



## RAM 1500 TRX

### Predator Front Bar Fitting Instruction

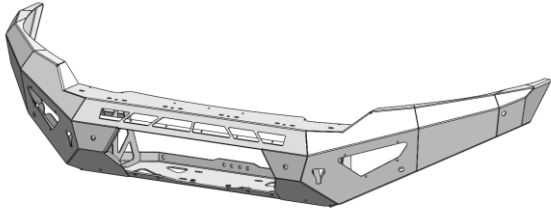
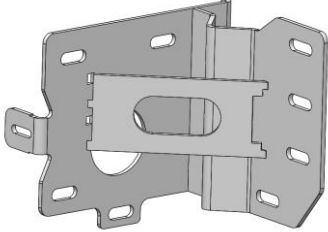
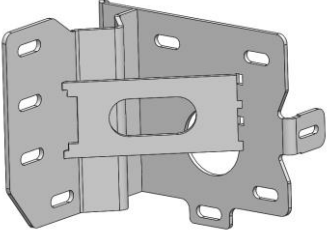
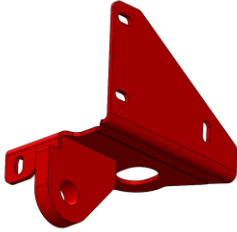
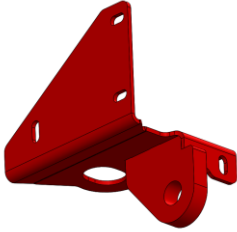
#### **IMPORTANT! – READ BEFORE INSTALLATION**

- When installed in accordance with these instructions, the front protection bar 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.

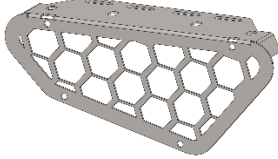
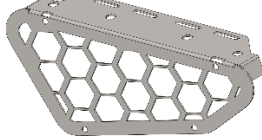
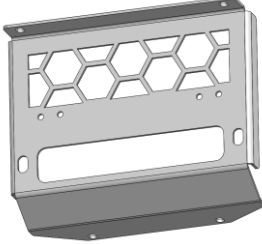
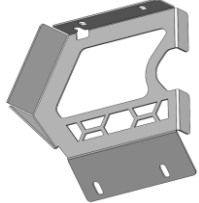
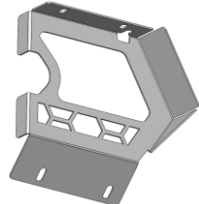
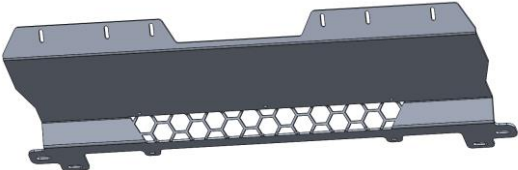
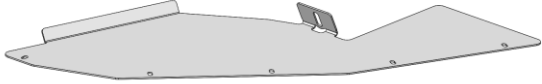
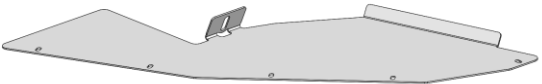
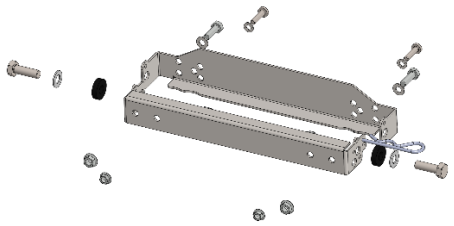
## PARTS LISTING

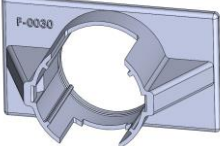
**IMPORTANT:** Check all parts are present before beginning work! Contact OFFROAD ANIMAL if something is missing.

### Parts List

Qty	Part Number	Description	Image
1	FB-RTX-DT-21-PR-ASM1	RAM 1500 TRX Predator Bar Welded Assy	
1	FB-R15-DT-21-PR-ASM2R	RAM 1500 DT Predator Impact Assy RH	
1	FB-R15-DT-21-PR-ASM2L	RAM 1500 DT Predator Impact Assy LH	
1	FB-RTX-DT-21-PR-ASM2R	RAM 1500 TRX Tow Point Assy RH	
1	FB-RTX-DT-21-PR-ASM2L	RAM 1500 TRX Tow Point Assy LH	

1	B-0519R	Ram 1500 Halo Fog Light Bracket RH	
1	B-0519L	Ram 1500 Halo Fog Light Bracket LH	
1	B-0589	RAM1500 DT Winch Control Box Mount Bracket	
1	B-1156R	RAM 1500 TRX Winch Strap RH	
1	B-1156L	RAM 1500 TRX Winch Strap LH	
1	B-1211	RAM 1500 TRX Oil Cooler Relocation Bracket	
1	B-1212	RAM 1500 TRX Oil Cooler Air Guide	
1	B-1213R	RAM 1500 TRX Bash Plate Mount RH	
1	B-1213L	RAM 1500 TRX Bash Plate Mount LH	
1	B-1385	RAM 1500 TRX Pan Brace	

1	M-0002R	Light Cover Mesh	
1	M-0002L	Light Cover Mesh	
1	M-0016	RAM 1500 Predator Fairlead Mesh	
1	M-0017R	RAM 1500 Predator Side Mesh RH	
1	M-0017L	RAM 1500 Predator Side Mesh LH	
1	U-0077	RAM 1500 TRX Centre Bash Plate	
1	U-0078R	RAM 1500 TRX Side Underpanel RH	
1	U-0078L	RAM 1500 TRX Side Underpanel LH	
1	NPF-COM-SM-ASM0	Number Plate Flip ASM Small	

1	FB-R15-DT-21-PR-ADRCP	ADR Compliance Plate RAM1500 DT	
6	F-0030	Parking Sensor Holder - Universal, Flat	
1	TK-COM-PSEN-6	Tape Kit - 6 Sensor Universal	N/A
2	PW-P-14X9-180	Pinch Weld - Plain 14X9MM, Rubber, 180mm Length	N/A
1	OFA-LOGO	Offroad Animal Metal Logo	
1	FI Note	Fitting Instruction Note	N/A

**PREDATOR Fasteners – Contained in Small Parts Kit Bag**

Qty	Part Number	Description
8	M4X12 PAN	SCREW, PAN HEAD PHILLIPS, M4X12X0.7 GR4.6 ZP
8	M4 FLAT WASHER	Flat Washer M4, 8mmODx0.8mm T
8	M4 FLANGE NUT	Flange Nut, M4
29	M6x16 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X16X1 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
29	M6 FLAT WASHER BLACK ZINC	M6 Flat Washer, 12x6.1x1, ISO4042 ZnNi BLACK PASSIVATED FINISH
19	M6 FLANGE NUT	Flange Nut, M6x1 G8.8 ZP
10	M6CN3MM	CAGE NUT M6x2.6-3.5
10	M8 X 20 HEX	Bolt Hex, M8X20x1.25, GR8.8 ZP
2	M8 X 35 HEX	Bolt Hex, M8X35X1.25, GR8.8 ZP
6	M8 X 16 BHCS BZP	SCREW, BUTTON HEAD CAP, M8X16X1.25 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
6	M8 X 30 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M8X30X1.25, ISO4042 ZnNi BLACK PASSIVATED FINISH
6	M8 FLAT WASHER	M8 FLAT WASHER
6	M8 HD FLAT WASHER	M8 FLAT WASHER - High Tensile 19x8x1.9mm
12	M8 FLAT WASHER- BLACK ZINC	M8 FLAT WASHER, 16.5x8.4x1.2, ISO4042 ZnNi BLACK PASSIVATED FINISH
10	M8 FLANGE NUT	Flange Nut, M8x1.25 G8.8 ZP
12	M10 x 25	Bolt Hex, M10X25x[1.5], GR8.8 ZP
12	M10 Flat Washer	M10 Flat Washer
2	M10 FW LHD	WASHER, FLAT M10X28.5X2.5
14	M10 FLANGE NUT	Flange Nut, M10x1.5 G8.8 ZP
14	M12X30	Bolt Hex, M12X30x1.75, GR8.8 ZP
16	M12 FW LHD	M12 FW Large Heavy Duty
12	M12 FLANGE NUT	Flange Nut, M12x1.75 G8.8 ZP
2	M12 Nyloc nut	M12 NYLOC NUT


## TOOLS REQUIRED

The following tools will be required to install the product.

<b>Hand Tools</b>	<b>Power Tools</b>	<b>Workshop Equipment</b>
Metric socket set 8-19mm	Electric/Air Impact Driver (Optional)	Isopropyl Alcohol
Socket extension bar	Air hacksaw	Rag
Metric spanner set 8-19mm		Cable Ties
Hex (Allen) key set 4-6mm		Respirator mask with P2 particulate filter
Torx key set		Sandpaper
Trim removal tool		Automotive adhesive sealant (eg. Sikaflex)
Plastic auto trim tool set		Lifting Trolley (Optional)
Flat blade screwdriver set		
Phillips head screwdriver set		
Utility knife		
Side cutters		
Pliers		
M8x1.25 metric tap (optional)		

