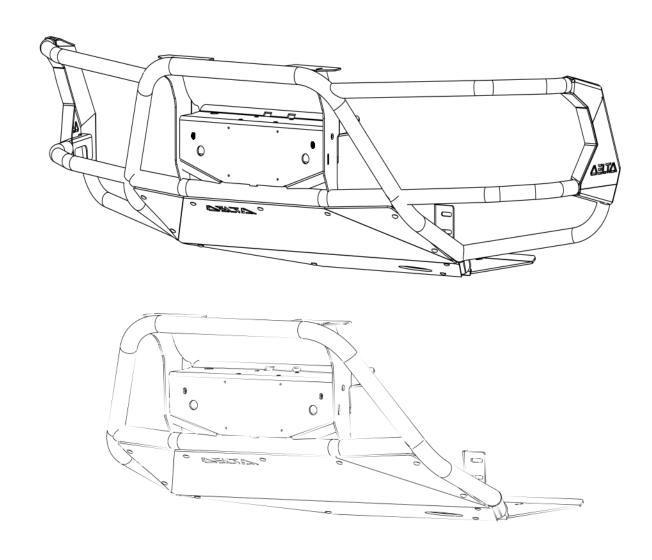


## 2014-2018 Mercedes Sprinter Front Tube Bumper

## "Maxima" and "Minima" - 4WD Models



#### **Overview**

Congratulations on your purchase of the DELTA Vehicle System Sprinter Bumper. This bumper protects the front of your vehicle and the drive train underneath with an integrated 3/16" skid plate. Because our bumper attaches to your Sprinter's chassis and suspension frame, you can stand on it, mount bikes, etc. This is a sleek & snug fitting front bumper that will not interfere with your OEM tow location and features an access hole for the oil pan drain plug through the skid plate.

This bumper is rated for 150-pound front cargo carrying capacity with the optional front hitch system. This is intended for bike racks, cargo carriers or similar items.

## **Product Compatibility**

Mercedes Sprinter Van 4WD • 2014 - 2018 Factory radiator guard mounts are required for the full installation. These come on most Sprinters.

#### **Parts List**





Date \_\_\_\_\_

1.	Tube Bumper Maxima (DELTA-10419) or Minima (DELTA-10457)		
2.	Skid plate (DELTA-10372-12)		x1
3.	Front mount bracket (DELTA-10459)		x1
4.	Mid mount brackets (10372-14 and 10372-15)		x2
5.	Aluminum Crush Sleeves / Spacers (DELTA-10460)		x2
	a.	Hardware Kit (DELTA-10458)	
	b.	5/16-18X1L Carriage Bolt	x13
	C.	5/16-18 Nylock Nut	x13
	d.	5/16 Washer	x13
	e.	3/8-16X1L Hex Bolt	x8
	f.	3/8-16X3.5 L Hex Bolt	x2
	g.	3/8-16 Nylock Nut	x10
	h.	3/8 Washer	x12
	i.	3/8 Lock Washer	x8
	j.	M8x20L Hex Bolt	x4
	k.	M8 Washer	x4

Packaged by \_\_\_\_\_

## **Required Tools**

- 3-inch extension
- 9/16" box-end wrench
- 9/16" socket
- 13mm socket
- 13mm box-end wrench
- T20 Star Bit
- T45 Star Bit
- Jack, blocks or extra set of hands to steady bumper during install
- Torque wrench (recommended)

Attach Skid Plate to Bumper Frame





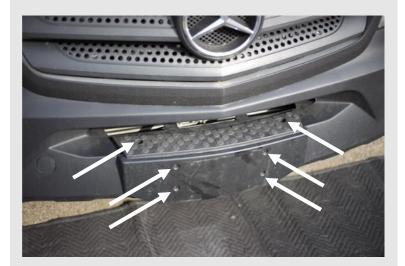
Attach the skid plate to the bumper frame using the provided carriage bolts.

The smooth bolt tops face outward as shown in the upper image.

Secure the bolts with the matching nuts and washers from the underside as shown in the lower image.

Note: Be sure all of your carriage bolts seat flush to the skid plate when tightened.

Remove OEM Step & License Parts



Remove the star bolts along the top of the OEM step plate with the T45 star bit and socket wrench.

Remove the four screws at the front of the license plate mount.

### **IMPORTANT!**

Keep the screws and bolts that you remove for later steps.

