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## SERVICE BULLETIN

### MAINTENANCE OF WAY EQUIPMENT

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**DATE:** 8-2011

**BULLETIN NO:** 11-007

**TITLE:** Stop Block Weld Inspection

**RATING:**

<input type="checkbox"/>	<b>DIRECTIVE</b> (Action Is Required)	<input checked="" 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 C1 HY-RAIL® Guide Wheel Unit

**SERIAL NO:** 60100 Through 60400

**SUMMARY:** It has come to the attention of Harsco Rail that the stop block on the cross tube assembly may not be welded properly. Improper welding of the stop block may have occurred on HR1500C1 HY-RAIL® Guide Wheel Units that have Serial Numbers 60100 through 60400. These units were shipped from the factory from April 1, 2011 through June 30, 2011. Because it is difficult to determine exactly which guide wheel units do or do not have the stop blocks welded properly, Harsco Rail is asking that the stop block weld be inspected on all guide wheel units with the above listed serial numbers and shipping dates.

**OPERATIONAL IMPACT:** The stop block on the cross tube has a set screw through it. The set screw is used to position the cross tube so the guide wheel unit spring cells are angled approximately 5 degrees towards the center of the vehicle when operating on rail. If the stop block was not properly welded, it may bend or break off when the guide wheel unit is lowered to the rail position. This will not cause unsafe rail operation if the guide wheel unit is properly locked in the rail position with the supplied lock pins. A bent or missing stop block may cause difficulty when trying to raise the guide wheels to the highway position. The difficulty occurs when the hydraulic cylinder is allowed to fully retract by the bent or missing stop block. When the hydraulic cylinder is then extended to raise the guide wheels to the highway position, it may attempt to rotate the cross tube assembly in the opposite direction or may not be able to extend because it is centered in line with the rod end pivot point.

**ACTION:** Check the serial number tag on your HR1500C1 guide wheel units for the above listed serial numbers. The units may be installed on your vehicle or in stock, waiting to be installed on a vehicle. If you have a unit with the above listed serial numbers, visually inspect the weld on the stop block. There should be a 1/8 inch fillet weld all around the stop block. If the stop block is properly welded, check and adjust the stop block set screw per the instructions in this Service Bulletin. No further action is required. Return the attached Inspection / Weld / Replace Stop Block Form to Harsco Rail using the address on the form. Indicate that the guide wheel unit was inspected

If the weld is not sufficient or if the stop block is bent or missing due to improper welding, it must be repaired. Take the vehicle to an approved HY-RAIL® guide wheel equipment repair facility. A list of the approved HY-RAIL® repair facilities can be found at [www.harscorail.com](http://www.harscorail.com). The facility will properly weld or replace the stop block per the instructions in this Service Bulletin.

**Attention: Approved HY-RAIL® guide wheel equipment repair facility:** Follow the instructions in this Service Bulletin to inspect, weld and / or replace a missing stop block. Harsco Rail will pay a maximum labor rate of \$75.00 per guide wheel unit to weld and / or replace a missing stop block. Harsco Rail must receive a completed copy of the attached form before credit for the labor will be issued. Use the contact information shown below to arrange labor credit and if necessary, to order replacement stop block components. After welding / repairing the guide wheel unit(s), make copies of the Inspection / Weld / Replace Stop Block Form included with this Service Bulletin and return it to Harsco Rail using the address on the form.

**CONTACT:** HY-RAIL® Guide Wheel Equipment Parts Sales at (507) 235-7143.

### 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.**

### Stop Block Inspection and Welding - See Figure 1

1. Inspect stop block (1) where it is welded to the cross tube assembly (2). There should be an 1/8 inch fillet weld all around the stop block where it is welded to the cross tube assembly. If the stop block is properly welded, check and adjust the stop block set screw per the instructions in this Service Bulletin. No further action is required.
2. Take the vehicle to an approved HY-RAIL® guide wheel equipment repair facility if the stop block (1) is not welded properly as shown in Figure 1. If the stop block is bent, it must be properly repositioned before welding.

**Stop Block Inspection and Welding - See Figure 1**

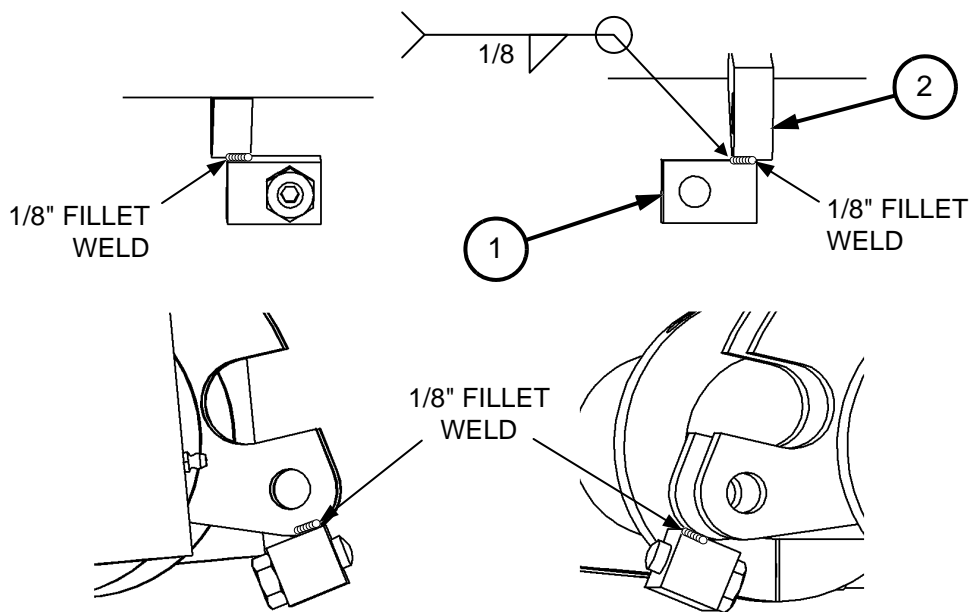
- If the stop block is missing, order the following components from HY-RAIL® Guide Wheel Equipment Parts Sales:

