

## FS Performance Engineering

### Subaru VB Front Splitter (chassis mounted) Installation Instructions Professional Installation Recommended as Always (or an avid DIY'er)

#### **Tools Needed:**

- Ratchet Wrench
  - 10mm Wrench
  - 10mm Socket
  - 12mm Socket
  - 13mm Socket
  - ½" Socket
  - Flat head screwdriver
  - Rivnut installation tool with 5/16" mandrel (see note below)
  - Heat gun/Isopropyl alcohol/Diagonal cutters (if you ordered edge trim)
- Drill
  - ¼" Drill Bit
  - 17/32" Drill Bit
  - Helper

#### **What's Supplied:**

##### **Parts:**

- (1) Left Side Splitter
- (1) Right Side Splitter
- (1) Center Splitter
- (1) Chassis Bracket

##### **Hardware:**

###### **Bag 1**

- (13) M6-1.0 x 20mm Hex Head Bolts
- (4) M6-1.0 x 30mm Hex Head Bolts
- (4) ¼"x5/8" Small Washers
- (25) ¼"x1" Washers
- (17) M6-1.0 Nyloc Nuts
- (2) M6-1.0 Whiznuts

###### **Bag 2**

- (4) 5/16"-18 SHORT rivnuts (2 are extra)
- (2) 3" Spacers
- (2) 5/16"-18 x 4" Hex Bolts
- (2) 5/16" x 1.25" Washers
- (2) 5/16" Lock Washers

###### **Bag 3**

- (2) M8-1.25 x 70mm Hex Bolts
- (2) 3" Spacers
- (2) 5/16" x 1.25" Washers
- (2) 5/16" Lock Washers

**IMPORTANT NOTE BEFORE INSTALLATION:**

- If you ordered splitter rods, you will need to assure you have located where you want to install them before final installation of your splitter. Once your splitter is on, you will not be able to access the inside of the bumper. We do not provide instructions on where to mount the rods. Please consider this.
- Splitter rod locations are up to you. If you're feeling ambitious, you can remove the bumper and mount the rods onto the frame and through the grill. Otherwise, find a place on the bumper.
- A splitter rod guide will come boxed with your splitter rods.



← Threaded Rivet Nut (Rivnut) Help

**Steps:**

- 1.) Begin by raising your vehicle. Place it securely on jack stands. Or alternatively use a vehicle lift.
- 2.) Identify and remove the 2 bolts shown using a 12mm socket and ratchet wrench. These two bolts help hold the stock skid plate on.

