

Removal

Engine removal is not required for this procedure.

WARNING

Be sure to read and follow the "General Safety Information and Caution" before doing any work related with the high voltage system. Failure to follow the safety instructions may result in serious electrical injuries.

Be sure to read and follow the "High Voltage Shut-off Procedures" before doing any work related with the high voltage system. Failure to follow the safety instructions may result in serious electrical injuries.

NOTICE

Use fender covers to avoid damaging painted surfaces.

To avoid damage, unplug the wiring connectors carefully while holding the connector portion.

Turn the crankshaft damper pulley so that the No.1 piston is at top dead center.

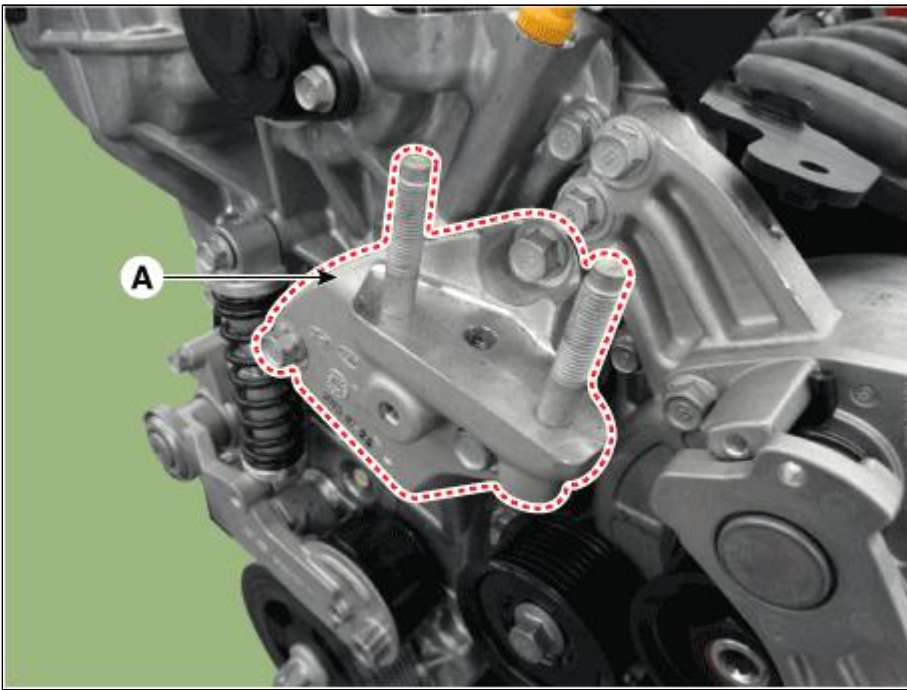
Information

Mark all wiring and hoses to avoid misconnection.

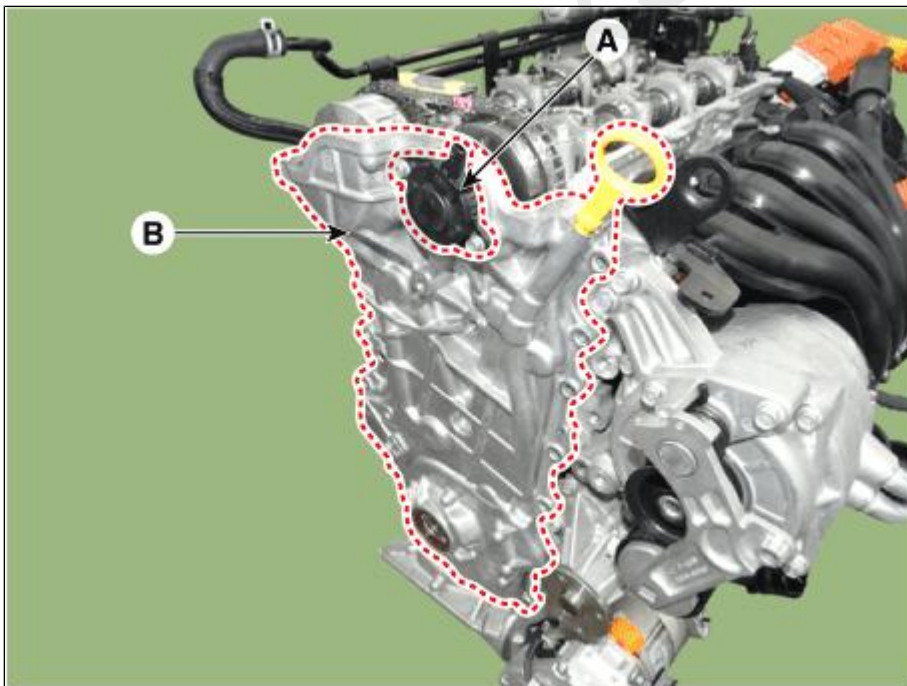
1. Shut off the High Voltage circuit.
(Refer to General Information - "High Voltage Shutoff Procedure")
2. Disconnect the battery positive terminal.
3. Loosen the drain plug, and drain the engine oil. Remove the oil filter cap to help drain the engine oil faster.
(Refer to Lubrication System - "Engine Oil")
4. Remove the air cleaner assembly.
(Refer to Intake And Exhaust System - "Air Cleaner")
5. Remove the RH front wheel.
(Refer to Suspension System - "Wheel")
6. Remove the engine room under cover.
(Refer to Engine And Transaxle Assembly - "Engine Room Under Cover")
7. Remove the drive belt.
(Refer to Drive Belt System - "Drive Belt")
8. Remove the engine mounting support bracket.
(Refer to Engine And Transaxle Assembly - "Engine Mounting")
9. Remove the engine support bracket.

