

# LIMITED SLIP AXLE CHATTER, SHUDDER, BINDING SENSATION, OR VIBRATION DURING LOW SPEED TURNING MANEUVERS

TSB 04-24-20

## FORD:

2002-2005 Crown Victoria, Mustang, Explorer  
2003-2005 Expedition  
2004-2005 F-150

## LINCOLN:

2002-2005 Town Car  
2003-2005 Navigator

## MERCURY:

2002-2005 Grand Marquis, Mountaineer

This article supersedes TSB **04-17-5** to update the model year and vehicle line coverage.

## ISSUE

Some 2003-2005 Expedition/Navigator, 2004-2005 F-150 vehicles equipped with a 9.75" or 8.8" limited slip rear axle, and 2002-2005 Explorer 4dr, Mountaineer, Crown Victoria, Grand Marquis, Town Car, and Mustang vehicles equipped with 8.8" limited slip rear axle, may exhibit a chatter, shudder, a binding sensation, or a vibration during low speed turns. On 4x4 vehicles, the sensation may appear to be originating from the front axle or the steering gear.

## ACTION

First verify the condition. On 4x4 trucks ensure that the vehicle is in 2WD, to isolate the rear axle. On all vehicles, turn the wheel fully right (or fully left) and then accelerate the vehicle. If the condition is verified to be in the rear axle, replace the limited slip clutch pack.

## SERVICE PROCEDURE

### CAUTION

**INSTRUCT THE CUSTOMER NOT TO TOW WITH THE VEHICLE FOR 500 MILES AFTER THIS REPAIR, TO ALLOW THE AXLE TO BREAK-IN PROPERLY.**

Order and install the appropriate clutch pack, follow the installation instruction sheet included in the service kit.

- 3L1Z-4947-AB (9.75" limited slip)

- 3L1Z-4947-BC (8.8" limited slip)

### NOTE

INSTALLING A CLUTCH PACK INTO AN INDEPENDENT REAR SUSPENSION (IRS) AXLE IS DIFFERENT FROM INSTALLING A CLUTCH PACK INTO A SOLID-BEAM AXLE. BE SURE TO FOLLOW THE INSTALLATION INSTRUCTION SHEET INCLUDED IN THE SERVICE KIT.

### INSTALLATION TIPS

- The clutch packs in this service kit DO NOT need to be shimmed. The clutch pack contains a pre-measured shim.
- Be sure to install NEW circlips and halfshaft/wheel end nuts on IRS rear axle (not included in the service kit).
- Soak the new clutch packs in Friction Modifier XL-3 (NOT XL-7) for fifteen (15) minutes prior to installation.
- For IRS axle, Halfshaft Seal Protector 205-506 (included in the 2002 Explorer/Mountaineer Essential Tool Kit) must be used when removing the halfshafts to protect against seal damage, which may result in leaks.
- Refill axles with 4 oz. Friction Modifier (XL-3) and the necessary amount of Rear Axle Lubricant XY-75W140-QL, regardless of the axle lubricant system originally used in the axle. Fill to capacity recommended in the Workshop Manual.

**NOTE:** The information in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers". Do not assume that a condition described affects your car or truck. Contact a Ford, Lincoln, or Mercury dealership to determine whether the Bulletin applies to your vehicle. Warranty Policy and Extended Service Plan documentation determine Warranty and/or Extended Service Plan coverage unless stated otherwise in the TSB article. The information in this Technical Service Bulletin (TSB) was current at the time of printing. Ford Motor Company reserves the right to supersede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.

## TSB 04-24-20 (Continued)

### NOTE

AXLE FLUID REQUIREMENTS HAVE BEEN CHANGED. ALL VEHICLES BEING REPAIRED BY THIS TSB MUST HAVE REAR AXLE LUBE XY-75W140-QL INSTALLED, IN PLACE OF XY-75W90-QFEHP. AS PART OF THIS REPAIR, CHECK AND REPLACE IF NECESSARY THE CURRENT XY-75W90-Q"FEHP" METAL TAG, WITH A NEW 75W140 TAG (F3TZ-4121-AA). ADDITIONALLY, REMOVE THE MULTI-COLORED LABEL WHICH IS LOCATED ON THE RIGHT SIDE AXLE TUBE, OR BLOCK OUT ANY/ALL "FEHP" OR "75W90" REFERENCES ON THE LABEL.

PART NUMBER	PART NAME
3L1Z-4947-AB	9.75" RR Axle Clutch
3L1Z-4947-BC	8.8" RR Axle Clutch
XY-75W140-QL	Rear Axle Lubricant
XL-3	Friction Modifier Additive
W710084-S439	Nut (Wheel End)
2L1Z-4B422-CA	Circlips (for 9.75")
1L2Z-4B422-BA	Circlips (for 8.8")

**WARRANTY STATUS:** Eligible Under Provisions Of New Vehicle Limited Warranty Coverage

OPERATION	DESCRIPTION	TIME
042420A	Expedition Without Air Suspension: Replace Clutch Pack (Includes Time For Road Test To Verify Concern, Replace Rear Clutch Pack, And Re-Road Test)	4.2 Hrs.
042420B	Expedition/Navigator With Air Suspension: Replace Clutch Pack (Includes Time For Road Test To Verify Concern, Replace Rear Clutch Pack, And Re-Road Test)	4.4 Hrs.
042420C	Explorer/Mountaineer: Replace Clutch Pack (Includes Time For Road Test To Verify Concern, Replace Rear Clutch Pack, And Re-Road Test)	4.6 Hrs.

042420D	F-150: Replace Clutch Pack (Includes Time For Road Test To Verify Concern, Replace Rear Clutch Pack, And Re-Road Test)	3.0 Hrs.
042420E	Crown Victoria/Grand Marquis, Town Car: Replace Clutch Pack (Includes Time For Road Test To Verify Concern, Replace Rear Clutch Pack, And Re-Road Test)	3.0 Hrs.
042420F	2002-2004 Mustang: Replace Clutch Pack (Includes Time For Road Test To Verify Concern, Replace Rear Clutch Pack, And Re-Road Test)	2.9 Hrs.
042420G	2005 Mustang: Replace Clutch Pack (Includes Time For Road Test To Verify Concern, Replace Rear Clutch Pack, And Re-Road Test)	3.4 Hrs.
042420H	Mustang Cobra: Replace Clutch Pack (Includes Time For Road Test To Verify Concern, Replace Rear Clutch Pack, And Re-Road Test)	5.6 Hrs.

### DEALER CODING

BASIC PART NO.  
4947

CONDITION  
CODE  
D4