

FS Performance Engineering

Toyota Corolla 2017-2018 Front Splitter Installation Instructions (with lip) WE MODIFIED THE ORIGINAL INSTRUCTIONS FOR A LIP:

Tools Needed:

- 10mm socket
- 10mm wrench
- ½" wrench
- Ratchet wrench
- Flat head screwdriver / clip remover
- Phillip's head screwdriver
- Painter's tape (if your car is a dark color)
- Sharpie/marker/pencil
- 1/4" drill bit
- 5/16" drill bit
- 3/8" drill bit (if you need more play, we did)
- Drill
- Exacto knife (possibly)

Included in Kit:

- (1) Splitter
- (2) Flares (if your splitter has flares)
- (3) Crash beam / Bash bar chassis rods w/ following specs:
 - 10" long
 - 5/16"-18 tapped on both sides
 - 3-9/16" long all thread locked in to one side, $\sim 2-\frac{5}{8}$ " protruding
- (3) $5/16-18 \times \frac{3}{4}$ " long hex head bolts
- (3) 5/16" ID, 1" OD fender washers
- (3) 5/16" ID small washers
- (3) 5/16"-18 Nyloc Nuts
- (3) 103mm spacers
- (2) 114mm spacers
- (6) 50mm spacers
- (4) M6 nyloc nuts
- (6) M6-1.0 x 70mm bolts (for bumper mounting)
- (3) M6-1.0 x 120mm bolts
- (2) M6-1.0 x 130mm bolts
- (15) 1/4" ID, 1" OD fender washers
- (7) 1/4" lock washers
- (1) Blue Loctite

If you splitter has flares:

- (4) $\frac{1}{4}$ "-20 x $\frac{3}{4}$ " SS countersunk bolts
- (4) 1/4" nylon countersunk washers
- (4) 1/4" SS small washers
- (4) 1/4"-20 SS nyloc nuts



Steps:

- 1.) Raise the car and secure with jack stands. Installing this splitter is 10x easier with a lift.
- 2.) Remove the under tray(s).
 - The first under tray has two 10mm bolts toward the front of the bumper that need to be removed (1st Picture). It also has eight pop/push clips holding it; use your flat head screwdriver or clip remover to remove the clips (2nd Picture). Off comes the first tray. (3rd and 4th pics)









- The second tray, which is above the first tray, is removed by taking off two 10mm screws and five 10mm bolts along the back edge (1st Picture). It can be unhinged by pushing back the two clips at the rear (2nd/3rd Pictures).









3.) We want to "square up" the splitter. First remove and discard the "flaps" on either side of the bumper underside. Locate the 10mm screws at the left and right edges of the bumper - remove them. Install your splitter into those two holes using M6-1.0 x 70mm bolts, 50mm spacers between, and a ¼" lock washer + 1" OD washer on bottom.. The back edge of the splitter should sit against the front edge of the inner fender well (your lip in this case). Make sure the same amount of splitter is sticking out on the left and right sides of the bumper/lip.

Note: If you want to double check that the splitter is squared up, insert a 120mm bolt (with a 1" OD fender washer under the head) into one of the center three most rearward holes and slightly thread it into the OEM location on the car. It will help hold the center up as well.





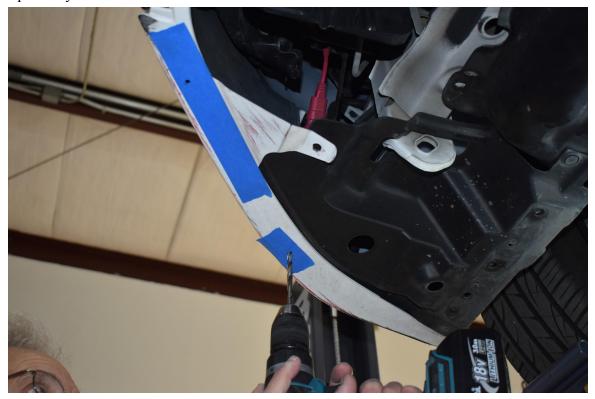


4.) If your corolla is a dark color, place tape on the underside of the bumper/lip where the 4 holes are located in the splitter along the perimeter of the bumper/lip. If it's a light color don't worry about the tape. Use your sharpie/marker/pencil to mark through those four holes onto the bumper/lip. Then remove the splitter.



