

CRAFTED LIKE NO OTHER

DON'T JUST SETTLE
FOR THE SAME
OLD BULL

OWNER MANUAL

FORD
RANGER 2023

AFN[®]
4 X 4 ACCESSORIES



WELCOME TO THE AFN FAMILY

This manual contains the **Ford RANGER +2023** fitting instructions for:
Bull Bar w/ Fog Lights Ref.: 48002864
Front Bumper w/ Fog Lights Ref.: 48002900

1 INTRODUCTION

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 accessory taking into consideration the original model lines and fitting points. We refuse to have a "one design fits all" solution and we are always looking forward 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

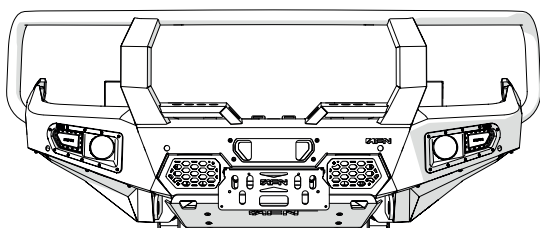
AFN 4x4 Accessories

Product: **Bull Bar w/ Fog lights**

Part Ref.: **48002864**

Product: **Front Bumper w/ Fog lights**

Part Ref.: **48002900**



Introduction 2

1 Checklist 4

Product 48002864

Product 48002900

2 Fitting Instructions 6

3 RANGER Catalogue 21

4 Warranty Terms 23

5 Attachments 24

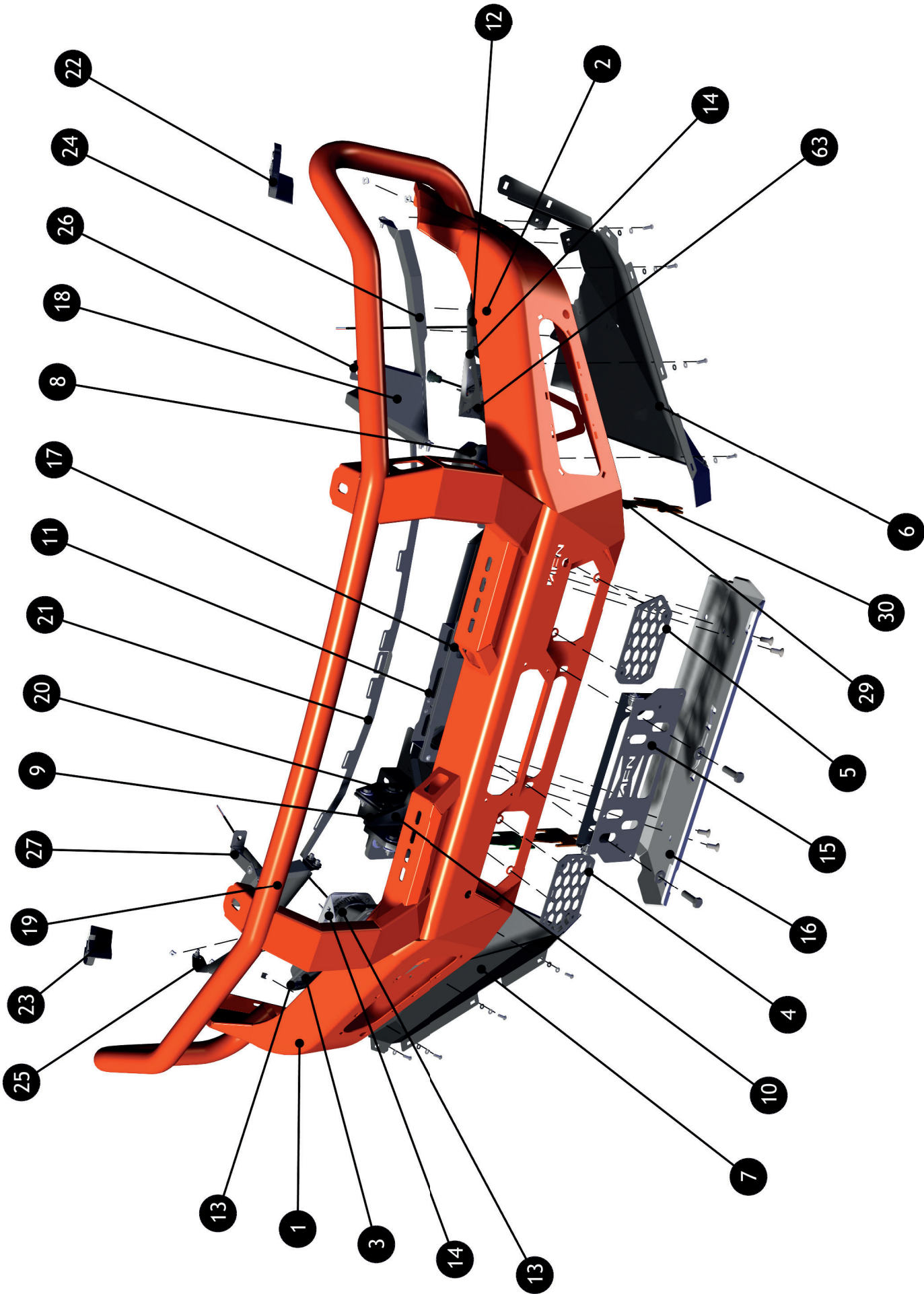


1 CHECKLIST

- 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 for both products **48002864** and **48002900**.

NUMBER	DESCRIPTION	REFERENCE	QTY	NUMBER	DESCRIPTION	REFERENCE	QTY
1	Bull Bar - Ford RANGER 2023	47002780	1x	34	Bolt M10x100x30	45000241	2x
2	AFN LED Indicator Lights - (Left Side)	47002088	1x	35	Bolt M10x25 <small>STAINLESS STEEL</small>	45000956	6x
3	AFN LED Indicator Lights - (Right Side)	47002089	1x	36	Washer M6	45000979	8x
4	Bumper Grill (Right Side)	47002782	1x	37	Bolt M6x20 <small>STAINLESS STEEL</small>	45000998	8x
5	Bumper Grill (Left Side)	47002783	1x	38	Cage Nut M6	45001012	16x
6	Left Wing	47002825	1x	39	Washer M3 <small>STAINLESS STEEL</small>	45001041	4x
7	Right Wing	47002826	1x	40	Nylock Nut M3 <small>STAINLESS STEEL</small>	45001043	4x
8	Winch Bracket Reinforcement (Left Side)	47002827	1x	41	Bolt M3x10 <small>STAINLESS STEEL</small>	45001045	4x
9	Winch Bracket Reinforcement (Right Side)	47002828	1x	42	Plastic Nut M3,5	45001113	8x
10	Winch Bracket	47002859	1x	43	Bolt M4x16 <small>STAINLESS STEEL</small>	45001114	8x
11	Radar Bracket - Ford RANGER 2023	47002867	1x	44	Washer M10 (big)	45001251	36x
12	Mask for Fog and Indicator Lights - (Left Side)	48002544	1x	45	Washer M6 (big)	45001252	22x
13	Mask for Fog and Indicator Lights - (Right Side)	48002545	1x	46	Washer M12 (small)	45001253	4x
14	Set of adjustable supports for fog lights	48002853	1x	47	Washer M6 (small)	45001256	4x
15	Foldable Plate Bracket	48002882	1x	48	Bolt M6x20	45001257	5x
16	Front Skid Plate <small>STAINLESS STEEL</small>	46011369	1x	49	Washer M8 (big)	45001267	26x
17	Radar Cover	46011370	1x	50	Rubber Nut	45001269	4x
18	HeadLight Component (Left Side)	46011373	1x	51	Bolt M8x30	45001520	10x
19	HeadLight Component (Right Side)	46011374	1x	52	Nylock Nut M8	45001521	16x
20	Winch Bracket's Reinforcement Plate	46011377	2x	53	Nylock Nut M6	45001522	12x
21	Grill Bracket	46011415	1x	54	Bolt M8x20	45001535	6x
22	Side Plastic (Left Side)	46011416	1x	55	Bolt M10x35	45001553	12x
23	Side Plastic (Right Side)	46011417	1x	56	Nylock Nut M10	45001554	18x
24	Headlight Bracket (Left Side)	46011549	1x	57	Nylock Nut M12	45001558	2x
25	Headlight Bracket (Right Side)	46011550	1x	58	Bolt M12x30	45001565	2x
26	Headlight Reinforcement (Left Side)	46011554	1x	59	Bolt M6x20	45001648	14x
27	Headlight Reinforcement (Right Side)	46011555	1x	60	Bolt M10x40	45001718	6x
28	Sleeve M10	46011560	2x	61	Plastic Washer M6	45001802	8x
29	Side Shim 2mm	46011583	2x	62	Nylock Nut M5	45001891	2x
30	Side Shim 4mm	46011584	2x	63	Led Fog Light - H8	45001987	2x
31	Ball Stud Bolt M6	46011662	2x	64	Rubber Bolt Ø12	45002036	4x
32	Washer M10 (big)	45000010	4x	65	Washer M5 (big)	45002084	2x
33	Nylock Nut M10	45000017	2x				



2 FITTING INSTRUCTIONS

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 responsibility for changes made in the vehicle by its manufacturer;
- Work safely and use specialized tools at all times;
- **Always use protective gear.**

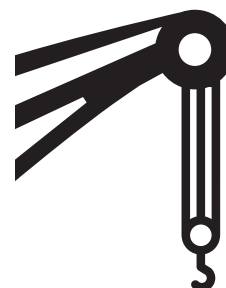
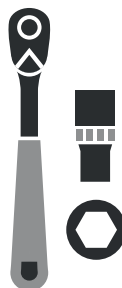


Size	Torque Nm	Torque lbft
M6	9 Nm	7 lbft
M8	22 Nm	16 lbft
M10	44 Nm	32 lbft
M12	77 Nm	57 lbft

Mouting Time

- 6-8 hours
- At times 2 people will be required to lift the bar into place

Tools Required



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

Step 1

Remove the OEM* bumper just as specified by the vehicle manufacturer in your maintenance manual. (Be aware that you must save the OEM bolts and nuts.)

Also remove the grill of the vehicle and be careful so you don't break the fasteners of the grill.



