TIMING GEAR CASE OR TIMING CHAIN CASE OIL SEAL (1KD–FTV)

1411T–01

REPLACEMENT

1. REMOVE ENGINE UNDER COVER SUB–ASSY NO.1

(a) Remove the 4 bolts and engine under cover No. 1.

2. DRAIN COOLANT (See page 16–50)

3. REMOVE RADIATOR SUPPORT SEAL UPPER

(a) Remove the 11 clips and radiator support seal upper.

4. REMOVE WIRE HARNESS (W/ COLD AREA)

(a) Remove the wire harness from the fan shroud.

5. REMOVE RADIATOR RESERVE TANK ASSY

(a) Remove the radiator reserve tank hose.

(b) Remove the 3 bolts and radiator reserve tank.

6. REMOVE RADIATOR HOSE NO.1

7. REMOVE FAN AND GENERATOR V BELT (See page 14–189)

HINT:

Loosen the 4 nuts for the fan w/ fluid coupling assy in advance.

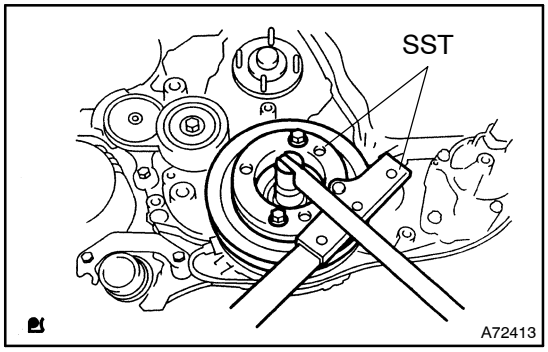
8. REMOVE FAN SHROUD

(a) Remove the oil cooler inlet hose and outlet hose from the hose clamp. (AT TRANSMISSION)

(b) Remove the 4 nuts for the fan w/ fluid coupling assy as well as 2 bolts for the fan shroud.

(c) Remove the fan w/ fluid coupling assy together with the fan shroud.

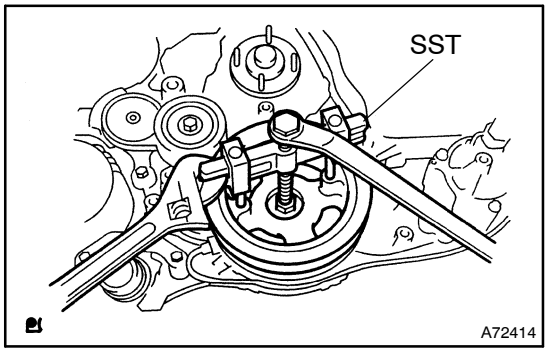
9. REMOVE FAN PULLEY



10. REMOVE CRANKSHAFT PULLEY

(a) Remove the bolt with holding the crankshaft using SST.
SST 09213–58013, 09330–00021

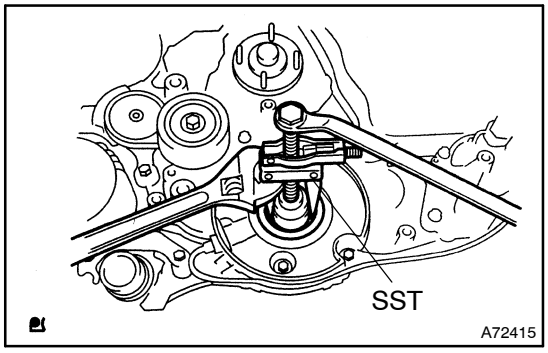
(b) Insert the service bolt.



(c) Remove the crankshaft pulley with SST.
SST 09950–50013 (09951–05010, 09952–05010, 09953–05020, 09954–05021)

NOTICE:

Apply fats to a thread and tip of SST (Center bolt) prior to use it.



