



RTR Spec 5 Mustang Fender Flares

2018-2019 Part Number 1898-7029-01

2015-2017 Part Number 1598-7018-01

Installation Guide

NOTE: Installation of the RTR Spec 5 Flares will widen the fender approximately 50 mm at the front and 75 mm at the rear.

RTR Recommends this install to be performed at a professional body shop with experience in modifications of this type.

The vehicle used in this installation is a 2018 model. While some details vary from 2015 - 2017 to 2018 +, the general installation procedure remains the same.

The installation depicted in this guide is of the Race Only carbon fiber flares which are unsuitable for daily driven vehicles. However, the install procedure remains the same.

Please read through this installation guide in it's entirety before beginning the installation.



Components

1. Front Flare, Left, 2 piece	1	10. 1/4-20 x 3/4" Hex Head Cap screw	2
2. Front Flare Right, 2 piece	1	11. 1/4-20 Lock Nut	2
3. Rear Flare Left	1	12. 1/4" Fender washer	4
4. Rear Flare Right	1	13. RTR Fender Trimming Template Front	1
5. Fuel Door Cover	1	14. RTR Fender Trimming Template Rear	1
6. Front Fender Liner extension	2	15. RTR Rear Inner Fender Extension Template	1
7. 10-24 Nut Sert	24	16. Adhesion Promoter	2
8. 10-24x 3/4" Button Head Cap Screw	24	17. 1/4" Plastic Rivets	12
9. #10 Flat Washer	24		

Additional Supplies Required

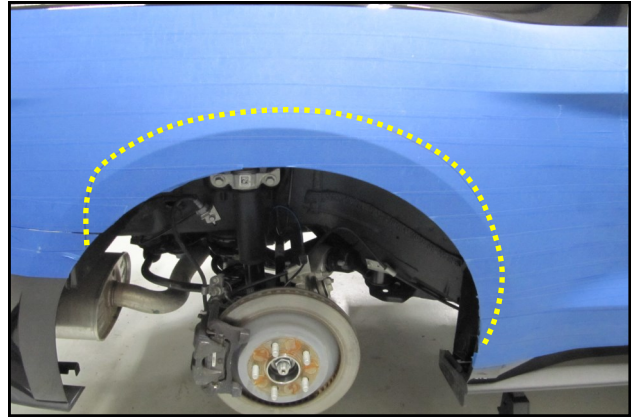
1. Seam Sealer	1 Can
2. 2" Painters Tape	3 Rolls
3. Rubberized Under Coat	2 Cans
4. Painters Plastic	1 Roll
5. Weld through Primer	1 Can
6. Paint Marker	1
7. Permanent Marker	1
8. 42"x 9" 18 Gauge Steel	2

Specialty Tools Required

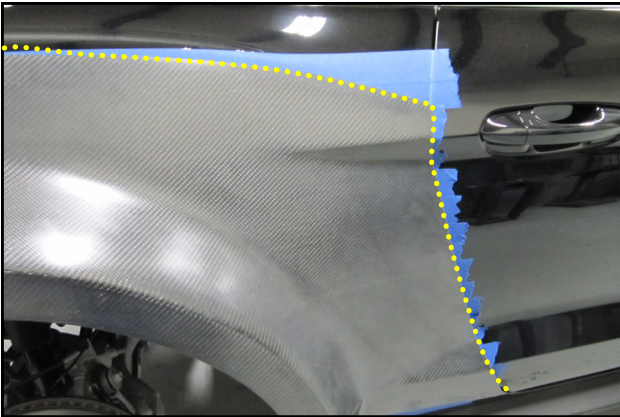
- 1/8" Cleco Pins
- Nutsert installation tool
- 5/16" Rotabroach
- Painters Plastic
- Paint Marker
- Automotive Paint Pen



1. Disconnect the battery. Raise the vehicle and support it using jack stands on all 4 corners. Remove the wheels and tires and set them aside. Remove the fender liner and set it aside.



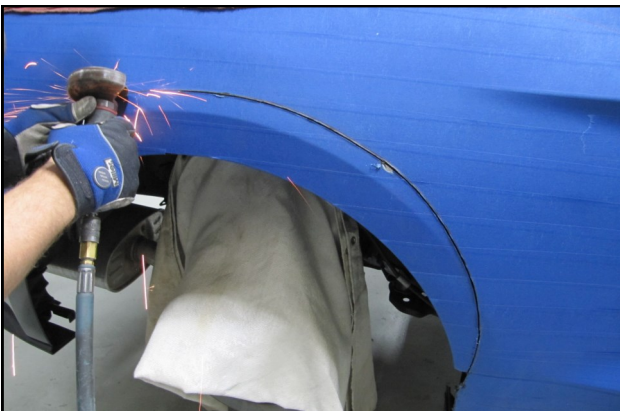
2. Using painters tape, cover the working area of the vehicle as shown. Using the appropriate Template, mark the fender with a cut line.



