

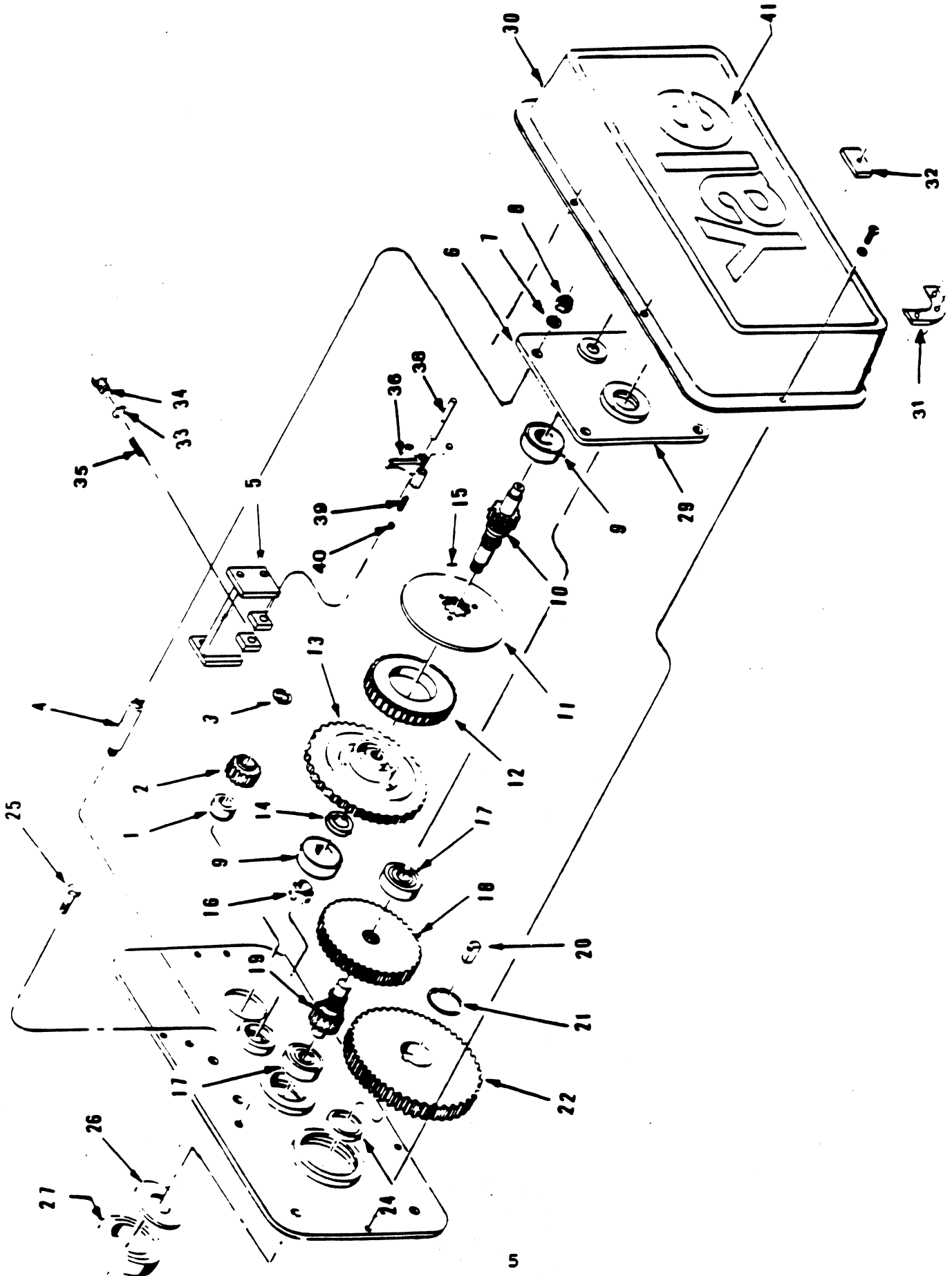
Section
1340

QEW GEAR GROUP

Gear Table

| | | |
|-------------------|------------|-------------------|
| 6483812-01 51.7:1 | | 6483812-02 34.1:1 |
| 17 | 6493543-04 | 6493543-03 |
| 18 | 6461784-02 | 6461784-01 |

| Item | P/N | Description | Qty. |
|------|-------------------|--------------------------------|------|
| 1 | 5019729-04 | SEAL | 1 |
| 2 | 6493403-00 | MOTOR PINION | 1 |
| 3 | 0159158-00 | RETAINING RING | 1 |
| 4 | 6491363-00 | STAND-OFF | 2 |
| 5 | 6493613-00 | PAWL BRACKET | 1 |
| 6 | 6461294-00 | BACKING PLATE | 1 |
| 7 | 0150270-00 | LOCK WASHER | 2 |
| 8 | 0665377-00 | NUT | 2 |
| 9 | 0151246-00 | BEARING | 2 |
| 10 | SEE GEAR TABLE | INT. PINION | 1 |
| 11 | 6415293-00 | RATCHET DISC | 1 |
| 12 | 6415273-00 | RATCHET W/LINING | 1 |
| 13 | 6418134-00 | H.S. GEAR 67T | 1 |
| 14 | 6411391-00 | SPACER | 1 |
| 15 | 0102805-00 | COTTER PIN | 1 |
| 16 | 0106694-00 | HEX NUT | 1 |
| 17 | 0220557-00 | BEARING | 2 |
| 18 | SEE GEAR TABLE | INT. GEAR | 1 |
| 19 | 6461774-00 | SS PINION | 1 |
| 20 | 6470033-01 | KEY | 1 |
| 21 | 6401529-01 | RET. RING | 2 |
| 22 | 6469713-00 | SS GEAR | 2 |
| 24 | 6461804-00 | SEAL | 1 |
| 25 | 0596946-00 | SCREW MOTOR MTG. | 4 |
| 26 | 0151206-00 | DRUM BRG (CONTROL END) | 1 |
| 27 | 0151275-00 | DRUM BRG (GEAR CASE END) SHOWN | 1 |
| 29 | 6461294-00 | BACKING PLATE | 1 |
| 30 | 6497443-00 | END COVER | 1 |
| 31 | 6495683-00 | CORNER STIFFENER | 2 |
| 32 | 6495703-00 | STIFFENER PLATE | 5 |
| 33 | 0104013-00 | GASKET PAWL STOP | 1 |
| 34 | 6464444-00 | PAWL STOP | 1 |
| 35 | 0110562-00 | SPRING COMP. | 1 |
| 36 | 0106820-00 | RATCHET PAWL | 1 |
| 37 | 6464734-00 | SCREW PAWL PIN RETAINER | 1 |
| 38 | 6493603-00 | PAWL-PIN | 1 |
| 39 | 0110567-00 | PAWL-SPRING | 1 |
| 40 | 0107993-00 | PAWL SPRING RETAINER | 1 |
| 41 | 0161097-00 | PAWL ADJUSTING SHIM | 4 |
| 42 | 6495253-02 | DECAL | 1 |



When Replacement Parts Are Needed, Order Only Yale® Factory Engineered Parts

REW GEAR GROUP

Section
1340

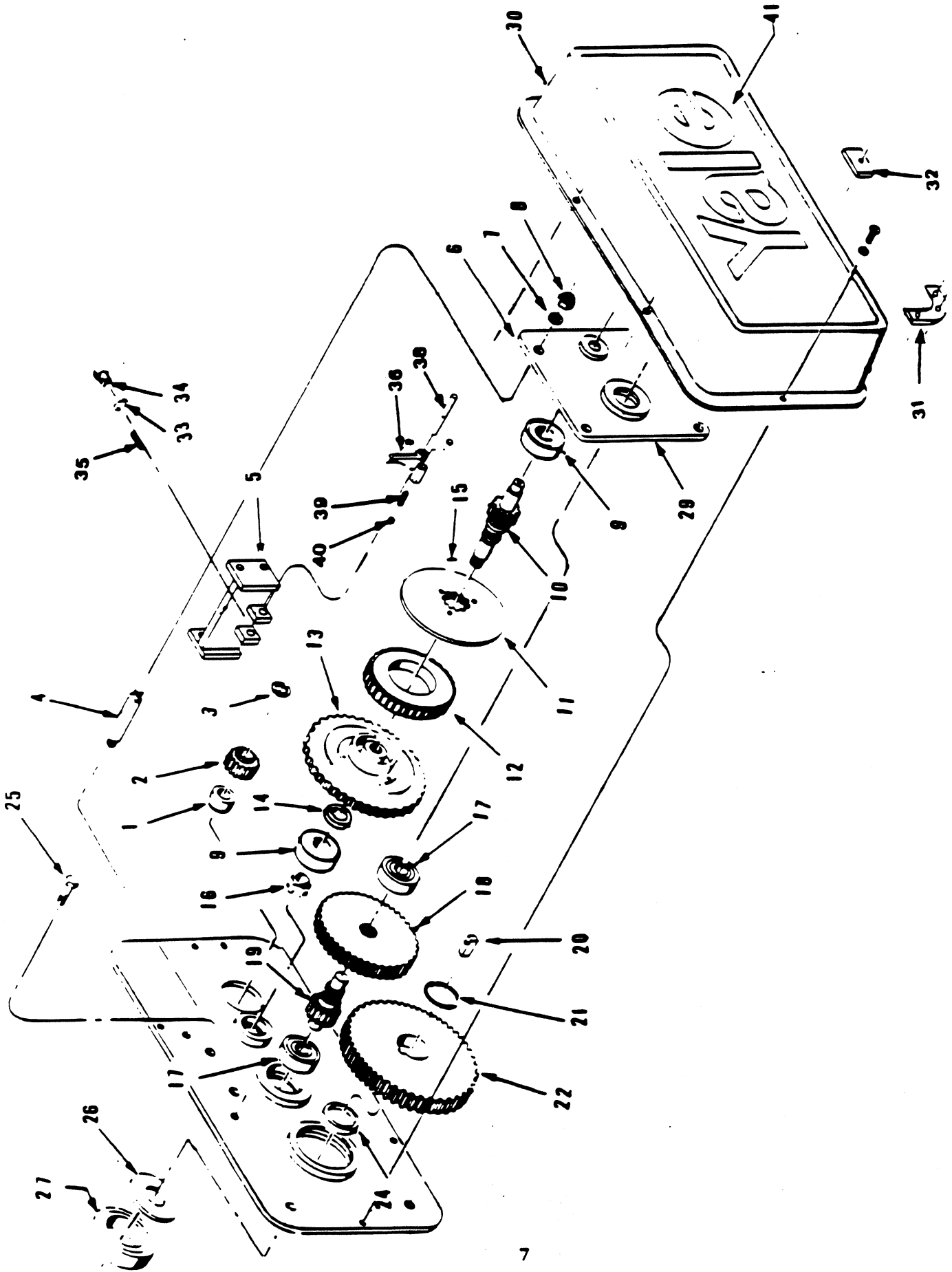
Gear Table

6480502-02 56.1:1 | 6480502-03 44/4:1

| | | |
|----|------------|------------|
| 10 | 6493543-02 | 6493543-03 |
| 18 | 6493263-02 | 6493263-03 |

| Item | P/N | Description | Qty. |
|------|---------------------|-------------------------|------|
| 1 | 5019729-04 | SEAL | 1 |
| 2 | 6493403-00 | MOTOR PINION | 1 |
| 3 | 0159158-00 | RETAINING RING | 1 |
| 4 | 6491363-00 | STAND-OFF | 1 |
| 5 | 6493613-00 | PAWL BRACKET | 4 |
| 6 | 6491283-00 | BACK PLATE | 1 |
| 7 | 0150270-00 | LOCK WASHER | 1 |
| 8 | 0665377-00 | NUT | 4 |
| 9 | 0151246-00 | BEARING | 4 |
| 10 | See Gear Table 1 | | |
| 11 | 6415293-00 | INT. PINION | 1 |
| 12 | 6415273-00 | RATCHET DISC | 1 |
| 13 | 6418134-00 | RATCHET W/LINING | 1 |
| 14 | 6411391-00 | H.S. GEAR 67T | 1 |
| 15 | 0102805-00 | SPACER | 1 |
| 16 | 0106694-00 | COTTER PIN | 1 |
| 17 | 0151294-00 | HEX NUT | 1 |
| 18 | See Gear Table | | |
| 19 | 6493473-00 | INT. GEAR | 1 |
| 20 | 6488144-01 | SS PINION | 1 |
| 21 | 0533528-00 | KEY | 1 |
| 22 | 6471183-00 | RET. RING | 1 |
| 24 | 6400899-03 | SS GEAR | 2 |
| 25 | 0596946-00 | SEAL | 1 |
| 26 | 6498253-00 | SCREW MOTOR MTG. | 4 |
| 27 | 6401629-03 | SPACER (CONTROL END) | 2 |
| 29 | 6491283-00 | DRUM BRG | 2 |
| 30 | 6491773-01 | BACKING PLATE | 1 |
| 31A | 6495683-00 | END COVER | 1 |
| 32A | 6495703-00 | CORNER STIFFENER TOP | 2 |
| 31B | 6461494-00 | STIFFENER PLATE | 5 |
| 32B | 6461504-00 | CORNER STIFFENER BOTTOM | 2 |
| 33 | 0104013-00 | STIFFENER | 1 |
| 34 | 0106849-00 | GASKET PAWL STOP | 1 |
| 35 | 0110562-00 | PAWL STOP | 1 |
| 36 | 0106820-00 | SPRING COMP. | 1 |
| 37 | 6464734-00 | RATCHET PAWL | 1 |
| 38 | 6493603-00 | SCREW PAWL PIN RETAINER | 1 |
| 39 | 0110567-00 | PAWL-PIN | 1 |
| 40 | 0107993-00 | PAWL-SPRING | 1 |
| 41 | 0161097-00 | PAWL SPRING RETAINER | 1 |
| 42 | 6495253-02 | PAWL ADJUSTING SHIM | 4 |
| | | DECAL | 1 |

PAT. 001



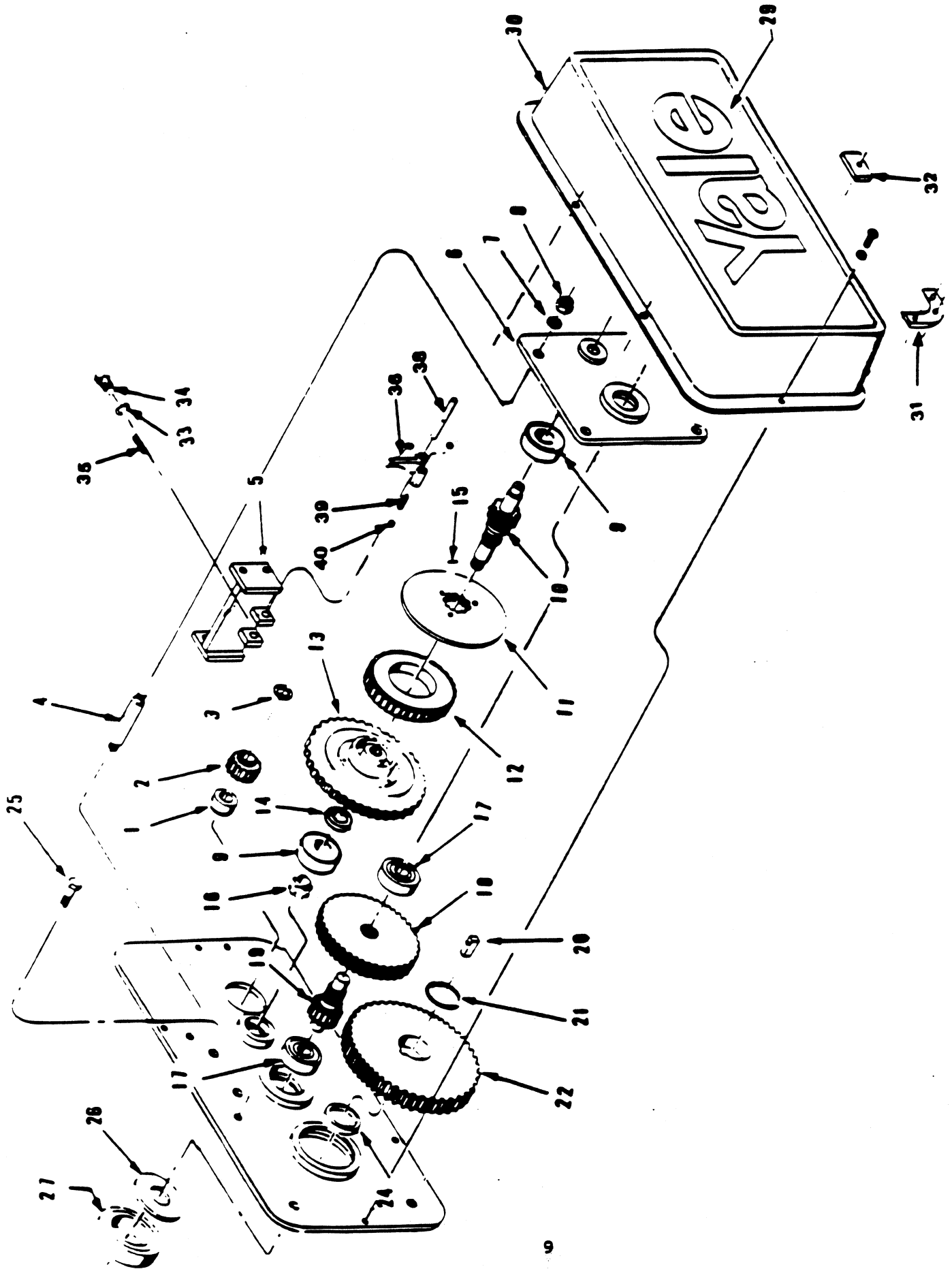
When Replacement Parts Are Needed, Order Only Yale's Factory Engineered Parts

SEW GEAR GROUP

Gear Table

| | | | |
|-------------------|------------|-------------------|--|
| 6480852-01 58.4:1 | | 6480852-02 89.4:1 | |
| 10 | 6494383-01 | 6494383-02 | |
| 18 | 6475103-01 | 6475103-02 | |

| Item | P/N | Description | Qty. |
|------|---------------|-------------------------|------|
| 1 | 6445001-00 | SPACER | |
| 2 | 6494603-00 | PINION | 1 |
| 3 | 0159163-00 | RETAINER RING | 1 |
| 4 | 6494113-00 | STAND OFF | 1 |
| 5 | 6494633-00 | PAWL BRKT. | 4 |
| 6 | 6494463-00 | BACK PLATE | 1 |
| 7 | 0401010-00 | L/WASHER | 1 |
| 8 | 0149697-00 | NUT, VAM 1 1/4-12 | 4 |
| 9 | 0545861-00 | BEARING | 4 |
| 10 | See Gr. Table | | 2 |
| 11 | 6419514-00 | RATCHET DISC 12 SPC. | |
| 12 | 6416643-00 | RATCHET W/LINING | 1 |
| 13 | 6439834-00 | H S GEAR | 1 |
| 14 | 6411161-00 | SPACER | 1 |
| 15 | 0154219-00 | COTTER PIN | 1 |
| 16 | 0106712-00 | NUT, HEX CASTLE | 1 |
| 17 | 6421761-00 | BEARING | 1 |
| 18 | See Gr. Table | | 2 |
| 19 | 6494613-00 | 2ND. INT. PINION | |
| 20 | 6470033-02 | KEY | 1 |
| 21 | 5001869-07 | RET. RING | 1 |
| 22 | 6475113-00 | SS GEAR | 2 |
| 24 | 0116136-00 | SEAL | 1 |
| 25 | 0596946-00 | SCREW | 1 |
| 26 | 6498303-00 | SHIM (CONTROL END) | 4 |
| 27 | 5025079-02 | DRUM BRG. | 2 |
| 28 | 6472053-06 | SPACER | 2 |
| 29 | 6460016-00 | DECAL | 1 |
| 30 | 6495223-00 | COVER GR. END | 2 |
| 31A | 6495683-00 | CORNER STIFFENER TOP | 1 |
| 32A | 6495703-00 | STIFFENER PLATE | 2 |
| 31B | 6461494-00 | CORNER STIFFENER BOTTOM | 9 |
| 32B | 6461514-00 | STIFFENER PLATE | 2 |
| 33 | 0104013-00 | GASKET PAWL STOP | 1 |
| 34 | 0106849-00 | PAWL STOP | 1 |
| 25 | 0110562-00 | SPRING COMP. | 1 |
| 36 | 0106818-00 | RATCHET PAWL | 1 |
| 38 | 0106877-00 | PAWL PIN | 1 |
| 39 | 0110553-00 | SPRING COMP. | 1 |
| 40 | 0107989-00 | PAWL SPRING RET. | 1 |

