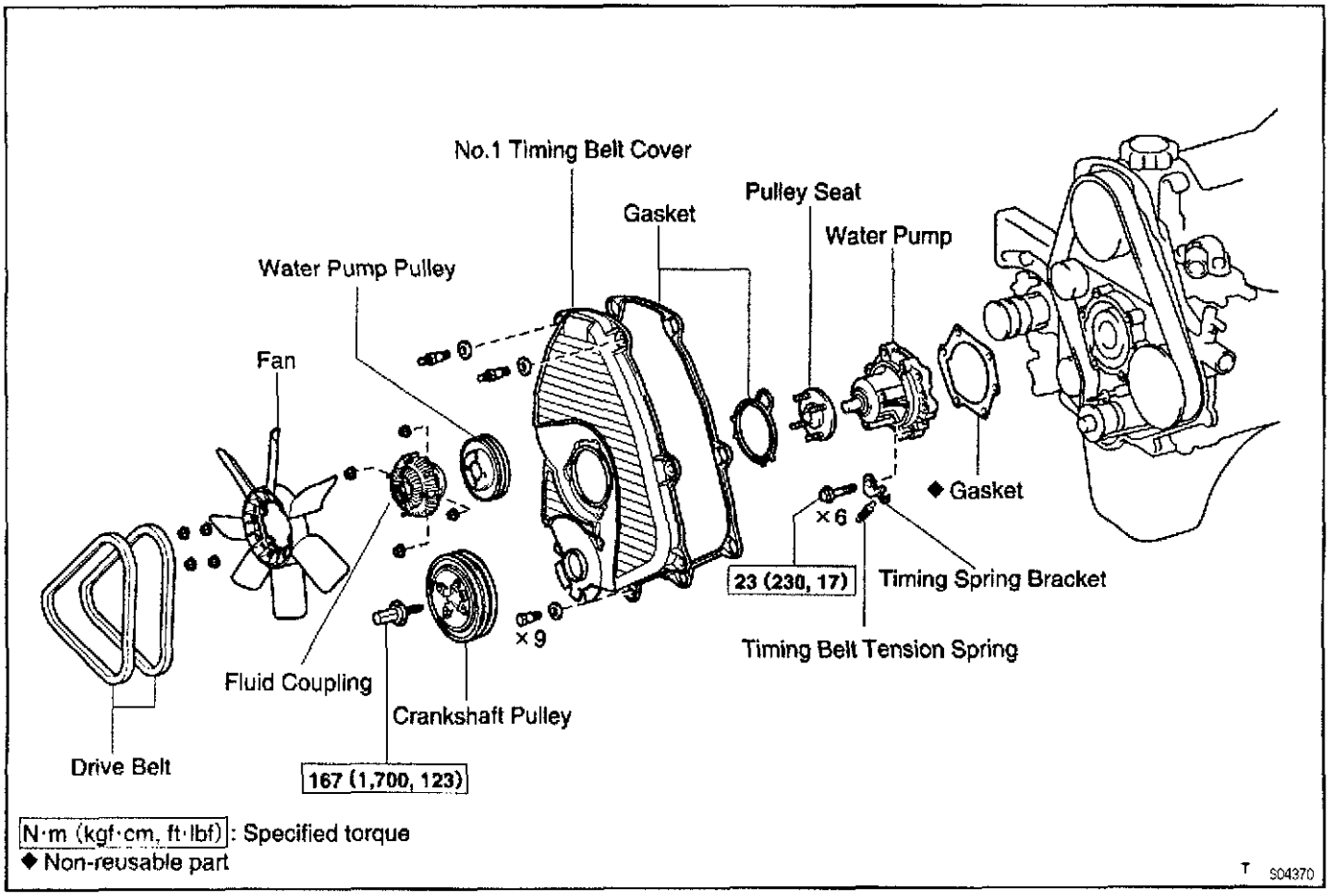
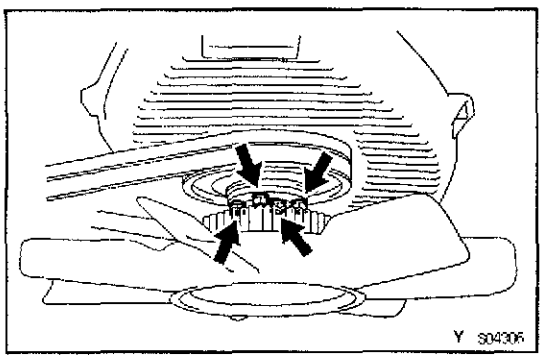
WATER PUMP

