

**HYUNDAI**NEW THINKING.
NEW POSSIBILITIES.**Technical Service Bulletin**

GROUP

CAMPAIGN

NUMBER

14-01-044

DATE

NOVEMBER 2014

MODEL(S)

VERACRUZ (EN)**SUBJECT:****CYLINDER HEAD COVER OIL LEAK REPAIR
(RECALL CAMPAIGN 121)****★ IMPORTANT******* Retail Vehicles *****

As required by federal law, dealers must perform all open recalls on used vehicles, demo and rental vehicles prior to placing them into customer use and whenever an affected vehicle is in the shop for any maintenance or repair.

When a vehicle arrives at the service department, access Hyundai Motor America's "Warranty Vehicle Information" screen via WEBDCS to identify open Campaigns.

Description: This bulletin outlines the following service procedures.

- Replace the LH cylinder head cover gasket.
- Inspect the alternator for signs of oil contamination.
- Replace the alternator if any oil contamination is found.

Applicable Vehicles: Veracruz (EN) vehicles built from January 13, 2006 to July 24, 2012

Parts Information:

Part Name	Part Number	Qty.
Gasket - Rocker Cover LH	22453-3C120-QQH	1
Generator Assembly	37300-3C120-RMA	* (See below NOTE)

***NOTE:** Replacement is required only if it does not pass the visual inspection for oil contamination.

Additional Materials:

Product Name	Part Number
Gray Liquid RTV Gasket	00232-19039 (or equivalent to TB1217H)

Warranty Information:

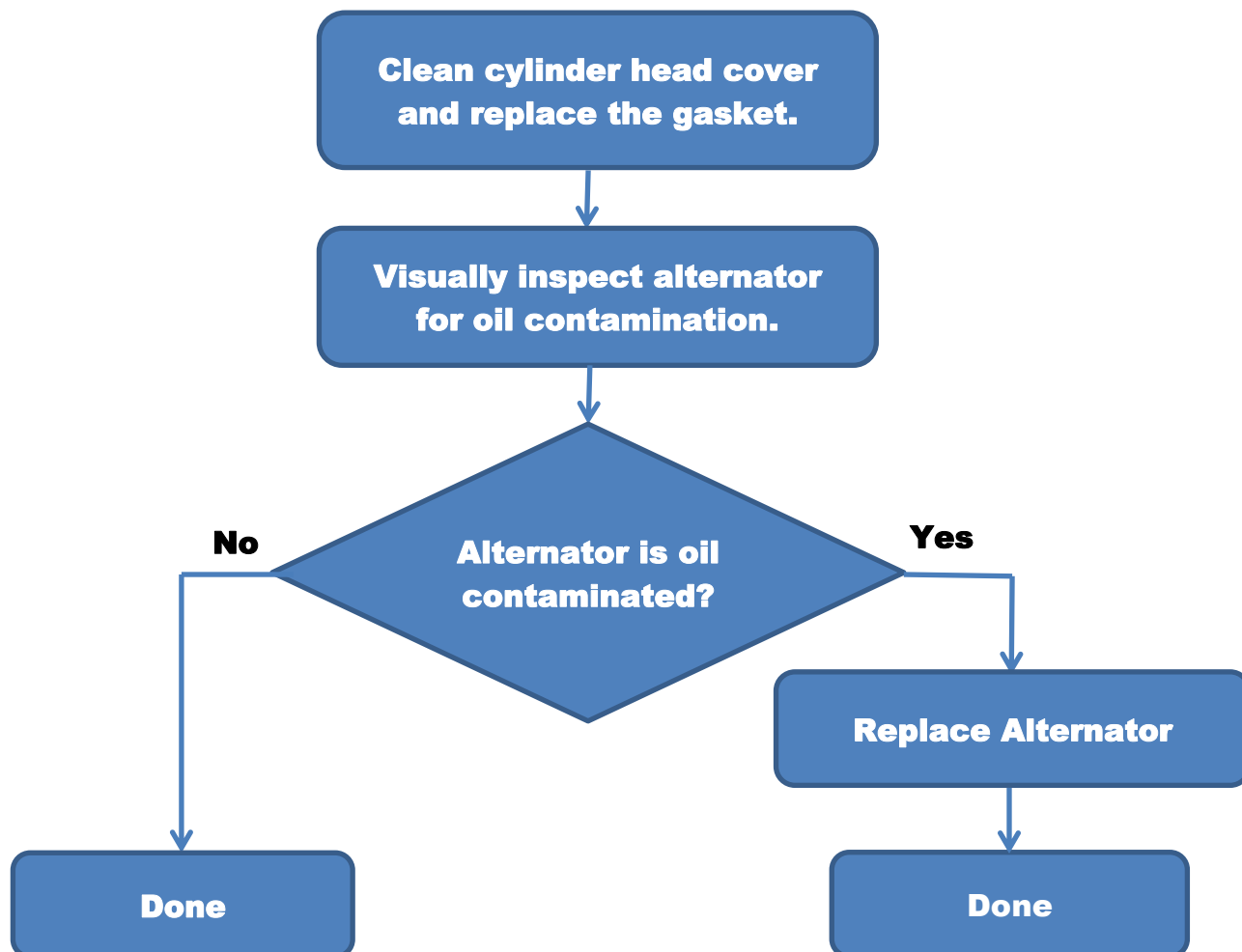
Op Code	Operation	Op. Time
41C054R0	CYLINDER HEAD COVER GASKET REPLACEMENT AND ALTERNATOR INSPECTION	1.0
41C054R1	CYLINDER HEAD COVER GASKET REPLACEMENT AND ALTERNATOR REPLACEMENT	1.8

