Thank you for choosing Predator Offroad.

By following this manual carefully, you can be confident that your roof rack will be fitted correctly and securely, ensuring strength, safety, and quality.

Before You Begin

Tools Required (not included):

- Socket set/spanners
- Allen Keys
- Measuring tape
- Marker or pencil
- Masking tape
- Anti-seize grease

Fastener torque specs:

- M6 Fasteners - 13Nm

Additional Information

- Estimated Installation Time: 2-3 hours
- Persons Required: 2 people recommended
- **Important:** Apply anti-seize grease to all bolts during installation.

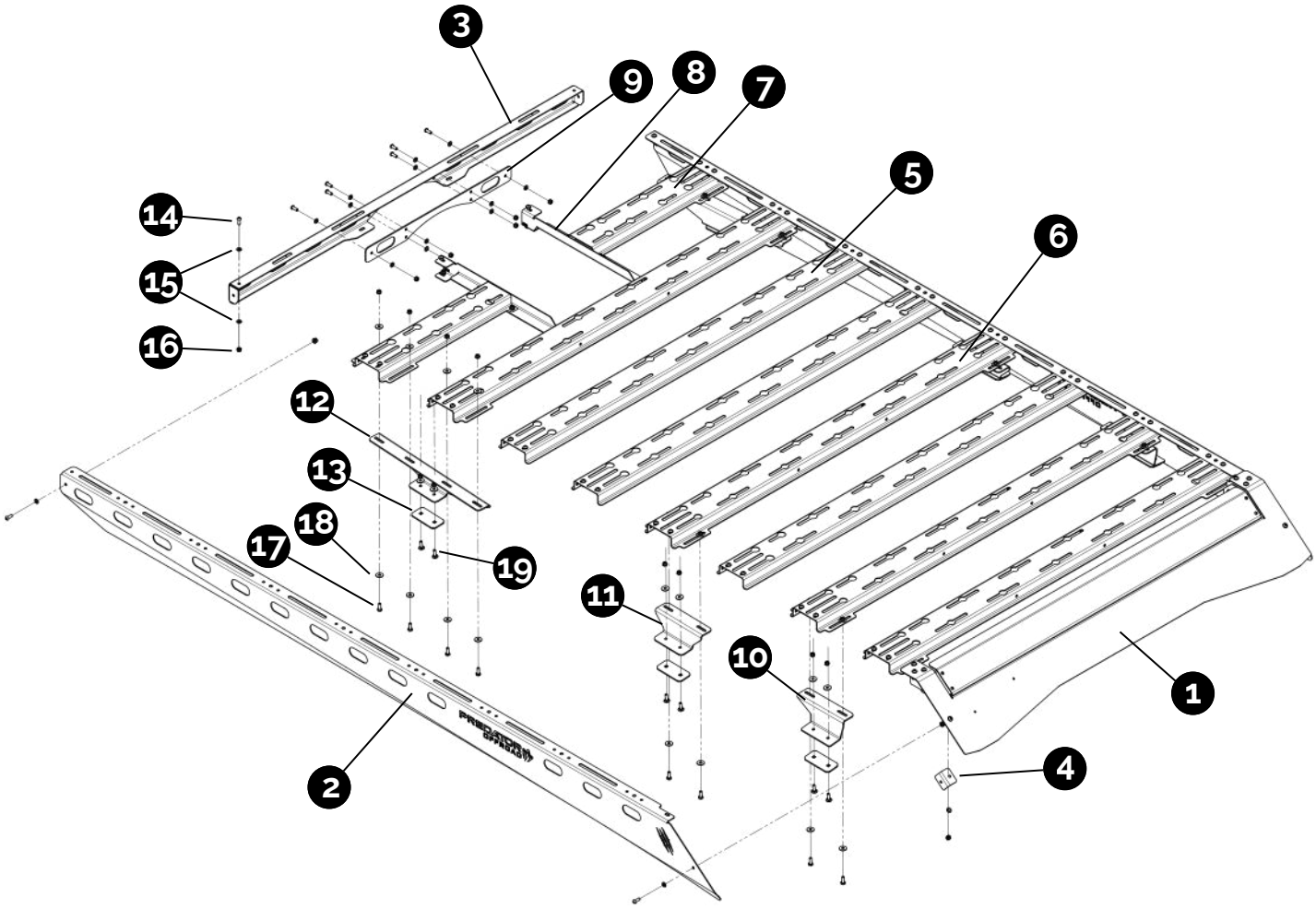
Remember, safety first, have fun, and don't forget to admire your hard work at the end!

Fitment Overview - Land Rover 110 Defender (2020+):

- Assemble the frame and cross bars.
- Insert the mounting track plates.
- Install the mounting brackets.
- Place clear vinyl strip.
- Fix the roof rack to the mounting brackets.

