

REMOVAL

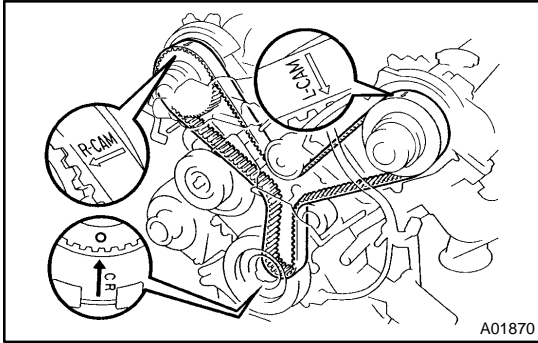
1. REMOVE OIL PAN PROTECTOR
2. REMOVE ENGINE UNDER COVER
3. DRAIN ENGINE COOLANT
4. REMOVE BATTERY CLAMP COVER
5. REMOVE AIR CLEANER INLET
6. REMOVE V-BANK COVER
Remove the bolt, 2 cap nuts and V-bank cover.
7. REMOVE AIR CLEANER AND INTAKE AIR CONNECTOR ASSEMBLY
8. REMOVE DRIVE BELT, FAN, FLUID COUPLING AND FAN PULLEY
 - (a) Loosen the 4 nuts holding the fluid coupling to the fan bracket.
 - (b) Remove the generator drive belt.
(See page [CH-8](#))
 - (c) Remove the 4 nuts, the fan, fluid coupling assembly and fan pulley.
9. REMOVE RADIATOR ASSEMBLY
(See page [CO-20](#))
10. REMOVE DRIVE BELT IDLER PULLEY
Remove the pulley bolt, cover plate and idler pulley.
11. REMOVE RH NO.3 TIMING BELT COVER
 - (a) Disconnect the PS air hose from the clamp of the timing belt cover.
 - (b) Disconnect the wire clamp.
 - (c) Disconnect the radiator reservoir outlet hose from the water inlet housing.
 - (d) Remove the bolt and nut, disconnect the outlet pipe from the timing belt cover and LH cylinder head.
 - (e) Remove the 3 bolts, timing belt cover and gasket.
12. REMOVE LH NO.3 TIMING BELT COVER
 - (a) Disconnect the engine wire from the 2 wire clamps.
 - (b) Remove the 4 bolts and nut.
 - (c) Disconnect the camshaft position sensor wire from the wire clamp on the timing belt cover.
 - (d) Disconnect the sensor connector from the connector bracket.
 - (e) Disconnect the sensor connector.
 - (f) Remove the wire grommet from the timing belt cover.
 - (g) Remove the timing belt cover and gasket.

13. REMOVE NO.2 TIMING BELT COVER

Remove the 2 bolts and No.2 timing belt cover.

14. DISCONNECT A/C COMPRESSOR FROM ENGINE
(See page EM-76)**15. REMOVE FAN BRACKET**

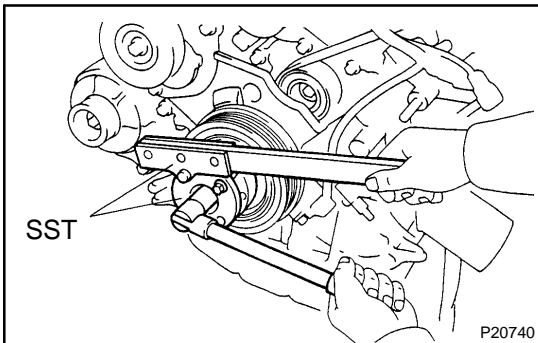
Remove the 2 bolts, 2 nuts and fan bracket.

**16. IF RE-USING TIMING BELT, CHECK INSTALLATION MARKS ON TIMING BELT**

Check that there are 3 installation marks on the timing belt by turning the crankshaft pulley as shown in the illustration.

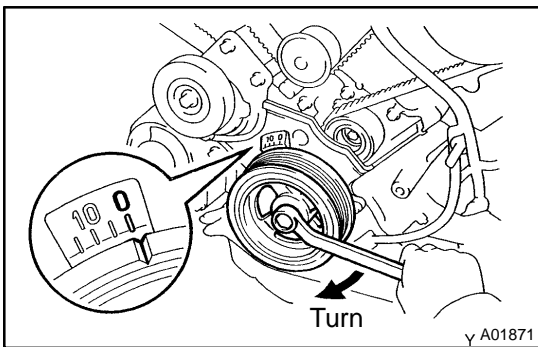
HINT:

If the installation marks have disappeared, place a new installation mark on the timing belt before removing each part.

**17. LOOSEN CRANKSHAFT PULLEY BOLT**

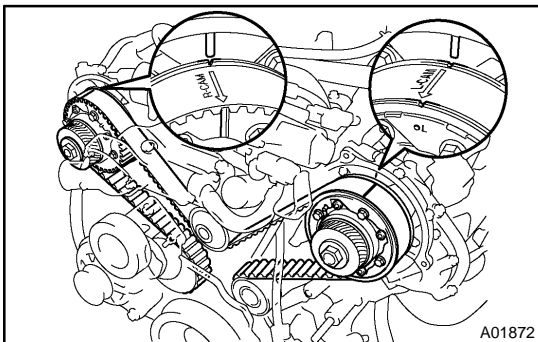
Using SST, loosen the pulley bolt.

