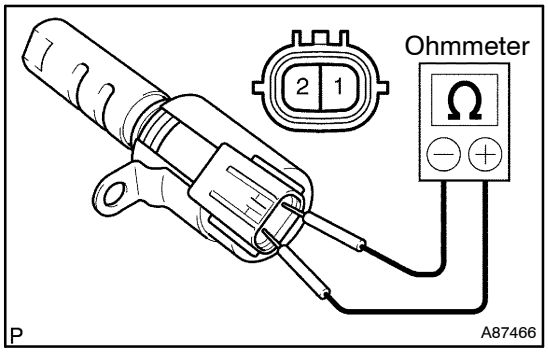
100M8–01

INSPECTION



1. INSPECT CAMSHAFT TIMING OIL CONTROL VALVE ASSY

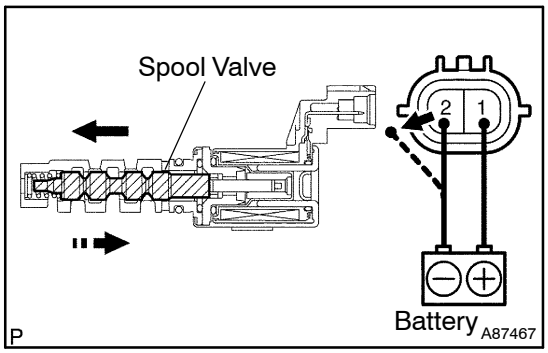
(a) Inspect the resistance.

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

Standard:

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

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



(b) Check the operation.

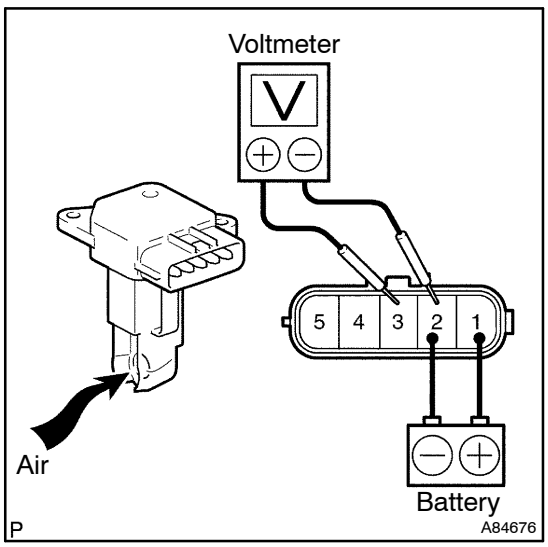
(1) Apply battery voltage across the terminals, then check that the spool valve operates.

NOTICE:

Check that the spool valve is not stuck.

HINT:

The spool valve may not return if foreign objects are caught in the spool valve. It may cause subtle pressure leaks to the advance side, and the DTC may be set.



2. INSPECT MASS AIR FLOW METER

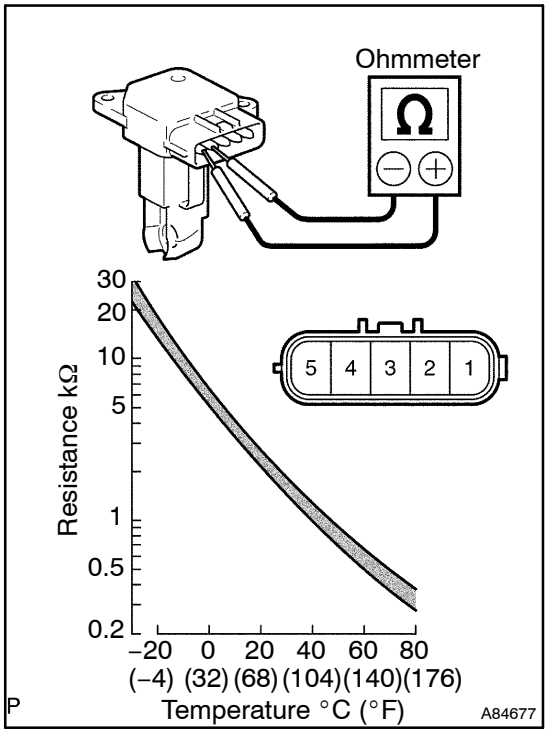
(a) Check the operation.

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

(2) Using an ohmmeter, 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.



