



# Rear Bumper Installation Instructions

P/N 210506.6: 2019+ Mercedes Sprinter Rear Bumper with Bike Rack Swing Arm

## Before you begin:

- *Stainless steel hardware may bind together when tightening — apply an anti-seize assembly lubricant to the threads of each bolt before assembly*
- *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
- Painter's Masking Tape
- Drill with a 5/32" drill bit

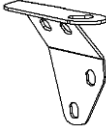
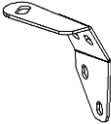
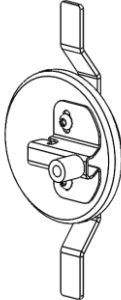


## Included Hardware:

<b>P/N</b>	<b>Description</b>	<b>Quantity</b>
70185	7/16"-14 x 4-1/2" hex head bolt, grade 8	8
70056	7/16"-14 nylon-locking nut, grade 8	8
70057	7/16" washer	16
70060	¼"-20 x 1" SS button head bolt	8
70009	¼" ID washer	16
70008	¼"-20 nylon-locking nut	8
70432	3/8"-16 x 1" SS hex head bolt, serrated flange	2
70246	Antiseize bolt lubricant packet, 2g	1
70078	10-32 x 1" SS Counter Philips head	4
70005	SS No. 10 washer	4
70004	SS 10-32 Nylock Nut	4
70479	Bit, 5/32" hex, tamper-resistant	1
401132	¼" Hex Bit Holder, Key Chain	1



**Additional Parts:**

<b>PN</b>	<b>Description</b>	<b>Quantity</b>	<b>Picture</b>
350577	Axle support bracket, driver	1	
350577.1	Axle support bracket, passenger	1	
351550	Emblem Replacement Assembly ( <i>pre-assembled</i> )	1	

**Stock Bumper Removal:**

1. Remove license plate.
2. Remove stock hitch by unbolting the eight (8) bolts underneath the vehicle. Disconnect any wiring connected onto the hitch before lowering (towing plug, parking sensor, etc...). Reference Figure 1.  
CAUTION: Unbolting will allow the hitch to fall if not properly supported.



Figure 1: Four (4) of the Hitch Mounting Bolts

*PRO TIP: The entire installation is much easier if you lower and remove the spare tire. Then replace once complete or install onto your new bumper.*

3. Remove the seven (7) torx bolts holding on the plastic rear bumper as indicated in Figure 2:



Figure 2: Torx Bolts on the Rear Bumper

4. Remove the two (2) plastic rivets holding on the plastic rear bumper from underneath the vehicle, close to the spare tire carriage. Reference Figure 3 and 4.



Figure 3: Plastic Rivets Underneath Bumper



Figure 4: Example of Plastic Rivet

- Remove the side panel plastic by gently pulling away on the plastic from the vehicle to expose additional bumper attachment points. Start from the rear wheel well working towards the back of the vehicle. Reference Figure 5.

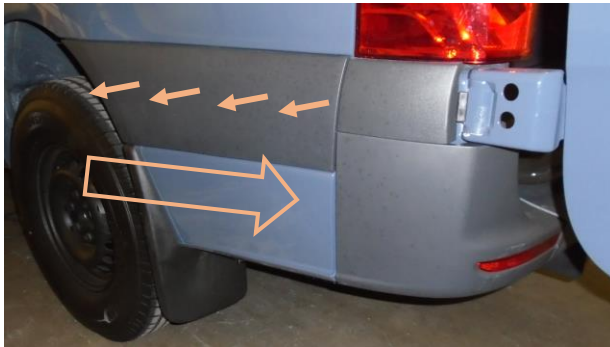


Figure 5: Side Panel Removal

- Remove the plastic rivets anchoring the plastic rear bumper assembly on both sides of the vehicle (see Figure 6).



Figure 6: Plastic Rivets Underneath the Side Panel

- Disconnect the tabs connecting the smaller plastic panel on top from the plastic rear bumper. Once disconnected, gently pull away from vehicle to remove. Retain small panel and repeat on opposite side. Reference Figures 7-8.



Figure 7: Removing Small Plastic Panel from Rear Bumper



Figure 8: Small Plastic Panel Removed

- Remove the plastic rear bumper from the rear of the vehicle, disconnecting any wiring that has not been done so already.
- Remove blind spot assist sensor from plastic rear bumper if applicable.
- Remove the air pressure relief inserts from each side of the vehicle by squeezing each side and pulling away from the vehicle. Reference Figure 9.



Figure 9: Air Pressure Relief Insert Removal



11. Remove the Mercedes Emblem from the rear passenger door by unscrewing the two torx bolts and peeling the adhesive off.

PRO TIP: Use a hair dryer or heat gun to allow the adhesive to come off easier.

### Rear Bumper Installation:

12. Install the axle support brackets (see “Additional Parts”) loosely onto the axle of the rear bumper using the 3/8” bolt, split washer, and flat washer. Reference Figure 10.

