



Harsco Track Technologies

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SERVICE BULLETIN MAINTENANCE OF WAY EQUIPMENT

DATE: 1-3-2003 **BULLETIN NO:** 02-036

TITLE: 200457 STEERING STOP GROUP

RATING:

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

PRODUCT SERIES / MODEL: All 2001 to present Chevrolet 2500HD 4X2 and 4X4 Vehicles Equipped With HY-RAIL® Guide Wheel Equipment Series 0307, HR0307A, HR0307B, HR1000A or HR1500B Rail Pilot Units.

SERIAL NO: All 0307 Models - All HR0307 Models A1 / B1 - All HR1000 Models A1 - All HR1500 Models B1

SUMMARY: Reports have been received that front wheels on a 2001 to present Chevrolet 2500HD vehicles were found to have rubbed on the upper control arms when turning hard left or right, and particularly when bouncing on uneven ground. As a result, the anti-lock brake sensor wires have been cut. Therefore, we recommend to inspect the vehicle's front tires, wheels, upper control arms and anti-lock brake sensor wires for damage, wear, nicks, gouges, rubbing, cut or frayed wires, etc.

OPERATIONAL IMPACT: To prevent the vehicle's front wheels from rubbing on the upper control arms when turning hard left or right, or bouncing on uneven ground, and possibly damaging the vehicle, tires, wheels and/or anti-lock brake sensor wires.

ACTION: It is recommended to take the vehicle to an authorized vehicle maintenance shop to inspect the vehicle's front tires, wheels, upper control arms and anti-lock brake sensor wires after thoroughly removing any grease, dirt, etc. Ensure there is no damage, wear, nicks, gouges, cut or frayed wires, etc. If any of the mentioned is found, replace the steering stops, weld-on new control arm guard plates, and relocate the anti-lock brake sensor wires per the instructions in this Service Bulletin. Order Steering Stop Group part # 200457 as needed.

CONTACT: If you have any questions or if we can be of any service, please contact the HY-RAIL® Parts Department at the Fairmont, MN. facility, (507) 235-7143.

SAFETY INFORMATION

- IT IS THE RESPONSIBILITY OF THE UP-FITTER OR REPAIR FACILITY TO ENSURE THESE INSPECTIONS AND MODIFICATIONS ARE DONE CORRECTLY TO OBTAIN SATISFACTORY VEHICLE PERFORMANCE.
- FOLLOW APPLICABLE RAILROAD LOCKOUT - TAGOUT PROCEDURE TO REMOVE ALL ENERGY SOURCES FROM VEHICLE AND RAIL GUIDE WHEEL EQUIPMENT.
- ANY JACK, JACK STANDS, HOIST, ETC. USED MUST BE RATED TO LIFT WEIGHT OF VEHICLE.

FAILURE TO COMPLY COULD RESULT IN SEVERE BODILY INJURY.

STEERING STOPS REPLACEMENT - See Figure 1 and Figure 2

1. Raise the front of the vehicle high enough so both of the front wheels are off of the ground.
2. Visually inspect the vehicle chassis components and tires for damage, wear, nicks, gouges, rubbing, cut or frayed wires, etc. Replace any damaged or worn component as necessary.
3. Remove both of the vehicle front wheels.
4. Remove the lower ball joint nut (A) to remove the existing steering stop (not illustrated).
5. Install the new steering stop (2 or 3) over the stud so the tab is facing the rear of the vehicle. Re-install the lower ball joint nut (A), push the steering stop (2 or 3) firmly against the vehicle manufacturer's steering knuckle and torque the nut (A) to 94 ft-lbs.
6. Repeat Steps 4 and 5 for the other side of the vehicle.
7. **Important:** Before doing any welding on the vehicle, disconnect all electrical cables from the battery and from the alternator.
8. Thoroughly clean the surface area on the vehicle upper control arm of all dirt, grease, rust, etc. where the new guard plate (1) will be welded to.

Note: If necessary, reform the guard plate (1) to match the contour of the upper control arm before welding on.

9. Position and weld the new guard plate (1) to the vehicle upper control arm per the dimension and weld symbol shown.
10. Repeat Steps 8 and 9 for the other side of the vehicle.

