



FORD RANGER

2011 MY ONWARD

CHASE RACK

IMPORTANT! – READ BEFORE INSTALLATION

- When installed in accordance with these instructions, the product does not affect the operation of the vehicles SRS airbags.
- This product must be installed exactly as per these instructions using only hardware supplied.
- Take a few moments to read instructions thoroughly before beginning work.
- In the event of damage to any bar component please contact OFFROAD ANIMAL to arrange repair/replacement of components.
- Do not use this product for any vehicle make or model other than that specified on these instructions.
- Do not remove labels from this product.
- This product and its fixings must not be modified in any way unless stated in these fitting instructions.
- The installation of this product is recommended for trained personnel.
- These instructions are correct at time of publication. OFFROAD ANIMAL cannot be held responsible for the impact of any changes subsequently made by the vehicle manufacturer. If you find something has changed please contact us to let us know!
- During installation it is the duty of the installer to check correct operation/clearances of all components.
- If Instructions are to be printed for reference in the workshop, it is recommended that they are printed in colour, for best legibility.

GENERAL CARE AND MAINTENANCE

Only wash the product with a PH neutral car wash to prevent paint damage and discolouration.

Plastic parts may be maintained with silicone spray.

Do not use acidic or alkaline based cleaning products.

It is important to perform regular checks (pre trip or on an annual basis) on the installed product. Checks include:

- Visual inspection for damage (eg. cracks, chips, dents etc.)
- Electrical wiring is not rubbing anything or worn out
- Bolts are torqued to correct specification (see torque guide below)

For touching up small stone chips, Offroad Animal recommends the following paint products:

- Dupli-Color Trim & Bumper Paint Black (TB101)
- VHT Hood, Bumper & Trim Paint Black (SP27)

BOLT TORQUE SETTINGS

Use the following bolt torques on all general fasteners, unless otherwise specified.

GENERAL FASTENERS	
Size	Torque Nm
M5	5 Nm
M6	9 Nm
M8	22 Nm
M10	44 Nm
M12	77 Nm

Use the following bolt torques on all structural front bar mount and tow point fasteners, and rear towbar fasteners, unless otherwise specified.

FRONT BAR MOUNTS AND TOW POINTS + REAR TOWBAR	
Size	Torque Nm
M10	57 Nm
M12	100 Nm
M14	164 Nm
M16	248 Nm

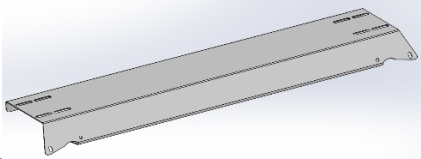
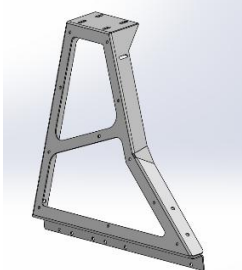
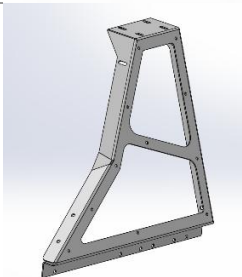
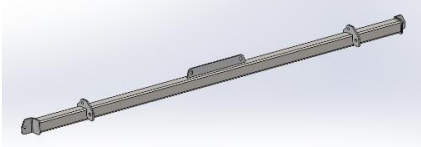

Always use a torque wrench to set correct torque settings. Ensure torque wrench is set to Nm unit of measurement. Otherwise perform conversion to lb-ft.


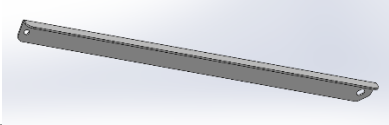
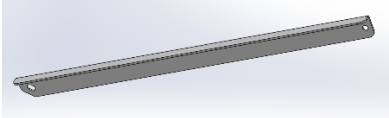
PARTS LISTING

IMPORTANT: Check all parts are present before beginning work! Contact OFFROAD ANIMAL if something is missing.

SPORTS BAR KIT

Main Parts – In the Box

Qty	Part Number	Description	Image
1	B-0003	Chase rack top panel	
1	CR-FRA-PX-11-ASM2L	Ranger chase section frame	
1	CR-FRA-PX-11-ASM2R	Ranger chase section frame	
1	CR-FRA-PX-11-ASM4	SAIL TIE BAR ASSY	
1	B-0027L	Chase rack panel	

1	B-0027R	Chase rack panel	
1	B-0044L	Chase rack joiner tube upper	
1	B-0044R	Chase rack joiner tube upper	

Small Parts – Contained in Small Parts Kit Bag

Qty	Part Number	Description
8	M10 x 30	Bolt Hex, M10X30x[1.5], GR8.8 ZP
8	M10 Flat Washer	M10 FW
8	M10 FLANGE NUT	Flange Nut, M10x1.5 G8.8 ZP
2	M8 X 20 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M8X20X1.25 BLACK ZP
8	M8 FLANGE NUT	Flange Nut, M8x1.25 G8.8 ZP
22	M6x16 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X16X1 GR12.9 BLACK ZP
22	M6 FLANGE NUT	Flange Nut, M6x1 G8.8 ZP
22	M6 FLAT WASHER BLACK ZINC	M6 FW BLACK ZP
18	M8 FLAT WASHER- BLACK ZINC	M8 FW- BLACK ZINC
6	M8 X 25 HEX	Bolt Hex, M8X25x1.25, GR8.8 ZP
10	M8 NYLOC	NYLOC SELF LOCKING NUT, ST STL A2 ISO
6	M8 X 30 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M8X30X1.25 BLACK ZP
4	M8 X 45 BHCS BZP	SCREW, BUTTON HEAD CAP, M8X45X1.25 BLACK ZP

