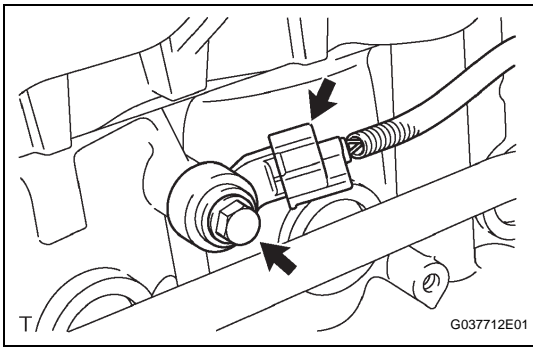


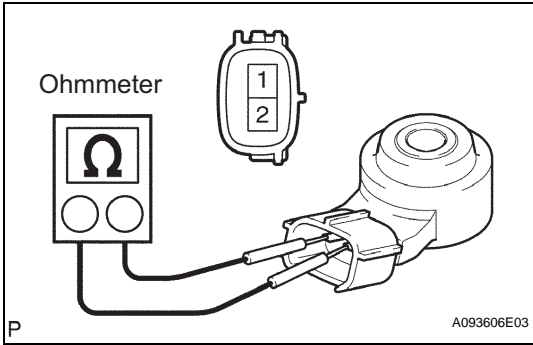
- (n) Remove the 5 bolts and 2 nuts, then remove the intake manifold.

ES



**9. REMOVE KNOCK CONTROL SENSOR**

- (a) Disconnect the knock control sensor connector.
- (b) Remove the bolt, then remove the knock control sensor.



**INSPECTION**

**1. 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 kΩ at 20°C (68°F)

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

**INSTALLATION**

**1. INSTALL KNOCK CONTROL SENSOR**

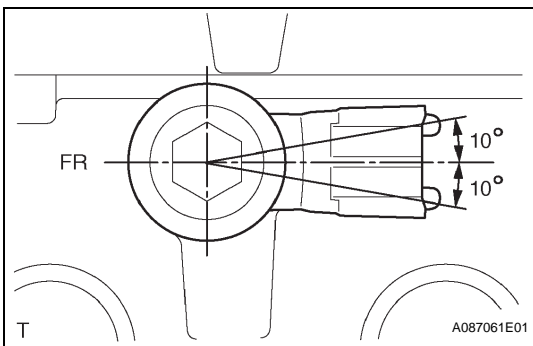
- (a) Install the knock control sensor with the bolt.

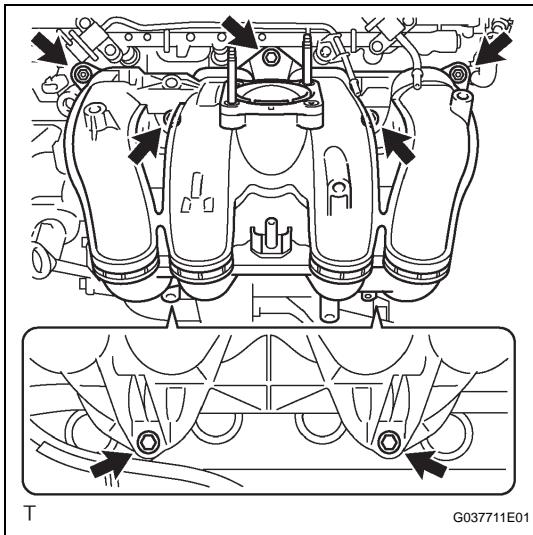
**Torque: 20 N\*m (204 kgf\*cm, 15 ft.\*lbf)**

**NOTICE:**

**Make sure that the knock sensor is at the correct angle when installing.**

- (b) Connect the knock control sensor connector.

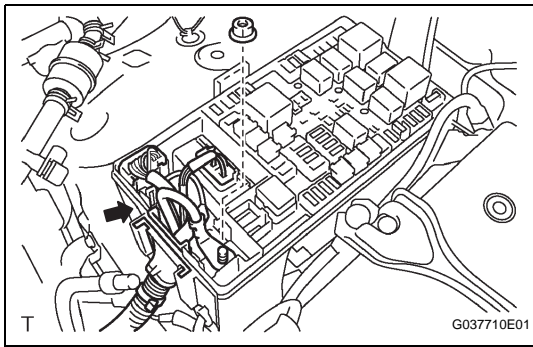




## 2. INSTALL INTAKE MANIFOLD

- (a) Install a new gasket onto the intake manifold.
- (b) Install the intake manifold with the 5 bolts and 2 nuts.

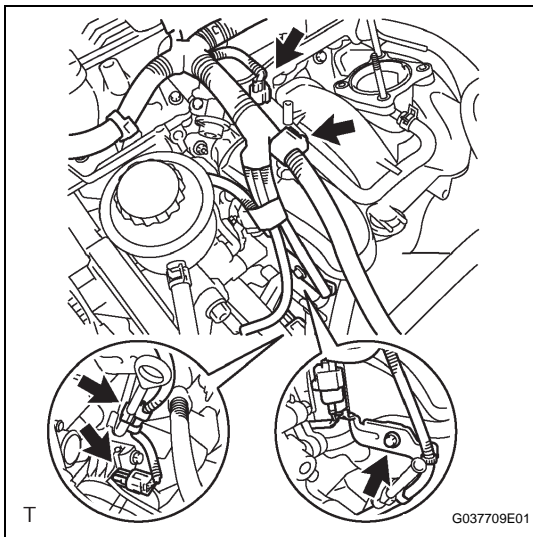
**Torque: 25 N\*m (255 kgf\*cm, 18 ft.\*lbf)**



- (c) Connect the engine wire harness to the relay block.
- (d) Install the nut shown in the illustration.

