	WASHER, SP. LK. 1/2 (HI-COLLAR)
67	2	021601	WASHER, FLAT 1/2
68	1	366158	SCREW, HEX HD. 3/8-16NC x 3/4 LG. GR.8
69	1	480540	PENDANT, REMOVABLE

NOTES

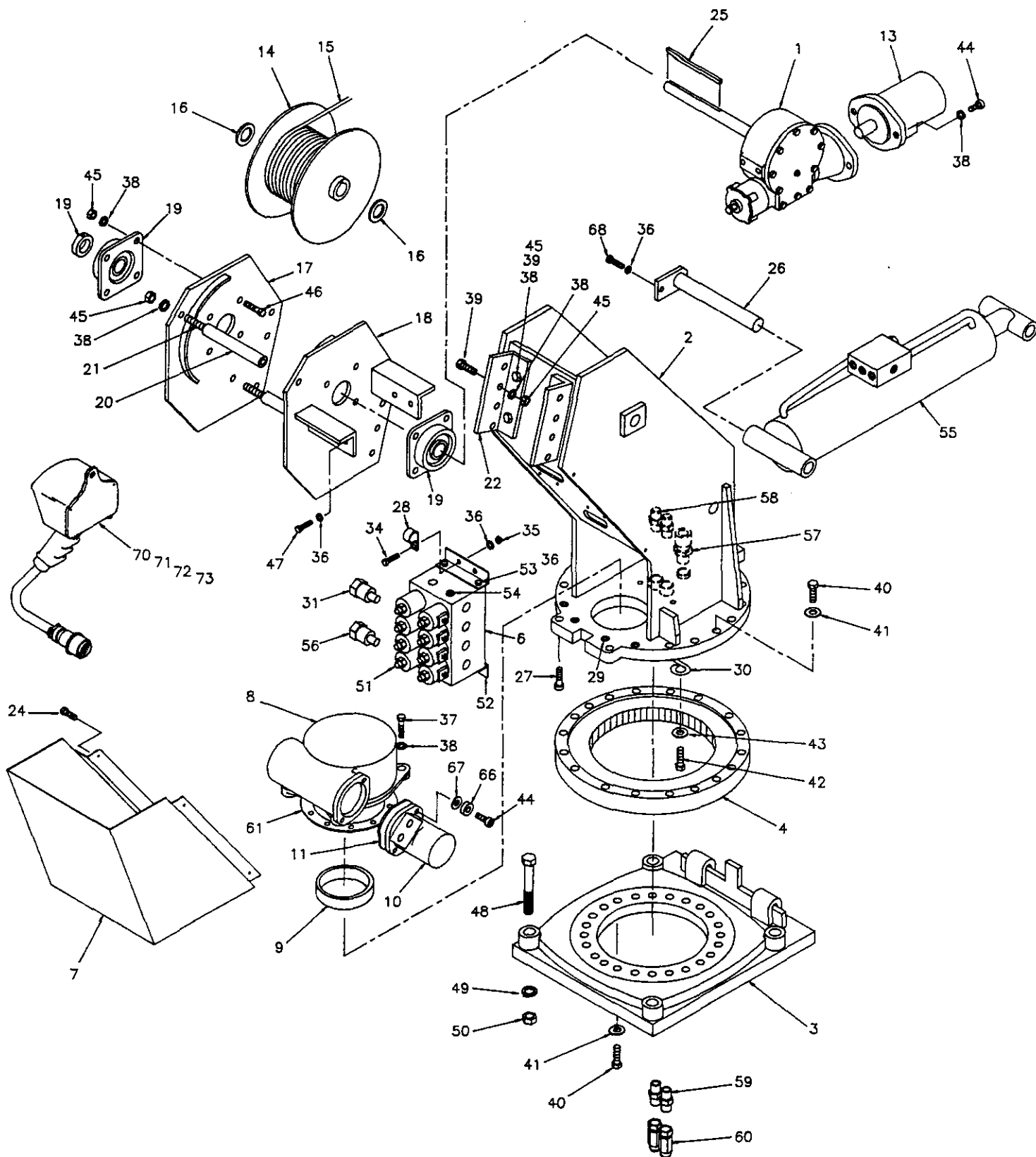
8005H PEDESTAL ASSEMBLY AW-480570

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	480075	ACTUATOR, HOIST
2	1	480050	PEDESTAL WELDMENT ASSEMBLY
3	1	480040	BASE PLATE ASSEMBLY
4	1	480023-002	BEARING, ROTATION
5	-	-	-
6	1	480313	MANIFOLD, BLOCK
7	1	480161	COVER, VALVE (w/ NOTCH)
8	1	480028	GEAR BOX, ROTATION
9	1	360162	RING, ECCENTRIC
10	1	480027	MOTOR, HYDRAULIC (ROTATION)
11	1	480019	GASKET, MOTOR
12	-	-	-
13	1	480076	MOTOR, HYDRAULIC (HOIST)
14	1	480066	DRUM, HOIST
15	1	480031	CABLE ASSEMBLY (3/8")
16	2	480073	SPACER, WINCH SHAFT
17	1	480064	SIDE PLATE - LEFT
18	1	480062	SIDE PLATE - RIGHT
19	2	480077	BEARING, 4-BOLT
20	2	480069	SPACER, TUBE
21	2	480070	ROD, SPACER
22	2	480072	BRACKET, MOUNTING
23	-	-	-
24	4	002615	SCREW, HEX HD. 1/4-20NC x 3/8 LG. SELF TAPPING
25	1	480094	KEY, SQ. 3/8
26	1	366191	PIN, PEDESTAL/CYLINDER
27	2	009118	SCREW, SOC. HD. 1/2-13NC x 2" LG. GR.5
28	1	480024	MOUNT, PENDANT RETAINER
29	4	006205	SCREW, SOC. HD. 5/8-11NC x 1 1/4 LG. GR.5
30	1	360207	RETAINER, ECCENTRIC RING
31	1	480183	CARTRIDGE, FLOW REGULATOR (480183-001, SEAL KIT)
32	1	480597	RECEPTACLE ASSEMBLY
33	1	480547	CAP, PENDANT RECEPTACLE
34	4	008701	SCREW, HEX HD. 3/8-16NC x 1" LG.
35	4	017100	NUT, HEX 3/8-16NC
36	9	021100	WASHER, SP. LK. 3/8
37	2	011608	SCREW, HEX HD. 1/2-13NC x 2" LG. GR.5
38	30	021500	WASHER, SP. LK. 1/2
39	12	010201	SCREW, HEX HD. 1/2-13NC x 1 1/2 LG. GR.5
40	38	012198	SCREW, HEX HD. 5/8-11NC x 1 3/4 LG. GR.8
41	38	023902	WASHER, FL. 5/8 HARDENED
42	1	007402	SCREW, HEX HD. 5/16-18NC x 5/8 LG. GR.5
43	5	020600	WASHER, SP. LK. 5/16
44	4	012197	SCREW, SOC. HD. 1/2-13NC x 1 1/2 LG. GR.5
45	24	017701	NUT, HEX 1/2-13NC
46	8	011605	SCREW, HEX HD. 1/2-13NC x 1 3/4 LG. GR.5
47	4	008601	SCREW, HEX HD. 3/8-16NC x 7/8 LG. GR.5
48	4	015104	SCREW, HEX HD. 7/8-14NF x 5" LG. GR.8

8005H PEDESTAL ASSEMBLY AW-480570

ITEM	QTY.	PART NO.	DESCRIPTION
49	4	022200	WASHER, SP. LK. 7/8
50	4	018900	NUT, HEX 7/8-14NF
51	8	480184	VALVE, CARTRIDGE
52	2	REF.	BRACKET, MANIFOLD
53	4	REF.	SCREW, HEX HD. 3/8-16NC x 3/4 LG.
54	1	000109	PLUG, PIPE 3/8
55	1	480377	CYLINDER, BOOM (COMPLETE)
	1	480377-001	CASE ASSEMBLY
	1	480377-002	SHAFT ASSEMBLY
	1	480377-003	HEAD GLAND
	1	480377-004	PISTON
	1	480376	SEAL KIT
56	1	480314	CARTRIDGE, CHECK VALVE
57	1	370433	CONNECTOR, CORD
58	2	360054	ADAPTER
59	2	750413	REDUCER
60	2	750412	SWIVEL JOINT
61	1	480011	SEAL, ROTATION ACTUATOR
62	1	480546	BRACKET
63	2	000404	SCREW, #6-32NC x 5/8 LG.
64	2	019600	WASHER, SP. LK. #6
65	2	015400	NUT, HEX #6-32NC
66	2	021502	WASHER, SP. LK. 1/2 (HI-COLLAR)
67	2	021601	WASHER, FLAT 1/2
68	1	366158	SCREW, HEX HD. 3/8-16 x 3/4 LG. GR.8
69	-	-	-
70	1	480590	PENDANT, FOUR FUNCTION
71	1	480591	PENDANT, FOUR FUNCTION PROPORTIONAL
72	1	480592	PENDANT, EIGHT FUNCTION
73	1	480593	PENDANT, EIGHT FUNCTION PROPORTIONAL

NOTES



AW-480570-110
 PEDESTAL ASSEMBLY, 8005H
 IN COMPARTMENT (IC) PENDANT

8005H PEDESTAL ASSEMBLY (IC) AW-480570-110

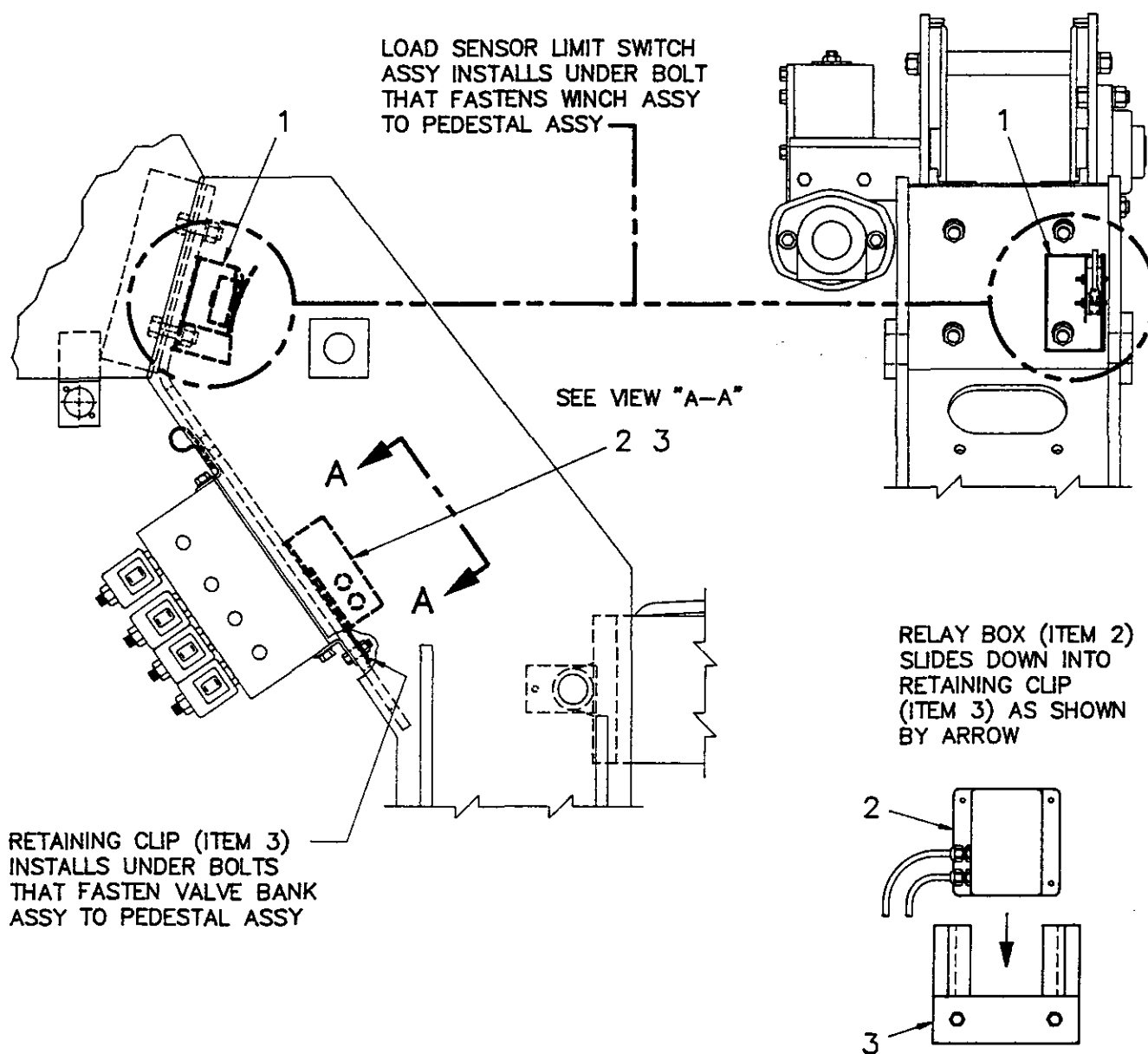
ITEM	QTY.	PART NO.	DESCRIPTION
1	1	480075	ACTUATOR, HOIST
2	1	480050	PEDESTAL WELDMENT ASSEMBLY
3	1	480040	BASE PLATE ASSEMBLY
4	1	480023-002	BEARING, ROTATION
5	-	-	-
6	1	480313	MANIFOLD, BLOCK
7	1	480160	COVER, VALVE
8	1	480028	GEAR BOX, ROTATION
9	1	360162	RING, ECCENTRIC
10	1	480027	MOTOR, HYDRAULIC (ROTATION)
11	1	480019	GASKET, MOTOR
12	-	-	-
13	1	480076	MOTOR, HYDRAULIC (HOIST)
14	1	480066	DRUM, HOIST
15	1	480031	CABLE ASSEMBLY (3/8")
16	2	480073	SPACER, WINCH SHAFT
17	1	480064	SIDE PLATE - LEFT
18	1	480062	SIDE PLATE - RIGHT
19	2	480077	BEARING, 4-BOLT
20	2	480069	SPACER, TUBE
21	2	480070	ROD, SPACER
22	2	480072	BRACKET, MOUNTING
23	-	-	-
24	4	002615	SCREW, HEX HD. 1/4-20NC x 3/8 LG. SELF TAPPING
25	1	480094	KEY, SQ. 3/8
26	1	366191	PIN, PEDESTAL/CYLINDER
27	2	009118	SCREW, SOC. HD. 1/2-13NC x 2" LG. GR.5
28	1	480024	MOUNT, PENDANT RETAINER
29	4	006205	SCREW, SOC. HD. 5/8-11NC x 1 1/4 LG. GR.5
30	1	360207	RETAINER, ECCENTRIC RING
31	1	480183	CARTRIDGE, FLOW REGULATOR (480183-001, SEAL KIT)
32	-	-	-
33	-	-	-
34	4	008701	SCREW, HEX HD. 3/8-16NC x 1" LG.
35	4	017100	NUT, HEX 3/8-16NC
36	9	021100	WASHER, SP. LK. 3/8
37	2	011608	SCREW, HEX HD. 1/2-13NC x 2" LG. GR.5
38	30	021500	WASHER, SP. LK. 1/2
39	12	010201	SCREW, HEX HD. 1/2-13NC x 1 1/2 LG. GR.5
40	38	012198	SCREW, HEX HD. 5/8-11NC x 1 3/4 LG. GR.8
41	38	023902	WASHER, FL. 5/8 HARDENED
42	1	007402	SCREW, HEX HD. 5/16-18NC x 5/8 LG. GR.5
43	5	020600	WASHER, SP. LK. 5/16
44	4	012197	SCREW, SOC. HD. 1/2-13NC x 1 1/2 LG. GR.5
45	24	017701	NUT, HEX 1/2-13NC
46	8	011605	SCREW, HEX HD. 1/2-13NC x 1 3/4 LG. GR.5
47	4	008601	SCREW, HEX HD. 3/8-16NC x 7/8 LG. GR.5
48	4	015104	SCREW, HEX HD. 7/8-14NF x 5" LG. GR.8

8005H PEDESTAL ASSEMBLY (IC) AW-480570-110

ITEM	QTY.	PART NO.	DESCRIPTION
49	4	022200	WASHER, SP. LK. 7/8
50	4	018900	NUT, HEX 7/8-14NF
51	8	480184	VALVE, CARTRIDGE
52	2	REF.	BRACKET, MANIFOLD
53	4	REF.	SCREW, HEX HD. 3/8-16NC x 3/4 LG.
54	1	000109	PLUG, PIPE 3/8
55	1	480377	CYLINDER, BOOM (COMPLETE)
	1	480377-001	CASE ASSEMBLY
	1	480377-002	SHAFT ASSEMBLY
	1	480377-003	HEAD GLAND
	1	480377-004	PISTON
	1	480376	SEAL KIT
56	1	480314	CARTRIDGE, CHECK VALVE
57	1	370433	CONNECTOR, CORD
58	2	360054	ADAPTER
59	2	750413	REDUCER
60	2	750412	SWIVEL JOINT
61	1	480011	SEAL, ROTATION ACTUATOR
62	-	-	-
63	-	-	-
64	-	-	-
65	-	-	-
66	2	021502	WASHER, SP. LK. 1/2 (HI-COLLAR)
67	2	021601	WASHER, FLAT 1/2
68	1	366158	SCREW, HEX HD. 3/8-16NC x 3/4 LG. GR.8
69	-	-	-
70	1	480590	PENDANT, FOUR FUNCTION
71	1	480591	PENDANT, FOUR FUNCTION PROPORTIONAL
72	1	480592	PENDANT, EIGHT FUNCTION
73	1	480593	PENDANT, EIGHT FUNCTION PROPORTIONAL

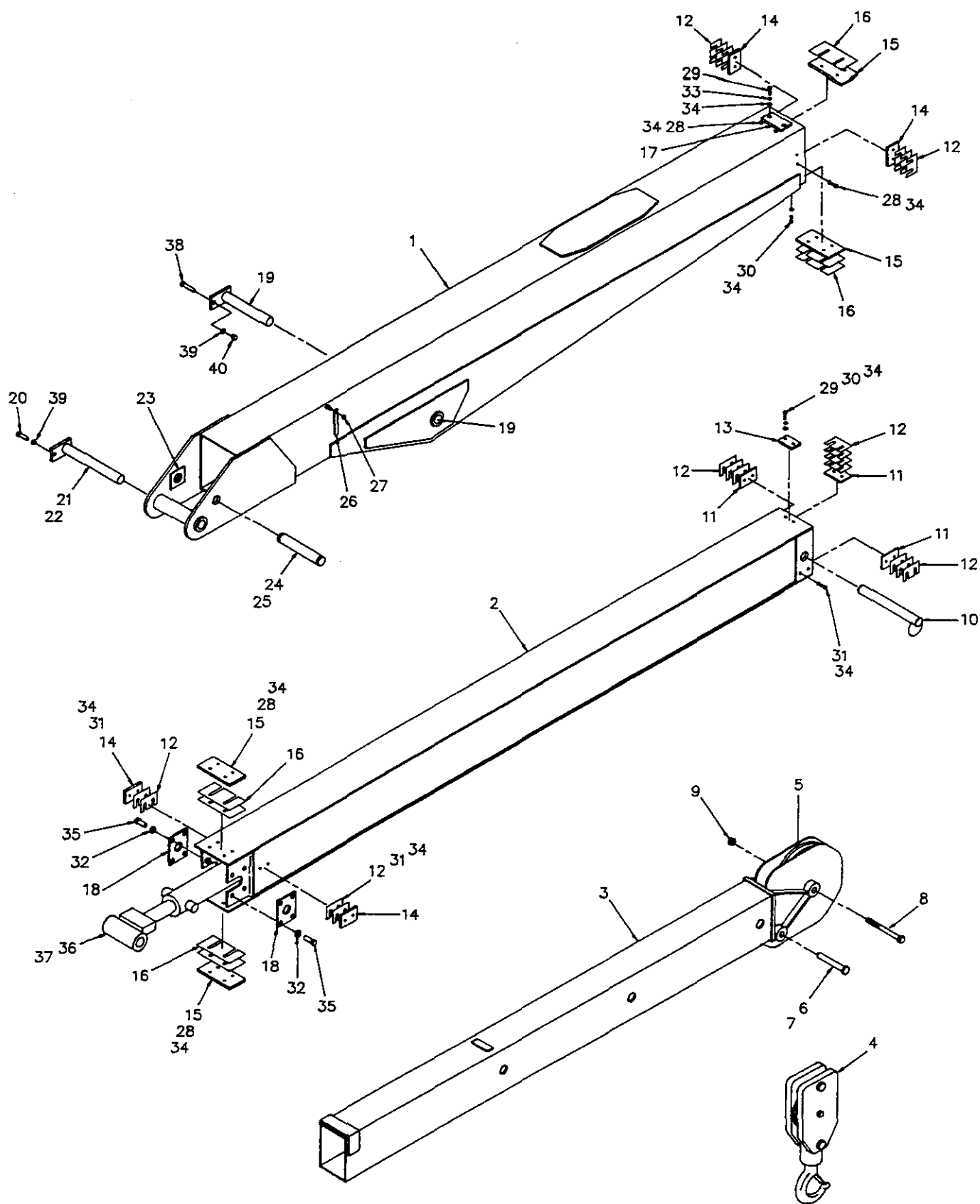
NOTE:

SEE CRANE WIRING DIAGRAM FOR ELECTRICAL CONNECTIONS



ITEM	QTY	P/N	DESCRIPTION
1	1	480380	LOAD SENSOR LIMIT SWITCH ASSY
2	1	366986	RELAY BOX ASSY
3	1	366987	RETAINING CLIP, RELAY BOX ASSY

AW-177
RELAY BOX & LOAD SENSOR
LIMIT SWITCH ASSEMBLY, 8005H



AW-480585
BOOM ASSEMBLY, 8005H

8005H BOOM ASSEMBLY AW-480585

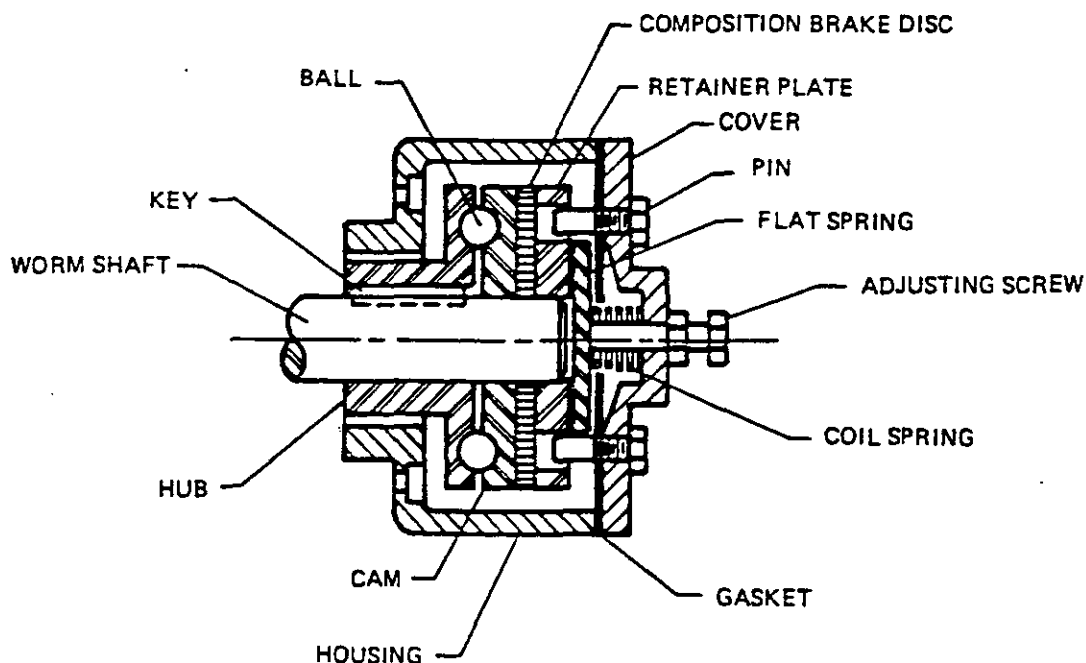
ITEM	QTY.	PART NO.	DESCRIPTION
1	1	480582	BOOM, LOWER (SEE NOTE 1)
2	1	480100	BOOM, POWER
3	1	480310	BOOM, MANUAL
4	1	360603	TRAVELING BLOCK (LONG)
5	1	366198	SHEAVE ASSEMBLY (BEARING ONLY - 366197)
6	1	360124	PIN, HITCH
7	1	360125	PIN, LOCK
8	1	014304	SCREW, HEX HD. 3/4-16NF x 6" LG. GR.5
9	1	018600	NUT, HEX LK. 3/4-16NF
10	1	480030	PIN, MANUAL BOOM
11	3	480120	PAD (STEEL)
12	22	480037	SHIM, SMALL (.032 THICK)
13	1	480118	PAD, LOWER BOOM
14	4	480036	PAD, BOOM (NYLATRON)
15	4	480032	PAD, BOOM (NYLATRON)
16	6	480033	SHIM, LARGE (.032 THICK)
17	1	366201	PAD, BOOM
18	2	480105	RETAINER, EXTENSION CYLINDER
19	1	366179	PIN, BOOM / CYLINDER
20	1	366158	SCREW, HEX HD. 3/8-16NC x 3/4" LG. GR.8
21	1	366192	PIN, PEDESTAL / BOOM
22	1	239000	GREASE ZERK
23	2	480121	SPACER
24	1	480129	PIN, EXTENSION CYLINDER
25	2	480029	RING, RETAINING
26	2	360038	ANGLE INDICATOR
27	2	016300	NUT, HEX LK. 1/4-20NC
28	14	005102	SCREW, HEX HD. 1/4-28NF x 5/8" LG.
29	4	005601	SCREW, HEX HD. 1/4-20NC x 1" LG.
30	4	005501	SCREW, HEX HD. 1/4-28NF x 3/4" LG.
31	8	005406	SCREW, HEX HD. 1/4-28NF x 1/2" LG.
32	8	010201	SCREW, HEX HD. 1/2-13NC x 1 1/2" LG. GR.5
33	4	020300	WASHER, FLAT 1/4
34	30	020200	WASHER, SP. LK. 1/4
35	8	021500	WASHER, SP. LK. 1/2
36	1	480015	CYLINDER, EXTENSION (COMPLETE)
	-	480015-001	CASE ASSEMBLY
	-	480015-002	SHAFT ASSEMBLY
	-	480015-003	HEAD GLAND
	-	480015-004	PISTON
37	1	480012	SEAL KIT
38	1	366159	SCREW, HEX HD. 3/8-16NC x 1 1/2" LG. GR.8
39	2	021100	WASHER, SP. LK. 3/8
40	1	017301	NUT, HEX LK. 3/8-16NC

NOTES:

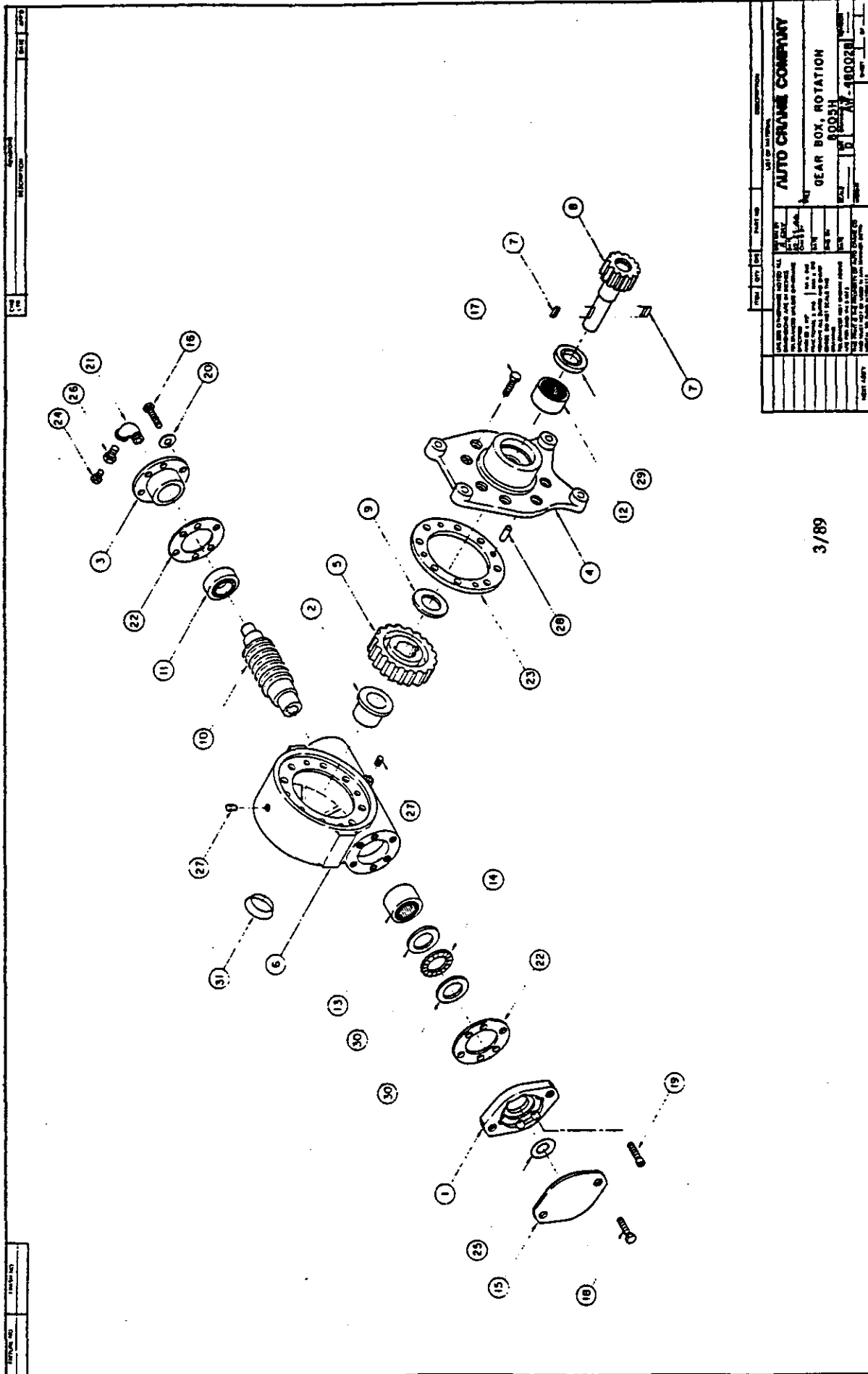
- 1.) BOOM 480080 HAS HOOKS FOR PENDANT CABLE.
BOOM 480582 IS EXACTLY THE SAME THE HOOKS
AND IS USED FOR PROPORTIONAL UNITS.

AUTOMATIC SAFETY BRAKE ASSEMBLY (OIL COOLED) HOIST

1. Winch has right hand worm and gear and spools over drum; use number one slots for brake balls.
2. Install brake hub on winch worm with key.
3. Assemble balls in cam using hard grease to hold balls in place.
4. Install cam and balls, fitting balls in slots on hub.
5. Install brake disc.
6. Install retainer.
7. Install flat spring in brake housing cover (arch down).
8. Install brake housing cover, fitting pins in slots on spring and holes in retainer.
9. Test brake by shifting winch to UP then DOWN to see if brake is working in proper rotation. If not, remove brake and locate brake balls in opposite set of slots.
10. Adjust to suit by tightening or loosening screw on outside of cover. When proper adjustment is obtained, secure screw with jam nut.