TYRE CARRIER KIT**Main Parts – In the Box**

Qty	Part Number	Description	Image
1	CR-FRA-PX-11-ASM3	CHASE RACK TYRE CARRIER	
1	B-0046L	revolver bracket chase frame	
1	B-0046R	revolver bracket chase frame	
1	TC-65-TS-ASM1	Tyre carrier slider Jap	
1	TC-COM-TB-ASM1	Tyre carrier BASE	
1	P-0077R	Chase Rack secure bar	
1	P-0077L	Chase Rack secure bar	
1	GSK28-350-800	GAS STRUT 350MM	

Small Parts – Contained in Small Parts Kit Bag

Qty	Part Number	Description
2	M12 Nyloc nut	Bolt,Hex, M12X30X1.75P GR8.8 ZP
4	SW-12x13	Nylon shoulder washer m12x13
2	M10 Flat Washer	M10 FW
4	M8 NYLOC	NYLOC SELF LOCKING NUT, M8
2	M12X110	Bolt Hex, M12X110x1.75, GR8.8 ZP
4	M12 FLAT WASHER	M12 FW
2	M10 x 30	Bolt Hex, M10X30x[1.5], GR8.8 ZP
2	M10 threaded knob male	M10 threaded knob male
2	D-0002	Tapered Locating Washer - Chase Rack
2	P-0076	Load Spreader Plate - Chase Rack
2	M10 FLANGE NUT	Flange Nut, M10x1.5 G8.8 ZP

ROOF RACK KIT**Main Parts – In the Box**

Qty	Part Number	Description	Image
1	B-0019L	chase rack side panel	
1	B-0019R	chase rack side panel	
1	B-0039	chase rack wind deflector	
3	B-0042	chase rack roof rack pane	
1	B-0153	chase rack wind deflector brace	

Small Parts – Contained in Small Parts Kit Bag

Qty	Part Number	Description
21	M6 FLANGE NUT	Flange Nut, M6x1 G8.8 ZP
21	M6 FLAT WASHER BLACK ZINC	M6 FW BLACK ZP
17	M6x20 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X20X1 GR12.9 BLACK ZP
4	M6x25 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X25X1 GR12.9 BLACK ZP

TOOLS REQUIRED

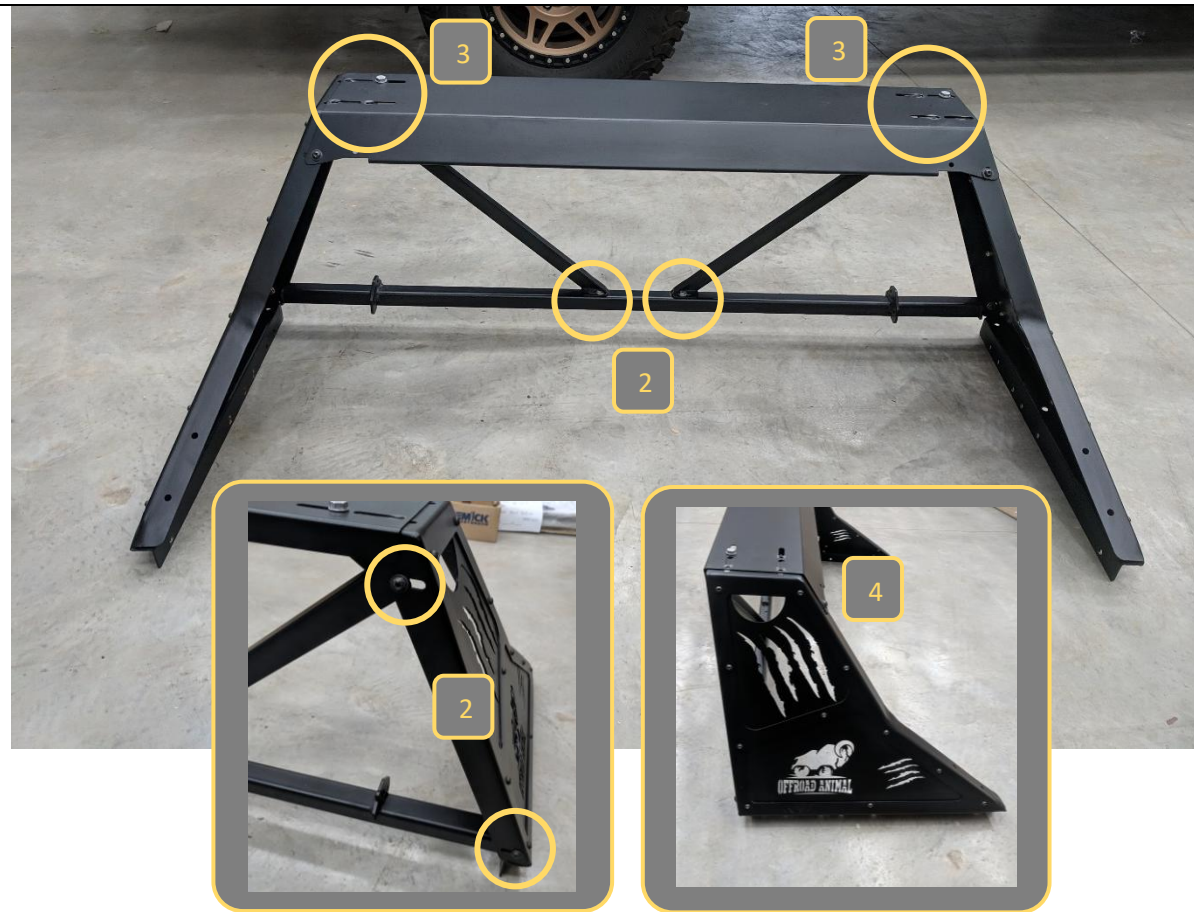
The following tools will be required to install the product.

Hand Tools	Power Tools	Workshop Equipment
Hex (Allen) Key Set 4-8mm	Electric Drill	Paint pen
Metric Socket Set 8-19 mm	9mm drill bit	Permanent Marker
G Clamps or Vice Grips		Soft Blanket
T45 Torx Driver		

WORKSHOP SAFETY

It is the responsibility of the installer to always complete works in a safe manner. Make sure the following safety equipment is available and precautions are observed whilst fitting this product.