# 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. Remove the number plate and set aside.

**TOOLS REQUIRED**

**FASTENERS**



2. Remove 6x 16mm hex bolts holding the factory skid plate.

**Retain bolts and skid plate for re-use.**

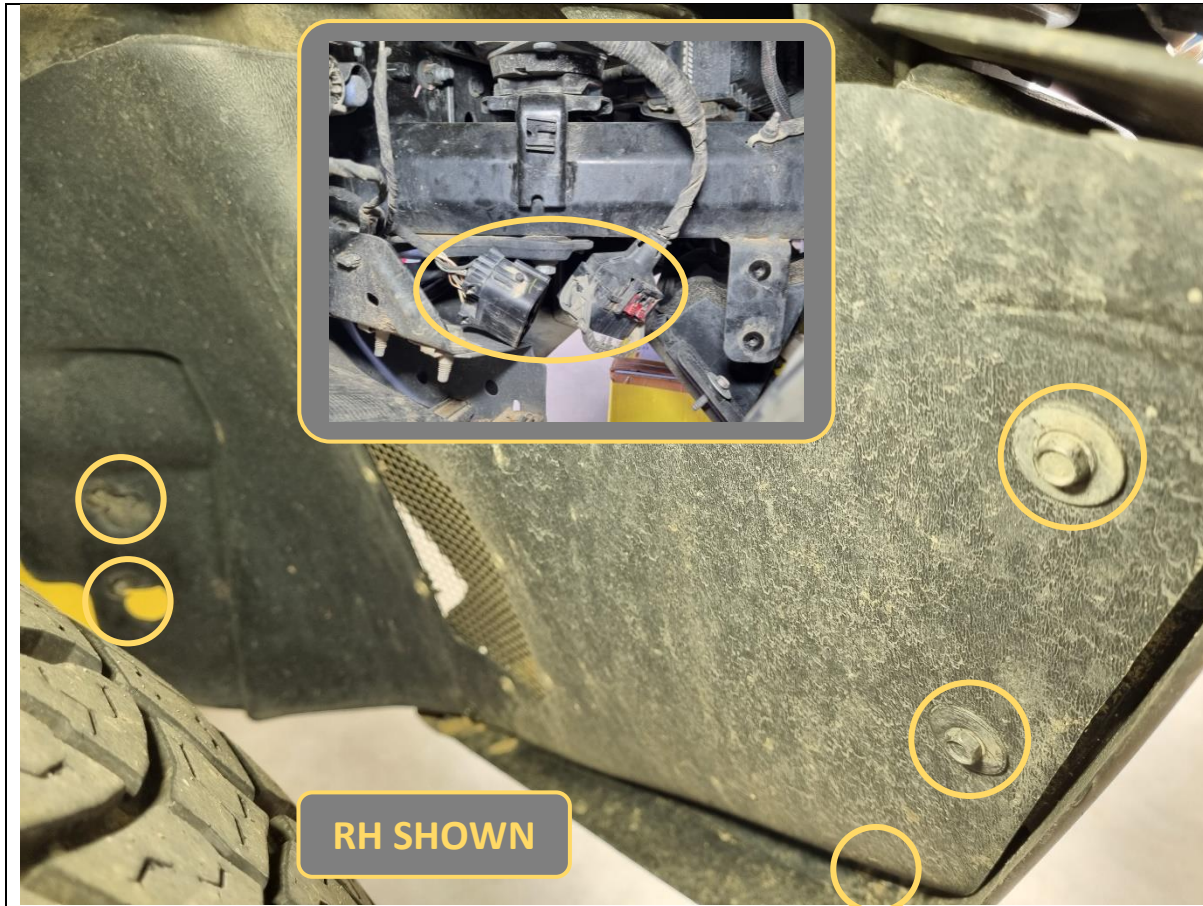
**TOOLS REQUIRED**

16mm socket/spanner

**FASTENERS**

6x 16mm factory hex bolts

Retain for re-use

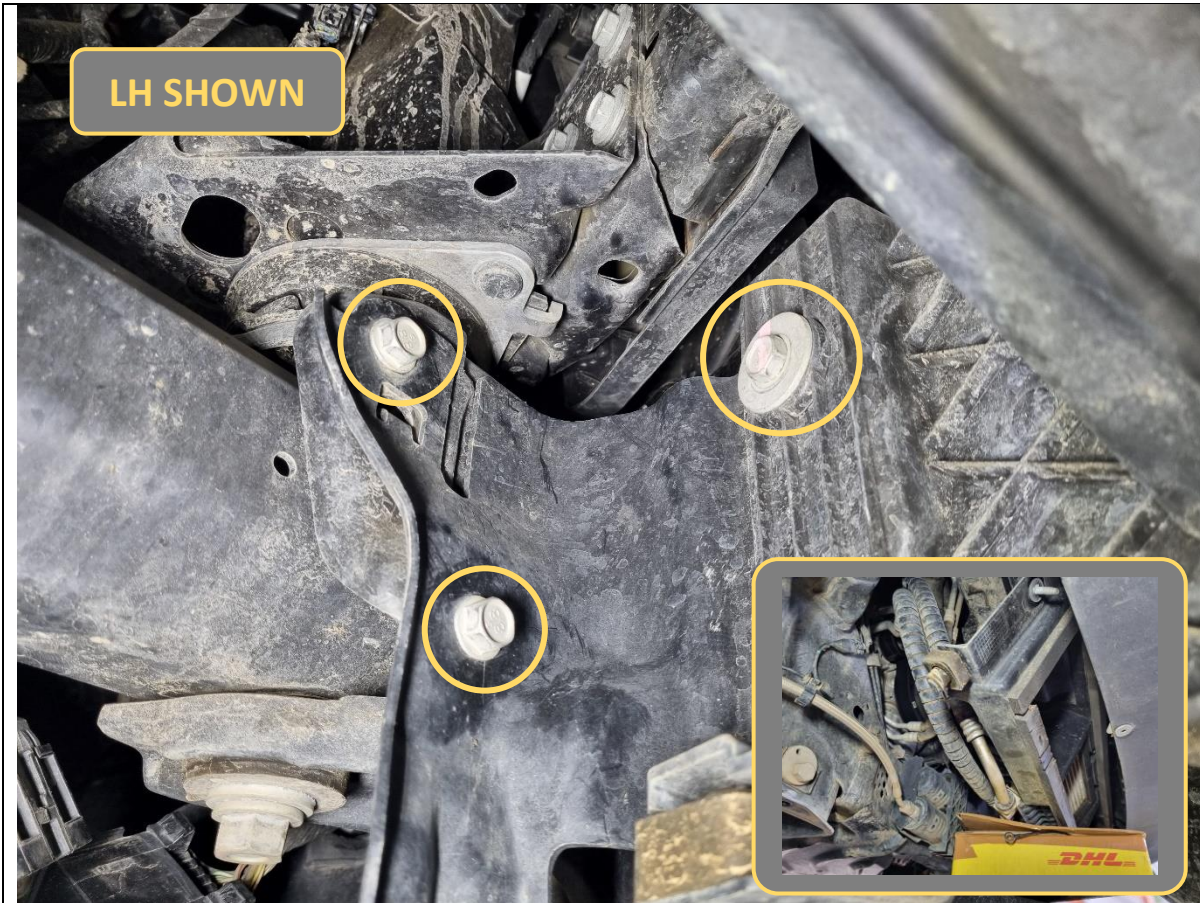


3. Remove 5x 8mm hex bolts holding the front inner wheel arch, per side.
4. Disconnect the main bumper wiring harness covered underneath on the LH passenger side (driver side for US LHD).

**TOOLS REQUIRED**

8mm socket/spanner

**FASTENERS**



5. Locate the oil cooler behind the front bumper, in between the chassis rails.
6. Support the oil cooler with a box or stand.
7. Remove 3x 13mm hex bolts (per side) holding the oil cooler mount to chassis.

**Retain these bolts for re-use.**

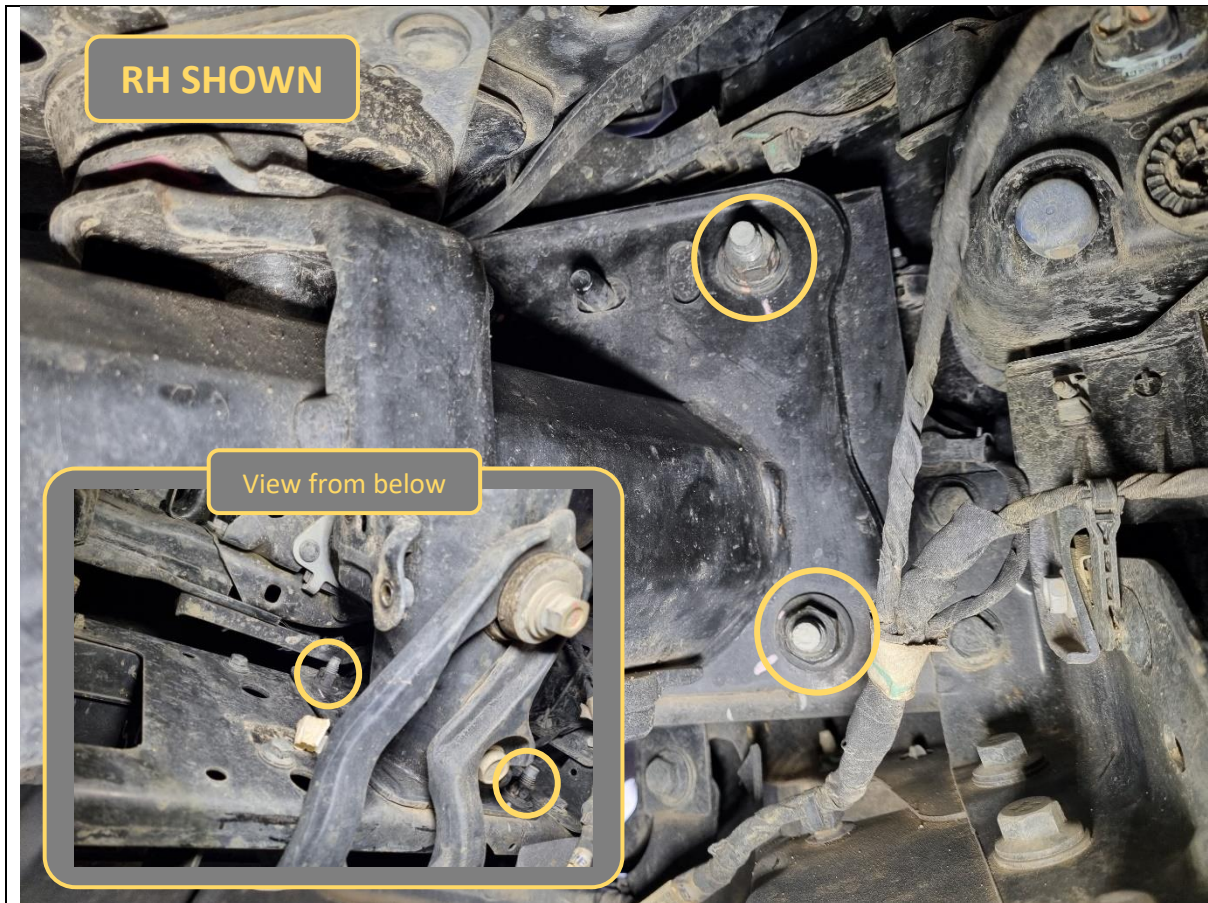
**TOOLS REQUIRED**

13mm socket/spanner

**FASTENERS**

6x 13mm factory hex bolts

Retain for re-use



8. Remove 3x 18mm hex nuts (per side) holding the bumper to the chassis rail.

**TOOLS REQUIRED**

18mm socket/spanner

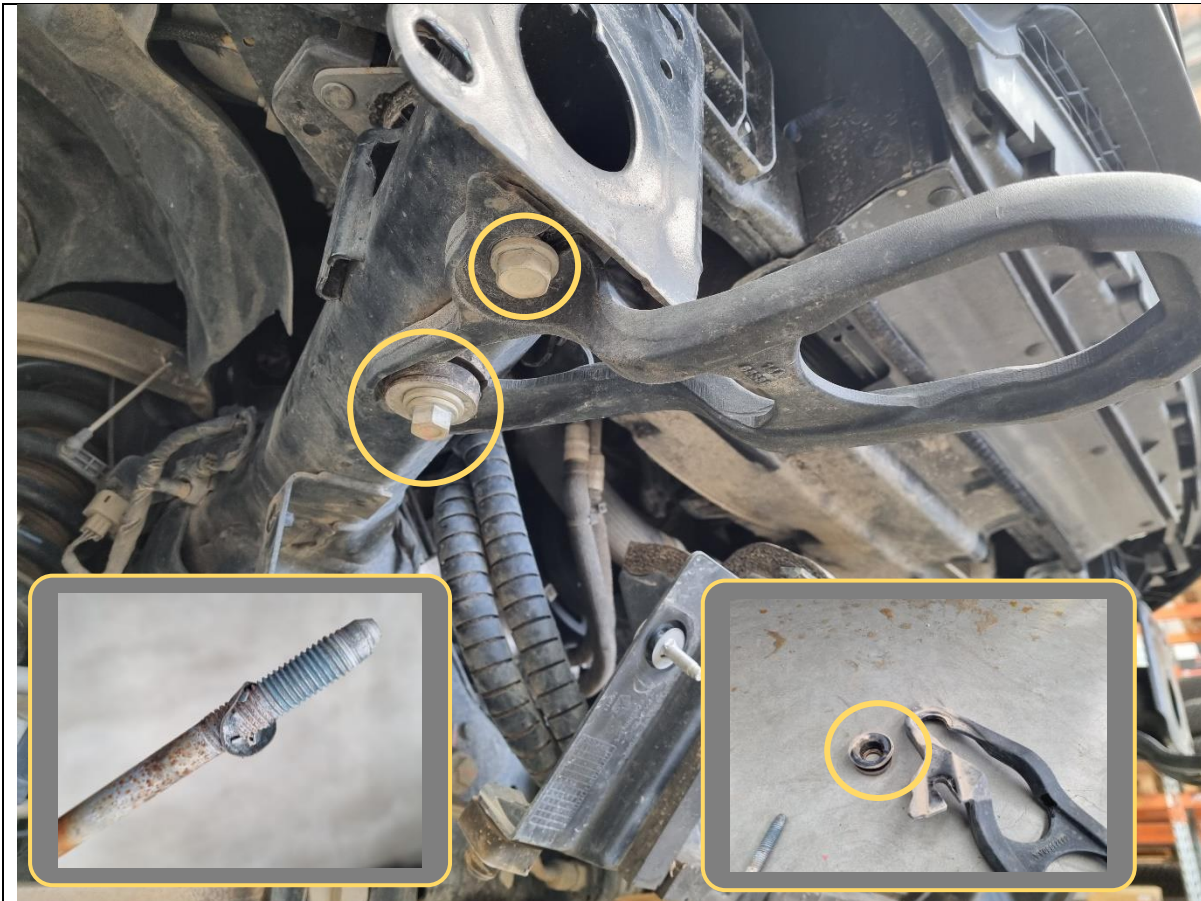
**FASTENERS**



9. With a lifting device or assistance from another person, pull the bumper outwards and remove from the vehicle. Set the bumper aside in a safe place.

