



## FS Performance Engineering

### Mazda Miata NA8 (1994-1997) Flat Underbody Panels (V1/V2) Installation Instructions

#### **Tools Needed:**

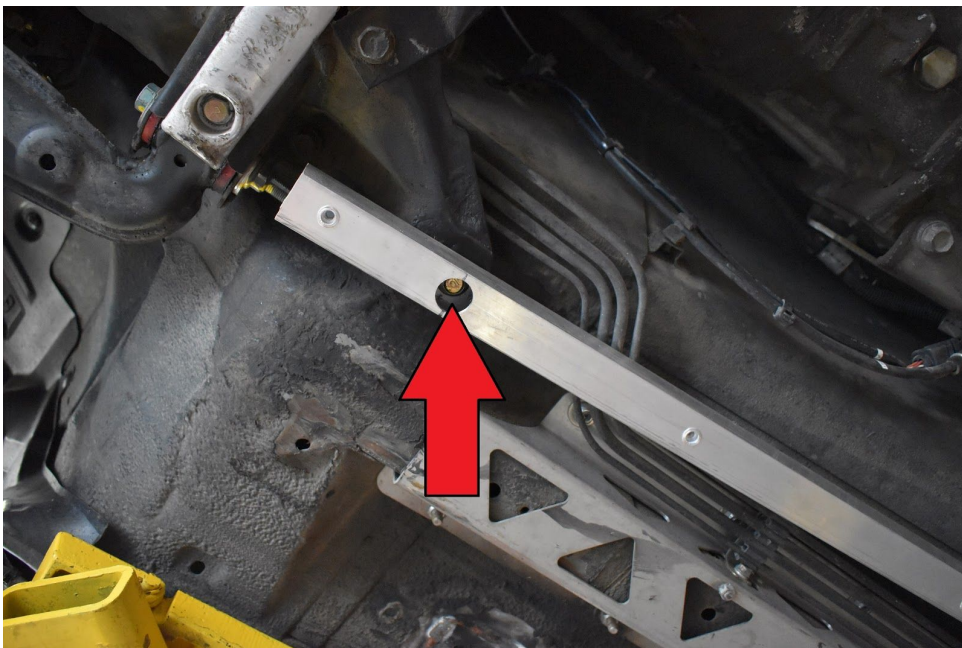
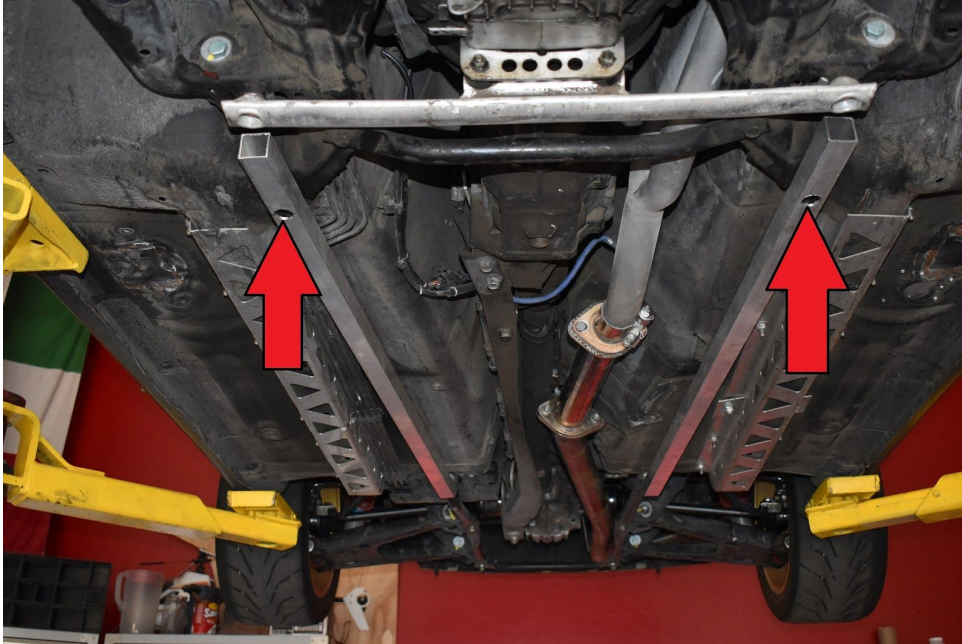
- 10mm wrench/socket
- 14mm wrench/socket (deep socket)
- 17mm wrench/socket
- 19mm wrench/socket (deep socket)
- A friend (hopefully not a tool)

