Toyota Hilux (N90)
AN220 Series MY26-on
Predator and 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 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.

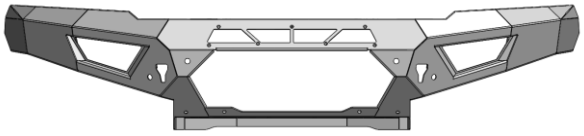
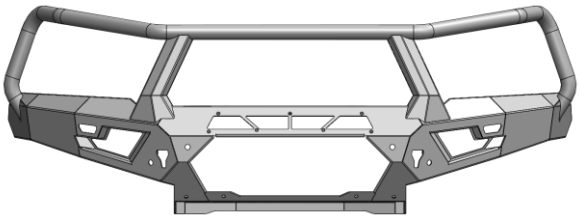
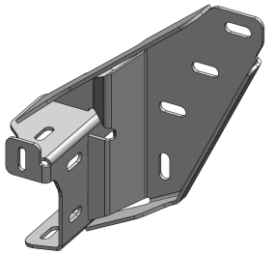
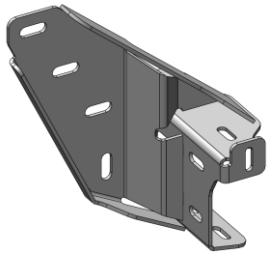
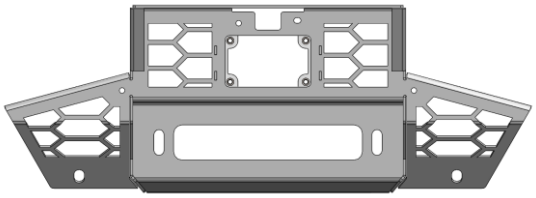
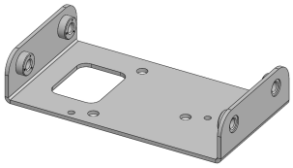
FRONT BAR MOUNTS AND TOW POINTS + REAR TOWBAR	
Size	**Torque Nm**
M10	57 Nm
M12	100 Nm
M14	164 Nm
M16	248 Nm

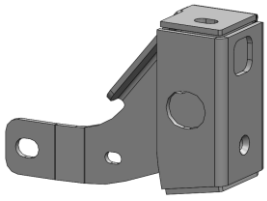
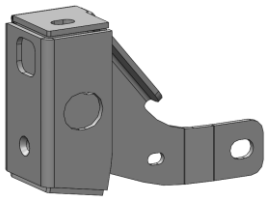
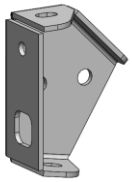
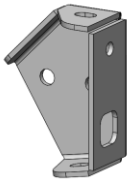
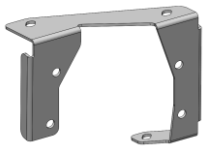
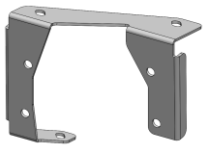
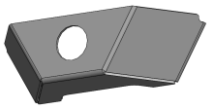
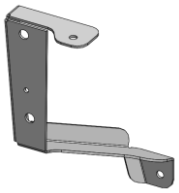
Always use a torque wrench to set correct torque settings. Ensure torque wrench is set to Nm unit of measurement. Otherwise perform conversion to lb-ft.

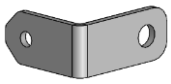
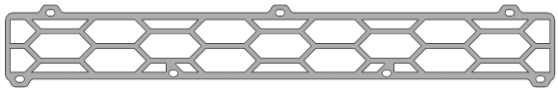
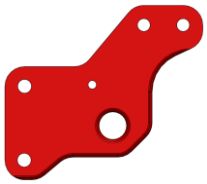
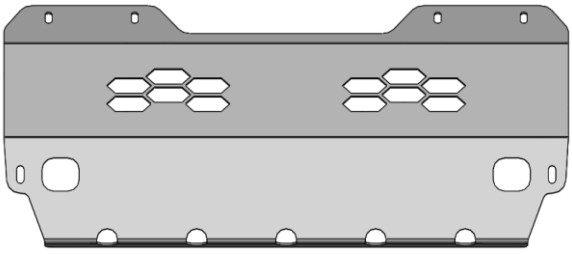
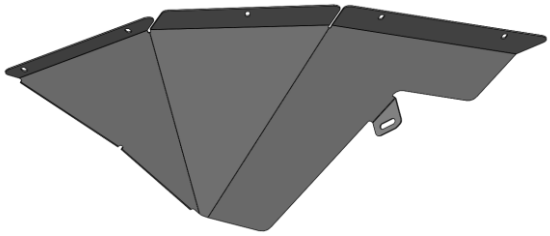
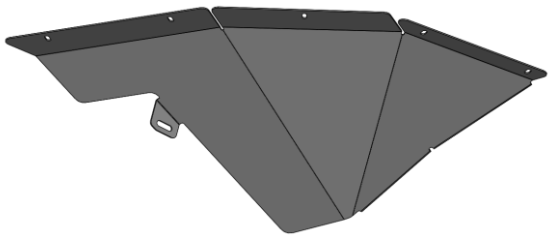
PARTS LISTING

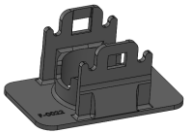
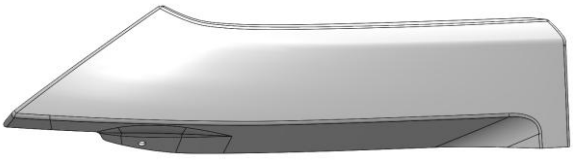
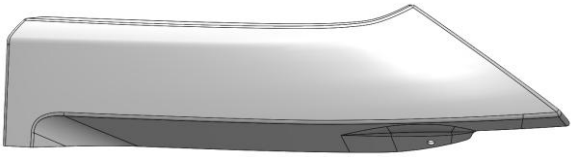
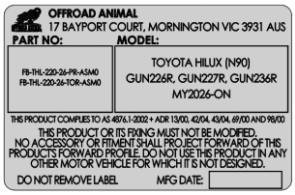
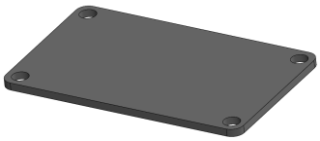
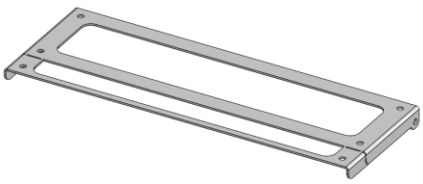
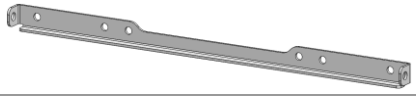
IMPORTANT: Check all parts are present before beginning work! Contact OFFROAD ANIMAL if something is missing.

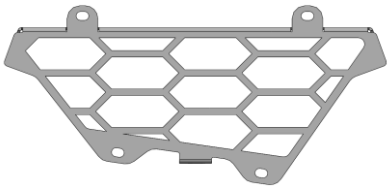
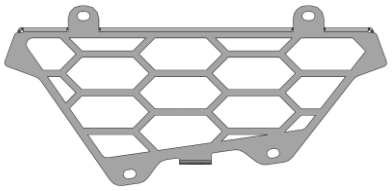
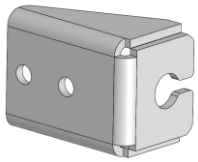
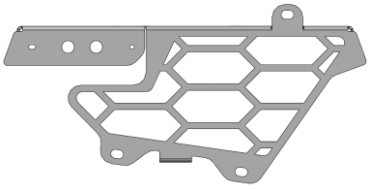
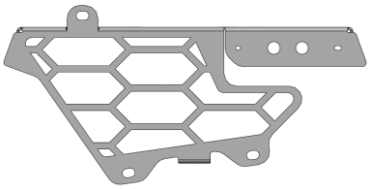
Main Parts – In the Box

Qty	Part Number	Description	Image
1	FB-THL-220-26-PR-ASM1	Hilux AN220 MY26 Predator Bar Welded Assembly	
		OR	
1	FB-THL-220-26-TOR-ASM1	Hilux AN220 MY26 Toro Bar Welded Assembly	
1	FB-THL-220-26-PR-ASM2R	Hilux AN220 MY26 Impact Assembly RH	
1	FB-THL-220-26-PR-ASM2L	Hilux AN220 MY26 Impact Assembly LH	
1	FB-THL-220-26-PR-ASM4	Hilux AN220 MY26 Mesh Fairlead	
1	B-1447	Prado 250 ACC Radar Mount	

1	B-1794R	Hilux AN220 MY26 Chassis Brace Outer RH	
1	B-1794L	Hilux AN220 MY26 Chassis Brace Outer LH	
1	B-1795R	Hilux AN220 MY26 Chassis Brace Inner RH	
1	B-1795L	Hilux AN220 MY26 Chassis Brace Inner LH	
1	B-1796	Hilux AN220 MY26 Pan Brace	
1	B-1797R	Hilux AN220 MY26 Fog Light Bracket RH	
1	B-1797L	Hilux AN220 MY26 Fog Light Bracket LH	
1	B-1798	Hilux AN220 MY26 Camera Housing	
1	B-1801R	Hilux AN220 MY26 Headlight Infill Inner Bracket RH	
1	B-1801L	Hilux AN220 MY26 Headlight Infill Inner Bracket LH	

1	B-1802R	Hilux AN220 MY26 Headlight Infill Outer Bracket RH	
1	B-1802L	Hilux AN220 MY26 Headlight Infill Outer Bracket LH	
1	B-1850	Hilux AN220 MY26 Centre Grille Support	
1	B-1879	Hilux AN220 MY26 Harness Anchor Bracket	
1	P-0515	22" Lightbar Mesh Infill Plate	
2	P-0539	Hilux AN220 MY26 Tow Point	
2	P-0540	Hilux AN220 MY26 Tow Point 4mm Spacer Plate	
2	P-0541	Hilux AN220 MY26 Tow Point 6mm Spacer Plate	
1	U-0133	Hilux AN220 MY26 Bash Plate	
1	U-0134R	Hilux AN220 MY26 Side Underpanel RH	
1	U-0134L	Hilux AN220 MY26 Side Underpanel LH	

1	OFA-LOGO	Offroad Animal Metal Logo	
2	CPHP029	Plastic Hole Insert, 17.4MM, Black, Tigerlink Hardware CPHP029	
1	CPHP125	Plastic Hole Insert, 16MM, Black, Tigerlink Hardware CPHP125	
4	F-0022	LC300 Sahara ZX + GR Sport Sensor Holder	
1	F-0038R	Hilux AN220 MY26 Headlight Infill RH	
1	F-0038L	Hilux AN220 MY26 Headlight Infill LH	
1	FB-THL-220-26-PR-ADRCP	ADR Compliance Plate Hilux AN220 2026+	
1	N-0017	Prado 250 ACC Radar Cover	
1	TK-COM-PSEN-4	Tape Kit - 4 Sensor Universal	N/A
1	TK-FB-THL-220-26	Tape Kit - Hilux AN220 MY26	N/A
NUMBER PLATE FLIP ASSEMBLY (NPF-COM-LGE-ASM0)			
1	B-1446	Number Plate Flip - Large	
1	B-1458	Number Plate Flip Base	

PREDATOR ONLY			
1	M-0084R	Hilux AN220 MY26 Predator Wing Mesh RH	
1	M-0084L	Hilux AN220 MY26 Predator Wing Mesh LH	
TORO ONLY			
2	B-0649	Toro Antenna Bracket - 90 Degree Tall	
1	M-0085R	Hilux AN220 MY26 Toro Wing Mesh RH	
1	M-0085L	Hilux AN220 MY26 Toro Wing Mesh LH	
1	11CAT1M-2	LED Autolamps 11CAT1M-2 Front Indicator - Twin Blister Pack	

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 Small Parts – Contained in Small Parts Kit Bag

Qty	Part Number	Description
13	M6 X 12 HEX	M6X12 HEX BOLT, ZP, 8.8
14	M6x12 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X12X1 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
28	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
13	M6 FLAT WASHER	M6 Flat Washer
42	M6 FLAT WASHER BLACK ZINC	M6 Flat Washer, 12x6.1x1, ISO4042 ZnNi BLACK PASSIVATED FINISH
30	M6 FLANGE NUT	Flange Nut, M6x1 G8.8 ZP
10	M6CN3MM	CAGE NUT M6x2.6-3.5
4	M8 X 20 HEX	Bolt Hex, M8X20x1.25, GR8.8 ZP
2	M8 X 40 HEX	Bolt Hex, M8X40X1.25, GR8.8 ZP
3	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
6	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 NYW	Washer, M8, Nylon
6	M8 FLANGE NUT	Flange Nut, M8x1.25 G8.8 ZP
12	M10 x 25	Bolt Hex, M10X25x[1.5], GR8.8 ZP
4	M10X30X1.25	Bolt Hex, M10X30x1.25, GR8.8 ZP
2	M10X20 BHCS	SCREW, BUTTON HEAD CAP, M10X20X1.5 GR12.9 ZP
18	M10 FW LHD	WASHER, FLAT M10X28.5X2.5
12	M10 FLANGE NUT	Flange Nut, M10x1.5 G8.8 ZP
4	M12X30	Bolt Hex, M12X30x1.75, GR8.8 ZP
4	M12X50	Bolt Hex, M12X50x1.75, GR8.8 ZP
8	M12X30x1.25 G10.9	Bolt Hex, M12X30x1.25, GR10.9 ZP
4	M12X50x1.25 GR10.9	Bolt Hex, M12X50x1.25, GR10.9 ZP
22	M12 FW LHD	M12 FW Large Heavy Duty
6	M12x1.25P FLANGE NUT	Flange Nut, M12x1.25 G10.9 ZP
2	M12x1.25P NYLOC NUT	NYLOC NUT, M12x1.25 G10.9 ZP
4	FB-THL-220-26-PR-ASM5	Hilux AN220 MY26 Chassis Nut Plate

TORO Small Parts – Contained in Small Parts Kit Bag

Qty	Part Number	Description
4	M3X12 PAN	SCREW, PAN HEAD PHILLIPS, M3X12X0.5 GR4.6 ZP
4	M3 FLAT WASHER	Flat Washer M3, 7mmODx0.5mm T
4	M3 NUT	Hex Nut, M3x0.5 G48.8 ZP
11	M6 X 12 HEX	M6X12 HEX BOLT, ZP, 8.8
14	M6x12 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X12X1 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
28	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
11	M6 FLAT WASHER	M6 Flat Washer
42	M6 FLAT WASHER BLACK ZINC	M6 Flat Washer, 12x6.1x1, ISO4042 ZnNi BLACK PASSIVATED FINISH
30	M6 FLANGE NUT	Flange Nut, M6x1 G8.8 ZP
10	M6CN3MM	CAGE NUT M6x2.6-3.5
4	M8 X 20 HEX	Bolt Hex, M8X20x1.25, GR8.8 ZP
2	M8 X 40 HEX	Bolt Hex, M8X40X1.25, GR8.8 ZP
3	M8 X 16 BHCS BZP	SCREW, BUTTON HEAD CAP, M8X16X1.25 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
6	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
6	M8 HD FLAT WASHER	M8 FLAT WASHER - High Tensile 19x8x1.9mm
12	M8 HD FLAT WASHER - BZP	M8 FLAT WASHER - High Tensile 19x8x2mm, ISO4042 ZnNi BLACK PASSIVATED FINISH
2	M8 NYW	Washer, M8, Nylon
6	M8 FLANGE NUT	Flange Nut, M8x1.25 G8.8 ZP
12	M10 x 25	Bolt Hex, M10X25x[1.5], GR8.8 ZP
4	M10X30X1.25	Bolt Hex, M10X30x1.25, GR8.8 ZP
2	M10X20 BHCS	SCREW, BUTTON HEAD CAP, M10X20X1.5 GR12.9 ZP
18	M10 FW LHD	WASHER, FLAT M10X28.5X2.5
12	M10 FLANGE NUT	Flange Nut, M10x1.5 G8.8 ZP
4	M12X30	Bolt Hex, M12X30x1.75, GR8.8 ZP
4	M12X50	Bolt Hex, M12X50x1.75, GR8.8 ZP
8	M12X30x1.25 G10.9	Bolt Hex, M12X30x1.25, GR10.9 ZP
4	M12X50x1.25 GR10.9	Bolt Hex, M12X50x1.25, GR10.9 ZP
22	M12 FW LHD	M12 FW Large Heavy Duty
6	M12x1.25P FLANGE NUT	Flange Nut, M12x1.25 G10.9 ZP
2	M12x1.25P NYLOC NUT	NYLOC NUT, M12x1.25 G10.9 ZP
4	FB-THL-220-26-PR-ASM5	Hilux AN220 MY26 Chassis Nut Plate

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	Air Hacksaw or Jigsaw or Multi-tool	Lifting Trolley
Metric Spanner Set 5.5-19mm	Angle Grinder	Isopropyl Alcohol
Hex (Allen) Key Set 4-6mm	Soldering Iron (Toro Only)	Rag
Trim Removal Tool		Cable Ties
Plastic Auto Trim Tool Set		Marker Pen
Flat Blade Screwdriver Set		Ruler
Phillips Head Screwdriver Set		Measuring Tape
Utility Knife		Masking Tape
Side Cutters		Sikaflex Adhesive
Pliers		Digital angle gauge
Deburring Tool		Black spray paint
M12x1.25 metric tap		Heat shrink (Toro Only)
Torque wrench		Electrical tape (Toro Only)
Magnetic pick-up tool		
Wire Strippers (Toro Only)		

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 may result in system errors that will need car to be taken to a dealership to resolve.

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

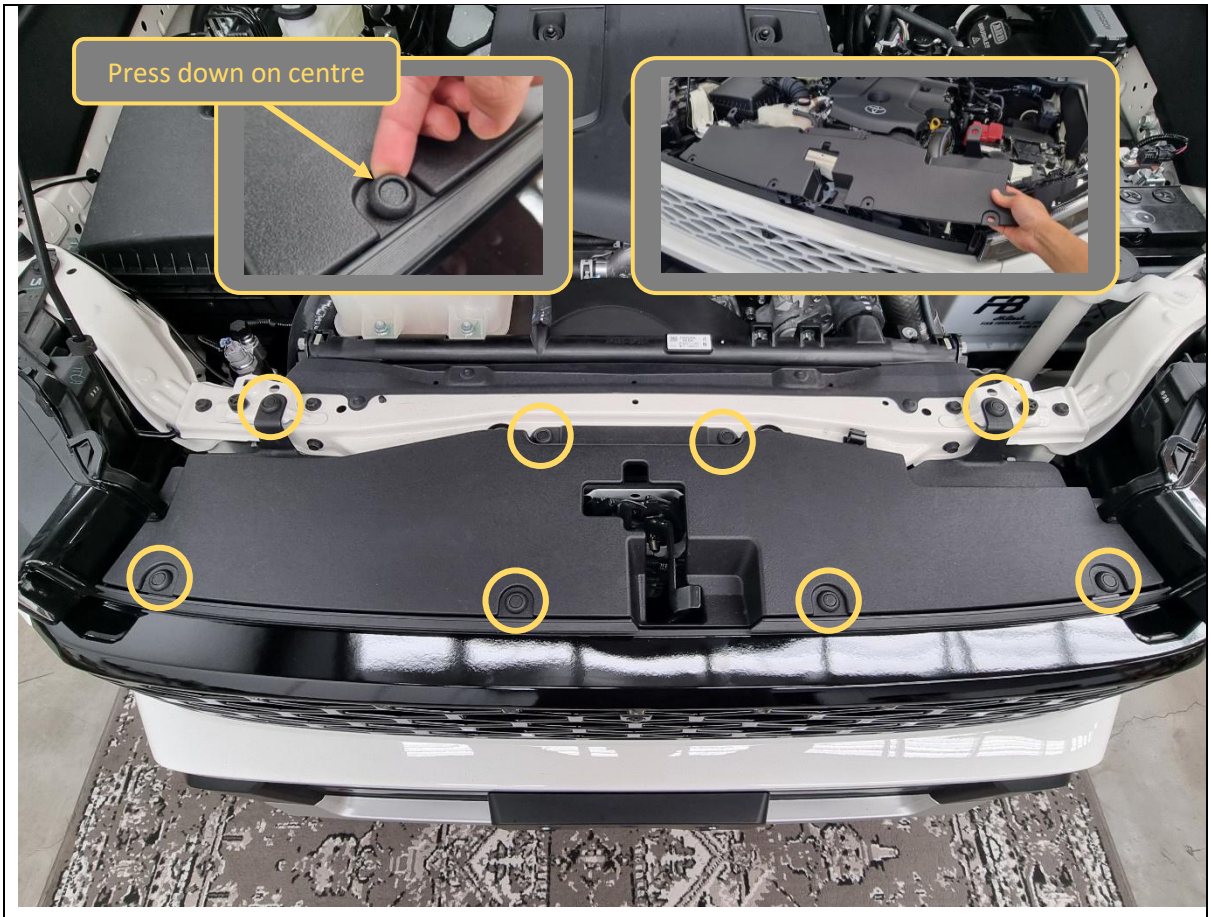
1. Remove number plate and set aside.
2. Open the bonnet.

TOOLS REQUIRED

Phillips head screwdriver

FASTENERS

Discard



3. Remove 8x plastic push clips holding the radiator top cover. Set cover and clips aside for re-assembly.

   Press down on the middle of the clip to remove.

TOOLS REQUIRED

FASTENERS

8x plastic push clips

Retain for re-assembly

4. Remove 4x 10mm hex bolts holding the top of the grille.

   Keep the 2x steel braces in the middle attached to the grille.

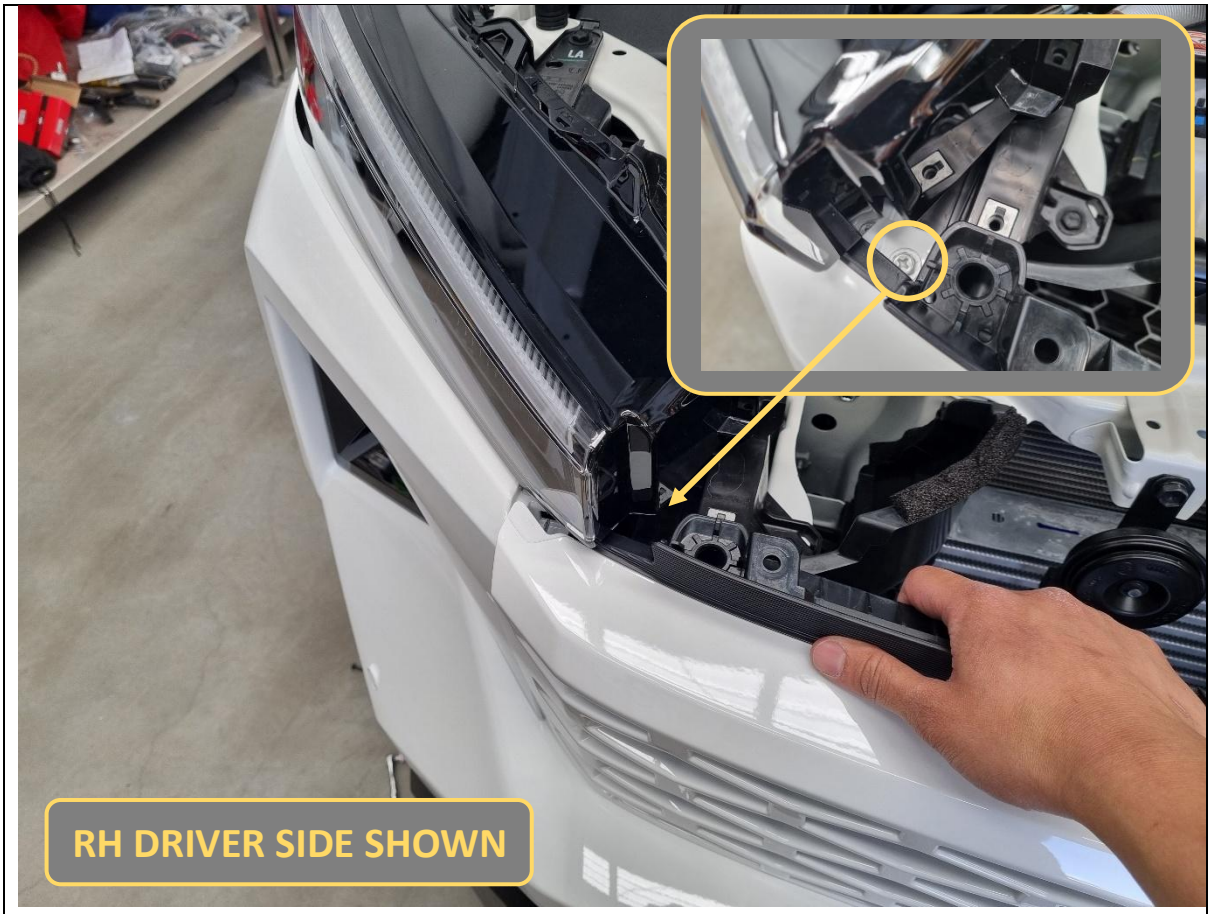
TOOLS REQUIRED

10mm socket/spanner

FASTENERS

4x factory 10mm hex bolt

Retain for re-assembly



5. Pull the top of the grille outwards and unclip the top half off the bumper.

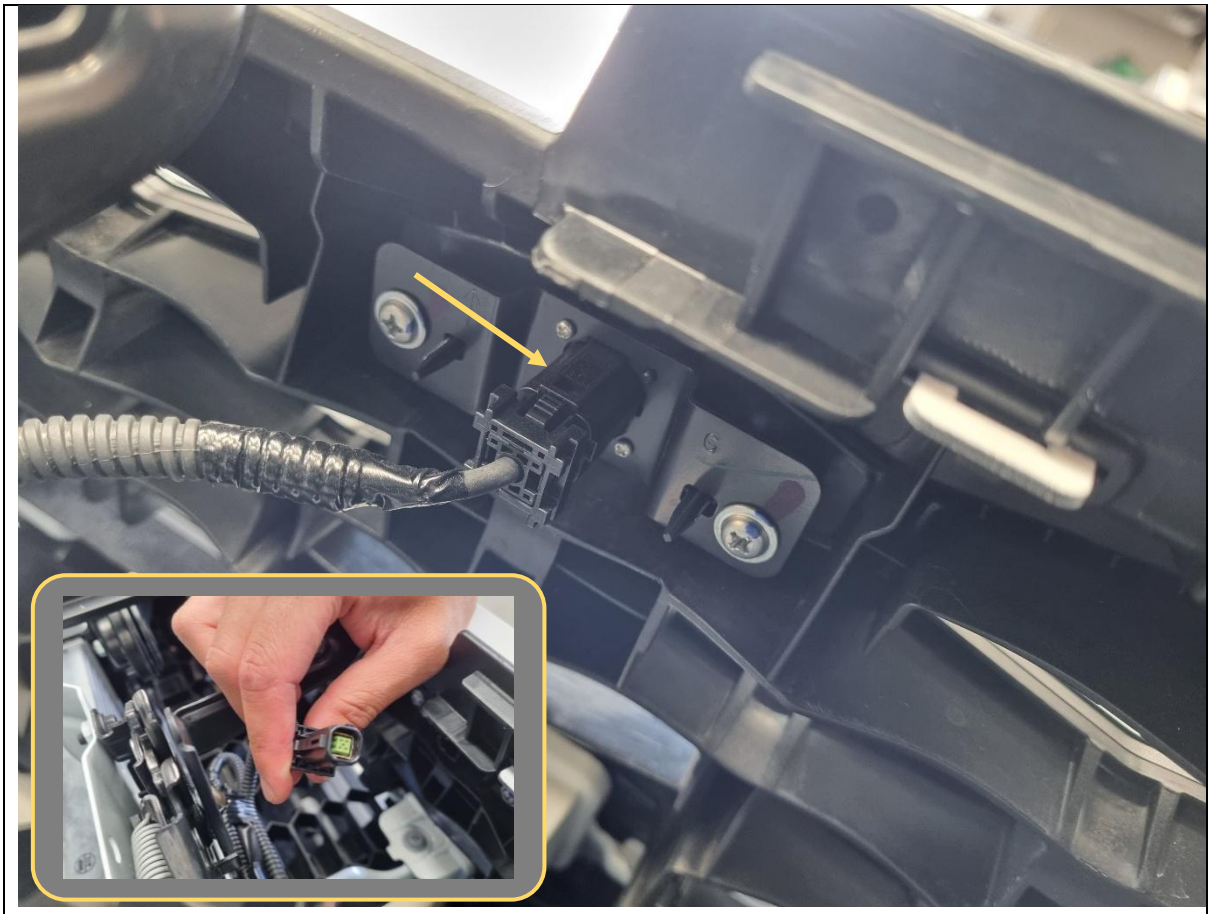
6. Locate the silver 10mm hex screw hidden underneath on each side and remove.

TOOLS REQUIRED

10mm socket/spanner
or
Phillips head screwdriver

FASTENERS

Discard



7. If equipped, unplug the front camera located behind the middle of the grille.

TOOLS REQUIRED

FASTENERS

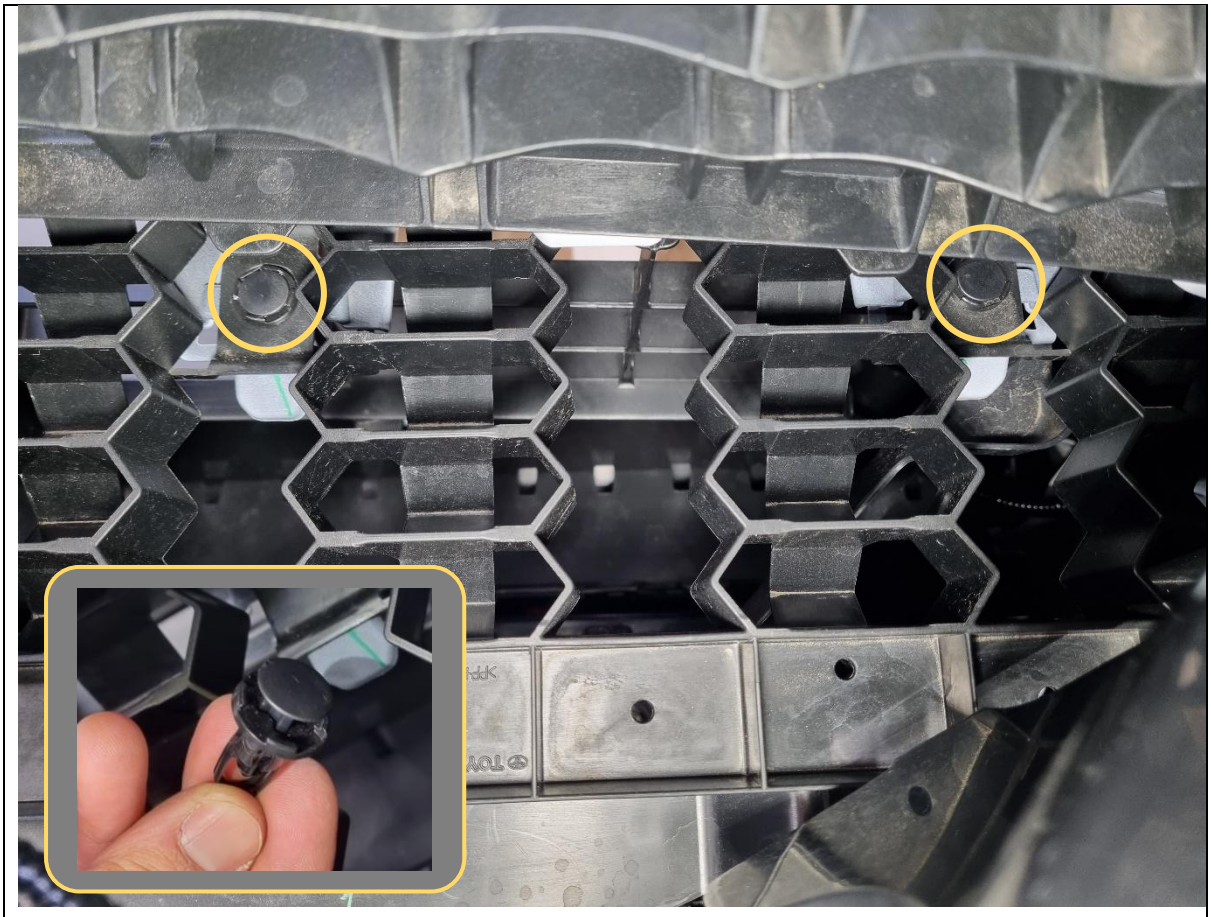
8. Locate the 1x silver 10mm hex screw holding the bumper to the vehicle, down behind the middle of the grille, and remove.

