Technical Bulletin # T118

January 31, 2005

VEHICLE: 4WD 2005 Ford Super Duty F-250 / 350

NOTICE: Shimmy problem on stock vehicles - In stock condition, some trucks exhibit a slight steering wheel oscillation (a quick back and forth motion) immediately after the truck impacts a rough spot in the road surface. Ford offers a dealer-performed warranty "fix" via a Technical Service Bulletin (TSB number 04-26-1) issued on December 15, 2004 which we have reprinted on the following pages.

Contact your local Ford dealer.

The TSB can also be viewed on Superlift's website www.superlift.com/dealers.
Note: This TSB may not be Ford's most recent; again, check with your local Ford dealer.

Other things to consider:

- The additional mass of larger / heavier tires and wheels can amplify this pre-existing condition.

- One of Ford's "fixes" covered in their TSB, is for an authorized Ford dealer to adjust steering box pre-load. At some time, Ford will probably make a running change at the factory, but Ford has not yet published a start date. Superlift advises against non-Ford authorized dealers performing the adjustment, but if you insist, be sure to check with your local Ford dealer beforehand; your "problem truck" may already be equipped with the new "tighter" steering box. If so, all you will do is cause more problems. A Ford dealer can check this for you via the truck's Vehicle Identification Number.

- If the truck still exhibits shimmy after Ford's TSB repairs are performed, Superlift suggests checking the truck's caster angle. We have found that factory specification of 3 degrees positive caster should be maintained. Also, our dual steering stabilizer system (#92690) helps to dampen excessive shimmy.

Superlift Suspension Systems – 300 Huey Lenard Loop – West Monroe, LA 71292
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Printable View (13 KB)	
TSB 04-26-1	• **STEERING WHEEL OSCILLATION (BACK AND FORTH MOTION) AFTER RIDING OVER BUMPS/RUTS**
Publication Date: December 15, 2004	

FORD: 2005 F-Super Duty

ISSUE:

Some 2005 F-Super Duty vehicles may exhibit steering wheel oscillation (back and forth motion) immediately following front or rear wheel impacts (i.e. pavement joints, frost heaves, rough roads, etc.). Steering wheel motion is typically in the range of ± 5 degrees, and typically dampens out in fewer than five oscillations. This condition occurs mostly on 4x4 vehicles, equipped with steering wheels which have redundant controls (i.e. climate and radio controls).

ACTION:

This procedure will minimize the steering wheel oscillations on impacts, however, there may be some remaining minor oscillation which would be considered normal.

Perform the following:

- Vehicle Inspection
- Evaluation Of Vehicle Prior To Repair
- Steering Gear Mesh Load Adjustment
- Replacement Of Redundant Control Steering Wheel (if equipped and vehicle built prior to 10/8/04)

SERVICE PROCEDURE

VEHICLE INSPECTION

1. Set tire pressures as indicated on the vehicle label (located on fuel door).
2. Wipe down and inspect the steering damper. Turn the steering wheel from lock to lock several times to cycle the steering damper and inspect for leaks.
   a. If leaks are present, install a new steering damper and continue with this TSB.
   b. If no leaks are present, continue with this TSB.
3. Check torques on the steering system fasteners (damper nuts (4x2), damper-to-bracket (F-250, F-350 4x4), damper-to-drag link, drag link-to-pitman arm nut, inner tie-rod end nut, outer tie-rod end nuts, and track bar bracket-to-frame nuts & bolts), adjust to specification as required. Refer to Workshop Manual Section 211-03.

EVALUATION OF VEHICLE PRIOR TO REPAIR

1. Ask customer what type of road surface and speed generates the steering wheel oscillation.
2. Road test vehicle on similar road surface and speed, to gain a feel for the severity of wheel oscillation.
3. During the road test, evaluate and note the steering wheel return-ability.
   a. Turn steering wheel full lock to lock to confirm no binding.
   b. Locate center, and then 45 degrees either side of center on the steering wheel.
   c. Driving vehicle at 35 MPH (56 Km/h), on a dry and flat road surface, turn the wheel 45 degrees and release. Note the approximate angle that the steering wheel returns to BEFORE CLEAR VISION. Perform and record the angle for both left and right. It is normal if the angle differs slightly from left to right.

