

INSTALLATION INSTRUCTIONS

NOMAD™ SERIES REAR & SWING OUT BUMPER



Application: 2019 Mercedes Sprinter Rear

Thank you for choosing Backwoods Adventure Mods for your bumper! We value our customers and the off road lifestyle.

Safety First! Thoroughly read all instructions and warnings before beginning the installation. Use your own judgment and, if necessary, have the installation done by a professional.

This bumper is intended for off-road use only. The owner assumes all liability for installation and use. Any sensor will have an altered view when installed in an after-market bumper.

IMPORTANT: The exhaust tailpipe may need to be modified. Check to ensure that the exhaust has a clear, unobstructed path. The exhaust may extend into a little channel into our bumper. While this may look like it fits, make sure you use a cutoff wheel and cut your exhaust a few inches before it goes into the bumper. This will allow the exhaust to breath and not heat up any components or electronics around it.

Hardware Kits Included:

BW00-0018

BW00-0020 (Swing Out Only)

BW00-0039 (Swing Out Only)

[Refer to last page for complete hardware list]



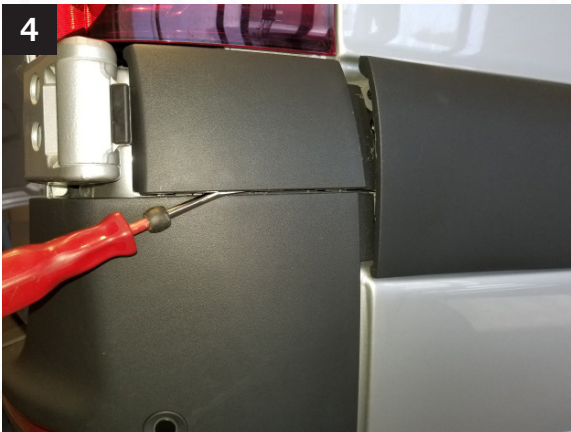
[These Instructions are for both the Nomad Rear bumper and the Nomad Rear Swing Out bumper.]

Remove OEM Bumper:

1. Disconnect battery (both if equipped) prior to performing any electrical work.
2. You may choose to remove your spare tire at this time, but it is not necessary.
3. Using a trim tool, unclip the rear side trim from the body. **Picture 1**
4. Using a small screwdriver or punch, press in on the center the plastic rivets that secure the small plastic cover (under the taillight) to the body. **Picture 2-3**



5. Using a trim tool, separate the plastic cover (below the taillights) from the bumper cover. **Picture 4**
6. Using a trim tool, remove the plastic rivets on the lower side of the bumper cover (Retain these rivets for step 9) and remove the plastic rivets on the underside of the bumper cover. **Picture 5**



7. Remove the 7 torx bolts holding the OEM bumper cover to the body. These are located just under the rear door weather strip and become visible once you open the rear doors. **Picture 6-7**



8. The outer sides of the bumper cover can now be removed (**Picture 8**), and then the center section of the bumper cover can be removed. If equipped with park assist sensors and/or blind spot assist sensors, take care to note the orientation and position of these sensors. If you choose to install them in the new bumper, they need to be installed exactly as they were in the OEM bumper. Disconnect any related wiring harnesses and set aside for installation.

**Note: Results vary when moving the sensors from the OEM location. Drive with care until you have verified that the system functions correctly. Adjustments may be necessary for the system to function correctly. We cannot guarantee our product is compatible with this system.

9. Using the plastic rivets that you retained in step 6, secure the small plastic cover (below the taillights) back to the body. **Picture 9-10**



10. If equipped with a trailer hitch, you will need to relocate the trailer wiring plug. The OEM bracket will need to be cut off of the hitch. Using a grinder with cut off wheel, cut through the weld, discard the bracket, and grind the area smooth. **Picture 11-12**



Install Your New Bumper:

1. If equipped with blind spot assist (BSA): Using the supplied brackets and hardware kit BW00-0018 sub 3, install the BSA sensors into the new bumper. **Picture 13-14**
If your van does not have this system, install the plastic cover only.



2. If equipped with park assist sensors (non swing out only), install the supplied plastic sensor housings in the bumper, then install the parking sensors into the housings in the same orientation and location as they were in the OEM bumper. If not equipped with sensors, install the sensor delete plugs instead.
3. If you ordered backup lights, install them into the bumper at this time using the manufacturer's hardware and instructions.
4. If equipped, install the OEM trailer wiring plug with the hardware from BW00-0018 sub 4.
5. **[Swing Out Bumper Only]** Install the shocks onto the bumper. This can be done later, but it's easier now. There are (4) $\frac{5}{16}$ " nuts in hardware kit BW00-0020 sub 3. **Picture 15-16**



