

## Service Bulletin

File in Section: 02 - Steering Bulletin No.: 12-02-32-004A Date: April. 2013

# INFORMATION

- Subject: Diagnostic Tips for Steering Gear Boot Stains, Perceived Fluid Leak from Power Steering Gear End Seals
- Models: 2008-2013 Buick Enclave 2009-2013 Chevrolet Traverse 2007-2013 GMC Acadia 2007-2010 Saturn OUTLOOK

#### This bulletin is being revised to update the models and provide an inspection procedure. Please discard Corporate Bulletin Number 12-02-32-004 (Section 02 – Steering).



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Technicians may notice a stain or shadow on the lower side of the steering gear boot bellows. These stains may be diagnosed as a leak from the rack housing end seals, allowing the fluid to leak into the boot and creating the stain.

Analysis has revealed that the stain is due to the gear assembly grease becoming liquefied from heat and collecting in the bellows of the boot causing the stain. This staining should be considered normal, especially for the RH boot, which is closest to the exhaust.

Do not replace the steering gear for this staining unless the vehicle has evidence of a loss of fluid from the pump reservoir with no external leaks.

If the vehicle has a history of a fluid loss from the reservoir with no signs of external leaks, diagnosis should include inspecting the inside of the steering gear boots for the presence of fluid using the procedure below. Only under these circumstances should the gear be replaced for the end seal leak.

- 1. Raise and support the vehicle.
- 2. If inspecting the RH steering gear boot, remove the heat shield.
- 3. Remove the outer boot clamp from the steering gear boot.
- 4. Remove the inner boot clamp from the steering gear boot with side cutters.
- 5. Point the larger opening of the boot downward to determine if fluid is accumulating in the boot. The amount of fluid that leaks out will determine the corrective action taken, if any.
  - If the fluid trickles out or there are a few droplets and the total amount is less than a tablespoon, do not replace the steering gear. This is the assembly grease that has liquefied and should be considered normal.
  - If the fluid pours out and the total amount is greater than a tablespoon, the steering gear should be replaced.
- 6. Install the steering gear boot onto the steering gear. Be sure to seat the steering gear boot in the groove on the steering gear housing.
- 7. Install the inner boot clamp to the steering gear boot with the J-22610 pliers.
- 8. Install the outer boot clamp to the steering gear boot.
- 9. If both boots are being inspected, repeat the above steps for the opposite side boot.
- 10. Reinstall the steering gear heat shield.
- 11. Lower the vehicle.

### **Parts Information**

Part Number	Description	Qty
11562064	Steering Gear Boot Clamp	2, if necessary

## **Warranty Information**

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
E9581*	Inspection of Steering Gear Boot for Presence of Fluid	0.4 hr
Add	To Inspect Other Boot	0.3 hr
*This is a unique labor operation for bulletin use only. It will not be published in the Labor Time Guide.		

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