TOYOTA TUNDRA
3RD GEN XK70 2022-on
PREDATOR & TORO FRONT BAR

IMPORTANT! – READ BEFORE INSTALLATION

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

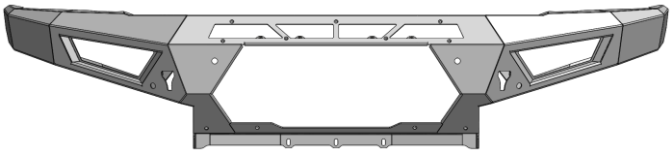
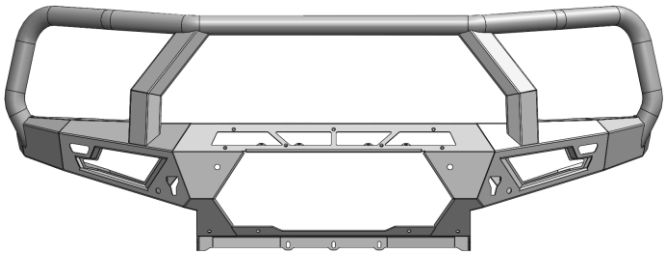
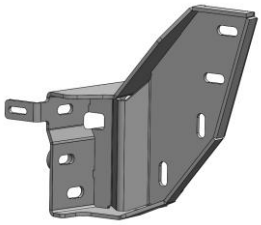
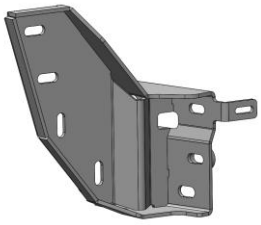
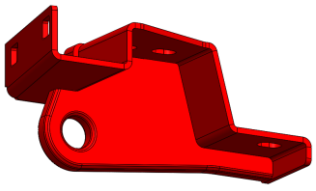
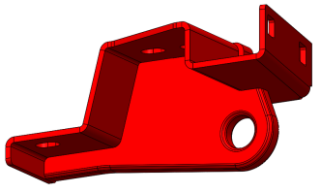
FRONT BAR MOUNTS AND TOW POINTS + REAR TOWBAR	
Size	**Torque Nm**
M10	57 Nm
M12	100 Nm
M14	164 Nm
M16	248 Nm

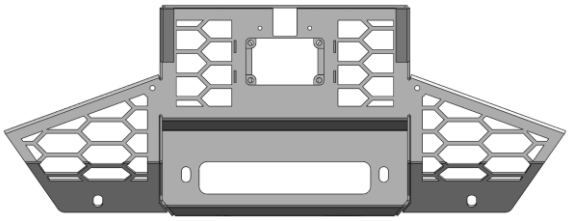
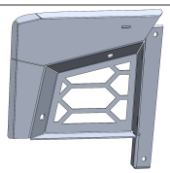
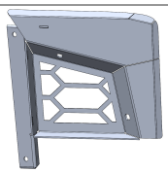
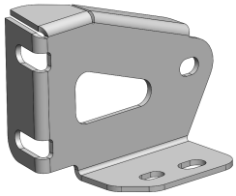
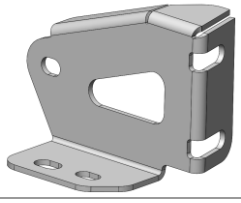
Always use a torque wrench to set correct torque settings. Ensure torque wrench is set to Nm unit of measurement. Otherwise perform conversion to lb-ft.

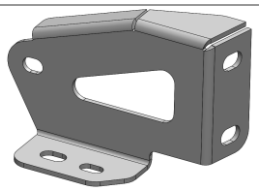
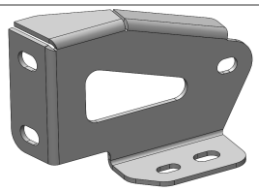
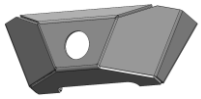
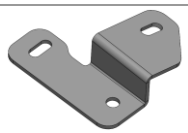
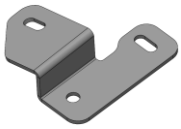
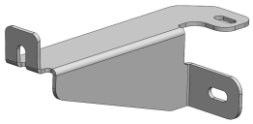
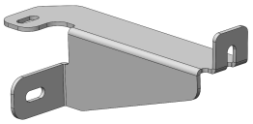
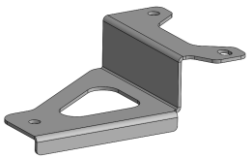
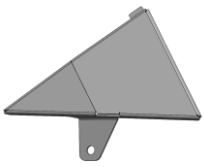
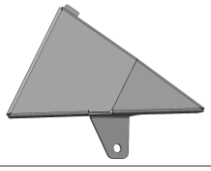
PARTS LISTING

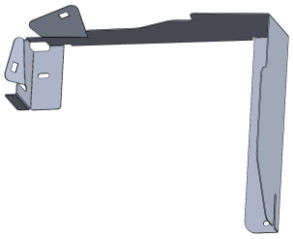
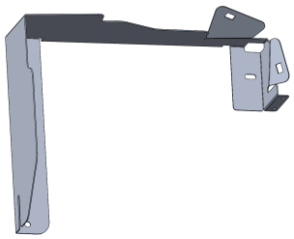
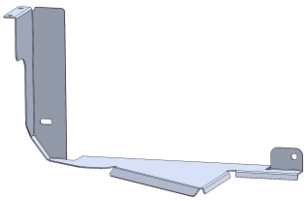
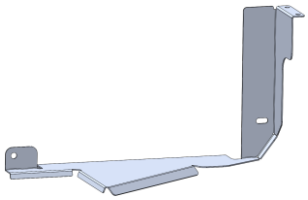
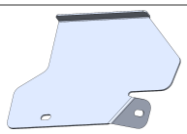
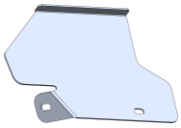
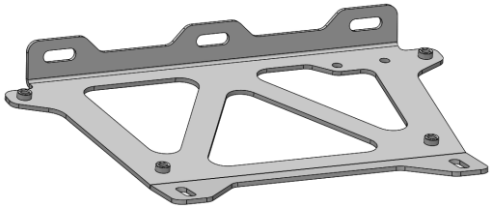
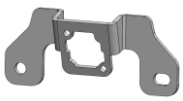
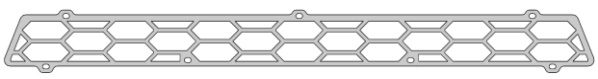
IMPORTANT: Check all parts are present before beginning work! Contact OFFROAD ANIMAL if something is missing.

