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(619) 449-9930

Front Bumper Installation Instructions

P/N 210769 / P/N:210769.1 2019+ Mercedes Sprinter Recon Front Winch Bumper

Before you begin:

- *This product is compatible with the Sprinter 1500, 2500, and 3500. However, 3500s may require specialized tooling and/or additional hardware.*
- *This installation requires two or more people*
- *Unless otherwise specified, refer to the general torque value at the end of the instructions for specified torque values.*

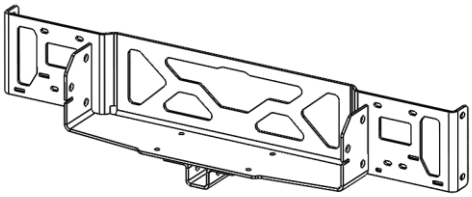
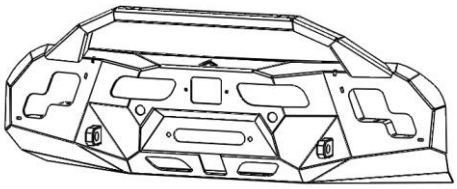
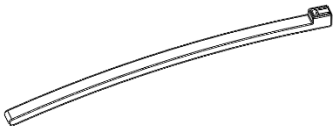
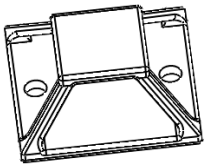
Required Tools:

- Standard and metric wrench set
- Standard and metric socket set
- Flat head screwdriver
- Hammer
- Putty knife
- Razor blade or box cutter
- Dremel or Cutoff Wheel
- Painter's masking tape

Included Hardware:

P/N	***Description***	***Quantity***
70124	M8-1.25 x 40mm, Fully Threaded, Zinc, Hex Head Bolt	8
70101	M8-1.25 Nut	8
70020	5/16" SS washer	8
70111	5/16" split locking washer	16
70036	½"-13 x 1- ½" grade 8 bolt	6
70035	½" washer	6
70106	½" split washer	6
70009	¼" SS Washer	4
70039	¼" SS Fender Washer	4
70008	¼-20 SS Nylock Nut	2
70060	Bolt, Button Head, Socket Cap, SS, 1/4-20 x 1"	2
70708	Washer, Med Split Lock, 3/8", Hrd Stl, Zinc	4
70246	Antiseize	1

Additional Parts:

PN	*Description*	*Quantity*	*Picture*
351871	Steel Winch Tray *(shipped with front receiver bolted on)*	1	
351872	Aluminum Recon Front Winch Bumper *(Shown with Bull Bar Option)*	1	
301268	Parking Sensor Retainer	2	
90101	ZiP Tie	4	
401018	Adhesive zip tie anchor	4	

Stock Bumper Removal:

NOTE: Bumper With Bullbar Version Shown, Installation is the Same for a Bumper with No Bullbar

1. Open and secure the hood.
2. Remove the three (3) torx screws across the top of the grille; reference Figure 1.

Figure 1: Grille Screws

3. Pull the grille slightly away from the vehicle and unclip the grille in the six (6) indicated locations

(see Figure 2 & 3). Once all tabs have been released, the grille can be removed.

Figure 2: Grille Tab Locations

Figure 3: Grille Tab Close Up

4. Unclip front camera from grille if applicable.
5. Remove the torx bolt near the top of the stock bumper on both sides seen with the grille removed. *Some Sprinter models may have additional hex bolt in recessed hole that will also need to be removed. Reference Figure 4.

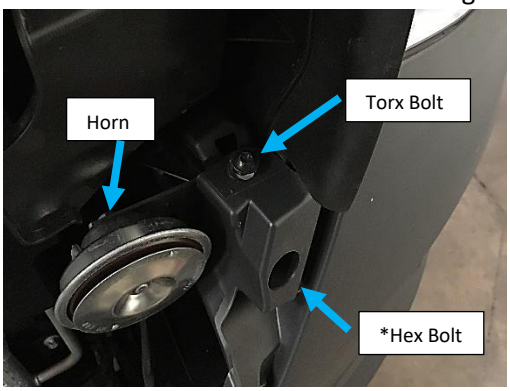


Figure 4: Torx Bolts Near Top of Stock Bumper

6. Remove the six (6) plastic rivets on the inside of each fender well. Gently pull the center of the rivet out, then remove entire rivet. Reference Figures 5-7.

