



Harsco Track Technologies

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SERVICE BULLETIN MAINTENANCE OF WAY EQUIPMENT

DATE: 3-18-2003 **BULLETIN NO:** 03-004

TITLE: BRAKE ARM PIVOT PINS

RATING:

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

PRODUCT SERIES / MODEL: RMC305 Series B TKO® Tie Remover / Inserter

SERIAL NO: All RMC305 Models B1 / B2 / B3 and B4

SUMMARY: The brake arm pivot pins that were originally installed on the machine are a non-pivoting type pin that could not be lubricated. These pins can be replaced by a new pivoting type pin with a grease fitting so it can be lubricated. These new pivoting type pins are being installed on new machines currently being built.

OPERATIONAL IMPACT: To allow the brake arm pivot pin to pivot during operation and to allow the pin to be lubricated for maximum wear life.

ACTION: The installation of the new brake arm pivot pins involves caging the brake actuators, removing the existing brake arm pivot pins, installing the new brake arm pivot pins and uncaging the brake actuators. Order the parts and quantities listed in the Parts List of this Service Bulletin for one machine.

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) 822-9160.

SAFETY INFORMATION

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

DISASSEMBLY - See Figure 1

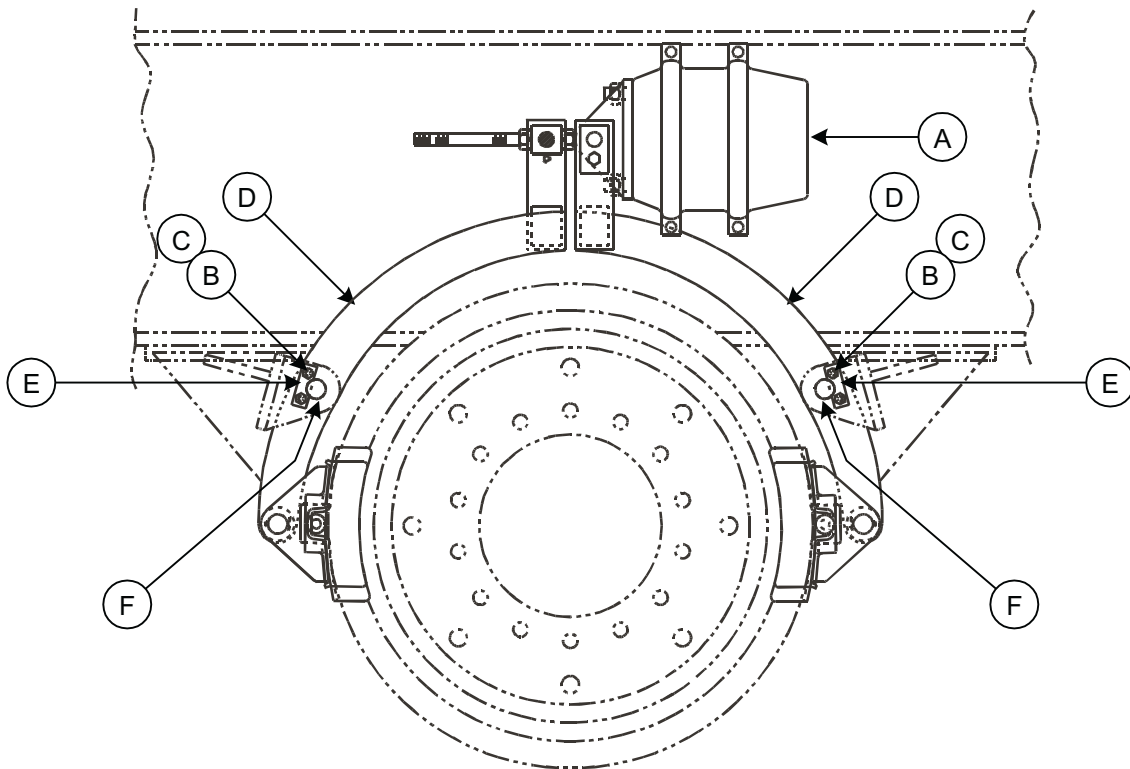
1. **Important:** Chock all of the machine wheels. Then cage the brake actuator (A) on the wheel that the brake pivot pins are to be changed out. See Caging Brake Actuator instructions in this Service Bulletin.
2. Remove the two 5/16 inch hex cap screws (B) and lock washers (C) from one of the brake arms (D). Then remove the lock plate (E) and pivot pin (F) from the brake arm (D).
3. Repeat Step 2 to remove the pivot pin (F) from the other brake arm (D).