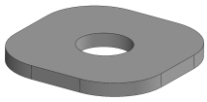
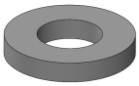
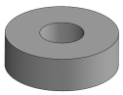
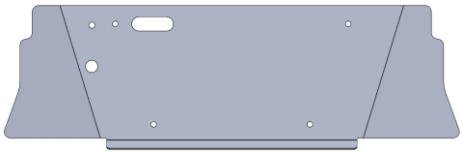
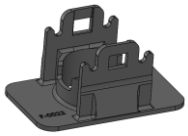
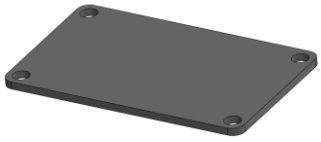
Main Parts – In the Box

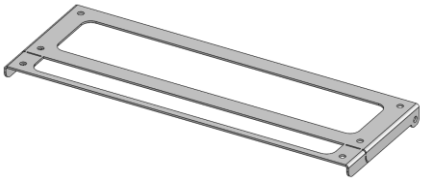
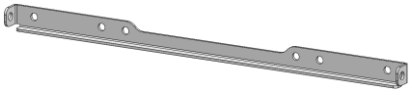
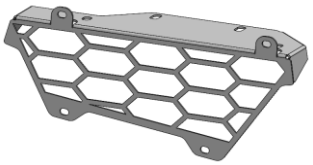
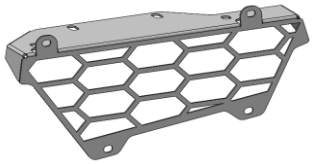
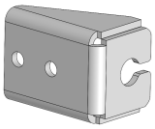
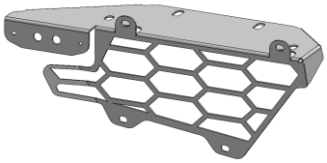
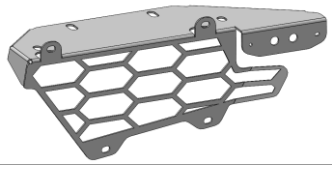
Qty	Part Number	Description	Image
1	FB-TTU-XK70-22-PR-ASM1	Toyota Tundra XK70 Predator Bar Weldment	
		OR	
1	FB-TTU-XK70-22-TOR-ASM1	Toyota Tundra XK70 Toro Bar Weldment	
1	FB-TTU-XK70-22-PR-ASM2R	Toyota Tundra XK70 Impact Assembly RH	
1	FB-TTU-XK70-22-PR-ASM2L	Toyota Tundra XK70 Impact Assembly LH	
1	FB-TTU-XK70-22-PR-ASM3R	Toyota Tundra XK70 Tow Point RH	
1	FB-TTU-XK70-22-PR-ASM3L	Toyota Tundra XK70 Tow Point LH	

1	FB-TTU-XK70-22-PR-ASM4	Toyota Tundra XK70 Mesh Fairlead Welded Assembly	
1	FB-TTU-XK70-22-PR-ASM5R	Toyota Tundra XK70 Side Underpanel Weldment RH	
1	FB-TTU-XK70-22-PR-ASM5L	Toyota Tundra XK70 Side Underpanel Weldment LH	
1	FB-TTU-XK70-22-PR-ASM6R	Toyota Tundra XK70 Headlight Infill RH	
1	FB-TTU-XK70-22-PR-ASM6L	Toyota Tundra XK70 Headlight Infill LH	
2	FB-TTU-XK70-22-PR-ASM8	Toyota Tundra XK70 Dual Nut Plate Welded Assembly	
2	B-1406	LC100/105 Pan Brace	
1	B-1657R	Tundra XK70 Outer Chassis Support RH	
1	B-1657L	Tundra XK70 Outer Chassis Support LH	

1	B-1658R	Tundra XK70 Inner Chassis Support RH	
1	B-1658L	Tundra XK70 Inner Chassis Support LH	
1	B-1661	Tundra XK70 Camera Housing	
1	B-1664R	Tundra XK70 Grille Shutter Lower Mount RH	
1	B-1664L	Tundra XK70 Grille Shutter Lower Mount LH	
1	B-1665R	Tundra XK70 Grille Shutter Upper Mount RH	
1	B-1665L	Tundra XK70 Grille Shutter Upper Mount LH	
1	B-1666	Tundra XK70 Grille Shutter Centre Mount	
1	B-1667	Tundra XK70 Pedestrian Speaker Relocation Bracket	
1	B-1668R	Tundra XK70 Bumper Infill RH	
1	B-1668L	Tundra XK70 Bumper Infill LH	

1	B-1669R	Tundra XK70 Intercooler Air Guide Inner RH	
1	B-1669L	Tundra XK70 Intercooler Air Guide Inner LH	
1	B-1670R	Tundra XK70 Intercooler Air Guide Outer RH	
1	B-1670L	Tundra XK70 Intercooler Air Guide Outer LH	
1	B-1671R	Tundra XK70 Intercooler Air Guide Bar Side RH	
1	B-1671L	Tundra XK70 Intercooler Air Guide Bar Side LH	
1	B-1672	Tundra XK70 Winch Strap	
1	B-1755	Tundra XK70 Grille Shutter Lower Centre Mount	
1	B-2091	Tundra XK70 Platinum Camera Relocation Bracket	
1	P-0488	BYD Shark 6 Lightbar Mesh Infill	

3	P-0501	Tundra XK70 Grille Shutter Spacer Plate	
2	P-0503	M12 Spacer, 25mm OD x 4mm T	
2	P-0504	M12 Spacer, 32mm OD x 10mm T	
2	T-0154	Crush Tube 66mm	
1	U-0117	Tundra XK70 Centre Bash Plate	
1	U-0119	Tundra XK70 Lower Splash Guard	
1	CPHP125	Plastic Hole Insert, 16MM, Black, Tigerlink Hardware CPHP125	
4	F-0022	LC300 Sahara ZX + GR Sport Sensor Holder	
1	FB-TTU-XK70-22-PR-ADRCP	ADR Compliance Plate Tundra XK70	
1	N-0017	Prado 250 ACC Radar Cover	
1	OFA-LOGO	Offroad Animal Metal Logo	
1	TK-COM-PSEN-4	Tape Kit - 4 Sensor Universal	N/A
1	TK-FB-FRA-NG-22	Tape Kit - NG Ranger - 3M 5952 2x 100x6mm	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-0073R	Tundra XK70 Predator Wing Mesh RH	
1	M-0073L	Tundra XK70 Predator Wing Mesh LH	
TORO ONLY			
1	B-0649	Toro Antenna Bracket - 90 Degree Tall	
1	M-0074R	Tundra XK70 Toro Wing Mesh RH	
1	M-0074L	Tundra XK70 Toro Wing Mesh LH	
1	11CAT1M-2	LED Autolamps 11CAT1M-2 Front Indicator - Twin Blister Pack	

