



FR461 INSTALLATION INSTRUCTIONS

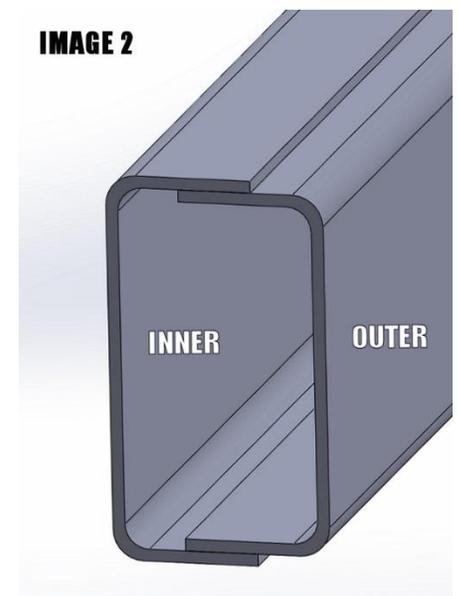
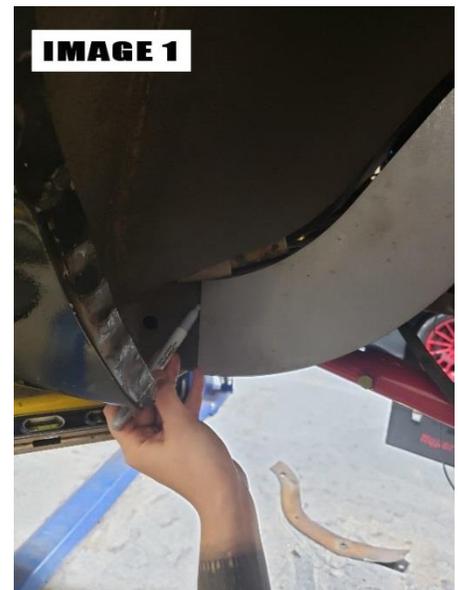
NOTE: This kit requires major cutting, grinding, and welding and is intended for advanced fabricators/welders only.

REQUIRED TOOLS:

- Angle grinder with cut-off wheel or Plasma cutter (recommended)
- Welder
- Hammer and pry-bar

INSTALLATION:

1. Lift vehicle to a good work height and safely support with stands under the frame rails along the rocker panel, just in front of the rear wheel openings. Once the vehicle is secure it is a good idea to support the rear frame before cutting the frame rail.
2. Choose a side to begin. The BMR plates are identical side-to-side. To establish the end cuts, position the BMR plate onto the factory frame rail, matching the contours of the plate to the frame rail. Mark the frame rail at the ends of the BMR plate as shown in **IMAGE 1**.
3. We recommend cutting 1" narrower than your previous mark on each end to prevent the removal of too much material.
4. Before cutting we recommend that the fuel tank and any fuel lines be covered with a welding blanket. Using a plasma cutter or cut-off wheel, begin cutting the outer portion of the frame rail away. The factory frame rail is composed of two C-shapes welded together (See **IMAGE 2** for cross-section diagram). The inner C-shape is larger than the outer. The BMR plate is designed to fit the larger inner C-shape of the frame rail so the entire outer section must be removed. Make your end cuts then trim away the outer portion a little at a time, test fitting the plate until the best fit is achieved. Since no two cars are identical and even the frame side-to-side will vary, some trimming of the plate will be necessary to get a good fit. The deeper the cut the more tire clearance this modification will allow.



5. Once the frame rail has been cut it should look similar to **IMAGE 3**. Position the BMR plate on the frame and C-clamp it into place as shown in **IMAGE 4**. It should be noted that the rear portion of the plate does not need to be bent if cut correctly, it should fit into the frame rail in that position, as shown in **IMAGE 4**.





- Using a MIG welder, tack the plate into place in various positions along the frame rail as shown in **IMAGE 5**. Using the supplied end plates, trim to fit the openings at each end, then tack them into place.



- Once you are happy with the fit, protect the areas that are susceptible to heat and begin welding the plate to the frame. It is a good idea to stagger your welds in 4"-6" lengths to prevent putting too much heat into the frame. Your finished frame rail should look similar to the images below and on the following page.