TOOLS REQUIRED

10mm socket/spanner
or
Phillips head screwdriver

FASTENERS

Discard



9. Still working behind the grille, locate and unclip 4x plastic push clips holding the bumper to the plastic honeycomb structure.

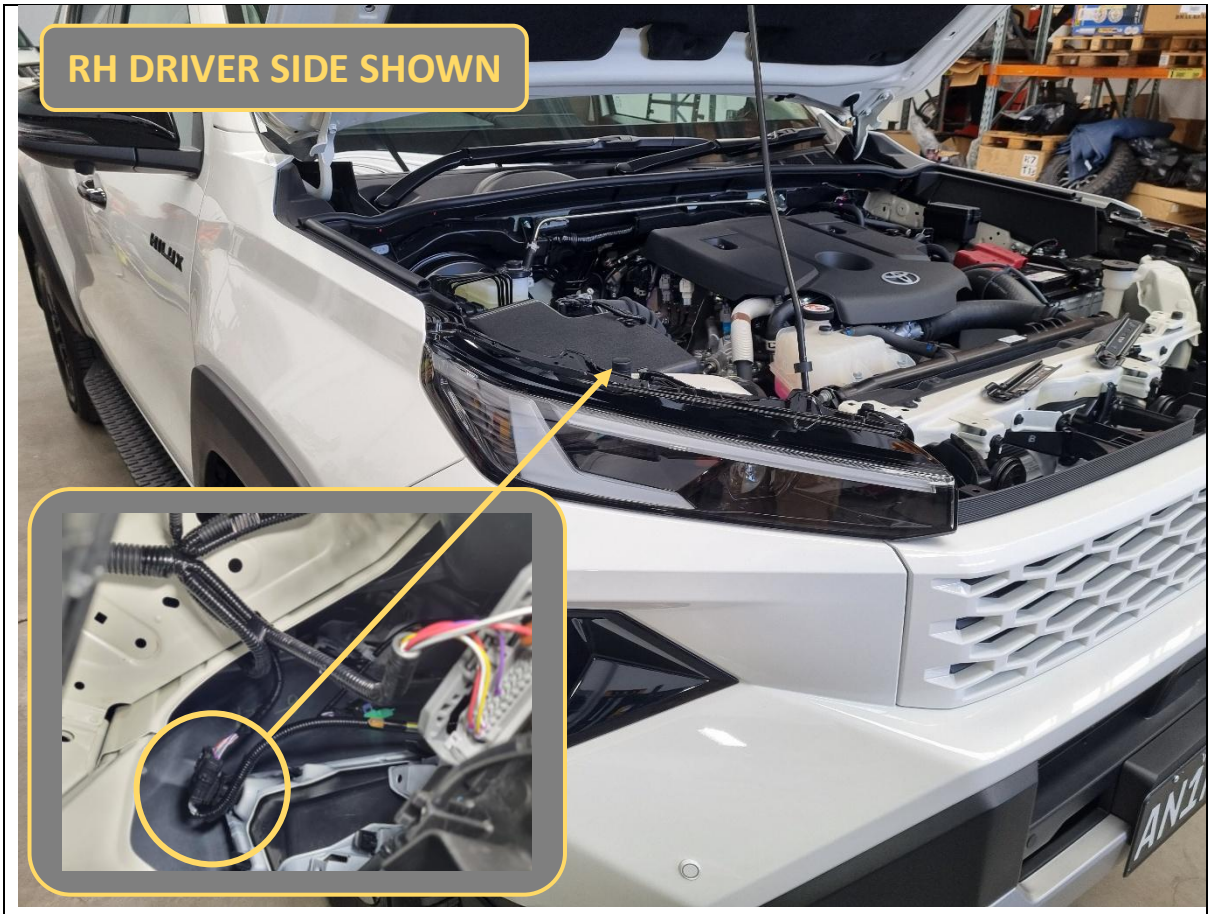
   Use a flat blade screwdriver or trim tool to pry up the centre section of the clip to remove.

TOOLS REQUIRED

Flat blade screwdriver
or
Trim tool

FASTENERS

Discard



10. Unplug the main bumper electrical harness, located down past the back of the RH driver side headlight.

TOOLS REQUIRED

FASTENERS

11. Inside the wheel arch, remove 2x plastic push clips (1x large, 1x small) holding the bumper to the wheel arch liner.

12. Remove 1x quarter turn push clip. Use a flat blade screwdriver and rotate the head of the clip 90 degrees before pulling out.

13. Remove 2x 8mm hex screws.

14. Repeat for other side.

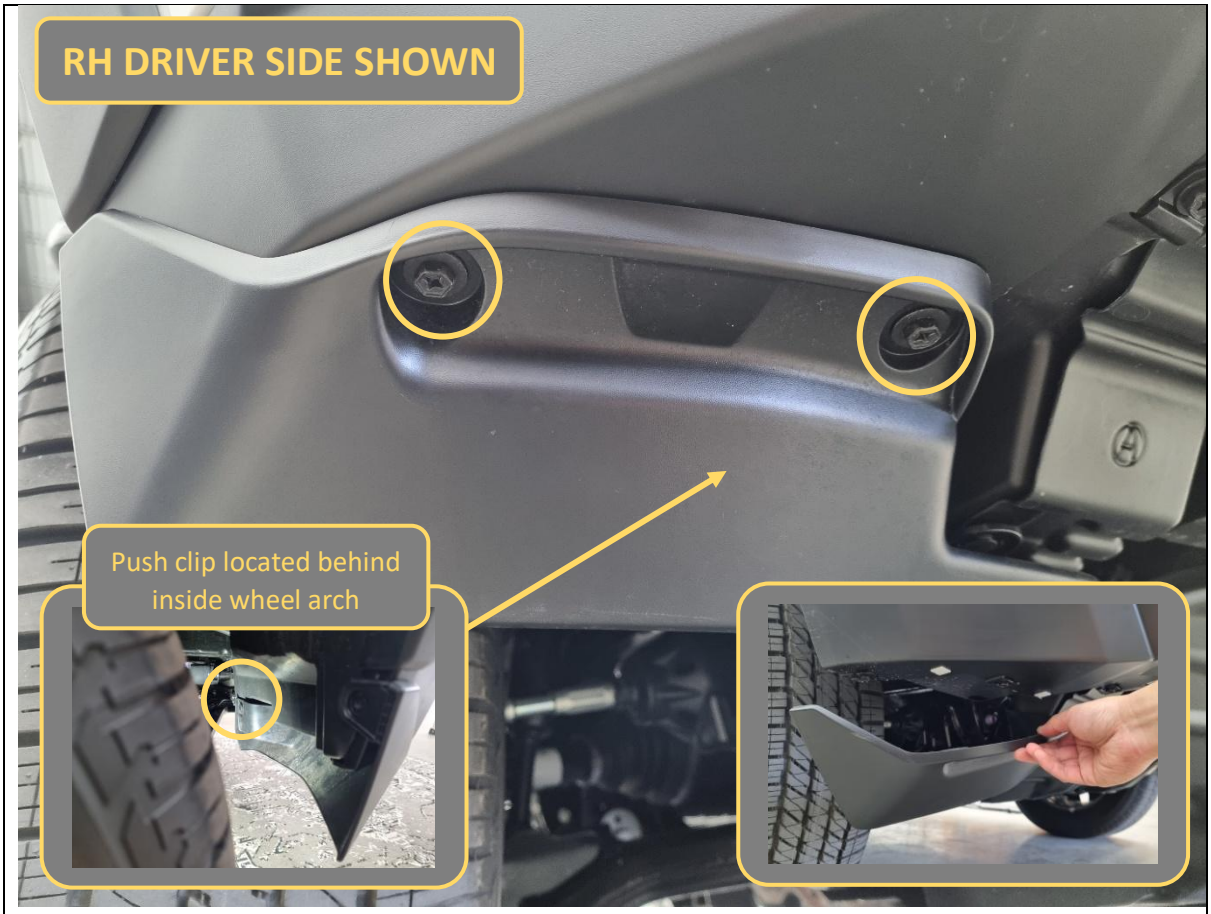
TOOLS REQUIRED

Flat blade screwdriver
or
Trim tool

8mm socket/spanner

FASTENERS

Discard



15. Remove 2x 10mm hex screws holding the bottom of the front bumper mudflap.
16. Remove 1x plastic push clip holding the back of the front bumper mudflap.
17. Remove and discard the front bumper mudflap and repeat for other side.

TOOLS REQUIRED

10mm socket

Flat blade screwdriver
or
Trim tool

FASTENERS

Discard

18. Remove 3x 10mm hex screws holding the bottom of the bumper to the wheel arch liner.

19. Also remove 1x plastic push clip holding the bottom of the bumper to the plastic centre splash guard.

20. Repeat for other side.

TOOLS REQUIRED

10mm socket

Flat blade screwdriver
or
Trim tool

FASTENERS

Discard

21. Remove 3x 10mm hex bolts holding the underside of the bumper centre.

TOOLS REQUIRED

10mm socket/spanner

FASTENERS

Discard

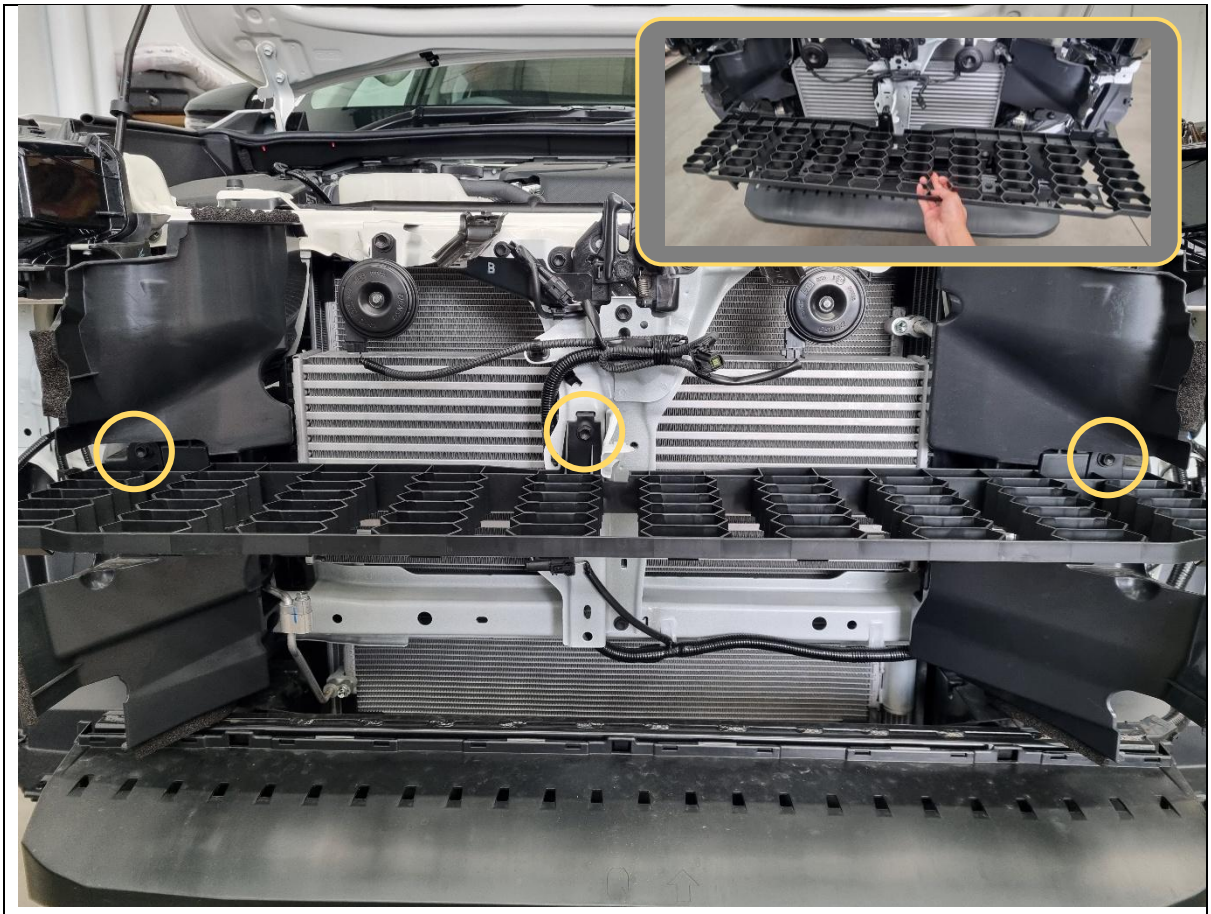
22. Start on each outer corner and pull the bumper outwards to unclip from the vehicle.

23. Fully remove bumper (with grille attached) from vehicle and set aside in a safe place.

    Take care not to drop it while sensors and radars are still attached to bumper.

TOOLS REQUIRED

FASTENERS



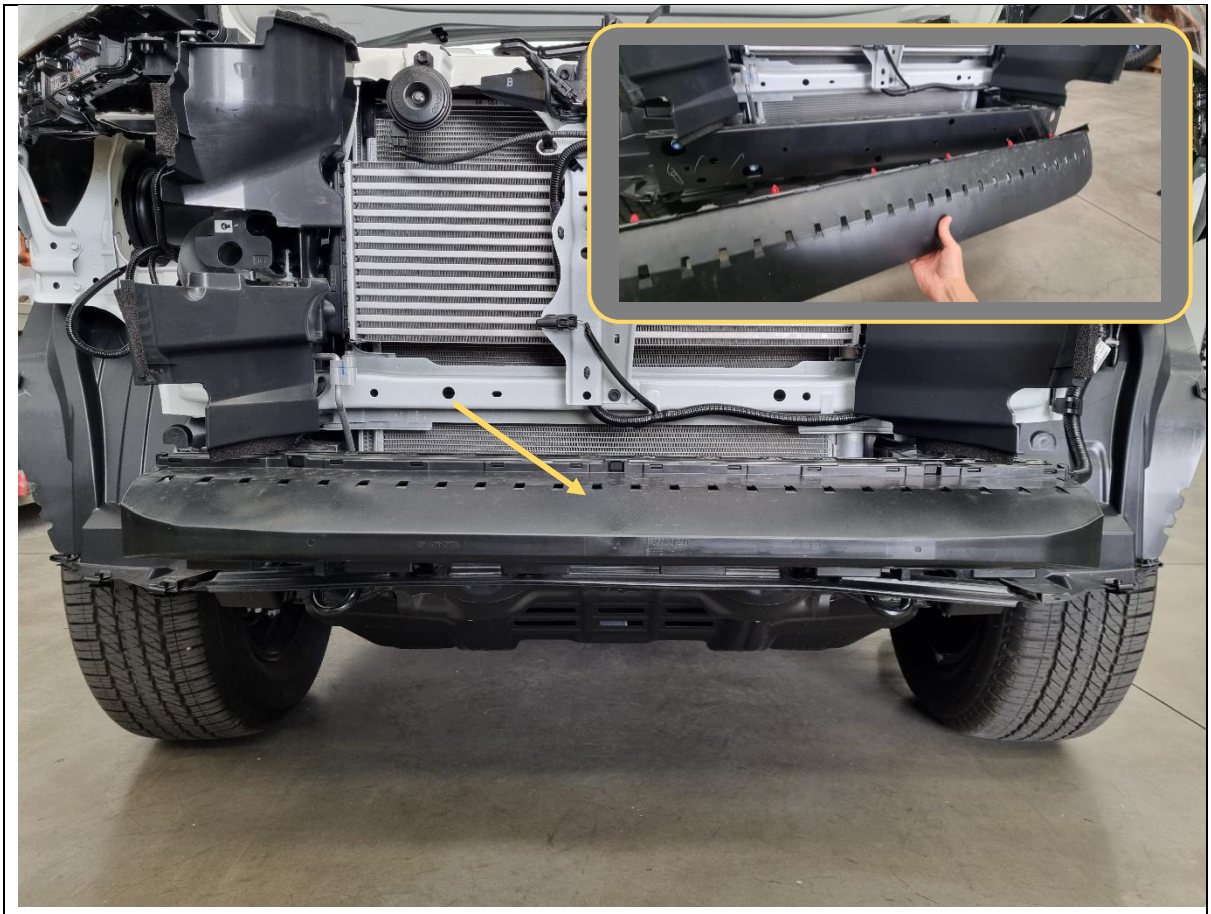
24. Remove 3x 10mm hex bolts holding the plastic honeycomb structure. Discard parts.

TOOLS REQUIRED

10mm socket/spanner

FASTENERS

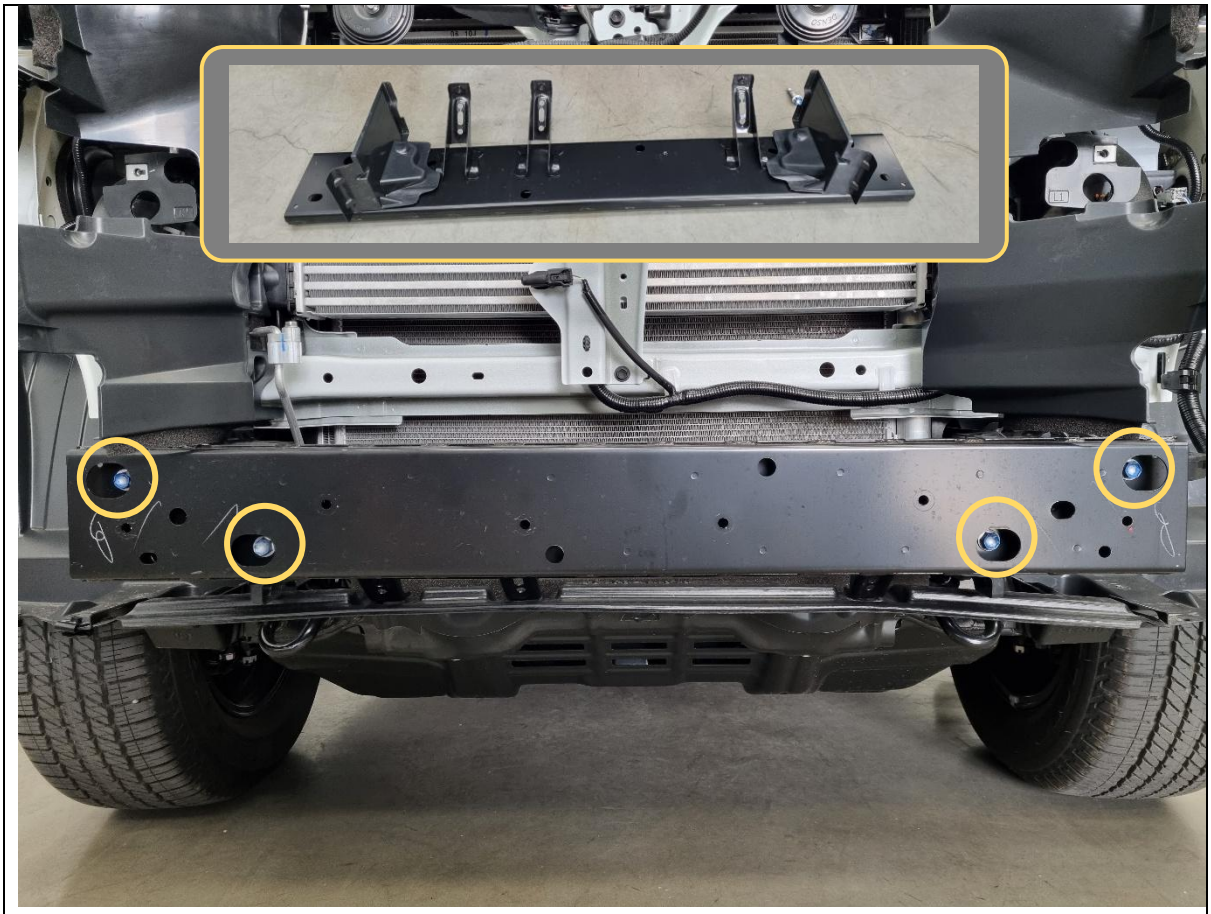
Discard



25. Pull outwards and unclip/discard the lower plastic impact structure.

TOOLS REQUIRED

FASTENERS



26. Remove 4x 14mm hex bolts holding the steel impact beam.

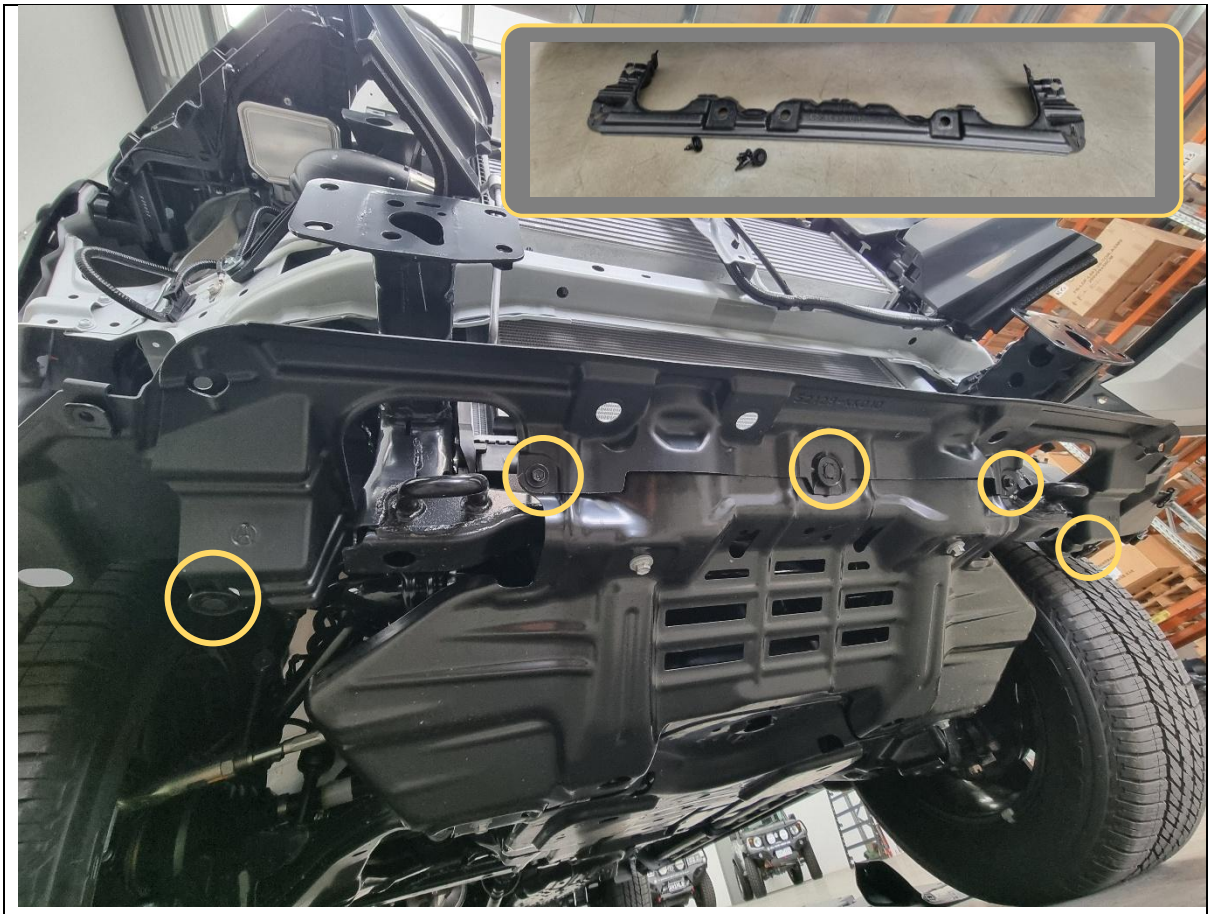
27. Remove impact beam (with small plastic air dams attached) from vehicle and discard.

TOOLS REQUIRED

14mm socket

FASTENERS

Discard



28. Remove 2x 10mm hex bolts and 3x plastic push clips holding plastic splash guard underneath. Discard parts.

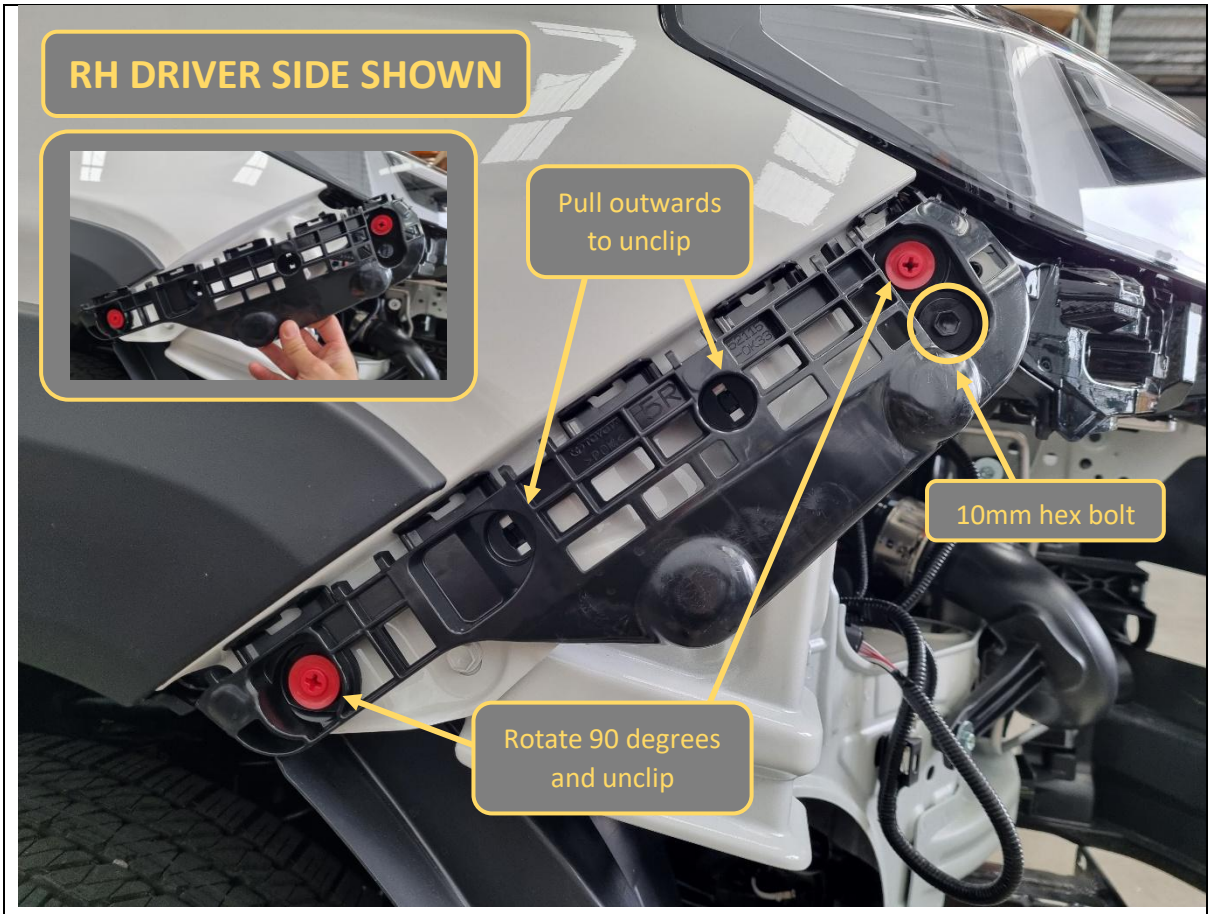
TOOLS REQUIRED

10mm socket

Flat blade screwdriver
or
Trim tool

FASTENERS

Discard



29. Remove 1x 10mm hex bolt (retain) and unclip 2x red clips holding the plastic bumper retainer to the quarter panel.

30. Pull outwards to release the remaining 2x clips holding the bumper retainer.

31. Repeat for other side.

TOOLS REQUIRED

10mm socket

Phillips head screwdriver

Flat blade screwdriver
or
Trim tool

FASTENERS

1x factory 10mm hex bolt
Retain

All others discard

32. Re-fit the 10mm hex bolt from the previous step back to the same hole in the quarter panel/headlight.

33. For vehicles with flares, there is a small tab hanging off the end that you can cut off with a multi-tool or similar.

TOOLS REQUIRED

10mm socket/spanner

Safety glasses

Air Hacksaw
or
Oscillating Multi Tool
or
Angle Grinder
or
Jigsaw

FASTENERS

1x factory 10mm hex bolt

Retained

34. Mask off and paint the exposed sheet metal guard black, as shown.

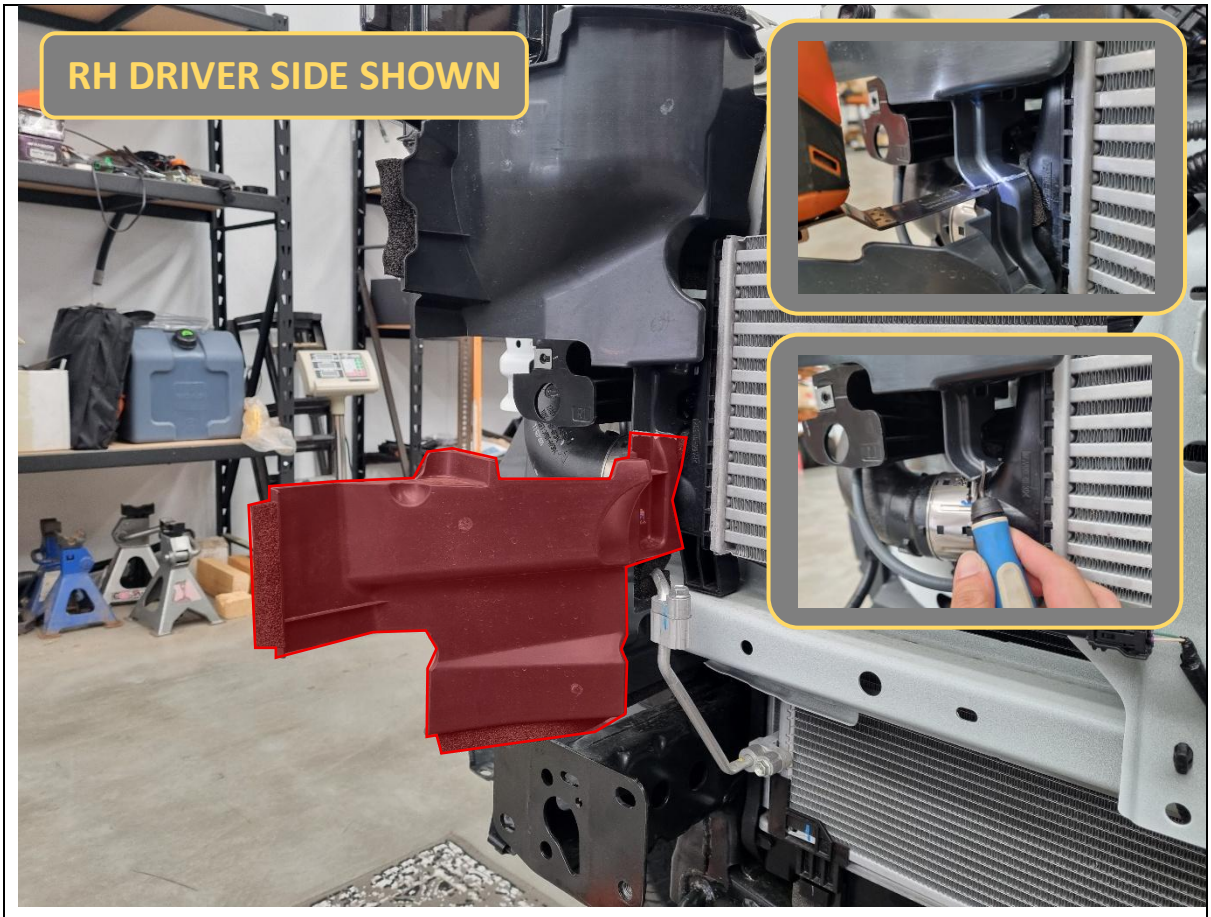
    Offroad Animal recommends Dupli-Color Trim & Bumper Paint Black (TB101) or VHT Hood Bumper & Trim Paint Black (SP27).