NOTE: Submit Claim on Campaign Claim Entry Screen

Circulate To: General Manager, Service Manager, Parts Manager, Warranty Manager, Service Advisors, Technicians, Body Shop Manager, Fleet Repair

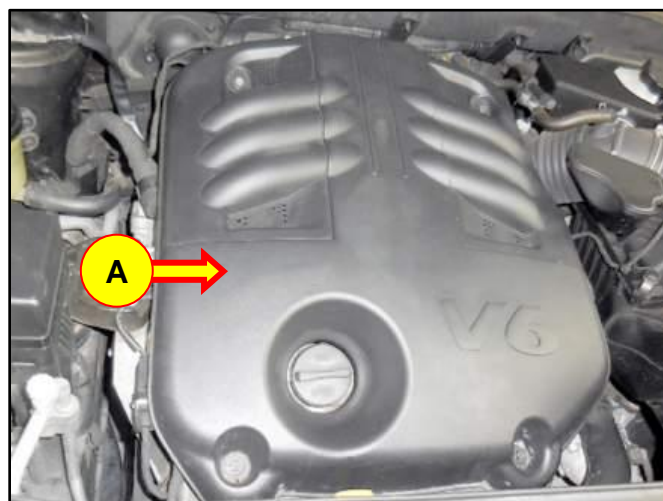
Service Procedure:

* Perform the service procedure referring to the flow chart below.

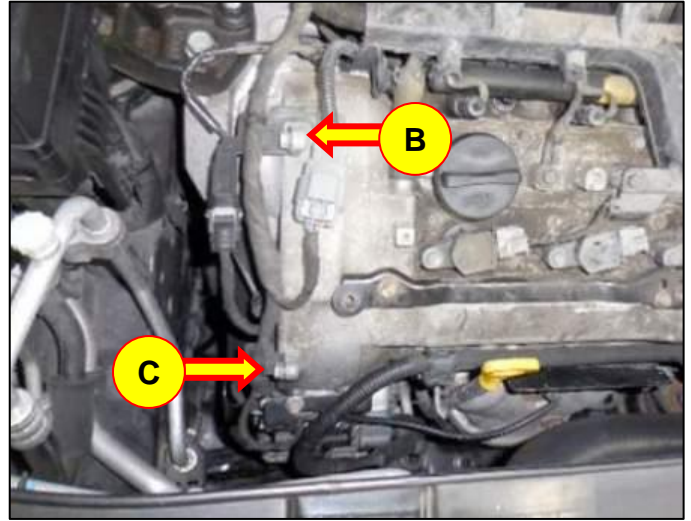


Cylinder Head Cover Gasket Replacement

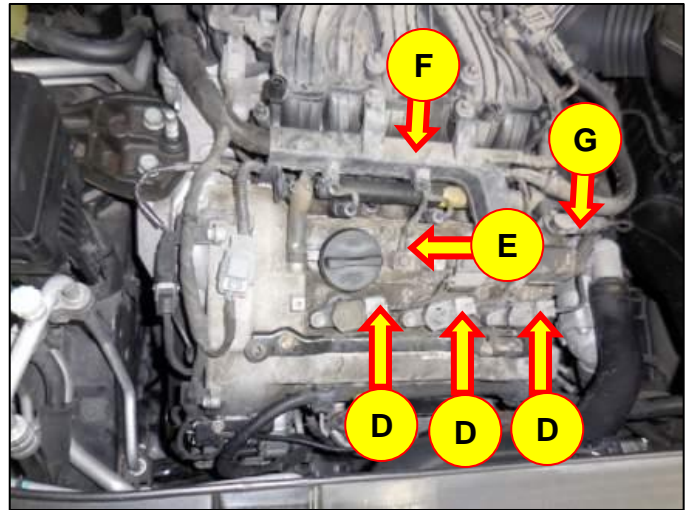
1. Remove the engine cover (A).



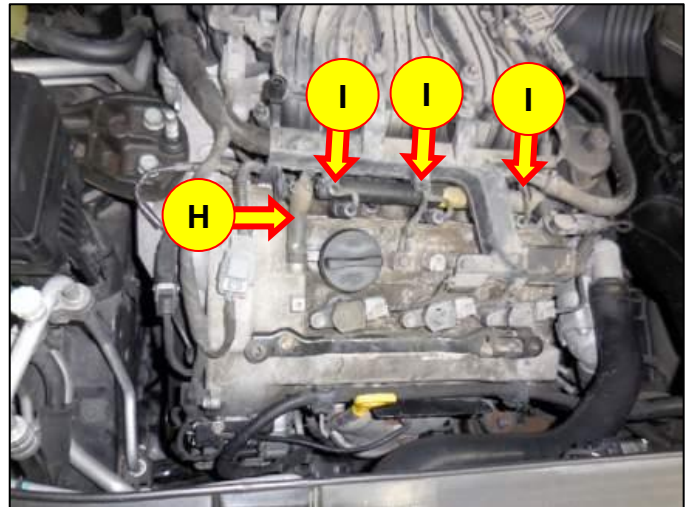
2. Remove the upper mounting bracket bolt (B) near the OCV connector.
3. Remove the lower mounting bracket bolt (C) near the B2S1 oxygen sensor connector.