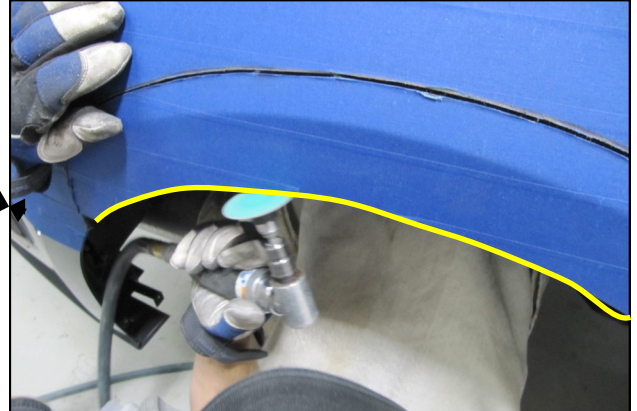
3. With the help of an assistant, hold the Flare up against the vehicle and trace the Flare with a permanent marker.



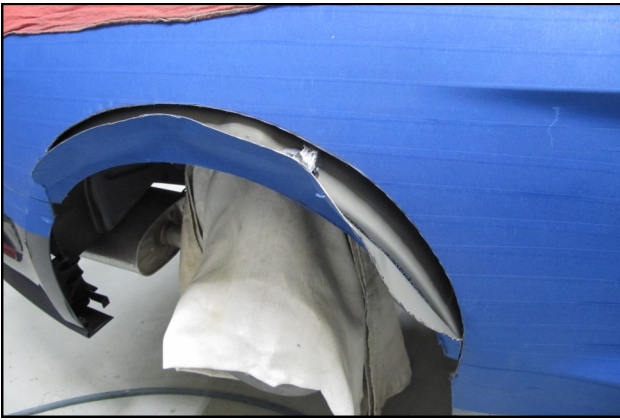
4. Using Fender covers or equivalent, cover the vehicle for protection against sparks and abrasive debris.



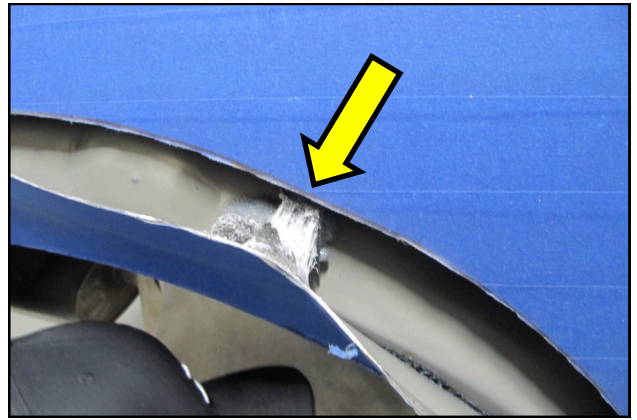
5. Cover the suspension, brakes and shock with a welding blanket and begin cutting the outer fender as shown.



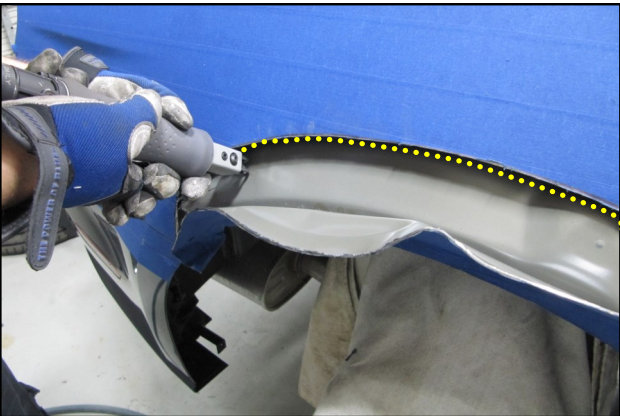
6. Use an angle grinder with a sanding disc to separate the outer and inner fenders at the edge.



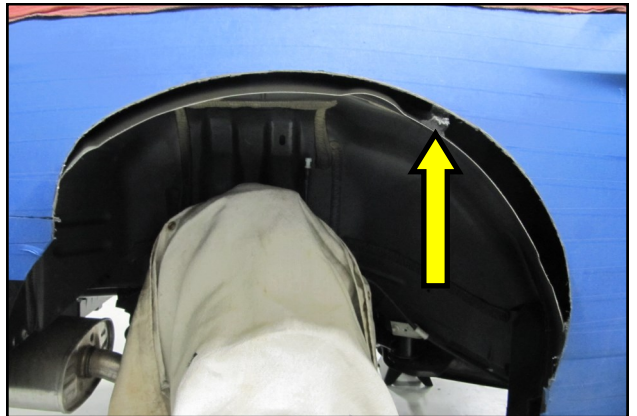
7. Peel back the outer fender to gain access to the inner fender.