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

- (4) Flat underbody panels
- (2) Aluminum square tubing mounting rails
- (14) M6-1.0 x 20mm bolts
- (14) 1" OD, 1/4" ID fender washers
- (2) M12-1.5 x 50mm bolts
- (4) M12-1.5 x 60mm bolts
- (6) M12 washers
- (2) 20 mm spacers
- (2) 15 mm spacers
- (2) 30 mm spacers
- (1) Threadlocker
- (1) INCH-LBS torque wrench

### Steps:

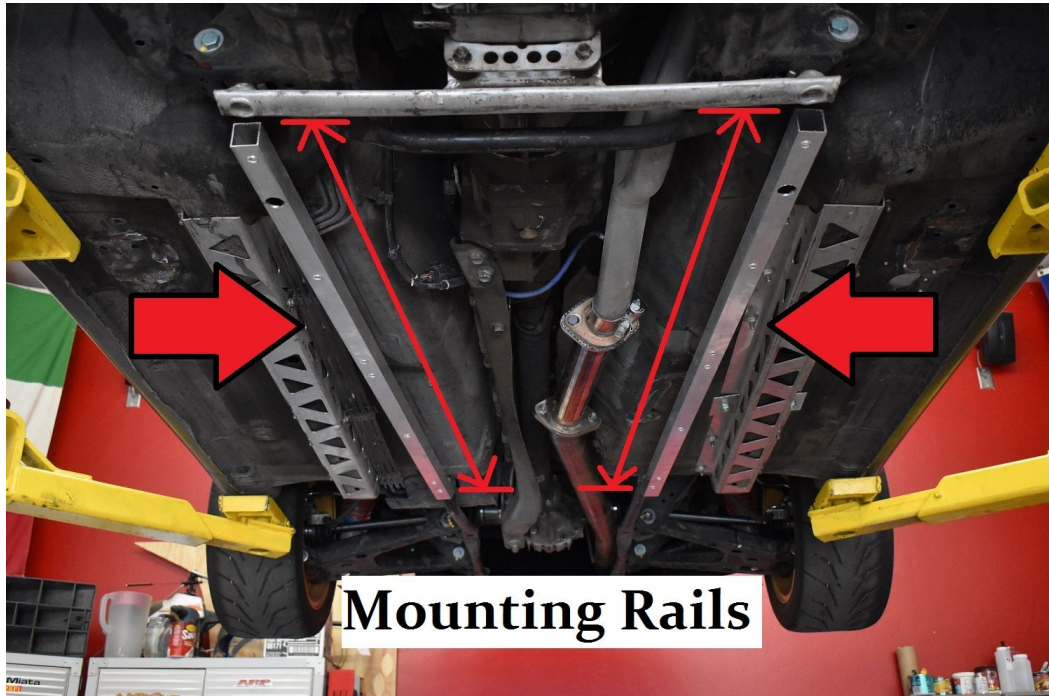
1. Raise car and secure with jack stands.
2. Remove the 14mm head bolts found to the inside of the frame rails, just past the front transmission mount. There should be washer, and lock washer on each of these bolts. These two bolts will later be used to mount the aluminum square tubing mounting rails (as you can see).