Remove Step Plate Tab Bolts & Pull Up to Remove





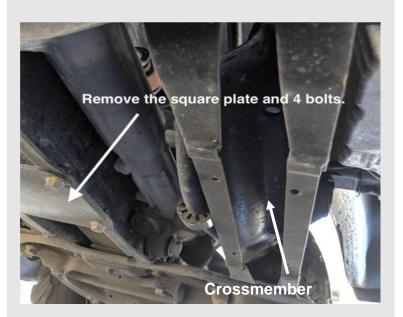
Pull the OEM license plate cover off to reveal the plastic mount bracket and the bolts holding the step plate tabs.

Remove the 13mm bolts from the front of the OEM license plate mount bracket using the 13mm socket and socket wrench.

Lift the step plate out of position and set aside.

Keep the removed bolts for later use.

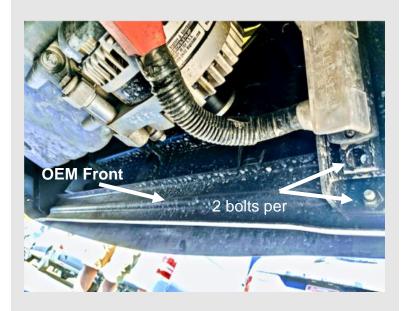
Remove Square Plate from Undercarriage



Remove the square plate attached to the undercarriage located between the front tires and behind the crossmember.

You will reuse this plate later as a spacer between the skid plate and frame.

You will reuse the bolts to attach the bumper's angle brackets in the in a later step. Remove Front Guard Behind the OEM Bumper

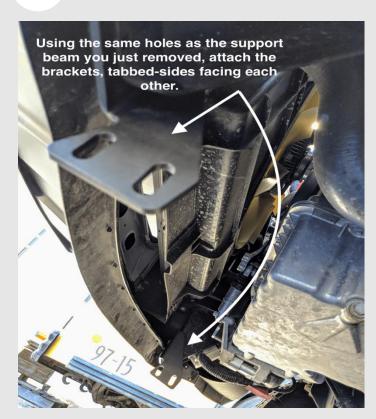


Remove the four factory bolts with a 13mm box end wrench from the front guard from the mounts just behind the existing bumper.

The front radiator guard and 4 bolts (2 on each side) that attach it can be discarded as they will not be used.

Note: The factory radiator guard mounts are an OEM part. If you do not have them on your vehicle. They can be purchased from Mercedes.

6 Install Bumper Angle Brackets



Use the M8 bolts you removed from the square plate for this step.

Attach the provided brackets as shown into the same holes previously holding the Front Guard (tabs facing each other).

Tip: Leave the bolts a little loose for adjustments later.

Install the Bumper Front Bracket



For each side of the mounting bracket, pull the OEM bumper plastic away from the frame slightly and slide bumper mounting bracket behind the plastic to ensure metal-to-metal contact with the frame.

Secure the bracket in place with the OEM torx star bolts and 13mm bolts removed in the previous steps.

TIP: Leave the bolts a little loose until the "Tighten All Bolts" step to allow for centering the mount before tightening them all completely.

7b

(con't)





The upper image shows the bumper bracket behind the OEM plastic and making full metal-to-metal contact with the frame.

The lower image shows location of the bolts to secure per side. These bolts were removed by you in the previous steps.

#### Note:

If installing the optional hitch, the top bolts should be left out and the M8 bolts included with the hitch will be used after the bumper is installed.

8

## Position the Bumper for Install



CAUTION: Letting go of the bumper quickly at any point in the next few steps (before the bumper is secured or skid plate supported) may result in damage to your van facade!

Use a jack, blocks, or an extra set of hands to lift the skid plate before you let go to complete the next few steps.

If you do not have a jack or extra help available: Once you have aligned the bumper on the mounting bracket, use extra care to let the top of the bumper SLOWLY rotate forward toward the front of the van and the skid plate to lower to the ground.

Position the bumper at the front of the van.

9a Lift and Align Bumper on Bracket





Lift bumper in the center and walk forward toward the mounting bracket

Align the bumper mounting tabs with the mounting bracket

# 9b Slide Onto Mount and CAREFULLY Release





#### **IMPORTANT!**

Do not allow the bumper to rotate forward into the van body uncontrolled when completing this step! The bumper tabs can damage your grill.

Slide the bumper, with tabs aligned forward, toward the grill and onto the mounting bracket.

Carefully rest the bumper onto its front mounting bracket & slowly allow the bumper to rotate toward the grill as the skid plate lowers to a rest on the ground, blocks, or a jack.

## 10 Supporting the Skid Plate





Using a jack or blocks, support the skid plate so that it is against the undercarriage.

Tip: Cover the block or jack with a towel to avoid any unwanted scratches on the skid plate and for easier adjustment.

## 1 1 Loosely Secure the Bumper



Gather 4 of the provided short 3/8 bolts, lock washers and washers.

Use these bolts to secure the bumper from the front (2 bolts per side).