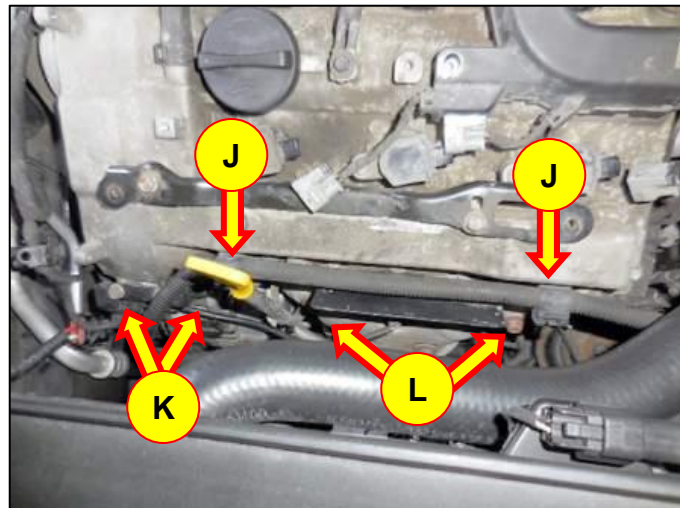
4. Disconnect the bank 2 ignition coil connectors (D), and remove the ground (E), and then remove the wiring harness protector (F).
5. Disconnect the bank 2 Camshaft Position Sensor (CMPS) at (G).



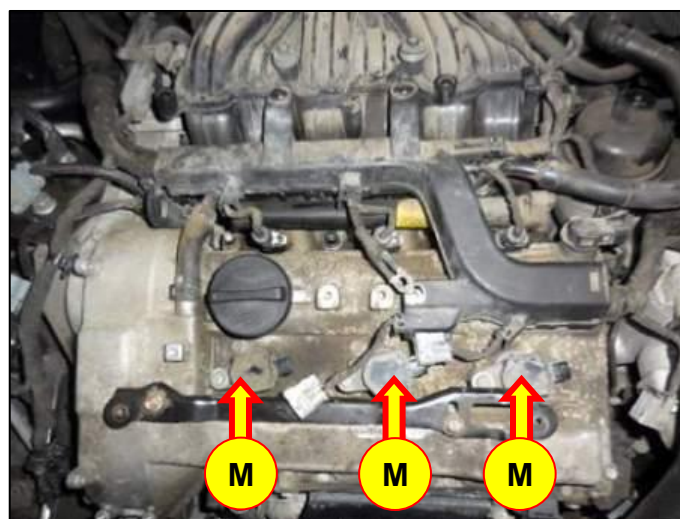
6. Remove the hose (H) and disconnect harness connectors (I) from the bank 2 fuel injectors.



7. Unlock the terminal cable clips (J).
8. Remove alternator "B" terminal cable mounting bracket bolts (K) and then remove the wire bracket bolts (L).

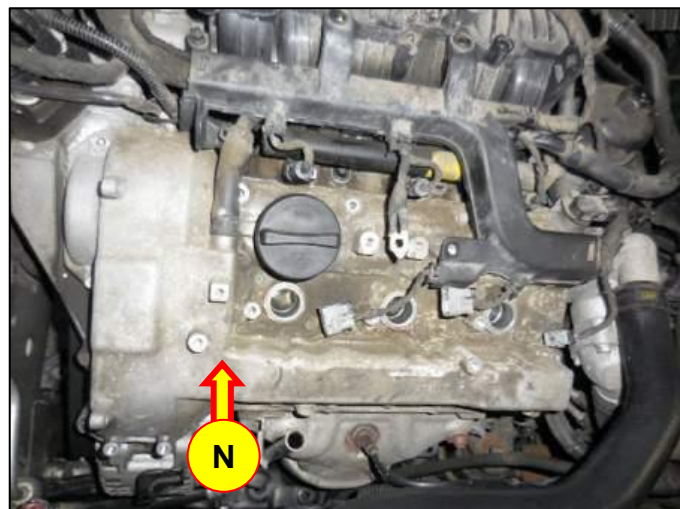


9. Remove the bank 2 ignition coils (M).



10. Remove the bank 2 (LH) cylinder head cover (N).

***Tightening torque specification:
8.0 lb-ft (96 lb-in, 10.8 Nm)***



NOTICE

Carefully remove the cylinder head cover to avoid any dirt/debris falling into the engine. Debris falling into the cylinder head can result in engine damage.



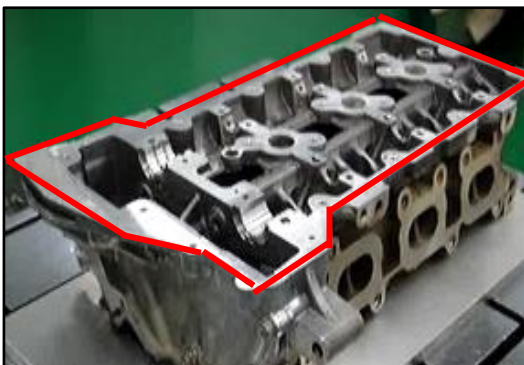
11. Remove all remaining liquid gasket residue (including outside area of the cylinder head and chain cover as shown in the picture below).



