

MSD INSTALLATION INSTRUCTIONS

Atomic MAP Sensor PN 2933

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Parts Included:

1 - MAP Sensor	2 - Oval O-rings
1 - O-Ring	1 - Foam gasket
1 - Spacer	

It is best to remove throttle body from the engine when installing replacement parts.

REMOVAL

- Disconnect the battery (-) cable.
- Remove the Air Cleaner assembly.
- Disconnect the throttle cable assembly, vacuum hoses, electrical connections, and fuel lines from the throttle body. Be prepared to catch fuel when removing fuel lines.
- Caution should be taken when disassembling the throttle body.

Remove the eight bolts that secure the fuel rails from the throttle body (Figure 1).

Disconnect the electrical connectors from the idle air control motor (IAC), injectors, fuel pressure sensor (FPS), and pull the rails away from the throttle body (Figure 2).

Note: The fuel rails are sealed with an O-Ring on each side of the throttle body fuel rail mounting surface. Remove the o-rings (Figure 3). Take caution not to score the machined surfaces.

⚠ WARNING

Installation of this product requires detailed knowledge of automotive systems and repair procedures. Installation of fuel system parts and any fuel tank modifications must be carried out by a qualified automotive technician. Installation of fuel system parts requires handling of gasoline. Ensure that work is performed in a well ventilated area with an approved fire extinguisher nearby. Extinguish all open flames, prohibit smoking and eliminate all sources of ignition in the area of the vehicle before beginning the installation.

When working with fuel systems, eye goggles and other safety apparel should be worn to protect against debris and sprayed gasoline. The finished work must be thoroughly checked to ensure there are no fuel leaks.

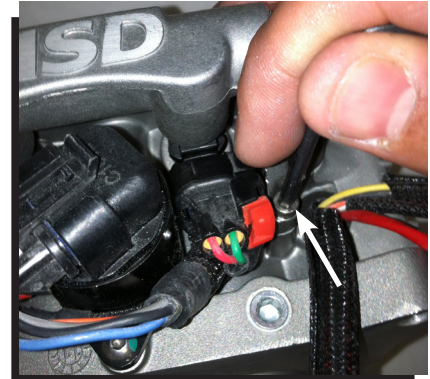


Figure 1

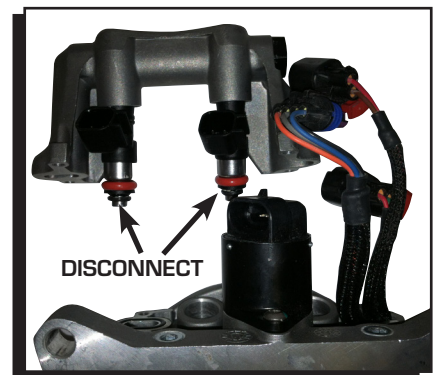


Figure 2

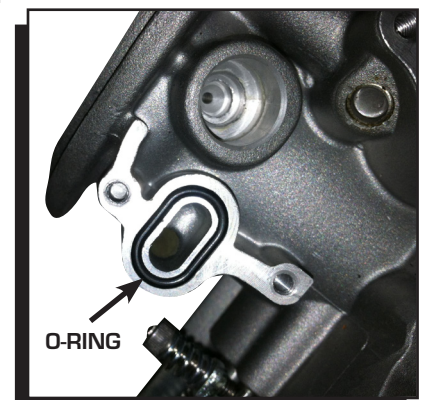


Figure 3

Remove the four screws that hold the ECU (Block with MSD cast into it) to the throttle body (Figure 4).

Carefully lift the block straight up away from the throttle body. There are four pins and an intake air temperature (IAT) sensor under the ECU block that can easily be damaged from mishandling (Figure 5). The IAT element sits in a plastic tube that may or may not lift out when the ECU is removed from the throttle body. Be careful not to lose the IAT tube (Figure 6).

Remove the two Torx screws retaining the Manifold Absolute Pressure (MAP) sensor (Figure 7).

