

CRANKSHAFT SEAL (1CD-FTV)

REPLACEMENT

140DN-01

1. DRAIN ENGINE OIL

- (a) Install a new gasket and the drain plug after draining engine oil.

Torque: 25 N·m (250 kgf·cm, 3 ft·lb)

2. REMOVE FRONT WHEEL RH

3. REMOVE ENGINE UNDER COVER RH

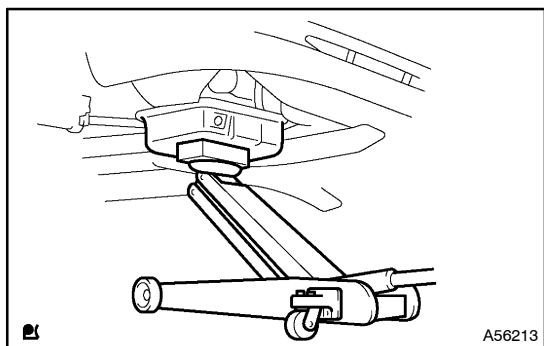
4. REMOVE ENGINE COVER SUB-ASSY NO.1

5. REMOVE V (COOLER COMPRESSOR TO CRANKSHAFT PULLEY) BELT NO.1

(See page 4-75)

6. REMOVE FAN AND GENERATOR V BELT

(See page 4-75)



7. REMOVE ENGINE MOUNTING BRACKET NO.2 RH

- (a) Place a wooden block between the jack and engine, and set the jack, then remove the 2 bolts, a nut and mounting bracket.

8. REMOVE CRANKSHAFT PULLEY

(See page 4-114)

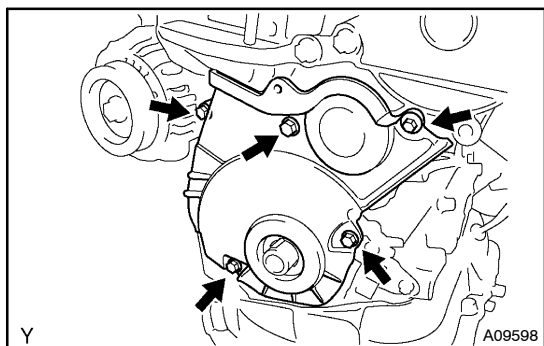
SST 09213-54015 (91651-60855), 09330-00021, 09950-50013 (09951-05010, 09952-05010, 09953-05010, 09953-05020, 09954-05021, 09954-05030)

9. REMOVE PULLEY SUB-ASSY, IDLER

- (a) Remove idler pulley set bolt and idler pulley.

10. REMOVE TIMING BELT NO.2 COVER

(See page 4-114)



11. REMOVE TIMING BELT NO.1 COVER

- (a) Remove the 5 bolts, 5 seal washers and timing belt cover.
(b) Remove the oil pump insulator.

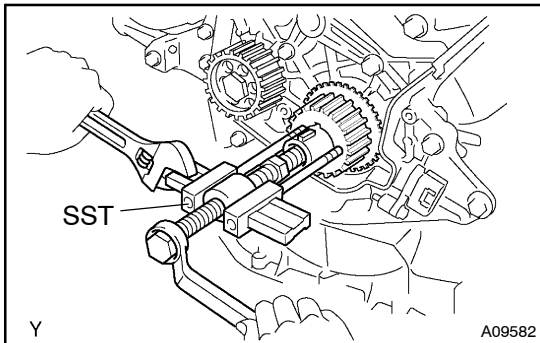
12. REMOVE TIMING BELT GUIDE

13. REMOVE TRANSVERSE ENGINE ENGINE MOUNTING BRACKET

(See page 4-114)

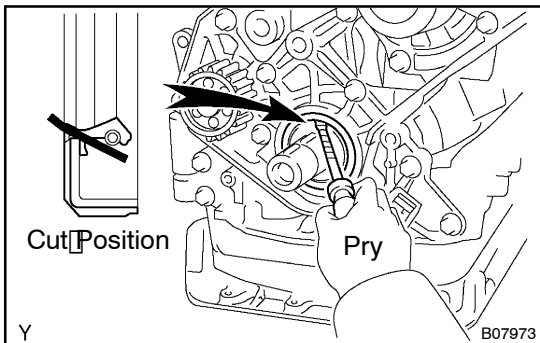
14. SET NO.1 CYLINDER TO TDC/COMPRESSION (See page 4-114)

AVENSIS VERSO/PICNIC REPAIR MANUAL
(RM864E)

15. REMOVE TIMING BELT**16. REMOVE CRANKSHAFT TIMING PULLEY**

- (a) If the pulley cannot be removed by hand, use SST to remove the timing pulley.