NOTES

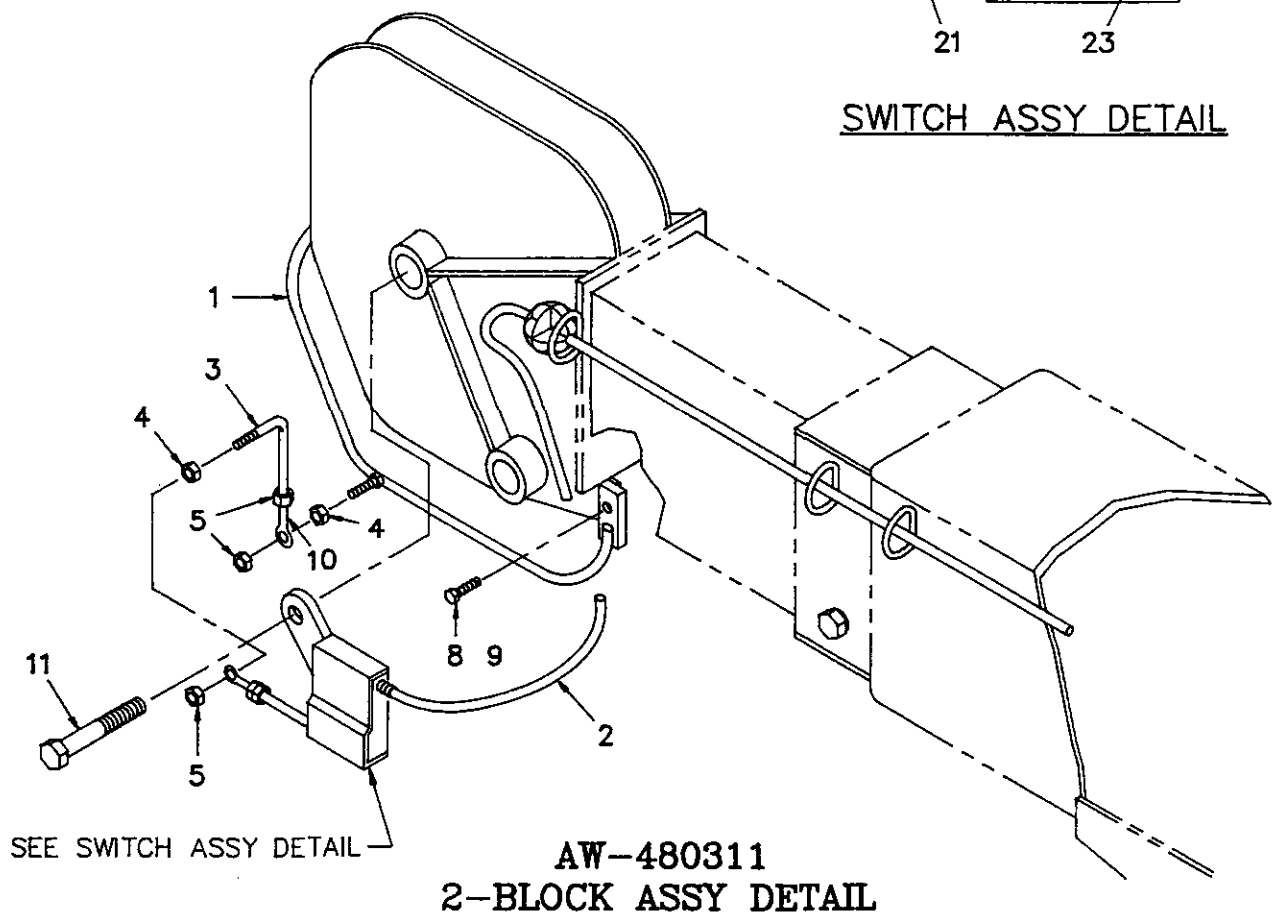
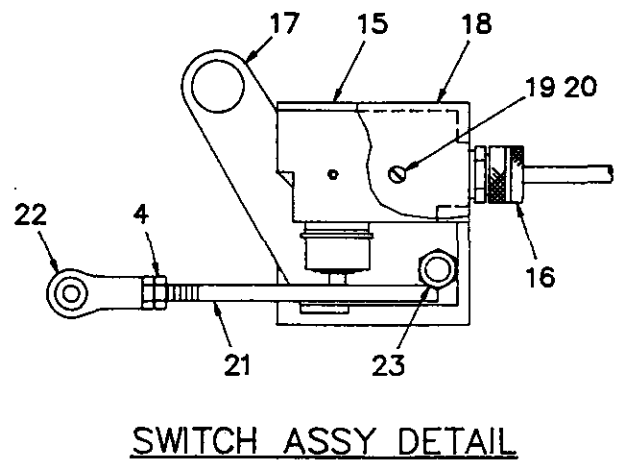
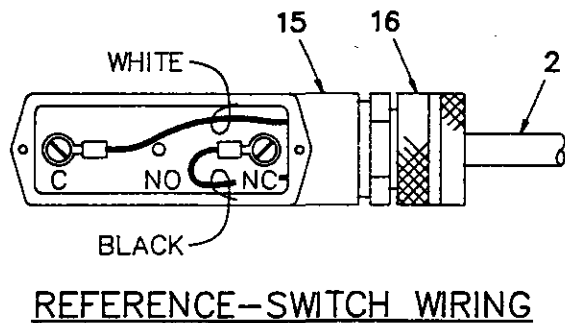
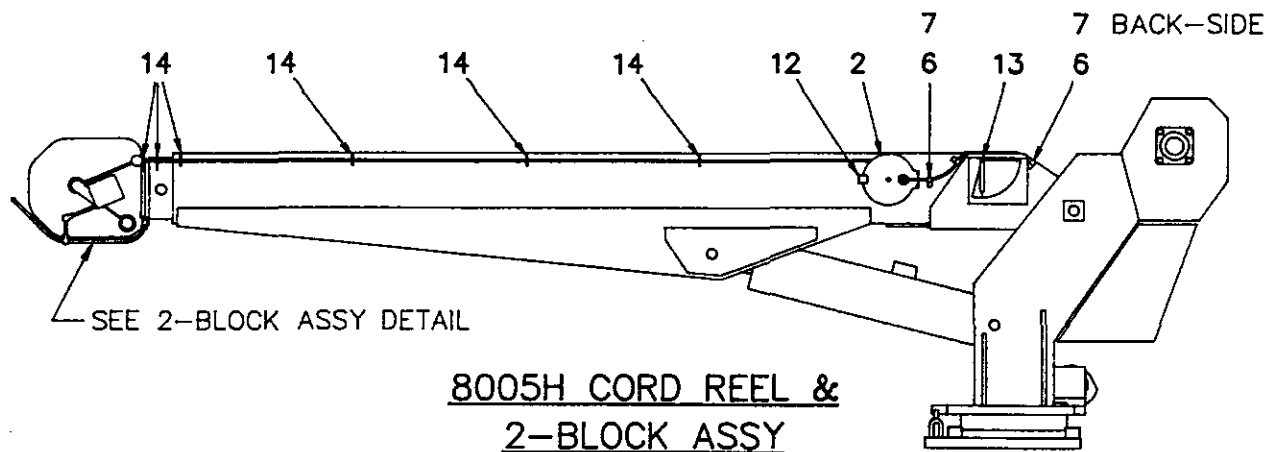


PART NO.		QUANTITY		UNIT		REMARKS	
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GEAR BOX, ROTATION AW-480028

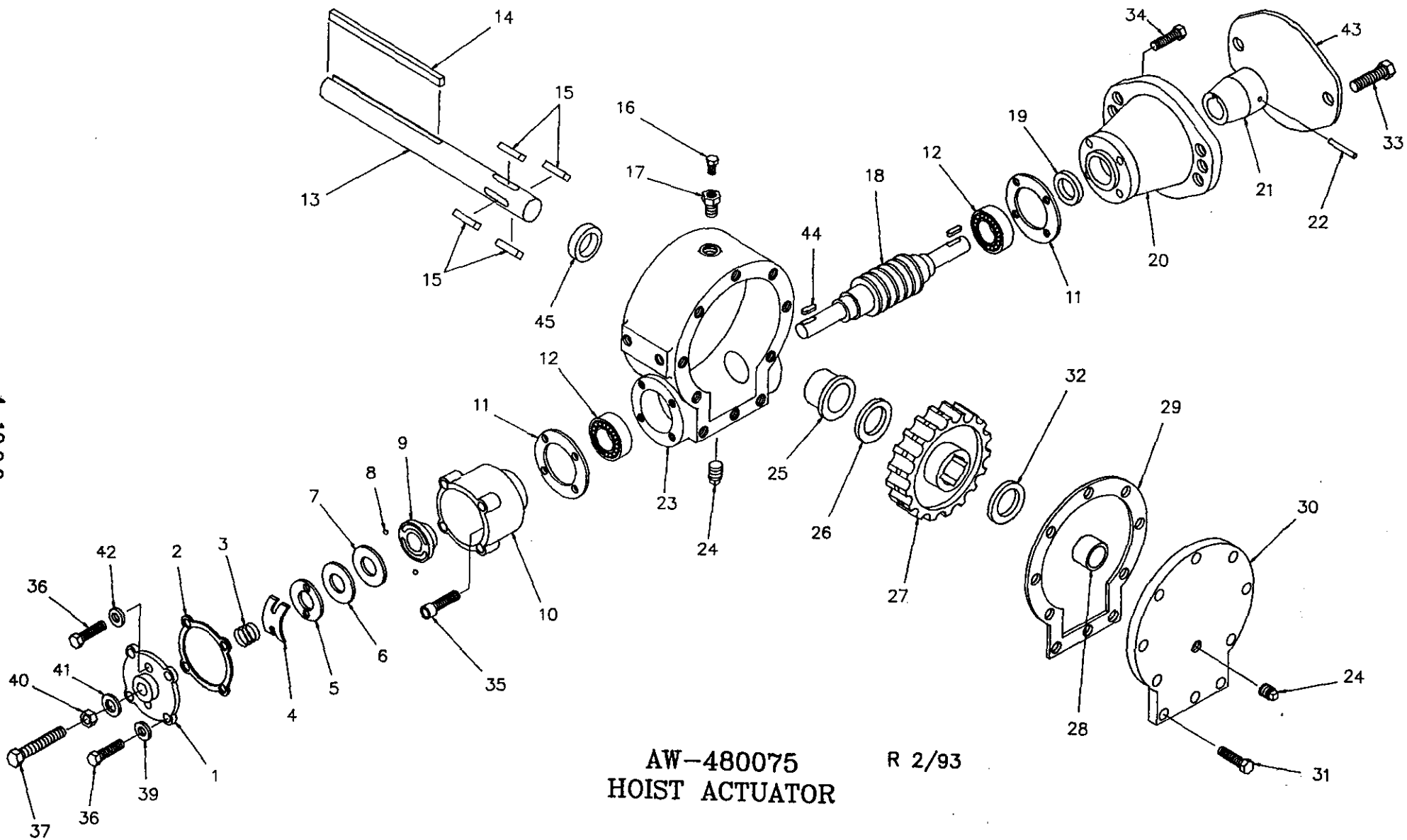
ITEM	QTY.	PART NO.	DESCRIPTION
1	1	480240	ADAPTER
2	1	480241	BUSHING
3	1	480242	CAP, BEARING
4	1	480243	COVER
5	1	480244	GEAR - R.H.
6	1	480237	HOUSING-GEAR
7	2	480246	KEY
8	1	480247	SHAFT-OUTPUT
9	1	480248	WASHER-THRUST
10	1	480249	WORM, R.H.
11	1	480251	BEARING-BALL
12	1	480252	BEARING-NEEDLE
13	1	480253	BEARING-NEEDLE
14	1	480254	BEARING-THRUST
15	1	480255	COVER
16	6	007400	CAPSCREW, 5/16 - 18 NC X 1" LG. HX. HD.
17	8	480238	CAPSCREW, 5/16 - 18 NC X 1 1/4 LG. HX. NYLOC HVY PATCH
18	2	011508	CAPSCREW, 1/2 - 13 NC X 3/4 LG. HX. HD.
19	6	480256	CAPSCREW, 5/16 - 18 NC X 1" LG. SOC. HD. LOC.-WEL
20	6	480258	LOCKWASHER, 5/16 MED. SECT. C.P.
21	1	480259	ELBOW, 90°
22	2	480260	GASKET
23	1	480250	GASKET
24	1	480262	FITTING, RELIEF
25	1	480239	O-RING
26	1	480263	REDUCER
27	2	480264	PLUG, PIPE
28	4	480265	PIN-DOWEL
29	1	480266	SEAL-OIL
30	2	480268	WASHER-THRUST
31	1	480269	PLUG, EXPANSION



2-BLOCK ASSEMBLY AW-480311

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	366116-001	BAIL, 2-BLOCK CROWN BRACKET
2	1	366973-001	CORD REEL ASSY
3	1	366196	2-BLOCK ARM
4	4	016100	NUT, HEX HD. 1/4-28 NF
5	3	016200	NUT, HEX LOCK 1/4-28 NF
6	3	002608	SCREW, HEX HD. SELF TAPPING 1/4-20 NC x 3/4 LG.
7	3	000115	CLIP, #15
8	1	007803	SCREW, HEX HD. 5/16-18 NC x 3 1/2 LG.
9	1	016801	NUT, HEX LOCK 5/16-18 NC
10	1	363006	BEARING, ROD END
11	1	REF.	SCREW, HEX HD. 3/4-16 NF x 6" LG.
12	1	320551	BRACKET, REEL MOUNT
13	2	005901	SCREW, 1/4-20 NC x 1/2 LG.
14	6	366108	D-RING
15	1	646900	SWITCH
16	1	642908	CORD CONNECTOR
17	1	363013-001	MOUNTING PLATE ASSY
18	1	363004	COVER, SWITCH
19	2	002602	SCREW, RD. HD. #6-32 NC x 1 1/4 LG.
20	2	019600	WASHER, SP. LK. #6
21	1	363005	LINKAGE, WELDMENT ROD
22	1	363006	BEARING, ROD END
23	1	017301	NUT, HEX LOCK 3/8-16 NC

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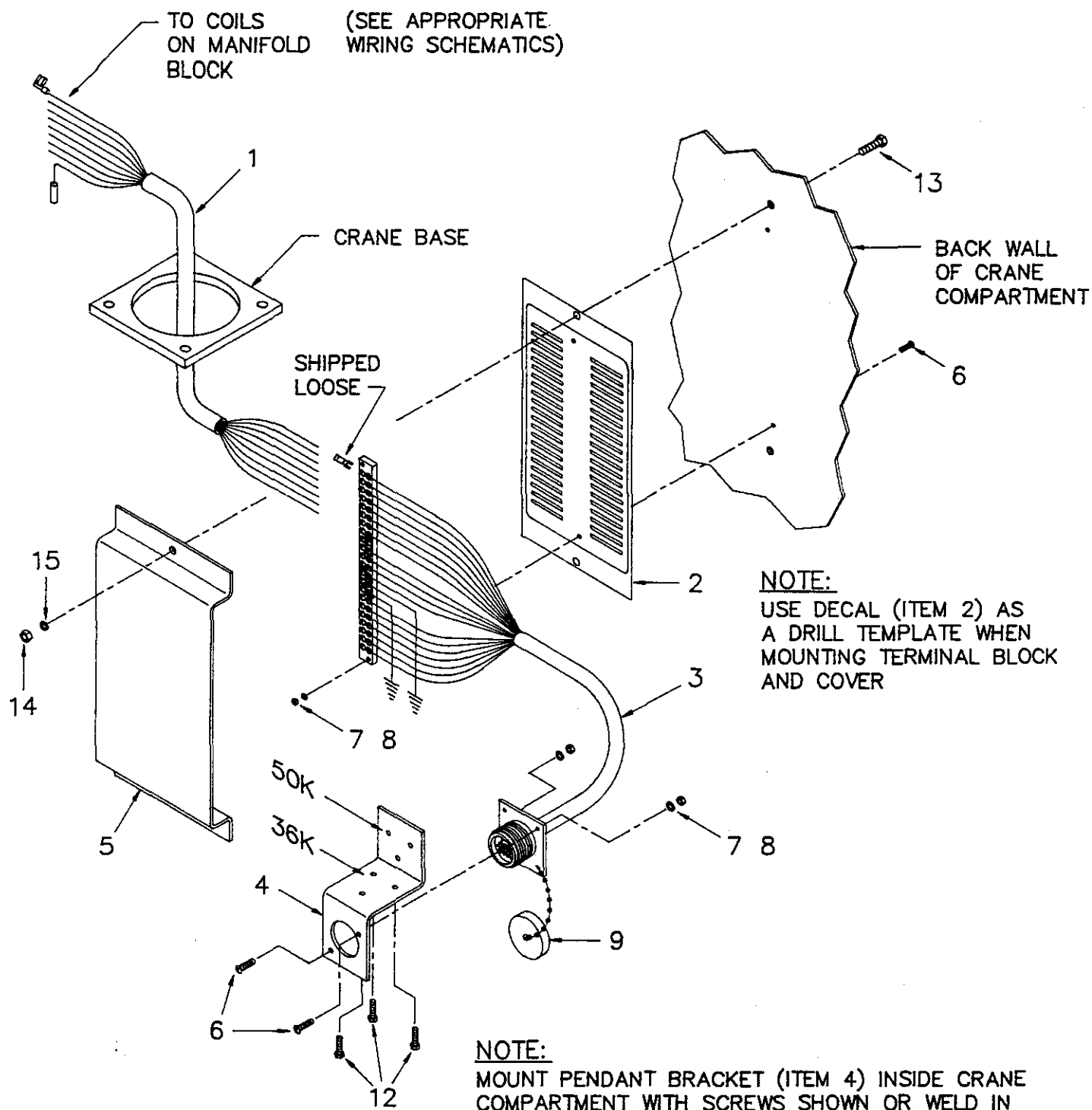


AW-480075
HOIST ACTUATOR

R 2/93

HOIST ACTUATOR AW-480075

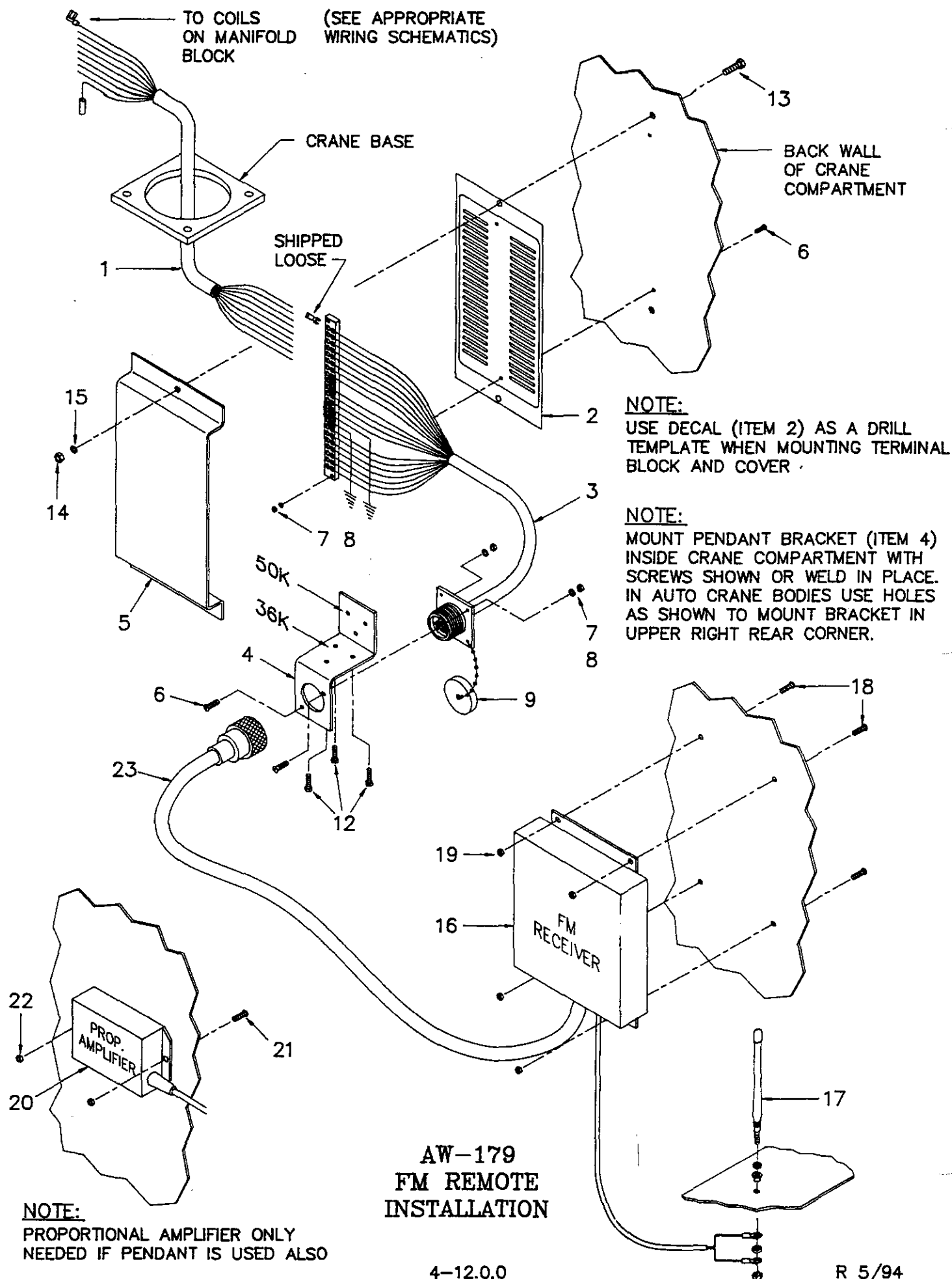
ITEM	QTY.	PART NO.	DESCRIPTION
1	1	360450	COVER, WORM BRAKE
2	1	360359	GASKET
3	1	360368	SPRING
4	1	360367	SPRING, FLAT
5	1	360342	PLATE, RETAINER
6	1	360364	PLATE, THRUST
7	1	360331	CAM, PLATE
8	2	360345	BALL, BRAKE
9	1	360339	HUB-BRAKE
10	1	360336	HOUSING-BRAKE
11	2	360358	GASKET
12	2	360346	BEARING
13	1	480078	SHAFT-OUTPUT
14	1	480094	KEY, 3/8 SQ.
15	4	360464	KEY, BARTH
16	1	360360	FITTING-RELIEF
17	1	360361	REDUCER
18	1	360344	WORM-R.H.
19	1	360365	OIL SEAL
20	1	360330	ADAPTER
21	1	360332	COUPLING
22	1	360363	SPIROL PIN
23	1	360461	HOUSING-GEAR (EFFECTIVE ON SERIAL NO. 636238)
24	2	360362	PIPE PLUG
25	1	360348	BUSHING
26	1	360369	THRUST WASHER
27	1	360460	GEAR-R.H. (EFFECTIVE ON SERIAL NO. 601090)
28	1	360462	BUSHING
29	1	360459	GASKET
30	1	360458	COVER
31	10	360350	CAPSCREW, 1/4-20NC x 3/4 LG. HX HD GR5
32	1	360466	THRUST WASHER
33	2	010202	CAPSCREW, 1/2-13NC x 1" LG. HX HD
34	4	360352	CAPSCREW, 1/4-20NC x 1 3/4 LG. SOC HD LOC-WEL
R/W# 4/4821 — 35	4	360463	CAPSCREW, 1/4-20NC x 7/8 SOC HD
36	6005703	360453	CAPSCREW, 1/4-20NC x 1" HX HD ALL THRD GR5 NYLOC H.P.
37	1	360456	CAPSCREW, 3/8-16NC x 1 1/2 LG HX HD ALL THRD GR5
38	—	—	—
39	4	360465	THREAD SEAL
40	1	360353	NUT, 3/8-16NC HX JAM
41	1	360371	THREAD SEAL
R/W# 4/18154 — 42	2	360455	WASHER, FLAT 1/4 ALUM.
43	1	360349	COVER-HYD. ADAPTER
44	2	360341	KEY
45	1	360366	OIL SEAL
46	1	480306	SEAL AND GASKET KIT



AW-178
INSTALLATION DRAWING
IN-COMPARTMENT (IC) PENDANT

IN-COMPARTMENT PENDANT INSTALLATION AW-178

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	480492	HARNESS, CRANE PIGTAIL
2	1	480490	DECAL, 22 STATION TERMINAL BLOCK
3	1	480491	HARNESS, 22 STATION/19 PIN SOCKET
4	1	480626	BRACKET, PENDANT
5	1	480493	COVER, 22 STATION TERMINAL BLOCK
6	4	000404	SCREW, ROUND HD. #6-32NC x 5/8 LG.
7	4	015400	NUT, HEX #6-32NC
8	4	019600	WASHER, SP. LK. #6
9	1	480547	CAP, RECEPTACLE (19 PIN)
10	6	750738	WIRE TIE STICK ON RETAINER
11	6	634401	WIRE TIE (7" LG.)
12	3	330038	SCREW, HEX HD. #10-24NC x 3/4 LG. SELF TAPPING
13	2	005500	SCREW, HEX HD. 1/4-20NC x 3/4 LG. G5
14	2	015900	NUT, HEX 1/4-20NC
15	2	020200	WASHER, SP. LK. 1/4

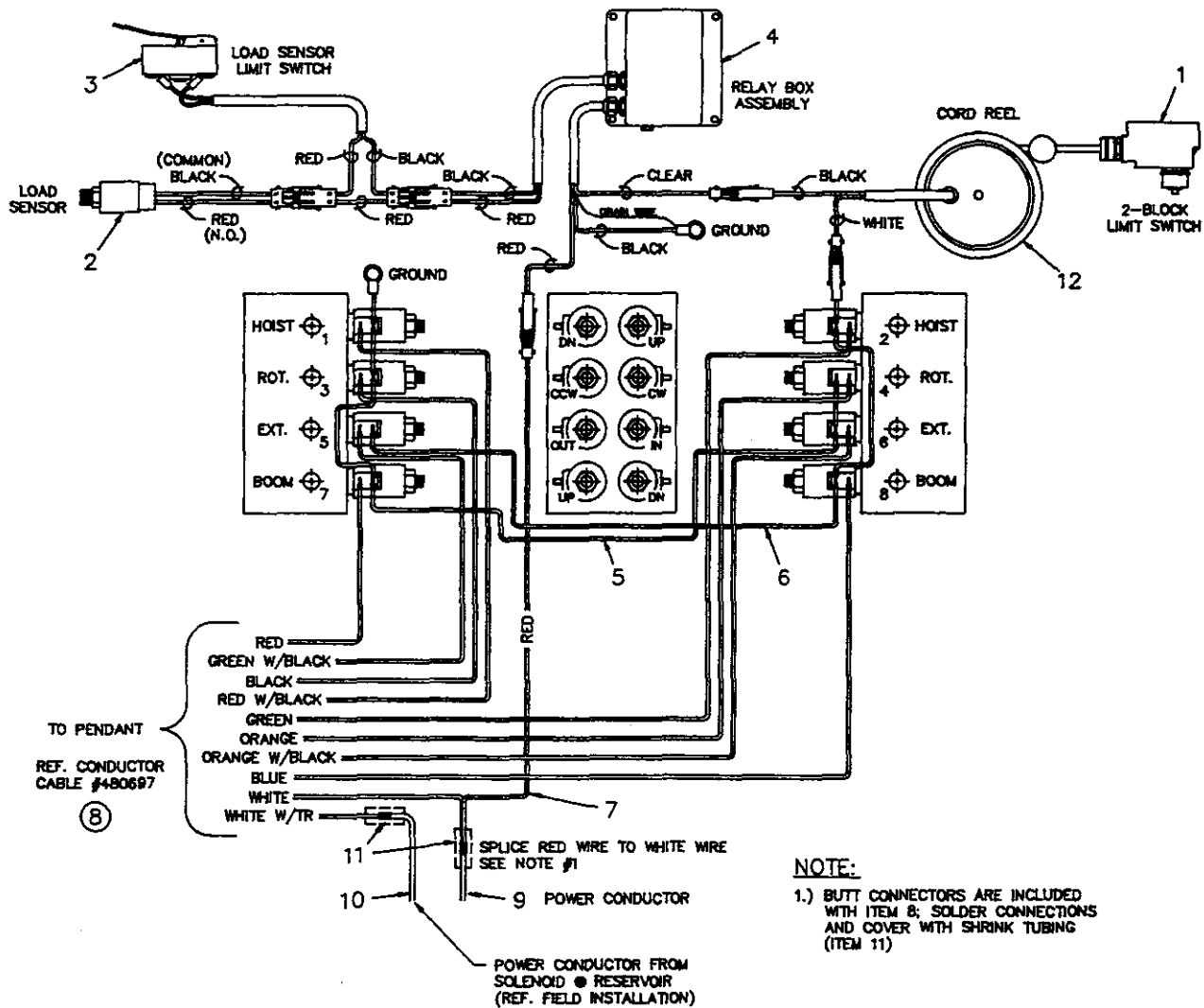


FM REMOTE INSTALLATION AW-179

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	480492	HARNESS, CRANE PIGTAIL
2	1	480490	DECAL, 22 STATION TERMINAL BLOCK
3	1	480491	HARNESS, 22 STATION/19 PIN SOCKET
4	1	480626	BRACKET, PENDANT
5	1	480493	COVER, 22 STATION TERMINAL BLOCK
6	4	000404	SCREW, ROUND HD. #6-32NC x 5/8 LG.
7	4	015400	NUT, HEX #6-32NC
8	4	019600	WASHER, SP. LK. #6
9	1	480547	CAP, RECEPTACLE (19 PIN)
10	6	750738	WIRE TIE STICK ON RETAINER
11	6	634401	WIRE TIE (7" LG.)
12	3	330038	SCREW, HEX HD. #10-24NC x 3/4 LG. SELF TAPPING
13	2	005500	SCREW, HEX HD. 1/4-20NC x 3/4 LG. G5
14	2	015900	NUT, HEX 1/4-20NC
15	2	020200	WASHER, SP. LK. 1/4
16	1	480629	FM REMOTE TRANSMITTER/RECEIVER ASSEMBLY
17	1	(SEE NOTE)	ANTENNA (STD.)
18	4	002607	SCREW, ROUND HD. #10-24NC x 3/4 LG.
19	4	015801	NUT, HEX LOCK #10-24NC
20	1	480537	AMPLIFIER, PROPORTIONAL
21	2	002200	SCREW, ROUND HD. #10-32NF x 3/4 LG.
22	2	015800	NUT, HEX LOCK #10-32NF
23	1	480625	CONTROL CABLE

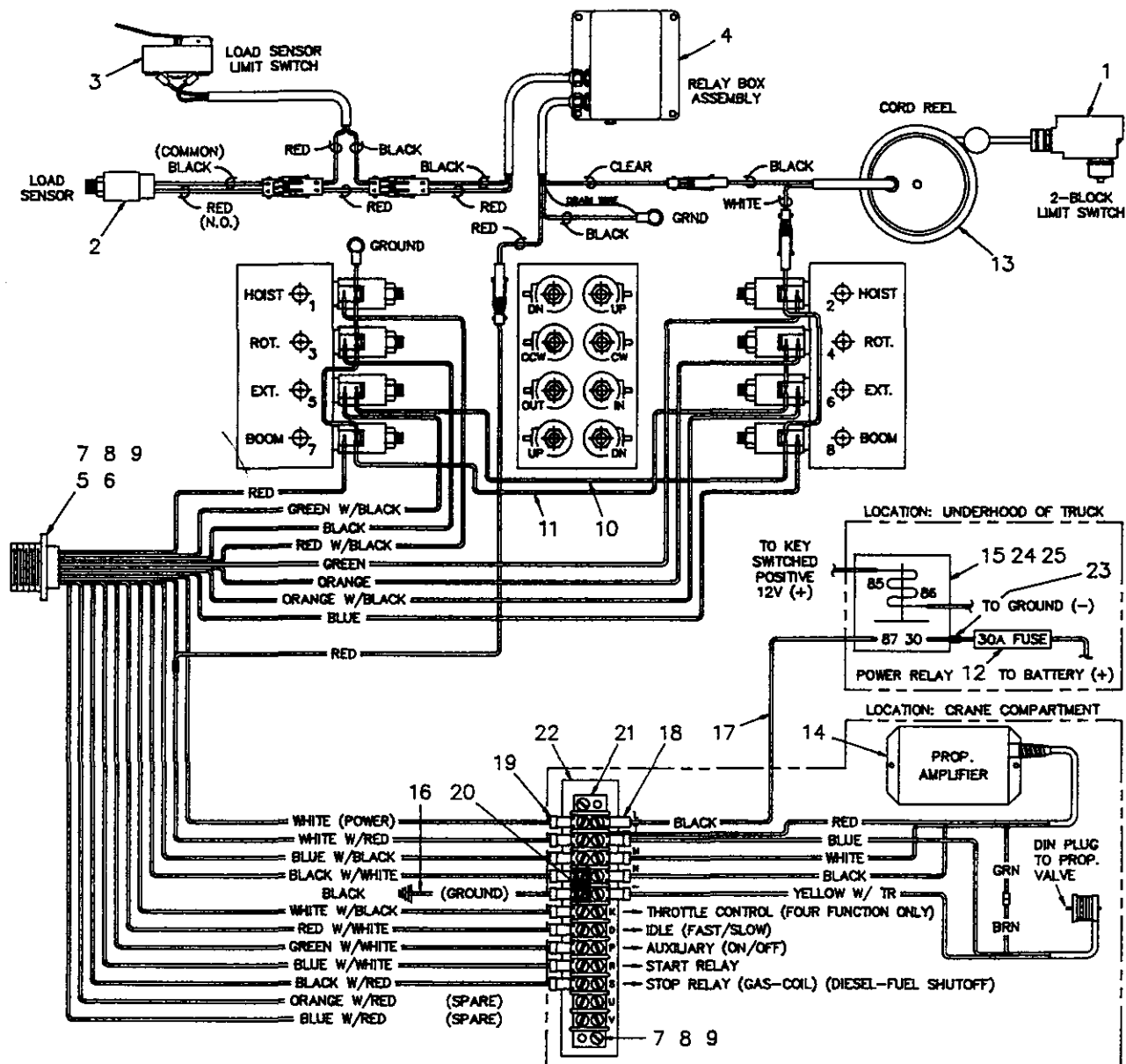
NOTE:

STANDARD ANTENNA COMES WITH TRANSMITTER/RECEIVER ASSEMBLY;
 - ANTENNA w/ MAGNETIC BASE (P/N 480608) CAN BE ORDERED AS
 AN EXTRA COST OPTION



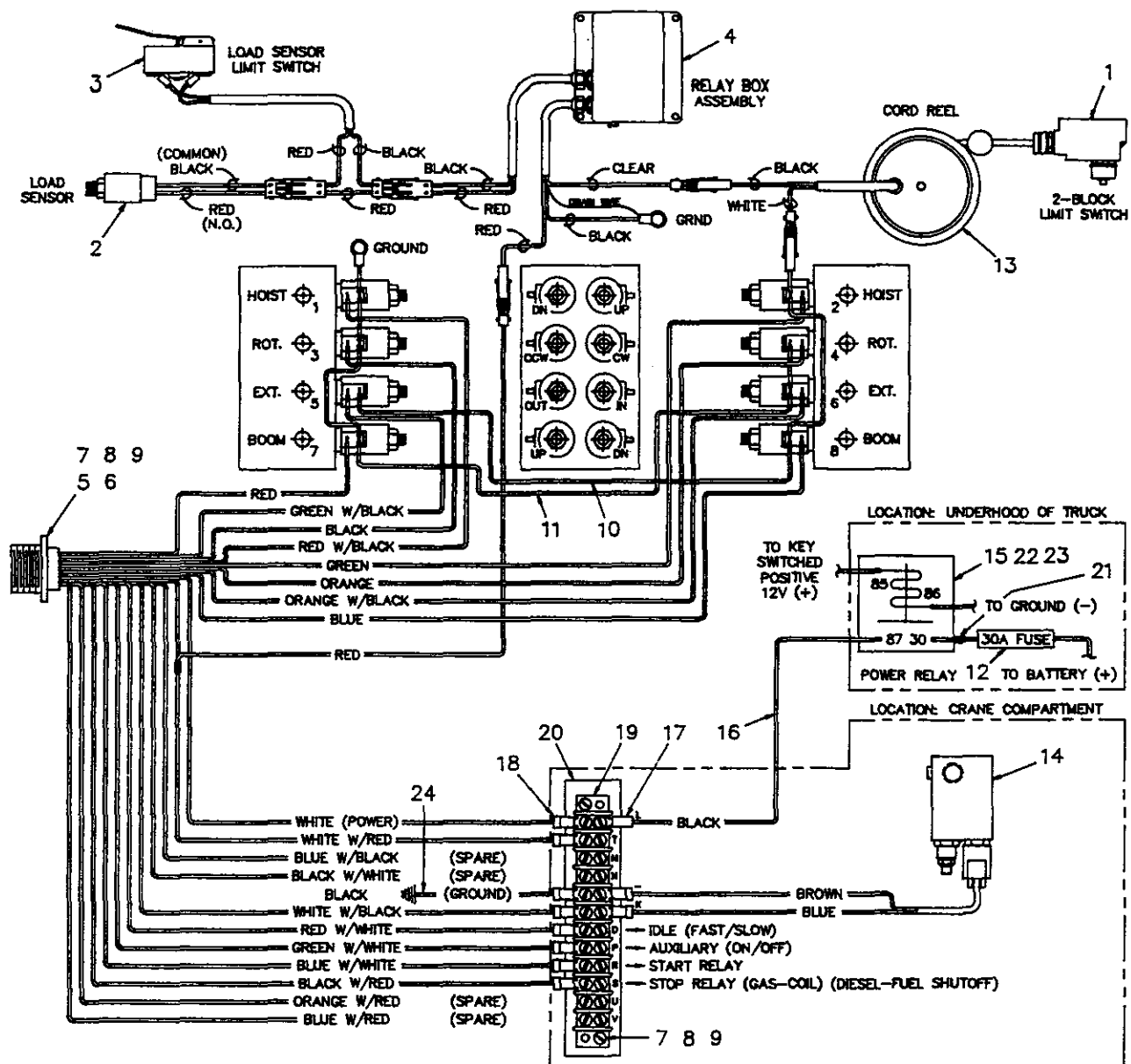
ITEM	QTY	PART NO.	DESCRIPTION	ITEM	QTY	PART NO.	DESCRIPTION
1	1	646900	SWITCH	7	1	480385	CONDUCTOR ASSY
2	1	480379	LOAD SENSOR ASSY	8	1	480697	CONDUCTOR CABLE (REF.)
3	1	480380	LOAD SENSOR LIMIT SWITCH ASSY	9	1	800657-009	CONDUCTOR, POWER
4	1	366986	RELAY BOX ASSY	10	1	366030	CONDUCTOR
5	1	480099	CONDUCTOR ASSY (POWER EXT.)	11	2	366995	1/4" SHRINK TBG x 3" LG
6	1	480384	CONDUCTOR ASSY	12	1	366973-001	CORD REEL ASSY

