



TOYOTA FJ CRUISER

2011-2016

PREDATOR & TORO FRONT BAR

IMPORTANT! – READ BEFORE INSTALLATION

- When installed in accordance with these instructions, the front protection bar does not affect the operation of the vehicle's 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.

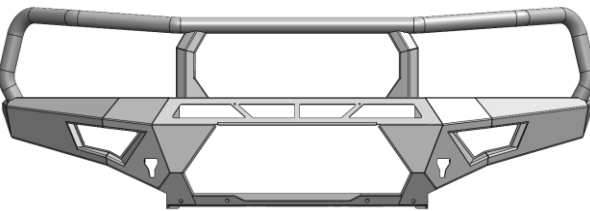
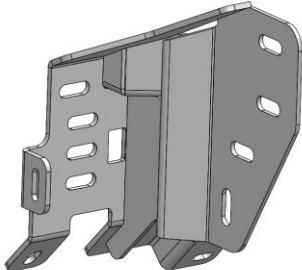
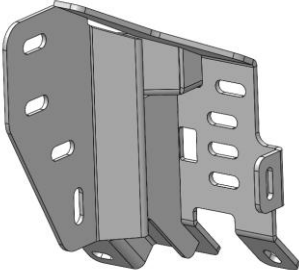
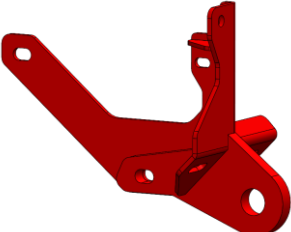
FRONT BAR MOUNTS AND TOW POINTS + REAR TOWBAR	
Size	Torque Nm
M10	57 Nm
M12	100 Nm
M14	164 Nm
M16	248 Nm

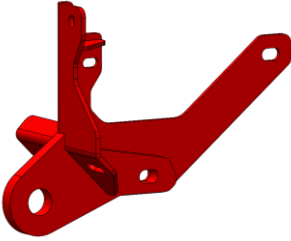
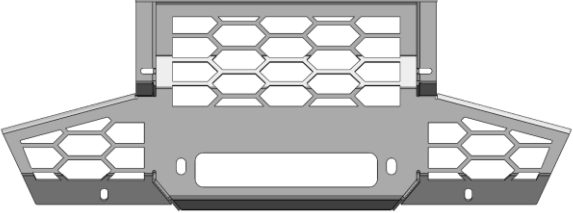
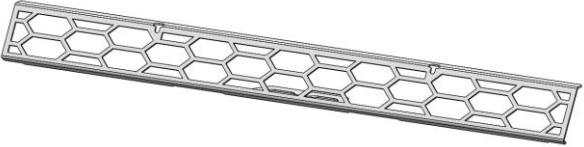
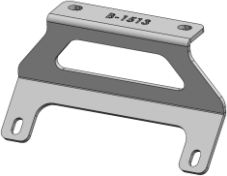
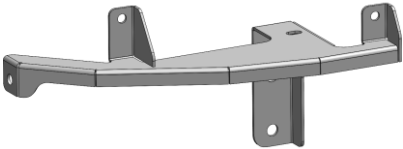
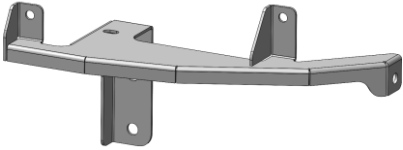
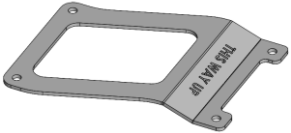
Always use a torque wrench to set correct torque settings. Ensure torque wrench is set to Nm unit of measurement. Otherwise perform conversion to lb-ft.

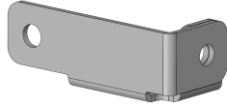
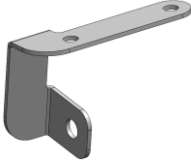
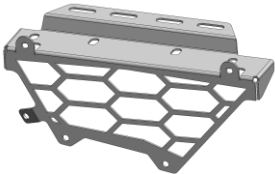
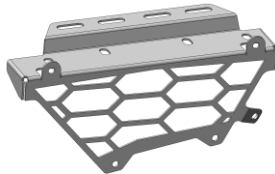
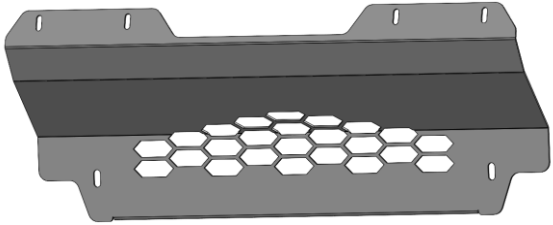
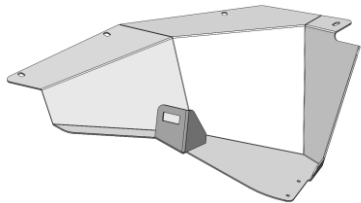
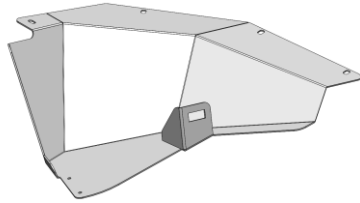
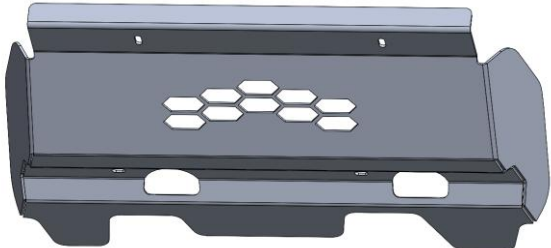
PARTS LISTING

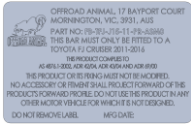
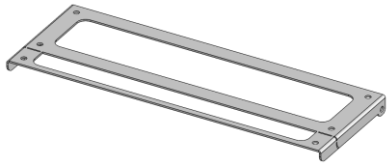
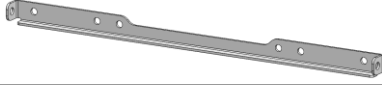
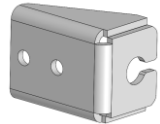
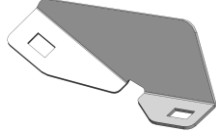
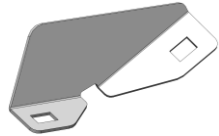
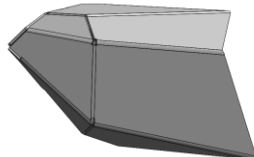
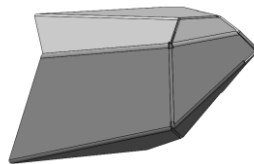
IMPORTANT: Check all parts are present before beginning work! Contact OFFROAD ANIMAL if something is missing.

Main Parts – In the Box

Qty	Part Number	Description	Image
1	FB-TFJ-J15-11-PR-ASM1	FJ Cruiser Predator Bar Welded Assembly	
OR			
1	FB-TFJ-J15-11-TOR-ASM1	FJ Cruiser Toro Bar Welded Assembly	
1	FB-TFJ-J15-11-PR-ASM2R	FJ Cruiser Impact Assembly RH	
1	FB-TFJ-J15-11-PR-ASM2L	FJ Cruiser Impact Assembly LH	
1	FB-TFJ-J15-11-PR-ASM3R	FJ Cruiser Tow Point Welded Assembly RH	

1	FB-TFJ-J15-11-PR-ASM3L	FJ Cruiser Tow Point Welded Assembly LH	
1	FB-TFJ-J15-11-PR-ASM4	FJ Cruiser Mesh Fairlead Welded Assembly	
1	B-1434	32" Lightbar Mesh Infill	
2	B-1513	FJ Cruiser Pan Brace	
1	B-1522R	FJ Cruiser Halo Fog Light Bracket RH	
1	B-1522L	FJ Cruiser Halo Fog Light Bracket LH	
1	B-1528R	FJ Cruiser Headlight Bracket RH	
1	B-1528L	FJ Cruiser Headlight Bracket LH	
1	B-1529	FJ Cruiser Power Steering Line Relocation Bracket	

1	B-1530	FJ Cruiser AC Line Relocation Bracket	
1	B-1531	FJ Cruiser Power Steering Line Clamp Base	
1	B-1532	FJ Cruiser Power Steering Line Clamp Outer	
1	M-0055R	FJ Cruiser Wing Light Mesh RH	
1	M-0055L	FJ Cruiser Wing Light Mesh LH	
1	U-0100	FJ Cruiser Centre Underpanel	
1	U-0101R	FJ Cruiser Side Underpanel RH	
1	U-0101L	FJ Cruiser Side Underpanel LH	
1	U-0102	FJ Cruiser Supplementary Bash Plate	

2	P-0414	FJ Cruiser 8mm Impact Assy Spacer	
1	OFA-LOGO	Offroad Animal Metal Logo	
1	FB-TFJ-J15-11-PR-ADRCP	ADR Compliance Plate FJ Cruiser	
NUMBER PLATE FLIP ASSEMBLY (NPF-COM-LGE-ASM0)			
1	B-1446	Number Plate Flip - Large	
1	B-1458	Number Plate Flip Base	
PREDATOR ONLY			
8	CPHP019	Plastic Hole Insert, 9MM, Black, Tigerlink Hardware CPHP019	
TORO ONLY			
2	B-0649	Toro Antenna Bracket - 90 Degree Tall	
1	B-1525R	FJ Cruiser Toro Wheel Guard Splash Cover RH	
1	B-1525L	FJ Cruiser Toro Wheel Guard Splash Cover LH	
OPTIONAL PREDATOR WING EXTENSION KIT (FB-TFJ-J15-11-PR-ASM6)			
1	FB-TFJ-J15-11-PR-ASM5R	FJ Cruiser Predator Wing Horn Welded Assembly RH	
1	FB-TFJ-J15-11-PR-ASM5L	FJ Cruiser Predator Wing Horn Welded Assembly LH	

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
4	M6 X 12 HEX	M6X12 HEX BOLT, ZP, 8.8
4	M6 X 20 HEX	M6X20 HEX BOLT, ZP, 8.8
2	M6x25 BHCS	SCREW, BUTTON HEAD CAP, M6X25X1 GR12.9 ZP
9	M6x12 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X12X1 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
22	M6x16 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X16X1 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
8	M6 FLAT WASHER	M6 FLAT WASHER
31	M6 FLAT WASHER BLACK ZINC	M6 Flat Washer, 12x6.1x1, ISO4042 ZnNi BLACK PASSIVATED FINISH
2	M6 PANEL WASHER	M6 PANEL WASHER - Stainless A2-70 G304 M6x18x1.6mm
21	M6 FLANGE NUT	Flange Nut, M6x1 G8.8 ZP
8	M6CN3MM	CAGE NUT M6x2.6-3.5
8	M8 X 20 HEX	Bolt Hex, M8X20x1.25, GR8.8 ZP
2	M8 X 30 HEX	Bolt Hex, M8X30x1.25, GR8.8 ZP
4	M8 X 30 BHCS	SCREW, BUTTON HEAD CAP, M8X30x1.25 GR12.9 ZP
2	M8 X 16 BHCS BZP	SCREW, BUTTON HEAD CAP, M8X16x1.25 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
4	M8 X 30 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M8X30x1.25, ISO4042 ZnNi BLACK PASSIVATED FINISH
14	M8 HD FLAT WASHER	M8 FLAT WASHER - High Tensile 19x8x1.9mm
6	M8 HD FLAT WASHER - BZP	M8 FLAT WASHER - High Tensile 19x8x2mm, ISO4042 ZnNi BLACK PASSIVATED FINISH
4	M8 FLANGE NUT	Flange Nut, M8x1.25 G8.8 ZP
2	M8 Cage nut	NUT, CAGE, M8X1.25 ZINC PLATE
4	M10 x 30	Bolt Hex, M10X30x[1.5], GR8.8 ZP
2	M10 X 40	Bolt Hex, M10X40x1.5, GR8.8 ZP
2	M10X30 BHCS	SCREW, BUTTON HEAD CAP, M10X30x1.5 GR12.9 ZP
8	M10 FW LHD	WASHER, FLAT M10X28.5X2.5
8	M10 FLANGE NUT	Flange Nut, M10x1.5 G8.8 ZP
10	M12X30	Bolt Hex, M12X30x1.75, GR8.8 ZP
2	M12X50x1.25	Bolt Hex, M12X50x1.25, GR8.8 ZP
14	M12 FW LHD	M12 FW Large Heavy Duty
6	M12 FLANGE NUT	Flange Nut, M12x1.75 G8.8 ZP
2	M12 Nyloc nut	M12 NYLOC NUT
2	NP-COM-M8-200-ASM0	M8 Nut Plate 200mm
2	NP-COM-M12-300-ASM0	M12 NUT PLATE 300MM STEM

TORO 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
4	M6 X 12 HEX	M6X12 HEX BOLT, ZP, 8.8
4	M6 X 20 HEX	M6X20 HEX BOLT, ZP, 8.8
2	M6x25 BHCS	SCREW, BUTTON HEAD CAP, M6X25X1 GR12.9 ZP
9	M6x12 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X12X1 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
26	M6x16 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X16X1 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
8	M6 FLAT WASHER	M6 FLAT WASHER
35	M6 FLAT WASHER BLACK ZINC	M6 Flat Washer, 12x6.1x1, ISO4042 ZnNi BLACK PASSIVATED FINISH
2	M6 PANEL WASHER	M6 PANEL WASHER - Stainless A2-70 G304 M6x18x1.6mm
21	M6 FLANGE NUT	Flange Nut, M6x1 G8.8 ZP
12	M6CN3MM	CAGE NUT M6x2.6-3.5
8	M8 X 20 HEX	Bolt Hex, M8X20x1.25, GR8.8 ZP
2	M8 X 30 HEX	Bolt Hex, M8X30x1.25, GR8.8 ZP
4	M8 X 30 BHCS	SCREW, BUTTON HEAD CAP, M8X30x1.25 GR12.9 ZP
2	M8 X 16 BHCS BZP	SCREW, BUTTON HEAD CAP, M8X16x1.25 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
8	M8 X 30 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M8X30x1.25, ISO4042 ZnNi BLACK PASSIVATED FINISH
14	M8 HD FLAT WASHER	M8 FLAT WASHER - High Tensile 19x8x1.9mm
10	M8 HD FLAT WASHER - BZP	M8 FLAT WASHER - High Tensile 19x8x2mm, ISO4042 ZnNi BLACK PASSIVATED FINISH
4	M8 FLANGE NUT	Flange Nut, M8x1.25 G8.8 ZP
2	M8 Cage nut	NUT, CAGE, M8X1.25 ZINC PLATE
4	M10 x 30	Bolt Hex, M10X30x[1.5], GR8.8 ZP
2	M10 X 40	Bolt Hex, M10X40x1.5, GR8.8 ZP
2	M10X30 BHCS	SCREW, BUTTON HEAD CAP, M10X30x1.5 GR12.9 ZP
8	M10 FW LHD	WASHER, FLAT M10X28.5X2.5
8	M10 FLANGE NUT	Flange Nut, M10x1.5 G8.8 ZP
10	M12X30	Bolt Hex, M12X30x1.75, GR8.8 ZP
2	M12X50x1.25	Bolt Hex, M12X50x1.25, GR8.8 ZP
14	M12 FW LHD	M12 FW Large Heavy Duty
6	M12 FLANGE NUT	Flange Nut, M12x1.75 G8.8 ZP
2	M12 Nyloc nut	M12 NYLOC NUT
2	NP-COM-M8-200-ASM0	M8 Nut Plate 200mm
2	NP-COM-M12-300-ASM0	M12 NUT PLATE 300MM STEM

NUMBER PLATE FLIP Fasteners – Contained in Number Plate Flip Kit

Qty	Part Number	Description
4	M6x12 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X12X1 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
4	M6x16 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X16X1 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
10	M6 FLAT WASHER BLACK ZINC	M6 Flat Washer, 12x6.1x1, ISO4042 ZnNi BLACK PASSIVATED FINISH
6	M6 FLANGE NUT	Flange Nut, M6x1 G8.8 ZP
2	M6 NYLON WASHER	Nylon Flat Washer, M6x12x1mm
2	M6 NYLOC	NYLOC SELF LOCKING NUT, ST STL A2 ISO

PREDATOR WING EXTENSION Fasteners – Contained in ASM6 Kit

Qty	Part Number	Description
8	M8 X 16 HEX	Bolt Hex, M8X16x1.25, GR8.8 ZP
8	M8 HD FLAT WASHER	M8 FLAT WASHER - High Tensile 19x8x1.9mm

TOOLS REQUIRED

The following tools will be required to install the product.

Hand Tools	Power Tools	Workshop Equipment
Metric Socket Set 10-19mm Socket Extension Bar Metric Spanner Set 10-19mm Hex (Allen) Key Set 4-6mm Trim Removal Tool Flat Blade Screwdriver Set Phillips Head Screwdriver Set Utility Knife Side Cutters Pliers Deburring Tool 5mm Drill Bit 6.5mm Drill Bit M8x1.25 metric tap M12x1.25 metric tap	Electric/Air Impact Driver (Optional) Angle Grinder Electric Drill	Panel Stand or Soft Blanket Lifting Trolley Marker Pen Measuring Tape Masking Tape Cable Ties Black spray paint Lubricant (eg. WD-40)

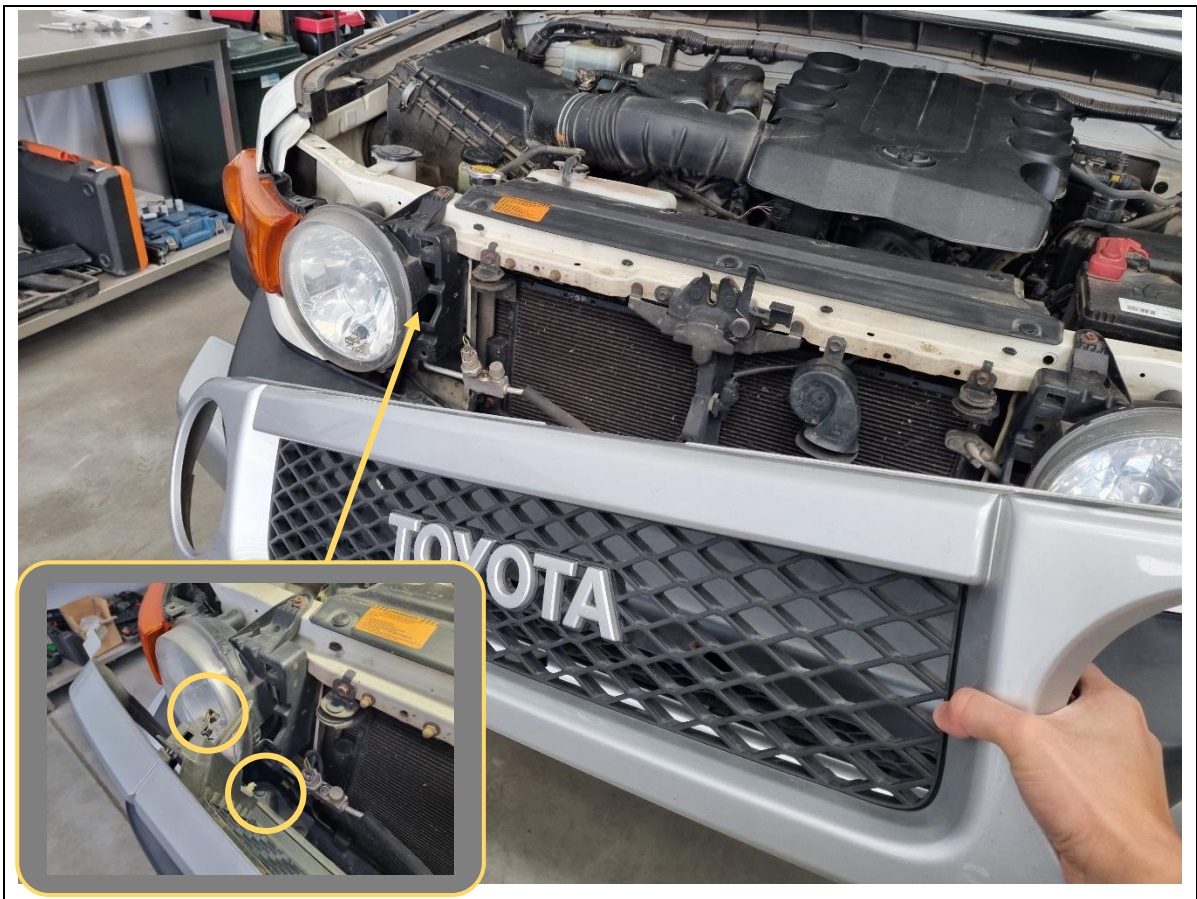
WORKSHOP SAFETY

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.

