Ford Ranger Super Duty (P703 2026-on)
Predator & Toro 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.

GENERAL CARE AND MAINTENANCE

Use caution when cleaning with pressure washers, as they may compromise the product coating's integrity. Exercise care to avoid surface damage.

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

Do not use acidic or alkaline based cleaning products.

Plastic parts may be maintained with silicone spray.

It is important to perform regular checks (pre/during/post trip or on an annual basis) on the installed product. More frequent checks may be required in extreme use cases. 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.

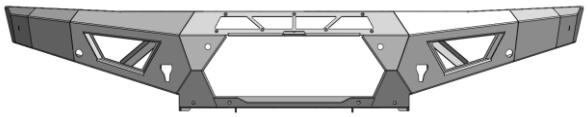
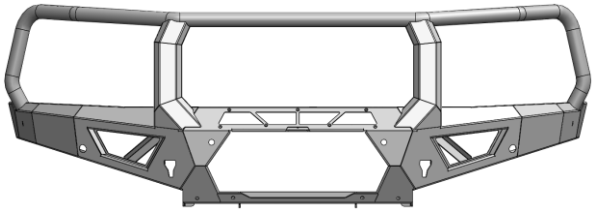
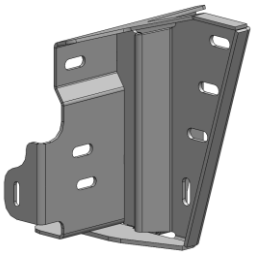
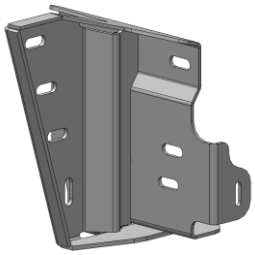
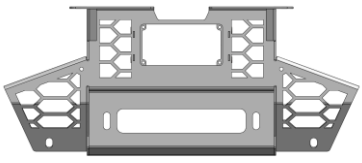
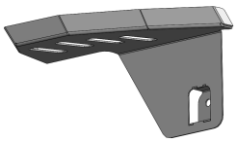
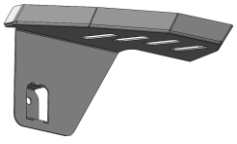
FRONT BAR MOUNTS AND TOW POINTS + REAR TOWBAR	
Size	**Torque Nm**
M10	57 Nm
M12	100 Nm
M14	164 Nm
M16	248 Nm

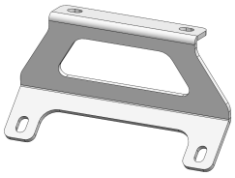
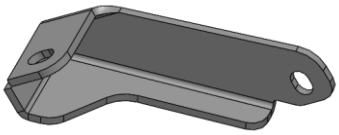
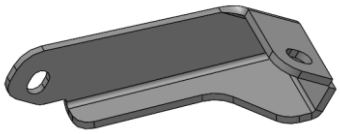
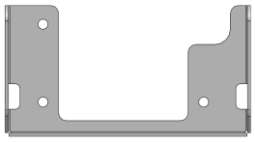
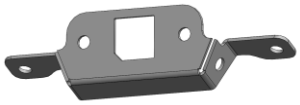
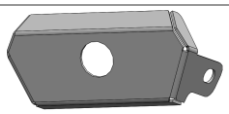
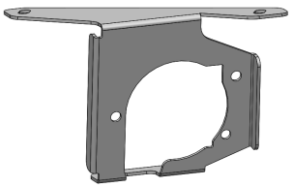
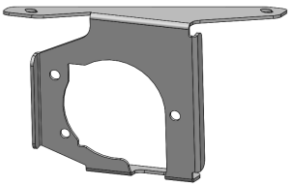
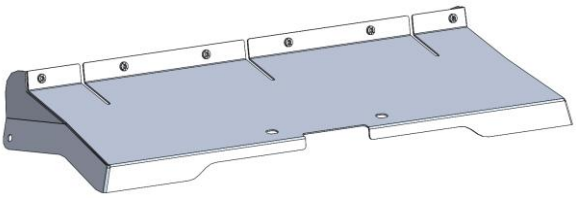
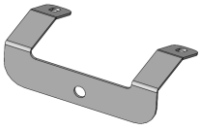
Always use a torque wrench to set correct torque settings. Ensure torque wrench is set to Nm unit of measurement. Otherwise perform conversion to lb-ft.

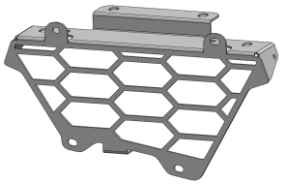
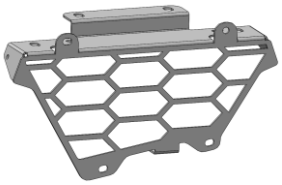
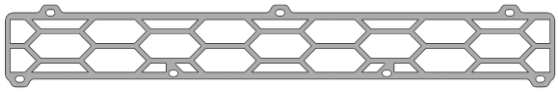
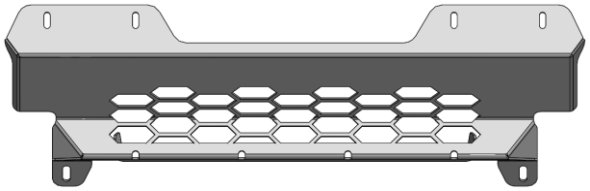
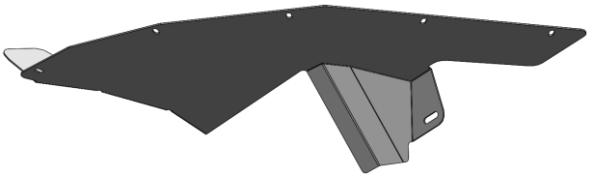
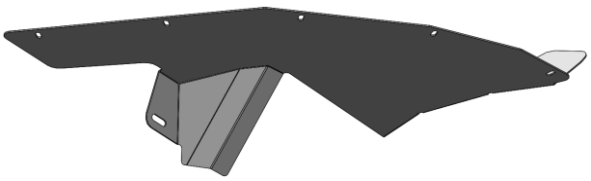
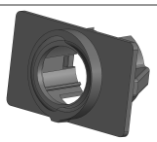
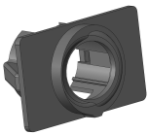
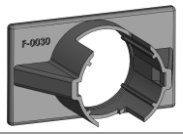
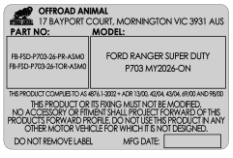
PARTS LISTING

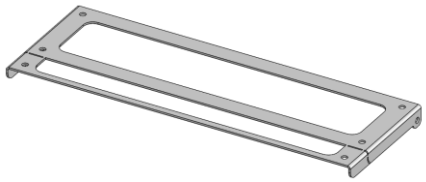
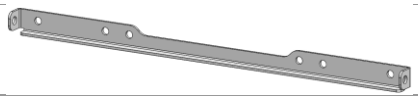
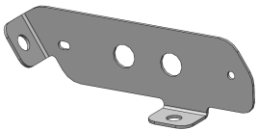
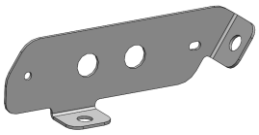
IMPORTANT: Check all parts are present before beginning work! Contact OFFROAD ANIMAL if something is missing.

Main Parts – In the Box

Qty	Part Number	Description	Image
1	FB-FSD-P703-26-PR-ASM1	P703 Ranger Super Duty Predator Bar Welded Assembly	
		OR	
1	FB-FSD-P703-26-TOR-ASM1	P703 Ranger Super Duty Toro Bar Welded Assembly	
1	FB-FSD-P703-26-PR-ASM2R	P703 Ranger Super Duty Impact Assembly RH	
1	FB-FSD-P703-26-PR-ASM2L	P703 Ranger Super Duty Impact Assembly LH	
1	FB-FSD-P703-26-PR-ASM4	P703 Ranger Super Duty Mesh Fairlead Welded Assembly	
1	FB-FSD-P703-26-PR-ASM6R	P703 Ranger Super Duty Flare Endcap RH	
1	FB-FSD-P703-26-PR-ASM6L	P703 Ranger Super Duty Flare Endcap LH	

1	B-1406	LC100/105 Pan Brace	
2	B-1818R	P703 Ranger Super Duty Chassis Brace	
2	B-1818L	P703 Ranger Super Duty Chassis Brace	
1	B-1819	P703 Ranger Radar Mount	
1	B-1820	P703 Ranger Super Duty Camera Mount	
1	B-1821	P703 Ranger Super Duty Camera Clamp	
1	B-1823	P703 Ranger Super Duty Camera Cover	
1	B-1824R	P703 Ranger Super Duty Fog Light Bracket (3 Bolt) RH	
1	B-1824L	P703 Ranger Super Duty Fog Light Bracket (3 Bolt) LH	
1	B-1834	P703 Ranger Super Duty Intercooler Air Guide	
1	B-1835	P703 Ranger Super Duty Intercooler Air Guide Centre Support	

1	M-0087R	P703 Ranger Super Duty Wing Mesh RH	
1	M-0087L	P703 Ranger Super Duty Wing Mesh LH	
1	P-0515	22" Lightbar Mesh Infill Plate	
1	U-0135	P703 Ranger Super Duty Bash Plate	
1	U-0136R	P703 Ranger Super Duty Side Underpanel RH	
1	U-0136L	P703 Ranger Super Duty Side Underpanel LH	
1	F-0013R	Ford Ranger Next Gen Sensor Holder - 11 Deg Vertical RH	
1	F-0013L	Ford Ranger Next Gen Sensor Holder - 11 Deg Vertical LH	
2	F-0030	Parking Sensor Holder - Universal, Flat	
1	FB-FSD-P703-26-PR-ADRCP	ADR Compliance Plate Ford Ranger Super Duty P703	
4	Fir Tree Clip 4.5mm Hole	Fine-rib push-in rivet, WURTH 0500827023	

1	N-0027	P703 Ranger Plastic Radar Cover	
1	TK-COM-PSEN-4	Tape Kit - 4 Sensor Universal	N/A
NUMBER PLATE FLIP ASSEMBLY (NPF-COM-LGE-ASM0)			
1	B-1446	Number Plate Flip - Large	
1	B-1458	Number Plate Flip Base	
INDICATOR REPEATER PARTS			
1	B-1827R	P703 Ranger Super Duty Indicator Repeater Clamp Bracket RH	
1	B-1827L	P703 Ranger Super Duty Indicator Repeater Clamp Bracket LH	
1	B-1828R	P703 Ranger Super Duty Indicator Repeater Housing RH	
1	B-1828L	P703 Ranger Super Duty Indicator Repeater Housing LH	
2	P-0544	P703 Ranger Super Duty Indicator Repeater Shim Plate - Main	
1	11CAT1M-2	LED Autolamps 11CAT1M-2 Front Indicator - Twin Blister Pack	
TORO ONLY			
1	B-1830R	P703 Ranger Super Duty Toro Antenna Bracket RH	
1	B-1830L	P703 Ranger Super Duty Toro Antenna Bracket LH	

Fasteners – Contained in Small Parts Kit Bag

Qty	Part Number	Description
4	M3X16 PAN	SCREW, PAN HEAD PHILLIPS, M3X16X0.5 GR4.6 ZP
4	M3 FLAT WASHER	Flat Washer M3, 7mmODx0.5mm T
4	M3 NYLOC	NYLOC SELF LOCKING NUT, ST STL A2 ISO
6	M4 X 10 HEX	M4X10 HEX BOLT, ZP, 4.6
6	M4 FLAT WASHER	Flat Washer M4, 8mmODx0.8mm T
14	M6 X 12 HEX	M6X12 HEX BOLT, ZP, 8.8
3	M6 X 20 HEX	M6X20 HEX BOLT, ZP, 8.8
12	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
7	M6 X 12 CSK BZP	SCREW, COUNTERSUNK CAP, M6X12X1 Black ZP
2	M6 X 16 PAN POZI THREAD FORMING SCREW BLACK ZINC	DIN 7500 PLASTIC THREAD FORMING SCREW, PAN POZI, M6X16, ISO4042 ZnNi BLACK PASSIVATED FINISH
17	M6 FLAT WASHER	M6 FLAT WASHER
38	M6 FLAT WASHER BLACK ZINC	M6 Flat Washer, 12x6.1x1, ISO4042 ZnNi BLACK PASSIVATED FINISH
36	M6 FLANGE NUT	Flange Nut, M6x1 G8.8 ZP
2	M6CN2MM	CAGE NUT M6x1.6-2.5
10	M6CN3MM	CAGE NUT M6x2.6-3.5
2	M8 X 20 HEX	Bolt Hex, M8X20x1.25, GR8.8 ZP
2	M8 X 16 BHCS BZP	SCREW, BUTTON HEAD CAP, M8X16X1.25 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
2	M8 X 20 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M8X20X1.25, ISO4042 ZnNi BLACK PASSIVATED FINISH
4	M8 X 30 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M8X30X1.25, ISO4042 ZnNi BLACK PASSIVATED FINISH
2	M8 HD FLAT WASHER	M8 FLAT WASHER - High Tensile 19x8x1.9mm
8	M8 HD FLAT WASHER - BZP	M8 FLAT WASHER - High Tensile 19x8x2mm, ISO4042 ZnNi BLACK PASSIVATED FINISH
2	M8 FLANGE NUT	Flange Nut, M8x1.25 G8.8 ZP
2	M10 x 25	Bolt Hex, M10X25x[1.5], GR8.8 ZP
4	M10 X 40	Bolt Hex, M10X40X1.5, GR8.8 ZP
2	M10 X 100	Bolt Hex, M10X100X1.5, GR8.8 ZP
8	M10 FW LHD	WASHER, FLAT M10X28.5X2.5
8	M10 FLANGE NUT	Flange Nut, M10x1.5 G8.8 ZP
4	M12X30	Bolt Hex, M12X30x1.75, GR8.8 ZP
4	M12X40	Bolt Hex, M12X40X1.75, GR8.8 ZP
8	M12X30x1.25 G10.9	Bolt Hex, M12X30x1.25, GR10.9 ZP
18	M12 FW LHD	M12 FW Large Heavy Duty
8	M12 FLANGE NUT	Flange Nut, M12x1.75 G8.8 ZP
6	M12x1.25P FLANGE NUT	Flange Nut, M12x1.25 G10.9 ZP
2	M12x1.25P NYLOC NUT	NYLOC NUT, M12x1.25 G10.9 ZP
8	P-0551	P703 Ranger Super Duty Impact Assembly Spacer 6mm
2	T-0174	Crush Tube 60mm L, 16mm OD x 1.6 WT

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

TORO ANTENNA Fasteners – Contained in Small Parts Kit Bag

Qty	Part Number	Description
4	M8 X 20 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M8X20X1.25, ISO4042 ZnNi BLACK PASSIVATED FINISH
4	M8 HD FLAT WASHER - BZP	M8 FLAT WASHER - High Tensile 19x8x2mm, ISO4042 ZnNi BLACK PASSIVATED FINISH

TOOLS REQUIRED

The following tools will be required to install the product.

Hand Tools	Power Tools	Workshop Equipment
Metric Socket Set 5.5-19mm	Electric/Air Impact Driver (Optional)	Panel Stand or Soft Blanket
Socket Extension Bar	Electrical/Air Drill	Lifting Trolley
Metric Spanner Set 5.5-19mm	Air Hacksaw or Jigsaw or Multi-tool	Isopropyl Alcohol
Hex (Allen) Key Set 4-6mm	Angle Grinder	Rag
T25 Torx bit		Cable Ties
Trim Removal Tool		Marker Pen
Plastic Auto Trim Tool Set		Ruler
Flat Blade Screwdriver Set		Measuring Tape
Phillips Head Screwdriver Set		Masking Tape
Utility Knife		Sikaflex Adhesive
Side Cutters		Bucket
Pliers		Digital angle gauge
Hose Line Clamp		Black spray paint
Deburring Tool		
2mm/5mm/6mm/7mm Drill Bits		

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.

WARNING

DO NOT turn on or move car whilst any camera or radar systems are disconnected.

Failure to observe this precaution will result in system errors that will need car to be taken to Ford Dealership to resolve.

Keep proximity keys away from vehicle and out of range to minimise the chances of computers activating whilst modules are disconnected.

1. Remove number plate and set aside.

TOOLS REQUIRED

Phillips head screwdriver

FASTENERS

2x screws

Discard

2. Remove 8x plastic push clips holding the top of the plastic bumper trim.

   Use a flat blade screwdriver or trim tool to release the clips.

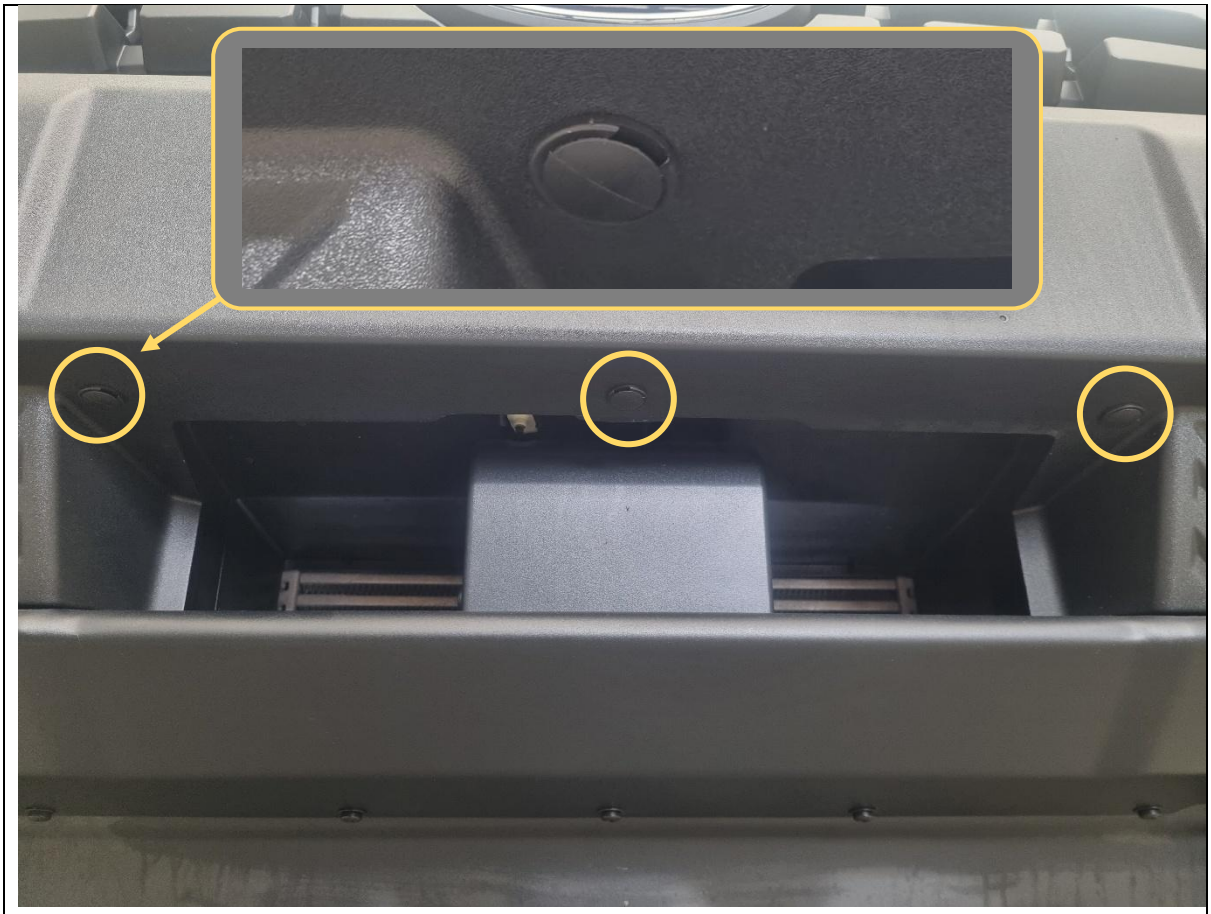
TOOLS REQUIRED

Flat blade screwdriver
or
Trim Tool

FASTENERS

8x push clips

Discard



3. Remove 3x plastic push clips holding the bottom of the plastic bumper trim.

   Use a flat blade screwdriver or trim tool to release the clips.

   Retain 1x clip for re-use.

TOOLS REQUIRED

Flat blade screwdriver
or
Trim Tool

FASTENERS

3x push clips

Retain 1x

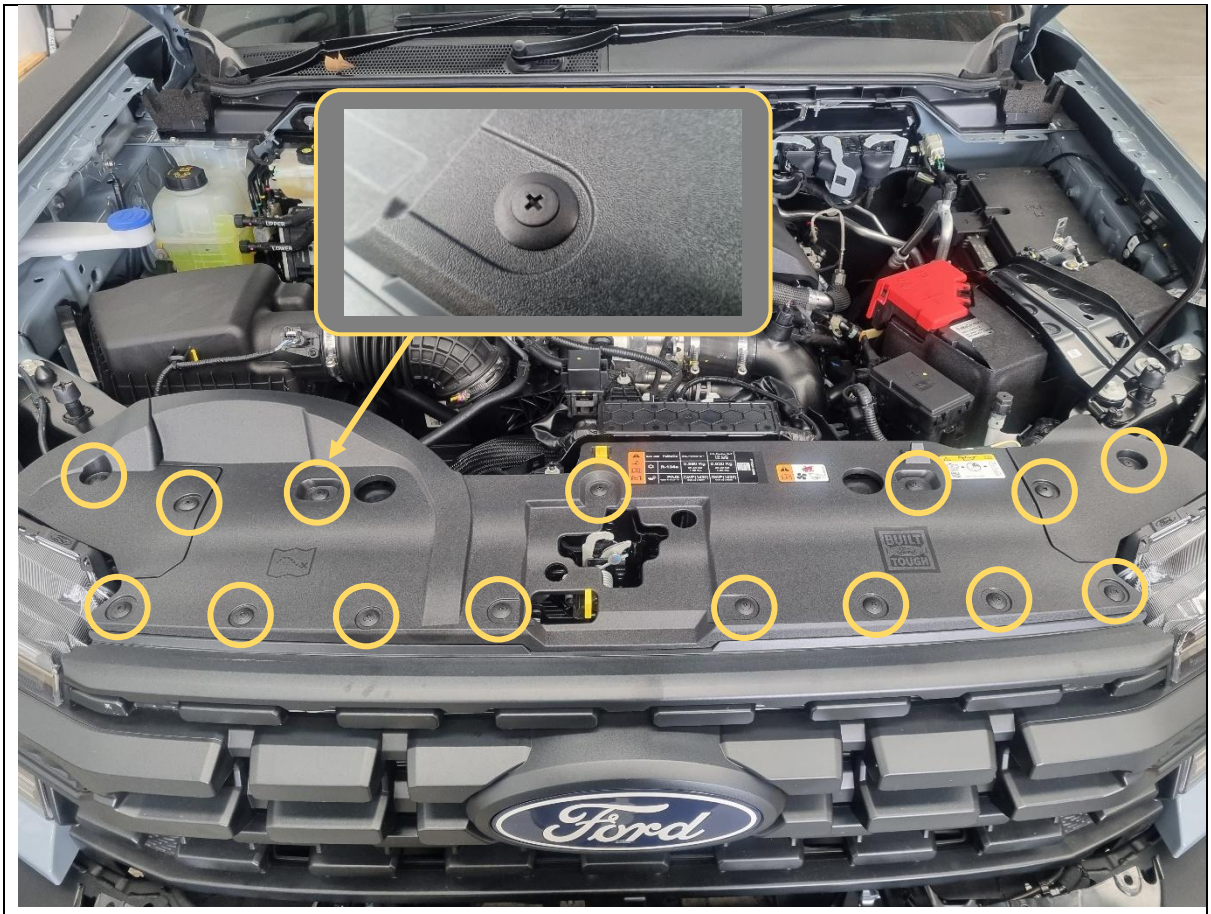
4. Start from both outer ends and pull the plastic bumper trim outwards to release the clips holding it to the vehicle.

5. Disconnect the parking sensor harness on the LH passenger side from the main bumper harness.

6. Set the plastic bumper trim aside for removing/relocating parking sensors later.

TOOLS REQUIRED

FASTENERS



7. Open the bonnet. The bonnet release handle is on the LH passenger side.

8. Remove 15x scrivets holding the radiator top cover and set aside.

   Use a Phillips head screwdriver to unscrew the head of the scrivet, then use a flat head screwdriver or trim tool to lift up and remove the scrivet.

TOOLS REQUIRED

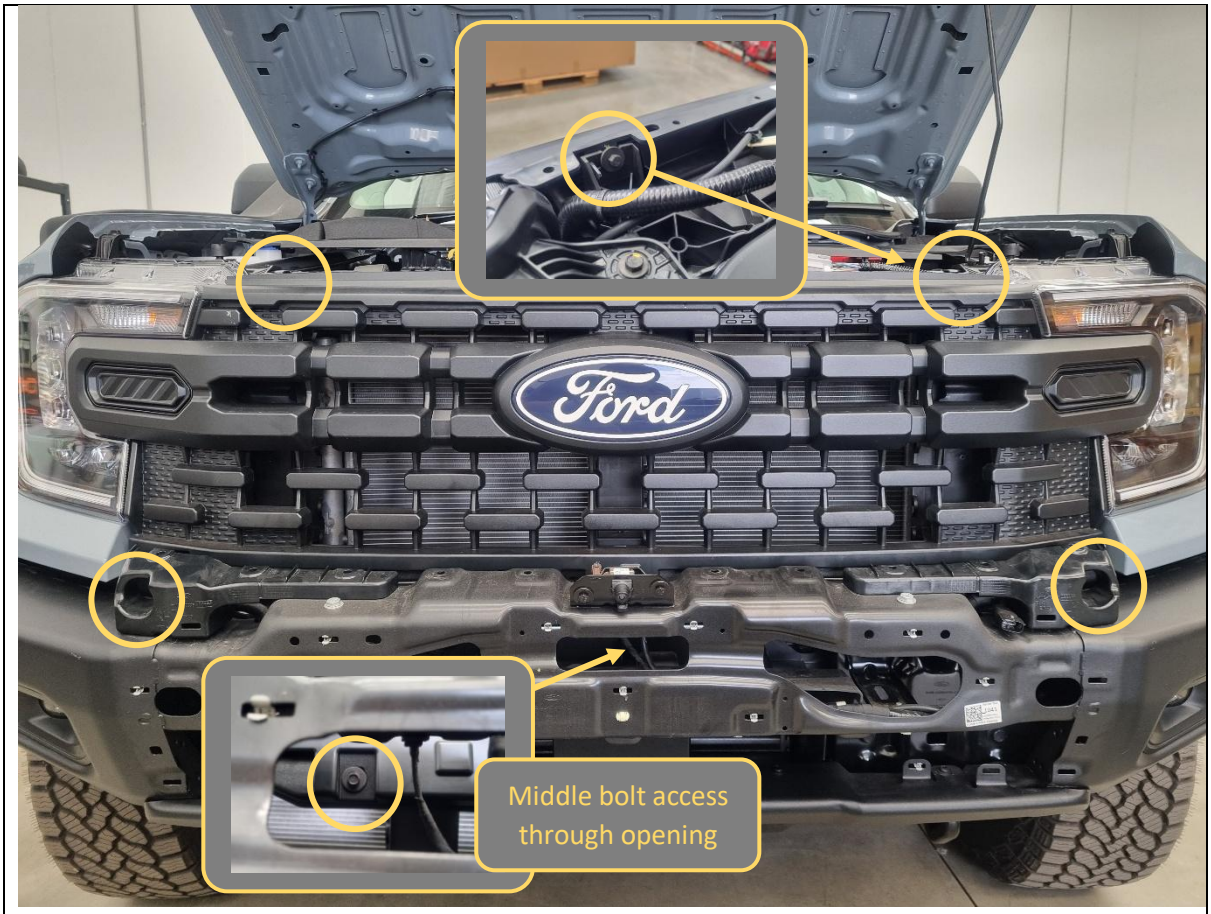
Phillips head screwdriver

Flat head screwdriver
or
Trim tool

FASTENERS

15x scrivets

Retain



9. Remove 5x 8mm hex bolts (2x top, 3x bottom) holding the grille.

   A socket extension is required for the bottom 3x bolts.

