



The Company

Founded in 1995, AFN - 4x4 Accessories dedicates itself to the production and commerce of all-terrain accessories. Its constant concern in its customers total satisfaction, and in the ideals of innovation and transformation have granted a position of notability both in the national and international panorama.

The only company in Portugal in the mass production of 4x4 accessories, relies on specialized and experienced technicians, with the most adequate knowledge, to an efficient response capability to its customers demands.

Thanks to the specialization in the several areas of design and manufacture and to a constant investment in technology, AFN has been broadening its wide range of products, without ever neglecting the quality factor.

4x4 Accessories

In its diversity of products we can include, with all-terrain quality, protection, safety and aesthetic accessories.

And it is here that AFN invest on the best technology, the best cut precision of the raw material, and the transformation of products with the quality recognized in the marketplace.

AFN has, at its disposal, resources to test and analyse the resistance of its products and stands in the front row regarding the European homologation of materials dedicated to all terrain.

The contact with the most important test laboratories for vehicles, both in England, Spain and Germany, provides AFN with the know-how to manufacture a wide range of quality products.

Our Design Approach

AFN designs each accessorie taking into consideration the original model lines and fixing points. We refuse to have a "one design fits all" solution and we are always looking foward to embrace new challenges on how to adjust a new product into a new model! The days of just throwing on a bit of steel together to form a protection system are gone. AFN is leading the way modern vehicle protection components are manufactured. Other will follow, and it won't be long where the AFN approach to Styling, Fit, Form and Function will become the benchmark for all other manufacturers.







INDEX

AFN 4x4 Accessories

Product: Bull Bar w/ Provision for OEM Fog light and AFN indicator

Part Ref.: 48002831

Introduction 2

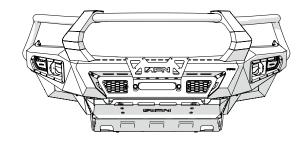
1 Checklist 4 Product 48002831

2 Fitting Instructions 6

3 BT-50 Catalogue 23

4 Warranty Terms 24

5 Attachments 25





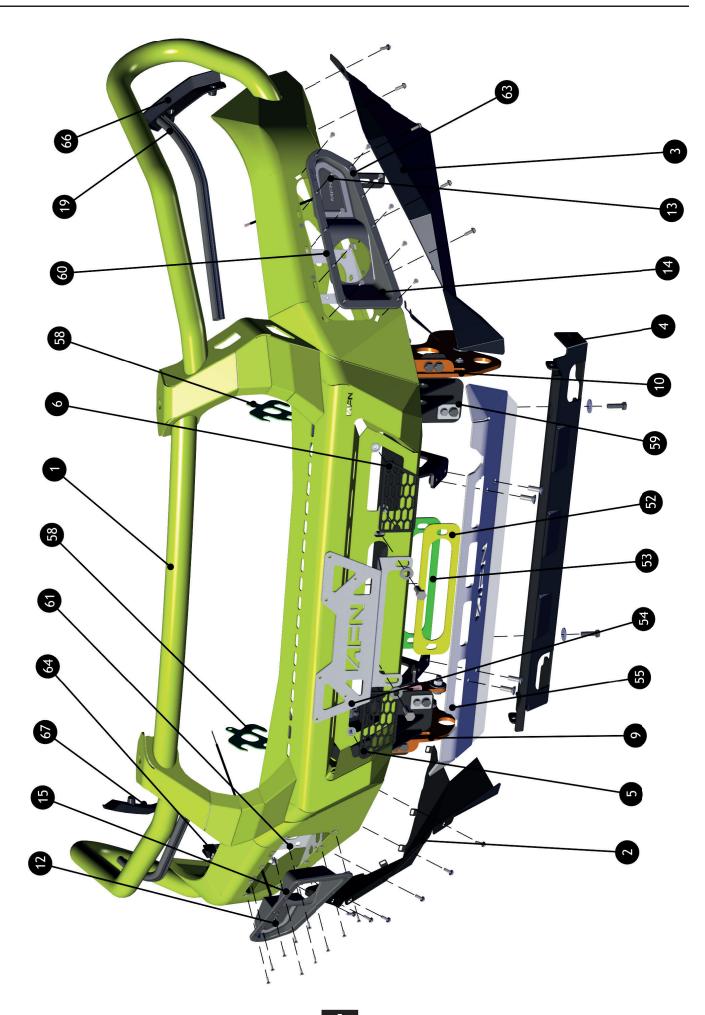




- In this section you have a checklist with all parts included for the installation of your AFN product
- This product should be installed as demonstrated in the product fitting instructions
- If verified that any component is damaged, please contact your nearest AFN distributor
- The specified parts will only fit in the models specified by AFN
- Do not modify any component of the product

This checklist is only for the product 48002831.

