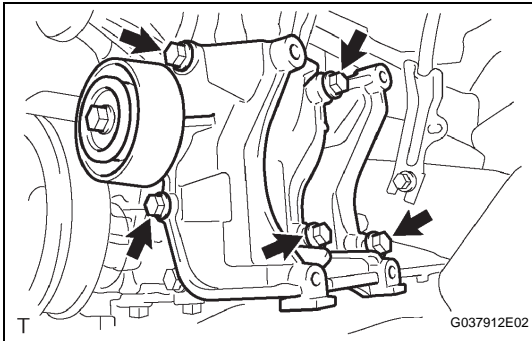


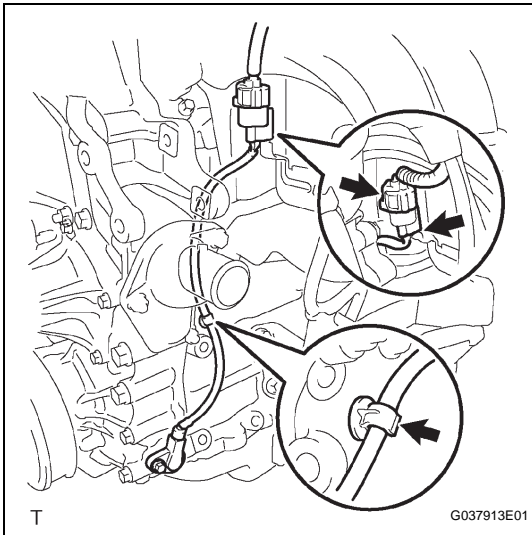
# CRANKSHAFT POSITION SENSOR

## REMOVAL

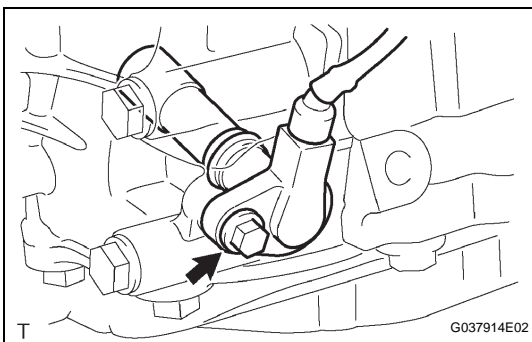
1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL
2. REMOVE ENGINE UNDER COVER SUB-ASSEMBLY NO.1 (for 4WD and Pre-Runner)
3. REMOVE FAN AND GENERATOR V BELT (W/ AIR CONDITIONING) (See page [EM-5](#))
4. SEPARATE COMPRESSOR AND MAGNETIC CLUTCH (W/ AIR CONDITIONING) (See page [EM-21](#))
5. REMOVE IDLE PULLEY ASSEMBLY WITH BRACKET (W/ AIR CONDITIONING)
  - (a) Remove the 5 bolts, then remove the idle pulley with bracket.

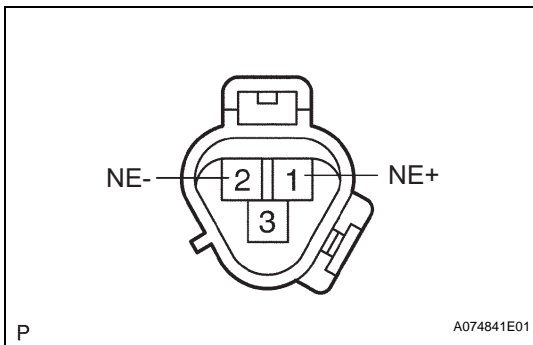


6. REMOVE CRANKSHAFT POSITION SENSOR
  - (a) Disconnect the crankshaft position sensor connector and the 2 wire harness clamps.



- (b) Remove the bolt, then remove the crankshaft position sensor.