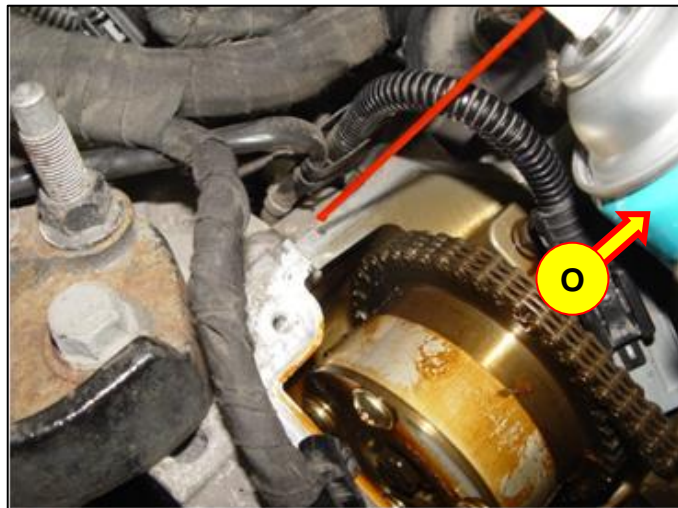
NOTICE

- ***Be careful not to damage the surface of the cylinder head cover.***
- ***The removed liquid gasket residue should not fall into the engine.***

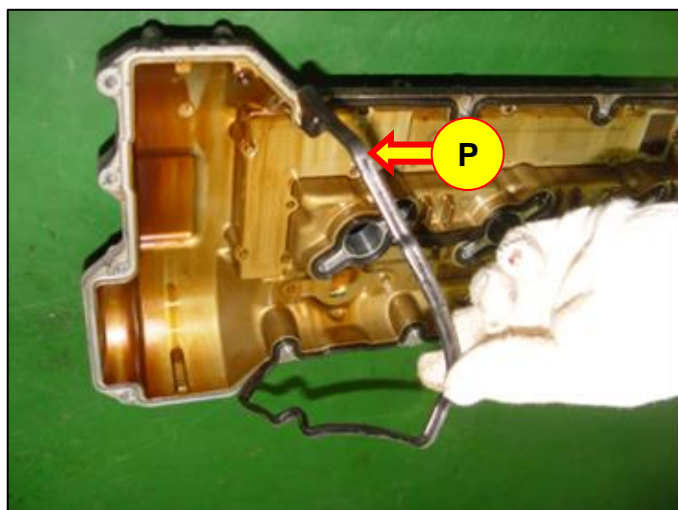
12. Clean the cylinder head and cover with a clean lint-free shop towel referring to the picture of the cleaning area below (highlighted in red).



13. With a degreaser/cleaner (O), clean off any of the remaining dirt and oil from the cylinder head and cover and then wipe dry with a clean lint-free shop towel.



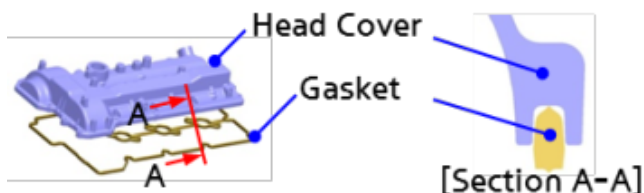
14. Remove the cylinder head cover gasket (P).



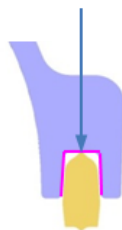
15. Install the new cylinder head cover gasket (Q).

NOTICE

Before installing the new gasket (Q), clean the gasket installing groove with a degreaser/cleaner and a clean lint-free shop towel.



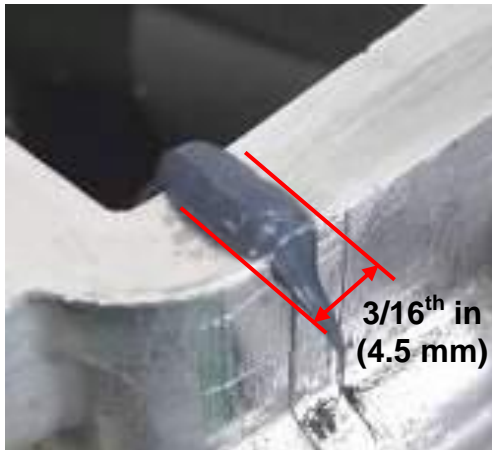
Gasket Installing Groove (Cleaning area)



16. Apply liquid RTV gasket onto the “T” joints (R), which is the mating points where the front timing chain cover and the cylinder head meet.

NOTICE

When applying the liquid RTV gasket, the applied bead on the surface should be approximately 3/16th in (4.5 mm) wide as shown in the picture below.