AW-480095 8005H ELECTRICAL ASSEMBLY



ITEM	QTY	PART NO.	DESCRIPTION	ITEM	QTY	PART NO.	DESCRIPTION
1	1	646900	SWITCH	14	1	480522	AMPLIFIER ASSY, PROPORTIONAL
2	1	480379	LOAD SENSOR ASSY	15	1	320355	POWER RELAY
3	1	480380	LOAD SENSOR LIMIT SWITCH ASSY	16	1	480549	CONDUCTOR, 16 Ga BLACK
4	1	366986	RELAY BOX ASSY	17	1	800657-009	CONDUCTOR, POWER
5	1	480597	RECEPTACLE ASSY	18	1	001002	TERMINAL, RING
6	1	480547	CAP, PENDANT RECEPTACLE	19	15	480495	TERMINAL, FLG'D SPADE (16-14 WIRE)
7	4	000404	SCREW, RD HD #6-32 x 5/8" LG.	20	1	636600	JUMPER
8	4	019600	WASHER, SP LK #6	21	1	635200	TERMINAL BLOCK
9	4	015400	NUT, HX #6-32	22	1	360610	DECAL, TERMINAL I.D.
10	1	480384	CONDUCTOR ASSY	23	2	001102	TERMINAL, WR 2RC-10
11	1	480099	CONDUCTOR ASSY (POWER EXT.)	24	1	320363	PLUG, RELAY
12	1	750167	FUSE, IN-LINE 30 AMP	25	5	320357	CONNECTOR, SPD LOCKING, NON-INS
13	1	366973-001	CORD REEL ASSY				

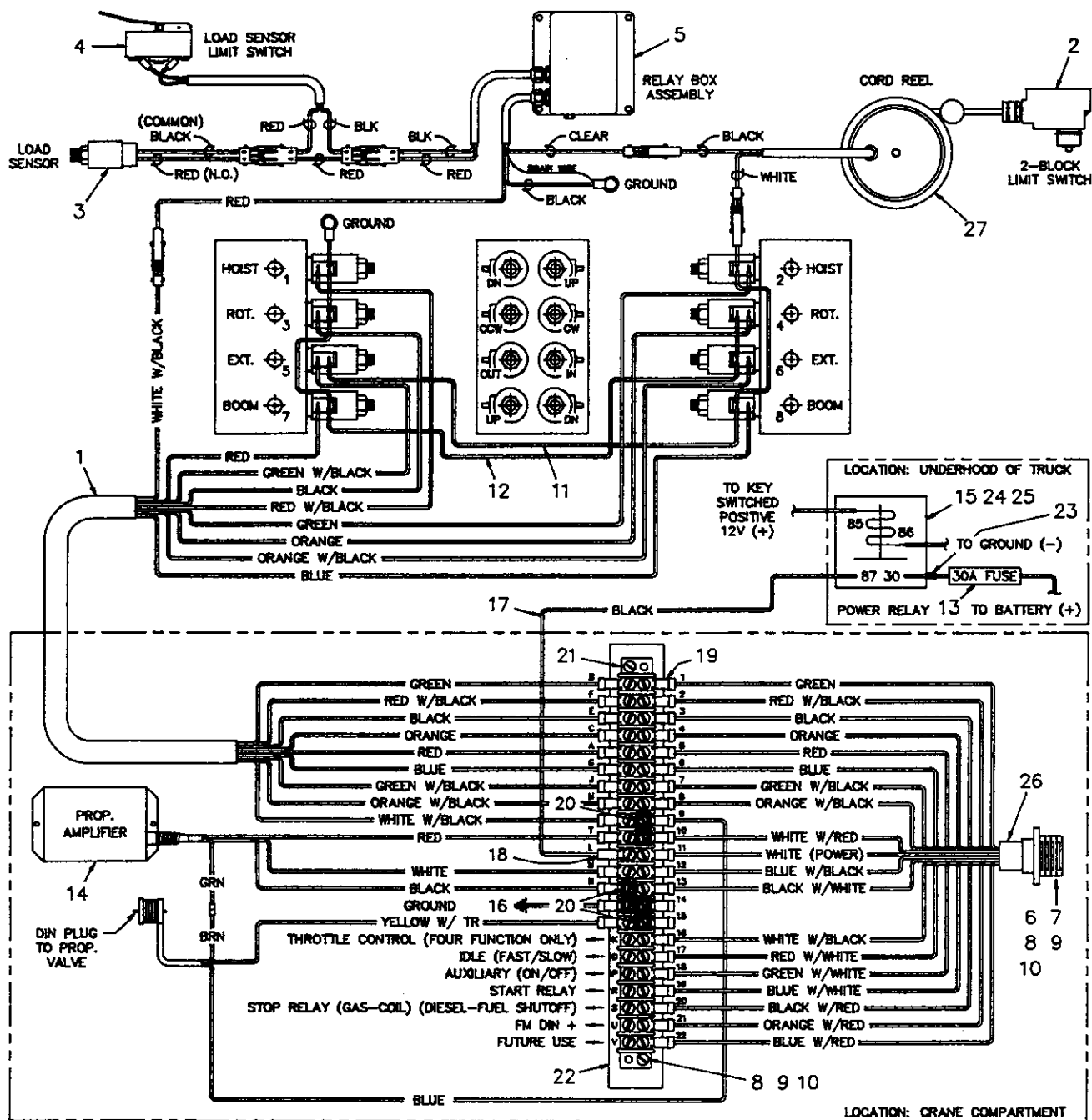
AW-117
CRANE WIRING, 8005H
w/ 4 & 8 FUNCTION PENDANTS, PROPORTIONAL (-200,-400)



ITEM	QTY	PART NO.	DESCRIPTION
1	1	646900	SWITCH
2	1	480379	LOAD SENSOR ASSY
3	1	480380	LOAD SENSOR LIMIT SWITCH ASSY
4	1	366986	RELAY BOX ASSY
5	1	480597	RECEPTACLE ASSY
6	1	480547	CAP, PENDANT RECEPTACLE
7	4	000404	SCREW, RD HD #6-32 x 5/8" LG.
8	4	019600	WASHER, SP LK #6
9	4	015400	NUT, HX #6-32
10	1	480384	CONDUCTOR ASSY
11	1	480099	CONDUCTOR ASSY (POWER EXT.)
12	1	750167	FUSE, IN-LINE 30 AMP

ITEM	QTY	PART NO.	DESCRIPTION
13	1	366973-001	CORD REEL ASSY
14	1	480157	RELIEF VALVE ASSY w/ SOLENOID
15	1	320355	POWER RELAY
16	1	800657-009	CONDUCTOR, POWER
17	1	001002	TERMINAL, RING
18	10	480495	TERMINAL, FLG'D SPADE (16-14 WIRE)
19	1	635200	TERMINAL BLOCK
20	1	360610	DECAL, TERMINAL I.D.
21	1	001102	TERMINAL, WR 2RC-10
22	1	320363	PLUG, RELAY
23	5	320357	CONNECTOR, SPD LOCKING, NON-INS
24	1	480549	CONDUCTOR, 16 Ga BLACK

AW-120
CRANE WIRING, 8005H
w/ 4 & 8 FUNCTION PENDANTS, LESS PROPORTIONAL (-100,-300)

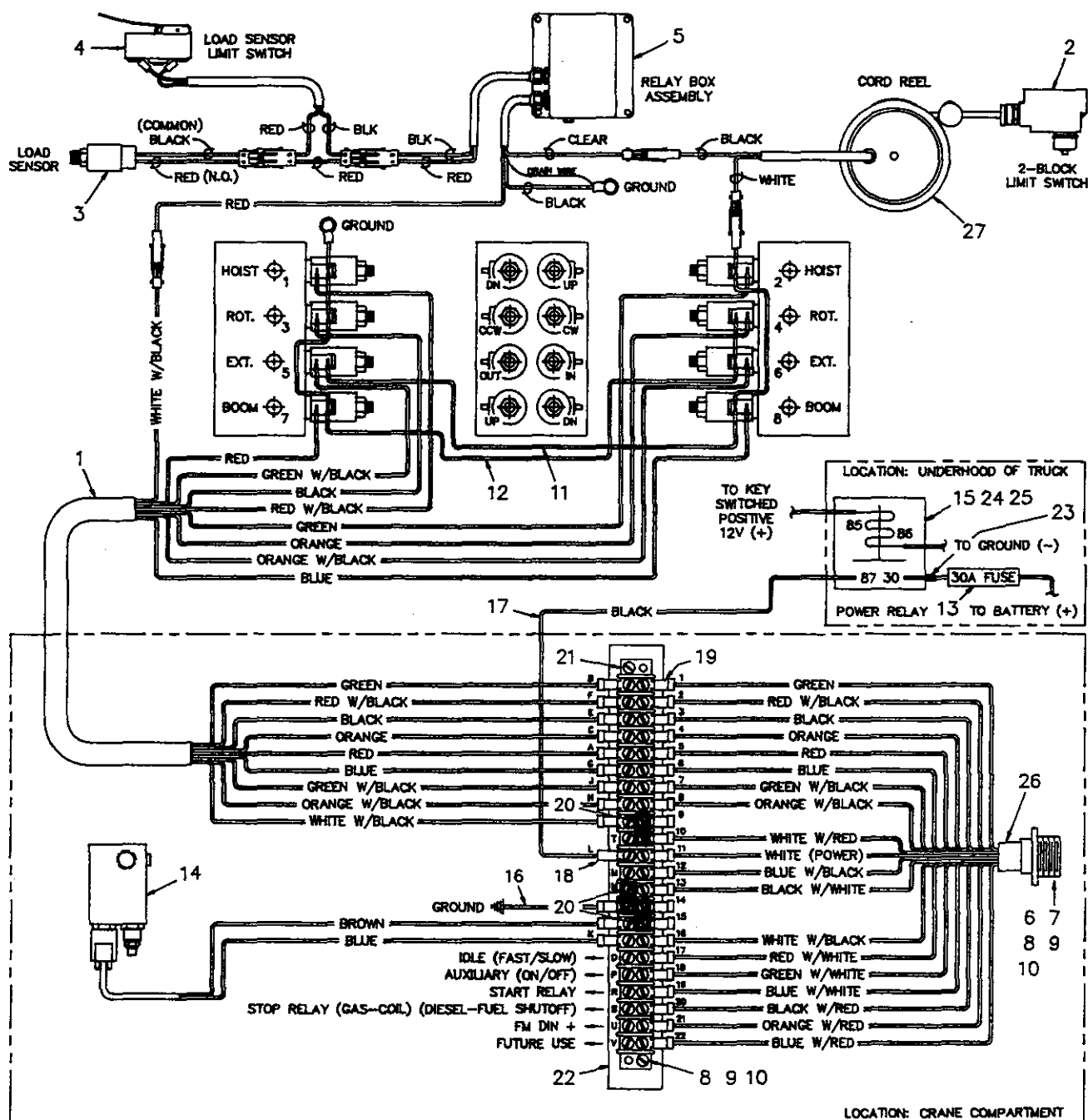


ITEM	QTY	PART NO.	DESCRIPTION
1	1	480386	HARNESS, CRANE PIGTAIL
2	1	646900	SWITCH
3	1	480379	LOAD SENSOR ASSY
4	1	480380	LOAD SENSOR LIMIT SWITCH ASSY
5	1	366986	RELAY BOX ASSY
6	1	480626	BRACKET, PENDANT RECEPTACLE
7	1	480547	CAP, PENDANT RECEPTACLE
8	4	000404	SCREW, RD HD #6-32 x 5/8" LG.
9	4	019600	WASHER, SP LK #6
10	4	015400	NUT, HX #6-32
11	1	480384	CONDUCTOR ASSY
12	1	480099	CONDUCTOR ASSY (POWER EXT.)
13	1	750167	FUSE, IN-LINE 30 AMP
14	1	480522	AMPLIFIER ASSY, PROP.

ITEM	QTY	PART NO.	DESCRIPTION
15	1	320355	POWER RELAY
16	1	480549	CONDUCTOR, 16 Ga BLACK
17	1	800657-009	CONDUCTOR, POWER
18	1	001002	TERMINAL, RING
19	36	480495	TERMINAL, FLG'D SPADE (16-14 WIRE)
20	3	636600	JUMPER
21	1	480494	TERMINAL BLOCK, 22 STA
22	1	480490	DECAL, 22 STA TERMINAL BLOCK
23	1	001102	TERMINAL, WR 2RC-10
24	1	320363	PLUG, RELAY
25	5	320357	CONNECTOR, SPD LOCKING, NON-INS
* 26	1	480491	HARNESS ASSY
27	1	366973-001	CORD REEL ASSY

* NOTE: ITEM 26 INCLUDES
ITEMS 19, 20 & 21

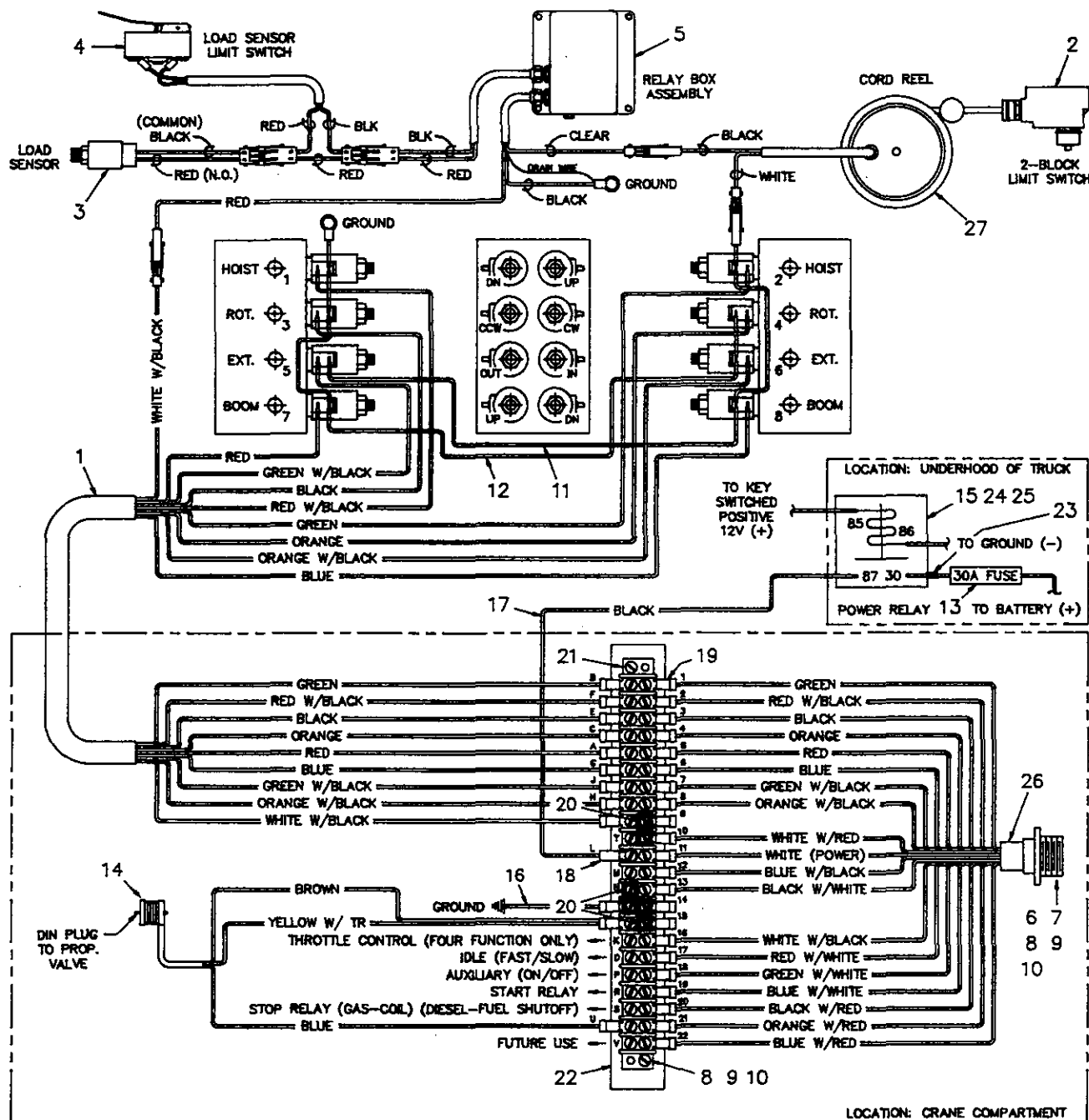
AW-144
CRANE WIRING, 8005H
w/ 4 & 8 FUNCTION PENDANTS, PROP. IC (-210,-410,-411,-412)



AW-147
 CRANE WIRING, 8005H
 w/ 4 & 8 FUNCTION PENDANTS, LESS PROP. IC (-110,-310)

5-6.0.0

R 5/94

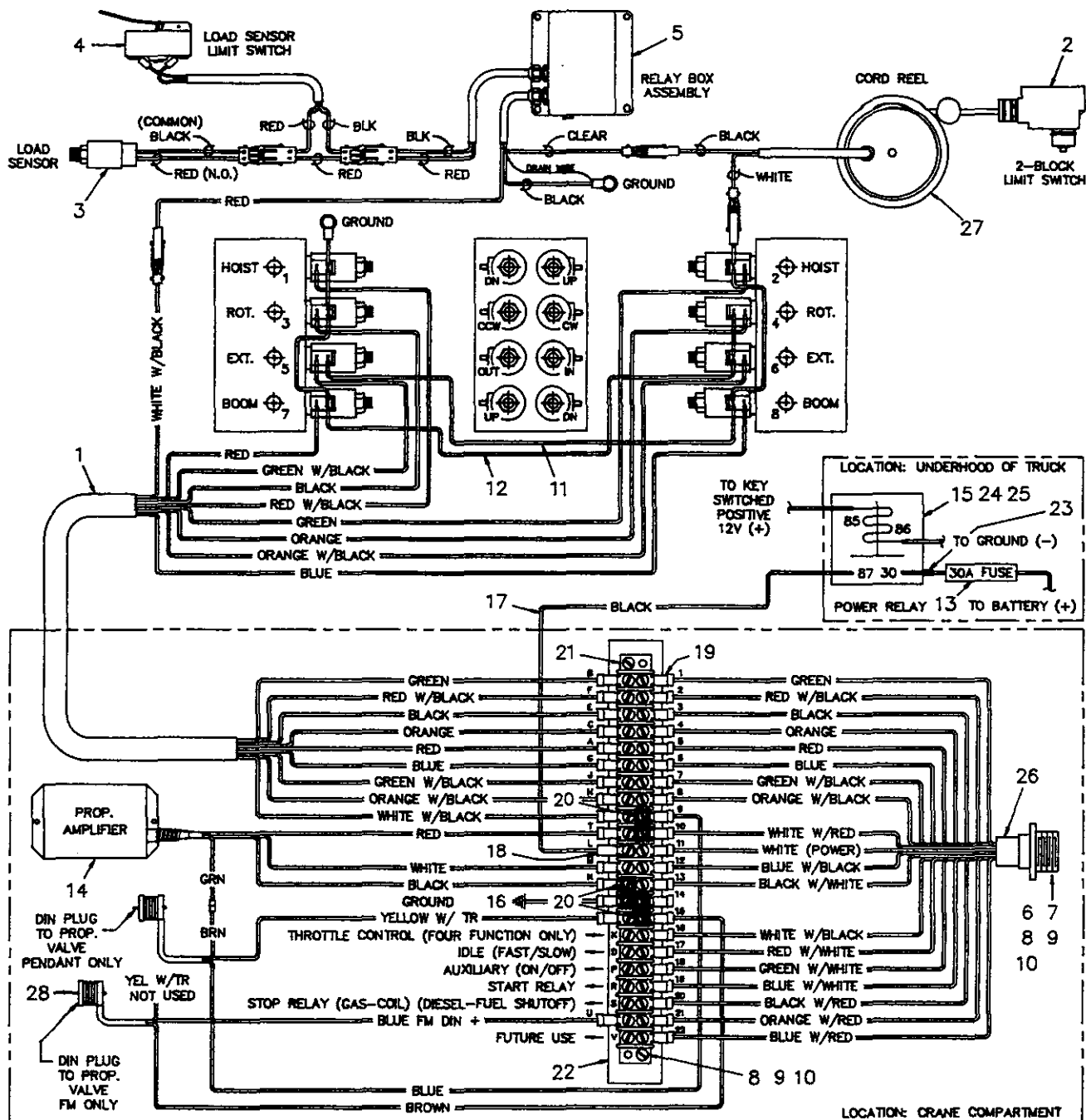


ITEM	QTY	PART NO.	DESCRIPTION
1	1	480386	HARNESS, CRANE PIGTAIL
2	1	646900	SWITCH
3	1	480379	LOAD SENSOR ASSY
4	1	480380	LOAD SENSOR LIMIT SWITCH ASSY
5	1	366986	RELAY BOX ASSY
6	1	480626	BRACKET, PENDANT RECEPTACLE
7	1	480547	CAP, PENDANT RECEPTACLE
8	4	000404	SCREW, RD HD #6-32 x 5/8" LG.
9	4	019600	WASHER, SP LK #6
10	4	015400	NUT, HX #6-32
11	1	480384	CONDUCTOR ASSY
12	1	480099	CONDUCTOR ASSY (POWER EXT.)
13	1	750167	FUSE, IN-LINE 30 AMP
14	1	480612	DIN PLUG ASSY

ITEM	QTY	PART NO.	DESCRIPTION
15	1	320355	POWER RELAY
16	1	480549	CONDUCTOR, 16 Ga BLACK
17	1	800657-009	CONDUCTOR, POWER
18	1	001002	TERMINAL, RING
19	34	480495	TERMINAL, FLG'D SPADE (16-14 WIRE)
20	3	636600	JUMPER
21	1	480494	TERMINAL BLOCK, 22 STA
22	1	480490	DECAL, 22 STA TERMINAL BLOCK
23	1	001102	TERMINAL, WR 2RC-10
24	1	320363	PLUG, RELAY
25	5	320357	CONNECTOR, SPD LOCKING, NON-INS
* 26	1	480491	HARNESS ASSY
27	1	366973-001	CORD REEL ASSY

AW-150
 CRANE WIRING, 8005H
 w/ FM REMOTE, PROPORTIONAL (-500,-520)

* NOTE: ITEM 26 INCLUDES
 ITEMS 19, 20 & 21



ITEM	QTY	PART NO.	DESCRIPTION
1	1	480386	HARNESS, CRANE PIGTAIL
2	1	646900	SWITCH
3	1	480379	LOAD SENSOR ASSY
4	1	480380	LOAD SENSOR LIMIT SWITCH ASSY
5	1	366986	RELAY BOX ASSY
6	1	480626	BRACKET, PENDANT RECEPTACLE
7	1	480547	CAP, PENDANT RECEPTACLE
8	4	000404	SCREW, RD HD #6-32 x 5/8" LG.
9	4	019600	WASHER, SP LK #6
10	4	015400	NUT, HX #6-32
11	1	480384	CONDUCTOR ASSY
12	1	480099	CONDUCTOR ASSY (POWER EXT.)
13	1	750167	FUSE, IN-LINE 30 AMP
14	1	480522	AMPLIFIER ASSY, PROP.

ITEM	QTY	PART NO.	DESCRIPTION
15	1	320355	POWER RELAY
16	1	480549	CONDUCTOR, 16 Ga BLACK
17	1	800657-009	CONDUCTOR, POWER
18	1	001002	TERMINAL, RING
19	37	480495	TERMINAL, FLG'D SPADE (16-14 WIRE)
20	3	636600	JUMPER
21	1	480494	TERMINAL BLOCK, 22 STA
22	1	480480	DECAL, 22 STA TERMINAL BLOCK
23	1	001102	TERMINAL, WR 2RC-10
24	1	320363	PLUG, RELAY
25	5	320357	CONNECTOR, SPD LOCKING, NON-INS
* 26	1	480491	HARNESS ASSY
27	1	366973-001	CORD REEL ASSY
28	1	480613	DIN CONNECTOR w/ CORD

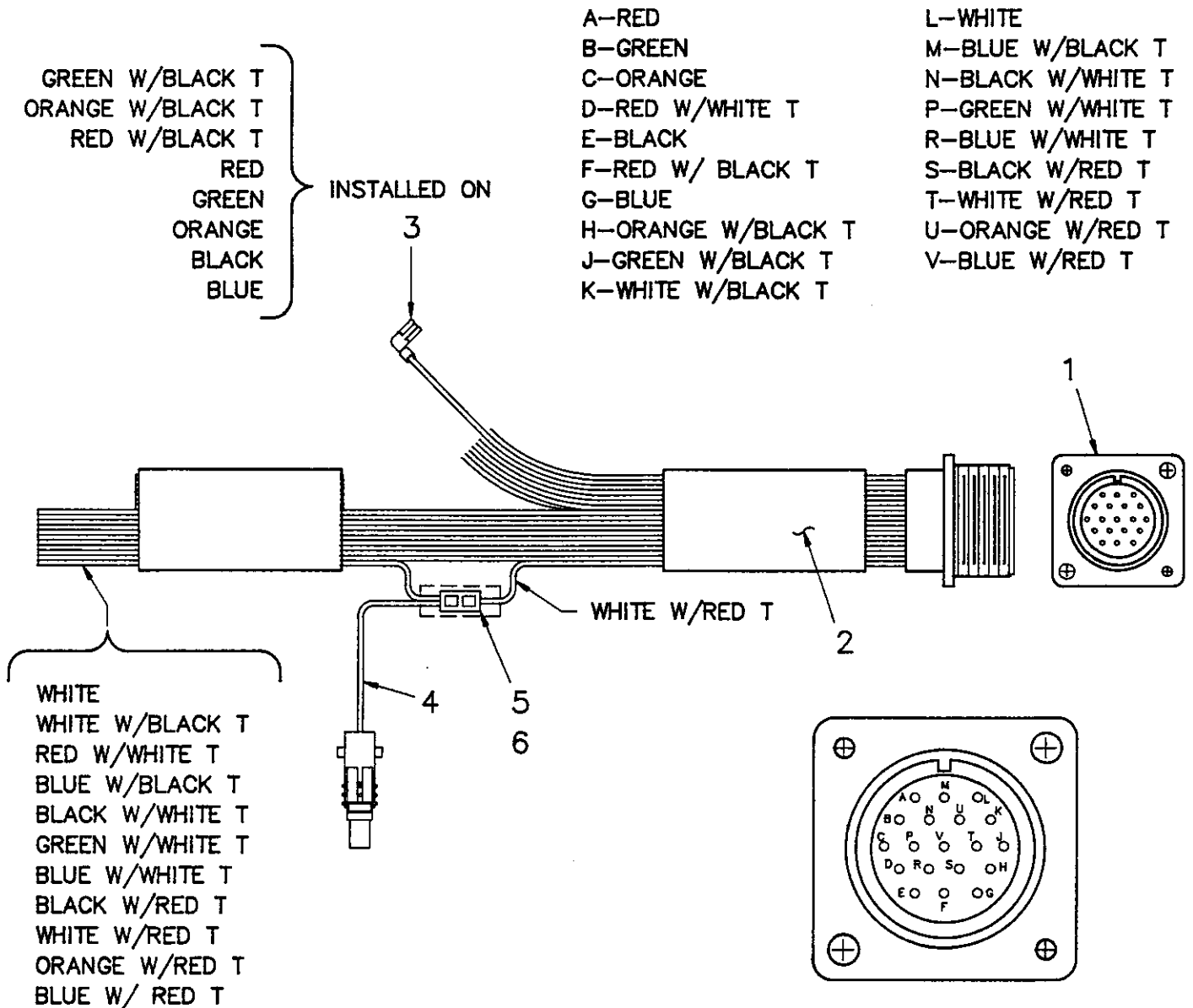
AW-176

CRANE WIRING, 8005H

w/ 8 FUNCTION IC PROP. PENDANT & 12 FUNCTION FM REMOTE (-510,-530)

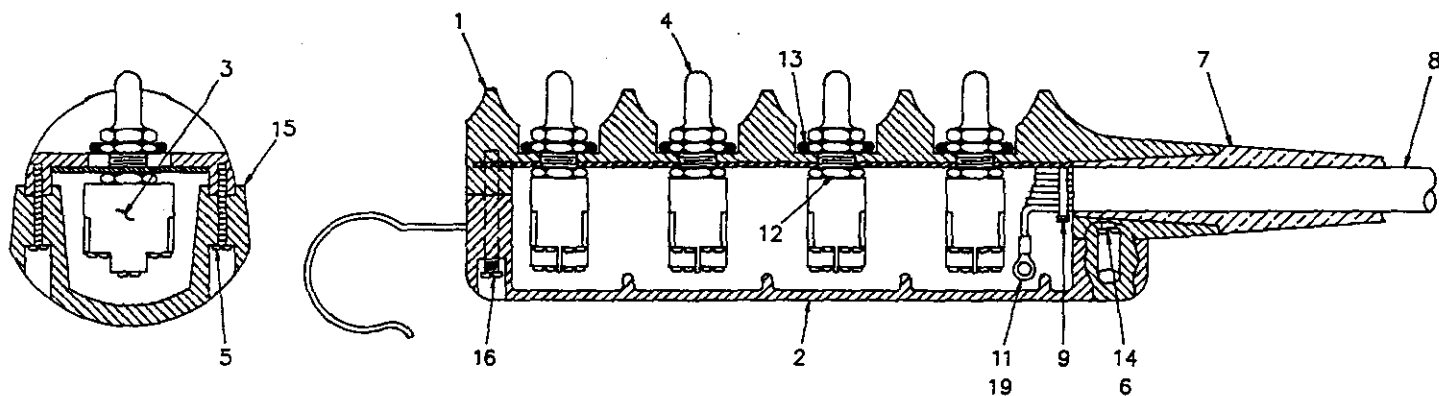
* NOTE: ITEM 26 INCLUDES
ITEMS 19, 20 & 21

WIRING GUIDE



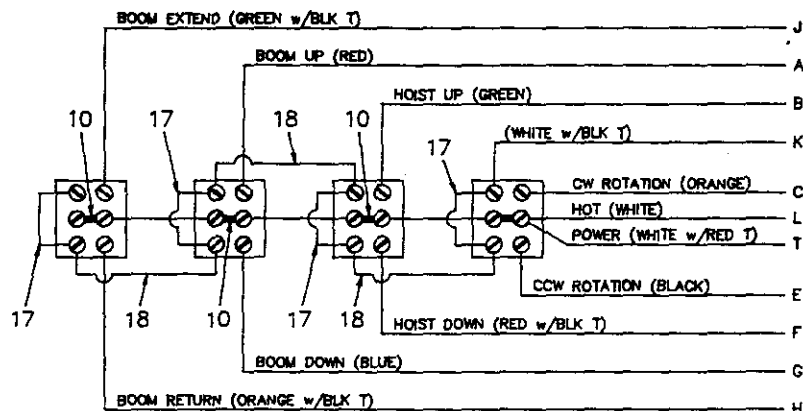
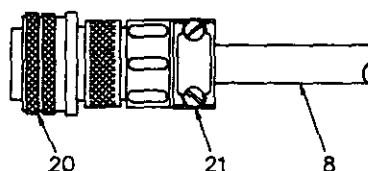
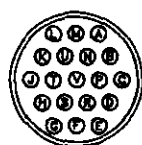
ITEM	QTY	P/N	DESCRIPTION
1	1	480542	RECEPTACLE (19 PIN)
2	1	480594-002	CONDUCTOR 16 Ga/19 CON. x 8'-0" LG.
3	8	000405	TERMINAL, FLAG
4	1	480385	CONDUCTOR ASSEMBLY, WEATHER PACK
5	1	001105	TERMINAL, BUTT CONNECTOR NON-INS
6	3"	366995	1/4" SHRINK TUBING