PART NO	DESCRIPTION	QTY
3425682	Stop Block .....	1
F012772	Set Screw, 1/2-13 x 1-1/2" Oval Point Soc Hd .....	1
F002737	Hex Jam Nut, 1/2"-13 .....	1
3421211	Drawing, Cross Tube Assembly (use for welding reference) .....	1

*Note: Before welding on the guide wheel unit, disconnect the wire harness from sensitive electronic components on the vehicle. The components may be, but are not limited to: the vehicle computer, ABS module and the instrument cluster. Disconnect the negative and positive battery cables from the battery.*

- When welding, connect the ground cable as close as possible to the stop block. Remove the paint from the location where the ground cable will be clamped. Weld the stop block to the cross tube assembly as shown in Figure 1. Clean and paint the stop block and re-paint the area where the ground cable was connected.
- After welding is completed on the guide wheel unit, reconnect wiring harnesses and battery cables. Check the vehicle gauges and other electrical devices to ensure they are working properly.

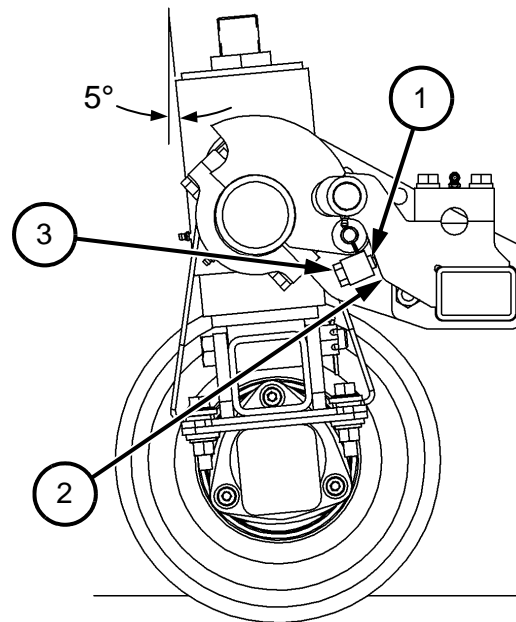
FIGURE 1  
INSPECTING / WELDING STOP BLOCK



**Adjusting Spring Cell Angle - See Figure 2**

1. The guide wheel unit spring cell angle will need to be checked and may need to be adjusted after welding / replacing the stop block. Also, periodically check the angle of the spring cells and adjust if necessary.
2. The spring cells should be adjusted so they are angled towards the center of the vehicle by approximately 5 degrees. Set screw (1) is used to set the angle of the spring cells when the unit is in the rail position.
3. Locate the vehicle on straight, level, tangent track. Lower the rear and front guide wheels to the rail position. Make sure the set screw (1) is against plate (2) on the guide wheel unit frame.
4. Hold an inclinometer on the front or rear of the spring cell tube. If the inclinometer indicates approximately 5 degrees, the spring cell angle is adjusted correctly. If not, the spring cell angle will need to be adjusted.
5. Raise the guide wheels. Loosen locknut (3). Rotate set screw (1) clockwise to decrease the angle or counter-clockwise to increase the angle. Tighten locknut (3). Lower the guide wheels to the rail position. Recheck the spring cell angle. Repeat adjustment procedure until the spring cell is angled approximately 5 degrees towards the center on the vehicle.

FIGURE 2  
ADJUSTING SPRING CELL ANGLE



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56031-1837  
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Cayce-West Columbia, SC  
29171-0020  
Tel: (803) 822-9160  
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200 South Jackson Road  
Ludington, MI  
49431  
Tel: (231) 843-3431  
Fax: (231) 843-1644

Printed In USA

# INSPECTION / WELD / REPLACE STOP BLOCK FORM

**When completed, mail this form to:** **Harsco Rail**  
**415 North Main Street**  
**Fairmont, MN 56031-1837**  
**Attention: Julie Klages**

**Name of Approved Repair Facility:** \_\_\_\_\_

HR1500C1 Guide Wheel Unit Serial Number: \_\_\_\_\_

Inspected       Welded       Replaced

Completed By: \_\_\_\_\_ Date: \_\_\_\_\_

HR1500C1 Guide Wheel Unit Serial Number: \_\_\_\_\_

Inspected       Welded       Replaced

Completed By: \_\_\_\_\_ Date: \_\_\_\_\_

HR1500C1 Guide Wheel Unit Serial Number: \_\_\_\_\_

Inspected       Welded       Replaced

Completed By: \_\_\_\_\_ Date: \_\_\_\_\_

HR1500C1 Guide Wheel Unit Serial Number: \_\_\_\_\_

Inspected       Welded       Replaced

Completed By: \_\_\_\_\_ Date: \_\_\_\_\_

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Inspected       Welded       Replaced

Completed By: \_\_\_\_\_ Date: \_\_\_\_\_

HR1500C1 Guide Wheel Unit Serial Number: \_\_\_\_\_

Inspected       Welded       Replaced

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HR1500C1 Guide Wheel Unit Serial Number: \_\_\_\_\_

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Completed By: \_\_\_\_\_ Date: \_\_\_\_\_

HR1500C1 Guide Wheel Unit Serial Number: \_\_\_\_\_

Inspected       Welded       Replaced

Completed By: \_\_\_\_\_ Date: \_\_\_\_\_