PREDATOR Fasteners – Contained in Small Parts Kit Bag

Qty	Part Number	Description
2	M4 X 12 HEX	M4X12 HEX BOLT, ZP, 4.6
2	M4 FLAT WASHER	Flat Washer M4, 8mmODx0.8mm T
22	M6 X 12 HEX	M6X12 HEX BOLT, ZP, 8.8
7	M6 X 20 HEX	M6X20 HEX BOLT, ZP, 8.8
4	M6x12 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X12X1 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
20	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
29	M6 FLAT WASHER	M6 Flat Washer
24	M6 FLAT WASHER BLACK ZINC	M6 Flat Washer, 12x6.1x1, ISO4042 ZnNi BLACK PASSIVATED FINISH
34	M6 FLANGE NUT	Flange Nut, M6x1 G8.8 ZP
4	M6CN2MM	CAGE NUT M6x1.6-2.5
10	M6CN3MM	CAGE NUT M6x1.6-3.5
6	M8 X 20 HEX	Bolt Hex, M8X20x1.25, GR8.8 ZP
4	M8 X 20 BHCS	SCREW, BUTTON HEAD CAP, M8X20X1.25 GR12.9 ZP
2	M8 X 16 BHCS BZP	SCREW, BUTTON HEAD CAP, M8X16X1.25 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
4	M8 X 30 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M8X30X1.25, ISO4042 ZnNi BLACK PASSIVATED FINISH
10	M8 HD FLAT WASHER	M8 FLAT WASHER - High Tensile 19x8x1.9mm
6	M8 HD FLAT WASHER - BZP	M8 FLAT WASHER - High Tensile 19x8x2mm, ISO4042 ZnNi BLACK PASSIVATED FINISH
4	M8 FLANGE NUT	Flange Nut, M8x1.25 G8.8 ZP
3	M10 x 30	Bolt Hex, M10X30x[1.5], GR8.8 ZP
2	M10 X 40	Bolt Hex, M10X40X1.5, GR8.8 ZP
2	M10X25 BHCS	SCREW, BUTTON HEAD CAP, M10X25X1.5 GR12.9 ZP
7	M10 FW LHD	WASHER, FLAT M10X28.5X2.5
5	M10 FLANGE NUT	Flange Nut, M10x1.5 G8.8 ZP
12	M12X30	Bolt Hex, M12X30x1.75, GR8.8 ZP
6	M12X40	Bolt Hex, M12X40X1.75, GR8.8 ZP
2	M12X100	Bolt Hex, M12X100x1.75, GR8.8 ZP
22	M12 FW LHD	M12 FW Large Heavy Duty
16	M12 FLANGE NUT	Flange Nut, M12x1.75 G8.8 ZP
2	M12 Nyloc nut	M12 Nyloc nut

TORO Fasteners – 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
2	M4 X 12 HEX	M4X12 HEX BOLT, ZP, 4.6
2	M4 FLAT WASHER	Flat Washer M4, 8mmODx0.8mm T
22	M6 X 12 HEX	M6X12 HEX BOLT, ZP, 8.8
7	M6 X 20 HEX	M6X20 HEX BOLT, ZP, 8.8
4	M6x12 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X12X1 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
20	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
29	M6 FLAT WASHER	M6 Flat Washer
24	M6 FLAT WASHER BLACK ZINC	M6 Flat Washer, 12x6.1x1, ISO4042 ZnNi BLACK PASSIVATED FINISH
34	M6 FLANGE NUT	Flange Nut, M6x1 G8.8 ZP
4	M6CN2MM	CAGE NUT M6x1.6-2.5
10	M6CN3MM	CAGE NUT M6x1.6-3.5
6	M8 X 20 HEX	Bolt Hex, M8X20x1.25, GR8.8 ZP
4	M8 X 20 BHCS	SCREW, BUTTON HEAD CAP, M8X20X1.25 GR12.9 ZP
2	M8 X 16 BHCS BZP	SCREW, BUTTON HEAD CAP, M8X16X1.25 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
4	M8 X 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
10	M8 HD FLAT WASHER	M8 FLAT WASHER - High Tensile 19x8x1.9mm
10	M8 HD FLAT WASHER - BZP	M8 FLAT WASHER - High Tensile 19x8x2mm, ISO4042 ZnNi BLACK PASSIVATED FINISH
4	M8 FLANGE NUT	Flange Nut, M8x1.25 G8.8 ZP
3	M10 x 30	Bolt Hex, M10X30x[1.5], GR8.8 ZP
2	M10 X 40	Bolt Hex, M10X40X1.5, GR8.8 ZP
2	M10X25 BHCS	SCREW, BUTTON HEAD CAP, M10X25X1.5 GR12.9 ZP
7	M10 FW LHD	WASHER, FLAT M10X28.5X2.5
5	M10 FLANGE NUT	Flange Nut, M10x1.5 G8.8 ZP
12	M12X30	Bolt Hex, M12X30x1.75, GR8.8 ZP
6	M12X40	Bolt Hex, M12X40X1.75, GR8.8 ZP
2	M12X100	Bolt Hex, M12X100x1.75, GR8.8 ZP
22	M12 FW LHD	M12 FW Large Heavy Duty
16	M12 FLANGE NUT	Flange Nut, M12x1.75 G8.8 ZP
2	M12 Nyloc nut	M12 Nyloc nut

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

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)	Clean Workshop Rag
Trim Removal Tool		Marker Pen
Flat Blade Screwdriver Set		Measuring Tape
Phillips Head Screwdriver Set		Masking Tape
Plastic Auto Trim Tool		Black Spray Paint
Utility Knife		Cable Ties
Side Cutters		Heat shrink (Toro Only)
Pliers		Electrical tape (Toro Only)
Hammer		Electrical wire (Toro Only)
Deburring Tool		Ring terminals (Toro Only)
Wire Strippers (Toro Only)		Sikaflex adhesive

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 attempt to turn on and move the vehicle while the front radar, camera and parking sensors are disconnected. Doing so may cause DTC error codes that can only be rectified by the dealer.

