



FS Performance Engineering
FRS/BRZ/86 Rear Diffuser “Big Boi” Installation Instructions

Tools Needed:

- 10mm wrench
- 10mm socket
- Ratchet wrench
- Long extension (optional)
- Flat head screwdriver (probably)
- A helping hand (friend)
- ¼” drill bit
- Drill

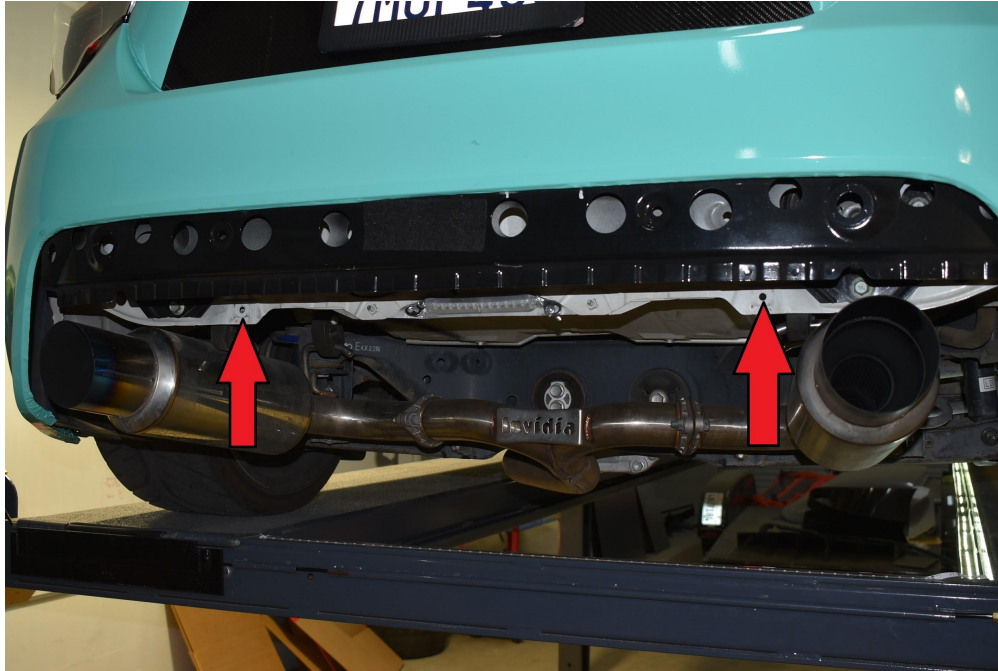
Included in Kit:

- (1) Center diffuser w/ fins
- (2) Outer diffuser pieces (driver & passenger sides)
- (2) Long steel brackets
- (2) Short steel brackets

- (2) 15mm spacers
- (2) 5mm spacers
- (20) M6-1.0 x 20mm bolts
- (2) M6-1.0 x 30mm bolts
- (22) ¼” small washers
- (2) ¼” small lock washers
- (8) 1” OD fender washers
- (20) M6 nyloc nuts

Steps:

- 1.) Raise car and secure with jack stands.
- 2.) These instructions are for our diffuser. Not the valence cutting procedure. So, if you haven't already... cut out the rear valence on your car then remove the brackets that can be found in these holes with your flat headed screwdriver.