NUMBER	DESCRIPTION	REFERENCE	QTY	NUMBER	DESCRIPTION	REFERENCE	QTY
1	Bull Bar - Mazda BT-50 2021	47002580	1x	35	Washer M8	45001255	4x
2	Right Wing	47002579	1x	36	Washer M6	45001256	4x
3	Left Wing	47002578	1x	37	Washer M8 (big)	45001267	4x
4	Lower Skid Plate	47002398	1x	38	Rubber Nut	45001269	4x
5	Bumper Grill (Right Side)	47002393	1x	39	Nylock Nut M8	45001521	4x
6	Bumper Grill (Left Side)	47002392	1x	40	Nylock Nut M6	45001522	4x
7	Triple Nut Plate (Right Side)	47002313	1x	41	Bolt M8x25	45001537	4x
8	Triple Nut Plate (Left Side)	47002312	1x	42	Bolt M12x40	45001544	4x
9	Recovery Point (Right Side)	47002311	1x	43	Bolt M10x35	45001553	6х
10	Recovery Point (Left Side)	47002310	1x	44	Nylock Nut M10	45001554	2x
11	Winch Bracket	47002309	1x	45	Bolt M12x30	45001565	8x
12	AFN LED Indicator Lights - (Right Side)	47002089	1x	46	Bolt M10x35x1.25	45001621	бх
13	AFN LED Indicator Lights - (Left Side)	47002088	1x	47	Lock Nut M10	45001707	4x
14	Mask for Fog and Indicator Lights - (Left Side)	48002544	1x	48	Lock Nut M12	45001710	8x
15	Mask for Fog and Indicator Lights - (Left Side)	48002545	1x	49	Plastic Washer M6	45001802	12x
16	Bolt M12x90x35	45000266	2x	50	Bolt M5x15	45001889	2x
17	Bolt M6x20	45000387	4x	51	Nylock Nut M5	45001891	2x
18	Washer M5 (big)	45000476	2x	52	Front Winch Bracket Shim 2,5mm thickness	46008193	1x
19	Rubber 512mm	45000502	2x	53	Front Winch Bracket Shim 4mm thickness	46008194	1x
20	Bolt M10x30	45000934	4x	54	Plate Bracket	46008444	1x
21	Washer M6	45000979	12x	55	Front Skid Plate STAINLESS STEEL	46009289	1x
22	Washer M12 STAINLESS STEEL	45000995	4x	56	Winch Reinforcement (Clamp)	46009295	2x
23	Bolt M6x20 STAINLESS STEEL	45000998	16x	57	Side Winch Bracket Shim 4mm thickness	46009296	2x
24	Cage Nut M6	45001012	16x	58	Side Winch Bracket Shim 2,5mm thickness	46009297	2x
25	Bolt M12x30 STAINLESS STEEL	45001027	2x	59	Double Hole Washer	46009303	2x
26	Nylock Nut M12	45001033	2x	60	Fog Light Bracket (Left Side)	46009971	1x
27	Bolt M10x30 STAINLESS STEEL	45001103	2x	61	Fog Light Bracket (Right Side)	46009972	1x
28	Plastic Nut M3,5	45001113	12x	62	Reinforcement for Spotlights	46010675	1x
29	Bolt M3,5x16 STAINLESS STEEL	45001123	12x	63	Bracket for OEM Headlight (Left Side)	46010815	1x
30	Flange Nut M4	45001166	8x	64	Bracket for OEM Headlight (Right Side)	46010816	1x
31	Bolt M4x12 STAINLESS STEEL	45001232	8x	65	Headlight Reinforcement	46010999	2x
32	Washer M12 (big)	45001250	22x	66	Side Plastic (Left Side)	46011000	1x
33	Washer M10 (big)	45001251	10x	67	Side Plastic (Right Side)	46011001	1x
34	Washer M10 (small)	45001254	10x				





WARNING:

Before you begin installation, read all instructions thoroughly. Proper tools will improve the quality of installation and reduce the time required.

- This product should be installed as demonstrated in the Product «Fitting Instructions»;
- The specified parts, will only fit the models specified by AFN;
- Do not modify any component of the product;
- It is recommended that this product is installed by specialized and trained personnel;
- AFN doesn't take responsability for changes made in the vehicle by its manufacturer;
- Work safely and use specialized tools at all times;
- Always use protective gear.









Size	Torque Nm	Torque Ibft
M6	9 Nm	7 lbft
M8	22 Nm	16 lbft
M10	44 Nm	32 lbft
M12	77 Nm	57 lbft

Mouting Time

- 3 hours
- 2 persons (recommended)

Tools Required



- Screwdriver star head
- Screwdriver flat head
- Wrench
- Wire cutter
- Ratchet wrench
- Allen wrench
- Crane

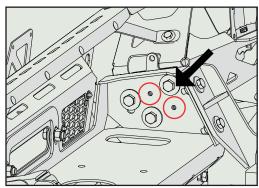


ATTENTION! - READ THIS BEFORE YOU START FITTING THE AFN BULLBAR | BUMPER

AFN has developed an easy and quick mounting system, where the assembly part combines both the AFN Bullbar | Front Bumper(1) and Winch Bracket(2) that is fitted on the vehicle, at once.

This assembly goes from factory, fully tighted with shims. This is what we call the «0 point of the AFN Bullbar | Front Bumper(1)».

The holes on the **Red Circles** must be correctly aligned in order to the AFN Bullbar | Bumper Assembly is on «O point».