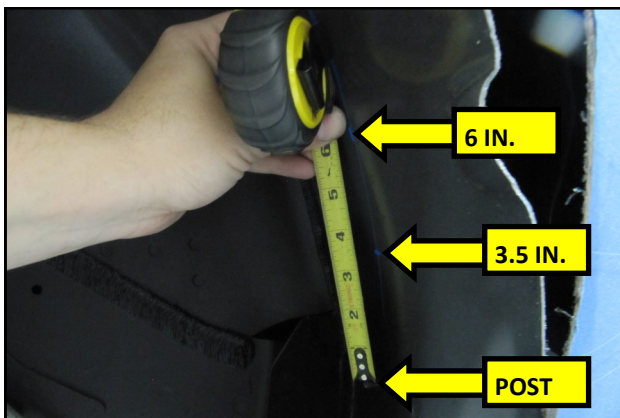
8. The sound deadener is attached to the outer fender with adhesive foam.



9. Using an air reciprocating saw, cut out the inner fender as shown.

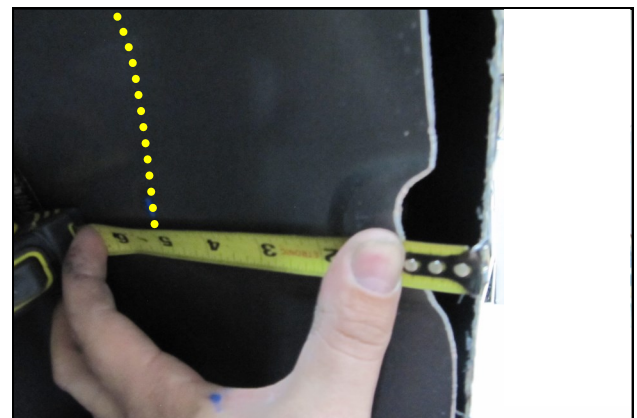


10. The sound deadener inside the fender will also be cut out.

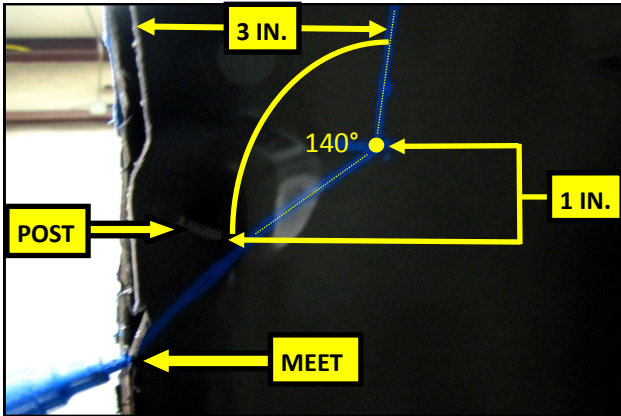


11. NOTE: All geometry references in this guide are approximate and will vary slightly on a case by case basis.

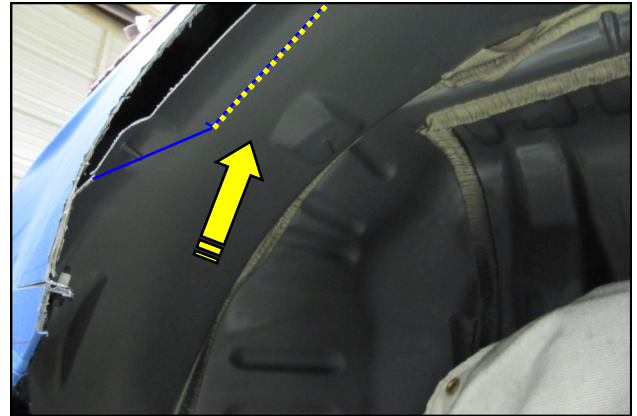
Locate the fender liner post at the lower front of the wheel well, and draw a line at 3.5 and 6 inch mark.



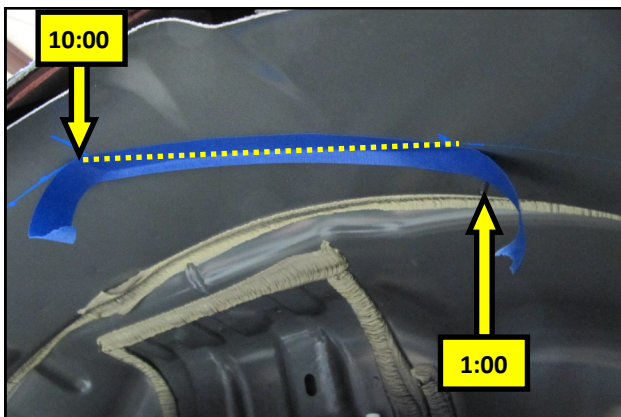
12. At the 6 inch mark, draw a vertical line, parallel with the fender edge, up to the first post. The line should terminate near a second fender liner post. The posts are to remain in the fender and are not to be cut out.



