DTC P1629 Theft Deterrent Fuel Enable Signal Not Received

Diagnostic Instructions

- Perform the Diagnostic System Check Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category.

DTC Descriptor

DTC P1629: Theft Deterrent Fuel Enable Signal Not Received

Circuit/System Description

The theft deterrent module (TDM) sends the prerelease password to the engine control module (ECM) via the serial data circuit. The ECM then sends a challenge to the TDM. Both the ECM and TDM perform a calculation on this challenge. If the calculated response from the TDM equals the calculation performed by the ECM, the ECM will allow vehicle starting.

Conditions for Running the DTC

- Ignition is in the ACCESSORY or RUN position.
- The ECM is not in learn mode.

Conditions for Setting the DTC

The ECM receives does not receive the challenge response from the TDM within the required amount of time.

Action Taken When the DTC Sets

The security indicator will illuminate.

Conditions for Clearing the DTC

A current DTC P1629 will be cleared when a challenge response is

received.

 A history DTC will be cleared after 40 malfunction-free ignition cycles or when a scan tool is used to clear DTCs.

Diagnostic Aids

DTC P1629 is an indicator that the challenge/response was not received within the required time. This does not necessarily indicate a fault is present with the TDM or ECM. Factors such as a long engine crank, a delay in the serial data communication, or B-codes set in the TDM will cause DTC P1629 to set. This DTC should not be used as a fault indicator, but rather as a symptom to assist in the diagnosis of these other systems.

Reference Information

Schematic Reference

Immobilizer Schematics

Connector End View Reference

Component Connector End Views

Description and Operation

Immobilizer Description and Operation

Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Scan Tool Reference

Control Module References for scan tool information