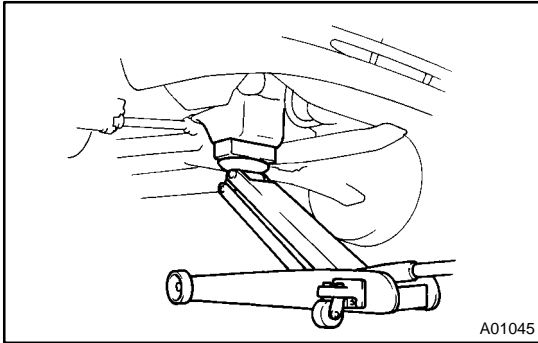


REMOVAL

1. DRAIN ENGINE COOLANT
2. REMOVE RH FRONT WHEEL
3. REMOVE RH ENGINE UNDER COVER
4. REMOVE DRIVE BELT AND GENERATOR
(See page [CH-7](#))
5. DISCONNECT PS PUMP FROM ENGINE
(See page [SR-24](#))

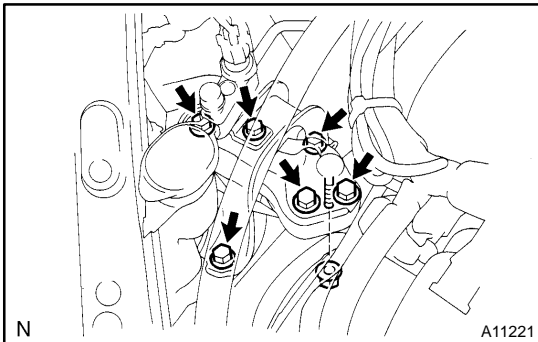


6. REMOVE RH ENGINE MOUNTING INSULATOR

- (a) Set the jack to the engine.

HINT:

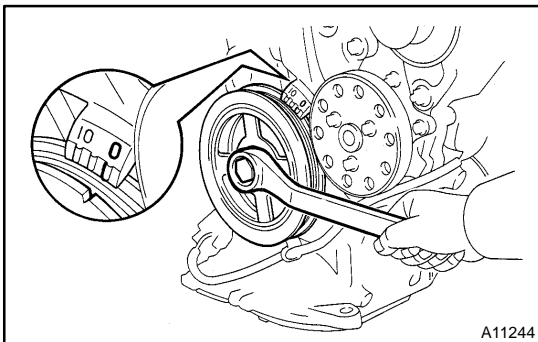
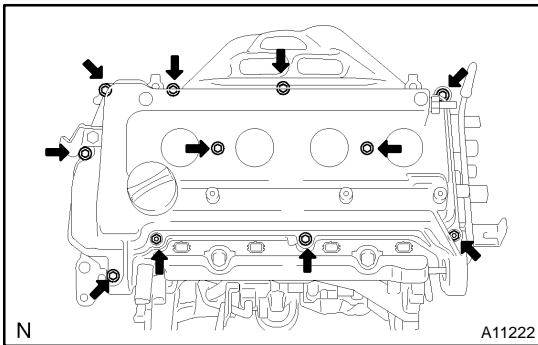
Place a wooden block between the jack and engine.



- (b) w/ A/C:
Remove the bolt holding the liquid tube to the RH engine mounting insulator.
- (c) Remove the 5 bolts, nut and RH engine mounting insulator.

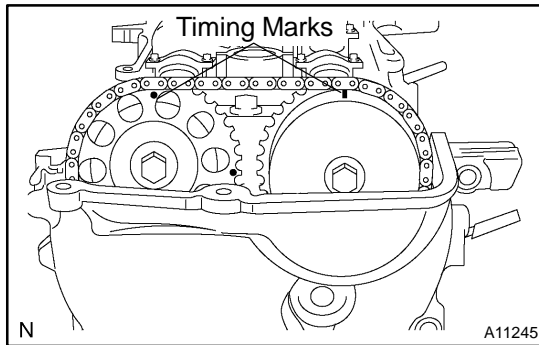
7. REMOVE CYLINDER HEAD COVER

- (a) Remove the 4 nuts and No.2 cylinder head cover.
- (b) Remove the ignition coils (See page [IG-6](#)).
- (c) Remove the 2 PCV hoses from the cylinder head cover.
- (d) Remove the 7 bolts, 2 seal washers, 2 nuts, cylinder head cover and gasket.