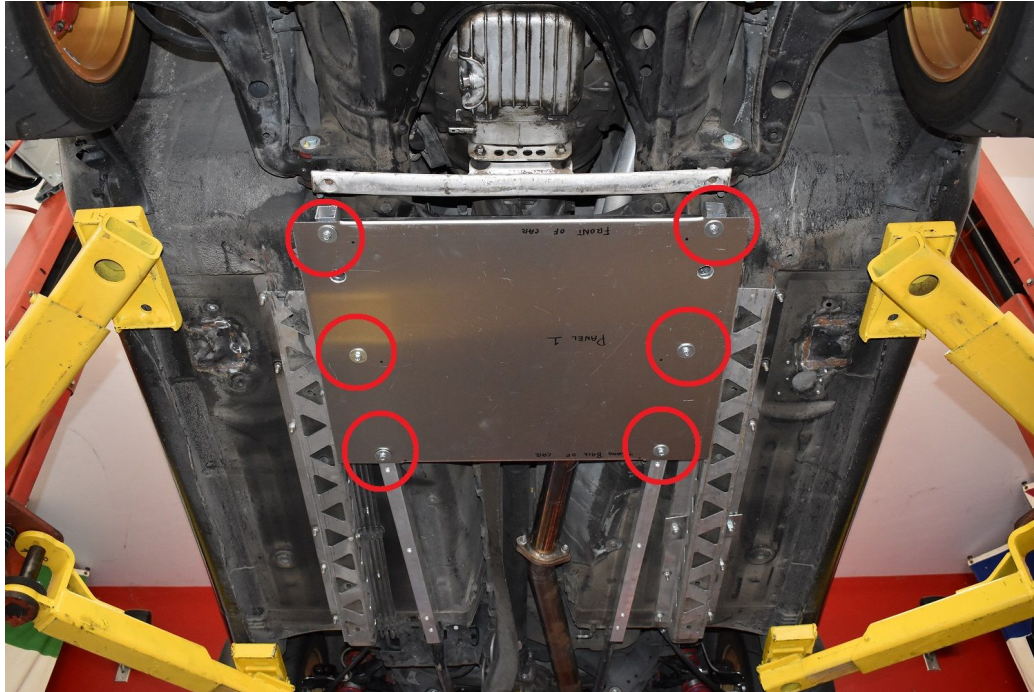
3. Remove the two 17mm head bolts holding the front of the rear subframe bracing. You will be eventually replacing these with two supplied M12-1.5 x 50mm bolts (like in the picture). Note: In the picture the front of the car is at the bottom of the picture, and the back of the car at the top of the picture.



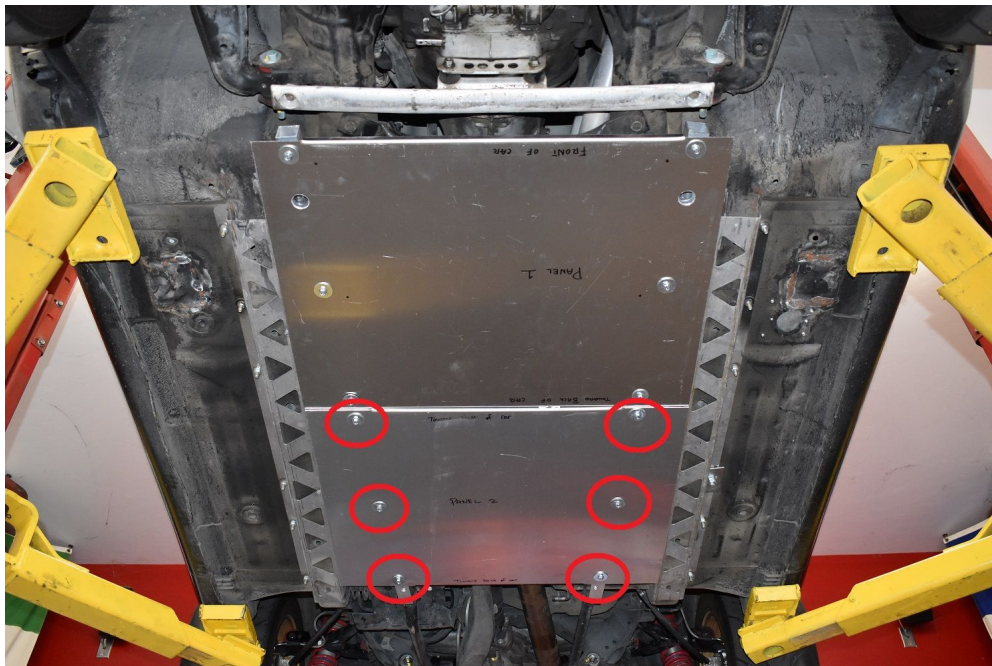
4. Install the supplied two aluminum square tubing mounting rails using the 14mm head bolts from step (2.) toward the front of the car and the supplied 19mm head M12-1.5 x 50mm bolts AND the 20mm aluminum spacers into the holes from step (3.) toward the back of the car. The rails should look like the illustrations below when installed. Torque down on them pretty good with your wrench set up.