Hearing Protection 	Always wear ear protection when using power tools.
Eye Protection 	Ensure eye protection is always worn when cutting or drilling.
Manual Handling 	Do not attempt to lift bar assemblies or rock sliders on your own. Always use two people to lift or use mechanical lifting aid such as hydraulic lifting trolley.
Vehicle Support 	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.

		
1. Remove 2x screws holding front number plate with a Phillips head screwdriver and set aside.	TOOLS REQUIRED Phillips head screwdriver	
	FASTENERS 2x screws (discard)	

	
2. Open the bonnet. 3. Remove 2x plastic push clips and 2x 10mm hex screws holding the top of the grille. Use a flat blade screwdriver to assist with unclipping the plastic push clips. Retain all fasteners.	TOOLS REQUIRED 10mm socket/spanner Flat blade screwdriver or Trim tool
	FASTENERS 2x plastic push clips 2x 10mm factory hex screws Retain for re-assembly



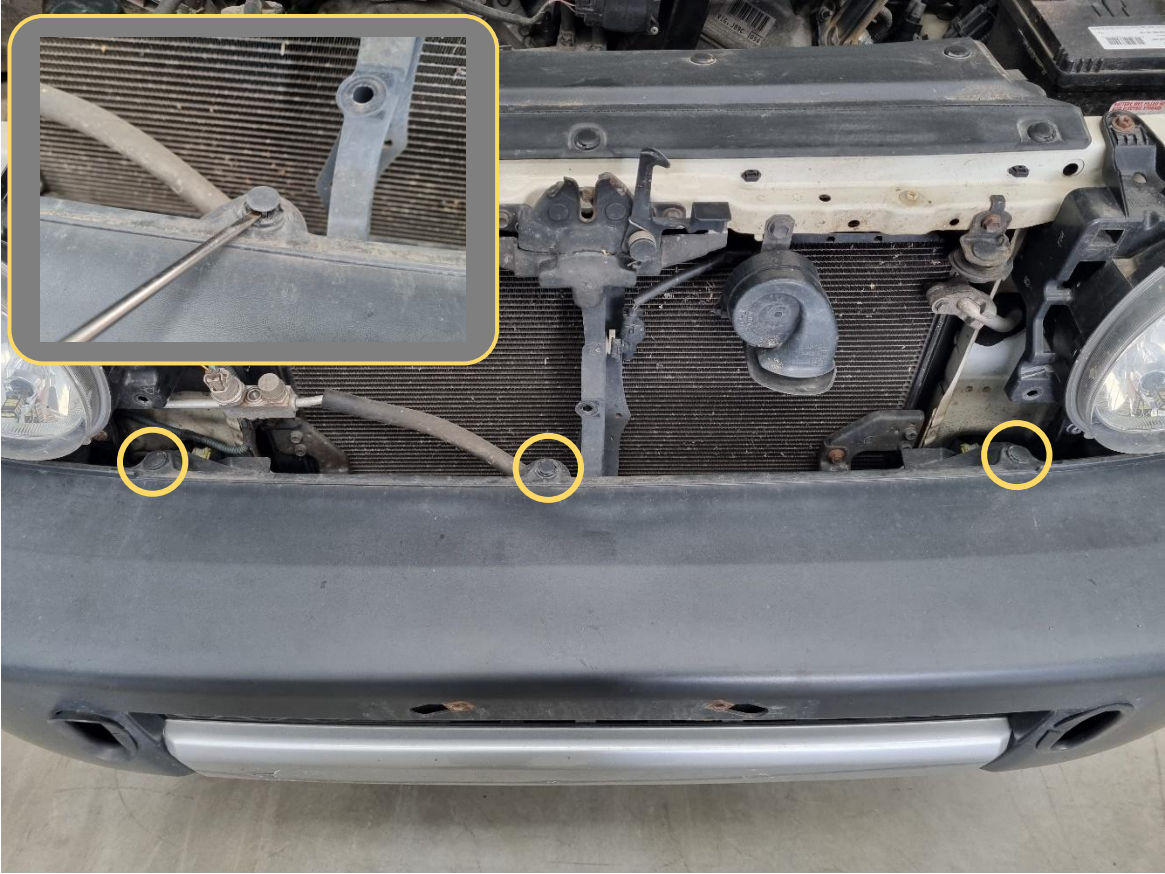
4. Pull forwards and unclip the grille. Set aside for later.

There are 4x clips (2x per side) holding the grille to the body. Use a flat blade screwdriver to assist with prying the clips apart if necessary.

TOOLS REQUIRED

Flat blade screwdriver
or
Trim tool

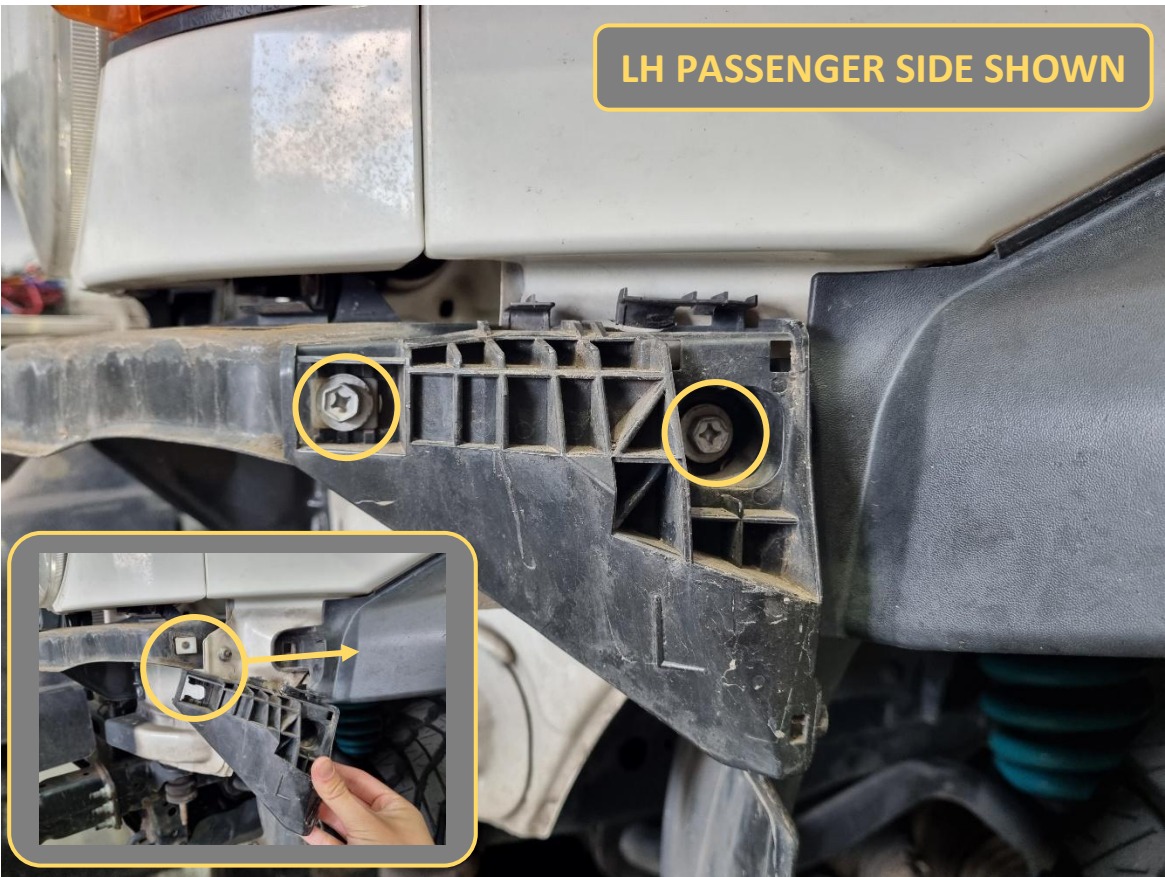
FASTENERS

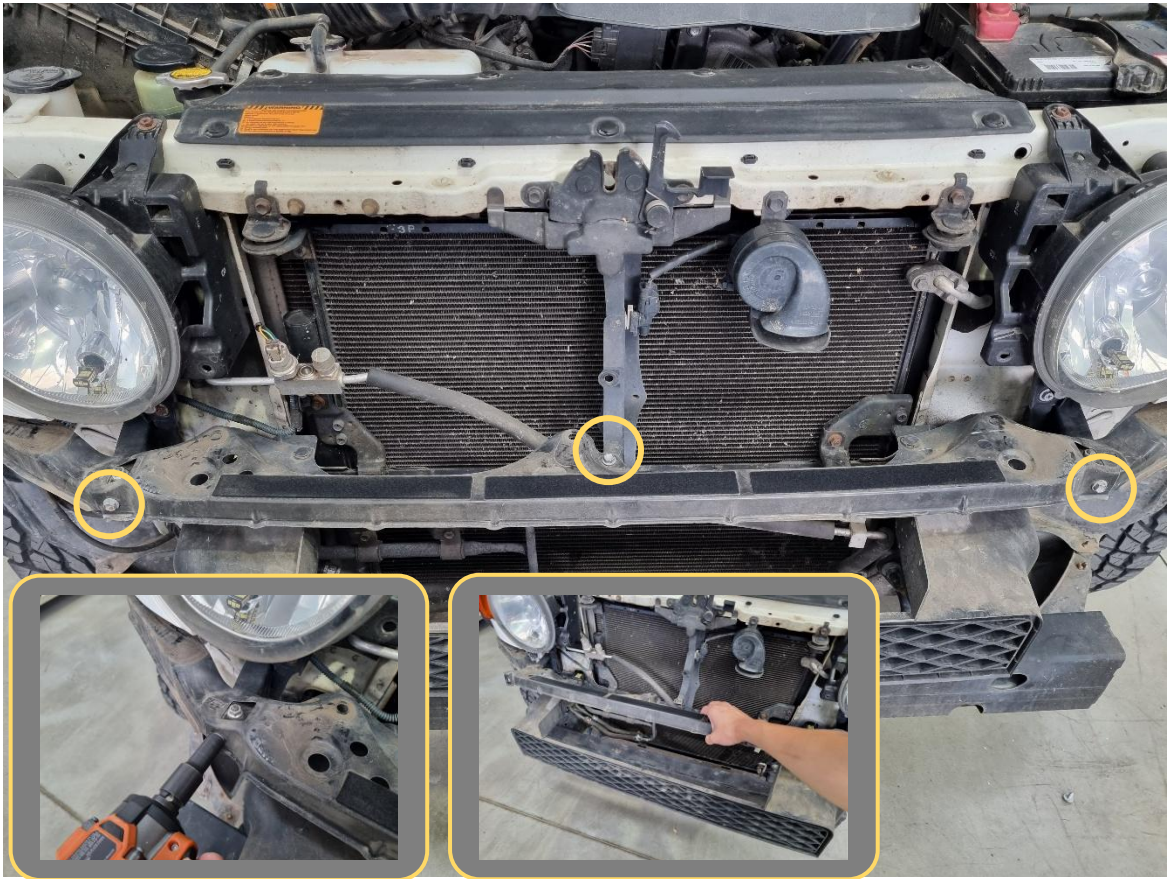
		
5. Remove and discard 3x plastic push clips holding the top of the bumper.	TOOLS REQUIRED Flat blade screwdriver or Trim tool	
	FASTENERS 3x plastic push clips Discard	

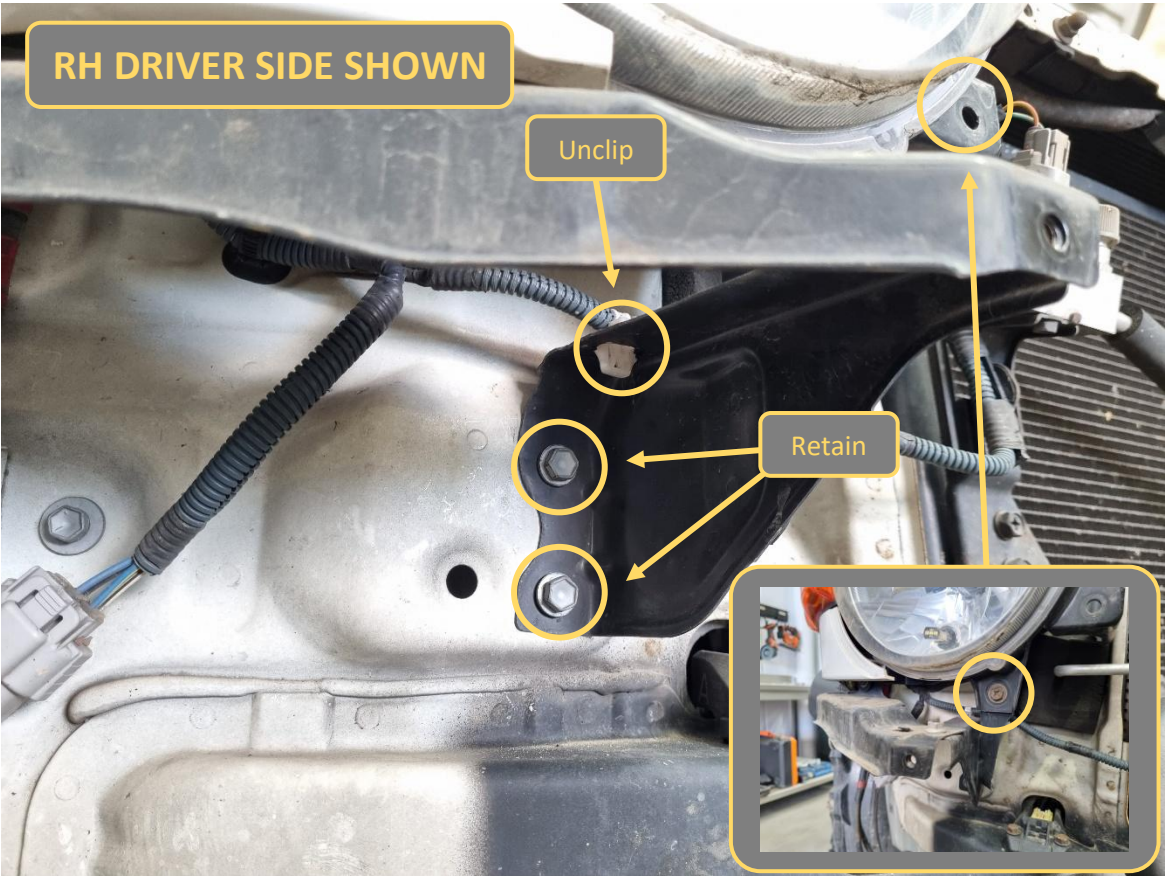
 RH DRIVER SIDE SHOWN	
6. Remove and discard 4x 10mm hex screws (2x per side) holding the sides of the bumper to the inner wheel guards.	TOOLS REQUIRED 10mm socket/spanner
	FASTENERS 4x 10mm factory hex screws Discard

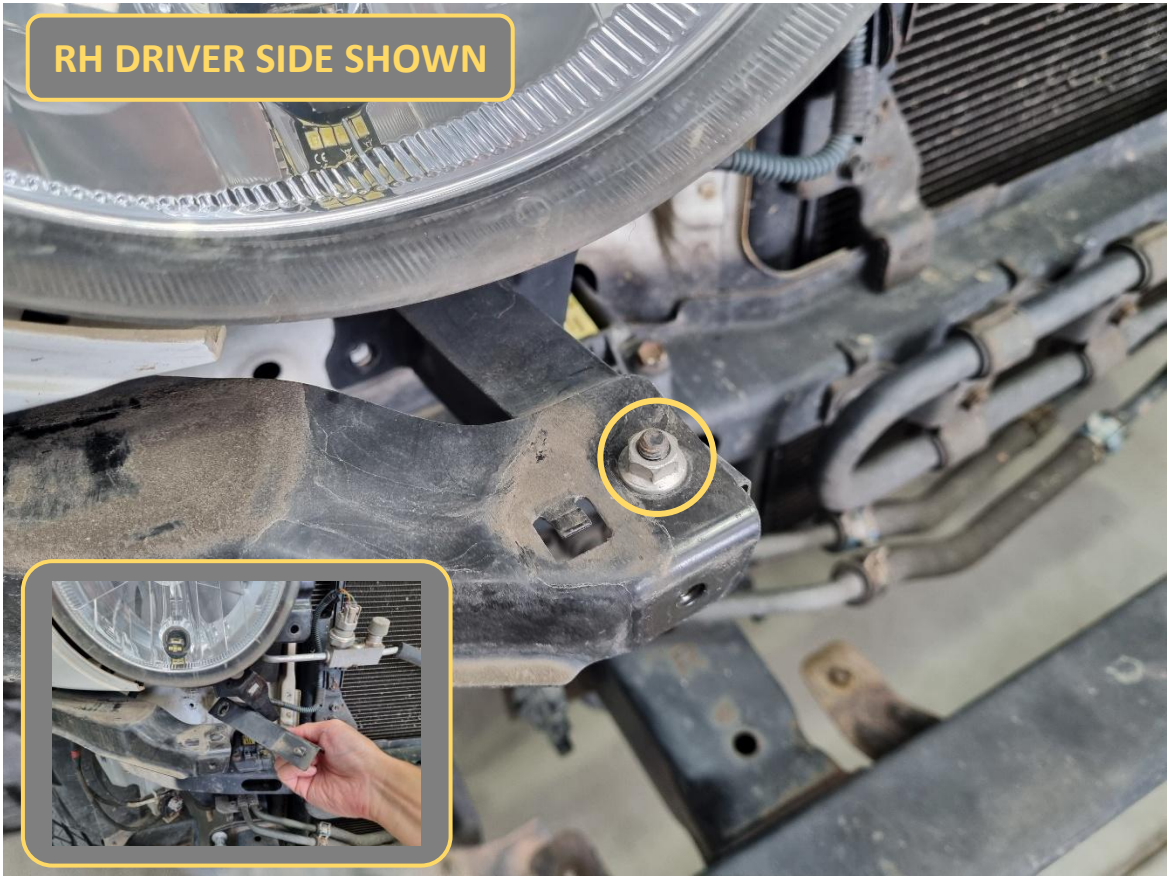
 RH DRIVER SIDE SHOWN	
7. Remove and discard 8x 10mm hex screws/bolts holding the underside of the bumper. 4x are shown in the image above.	TOOLS REQUIRED 10mm socket/spanner
	FASTENERS 8x 10mm hex screws/bolts Discard

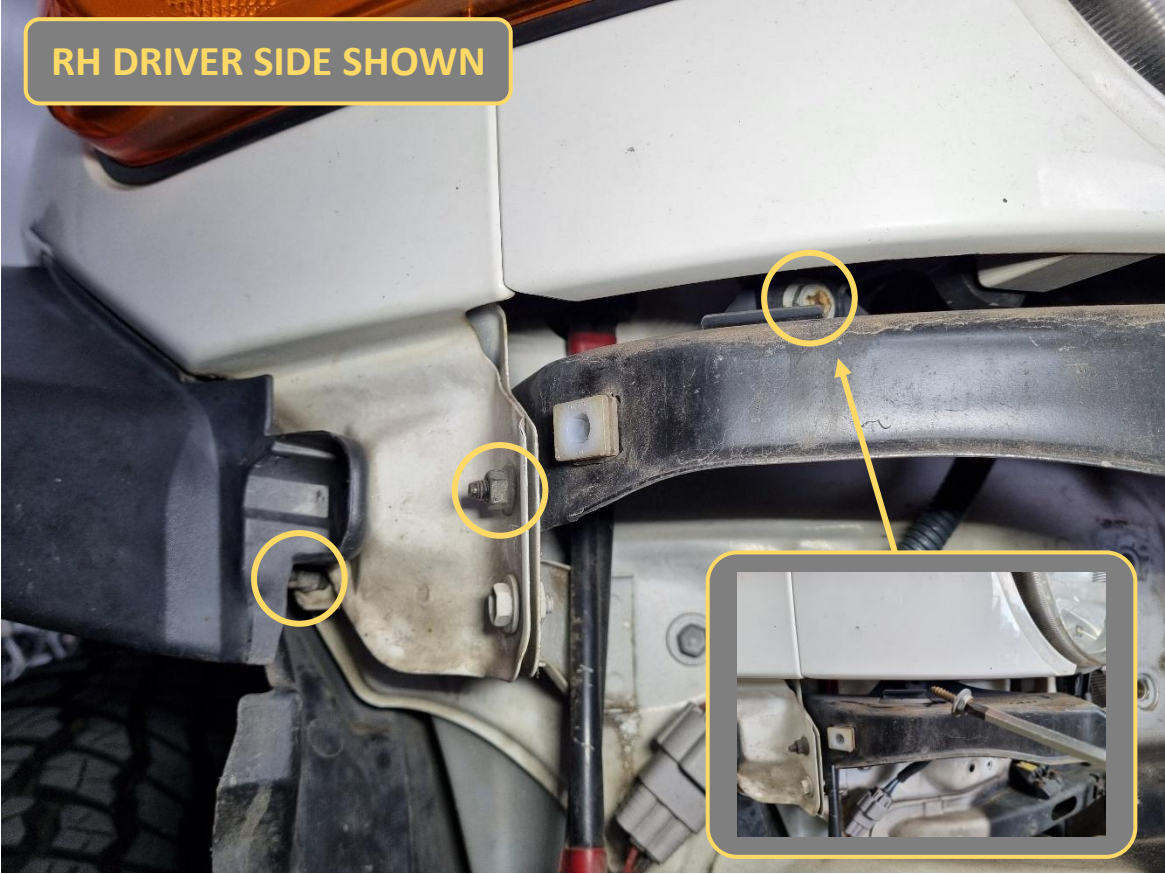
 RH DRIVER SIDE SHOWN	
8. Starting from each end, pull the bumper outwards and release all clips. Note: The bumper is seated on a round spigot on one of the side bolt holes (circled). Unseat it first before attempting to release the clips and pull the bumper off. 9. Fully remove the bumper and discard.	TOOLS REQUIRED
	FASTENERS