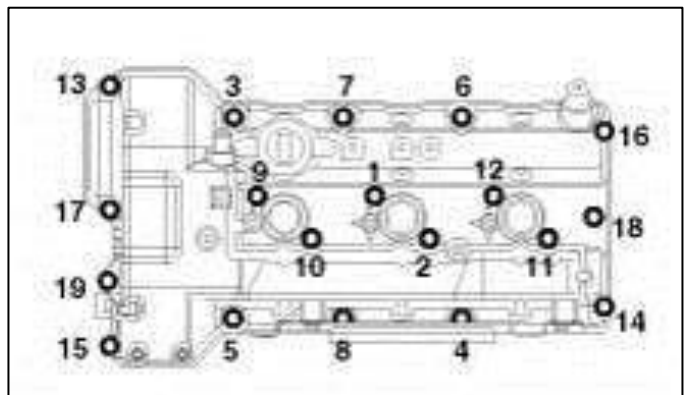
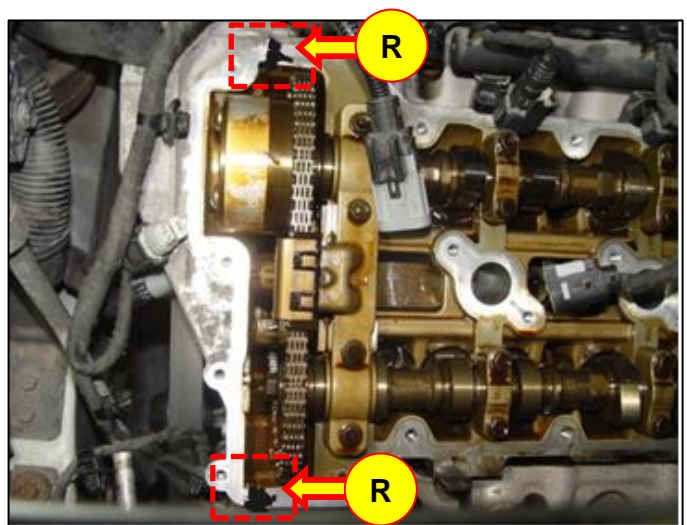
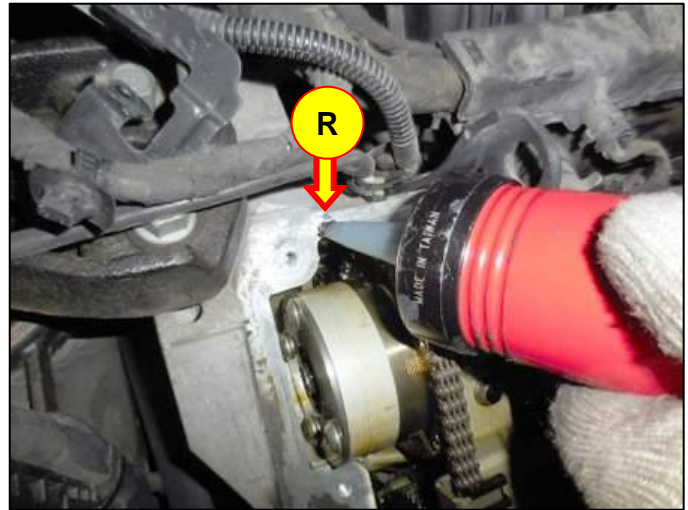


Carefully reinstall the cylinder head cover within the next several minutes before the liquid RTV gasket begins to harden.

Tightening torque specification:
8.0 lb-ft (96 lb-in, 10.8 Nm)

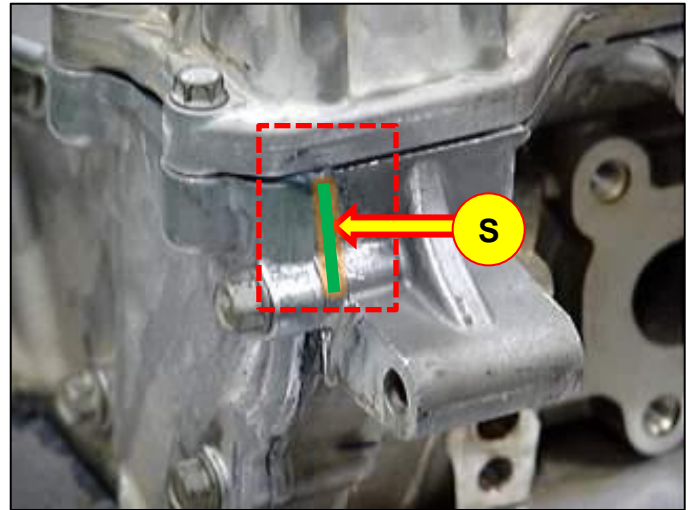
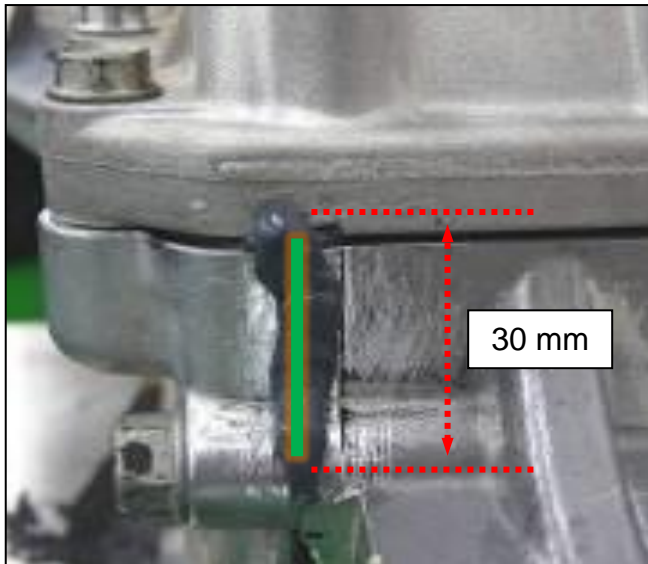
NOTICE

When reinstalling the cylinder head cover, tighten the bolts in the order as shown in the picture at right.



17. Apply liquid RTV gasket onto the outer surface of the “T” joints (S) of the cylinder head and cover.

- Apply the liquid RTV gasket in a line at least 30 mm long, following the green bold line as shown in the picture on the right and below.



- Within several minutes before the liquid RTV gasket begins to harden, spread the gasket evenly as shown in the picture on the right.



18. Reinstall all the removed parts in the reverse order of removal.

NOTICE

Allow at least one hour for the liquid RTV gasket to cure before starting the engine.

ALTERNATOR INSPECTION

Visually inspect the alternator for presence of any level of oil contamination due to oil leakage that may have occurred down from the rocker cover.

Inspect for oil contamination of Alternator

- If **ANY** level of oil contamination is found inside or on the exterior of the alternator, then the alternator must be replaced using the service procedure outlined in the following pages.