<p>Hearing Protection</p> 	<p>Always wear ear protection when using power tools.</p>
<p>Eye Protection</p> 	<p>Ensure eye protection is always worn when cutting or drilling.</p>
<p>Manual Handling</p> 	<p>Do not attempt to lift bar assemblies or rock sliders on your own.</p> <p>Always use two people to lift or use mechanical Lifting aid such as hydraulic lifting trolley.</p>
<p>Vehicle Support</p> 	<p>Always ensure vehicle is properly supported when working on it. Do not attempt to fit products whilst suspension work is being carried out. Do not work under a vehicle supported only by a jack.</p>




1. Start by assembling the Chase rack on the ground, away from the vehicle.
2. Fit the sail tie bar to the sail arms using M8X25 hex bolt, flat washer and flange nut.
3. Fit the top panel to the sail arms using M10x30 hex bolts, flat washers and flange nuts.
4. Fit the chase rack panels, using M6x16 button head bolts, M6 flat washers and M6 flange nuts.
5. Leave all bolts finger tight at this stage.

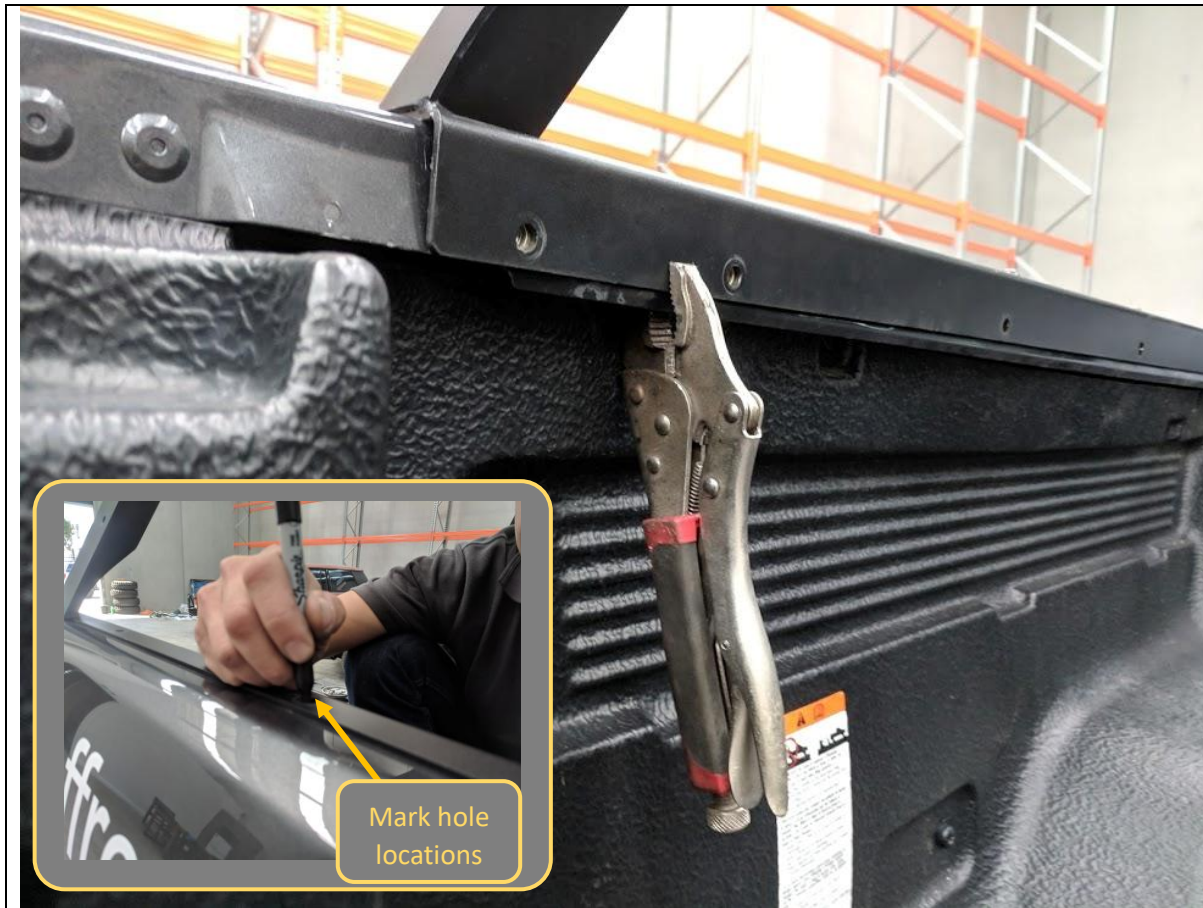
TOOLS REQUIRED**FASTENERS**

M8x25 hex bolt
M8 Flange Nut
M8 Flat Washer

M10x30 Button head bolt
M10 Flange Nut
M10 Flat Washer

M6x16 black button head
M6 flat washer
M6 flange nut

		
<div>6. With assistance, Lift the assembled chase rack onto the bed of the ute.</div> <div>Ensure the side rails are sitting on the top face of the tub and that the rack is sitting as far as possible towards the cab.</div>	TOOLS REQUIRED	
	FASTENERS	



