



## **INSTALLATION INSTRUCTIONS**

### **PART NUMBER: 26-2100**

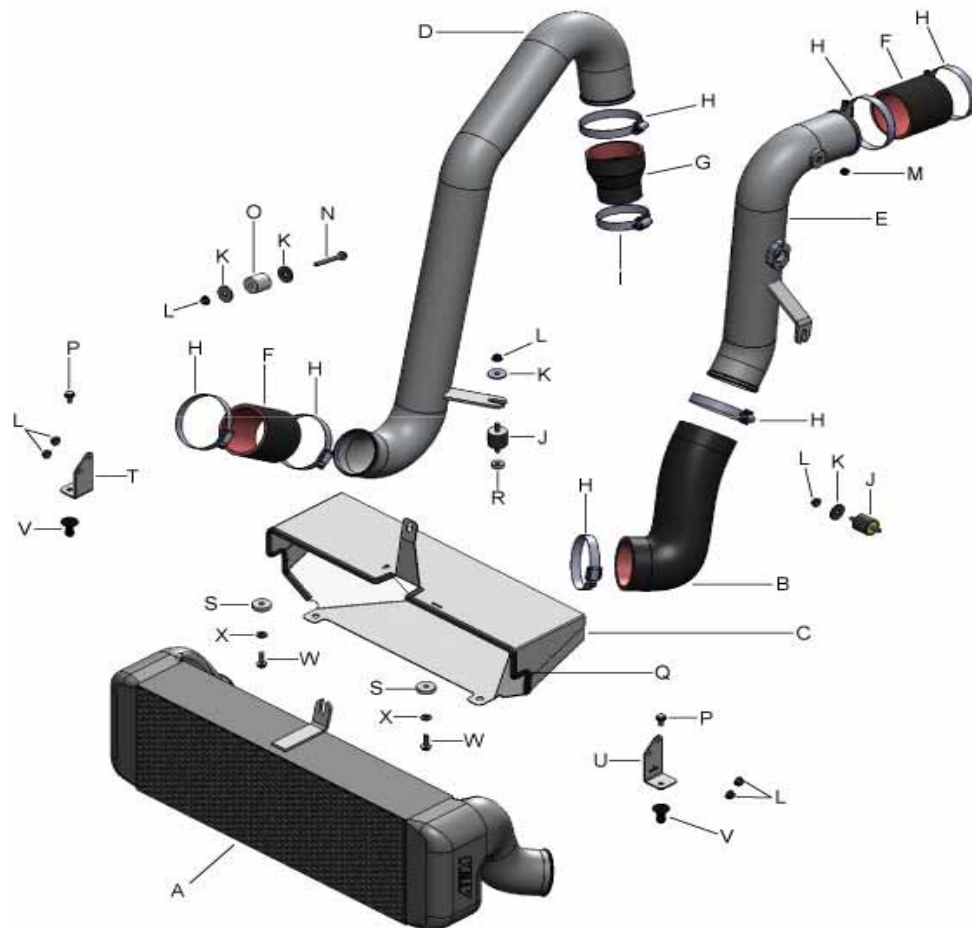
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2010-12 HYUNDAI Genesis L4-2.0L Turbo Manual Transmission SEE \* NOTE

**\* NOTE: Legal in California only for racing vehicles which may never be used upon a highway**

## PARTS LIST

Description	Qty.	Part Number
A Intercooler; Hyundai Genesis	1	25-0001
B Hose, Silicone 2.75" Hyundai Genesis	1	5-1044
C Heat Shield; Shroud For Hyundai Genesis	1	20-8510
D Intercooler Pipe, Hyundai Genesis, Hot Side	1	2-1410
E Intercooler Pipe, Hyundai Genesis, Cold Side	1	2-1411
F Hose, Silicone 2.75x3" Blk.	2	5-275
G Hose; 2-3/4" To 2" ID X 3" L Tprd. Reinforced	1	5-1045
H 1/2" Bnd. Hose Clamp, 2.31-3.25"	7	9444
I Hose Clamp, 2.25	1	103-BLO-3620
J Mount, Rubber 1" X 6mm	2	1228599
K Washer; 1"D X 1/4 Hole Fender	4	08160
L Nut, M6 Hex Serrated	7	444.460.04
M Plug; Stainless Steel 1/8" NPT	1	1-1014
N Bolt, Hex/Flange M6-1 X 50	1	1-2070
O Spacer, 1.00 OD .256 ID X 1"	1	2-658
P Bolt, Hex/Flange M6-1.0 X 12	2	1-2110
Q Rubber Edge Trim 37"	1	8-3037
R Spacer, .625 OD X .295 ID X .1	1	2-125
S Spacer, 1.00 OD X .315 ID X .2	2	2-665
T Bracket; "L", 26-2100 PC/TK	1	32-3069
U Bracket; "L", 26-2100 PC/TK	1	32-3068
V Nipple, Heat Shield Mount	2	2-780
W Bolt, Hex/Flange M6-1 X 20	2	1-2038
X Washer, M6 X 12mm OD Zinc	2	1-3018



