



2018-19 Ford F-150

RTR Upper Grille

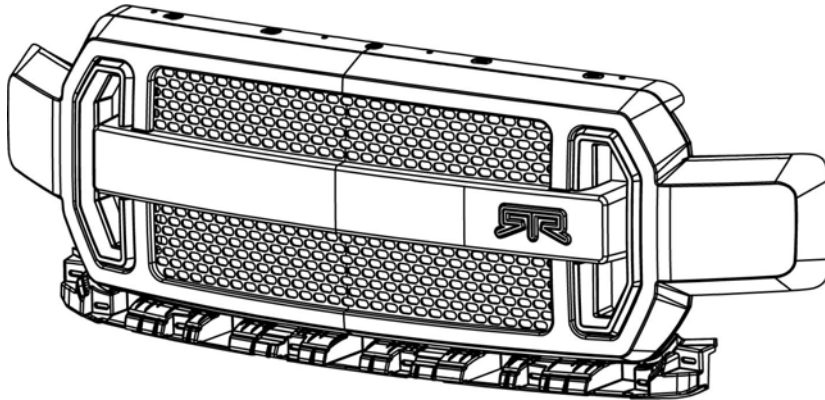
Part numbers:

1897-7002-01 with Lighting Kit

1897-7003-01 with Non LED Inserts

Components Included

1.	RTR Grille	1
2.a	RTR Lighting kit	1
2.b	RTR Non LED Inserts	1
3.	Grille Studs	4
4.	Cable Ties	10
5.	Grille Badge	1
6.	Dielectric Grease Pack	1



**NOTE:** The RTR Grille is not intended for vehicles equipped with the 360-Degree camera system.

In addition to common hand tools, installation of this part will require the use of a body clip tool or equivalent, a 5.5 MM socket and isopropyl alcohol.



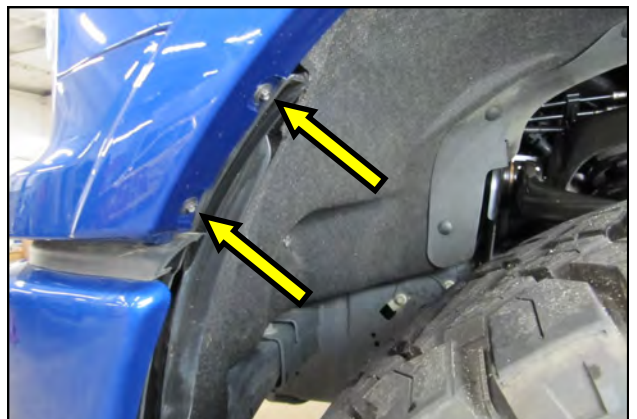
1. Disconnect the Negative terminal on the battery.



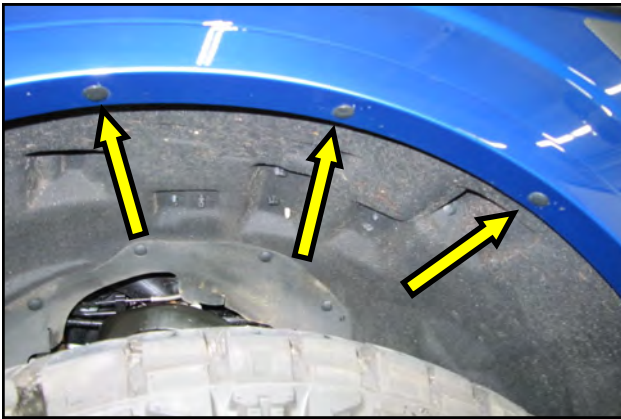
2. Remove the OEM fender flares if so equipped.



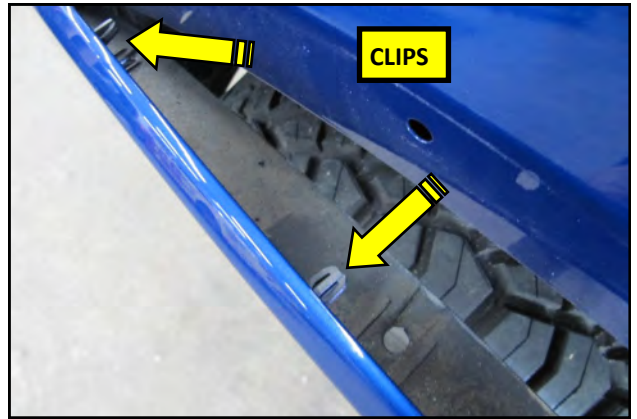
3. Starting at rear of the flare, remove the plastic fastener securing it to the rocker panel.



4. At the front of the flare, remove the two 5.5 mm head screws.



5. Remove the 3 fir tree anchors in the 11, 12 and 1 O'clock positions in the Flare lip.



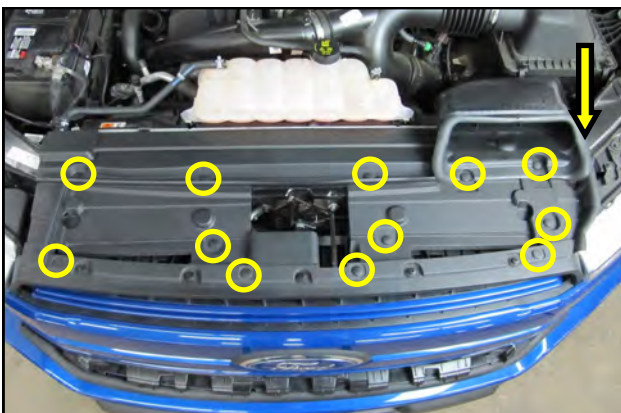
6. Using a body clip tool or equivalent, unclip the flare from the fender and set it aside. Repeat steps 3-6 on the opposite side of the vehicle.