NOTE:
Fitment is confirmed for Limited and Platinum models. These are the only models sold by Toyota Australia as of Nov 2026. Check with Offroad Animal for other models that have been imported/converted by a 3rd party.

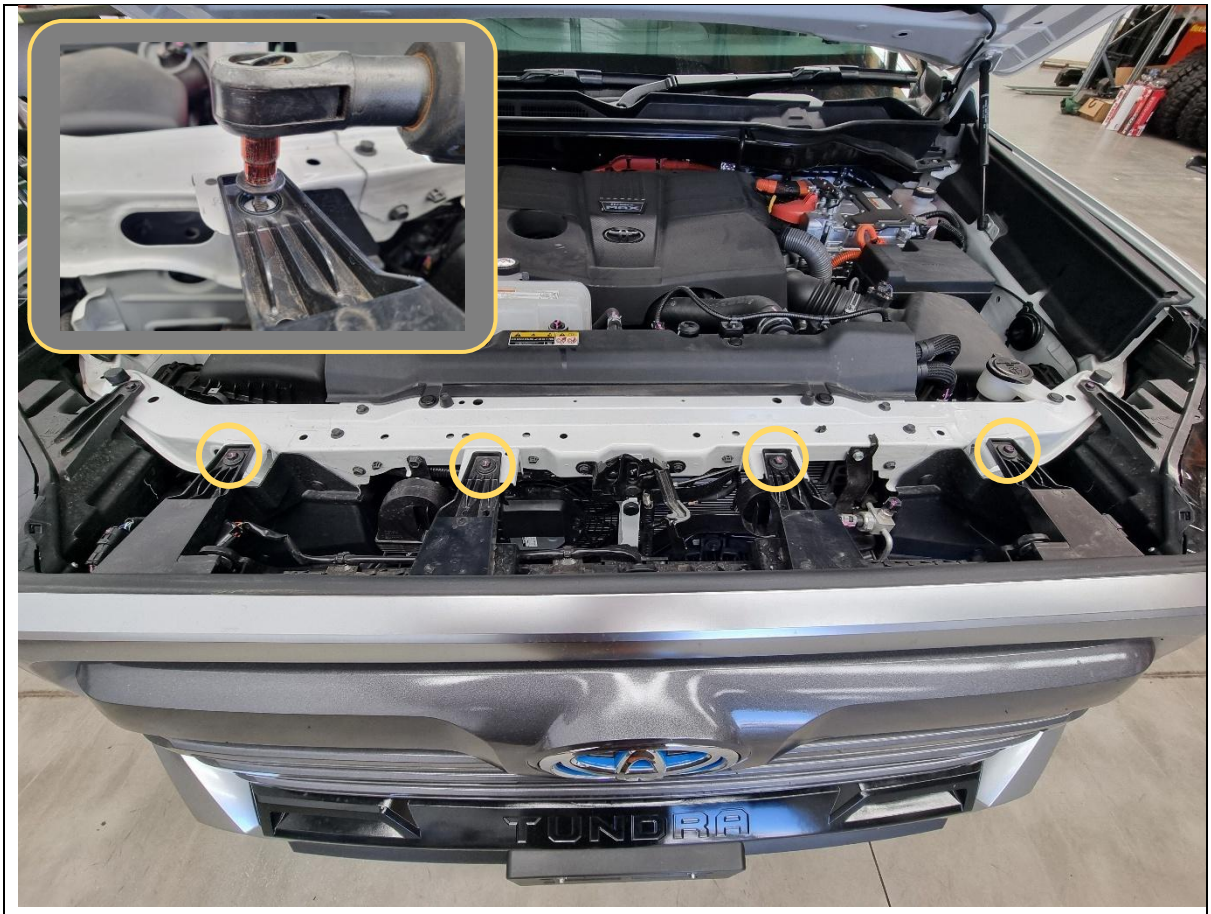
1. Remove 2x screws holding front number plate with a Phillips head screwdriver and set aside.

TOOLS REQUIRED

Phillips head screwdriver

FASTENERS

2x screws (discard)



