EFFECTIVE SERIAL NO. _____

OWNERS MANUAL

5005EH

REVISION 4/94

PART NO. 999955

SERIAL NO. _____

AUTO CRANE COMPANY

PO BOX 580697, TULSA, OK 74158-0697

4707 N. MINGO ROAD, TULSA, OK 74117

PHONE (918) 836-0463, TELEX 158108 RAMSEY TUL

SALES FAX (918) 438-6688 SERVICE FAX (918) 834-5979

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.

5005EH – OWNER'S MANUAL

CONTENTS

--- 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.

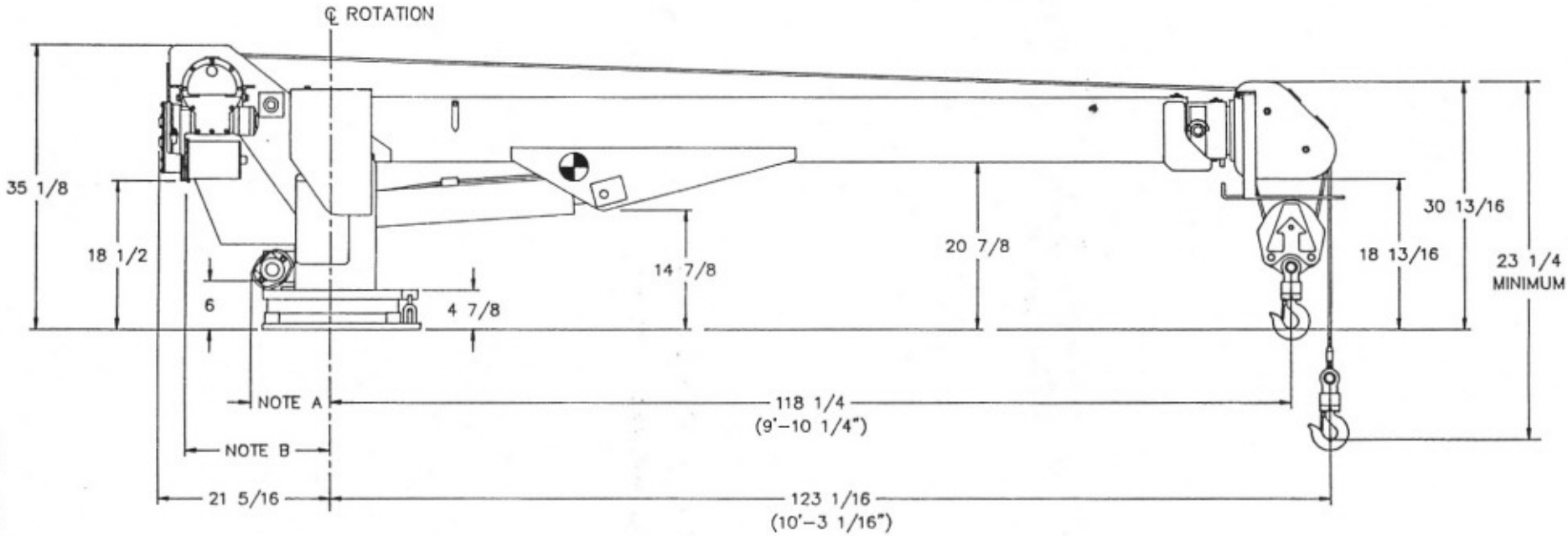
For hydraulic outriggers:

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:

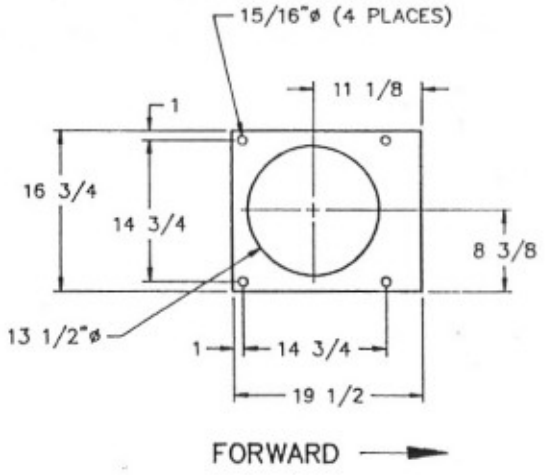
1. Pull lock pins to release jack leg or drop down outrigger and move to outermost lock position.
2. Make sure lock pins are reinstalled properly.
3. Lower outrigger pad to firm ground and adjust foot to take out slack.
4. Crane is now ready to operate.

REVISED 4/94



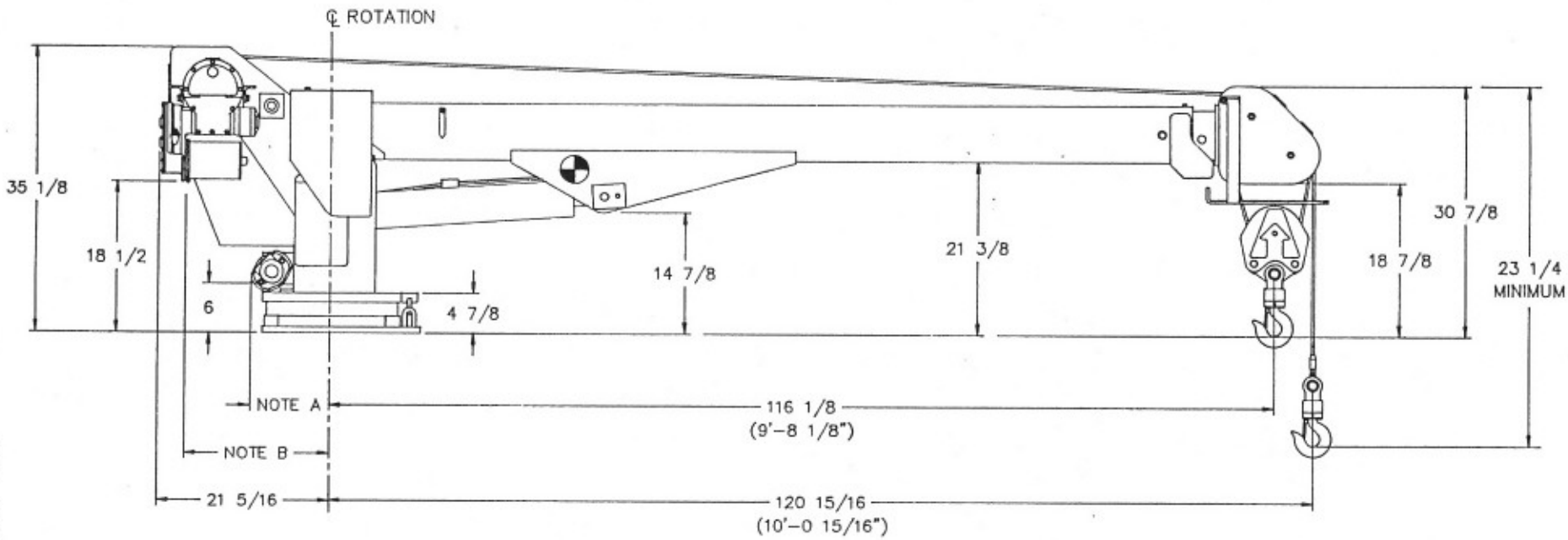
NOTES:

A. MAX TURNING RADIUS AT ROTATION MOTOR = 14 1/2"
B. MAX TURNING RADIUS AT HOIST ACTUATOR = 22 1/2"



SPECIFICATIONS:

LENGTH = 12'-2"
WIDTH = 22 1/2"
HEIGHT = 35 1/8"
BOOM LENGTH = 10'-3 1/16" (SINGLE LINE, RETRACTED)
BOOM EXTENSION
POWER - 6'
MANUAL - 4'
TOTAL - 10'
CRANE WEIGHT = APPROX. 1337 LBS.
POWER SOURCE = 24 VOLT DC W/ HYD POWER UNIT
REMOTE MOUNTED VOLTAGE SWITCHING UNIT AND PENDANT CONNECTION BOX
370° ROTATION
HYD RELIEF SETTING = 2200 PSI
MAX AMP DRAW FOR HOIST = APPROX. 95 AMPS
MAX AMP DRAW FOR HYD° UNIT = APPROX. 120 AMPS



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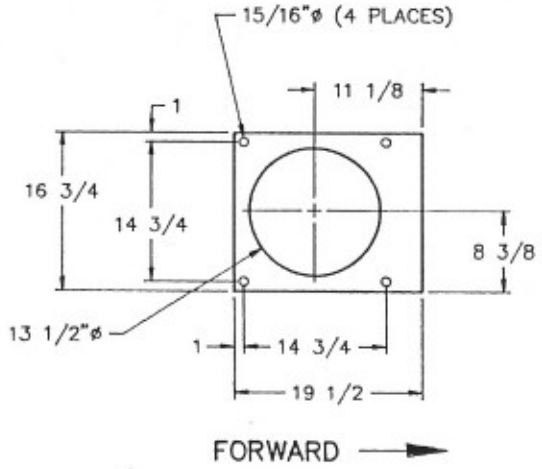
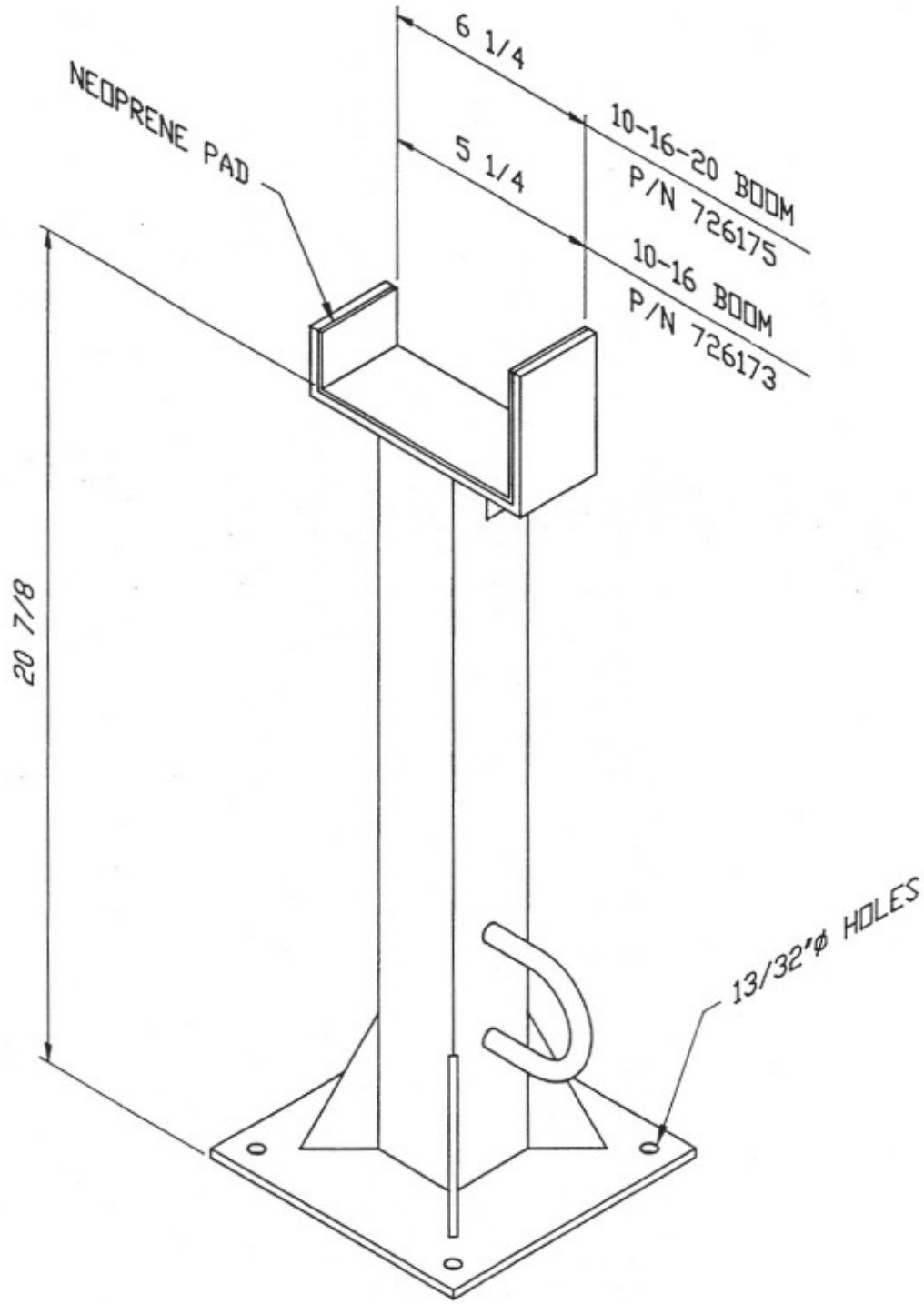


SPECIFICATIONS:

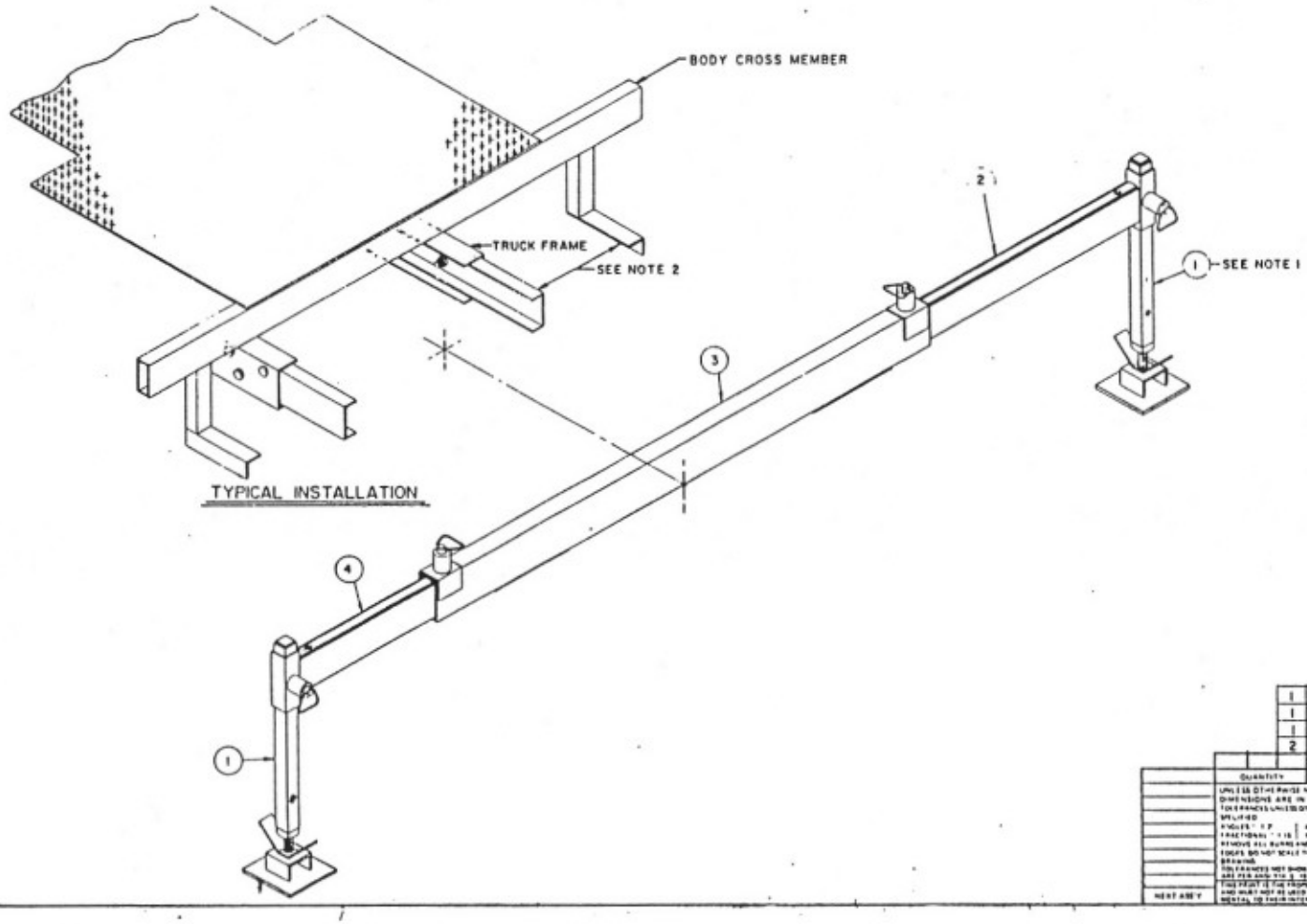
LENGTH = 12'-0"
WIDTH = 22 1/2"
HEIGHT = 35 1/8"
BOOM LENGTH = 10'-0 15/16"" (SINGLE LINE, RETRACTED)
BOOM EXTENSION = 6' POWER
CRANE WEIGHT = APPROX. 1200 LBS.
POWER SOURCE = 24 VOLT DC W/ HYD POWER UNIT
REMOTE MOUNTED VOLTAGE SWITCHING UNIT AND PENDANT CONNECTION BOX
370° ROTATION
HYD RELIEF SETTING = 2200 PSI
MAX AMP DRAW FOR HOIST = APPROX. 95 AMPS
MAX AMP DRAW FOR HYD UNIT = APPROX. 120 AMPS



NOTE:

FOR 10–16–20 BOOM, ORDER AUTO CRANE P/N 726175
FOR 10–16 BOOM, ORDER AUTO CRANE P/N 726173

AW–359
5005H/EH BOOM SUPPORT



TYPICAL INSTALLATION

NOTES:

1. ADDITIONAL 3/4" HOLES MAY BE DRILLED IN THE LEG ASSEMBLIES FOR PROPER HEIGHTS. (DEPENDING ON INDIVIDUAL APPLICATIONS.)