Tightening torque :

39.2 - 44.1 N.m (4.0 - 4.5 kgf.m, 28.9 - 32.5 lb-ft)



10. Remove the drive belt tensioner.
(Refer to Timing System - "Drive Belt Tensioner")
11. Remove the idler.
(Refer to Timing System - "Idler")
12. Remove the crankshaft damper pulley.
(Refer to Timing System - "Crankshaft Damper Pulley")
13. Remove the water pump pulley.
(Refer to Cooling System - "Water Pump")
14. Remove the cylinder head cover.
(Refer to Cylinder Head Assembly - "Cylinder Head Cover")
15. Remove the oil control solenoid (OCS) (A) and then remove the timing chain cover (B).



NOTICE

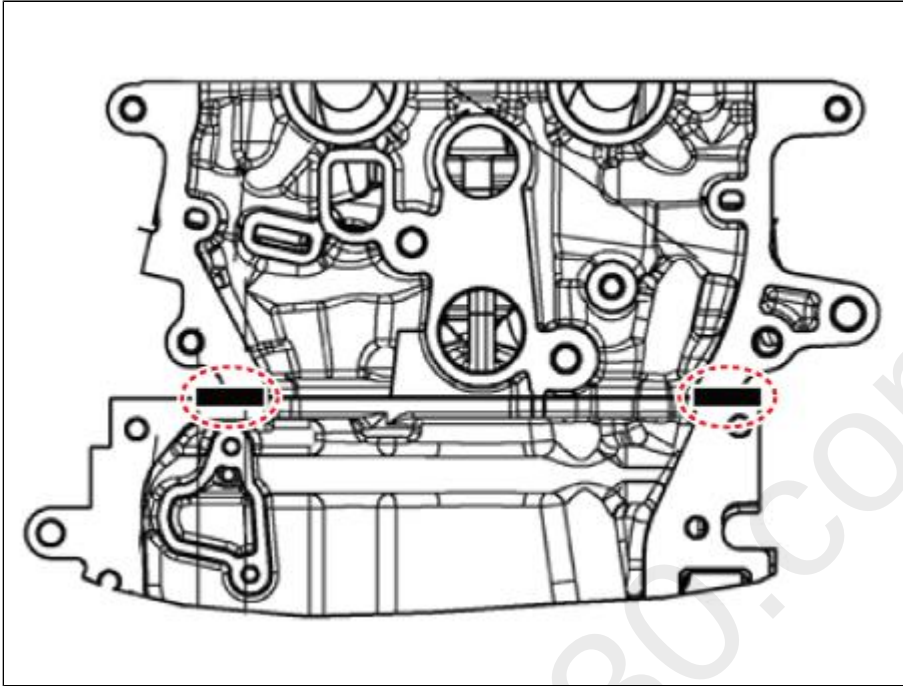
Be careful not to damage the contact surfaces of cylinder block, cylinder head and timing chain cover.

