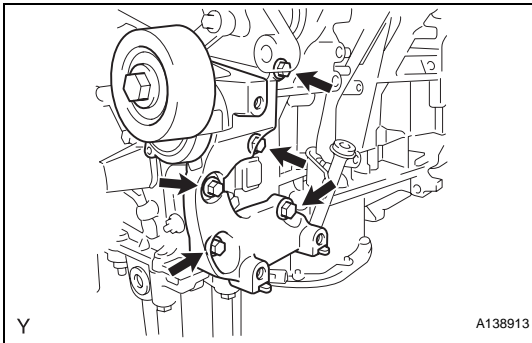
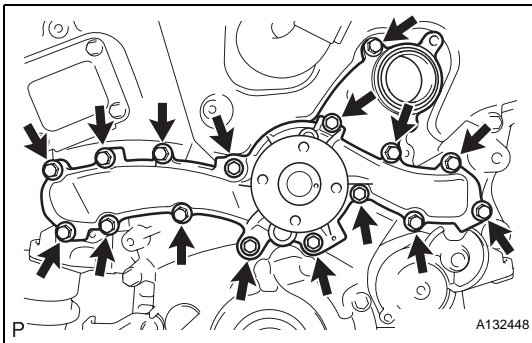


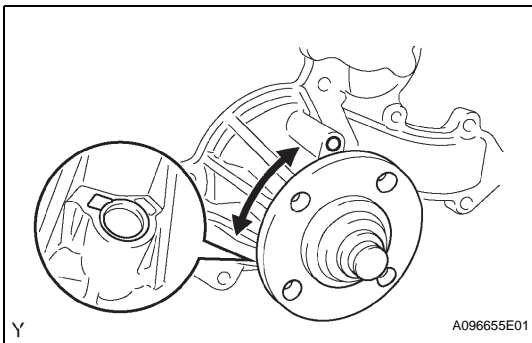
6. **REMOVE NO. 2 IDLER PULLEY SUB-ASSEMBLY**
 (a) Remove the bolt, No. 2 idler pulley cover plate and No. 2 idler pulley.



7. **REMOVE V-RIBBED BELT TENSIONER ASSEMBLY**
 (a) Remove the 5 bolts and V-ribbed belt tensioner assembly.

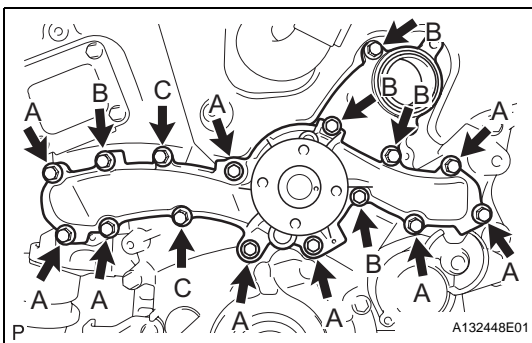


8. **REMOVE WATER PUMP ASSEMBLY**
 (a) Remove the 16 bolts, water pump and water pump gasket.



INSPECTION

1. **INSPECT WATER PUMP ASSEMBLY**
 (a) Visually check the drain hole for coolant leakage. If leakage is found, replace the water pump assembly.
 (b) Turn the pulley, and then check that the water pump bearing moves smoothly without making a clicking noise. If it does not move smoothly, replace the water pump assembly.

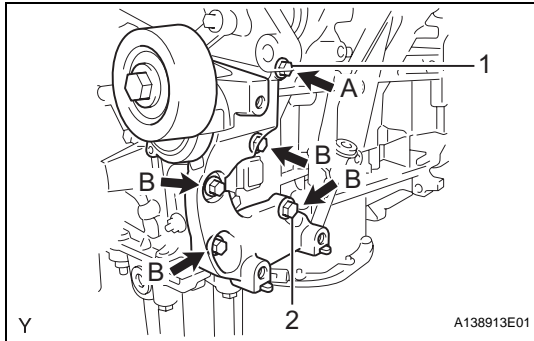


INSTALLATION

1. **INSTALL WATER PUMP ASSEMBLY**
 (a) Install a new water pump gasket and the water pump with the 16 bolts.
Torque: 21 N*m (214 kgf*cm, 15 ft.*lbf) for bolt A
9.1 N*m (93 kgf*cm, 81 in.*lbf) for bolt B and C

NOTICE:

- Be sure to replace the 2 C bolts with new ones or reuse them after applying adhesive.
Adhesive:
Toyota Genuine Adhesive 1344, Three Bond 1344 or Equivalent
- Make sure that there is no oil on the threads of the A bolts.

**2. INSTALL V-RIBBED BELT TENSIONER ASSEMBLY**

- (a) Temporarily install the V-ribbed belt tensioner with the 5 bolts.

HINT:

Each bolt length is as follows:

A: 70 mm (2.76 in.)

B: 30 mm (1.30 in.)

- (b) Install the V-ribbed belt tensioner by tightening the bolt 1 and bolt 2 in the order shown in the illustration.