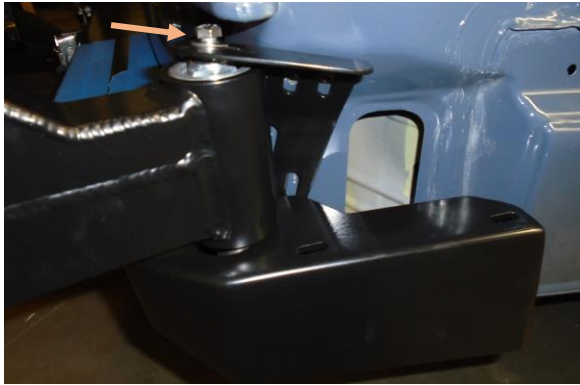


Figure 10: Pre-Mounting Axle Support Brackets

13. Install new rear bumper by lifting up to vehicle and inserting supplied 7/16” hardware through the hitch mounting locations on the vehicle. Do not yet tighten hardware.

PRO TIP: While lifting the bumper into place, shift the exhaust to allow the bumper to pass with ease.

14. Position rear bumper into desired position front-to-back. Tighten 7/16” mounting hardware to fix into position. Tighten hardware to 63 ft-lbs of torque.
15. Position the axle support brackets up to the contours of the vehicle. Using the holes in bracket as a template, drill through outer surface of vehicle. Reference Figure 11.

PRO TIP: Use painter’s masking tape to protect bumper as swing arm from drill.



Figure 11: Drilling for Axle Support Bracket

16. Insert and tighten all hardware on axle support bracket using provided 1/4” hardware. Use the access through the insert opening to tighten. Tighten 3/8” bolt on top of axle as well. Reference Figure 12.



Figure 12: Tightening Hardware Through Insert Opening

17. Install the trim assemblies temporarily to verify clearances around axle system and fitment onto vehicle. Reference Figure 13.



Figure 13: Installation of the Trim Assembly

PRO TIP: Mounting from the vehicle to the hitch and from the hitch to the aluminum bumper are both adjustable. Loosen associated bolts, position, and re-tighten into desired location on vehicle.



18. Re-install air pressure relief insert into opening.
19. Install blind spot assist into trim assemblies (if applicable) by sandwiching the sensor between the sensor window and the sensor bracket as shown in Figure 14.



Figure 14: Blind Spot Sensor Installation

20. Tighten the trim assemblies onto the bumper from underneath the vehicle using provided 1/4"-20 bolts, washer, and lock washer. Each trim assembly has three (3) mounting locations.
21. Re-install the plastic paneling in starting with the small upper panel. Repeat for both sides.
22. Place the emblem replacement anchor into the cavity left by the Mercedes emblem.
23. Place the emblem replacement backing plate on the inside of the door behind the replacement anchor and sheet metal of the door.
24. Bolt through the backing plate and door into the anchor piece using 1/4"-20 x 1/2" bolts and 1/4" star lock washers.
25. Slowly close the door and confirm the bolts and backing plate do not interfere with either door
26. Re-install license plate onto new bumper
27. Install lights if applicable (license plate light and flush-mounted back up lights).
28. Install the factory trailer plug by lining it up with the trailer plug cutout on the bumper. Make sure the placement of the plug is lined up correctly, then center punch and drill four holes using a 5/32" drill bit. Finally, securely fasten the plug with the provided hardware use 10-32 x 1" bolts (70078), SS washers (70005), and Nylock nuts (70004). Reference Figure 15.



Figure 15: Installation of the trailer plug

### Tire Rack Installation:

29. Loosely fasten the Tire Mount Bracket to the slotted channel, going through the bracket first, using the 3/8" carriage head bolts, washer, and nuts to mount. Reference Figure 15.

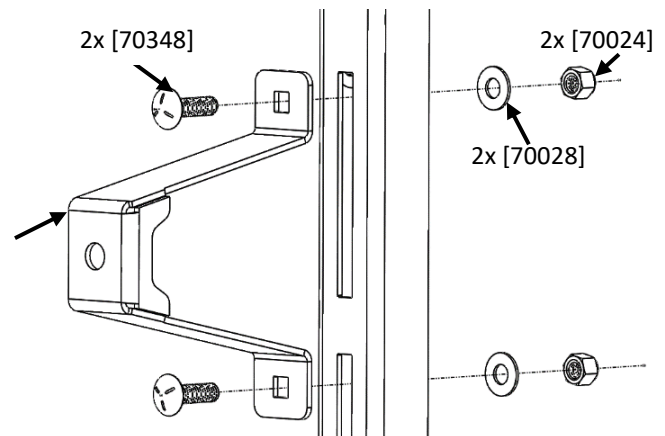


Figure 15: Mounting Tire Bracket

- 1x [351133]
30. Place the mounting bracket in the correct location by placing your tire on the tire supports and then adjusting the bracket vertically until the center hub aligns with the center of the bracket.
31. Once the bracket is in place remove the tire and tighten the hardware holding the bracket in place.
32. Place the tire on the support stands and mount the wheel wedge, using the 5" hex head bolt, washer and star washer. Reference Figure 4 and 5.