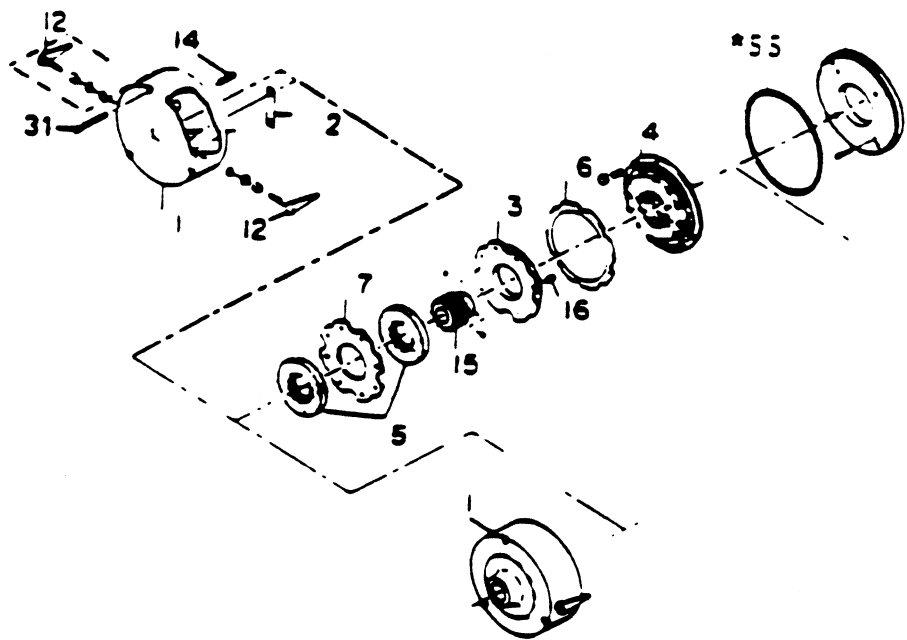


When Replacement Parts Are Needed, Order Only Yale® Factory Engineered Parts

Yale Hoisting Equipment

SECTION 13.
MOTOR BRAKE

REPAIR PARTS



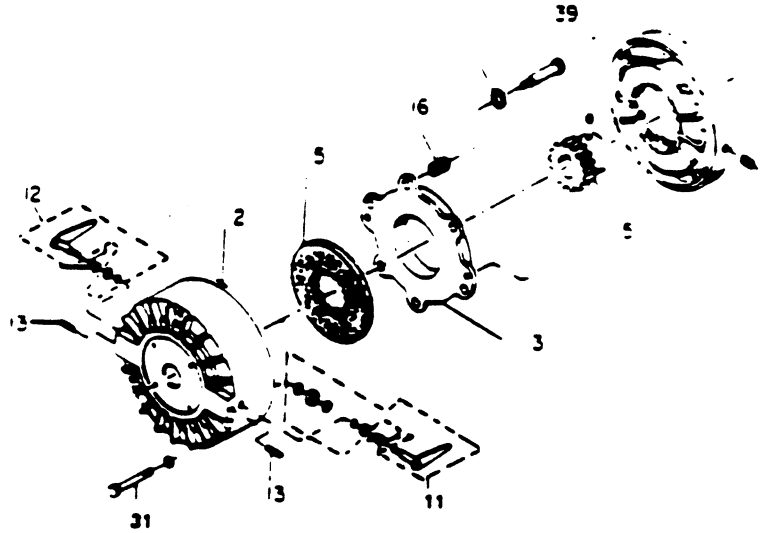
REULAND MOTOR BRAKE 25 FT. LB

| ITEM NUMBER | PART NUMBER | DESCRIPTION | QTY. |
|-------------|-------------|-------------------------------|------|
| 55 | 648939301 | GASKET | 1 |
| 1 | 648939302 | HOUSING | 1 |
| 2 | 648939303 | BRAKE SHIM | 4 |
| 3 | 648939304 | ARMATURE ASM. | 1 |
| 4 | 648939305 | STATOR 200V | 1 |
| | 648939306 | STATOR 230/400V | 1 |
| | 648939307 | STATOR 575V | 1 |
| 5 | 648939308 | FRICTION DISC | 2 |
| 6 | 648939309 | COMPRESSION PLATE | 1 |
| 7 | 648939310 | BRAKE PLATE | 1 |
| 12 | 648939313 | MANUAL RELEASE SPRING ASM. ** | 2 |
| 14 | 648939314 | GUIDE PIN | 8 |
| 15 | | BRAKE HUB | |
| | 648939315 | .750 BORE | |
| | 648939316 | .875 BORE | |
| | 648939317 | 1.125 BORE | |
| | 648939318 | 1.375 BORE | |
| | 648939319 | 1.625 BORE | |
| 16 | 648939320 | TORQUE SPRING | |
| | | 3 HP 15 FT. LB. | 4 |
| | | 5 HP 25 FT. LB. | 6 |
| 31 | 648939321 | HOUSING COVER BOLT | 3 |

* AS REQUIRED
** SPECIFY LEFT OR RIGHT

When Replacement Parts Are Needed, Order Only Yale® Factory Engineered Parts

REPAIR PARTS



REULAND MOTOR BRAKE 50/75 FT. LB

| ITEM NUMBER | PART NUMBER | DESCRIPTION | QTY |
|-------------|-------------|----------------------------------|-----|
| 2 | 648940301 | BRAKE HOUSING | 1 |
| 3 | 648940302 | ARMATURE ASM. | 1 |
| 4 | 648940303 | STATOR 200V) | |
| | 648940304 | STATOR 230/400V) SELECT 1 | |
| | 648940306 | STATOR 575) | |
| 5 | 648940308 | FRICTION DISC | 1 |
| | 648940309 | MANUAL RELEASE SPRING ASM. LEFT | 1 |
| 12 | 648940310 | MANUAL RELEASE SPRING ASM. RIGHT | 1 |
| 13 | 648940311 | STOP PIN | 1 |
| 15 | 648940312 | BRAKE HUB | 1 |
| | 648940313 | 1.375 BORE | |
| | 648940314 | 1.625 BORE | |
| | 648940315 | 1.875 BORE | |
| 16 | 648940316 | TORQUE SPRING 25 FT. LB. BRAKE | 4 |
| | 648940317 | 50 FT. LB. BRAKE | |
| 31 | 648940316 | HOUSING COVER BOLT | 6 |
| 39 | 648940317 | SHOULDER BOLT | 3 |
| | | | 6 |

When Replacement Parts Are Needed, Order Only Yale® Factory Engineered Parts

Yale Hoisting Equipment

SECTION 1301
MOTOR BRAKE

HUB LOCATION DIMENSIONS

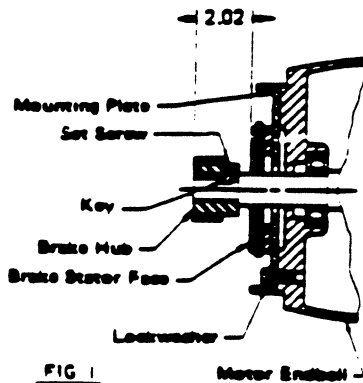


FIG 1

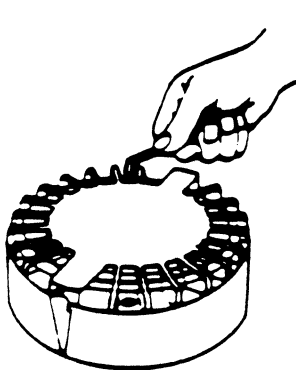
MAINTENANCE INSTRUCTIONS

The Stator-Armature air gap is factory set and requires no resetting, even when installing a new friction disc. However, as with any electro-mechanical device periodic inspection will insure optimum performance. Recommended inspection procedure is as follows:

1. Inspect brake disc every 3,000 cycles. The disc should be replaced when worn to .475" thickness.
2. Inspect brake disc for general condition, and signs of unusual wear remove any build-up of wear particles.
3. Inspect all bolts, hub set screws, etc. for tightness.

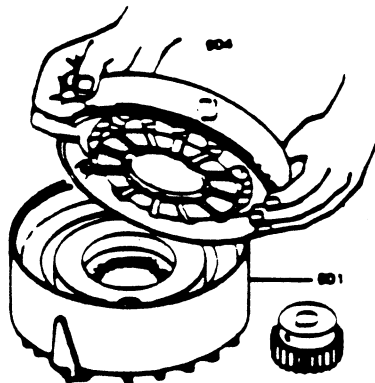
WARNING

Brake failure may be caused by improper application and/or lack of maintenance. Additional means shall be provided to insure safety of personnel if injury could be caused by brake failure. Do not energize brake with cover assembly removed. Wound stator can be damaged, voiding warranty.



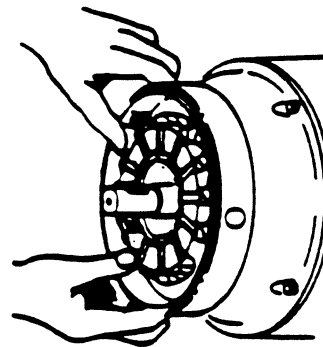
STEP 1

Remove three brake housing cover bolts (931) from cover.



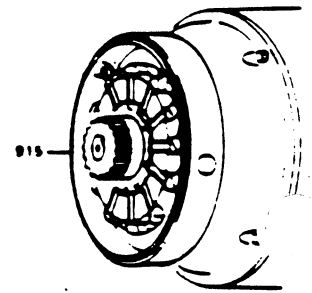
STEP 2

Brake now comes apart in two assemblies. Stator assembly (904) and Brake housing assembly (901).



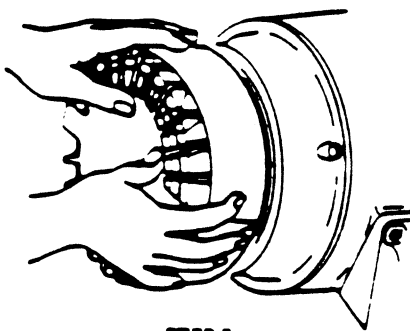
STEP 3

Align brake lead hole in stator assembly with corresponding hole in motor and lead brake leads into motor. Mount stator assembly to motor, using care to insure the "lining up" of diameter of stator assembly with the register on motor endbell for proper fit of housing assembly. Use mounting bolts to secure stator assembly in place.



STEP 4

Position brake hub (915) on motor shaft (see Fig. 1 for installation location). Tighten set screws.



STEP 5

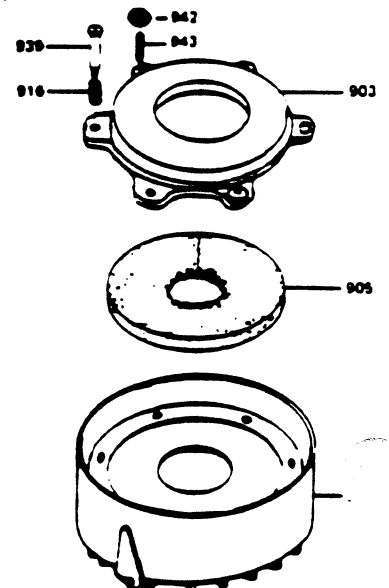
Using care to insure proper mating of hub to line and brake lining disc, secure housing assembly to stator assembly. If housing assembly fails to align easily with register of motor endbell, releasing of brake release levers momentarily will allow centering of brake disc and alignment of fit. Secure with brake housing cover bolts furnished, and return release levers to normal position.

STEP 6

Friction Disc Renewal - Remove power from system. Now follow the steps one and two. Then proceed to remove all six shoulder bolts (939) from the brake housing assembly.

NOTE The location of each torque spring (916). Do not remove the two elastic stop nuts (942). These are factory set to regulate rotor lift height. Armature can be removed without removing elastic stop nuts. Lift out the armature assembly (903) from the brake housing. The friction disc (906) is now accessible for removal and replacement.

Visually check all parts for foreign material. Insert new friction disc into brake housing, making sure it is located in approximately the center and reassemble the armature assembly. Torque springs and shoulder bolts into their original positions. Then tighten to 35 ft. lb. with torque wrench.

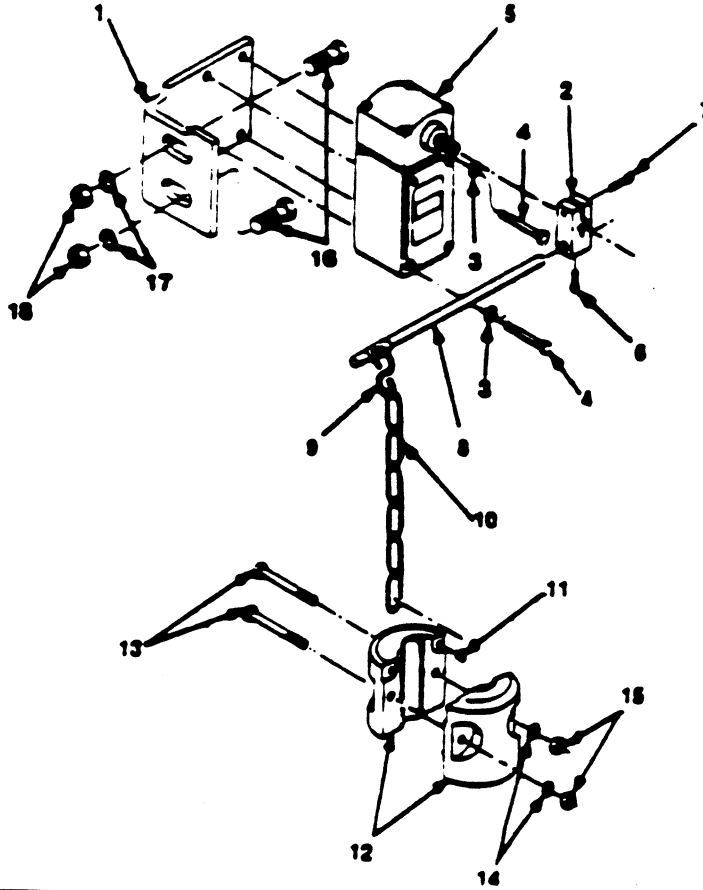


Yale Hoisting Equipment

UPPER PLUGGING L/S

SECTION 1412

REPAIR PARTS



| ITEM | PART NO. | DESCRIPTION | QTY |
|------|---------------|-------------------------------|-----|
| 2 | 6467791-00 | HUB..... | 1 |
| 3 | 0150285-00 | LOCKWASHER NO. 10..... | 2 |
| 4 | 0148768-00 | R.H. SCREW 10-32..... | 2 |
| 5 | SEE PART LIST | LIMIT SWITCH..... | 1 |
| 6 | 0658254-00 | SOCKET SCREW 10-32 X 3/8.... | 1 |
| 7 | 0858255-00 | SOCKET SCREW 10-32 X 5/8.... | 1 |
| 8 | | 1/4 ALUMINUM L.S. ROD..... | 1 |
| 9 | 0591497-00 ** | S HOOK..... | 1 |
| 10 | 6450221-79 ** | CONTROL CHAIN..... | ** |
| 11 | 0105760-00 ** | L.S. WEIGHT PIN..... | 2 |
| 12 | 6495351-00 ** | L.S. WEIGHT..... | 2 |
| 13 | 0109484-00 ** | R.H. SCREW 1/4-20 X 1 3/4.... | 2 |
| 14 | 0150308-00 ** | LOCKWASHER 1/4 IN..... | 2 |
| 15 | 0149707-00 ** | JAM NUT 1/4 - 20..... | 2 |

**SPECIFY LENGTH

**WEIGHT TYPE LIMIT SWITCH ONLY

PAT-004

AUGUST 1987

SECTION 1420 / 30

LIMIT SWITCH

EW SERIES - ALL CHASSIS GEARED LIMIT SWITCH STANDARD AND EXPLOSION PROOF UNITS

ADJUSTMENT

The limit switch cams are set at the factory for maximum lift. If re-adjustment is necessary, the following procedure should be followed.



WARNING! If equipment is located in a hazardous area, be sure power is off before opening cover.

1. Remove limit switch cover.
2. Loosen the two cam clamping screws one half turn each.
3. Locate the adjusting pinion for the cam which requires re-adjustment by referring to the arrow on the contact unit insulator.
4. Depress pinion with a screwdriver to engage gears. Rotate the cam to the desired setting. The white mark on the gear teeth is directly over the cam lobe that trips the switch.
5. Tighten the cam clamping screws and replace the limit switch cover.

MAINTENANCE

LUBRICATION

The limit switch has been permanently lubricated at the factory. An increase in life may be obtained by occasionally placing a small amount of gear grease on the worm and worm gear.

CONTACT UNIT REPLACEMENT

If a contact unit should require replacement, the following procedure should be followed to ensure proper operation of the limit switch.



WARNING! If equipment is located in a hazardous area, be sure power is off before opening cover.

1. Remove the limit switch cover.
2. Remove the defective contact unit.
3. Turn the cam so that the cam lobe is away from the cam follower.
4. Install the new contact unit and the insulator, pushing the bracket toward the center post as far as possible.
5. Tighten both mounting screws.
6. Loosen both mounting screws one half turn.
7. Loosen the cam clamping screws one half turn each.
8. Using the adjusting pinion, rotate the cam lobe past the cam follower. This will push the bracket into the proper position.
9. Re-tighten the contact unit mounting screws.
10. Re-adjust cam by following the instructions given under ADJUSTMENT.

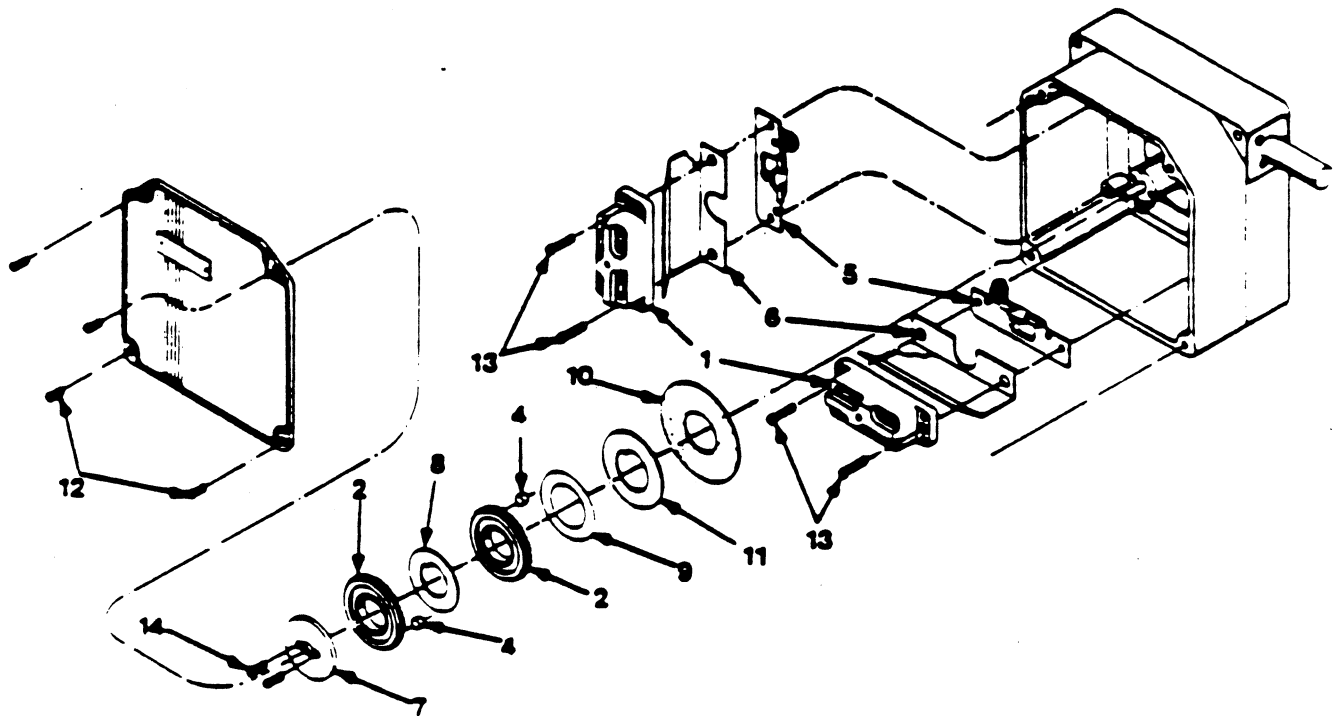
When Replacement Parts Are Needed, Order Only Yale[®] Factory Engineered Parts

Yale Hoisting Equipment

SECTION 142313
LIMIT SWITCH

EW SERIES- ALL CHASSIS ELECTRIC HOIST
GEARED LIMIT SWITCH STANDARD & EXPLOSION PROOF UNITS

6432652 _____
6432662 _____
6432672 _____
6432682 _____
6432692 _____



| ITEM | PART NO. | DESCRIPTION | QTY |
|------|------------|--|-----|
| 1 | 6492221-01 | CONTACT UNIT (1 NO - 1 NC) | ▼ |
| | 6492221-02 | CONTACT UNIT (1 NC) | ▼ |
| 2 | 6492221-03 | CAM (STANDARD) | ▼ |
| | 6492221-04 | CAM (45° DWELL) | ▼ |
| 4 | 6492221-05 | ROLLER FOR CAM | ▼ |
| 5 | 6492221-06 | PINION AND BRACKET | ▼ |
| 6 | 6492221-07 | INSULATOR | ▼ |
| 7 | 6492221-08 | CLAMPING PLATE | 1 |
| 8 | 6492221-09 | SPACER WASHER | ▼ |
| 9 | 6492221-10 | SPRING WASHER | 1 |
| 10 | 6492221-11 | CLUTCH DISC | 1 |
| 11 | 6492221-12 | RETAINER WASHER | 1 |
| 12 | . | COVER SCREW NO. 6 - 32 X 3/8 | |
| 13 | . | CONTACT MOUNTING SCREW NO. 6 - 32 X 5/8 SEMS | |
| 14 | . | CAM CLAMPING SCREW NO. 6 - 32 X 3/8 SEMS | |

▼ QUANTITY AS REQUIRED.