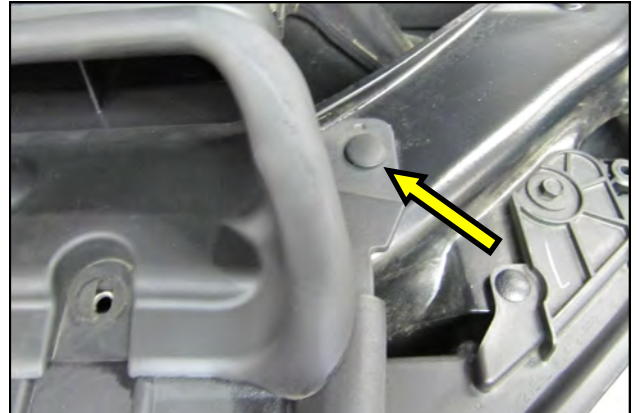
7. Remove the bumper trim.



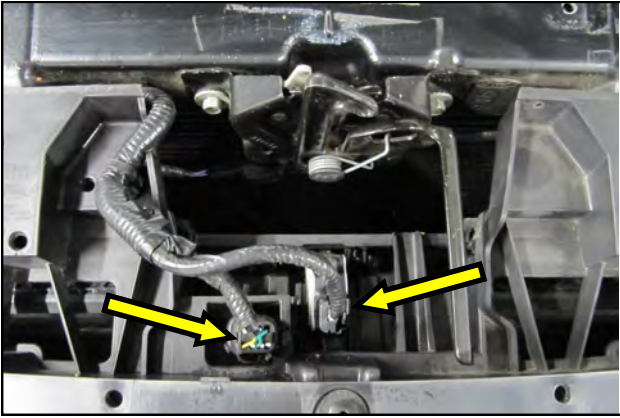
8. Separate the edges first, then disengage the center tabs to remove the trim from the vehicle.



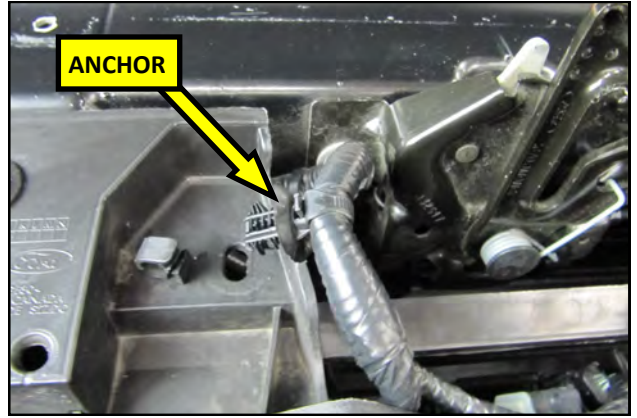
9. Remove the 13 plastic rivets securing the core support cover to the vehicle.



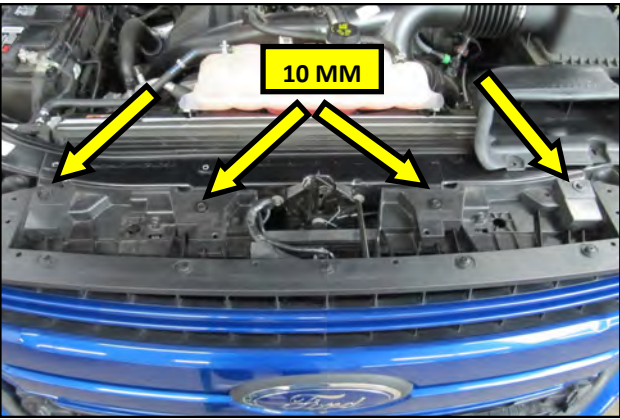
10. The last rivet resides on the other side of the air box inlet. Once all of the rivets are removed, slide the cover out from under the air box inlet and set it aside.



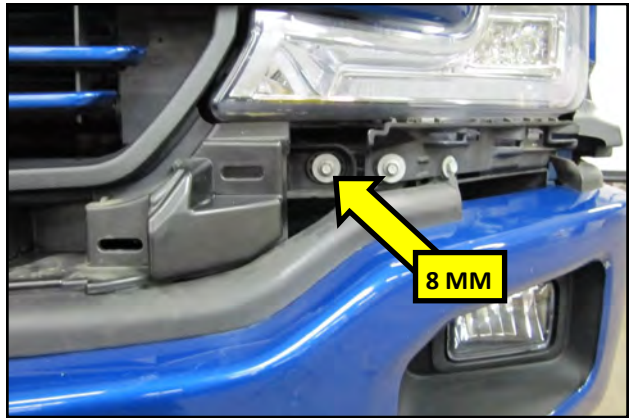
**11.** Disconnect the shutter motor and the air temp sensor



**12.** Pry the harness anchor out of the shutter assembly.



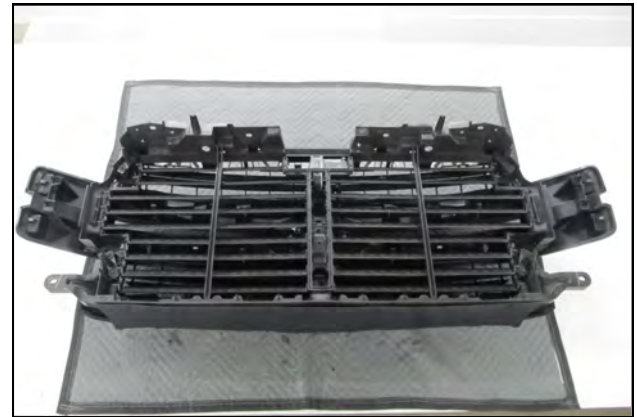
**13.** Remove the 4 upper grille screws and set them aside.