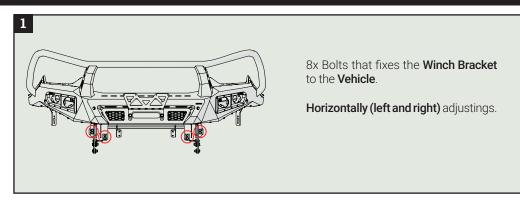


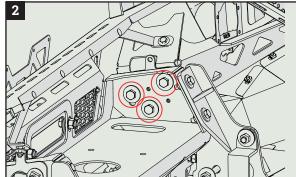
ADJUSTING THE AFN BULLBAR | BUMPER

Every AFN Bull Bar | Front Bumper is designed taking into consideration the vehicle's original lines.

In order to give a good response in terms of design, resistance and functionality, we've created some ways to adjust the AFN Bull Bar | Front Bumper to the vehicle, depending on the customer's preferences.

- 1 When loosen -> allows the AFN Bull Bar | Front Bumper to be adjusted horizontally.
- 2 When loosen -> allows the AFN Bull Bar | Front Bumper to be adjusted vertically and depth.





6x Bolts, 3x on each side, that fixes the Winch Bracket to the AFN Bull Bar | Front Bumper.

Vertically (height) and depth adjustings.

Step 1

Start by cutting the OEM* Grill.

Bear in mind that this a precision task, so please take time to correctly trim the Grill.

You may apply some tape to mark the trimming line and then

See the image on the right that shows how it should be done.

You may have to do the final touches in the trimming the grill. When it's done, and if you want to do a cleaner job, you may use a file to smooth the rough edges.

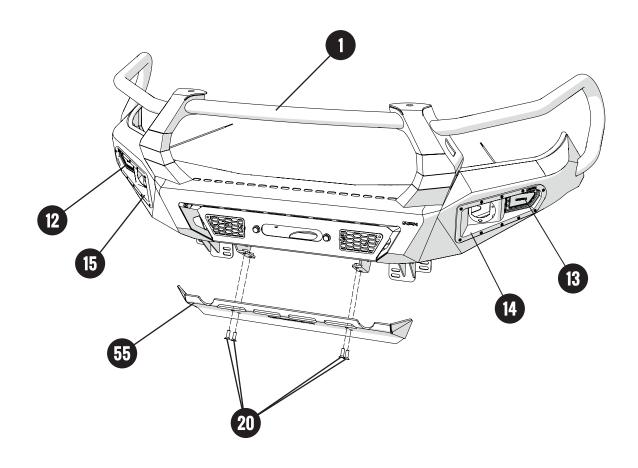


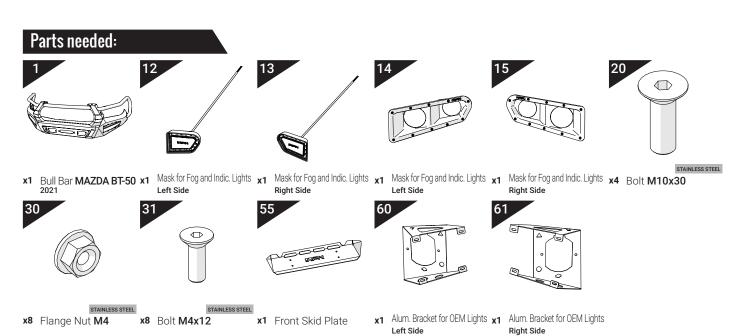




Step 2 - Preparation of the AFN Bullbar | Front Bumper

Preview





4			
48002544	NUMBER	REF	QUANTITY
	A1	4607977	1x
4	B1	45001114	10x
12	C1	45001113	10x
_ /	0.	10001110	10/

LC			
18002445	NUMBER	REF	QUANTITY
	A2	46007978	1x
4	B2	45001114	10x
13	C2	45001113	10x

Installation



Step 2 - Preparation of the AFN Bullbar | Front Bumper

Before installing the AFN Bullbar | Front Bumper(1) on the vehicle there are some details that we advise to do first, in order to be easier the fitting into the vehicle.

Start by removing the Front Skid Plate(55) from the AFN Bullbar | Front Bumper(1).

You may leave the 4x Bolts M10x30(20) finger tighted in the Winch Bracket(2), so you don't loose them.

The Front Skid Plate(55) will be fitted again, later on (these bolts are already fitted on the Bumper)

Then, remove the Plastic Mask for Fog and Indicator Lights(A1) -> (14).

10x Bolts M4x16 (B1). (these bolts are already fitted on the Bumper)

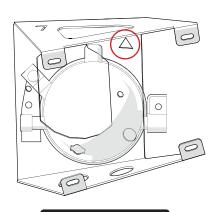
Also Aluminium remove the Bracket(70).

4x Bolts M4x12(31) with 4x Flange Nuts M4(30). (these bolts are already fitted on the Bumper)

Once that is done, fit the OEM* Fog and Indicator Lights on the Left Aluminium Bracket(60).

Please note the triangles on the Left Aluminium Bracket(60), which indicates the right orientation when fitting. They must be up. (red circles)

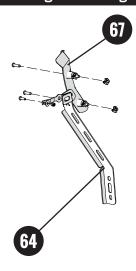
Repeat this step for the other side, using Right Aluminium Bracket(61).