35. Do this on both sides.

TOOLS REQUIRED

Masking tape
Black spray paint

FASTENERS



36. Cut off and discard the lower half of the plastic air dam, at its narrowest point just above the intercooler piping.

    Take care not to damage the intercooler piping.

37. Remove any sharp edges with a deburring tool or utility knife.

TOOLS REQUIRED

Safety glasses

Air Hacksaw
or
Oscillating Multi Tool
or
Angle Grinder
or
Jigsaw

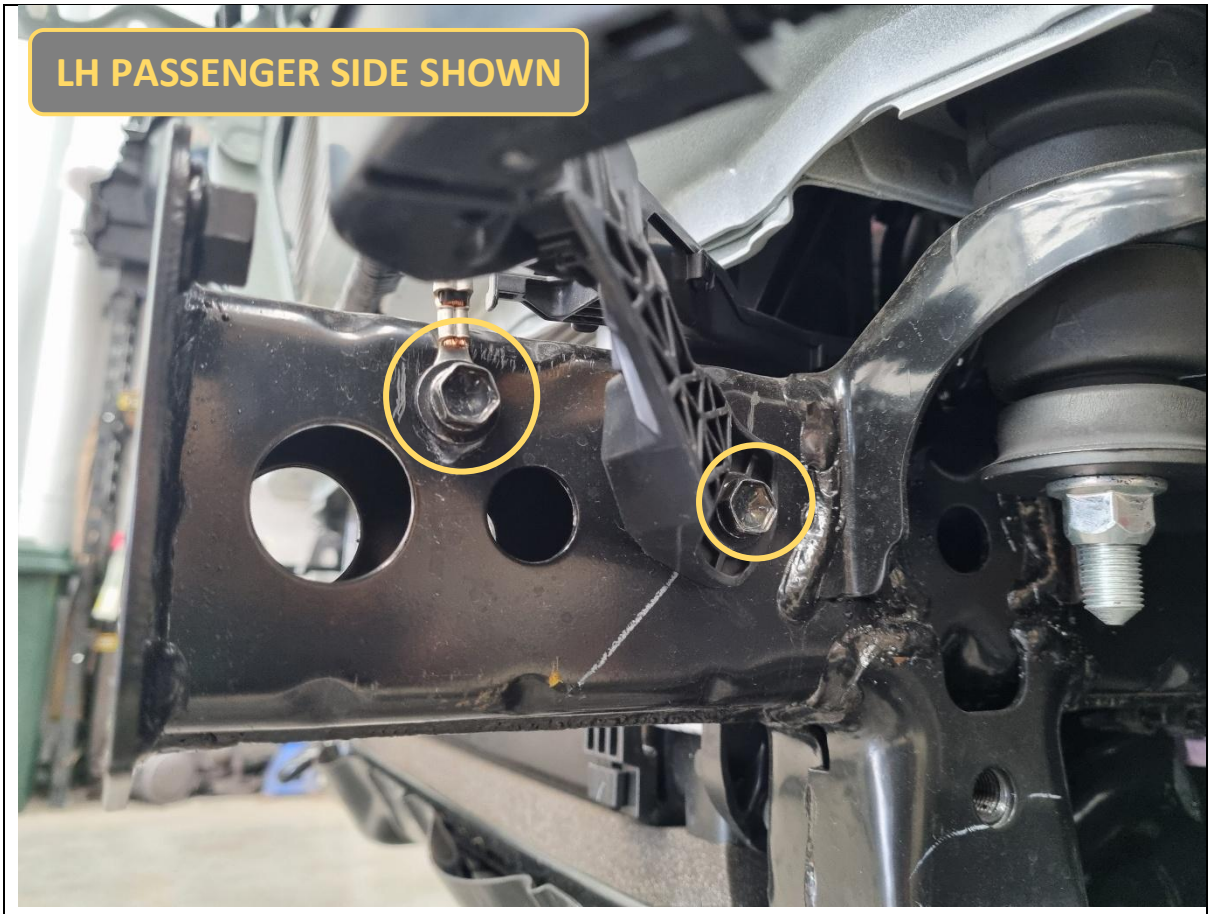
Deburring tool
or
Utility knife

FASTENERS

38. Repeat air dam cut for LH passenger side cut as shown.

TOOLS REQUIRED

FASTENERS



39. Locate the electrical harness on the outside of the LH chassis rail.

    Remove 2x 12mm hex bolts holding the plastic harness housing and earth ring terminal to the chassis.

    Retain 1x of the bolts.

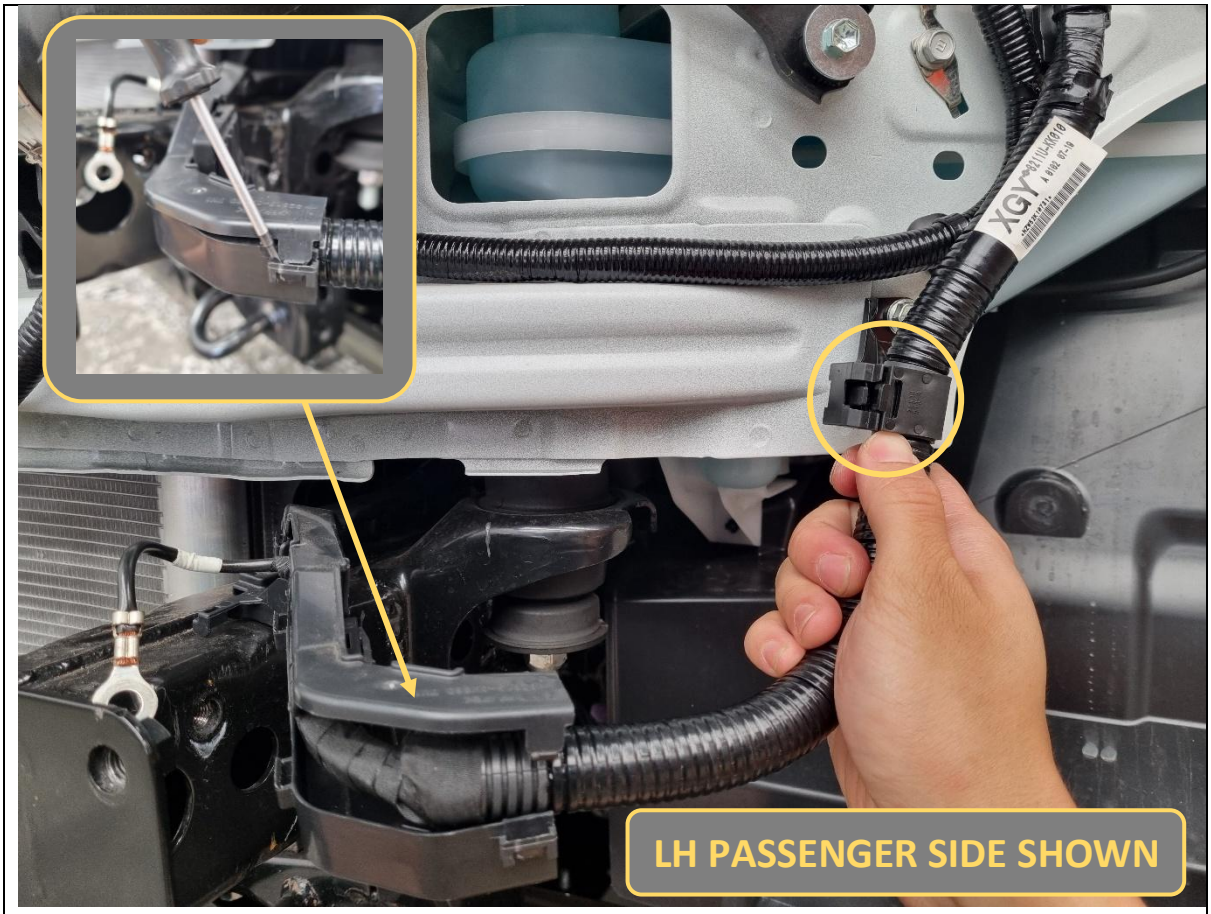
TOOLS REQUIRED

12mm socket/spanner

FASTENERS

2x factory 12mm hex bolt

Retain 1 of 2



40. Use a flat blade screwdriver to unclip the top and bottom halves of the plastic harness housing.

41. Also unclip the harness from the body at the circled location.

TOOLS REQUIRED

Flat blade screwdriver

FASTENERS

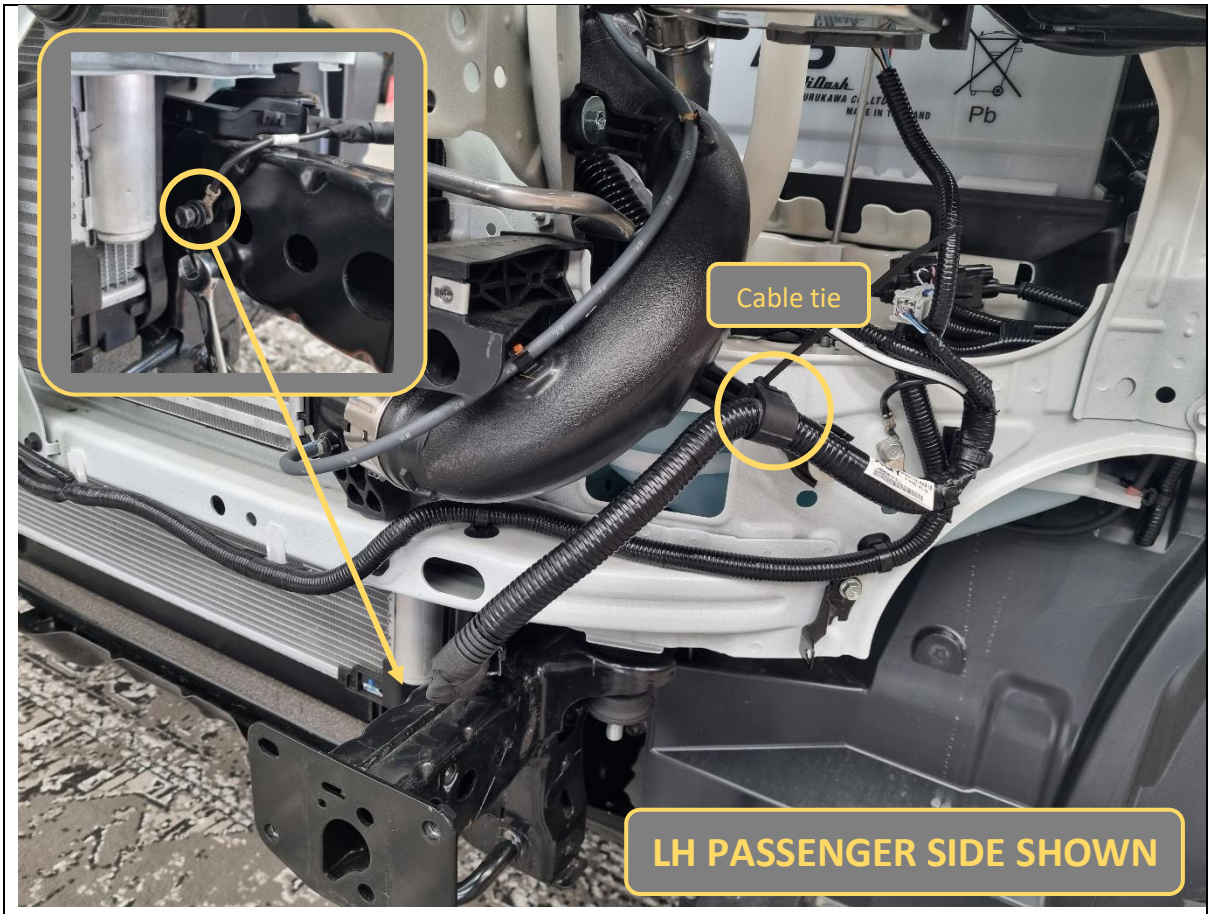
42. Use a pair of side cutters and cut off the front section of the plastic housing halves, as shown.

    Take care not to cut the electrical harness itself.

TOOLS REQUIRED

Side cutters

FASTENERS



43. Move the earth ring terminal to the inside face of the chassis rail and secure to the nutserts in the chassis with the 12mm hex bolt removed earlier.

44. Cable tie the harness up out of the way at the circled location. Ensure it is not directly contacting/rubbing with other objects.

TOOLS REQUIRED

12mm socket/spanner
Cable tie
Side cutters

FASTENERS

1x factory 12mm hex bolt

Retained

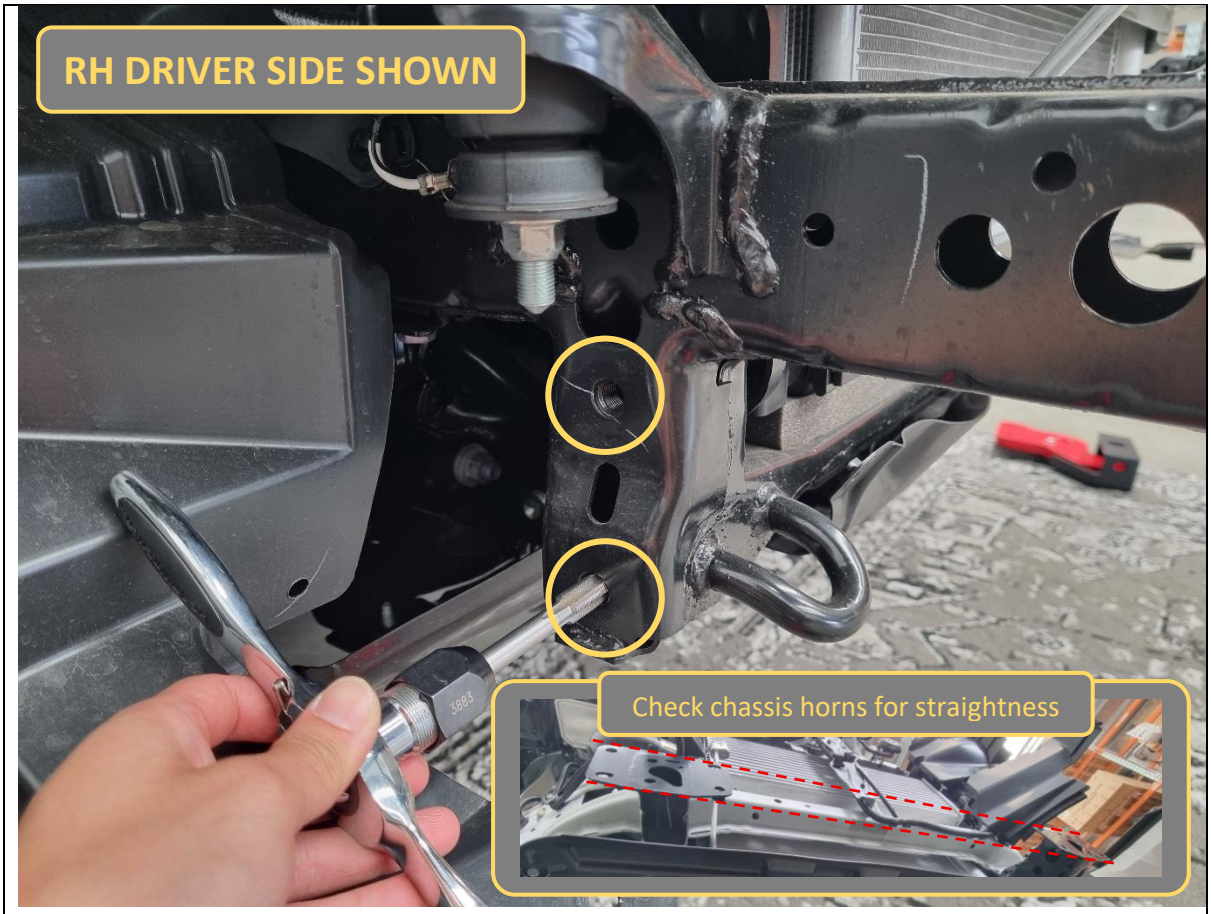
45. Locate the P-0539 red tow point, P-0541 spacer plate and B-1794 outer chassis brace parts.

46. Assemble them as shown (spacer plate sandwiched in between) and loosely secure together using 1x M8x40 hex bolt, flat washer and flange nut.

TOOLS REQUIRED

13mm socket/spanner

FASTENERS



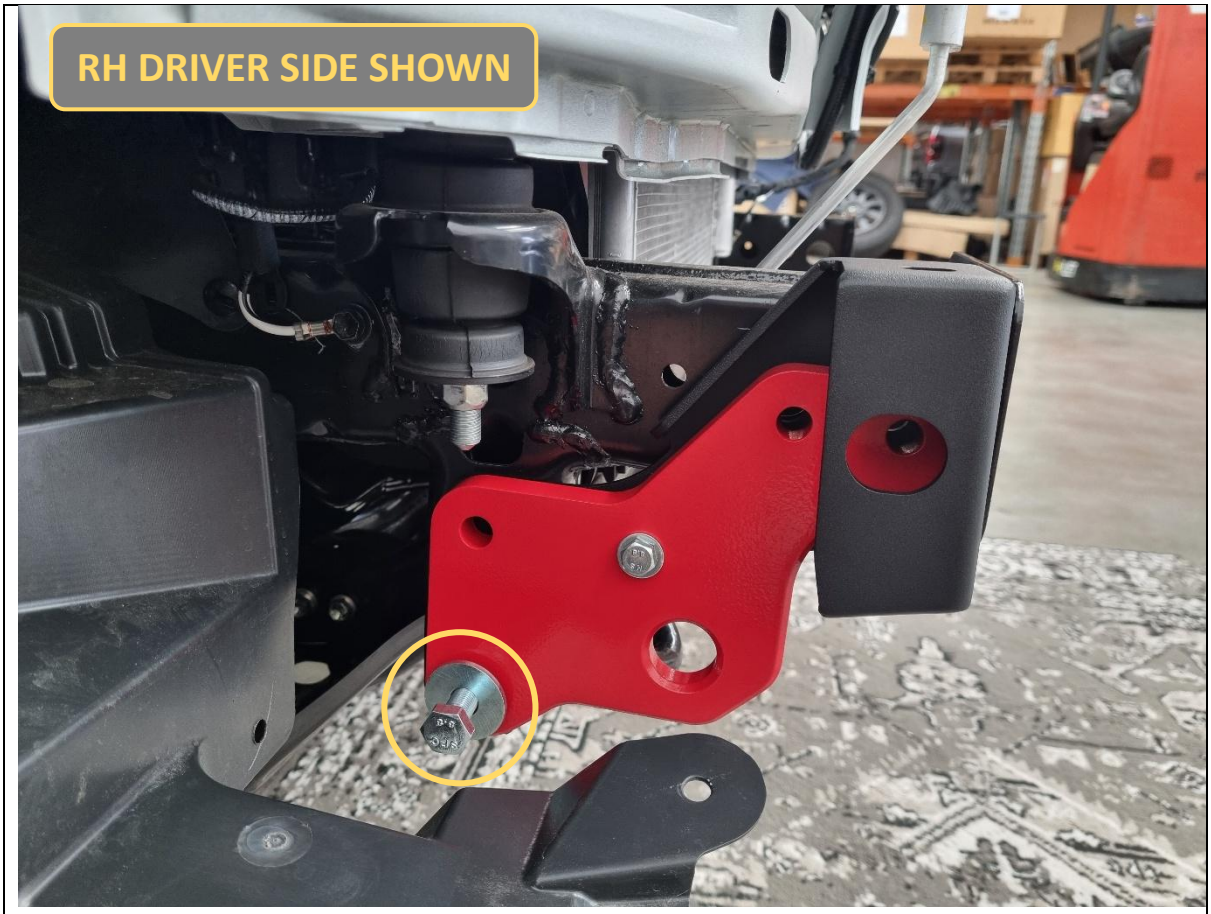
47. Clean/remove residual paint inside the 2x circled nutserts in the chassis with an M12x1.25p fine pitch tap.

48. Also check the front faces of the chassis horns are straight and parallel to each other in top view. If there are parts that are bent/angled, you may need to straighten them out with a hammer.

TOOLS REQUIRED

M12x1.25p fine pitch tap

FASTENERS



49. Fit the tow point and outer chassis brace to the outer face of the chassis rail, and loosely secure at the back lower hole with 1x M12x50x1.25p fine pitch hex bolt and flat washer as shown.

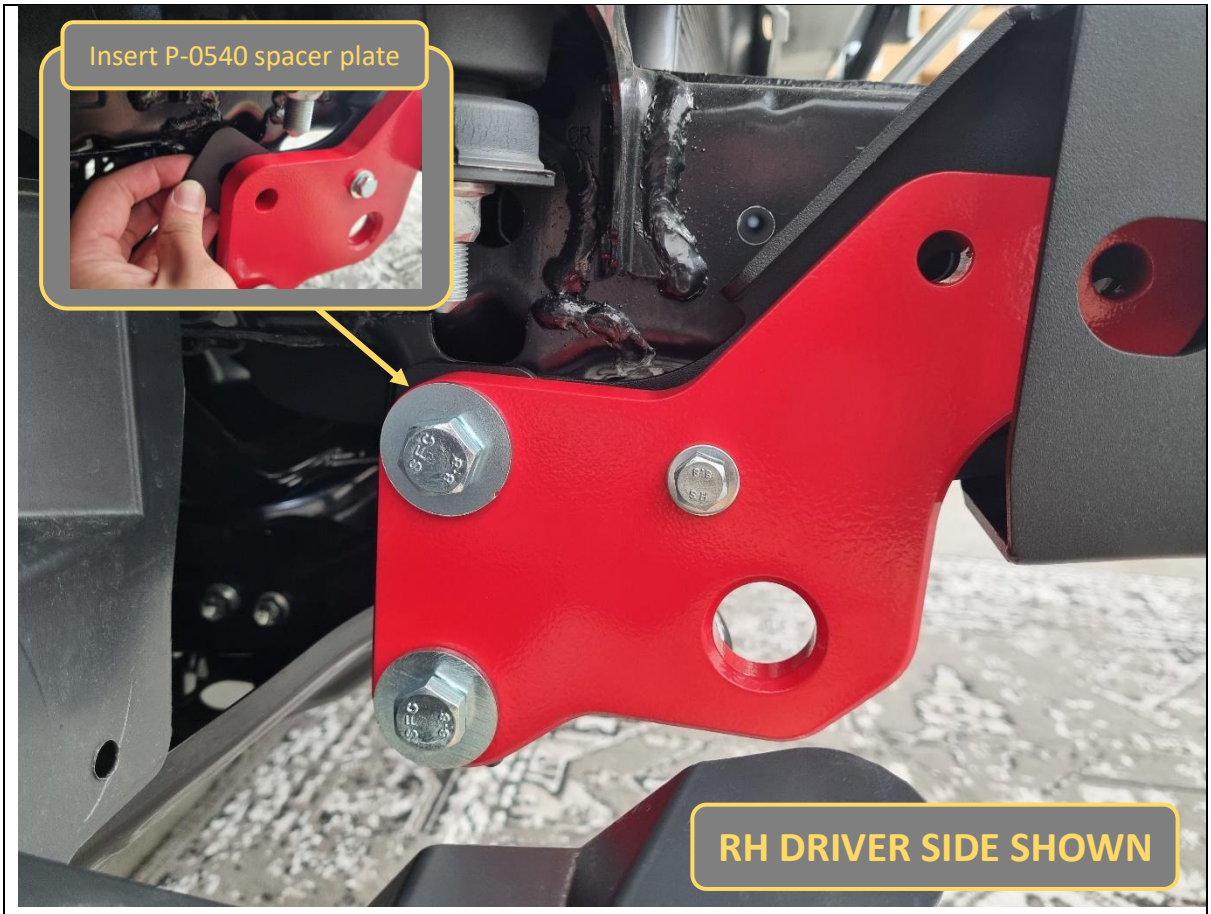
    Do not mix the M12x1.25p fine pitch bolts with the M12x1.75p coarse pitch bolts supplied in the kit.

TOOLS REQUIRED

18/19mm socket/spanner

FASTENERS

1x M12x50x1.25p hex bolt
1x M12 flat washer



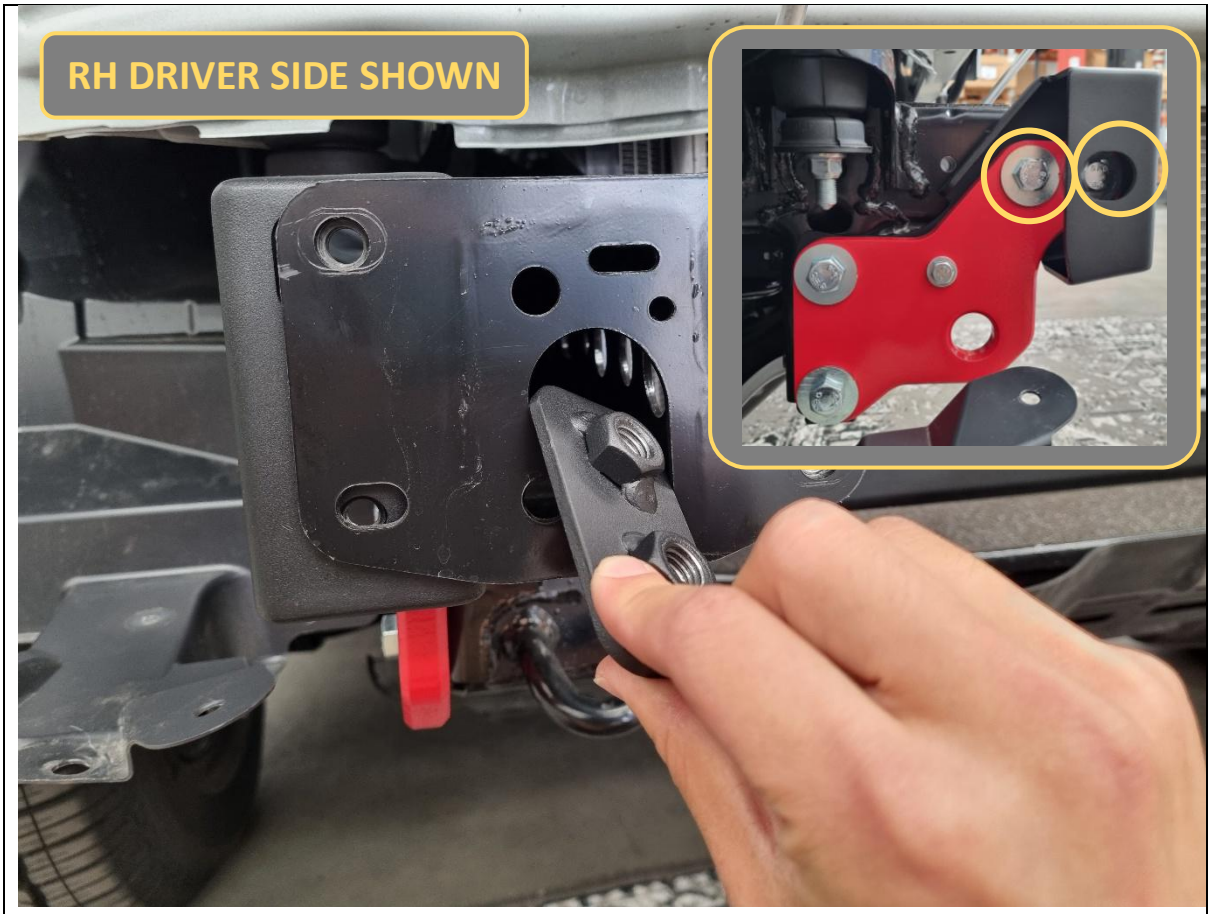
50. Insert 1x P-0540 spacer plate in between the tow point and chassis brace at the location shown, then loosely secure to chassis with 1x M12x50x1.25p fine pitch hex bolt and flat washer.

TOOLS REQUIRED

18/19mm socket/spanner

FASTENERS

1x M12x50x1.25p hex bolt
1x M12 flat washer



51. Insert 1x dual nutplate through the opening on the front face of the chassis rail.

52. Hold the nutplate up against the inside wall of the chassis, then loosely secure from the outside with 2x M12x30x1.75p coarse pitch hex bolts and flat washers.

    Front most bolt can be tightened using most 1/2” drive sockets. Impact sockets may be too large to fit through hole.

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

TOOLS REQUIRED

18/19mm socket/spanner

FASTENERS

2x M12x30x1.75p hex bolt
2x M12 flat washer
1x dual nutplate

53. Insert 1x dual nutplate through the opening on the front face of the chassis rail and hold it up against the inside wall of the chassis.

54. Fit the B-1795 inner chassis brace to the inside face of the chassis rail and loosely secure to the nutplate with 2x M12x30x1.75p coarse pitch hex bolts and flat washers.

