

**ENGINE—7.3L—LOW OIL PRESSURE—CUAUTITLAN  
BUILT VEHICLES ONLY—EQUIPPED WITH 7.3L  
POWERSTROKE DIESEL ENGINE—ENGINE SERIAL  
NUMBERS (ESN) BETWEEN 5000000 AND 5008850  
ONLY**

**Article No.  
03-21-43**

**FORD:** 2001 SUPER DUTY F SERIES

Article **01-10-10** is being republished in its entirety as part of a consolidated 7.3L diagnostic aid booklet.

**ISSUE**

Some Cuautitlan built vehicles equipped with the 7.3L Powerstroke diesel engine with Engine Serial Number (ESN) between 5000000 and 5008850 may exhibit a low oil pressure condition. This may be caused by the rear lifter gallery cup plugs coming out.

**ACTION**

Verify engine has a low oil pressure condition. If normal diagnostics cannot pinpoint the condition, refer to the following Service Procedure for details.

**SERVICE PROCEDURE**

**OIL PRESSURE AND GALLERY PLUG  
INSPECTION PROCEDURE**

1. Verify low oil pressure with hand-held gauge. Pressure at reservoir should be greater than 10 psi at idle with the engine at operating temperature.
2. After verifying low pressure at the reservoir, measure the pressure at one of the main bearing cross-drill plugs on the main oil gallery on the left side of the engine, approximately 25mm (1") above the oil pan rail. A 3mm (1/8") pipe plug exists to cap each of the five (5) main bearing feed cross-drilled galleries. Use any of the access points.

If main gallery pressure is higher than the reading at the reservoir, this indicates an internal loss of oil pressure in the short block assembly. A condition of low oil pressure may be the result from a tappet gallery plug coming out of the rear of the crankcase.

These plugs may be accessed by removing the transmission, flywheel or flexplate, rear crankshaft seal, and rear cover plate. The rear cam journal can be seen with the plate removed.

Relative to the cam, at 10 o'clock and 2 o'clock, there are two (2) holes that should have a Oil Gallery Cup Plug (40064-R1) installed. If the plug is missing, replace the cup using the following repair procedure (Figure 1).

**NOTE**

**CARE MUST BE TAKEN PARTICULARLY ON THE 10 O'CLOCK (LEFT) HOLE NOT TO INSTALL THE PLUG TOO DEEP (THE TURBO LUBE PASSAGE COULD BE RESTRICTED), BUT THE PLUG MUST BE INSTALLED DEEP ENOUGH TO HOLD (FORD THREADLOCK 262 MAY BE USED TO ASSIST IN RETAINING THE PLUG).**

It is very important to use the approved Ford Cup Plug (40064-R1) for this repair. The use of aftermarket plugs may cause leaks due to inconsistent cup sizes.

**OIL GALLERY PLUG REPLACEMENT  
PROCEDURE**

1. Remove the transmission. Refer to the appropriate Workshop Manual, Section 307-01 (automatic transmission) or Section 308-03 (manual transmission).
2. Remove the flywheel or flexplate.
3. Remove rear crankshaft seal.
4. Remove the rear cover plate.
5. Inspect the block to determine which oil gallery plug is missing. The cup plug bore needs to be free of oil and old sealant from previous plug installation (Figure 2).

**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.

# Article No. 03-21-43 Cont'd.

- Look in the bore of the lifter gallery and note the location of the 15° lead in chamfer. The cup plug needs to be installed so that the most rearward part of the plug is just forward of the 15° chamfer. This ensures that proper loading is on the plug for good retention.

**NOTE**

IT MAY BE HELPFUL TO MARK THE CHAMFER LEADING EDGE WITH AN INK MARKER SO THAT IT IS EASILY IDENTIFIED WHEN THE PLUG HAS BEEN INSTALLED TO THE PROPER DEPTH. IT IS ALSO IMPORTANT NOT TO DRIVE THE LEFT BANK PLUG TOO DEEP AS TO BLOCK OFF THE OIL SUPPLY TO THE TURBOCHARGER. THERE SHOULD BE APPROXIMATELY 1.2mm (0.050") OF THE PARENT BORE VISIBLE BETWEEN THE CHAMFER AND THE END OF THE PLUG WHEN PROPERLY INSTALLED (FIGURE 3).

**NOTE**

IF THE CUP PLUG IS NOT INSTALLED CORRECTLY A REPEAT FAILURE IS LIKELY TO OCCUR. CUP PLUG 40064-R1 MUST BE USED.

- Utilize a plug driver that fits the ID of the cup plug. Do not attempt to drive on the end of the plug.
- Apply Ford Threadlock 262 (TA-26) to the outside diameter of the plug at the nose.
- Install plug, utilizing driver to the proper depth as described in Step 6 above. Inspect the other lifter gallery plug not being replaced for proper installation depth of 1.2mm (0.050") beyond the 15° chamfer. If not beyond chamfer, utilize driver to install to the 1.2mm (0.050") depth.
- Reinstall rear cover plate, rear crankshaft seal, flywheel or flexplate and transmission per Workshop Manual.