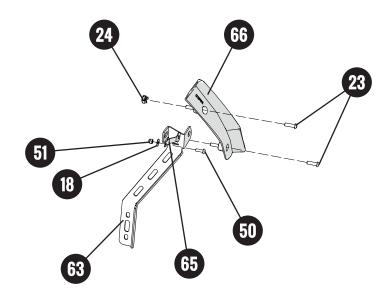


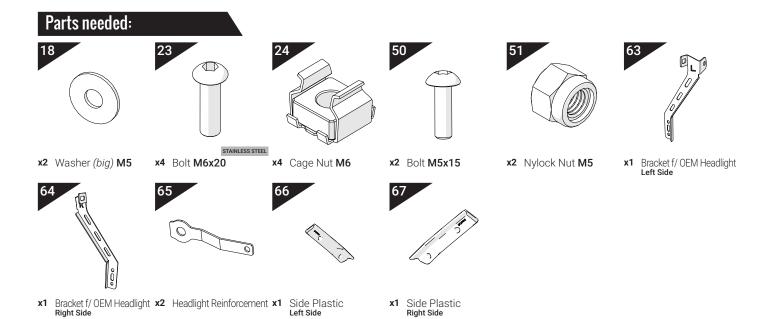
FOG LIGHT

Step 3 - Fitting the Headlight Brackets







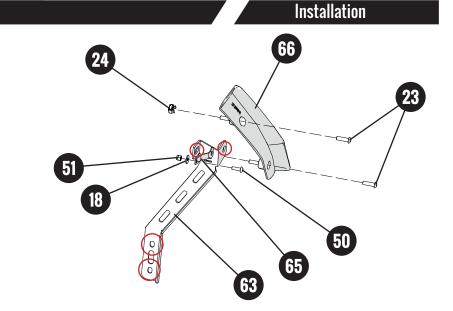


Step 3 - Fitting the Headlight Brackets

Before fitting the **AFN Bullbar | Front Bumper(1)** on the vehicle there are some details that we advise to do first.

Start by fitting the **Left Headlight** Bracket(63), using 2x OEM* Bolts.

Then, fit the Headlight Reinforcement(65) in the vehicle, using 1x M5x15(50) with 1x Washer **M5**(18) and 1x Nylock Nut **M5**(51).



Once that is done, fit the **Left Side** Plastic(66), using 2x Bolts M6x20 (23) with 2x Cage Nuts M6(24). (see red circles, on picture below)

Give the final torque.

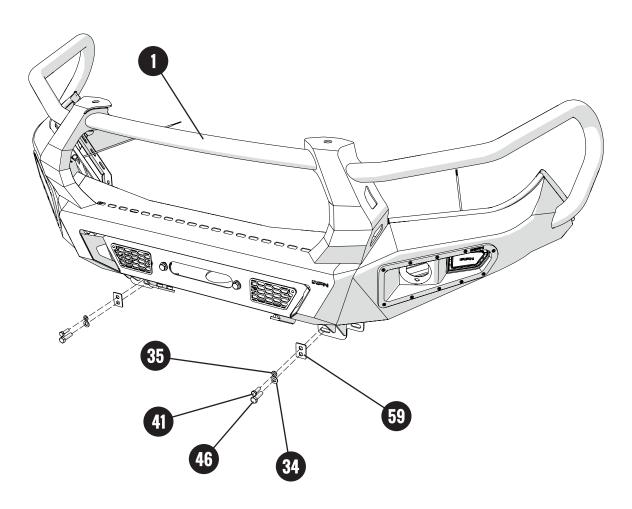


Repeat all of these steps for the other side, using Right Headlight **Bracket(64)** with 1x **Headlight** Reinforcement(65) and Right Side Plastic(67).

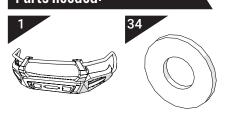
Give the final torque.

Step 4 - Fitting the AFN Bumper and Winch Bracket Assembly on Chassis

Preview



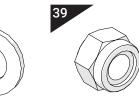
Parts needed:



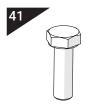
x1 Bull Bar MAZDA BT-50 x2 Washer M10 2021



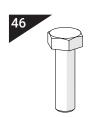
x4 Washer M8



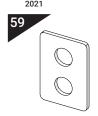
x2 Nylock Nut M8



x2 Bolt M8x25



x2 Bolt M10x35x1.25



x2 Double Hole Washer



Step 4 - Fitting the AFN Bumper and Winch Bracket Assembly on Chassis

Installation

ATTENTION!

AFN has developed an easy and quick mounting system, where the the assembly part combines both the AFN Bullbar | Front Bumper(1) and Winch Bracket(2) that is fitted on the vehicle, at once. This assembly goes from factory, fully tighted with shims. This is what we call the «0 point of the AFN Bullbar | Front Bumper(1)».

The holes on the Red Circles must be correctly align in order to the AFN Bullbar | Bumper Assembly is on «0 point».

So, with help of another person or a crane, lift the AFN Bullbar | Bumper Assembly and fit it in the vehicle, as shown in the image.

