

Throttle Position (TP) Sensor

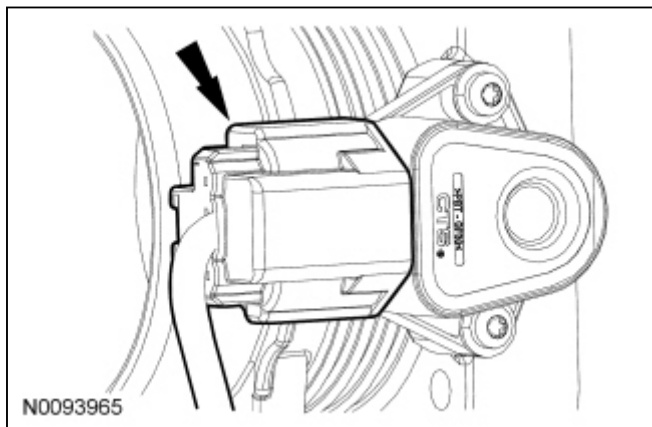
Removal

All engines

1. Remove the Air Cleaner (ACL) outlet pipe. For additional information, refer to [Section 303-12](#).

4.0L SOHC engine

2. Disconnect the Throttle Position (TP) sensor electrical connector.

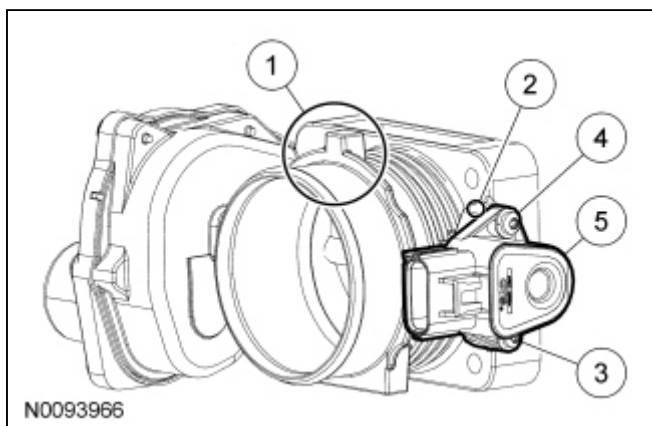


3. **NOTICE:** Do not put direct heat on the Throttle Position (TP) sensor or any other plastic parts because heat damage may occur. Damage may also occur if Electronic Throttle Body (ETB) temperature exceeds 120°C (248°F).

NOTE: Do not use power tools.

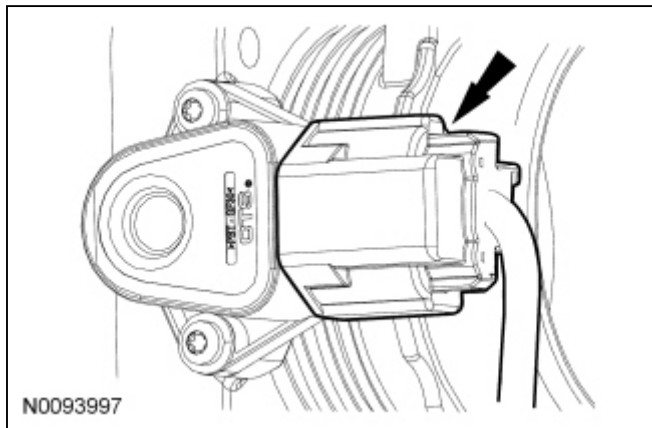
Remove the **TP** sensor.

1. Using a suitable heat gun, apply heat to the top of the **ETB** until the top **TP** sensor bolt ear reaches approximately 55°C (130°F), this should take no more than 3 minutes using an 1,100-watt heat gun. The heat gun should be about 25.4 mm (1 in) away from the **ETB**.
2. Monitor the temperature of the top **TP** sensor bolt ear on the **ETB** with a suitable temperature measuring device, such as a digital temperature laser or infrared thermometer, while heating the **ETB**.
3. Using hand tools, quickly remove the bolt farthest from the heat source first and discard.
4. Using hand tools, remove the remaining bolt and discard.
5. Remove and discard the **TP** sensor.



4.6L (3V) and 5.4L (4V) engines

4. Disconnect the **TP** sensor electrical connector.

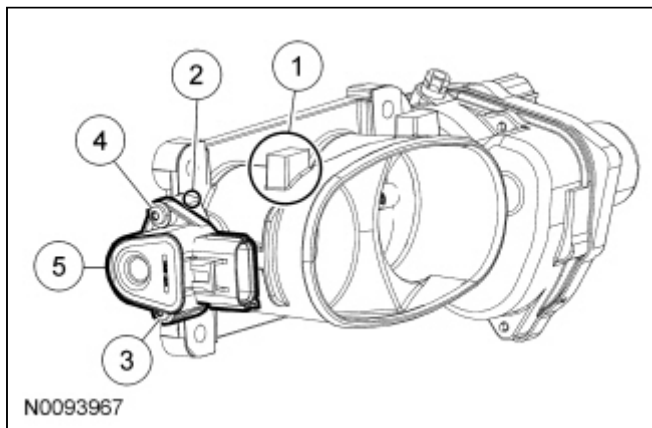


5. **NOTICE:** Do not put direct heat on the Throttle Position (TP) sensor or any other plastic parts because heat damage may occur. Damage may also occur if Electronic Throttle Body (ETB) temperature exceeds 120°C (248°F).