1. Install the timing chain cover.

- (1) The sealant locations on the chain cover and the counter parts (cylinder head, cylinder block) must be free of harmful foreign materials, oil, dust and moisture. Spraying cleaner on the surface and wiping with a clean duster.
- (2) Before assembling the timing chain cover, the liquid sealant should be applied on the gap between cylinder head and cylinder block.
The part must be assembled within 5 minutes after sealant was applied.

Bead width : Ø 3.0 - 5.0 mm (0.11 - 0.20 in.)

Sealant : MS721-40AA or AAO



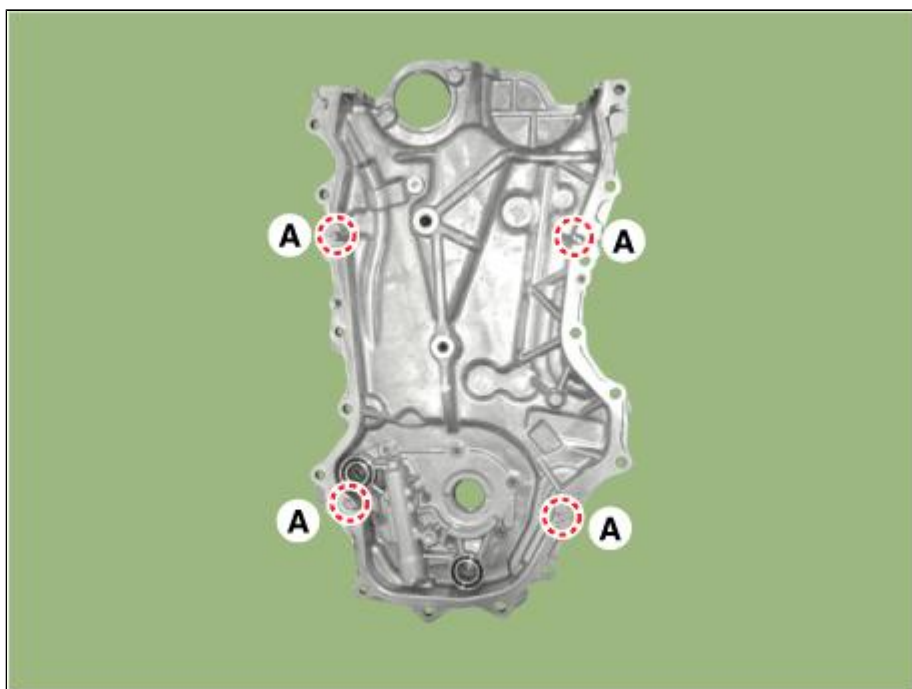
- (3) After applying liquid sealant on the timing chain cover, assemble the cover within 5 minutes after sealant was applied. Continuous bead of sealant should be applied to prevent any path from oil leakage.

Bead width

All section : Ø2.5 - 3.5 mm (0.10 - 0.14 in.)

A section : Ø3.5 - 4.5 mm (0.14 - 0.18 in.)