PRO TIP: Access to the rivets is much easier by turning the vehicle's wheels.

Figure 5: (4X) Plastic Rivets on the Inside of the Wheel Well

Figure 6: (2X) Plastic Rivets on Underside of Bumper

Figure 7: Example of the Plastic Rivet

7. Pull gently on the corner of the plastic bumper directly away from the vehicle. Start in the corner nearest the wheel well working towards the center. Repeat for other side of vehicle. Reference Figure 8.

Figure 8: Removing Plastic Bumper

8. Remove the two (2) plastic caps on the front bumper step to reveal two (2) torx bolts (reference Figure 9 & 10). Remove bolts.

Figure 9: Plastic Cap Location

Figure 10: Front Bumper Step with Plastic Cap Removed

9. Remove stock front bumper by pulling directly away from vehicle being sure to disconnect any sensors that are attached (parking, air temperature, and/or fog lights as applicable).
10. Remove the collision prevention sensor from the plastic bracket. Release tab on the top of the sensor and rotate the sensor forward to remove. Disconnect sensor from wiring harness.
11. Remove the plastic sensor bracket by unscrewing the two (2) torx bolts near the top of the radiator and pulling loose from stock steel bumper.
12. Remove the eight (8) bolts holding the stock steel bumper in place using a 13mm wrench as shown in Figure 11.

    CAUTION: Once all the bolts are removed, the bumper may fall if not properly supported.

Figure 11: Four (4) Frame Bolts per Side Holding the Stock Steel Bumper to the Vehicle.

13. Remove the stock steel bumper using a putty knife and a hammer if the bumper does not come loose after removing the bolts in the previous step. The frame sealant may cause the steel bumper to stick to the frame. See Figure 12.

    CAUTION: once the seal is broken, the bumper may fall if not properly supported.

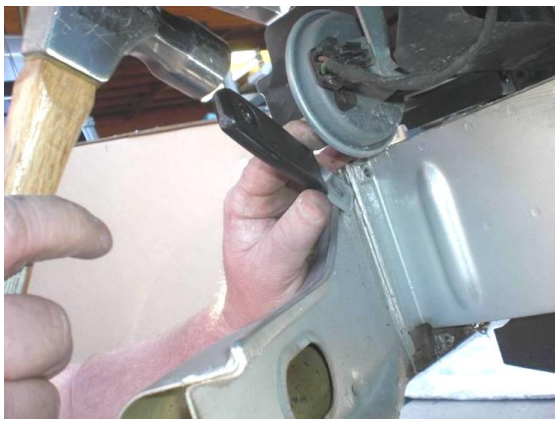
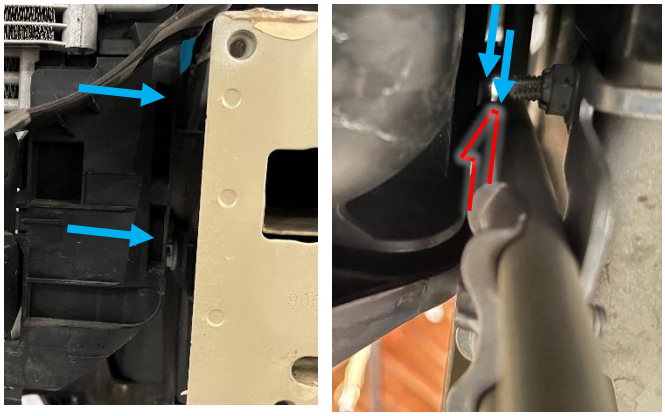


Figure 12: Releasing the Stock Steel Bumper from the Vehicle Using a Putty Knife and Hammer

14. Remove the air flow skirt by unclipping each side and away from the van as shown in Figure 13-15. The rubber gasketing will need to be cut around the hose lines to remove – be careful not to cut the hoses!



a.) Front *b.) Underneath*

Figure 13: Air Flow Skirt Clip Locations from Front (a) and from Underneath (b)