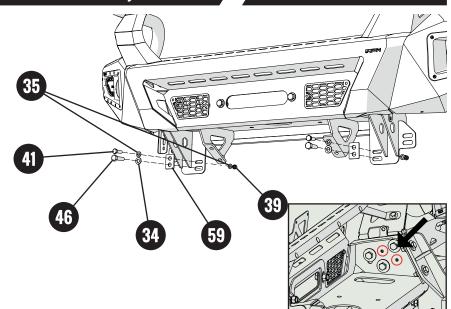
Use 2x Bolts M10x35x1.25(46), with 2x Washers M10(34), and 2x Double Hole Washer(59), in the bottom.

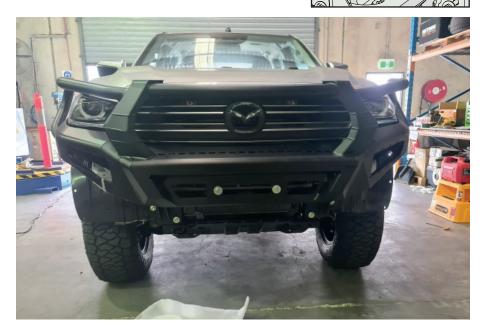
Then, on top, use 2x Bolts M8x25(41), with 4x Washers **M8(35)** and 1x Nylock Nut **M8(39)**.

Just finger tight all bolts

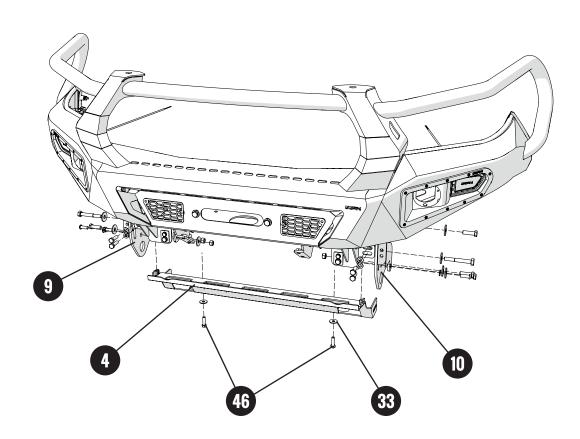
Do Not tighten yet.

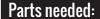
If you have done it correctly, this is what it should look like.





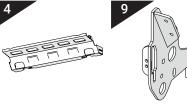
Step 5 - Fitting the AFN Recovery Points on Winch Bracket and Chassis





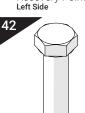


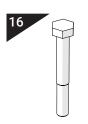
x1 Lower Skid Plate



x1 Recovery Point Right Side



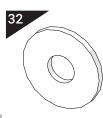




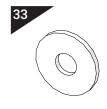
x2 Bolt M12x90x35



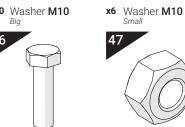
x2 Bolt **M10x30**



x16 Washer M12



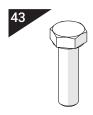
x10 Washer **M10**



x2 Bolt M10x35x1.25 x4 Lock Nut M10



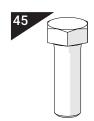
x4 Bolt **M12x40**



x6 Bolt **M10x35**



x2 Nylock Nut M10



x2 Bolt **M12x30**



x8 Lock Nut M12



x2 Winch Reinforcement

Step 5 - Fitting the AFN Recovery Points on Winch Bracket and Chassis

Once the **Assembly** is fitted, it's time to fit **Left Recovery Point**(10) connecting the **Winch Bracket**(2) to the **Chassis**.

Use 1x Bolt **M10x35x1.25(16)**, with 1x Washer **M10(32)**, on top.

On the bolts that fit directly into the chassis be careful so you don't damage the Chassis' thread pitch.

Use 1x Bolt M10x35(43), with 2x Washers M10(34) and 1x Nylock Nut M10(44), on bottom.

Then, on the side, use 1x Bolt M12x30(45) with 2x Washers M12(32) and 1x Lock Nut M12(48).

Also, on the side, use 2x Bolts M10x35(43) with 4x Washers M10(33) and 2x Lock Nuts M10(47).

Then, use 2x Bolts M12x40(42), with 4x Washers M12(32) and 2x Lock Nuts M12(48) to fit the interior CLAMP(56).

Repeat all of these steps for the other side, using **Right Recovery Point(9)**.

Once both **Recovery Points** are fitted, i'ts time for the **Lower Skid Plate**(46).

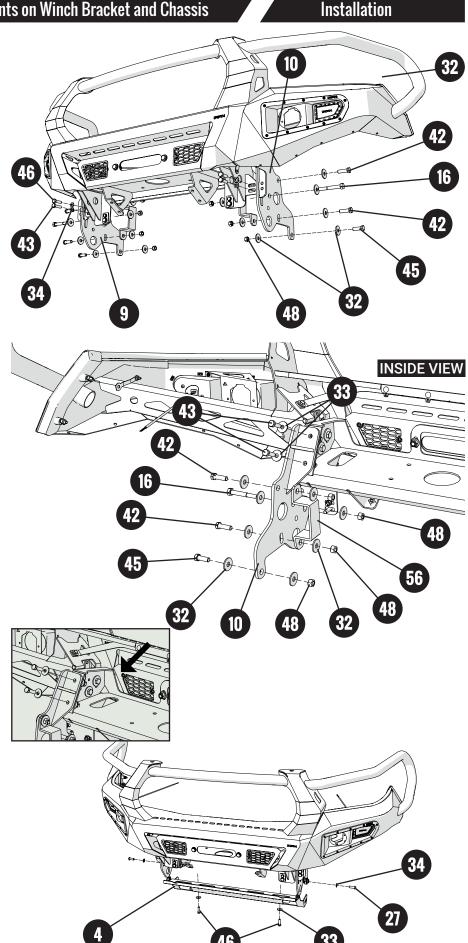
Use 2x Bolts **M10x35x1.25(46)** and 2x Washers **M10(33)**, on bottom.

