# Technical Bulletin

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## Toyota Throttle Position Sensor (Potentiometer)

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Owing to demand, Blue Print is now cataloguing three Toyota Throttle Position Sensors (Potentiometers).


This device signals the exact position of the throttle valve at any time to the engine ECU by varying the output voltage through a variable resistor or potentiometer. It is a key component in the vehicle engine management system and if malfunctioning may cause symptoms such as;

- **Hesitation or 'flat spot'**
- **Engine stalling**
- **Idle speed surging**
- **'Bucking' during deceleration**

A malfunction with this should register a fault code within the ECU diagnostic memory, however the engine warning lamp (MIL) may not necessarily illuminate. It may be accompanied by other codes such as 'Lean Mixture'. If the unit uses carbon tracks, dirt or carbon deposits will badly affect the performance (see images).
Specialist equipment is not needed to retrieve fault codes stored in the ECU memory, however the relevant Toyota procedure should be followed to obtain them (using the 'blink' code from the engine warning lamp). The sensor unit may be tested using resistance measurements between sensor terminals or by a suitable diagnostic tool/ oscilloscope. As failure is often a result of wear at certain throttle positions, we recommend the use of specialist equipment.

Remember that any fault codes should be cleared from the ECU memory after the repair has been carried out, and that the final position of the sensor must be set correctly prior to testing or after its replacement (please refer to the workshop manual or technical information for your specific vehicle model).



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