

GrimmSpeed Phenolic Spacer

Installation Instructions

Hyundai Genesis 2.0T



All GrimmSpeed products are intended for Off-Road use only. Park your vehicle on a level surface. Fully engage the parking brake and put wheel stops on the front and rear wheels to keep the vehicle from rolling.

Warning (read before installing):

Before moving forward with the setups outlined below, insure that you have the experience to properly modify your car. If not, please consult a professional. Without a proper install you could possibly damage your engine. Under no circumstances is the GrimmSpeed Phenolic Spacer to be used in any applications where failure of the spacer to operate as intended could jeopardize the safety of the operator or any other person or property.

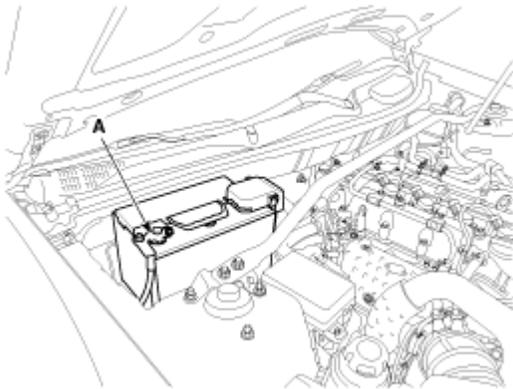
Note: If you do not think you can remember where all of the vacuum hoses and wiring connectors go on your intake manifold, an easy way to remember is to put a piece of tape on them and write where they go.

Purpose

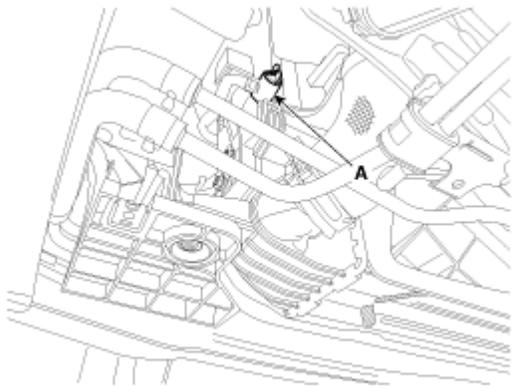
The benefits of this upgrade are to keep the superheated engine temps out of your intake manifold. The cooler the intake manifold and intake air temp is, the higher the power your vehicle is able to create. Cars like cold intake air! Your car has an aluminum head and an aluminum intake manifold, in turn the heat from the very hot engine will easily transfer into the intake manifold. One of the most effective ways to reduce this transfer is to install a Phenolic Spacer.

B. Installation Steps(Refer Steps to Image Below)

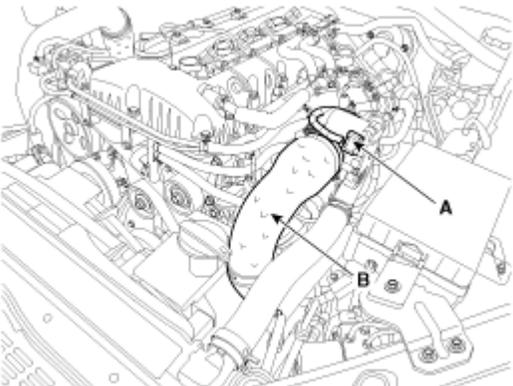
1. Disconnect the negative (-) battery terminal (A).



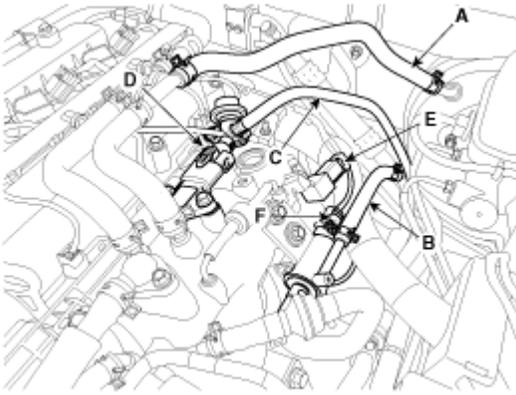
2. Remove the drain plug (A) and drain the engine coolant. If you do not want to drain coolant you can plug the coolant line temporarily while the intake manifold is off. Please remember to top off coolant if you use this method though.



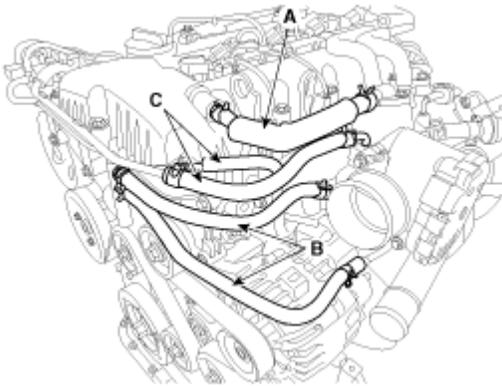
3. Remove the ETC connector (A) and intercooler outlet hose via hose clamp(B).



