

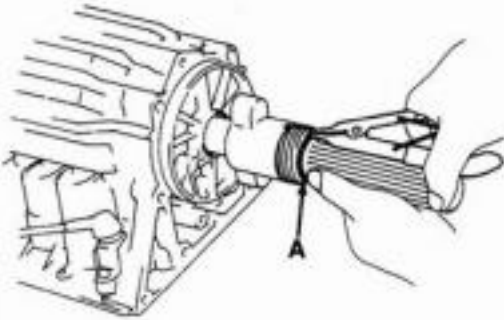


AW-4 AUTOMATIC TRANSMISSION IN-VEHICLE SERVICE-TESTING-ADJUSTMENT



Remove the extension housing.

Remove the speedometer drive gear snap ring (A).

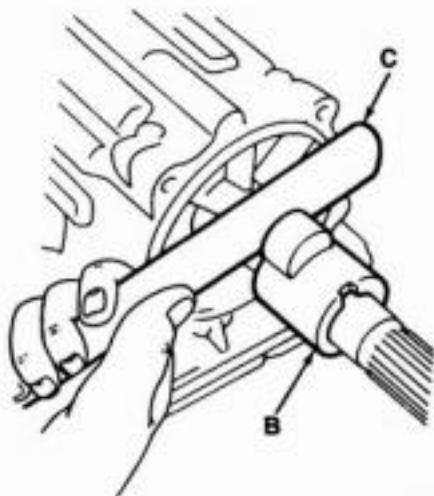


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Remove the speedometer drive gear and the spacer (if equipped).

Remove the rotor (B) by carefully prying it off the output shaft with a wood dowel or hammer handle (C).

Clean the sealing surfaces of the transmission case and extension housing.



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Rotor and Speedometer Drive Gear Installation

Install the rotor, spacer (if equipped) and drive gear on the output shaft and install the drive gear snap ring.

Apply a bead of Loctite 518 sealant to the transmission case sealing surface and install the extension housing on the case.

Tighten the extension housing bolts to 34 N·m (25 ft-lbs) torque.

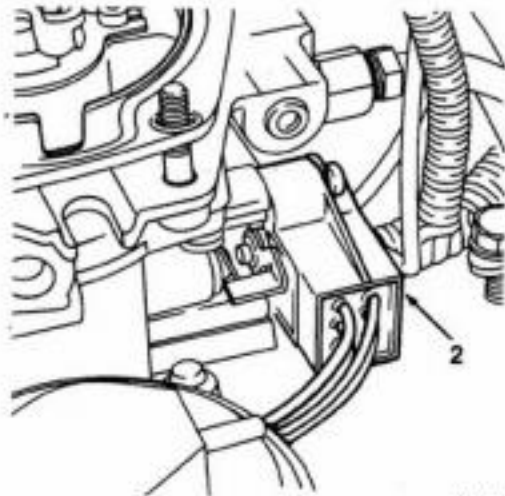
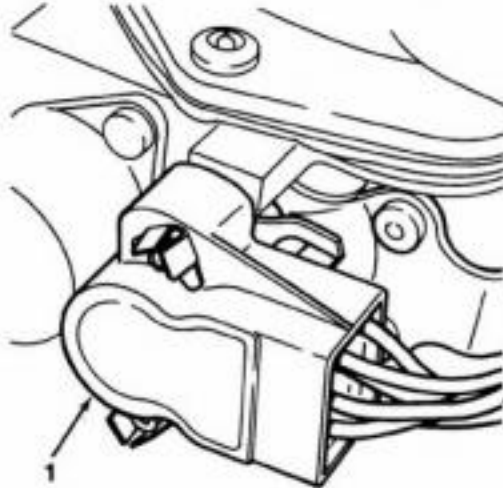
Install the components removed to gain access to the rotor and drive gear.

THROTTLE POSITION SENSOR (TPS)

A separate throttle position sensor is used for automatic transmission applications. The transmission sensor is attached to the base of the throttle body. Sensor (1) is used on 6-cyl. models. Sensor (2) is used on 4-cyl. models.