STEERING STOPS REPLACEMENT

FIGURE 1
STEERING STOP REPLACEMENT

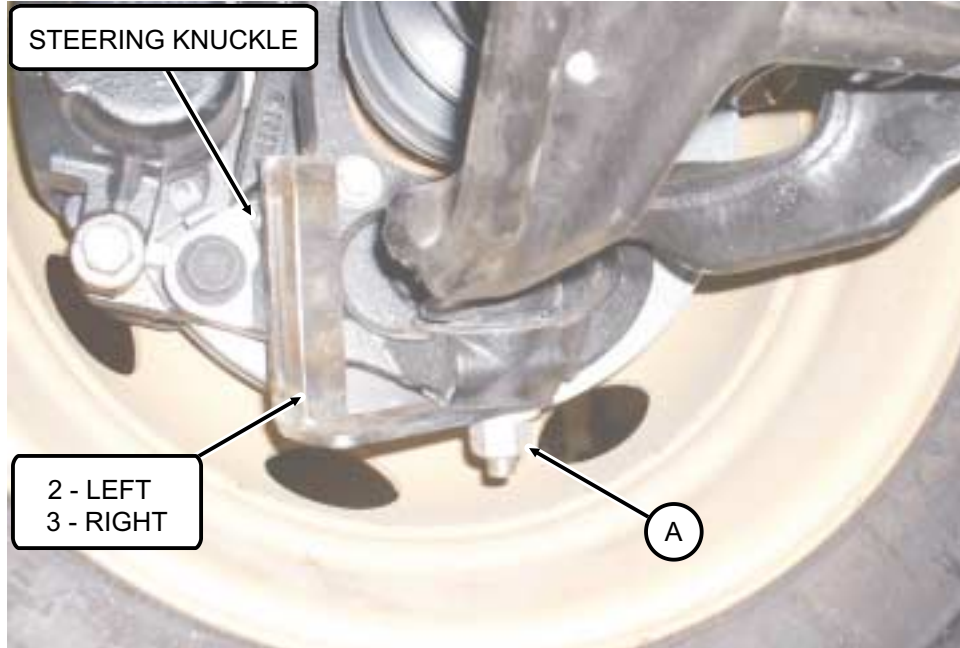
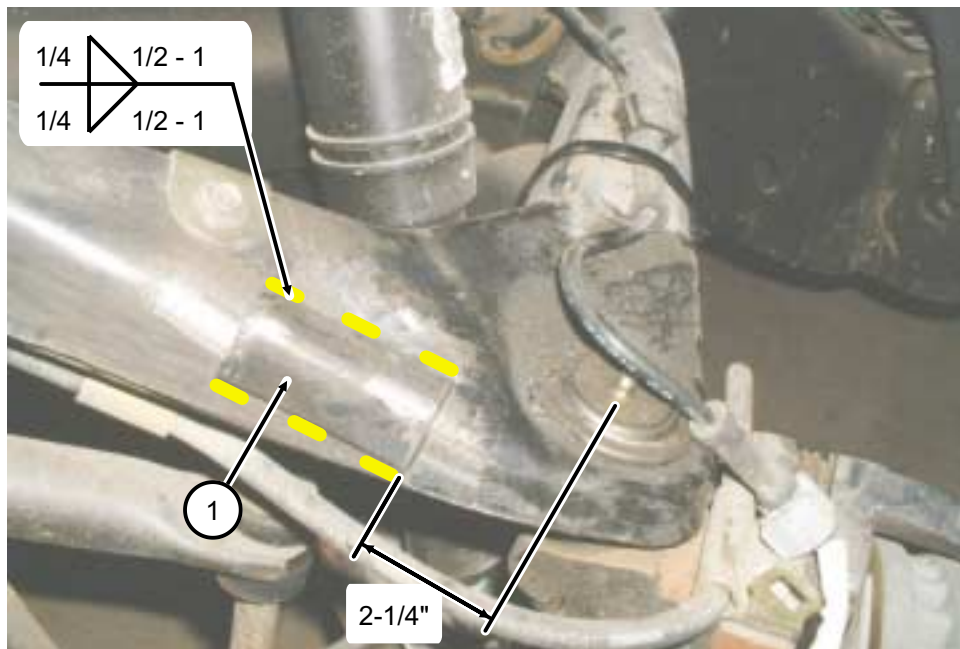