ASSEMBLY - See Figure 2

4. Install a grease fitting (2) in the end of a new pivot pin (1). Apply a light coat of grease to outside of the new pivot pin (1). Align the pivot hole in the brake arm (D) with the holes in the brake bracket on the machine frame and install the pivot pin (1) so the grease fitting (2) is accessible from the outside of the machine. Secure the new pivot pin (1) with a 1 inch wrought washer (3) and a 3/16 x 1-1/4 inch cotter pin (4) on the inside of the brake bracket.
5. Repeat Step 4 to install the new pivot pin (1) in the other brake arm (D).
6. Connect a grease gun to the grease fittings (2) and pump an adequate amount of grease into the new pivot pins (1).
7. **Important:** Un-cage the brake actuator (A) on the wheel that the brake pivot pins were changed out. See Un-Caging Brake Actuator instructions in this Service Bulletin.
8. Repeat Steps 1 - 7 to change out the pivot pins on all four wheels of the machine.
9. After changing out all four wheels on the machine, make sure all brake actuators are un-caged and the brake shoes are applied on the wheels. Then remove the wheel chocks from all of the machine wheels.
10. Start the machine engine. Release and apply both the parking and service brakes several times to ensure proper operation of the brake components.

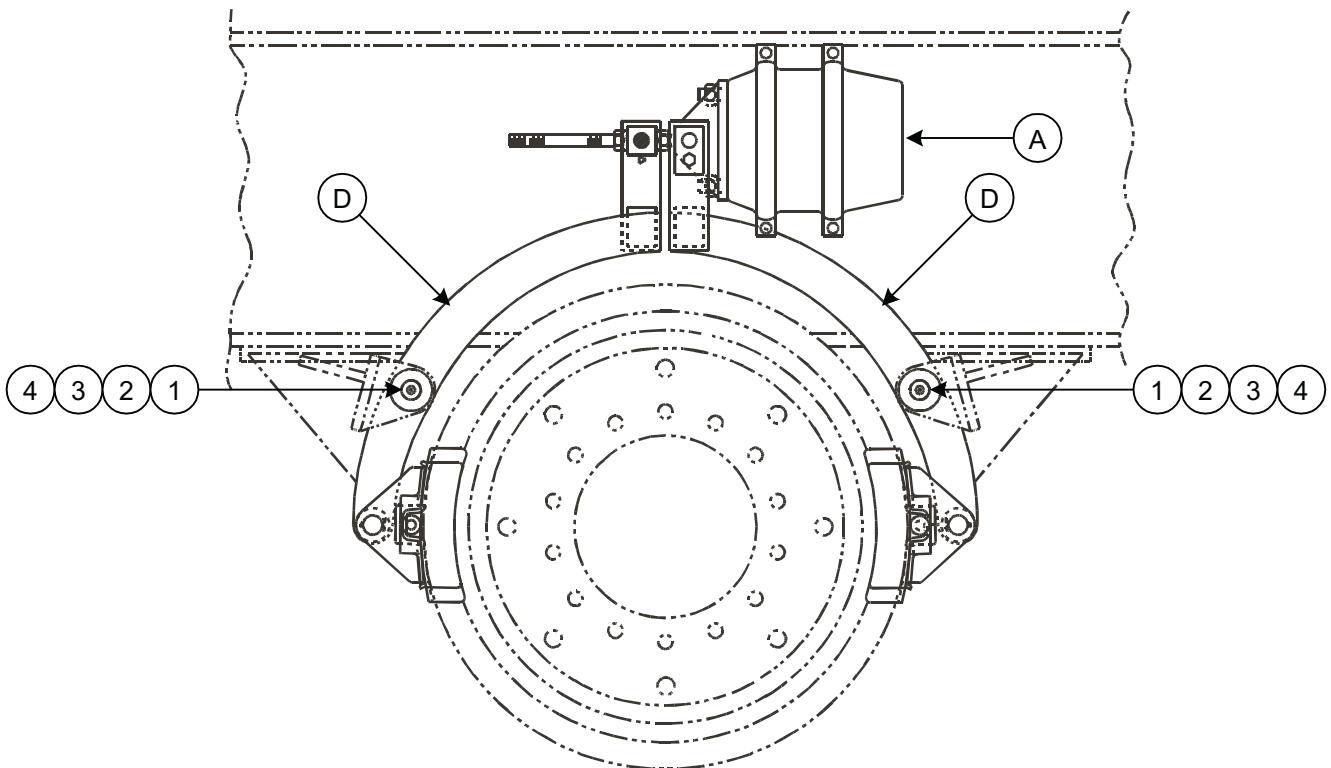
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FIGURE 1
DISASSEMBLY



