



## **FRONT BUMPER INSTALLATION INSTRUCTIONS** **2014+ DODGE / MERCEDES SPRINTER**

### **Please read before beginning**

- *Stainless steel hardware may bind together when tightening—It is recommended that you apply an anti-seize assembly lubricant to the threads of each bolt before assembly*
- *This installation requires two people*

### **Required tools**

- Standard wrench set
- Torx (6 point star head) wrench set
- Flat head screwdriver
- Hammer
- Putty knife
- Razor or box cutter
- Drill, with 1/2" drill bit
- Shears or tin snips



### **Included hardware**

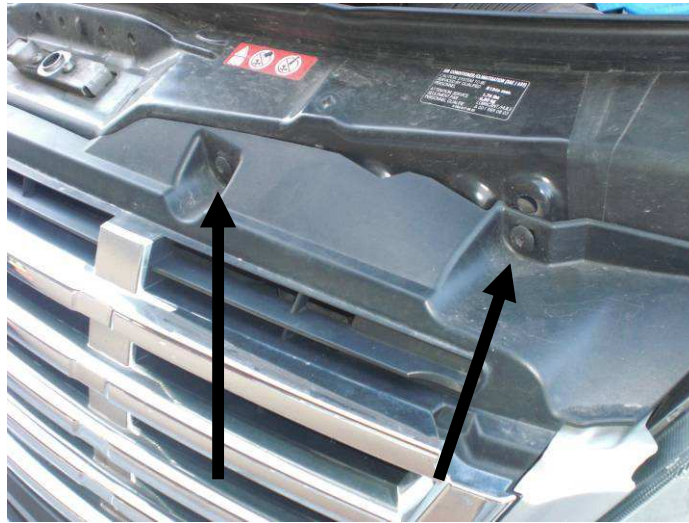
### **Quantity**

• 70103 – 1/2"-13 x 2 1/2" Hex head bolt	4
• 70109 – 1/2"-13 x 5" Hex head bolt	2
• 70035 – 1/2" ID Flat washer	12
• 70033 – 1/2"-13 Nut with nylon locking insert	6
• 70060 – 1/4"-20 x 1" Button head socket cap screw	2
• 70008 – 1/4"-20 Nut with nylon locking insert	2
• 70102 – M8-1.25 x 65mm Hex head bolt	6
• 70101 – M8-1.25 Hex nut	6
• 70027 – 3/8" ID Thick washer	6
• 70111 – 5/16" ID Split lock washer	6
• Steel support brackets	2 pairs
• Fairlead cover	1
• 70008- 1/4-20 Nylock Nuts SS	2
• 70039- 1/4 x 7/8 Fender Washer SS	4
• 70060- 1/4-20 x 1" Button Head Bolt SS	2
• 70207 - #6-32 x 1/2" Philips Bolt	2
• 70208 - #6-32 nut	2
• Keys for winch compartment	1 set
• DEF tank bracket	1