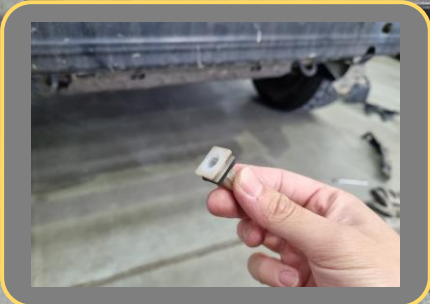
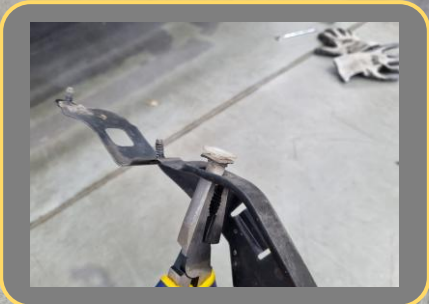
	
10. Remove 2x 10mm hex screws holding each outer bumper clip. 11. Gently pull out the rear bolt hole clip, then slide the front end rearwards off the white body clip. Discard the bumper clip. 12. Retain 1x hex screw from each side.	TOOLS REQUIRED 10mm socket/spanner
	FASTENERS 4x 10mm factory hex screw Retain 2x Discard 2x

	
13. Remove 3x 10mm hex bolts securing the centre cross member. 14. Remove and discard the centre cross member.	TOOLS REQUIRED 10mm socket/spanner
	FASTENERS 3x 10mm factory hex bolts Discard

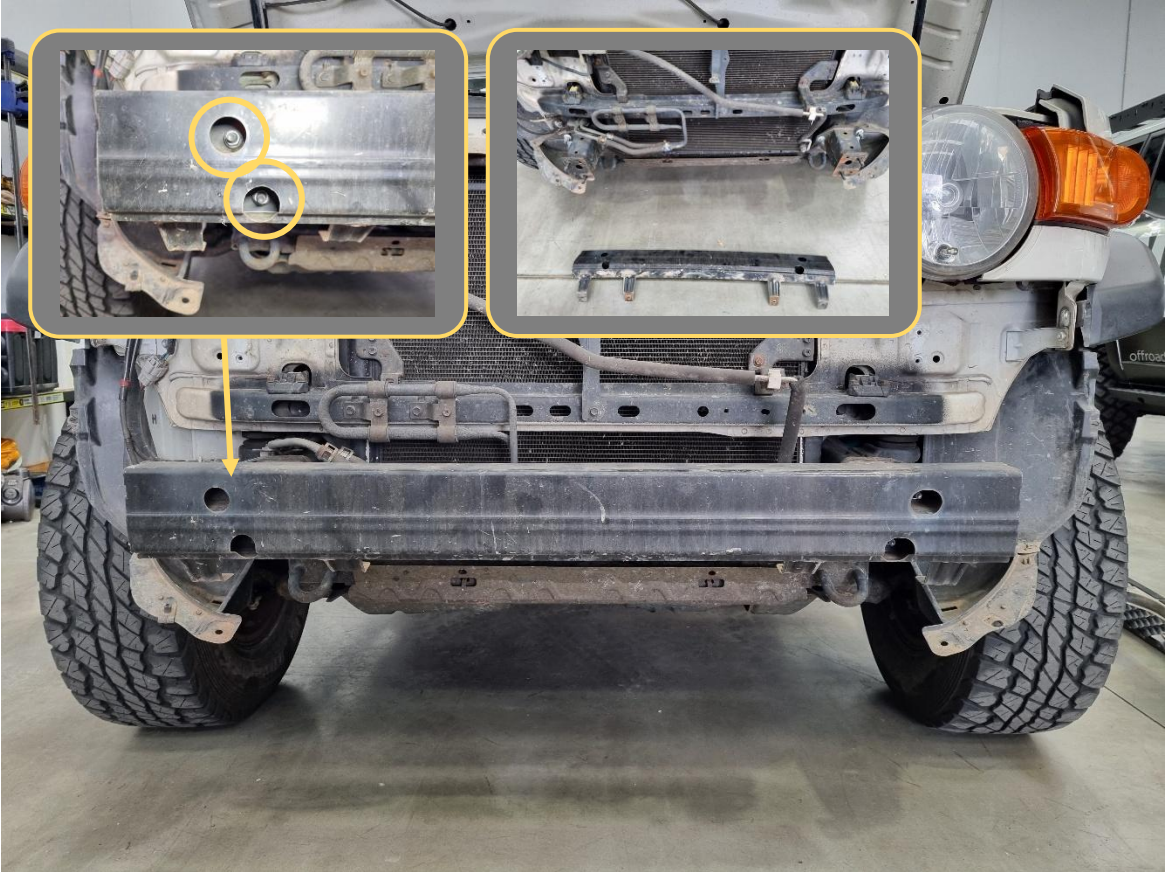
	
15. Remove 3x 10mm hex bolts securing each inner headlight bracket (2x to the body, 1x to the headlight). 16. Retain the bolts going into the body. Discard the headlight bolt. 17. On the RH driver side only, also unclip the loom from the bracket. Use a flat blade screwdriver or trim tool to assist.	TOOLS REQUIRED 10mm socket/spanner Flat blade screwdriver or Trim tool
	FASTENERS 6x 10mm factory hex bolts Retain 4x Discard 2x

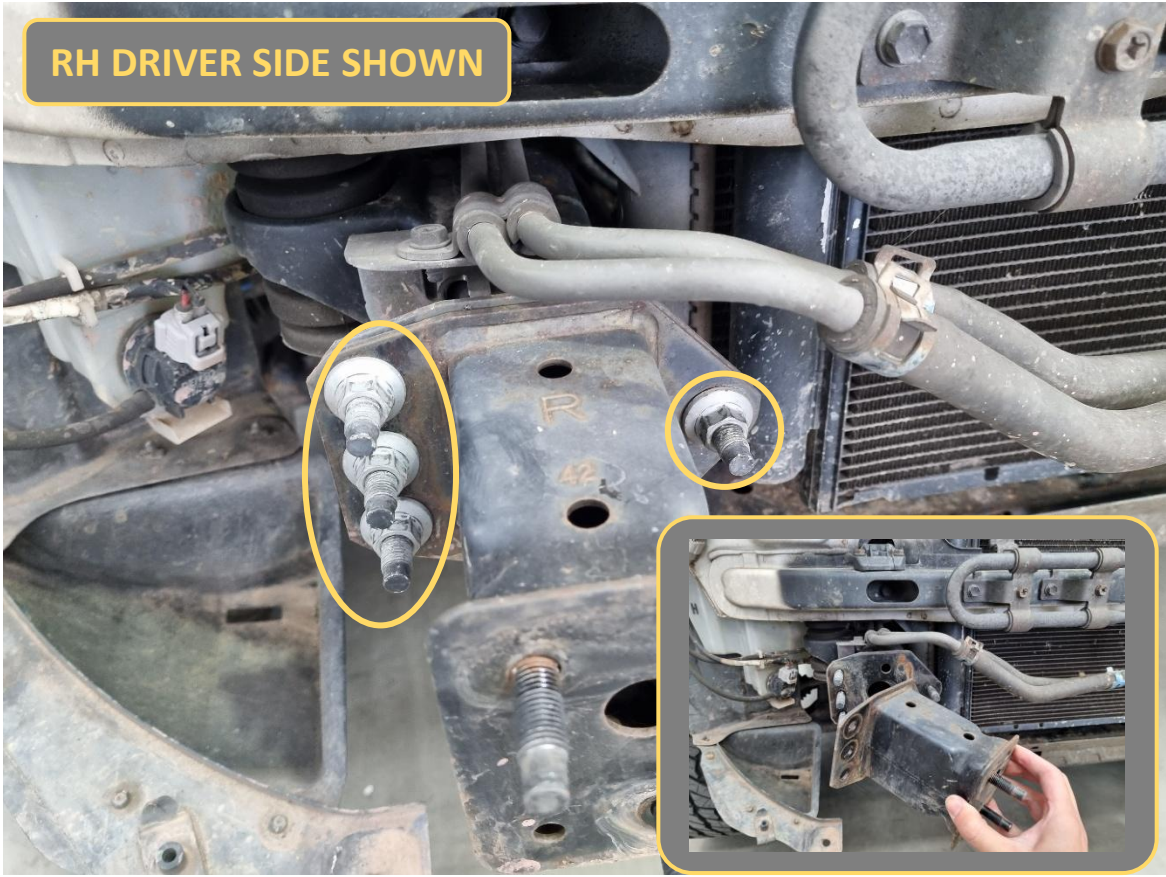
RH DRIVER SIDE SHOWN 	
18. Remove 1x 10mm hex nut holding each inner headlight bracket to each outer headlight bracket. Nuts can be discarded. 19. Remove and discard the inner headlight brackets.	TOOLS REQUIRED 10mm socket/spanner
	FASTENERS 2x 10mm factory hex nuts Discard

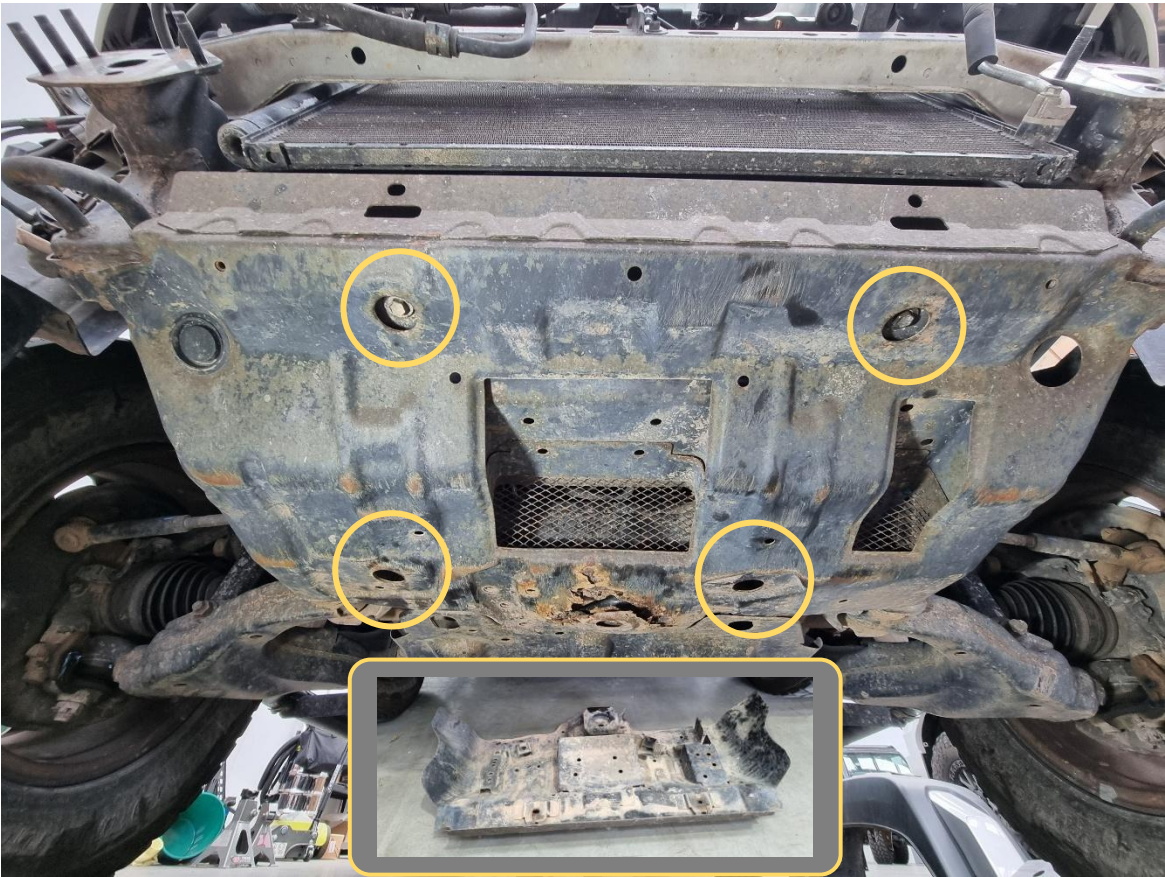
	
20. Remove 2x 10mm hex nuts and 1x 10mm hex bolt securing each outer headlight bracket. The 10mm hex bolt under the headlight can be accessed with a Phillips head screwdriver. One of the 10mm hex nuts is hidden under the flare.	TOOLS REQUIRED Phillips head screwdriver 10mm socket/spanner
	FASTENERS 4x 10mm factory hex nut 4x 10mm factory hex bolt Discard

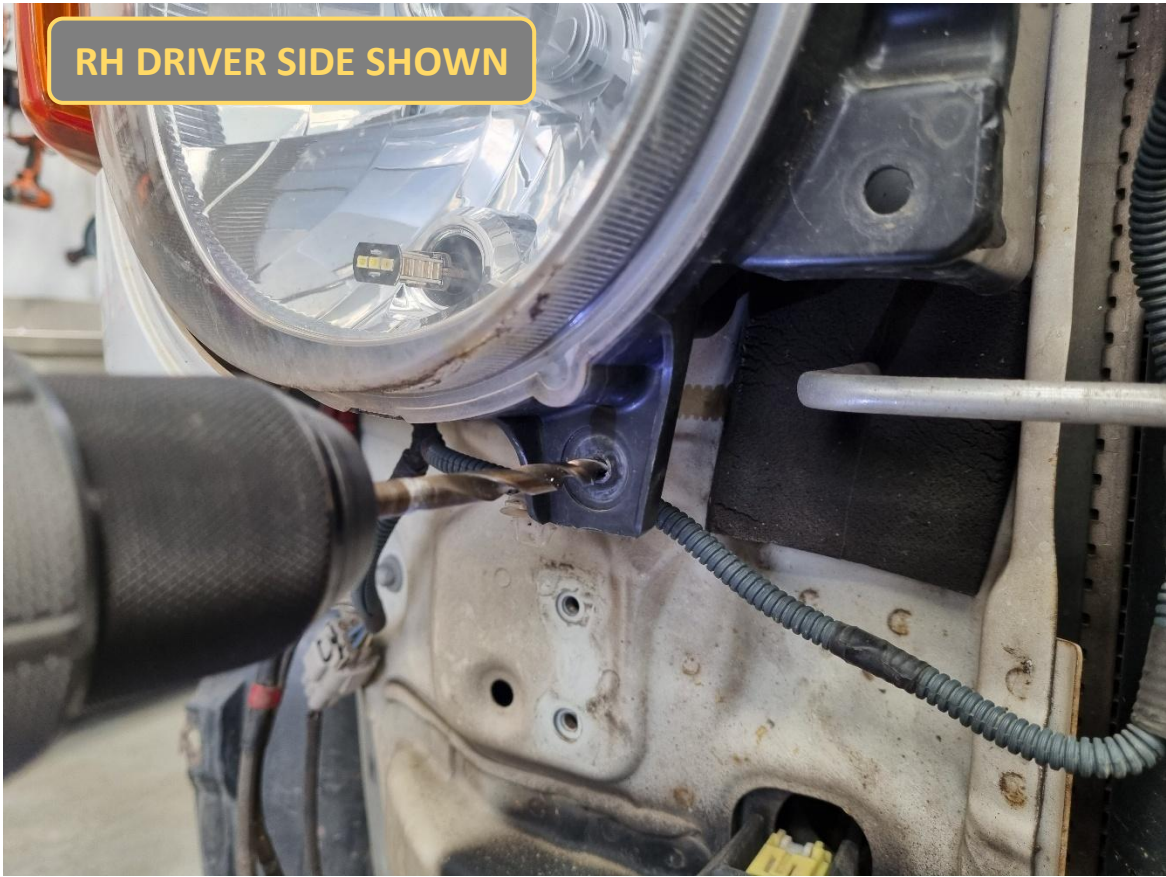
RH DRIVER SIDE SHOWN  	
21. Fully remove the outer headlight brackets. 22. Use a pair of pliers and push out the white threaded plastic plug from each outer headlight bracket. 23. Retain the plastic plugs and discard the headlight brackets.	TOOLS REQUIRED Pliers
	FASTENERS

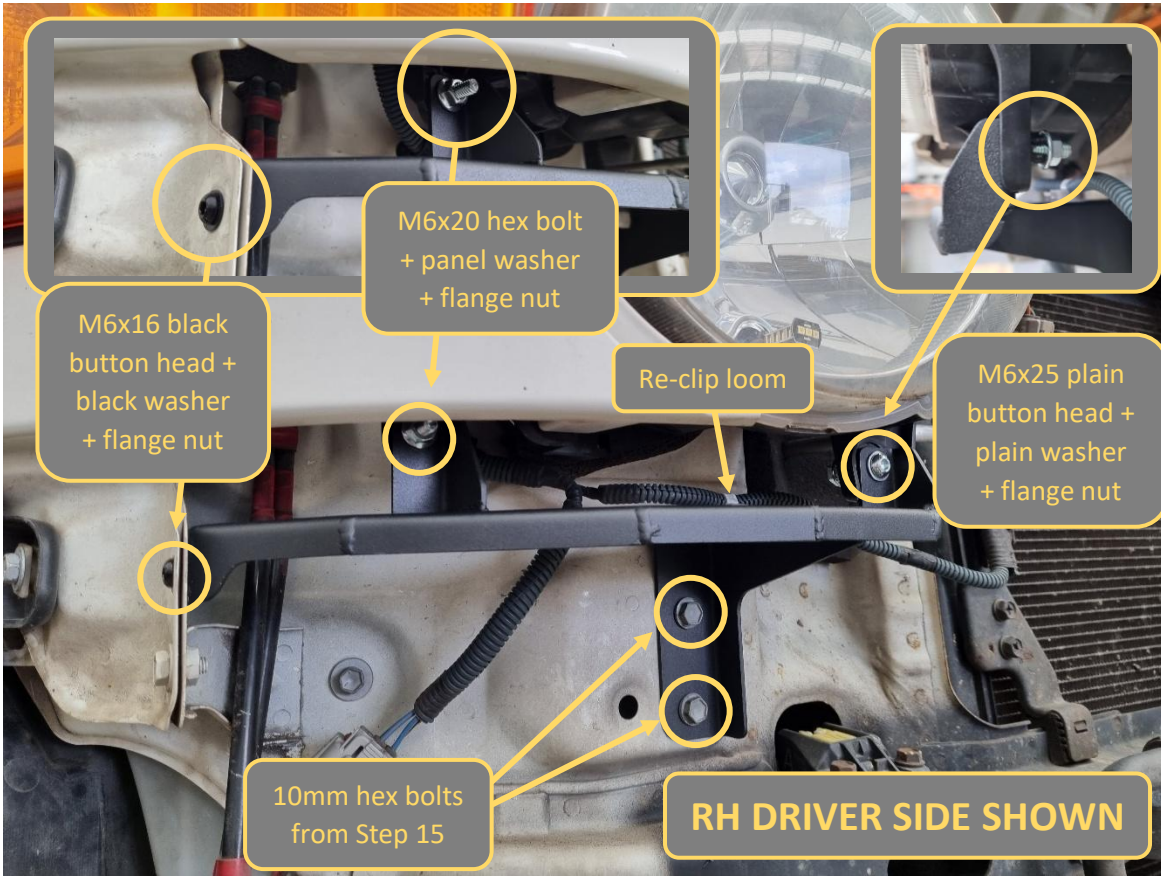
RH DRIVER SIDE SHOWN 	
24. Push the white threaded plastic plug through the square cutout of the flare and into the body. 25. Then fit the retained 10mm hex screw from Step 10 to the threaded plastic plug to secure the flare back to the body.	TOOLS REQUIRED 10mm socket/spanner
	FASTENERS 2x 10mm factory hex screw Retained from Step 10

