

## **FS Performance Engineering**

Mazda Miata NA (1990-1997) "The Monstrosity" Rear Diffuser Installation Instructions

NOTE: NA6 Miatas don't have subframe bracing. Additional brackets are provided to install on NA6 miatas.

#### **Tools Needed:**

- 10mm wrench/socket
- 12mm wrench/socket
- 14mm wrench/socket
- 17mm wrench/socket
- 19mm wrench/socket
- Telescoping magnet, small magnet (MAKES THIS SO MUCH EASIER, you will see why) (NA6) only
- A friend (hopefully not a tool)

#### **Included in NA8 Kit:**

- (1) NA6/NA8 Monstrosity / Monstrosity Junior Diffuser
- (1) Mounting Bracket
- (2) M12-1.5 x 40mm bolts
- (2) M12 washers
- (3) M6-1.0 x 20mm bolts
- (3) <sup>1</sup>/<sub>4</sub>" fender washers (1" OD)
- (3) M6 nyloc nuts
- (3) 1/4" small washers
- (4) M8-1.25 wiznuts (JUST IN CASE)
- (4) M8 sized small washers (JUST IN CASE)
- (1) Threadlocker (for you racers)

## **CONTINUED ON NEXT PAGE (NA6 KIT)**



### **Included in NA6 Kit:**

- (1) NA6/NA8 Monstrosity / Monstrosity Junior Diffuser
- (1) Mounting Bracket
- (2) L-shaped (kind of) brackets
- (1) Sway bar bracket (because you have no rear subframe bracing!)
- (9) M6-1.0 x 20mm bolts
- (4) M6 wiznuts
- (7) M6 nyloc nuts
- (2) M8-1.25 Bolts
- (2) M8 Nyloc nuts
- (4) 5/16" ID, 1.25" OD washers
- (4) M8-1.25 wiznuts (JUST IN CASE)
- (4) M8 sized small washers (JUST IN CASE)
- (7) 1/4" small washers
- (5) 1/4" fender washers (1" OD)
- (4) 1/4" very large fender washers (>1" OD)
- (1) Threadlocker (for you racers)
- (3) M6-1.0 x 30mm bolts (just in case you need longer bolts)
- (3) 10mm spacers (just in case you have to use longer bolts)



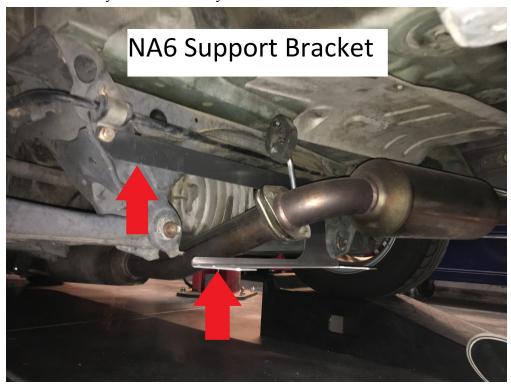
# **Steps:**

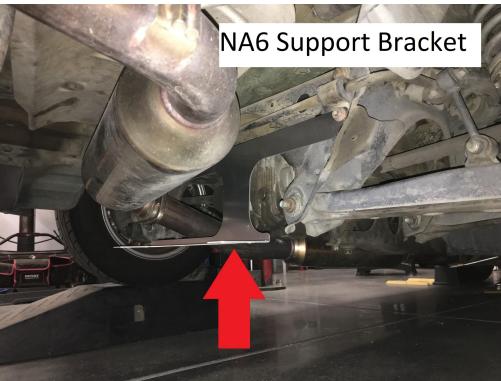
- 1. Raise car and secure with jack stands.
- 2. Remove the two 17mm bolts at the rear subframe. If you own a NA6 and don't have the bracing, move onto the next step. If you own a NA8 move onto step 4!





3. Identify the lower bolts that hold the rear sway bar on and remove them with your 14mm wrench. Then attach the sway bar bracket we provided. Tighten securely and feel free to use thread locker if you feel necessary.