13. Mark the rear inner fender as shown with a horizontal line 1 in. above the rear most liner post and small vertical line 3 in. inboard of the fender cut. Make a downward angled line from the vertical line at approximately 140 deg or to where the two layers meet.



14. Continue the Vertical line from step 13. upward in the inner fender to the 10:00 position.



15. Connect the two lines at the 10:00 and 1:00 positions. This completes marking off the material that will be removed.



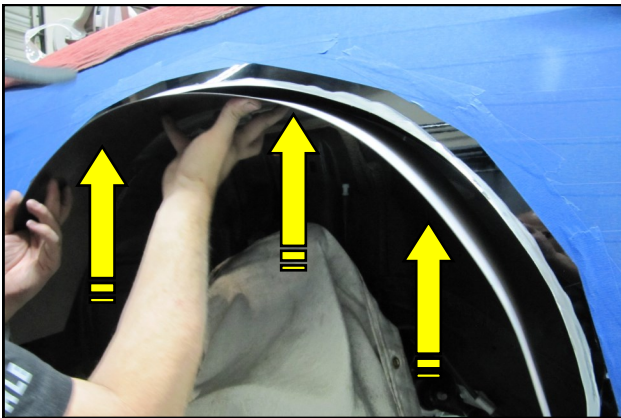
16. Cut out the remaining rear inner fender material as shown.



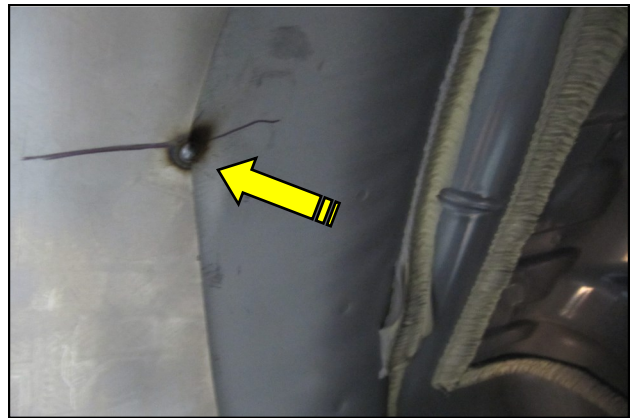
17. Peel back 1.5 to 2.0 in. of tape and sand the outer fender down to bare metal.



18. Apply a Weld-Thru-Primer to the work area of the inner fender to prevent corrosion and rusting of the metal joints where the two pieces will be welded together. Use the Rear Inner Fender Extension Template to create the extensions. RTR Recommends using 18 gauge steel.



19. Place a Fender Extension into the work area and adjust its position until you have complete coverage. The Fender Extension is intended to have excess material extending past the outer fender.



20. Once optimal positioning has been established, Place a single tack weld in the 12:00 position. Reconfirm the extension position and proceed to place tack welds in alternating locations along the extension.



21. Continue to place tack welds in alternating locations along the extensions inner and outer edges as shown.



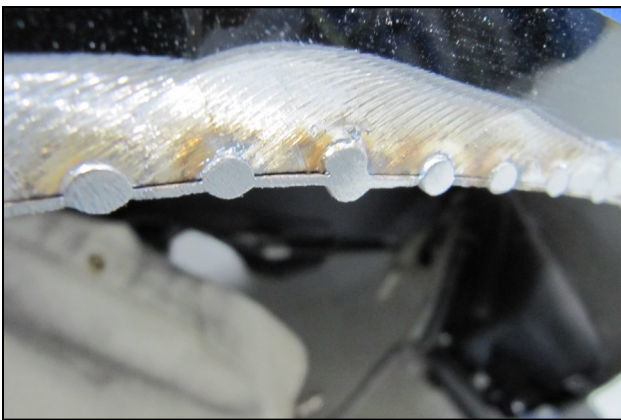
22. Alternate view of alternating tack welds. Use care not to overheat and warp the fender.



23. Using a cut of wheel, trim the excess Fender Extension off of the vehicle. **NOTE:** Depending on your inner fender cut, you may have excess material to remove at one or both ends of the extension.



24. Continue tack welding along the inner and outer edges until sufficient coverage has been achieved.



25. Carefully sand flat the tack welds along the outer edge and round off any sharp edges.



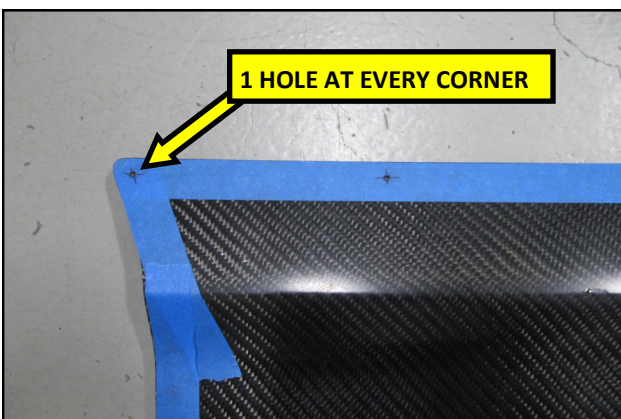
26. Mask off the vehicle with painters plastic and apply seam sealer to the edges of the extension.