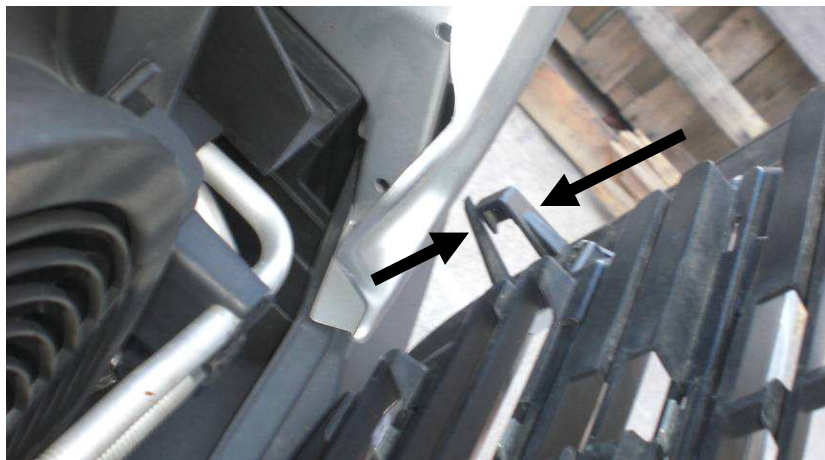


## **Installation Instructions**

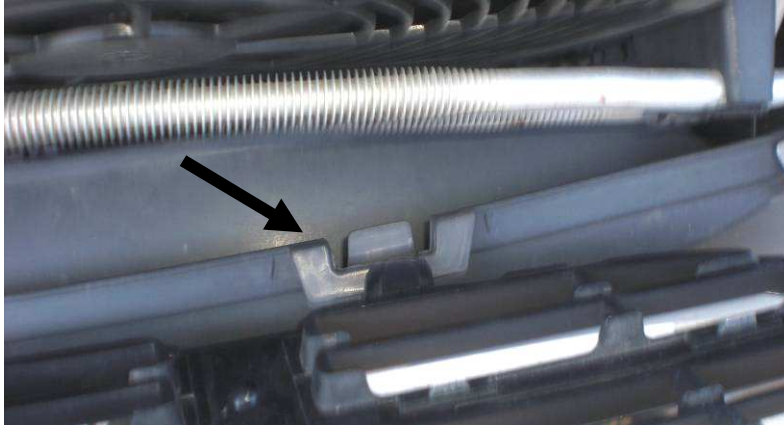
1. To remove the stock bumper, begin by propping up the hood in order to access the grill
2. Remove the Two torx-head bolts and 4 Plastic Pop out clips holding the grill on (indicated by the arrows in figure 1) – do not discard these, you will need them to put the grill back on
3. Once the bolts have been removed, the plastic clips holding the grill on must be released—pull the grill towards you gently to allow some space to put your hand behind it and reach the clips
  - To release the two large clips on the sides of the grill seen in figure 2, squeeze the top and bottom together (indicated by arrows) and push down—be careful, these break easily
  - To release the three bottom clips holding the grill to the bumper cover as seen in figure 3, push down on the tab sticking out from the grill while pulling the grill gently towards you—these
  - The use of gloves is strongly recommended here, as the metal heat exchanger tubes behind the grill are fairly sharp



**Figure 1: Stock grill hardware**



**Figure 2: Grill retaining clips**



**Figure 3: Lower grill retaining clips (top view)**

4. Remove the plastic fasteners holding the bumper cover to the fender liners—there are three inside the fender and two underneath the front edge of the bumper cover on each side as seen in the photos below—in order to remove them, pry up on the center part of the fastener with a flat head screwdriver until it pops up, then the entire fastener may be removed by hand (see picture below)



**Figure 4: (Clockwise from top left) Plastic fastener location in fender well; Plastic fastener locations under leading edge of bumper; Plastic fastener closed (left) and open (right)**

5. Remove the 2 Torx-head bolts at the inner corners of the headlights



**Figure 5: Headlight trim piece torx bolts**

6. Now remove the plate cover shown in the image below and to the left; there are four bolts holding it on—there may be a sensor attached to it; make sure to disconnect the wiring connector
7. Once the plate cover is removed, the two bumper cover mounting bolts are exposed (indicated by circles below and to the right); these may be removed with a 13mm wrench—There are also two large torx-head bolts on top which must be removed, indicated by arrows below.



**Plate cover (left) and plate cover removed (right) showing bumper cover fasteners**

8 Now simply slide the bumper cover forward to remove it—if resistance is encountered, stop and check for fasteners still attached; the bumper should slide off easily. Do not pull it completely off because you will have to remove sensors and fog light harnesses

9. Once you have the bumper pulled out slightly, disconnect the fog lights, collision sensor, and temperature sensor that are clipped into the backside of the bumper.

10. Now the bumper should be exposed; there are four bolts on each side which must be removed, use a 13mm wrench—There may be some frame sealant stuck on the bolt heads; Use a box cutter to scrape it off in order to fit a wrench on the head of the bolt



**Figure 6: Stock bumper, passenger side**

11. Once the bolts are removed, the bumper usually is stuck to the frame of the vehicle because of the frame sealant; In order to release the bumper, gently tap on the seam between the bumper and the frame using a putty knife and hammer as shown in figure 7 below—Make sure there is someone supporting the bumper as you do this so that it does not fall and cause injury once released; once the seal is broken between the bumper and frame, pull the bumper forward on that side—the leverage should release the seal on the opposite side as well
12. Remove the 2 plastic pieces that are located just inside the headlights. You can use a 3/8" socket to remove the Star Shaped bolt if you do not have the correct socket to fit it.
13. Remove the plastic pieces that held the sides of the bumper located underneath the fender right in front of the wheel wells.