TOOLS REQUIRED

18/19mm socket/spanner

FASTENERS

2x M12x30x1.75p hex bolt
2x M12 flat washer
1x dual nutplate

55. Fit the impact assembly onto the end of the chassis.

56. Loosely secure to the nutserts on the chassis horn with 2x M10x30x1.25p fine pitch hex bolts and flat washers.

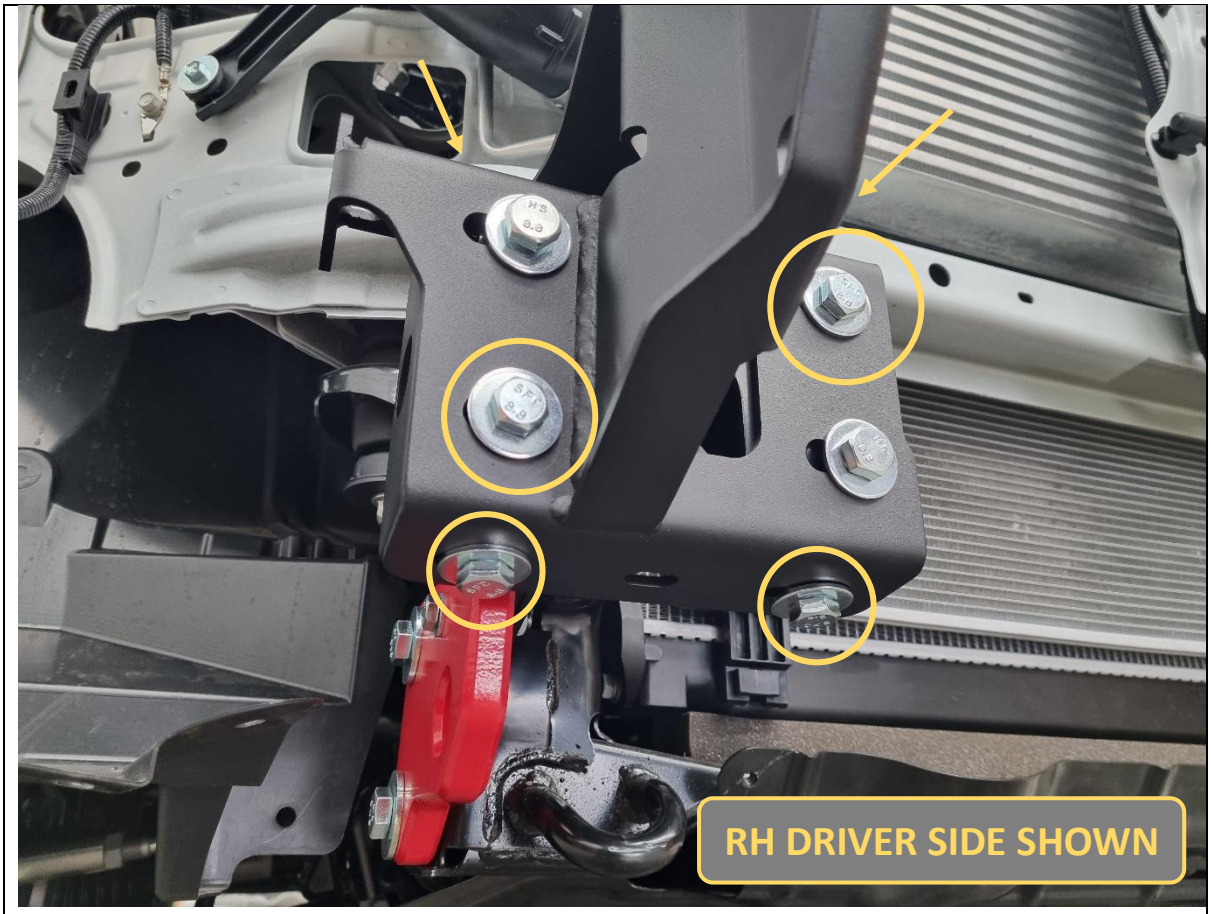
    <u>Do not mix the M10x1.25p fine pitch bolts with the M10x1.5p coarse pitch bolts supplied in the kit.</u>

TOOLS REQUIRED

18/19mm socket/spanner

FASTENERS

2x M10x30x1.25p hex bolt
2x M10 flat washer



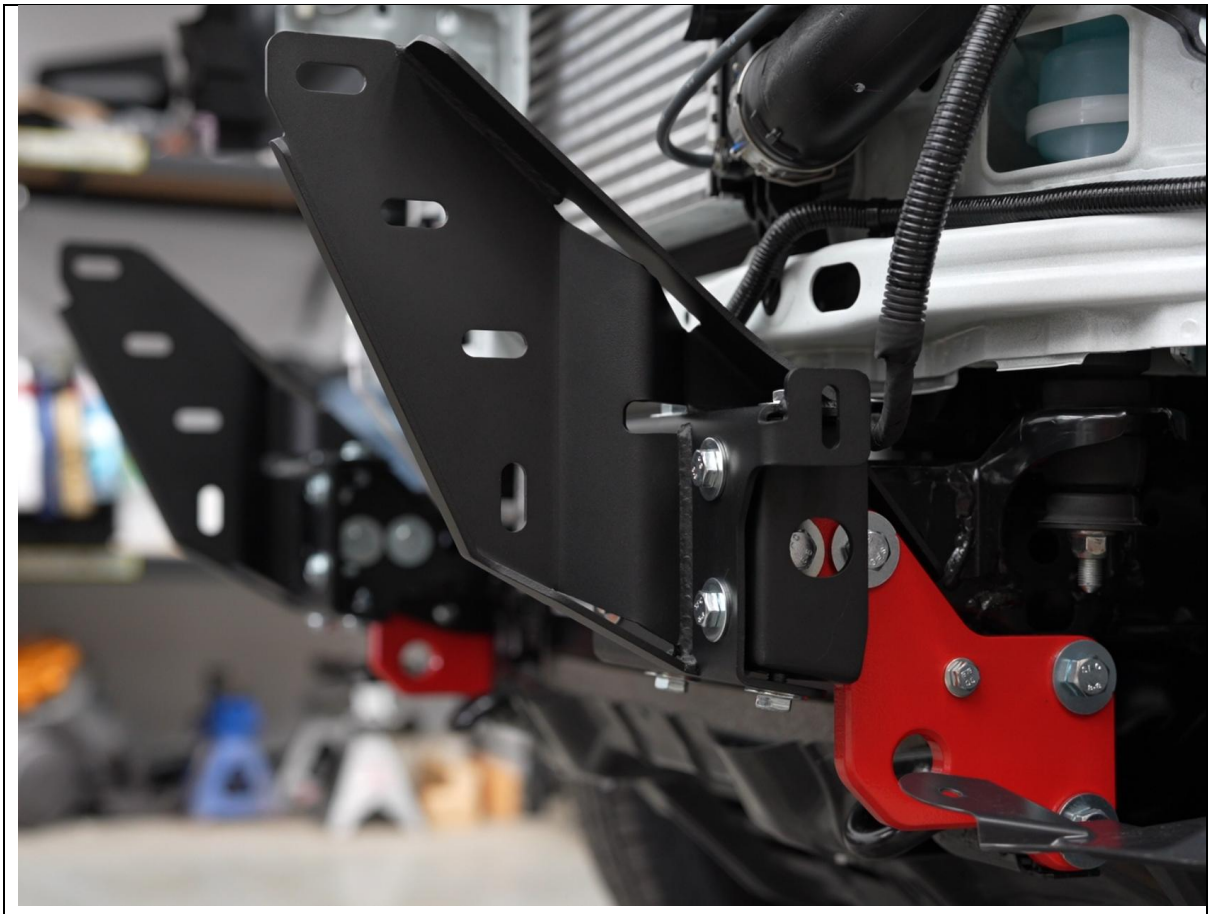
57. Loosely fit remaining bolts into impact assembly. They are all M10x25 hex bolts with flat washers and flange nuts (except one which goes into a nutserts in the outer chassis brace).

TOOLS REQUIRED

16/17mm socket/spanner

FASTENERS

6x M10x25 hex bolt
6x M10 flat washer
5x M10 flange nut

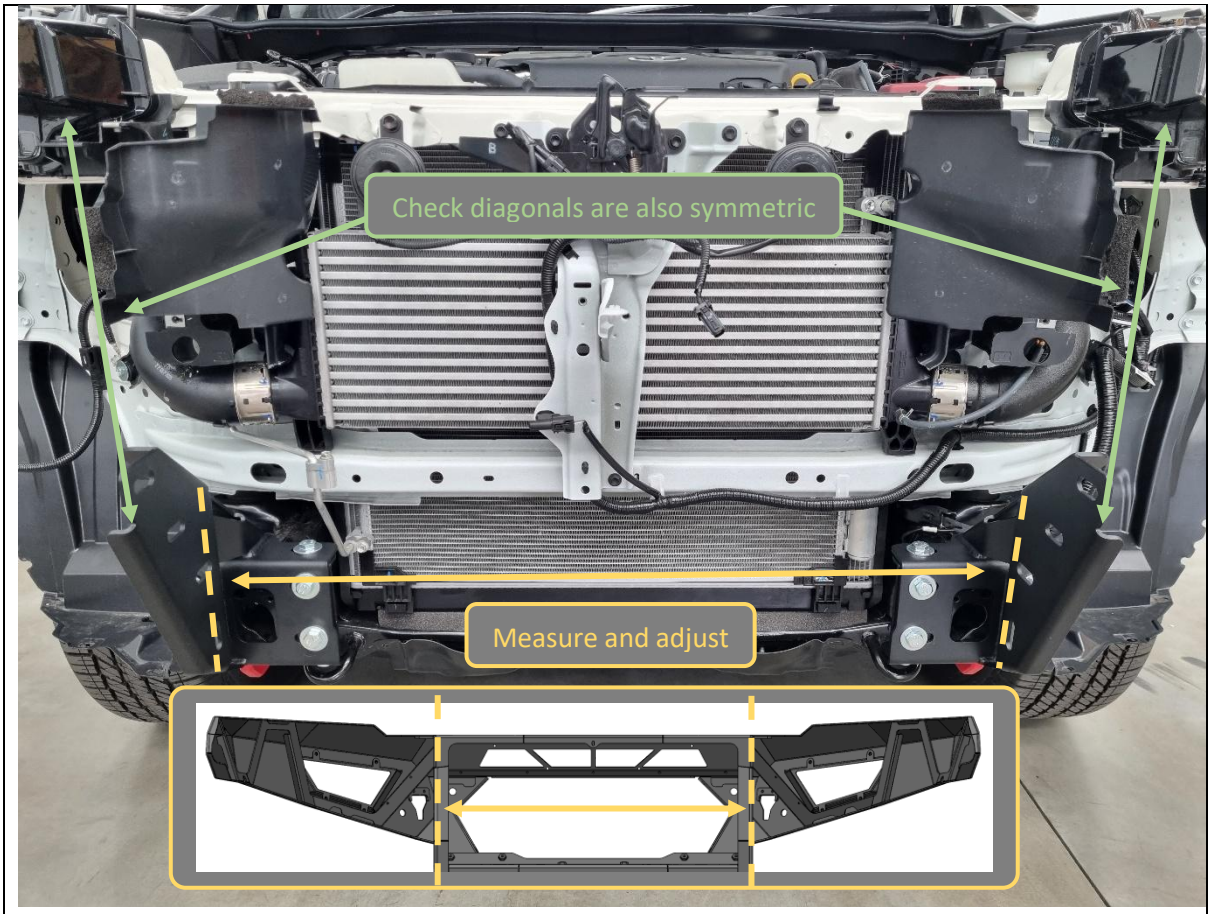


58. Repeat installation of tow point, chassis braces and impact assembly for other side.

59. Leave all bolts loose at this stage.

TOOLS REQUIRED

FASTENERS



60. 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

61. 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.

62. Also 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

63. Once happy with alignment, tighten (and check with torque wrench) all bolts holding impact assemblies, tow points and chassis braces in the following order:
    1. Front M10 impact assembly bolts
    2. Top/bottom M10 impact assembly bolts
    3. M8/M12 tow point/chassis brace bolts

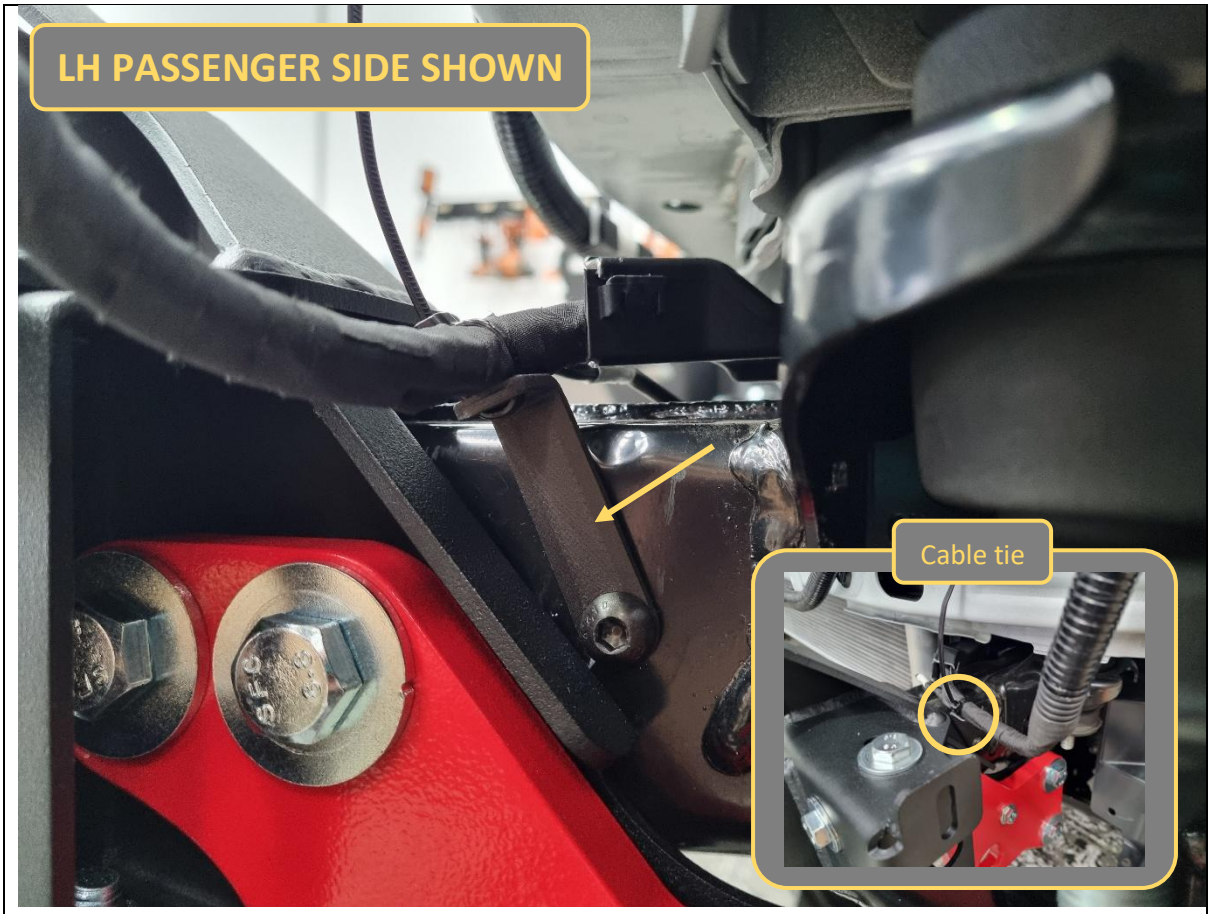
64. Re-check the distance and re-adjust if required.

TOOLS REQUIRED

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

Torque wrench

FASTENERS



65. Fit the B-1879 harness anchor bracket to the nutsert on the LH outside chassis rail face and secure with 1x M8x16 black button head bolt (no washer).

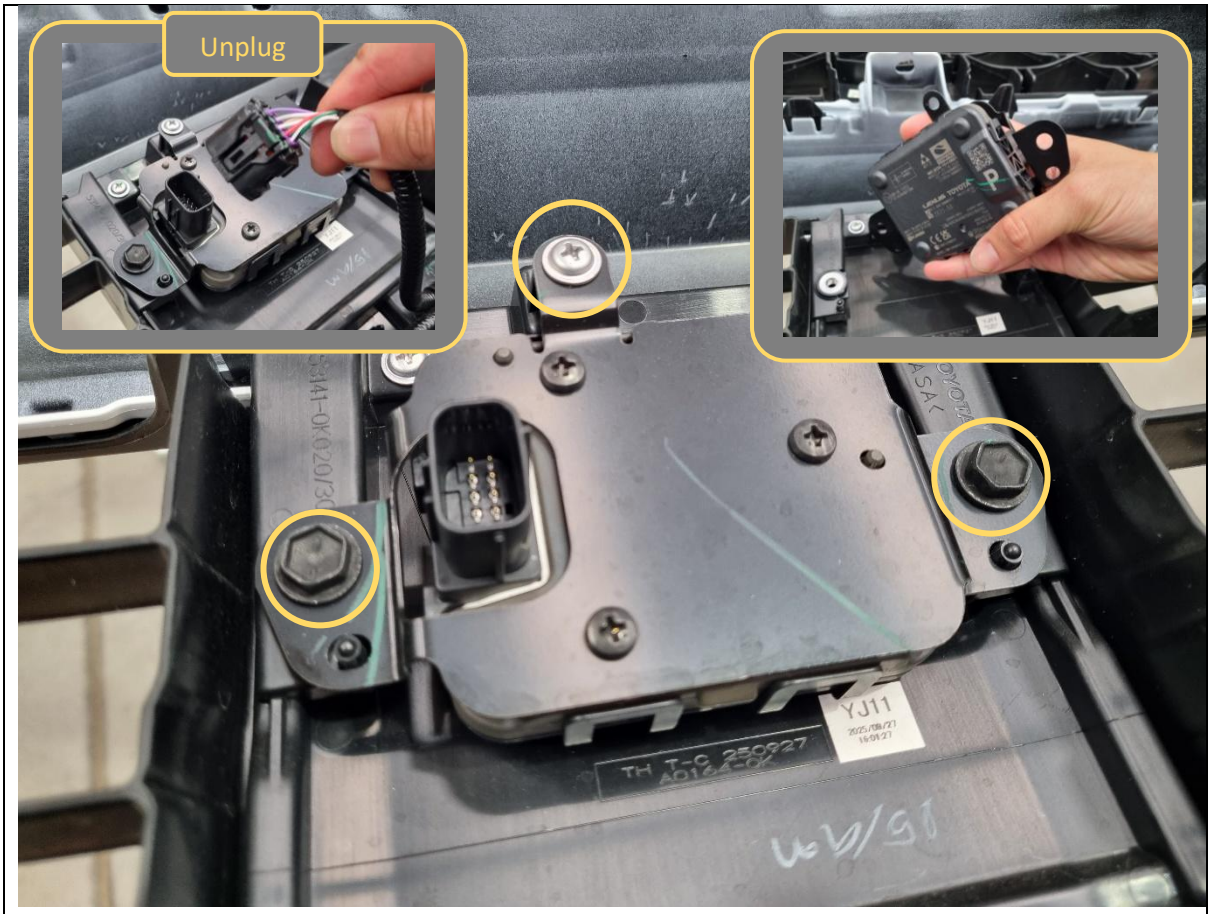
66. Cable tie the electrical harness to the anchor bracket, ensuring it is not directly contacting/rubbing with other objects.

TOOLS REQUIRED

5mm hex/Allen key
Cable tie

FASTENERS

1x M8x16 black button head



Time to strip the bumper.

67. Unplug the radar located on the inside of the bumper in the middle.

68. Remove 2x 10mm hex bolts and 1x Phillips head screw holding the radar.

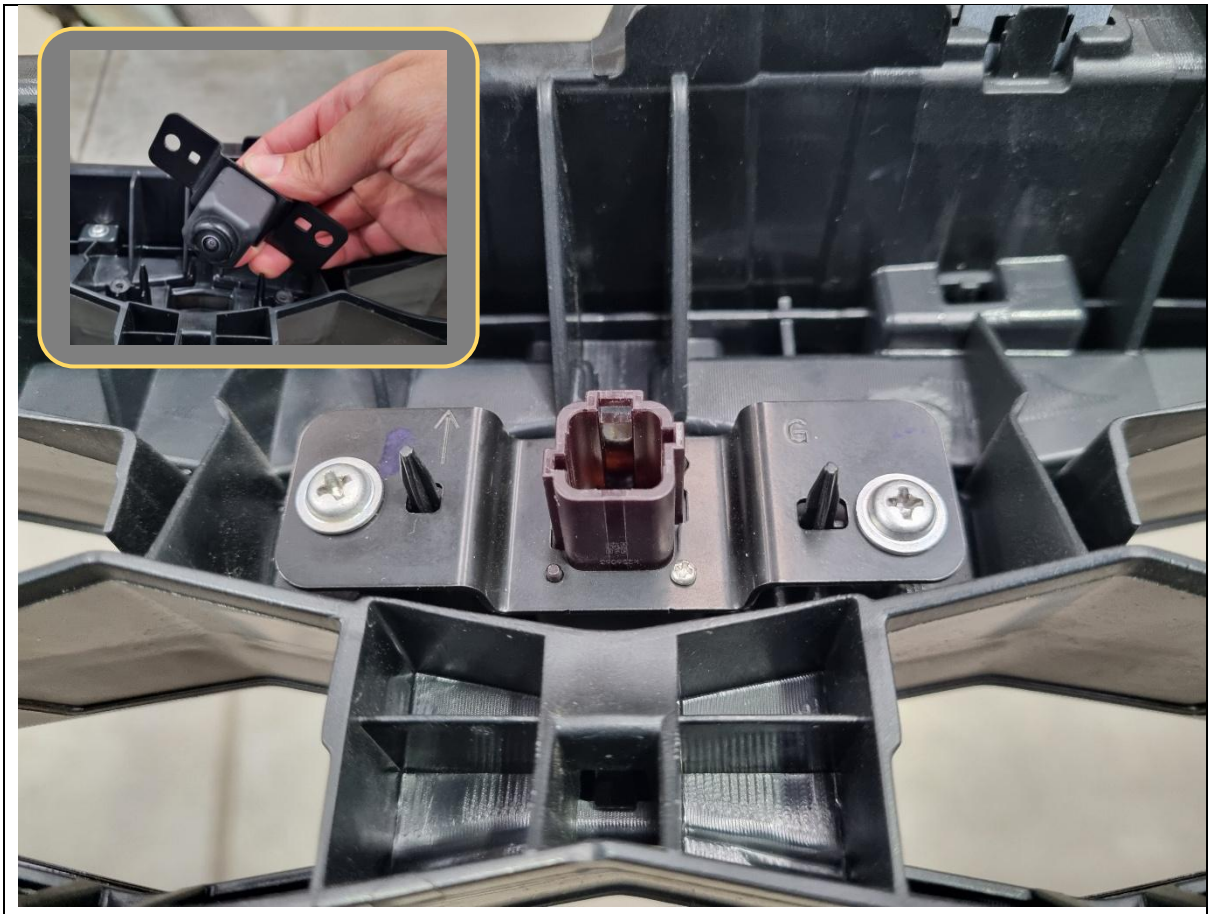
69. Carefully and gently remove the radar and set it aside in a safe place. Take care not to drop/damage it.

TOOLS REQUIRED

10mm socket/spanner
Phillips head screwdriver

FASTENERS

Discard



Camera relocation into the bull bar is optional but highly recommended if installing driving lights or Predator top hoops, as these accessories will block/limit visibility.

Even if no accessories are fitted, the bottom portion of the front camera view will be blocked by the bull bar.

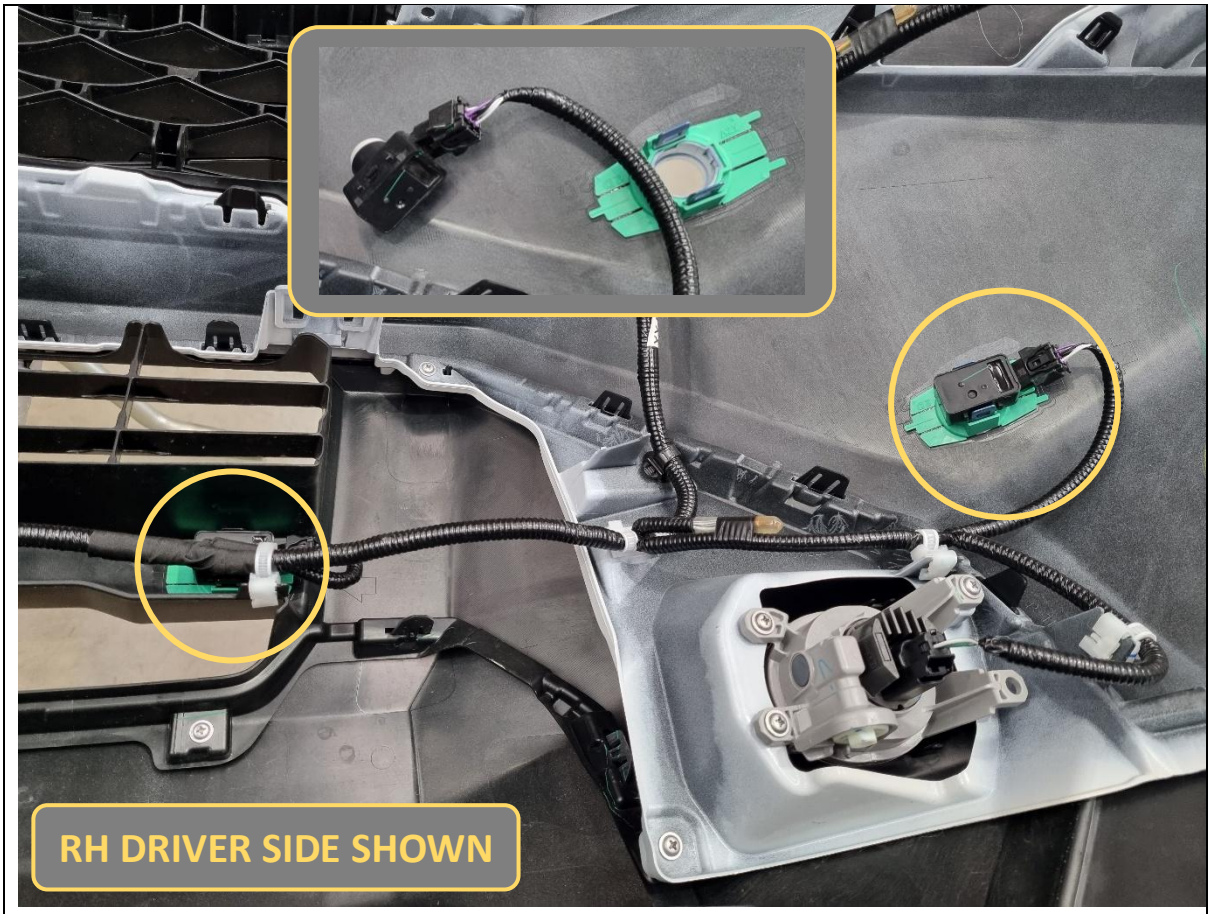
70. If relocating the camera, remove 2x Phillips head screws holding camera bracket. Remove the camera and bracket and set aside in a safe place.

TOOLS REQUIRED

Phillips head screwdriver

FASTENERS

Discard



71. Unclip the parking sensors from the sensor holders.

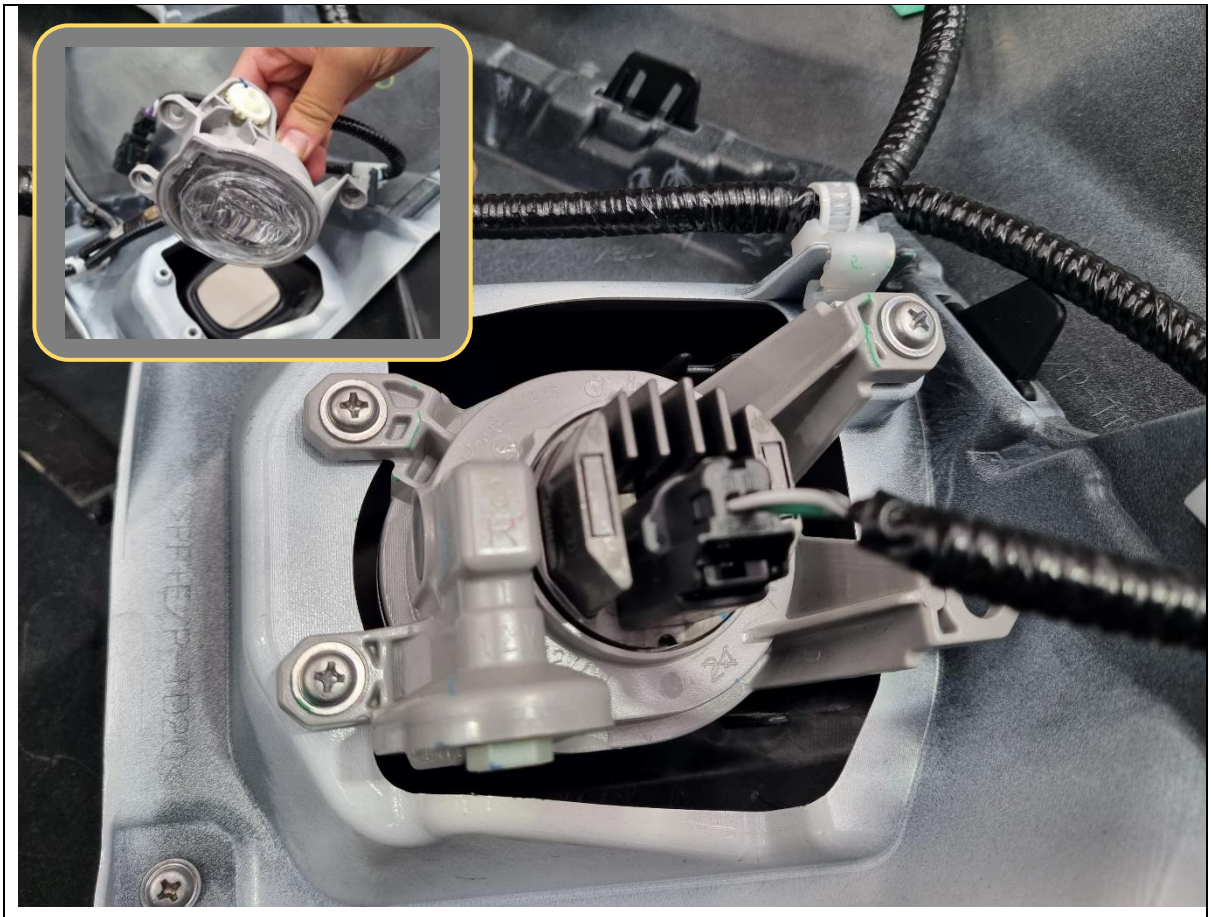
    Label each parking sensor with its position (eg. outer LH, inner LH, inner RH, inner RH) and take note of which direction the plug is pointing.

    Some vehicles only have 2x parking sensors instead of 4x.

    These need to be matched when installed in the bull bar.

TOOLS REQUIRED

FASTENERS



72. If equipped, remove 3x Phillips head screws holding each fog light.

TOOLS REQUIRED

Phillips head screwdriver

FASTENERS

Discard

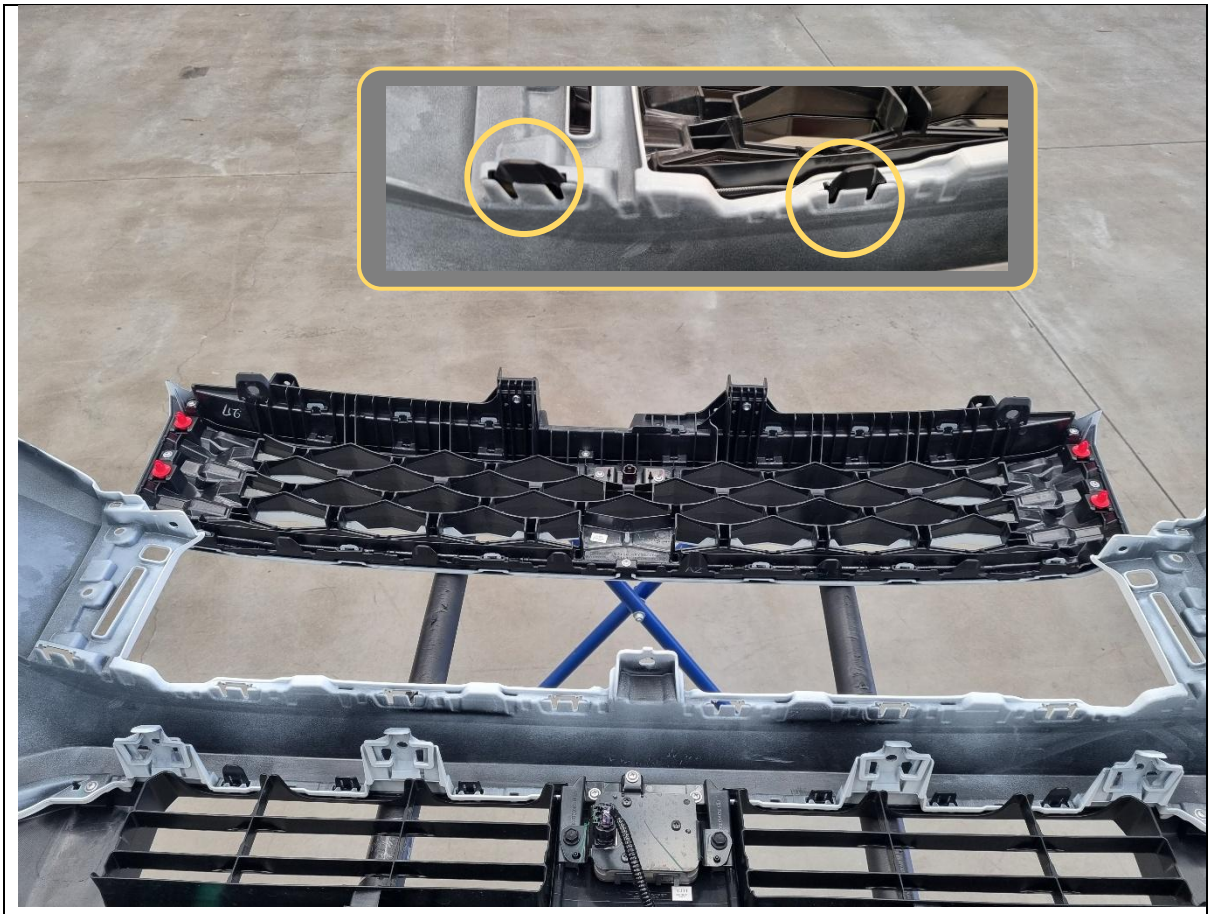
73. Unclip the wiring harness from the bumper.

