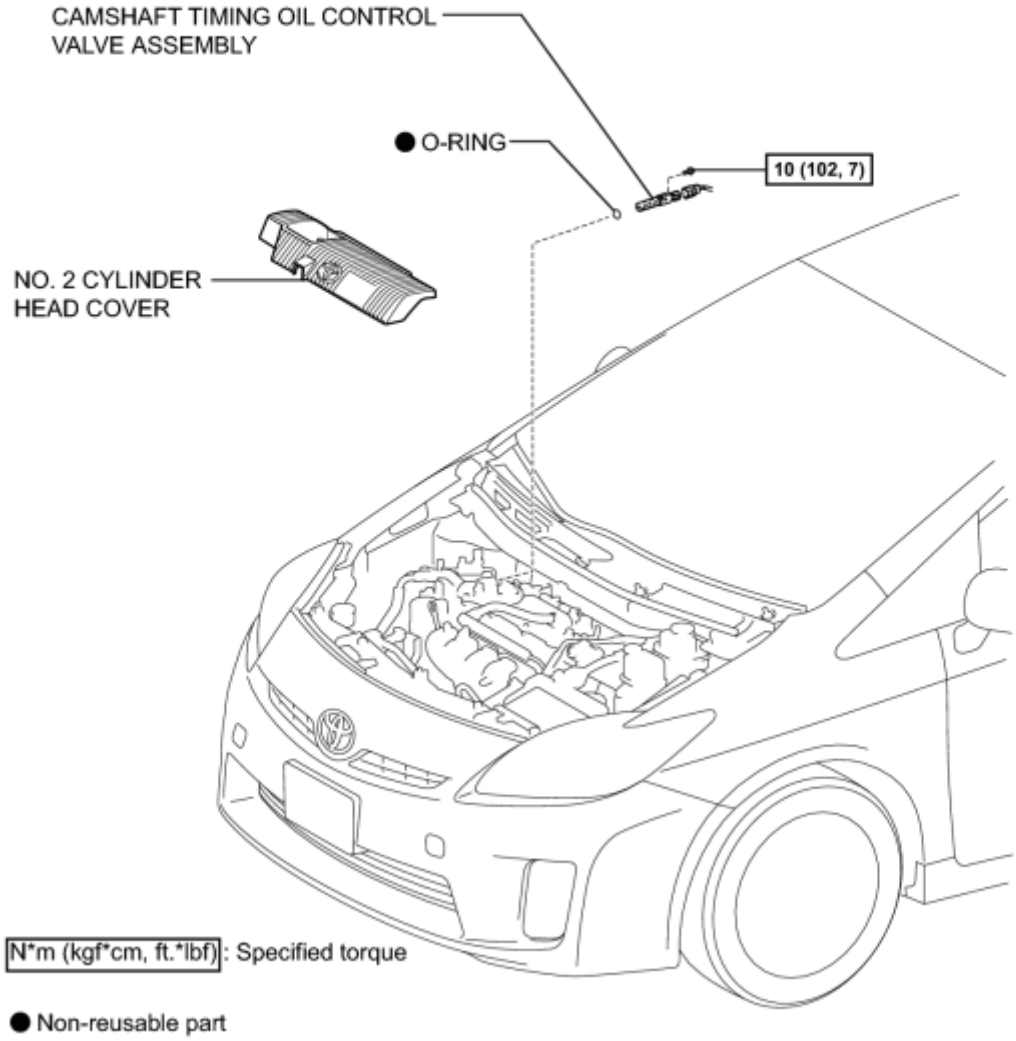
COMPONENTS

ILLUSTRATION



ON-VEHICLE INSPECTION

1. INSPECT CAMSHAFT TIMING OIL CONTROL VALVE ASSEMBLY

(a) Connect the Techstream to the DLC3.

(b) Turn the Techstream on.

(c) Set the vehicle to the inspection mode INFO.

(d) Start the engine.

(e) Inspect the oil control valve.

(1) Enter the following menus: Powertrain / Engine and ECT / Active Test / Control the VVT System (Bank 1).

(2) Check the engine speed when the oil control valve is operated using the Techstream with the engine coolant temperature at 50°C (122°F) or less.

HINT:

- When performing the Active Test, the air conditioning should be on.
- Engine coolant temperature when the engine is started should be 30°C (86°F) or less.