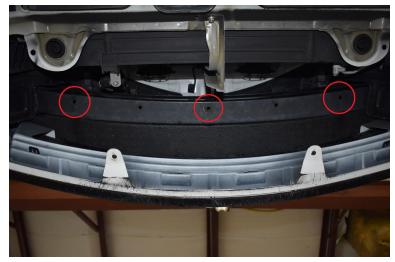


5.) Grab your drill. Drill 1/4" holes through the bumper into the spots you just marked from the previous step. If you have a lip you will likely be drilling through it as well. Then remove the tape if any was used.

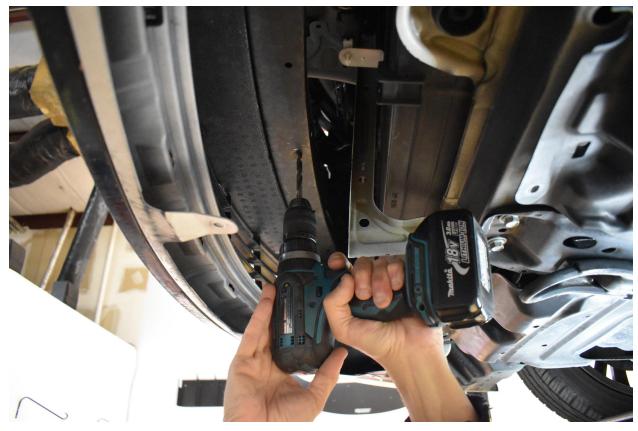


6.) Next, swap to a 5/16" drill bit. We are now going to drill through your crash bar. Locate the 3 holes in the following picture. Push your drill bit through the bottom holes up until it touches the top portion of the crash bar. Drill a hole in the top portion. TAKE YOUR TIME.

CRITICAL: When doing so make sure you are drilling perfectly vertical, not at an angle! To assure you are drilling vertically have a friend eyeball it from the front, and side. After drilling, we decided to open the holes to 3/8". This provides a bit of "play." Feel free to do so.



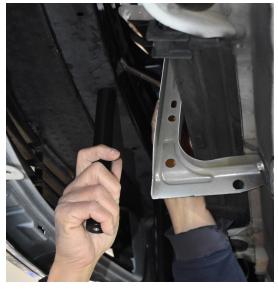




7.) Install your 3 round crash bar mounts. Push the thread through the bottom and newly drilled top holes in the crash bar. Use a 5/16" ID small washer and 5/16"-18 nyloc nut on the top. To tighten use a $\frac{1}{2}$ " wrench to turn the nut while gripping the crash bar mount.









8.) Install your splitter into the holes along the bumper - the 2 OEM spots on the left and right edges, and the 4 drilled holes. Use M6-1.0 x 70mm bolts with 1" OD fender washers on top and bottom and M6 nyloc nuts on top (nuts only for the 4 drilled holes) - **USE 50MM SPACERS BETWEEN THE SPLITTER AND BUMPER IF YOU HAVE A LIP**. Securely tighten.





9.) Next install your 5/16"- $18 \times 3/4$ " long bolts into the crash bar mounts. If you did not drill perfectly vertically, you will need to reach in behind the splitter and move the mounts so they line up. This is where a friend and a lift come in handy. Use 5/16" ID, 1" OD fender washers under the heads and blue threadlocker on the bolts.

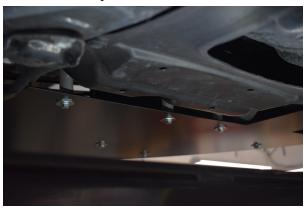






10.) We are on the home stretch. There are 5 holes left in the splitter at the rear. The holes at the most outer left & outer right use M6-1.0 x 130mm bolts and 114mm spacers. The inner three use M6-1.0 x 120mm bolts and 103mm spacers. Use $\frac{1}{4}$ " lock washers and 1" OD fender washers under the heads of the bolts, and place the spacers between the splitter and car. The bolts will thread into the existing holes in the car.

Note: We noticed that the plastic decided to move and slightly cover a couple of the holes. Feel free to trim the plastic out of the with an exacto knife.







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



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