

FS Performance Engineering

Mazda 3 (2014-2016) Front Splitter Installation Instructions *Professional Installation Always Recommended*

Tools Needed:

- Friend/helper
- 8mm socket
- 10mm socket
- 10mm wrench
- Ratchet wrench
- Flat head screwdriver & Phillip's head screwdriver
- Long extension for ratchet wrench
- 1/4" industrial rated drill bit, possibly several bits IF YOU ARE INSTALLING ROD BRACKETS (professional install recommended)
- Sharpie/marker
- Tools for splitter rods themselves are on separate rod instructions.

Included in Kit:

- (1) Splitter
- (1) 2nd layer (if you ordered 2 layer)
- (2) Winglets
- (1) Coolant drain plate
- (1) White vinyl patch (if you ordered 2 layer)
- (4) M6-1.0 x 20mm bolts (for drain plate)
- (6) M6-1.0 x 30mm bolts
- (6) 10 mm spacers
- (6) M6-1.0 x 40mm bolts
- (6) 15mm spacers
- (4) 1.25" long #12 screws
- (8) M6 nyloc nuts
- (16) 1/4" ID, 1" OD washers
- (8) 1/4" ID small washers
- (8) 1/4" lock washers

(2) Chassis rod brackets (if you ordered them)

- (4) M6-1.0 x 20mm bolts
- (8) 1/4" small washers
- (4) M6 nyloc nuts

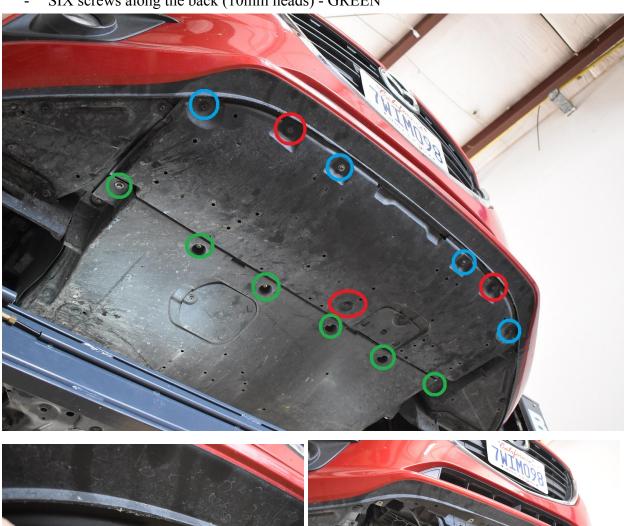
Winglet hardware:

- (4) $\frac{1}{4}$ "-20 x 0.75" SS countersunk bolts
- (4) 1/4"-20 SS nyloc nuts
- (4) 1/4" countersunk washers
- (4) 1/4" SS small washers



Steps:

- 1.) Raise the front of the car and place it on jack stands. You need plenty of room under the car.
- 2.) Begin by removing the skid plate that sits under the front bumper. It has:
 - FOUR screws along with front (8mm heads) BLUE
 - THREE pop clips, 2 at the front, 1 at the center (use a flat head screwdriver) RED
 - SIX screws along the back (10mm heads) GREEN







3.) Remove the THREE screws *on each side* of the bumper. These have 8mm heads.



4.) Remove the "flaps" that hang down on each side using your flat head screwdriver. There should be 3 pop clips.



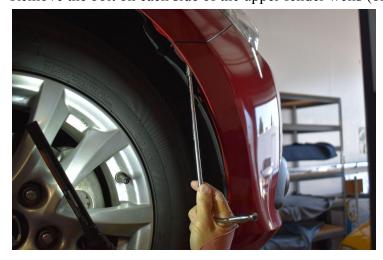


5.) If you are installing chassis rod brackets follow this step. If not, splitter rod mounting will be up to you so skip to step 6 (page 11). For those without the brackets we recommend mounting onto the bumper (or wherever you decide) BEFORE doing final splitter install.

Since you are installing rod brackets you need to remove the bumper first. Start by removing the 3 pop clips in both front inner fender wells in front of the wheels.



Remove the bolt on each side of the upper fender wells (8mm head).





Open the hood and remove the following:

- TWO bolts with 10mm heads @ air intake GREEN
- FOUR phillip's head screws RED
- EIGHT pop clips (1 is under air intake) BLUE









The bumper can now be pulled away from the fender wells. Use a little force and pull away from the car on each side (have a friend hold the other side).

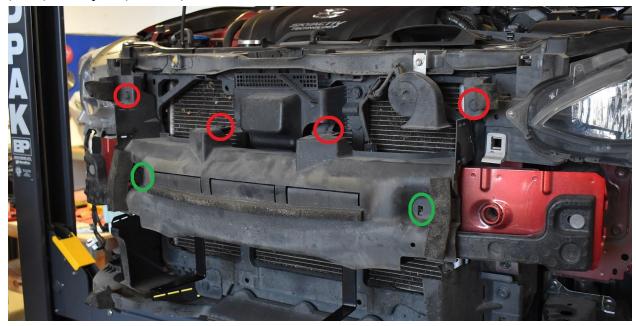


To fully separate the bumper disconnect the fog light wires on both sides. Set the bumper aside.





To access the crash bar you need to remove the plastic and foam. The plastic has 4 pop clips (RED) and 2 pins (GREEN).