• STANDARD HARDWARE ITEMS - OBTAIN LOCALLY

YE 0523
FORM NO. 165-908-039

When Replacement Parts Are Needed, Order Only Yale® Factory Engineered Parts

REV JULY 1983

EW SERIES

Yale Hoisting Equipment

SECTION 1430
LIMIT SWITCH

REPAIR PARTS AND Adjustment Of Limit Switches

1. UPPER AND LOWER LIMIT SWITCH.



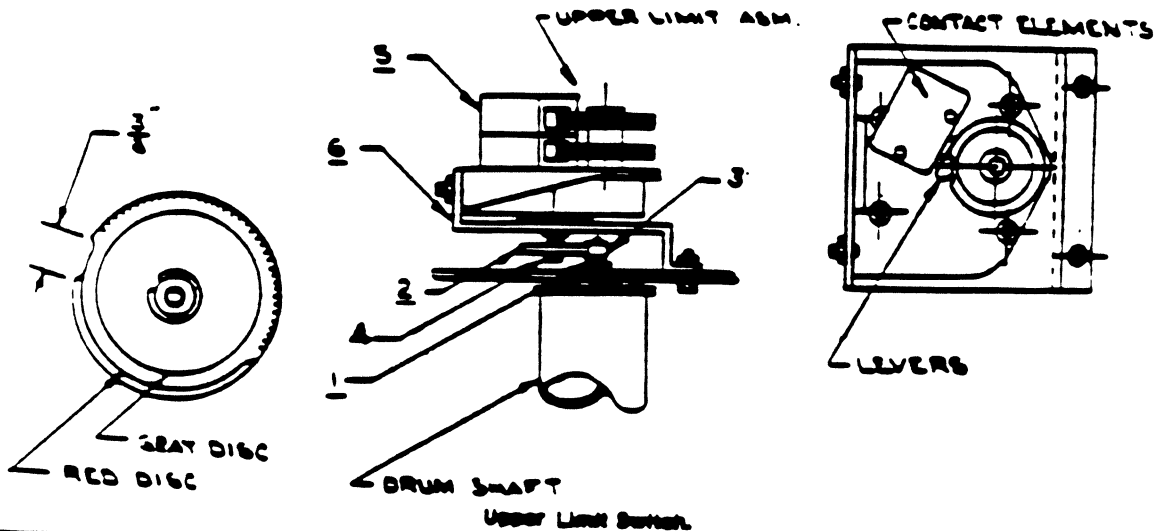
WARNING EACH STEP OUTLINED BELOW MUST BE FOLLOWED FOR PROTECTION AGAINST ELECTRICAL SHOCK AND INJURY FROM MOVING COMPONENTS.

To adjust the traveling nut limit switches, or to set them at other levels:

- (a) Remove all electrical power from the hoist.
- (b) Remove control cover.
- (c) Adjustment discs rotate in a clockwise direction when hoist is lifting and in a counter-clockwise direction when lowering.
- (d) For upper limit switch, move the external adjusting disc.
- (e) For lower limit switch, move the internal adjusting disc.
- (f) Each disc includes two movable sectors independent from each other (one red and one grey).
- (g) Move each of the two red and grey discs in the desired direction keeping a gap of 3/8" between the discs.



WARNING AT LEAST 1 WRAP OF ROPE MUST REMAIN ON THE DRUM IN THE LOWEST POSITION.



| ITEM | 1 LIFT P/N | 2 LIFT P/N | DESCRIPTION | 1 LIFT QTY | 2 LIFT QTY |
|------|---------------|---------------|-------------------------------------|---------------|---------------|
| | 6481732 01 | 6481732 02 | LIMIT SW. ASM. INCLUDES ITEM 1-6 | 1 | 1 |
| 1 | 6496303 00 | 6496303 00 | PINION SHAFT | 1 | 1 |
| 2 | ————— | 6496363 00 | PINION 21T. | ————— | 1 |
| 3 | 6496343 00 | ————— | PINION 14T. | 2 | 1 |
| 4 | 6496373 00 | 6496373 00 | PINION ASM. | 1 | 1 |
| 5 | 6473653 01 | 6473653 01 | LIMIT SWITCH | 1 | 1 |
| 6 | 6496323 00 | 6496323 00 | MTG. BRACKET | 1 | 1 |

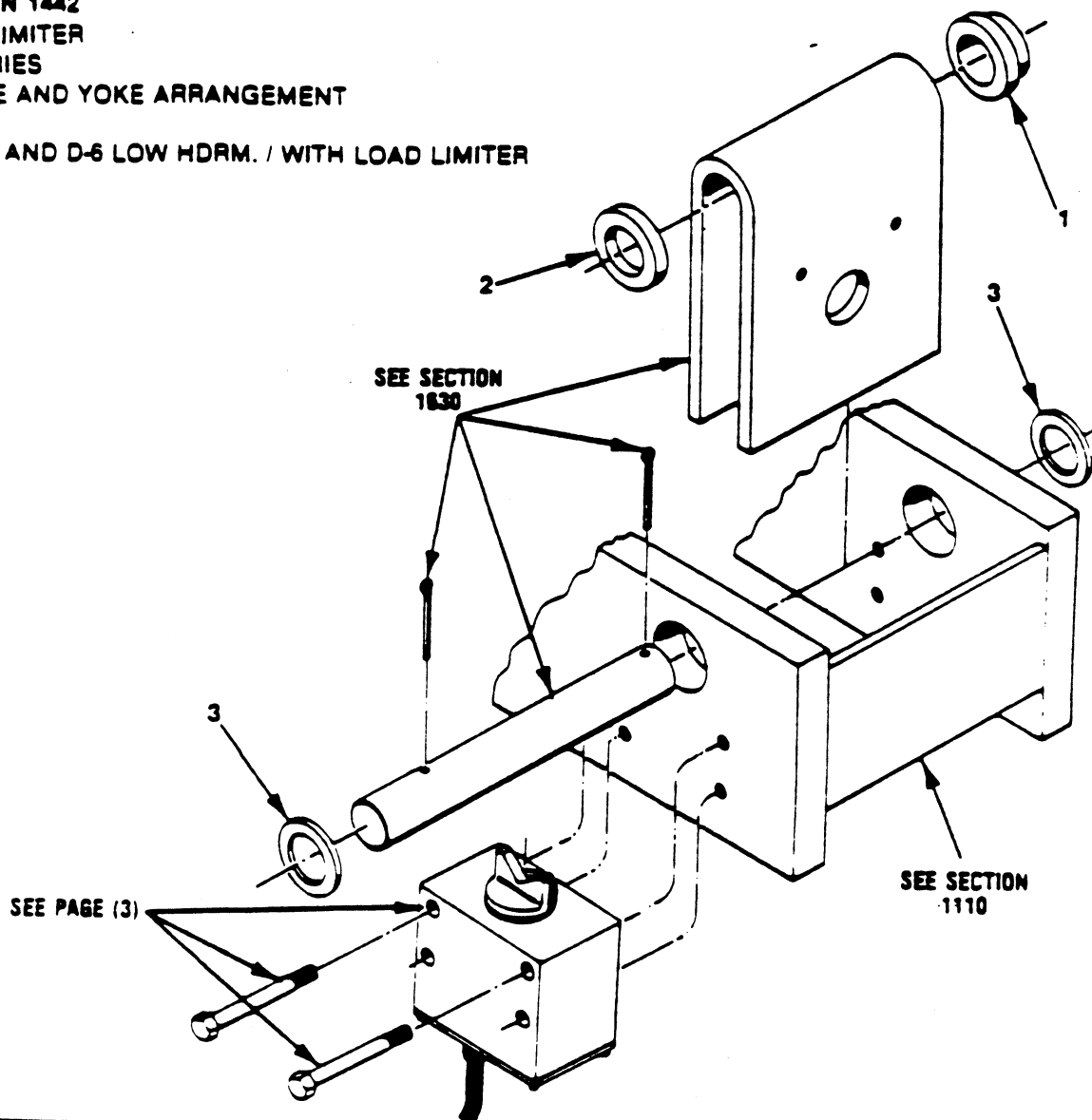
When Replacement Parts Are Needed, Order Only Yale® Factory Engineered Parts

AUGUST 1987

EW SERIES-P

**SECTION 1442
LOAD LIMITER
EW SERIES
SHEAVE AND YOKE ARRANGEMENT**

D-2, D-4 AND D-6 LOW HDRM. / WITH LOAD LIMITER



| ROPE DIA. & REEVING | ITEM 1 SPACER | ITEM 2 PLAIN SPACER | ITEM 3 WASHER | QTY |
|---------------------|---------------|---------------------|---------------|-----|
| 1/4-5/16 D2-D4 | 6480911-05 | 6446283-13 | 6425151-08 | 2 |
| 5/16-3/8 D4 | 6428541-08 | N/R | 6425151-08 | 4 |
| 1/4-3/8 D2-D4 | 6428541-08 | N/R | 6425151-08 | 4 |
| 3/8-7/16 D2-D4 | 6428541-05 | N/R | 0236284-00 | 4 |
| 7/16-1/2 D2-D4 | 6428541-05 | N/R | 0236284-00 | 4 |
| 1/2-9/16 D2-D4 | 6446283-20 | N/R | 6421751-07 | 2 |
| 7/16-1/2 D6 | 6421741-05 | N/R | 6421751-08 | 2 |

N/R - NOT REQUIRED

FORM NO. 185-808-034-1

When Replacement Parts Are Needed, Order Only Yale® Factory Engineered Parts

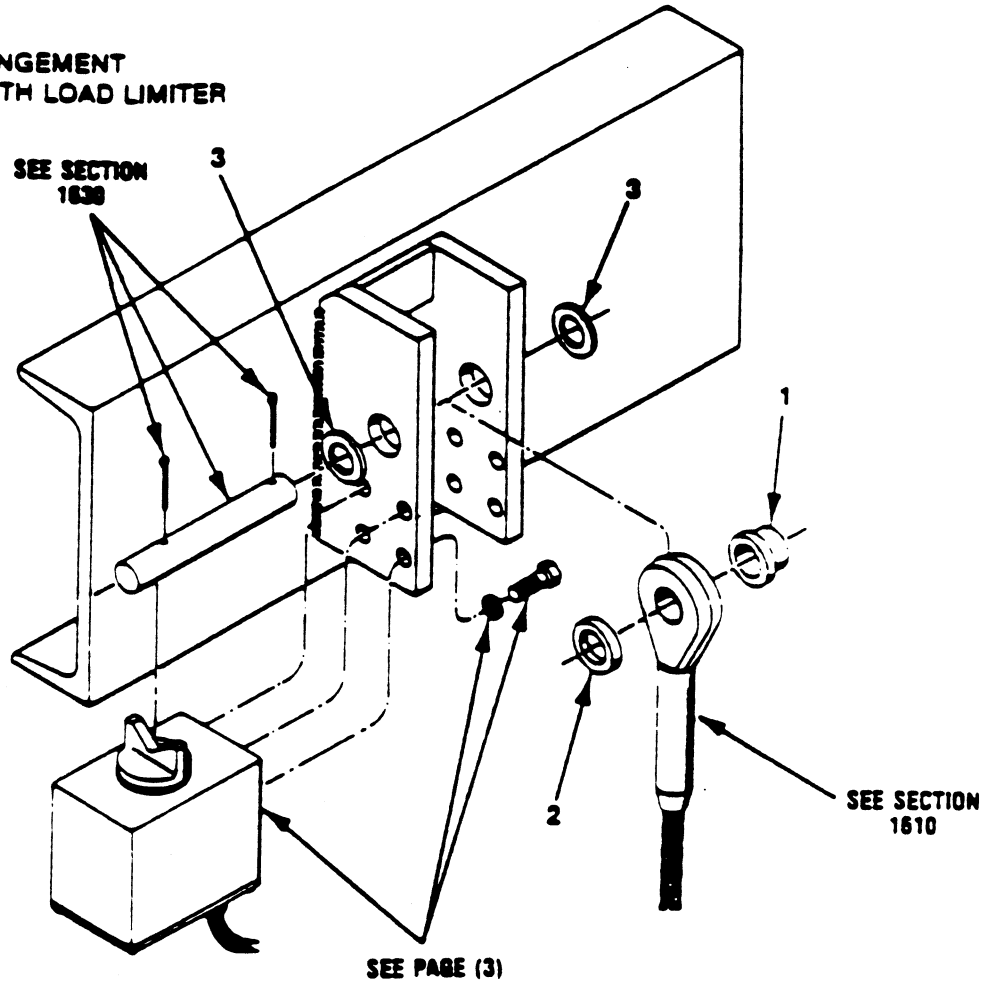
JUNE 1983

EW SERIES

Yale Hoisting Equipment

SECTION 144: LOAD LIMITER

EW SERIES
DEAD END ROPE ARRANGEMENT
S2 - S4 STD. HORM. / WITH LOAD LIMITER



| ROPE DIA | ITEM 1 SHOULDER SPACER | ITEM 2 PLAIN SPACER | ITEM 3 WASHER |
|----------|------------------------------|---------------------------|------------------|
| 4 | 648743101 | 644486103 | 016110900 |
| 5.16 | 648743102 | 642448108 | 016111200 |
| 3/8 | 648743103 | 642448107 | |
| 1.16 | 648743102 | ↓ | ↓ |
| 1.2 | 648743102 | | |
| 5/8 | 648743104 | 644628316 | 053581900 |
| 3/4 | 648743105 | 644628317 | 016120100 |

FORM NO. 165-908-034

When Replacement Parts Are Needed, Order Only Yale® Factory Engineered Parts

APRIL 1984

EW SERIES

**SECTION 1442
LOAD LIMITER**

| COMMON PARTS | | | |
|--------------|------------|---|------|
| ITEM | PART NO. | DESCRIPTION | QTY. |
| 1 | SEE TABLE | HOUSING (SIDE MOUNT) | 1 |
| | SEE TABLE | HOUSING (END MOUNT) | 1 |
| 2 | 6483721-00 | PLUNGER | 1 |
| 3 | 6483731-00 | ADJUSTING BLOCK | 1 |
| 4 | 6483701-00 | COVER (LIMIT SWITCH) | 1 |
| 5 | 6453923-00 | BRACKET (SWITCH) | 1 |
| 6 | 6454013-00 | MOUNTING BRACKET | 1 |
| 7 | 6483681-00 | ADJUSTING SCREW | 1 |
| 8 | 6483671-00 | CLEVIS PIN | 1 |
| 9 | 6402478-17 | BELLEVILLE SPRING | • |
| 10 | 6484161-02 | THRUST WASHER (1.56 O.D.) | 1 |
| 11 | 6484161-01 | THRUST WASHER (2.062 O.D.) | 1 |
| 12 | 0128244-00 | "O" RING | 1 |
| 13 | 0167773-00 | SPRING | 1 |
| 14 | 0148633-00 | SCREW (COVER) | 4 |
| 15 | 0114108-00 | LOCKWASHER (CAD. PLATED) | 4 |
| 16 | 0148615-00 | SCREW (MTG. BRACKET) | 1 |
| 17 | 0114099-00 | LOCKWASHER (SHAKEPROOF) | 1 |
| 18 | 0149360-00 | NUT (MTG. BRACKET) | 1 |
| 19 | 0210676-00 | ROUND HEAD SCREW | 1 |
| 20 | 0211973-00 | HEX NUT | 1 |
| 21 | 6484141-00 | MICRO SWITCH | 1 |
| 22 | 0102775-00 | COTTER PIN | 1 |
| 23 | 0149393-00 | HEX NUT (ADJUSTING SCREW) | 1 |
| 24 | 0150266-00 | LOCKWASHER, 1/2 MED. (NOT SHOWN) | 4 |
| 25 | 2031527-00 | SCREW, 1/2 - 13 (NOT SHOWN) LOW HEADROOM | AR** |
| | 0554850-00 | SCREW, 1/2 - 13 (NOT SHOWN) STD. HEADROOM | 4 |
| 26 | 0515453-00 | LOCKWASHER, SHAKEPROOF | 1 |

* SEE TABLE FOR QUANTITY REQUIRED.
**AR AS REQUIRED FOR FRAME MTG. BRACKET.

| LOAD LIMITER ASSEMBLY NUMBER | TYPE OR MOUNT | HOUSING ITEM 1 | BELLEVILLE SPRING ITEM 9 QUANTITY |
|------------------------------|----------------------------|----------------|-----------------------------------|
| 6448482-01 | SIDE MOUNT OR LOW HEADROOM | 6483741-00 | 1 |
| 6448482-02 | SIDE MOUNT OR LOW HEADROOM | 6483741-00 | 2 |
| 6448482-03 | END MOUNT OR STD. HEADROOM | 6483751-00 | 1 |
| 6448482-04 | END MOUNT OR STD. HEADROOM | 6483751-00 | 2 |

FORM NO. 165-908-034-4

When Replacement Parts Are Needed, Order Only Yale® Factory Engineered Parts
JUNE 1983 4 EW SERIES

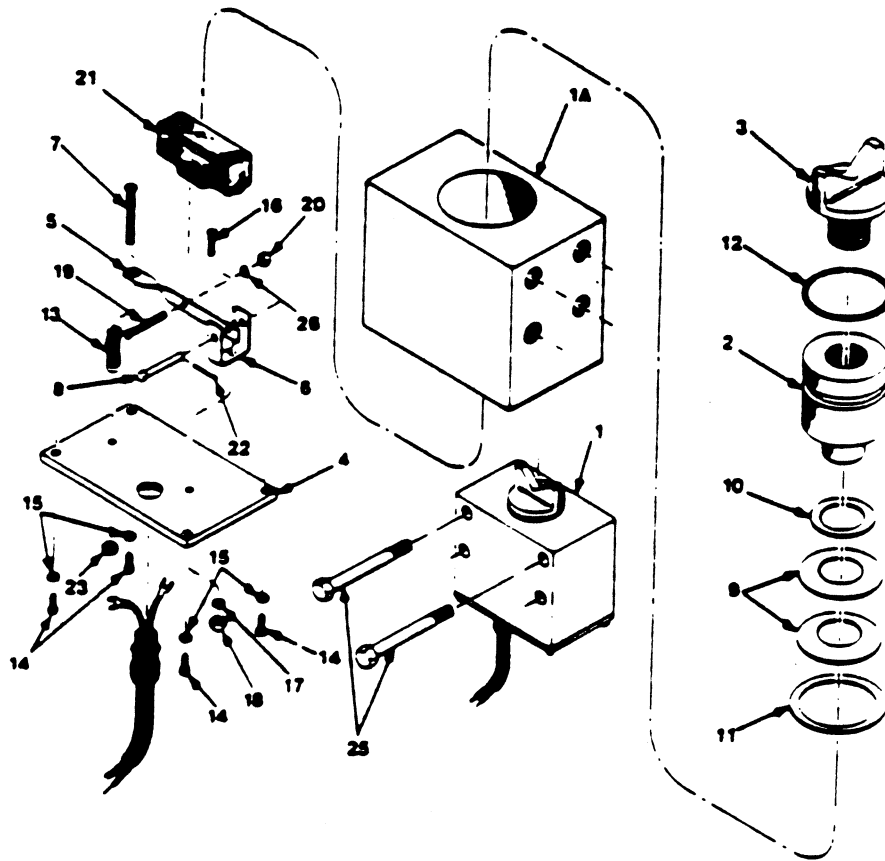
IMPORTANT
SELECT COMPONENT ASSEMBLY
NUMBER FROM PARTS LIST IN FRONT
COVER BEFORE SELECTING
REPLACEMENT ITEM NUMBER

EW SERIES

OVERLOAD LIMIT SWITCH

LIMIT SWITCH ASSEMBLIES NUMBERS

- 6448482-01 (LOW HEADROOM) 1/2 - 7 1/2 TON - D2, 3 - 15 TON - D4, 20 TON - D6
- 6448482-02 (LOW HEADROOM) 10 - 15 TON - D2, 20 - 25 TON - D4, 25 - 35 TON - D6
- 6448482-03 (STANDARD HEADROOM) 1/2 - 7 1/2 TON - S2, 3 - 15 TON - S4
- 6448482-04 (STANDARD HEADROOM) 10 - 15 TON - S2, 20 - 25 TON - S4



To Calibrate the Load Limiter Switch:

1. Attach load to hook which meets the minimum desired weight limit above established limit of maximum hoisting performance.
2. Suspend the load approximately 1/2 - 1" above normal load surface.
3. Turn main power supply "OFF"
4. Refer to wiring diagram WDX□XX for your equipment that the fifth digit must be 1, or 3, or 4 or 7
5. Loosen hex jam nut on slotted adjusting screw and turn adjusting screw "CLOCKWISE" until ohm meter verifies continuity between terminals 1 and 7.
6. While maintaining the position of the adjusting screw, tighten the hex jam nut to lock the screw in place.
7. Turn main power supply "ON" and lower the test load to normal load surface.
8. Try to raise the load; if load is raised beyond your specified limits, repeat steps 2 through 6.