74. Label parking sensors if not already done so, then unplug and separate the fog lights and parking sensors from the harness.

    Set all parts aside in a safe place.

TOOLS REQUIRED

FASTENERS



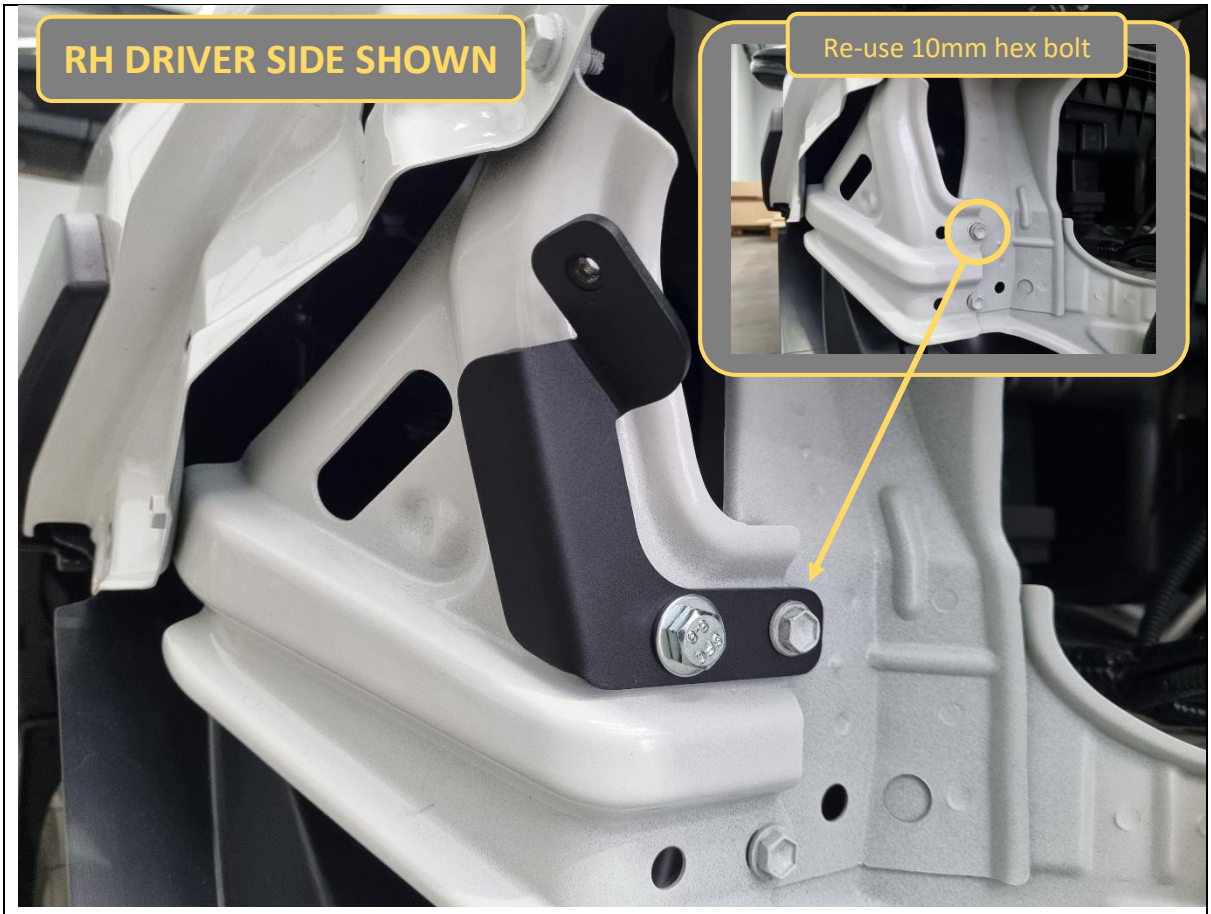
75. Use a trim tool or flat blade screwdriver to release the 8x tabs holding the bottom edge of the grille to the bumper.

76. Set the grille aside. The bumper is no longer needed and can be discarded/sold on Marketplace.

TOOLS REQUIRED

Trim tool
or
Flat blade screwdriver

FASTENERS



77. Locate the 10mm hex bolt on the guard underneath the headlight and remove it.

78. Fit the B-1802 outer headlight infill bracket to the guard and loosely secure with the factory 10mm hex bolt and also 1x M8x20 hex bolt, flat washer and flange nut.

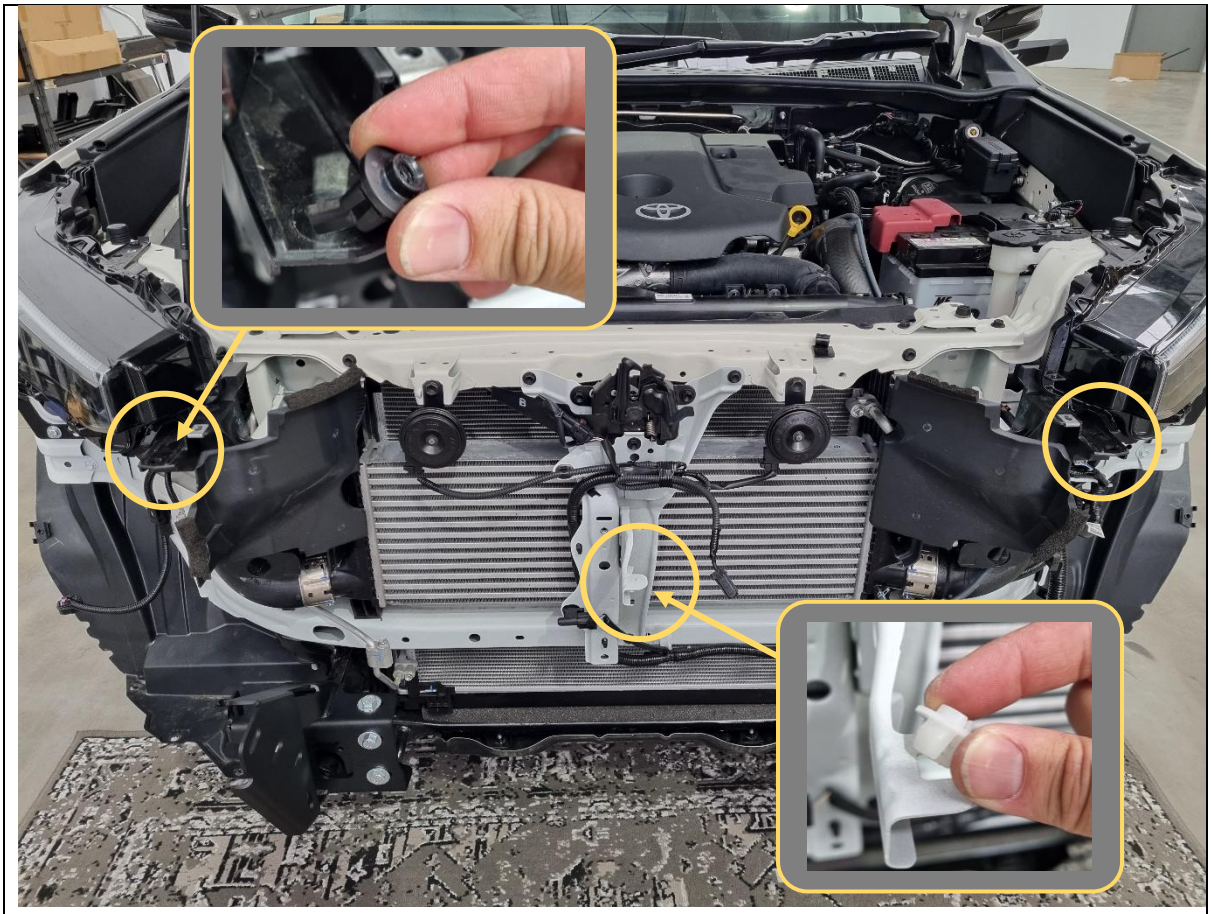
    Do this on both sides and keep bolts loose for now.

TOOLS REQUIRED

10mm socket/spanner
13mm socket/spanner

FASTENERS

1x factory 10mm hex bolt
1x M8x20 hex bolt
1x M8 flat washer
1x M8 flange nut



79. Remove 3x plastic screw clips on the body that were originally used to secure the bumper.

TOOLS REQUIRED

FASTENERS

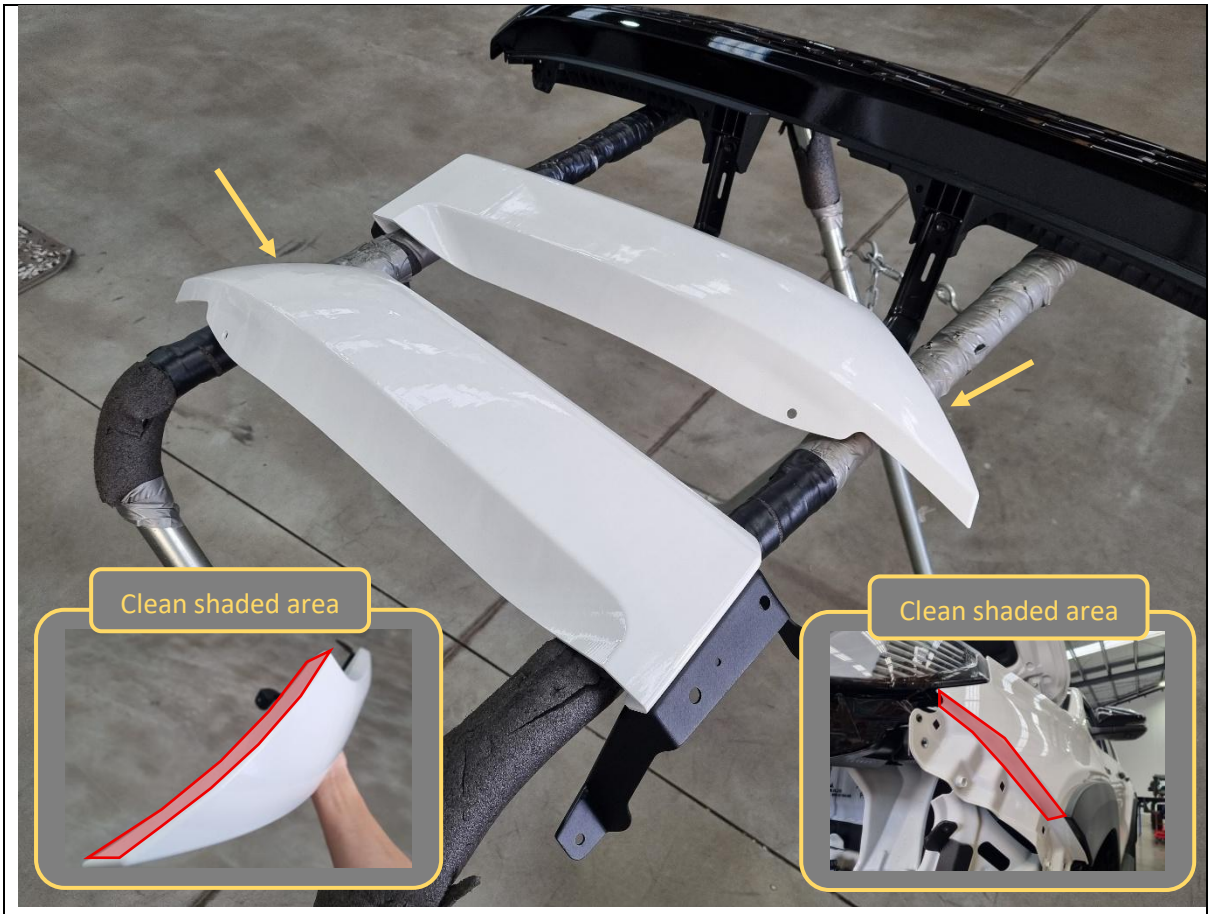
80. Fit the B-1801 inner headlight infill bracket to the flat face on the plastic F-0038 headlight infill and secure using 2x M6x16 black button head bolts, black washers and flange nuts.

TOOLS REQUIRED

4mm hex/Allen key

FASTENERS

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



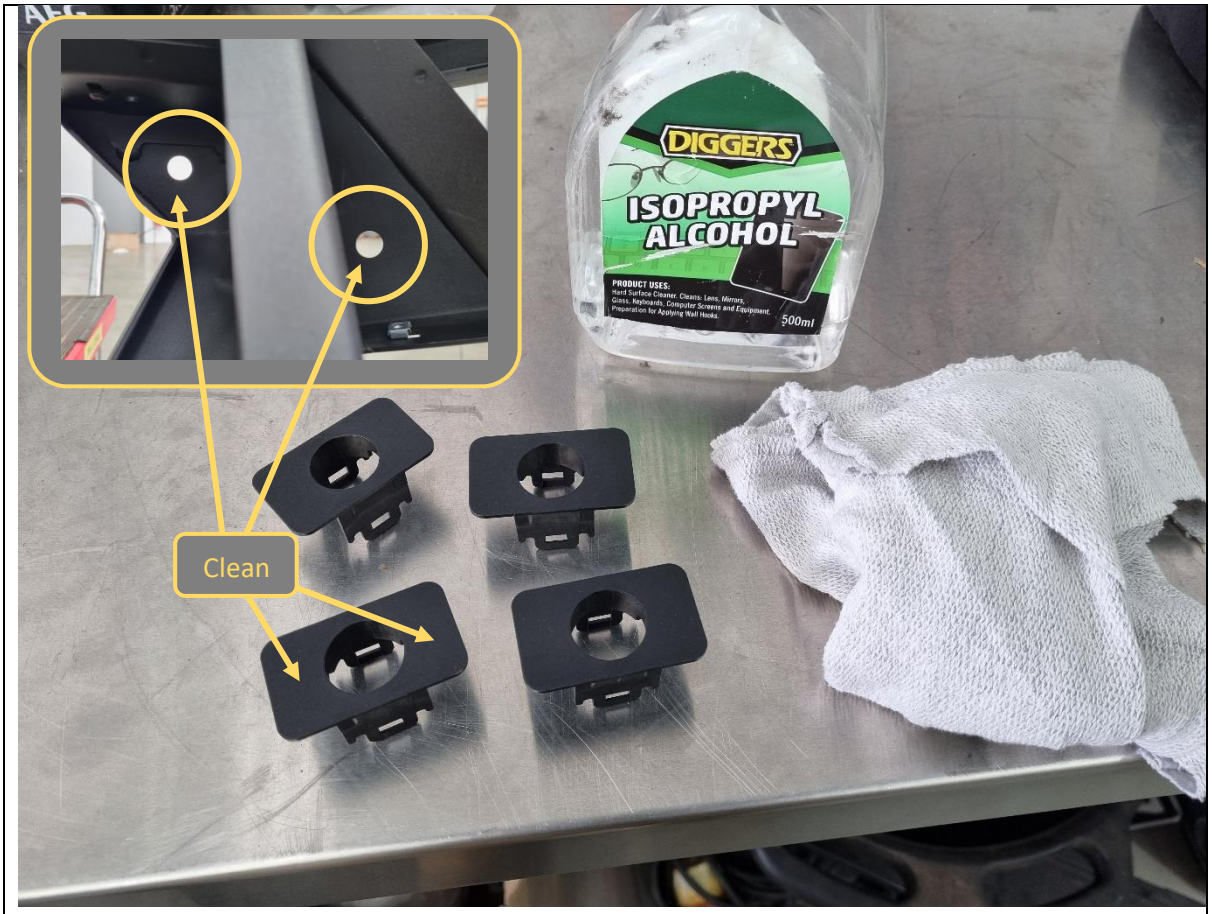
81. Clean the highlighted face of the plastic headlight infills with isopropyl alcohol and a clean rag.

82. Also clean the highlighted face on the guard of the car.

TOOLS REQUIRED

Isopropyl alcohol
Clean rag

FASTENERS

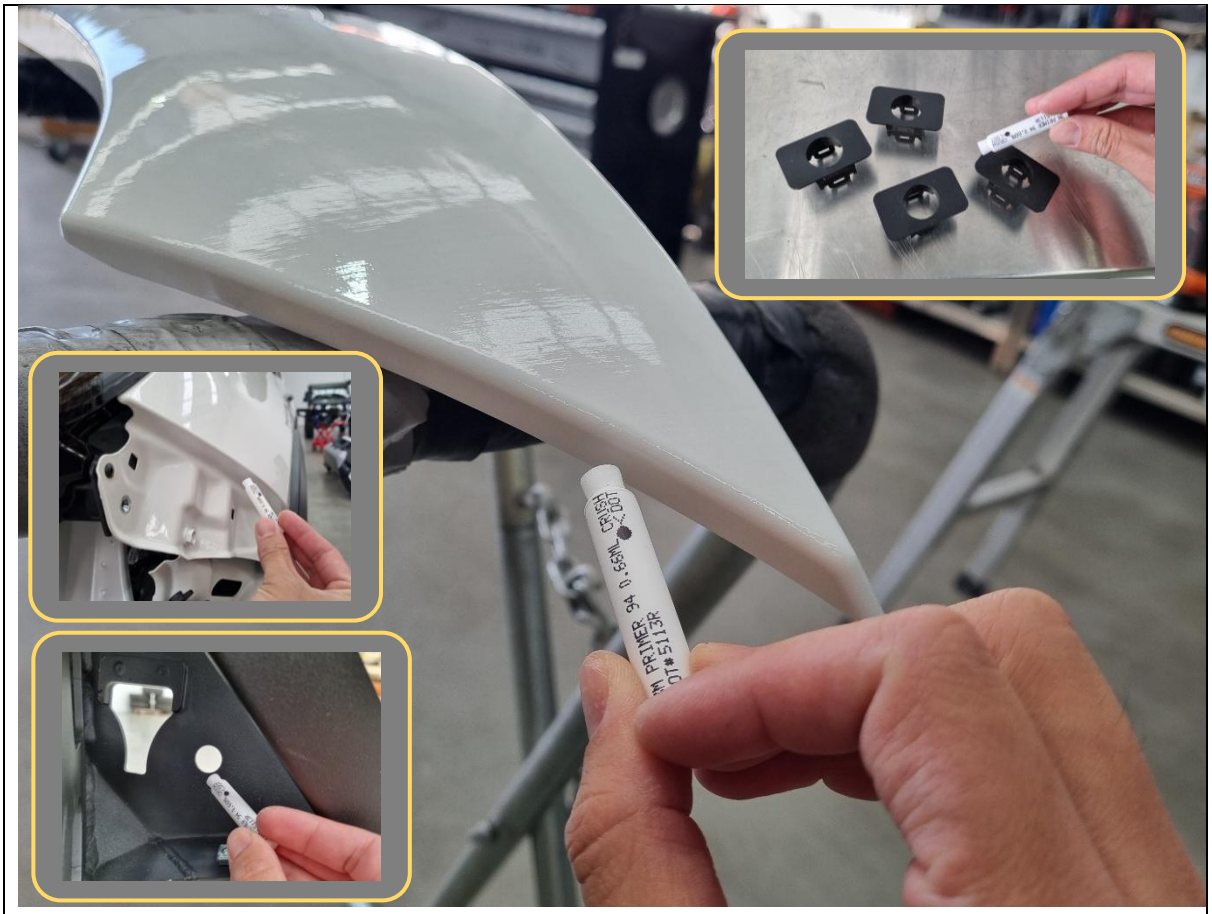


83. Clean the mounting surfaces of the 4x supplied parking sensor holders and the corresponding mounting locations on the inside of the bull bar with isopropyl alcohol or similar and let it dry.

TOOLS REQUIRED

Isopropyl alcohol
Clean rag

FASTENERS



84. Break the bulb of the 2x 3M Primer 94 ampoules supplied in the tape kits to activate primer dispensing.

85. Apply Primer 94 to all the cleaned surfaces, on the headlight infills, guard, bull bar and sensor holders.

TOOLS REQUIRED

FASTENERS

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

86. Apply supplied 3M VHB tape from the tape kits to the headlight infills and parking sensor holders as shown.

87. Clip the parking sensors into the sensor holders and set aside for later.

TOOLS REQUIRED

FASTENERS

88. Use a utility knife or similar to peel off the red backing film for the VHB tape.

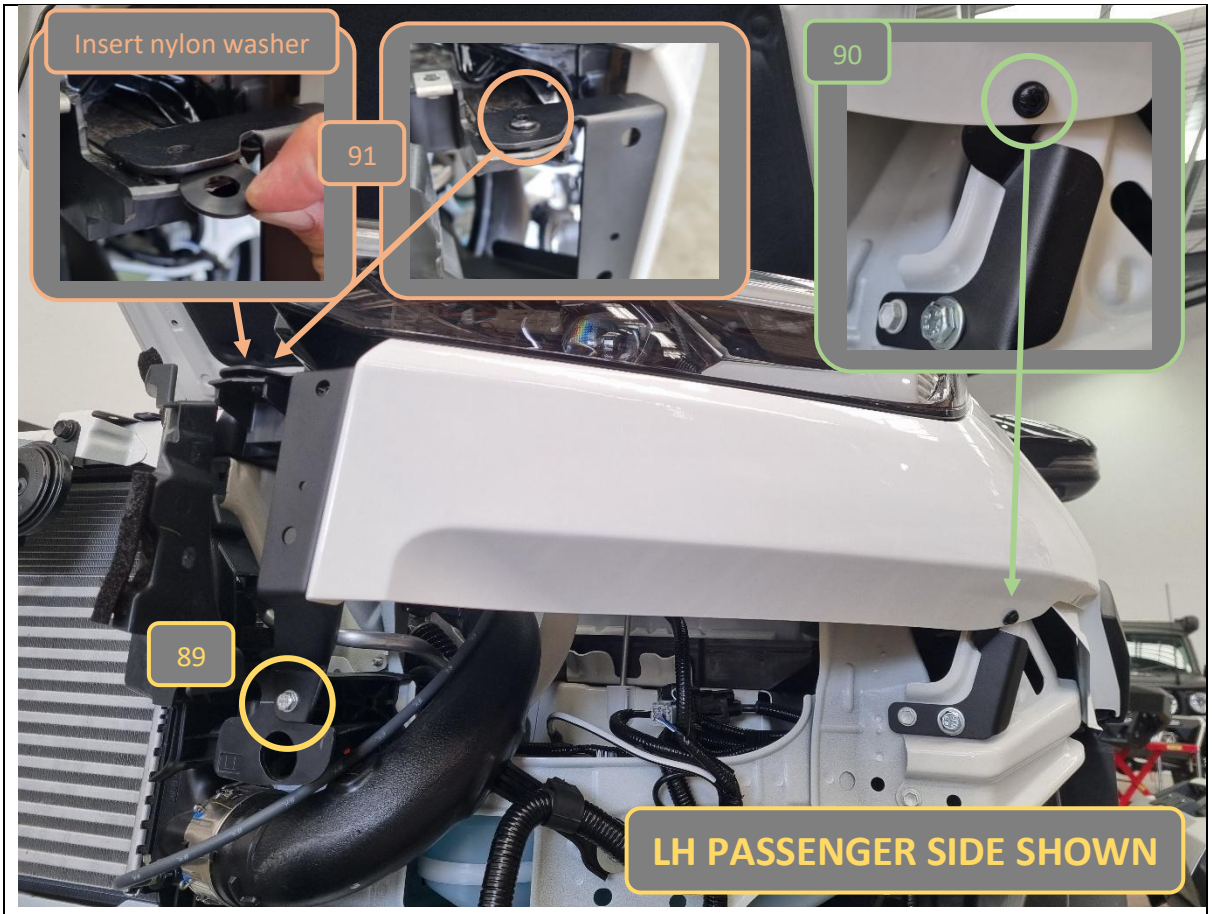
89. Present the headlight infill to the car and align the rearmost edge with the quarter panel first. Press firmly so the tape adheres to the guard.

TOOLS REQUIRED

Utility knife

FASTENERS

Bolt



90. Loosely secure the bottom of the inner headlight infill bracket to the body with 1x M6x12 hex bolt and flat washer.

91. Loosely secure the infill to the outer headlight infill bracket with 1x M6x16 black button head bolt and black washer.

92. Insert 1x M8 nylon washer in between the top bolt hole of the inner headlight infill and vehicle headlight mounting tab.

    Then loosely secure with 1x M6x16 black button head bolt, black washer and flange nut.

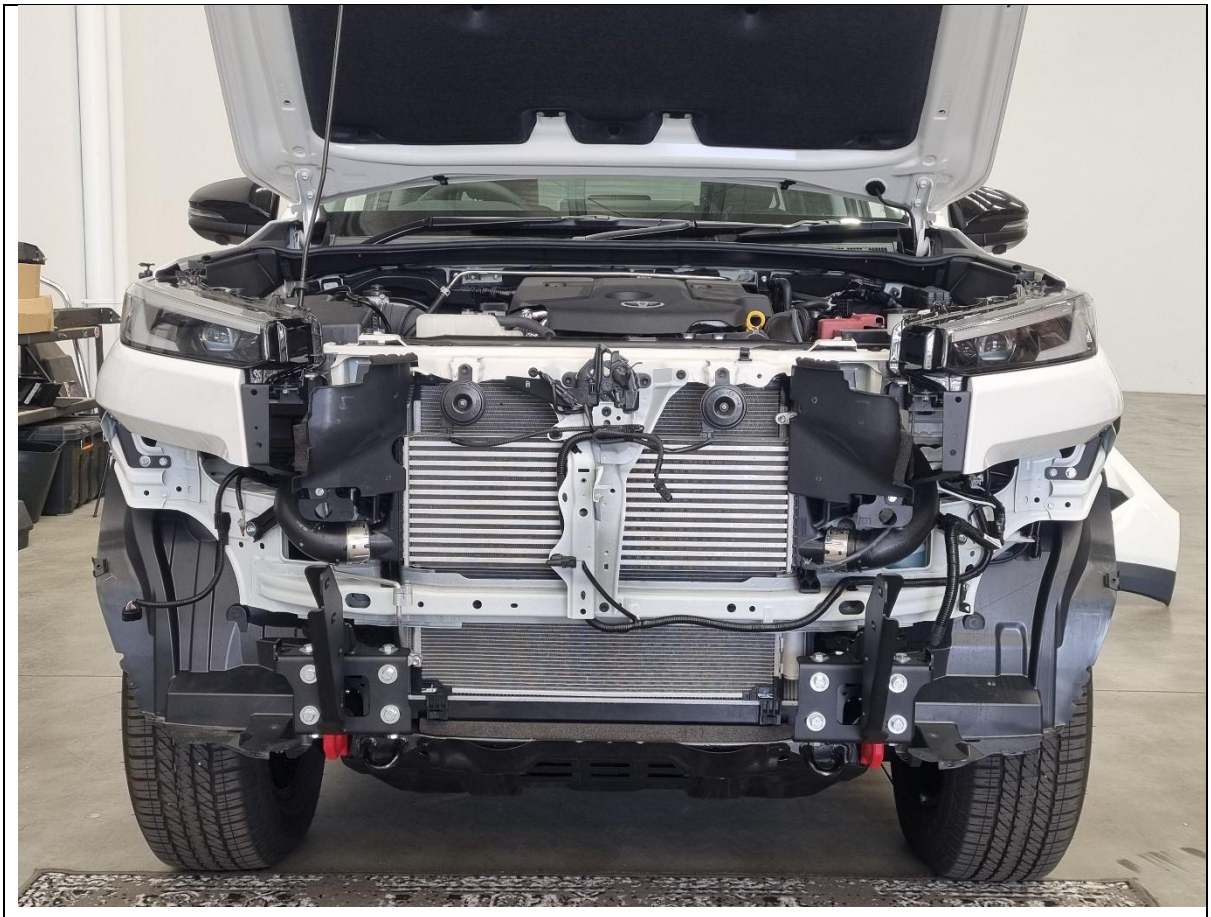
TOOLS REQUIRED

4mm hex/Allen key
10mm socket/spanner

FASTENERS

1x M6x12 hex bolt
1x M6 flat washer

2x M6x16 black button head
2x M6 black washer
1x M6 flange nut
1x M8 nylon washer



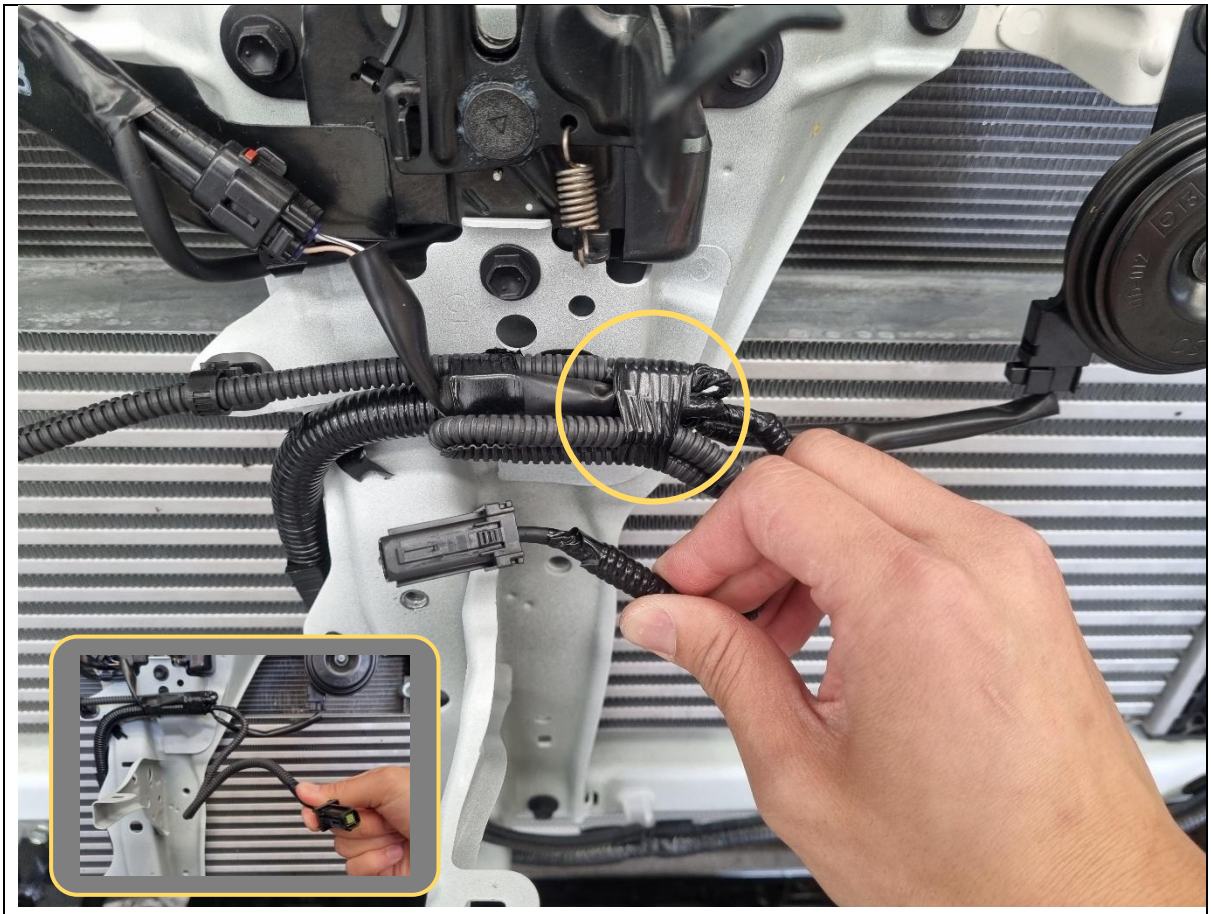
93. Tighten all bolts on the headlight infill and mounting brackets.

