

FS Performance Engineering

Toyota Corolla 2014-16 Front Splitter Installation Instructions (with lip)

WE MODIFIED THE ORIGINAL INSTRUCTIONS FOR A LIP:

PLEASE NOTE - THE BUMPER WILL BE "FORMED" TO THE SPLITTER MEANING THAT THE WE ARE SQUARING UP THE BUMPER USING THE SPLITTER

Tools Needed:

- 10mm socket
- 10mm wrench
- 1/2" 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:
 - 9 3/8" 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) 88mm spacers
- (2) 99mm spacers
- (6) 45mm spacers
- (6) M6 nyloc nuts
- (6) M6-1.0 x 65mm bolts (for bumper mounting)
- (3) M6-1.0 x 110mm bolts
- (2) M6-1.0 x 120mm bolts
- (17) 1/4" ID, 1" OD fender washers
- (5) 1/4" lock washers
- (1) Blue Loctite
- (4) M6-1.0 x 20mm bolts + M6 whiz nuts for 3 piece splitter temporary holds

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.) IF YOU HAVE A THREE PIECE SPLITTER we recommend bolting the splitter together temporarily for steps 3-5. Use the common bolt holes among the pieces. Use four M6-1.0 x 20mm bolts and whiznuts.

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.

Remove the speed nuts at these locations as well. Since you have a lip you are using longer bolts and spacers. Install your splitter into those two holes using M6-1.0 x 65mm bolts, 45mm spacers between, 1" OD washer on bottom and top, and M6 nyloc nut on top.

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: To help make sure things are lined up insert a 110mm 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.



This is showing a splitter with no lip:



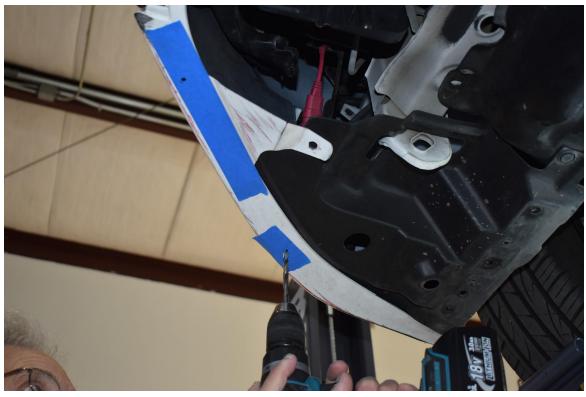


4.) If your corolla is a dark color, place tape on the underside of the bumper/lip where the 4 holes are located in the splitter along the perimeter of the bumper/lip. If it's a light color don't worry about the tape. Use your sharpie/marker/pencil to mark through those four holes onto the bumper/lip.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





5.) Assure the splitter is spaced from the bumper equally on the left and right. Grab your drill. Drill ¼" 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.

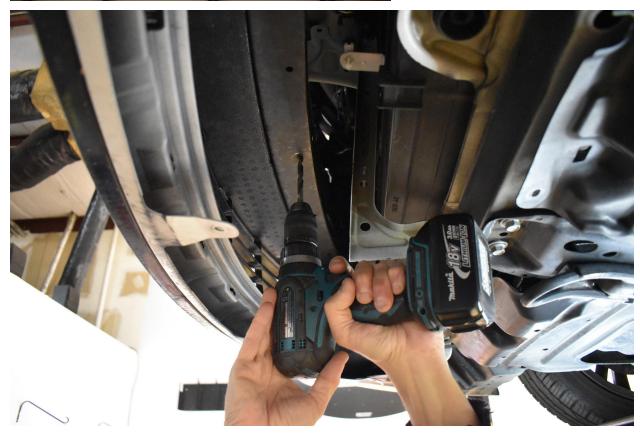




6.) Next, swap to a 5/16" drill bit. We are now going to drill through your crash bar. Locate the 3 holes in the following picture. Push your drill bit through the bottom holes up until it touches the top portion of the crash bar. Drill a hole in the top portion. TAKE YOUR TIME.

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.

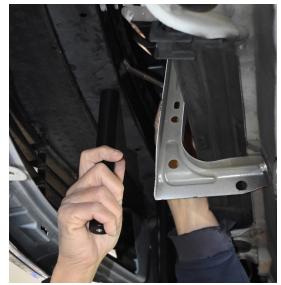






7.) Install your 3 round crash bar mounts. Push the thread through the bottom and newly drilled top holes in the crash bar. Use a 5/16" ID small washer and 5/16"-18 nyloc nut on the top. To tighten use a $\frac{1}{2}$ " wrench to turn the nut while gripping the crash bar mount.





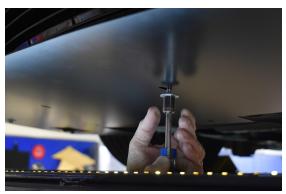


8.) Install your splitter into the holes along the bumper - the 2 OEM spots on the left and right edges, and the 4 drilled holes. Use M6-1.0 x 65mm bolts with 1" OD fender washers on top and bottom and M6 nyloc nuts on top (nuts only for the 4 drilled holes) - USE 45MM SPACERS BETWEEN THE SPLITTER AND 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 vertical, 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 120mm bolts and 99mm spacers. The inner three use M6-1.0 x 110mm bolts and 88mm 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. Securely tighten.

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.) That was the last step! 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