



# Harsco Track Technologies

Harsco

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## SERVICE BULLETIN MAINTENANCE OF WAY EQUIPMENT

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**DATE:** 12-18-2001 **BULLETIN NO:** 01-020

**TITLE:** RAIL CLAMP MANIFOLD INTERNAL CHECK VALVE REMOVAL

**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:** 6700S TAMPERS

**SERIAL NO:** All Models Serial # 152773 and Higher With Dual Rail Clamp Manifold

**SUMMARY:** The internal check valve located in the pressure port of the rail clamp manifold has broken on occasion due to hydraulic impulses in the line. It has been determined that the rail clamp circuit does not need this check valve to operate properly and it should be removed from the manifold.

**OPERATIONAL IMPACT:** Eliminating the check valve inside of the rail clamp manifold will improve machine reliability.

**ACTION:** The removal of the internal check valve from the rail clamp manifold requires:

- Making a retainer removal tool per the included instructions or obtaining a retainer removal tool part # 2004942 from Harsco Track Technologies.
- Disconnecting the hydraulic pressure line and removing the fitting from the manifold.
- Using the retainer removal tool to remove the internal check valve.
- Re-installing the fitting in the manifold and reconnecting the pressure line.
- Checking for hydraulic leaks.

**CONTACT:** If you have any questions or if we can be of any service, please contact Bill Perry or Doug Budreau at the Ludington, MI. facility, (231) 843-3431.

**SAFETY INFORMATION**

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

**RETAINER REMOVAL TOOL - See Figure 1**

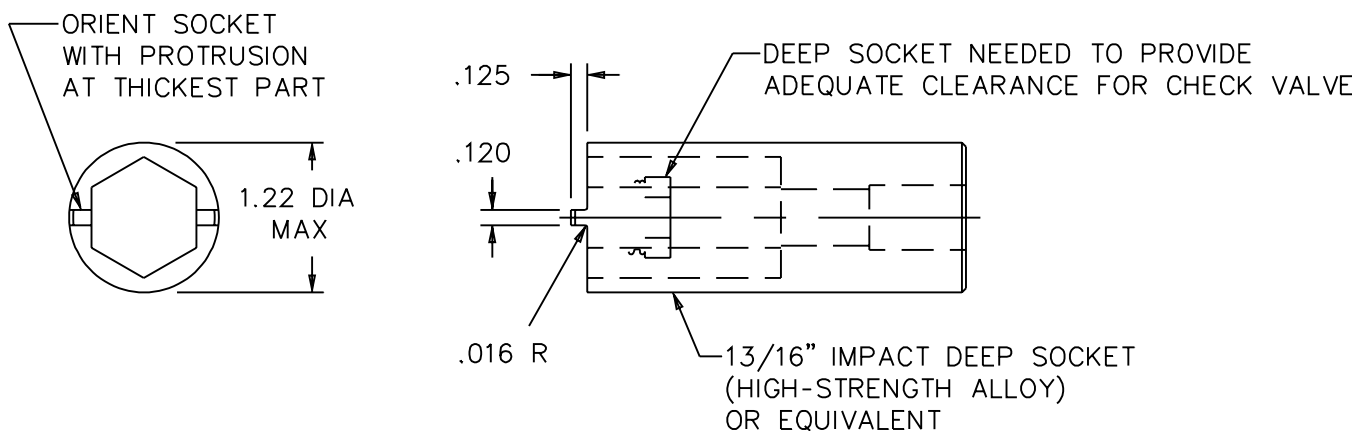
1. Make a retainer removal tool from a 13/16" deep impact socket per the dimensions shown or obtain a retainer removal tool part # 2004942 from Harsco Track Technologies.

**CHECK VALVE REMOVAL - See Figure 2 and Figure 3**

2. Disconnect the hydraulic pressure line from the manifold. Remove the hydraulic fitting from the manifold.
3. Use the retainer removal tool to remove the retainer that secures the internal check valve inside of the manifold. Remove the check valve from the manifold.
4. Re-install the hydraulic fitting in the manifold and tighten securely. Re-connect the hydraulic pressure line to the fitting and tighten securely.
5. Start the engine and pressurize the rail clamp manifold.
6. Check the hydraulic pressure line and fitting for hydraulic leaks.
7. Test the machine to ensure proper operation.
  - 7.1 If the machine does not jack, adjust the jackbeam clamp pressure switches. See Step 8.
  - 7.2 If the right outside rail hook and the right jackbeam guide wheels do not hit the rail at the same time, adjust the rail clamp sequence valve. See Step 9.