2. WELD ITEM 3 TO FRAME EXTENSIONS AND CROSS MEMBER EXTENSIONS.

ITEM	QTY	D/S	PART NO	DESCRIPTION
1	4	C	360325	SOCKET / PULL PIN ASS'Y
1	3	C	360303-00	O.R. SOCKET / PULL PIN ASS'Y
1	2	C	360302	SOCKET / PULL PIN ASS'Y
2	1	C	360301	LEG ASS'Y

LIST OF MATERIAL

AUTO CRANE COMPANY

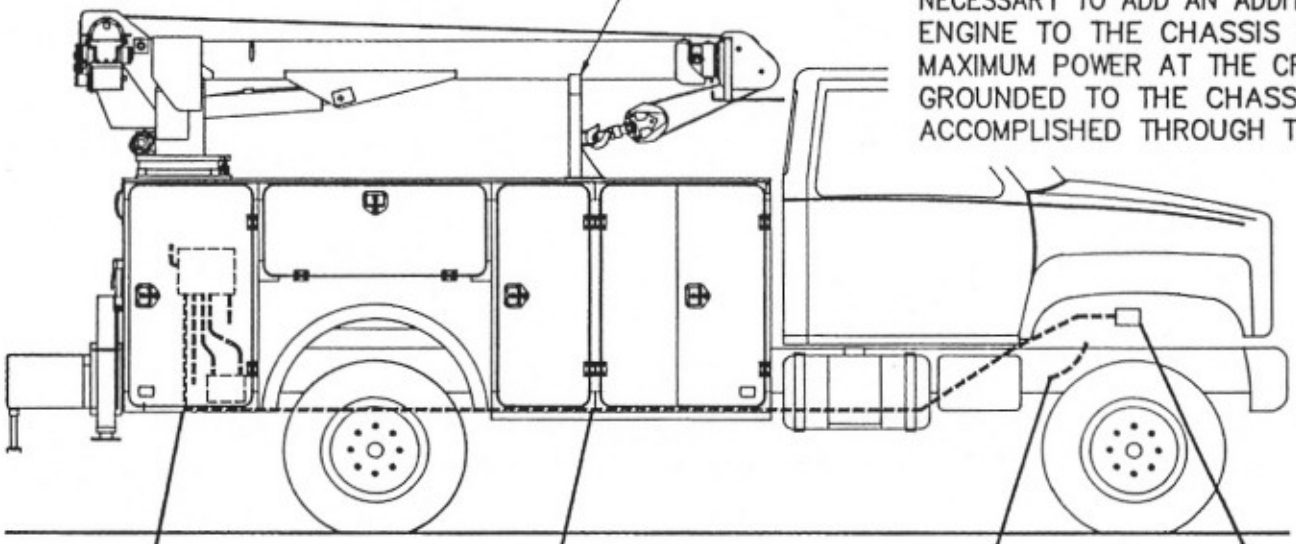
TITLE: STABILIZER ASSEMBLY

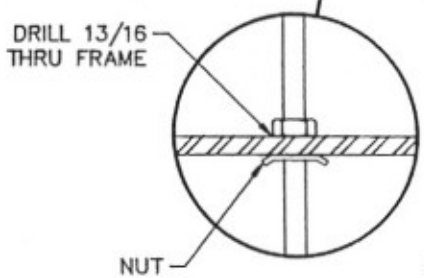
SCALE: 1/8 | SIZE: D | DRAWING NO.: AW-360300-001

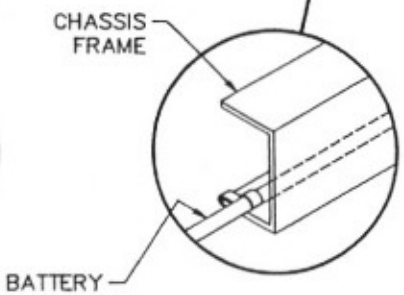
1. DRILL 13/16 DIAMETER HOLE IN COMPARTMENT FLOOR OR BACK WALL. INSTALL CABLE AND BUSHING (No.BB–50 FURNISHED ON CABLE) AS SHOWN. WRAP ELECTRICAL TAPE AROUND CABLE TO GIVE THE WIRE A SNUG FIT IN BUSHING.
2. RUN CABLE INSIDE CHASSIS FRAME TO STARTER SOLENOID BATTERY CONNECTION. LOCATE CABLE SO THAT IT WILL BE PROTECTED, AVOID SHARP EDGES. INSTALL THE NO.838 FRAME CLIPS TO HOLD CABLE SECURELY IN PLACE. IF SURPLUS CABLE EXISTS, THE CABLE CAN BE CUT OFF, AND EXTRA TERMINAL FURNISHED WITH CABLE INSTALLED.
3. REMOVE NUT ON SOLENOID BATTERY TERMINAL POST, INSTALL CRANE POWER CABLE, REPLACE NUT AND TIGHTEN.
4. IF THE BATTERY IS GROUNDED TO THE ENGINE, IT MAY BE NECESSARY TO ADD AN ADDITIONAL GROUND CABLE FROM THE ENGINE TO THE CHASSIS FRAME IN ORDER TO OBTAIN MAXIMUM POWER AT THE CRANE. THE CRANE SHOULD BE GROUNDED TO THE CHASSIS FRAME. THIS IS USUALLY ACCOMPLISHED THROUGH THE BODY MOUNTING BRACKET.

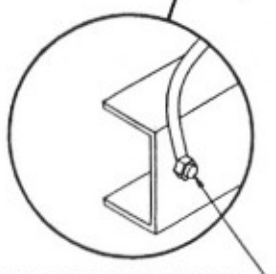
CAUTION:
BOOM MUST BE PROPERLY SECURED IN PLACE, ON A BOOM SUPPORT BRACKET, WHEN CRANE IS NOT IN USE. (TO PREVENT GEAR DAMAGE)

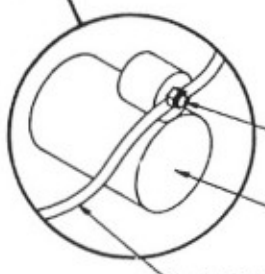
BOOM SUPPORT BRACKET
AUTO CRANE P/N 726175
FOR 10–16–20 BOOM,
AUTO CRANE P/N 726173
FOR 10–16 BOOM











AW–350
5005EH INSTALLATION

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 of 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, up to 5000 pound ratings, use 5/16 inch diameter galvanized preformed 7 x 19 aircraft cable which, when new, has a minimum strength of 9,800 pounds. It is recommended when 2500 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 3.9 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.

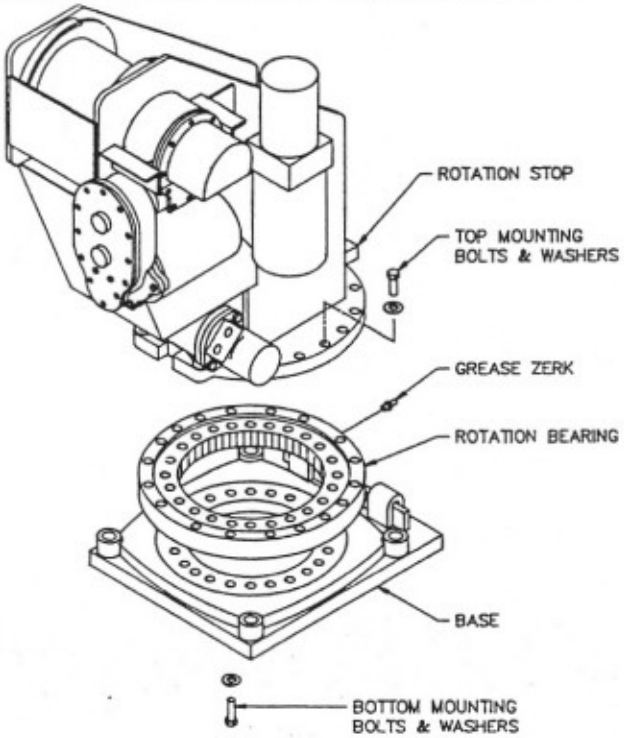
Items to look for while inspecting the cables are:

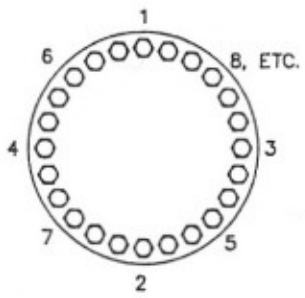
1. Broken strands
2. Kinks and flattened sections.
3. Corrosion and abrasion.

LUBRICATION & MAINTENANCE SCHEDULE 5005EH 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 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
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, SPUR GEAR SAE 30 OIL
HYDRAULIC FLUID					X	DRAIN, FLUSH, & REFILL WITH SUN 2105 HYD. OIL, SAE 5W-20.
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

REVISION 4/94





TORQUE SEQUENCE ILLUSTRATION

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 INTERMITTENLY.
   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

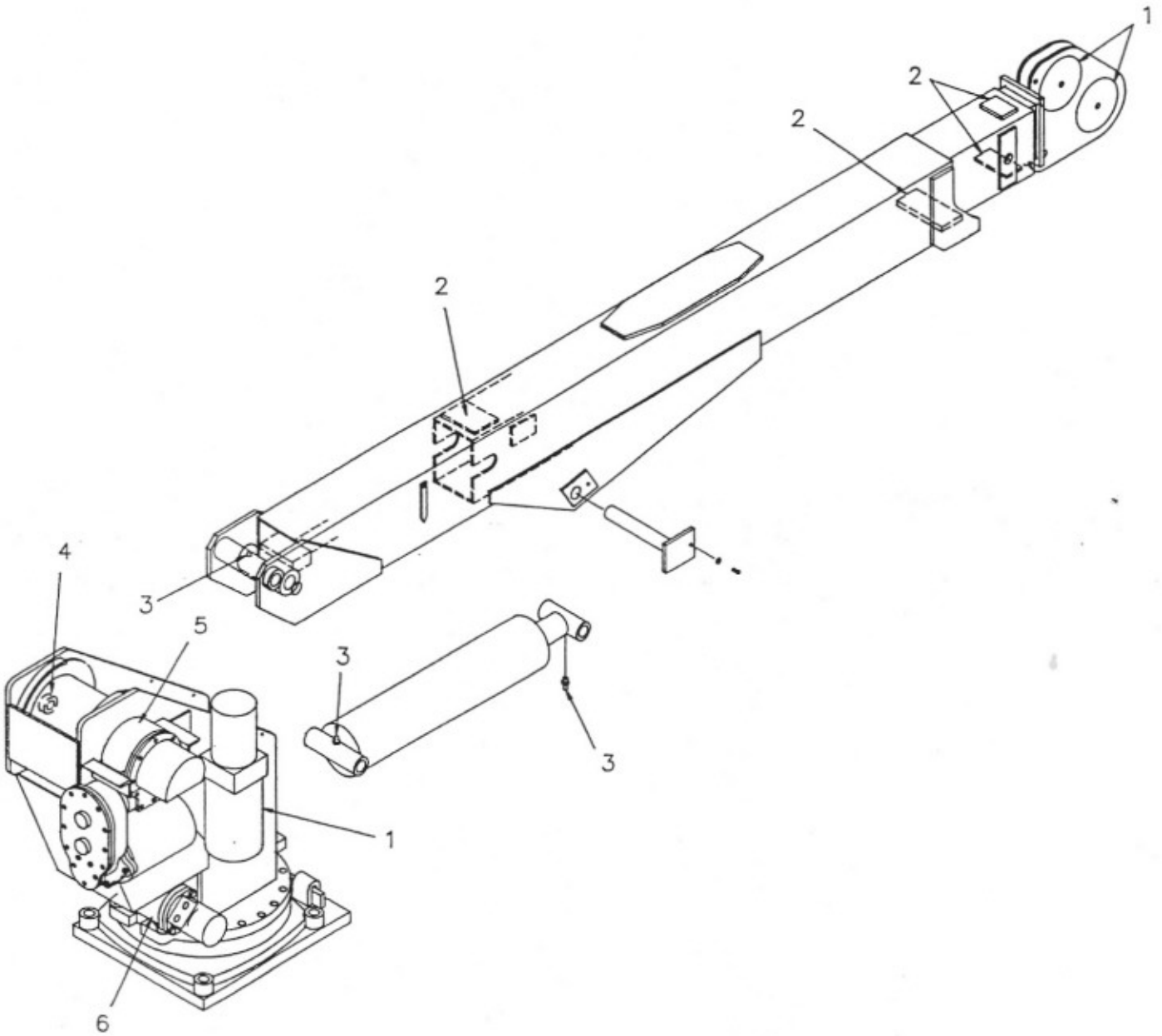
1. MAKE SURE MOUNTING SURFACES ARE FLAT AND CLEAR OF DEBRIS.
2. INSTALL BEARING SUCH THAT THE GREASE ZERK ON THE BEARING IS LOCATED DIRECTLY UNDER THE ROTATION STOP OF THE PEDESTAL.
3. INSTALL TOP AND BOTTOM BOLTS AND FLAT WASHERS. ALL BOLTS MUST BE GRADE 8 AND USED WITH HARDENED FLAT WASHERS. REFER 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–346
5005EH ROTATION BEARING MAINTENANCE



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. HYDRAULIC FLUID:
   USE DTE-13 OR EQUIVALENT. RESERVOIR SHOULD BE FLUSHED AND NEW FLUID ADDED ONCE A YEAR, OR IF A HYDRAULIC FAILURE OCCURS.

AW-347
5005EH LUBRICATION MAINTENANCE

MAINTENANCE OF BATTERIES

Batteries furnished with Auto Crane units for 24-volt or 12-24-volt operation, are required by law to be shipped without electrolyte. Be sure the electrolyte has been added before operating the unit.

Maintenance of Auto Crane unit batteries differs very little from the generally prescribed maintenance of any lead acid battery. All batteries must be kept properly charged; they must be kept properly filled with water; and they must be kept relatively clean.

Many things affect the proper charge to a battery, such as regulator settings, the proper tightness of belts on the alternator or generator, and good, clean connections of all cables and wires at the battery, regulator, starting motor, alternator or generator, and – most important – the ground connections. See Cable Instructions.

Keeping the battery as fully charged as possible without overcharging is of extreme importance, especially when vehicles are left outside for extended periods of time in extremely cold climates. A battery can freeze; freezing points for various specific gravities of acid are as follows:

Specific Gravity (Corrected to 80°F)	Freezing Temperature Degrees F.
1.280	-90°F
1.250	-62°F
1.200	-16°F
1.150	5°F
1.100	19°F

From the above, it is apparent that a half-charged battery (about 1.200 specific gravity) cannot stand for any length of time at -20°F or it will freeze.

The main reason for keeping the battery as fully charged as possible without overcharging, of course, is to assure that power is available even though the vehicle has been standing for some time.

The battery should be properly filled with water at all times. If the electrolyte level is allowed to fall below the top of the plates, the results become threefold: 1, the exposed portion of the plate will become sulfated; 2, the portion of the plate exposed is not usable; and 3, that portion of the acid remaining becomes more concentrated and may cause more rapid deterioration of the remaining parts of the battery.

The battery should be kept clean. Batteries filled with acid and which are not in use self-discharge to a limited degree because of the nature of the materials within the battery; but if dirt is allowed to collect on the top of the battery, and this dirt absorbs moisture, an electrical path can be set up between the various terminals of the battery of the ground. Once such a path has been established, the self-discharge of the battery is considerably accelerated. This also accelerates corrosion of the battery cables at the terminals.

Periodic Maintenance is Needed.

A definite program of periodic maintenance of all batteries should be conducted on a regular basis. Periodic maintenance includes checking belts for tightness on the charging equipment, checking battery electrolyte levels, checking cables for good connections, and cleaning where corrosion is apparent. When corrosion is cleaned off, the cable terminals and battery terminals should be coated with a light coating of petroleum jelly before they are replaced. When terminals are cleaned the top of the battery should be cleaned with a mild solution of soda water.

If the condition of the battery is in question, it should be removed from the vehicle, taken to the shop, and allowed to reach room temperature. It should then be recharged until specific gravity readings are unchanged over three readings taken at one-half intervals. If the specific gravity readings are fairly uniform, the battery should be checked with a high rate tester in accordance with instructions on the tester. A load test is the best test one can make on a battery.

If, after charging, it is noted that the specific gravity reading of one cell is 30 points less than any of the other cells, it may be assumed that that cell is bad and that the battery should be replaced. If all cells are uniform but not up to full charge, a low rate of charge should be attempted for an extended period of time. This usually will recover a badly sulfated battery.

If it necessary to replace a battery, and a dry charge battery is used, the following procedure applies:

1. Fill the battery with electrolyte of the proper specific gravity.

2. Place the battery on charge in accordance with instructions given by the manufacturer.

It is essential that the second step above be followed to assure that the battery going on the vehicle is fully charged.

It is also very important that the battery hold-downs be checked periodically to assure that the batteries are properly positioned to avoid vibration problems, breakage of cables, or terminal breakage. Care must be taken to avoid cracking or breaking containers or covers by tightening hold-down fixtures excessively, yet they must not be so loose that breakage results from a too loose hold-down.

Low maintenance batteries (such as the Delco "Freedom Battery") should not be used on Auto Cranes or trucks equipped with Auto Cranes. These batteries are not designed for "deep" discharge.

MINIMUM VOLTAGE AT CRANE BATTERY – 13.2V.
Check to make sure of ground between truck engine and frame. Manufacturers sometimes leave this off and ground only to cab of truck, which is mounted on rubber pads and does not conduct a good ground.

If bodies or beds are to be mounted on wooden strips (along top of frame), a ground strap must be routed from frame (truck) to the body (across the wooden strips). All of the above is important to assure good ground for the charging system of the unit, as well as proper installation of the Tweco bracket.

To keep your charging systems working correctly, do not jump start other equipment off of battery unit.

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 Figure 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, carefuly 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!

