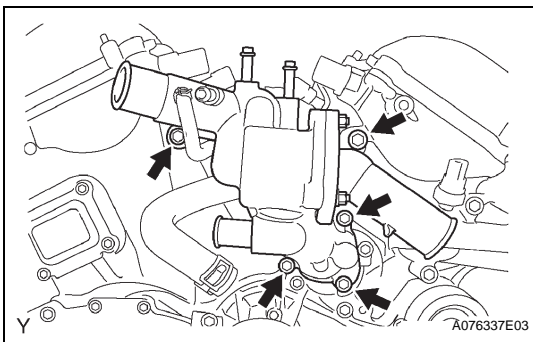
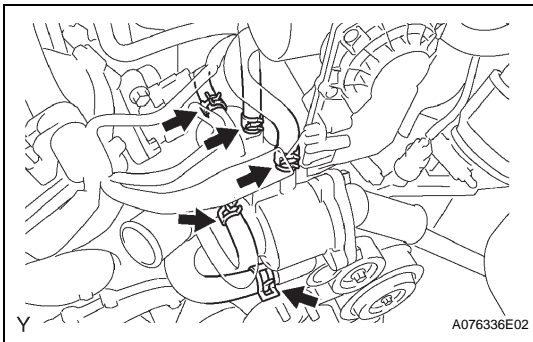
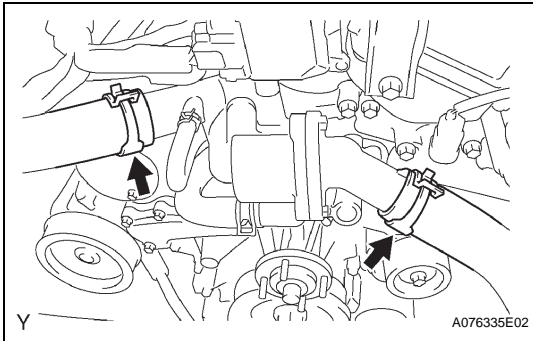


## REMOVAL

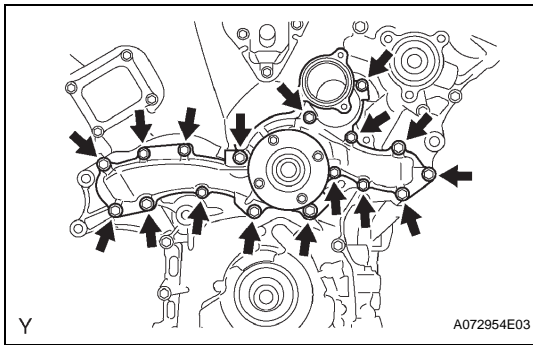
1. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
2. **REMOVE FAN**  
Refer to the procedures up to "REMOVE FAN" (See page [CO-17](#)).
3. **REMOVE V-BANK COVER (See page [ES-428](#))**
4. **REMOVE AIR CLEANER ASSEMBLY (See page [ES-429](#))**
5. **REMOVE GENERATOR ASSEMBLY**  
Refer to the procedures up to "REMOVE GENERATOR ASSEMBLY" (See page [CH-9](#))
6. **REMOVE WATER INLET**
  - (a) Disconnect the 2 radiator hoses.



- (b) Disconnect the 5 water by-pass hoses.

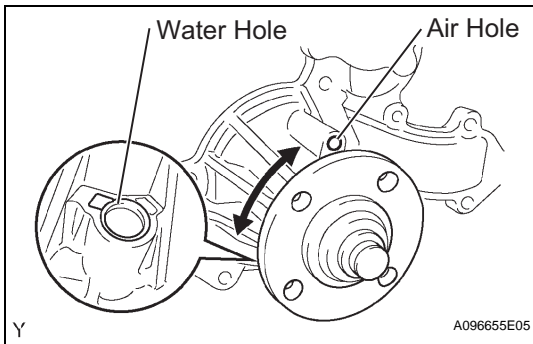
- (c) Remove the 5 bolts and water inlet.
- (d) Remove the O-ring from the water outlet pipe.
- (e) Remove the gasket from the water pump.

7. **REMOVE NO. 2 IDLER PULLEY SUB-ASSEMBLY (See page [EM-23](#))**
8. **SEPARATE COOLER COMPRESSOR ASSEMBLY (See page [ES-420](#))**
9. **REMOVE V-RIBBED BELT TENSIONER ASSEMBLY (See page [EM-22](#))**
10. **SEPARATE VANE PUMP ASSEMBLY (See page [EM-22](#))**



## 11. REMOVE WATER PUMP ASSEMBLY

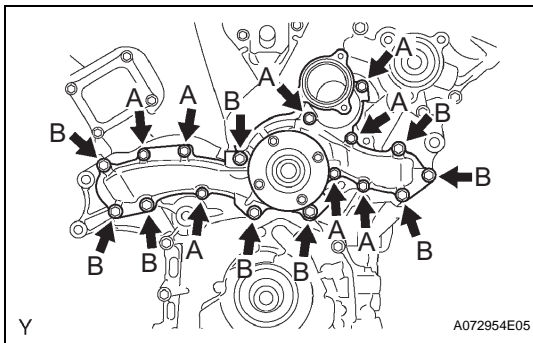
- (a) Remove the 17 bolts, then remove the water pump and gasket.