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

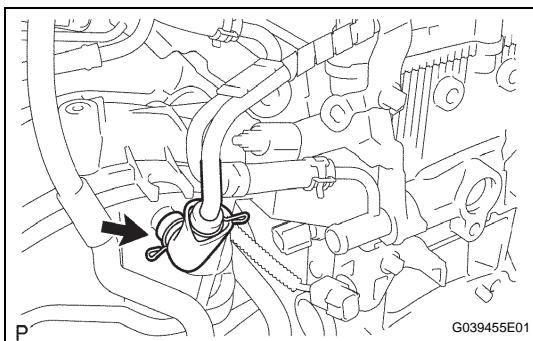
- (e) Connect the 3 connectors.



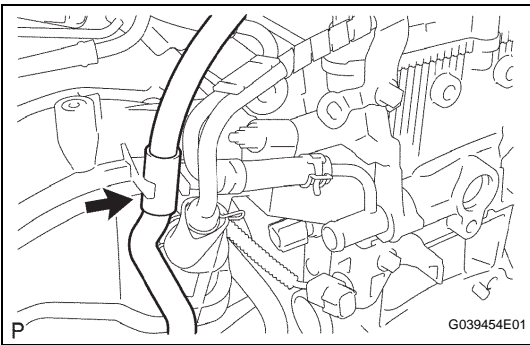
- (f) Install the harness clamp bracket with the bolt.

**Torque: 8.2 N\*m (84 kgf\*cm, 73 in.\*lbf)**

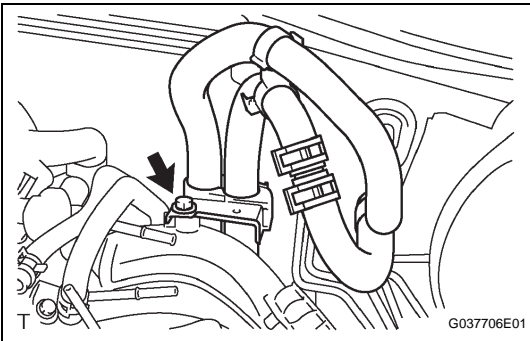
- (g) Engage the wire harness clamp.
- (h) Connect the compressor magnetic clutch connector.  
(w/ AIR CONDITIONING)
- (i) Engage the engine wire harness clamp.
- (j) Connect the VSV connector.



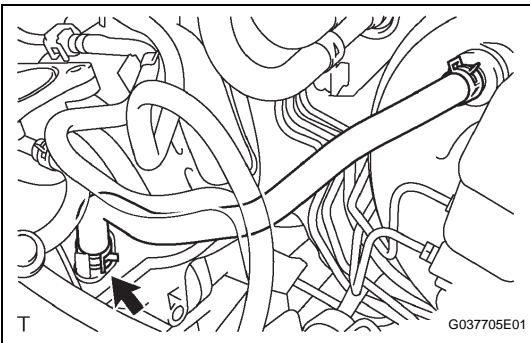
- (k) Connect the ventilation hose No. 3.



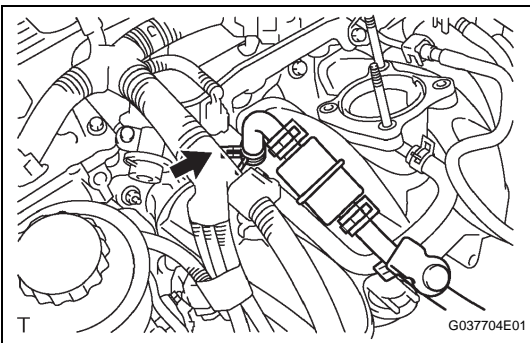
(l) Connect the water by-pass hose No. 2.



(m) Install the clamp bracket with the bolt.  
Torque: 19 N\*m (194 kgf\*cm, 14 in.\*lbf)



(n) Connect the vacuum hose.



(o) Connect the fuel vapor feed hose to the VSV.

3. **CONNECT FUEL HOSE (See page [FU-17](#))**
4. **CONNECT FUEL HOSE NO.2 (See page [FU-17](#))**
5. **INSTALL THROTTLE WITH MOTOR BODY ASSEMBLY (See page [ES-454](#))**
6. **INSTALL INTAKE AIR CONNECTOR (See page [ES-455](#))**
7. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**  
Torque: 3.9 N\*m (40 kgf\*cm, 35 in.\*lbf)
8. **ADD ENGINE COOLANT (See page [CO-3](#))**
9. **CHECK FOR ENGINE COOLANT LEAKAGE (See page [CO-2](#))**
10. **CHECK FOR FUEL LEAKAGE**
11. **INSTALL ENGINE UNDER COVER SUB-ASSEMBLY NO.1 (for 4WD and Pre-Runner)**