EG7AL-01

COMPONENTS FOR REMOVAL AND INSTALLATION

EG

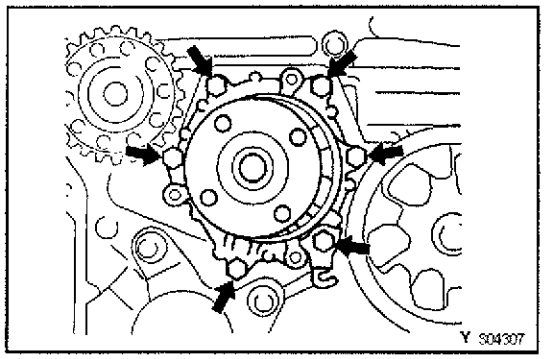




EG568-02

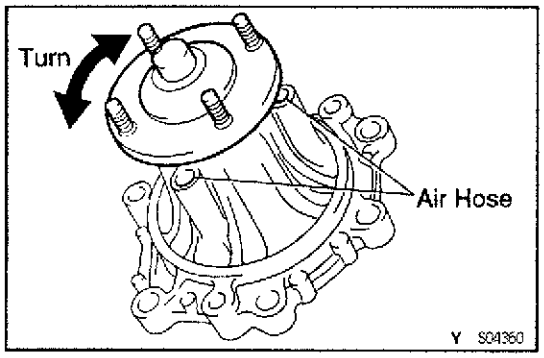
WATER PUMP REMOVAL

1. **DRAIN ENGINE COOLANT**
2. **REMOVE DRIVE BELTS, FAN, FLUID COUPLING AND WATER PUMP PULLEY**
   (a) Loosen the 4 water pump pulley nuts.
   (b) Loosen the alternator pivot bolt and adjusting lock bolt.
   (c) Loosen the adjusting bolt, and remove the 2 drive belts.
   (d) Remove the 4 nuts, the fan, fluid coupling assembly and pulley.
   (e) Remove the 4 nuts and fan from the fluid coupling.
3. **REMOVE CRANKSHAFT PULLEY AND NO.1 TIMING BELT COVER**
   (See steps 3 and 4 in timing belt removal in Engine Mechanical)
4. **REMOVE TIMING BELT TENSION SPRING**
   Using needle nose pliers, remove the tension spring.



5. REMOVE WATER PUMP

Remove the 6 bolts, tension spring bracket, water pump and gasket.



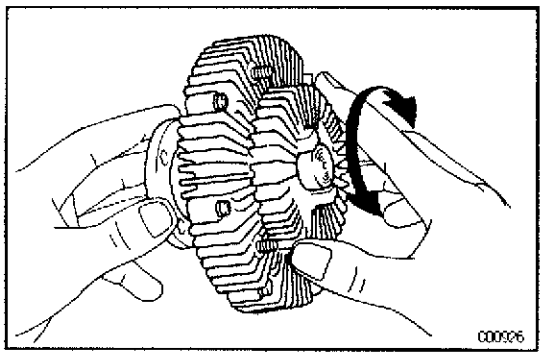
WATER PUMP INSPECTION

S0TAM-01

1. INSPECT WATER PUMP

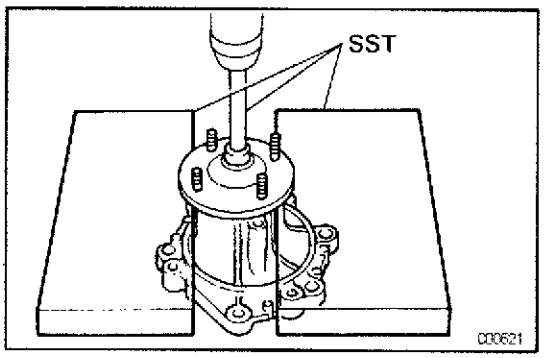
(a) Visually check the air holes for coolant leakage.
If leakage is found, replace the water pump.
If engine coolant has leaked onto the timing belt, replace the timing belt.