Step 2

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



Step 3

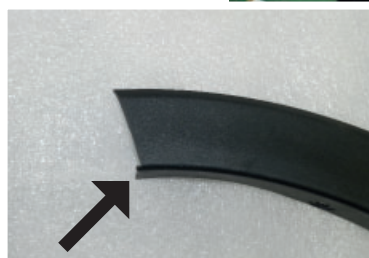
Start by cutting the **OEM* Wheel Arch Cover**.

Bear in mind that this a precision task, so please take time to correctly trim the **Wheel Arch Cover**.

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

Please note that the cut must have this format in order to stay fixed in **AFN's Side Plastic**.

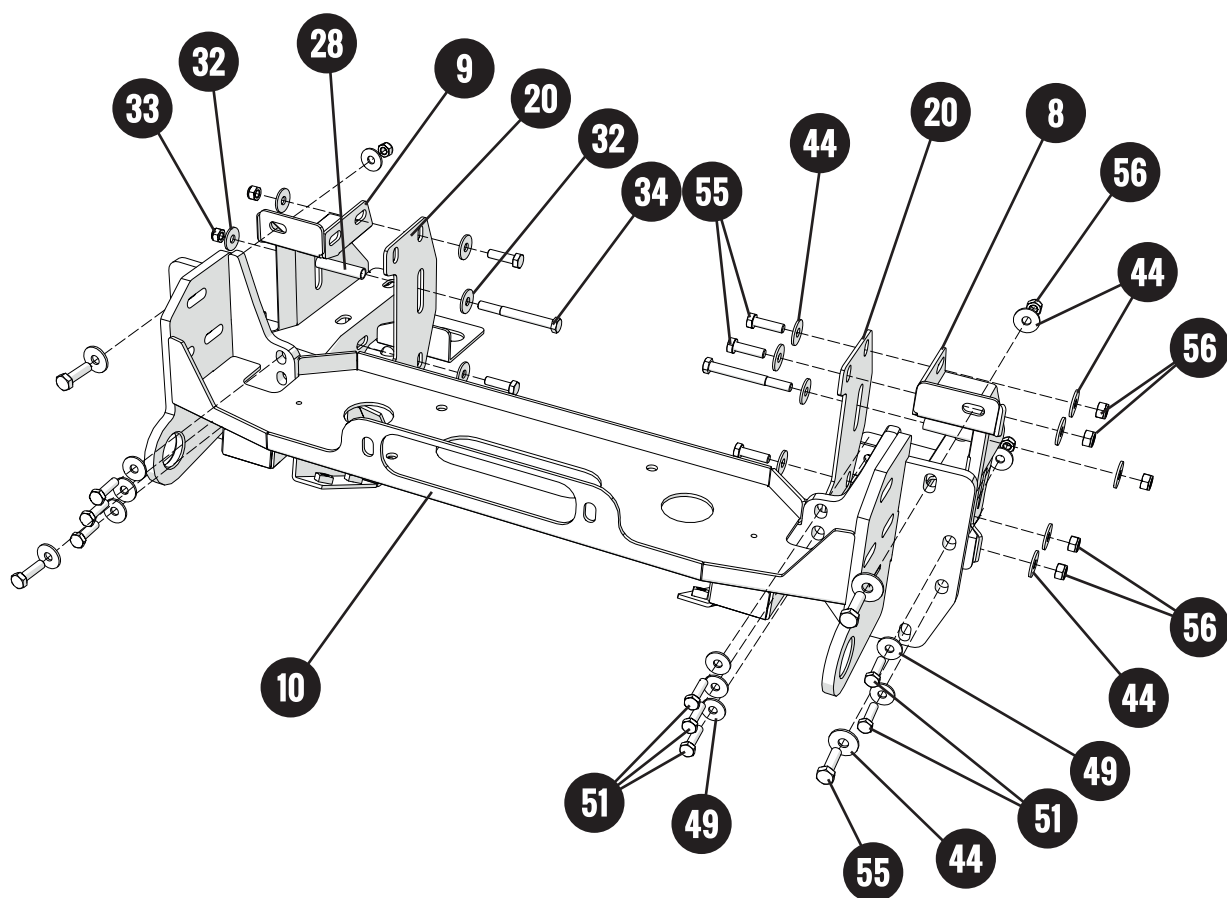
You may have to do the final touches in the trimming the grill. When it's done, and if you want to do a cleaner job, you may use a file to smooth the rough edges.



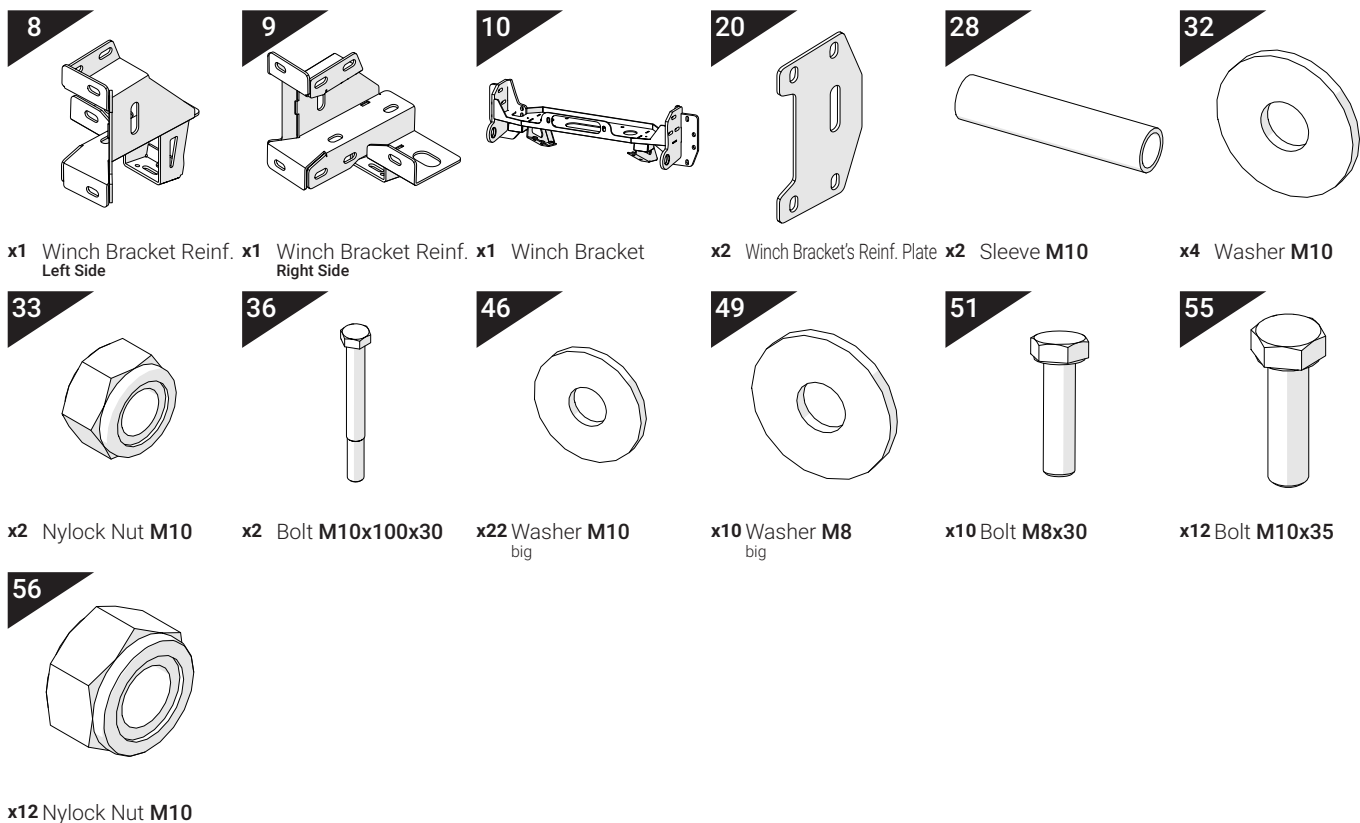
*OEM - Original Equipment Manufacturer

Step 1 - Fitting of the AFN Winch Bracket in the Vehicle

Preview



Parts needed:



Step 1 - Fitting of the AFN Winch Bracket in the Vehicle**Installation**

Once the vehicle is ready, start by fitting the **Left Winch Bracket Reinforcement(8)**.

Also use **Winch Bracket's Reinforcement Plate(20)** with 4x Bolts **M10x35(55)**, 8x Washers **M10(44)** and 4x Nylock Nuts **M10(56)**.

Then, use 1x Bolt **M10x100x30(34)** with 2x Washers **M10(32)**, Sleeve **M10(28)** and 1x Nylock Nut **M10(33)**.

Finally, in the bottom, use **OEM* Bolts. (see red circles, on picture)**

Just finger tight all bolts

Do Not tighten yet.

Repeat this step for the other side, using **Right Winch Bracket Reinforcement(9)**.

Once that is done, it's time to fit the **AFN Winch Bracket(10)**.

Inner Side:

Use 6x Bolts **M8x30(51)** with 12x Washers **M8(49)** and 6x Nylock Nuts **M8(X)**.