5. Install panel 1 using six M6-1.0 x 20mm bolts and six corresponding fender washers. Panel 1 is closest to the front of the car. It (and all of the other panels) can only be installed one way because the mounting rails gradually get closer (and so do the holes in the panel) toward the back of the car. Make sure the ¼” folds at the front and back of the panel point upward. Leave only finger tight.



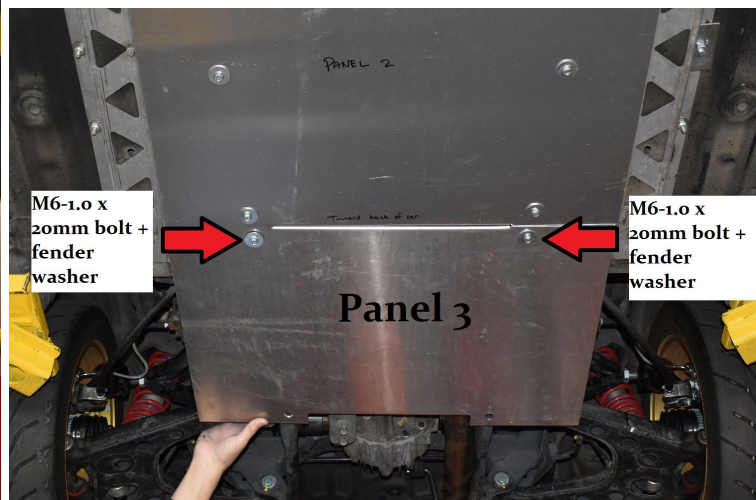
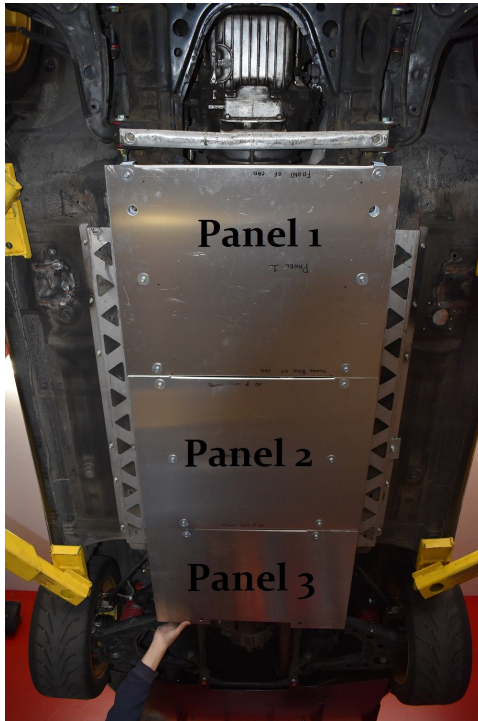
6. Install panel 2 using six M6-1.0 x 20mm bolts and six corresponding fender washers. Panel 2 should sit right up against panel 1. Finger tighten.