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FIGURE 2
ASSEMBLY



CAGING BRAKE ACTUATORS - See Figure 3

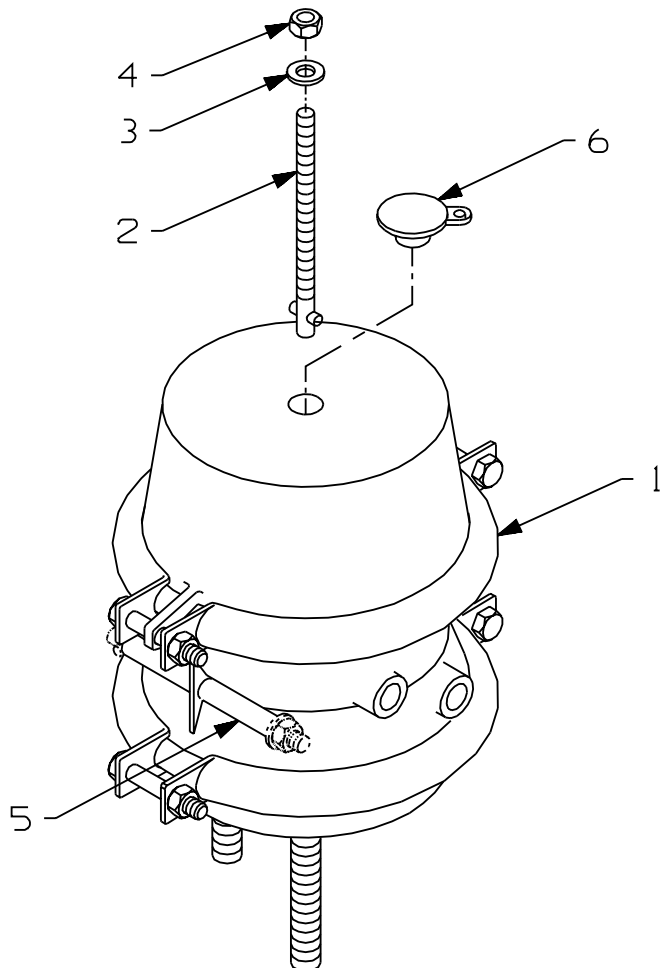
1. Visually inspect the brake actuator for any structural damage (cracks, wear, dents, etc.). Do not attempt to mechanically release (cage) the brake actuator spring chamber if any structural damage to the actuator is evident. If damaged, remove the actuator from service and replace with a new actuator.
2. Remove the release tool (2), washer (3) and nut (4) from the storage pocket (5) on the side of the actuator (1).
3. Remove the rubber dust plug (6) from the end of the actuator (1).
4. Insert the release tool (2) (cross pin end) through the hole into the actuator (1). Turn the release tool (2) 1/4 turn clockwise and pull out to seat the release tool in the inside of the actuator (1).
5. Install the washer (3) and nut (4) on the threaded end of the release tool (2). Slowly turn the nut (4) clockwise until snug to mechanically release (cage) the internal brake spring. Make sure the brake shoes are released from the wheel tread.

UN-CAGING BRAKE ACTUATORS - See Figure 3

1. Slowly turn the nut (4) counter-clockwise until loose to mechanically apply (uncage) the internal brake spring. Make sure the brake shoes are applied on the wheel tread.
2. Push in and turn the release tool (2) 1/4 turn counter-clockwise to unseat the release tool (2) from the inside of the actuator (1).
3. Insert the release tool (2) in the storage pocket (5) on the side of the actuator (1) and secure with the washer (3) and nut (4).
4. Install the rubber dust plug (6) in the end of the actuator (1).

FIGURE 3
BRAKE ACTUATOR

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GROUP PARTS LIST

Note: See Figure 2 for Item numbers. The quantities listed are for one machine.

ITEM	PART NO	DESCRIPTION	QTY
1	200645	Pivot Pin.	8
2	F004551	Grease Fitting	8
3	F013412	Wrought Washer, 1"	8
4	F001094	Cotter Pin, 3/16 x 1-1/4"	8

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