FIGURE 2
UPPER CONTROL ARM PLATE INSTALLATION



ANTI-LOCK BRAKE SENSOR WIRE RELOCATION - See Figure 3 and Figure 4

11. **Important:** Before relocating the anti-lock brake sensor wires, disconnect all electrical cables from the battery.
12. Inspect the anti-lock brake sensor wire for any damage, wear, fraying, etc. If any damage is found, replace the sensor wire.
13. Relocate the anti-lock brake sensor wire from its original mounting location as shown in Figure 3 to its new mounting location as shown in Figure 4 re-using all of the original factory mounting clips. Secure the sensor wire to the vehicle upper control arm using ty-raps as necessary.
- 14 Repeat Steps 12 and 13 for the other side of the vehicle.

STEERING STOPS INSPECTION

15. Re-install both of the vehicle front wheels. Torque the vehicle wheel nuts to the torque listed on the decal located on the rim or to the torque listed in your Operator's, Service and Parts Manual.
16. After installing the new steering stops, welding on the new upper control arm guard plates, relocating the anti-lock brake wires and/or modifying the new steering stops on both sides of the vehicle, reconnect all electrical cables to the alternator and to the battery.
17. Lower the front of the vehicle back down to the ground.
18. Turn the vehicle front wheels both hard left and hard right. Check the vehicle's front wheels (tires and rims) for contact with any fixed part of the vehicle in both directions. There must be a minimum of 3/8 - 1/2 inch (9.5 - 12.7 mm) clearance between the vehicle front wheel rim and the vehicle upper control arm.
 - 18.1 If there is 3/8 - 1/2 inch (9.5 - 12.7 mm) of clearance, the clearance is correct.
 - 18.2 If there is less than 3/8 - 1/2 inch (9.5 - 12.7 mm) of clearance or any contact at all, the new steering stops must be modified. Go to Step 19 - Steering Stop Modification.
 - 18.3 If there is more than 5/8 inch (15.9 mm) of clearance, the steering stops can be modified to decrease the turning radius of the vehicle. Go to Step 19 - Steering Stop Modification.

