

EM

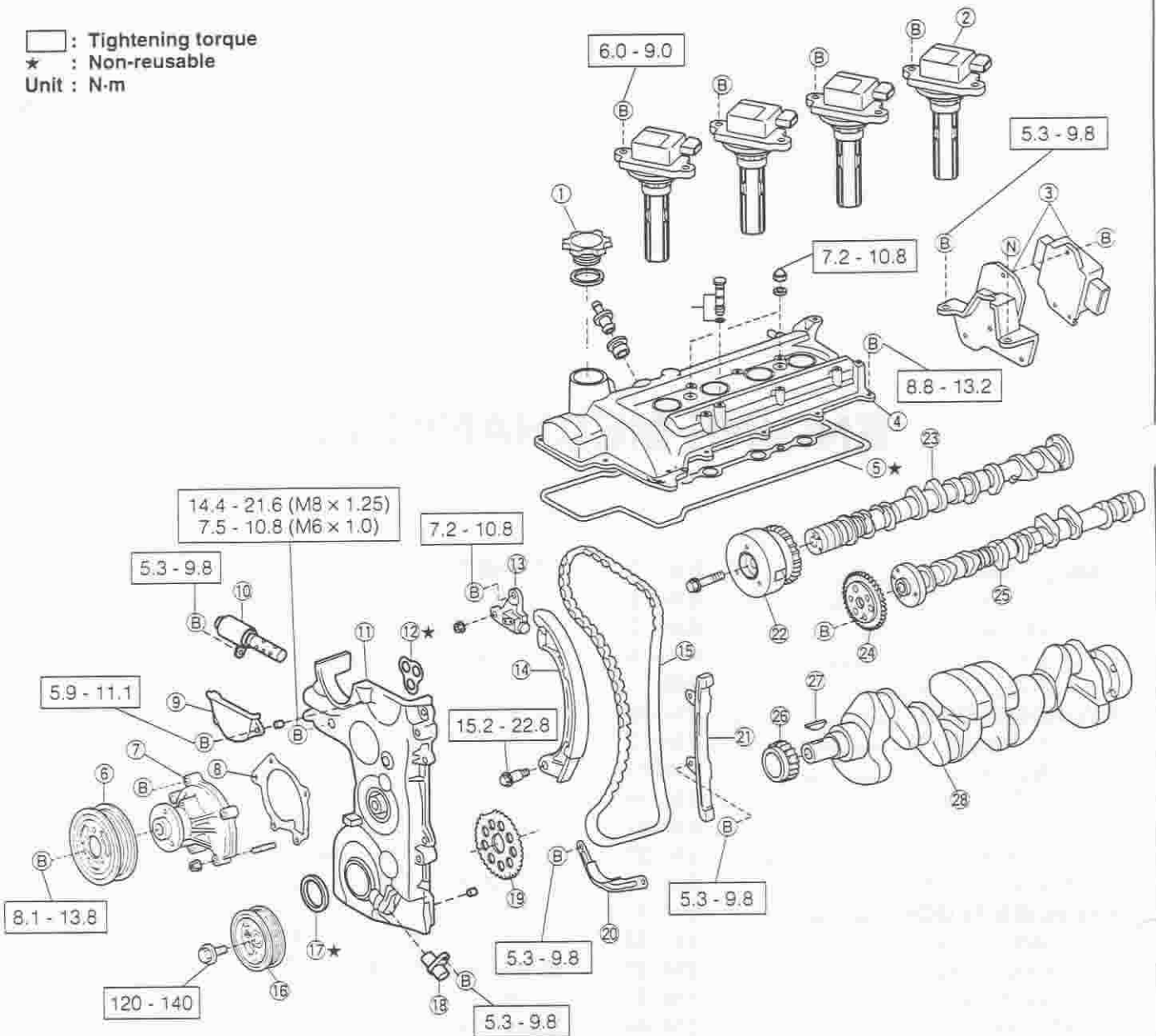
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TIMING CHAIN COMPONENTS