6. **[Swing Out Bumper Only]** Install the wear plate with hardware from kit BW00-0020 sub 4. Install the lower latch catch (U-shaped bracket) with the carriage bolts in kit BW00-0020 sub 5. **Pictures 17-18**
7. Reinstall the trailer hitch (if equipped) using the long bolts from hardware kit BW00-0018 sub 1 from the inside, facing out. Then hang the bumper mounts on the bolts and install the washers and nuts. Center the mounts fore/aft and tighten. Repeat on the other side. **Pictures 19-20**



8. Install the bumper onto the brackets. **IMPORTANT: Team lift to avoid injury and/or damage to the van!** We recommend two people to hold the bumper (one on each side) and a third person to install the bolts from under the van. Take care not to scratch the van when placing the bumper in place. Using the hardware from BW00-0018 sub 2, secure the bumper to the mounts. **Pictures 21-23** Center the bumper side to side, adjust the height to the desired gap under the doors, and tighten the hardware. Carefully check clearance by slowly opening the rear doors to the first stop.



9. If the bumper needs to tilt forward or rearward, or be adjusted fore/aft, you can make these adjustments now using the bolts that secure the mounts to the frame.
10. Reconnect the wiring for the trailer plug, parking sensors, and blind spot assist sensors (if equipped). Wire the reverse lights, if applicable, per the manufacturer's instructions.

This is the end of the installation for the rear, non swing out bumper.

11. Install the swing arms into the bumper with the 3/4" hardware from kit BW00-0020 sub 1. Drop the bolt through from the top. Using the supplied thread locker, install the nut on the bolt and torque until there is some resistance on the swing arm. Cap the holes with the included plastic plugs. **Pictures 24-26.**



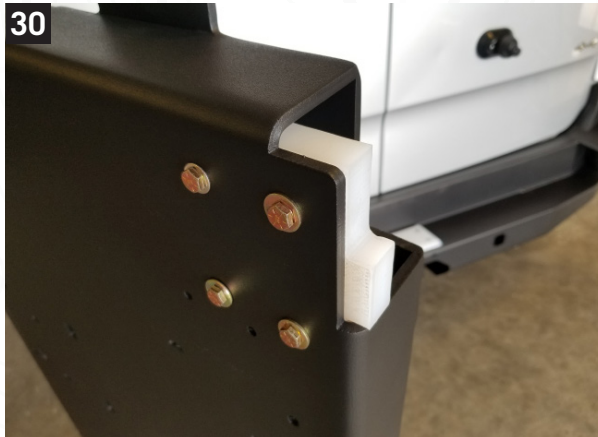
12. Install the accessory plates onto the swing arms, one side at a time. We recommend one person to hold the plate and one person to install hardware. Do not tighten yet. Use the hardware from BW00-0020 sub 2. **Picture 26**
13. Adjust the accessory plates. Use a stack of washers (or anything about $\frac{3}{8}$ " thick) to space the plates off the wear pad. This will account for the extra weight you'll be adding to the plates later. Adjust the plates so that they sit level and square. Have a helper stand back from the van and make sure they look good. Tighten the bolts when you're satisfied with the placement. Keep in mind, this is more difficult to adjust once the accessories, such as the toolboxes, are installed.

[The following set of instructions will result with the passenger side opening first, and the latch will be on the passenger side. If you prefer the driver door to open first, then install the latch setup on the opposite side.]

14. Install the overlap plate onto the passenger side opening accessory plate using the supplied $\frac{5}{16}$ " hardware from kit BW00-0020 sub 3. Install the rubber strip as pictured. **Pictures 27-29**



15. Install the upper plastic latch pad (the thickest one included), using hardware from kit BW00-0039. **Pictures 30-31**



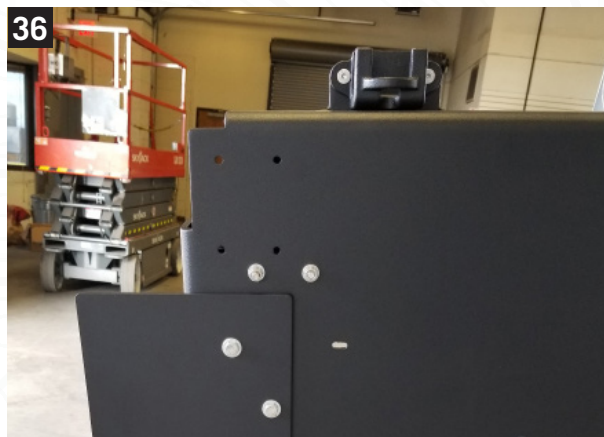
16. Install the swing out stop and plastic pad on the driver's side swing arm, using hardware from BW00-0039 (the countersink hardware secures the plastic pad to the bracket). Use the 1" long, 1/4" bolts from kit BW00-0020 sub 5 to secure the bracket to the swing out. **Pictures 32-33**