ANTI-LOCK BRAKE SENSOR WIRE RELOCATION

FIGURE 3
ANTI-LOCK BRAKE SENSOR WIRE IN ORIGINAL LOCATION

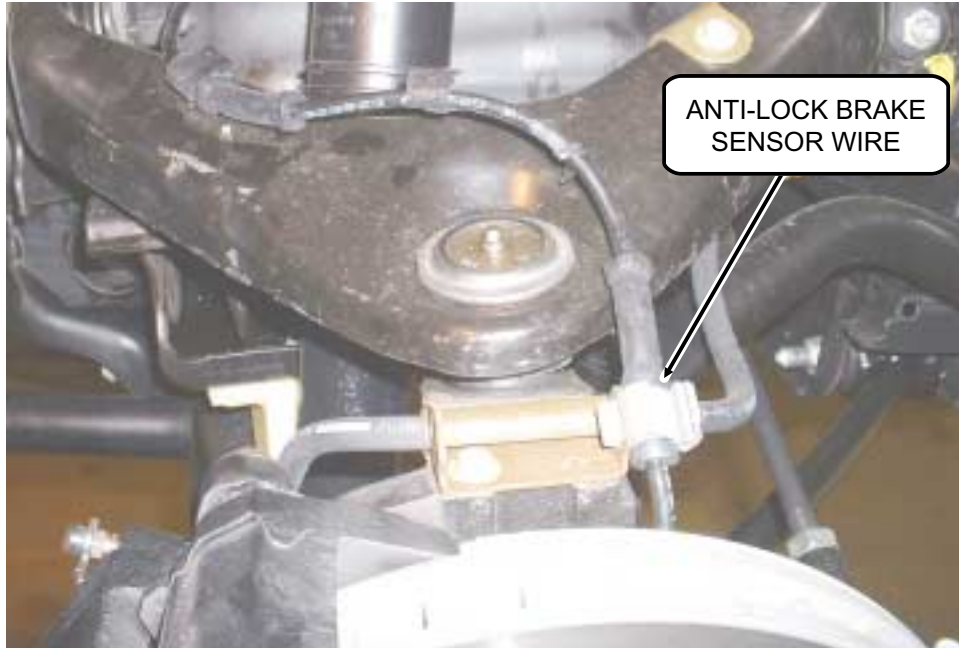
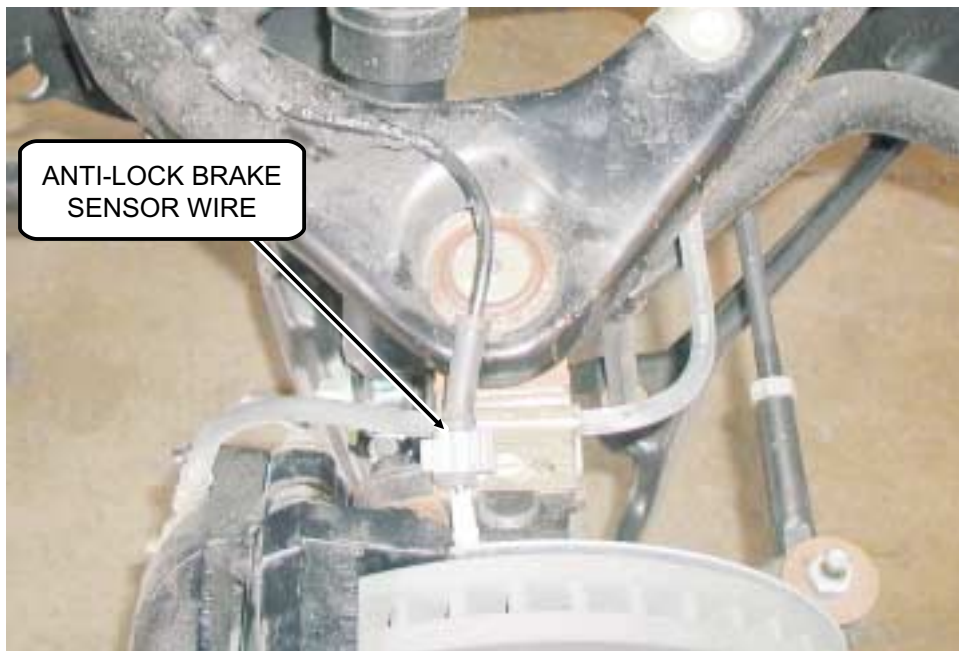