**FIGURE 1**  
**RETAINER REMOVAL TOOL**

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CHECK VALVE REMOVAL

FIGURE 2  
RAIL CLAMP MANIFOLD - TOP VIEW

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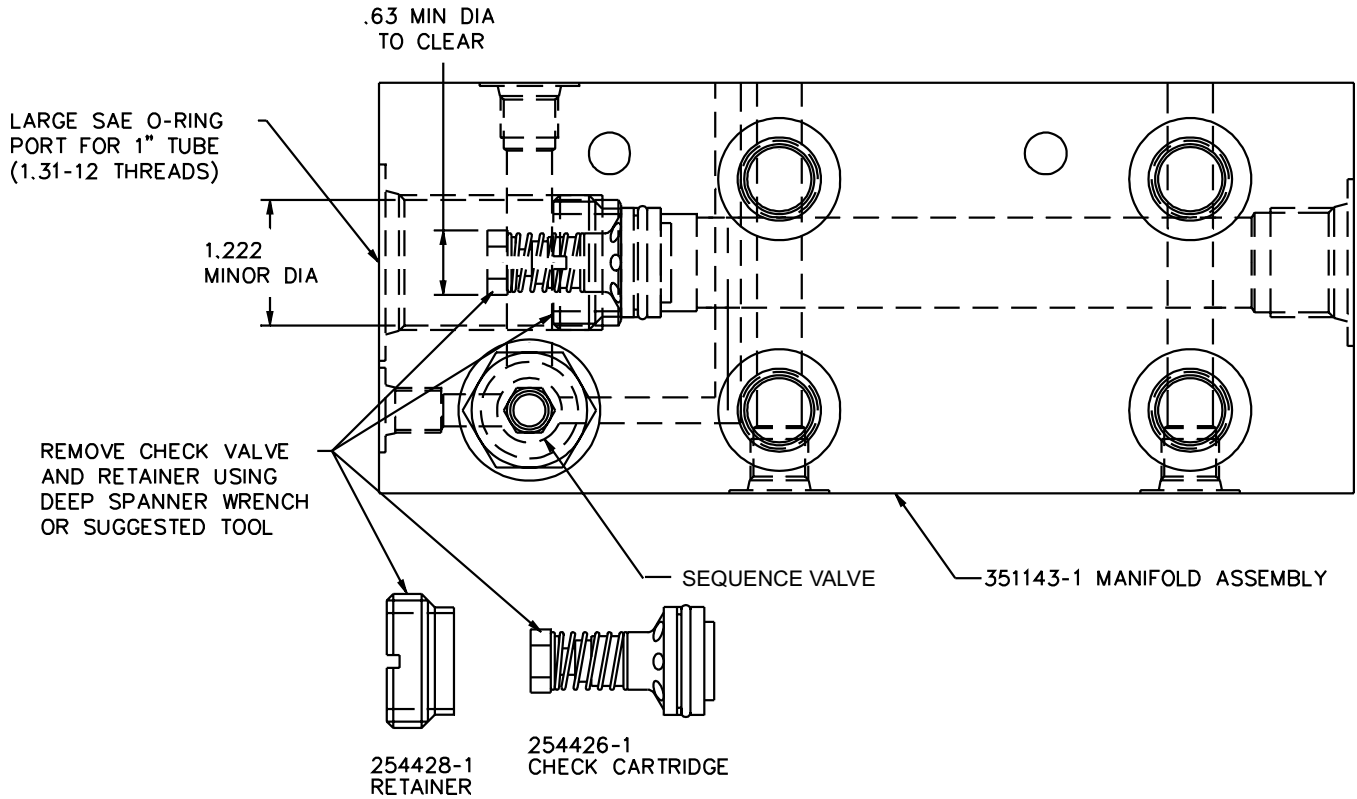
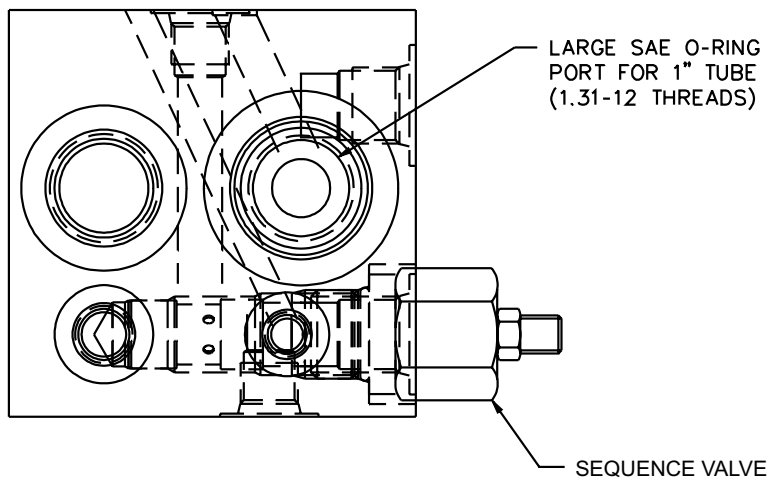