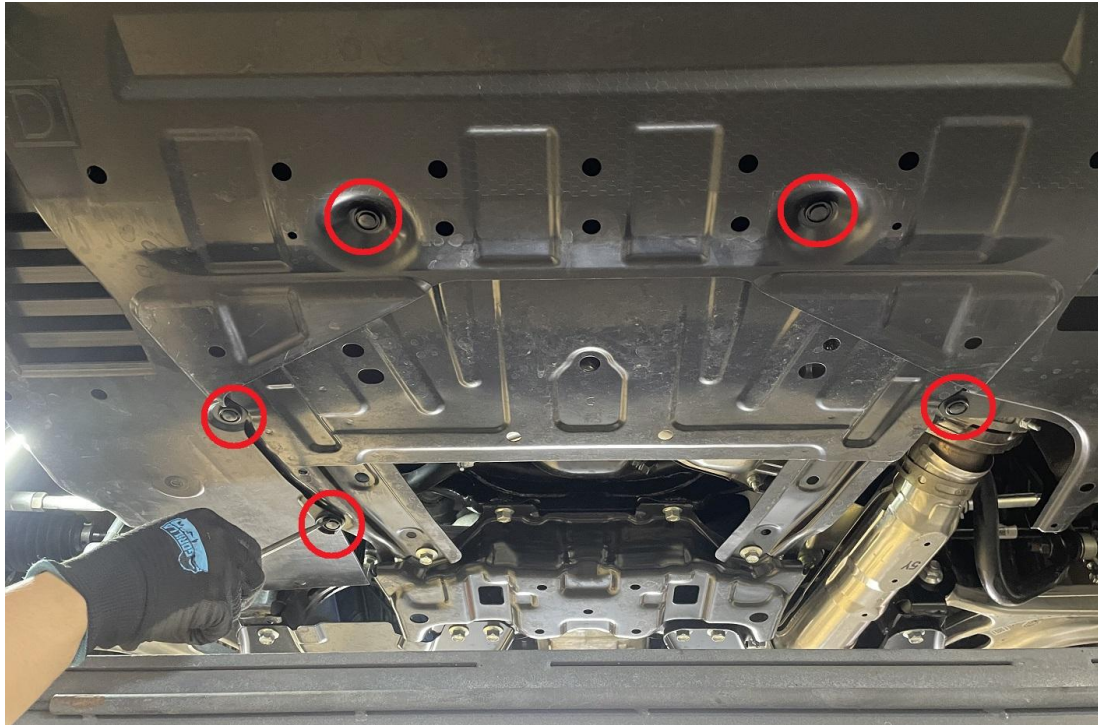


3.) Remove the skid plate by removing the pop clips that hold it. Use a flat head screwdriver to pop the centers out, then pull each clip out. There are (4) along the front attached to the bumper, (5) on the bottom attached to various points on the vehicle, and (3) on each side the skid plate -> these ones may be harder to reach. See pictures.