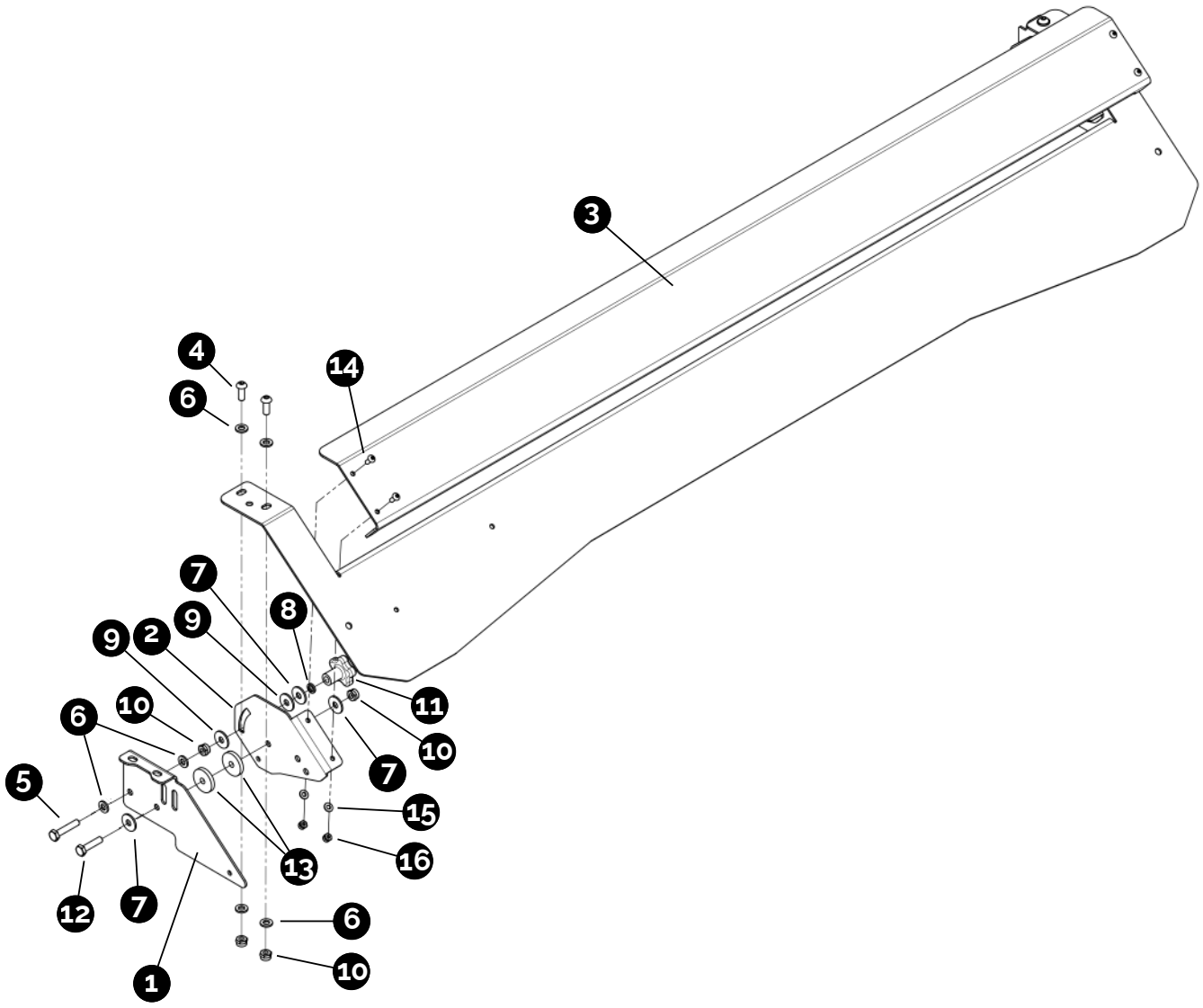
What's in the box?

Number	Item	Quantity
1	WindDeflector	1
2	Side Rails	2
3	Back Rail	1
4	Wind Deflector Mounting Brackets	2
5	Standard Cross Bars	4
6	Mounting Cross Bars	3
7	Split Mounting Cross Bars	2
8	Split Cross Bar Braces	2
9	Back Rail Brace Plate	1
10	Front Mounting Brackets	2
11	Middle Mounting Brackets	2
12	Rear Mounting Brackets	2
13	Mounting Track Plates	6
14	M6x16 Button Head Bolts	52
15	M6 Standard Flat Washers	104
16	M6 Nyloc Nuts	80
17	M6x16 Hex Bolts	16
18	M6 Fender Washers	28
19	M6x20 Carriage Bolts	12



Gen 2 Active Wind Deflector

Number	Item	Quantity
1	Primary Bracket WD 1	2
2	Secondary Bracket WD 2	2
3	Light Bar Cover Plate	1
4	M6x16 Button Head Bolt	4
5	M6x30 Hex Bolt	2
6	M6 Standard Flat Washer	12
7	M6 Fender Washer	6
8	M6x1.6 Split Washer	2
9	M6x1.6x18 White Nylon Washer	4
10	M6 Nyloc Nuts	8
11	M6 Plastic Star Nut	2
12	M6x25 Hex Bolt	2
13	M6x4mm Black Nylon Washer	4
14	M4x12mm Button Head Bolt	4
15	M4 Fender washer	4
16	M4 Nyloc Nut	4