On sides use 2x Bolts **M10x30(27)** with 2x Washers **M10(34)**.

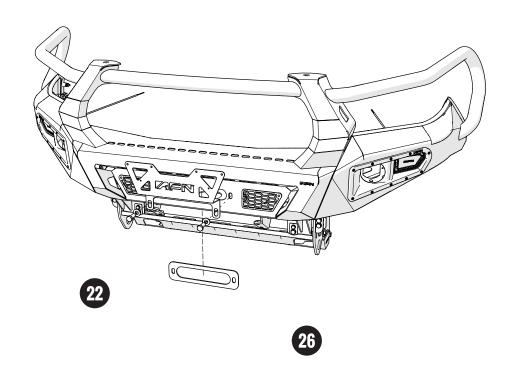
Just finger tight all bolts

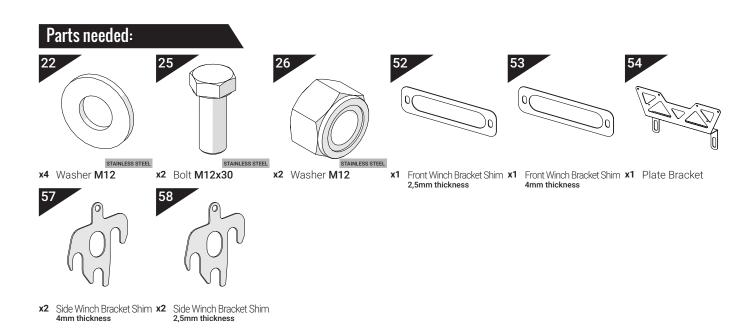
Do Not tighten yet.

If you have done it correctly, this is what it should look like.



Step 6 - Full tightening the AFN Bullbar | Front Bumper





Step 6 - Full tightening the AFN Bullbar | Front Bumper

Start by loosen the 2x Bolts of the Center in the AFN Bullbar | Front **Bumper(1)**, one at a time.

Then, fit the Plate Bracket(54) using the same 2x Bolts M12x30(25) with 4x Washers M12(22) and 2x Nylock Nuts M12(26). (these bolts are already fitted on the Bumper)

Now, it's time to check if the AFN **Bullbar | Bumper(1)** is correctly aligned to the Vehicle.

If not, loosen the Bolts of the Winch **Mount** and **ADD/REMOVE** the shims, depending on what suits better between the AFN Bullbar | Bumper(1) and the Vehicle.

The side shims(57) and (58) allows the corners of the AFN Bullbar | Bumper(1) to open or to close, depending if they are fitted or not.

The front shims(52) and (53)shortens or extends the distance of the AFN Bullbar | Bumper(1) to the Vehicle's fenders.

Mind that this is a precision task, please take time to correctly assemble this step.

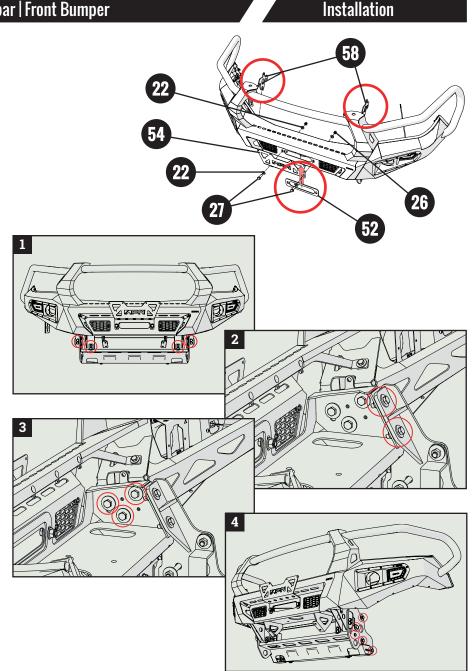
Use them only if you have to, they are opcional and may not be needed.

