



FS Performance Engineering
Kia Optima (2011-2015) Rear Diffuser Installation Instructions

Tools Needed:

- 10mm wrench
- 10mm socket
- Ratchet wrench
- Phillip's head screwdriver

Additionally for outer pieces:

- Drill
- 1/4" drill bit
- Masking tape
- Sharpie

Included in Center Diffuser Kit:

- (1) Center Diffuser
- (2) "L" shaped brackets
- (2) M6-1.0 x 20mm bolts
- (2) M6-1.0 x 45mm bolts
- (6) M6 Nyloc Nuts
- (4) 1/4" ID, 1" Washers
- (4) 1/4" ID Small Washers
- (2) 20mm spacers

Included in Outer Pieces Kit:

- (2) Outer Pieces (left and right)
- (2) M6-1.0 x 20mm bolts
- (6) M6-1.0 x 40mm bolts
- (8) 1/4" ID, 1" OD washers
- (8) 1/4" ID small washers
- (6) 15mm spacers
- (8) M6 Nyloc Nuts

Steps:

- 1.) Raise the rear of the car and secure it with jack stands.
- 2.) On the left side of the car's lower trunk, identify the exhaust heat shield. The lower portion needs to be bent up so it does not interfere with your diffuser. We simply used our hand strength to do so.



- 3.) Identify and remove the nut on each side of the car holding the head shield.



4.) Pull the exhaust shielding outward and slip an L bracket over the threads. The shorter portion needs to be on the bottom pointing toward the inside of the car. Push the exhaust shielding back. Then install a M6 nyloc nut onto the threads. Do not tighten all of the way.



5.) At the rear of the bumper, remove the 2 Phillip's head clips that hold the bumper up.





6.) You can now install your center diffuser with help from a friend. At the rear the diffuser installs into the holes from the previous step. You will need to use a M6-1.0 x 45mm bolt and nyloc nut on top. A 20mm spacer needs to be placed between the diffuser and bumper. Use large washers on bottom, and small on top under the nut. Leave loose.





7.) Toward the front of the car install the diffuser into the lower holes in the “L” brackets. Use M6-1.0 x 20mm bolts with nyloc nuts. Use large washers on bottom, and small on top. Leave loose.





8.) Position the diffuser forward/back so the fins are not touching the bumper. Then tighten all of the nuts/bolts. Remember to tighten the nut on the exhaust shielding securely as well. Now you are done with the center diffuser!!!! If you have any questions feel free to reach out to us.

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9.) For the outer pieces, holes need to be drilled into the bumper, then marked and drilled on the piece. We don't pre-drill holes in this piece because not everyone wants the piece positioned in the same manner. Enough hardware is provided for 4 holes on each piece. Place masking tape on the underside of the bumper on each side.

With help from a friend hold the outer pieces onto the car and position them where you'd like them. The pieces are shaped in a way to avoid the mudflaps if you have them. Figure out where holes would be best on the bumper. Drill those holes.

Then, hold your piece up against the car and mark down through the holes onto the outer diffuser piece.



11.) Drill the marked holes in your outer pieces. Install your outer pieces. The hole toward the back of the car uses a M6-1.0 x 20mm bolt. The remaining holes use M6-1.0 x 40mm bolts and **15mm spacers**. Use nyloc nuts on top, large washers on bottom, and small washers on top. Securely tighten.





12.) Enjoy your new FS Performance Engineering aero! Tag us & use #FSPerformanceEngineering in the online world!!



For questions email costas@fspeinc.com or jim@fspeinc.com
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