**Figure 7: Releasing stock bumper with hammer and putty knife**

14. Take the supplied M8 bolts and thread them into the frame horns as shown in the figure below; insert three per side, with no bolt installed on the upper outer hole as shown—tighten these bolts down



**Figure 8: M8 bolts installed on passenger side frame horn**

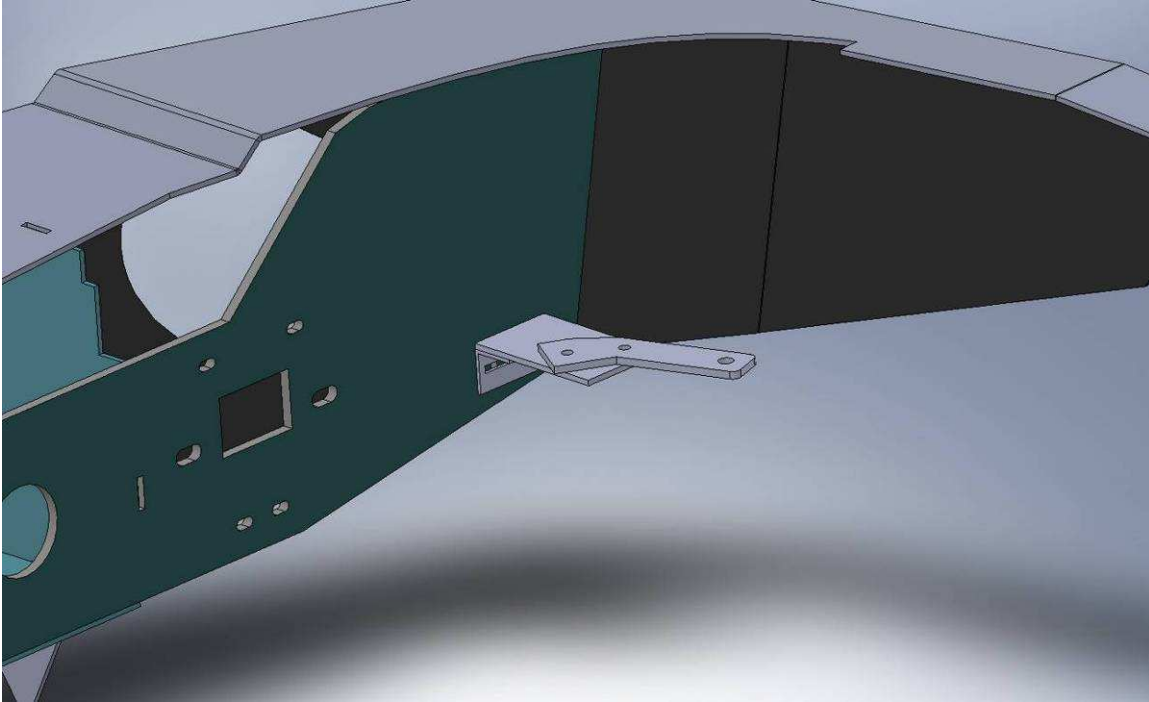
15. Lift up the bumper and install it on the frame horns, aligning the holes in the rear of the bumper with the bolts which were just installed—it should slide on easily
16. Check that the bumper is centered on the car and level
17. With someone supporting the bumper, install the supplied M8 nuts with 3/8" washers on the bumper surface, then 5/16" split washers beneath the nut, then snug them down as shown in the image below—do not tighten down fully, as you may want to remove them for a later step



