

General Service Bulletin (GSB):	Permanent DTC Overview
GSB Overview:	This bulletin will provide a quick overview of what a Permanent DTC is and how they will be displayed.
NOTE: This information is not intended to replace or supersede any warranty, parts and service policy, Work Shop Manual (WSM) procedures, technical training, or wiring diagram information.	

Permanent Diagnostic Trouble Codes (DTCs)

A Permanent Diagnostic Trouble Code (DTC) is stored when a DTC is confirmed and the Malfunction Indicator Lamp (MIL) has been illuminated. A Permanent DTC can only then be cleared by the module strategy and cannot be erased by clearing DTCs with a scan tool, a Keep-Alive Memory (KAM) reset, or battery disconnect. Permanent DTCs will be displayed on Integrated Diagnostic System (IDS) beginning with release R104.

The intended use of the Permanent DTC is to prevent vehicles from passing an in-use inspection simply by disconnecting the battery or clearing DTCs with a scan tool prior to the inspection.

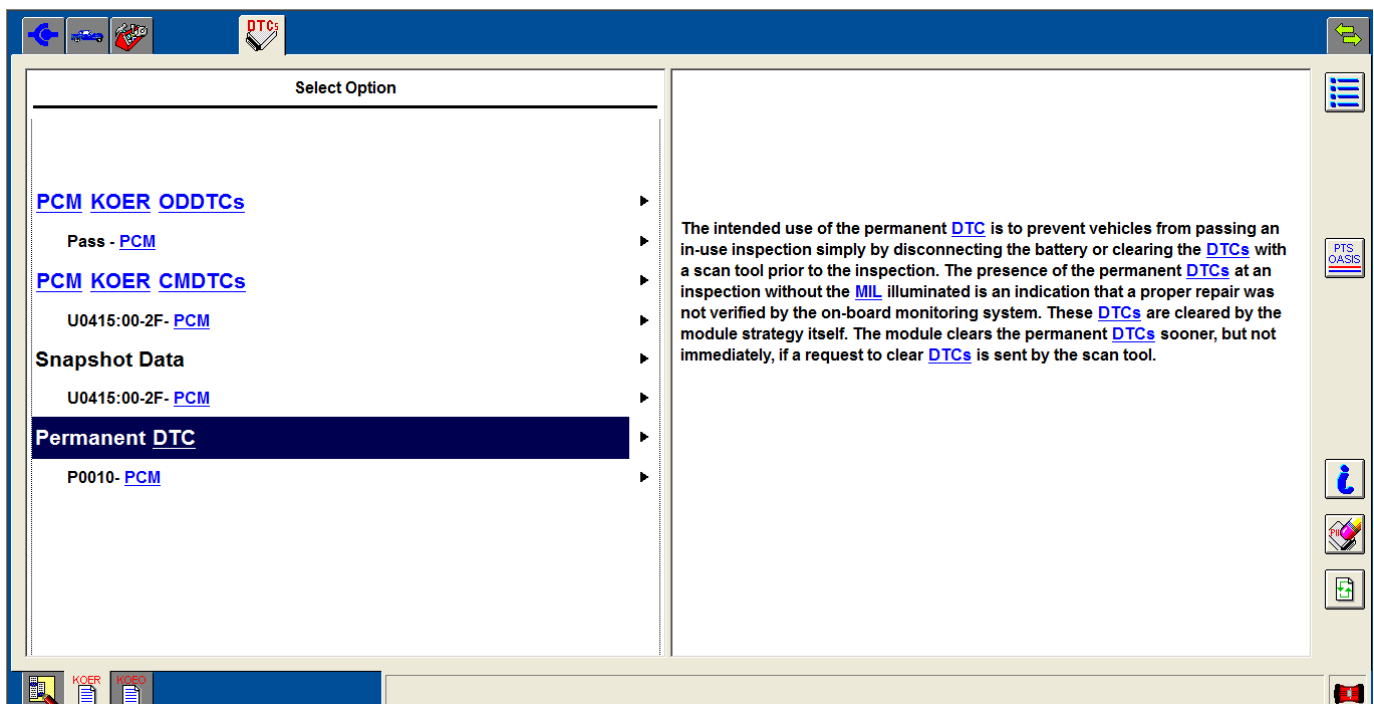
A Permanent DTC will be erased one of two ways:

- After three consecutive confirmed fault-free monitoring cycles. The MIL is extinguished and the Permanent DTC is cleared at the start of the fourth fault-free monitoring cycle.
- After one confirmed fault-free monitoring cycle following a scan tool “clear DTC” request.

A driving cycle must include the following:

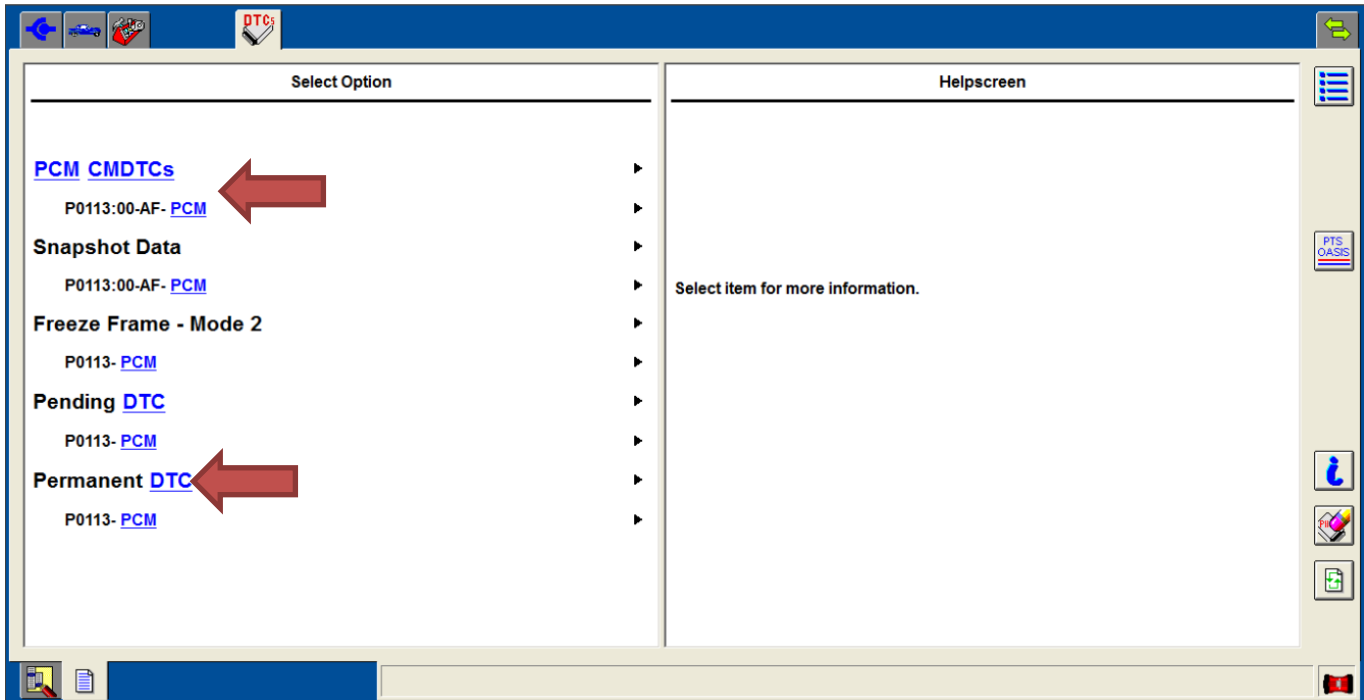
- The OBD monitor must run and determine that that fault is no longer present.
- Cumulative time since engine start (or propulsion system active for hybrid vehicles) is greater than 10 minutes.
- Cumulative vehicle operation above 40 km/h (25 MPH) occurs for greater than 5 minutes.
- Continuous operation at idle (i.e., accelerator pedal released by driver and vehicle speed less than 1 km/h or 1 MPH) for greater than 30 seconds.