Read and understand these instructions **BEFORE** attempting to install this product. Failure to follow installation instructions and not using the provided hardware may damage the inter-cooler system, throttle body and engine.

## 1. Preparing Vehicle

- a. Make sure vehicle is parked on level surface.
- b. Set parking brake.
- c. If engine has run in the past two hours, let it cool down.
- d. Disconnect negative battery terminal.
- e. Raise the front of the vehicle with a jack. Refer to your owner's manual for proper jack and jack stand placement to properly support vehicle. Support your vehicle using properly rated jack stands before wheel removal or while working under the vehicle.

**NEVER WORK UNDER A VEHICLE WITHOUT USING JACK STANDS.**

- f. The AEM® intercooler system is designed for use with the AEM® intake system.
- g. Do not discard stock components after removal of the factory system.

## 2. Removal of stock system



a. Remove the air scoop (if equipped) by removing the 4 clips.



b. Remove the coolant reservoir by removing 2 self tapping screws and disconnecting the hose.



c. Remove the electric fan and shroud by removing 2 M6 bolts and unplugging the fan. Disconnect the plastic clip securing the fan wiring to the fan shroud.



d. Remove the upper radiator mounts by removing 2 M6 bolts on each mount.



e. Use pliers to remove the “tamper resistant” hose clamp at the throttle body.



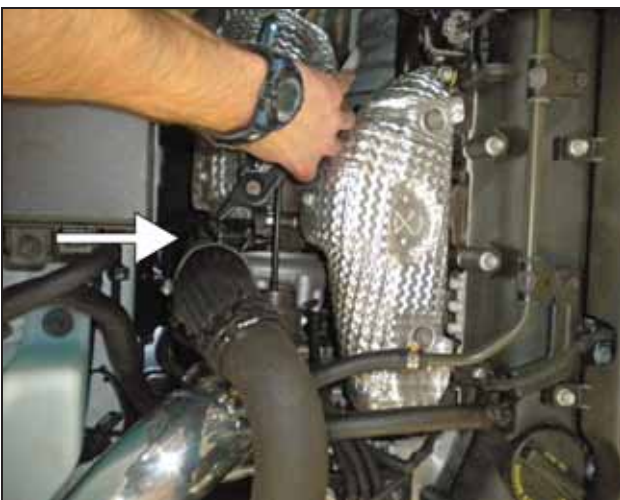
f. Unplug the boost pressure sensor located on the left charge pipe near the throttle body.



g. Pull the left charge pipe off of the throttle body.



h. Remove the M8 bolt securing the right charge pipe to the bracket above the power steering pump.



i. Use pliers to squeeze and slide the spring clamp on the compressor outlet up onto the charge pipe.



j. Pull the right charge pipe up and off of the compressor outlet.



k. Remove the 8 plastic clips securing the front of the bumper cover.



l. Remove one self tapping screw from each side of the bumper cover.



m. From underneath the car, remove 4 clips. Two clips from each side of the vehicle.



n. Remove the front under tray by removing 4 M6 bolts.



o. Remove the second under tray by removing 5 M6 bolts.



p. Use pliers to squeeze the spring clamp and slide it back on the charge pipe. Do this on both charge pipes.



q. Slide the charge pipes off of the intercooler and remove them from the car.



r. Lift up on the corners of the bumper cover to disengage the plastic pin on each side.



s. Carefully pull out and up on the outside edges of the bumper cover to release it from the clips under the fender and headlight. Take care not to damage the bumper cover.



t. Remove the bumper cover and set it aside in a safe location.



