

#### MASS AIR FLOW SENSOR ONLY INSTALLATION INSTRUCTION

#### **ENGLISH**

#### **WARNING**

The Mass air flow sensor is a very precise electronic device that requires specific care during installation. Please follow the instructions below to prevent any damage to the unit or installation errors that may lead to a "check engine light" or engine performance issues.



Torx bit tool size 20 and 25

### BEFORE REPLACING THE MASS AIR FLOW SENSOR

- 1. Inspect and repair any engine vacuum leaks.
- 2. Inspect for loose air ducts between the mass air flow and throttle.
- 3. If air ducts are torn or cracked replace as necessary.
- 4. Replace all damaged or broken air duct clamps or screws.
- 5. Ensure the Positive Crankcase Ventilation system (PCV) is functioning properly.
- 6. Inspect and repair any wiring related to the mass air flow sensor. (Connector to Engine Computer)
- Check for any pre-existing trouble codes and fix them first.

To prevent any damage to the new sensor, it is recommended that the Mass air flow assembly be removed from the vehicle.

# MASS AIR FLOW REMOVAL AND INSTALLATION

- Disconnect the Mass Air Flow sensor electrical connector. (note the harness connector routing and position for new sensor installation)
- b) If the Mass Air Flow is supported to a bracket, remove the bolts.
- Loosen the clamps securing the air ducts to the Mass Air Flow.
- d) Remove the MAF assembly from vehicle.

- e) Using the Torx bit tool supplied with the sensor, remove the screws holding the sensor.
- f) Gently pull the sensor out from the housing.
- g) Clean housing from any contaminants that may compromise sensor functionality.
- h) Holding the sensor by the electrical connector, insert the replacement sensor in the housing. Push the sensor in until seated.
- i) Install the screws by hand and tighten using the Torx bit tool.

# Do not overtighten the screws as damage to the housing may occur.

- j) Install Mass air flow assembly to vehicle.
- k) Ensure all hoses and clamps are properly installed and tightened.
- Connect electrical connector to the sensor and ensure harness is routed properly away from hot and moving parts such as the cooling fan blades.
- m) Run the engine and let it reach normal operating temperature.
- n) If the malfunction indicator lamp (Check Engine) comes on, turn the ignition switch to the "OFF" position and inspect the connection to the sensor and air ducts.
- o) If all visual inspections are not showing any anomalies, repeat previous step M.
- p) If the malfunction indicator lamp (Check Engine) is still on, retrieve the trouble codes and refer to the appropriate service manual or technical information for your vehicle for corrective action.