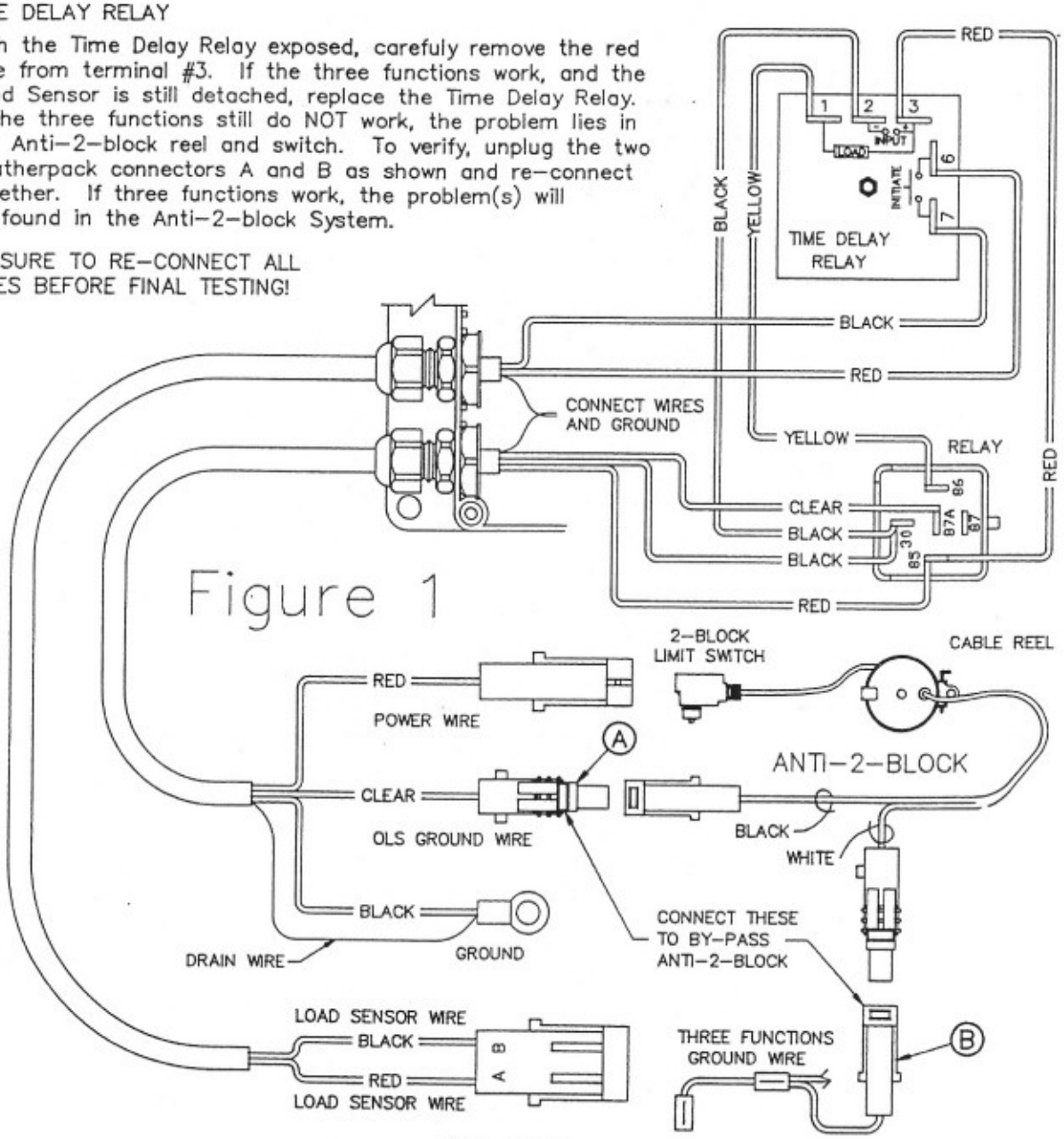


Figure 1

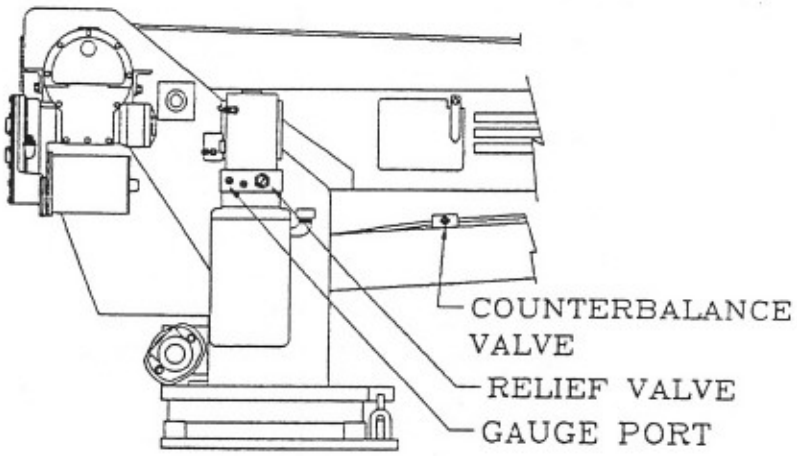
AW-360
OVERLOAD SYSTEM, ANTI 2-BLOCK TROUBLE SHOOTING GUIDE

Relief Valve Setting

- With crane boom supported, remove plug and insert 2500 PSI gauge (see diagram below). Remove boom support and operate boom retract to end of stroke (fully in). Continue operation of the boom in function and read relief pressure on gage. It should read 2200 PSI. If not, readjust system pressure. Leave gauge installed for counterbalance setting procedure.

requires adjustment. Repeat boom movement for each test.

- Loosen nut on adjustment screw and do one of the following:
  - To increase the CB valve setting, turn the adjustment screw ccw. Located on the front of CB valve block towards end of boom. Loosen nut and adjust Allen head screw.
  - To reduce the CB valve setting, turn the adjustment screw clockwise.



5005EH
RELIEF & COUNTERBALANCE VALVE
ADJUSTMENT

Notice:

- If system pressure meets or exceeds the overload pressure switch setting of 2350 PSI, the boom will **LOCK IN THE FULL UP POSITION.** See overload system information in this manual. System pressure well below 2200 PSI will limit the load lifting capabilities of the crane.

Counterbalance Valve Adjustment

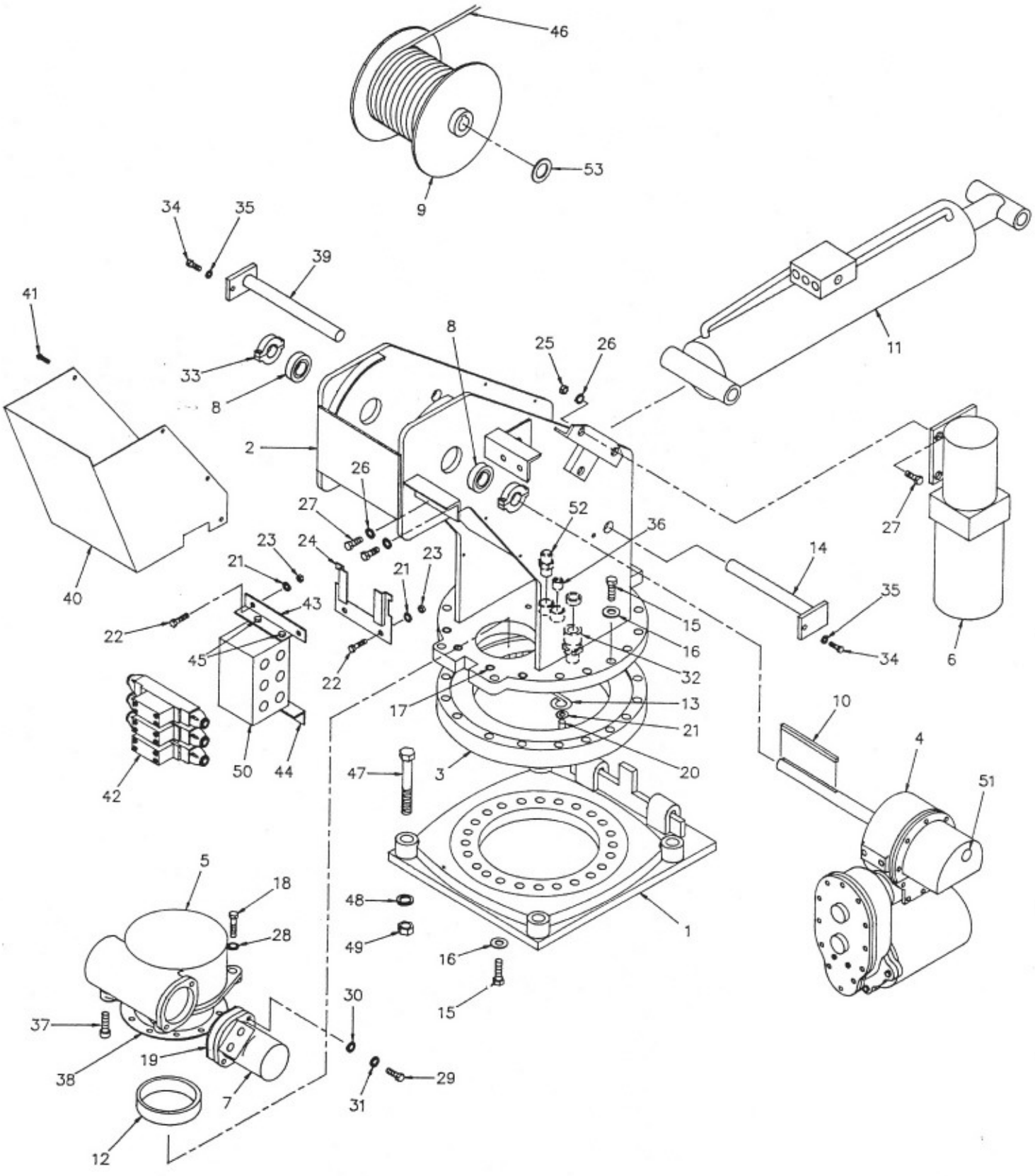
- With no load on boom, boom up to an angle of 60 degrees. Then Boom-Down and note pressure reading. If pressure reading is not approximately 1000 PSI, the counterbalance valve

- Tighten nut on adjustment screw and repeat pressure testing procedure if needed to obtain the proper pressure setting.
- Support the boom and remove the pressure gauge and re-install -6 plug. Crane is now ready for operation.

Emergency Lowering Procedure

In an emergency situation when it becomes necessary to lower the boom without flow present, the CB valve adjustment can be turned clockwise until the boom begins to descend. Be careful when turning adjustment! Turning too far will cause valve to NOT operate again!

NOTES

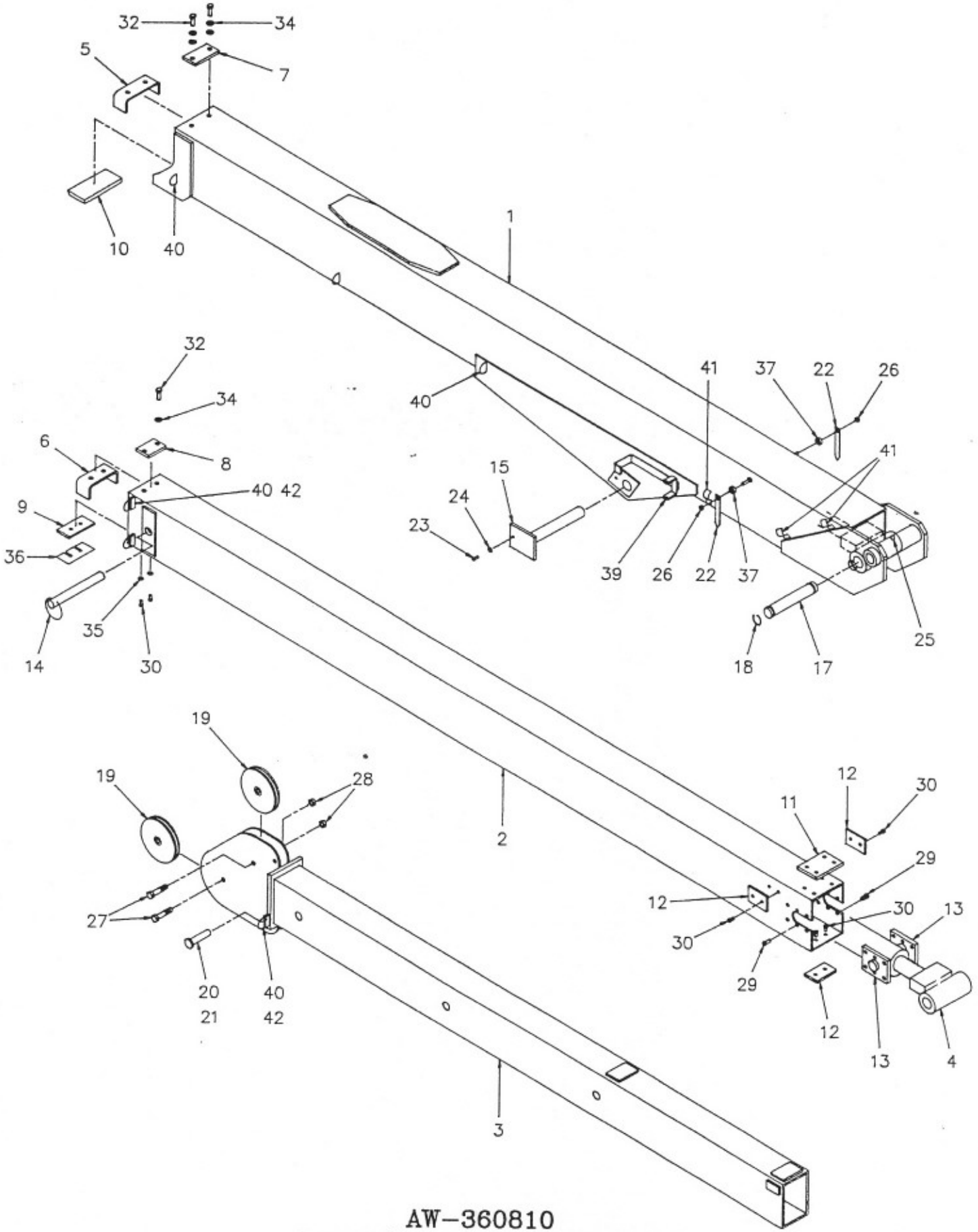


AW–360801
5005EH PEDESTAL ASSEMBLY

R 2/94

AW-360801, 5005EH PEDESTAL ASSEMBLY

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	360536	BASE PLATE ASSEMBLY
2	1	360825	PEDESTAL WELDMENT
3	1	480023-002	ROTATION BEARING
4	1	360807	WINCH, 24V
5	1	480028	ROTATION GEAR BOX
6	1	360808	POWER UNIT, (HYD. PUMP & RESERVOIR)
7	1	480027	MOTOR, HYD. (ROTATION)
8	2	400500	BEARING
9	1	360543	DRUM, HOIST
10	1	360557	KEY, 5/16
11	1	360805	CYLINDER, BOOM UP
12	1	360162	RING, ECCENTRIC
13	1	360207	RETAINER, ECCENTRIC RING
14	1	360624	PIN, PEDESTAL/CYLINDER
15	38	012198	SCREW, HX HD 5/8NC X 1 3/4 G8
16	38	023902	WASHER, FLAT 5/8 HARDENED
17	4	006205	SCREW, HX HD 5/8NC X 1 1/4 G8
18	2	011608	SCREW, HX HD 1/2NC X 2 G5
19	1	480019	GASKET, MOTOR
20	1	007402	SCREW, HX HD 5/16NC X 5/8 G5
21	7	020600	WASHER, SP LK 5/16
22	6	007811	SCREW, HX HD 5/16NC x 1
23	6	016500	NUT, HEX 5/16NC
24	1	366987	RETAINER, RELAY BOX
25	3	017100	NUT, HEX 3/8NC
26	7	021100	WASHER, SP LK 3/8
27	7	008601	SCREW, HX HD 3/8NC X 7/8 G5
28	2	021500	WASHER, SP LK 1/2
29	2	012197	SCREW, SOC HD 1/2NC X 1 1/2 G5
30	2	021502	WASHER, SP LK 1/2 (HI-COLLAR)
31	2	021601	WASHER, FLAT 1/2 SAE (SPECIAL)
32	1	370433	CABLE CONNECTOR
33	2	330468	COLLAR, SPLIT-LOCK
34	2	005500	SCREW, HX HD 1/4NC X 3/4
35	2	020200	WASHER, SP LK 1/4
36	1	750477	PLUG, PIPE 1/2
37	2	009118	SCREW, SOC HD 1/2NC X 2 G5
38	1	480011	SEAL, ROTATION BOX
39	1	360625	PIN, LOWER BOOM PIVOT
40	1	~~360867~~	COVER Now 360544
41	6	002608	SCREW, HX HD 1/4NC X 3/4 S.T.
42	3	300204	DIRECTIONAL VALVE ASSEMBLY
43	1	320392	BRACKET, MANIFOLD (TOP)
44	1	320393	BRACKET, MANIFOLD (BOTTOM)
45	4	002614	SCREW, HX HD 5/16NC X 5/8 S.T.
46	1	360155	WIRE ROPE ASSEMBLY, 5/16
47	4	015104	SCREW, HX HD 7/8NF X 5 G8
48	4	022200	LOCKWASHER, 7/8
49	4	018900	NUT, HEX 7/8NF
50	1	202710	MANIFOLD
51	1	360848	PLUG, PLASTIC 1"ø
52	1	642908	CORD CONNECTOR
53	2	480073	SPACER, WINCH SHAFT



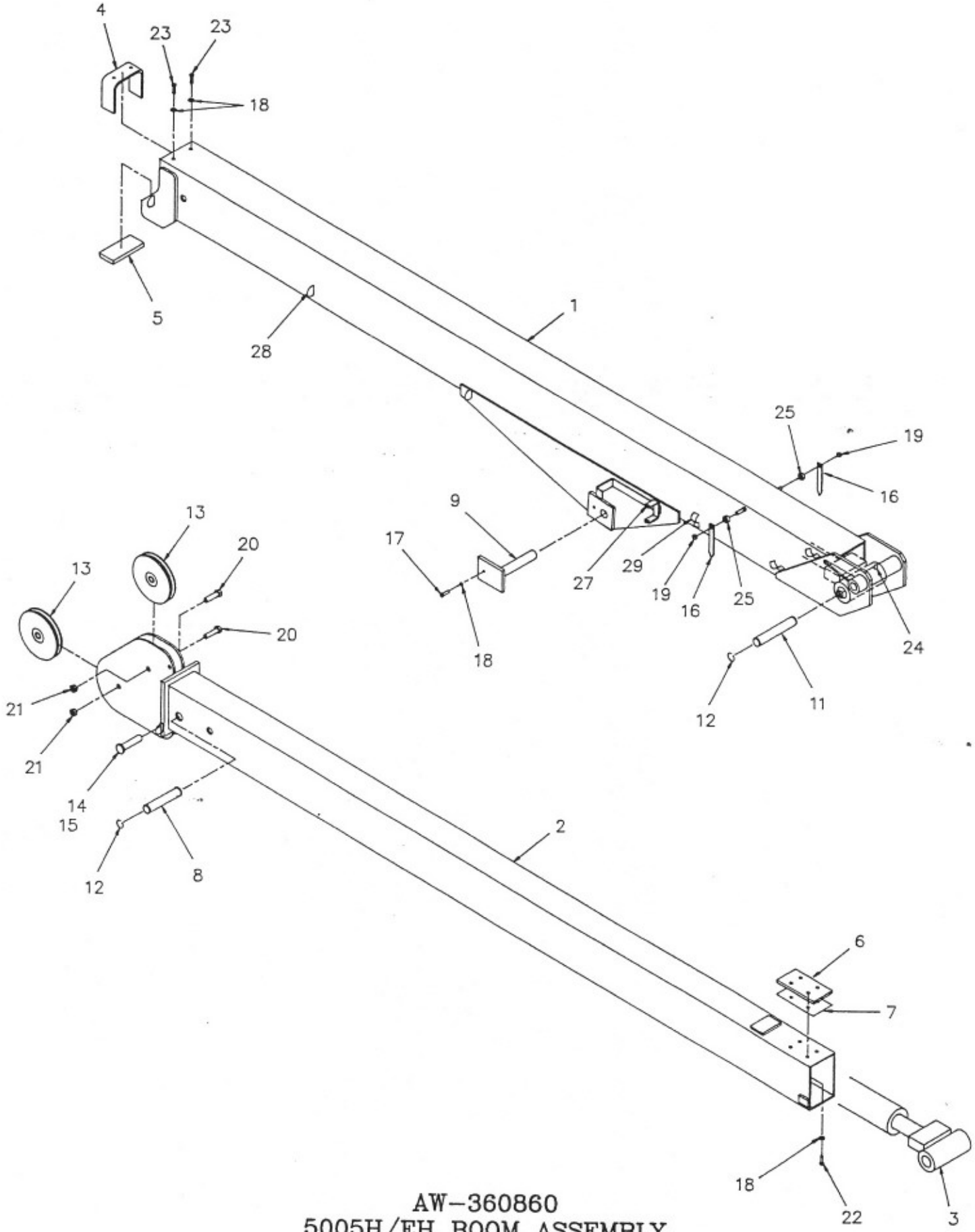
AW–360810
5005H/EH BOOM ASSEMBLY
10–16–20

AW-360810, 5005H/EH BOOM ASSEMBLY (10-16-20)