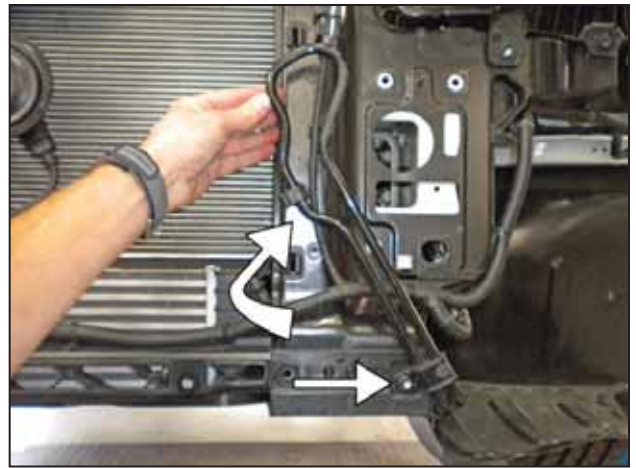
u. Remove the bumper support by removing 6 M8 bolts, and 2 M6 nuts.



v. Remove the air deflector by sliding them up and pulling them toward the front.



w. Unclip the plastic clip holding the power steering cooler in place. Also loosen the M6 bolt.



x. Rotate the power steering cooler as shown and retighten the M6 bolt to hold it in place temporarily.



y. Unclip the ambient air temp sensor from the vertical support.



z. Use flush cuts to trim off the "key" on the clip so that the sensor can be rotated slightly. Then reinstall the sensor.



aa. From underneath the car, remove 2 M6 bolts from each side of the intercooler.



ab. Lift up on the intercooler and rotate the bottom of it out towards the rear of the car. Then lower and remove the intercooler. It may be helpful to support the radiator from the top using clamps during this step.

### 3. Installation of AEM® Intercooler System

a. When installing the intercooler system, do not completely tighten the hose clamps or mounting hardware until instructed to do so.



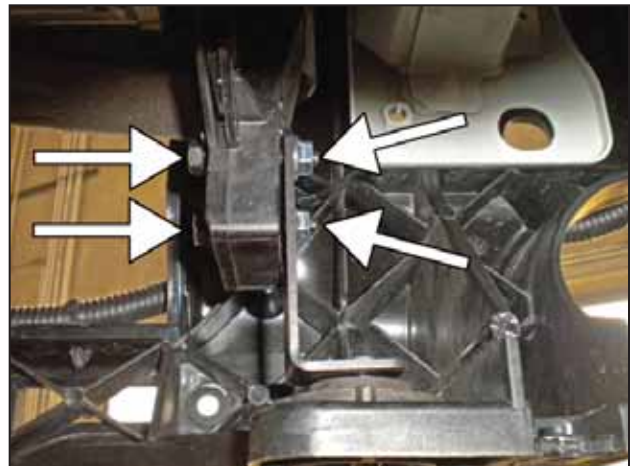
b. If the rubber grommets come out with the intercooler put them back in place.



c. Reinstall both upper radiator brackets removed in step 2d.



d. Assemble the supplied radiator support brackets as shown using one short M6 bolt and one aluminum nipple for each.



e. Install the radiator support brackets as shown using the M6 bolts removed in step 2aa and the supplied M6 nuts. Look for the "R" or "L" stamped on each bracket. **The bolt should go through from the radiator side and the nut should be on the bracket side.**



f. Using a pair of flush-cuts or similar tool, trim off the two plastic nubs on the front of the lower cross member.



g. On the side of the left frame rail, locate the two M6 bolts used for attaching ground wires. Remove the ground wire from the top bolt location.



h. Move the ground wire to the lower bolt location and stack it on top of the existing terminal. Be sure the ground bolt is secure. Leave the top bolt hole vacant.



i. Install one of the supplied M6 rubber mounts into the vacant bolt hole from the previous step. Hand tighten the rubber mount.



