2-4 ENGINE ELECTRICAL

minal on the coil. A DVOM is recommended to test for voltage. Turn the ignition switch to the **RUN** position and connect the negative lead of the DVOM to a ground or the negative post/cable clamp on the battery. Connect the other lead of the DVOM to the **BATT** terminal on the coil. The voltage measured should be within 1 volt of the battery voltage as measure across the posts of the battery.

After verifying there is battery voltage present, the next check is to verify the operation of the coil primary ground which is received at the coil from the ICM (Ignition Control Module). This check is accomplished using a test lamp and connecting the lead of the test lamp to the ground or the battery negative post/cable clamp. Connect the test lamp to the ground side of the coil (the connection opposite the BATT terminal on the coil on the other side of the coil tower) and crank the engine. The light should blink on and off repeatedly as long as the engine cranks or runs. If the light does not blink the problem is either in the ICM or the PIP signal generated by the sensor inside the distributor.

The final check of the primary coil is to check the resistance of the coil. This is accomplished by using a DVOM and probing the **BATT** terminal and the coil ground terminal. Measure the resistance between the two terminals. If the resistance is between 0.3 and 1.0 ohm, the primary ignition coil is within specifications. If the reading differs from this specification, replace the coil and retest.

Secondary Windings

See Figure 16

The coil secondary resistance is the final check of the ignition coil. Use a DVOM to measure the resistance between the **BATT** terminal to the high voltage terminal of the ignition coil. If the reading is between 6,500–11,500 ohms, the ignition coil is OK. If the reading is less than 6,500 or more than 11,500 ohms, replace the ignition coil. If the secondary windings are within specifications and the primary circuit also tests within specifications, inspect and test the spark plug wires and the spark plugs, refer to Section 1.

REMOVAL & INSTALLATION

See Figures 17, 18, 19 and 20

- 1. Disconnect the negative battery cable.
- 2. Disengage the TFI-IV harness or the engine

control sensor wiring connector from the ignition coil, as applicable.

- 3. On the 3.8L engine, disengage the engine control wiring connector from the radio ignition interference capacitor.
- Remove the ignition coil retaining screws and the ignition coil and radio interference capacitor (if equipped) from the ignition coil mounting bracket.
- 5. Remove the ignition coil cover from the ignition coil by releasing the locking tabs on both sides of the cover, then remove the ignition coil.

To install:

- 6. Install the ignition coil, then attach ignition coil cover, making sure the cover is firmly in place.
- 7. If removed, connect the ignition coil and radio interference capacitor, then install the ignition coil retaining screws. Tighten the retaining screws to 25–35 inch lbs. (3–4 Nm).
- 8. Connect the coil wire, then engage any electrical connectors that were removed.
 - 9. Connect the negative battery cable.

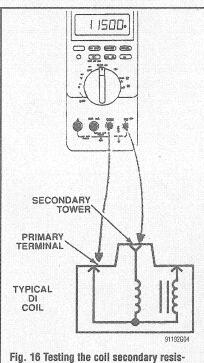


Fig. 16 lesting the coll secondary resistance



Fig. 18 Remove the ignition coil retaining screws

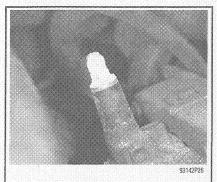


Fig. 19 If your coil has this kind of buildup, it needs a good cleaning

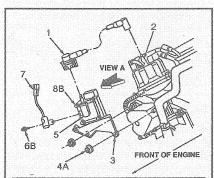
Ignition Module

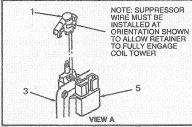
In earlier models, the ICM was referred to as the TFI-IV Ignition Module; the name was later changed to Ignition Control Module (ICM).

REMOVAL & INSTALLATION

▶ See Figures 21 and 22

- 1. Disconnect the negative battery cable.
- 2. Remove the screws attaching the cowl vent screen to the top of the cowl.

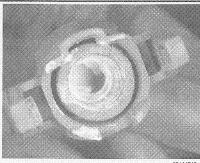




- Ignition coil to distributor high tension wiring
- 2 Distributor cap
- 3 Ignition coil mounting bracket
- 4A Nut (2 req'd)
- 5 Ignition coil
- 6B Screw
- 7 Radio ignition interference capacitor
- 88 Screw (4 req'd)
- A Tighten to 40-50 Nm (30-41 lb.ft.)
- B Tighten to 2.8-4.0 Nm (25-35 lb.in.)

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Fig. 17 Ignition coil and related components—late model 3.8L shown



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Fig. 20 This is the coil wire. Replace it if it looks like this