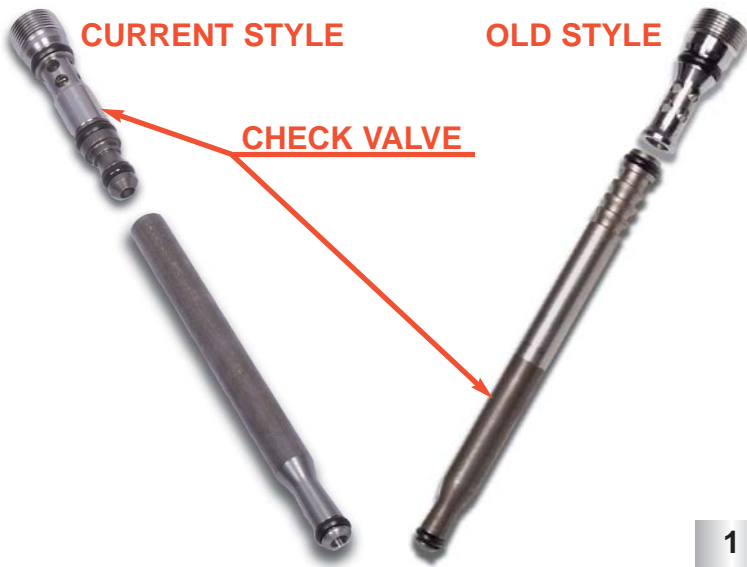


2005 6.0L DIT RUNNING CHANGES



1

High-Pressure Stand Pipe

- The high-pressure check valve has been moved from an integral part of the stand pipe to the supply port plug.
- The change began with engine build date October 28, 2004 and engine serial number 6426234 on Indianapolis built engines and 0174191 on Huntsville built engines.



2

High-Pressure Check Valve

- The new high-pressure stand pipe and check valve assembly can be used to replace the current design on the 2004.25 and early 2005 MY engines.



3

High-Pressure Block-Off Tools

- New block-off tools are required when performing ICP diagnostics on an engine equipped with the new style stand pipe and check valve assembly.
- The ICP diagnostic test procedures are the same procedures that were performed on the 2004.25 MY engines.
- Tool part number 303-1163 includes both block-off tools.

2005 6.0L DIT RUNNING CHANGES

Stand Pipe Removal Tool

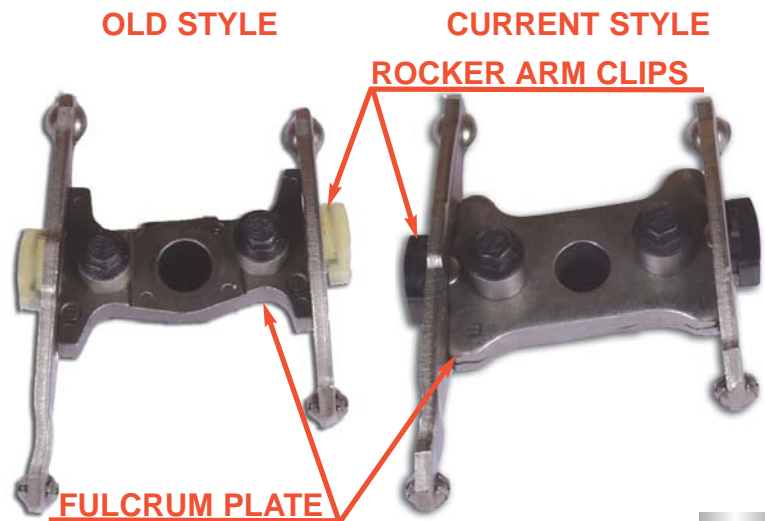
- This tool is used to remove the stand pipe from the branch tube if it separates from the high-pressure check valve during disassembly.
- Tool part number 303-1164.