TOOLS REQUIRED

8mm socket/spanner
Socket extension bar

FASTENERS

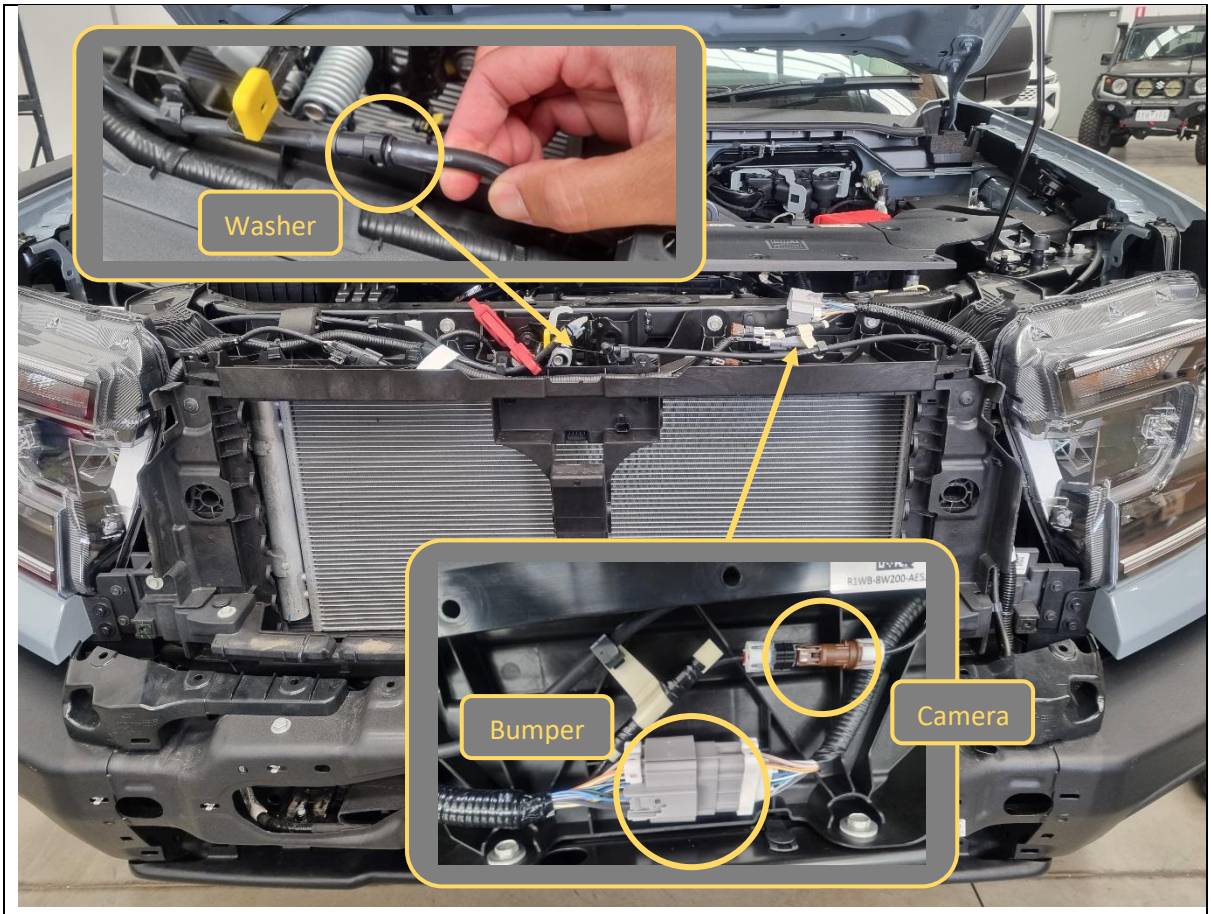
5x factory 8mm hex bolt

Retain

10. Start from the outer corners and firmly pull the grille outwards to release the clips holding it to the vehicle. Set aside in a safe place.

TOOLS REQUIRED

FASTENERS



11. Disconnect the main bumper harness and camera harness at the top.

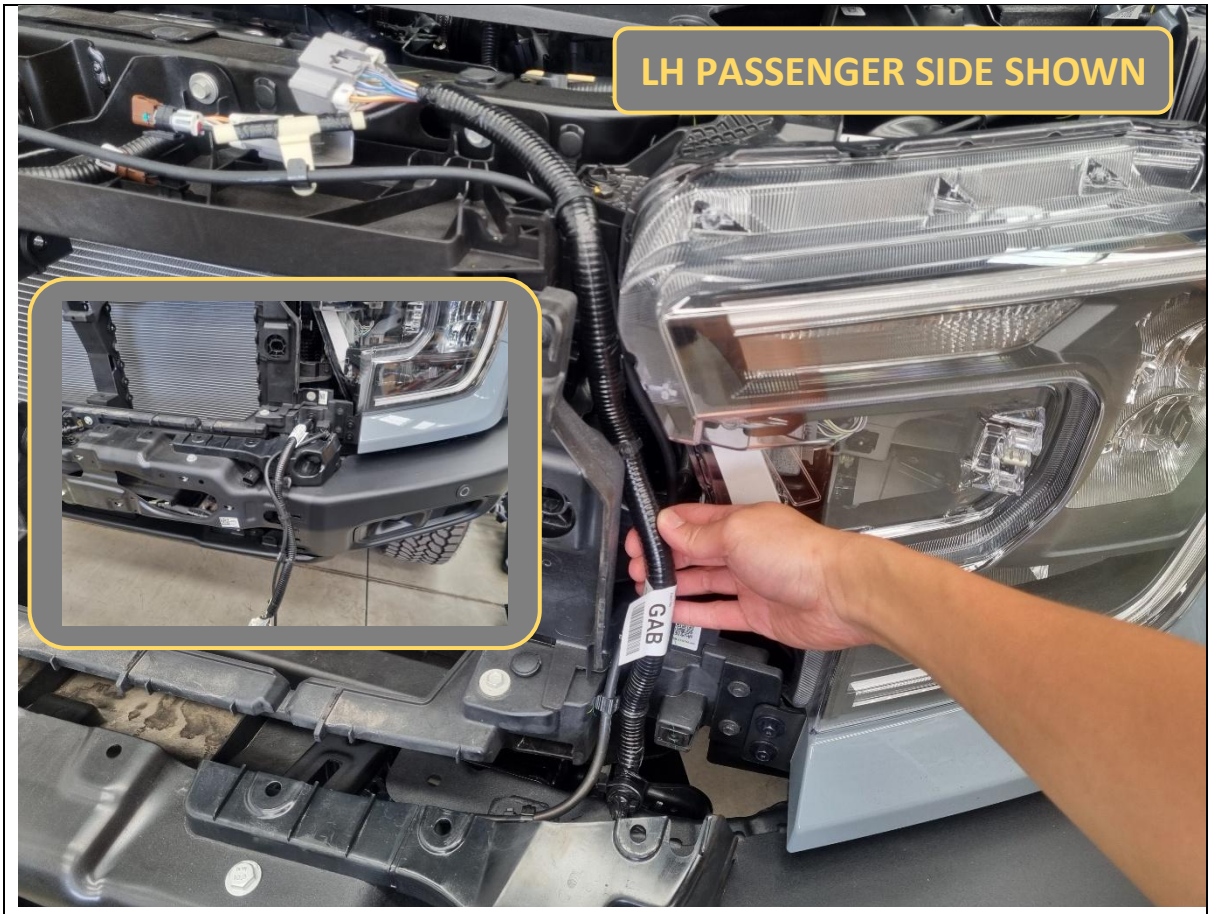
12. Either clamp the camera washer hose either side of the connector with cable ties and/or hose line clamps, or place a bucket underneath to let washer fluid drain out (this needs to be re-filled at the end, see maintenance section of Ford owner's manual).

13. Disconnect the camera washer hose.

TOOLS REQUIRED

Cable ties
or
Hose line clamp
or
Bucket

FASTENERS

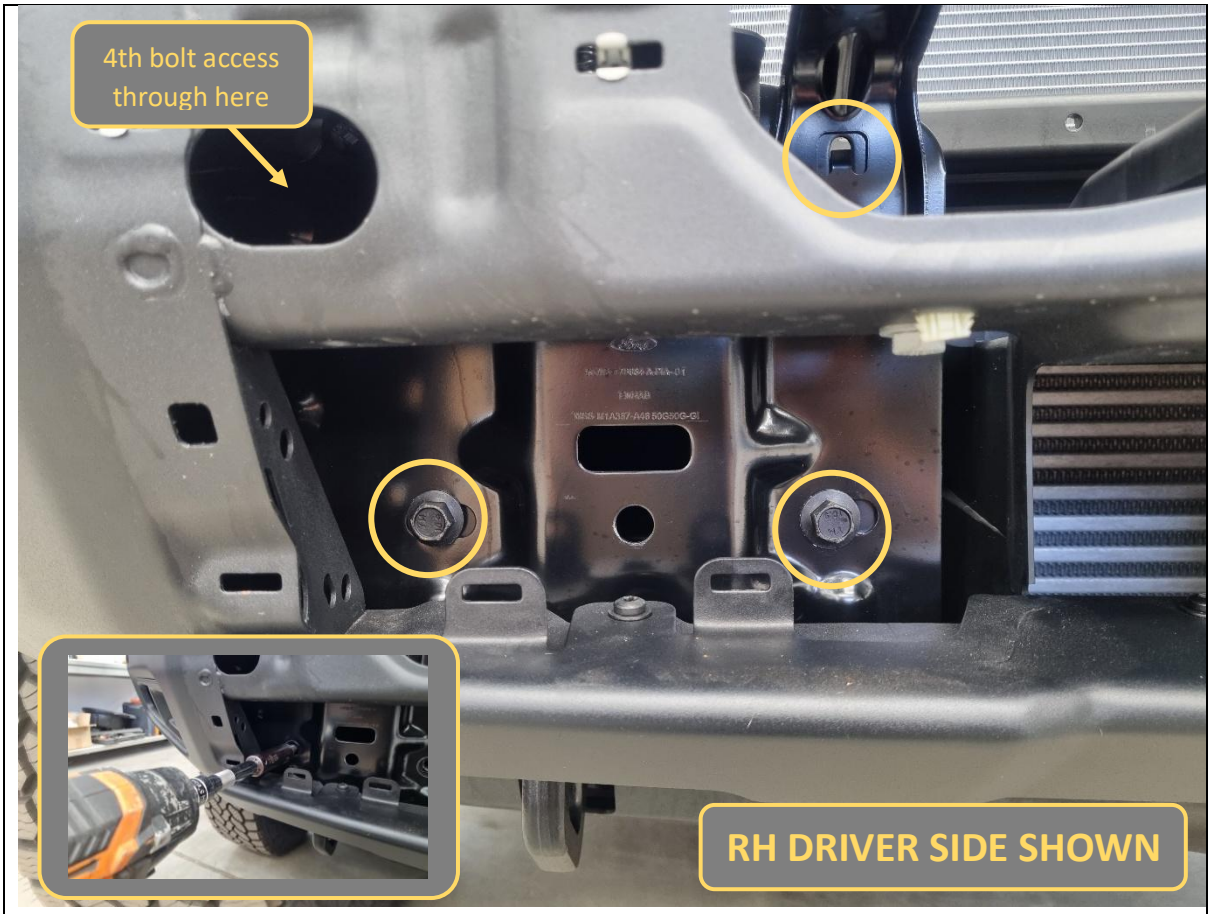


14. Unclip the bumper/camera harness and washer hose from the vehicle all the way down on the LH passenger side until you reach the steel bumper.

TOOLS REQUIRED

Trim tool

FASTENERS



15. Remove 8x 15mm hex bolts (4x per side) holding the steel bumper to the chassis.

    A socket extension bar is required.

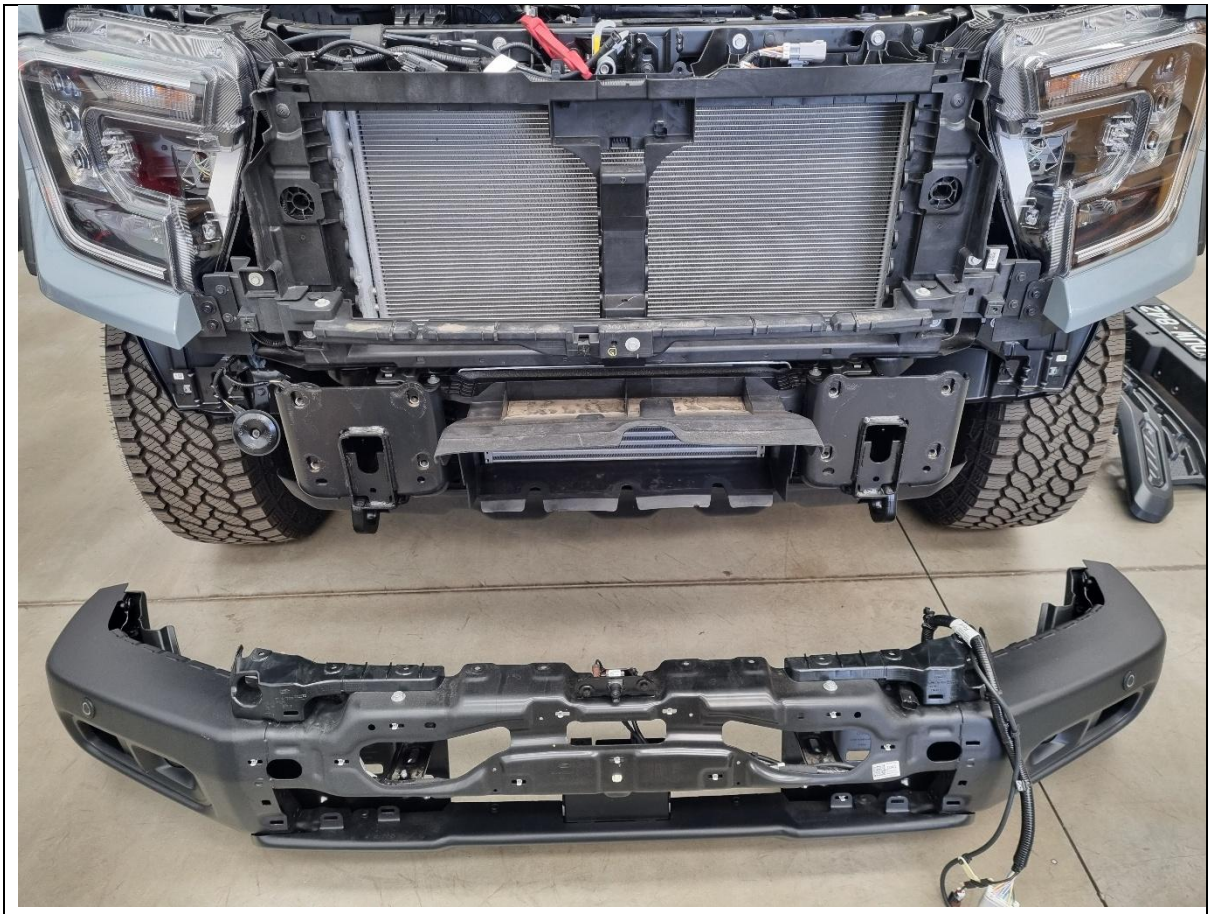
TOOLS REQUIRED

15mm socket
Socket extension bar

FASTENERS

8x factory 15mm hex bolts

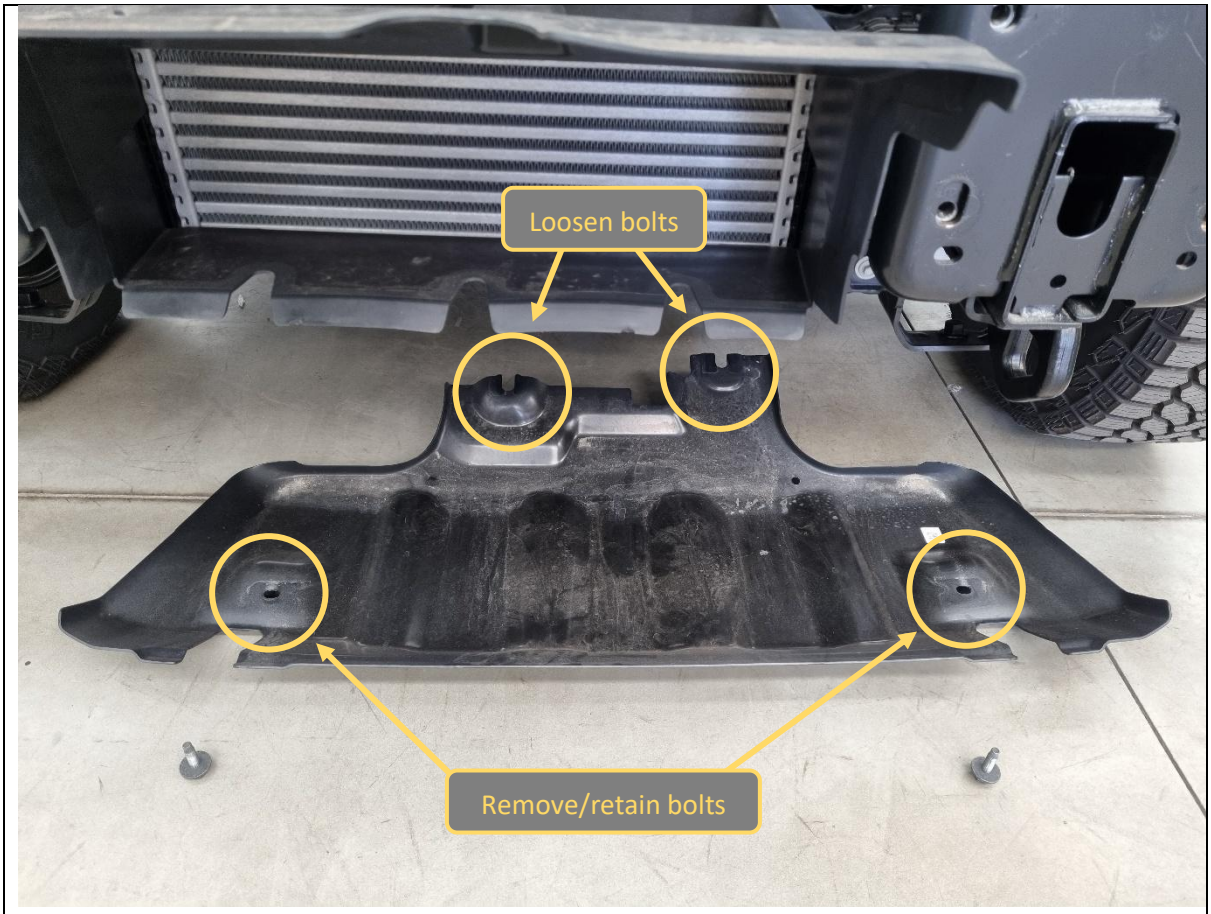
Discard



16. Remove the steel bumper and set aside.

TOOLS REQUIRED

FASTENERS



17. Remove 2x 15mm hex bolts holding the front of the factory bash plate.

    Retain these bolts.

18. Loosen 2x 15mm hex bolts holding the rear of the factory bash plate.

19. Slide the factory bash plate out and set aside for later.

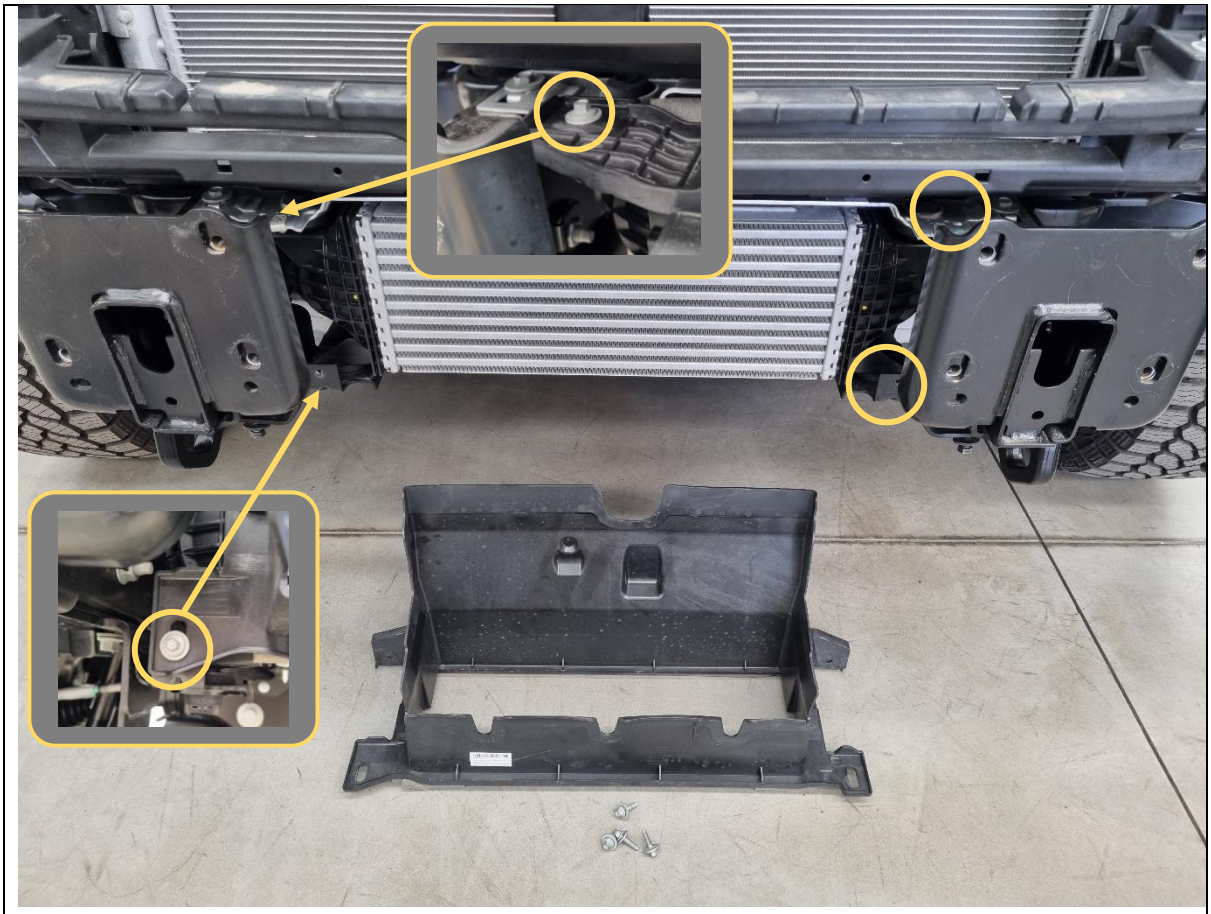
TOOLS REQUIRED

15mm socket/spanner

FASTENERS

2x factory 15mm hex bolt

Retain



20. Remove 4x 8mm hex bolts holding the intercooler shroud.

21. Remove shroud and set aside. Retain bolts.

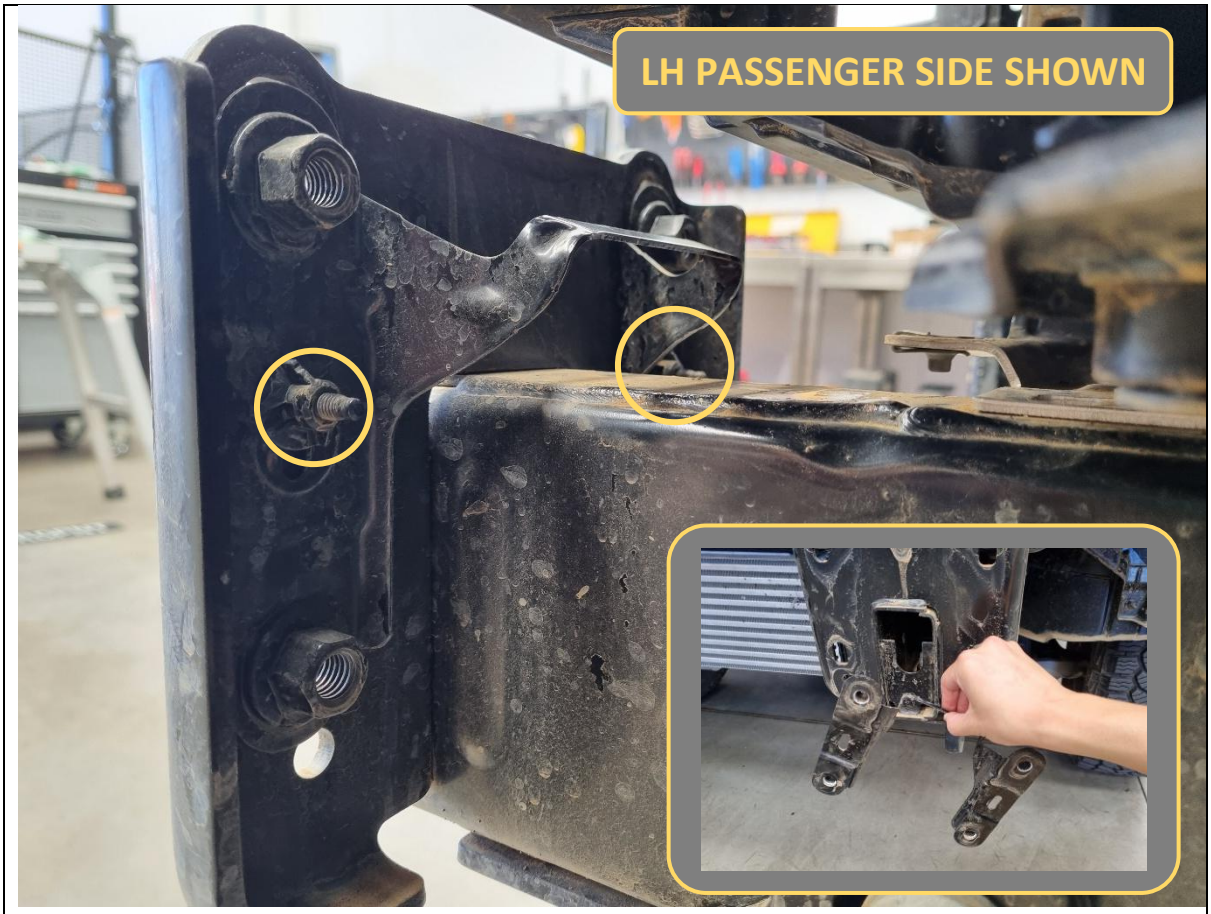
TOOLS REQUIRED

8mm socket/spanner

FASTENERS

4x factory 8mm hex bolt

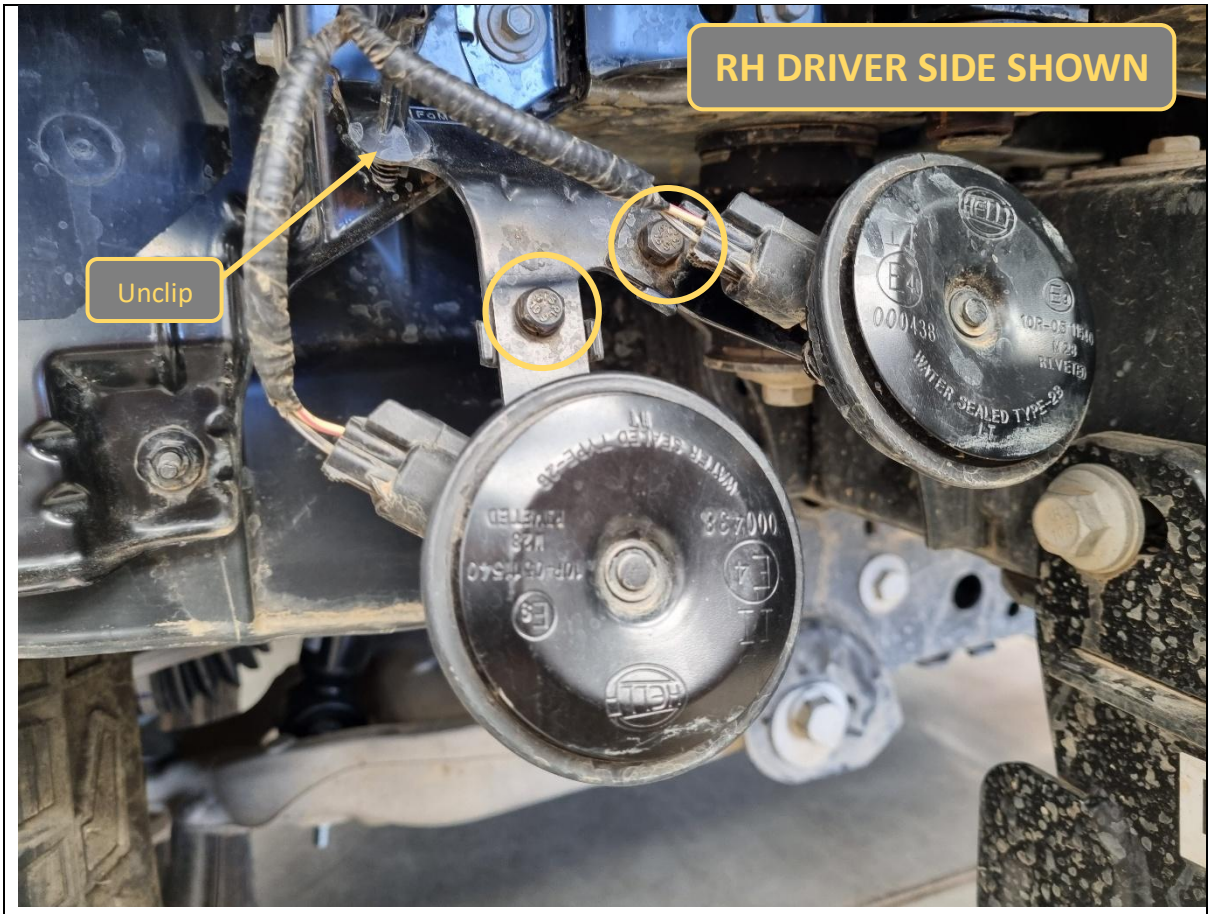
Retain



22. Remove 2x wing nuts holding each of the nut plates behind the chassis horn. Discard the nut plates.

TOOLS REQUIRED

FASTENERS



23. On the RH driver side, remove 1x 10mm hex bolt and nut holding each of the horns. Let the horns hang loose and discard the fasteners.

    Note: You may need to disconnect one of the horns for tool access.