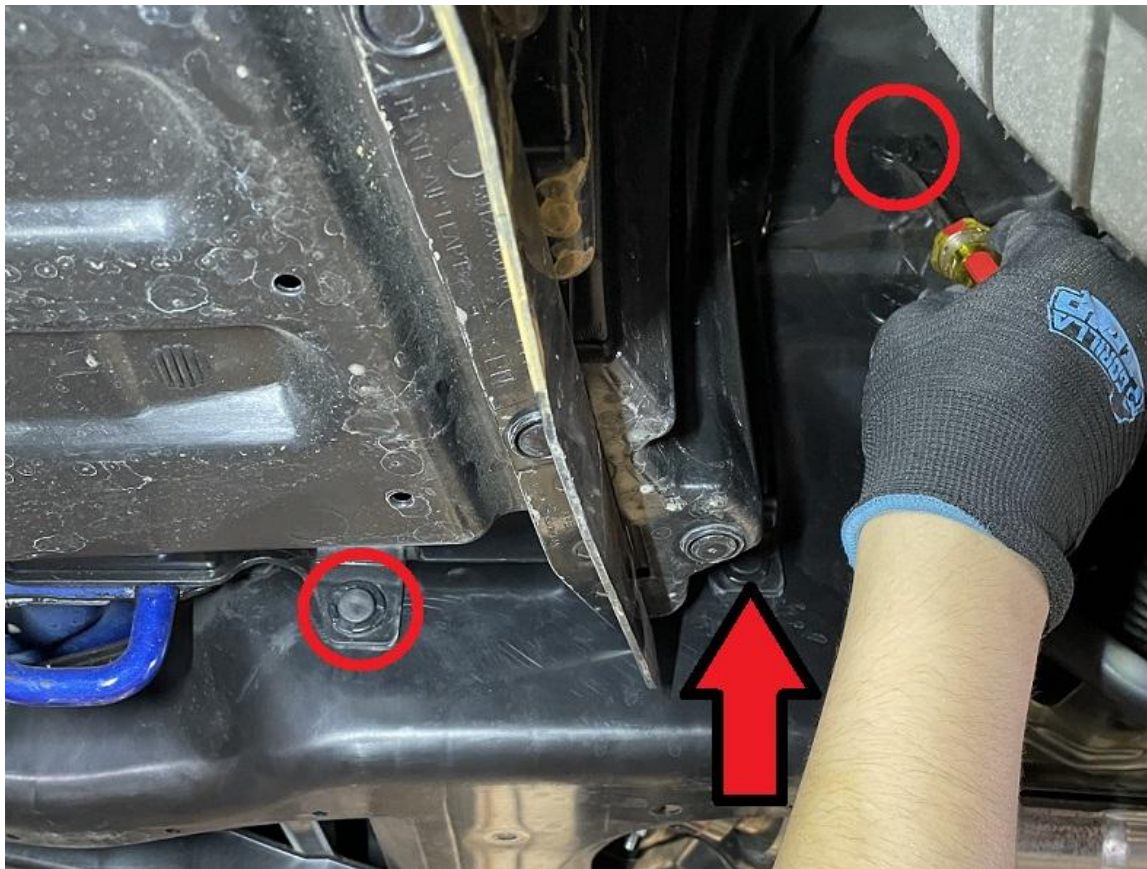
**FOUR ACROSS THE FRONT:**



**FIVE UNDERNEATH - these clips look a little bit different than the first four:**



**THREE ON EACH SIDE (one side shown)**



## REMOVE THE TRAY!

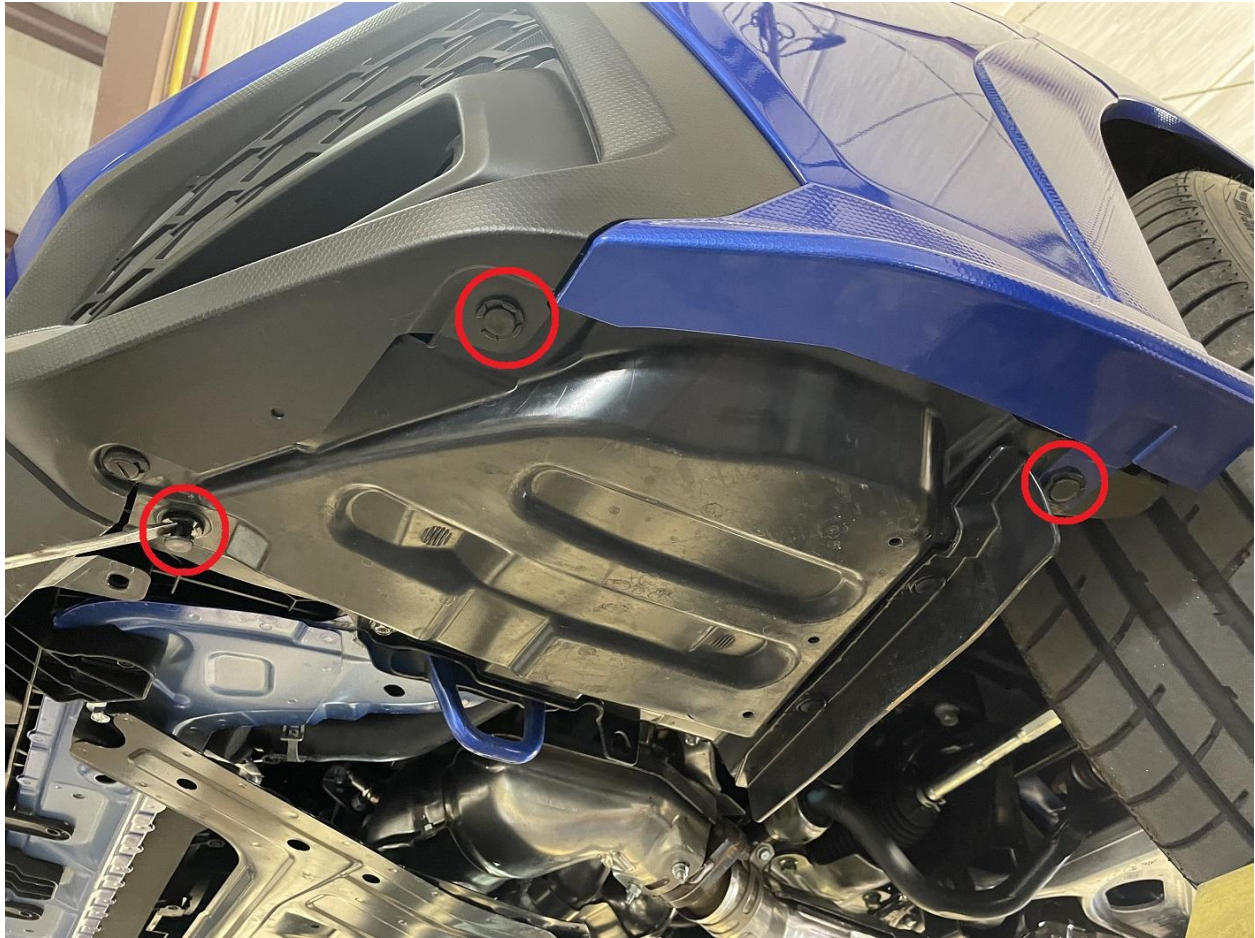


4.) Remove the clips & bolt on the outer trays (left and right). Each side has (1) bolt with a 10mm head, and 3 pop clips. This gives you access to the inside of the outer trays.