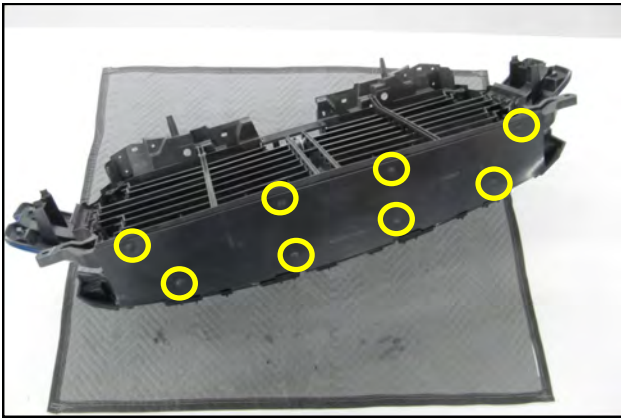
**14.** Remove the lower grille screw from both sides of the grille.



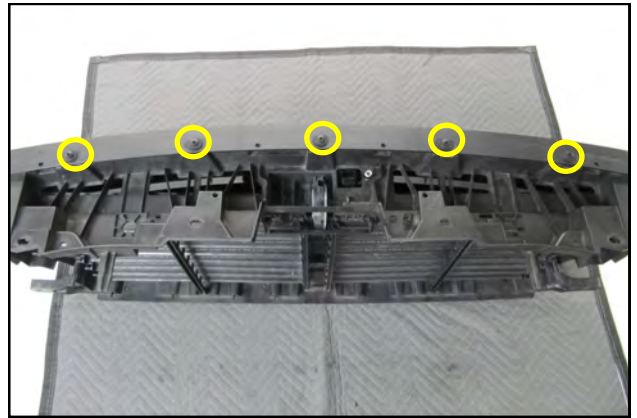
**15.** Slide the OEM grille and shutter assembly forward and out of the vehicle.



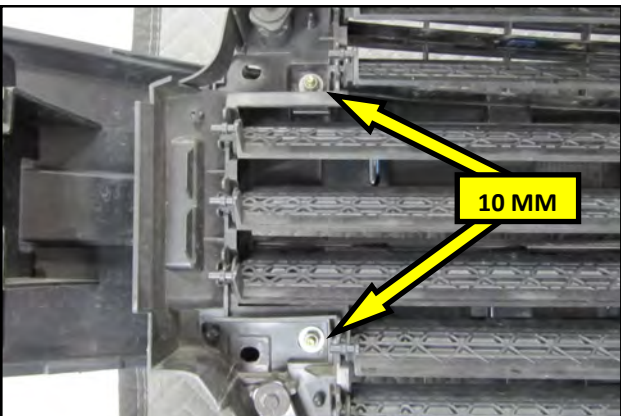
**16.** Set the grille and shutter assembly onto a padded work surface.



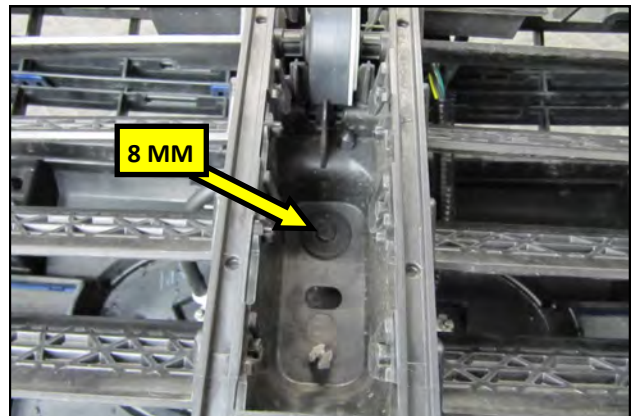
**17.** Carefully remove the 8 fir tree anchors securing the splash shield to the bottom of the assembly and set them aside along with the shield. The anchors will be reused.



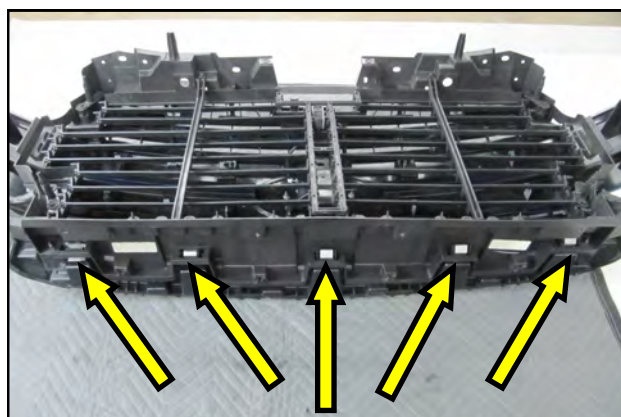
**18.** Remove the 5 plastic rivets from the top of the assembly and set them aside for reuse.



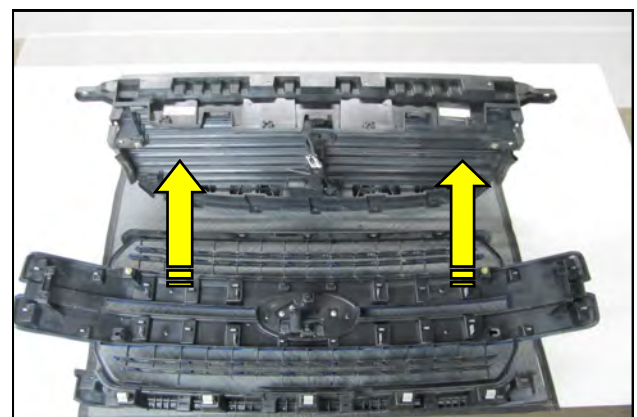
**19.** Remove the 2, flange nuts on each side of the shutter. **Note:** In many cases, the stud mount will yield before the nut does. If this occurs, remove the stud and nut with the shutter. This issue is addressed in step 23.