27. When the sealer is dry, apply undercoat to the work area. Remove the painters plastic when the undercoat has dried.



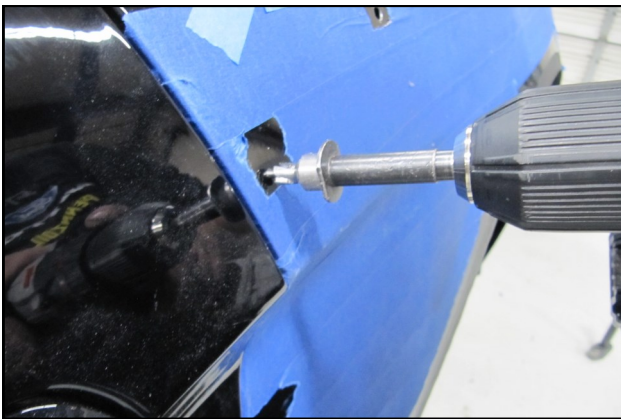
28. Prepare the Fender Flare for installation by taping the outer edges for marking.



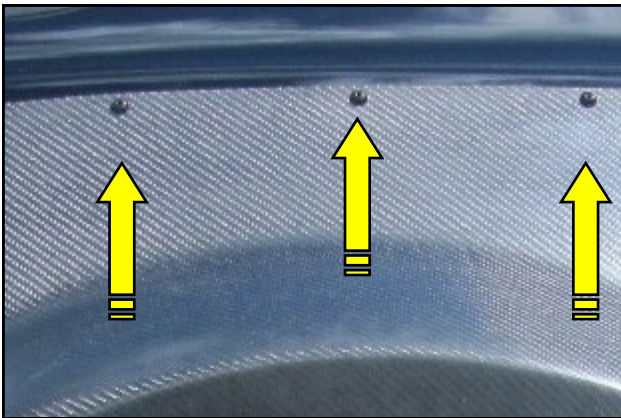
29. Mark the flares for drilling with approximately 6 in. spacing along the top edge and 3.5 in. spacing between the sides and bottom. RTR advises drilling the holes .375 in. from the edges. Even spacing is critical. Drill .125 in. pilot holes into the Flare.



30. Place the Flare onto the vehicle and tape it into place. Drill .125 in. holes into the fender. Install Cleco pins into the holes to secure the Flare and maintain proper alignment.



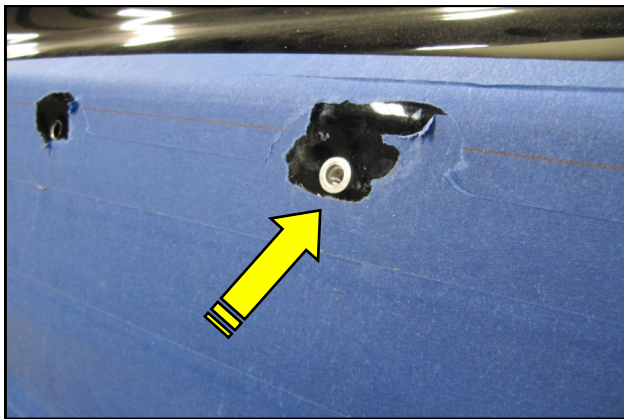
31. Remove the RTR Flare from the vehicle and using a 5/16 Rotabroach, enlarge the holes in the vehicle fender.



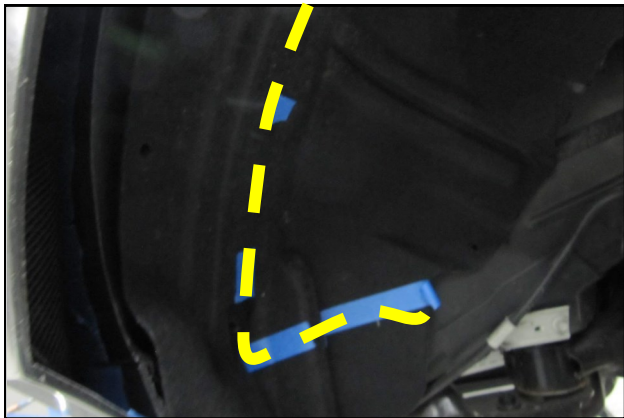
33. Carefully install the Flare onto the vehicle using the 10-24 Button Head Cap Screws and Washers. Start at the center and work outward. Do not fully tighten any of the fasteners until every one has been successfully started.