NOTE: Do not use power tools.

Remove the **TP** sensor.

1. Using a suitable heat gun, apply heat to the top of the **ETB** until the top **TP** sensor bolt ear reaches approximately 55°C (130°F), this should take no more than 3 minutes using an 1,100-watt heat gun. The heat gun should be about 25.4 mm (1 in) away from the **ETB**.
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Installation

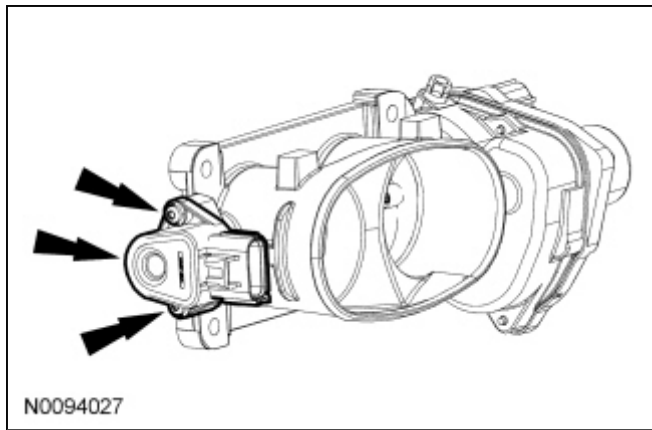
4.6L (3V) and 5.4L (4V) engines

1. **NOTE:** When installing the new **TP** sensor, make sure that the radial locator tab on the **TP** sensor is aligned with the radial locator hole on the **ETB**.

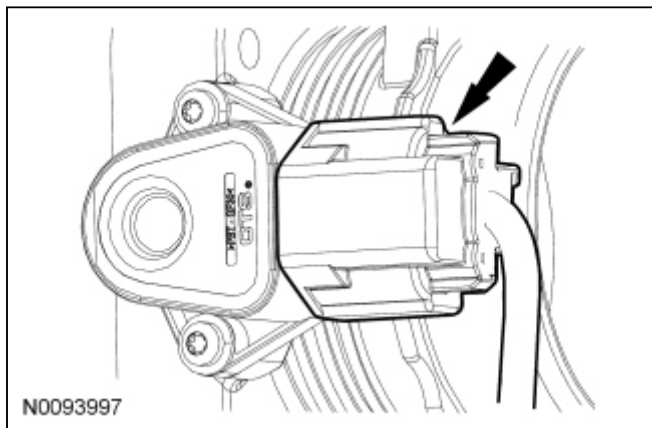
NOTE: Do not use power tools.

Install the new **TP** sensor.

- Using hand tools, install the 2 new bolts.
 - Tighten to 3 Nm (27 lb-in).



2. Connect the **TP** sensor electrical connector.



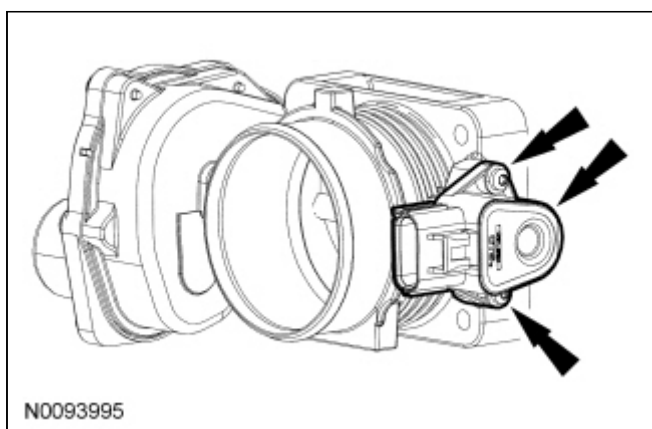
4.0L SOHC engine

3. **NOTE:** When installing the new **TP** sensor, make sure that the radial locator tab on the **TP** sensor is aligned with the radial locator hole on the **ETB**.

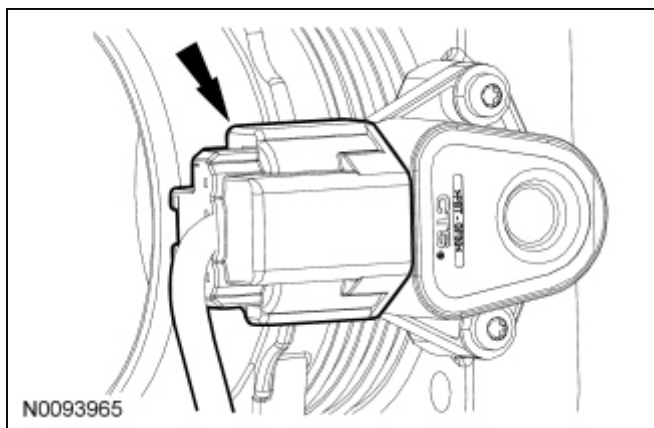
NOTE: Do not use power tools.

Install the new **TP** sensor.

- Using hand tools, install the 2 new bolts.
 - Tighten to 3 Nm (27 lb-in).



4. Connect the **TP** sensor electrical connector.



All engines

5. Install the [ACL](#) outlet pipe. For additional information, refer to [Section 303-12](#).
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