Outer Side:

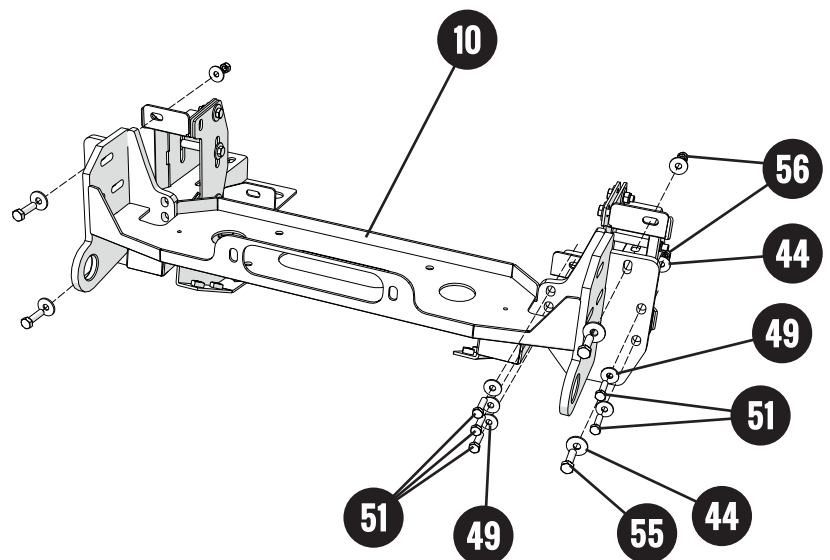
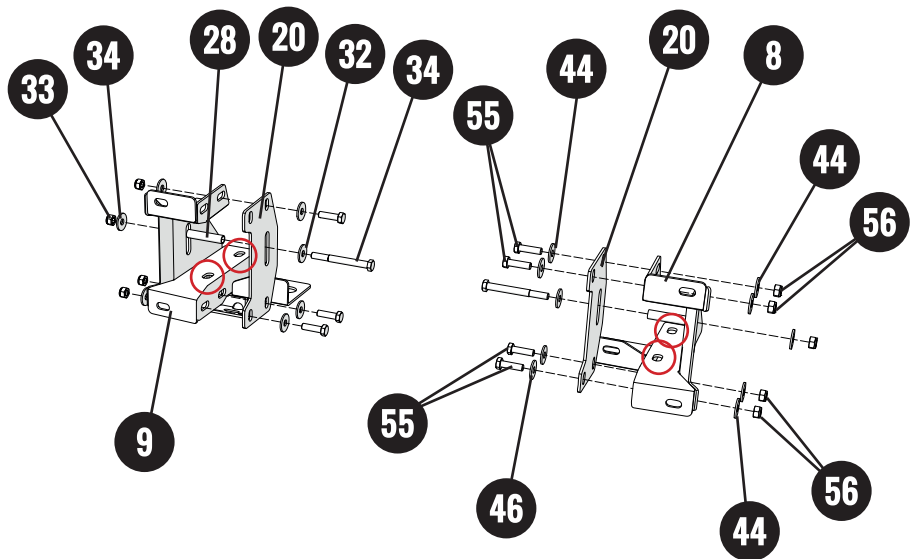
Use 4x Bolts **M8x30(51)** with 4x Washers **M8(49)**.

Use 4x Bolts **M10x35(55)** with 8x Washers **M10(44)** and 4x Nylock Nuts **M10(56)**.

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

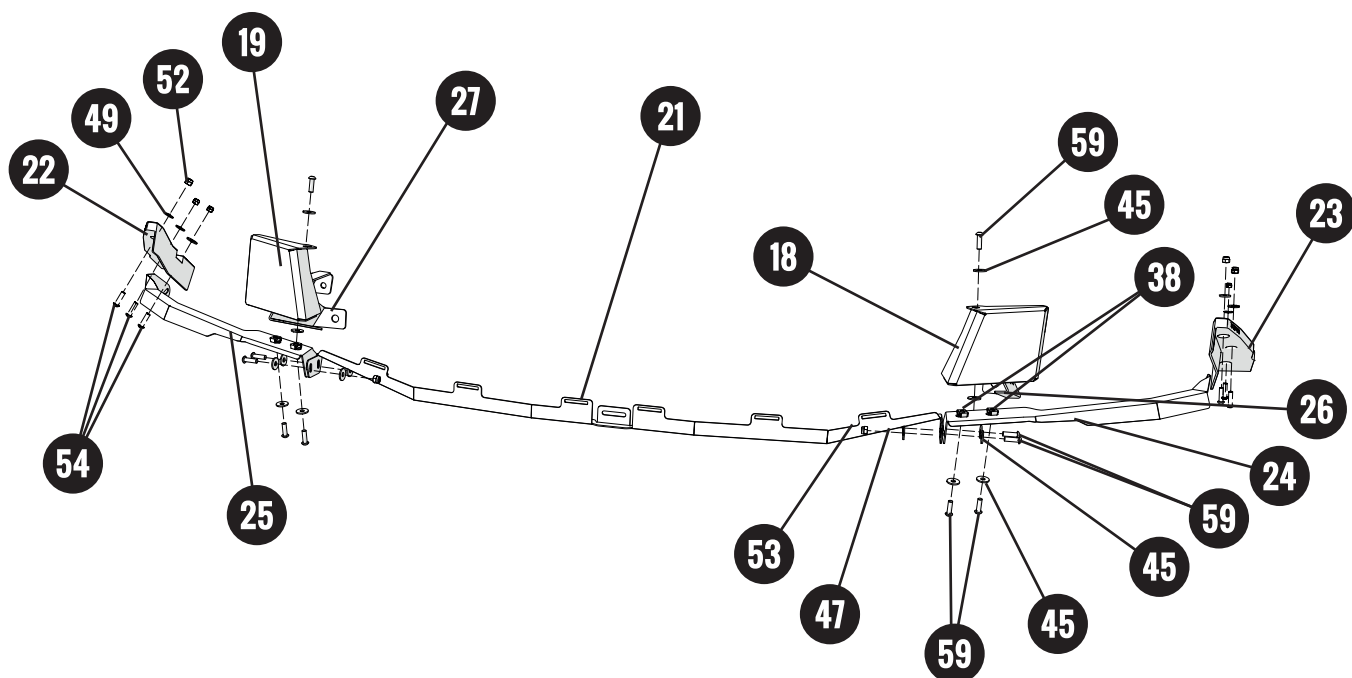
Once everything is correctly fitted,
Give the final torque on all bolts.

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

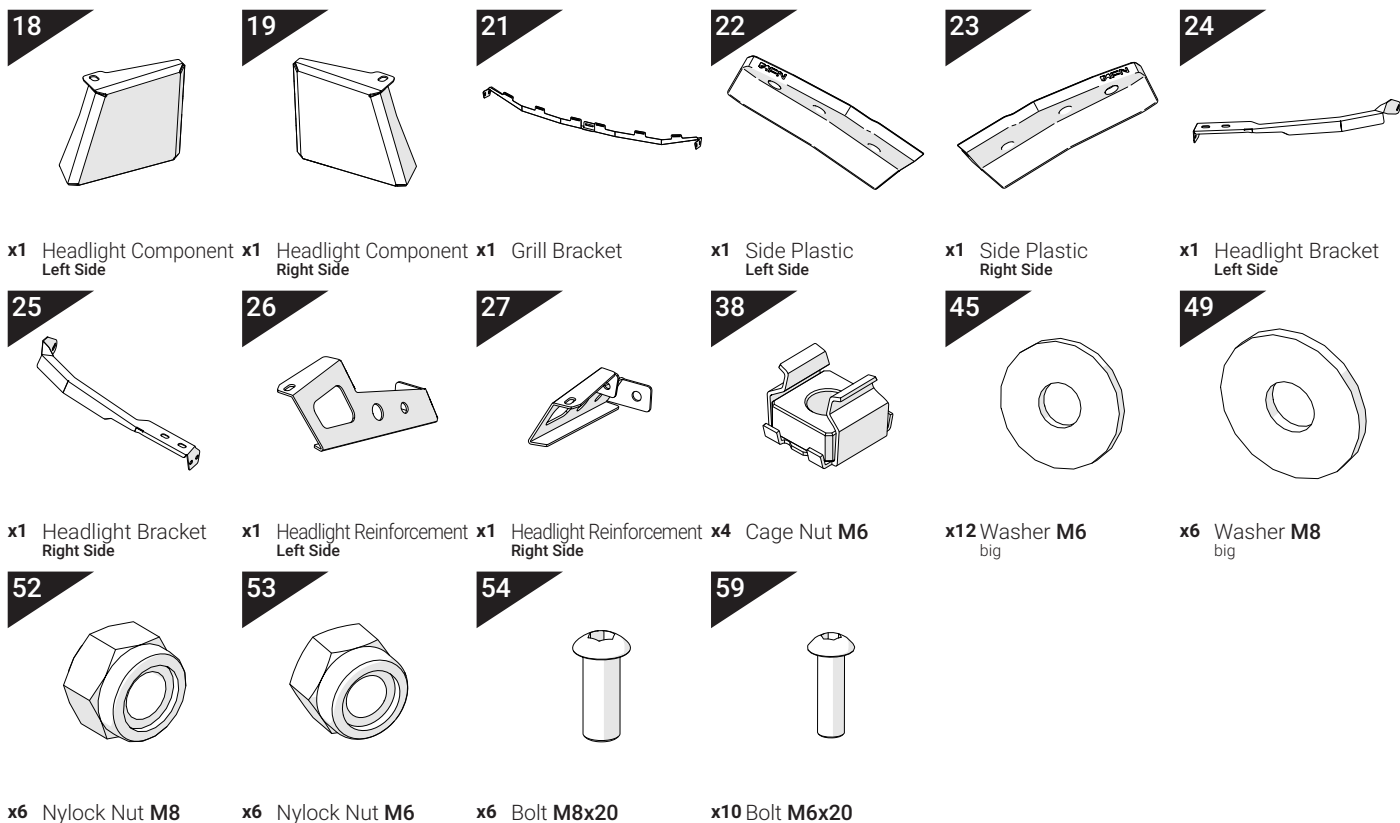


Step 2 - Fitting the Headlight Brackets and Grill Bracket

Preview



Parts needed:



Step 2 - Fitting the Headlight Brackets and Grill Bracket**Installation**

Start by fitting the **Left Headlight Reinforcement(26)**, using 2x *OEM** Bolts. (see red circles, on picture)

Then, fit the **Left Headlight Component(18)** using 1x Bolt **M6x20(59)** with 2x Washers **M6(45)** and 1x Nylock Nut **M6(53)**.

Once that is done, fit the **Left Side Plastic(23)**, using 3x Bolts **M8x20(54)** with 3x Washers **M8(49)** and 3x Nylock Nuts **M8(52)**.

Then, fit the **Left Headlight Bracket(24)** using 1x *OEM** Bolts. (see red circles, on picture)

In the front, use 2x Bolts **M6x20(59)**, 2x Washers **M6(45)** and 2x Cage Nuts **M6(38)**.

Just finger tight all bolts

Do Not tighten yet.