Leave the bolts slightly loose until the skid plate is secured to allow for adjustments later.

## 12a Attach Skid Plate to Crossmember







Gather the provided 2 spacers, 2 longs bolts, 2 matching nuts & 4 washers

Work with one side at a time.

Insert a spacer into the crossmember above the skid plate.

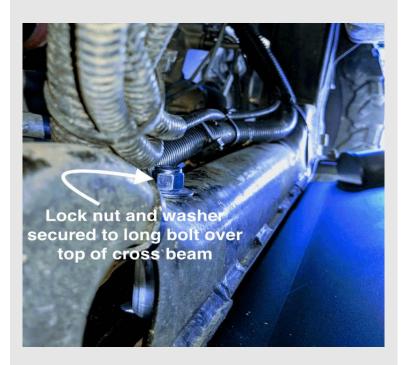
With the spacer standing on end, slide the spacer toward the center of the vehicle so it aligns with the hole in the skid plate, as shown in the lower image. 12b Insert Long Bolts with Washers



Insert the long bolt with washer through the skid plate, spacer, and into the hole in the crossmember.

Secure the bolt at the top with another washer and a lock nut.

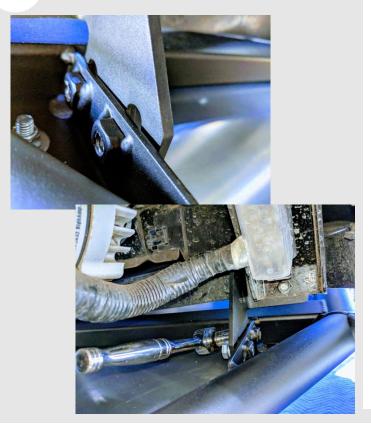
12c (con't)



The image shows the washer and nut securing the spacer over the top of the crossmember.

Leave the nut a little loose to allow for minor adjustment when securing the other spacer in place.

13 Secure Bumper at Tab Mounts



Align the bolt holes of the bumper frame to the outside of the tabbed brackets on either side as shown (upper).

Using the 3/8 short bolts with a lock washer and washer, loosely secure the bumper frame to the mid brackets as shown (lower) on both sides of the bumper.

Make sure these tab mounts are free to move around. They will not be tightened until the bumper is centered on the vehicle in a later step of the instructions.

14a Insert and Secure Square Plate



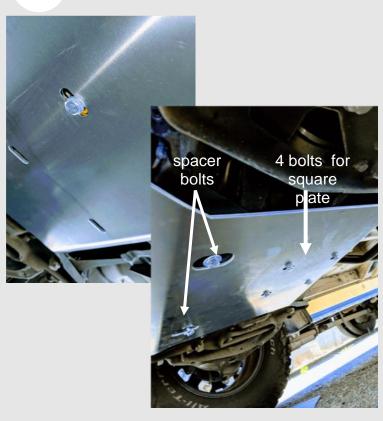
The square plate removed from the undercarriage in a previous step will be used as a spacer for the rear-most portion of the skid plate for strength and to eliminate any rattle.

Hold the plate up to the skid plate holes to orient the holes in the square plate correctly.

Then, with the correct orientation determined, insert the square plate between the undercarriage and the skid plate.

Slide the plate toward the center to align with the skid plate holes.

# 14b Secure the Plate



Using the remaining bolts, secure the square plate and skid plate into the existing holes in the undercarriage.

# Center the Bumper

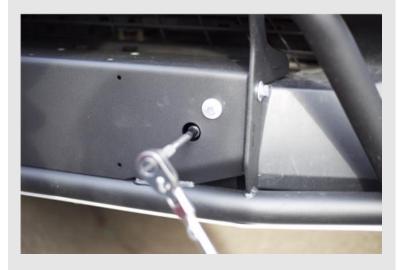


# MAXIMA (shown here): With all bolts just slightly loose, adjust the bumper so that the space between the van sides and the bumper's endcaps are even on the left and the right.

The gap should be  $\frac{3}{8}$  to  $\frac{1}{2}$ ".

#### MINIMA:

With all bolts slightly loose, adjust the bumper so that it is centered with the front of the van.



Be sure to tighten *all* bolts and nuts securely now that the bumper is in place starting from the back at the square plate location and working forward to the front of the van.

4 bolts through the skid plate and square plate
2 bolts through the skid plate and spacers
6 bolts at front of bumper
8 bolts (4 per side) securing tabbed brackets to bumper frame
All bolts securing front of bumper and license plate mount.

The rear crossmember bolts at the square plate should torque to 37 ft-lbs. All 13mm bolts and torx bolts should torque to 22 ft-lbs.