

CRAFTED LIKE NO OTHER

DON'T JUST SETTLE
FOR THE SAME
OLD BULL

OWNER MANUAL

MERCEDES
G-CLASS 1979+

AFN[®]
4 X 4 ACCESSORIES

WELCOME TO THE AFN FAMILY

This manual contains the Mercedes G-CLASS +1979 fitting instructions for:
Rear Bar w/ Wheel Carrier Ref.: 48002556

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

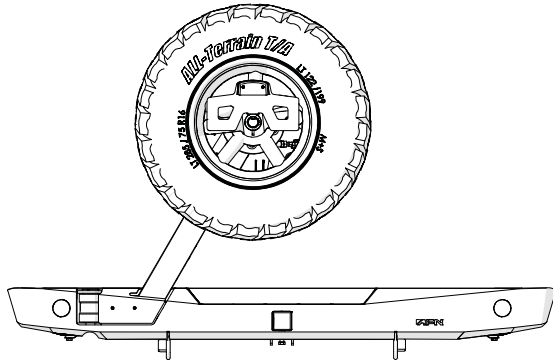
AFN designs each accessory taking into consideration the original model lines and fitting points. We refuse to have a "one design fits all" solution and we are always looking forward to embrace new challenges on how to adjust a new product into a new model!

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.





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AFN 4x4 Accessories
Product: **Rear Bumper w/ wheel carrier**
Part Ref.: **48002556**

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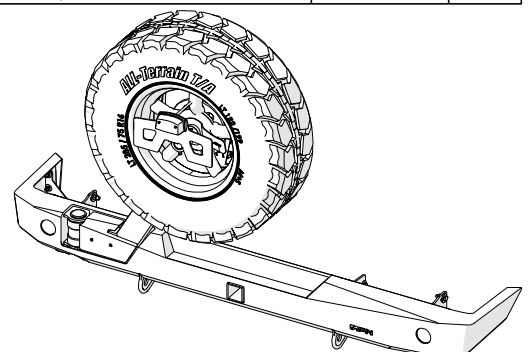
1 CHECKLIST

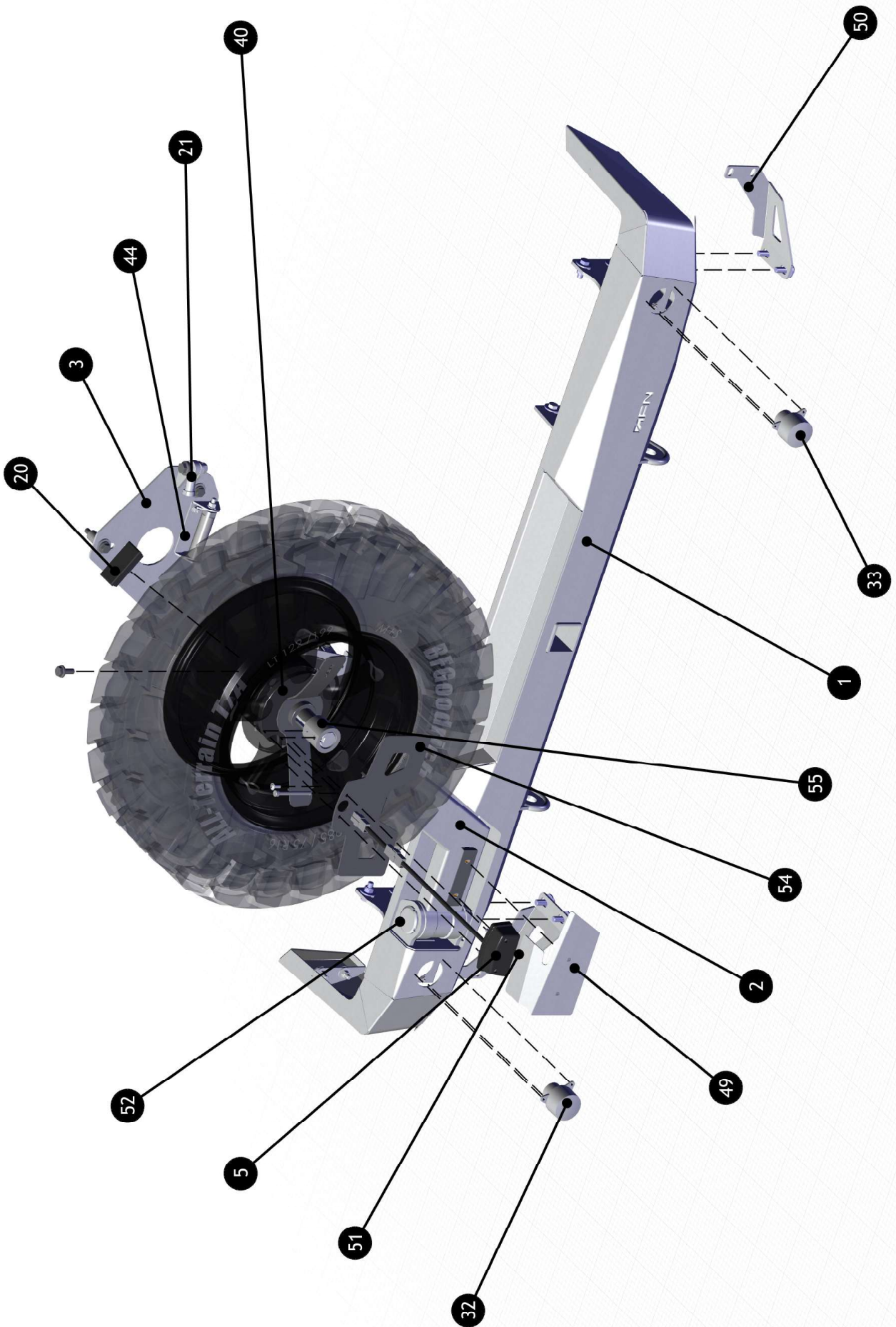


- In this section you have a checklist with all parts included for the installation of your AFN product
- This product should be installed as demonstrated in the product fitting instructions
- If verified that any component is damaged, please contact your nearest AFN distributor
- The specified parts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

This checklist is for product **48002556**.

NUMBER	DESCRIPTION	REFERENCE	QTY	NUMBER	DESCRIPTION	REFERENCE	QTY
1	Rear Bumper Mercedes G	47002092	1x	30	Flange Nut M12	45001249	2x
2	Wheel Carrier Arm	47002093	1x	31	Bolt M6x16	45001258	1x
3	Closing Bracket Plate	47002094	1x	32	Round Fog LED Light	45001385	1x
4	Closing Swivel	47000801	1x	33	Round Reverse LED Light	45001386	1x
5	Plate Light	47001233	1x	34	Flange Bolt M12x45	45001401	2x
6	Bolt M10x30	45000007	8x	35	Flange Bolt M6x35	45001402	4x
7	Washer M10	45000010	20x	36	Flange Bolt M10x60x25	45001403	1x
8	Washer M8	45000011	8x	37	Plastic Arm Stop	46003672	2x
9	Bolt M8x25	45000014	4x	38	Pin Lock Hitch Pin for Plate Bracket	46004841	1x
10	Bolt M10x25	45000015	4x	39	Tire Bracket Shaft	46005351	1x
11	Nylock Nut M10	45000017	8x	40	Nylon Tire Limiter Cap	46005352	1x
12	Nylock Nut M8	45000018	4x	41	Nylon Tire Limiter	46005353	1x
13	Nut M12	45000034	3x	42	Tire Bracket Nut	46005354	1x
14	Bolt M14x45	45000163	1x	43	Plastic Cap M14	46007960	1x
15	Bolt M12x40	45000267	2x	44	Closing Bracket	46007969	1x
16	Washer M10	45000307	3x	45	Plastic Bushing	46007970	1x
17	Tapered Bearing Ø62xØ35x19	45000871	1x	46	Adjustment Shim	46007971	2x
18	Tapered Bearing Ø55xØ30x18	45000872	1x	47	Hitch Lock Pin for Closing Bracket	46007974	1x
19	Cage Nut M4	45000949	8x	48	Bushing	46007976	1x
20	Wheel Carrier Arm Nylon Cap	45001028	1x	49	Wheel Carrier Arm Cover	46008015	1x
21	Heim Joint M12	45001046	2x	50	Right Reinforcement	46008016	1x
22	Bolt M4x12	45001090	6x	51	Left Reinforcement	46008017	1x
23	Bearing Seal Ø55x40x7	45001132	1x	52	Threaded Shaft	46008018	1x
24	Bearing Seal Ø62x45x7	45001133	1x	53	Threaded Shaft Nut	46008019	1x
25	Bolt M4x12	45001232	2x	54	Plate Bracket	46008033	1x
26	Hex Flange Bolt M10x25	45001236	1x	55	Sleeve Bracket	46008035	1x
27	Hex Flange Bolt M10x45x30	45001239	2x	56	Upper Sleeve	46008036	1x
28	Flange Nut M6	45001246	4x	57	Lower Sleeve	46008037	2x
29	Flange Nut M8	45001247	3x	58	Tie Rod Adapter Stud	46008038	1x