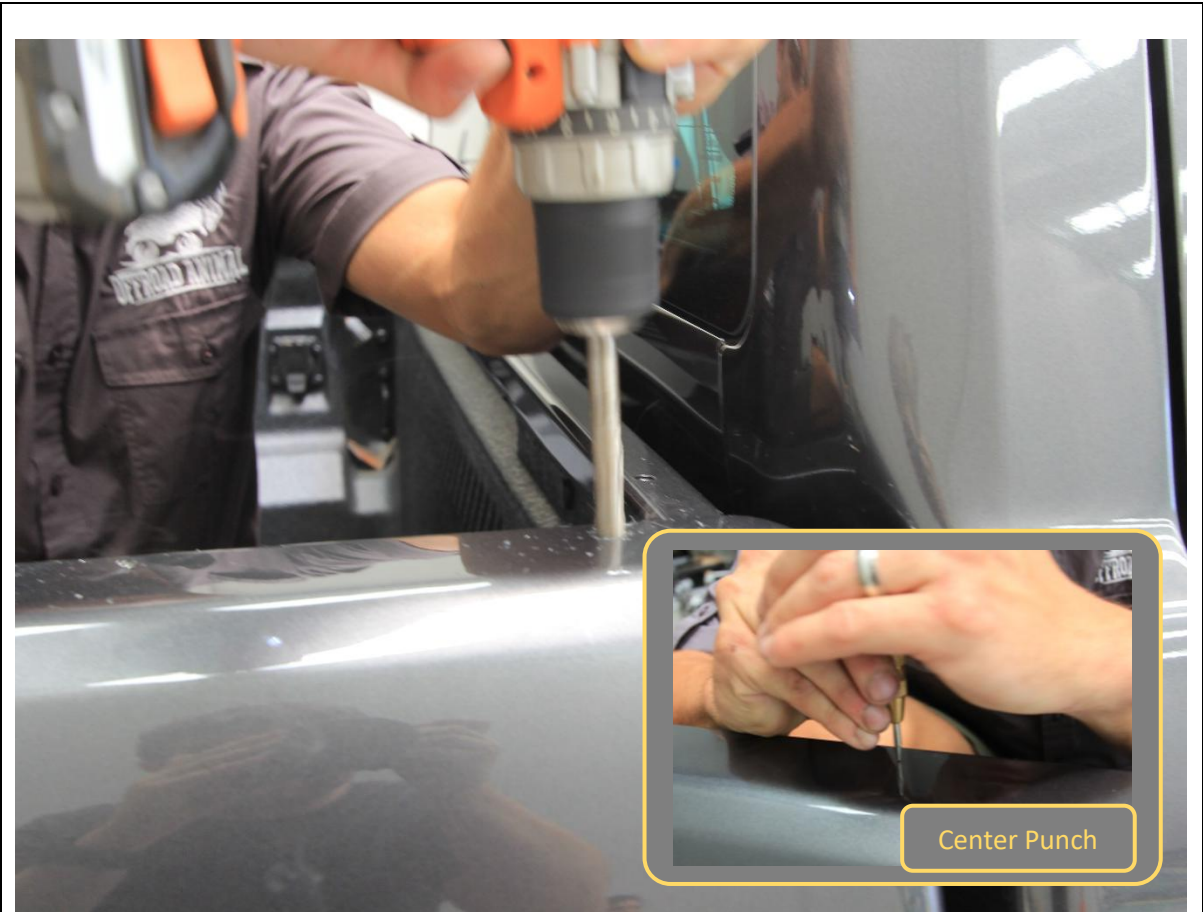
7. Using vice grips or G clamps, clamp the side lowers to the tub, ensuring that they are sitting tight against both the top and side of the tub.
8. Mark hole locations on tub, using permanent marker or paint pen.

Some hole locations will not be suitable on all vehicles due to design of tub. Use minimum 4x locations in each top and side faces.

TOOLS REQUIRED

G Clamps or Vice Grips
Marker

FASTENERS

 <div>Center Punch</div>	
<div>9. Undo all clamps and with assistance, remove rack from tub.</div> <div>10. Center punch all hole locations.</div> <div>11. Drill 9mm diameter hole through locations marked and punched. On top face ensure hole goes through both layers of tub.</div> <div>12. Paint all exposed edges with paint pen to prevent corrosion.</div>	<div>TOOLS REQUIRED</div> <div>Drill</div> <div>9mm Drill Bit</div> <div>Center Punch</div> <div>Paint Pen</div>
	<div>FASTENERS</div>



<div>13. With assistance re-fit chase rack to tub and align with holes drilled.</div> <div>14. Fit the tub reinforcement brackets, using the Existing factory T45 Torx bolts in tub.</div> <div>15. Secure with M8x40 Button head bolts, flat washers and Nyloc Nuts, through top face and M8x20 Button head bolts, flat washers and Nyloc Nuts through the side face.</div> <div>16. Tighten all bolts, using 5mm Hex key and 13mm spanner.</div>	TOOLS REQUIRED <div>5mm Hex Key 13mm Socket Extension Bar T45 Torx Driver</div>
	FASTENERS <div>M8x40 Button Head M8x20 Button Head M8 Flat Washer M8 Flange Nut</div>




Congratulations!
Head for the tracks and enjoy the sweet sports bar sail on your Ute!

Roof Rack




<div>1. If fitting roof rack portion of chase rack, do this now, before fitting tyre carrier.</div> <div>2. If only fitting tyre carrier skip to next section.</div>	TOOLS REQUIRED
	FASTENERS

	
<div><div>3. Start by assembling the roof rack on the ground, away from the vehicle.</div><div>4. First secure the cross rails to the side rails using M6x16 Button head bolts, Flat washer and Flange nut.</div><div>5. Fit front rail and wind deflector to cross rails using M6x16 Button head bolts, Flat washer and Flange nut.</div><div>6. Secure front rail and wind deflector with further M6x16 Button head bolts, Flat washers and Flange nuts through the front face.</div></div>	<div>TOOLS REQUIRED</div>
	<div>FASTENERS</div> <div>M6x16 Black Button Head M6 Flat Washer M6 Flange Nut</div>



7. Light bars or other roof rack accessories can be fitted at this stage if required.

TOOLS REQUIRED**FASTENERS**

		
<div>8. Prepare vehicle roof, by covering with a blanket or other soft protection sheet to prevent marking of roof.</div>	<div>TOOLS REQUIRED</div> <div>Soft Blanket</div>	
	<div>FASTENERS</div>	



<p>9. With Assistance, lift roof rack onto roof of vehicle. Place rear of rack assembly where roof rack bolts to sail.</p> <p>Take care not to bend radio antenna when positioning rack.</p>	TOOLS REQUIRED
	FASTENERS



ured.