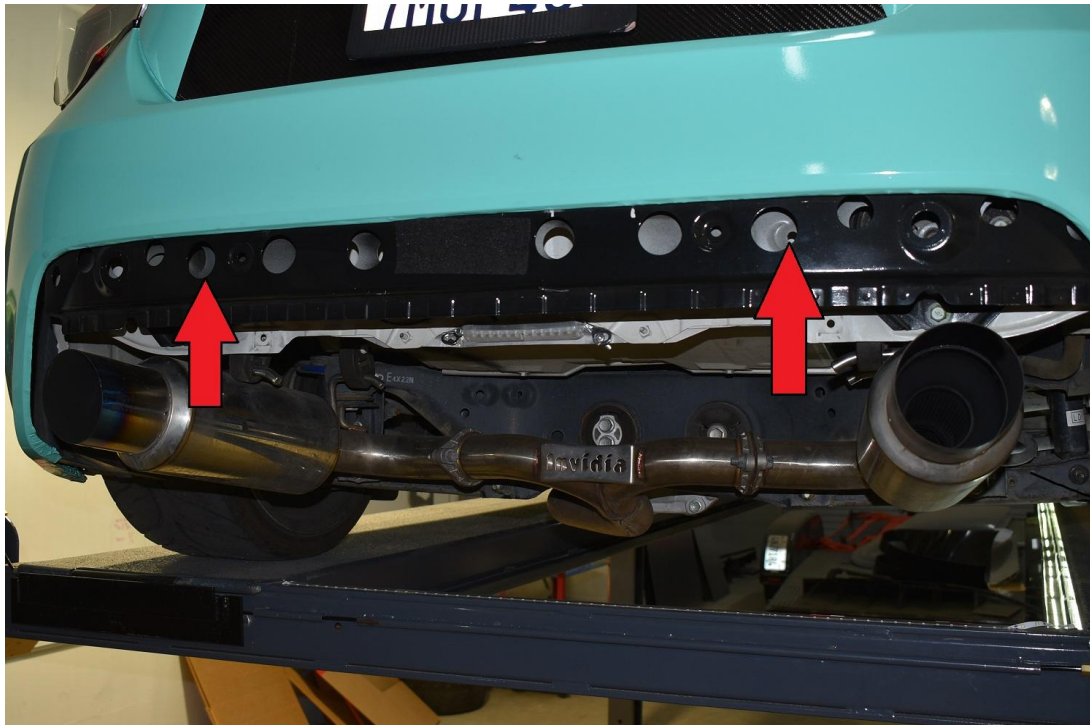
- 3.) Identify and remove the two front-most bolts that secure the rear muffler exhaust shield. You will not be reusing these bolts.

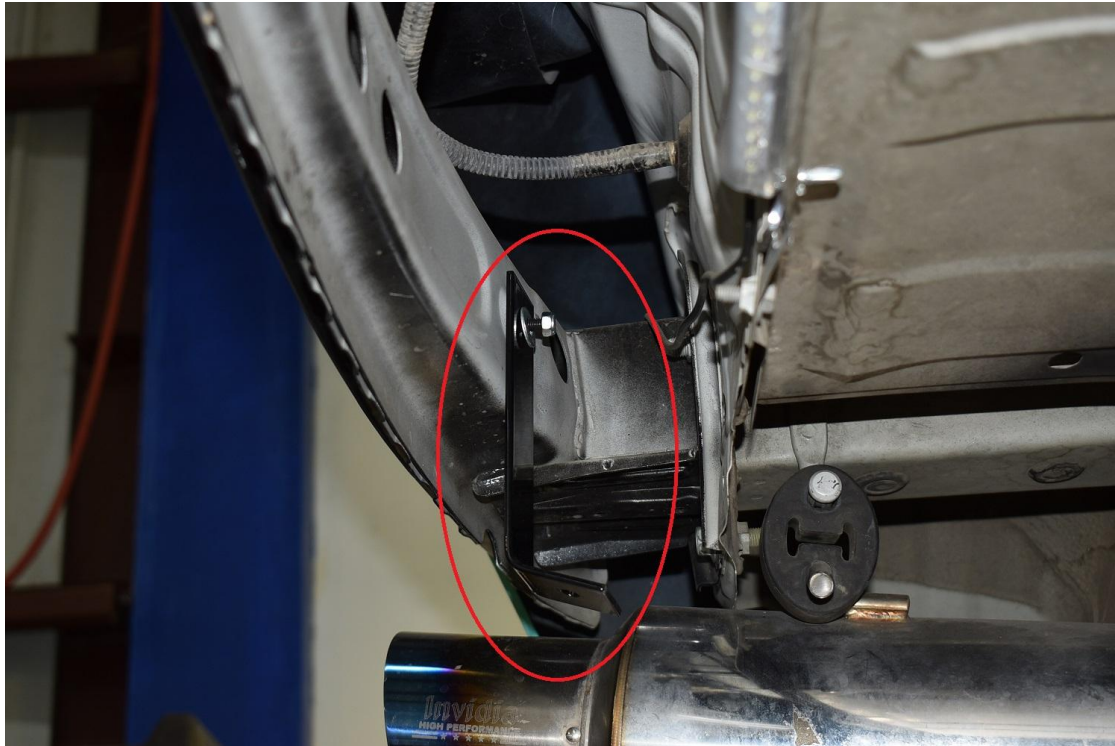
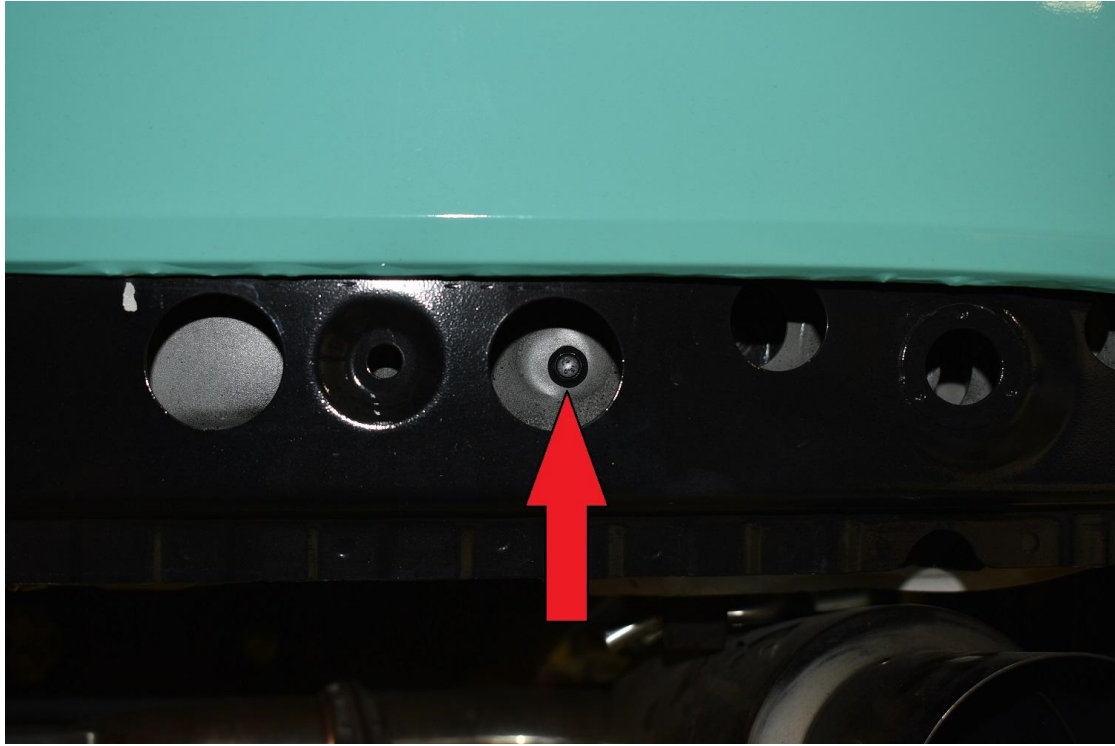