**TOOLS REQUIRED**

**FASTENERS**



10. Remove 1x 18mm hex bolt (rear) and 1x 21mm hex bolt (front) holding each tow hook to the underside of the chassis. Retain both bolts.

Note: The 18mm hex bolt has a keeper/retention washer into the body mount that may be lodged in sideways (see bottom left inset). In some cases, you may need to hammer the bolt out. It is ok to discard the keeper washer.

11. Remove the rubber bush from each tow hook and set aside for re-use. The tow hooks may be discarded.

**TOOLS REQUIRED**

18mm socket/spanner  
21mm socket/spanner

**FASTENERS**

2x 18mm factory hex bolt  
2x 21mm factory hex bolt  
2x factory rubber bush

Retain for re-use



12. Remove 2x 13mm hex bolts holding the top of the oil cooler to its mount. Ensure the rubber parts stay with the oil cooler.

**TOOLS REQUIRED**

13mm socket/spanner

**FASTENERS**





13. Remove 2x 10mm hex nuts holding the bottom of the oil cooler to its mount.
14. Retain the rubber block with the threaded studs (bottom left inset photo), as well the hex nuts.
15. Remove and discard the oil cooler mount.

**TOOLS REQUIRED**

10mm socket/spanner

**FASTENERS**

2x 10mm factory hex nut



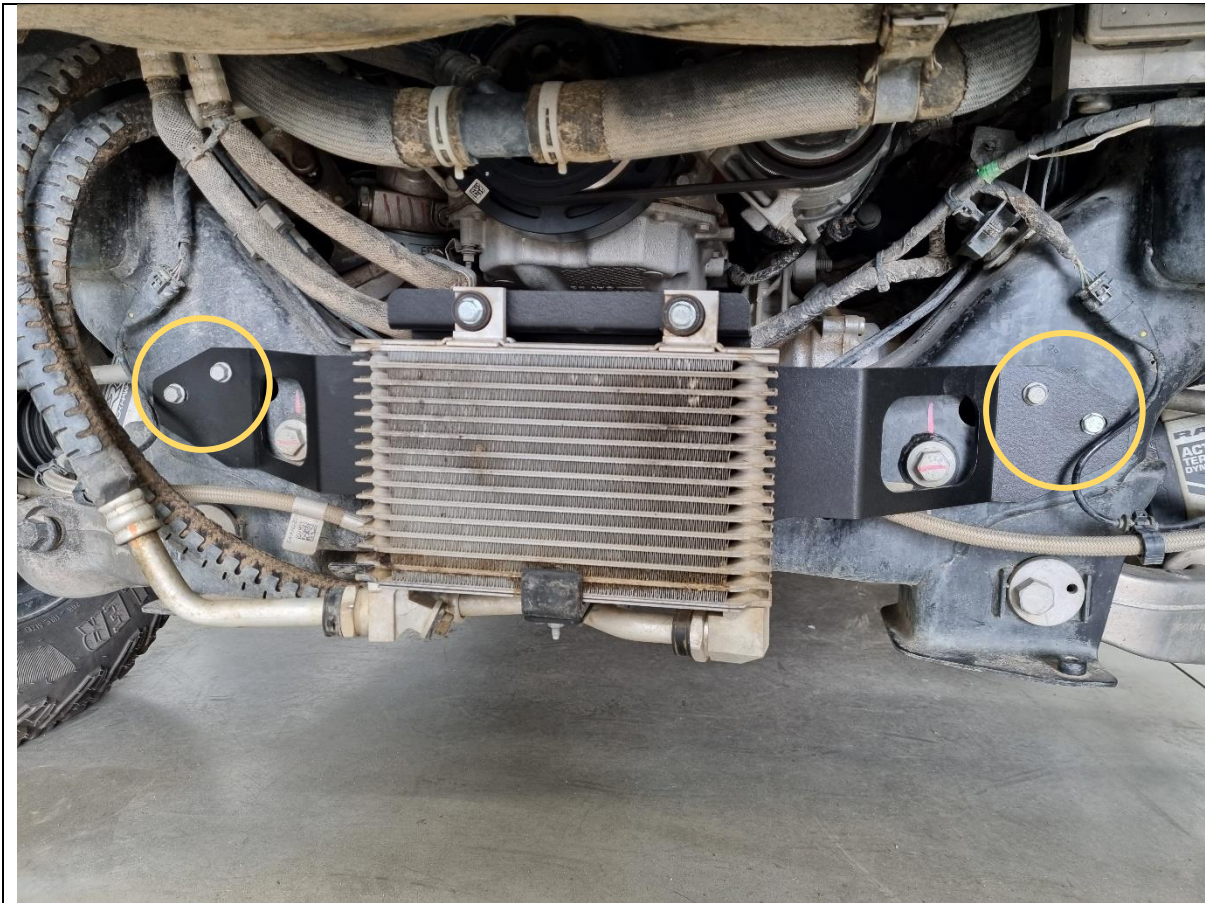
16. Place the rubber block with studs back onto the centre of the oil cooler, at the bottom.
17. Fit the supplied oil cooler relocation bracket to the oil cooler, by sliding it on the from the side. Gently manipulate the coolant lines out of the way by hand if needed to get the mount on.
18. Fit and secure the rubber block studs first with the factory 10mm hex nuts.
19. Then secure the top with the supplied 2x M8x25 hex bolts, heavy duty washers and flange nuts.

**TOOLS REQUIRED**

- 10mm socket/spanner
- 13mm socket/spanner

**FASTENERS**

- 2x 10mm factory hex nut
- 2x M8x35 hex bolt
- 2x M8 heavy-duty washer
- 2x M8 flange nut



20. Re-use 4x of the 13mm hex bolts from Step 7 and fit the oil cooler and bracket to the embedded nuts in the chassis cross member, as shown.

Ensure electrical cables are not pinched in between the bracket and chassis.

21. If required, the threads of the nuts in the chassis may need to be cleaned with a M8x1.25 metric tap.

**TOOLS REQUIRED**

13mm socket/spanner  
M8x1.25 metric tap (optional)

**FASTENERS**

4x 13mm factory hex bolts (retained from Step 7)

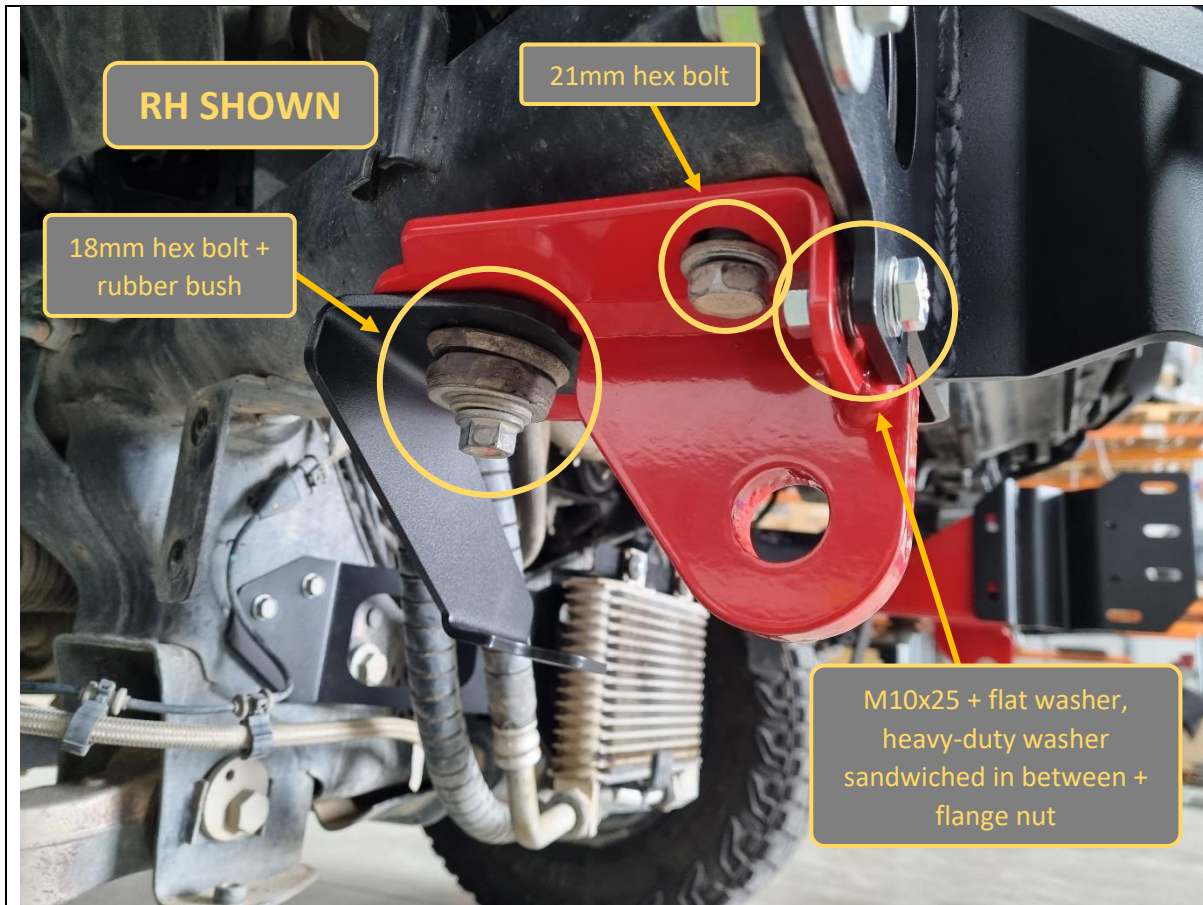


22. Loosely fit each impact assembly to the front face of the chassis horns with 3x M12x30 hex bolts, heavy-duty washers and flange nuts.

**TOOLS REQUIRED**

**FASTENERS**

- 6x M12x30 hex bolt
- 6x M12 heavy-duty washer
- 6x M12 flange nut



<p>23. Fit the tow point and bash plate mount to the underside of the chassis rail.</p> <p>24. Re-use the 21mm tow point hex bolt from Step 10 for the front underside hole.</p> <p>25. For the rear underside hole, place the bash plate mount over the tow point, then re-use and loosely secure to the chassis with the long 18mm tow point hex bolt and rubber bush from Step 10.</p>	<p><b>TOOLS REQUIRED</b></p>
<p>26. At the front, loosely secure the impact assembly to the tow point with 1x M10x25 hex bolt and standard flat washer on the outside, <u>1x heavy-duty washer sandwiched in between</u>, and then 1x flange nut on the back.</p> <p>27. Repeat for other side. Keep all bolts loose at this stage.</p>	<p><b>FASTENERS</b></p> <p>2x 18mm factory hex bolt 2x 21mm factory hex bolt 2x factory rubber bush</p> <p>2x M10x25 hex bolt 2x M10 flat washer 2x M10 heavy-duty washer 2x M10 flange nut</p>



28. Loosely secure the inner face of each tow point to each impact assembly with 2x M10x25 hex bolts, flat washers and flange nuts.