□ : Tightening torque
 ★ : Non-reusable
 Unit : N·m

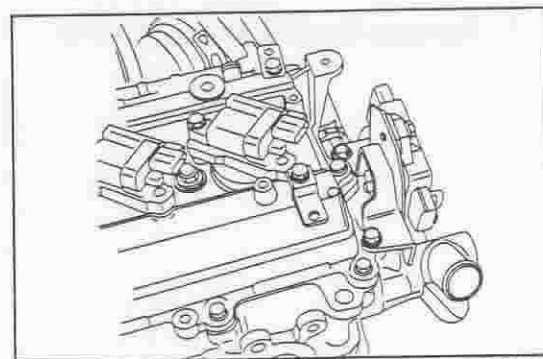


- ① Oil filler cap
- ② Ignition coil
- ③ Igniter assy
- ④ Cylinder head cover
- ⑤ Cylinder head cover gasket
- ⑥ Water pump pulley
- ⑦ Water pump
- ⑧ Water pump gasket
- ⑨ Timing chain cover No. 2
- ⑩ Oil control valve
- ⑪ Timing chain cover
- ⑫ Timing chain cover gasket
- ⑬ Timing chain tensioner
- ⑭ Tensioner arm

- ⑮ Timing chain
- ⑯ Crankshaft pulley
- ⑰ Type T oil seal
- ⑱ Crank angle sensor
- ⑲ Crank angle sensor plate
- ⑳ Timing chain guide No. 2
- ㉑ Timing chain guide
- ㉒ Valve timing controller
- ㉓ Camshaft No. 1
- ㉔ Camshaft No. 2 sprocket
- ㉕ Camshaft No. 2
- ㉖ Camshaft sprocket
- ㉗ key
- ㉘ Crankshaft

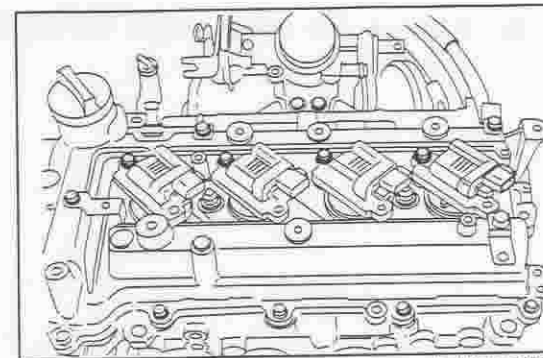
REMOVAL

1. Remove the drive belt. (Refer to the CH section.)
2. Remove the ignitor assembly. (European specifications only)



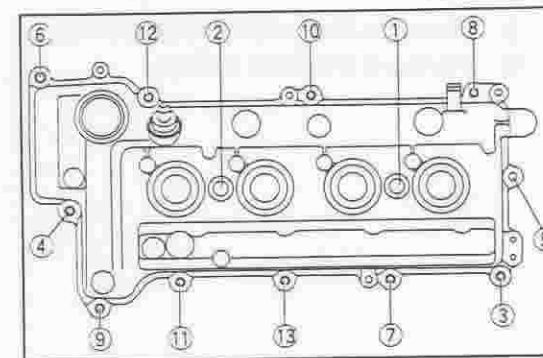
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3. Remove the ignition coil from the cylinder head cover.



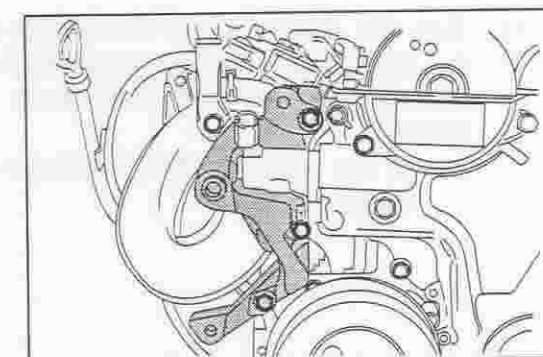
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4. Remove the cylinder head cover and gasket by removing the retaining bolts and nuts in the sequence shown in the right figure.