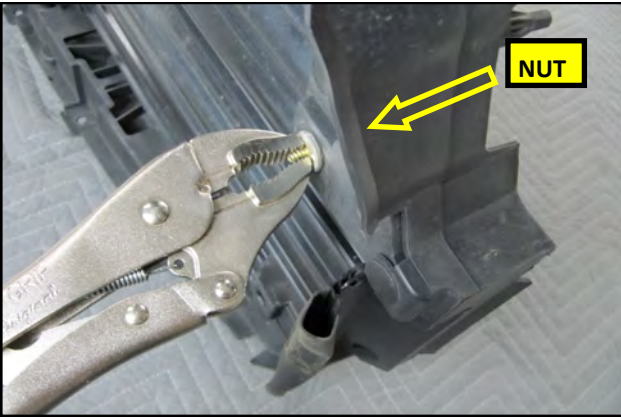
**20.** Remove the screw in the center of the shutter assembly, just below the motor. This fastener will not be reused with the RTR Grille.



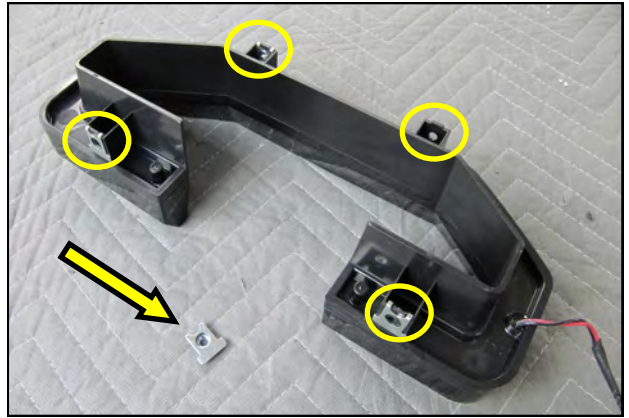
**21.** Depress the 5 spring clips, one by one, while lifting up on the shutters.



**22.** Separate the shutter assembly from the OEM grille as shown.



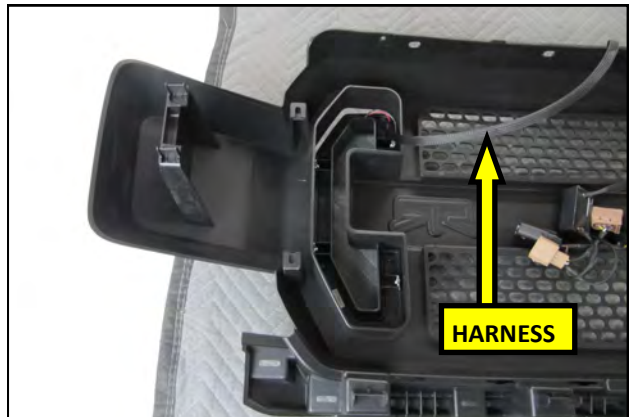
**23.** For grille studs that were removed in step 19, Use locking pliers to hold the stud and remove the nuts with a 10 mm socket. The OEM flange nuts are to be reused.



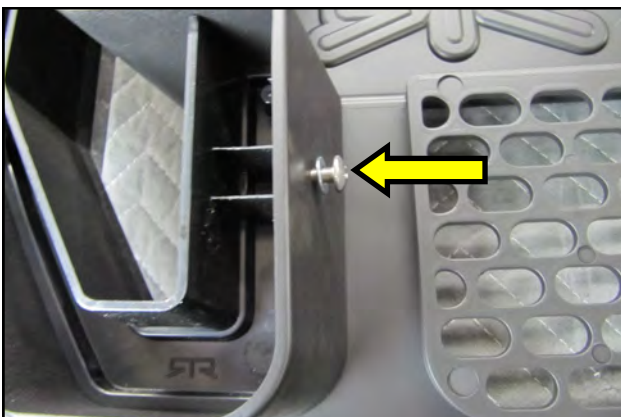
**24.** Install the Speed Nuts onto the LEDs or Inserts as shown, with the flat side facing outward and the threads facing inward.



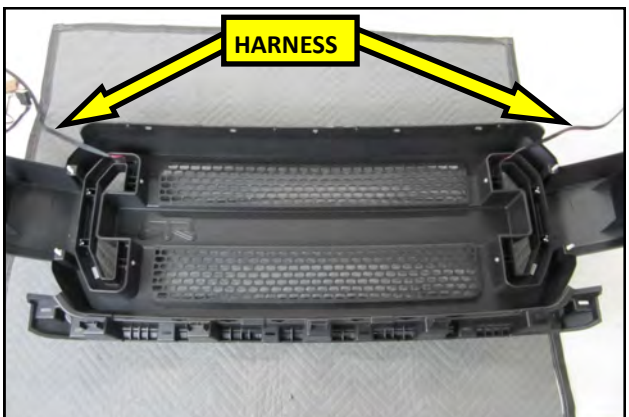
**25.** Place the RTR Grille, face down, onto a padded work surface. **NOTE:** The remainder of this manual contains information regarding the installation of the optional LED Lighting. If this install does not include Lighting, disregard any irrelevant steps.