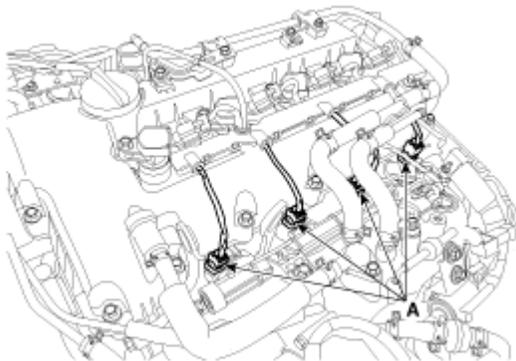
5. Disconnect the vacuum hose from brake booster(A), PCSV hose from intake manifold (B), fuel hose – 2 10mm nuts (C), MAP sensor connector (D), condenser connector (E) and PCSV connector (F).



6. Remove the PCV hose (A), coolant hoses (B) and vacuum hoses (C). You do not need to completely remove these hoses, just disconnect from Intake Manifold/Throttle Body. Remove Throttle Body via 2 10mm Bolts and 2 10mm Nuts.



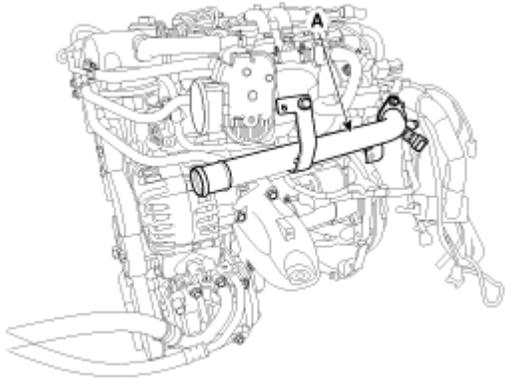
7. Remove the injector connectors (A). The rearmost injector wires each have an additional wire that is Y'd off and go to the Intake Manifold, if you haven't already, disconnect these from the Intake Manifold as well.



8. Remove the water outlet pipe (A). You may only need to detach end of hard coolant line that is on the back side via 2 12mm nuts and 1 12mm bracket bolt and then move out of way. By only taking one end of the coolant line off, you will save some coolant from dumping out if you did not fully drain cooling system.

Tightening torque :

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

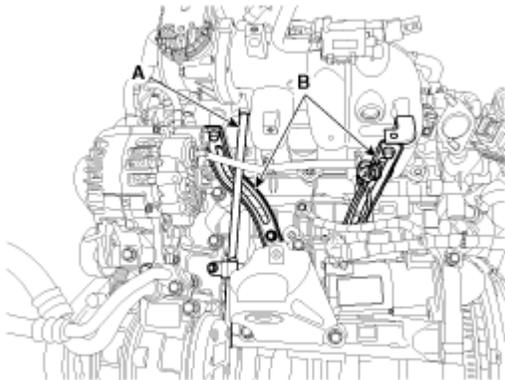


9. Remove the oil level gauge (A) and intake manifold stay (B) bolt.

Tightening torque :

A: 7.8~ 11.8N.m (0.8 ~ 1.2kgf.m, 5.8 ~ 8.7lb-ft)

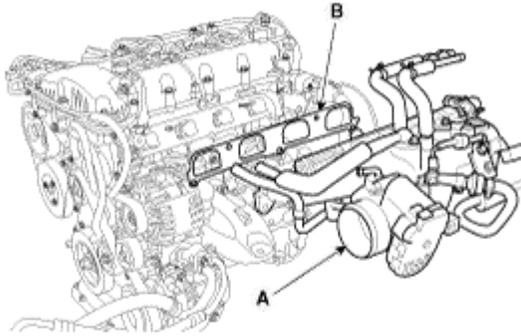
B: 18.6~ 22.5N.m (1.9 ~ 2.3kgf.m, 13.7 ~ 16.6lb-ft)



10. Remove the intake manifold (A) and gasket (B), Throttle Body will be removed from above step. Remove (3) lower Intake Manifold>Engine Head 12mm bolts. This task may seem daunting at first; luckily Hyundai has given us a pretty good path to sneak a socket extension in to get them. Remove (2) upper Intake Manifold>Engine Head 12mm nuts. Underneath the Intake Manifold, there are (2) 10mm nuts holding to brackets on. If you can lift the Intake Manifold slightly it will make getting these nuts off much easier. You are now able to pull out the Intake Manifold.

Tightening torque :

18.6~ 27.4N.m (1.9 ~ 2.8kgf.m, 13.7 ~ 20.2lb-ft)



11. Install the GrimmSpeed Phenolic Spacer. Make sure to leave the OEM gasket on the head, and then install the Phenolic Spacer on top of it. The two top Intake Manifold studs will hold the Phenolic Spacer in place. We advise purchasing a second OEM gasket so you are essentially sandwiching in the Phenolic Spacer. Doing this will ensure you have a perfect seal.

Installation is the reverse of removal. When reinstalling the Intake Manifold you will need to use the 3 longer IM>Head bolts that we have supplied.

Please contact us if you have any questions during installation.

651-414-9747 or sales@grimmspeed.com

Thank you for your purchase!