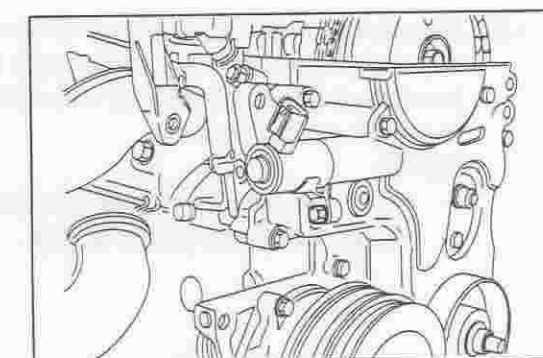
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5. Remove the alternator bracket.



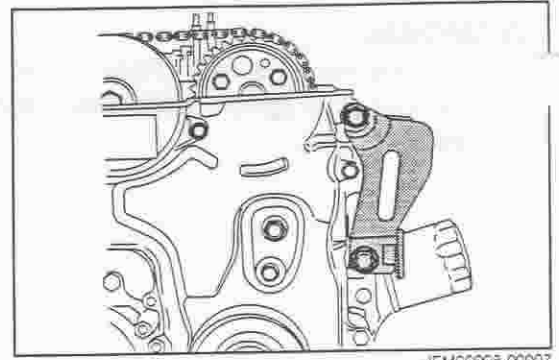
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6. Remove the oil control valve from the timing chain cover.

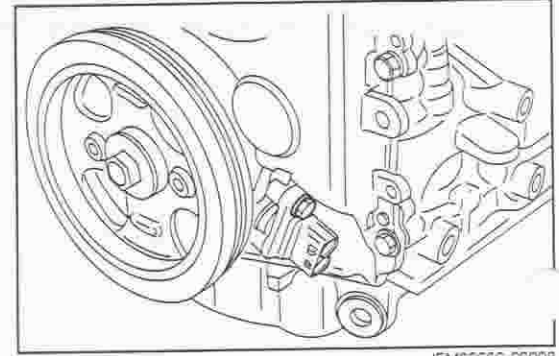


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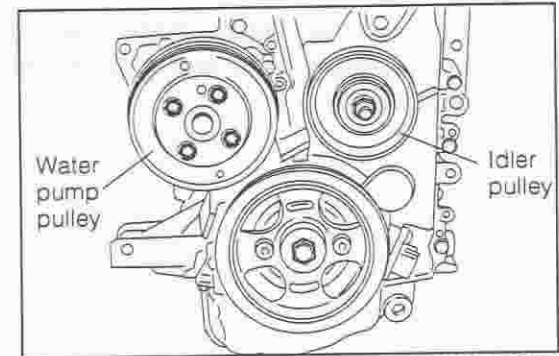
7. Remove the idler pulley bracket.



8. Remove the crank angle sensor from the timing chain cover.



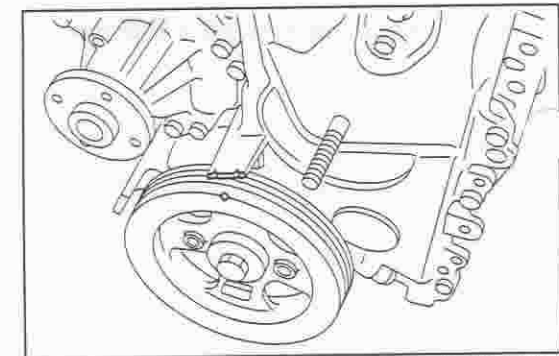
9. Remove the water pump pulley.
10. Remove the idler pulley.



11. Turn the crankshaft in the engine rotating direction, until the timing mark on the crankshaft pulley is aligned with the indicator on the timing chain cover.

NOTE:

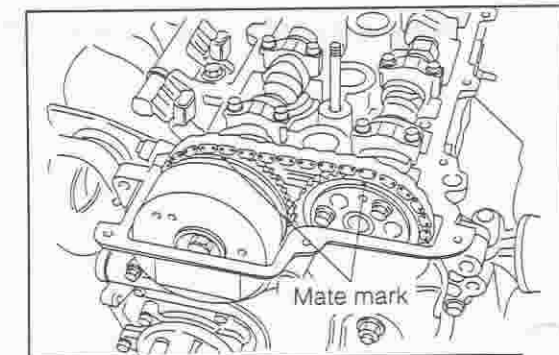
- At this point, the No. 1 cylinder assumes the top dead center.