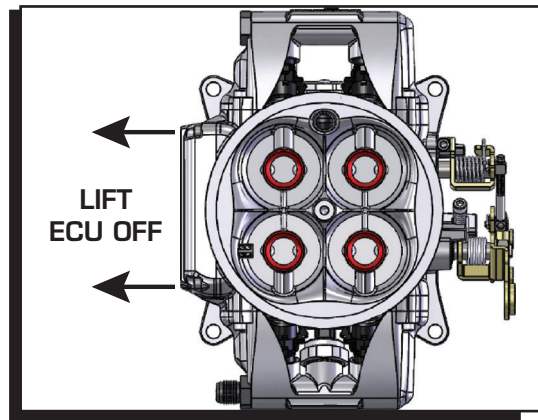


Figure 4

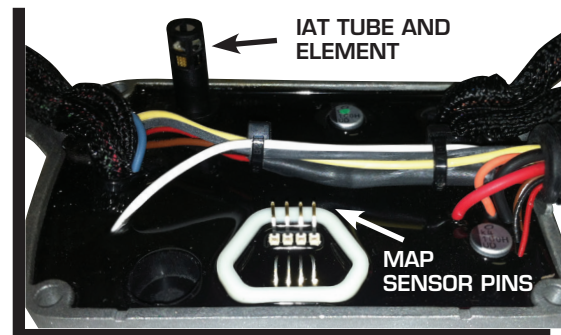


Figure 5

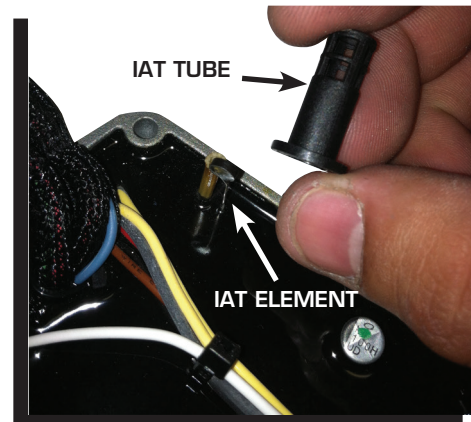


Figure 6

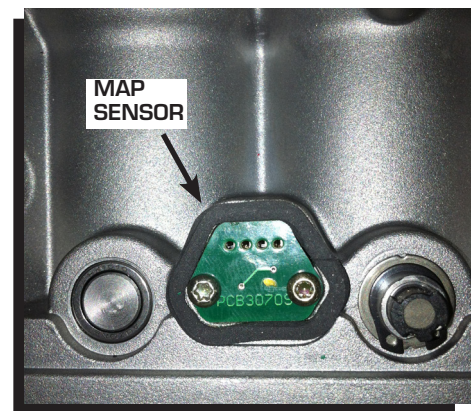


Figure 7

Using a pick or a fine flatblade screw driver, carefully pry the MAP sensor, MAP sensor spigot O-ring and spacer out of the throttle body (Figure 8).

INSTALLATION

Place the plastic spacer on the MAP sensor spigot. Place the MAP sensor O-ring on top of the spacer. Lightly apply white grease to the O-ring for ease of installation (Figure 9).

Place the O-ring on the MAP sensor spigot and push the spigot into the throttle body. Secure the MAP sensor with the torx screws. **Do not over-tighten the screws.**

Remove the foam gasket from the throttle body and replace with the supplied gasket. Place the IAT tube into the orifice on the throttle body (Figure 10).

Carefully lower the ECU assembly onto the throttle body. Avoid forcing the ECU assembly as the IAT sensor and four pins for the MAP sensor are delicate. Double check the four map sensor pins and IAT sensor have lined up. Route the wire harnesses in a manner that they do not pinch when the ECU is bolted down (Figure 11).

Assembly of the fuel rails is reverse order of the disassembly.



Figure 8

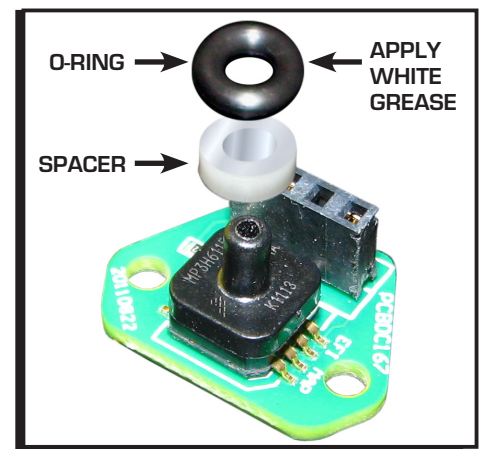


Figure 9

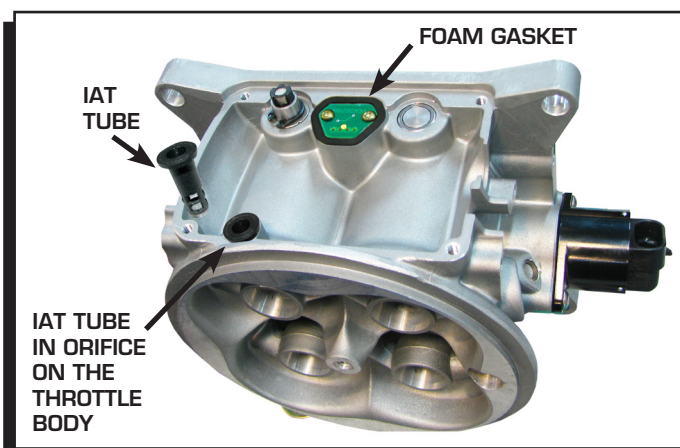


Figure 10

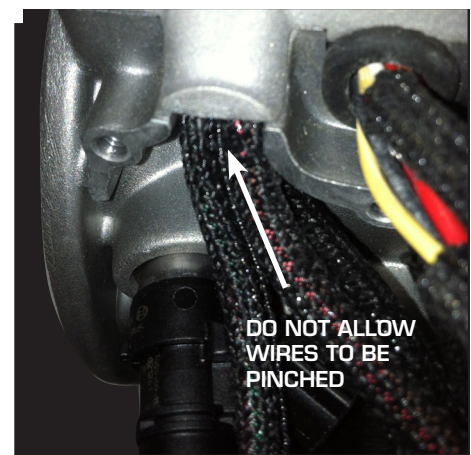


Figure 11