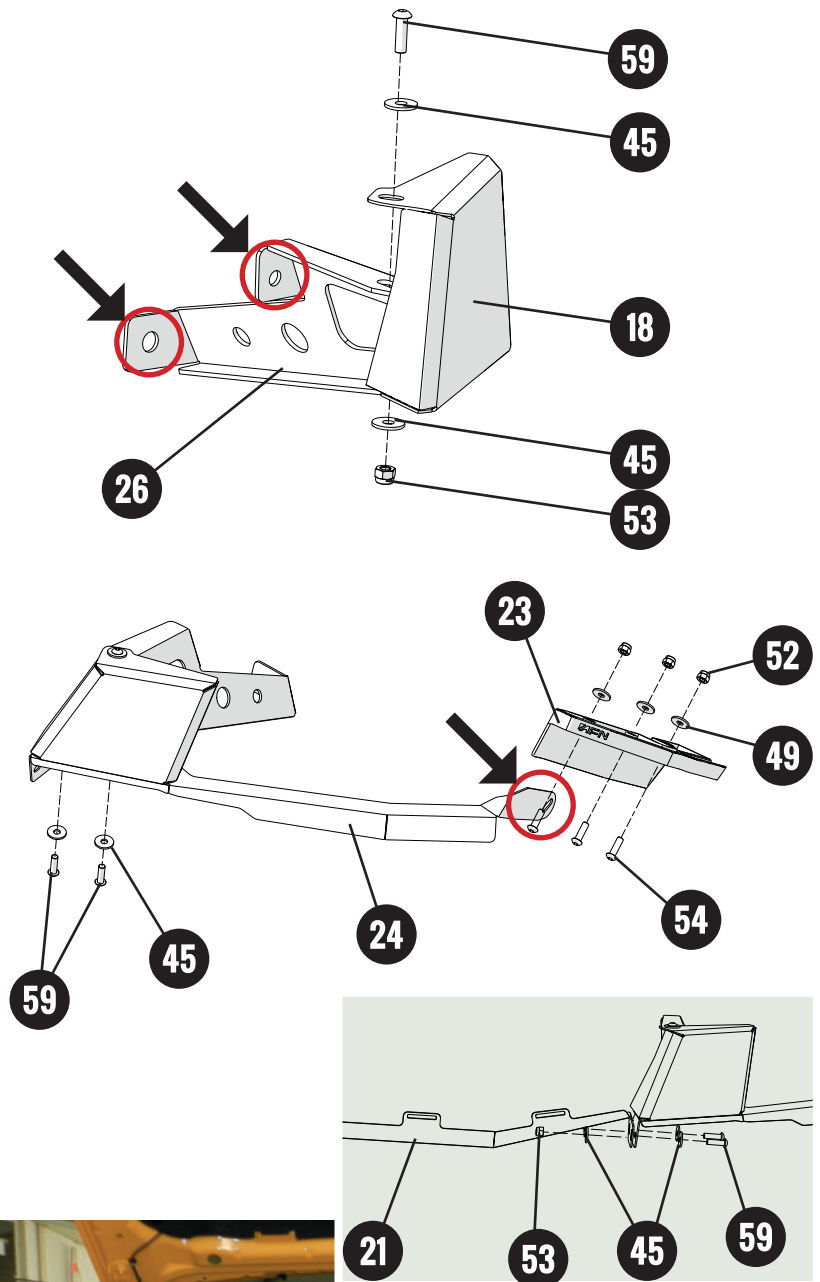
Repeat all of these steps for the other side, using **Right Headlight Reinforcement(27)**, **Headlight Component(19)**, **Left Headlight Bracket(25)** and **Right Side Plastic(22)**.

Finally, it's time to fit the **Grill Bracket(21)** in both **Headlight Brackets(24)** and **(25)** using 4x Bolts **M6x20(59)**, 8x Washers **M6(45)** and 4x Nylock Nuts **M6(53)**.

Once everything is correctly fitted,
Give the final torque on all bolts.

The last step is to fit the *OEM** Grill in the **Grill Bracket(21)**.

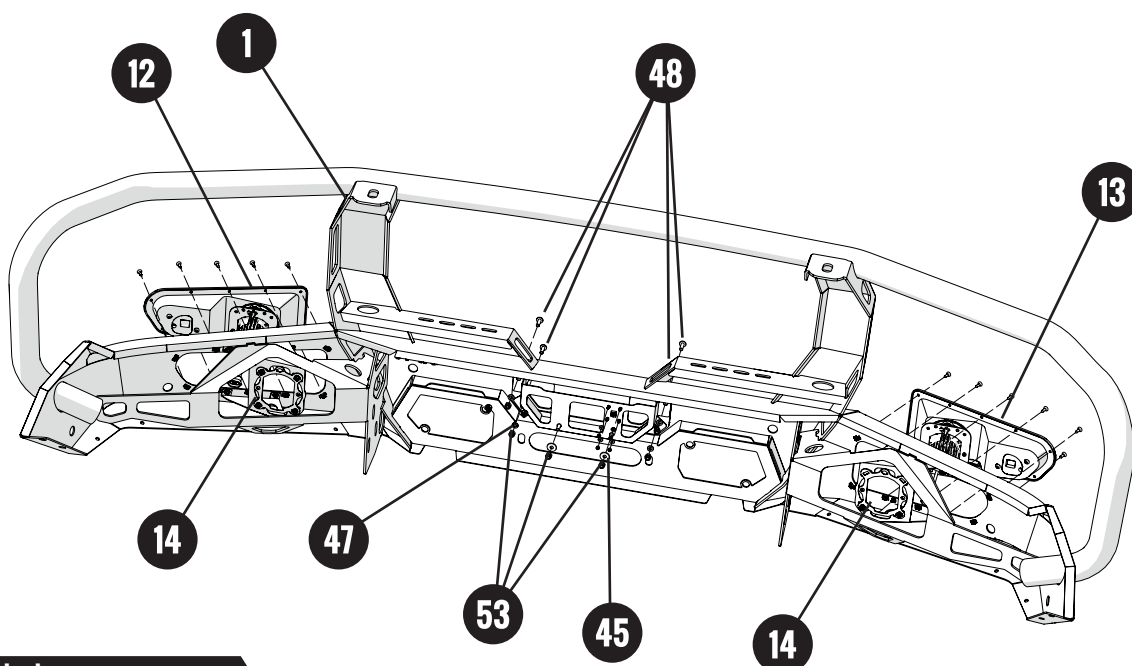
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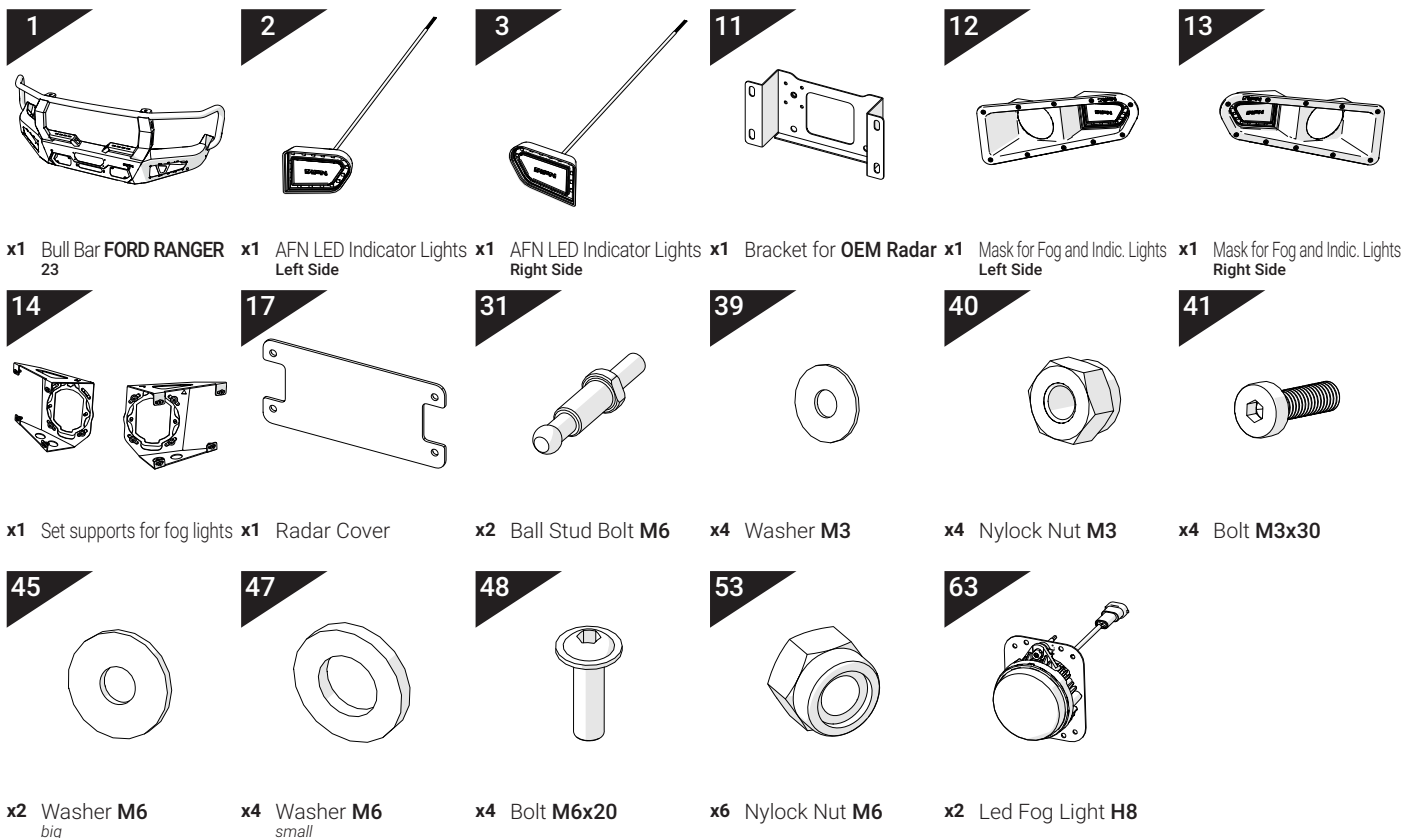
*OEM - Original Equipment Manufacturer

Step 3 - Preparing the AFN Bullbar | Bumper

Preview



Parts needed:



12 48002544

NUMBER	REF	QUANTITY
A1	4607977	1x
B1	45001114	10x
C1	45001113	10x

14 48002853

NUMBER	REF	QUANTITY
A3	46011110	1x
B3	46011109	1x
C3	45001232	4x
D3	45001166	4x
E3	45000949	4x
F3	45000924	4x
G3	45000921	6x

Step 3 - Preparing the AFN Bullbar | Bumper**Installation****ATTENTION!**

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

Start by removing the OEM* Radar from the original Bumper, and fit it in **Bracket for OEM Radar(11)**, using 2x Ball Stud Bolt **M6(31)**, 2x Washers **M6(45)**, and 2x Nylock Nuts **M6(53)**.