12. Ensure that the mate mark on the camshaft timing sprocket points upward. If the mate mark does not point upward, turn the crankshaft another one turn. And ensure that now the mark points upward.

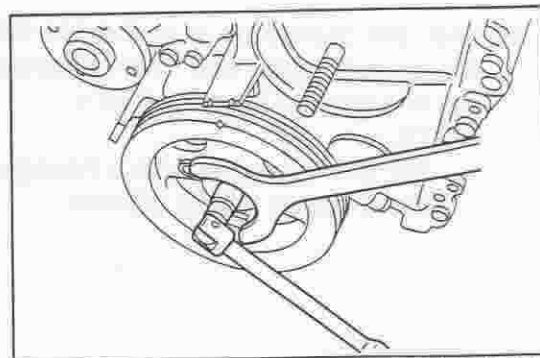
NOTE:

- Now, the No. 1 cylinder assumes the top dead center under the compression stroke.



13. Remove the crankshaft pulley by removing the pulley bolt, while preventing the crankshaft pulley from being turned, using the following SST.

SST: 09278-87201-000



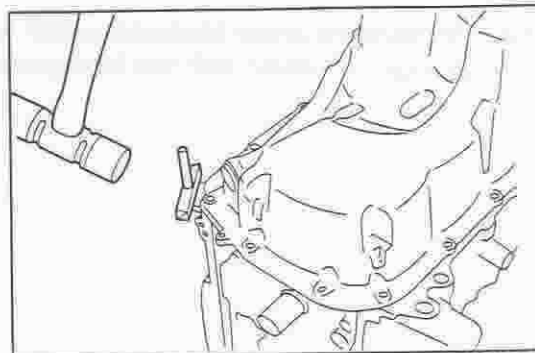
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14. Removal of oil pan.

(1) Loosen the attaching bolts and nuts of the oil pan over two or three stages. Pull out the bolts and nuts.

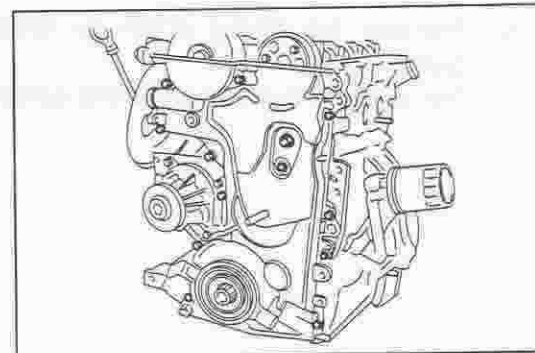
(2) Separate the oil pan from the cylinder block by driving the following SST into between the cylinder block and the oil pan.

SST: 09032-00100-000



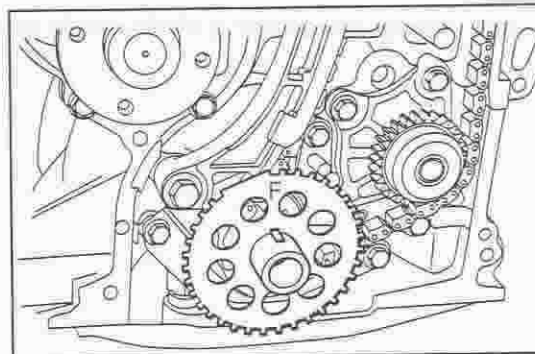
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15. Remove the timing chain cover by removing the retaining bolts and nuts.



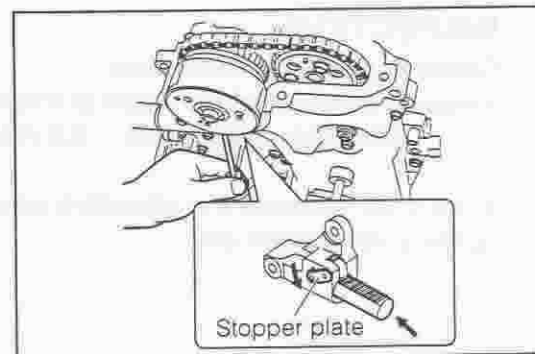
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16. Remove the crank angle sensor plate.