4.) Loosely install the long brackets. The shorter folded tab is at the top. Use 20mm long bolts, 1/4" small washers, and lock washers under the heads.

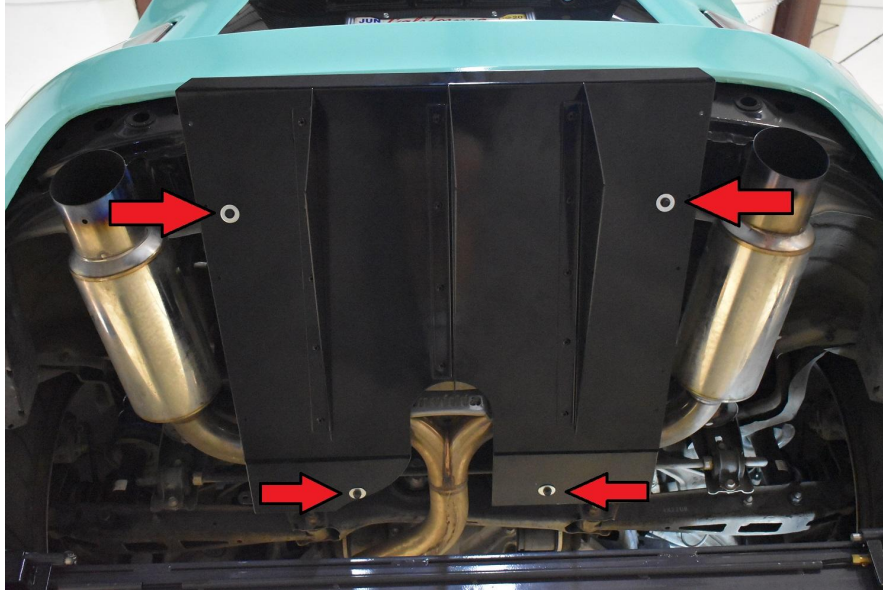


5.) Identify these two holes in the rear subframe and loosely install your short brackets. Use 20mm bolts toward the back of the car, and 1/4" small washers and nyloc nuts on the other side.