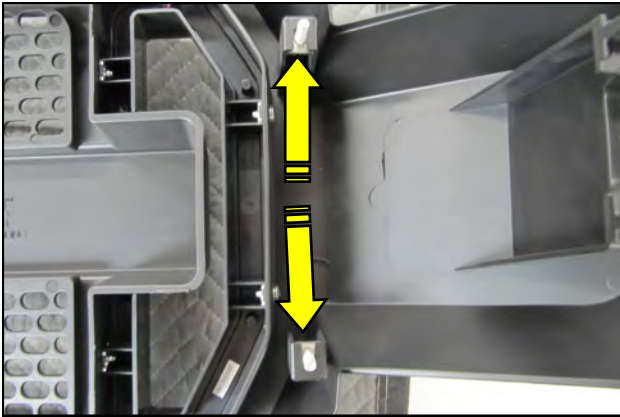
**26.** Route the Wiring Harness through the front of the Grille and insert the LED or Insert into the RTR Grille. The LEDs and Inserts are side specific and are marked accordingly on the back side.



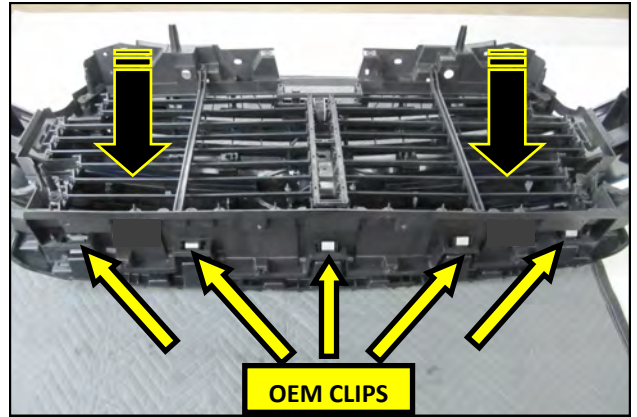
**27.** Align the Speed Nuts with the holes in the Grille and secure the LED or Insert using the 5MM Screws and Flat Washers.



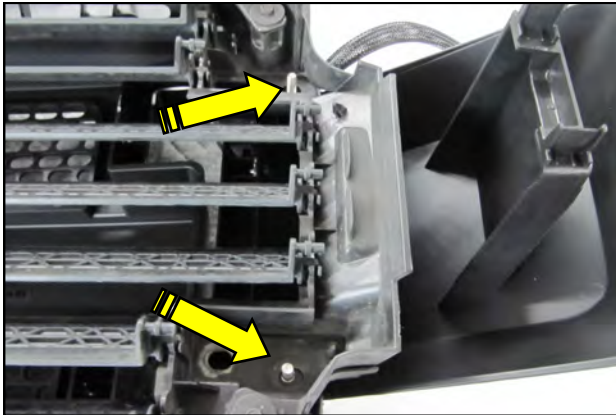
**28.** Install the second LED or Insert into the Grille and lay the Wiring Harnesses up and away from the Grille as shown.



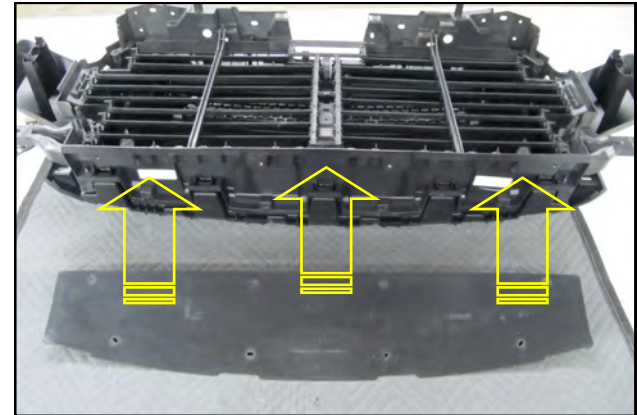
**29.** Slide the Grille Studs into the slots as shown on both sides Grille.



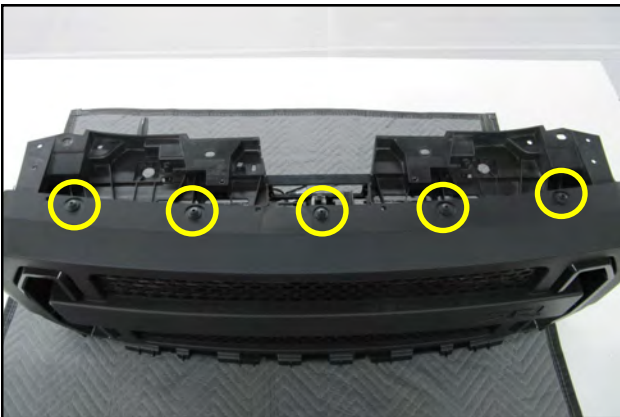
**30.** Transfer the OEM clips from step 21 onto the RTR Grille. Slide the OEM shutters over the RTR Grille Studs and onto the RTR Grille as shown.



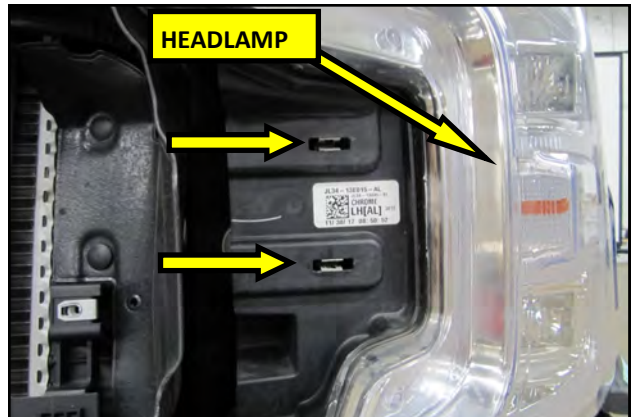
**31.** Reinstall the OEM flange nuts from steps 19 and 23, onto the RTR Grille and shutter assembly.