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.**

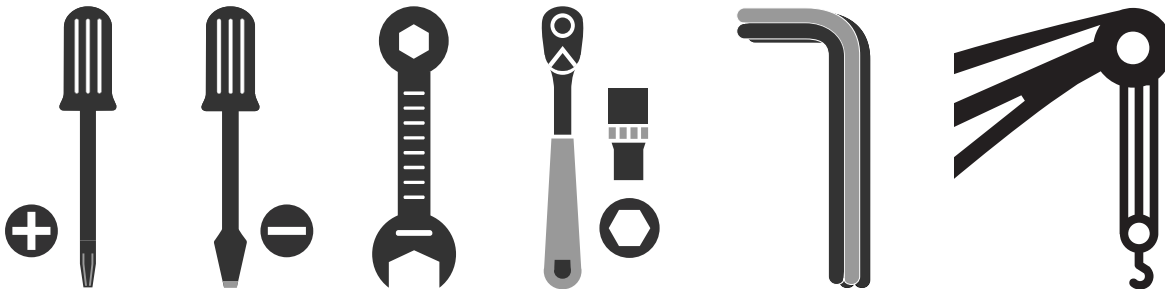


Size	Torque Nm	Torque lbft
M6	9 Nm	7 lbft
M8	22 Nm	16 lbft
M10	44 Nm	32 lbft
M12	77 Nm	57 lbft

Mouting Time

- 4 hours
- 2 persons (recommended)

Tools Required



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

Step 1 - Remove the OEM* Bumper

Remove the *OEM** Rear Bumper just as specified by the vehicle manufacturer in your maintenance manual.

(Be aware that you must save the *OEM bolts and nuts*.)



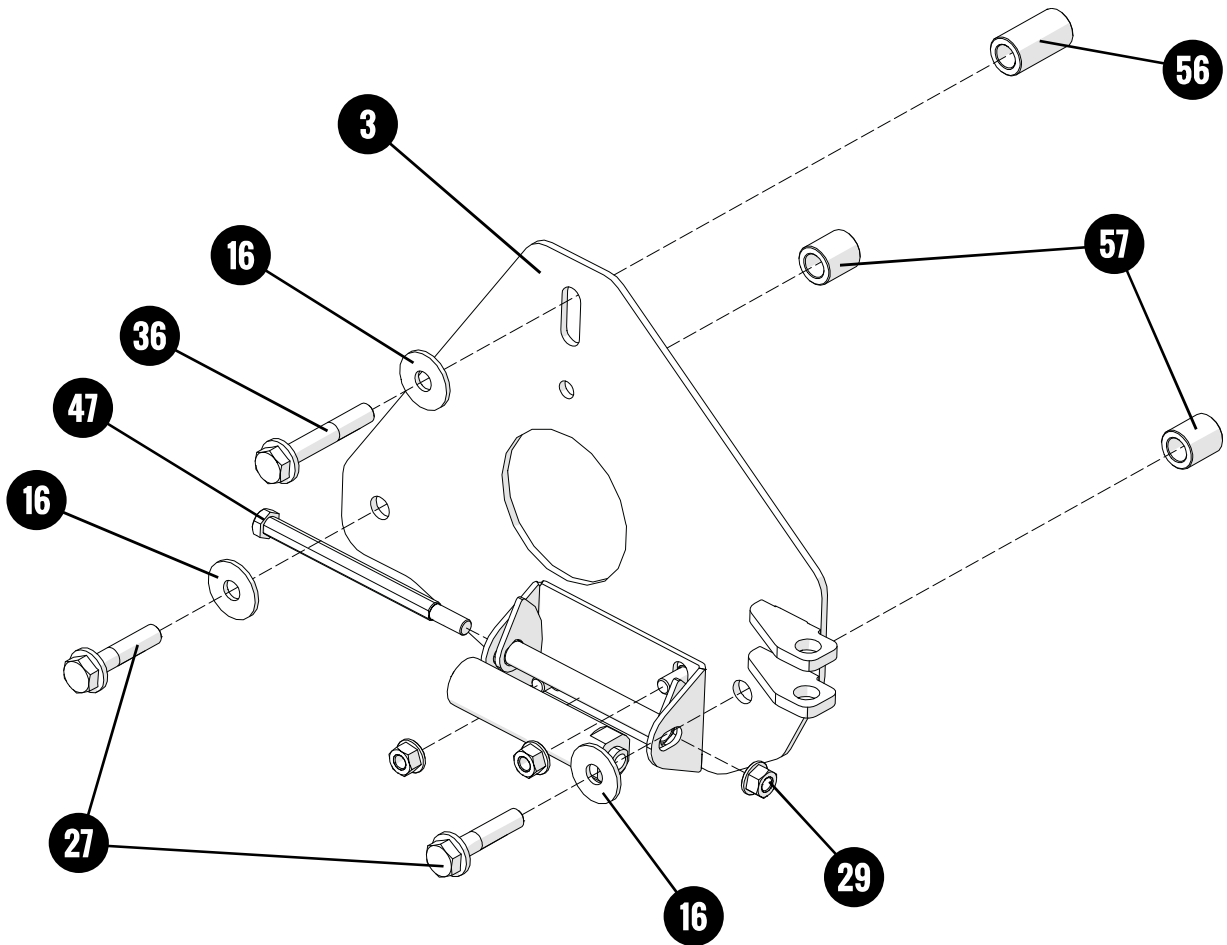
Also remove the *OEM** Wheel Carrier, only just three bolts, marked in the highlighted area.

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

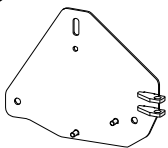
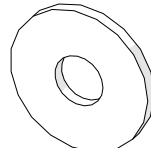
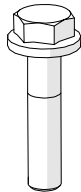
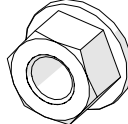
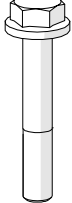
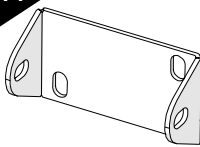
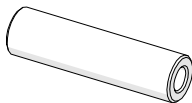

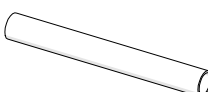
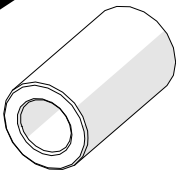
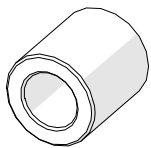


Step 2 - Fitting the AFN Closing Bracket Plate on Vehicle

Preview



Parts needed:

- | | | | | | |
|--|--|--|---|--|--|
| <p>3</p>  | <p>16</p>  | <p>27</p>  | <p>29</p>  | <p>36</p>  | <p>44</p>  |
| <p>x1 Closing Bracket Plate</p> | <p>x3 Washer M10</p> | <p>x2 Hex Flange Bolt M10x45x30</p> | <p>x3 Flange Nut M8</p> | <p>x1 Hex Flange Bolt M10x60x25</p> | <p>x1 Closing Bracket</p> |
| <p>45</p>  | <p>47</p>  | <p>48</p>  | <p>56</p>  | <p>57</p>  | |
| <p>x1 Plastic Bushing</p> | <p>x1 Hitch Lock Pin</p> | <p>x1 Bushing</p> | <p>x1 Upper Sleeve</p> | <p>x2 Lower Sleeve</p> | |

Step 2 - Fitting the AFN Closing Bracket Plate on Vehicle**Installation**

Start by taking on Bushing(48) plus Plastic Bushing(45) and assemble them together.

Afterwards, put them inside Closing Bracket(44), using 1x Hitch Lock Pin for Closing Bracket(47) with 1x Flange Nut M8(29).

