

Additional Fitting Instructions for Australian AFN 4x4 Bullbar Installation.



These instructions are aimed at assisting our customers install the Mercedes Benz Sprinter Bullbar for the Australian Market.

The parts supplied with the Bullbar will cover both the earlier models as well as the newer vehicle. There may be some parts that will not be used.

There are some minor changes that we undertook during the installation of our prototype which will assist in making some decisions of the fitment of the Bullbar.

The below link is a link to our American Partner that shows the full installation including the removal which may assist some installers.



https://www.google.com/search?q=owlvan+bullbar+fitting&rlz=1C1VDKB_enAU1065AU1072&oq=owlvan+bullbar+fitting&gs_lcrp=EgZjaHJvbWUyBggAEEUYOTIJCAEQIRgKKGKABMgkIAhAhGAoYoAEyCQgDECEYChigATIHCAQQIRiSAzIHCAUQIRiSAzIHCAyQIRiSAzIHCAcQIRiSAzIHCAgQIRiSAzIHCAkQIRiSA9IBCjEzMTg0ajBqMTWoAgiwAgHxBfZi4OphP9Nz&sourceid=chrome&ie=UTF-8#fpstate=ive&vld=cid:5f085e43,vid:7dT0G_r7BGE,st:0

Important things to note.

In the video you will notice that the way the bumper is cut is different to what we did on our prototype vehicle. The main reason for this was because we felt that the clearance under the “Ad-Blue” tank was insufficient and the different cut helped with this. In the Australian installation we lowered the entire Bullbar which resulted in a gap on the side of the car.

To compensate for this, we opted to keep the side bumper support bracket which was trimmed to retain the securing mechanism.

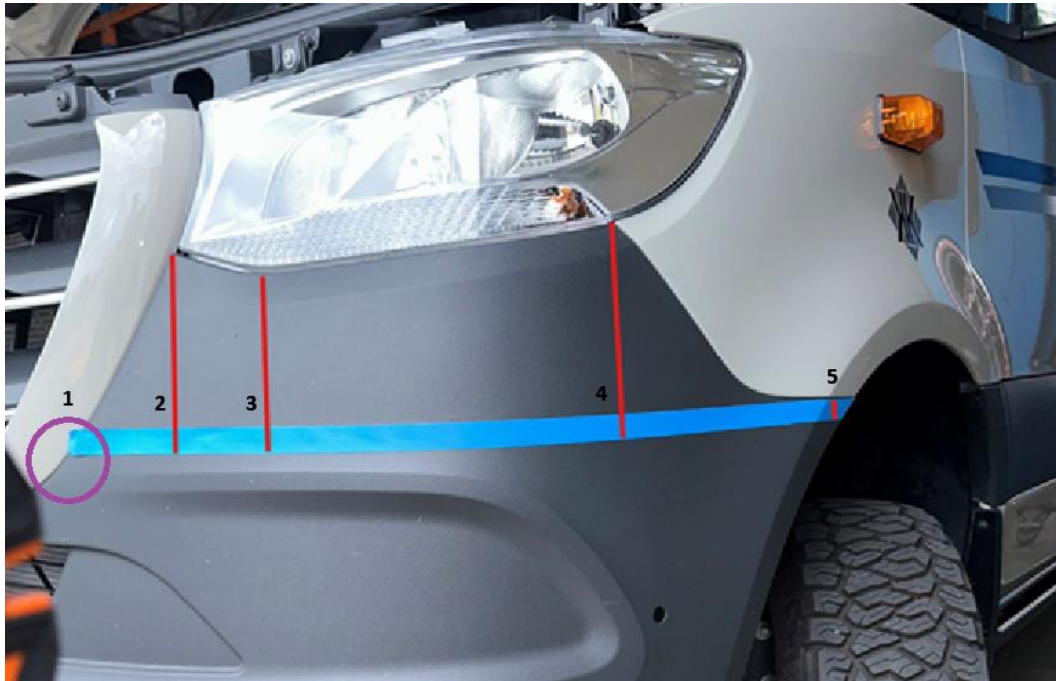
This additional piece was not removed for the Australian Installation.