17. Install the lower latch rod support into the bottom two holes in the passenger side plate using the supplied countersink bolts in BW00-0020 sub 5 (one long, one short). Install the upper latch rod support into the 2 holes immediately above the overlap plate on the passenger side using the supplied counter sink bolts in BW00-0020 sub 5 (one long, one short). **Pictures 34-35**

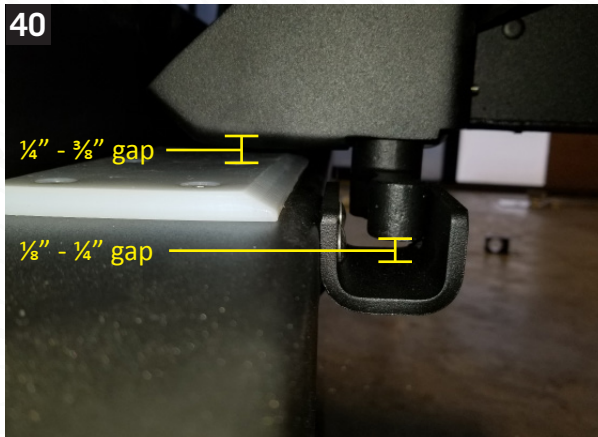


18. Install the handle catch onto the passenger side accessory plate using the remaining countersink hardware from BW00-0020. **Pictures 36-37**



19. Drop one of the latches (teardrop shaped part with a square hole) into the upper latch rod support. Drop the latch rod down through the latch, and temporarily tighten the set screw in the latch. Install the other latch into the lower latch rod support from the bottom side. Loosen the set screw in the top latch and adjust the rod so that it's flush with the bottom latch. Tighten the set screws on both latches. This may take some adjustment. The set screw in the upper latch keeps the rod suspended, so use this one to set the height. Adjust so that the bottom of the lower latch is 1/8" to 1/4" above the lower latch catch. Some up/down adjustment may be necessary for smooth operation.

20. Install the handle at the top of the latch rod and tighten the set screw. **Picture 38-41**



21. At this point, all of the components are installed. You may need to adjust either or both of the swing out doors, inwards or outwards so that the latches will catch. Carefully open the right side swing out door and the right side van door and make sure the emblem does not hit the left side swing out. **Pictures 42-43**





Application: 2019 Mercedes Sprinter Rear

Hardware Kit BW00-0018:

Sub 1 (Attach Mount to Frame)

- (8) M12x110
- (16) M12 Flat Washers
- (8) M12 Lock Washers
- (8) M12 Hex Nuts

Sub 2 (Attach Bumper to Mounts)

- (8) ½"-13x1.5" Bolts
- (16) ½" Flat Washers
- (8) ½" Lock Washers
- (8) ½"-13 Hex Nuts

Sub 3 (BSA Bolts)

- (8) ¼"-20x1" Button Head Bolt
- (16) ¼" Flat Washers
- (8) ¼"-20 Lock Nuts

Sub 4 (Trailer Plug Bolts)

- (4) #10x¾" Button Head Bolt
- (8) #10 Flat Washers
- (4) #10 Lock Washers
- (4) #10 Hex Nuts

Hardware Kit BW00-0020 (Swing Out Bumper Only):

Sub 1 (Swing Arm)

- (2) ¾"-10x5.5" Hex Bolts
- (2) ¾"-10 Hex Nuts
- Thread Locker

Sub 2 (Accessory Plates)

- (12) 7/16"-20x1.5" Bolt
- (24) 7/16" Flat Washer
- (12) 7/16" Lock Washer
- (12) 7/16"x20 Hex Nut

Sub 3 (Overlap Plate)

- (7) 5/16"-18x1" Hex Bolt
- (7) 5/16"-18 Hex Nut
- (14) 5/16" Flat Washer
- (7) 5/16" Lock Washer

Sub 4 (Wear Pad)

- (6) ¼"-20x1" Countersink Bolt
- (6) ¼" Flat Washer
- (6) ¼" Lock Washer
- (6) ¼"-20 Hex Nut

Sub 5 (Latch)

- (4) ¼"-20x1" Carriage Bolts
- (4) ¼"-20x1" Countersink Bolt
- (2) ¼"-20x1.25" Countersink Bolt
- (4) ¼"-20x1" Hex Bolt
- (18) ¼" Flat Washer
- (14) ¼" Lock Washer
- (14) ¼"-20 Hex Nut

Sub 6 (Shocks & Stopper)

- (1) ⅜"-16 Hex Nut (Not used on 2019 Sprinter)
- (3) ⅜" Flat Washer (Not used on 2019 Sprinter)
- (4) 5/16"-18 Hex Nut
- (4) 5/16" Flat Washer

Hardware Kit BW00-0039 (Swing Out Bumper Only):

- (4) ¼"-20x1" Countersink Bolt
- (4) ¼"-20x¾" Hex Bolt
- (12) ¼" Flat Washer
- (8) ¼" Lock Washer
- (8) ¼"-20 Hex Nut