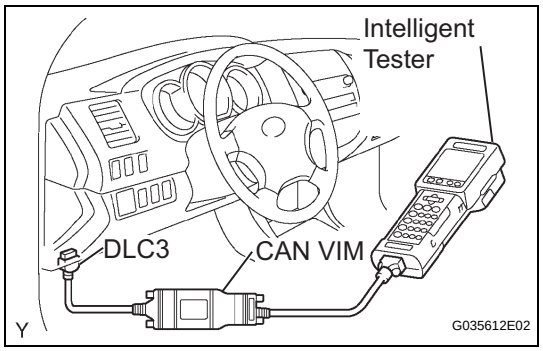


CAMSHAFT TIMING OIL CONTROL VALVE ASSEMBLY

ON-VEHICLE INSPECTION

1. INSPECT CAMSHAFT TIMING OIL CONTROL VALVE ASSEMBLY

(a) Check the operation.

(1) Turn the ignition switch to ON.

(2) Turn the intelligent tester ON.

(3) Start the engine and warm it up.

(4) Select the following menu items: DIAGNOSIS / ENHANCED OBD II / ACTIVE TEST / VVT CTRL B1.

(5) Operate the OCV using the intelligent tester, then check the engine speed.

Standard

Tester Operation	Specified Condition
OCV OFF	Normal engine speed
OCV ON	Rough idling or engine stalls

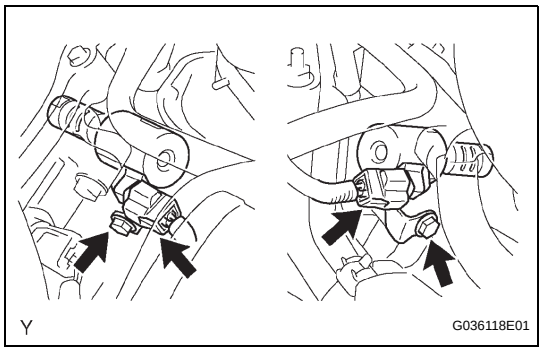
If the operation is not as specified, check the camshaft timing oil control valve, wire harness and ECM.

ES

ES

REMOVAL

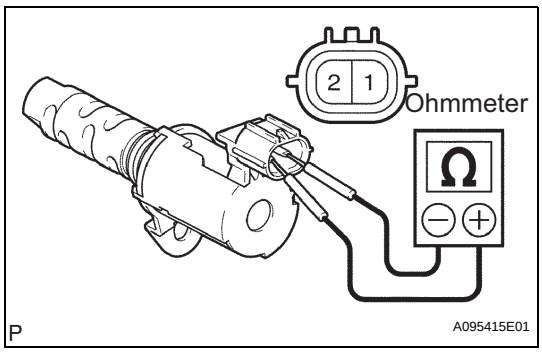
1. **DRAIN ENGINE COOLANT (See page CO-3)**
2. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
3. **REMOVE V-BANK COVER (See page ES-414)**
4. **REMOVE AIR CLEANER ASSEMBLY (See page ES-415)**
5. **REMOVE INTAKE AIR SURGE TANK (See page FU-11)**
6. **REMOVE CAMSHAFT TIMING OIL CONTROL VALVE ASSEMBLY**
   (a) Disconnect the 2 connectors.
   (b) Remove the 2 bolts, then remove the 2 camshaft timing oil control valves.



INSPECTION

1. **INSPECT CAMSHAFT TIMING OIL CONTROL VALVE ASSEMBLY**
   (a) Check the resistance.
      (1) Using an ohmmeter, measure the resistance between the terminals.
      Standard

Tester Connection	Specified Condition
1 (+B) - 2 (GND)	6.9 to 7.9 Ω at 20°C (68°F)



If the result is not as specified, replace the camshaft timing oil control valve.

   (b) Check the operation.
      (1) Connect the positive (+) lead from the battery to terminal 1 and negative (-) lead to terminal 2, and check that the valve operates.
      NOTICE:
      Check that the spool valve is not stuck.
      HINT:
      The spool valve may not return if foreign objects are caught in it. This may cause subtle pressure leakage to the advance side, and a DTC may, be set.