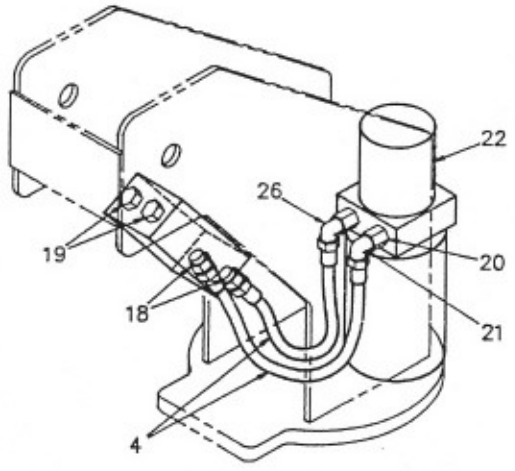
ITEM	QTY.	PART NO.	DESCRIPTION
1	1	360815	BOOM, LOWER
2	1	366080	BOOM, CENTER
3	1	360820	BOOM, MANUAL
4	1	366162	CYLINDER, BOOM EXTENSION
5	1	366183	STOP, CENTER BOOM
6	1	366112	STOP, UPPER BOOM
7	1	366201	PAD, BOTTOM TOP
8	1	366202	PAD, BOOM TOP
9	1	366199	PAD, BOOM
10	1	366187	PAD, RETAINER LOWER
11	1	366185	PAD, BOOM TOP (CENTER BOOM)
12	3	366186	PAD, BOOM (CENTER BOOM)
13	2	366184	RETAINER, EXTENSION CYLINDER
14	1	366190	PIN, ASSEMBLY WITH LANYARD
15	1	360819	PIN, BOOM CYLINDER
16	–	–	–
17	1	366193	PIN, EXTENSION CYLINDER
18	2	480029	RING, RETAINING
19	2	240236	SHEAVE ASSEMBLY
20	1	360814	PIN, CROWN
21	1	360124	PIN, HITCH
22	2	360038	ANGLE INDICATOR
23	1	005500	SCREW, HEX HD 1/4NC X 3/4
24	1	020200	WASHER, SP LK 1/4
25	1	239000	GREASE ZERK
26	2	016300	NUT, HEX LK 1/4NC
27	2	011511	SCREW, HEX HD 1/2NF X 2 1/4 G5
28	2	017700	NUT, HEX LK 1/2NF
29	12	008400	SCREW, HEX HD 3/8NC X 3/4
30	8	007808	SCREW, HEX HD 5/16NC 1/2
31	4	005406	SCREW, HEX HD 1/4NF X 1/2
32	4	008800	SCREW, HEX HD 3/8NF X 1
33	4	021100	WASHER, SP LK 3/8 SAE
34	6	021200	WASHER, FLAT 3/8
35	2	020600	WASHER, SP LK 5/16
36	A/R	480037	SHIM
37	2	360849	SPACER, PLASTIC 1/4"ø
38	1	366166	SEAL KIT
39	1	REF	CORD REEL BRACKET (320551)
40	6	REF	D-RING (366108)
41	3	REF	CLIP (000115)
42	3	REF	SPACER (800246-025)

AW-360860, 5005H/EH BOOM ASSEMBLY (10-16)

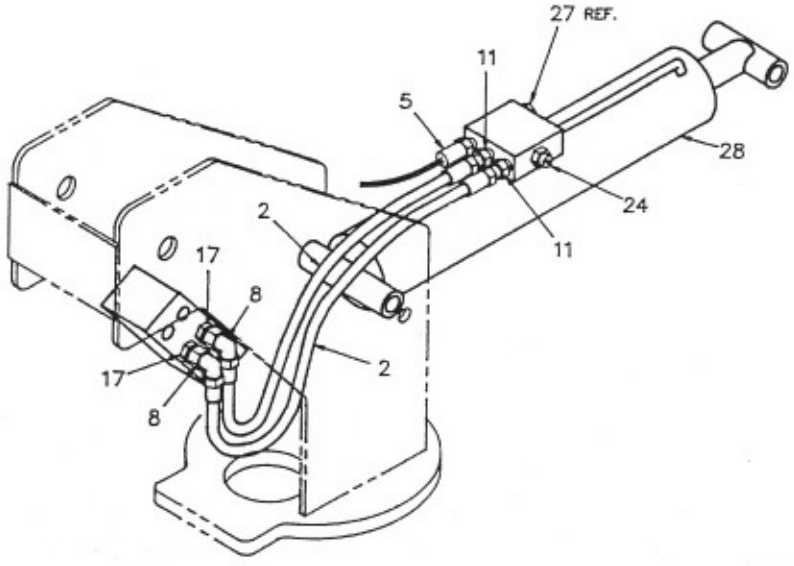
ITEM	QTY.	PART NO.	DESCRIPTION
1	1	360861	BOOM, LOWER
2	1	366862	BOOM, UPPER
3	1	360152	CYLINDER, BOOM EXTENSION
4	1	360545	RETAINER, INNER BOOM
5	1	360167	PAD, RETAINER LOWER (SLIDE)
6	1	480032	PAD, BOOM
7	2	480033	SHIM, LARGE (.032 THK)
8	1	360121	PIN, EXTENSION CYLINDER-UPPER BOOM
9	1	360621	PIN, BOOM / CYCLINDER
10	—	—	—
11	1	360120	PIN, EXTENSION CYLINDER-LOWER BOOM
12	4	360122	RING, RETAINING
13	2	240236	SHEAVE, ASSEMBLY
14	1	360814	PIN, CROWN
15	1	360124	PIN, HITCH
16	2	360038	INDICATOR, ANGLE
17	1	005500	SCREW, HX. HD. 1/4 NC X 3/4 LG.
18	7	020200	WASHER, SP. LK. 1/4
19	2	016300	NUT, LK. 1/4 NC
20	2	011511	SCREW, HX. HD. 5/8 NF X 2 1/4 GR5
21	2	017700	NUT, LK. 5/8 NFCP
22	4	005406	SCREW, HX. HD. 1/4 NF X 1/2 LG.
23	2	005901	SCREW, HX. HD. 1/4 NC X 1/2 LG.
24	1	239000	GREASE ZERK
25	2	360849	SPACER, PLASTIC
26	1	330603	SEAL KIT
27	1	REF	CORD REEL BRACKET (320551)
28	4	REF	D-RING (366108)
29	3	REF	CLIP (000115)



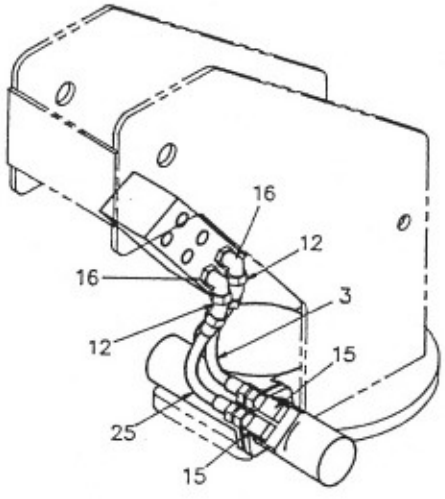
AW-360860
5005H/EH BOOM ASSEMBLY
10-16 BOOM



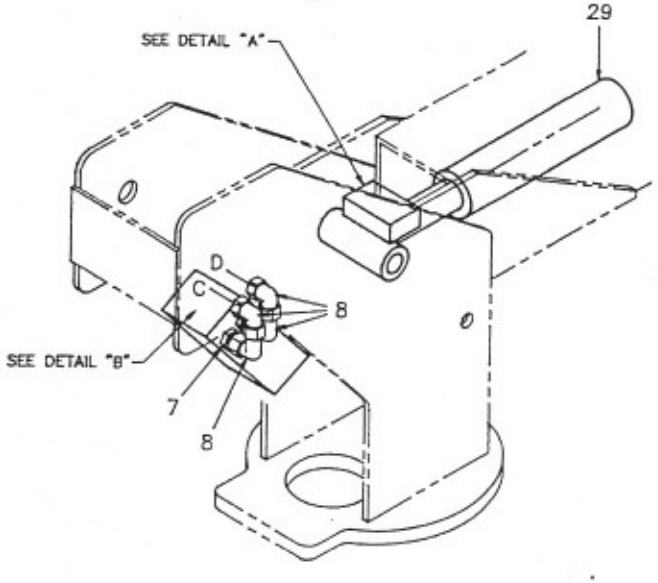
POWER UNIT



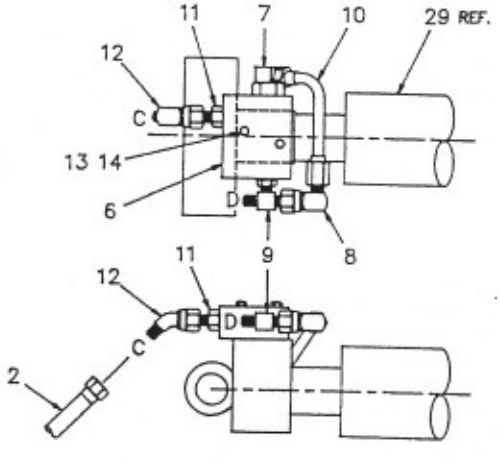
BOOM UP
(MIDDLE SPOOL)



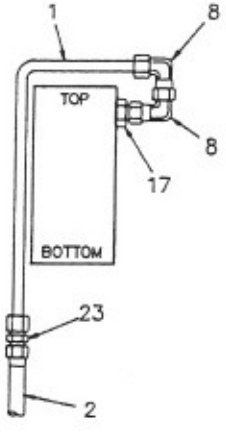
ROTATION
(BOTTOM SPOOL)



EXTENSION
(TOP SPOOL)



DETAIL "A"

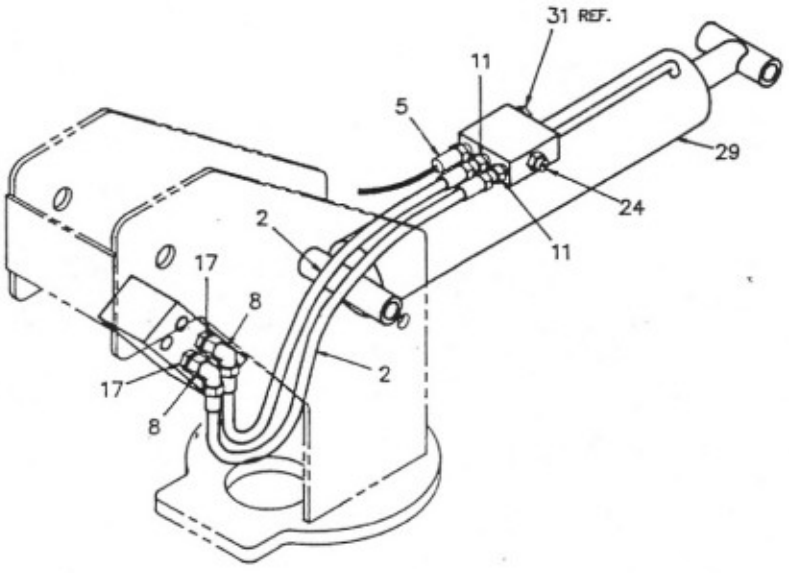


DETAIL "B"

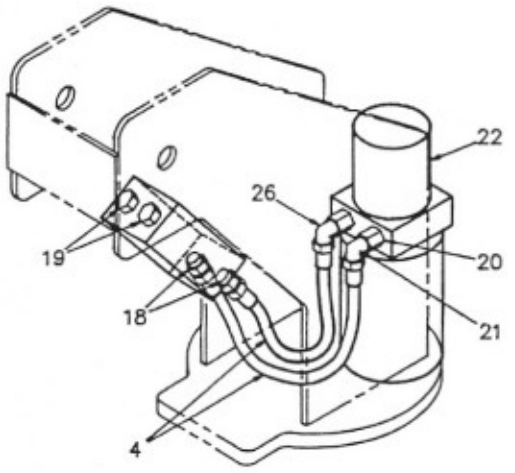
AW-360803
5005EH HYDRAULIC ASSEMBLY
10-16-20 BOOM

AW-360803, 5005EH HYDRAULIC ASSEMBLY (10-16-20)

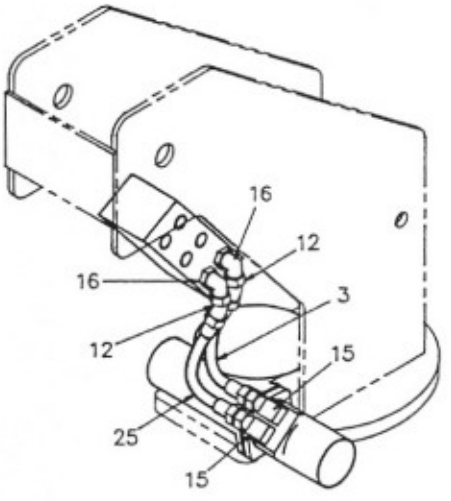
ITEM	QTY.	PART NO.	DESCRIPTION
1	2	320489	TUBE ASSEMBLY
2	4	480208	HOSE ASSEMBLY
3	1	812203-013	HOSE ASSEMBLY
4	2	360573	HOSE ASSEMBLY
5	1	320543	LOAD SENSOR
6	1	330412	VALVE, COUNTERBALANCE
7	1	200892	ELL, 90° -6 NPT/-6 JIC
8	7	480194	ELL, 90° -6 JIC SWIVEL/-6 JIC
9	1	241168	TEE, -6 ORB/-6 JIC RUN
10	1	480212	TUBE ASSEMBLY
11	3	200876	ADAPTER, -6 ORB/-6 JIC
12	3	330647	ELL, 45° -6 JIC SWIVEL
13	2	005810	SCREW, HX HD 1/4NC X 1 3/4 LG.
14	2	020200	WASHER, SP LK 1/4
15	2	202759	ELL, 90° -8 NPT/-6 JIC
16	2	330272	ELL, 90° -8 ORB/-6 JIC
17	4	202756	ADAPTER, -8 ORB/-6 JIC
18	2	202755	ADAPTER, -10 ORB/-6 JIC
19	2	330072	PLUG, HX HD -10 ORB
20	1	320336-002	RETURN PORT PLUG
21	1	241175	ELL, 90° -6 ORB/-6 JIC
22	1	360808	POWER UNIT
23	2	241170	UNION, -6 JIC
24	1	480188	COUNTERBALANCE VALVE CARTRIDGE
25	1	812203-014	HOSE ASSEMBLY
26	1	330645	ELL, 90° -6 ORB/-6 JIC EXTRA LONG
27	1	REF.	PLUG, -6 ORB
28	1	360805	CYLINDER, BOOM UP
29	1	366162	CYLINDER, EXTENSION



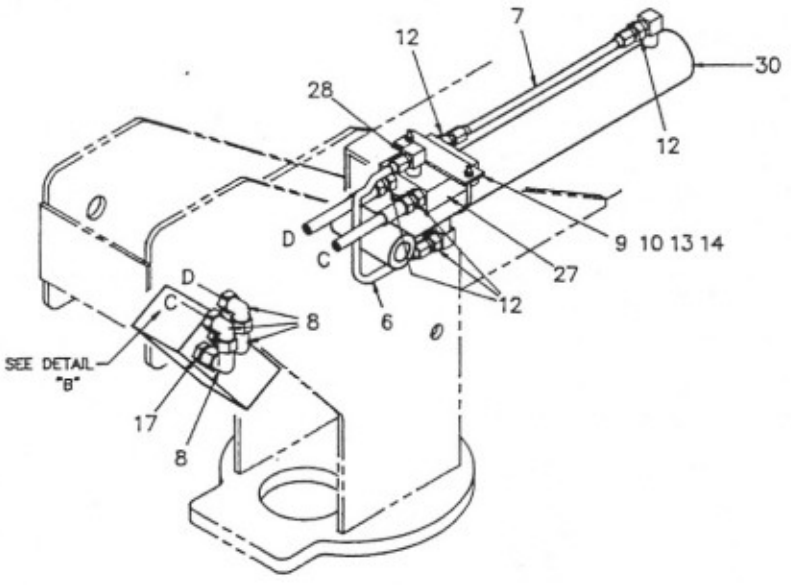
BOOM UP
(MIDDLE SPOOL)



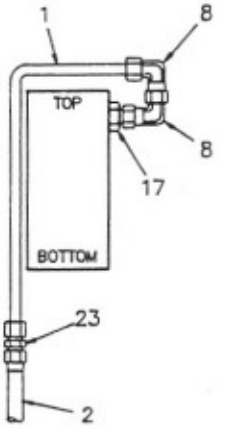
POWER UNIT



ROTATION
(BOTTOM SPOOL)



EXTENSION
(TOP SPOOL)

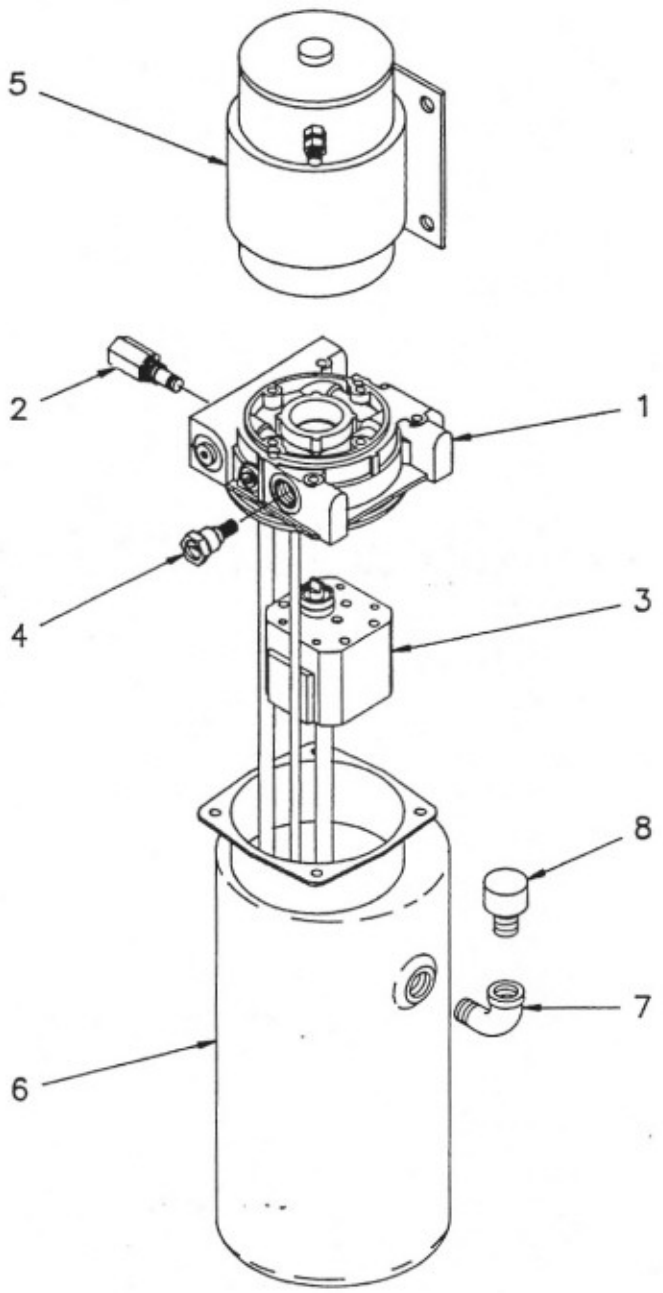


DETAIL "B"

