DTC P1631 Theft Deterrent Start Enable Signal Not Correct

Circuit Description

This test checks for mismatched passwords between the body control module (BCM) and powertrain control module (PCM). Whenever replacing the BCM or PCM, follow the theft learn procedure in order for the system to learn the new password.

Conditions for Running the DTC

Mismatched passwords between the BCM and PCM

Conditions for Setting the DTC

- The PCM detects a wrong password from the BCM.
- Fuel disable lockout is set.
- The system has received an incorrect fuel continue password.
- A faulty ignition switch
- The BCM was replaced.

Action Taken When the DTC Sets

- The engine starts and then the engine stalls immediately.
- The PCM stores the DTC information into memory when the diagnostic runs and fails.
- The malfunction indicator light (MIL) will not illuminate.
- The PCM records the operating conditions at the time the diagnostic fails. The PCM stores this information in the Failure Records.

Conditions for Clearing the DTC

- A last test failed, or current DTC, clears when the diagnostic runs and does not fail.
- A history DTC will clear after 40 consecutive warm-up cycles, if no failures are reported by this or any other non-emission related diagnostic.
- Use a scan tool in order to clear the DTC.

Test Description

The numbers below refer to the step numbers on the diagnostic table.

3. The 11 minute and 30 second time criteria are a minimum required amount of time. The time limit can exceed this limit without interfering with the Auto Learn Procedure. Use a scan tool VTD Auto Learn Timer equals Inactive in order to determine when the 11 minutes has expired.

6. If DTC P1631 is set, this indicates that you did not follow the procedure correctly. Perform the Re-learn procedure again.

DTC P1631 Theft Deterrent System-Password incorrect

Step	Action	Value (s)	Yes	No
1	Did you perform the Powertrain On-Board Diagnostic (OBD) System Check?	--	Go to Step 2	Go to Powertrain On Board Diagnostic (OBD) System Check
2	**Important** Check for any body control module DTCs being set except if you were sent here from PCM Replacement before proceeding with this table. If a body control module DTC is set, refer to the appropriate BCM DTC. Is a Tech 2® available?	--	Go to Step 4	Go to Step 3
3	**Important:** • This step is for United States and Canada vehicles only. • Maintain the battery voltage while the PCM is in the Learn Procedure. Follow this procedure exactly as indicated or you will have to repeat the procedure from the beginning. 1. Turn ON the ignition, leaving the engine OFF for 11 minutes. 2. Turn OFF the ignition for 30 seconds. 3. Turn ON the ignition, with the engine OFF for 11 minutes. 4. Turn OFF the ignition for 30 seconds. 5. Turn ON the ignition, with the engine OFF for 11 minutes. 6. Turn OFF the ignition for 30 seconds. 7. Turn ON the ignition leaving the engine OFF and wait 30 seconds. 8. Attempt to start the engine. Does the engine start and operate normally?	--	Go to Step 5	Go to Step 6
4	**Important** Maintain the battery voltage while the PCM is in the Learn Procedure. Follow this procedure exactly as indicated or you will have to repeat the procedure from the beginning. 1. Enter the service programming system (SPS) using a Tech 2®. 2. Enter the vehicle information. 3. Choose the Request Info soft key on the scan tool. 4. Select Done. 5. Follow the instructions on the vehicle set-up screen. 6. Disconnect the scan tool from the vehicle. 7. Connect the scan tool to the Techline terminal. 8. At the Techline terminal, select service programming system (SPS) and select terminal to Tech 2® programming method. 9. Select Done. 10. Follow the instructions on the remaining screens. 11. Select the vehicle theft re-learn option. 12. Select Program at the summary screen. The terminal will	--		

	download information to the Tech 2. 13. Return the scan tool to the vehicle. 14. Connect the scan tool to diagnostic link connector (DLC). 15. Select Service Programming from the Tech 2 main menu. 16. Answer the prompts regarding the model year and vehicle type. 17. Press the Theft Re-learn soft key on the Tech 2. 18. Follow the instructions on the remaining screens. ○ The PCM and the BCM will be prepared for re-learn. ○ A security timer will be on for approximately 11 minutes. It is important that during the 11 minute-wait, the user keeps the scan tool connected to the vehicle. ○ When the PCM and the BCM are prepared to re-learn, turn OFF the ignition for 30 seconds and then start the engine. Does the engine start and operate normally?		Go to Step 5	Go to Step 6
5	**Important:** Monitor all DTC status parameters and note any additional DTCs before clearing DTCs. 1. Clear the powertrain control module (PCM) DTCs. 2. Turn OFF the ignition for 30 seconds. 3. Attempt to start the engine. Does the engine start and operate normally?	--	System OK	Go to Step 6
6	Are DTCs P1626 or P1631 set?	--	Go to applicable DTC table	Go to Step 2