94. Repeat installation procedure for other headlight infill.

TOOLS REQUIRED

Utility knife
4mm hex/Allen key
10mm socket/spanner
13mm socket/spanner

FASTENERS



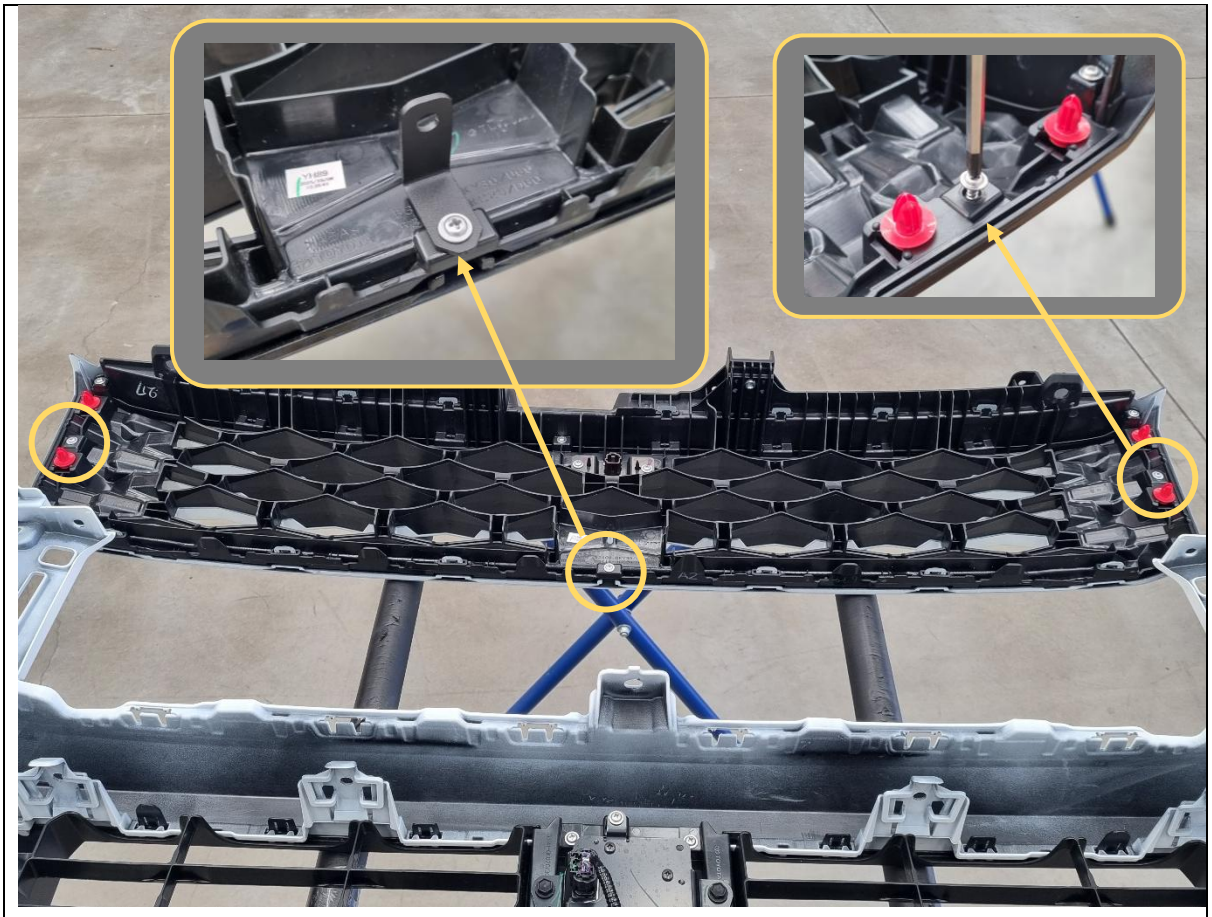
95. If relocating the front camera on vehicles with digital front camera, unwrap the camera loom on the car as shown.

96. For analogue cameras, the loom may need to be manually extended by soldering in wire extensions. A patch harness may become available in the future, but at time of publication, manual extension is required.

Note: To determine digital/analogue camera, check the vehicle ID label in the LH passenger door jam. If the model code ends with 'Q3' or is a manual transmission, it is an analogue camera. All other variants will be digital.

TOOLS REQUIRED

FASTENERS



97. Remove 2x Phillips head screws (1x each side) next to the red plastic clips on the back of the grille. Retain for re-use.

98. Remove 1x Phillips head screw on the bottom centre of the back of the grille, then fit the B-1850 centre grille support bracket witht the same screw, as shown.

    The end of the L-bracket with the chamfered corners goes onto the grille.

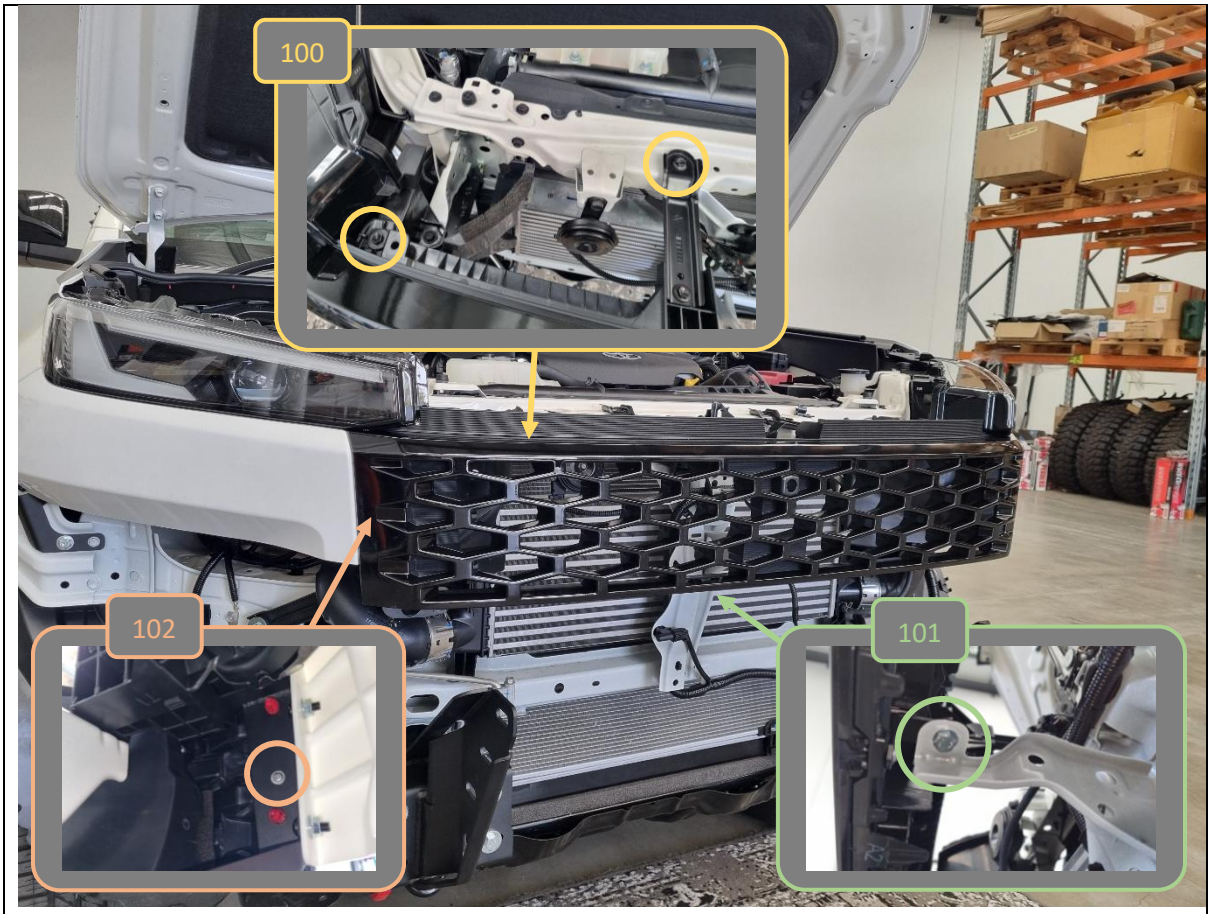
TOOLS REQUIRED

Phillips head screwdriver

FASTENERS

3x Phillips head screws

Retain



99. Fit the grille back onto the car. The red clips go into the holes in the inner headlight infill brackets.

    If the camera is not being relocated, plug it back in.

100. Re-secure at the top using the 4x factory 10mm hex bolts removed earlier.

101. Secure the bottom to the centre support bracket using 1x M6x12 hex bolt, flat washer and flange nut.

102. Secure the sides re-using the Phillips head screws removed in the previous steps.

TOOLS REQUIRED

10mm socket/spanner
Phillips head screwdriver

FASTENERS

4x factory 10mm hex bolt
2x Phillips head screws

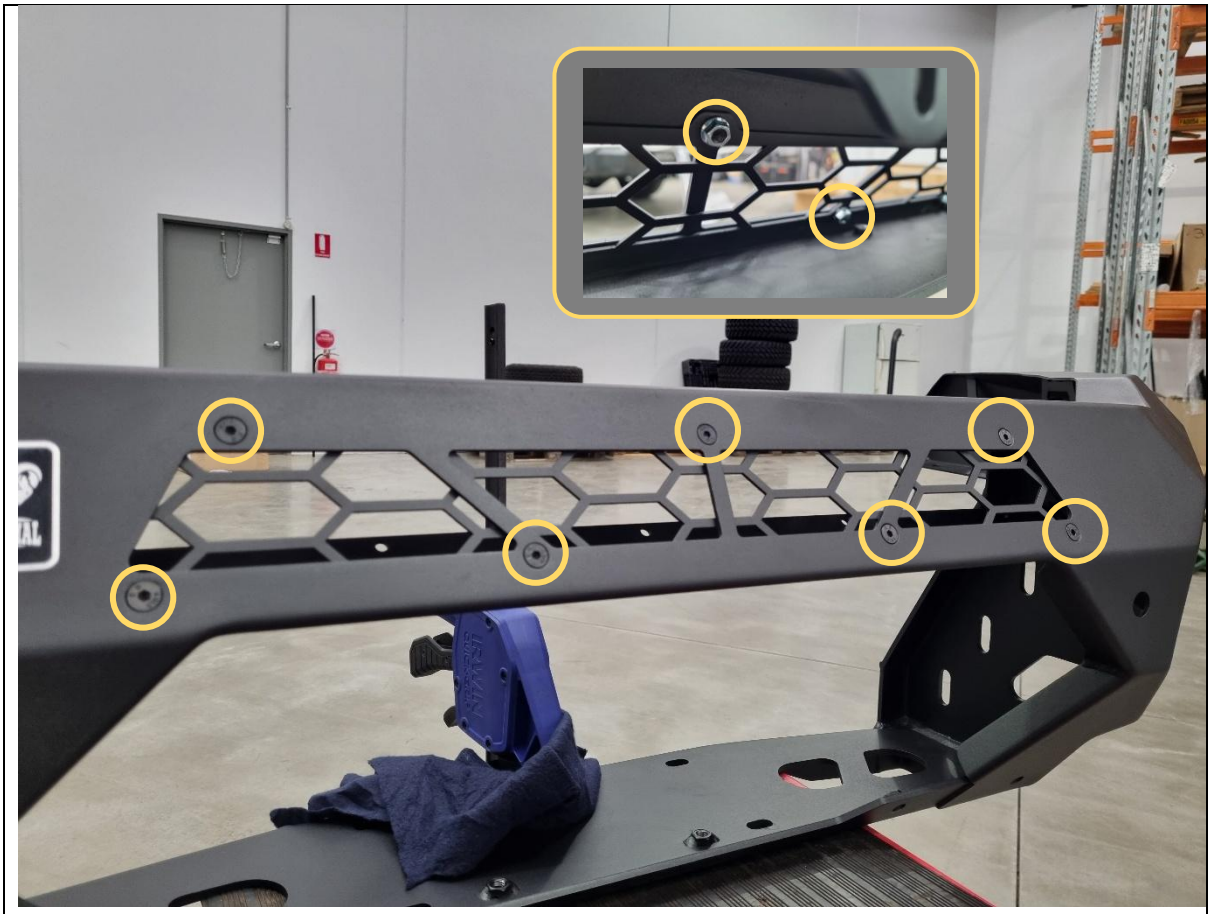
Retained

1x M6x12 hex bolt
1x M6 flat washer
1x M6 flange nut

103. If the camera has been relocated, fit the 16mm plastic blanking plug into the hole left behind in the grille.

TOOLS REQUIRED

FASTENERS



104. 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

105. 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

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

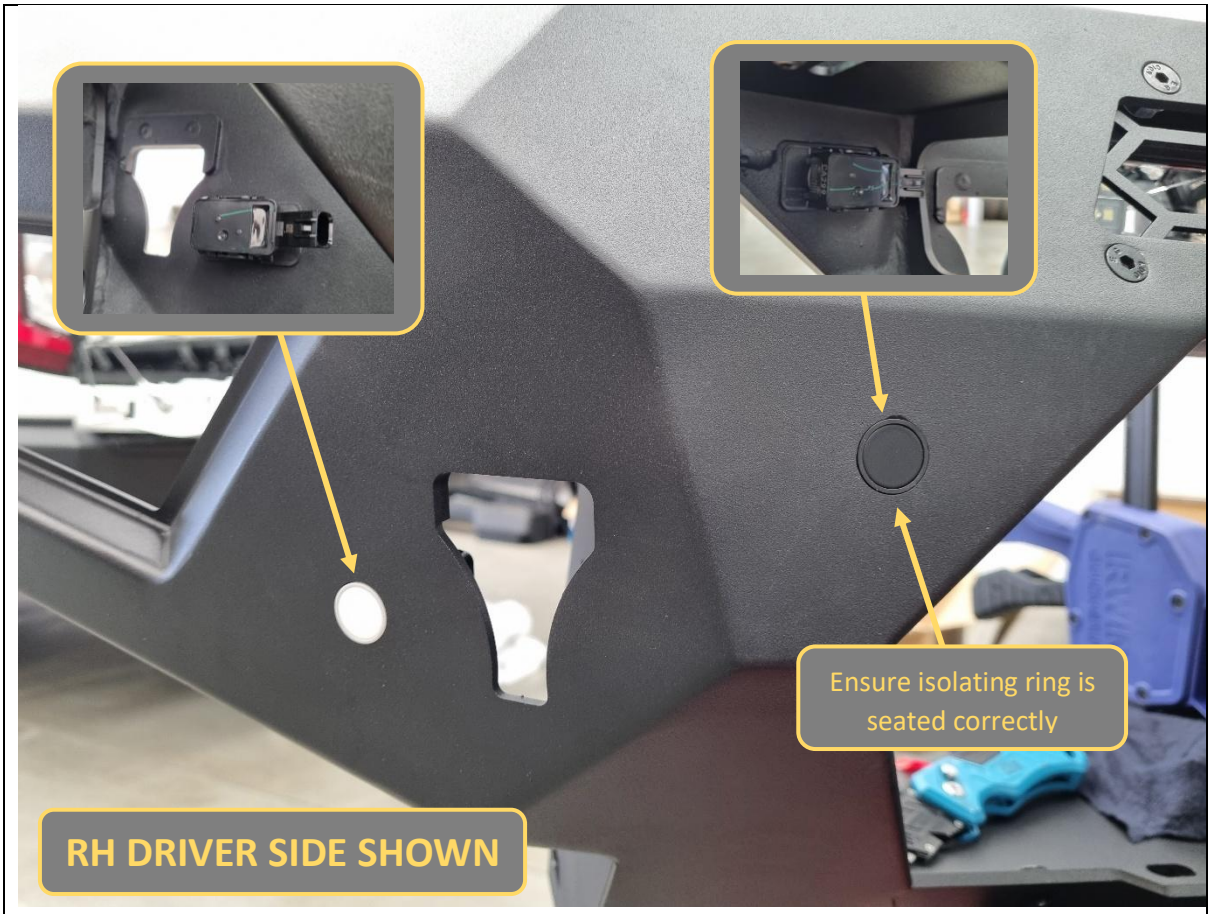
Use a small flat blade screwdriver to push the edge of the cage to engage with the slot to aid fitting.

TOOLS REQUIRED

Flat blade screwdriver

FASTENERS

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



Locate the parking sensors with sensor holders and tape applied.

107. 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.

108. 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).

109. 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

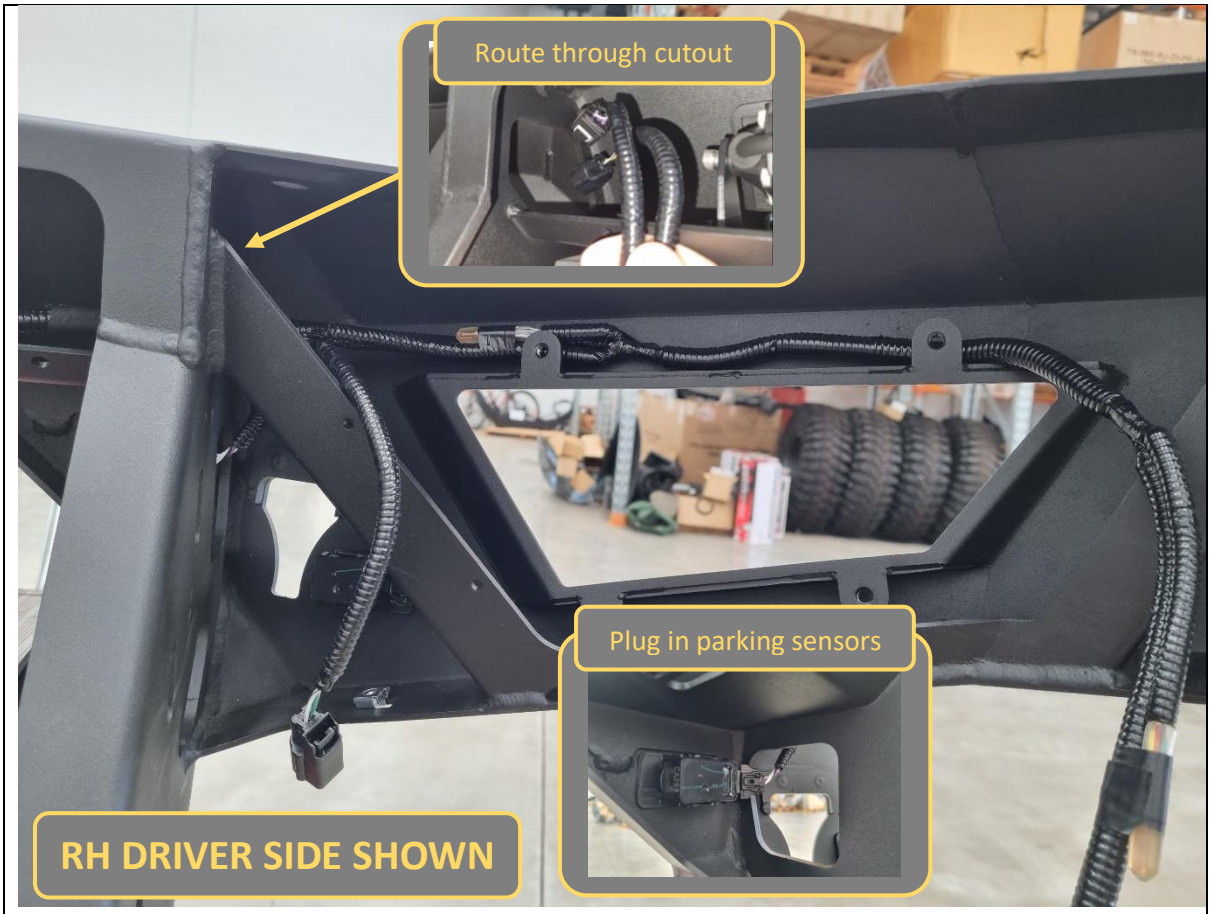
Utility knife
Sikaflex

FASTENERS

110. For cars with only 2x parking sensors, fit the 18mm plastic blanking plugs in the unused holes on the bull bar instead..

TOOLS REQUIRED

FASTENERS



111. Route the bumper harness through the inside of the bull bar up top. Ensure the main connector to the vehicle is on the RH driver side, matching the original bumper.

112. Plug in all parking sensors.

TOOLS REQUIRED

FASTENERS

113. **Toro only.** Fit the supplied indicator repeater lamps to the wing meshes. Use the double sided tape pads to affix the lamp to the mesh.

Ensure the mounting holes line up with the mesh and that compliance marking on the lamp is upright.

TOOLS REQUIRED

FASTENERS

114. **Toro only.** Secure each indicator with 2x M3x12 pan head screws, flat washers and hex nuts.

TOOLS REQUIRED

Phillips head screwdriver
5.5mm socket/spanner

FASTENERS

4x M3x12 pan head screw
4x M3 flat washer
4x M3 hex nut

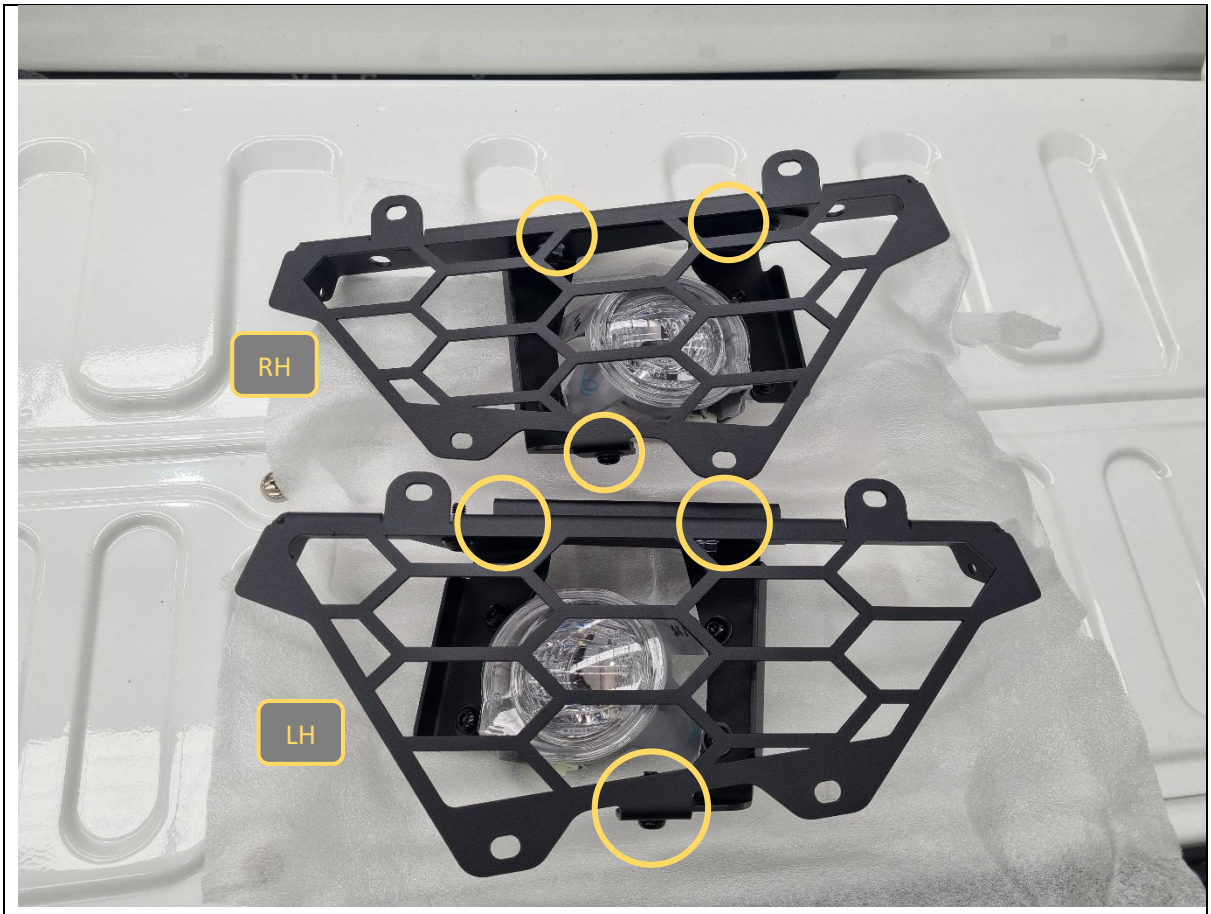
115. If fitting/re-using the genuine Toyota fog lights, fit them to the B-1797 fog light brackets and secure each one with 4x M6x16 black button head bolts, black washers and flange nuts.

TOOLS REQUIRED

4mm hex/Allen key

FASTENERS

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



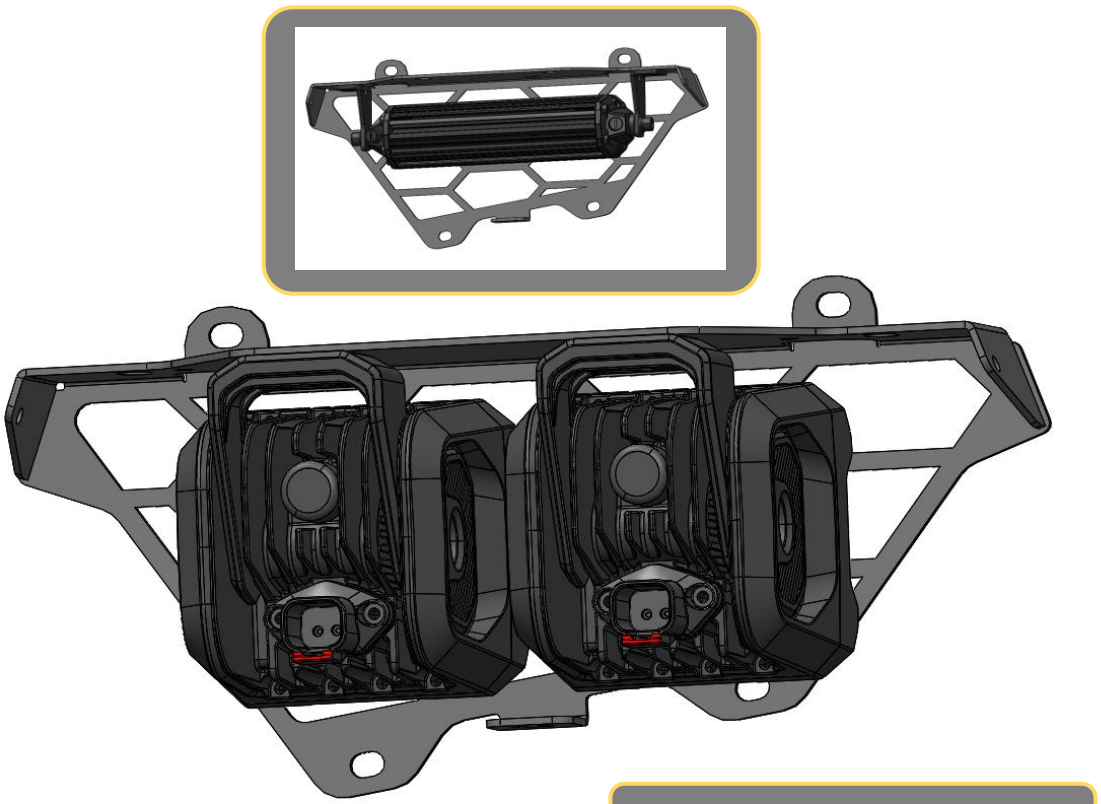
116. Fit the fog light and bracket into each wing mesh. Secure each one using 3x M6x12 black button head bolts, black washers and flange nuts.

TOOLS REQUIRED

4mm hex/Allen key

FASTENERS

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



117. The wing meshes also support cube lights or an 8” light bar in place of the fog lights.

Up to 2x cube lights can be fitted to each wing mesh for the Predator bar. Toro bars can only take 1x per wing.

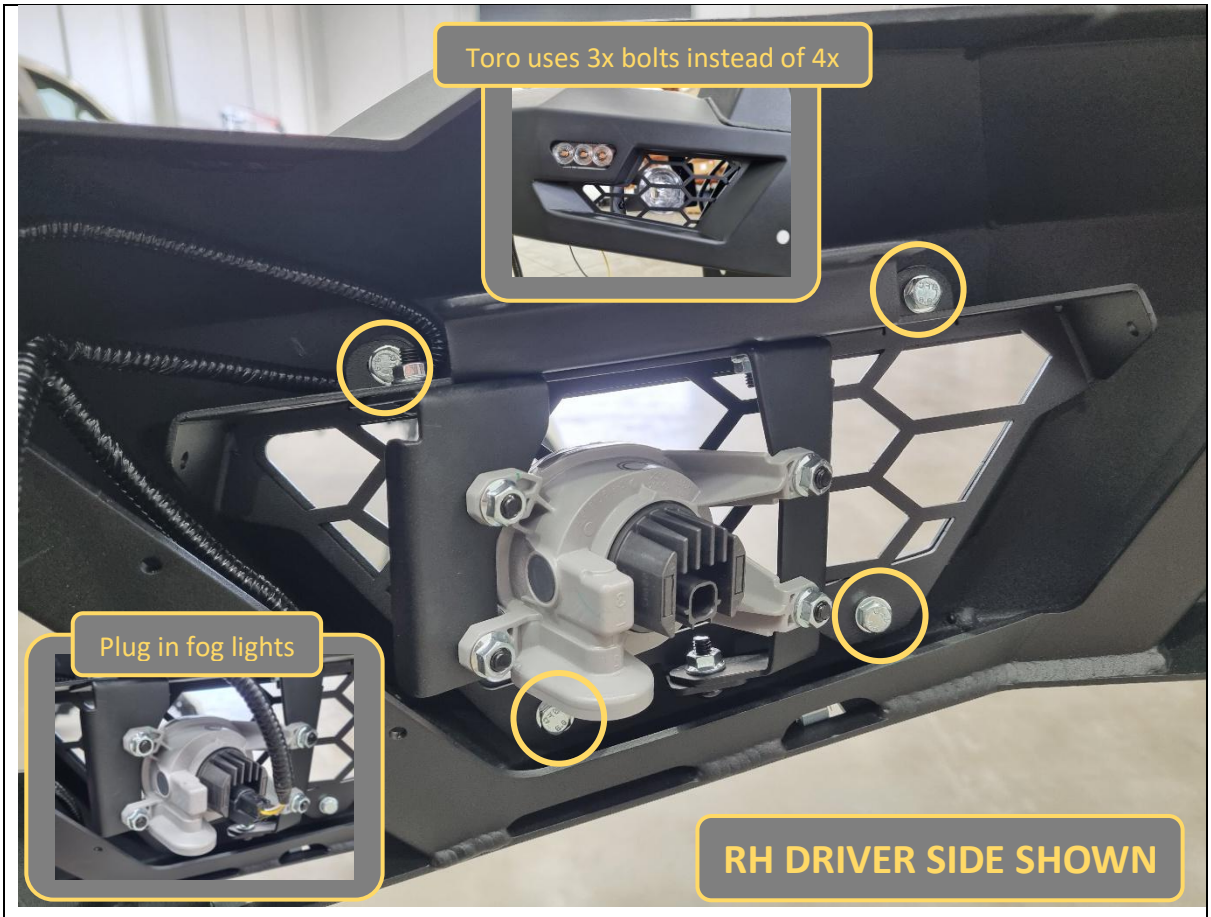
Bolt lights to the underside of the wing mesh flange using fasteners supplied with the lights.

TOOLS REQUIRED

Supplied with accessories

FASTENERS

Supplied with accessories



118. Fit the wing meshes and secure each one to the nutserts in the bull bar with M6x12 hex bolts and flat washers.

The Predator wing mesh uses 4x bolts each. The Toro uses 3x.

119. If fitted, plug in the fog lights.

TOOLS REQUIRED

10mm socket/spanner
Socket extension bar

FASTENERS

M6x12 hex bolt
M6 flat washer

8x of each for Predator
6x of each for Toro

120. **Predator only.** 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

121. If fitting driving lights to this bar, 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 2x 9” round driving lights.

