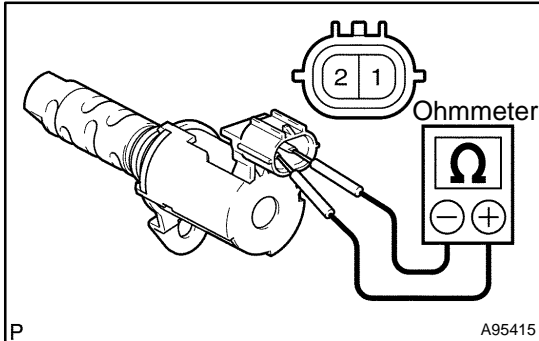


# INSPECTION



## 1. 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 $\Omega$ at 20°C (68°F)

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

### (b) Check the operation.

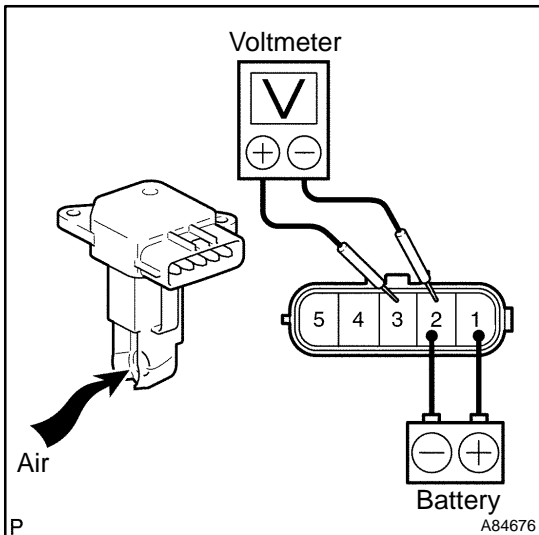
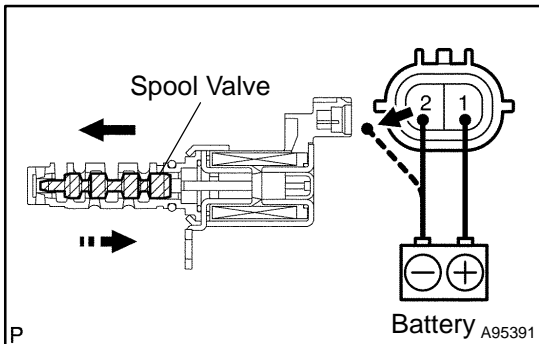
- (1) Apply battery voltage across the terminals and check that the spool valve operates.

