TIMING GEAR CASE OR TIMING CHAIN CASE OIL SEAL (2TR–FE)

1420M–01

REPLACEMENT

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

(a) Remove the 4 bolts and engine under cover.

2. DRAIN ENGINE COOLANT (SEE PAGE 16–5)

3. REMOVE RADIATOR SUPPORT SEAL UPPER (SEE PAGE 16–11)

4. DISCONNECT RADIATOR HOSE INLET

5. DISCONNECT RADIATOR HOSE OUTLET

6. DISCONNECT OIL COOLER INLET HOSE NO.1 (AUTOMATIC TRANSMISSION)

7. DISCONNECT OIL COOLER OUTLET HOSE (AUTOMATIC TRANSMISSION)

8. SEPARATE FAN SHROUD (SEE PAGE 16–11)

9. REMOVE RADIATOR ASSY (SEE PAGE 16–11)

10. REMOVE FAN SHROUD

(a) Remove the fan shroud from the engine room.

11. REMOVE FAN AND GENERATOR V BELT (SEE PAGE 14–9)

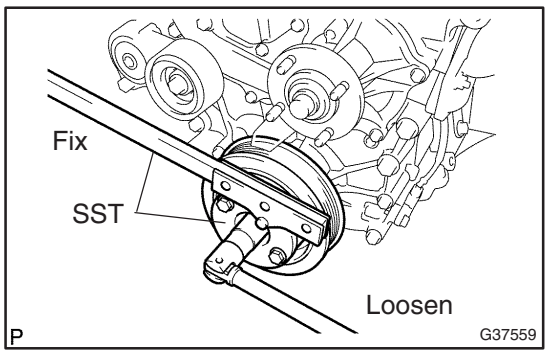
HINT:

Loosen the 4 nuts for the fluid coupling in advance.

12. REMOVE FLUID COUPLING ASSY

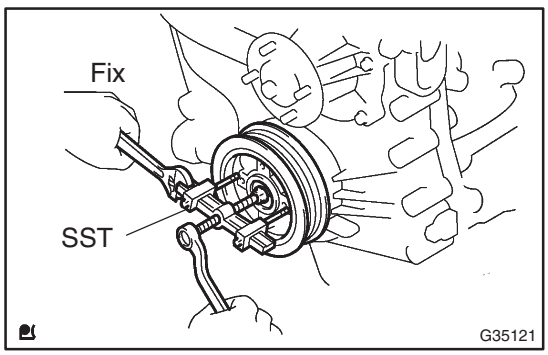
(a) Remove the 4 nuts with the coupling from the water pump pulley.

13. REMOVE FAN PULLEY

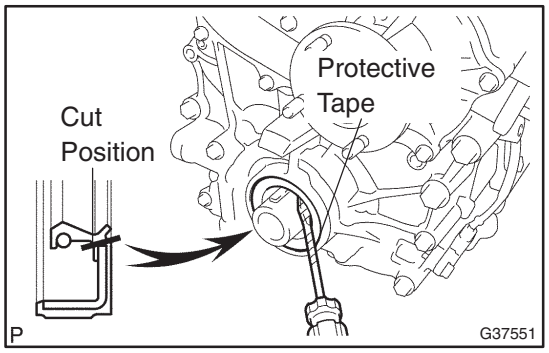


14. REMOVE CRANKSHAFT PULLEY

(a) Using SST, loosen the pulley bolt.
SST 09213–54015 (91651–60855), 09330–00021



(b) Using SST, remove the pulley bolt and pulley.
SST 09950–50013 (09951–05010, 09952–05010, 09953–05010, 09954–05021)

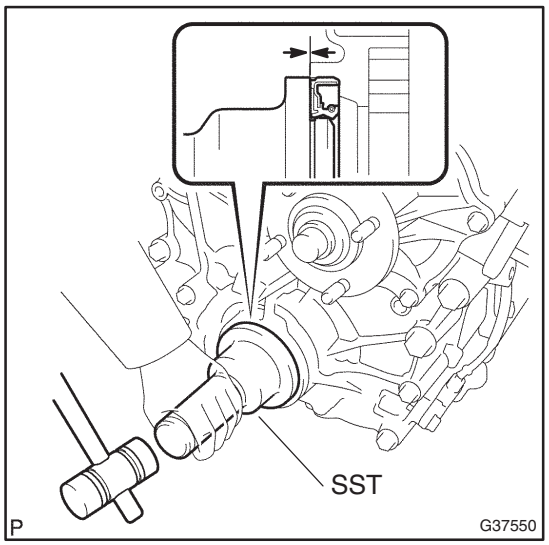


15. REMOVE TIMING GEAR CASE OR TIMING CHAIN CASE OIL SEAL

(a) Using a screwdriver with its tip taped, pry out the oil seal.

NOTICE:

After the removal, check the crankshaft for damage. If it is damaged, smooth the surface with 400–grit sandpaper.



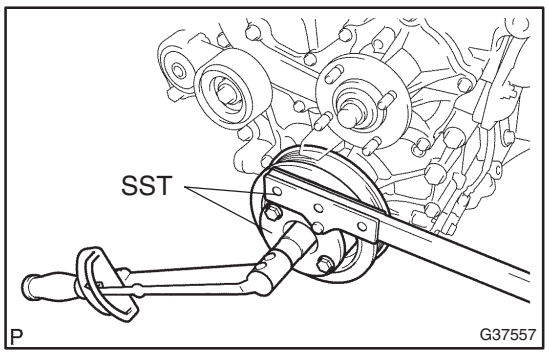
16. INSTALL TIMING GEAR CASE OR TIMING CHAIN CASE OIL SEAL

(a) Using SST and a hammer, tap in the oil seal until its surface is flush with the rear oil seal retainer edge.
SST 09223–50010

NOTICE:

- **Keep the lip free from foreign matter.**
- **Do not tap the oil seal at an angle.**

(b) Apply MP grease to a new oil seal lip.



17. INSTALL CRANKSHAFT PULLEY

(a) Align the pulley set key with the key groove of the pulley, and slide on the pulley.

(b) Using SST, install a new crankshaft pulley bolt.
SST 09213–54015 (91651–60855), 09330–00021
Torque: 260 N·m (2,651 kgf·cm, 192 ft·lbf)

NOTICE:

Do not reuse the pulley bolt.

18. INSTALL FAN PULLEY

19. INSTALL FLUID COUPLING ASSY

(a) Install the coupling to the water pump pulley with the 4 nuts.
Torque: 25 N·m (255 kgf·cm, 18 ft·lbf)

20. INSTALL FAN AND GENERATOR V BELT (SEE PAGE 14–9)

21. INSPECT DRIVE BELT (SEE PAGE 14–1)

22. INSTALL FAN SHROUD

(a) Temporarily place the fan shroud in the engine room.

23. INSTALL RADIATOR ASSY (SEE PAGE 16–11)

24. CONNECT FAN SHROUD (SEE PAGE 16–11)

25. CONNECT OIL COOLER OUTLET HOSE (AUTOMATIC TRANSMISSION)

26. CONNECT OIL COOLER INLET HOSE NO.1 (AUTOMATIC TRANSMISSION)

27. CONNECT RADIATOR HOSE NO.2

28. CONNECT RADIATOR HOSE NO.1

29. INSTALL RADIATOR SUPPORT SEAL UPPER (SEE PAGE 16–11)

30. CHECK FOR ENGINE COOLANT LEAKS (SEE PAGE 16–1)

31. CHECK FOR ENGINE OIL LEAKS

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

(a) Install the engine under cover with the 4 bolts.

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