The foam has 2 pins (BLUE).



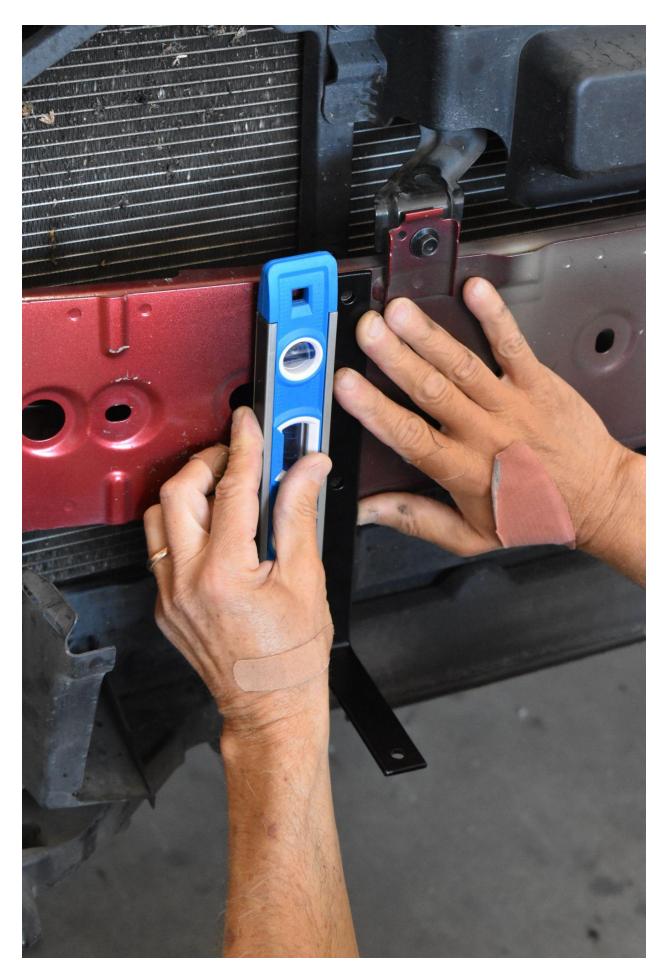




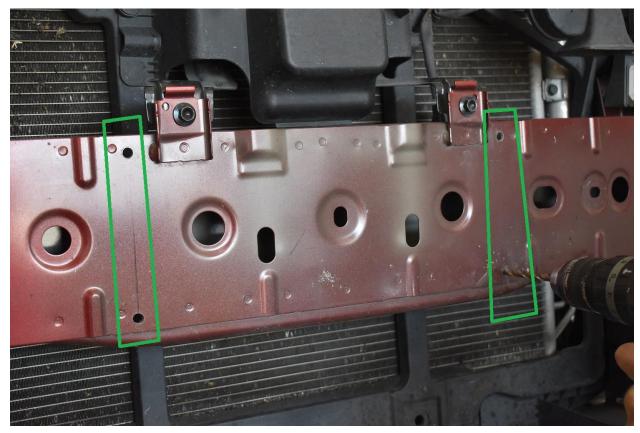
Now you can install the splitter rod brackets. They are located 6 $\frac{5}{8}$ " from the center of the crash bar. The top of the chassis bracket meets the top of the crash bar. Use a level to vertically align the brackets. Mark the holes and drill them out with a $\frac{1}{4}$ " industrial rated drill bit. They are installed with M6-1.0 x 20mm bolts, $\frac{1}{4}$ " small washers, and nyloc nuts.















Once the brackets are on, you can reinstall all components in reverse order to get the bumper back on. We want to get back to step 4's position (flap removed). WHEN INSTALLING THE FOAM you will need to cut a little bit out to accommodate the top bolts in the chassis brackets.







6.) The splitter can now be installed. It uses only existing bumper holes so you don't need to drill any. If you have a 2nd layer on your splitter, it will use common bolt holes at the 1st top layer. Be sure you applied vinyl on the 2nd layer where the letters shine through the 1st layer.

The splitter uses a series of different length bolts, screws and spacers to mount to the bumper. Here is a drawing showing where they mount along the bumper. We recommend mounting these first. All bolts use 1" OD fender washers on bottom, ¼" small washer + nyloc nut on top. All #12 screws use a 1" OD fender washer on the bottom. If there are speed nuts where the bolts go you will need to remove them first with a flat head screwdriver.



Carbon or 1 layer splitter:





Example of what it looks like on the inside (ignore the speed nuts, that was an old install):



8.) The rear 4 holes double as holding up the splitter and rear tray. Use M6-1.0 x 40mm bolts to secure it. Under the heads of the bolts use $\frac{1}{4}$ " lock washers and 1" washers. No spacers used here, just make sure you tighten well.





9.) Install the drain cover plate. Use $\frac{1}{4}$ " lock washers and M6-1.0 x 20mm bolts to thread into the rivnuts.



10.) Install the winglets. Use the counter sunk hardware. USE OIL ON THE THREADS WHEN TIGHTENING - don't over tighten.





11.) Install your rods onto the chassis rod brackets if you haven't already. Install the rods onto the splitter.



- 12.) Apply edge trim if you haven't already!! Use light heat around corners. Prep surface first with isopropyl alcohol.
- 13.) 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