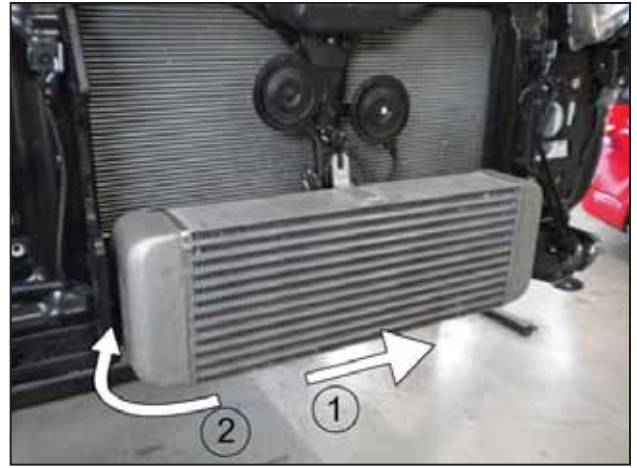
j. Install the other M6 rubber mount as shown with the small aluminum spacer under it. Hand tighten the rubber mount.



k. Lay out the supplied hardware as shown. One long M6 bolt, two large fender washers, one 1" tall spacer, one M6 nut, two shorter M6 bolts, two smaller washers, and two short spacers.



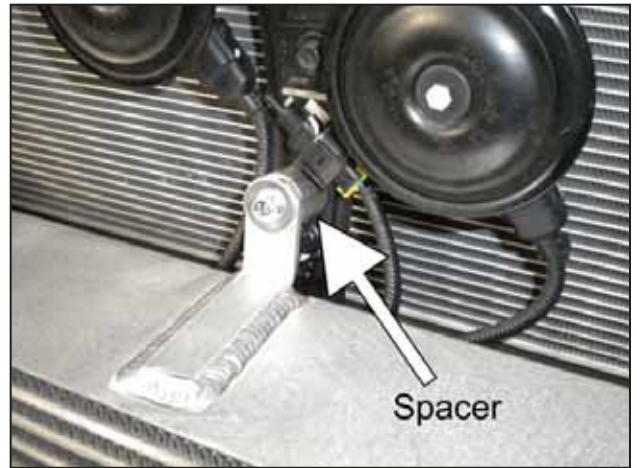
l. Inspect the end tanks of the intercooler and remove any packaging material that may obstruct the inlet and outlet. Begin the installation of the AEM® intercooler as shown. Guide the left intercooler neck into position, then lower the intercooler down, so that the left lower bracket slides under the cross member.



m. With the left neck in position, tip the top of the intercooler back and guide the right neck into position. The intercooler will have to be pushed all the way to the left side of the car for the right neck to slip past the opening.



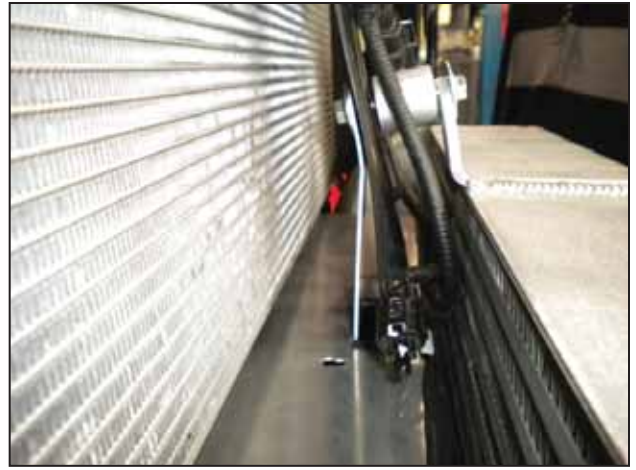
n. Once the right neck slips through the opening, lower the intercooler down all the way and tip the top towards the front so that both of the lower brackets are in place below the cross member.