2. Open the bonnet.

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

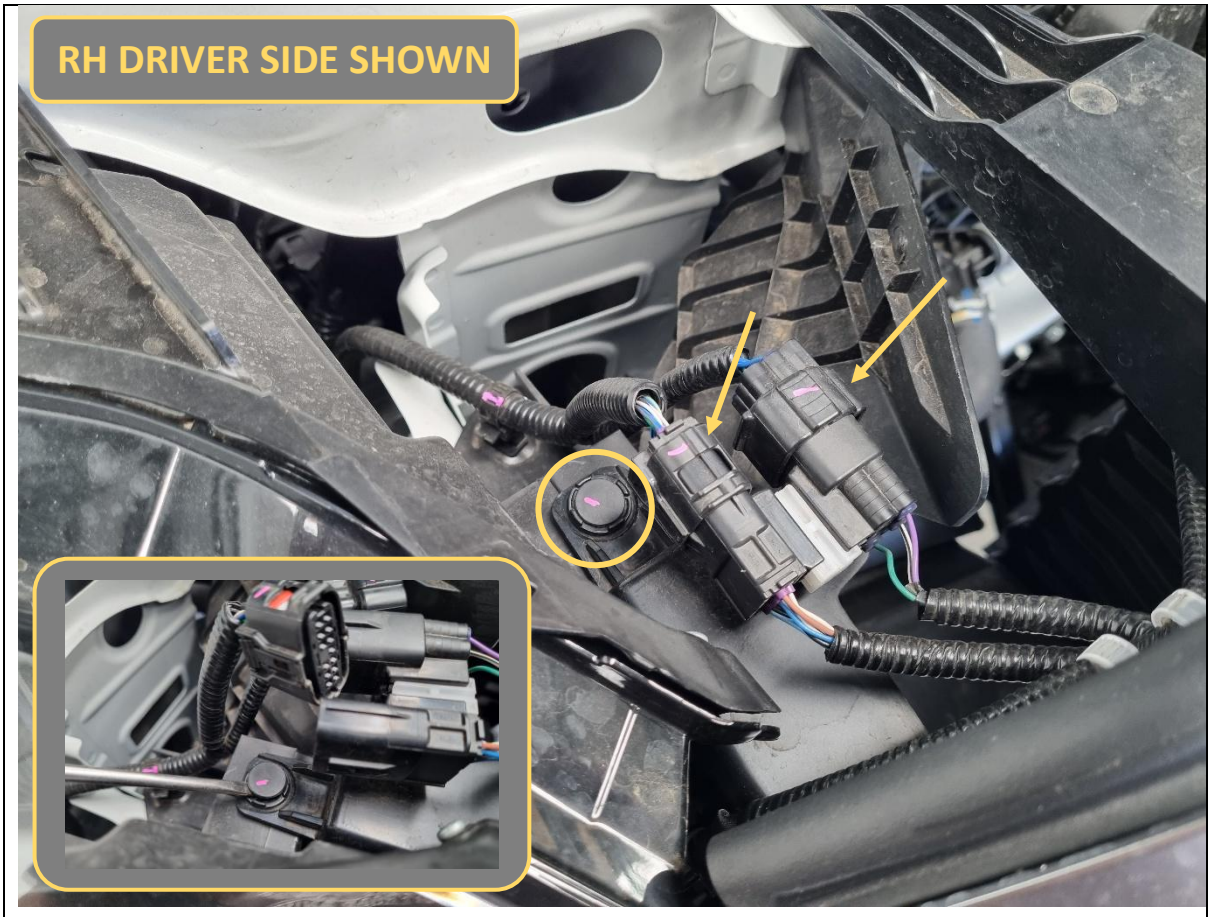
TOOLS REQUIRED

10mm socket/spanner

FASTENERS

4x 10mm hex bolts

Retain for re-assembly



4. Remove 2x plastic push clips (1x per corner) holding the top of the grille. Use a flat blade screwdriver or trim tool to assist with levering the clip off.

5. Unplug 4x electrical connectors (2x per corner) on the top of the grille.

TOOLS REQUIRED

Flat head screwdriver
or
Trim tool

FASTENERS

2x plastic push clips

Retain for re-assembly



6. Reaching down behind the grille from above, remove 2x 10mm hex bolts holding each of the 2x lower grille support brackets to the body.

   Retain 2x of the bolts for later.

TOOLS REQUIRED

10mm socket/spanner

FASTENERS

4x 10mm hex bolts

Retain 2x



7. Remove 4x 10mm hex bolts holding the underside of the bumper.

TOOLS REQUIRED

10mm socket/spanner

FASTENERS

4x 10mm hex bolts

Discard



8. Apply masking tape to the flare where the bumper meets the quarter panel.

9. Use a ruler and marker pen to mark a straight line parallel with the quarter panel edge.

TOOLS REQUIRED

Masking tape
Ruler
Marker pen

FASTENERS



10. Remove 6x 10mm hex screws holding the flare/wheel arch liner on each side, as shown.

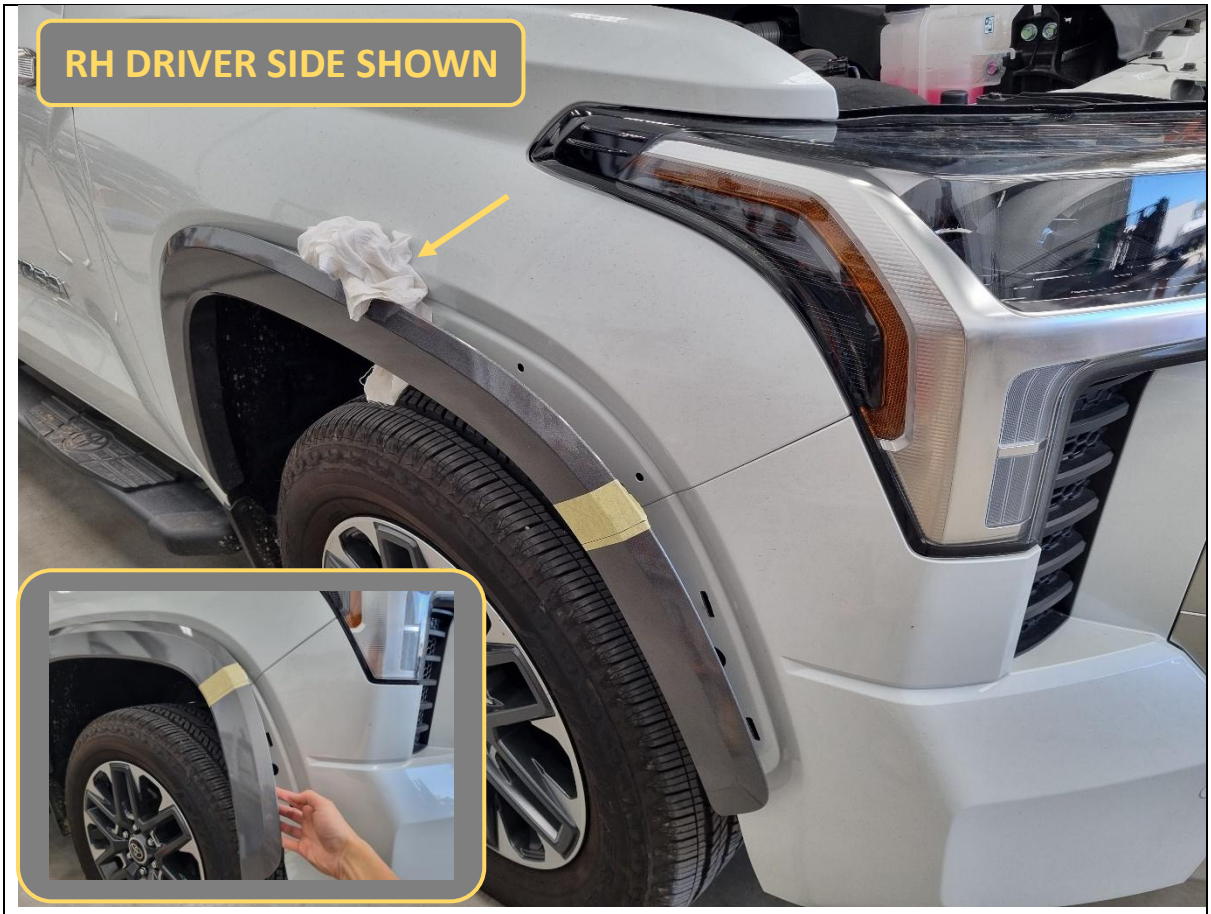
TOOLS REQUIRED

10mm socket/spanner

FASTENERS

12x 10mm hex screws

Retain 4x for re-assembly



11. Start from the front bottom corner and pull the flare outwards to unclip.

12. Go about halfway to where the last bolt was removed in the previous step, then stuff some rags between the flare and quarter panel so you can access the corner of the bumper.