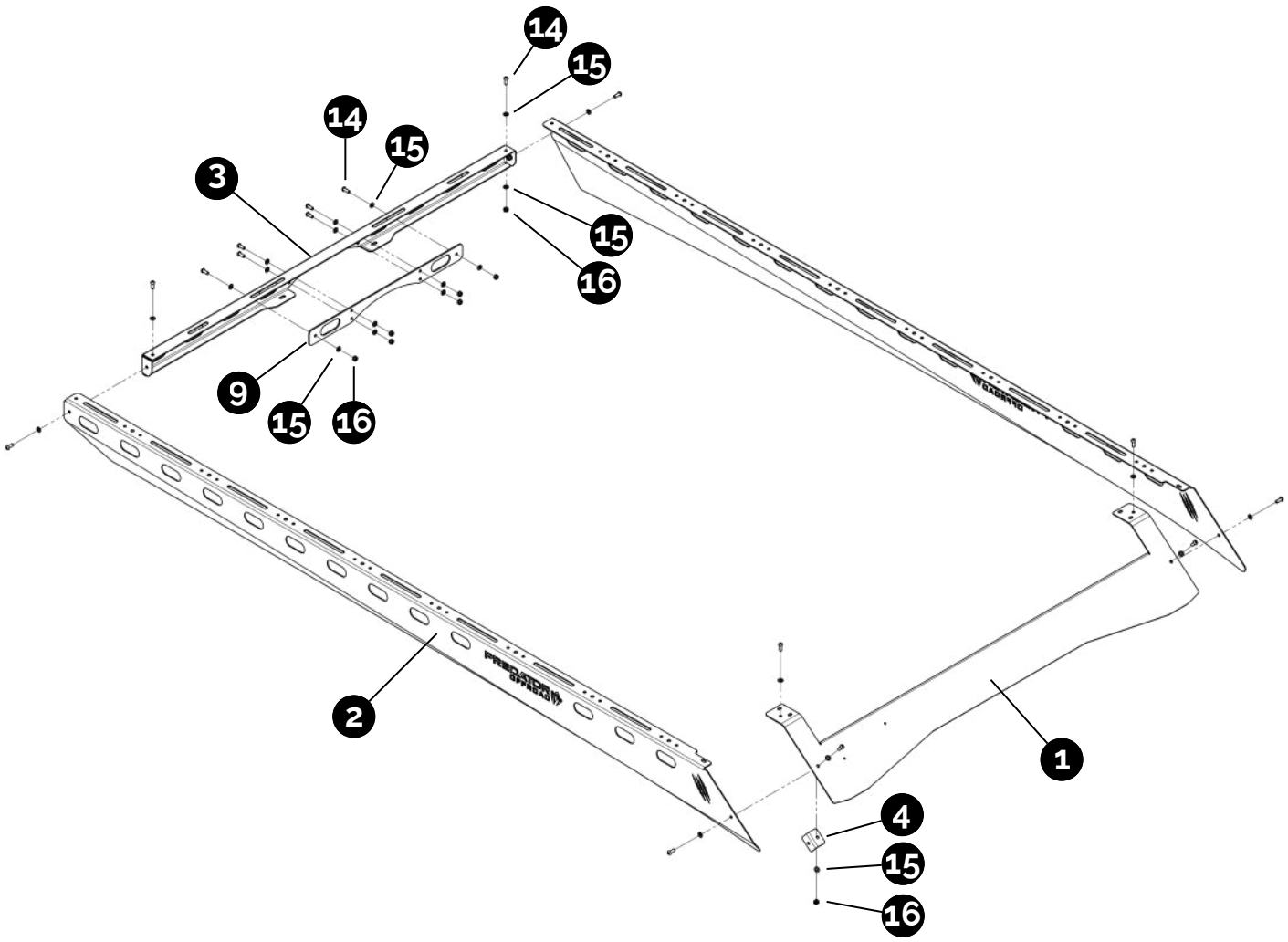


Please Take Note! All Bolts used in the installation must be greased with anti-seize grease.

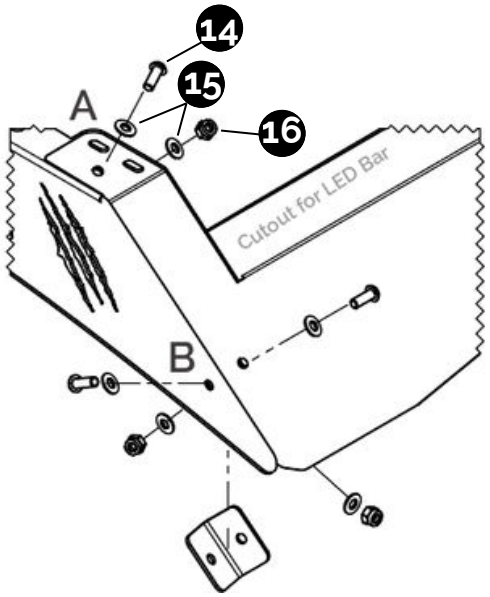
Step 1: Begin with the outer frame of your roof rack.

Tip: Assembling the rack in an upside-down position makes it easier to align and secure all the bolts. Please note: For demonstration purposes, the drawings below are shown in the upright position. Use M6x16 Button head bolts (**14**) with M6 Nyloc nuts (**16**) and M6 Standard flat washers (**15**) on both sides for each connection.
Tip: Tighten the bolts for the outer frame but leave the bolts loose that mount the crossbars to the outer frame! This will allow you to square the roof rack.

Fix the Back Rail Brace Plate (**9**) to the back rail (**3**) using the same hardware.



Step 2: Securing the Wind Deflector



Position the wind deflector over the side profile of the rack.

At Area A, insert an M6x16 Button head bolt (**14**) with a M6 Standard Flat washer (**15**) from the top, and secure it underneath with another M6 Standard Flat washer (**15**) and an M6 Nyloc nut (**16**). This connects the wind deflector to the side profile.

At Area B, place the small 90° angle bracket on the inside of the frame. Secure it using an M6x16 Button head bolt (**14**), with M6 Standard Flat washers (**15**) on both sides and an M6 Nyloc nut (**16**).

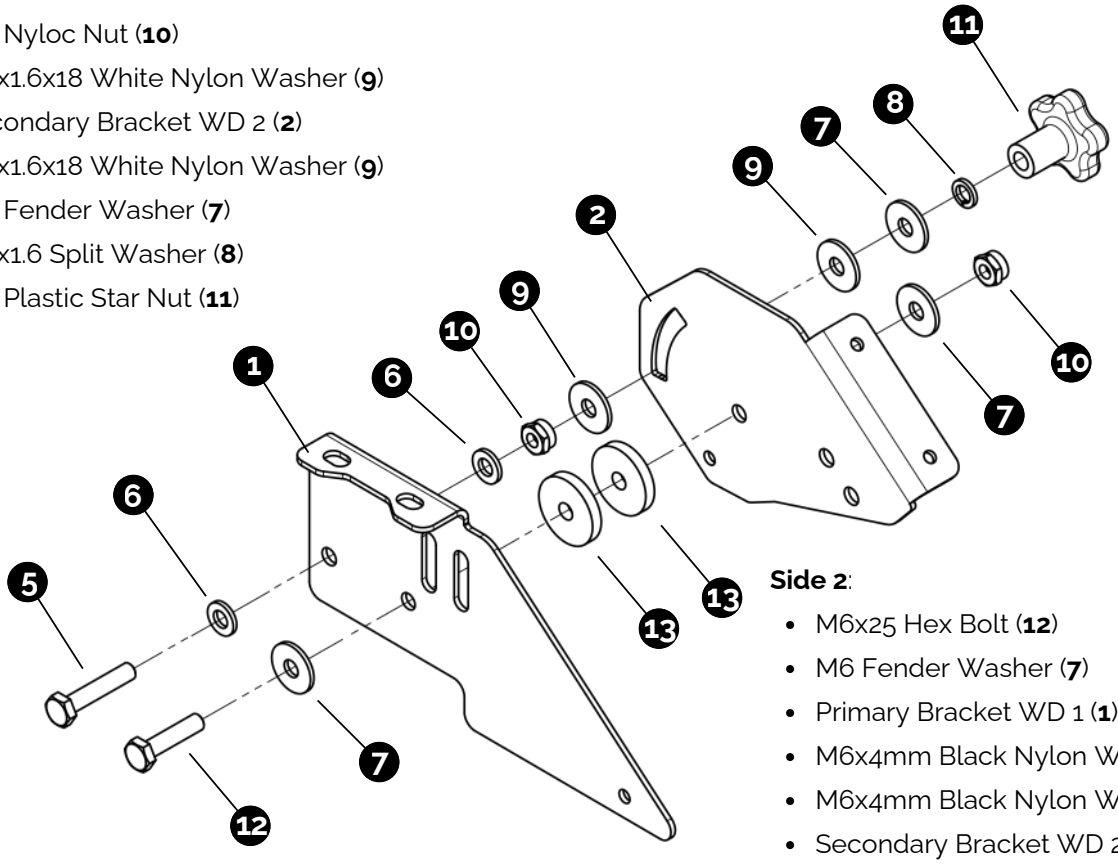
Step 3: Assemble the Gen 2 Active Wind Deflector

