



Throttle Position (TP) Sensor (18.30.17)

Removal

NOTE :

The TP sensor is part of the throttle body and cannot be serviced separately.

- 1 . Disconnect the battery ground cable. For additional information, refer to [Specifications](#) (Section 414-00)
- 2 . Remove the engine cover. For additional information, refer to [Engine Cover - 4.0L \(12.30.50\)](#) (Section 501-05)
- 3 . Remove the air intake resonator. For additional information, refer to (Section 303-12)
- 4 . Disconnect the TP sensor electrical connector.

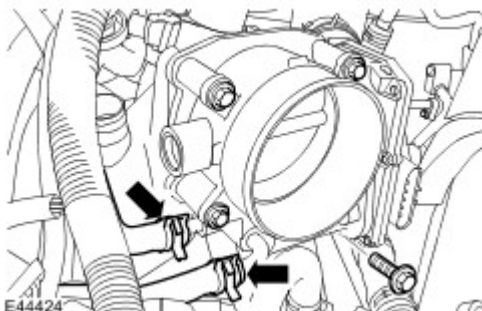


- 5 .  **WARNING:** Since injury such as scalding could be caused by escaping steam or coolant, do not remove the filler cap from the coolant expansion tank while the system is hot.

Disconnect the coolant hoses from the throttle body.

- Clamp the throttle body coolant hoses to minimize coolant loss.
- Release the throttle body hose clips

- 6 . Remove the throttle body.
 - Remove the 4 bolts.
 - Remove and discard the throttle body gasket.



Installation

- 1 . Install the throttle body.
 - ▶ Clean the component mating faces.
 - ▶ Install a new gasket.
 - ▶ Tighten the 4 bolts to 10 Nm (7 lb.ft).
- 2 . Connect the coolant hoses to the throttle body.
 - ▶ Secure the throttle body hoses clips.
 - ▶ Remove the hose clamps from the throttle body hoses.
- 3 . Install the TP sensor electrical connector.
- 4 . Install the air intake resonator. For additional information, refer to (Section 303-12)
- 5 . Install the engine cover. For additional information, refer to [Engine Cover - 4.0L \(12.30.50\)](#) (Section 501-05)
- 6 . Connect the battery ground cable. For additional information, refer to [Specifications](#) (Section 414-00)
- 7 . Check and top-up the coolant.
- 8 . Use T4 to re-calibrate a new TP sensor.