Please note that because the chassis and body are on the same platform this is no movement and very little flex between the two which allows for the tight cut tolerances

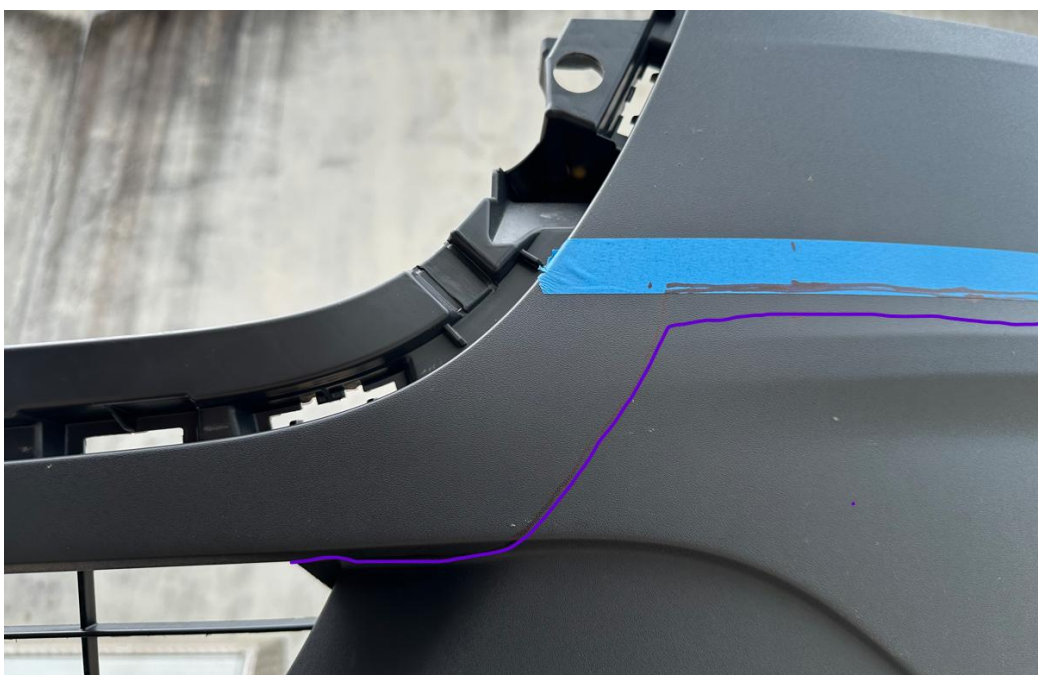


When cutting the original bumper, it is suggested that you leave a little extra during the first cut and then trim the bumper to for the ideal fit.

Please note that the following measurements are for reference only and AFN will not be held responsible for errors caused during the fitting process.



Start off by cutting the centre portion of the original bumper. At this point you can also make a “First Cut” along the bottom of the Masking tape portion leaving enough material for a final cut.





Allow at least a 50mm edge on the first cut from the side of the grille. The second cut at 30mm was done as a second cut. This may need to be cut further depending on the installation.

1



2



3



4



5



To retain the bumper, it is important to ensure the original bumper trim is used and cut accordingly.