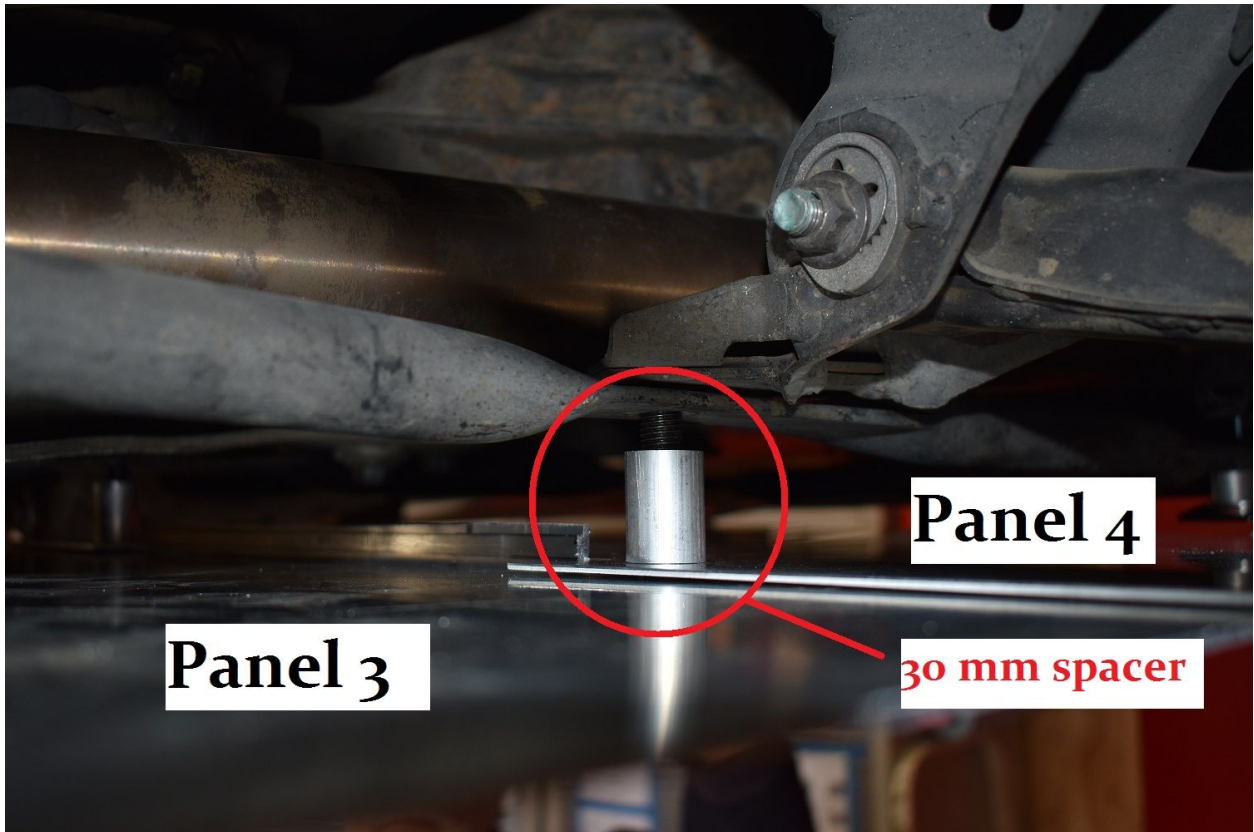
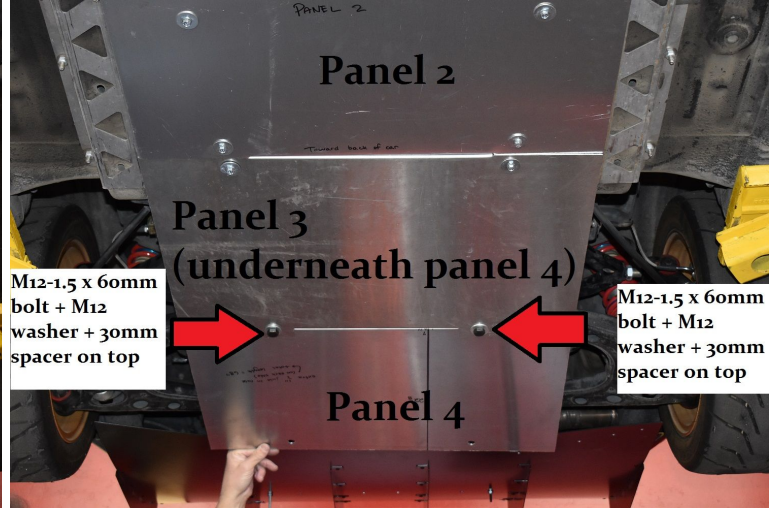
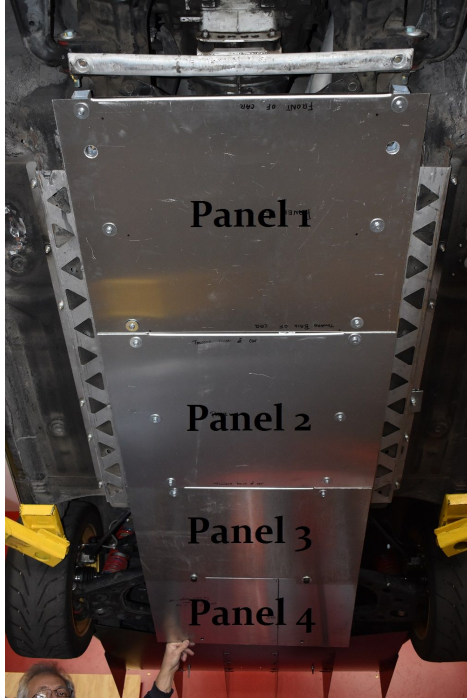