24. Also unclip the horn loom from the mounting bracket (see arrow).

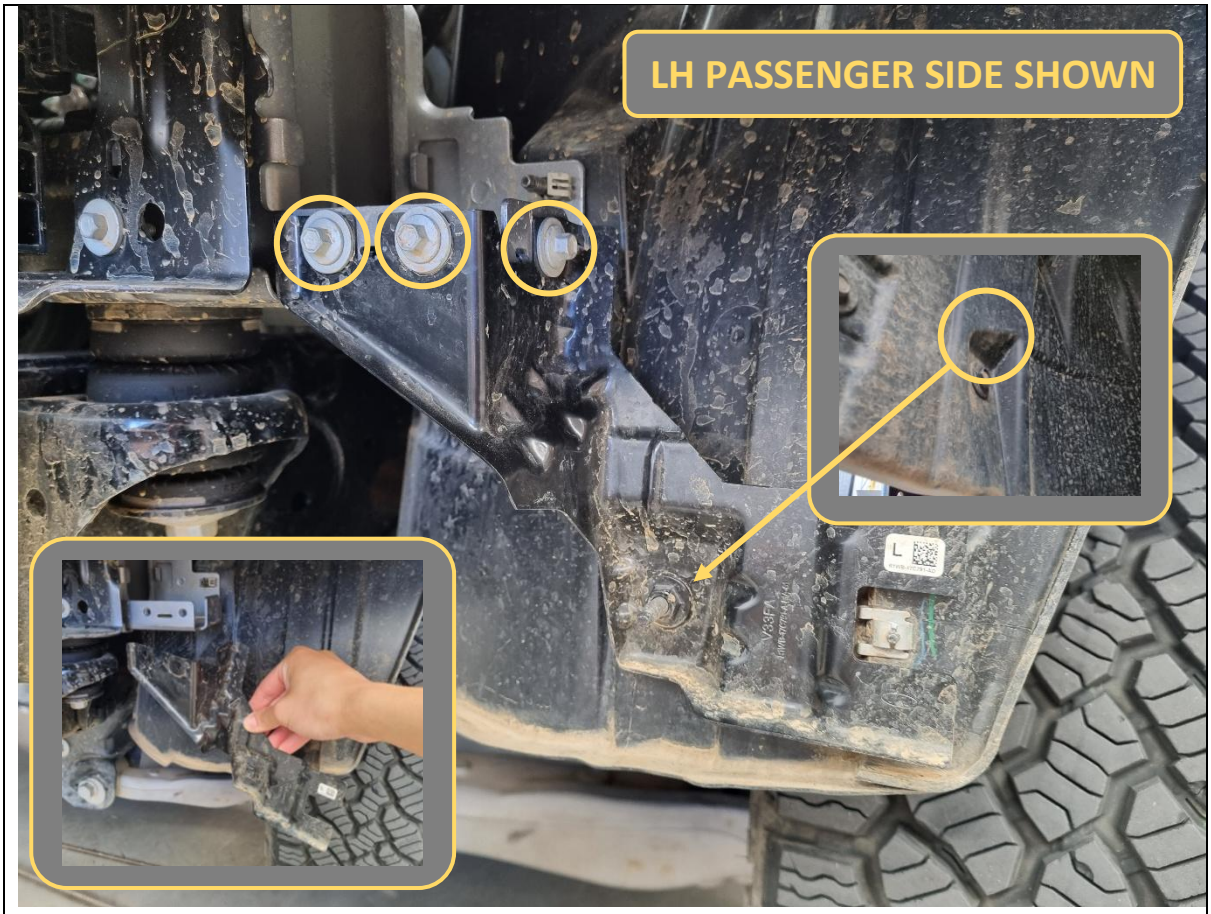
TOOLS REQUIRED

10mm socket/spanner

Trim tool
or
Flat blade screwdriver

FASTENERS

Discard



25. Remove 3x 8mm hex bolts and 1x 10mm hex bolt holding each wheel arch liner support bracket.

26. Keep the 8mm hex bolts and discard the bracket + 10mm hex bolts.

TOOLS REQUIRED

8mm socket/spanner
10mm socket/spanner

FASTENERS

6x factory 8mm hex bolt
Retain

2x factory 10mm hex bolt
Discard

27. Flip the horns upside down from original orientation and re-mount them to where the wheel arch liner support bracket was bolted to with the 8mm factory hex bolts.

28. Fit the remaining 8mm hex bolts into any leftover wheel arch liner support bracket holes on both sides.

TOOLS REQUIRED

8mm socket/spanner

FASTENERS

6x factory 8mm hex bolt

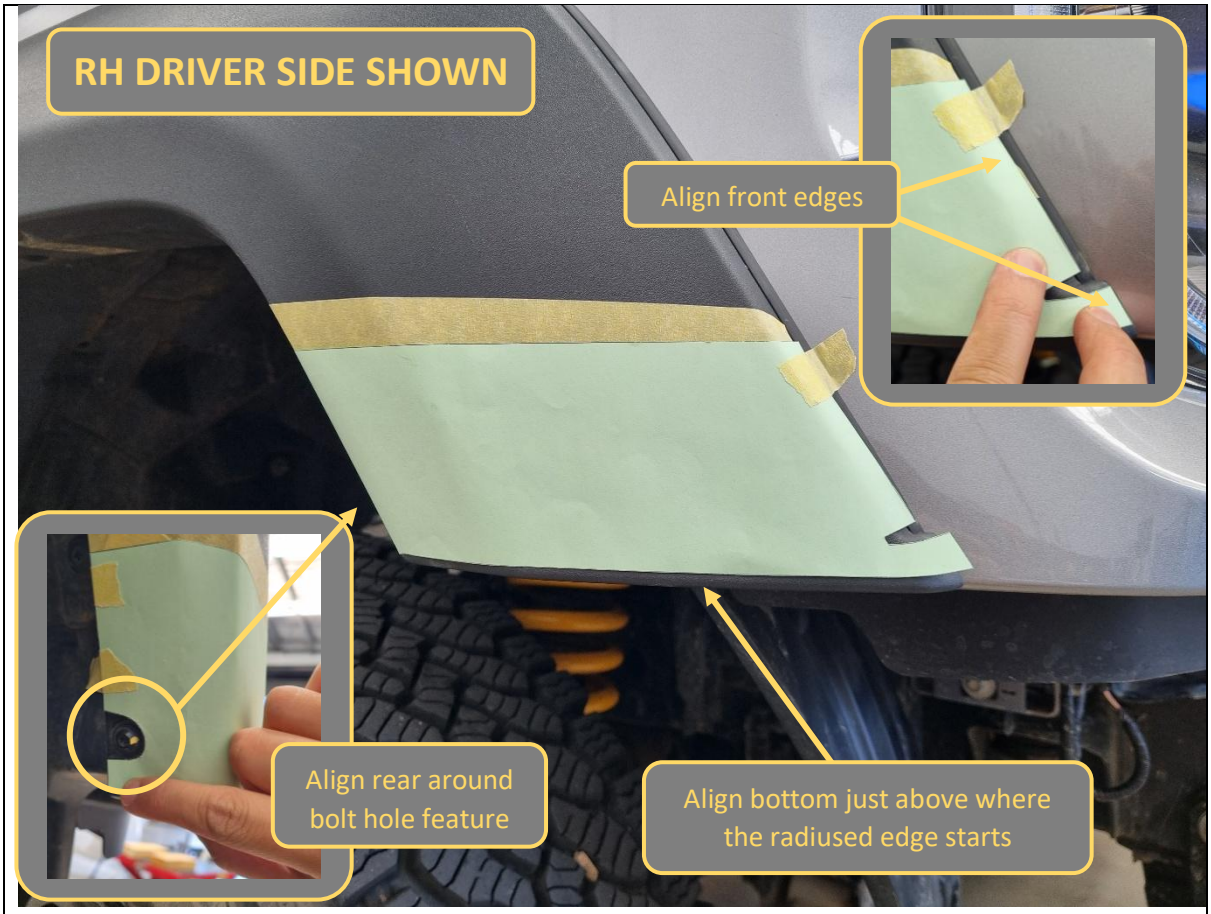
Retained from Step 25

29. The front of the flares needs to be trimmed. Apply masking tape over the approximate area shown.

TOOLS REQUIRED

Masking tape

FASTENERS



30. Go to https://offroadanimal.com.au/content/P703 Ranger Super Duty Flare Cut Template.pdf to download and print the flare cut template. Make sure to print at 100% scale on A4 paper and cut out the profile.

31. Align the template onto the flare as shown. Hold in place with masking tape.

TOOLS REQUIRED

Masking tape

FASTENERS

32. Mark out the cut line with a marker pen, then remove the paper template.

33. Remove and discard 1x T25 Torx screw holding the end of the flare.

TOOLS REQUIRED

Marker pen

T25 Torx bit

FASTENERS

1x T25 Torx screw

Discard

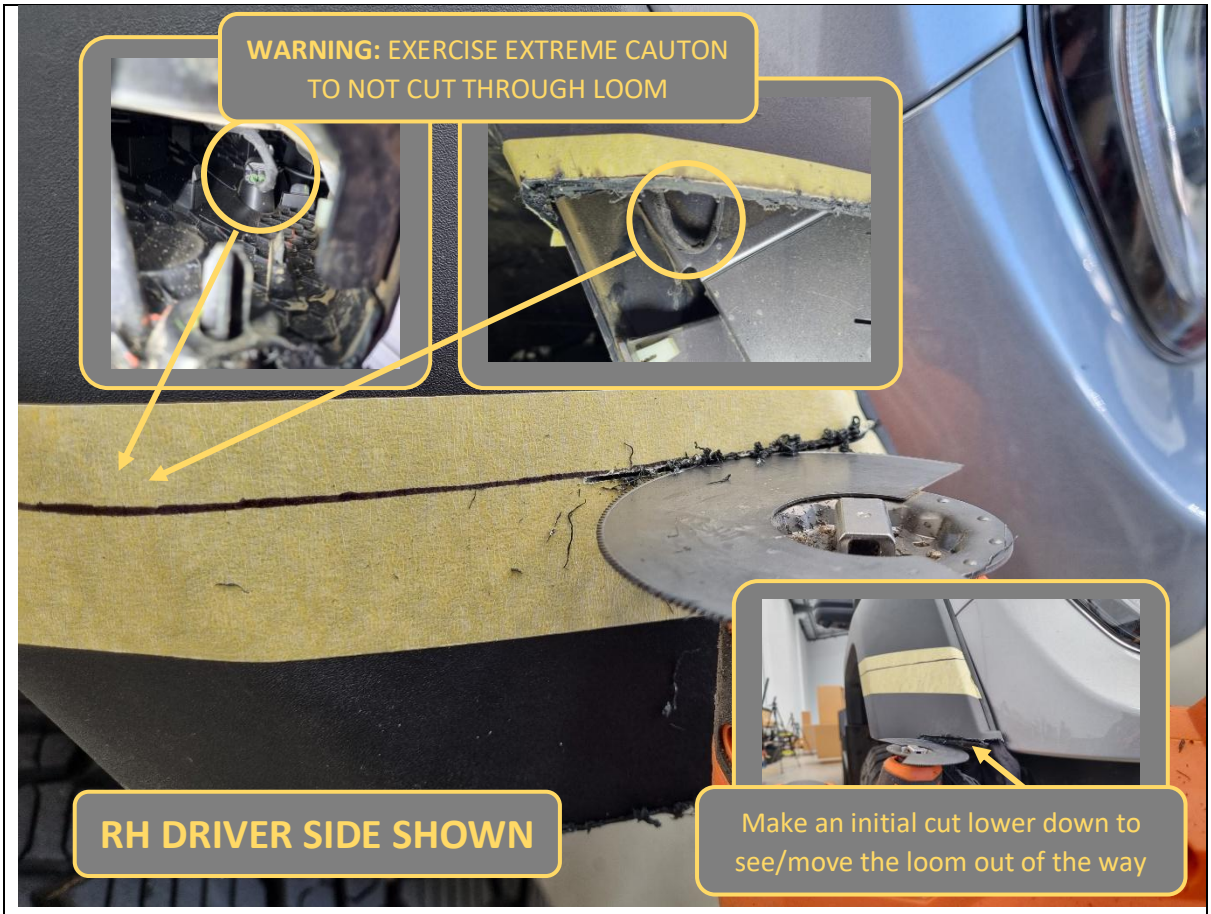
34. Gently pull out and unclip the end of the flare so it is away from the bumper fascia in preparation for cutting.

35. Stuff a workshop rag in between to keep the flare off the bumper fascia.

TOOLS REQUIRED

Workshop rag

FASTENERS



36. Time to cut the flare.

    Note that there is a wire loom for the side repeater lamp on the back of the flare that is extremely close to the flare cut line.

37. Start by making an initial cut at least 30mm below the marked cut line (or cut the bottom cap off).

38. Once you have visible access from below, move/reposition the loom so it is well clear of the flare cut line.

39. Now carefully cut the flare along the marked cut line.

TOOLS REQUIRED

Multi-tool
or
Similar cutting tool

Safety glasses

FASTENERS

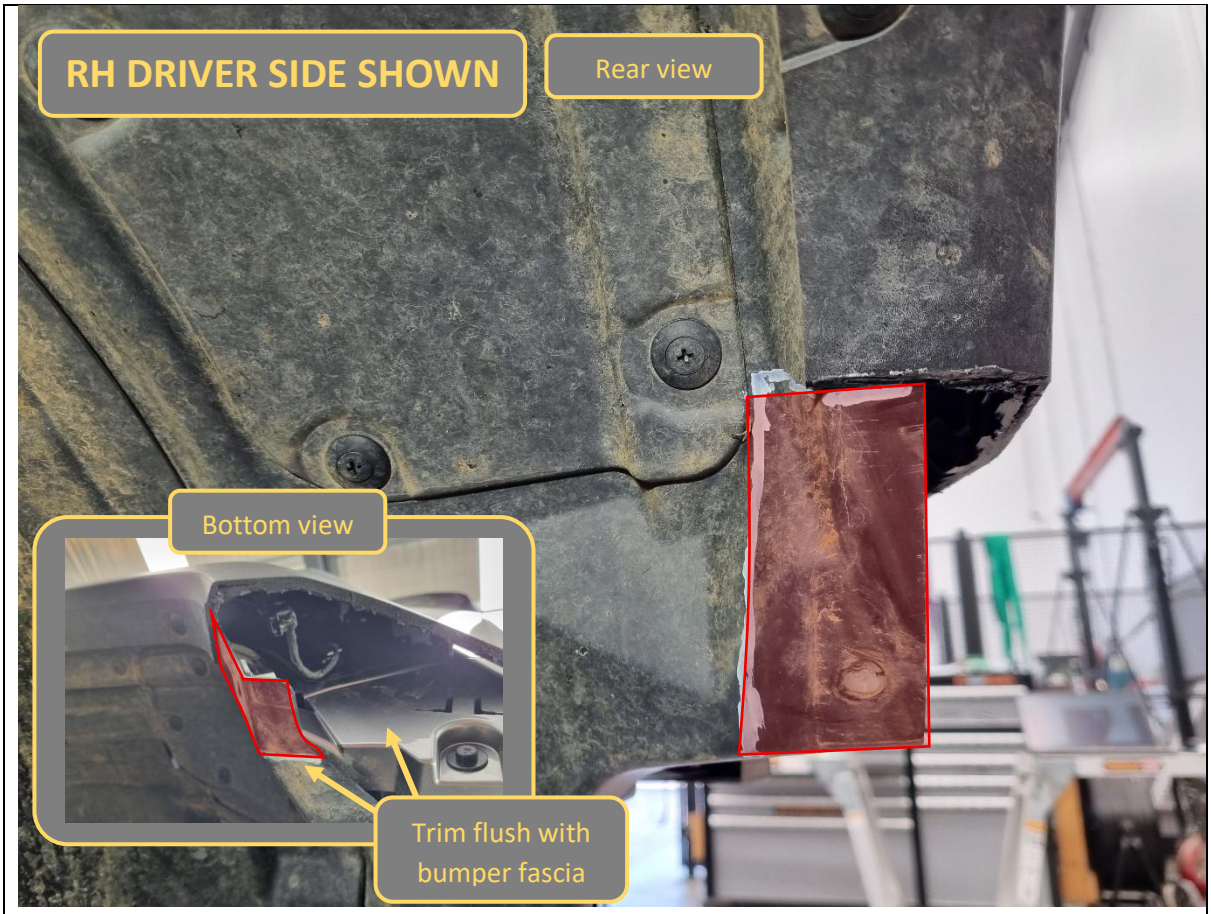
40. Discard the lower cut off portion of the flare and remove masking tape.

41. Deburr the cut edge.

TOOLS REQUIRED

Deburring tool

FASTENERS



42. The wheel arch liner also needs a trim. Cut off the area highlighted.

    When looking from the rear/below, this section of the wheel arch liner needs to be cut flush with the plastic bumper fascia.

    Also cut off an extra section at the top, so you can physically reach in and fit a nut behind the flare later.

43. Deburr the trimmed edges.

TOOLS REQUIRED

Multi-tool
or
Similar cutting tool

Safety glasses

Deburring tool

FASTENERS

44. Also cut off the mounting block on the bumper fascia.

45. Deburr the cut edges.

TOOLS REQUIRED

Multi-tool
or
Similar cutting tool

Safety glasses

Deburring tool

FASTENERS

46. Remove the 10mm hex screw holding the bumper fascia. Do not discard.

TOOLS REQUIRED

10mm socket/spanner

FASTENERS

1x factory 10mm hex screw

Retain

47. Fit the flare endcap onto the vehicle and secure to the bumper fascia with the 10mm hex screw removed in the previous step.

    Ensure the flare endcap is pressed firmly up and against the flare so that there is minimal gap.

TOOLS REQUIRED

10mm socket/spanner

FASTENERS

1x factory 10mm hex screw

Retained from Step 43

48. Locate the hole on the back of the flare endcap and use it as a guide to drill a 5mm hole into the flare.

    Ensure the flare endcap is pressed snug up against the flare before drilling.

49. Secure the back of the endcap to the flare with 1x M6x16 black self tapping screw.

50. Repeat the entire flare procedure for the other side of the car.

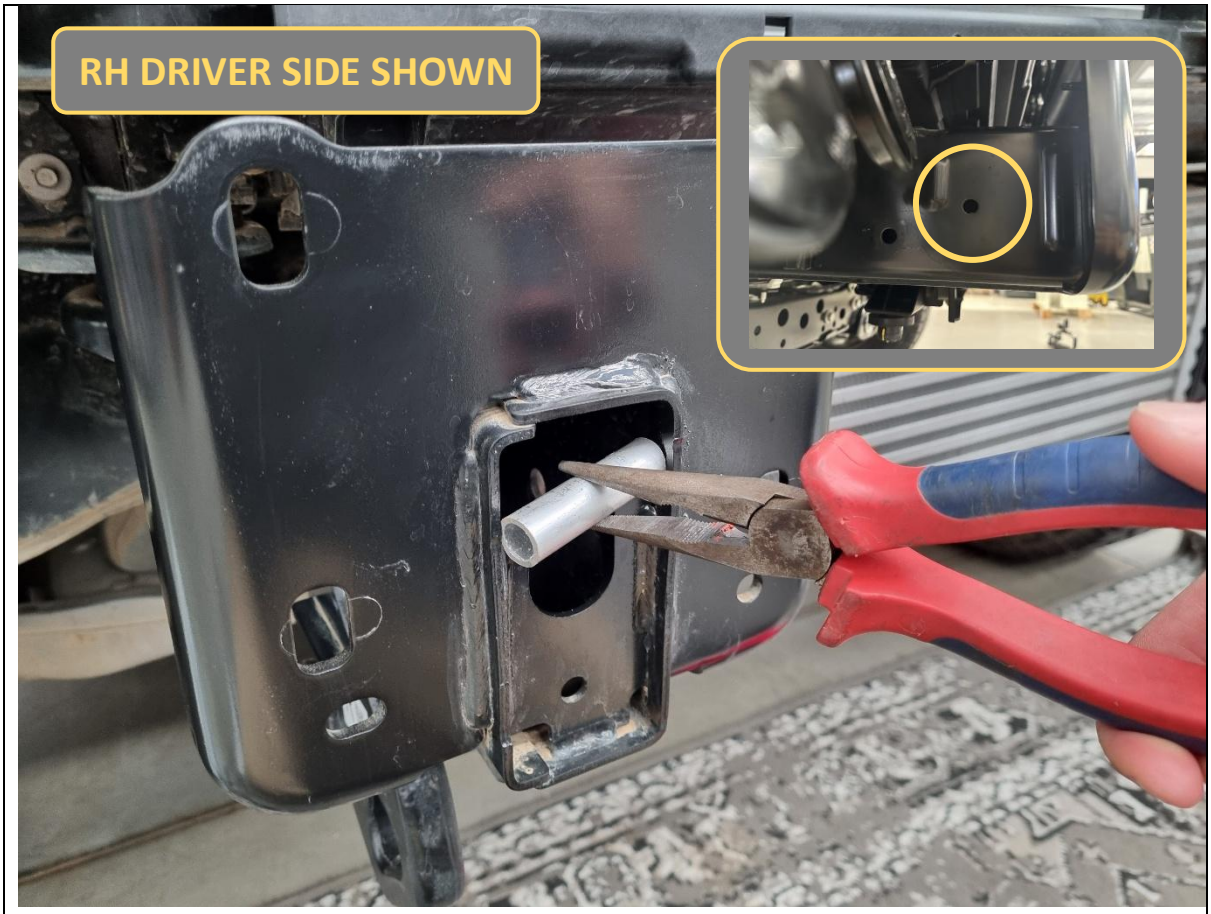
TOOLS REQUIRED

5mm drill bit
Electric drill
Safety glasses

Phillips head screwdriver

FASTENERS

1x M6x16 self tapping screw



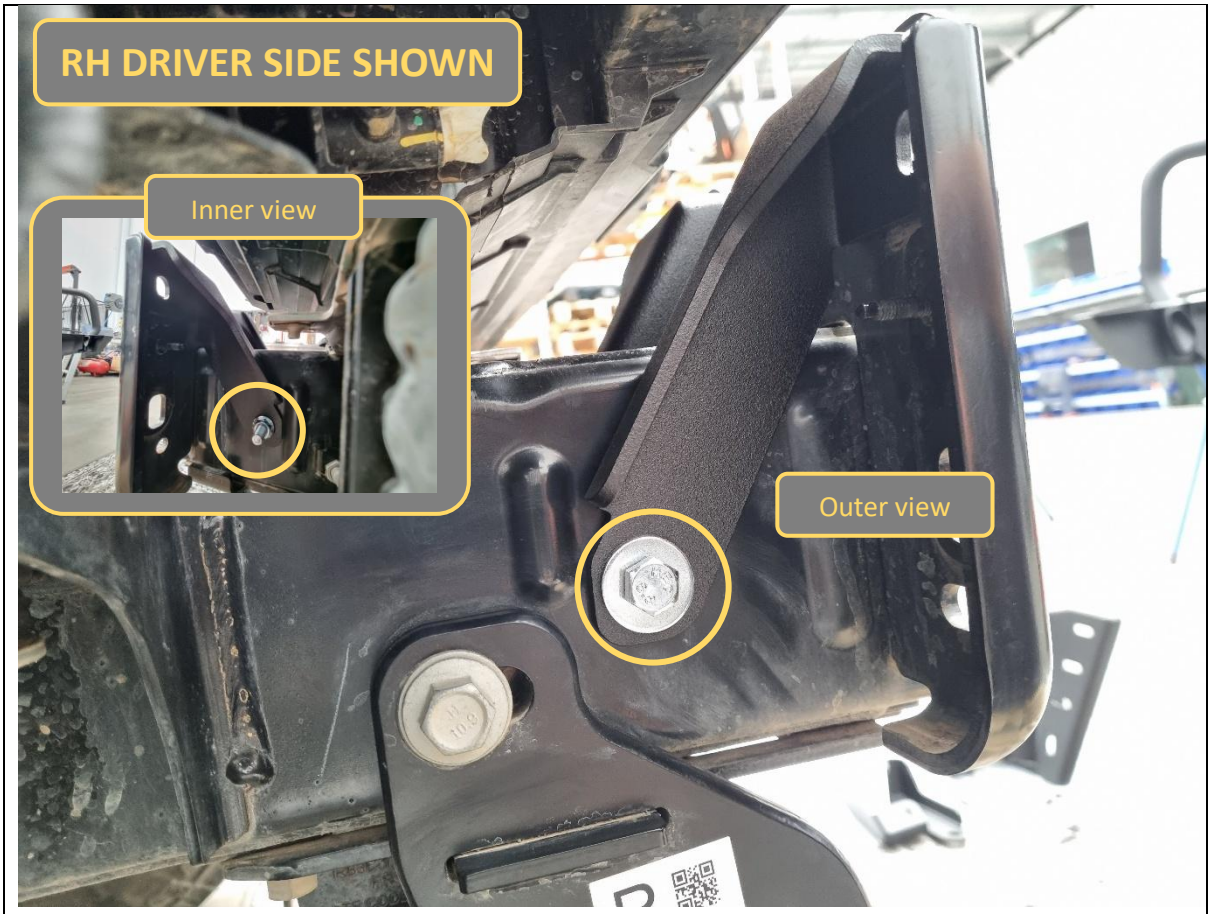
51. Use a pair of pliers to position the T-0174 crush tube inside the front end of the chassis rail. Align it with the through hole on the sides of the chassis.

TOOLS REQUIRED

Pliers

FASTENERS

T-0174 crush tube



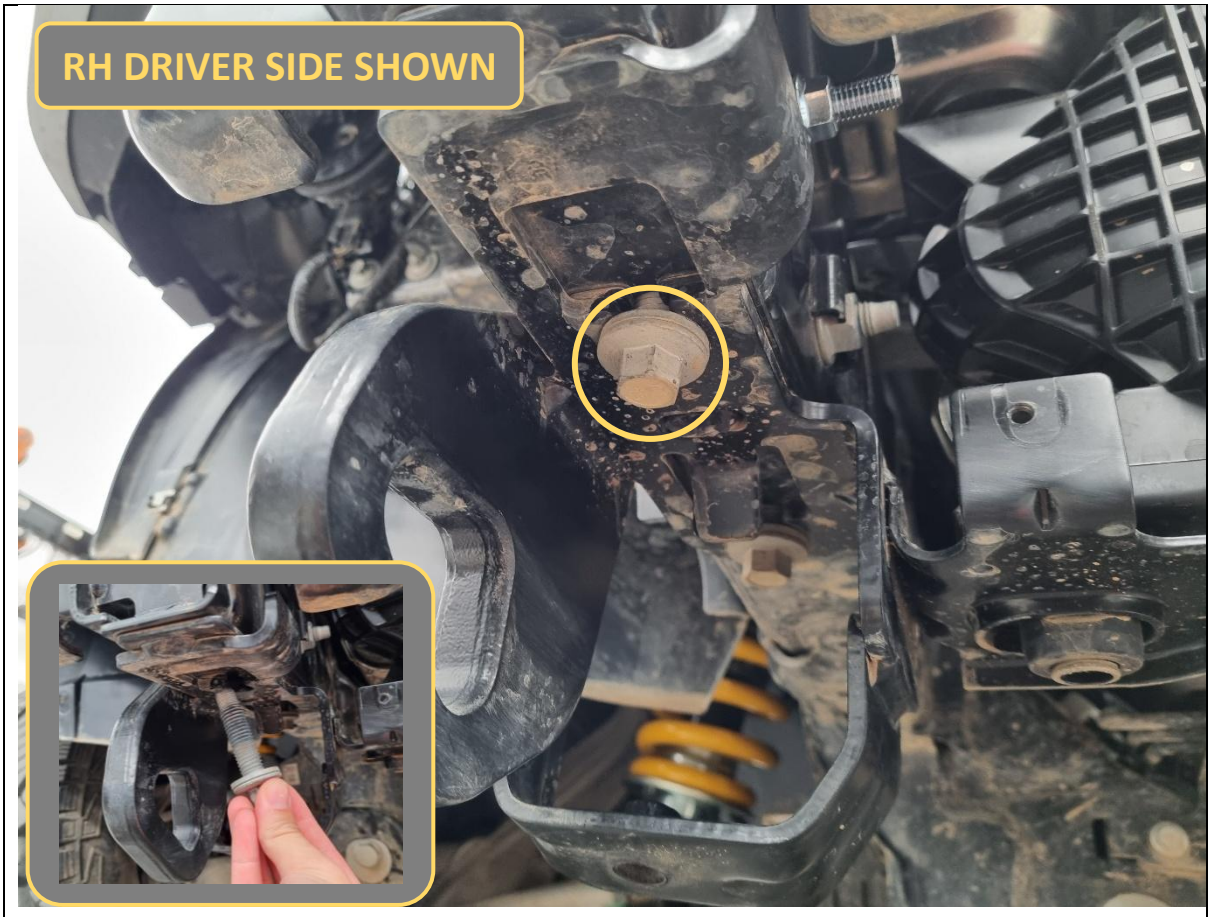
52. Fit the pair of chassis braces to the outer and inner faces of the chassis rail.

53. Loosely secure to the chassis with 1x M10x100 hex bolt, heavy duty washer and flange nut.

TOOLS REQUIRED

FASTENERS

1x M10x100 hex bolt
1x M10 heavy duty washer
1x M10 flange nut



54. On the underside, remove the front 15mm hex bolt holding the factory recovery point.

55. Retain for re-use.

TOOLS REQUIRED

15mm socket/spanner

FASTENERS

1x factory 15mm hex bolt

Retain

56. Pre-position 2x M12x40 hex bolts and heavy duty washers through the middle pair of holes on the impact assembly.

57. Pre-position 2x M10x40 hex bolts and heavy duty washers through the bottom pair of holes on the impact assembly.

58. On the back, pre-position 2x P-0551 spacer plates to each group of M10/M12 bolts.

TOOLS REQUIRED

FASTENERS

2x M10x40 hex bolt
2x M10 heavy duty washer

2x M12x40 hex bolt
2x M12 heavy duty washer

4x P-0551 spacer plate

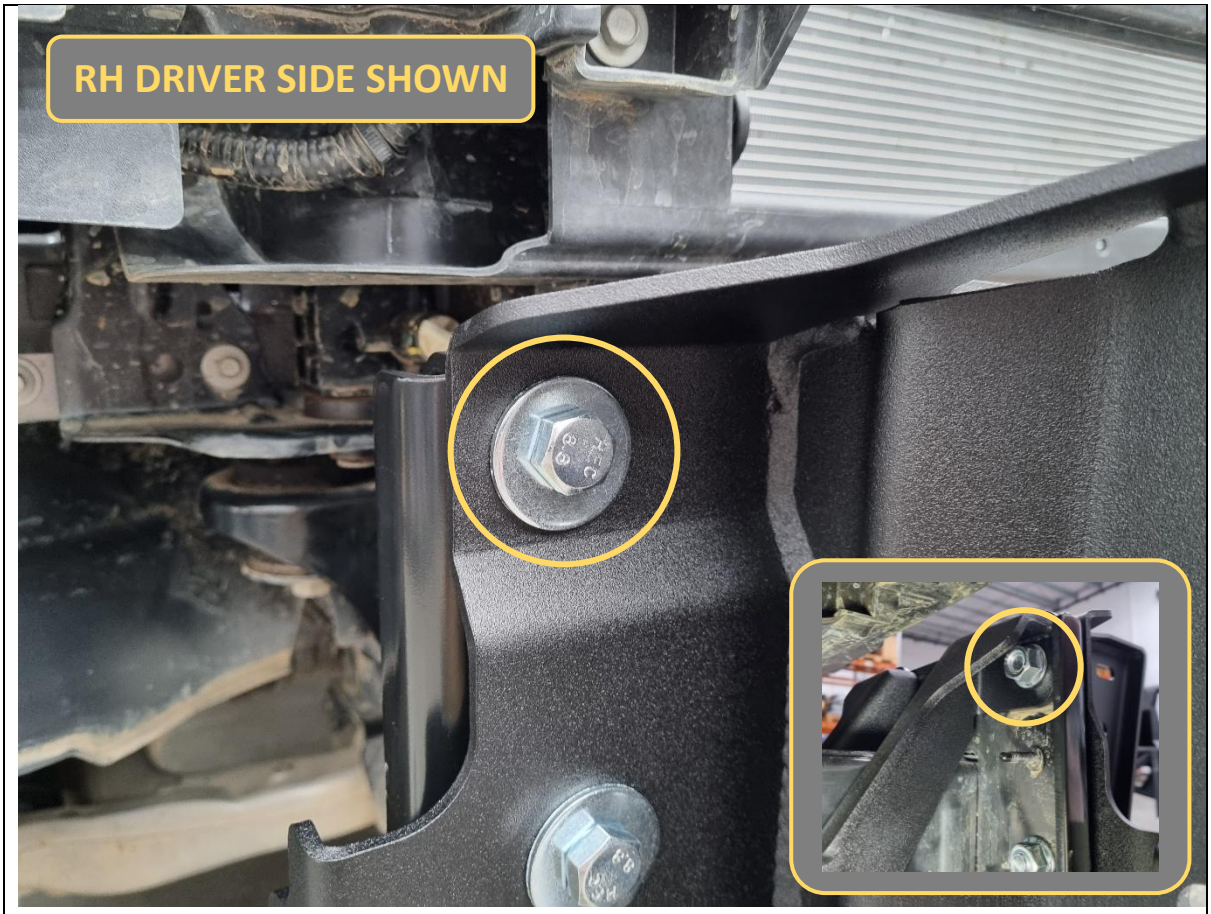
59. Fit the impact assembly onto the end of the chassis horn.