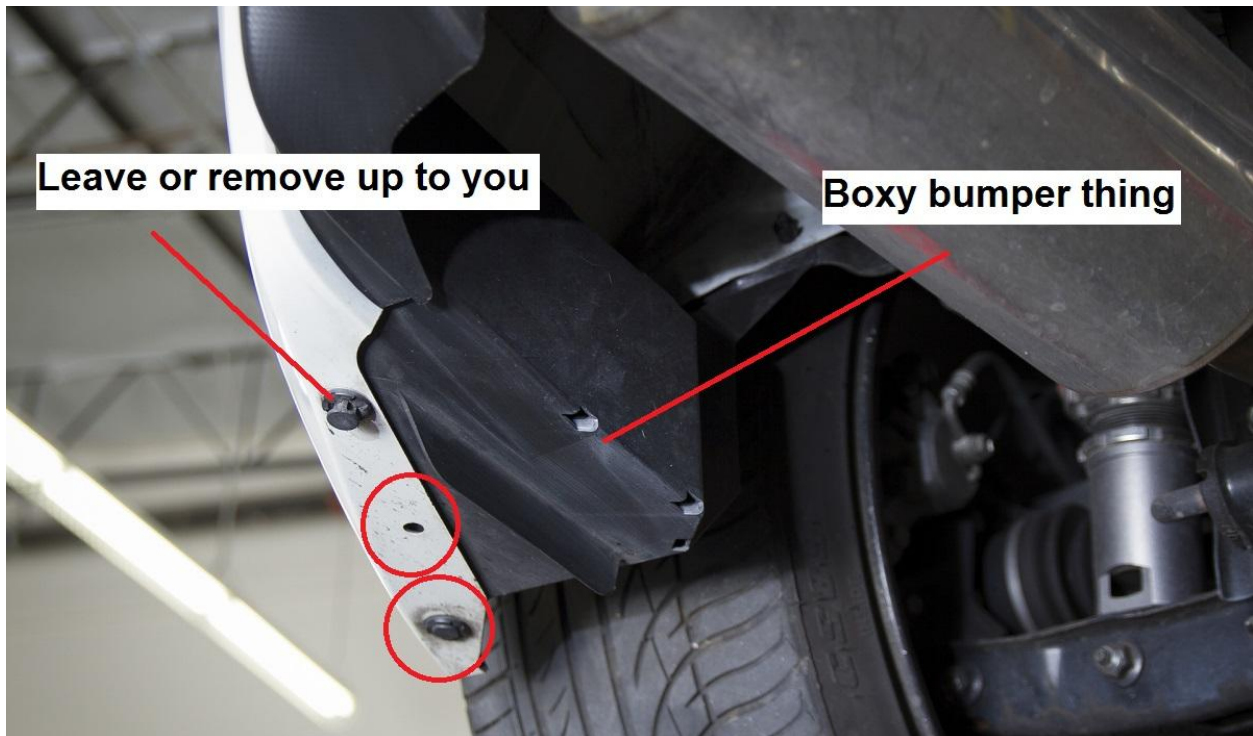




6.) Loosely install your center diffuser onto the brackets. Use 20mm bolts + 1" OD fender washers on the bottom, and 1/4" small washers + nyloc nuts on top. NOTE: the two holes at the front of the car are NOT pre-drilled. Why? Because we've realized there are a million different way to route an exhaust. If the brackets work, use them!!!



7.) Remove the 1 to 2 clips toward the front of the car that can be found at either end of the rear bumper. Yours will likely have two, not three. We want to use the two holes circled in the pic. We later realized these clips hold some kind of boxy bumper support (as can be seen). Feel free to work around the box by cutting the fins on it, or just remove it all together (recommended).

