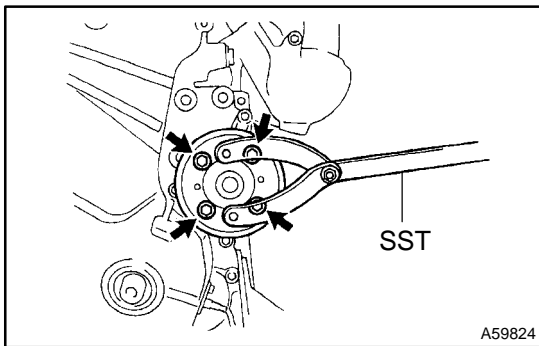


WATER PUMP ASSY (2ZZ-GE)

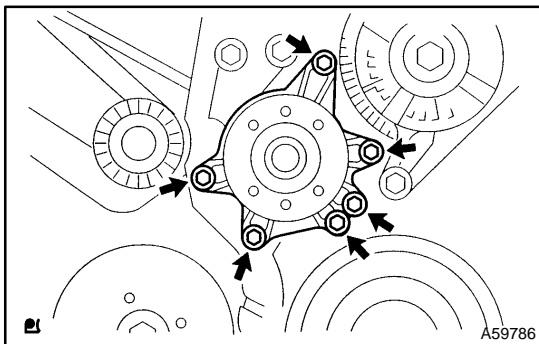
160XV-01

REPLACEMENT

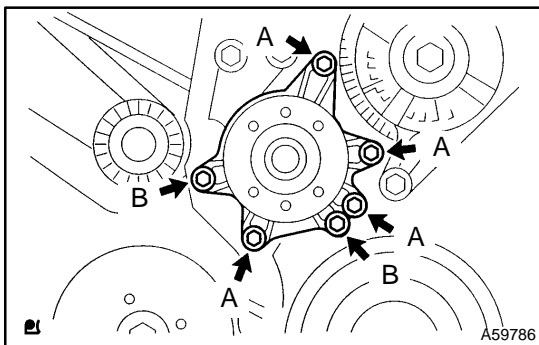
1. DRAIN COOLANT (See page 16-18)
2. REMOVE ENGINE UNDER COVER RH
3. REMOVE CYLINDER HEAD COVER NO.2
 - (a) Remove the 3 bolts and nut, then remove the cylinder head cover No. 2.
4. DISCONNECT BATTERY NEGATIVE TERMINAL
5. REMOVE WIRE HARNESS PROTECTOR (See page 14-161)
6. SEPARATE SUCTION HOSE SUB-ASSY (See page 14-161)
7. REMOVE AIR SWITCHING VALVE ASSY (See page 12-34)
8. REMOVE FAN AND GENERATOR V BELT (See page 14-161)
9. REMOVE GENERATOR BRACKET NO.1 (See page 19-20)
10. REMOVE GENERATOR ASSY (See page 19-20)



11. REMOVE WATER PUMP PULLEY
 - (a) Using SST, remove the water pump pulley.
SST 09960-10010 (09962-01000, 09963-00600)



12. REMOVE WATER PUMP ASSY
 - (a) Remove the 6 bolts and water pump.
 - (b) Remove the O-ring from the timing chain cover.

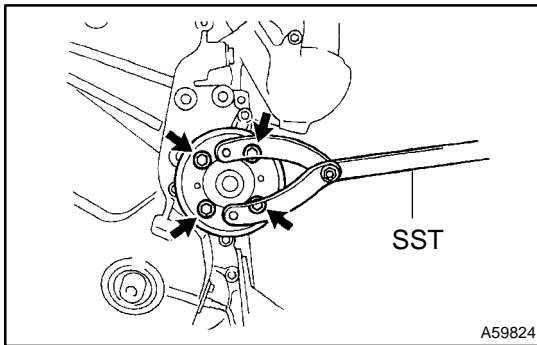


13. INSTALL WATER PUMP ASSY
 - (a) Place a new O-ring on the timing chain cover.
 - (b) Install the water pump with the 6 bolts.
Torque: 9.0 N·m (92 kgf·cm, 80 in·lbf)

HINT:

Each bolt length is indicated in the table.

Bolt A	35 mm (1.38 in.)
Bolt B	28 mm (1.10 in.)

**14. INSTALL WATER PUMP PULLEY**

- (a) Using SST, install the water pump pulley.
SST 09960-10010 (09962-01000, 09963-00600)
Torque: 15 N·m (153 kgf·cm, 11 ft·lbf)

- 15. INSTALL GENERATOR ASSY (See page 19-20)**
16. INSTALL GENERATOR BRACKET NO.1 (See page 19-20)
17. INSTALL AIR SWITCHING VALVE ASSY (See page 12-34)
18. INSTALL SUCTION HOSE SUB-ASSY
Torque: 9.8 N·m (100 kgf·cm, 87 in·lbf)
19. CONNECT BATTERY NEGATIVE TERMINAL
Torque: 3.5 N·m (36 kgf·cm, 31 in·lbf)
20. ADD COOLANT (See page 16-18)
21. CHECK FOR ENGINE COOLANT LEAKAGE (See page 16-12)
22. INSTALL CYLINDER HEAD COVER NO.2
Torque: 7.0 N·m (71 kgf·cm, 62 in·lbf)