

## **Harsco Track Technologies**

#### Harsco

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# **SERVICE BULLETIN**

MAINTENANCE OF WAY EQUIPMENT								
DATE:	11-17-2003			BULLETIN NO:	03-025			
TITLE:	330838-1 JACKING CYLINDER PISTON WEAR RING							
RATING:		<b>DIRECTIVE</b> (Action Is Required)		ALERT (Potential Problem)				
		INFORMATION (Action Is Optional)	X	PRODUCT IMPROVEME (Enhance Product)	NT			
PRODUCT S	ERIES / M	<b>ODEL</b> : 6700S Tampers						
SERIAL NO:	All Mode	ls						

SUMMARY:

There have been several instances where there has been premature wear on the inside of the cylinder barrel requiring the barrel to be scrapped. The current cylinder design has a steel barrel and a cast iron piston with a single seal and no wear bearing. The cast iron material is the intended bearing material for the piston. The piston is designed with a second groove so it can be used in a double acting cylinder application, however only one seal is used because the jacking function requires only a single acting cylinder.

A non metallic wear ring has been developed to fit in the second groove of the piston and provide a bearing surface for the piston during operation. The piston wear ring is being installed on all future part #330838-1 Jacking Cylinder assemblies and is available to add to any existing cylinders in the field. All future cylinder service kits part #170217-1 will also include the new wear ring.

**OPERATIONAL IMPACT:** To improve jacking cylinder reliability and minimize wear.

ACTION: Order one Piston Wear Ring part #2007989 for each jacking cylinder that is to

be updated with the new wear ring.

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.

### WEAR RING INSTALLATION - See Figure 1

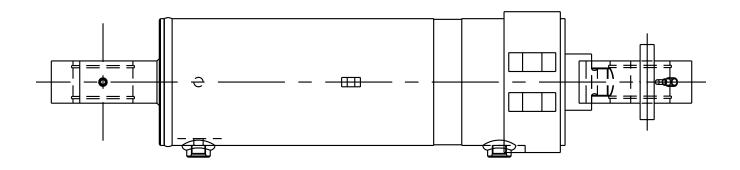
- 1. Disconnect the hydraulic lines from the jacking cylinder ports. BE SURE TO CATCH ALL HYDRAULIC FLUID IN A LEAK-PROOF CONTAINER.
- 2. Remove the jacking cylinder from the machine.
- 3. Thoroughly clean the jacking cylinder and then disassemble.
- 4. Install the wear ring (15 illustrated in red) in the groove of the piston (2).
- 5. Re-assemble the jacking cylinder.
- 6. Re-install the jacking cylinder on the machine.
- 7. Reconnect the hydraulic lines to the jacking cylinder.
- 8. Start the engine and pressurize the jacking cylinder circuit.
- 9. Check the jacking cylinder and all hydraulic lines and fittings for leaks. DO NOT USE YOUR BARE HANDS WHEN CHECKING FOR HYDRAULIC LEAKS.

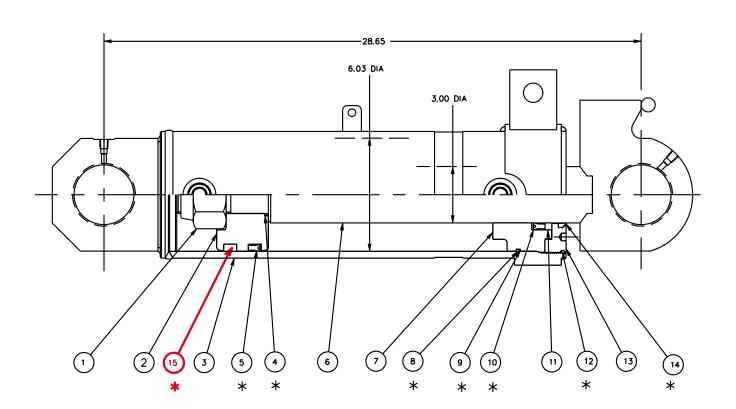
#### **PARTS LIST** - See Figure 1 for Item Numbers

ľ	TEM	PART NO	DESCRIPTION	QTY
	1	170218-1	Lock Nut	
	2	170219-1	Piston	1
	3	313876-1	Cylinder Weldment	1
*	4	150395-17	O-Ring	1
*	5	250447-1	Piston Seal	1
	6	313878-1	Piston Rod Assembly	1
	7	170222-1	Cylinder Head	1
*	8	150395-47	O-Ring	1
*	9	250448-1	Back-Up Ring	1
*	10	250449-1	Rod Seal	1
	11	170223-1	Non-Extrusion Ring	1
*	12	150012-19	O-Ring	1
	13	170224-1	Retainer	1
*	14	250450-1	Rod Wiper	1
*	15	2007989	Wear Ring	
*		170217-1	Service Kit (Includes all items marked with an asterisk *)	1

#### **WEAR RING INSTALLATION**

FIGURE 1
JACKING CYLINDER ASSEMBLY





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