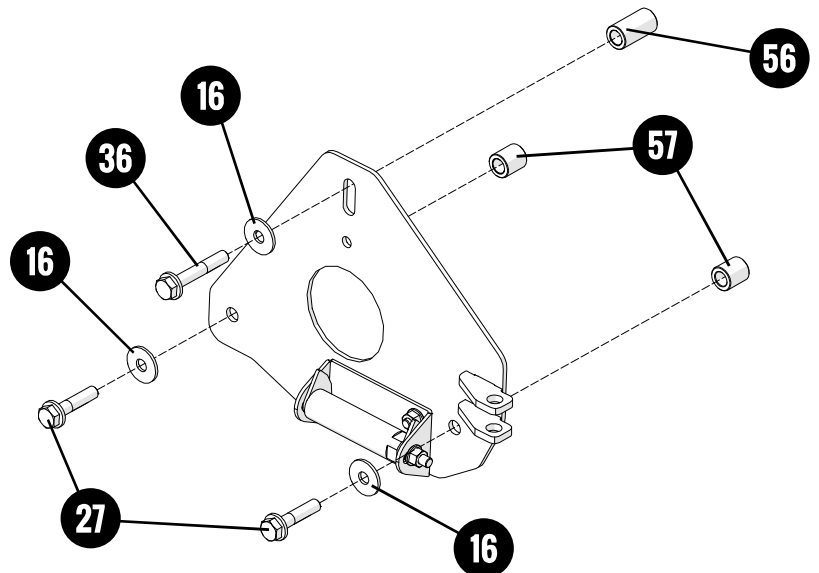
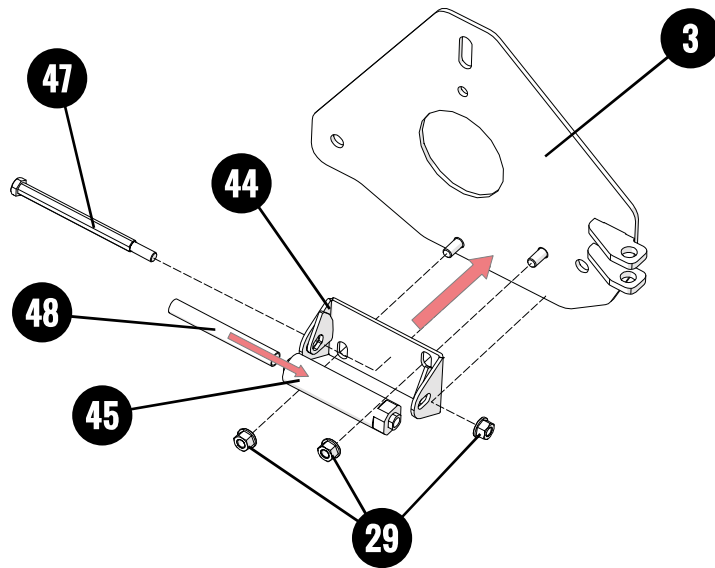
Then, fit the assembled part on Closing Bracket Plate(3).

Use 2x Flange Nuts M8(29).

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

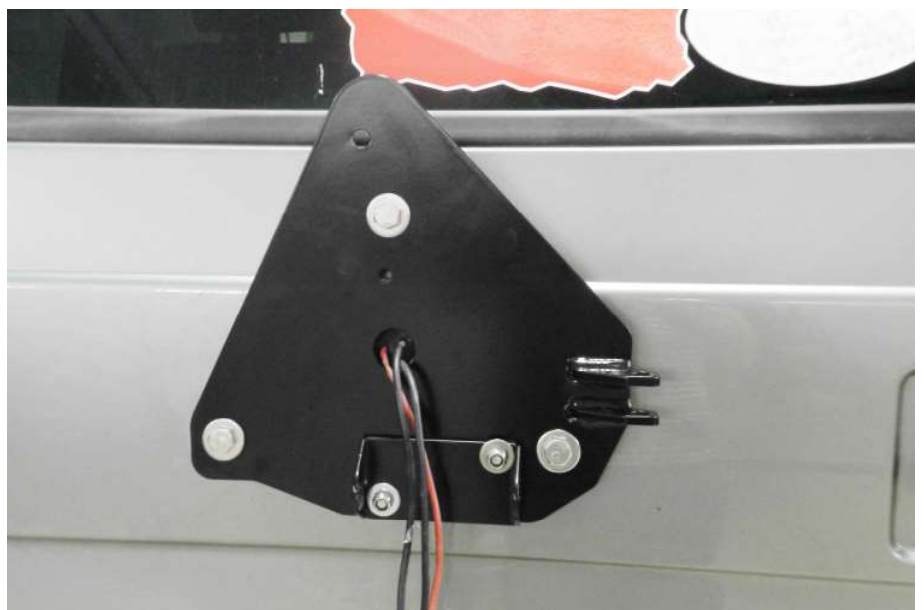
Once that is done, fit Closing Bracket Plate(3) into the vehicle.

Use 1x Bolt M10x60x25(36) on top, 2x Bolts M10x45x30(27) and 3x Washers M10(16) and 1x Upper Sleeve(56) and 2x Lower Sleeves(57).



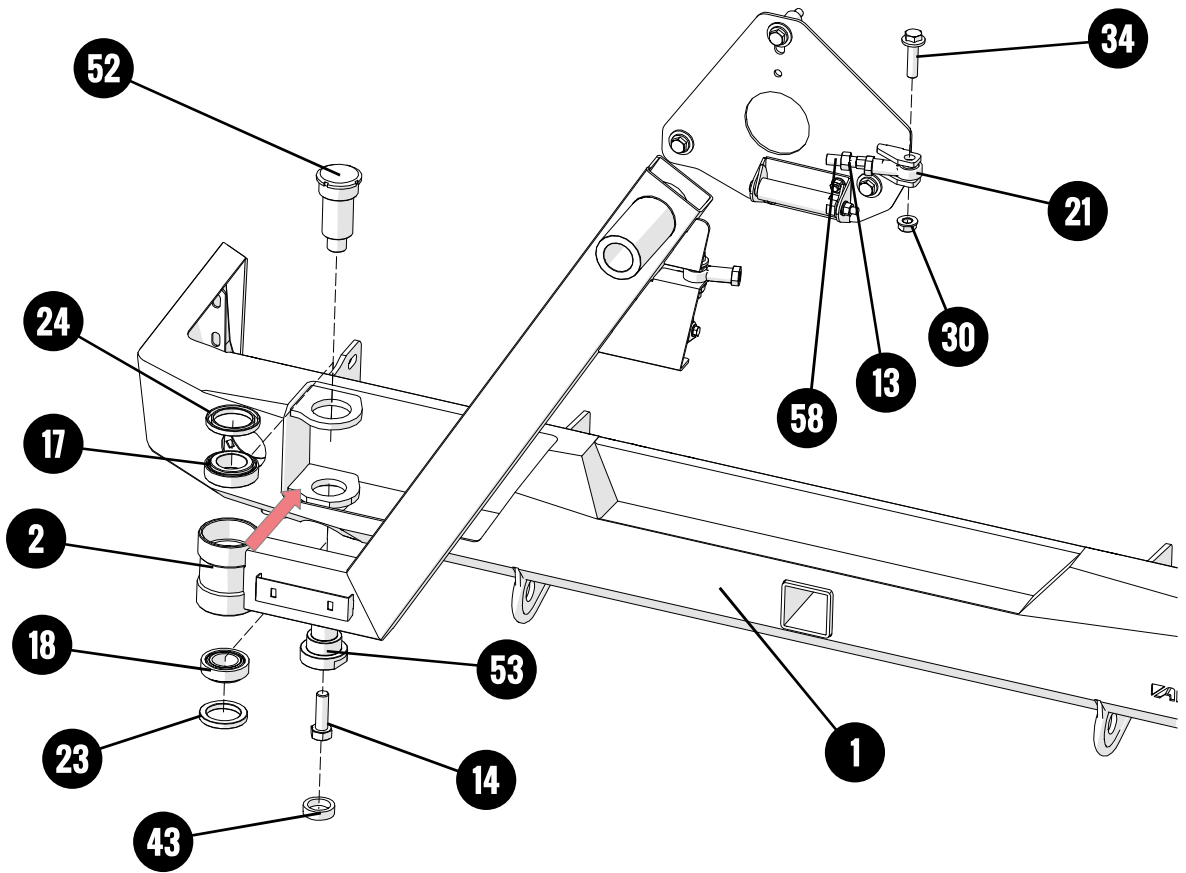
If you done it correctly this is what it should look like.

Give the final torque.

