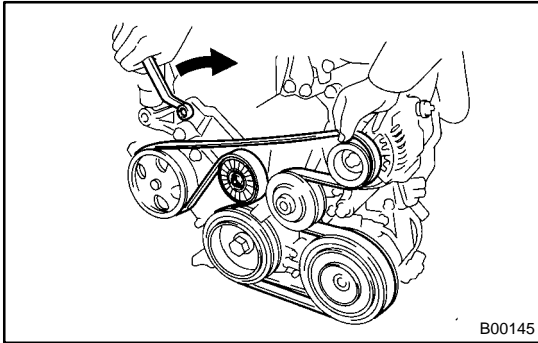


# WATER PUMP ASSY (2ZZ-GE)

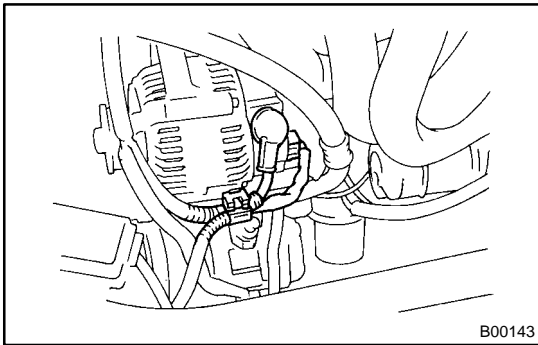
## REPLACEMENT

160CZ-01

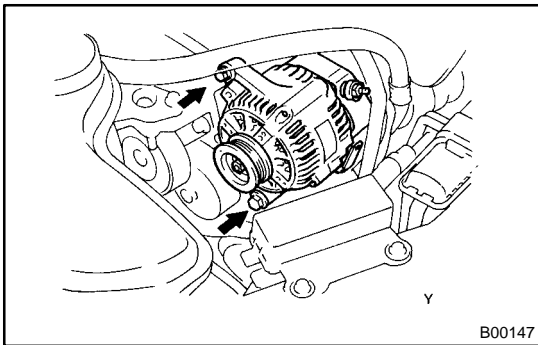
1. REMOVE ENGINE UNDER COVER RH
2. DRAIN COOLANT (See page 16-6)



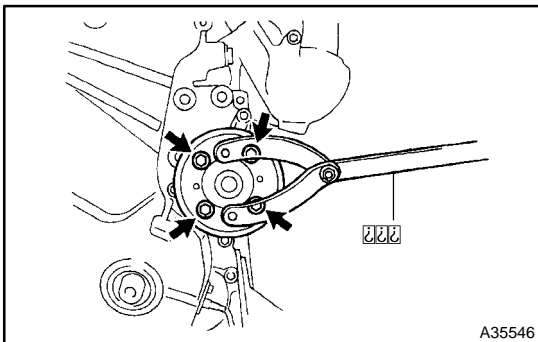
3. REMOVE FAN AND GENERATOR V BELT (See page 14-177)



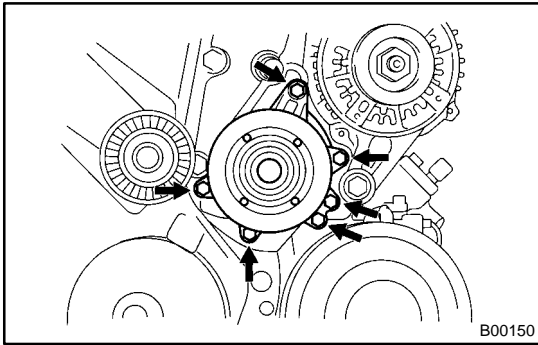
4. REMOVE GENERATOR ASSY
  - (a) Disconnect the wire clamp from the wire clip on the rectifier end frame.
  - (b) Remove the rubber cap and nut, and disconnect the alternator wire.
  - (c) Disconnect the alternator connector.



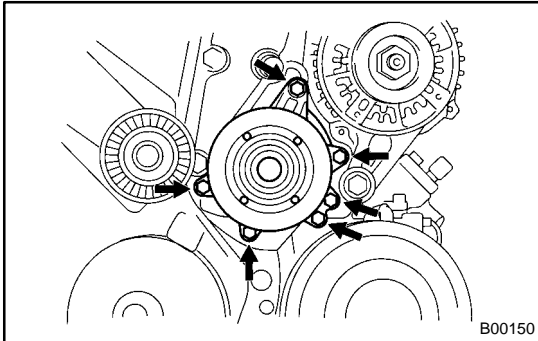
- (d) Remove the 2 bolts and alternator.



5. REMOVE WATER PUMP ASSY
  - (a) Using SST, remove 4 bolts and the water pump pulley.  
SST 09960-10010 (09962-01000, 09963-00600)



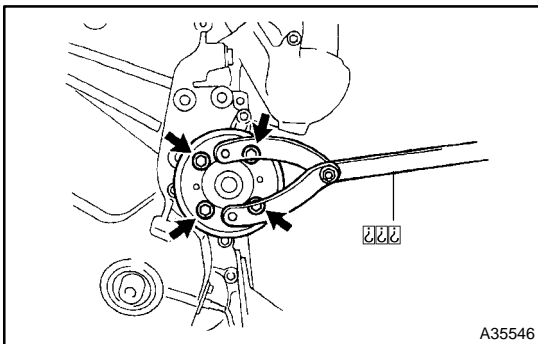
- (b) Remove the 6 bolts, water pump and O-ring.



## 6. 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)**



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

## 7. INSTALL GENERATOR ASSY

**Torque:**

12 mm head 25 N·m (250 kgf·cm, 18 ft·lbf)

14 mm head 54 N·m (550 kgf·cm, 39 ft·lbf)

8. ADD COOLANT (See page 16-6)  
 9. CHECK ENGINE COOLANT LEAK (See page 16-6)