TOOLS REQUIRED

Workshop rags

FASTENERS

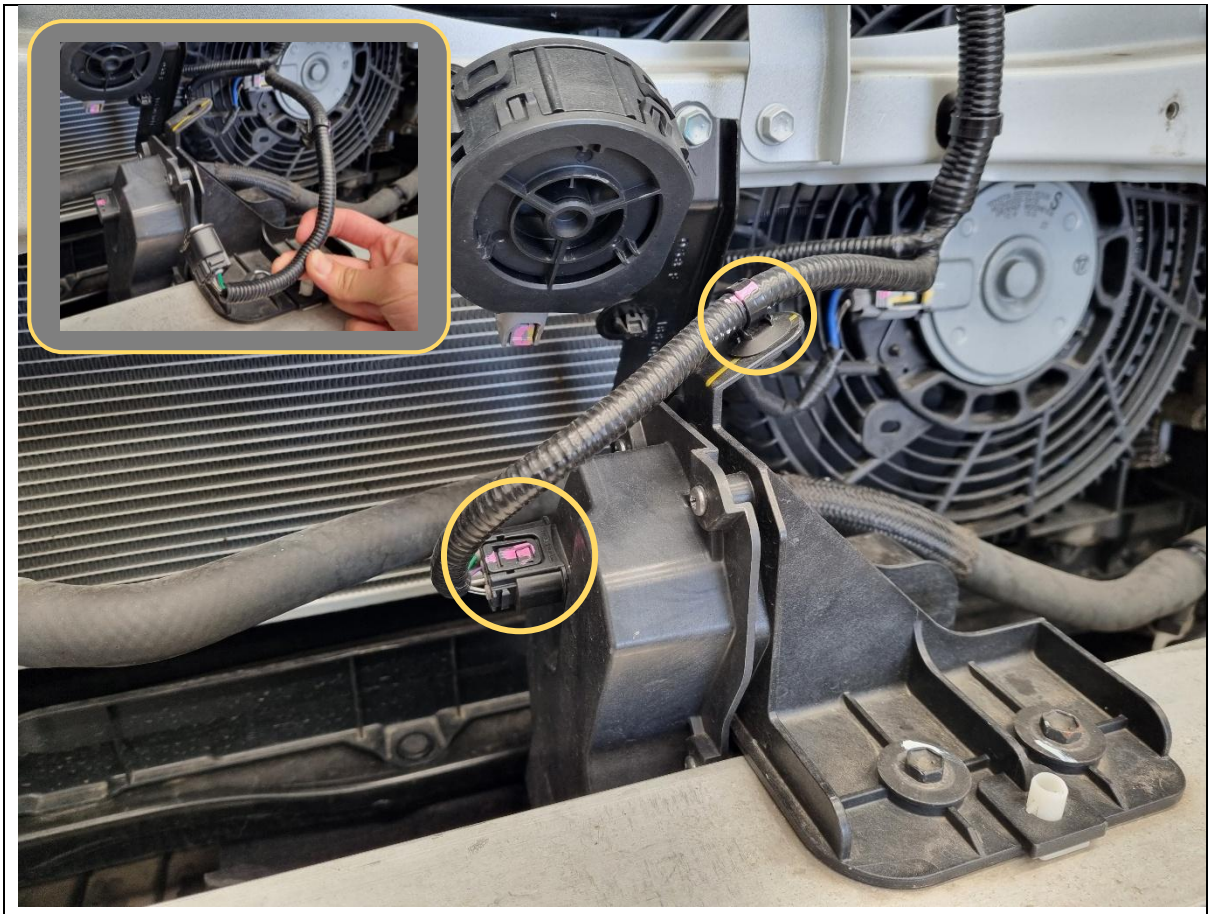
2x screws (discard)



13. Start from the outer corners of the bumper and pull outwards to unclip. Then fully remove the bumper/grille assembly and set aside on a panel stand or a soft blanket.