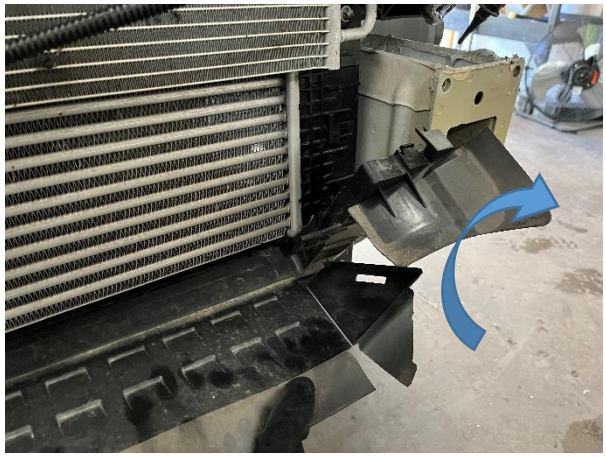


Figure 14: Air Flow Skirt Pulled Out

Figure 15: Air Flow Skirt Cut for Removal

15. Loosen **only the bottom** most bolts holding on each of the black steel crossmember underneath the radiator (see Figure 16). Retain factory bolt for re-installation.

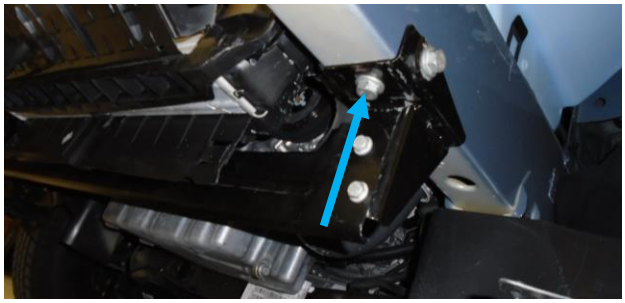


Figure 16: Engine Crossmember Bracket Factory Bolts (Driver Side Shown)

NOTE: Sprinter 3500 may or may not have these factory bolts and/or threaded inserts. Additional tapping and hardware *may be required*.

Winch Tray Installation:

16. Unbolt it from the inside of the winch tray as shown in Figure 17.

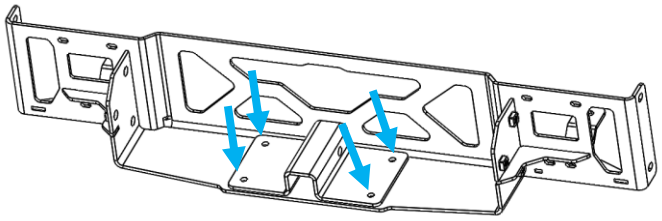


Figure 17: Front Receiver in Shipping Configuration

17. Optional: If you'd like to install the included front hitch receiver to the winch tray, bolt the hitch receiver back on to the bottom of the winch tray with the included 3/8" hardware as shown in Figure 18.

    NOTE: center & line up the front receiver with the cut out on the aluminum bumper for proper alignment during final assembly.

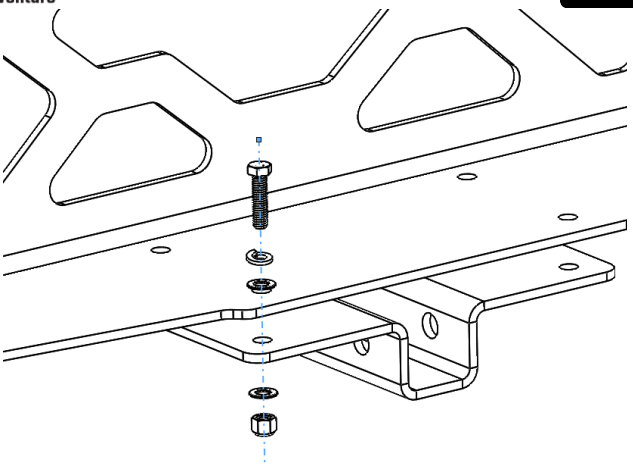


Figure 18: Front Receiver Bolted in Usable Configuration

18. Install the eight (8) provided M8 bolts with eight (8) split washers through the frame, from back to front, creating studs to mount the winch tray onto (Reference Figure 17).