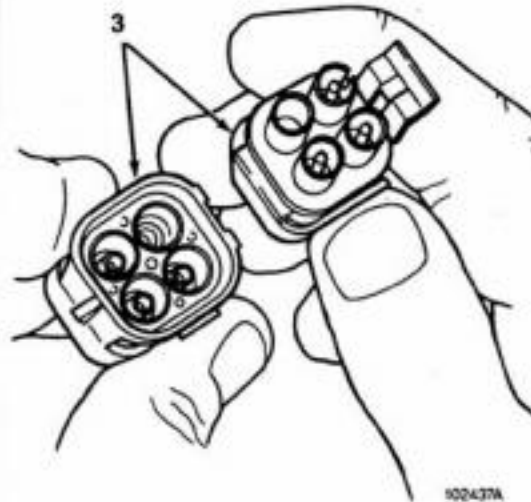
AW-4 AUTOMATIC TRANSMISSION IN-VEHICLE SERVICE-TESTING-ADJUSTMENT



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Sensor operation is checked by measuring input and output voltage. Sensor adjustment involves changing output voltage by rotating the sensor to change voltage. Sensor input and output voltage is checked at the sensor wire harness connectors with a voltmeter.

NOTE: The connectors (3) that connect the TPS harness to the TCU harness have a square shape. The connector terminals are identified by letters molded into the back of each connector.



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TPS Voltage Measurement

Turn the ignition key to the On position.

Measure sensor input voltage as follows.

NOTE: Do not disconnect the harness connectors to measure voltage in the following steps. Insert the voltmeter test leads through the back of each connector to make contact with the indicated wire terminals.

- Connect the voltmeter negative lead to the connector D terminal.
- Connect the voltmeter positive lead to the connector A terminal.
- Close the throttle plate completely and note input voltage. Be sure the throttle lever is seated against the idle stop.
- Input voltage at terminals A and D should be approximately 5.0 volts on both 4- and 6-cyl. models.



AW-4 AUTOMATIC TRANSMISSION IN-VEHICLE SERVICE-TESTING-ADJUSTMENT



Check sensor output voltage as follows:

- Disconnect the voltmeter positive lead and reconnect it to terminal B.
- Maintain the throttle plate in the closed position and note output voltage.
- On 6-cyl. models, output voltage should be approximately 4.2 volts.
- On 4-cyl. models, output voltage should be approximately 0.2 volts.
- If sensor output voltage is incorrect, leave the voltmeter connected and proceed to TPS Adjustment.

TPS Adjustment

Be sure the voltmeter is still connected to terminals B and D.

Loosen the sensor attaching screws. Then partially retighten one of the screws to secure the sensor for adjustment.

Rotate the sensor while observing the voltmeter.

When required output voltage is obtained, tighten the sensor attaching screws securely and remove the voltmeter.

TPS Replacement

Disconnect the battery negative cable.

Remove the sensor attaching screws.

Disconnect the sensor harness connectors and remove the sensor.

Connect the replacement sensor to the TCU harness.

Mount the sensor on the throttle body, but do not fully tighten the sensor attaching screws at this time.

Check and adjust sensor output voltage. Refer to the TPS Adjustment procedure.

Connect the battery negative cable.

TRANSMISSION-TORQUE CONVERTER REMOVAL

Raise the vehicle.

Drain the transmission fluid and reinstall the oil pan drain plug.

Disconnect the upper half (A) of the transmission fill tube.