AW-480597 PENDANT RECEPTACLE ASSEMBLY



WIRING GUIDE

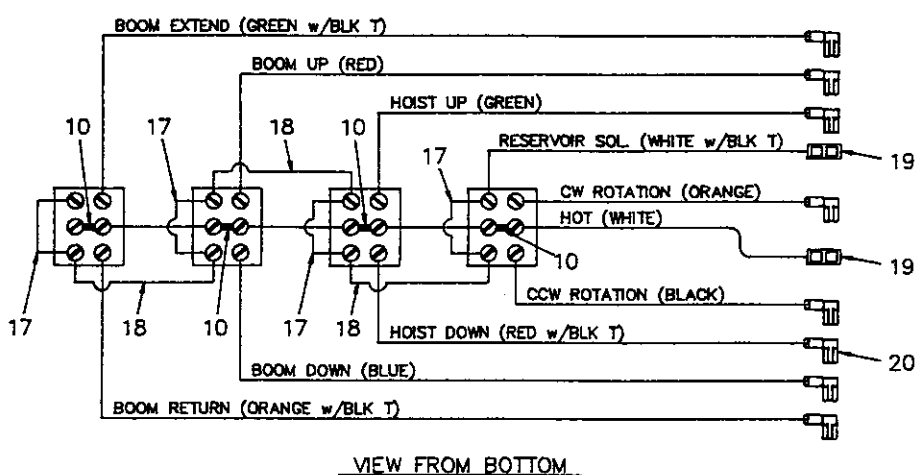
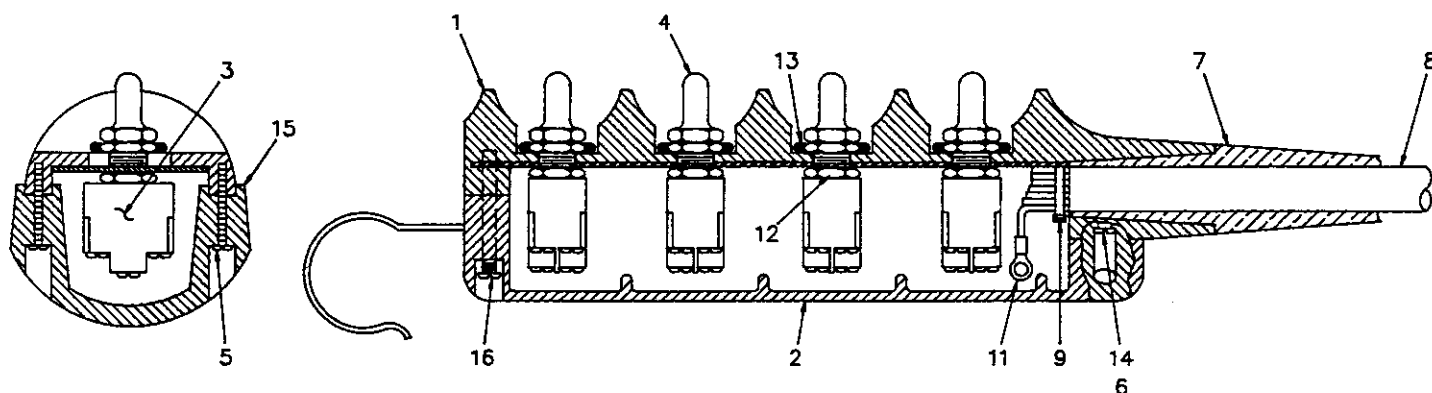
A-RED
 B-GREEN
 C-ORANGE
 D-RED W/WHITE T
 E-BLACK
 F-RED W/BLACK T
 G-BLUE
 H-ORANGE W/BLACK T
 J-GREEN W/BLACK T
 K-WHITE W/BLACK T
 L-WHITE
 M-BLUE W/BLACK T
 N-BLACK W/WHITE T
 P-GREEN W/WHITE T
 R-BLUE W/WHITE T
 S-BLACK W/RED T
 T-WHITE W/RED T
 U-ORANGE W/RED T
 V-BLUE W/RED T



VIEW FROM BOTTOM

ITEM	QTY	P/N	DESCRIPTION	ITEM	QTY	P/N	DESCRIPTION
1	1	631601	PENDANT HOUSING	11	2	000101	TERMINAL, RING #6/14-16 Ga.
2	1	631700	COVER, BOTTOM	12	4	675271	NUT, HEX
3	4	634200	SWITCH, TOGGLE	13	4	642100	"O"-RING
4	4	640302	BOOT, TOGGLE SWITCH	14	4	019700	WASHER, SP. LK. #8
5	10	005001	SCREW, PAN HD. #8 x 3/4	15	21"	800580	3/4" OKONITE RUBBER TAPE
6	2	005101	SCREW, PAN HD. #8 x 1 1/4	16	1	004700	SCREW, PAN HD. #8 x 1 1/2
7	1	633801	ADAPTER, CABLE	17	4	622346	CONDUCTOR ASSY 2 1/8" LG.
8	1	480594-001	CONDUCTOR CABLE (19 COND.)	18	3	622347	CONDUCTOR ASSY 3 1/8" LG.
9	2	634401	CABLE TIE	19	1	002012	TERMINAL, RING #6/18-22 Ga.
10	4	636600	JUMPER	20	1	480514	PLUG, CONNECTOR
				21	1	480515	CLAMP, CABLE

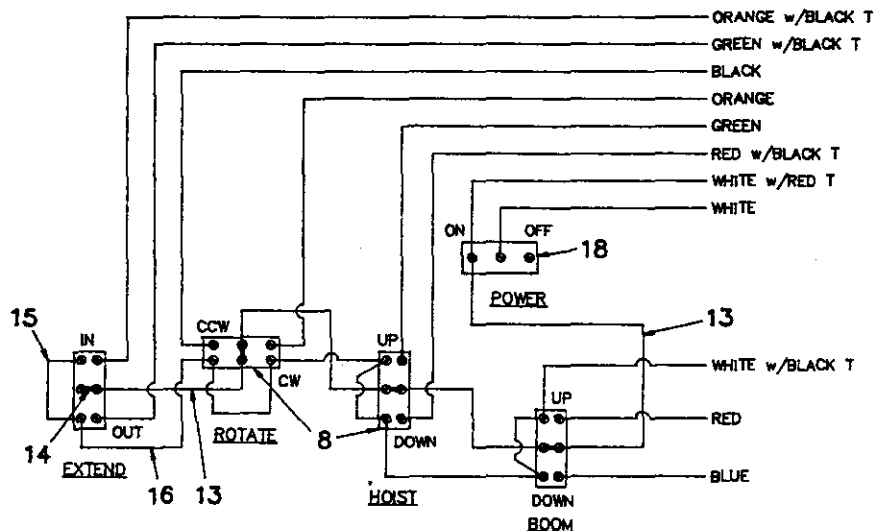
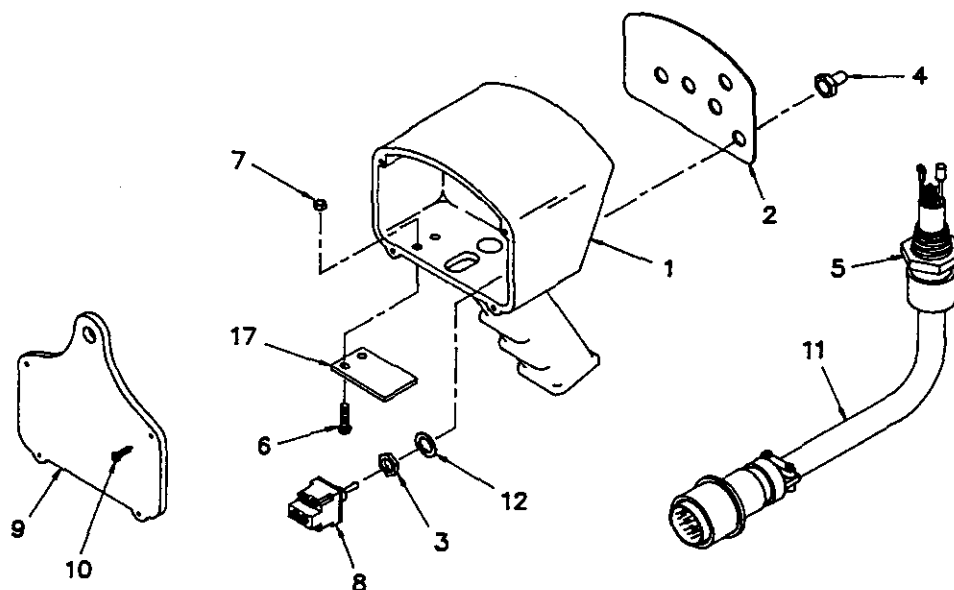
AW-480540 PENDANT ASSEMBLY, 4 FUNCTION REMOVABLE w/ 19 PIN CONNECTOR



ITEM	QTY	P/N	DESCRIPTION	ITEM	QTY	P/N	DESCRIPTION
1	1	631601	PENDANT HOUSING	11	10	000101	TERMINAL, RING
2	1	631700	COVER, BOTTOM	12	4	675271	NUT, HEX
3	4	634200	SWITCH, TOGGLE	13	4	642100	"O"-RING
4	4	640302	BOOT, TOGGLE SWITCH	14	4	019700	WASHER, SP. LK. #8
5	10	005001	SCREW, PAN HD. #8 x 3/4	15	21"	800580	3/4" OKONITE RUBBER TAPE
6	2	005101	SCREW, PAN HD. #8 x 1 1/4	16	1	004700	SCREW, PAN HD. #8 x 1 1/2
7	1	633801	ADAPTER, CABLE	17	4	622346	CONDUCTOR ASSY 2 1/8" LG.
8	1	800632-004	CONDUCTOR CABLE (27')	18	3	622347	CONDUCTOR ASSY 3 1/8" LG.
9	2	634401	CABLE TIE	19	2	001102	SPLICE, BUTT (REF.)
10	4	636600	JUMPER	20	8	000405	TERMINAL, FLAG (REF.)

NOTE:
ITEMS 19 & 20 ARE
INCLUDED WITH ITEM 8

AW-480093
PENDANT ASSEMBLY
4 FUNCTION, NONREMOVABLE



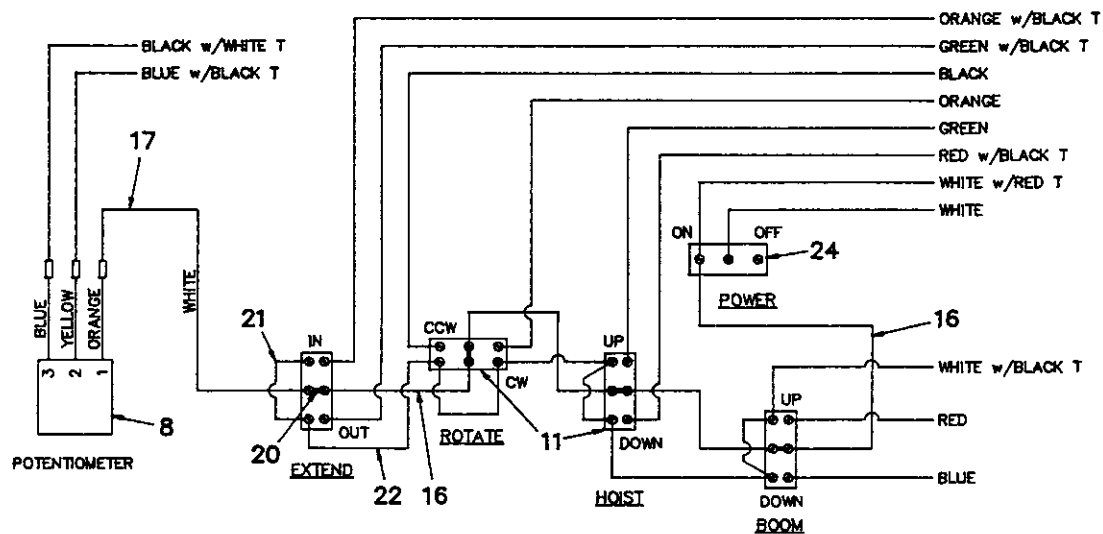
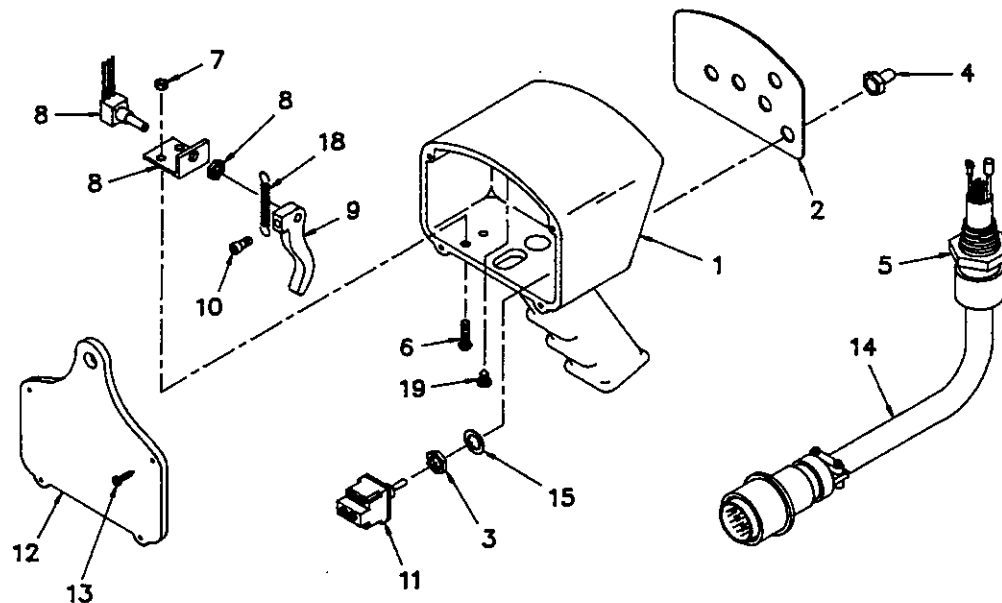
WIRING DIAGRAM

ITEM QTY.	PART NO.	DESCRIPTION
1 1	480501	PENDANT HOUSING
2 1	480513	DECAL, COVER PLATE
3 5	REF.*	NUT
4 5	640300	BOOT, TOGGLE SWITCH
5 1	370433	CONNECTOR, HUBBEL F3
6 2	002607	SCREW, #10-24NC x 3/4
7 2	015801	NUT, HX. LK. #10-24NC
8 4	634200	SWITCH, TOGGLE DPDT
9 1	480504	BACK PLATE
10 4	480516	SCREW, S.T. RD. HD. #6 x 3/4

ITEM QTY.	PART NO.	DESCRIPTION
11 1	480595	CABLE ASSEMBLY
12 5	REF.*	WASHER, LOCK
13 4	660302	CONDUCTOR ASSEMBLY
14 4	636600	JUMPER
15 4	622346	CONDUCTOR ASSEMBLY 2 1/8"
16 3	622347	CONDUCTOR ASSEMBLY 3 1/8"
17 1	480598	COVER, TRIGGER OPENING
18 1	750090	SWITCH, TOGGLE ON/OFF
19 2	750737	TIE, CABLE

* COMES WITH ITEM 8

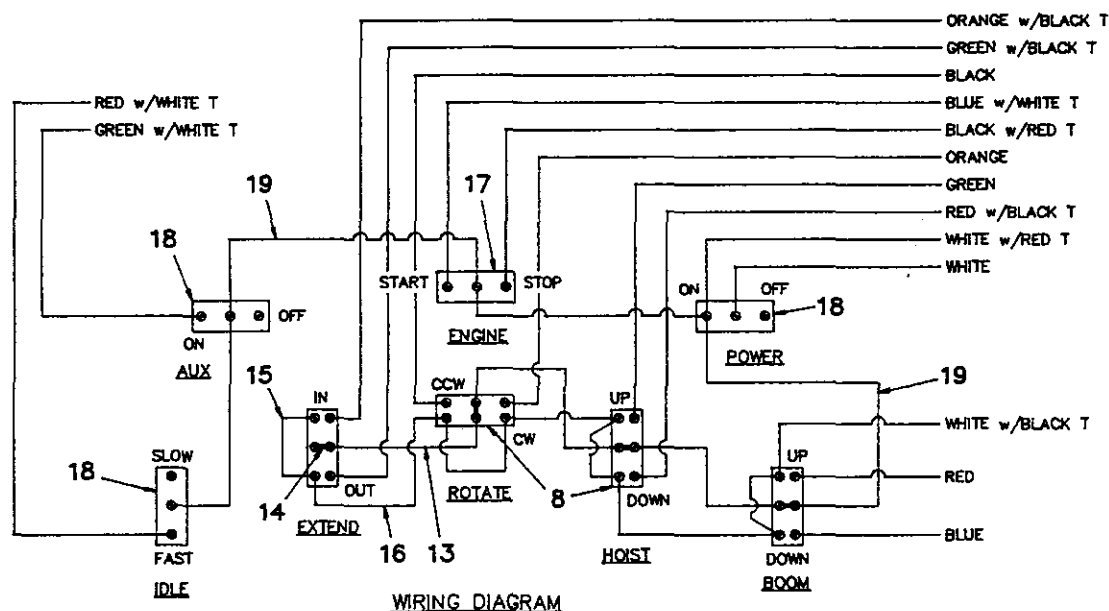
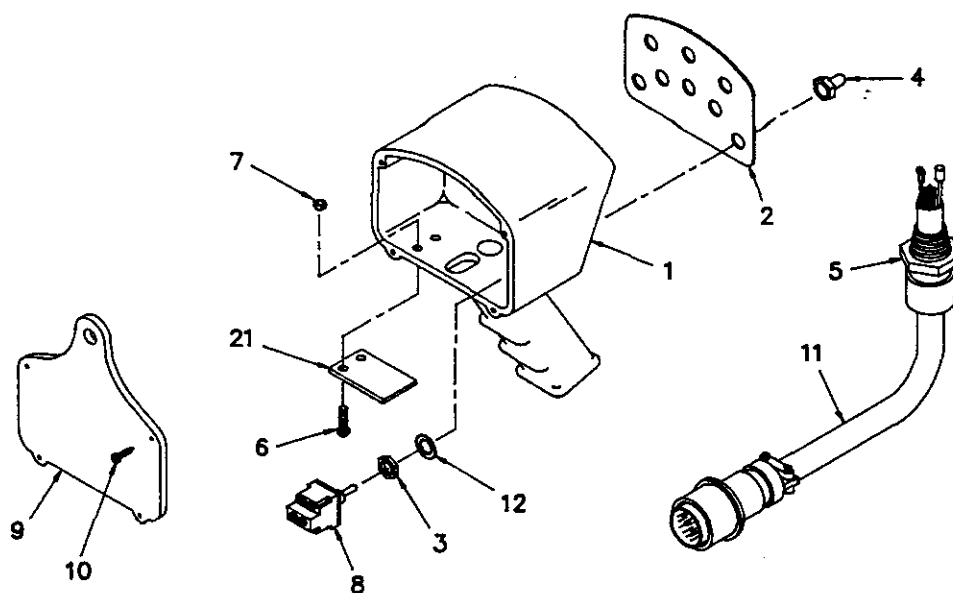
AW-480590
PENDANT ASSEMBLY
FOUR (4) FUNCTION, STANDARD



ITEM QTY.	PART NO.	DESCRIPTION	ITEM QTY.	PART NO.	DESCRIPTION
1 1	480501	PENDANT HOUSING	13 4	480516	SCREW, S.T. RD. HD. #6 x 3/4
2 1	480513	DECAL, COVER PLATE	14 1	480596	CABLE ASSEMBLY
3 4	REF.*	NUT	15 4	REF.*	WASHER, LOCK
4 4	640300	BOOT, TOGGLE SWITCH	16 4	660302	CONDUCTOR ASSEMBLY
5 1	370433	CONNECTOR, HUBBEL F3	17 1	480524	CONDUCTOR ASSEMBLY
6 2	002607	SCREW, #10-24NC x 3/4	18 1	480523	SPRING, TRIGGER RETURN
7 2	015801	NUT, HX. LK. #10-24NC	19 1	005003	SCREW, PAN HD. S.T. #6 x 3/8
8 1	480507	POTENTIOMETER ASSEMBLY	20 4	636600	JUMPER
9 1	480506	TRIGGER	21 4	622346	CONDUCTOR ASSEMBLY 2 1/8"
10 1	480517	SCREW, SOC. HD. #10-32NF x 5/8	22 3	622347	CONDUCTOR ASSEMBLY 3 1/8"
11 4	634200	SWITCH, TOGGLE DPDT	23 2	750737	TIE, CABLE
12 1	480504	BACK PLATE	24 1	750090	SWITCH, TOGGLE ON/OFF

* COMES WITH ITEM 11

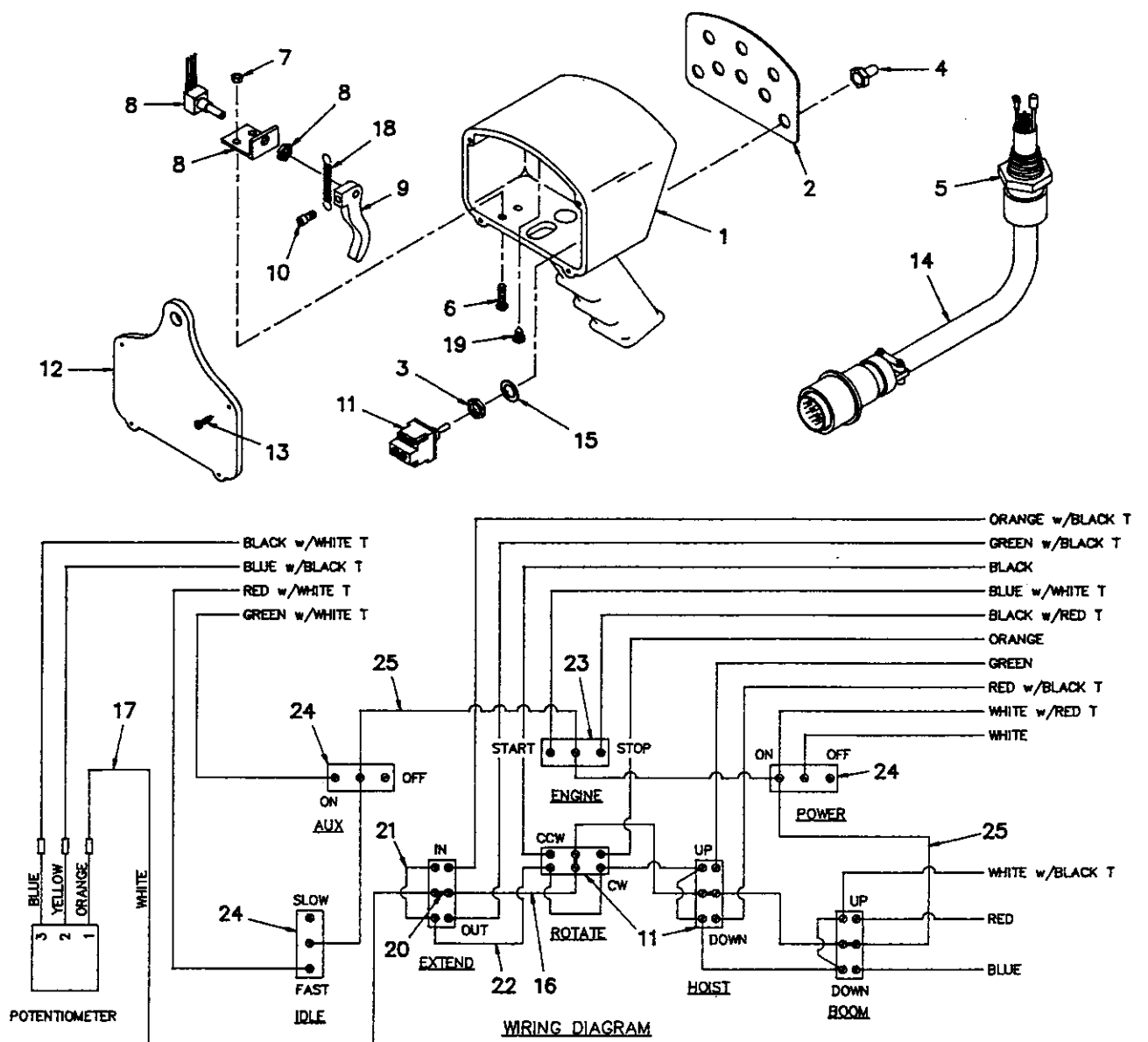
AW-480591 PROPORTIONAL PENDANT ASSEMBLY FOUR (4) FUNCTION



ITEM	QTY.	PART NO.	DESCRIPTION	ITEM	QTY.	PART NO.	DESCRIPTION
1	1	480501	PENDANT HOUSING	12	8	REF.*	WASHER, LOCK
2	1	480518	DECAL, COVER PLATE	13	3	660302	CONDUCTOR ASSEMBLY
3	8	REF.*	NUT	14	4	636600	JUMPER
4	8	640300	BOOT, TOGGLE SWITCH	15	4	622346	CONDUCTOR ASSEMBLY 2 1/8"
5	1	370433	CONNECTOR, HUBBEL F3	16	3	622347	CONDUCTOR ASSEMBLY 3 1/8"
6	2	002607	SCREW, #10-24NC x 3/4	17	1	622000	SWITCH, TOGGLE SPDT
7	2	015801	NUT, HX. LK. #10-24NC	18	3	750090	SWITCH, TOGGLE ON/OFF
8	4	634200	SWITCH, TOGGLE DPDT	19	1	480526	CONDUCTOR ASSEMBLY
9	1	480504	BACK PLATE	20	2	750737	TIE, CABLE
10	4	480516	SCREW, S.T. RD. HD. #6 x 3/4	21	1	480598	COVER, TRIGGER OPENING
11	1	480588	CABLE ASSEMBLY				

* COMES WITH ITEM 8

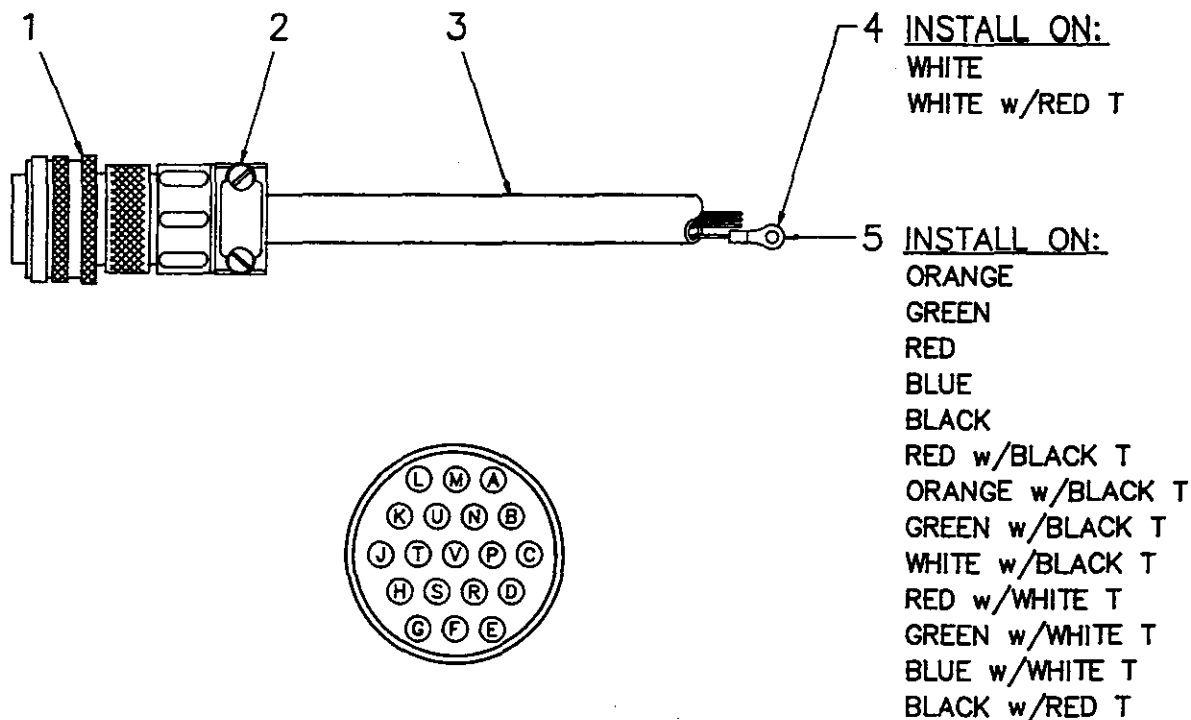
**AW-480592
PENDANT ASSEMBLY
EIGHT (8) FUNCTION, STANDARD**



ITEM	QTY.	PART NO.	DESCRIPTION	ITEM	QTY.	PART NO.	DESCRIPTION
1	1	480501	PENDANT HOUSING	14	1	480589	CABLE ASSEMBLY
2	1	480518	DECAL, COVER PLATE	15	8	REF.*	WASHER, LOCK
3	8	REF.*	NUT	16	3	660302	CONDUCTOR ASSEMBLY
4	8	640300	BOOT, TOGGLE SWITCH	17	1	480524	CONDUCTOR ASSEMBLY
5	1	370433	CONNECTOR, HUBBEL F3	18	1	480523	SPRING, TRIGGER RETURN
6	2	002607	SCREW, #10-24NC x 3/4	19	1	005003	SCREW, PAN HD. S.T. #6 x 3/8
7	2	015801	NUT, HX. LK. #10-24NC	20	4	636600	JUMPER
8	1	480507	POTENTIOMETER ASSEMBLY	21	4	622346	CONDUCTOR ASSEMBLY 2 1/8"
9	1	480506	TRIGGER	22	3	622347	CONDUCTOR ASSEMBLY 3 1/8"
10	1	480517	SCREW, SOC. HD. #10-32NF x 5/8	23	1	622000	SWITCH, TOGGLE SPDT
11	4	634200	SWITCH, TOGGLE DPDT	24	3	750090	SWITCH, TOGGLE ON/OFF
12	1	480504	BACK PLATE	25	1	480526	CONDUCTOR ASSEMBLY
13	4	480516	SCREW, S.T. RD. HD. #6 x 3/4	26	2	750737	TIE, CABLE

* COMES WITH ITEM 11

AW-480593 PROPORTIONAL PENDANT ASSEMBLY EIGHT (8) FUNCTION

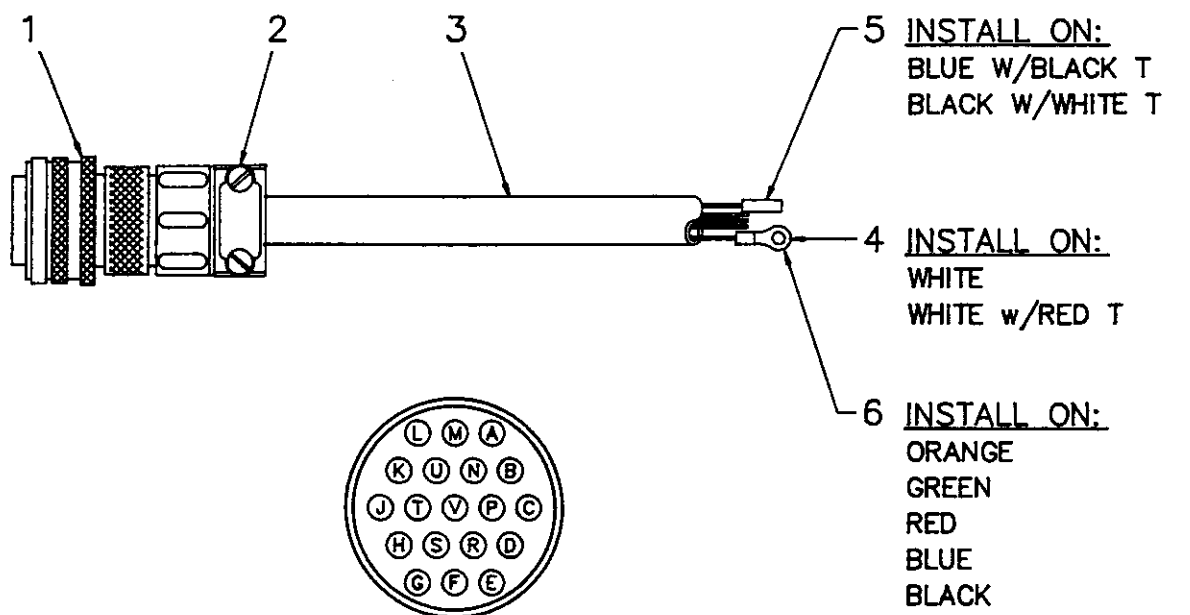


WIRING GUIDE

A-RED	L-WHITE
B-GREEN	M-BLUE W/BLACK T
C-ORANGE	N-BLACK W/WHITE T
D-RED W/WHITE T	P-GREEN W/WHITE T
E-BLACK	R-BLUE W/WHITE T
F-RED W/BLACK T	S-BLACK W/RED T
G-BLUE	T-WHITE W/RED T
H-ORANGE W/BLACK T	U-ORANGE W/RED T
J-GREEN W/BLACK T	V-BLUE W/RED T
K-WHITE W/BLACK T	

<u>ITEM</u>	<u>QTY</u>	<u>P/N</u>	<u>DESCRIPTION</u>
1	1	480514	PLUG, CONNECTOR
2	1	480515	CLAMP, CABLE
3	30'	480594-001	CABLE, CONDUCTOR (19 COND.)
4	2	000101	TERMINAL, RING #6 / 14-16 Ga
5	13	002012	TERMINAL, RING #6 / 18-22 Ga