Once the AFN Bullbar | Bumper(1) is in place, there is a tightening order to it. Tightening order:

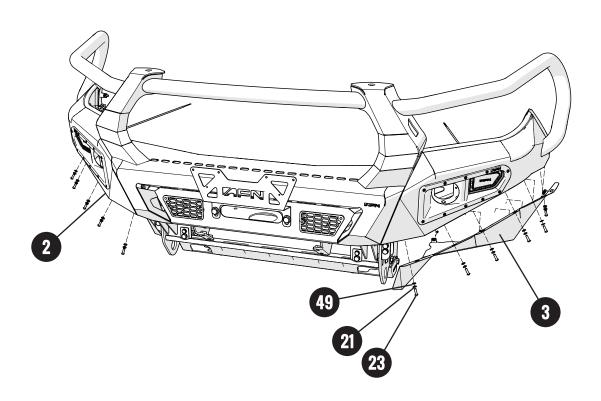
- 1 Start by the 4x Bolts on the chassis;
- 2 Then, the 4x Bolts on top of the Winch bracket:
- 3 The 3x Bolts on each side, of the Winch bracket;
- 4- The 5x Bolts on each side, of the Recovery Points;

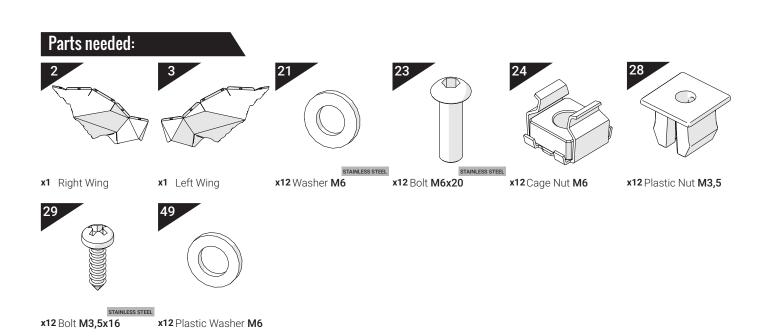
Check the Initital notes on adjusting the Bumper, on page 7.

Once everything is correctly fitted, Give the final torque.









Step 7 - Fitting the Wings in the AFN Bullbar | Bumper

Installation

Take on **Left Wing(3)** and fit it on the AFN Bullbar | Front Bumper(1).

But first we advise to fit 6x Cage Nuts M6(24).

On the Rear, fit 6x Plastic Nuts M3,5(28).

Tip1:

You may use a screwdriver to easily fit the 12x Cage Nuts(24).

You may use a rubber mallet to easily fit the 12x Plastic Nuts(28).

Once that is done, fit the **Left Wing(3)** in the AFN Bullbar | Bumper(1).

Use 6x Bolts M6x20(23) with 6x Washers M6(21) and 6x Plastic Washers **M6(49)**.

Give the final torque.

Move the **Plastic fender** against the Left Wing(3) and mark the cut line. then cut *OEM** plastic fender.

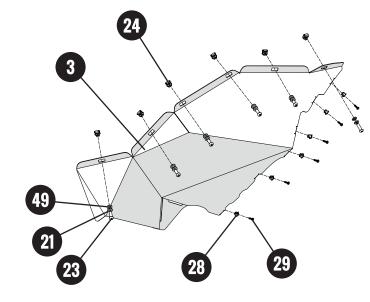
After the Plastic fender is cutted, move it to the inside of the Left Wing(3) and drill a 7mm diameter hole.

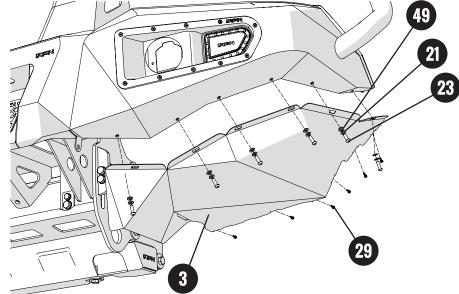
Then, move the Plastic fender to the outside of the Left Wing(3) and fit them through these holes using 6x Bolts M3,5x16(29).

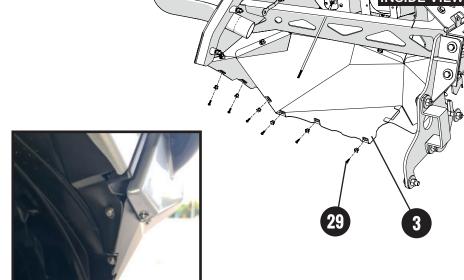
Repeat all theese steps on the other side for the **Right Wing(2)**.

Give the final torque.