**TOOLS REQUIRED**

**FASTENERS**

- 4x M10x25 hex bolt
- 4x M10 flat washer
- 4x M10 flange nut



29. Measure the distance between the outside faces of uprights on bar using tape measure. Write distance below for reference if required.

Bar Upright Width = \_\_\_\_\_mm

30. Adjust mounts by sliding left/right on the slots, such that distance between inner faces of mounts are approximately 2mm more than bar. Ensure the mount faces are vertically upright and symmetric left/right on the chassis.

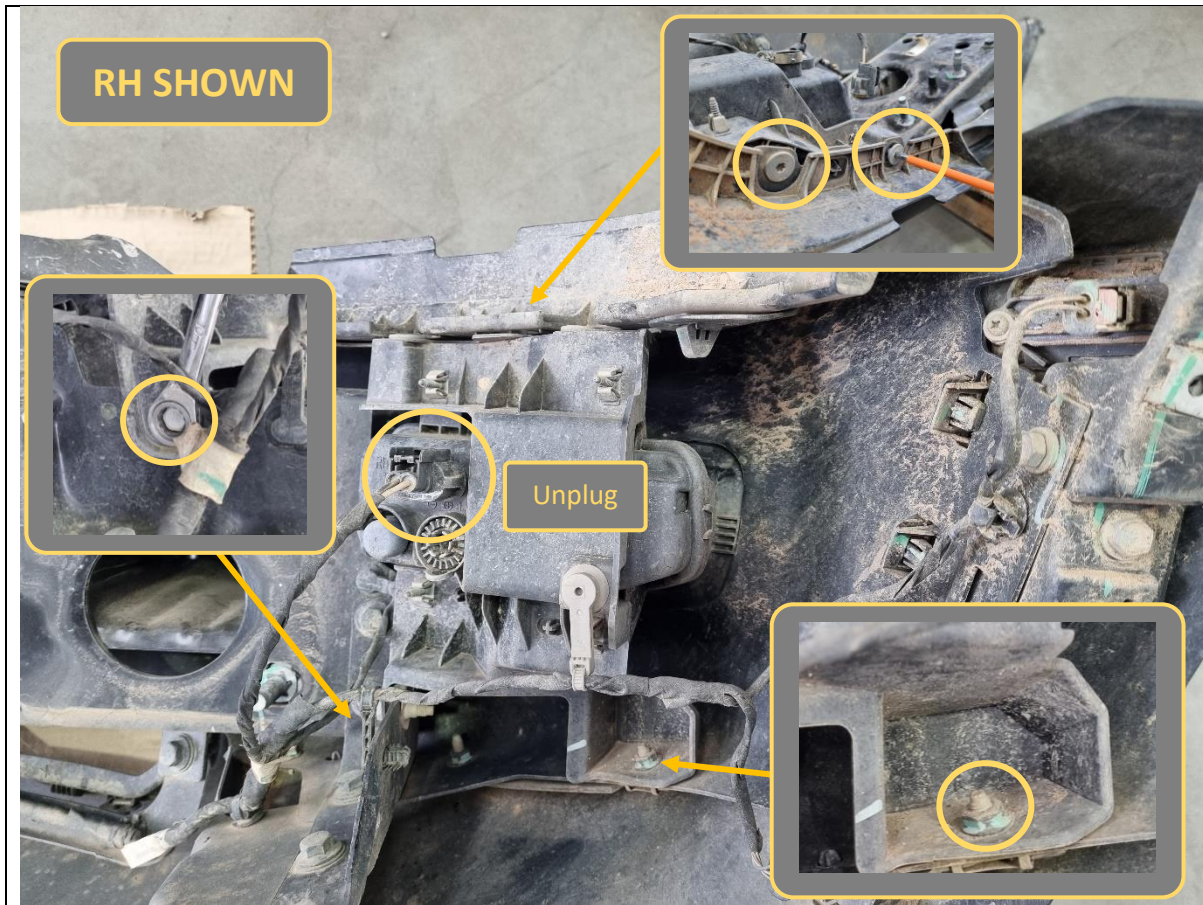
31. Secure and tighten mounts and tow points. Check and confirm distances are correct after tightening.

**TOOLS REQUIRED**

Tape measure

- 16mm socket/spanner
- 17mm socket/spanner
- 18mm socket/spanner
- 19mm socket/spanner
- 21mm socket/spanner

**FASTENERS**



- 32. Unplug the fog light on the back of the bumper.
- 33. Remove 2x T40 Torx screws holding the top of the fog light to the bumper.
- 34. Remove 1x 10mm hex nut holding the bottom outer corner of the fog light to the bumper.
- 35. Remove 1x 10mm hex bolt holding the bottom inner corner of the fog light to the bumper.

**TOOLS REQUIRED**

T40 Torx bit  
10mm socket/spanner

**FASTENERS**





36. Remove and discard the fog light.

37. Repeat for the other side.

**TOOLS REQUIRED**

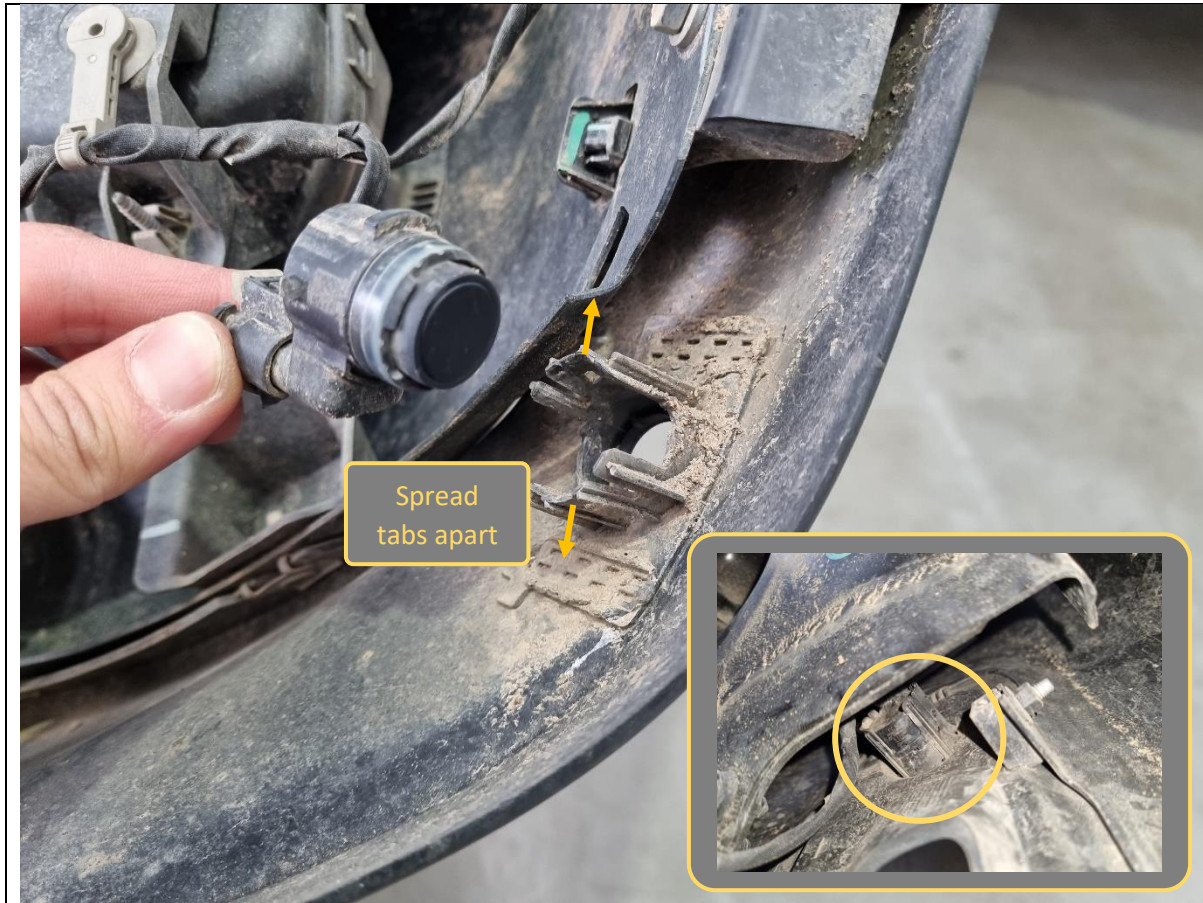
**FASTENERS**



38. Unplug the side marker lamps located on the outer ends of the bumper. These lamps will not be relocated into the bullbar.

**TOOLS REQUIRED**

**FASTENERS**



39. Locate the 6x parking sensors on the bumper, and unclip them from its plastic housing by spreading the housing plastic tabs apart.

2x of the sensors are hidden behind metal bumper brackets (see inset photo), but can still be reached by hand without disassembly.

**TOOLS REQUIRED**

**FASTENERS**



- 40. Use a trim removal tool and unclip the entire bumper wiring harness.
- 41. Remove the harness with parking sensors from vehicle and set aside.

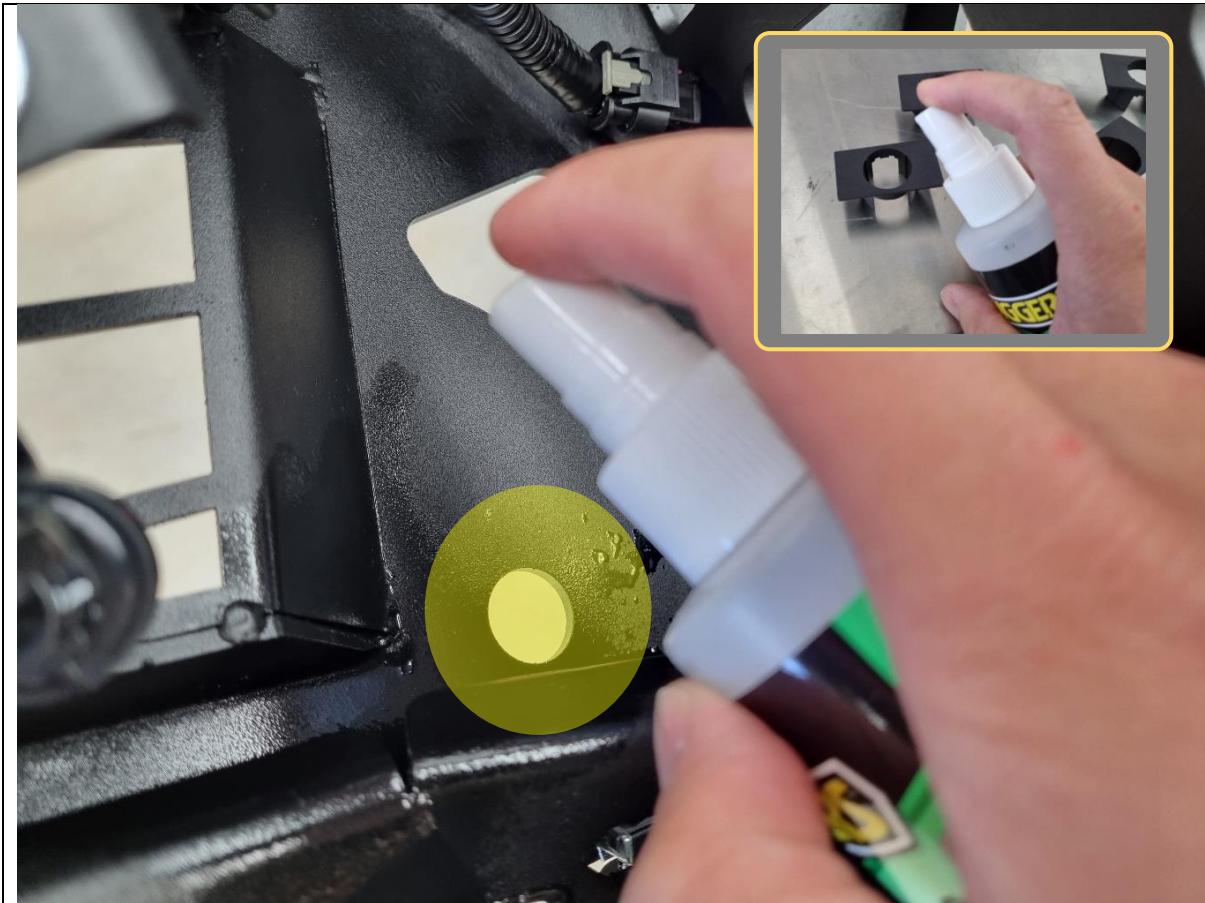
Take note of left/right orientation. The connector to the main vehicle harness should be on the left.