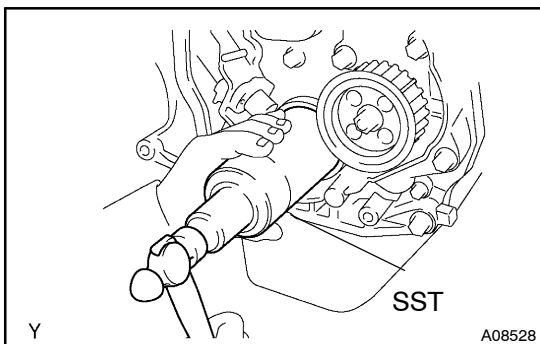
SST 09950-50013 (09951-05010, 09952-05010, 09953-05010, 09953-05020, 09954-05021)

**17. REMOVE CRANKSHAFT SEAL**

- (a) Using a knife, cut off the oil seal lip.
(b) Using a screwdriver, pry out the oil seal.

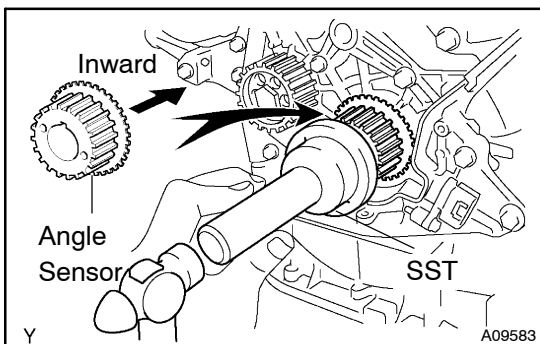
NOTICE:

Be careful not to damage the crankshaft. Tape the screwdriver tip.

**18. INSTALL CRANKSHAFT SEAL**

- (a) Using SST and a hammer, tap in the oil seal until its surface is flush with the oil pump edge.

SST 09316-60011 (09316-00011)

**19. INSTALL CRANKSHAFT TIMING PULLEY**

- (a) Align the pulley set key with the key groove of the timing pulley.
(b) Using SST and a hammer, tap in the timing pulley, facing the angle sensor inward.

SST 09223-46011

20. SET NO.1 CYLINDER TO TDC/COMPRESSION (See page 14-114)

SST 09960-10010 (09962-01000, 09963-01000)

21. INSTALL TIMING BELT

(See page 14-114)

22. **INSTALL TRANSVERSE ENGINE ENGINE MOUNTING BRACKET**
(See page 14-114)
23. **INSTALL TIMING BELT GUIDE**
(See page 14-114)
24. **INSTALL TIMING BELT NO.1 COVER**
(See page 14-114)
25. **INSTALL TIMING BELT NO.2 COVER**
(See page 14-114)
26. **INSTALL PULLEY SUB-ASSY, IDLER**
 - (a) Install idler pulley set bolt and idler pulley.
Torque: 43 N·m (440 kgf·cm, 317 ft·lbf)
27. **INSTALL CRANKSHAFT PULLEY**
(See page 14-114)
SST 09213-54015 (91651-60855), 09330-00021
28. **INSTALL ENGINE MOUNTING BRACKET NO.2 RH**
 - (a) Install the 2 bolts, nut and mounting bracket.
Torque: 64 N·m (653 kgf·cm, 47 ft·lbf)
 - (b) Remove the jack.
29. **ADJUST V (COOLER COMPRESSOR TO CRANKSHAFT PULLEY) BELT NO.1**
(See page 14-75)
30. **INSTALL ENGINE COVER SUB-ASSY NO.1**
(See page 11-23)
31. **INSTALL FRONT WHEEL RH**
Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)
32. **ADD ENGINE OIL**
33. **CHECK ENGINE OIL LEAK**