10. Remove bolts from top of sail upright on one side.
11. Align the roof rack with the slots in the sail.
12. Secure the roof rack using M10x30 Hex bolts removed from sail.
13. If fitting tire carrier, fit the support brackets at this time. The support bracket sits underneath the sail upright and is secured using the same fasteners as roof rack.

TOOLS REQUIRED**FASTENERS**

M10x30 Hex
M10 Flat Washer
M10 Flange Nuts
(Re-use from Sail)



<div>14. Tighten all bolts securing the roof rack using 15mm socket and 16 mm socket / spanner. A ratchet spanner makes tightening the far corner bolt much easier.</div> <div>15. Tighten all bolts securing cross bars and front bar to roof rack side panels, using 4mm Hex key and 10mm spanner.</div>	<div>TOOLS REQUIRED</div> <div>15mm Socket 16mm Spanner (ratchet Preferred) 10mm spanner 4mm hex key</div>
	<div>FASTENERS</div>

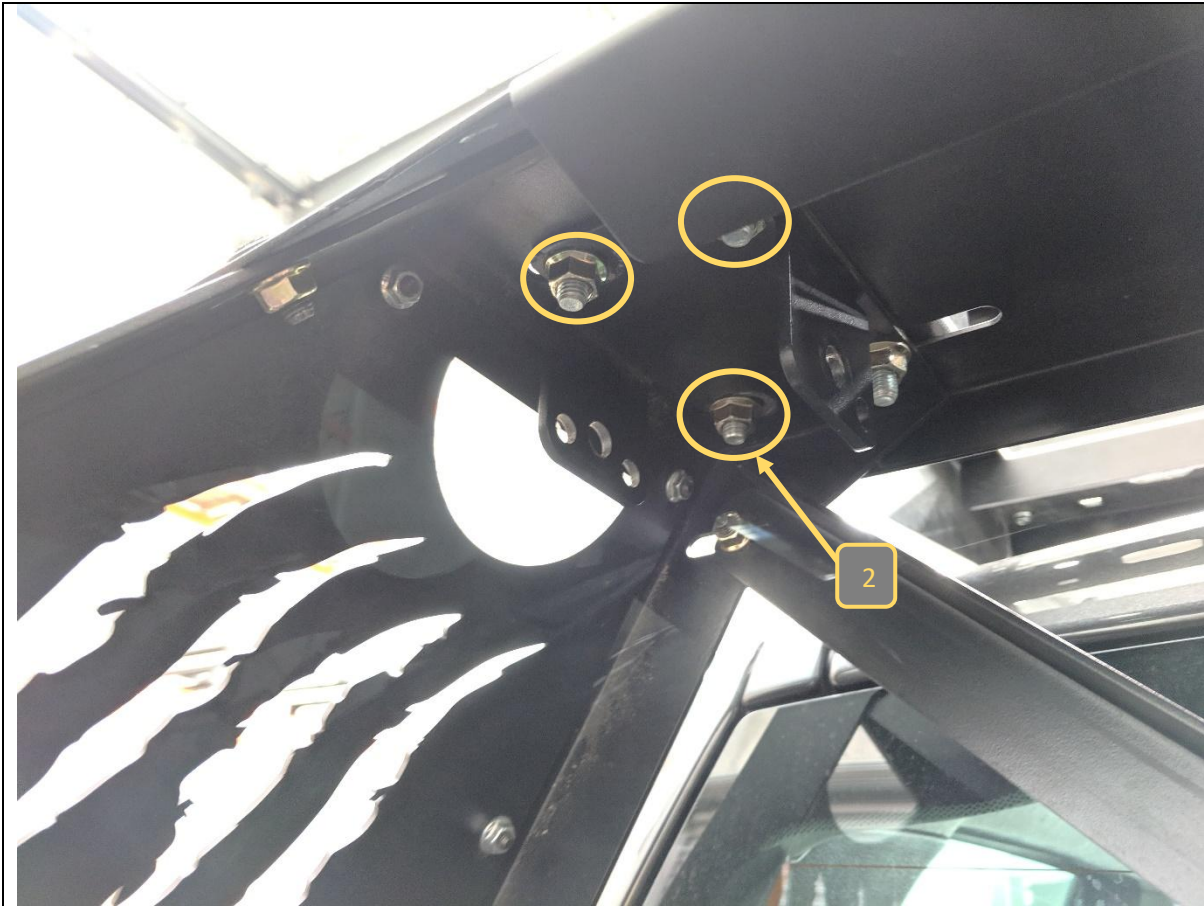


Congratulations!
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Tire Carrier



<p>1. If fitting roof rack portion of chase rack do this before fitting tire carrier.</p>	<p>TOOLS REQUIRED</p>
	<p>FASTENERS</p>



