




Heavy Duty Hinge Bracket Installation Instructions

P/N 210789.1: Mercedes Sprinter 19+ Rear Door Heavy Duty Hinge Bracket Kit DS

Before you begin:

- This product is only compatible with Mercedes Sprinter vehicle platforms with the 180 degree hinges. Part Number 210777.1 is available for purchase to replace the 270 degree hinges with the factory OEM 180 degree hinges.
- 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 on Rear Door Product with Heavy Duty Brackets Installed is 255 lbs.**
- Unless otherwise specified, refer to the general torque value at the end of the instructions for specified torque values



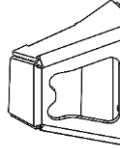
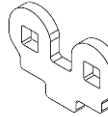
Required Tools:

- Standard and metric wrench set
- Standard and metric socket set

Included Hardware:

P/N	Description	Quantity
70277	Bolt, Grade 5 Square Neck Carriage, 5/16-18 x 1.5", SS Black Oxide	4
70369	Bolt, Grade 5 Square Neck Carriage, 5/16-18 x 1", SS Black Oxide	4
70345	5/16" ID Washer, BLACK OXIDE, SS	8
70346	5/16"-18 Nylon-Locking Nut, BLACK OXIDE, SS	8
401096	2" x 1/8" Foam Strip	9"
70246	Antiseize	1

Additional Parts:

Part Number:	Description:	Quantity:	Picture:
351571.1	Rear Door Lower Hinge Bracket, Heavy Duty, DS	1 ea.	
351570.1	Rear Door Upper Hinge Bracket, Heavy Duty, DS	1 ea.	
351572.1	Rear Door Upper Hinge Bracket, Upper Retaining Plate, DS	1 ea.	
351573.1	Rear Door Lower Hinge Bracket, Lower Retaining Plate, DS	1 ea.	



NOTE: This is a SUPPLEMENTAL installation for the Heavy-Duty Hinge brackets ONLY. The Sprinter Rear Door Ladder or Tire Rack (P/N 210718 or 210713) is sold separately - follow the separately provided instructions for installation of the rear door rack, using these instructions to use the HD brackets during installation.

NOTE: This product requires the vehicle to have 180 degree hinges installed.

Heavy Duty Mounting Bracket Preparation

1. Cut foam stripping (401096) into one 4.5" section for the Upper Heavy-Duty Bracket (351570.1) and one 4" section for the Lower Heavy-Duty Bracket (351571.1). Put over the outside face of the Heavy Duty door hinge brackets and cut holes out for the bolts as shown in Figure 1 and Figure 2. Cut excess foam off as needed.



Figure 1: HD Upper Bracket with Foam Tape



Figure 2: HD Lower Bracket with Foam Tape

Heavy Duty Mounting Bracket Installation:

2. Installing the HD brackets to a Sprinter Rear Door Ladder or Tire Rack prior to installation onto the vehicle has been found to be the easiest way of installing these brackets. If the rear door rack was previously installed onto the vehicle, unbolt the rack and remove from vehicle.
3. Install the Upper Heavy-Duty Hinge Bracket (351570.1) to the upper mounting blade on the Sprinter Rear Door Ladder or Tire Rack using 2X - 5/16" x 1" Carriage bolts (70369), 2X - washers (70345), and 2X - Nylock nuts (70346), loosely securing the bracket to the base unit as shown in Figure 3. Do NOT tighten hardware.

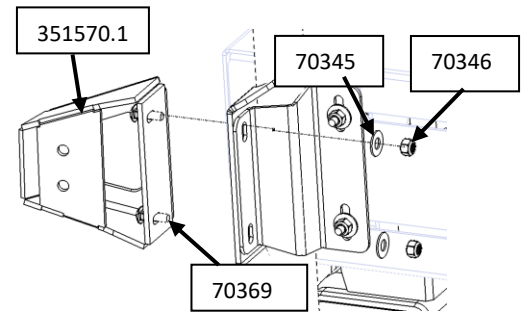


Figure 3: Heavy Duty Upper Hinge Bracket Installation

4. Repeat Step 3 for the Lower Heavy-Duty Hinge Bracket (351571.1) and the lower mounting blade of the Base Unit. Use 2X - 5/16" x 1" Carriage bolts (70369), 2X - washers (70345), and 2X - Nylock nuts (70346), loosely securing the bracket to the Base Unit as shown in Figure 4. Do NOT tighten hardware.