PART NUMBER	PART NAME
40064-R1	Oil Gallery Cup Plug
TA-26	Ford Threadlock 262

**OTHER APPLICABLE ARTICLES:** NONE

**SUPERSEDES:** 01-10-10

**WARRANTY STATUS:** Eligible Under The Provisions Of Bumper To Bumper Warranty Coverage

OPERATION	DESCRIPTION	TIME
032143A	Install Oil Gallery Plug (Includes Time To Remove And Install Transmission) - F-250-550 Super Duty 7.3L DI Manual Transmission 4X2	3.1 Hrs.
032143AB	Install Oil Gallery Plug (Includes Time To Remove And Install Transmission And Transfer Case) - F-250-550 Super Duty 7.3L DI Manual Transmission 4X4	4.9 Hrs.
032143AC	Install Oil Gallery Plug (Includes Time To Remove And Install Transmission) - F-250-550 Super Duty 7.3L DI Automatic Transmission 4X2	3.2 Hrs.
032143AD	Install Oil Gallery Plug (Includes Time To Remove And Install Transmission And Transfer Case) - F-250-550 Super Duty 7.3L DI Automatic Transmission 4X4	4.4 Hrs.

**DEALER CODING**

BASIC PART NO.  
6005

CONDITION CODE  
12

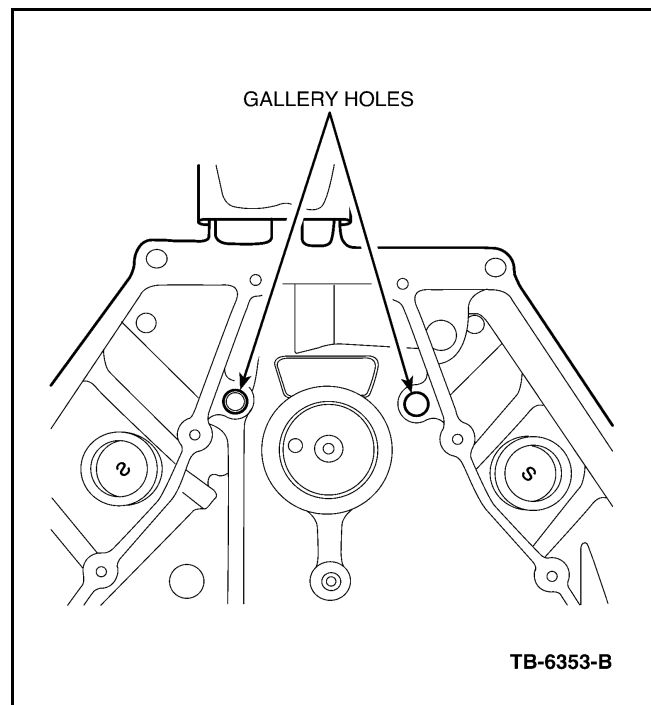


Figure 1 - Article 03-21-43

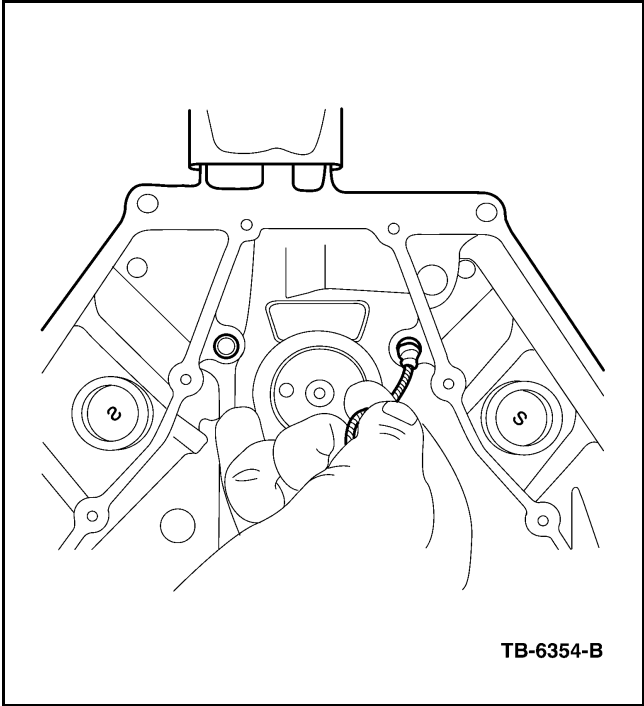


Figure 2 - Article 03-21-43

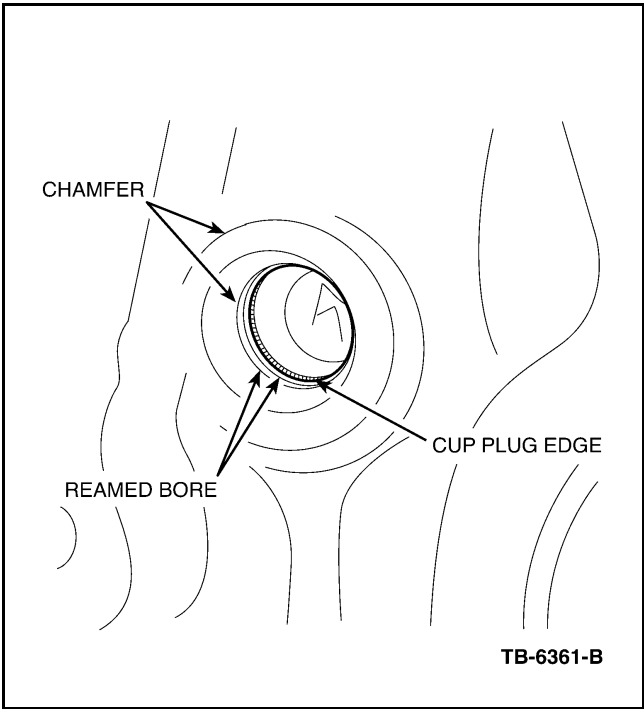


Figure 3 - Article 03-21-43