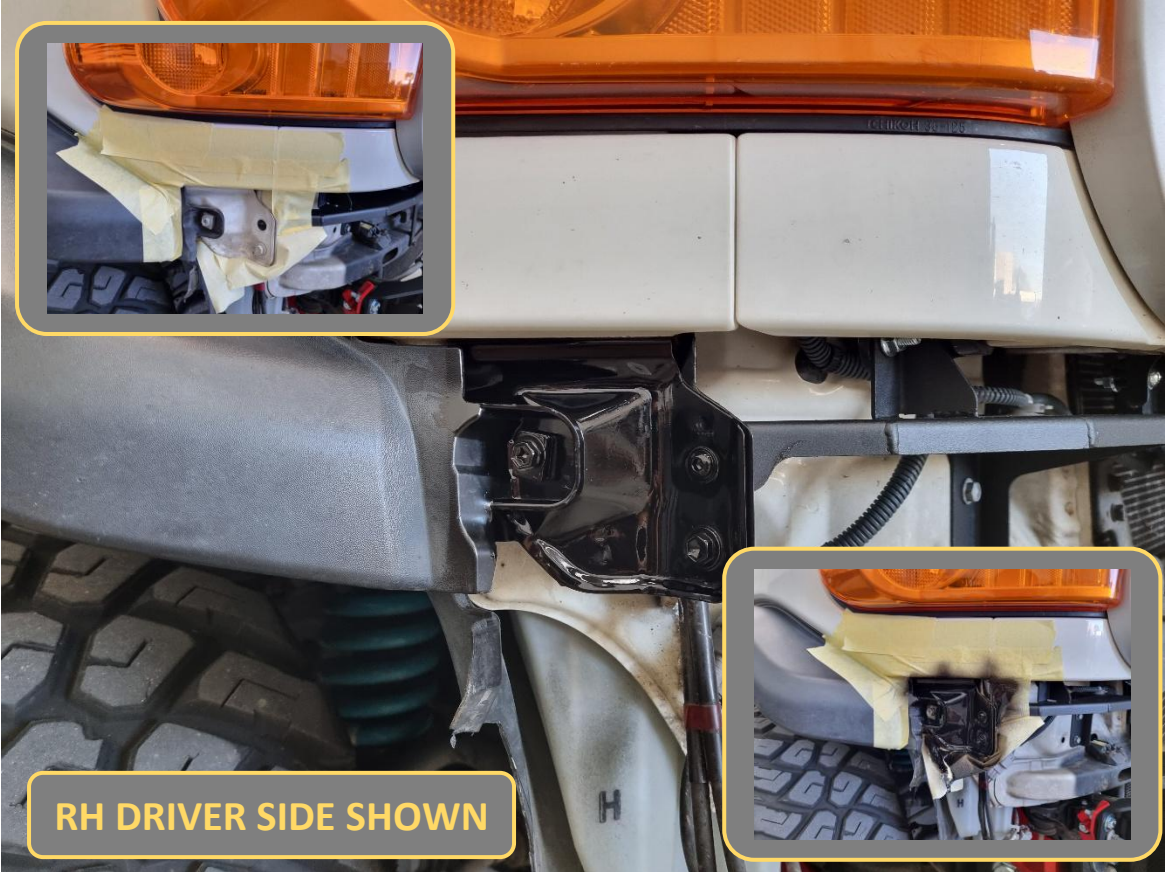
		
26. Remove 4x 14mm hex nuts holding the anti intrusion beam. Discard the nuts. 27. Remove and discard the anti intrusion beam.	TOOLS REQUIRED 14mm socket Socket extension bar	
	FASTENERS 4x 14mm factory hex nut Discard	

	
28. Remove 4x 14mm hex nuts holding each impact crush can. <u>Retain these nuts.</u> 29. Remove and discard the pair of crush cans.	TOOLS REQUIRED 14mm socket Socket extension bar
	FASTENERS 8x 14mm factory hex nut Retain

		
30. Remove 4x 12mm hex bolts (M8x1.25) holding the factory skid plate. Discard bolts and skid plate.	TOOLS REQUIRED 12mm socket Socket extension bar	
	FASTENERS 4x 12mm factory hex bolt Discard	

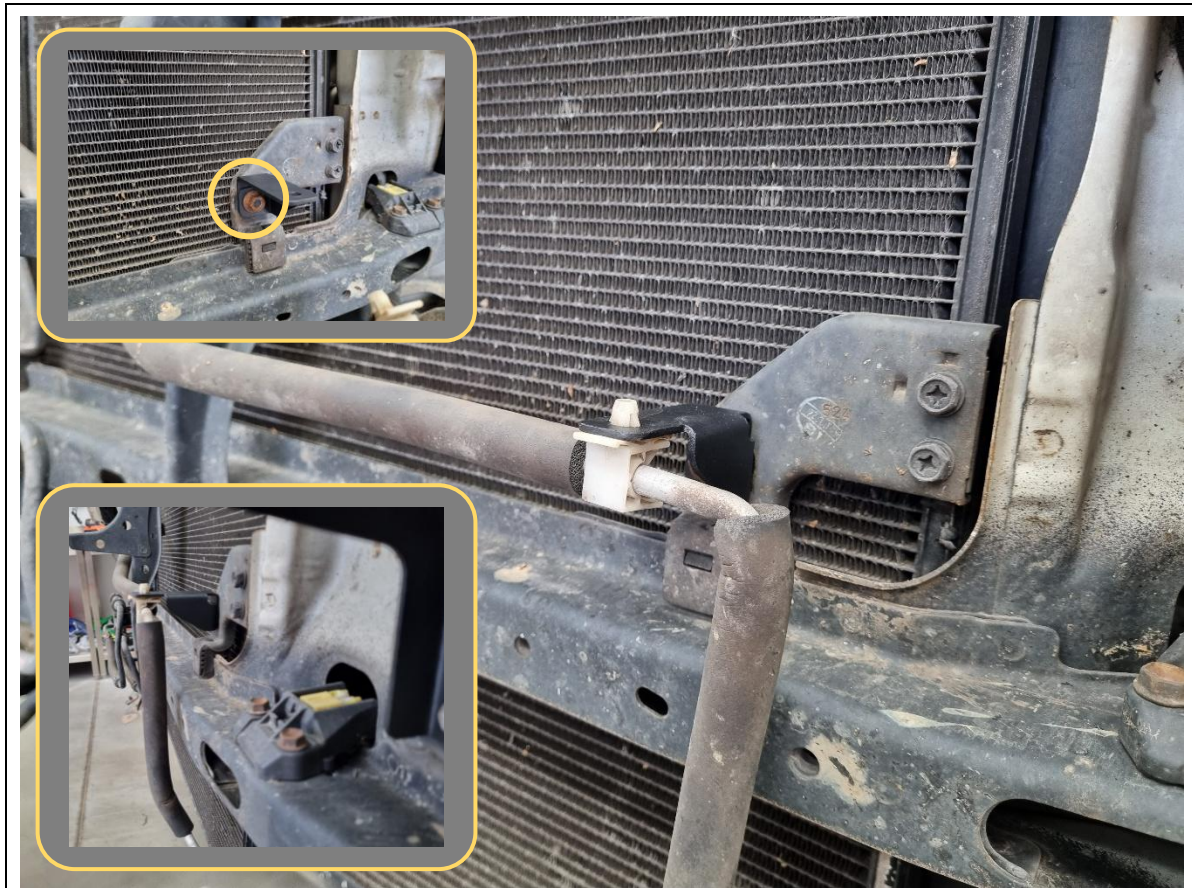
	
31. Drill the plastic inner headlight hole out to 6.5mm with a drill. Do this on both sides.	TOOLS REQUIRED 6.5mm drill bit Electric drill or Similar
	FASTENERS

	
32. Fit each of the supplied headlight brackets as follows: a. Secure base of bracket to body with 2x 10mm factory hex bolts retained from Step 15. b. Secure outer corner of bracket to fender guard with 1x M6x16 black button head bolt, black washer and flange nut. c. Secure center of bracket to headlight with 1x M6x20 hex bolt, large panel washer and flange nut. <u>Bolt on inside, nut on outside.</u> d. Secure inner corner of bracket to headlight with 1x M6x25 plain button head bolt, plain washer and flange nut.	TOOLS REQUIRED 10mm socket/spanner 4mm hex/Allen key
	FASTENERS 4x 10mm factory hex bolts (retained from Step 15) 2x M6x16 black button head 2x M6x25 plain button head 2x M6x20 hex bolt 2x M6 black flat washer 2x M6 plain flat washer 2x M6 large panel washer 6x M6 flange nut

 RH DRIVER SIDE SHOWN		
33. For light coloured vehicles, it is recommended to paint the exposed bottom section of the fender guard black. 34. Wipe clean and mask off the area with masking tape, then paint black. 35. Remove masking tape and allow paint to dry while mounts are being fitted.		TOOLS REQUIRED Masking tape Black spray paint
		FASTENERS

	
36. Locate the A/C line bracket on the LH side in front of the radiator/condenser. Remove the 10mm hex nut securing the bracket to the body. Retain this nut.	TOOLS REQUIRED 10mm socket/spanner
	FASTENERS 1x 10mm factory hex nut Retain

	
37. Use a pair of pliers and unclip the bracket from the A/C line. Discard the bracket.	TOOLS REQUIRED Pliers
	FASTENERS



38. Fit the B-1530 A/C line relocation bracket to the body and secure with the 10mm hex nut retained from Step 36.

39. Gently bend the A/C line inwards by hand and clip it into the hole in the relocation bracket. Ensure clip is fully engaged in the hole, use pliers to assist if necessary.

40. Continue manipulating the A/C line so that it sits close to the body, with around 5mm clearance (see bottom inset photo).

This is to ensure clearance with fitment of the winch and cradle later.