4

Rocker Arm Fulcrum Plate

- The rocker arm fulcrum plates have a new appearance due to a change in the manufacturing process.
- The plastic rocker arm clip has been made more robust by improving the plastic material.
- **NOTE: Service kits are available for the new fulcrum plates. The new design is reverse compatible with the previous design.**



5

VGT Control Valve Connector

- The engine sensor harness has received several changes during the 2005 MY. Most of the changes have been made to reduce chafe points and provide more secure connections.
- One noticeable change is a new VGT control valve connector.
- The new connector will provide a more secure connection to the VGT control valve.
- **NOTE: The VGT control valve did not change.**

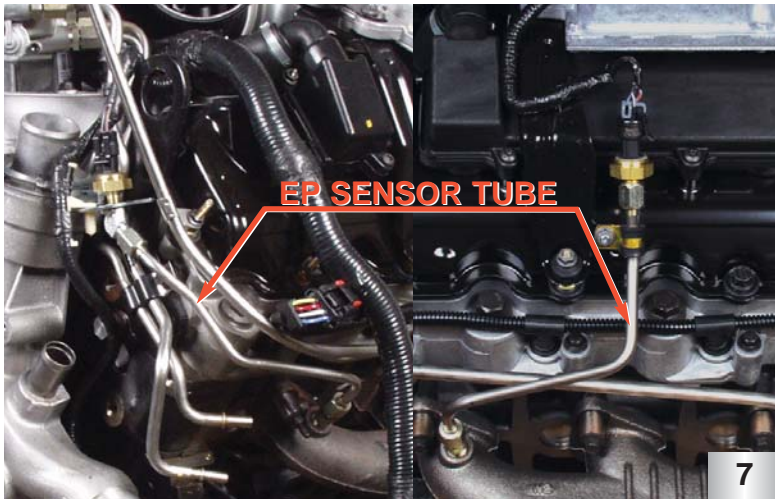


6

2005 6.0L DIT RUNNING CHANGES

OLD STYLE

CURRENT STYLE

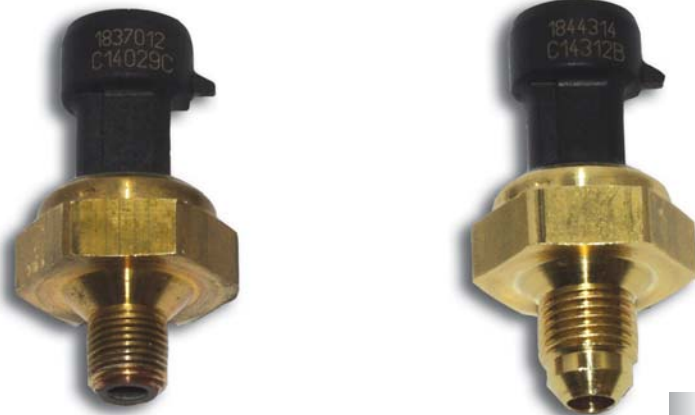


Exhaust Pressure Sensor Relocation

- The Exhaust Pressure (EP) sensor has been relocated to the FICM bracket.
- This change requires a new EP tube and FICM bracket to be used.
- The engine sensor harness had to be lengthened to accommodate the new sensor location.
- **NOTE: It is important to secure the nut on the EP sensor tube when removing the EP sensor.**

OLD STYLE

CURRENT STYLE



Exhaust Pressure Sensor

- The F-series vehicles now use the same Exhaust Pressure (EP) sensor as the E-series previously used.
- The sensor mounting threads changed to improve the parts commonality between the F-series and E-series vehicles.

OLD STYLE

CURRENT STYLE



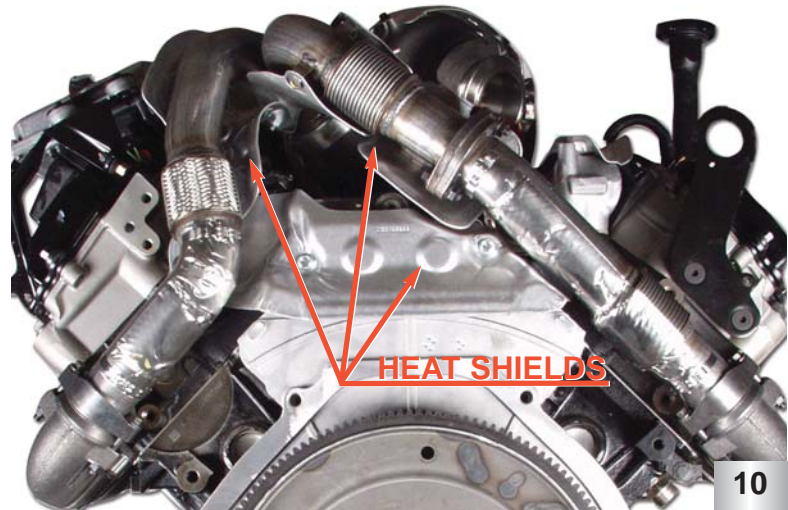
Water Pump Pulley

- The water pump pulley has been made more robust with the use of a thicker flange.
- The new water pump pulley design does not require the separate flange support plate as used on the previous design.