AW-480588
PENDANT CABLE ASSEMBLY

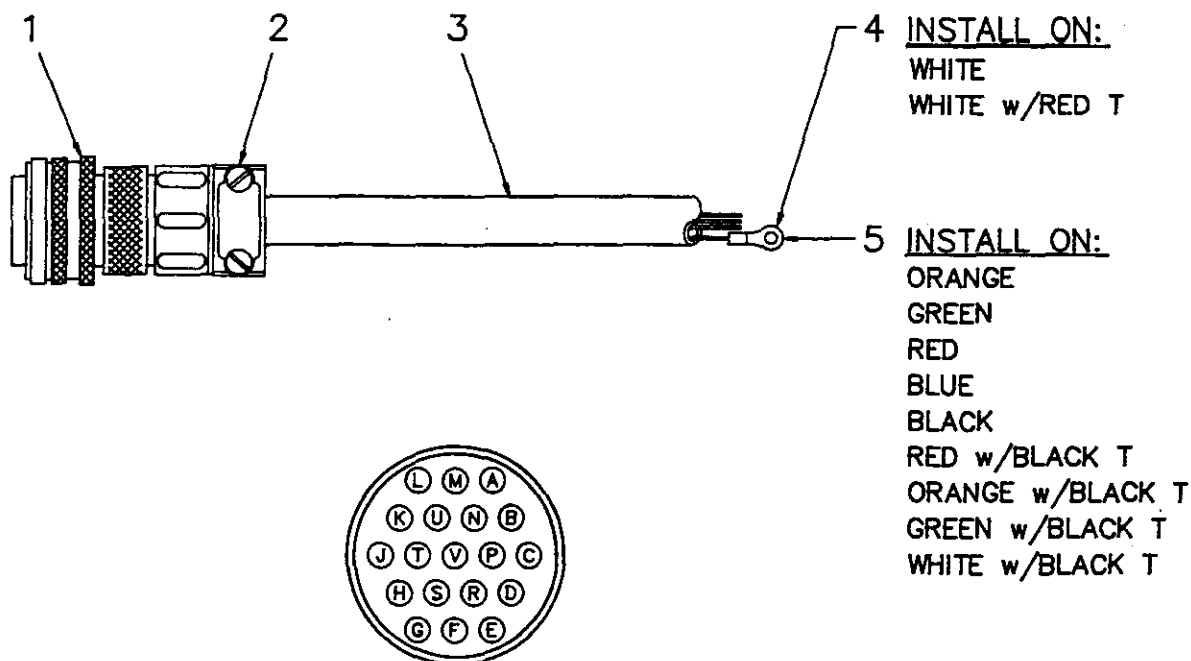


A-RED
B-GREEN
C-ORANGE
D-RED W/WHITE T
E-BLACK
F-RED W/BLACK T
G-BLUE
H-ORANGE W/BLACK T
J-GREEN W/BLACK T
K-WHITE W/BLACK T

L-WHITE
M-BLUE W/BLACK T
N-BLACK W/WHITE T
P-GREEN W/WHITE T
R-BLUE W/WHITE T
S-BLACK W/RED T
T-WHITE W/RED T
U-ORANGE W/RED T
V-BLUE W/RED T

ITEM	QTY	P/N	DESCRIPTION
1	1	480514	PLUG, CONNECTOR
2	1	480515	CLAMP, CABLE
3	30'	480594-001	CABLE, CONDUCTOR (19 COND.)
4	2	000101	TERMINAL, RING #6 / 14-16 Ga
5	2	480510	BULLET CONNECTOR, FEMALE
6	13	002012	TERMINAL, RING #6 / 18-22 Ga

AW-480589
PENDANT CABLE ASSEMBLY

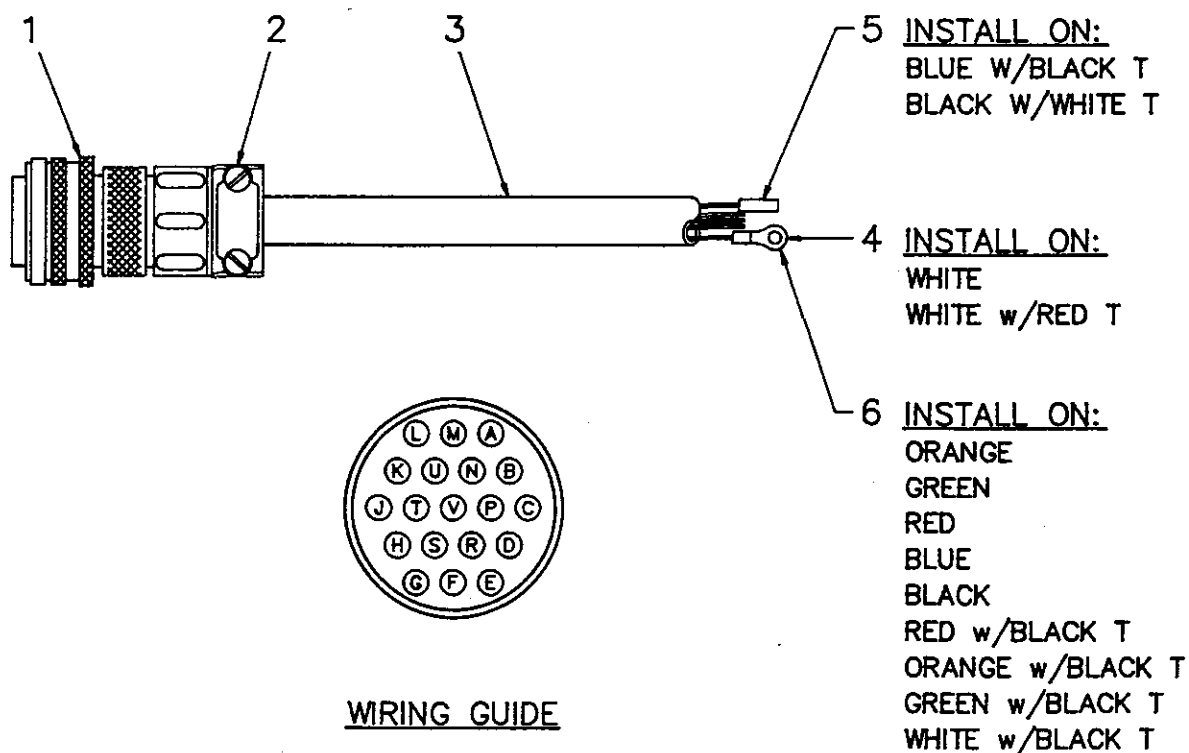


WIRING GUIDE

A-RED	L-WHITE
B-GREEN	M-BLUE W/BLACK T
C-ORANGE	N-BLACK W/WHITE T
D-RED W/WHITE T	P-GREEN W/WHITE T
E-BLACK	R-BLUE W/WHITE T
F-RED W/BLACK T	S-BLACK W/RED T
G-BLUE	T-WHITE W/RED T
H-ORANGE W/BLACK T	U-ORANGE W/RED T
J-GREEN W/BLACK T	V-BLUE W/RED T
K-WHITE W/BLACK T	

<u>ITEM</u>	<u>QTY</u>	<u>P/N</u>	<u>DESCRIPTION</u>
1	1	480514	PLUG, CONNECTOR
2	1	480515	CLAMP, CABLE
3	30'	480594-001	CABLE, CONDUCTOR (19 COND.)
4	2	000101	TERMINAL, RING #6 / 14-16 Ga
5	9	002012	TERMINAL, RING #6 / 18-22 Ga

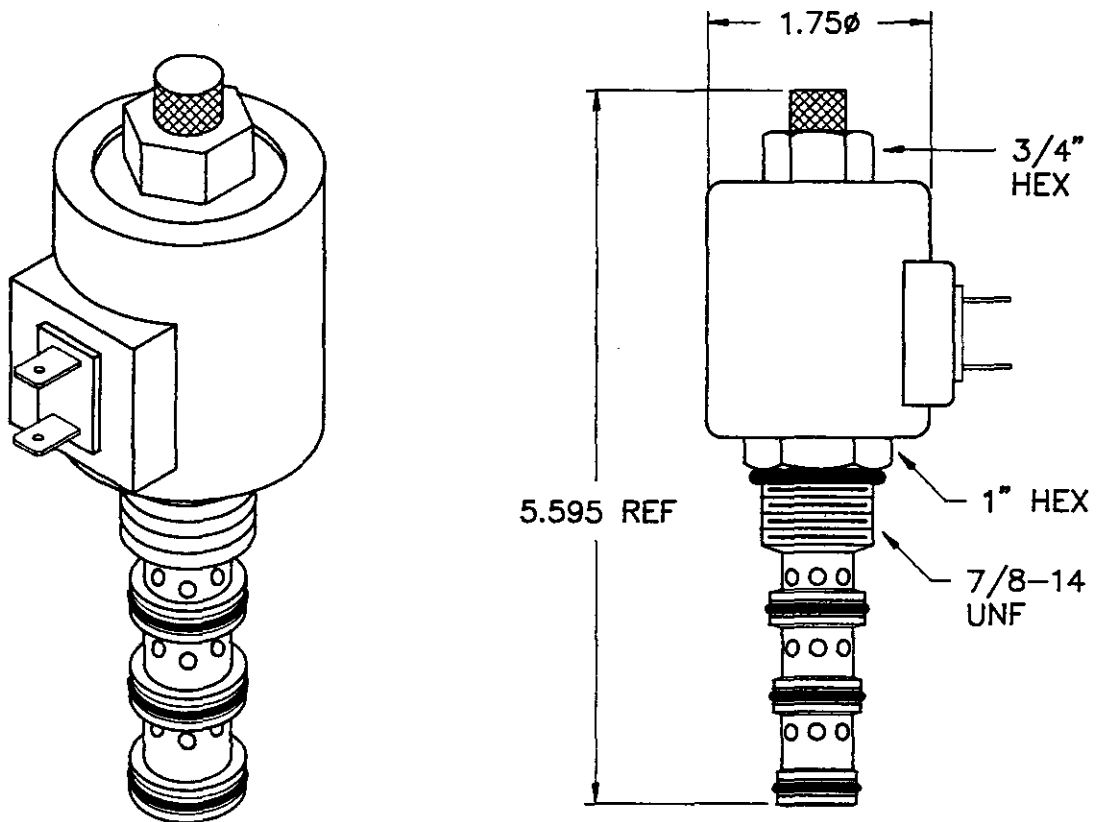
AW-480595 PENDANT CABLE ASSEMBLY



A-RED	L-WHITE
B-GREEN	M-BLUE W/BLACK T
C-ORANGE	N-BLACK W/WHITE T
D-RED W/WHITE T	P-GREEN W/WHITE T
E-BLACK	R-BLUE W/WHITE T
F-RED W/BLACK T	S-BLACK W/RED T
G-BLUE	T-WHITE W/RED T
H-ORANGE W/BLACK T	U-ORANGE W/RED T
J-GREEN W/BLACK T	V-BLUE W/RED T
K-WHITE W/BLACK T	

ITEM	QTY	P/N	DESCRIPTION
1	1	480514	PLUG, CONNECTOR
2	1	480515	CLAMP, CABLE
3	30'	480594-001	CABLE, CONDUCTOR (19 COND.)
4	2	000101	TERMINAL, RING #6 / 14-16 Ga
5	2	480510	BULLET CONNECTOR, FEMALE
6	9	002012	TERMINAL, RING #6 / 18-22 Ga

**AW-480596
 PENDANT CABLE ASSEMBLY**

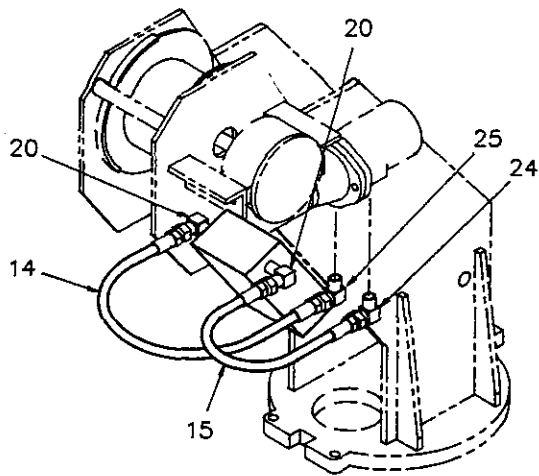


NOTES:

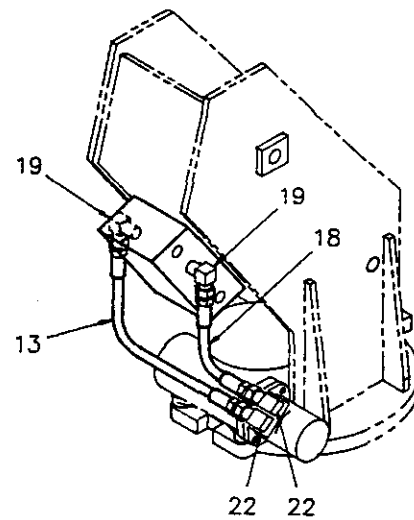
- 1.) FOR SEAL KIT, ORDER PART NO. 480184-002
- 2.) FOR REPLACEMENT COIL, ORDER PART NO. 480184-003

AW-480184
CARTRIDGE VALVE

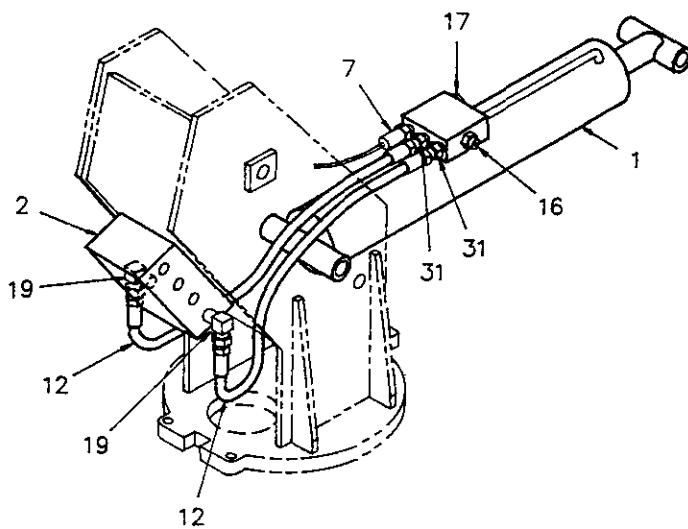
NOTES



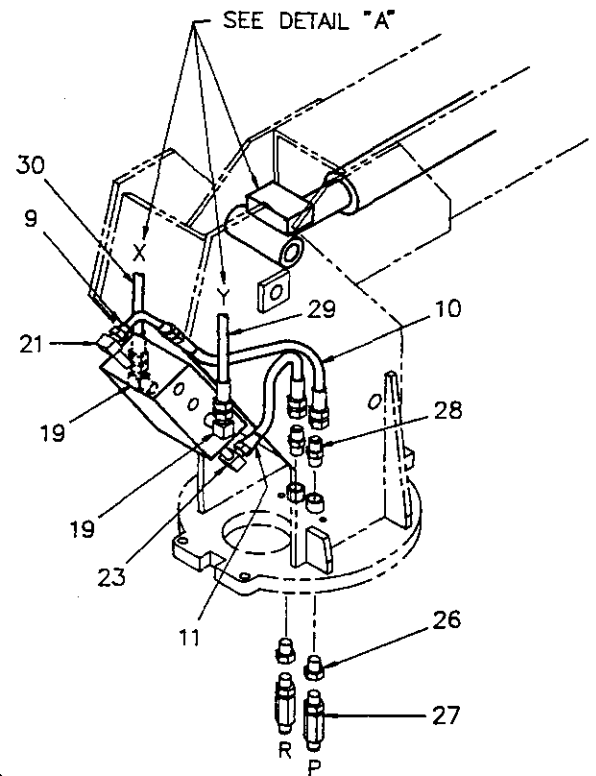
HOIST
(TOP SPOOL)



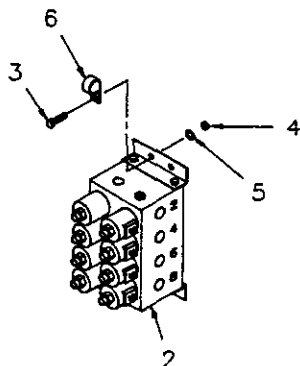
ROTATION
(2nd SPOOL FROM TOP)



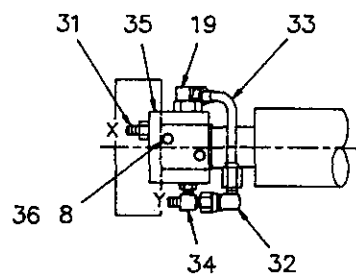
BOOM-UP
(BOTTOM SPOOL)



**PRESSURE / RETURN
EXTENSION**
(3rd SPOOL FROM TOP)



VALVE BANK

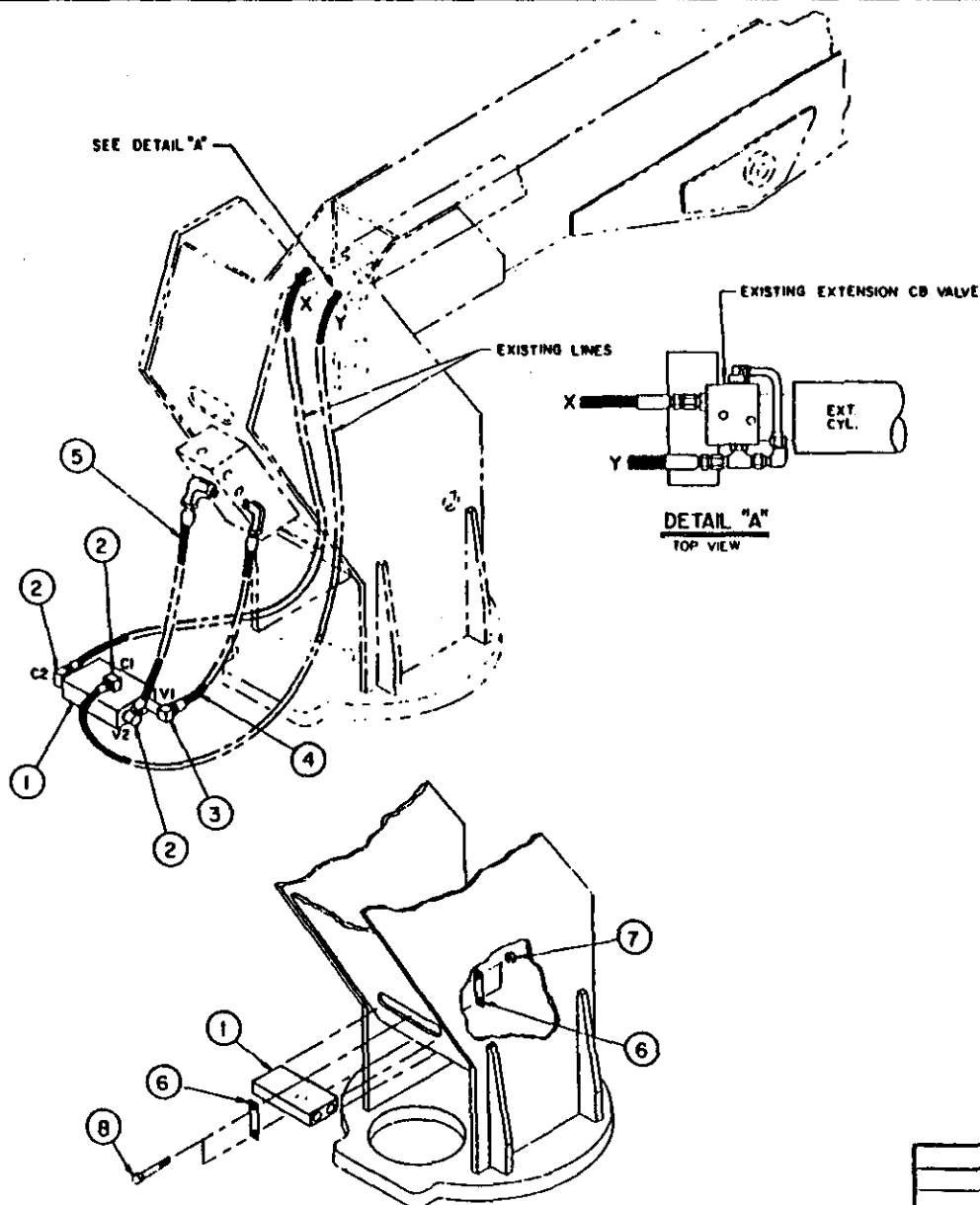


DETAIL "A"

**AW-480573
HYDRAULIC ASSEMBLY, 8005H**

8005H HYDRAULIC ASSEMBLY AW-480573

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	480377	CYLINDER, BOOM
2	1	480181	VALVE BANK ASSEMBLY
3	4	008701	SCREW, HEX HD. 3/8-16NC x 1" LG.
4	4	017100	NUT, HEX 3/8-16NC
5	4	021100	WASHER, SP. LK. 3/8
6	1	480024	MOUNT, PENDANT RETAINER
7	1	480379	LOAD SENSOR ASSEMBLY
8	2	020200	WASHER, SP. LK. 1/4
9	1	480211	TUBE ASSEMBLY
10	1	480200	HOSE ASSEMBLY (PRESSURE)
11	1	480201	HOSE ASSEMBLY (RETURN)
12	2	480208	HOSE ASSEMBLY (BOOM UP 31 1/2")
13	1	480205	HOSE ASSEMBLY (ROTATION 19 1/4")
14	1	480203	HOSE ASSEMBLY (HOIST 24 3/4")
15	1	480202	HOSE ASSEMBLY (HOIST 21 1/2")
16	1	480188	COUNTERBALANCE VALVE CARTRIDGE
17	1	REF.	PLUG, -6 O-RING
18	1	480204	HOSE ASSEMBLY (ROTATION 17 1/2")
19	7	200892	ELL, 90° -6 NPT / -6 JIC
20	2	360044	ELL, 90° -6 NPT / -8 JIC STD.
21	1	480190	ELL, 90° -6 NPT / -8 JIC X-LONG
22	2	202759	ELL, 90° -8 NPT / -6 JIC
23	1	480213	ELL, 90° -6 NPT / -8 JIC LONG
24	1	360043	ELL, 90° -8 NPT / -8 JIC
25	1	360045	ELL, 90° -8 NPT / -8 JIC MED. LONG
26	2	750413	REDUCER
27	2	750412	SWIVEL JOINT
28	2	360054	ADAPTER
29	1	480207	HOSE ASSEMBLY (EXT. CYL 45 1/2")
30	1	480206	HOSE ASSEMBLY (EXT. CYL 44")
31	3	200876	ADAPTER, -6 O-RING / -6 JIC
32	1	480194	ELL, 90° -6 JIC SWIVEL / -6 JIC
33	1	480212	TUBE ASSEMBLY
34	1	241168	TEE, -6 O-RING / -6 JIC RUN
35	1	330412	VALVE, COUNTERBALANCE
36	2	005810	SCREW, HEX HD. 1/4-20NC x 1 3/4" LG. GR.5

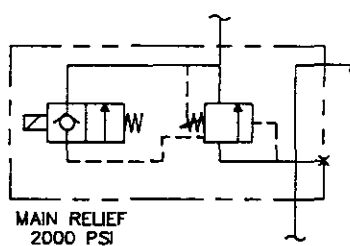
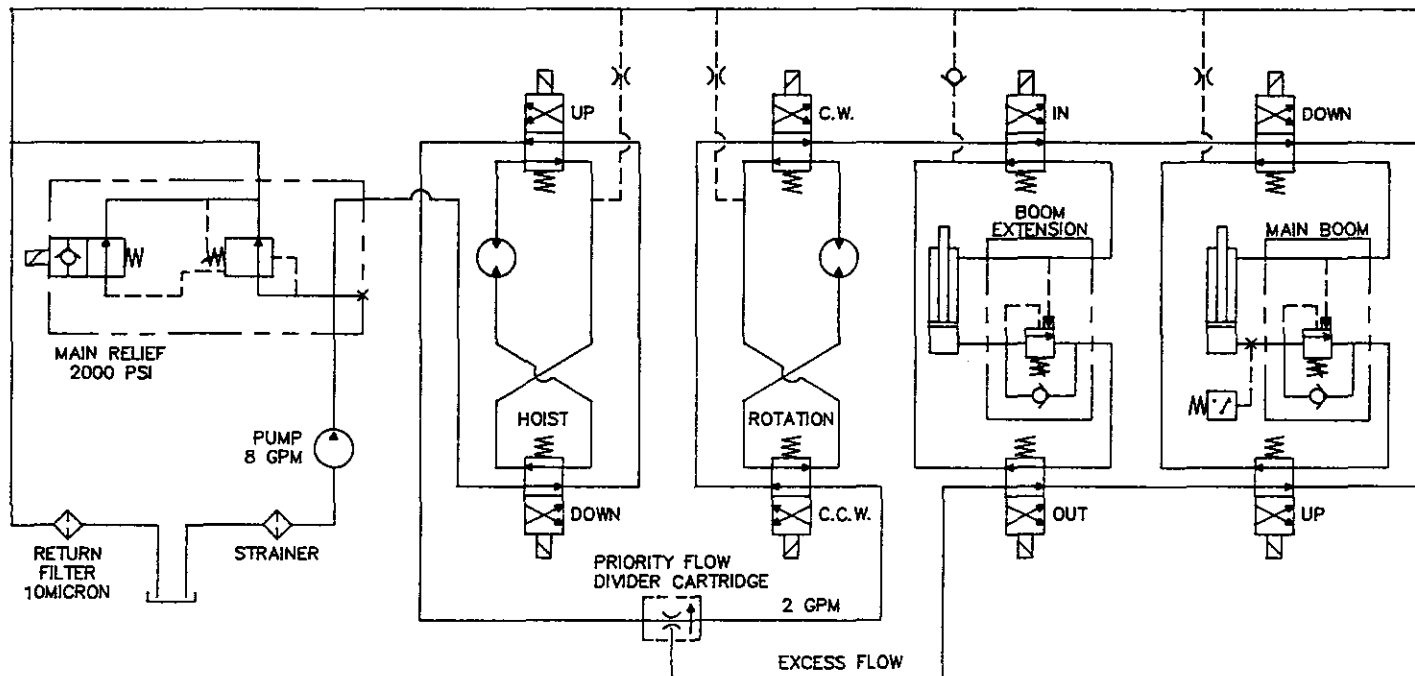
**NOTES:**

1. FOR USE WHEN MANIFOLD RETURN LINE BACK PRESSURE EXCEEDS 100 PSI (TO ELIMINATE POSSIBLE BOOM OUT CREEP)
2. COUNTERBALANCE CARTRIDGE, SUN CBCA-LAN SET TO 4000 PSI WITH 3:1 PILOT RATIO
3. AFTER INSTALLATION, BOOM EXTEND PRESSURE WILL BE HIGHER

ITEM	QTY	DVS	PART NO	DESCRIPTION
8	2	A	007803	SCR. HX. HD 5/16-NC x 3 1/2 LG.
7	2	A	016801	NUT HEX-LOCK 5/16-NC
6	2	B	480218	CLAMP, COUNTERBALANCE VALVE
5	1	A	480204	HOSE ASS'Y
4	1	A	480204	HOSE ASS'Y
3	1	A	360046	90° ELL. LONG -6 NPT/-6 JIC
2	3	A	200892	90° ELL. -6 NPT/-6 JIC
1	1	A	480187	COUNTERBALANCE VALVE

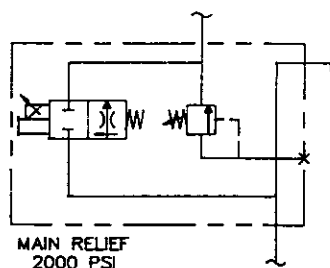
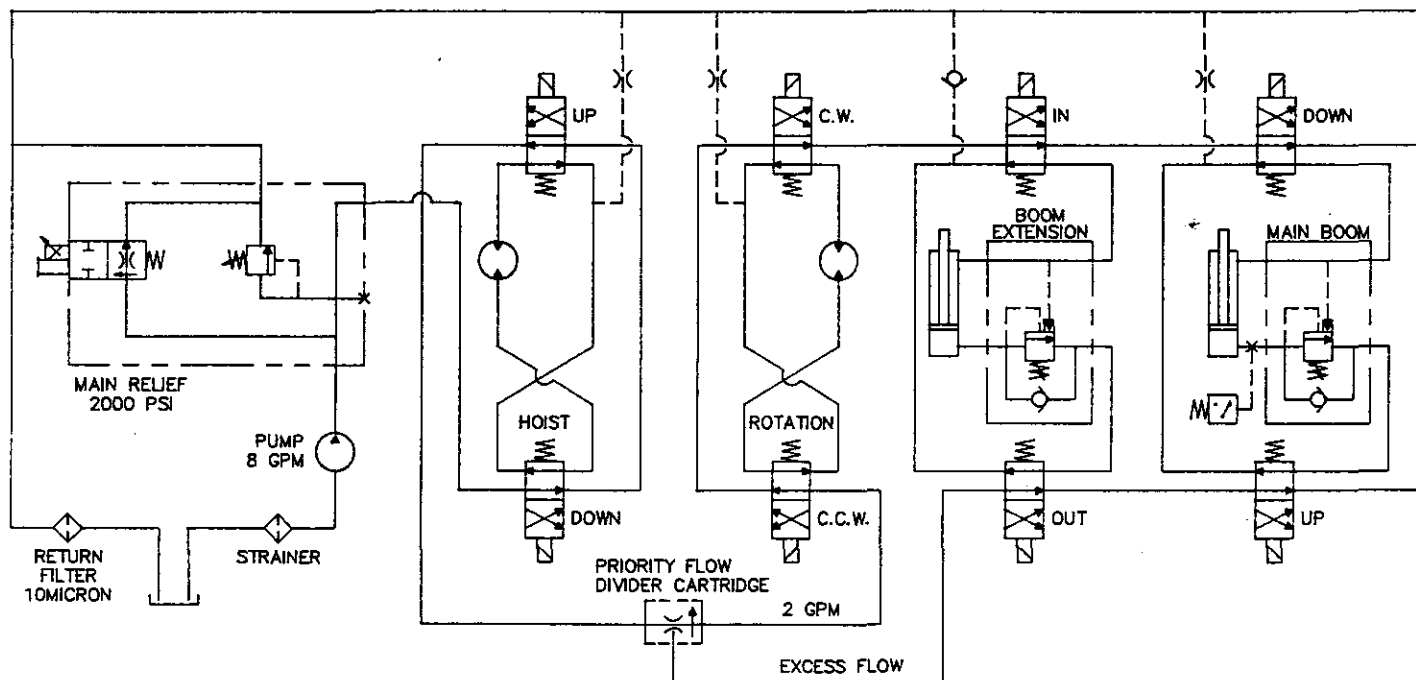
UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE IN INCHES TOLERANCES UNLESS OTHERWISE SPECIFIED ANGLES ± 1/2° FRACTIONAL ± 1/16 REMOVE ALL BURRS AND SHARP EDGES DO NOT SCALE THIS DRAWING TOLERANCES NOT SHOWN ABOVE ARE PER ANSI Y14.5-1973 THIS PRINT IS THE PROPERTY OF AUTO CRANE CO AND MUST NOT BE USED IN ANY MANNER DETRIMENTAL TO THEIR INTERESTS		DRAWN BY DATE CHECK BY DATE ENG BY DATE	AUTO CRANE COMPANY P.O. BOX 58087 • TULSA, OKLAHOMA 74158-0887 4701 NORTH MINGO ROAD • 918 536 0483
NEXT ASSY		TITLE COUNTERBALANCE KIT, "EXT. IN" FOR 800SH	SCALE C
		DRAWING NO AW-480219	REVISION SHEET 1 OF 1

NOTES



RELIEF VALVE SHOWN
WITH SOLENOID ENERGIZED

AW-480653 HYDRAULIC SCHEMATIC, 8005H



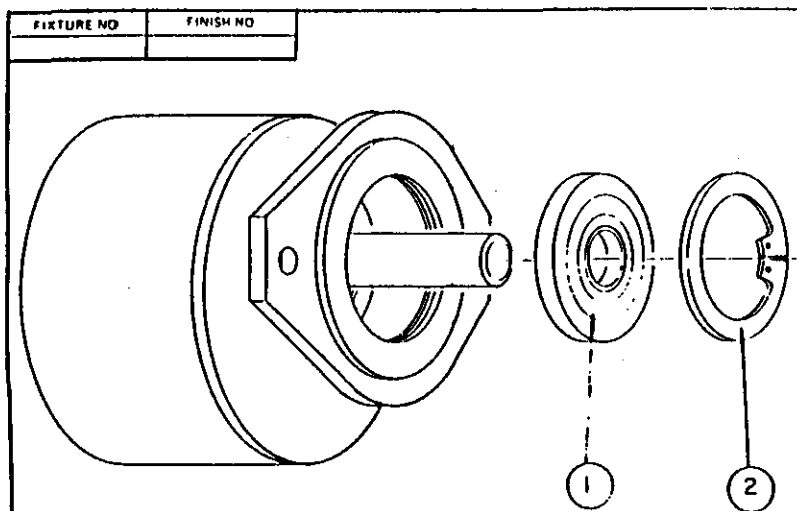
RELIEF VALVE SHOWN
WITH SOLENOID ENERGIZED

AW-125 HYDRAULIC SCHEMATIC, 8005H PROPORTIONAL

6-4.0.0

FIXTURE NO.	FINISH NO.	CHG LTR	REVISIONS	DATE	APP'D																																																		
		DESCRIPTION																																																					
<p>NOTES:</p> <ol style="list-style-type: none"> TO ORDER HYD. PUMP ASSEMBLY USE PART NO. 480022, WHICH CONSISTS OF HYD. PUMP (480018), 3/4 14 NPT / 15/16- 12 JIC SUCTION ADAPTER (360055), AND 3/4-14 NPT / 1 1/16 -12 JIC PRESSURE ADAPTER (750399). FOR SEAL KIT USE PART NO. 480018-001. FOR SERVICE KIT USE PART NO. 480018-002. 																																																							
<p>NOTE:</p> <p>PUMP SPEED-1000 R.P.M. (STANDARD)</p>																																																							
<p>ADAPTER: SAE "A" 2 BOLT FLANGE (DIRECT MOUNT ONLY) SHAFT: STRAIGHT SHAFT WITH KEY 3/4" DIA. 2-3/4" LONG 3/16" SQ. KEY 1-5/8" LONG.</p>																																																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">ITEM</th> <th style="width: 10%;">QTY</th> <th style="width: 10%;">D/S</th> <th style="width: 20%;">PART NO.</th> <th style="width: 50%;">DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td colspan="5" style="text-align: center;">LIST OF MATERIAL</td> </tr> <tr> <td colspan="3"></td> <td colspan="2" style="text-align: center;">AUTO CRANE COMPANY</td> </tr> <tr> <td colspan="3"></td> <td colspan="2" style="text-align: center;">TITLE</td> </tr> <tr> <td colspan="3"></td> <td colspan="2" style="text-align: center;">PUMP, HYDRAULIC - DIRECT MOUNT</td> </tr> <tr> <td colspan="3"></td> <td>SCALE</td> <td>SIZE</td> </tr> <tr> <td colspan="3"></td> <td></td> <td>B</td> </tr> <tr> <td colspan="3"></td> <td>DRAWING NO.</td> <td>REVISION</td> </tr> <tr> <td colspan="3"></td> <td>AW-480018</td> <td></td> </tr> <tr> <td colspan="3"></td> <td>WEIGHT</td> <td>SHEET 1 OF 1</td> </tr> </tbody> </table>						ITEM	QTY	D/S	PART NO.	DESCRIPTION	LIST OF MATERIAL								AUTO CRANE COMPANY					TITLE					PUMP, HYDRAULIC - DIRECT MOUNT					SCALE	SIZE					B				DRAWING NO.	REVISION				AW-480018					WEIGHT	SHEET 1 OF 1
ITEM	QTY	D/S	PART NO.	DESCRIPTION																																																			
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<p>UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE IN INCHES. TOLERANCES UNLESS OTHERWISE SPECIFIED.</p> <p>ANGLES $\pm 1/2^\circ$.XX \pm .040</p> <p>FRACTIONAL $\pm 1/16$.XXX \pm .010</p> <p>REMOVE ALL BURRS AND SHARP EDGES. DO NOT SCALE THIS DRAWING.</p> <p>TOLERANCES NOT SHOWN ABOVE ARE PER ANSI Y14.5-1973</p> <p>THIS PRINT IS THE PROPERTY OF AUTO CRANE CO. AND MUST NOT BE USED IN ANY MANNER DETRIMENTAL TO THEIR INTERESTS.</p>																																																							
<p>3/89</p> <p>NEXT ASS'Y</p>																																																							

