

VEHICLE LEAN/SAG WHEN OBSERVED FROM REAR OF VEHICLE

TSB 04-23-6

FORD:

1999-2005 F-250, F-350

ISSUE

Some 1999-2005 F-Super Duty 250/350 vehicles may exhibit a vehicle lean or sag, to the right or left, when looking at the vehicle from the rear.

ACTION

It may be necessary to install Ford approved shims to correct vehicle lean condition. Refer to the following Service Procedure.

SERVICE PROCEDURE

NOTE

WHEN VERIFYING THE VEHICLE LEAN ALL EQUIPMENT MUST BE REMOVED FROM THE VEHICLE SUCH AS TOOL BOXES, CAPS, BED FUEL TANKS, ETC. THE VEHICLE MUST BE PARKED ON A LEVEL SURFACE.

NOTE

THIS REPAIR MAY ONLY BE PERFORMED ON THE REAR OF THE VEHICLE. DO NOT ATTEMPT THIS PROCEDURE ON THE FRONT OF THE VEHICLE.

1. Check for fractured or broken springs, both front and rear.
 - a. If a spring is fractured, replace the spring and re-evaluate the vehicle. If the condition is corrected return the vehicle to the customer, if not proceed to Step 2.

NOTE

IF SPRING REPLACEMENT IS NECESSARY, REFER TO PART CATALOG FOR PROPER APPLICATION AND PART NUMBER INFORMATION.

- b. If springs are found to be OK, proceed to Step 2.
2. Check tire pressures and adjust if necessary.

3. Measure the vehicle ride height from wheel lip to top of wheel well opening, at all four corners, Figure 1.

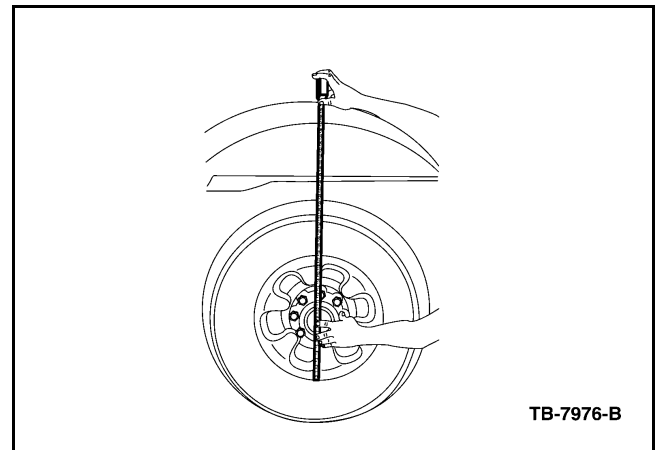


Figure 1 - Article 04-23-6

4. Calculate the difference between left to right (Worksheet 1).

| Worksheet 1 (Wheel Lip To Wheel Well Opening) | | | | | |
|---|----|--------------------------|----|----|--------------------------|
| LF | RF | Difference Left To Right | LR | RR | Difference Left To Right |
| | | | | | |

5. Measure chassis ride height per Workshop Manual Section 204-00 (Description And Operation; Ride Height) at all four corners and calculate the difference between left to right (Worksheet 2).

| Worksheet 2 (Chassis Ride Height Per Workshop Manual Procedure) | | | | | |
|---|----|--------------------------|----|----|--------------------------|
| LF | RF | Difference Left To Right | LR | RR | Difference Left To Right |
| | | | | | |

6. Refer to the following chart for repair action to take.

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.

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| Repair Action Chart | | |
|--|--|--|
| Wheel Lip To Wheel Well Difference Left To Right | Chassis Ride Height Difference Left To Right | Action |
| 0 to 3/4" (19 mm) | N/A | No action to be taken |
| Greater than 3/4" (19 mm) | Less than 3/4" (19 mm) | No chassis correction authorized, investigate frame and body systems |
| Greater than 3/4" (19 mm) | 3/4" to 1" (19 to 25 mm) | Install shim 3C4Z-5A300-AA on low side of vehicle |
| Greater than 3/4" (19 mm) | Greater than 1" to 1 3/4" (25 to 44 mm) | Install shim 5C3Z-5742-AA on low side of vehicle |
| Greater than 3/4" (19 mm) | 2" and Greater (51 mm and Greater) | Replace spring |

7. If shim installation is needed, install the shim as shown in Figures 2 and 3.

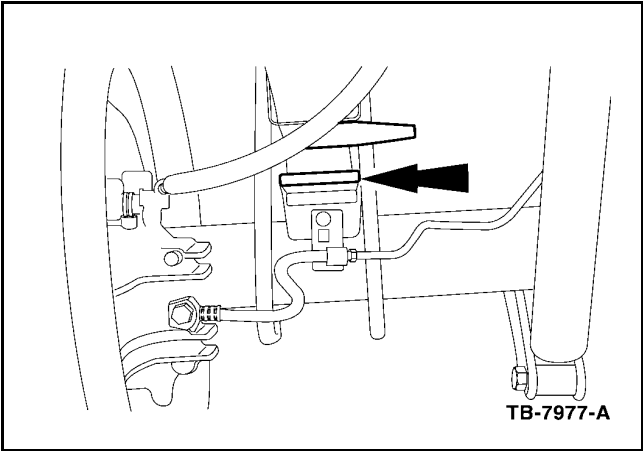


Figure 2 - Article 04-23-6

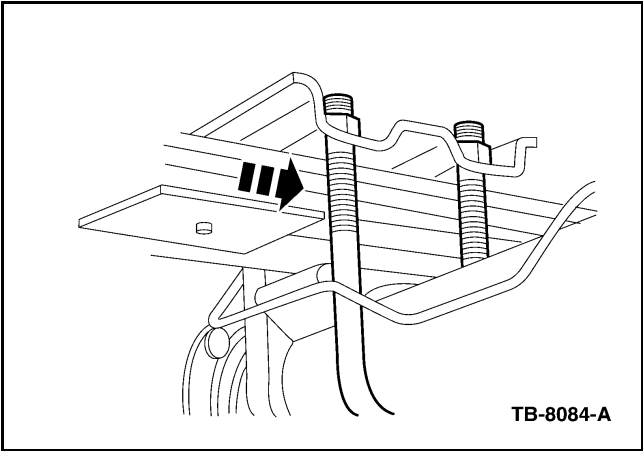


Figure 3 - Article 04-23-6

8. Inspect U-bolts and replace if necessary.

NOTE
IF U-BOLT REPLACEMENT IS NECESSARY, REFER TO PART CATALOG FOR PROPER APPLICATION AND PART NUMBER INFORMATION.

9. After shim installation re-measure the vehicle ride height per Workshop Manual Section 204-00. If the ride height is now greater than 200 mm for a single rear wheel vehicle, or 210 mm for a dual rear wheel vehicle replace the spring.

CAUTION
IF NECESSARY INSTALL NEW SUSPENSION FASTENERS. ALWAYS REPLACE FASTENERS WITH THE SAME PART NUMBER, OR AN EQUIVALENT PART. DO NOT USE A REPLACEMENT FASTENER OF LESSER QUALITY OR DIFFERENT DESIGN. TORQUE VALUES MUST BE USED AS SPECIFIED IN THE WORKSHOP MANUAL FOR CORRECT RETENTION OF COMPONENT.

| PART NUMBER | PART NAME |
|---------------|-----------|
| 3C4Z-5A300-AA | 1/2" Shim |
| 5C3Z-5742-AA | 1" Shim |

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

DEALER CODING

BASIC PART NO.
5560

CONDITION
CODE
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