

Last Modified: 9-29-2009	5.6 A	From: 200501
Model Year: 2006	Model: Hiace	Doc ID: RM00000126J000X
Title: 5L-E ENGINE MECHANICAL: TIMING BELT: REMOVAL (2006-2010 Hiace)		

REMOVAL

1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

2. DRAIN ENGINE COOLANT

INFO

3. REMOVE FRONT SEAT ASSEMBLY RH (for Hi-back Seat Type)

HINT:

Use the same procedures described for the LH side.

INFO

4. REMOVE FRONT SEAT ASSEMBLY RH (for Low-back Seat Type)

HINT:

Use the same procedures described for the LH side.

INFO

5. REMOVE FRONT DOOR SCUFF PLATE RH

6. REMOVE ENGINE SERVICE HOLE SUB COVER SUB-ASSEMBLY

INFO

7. REMOVE RADIATOR HOSE INLET

8. REMOVE VANE PUMP V BELT

INFO

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

INFO

10. REMOVE FAN & GENERATOR V BELT (w/o Air Conditioning)

INFO

11. REMOVE FAN & GENERATOR V BELT (w/ Air Conditioning)

INFO

12. REMOVE FAN PULLEY

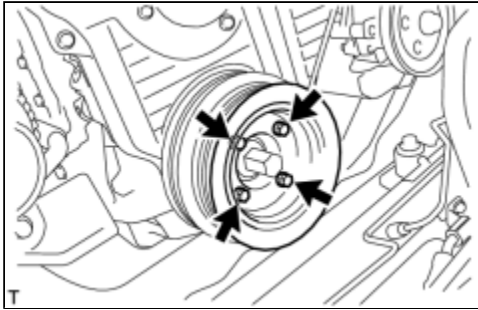
(a) Remove the 4 nuts, fan spacer and fan pulley.

13. REMOVE COMPRESSOR AND MAGNETIC CLUTCH (w/ Air Conditioning)

INFO

14. REMOVE COMPRESSOR MOUNTING BRACKET (w/ Air Conditioning)

INFO

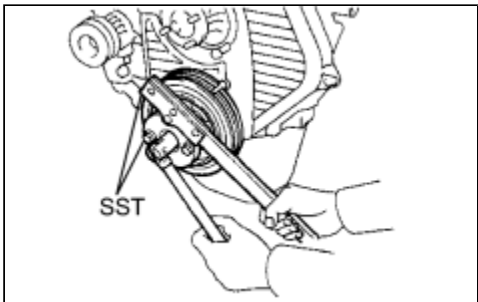
15. REMOVE VANE PUMP DRIVE PULLEY

(a) w/o Air conditioning:

- (1) Remove the 4 bolts, vane pump drive pulley and the vane pump drive pulley spacer.

(b) w/ Air conditioning:

- (1) Remove the 4 bolts, 2 vane pump drive pulleys.

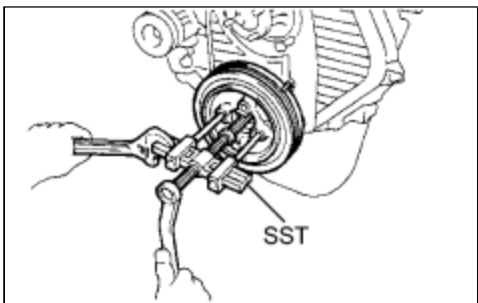
16. REMOVE CRANKSHAFT PULLEY

(a) Using SST, remove the pulley bolt.

SST: 09213-54015

91651-60855

SST: 09330-00021



(b) Using SST, remove the pulley.