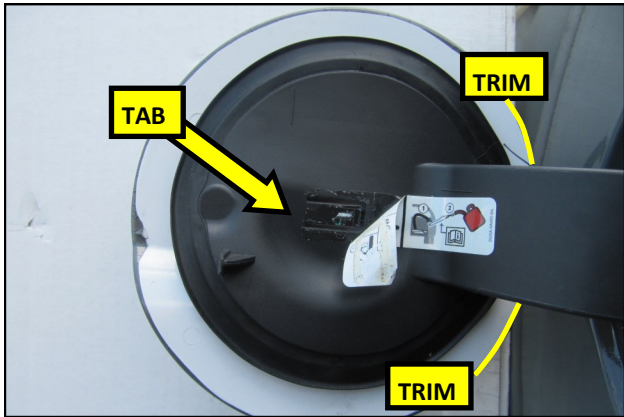
35. Trim the rear of the fender liner to gain sufficient wheel and tire clearance.



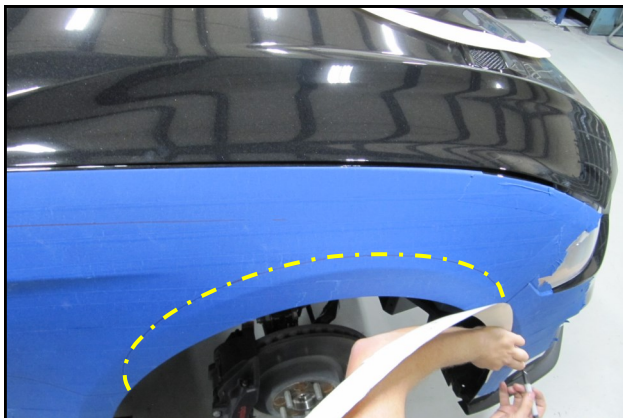
32. Install the 10-24 Nutserts into the fender.



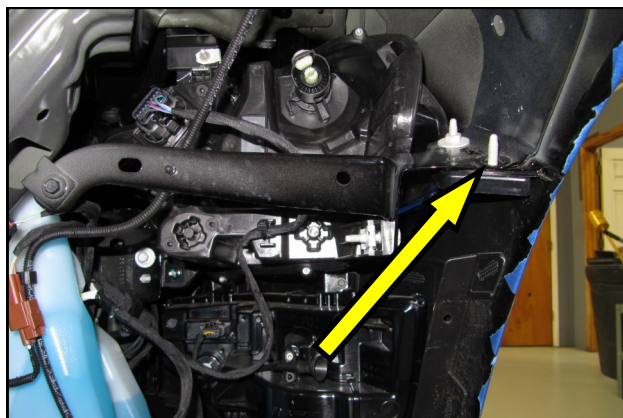
34. Make a tape line on the front of the inner fender and trim the fender liner back to gain sufficient wheel and tire clearance.



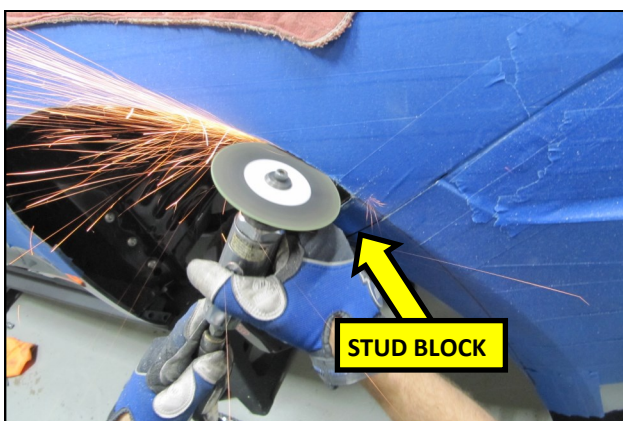
36. Peel back the decal on the inside of the fuel door to expose the lock tab. Disengage the lock tab and slide the fuel door off. The leading edge of the OEM fuel door may need to be trimmed to gain sufficient clearance. Clean the outside of the fuel door with a prep solvent and apply the Adhesion Promoter. Remove the backer from the double sided tape on the RTR Fuel door cover and apply it to the OEM Fuel door.



37. Remove fender badge and set it aside. Use painters tape to cover the working area on the front fender and trace the appropriate Template onto it as shown.



38. Remove the fender liner. Remove the outer 6mm flange nut from the stud block. The fender cut will pass through this stud block and the inner stud and nut will remain.