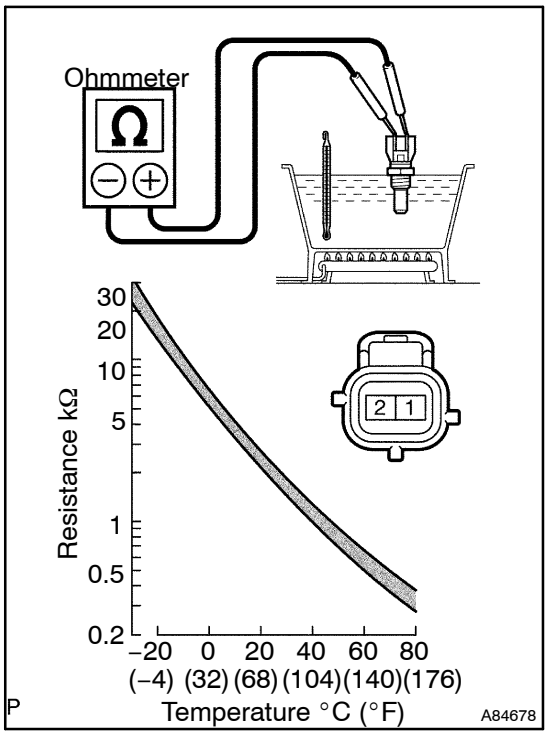
(b) Inspect the resistance.

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

Standard:

Tester Connection	Specified Condition
4 (THA) – 5 (E2)	13.6 to 18.4 kΩ at –20°C (–4°F)
4 (THA) – 5 (E2)	2.21 to 2.69 kΩ at 20°C (68°F)
4 (THA) – 5 (E2)	0.493 to 0.667 kΩ at 60°C (140°F)

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



3. INSPECT ENGINE COOLANT TEMPERATURE SENSOR

(a) Inspect the resistance.

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

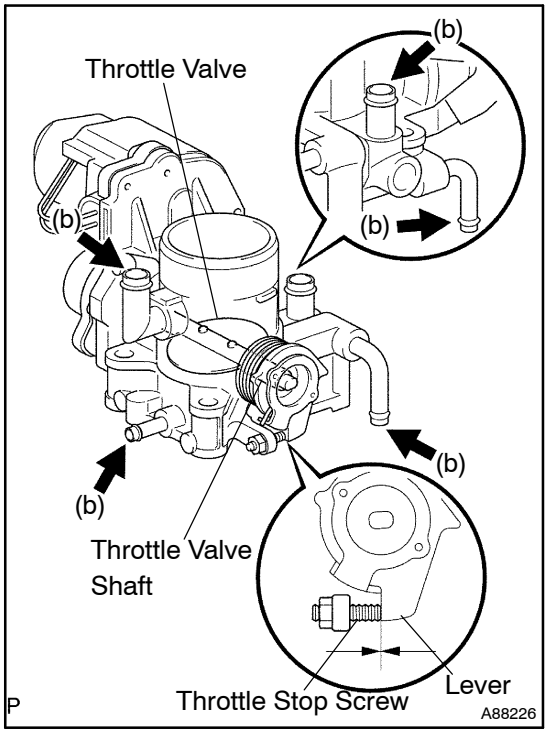
Standard:

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 out water on the engine coolant temperature sensor.

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



4. INSPECT THROTTLE W/MOTOR BODY ASSY

(a) Check the appearance.

(1) Check that the throttle valve shaft does not rattle.

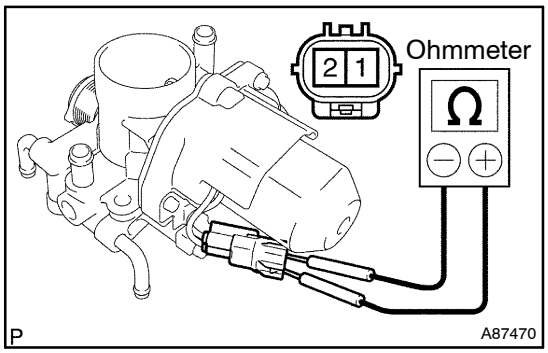
(2) Check that each port is not clogged.

(3) Check that the throttle valve opens and closes smoothly.

(4) Check that there is no clearance between the throttle stop screw and lever when the throttle valve is fully closed.

NOTICE:

Do not adjust the throttle stop screw.