Some parking sensors may need to be temporarily disconnected to route the harness out of the bumper.

**TOOLS REQUIRED**

Trim removal tool

**FASTENERS**

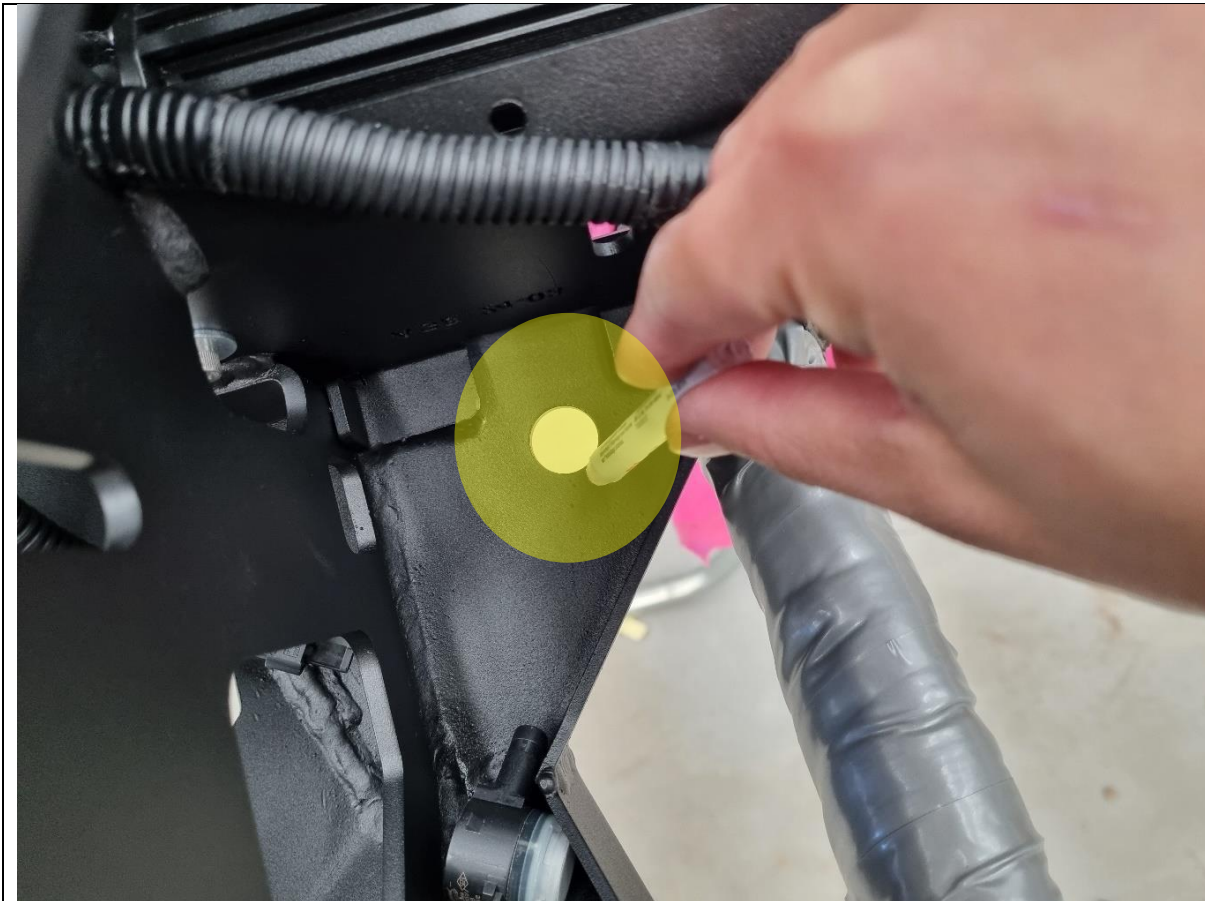


- 42. Clean the areas on the inside of the bullbar adjacent to the 6x sensor holes with isopropyl alcohol. Allow to dry.
- 43. Lightly scuff the bonding surfaces of the 6x supplied plastic sensor housings with sandpaper. Then clean with isopropyl alcohol or similar. Allow to dry.

**TOOLS REQUIRED**

- Isopropyl alcohol
- Clean rag
- Sandpaper

**FASTENERS**



44. Press down on the arrow location and break the bulb of the supplied 3M Primer 94 ampule to activate the primer dispensing.

45. Apply 3M Primer 94 to all areas adjacent to the parking sensor locations, on both the bullbar and the sensor housings.

**Important:** Allow at least 5 minutes for the primer to chemically bond to the surfaces.

**TOOLS REQUIRED**

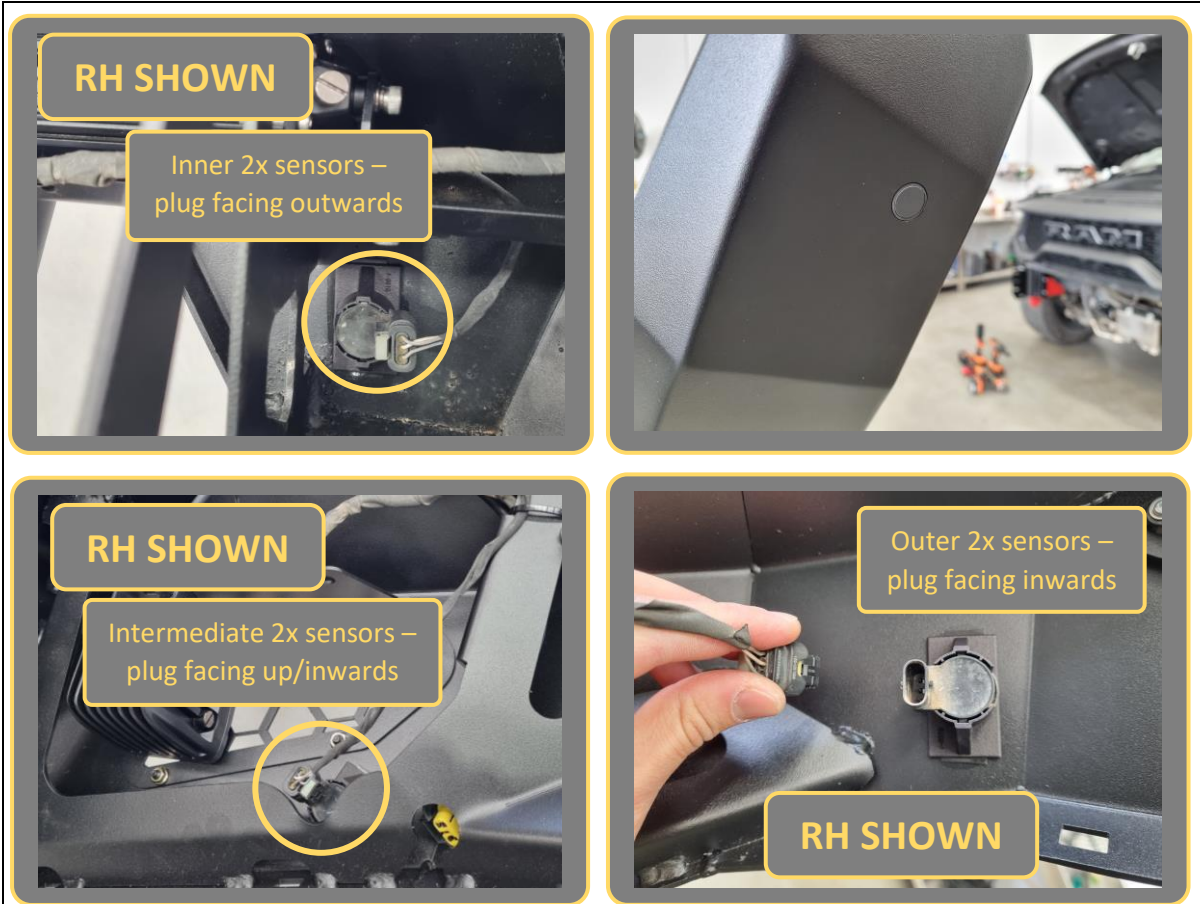
**FASTENERS**



- 46. Unplug the parking sensors from the previously removed bumper wiring harness. Take note of the location of each parking sensor on the car/bullbar (eg. outer left, middle left, middle right etc.).
- 47. Fit parking sensors into the plastic sensor housings.
- 48. Apply supplied VHB tape pads to all sensor housings as shown.

**TOOLS REQUIRED**

**FASTENERS**



49. Remove backing film on VHB tape (easier with utility knife to peel off) and adhere parking sensors in position in the bullbar.
50. Apply pressure for at least 10 seconds after positioning for best adhesion.  
  
Ensure the parking sensor orientation matches the images above.
51. Add a pea-sized blob of automotive adhesive sealant over the sensor holder and inside face of bar to hold to ensure the tape holds position.
52. Route the bumper wiring harness through the cutouts inside the bullbar.
53. Connect all parking sensors back to the wiring harness.

**TOOLS REQUIRED**

Utility knife  
Automotive adhesive sealant (eg. Sikaflex)

**FASTENERS**





- 54. If the option has been selected, fit the Offroad Animal Halo fog lights to the supplied fog light brackets using 4x M4x12 pan head screws, flat washers and flange nuts (each).
- 55. Fit the fog light and bracket to the light mesh panel, using the supplied 2x M8x20 hex bolts, flat washers and flange nuts.