Then, use 4x Bolts **M3x10(41)**, 4x Washers **M3(39)**, and 4x Nylock Nuts **M3(40)**.

Finally, fit the **Bracket for OEM Radar(11)** in **AFN Bullbar | Front Bumper(1)**.

Use 4x Bolts **M6x20(48)**, 4x Washers **M6(47)**, and 4x Nylock Nuts **M6(53)**.

Once that is done, it's time to fit the **Plastic Mask for Fog and Indicator Lights(12)** and Left Led Indicator Light(2) in the **AFN Bullbar | Front Bumper(1)**.

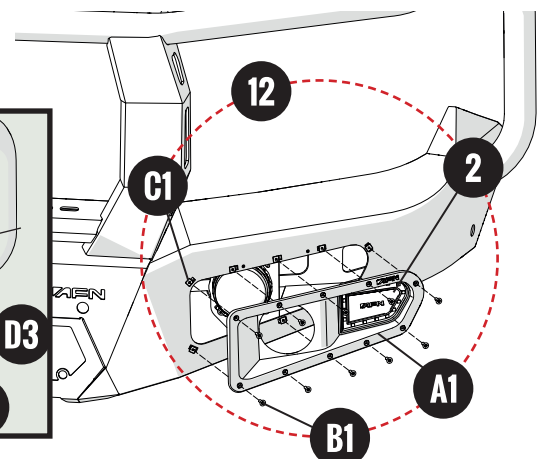
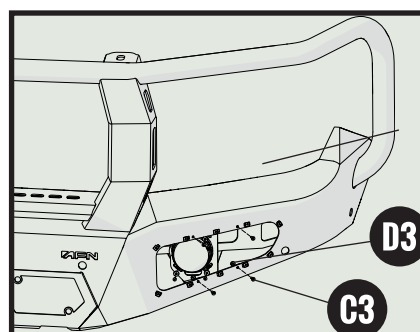
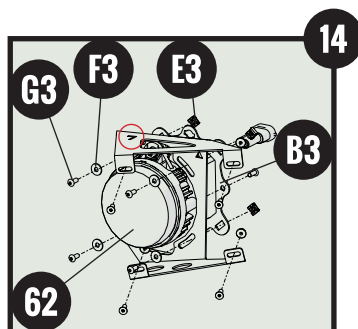
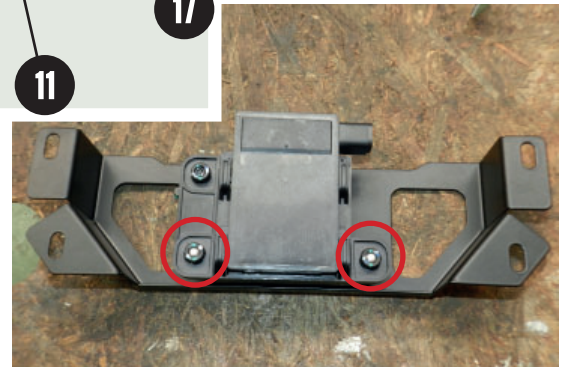
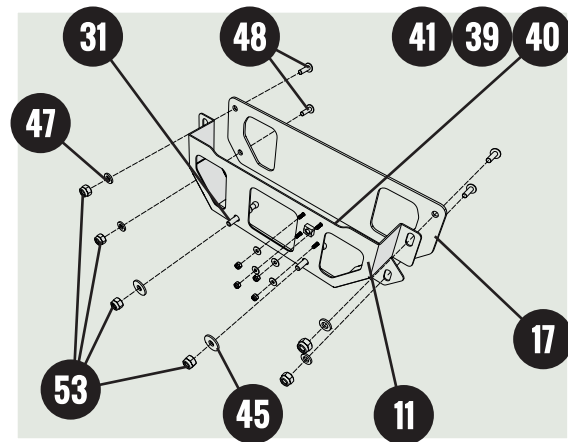
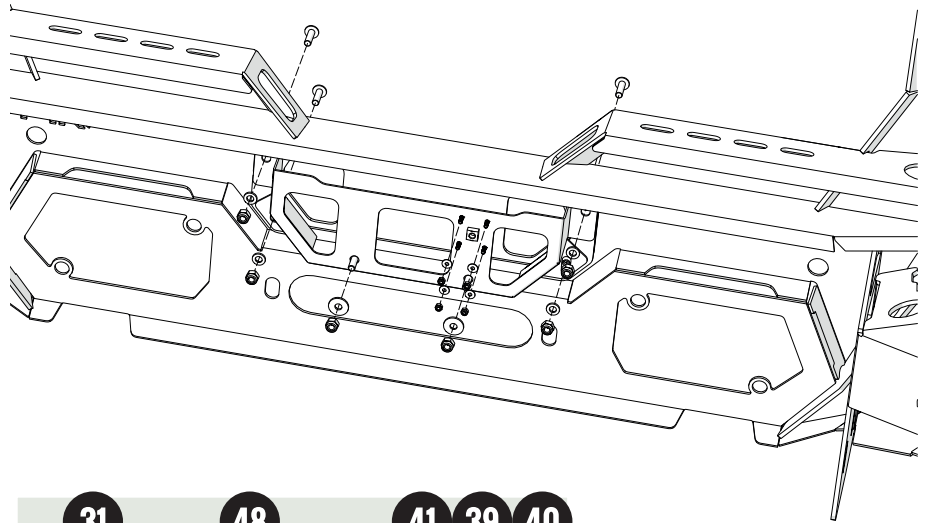
Take on **Led Fog Lights(63)** and fit it in the **Support for Fog Light(14)** with **Rear Bracket Fog Light(B3)**.

Use 4x Bolts **M4x10(G3)** with 4x Washers **M4(F3)** and 4x Cage Nuts **M4(E3)**. *(these bolts are already fitted on the Bumper)*

Then, fit this assembly, in the **AFN Bullbar | Front Bumper(1)** use 4x Bolts **M5x16(C3)** with 4x Flange Nuts **M5(D3)**.

Finally, fit the **Mask for Fog and Indicator Lights(12)** in the **AFN Bullbar | Front Bumper(1)** use 10x Bolts **M4x16(B1)** with 4x Plastic Nuts **M3,5(C1)**.

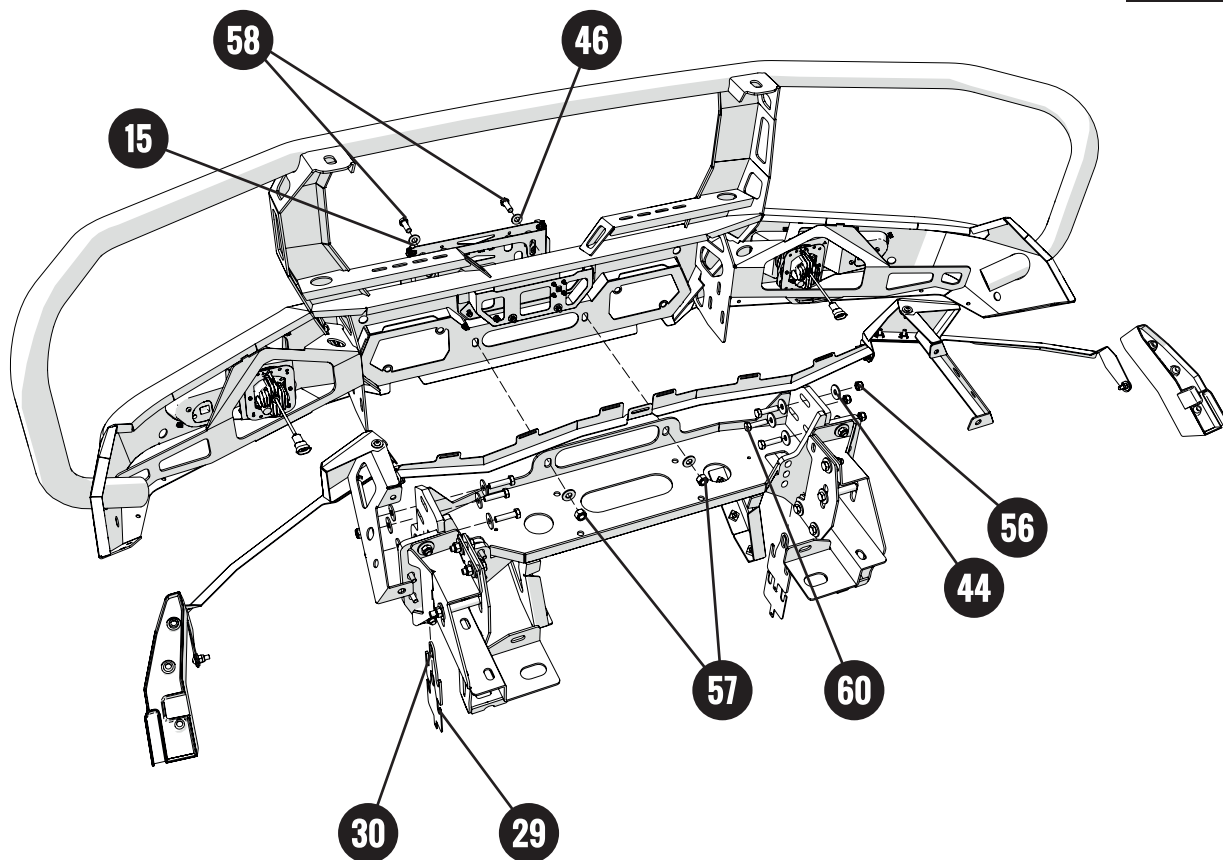
Once everything is correctly fitted,
Give the final torque on all bolts.



