

Subject: 2006 6.0L Diesel Power Stroke Cylinder Head Commonization

Effective Date: Ford Production Assembly Plants - January 11, 2006
Kentucky Truck Plant (Super Duty) & Lorraine Assembly Plant (Econoline)

Description

Changes are being made to the 6.0L diesel cylinder head, head gasket, crankcase block, rocker arm carrier and injector hold down clamps for the 2006 Super Duty and Econoline Program. The action is taking place to facilitate/commonize the International manufacturing process for the upcoming 6.4L program. The 2006 6.0L used in Ford vehicle after January 11, 2006 are being referred to as "Commonization Engines".

Part number details are provide on a separate excel spreadsheet.

Cylinder Head:

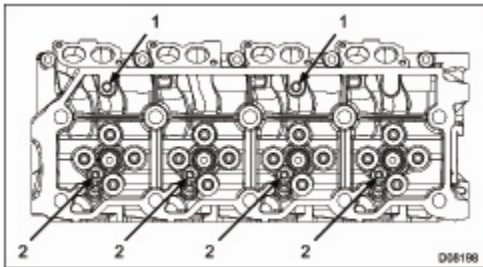


Figure 1 - New cylinder head

- 1. Carrier boss bolt holes M10 x 1.5
- 2. Injector clamp bolt holes (relocated)

The new cylinder heads have several casting changes including a slight injector clamp bolt hole relocation (2, figure 1) and the carrier boss bolt hole size and location changes (1, figure 1). New cylinder heads also use 32 mm cup plugs replacing the old 28 mm cup plugs.

The cylinder head gasket is also new to accommodate the new 20mm cylinder head location dowels. Pre commonization head use 18mm dowels

Note: At this time the new cylinder head assembly is not interchangeable with the previously level head.

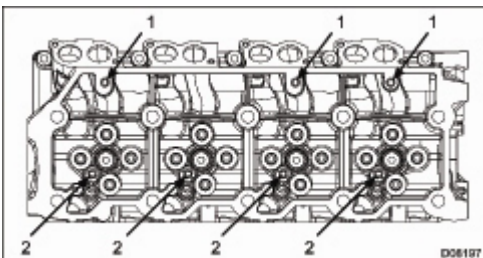


Figure 2 – Previous Level Cylinder Head

- 1. Carrier boss bolt holes M8 x 1.5
- 2. Injector clamp bolt holes (original locations)

Note: The previous level cylinder head assembly is not interchangeable with the new head.

Block Assembly:

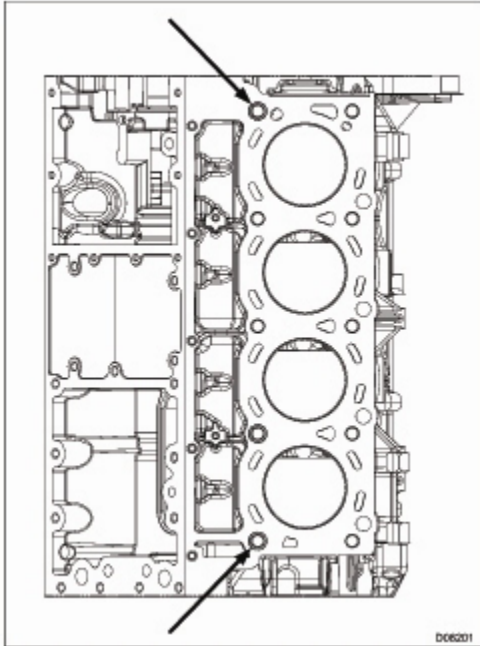


Figure 3 - New Block Assembly

The new crankcase (block) uses two 20mm cylinder head locating dowels per head.

The old crankcase (block) uses two 18mm cylinder head locating dowels per head.

Note: The new and old block assembly is not interchangeable. This affects replacement of all 6009 short blocks and the 6010 bare blocks.

Rocker Arm Carrier:

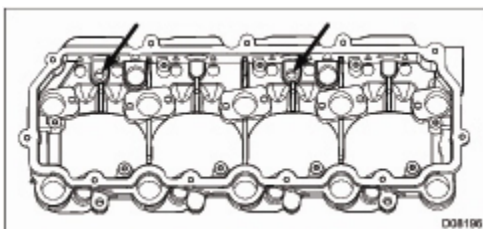


Figure 4 - New Rocker Arm Carrier

Casting changes to the rocker carrier provide increased clearance for new injector hold down clamps (figure 6). The new carrier also uses only 2 bolts and locating dowels to attach the carrier to the head.

The new rocker carrier is serviced in a Rocker Arm Carrier Kit which includes the rocker carrier cover, gasket and necessary dowels.

Note: The new and old rocker arm carrier kits are not interchangeable.

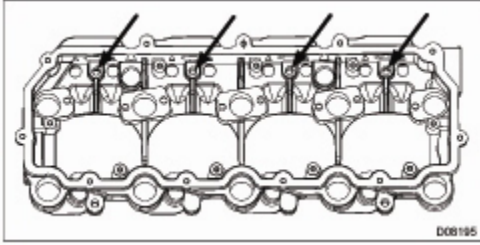


Figure 5 – Previous Level Rocker Arm Carrier Kit

The old rocker arm carrier uses 4 attaching bolts to hold the carrier to the old cylinder head (figure 2).

The previous rocker arm carrier is also serviced in a kit which includes the rocker carrier cover, gasket and necessary dowels.

Note: The previous level rocker arm kit is not interchangeable with the new kit and will remain available for service.

Injector Hold Down Clamp:

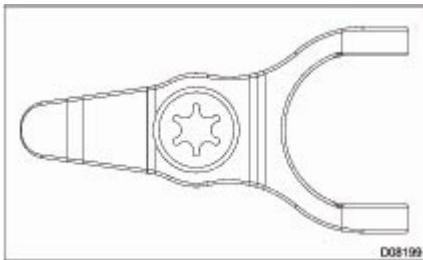


Figure 6 - New Injector Hold Down Clamp Assembly

The tail end of the new injector hold down clamp is being reduced to avoid interference with the rocker arm carrier wall. Injector hold down clamp bolt torque will increase from 24 lbf-ft to 25.8 lbf-ft and bolt head size will increase from T40 to T45.

Note: The new and old injector hold down clamps are not in interchangeable.

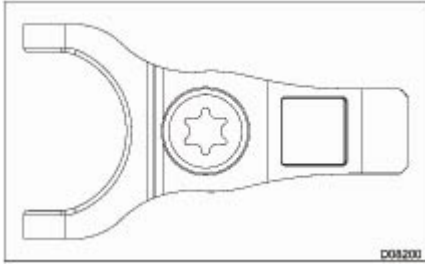


Figure 7 – Previous Level Injector Hold Down Clamp Assembly

Note: The new and old injector hold down clamps are not interchangeable. The old injector hold down clamp will remain available for service.

Future Releases – For Internal FCSD Communication Only

A new service cylinder head kit that will work on the previously engine block will be released for service in the near future. The new kit will include stepped dowels (20mm/18mm), the new cylinder head (with the new carrier assembly), a cylinder head gasket kit, early level standpipe and an instruction sheet.

The head will be available for dealer to purchase when the existing supply of earlier level new heads are no longer available.