2005 6.0L DIT RUNNING CHANGES

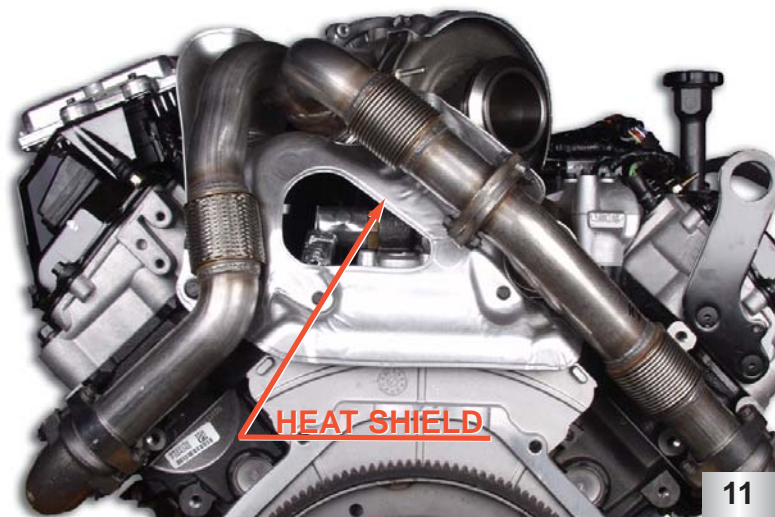
Early Style Rear Heat Shield

- The 2003, 2004, and early production 2005 MY engines have three heat shields in the rear of the engine.
- Two of the shields attach to the exhaust up pipes and the remaining shield attaches to the high-pressure pump cover and left hand cylinder head.



Current Style Rear Heat Shield

- The three heat shields on the 2003, 2004, and early 2005 MY engines have now been incorporated into one large heat shield.
- The new heat shield attaches to the high-pressure pump cover, left hand cylinder head and to the intake manifold.



Heat Shield Mounting Bracket

- The new rear heat shield mounting bracket will have to be removed to gain access to the IPR valve.



2005 6.0L DIT RUNNING CHANGES

2005 Excursion		
Component	Pre-Jan 2005	Post-Jan 2005
High-Pressure Pump	Swash Plate 04 MY Carryover	New V4
Front Cover	04 MY Carryover	Inlet Port
EGR Valve	04 MY Carryover	New Seal
EGR Throttle	04 MY Carryover	Deleted

13

2005 MY Excursion Engine Change

- The early 2005 MY Excursions were equipped with the 2004.25 MY engines.
- Beginning January 2005 all Excursions will be equipped the the 2005 MY engine.
- The Excursion engine will include all of the updates that have previously been listed for the F-series engines.



14

New DTC P2457

- P2457 Exhaust Gas Recirculation (EGR) cooler performance.
- The fault is detected when the IAT2 exceeds a calibrated temperature for more than 30 seconds, with an IAT temperature of less than 34°C (93.2°F).
- Possible causes: engine overheating, cooling system restriction, charge air cooler system restriction, or an EGR cooler restriction.
- Refer to the PCED for further information.



15

Removed MAF Sensor

- The Mass Air Flow (MAF) Sensor has been removed from F-Series vehicles with Federal calibrations beginning in November 2004.
- The Intake Air Temperature (IAT1) Sensor will be mounted in the same location as the previous IAT1/MAF combination sensor.

2005 6.0L DIT RUNNING CHANGES

Previous Turbocharger Bracket

- The previous style turbocharger bracket has been improved to make the engine less sensitive to moan/droan concerns.
- This bracket went in production on September 29, 2003 beginning with engine serial number 6155637 for Indianapolis built engines and engine serial number 0094580 for Huntsville built engines.
- This bracket was used on 2004.25 and early 2005 MY engines.