## INSPECTION

### 1. INSPECT CRANKSHAFT POSITION SENSOR

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

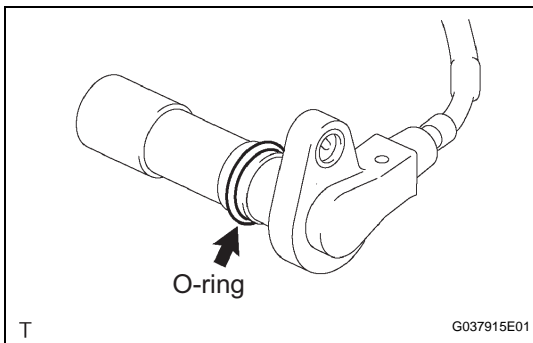
#### Standard

Tester Connection	Specified Condition
1 (NE+) - 2 (NE-)	1,630 to 2,740 $\Omega$ at COLD
1 (NE+) - 2 (NE-)	2,065 to 3,225 $\Omega$ at HOT

#### HINT:

Cold and Hot mean the temperature of the coils themselves. Cold is from -10 to 50°C (14 to 122°F) and Hot is from 50 to 100°C (122 to 212°F).

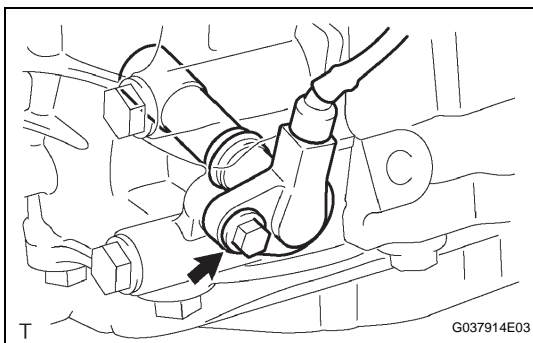
If the result is not as specified, replace the camshaft position sensor.



## INSTALLATION

### 1. INSTALL CRANKSHAFT POSITION SENSOR

- (a) Apply a light coat of engine oil to the O-ring of the crankshaft position sensor.

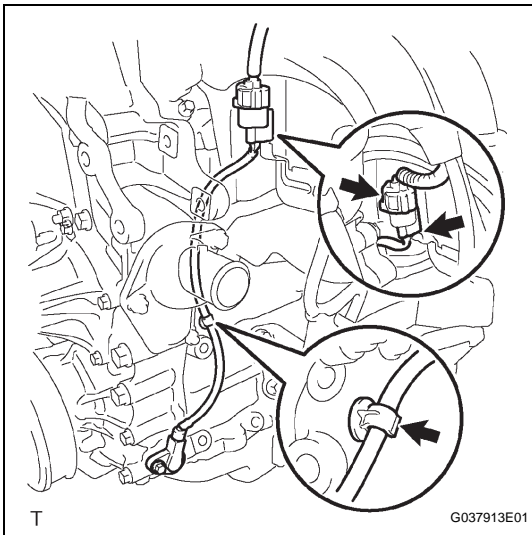


- (b) Install the camshaft position sensor with the bolt.

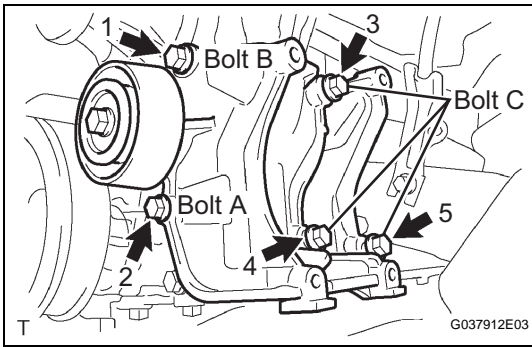
**Torque: 8.5 N\*m (87 kgf\*cm, 75 in.\*lbf)**

#### NOTICE:

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



- (c) Connect the crankshaft position sensor connector and the 2 wire harness clamps.



2. **INSTALL IDLE PULLEY ASSEMBLY WITH BRACKET (W/ AIR CONDITIONING)**
  - (a) Using several steps, uniformly install and tighten the 5 bolts in the sequence shown in the illustration.  
**Torque: 21 N\*m (214 kgf\*cm, 16 ft.\*lbf) for bolt A**  
**43 N\*m (438 kgf\*cm, 32 ft.\*lbf) for bolt B, C**
3. **INSTALL COMPRESSOR AND MAGNETIC CLUTCH (W/ AIR CONDITIONING) (See page [EM-34](#))**
4. **INSTALL FAN AND GENERATOR V BELT (W/ AIR CONDITIONING) (See page [EM-6](#))**
5. **INSTALL ENGINE UNDER COVER SUB-ASSEMBLY NO.1 (for 4WD and Pre-Runner)**
6. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**  
**Torque: 3.9 N\*m (40 kgf\*cm, 35 in.\*lbf)**