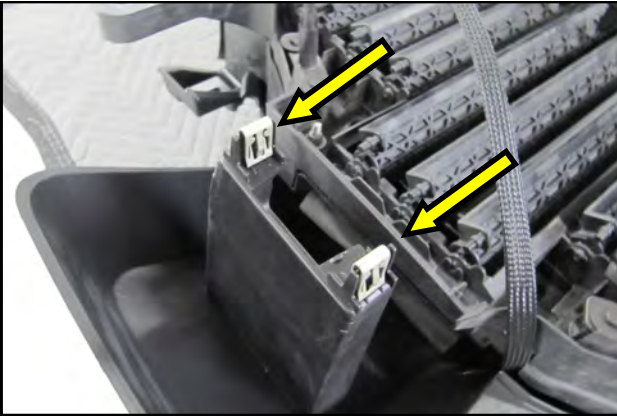
**32.** Reinstall the OEM splash shield onto the RTR Grille and shutter assembly.



**33.** Reinstall the OEM plastic rivets into the top of the Grille assembly.



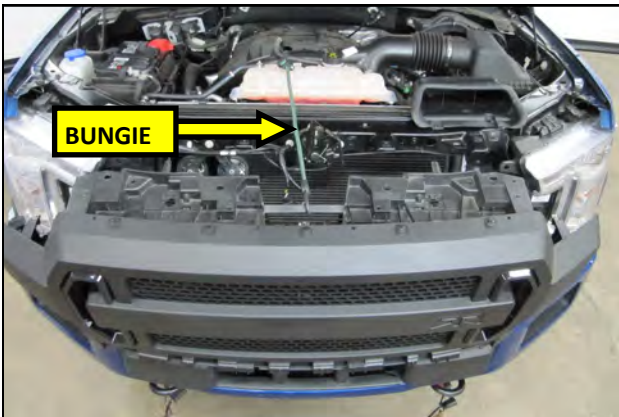
**34.** Remove the outer retainer clips from both sides the vehicle. In some cases, the clips may still be attached to the OEM grille.



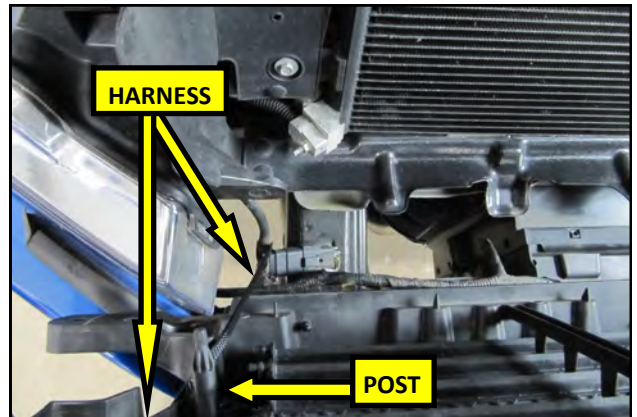
**35.** Transfer the OEM retainer clips onto the RTR Grille as shown.



**36.** Raise the front of vehicle and safely support it using jack stands. Remove the front wheels and tires.



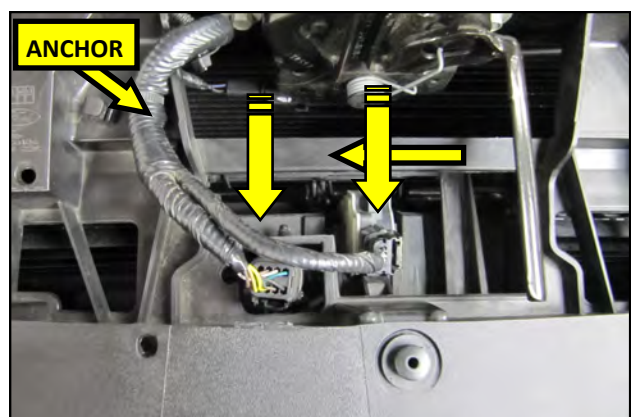
**37.** Set the RTR Grille assembly onto the bumper of the vehicle and suspend it from the engine using a bungee cord as shown.



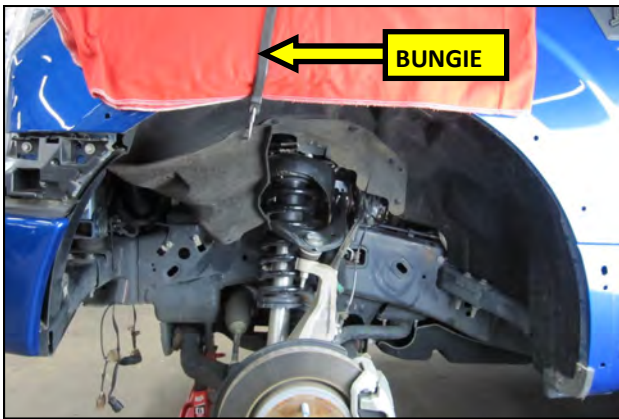
**38.** Carefully route the Wiring Harnesses down the sides of the Grille and towards the outside of the frame rails.



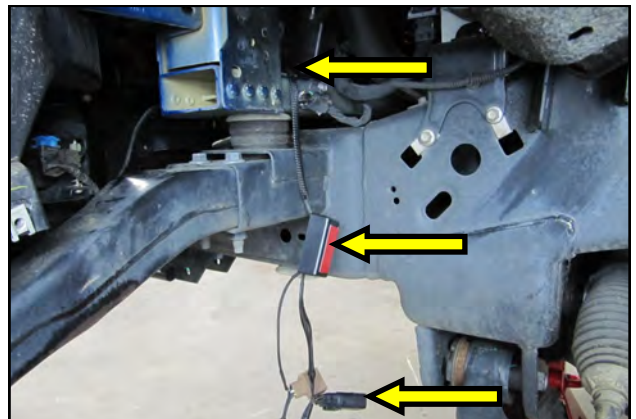
**39.** Remove the bungee cord and fully insert the RTR Grille assembly into the vehicle.