TOOLS REQUIRED

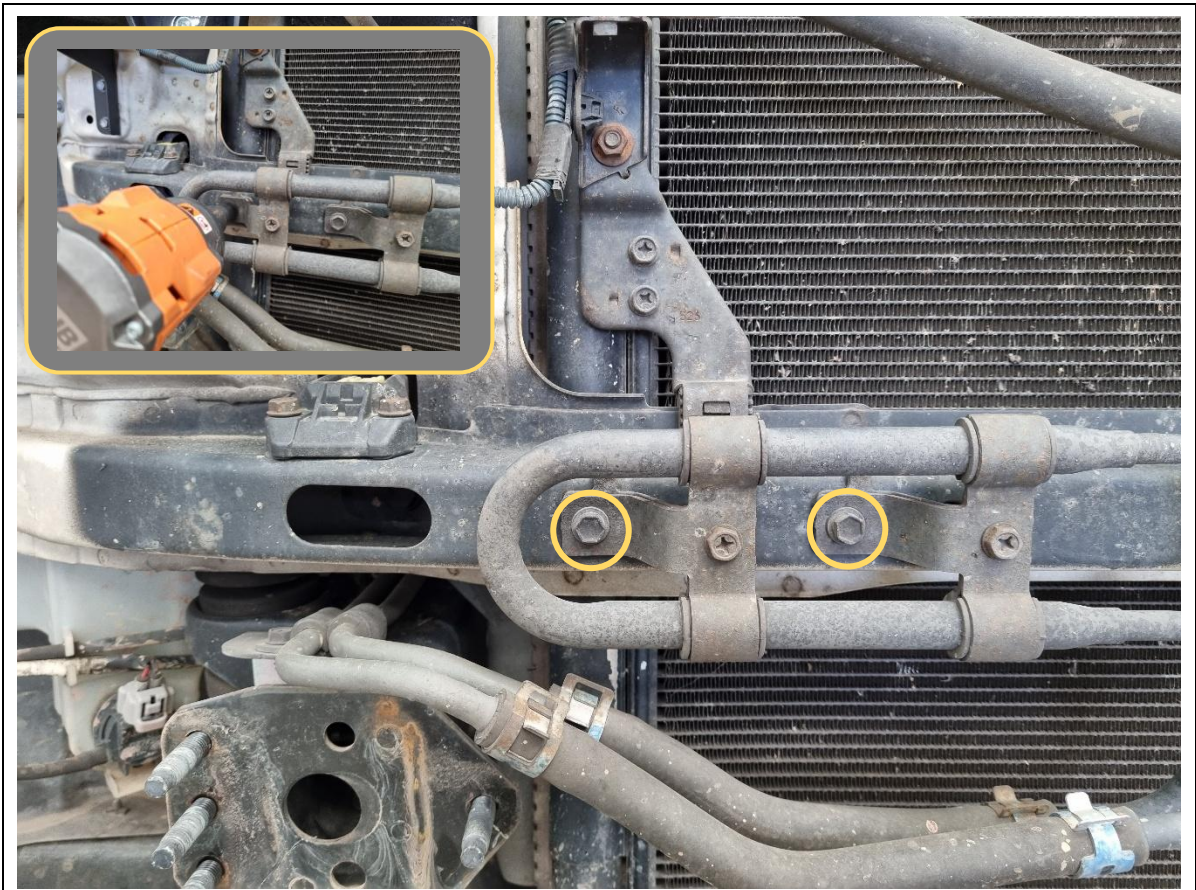
10mm socket/spanner

Pliers

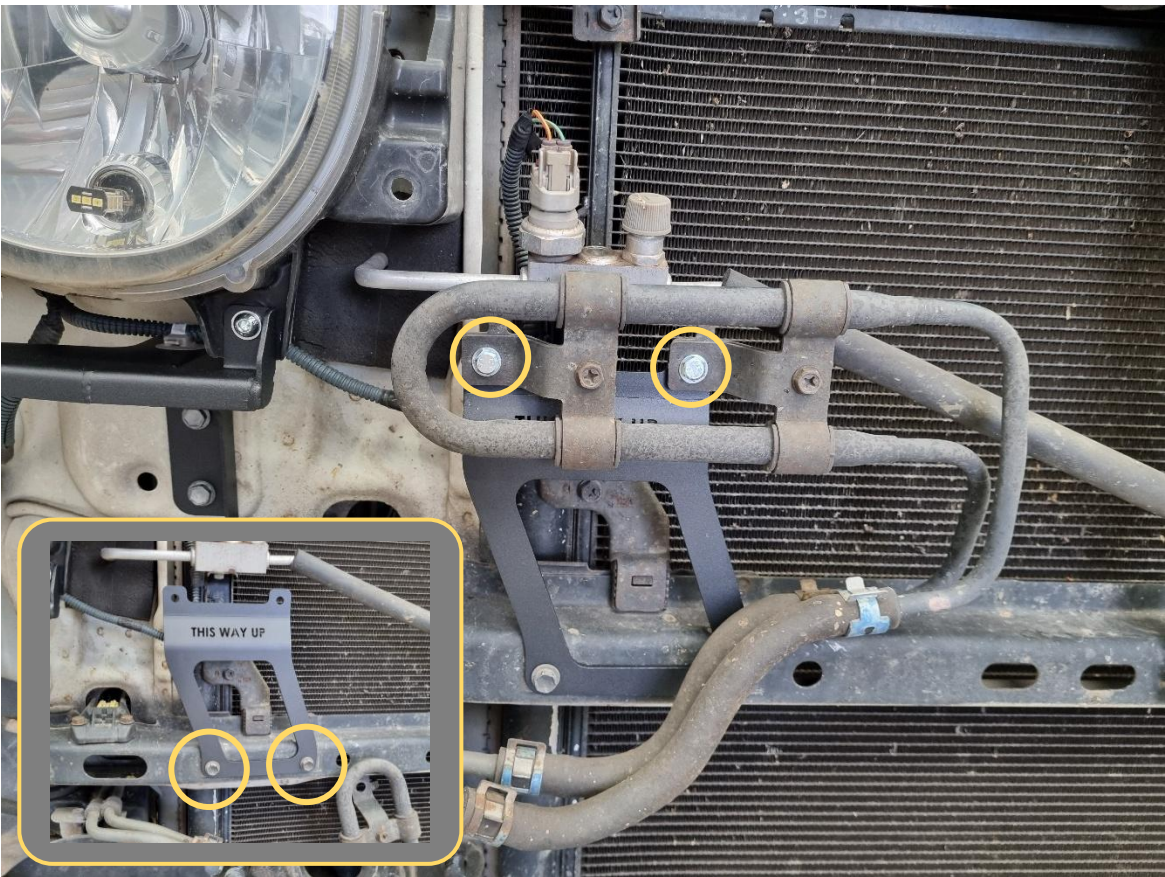
FASTENERS

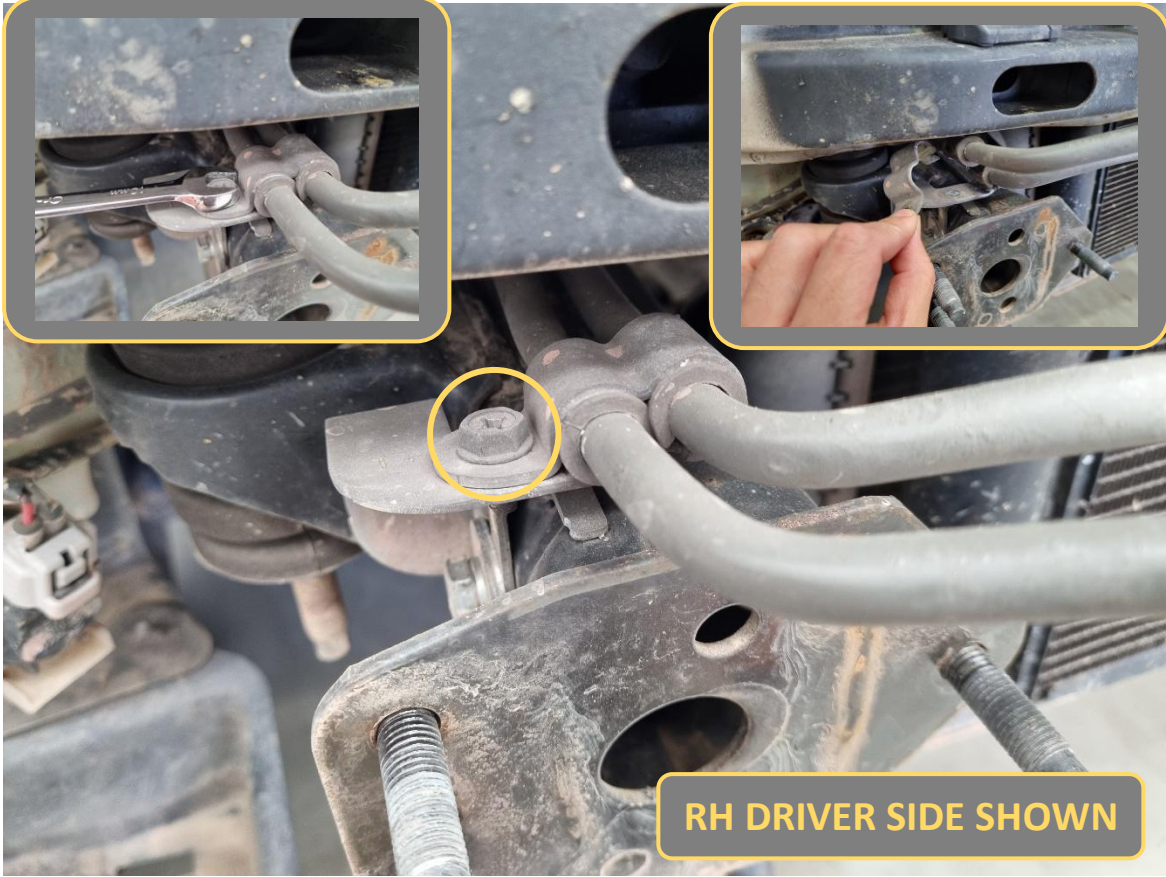
1x 10mm factory hex nut

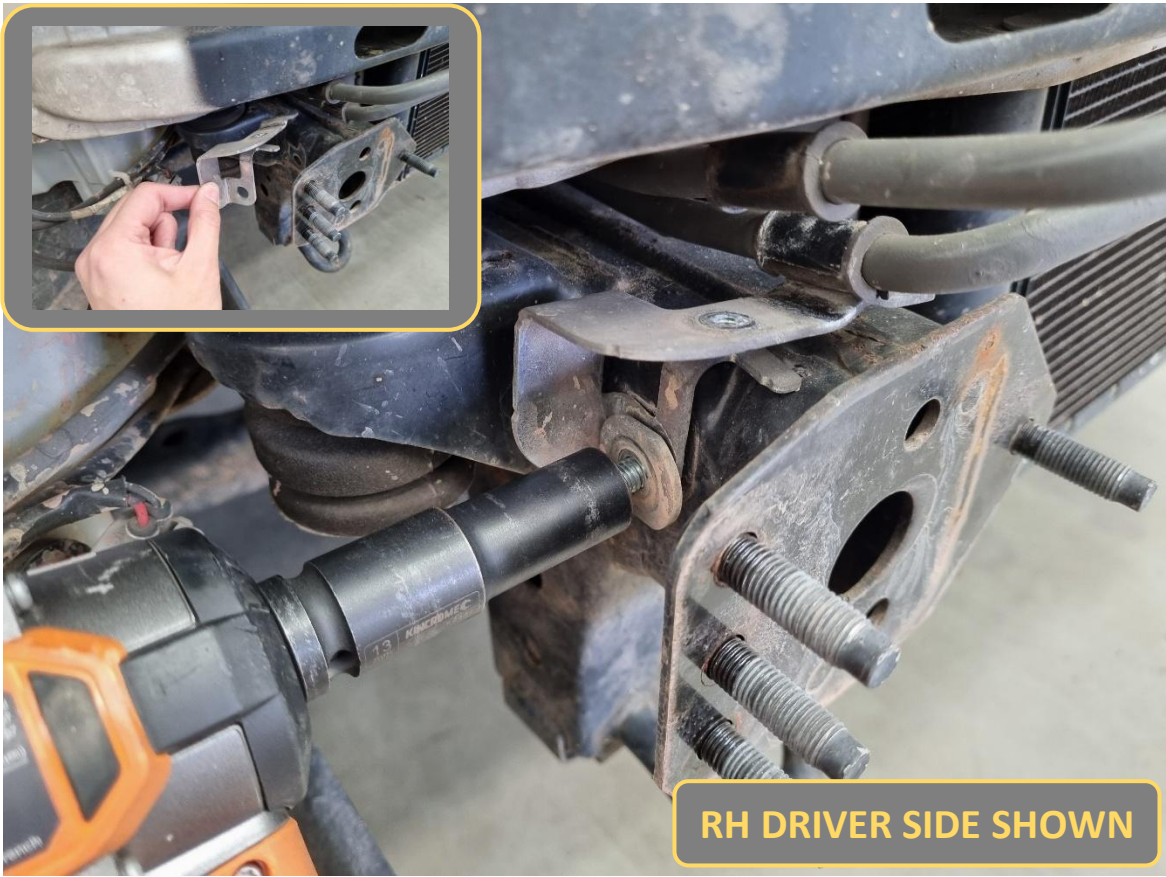
Retained from Step 36

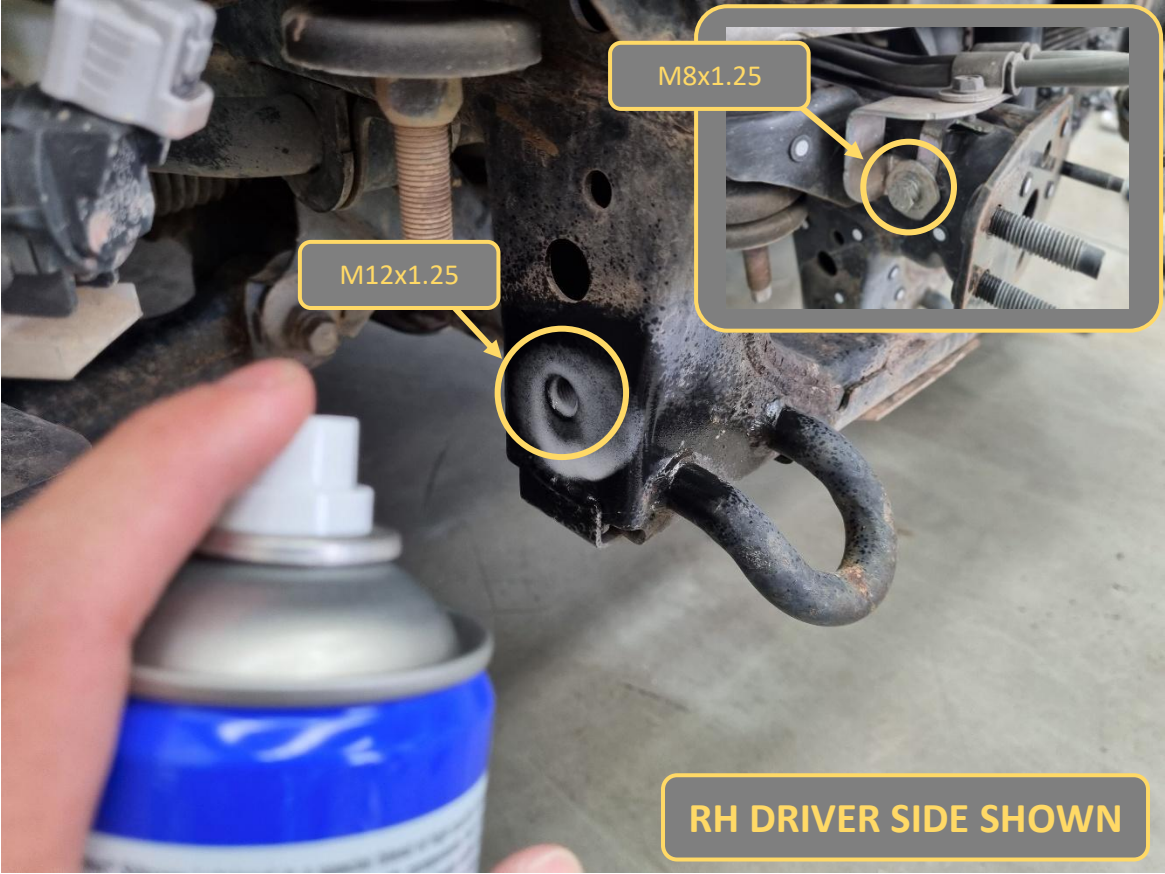


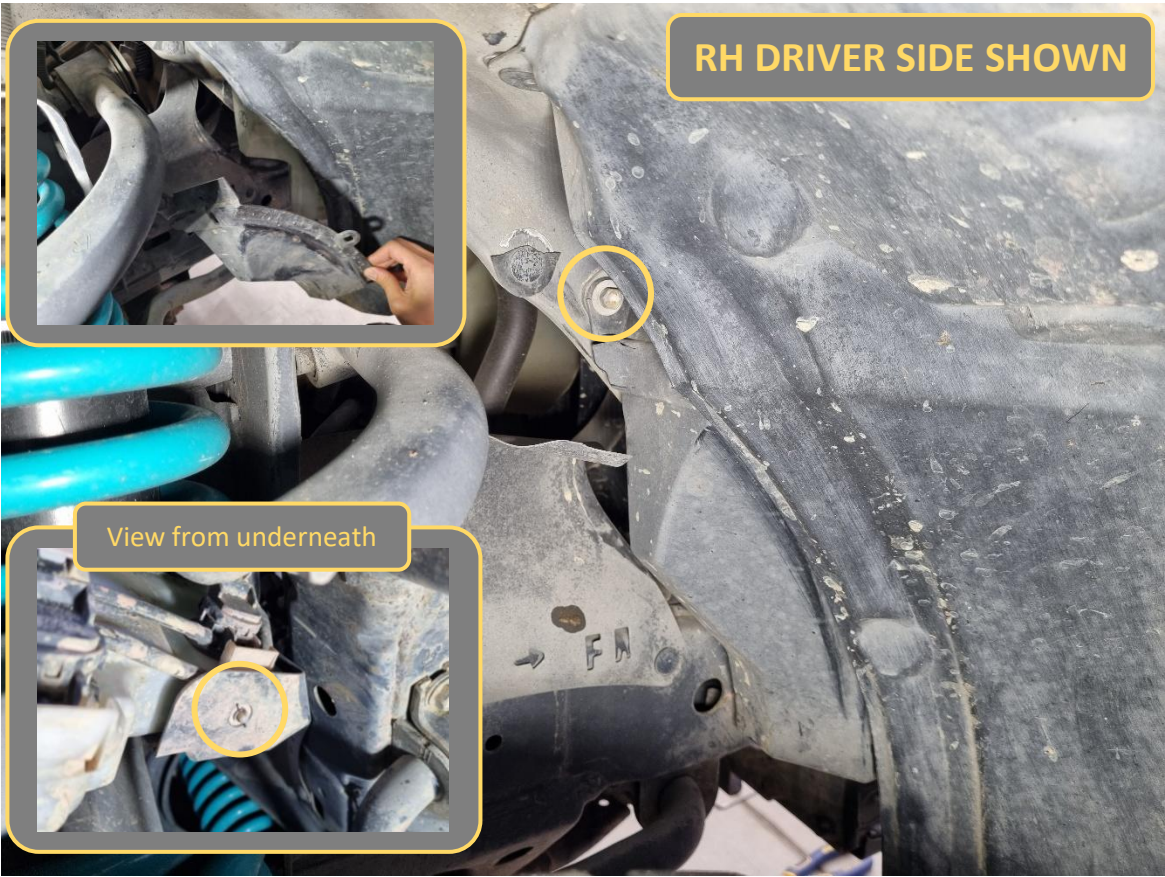
41. Remove 2x 10mm hex bolts holding the power steering lines to the body. Retain the bolts.	TOOLS REQUIRED 10mm socket/spanner
	FASTENERS 2x 10mm factory hex bolt Retain

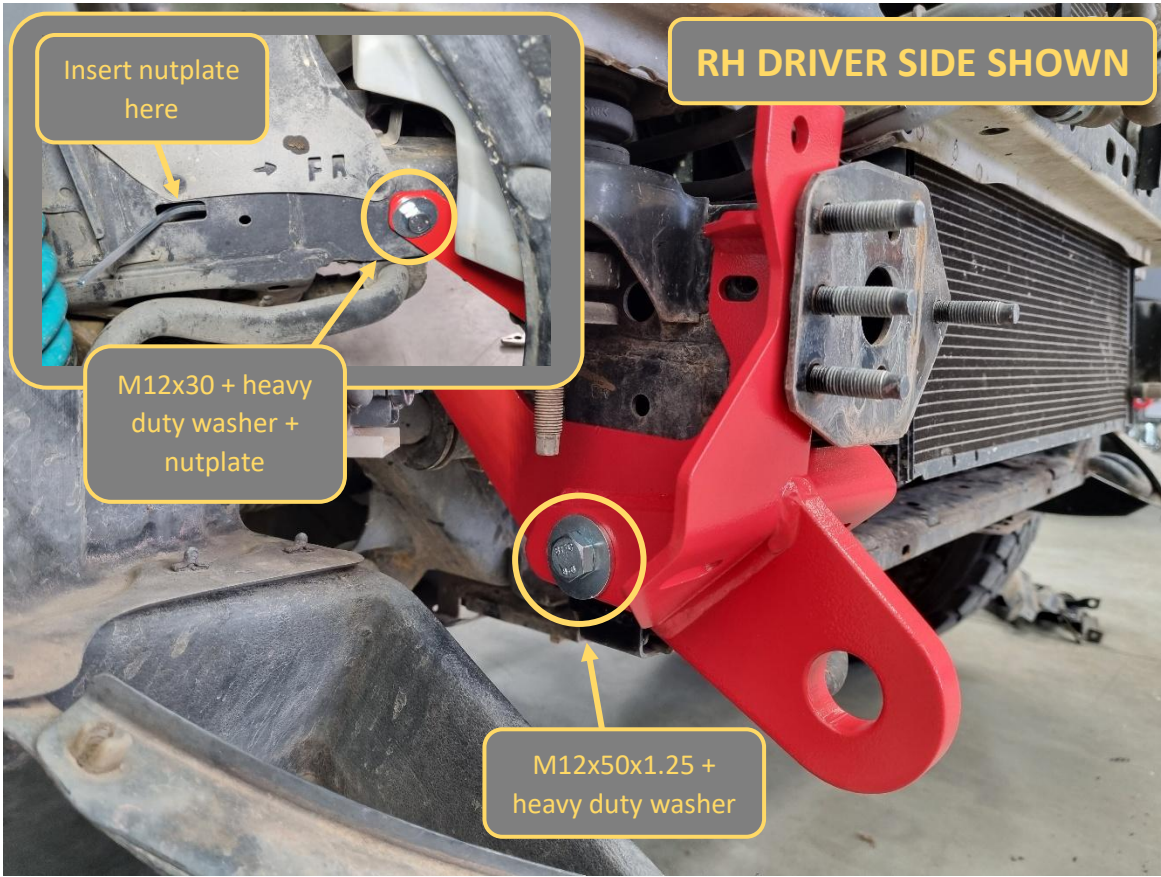
	
42. Fit the B-1529 power steering line relocation bracket to same holes in the body, re-using the 10mm hex bolts from Step 41. 43. Relocate the power steering lines up to the new bracket and secure with 2x M6x20 hex bolts, flat washers and flange nuts.	TOOLS REQUIRED 10mm socket/spanner
	FASTENERS 2x 10mm factory hex bolt (retained from Step 41) 2x M6x20 hex bolt 2x M6 flat washer 2x M6 flange nut

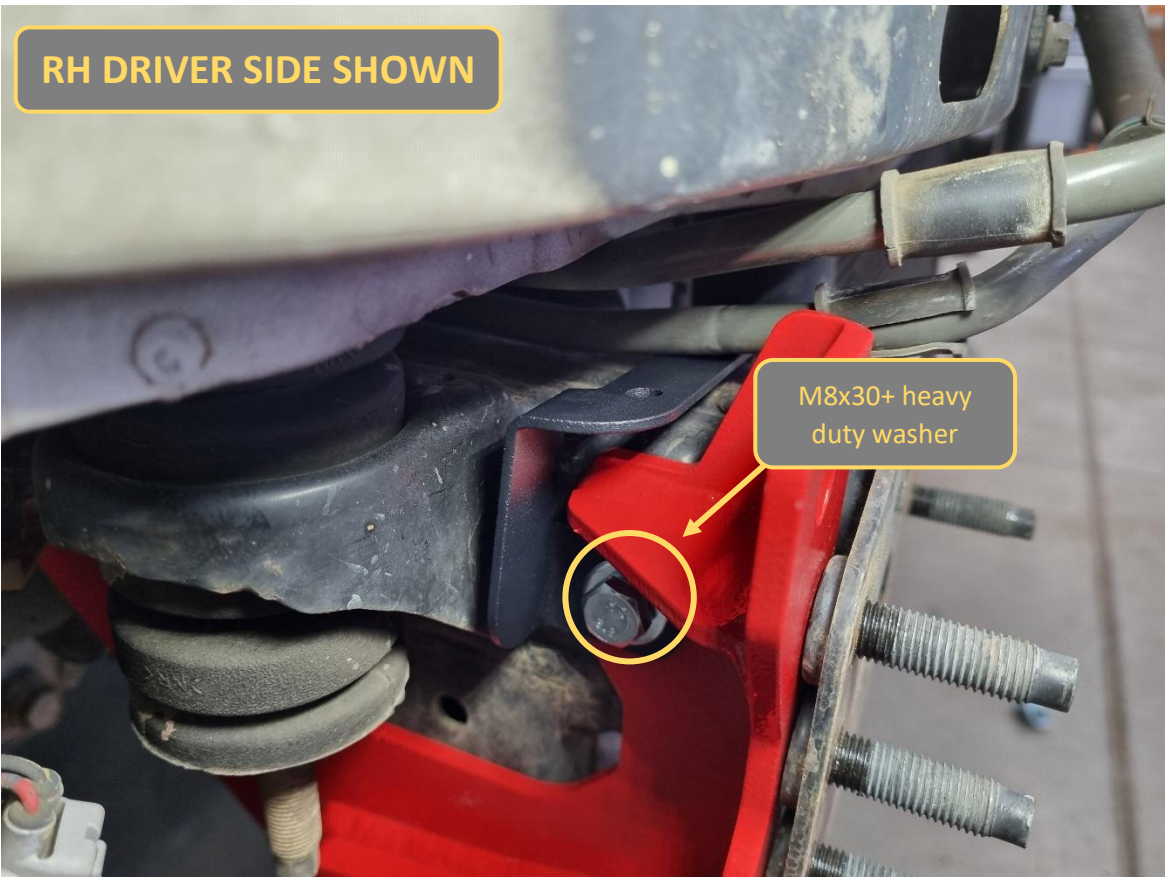
 RH DRIVER SIDE SHOWN	
44. Locate the power steering line clamp on top of the RH chassis rail, and use a 10mm spanner to remove the 10mm hex bolt and clamp bracket. Discard these parts.	TOOLS REQUIRED 10mm spanner
	FASTENERS 1x 10mm factory hex bolt Discard

	
45. Remove the 12mm hex bolt (M8x1.25) securing the power steering clamp mount bracket to the chassis. Discard both parts. 46. Ensure the rubber sleeves remain on the power steering lines.	TOOLS REQUIRED 12mm socket/spanner
	FASTENERS 1x 12mm factory hex bolt Discard

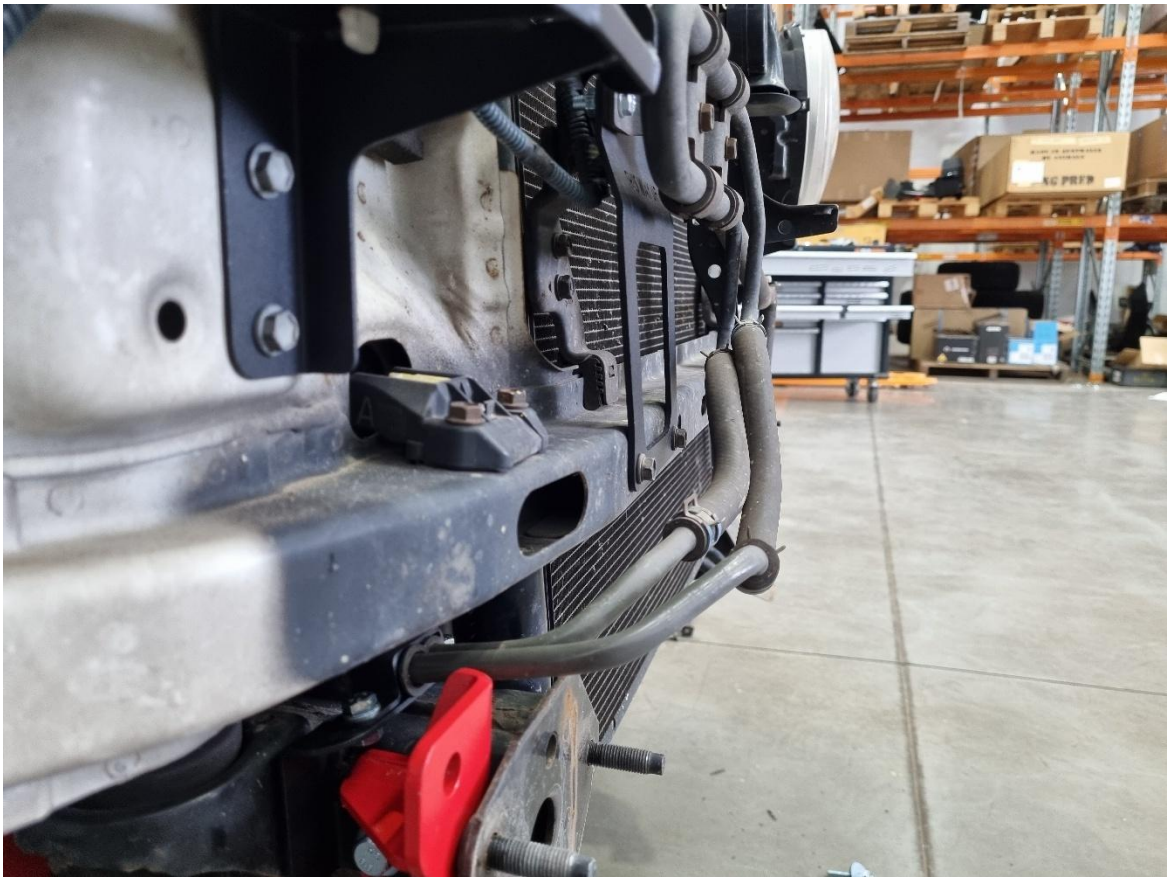
	
47. Prepare the chassis rail for fitment by cleaning out existing threads. With the use of cutting fluid, run taps through the indicated holes on both the RH and LH chassis rail. a. M8x1.25 through same hole as power steering bracket b. M12x1.25 through lower most hole	TOOLS REQUIRED M8x1.25 metric tap M12x1.25 metric tap Lubricant or cutting fluid
	FASTENERS