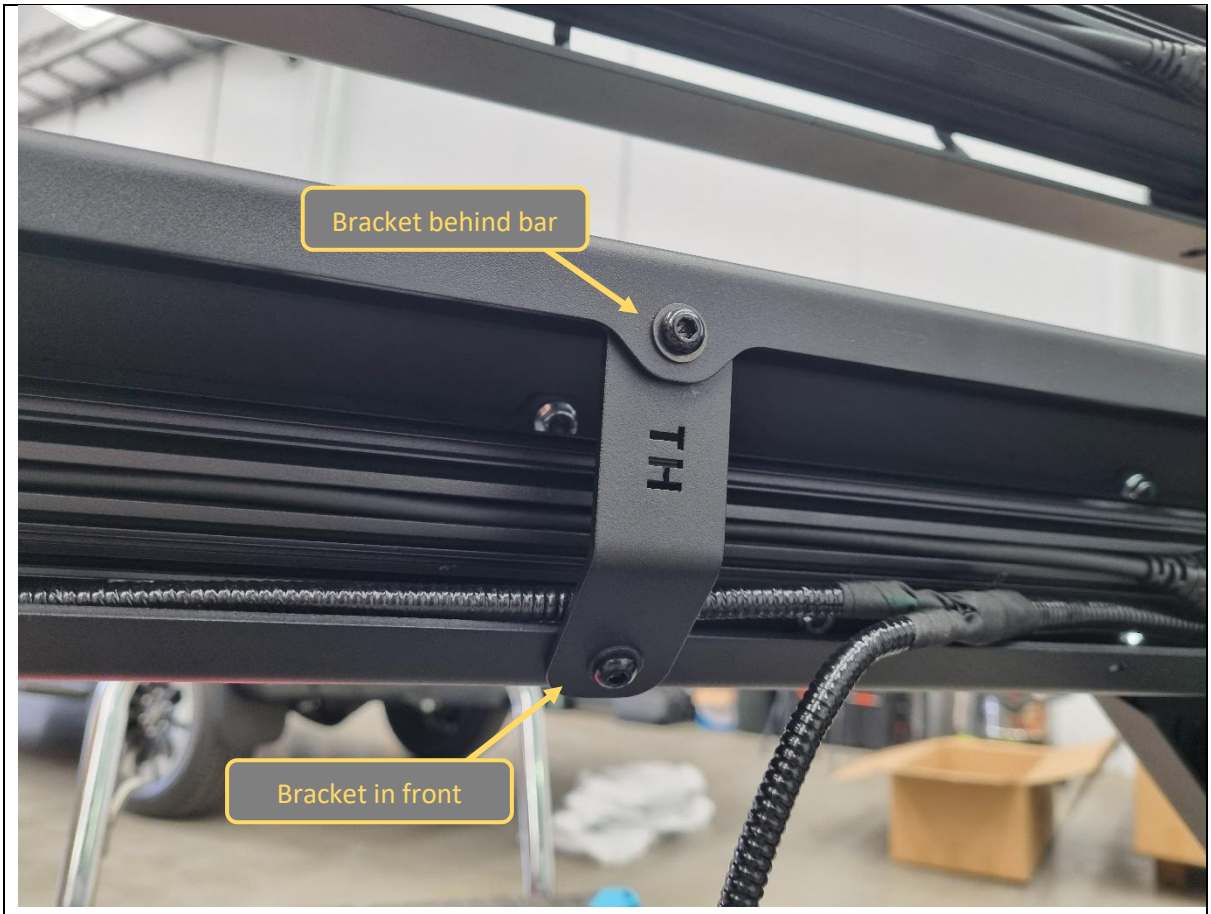
The Toro bar supports up to 2x 7” round driving lights or 2x 8.5” Stedi Type X Evo style driving lights.

TOOLS REQUIRED

Supplied with accessories

FASTENERS

Supplied with accessories



122. Fit the pan brace behind the integrated light bar area and secure to the bar using 2x M6x16 black button head bolts, black washers and flange nuts.

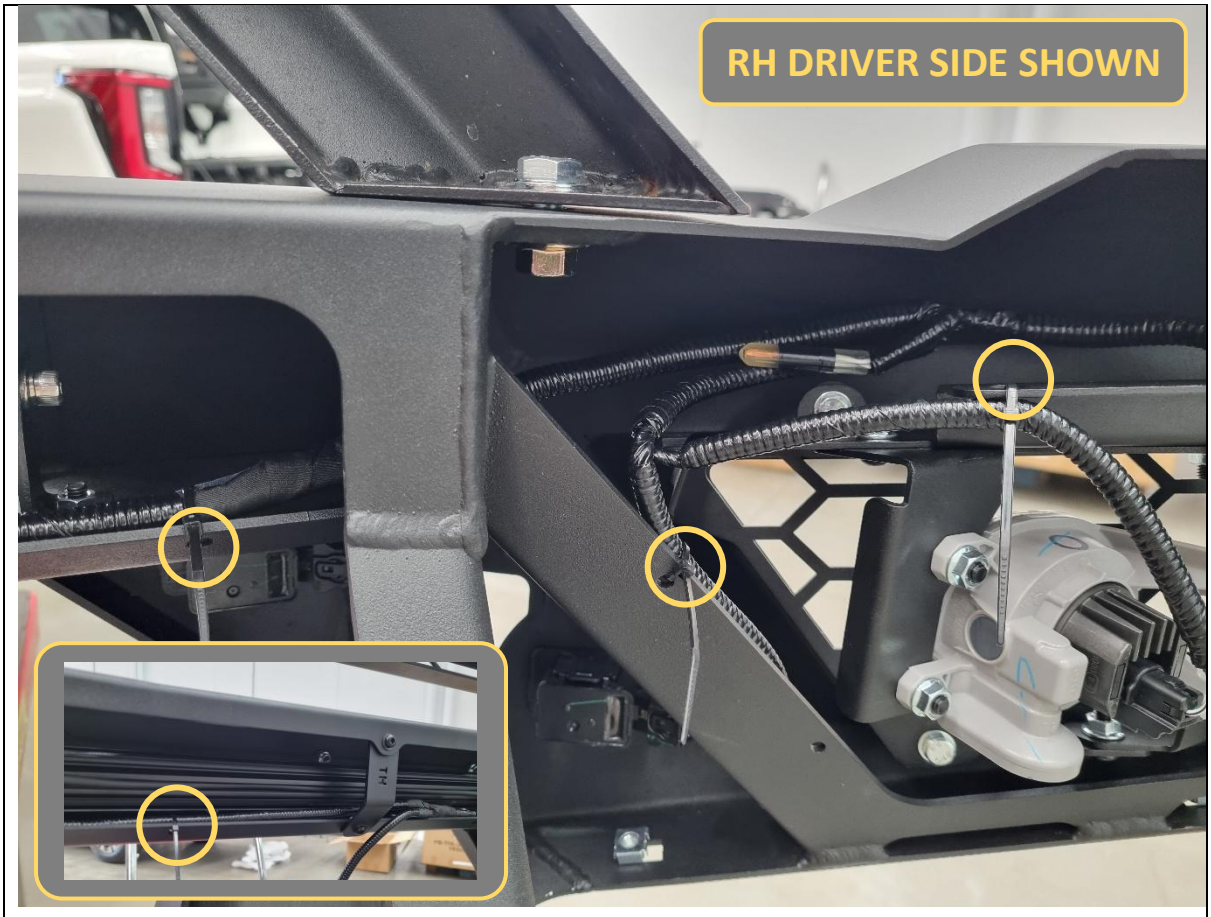
The pan brace is required for all fitments, even if no lights are installed.

TOOLS REQUIRED

4mm hex/Allen key

FASTENERS

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



123. Tidy up the harness inside the bull bar using cable ties and the holes provided along the length of the bar.

TOOLS REQUIRED

Cable ties
Side cutters

FASTENERS

124. **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.

125. **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

126. If not doing any more accessory wiring around the back of the headlights, re-fit the radiator top cover and engine bay side covers. The bonnet can now be closed.

127. 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.

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

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

129. **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
18/19mm socket/spanner

FASTENERS

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

130. 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 parallel with the fold on the headlight infill, with 20mm vertical clearance

Side view: The end of the bar wing should be parallel to the guard with 20mm clearance. The top face of the wing should line up with the corner of the flare. (Non flared vehicles will have to approximate position)

Top view: There should be around 10-15mm clearance between the bar and the grille.

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

Torque to **150Nm**.

TOOLS REQUIRED

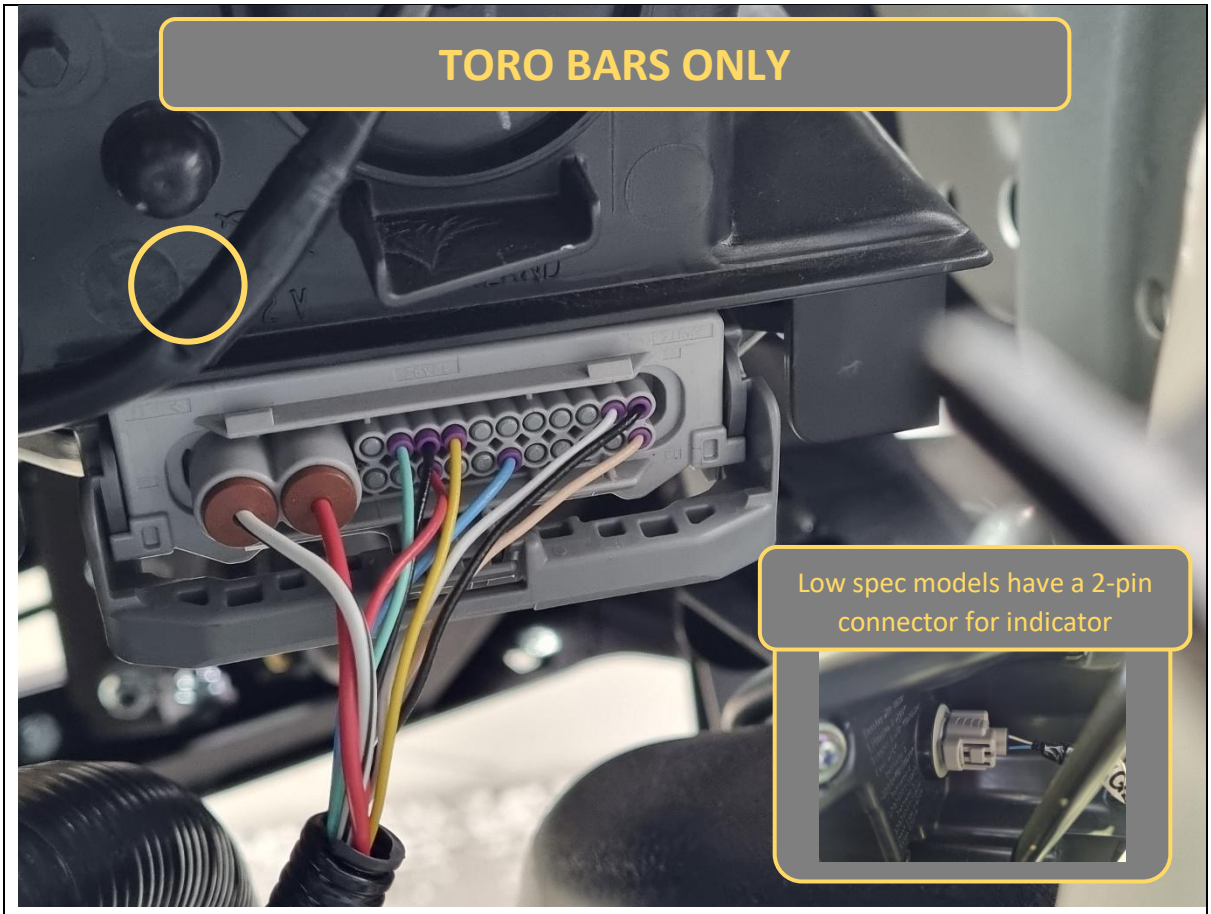
Lifting trolley
18/19mm socket/spanner
Torque wrench

FASTENERS

132. Plug the bumper harness back into the main vehicle harness.

TOOLS REQUIRED

FASTENERS



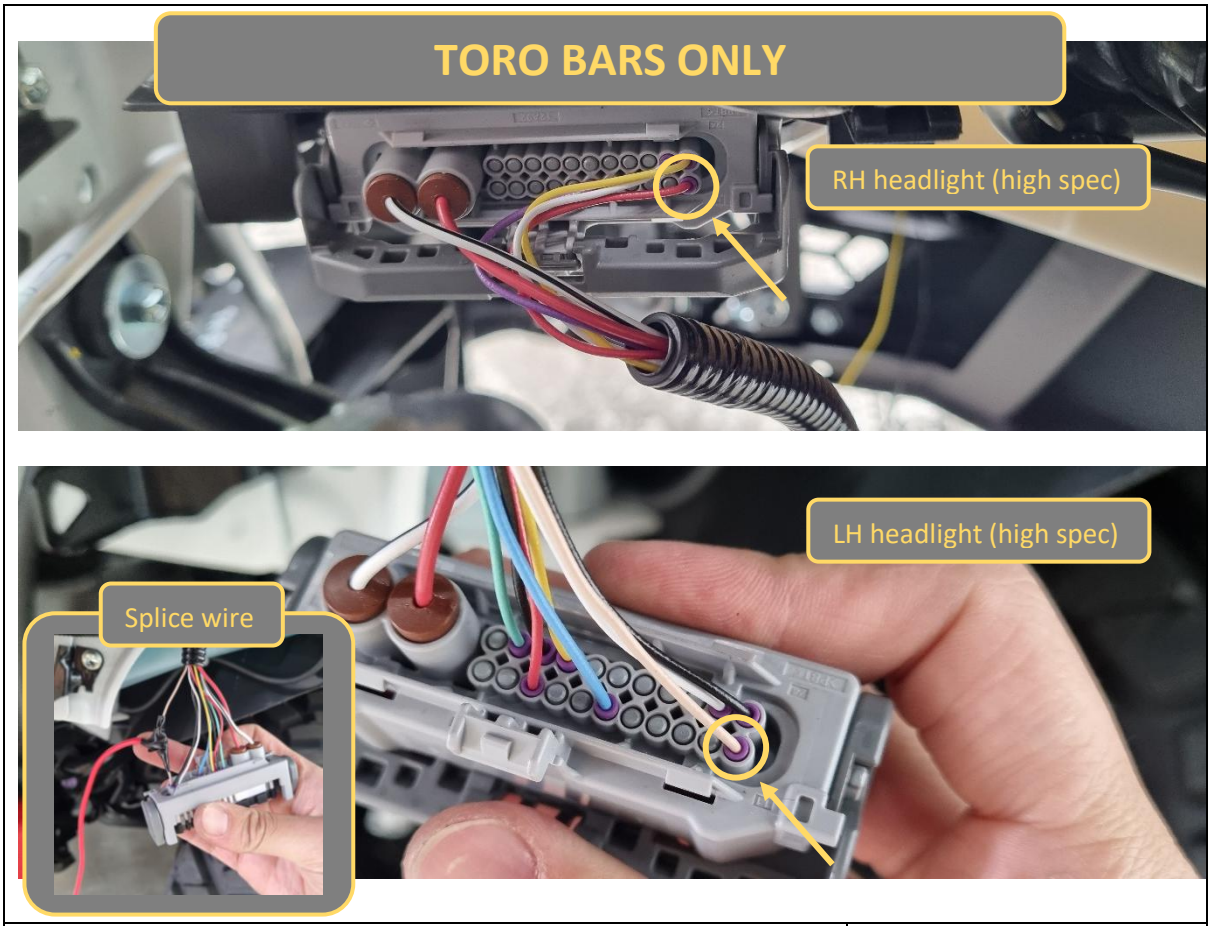
133. **Toro only.** Locate the plug on the back of each headlight and disconnect.

Low spec models where the indicator is a halogen bulb use a 2-pin connector.

High spec models with LED headlights have a 24-pin lever latch style connector.

TOOLS REQUIRED

FASTENERS



134. **Toro only.** With ignition off, use the hazard light switch (not indicator switches since radar/camera and unplugged), and probe with a test light to confirm indicator signal.

    On low spec headlights, there will just be a indicator signal and ground wire in the connector.

    On high spec headlights, the pin location (#11) on LH and RH headlight plugs should be the same, but wire colours are different.

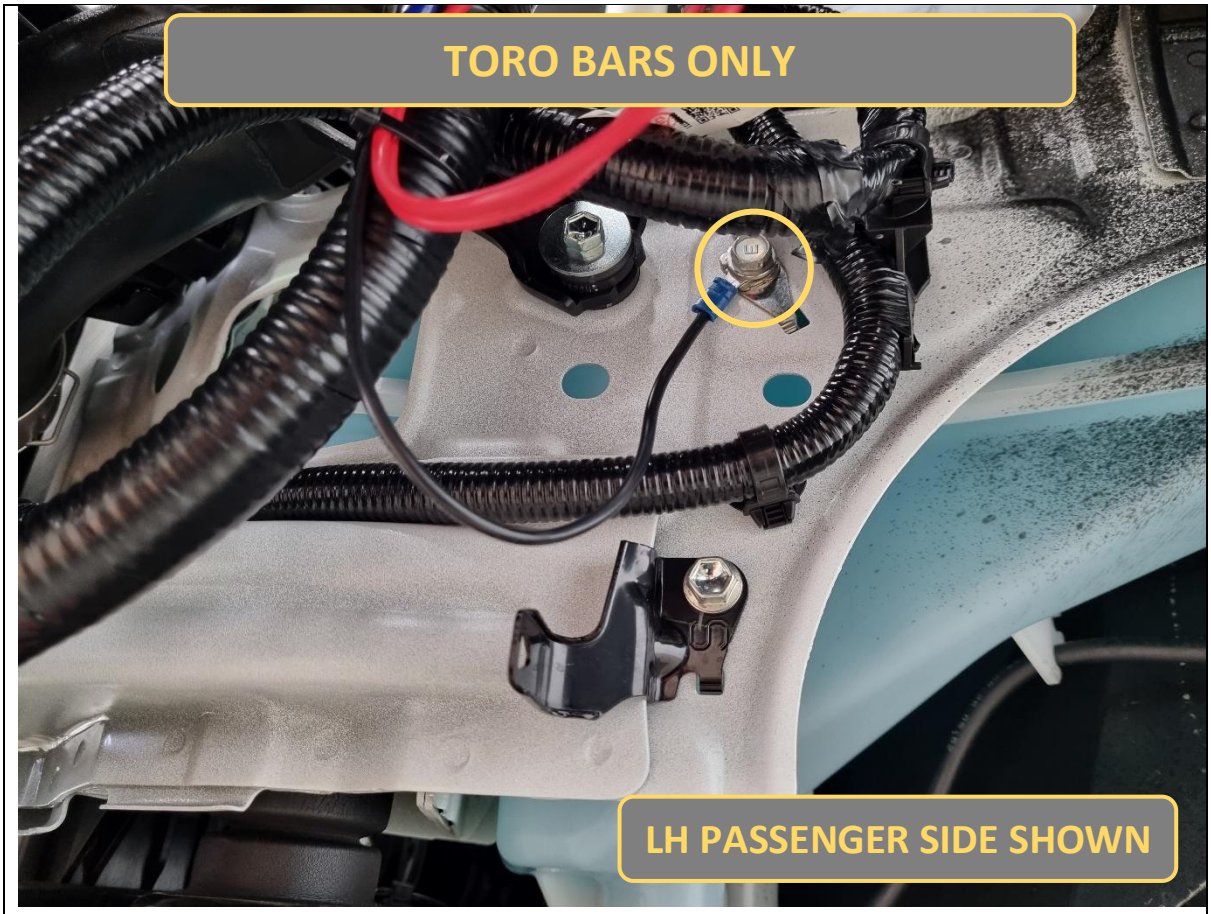
    RH side should be red.
    LH side should be beige.

135. **Toro only.** Splice and solder automotive electrical wires into the harness for indicator signal. Use heat shrink or electrical tape to insulate solder connections. Do this for both LH and RH indicators, then re-plug back into headlight.

TOOLS REQUIRED

Cutting pliers
Wire strippers
Soldering iron
Solder
Automotive electrical wire
Heat shrink
Heat gun
Electrical tape

FASTENERS



136. **Toro only.** On low spec headlights, also splice and solder automotive electrical wires into the harness for ground signal. Use heat shrink or electrical tape to insulate solder connections.

137. **Toro only.** On high spec headlights, crimp a ring terminal suitable for an M6 bolt onto automotive electric wire and run to the highlighted earth point on the body, located directly underneath the headlight.

TOOLS REQUIRED

10mm socket/spanner
Crimp tool
Ring terminal for M6

or

Cutting pliers
Wire strippers
Soldering iron
Solder
Automotive electrical wire
Heat shrink
Heat gun
Electrical tape

FASTENERS

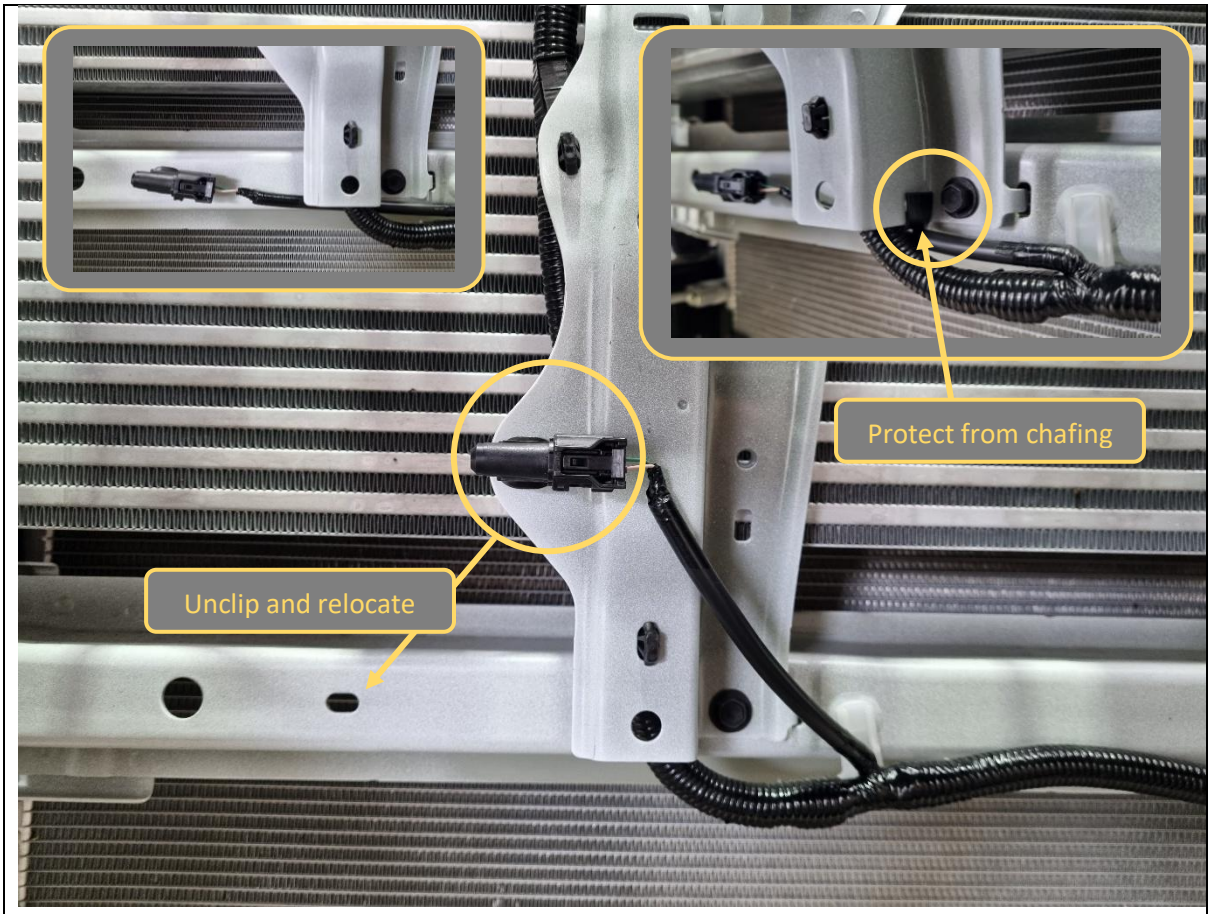
Bolt

138. **Toro only.** Connect the spliced indicator wires to the indicator repeater lamps on the bull bar (solder/crimp together, ensure well insulated).

139. **Toro only.** With ignition off, use the hazard light switch to check and confirm indicator repeater lamps are functioning.

TOOLS REQUIRED

FASTENERS



140. If fitting a winch, the air temperature probe sensor needs to be relocated to stay clear of winch rope should it "bird's nest".

Unclip the sensor and relocate it to the indicated location.

141. Protect the harness from chafing the underside of the body frame member using pinch weld rubber, corrugated tubing and/or several layers of electrical tape.

TOOLS REQUIRED

Trim tool
Pinch weld rubber

FASTENERS

142. If fitting a winch, do so now. Lift and pivot 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

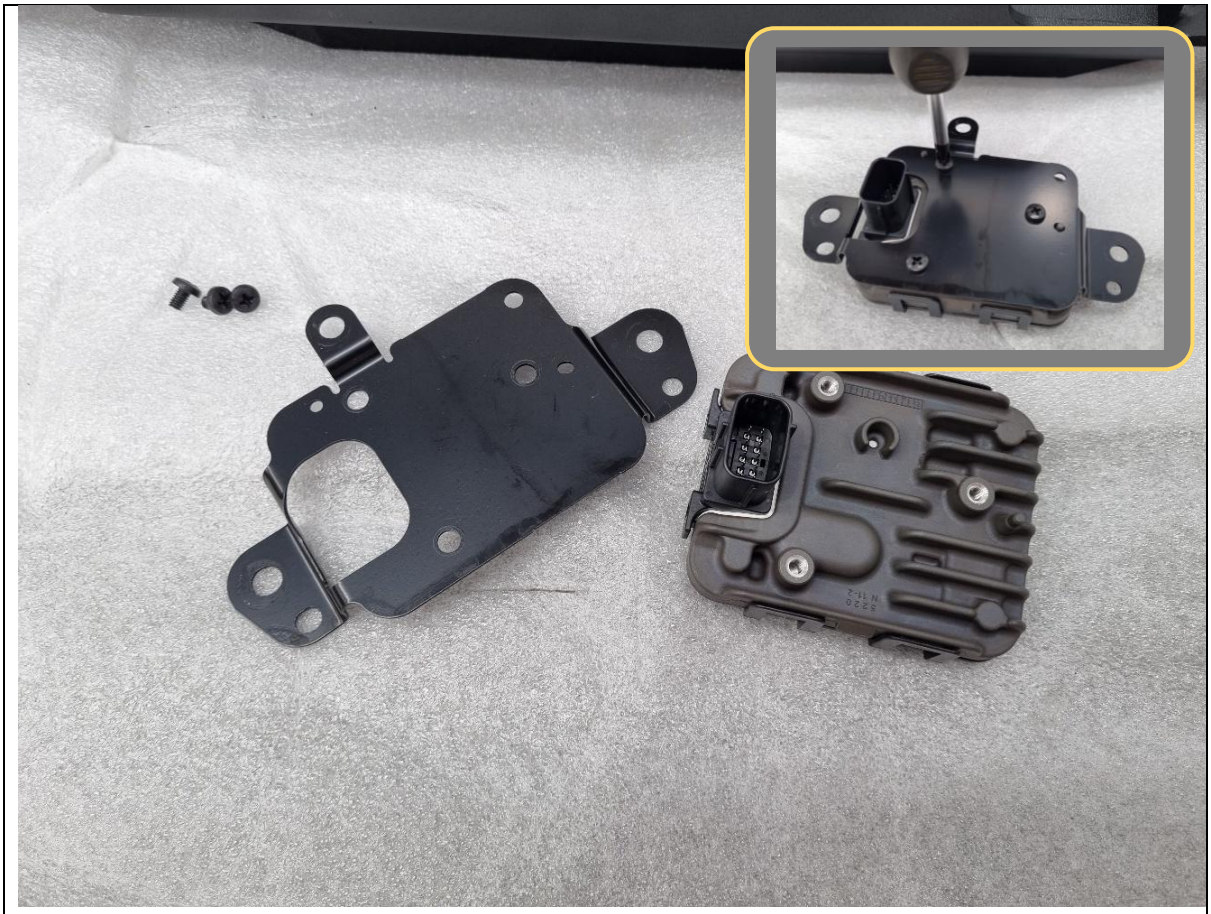
143. If required, fit the winch fairlead to the mesh fairlead mount using M10 or 3/8” fasteners supplied with the winch. This bar is only compatible with hawse type fairleads.

TOOLS REQUIRED

Refer to instructions supplied by winch

FASTENERS

Supplied with winch



144. Locate the radar removed from the bumper and separate it from its mounting bracket by removing 3x Phillips head screws. Retain the screws.

Take care not to strip the heads of the screws as they may be done up very tight.

TOOLS REQUIRED

Phillips head screwdriver

FASTENERS

3x Phillips head screws

Retain

145. Re-fit the radar to the supplied B-1447 relocation bracket and secure using the retained screws.

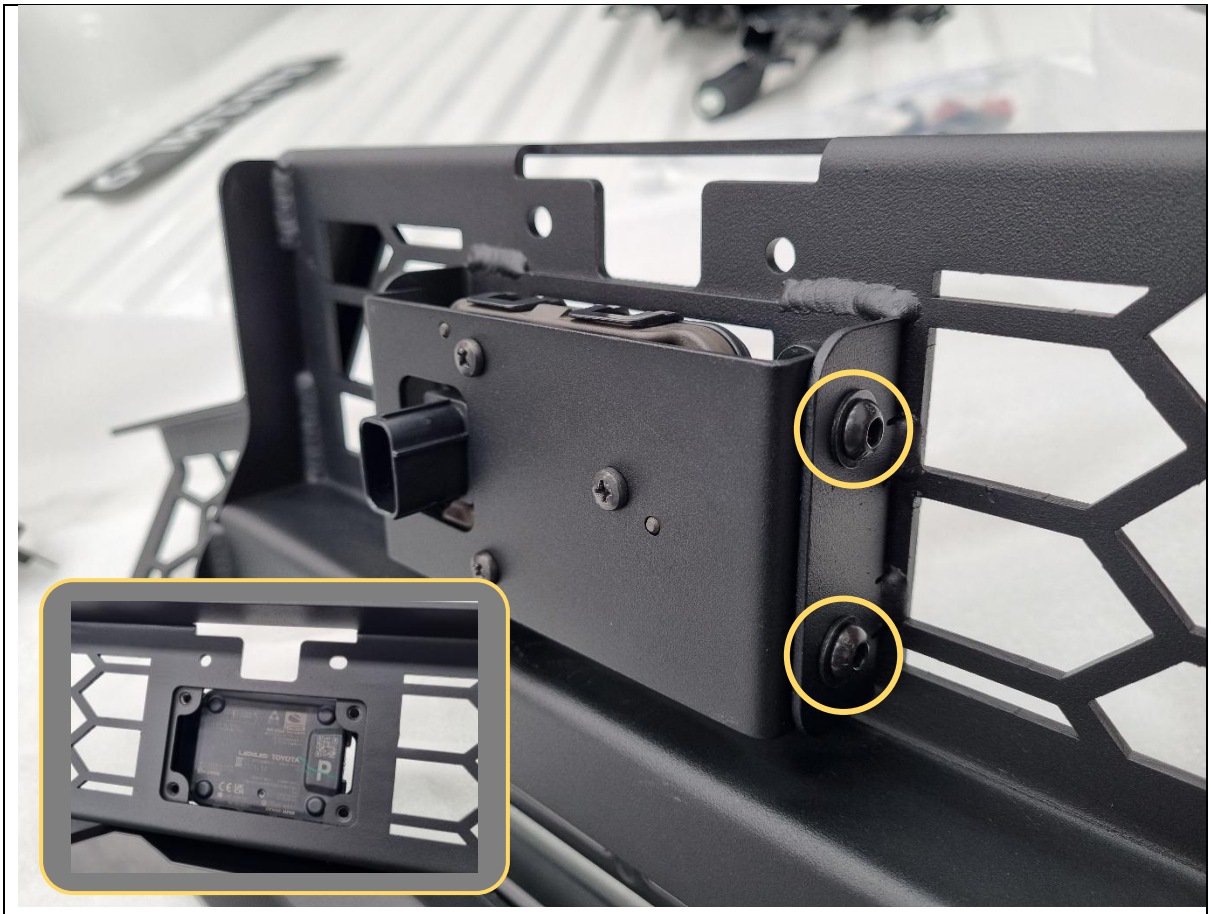
TOOLS REQUIRED

Phillips head screwdriver

FASTENERS

3x Phillips head screws

Retained



146. Fit the radar and relocation bracket to the back of the centre mesh, and loosely secure with 4x M6x12 black button head bolts and black washers.