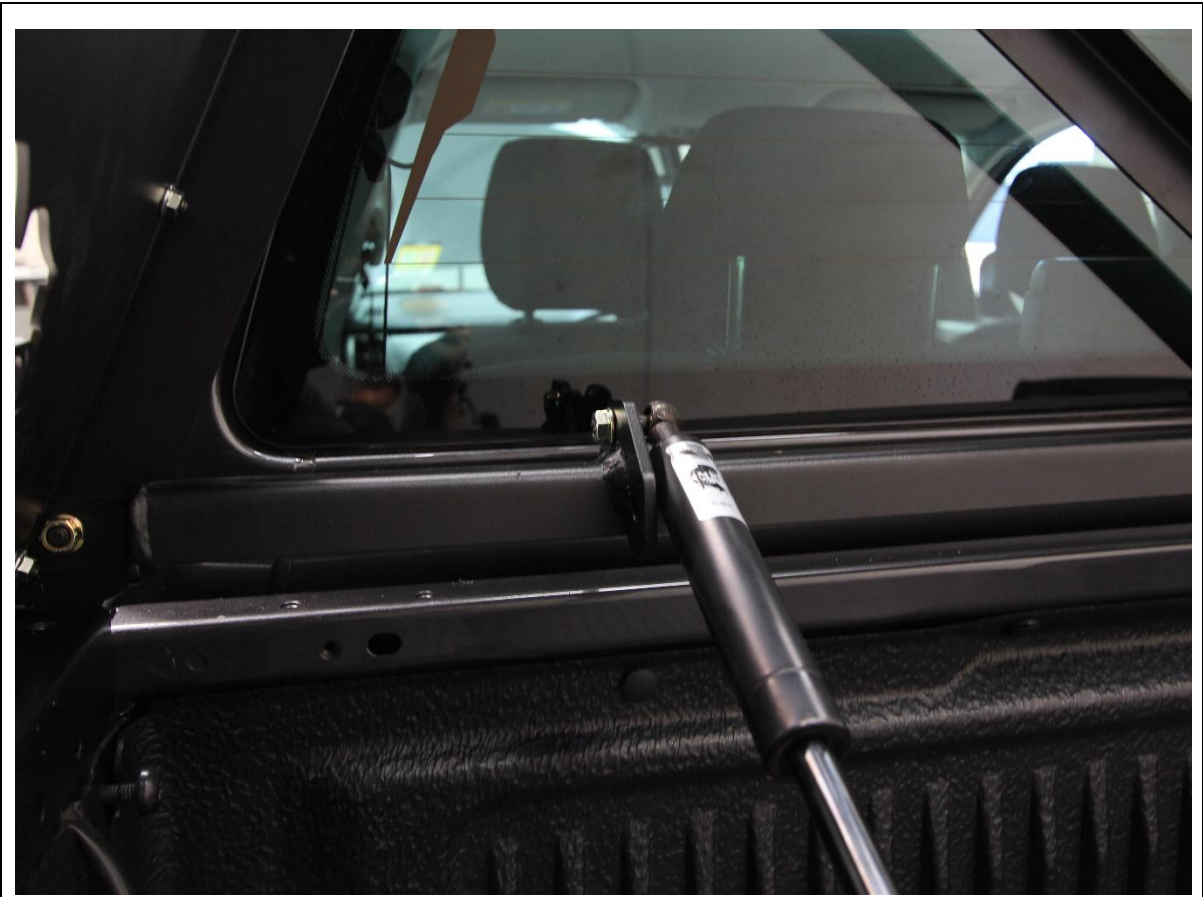
2. Fit tire carrier support brackets to sail, using 3x M10x30 Bolts, Flat washers and flange nuts per side. If you have already done this when fitting roof rack skip ahead to step 5.
3. Remove bolts from top of sail upright on one side.
4. Fit the support brackets and secure using the same fasteners as roof rack.

TOOLS REQUIRED

16mm Spanner
15mm Socket

FASTENERS

6x M10x30 Bolt
6x M10 Flat Washer
6x M10 Flange Nut

		
<div>5. Fit the gas struts to the tie bar, using M8 Flange nuts.</div> <div>6. Fat end of gas strut should sit toward bottom of chase rack as shown.</div> <div>7. Tighten using 13 and 14mm spanner.</div> <div>8. Complete for both sides of vehicle.</div>	TOOLS REQUIRED 13mm Spanner 14mm Spanner	
	FASTENERS 2x M8 Flange Nut	



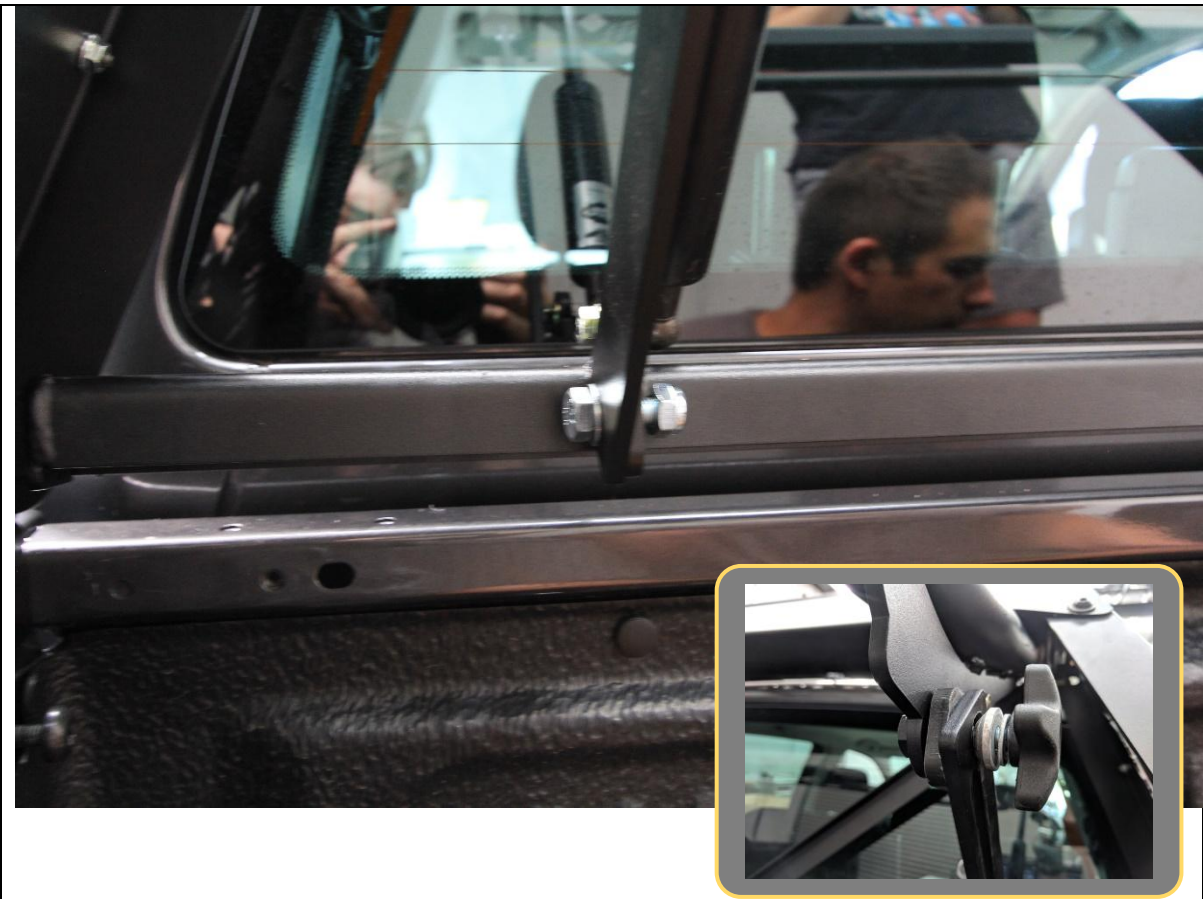
<div>9. Lift tire carrier assembly into tub in preparation for fitment.</div> <div>10. Insert nylon shoulder washers into large holes on clevis.</div>	TOOLS REQUIRED
	FASTENERS