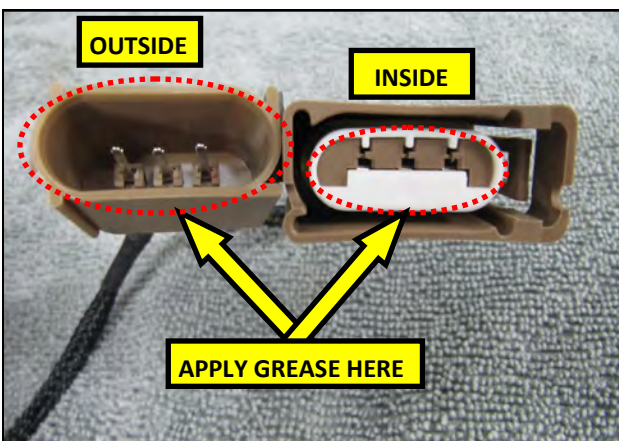
**40.** Reconnect the shutter motor and the air temp sensor. Insert the harness anchor into the shutter assembly.



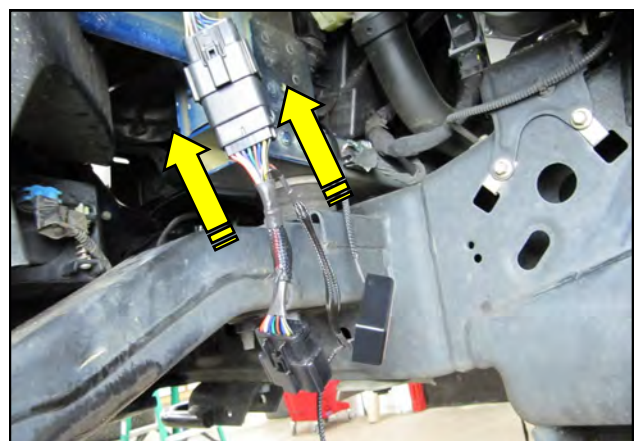
**41.** Remove the two 5.5 MM head screws and plastic rivet at the front of the fender liner. Pull the fender liner back and secure it in place using a bungee cord as shown.



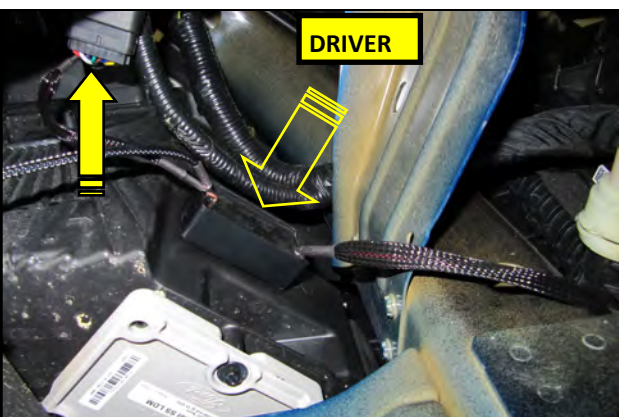
**42.** Carefully route the Wiring Harness past the radiator and over the cross member.



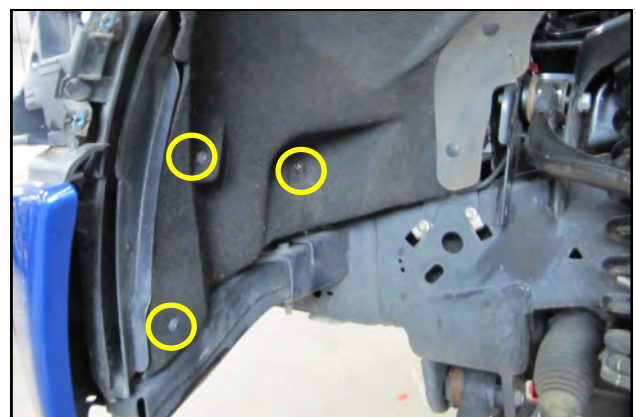
**43.** Match the RTR LED Connectors to the Vehicles connector type. There are two – Brown or Black. Ensure that the Pins are straight and realign them if necessary. Apply the supplied Dielectric Grease to the Connectors to prevent corrosion in the Connector.



**44.** Disconnect the head lamp. Connect the OEM head-lamp harness to the RTR LED Harness. Connect the second RTR connector to the head lamp assembly.

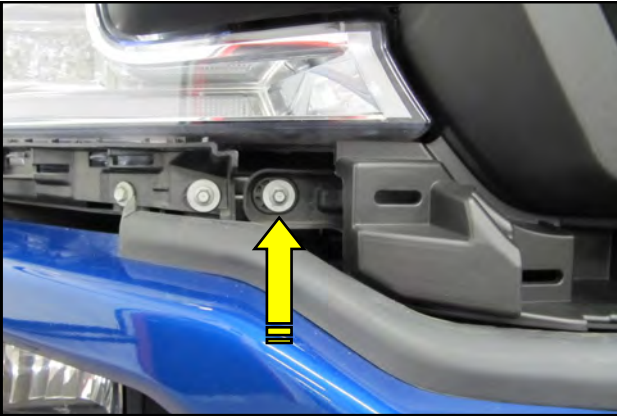


**45.** Find a suitable location for the LED Driver, and clean it of any and all dirt or debris using isopropyl alcohol. Mount the Driver using the double sided tape. Use the supplied Cable Ties to secure the wiring. Reconnect the battery and perform a function test of the lighting. Troubleshooting tips can be found on page 10 of this manual.