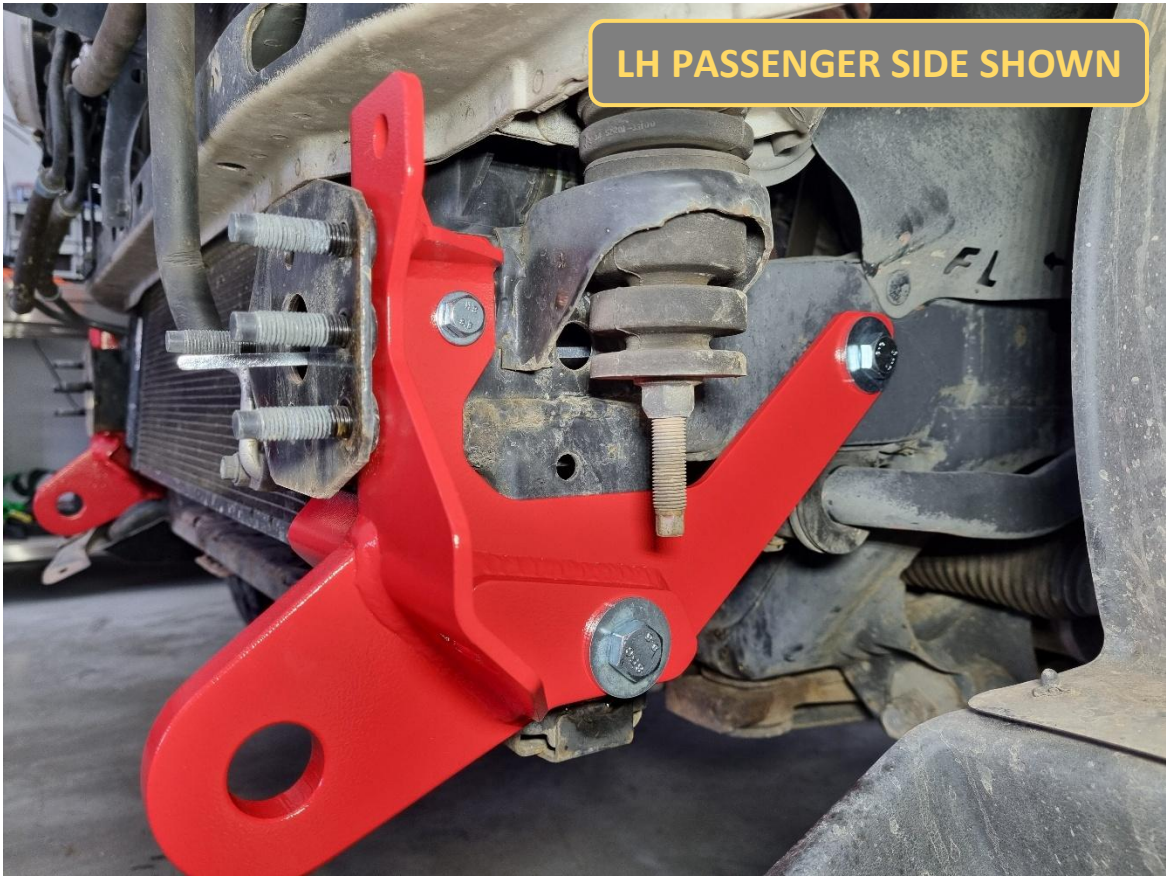
 RH DRIVER SIDE SHOWN View from underneath	
48. The plastic washer bottle cover partially obstructs access to the chassis on the RH side. Looking in from the wheel arch, remove 1x 10mm hex bolt and unclip the washer bottle cover from underneath. Retain the bolt.	TOOLS REQUIRED 10mm socket/spanner
	FASTENERS 1x 10mm factory hex bolt Retain

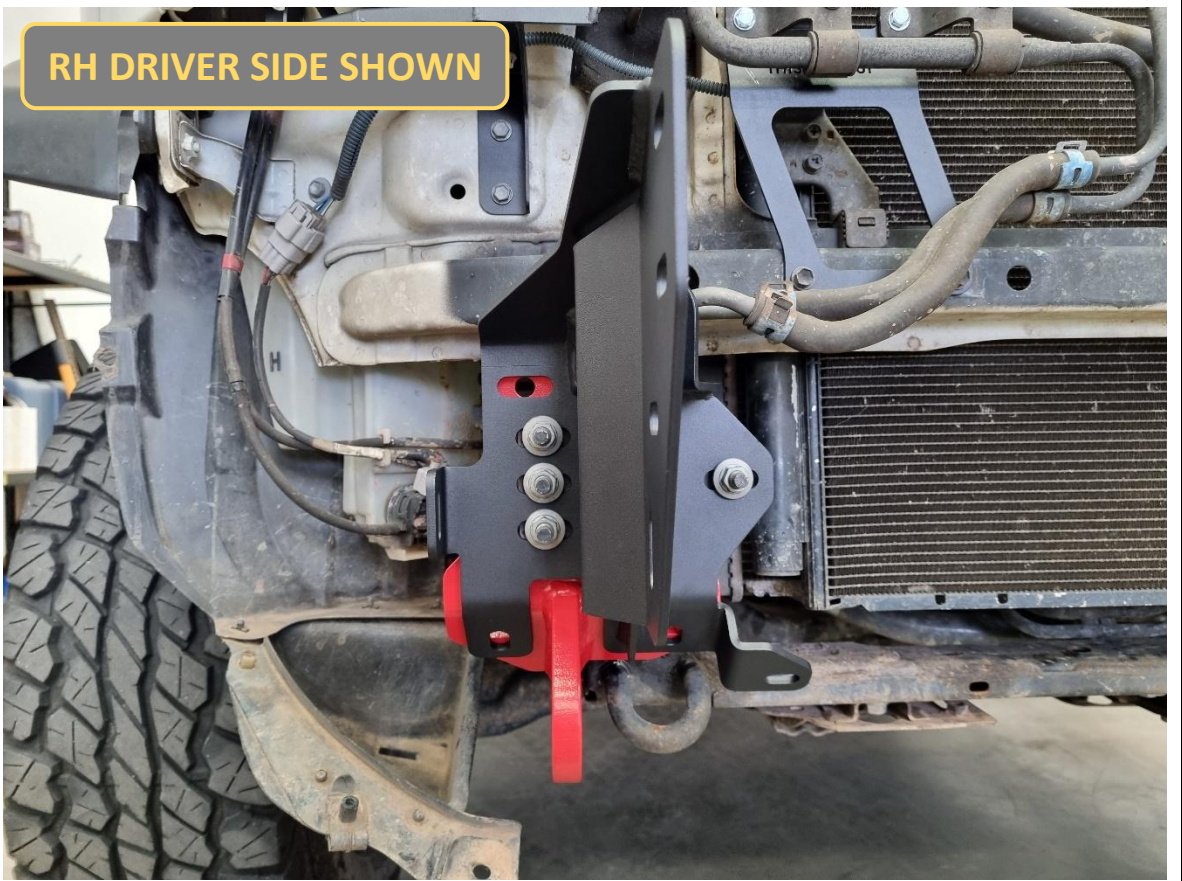
	
49. Fit the RH tow point to the outside of the RH chassis rail as shown. 50. Loosely secure with 1x M12x50x1.25 fine pitch hex bolt and heavy duty washer into the weld nut in the chassis. 51. At the rear looking in from the wheel arch, insert 1x M12 nutplate through the rectangular cutout in the chassis, then loosely secure the tow point to it with 1x M12x30 hex bolt and heavy duty washer. See inset photo. 52. Ensure the tow point is sitting flush up against the chassis rail, and keep bolts finger tight at this stage.	TOOLS REQUIRED 19mm socket/spanner
	FASTENERS 1x M12x30 hex bolt 1x M12x50x1.25 hex bolt 2x M12 heavy duty washer 1x M12 nutplate

	
53. Fit the B-1531 power steering clamp base to the outside of the RH tow point and loosely secure with 1x M8x30 hex bolt and heavy duty washer, as shown. Leave bolt finger tight. Position the power steering lines on top of the clamp base. Note: If another brand aftermarket bull bar has previously been fitted, sometimes the weld nut in the chassis has been drilled out. If this is the case, use 1x M8 nutplate (supplied) and insert it through the opening in the front of the chassis.	TOOLS REQUIRED 13mm socket/spanner
	FASTENERS 1x M8x30 hex bolt 1x M8 heavy duty washer (1x M8 nutplate)

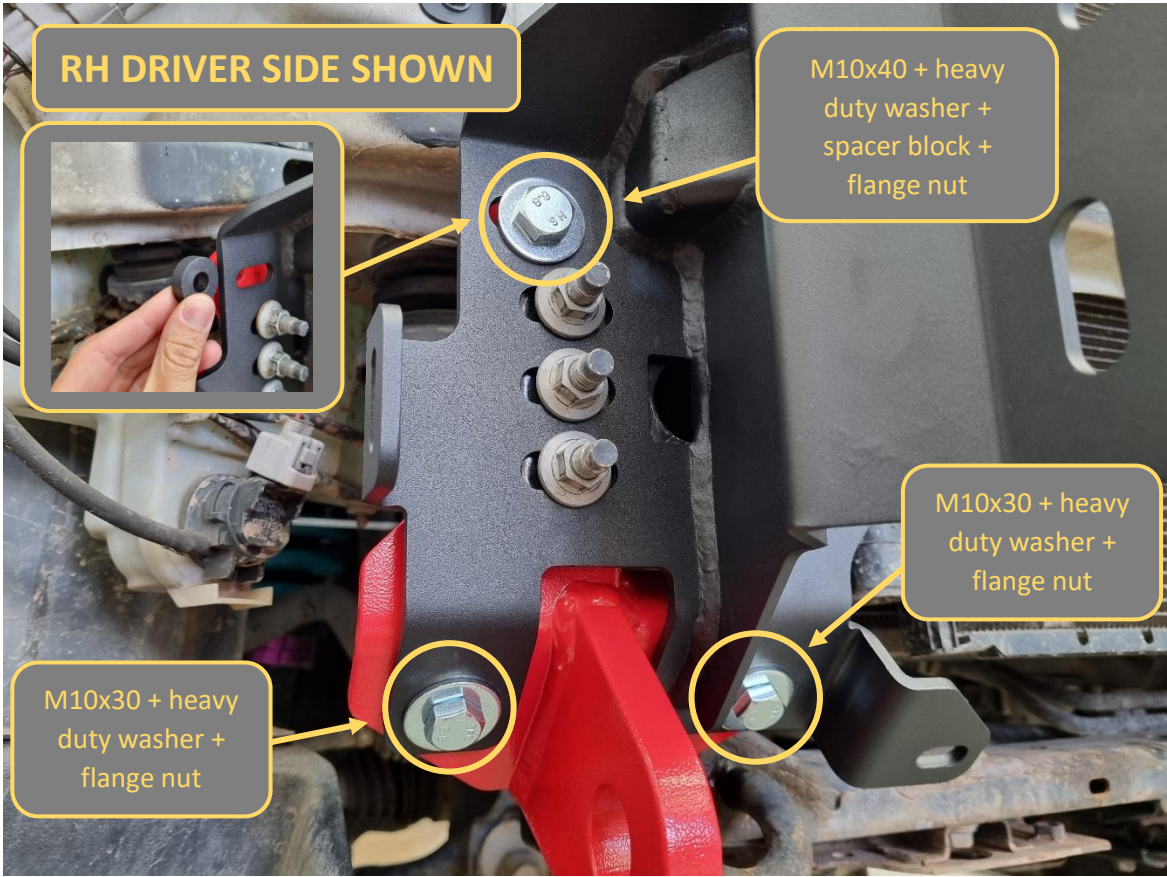
RH DRIVER SIDE SHOWN 	
54. Reposition the rubber sleeves on the power steering lines to align with the clamp base. 55. Then fit the B-1532 outer clamp over the top and secure with 2x M6x12 hex bolts, flat washers and flange nuts. Fully tighten these bolts.	TOOLS REQUIRED 10mm spanner
	FASTENERS 2x M6x12 hex bolt 2x M6 flat washer 2x M6 flange nut

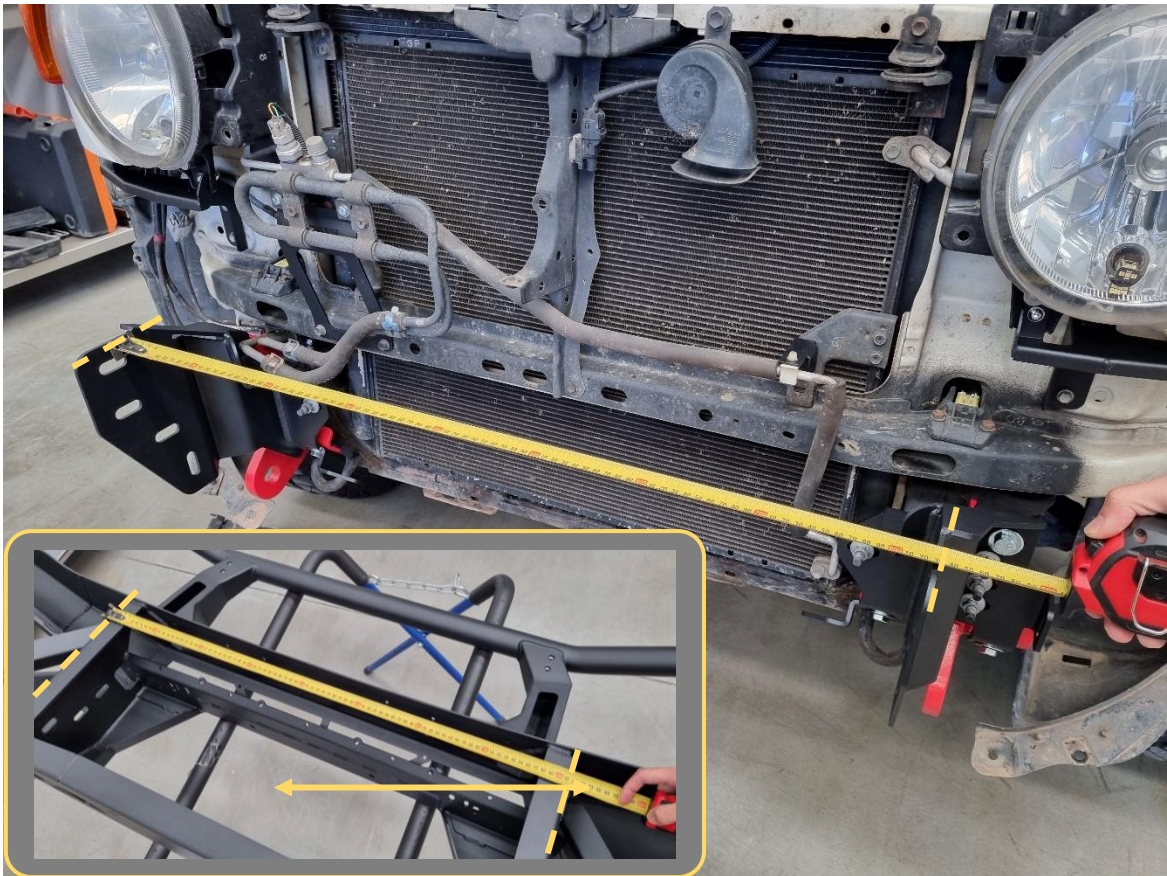
	
56. Ensure the power steering and A/C lines will not rub on anything. Aim for around 5mm clearance. Gently bend the hard lines by hand if necessary.	TOOLS REQUIRED
	FASTENERS

	
57. Loosely fit the LH tow point, following the same procedure as the RH tow point. This side is easier without the power steering lines and washer bottle getting in the way. Again, ensure the tow point sits flush against the chassis rail and leave the bolts finger tight.	TOOLS REQUIRED 18/19mm socket/spanner 13mm socket/spanner
	FASTENERS 1x M12x30 hex bolt 1x M12x50x1.25 hex bolt 2x M12 heavy duty washer 1x M12 nutplate 1x M8x30 hex bolt 1x M8 heavy duty washer (1x M8 nutplate)



58. Fit each impact assembly onto the ends of the chassis rails and loosely secure each one with the 4x 14mm hex nuts retained from Step 28.	TOOLS REQUIRED 14mm socket/spanner
	FASTENERS 8x 14mm hex nut Retained from Step 28

	
59. Loosely secure the bottom of each impact assembly to the tow points with 2x M10x30 hex bolts, heavy duty washers and flange nuts. 60. Insert 1x P-0414 8mm spacer block in between the impact assembly and tow point (see inset photo), then loosely secure with 1x M10x40 hex bolt, heavy duty washer and flange nut.	TOOLS REQUIRED 16/17mm socket/spanner
	FASTENERS 4x M10x30 hex bolt 2x M10x40 hex bolt 6x M10 heavy duty washer 6x M10 flange nut 2x P-0414 spacer block

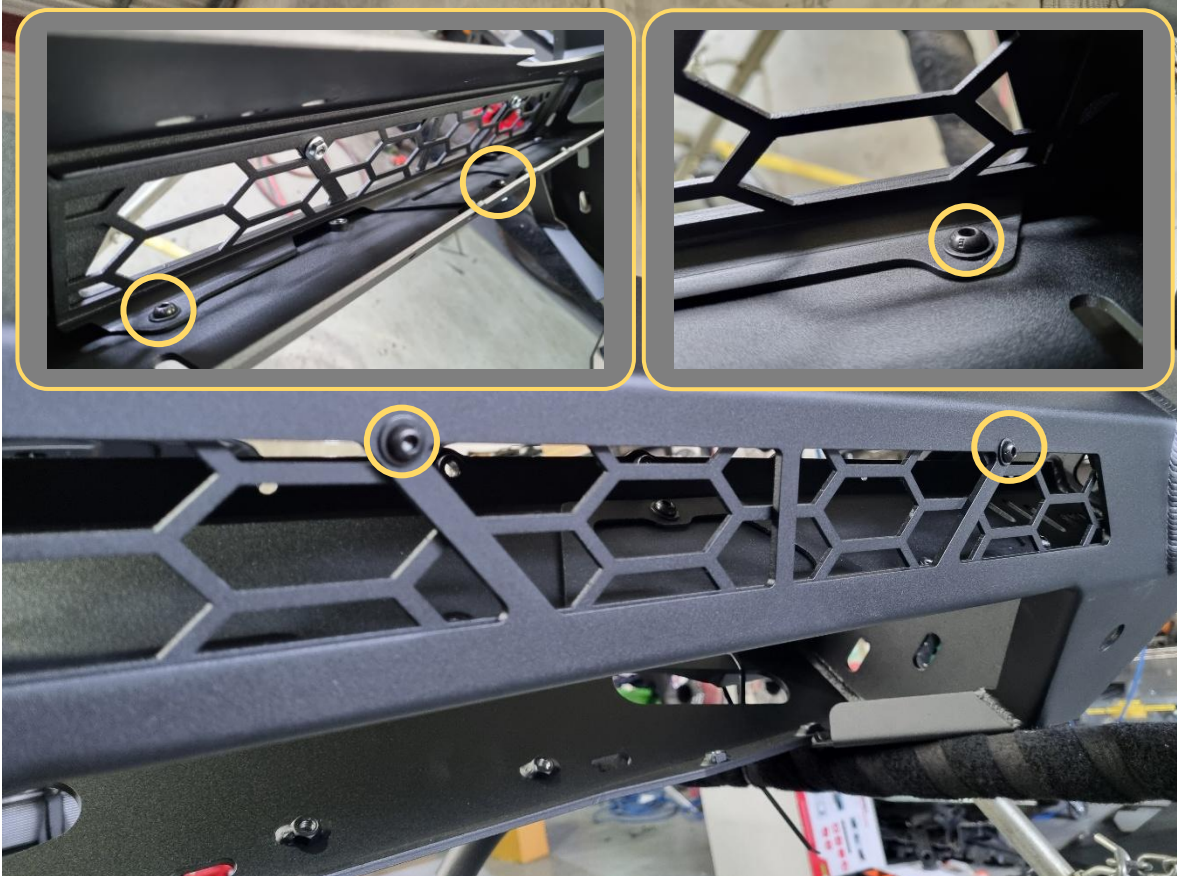
	
61. Measure the distance between the outside faces of the uprights on the bull bar using a tape measure. Write the distance below for reference if required: Bar upright width = _____ mm 62. Adjust the impact assemblies by sliding left/right on the slots, such that the distance between the inner mounting faces of the impact assemblies are 2-5mm more than the bull bar distance. Ensure the mount faces are vertically upright and symmetric left/right on the vehicle (measure to the corners of the headlights or similar to check).	
TOOLS REQUIRED Tape measure	
FASTENERS	

