



# Harsco Track Technologies

Harsco

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## SERVICE BULLETIN MAINTENANCE OF WAY EQUIPMENT

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**DATE:** 4-17-2002 **BULLETIN NO:** 02-014

**TITLE:** H5463XAA PROXIMITY SWITCH CONVERSION GROUP

**RATING:**

<input type="checkbox"/>	<b>DIRECTIVE</b> (Action Is Required)	<input type="checkbox"/>	<b>ALERT</b> (Potential Problem)
<input type="checkbox"/>	<b>INFORMATION</b> (Action Is Optional)	<input checked="" type="checkbox"/>	<b>PRODUCT IMPROVEMENT</b> (Enhance Product)

**PRODUCT SERIES / MODEL:** MKIV and MKVI Tampers

**SERIAL NO:** All Models manufactured with proximity switches.

**SUMMARY:** The proximity switch part # 0-3110025-0-11 used on the MKIV and MKVI workhead circuit is no longer being manufactured. An alternate proximity switch part # 0-3110025-0-29 has been tested and is now available as a direct replacement.

**OPERATIONAL IMPACT:** None.

**ACTION:** Order new proximity switch part # 0-3110025-0-29 as required. If the old proximity switch part # 0-3110025-0-11 is ordered, it will automatically be replaced by the new Proximity Switch Conversion Group part # H4563XAA.

The installation of this Conversion Group requires:

- Disconnecting the electrical wires from the existing proximity switch and removing the switch from the machine.
- Installing the new proximity switch on the machine and reconnecting the electrical wires to the switch.

**CONTACT:** If you have any questions or if we can be of any service, please contact the Service Department at the Columbia, SC. facility, (803) 345-9160.

**SAFETY INFORMATION**

- **FOLLOW APPLICABLE RAILROAD LOCKOUT - TAGOUT PROCEDURE TO REMOVE ALL ENERGY SOURCES FROM MACHINE. FAILURE TO COMPLY COULD RESULT IN SEVERE BODILY INJURY.**

**CONVERSION GROUP INSTALLATION - See Figure 1**

1. Locate the existing proximity switch on the workhead
2. Disconnect the electrical wires from the existing proximity switch. Then remove the existing proximity switch from the workhead and discard.

*Note: Be sure to note which electrical wires are connected to the switch contacts and the wire numbers for proper re-assembly.*

3. Install the new proximity switch (1) on the workhead. Re-connect the electrical wires to the new proximity switch (1) as follows:
  - 3.1 Connect the signal wire from the old switch #1 NO (normally open) contact to the new switch #2 NO (normally open) contact.
  - 3.2 Connect the ground wire #000 from the old switch #3 (-) VDC contact to the new switch #4 (-) VDC contact.
  - 3.3 Connect the power wire #286 or #289 from the old switch #2 (+) VDC contact to the new switch #3 (+) VDC contact.