STANDARD HEADROOM & LOW HEADROOM ASM SAME EXCEPT FOR HOUSING MOUNTING HOLES

FORM NO. 105 30-

When Replacement Parts Are Needed, Order Only Yale Factory Engineered Parts

DETERMINE WIRE ROPE DIAMETER

SEE PARTS LIST IN FRONT COVER FOR WIRE ROPE ASM NUMBER

EXAMPLE

TYPICAL ROPE DESCRIPTION

| DESCRIPTION | COMPONENT | SEC. |
|--|-----------|------|
| ROPE ASM 31 S060-S6X19-053 | 644728201 | 1610 |

ROPE DIAMETER
31 — 5/16 in. NOMINAL

NOTE 31 DESIGNATES NOMINAL ROPE DIAMETER.

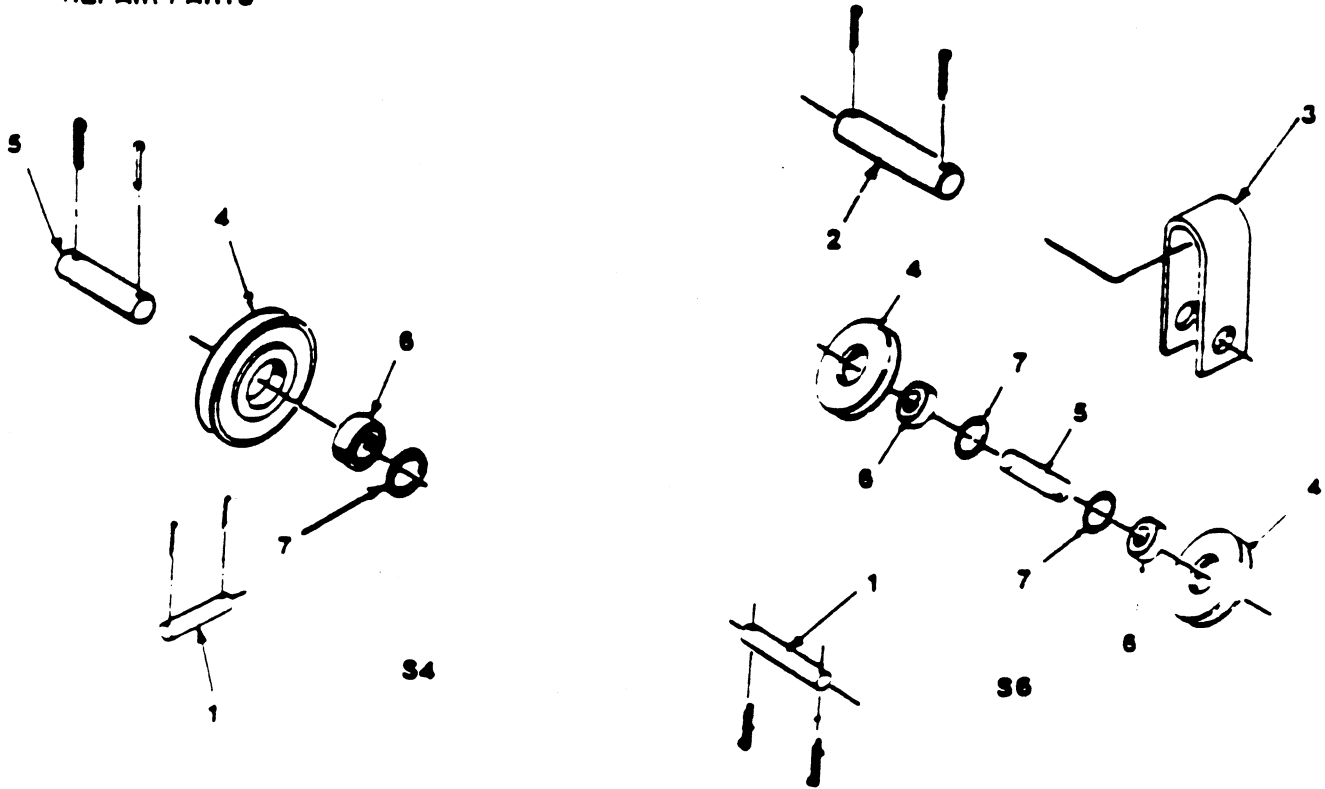
SIZES AVAILABLE

- 25 — 1/4 in.
- 31 — 5/16 in.
- 37 — 3/8 in.
- 43 — 7/16 in.
- 50 — 1/2 in.
- 56 — 9/16 in.
- 62 — 5/8 in.
- 75 — 3/4 in.

Yale Hoisting Equipment

SECTION 153C
REEVING KIT

REPAIR PARTS



| ITEM | DESCRIPTION | S4 REW3 | S4 QEW2 QEW3 | S4 REW5 SEW6 | S6 REW7-1/2 | S4 SEW7-1/2 SEW10 | S6 SEW15 |
|------|---------------------------|------------|--------------------|--------------------|----------------|-------------------------|-------------|
| | COMP. REEVING KIT | 647929201 | 647929202 | 647929200 | 647057200 | 648096200 | 647187201 |
| 1 | ROPE ANCHOR PIN | 647018307 | 647018307 | 647018307 | 647638300 | 644495108 | 644495108 |
| 2 | IDLER SHEAVE PIN (TOP) | -- | -- | -- | 648612102 | -- | 648535301 |
| 3 | YOKE (IDLER) | -- | -- | -- | 648500300 | -- | 647553300 |
| 4 | IDLER SHEAVE | 010988501 | 010988501 | 010988500 | 010998500 | 010998600 | 010998600 |
| 5 | IDLER SHEAVE PIN | 645203116 | 645203116 | 645203116 | 645203121 | 645203110 | 648535301 |
| 6 | IDLER SHEAVE BEARING | 015128100 | 015128100 | 015128100 | 015128100 | 500353905 | 500353905 |
| 7 | BEARING RETAINER | 500343914 | 500343914 | 500343914 | 500343914 | 501989909 | 501989909 |
| | ROPE RETAINER (NOT SHOWN) | 643934200 | 643934201 | 643934200 | 643934200 | 643934200 | 643934200 |

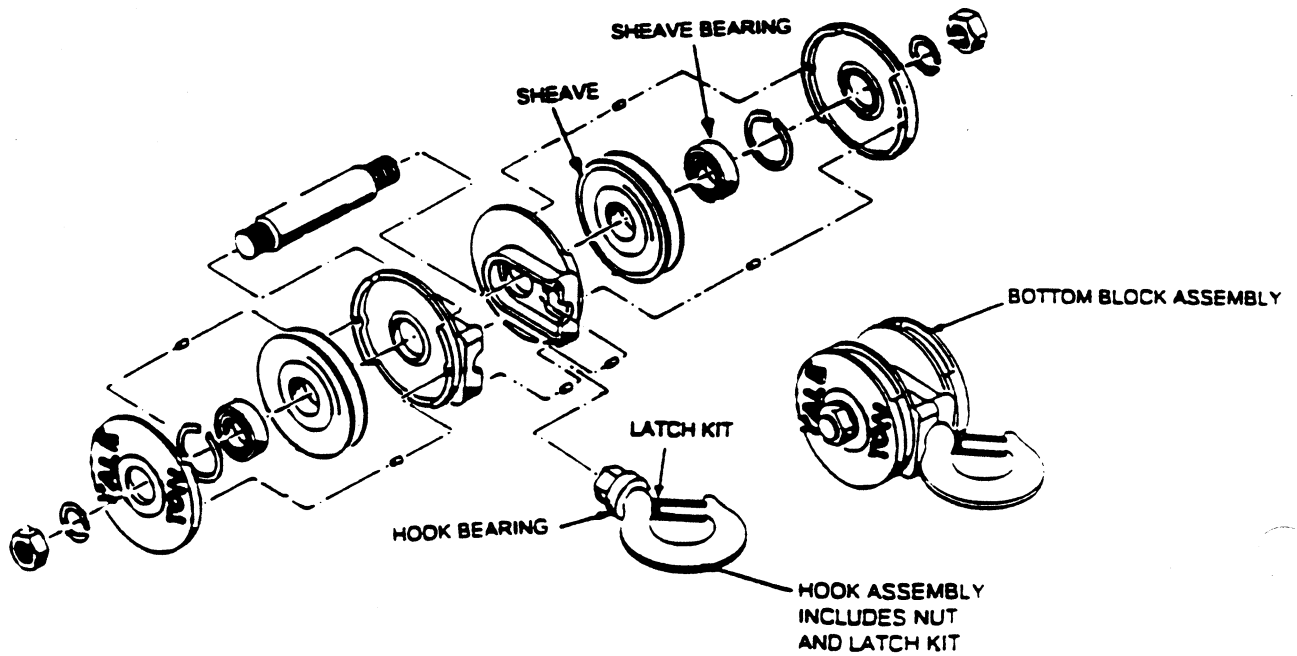
PAT-008

When Replacement Parts Are Needed, Order Only Yale® Factory Engineered Parts



BOTTOM BLOCK REPAIR PARTS

SECTION C
BOTTOM BLOCK



NOTE:
THE BOTTOM BLOCK ILLUSTRATED
ABOVE MAY NOT EXACTLY REPRESENT
THE ACTUAL APPEARANCE OF YOUR
BOTTOM BLOCK. HOWEVER IT IS TYPICAL

NOTE:
FOR REPLACEMENT, SEE PARTS LIST IN FRONT OF PARTS MANUAL. FOR PARTS NOT LISTED
CONTACT THE FACTORY

When Replacement Parts Are Needed, Order Only YALE Factory Engineered Parts

SECTION 2300
CONTROL COMPONENTS


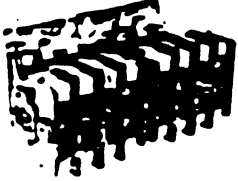



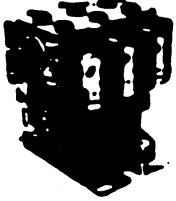
To Select Control Components or Repair Parts

- (1) Refer to parts list in front cover of manual for component part numbers. The illustrations and descriptions in this section can be used to assist in component identification.

- (2) If complete device is needed, order by part number from the parts list.

- (3) If repair parts are needed, locate the component number in this section and order the repair parts listed for that device. If the component is not shown or the part you need is not listed, order the complete device or request assistance from your Yale dealer or repair station.

SECTION 2310 & 15
CONTACTOR

| | COIL VOLTAGE | CONTACTOR PART NO. | COIL PART NO. | CONTACT KIT | AUXILIARY CONTACT |
|---|-----------------|-----------------------|------------------|--------------------------|----------------------|
|  | 24 | 6401559-01 | 5030818-00 | 6400028-00 | 6446608-01 (N.O.) |
| | 115 | 6401559-02 | 5030828-00 | | 6446608-02 (N.C.) |
|  | 24 | 6495701-01 | 6455871-11 | 6455871-10 (2) Req'd. | 6424981-20 |
| | 115 | 6495701-02 | 6455871-12 | | |
|  | 24 | 6455808-01 | 6453168-00 | 6455898-00 (2) Req'd. | 6453218-00 (N.O.) |
| | 115 | 6455808-02 | 6453178-00 | | 6453228-00 (N.C.) |
|  | 24 | 6424981-01 | 6424981-11 | 6424981-10 (2) Req'd. | 6424981-20 |
| | 115 | 6424981-02 | 6424981-12 | | |
|  | 24 | 6455881-01 | 6455871-11 | 6455881-10 | 6424981-20 |
| | 115 | 6455881-02 | 6455871-12 | | |
|  | 24 | 6455891-01 | 6424981-01 | 6424981-10 | 6424981-20 |
| | 115 | 6455891-02 | 6424981-02 | | |

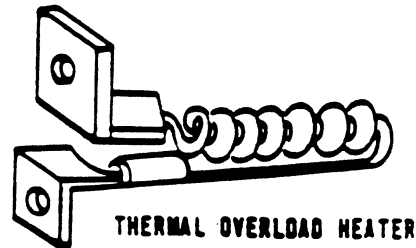
Form No. 165-909-027

When Replacement Parts Are Needed, Order Only Yale Factory Engineered Parts

Yale Hoisting Equipment

SECTION 2345
THERMAL OVERLOAD HEATERS

EW SERIES
THERMAL OVERLOAD HEATERS



The Overload Heater Illustrated Above May Not Exactly Represent The Actual Appearance Of Your Overload Heater. However, It Is Typical.

| Manufacturers Identification | Part Number | Full Load Amp Rating When Used in Overload Relay Number | | | |
|------------------------------|-------------|---|---|---|-------------------------------|
| | | 6452508-00 (SEO-682) (3 Pole) Rating | 6481811-01 (SEO-982) (3 Pole) Rating | 0106755-00 0106756-00 (ARO-1) (1 Pole) Rating | (ATO-1) (1 Pole) Rating |
| AR .71 | 6400789-01 | .52-.56 | | .56-.60 | |
| AR .78 | 6400789-04 | .57-.62 | | .61-.66 | |
| AR 1.05 | 6400789-03 | .77-.84 | | .82-.89 | |
| AR 1.15 | 0579103-00 | .85-.92 | | .90-.98 | |
| AR 1.26 | 0106784-00 | .93-1.01 | | .99-1.08 | |
| AR 1.39 | 6400789-07 | 1.02-1.12 | | 1.09-1.19 | |
| AR 1.53 | 0106775-00 | 1.13-1.23 | | 1.20-1.31 | |
| AR 1.68 | | 1.24-1.35 | | 1.32-1.45 | |
| AR 1.85 | 0106772-00 | 1.36-1.50 | | 1.46-1.60 | |
| AR 2.04 | 0106787-00 | 1.51-1.65 | | 1.61-1.76 | |
| AR 2.24 | 0106776-00 | 1.66-1.81 | | 1.77-1.93 | |
| AR 2.46 | 6400789-02 | 1.82-1.99 | | 1.94-2.13 | |
| AR 2.71 | 0106782-00 | 2.00-2.19 | | 2.14-2.34 | |
| AR 2.98 | 0546128-00 | 2.20-2.41 | | 2.35-2.58 | |
| AR 3.28 | 0106770-00 | 2.42-2.67 | | 2.59-2.85 | |
| AR 3.62 | 0106778-00 | 2.68-2.93 | | 2.86-3.13 | |
| AR 3.98 | 6400789-06 | 2.94-3.22 | | 3.14-3.44 | |
| AR 4.37 | 0560153-00 | 3.23-3.54 | | 3.45-3.78 | |

FORM NO. 165-909-013

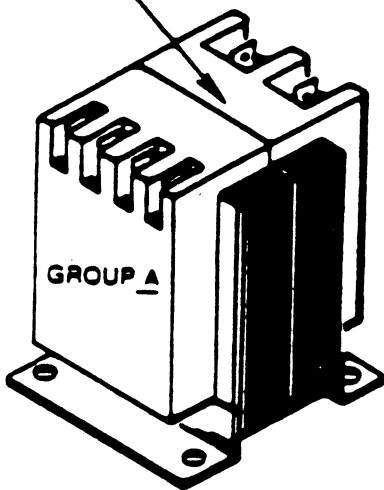
When Replacement Parts Are Needed, Order Only Yale[®] Factory Engineered Parts

AUGUST 1983

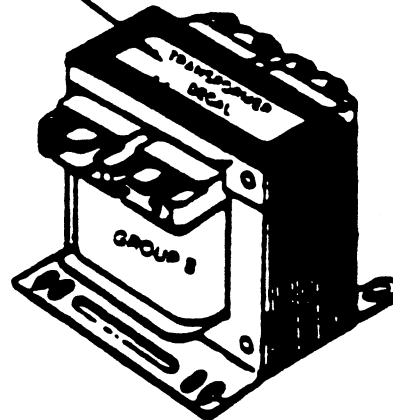
Duff-Norton Yale® Hoists

SECTION 2330 TRANSFORMER

TRANSFORMER NINE DIGIT PART NUMBER STAMPED HERE



1. FIND VA, PRIMARY & SECONDARY VOLTS
2. USE PARTS LIST IN FRONT COVER OR CHART TO SELECT TRANSFORMER



GROUP A


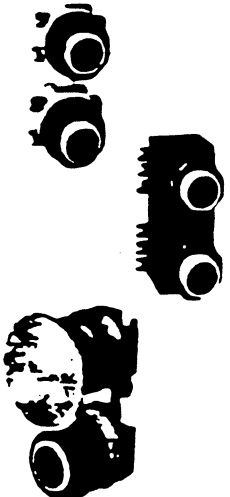






| VA | Primary Volts | Secondary Volts | Hertz | Part Number | Fuse Required |
|----|---------------|-----------------|-------|-------------|---------------|
| 25 | 115/230 | 24 | 50/60 | 6437393-01 | N/R |
| | 230/460 | 24 | 50/60 | 6437393-02 | N/R |
| | 115/230 | 110 | 50/60 | 6437393-03 | N/R |
| | 230/460 | 110 | 50/60 | 6437393-04 | N/R |
| | 200 | 24 | 50/60 | 6437393-05 | N/R |
| | 200 | 110 | 50/60 | 6437393-06 | N/R |
| | 575 | 24 | 50/60 | 6437393-07 | N/R |
| | 575 | 110 | 50/60 | 6437393-08 | N/R |

