Causes:	• Fuel injector 10 • Running out of fuel • EVAP canister purge valve • Fuel pressure • Evaporative emission system • Exhaust gas recirculation (EGR) system • Base engine • Misfire monitor neutral profile correction has not been relearned since the last mechanical repair
Diagnostic Aids:	Misfire is defined as lack of combustion in a cylinder due to absence of spark, incorrect fuel metering, low compression, or any other cause. The malfunction indicator lamp (MIL) blinks once per second when a misfire severe enough to cause catalyst damage is detected. If the MIL is on steady state due to a misfire, this indicates the threshold for emissions was exceeded and caused the vehicle to fail an inspection and maintenance tailpipe test.

Application	Key On Engine Off	Key On Engine Running	Continuous Memory
All	GO to Pinpoint Test HD .		

P0313 - Misfire Detected With Low Fuel

Description: **Possible Causes:**	This DTC sets when an engine misfire fault is detected with low fuel level. • Customer driving habits • Low fuel or no fuel in tank (less than 1/8 tank)		
Diagnostic Aids:	Verify the fuel level is above 1/8 before diagnosing engine misfire DTCs.		
Application	**Key On Engine Off**	**Key On Engine Running**	**Continuous Memory**
All	GO to Pinpoint Test HD .		

P0315 - Crankshaft Position System Variation Not Learned

Description:	The PCM has not learned the crankshaft pulse wheel tooth spacing. This DTC disables the misfire monitor.		
Possible Causes:	• PCM reprogramming • PCM replacement • Internal PCM non-volatile random access memory (NVRAM) error		
Diagnostic Aids:	Complete the Misfire Monitor Neutral Profile Correction procedure using the scan tool.		
Application	**Key On Engine Off**	**Key On Engine Running**	**Continuous Memory**
All	Refer to the Description, Possible Causes and Diagnostic Aids for the DTC.		

P0316 - Misfire Detected On Startup (First 1000 Revolutions)

Description:	This DTC sets in addition to any type B misfire DTC which occurs in the first 1,000 revolution test interval following engine start.
Possible Causes:	• Damaged crankshaft position (CKP) sensor • Damaged ignition system • Damaged fuel injectors • Running out of fuel • Fuel quality • Base engine • Damaged PCM

Diagnostic Aids:	Freeze frame data and the DTC P03xx are also stored, indicating which cylinder the misfire occurred.

Application	Key On Engine Off	Key On Engine Running	Continuous Memory
All	GO to Pinpoint Test HD .		

P0320 - Ignition/Distributor Engine Speed Input Circuit

Description:	This DTC sets when several erratic profile ignition pickup (PIP) pulses have occurred in the crankshaft position (CKP) sensor signal within a calibrated time period when the camshaft speed exceeds the equivalent speed of engine idle.
Possible Causes:	• CKP+ circuit intermittent open (VR type) • CKP- circuit intermittent open (VR type) • CKP circuit intermittent open (Hall effect) • VREF circuit intermittent open (Hall effect) • SIGRTN circuit intermittent open (Hall effect) • CKP+ circuit intermittent short to voltage (VR type) • CKP- circuit intermittent short to voltage (VR type) • CKP circuit intermittent short to voltage (Hall effect) • VREF circuit intermittent short to voltage (Hall effect) • SIGRTN circuit intermittent short to voltage (Hall effect) • CKP+ circuit intermittent short to ground (VR type) • CKP- circuit intermittent short to ground (VR type) • CKP circuit intermittent short to ground (Hall effect) • VREF circuit intermittent short to ground (Hall effect) • SIGRTN circuit intermittent short to ground (Hall effect) • CKP sensor incorrectly installed • Damaged CKP sensor • Incorrect, damaged or corroded connections • Arcing secondary ignition components (coil, wires and plugs) • Arcing relays or other high current devices (cooling fan or starter motor) • On board 2 way radio transceiver • Radio frequency interference or electromagnetic interference from an external source • Incorrectly grounded high power aftermarket equipment
Diagnostic Aids:	

Application	Key On Engine Off	Key On Engine Running	Continuous Memory
All	GO to Pinpoint Test A .		

P0322 - Ignition/Distributor Engine Speed Input Circuit No Signal

Description:	This DTC sets when the crankshaft position (CKP) sensor profile ignition pickup (PIP) pulse is missing for greater than a calibrated number of camshaft revolutions when the camshaft speed exceeds the equivalent speed of engine idle.
Possible Causes:	• CKP+ circuit intermittent open (VR type) • CKP- circuit open (VR type) • CKP circuit open (Hall effect) • VREF circuit open (Hall effect) • SIGRTN circuit open (Hall effect) • CKP+ circuit short to voltage (VR type) • CKP- circuit short to voltage (VR type) • CKP circuit short to voltage (Hall effect) • VREF circuit short to voltage (Hall effect) • SIGRTN circuit short to voltage (Hall effect) • CKP+ circuit short to ground (VR type)