Nut Plate Modification

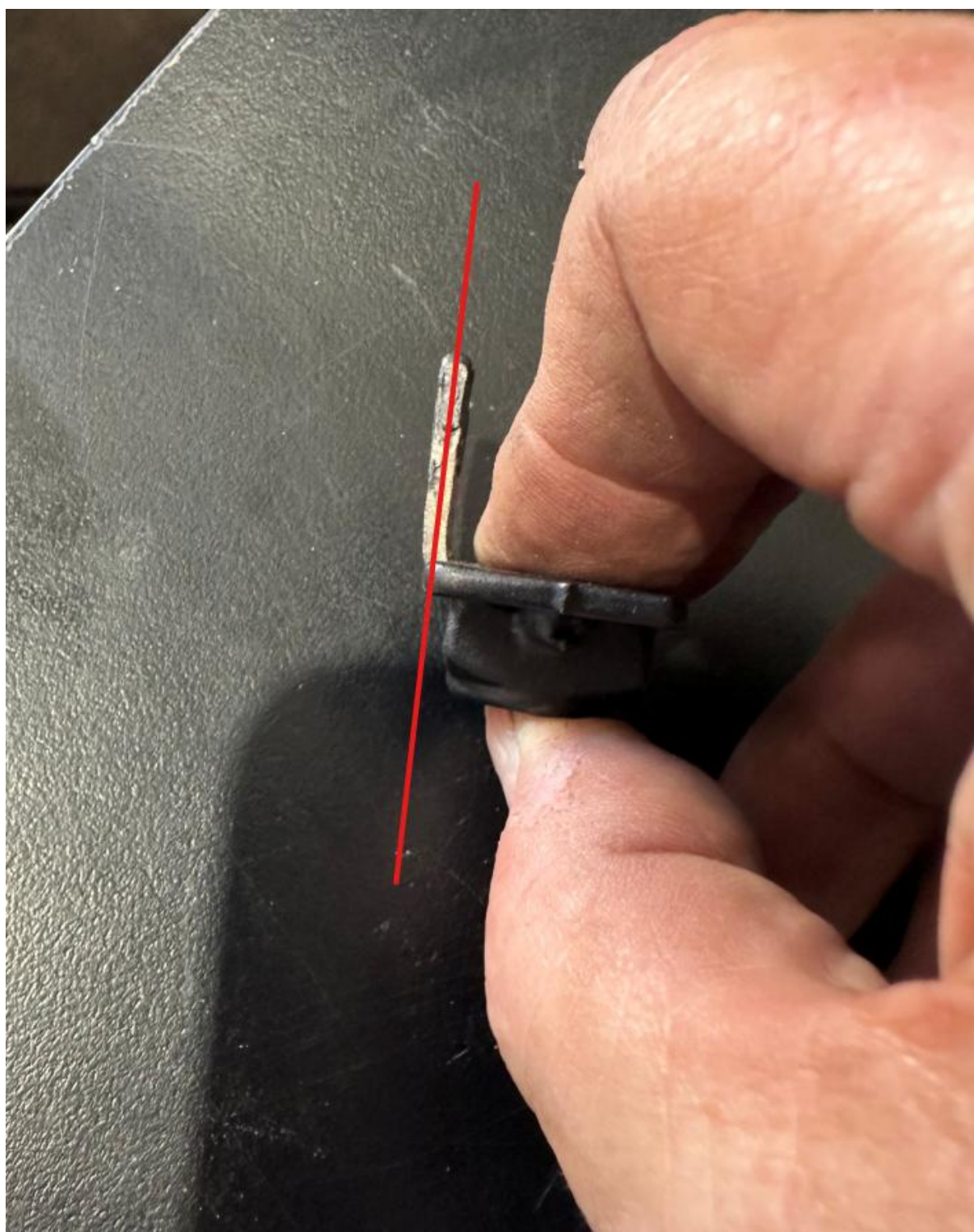
We have noticed that the small tab on the end of the nut tab will prevent the nut from going into the hole and aligning the nut with the mounting plate.



The following modifications are required.

1. Cut a corner off the end of the plate
2. Flatten out the small tab
3. Bend the tab as close as possible to the end of the plate
4. Repaint the plates.





Air Cooling Ducting





Front Camera Relocation



The following pictures show the cuts that are necessary to fit the camera to the front of the Bullbar. Not all vehicles are fitted with front cameras.





Once the cuts have been completed reassemble the camera, fit the mounting bracket and then position the camera in the best position. Using a marker pen mark the position of the camera.

Once the position is marked remove the bracket and mark and drill two holes in the OEM camera bracket. Mount the camera to the bracket with the supplied fasteners.

It is recommended to paint these parts black.







Adaptive cruise control radar Installation

Cut the OEM bracket as shown. Both sides of the bracket need to be cut.