NOTICE

*The example shown has a high level of oil contamination on the alternator, but **ANY** level of oil contamination found outside or inside the alternator requires replacement of the alternator.*

Example: Oil Contamination → Replace Alternator



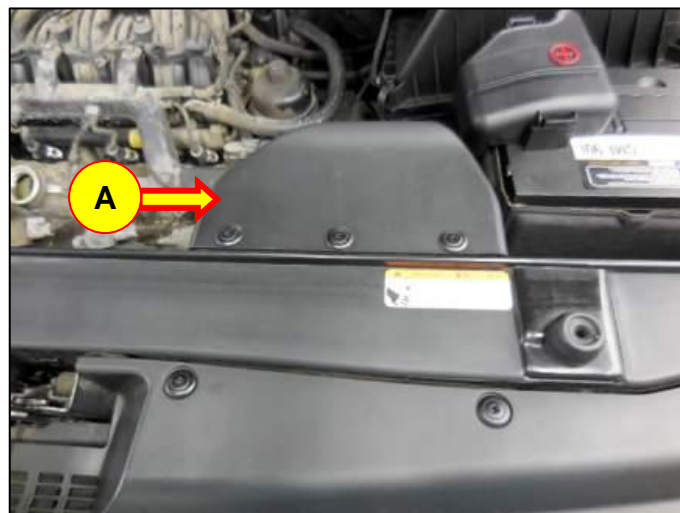
- If **NO** oil contamination is found anywhere on the exterior or inside the alternator, then the service procedure is complete.

Example: No Oil Contamination → Good Alternator



ALTERNATOR REPLACEMENT

1. Remove the air duct (A).



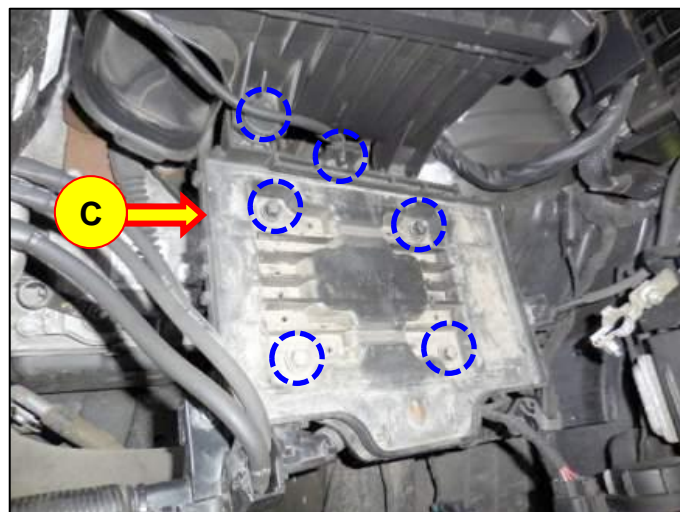
2. Disconnect the battery (B) and make note of customer radio presets to program back later.



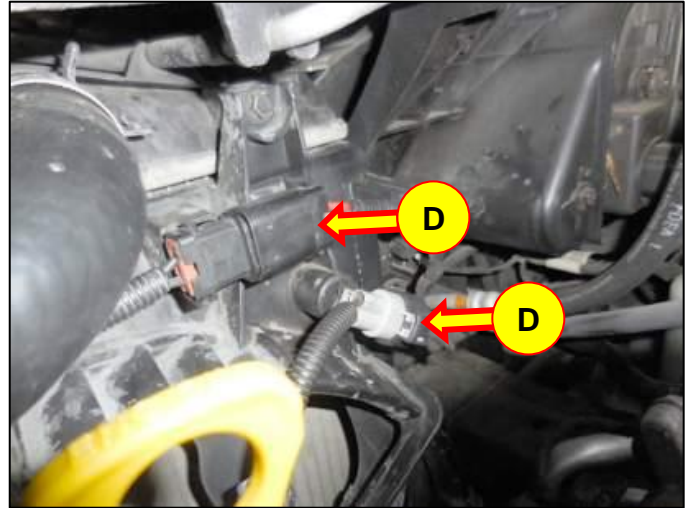
3. Loosen the battery tray mounting fasteners and remove the battery tray (C).

NOTICE

Set aside the removed battery tray (C) to a safe area so that it does not interfere during the alternator removal process.

