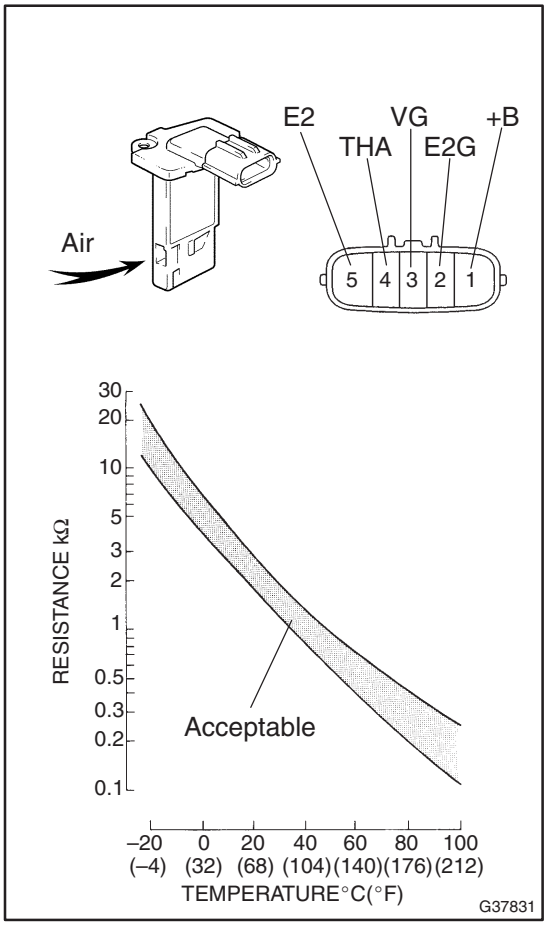
INSPECTION



1. INSPECT INTAKE AIR FLOW METER SUB–ASSY

(a) Check the operation.

(1) Apply battery voltage across terminals 1 (+B) and 2 (E2G).

(2) Using a voltmeter, connect the positive (+) tester probe to terminal 3 (VG) and the negative (–) tester probe to terminal 2 (E2G).

(3) Blow air into the mass air flow meter, then check that the voltage fluctuates.

If the voltage does not fluctuate, replace the mass air flow meter.

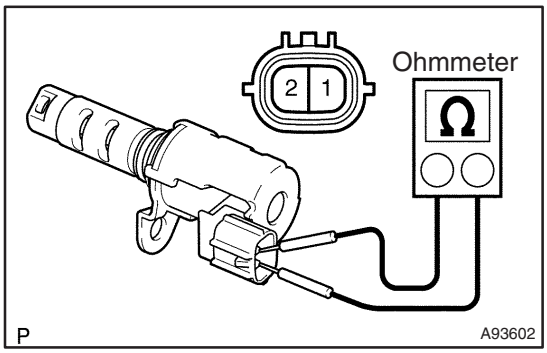
(b) Check the resistance.

(1) Using an ohmmeter, measure the resistance between the terminals.

Standard:

Tester Connection	Specified Condition
4 (THA) – 5 (E2)	12.5 to 16.9 kΩ at –20°C (–4°F)
4 (THA) – 5 (E2)	2.19 to 2.67 kΩ at 20°C (68°F)
4 (THA) – 5 (E2)	0.50 to 0.68 kΩ at 60°C (140°F)

If the result is not as specified, replace the mass air flow meter.



2. INSPECT CAMSHAFT TIMING OIL CONTROL VALVE ASSY

(a) Check the resistance.

(1) Using an ohmmeter, measure the resistance between the terminals.

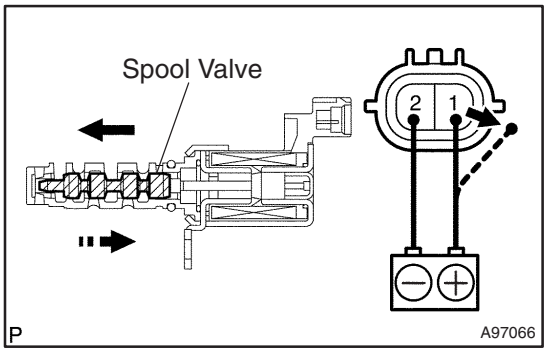
Standard:

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

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

(b) Check the operation.

(1) Apply battery voltage across the terminals, and check that the spool valve operates.

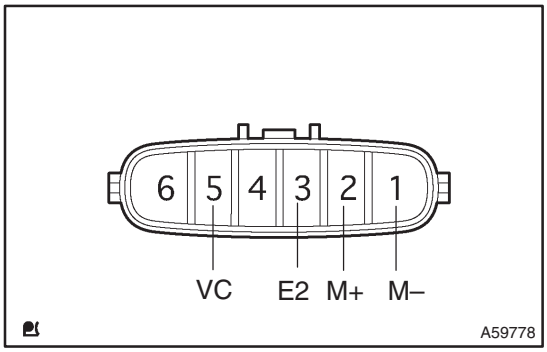


NOTICE:

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



3. INSPECT THROTTLE W/MOTOR BODY ASSY

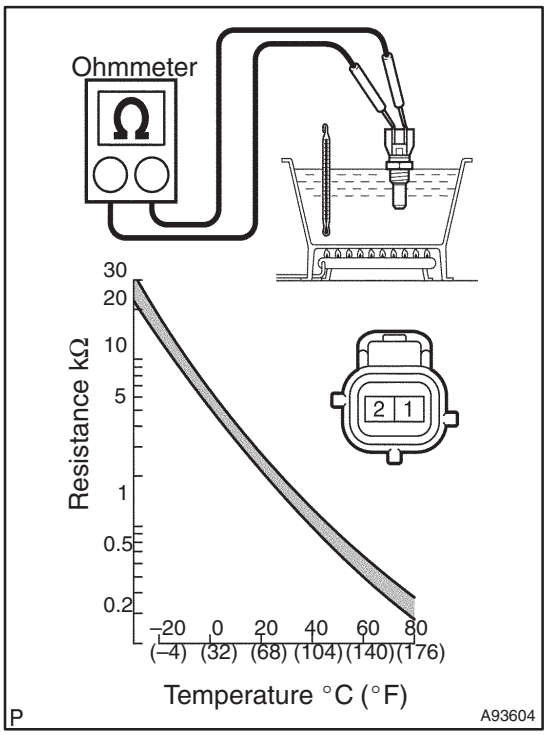
(a) Check the resistance.

(1) Using an ohmmeter, measure the resistance between the terminals.

Standard:

Tester Connection	Specified Condition
1 (M–) – 2 (M+)	0.3 to 100 Ω at 20°C (68°F)
3 (E2) – 5 (VC)	2.0 to 4.0 kΩ at 20°C (68°F)

If the result is not as specified, replace the throttle body.



4. INSPECT ENGINE COOLANT TEMPERATURE SENSOR

(a) Check the resistance.

(1) Using an ohmmeter, measure the resistance between the terminals.

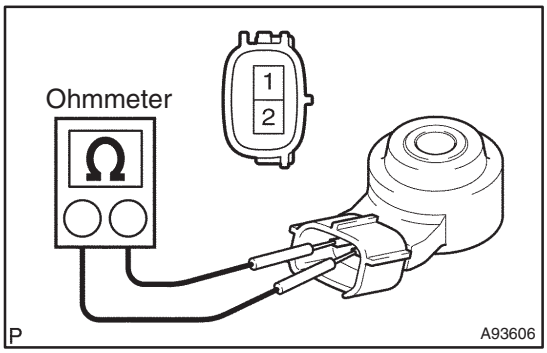
Standard:

Tester Connection	Specified Condition
1 (E2) – 2 (THW)	2.32 to 2.59 kΩ at 20°C (68°F)
1 (E2) – 2 (THW)	0.310 to 0.326 kΩ at 80°C (176°F)

NOTICE:

If checking the engine coolant temperature sensor in water, be careful not to allow water to intrude into the terminals. After checking, wipe up water on the engine coolant temperature sensor.

If the result is not as specified, replace the engine coolant temperature sensor.



5. INSPECT KNOCK CONTROL SENSOR

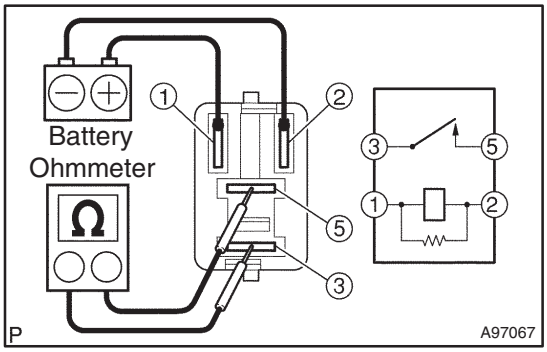
(a) Check the resistance.

(1) Using an ohmmeter, measure the resistance between the terminals.

Standard:

Tester Connection	Specified Condition
1 (Ground) – 2 (Output)	120 to 280 kΩ at 20°C (68°F)

If the result is not as specified, replace the knock sensor.



6. INSPECT CIRCUIT OPENING RELAY

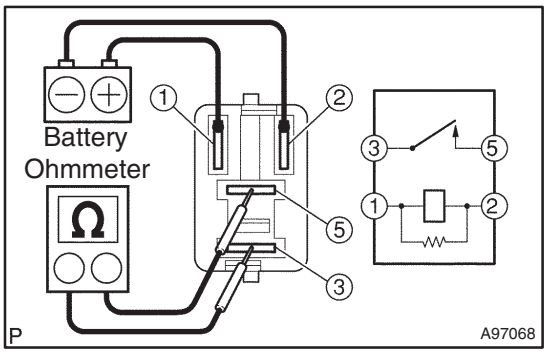
(a) Check the resistance.

(1) Using an ohmmeter, measure the resistance between the terminals.

Standard:

Tester Connection	Specified Condition
3 – 5	10 kΩ or higher
3 – 5	Below 1 Ω (Apply battery voltage to terminals 1 and 2)

If the result is not as specified, replace the circuit opening relay.



7. INSPECT EFI RELAY

(a) Check the resistance.

(1) Using an ohmmeter, measure the resistance between the terminals.

Standard:

Tester Connection	Specified Condition
3 – 5	10 kΩ or higher
3 – 5	Below 1 Ω (Apply battery voltage to terminals 1 and 2)

If the result is not as specified, replace the E.F.I relay.