

**FORD:**

2003-2005 Excursion

2003-2007 F-Super Duty

2004-2009 E-Series

2004-2007 F-650, F-750

This article supersedes TSB'S **09-12-2** and **07-21-4** to direct repairs to the Workshop Manual (WSM) Turbocharger Reconditioning procedure added to the online WSM and updates to the pinpoint test (PPT) in the Powertrain Controls/Emission Diagnostic (PC/ED) manual.

**ISSUE**

Some 2003-2007 F-Super Duty, 2004-2007 F-650/750, 2003-2005 Excursion and 2004-2009 Econoline vehicles equipped with a 6.0L diesel engine may exhibit any one, or a combination of the following concerns: lack of power, white/black smoke or a surge.

On 2003-2007 F-Super Duty, 2003-2005 Excursion, and 2004-2009 Econoline these concerns may or may not be accompanied by any one, or a combination, of the following diagnostic trouble codes (DTCs): P0238, P0299, P0404, P0478, P2262 and/or P2263. These concerns and/or DTCs could be a result of coking deposits inside the turbocharger.

On 2004-2007 F-Super Duty 650-750, these concerns may or may not be accompanied with the following DTCs: 261, 342, 343, 353, 354 and/or 361. These concerns and/or DTCs could be a result of coking deposits inside the turbocharger.

**ACTION**

Follow the Service Procedure steps to correct the condition.

**SERVICE PROCEDURE**

Coking deposits inside the turbocharger turbine housing can impede vane response causing high or low instances of exhaust pressure. Unexpected exhaust pressure results can cause over-boost, under-boost, insufficient or excessive exhaust gas recirculation, or unexpected EGR valve position, resulting in these symptoms.

For F-Super Duty, Excursion, E-Series vehicles built on or before 9/29/2003, follow PPT KA in the PC/ED manual diagnostics. If the PPT in the PC/ED manual diagnostics leads to turbocharger replacement, use the Turbocharger Inspection Procedure first to check for internal turbocharger oil leaks. Then, determine if the turbocharger can be repaired with a center housing rotating assembly (CHRA) replacement or if it can be cleaned instead of replacing the entire turbocharger following the turbocharger reconditioning service procedure.

For F-Super Duty, Excursion, and E-Series vehicles built on or after 9/30/2003, perform the Powertrain Air Management Turbo Boost test and VVT test with IDS. Use of the VPS tool 418-626 along with IDS/VMM is required. Tool 418-626 was shipped in kit TKIT-2007VP-F and TKIT-2007TV-F. Dealers should have received one or the other of these two kits.

Refer to the updated online WSM, Section 303-04D: for diagnosis, testing and reconditioning of the turbocharger assembly.

For F-Super Duty 650-750 vehicles, refer to the updated online WSM, Section 303-04B: for diagnosis, testing and reconditioning of the turbocharger assembly.

**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 09-16-5 (Continued)

| PART NUMBER     | PART NAME                                                                                                                      |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------|
| 6C3Z-9T515-A    | Oil Drain Tube                                                                                                                 |
| 3C3Z-9G489-AARM | Center Housing - 2003 F-Super Duty/Excursion                                                                                   |
| 3C3Z-9G489-BARM | Center Housing - Bolted w/o Clamp Plate) 2003 F-Super Duty/Excursion                                                           |
| 4C3Z-9G489-AARM | Center Housing - 2004-2005 F-Super Duty (Built before 11/4/2004), E-Series, And Excursion (Built before 1/10/2005)             |
| 5C3Z-9G489-AARM | Center Housing - 2005 Excursion (Built after 1/10/2005), 2005-2007 F-Super Duty (Built after 11/4/2004) And 2005-2009 E-Series |
| XL-2            | Motorcraft® High Temperature Nickel Anti Seize Lubricant                                                                       |
| PM-2            | Motorcraft® Carburetor Tune-Up Cleaner                                                                                         |
| W302676         | V-Band Clamp                                                                                                                   |
| W302677         | Locknut                                                                                                                        |
| 3C3Z-6C885-A    | Unison Ring                                                                                                                    |

| OPERATION | DESCRIPTION                                                                                    | TIME        |
|-----------|------------------------------------------------------------------------------------------------|-------------|
| MT091605  | Use SLTS Operations If Available; Claim Additional Diagnosis Or Labor Performed As Actual Time | Actual Time |

### DEALER CODING

BASIC PART NO.  
6K682

CONDITION  
CODE  
42

**WARRANTY STATUS:** Eligible Under Provisions Of  
New Vehicle Limited  
Warranty Coverage And  
Emissions Warranty  
Coverage  
IMPORTANT: Warranty  
coverage limits/policies are  
not altered by a TSB.  
Warranty coverage limits  
are determined by the  
identified causal part.