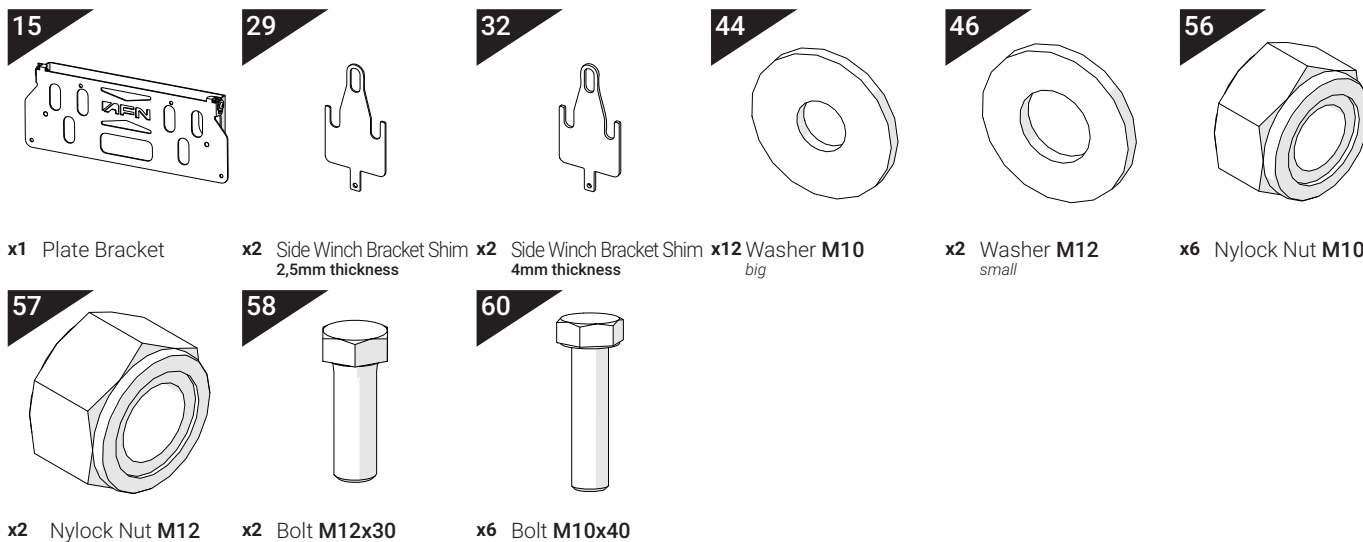
Step 4 - Fitting the AFN Bullbar | Bumper in the Vehicle

Preview

INSIDE VIEW



Parts needed:



Step 4 - Fitting the AFN Bullbar | Bumper in the Vehicle**Installation**

Once the **AFN Bullbar | Front Bumper(1)** is ready, it's time to fit it into the **Winch Bracket(2)**.

Use 6x Bolts **M10x40(60)**, with 12x Washers **M10(44)** and 6x Nylock Nuts **M10(56)**.

Then, fit **Plate Bracket(15)** using 2x Bolts **M12x30(58)** with 4x Washers **M12(46)** and 2x Nylock Nuts **M12(57)**.

Just finger tight all bolts

Do Not tighten yet.

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**.

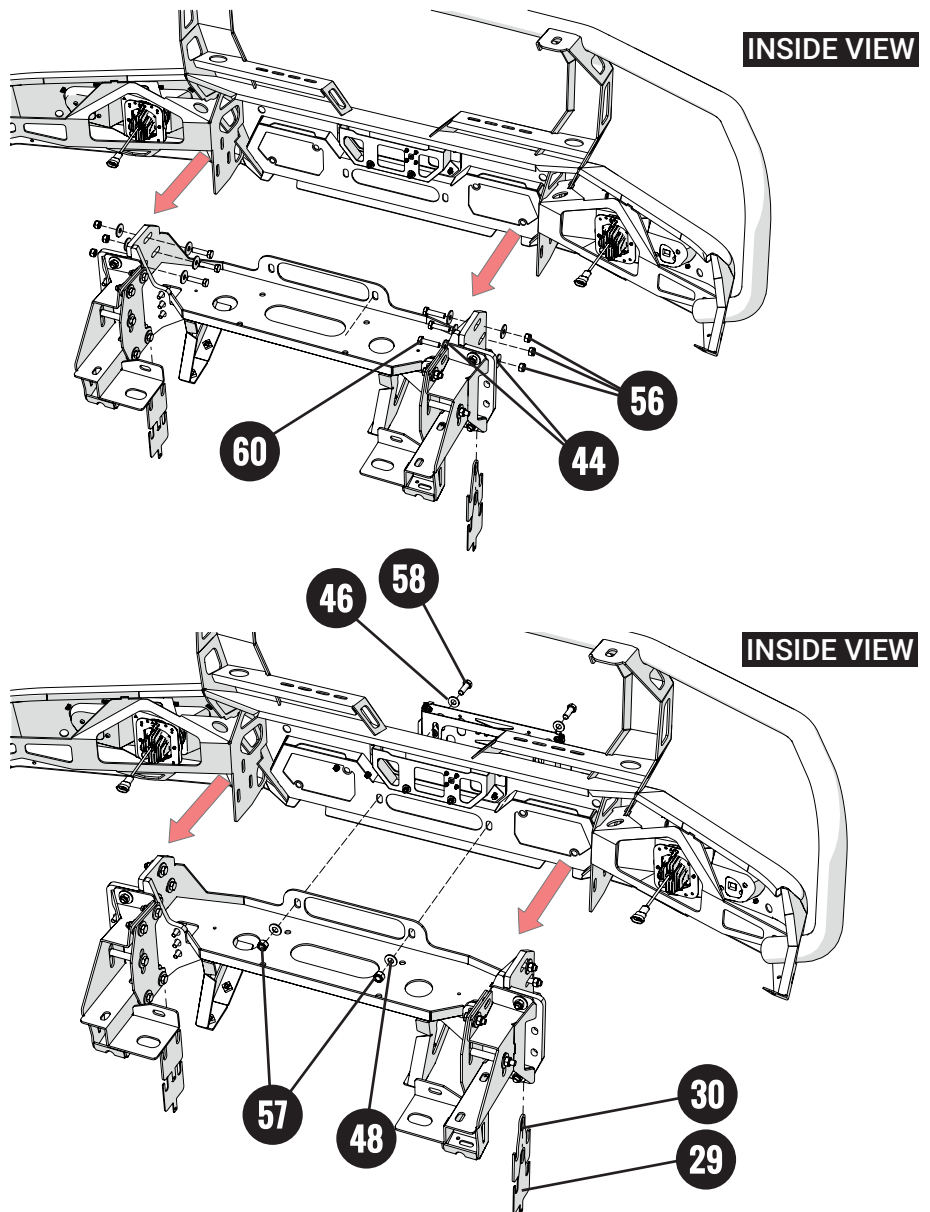
The side shims(**29**) and (**30**) allows the corners of the **AFN Bullbar | Bumper(1)** to open or to close, depending if they are fitted or not.

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

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

Once everything is correctly fitted,
Give the final torque on all bolts.

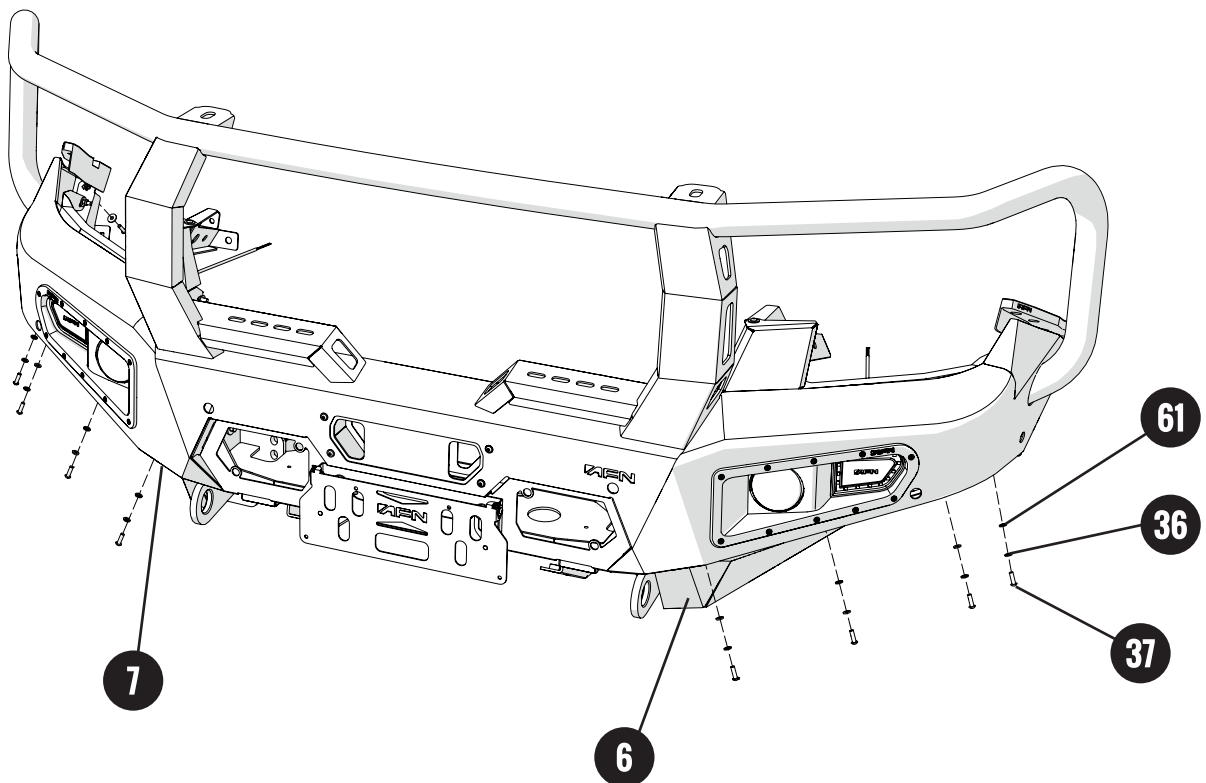
If you have done it correctly, this is what it should look like.