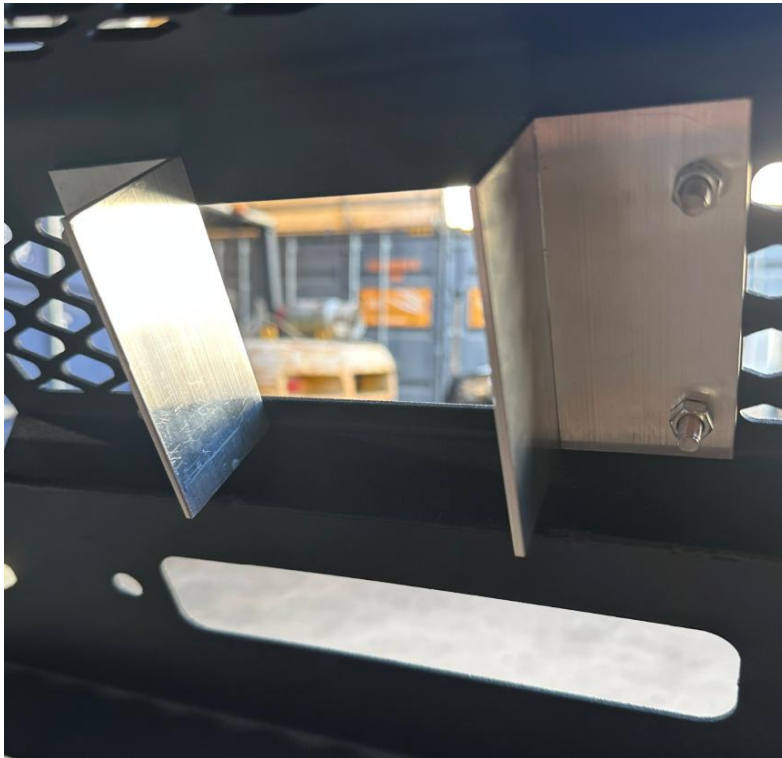


Once you have cut the brackets you are ready to mark and drill the holes.

Please note that the radar is intended to be mounted at 90 degrees to the road surface. If the vehicle is lifted, then a slight downward angle is preferred. The bracket does have a small adjustment range. Mount the sensor in the 0-degree position to start off with. The picture below shows the sensor at -2 degrees.



Fit the two supplied brackets with the relevant fasteners. Do not fully tighten yet.



Position the radar as close as possible to vertical and mark the holes on the side of the brackets.





Drill the holes to suit fasteners





Mount the radar with the supplied cover plate. It is recommended to paint the cover plate. The picture shows the cover plate painted matte black.







Blind spot sensor

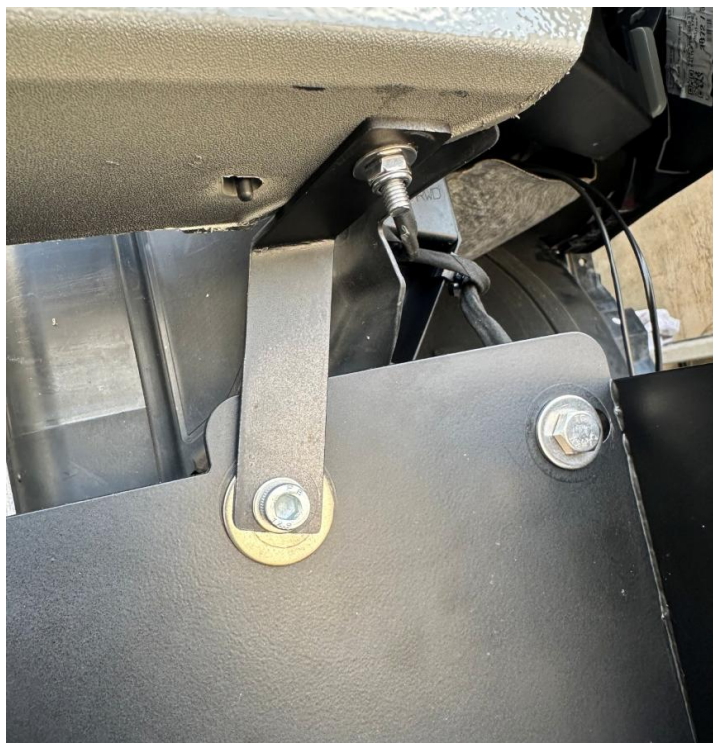
Not all vehicles are fitted with this sensor. If you do not have this sensor then use the cover supplied and fasten it to the Bullbar with the supplied fasteners.

