



# Ladder Installation Instructions

P/N 210562: 2007+ Mercedes Sprinter Ladder Mount for Cruiser Roof Rack

-----BRACKETS ONLY------BRACKETS ONLY------

# 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
- Over tightening bolts can cause the hardware to break due to excessive force. When tightening, be sure to apply only the recommended torque.
- Lower attachment bracket (PN: 350558) will not be covered under warranty. Replacements can be ordered for additional cost.
- The ladder is designed to fit in front of the rear wheel of the van.
- 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

### **Included Subassemblies:**



1X - 350541 Left Upper Bracket

### Included Hardware:

# 1X – 350541.1 Right Upper Bracket

P/N	Description	
70094	¼"-20 X ¾", Buttonhead Bolt	4
70008	¼"-20, Nylock Nut	4
70009	¼" Washer	8
70019	5/16"-18 Nylon-locking nut	2
70020	5/16" ID Washer	2
70201	5/16"-16 x 1" socket cap screw, stainless steel	2
70246	Antiseize Packet, 2g	1



NOTE: If you have purchased an accompanying pair of nerf bars, it is easier to install the ladder **first**.

NOTE: This ladder will only work in conjunction with Aluminess' Sprinter Cruiser Roof Rack.

## Upper Attachment Assembly:

 Locate the desired location on the van for the ladder. Find the location of each upper attachment bracket along the side rail of the cruiser roof rack based on the width of the ladder.

PRO TIP: Face the bracket towards the inside of your ladder for a more polished finished product.

2. Insert the top corner bolt of the bracket to the lower slot of the side rail. Using the upper attachment brackets as a template, mark the side railing of your cruiser roof rack in the adjacent hole on the bracket, drill a ¼" hole through the side rail in this spot. Repeat process for opposite side ensuring that the distance between the brackets matches the distance between the top ladder mounting holes . Reference Figure 1 below.



Figure 1: Upper Attachment Brackets

- Attach the upper bracket using the ¼"- 20 buttonheads (70094) in the marked locations, through the bracket into the roof rack.
- Attach the top of the ladder using the 5/16" hardware through the bracket as shown in Figure 2. NOTE: *BE CAREFUL* to not over tighten and be sure to apply anti-seize to the hardware.



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Figure 2: Ladder Attachment to Upper Brackets

#### Bottom Bracket Assembly:

- 5. With the ladder attached at the top, locate the desired position of the lower attachment bracket. Ensure the ladder is straight compared to the vehicle before finalizing lower bracket placement.
- 6. Hold the lower attachment bracket up to the vehicle body using C-clamps or spring clips. Be sure to align the bottom three holes with the pinch weld.



Figure 3: Lower Attachment Installation

- Using a ¼" drill bit, make three holes through the pinch weld using the bracket as a template for alignment.
- Install the ¼" cap screws, washers, and nuts into the drilled holes. Tighten down bolts to <u>6 ft-lbs. of</u> <u>torque</u>. NOTE: **BE CAREFUL** to not over tighten and be sure to apply anti-seize to the cap screws.
- 9. Place ladder against lower attachment bracket making sure the bottom of the ladder aligns over the threaded studs.
- 10. Install ¼" washers and nuts onto the threaded studs.
- While applying downward pressure to the ladder, tighten the ¼"-20 nuts to <u>6 ft-lbs. of torque</u> fixing the





ladder in place. NOTE: *BE CAREFUL* to not over tighten be sure to apply anti-seize.



Figure 4: Lower Attachment Assembly

- Visually inspect the position of the ladder—if satisfied, tighten down the top bolts to <u>6 ft-lbs. of</u> <u>torque</u> for the ¼" hardware and to <u>11 ft-lbs of</u> <u>torque</u> for the 5/16" hardware.
- 13. Check all fasteners for fitment after 50 miles of driving, and every 1000 miles afterwards. 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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