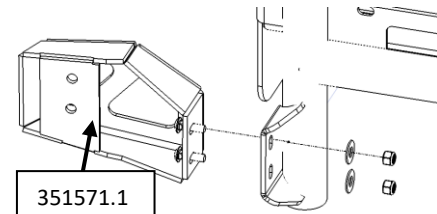


Figure 4: Heavy Duty Lower Hinge Bracket Installation



Mounting Rear Door Ladder or Tire Rack assembly to Van:

5. Insert 2x 5/16" Long Carriage bolts (70277) into the upper retaining plate (351572.1) and lower retaining plate (351573.1) as shown in Figure 5 and Figure 6.

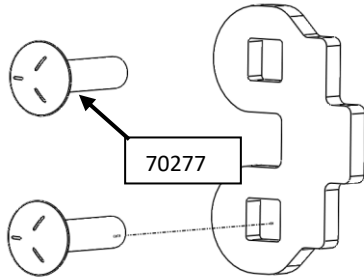


Figure 5: HD Upper Backing Plate Hardware Routing

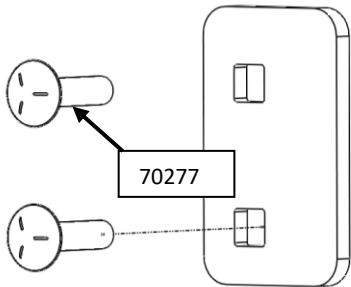


Figure 6: HD Lower Backing Plate Hardware Routing

6. Insert the backing plates into their respective factory hinges with the carriage bolts inserted through the hinge, pointing away from the vehicle as shown in Figure 7 and Figure 8. Note the orientation of the Backing Plates MUST be exactly as shown. If the bolt holes do not align perfectly, try flipping the Backing Plate around.



Figure 7: Lower Backing Plate Insertion



Figure 8: Upper Backing Plate Insertion

7. Close the door to keep the hardware in place and sticking out as shown in Figure 9 and Figure 10.



Figure 9: Lower Hinge Bolt Routing



Figure 10: Upper Hinge Bolt Routing

8. If the hardware is not sticking out, or is falling back into the hinge, fill the void with a piece of cardboard as shown in Figure 11 and Figure 12 as a temporary measure during installation.



Figure 11: Cardboard to Push Bolts Out on Lower Hinge



Figure 12: Cardboard to Push Bolts Out on Upper Hinge

9. Close the vehicle door to help keep the bolts in place during alignment onto the vehicle.
10. Install the Rear Door Base Unit Rack onto the protruding bolts of the HD retaining plates and against the hinges of the van. Fasten the upper

and lower hinges through the Heavy-Duty Brackets onto the preinstalled 4X - 5/16 x 1-1/2" carriage bolts (70277) using 4X - washers (70345) and 4X - Nylock nuts (70346). Refer to Figure 13 and Figure 14.



Figure 13: Heavy Duty Lower Bracket Mounting



Figure 14: Heavy Duty Upper Bracket Mounting

11. Use the separately provided bracket to fasten the Rear Door Ladder or Tire Rack at the centerline of the vehicle (refer to Install Instructions for Sprinter Rear Door Ladder or Tire Rack, 210718 or 210713).
12. Make any final adjustments to align HD brackets and Rear Door Ladder or Tire Rack onto the vehicle. Tighten **ALL** hardware including the bolts securing the Heavy-Duty Brackets to the Rear Door Ladder or Tire Rack. Refer to the torque spec table at the end of these instructions for bolt torque values.
13. Check all fasteners after the first 100 miles and periodically thereafter.
14. Your new Aluminess Heavy-Duty Hinge Brackets are 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	--



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