FIGURE 3  
RAIL CLAMP MANIFOLD - END VIEW

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**JACKBEAM CLAMP PRESSURE SWITCHES ADJUSTMENT** - See Figure 4

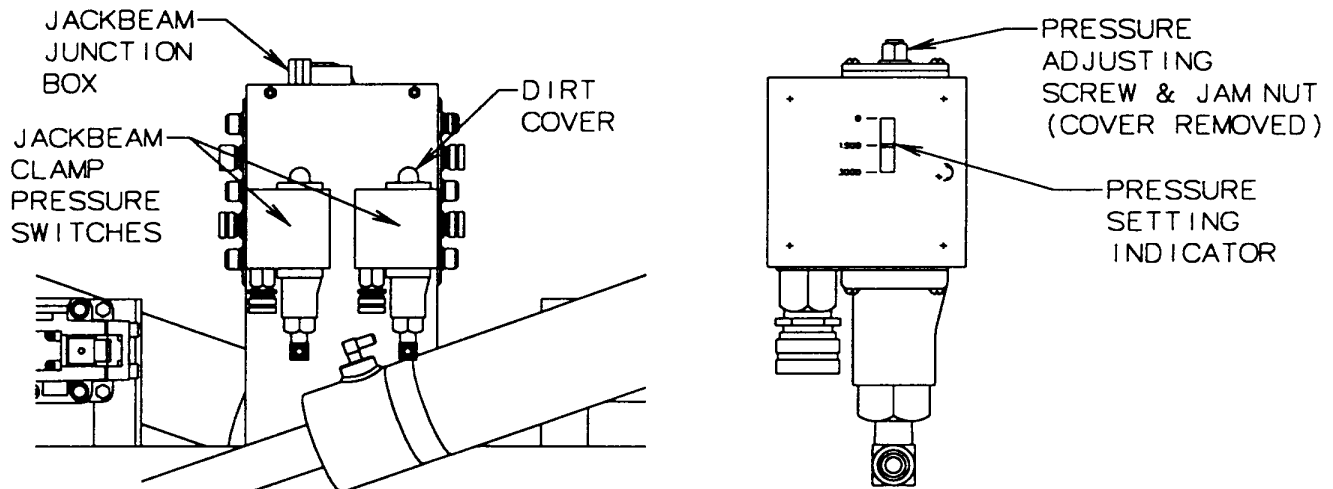
8. The jackbeam rail clamp pressure switches should be set to 1,600 - 1,800 PSI (110.32 - 124.11 bar) for the machine to jack properly. Remove the cover. Loosen the jam nut on the top of the pressure switch box. Adjust the screw until the pressure setting indicator is set to 1,600 - 1,800 PSI (110.32 - 124.11 bar). Tighten the jam nut securely. Re-install the cover. Recheck the operation of the machine and adjust the pressure switches as needed for proper operation.

**RAIL CLAMP SEQUENCE VALVE ADJUSTMENT** - See Figure 2 and Figure 3

9. The sequence valve adjustment should be set so that the right outside rail hook and the right jackbeam guide wheels hit the rail at the same time. Loosen the jam nut on the sequence valve. Turn the sequence valve clockwise all the way in and then back out counter-clockwise four complete turns. Tighten the jam nut securely. Recheck the operation of the machine and adjust the sequence valve as needed for proper operation.

FIGURE 4  
JACKBEAM CLAMP PRESSURE SWITCHES

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