Step 3.1: Assemble the pivoting system

Fix the primary bracket (**1**) to the secondary bracket (**2**) by placing the fixatives in this order:

Side 1:

- M6x30 Hex Bolt (**5**)
- M6 Standard Flat Washer (**6**)
- Primary Bracket WD 1 (**1**)
- M6 Standard Flat Washer (**6**)
- M6 Nyloc Nut (**10**)
- M6x1.6x18 White Nylon Washer (**9**)
- Secondary Bracket WD 2 (**2**)
- M6x1.6x18 White Nylon Washer (**9**)
- M6 Fender Washer (**7**)
- M6x1.6 Split Washer (**8**)
- M6 Plastic Star Nut (**11**)



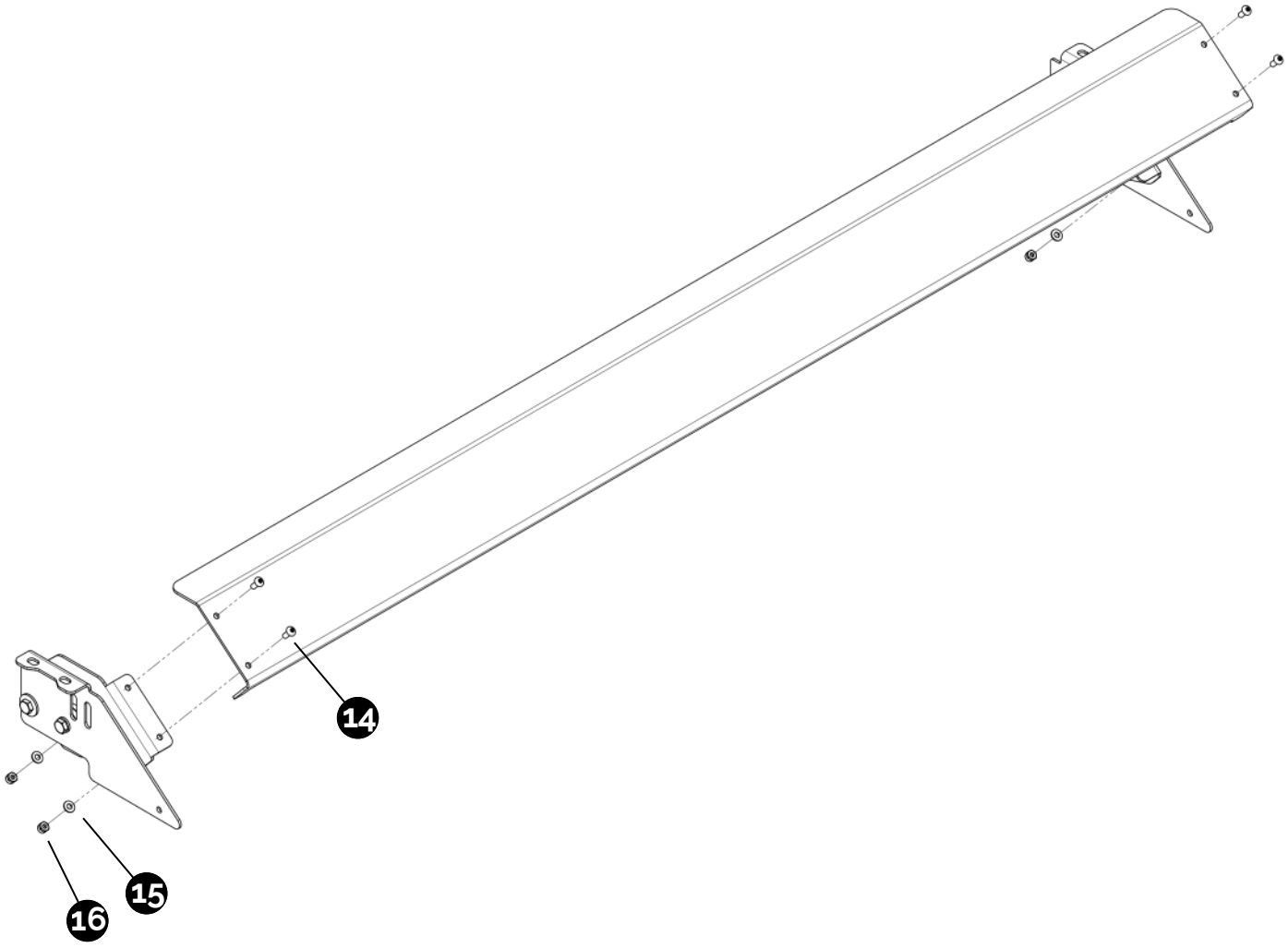
Side 2:

- M6x25 Hex Bolt (**12**)
- M6 Fender Washer (**7**)
- Primary Bracket WD 1 (**1**)
- M6x4mm Black Nylon Washer (**13**)
- M6x4mm Black Nylon Washer (**13**)
- Secondary Bracket WD 2 (**2**)
- M6 Fender Washer (**7**)
- M6 Nyloc Nut (**10**)

Step 3.2: Fix the light bar cover plate to the pivoting system

Fix the light bar cover plate (**3**) to the pivoting system using:

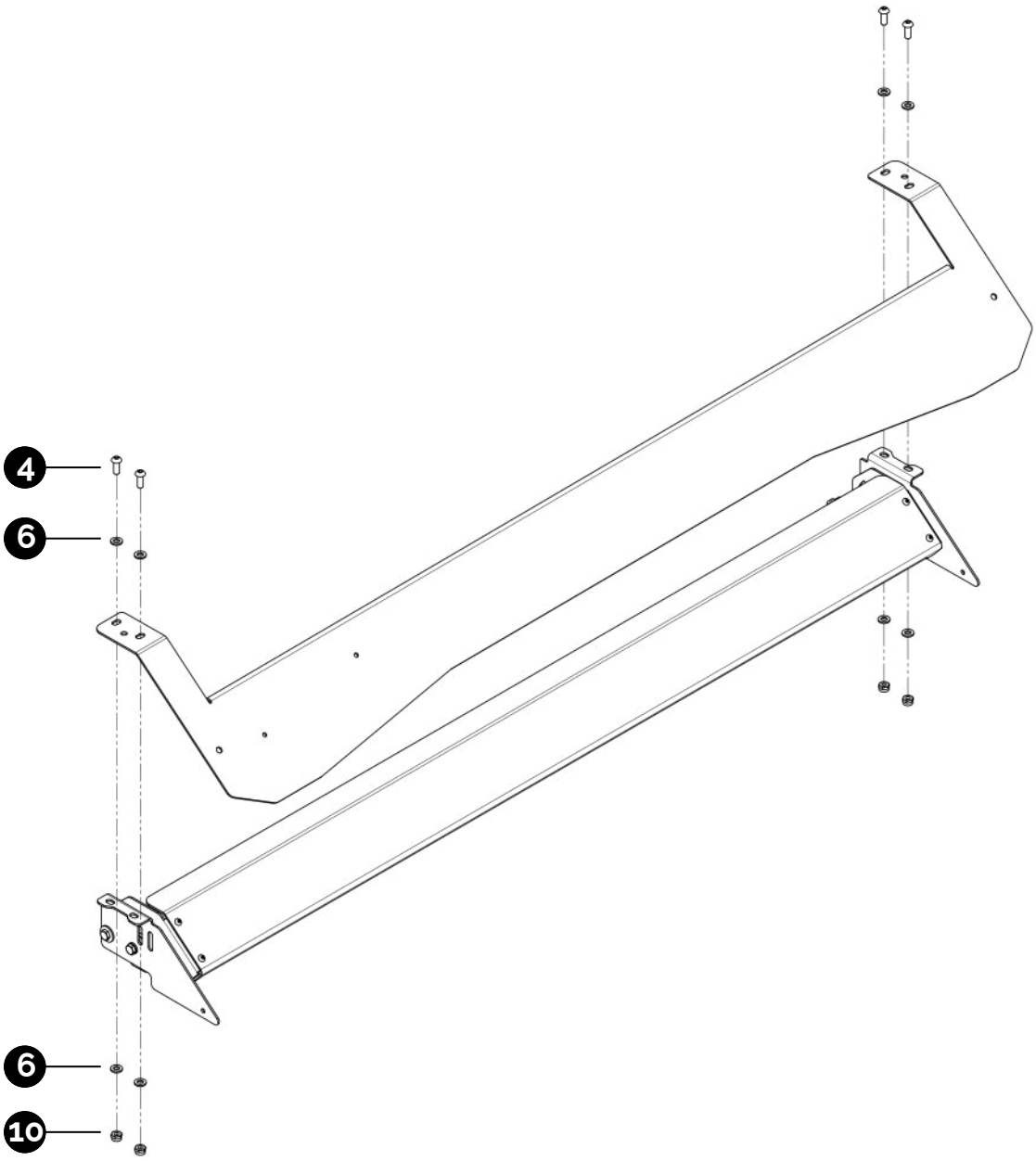
- M4x12 Button head bolts (**14**)
- M4 Fender washers (**15**) on the inside of the pivoting system only.
- M5 Nyloc nuts (**16**)



Step 3.3: Install the active assembly into the wind deflector

Fix the active assembly to the wind deflector using:

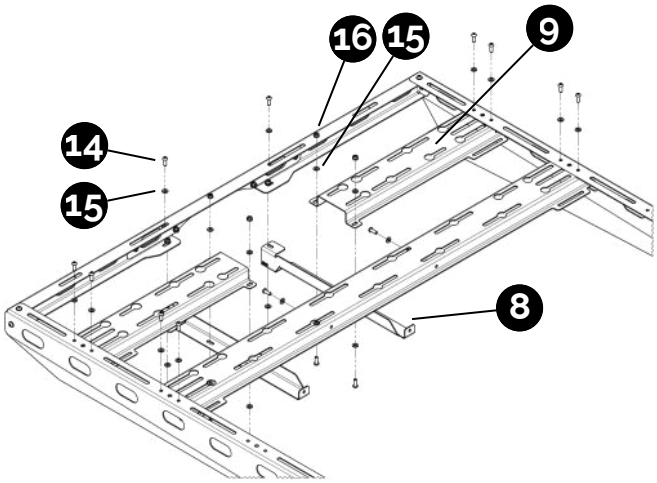
- M6x16 Button head bolts (**4**)
- M6 Standard flat washers (**6**) on both sides
- M6 Nyloc nuts (**10**)