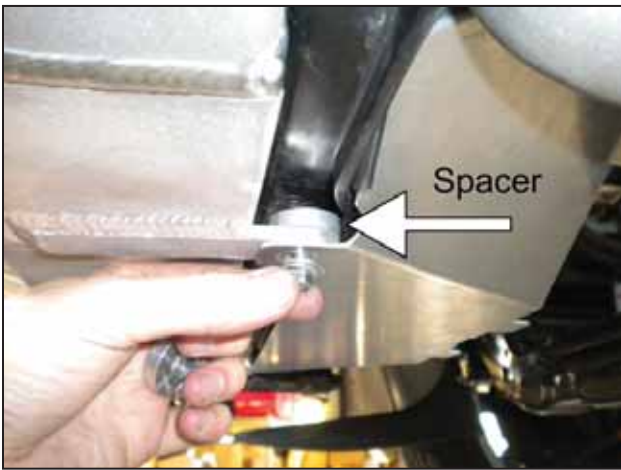
o. Install the long M6 bolt, one fender washer, and 1" tall spacer as shown. Let the bolt hang in place for now. Make sure that the ambient air temp sensor is rotated clockwise out of the way.



p. Install the supplied rubber edge trim on the intercooler shroud edges as shown. Cut and trim the rubber as needed.



q. Install the shroud and attach it to the back of the bolt installed in step 3(o) using the supplied fender washer and M6 nut. Leave the nut loose for now. The tabs on the bottom of the shroud should rest below the tabs on the intercooler.



r. From underneath the car, install the short aluminum spacers on top of the intercooler mounting brackets. The spacers need to be between the intercooler brackets, and the cross member.



s. Attach the intercooler to the cross member with the supplied M6 bolts and washers. Lift up on the intercooler and run the bolts in, but do not tighten them all the way until everything is aligned.



t. Run the top mounting bolt in and push the shroud toward the front of the car to reduce the gap between the intercooler and the shroud.



u. For best fit, push the intercooler toward the right side of the car. When the alignment of the shroud and the intercooler looks good tighten all three bolts.



v. On the back of the bumper near the left mount, a hole needs to be drilled for mounting the power steering cooler.



w. Measure 2.5" from the corner of the mount as shown. Mark and drill a 3/8" diameter hole. Deburr and paint the edges of the hole to prevent rust.



x. Install the bumper support, and check the alignment of the hole. The clip that holds the power steering cooler in place should snap into the hole. Readjust the M6 bolt/mount if needed.



y. Attach the bumper support with the 6 M8 bolts and 2 M6 nuts removed in step 2(u).



z. Install the lower coupler using two #44 clamps as shown.



aa. Gently bend the power steering cooling line to clear the coupler. It is best to achieve at least 1/4" clearance between the power steering cooler line and the coupler. Take care to not kink the power steering lines.



ab. Install the reducer coupler as shown with a #36 and #44 clamp.



ac. Install one of the straight couplers on the intercooler as shown using 2 #44 clamps. Apply some silicone spray to the inside of the coupler to help with installation.



ad. Install the right charge pipe as shown. Line up the lower end of the pipe, and press the upper end down into the coupler on the compressor outlet. Secure it to the rubber mount with the supplied fender washer and M6 nut.



ae. If not using water injection, install the supplied 1/8" NPT plug into the water injection bung on the left charge pipe. Use some Teflon tape or thread sealant. If using an AEM® water injection system, install the injector using Teflon tape or sealant and follow the instructions provided with the water injection kit.



af. Transfer the boost sensor from the OEM charge pipe to the AEM® charge pipe. Attach using the same OEM bolts.



ag. Install one of the straight couplers onto the throttle body using 2 #44 clamps and install the left charge pipe as shown. Secure it to the rubber mount using the supplied fender washer and M6 nut. Plug in the boost sensor.



ah. Take some time to align the charge pipes for best fit. There should be about  $\frac{1}{4}$ " minimum clearance between the pipes and other components in the engine bay.



ai. Once proper fit is achieved. **Tighten all hose clamps and rubber mounts.**



aj. On the right lower corner of the electric fan shroud, mark and trim the area shown for clearance with the charge pipe.



ak. After trimming, the fan shroud should look as shown.