LESS STRUCTURAL SUPPORT



16

Current Turbocharger Bracket

- The current production turbocharger bracket has been made more robust by adding material across the center of the bracket.
- The new design minimizes the moan/droan concerns.
- The current bracket went into production on January 5, 2005 beginning with engine serial number 6470111 for Indianapolis built engines and engine serial number 0189356 for Huntsville built engines.
- **NOTE: The current bracket is reverse compatible with 2004.25 and early 2005 MY engines.**

ADDED STRUCTURAL SUPPORT



17

Optimized Exhaust Pressure Sensor

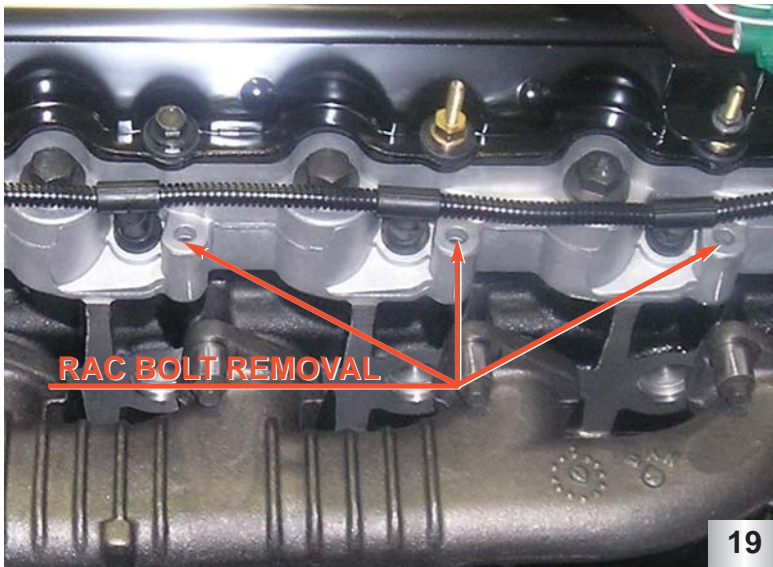
- A new Exhaust Pressure (EP) sensor went into production on January 14, 2005.
- The new sensor incorporates an improved ceramic sensing disc that is less susceptible to exhaust corrosion.
- The optimized sensor can be identified by the International part number 1850353C1 or 1850352C1 located near the top of the sensor body.
- **NOTE: The optimized EP sensor is available as a service part for 2003.25, 2004.25, and early 2005 MY engines which use different mounting threads.**

INTERNATIONAL PART NUMBER



18

2005 6.0L DIT RUNNING CHANGES



Rocker Arm Carrier (RAC) Bolts

- The cylinder head is now manufactured without the four outer rocker arm carrier (RAC) hold down bolt holes.
- The rocker arm carrier (RAC) still has the bolt holes in the casting with no bolts installed.
- The reason for the change is the clamp load provided by the cylinder head bolts is sufficient to for the rocker carrier.
- This change began with engine serial number 6537996 on April 5, 2005 on Indianapolis built engines.

F-Series Emissions Label

 2006 6.0 DIT ENGINE FAMILY 6NVXH06.0AEC	MODEL	ADV. BHP @ RPM	LB-FT TORQ. @ RPM
	A325	325 @ 3300	570 @ 2000
CURB IDLE, FUEL RATE @ ADVERTISED POWER, AND INJECTION TIMING ARE NON-ADJUSTABLE.			
EMISSION CONTROL SYSTEM: ECM, TC, DI, CAC, EGR, OC			
DISPLACEMENT: 6.0L			
IMPORTANT ENGINE INFORMATION: THIS ENGINE HAS A PRIMARY INTENDED SERVICE APPLICATION AS A LIGHT HEAVY-DUTY DIESEL ENGINE & CONFORMS TO U.S. EPA LEV-CLEAN FUEL FLEET VEHICLE PROGRAM REGULATIONS, CALIFORNIA, CANADIAN, AND AUSTRALIAN ADR-30 REGULATIONS FOR THE 2006 MODEL YEAR AND IS CERTIFIED TO OPERATE ON DIESEL FUEL.			

EMISSION CONTROL INFORMATION
 ENGINE MANUFACTURED BY:
INTERNATIONAL TRUCK AND ENGINE CORPORATION
INTERNATIONAL
 1858583C1

2006 MY Engine

- The 2006 MY F-series engines began production May 6, 2005 with engine serial number 6561405 for Indianapolis built engines and May 3, 2005 with engine serial number 0222228 for Huntsville built engines.
- The 2006 MY E-series engine began production April 6, 2005 beginning with engine serial number 0213261.
- The MY change does not include any current hardware changes.