TOOLS REQUIRED

FASTENERS

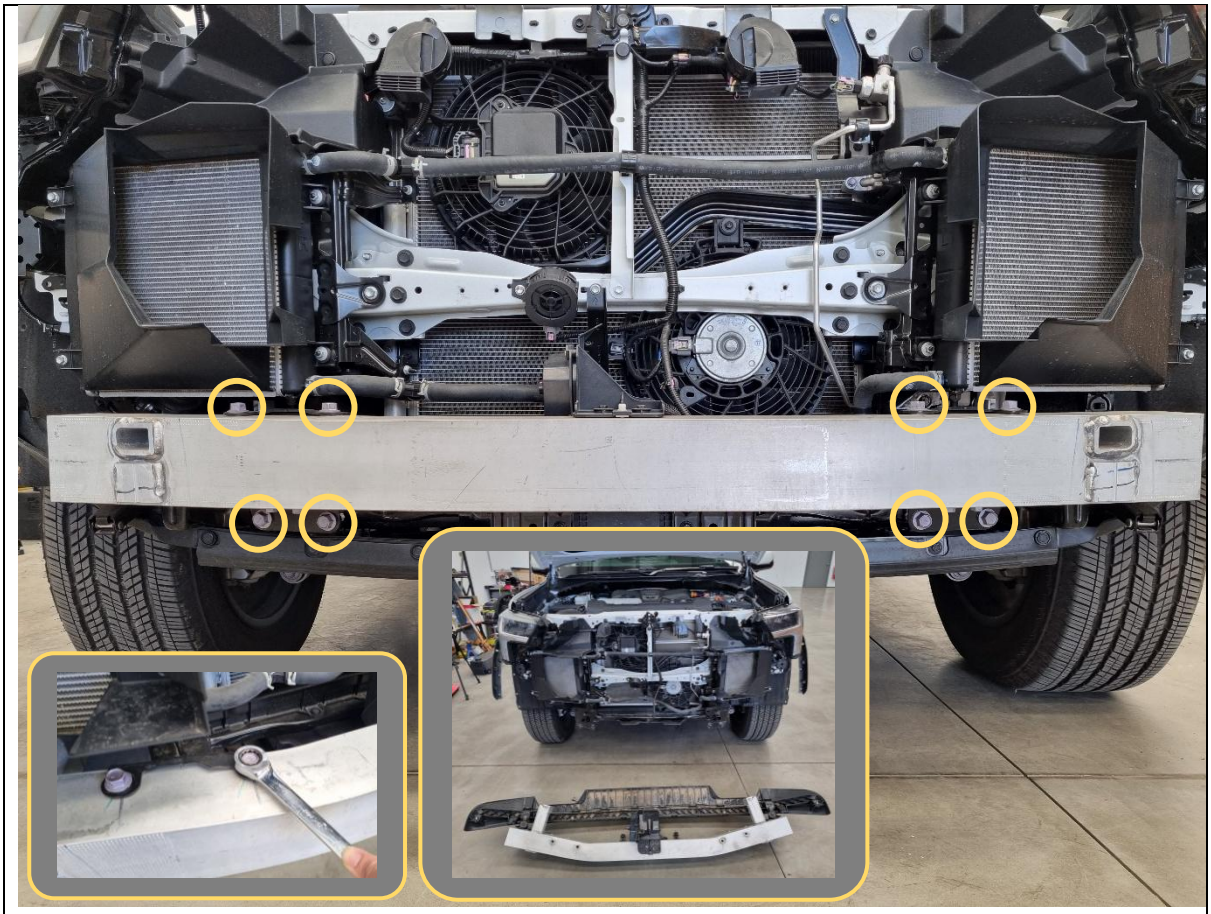


14. Locate the active spoiler motor on the metal crash beam and disconnect the plug. Also unclip the harness from the motor.

TOOLS REQUIRED

Trim removal tool

FASTENERS



15. Remove 8x 17mm hex bolts holding the metal crash beam and active spoiler to the chassis.

    Retain 4x of the bolts.

    Note:
    Removing the active spoiler assembly will not cause an engine management light (EML) on the dash, but may potentially leave a code on the ECU.

    Removal of this assembly has been done and tested without issue. **However, Offroad Animal recommends not discarding the active spoiler assembly components for a period of time (eg. 1 month) after bar installation.** Please contact if there is an issue and we can supply a bracket to relocate the motor.

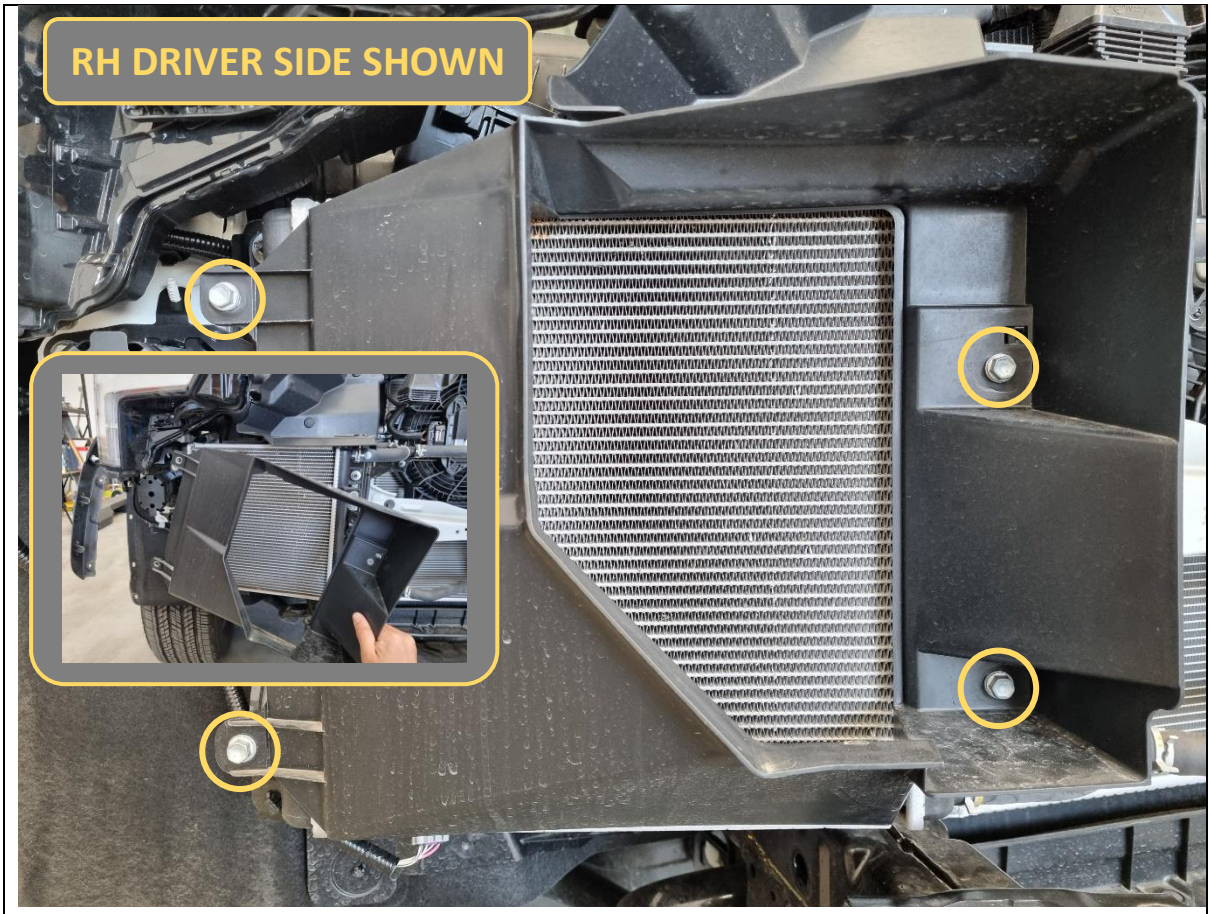
TOOLS REQUIRED

17mm socket/spanner

FASTENERS

8x 17mm hex bolts

Retain 4x



16. Remove 4x 10mm hex bolts holding each intercooler shroud.

    Retain all bolts.