GROUP B

| | | | | | |
|---------|---------|-----|-------|------------|------------|
| 50 | 200 | 115 | 50/60 | 6478963-12 | 6458398-04 |
| | 230/460 | 115 | 50/60 | 6478963-13 | 6458398-04 |
| | 575 | 115 | 50/60 | 6478963-14 | 6458398-04 |
| | 200 | 24 | 50/60 | 6478963-16 | 6458398-11 |
| | 230/460 | 24 | 50/60 | 6478963-17 | 6458398-11 |
| | 575 | 24 | 50/60 | 6478963-18 | 6458398-11 |
| | 150 | 200 | 115 | 50/60 | 6478963-22 |
| 230/460 | | 115 | 50/60 | 6478963-23 | 6458398-08 |
| 575 | | 115 | 50/60 | 6478963-24 | 6458398-08 |
| 200 | | 24 | 50/60 | 6478963-26 | 6458398-20 |
| 230/460 | | 24 | 50/60 | 6478963-27 | 6458398-20 |
| 575 | | 24 | 50/60 | 6478963-28 | 6458398-20 |
| 300 | | 200 | 115 | 50/60 | 6478963-32 |
| | 230/460 | 115 | 50/60 | 6478963-33 | 6458398-12 |
| | 575 | 115 | 50/60 | 6478963-34 | 6458398-12 |
| | 200 | 24 | 50/60 | 6478963-36 | 6458398-25 |
| | 230/460 | 24 | 50/60 | 6478963-37 | 6458398-25 |
| | 575 | 24 | 50/60 | 6478963-38 | 6458398-25 |

N/R NOT REQUIRED

When Replacement Parts Are Needed, Order Only Yale® Factory Engineered Parts

| | | | | |
|------|---|-----------------------------------|---|--|
| 2740 |  | Enclosure (Less) (Elements) | Two Button Four Button Six Button Eight Button Ten Button | 6452753-02 6452753-04 6452753-06 6452753-08 6452753-10 |
| 2750 |  | Elements | Single Speed (Pair) | 6452763-01 |
| | | | Two Speed (Pair) | 6452763-02 |
| | | | Five Speed (Pair) | 6452763-05 |
| | | | Maintained/ Momentary | 6455953-00 |
| |  | Selector Switch | Two Position Three Position | 6463493-00 6455983-00 |
| |  | Pilot Light | 115 Volt Red | 6455973-00 |
| |  | Potentiometer | 1000 Ohm | 6451821-01 |
| |  | Elements | Single Button (One) | 6456263-00 |
| |  | Off/On Element | Locking Non-Locking | 6455963-00 |
| |  | Closing Plate | | 6452883-00 |

JULY 1983

**SECTION 2345
THERMAL OVERLOAD HEATERS**

| Manufacturers Identification | Part Number | Full Load Amp Rating When Used in Overload Relay Number | | | |
|------------------------------|-------------|---|---|---|-------------------------------|
| | | 6482508-00 (SEO-882) (3 Pole) Rating | 6481811-01 (SEO-882) (3 Pole) Rating | 0106755-00 0106756-00 (ARO-1) (1 Pole) Rating | (ATO-1) (1 Pole) Rating |
| AR 4.80 | 6400789-05 | 3.55—3.91 | | 3.79—4.17 | |
| AR 5.3 | 0106783-00 | 3.92—4.28 | | 4.18—4.57 | |
| AR 5.8 | 0106771-00 | 4.29—4.72 | | 4.58—5.04 | |
| AR 6.4 | 0586636-00 | 4.73—5.17 | | 5.05—5.52 | |
| AR 7.0 | 0106779-00 | 5.18—5.68 | | 5.53—6.07 | |
| AR 7.7 | 0106762-00 | 5.69—6.28 | | 6.08—6.70 | |
| AR 8.5 | 0106768-00 | 6.29—6.87 | | 6.71—7.33 | |
| AR 9.3 | 0106769-00 | 6.88—7.54 | 5.11—5.60 | 7.34—8.05 | 7.34—8.05 |
| AR 10.2 | 0106767-00 | 7.55—8.28 | 5.61—6.15 | 8.06—8.84 | 8.06—8.84 |
| AR 11.2 | 0106781-00 | 8.29—9.16 | 6.16—6.81 | 8.85—9.78 | 8.85—9.78 |
| AR 12.4 | 0106774-00 | 9.17—9.99 | 6.82—7.47 | 9.79—10.6 | 9.79—10.6 |
| AR 13.6 | 0106766-00 | 10.0 —11.3 | 7.48—8.47 | 10.7 —12.0 | 10.7 —12.0 |
| AR 15.4 | 0106785-00 | 11.4 —12.9 | 8.47—9.67 | 12.1 —13.8 | 12.1 —13.8 |
| AR 17.6 | 0106763-00 | 13.0 —15.1 | 9.68—11.2 | 13.9 —16.1 | 13.9 —16.1 |
| AR 20.5 | 0106777-00 | 15.2 —16.9 | 11.3—12.5 | 16.2 —18.1 | 16.2 —18.1 |
| AR 23 | 0106764-00 | 17.0 —19.9 | 12.6—14.8 | 18.2 —21.2 | 18.2 —21.2 |
| AR 27 | 0106765-00 | 20.0 —22.1 | 14.9—16.4 | 21.3 —23.6 | 21.3 —23.6 |
| AR 30 | 0106768-00 | 22.2 —24.8 | 16.5 —19.1 | 23.7 —27.5 | 23.7 —27.5 |
| AR 35 | 0106780-00 | 25.9 —28.5 | 19.2 —21.9 | 27.6 —31.5 | 27.6 —31.5 |
| AR 40 | 0547894-00 | 29.6 —31.5 | 22.0 —23.1 | | 31.6 —33.6 |
| AR 44 | 6466548-00 | | 24.2 —25.7 | | 34.7 —37.0 |
| AR 47 | | | 25.8 —27.9 | | 37.1 —40.2 |
| AR 51 | 0548711-00 | | 28.0 —30.1 | | 40.3 —43.3 |
| AR 55 | 0594821-00 | | 30.2 —32.9 | | 43.4 —47.3 |
| AR 60 | | | 33.0 —36.2 | | 47.4 —52.0 |
| AR 66 | | | 36.3 —39.5 | | |
| AR 72 | | | 39.6 —43.3 | | |
| AR 79 | | | 43.4 —47.2 | | |
| AR 86 | | | 47.3 —51.6 | | |
| AR 94 | | | 51.7 —55.0 | | |

IO-09-013
CRM NO 185-909-013

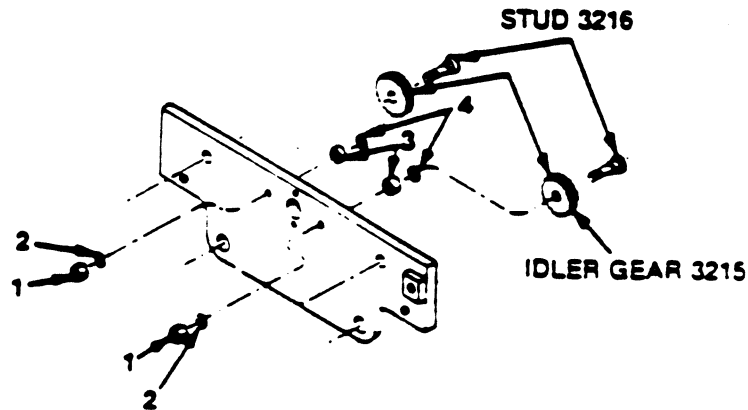
When Replacement Parts Are Needed, Order Only Yale® Factory Engineered Parts
EA SERIES

SECTION 2710 / 80

PUSH BUTTON

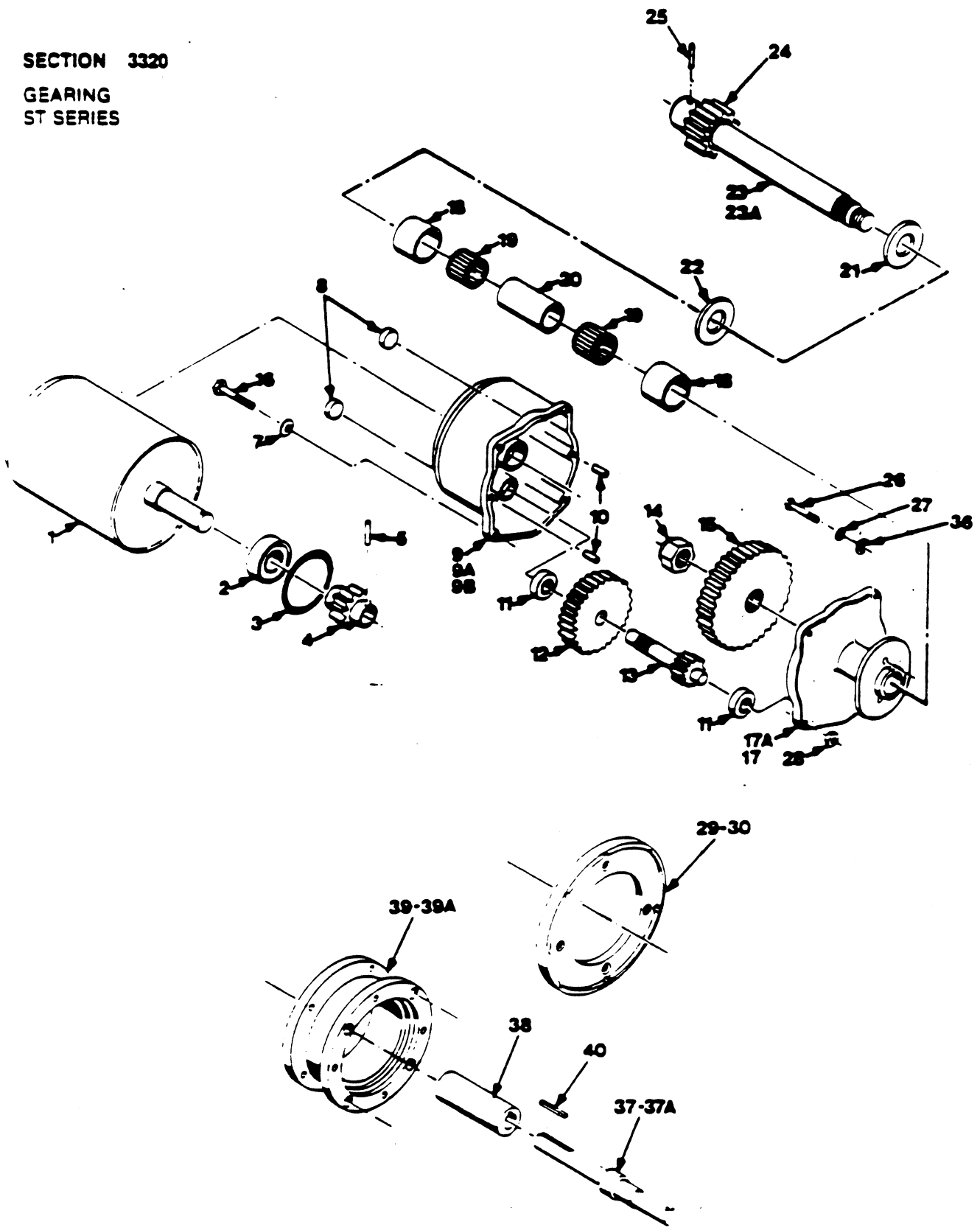
| 2760 | Component Number | Markings | | | | |
|------|------------------|----------|----|------|---------|---------|
| | | 1 | 1A | 1B | 2 | 3 |
| | 6452803-01 | Hoist | | | Up | Down |
| | 6452803-02 | Trolley | | | East | West |
| | 6452803-03 | Trolley | | | Forward | Reverse |
| | 6452803-04 | Trolley | | | North | South |
| | 6452803-05 | Bridge | | | Forward | Reverse |
| | 6452803-06 | Bridge | | | East | West |
| | 6452803-07 | Bridge | | | North | South |
| | 6452803-08 | | | | Start | Stop |
| | 6452803-09 | | | | Reset | Stop |
| | 6452803-10 | | | | | |
| | 6452803-11 | | | | Forward | Reverse |
| | 6452803-12 | | | | North | South |
| | 6452803-13 | | | | East | West |
| | 6452803-14 | | | | In | Out |
| | 6452803-15 | | | | Left | Right |
| | 6452803-16 | Crane | | | Forward | Reverse |
| | 6452803-17 | | | | Off | On |
| | 6452803-18 | | | | On | Off |
| | 6452803-19 | | | | Stop | Start |
| | 6452803-20 | | | | Stop | Reset |
| | 6452803-21 | | | Inch | | Run |
| | 6452803-22 | | | Slow | | Fast |

| | | | | | |
|------|--|---|--------------------|------------|------------|
| 2710 | | Complete Station | Two Button | Up-Down | 6480701-01 |
| | | | S / Speed | Fwd- Rev | 6480701-02 |
| | | | Two Button | Up-Down | 6469823-01 |
| | | | Two Speed | Fwd-Rev | 6469823-02 |
| 2710 | | COMPLETE STATION | TWO BUTTON S/SPEED | 6471993-00 | |
| 2710 | | For Explosion Proof or other Special Push Buttons. Refer to Computer Parts list in front of Manual. | | | |



| GEAR | STUD | ITEM 1 NUT | ITEM 2 LOCKWASHER | ITEM 3 SPACER | ITEM 4 WASHER |
|------------|------------|---------------|----------------------|------------------|------------------|
| STANDARD | | | | | |
| 0664821-00 | 0664826-00 | 0149375-00 | 0401008-00 | 6400821-00 | 0250699-00 |
| 0664432-00 | 6400811-00 | 0149374-00 | 0150268-00 | 0544159-00 | 0143734-00 |
| 6456801-00 | 6400811-00 | 0149374-00 | 0150268-00 | 0544158-00 | 0143734-00 |
| BRONZE | | | | | |
| 6490241-00 | 0664826-00 | 0149375-00 | 0401008-00 | 6400821-00 | 0250699-00 |
| 6421663-00 | 6400811-00 | 0149374-00 | 0150268-00 | 0544158-00 | 0143734-00 |
| 6487501-00 | 6400811-00 | 0149374-00 | 0150268-00 | 0544158-00 | 0143734-00 |

SECTION 3320
GEARING
ST SERIES



FORM NO 185-912-115

When Replacement Parts Are Needed, Order Only Yale® Factory Engineered Parts

EW 4W SERIES

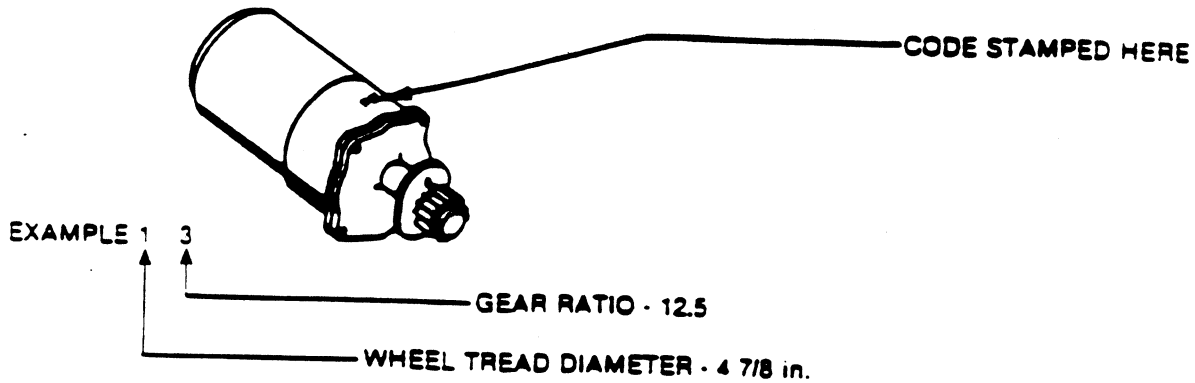
Yale Hoisting Equipment

USER INFORMATION PAGE

IMPORTANT
SELECT COMPONENT ASSEMBLY
NUMBER FROM PARTS LIST IN FRONT
COVER BEFORE SELECTING
REPLACEMENT ITEM NUMBER

SECTION 332
ST GEARING

1. FIND TWO DIGIT IDENTIFICATION CODE STAMPED ON TOP OF THE TROLLEY GEARCASE.



2. SEE TABLE BELOW FOR TROLLEY SPEED AND REPAIR PARTS PAGE NUMBER.
3. TURN TO SECTION 3320 PAGES 2, 3 & 4 FOR REPAIR PART INFORMATION

NOTE. CATALOG SPEEDS ARE BASED ON 1800 RPM MOTORS.

| Complete ST Gearing Assembly | | | | | | | |
|------------------------------|-------------------------|-----------------------|----------------|----------------------|------------|---------------|-----------------|
| Standard EW Selection | Exp. Proof EW Selection | Standard AW Selection | Two Digit Code | Tread Diameter (in.) | Gear Ratio | Trolley Speed | Section Page No |
| 6460072-11 | 6462142-11 | 6459472-11 | 11 | 4 7/8 | 18.06 | 25 | 3320 Page 4 |
| 6460072-12 | 6462142-12 | 6459472-12 | 12 | 4 7/8 | 13.58 | 30 | |
| 6460072-13 | 6462142-13 | 6459472-13 | 13 | 4 7/8 | 12.5 | 35 | |
| 6460072-14 | 6462142-14 | 6459472-14 | 14 | 4 7/8 | 9.4 | 50 | |
| 6460072-15 | 6462142-15 | 6459472-15 | 15 | 4 7/8 | 7.87 | 55 | |
| 6460072-16 | 6462142-16 | 6459472-16 | 16 | 4 7/8 | 5.45 | 70 | |
| 6460072-21 | 6462142-21 | 6459472-21 | 21 | 6 | 18.06 | 35 | 3320 Page 4 |
| 6460072-22 | 6462142-22 | 6459472-22 | 22 | 6 | 13.58 | 50 | |
| 6460072-23 | 6462142-23 | 6459472-23 | 23 | 6 | 12.5 | 55 | |
| 6460072-24 | 6462142-24 | 6459472-24 | 24 | 6 | 9.4 | 70 | |
| 6460072-25 | 6462142-25 | 6459472-25 | 25 | 6 | 7.87 | 80 | |
| 6460072-26 | 6462142-26 | 6459472-26 | 26 | 6 | 5.45 | 120 | |
| 6460072-31 | 6462142-31 | 6459472-31 | 31 | 8 | 18.06 | 35 | 3320 Page 4 |
| 6460072-32 | 6462142-32 | 6459472-32 | 32 | 8 | 13.58 | 45 | |
| 6460072-33 | 6462142-33 | 6459472-33 | 33 | 8 | 12.5 | 50 | |
| 6460072-34 | 6462142-34 | 6459472-34 | 34 | 8 | 9.4 | 70 | |
| 6460072-35 | 6462142-35 | 6459472-35 | 35 | 8 | 7.87 | 80 | |
| 6460072-36 | 6462142-36 | 6459472-36 | 36 | 8 | 5.45 | 115 | |
| 6460072-41 | 6462142-41 | 6459472-41 | 41 | 10 | 18.06 | 35 | 3320 Page 4 |
| 6460072-42 | 6462142-42 | 6459472-42 | 42 | 10 | 13.58 | 45 | |
| 6460072-43 | 6462142-43 | 6459472-43 | 43 | 10 | 12.5 | 50 | |
| 6460072-44 | 6462142-44 | 6459472-44 | 44 | 10 | 9.4 | 70 | |
| 6460072-45 | 6462142-45 | 6459472-45 | 45 | 10 | 7.87 | 80 | |
| 6460072-46 | 6462142-46 | 6459472-46 | 46 | 10 | 5.45 | 115 | |

□ Face Mounting

FORM NO. 165-972-113

When Replacement Parts Are Needed, Order Only Yale[®] Factory Engineered Parts

REV. JULY 1983

EW AW SERIES

SECTION 3320

GEARING
ST SERIES

TABLE 1

| | PINION SHAFT ITEM 23 | PINION ITEM 24 | DRIVE PIN ITEM 25 |
|--------------------|----------------------------|------------------------|-------------------------|
| 6 in. Whl Trolley | 6401423-00 | 0588168-00 14 teeth | 0559292-00 |
| 8 in. Whl Trolley | 6435181-00 | 6415121-00 10 teeth | 0157393-00 |
| 10 in. Whl Trolley | 6426333-00 | 6415121-00 10 teeth | 0157393-00 |