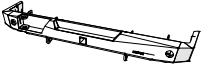
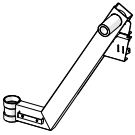
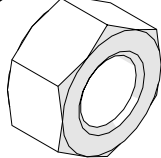
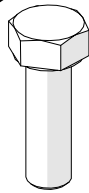
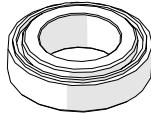

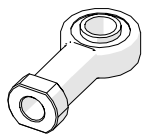


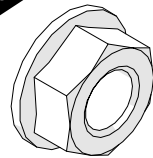
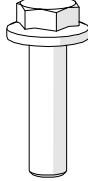
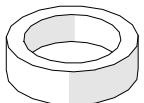
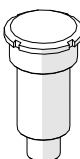
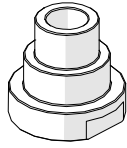
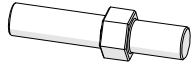


Step 3 - Fitting the Wheel Carrier Arm on AFN Rear Bumper

Preview



Parts needed:

- | | | | | | |
|--|--|--|--|--|--|
| <p>1</p>  | <p>2</p>  | <p>13</p>  | <p>14</p>  | <p>17</p>  | <p>18</p>  |
| <p>x1 Rear Bumper
Mercedes G</p> | <p>x1 Wheel Carrier Arm
Mercedes G</p> | <p>x1 Nut M12</p> | <p>x1 Bolt M14x45</p> | <p>x1 Tapered Bearing
Ø62xØ35x19</p> | <p>x1 Tapered Bearing
Ø55xØ30x18</p> |
| <p>21</p>  | <p>23</p>  | <p>24</p>  | <p>30</p>  | <p>34</p>  | <p>43</p>  |
| <p>x2 Heim Joint M12</p> | <p>x1 Bearing Seal
Ø55xØ40x17</p> | <p>x1 Bearing Seal
Ø62xØ45x7</p> | <p>x2 Flange Nut M12</p> | <p>x2 Flange Bolt M12x45</p> | <p>x1 Plastic Cap M14</p> |
| <p>52</p>  | <p>53</p>  | <p>58</p>  | | | |
| <p>x1 Threaded Shaft</p> | <p>x1 Threaded Shaft Nut</p> | <p>x1 Tie Rod Adapter Stud</p> | | | |

Step 3 - Fitting the Wheel Carrier Arm on AFN Rear Bumper**Installation****ATTENTION!**

The following step **only applies if the Wheel Carrier is not mounted**, or if by any case there is a need to dismount it. **Proceed to next Step.**

Before inserting the **AFN Rear Bumper(1)** on the vehicle there are some details that we advise to do first (so, place it on a flat working surface).

Take on the **Wheel Carrier Arm(2)** and fit both Bearing Seals(23) and (24) with both Tapered Bearings (17) and (18). Check the image to correctly assemble this.

Then, fit the **Wheel Carrier Arm(2)** in the **AFN Rear Bumper(1)**.

Use 1x Threaded Shaft(52) on top.

On bottom, use 1x Threaded Shaft Nut(53) with 1x Bolt **M14x45(52)**.

Give the final torque.

Finally, use 1x Plastic Cap **M14(43)**.

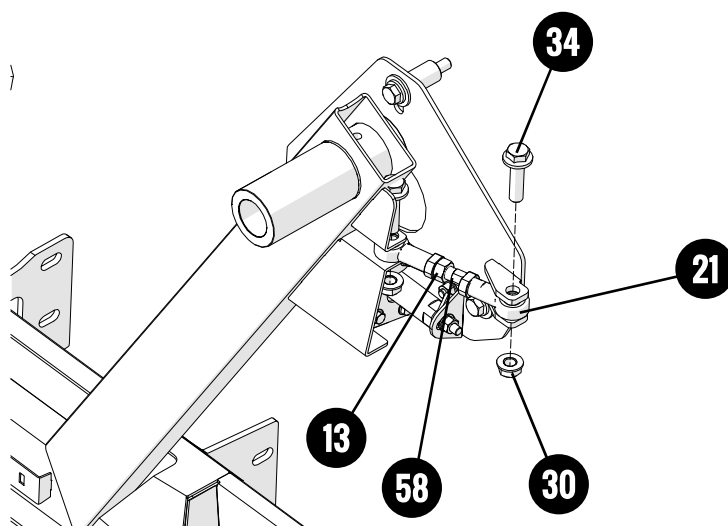
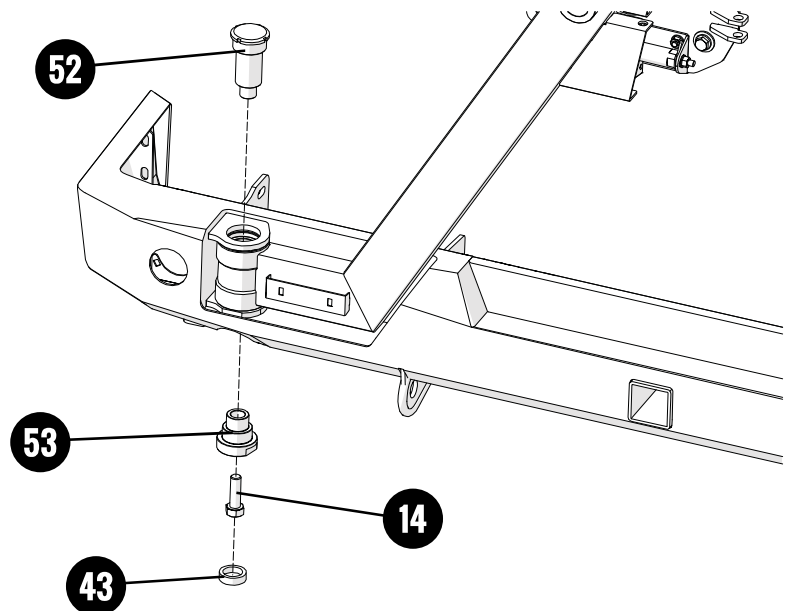
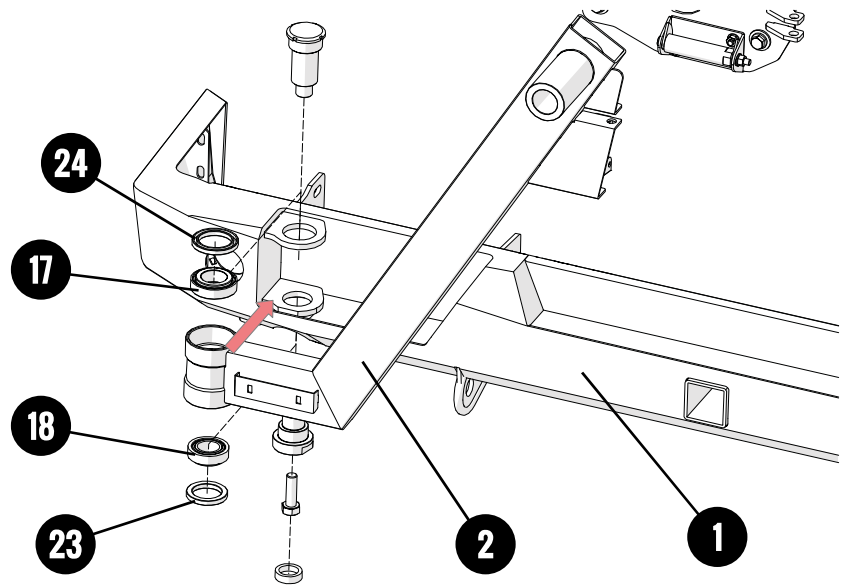
Now it's time to connect the **Wheel Carrier Arm(2)** to the **Closing Bracket Plate(3)**.

Use 1x Heim Joint **M12(21)** with 1x Flange Bolt **M12x45(21)** and 1x Flange Nut **M12(30)**.

Repeat this steps for the other Heim Joint **M12(21)** and fit it into the **Wheel Carrier Arm(2)**.