JEM00015-00014

17. Move the chain tensioner stopper plate downward. Under this unlocked state, push in the plunger deeply.

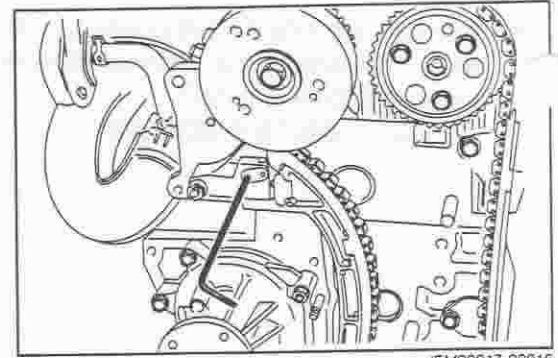


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18. With the plunger in a pushed-in state, align the holes of the stopper plate and chain tensioner. Insert a hexagonal rod wrench into place to lock it.

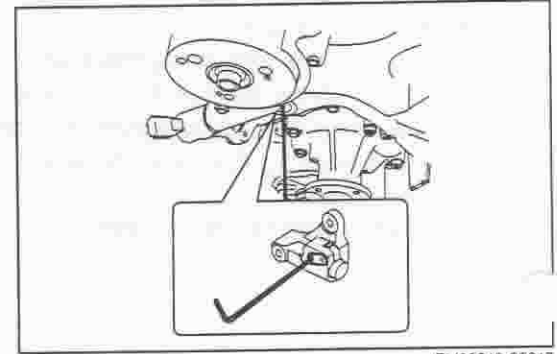
NOTE:

- For this operation, use a hexagonal rod wrench whose width across flats is 2.5 mm.



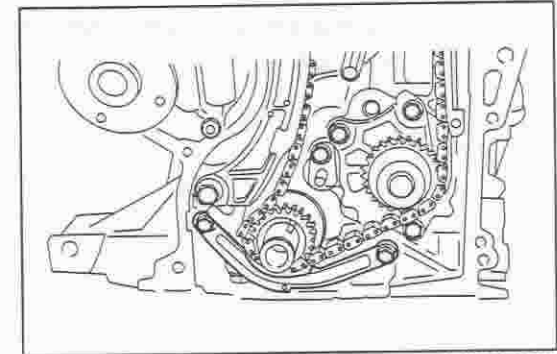
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19. Remove the chain tensioner under a condition in which the plunger is locked with the hexagonal rod wrench inserted.



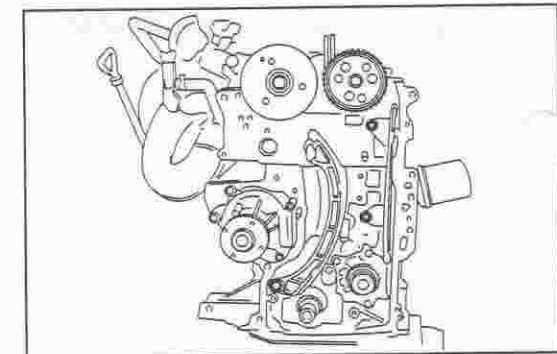
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20. Remove the timing chain by removing the timing chain guide No. 2.
21. Remove the crankshaft timing sprocket.



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22. Remove the timing chain guide and timing chain arm.



JEM00020-00019

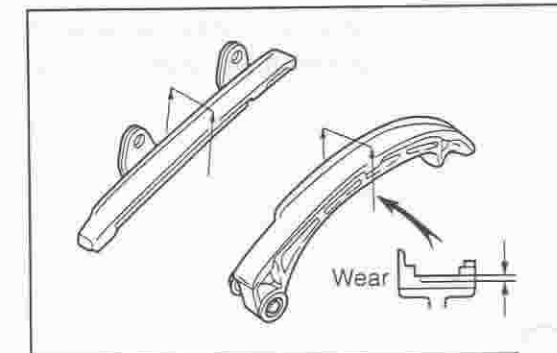
INSPECTION

Chain Guide and Chain Arm

Measure the wear of the chain guide and arm.

Allowable Wear Limit: 0.5 mm

If the wear exceeds the allowable wear limit, replace the chain guide and/or chain arm.



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