39. Cover the suspension, brakes and shock with a welding blanket and begin cutting the outer fender as shown.



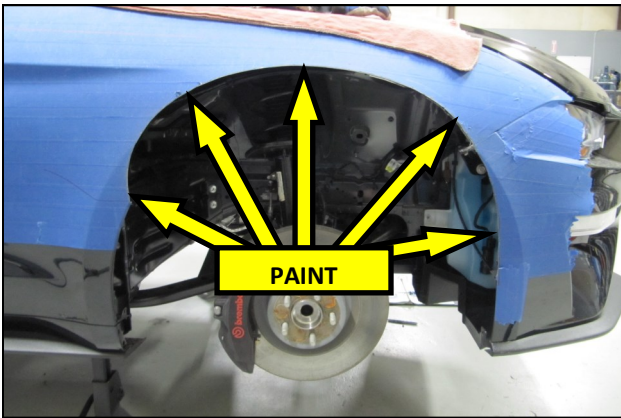
40. Inside view of the cut fender. Apply undercoat to the edges of the cut bracket.



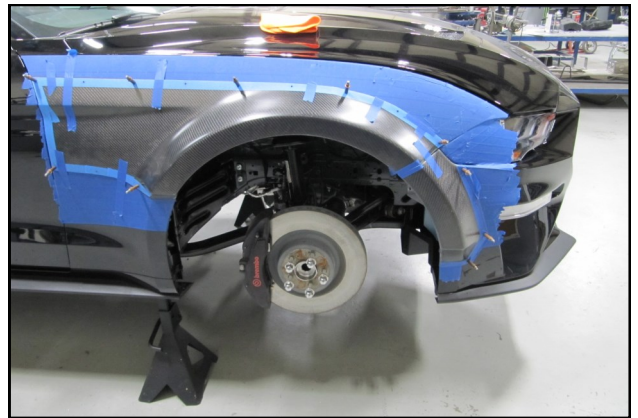
41. Prepare the Fender Flare for installation by taping the outer edges for marking.



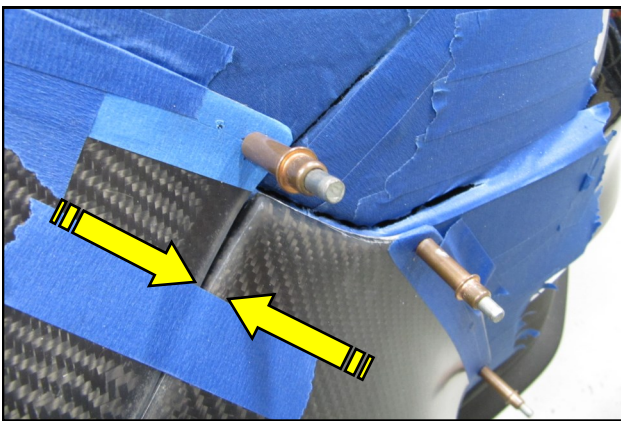
42. Mark the flares for drilling with approximately 5.5in. spacing along the top edge and 3.5 in. spacing between the sides and bottom. RTR advises drilling the holes .375 in. from the edges. Even spacing is critical.



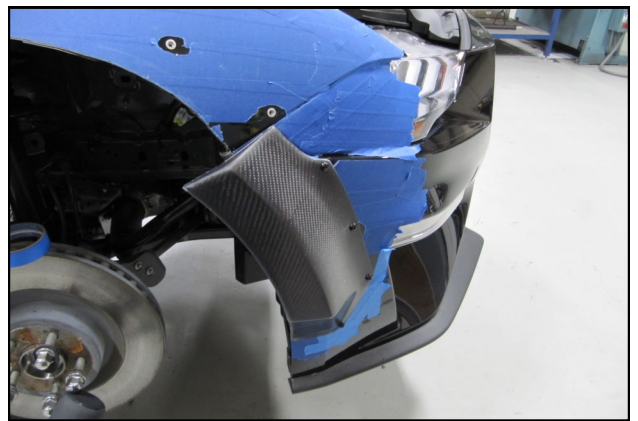
43. Paint the cut edges of the inner fender to prevent chipping. An automotive paint pen works well.



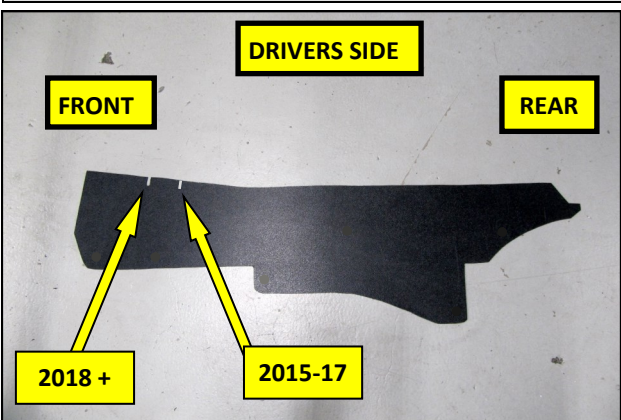
44. Place the front Flares onto the vehicle and tape them into place. Drill .125 in. pilot holes into the Flares and then the fender. Install Cleco pins into the holes to secure the Flares and maintain proper alignment.



