



Base Unit Installation Instructions

P/N 210760: 2019+ Mercedes Sprinter Rear Door Base Unit

Before you begin:



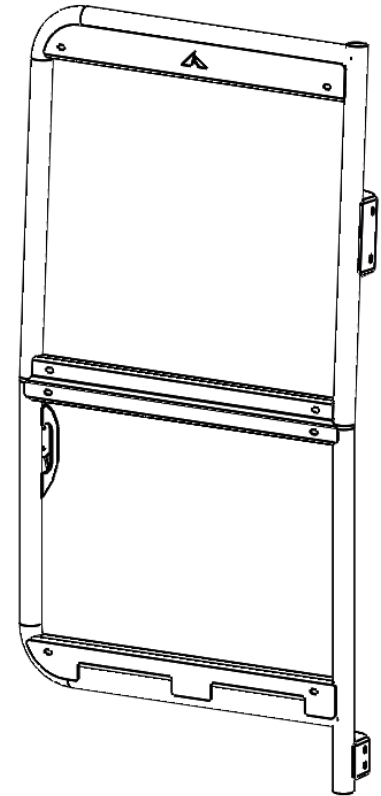
- *Stainless steel (SS) hardware may bind together when tightening — apply an anti-seize assembly lubricant to the threads of each SS bolt before assembly.*
- *Do NOT use an impact gun if this symbol is shown – doing so may strip or cross-thread bolts.*
- **Maximum load capacity is 200 lbs evenly distributed on base unit rack while travelling.**
- *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
- Torx bit set
- Isopropyl Alcohol
- Baby Soap or Dish Soap
- Clean Rag
- Tin Snips or Dremel Cut-Off Wheel
- Painter's Tape (optional)
- Spray Bottle (optional)
- Heat Gun or Blow Dryer (optional)

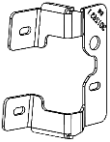
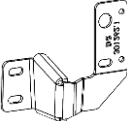

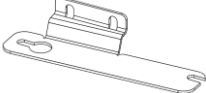



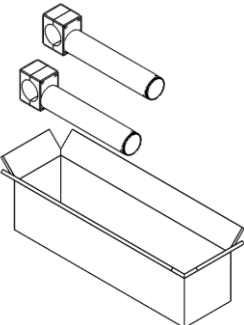
Included Hardware:

P/N	Description	Quantity
70344	5/16"-18 x 1" Button Head Bolt, BLACK OXIDE, SS	4
70345	5/16" ID Washer, BLACK OXIDE, SS	8
70346	5/16"-18 Nylon-Locking Nut, BLACK OXIDE, SS	4
70219	M8-1.25 x 40mm, Fully Threaded, SS, Hex Head Bolt	6
70111	5/16" ID Split Washer	6
70079	#10-32 x 1/2" Philips head bolt, SS	4
70004	#10-32 Nylon-Locking Nut, SS	4
70060	1/4"-20 x 1" Button Head Bolt	4
70008	1/4"-20 Nylon Locking Nut	6
70009	1/4" ID SS Washer	8
70038	1/4" – 20 X 2 3/4", Phillips head Screw, SS	4
70039	1/4" x 1" Fender, Washer, SS`	4
70040	1/4" Countersunk, Washer, SS	4
70436	3/8" ID x 1" OD cushioning washer	2
70449	1/4"-20 SS weld nut	2
70246	Antiseize Bolt Lubricant Packet, 2g	1
301312.1	Impact Resistant Tape, upper hinge	1
301312.2	Impact Resistant Tape, lower hinge	1
301312.3	Impact Resistant Tape, center hinge	1
401021	Door Limiting Strap	1
401022	Webbing Anchor, 1" Webbing	1





Additional Parts:

<i>Part Number:</i>	<i>Description:</i>	<i>Quantity:</i>	<i>Picture:</i>
350650	Upper Hinge Bracket, Passenger	1 ea.	
350652	Lower Hinge Bracket, Passenger	1 ea.	
350852	Emblem Replacement (pre-assembled)	1 ea.	
350663	Door Seam Bracket	1 ea.	
350638	Hard Stop, Strap Bracket	1 ea.	
350676	Hard Stop, Strap Clamp	1 ea.	
301258	M8 Machined Spacer	3 ea.	
210618	8" Tire Support Post (PAIR)	1 box	

Protective Tape Application:

1. Remove the Mercedes Emblem from the rear passenger door by unscrewing the two (2) torx bolts and peeling the adhesive off.