60. Loosely secure with 2x M10 flange nuts and 2x M12 flange nuts on the rear.

TOOLS REQUIRED

FASTENERS

2x M10 flange nut
2x M12 flange nut



61. Loosely secure the top of the impact assembly to each chassis brace with 1x M12x30x1.75p coarse pitch hex bolt, heavy duty washer and coarse pitch flange nut.

    <u>Do not mix the M12x1.75p coarse pitch bolts with the M12x1.25p fine pitch bolts supplied in the kit.</u>

TOOLS REQUIRED

FASTENERS

2x M12x30x1.75p hex bolt
2x M12 heavy duty washer
2x M12x1.75p flange nut

62. Re-fit the tow point bolt to the bottom of the impact assembly and chassis.

63. Snug up the bolt so that the impact assembly is pressed up against the chassis, but still loose enough to adjust left/right.

64. Repeat procedure for fitment of impact assembly and chassis brace on other side of chassis.

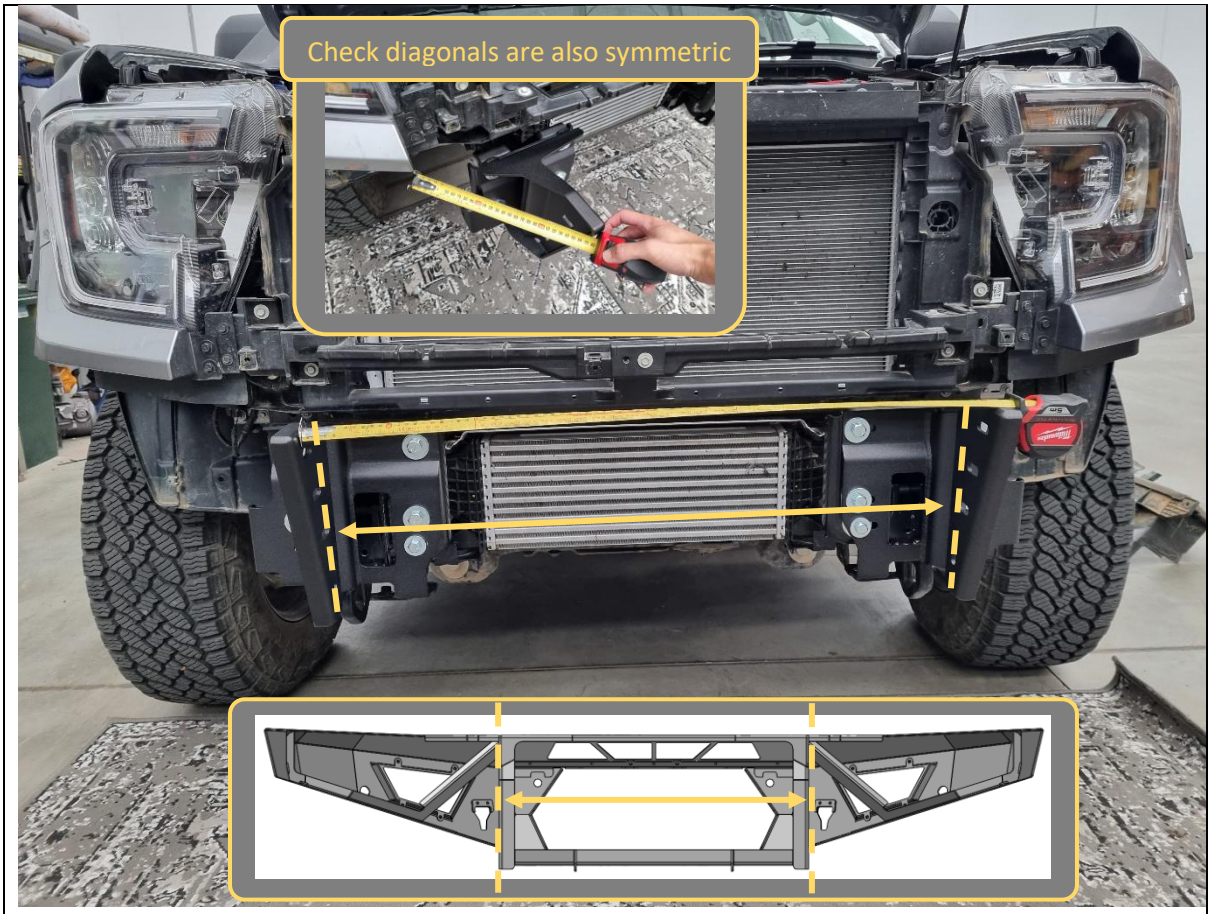
TOOLS REQUIRED

15mm socket/spanner

FASTENERS

1x factory 15mm hex bolt

Retained from Step 54



65. 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

66. 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.

67. 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, rather than using the chassis as reference.

    This is because the body of the vehicle may not necessarily be mounted centrally on the chassis.

TOOLS REQUIRED

Tape measure

FASTENERS

68. Once happy with alignment, tighten all bolts holding impact assemblies and chassis braces in the following order:
    a. Front M12 bolts (torque to 100Nm)
    b. Front M10 bolts (torque to 57Nm)
    c. Chassis brace side M10 bolts (torque to 57Nm)
    d. Bottom recovery point bolts (torque to 164Nm)

69. Re-check the distance and re-adjust if required.

TOOLS REQUIRED

15mm socket/spanner
16/17mm socket/spanner
18/19mm socket spanner

Torque wrench

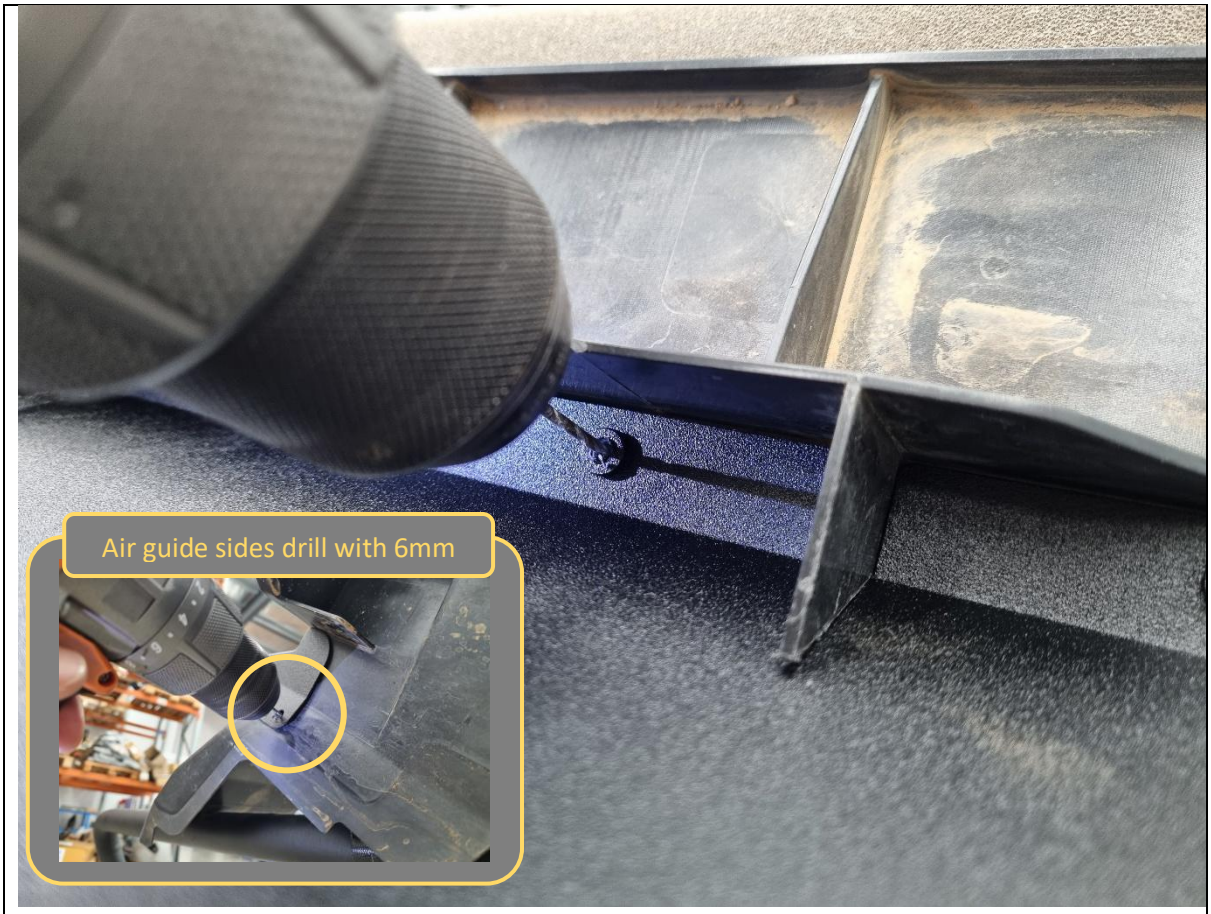
FASTENERS

70. Dry test fit the B-1834 intercooler air guide onto top of the factory intercooler shroud removed earlier.

71. Align the air guide so the back edge is flush on the plastic rib.

TOOLS REQUIRED

FASTENERS



72. Use 2mm + 6mm drill bits and the air guide holes/nutserts as a guide to drill small pilot holes around the intercooler shroud.

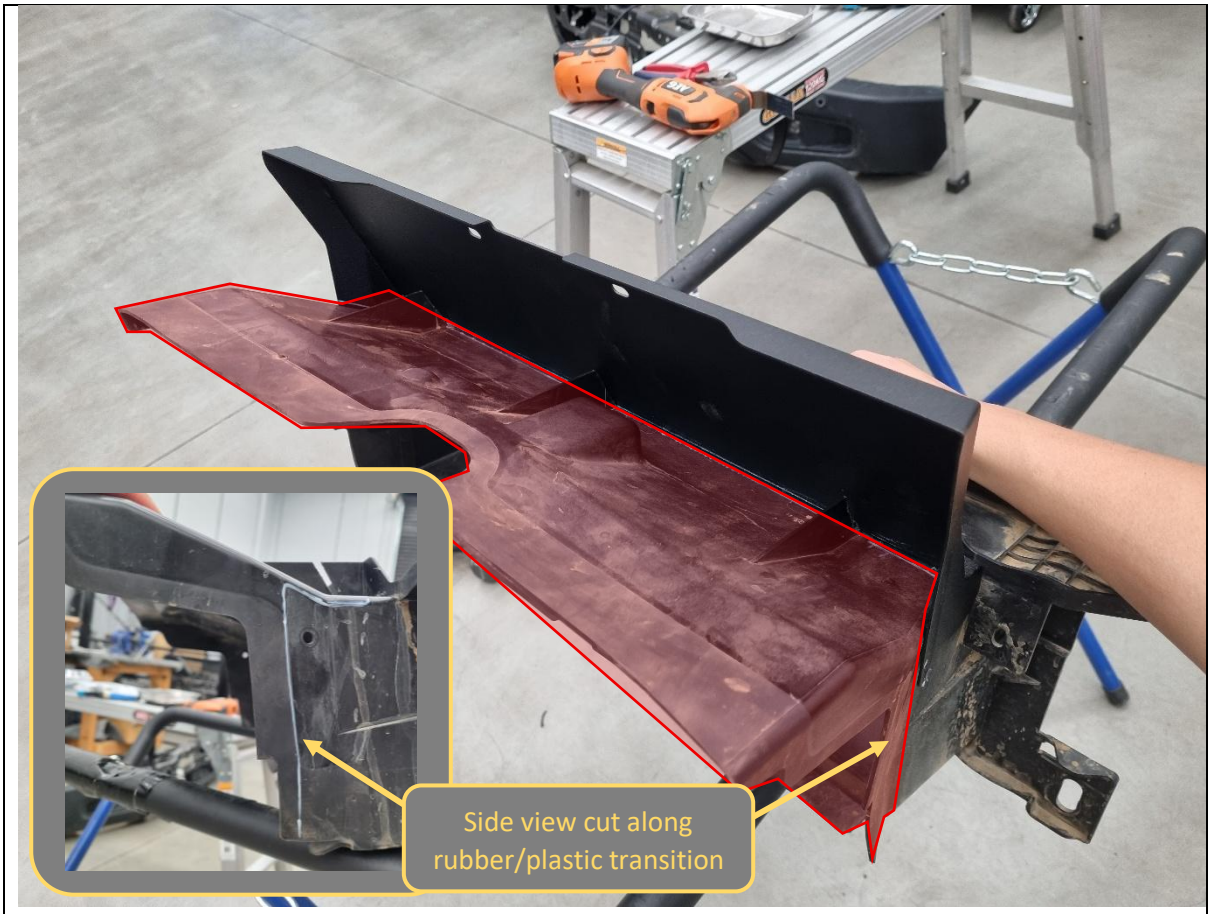
    There are 6x holes on top (drill 2mm), and 1x on each side (drill 6mm). So 8x pilot holes in total.

TOOLS REQUIRED

2mm drill bit
6mm drill bit
Electric drill

Safety glasses

FASTENERS

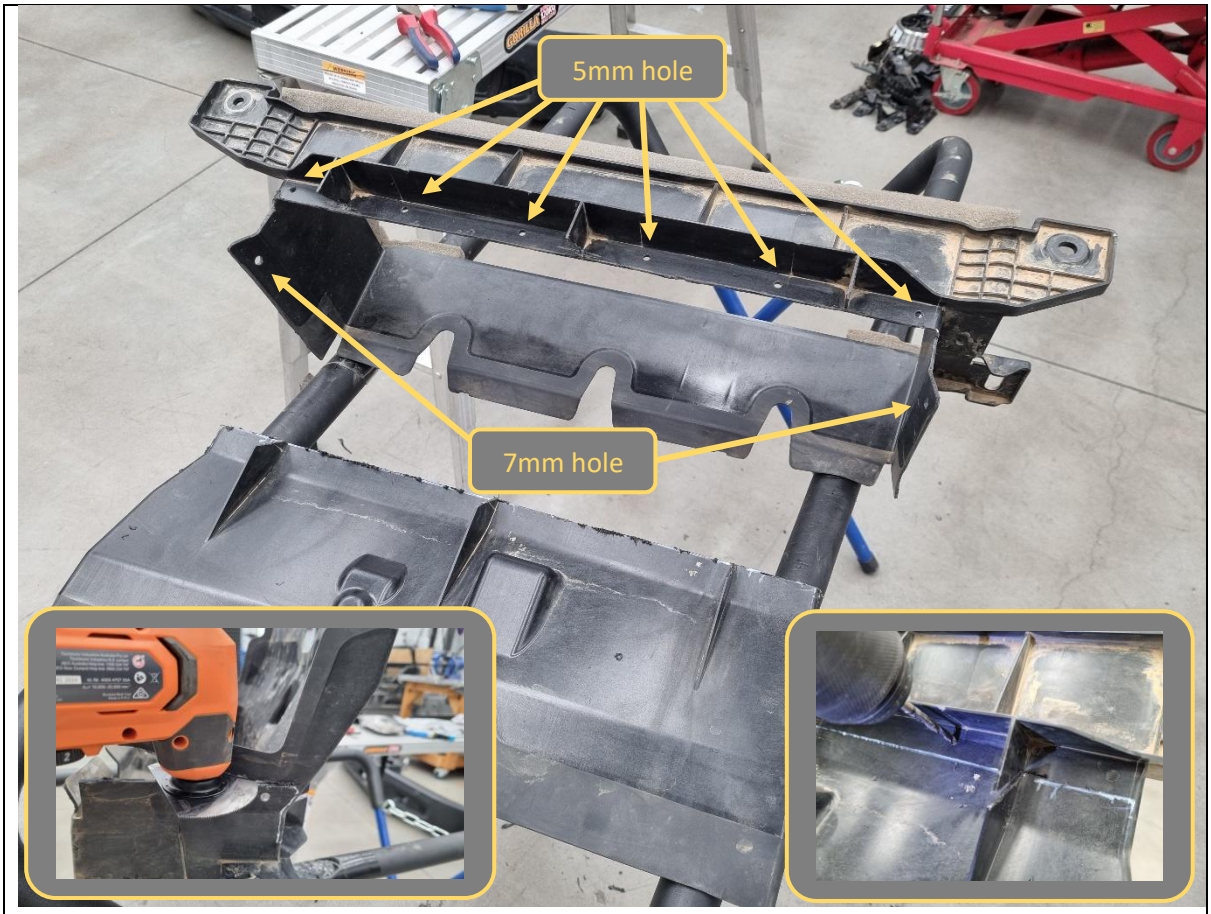


73. Use a marker pen and the air guide as reference and mark out the front section of the intercooler shroud which will need to be trimmed.

TOOLS REQUIRED

Marker pen

FASTENERS



74. Remove the air guide from the intercooler shroud.

75. Use the pilot holes as a guide and drill out the 6x top holes to 5mm diameter.

76. Use the pilot holes as a guide and drill out the 2x side holes to 7mm diameter.

77. Cut the intercooler shroud along the marked cut line, then deburr sharp edges.

TOOLS REQUIRED

5mm drill bit
7mm drill bit
Electric drill

Multi-tool
or
Similar cutting tool

Safety glasses

Deburring tool

FASTENERS

78. Re-fit the modified intercooler shroud to the vehicle, re-using the factory 8mm hex bolts removed earlier.

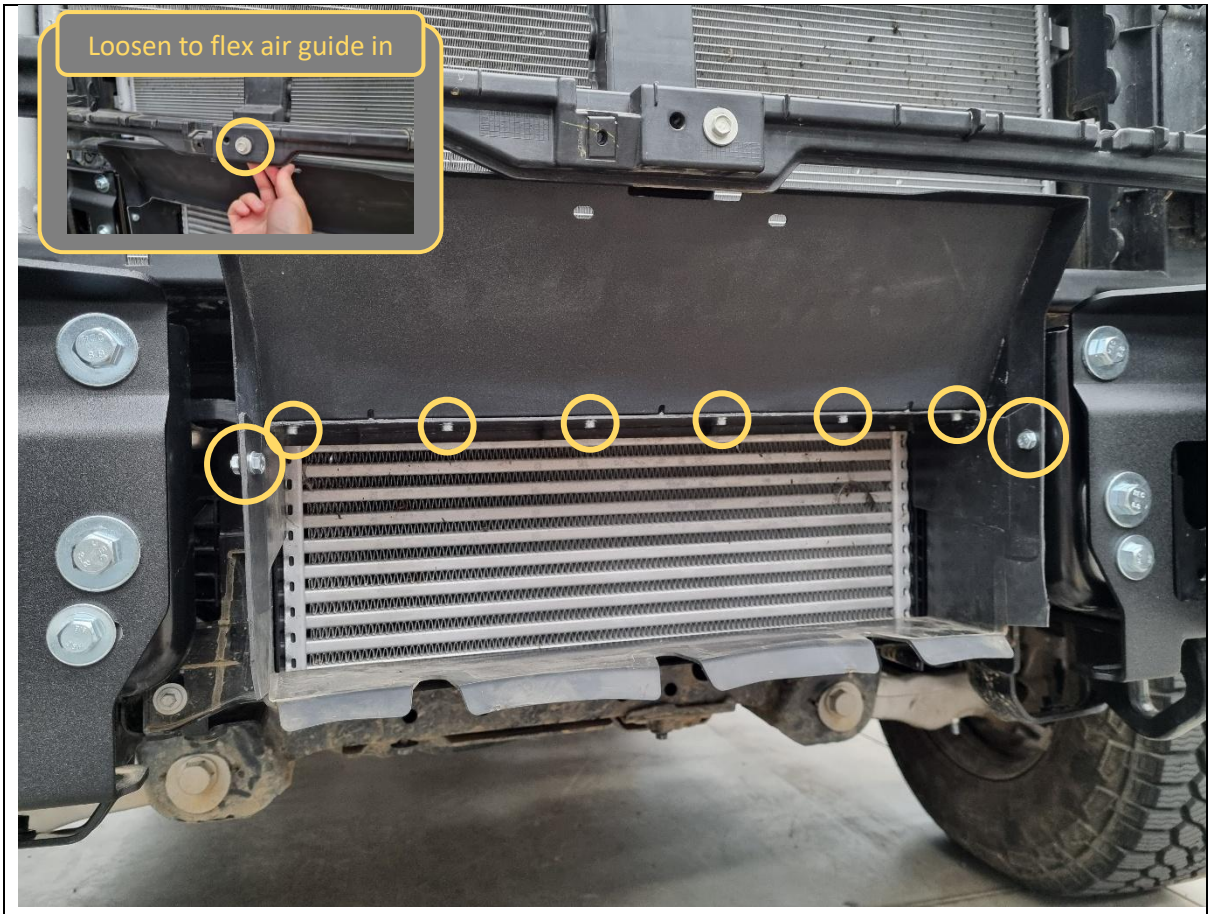
TOOLS REQUIRED

8mm socket/spanner

FASTENERS

4x factory 8mm hex bolt

Retained from Step 20



79. Fit the air guide to the modified intercooler shroud.

    Note: You may need to temporarily remove/loosen the 10mm hex bolt up top and pull the grille support structure outwards to be able to flex the air guide into position.

80. Secure the air guide to the intercooler shroud with 6x M4x10 hex bolts and washers along the top edge, and 2x M6x12 hex bolts, washers and flange nuts on the sides.

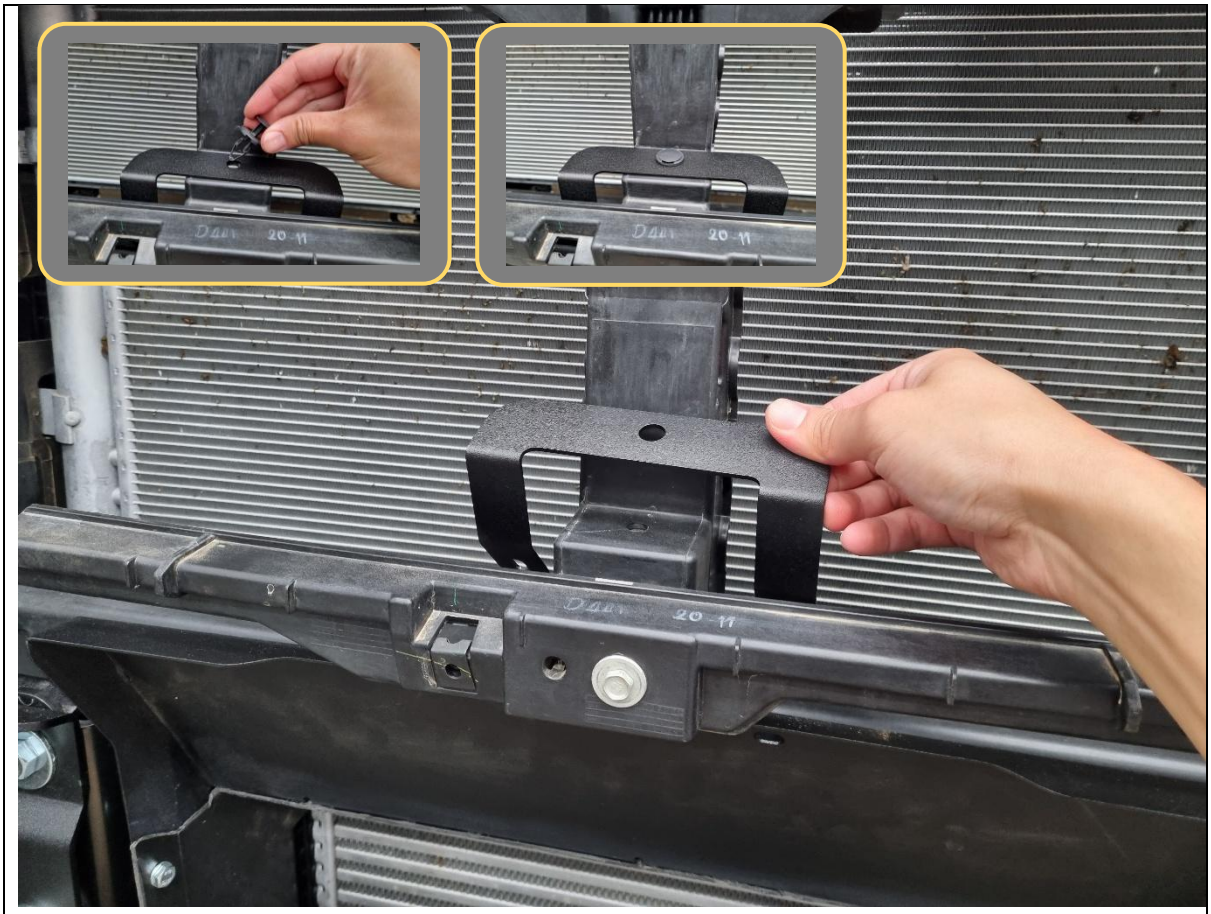
TOOLS REQUIRED

7mm socket/spanner
10mm socket/spanner

FASTENERS

6x M4x10 hex bolt
6x M4 flat washer

2x M6x12 hex bolt
2x M6 flat washer
2x M6 flange nut



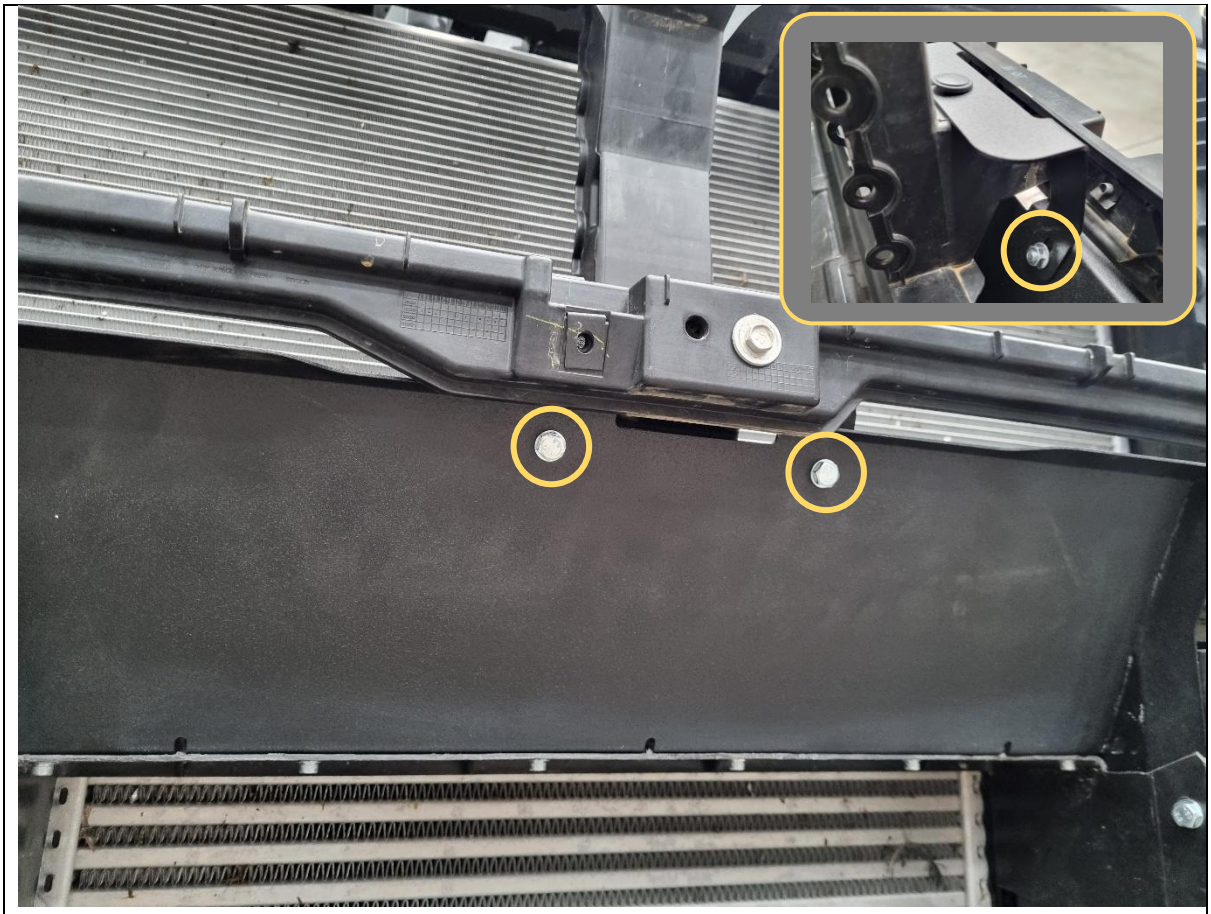
81. Position the B-1835 air guide centre support bracket on top and clip into the plastic structure with 1x plastic push clip retained from removing the bumper trim.