**NOTE: Tighten down bolt until snug with wedge (it should be very hard/near impossible to rotate the**



**wedge by hand. Once at this point tighten 2 more full rotations.**

**Note: Preferred torque spec. is 70 inch pounds**



Figure 5: Tire Mount Assembled

33. [Optional] If desired, you can mount a Rotopax to the wheel wedge. After installing the cover [Step 34], bolt the rotopax mount through the wheel wedge cover to the wheel wedge using the security bolts [70478], as shown below in figure 6. Then simply install the rotopax onto the mount.

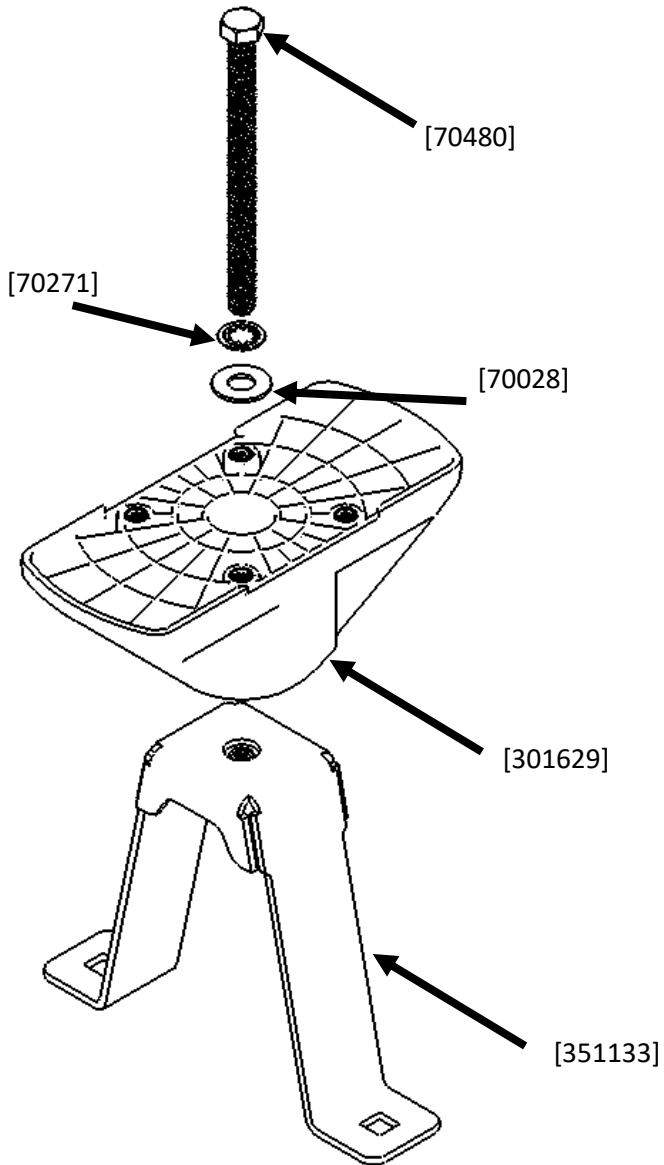


Figure 4: Wheel Wedge Assembly



Figure 6: Rotopax Mount



34. Once everything is securely fastened, bolt the cover to the wheel wedge using the included special bit [70479], and bolts [70478]. Reference Figure 7.

35. Check mounting hardware after first 100 miles of driving and periodically after to verify hardware has not become loose from vibration.  
36. Your new Aluminess bumper is now installed, enjoy!

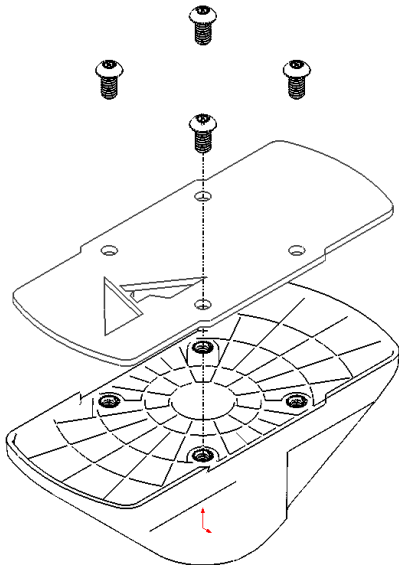


Figure 7: Wheel Wedge, Cover Mounting

<b>General Torque Values</b>			
<b>Size</b>	<b>Stainless Steel</b>	<b>Zinc</b>	<b>Grade 8</b>
#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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