#### 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.

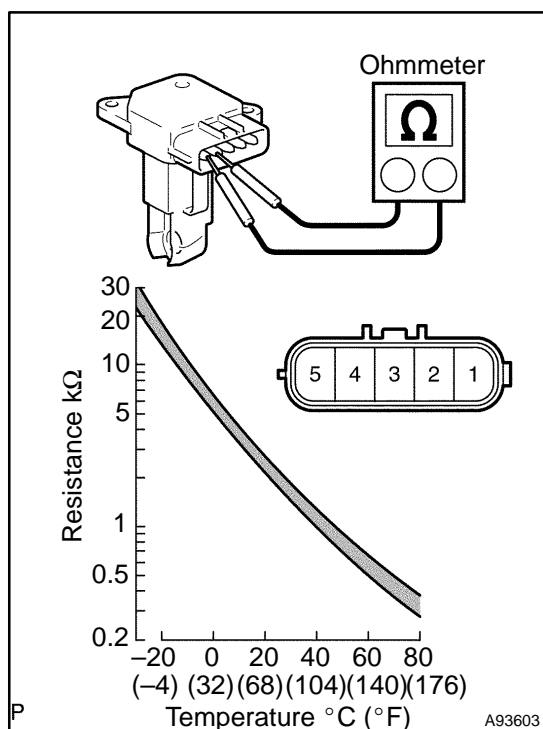


## 2. INSPECT MASS AIR FLOW METER

### (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 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.



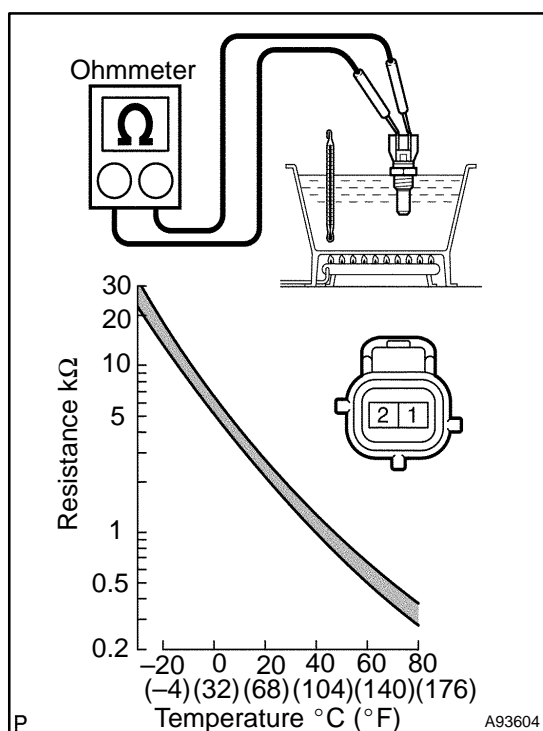
(b) Check the resistance.

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

**Standard:**

Tester Connection	Specified Condition
4 (THA) – 5 (E2)	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 result is not as specified, replace the mass air flow meter.



### 3. INSPECT ENGINE COOLANT TEMPERATURE SENSOR

(a) Check the resistance.

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

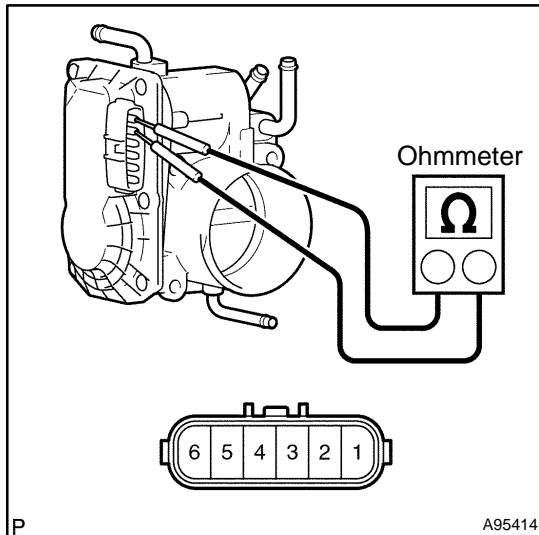
**Standard:**

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 the water off the engine coolant temperature sensor.**

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



#### 4. INSPECT THROTTLE BODY ASSY

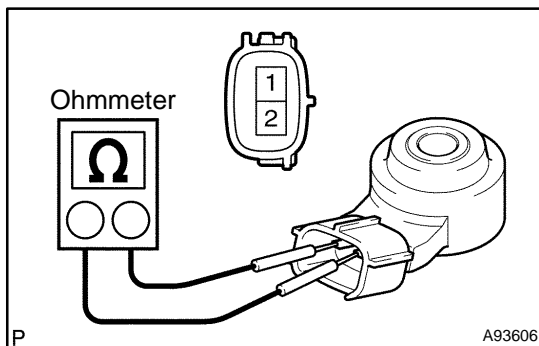
(a) Check the resistance.

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

**Standard:**

Tester Connection	Specified Condition
1 (M-) – 2 (M+)	0.3 to 100 $\Omega$ at 20°C (68°F)