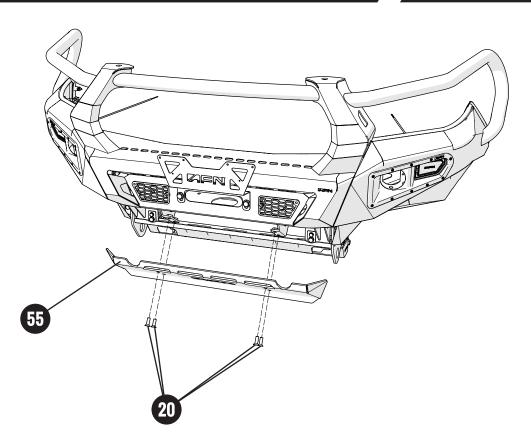


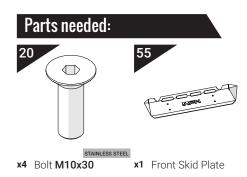




Step 8 - Fitting the Skid Plate in the AFN Bullbar | Bumper

Preview







Step 8 - Fitting the Skid Plate in the AFN Bullbar | Bumper

Installation

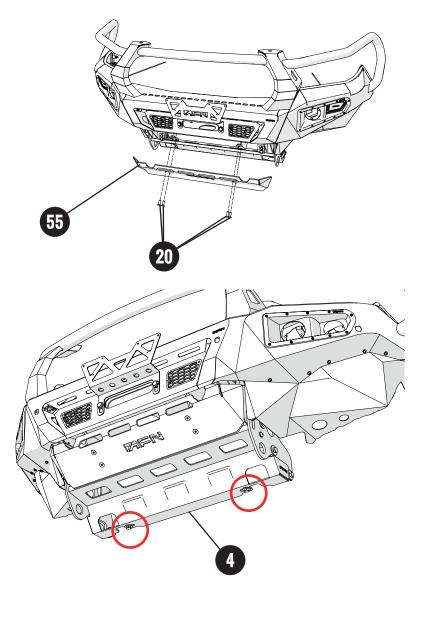
Start by fitting the Front Skid Plate(55) beneath the AFN Bullbar | Front Bumper(1).

Use 4x Bolts M10x30(23).

Give the final torque.

Once that is done, it's time to fully tight the 2x bolts on the Lower Skid Plate(4).

Give the final torque.





Step 9 - Final Result

Your new AFN Bullbar | Front Bumper is now installed on your Mazda BT-50!

Have Fun!



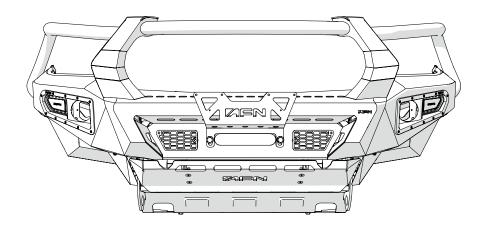
Reminder!

Before operating a vehicle fitted with an **AFN Front Bumper | Bullbar**:

- Make sure all fittings are tightened
- Check winch operation (if installed)
- Check all electrical wiring attached to lights and parking sensors (if installed)

Maintenance | Care

Periodically check and tighten all nuts. Stripped, fractured or bent bolts or nuts need to be replaced.



AFN 4x4 Accessories is becoming a well known brand for its products due to its quality, design and safety which are challenged for thousands of people everyday, worldwide.

In its diversity of products we can include, with all-terrain quality, protection, safety and aesthetic accessories. With that being said, **AFN 4x4** has some other accessories that every offroad passionate would like to have, such are **Body Protections**, **Underbody Protections**, **Light Holders**, **Storage** (Wheel Supports and Jerry-can carriers) and others related to the **Aesthetics**.

We have some 4x4 accessories that combine with the original model lines that if you take a closer look you will see that they don't appear to be an accessorie, but a must-have.

Please be in mind that some accessories are available only to some models. Feel free to check all the products that may interest you in our website at: www.afn.pt



Ref.: 48002831 - Bull Bar w/ Fog Lights



AFN4x4 products are warranted free from defects in materials and workmanship for a period of two (2) years from the date of initial retail purchase. Third-party components are delivered under the original manufacturer warranty.

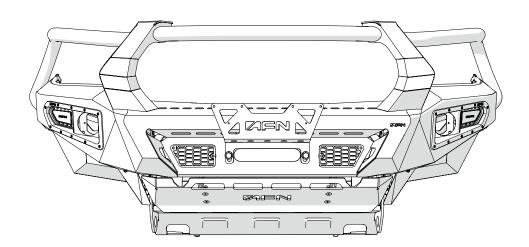
Under the present warranty, **AFN4x4** obligation shall be limited to repairing, replacing or crediting, at its option, any part found to be defective.

AFN4x4 does not warrant or make any representations concerning its goods when:

- a) The products are purchased used, scratch and dent or when the box was opened.
- b) The products are not installed, used, and maintained strictly in accordance with AFN4x4's instructions.
- c) The products are installed in vehicles that are used in competition.
- d) The products are installed in vehicles fitted with aftermarket non-standard tires with diameters in excess of OEM* specifications.
- e) The products are installed in vehicles with engines that have been modified to increase performance.

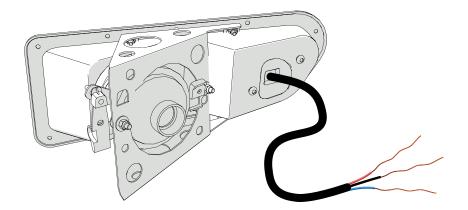
AFN4x4 will not be responsible for goods damaged in transit. If any goods arrive damaged, please contact the **AFN4x4** as soon as possible. **AFN4x4** will assess and may arrange to have the damaged goods returned to a **AFN4x4** Distributor and arrange for a replacement of the goods. Damaged goods must be returned in the condition received by you with all original packaging, accessories and/or manuals. If they are not returned in same condition sent there may be an additional fee charged.

To file a claim under this warranty please contact **AFN4x4** at +351 256 808 300 or via email at **geral@afn.pt** to request a *Returned Goods Authorization (RGA)* number and instructions for returning the defective component.



AFN LED LIGHTS 48002698_48002718_48002724





Electrical Fittings:

- The Red One / Brown One must be connected to the Positive of the OEM Day Running Light.
- The **Black One** must be connected to the Neutral cable of the vehicle.
- The Blue One must be connected to the Positive of the OEM blinkers.

Test if everything is correctly functioning.