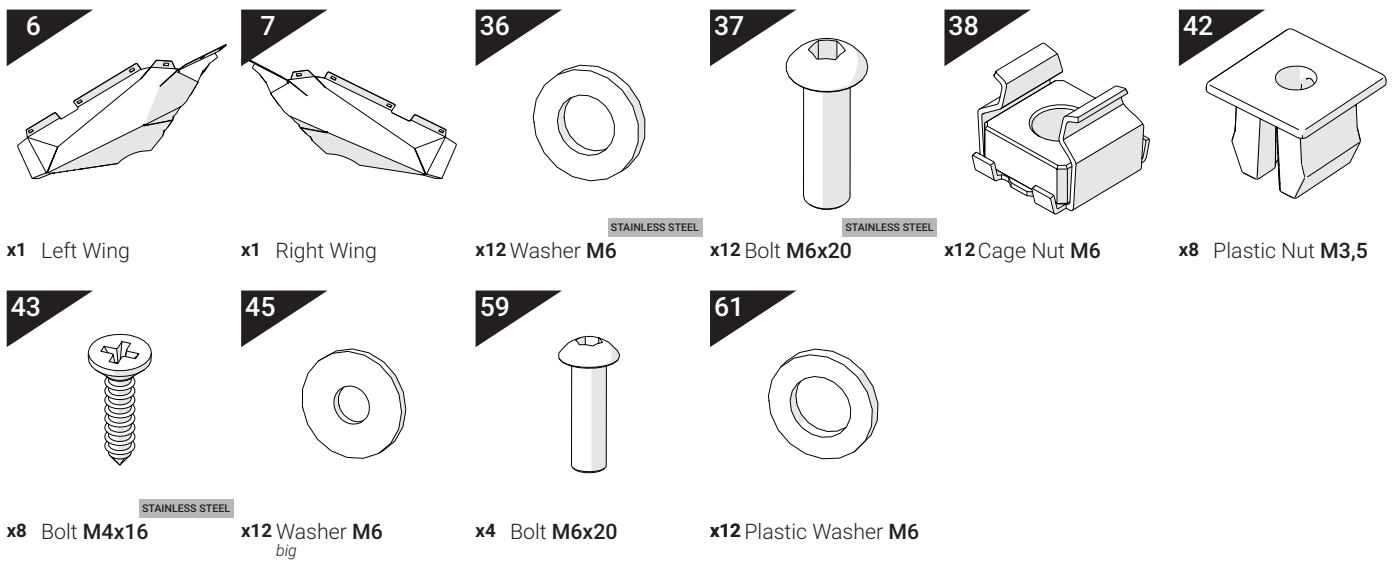
The **AFN Bullbar | Bumper(1)** must have an equal gap (**10-15 mm**) on both sides and also near the headlights.

Step 5 - Fitting the Wings in the AFN Bullbar | Bumper

Preview



Parts needed:



Step 5 - Fitting the Wings in the AFN Bullbar | Bumper**Installation**

Take on **Left Wing(6)** and fit it on the **AFN Bullbar | Front Bumper(1)**.

But first we advise to fit 6x Cage Nuts **M6(38)**.

On the Rear, fit 4x Plastic Nuts **M3,5(42)**.

Tip1:

You may use a screwdriver to easily fit the 12x Cage Nuts(38).

Tip2:

You may use a rubber mallet to easily fit the 8x Plastic Nuts(42).

Once that is done, fit the **Left Wing(6)** in the **AFN Bullbar | Bumper(1)**.

In the front:

Use 4x Bolts **M6x20(37)** with 4x Washers **M6(36)** and 4x Plastic Washers **M6(61)**.

In the rear:

Use 2x Bolts **M6x20(59)** with 2x Washers **M6(45)**.

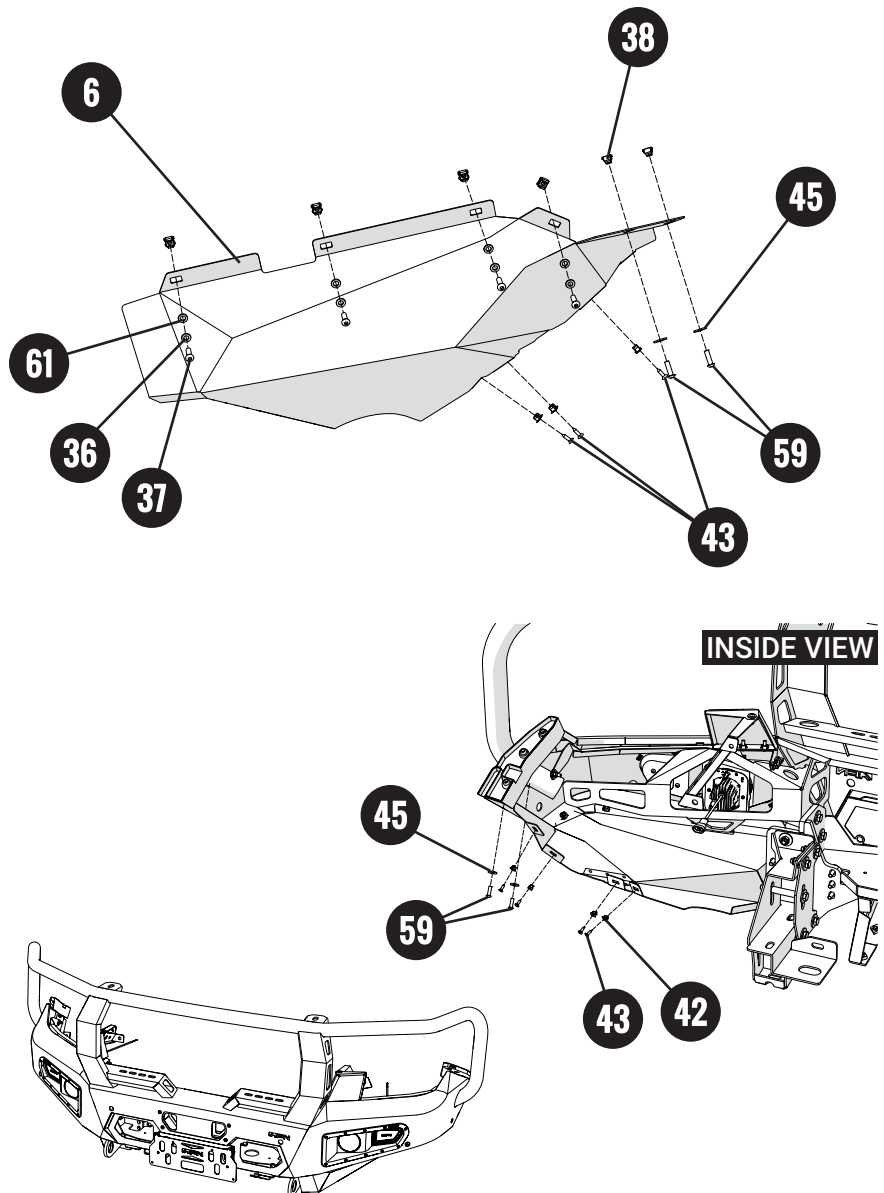
Give the final torque.

Move the **Plastic fender** against the **Left Wing(6)** 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.

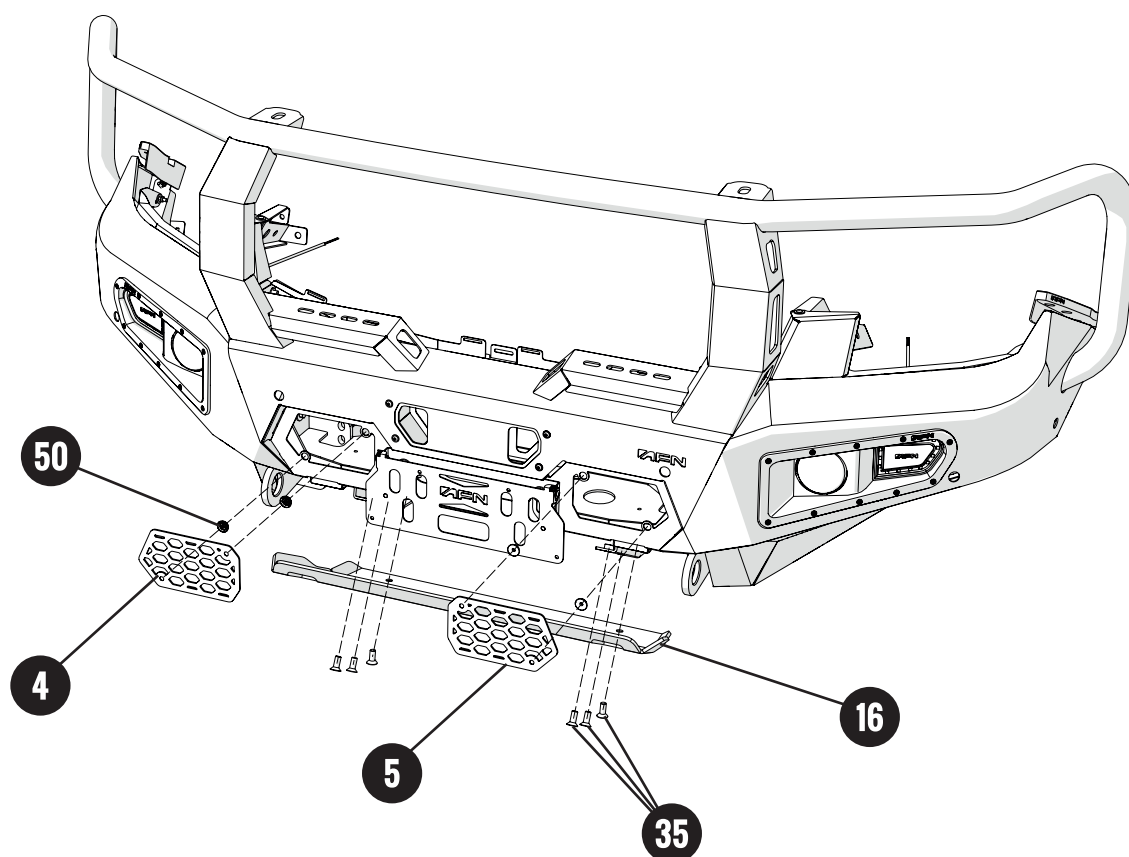
Then, move the **Plastic fender** to the outside of the **Left Wing(6)** and fit them through these holes using 4x Bolts **M4x16(43)**.