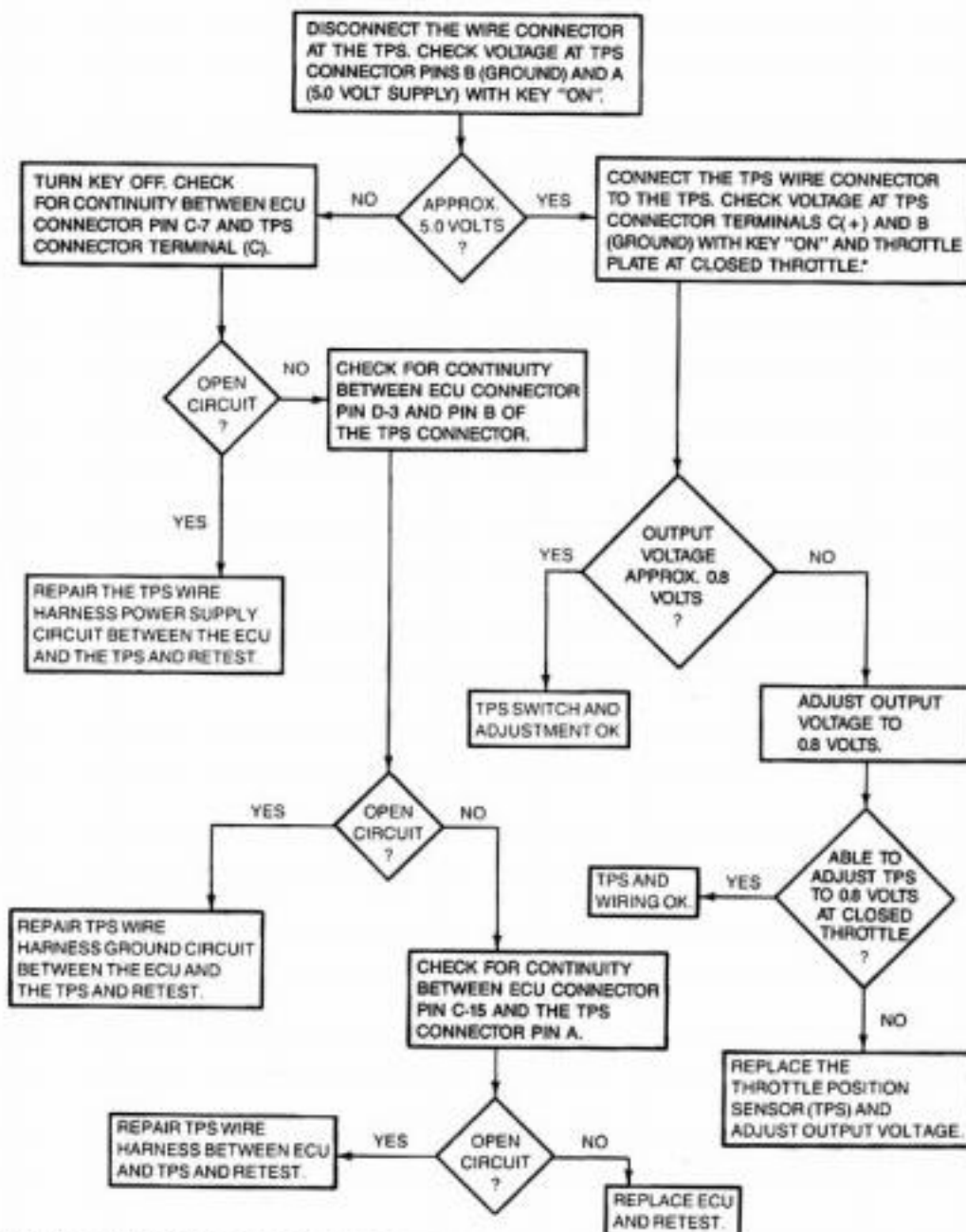


4.0L MULTI-POINT FUEL INJECTION



DIAGNOSIS/TESTING

THROTTLE POSITION SENSOR (TPS) TEST



* DO NOT UNFASTEN THE SENSOR WIRE HARNESS CONNECTOR. INSERT THE VOLTMETER TEST LEADS THROUGH THE BACK OF THE WIRE HARNESS CONNECTOR TO MAKE CONTACT WITH THE SENSOR TERMINALS.

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