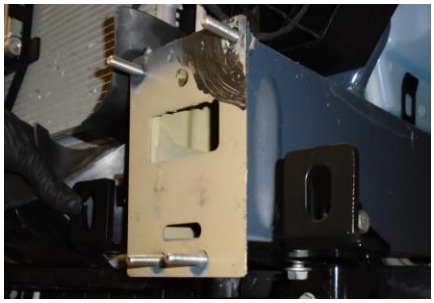


Figure 19: M8 Bolts Installed

19. Install the steel winch tray bracket onto the M8 'studs' and **over** the factory crossmember brackets. See Figure 18.

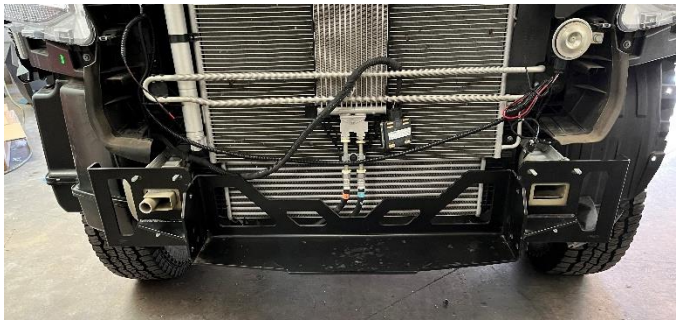


Figure 20: Winch tray Installed

20. Center the winch tray onto frame. Use remaining 5/16" washer, split washers, and M8 nuts to tighten tray into position.

21. From the bottom, reinstall the factory hardware through the winch tray and through the factory crossmember brackets. Reference Figure 19.

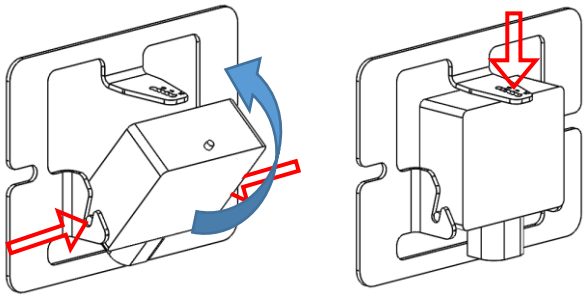
NOTE: 3500 Sprinters may require additional step – frame may need to be tapped with M14x1.5mm. Factory bolt is M14x1.5 x 30mm long.

Figure 21: Installed Factory Crossmember Bolt Thru Winch Tray

22. Install winch onto winch tray if desired.

Front Radar Sensor Installation:

23. Install the front radar sensor into the sensor carriage by locating the two (2) protrusions on each side (Figure 20a) and rotating the sensor into the carriage (Figure 20b). Use Figure 21 as a guide to depress the tab on top to secure the sensor into place at the correct position.



a. *b.*

Figure 22: Sensor Installation

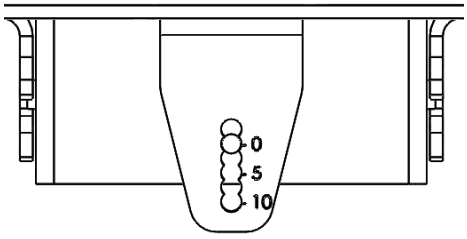


Figure 23: Sensor Alignment from -2.5 degrees to +10 degrees

NOTE: It is **essential** that the sensor is level left-to-right (± 1°) and as perpendicular to the road as possible (± 1°). Set the sensor to second-most forward position (0 degrees) to start, but verify level while installing into the vehicle. This will make re-calibrating the front sensor much easier.

NOTE: Adjustment can be made after installation is complete by removing the front two ¼"-20 bolts, adjusting the sensor, and reinstalling (Figure 22).