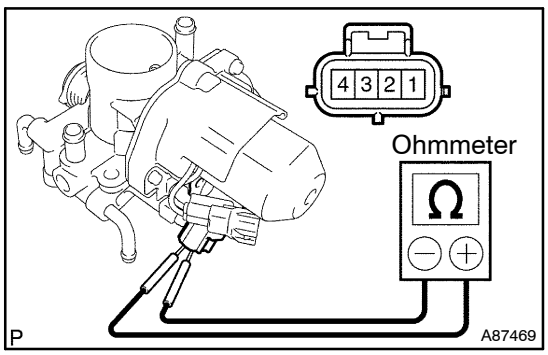
(b) Inspect the resistance of the throttle control motor.

(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)

If the resistance is not as specified, replace the throttle with motor body.



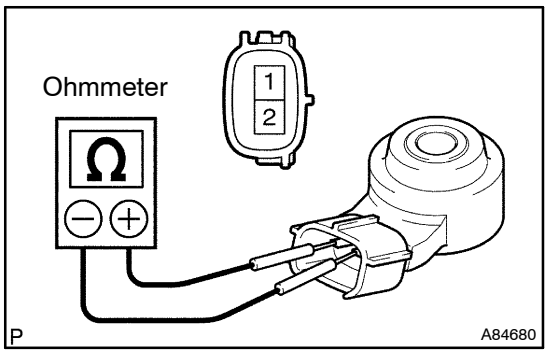
(c) Inspect the resistance of the throttle position sensor.

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

Standard:

Tester Connection	Specified Condition
1 (VC) – 4 (E2)	1.25 to 2.35 kΩ at 20°C (68°F)

If the resistance is not as specified, replace the throttle with motor body.



5. INSPECT KNOCK SENSOR

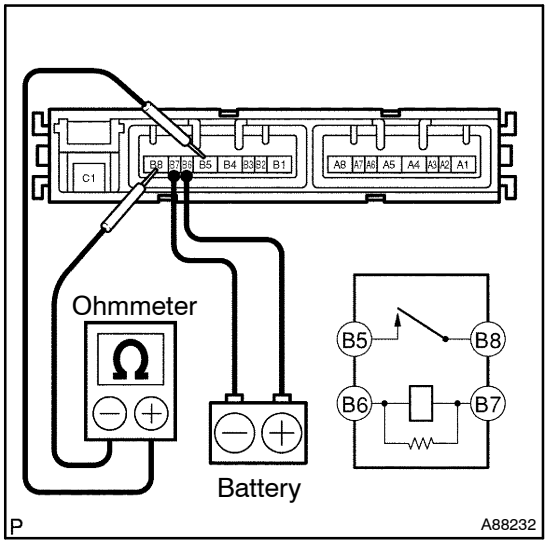
(a) Inspect the resistance.

(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 resistance is not as specified, replace the knock sensor.



6. INSPECT EFI RELAY

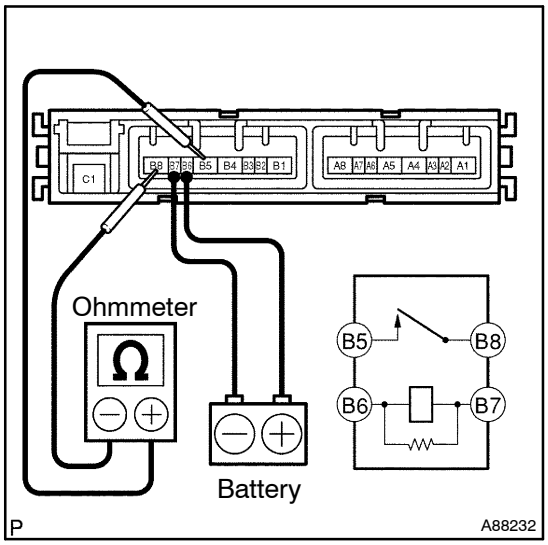
(a) Inspect the resistance.

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

Standard:

Tester Connection	Specified Condition
B5 – B8	10 kΩ or higher
B5 – B8	Below 1 Ω (Apply battery voltage to terminal B6 and B7)

If the result is not as specified, replace the EFI relay.



7. INSPECT CIRCUIT OPENING RELAY

(a) Inspect the resistance.

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

Standard:

Tester Connection	Specified Condition
B5 – B8	10 kΩ or higher
B5 – B8	Below 1 Ω (Apply battery voltage to terminal B6 and B7)

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