AW-360866
5005EH HYDRAULIC ASSEMBLY
10-16 BOOM

AW-360866, 5005EH HYDRAULIC ASSEMBLY (10-16)

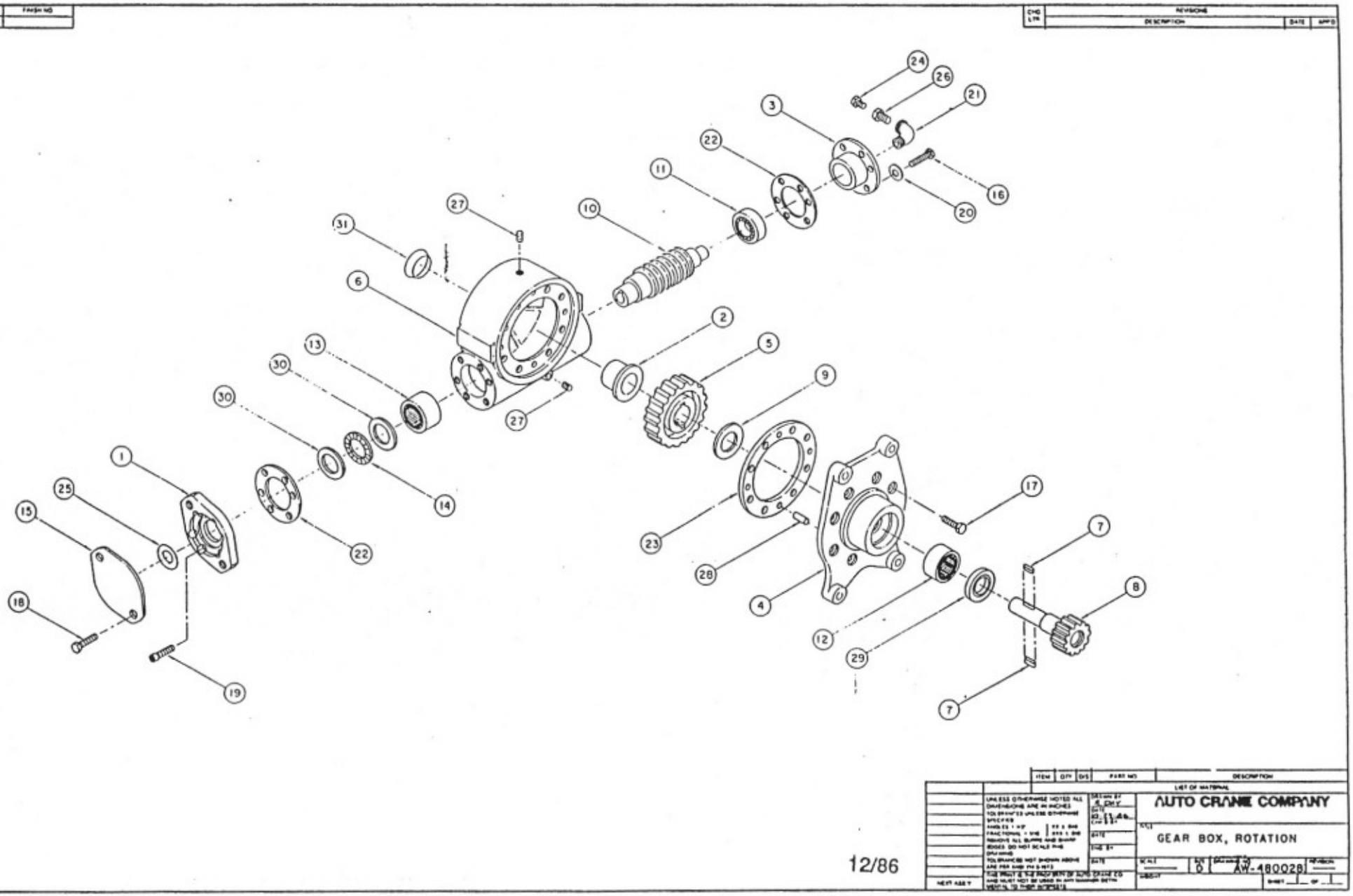
ITEM	QTY.	PART NO.	DESCRIPTION
1	2	320489	TUBE ASSEMBLY
2	4	480208	HOSE ASSEMBLY
3	1	812203-013	HOSE ASSEMBLY
4	2	360573	HOSE ASSEMBLY
5	1	320543	LOAD SENSOR
6	1	360069	TUBE ASSEMBLY
7	1	360070	TUBE ASSEMBLY
8	6	480194	ELL, 90° -6 JIC SWIVEL/-6 JIC
9	1	360091	U-BOLT
10	1	360092	CLAMP
11	2	200876	ADAPTER, -6 ORB/-6 JIC
12	5	360042	ADAPTER, -6 NPT/-6 JIC
13	2	015900	NUT, HEX HD 1/4-NC
14	2	020200	WASHER, SP LK 1/4
15	2	202759	ELL, 90° -8 NPT/-6 JIC
16	2	330272	ELL, 90° -8 ORB/-6 JIC
17	4	202756	ADAPTER, -8 ORB/-6 JIC
18	2	202755	ADAPTER, -10 ORB/-6 JIC
19	2	330072	PLUG, HX HD -10 ORB
20	1	320336-002	RETURN PORT PLUG
21	1	241175	ELL, 90° -6 ORB/-6 JIC
22	1	360808	POWER UNIT
23	2	241170	UNION, -6 JIC
24	1	480188	COUNTERBALANCE VALVE CARTRIDGE
25	1	812203-014	HOSE ASSEMBLY
26	1	330645	ELL, 90° -6 ORB/-6 JIC EXTRA LONG
27	1	360153	VALVE, COUNTERBALANCE
28	1	200892	ELL, 90° -6 NPT/-6 JIC
29	1	360805	CYLINDER, BOOM UP
30	1	360152	CYLINDER, EXTENSION
31	1	REF.	PLUG, -6 ORB



ITEM	QTY	P/N	DESCRIPTION	ITEM	QTY	P/N	DESCRIPTION
1	1	360808–003	ADAPTER KIT	5	1	360808–002	MOTOR
2	1	320336–002	RETURN PORT PLUG KIT	6	1	320336–004	RESERVOIR KIT
3	1	360808–001	PUMP KIT	7	1	320335–008	ELBOW FITTING
4	1	320336–003	RELIEF VALVE KIT	8	1	200545	BREATHER CAP

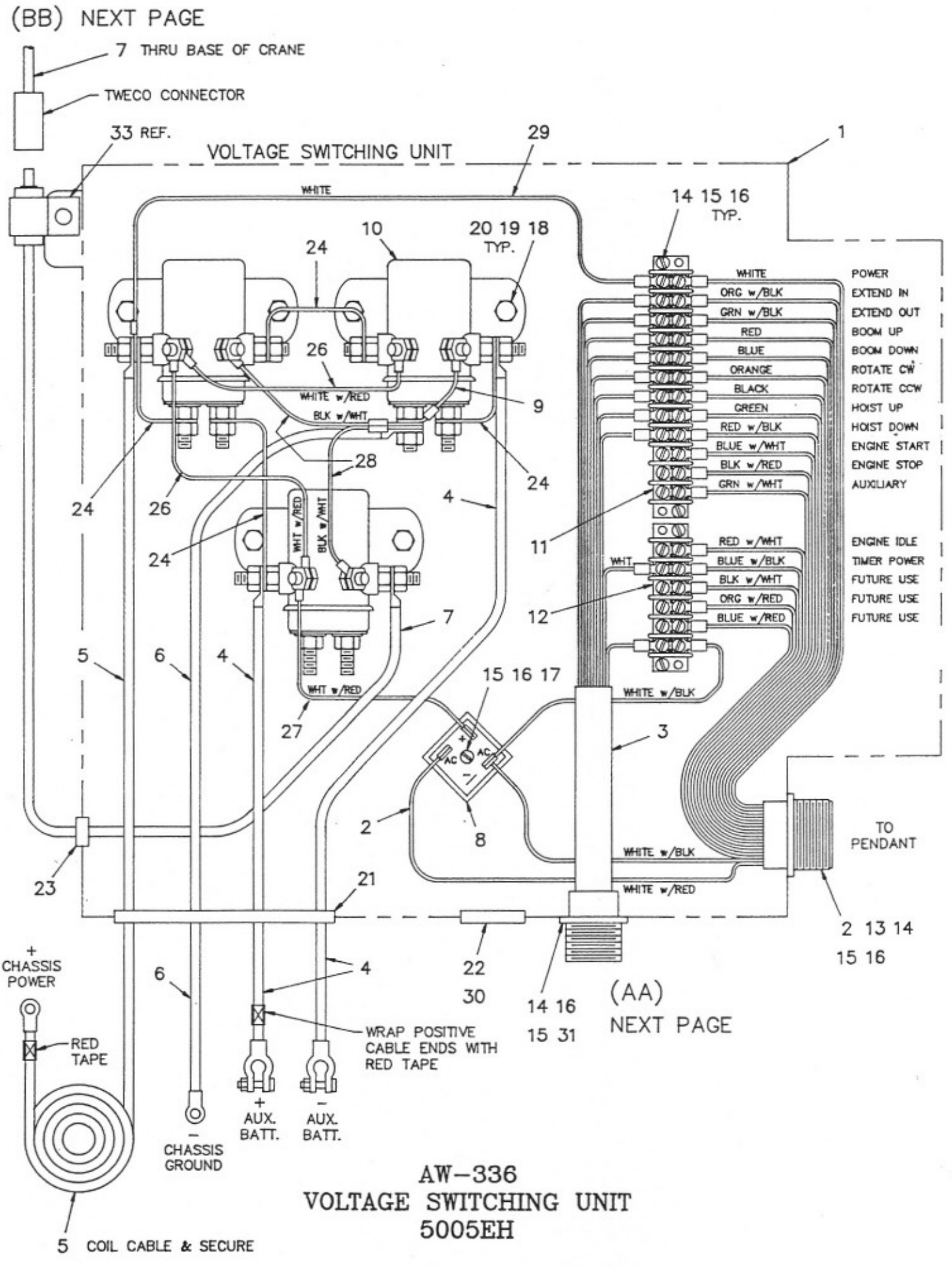
AW–360808
HYDRAULIC PUMP & RESERVOIR
5005EH

NOTES


AUTO CRANE COMPANY
GEAR BOX, ROTATION
AW-480028
12/86

GEAR BOX, ROTATION AW-480028

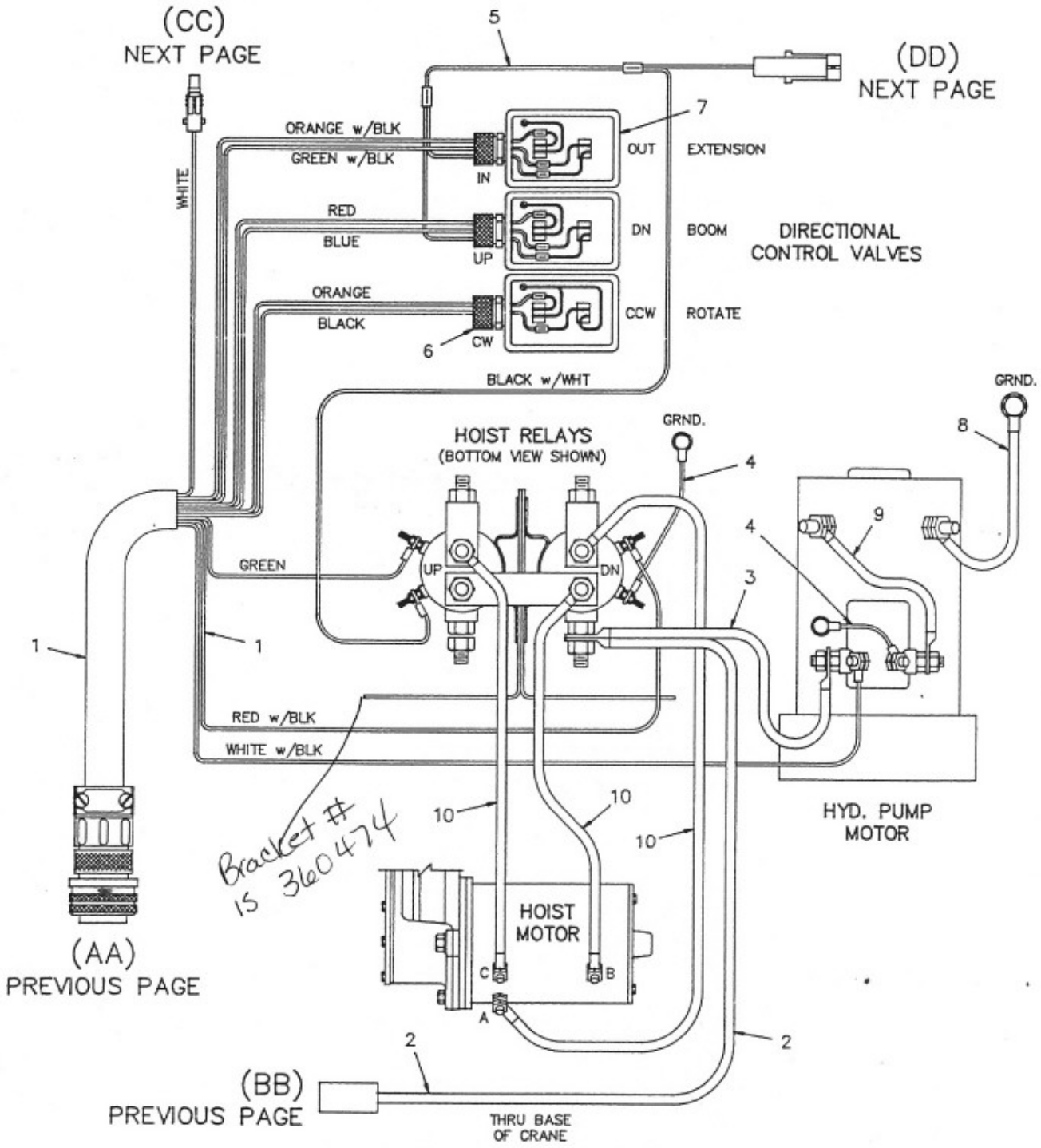
ITEM	QTY.	PART NO.	DESCRIPTION
1	1	480240	ADAPTER
2	1	480241	BUSHING
3	1	480242	CAP, BEARING
4	1	480243	COVER
5	1	480244	GEAR - R.H.
6	1	480237	HOUSING-GEAR
7	2	480246	KEY
8	1	480247	SHAFT-OUTPUT
9	1	480248	WASHER-THRUST
10	1	480249	WORM, R.H.
11	1	480251	BEARING-BALL
12	1	480252	BEARING-NEEDLE
13	1	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



AW–336
VOLTAGE SWITCHING UNIT
5005EH

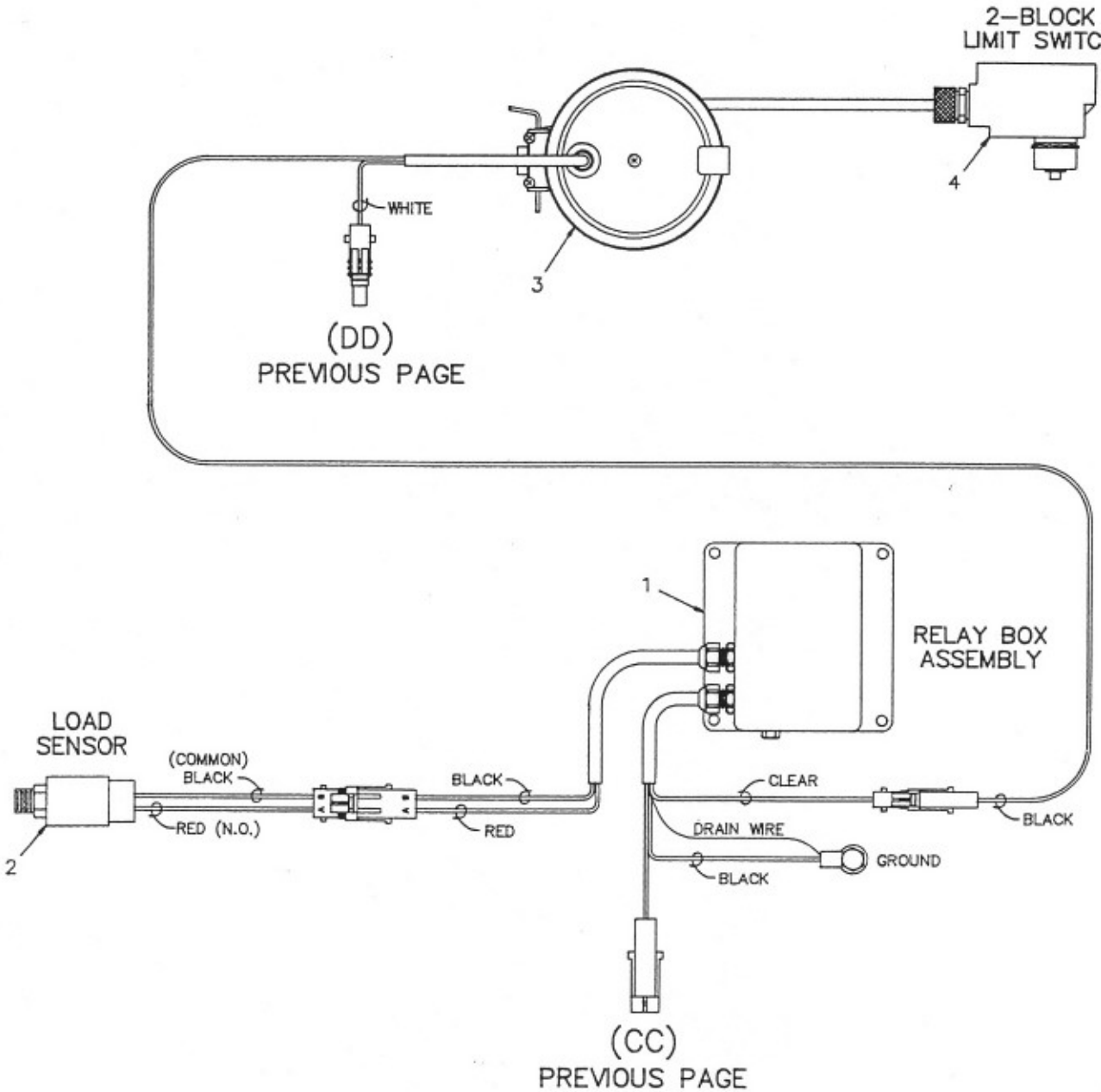
AW-336, VOLTAGE SWITCHING UNIT

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	360832	ENCLOSURE ASSEMBLY
2	1	360833	RECEPTACLE ASSEMBLY
3	1	360834	POWER CABLE, RECEPTACLE ASSY
4	2	360853	BATTERY CABLE
5	1	360858	CONDUCTOR ASSEMBLY (25'-9")
6	1	360859	CONDUCTOR ASSEMBLY (6'-9")
7	1	360844	CONDUCTOR ASSEMBLY (w/ TWECO)
8	1	751138	RECTIFIER, BRIDGE 25 AMP
9	1	360845	CONDUCTOR ASSEMBLY
10	3	200182	RELAY
11	1	635200	TERMINAL BLOCK, 12 STATION
12	1	635203	TERMINAL BLOCK, 6 STATION
13	1	480547	CAP, RECEPTACLE
14	8	000404	SCREW, #6-32NC x 5/8 LG.
15	9	015400	NUT, HEX #6-32NC
16	9	019600	WASHER, SP LK #6
17	1	000602	SCREW, #6-32NC x 1 LG.
18	6	005901	SCREW, HEX HD 1/4-20NC x 1/2 LG.
19	6	015900	NUT, HEX 1/4-20NC
20	6	020200	WASHER, SP LK 1/4
21	1	750282	GROMMET
22	1	371024	GROMMET
23	1	750169	GROMMET
24	4	658300	CONDUCTOR ASSEMBLY (COPPER STRIP)
25	2	360872	CONDUCTOR ASSEMBLY
26	2	360873	CONDUCTOR ASSEMBLY
27	1	360841	CONDUCTOR ASSEMBLY
28	2	360876	CONDUCTOR ASSEMBLY
29	1	360877	CONDUCTOR ASSEMBLY
30	1	360878	CAP PLUG, TAPERED
31	1	360879	CAP PLUG (10 PIN RECEPTACLE)
32	1	360837	DECAL, V.S.U. WIRING DIAGRAM
33	1	480024	MOUNT, CABLE RETAINER