Torque: 43 N*m (438 kgf*cm, 32 ft.*lbf)

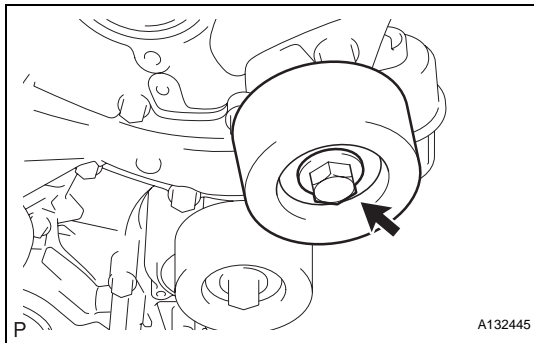
- (c) Tighten the other bolts.

Torque: 43 N*m (438 kgf*cm, 32 ft.*lbf)

3. INSTALL NO. 2 IDLER PULLEY SUB-ASSEMBLY

- (a) Install the No. 2 idler pulley cover plate and No. 2 idler pulley with the bolt.

Torque: 43 N*m (438 kgf*cm, 32 ft.*lbf)

**4. INSTALL WATER PUMP PULLEY**

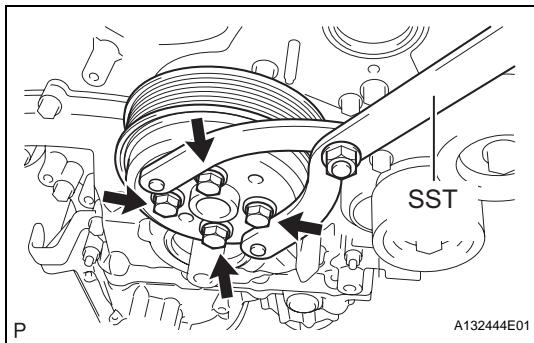
- (a) Temporarily install the water pump pulley with the 4 bolts.

- (b) Using SST, hold the water pump pulley.

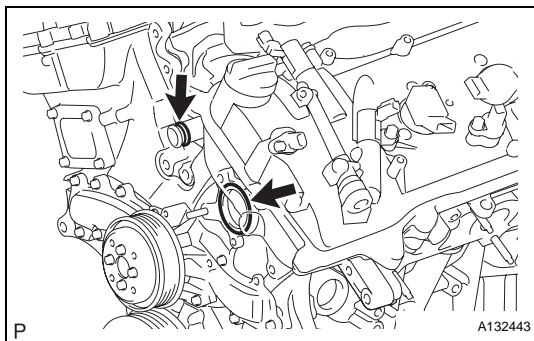
SST 09960-10010 (09962-01000, 09963-00700)

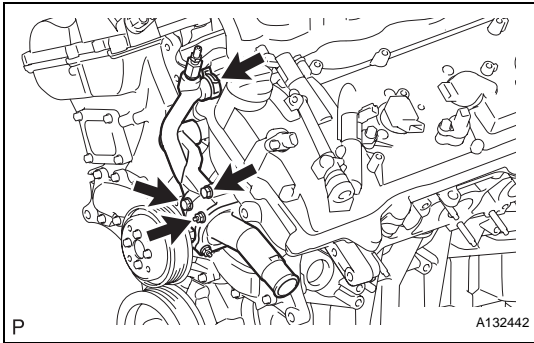
- (c) Tighten the 4 bolts.

Torque: 21 N*m (214 kgf*cm, 15 ft.*lbf)

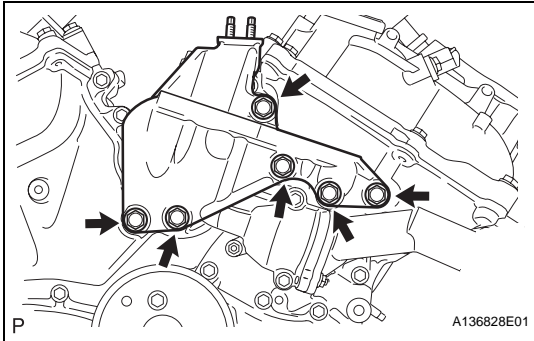
5. INSTALL CRANKSHAFT PULLEY (See page [EM-126](#))**6. INSTALL WATER INLET HOUSING**

- (a) Install a new water inlet housing No. 1 gasket and water outlet pipe O-ring.





- (b) Install the water inlet with the 2 bolts and nut.
Torque: 10 N*m (102 kgf*cm, 7 ft.*lbf)
NOTICE:
Be careful not to allow the O-ring to get caught between the parts.
- (c) Connect the water hose.



7. INSTALL FRONT NO. 1 ENGINE MOUNTING BRACKET LH

- (a) Install the front No. 1 engine mounting bracket LH with the 6 bolts.
Torque: 54 N*m (551 kgf*cm, 40 ft.*lbf)
NOTICE:
- Install the water inlet and mounting bracket within 15 minutes after installing the chain cover.
 - Do not start the engine for at least 2 hours after installation.

8. INSTALL ENGINE ASSEMBLY

- (a) Install the engine (see page [EM-31](#)).