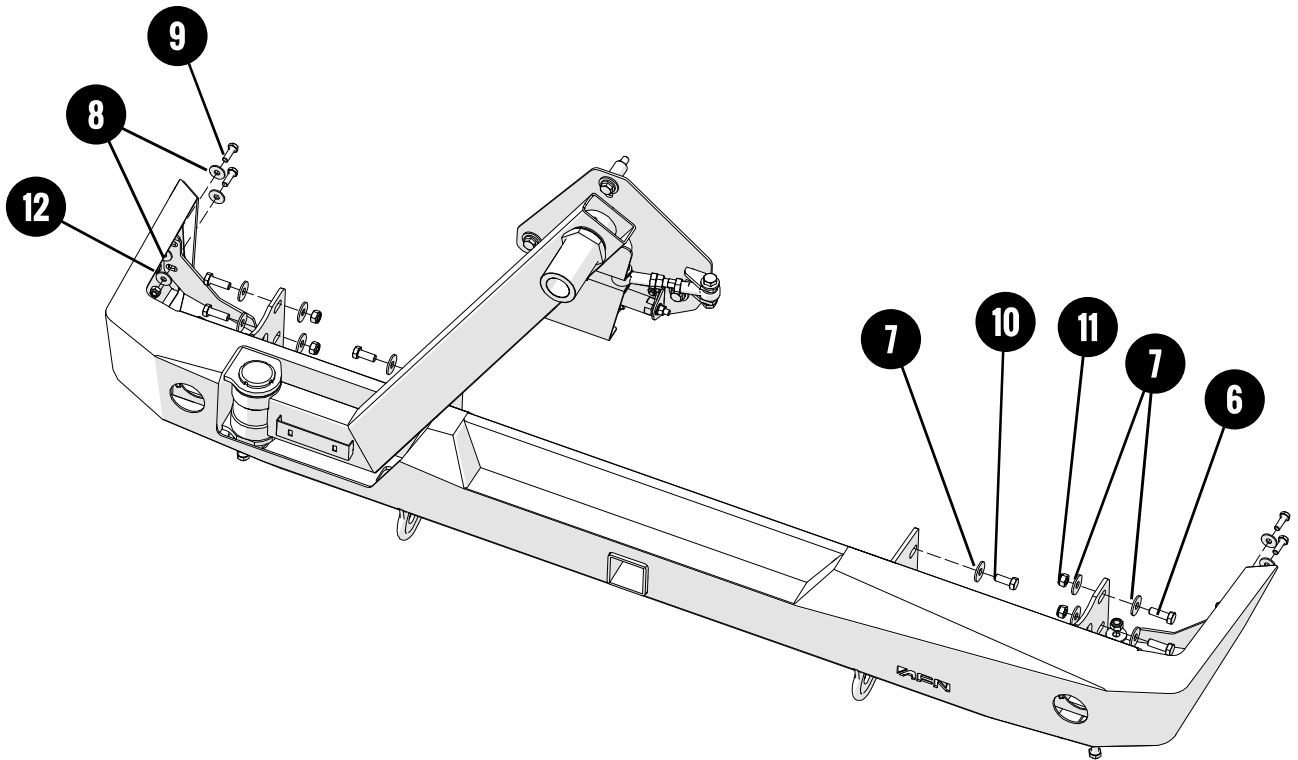
Once that is done, take on **Tie Rod Adapter Stud(58)** with 1x Nut **M12(13)**. It will connect both Heim Joints **M12(21)**.

Please be in mind that **Tie Rod Adapter Stud(58)** **MUST BE** well adjusted before proceeding to the next step.

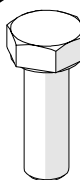
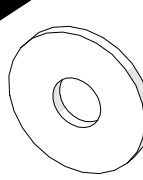
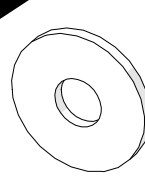
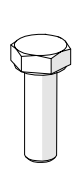
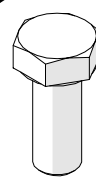
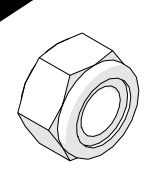
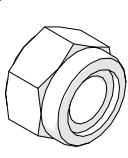
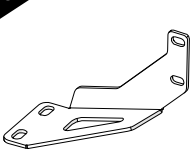
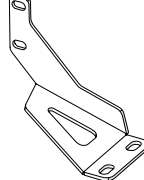


Step 4 - Fitting the AFN Rear Bumper to the Chassis

Preview



Parts needed:

- | | | | | | |
|--|--|--|---|--|--|
| 6
 | 7
 | 8
 | 9
 | 10
 | 11
 |
| x8 Bolt M10x30 | x20 Washer M10 | x2 Washer M8 | x4 Bolt M8x25 | x4 Bolt M10x25 | x8 Washer M10 |
| 12
 | 50
 | 51
 | | | |
| x4 Washer M8 | x1 Right Reinforcement x1 Left Reinforcement | | | | |

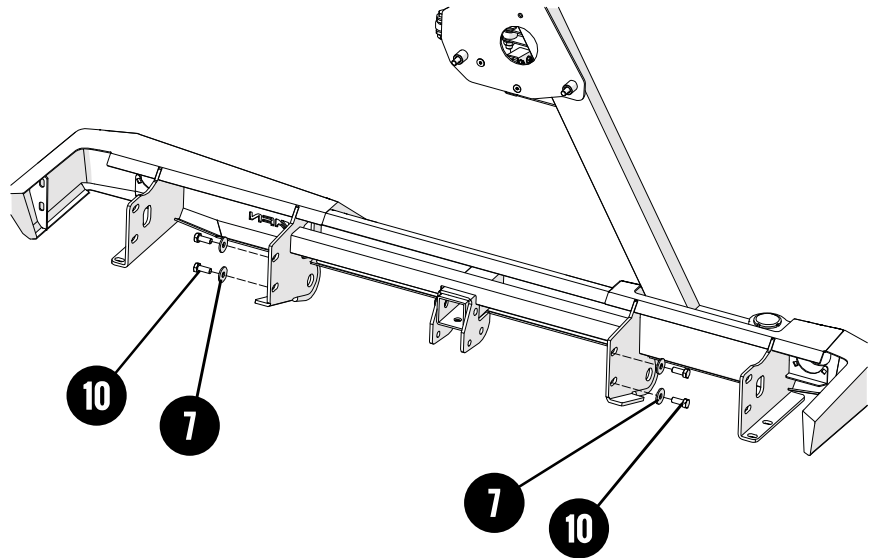
Step 4 - Fitting the AFN Rear Bumper to the Chassis**Installation**

With help of another person or a crane, fit the **AFN Rear Bumper(1)** into the **Vehicle**. Bolts needed:

Use 4x Bolts **M10x25(10)** with 4x Washers **M10(7)**.

Just finger tight both bolts

Do Not tighten yet.

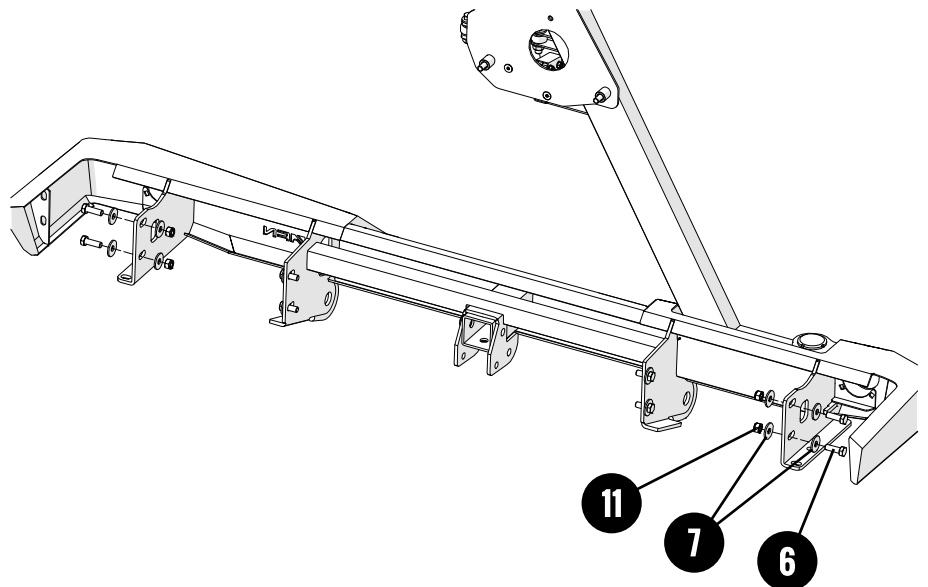


Once the **AFN Rear Bumper(1)** is secured in the middle, fit the outer sides of it into the **Chassis**.

Use 4x Bolts **M10x30(6)** with 8x Washers **M10(7)**, and 4x Nylock Nuts **M10(11)**.

Just finger tight both bolts

Do Not tighten yet.