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

2. Cut the supplied protective tape into shape using the templates at the end of the installation instructions to provide additional

protection for the door. Each bracket is designed to contact only at the door edges, but enough protective tape is provided to cover the entire overlapping area. Make sure that the sticky side is oriented correctly while cutting and applying (white backing towards vehicle). Reference Figures 1 & 2.



Figure 1: Protective Tape Locations on Door

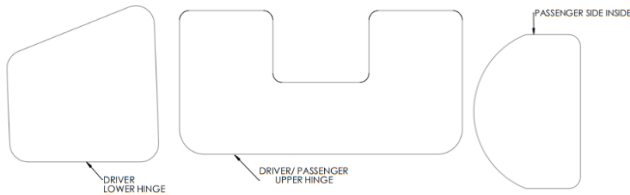


Figure 2: Template Examples

3. Dry-fit the corresponding brackets around the door in each location to find the desired position for the protective tape on the vehicle. Use painter's tape to outline application area of protective tape if desired.
4. Apply the protective tape to each location, one at a time, using the method described below (wet application technique).
5. Prepare the surface for protective film application:
 - a. Clean the area around each hinge with isopropyl alcohol and rag.
 - b. Wash your hands thoroughly.
 - c. Do not apply in direct sunlight
 - d. Apply in temperatures above 60°F.
6. Spray the surface thoroughly with water and do not wipe down the surface.
7. Remove the liner from the protective tape while spraying the adhesive side with water.
8. Apply the protective tape to the outside of the door at the upper hinge, lower hinge, or center latching location. On the hinge side of the door, leave approximately 1/2" of tape overhanging to be wrapped around the edge of the door

- (contact zone). Leave the tape overhanging for now.
9. Squeegee all air bubbles out starting at adhered edge. Press with your fingers first, and squeegee only if needed.
 10. Wrap remaining protective tape around the door edge.
 11. The adhesion process can be speed up by creating a 3:1 water-alcohol solution (3-parts water, 1-part alcohol) and spraying between the door and tape (lift section up and spray adhesive side).

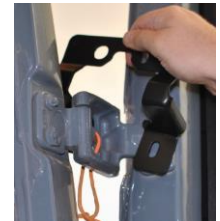
Bracket Installation:

12. Install the upper hinge bracket by:

- a. Remove only the lower torx bolt, *on the door*.



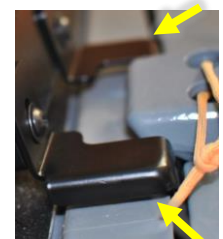
- b. Fit the upper hinge bracket over the hinge.



- c. Rotate into place.



- d. Fit the bracket over the upper torx bolt and rotate into desired position. Make sure the bracket is not contacting the sheet metal on the other side of the door, at either the top or the bottom of the bracket.





e. Install a M8 bolt and 5/16" split washer into the bottom hole. Tighten the bolt to ~17 ft-lbs (23 Nm).



f. Remove upper torx bolt and install a M8 bolt, 5/16" split washer, and **M8 machined spacer**.



g. Tighten down second bolt to ~17 ft-lbs (23 Nm)



13. Install the lower hinge bracket following the same procedure detailed in Step 12 and by installing over the hinge from the bottom up. Reference Figure 3.

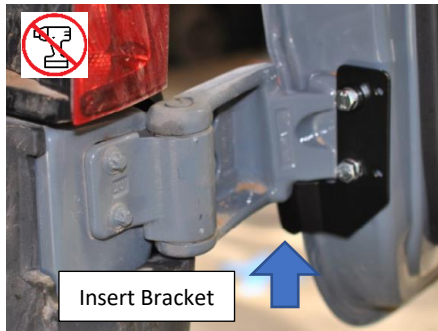


Figure 3: Lower Bracket Installed

14. Install the door seam bracket by completing the following steps. Note: be careful when inserting parts into the door – if they become dislodged, they can fall into the door and will be difficult to retrieve.

a. Remove the two (2) door plugs closest to the emblem.



b. Assemble the door seam bracket hardware in this order *exactly* – 1/4"-20 weld nut (projections towards rubber), 3/8" cushioning washer, 1/4" ID washer, 1/4"-20 x 1" bolt.



c. Insert one end of the weld nut through one of the door seam holes.



d. Rotate the weld nut through into to the door seam.



e. Fold the cushioning washer and insert into the hole. Note: trying to **remove** the cushioning washer once inserted is difficult; removal will likely destroy washer. Only insert once you're ready.



f. Once inserted, the washer should prevent the assembly from falling through – carefully verify.



g. Insert door seam bracket over the inserted hardware.