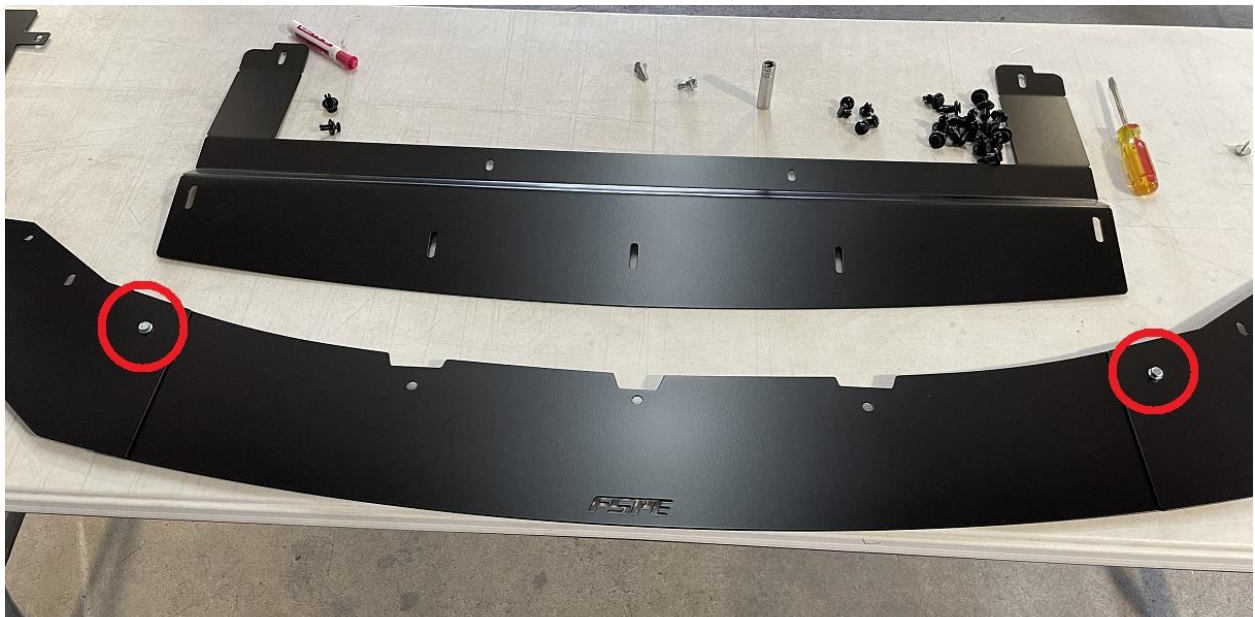
### 10MM HEAD BOLT:



**THREE POP CLIPS:**



5.) Bolt together your splitter using (2) M6-1.0 x 20mm hex head bolts, and (2) M6-1.0 whiz nuts. Point the bolts downward. The center splitter goes below the outer two, lettering faces up.





6.) Bolt your splitter onto the car at the most outer holes. Use the M6-1.0 x 30mm bolts, with a 1/4" washer on top and bottom, and nyloc nut on top. These bolts must pass through the bumper cover and outer skid plate. Leave loose. (it will be a far reach on the inside)







7.) Identify the dimple shown in the bumper cover on each side. These will be located above the splitter. Rotate the splitter out the way, and drill a  $\frac{1}{4}$ " hole through the 2 dimples.





8.) Install (2) M6-1.0 x 20mm bolts into those locations just drilled. Use ¼" x 1 washers on top and bottom, and nyloc nuts on top. Securely tighten.





9.) Securely tighten the bolts from step 6. Assure the bolt is indeed passing through the bumper cover/holes and outer skid plate. You'll have to reach above the outer skid plate - try to tighten it so the outer skid plate is about where it needs to be when it's fully installed on the vehicle.