TOOLS REQUIRED

FASTENERS

1x plastic push clip

Retained from Step 3



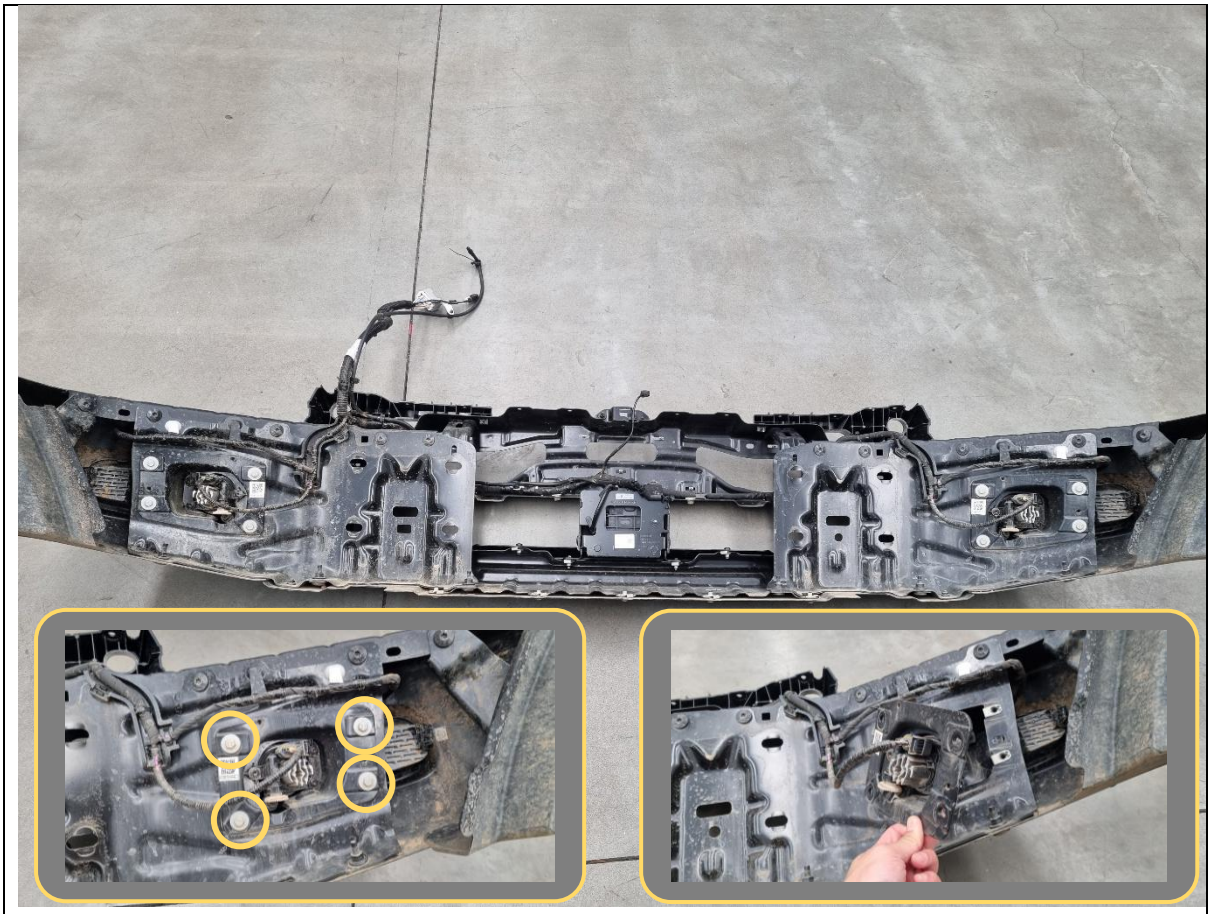
82. Secure the air guide to the support bracket with 2x M6x12 hex bolts, washers and flange nuts.

TOOLS REQUIRED

10mm socket/spanner

FASTENERS

2x M6x12 hex bolt
2x M6 flat washer
2x M6 flange nut



83. Time to strip the bumper. Remove 4x 10mm hex bolts holding each fog light housing to the inner bumper skin.

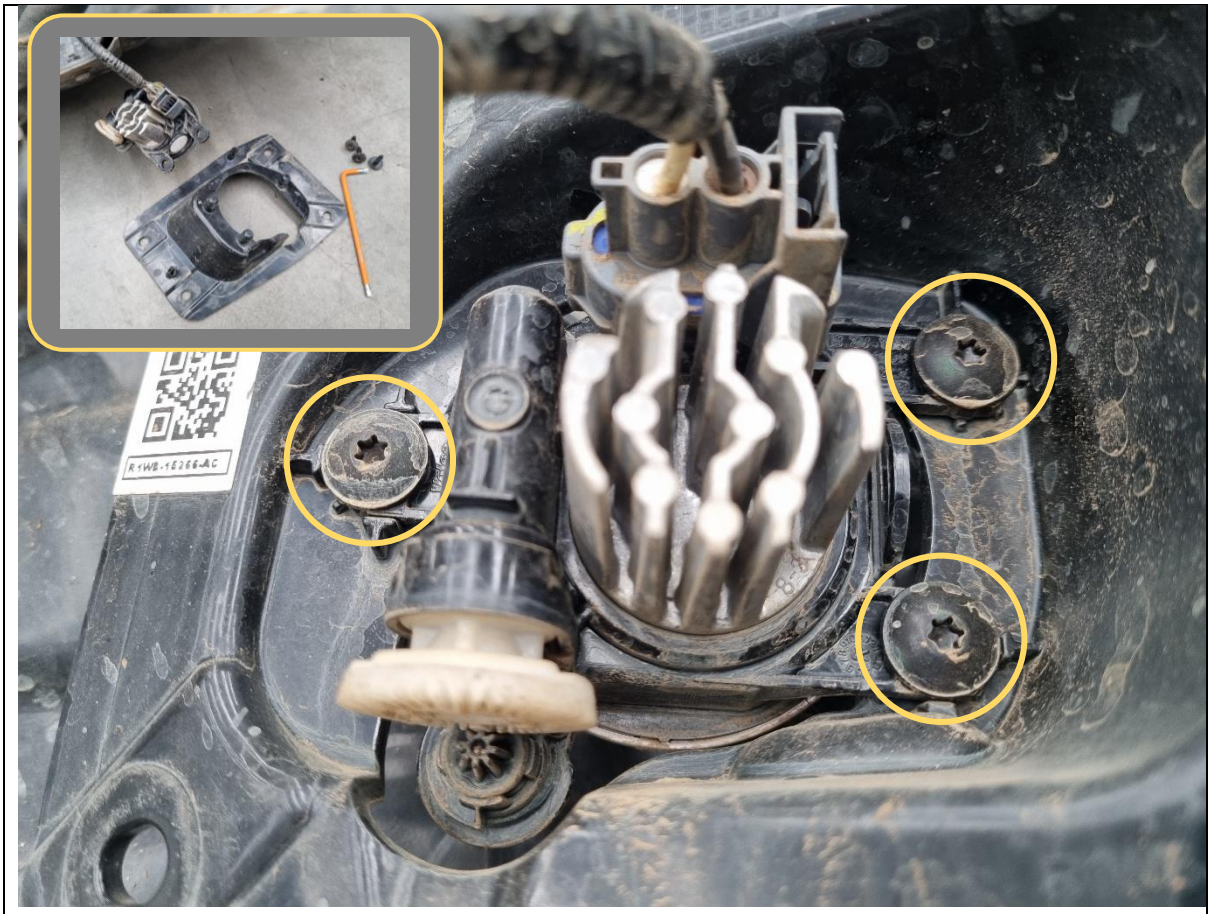
TOOLS REQUIRED

10mm socket/spanner

FASTENERS

8x factory 10mm hex bolt

Discard



84. Remove and discard 3x T25 Torx screws holding each fog light to its plastic housing.

TOOLS REQUIRED

T25 Torx bit

FASTENERS

6x T25 Torx screw

Discard

85. Reach through the fog light opening in the bumper and locate the outer parking sensor on each side.

86. Spread the plastic locking tabs apart and unclip both parking sensors.

TOOLS REQUIRED

FASTENERS

87. Locate the camera on top of the bumper and remove 2x 10mm hex bolts holding the camera clamp bracket to the mounting bracket.

88. Unclip the camera and washer from the front bracket.

TOOLS REQUIRED

10mm socket/spanner

FASTENERS

2x factory 10mm hex bolt

Discard

89. Separate the washer nozzle from the camera body.

TOOLS REQUIRED

FASTENERS

90. Remove 2x plastic push clips holding on the plastic radar cover. Discard parts.

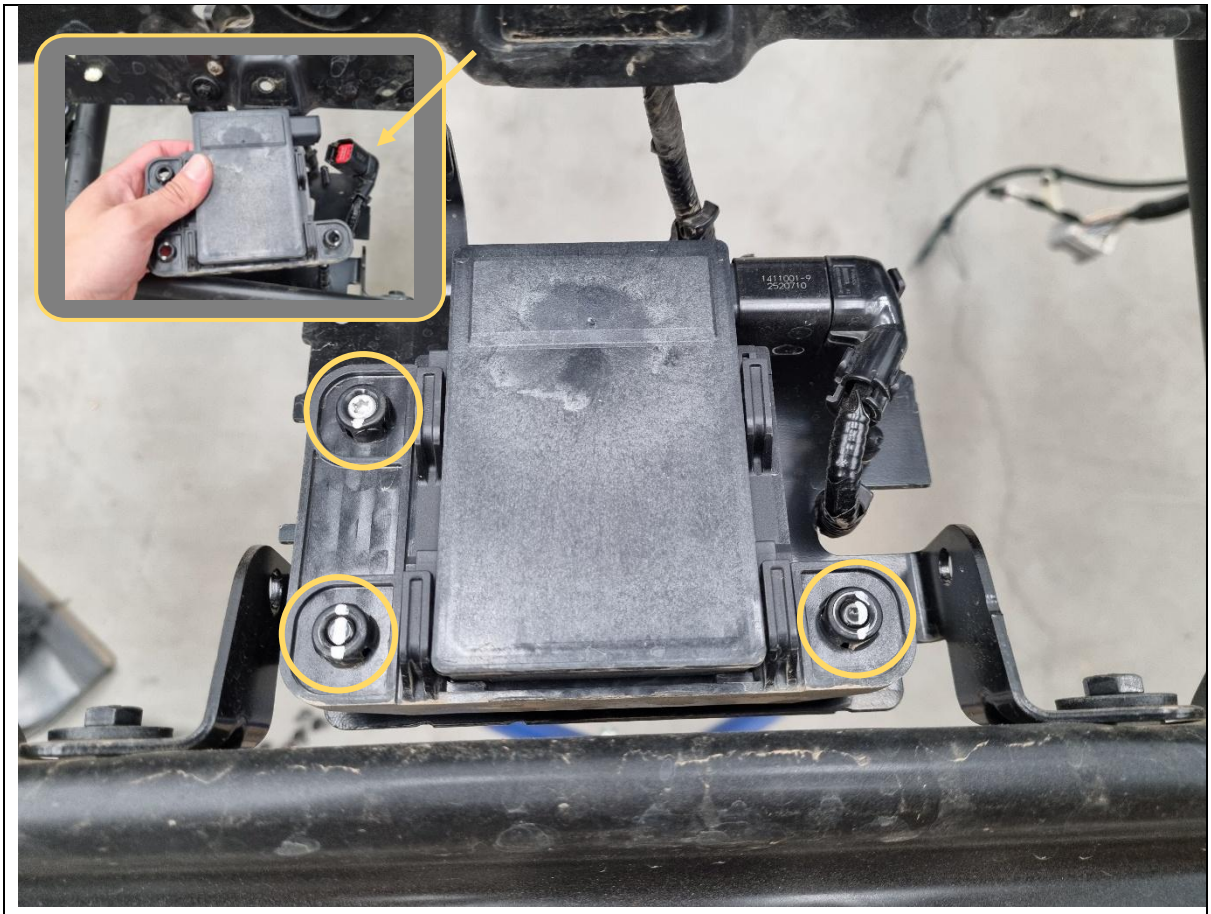
TOOLS REQUIRED

Trim tool
or
Flat blade screwdriver

FASTENERS

2x plastic push clips

Discard



91. Carefully pull outwards and unclip the radar from the ball point mounts.

92. Disconnect the radar at the plug and set it aside in a safe place.

WARNING
Take extra care to not drop or impact the radar.

TOOLS REQUIRED

FASTENERS

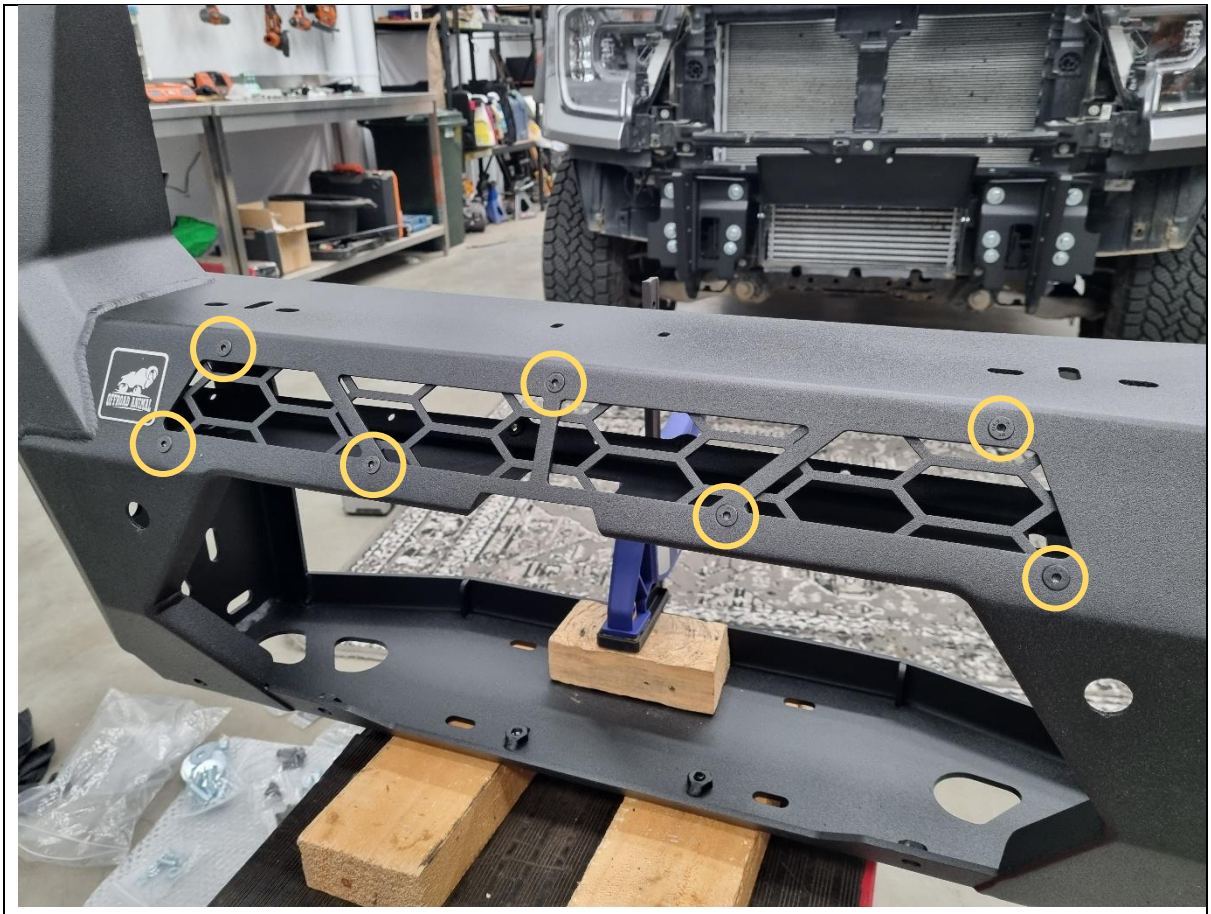
93. Unclip the loom from the bumper.

94. Separate the washer hose from the main bumper harness.

TOOLS REQUIRED

Trim tool
or
Flat blade screwdriver
or
Side cutters

FASTENERS



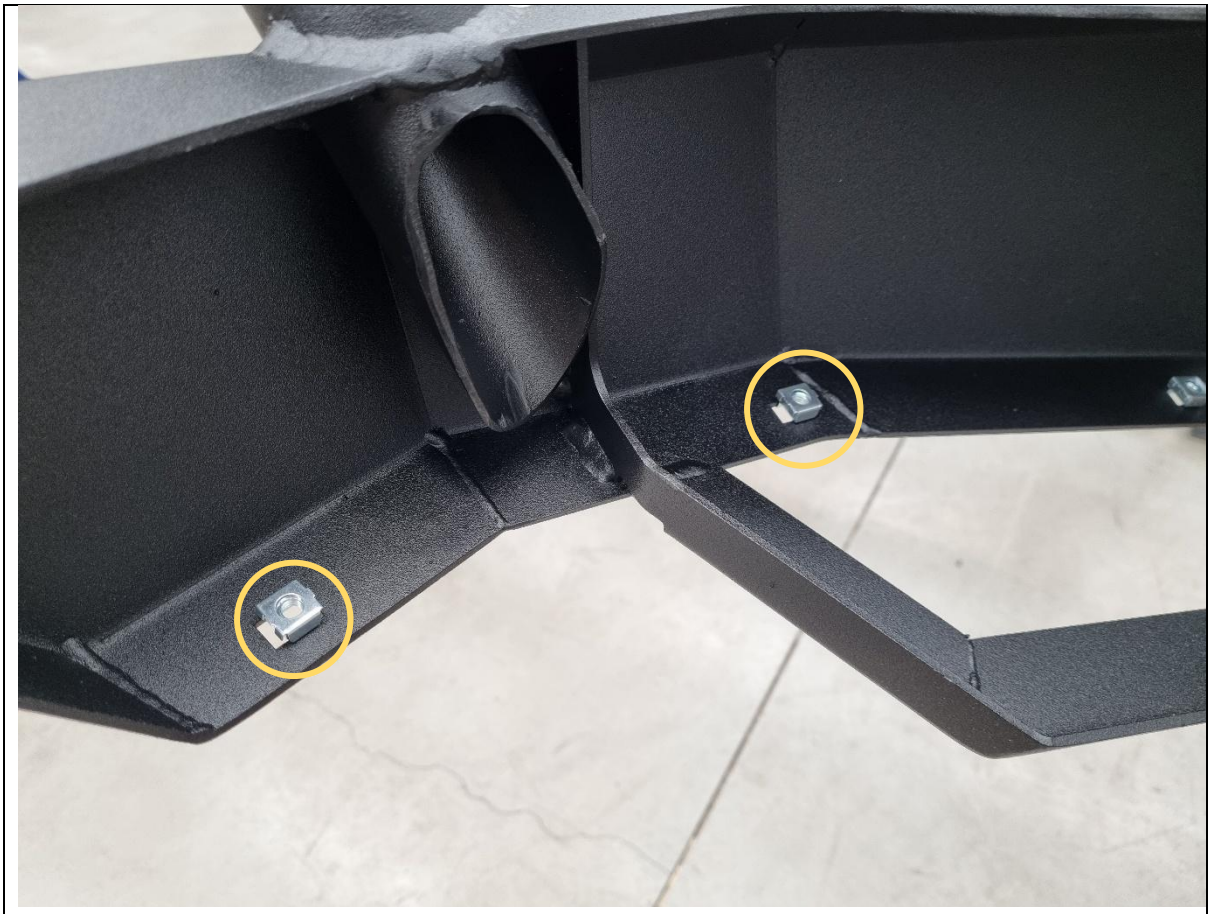
95. Fit the mesh infill plate from inside the bull bar and secure with 7x M6x12 black countersunk bolts and flange nuts.

TOOLS REQUIRED

4mm hex/Allen key

FASTENERS

7x M6x12 black countersunk
7x M6 flange nut



96. Fit 10x M6 cage nuts into the rectangular slots in bottom of the bull bar wings (5x per side).

    There should be two types of M6 cage nuts supplied. There are 10x cage nuts suited for thicker 3mm sheet metal, which are to be used here. The other 2x cage nuts are suited for thinner 2mm sheet metal and will be used later.

    Use a small flat blade screwdriver to push the edge of the cage to engage with the slot to aid fitting.

TOOLS REQUIRED

Flat blade screwdriver

FASTENERS

10x M6 cage nuts
(to suit 3mm sheet metal)

97. Fit the wing meshes to the inside of each bull bar wing and secure each one with 4x M6x12 hex bolts and washers.

TOOLS REQUIRED

10mm socket/spanner

FASTENERS

8x M6x12 hex bolt
8x M6 flat washer

All Toro bars require indicator repeaters to be installed.

Predator bars fitted with round hoop (TB-COM-PR-WD-RND-ASM0) also require indicator repeaters.

98. Use the double-sided tape pad supplied with the indicator repeaters and affix to the P-0544 mounting plate.

    Ensure the indicator repeaters are taped to opposite faces on the mounting plate (LH and RH need to be mirrored) like the image shown.

    Also ensure the markings on the indicator repeaters are orientated up.

99. Pre-position 2x M3x16 pan head screws through the mounting holes of the indicator repeaters.

TOOLS REQUIRED

FASTENERS

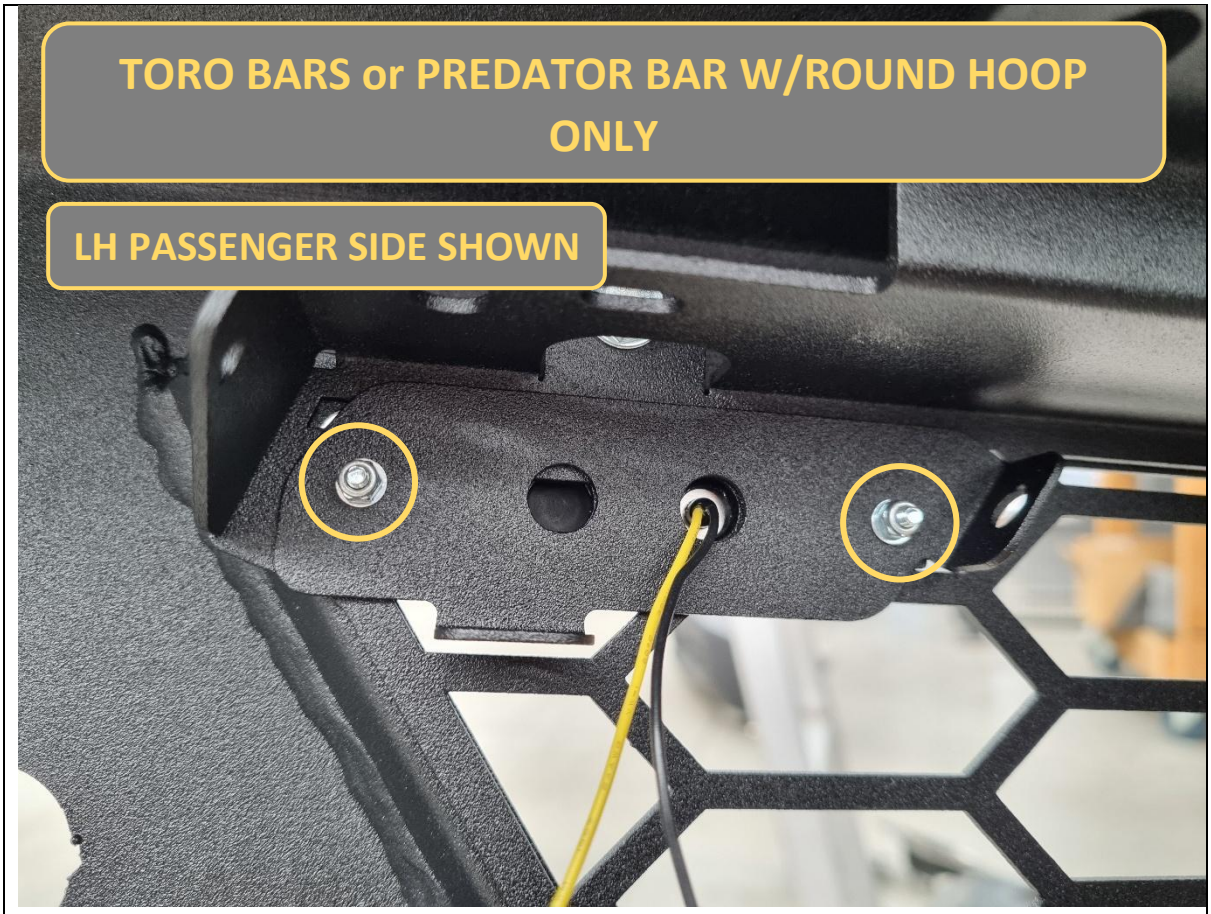
4x M3x16 pan head screw

100. Peel off the film on the other side of the double-sided tape.

101. Fit the indicator repeater with mount plate to the outside of the wing mesh opening. Align the mount plate into the upper outer corner of the wing mesh opening.

TOOLS REQUIRED

FASTENERS



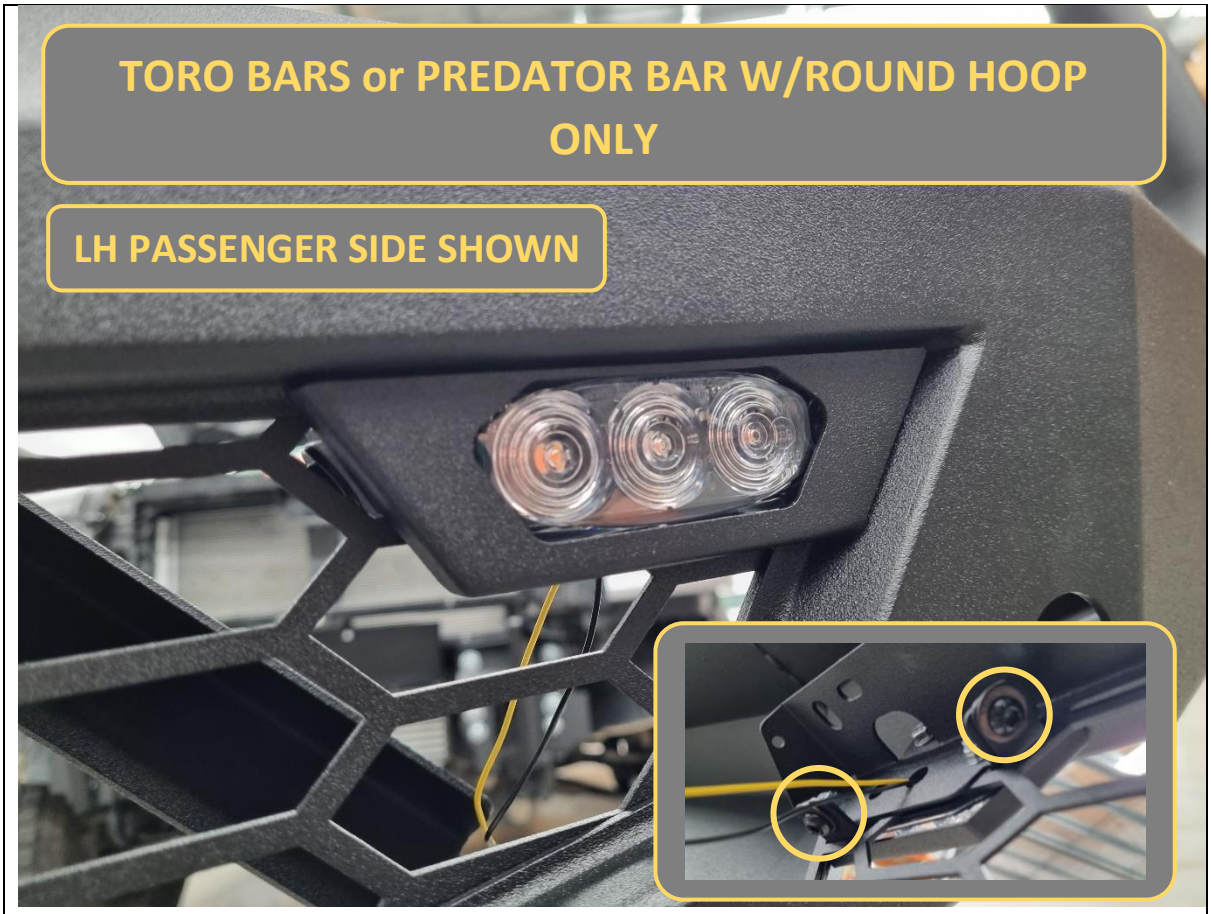
102. Fit the B-1827 clamp bracket onto the rear and secure to the 2x M3x16 pan head screws with 2x flat washers and Nyloc nuts.