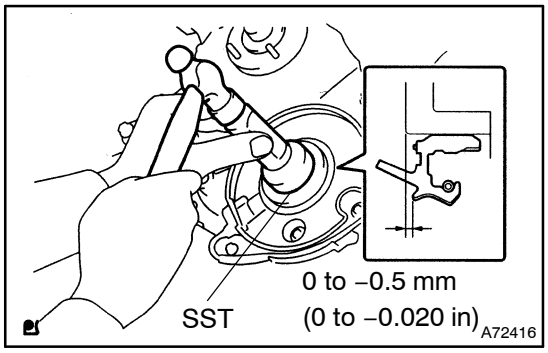
11. REMOVE TIMING GEAR CASE OR TIMING CHAIN CASE OIL SEAL

(a) Remove the oil seal with SST.

SST 09308–10010, 09950–50013 (09957–04010), 09950–60010 (09951–00350)

NOTICE:

Make sure that there is no damage like scratch on the inner–joint–face of the crankshaft after the oil seal removal. If it is found, please make the surface smooth by a sandpaper (#400).



12. INSTALL TIMING GEAR CASE OR TIMING CHAIN CASE OIL SEAL

(a) Apply a bit of MP grease to a new oil seal's lip.

NOTICE:

Keep the lip clean. Not to bring dirt and dust on that area.

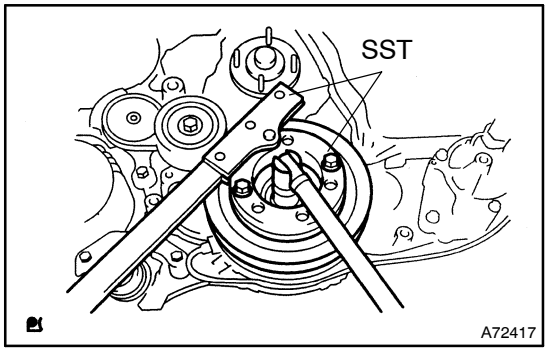
(b) Fit the oil seal by using SST and a hammer.

SST 09223–46011

Acceptable depth from the top–flat–face of the timing gear case cover: 0 to –0.5 mm (0 to –0.020 in.)

NOTICE:

Be sure to make the oil seal a horizontal when embedded.



13. INSTALL CRANKSHAFT PULLEY

(a) Tighten the bolt with holding the crankshaft pulley using SST.

SST 09213–58013

Torque: 365 N·m (3722 kgf·cm, 270 ft·lbf)

14. INSTALL FAN PULLEY

15. INSTALL FAN SHROUD

(a) Temporarily place the fan shroud together with the fan w/ fluid coupling assy to the correct location inside the engine room.

(b) Install the fan shroud to the radiator with the 2 bolts.

Torque: 5 N·m (51 kgf·cm, 44 in.·lbf)

(c) Install the fan w/ fluid coupling assy to the water pump with the 4 nuts.

Torque: 18 N·m (184 kgf·cm, 13 ft·lbf)

(d) Install the oil cooler inlet hose and outlet hose to the hose clamp. (AT TRANSMISSION)

16. INSTALL FAN AND GENERATOR V BELT (See page 14–189)

17. INSTALL RADIATOR HOSE NO.1

18. INSTALL RADIATOR RESERVE TANK ASSY

(a) Install the radiator reserve tank with the 3 bolts.

Torque: 5 N·m (51 kgf·cm, 44 in.·lbf)

(b) Install the radiator reserve tank hose.

19. INSTALL WIRE HARNESS (W/ COLD AREA)

(a) Install the wire harness to the fan shroud.

20. INSTALL RADIATOR SUPPORT SEAL UPPER

(a) Install the radiator support seal upper with the 11 clips.

21. ADD ENGINE COOLANT (See page 16–50)

22. CHECK FOR ENGINE COOLANT LEAKS

23. CHECK ENGINE OIL LEAK

24. INSTALL ENGINE UNDER COVER SUB–ASSY NO.1

(a) Install the engine under cover No. 1 with the 4 bolts.

Torque: 29 N·m (296 kgf·cm, 21 ft·lbf)