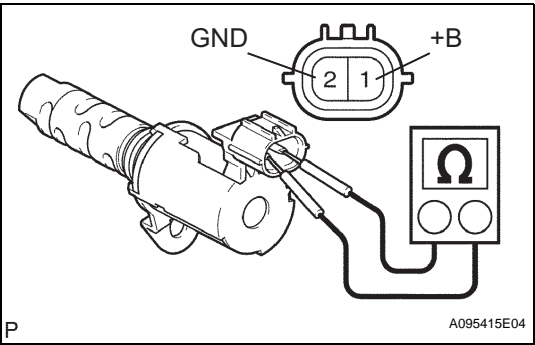
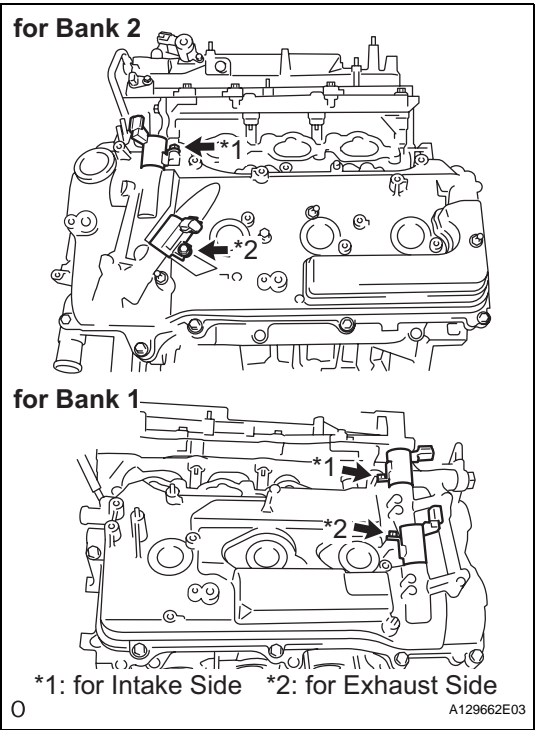


REMOVAL

1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL
- CAUTION:
Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.
2. REMOVE ENGINE ASSEMBLY
- (a) Remove the engine (see page EM-21).
3. REMOVE INTAKE AIR SURGE TANK ASSEMBLY
- (See page EM-27)
4. REMOVE CAMSHAFT TIMING OIL CONTROL VALVE ASSEMBLY
- (a) Disconnect the 4 oil control valve connectors.
- (b) Remove the 4 bolts and 4 oil control valves.
- (c) Remove the O-ring from each oil control valve.

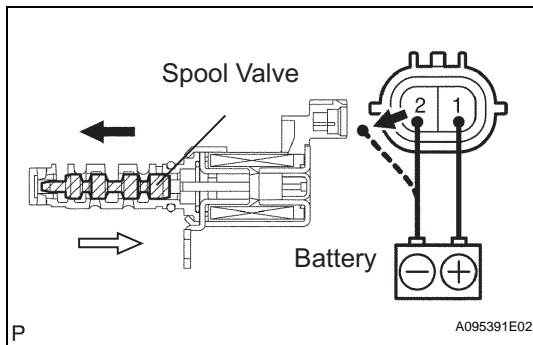


INSPECTION

1. INSPECT CAMSHAFT TIMING OIL CONTROL VALVE ASSEMBLY
- (a) Measure the resistance of the oil control valve.
- Standard resistance

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 oil control valve assembly.



(b) Check the operation.

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

OK

Condition	Specified Condition
Battery positive (+) voltage is applied	Valve moves in black arrow direction shown in illustration
Battery positive (+) voltage is cut off	Valve moves in white arrow direction shown in illustration

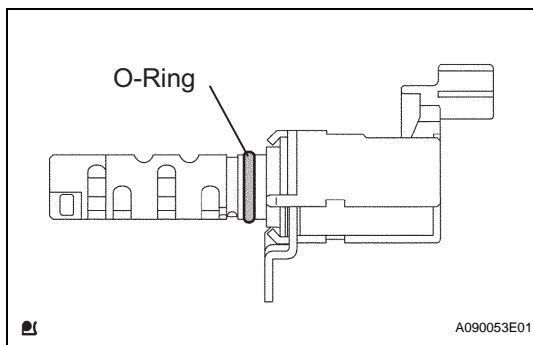
NOTICE:

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 leaks to the advance side, and a DTC may be set.

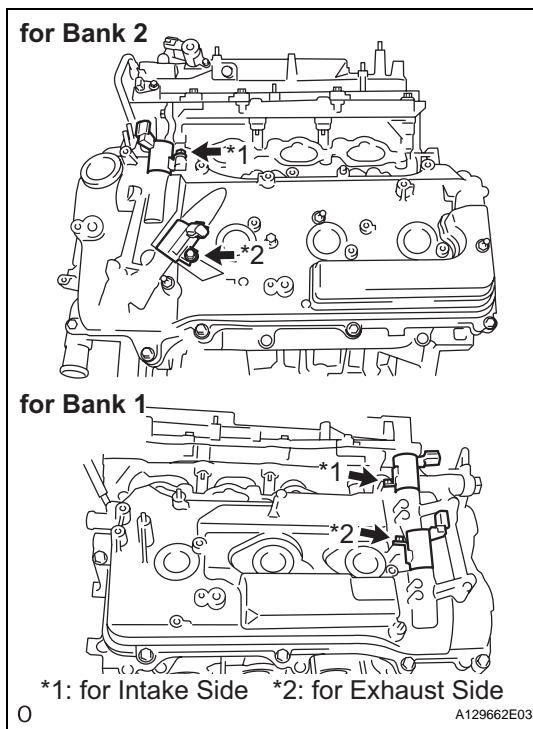
ES



INSTALLATION

1. INSTALL CAMSHAFT TIMING OIL CONTROL VALVE ASSEMBLY

- (a) Apply a light coat of engine oil to new 4 O-rings of the oil control valves.
- (b) Install the O-rings to the 4 oil control valves.



- (c) Install the 4 oil control valves with the 4 bolts.

Torque: 9.0 N*m (92 kgf*cm, 80 in.*lbf)

NOTICE:

Make sure that the O-ring is not cracked or jammed.

- (d) Connect the 4 oil control valve connectors.

2. INSTALL INTAKE AIR SURGE TANK ASSEMBLY (See page EM-34)

3. INSTALL ENGINE ASSEMBLY

- (a) Install the engine (see page EM-31).

4. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

5. CHECK FOR ENGINE OIL LEAKS

- (a) Start the engine, and check that there are no oil leaks.