TOOLS REQUIRED

PH1 Phillips head screwdriver
5.5mm socket/spanner

FASTENERS

2x M3 flat washer
2x M3 Nyloc nut



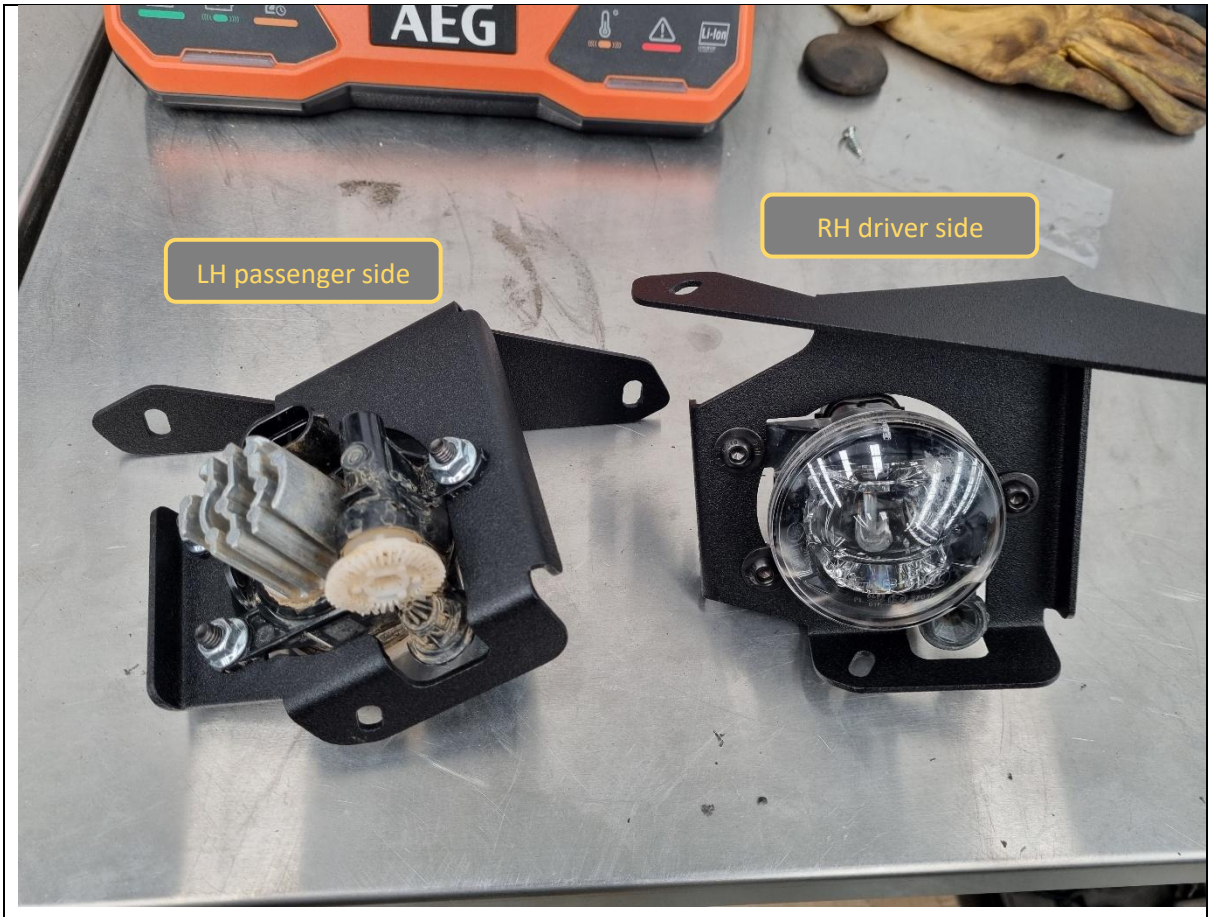
103. Fit the B-1828 housing from the outside and secure to the clamp bracket with 2x M6x12 black button head bolts, black washers and flange nuts.

TOOLS REQUIRED

4mm hex/Allen key

FASTENERS

2x M6x12 black button head
2x M6 black washer
2x M6 flange nut



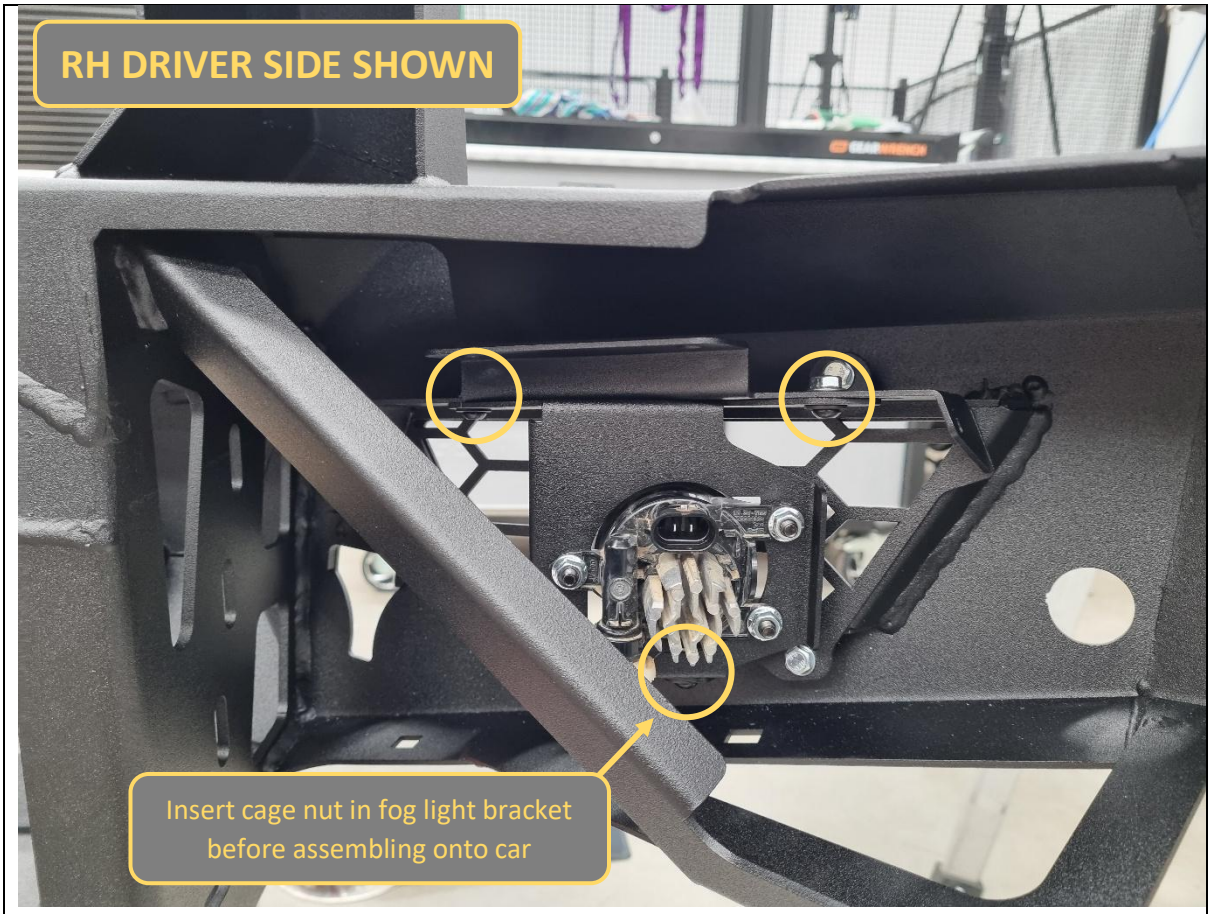
104. The Ford OE fog lights can be re-fitted to the bar. Fit the fog lights to the supplied B-1824 fog light brackets and secure with 3x M6x16 black button head bolts, black washers and flange nuts, each.

TOOLS REQUIRED

4mm hex/Allen key

FASTENERS

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



105. Insert 1x M6 cage nut in the rectangular slot on the bottom of the fog light bracket. Use a flat blade screwdriver to assist.

106. Fit the fog light and bracket to the wing mesh installed on the bull bar.

107. Secure with 2x M6x12 black button head bolts, black washers and flange nuts at the top.

108. Secure with 1x M6x12 black button head bolt and black washer into the cage nut at the bottom.

TOOLS REQUIRED

Flat blade screwdriver

4mm hex/Allen key

FASTENERS

3x M6x12 black button head
3x M6 black washer
2x M6 flange nut

1x M6 cage nut
(to suit 2mm sheet metal)

109. Instead of fog lights, there is also the option to fit an 8” light bar or up to two 2”x2” cube lights in each wing mesh.

Only one 2”x2” cube light can be fitted if indicator repeaters are present.

Or you can fit no lights at all.

Note: Stedi C4 cube lights require spacers to sit at the right height. Offroad Animal cube lights fit without modification.

TOOLS REQUIRED

Supplied with accessories

FASTENERS

Supplied with accessories

110. Unclip the middle parking sensors and loom from the bumper trim panel.

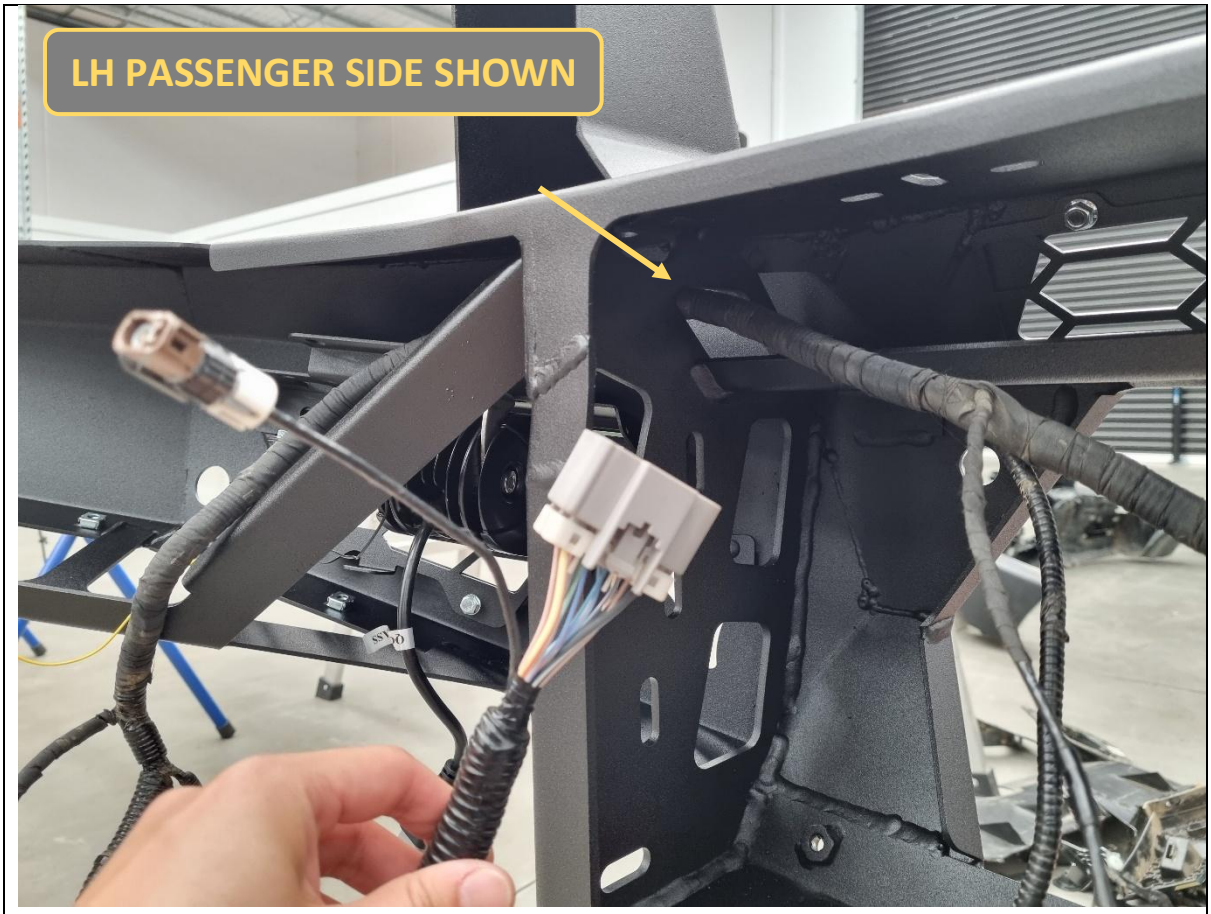
TOOLS REQUIRED

FASTENERS

111. Swap over the rubber isolating rings between the outer and inner parking sensors so that the outer sensors use the smaller diameter (thinner) ring and the inner sensors use the larger diameter (thicker) ring.

TOOLS REQUIRED

FASTENERS



112. Route the main bumper harness through the middle of the bull bar, through the cutout as indicated with the arrow.

113. Ensure the harness is correctly orientated with the main connector on the LH passenger side, on the outside of the mounting upright.

TOOLS REQUIRED

FASTENERS

114. Fit the front camera into the keyed cutout in the B-1820 camera mount bracket.

115. Securely clamp the camera with the B-1821 clamp bracket on the rear with 2x M6x12 black button head bolts, black washers and flange nuts.

TOOLS REQUIRED

4mm hex/Allen key

FASTENERS

2x M6x12 black button head
2x M6 black washer
2x M6 flange nut

116. Plug the camera into the loom.

117. Fit the camera and mount into the centre of the bull bar.

Route the camera loom through the cutout to the top.

118. Secure with 2x M6x16 black button head bolts, black washers and flange nuts.

Have the bolt heads on top as shown.

TOOLS REQUIRED

4mm hex/Allen key

FASTENERS

2x M6x16 black button head
2x M6 black washer
2x M6 flange nut

119. Fit the B-1823 camera cover over the top and secure to the mount bracket with 2x M6x12 black button head bolts, black washers and flange nuts.

Ensure the camera lens is fully poking out the centre hole of the cover.

TOOLS REQUIRED

4mm hex/Allen key

FASTENERS

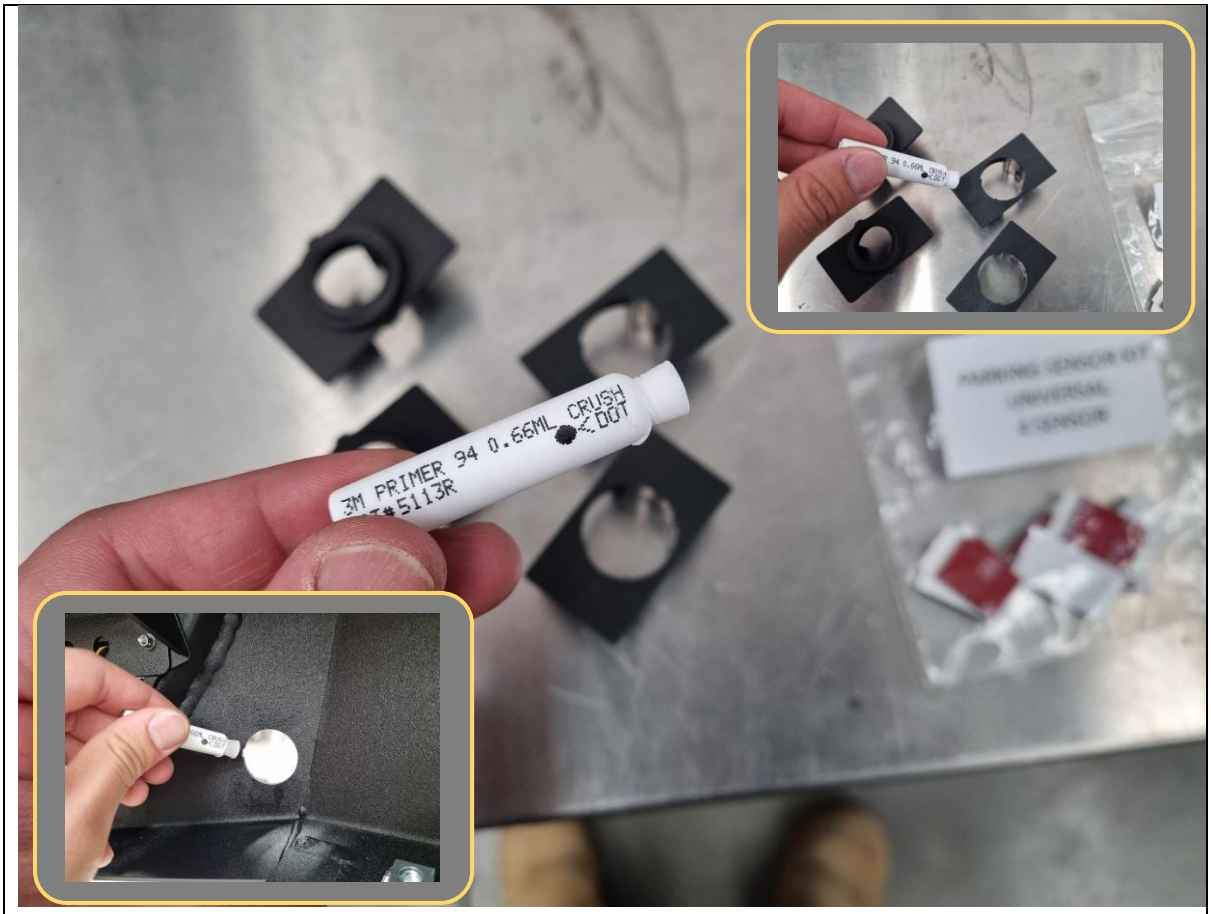
2x M6x12 black button head
2x M6 black washer
2x M6 flange nut

120. Clean the mounting surfaces of the 4x supplied parking sensor holders and the corresponding mounting locations on the inside of the bull bar with isopropyl alcohol or similar and let it dry.

TOOLS REQUIRED

Isopropyl alcohol
Rag

FASTENERS

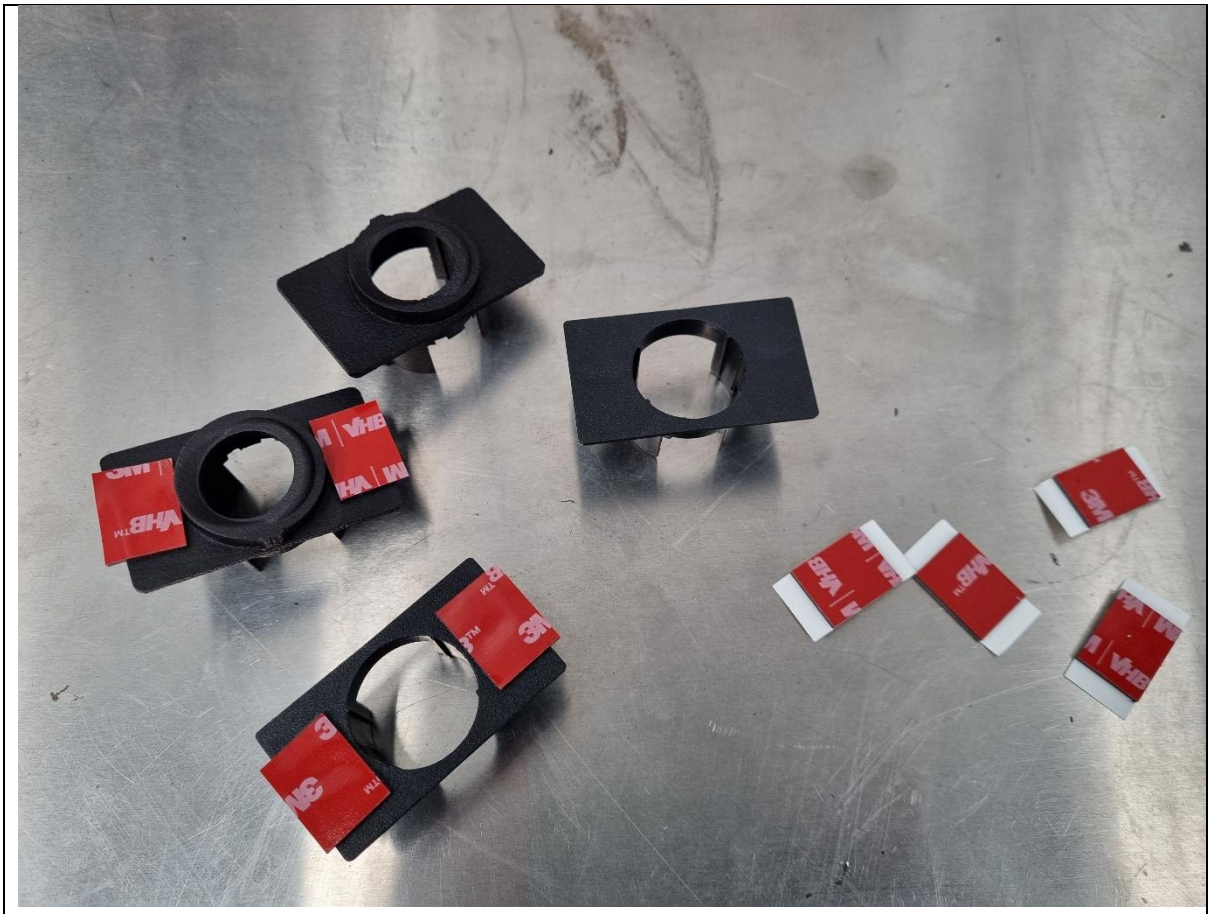


121. Use the 3M Primer 94 ampule from the parking sensor tape kit and apply primer to all the cleaned surfaces, both on the bull bar and the sensor holders.

TOOLS REQUIRED

FASTENERS

3M Primer 94



Allow at least 5 minutes for the primer to chemically bond to the surfaces before applying tape.

122. Apply supplied 3M VHB tape from the universal parking sensor tape kit to the parking sensor holders as shown.

TOOLS REQUIRED

FASTENERS

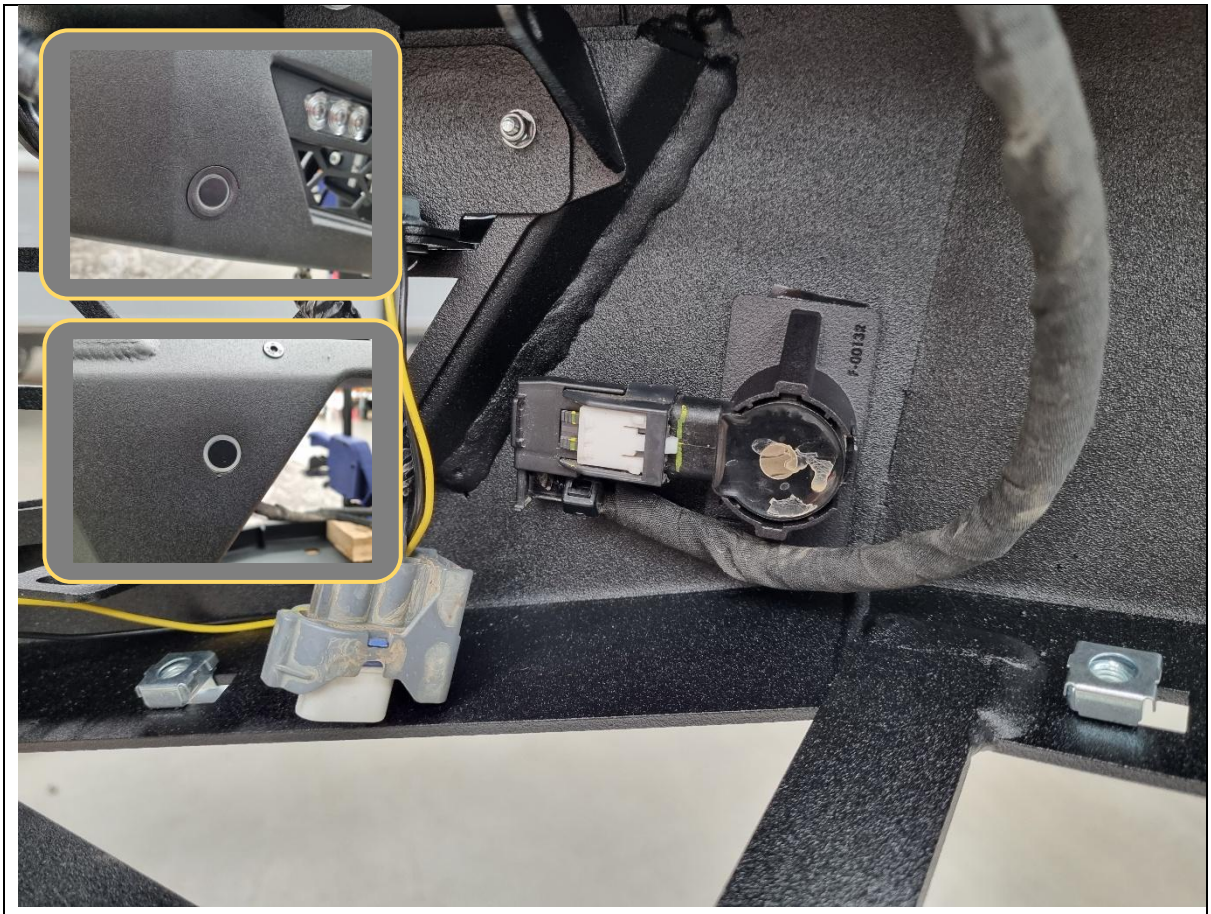
123. Clip the F-0030 (flat style) sensor holders into the middle 2x parking sensors.

124. Clip the F-0013R sensor holder in the outer RH parking sensor, and the F-0013L sensor holder in the outer LH parking sensor.

Ensure the rubber isolating ring is seated correctly in the sensor holder and not squished to one side.

TOOLS REQUIRED

FASTENERS



125. Remove the backing film off the tape on the parking sensor holders (use utility knife or 90 degree pick to assist), then fit to their corresponding positions inside the bull bar.

    Ensure the rubber isolating ring of the parking sensor fits through the hole in the bar and is not wedged in incorrectly.

126. Ensure the sensor plug orientation matches the installation in the factory bumper (middle sensors pointing outwards, outer sensors pointing inwards towards the centre of the vehicle).

127. Add a pea-sized blob of automotive adhesive sealant (we recommended Sikaflex 227) over the sensor/headlight washer holders and inside face of bar to hold to ensure the tape holds position.

TOOLS REQUIRED

Utility knife
Sikaflex

FASTENERS

128. Route the middle parking sensor loom through the side cutout in the bull bar and connect back to the main bumper loom.

TOOLS REQUIRED

FASTENERS

129. If fitting an integrated light bar, do so now.

This bar is designed to fit the Offroad Animal 22-inch light bar. If fitting this light bar, assemble the light bar with legs facing outwards, and line it up with the slots in the centre gusset. Secure with M6 fasteners supplied with the light.

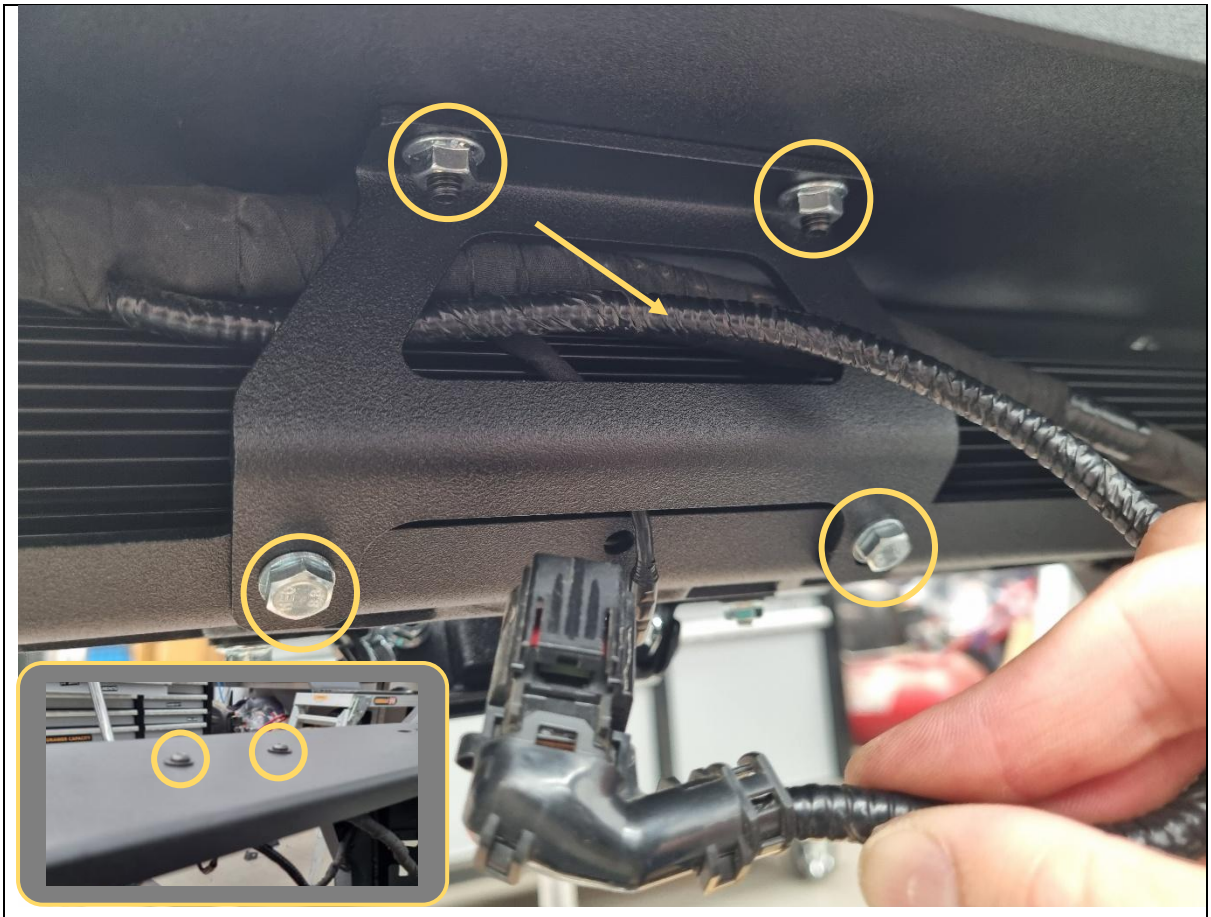
This bar can accommodate most other “20-22inch” size single row light bars. Stedi ST3K light bars require legs facing inwards.

TOOLS REQUIRED

Supplied with accessories

FASTENERS

Supplied with accessories



130. Fit the pan brace to the back of the light bar mounting area. Route the radar connector through the cutout of the pan brace.

