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## SERVICE BULLETIN

### MAINTENANCE OF WAY EQUIPMENT

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**DATE:** 11-2011

**BULLETIN NO:** 11-009

**TITLE:** Axle Retaining Strap Replacement

**RATING:**

<input checked="" 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 type="checkbox"/>	<b>PRODUCT IMPROVEMENT</b> (Enhance Product)

**PRODUCT SERIES / MODEL:** HR1500 Series B3 and HR1500 Series C1  
HY-RAIL® Guide Wheel Units

**SERIAL NO:** N/A

**SUMMARY:** It has come to the attention of HarSCO Rail that the axle retaining straps used to hold the guide wheel unit axle assembly to the upper structure, in the highway position, may develop small cracks which can cause the strap to break. To correct this potential problem, HarSCO Rail has made a change in the design of the axle retaining straps. The new design uses thicker material and radiuses in place of straight cuts in the locations where the strap width changes.

**OPERATIONAL IMPACT:** A broken axle retaining strap may result in one end of the axle assembly separating from the upper structure. If both straps were to break at the same time, both ends of the axle assembly may separate from the upper structure. This will normally occur when the unit is raised from the rail position. Be aware that if both axle retaining straps break, the axle assembly may separate from the upper structure while the vehicle is traveling on the highway.

**ACTION:** **HarSCO Rail strongly recommends that you inspect your guide wheel equipment and vehicle daily.** The axle retaining straps must be inspected. If any cracks are found in the strap, the vehicle must be removed from service and taken to an approved HY-RAIL® guide wheel equipment repair facility for strap replacement. If any axle retaining strap is found to be broken, the vehicle must be removed from service. The axle assembly must be secured to the upper structure with a chain, cable or other device to prevent it from separating from the upper structure. The vehicle must then be taken to the nearest approved HY-RAIL® guide wheel equipment repair facility for axle retaining strap replacement.

**CONTACT:** Parts Sales: (507) 235-7143  
Service: (507) 235-7212 or (507) 235-7137

### Safety Information



- **FOLLOW APPLICABLE RAILROAD LOCKOUT - TAGOUT PROCEDURES TO DISABLE ENERGY SOURCES WHEN PERFORMING MAINTENANCE, MAKING ADJUSTMENTS OR REPAIRS TO THE VEHICLE OR EQUIPMENT. FAILURE TO HEED THIS WARNING COULD RESULT IN SEVERE BODILY INJURY.**

### Inspecting Axle Retaining Straps - See Figure 1

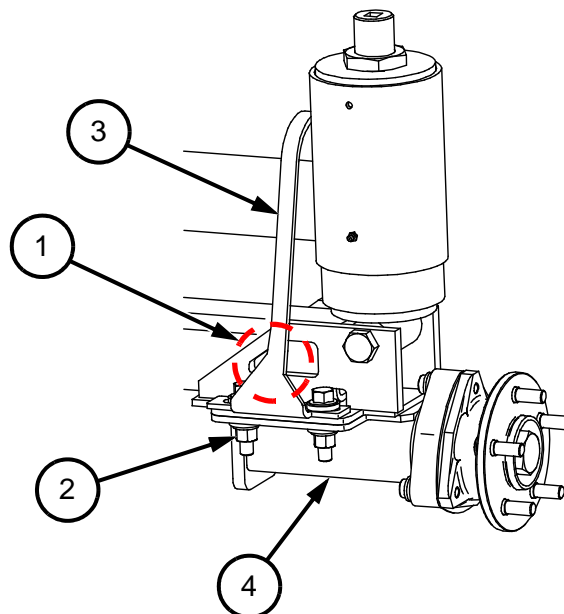
1. Lower the guide wheel unit to the rail position. If the axle retaining strap is not broken, inspect the strap for cracks or distortion. Pay special attention to the area where the strap transitions from wide to narrow (1). If any of these conditions are found, the axle retaining straps must be replaced. Take the vehicle to an approved HY-RAIL® guide wheel equipment repair facility for axle retaining strap replacement.

### Removing Axle Retaining Straps - See Figure 1

*Note: Do not loosen or remove all four stub axle / axle retaining strap securing fasteners (2) at the same time as this will cause the stub axle to fail to maintain its alignment resulting in having to do a complete re-alignment of the guide wheel unit.*

1. On one side of the axle, front or rear, loosen and remove the two strap / stub axle retaining fasteners (2). Bend the strap (3) away from the unit. Reinstall the two strap / stub axle retaining fasteners (2). Tighten the fasteners enough to hold the stub axle (4) in place.
2. Remove the two strap / stub axle retaining fasteners (2) from the other side of the axle. Remove the strap and discard it.