Repeat all these steps on the other side for the **Right Wing(7)**.

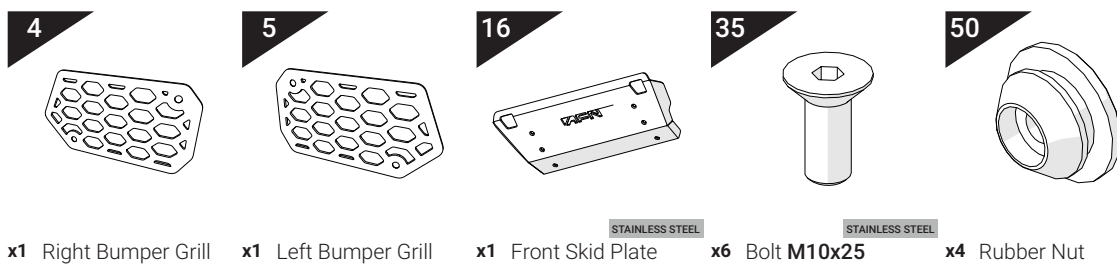
Give the final torque.

Step 6 - Fitting the Skid Plate and Bumper Grills in the AFN Bullbar | Bumper

Preview



Parts needed:

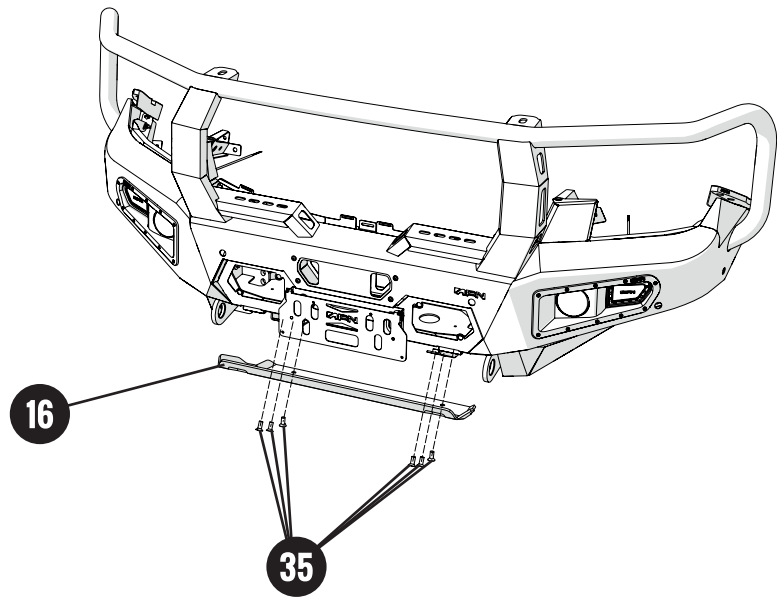


Step 6 - Fitting the Skid Plate and Bumper Grills in the AFN Bullbar | Bumper**Installation**

Start by fitting the **Front Skid Plate(16)** beneath the **AFN Bullbar | Front Bumper(1)**.

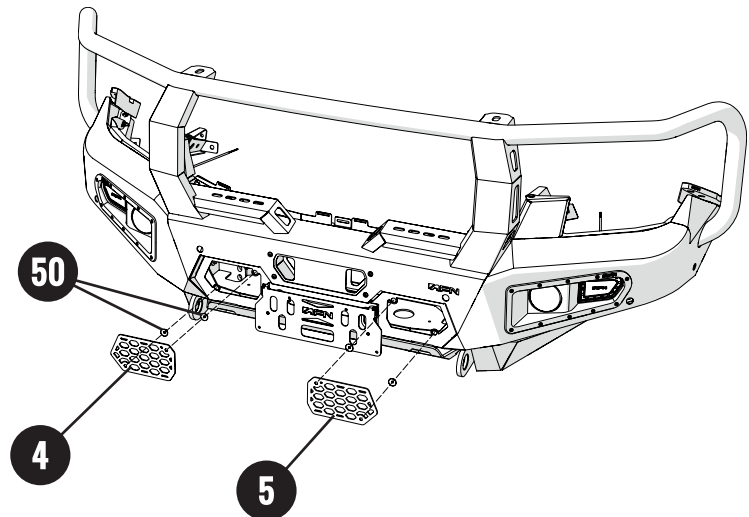
Use 6x Bolts **M10x25(35)**.

Give the final torque.



Finally, it's time to fit both **Bumper Grills(4)** and **(5)** using 4x Rubber Nuts(**50**).

Give the final torque.



Step 9 - Final Result

Your new **AFN Bullbar | Front Bumper** is now installed on your **Ford RANGER**!

Have Fun!



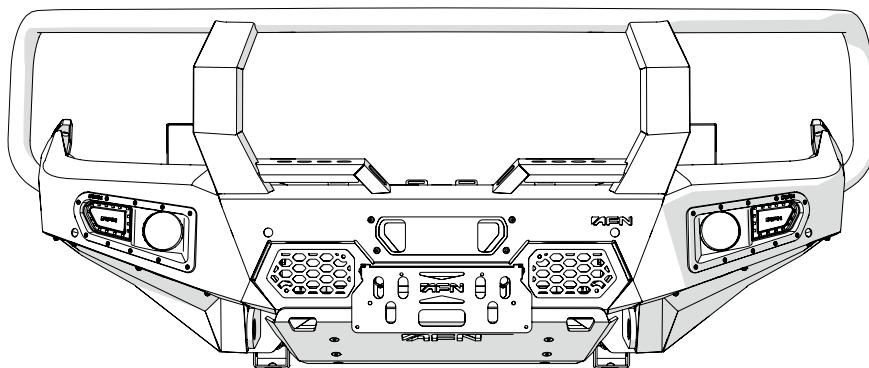
Reminder !

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.





3 RANGER CATALOGUE

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 as **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 accessory, 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.: 48002864 - Bull Bar w/ Fog Lights



Ref.: 48002900 - Front Bumper w/ Fog Lights



Ref.: 48002907 - Bull Bar w/ Fog Lights **ARMY**



Ref.: 4800XXXX - Rear Bumper w/ trailer hitch



Ref.: 48002903 - Rear Bumper w/ trailer hitch
ARMY



Ref.: 48002897 - Transfer box Skid Plate
V6 Diesel Engine



Ref.: 48002896 - Gearbox Skid Plate
V6 Diesel Engine



Ref.: 48002906 - Radiator Skid Plate



Ref.: 48002868 - Side Steps



Ref.: 48002869 - Nerf Bars



Ref.: 48002904 - Roof Rack for Hardtop



Ref.: 48002909 - Roof Rack for Hardtop

4 WARRANTY TERMS

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.

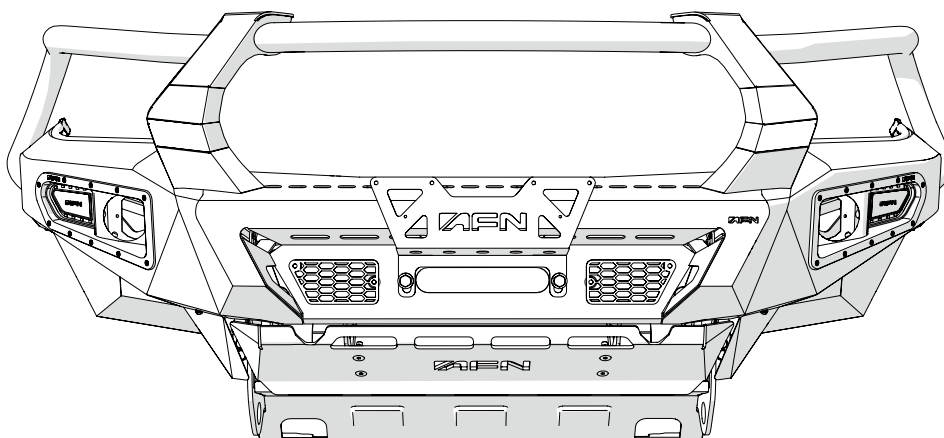
Under the present warranty, **AFN4x4** obligation shall be limited to repairing, replacing or crediting, at its option, any part found to be defective.

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.

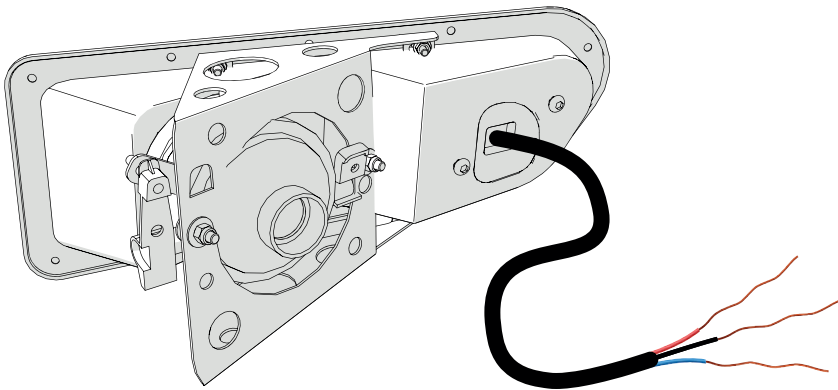
AFN4x4 will not be responsible for goods damaged in transit. If any goods arrive damaged, please contact the **AFN4x4** as soon as possible. **AFN4x4** will assess and may arrange to have the damaged goods returned to a **AFN4x4** Distributor and arrange for a replacement of the goods. Damaged goods 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 48002544

5 ATTACHMENTS

**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.

DON'T JUST SETTLE FOR THE SAME OLD BULL



WWW.AFN.PT | SALES@AFN.PT | FACEBOOK.COM/AFN4X4

WELCOME TO THE AFN FAMILY



PROGRAMA OPERACIONAL REGIONAL DO NORTE



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