131. Secure the pan brace to the top face of the bull bar with 2x M6x16 black button head bolts, black washers and flange nuts.

132. Secure the bottom to the embedded nuts in the bull bar with 2x M6x12 hex bolts and flat washers.

TOOLS REQUIRED

4mm hex/Allen key
10mm socket/spanner

FASTENERS

2x M6x12 hex bolt
2x M6 flat washer

2x M6x16 black button head
2x M6 black washer
2x M6 flange nut

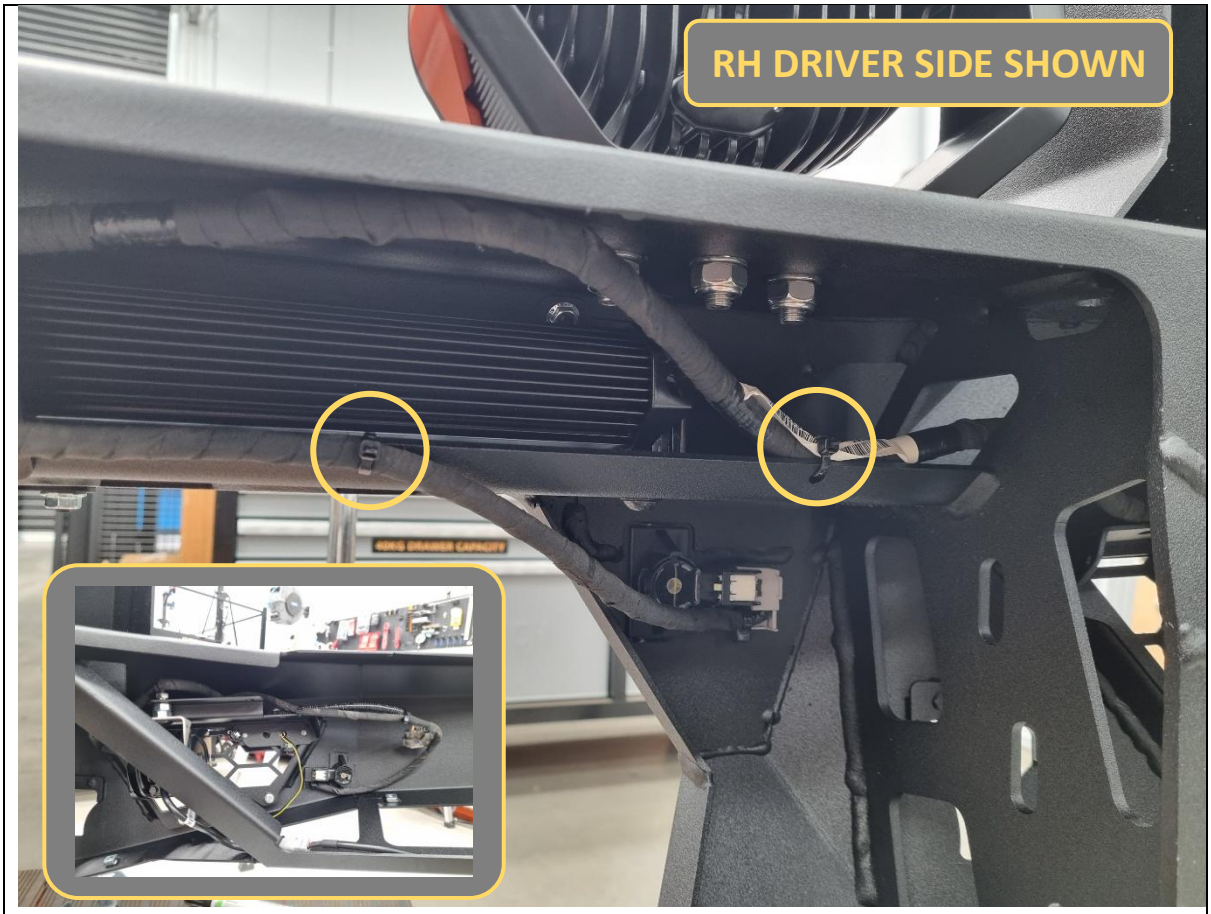
133. If fitting driving lights, stealth hoop, round hoop or rally hoop to this bar, this is also the most convenient time to do so. It is still possible later, but it is more difficult.

TOOLS REQUIRED

Supplied with accessories

FASTENERS

Supplied with accessories

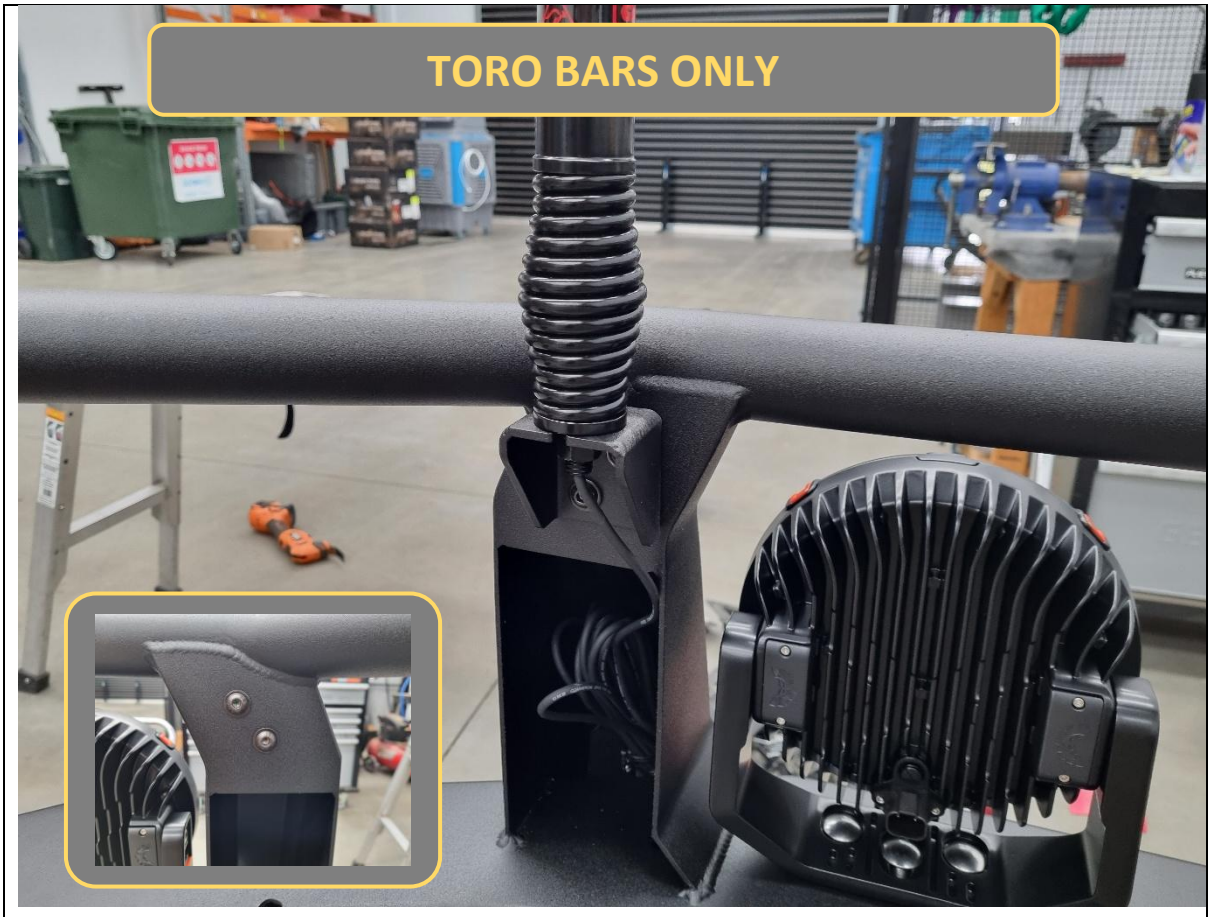


134. Use cable ties and the various holes in the bar and perform cable management on the loom.

TOOLS REQUIRED

Cable ties
Side cutters

FASTENERS



135. **Toro only.** If required, fit the supplied antenna mounting brackets to the back of the bar, and secure with 2x M8x20 black button head bolts and black washers, each.

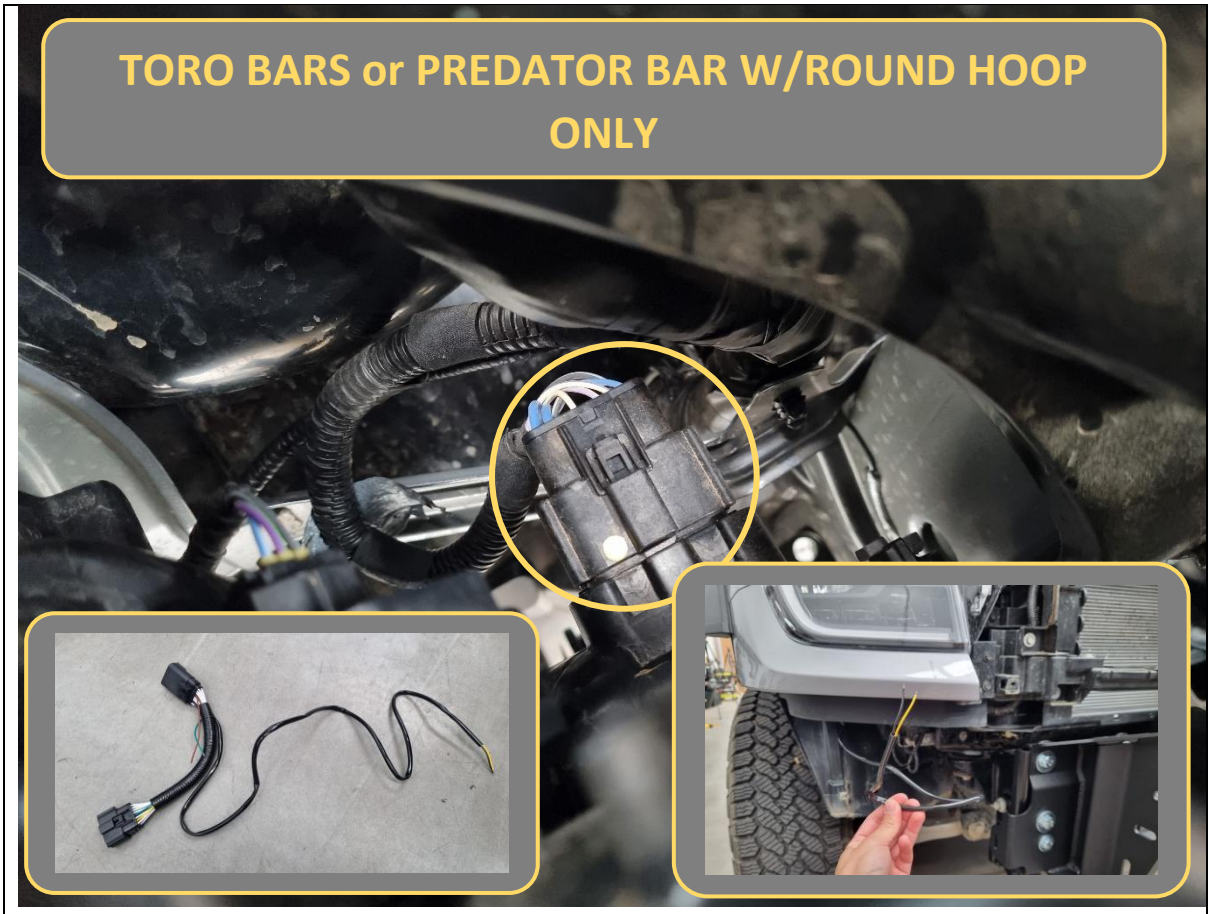
136. **Toro only.** Else, fit the 2x M8x20 black button head bolts and black washers to the back of each bull bar upright, to protect nut threads in bar for future use.

TOOLS REQUIRED

5mm hex/Allen key

FASTENERS

4x M8x20 black button head
4x M8 black flat washer



137. For finding the indicator signal for wiring up the indicator repeaters, locate the main headlight plug behind the headlight.

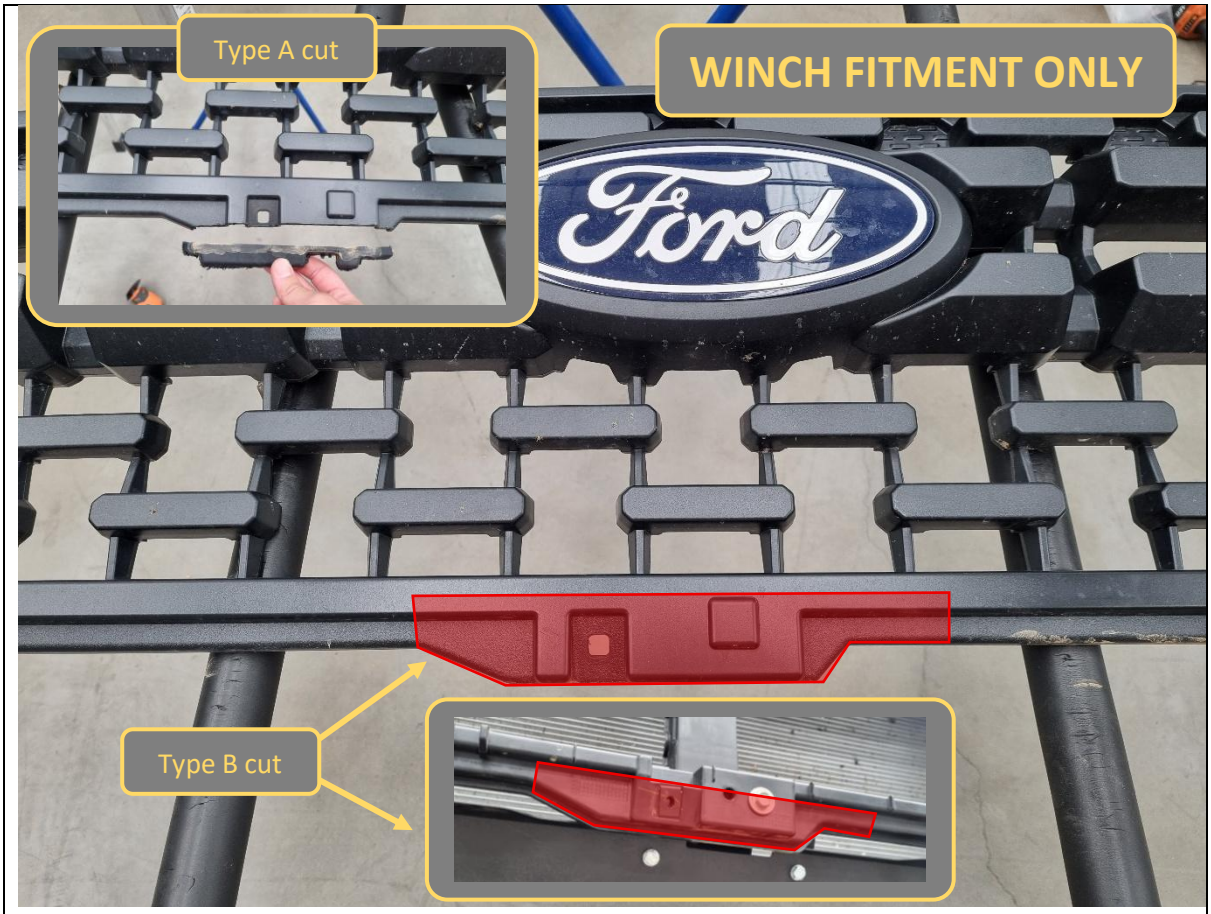
138. You can use the optional Offroad Animal piggyback harness (purchased separately) which will output signal (yellow) and ground (black), otherwise you will need to manually splice into the headlight harness. Consult an automotive electrician if unsure.

139. If using the Offroad Animal piggyback harness, tape off the green and brown high beam trigger wires used on other Ford Ranger headlight models.

    As of March 2026, the Super Duty high beam trigger is located in the kick panel in the cab.

TOOLS REQUIRED

FASTENERS



140. If you are fitting or plan to fit a winch with a top mount control box that is taller than 240mm, you will need to trim off the bottom of the grille and/or support structure.

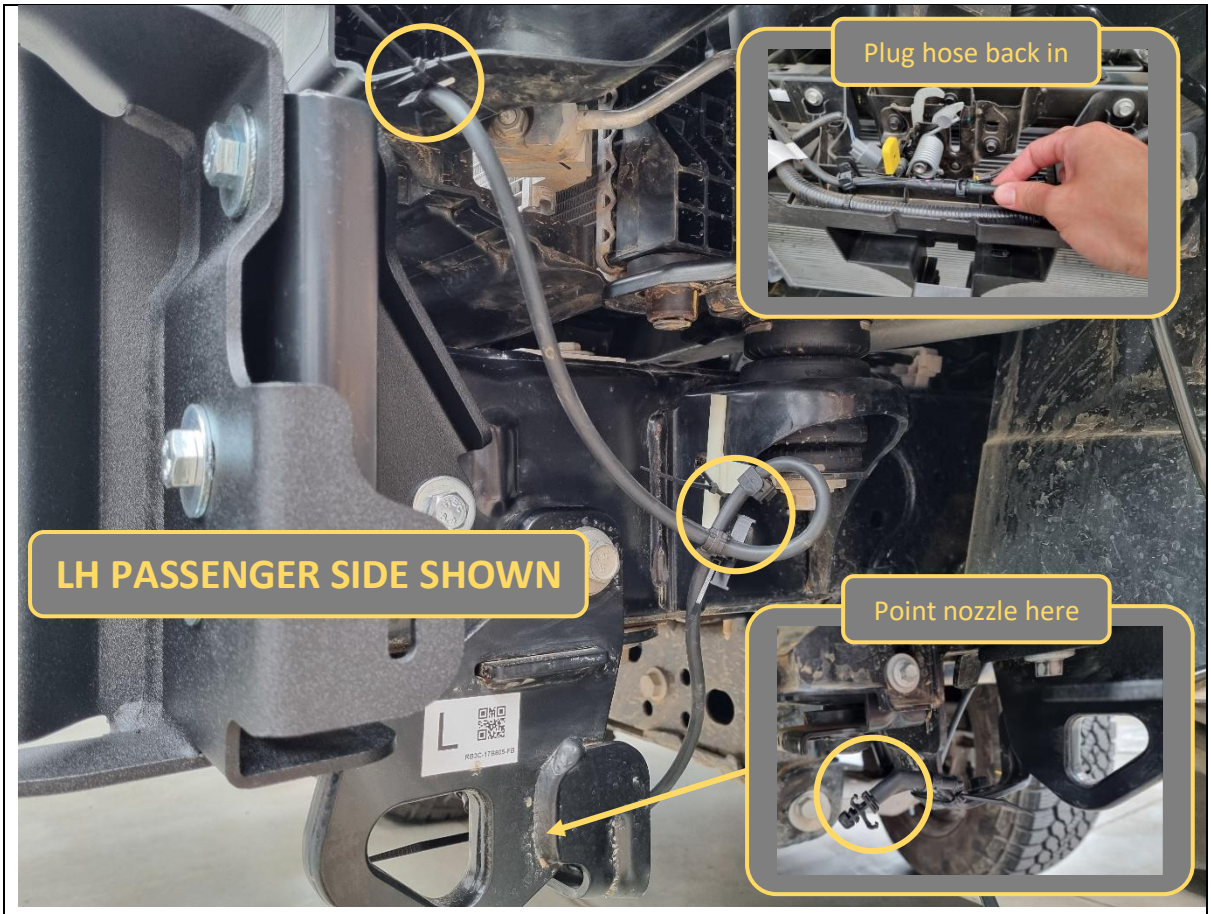
141. Offroad Animal has checked the following winches for compatibility:
    a. Bushranger Covert
        i. No grille cut required
    b. Carbon 12K Winch V3
        i. No grille cut required for offset box mount
        ii. Type B cut required for central mount
    c. Runva 11EXPEDITION
        i. Type A cut required
    d. Runva 11XP
        i. No grille cut required for offset box mount
        ii. Type A cut required for central mount
    e. WARN VR EVO
        i. Type A cut required
    f. WARN ZEON
        i. Type B cut required

TOOLS REQUIRED

Multi-tool
or
Similar cutting tool

Safety glasses

FASTENERS



142. Plug the washer hose back to the vehicle and remove any hose clamps.

143. Route the washer hose down the LH side to the LH recovery point. Water will spray down here instead of onto the camera.

144. Reposition the plastic clips attached to the washer hose and cable tie them to vehicle in appropriate locations, such that the rubber washer hose will not rub on anything.

TOOLS REQUIRED

Cable ties
Side cutters

FASTENERS

145. Pre-position the grille back onto the vehicle, but leave the LH unclipped and loose so you can route the main bumper harness back through to the connector up top.

TOOLS REQUIRED

FASTENERS

146. With assistance from other people or a mechanical lift trolley (recommended), bring the bull bar towards the vehicle.

147. Route the bumper harness back up behind the grille and plug back in the main bumper and camera connectors.

148. Fully press in and clip in the grille once harness is routed through.

TOOLS REQUIRED

Lifting trolley

FASTENERS

149. Lift the bar onto the mounts on the vehicle.

150. Secure the bar to the mounts with 8x M12x30x1.25p fine pitch bolts, heavy-duty washers and fine pitch Nyloc + flange nuts. Leave finger tight at this stage.

<u>Do not mix the M12x1.25p fine pitch bolts with the M12x1.75p coarse pitch bolts supplied in the kit.</u>

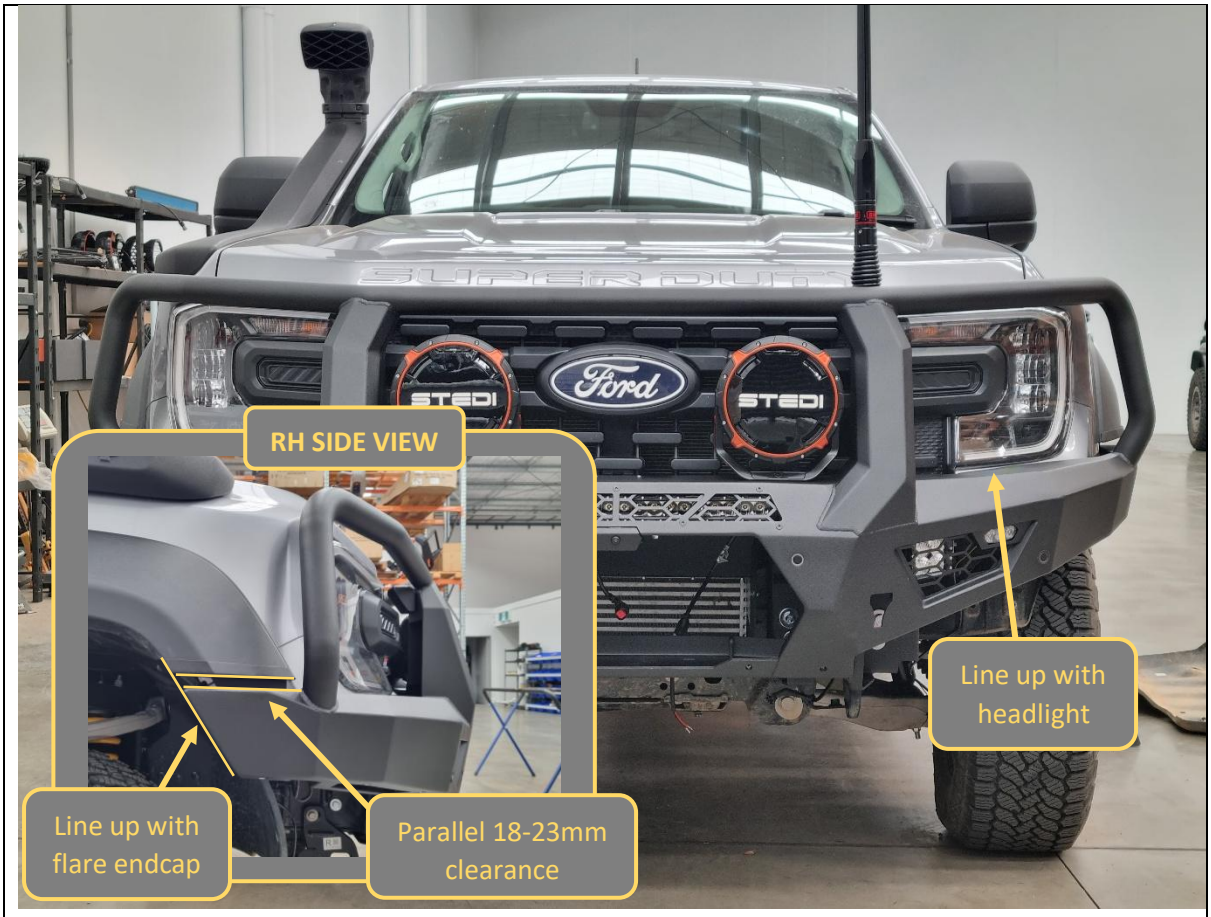
Note: Use a washer on both bolt and nut side for the Nyloc nut. 1x Nyloc required per side of the bar. 1x washer on the bolt side is all that is required with flange nuts.

TOOLS REQUIRED

Lifting trolley

FASTENERS

8x M12x30x1.25p hex bolt
10x M12 heavy duty washer
2x M12x1.25p Nyloc nut
6x M12x1.25p flange nut



151. 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 face of the wings should sit just below the bottom edge of the headlights.

Side view: The end of the bar wing should be in line with the fold in the flare endcap. There should also be 18-23mm vertical clearance between the top of the bull bar wing and bottom of flare endcap.

Top view: There should be around 15mm clearance between the bar and the grille.

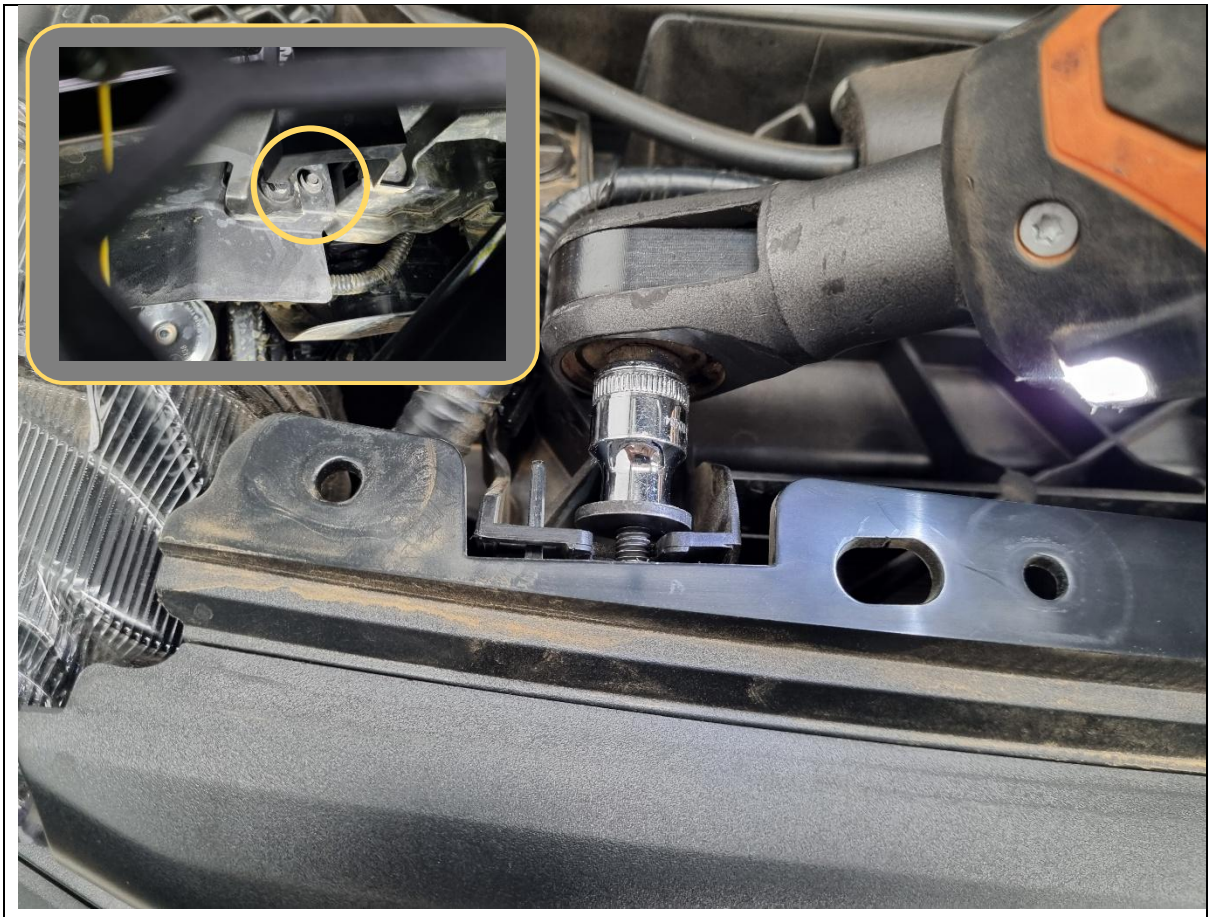
152. Once happy with alignment, tighten all 8x M12 bolts.

TOOLS REQUIRED

Lifting Trolley

18/19mm socket/spanner

FASTENERS



153. Re-secure the grille to the vehicle with the factory 8mm hex bolts removed earlier.

154. The lower 3x bolts can be accessed from underneath behind the bull bar.

155. Skip the middle bolt if that region was cut away for winch clearance.

TOOLS REQUIRED

8mm socket/spanner

FASTENERS

5x factory 8mm hex bolt

Retained from Step 9

156. Connect the indicator repeater wires to the spliced/piggyback wires from the headlight.

Either solder/crimp wires together and electrically insulate the connection afterwards.

157. Confirm function of the indicator repeaters by turning on the vehicle hazard lights.

Do not turn the vehicle ignition on to test this since the radar is still disconnected. Only use the hazard warning switch.

TOOLS REQUIRED

Electrical tools

FASTENERS

158. If fitting a winch, do so now.

Ensure the camera, radar and bumper harnesses do not get squished.