**TOOLS REQUIRED**

- Phillips head screwdriver
- 13mm socket/spanner

**FASTENERS**

- 8x M4x12 pan head
- 8x M4 flat washer
- 8x M4 flange nut
  
- 4x M8x20 hex bolt
- 4x M8 flat washer
- 4x M8 flange nut



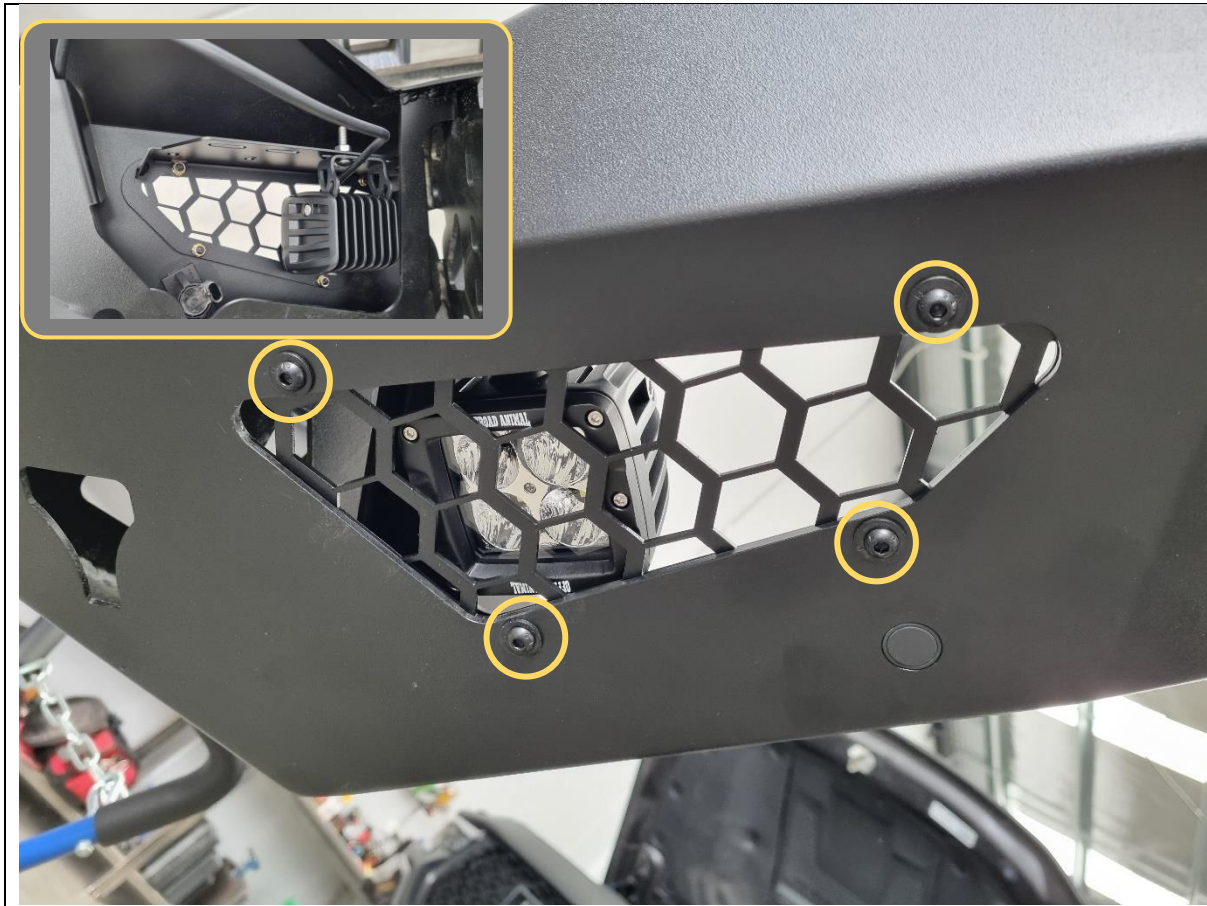
56. If wanting to fit other lights to the wing mesh instead of fog lights, do so now. The wing mesh is capable to taking most 8" light bars and cube lights.

**TOOLS REQUIRED**

Supplied with lights

**FASTENERS**

Supplied with lights



- 57. Fit the wing mesh to the bullbar using 4x M16x16 black button head bolts, black flat washers and flange nuts.
- 58. Secure and tighten using 4mm hex/Allen key and repeat for other side.
- 59. If fitted, wire up the ORA halo fog lights to the bumper wiring harness.

**TOOLS REQUIRED**

4mm hex/Allen Key

**FASTENERS**

8x M6x16 black button head  
8x M6 black washer  
6x M6 flange nut



60. If fitting an integrated light bar, do so now from the back.

This bar is designed to fit the Offroad Animal 32 inch light bar. If fitting this light bar, assemble the light bar with legs facing inwards, and line it up with the slots in the centre gusset. Secure with M6 fasteners supplied with the light.

This bar can accommodate most other “30-32 inch” size light bars. Stedi ST3K light bars require legs facing outwards.

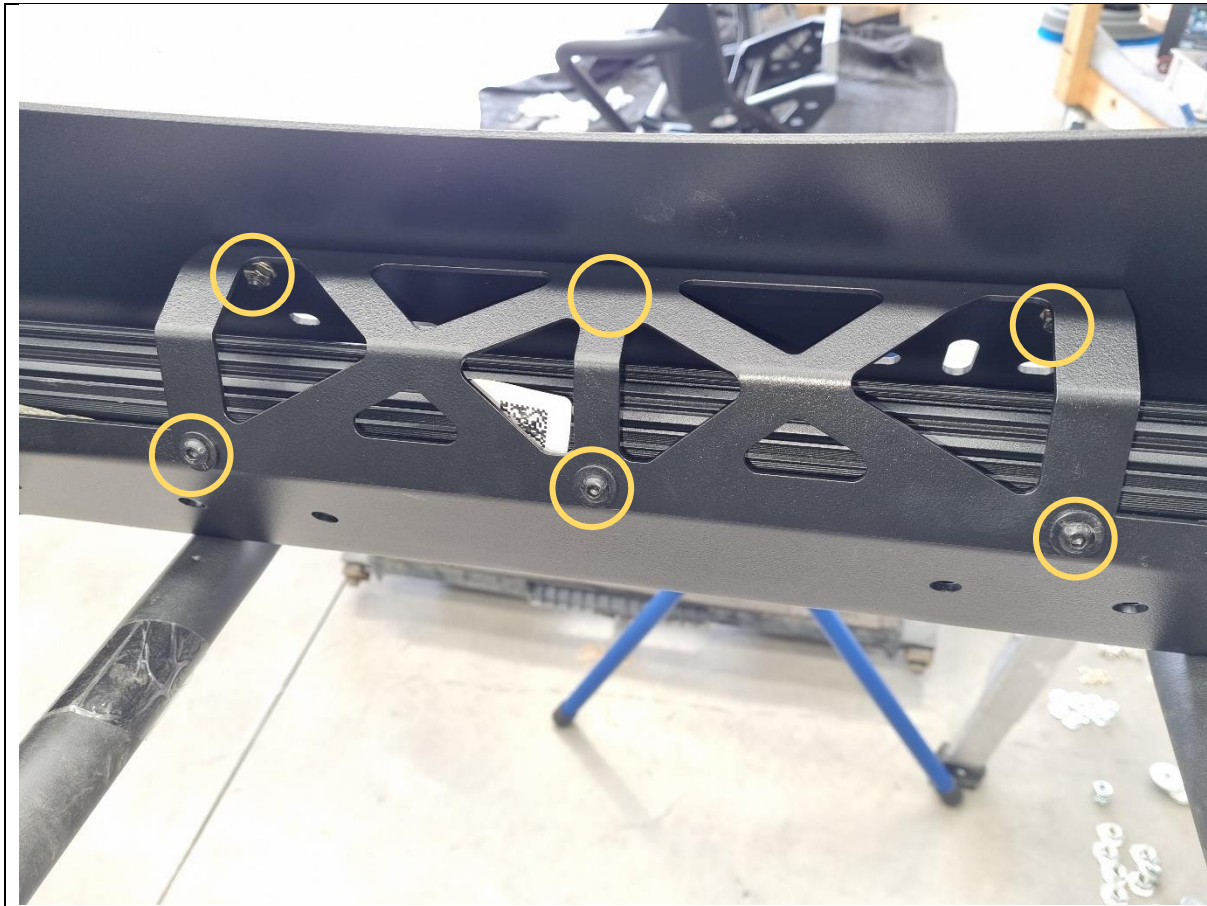
61. If fitting driving lights, stealth hoop, round hoop or rally hoop to this bar, this is also the most convenient time to do so. It is still possible later but is more difficult.

**TOOLS REQUIRED**

Supplied with accessories

**FASTENERS**

Supplied with accessories



62. Fit the pan brace to the back of the bar using 6x M6x16 black button head bolts, flat washers and flange nuts.

63. Tidy up the wiring harness and other looms with cable ties on the inside of the bar.

**TOOLS REQUIRED**

4mm hex/Allen key

Cable ties  
Cutting pliers

**FASTENERS**

6x M6x16 black button head  
6x M6 black flat washer  
6x M6 flange nut



64. Fit 10x M6 cage nuts into the rectangular slots on the bottom of the bar wing (5x per side).

To aid fitting, use a small flat blade screwdriver to push the edge of the cage nut to engage with the slot.

**TOOLS REQUIRED**

Flat blade screwdriver

**FASTENERS**

10x M6 cage nut



65. The wheel flares need to be trimmed to fit the bar.  
Apply masking tape over the flares in approximately  
the position shown.

**TOOLS REQUIRED**

Masking tape

**FASTENERS**



66. Measure and mark a straight horizontal line that is parallel to the bottom edge of the flare, 130mm away. Do this for both flares.

**TOOLS REQUIRED**

Marker pen  
Ruler

**FASTENERS**





- 67. Remove 8x 8mm hex bolts securing the underside of each flare. Retain the bolts for re-fitment.
- 68. (Optional) Drop the wheel arch liner for better access for removing plastic clips in next step. Wheel arch liner is held on by a mix of 8mm hex bolts and plastic push clips.

**TOOLS REQUIRED**

8mm socket/spanner

**FASTENERS**

16x 8mm factory hex bolts



- 69. Starting from the back, pull outwards to release the clips holding the flare to the fender.
- 70. To make it easier, reach in from behind with an 8mm socket to help push the clips through their mounting holes (wheel arch liner needs to be dropped).
- 71. Set both removed flares aside in a safe place.

**TOOLS REQUIRED**

8mm socket (optional)

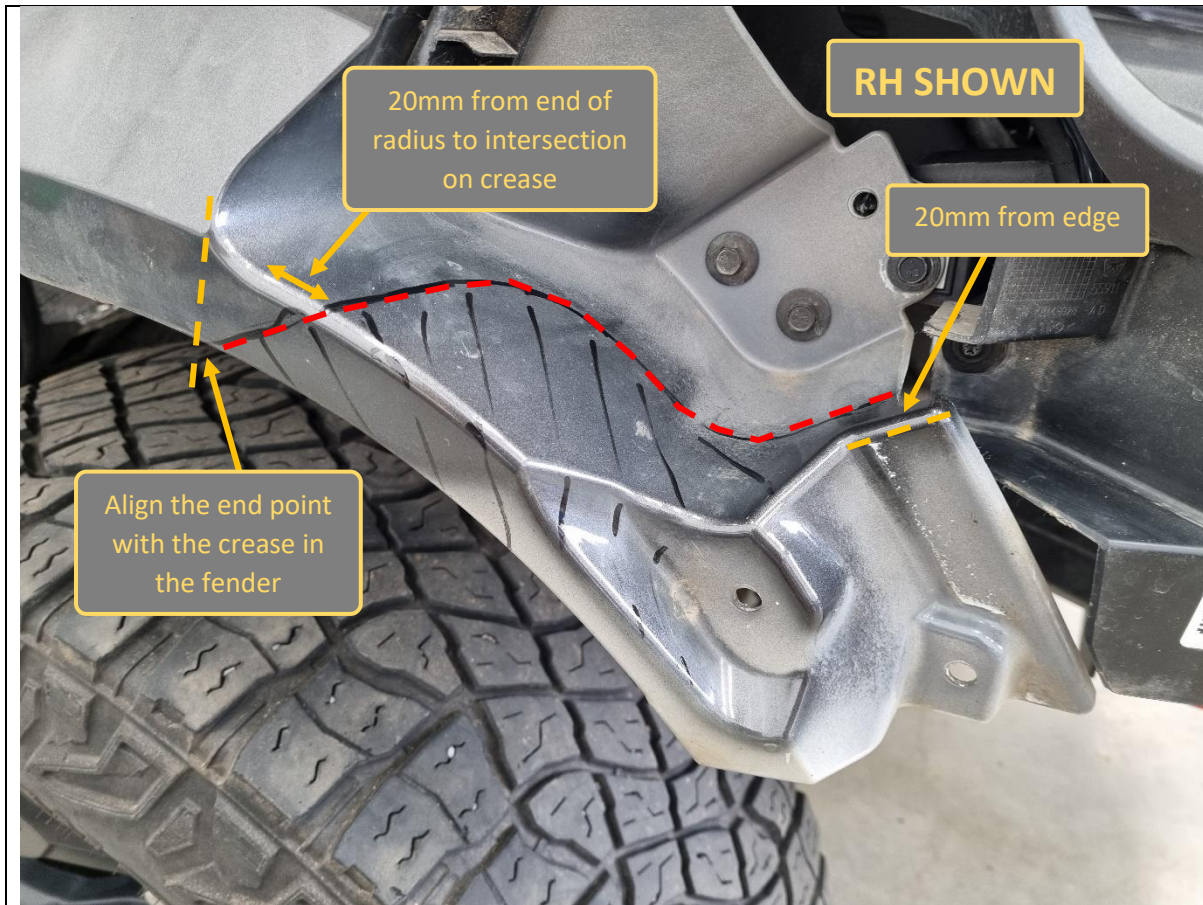
**FASTENERS**



72. Remove the plastic trim under each headlight. Start at the base of the grille and pull the trim outwards to release the clips.