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



#### 5. INSPECT KNOCK SENSOR

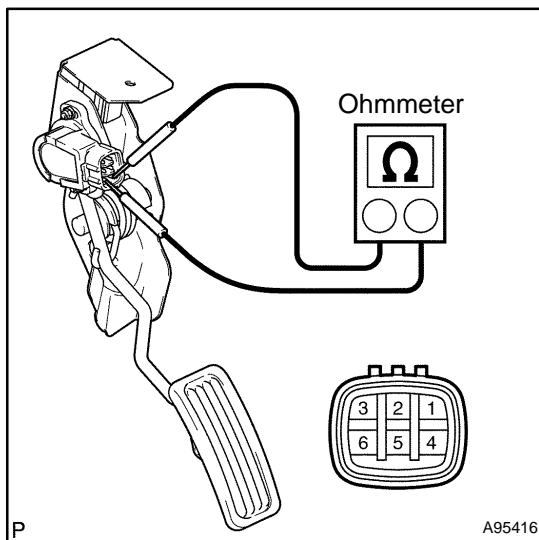
(a) Check the resistance.

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

**Standard:**

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

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



#### 6. INSPECT ACCELERATOR PEDAL ASSY

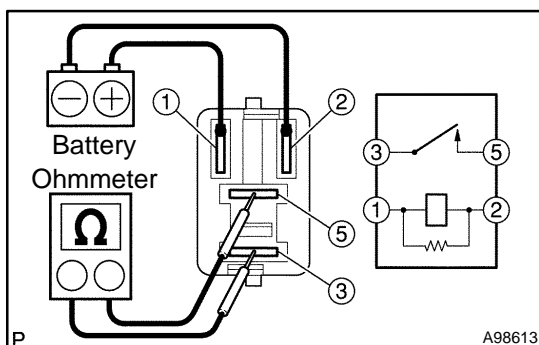
(a) Check the resistance.

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

**Standard:**

Tester Connection	Specified Condition
3 (EP1) – 6 (VCP1)	1.5 to 6.0 k $\Omega$
1 (EP2) – 4 (VCP2)	1.5 to 6.0 k $\Omega$

If the result is not as specified, replace the accelerator pedal rod.



#### 7. INSPECT MAIN RELAY

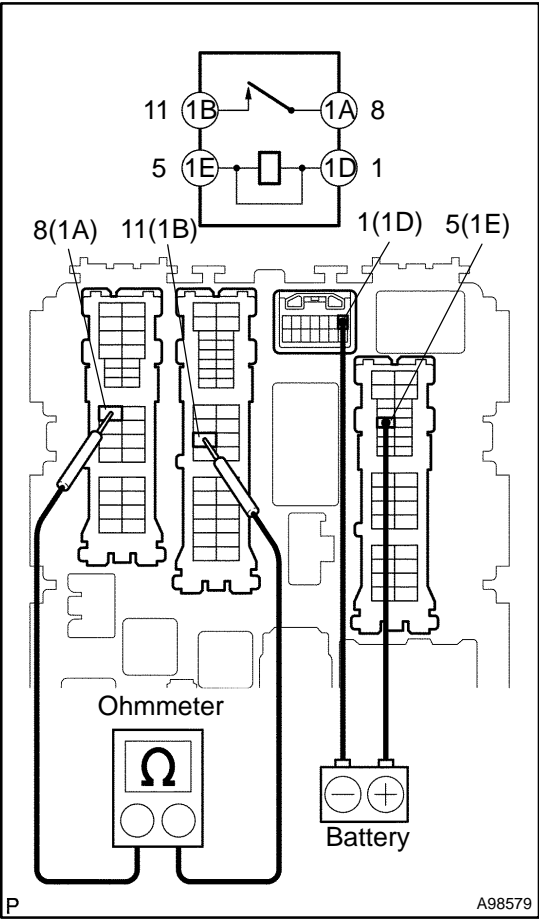
(a) Check the resistance.

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

**Standard:**

Tester Connection	Specified Condition
3 – 5	10 k $\Omega$ or higher
3 – 5	Below 1 $\Omega$ (Apply battery voltage to terminals 1 and 2)

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



**8. INSPECT CIRCUIT OPENING RELAY**

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

**Standard:**

Tester Connection	Specified Condition
1B (11) – 1A (8)	10 k $\Omega$ or higher
1B (11) – 1A (8)	Below 1 $\Omega$ (Apply battery voltage to terminals 1E (5) and 1D (1))

If the result is not as specified, replace the instrument panel junction block.