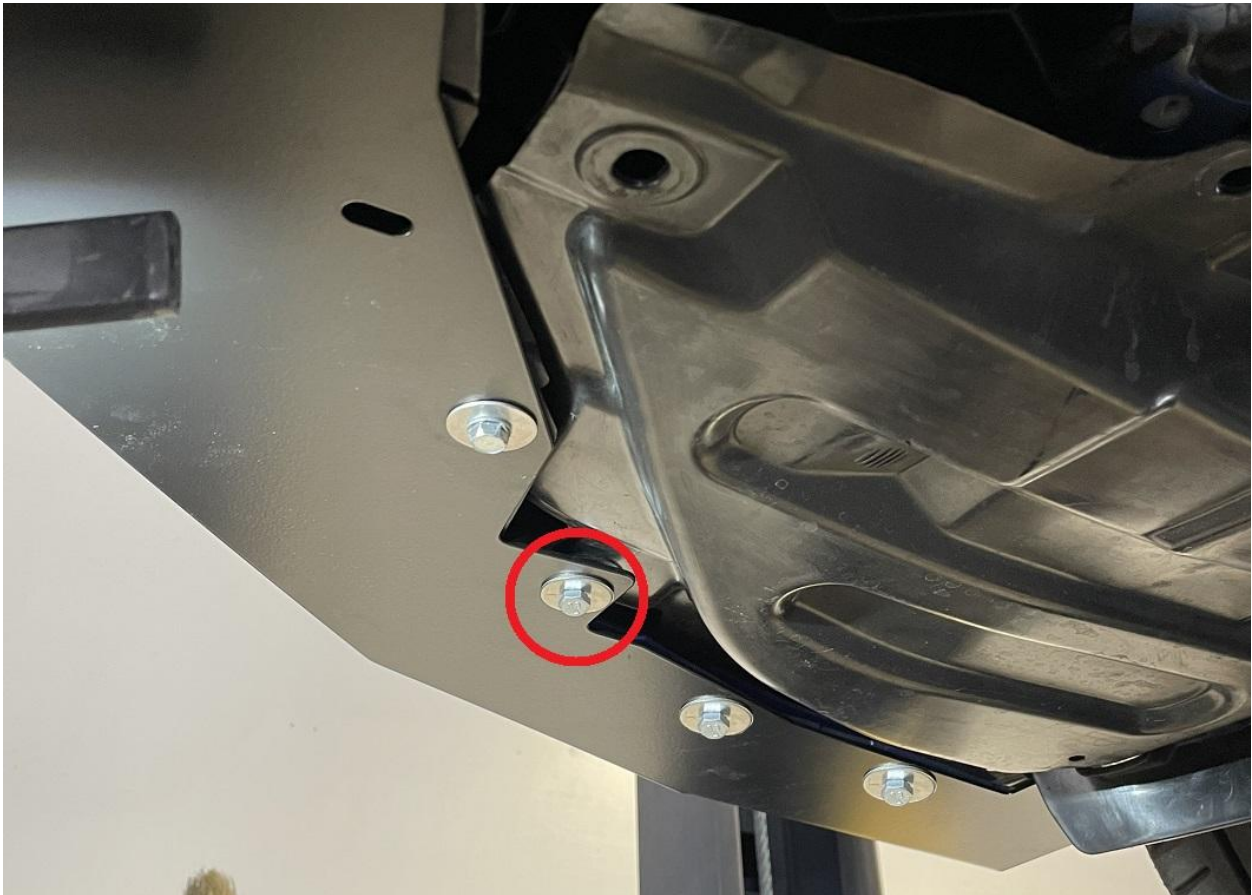
10.) Drill out the 2 holes shown on each side of the bumper cover with your  $\frac{1}{4}$ " drill bit. Then install (4) M6-1.0 x 20mm bolts with nyloc nuts on top. You will need to use the larger  $\frac{1}{4}$ "x1" washers on bottom, and smaller  $\frac{1}{4}$ "x5/8" washers on the inside of the bumper cover. Securely tighten.

Note: We didn't pass through the OEM skid plate here, personally. Only the bumper cover.





11.) Install M6-1.0 x 30mm long bolts and nyloc nuts into the holes shown. Use ¼"x1" washers on top and bottom. NOTE: Use a 5mm spacer between the splitter and bumper cover. These bolts will pass through the bumper cover and outer skid plate holes. Securely tighten.