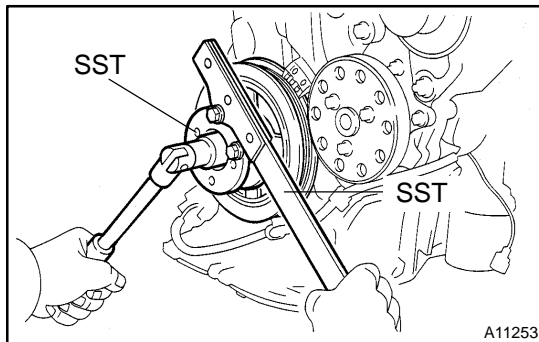
8. SET NO.1 CYLINDER TO TDC/COMPRESSION

- (a) Turn the crankshaft pulley, and align its groove with timing mark "0" of the timing chain cover.



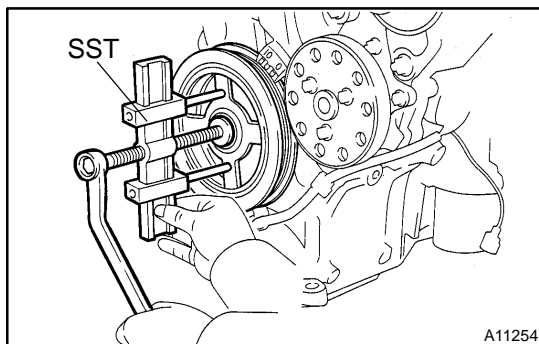
- (b) Check that both timing marks on the camshaft timing sprocket and valve timing controller assembly are facing right up as shown in the illustration.

If not, turn the crankshaft 1 revolution (360°) and align the marks as above.



9. REMOVE CRANKSHAFT PULLEY

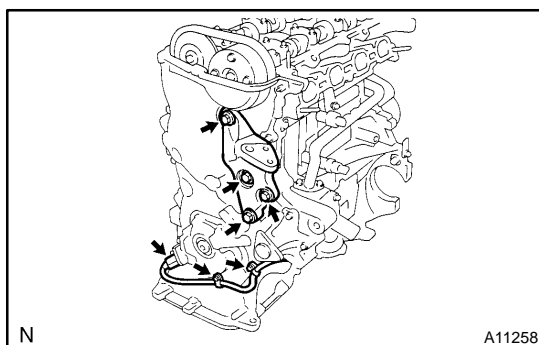
- (a) Using SST, remove the pulley bolt.
SST 09213-70010, 09330-00021
- (b) Remove the crankshaft pulley and pin.



HINT:

If necessary, remove the pulley with SST.

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



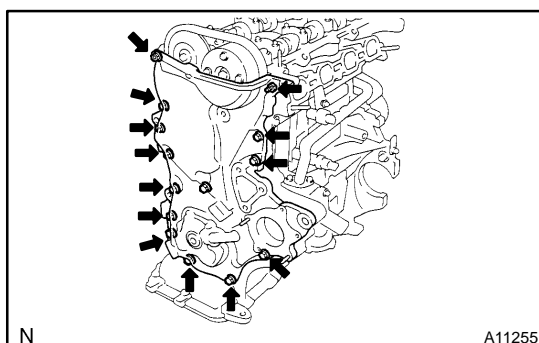
10. REMOVE CRANKSHAFT POSITION SENSOR (See page IG-12)

11. REMOVE RH ENGINE MOUNTING BRACKET

Remove the 4 bolts and mounting bracket.

12. REMOVE WATER PUMP (See page CO-4)

13. REMOVE OIL CONTROL VALVE (See page EM-28)



14. REMOVE TIMING CHAIN COVER

- (a) Remove the 13 bolts and nut.
- (b) Using a torx wrench socket (E8), remove the stud bolt.
- (c) Remove the timing chain cover by prying the portions between the cylinder head and cylinder block with a screwdriver.

NOTICE:

Be careful not to damage the contact surfaces of the timing chain cover, cylinder head and cylinder block.

(d) Remove the 2 O-rings from the cylinder block and oil pan No.1.

15. REMOVE CHAIN TENSIONER

Remove the 2 bolts and chain tensioner.

16. REMOVE CHAIN TENSIONER SLIPPER

17. REMOVE CHAIN VIBRATION DAMPER

Remove the 2 bolts and damper.

18. REMOVE TIMING CHAIN