REMOVAL AND INSTALLATION

The following removal instructions are specific to a 2005 Ford F250 6.0L but are essentially the same for all applications. For installation reverse the instructions. If in doubt please refer to appropriate vehicle specific service information.

1. Make sure the ignition switch is in the OFF position prior to working on the electronic engine controls.

2. Relieve the cooling system pressure. Disconnect and plug or cap the engine vent hose and radiator vent hose. **WARNING: Never remove the pressure relief cap while the engine is operating or when the cooling system is hot. Failure to follow these instructions can result in damage to the cooling system or engine or result in personal injury. To avoid having scalding hot coolant or steam blow out of the degas bottle when removing the pressure relief cap, wait until the engine has cooled, then wrap a thick cloth around the pressure relief cap and turn it slowly. Step back while the pressure is released from the cooling system. When certain all the pressure has been released, (still with a cloth) turn and remove the pressure relief cap. Failure to follow these instructions can result in personal injury.**

3. Remove the bolts and position the degas bottle aside.

4. Disconnect the two exhaust pressure (EP) sensor harness pin-type retainers.

BASIC TROUBLESHOOTING

- Inspect the vehicle harness for any visible damage and repair found damage.
- Inspect the FICM connector pins for dirt or other foreign objects. If found clean pins.
- Inspect the connector pins to see if they are damaged or bent.
- Make sure the harness connectors are properly seated onto the FICM.
- If your scan tool does not communicate with the vehicle, check to make sure the scan tool is properly seated to the diagnostic connection port under the dashboard.
5. Disconnect the EP sensor electrical connector and position the harness aside.

6. Remove the two bolts, two nuts and turbocharger intake tube bracket.

7. Remove the fuel injector control module (FICM) bolts.

8. Disconnect the electrical connectors. Remove the FICM. CAUTION: Make sure both latches are released before removing the electrical connectors or engine damage can occur.

9. NOTICE: With the engine cold, fill vehicles without a yellow fill level decal on the degas bottle only to the MIN line. The correct fill level on these vehicles is between the MIN line and 15 mm (0.59 in) below the MIN line. Fill vehicles with a yellow fill level decal to within the yellow cold fill range shown on the decal. These fill levels will allow for coolant expansion. Overfilling the degas bottle may result in damage to the pressure cap, which can cause the engine to overheat.

**CALIBRATION AND PROGRAMMING**

This FICM is pre-programmed with the latest software available at the time of remanufacturing. If there are software compatibility issues after installation, you will get a U0306 fault code. If this fault code is present we recommend FICM / PCM calibration. Also, ALL FICM require the Vehicle Identification Number to be entered into the FICM as the ECU verifies the VIN in the FICM. If this is not done the engine will run properly but you may get a fault code or check engine light.

**COMMON FICM FAULT CODES**

**FICM has detected an open injector circuit. Defective stator, harness, FICM.**
- P0261: Cylinder 1 injector circuit low
- P0264: Cylinder 2 injector circuit low
- P0267: Cylinder 3 injector circuit low
- P0270: Cylinder 4 injector circuit low
- P0273: Cylinder 5 injector circuit low
- P0276: Cylinder 6 injector circuit low
- P0279: Cylinder 7 injector circuit low
- P0282: Cylinder 8 injector circuit low

**FICM has detected a short in an injector circuit. Injector circuit short to ground. Defective stator, harness, FICM.**
- P0262: Cylinder 1 injector circuit high
- P0265: Cylinder 2 injector circuit high
- P0268: Cylinder 3 injector circuit high
- P0271: Cylinder 4 injector circuit high
- P0274: Cylinder 5 injector circuit high
- P0277: Cylinder 6 injector circuit high
- P0280: Cylinder 7 injector circuit high
- P0283: Cylinder 8 injector circuit high

**Maximum or minimum pulse width exceeded. Cylinder weak due to mechanical problem or injectors not contributing correct volume of fuel.**
- P0263: Cylinder 1 contribution balance
- P0266: Cylinder 2 contribution balance
- P0269: Cylinder 3 contribution balance
- P0272: Cylinder 4 contribution balance
- P0275: Cylinder 5 contribution balance
- P0278: Cylinder 6 contribution balance
- P0281: Cylinder 7 contribution balance
- P0284: Cylinder 8 contribution balance

**Miscellaneous faults.**
- P0611: FICM performance - FICM memory fault will set if a RAM or ROM fault exists. Loss of FICM power or other internal FICM failure
- P1378: FICM system voltage low - FICM detects power below 7 volts. Low batteries, loose connection/resistance in circuit, defective relay.
- P1379: FICM system voltage high - FICM detects power exceeding 16 volts. Charging system fault.
- P0148: Fuel delivery error - Engine RPM exceeded requested RPM.
- P2552: FICM circuit - Throttle/fuel inhibit circuit.
- U0105: Lost communication with FICM - Check Can2H/Can2L circuits. FICM or PCM issue.
- U0306: Software compatibility issues with FICM - Reprogramming of FICM and PCM may ne necessary.