(b) Turn the pulley and check that the water pump bearing moves smoothly and quietly.
If necessary, replace the water pump.



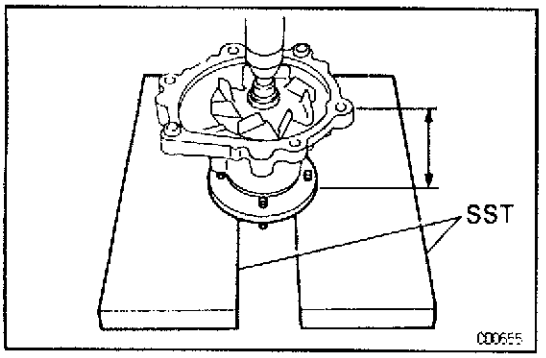
2. INSPECT FLUID COUPLING

Check the fluid coupling for damage and silicon oil leakage.
If necessary, replace the fluid coupling.



3. REPLACE PULLEY SEAT

(a) Using SST and a press, press the shaft of the bearing and remove the pulley seat.
SST 09236–00101 (09237–00010, 09237–00050)

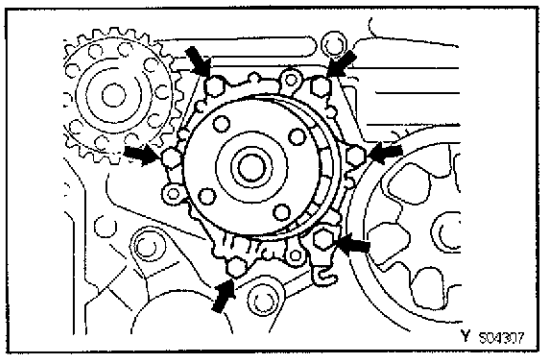


(b) Using SST and a press, press the shaft of the bearing and install a new pulley seat to a distance of 76.5 – 77.5 mm (3.012 – 3.051 in.) between the pulley seat and pump body.
SST 09236–00101 (09237–00010)

TIMING BELT COMPONENTS INSPECTION

(See timing belt in Engine Mechanical)

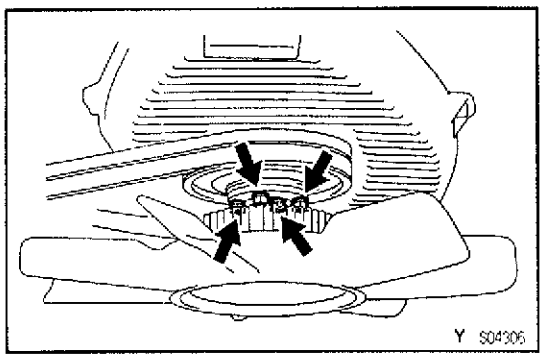
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WATER PUMP INSTALLATION

1. **INSTALL WATER PUMP**
   Install a new gasket, the water pump and tension spring bracket with the 6 bolts.
   Torque: 23 N·m (230 kgf·cm, 17 ft·lbf)

2. **INSTALL TIMING BELT TENSION SPRING**
   Using needle nose pliers, install the tension spring.
3. **INSTALL NO.1 TIMING BELT COVER AND CRANKSHAFT PULLEY**
   (See steps 10 and 11 in timing belt installation in Engine Mechanical)



4. **INSTALL WATER PUMP PULLEY, FLUID COUPLING, FAN AND DRIVE BELTS**
   (a) Install the fan to the fluid coupling with the 4 nuts.
   Torque: 6.5 N·m (65 kgf·cm, 57 in.·lbf)
   (b) Temporarily install the pump pulley, the fan and fluid coupling assembly with the 4 nuts.
   (c) Install and adjust the drive belts.
   (d) Stretch the belts tighten the 4 water pump pulley nuts.
   Torque: 12 N·m (120 kgf·cm, 9 ft·lbf)
5. **FILL WITH ENGINE COOLANT**
6. **START ENGINE, AND CHECK FOR COOLANT LEAKS**