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# HDR™ K240260
## HOIST DRUM ROTATION INDICATOR KIT

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HDR™ K240260
HOIST DRUM ROTATION INDICATOR KIT

The Hoist Drum Rotation Indicator Kit includes three basic components: a TRANSMITTER, a DRIVER, and an INDICATOR.

OPERATIONAL FEATURES

- **FAST INDICATION**: Operator "feels" the direct Drum response which assists in controlling the operation of the lever.
- **HIGH TORQUE**: Provides accurate and stable indications even at a very slow speed.
- **BI-DIRECTIONAL**: Follows and displays the direction of the drum rotation (clockwise or counterclockwise) with equal precision and torque.
- **LONG LIFE**: Allows long, reliable operation with a minimum of moving parts, friction, and wear.
- **EASY INSTALLATION**: Uses existing mounting hardware and levers. Universal hardware is available.

**FIGURE 1: SYSTEM CABLING**
SPECIFICATIONS

TRANSMITTER – A240260
- Bi-directional sensing, pulse generator, coupled to the drum by a 5" rubber wheel
- Housed in a 3"x 3" x 2" box
- Wire cable for driver interconnection

DRIVER – A240240 (12 volts) or A240241 (24 volts)
- Solid state electronic translator and power driver
- Housed in a 5" x 5" x 4" box
- Two-wire 12 or 24 volt battery input connection (voltage must be specified)

INDICATOR – A240230
- Electrical step moter with clamp attachment provides lever control
- Output to a “toothed” indicator rubber cup
- Housing 2" x 2" x 3" with an overall length of 6"
- Wire cable for driver interconnection
- Can be used in dual operator station, such as boom trucks with second indicator + splitter cable available upon request.

POWER
- 12 VDC, 5 amps/24VDC

SPEED
- 0 to 200 RPM continuous
  (Indicator may be stalled for any period without loss of operation or tactile feel)

REMOTE DISTANCE
Up to 200 ft. – Extension cable available upon request.

OPERATING TEMPERATURE
- 40 °F to + 130 °F
INSTALLING THE HDR™ TRANSMITTER

1. Mount the transmitter on the hoist drum frame so that the wheel rolls along the top of the drum flange.

   ![Diagram of HDR™ Transmitter Installation]

   **Note:** If the transmitter cable is routed through the slip rings, the wire colors must be matched on each side. Green must go to green, black to black, and white to white.

2. Carefully check the hoist drum flange for lumps of paint, burrs, etc., that will cause the wheel to bounce when the drum rotates rapidly. Remove all such irregularities before installing the transmitter.

   **Note:** Do not extend the wheel over the drum to prevent the wire rope from snagging or rubbing on the drum.

3. Loosen the set screw in the base near the cord and rotate the transmitter case for best routing of the power cable.

   - Route the cable so that any boom movement does not wear, abrade, or impose undue tension on the cable. **Note:** Keep the cable clear of areas that might cause abrasion, wear, or damage. Do not pinch or crush the cable.
   - Clamp the cable, as necessary, to the frame to prevent pinching or snagging.
   - Route the cable to the driver.
   - Align the keyways before inserting the plug in the driver receptacle.
   - Tighten the threaded retaining collar finger tight.

   **FIGURE 2: HDR™ TRANSMITTER – A 240260**

Universal Mounting Hardware:
Transmitter Part Numbers
Spring: P065015
Bracket: P065016
1. Mount the driver amplifier unit with four (4) \( \frac{1}{4}'' \) bolts in the hydraulic compartment or in an area where the unit will never be exposed to direct moisture or rain. Position the unit so that the plugs from the transmitter and indicator units can be easily installed after the unit is mounted.

2. Connect a No. 14 AWG electrical wire from the ground terminal to a clean ground on the cab or frame. Connect another No. 14 AWG insulated electrical wire from the terminal between the receptacles to a fused terminal post that is turned “on and off” by the ignition switch. The fuse should not be larger than five (5) amps.

   **Note:** If a fused terminal is not available, use an in-line fuse and connect to any terminal post which is turned on and off by the ignition switch. If the unit is connected to a terminal that is not turned off, the battery will run down.

3. After the indicator and transmitter are mounted, connect the plugs from these devices to the driver.

   **Note:** Be sure to align the keyways in the plugs and receptacles before inserting and tightening the threaded collars finger tight.

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**FIGURE 3: THE HDR™ DRIVER**

Use A240240 Driver for 12 VDC

Use A240241 Driver for 24 VDC

NET WEIGHT 1.2 lbs.
1. Mount the indicator on the hoist control lever using the set screw to lock it in position after the four (4) clamp screws have been tightened.

2. Route the cable down the lever, along the cab wall, and back to the driver amplifier. Clamp into place using plastic ties.
   (Note: Keep the cable clear of areas that might cause abrasion, wear, or damage. Do not pinch or crush the cable.)

3. Connect the cable plug to the seven (7) pin transmitter receptacles. Be sure to align the keyways before inserting and tightening the threaded retaining collar finger.