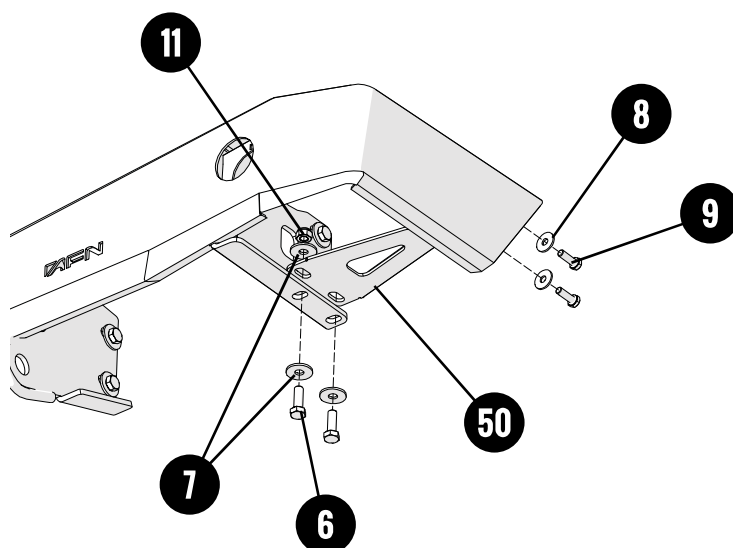
Finally, fit both Reinforcements(**50**) and (**51**) in the **AFN Rear Bumper(1)**.

Use 2x Bolts **M10x30(6)** with 4x Washers **M10(7)** and 2x Nylock Nuts **M10(11)**, on bottom.

Use 2x Bolts **M8x25(9)** with 4x Washers **M8(11)** and 2x Nylock Nuts **M8(12)** on back.

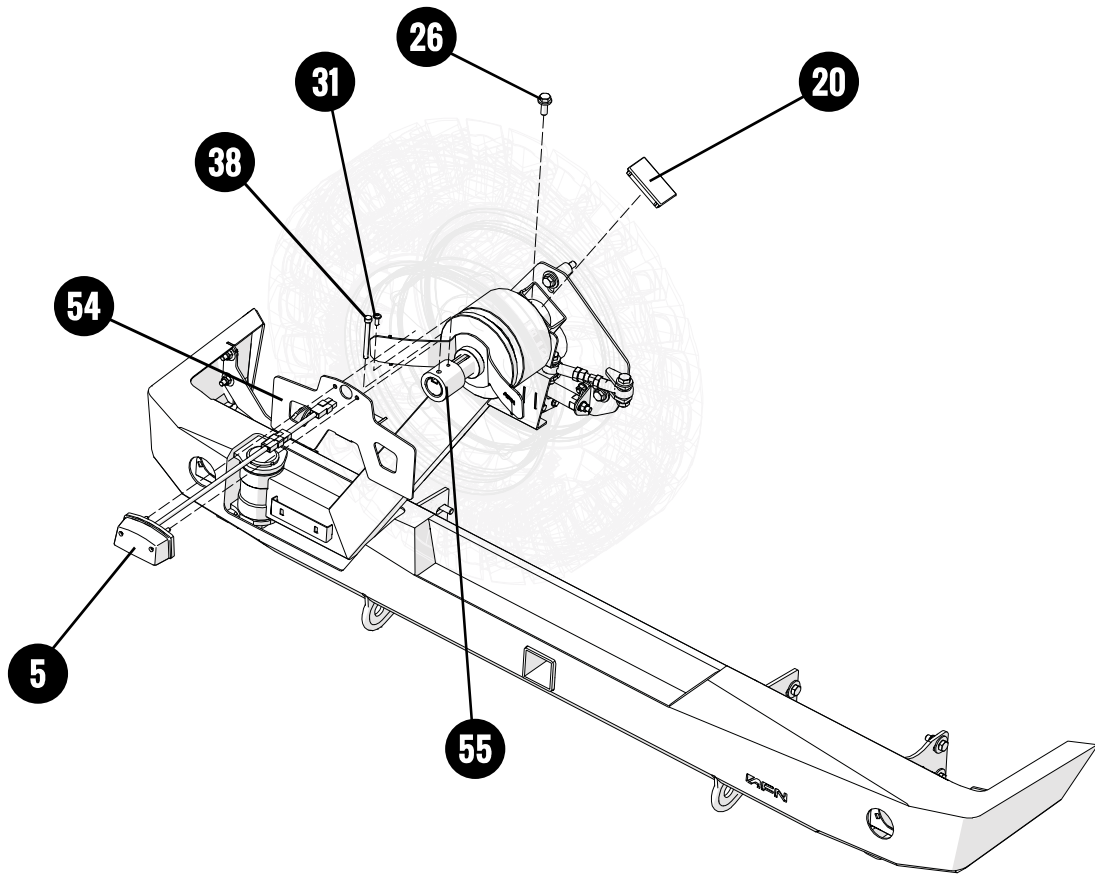
Just finger tight both bolts

Do Not tighten yet.

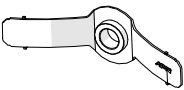
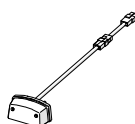
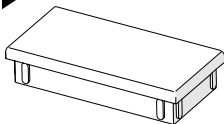
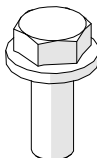
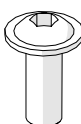

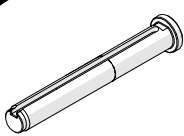
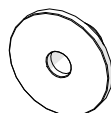
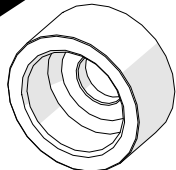
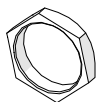
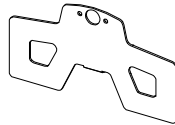
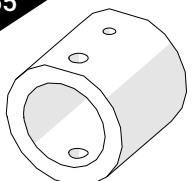


Step 5 - Fitting the Wheel Carrier Parts and Tire in the AFN Rear Bumper

Preview



Parts needed:

- | | | | | | |
|---|---|--|---|--|---|
| <p>4</p>  <p>x1 Closing Swivel</p> | <p>5</p>  <p>x1 Plate Light</p> | <p>20</p>  <p>x6 Nylon Cap for Wheel Carrier Arm</p> | <p>26</p>  <p>x1 Hex Flange Bolt M10x25</p> | <p>31</p>  <p>x1 Bolt M6x16</p> | <p>38</p>  <p>x1 Pin Lock Hitch Pin for Plate Bracket</p> |
| <p>39</p>  <p>x1 Tire Bracket Shaft</p> | <p>40</p>  <p>x1 Nylon Tire Limiter Cap</p> | <p>41</p>  <p>x1 Nylon Tire Limiter</p> | <p>42</p>  <p>x1 Tire Bracket Nut</p> | <p>54</p>  <p>x1 Plate Bracket</p> | <p>55</p>  <p>x1 Sleeve Bracket</p> |

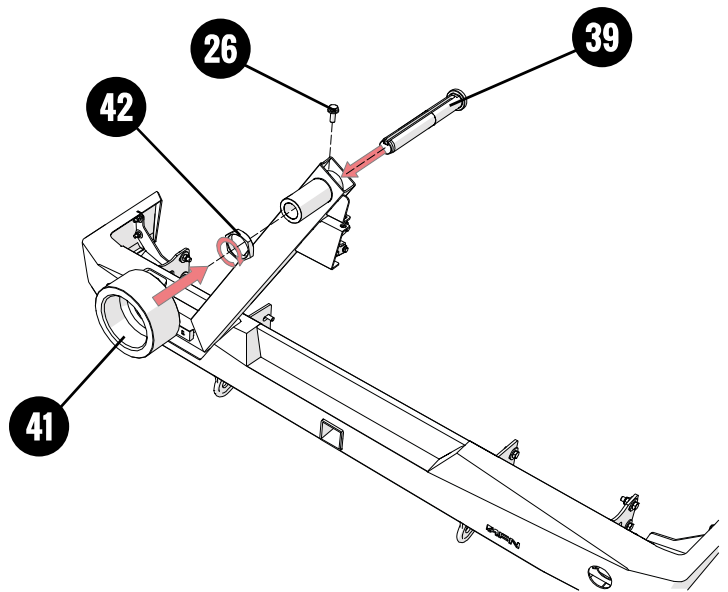
Step 5 - Fitting the Wheel Carrier Parts and Tire in the AFN Rear Bumper**Installation**

Take on Tire Bracket Shaft(39) and fit it the Wheel Carrier Arm(2). It must enter from behind of the arm.

Use 1x Hex Flange Bolt **M10x25(41)** to secure the Tire Bracket Shaft(39).

Then take on Tire Bracket Nut(42) and tight it on Wheel Carrier Arm(2).