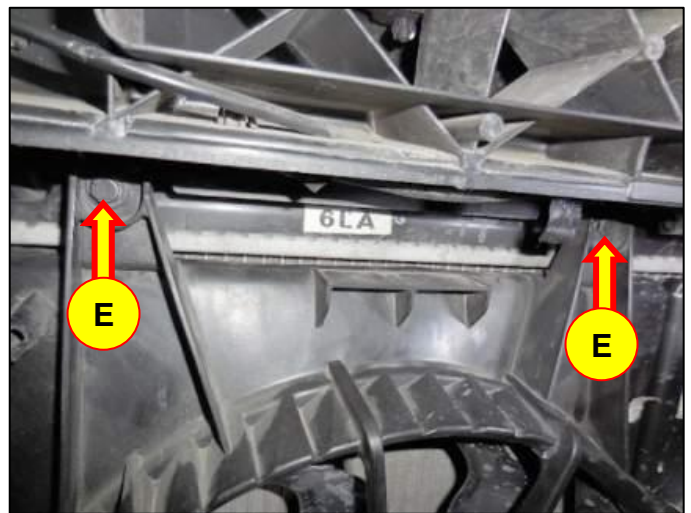


4. Disconnect the fan motor connectors (D).



5. Remove the LH fan shroud bolts (E).

***Tightening torque specification:
5.0 lb-ft (60 lb-in, 6.8 Nm)***



6. Remove the LH fan shroud (F).

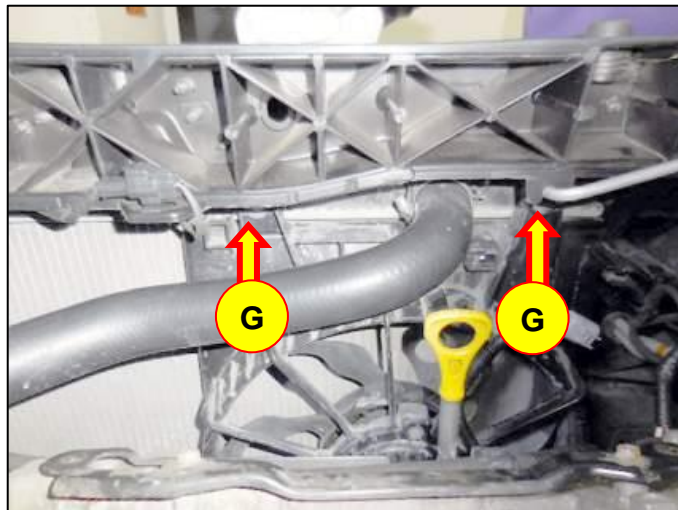
NOTICE

***Carefully remove the LH fan shroud (F)
so that it does not damage any
surrounding parts.***

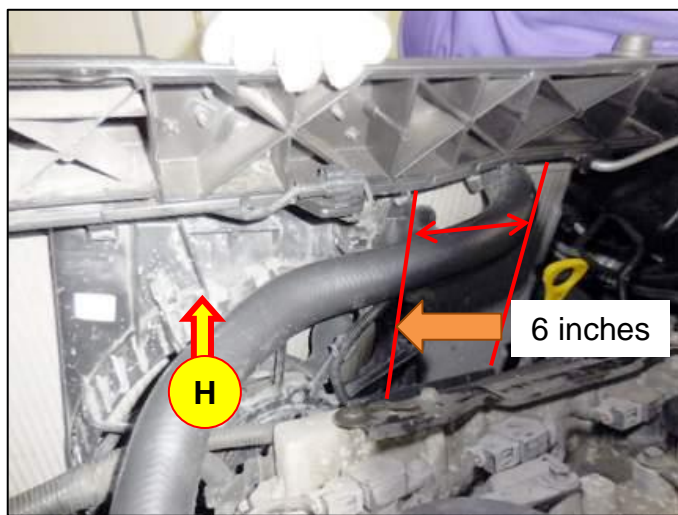


7. Remove the RH fan shroud bolts (G).

***Tightening torque specification:
6.5 lb-ft (78 lb-in, 8.8 Nm)***

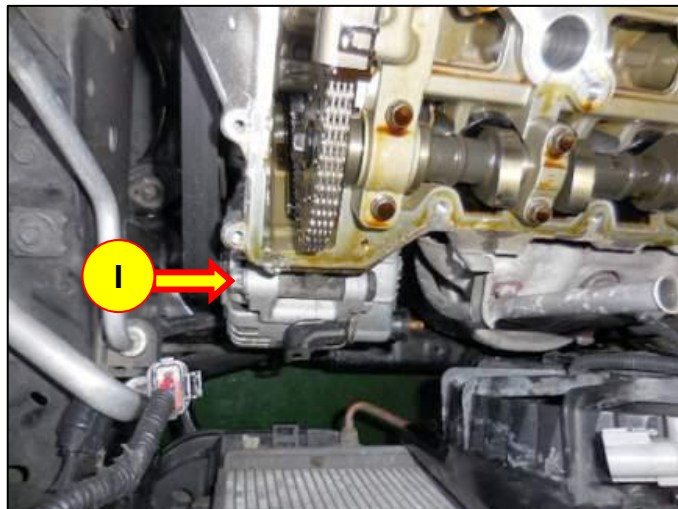


8. Move the RH fan shroud (H) about 6 inches towards the driver's side of the vehicle (as shown by the orange arrow) to provide enough working space to remove and replace the alternator.