7. Remove the four 17mm head bolts holding the middle and back of the rear subframe bracing.

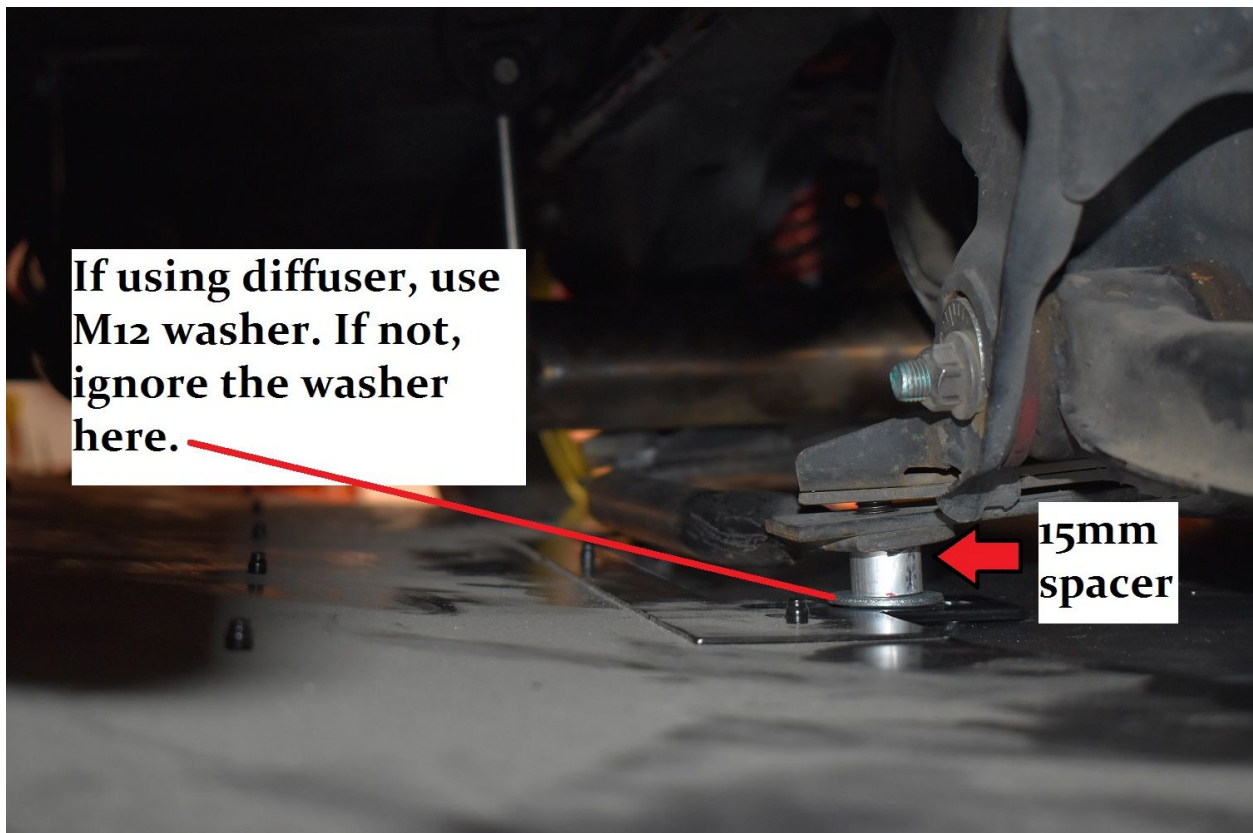
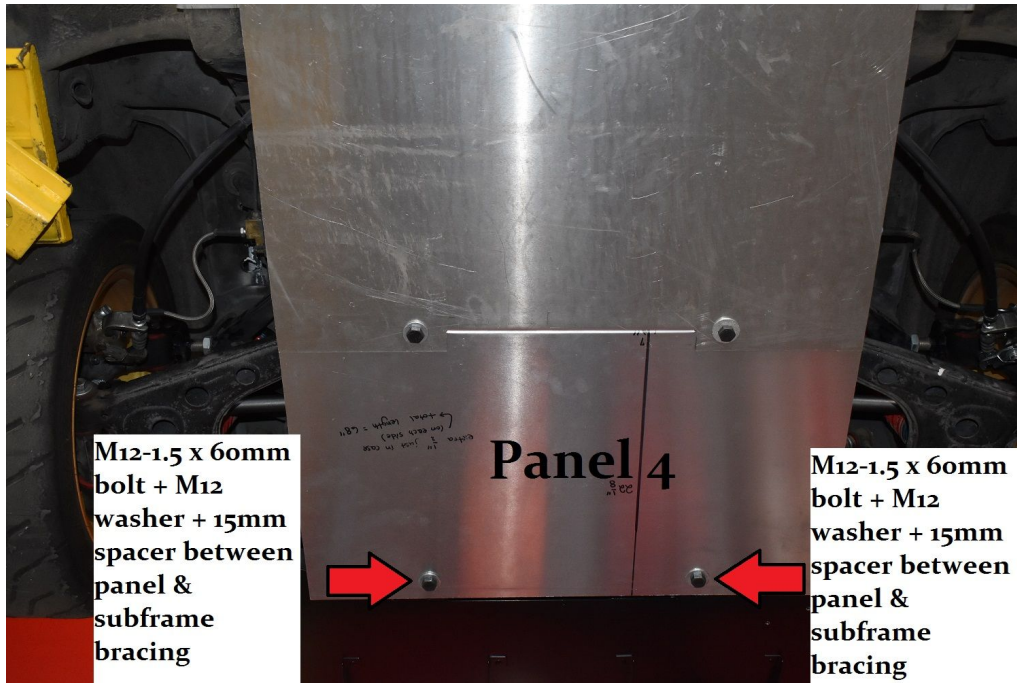