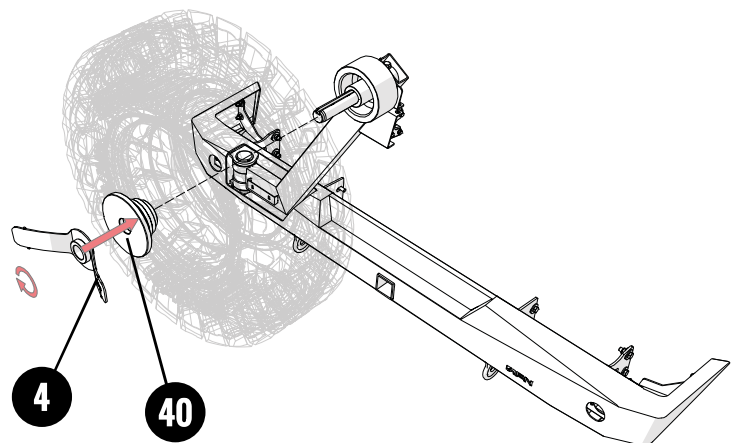
Finally, fit the Nylon Tire Limiter(41).



Once that is done, it's time to fit the Spare Tire on the Tire Bracket Shaft(39).

Then, use Nylon Tire Limiter Cap(40) with the Closing Swivel(4) to fully tight the Spare Tire.

Give the final torque.



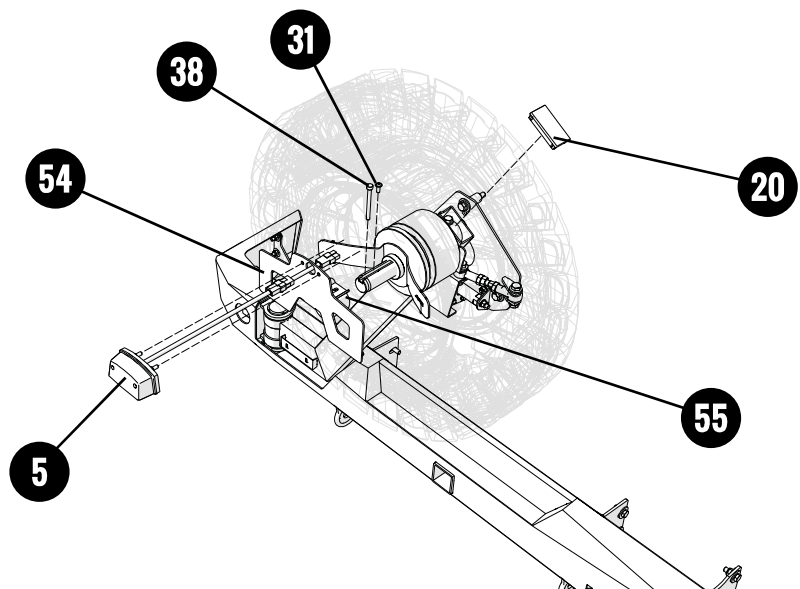
Finally, take on Plate Bracket(54) with Sleeve Bracket(55) and fit them on the Tire Bracket Shaft(39).

Use 1x Bolt **M6x16(31)**.

Then, use 1x Pin Lock Hitch Pin(38) to secure the assembled part in the Tire Bracket Shaft(39).

When the time comes to change your tire, the only thing to do is to unlock the Pin Lock Hitch Pin(38) and the assembled plate bracket will be free to be pulled out. (beware of the cables)

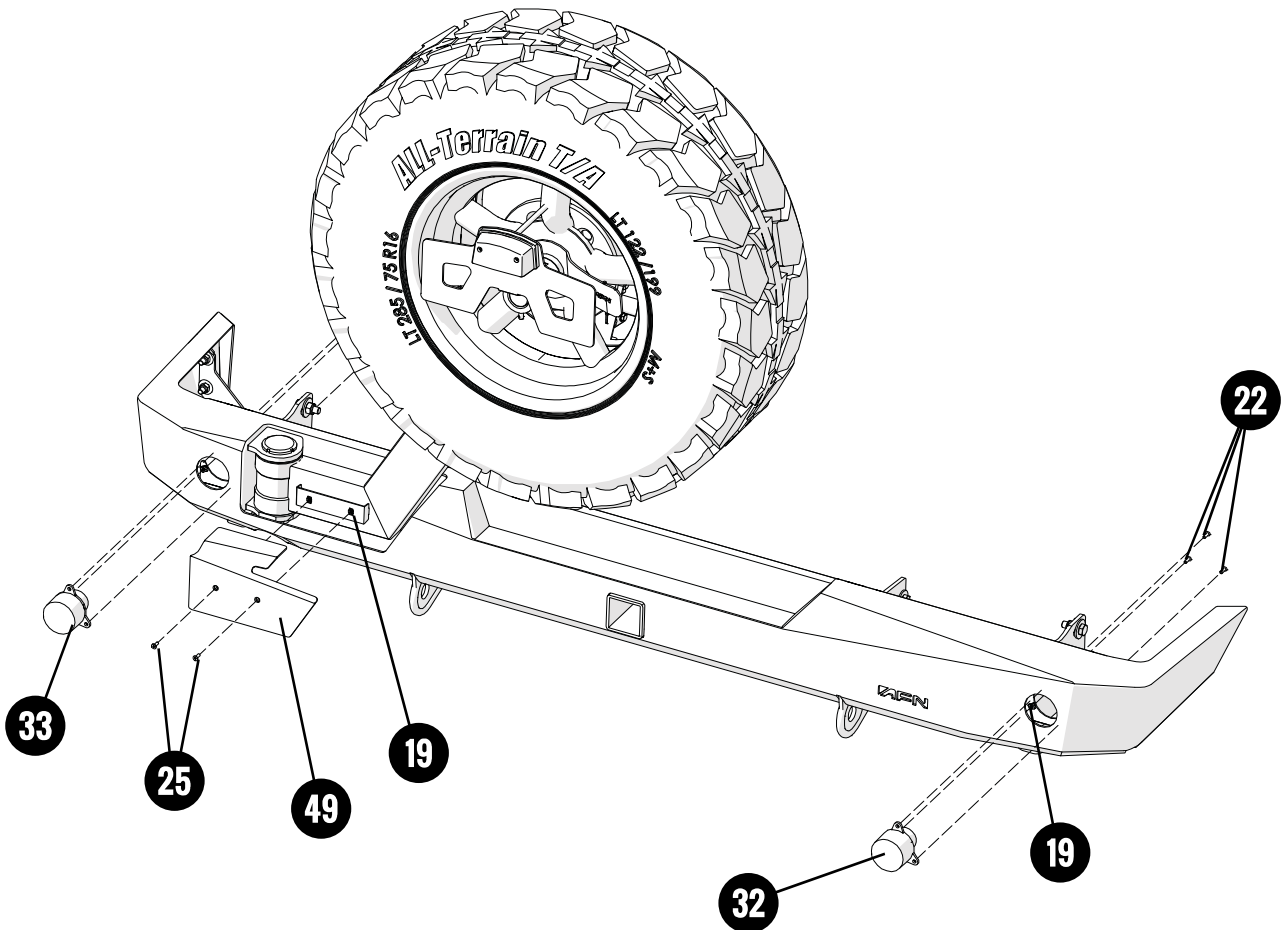
Finally, fit the Plate Light(5) on Plate Bracket(54).