## INSPECTION

### 1. INSPECT WATER PUMP ASSEMBLY

- (a) Visually check the water hole for coolant leakage. If leakage is found, replace the water pump assembly.
- (b) Turn the pulley and check that the water pump bearing moves smoothly and quietly. If necessary, replace the water pump assembly.



## INSTALLATION

### 1. INSTALL WATER PUMP ASSEMBLY

- (a) Install a new gasket and the water pump with the 17 bolts.

**Torque: For Bolt A**

**9.0 N\*m (92 kgf\*cm, 80 in.\*lbf)**

**For Bolt B**

**23 N\*m (235 kgf\*cm, 17 ft.\*lbf)**

### 2. INSTALL VANE PUMP ASSEMBLY (See page [EM-33](#))

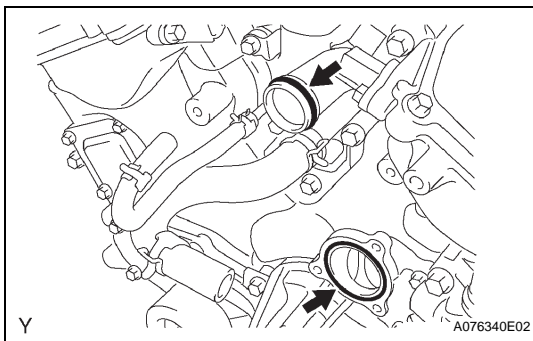
### 3. INSTALL V-RIBBED BELT TENSIONER ASSEMBLY (See page [EM-33](#))

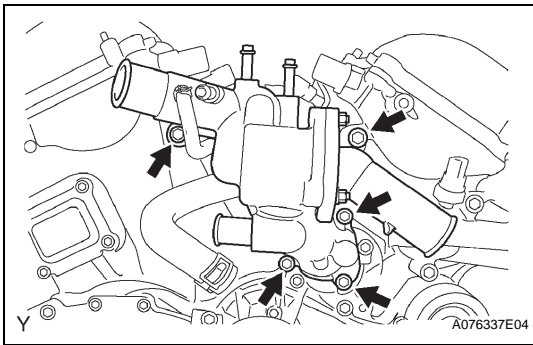
### 4. INSTALL COOLER COMPRESSOR ASSEMBLY (See page [ES-421](#))

### 5. INSTALL NO. 2 IDLER PULLEY SUB-ASSEMBLY (See page [EM-33](#))

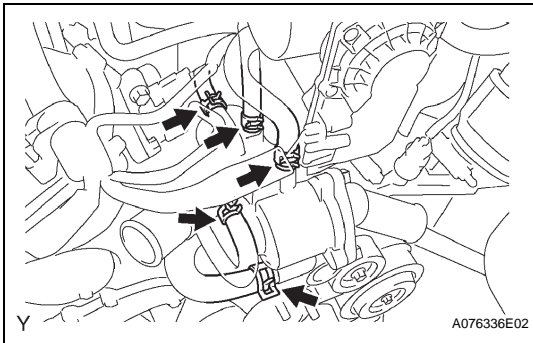
### 6. INSTALL WATER INLET

- (a) Install a new O-ring onto the water outlet pipe.
- (b) Install a new gasket onto the water pump.
- (c) Apply soapy water to the O-ring.

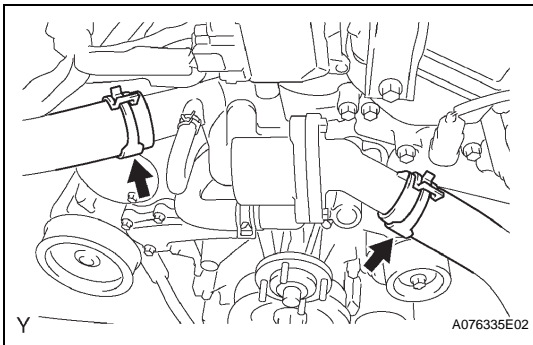




- (d) Install the water inlet with the 5 bolts.  
**Torque: 9.0 N\*m (92 kgf\*cm, 80 in.\*lbf)**



- (e) Connect the 5 water by-pass hoses.



- (f) Connect the 2 radiator hoses.

**7. INSTALL GENERATOR ASSEMBLY**

Refer to the procedures up to "INSTALL GENERATOR ASSEMBLY" (See page [CH-17](#))

**8. INSTALL AIR CLEANER ASSEMBLY (See page [ES-431](#))**

**9. INSTALL FAN**

Refer to the procedures up to "INSTALL FAN" (See page [CO-17](#)).

**10. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**

**Torque: 3.9 N\*m (40 kgf\*cm, 35 in.\*lbf)**

**11. INSTALL V-BANK COVER (See page [ES-431](#))**