How Permanent DTCs Will Be Displayed On IDS

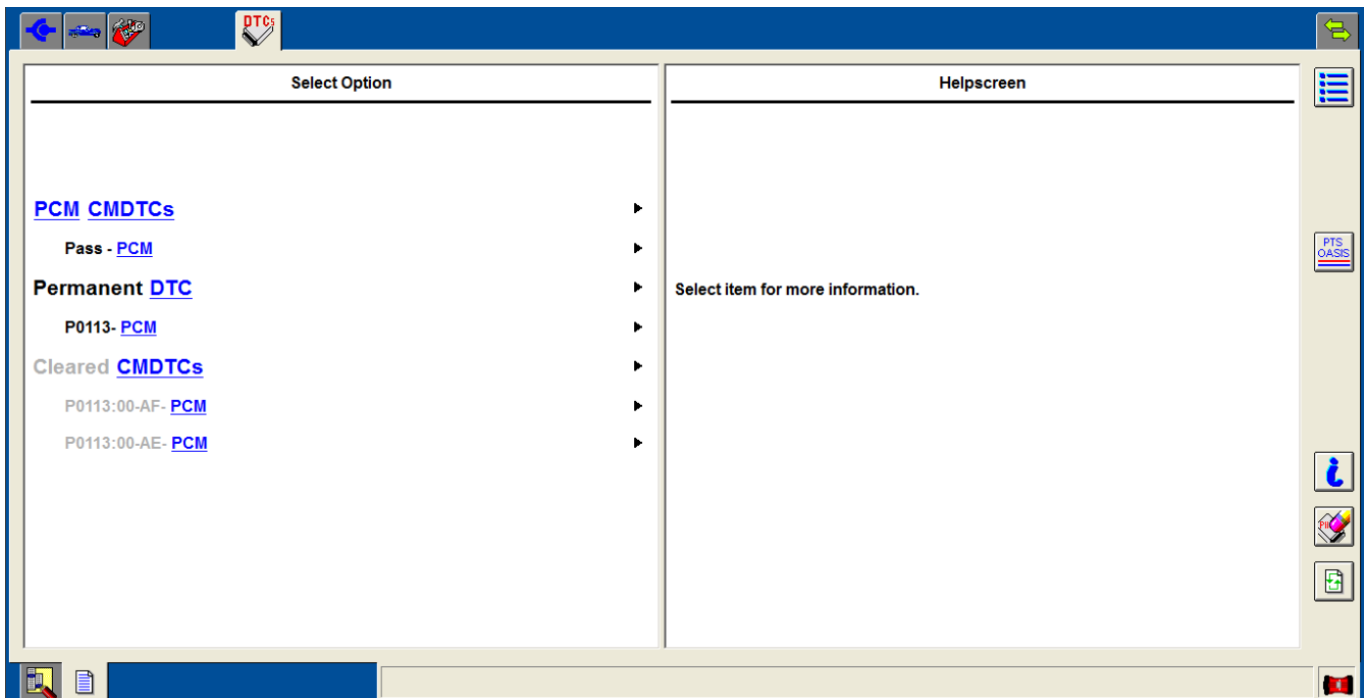


Typical Permanent DTC Scenario

Fault is detected and MIL is illuminated – Permanent DTC and CMDTC is set



Vehicle is repaired and a scan tool code clear is performed – Permanent DTC remains until a successful drive cycle is performed.



The presence of a Permanent DTC(s) without an illuminated MIL is an indication that the on-board monitoring system has not yet completed its verification. After repair, the remaining Permanent DTC corresponding to the repair can be treated as a P1000.

DO NOT attempt to diagnose or repair a Permanent DTC(s) without a corresponding customer complaint unless the vehicle is rejected during an Inspection/Maintenance (I/M) inspection.