4. Locate the four nuts/bolts that hold the bumper to the tow hooks. Remove the nuts using a 14mm wrench/socket and install the supplied bracket as shown. Tighten securely. If you don't have one (or both) towhooks you will be fine. If you are missing nuts we have provided the M8 wiznuts and washers to use (AREN'T WE NICE?):) By the way your bracket will have THREE holes, not six like in the picture. These are common instructions. IF YOU OWN A NA8 SKIP TO STEP 6.









5. NA6 miatas please install the L-shaped bracket thingies to the rear block looking thingies. The tow hooks are bolted to the blocks. This is where your telescoping magnet comes into play. You want to get the bolts into the holes from the inside. On one of them you will even need to hold a washer on the bolt. Just check out ALL of the pictures.

PASSENGER SIDE BLOCK THING WITH A M6 BOLT POKING OUT OF THE HOLE:



BLOCK THING WITH A M6 BOLT AND '4" SMALL WASHER BEING PUT THROUGH BIG HOLE INTO SMALL HOLE ON SIDE. We used the magnet here.





WHAT IT LOOKS LIKE WHEN BRACKET IS INSTALLED... <u>except your tab on the</u> <u>bottom will be folded the opposite way!!!</u> Use the WIZNUTS here and threadlocker if you want. Do both sides and tighten securely.





6. With help from a friend, install the diffuser using:

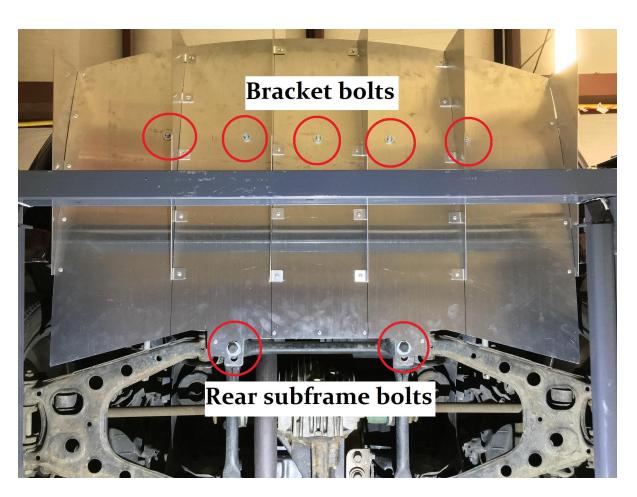
**NA8 MIATAS:** (2) M12-1.5 x 40mm bolts and (2) M12 washers into the rear subframe. You are replacing the OEM bolts. Hand tighten.

**NA6 MIATAS:** (2) M8-1.25 x 20mm bolts w/ a LARGE fender washer (1.25" OD) on the bottom <u>and</u> top and a M8 nyloc nut on top. You are attaching the diffuser to the sway bar bracket. Don't tighten all the way.

**NA8 & NA6 MIATAS:** Using (3) M6-1.0 x 20mm bolts facing up with (3) ½" fender washers (1" OD), and (3) M6 nyloc nuts + ½" small washers on top, install the diffuser to the tow hook bracket as shown. Don't tighten all the way. If you have a NA6 miata you might have to use 10mm spacers and the longer M6-1.0 x 30mm bolts.

**NA6 MIATAS:** Use (2) M6-1.0 x 20mm bolts facing upward w/ (2) ½" fender washers (1" OD) on the bottom up through the diffuser and into the L-bracket thingies. Then use ½" small washers and M6 nyloc nuts on top. Don't tighten all the way.

NOTE: PICTURE SHOWS FIVE BOLTS - THIS IS FOR THE NA6 MIATA





- 7. Adjust the diffuser forward/backward as you would like and tighten securely every single bolt/nut that has been installed.
- 8. Enjoy your new FS Performance Engineering rear diffuser! Remember to send us pictures once it is installed.



For questions email <u>costas@fspeinc.com</u> or <u>jim@fspeinc.com</u> Or call/text us at (661) 809-0954