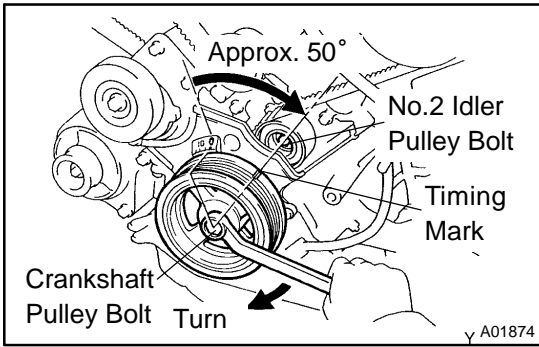
SST 09213-70010 (90105-08076),
09330-00021

**18. SET NO.1 CYLINDER TO APPROX. 50° ATDC/COMPRESSION**

(a) Turn the crankshaft pulley and align its groove with timing mark "0" of the No.1 timing belt cover.

(b) Check that the timing marks of the camshaft timing pulleys and timing belt rear plates aligned.
If not, turn the crankshaft 1 revolution (360°).





- (c) Turn the crankshaft pulley approx. 50° clockwise, and put the timing mark of the crankshaft pulley in line with the centers of the crankshaft pulley bolt and the idler pulley bolt.

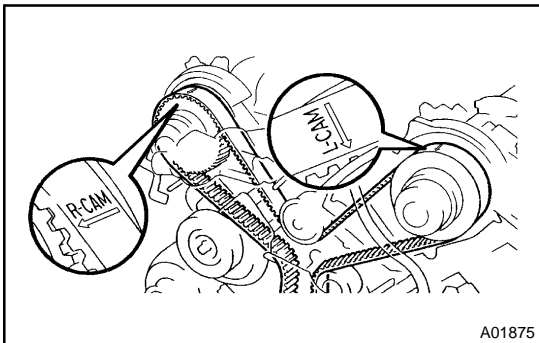
NOTICE:

If the timing belt is disengaged, having the crankshaft pulley at the wrong angle can cause the piston head and valve head to come into contact with each other when you remove the camshaft timing pulley (step 19), causing damage. So always set the crankshaft pulley at the correct angle.

- (d) Remove the crankshaft pulley bolt.

NOTICE:

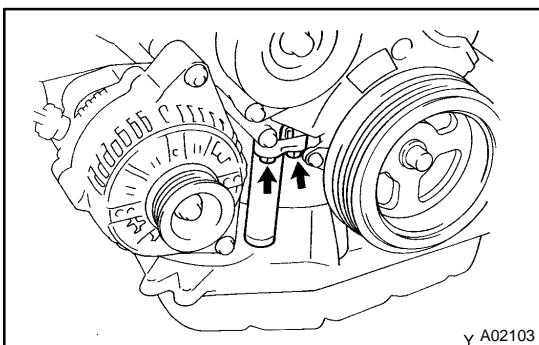
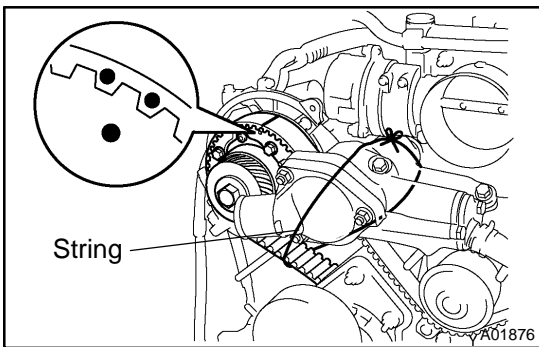
Do not turn the crankshaft pulley.



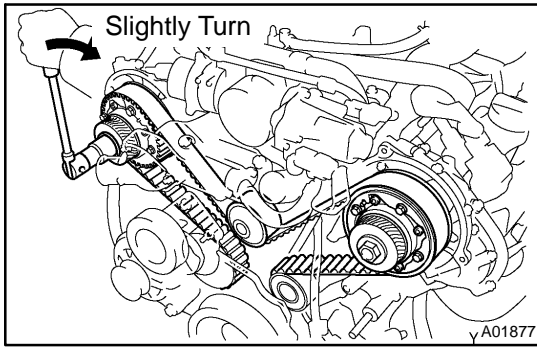
19. REMOVE TIMING BELT TENSIONER

HINT:

- When re-using timing belt:
If the installation marks have disappeared, before remove the timing belt, place 2 new installation marks on the timing belt to match the timing marks of the camshaft timing pulleys.
- When replacing timing belt tensioner only:
To avoid meshing of the timing pulley and timing belt, secure one of them with string. And place matchmarks on the timing belt and RH camshaft timing pulley.