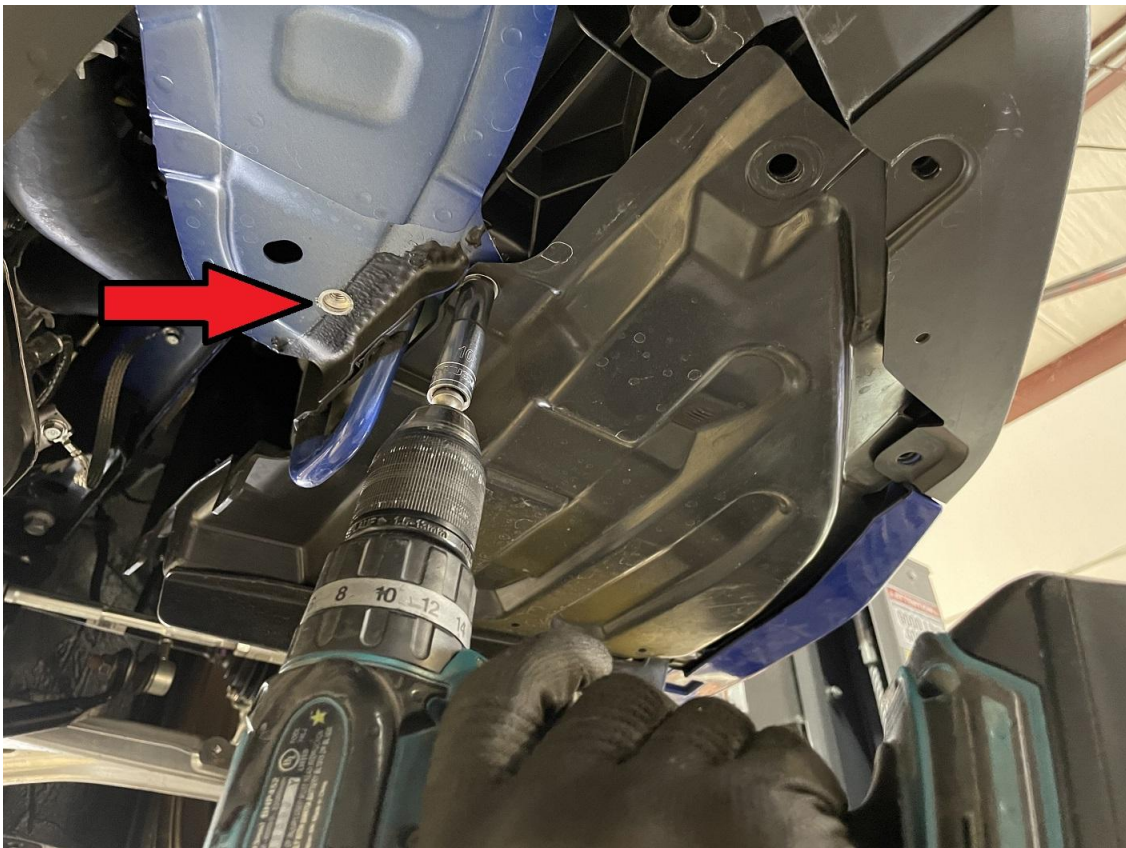




12.) Install (2) M6-1.0 x 20mm bolts, nyloc nuts, with 1/4"x1" washers on top/bottom, into the holes shown. Be sure to pass through the outer skid plate as well. Securely tighten.



13.) Identify and drill out the hole shown (on each side of the car) with a 17/32" drill bit. Install the supplied 5/16 Rivnuts into the holes shown. Two extra rivnuts are supplied just in case. If you need help understanding a rivnut tool, see the QR code at the beginning of these instructions. **RED ARROW POINTS TO RIVNUT LOCATION (1 on each side of car)**



14.) Reinstall the inner and outer skid plates and remove the center splitter. Note that not all clips will be used because we replaced a lot of them with bolts. Don't reinstall the (2) 12mm bolts that are located on the center skid plate yet.