This bar is designed to fit most low mount winches, in foot down configuration. WARN ZEON 12 is the largest winch confirmed to fit.

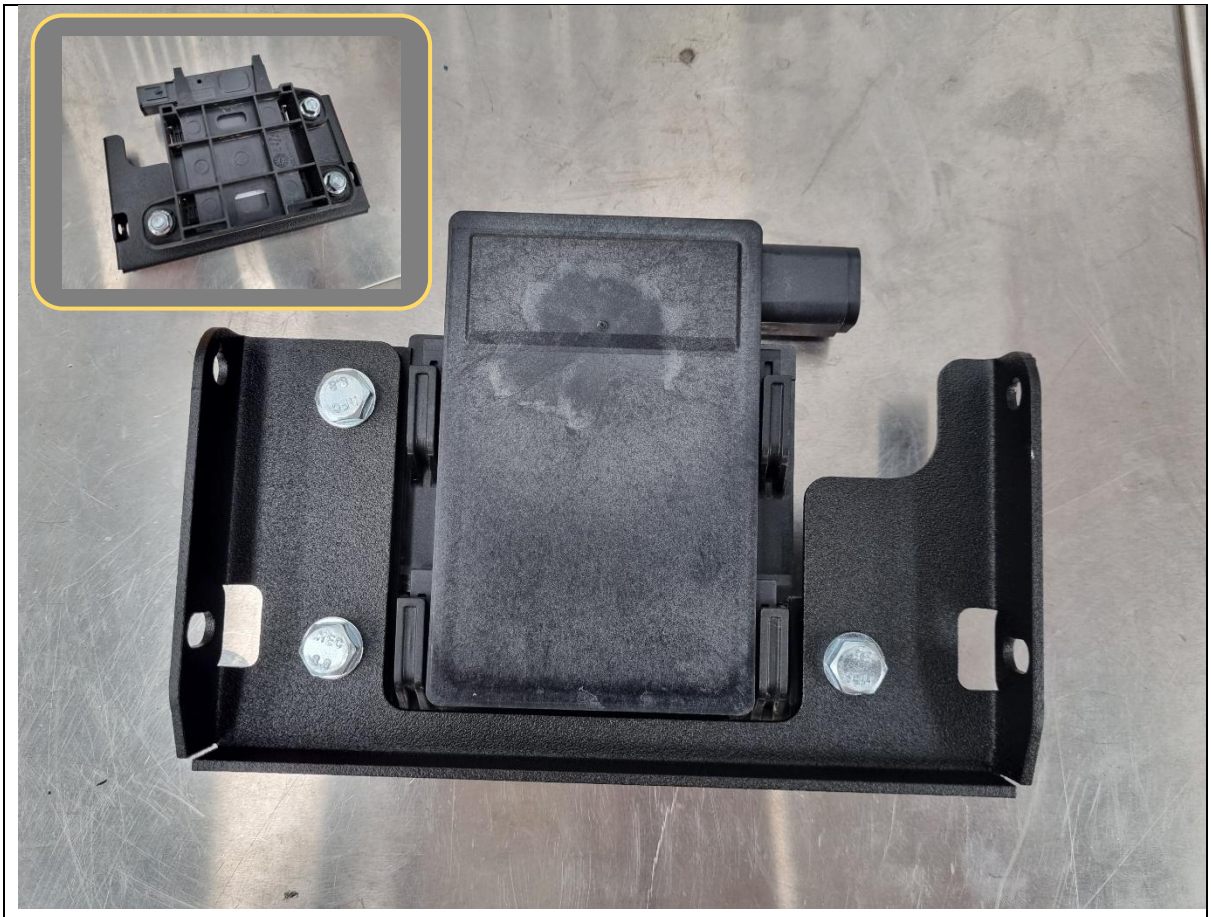
Ensure clutch handle will be accessible through opening in front mesh panel. Refer to winch instructions regarding changing clutch handle location.

TOOLS REQUIRED

Refer to instructions supplied by winch

FASTENERS

Supplied with winch



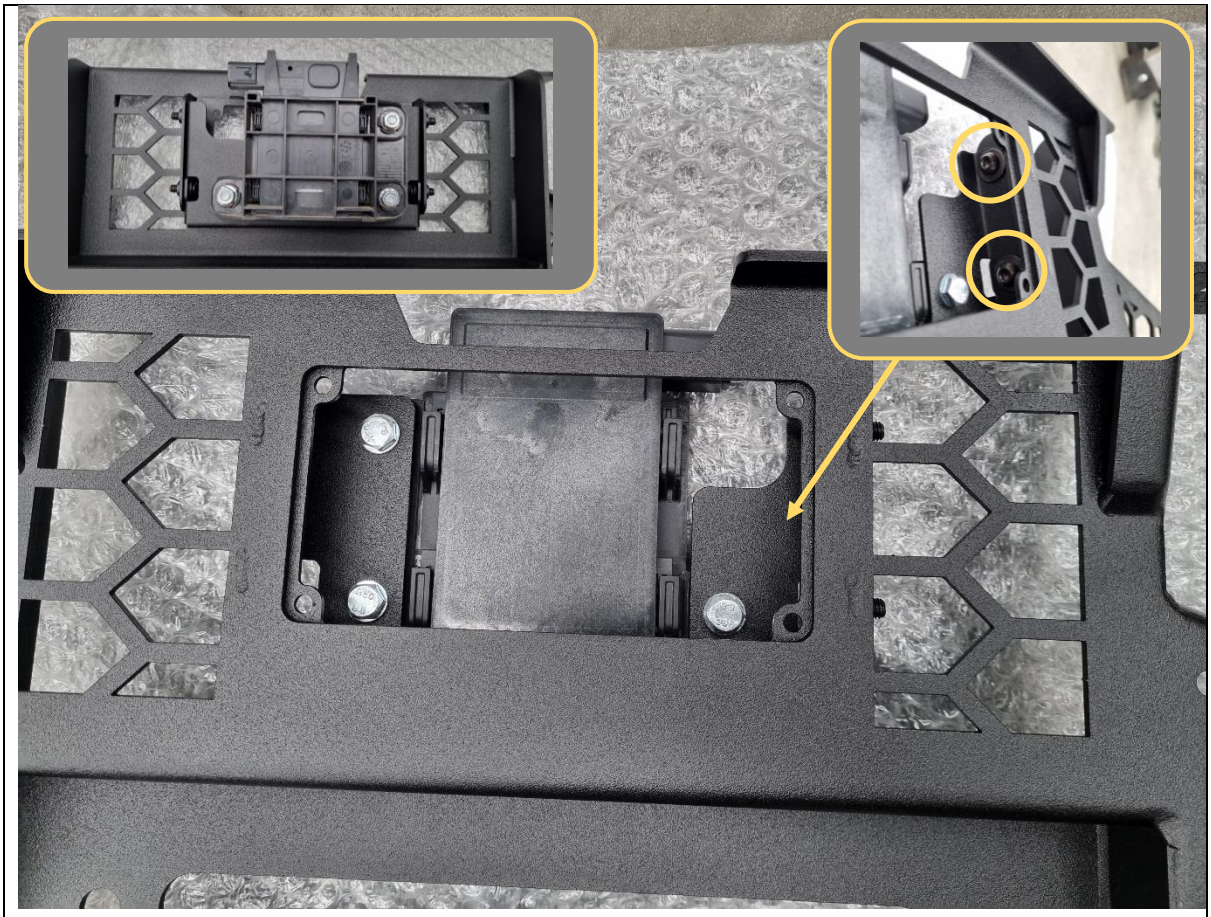
159. Fit the radar to the back of the B-1819 radar bracket and secure with 3x M6x20 hex bolts, flat washers and flange nuts.

TOOLS REQUIRED

10mm socket/spanner

FASTENERS

3x M6x20 hex bolt
3x M6 flat washer
3x M6 flange nut



160. Fit the radar with bracket to the back of the centre mesh.

Ensure the radar is correctly orientated with the plug pointing to the LH passenger side.

161. Finger tight secure the radar bracket to the embedded nuts in the centre mesh using 4x M6x16 black button head bolts and black washers.

The angle of the radar will be adjusted once fitted to the bull bar and bolts tightened at that stage.

TOOLS REQUIRED

4mm hex/Allen key

FASTENERS

4x M6x16 black button head
4x M6 black washer

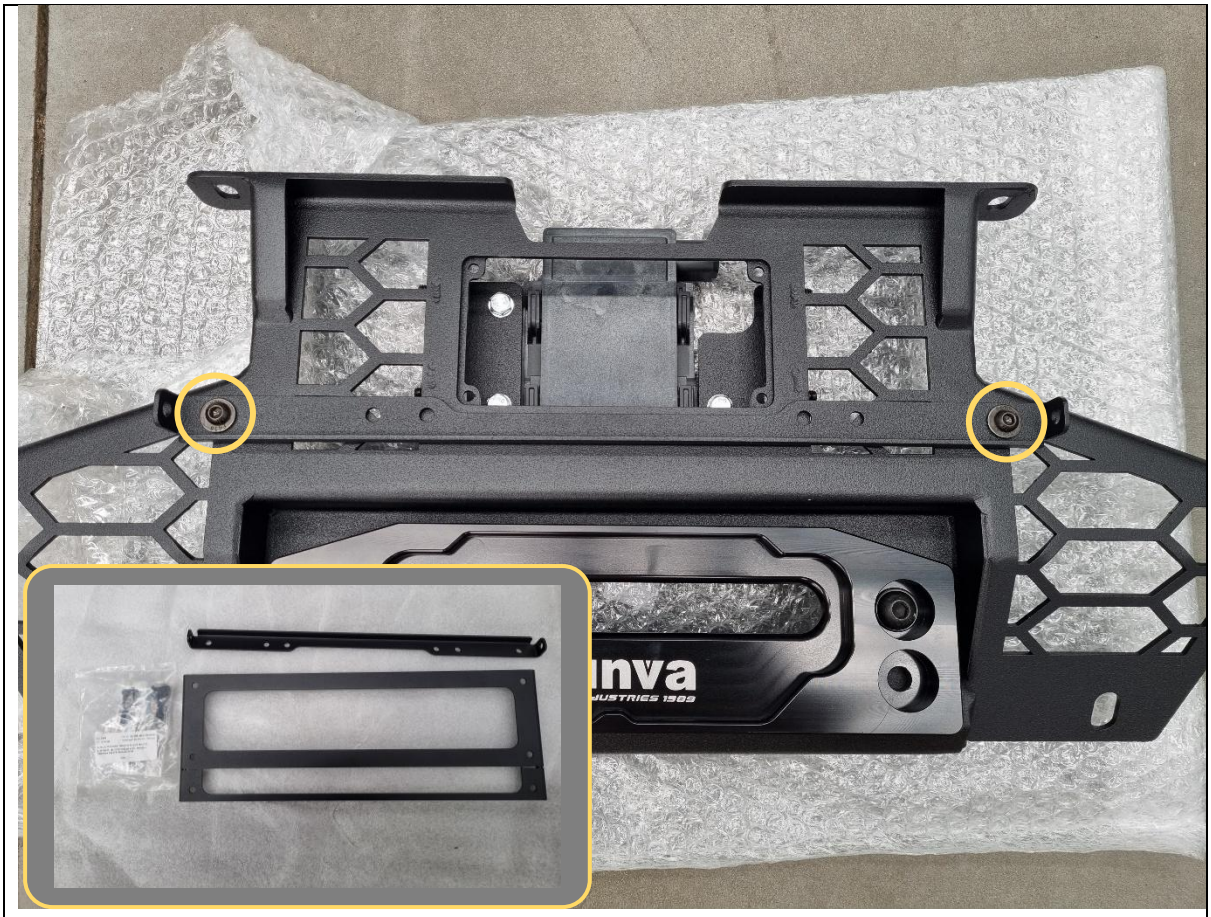
162. If fitting a winch, fit the hawse fairlead to the centre mesh now using M10 or 3/8” fasteners supplied with the winch. This bar is only compatible with hawse type fairleads.

TOOLS REQUIRED

Refer to instructions supplied by winch

FASTENERS

Supplied with winch



Locate the number plate flip brackets and fastener kit.

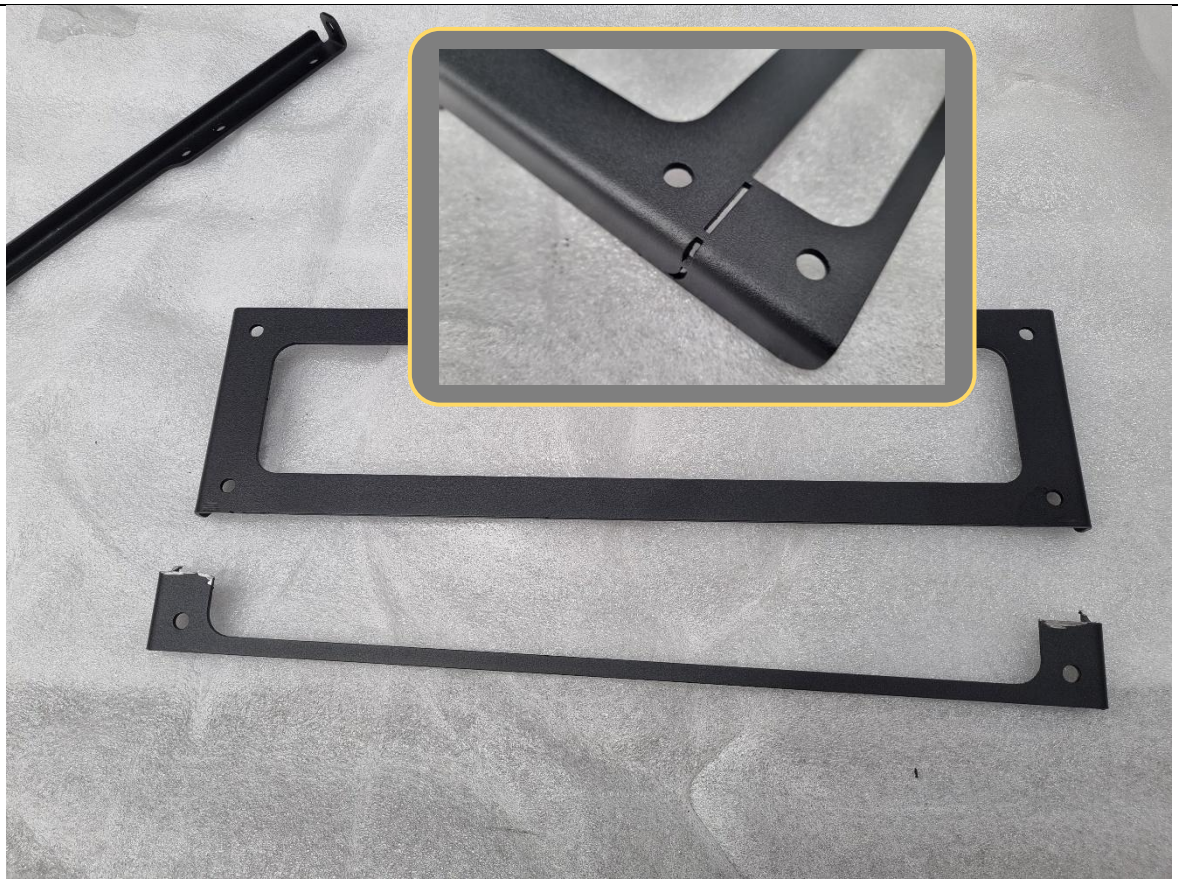
163. Fit the base bracket to the centre mesh and secure with 2x M6x16 black button head bolts, black washers and flange nuts.

TOOLS REQUIRED

4mm hex/Allen key

FASTENERS

2x M6x16 black button head
2x M6 black flat washer
2x M6 flange nut



The number plate flip bracket is designed to be compatible with both standard and slimline number plates.

164. If fitting to a slimline plate, use an angle grinder to cut the bottom section of the bracket off along the laser cut grooves.

165. Deburr the cut edges, then paint over to prevent rust.

TOOLS REQUIRED

Angle grinder

Deburring tool

Black spray paint

FASTENERS

166. 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.

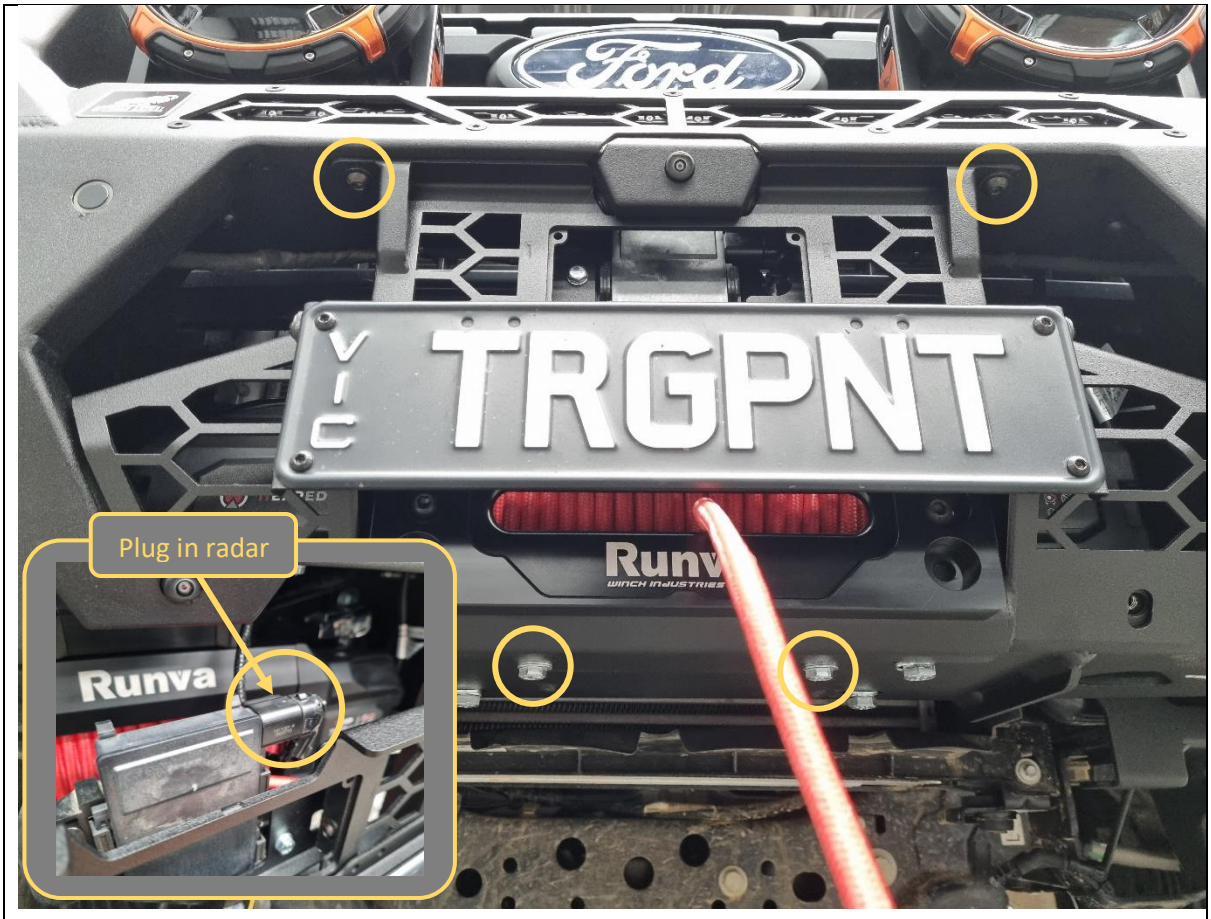
167. Attach number plate to flip bracket using 4x M6x12 black button head bolts, black washers and flange nuts.

TOOLS REQUIRED

4mm hex/Allen key
10mm spanner

FASTENERS

4x M6x12 black button head
2x M6x16 black button head
8x M6 black flat washer
4x M6 flange nut
2x M6 nylon washer
2x M6 Nyloc nut



168. 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.

169. Connect the radar to the bumper harness.

170. Secure the centre mesh to the bar using 2x M8x16 black button head bolts + black washers (top), 2x M8x20 hex head bolts + heavy duty 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 heavy duty washer

171. Hold up a digital angle gauge or other measuring tool to the front face of the radar.

172. Adjust the radar so that the radar is sitting 90deg perpendicular to the ground.

173. Once aligned, tighten the 4x M6 button head bolts holding the radar (see inset photo).

174. Turn the car on test the operation of the radar, camera, parking sensors and fog lights (if fitted).

TOOLS REQUIRED

Digital angle gauge

4mm hex/Allen key

FASTENERS

175. Fit the supplied plastic N-0027 radar cover panel (textured face on outside) and secure to the centre mesh with 4x fir tree clips supplied.

TOOLS REQUIRED

4mm hex/Allen key

FASTENERS

4x fir tree clip

176. Re-install the radiator top cover with the 15x scrivets removed earlier and close the bonnet.

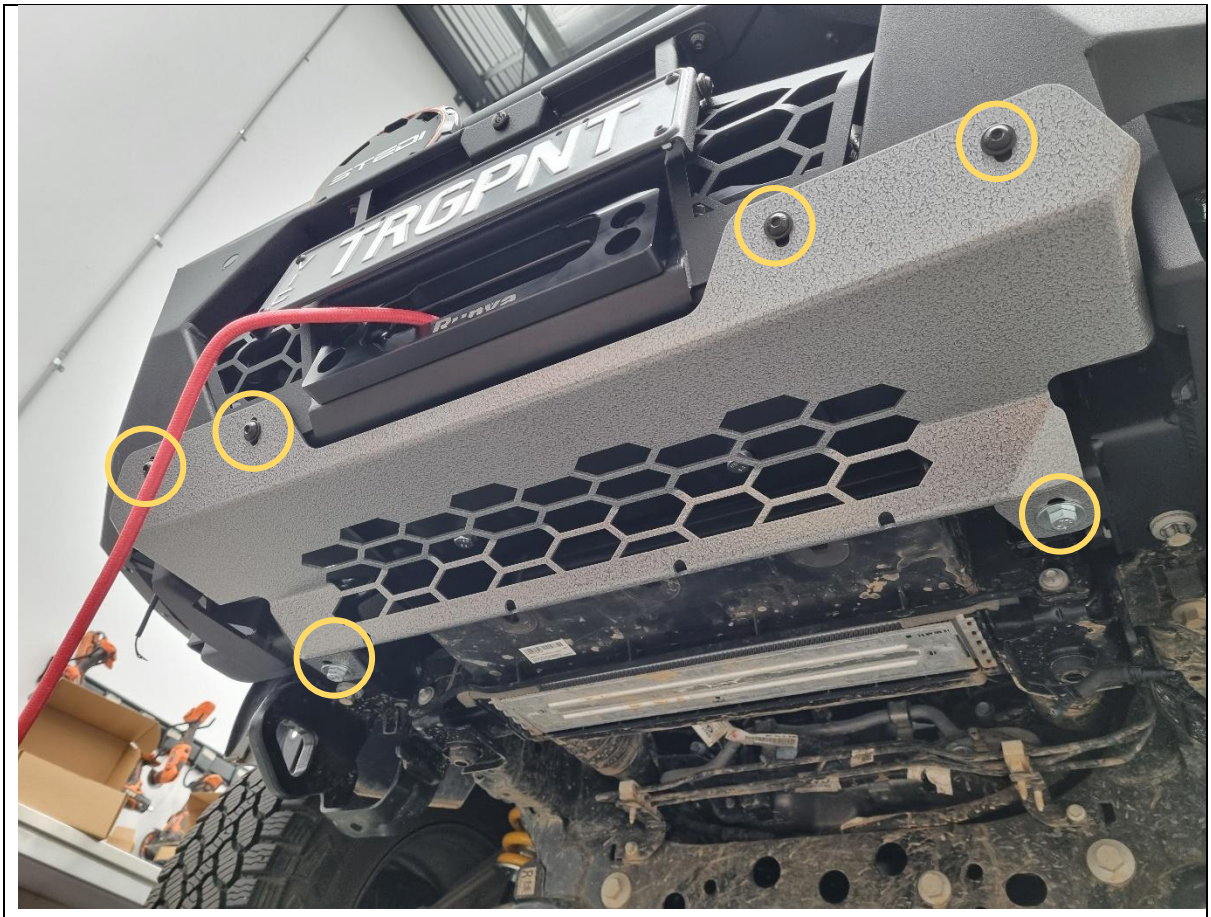
TOOLS REQUIRED

Phillips head screwdriver

FASTENERS

15x scrivets

Retained from Step 8



177. Fit the bash plate to the underside of the bull bar.

178. Secure to the bull bar at the front with 4x M8x30 black button head bolts and black washers.

179. Secure to the impact assemblies at the rear with 2x M10x25 hex bolts, heavy duty washers and flange nuts.

TOOLS REQUIRED

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

FASTENERS

4x M8x30 black button head
4x M8 black flat washer

2x M10x25 hex bolt
2x M10 heavy duty washer
2x M10 flange nut

180. Re-fit the factory bash plate with the factory 15mm hex bolts.

TOOLS REQUIRED

15mm socket/spanner

FASTENERS

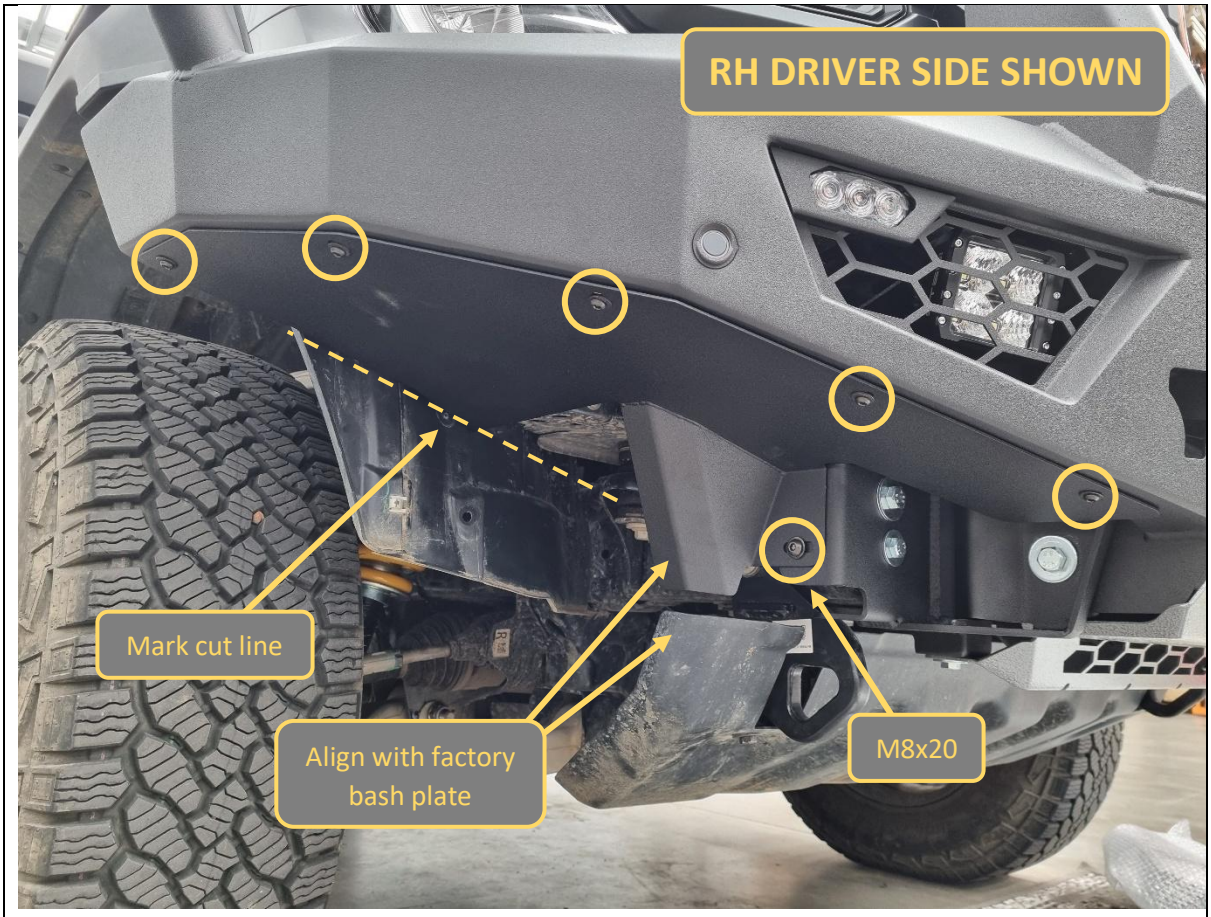
2x factory 15mm hex bolt

Retained from Step 17

181. Peel off the backing film and affix the ADR compliance plate to the inside of the RH side underpanel.

TOOLS REQUIRED

FASTENERS



182. Dry test fit the side underpanels to the underside of the bull bar wings.

183. Loosely secure each one with 5x M6x16 black button head bolts and black washers, plus 1x M8x20 black button head bolt, black washer and flange nut.

Align the protruding section with the factory bash plate.

184. Using a marker pen, mark out a cut line on the wheel arch liner that matches the bottom profile of the side underpanel.

TOOLS REQUIRED

4mm hex/Allen key
5mm hex/Allen key

Marker pen

FASTENERS

10x M6x16 black button head
10x M6 black flat washer

2x M8x20 black button head
2x M8 black flat washer
2x M8 flange nut

185. Remove the side underpanels, then cut the wheel arch liners along the marked lines.

186. Clean up the cut edge with a deburring tool or similar.

TOOLS REQUIRED

Multi-tool
or
Similar cutting tool

Safety glasses

Deburring tool

FASTENERS

187. Re-fit and fully tighten the side underpanels. Ensure the trimmed wheel arch liner is tucked inside the flanges on the back of the side underpanels.

188. The fitment is now complete. Double check all fasteners are done up.

TOOLS REQUIRED

4mm hex/Allen key
5mm hex/Allen key

FASTENERS

Congratulations! You're done! Get out and tour Australia in your super tough Super Duty!