STEERING GEAR MESH LOAD ADJUSTMENT

1. Insert hex wrench into steering gear mesh load adjuster screw.
2. While holding the mesh load adjuster screw tight, back off lock nuts two full turns to allow free movement of the adjuster screw.
3. Carefully tighten adjuster screw until a slight increase in resistance is felt, then back off approximately 1/16th of a turn.
4. Hold the adjuster screw in place and tighten lock nut. Do not allow the adjustment screw to turn while tightening the locking nut down.
5. Road test vehicle and evaluate for improvement in steering wheel oscillations.
   a. Confirm that there is no objectionable increase in steering efforts, especially at low speeds.
   b. Verify that steering wheel return-ability is approximately the same as it was during the original evaluation (within 5 degrees).
   c. Turn steering wheel full lock to lock to confirm no binding.
6. Park the vehicle to let it cool down. Road test cold to confirm acceptable parking efforts and return-ability in cold condition. Repeat the mesh load adjustment if needed.

REPLACEMENT OF REDUNDANT CONTROL STEERING WHEEL - Vehicles Built Prior To 10/8/2004 Only

NOTE: THE REPLACEMENT STEERING WHEEL WILL CONTAIN THE REDUNDANT CONTROLS.

1. Remove driver air bag assembly. Refer to Workshop Manual Section 211-04 for complete instructions.
2. Remove the steering wheel.
3. Install new steering wheel.
4. Reinstall driver air bag assembly.
5. Re-set clear vision as required.

NOTE: FOR ADDITIONAL INFORMATION, PLEASE REFER TO SECTION 211-04 OF THE 2005 SUPER DUTY F-SERIES WORKSHOP MANUAL FOR COMPLETE REMOVAL AND INSTALLATION PROCEDURES FOR THE STEERING COLUMN.

PART NUMBER	PART NAME
5C7Z-3600-ABA	Redundant Control Steering Wheel (King Ranch Tan/Peb)
5C7Z-3600-CBA	Redundant Control Steering Wheel (Charcoal Black)

WARRANTY STATUS:

Eligible Under Provisions Of New Vehicle Limited Warranty Coverage

OPERATION	DESCRIPTION	TIME
042601A	F-Super Duty With Gas Engine: Perform Inspection/Evaluation, Adjust Mesh Load	2.2 Hrs.
042601A	F-Super Duty With 6.0L Diesel: Perform Inspection/Evaluation, Adjust Mesh Load	3.2 Hrs.
042601B	F-Super Duty With Gas Engine: Perform Inspection/Evaluation, Adjust Mesh Load, And Replace Damper	2.3 Hrs.
042601B	F-Super Duty With 6.0L Diesel: Perform Inspection/Evaluation, Adjust Mesh Load, And Replace Damper	3.2 Hrs.
042601C	F-Super Duty With Gas Engine: Perform Inspection/Evaluation, Adjust Mesh Load, And Replace Steering Wheel	2.8 Hrs.
042601C	F-Super Duty With 6.0L Diesel: Perform Inspection/Evaluation, Adjust Mesh Load, And Replace Steering Wheel	3.6 Hrs.
042601D	F-Super Duty With Gas Engine: Perform Inspection/Evaluation, Adjust Mesh Load, Replace Damper And Steering Wheel	2.9 Hrs.

042601D	F-Super Duty With 6.0L Diesel: Perform Inspection/Evaluation, Adjust Mesh Load, Replace Damper And Steering Wheel	3.7 Hrs.

DEALER CODING

BASIC PART NO.	CONDITION CODE
3600	42

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.