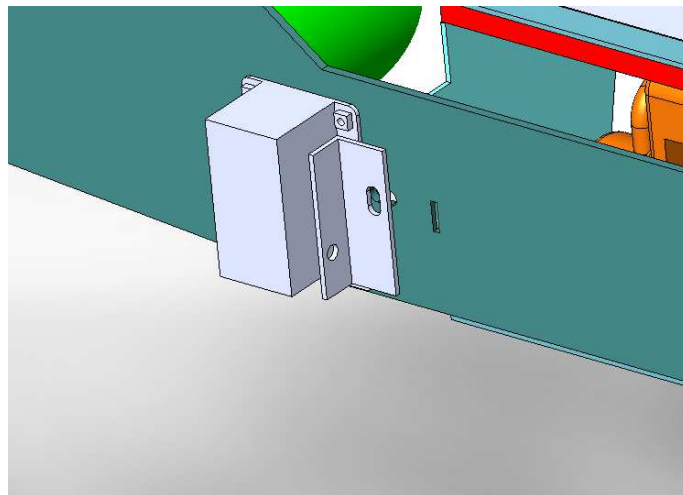
**Figure 9: Frame mounting bolts with lock washers and 3/8" washers installed**



18. With the bumper mounted you will now install the DEF tank bracket if your Sprinter is equipped with a DEF tank in the front location. Assemble the DEF bracket as shown in the picture below. You will then mount the piece that is in the shape of California to the tank. Once the bracket is attached to the tank you can hold the angle part of the bracket up against the backplate of the bumper. Use the holes in the angle as a guide to drill through the backplate of the bumper. Attach the bracket using the  $\frac{1}{4}$ " hardware provided.



19. With the bumper hardware secured, bolt on the steel support brackets as shown in figure 9 below, using the supplied  $\frac{1}{2}$ " hardware—the slotted hole aligns with the hole in the back surface of the bumper, and the smaller hole should be against the lower surface of the side of the frame—do not tighten these bolts down fully yet, you may have to move the bracket slightly



**Figure 10: Drawing of steel support bracket installation**



**Figure 11: Steel support brackets bolted to frame**

20. Using a 1/2" drill bit, drill through the lower holes, into the frame in order to create a hole for the 5" long bolt to pass through—a couple of ways to accomplish this are discussed below
  - a. The simplest and most accurate method is to make sure the brackets are bolted securely to the bumper, and drill as straight as possible through the lower hole in the bracket and into the frame—once the hole has been made, pull the drill out and do the same to the other side of the frame—therefore, you will be drilling 4 separate holes; Slide the 5" bolt through the holes to make sure they line up right—if they don't, take the drill and ream the holes out slightly larger
  - b. The second method is more time-consuming and less accurate, but is practical if you do not have a drill which is small enough to fit in this working space—First, with the brackets firmly secured, mark the lower hole locations on the frame using a center punch or scribe; make sure you mark the exact hole center—Then, remove the brackets and bumper and drill the holes out which were just marked—Reinstall the bumper and brackets and see if the bolt passes smoothly through all of the holes—If not, ream out the holes until the bolt is able to pass through the brackets and frame hole
21. Install the 5" bolt through the brackets and frame using the supplied washers and nylon locking nut, then tighten down all of the 1/2" hardware
22. Tighten down the M8 hardware holding the bumper to the frame
23. If you have a winch, install it now—you will be unable to do so after the following steps





***Figure 12: Bumper door, rear portion installed***

24. Re-install the grill, making sure the tabs facing upwards from the door are protruding up into the square slots in the lower part of the grill as shown in figure 13 below
25. Mount the Horn to the open hole on the Passenger Side of the back of the bumper
26. Insert the temperature sensor through the angle welded on the back of the bumper. For extra security put a dab of Silicone on the back. This should keep the sensor from bouncing out
27. Mount the Collision sensor to the Plexiglas behind the window in the front bumper using the #6-32 x 1/2" hardware. The Sensor should be pointing straight forward. If you get any alarms going off while you are driving, adjust the sensor up or down.



**Figure 13: Stock grill installed on Aluminess door tabs**

28. At this point, you may wish to trim the inner plastic fender liners so that they do not hang down from behind the bumper—simply cut them with shears or tin snips and re-attach any fasteners to insure that they do not hang loosely
29. Install the fairlead cover on the front face of the bumper using the supplied 3/8" hardware—there are two small 1/4" holes in the fairlead cover for mounting a license plate
30. Finally install the other portion of the door, as shown in figure 14 below, and any lights or accessories at this point—the bumper installation is complete



**Figure 14: Bumper door installed**