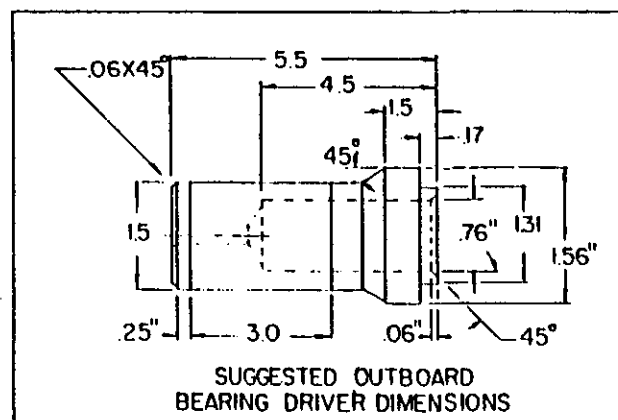
55118



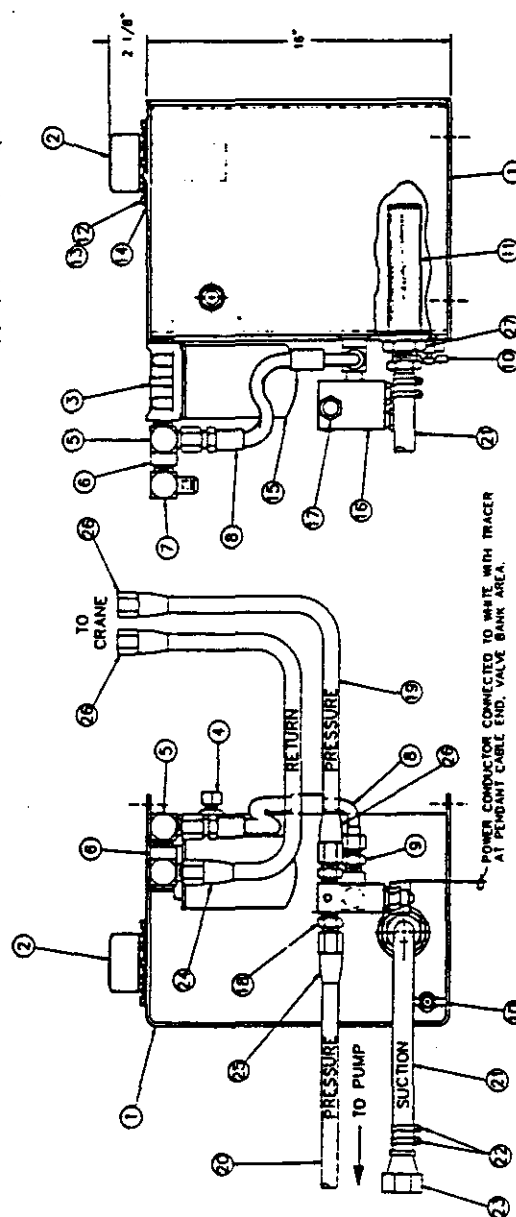
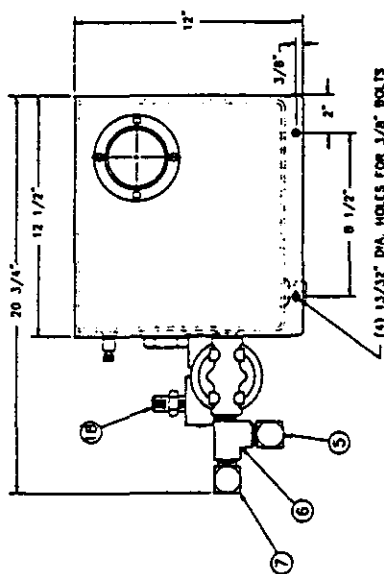
NOTE:

1. MAXIMUM NORMAL U-JOINT SHAFT OPERATING ANGLE - 10°
2. MAXIMUM R.P.M. - 1500.
3. PUMP SHAFT AND P.T.O. SHAFT SHALL BE PARALLEL.
4. SLIDE BEARING OVER SHAFT.
5. WITH EVEN PRESSURE, SEAT BEARING.
6. INSTALL SNAP RING.

**OUTBOARD BEARING KIT IS REQUIRED
FOR DRIVE SHAFT MOUNTING!**



		1	2	A	480008	SNAP RING
		1	1	A	480007	OUTBOARD BEARING
				ITEM D/S	PART NO.	DESCRIPTION
QUANTITY				LIST OF MATERIAL		
UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE IN INCHES. TOLERANCES UNLESS OTHERWISE SPECIFIED ANGLES: 1/2" XX 2.40 FRACTIONAL: 1/16 .XXX: .010 REMOVE ALL BURRS AND SHARP EDGES DO NOT SCALE THIS DRAWING TOLERANCES NOT SHOWN ABOVE ARE PER ANSI Y14.5-1913 THIS PRINT IS THE PROPERTY OF AUTO CRANE CO. AND MUST NOT BE USED IN ANY MANNER DETRIMENTAL TO THEIR INTERESTS				DRAWN BY G. S. MAN		
				DATE 2-2-87		
				CHK'D BY		
				DATE		
				DRG. NO.		
				ENG. BY		
				DATE		
				SCALE		
				SIZE		
				QTY. REQ'D		
NEXT ASSY				TITLE AUTO CRANE COMPANY P.O. BOX 46548 • TULSA, OKLAHOMA 74146 8700 BROKEN ARROW EXPRESSWAY • 918 927-9478 OUTBOARD BEARING KIT, PUMP		
				AW-480006		
				REVISION		
				WEIGHT		
				SHEET 1 OF 1		



REV	DATE	BY	CHKD	DESCRIPTION
1				LIST OF MATERIALS
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4				1.0000
5				1.0000
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7				1.0000
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99				1.0000
100				1.0000

RESERVOIR ASSEMBLY, 8005H, AW-480150

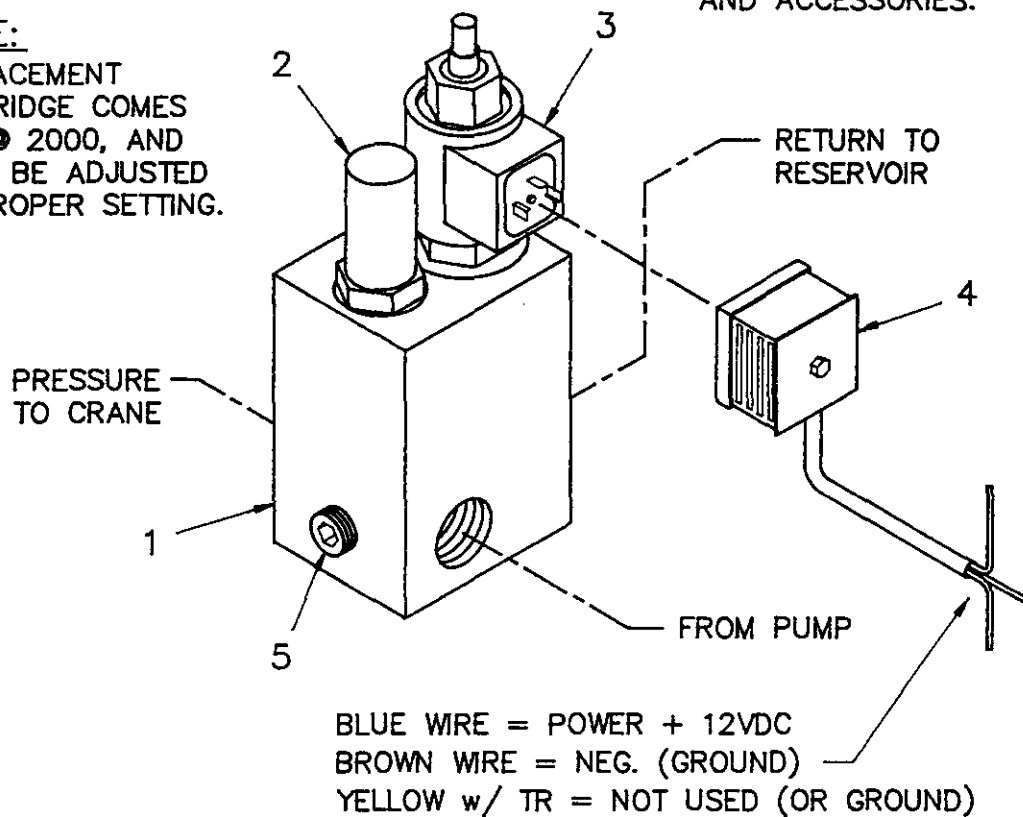
ITEM	QTY.	PART NO.	DESCRIPTION
1	1	480151	RESERVOIR WELDMENT
2	1	360151	FILLER ASSEMBLY
3	1	360156	FILTER ASSEMBLY
4	1	360150	SIGHT PLUG
5	1	551222	ELL
6	1	360262	TEE
7	1	360263	ELL
8	1	360284	HOSE ASSEMBLY
9	1	360054	ADAPTER, STRAIGHT
10	1	750715	DRAIN VALVE
11	1	360282	STRAINER, SUCTION
12	4	005500	SCREW, HX. 1/4-20 X 3/4"
13	4	020200	WASHER, 1/4 SP. LK.
14	1	360249	COVER, CLEAN OUT
15	1	360277	SPIN ON FILTER (FOR REPLACEMENT)
16	1	REF.	VENTED RELIEF VALVE ASSEMBLY (360247)
17	1	REF.	ADAPTER, STRAIGHT (360054)
18	1	REF.	ADAPTER, STRAIGHT (551215)
19	1	REF.	HOSE, -8 (551228-001)
20	1	REF.	HOSE, -12 (360274-001)
21	1	REF.	HOSE, -16 (360275-001)
22	4	REF.	HOSE CLAMP, -16 (360268)
23	1	REF.	HOSE ADAPTER (360273)
24	1	REF.	FITTING, REUSABLE 10-8 (551227)
25	2	REF.	FITTING, REUSABLE 10-12 (360269)
26	3	REF.	FITTING, REUSABLE 8-8 (360266)
27	1	REF.	ADAPTER, STRAIGHT (360270)

NOTES:

- ITEMS 17 THRU 27 ARE AVAILABLE AS A KIT, PART NO. 480159

NOTE:
REPLACEMENT
CARTRIDGE COMES
SET @ 2000, AND
MUST BE ADJUSTED
TO PROPER SETTING.

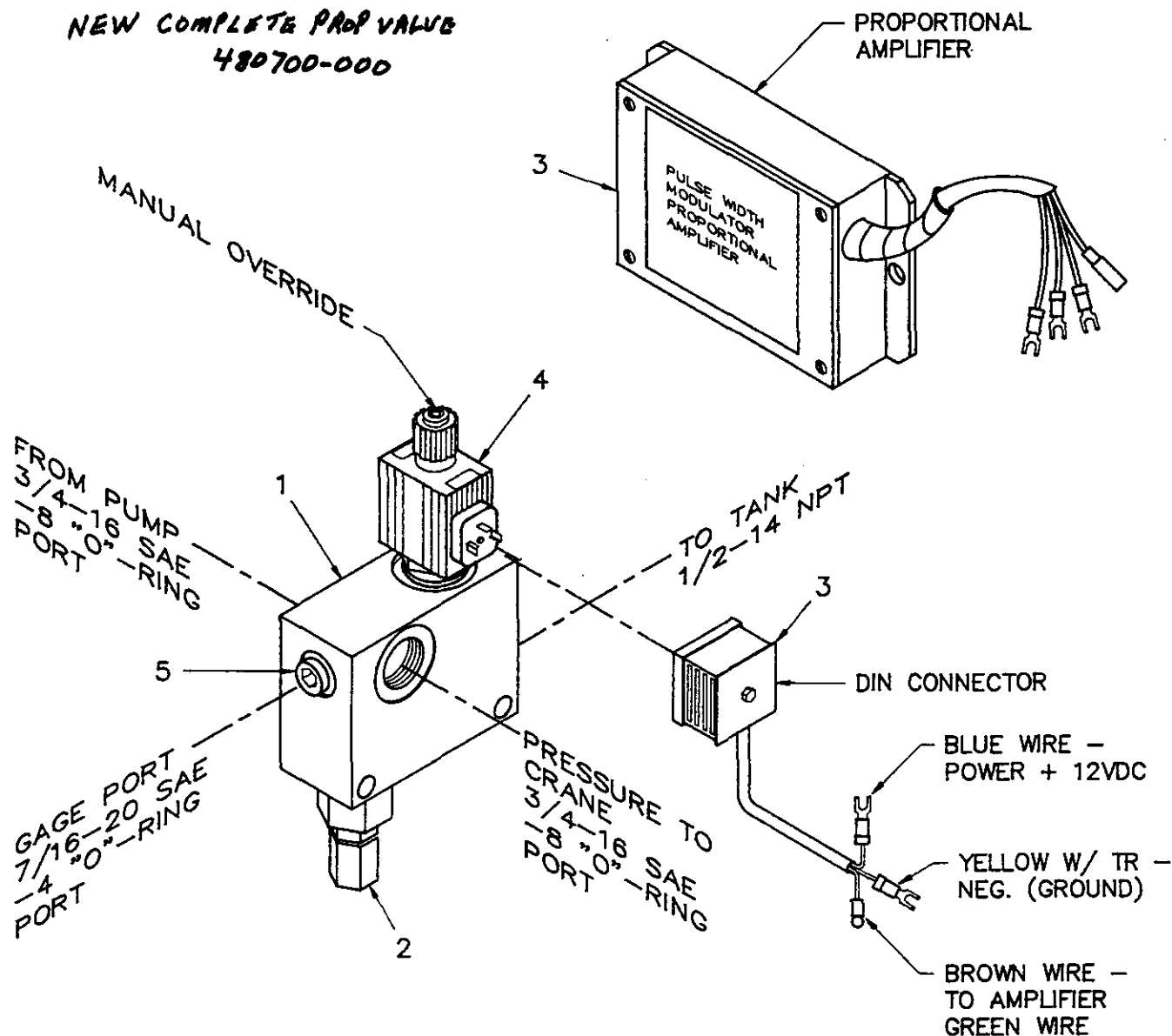
NOTE:
RELIEF VALVE MUST BE
LOCATED BETWEEN PUMP
AND ANY OTHER VALVES
AND ACCESSORIES.



ITEM	QTY	P/N	DESCRIPTION
1	1	480135	VALVE, VENTED RELIEF 2000 P.S.I.
2		480135-001	REPLACEMENT CARTRIDGE
3	1	480137	VALVE, DIRECTIONAL SOLENOID
4	1	480613	DIN CONNECTOR
5	1	000209	PLUG, PIPE - SOC. 1/4"

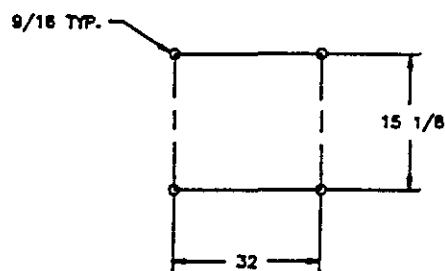
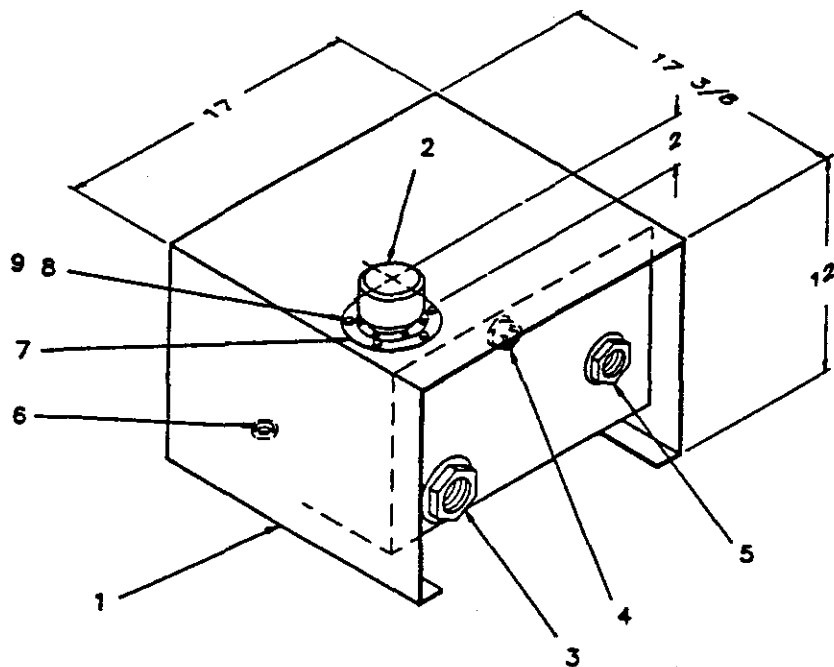
AW-480157
VENTED RELIEF VALVE
ASSEMBLY w/ SOLENOID

NEW COMPLETE PROP VALVE
480700-000



ITEM	QTY	P/N	DESCRIPTION
1	1	480521	MANIFOLD, BLOCK
2	1	360157-002	VALVE, RELIEF
3	1	480522	AMPLIFIER, PROP. (IN SHIP KIT)
4	1	480520	VALVE, SOLENOID
5	1	000211	PLUG, -4 SAE "O"-RING

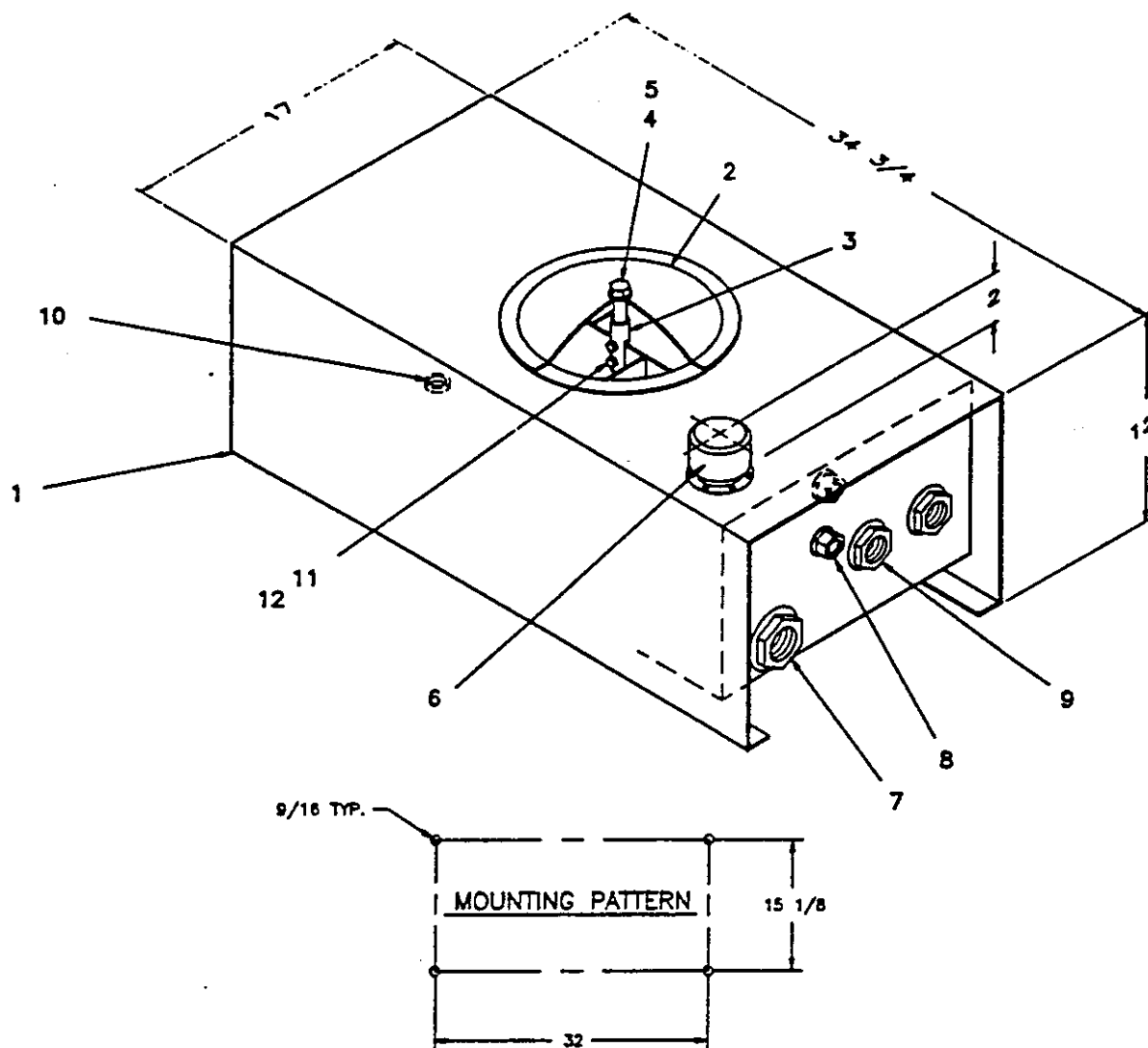
AW-480525
HYDRAULIC MANIFOLD ASSEMBLY
PROPORTIONAL



MOUNTING PATTERN

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	750501	RESERVOIR WELD ASSEMBLY
2	1	360151	FILLER ASSEMBLY
3	1	360282	STRAINER, SUCTION
4	1	360150	SIGHT GLASS
5	1	750708	STRAINER, DIFFUSER
6	1	750477	PIPE PLUG, 1/2-14
7	1	360249	COVER, CLEAN OUT
8	4	005500	SCREW, HX. HD. 1/4-20 X 3/4
9	4	020200	WASHER, SP. LK. 1/4

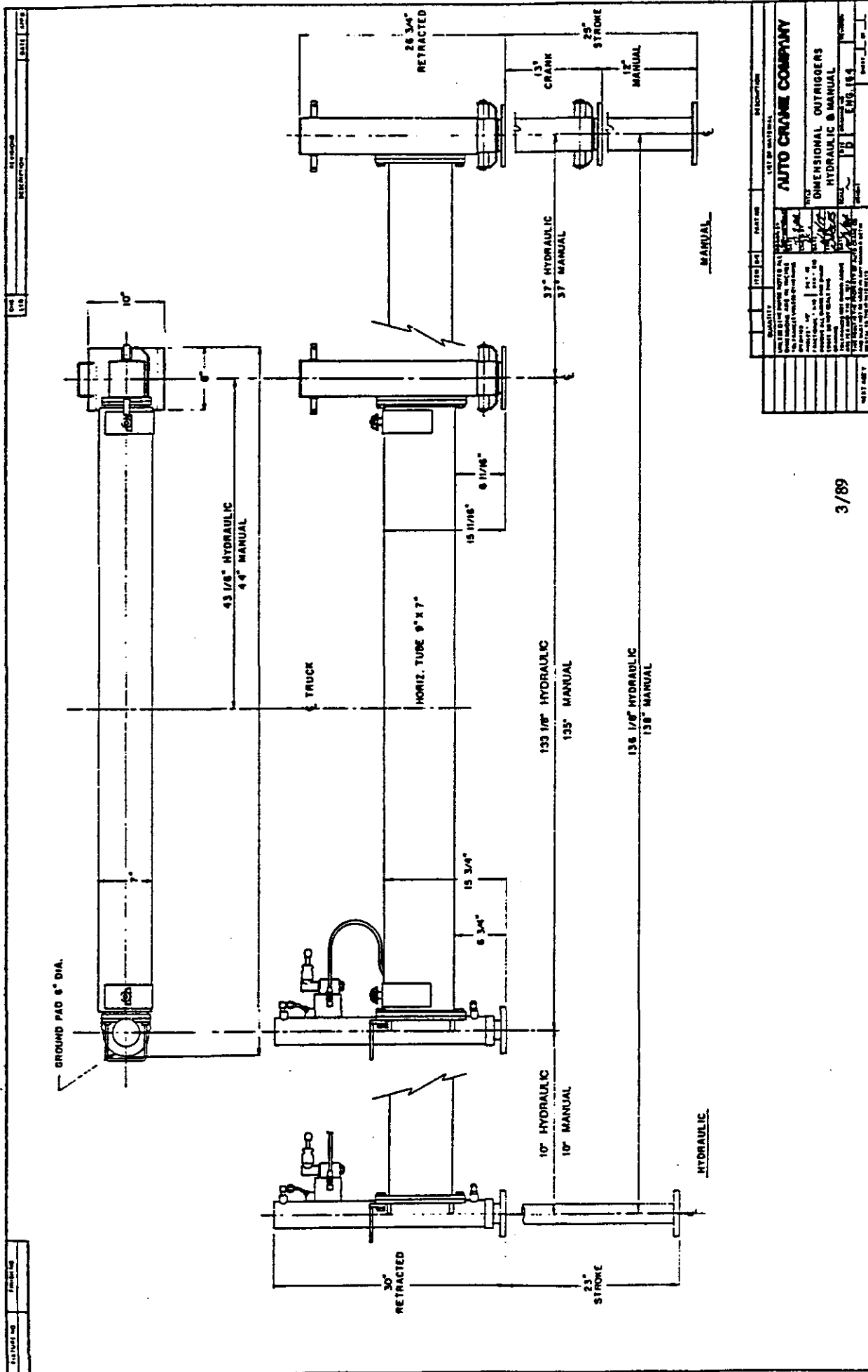
AW-750500
9 GALLON RESERVOIR



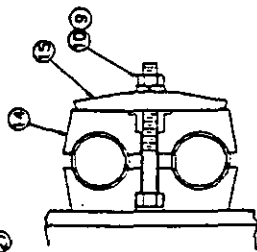
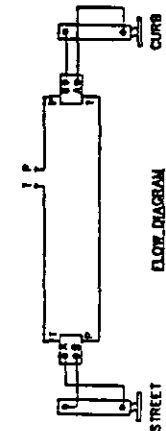
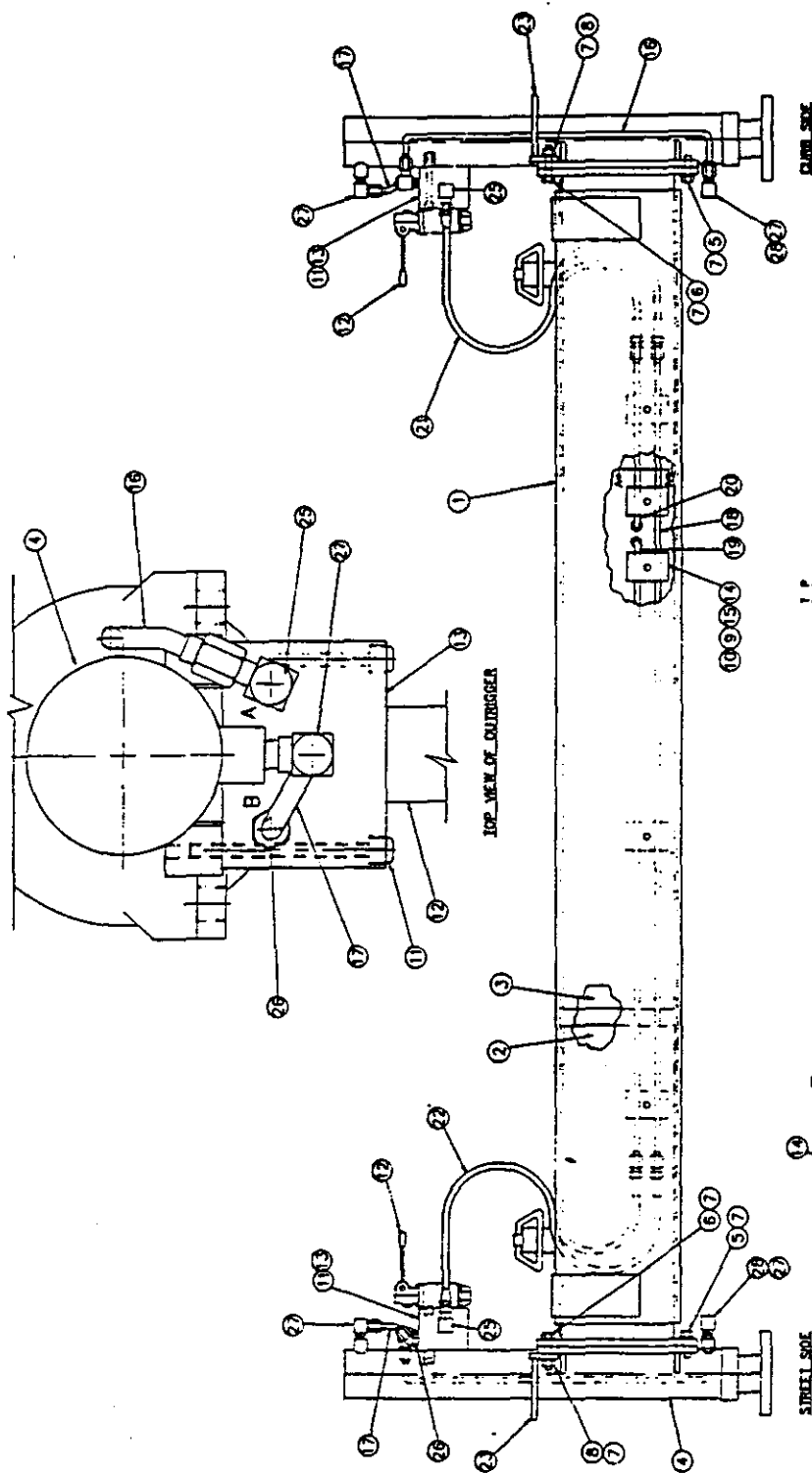
ITEM	QTY.	PART NO.	DESCRIPTION
1	1	750691	RESERVOIR WELD ASSEMBLY
2	1	750712	COVER
3	1	750709	ADAPTER, BAFFLE
4	1	750716	CRUSH WASHER
5	1	750711	BOLT, END COVER
6	3	360151	FILLER ASSEMBLY
7	1	750707	STRAINER, SUCTION
8	2	360150	SIGHT PLUG
9	2	750708	STRAINER, DIFFUSER
10	1	750477	PIPE PLUG, 1/2-14
11	2	009108	SCREW, HX. HD 3/8-NC X 1 1/4
12	2	017400	NUT, HX. LK. 3/8-NC

AW-750690
18 GALLON RESERVOIR

NOTES



QUANTITY		PART NO.		DESCRIPTION	
LIST OF MATERIAL					
AUTO CRANE COMPANY					
DIMENSIONAL OUTRIGGERS					
HYDRAULIC & MANUAL					
ENG. 184					
CHECKED BY: [Signature]					
DESIGNED BY: [Signature]					
DRAWN BY: [Signature]					
DATE: 3/89					
SCALE: 1/2" = 1'-0"					
SHEET NO. 1 OF 1					



NOTE
 (a) MANUAL VALVE LEVER- PUSH DOWN
 TO EXTEND CYL
 (b) MANUAL VALVE LEVER- PULL UP TO
 RETRACT CYL

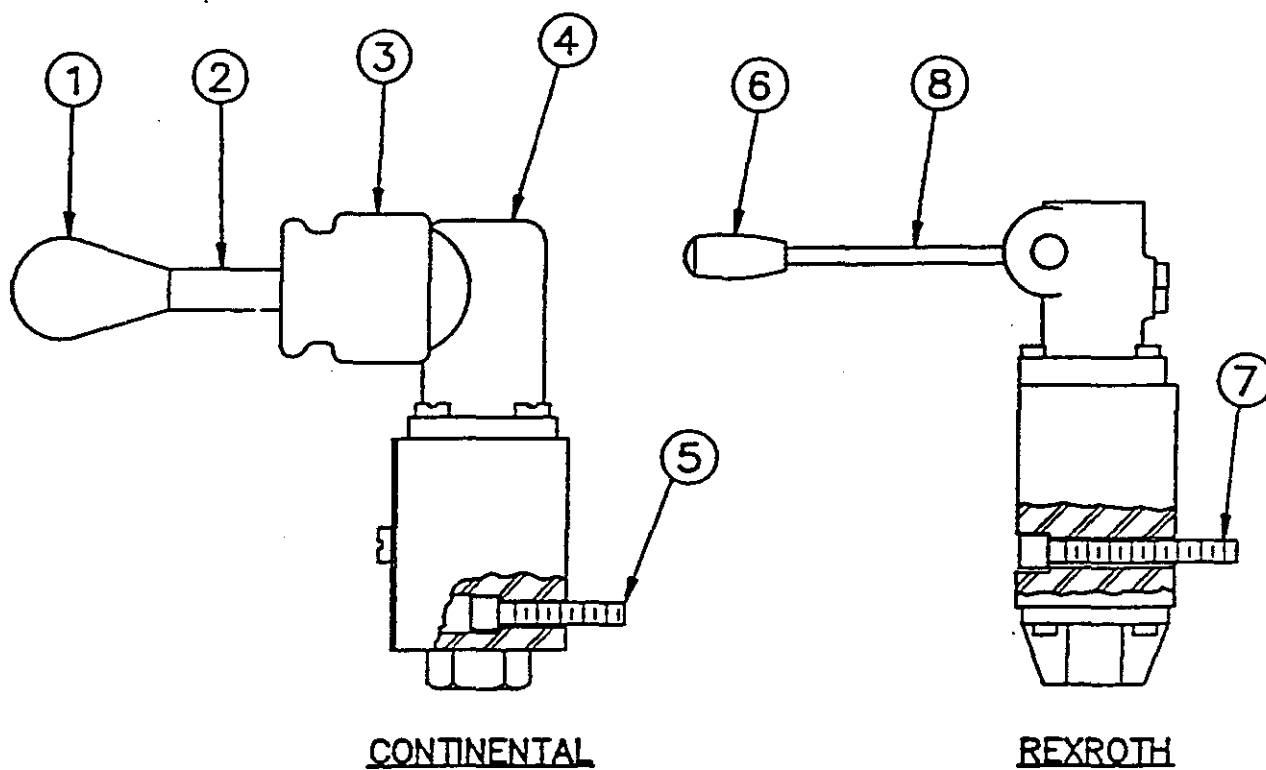
LIST OF MATERIALS		QUANTITY	DESCRIPTION
1	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
2	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
3	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
4	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
5	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
6	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
7	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
8	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
9	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
10	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
11	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
12	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
13	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
14	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
15	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
16	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
17	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
18	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
19	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
20	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
21	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
22	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
23	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
24	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
25	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE
26	1/2" DIA. X 1/2" LONG	1	CLAMP SIDE

SECTION A-A

HYD. OUTRIGGER ASS'Y, AW-480300

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	750899	MAIN CROSS TUBE
2	1	750893	SLIDE, STREET SIDE
3	1	750894	SLIDE, CURB SIDE
4	2	480017	CYLINDER, VERTICAL
5	4	012203	SCREW, HX. HD. 5/8 - NF X 1 1/4
6	4	013506	SCREW, HX. HD. 5/8 - NF X 2 1/4
7	12	023800	WASHER, SP. LK. 5/8
8	4	018302	NUT, HX. 5/8 - NF
9	5	016500	NUT, HX. 5/16 - NC
10	5	020600	WASHER, SP. LK. 5/16
11	4	003906	SCREW SOC. HD. 5/16 - 18 NC X 3 1/4
12	2	480230	VALVE MANUAL, OUTRIGGER (VERTICAL)
13	2	480231	MANIFOLD, OUTRIGGER
14	5	480232	CLAMP, HALVES
15	5	480233	PLATE, TWIN COVER
16	2	480220	TUBE ASS'Y (LEG)
17	2	480221	TUBE ASS'Y (LEG)
18	1	480222	TUBE ASS'Y
19	1	480223	TUBE ASS'Y
20	1	480224	TUBE ASS'Y
21	2	480225	HOSE ASS'Y O.R. (CURB SIDE)
22	2	480226	HOSE ASS'Y O.R. (STREET SIDE)
23	2	480227	HANDLE ASS'Y
24	1	480235	KIT, OUTRIGGER INSTALLATION
25	6	241175	ELL, 90°, -6 ORB/ -6 JIC
26	2	480195	ELL, 45°, -6 ORB/ -6 JIC
27	4	200892	ELL, 90°, 3/8 NP/ -6 JIC
28	2	360048	ELL, 90°, -6 NPT/ -6 NPTF
29	1	480014	SEAL KIT (FOR CYL. 480017)

3/89



SEAL KIT (CONTINENTAL)
480230-009

SEAL KITS (REXROTH)
480230-010, BUNA (LOW TEMP)
480230-011, VITA (HIGH TEMP.)