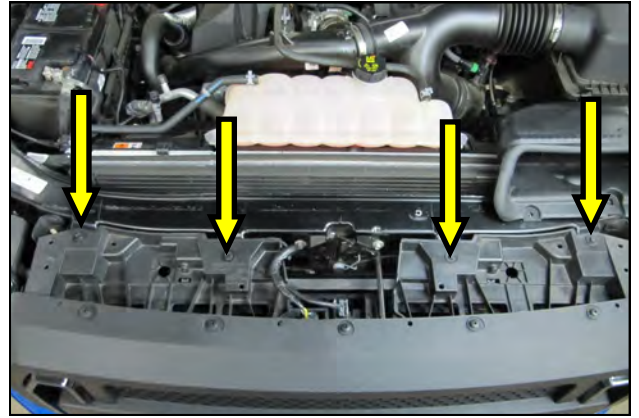


**46.** Reinstall the fender liner using the OEM fasteners. Repeat steps 41-45 on the opposite side of the vehicle.

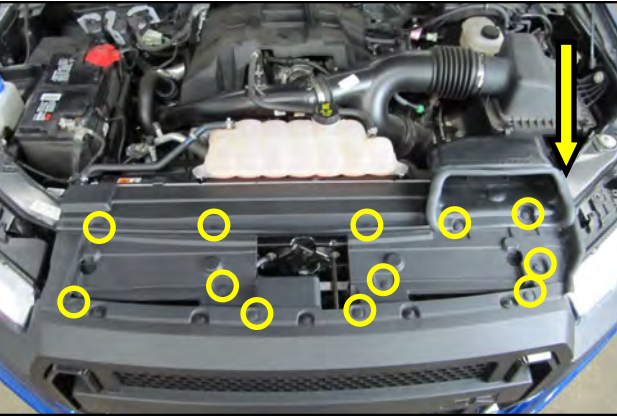




47. Secure the lower portion of the RTR Grille using the screws removed in step 14.



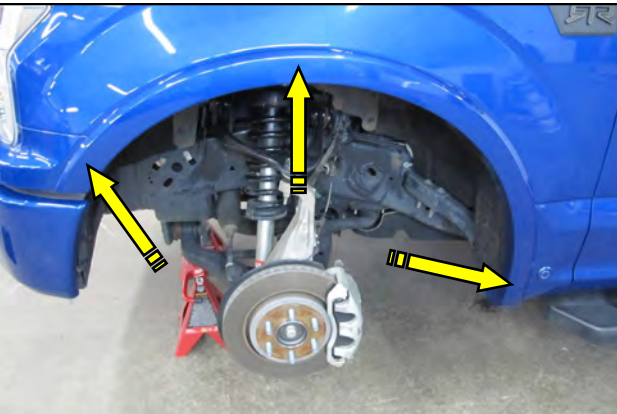
48. Secure the upper portion of the Grille using the 4 screws removed in step 13.



49. Reinstall the core support cover using the OEM rivets.



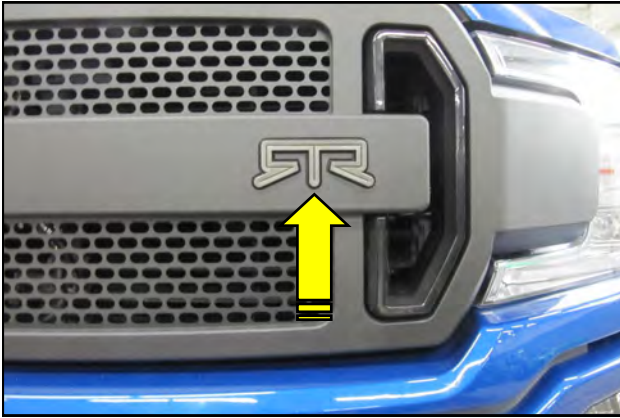
50. Reinstall the bumper trim onto the vehicle.



51. Reinstall the fender flares if so equipped.



52. Reinstall the wheels and tires and lower the vehicle onto the ground. Torque the lug nuts to 150 lb.-ft



**53.** Clean the Badge recess on the RTR Grille using isopropyl alcohol and mount the Badge onto the Grille.



**OPERATION:** The RTR Grill Lamps are triggered off of the parking lamp circuit. The LEDs will be illuminated when the parking lights are on or when the headlights are turned on.

## Troubleshooting

- ◆ If lamps do not illuminate, unplug the connector, inspect the connector terminals, making sure they are straight, and reconnect.
- ◆ If there is still no function, make sure the light switch is turned to the parking or headlamp position. The lamps should be turned on any time your truck's lights are illuminated.
- ◆ If LED Grille is illuminated, but headlamps are inoperable, confirm that the inline connector is connected on both sides, both to the factory harness and to the headlamp.
- ◆ If you observe condensation in the lamps, keep vehicle in a dry location for 1-2 days to allow the internal pressure of the lamp to equalize. If condensation does not disappear, or moisture persists, contact RTR Vehicles.

## Care

- ◆ Clean the lamps using a mild solution of car soap and water.
- ◆ Do not use any harsh solvents or cleaners.
- ◆ Wipe the lenses dry using a clean microfiber cloth.
- ◆ Do not use the hi pressure hose setting at the car wash or a pressure washer to clean the Lights.

## Warranty

- ◆ Warranty information can be found at [www.RTRVehicles.com](http://www.RTRVehicles.com)

Customer Support: 1 (866) 839-7444

Customer Support Hours: Mon - Fri, 9:00 AM EST - 4:00 PM EST