2001 PCED On Board Diagnostics II Diesel

SECTION 2: Diagnostic Methods
Procedure revision date: 08/22/2002

### **Freeze Frame Data**

## **Description**

Freeze Frame Data allows access to emission related values from specific generic PIDs. These values are stored the instant an emission related DTC is stored in Continuous Memory. This provides a snapshot of the conditions that were present when the DTC was stored. Once one set of freeze frame data is stored, this data will remain in memory even if another emission related DTC is stored. There are no fuel system DTCs for the 7.3L diesel. When a DTC associated with the freeze frame is erased or a PCM memory reset is performed, new freeze frame data can be stored again. In the event of multiple emission related DTCs in memory, always note the DTC for the freeze frame data. Load, RPM and VSS are the only parameters used for the 7.3L Diesel; all other parameters are to be ignored.

#### FREEZE FRAME DATA TABLE

PID#	Acronym	Description	Measurement Units
0004	LOAD	Calculated Load Value	PERCENT
000C	RPM	Engine RPM	R/MIN
000D	VSS	Vehicle Speed	MPH-KMH

## Accessing Freeze Frame PID Data

#### **New Generation Star**

- Perform the necessary vehicle preparation and visual inspection.
- Connect scan tool to DLC.
- SELECT CORRECT VEHICLE, YEAR and MODEL.
- Select year, engine, model with the appropriate qualifier, if needed (i.e., transmission, Federal, California).
- Follow operating instructions from the menu.
- Select GENERIC OBD II FUNCTIONS.
  - Press CONT button if all OBD II monitors are not complete.
- Turn key on.
- Select FREEZE FRAME PID REQUEST.

### **Generic Scan Tool**

Refer to the manufacturer's manual for specific instructions.

# **Resetting Vehicle Specific Codes**

#### **New Generation Star**

- Perform the necessary vehicle preparation and visual inspection.
- SELECT CORRECT VEHICLE YEAR and MODEL.
- Follow operating instructions from the menu.
- Select DIAGNOSTIC DATA LINK.
- Select PCM.
- Select DIAGNOSTIC TEST MODES.
- Select RETRIEVE/CLEAR CONTINUOUS DTCs.
- Select CLEAR.
- Generic Scan Tool.
- Refer to the manufacturer's manual for specific instructions.

### **OBD II PID Data Monitor**

The PID monitor for OBD II offers real time evaluation of several emissions-related parameters. Most of these are related to the HO2S and EGR, for which the diesel has no equivalent. The only parameters which apply to 7.3L diesel applications are CCNT, MAP, MIL, RPM and VSS.