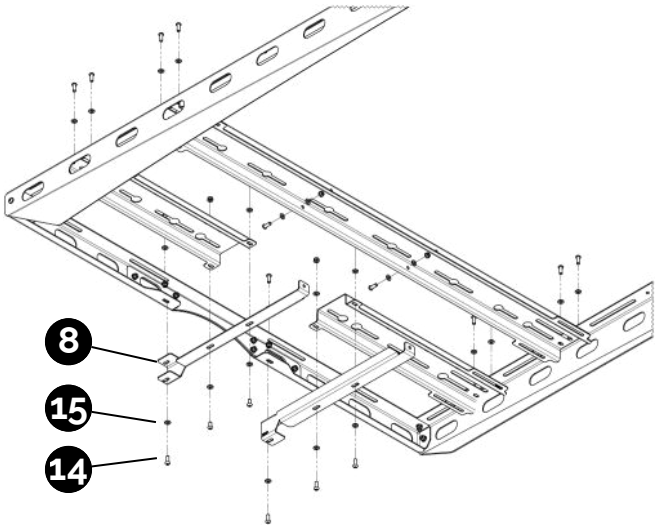
Step 4: Install the Cross Bars

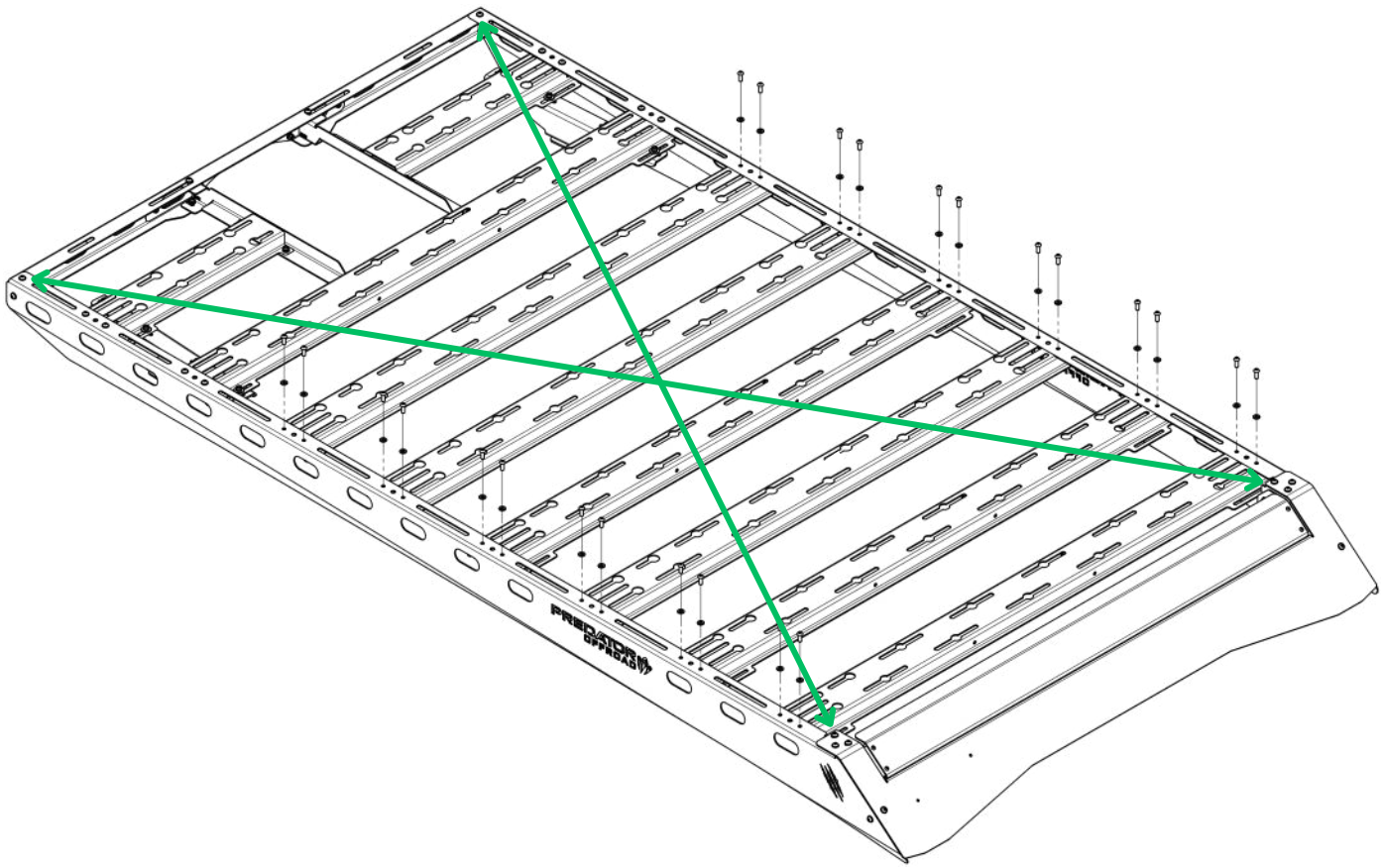
Insert the Split mounting cross bars (**7**) and Rear split cross bar braces (**8**) into position. Next insert all the cross bars (**5&6**). Secure each cross bar using M6x16 Button head bolts (**14**), M6 Standard Flat washers (**15**), and M6 Nyloc nuts (**16**) - see images below.
As mentioned in the previous tip, installation is easier with the rack in the upside-down position.
Once the cross bars are all placed in, but not tightened, turn the rack back to its upright position to square the rack.
Now take a measuring tape and measure from corner bolt to corner bolt **(as demonstrated below on the diagram with the green arrows)**. When the distances are the same as each other your rack will be square and ready to be tightened.

