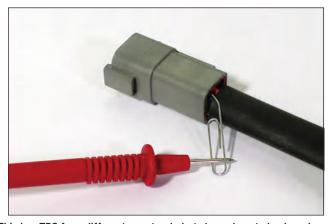
TPS Installation

- 1. Disconnect negative battery terminal.
- 2. Remove the old Throttle Position Sensor (TPS) and wiring connector.
- 3. Install new TPS on throttle shaft and thread in mounting screws.
 - a. If the TPS does not line up with the throttle shaft opening, remove the TPS mounting bracket from the injection pump and proceed to set the TPS on the throttle shaft's socket.
 - b. TPS should be installed such that the mounting bracket has to be rotated clockwise to align with the mounting holes and the hex head on TPS should be near flush with the top surface of the throttle shaft.
- 4. Torque TPS mounting bracket screws to 60in-lbs (7Nm) and the TPS mounting screws to 20in-lbs (2Nm).
- 5. Reinstall the TPS connector and negative battery cable.

TPS Adjustment

- 1. Check throttle for proper adjustment.
 - a. Throttle lever must contact the low idle speed screw and reach the breakover when the throttle is at the wide open position. If either of these conditions are met, the throttle linkage must be adjusted (refer to service manual or equivalent for adjustment procedure and diagrams). If conditions are met, continue to Step 2.
- 2. Back probe the center terminal on the TPS electrical connector.



This is a TPS for a different year truck, but shows how to back probe an electrical connection with a paper clip for easy access for the voltmeter.

3. Connect positive lead from voltmeter to this probe and ground the negative lead.

Continued on Next Page ▶



Installation:

Throttle Position Sensor, '90-'93

- 4. Switch ignition to the ON position and ensure that the throttle lever is in contact with the low idle speed screw. Voltmeter should read 1 volt.
 - a. If voltage output is not 1 volt, use a wrench to adjust the TPS shaft until it reaches 1 volt.
- 5. Move throttle lever to wide open throttle position. The spring load breakover lever should be at rest against the breakover spring.
 - a. If not, the throttle actuation rod must be adjusted before adjusting the TPS (refer to service manual or equivalent for adjustment procedure and diagrams).
- 6. With the throttle wide open, ensure TPS voltage output is at least 3.25 volts.
 - a. If 3.25 volts is not achieved, use a wrench to adjust the TPS sensor shaft until the voltage reaches 3.25 volts.

We hope you have found these tips to be helpful. We sincerely thank you for your purchase from Geno's Garage.