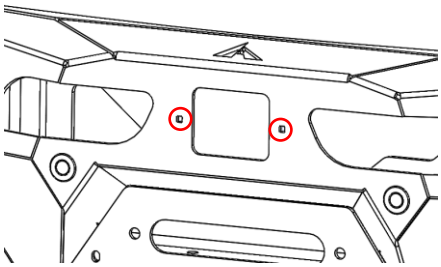


Figure 24: Sensor Window Removal

24. Install parking sensor retainers (PN 301268) by pressing them into the cutout holes as shown in Figure 25.

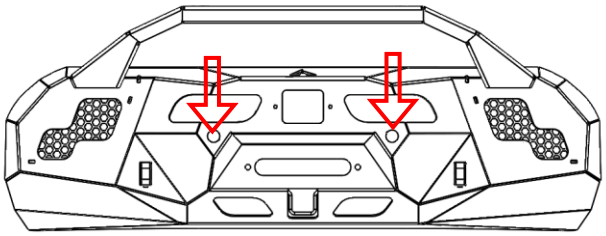


Figure 25: Parking Sensor Retainer Hole Position

25. The Light Grille's on either side can be adjusted or removed by loosening or removing the ¼-20 hardware in the locations shown in Figure 26.

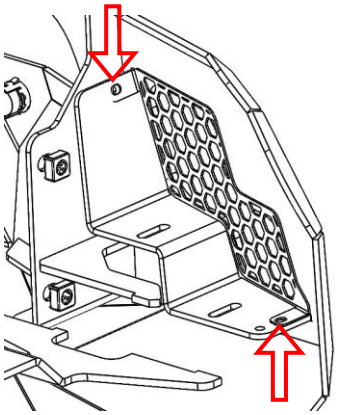


Figure 26: Light Grille Hardware Mounting Locations

Factory Plastic Preparation:

26. Using a Dremel or cutoff wheel, cut the mesh from the air flow relief (Figure 27). Cut a large enough relief on the top center section to provide clearance for a winch solidnoid controller (reference).

Figure 27: Cutout Grille Mesh from Air Flow Relief

Figure 28: Winch Controller Relief Example

27. Mark out the location to be cut on the factory plastic front bumper using painter's tape. The width of the cutout should be ~51 wide" (25-1/2" from centerline). Start at the bottom of the license plate and mark up to the air flow relief. Use Figure 29 as a dimensional guide.

Figure 29: Marking Front Bumper Cutout

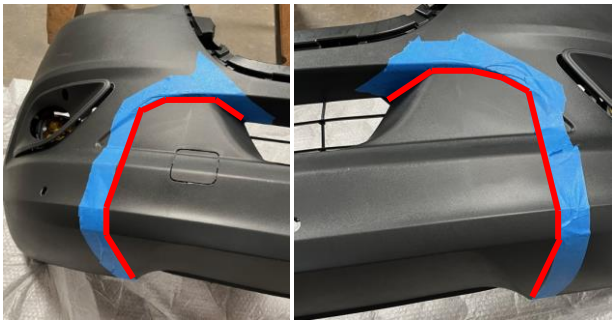


Figure 30: Cutout Close Up – Front

Figure 31: Cutout Close Up - Bottom

Figure 32: Completed Front Bumper Cutout

PRO TIP: A razor blade or metal deburr tool can be used to clean up the rough plastic edges left from using the cutoff wheel.

NOTE: Do **NOT** cutout air temperature sensor mount on driver’s side of bumper. This is necessary for reinstallation (See Figure 33).

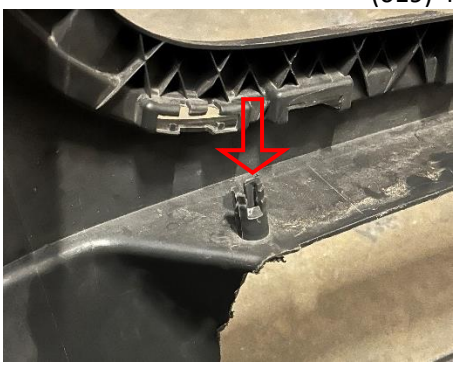


Figure 33: Air Temperature Sensor Mounting Location

NOTE: Do **NOT** cut off the bottom mounting hole in the factory plastic – this hole will be re-used to secure the factory plastic once re-installed. Cut to the inside of this hole. See Figure 34.