**TOOLS REQUIRED**

**FASTENERS**



73. The fiberglass fender also needs a section cut and removed. Use a marker pen and ruler to mark out the cut area on the fender.

**TOOLS REQUIRED**

Marker pen

**FASTENERS**

4x M6x16 black button head  
4x M6 black washer  
4x M6 flange nut



RH SHOWN

74. Use an air hacksaw to cut the fender along the marked cut line.

**WARNING: Fibreglass fibres are skin irritants and can cause respiratory issues when inhaled. Wear gloves and long sleeves, wear a respirator mask with P2 class particulate filter, and wear safety glasses/goggles. Wipe clean the area immediately after cutting.**

75. Repeat for other side.

**TOOLS REQUIRED**

- Air hacksaw
- Respirator mask with P2 particulate filter

**FASTENERS**



76. Cut the flares along the marked cut lines.

77. Remove masking tape and clean up the cut edges with a utility knife.

**TOOLS REQUIRED**

Air hacksaw or similar  
Utility knife

**FASTENERS**



78. Fit and trim the supplied pinch weld to the cut flare edge.

79. Notch the inside of the pinch weld to clear the flare clip mount (see inset).

**TOOLS REQUIRED**

Side cutters

**FASTENERS**



80. The front camera in the grille will be partially obstructed by the bullbar (see reference image above). Driving lights and top tubes will fully obstruct the camera.

81. The camera can be optionally relocated to a stealth hoop or rally hoop with the RAM 1500 DT / 2500 DJ2 Camera Relocation Kit (part no. TB-COM-RAM-CAM-BRKIT) purchased separately. Refer to instructions on the website at [offroadanimal.com.au](http://offroadanimal.com.au)

**Note:** As of Oct 2024, you can only relocate the camera when there is a 32" wide Stealth Hoop or Quad Rally Hoop fitted.

**TOOLS REQUIRED**

**FASTENERS**





- 82. Re-fit the plastic trim under each headlight.
- 83. Re-fit the trimmed wheel arch flares using factory fasteners.
- 84. Re-fit wheel arch liners, if removed.

**TOOLS REQUIRED**

8mm socket/spanner

**FASTENERS**

8mm factory hex bolts



85. Using a utility knife, cut out a 30x30mm section out of the wheel arch liner, directly below the flare cut. Do this on both sides.

**TOOLS REQUIRED**

Utility knife  
Ruler

**FASTENERS**



86. With assistance, either from another person, or a lifting trolley, lift the bar onto the mounts on the vehicle.

87. Secure the bar to the mounts with 8x M12x30 Bolts, heavy duty washers and M12 Nyloc + flange nuts. Leave finger tight at this stage.

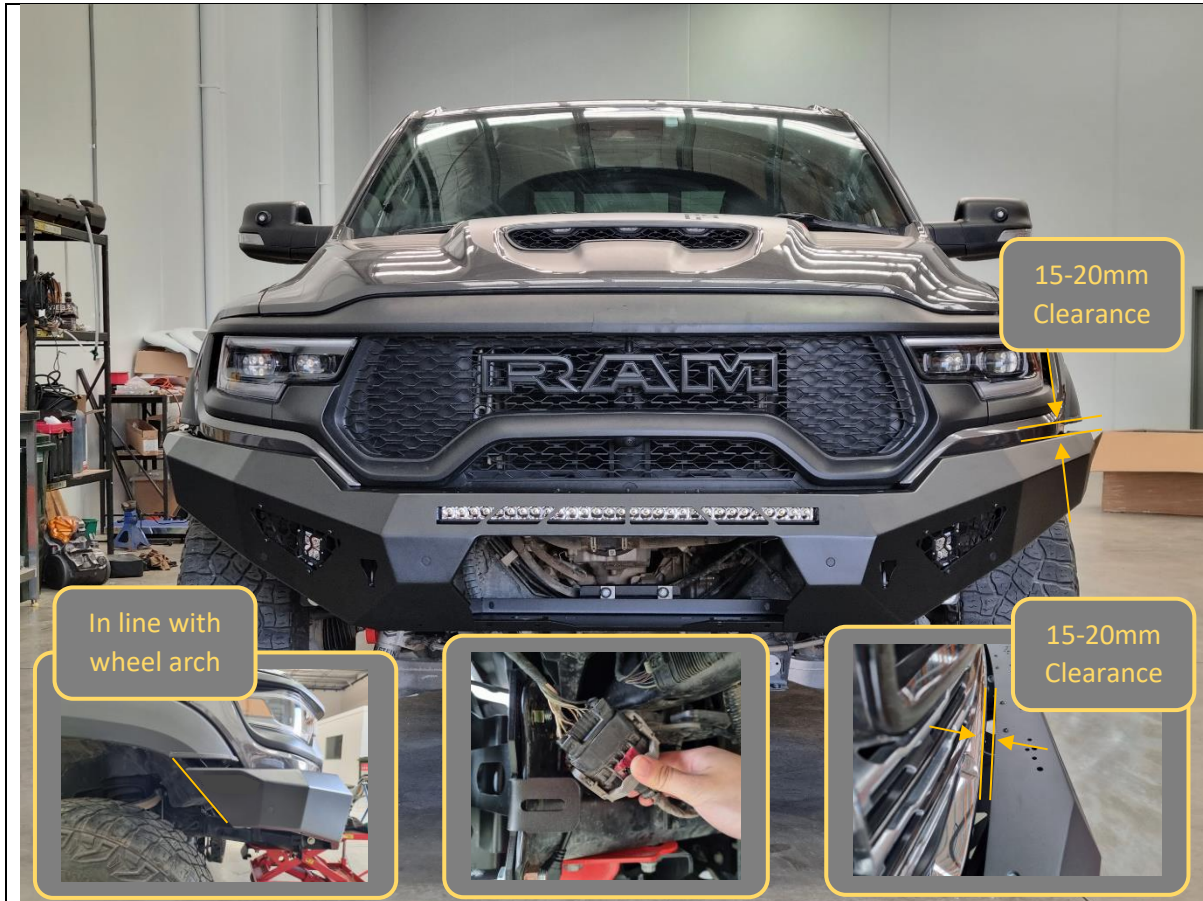
Note: Use a washer on both bolt and nut side for the Nyloc nut. 1x washer on the bolt side is all that is required with flange nuts.

**TOOLS REQUIRED**

Lifting trolley

**FASTENERS**

8x M12x30 hex bolt  
10x M12 heavy duty washer  
2x M12 Nyloc nut  
6x M12 flange nut



<p>88. With assistance, from another person, align the bar with the edges of the vehicle. The bar should sit symmetric left/right on the vehicle.</p> <p>In front view, the top face of the bar should sit parallel with the bottom edge of the trimmed flares, with about 15-20mm vertical clearance.</p> <p>In side view, the end of the bar wing should be in line with the wheel arch liner.</p> <p>In top view, there should be 15-20mm clearance between the bar and grille.</p>	<p><b>TOOLS REQUIRED</b></p> <p>18/19mm socket/spanner</p>
<p>89. Once happy with alignment, tighten all 8x M12 bolts.</p> <p>90. Reconnect the bumper wiring harness to the vehicle.</p>	<p><b>FASTENERS</b></p>



91. From underneath the vehicle, install the 2x tension straps connecting the bottom of the winch cradle to the tow points.

Note: The longer slot ins the strap goes to the tow point, and the shorter slot goes to the winch cradle.

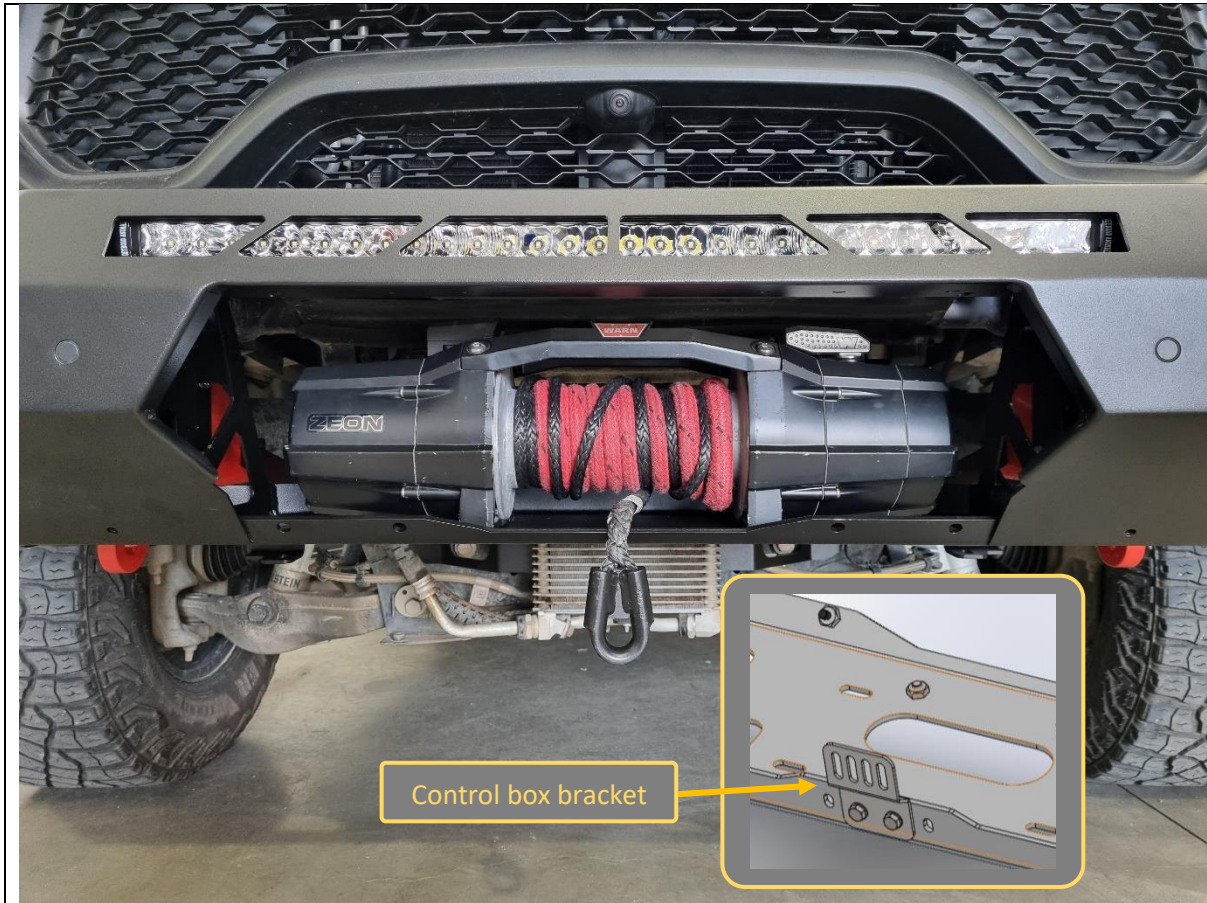
92. Secure each tension strap using 2x M10x25 hex bolts, flat washers and flange nuts.

