# DRIVESHAFT—THUMP/CLUNK ON LIGHT ACCELERATION FROM STOP OR WHEN BRAKING AND COMING TO A STOP—RANGER 4X4 SUPER CAB

TSB 04-23-7

## FORD:

1998-2005 Ranger

This article supersedes TSB **03-26-2** to update the vehicle model years and service procedure.

### **ISSUE**

Some Ranger 4X4 Super Cab vehicles may exhibit a low frequency thump type noise/vibration on light acceleration from a stop and/or when coming to a stop with light to moderate braking. This may be caused by axle wind up during acceleration or deceleration, creating a stick/slip condition at the rear driveshaft slip yoke splines.

## **ACTION**

A new type of grease is available which will greatly reduce the sticking/binding in the slip yoke during acceleration and deceleration. To service, apply the new grease to the rear driveshaft slip yoke splines. Refer to the following Service Procedure.

#### **NOTE**

OTHER DRIVELINE NOISE CONDITIONS WILL NOT BE CORRECTED WITH THIS PROCEDURE. REFER TO THE APPROPRIATE RANGER WORKSHOP MANUAL FOR DIAGNOSIS AND REPAIR OF ENGAGEMENT CLUNK, TIP-IN/OUT CLUNK OR CLUTCH ENGAGEMENT CLUNK CONDITIONS.

# **SERVICE PROCEDURE**

## **DRIVESHAFT REMOVAL**

- Index (mark) the rear driveshaft to the rear pinion flange and the front of the driveshaft to the transfer case flange.
- 2. Remove the rear driveshaft.

#### SLIP YOKE DISASSEMBLY

# **CAUTION**

DO NOT, UNDER ANY CIRCUMSTANCE, CLAMP THE DRIVESHAFT IN THE JAWS OF A VISE OR SIMILAR HOLDING FIXTURE. DENTING OR A FRACTURE CAN RESULT, CAUSING DRIVESHAFT FAILURE DURING VEHICLE OPERATION.

- 1. Place the driveshaft on a suitable workbench. Do not damage the tube.
- Mark the driveshaft and slip yoke on both sides of the boot. Mark the location of the clamp crimps so the new clamps can be installed in the same location (Figure 1).

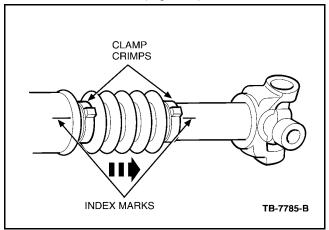


Figure 1 - Article 04-23-7

- 3. Cut and discard the slip yoke boot clamps.
- 4. Remove the slip yoke from the driveshaft.
- Thoroughly clean the boot making sure to remove all of the old grease and dirt. Inspect the boot for damage.

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 supercede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.

# TSB 04-23-7 (Continued)

- Inspect the lubricant on the driveshaft splines and in the driveshaft slip yoke for contamination. If contaminated, inspect the driveshaft splines and slip yoke for wear.
- Using a stiff NON-METALLIC brush and a suitable solvent, thoroughly clean all the old grease out of the splines on the slip yoke and the driveshaft.
- Use compressed air to completely dry both spline areas.

#### **ASSEMBLY**

- 1. Install the slip yoke boot on the driveshaft (small opening end first).
- 2. Install and crimp the small slip yoke boot clamp using a keystone clamp installer (SST 211-002).
- Pull the boot toward the driveshaft to expose the splines. Completely coat all slip yoke and driveshaft spline surfaces with the grease supplied in the kit.
- 4. Position the large slip yoke boot clamp on the boot (DO NOT CRIMP).
- 5. Align the index marks and install the slip yoke on the driveshaft.
- 6. Set boot free length as follows:
  - a. Remove any excess grease from the slip yoke boot and driveshaft slip yoke surfaces.
  - b. Position the slip yoke boot in the slip yoke boot groove.
  - c. Set the boot length to 3" (76 mm) by sliding the slip yoke. Measure between the inner side of the clamps as shown in (Figure 2).
  - d. Bleed the air from the slip yoke boot using a screwdriver as shown in (Figure 2).
- 7. Crimp the large slip yoke boot clamp using SST 211-002.

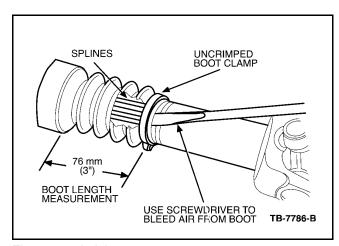


Figure 2 - Article 04-23-7

#### **INSTALL DRIVESHAFT**

- Align the driveshaft front index mark with the mark on the transfer case flange and install the driveshaft. Torque the bolts to 82 lb-ft (111 N•m).
- Align driveshaft rear flange index mark with the mark on the pinion flange and install the driveshaft. Torque the bolts to 83 lb-ft (112 N•m).

PART NUMBER	PART NAME
F87Z-4K277-AA 4L5Z-4K277-AA	Drive Shaft Slip Yoke Kit (Steel Shaft) Drive Shaft Slip Yoke Kit (Aluminum Shaft)

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

OPERATION DESCRIPTION TIME

042307A Apply New Grease To The 0.7 Hr.

Rear Driveshaft Slip Yoke Splines

# **DEALER CODING**

	CONDITION
BASIC PART NO.	CODE
4K277	41