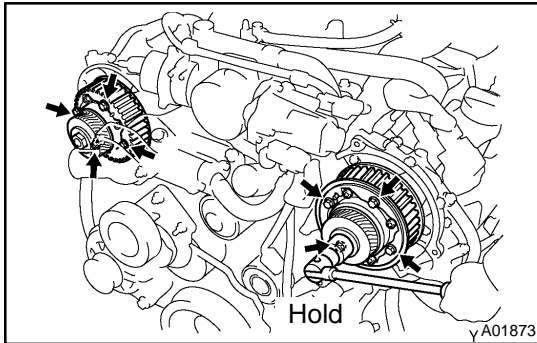


Alternately loosen the 2 bolts, and remove them, the belt tensioner and dust boot.



20. DISCONNECT TIMING BELT FROM CAMSHAFT TIMING PULLEYS

- Loosen the tension spring between the LH and RH camshaft timing pulleys by slightly turning the RH camshaft timing pulley clockwise.
- Disconnect the timing belt from the camshaft timing pulleys.



21. REMOVE CAMSHAFT TIMING PULLEYS

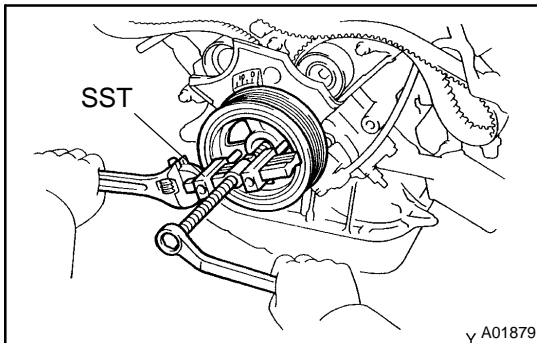
Holding the intake camshaft, remove the 4 bolts and timing pulley. Remove the 2 timing pulleys.

22. REMOVE GENERATOR

(See page [CH-8](#))

23. REMOVE DRIVE BELT TENSIONER

Remove the bolt, 2 nuts and belt tensioner.



24. REMOVE CRANKSHAFT PULLEY

Using SST, remove the crankshaft pulley.

SST 09950-50010 (09951-05010, 09952-05010, 09953-05010, 09953-05020, 09954-05020)

NOTICE:

Do not turn the crankshaft pulley.

25. REMOVE NO.1 TIMING BELT COVER

Remove the 4 bolts, timing belt cover.

26. REMOVE TIMING BELT GUIDE

27. REMOVE TIMING BELT COVER SPACER

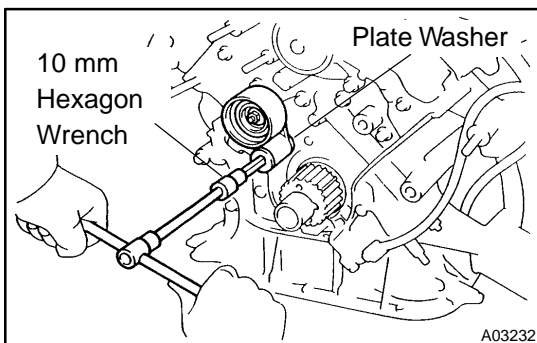
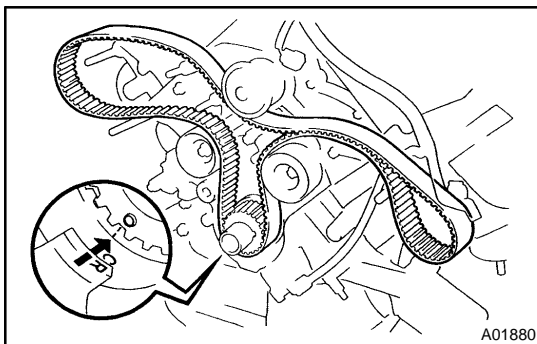
28. REMOVE TIMING BELT

HINT:

If re-using the belt and the installation mark has disappeared from it, place a new installation mark on the timing belt to the match the dot mark of the crankshaft timing pulley.

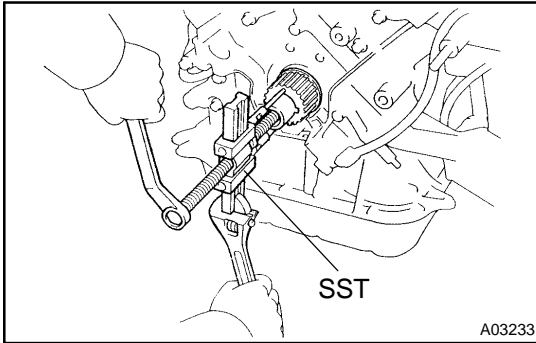
29. REMOVE NO.2 IDLER PULLEY

Remove the bolt and idler pulley.



30. REMOVE NO.1 IDLER PULLEY

Using a 10 mm hexagon wrench, remove the bolt, idler pulley and plate washer.

**31. REMOVE CRANKSHAFT TIMING PULLEY**

Using SST, remove the timing pulley.

SST 09950-50010 (09951-05010, 09952-05010,
09953-05010, 09953-05020, 09954-05010)

NOTICE:

Do not turn the timing pulley.