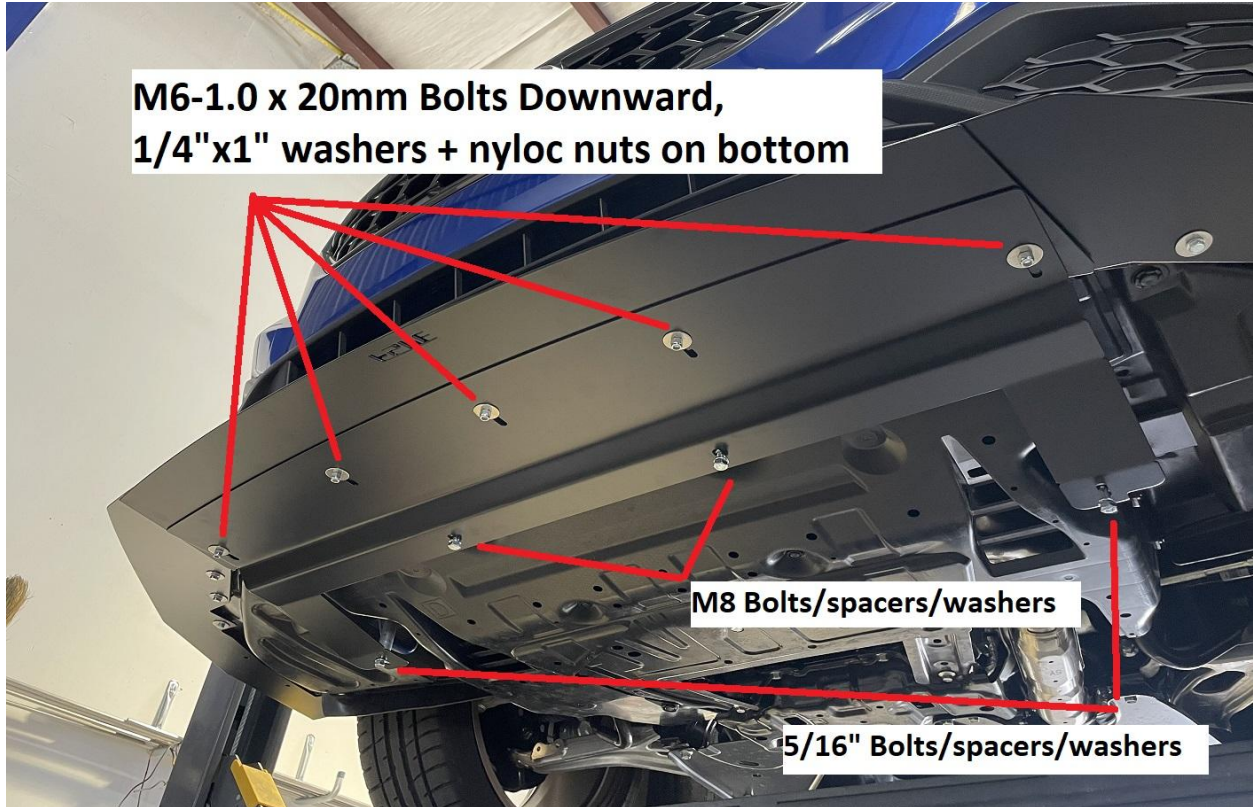


15.) Install your chassis bracket LOOSELY onto the vehicle into the two rivnuts installed, and 12mm bolt locations at the center that hold the center skid plate.

- The rivnut locations will use 5/16"-18 x 4" long bolts, 3" spacers between the chassis bracket & frame, and 5/16"x1.25" + lock washers underneath.
- The front two holes will use M8x1.25 x 70mm bolts, 1.5" spacers, and 5/16"x1.25" + lock washers underneath.

Install your center splitter LOOSELY above the chassis bracket but below the outer splitter pieces. You will need to drop 3 additional M6-1.0 x 20mm bolts down through the center splitter from the top. Use 1/4"x1" washers underneath with nyloc nuts.





16.) Assure all bolts have lined up, and the splitter looks to be lined up, and securely tighten each bolt. You can access the bolt heads from above between the splitter and bumper cover.



17.) If you have edge trim: clean the top edge of the side skirt extension with isopropyl alcohol. Apply the edge trim. Use light heat on the trim to increase flexibility around curves/edges. Cut to size with your diagonal cutters!



18.) You are done! Enjoy your new splitter! Feel free to tag us online using #FSPerformanceEngineering. If you have any questions don't hesitate to contact us.



PHONE: 661-809-0954

EMAIL: [costas@fspeinc.com](mailto:costas@fspeinc.com)

THANK YOU :)