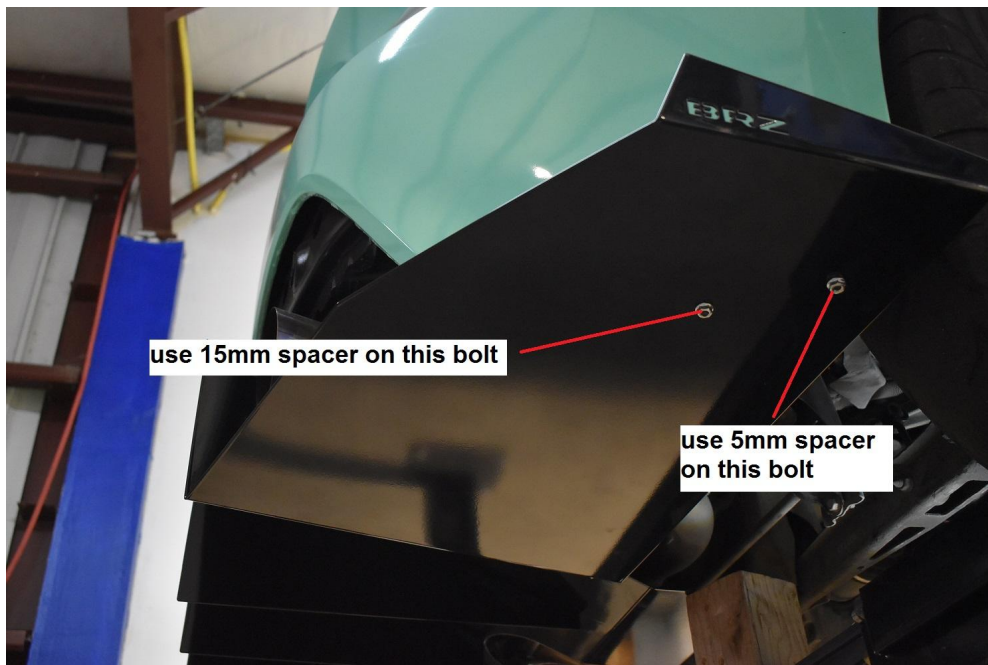


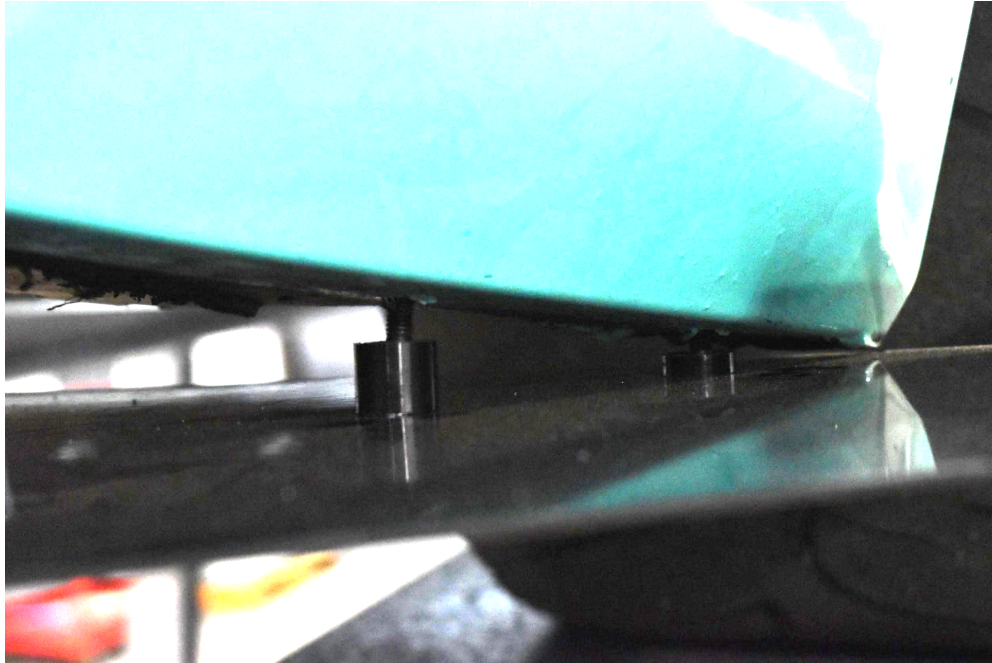
8.) Install your outer diffuser pieces onto the center diffuser. When mounting to the center diffuser lay the outer diffuser on top. This is straightforward. Use M6-1.0 x 20mm bolts pointing upward with 1/4" small washers + nyloc nuts on top. Securely tighten these bolts.



9.) Install the diffuser into the holes exposed from step 7. In the hole toward the front of the car use a M6-1.0 x 20mm bolt & 1" OD fender washer on bottom, a 5mm spacer between the diffuser and car, and a 1/4" small washer & nyloc nut on top.

In the hole toward the back of the car do the same thing but use a 30mm long bolt & 15mm tall spacer (pics don't show washers). Securely tighten these bolts.





10.) Our goal was to get it secured to the bumper so it sits straight. So now securely tighten the remaining bolts from all of the previous steps.

11.) 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
Or call/text us at (661) 809-0954