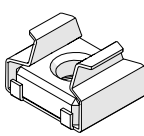
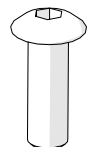
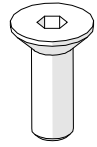
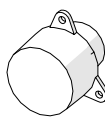
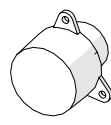
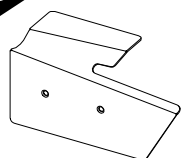
Once everything is correctly fitted, **Give the final torque on all bolts.**

Step 6 - Fitting the Rear Lights on AFN Rear Bumper

Preview



Parts needed:

- | | | | | | |
|--|---|---|--|--|--|
| <p>19</p>  <p>x8 Cage Nut M4</p> | <p>22</p>  <p>x6 Bolt M4x12</p> | <p>25</p>  <p>x2 Bolt M4x12</p> | <p>32</p>  <p>x1 Round Fog LED Light</p> | <p>33</p>  <p>x1 Round Reverse LED Light</p> | <p>49</p>  <p>x1 Wheel Carrier Arm Cover</p> |
|--|---|---|--|--|--|

Step 6 - Fitting the Rear Lights on AFN Rear Bumper**Installation**

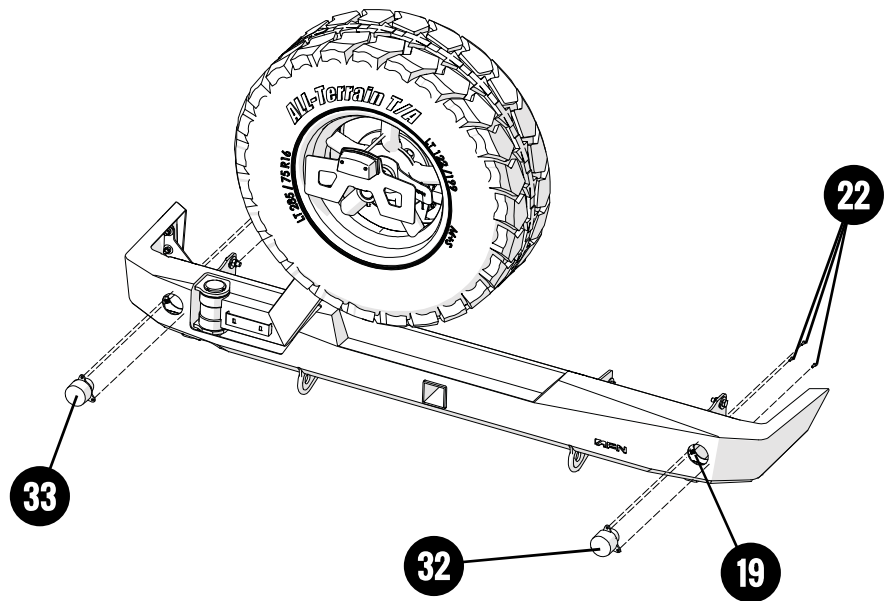
Take on Round Fog LED Light(32) and fit it the **AFN Rear Bumper(1)**.

It must enter from **beneath** the **AFN Rear Bumper(1)**.

Use 3x Bolts **M4x12(22)** and 3x Cage Nuts **M4(19)**.

Just finger tight both bolts

Do Not tighten yet.

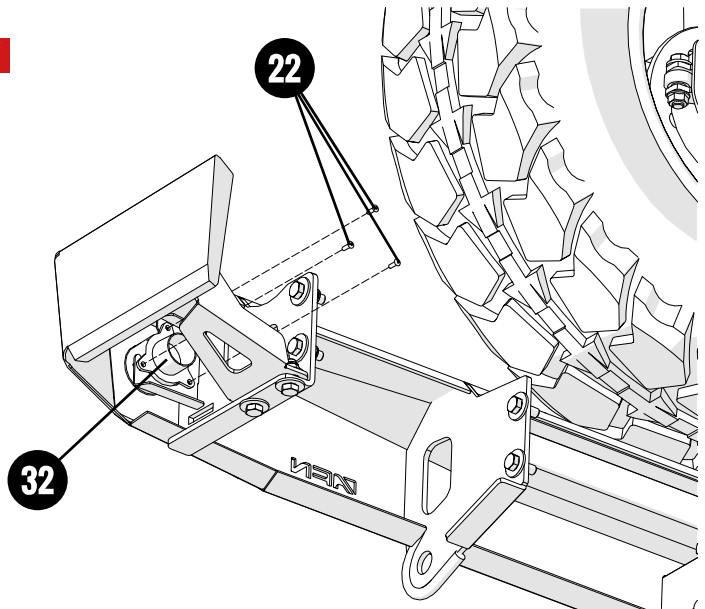


Repeat this step for the other side using the Round Reverse LED Light(33) in the **AFN Rear Bumper(1)**.

Use 3x Bolts **M4x12(22)** and 3x Cage Nuts **M4(19)**.

Fit all electrical cables and check if everything are operating smoothly.

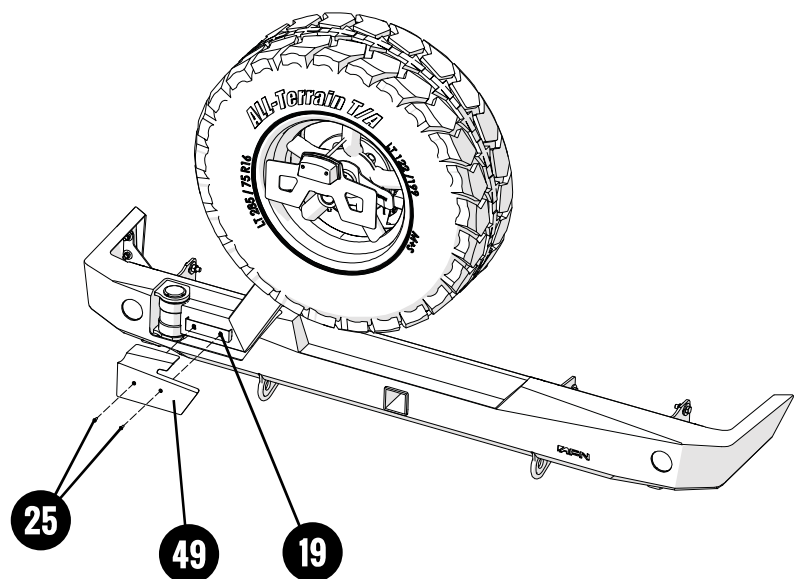
Once everything is correctly fitted,
Give the final torque on all bolts.

INSIDE VIEW

Finally, fit the **Wheel Carrier Arm Cover(49)** on the **AFN Rear Bumper(1)**.

Use 2x Bolts **M4x12(25)** and 2x Cage Nuts **M4(19)**.

Once everything is correctly fitted,
Give the final torque.





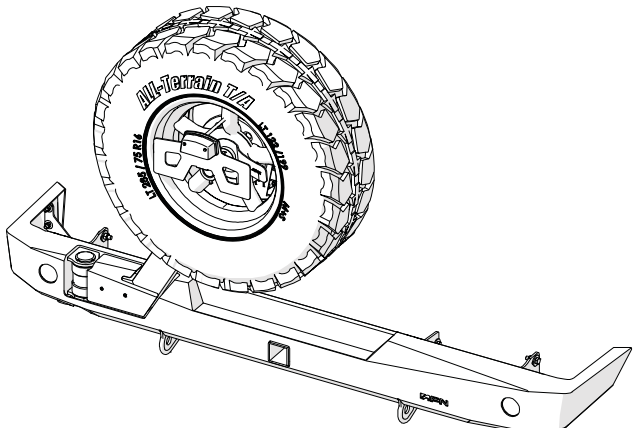
Your new **AFN REAR BUMPER** is now installed on your **Mercedes G-CLASS!**
Have Fun!

Reminder !

- Before operating a vehicle fitted with an AFN Rear Bumper:
- 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 G-CLASS 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.: 48002402 - Bullbar with fog lights



Ref.: 48002556 - Rear Bumper w/ Wheel Carrier

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.

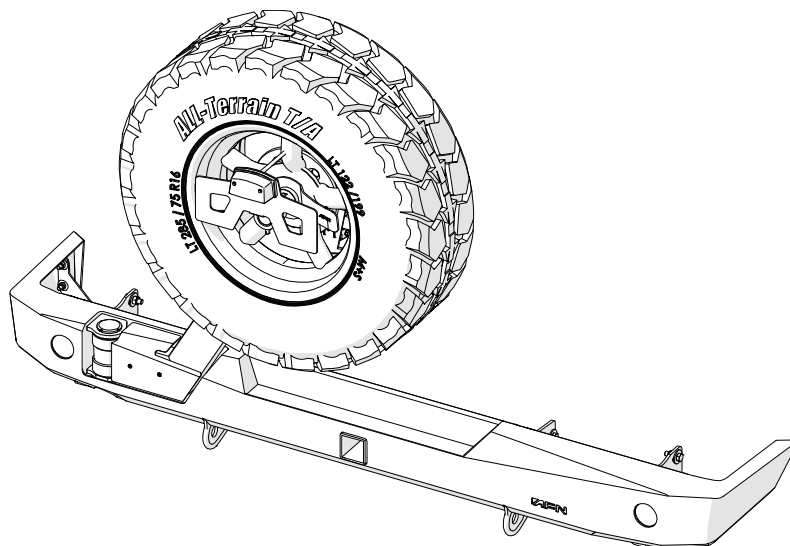
Under the present warranty, **AFN4x4** obligation shall be limited to repairing, replacing or crediting, at its option, any part found to be defective.

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.





5 AFN 4x4 PARTNERS



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