



### **Fitting Instructions for New AFN 4x4 Australia LED Indicator/Fog Light for 2021 Mazda BT50**



When fitting the new AFN Bullbar for the 2021 Mazda BT50 it is important to understand some of the regulations with regards to the Fog, Indicator and Park Lights.

On the Mazda, the Fog, Indicator and Park light formed part of the light assembly fitted to the Original Bumper. By removing the bumper, we needed to find an alternative Indicator and park light that will form part of the primary light arrangement.

To overcome this problem, we have manufactured a combination Fog and Indicator assembly that meets the Australian Design Rules. This is different to a secondary light which is common in most of our other Bullbars.

These lights are now classified as the primary lights, and this is particularly important to the indicator arrangement.

The new AFN round Light has been tested and approved to meet or exceed the Australian design rules with regards to the primary requirements for Indicators.

The original indicator as supplied as part of the vehicle is a standard incandescent style bulb. This bulb together with the vehicle Canbus system detects the load generated for this style of light. When changing to LED style lights the load is different and as such the vehicle may generate a fault code if the light is simply replaced with a LED style light. To overcome this problem each Bullbar is supplied with 2 load resistors that must be wired in Parallel with the indicator wires. Please note that resistors are not polarity sensitive.

This problem does not exist with the Fog or Park light arrangements. For vehicles fitted standard with fog lights these are simply a replacement and can be wired up as per the original light. The original light fitted to the vehicle is a LED fog light so there are no issues related to wiring of this light.

The New AFN combination light has 3 wires and the Fog and Indicator share a common ground connection.

The wiring colours are as follows:

1. Red – Indicator – Turn Signal
2. White – Fog light connection
3. Black – Ground



The Park light connection will be made to the AFN LED combination light. The wire connections are as follows:

1. White – Chassis/Ground
2. Brown – Park Light
3. Green – Not Used on the BT50



Please note that the lights are supplied with unterminated connections only. It is advisable that the connections be made by a qualified Auto-Electrician.

AFN does supply a full plug and play wiring harness, and this can be purchased directly from AFN 4x4 Australia.

These instructions are intended to assist with the installation of the new AFN Indicator/Fog Light.

Some Basic mechanical skills are required for the proper installation of this product.

Please fit the light before fitting the Bullbar to the Vehicle.

Tools required:

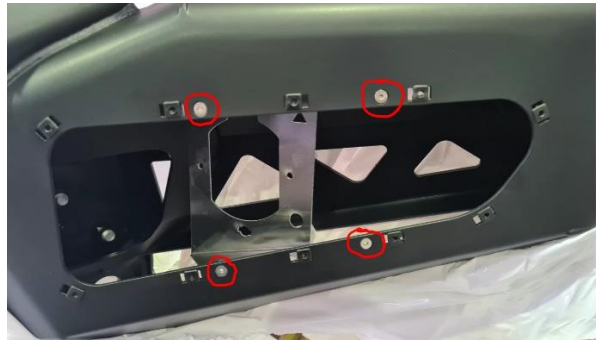
1. 3mm Allen Key
2. 2.5mm Allen Key
3. Phillips Head driver
4. Side Cutters
5. Wire strippers

Please ensure that you have received all of the parts as laid out in the image below:



**Step 1:**

Remove the Light Cages from the Bullbar. Using a 2.5mm allen key and 7mm spanner



**Step 2:**

Assemble the ball end adjusting screw and Ball retainer.

Insert the ball end screw into the retainer and push in until the ball end clips into place. A reasonable amount of force will be required to push it into place.





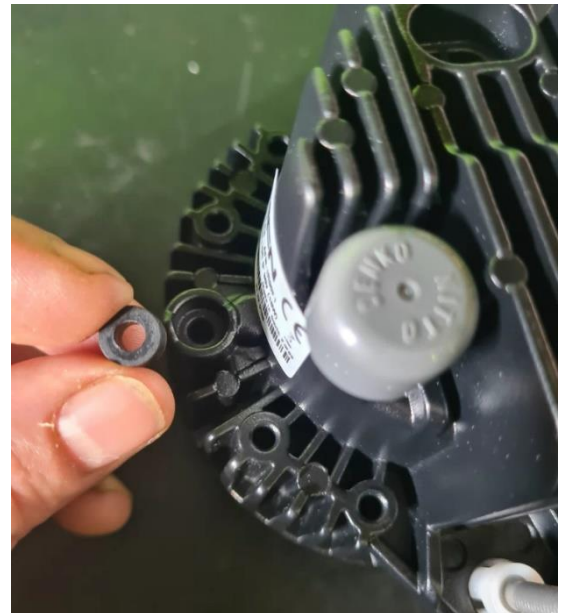
### Step 3:

Insert the assembled adjusting screw into the light housing.