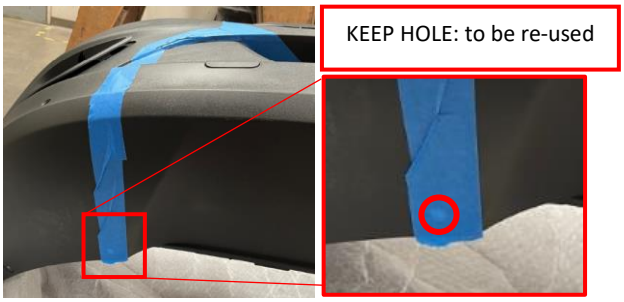


Figure 34: Bottom Mounting Location

Front Bumper Installation:

28. Reinstall only the two driver’s side parking sensors into the plastic factory bumper if applicable. Leave the remaining parking sensors uninstalled for the time being.
29. Reinstall the factory plastic bumper back onto the vehicle using only the top two torx bolts shown in Figure 4. Leave both outer wings loose for the time being (Reference Figure 35).

Figure 35: Loosely Installed Factory Front Bumper

30. Partially install the aluminum front bumper onto the steel winch tray (Figure 36). Route the parking sensor wiring harness from behind the factory plastic bumper on the passenger side (Figure 36), through the two relief cuts in the aluminum front bumper (Figure 37), and back behind the other side of the factory plastic front bumper on the driver side(Figure 36).

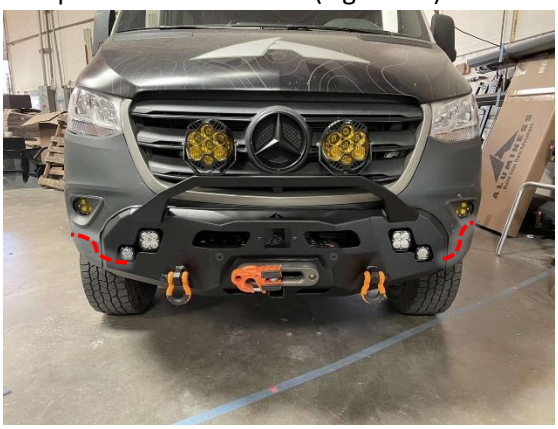


Figure 36: Parking Sensor Wiring Harness Routing For Factory Bumper

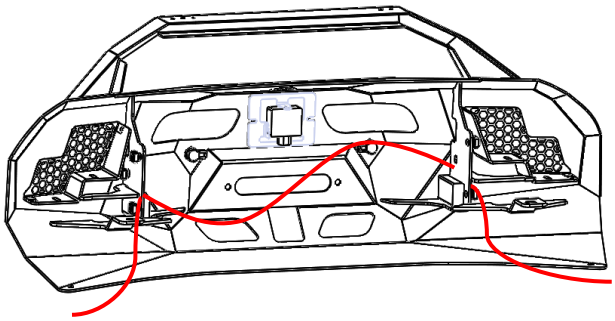


Figure 37: Parking Sensor Wiring Harness Routing

31. Ensuring the wiring harness won't get pinched, slide the aluminum front bumper into place aligning the six (6) mounting holes of the bumper to the winch tray (3 per side).
32. Install the 1/2" hardware through each mounting location, three (3) per side. Access may be gained from inside the bumper, and the ½" bolt [70036], washer [70035], and split washer [70106] can be threaded into the weld nuts on the outside of the steel winch tray (Figure 38).

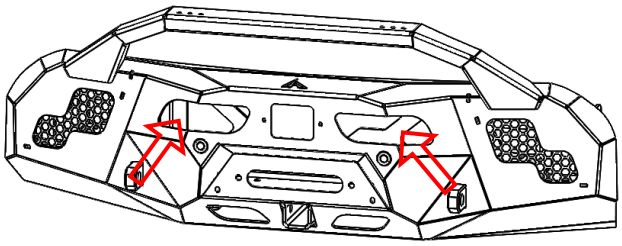


Figure 38: Access Holes for Mounting Bolts

33. Adjust bumper into desired position ensuring all rubber trim is properly seated.
34. Tighten all ½" hardware.
35. Using four ¼" Fender Washers (70039), two 1/4-20 x 1" Bolts (70060), and two ¼-20 SS Nylock Nuts (70008), bolt the lower tray of the bumper to the factory plastic bumper as shown in Figure 37 and Figure 38.