	
63. Once adjusted, fully tighten all bolts in the following order: a. 14mm hex nuts (impact assembly to chassis rail) b. M10 hex bolts (impact assembly to tow point) c. M8+M12 hex bolts (tow point to chassis) Note: Ensure tow points are sitting firmly flush against the chassis rail before tightening to impact assembly. 64. Re-check the distance and re-adjust if required. 65. If there are nutplate sticks poking out of the front of the chassis, bend these flat and out of the way.	TOOLS REQUIRED 13mm socket/spanner 14mm socket/spanner 16/17mm socket/spanner 18/19mm socket/spanner
	FASTENERS

	
66. Re-fit the plastic washer bottle cover using the 10mm hex bolt retained from Step 48. 67. Also check and ensure all nutplate sticks poking out of the chassis will not hit any moving suspension parts. Bend them out of the way if necessary.	TOOLS REQUIRED 10mm socket/spanner
	FASTENERS 1x 10mm hex bolt Retained from Step 48



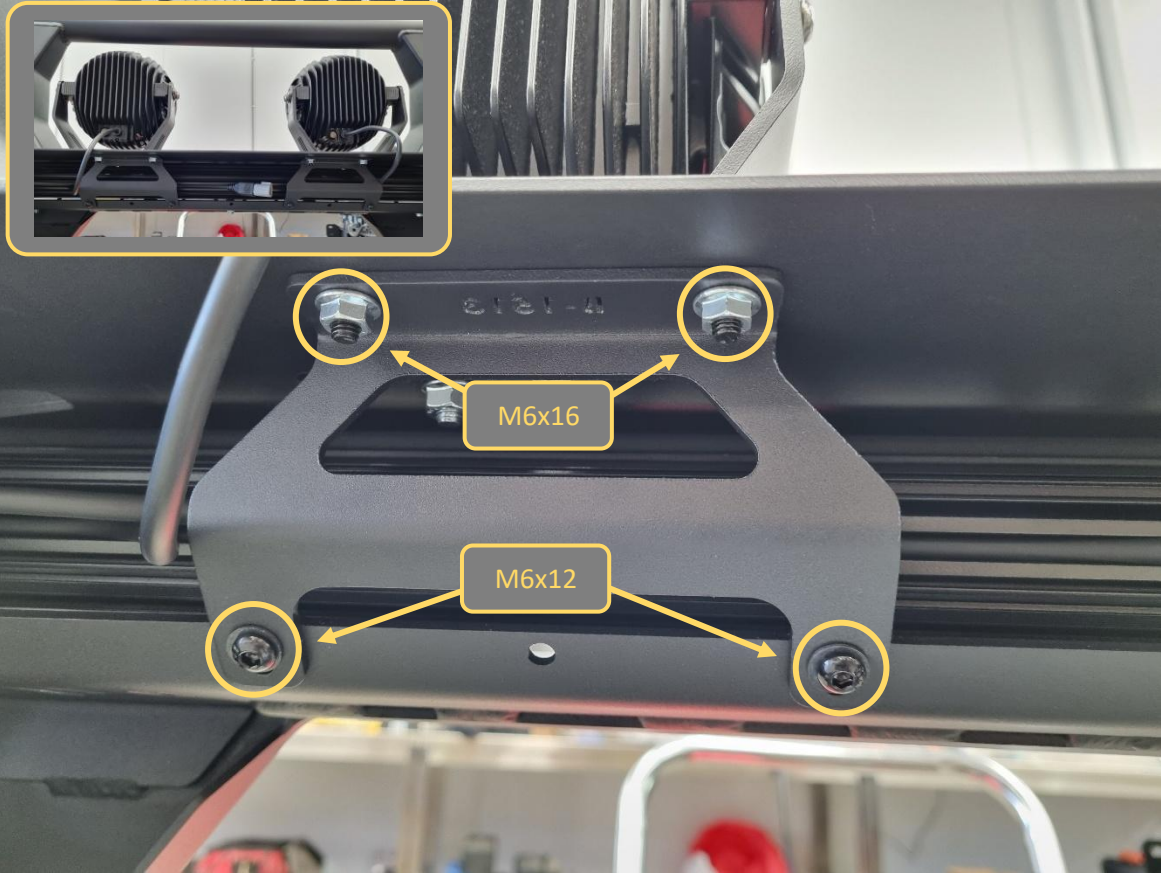
68. Re-fit the grille using original clips and fasteners.	TOOLS REQUIRED 10mm socket/spanner
	FASTENERS 2x plastic push clips 2x 10mm factory hex screws Retained from Step 3

	
69. Fit the B-1434 light bar mesh infill to the inside of centre section the bull bar. Insert the middle tab in the bar first, then rotate to get the rest of the mesh in. Note: Fitment of this part is required on all bars. 70. Secure the infill with 5x M6x12 black button head bolts, black flat washers and flange nuts. For the bottom 3x bolts, have the bolt head facing upwards for better visual appearance.	TOOLS REQUIRED 4mm hex/Allen key
	FASTENERS 5x M6x12 black button head bolt 5x M6 black flat washer 5x M6 flange nut



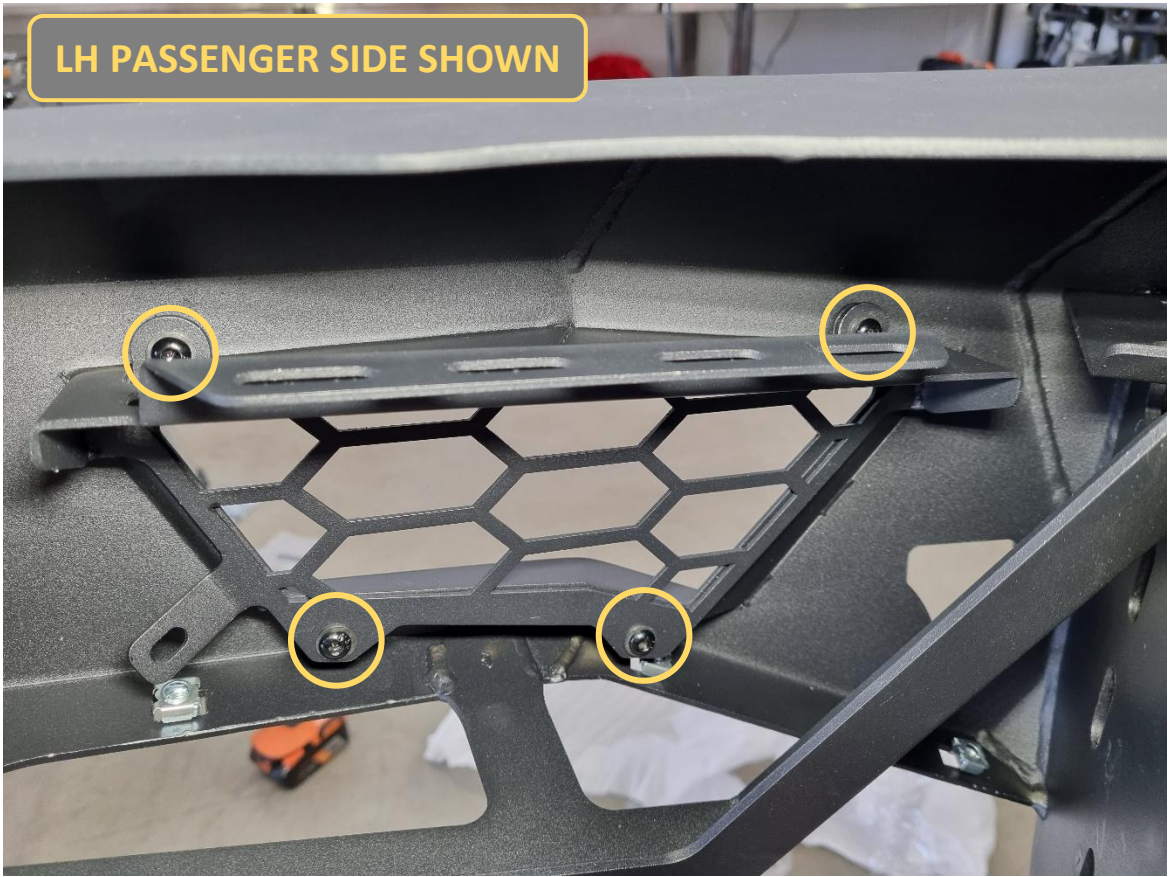
71. If fitting an integrated light bar, do so now. This bar is designed to fit the Offroad Animal 32-inch light bar. If fitting this light bar, assemble the light bar with legs facing <u>inwards</u>, and line it up with the slots in the centre gusset. Secure with M6 fasteners supplied with the light. This bar can accommodate most other “30-32inch” size single row light bars. Stedi ST3K light bars require legs facing <u>outwards</u>.	TOOLS REQUIRED Supplied with accessories
	FASTENERS Supplied with accessories

	
72. If fitting driving lights this is also the most convenient time to do so. It is still possible later, but it is more difficult. The Predator bar supports up to 9" round driving lights. The Toro bar supports up to 7" round driving lights, or 8.5" Stedi Type X Evo size lights.	TOOLS REQUIRED Supplied with accessories
	FASTENERS Supplied with accessories

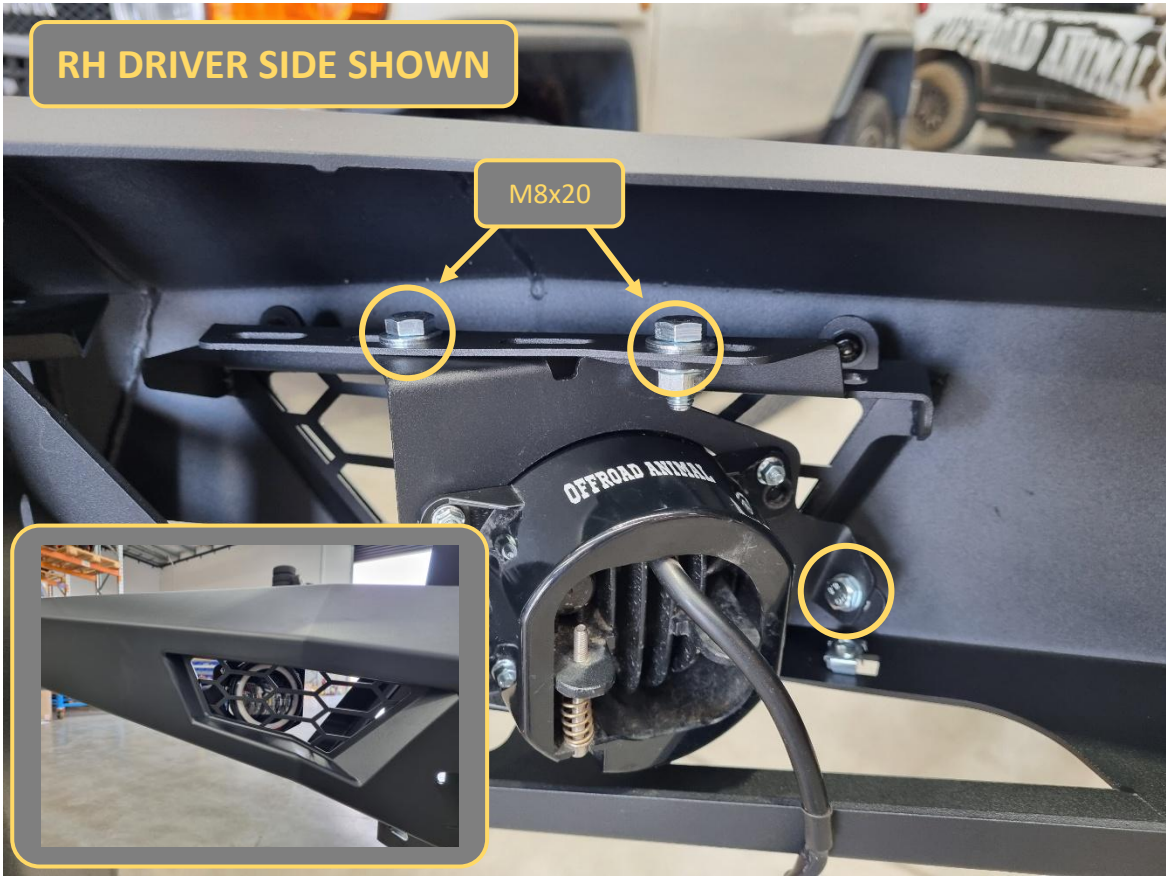
	
73. Fit the pair of pan brace brackets to the back of the centre section of the bull bar. 74. Secure each pan brace at the top with 2x M6x16 black button head bolts, black washers and flange nuts. 75. Secure each pan brace at the bottom with 2x M6x12 black button head bolts and black washers.	TOOLS REQUIRED 4mm hex/Allen key
	FASTENERS 4x M6x12 black button head 4x M6x16 black button head 8x M6 black flat washer 4x M6 flange nut

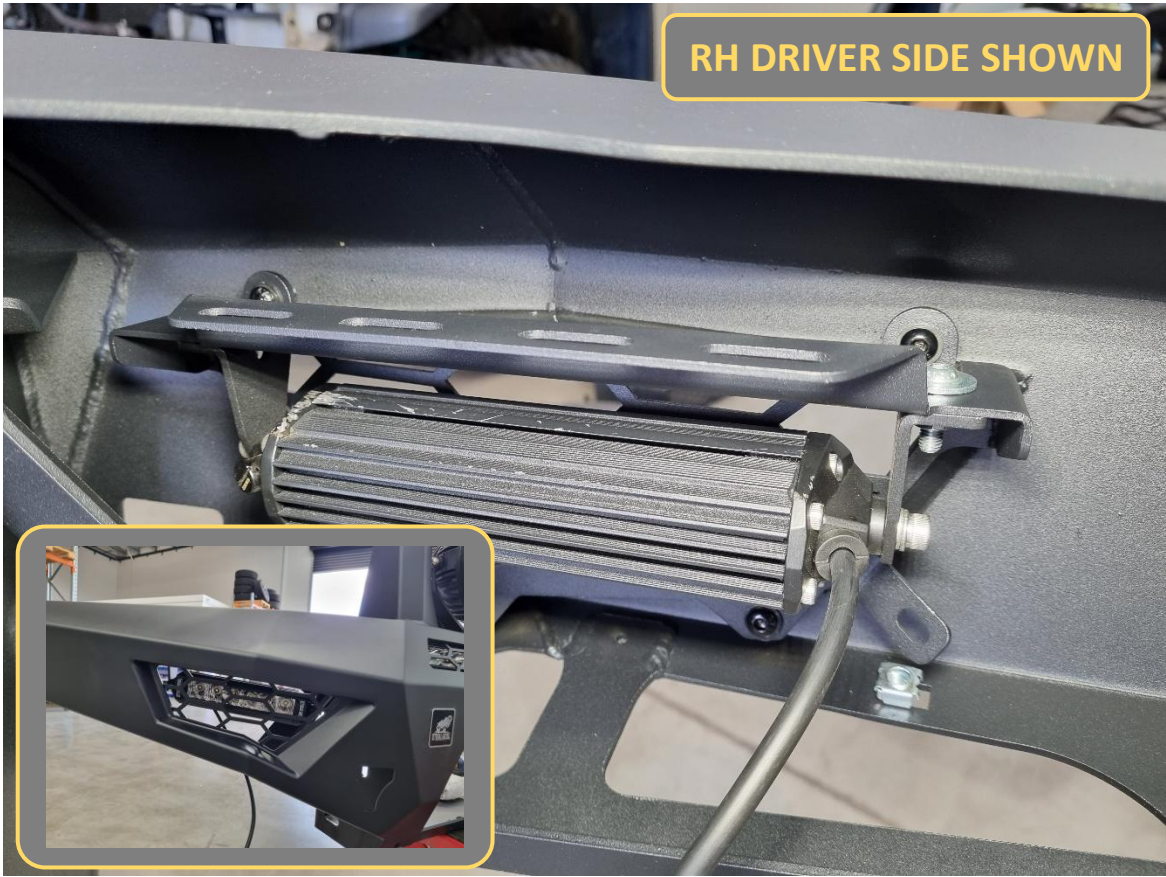
	
76. If fitting top tubes (Stealth Hoop, Round Hoop or Rally Hoop) to the Predator bar, now is the best time to do so. It is still possible later, but it is more difficult.	TOOLS REQUIRED Supplied with accessories
	FASTENERS Supplied with accessories

	
77. Fit 8x M6 cage nuts into the rectangular slots in bottom of wing (4x 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 8x M6 cage nut

LH PASSENGER SIDE SHOWN 	
78. Fit the wing meshes to the inside of the bull bar wings, and secure each one with 4x M6x16 black button head bolts and black washers.	TOOLS REQUIRED 4mm hex/Allen key
	FASTENERS 8x M6x16 black button head 8x M6 black flat washer

	
The wing meshes support a number of different lighting options. Refer to next few pages for mounting various lights. 79. If fitting Offroad Animal Halo Fog Lights, fit each fog light to the supplied B-1522 brackets and secure with 4x M4x12 pan head screws, flat washers and flange nuts.	TOOLS REQUIRED Phillips head screwdriver
	FASTENERS 8x M4x12 pan head screw 8x M4 flat washer 8x M4 flange nut

	
80. Fit the fog light and bracket to the inside of the wing mesh. Secure at the top with 2x M8x20 hex bolts, flat washers and flange nuts. Secure the outer corner with 1x M6x12 hex bolt, flat washer and flange nut. 81. Repeat for other side.	TOOLS REQUIRED 10mm socket/spanner 13mm socket/spanner
	FASTENERS 4x M8x20 hex bolt 4x M8 flat washer 4x M8 flange nut 2x M6x12 hex bolt 2x M6 flat washer 2x M6 flange nut

RH DRIVER SIDE SHOWN 	
82. If fitting 8” light bars, bolt them to the underside of the wing mesh flange using fasteners supplied with the light.	TOOLS REQUIRED Supplied with accessories
	FASTENERS Supplied with accessories



83. If fitting cube lights, up to 2x can be fitted to each wing mesh.
84. Bolt them to the underside of the wing mesh flange using fasteners supplied with the lights.

Note: For Stedi C4 lights (pictured), spacers are needed to shift the light downwards so they align with the opening in the bull bar. Offroad Animal brand cube lights do not need spacers.

TOOLS REQUIRED

Supplied with accessories

FASTENERS

Supplied with accessories

PREDATOR BARS ONLY

RH DRIVER SIDE SHOWN



85. **Predator only.** The Predator bar comes with optional wing extensions (Part no. FB-TFJ-J15-11-PR-ASM6, purchased separately).

86. **Predator only.** If fitting them, the best time to do so is now. It is possible once the bull bar is on the car but it is more difficult. Secure them to the wing with 4x M8x16 hex bolts and flat washers (each).

87. **Predator only.** If not fitting the wing extensions, plug the holes in the wing with the supplied 9mm plastic round plugs.