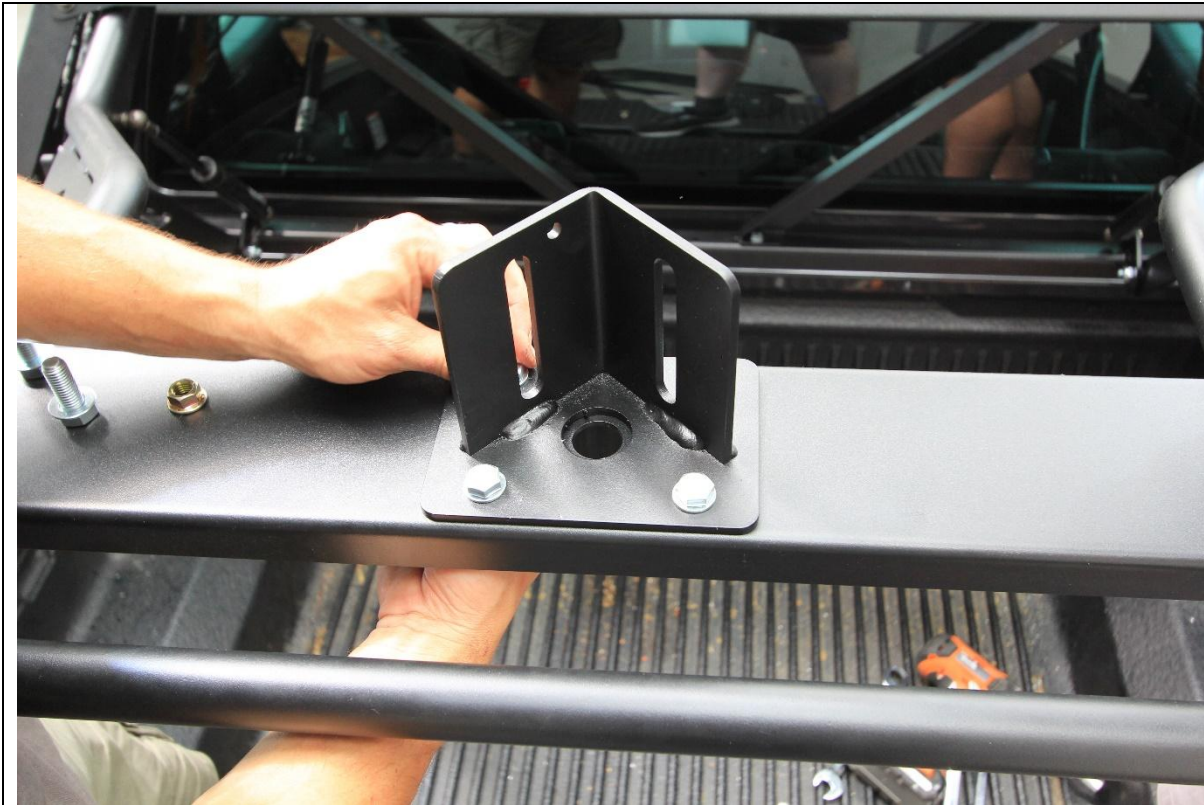
11. With assistance lift the tire carrier assembly and align with the support brackets.
12. Secure the tire carrier assembly to the support brackets using M12x110mm Bolt, flat washers and M12 Nyloc Nut.
13. Fit the gas struts to the tire assembly using M8 Flange nut. Tighten using 14mm and 13mm spanners.
14. Tighten main M12 bolt such that there is no play, but the carrier assembly can still pivot freely.