For vehicles fitted with the sensor please use the aluminium support bracket and secure the sensor in position as shown below.



Grille Support

Two angled brackets are supplied with the kit. These are intended to support the grille once the grill has lost its original mounting.



Sump Bash Plate

On older vehicles the bash plate will just bolt on. The below steps are for newer vehicles.

The first step is to position the hold down plates with the fasteners supplied. DO not tighten the bolts. Please note that the plates may differ from the pictures.

Slide the Bash plate over the chassis support first.





Once in place only then fit the two single brackets.





Parking Sensors

The kit is supplied with 6 off parking sensor holders and 2 blanking plugs. Some vehicles are fitted with 6 sensors and other only 4. The two centre holes must be plugged for vehicles with 4 parking sensors.



When fitting the sensors you will need to trim the small rubber grommet. In the grommet there are small lips that will prevent the sensor from going all the way into the holder and will cause the sensors to trigger.



Using a sharp knife trim these small lips off.



Serrated Flange Head Bolts

Do not use these bolts without washers as they will damage the powder coat. If you do damage the paint, make sure that you touch up and surfaces that are exposed. Heavy Duty washers have been supplied for these.



Rubber Trim is supplied to finish off the edge of the bumper cut.

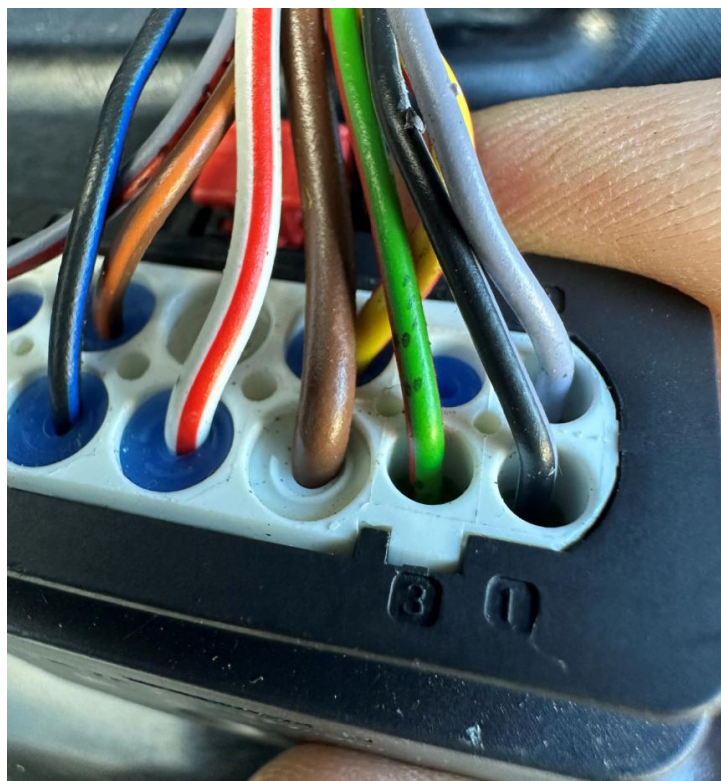


When fitting the wings make sure you use the supplied nylon washer to prevent the fasteners from damaging the powder coated surface/



Lights.

Right Hand Side Plug



Left Hand Side Plug



1. Pin 5 – Brown Common Ground
2. Pin 1 – Black Violet Indicator Right (Right hand Side Plug)
3. Pin 1 – Black White Indicator Left (Left Hand Side Plug)
4. Pin 9 – Black Blue DRL left and Right

Connection of the Fog Lights.

Not all Vehicles come standard with Fog lights. IF your vehicle is fitted with the following switch then it is possible to connect up the front fog lights through the connector plug.



We currently don't know the correct wiring colours for this output and if someone does find the correct output wires please let us know so that we can update this document.