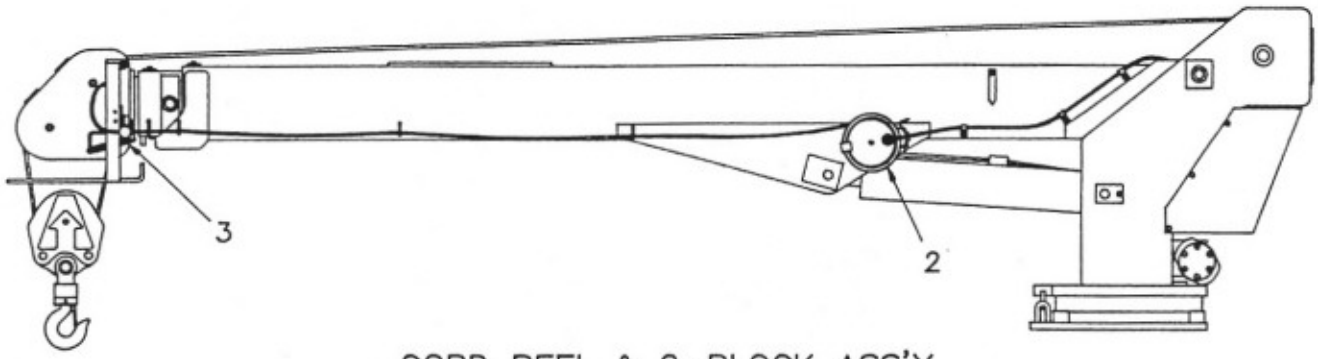
ITEM	QTY	P/N	DESCRIPTION	ITEM	QTY	P/N	DESCRIPTION
1	1	360857	POWER CABLE, PLUG ASSY	6	3	642908	CORD CONNECTOR
2	1	360844	CONDUCTOR (w/ TWECO)	7	3	300204	DIR. CONTROL VALVE
3	1	622324	CONDUCTOR	8	1	360843	CONDUCTOR
4	2	360872	CONDUCTOR	9	1	·	CONDUCTOR
5	1	360846	CONDUCTOR	10	3	·	CONDUCTOR

AW-337
5005EH HOIST RELAY ASSEMBLY

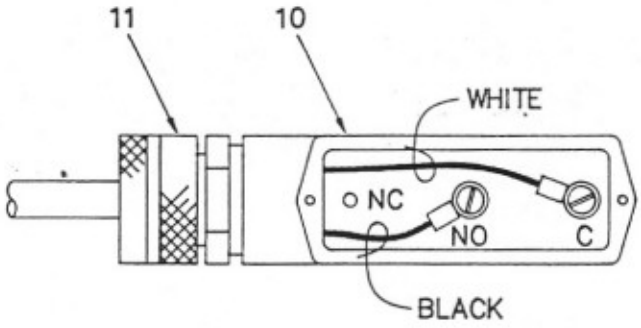


ITEM	QTY	P/N	DESCRIPTION
1	1	366986	RELAY BOX ASSEMBLY
2	1	320543	LOAD SENSOR ASSEMBLY
3	1	366973–001	CORD REEL ASSEMBLY
4	1	646900	SWITCH (2–BLOCK)

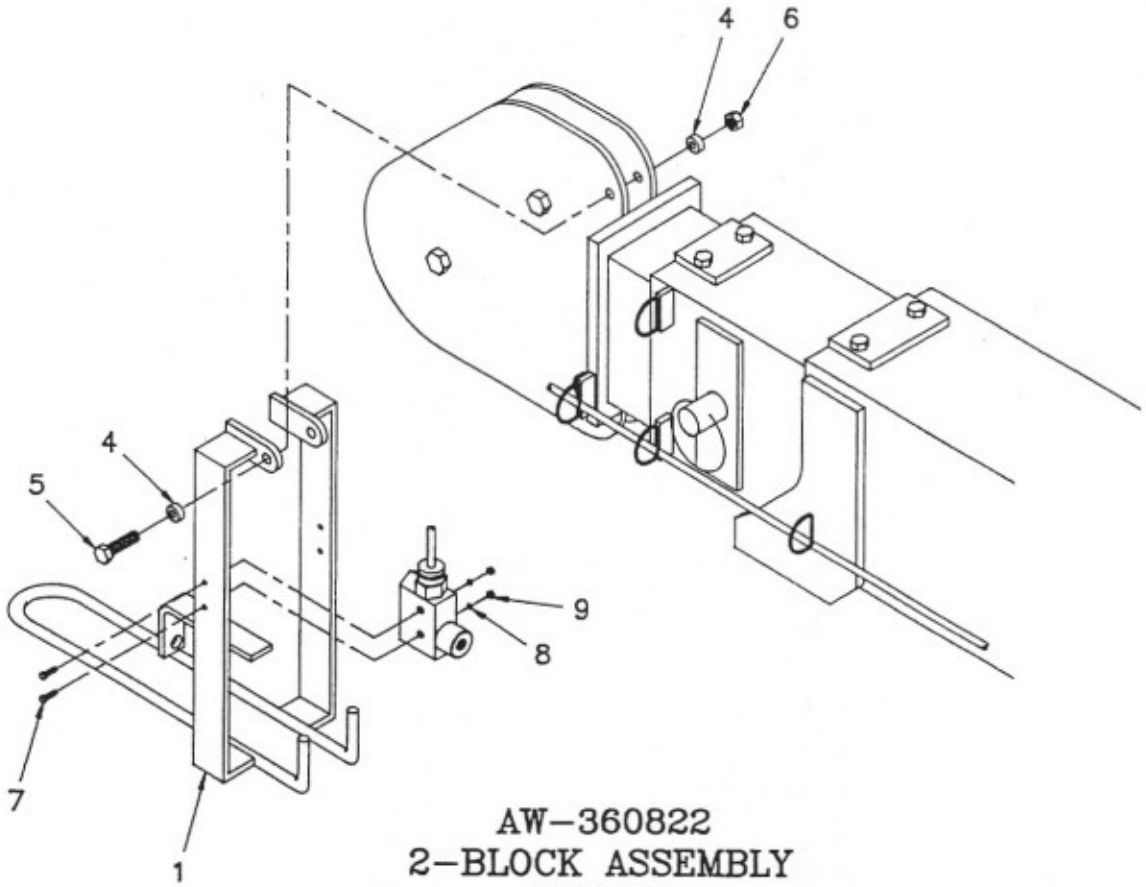
AW–338
5005EH LOAD SENSOR/
2–BLOCK ASSEMBLY



CORD REEL & 2-BLOCK ASS'Y



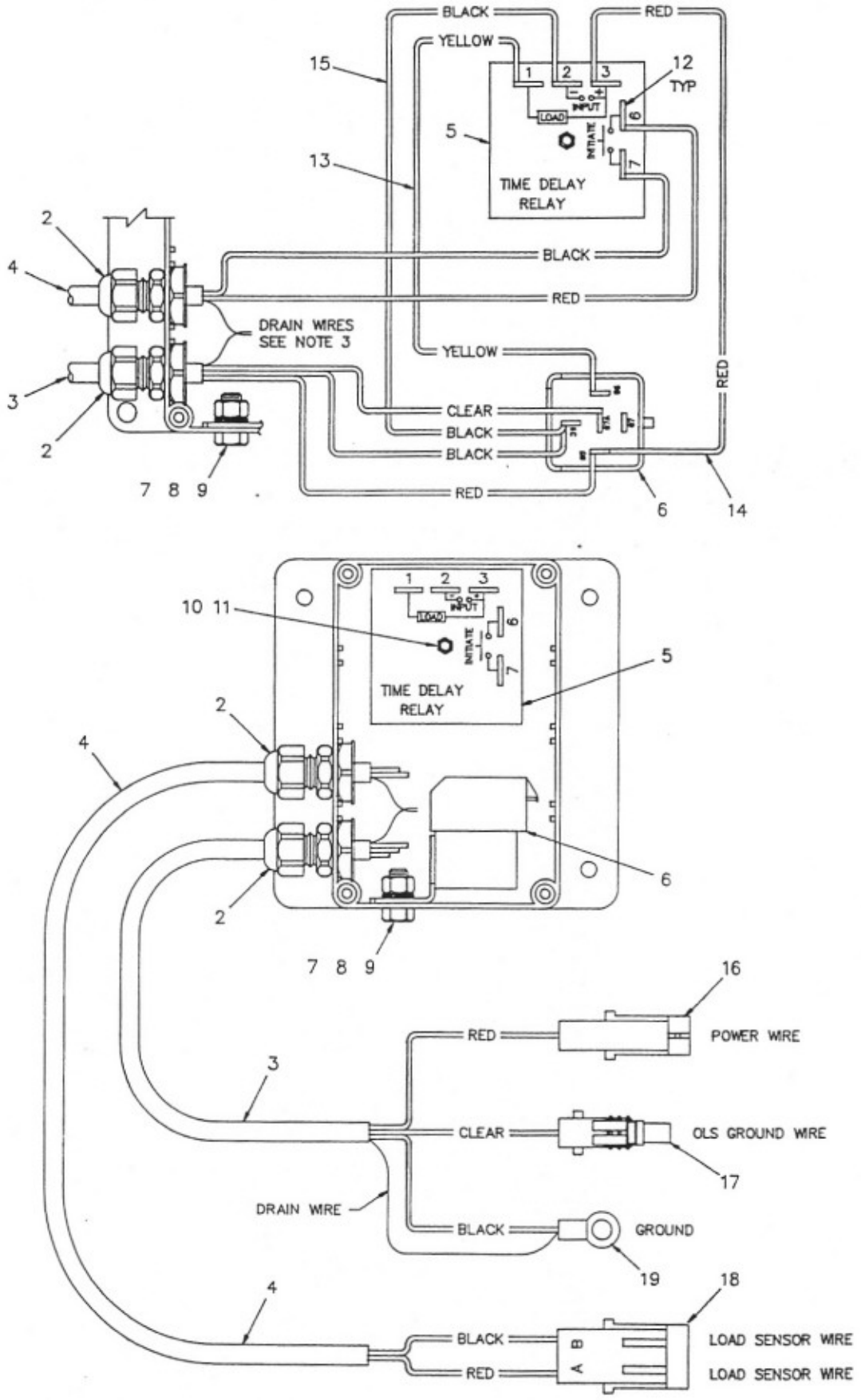
REFERENCE-SWITCH WIRING



AW-360822
2-BLOCK ASSEMBLY
5005EH

AW-360822, 2-BLOCK ASSEMBLY

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	360823	2-BLOCK WELDMENT
2	1	366973-001	CORD REEL ASSY w/WEATHER PACK CONNECTORS
3	1	360824	SPRING, 2-BLOCK
4	2	360852	SPACER, PLASTIC ø3/8"
5	1	009800	SCREW, HX. HD. 3/8-24 NF X 3 1/2 LG.
6	1	017400	NUT, LOCK 3/8=24 NF
7	2	000610	SCREW, ROUND HD. #6-32 NC X 1 1/2 LG.
8	2	019600	WASHER, SP. LK. #6
9	2	015400	NUT, #6-32 NC
10	1	646900	SWITCH
11	1	642908	CORD CONNECTOR

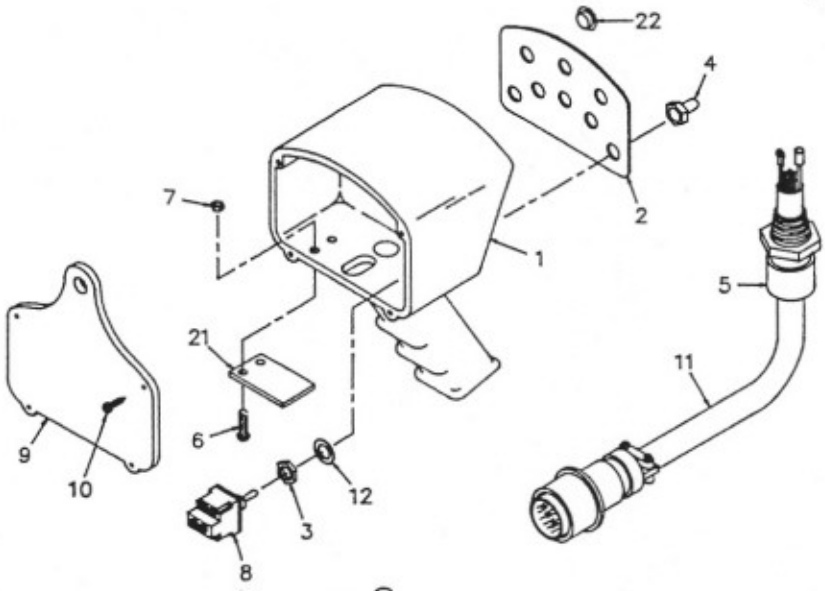


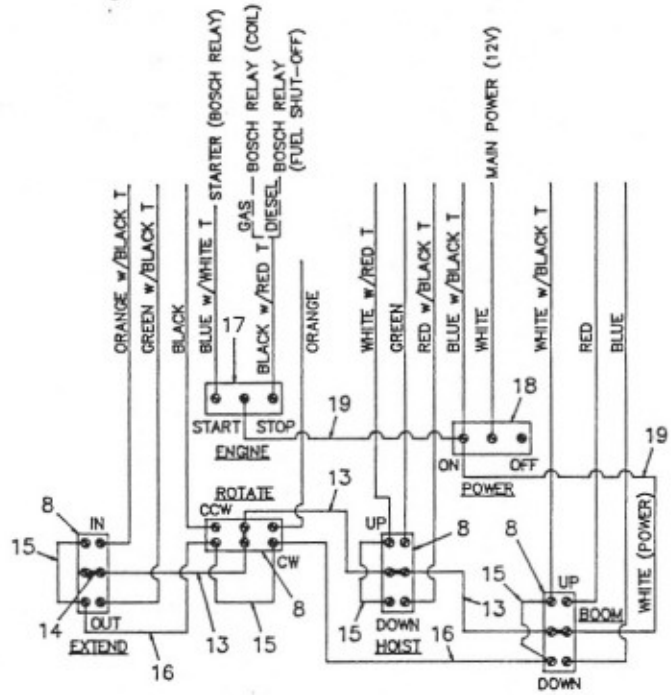
AW-366986
RELAY BOX ASSEMBLY

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

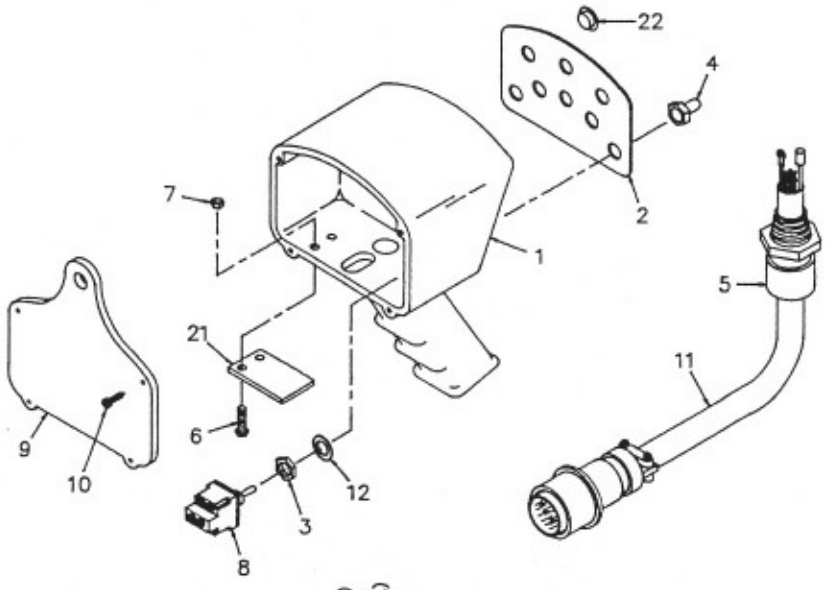
screw on

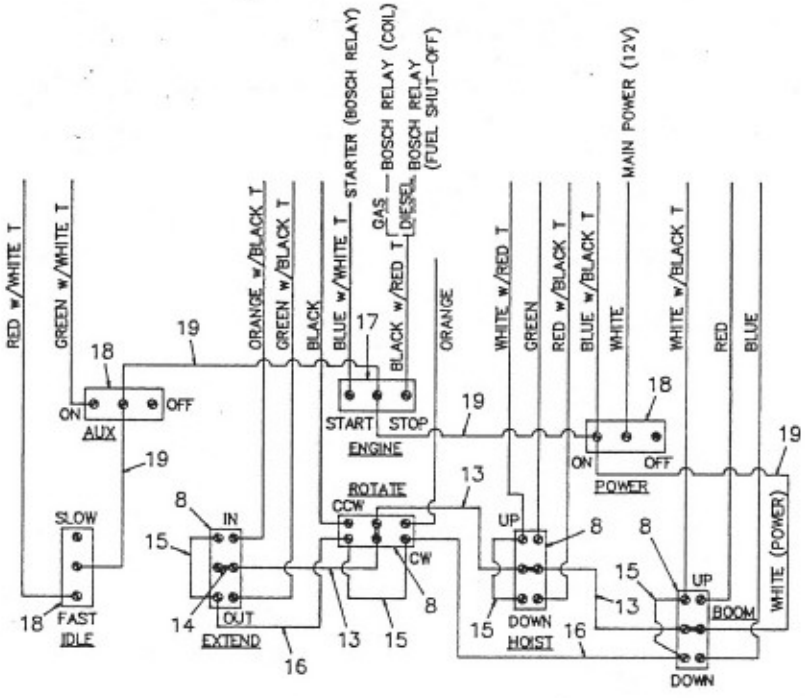




ITEM	QTY	PART NO.	DESCRIPTION	ITEM	QTY	PART NO.	DESCRIPTION
1	1	480501	HOUSING, PENDANT	12	6	–	WASHER, LOCK
2	1	480501	DECAL, COVER	13	3	660302	CONDUCTOR ASSEMBLY
3	6	REF.	NUT	14	4	636600	JUMPER
4	6	640300	BOOT, TOGGLE	15	4	622346	CONDUCTOR ASSEMBLY
5	1	370433	CONNECTOR	16	2	622347	CONDUCTOR ASSEMBLY
6	2	002607	SCREW, HX HD #10NC X 3/4	17	1	622000	SWITCH, TOGGLE SPDT
7	2	015801	NUT, HX LK #10–24NC	18	1	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, #6 X 3/4 S.T.	21	1	480598	COVER, TRIGGER OPENING
11	1	480588	CABLE ASSEMBLY	22	2	360847	PLUG, PLASTIC