Ensure radar orientation matches the photos and how it originally sat in the bumper.

The angle of the radar will be adjusted once it is installed onto the vehicle.

TOOLS REQUIRED

4mm hex/Allen key

FASTENERS

4x M6x12 black button head
4x M6 black washer

147. If relocating the front camera, place it in the B-1798 camera housing with holes lined up.

    If not relocating, fit the 16mm plastic blanking plug in the camera housing hole.

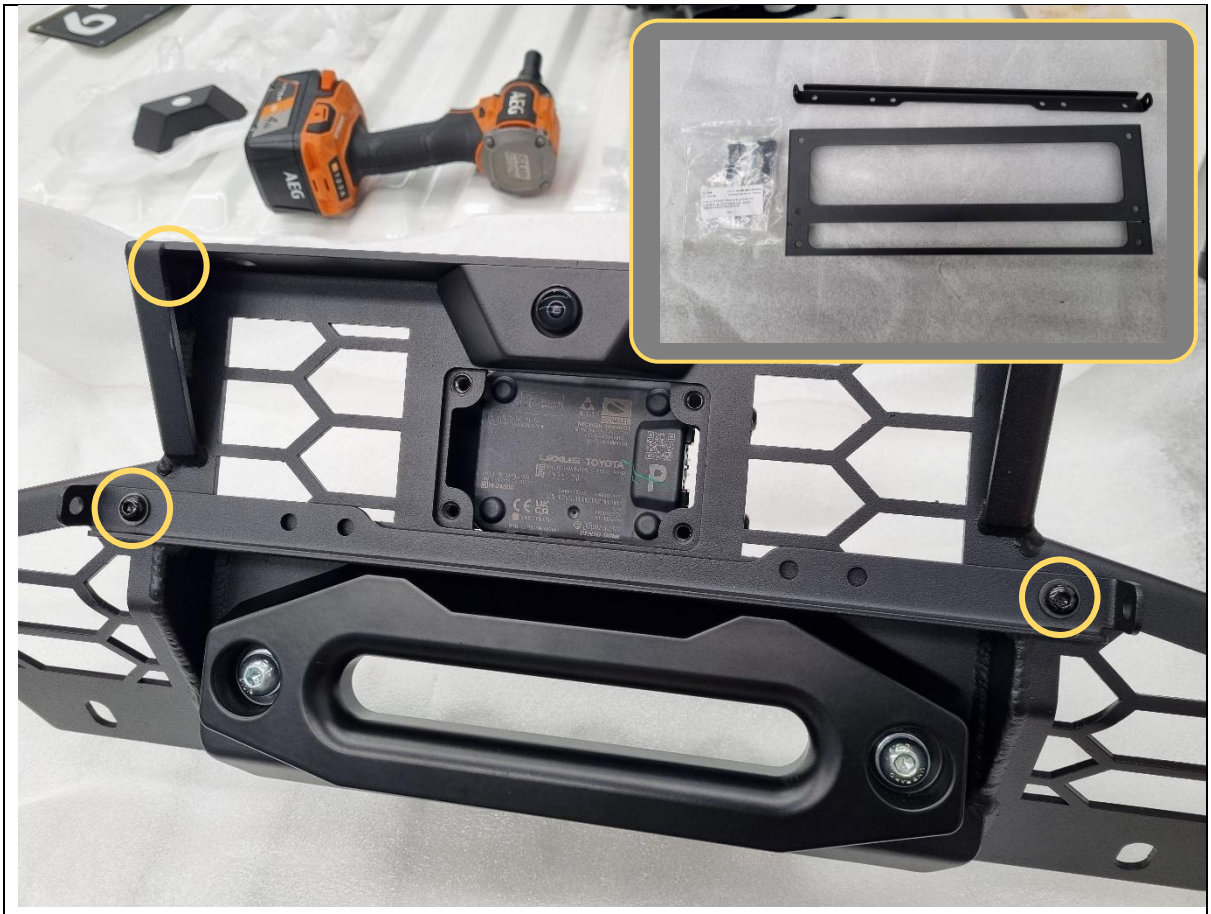
148. Fit the camera housing to the front of the mesh fairlead, with the camera sandwiched in between. Secure from the back into the nutserts in the housing with 2x M6x12 hex bolts and flat washers.

TOOLS REQUIRED

10mm socket/spanner

FASTENERS

2x M6x12 hex bolt
2x M6 flat washer



Locate the number plate flip brackets and fastener kit.

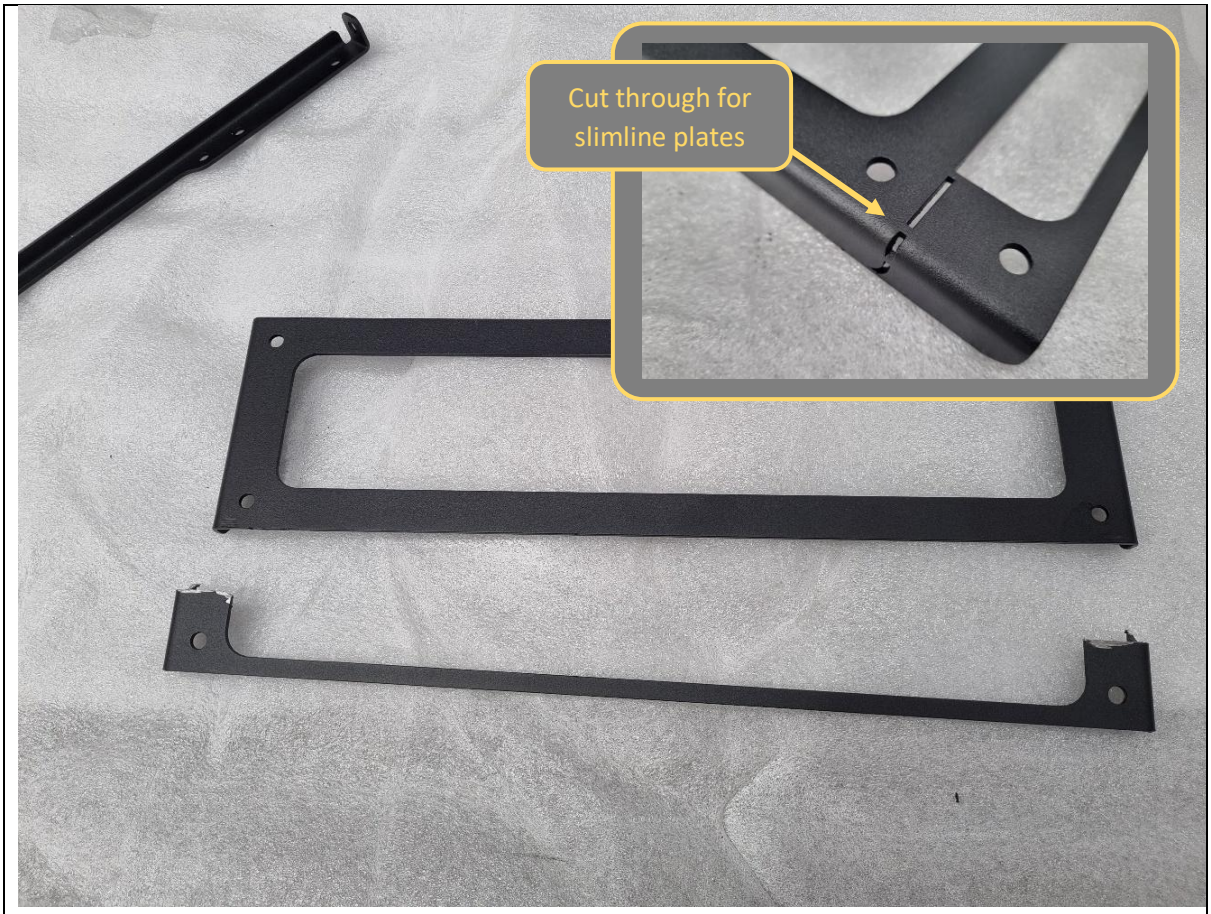
149. Fit the base bracket to the centre mesh and secure with 2x M6x16 black button head bolts, black washers and flange nuts.

TOOLS REQUIRED

4mm hex/Allen key

FASTENERS

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



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

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

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

TOOLS REQUIRED

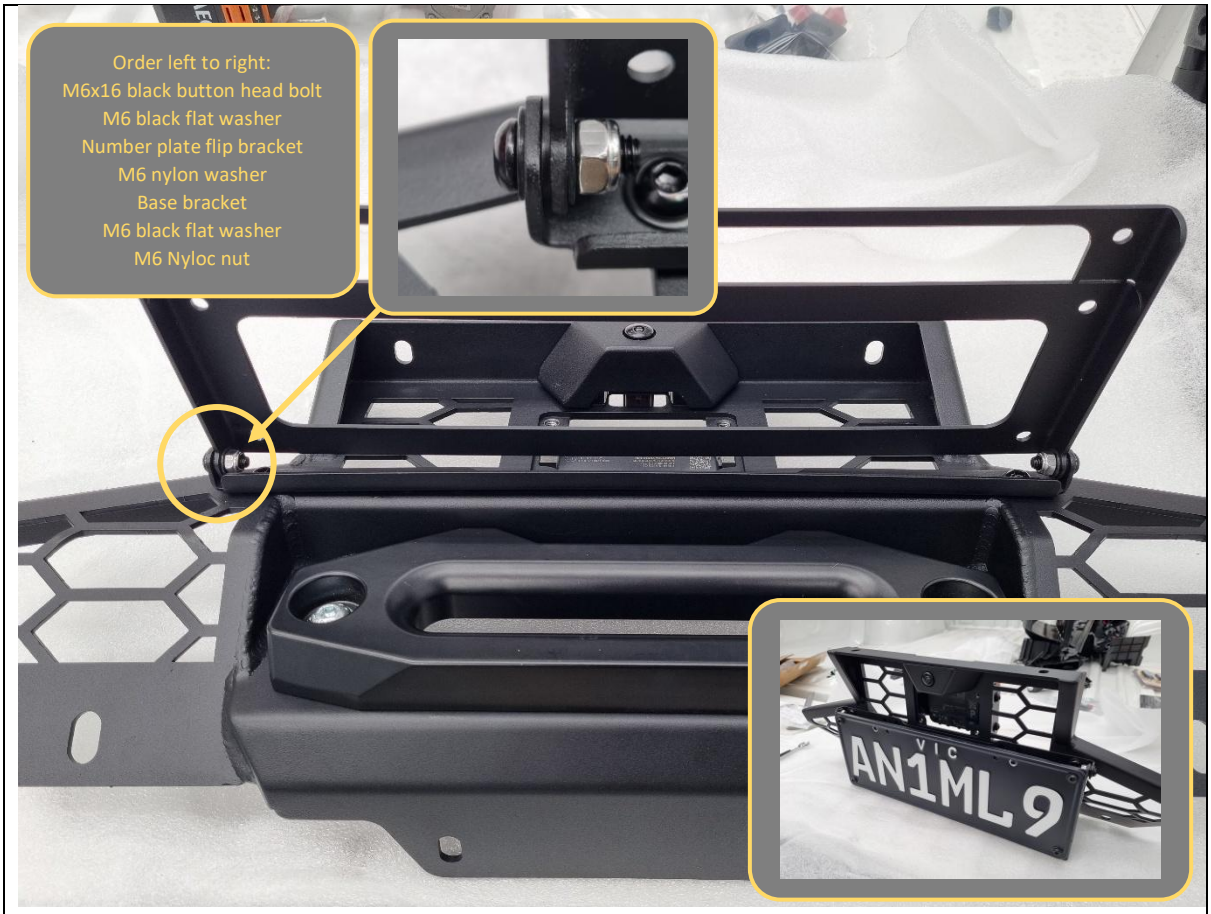
Angle grinder

Deburring tool

Black spray paint

FASTENERS

Bolt



152. 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.

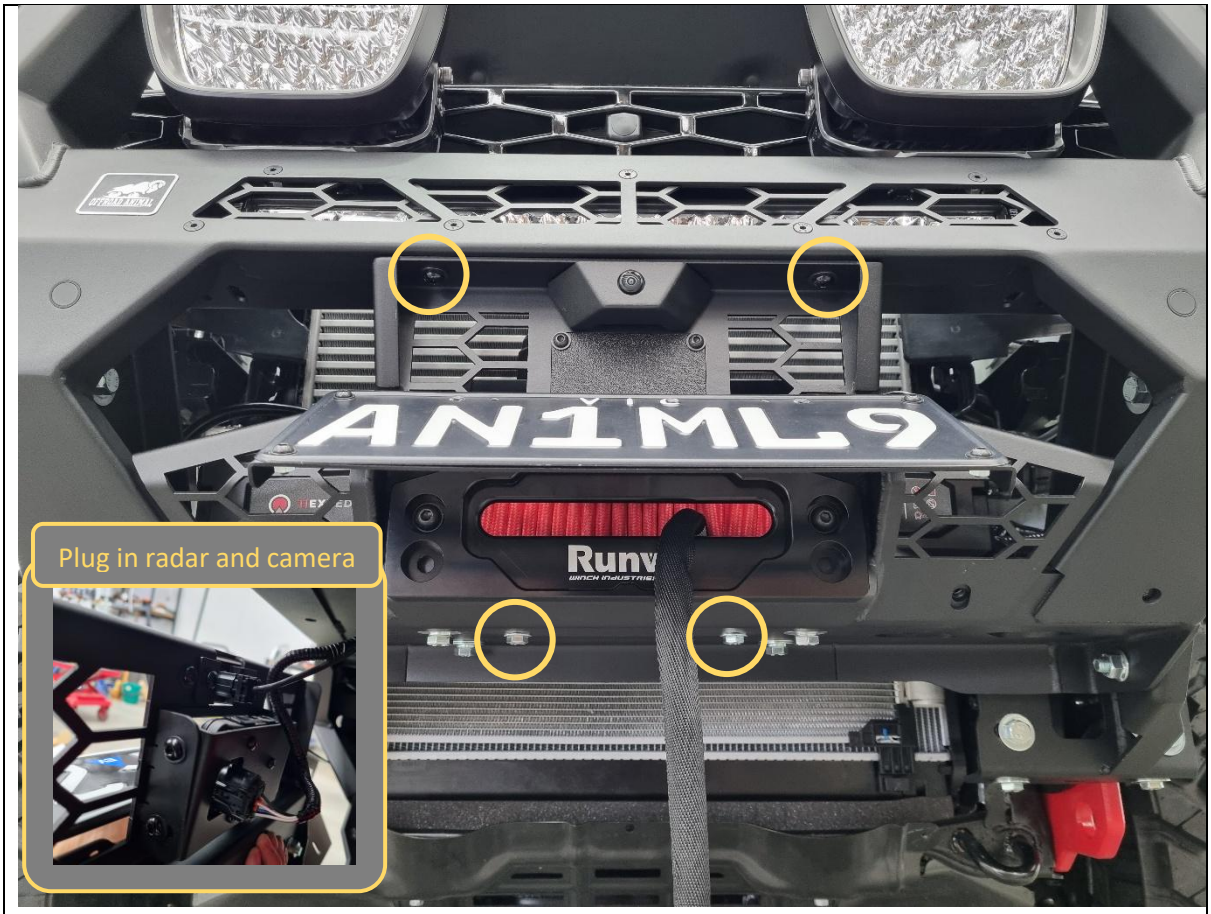
153. Attach number plate to flip bracket using 4x M6x12 black button head bolts, black washers and flange nuts.

TOOLS REQUIRED

4mm hex/Allen key
10mm spanner

FASTENERS

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



154. 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.

155. Connect the radar and camera to the bumper harness.

156. 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).

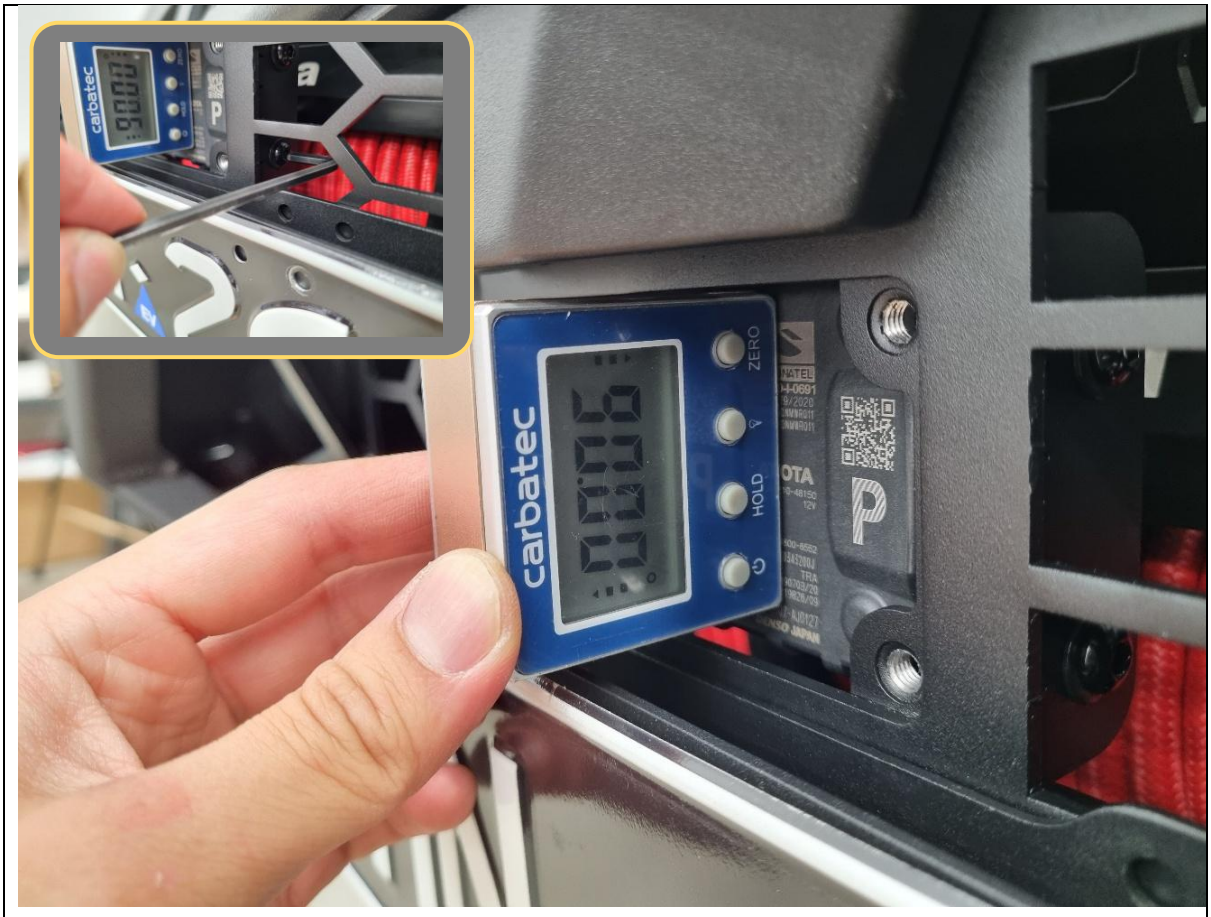
TOOLS REQUIRED

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



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

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

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

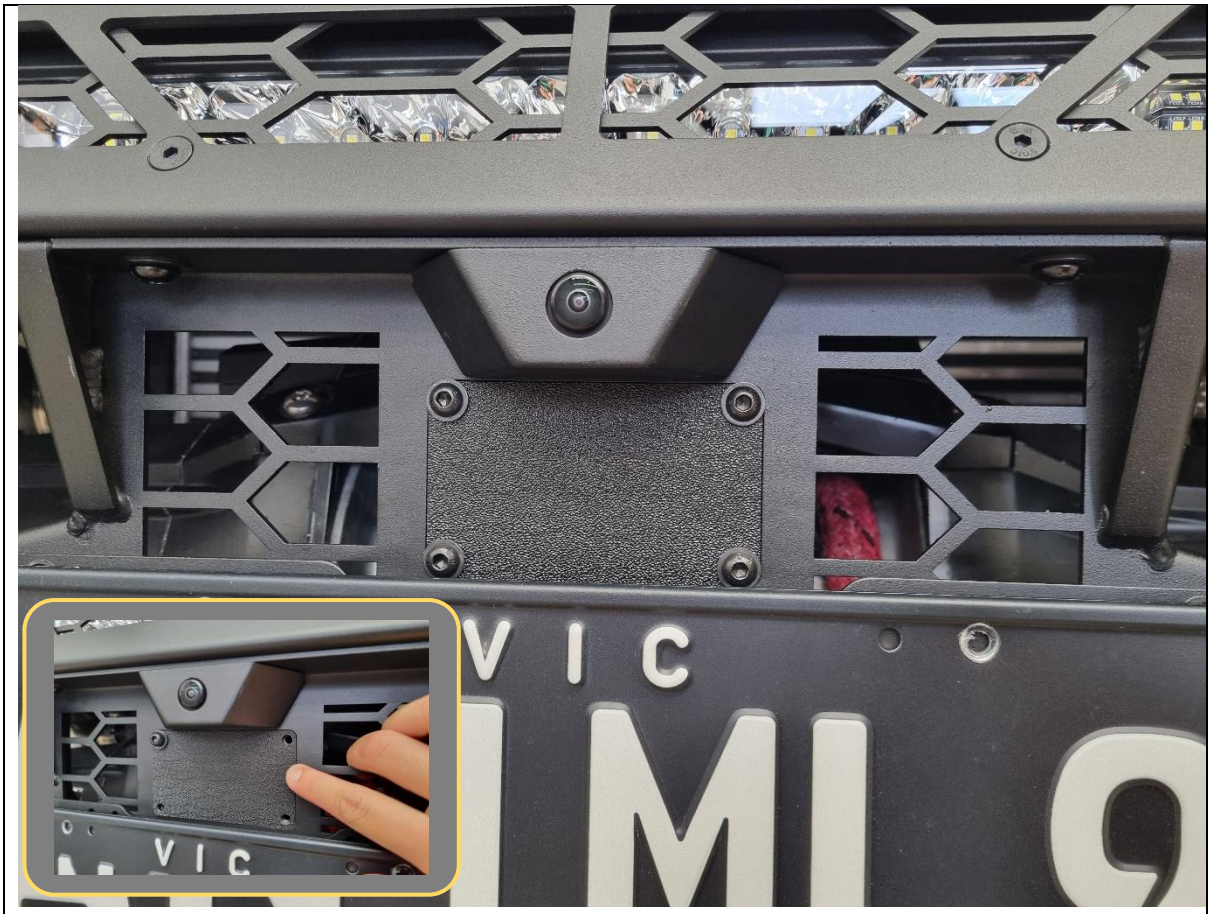
160. Once all sensors/camera/radars are connected, turn the car ignition on and confirm function of parking sensors, radar, camera and fog lights. Ensure there are no warning messages on the dash.

TOOLS REQUIRED

Digital angle gauge

4mm hex/Allen key

FASTENERS



161. Fit the supplied plastic N-0017 radar cover panel and secure it to the centre mesh with 4x M6x16 black button head bolts and black washers.

TOOLS REQUIRED

4mm hex/Allen key

FASTENERS

4x M6x16 black button head
4x M6 black flat washer

162. Fit the bash plate to the underside of the bar.

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

164. Secure to the impact assemblies at the rear with 2x M10x20 button head bolts, flat washers and flange nuts.

You may need to use a magnetic pick up tool to assist with positioning and holding the M10 flange nuts.

TOOLS REQUIRED

5mm hex/Allen key
6mm hex/Allen key
Magnetic pick up tool

FASTENERS

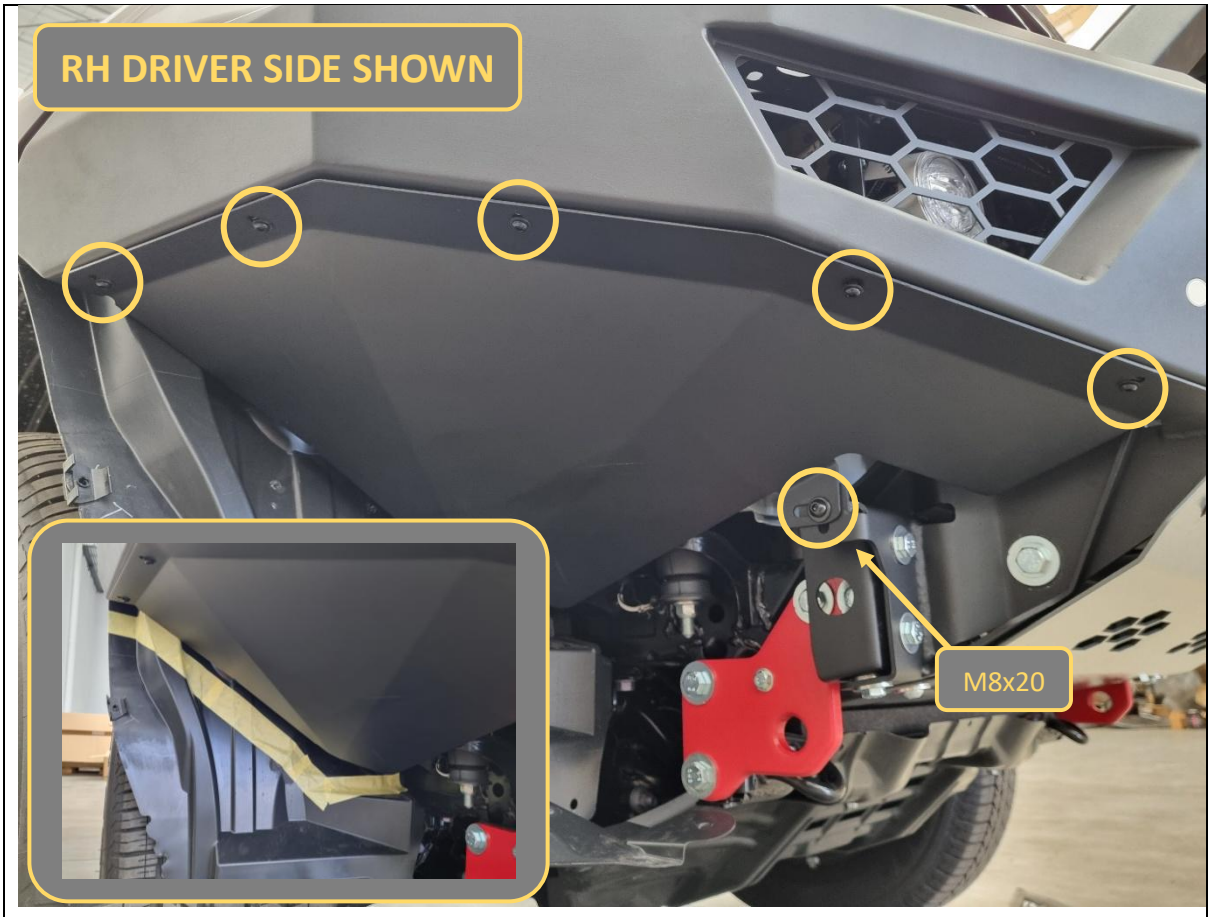
4x M8x30 black button head
4x M8 black flat washer

2x M10x20 button head
2x M10 flat washer
2x M10 flange nut

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

TOOLS REQUIRED

FASTENERS



166. Fit the side underpanels to the underside of the bull bar wings.

167. 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.

168. Apply masking tape to the wheel arch liner, then mark out a cut line that sits approximately 15mm below the profile of the side underpanel (see inset photo).

TOOLS REQUIRED

4mm hex/Allen key
5mm hex/Allen key
Masking tape
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

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

Whilst cutting, pull down on the section to be removed and apply tension, to allow for an easy cut.

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

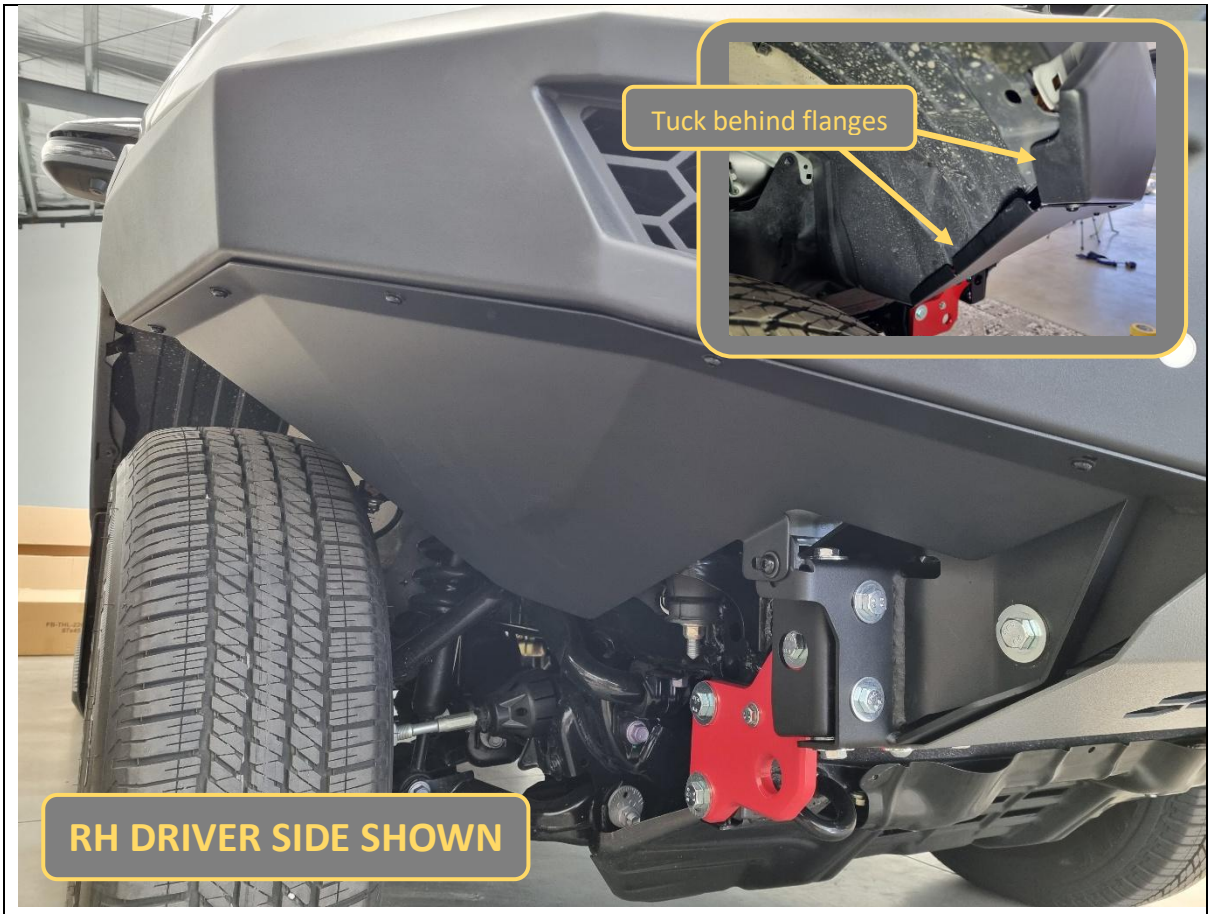
TOOLS REQUIRED

Safety glasses

Air Hacksaw
or
Oscillating Multi Tool
or
Angle Grinder
or
Jigsaw

Deburring tool
or
Utility knife

FASTENERS



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

172. The fitment is now complete. Double check all fasteners are done up to correct torque specifications.

TOOLS REQUIRED

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

FASTENERS

Bolt

Congratulations! You're done! Get out and explore in your good looking and tough HiLux!