TABLE 2

| TWO DIGIT CODE | WHEEL TREAD DIA. | | | MOTOR PINION ITEM 4 | LOCK PIN ITEM 5 | GEAR ITEM 12 | PINION ITEM 13 | GEAR ITEM 15 |
|----------------------|------------------|-----|--------|---------------------------|-----------------------|------------------------|------------------------|------------------------|
| | 4 7/8 | 6 | 8 & 10 | | | | | |
| | SPEED FPM | | | | | | | |
| 11 | 25 | . | . | 0104607-00 12 teeth | 0106959-00 | 6407531-00 52 teeth | 6407511-00 12 teeth | 0226396-00 50 teeth |
| 12 | 30 | . | . | 0104607-00 12 teeth | 0106959-00 | 6407531-00 52 teeth | 6407501-00 15 teeth | 0226408-00 47 teeth |
| 13 | 35 | . | . | 0104602-00 16 teeth | 0106953-00 | 6407541-00 48 teeth | 6407511-00 12 teeth | 0226396-00 50 teeth |
| 14 | 50 | . | . | 0104602-00 16 teeth | 0106953-00 | 6407541-00 48 teeth | 6407501-00 15 teeth | 0226408-00 47 teeth |
| 15 | 55 | . | . | 0104607-00 12 teeth | 0106959-00 | 6407531-00 52 teeth | 6407521-00 22 teeth | 0610986-00 40 teeth |
| 16 | 70 | . | . | 0104602-00 16 teeth | 0106953-00 | 6407541-00 48 teeth | 6407521-00 22 teeth | 0610986-00 40 teeth |
| 21 31 41 | . | 35 | 35 | 0104607-00 12 teeth | 0106959-00 | 6407531-00 52 teeth | 6407511-00 12 teeth | 0226396-00 50 teeth |
| 22 32 42 | . | 50 | 45 | 0104607-00 12 teeth | 0106959-00 | 6407531-00 52 teeth | 6407501-00 15 teeth | 0226408-00 47 teeth |
| 23 33 43 | . | 55 | 50 | 0104602-00 16 teeth | 0106953-00 | 6407541-00 45 teeth | 6407511-00 12 teeth | 0226396-00 50 teeth |
| 24 34 44 | . | 70 | 70 | 0104602-00 16 teeth | 0106953-00 | 6407541-00 48 teeth | 6407501-00 15 teeth | 0226408-00 47 teeth |
| 25 35 45 | . | 80 | 80 | 0104607-00 12 teeth | 0106959-00 | 6407531-00 52 teeth | 6407521-00 22 teeth | 0610986-00 40 teeth |
| 26 36 46 | . | 120 | 115 | 0104602-00 16 teeth | 0106953-00 | 6407541-00 48 teeth | 6407521-00 22 teeth | 0610986-00 40 teeth |

-115-3

FORM NO. 165-912-115

When Replacement Parts Are Needed, Order Only Yale² Factory Engineered Parts

ST SERIES

REV JULY 1983

| ITEM | PART NO. | DESCRIPTION | QTY. |
|------|----------------|---|------|
| 1 | SEE PARTS LIST | MOTOR | 1 |
| 2 | 0325737-00 | MOTOR BEARING | 1 |
| 3 | 0193248-00 | "O" RING | 1 |
| 4 | SEE TABLE 2 | PINION | 1 |
| 5 | SEE TABLE 2 | PINION PIN | 1 |
| 6 | 0146723-00 | SCREW (CONTROL BOX MTG. ONLY) | 2 |
| 7 | 0150264-00 | WASHER | 4 |
| 8 | 0230825-00 | PIPE PLUG | 2 |
| 9 | 0192483-00 | GEARCASE FOR PARTIAL MOTOR | 1 |
| 9A | 5041384-00 | GEARCASE FOR C-FACE MOTOR | 1 |
| 9B | 6499941-00 | GEARCASE AIR POWERED | 1 |
| 10 | 6400529-01 | DOWEL PIN | 2 |
| 11 | 0100850-00 | BEARING | 2 |
| 12 | SEE TABLE 2 | GEAR | 1 |
| 13 | SEE TABLE 2 | PINION | 1 |
| 14 | 0326590-00 | LOCKNUT 5/8 - 11 | 1 |
| 15 | SEE TABLE 2 | GEAR | 1 |
| 16 | 0570482-00 | SCREW 3/8 - 16 x 1 | 4 |
| 17 | 0221092-00 | GEARCASE COVER STANDARD | 1 |
| 17A | 6446561-00 | GEARCASE COVER C-FACE & AIR POWERED | 1 |
| 18 | 0610994-00 | INNER RACE | 2 |
| 19 | 0572813-00 | NEEDLE BEARING | 2 |
| 20 | 0317344-00 | SPACER | 1 |
| 21 | 0535816-00 | WASHER | 1 |
| 22 | 0544158-00 | WASHER, THRUST BRONZE SELF LUB. | 1 |
| 23 | SEE TABLE 1 | SHAFT | 1 |
| 23A | 6400851-00 | PINION & SHAFT ASM. (4 7/8 WHL TREAD DIA. ONLY) | 1 |
| 24 | SEE TABLE 1 | PINION | 1 |
| 25 | SEE TABLE 1 | DRIVE PIN | 1 |
| 26 | 0554850-00 | SCREW 1/2 - 13 x 1 1/4 | 2 |
| 27 | 0150266-00 | LOCKWASHER | 2 |
| 28 | 0149369-00 | NUT 3/8 - 16 | 2 |
| 29 | 5039344-00 | ADAPTER (C-FACE MOTOR) | 1 |
| 30 | 5039354-00 | ADAPTER (GEARCASE) (C-FACE MOTOR) | 1 |
| 31 | 0149087-00 | SCREW 5/16 X 1 FLAT HD (NOT SHOWN) | 4 |
| 32 | 0149100-00 | SCREW 3/8 X 7/8 FLAT HD (NOT SHOWN) | 4 |
| 33 | 0597191-00 | SCREW 3/8 - 1 1/2 (NOT SHOWN) | 4 |
| 34 | 0150264-00 | 3/8 LOCKWASHER (NOT SHOWN) | 12 |
| 35 | 0597164-00 | SCREW 5/16 X 2 1/4 (NOT SHOWN) | 4 |
| 36 | 0161100-00 | FLAT WASHER | 2 |
| 37 | 6489361-00 | PINION SHAFT (W/HORTON BRK.) AIR POWERED | 1 |
| 37A | 6447193-00 | PINION SHAFT (W/O BRAKE) AIR POWERED | 1 |
| 38 | 6447203-00 | COUPLING (W/O BRAKE) AIR POWERED | 1 |
| 39 | 6447213-00 | ADAPTER (W/O BRAKE) AIR POWERED | 1 |
| 39A | 6489391-00 | ADAPTER (W/HORTON BRAKE) AIR POWERED | 1 |
| 40 | 6405431-00 | KEY, DRIVE SHAFT AIR POWERED | 2 |
| 41 | 0621437-00 | SCREW 5/16 X 1 (NOT SHOWN) AIR POWERED | 4 |
| 42 | 0150262-00 | LOCKWASHER 5/16 (NOT SHOWN) AIR POWERED | 4 |
| 43 | 0570482-00 | SCREW 3/8 X 1 (NOT SHOWN) AIR POWERED | 8 |

FORM NO. 165-912-115

When Replacement Parts Are Needed, Order Only Yale® Factory Engineered Parts

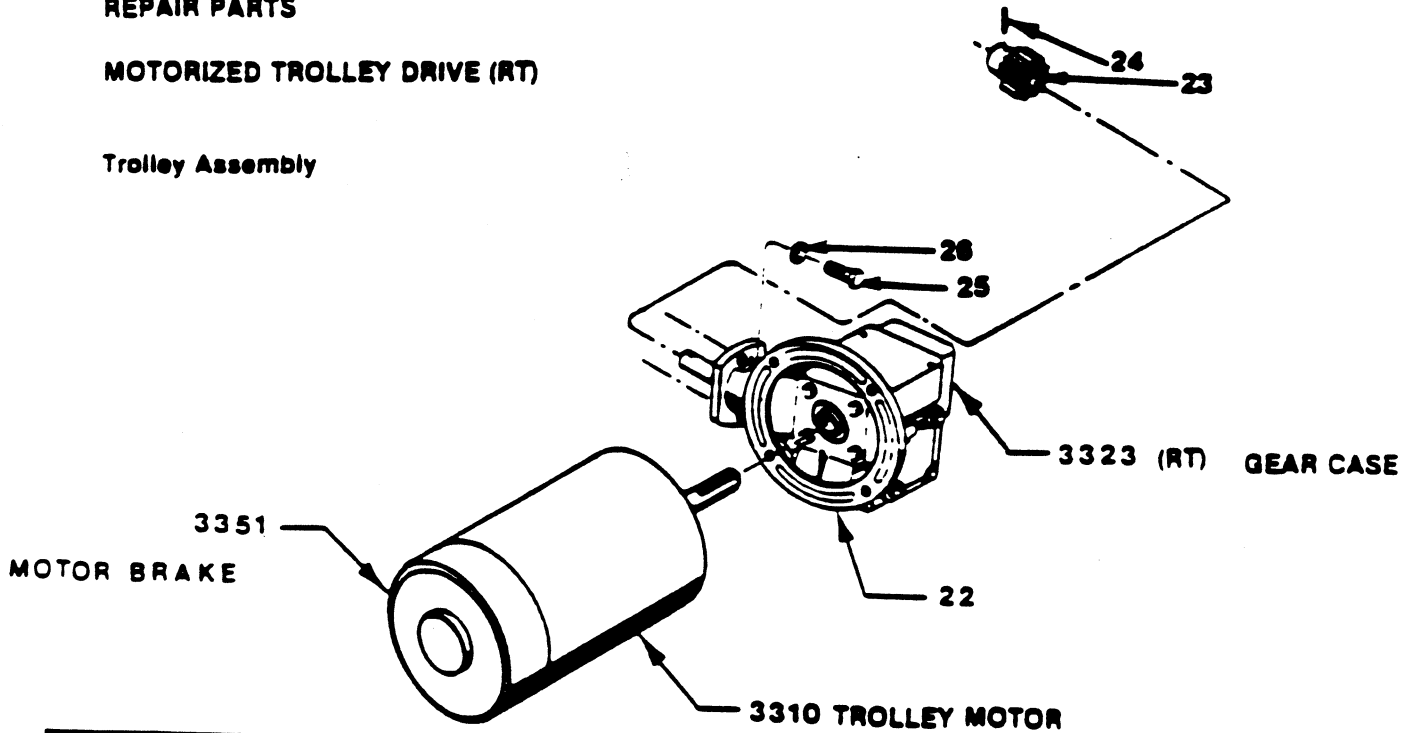
Yale Hoisting Equipment

SECTION 3323

REPAIR PARTS

MOTORIZED TROLLEY DRIVE (RT)

Trolley Assembly



| ITEM NBR | PART NUMBER | DESCRIPTION | QTY |
|----------|----------------|---|-----|
| 3323 | SEE PART LIST | GEAR CASE | |
| 3232 | SEE PART LIST | RT MGT. KIT (incl. items 23, 24, 25 & 26) | 1 |
| 22 | 6498053 | ADAPTOR RING | 1 |
| 23 | | PINION | 1 |
| 24 | | GROOVE PIN | 1 |
| 25 | | BOLT | 1 |
| 26 | | LOCK WASHER | 2 |
| 3310 | SEE PART LIST* | MOTOR | 2 |
| 3351 | SEE PART LIST | MOTOR BRAKE | 1 |

* When Ordering Motors Give Complete Data on Motor Nameplate.

PAT-005

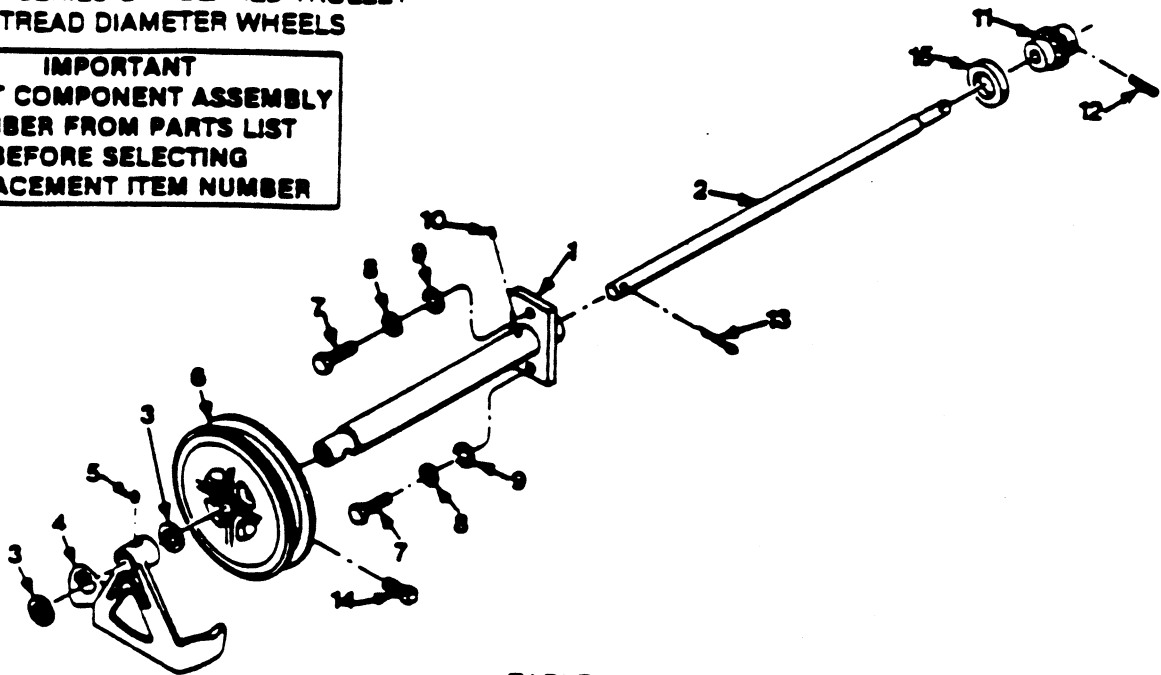
When Replacement Parts Are Needed, Order Only Yale® Factory Engineered Parts

SECTION 3330

HAND WHEEL GROUP

EW / AW SERIES GT - GEARED TROLLEY
8 & 10" TREAD DIAMETER WHEELS

IMPORTANT
SELECT COMPONENT ASSEMBLY
NUMBER FROM PARTS LIST
BEFORE SELECTING
REPLACEMENT ITEM NUMBER



TABLE

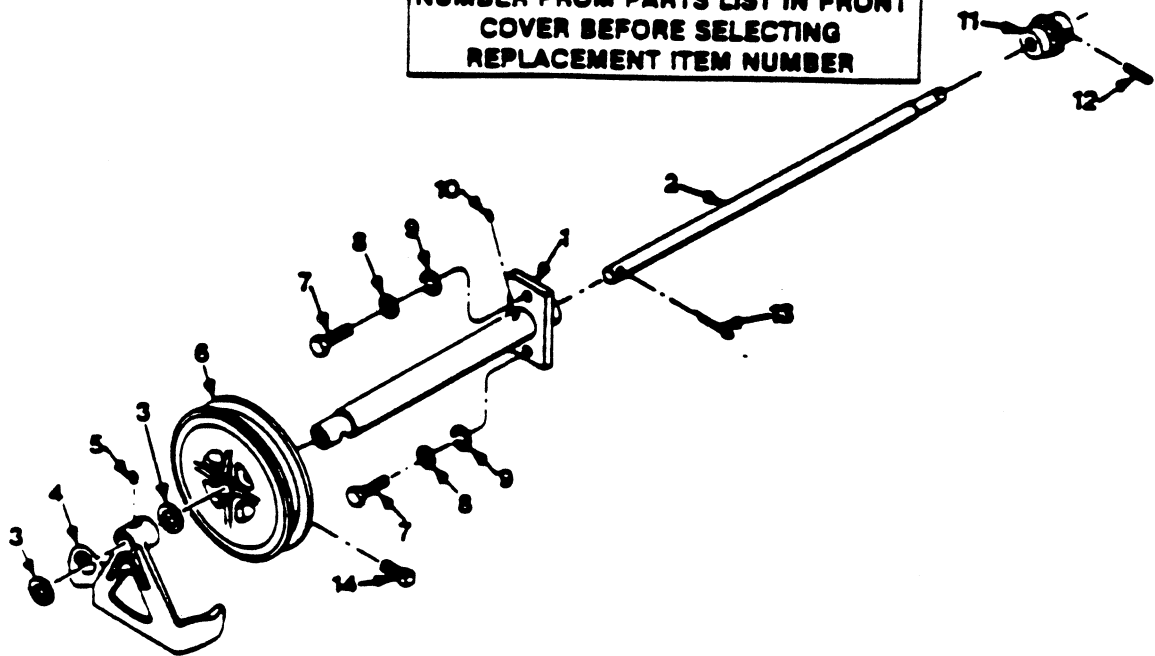
| ASSEMBLY NUMBER | ITEM 1 EXTENSION | ITEM 2 SHAFT | LIFT |
|-----------------|------------------|--------------|------|
| 6434742-01 | 6445804-01 | 6436753-00 | 2 |
| 6434742-02 | 0684820-00 | 0665191-00 | 3 |
| 6434742-03 | 6443384-00 | 6419981-06 | 4 |
| 6434742-04 | 6420554-00 | 6410351-00 | 5 |
| 6434742-05 | 6444194-01 | 6419981-03 | 6 |
| 6434742-06 | 6444194-02 | 6419981-04 | 7 |
| | | | 8 |

| ITEM NUMBER | PART NUMBER | DESCRIPTION | QTY |
|-------------|-------------|---------------------------------------|-----|
| 1 | SEE TABLE | EXTENSION ITEM 1 | 1 |
| 2 | SEE TABLE | SHAFT ITEM 2 | 1 |
| 3 | 0250664-00 | WASHER | 3 |
| 4 | 0591410-00 | GUIDE | 1 |
| 5 | 0185584-00 | FITTING | 1 |
| 6 | 0535795-00 | HANDWHEEL | 1 |
| 7 | 0596946-00 | 1/2-13 X 1 1/2 HEX HEAD SCREW | 2 |
| 8 | 0142209-00 | WASHER | 2 |
| 9 | 0150266-00 | LOCKWASHER | 2 |
| 10 | 0227845-00 | FITTING | 1 |
| 11 | 0589890-00 | PINION | 1 |
| 12 | 0230236-00 | ROLL PIN | 1 |
| 13 | 0154214-00 | COTTER PIN | 1 |
| 14 | 0388010-00 | 1/2-13 SQUARE HEAD SCREW | 1 |
| 15 | 0665193-00 | SPACER | 1 |
| 16 | 0033730-00 | HAND CHAIN (NOT SHOWN) SPECIFY LENGTH | 1 |

When Replacement Parts Are Needed, Order Only Yale Factory Engineered Parts. 165-912-073

EW / AW SERIES GT - GEARED TROLLEY
4 7/8" & 6" TREAD DIAMETER WHEELS

IMPORTANT
SELECT COMPONENT ASSEMBLY
NUMBER FROM PARTS LIST IN FRONT
COVER BEFORE SELECTING
REPLACEMENT ITEM NUMBER



TABLE

| 4 7/8" TREAD DIAMETER WHEELS | | | | |
|------------------------------|------------------|--------------|----------------|------------------|
| ASSEMBLY NUMBER | ITEM 1 EXTENSION | ITEM 2 SHAFT | ITEM 11 PINION | ITEM 12 ROLL PIN |
| 6434722-01 | 0864454-00 | 6456491-01 | 0250202-00 | 0230207-00 |
| 6434722-02 | 6437154-00 | 6456491-02 | ↓ | ↓ |
| 6434722-03 | 6439061-00 | 6456491-03 | ↓ | ↓ |
| 6434722-04 | 6452881-01 | 6456491-04 | ↓ | ↓ |
| 6434722-05 | 6452881-02 | 6456491-05 | ↓ | ↓ |
| 6434722-06 | 6442576-00 | 6456491-06 | ↓ | ↓ |
| 6434722-07 | 6452881-03 | 6456491-07 | 0250202-00 | 0230207-00 |

| 6" TREAD DIAMETER WHEELS | | | | |
|--------------------------|------------------|--------------|----------------|------------------|
| ASSEMBLY NUMBER | ITEM 1 EXTENSION | ITEM 2 SHAFT | ITEM 11 PINION | ITEM 12 ROLL PIN |
| 6434732-01 | 0864454-00 | 0864456-00 | 0588168-00 | 0559292-00 |
| 6434732-02 | 6437154-00 | 6430283-00 | ↓ | ↓ |
| 6434732-03 | 6439061-00 | 6439051-00 | ↓ | ↓ |
| 6434732-04 | 6452881-01 | 6452881-01 | ↓ | ↓ |
| 6434732-05 | 6452881-02 | 6452881-02 | ↓ | ↓ |
| 6434732-06 | 6442576-00 | 6446733-00 | ↓ | ↓ |
| 6434732-07 | 6452881-03 | 6452881-03 | 0588168-00 | 0559292-00 |

| ITEM NUMBER | PART NUMBER | DESCRIPTION | QTY |
|-------------|-------------|---------------------------------------|-----|
| 1 | 0250868-00 | WASHER | 2 |
| 4 | 0588165-00 | GUIDE | 1 |
| 5 | 0185584-00 | FITTING | 1 |
| 6 | 0111132-00 | HANDWHEEL | 1 |
| 7 | 0554850-00 | 1/2-13 X 1 1/4 HEX HEAD SCREW | 2 |
| 8 | 0142209-00 | WASHER | 2 |
| 9 | 0150286-00 | LOCKWASHER | 2 |
| 10 | 0227845-00 | FITTING | 1 |
| 11 | SEE TABLE | PINION | 1 |
| 12 | SEE TABLE | ROLL PIN | 1 |
| 13 | 0381400-00 | COTTER PIN | 1 |
| 14 | 0388054-00 | 7/16-14X1 SQUARE HEAD SCREW | 1 |
| 15 | 0033730-00 | HAND CHAIN (NOT SHOWN) SPECIFY LENGTH | |

165-912-070

When Replacement Parts Are Needed, Order Only Yale Factory Engineered Parts.