View from top



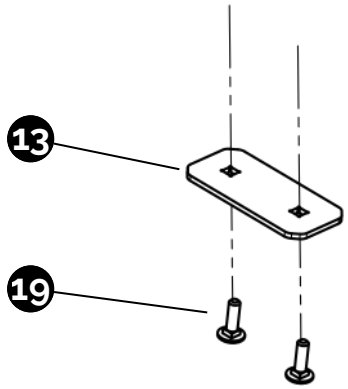
View from bottom

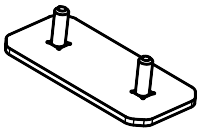


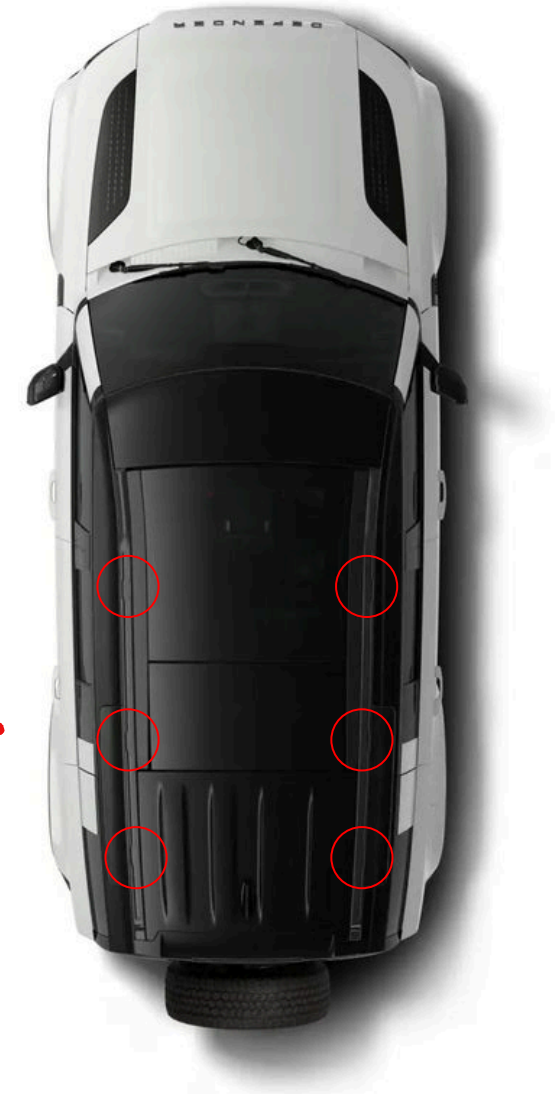


Step 5: Insert the Mounting Track Plates

Insert the M6 Carriage bolts (**19**) into the mounting track plates (**13**). With the carriage bolts inserted, slide the mounting track plates into the tracks on the vehicle's roof.







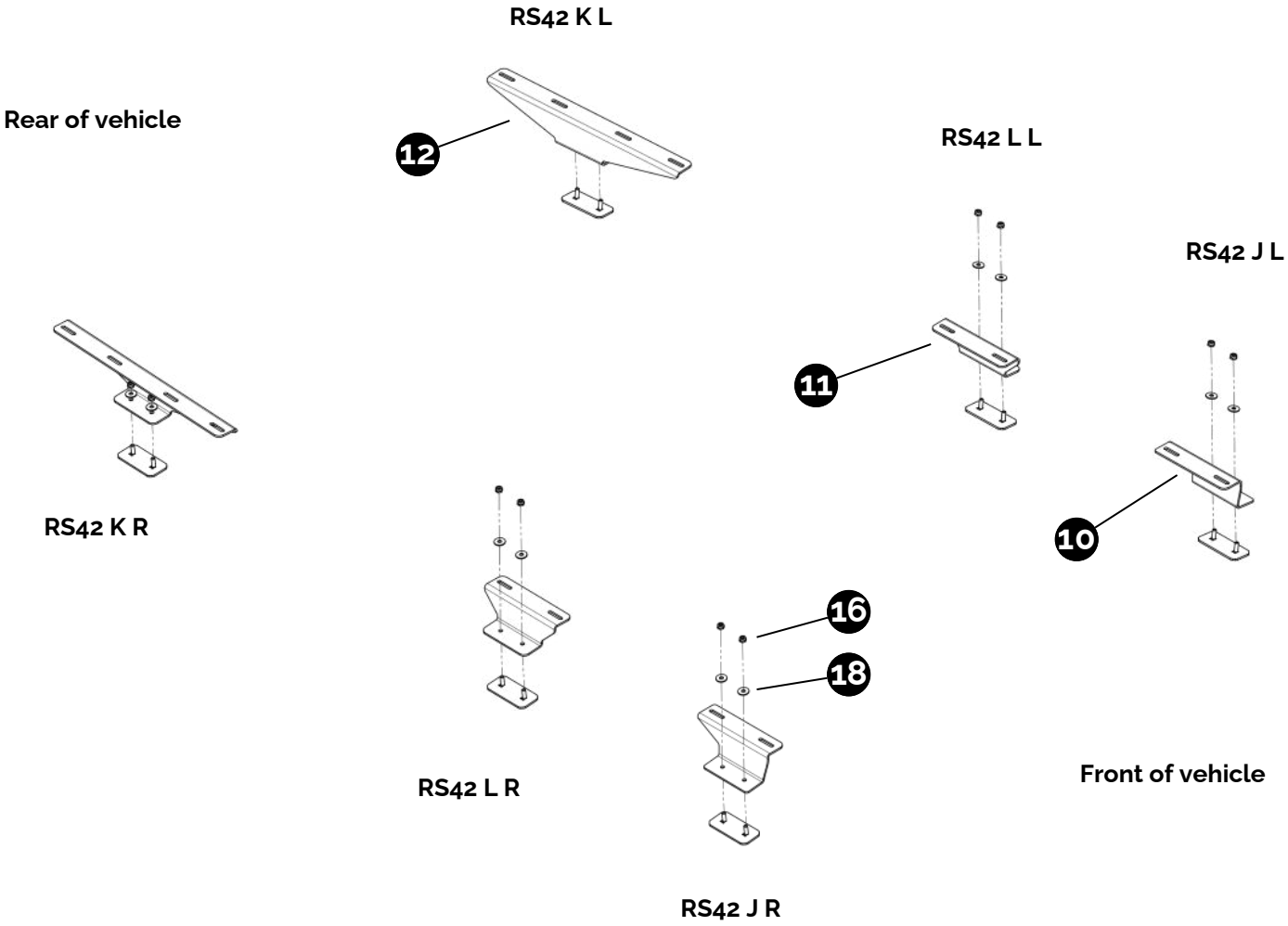
Step 6: Align and Secure the mounting brackets

Place the mounting brackets over the M6 carriage bolts.