Figure 37: Lower Tray Mounting Bolt Location (Outside)

Figure 38: Lower Tray Mounting Bolt Location (Inside)

36. Tighten all ¼" hardware.
37. Connect front radar sensor through the back of the bumper if applicable.
38. Reinstall the air temperature sensor back into position on the factory plastic front bumper (Figure 33).
39. Reinstall all the parking sensor back into factory position or into the aluminum front bumper if not done so already and as applicable.
40. Reinstall the fog lights as applicable.
41. Reinstall the factory plastic front bumper wings onto the vehicle. Reference Figure 8.
42. Reinstall the plastic fenders into the plastic front bumper using the factory plastic rivets. Reference Figure 5 - Figure 7.
43. Re-install the grille onto vehicle. Reference Figure 2 - Figure 3. Ensure all tabs are fully engaged upon reinstallation.

NOTE: The grille may be tight against the bull bar. Carefully work it into position. Painter's tape can be used to protect the grille if necessary.

44. Re-install the final three (3) torx bolts to secure the grille shown in Figure 1.
45. Ensure all the sensors are working correctly (as applicable) by driving around 15-30 mins. Adjust as needed. Keep in mind the notes listed along with Figure 22 - Figure 24.
46. Complete fairlead installation as applicable for your winch.
47. Enjoy your new Aluminess bumper!

General Torque Values

Size	Stainless Steel	Zinc	Grade 8
#6-32	10 lb-ft	--	--
#8-32	18.4 lb-ft	--	--
#10-32	26.6 lb-ft	--	--
1/4"-20	5.3 lb-ft	7.8 lb-ft	9 lb-ft
5/16"-18	10.9 lb-ft	16 lb-ft	18 lb-ft
3/8"-16	19.4 lb-ft	28.3 lb-ft	33 lb-ft
7/16"-14	31 lb-ft	45 lb-ft	52 lb-ft
1/2"-13	47 lb-ft	69 lb-ft	80 lb-ft
M6	4.7 lb-ft	5.8 lb-ft	--
M8	11.3 lb-ft	14.1 lb-ft	--
M10	22.3 lb-ft	27.9 lb-ft	--
M12	38.9 lb-ft	48.7 lb-ft	--

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1. Lifetime Warranty. Aluminess provides a lifetime warranty of its products to the original retail purchaser provided such products are installed correctly according to the official Aluminess installation instructions. Any modification to the original product design, function or use of any Aluminess products will void the Aluminess warranty. Aluminess will have sole discretion to determine warranty eligibility for any and all Aluminess products sold to any purchaser.

2. Limited Remedies. Subject to any limitations and exclusions described herein, and subject to Aluminess' determination of warranty eligibility, Aluminess will remedy defects in product materials and/or workmanship of any product by repairing or replacing such defective product, which shall be within Aluminess' sole discretion, without charge for parts or labor. Aluminess may elect in its sole discretion not to replace a defective product and issue the purchaser a refund equal to the purchase price of any defective product or purchaser may elect to receive a credit (equal to such refund) toward the purchase of new Aluminess products. Repair or replacement of a defective product or providing a refund or credit to purchaser will be purchaser's exclusive remedy under this warranty. Damage to a purchaser's vehicle, cargo and/or any other person or property is expressly excluded from the Aluminess warranty.

3. Modification. Aluminess products are designed to be mounted to factory equipped vehicles. Aftermarket additions to such vehicle may or may not require modification of an Aluminess product. The Aluminess warranty does not extend to any Aluminess products that are modified to fit around other otherwise accommodate or be compatible with any aftermarket vehicle accessories or alterations. Aluminess does not guarantee fitment with any other aftermarket accessories or modified vehicle, and it is up to purchaser to determine fitment prior to purchasing any Aluminess product.

4. Damage. Damage to Aluminess products due to normal wear and tear, including, but not limited to, cosmetic issues and superficial scratches, or structural damage to an Aluminess product in connection with any vehicle collisions or other structural degradation in connection with the use of such vehicle (on road or off road) will not be covered by the Aluminess warranty. Additionally, any product user's misuse, neglect, overloading, improper maintenance or improper installation or repair of any Aluminess products are not covered under the Aluminess warranty.

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