Yale Hoisting Equipment

SECTION 3405
WHEEL & AXLE

CONSOLIDATED LISTING BY COMPONENT NUMBER

GT, PT & ST SERIES

| Whl & Axle Grp Component No. | Refer Page No. | Tread Diameter | Tread Type | Wheel Type | Beam Type | Material | Wheel Part Number |
|------------------------------|----------------|----------------|------------|------------|------------|----------|-------------------|
| 6431282-00 | 3 | 4 7/8 | Ball | Plain | ASI | Standard | 6412133-00 |
| 6431292-00 | 3 | 4 7/8 | ↓ | Geared | ↓ | ↓ | 6412143-00 |
| 6431302-00 | 4 | 6 | ↓ | Plain | ↓ | ↓ | 6403844-00 |
| 6431312-00 | 4 | 6 | ↓ | Geared | ↓ | ↓ | 6403854-00 |
| 6431322-00 | 5 | 8 | ↓ | Plain | ↓ | ↓ | 6442494-00 |
| 6431332-00 | 5 | 8 | ↓ | Geared | ↓ | ↓ | 6442504-00 |
| 6431342-00 | 6 | 10 | ↓ | Plain | ↓ | ↓ | 0664017-00 |
| 6431352-00 | 6 | 10 | Ball | Geared | ASI | Standard | 0664432-00 |
| 6431362-00 | 3 | 4 7/8 | Ball | Plain | ASI | Bronze | 6405663-00 |
| 6431372-00 | 3 | 4 7/8 | ↓ | Geared | ↓ | ↓ | 6405673-00 |
| 6431382-00 | 4 | 6 | ↓ | Plain | ↓ | ↓ | 0664887-00 |
| 6431392-00 | 4 | 6 | ↓ | Geared | ↓ | ↓ | 0664886-00 |
| 6431402-00 | 5 | 8 | ↓ | Plain | ↓ | ↓ | 6404364-00 |
| 6431412-00 | 5 | 8 | ↓ | Geared | ↓ | ↓ | 6404374-00 |
| 6431422-00 | 6 | 10 | ↓ | Plain | ↓ | ↓ | 6426896-00 |
| 6431432-00 | 6 | 10 | Ball | Geared | ASI | Bronze | 6426906-00 |
| 6437032-00 | 6 | 9 3/4 | Flat | Plain | WF | Standard | 6450511-00 |
| 6437042-00 | 6 | 9 3/4 | ↓ | Geared | ↓ | Standard | 6450521-00 |
| 6438122-00 | 3 | 4 3/4 | ↓ | Plain | ↓ | Bronze | 6450431-00 |
| 6438132-00 | 3 | 4 3/4 | Flat | Geared | WF | Bronze | 6450441-00 |
| 6439142-00 | 3 | 4 3/4 | Flat | Plain | Pat. Track | Standard | 6465981-00 |
| 6439152-00 | 3 | 4 3/4 | ↓ | Geared | ↓ | ↓ | 6465991-00 |
| 6439622-00 | 4 | 5 7/8 | ↓ | Geared | ↓ | ↓ | 6454164-00 |
| 6439632-00 | 4 | 5 7/8 | Flat | Plain | Pat. Track | Standard | 6454154-00 |
| 6440242-00 | 3 | 4 3/4 | Flat | Plain | WF | Standard | 6450411-00 |
| 6440252-00 | 3 | 4 3/4 | ↓ | Geared | WF | Standard | 6450421-00 |
| 6440642-00 | 3 | 4 3/4 | ↓ | Plain | Pat. Track | Bronze | 6468751-00 |
| 6440652-00 | 3 | 4 3/4 | ↓ | Geared | Pat. Track | Bronze | 6468761-00 |
| 6440722-00 | 5 | 7 3/4 | ↓ | Geared | WF | Standard | 6433774-00 |
| 6440732-00 | 5 | 7 3/4 | ↓ | Plain | WF | Standard | 6433764-00 |
| 6441142-00 | 4 | 5 3/4 | ↓ | Plain | WF | Bronze | 6450471-00 |
| 6441152-00 | 4 | 5 3/4 | ↓ | Geared | WF | Bronze | 6450481-00 |
| 6441812-00 | 4 | 5 3/4 | ↓ | Plain | WF | Standard | 6450451-00 |
| 6441822-00 | 4 | 5 3/4 | Flat | Geared | WF | Standard | 6450461-00 |
| 6443282-00 | 6 | 10 | Flat | Geared | Pat. Track | Standard | 6473431-00 |
| 6443292-00 | 6 | 10 | ↓ | Plain | ↓ | ↓ | 6472651-00 |
| 6443782-00 | 5 | 8 | ↓ | Plain | ↓ | ↓ | 6446414-00 |
| 6443792-00 | 5 | 8 | Flat | Geared | Pat. Track | Standard | 6446424-00 |
| 6448512-00 | 4 | 5 7/8 | Flat | Plain | Pat. Track | Bronze | 6484291-00 |
| 6448522-00 | 4 | 5 7/8 | ↓ | Geared | ↓ | Bronze | 6484211-00 |
| 6461972-00 | 4 | 5 7/8 | ↓ | Plain | ↓ | Standard | 6454154-00 |
| 6461982-00 | 4 | 5 7/8 | ↓ | Geared | ↓ | Standard | 6454164-00 |
| 6463222-00 | 4 | 6 | ↓ | Plain | ↓ | Bronze | 6407373-00 |
| 6463232-00 | 4 | 6 | Flat | Geared | Pat. Track | Bronze | 6407383-00 |

* Includes Wheel, Bearings, Axle & Spacers.

121141

FORM NO. 185-912-114

When Replacement Parts Are Needed, Order Only Yale® Factory Engineered Parts

1983

EW SERIES

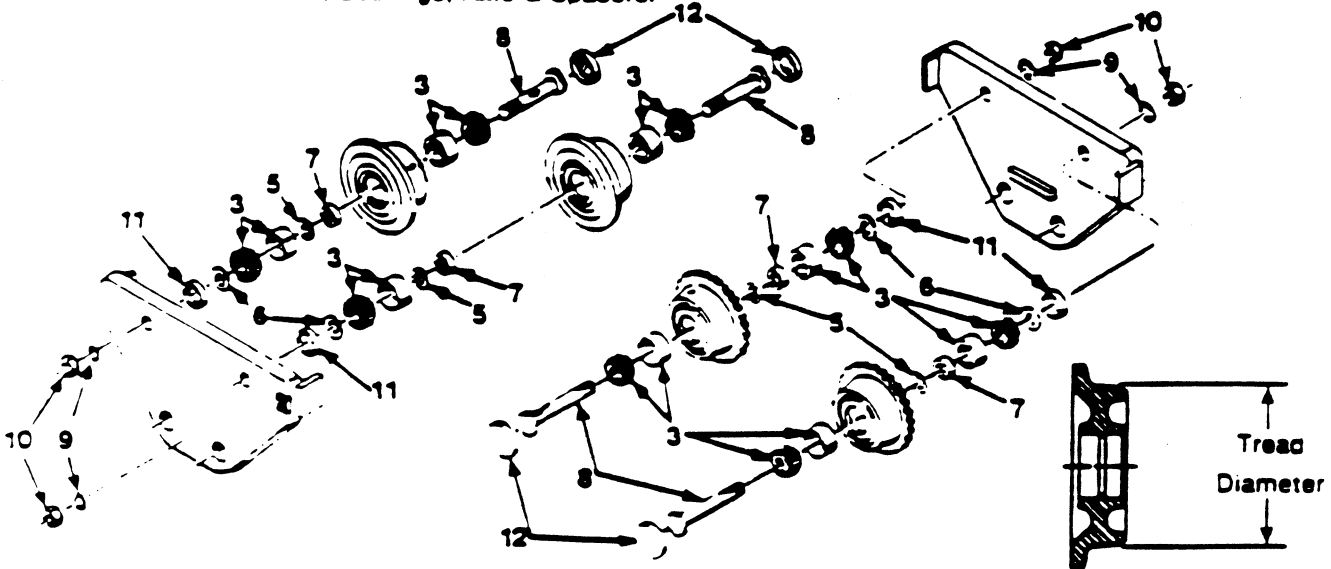
SECTION 3405

**WHEEL & AXLE
WHEEL TREAD DIAMETER 6 IN. ASI**

GT, PT & ST SERIES

| Wheel & Axle Group Component No. * | Tread Diameter | Tread Type | Wheel Type | Beam Type | Material | Wheel Part Number |
|------------------------------------|----------------|------------|------------|------------|----------|-------------------|
| 6431302-00 | 6 | Ball | Plain | ASI | Standard | 6403844-00 |
| 6431312-00 | 6 | Ball | Geared | ASI | Standard | 6403854-00 |
| 6431382-00 | 6 | Ball | Plain | ASI | Bronze | 0664887-00 |
| 6431392-00 | 6 | Ball | Geared | ASI | Bronze | 0664886-00 |
| 6439622-00 | 5 7/8 | Flat | Geared | Pat. Track | Standard | 6454164-00 |
| 6439632-00 | 5 7/8 | Flat | Plain | Pat. Track | Standard | 6454154-00 |
| 6441142-00 | 5 3/4 | Flat | Plain | WF | Bronze | 6450471-00 |
| 6441152-00 | 5 3/4 | Flat | Geared | WF | Bronze | 6450481-00 |
| 6441812-00 | 5 3/4 | Flat | Plain | WF | Standard | 6450451-00 |
| 6441822-00 | 5 3/4 | Flat | Geared | WF | Standard | 6450461-00 |
| 6448512-00 | 5 7/8 | Flat | Plain | Pat. Track | Bronze | 6484291-00 |
| 6448522-00 | 5 7/8 | Flat | Geared | Pat. Track | Bronze | 6484211-00 |
| 6461972-00 | 5 7/8 | Flat | Plain | Pat. Track | Standard | 6454154-00 |
| 6461982-00 | 5 7/8 | Flat | Geared | Pat. Track | Standard | 6454164-00 |
| 6463222-00 | 6 | Flat | Plain | Pat. Track | Bronze | 6407373-00 |
| 6463232-00 | 6 | Flat | Geared | Pat. Track | Bronze | 6407383-00 |

* Includes Wheel, Bearings, Axle & Spacers.



| ITEM NUMBER | COMPONENT NUMBER | PART DESCRIPTION | QTY PER WHEEL |
|-------------|------------------|------------------|---------------|
| 3 | 0578982-00 | BEARING TAPERED | 2 |
| 5 | 0111950-00 | BEARING SHIM | 4 |
| 6 | 0601083-00 | BEARING SPACER | 1 |
| 7 | 0579174-00 | WHEEL SPACER | 1 |
| 8 | 0664049-00 | AXLE | 1 |
| 9 | 0401010-00 | LOCKWASHER 1 1/4 | 1 |
| 10 | 0379032-00 | AXLE NUT | 1 |

FORM NO 165-912-114

When Replacement Parts Are Needed, Order Only Yale® Factory Engineered Parts

EW SERIES

Yale Hoisting Equipment

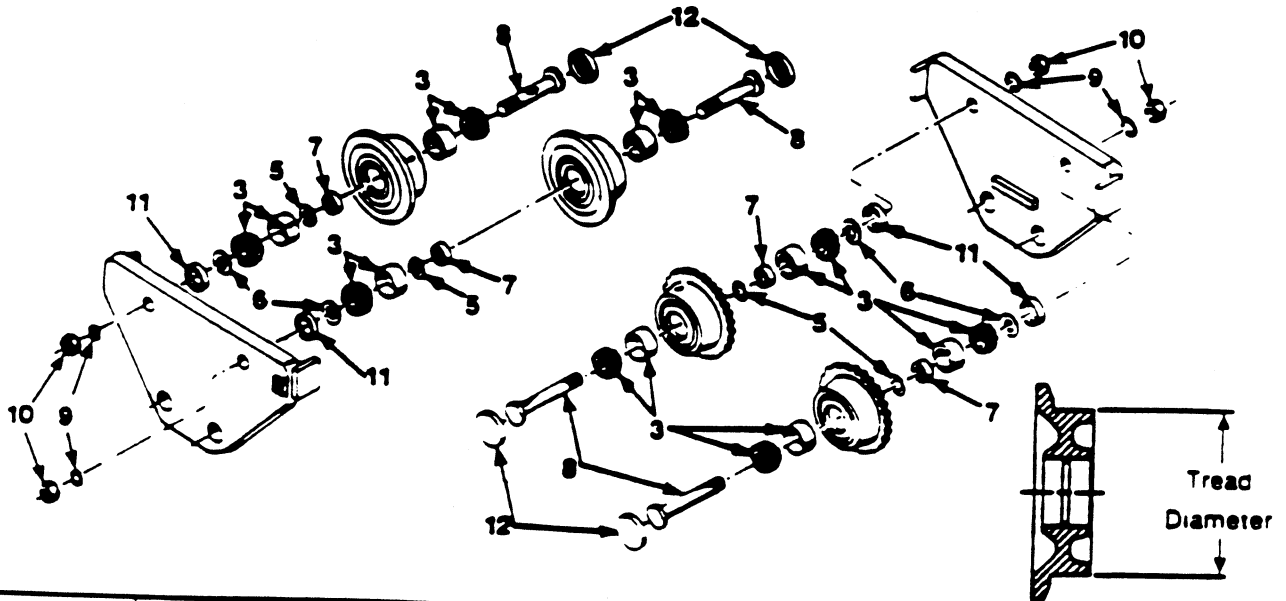
SECTION 3405
WHEEL & AXLE

WHEEL TREAD DIAMETER 4 7/8 IN. ASI

GT, PT & ST SERIES

| Wheel & Axle Group Component No. * | Tread Diameter | Tread Type | Wheel Type | Beam Type | Material | Wheel Part Number |
|------------------------------------|----------------|------------|------------|------------|----------|-------------------|
| 6431282-00 | 4 7/8 | Ball | Plain | ASI | Standard | 6412133-00 |
| 6431292-00 | 4 7/8 | Ball | Geared | ASI | Standard | 6412143-00 |
| 6431362-00 | 4 7/8 | Ball | Plain | ASI | Bronze | 6405663-00 |
| 6431372-00 | 4 7/8 | Ball | Geared | ASI | Bronze | 6405673-00 |
| 6438122-00 | 4 3/4 | Flat | Plain | WF | Bronze | 6450431-00 |
| 6438132-00 | 4 3/4 | Flat | Geared | WF | Bronze | 6450441-00 |
| 6439142-00 | 4 3/4 | Flat | Plain | Pat. Track | Standard | 6465981-00 |
| 6439152-00 | 4 3/4 | Flat | Geared | Pat. Track | Standard | 6465991-00 |
| 6440242-00 | 4 3/4 | Flat | Plain | WF | Standard | 6450411-00 |
| 6440252-00 | 4 3/4 | Flat | Geared | WF | Standard | 6450421-00 |
| 6440642-00 | 4 3/4 | Flat | Plain | Pat. Track | Bronze | 6468751-00 |
| 6440652-00 | 4 3/4 | Flat | Geared | Pat. Track | Bronze | 6468761-00 |

* Includes Wheel, Bearings, Axle & Spacers.



| ITEM NUMBER | COMPONENT NUMBER | PART DESCRIPTION | QTY. PER WHEEL |
|-------------|------------------|------------------|----------------|
| 3 | 0641327-00 | BEARING CONE | 2 |
| 4 | 0641326-00 | BEARING CUP | 2 |
| 5 | 5024531-00 | BEARING SHIM | 4 |
| 6 | 0664040-00 | BEARING SPACER | 1 |
| 7 | 0664039-00 | WHEEL SPACER | 1 |
| 8 | 0664038-00 | AXLE | 1 |
| 9 | 0213606-00 | AXLE NUT | 1 |

FORM NO. 185-912-114

When Replacement Parts Are Needed, Order Only Yale® Factory Engineered Parts

SECTION 3405

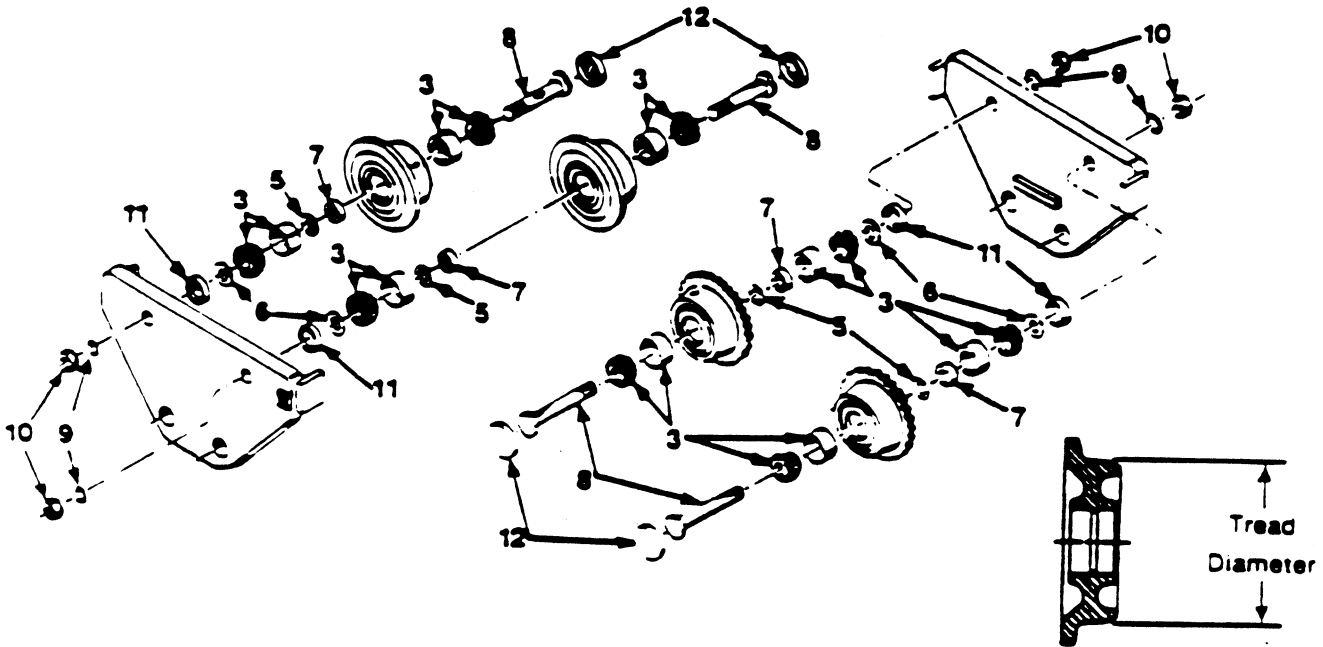
WHEEL & AXLE

WHEEL TREAD DIAMETER 10 IN. ASI

GT, PT & ST SERIES

| Wheel & Axle Group Component No. * | Tread Diameter | Tread Type | Wheel Type | Beam Type | Material | Wheel Part Number |
|------------------------------------|----------------|------------|------------|------------|----------|-------------------|
| 6431342-00 | 10 | Ball | Plain | ASI | Standard | 0654017-00 |
| 6431352-00 | 10 | Ball | Geared | ASI | Standard | 0654432-00 |
| 6431422-00 | 10 | Ball | Plain | ASI | Bronze | 6426896-00 |
| 6431432-00 | 10 | Ball | Geared | ASI | Bronze | 6426906-00 |
| 6437032-00 | 9 3/4 | Flat | Plain | WF | Standard | 6450511-00 |
| 6437042-00 | 9 3/4 | Flat | Geared | WF | Standard | 6450521-00 |
| 6443282-00 | 10 | Flat | Geared | Pat. Track | Standard | 6473431-00 |
| 6443292-00 | 10 | Flat | Plain | Pat. Track | Standard | 6472651-00 |