TOOLS REQUIRED**FASTENERS**

M12x110 Bolt
M12 Flat Washers
M12 Nyloc Nut



<div>15. Fit the support arms to the Tie bar, using M10x30 Bolt, Flat washers and Nyloc Nut.</div> <div>16. Tighten such that there is no play, but the carrier assembly can still pivot freely.</div> <div>17. Fit the M10 Hand knob, flat washer and conical locating washer through the support arm and secure into the weld nut on the tire carrier assembly.</div> <div>18. Complete for both sides of tire carrier.</div>	TOOLS REQUIRED
	FASTENERS <div>M10x30 Hex Bolt</div> <div>M10 Flat Washer</div> <div>M10 Nyloc Nut</div> <div>M10 Hand wheel</div> <div>Conical Locating washer</div> <div>Spacer Plate</div>



19. Fit the Tire hold down assembly base to the main tire carrier assembly, using M10x30 Bolts, Flat washers and Flange Nuts

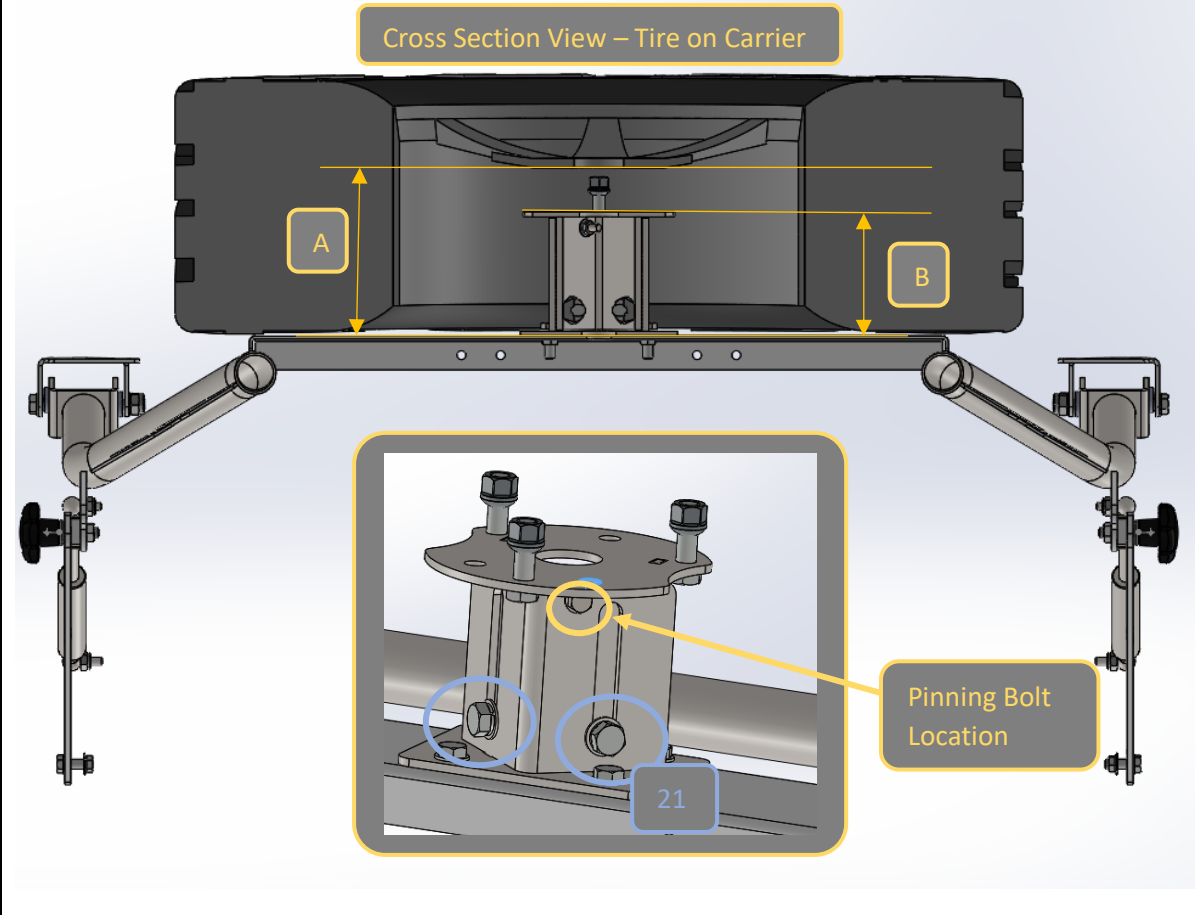
20. Tighten all bolts using 16mm Spanner and 15mm Socket

TOOLS REQUIRED

15mm socket
16mm spanner

FASTENERS

4x M10x30 Bolt
4x M10 Flat Washer
4x M10 Flange Nut

 <p>The diagram shows a cross-section of a tire mounted on a carrier. Two vertical double-headed arrows indicate distances: 'A' is the distance from the wheel center to the crossbar, and 'B' is the distance from the wheel center to the carrier base. An inset shows a close-up of the carrier base with a pinning bolt location circled in yellow and labeled '21' in a blue box. A yellow arrow points from the 'Pinning Bolt Location' label to the inset.</p>	
<ol style="list-style-type: none"> 21. Fit the Tire carrier slider to the base using the two M12 Bolts through the slots. 22. Place tire on the tire carrier. Measure the distance between the wheel center and the cross bar on the tire carrier when the wheel is resting on the tire carrier (Distance A). 23. Remove the tire from the carrier. Set the height of the tire carrier (Distance B) to be approximately 15mm less than the Wheel to Crossbar measurement (Distance A). 24. Lock the tire carrier assembly in place by tightening the M12 Bolts using 18mm spanner. 25. Drill the pinning hole in situ, using 9mm drill bit. Fit M8x25 pinning bolt with M8 flat washer and M8 Flange nut. 	<p>TOOLS REQUIRED</p> <p>18mm Spanner 13mm Spanner Electric Drill 9mm Drill Bit</p> <p>FASTENERS</p> <p>M12x30 Hex Bolt M12 Flat Washer M8x25 Bolt M8 Flat Washer M8 Flange Nut</p>

	
<div>26. With assistance from another person, lift the spare tire onto the tire carrier.</div> <div>27. Secure using wheel nuts and 19mm socket.</div> <div>28. Re-check all fasteners are tight and you are done! Make sure to lock the tire carrier in either the up or down position using the hand bolts and conical locating washers.</div>	<div>TOOLS REQUIRED</div> <div>19mm Socket</div>
	<div>FASTENERS</div> <div>Wheel nuts</div>



Congratulations!
Head for the tracks and enjoy the sweet tire carrier on your Ranger!