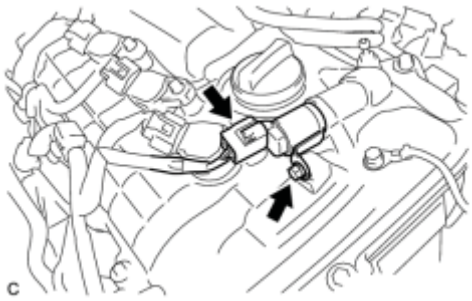
Standard:

Control Range	Specified Condition
OFF	Normal engine speed
ON	Rough idle or engine stalls (soon after oil control valve switched from OFF to ON)

REMOVAL

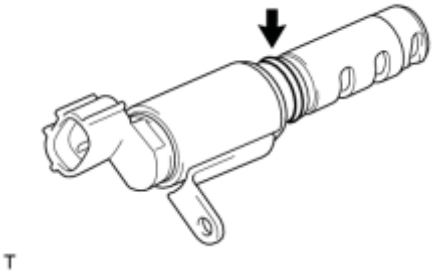
1. REMOVE NO. 2 CYLINDER HEAD COVER INFO

2. REMOVE CAMSHAFT TIMING OIL CONTROL VALVE ASSEMBLY



(a) Disconnect the camshaft timing oil control valve assembly connector.

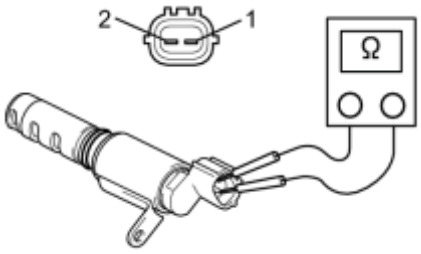
(b) Remove the bolt and remove the camshaft timing oil control valve assembly.



(c) Remove the O-ring from the camshaft timing oil control valve assembly.

INSPECTION

1. INSPECT CAMSHAFT TIMING OIL CONTROL VALVE ASSEMBLY



(a) Measure the resistance according to the value(s) in the table below.

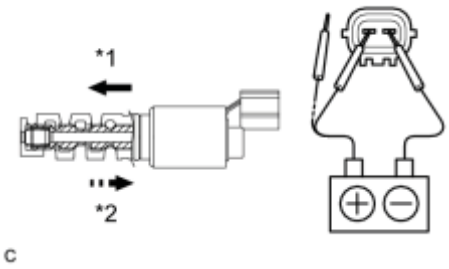
Standard Resistance:

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

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

(b) Check the operation.

(1) Connect a positive (+) battery lead to terminal 1 and a negative (-) lead to terminal 2, and check the movement of the valve.



Text in Illustration

*1	When Applied
*2	When Cut Off

NOTICE:

Confirm that the valve moves freely and does not stick in any position.

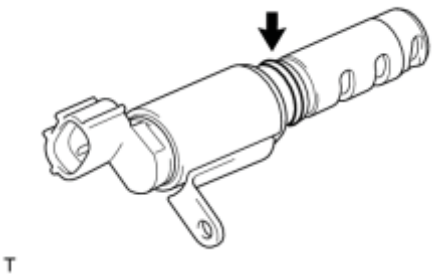
If necessary, replace the camshaft timing oil control valve assembly.

HINT:

Accumulation of foreign matter can cause minor pressure leaks. Minor pressure leaks will cause the camshaft to advance or retard, and this will cause a DTC to be set.

INSTALLATION

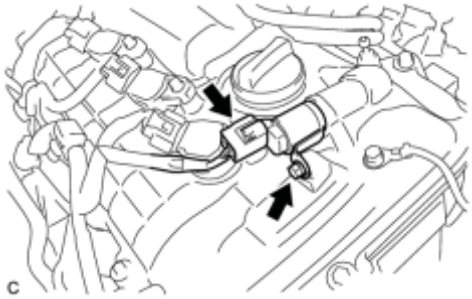
1. INSTALL CAMSHAFT TIMING OIL CONTROL VALVE ASSEMBLY



(a) Apply a light coat of engine oil to a new O-ring and install it onto the camshaft timing oil control valve assembly.

NOTICE:

Do not twist the O-ring.



(b) Install the camshaft timing oil control valve assembly and wire harness bracket with the bolt.

Torque: **10 N·m (102 kgf·cm, 7ft·lbf)**

(c) Connect the camshaft timing oil control valve assembly connector.

2. INSPECT FOR OIL LEAK

3. INSTALL NO. 2 CYLINDER HEAD COVER INFO