FIGURE 4
ANTI-LOCK BRAKE SENSOR WIRE IN NEW LOCATION

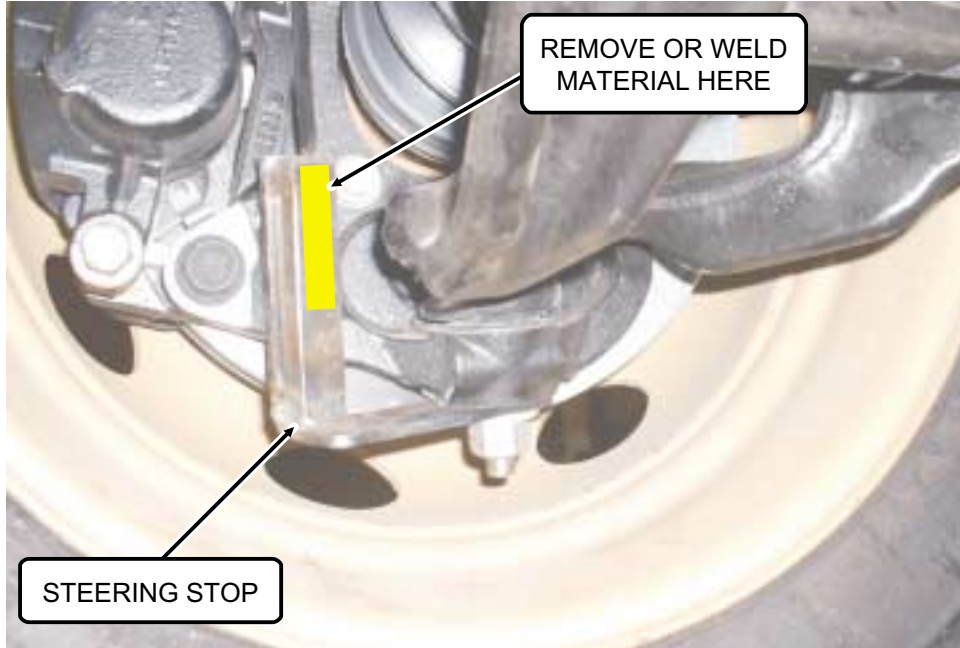


STEERING STOPS MODIFICATION - See Figure 5

19. Raise the front of the vehicle high enough so both of the front wheels are off of the ground.
20. Remove both of the vehicle front wheels.
21. If there was more than 5/8 inch (15.9 mm) of clearance, use a grinder to remove material from the steering stop surface in the area shown. DO NOT remove too much material before rechecking the steering stop clearance. Then go back to Step 15 to repeat the Steering Stops Inspection Procedure.
22. **Important:** Before doing any welding on the vehicle, disconnect all electrical cables from the battery and from the alternator.
23. Thoroughly clean the contact area of the steering stop surface of all dirt, grease, rust, etc. where material (not supplied) will be welded to.
24. If there was less than 3/8 - 1/2 inch (9.5 - 12.7 mm) of clearance or any contact at all, weld a 1 inch wide piece of suitable material to the steering stop surface in the area shown for the thickness needed and length required. Then go back to Step 15 to repeat the Steering Stops Inspection Procedure.

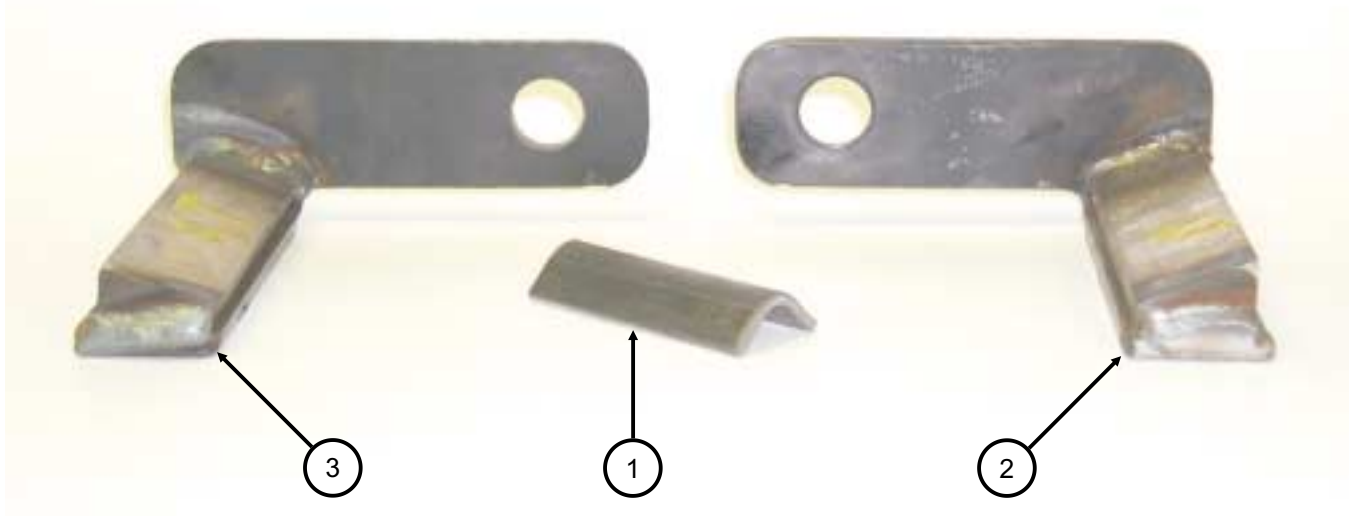
STEERING STOPS MODIFICATION

FIGURE 5
STEERING STOP MODIFICATION



STEERING STOP GROUP PARTS LIST - See Figure 6

**FIGURE 6
STEERING STOP GROUP PARTS**



ITEM	PART NO	DESCRIPTION	QTY
	200457	STEERING STOP GROUP	1
1	200453	Guard Plate - Upper Control Arm (weld on)	2
2	200455	Wheel Stop - Left	1
3	200456	Wheel Stop - Right	1

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