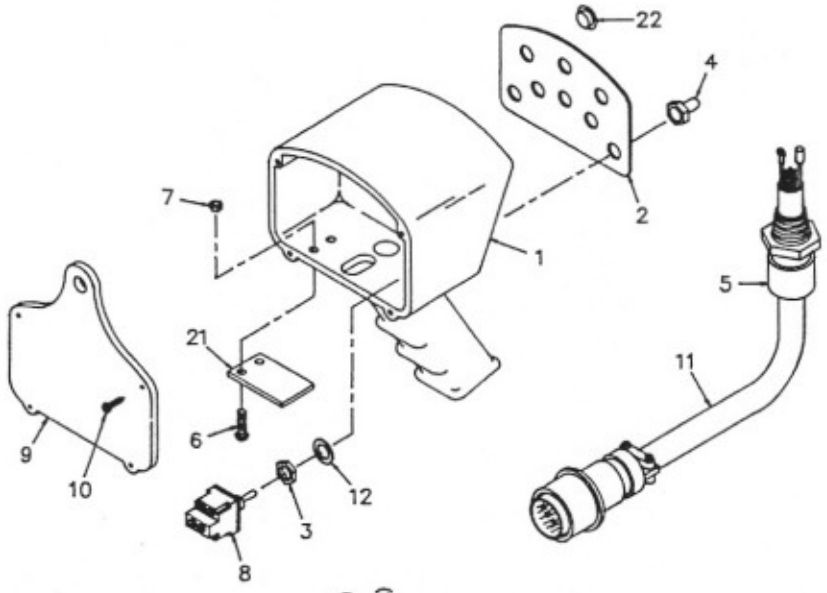
AW–341
5005EH PENDANT
(360840)

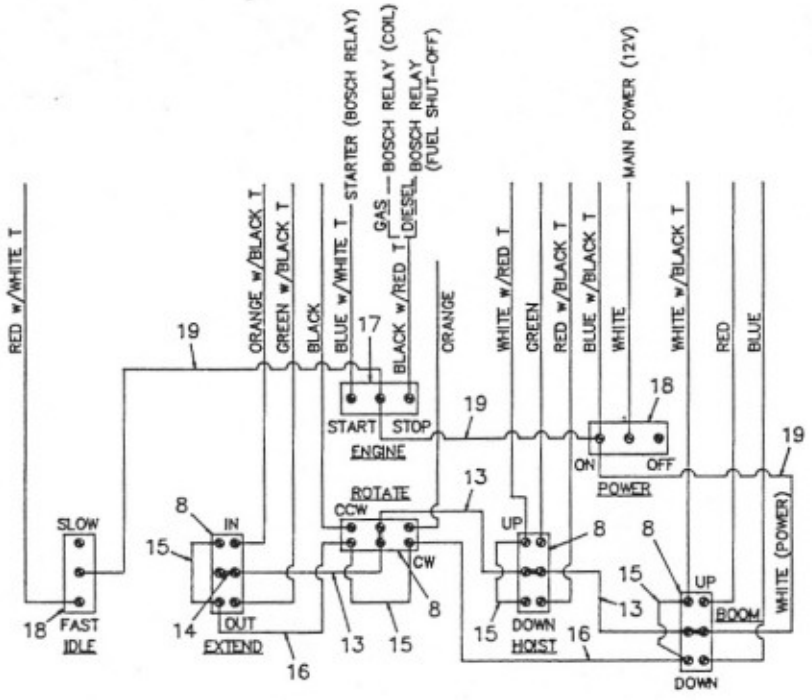




ITEM	QTY	PART NO.	DESCRIPTION	ITEM	QTY	PART NO.	DESCRIPTION
1	1	480501	HOUSING, PENDANT	12	8	–	WASHER, LOCK
2	1	480501	DECAL, COVER	13	3	660302	CONDUCTOR ASSEMBLY
3	8	REF.	NUT	14	4	636600	JUMPER
4	8	640300	BOOT, TOGGLE	15	4	622346	CONDUCTOR ASSEMBLY
5	1	370433	CONNECTOR	16	2	622347	CONDUCTOR ASSEMBLY
6	2	002607	SCREW, HX HD #10NC 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, #6 X 3/4 S.T.	21	1	480598	COVER, TRIGGER OPENING
11	1	480588	CABLE ASSEMBLY	22	–	360847	PLUG, PLASTIC

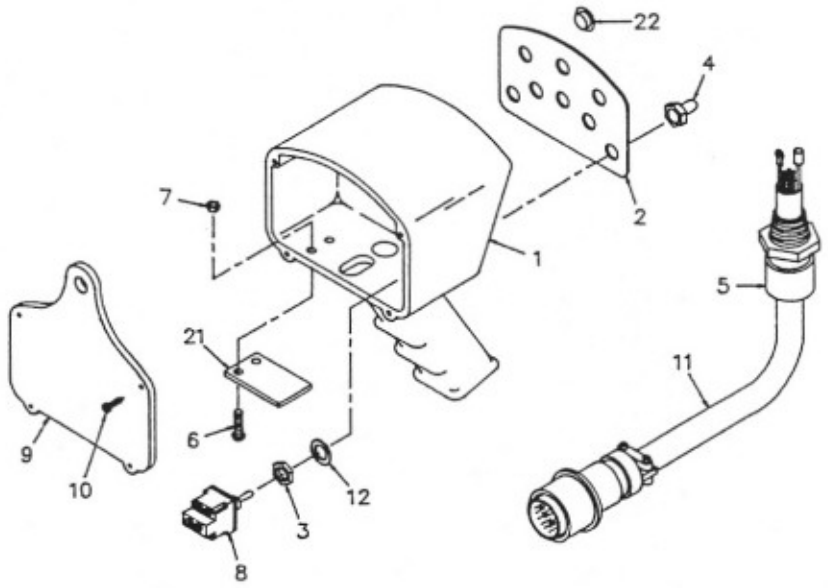
AW–342
5005EH PENDANT
(360840–001)

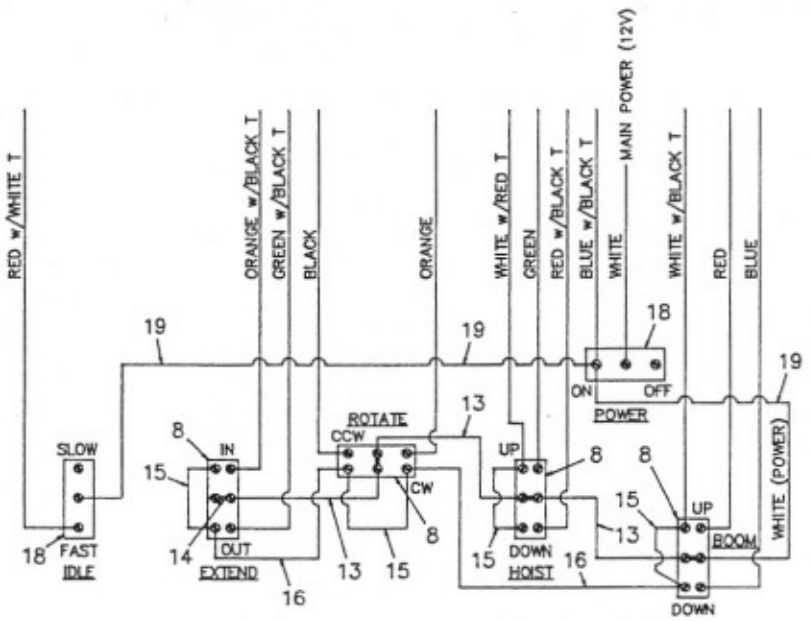




ITEM	QTY	PART NO.	DESCRIPTION	ITEM	QTY	PART NO.	DESCRIPTION
1	1	480501	HOUSING, PENDANT	12	7	–	WASHER, LOCK
2	1	480501	DECAL, COVER	13	3	660302	CONDUCTOR ASSEMBLY
3	7	REF.	NUT	14	4	636600	JUMPER
4	7	640300	BOOT, TOGGLE	15	4	622346	CONDUCTOR ASSEMBLY
5	1	370433	CONNECTOR	16	2	622347	CONDUCTOR ASSEMBLY
6	2	002607	SCREW, HX HD #10NC X 3/4	17	1	622000	SWITCH, TOGGLE SPDT
7	2	015801	NUT, HX LK #10–24NC	18	2	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, #6 X 3/4 S.T.	21	1	480598	COVER, TRIGGER OPENING
11	1	480588	CABLE ASSEMBLY	22	1	360847	PLUG, PLASTIC

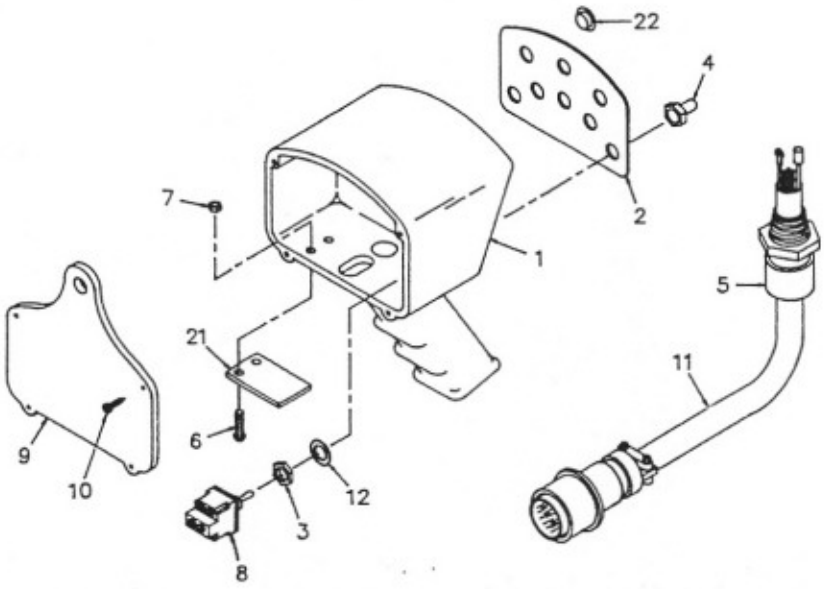
AW–343
5005EH PENDANT
(360840–002)

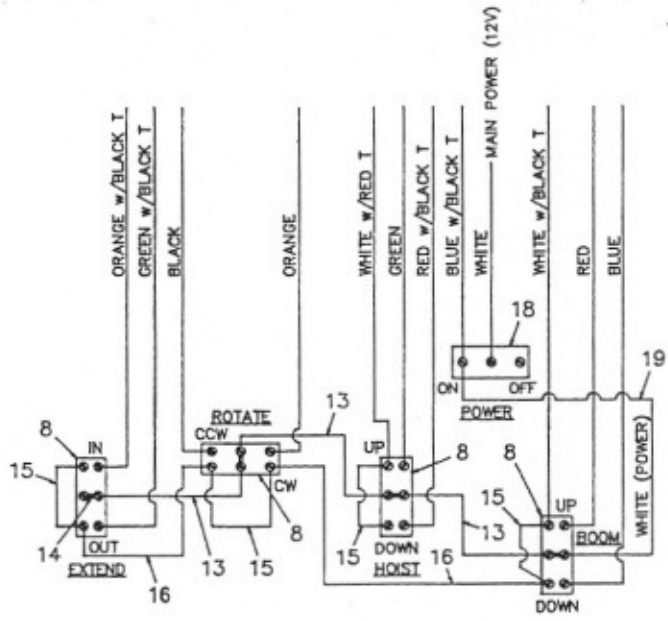




ITEM	QTY	PART NO.	DESCRIPTION	ITEM	QTY	PART NO.	DESCRIPTION
1	1	480501	HOUSING, PENDANT	12	6	–	WASHER, LOCK
2	1	480501	DECAL, COVER	13	3	660302	CONDUCTOR ASSEMBLY
3	6	REF.	NUT	14	4	636600	JUMPER
4	6	640300	BOOT, TOGGLE	15	4	622346	CONDUCTOR ASSEMBLY
5	1	370433	CONNECTOR	16	2	622347	CONDUCTOR ASSEMBLY
6	2	002607	SCREW, HX HD #10NC X 3/4	17	–	622000	SWITCH, TOGGLE SPDT
7	2	015801	NUT, HX LK #10–24NC	18	2	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, #6 X 3/4 S.T.	21	1	480598	COVER, TRIGGER OPENING
11	1	480588	CABLE ASSEMBLY	22	2	360847	PLUG, PLASTIC

AW–344
5005EH PENDANT
(360840–003)

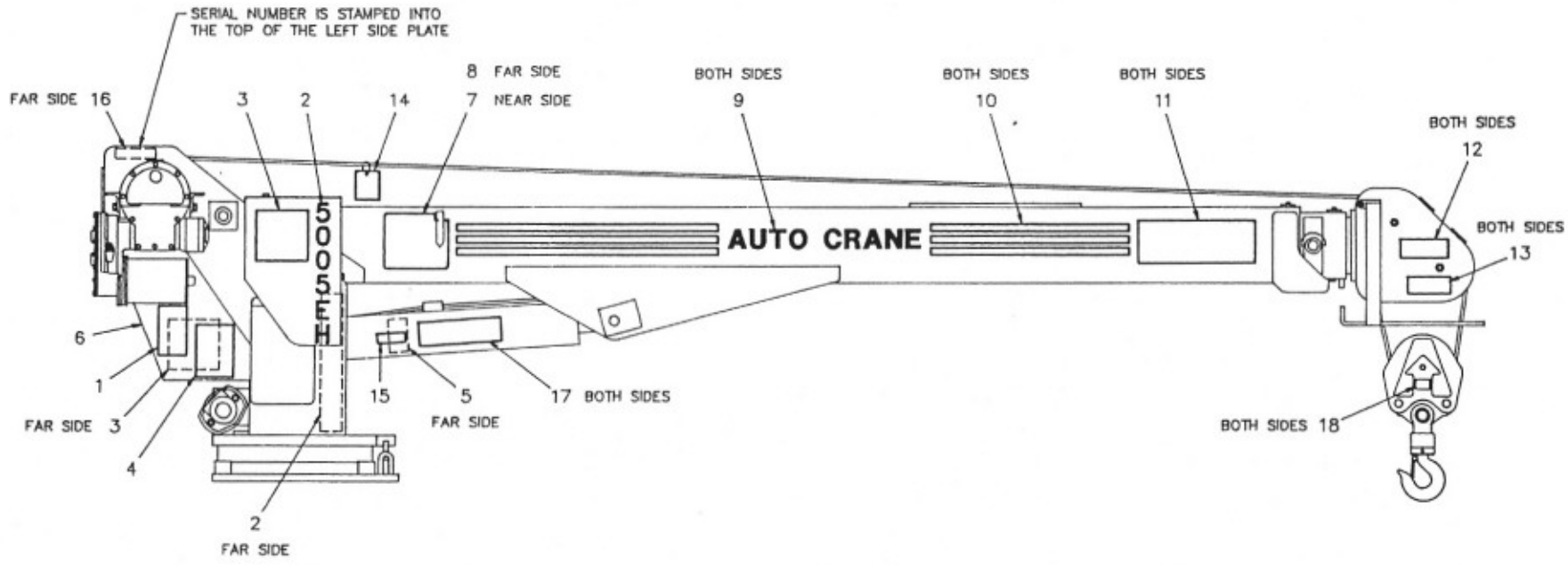




ITEM	QTY	PART NO.	DESCRIPTION	ITEM	QTY	PART NO.	DESCRIPTION
1	1	480501	HOUSING, PENDANT	12	5	–	WASHER, LOCK
2	1	480501	DECAL, COVER	13	3	660302	CONDUCTOR ASSEMBLY
3	5	REF.	NUT	14	4	636600	JUMPER
4	5	640300	BOOT, TOGGLE	15	4	622346	CONDUCTOR ASSEMBLY
5	1	370433	CONNECTOR	16	2	622347	CONDUCTOR ASSEMBLY
6	2	002607	SCREW, HX HD #10NC X 3/4	17	–	622000	SWITCH, TOGGLE SPDT
7	2	015801	NUT, HX LK #10–24NC	18	1	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, #6 X 3/4 S.T.	21	1	480598	COVER, TRIGGER OPENING
11	1	480588	CABLE ASSEMBLY	22	3	360847	PLUG, PLASTIC

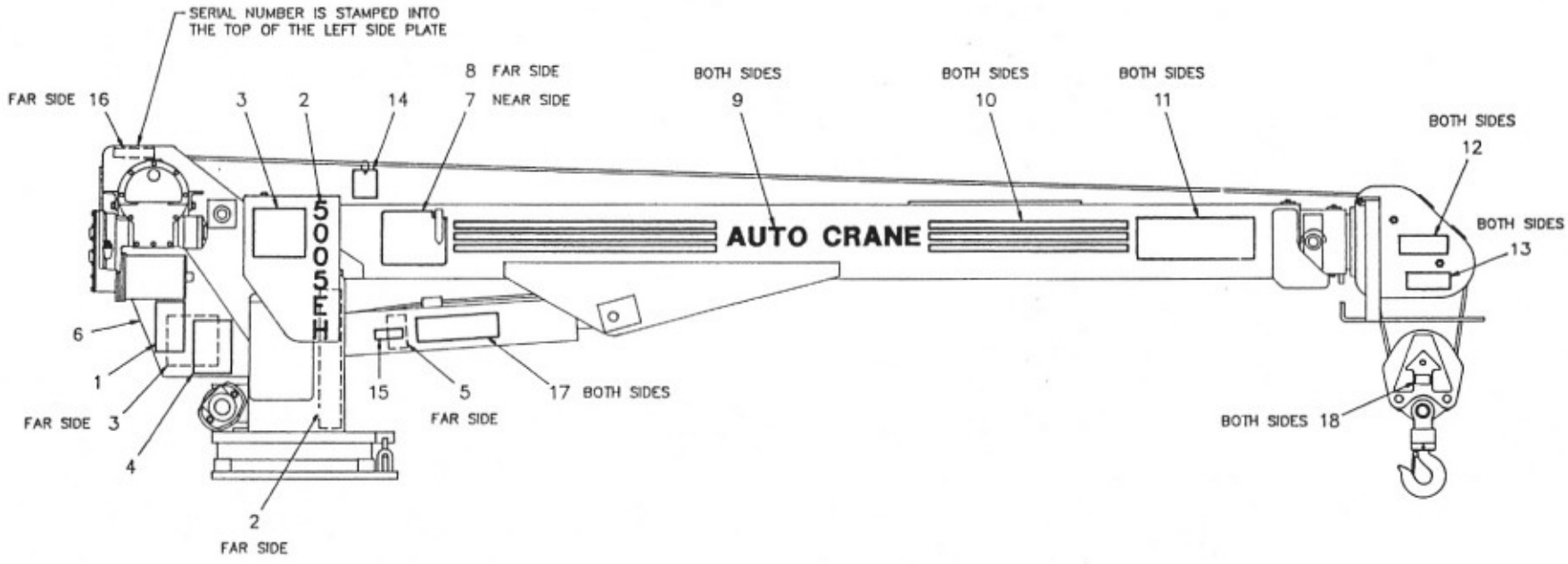
AW–345
5005EH PENDANT
(360840–004)