SST: 09950-50013

09951-05010

09952-05010

09953-05020

09954-05021

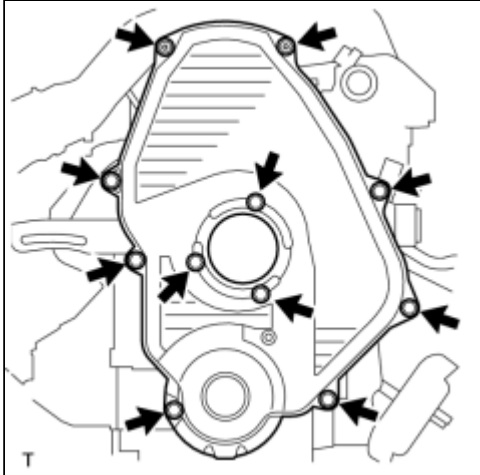
SST: 09950-60010

09951-00490

SST: 09950-40011

09957-04010

17. REMOVE TIMING CHAIN OR BELT COVER SUB-ASSEMBLY

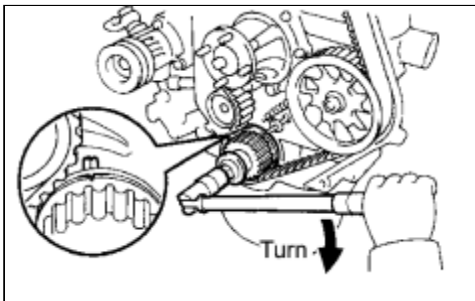


- (a) Remove the 11 bolts, washers, timing belt cover and 2 gaskets.

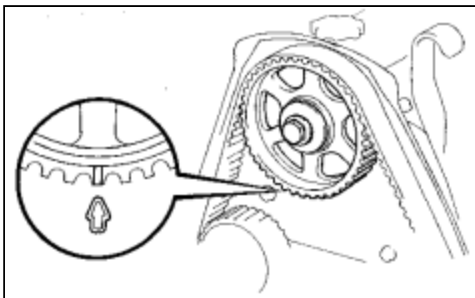
18. REMOVE TIMING BELT GUIDE

- (a) Remove the timing belt guide.

19. SET NO.1 CYLINDER TO TDC/ COMPRESSION

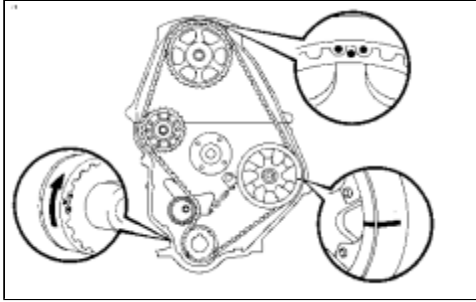


- (a) Using the crankshaft pulley bolt, align its groove with the timing pointer by turning the crankshaft clockwise.



- (b) Check that the timing marks of the camshaft timing pulley and No.2 timing belt cover are aligned.
If not, turn the crankshaft 1 revolution (360°).

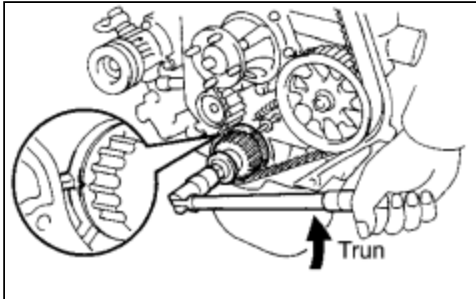
20. REMOVE TIMING BELT



(a) Remove the timing belt.

HINT:

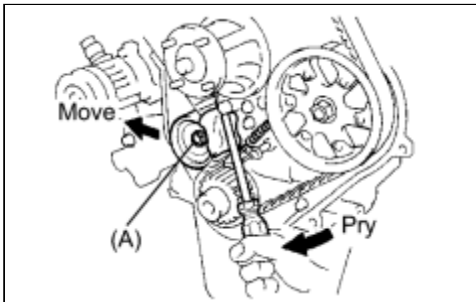
If reusing the timing belt, draw a direction arrow on the timing belt (in the direction of engine revolution), and place matchmarks on the pulleys and timing belt.



(b) Turn the crankshaft 90° counterclockwise, and put the timing mark of the crankshaft timing pulley with the protrusion of the timing gear case.

NOTICE:

If the timing belt is disengaged, having the crankshaft timing 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, causing damage. So always set the crankshaft pulley at the correct angle.



(c) Loosen the timing belt idler No.1 bolt (A), and shift the idler to the left as far as possible.

(d) Temporarily tighten the pulley bolt (A), and then relieve the timing belt tension.

(e) Remove the timing belt.