Fasten the mounting brackets using:

- M6 Fender washers (**18**)
- M6 Nyloc nuts (**16**)

Important: Do not over tighten the brackets as they will need to be adjusted in **Step 8.**



Step 7: Position the Rack on the Mounting Brackets to Place Clear Vinyl Strip

Dry fit the rack to the vehicle, line it up with the mounting brackets and get the rack roughly into the correct position, with the wind deflector resting on the roof.

The inside of the arch in the back rail (**3**) should be approximately 40mm from the shark fin on the roof. Make sure all your mounting holes line up.

Mark the roof to place your clear vinyl strip underneath where your wind deflector touch the vehicle's roof. The easiest way to do this is to place masking tape on each side of where the wind deflector sits and with a marker/pencil draw a guide line for where to stick the clear vinyl strip.

Move you're rack back on the vehicle or take it off and give your roof a clean where you are going to place the strip.
Once you've done that you can place your clear vinyl strip.



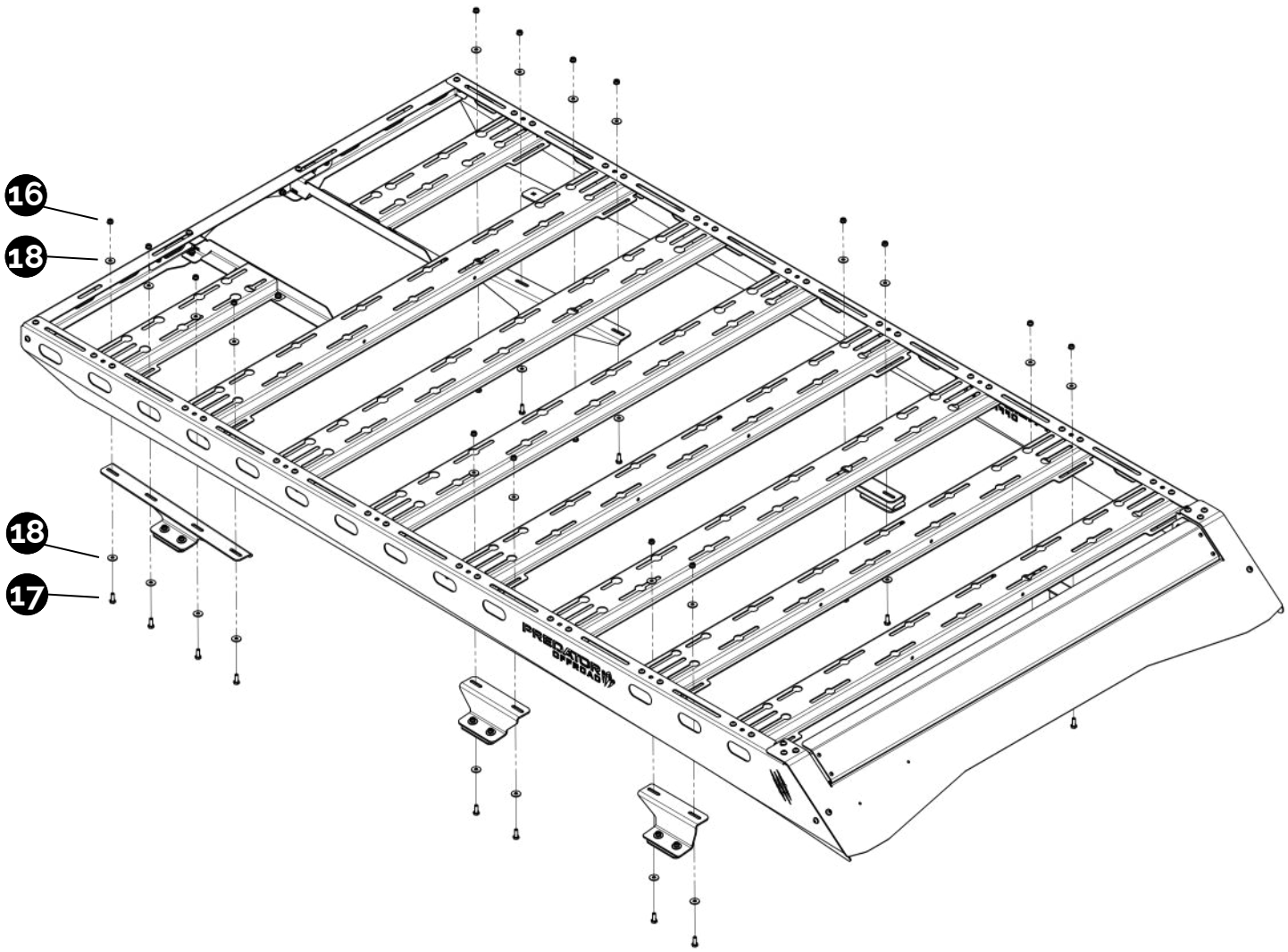
Step 8: Mounting the Roof Rack

Place the roof rack onto the mounting brackets. It's crucial to ensure the rack is centered on the vehicle's roof.

The inside of the arch in the back rail (**3**) should be approximately 40mm from the shark fin on the roof.

Once the rack is properly aligned in the front, back, left, right positions, proceed to secure the rack to the mounting brackets using the following:

- M6x16 Hex Bolts (**17**)
- M6 Fender Washers (**18**) on both sides
- M6 Nyloc Nuts (**16**)



Now that your roof rack is installed, the Adventure begins!