* Includes Wheel, Bearings, Axle & Spacers.



| ITEM NUMBER | COMPONENT NUMBER | PART DESCRIPTION | QTY. PER WHEEL |
|-------------|------------------|--------------------|----------------|
| 3 | 0651247-00 | BEARING CONE | 2 |
| 4 | 0651248-00 | BEARING CUP | 2 |
| 5 | 0651256-00 | BEARING SHIM | 4 |
| 6 | 0651249-00 | BEARING SPACER | 1 |
| 7 | 0651250-00 | WHEEL SPACER | 1 |
| 8 | 0651243-00 | AXLE | 1 |
| 9 | 5021379-02 | LOCKWASHER | 1 |
| 10 | 6401679-00 | AXLE NUT | 1 |
| 11 | 0651252-00 | DUST COVER INSIDE | 1 |
| 12 | 0651253-00 | DUST COVER OUTSIDE | 1 |

FORM NO 165-912-114

12-114

When Replacement Parts Are Needed, Order Only Yale® Factory Engineered Parts

EW SERIES

Yale Hoisting Equipment

WHEEL TREAD DIAMETER 8 IN. ASI

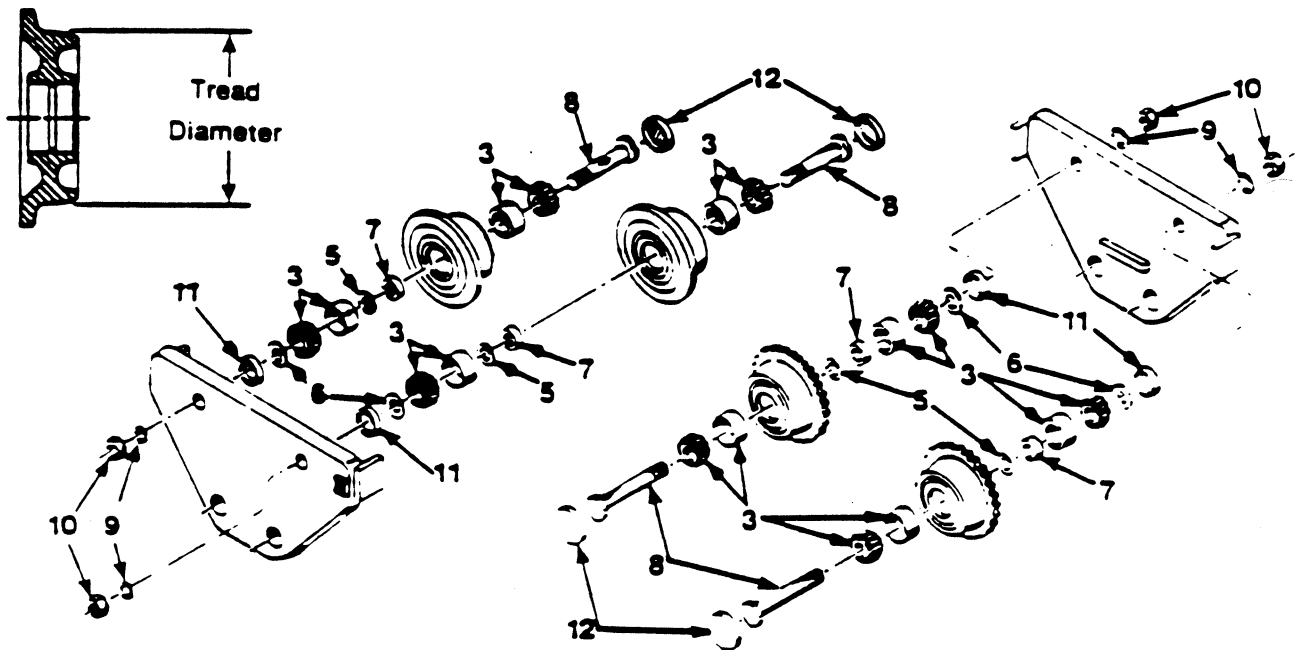
SECTION 3405

WHEEL & AX

GT, PT & ST SERIES

| Wheel & Axle Group Component No. * | Tread Diameter | Tread Type | Wheel Type | Beam Type | Material | Wheel Part Number |
|------------------------------------|----------------|------------|------------|------------|----------|-------------------|
| 6431322-00 | 8 | Ball | Plain | ASI | Standard | 6442494-00 |
| 6431332-00 | 8 | Ball | Geared | ASI | Standard | 6442504-00 |
| 6431402-00 | 8 | Ball | Plain | ASI | Bronze | 6404364-00 |
| 6431412-00 | 8 | Ball | Geared | ASI | Bronze | 6404374-00 |
| 6440722-00 | 7 3/4 | Flat | Geared | WF | Standard | 6433774-00 |
| 6440732-00 | 7 3/4 | Flat | Plain | WF | Standard | 6433764-00 |
| 6443782-00 | 8 | Flat | Plain | Pat. Track | Standard | 6446414-00 |
| 6443792-00 | 8 | Flat | Geared | Pat. Track | Standard | 6446424-00 |

* Includes Wheel, Bearings, Axle & Spacers.



| ITEM NUMBER | COMPONENT NUMBER | PART DESCRIPTION | QTY. PER WHEEL |
|-------------|------------------|--------------------|----------------|
| 3 | 0646689-00 | BEARING TAPERED | 2 |
| 5 | 0111948-00 | BEARING SHIM | 4 |
| 6 | 0646668-00 | BEARING SPACER | 1 |
| 7 | 0236024-00 | WHEEL SPACER | 1 |
| 8 | 0864012-00 | AXLE | 1 |
| 9 | 0150300-00 | LOCKWASHER 1 3/8 | 1 |
| 10 | 0149713-00 | AXLE NUT 1 3/8 - 6 | 1 |
| 11 | 0646666-00 | DUST COVER INSIDE | 1 |
| 12 | 0646667-00 | DUST COVER OUTSIDE | 1 |

12-114

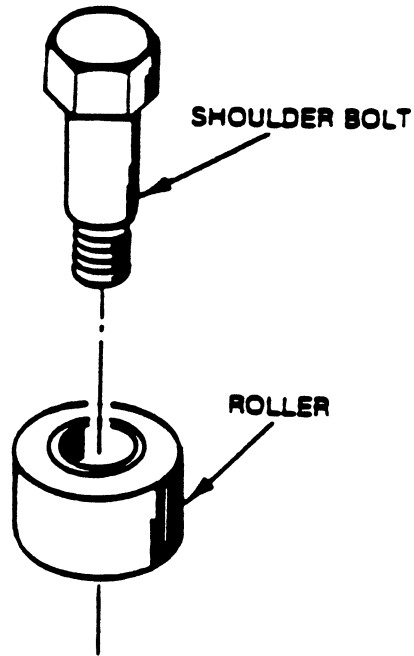
FORM NO. 165-912-114

When Replacement Parts Are Needed, Order Only Yale® Factory Engineered Parts

JULY 1983

SECTION 3475
TROLLEY GUIDE ROLLER

**IMPORTANT
SELECT COMPONENT ASSEMBLY
NUMBER FROM PARTS LIST
BEFORE SELECTING
REPLACEMENT ITEM NUMBER**



| COMPONENT NUMBER | ROLLER DIAMETER | MATERIAL | ROLLER PART NUMBER | SHOULDER BOLT PART NO. |
|------------------|-----------------|----------|--------------------|------------------------|
| 6446012-01 | 2 | STANDARD | 6481681-01 | 6481371-00 |
| 6446012-02 | 1 3/4 | STANDARD | 6481681-02 | 6481371-00 |
| 6452562-01 | 2 | BRONZE | 6491571-01 | 6481371-00 |
| 6452562-02 | 1 3/4 | BRONZE | 6491571-02 | 6481371-00 |

FORM NO. 165-912-116

When Replacement Parts Are Needed, Order Only Yale[®] Factory Engineered Parts

JULY 1983

EW SERIES

POWERED HOIST INSPECTION CHECK LIST

SEE PREVENTIVE MAINTENANCE SECTION OF INSTRUCTION MANUAL FOR DETAILS.

CHECK ONLY COMPONENTS APPLICABLE FOR SPECIFIC EQUIPMENT AND INSPECTION TYPE.

HOIST MODEL _____

HOIST S/N _____

| HOOKS | YES | NO | CABLE | YES | NO | CHAINS | YES | NO |
|--|--------------------------|--------------------------|-----------------------------|--------------------------|--------------------------|---|--------------------------|--------------------------|
| HARDWARE LOOSE | <input type="checkbox"/> | <input type="checkbox"/> | BROKEN WIRES AT ENDS | <input type="checkbox"/> | <input type="checkbox"/> | BINDING | <input type="checkbox"/> | <input type="checkbox"/> |
| CRACKS | <input type="checkbox"/> | <input type="checkbox"/> | BROKEN WIRES EXCESSIVE | <input type="checkbox"/> | <input type="checkbox"/> | CRACKED | <input type="checkbox"/> | <input type="checkbox"/> |
| EXCESSIVE WEAR | <input type="checkbox"/> | <input type="checkbox"/> | EXCESSIVE WEAR | <input type="checkbox"/> | <input type="checkbox"/> | TWISTED | <input type="checkbox"/> | <input type="checkbox"/> |
| BENT | <input type="checkbox"/> | <input type="checkbox"/> | KINKED OR DISTORTED | <input type="checkbox"/> | <input type="checkbox"/> | DISTORTED | <input type="checkbox"/> | <input type="checkbox"/> |
| SPREADING | <input type="checkbox"/> | <input type="checkbox"/> | CORROSION | <input type="checkbox"/> | <input type="checkbox"/> | CORRODED | <input type="checkbox"/> | <input type="checkbox"/> |
| FREELY ROTATE | <input type="checkbox"/> | <input type="checkbox"/> | HEAT DAMAGED | <input type="checkbox"/> | <input type="checkbox"/> | EXCESSIVE WEAR | <input type="checkbox"/> | <input type="checkbox"/> |
| LATCH DAMAGED | <input type="checkbox"/> | <input type="checkbox"/> | | | | WORN CHAIN GUIDES | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | POCKET WHEELS WORN | <input type="checkbox"/> | <input type="checkbox"/> |
| BRAKES | YES | NO | WIRING | YES | NO | DRUM & SHEAVES | YES | NO |
| MOTOR BRAKE WORN OR NOT OPERATING | <input type="checkbox"/> | <input type="checkbox"/> | LOOSE CONNECTIONS | <input type="checkbox"/> | <input type="checkbox"/> | WORN EXCESSIVELY | <input type="checkbox"/> | <input type="checkbox"/> |
| EXCESSIVE LOADBRAKE DRIFT OR BLACKLASH | <input type="checkbox"/> | <input type="checkbox"/> | FRAYED | <input type="checkbox"/> | <input type="checkbox"/> | CRACKED OR SCORED | <input type="checkbox"/> | <input type="checkbox"/> |
| EXCESSIVE DISC WEAR | <input type="checkbox"/> | <input type="checkbox"/> | DAMAGED | <input type="checkbox"/> | <input type="checkbox"/> | | | |
| | | | PROPER GROUNDING | <input type="checkbox"/> | <input type="checkbox"/> | | | |
| LIMIT SWITCHES | YES | NO | LOAD LIMITING DEVICE | YES | NO | COLLECTORS | YES | NO |
| OPERATING PROPERLY | <input type="checkbox"/> | <input type="checkbox"/> | OPERATING PROPERLY | <input type="checkbox"/> | <input type="checkbox"/> | BINDING | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | EXCESSIVE WEAR | <input type="checkbox"/> | <input type="checkbox"/> |
| HOUSING | YES | NO | OPERATION CONTROLS | YES | NO | LUBRICATION | YES | NO |
| DISTORTED | <input type="checkbox"/> | <input type="checkbox"/> | CONTACTOR PITTING | <input type="checkbox"/> | <input type="checkbox"/> | ALL POINTS LUBRICATED AS GIVEN IN LUB CHART | <input type="checkbox"/> | <input type="checkbox"/> |
| CRACKS | <input type="checkbox"/> | <input type="checkbox"/> | OPERATING PROPERLY | <input type="checkbox"/> | <input type="checkbox"/> | OIL DARK OR LOW | <input type="checkbox"/> | <input type="checkbox"/> |
| LOOSE HARDWARE | <input type="checkbox"/> | <input type="checkbox"/> | DAMAGED PUSH BUTTON | <input type="checkbox"/> | <input type="checkbox"/> | OIL LEAKS | <input type="checkbox"/> | <input type="checkbox"/> |
| BEARING NOISE | <input type="checkbox"/> | <input type="checkbox"/> | HOUSING | <input type="checkbox"/> | <input type="checkbox"/> | | | |
| SUPPORTING STRUCTURE | YES | NO | AIR SYSTEM | YES | NO | WARNING LABELS | YES | NO |
| CONTINUED ABILITY TO SUPPORT IMPOSED LOADS | <input type="checkbox"/> | <input type="checkbox"/> | LEAKING | <input type="checkbox"/> | <input type="checkbox"/> | MISSING | <input type="checkbox"/> | <input type="checkbox"/> |
| WORN OR DISTORTED TROLLEY PARTS | <input type="checkbox"/> | <input type="checkbox"/> | LOOSE CONNECTIONS | <input type="checkbox"/> | <input type="checkbox"/> | ILLEGIBLE | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | BROKEN CONTROL PENDANT | <input type="checkbox"/> | <input type="checkbox"/> | | | |

NOTE IF ANY () IS CHECKED DO NOT OPERATE THE HOIST UNTIL REPAIRS HAVE BEEN MADE.

REMARKS AND REPAIRS MADE _____

SIGNATURE _____ DATE _____ CLOCK NUMBER _____

POWERED HOIST INSPECTION CHECK LIST

SEE PREVENTIVE MAINTENANCE SECTION OF INSTRUCTION MANUAL FOR DETAILS.

CHECK ONLY COMPONENTS APPLICABLE FOR SPECIFIC EQUIPMENT AND INSPECTION TYPE.

HOIST MODEL _____

HOIST S/N _____

| HOOKS | YES | NO | CABLE | YES | NO | CHAINS | YES | NO |
|--|--------------------------|--------------------------|------------------------|--------------------------|--------------------------|---|--------------------------|--------------------------|
| HARDWARE LOOSE | <input type="checkbox"/> | <input type="checkbox"/> | BROKEN WIRES AT ENDS | <input type="checkbox"/> | <input type="checkbox"/> | BINDING | <input type="checkbox"/> | <input type="checkbox"/> |
| CRACKS | <input type="checkbox"/> | <input type="checkbox"/> | BROKEN WIRES EXCESSIVE | <input type="checkbox"/> | <input type="checkbox"/> | CRACKED | <input type="checkbox"/> | <input type="checkbox"/> |
| EXCESSIVE WEAR | <input type="checkbox"/> | <input type="checkbox"/> | EXCESSIVE WEAR | <input type="checkbox"/> | <input type="checkbox"/> | TWISTED | <input type="checkbox"/> | <input type="checkbox"/> |
| BENT | <input type="checkbox"/> | <input type="checkbox"/> | KINKED OR DISTORTED | <input type="checkbox"/> | <input type="checkbox"/> | DISTORTED | <input type="checkbox"/> | <input type="checkbox"/> |
| SPREADING | <input type="checkbox"/> | <input type="checkbox"/> | CORROSION | <input type="checkbox"/> | <input type="checkbox"/> | CORRODED | <input type="checkbox"/> | <input type="checkbox"/> |
| FREELY ROTATE | <input type="checkbox"/> | <input type="checkbox"/> | HEAT DAMAGED | <input type="checkbox"/> | <input type="checkbox"/> | EXCESSIVE WEAR | <input type="checkbox"/> | <input type="checkbox"/> |
| LATCH DAMAGED | <input type="checkbox"/> | <input type="checkbox"/> | | | | WORN CHAIN GUIDES | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | POCKET WHEELS WORN | <input type="checkbox"/> | <input type="checkbox"/> |
| BRAKES | YES | NO | WIRING | YES | NO | DRUM & SHEAVES | YES | NO |
| MOTOR BRAKE WORN OR NOT OPERATING | <input type="checkbox"/> | <input type="checkbox"/> | LOOSE CONNECTIONS | <input type="checkbox"/> | <input type="checkbox"/> | WORN EXCESSIVELY | <input type="checkbox"/> | <input type="checkbox"/> |
| EXCESSIVE LOADBRAKE DRIFT OR BLACKLASH | <input type="checkbox"/> | <input type="checkbox"/> | FRAYED | <input type="checkbox"/> | <input type="checkbox"/> | CRACKED OR SCORED | <input type="checkbox"/> | <input type="checkbox"/> |
| EXCESSIVE DISC WEAR | <input type="checkbox"/> | <input type="checkbox"/> | DAMAGED | <input type="checkbox"/> | <input type="checkbox"/> | | | |
| | | | PROPER GROUNDING | <input type="checkbox"/> | <input type="checkbox"/> | | | |
| LIMIT SWITCHES | YES | NO | LOAD LIMITING DEVICE | YES | NO | COLLECTORS | YES | NO |
| OPERATING PROPERLY | <input type="checkbox"/> | <input type="checkbox"/> | OPERATING PROPERLY | <input type="checkbox"/> | <input type="checkbox"/> | BINDING | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | EXCESSIVE WEAR | <input type="checkbox"/> | <input type="checkbox"/> |
| HOUSING | YES | NO | OPERATION CONTROLS | YES | NO | LUBRICATION | YES | NO |
| DISTORTED | <input type="checkbox"/> | <input type="checkbox"/> | CONTACTOR PITTING | <input type="checkbox"/> | <input type="checkbox"/> | ALL POINTS LUBRICATED AS GIVEN IN LUB CHART | <input type="checkbox"/> | <input type="checkbox"/> |
| CRACKS | <input type="checkbox"/> | <input type="checkbox"/> | OPERATING PROPERLY | <input type="checkbox"/> | <input type="checkbox"/> | OIL DARK OR LOW | <input type="checkbox"/> | <input type="checkbox"/> |
| LOOSE HARDWARE | <input type="checkbox"/> | <input type="checkbox"/> | DAMAGED PUSH BUTTON | <input type="checkbox"/> | <input type="checkbox"/> | OIL LEAKS | <input type="checkbox"/> | <input type="checkbox"/> |
| BEARING NOISE | <input type="checkbox"/> | <input type="checkbox"/> | HOUSING | <input type="checkbox"/> | <input type="checkbox"/> | | | |
| SUPPORTING STRUCTURE | YES | NO | AIR SYSTEM | YES | NO | WARNING LABELS | YES | NO |
| CONTINUED ABILITY TO SUPPORT IMPOSED LOADS | <input type="checkbox"/> | <input type="checkbox"/> | LEAKING | <input type="checkbox"/> | <input type="checkbox"/> | MISSING | <input type="checkbox"/> | <input type="checkbox"/> |
| WORN OR DISTORTED TROLLEY PARTS | <input type="checkbox"/> | <input type="checkbox"/> | LOOSE CONNECTIONS | <input type="checkbox"/> | <input type="checkbox"/> | ILLEGIBLE | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | BROKEN CONTROL PENDANT | <input type="checkbox"/> | <input type="checkbox"/> | | | |

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REMARKS AND REPAIRS MADE _____

SIGNATURE _____ DATE _____ CLOCK NUMBER _____