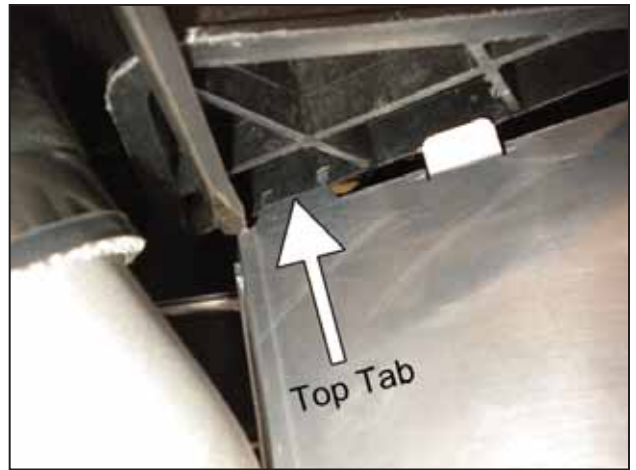
al. Lower the electric fan and shroud into place. Guide the lower tabs on the fan into the mounts on the radiator from underneath.



am. From under the car, manipulate the fan shroud and intercooler shroud so that the tabs snap into position.



an. Push the bottom of the fan shroud toward the rear as shown to engage the bottom middle tab. The middle tab should rest on top of the fan shroud, and the two outer tabs should rest below the fan shroud.



ao. Use a similar approach on each side of the inter-cooler shroud. The top tab should rest on top of the fan shroud and the lower tab should rest below it.



ap. Once the tabs are in position, secure the fan with the two M6 bolts removed in step 2(c). **Plug in the fan** and secure the wiring.



aq. Install the coolant reservoir using the two self tapping screws removed in step 2(b). Connect the overflow hose and ensure clearance between the reservoir and left charge pipe; readjust the pipe if necessary.



ar. Reinstall the bumper cover by reversing the removal steps.



as. Check for clearance of the power steering cooler lines to the fender liner. Gently bend the lines and / or trim the fender liner as needed.



at. Some minor trimming of the fender liner as shown may be necessary to clear the power steering lines.



au. Two inner mounts and one reinforcement rib of the front under tray need some minor trimming.



av. Mark the mounts as shown, and remove about 1/2" from the mounts.



aw. Mark the reinforcement rib on the left side as shown, and trim.



ax. Install the trimmed under tray using only the two outer mounts and two of the bolts removed in step 2(n). Check for clearance in the trimmed areas and modify if necessary.



ay. Install the second under tray using the 5 M6 screws removed in step 2(o).



az. Make a final check for clearance between all components, and re-adjust if necessary. Be sure that all fasteners are tight including hose clamps and rubber mounts, and that the electric fan is plugged in before starting the vehicle.

#### 4. Reassemble Vehicle

- a. Position the intercooler pipes for the best fitment. Be sure that the pipes or any other components do not contact any part of the vehicle. Tighten the rubber mount, all bolts, and hose clamps.
- b. Check for proper hood clearance. Re-adjust pipes if necessary and re-tighten them.
- c. Inspect the engine bay for any loose tools and check that all fasteners that were moved or removed are properly tightened.
- d. Reconnect negative battery terminals and start engine. Let the vehicle idle for 3 minutes. Perform a final inspection before driving the vehicle.

#### 5. Service and Maintenance

- a. Use window cleaner to clean your powder coated AEM® charge pipes. **(NOTE: DO NOT USE aluminum polish on powder coated AEM charge pipes).**

For technical inquiries  
e-mail us at  
[sales@aemintakes.com](mailto:sales@aemintakes.com)  
or  
call us at  
800.992.3000

## **AEM Intercooler system Warranty Policy**

AEM® warrants to the original purchaser that the AEM intercooler system is free from defects in workmanship and materials for a period of 1 year.

The warranty covers the entire intercooler system.

The warranty applies to vehicles NOT used in competitive racing events. AEM will not honor this warranty if the intercooler system has been altered in any way, installed incorrectly, used with non AEM hardware, the vehicle has been in an accident or is not installed on the vehicle for which it is intended to fit. AEM will not warrant any intercooler system for damage deemed normal wear and tear such as the occurrence of bent fins from rocks/bugs/road debris.

For warranty consideration, the original sales receipt must be presented to the retailer from where the system was purchased or any AEM retailer in good standing with AEM. The warranty applies to the parts that are deemed defective by AEM and only those parts shall be replaced. AEM does not assume the cost of removal and reinstallation of the intercooler system.

No other warranty expressed or implied (including merchantability) applies to AEM intercooler systems, nor is any person or the manufacturer authorized to assume any other warranty. Further AEM does not assume responsibility for any consequential damages arising from the purchaser's use of the product.

This warranty gives you specific legal rights. Your rights may vary depending on the state where you reside.