NOTES



ITEM	QTY	PART NO.	DESCRIPTION	ITEM	QTY	PART NO.	DESCRIPTION
1	1	040579	DECAL, CAUTION–WORK RULES	10	13'	040620	STRIPING
2	2	360839	DECAL, 5005EH	11	2	040529	DECAL, DANGER–SHOCK
3	1	360838	DECAL, LOAD CHART	12	2	040517	DECAL, DANGER–STAY CLEAR
4	1	040580	DECAL, DANGER–OPERATE	13	2	040518	DECAL, DANGER–STAY CLEAR
5	1	040632	DECAL, DANGER – CYL. OPERATION	14	1	999960	INSTALLATION CHECKLIST
6	1	360034	DECAL, LOGO	15	1	040587	DECAL, WARNING–LOAD SENSOR
7	1	360036	DECAL, ANGLE INDICATOR, RIGHT	16	1	330622	DECAL, SERIAL NO.
8	1	360037	DECAL, ANGLE INDICATOR, LEFT	17	2	040519	DECAL, DANGER–SCISSOR POINT
9	2	040624	DECAL, AUTO CRANE	18	2	360480–100	DECAL, BLOCK WEIGHT & MAX. LOAD

AW–360809
5005EH DECAL LAYOUT (BLUE)

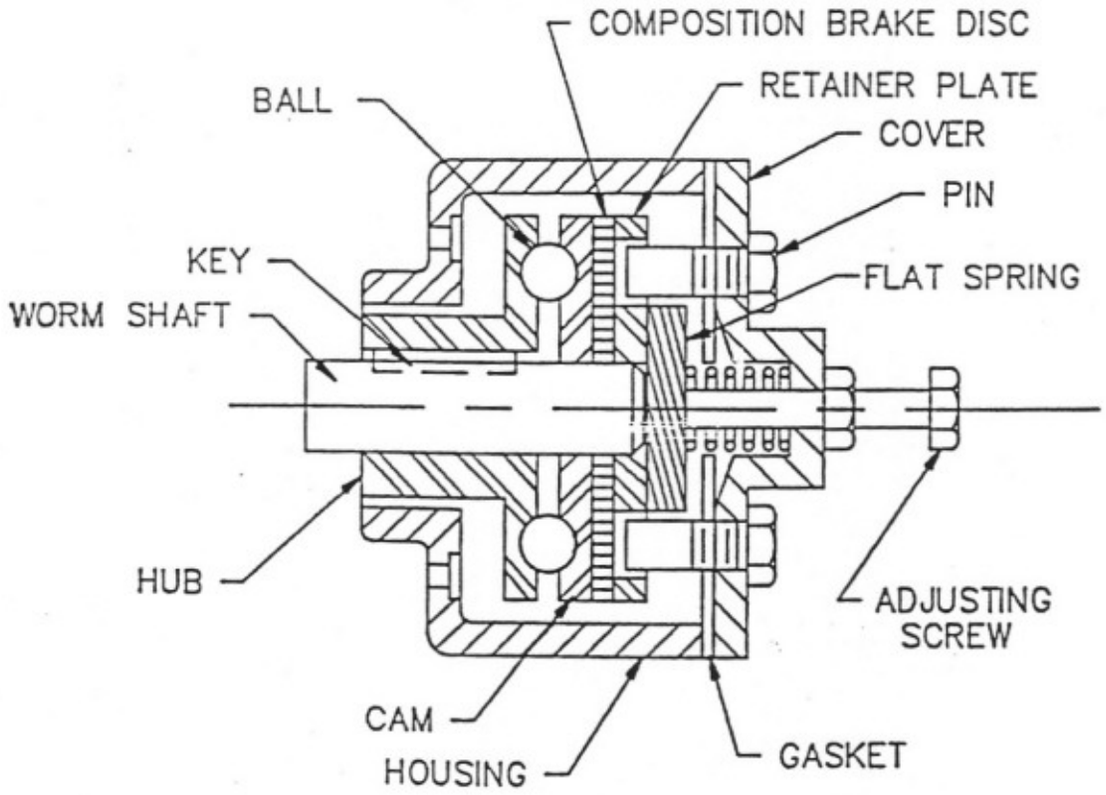


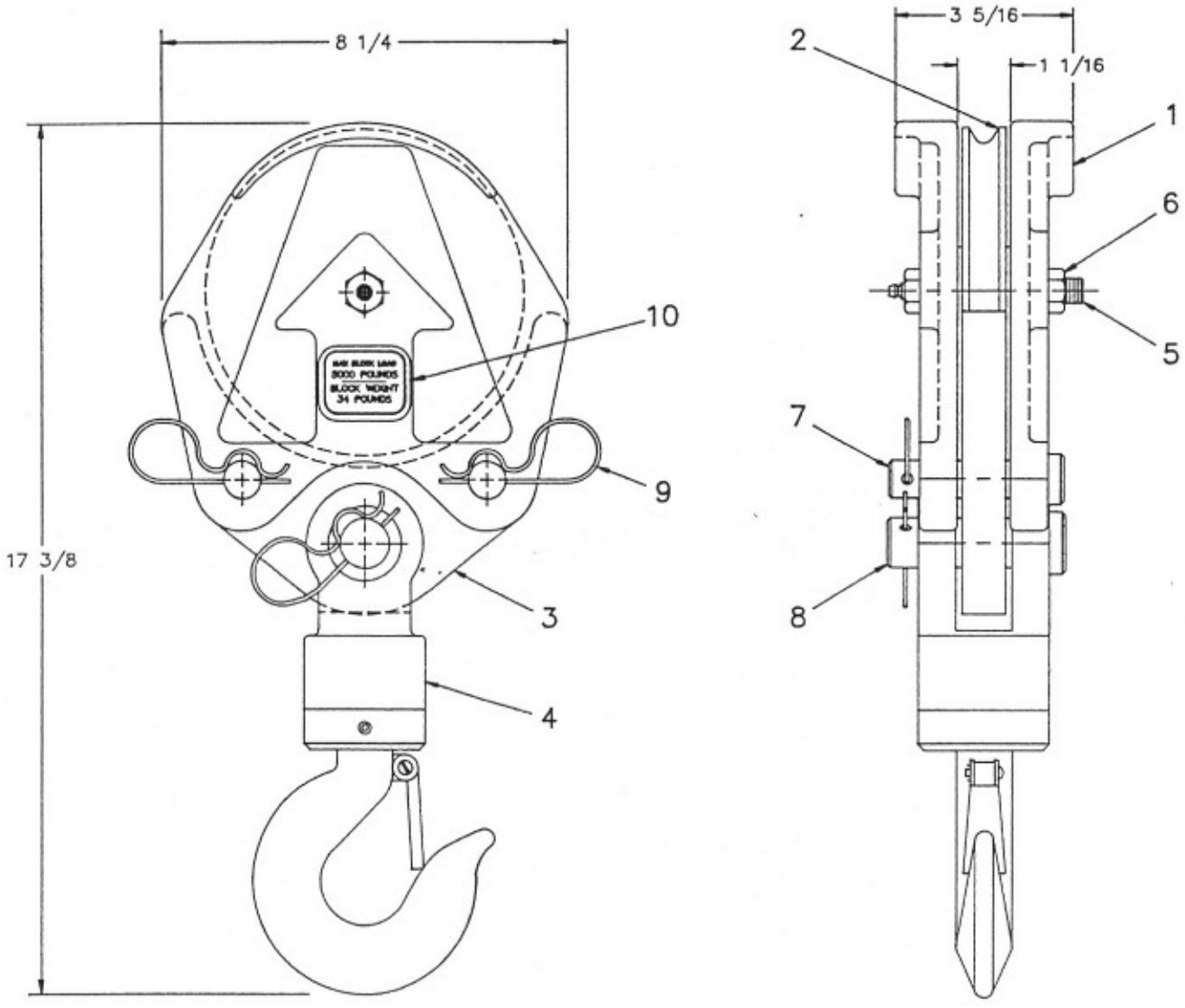
ITEM	QTY	PART NO.	DESCRIPTION	ITEM	QTY	PART NO.	DESCRIPTION
1	1	040579	DECAL, CAUTION–WORK RULES	10	13'	040620	STRIPING
2	2	360839–100	DECAL, 5005EH	11	2	040529	DECAL, DANGER–SHOCK
3	1	360838–100	DECAL, LOAD CHART	12	2	040517	DECAL, DANGER–STAY CLEAR
4	1	040580	DECAL, DANGER–OPERATE	13	2	040518	DECAL, DANGER–STAY CLEAR
5	1	040632	DECAL, DANGER – CYL. OPERATION	14	1	999960	INSTALLATION CHECKLIST
6	1	360034–100	DECAL, LOGO	15	1	040587	DECAL, WARNING–LOAD SENSOR
7	1	360036–100	DECAL, ANGLE INDICATOR, RIGHT	16	1	330622–100	DECAL, SERIAL NO.
8	1	360037–100	DECAL, ANGLE INDICATOR, LEFT	17	2	040519	DECAL, DANGER–SCISSOR POINT
9	2	040624–100	DECAL, AUTO CRANE	18	2	360480–100	DECAL, BLOCK WEIGHT & MAX. LOAD

AW–360809–100
5005EH DECAL LAYOUT (BLACK)

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.



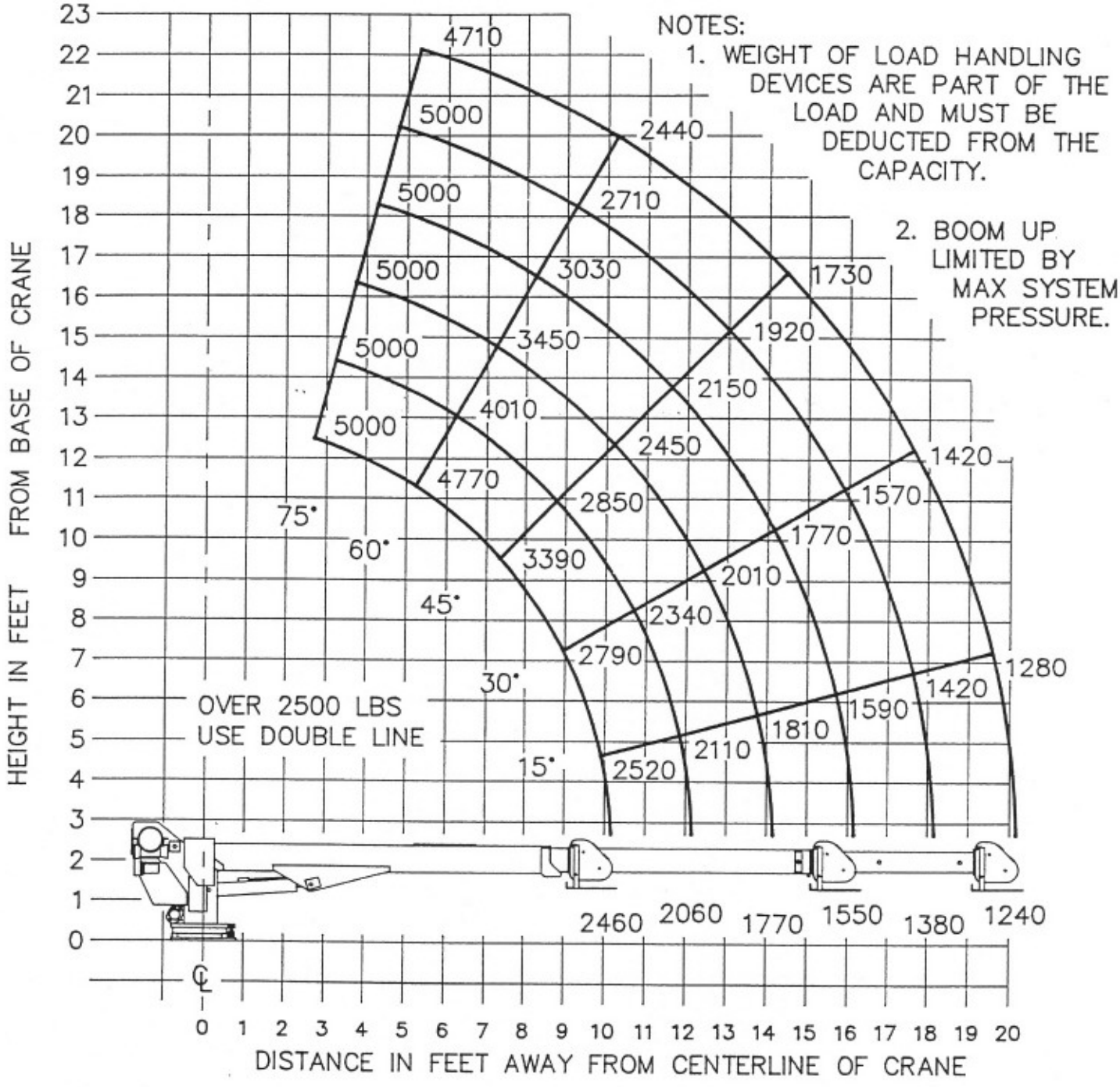


ITEM	QTY	P/N	DESCRIPTION	ITEM	QTY	P/N	DESCRIPTION
1	2	480362	SIDE PLATE (MACH.)	6	1	017800	NUT, HX LK 1/2–20NF
2	1	240236	SHEAVE ASSEMBLY	7	2	480367	PIN, BLOCK
3	1	480364	TACKLE, LOWER	8	1	480368	PIN, SWIVEL HOOK
→ 4	1	480371	HOOK, SWIVEL – 3 TON	9	3	360124	PIN, HITCH (HAIR PIN)
5	1	480372	BOLT, SHEAVE w/ ZERK	10	2	360480–100	DECAL, MAX. LOAD

LATCH KIT FOR Hook 480357

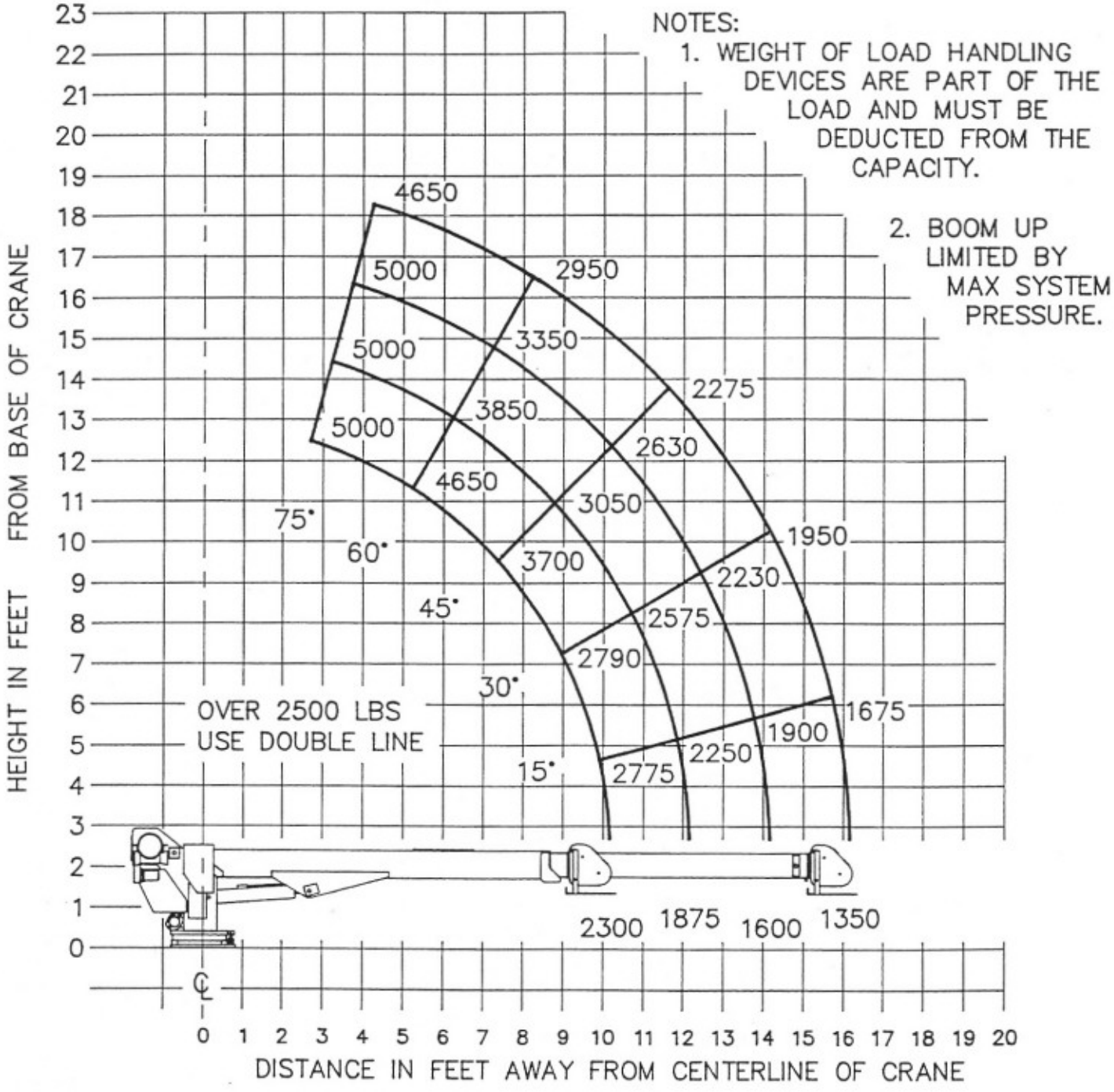
AW–360480
TRAVELING BLOCK ASSEMBLY
5005H/EH (SHORT)

MODEL 5005EH 10-16-20 MAXIMUM LOAD CHART



AW-340
5005EH LOAD CHART
10-16-20 BOOM

MODEL 5005EH 10-16 MAXIMUM LOAD CHART



AW-349
5005EH LOAD CHART
10-16 BOOM

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 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.