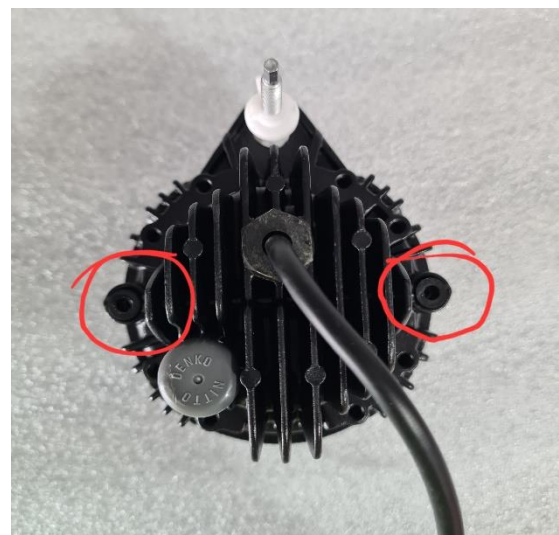
Push the assembly into the housing. This will also require a reasonable amount of force. Please note that once this piece is fitted it is very difficult to remove this assembly. Do not fit the retainer first as it is not possible to fit the adjusting screw once this part is inserted into the light housing



Step 4: Fit the two rubber grommets into the light housing and also fit the locking nut onto the adjusting bolt.

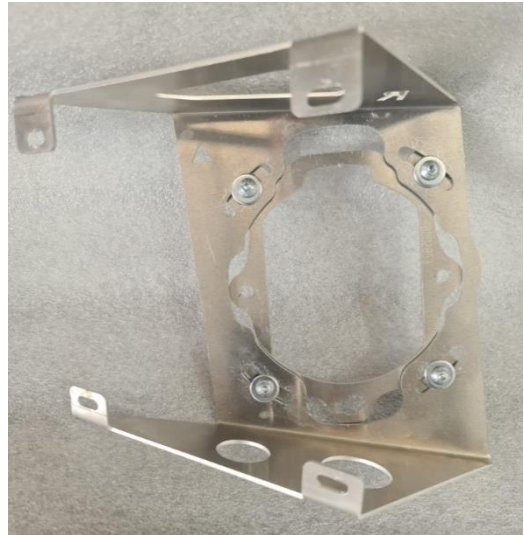


Assembled View:



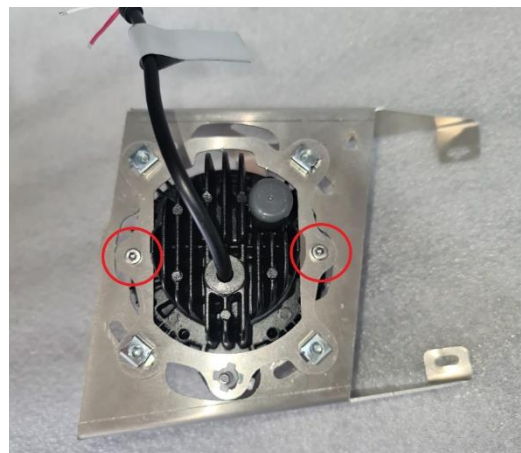
**Step 5:**

Assemble the mounting bracket so that the light mounting bracket is on the outside of the cage and the securing screws are in the inside.



**Step 6:**

Install the light into the assembled housing and secure into place using the supplied M4 bolts. Please note that these holes are not tapped, and the intention is for the supplied bolts to self-tap the housing. Do not overtighten the bolts. Use a small amount of lubricant to aid installation.



**Step 8:**

Once you have assembled both lights into their cages, proceed to fit the light assemblies back into the bullbar.

At this stage you are ready to fit the Bullbar and connect the lights. Do not fit the light surround at this stage until the lights have been adjusted.

**Step 9:**

When fitting the surrounds pay special attention to the fitment of the Philips Head screws. Ensure that the screw locates the centre of the plastic clip nut.



**Step 10:**

When securing the light surrounds be careful not to overtighten this cover as it may distort the edging.