8. Panels 3 and 4 are going to be overlapped. **Panel 3 will be under panel 4.** Install panel 3 using two M6-1.0 x 20mm bolts and two fender washers at the front on the mounting rails. Overlap panels 3 and 4 and install them into the holes in the middle of the bracing from step (7.) using two M12-1.5 x 60mm bolts + two M12 fender washers + two 30mm spacers between the panels and subframe bracing. See several pictures below. Finger tighten everything.





9. Install the backside of panel 4 into the subframe bracing using two M12-1.5 x 60mm bolts, two M12 washers, and two 15mm spacers. If you have our diffuser installed you will need the additional two M12 washers - if not, then ignore this sentence. Finger tighten.







10. Now, hand tighten (as opposed to finger tighten) all of the bolts, both with 10mm heads and 19mm heads, holding the panels. You are doing this step to align the panels so they all sit flush up against one another.

11. For this step you are adding threadlocker to the M6-1.0 x 20mm bolts. Remove one M6-1.0 x 20mm bolt (and fender washer) at a time, add threadlocker, and install the bolt (and fender washer) back through the panel and into the mounting rail. Tighten to **60 in-lbs (NOT FOOT POUNDS, IF YOU WANT TO USE FT-LBS. YOU CAN USE 5 FT.-LBS WHICH IS THE SAME AS 60 IN-LBS.)**. After threadlocker has been added to each 10mm head bolt, torque down on the 19mm head bolts at the rear pretty good.. About the same amount of torque used to remove them.

UPDATE 1/4/19: If there is any gap between your diffuser and edges of the underbody panel 4, feel free to make holes on each edge and bolt the diffuser to the flat underbody panel 4.

12. Enjoy your new FS Performance Engineering flat underbody panels! Remember to send us pictures once they are installed.



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