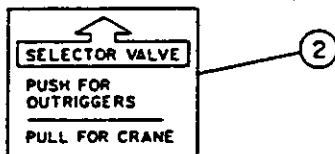
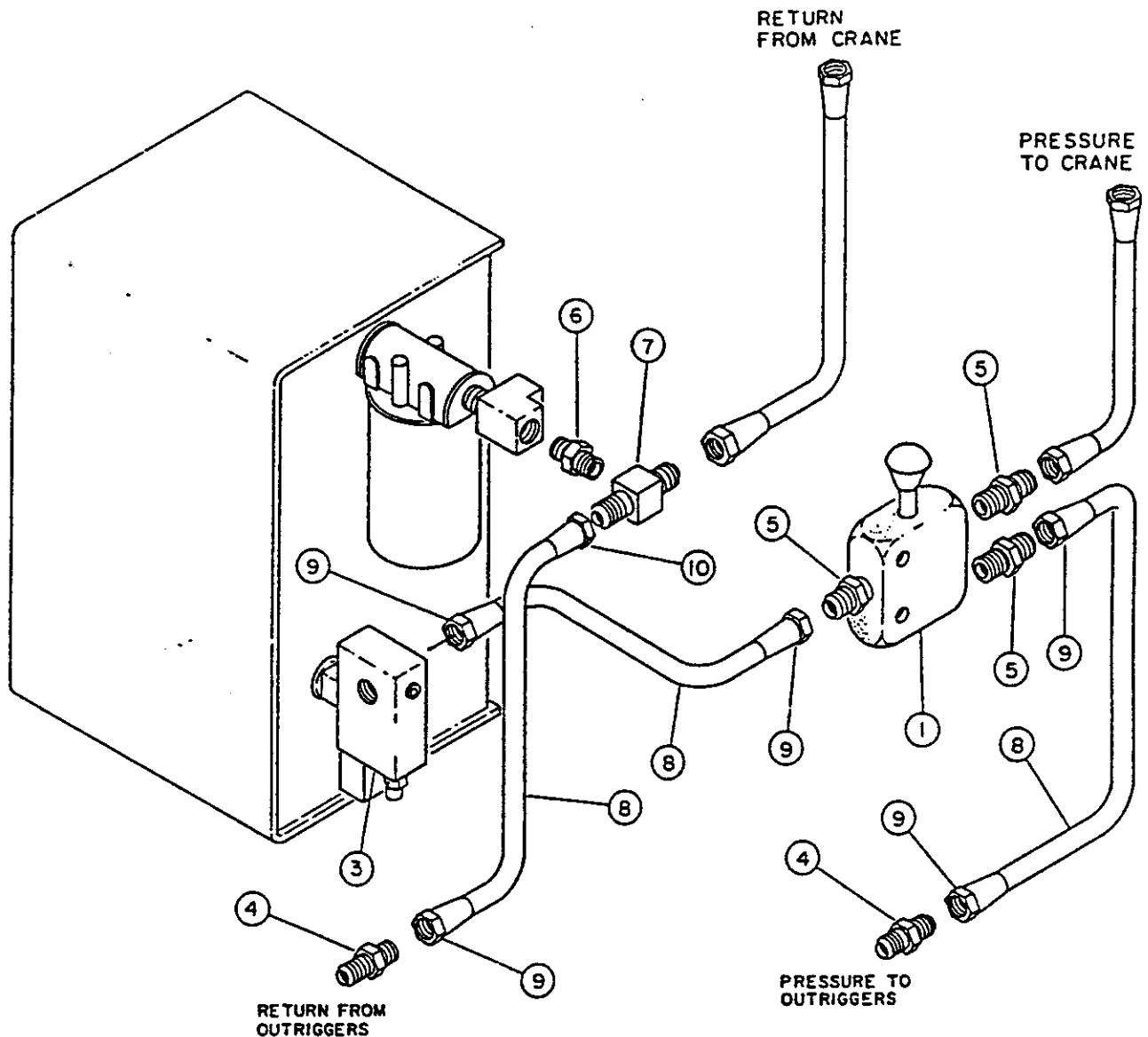
AW-073. OUTRIGGER VALVE (PART NO. 480230)

OUTRIGGER VALVE, AW-073

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	480230-001	KNOB
2	1	480230-002	LEVER ASS'Y
3	1	480230-003	BOOT
4	1	480230-004	HOUSING, ASS'Y
5	1	480230-005	BOLT KIT (4 SOC. HD. SCREWS #10 - 24 X 7/8)
6	1	480230-006	KNOB
7	1	480230-007	BOLT KIT(4, SOC. HD. SCREWS #10 - 24 X 2" LG)
8	1	480230-008	LEVER ASS'Y



		ITEM	D/S	PART NO.	DESCRIPTION	
QUANTITY		LIST OF MATERIAL				
UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE IN INCHES. TOLERANCES UNLESS OTHERWISE SPECIFIED		DRAWN BY R. P.		AUTO CRANE COMPANY		
ANGLES : 3°		DATE 7/16/80				
FRACTIONAL : 1/16		CHK'D BY		TITLE HYDRAULIC SCHEMATIC 8005H WITH HYDRAULIC OUTRIGGERS		
REMOVE ALL BURNS AND SHARP EDGES DO NOT SCALE THIS DRAWING		DATE				
TOLERANCES NOT SHOWN ABOVE ARE PER ANSI Y14.5 1973		TND BY		SCALE 1" = 1'-0"		
		DATE				
THIS PRINT IS THE PROPERTY OF AUTO CRANE CO AND MUST NOT BE USED IN ANY MANNER DETRIMENTAL TO THEIR INTERESTS		WEIGHT		SIZE C		DRAWING NO AW-480170
NEXT ASSY						REVISION
						SHEET 2 OF 2



NOTES

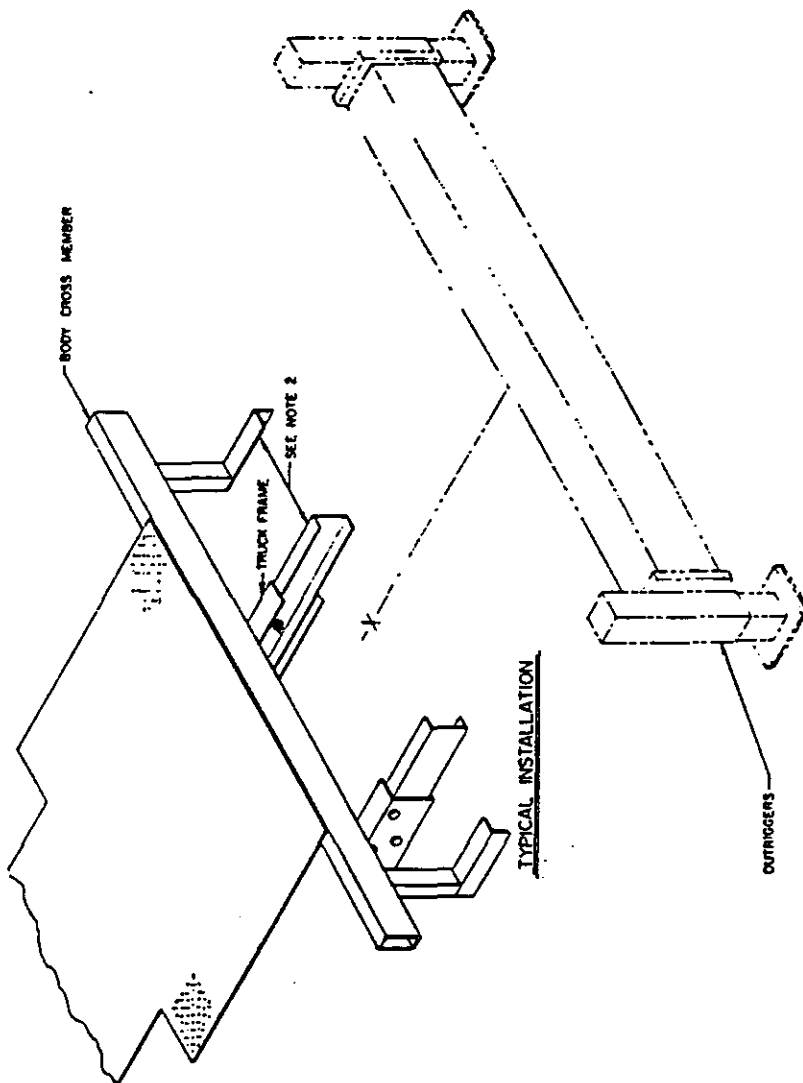
1. ITEMS 4 THROUGH 10 MAY BE PURCHASED AS A KIT WITH PART NUMBER 480234.

2. FOR ADDITIONAL INFORMATION, SEE AW-480150 AND 366212.

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	480236	SELECTOR VALVE
2	1	750271	DECAL, SELECTOR VALVE
3	1	REF.	DUMP VALVE ASS'Y
4	2	REF.	ADAPTER ST. -8 JIC / -8 JIC
5	3	REF.	ADAPTER ST. -8 NPT / -8 JIC
6	1	REF.	ADAPTER ST. -8 NPT / -12 NPT
7	1	REF.	TEE, -10 JIC RUN / -8 NPT FEM.
8	12'	REF.	HOSE, -8
9	5	REF.	HOSE FITTING, -8 JIC / -8 HOSE
10	1	REF.	HOSE FITTING, -8 JIC / -10 HOSE

OUTRIGGER INSTALLATION KIT

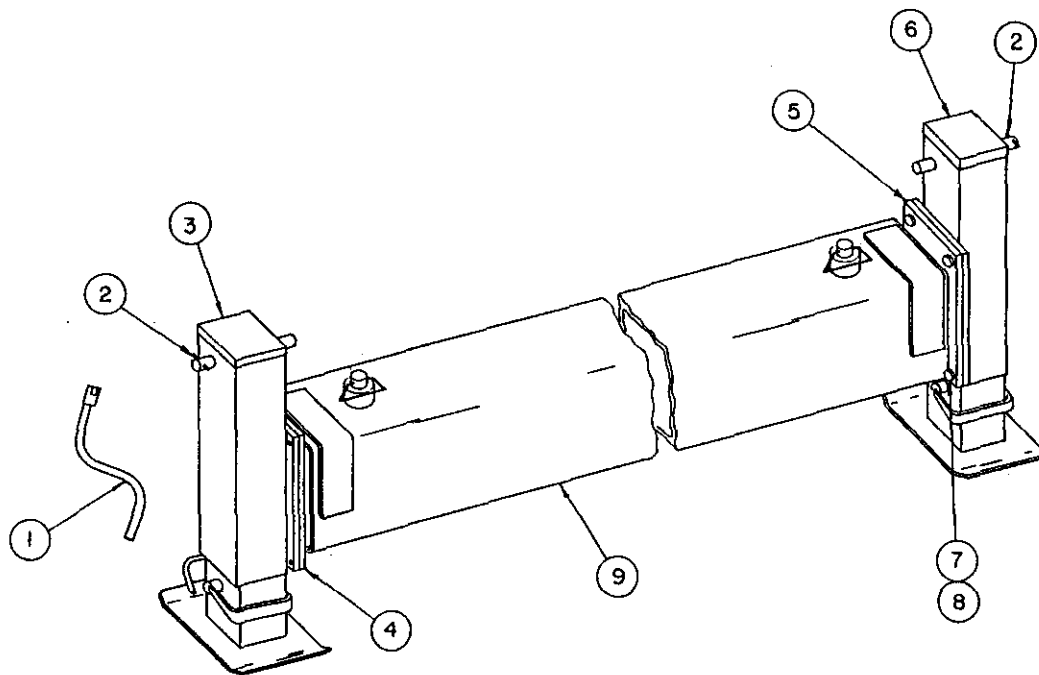
PART NO. 480235



- NOTES:
1. WELD MAIN CROSS TUBE TO FRAME EXTENSIONS AND CROSS MEMBER EXTENSIONS.
 2. CAUTION ON HYDRAULIC OUTRIGGERS (REF. PN-88070), POSITION SO THAT THE WELD OR BRACING DOES NOT INTERFERE WITH HYDRAULIC TUBING OR HOSE HOOD-UP.

QUANTITY		ITEM NO.	DESCRIPTION
LIST OF MATERIAL			
AUTO CRANE COMPANY			
INSTALLATION - OUTRIGGERS BOOM			
REV. 1			
REV. 2			
REV. 3			
REV. 4			
REV. 5			
REV. 6			
REV. 7			
REV. 8			
REV. 9			
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REV. 100			

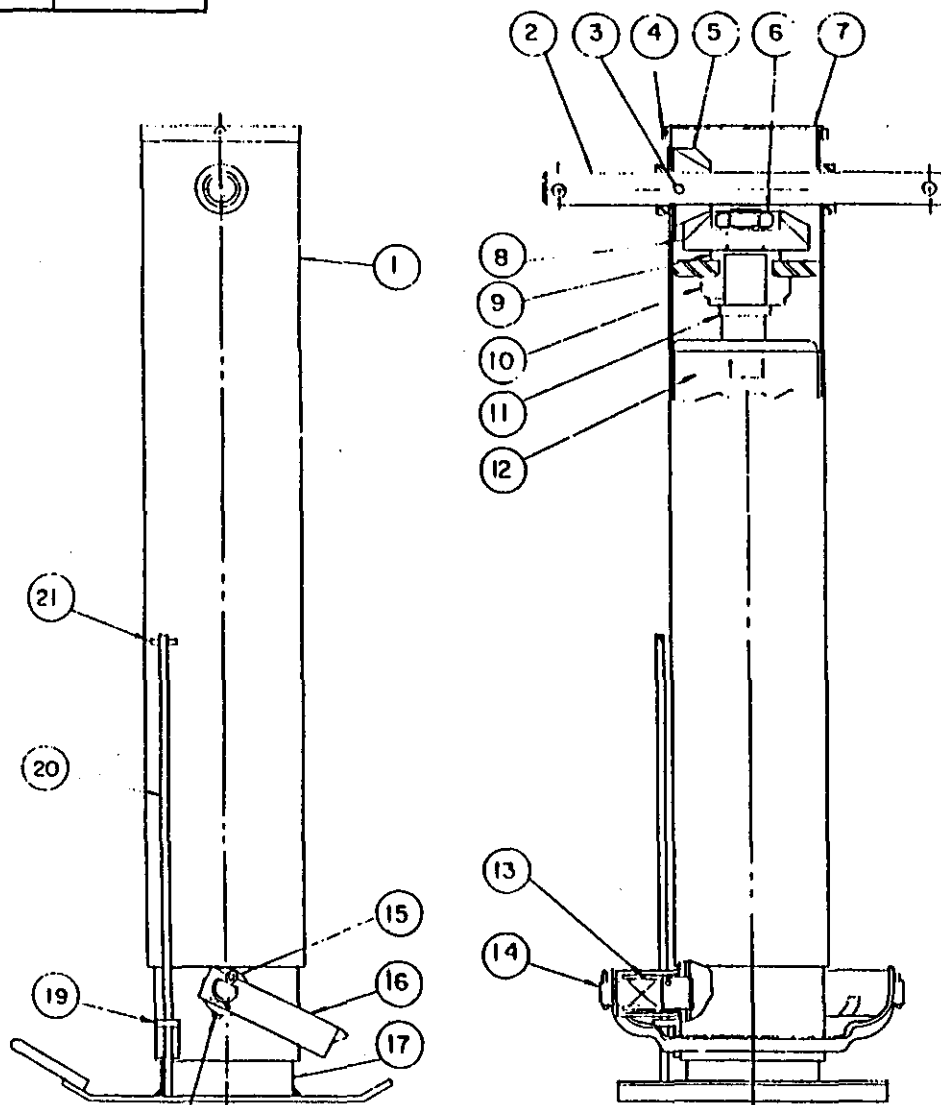
7-7.0.0



9	1		750891	MAIN CROSS TUBE ASS'Y
8	8		012203	SCREW, 5/8" NF X 1 1/4" LG.
7	8		023800	WASHER SP LK. 5/8"
6	1		480169	OUTRIGGER, RIGHT
5	1		750894	SLIDE, CURB SIDE
4	1		750893	SLIDE, STREET SIDE
3	1		480168	OUTRIGGER, LEFT
2	2		480162	ROLL PIN 3/8" X 2" LONG
1	1		480164	CRANK HANDLE
ITEM	QTY	D/S	PART NO.	DESCRIPTION

UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE IN INCHES. TOLERANCES UNLESS OTHERWISE SPECIFIED: ANGLES $\pm 1/2^\circ$ XX $\pm .040$ FRACTIONAL $\pm 1/16$ XXX $\pm .010$ REMOVE ALL BURRS AND SHARP EDGES. DO NOT SCALE THIS DRAWING. TOLERANCES NOT SHOWN ABOVE ARE PER ANSI Y14.5-1973		DRAWN BY <i>R.L.</i> DATE 8-16-88 CHK'D BY DATE ENG. BY DATE		AUTO CRANE COMPANY P.O. BOX 580697 • TULSA, OKLAHOMA 74158-0697 4707 NORTH MINGO ROAD • 918-536-0463	
		TITLE OUTRIGGER ASSEMBLY MANUAL		SCALE C SIZE C DRAWING NO. AW-480301 REVISION SHEET ____ OF ____	
THIS PRINT IS THE PROPERTY OF AUTO CRANE CO. AND MUST NOT BE USED IN ANY MANNER DETRIMENTAL TO THEIR INTERESTS.		NEXT ASS'Y		WEIGHT	

CHG	DESCRIPTION	DATE	APP'D
LTR	REVISIONS		



(18) - INSERT ROLL PIN
UNTIL FLUSH WITH
OUTSIDE OF TUBE.

1	21	A	A022701	ROLL PIN 3/16" X 3/4" LG.
1	20	A	480149	RETAINER ROD
1	19	A	480148	ANGLE, BRACKET
2	18	A	480287	ROLL PIN
1	17	A	480286	DROP LEG S/A
1	16	A	480285	SHOT PIN HANDLE
2	15	A	480284	COTTER PIN
2	14	A	480283	SHOT PIN
2	13	A	480282	COMP SPRING
1	12	A	480281	INNER LEG S/A
1	11	A	480280	SPECIAL WASHER
1	10	A	480279	THRUST BEARING
1	9	A	480278	BUSHING
1	8	A	480277	BEVEL GEAR
1	7	A	480276	COVER
1	6	A	480275	JAM NUT
1	5	A	480274	BEVEL PINION GEAR
2	4	A	480273	SELF TAPPING SCR.
1	3	A	480272	SPRAL PIN
1	2	A	480271	CRANK SHAFT
1	1	A	480270	OUTER LEG S/A

QUANTITY		ITEM	D/S	PART NO.	DESCRIPTION
UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE IN INCHES. TOLERANCES UNLESS OTHERWISE SPECIFIED:		AUTO CRANE COMPANY P.O. BOX 48548 • TULSA, OKLAHOMA 74165 8200 BROKEN ARROW EXPRESSWAY • 918 627-9435			
ANGLES: 1/2" X 2.40		OUTRIGGER, MANUAL TITLE _____ SCALE _____ SIZE C DRAWING NO. AW-480166 REVISION _____ WEIGHT _____ SHEET 2 OF 2			
FRACTIONAL: 1/16" X 2.010					
REMOVE ALL BURRS AND SHARP EDGES DO NOT SCALE THIS DRAWING.					
TOLERANCES NOT SHOWN ABOVE ARE PER ANSI Y14.5-1973					
THIS PRINT IS THE PROPERTY OF AUTO CRANE CO. AND MUST NOT BE USED IN ANY MANNER DETRIMENTAL TO THEIR INTERESTS.					

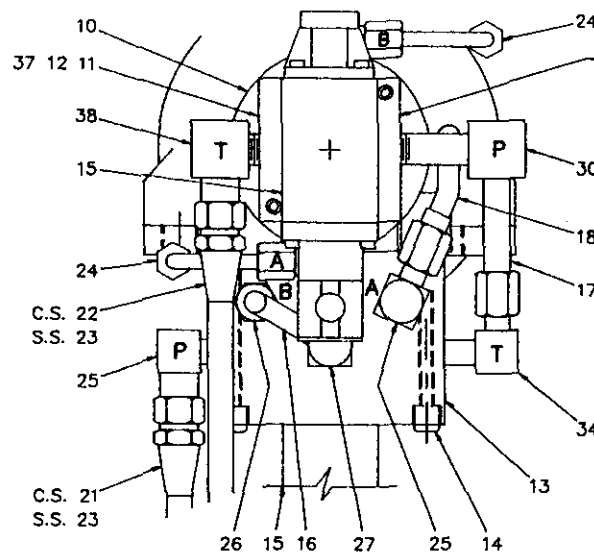
NOTES

NOTE: (VERTICAL CYLINDERS)

- (a) MANUAL VALVE LEVER-- PUSH DOWN TO EXTEND CYL.
(b) MANUAL VALVE LEVER-- PULL UP TO RETRACT CYL.

(HORIZONTAL CYLINDERS)

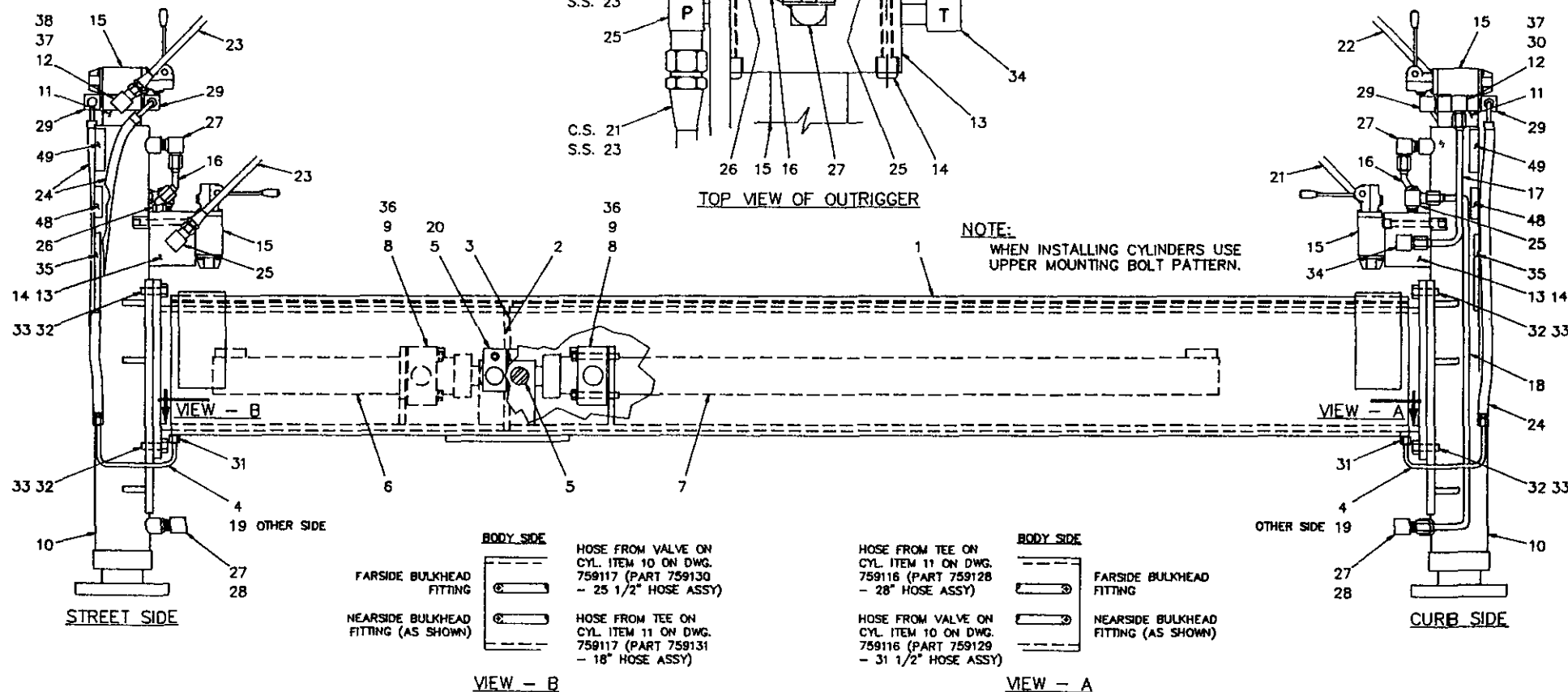
- (a) MANUAL VALVE LEVER-- PULL AWAY FROM BODY TO EXTEND CYL.
(b) MANUAL VALVE LEVER-- PUSH TOWARD BODY TO RETRACT CYL.



NOTE: BASE OF ITEM #11 TO BE WELDED TO TOP OF ITEM #10 w/ 3/16" FILLET - w/ MTG. HOLES IN THE ORIENTATION SHOWN

TOP VIEW OF OUTRIGGER

NOTE: WHEN INSTALLING CYLINDERS USE UPPER MOUNTING BOLT PATTERN.



7-9.0.0

R 5/94

**AW-759100
HYDRAULIC OUTRIGGER ASSEMBLY
(HYD. IN/OUT - UP/DOWN)**

GENERAL NOTES:

1. ALL OPEN PORTS TO BE CAPPED OR PLUGGED.
2. VERTICAL AND HORIZONTAL CYLINDERS TO BE PRESSURE CHECKED @ 2350 P.S.I.
3. SHOULD INSTALL HORIZ. SLIDES (759102 & 759103) AND ALL HYDRAULICS BEFORE INSTALLING VERTICAL HYD. (CYL.) LEGS.

HYDRAULIC OUTRIGGER ASSEMBLY AW-759100

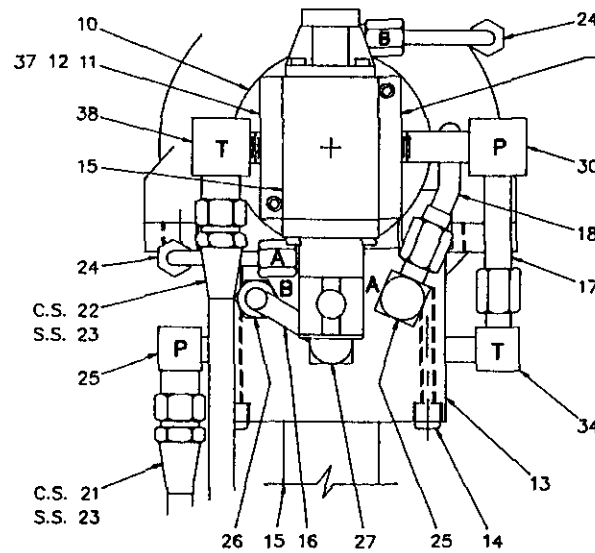
ITEM	QTY.	PART NO.	DESCRIPTION
1	1	759101	MAIN CROSS TUBE
2	1	759103	SLIDE (STREET SIDE)
3	1	759102	SLIDE (CURB SIDE)
4	2	759140	TUBE ASSEMBLY (LEG)
5	2	759112	ANCHOR PIN
6	1	759117	CYLINDER ASSEMBLY, HORIZONTAL (STREET SIDE)
7	1	759116	CYLINDER ASSEMBLY, HORIZONTAL (CURB SIDE)
8	4	759111	TRUNNION BLOCK
9	8	759132	SCREW, HEX HD. 3/8-16NC x 2 3/4 LG.
10	2	750892	CYLINDER, VERTICAL
11	2	759115	SPACER, MANIFOLD
12	2	759133	MANIFOLD BLOCK
13	2	480231	MANIFOLD, OUTRIGGER
14	4	003906	SCREW, SOC. HD. 5/16-18NC x 3 1/4 LG.
15	4	480230	VALVE, MANUAL OUTRIGGER
16	2	480221	TUBE ASSEMBLY (LEG)
17	2	759125	TUBE ASSEMBLY (LEG)
18	2	480220	TUBE ASSEMBLY (LEG)
19	2	759124	TUBE ASSEMBLY (LEG)
20	2	002608	SCREW, HEX HD. 1/4-20NC x 3/4 LG. SELF-TAPPING
21	1	750453	HOSE ASSEMBLY, OUTRIGGER PRESSURE (CURB SIDE)
22	1	759126	HOSE ASSEMBLY, OUTRIGGER TANK (CURB SIDE)
23	2	750452	HOSE ASSEMBLY, OUTRIGGER (STREET SIDE)
24	4	759127	HOSE ASSEMBLY
25	4	241175	ELL, 90° -6 ORB/-6 JIC
26	2	480195	ELL, 45° -6 ORB/-6 JIC
27	4	200892	ELL, 90° -6 NPT/-6 JIC
28	2	360048	ELL, 90° -6 NPT/-6 NPTF
29	4	330176	ELL, 90° -4 NPT/-4 JIC
30	2	759134	ELL, 90° LONG -4 NPT/-4 JIC
31	4	759135	ADAPTER, BULKHEAD -4 JIC/-4 JIC
32	8	012202	SCREW, HEX HD. 5/8-11NC x 1 1/4 LG.
33	8	023800	WASHER, SP. LK. 5/8
34	2	759137	ELL, 90° -6 ORB/-4 JIC
35	2	040581	DECAL, DANGER, STAND CLEAR
36	8	021100	WASHER, SP. LK. 3/8
37	4	005903	SCREW, SOC. HD. 1/4-20NC x 7/8 LG.
38	2	330273	ELL, 90° -4 NPT/-6 JIC
39	1	750456	TUBE ASSEMBLY
40	1	750454	TUBE ASSEMBLY
41	1	750455	TUBE ASSEMBLY
42	5	480232	CLAMP HALVES
43	5	480233	PLATE TWIN COVER
44	5	020600	WASHER, SP. LK. 5/16
45	5	016500	NUT, HEX 5/16-18NC
46	5	007805	SCREW, HEX HD. 5/16-18NC x 1 1/2 LG.
47	2	750451	HOSE ASSEMBLY
48	2	759017	DECAL, CAUTION
49	2	759016	DECAL, DANGER

NOTE: (VERTICAL CYLINDERS)

- (a) MANUAL VALVE LEVER- PUSH DOWN TO EXTEND CYL.
(b) MANUAL VALVE LEVER- PULL UP TO RETRACT CYL.

(HORIZONTAL CYLINDERS)

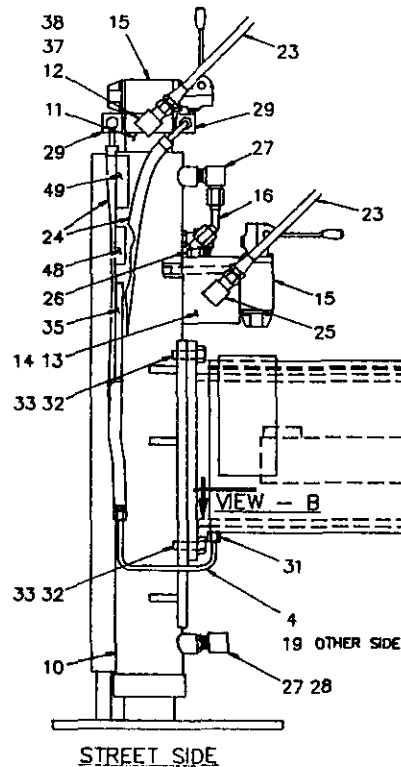
- (a) MANUAL VALVE LEVER- PULL AWAY FROM BODY TO EXTEND CYL.
(b) MANUAL VALVE LEVER- PUSH TOWARD BODY TO RETRACT CYL.