45. Align the two sections of the Flare and clamp them together at the inside flanges. Drill a single 19/64" Hole and bolt the Flare pieces together using a set of the 1/4 -20 Bolts, Nuts and Fender Washers.



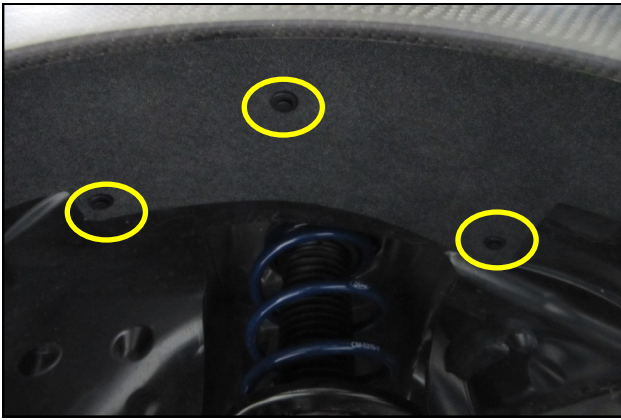
46. Remove the RTR Flares from the vehicle and set them aside. Using a 5/16 " Rotabroach, enlarge the holes in the vehicle fender. Install the 10-24 Nutserts and reinstall the flares using the 10-24 Button Head Cap Screws and Washers.



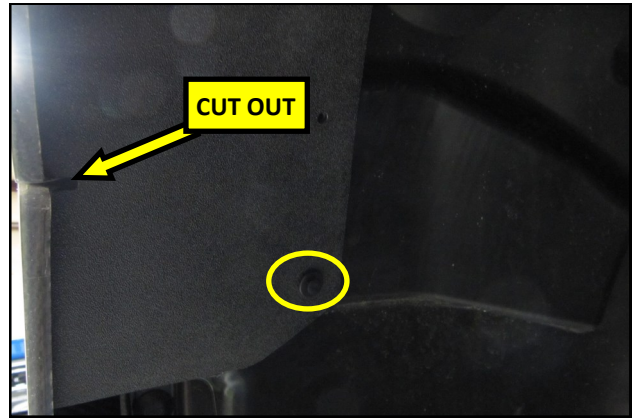
47. Place the RTR Front Fender liner extension up against the OEM fender liner, texture side down, and mark a cut line onto the OEM Liner. There are two cut outs on the front of the Extension. One is for 2018+ vehicles and the other is used on 2015-2017 vehicles.



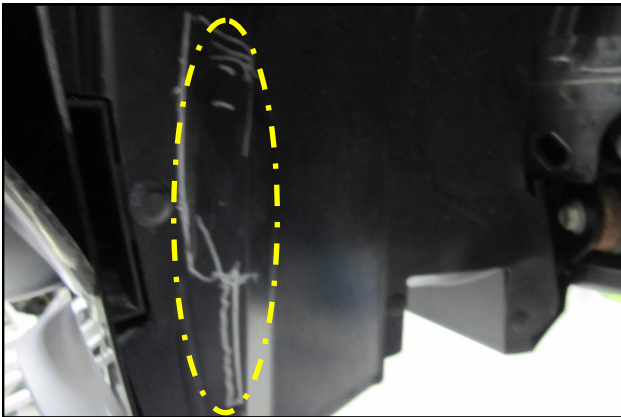
48. Drill 6, 1/4" holes into the Liner extension and secure it using the Plastic rivets.



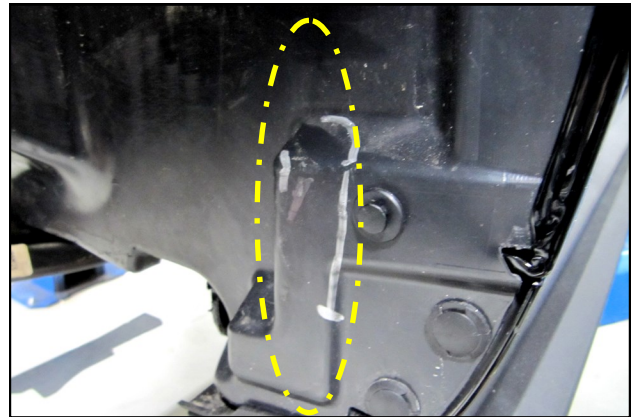
49. Suggested Rivet locations, Center.



50. Suggested Rivet location, Front.



51. Using a heat gun, thermoform the front lower, inner fender in the area shown, to gain tire clearance.



52. Using a heat gun, thermoform the rear lower, inner fender in the area shown, to gain tire clearance.



53. Reconnect the battery. Mount the wheels and tires and check clearance at full lock, left and right and test drive to check clearance under compression.

RTR Recommended Wheel and Tire combination

Front Wheel	20 x 9.5 -10
Front Tire	285-30-20
Rear Wheel	20 x 11 -16
Rear Tire	305-30-20