- h. Slide the bracket down while aligning the two (2) holes at the location of the emblem (inserting hardware can be useful).



- i. While applying slight backpressure, tighten the door seam bracket down.



Base Unit Installation:

15. Install the base unit using the provided hardware:
- Loosely install all bolts through the brackets and base unit before tightening.
 - Use the 5/16"-18 x 1" bolts for the upper and lower hinge brackets.
 - Use 1/4"-20 x 3/4" bolts for the center bracket, bolting through the door seam bracket, the door seam, the emblem replacement bracket, and base unit (See Figure 4).

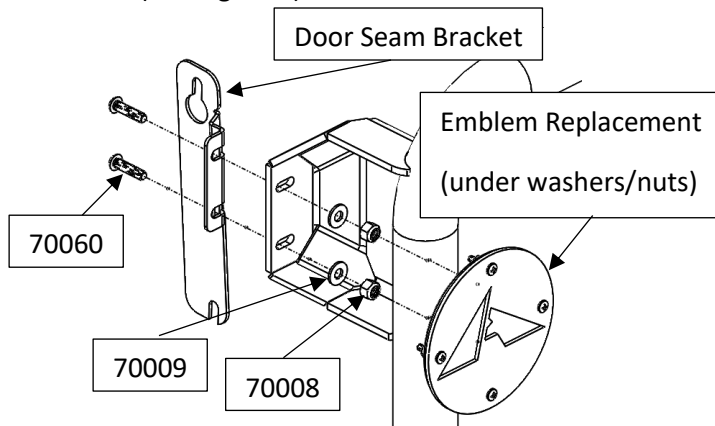


Figure 4: Emblem Replacement and Door Seam Bracket Installation

- Tighten the upper and lower hinge brackets first.
16. With all bolts tightened, verify the hinge brackets and inner door brackets have appropriate clearances with the body while

slowly opening and closing both rear doors. Adjust as needed.

Limiting Strap Installation (Optional):

17. Install the hard stop strap bracket onto the lower hinge by completing the following:

- Remove only the lower torx bolt, *on the vehicle*.



NOTE: A 8mm – 12 point socket may provide enough 'bite' to remove the two torx bolts. HOWEVER, do so at your own risk – using the improper tool for the job may result in stripping the bolts. Do NOT use an impact gun to remove these bolts.

- Install the bracket over the upper torx bolt with the provided M8 bolt and 5/16" split washer through the bottom hole. The larger hole must be on top. Tighten M8 bolt to ~17 ft-lbs (23 Nm).
- Remove the upper torx bolt and install a M8 bolt, 5/16" split washer, and **M8 machined spacer**.



- Tighten down second bolt to ~17 ft-lbs (23 Nm).

18. Install the door strap onto the hard stop bracket using the strap clamp to secure it. Feed the strap clamp through the largest eyelet in the strap and bolt it to the hard stop bracket. Direct the strap towards the lower hinge when tightening down the clamp. Reference Figure 5 and 6.

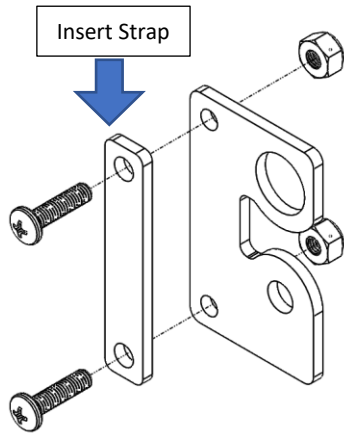


Figure 5: Strap Clamp Assembly



Figure 8: Door Limiting Strap Installed

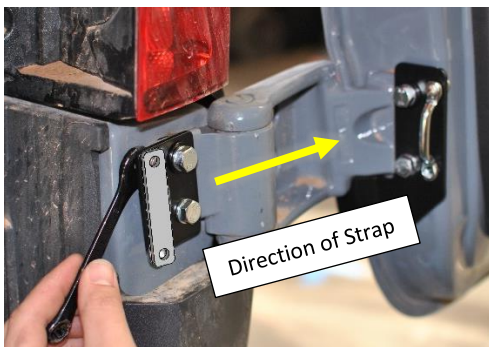


Figure 6: Strap Clamp Install onto Hard Stop Bracket

19. Open the door partially so that you can thread the limiting strap into place.
20. Install the webbing anchor onto the lower hinge bracket. Be sure to first thread the anchor through door strap (reference Figure 7 - 8).