TOP VIEW OF OUTRIGGER

NOTE: BASE OF ITEM #11 TO BE WELDED TO TOP OF ITEM #10 w/ 3/16" FILLET - w/ MTG. HOLES IN THE ORIENTATION SHOWN

NOTE: WHEN INSTALLING CYLINDERS USE UPPER MOUNTING BOLT PATTERN.



STREET SIDE

BODY SIDE
FARSIDE BULKHEAD FITTING
NEARSIDE BULKHEAD FITTING (AS SHOWN)

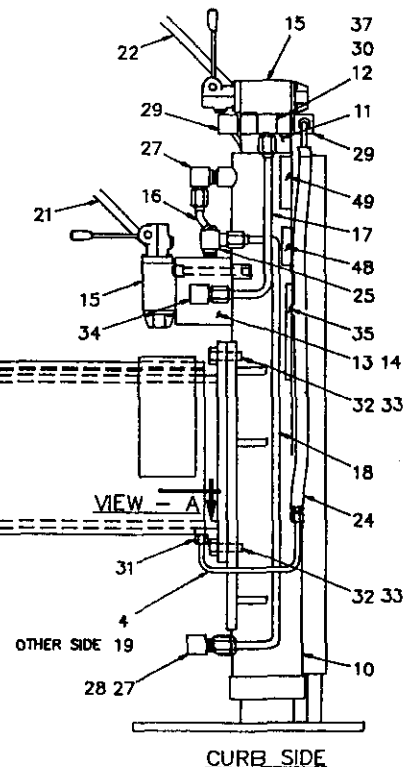
VIEW - B

HOSE FROM VALVE ON CYL. ITEM 10 ON DWG. 759117 (PART 759130 - 25 1/2" HOSE ASSY)
HOSE FROM TEE ON CYL. ITEM 11 ON DWG. 759117 (PART 759131 - 18" HOSE ASSY)

HOSE FROM TEE ON CYL. ITEM 11 ON DWG. 759116 (PART 759128 - 28" HOSE ASSY)
HOSE FROM VALVE ON CYL. ITEM 10 ON DWG. 759116 (PART 759129 - 31 1/2" HOSE ASSY)

BODY SIDE
FARSIDE BULKHEAD FITTING
NEARSIDE BULKHEAD FITTING (AS SHOWN)

VIEW - A



CURB SIDE

GENERAL NOTES:

1. ALL OPEN PORTS TO BE CAPPED OR PLUGGED.
2. VERTICAL AND HORIZONTAL CYLINDERS TO BE PRESSURE CHECKED @ 2350 P.S.I.
3. SHOULD INSTALL HORIZ. SLIDES (759102 & 759103) AND ALL HYDRAULICS BEFORE INSTALLING VERTICAL HYD. (CYL.) LEGS.

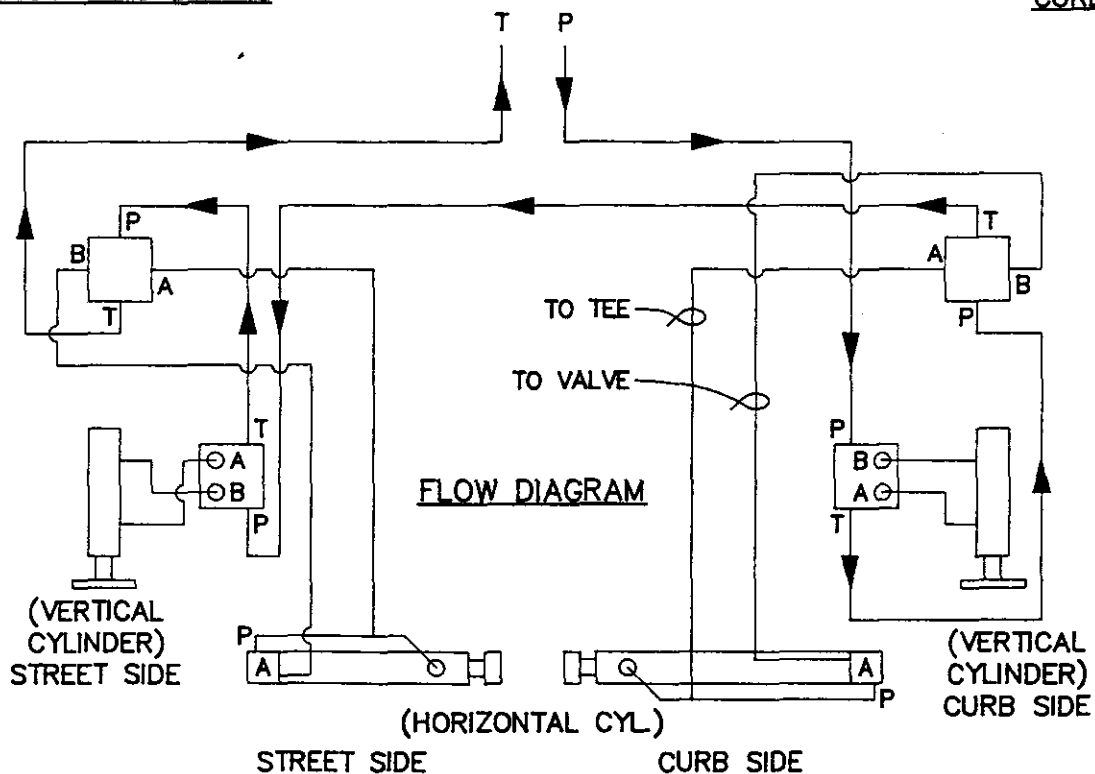
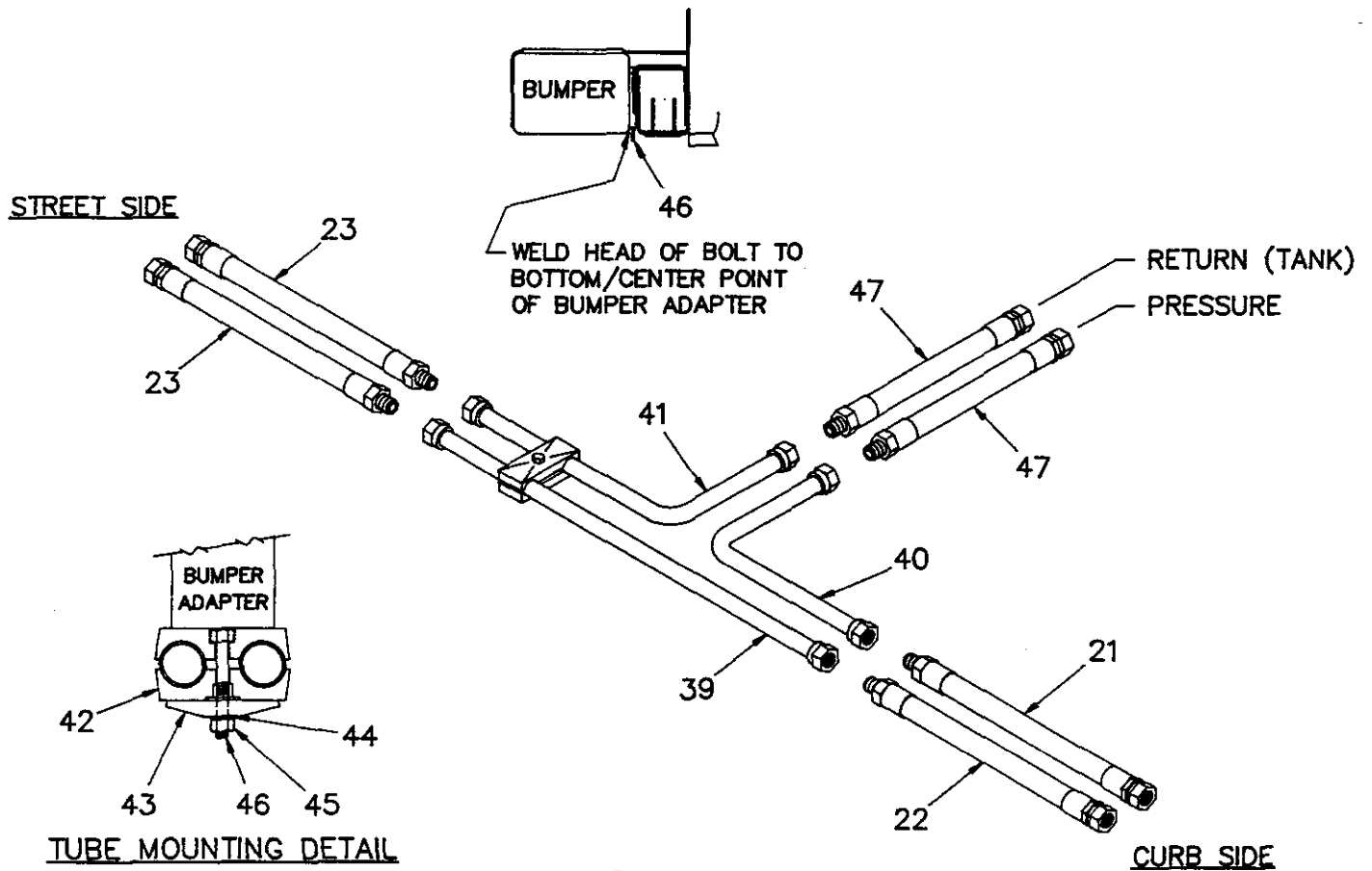
**AW-759160
HYDRAULIC OUTRIGGER ASSEMBLY
(HYD. IN/OUT - UP/DOWN)**

7-9.2.0

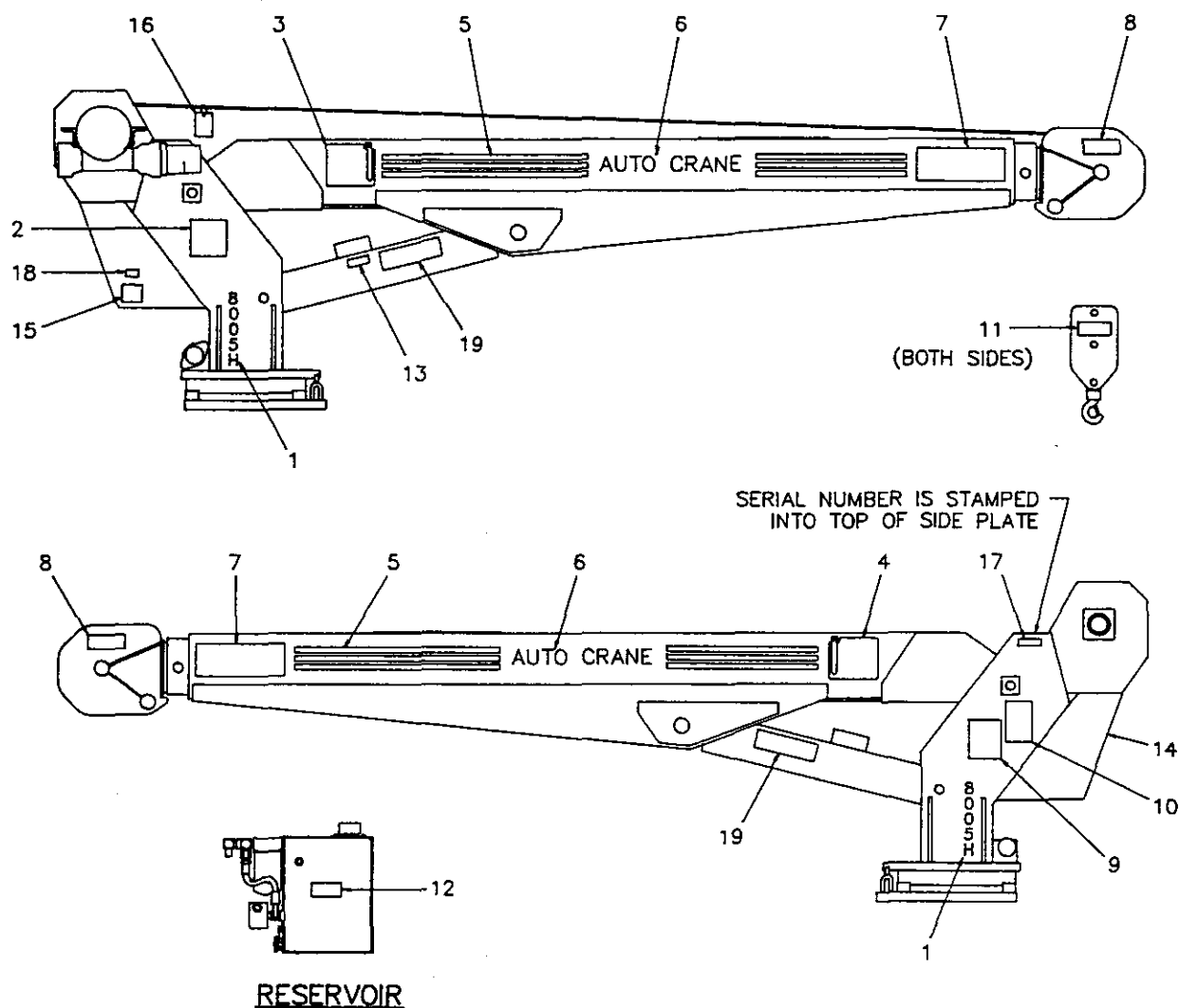
R 5/94

HYDRAULIC OUTRIGGER ASSEMBLY AW-759160

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	759101	MAIN CROSS TUBE
2	1	759103	SLIDE (STREET SIDE)
3	1	759102	SLIDE (CURB SIDE)
4	2	759140	TUBE ASSEMBLY (LEG)
5	2	759112	ANCHOR PIN
6	1	759117	CYLINDER ASSEMBLY, HORIZONTAL (STREET SIDE)
7	1	759116	CYLINDER ASSEMBLY, HORIZONTAL (CURB SIDE)
8	4	759111	TRUNNION BLOCK
9	8	759132	SCREW, HEX HD. 3/8-16NC x 2 3/4 LG.
10	2	759161	CYLINDER, VERTICAL
11	2	759115	SPACER, MANIFOLD
12	2	759133	MANIFOLD BLOCK
13	2	480231	MANIFOLD, OUTRIGGER
14	4	003906	SCREW, SOC. HD. 5/16-18NC x 3 1/4 LG.
15	4	480230	VALVE, MANUAL OUTRIGGER
16	2	480221	TUBE ASSEMBLY (LEG)
17	2	759125	TUBE ASSEMBLY (LEG)
18	2	480220	TUBE ASSEMBLY (LEG)
19	2	759124	TUBE ASSEMBLY (LEG)
20	2	002608	SCREW, HEX HD. 1/4-20NC x 3/4 LG. SELF-TAPPING
21	1	750453	HOSE ASSEMBLY, OUTRIGGER PRESSURE (CURB SIDE)
22	1	759126	HOSE ASSEMBLY, OUTRIGGER TANK (CURB SIDE)
23	2	750452	HOSE ASSEMBLY, OUTRIGGER (STREET SIDE)
24	4	759127	HOSE ASSEMBLY
25	4	241175	ELL, 90° -6 ORB/-6 JIC
26	2	480195	ELL, 45° -6 ORB/-6 JIC
27	4	200892	ELL, 90° -6 NPT/-6 JIC
28	2	360048	ELL, 90° -6 NPT/-6 NPTF
29	4	330176	ELL, 90° -4 NPT/-4 JIC
30	2	759134	ELL, 90° LONG -4 NPT/-4 JIC
31	4	759135	ADAPTER, BULKHEAD -4 JIC/-4 JIC
32	8	012202	SCREW, HEX HD. 5/8-11NC x 1 1/4 LG.
33	8	023800	WASHER, SP. LK. 5/8
34	2	759137	ELL, 90° -6 ORB/-4 JIC
35	2	040581	DECAL, DANGER, STAND CLEAR
36	8	021100	WASHER, SP. LK. 3/8
37	4	005903	SCREW, SOC. HD. 1/4-20NC x 7/8 LG.
38	2	330273	ELL, 90° -4 NPT/-6 JIC
39	1	750456	TUBE ASSEMBLY
40	1	750454	TUBE ASSEMBLY
41	1	750455	TUBE ASSEMBLY
42	5	480232	CLAMP HALVES
43	5	480233	PLATE TWIN COVER
44	5	020600	WASHER, SP. LK. 5/16
45	5	016500	NUT, HEX 5/16-18NC
46	5	007805	SCREW, HEX HD. 5/16-18NC x 1 1/2 LG.
47	2	750451	HOSE ASSEMBLY
48	2	759017	DECAL, CAUTION
49	2	759016	DECAL, DANGER



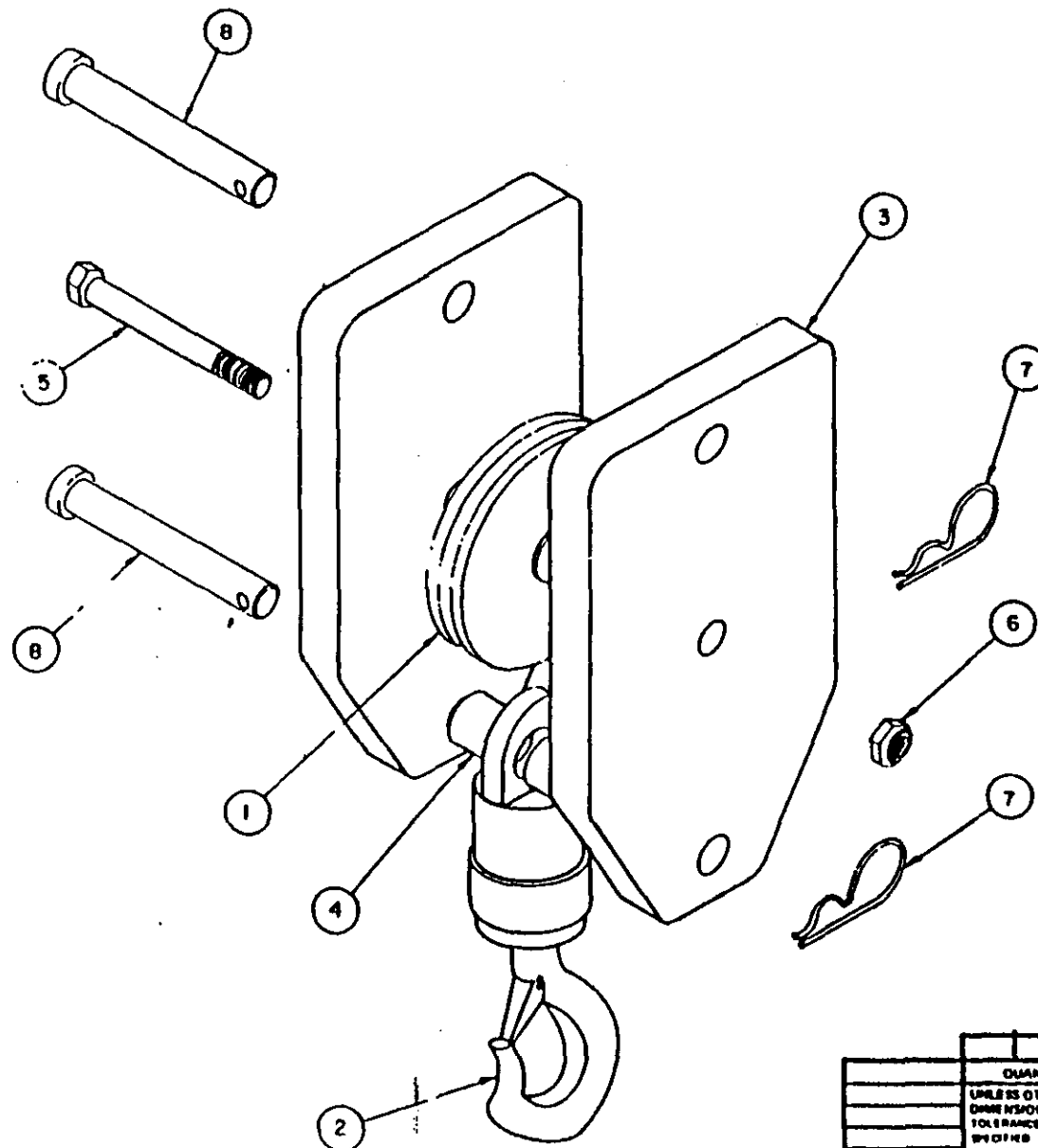
AW-759100 & 759160
HYDRAULIC OUTRIGGER ASSEMBLY
(HYD. IN/OUT - UP/DOWN)



ITEM	QTY.	PART NO.	DESCRIPTION	ITEM	QTY.	PART NO.	DESCRIPTION
1	2	480034	DECAL, 8005H	11	2	040518	DECAL, STAY CLEAR OF LOAD
2	1	480010	LOAD CHART	12	1	040634	CAUTION, 8 GPM
3	1	480038	DECAL, ANGLE INDICATOR, RIGHT	13	1	040587	DECAL, LOAD SENSOR
4	1	480039	DECAL, ANGLE INDICATOR, LEFT	14	1	360034	DECAL, LOGO
5	8'	040620	STRIPING	15	1	040632	WARNING, CYLINDER IN OPP.
6	2	040624	DECAL, AUTO CRANE	16	1	999944	INSTALLATION CHECKLIST
7	2	040529	DECAL, DANGER ELECTRIC	17	1	330622	DECAL, SERIAL NUMBER
8	2	040517	DECAL, STAY CLEAR OF BOOM	18	1	330633	DECAL, OPTI-FLOW
9	1	040580	DECAL, MUST NOT...	19	2	040519	DECAL, DANGER, SCISSOR POINT...
10	1	040579	DECAL, WORK RULES				

AW-480021
DECAL LAYOUT, 8005H

8-4.0.0



NOTE:
ITEM 1, BEARING P/N 240234

8	2	B	360605	PIN, BLOCK
7	2	A	360124	PIN, HITCH
6	1	A	017800	NUT, HEX-LOCK 1/2 - 20
5	1	A	006801	SCREW, HEX - HD 1/2 - 20 X 4" LG.
4	1	A	240237	SPACER, BUSHING 1" O.D.
3	2	C	360601	BLOCK SIDE PLATE
2	1	A	480028	HOOK, SWIVEL
1	1	B	480130	SHEAVE ASSEMBLY

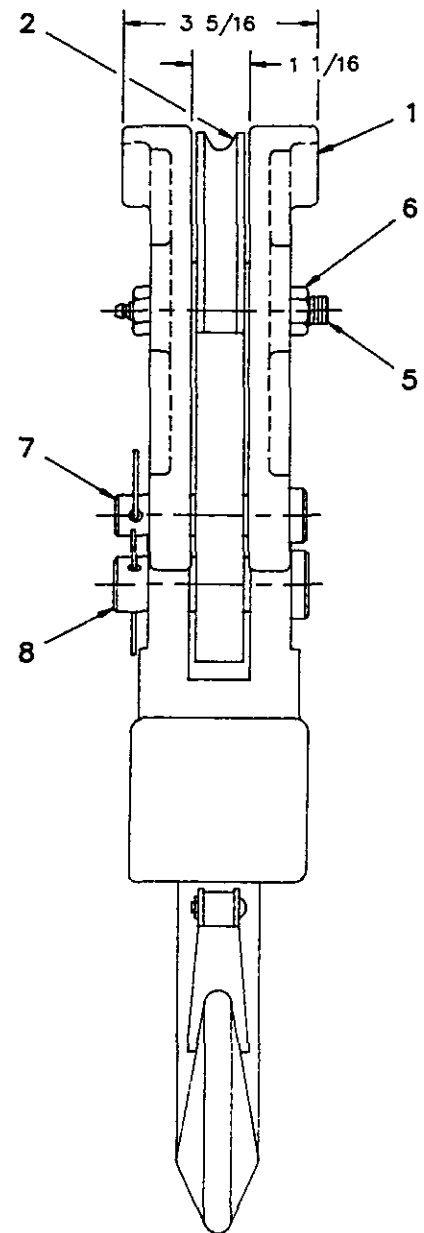
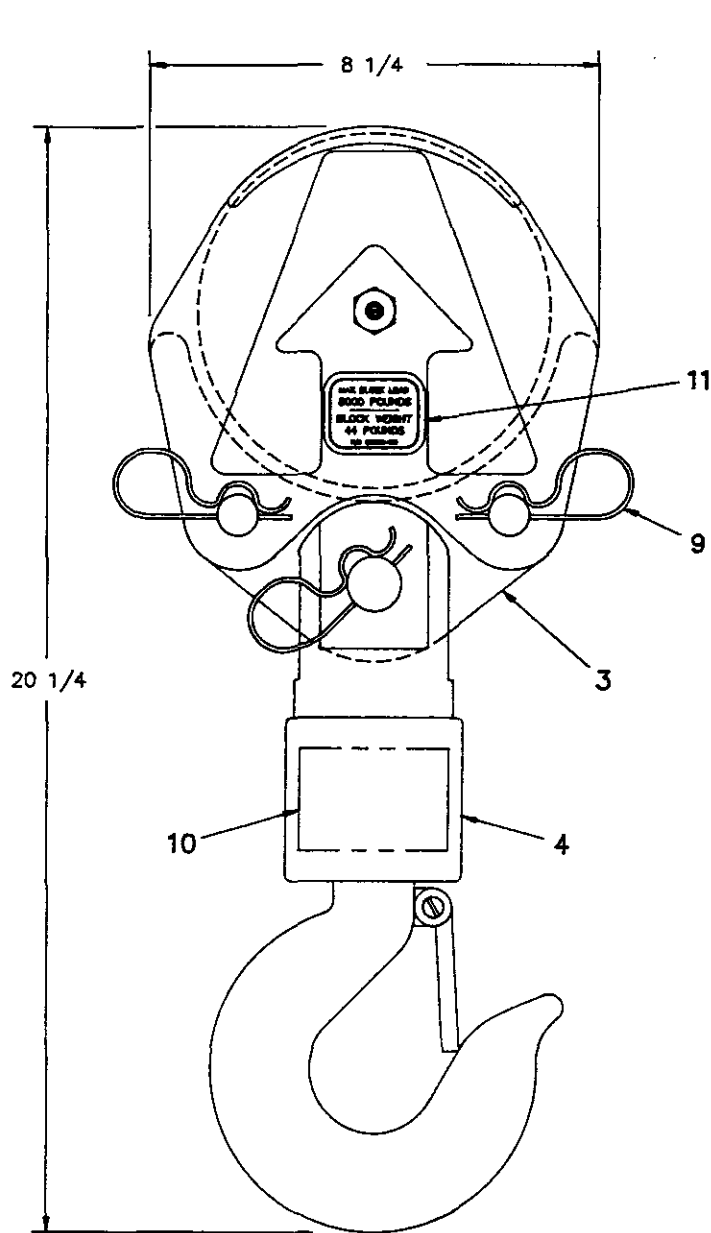
QUANTITY		ITEM	D/S	PART NO	DESCRIPTION
UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE IN INCHES. TOLERANCES UNLESS OTHERWISE SPECIFIED ARE: FRACTIONAL: 1/16 DEC: .001 FRACTIONAL: 1/16 DEC: .010 REMOVE ALL BURRS AND SHARP EDGES DO NOT SCALE THIS DRAWING TOLERANCES NOT SHOWN ABOVE ARE PER ANSI Y14.5-1973 THIS PRINT IS THE PROPERTY OF AUTO CRANE CO. AND MUST NOT BE USED IN ANY MANNER OR IN REPRODUCTION WITHOUT THE WRITTEN CONSENT OF THEIR REPRESENTATIVE					
DRAWN BY		DATE			
CHECKED BY		DATE			
DATE		SCALE			
DATE		SIZE			
DATE		DRAWING NO			
DATE		REVISION			
DATE		WEIGHT			
DATE		SHEET			

AUTO CRANE COMPANY

TRAVELING BLOCK ASSEMBLY
8005H

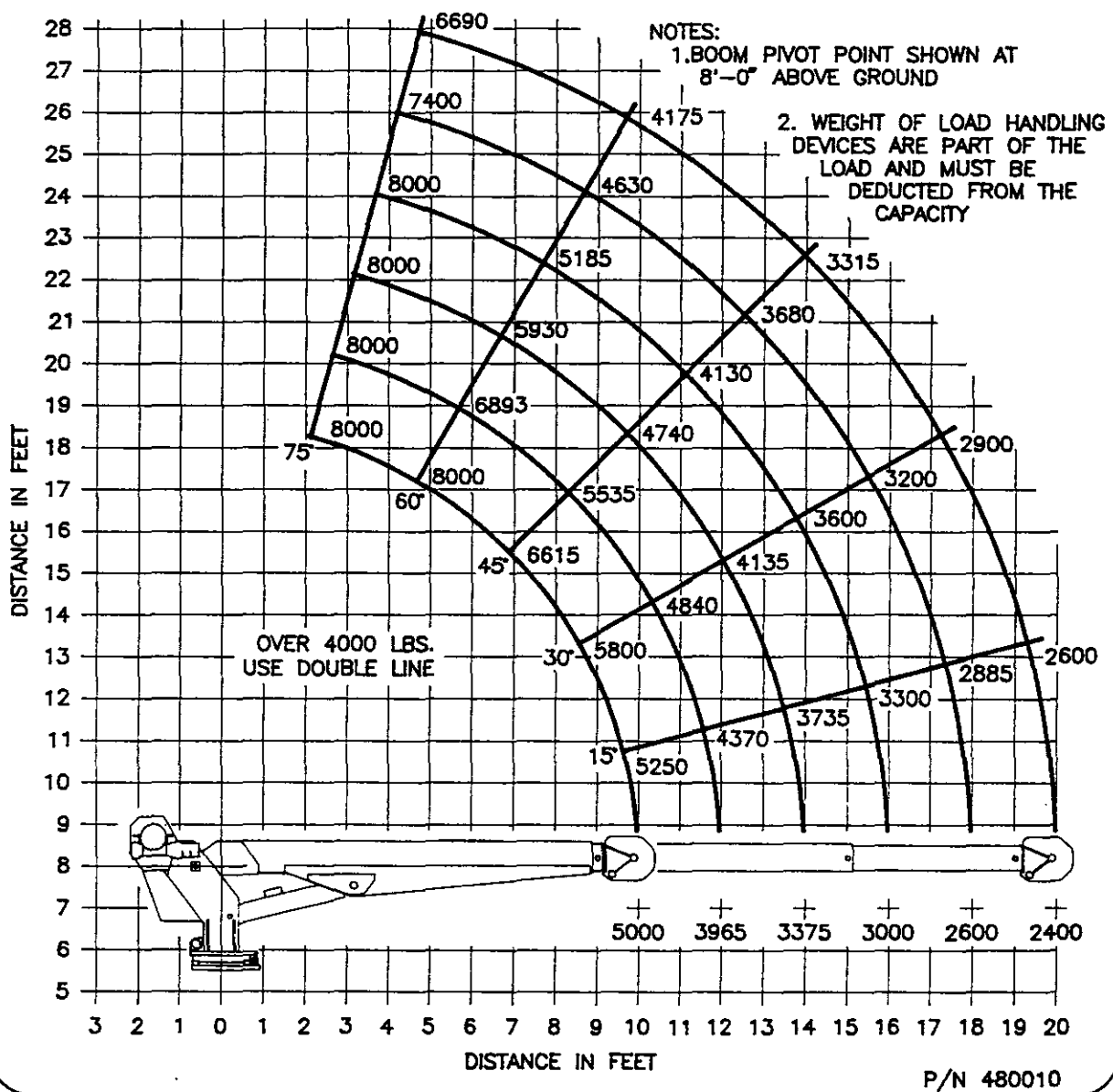
SCALE ~ SIZE C DRAWING NO AW-360603 REVISION

3/89



ITEM	QTY	P/N	DESCRIPTION	ITEM	QTY	P/N	DESCRIPTION
1	2	480362	SIDE PLATE (MACH.)	6	1	017800	NUT, HX LK 1/2-20NF
2	1	480130	SHEAVE ASSEMBLY	7	2	480367	PIN, BLOCK
3	1	480364	TACKLE, LOWER	8	1	480368	PIN, SWIVEL HOOK
4	1	480366	HOOK, SWIVEL - 6 TON	9	3	360124	PIN, HITCH (HAIR PIN)
5	1	480372	BOLT, SHEAVE w/ ZERK	10	1	040518	DECAL, DANGER
				11	2	480360-100	DECAL, MAX. LOAD

**AW-480360
TRAVELING BLOCK ASSEMBLY
8005H (SHORT)**





AUTO CRANE COMPANY

P. O. BOX 581510 • TULSA, OKLAHOMA 74158

Limited Warranty

Auto Crane will warranty to consumer for a period of twelve months from date of purchase that each new Auto Crane product it sells will be free under normal use and service, from defects in material and workmanship. Date of purchase will be honored as either date of purchase by distributor or his date of sale of the product as substantiated by Distributor Delivery Report.

Obligation of Auto Crane under this warranty is limited to replacement or repair of parts that appear to manufacturer after review and / or inspection to be defective. This warranty does not obligate Auto Crane to bear the cost of labor or transportation charges in connection with the replacement or repair of defective parts. Responsibility for customer's claims arising from misapplication, abuse, misuse or alteration of equipment or parts lies with the distributor or user and no warranty obligation is assumed in the circumstances by Auto Crane.

Auto Crane will in no event be liable for any consequential damages or contingent liabilities arising out of the failure of any Auto Crane product or parts to operate properly.

Auto Crane makes no warranty in respect to component accessories, same being subject to the warranties of their respective manufacturers.

If field service, at the request of buyer, is rendered and fault is found not to be with Auto Crane's product, the buyer shall pay the time and expense of the field representative. Claims for service labor or other expenses that have been incurred by the buyer without approval or authorization of Auto Crane will not be accepted.

AUTO CRANE COMPANY IS UNDER NO OBLIGATION TO EXTEND THIS WARRANTY TO ANY CUSTOMER FOR WHICH AN AUTO CRANE WARRANTY REGISTRATION CARD HAS NOT BEEN COMPLETED AND MAILED TO AUTO CRANE COMPANY WITHIN FIFTEEN (15) DAYS AFTER DATE OF PURCHASE.