**TOOLS REQUIRED**

16/17mm socket/spanner

**FASTENERS**

4x M10x25 hex bolt  
4x M10 flat washer  
4x M10 flange nut



<p>93. If fitting a winch, do so now.</p> <p>94. This bar is designed to fit most low mount winches, in foot down configuration. WARN 16.5ti is largest winch confirmed to fit.</p> <p>95. The control box can be mounted on the supplied control box bracket, which affixes to the rear of the winch cradle or directly affixed to the back of the cradle slots.</p> <p>96. Ensure clutch handle will be accessible through opening in front mesh panel. Refer to winch instructions regarding changing clutch handle location.</p>	<p><b>TOOLS REQUIRED</b></p> <p>Refer to instructions supplied by winch</p>
	<p><b>FASTENERS</b></p> <p>Supplied with winch</p>



- 97. If required, fit the winch fairlead to the centre mesh fairlead mount using M10 or 3/8" fasteners supplied with the winch. This bar is only compatible with hawse type fairleads.
- 98. Fit number plate flip mount to mesh panel using 2x M6x20 hex bolts, flat washers and flange nuts supplied in the number plate flip kit.
- 99. Attach number plate to mount using supplied pan head screws in the number plate flip kit.

**TOOLS REQUIRED**

10mm socket/spanner  
Phillips head screwdriver

**FASTENERS**

2x M6x20 hex bolt  
2x M6 flat washer  
2x M6 flange nut



100. Fit the mesh fairlead mount to the threaded holes in the centre of the bar, using 2x M8x16 black button head bolts (top), 2x M8x20 hex head bolts (bottom) and 4x flat washers (2x black for the top, 2x standard for the bottom).
101. Tighten fasteners using 13mm socket/spanner and 5mm hex/Allen key.
102. Feed winch cable through the hawse fairlead if applicable.

**TOOLS REQUIRED**

- 13mm socket/spanner
- 5mm hex/Allen key

**FASTENERS**

- 2x M8x16 black button head
- 2x M8 black flat washer
- 2x M8x20 hex head
- 2x M8 heavy-duty washer





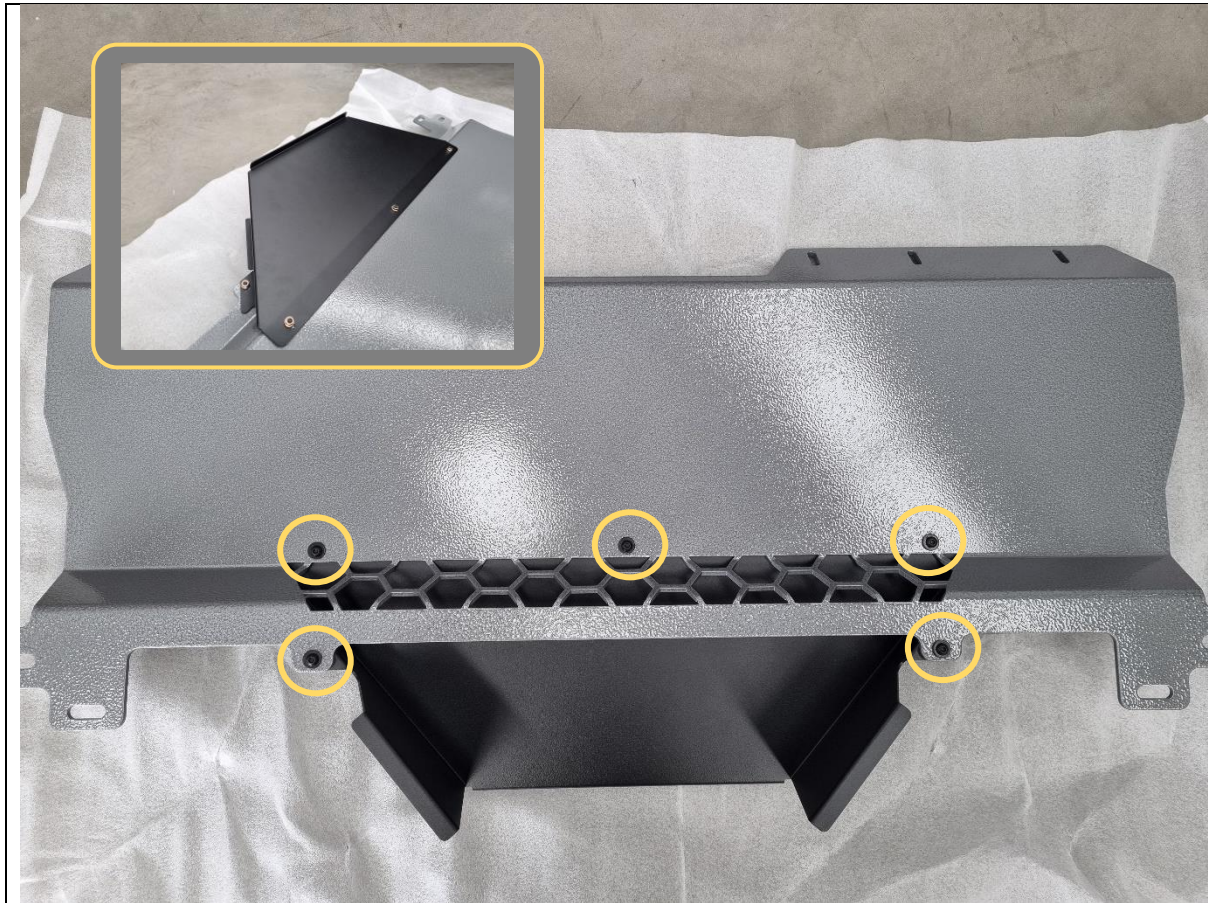
- 103. Insert the side mesh panels into the winch opening at an angle as shown, to get the outer flange behind the return of the front face of the bar.
- 104. Secure the top of each side mesh panel to the threaded holes in the bar with 2x M8x16 black button head bolts and black washers.
- 105. Tighten fasteners using a 5mm hex/Allen key.
- 106. Don't fit any bolts to the bottom bolts at this stage.

**TOOLS REQUIRED**

5mm hex/Allen key

**FASTENERS**

4x M8x16 black button head  
4x M8 black flat washer



107. Fit the oil cooler air guide to the bash plate as shown, and secure with 5x M6x16 black button head bolts, black washers and flange nuts.

**TOOLS REQUIRED**

4mm hex/Allen key

**FASTENERS**

5x M6x16 black button head  
5x M6 black flat washer  
5x M6 flange nut



- 108. Fit the centre bash plate to the bar using 6x M8x30 black button bolts and flat washers.
- 109. Secure the back of the centre bash plate to the bash plate mounts using 2x M10x25 hex head bolts, flat washers and flange nuts.

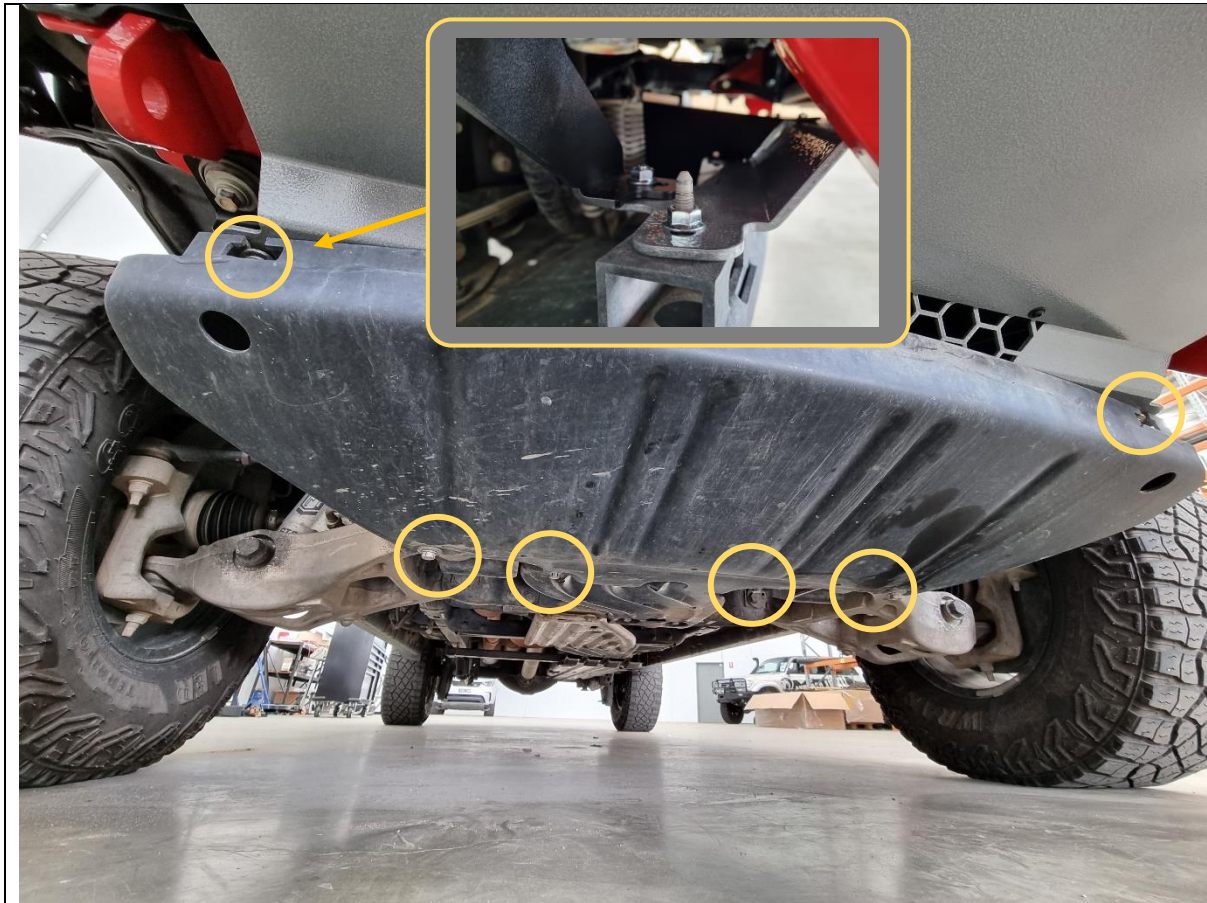
**TOOLS REQUIRED**

5mm hex/Allen key  
16/17mm socket/spanner

**FASTENERS**

6x M8x30black button head  
6x M8 black flat washer

2x M10x25 hex bolt  
2x M10 flat washer  
2x M10 flange nut



110. Re-fit the factory skid plate, using the 6x factory 16mm hex bolts from Step 2, plus 2x supplied M10 flange nuts for the front 2x bolts into the bash plate.

**TOOLS REQUIRED**

16mm socket/spanner

**FASTENERS**

6x 16mm factory hex bolt  
2x M10 flange nut





- 112. Secure the side underpanel to the bar with 5x M6x16 black button head bolts and black flat washers.
- 113. Secure the side underpanel to the impact assembly (see inset) using 1x M8x20 hex head bolt, heavy-duty washer and flange nut.
- 114. Repeat for other side underpanel.

**TOOLS REQUIRED**

- 4mm hex/Allen key
- 13mm socket/spanner

**FASTENERS**

- 10x M6x16 black button head
- 10x M6 black flat washer
- 10x M6 flange nut
  
- 2x M8x20 hex bolt
- 2x M8 heavy-duty washer
- 2x M8 flange nut



- 115. Fit the Offroad Animal logo plate to the front of the vehicle as shown.
- 116. Review fitment and double check all bolts are tightened correctly.

**TOOLS REQUIRED**

**FASTENERS**



**Congratulations! You're done!**  
**Head out of town and enjoy your newly protected TRX!**