TOOLS REQUIRED

13mm socket/spanner

FASTENERS

8x M8x16 hex bolt
8x M8 flat washer

OR

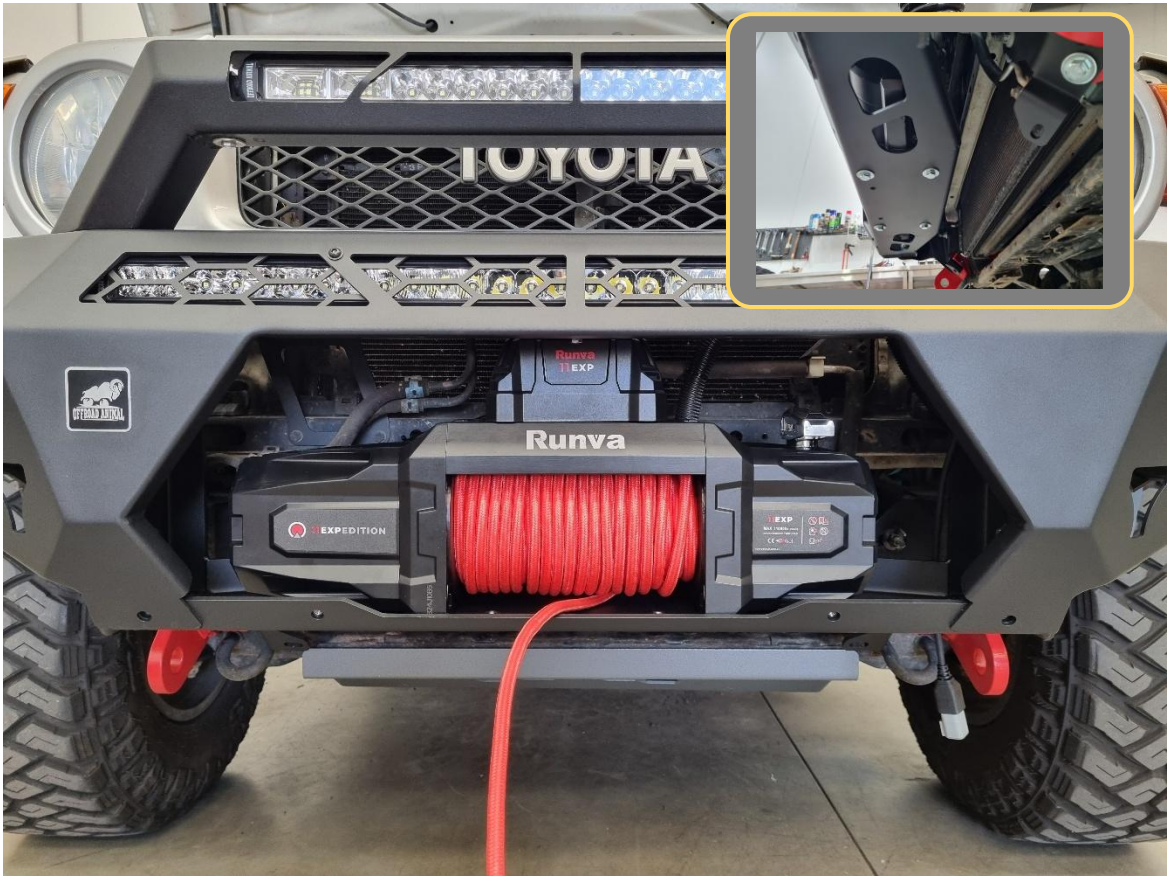
8x 9mm plastic round plugs

TORO BARS ONLY RH DRIVER SIDE SHOWN 	
88. Toro only. If required, fit the supplied antenna mounting brackets to the back of the bar, and secure with 2x M8x30 black button head bolts and black washers, each. 89. Toro only. Else fit the 2x M8x30 black button head bolts and black washers to the back of each bullbar upright, to protect nut threads in bar for future use.	TOOLS REQUIRED 5mm hex/Allen key
	FASTENERS 4x M8x30 black button head bolt 4x M8 black flat washer

	
90. The bull bar is now finally ready to go onto the vehicle. With assistance, either from another person or a lifting trolley, lift the bar onto the mounts on the vehicle.	TOOLS REQUIRED Lifting trolley
	FASTENERS

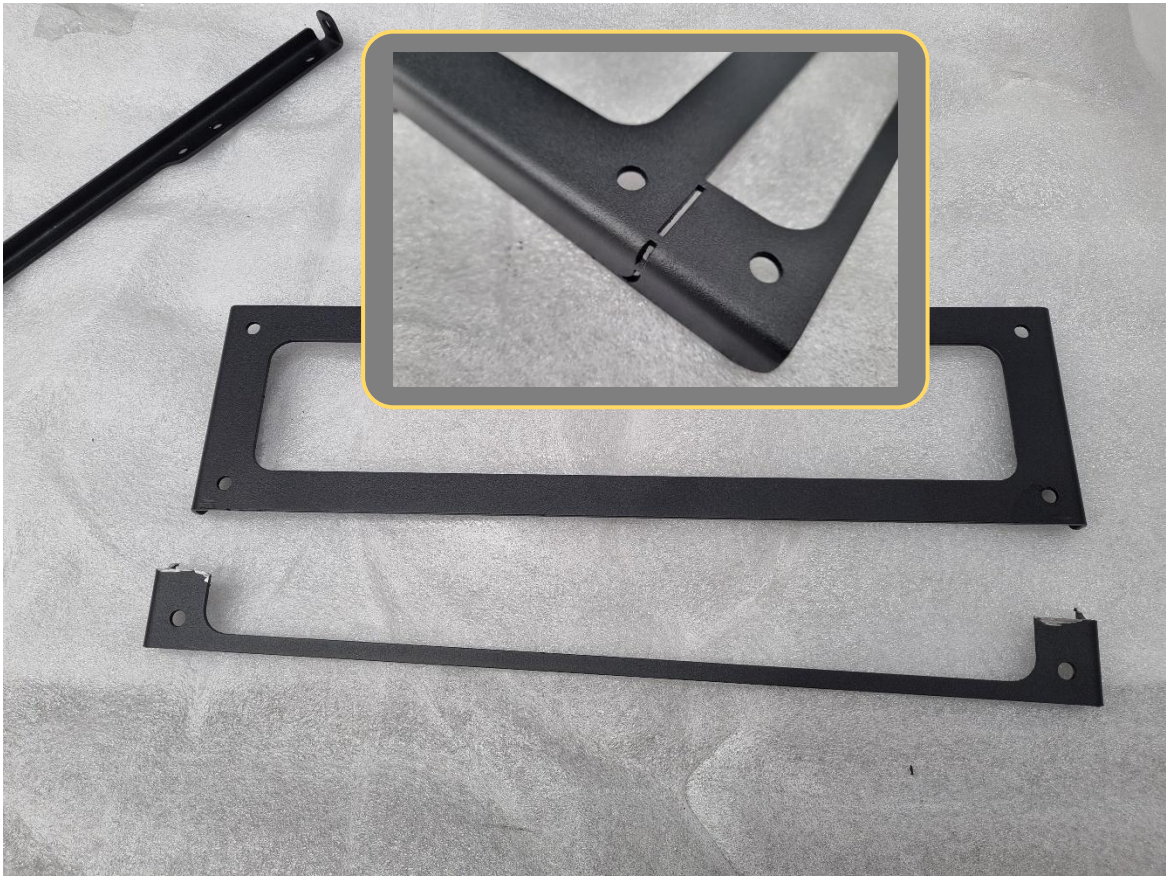
		
91. Secure the bar to the mounts with 8x M12x30 bolts, heavy-duty washers and Nyloc + flange nuts. Leave finger tight at this stage. Note: Use a washer on both bolt and nut side for the Nyloc nut. 1x Nyloc required per side of the bar. 1x washer on the bolt side is all that is required with flange nuts.	TOOLS REQUIRED 18/19mm socket/spanner	
	FASTENERS 8x M12x30 hex bolt 10x M12 heavy duty washer 2x M12 Nyloc nut 6x M12 flange nut	

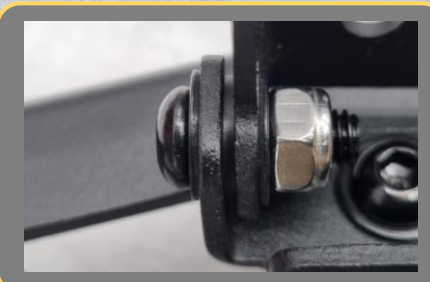
	
92. With assistance, from another person, align the bar with the edges of the vehicle. Adjust such that the clearances are neat, and the bar is symmetric left/right on the vehicle. Front view: The bar should sit horizontally level. The top flat surface of the bar should be exactly in line with the bottom edge of the grille/guard. Side view: The end of the bar wing should be sitting around 15mm in front of the flares. (Not applicable if fitting Predator bar without wing extensions) Top view: There should be around 15mm clearance between the bar and the grille/guard/flares. 93. Once happy with alignment, fully tighten all 8x M12 bolts.	TOOLS REQUIRED Lifting Trolley 18/19mm socket/spanner
	FASTENERS

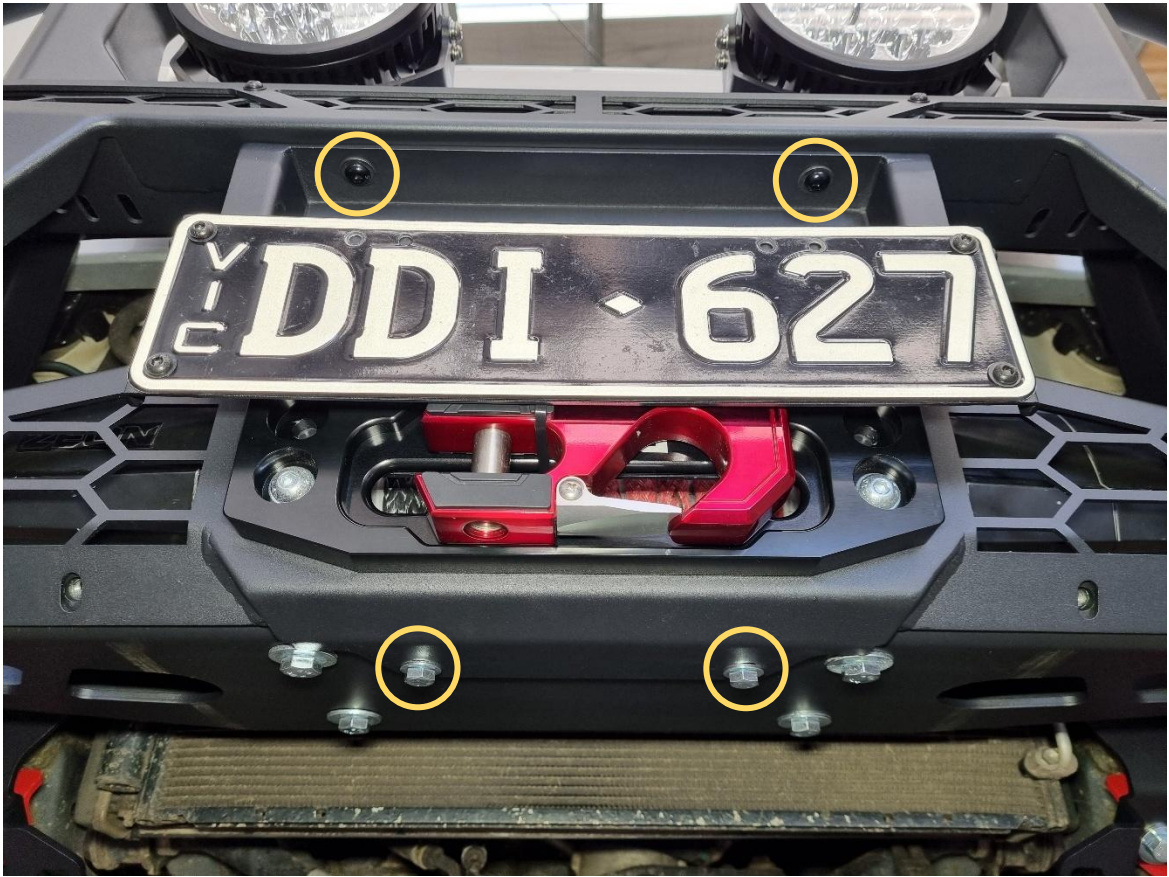
	
94. If fitting a winch, do so now. Lift the winch into the opening at the front of the bull bar. This bar is designed to fit most low mount winches, in foot down configuration. Secure the winch with bolts underneath the cradle. WARN ZEON 12 is the largest winch confirmed to fit. Ensure clutch handle will be accessible through opening in front mesh panel. Refer to winch instructions regarding changing clutch handle location.	TOOLS REQUIRED Refer to instructions supplied by winch
	FASTENERS Supplied with winch

		
95. If fitting a winch, fit the hawse fairlead to the centre mesh now using M10 or 3/8" fasteners supplied with the winch. This bar is only compatible with hawse type fairleads.	TOOLS REQUIRED Refer to instructions supplied by winch	
	FASTENERS Supplied with winch	

	
96. Locate the number plate flip brackets and fastener kit. Fit the base bracket to the centre mesh and secure with 2x M6x16 black button head bolts, black washers and flange nuts. The folded flange is on the bottom.	TOOLS REQUIRED 4mm hex/Allen key
	FASTENERS 2x M6x16 black button head bolt 2x M6 black flat washer 2x M6 flange nut

		
97. The number plate flip bracket is designed to be compatible with both standard and slimline number plates. If fitting to a slimline plate, use an angle grinder to cut the bottom section of the bracket off along the laser cut grooves. 98. Deburr the cut edges, then paint over to prevent rust.	TOOLS REQUIRED Angle grinder Deburring tool Black spray paint	
	FASTENERS	

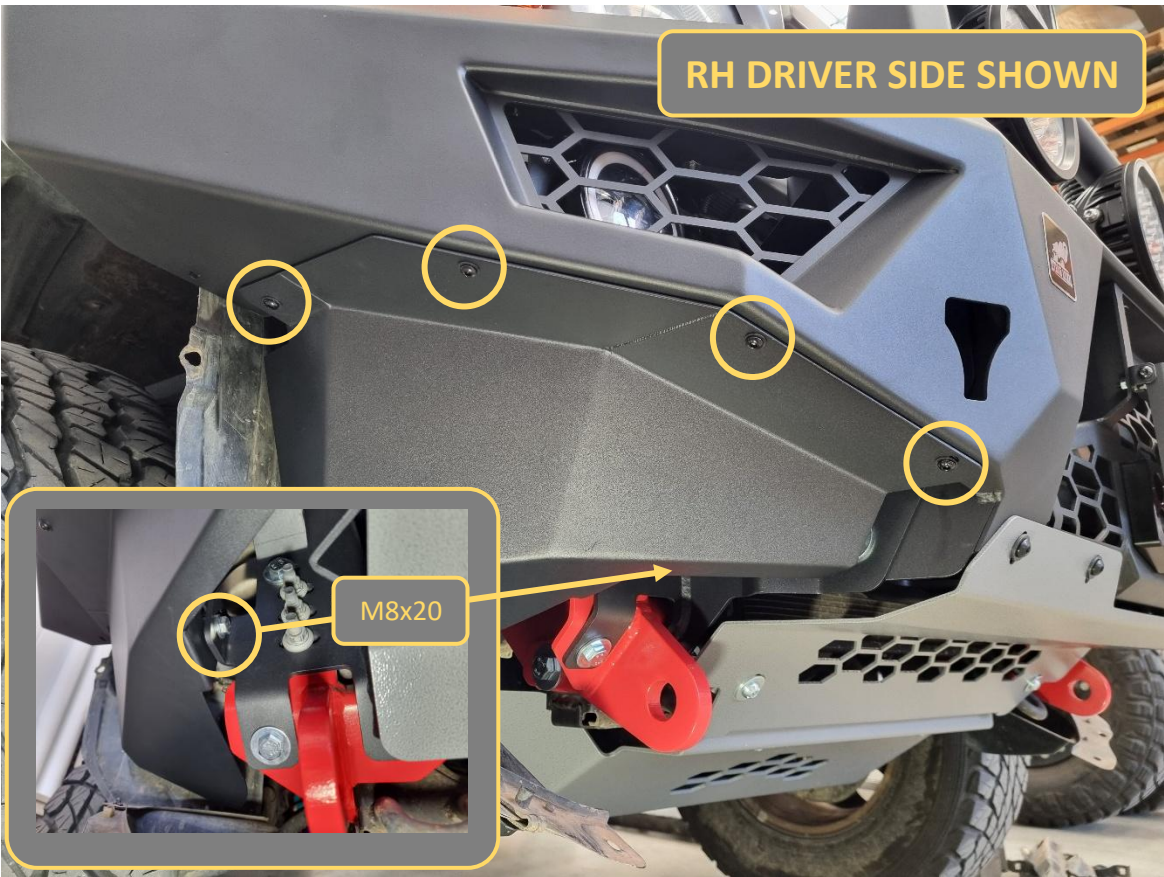
Order left to right: M6x16 black button head bolt M6 black flat washer Number plate flip bracket M6 nylon washer Base bracket M6 black flat washer M6 Nyloc nut   		
99. Fit number plate flip bracket to base bracket as shown above. Tighten bolts so that flip bracket can be moved by hand with some friction resistance. 100. Attach number plate to flip bracket using 4x M6x12 black button head bolts, black washers and flange nuts.	TOOLS REQUIRED 4mm hex/Allen key 10mm spanner	
	FASTENERS 4x M6x12 black button head bolt 2x M6x16 black button head bolt 8x M6 black flat washer 4x M6 flange nut 2x M6 nylon washer 2x M6 Nyloc nut	

	
101. Present the centre mesh up to the centre opening of the bar. If a winch is fitted, feed the winch rope through the hawse fairlead and fit the winch hook. 102. Secure the centre mesh to the bar using 2x M8x16 black button head bolts + black washers (top), 2x M8x20 hex head bolts + flat washers (bottom).	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 flat washer

	
103. Fit the bash plate to the underside of the bar. 104. Secure to the bar at the front with 4x M8x30 black button head bolts and black washers. 105. Secure to the impact assemblies at the rear with 2x M10x30 button head bolts, heavy duty washers and flange nuts.	TOOLS REQUIRED 5mm hex/Allen key 6mm hex/Allen key
	FASTENERS 4x M8x30 black button head bolt 4x M8 black flat washer 2x M10x30 button head bolt 2x M10 heavy duty washer 2x M10 flange nut

	
106. Fit the supplementary bash plate to the underside of the car. 107. Secure to the weld nuts in the chassis with 4x M8x30 button head bolts and flat washers.	TOOLS REQUIRED 5mm hex/Allen key
	FASTENERS 4x M8x30 button head bolt 4x M8 flat washer

	
108. Peel off the backing film and affix the ADR compliance plate to the inside of RH side underpanel. 109. Also fit 1x M8 cage nut to the rectangular slot on each side underpanel, as shown. 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 2x M8 cage nut

		
110. Fit the side underpanels to the underside of the bull bar wings. 111. Loosely secure each one with 4x M6x16 black button head bolts and black washers, plus 1x M8x20 hex bolt, flat washer and flange nut.	TOOLS REQUIRED 4mm hex/Allen key 13mm socket/spanner	
	FASTENERS 8x M6x16 black button head 8x M6 black flat washer 2x M8x20 hex bolt 2x M8 flat washer 2x M8 flange nut	

	
112. Apply masking tape to the wheel arch liner, then mark out a cut line that matches the profile of the side underpanel.	TOOLS REQUIRED Masking tape Marker pen
	FASTENERS

	
113. Cut the wheel arch liners along the marked lines using a utility knife or similar cutting tool. Whilst cutting, pull down on the section to be removed and apply tension, to allow for an easy cut. 114. Clean up the cut edge with a deburring tool or similar.	TOOLS REQUIRED Utility knife Deburring tool
	FASTENERS

		
115. Drill 2x 5mm holes side by side along the bottom of the trimmed wheel arch liner, in approximate position shown.	TOOLS REQUIRED 5mm drill bit Electric drill or Similar	
	FASTENERS	

 LH PASSENGER SIDE SHOWN	
116. Tuck the wheel arch liners inside the back of the side underpanels. 117. Pass 2x cable ties through the drilled holes and secure the wheel arch liner to the holes in the bottom of the side underpanel. Do this for both sides. 118. Fully tighten the side underpanels.	TOOLS REQUIRED Side cutters 4mm hex/Allen key 13mm socket/spanner
	FASTENERS Cable ties (not supplied)

TORO BARS ONLY RH DRIVER SIDE SHOWN 	
119. Toro only. Fit 2x M6 cage nuts to the rectangular slots on the inside of the B-1525 splash guard covers. To aid fitting, use a small flat blade screwdriver to push the edge of the cage nut to engage with the slot. 120. Toro only. Fit the B-1525 splash guard covers to the back of the bull bar wing, and secure each one with 2x M6x16 black button head bolts and black washers. 121. The fitment is now complete. Double check all fasteners are done up.	TOOLS REQUIRED 4mm hex/Allen key Flat blade screwdriver
	FASTENERS 4x M6x16 black button head 4x M6 black flat washer



Congratulations! You're done! Go hit the tracks in your tough looking FJ!