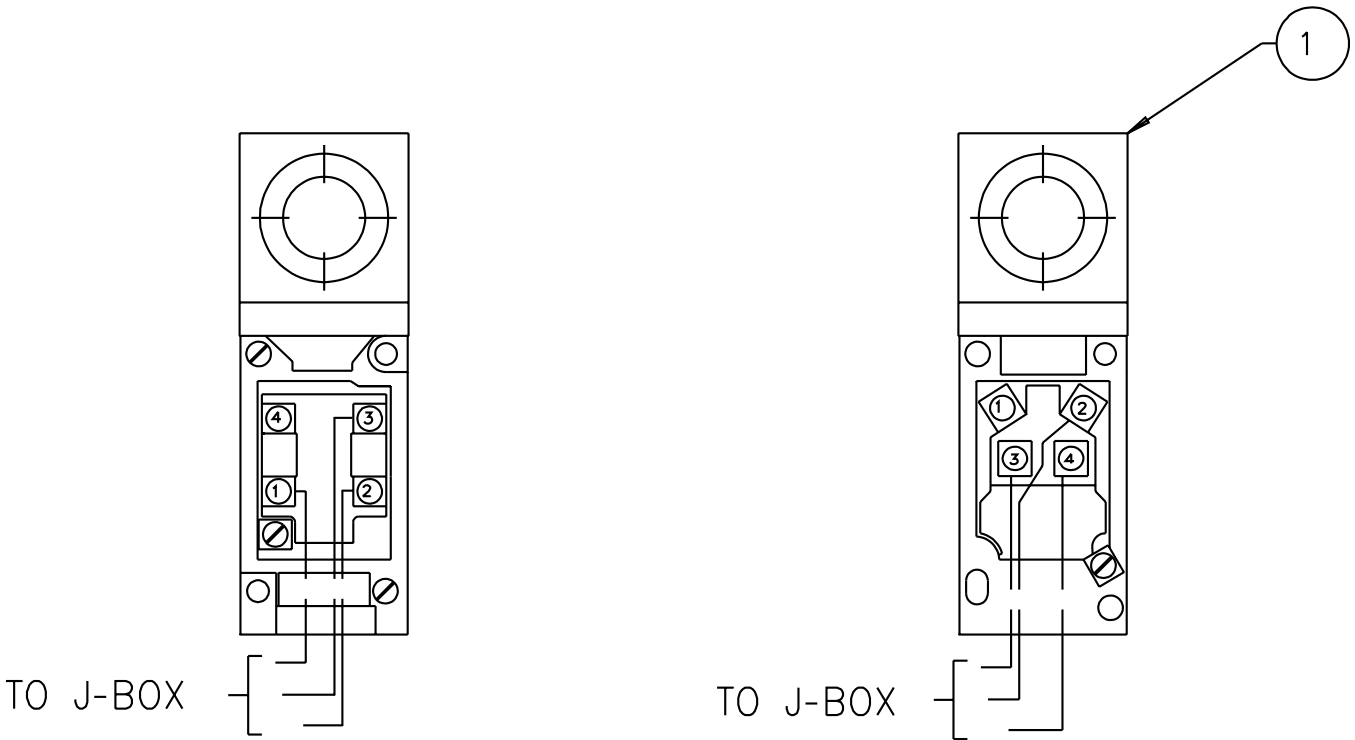
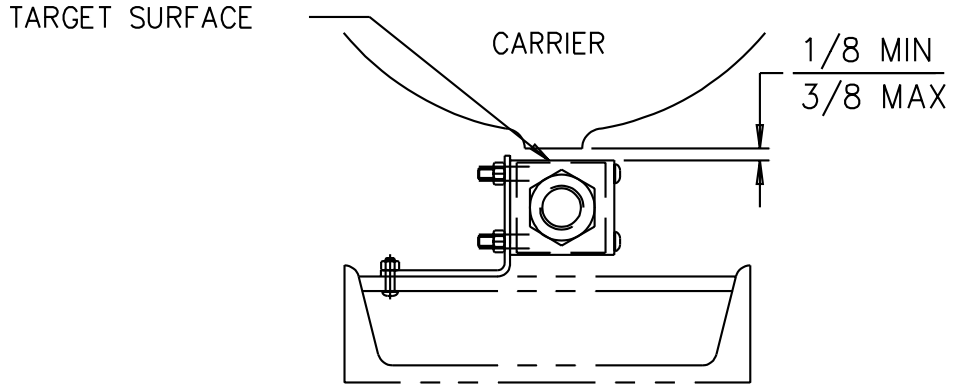
*Note: The new switch #1 NC (normally closed) contact is not used.*

4. Rotate the head of the new proximity switch (1) so the sensing face is towards the carrier. Apply a small drop of blue Loctite to the screws that mount the sensing head to the switch body and then tighten securely.
5. Start the engine.
6. Verify proper operation of the new proximity switch. When metal is placed within the sensing range of 1/8 - 3/8 inch (3.18 - 9.53 mm) of the proximity switch, the "NC SWITCH CLOSED" red LED will go out and the "NO SWITCH CLOSED" red LED will come on.

**CONVERSION GROUP INSTALLATION**

H5463XAA-1

**FIGURE 1  
PROXIMITY SWITCH CONVERSION**



OLD STYLE SWITCH WIRING  
HONEYWELL MPS31HD

- 1 - NO (NPN)
- 2 - (+) VDC
- 3 - (-) VDC
- 4 - NC (NPN) (Not Used)

NEW STYLE SWITCH WIRING  
CUTTLER-HAMMER E51SNL

- 1 - NC (NPN) (Not Used)
- 2 - NO (NPN)
- 3 - (+) VDC
- 4 - (-) VDC

**CONVERSION GROUP PARTS LIST**

ITEM	PART NO	DESCRIPTION	QTY
	H5463XAA	PROXIMITY SWITCH CONVERSION GROUP . . . . .	1
1	0-3110025-0-29	Proximity Switch . . . . .	1

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