Injectronics

Remanufactured Automotive Electronics Components

PRODUCT SERVICE INFORMATION

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Vehicle: Holden Barina TK 1.6L / Viva JF 1.8L

Subject: MR140 exchange ECM

Crankshaft position system variation learn:

Important: If the crankshaft position variation procedure has not learned, a false misfire could be detected and DTC P0300 may set. If sent here from DTC P0300, proceed with the crankshaft position variation learn procedure.

1. Monitor the engine control module (ECM) for DTC's with a scan tool. If other DTC's are set, except DTC P0300 or P0315, refer to Diagnostic Trouble Code (DTC) List—Vehicle for the applicable DTC.
2. Select the crankshaft position variation learn procedure with a scan tool.
3. The scan tool instructs you to perform the following:

    - Accelerate to wide open throttle (WOT)
    - Release throttle when fuel cut off occurs
    - Observe fuel cut off for applicable engine
    - Engine should not accelerate beyond calibrated RPM value
    - Release throttle immediately if value is exceeded
    - Block drive wheels
    - Set parking brake
    - Do not apply brake pedal
    - Cycle ignition from off to on
    - Apply and hold brake pedal
    - Start and idle engine
    - Turn A/C off

Vehicle must remain in park or neutral. The scan tool monitors certain component signals to determine if all the conditions are met to continue with the procedure. The scan tool only displays the condition that inhibits the procedure. The scan tool monitors the following components

- Crankshaft position (CKP) sensor activity - If there is a CKP sensor condition, refer to the applicable DTC
- Camshaft position (CMP) signal activity - If there is a CMP signal condition, refer to the applicable DTC
- Engine coolant temperature (ECT) - If the engine coolant temperature is not warm enough, idle the engine until the engine coolant temperature reaches the correct temperature.

4. Enable the CKP system variation learn procedure with the scan tool and perform the following:

Important: While the CKP variation learn procedure is in progress, hold the throttle at WOT for 5 fuel cutoffs. The learn procedure must determine there has been 5 fuel cut offs to properly perform the test.

- Accelerate to WOT
- Hold throttle while fuel cut-off occurs

5. The scan tool displays Learn Status: Learned this ignition. If the scan tool indicates that DTC P0315 ran and passed, the CKP variation learn procedure is complete. If the scan tool indicates DTC P0315 failed or did not run, refer to DTC P0315. If any other DTC's set, refer to Diagnostic Trouble Code (DTC) List - Vehicle for the applicable DTC.

6. Turn off the ignition for 30 seconds after the learn procedure is completed successfully. The CKP system variation learn procedure is also required when the following service procedures have been performed, regardless of whether or not DTC P0315 is set:

- An engine replacement
- An ECM replacement
- A harmonic balancer replacement
- A crankshaft replacement
- A CKP sensor replacement
- Any engine repairs which disturb the crankshaft to CKP sensor relationship

Idle Learn

- Procedures 1 & 2 listed below needs to be performed whenever the following occurs:
- The battery cables are disconnected
- The ECM is disconnected or replaced
- The fuse that supplies ignition 1 or battery positive voltage to the ECM is removed
- The IAC valve is removed or replaced
- There is an IAC system fault

Procedure 1

1. Turn off all accessories
2. Start the engine
3. Allow the engine to idle for 10 seconds
4. Turn OFF the ignition for 1 minute
5. Perform Procedure 2

Procedure 2 - Automatic Transmission

1. Allow the engine to run until the engine coolant temperature is more than 85°c
2. Allow the engine to idle for 10 minutes
3. Turn ON the A/C for 1 minute, if equipped
4. Turn OFF the A/C for 1 minute, if equipped
5. Apply the parking brake and place the transmission into drive (D)
6. Allow the engine to idle for 1 minute
7. Turn ON the A/C for 1 minute, if equipped
8. Turn OFF the ignition. The idle learn procedure is complete

Procedure 2 - Manual Transmission

1. Allow the engine to run until the engine coolant temperature is more than 85°c
2. Allow the engine to idle for 10 minutes
3. Turn ON the A/C for 1 minute, if equipped
4. Turn OFF the ignition. The idle learn procedure is complete