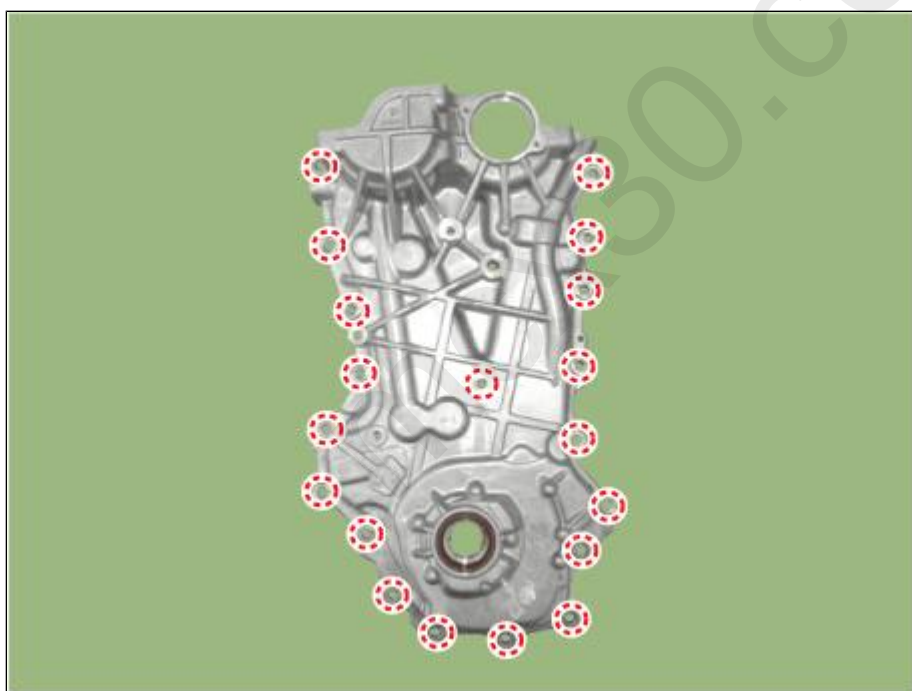
Sealant : MS721-40AA or AAO



- (4) The dowel pins on the cylinder block and holes on the timing chain cover should be used as a reference in order to assemble the timing chain cover correctly.

Tightening torque :

18.6 - 23.5 N.m (1.9 - 2.4 kgf.m, 13.7 - 17.4 lb-ft)



NOTICE

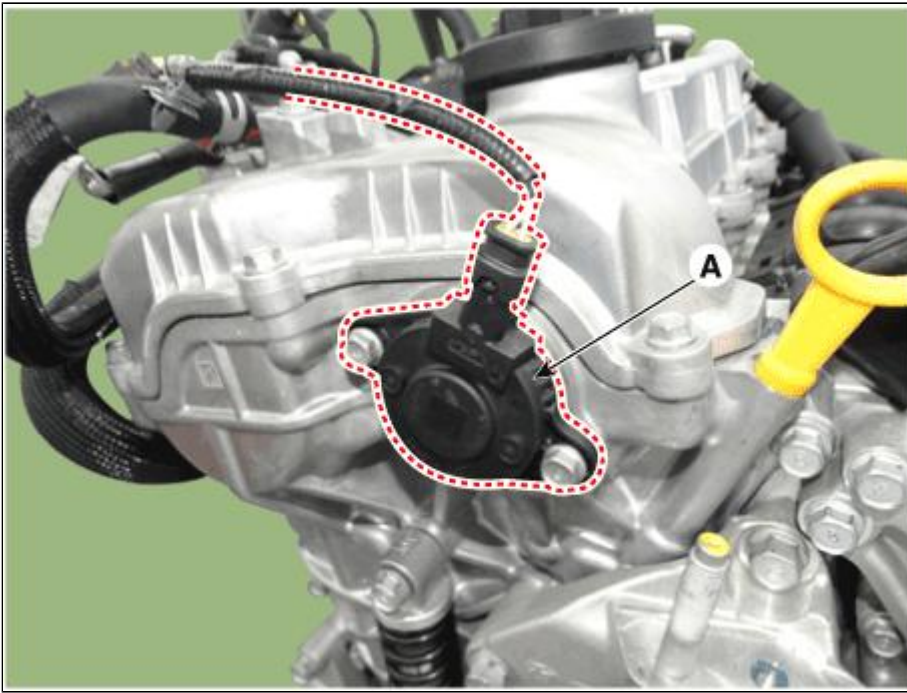
Do not reuse the seal bolts.

The engine running or pressure test should not be performed within 30 minutes after the timing chain cover was assembled.

2. Install the oil control solenoid (OCS) (A).

Tightening torque :

9.8 - 11.8 N.m (1.0 - 1.2 kgf.m, 7.2 - 8.7 lb-ft)



3. Replace the front oil seal if necessary.
(Refer to Timing System - "Front Oil Seal")
4. Install the other parts reverse order of removal.
5. Connect the High Voltage circuit.
(Refer to General Information - "High Voltage Shutoff Procedure")
6. Add all the necessary fluids and check for leaks. Connect diagnostic tool. Check for codes, note, and clear.
Recheck.

NOTICE

Refill engine with engine oil.

Inspect for fuel leakage.

After assembling the fuel line, turn on the ignition switch so that the fuel pump runs for approximately two seconds and fuel line pressurizes.

Repeat this operation two or three times, then check for fuel leakage at any point in the fuel line.

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