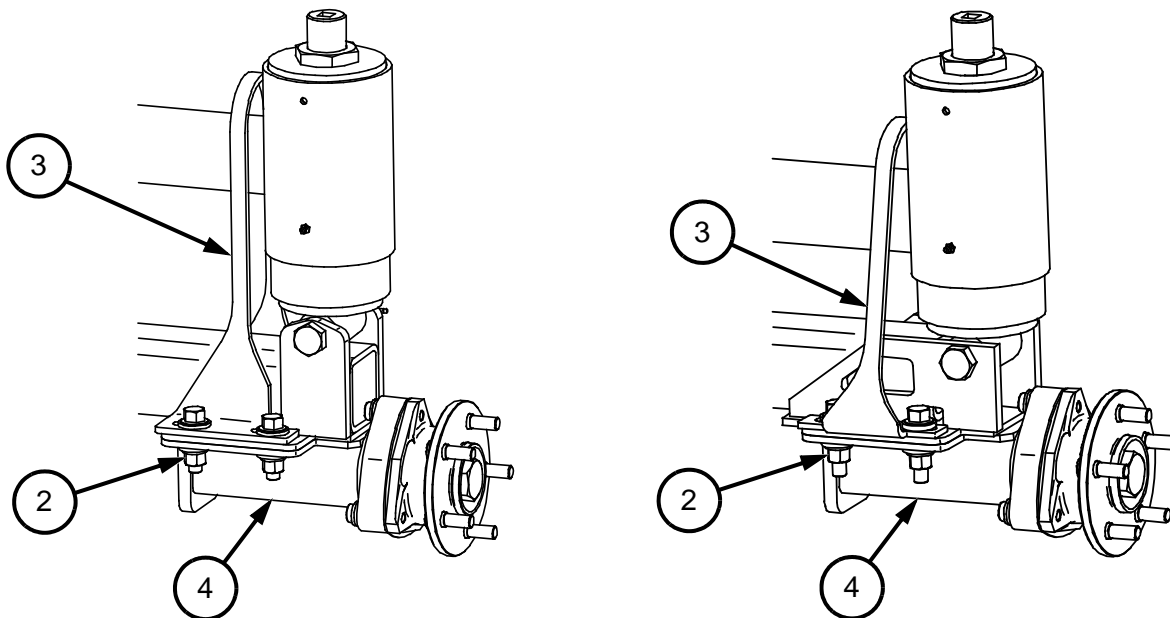
FIGURE 1  
INSPECTING / REMOVING AXLE RETAINING STRAPS - HR1500C1 SHOWN



**Installing Axle Retaining Straps - See Figure 2**

1. Place the new axle retaining strap (3) over the cross tube and align the slots in the strap with the holes in the axle / stub axle (4) where the last two fasteners were removed. Install the strap / stub axle retaining fasteners (2) securing the strap to the axle assembly.
2. Slide the axle retaining strap outward in its slots, towards the spring cell. The strap should be near the spring cell but not touching it. Tighten the fasteners enough to hold the stub axle (4) in place.
3. On the other side of the axle, move the axle retaining strap away from the axle to access the two strap / stub axle retaining fasteners (2) that were reinstalled during the Removing Axle Retaining Strap Procedure. Loosen and remove strap / stub axle retaining fasteners (2).
4. Move the axle retaining strap into place aligning the slots in the strap with the holes in the axle / stub axle (4). Install strap / stub axle retaining fasteners (2) securing the strap to the axle assembly. Check the clearance between the axle strap and the spring cell. Adjust the axle retaining strap in its slots for proper clearance between the strap and the spring cell. Tighten the fasteners.
5. Torque all four strap / stub axle retaining fasteners to 110 lb-ft (150 N-m).
6. Repeat the procedure to install a new axle retaining strap on the other end of the guide wheel unit.
7. After both axle retaining strap are installed, raise and lower the guide wheel unit to ensure clearance between the strap and vehicle components. If it is necessary to move the strap in or out, make sure to move only one side at a time to ensure stub axle alignment is maintained.

FIGURE 2  
INSTALLING AXLE RETAINING STRAPS  
HR1500 SERIES B3 HR1500 SERIES C1



**Axle Retaining Straps**

*Note: Order the correct straps for your Guide Wheel Unit. Two straps are required for each unit.*

PART NO	DESCRIPTION	QTY
204158	HR1500B3 FRONT GUIDE WHEEL UNIT	
3417873	Axle Retaining Strap - Long . . . . .	2
203916	HR1500B3 REAR GUIDE WHEEL UNIT	
3417874	Axle Retaining Strap - Short. . . . .	2
3421539	HR1500C1 FRONT OR REAR GUIDE WHEEL UNIT	
3421080	Axle Retaining Strap. . . . .	2

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