21. With the strap fully installed, verify clearances at the fully opened position between the product and the side of the van. Also verify clearances at the lower hinge as the door is slowly.
22. If mounting a box is desired, grab your included 8" support posts [350662]. Unscrew the bolts holding the pipe clamp together, and place the posts facing out on the bottom of the pipe of the base unit. Adjust the posts so that they are level with the van and evenly spaced over where you want the box to sit. Tighten the pipe clamp support posts down.
23. Mark and drill 5/16" holes through the back of your box into the cross pipe in the middle of the base unit, and through the bottom of the box into the support posts. Secure box to rail using the hardware shown in figures 9 and 10 below.

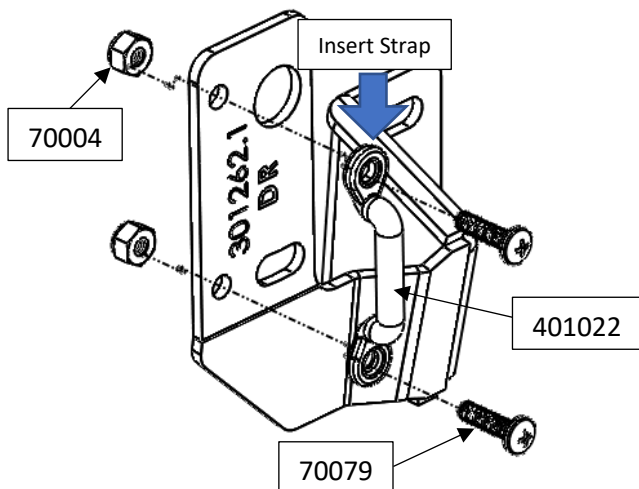


Figure 7: Installation of Webbing Anchor onto Bracket

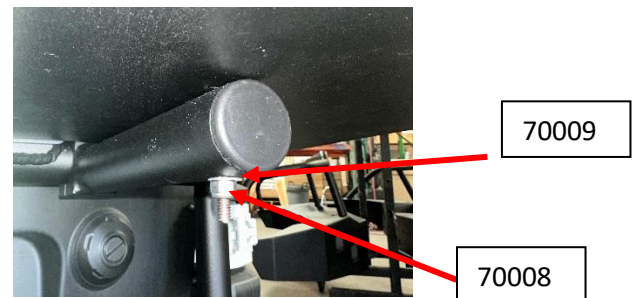


Figure 9: support post mounting

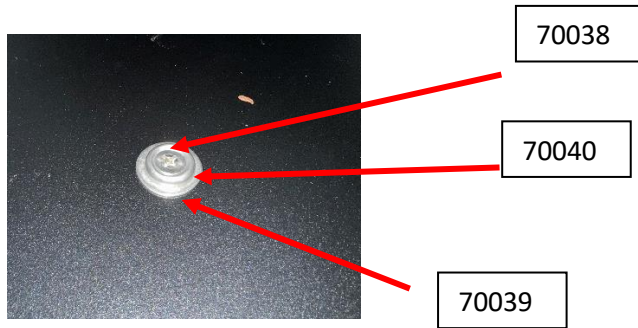


Figure 10: inside box

24. Complete the installation of any additional Aluminess products by following the separately provided instructions.
 - a. Vertical Bike Rack System (PN 210551)
 - b. Horizontal Bike Rack System (PN 210552)
25. Check all mounting hardware after first 100 miles of driving and periodically after to verify hardware has not become loose from vibration.
26. Your new Aluminess Base Unit is now installed, enjoy!

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	--



Aluminess Products, Inc. (Aluminess) Warranty

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.
5. Use of the Products. Aluminess products are designed for off road vehicle use. Installing Aluminess products on a vehicle may exceed the factory designed capabilities of such vehicle and could potentially lead to vehicle damage. Aluminess will not be responsible for any damage caused to a purchaser or user's vehicle or any vehicle accessories caused by the use of any Aluminess products. It is to the sole responsibility of purchaser to inspect and ensure that the intended vehicle and Aluminess products are suitable and compatible for travel on road and off road. No seller nor any manufacturer of Aluminess products will be liable for any loss, damage or injury directly or indirectly arising from the use of any Aluminess products. Before using any Aluminess products, the purchaser or user will determine the suitability of the product(s) for their intended use(s) and the purchaser or user shall assume all responsibility and risk in connection therewith.
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