9. Remove the alternator upper mounting bolt (I).

***Tightening torque specification:
22 lb-ft (29.8 Nm)***

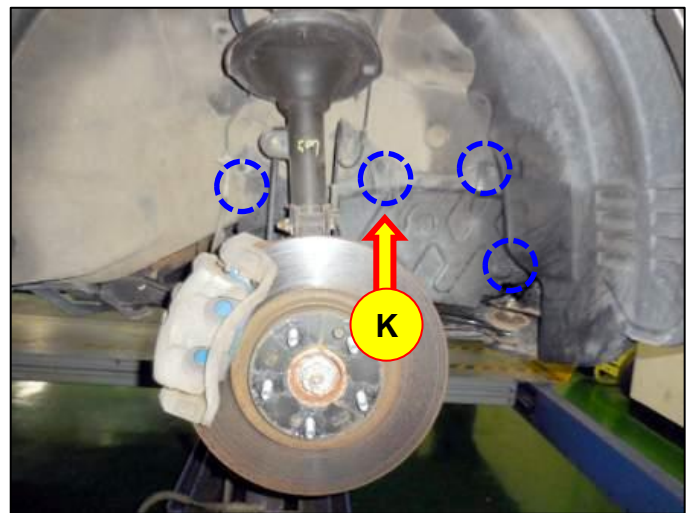


10. Remove the RH wheel and tire by loosening the 5 wheel nuts (J).

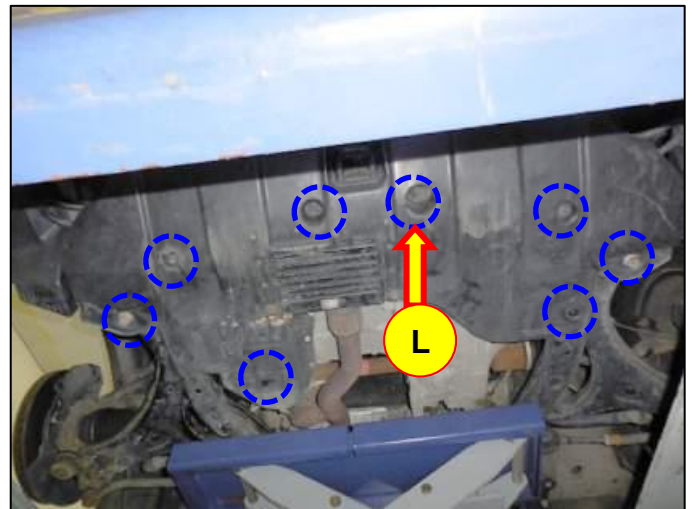
***Tightening torque specification:
75 lb-ft (101.7 Nm)***



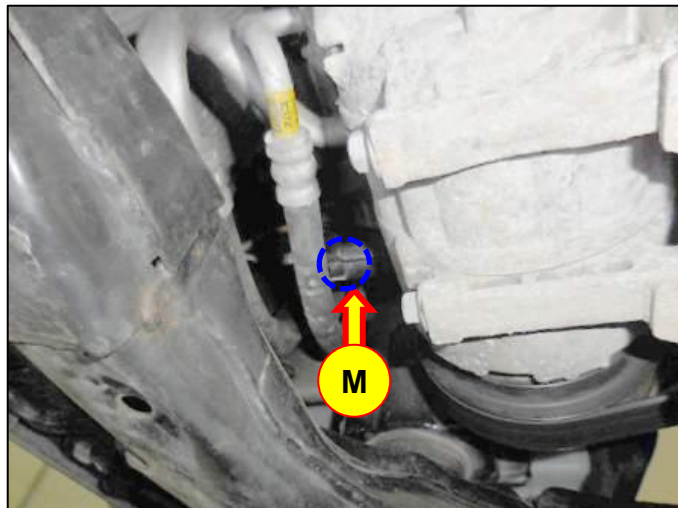
11. Remove the RH engine side cover (K).



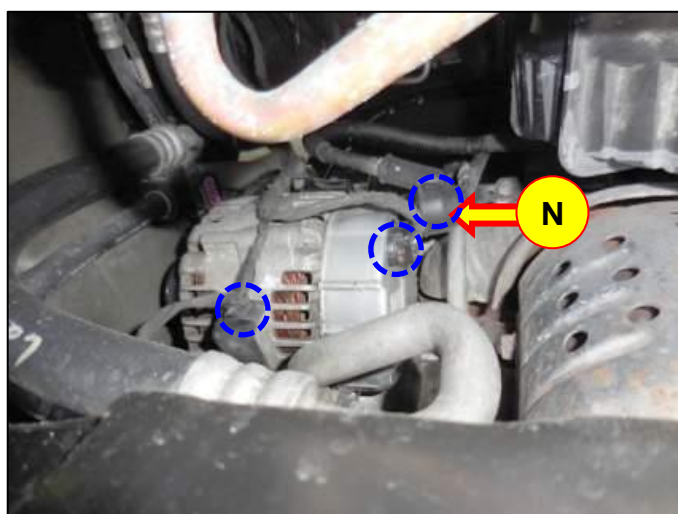
12. Remove the undercover (L).



13. Disconnect the connector (M) from the A/C compressor.



14. Remove the alternator connector and the B+ terminal (N).

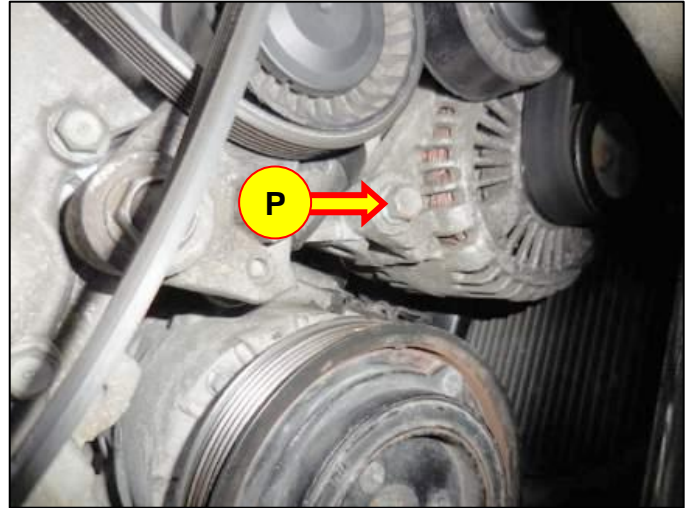


15. Remove the drive belt after relaxing the belt tension by rotating the tensioner pivot bolt (O).



16. Remove the alternator lower mounting bolt (P).

***Tightening torque specification:
22 lb-ft (29.8 Nm)***



17. Remove the alternator (Q).



17. Install the replacement alternator in the reverse order of removal.
18. Verify repair.