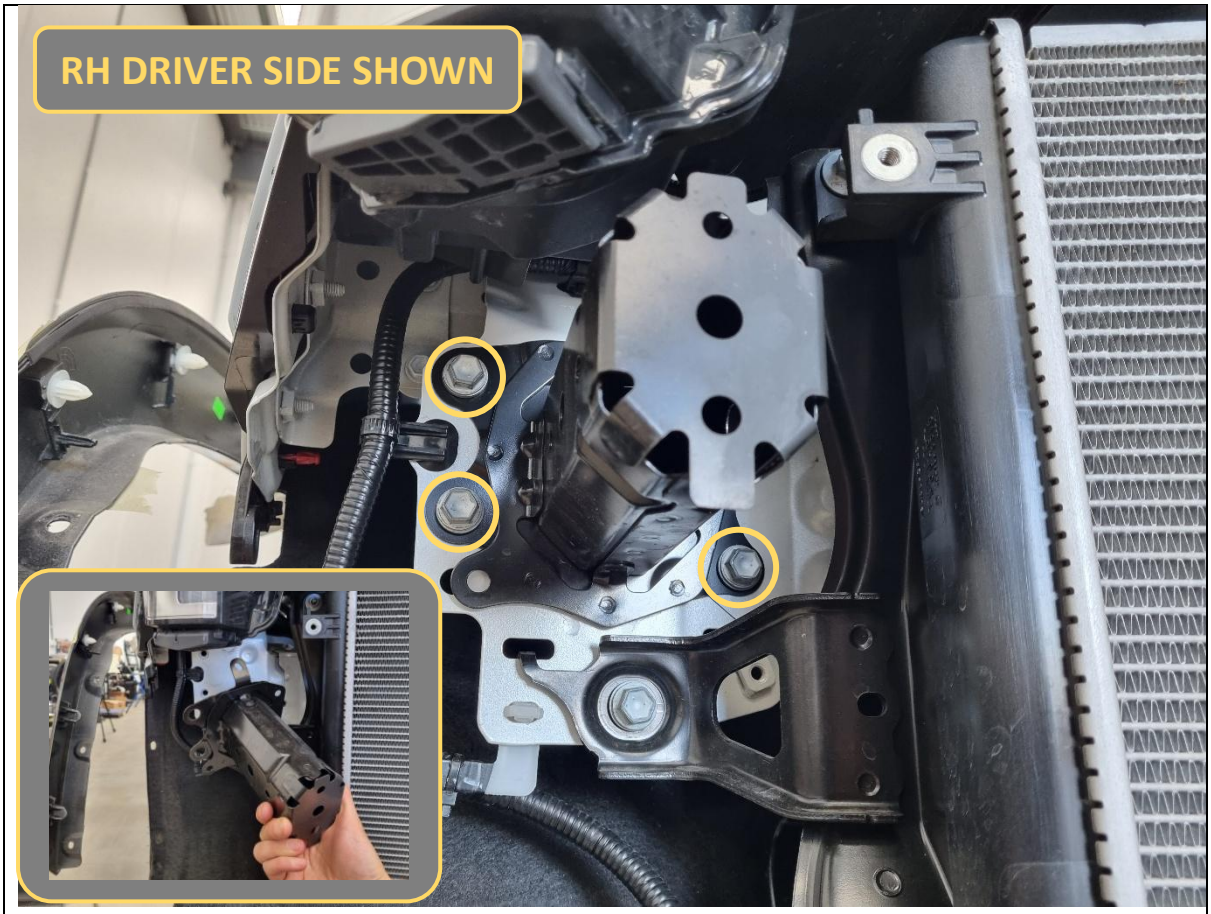
TOOLS REQUIRED

10mm socket/spanner

FASTENERS

8x 10mm hex bolts

Retain



17. Remove 3x 12mm hex bolts holding the crush can below each headlight.

    Discard all parts.

TOOLS REQUIRED

12mm spanner

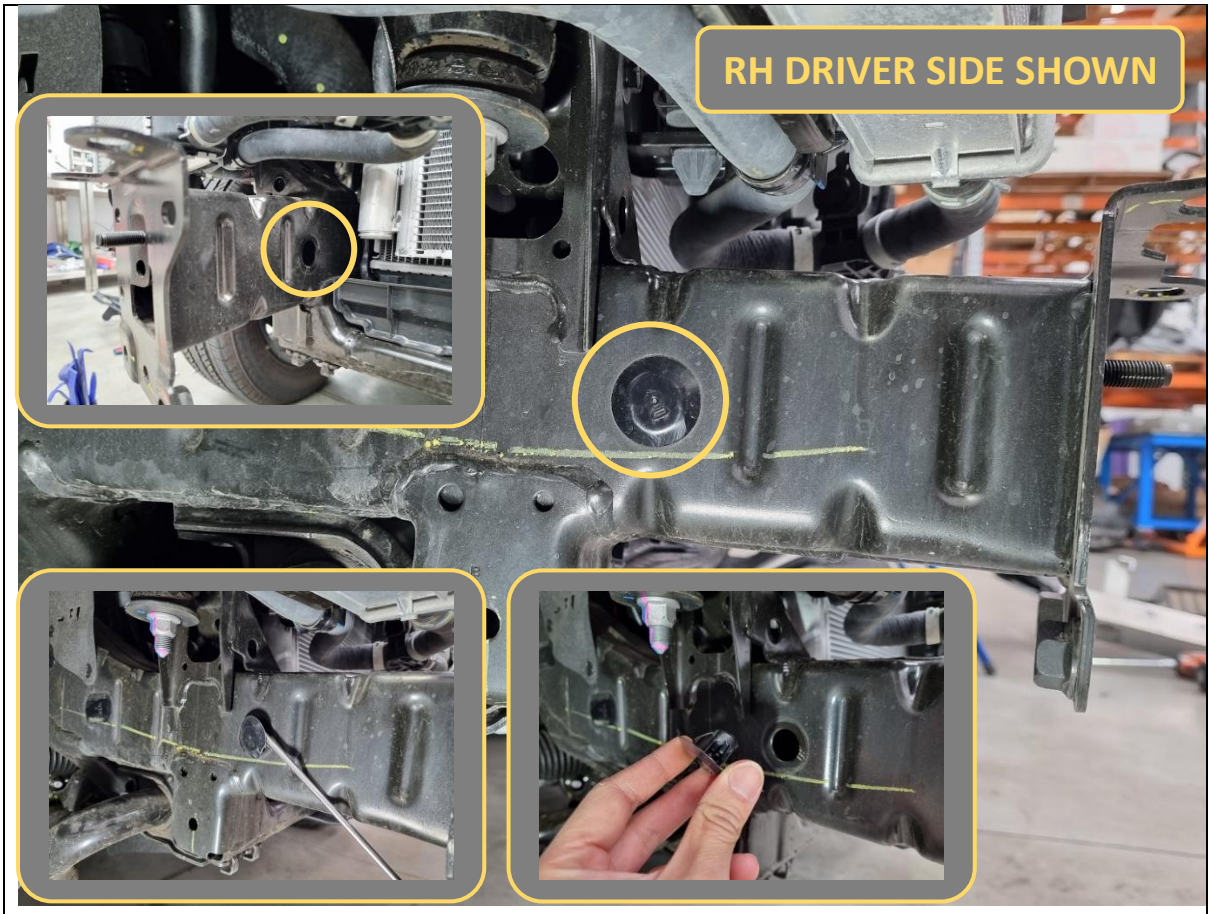
or

12mm socket
Socket extension bar

FASTENERS

6x 12mm hex bolts

Discard



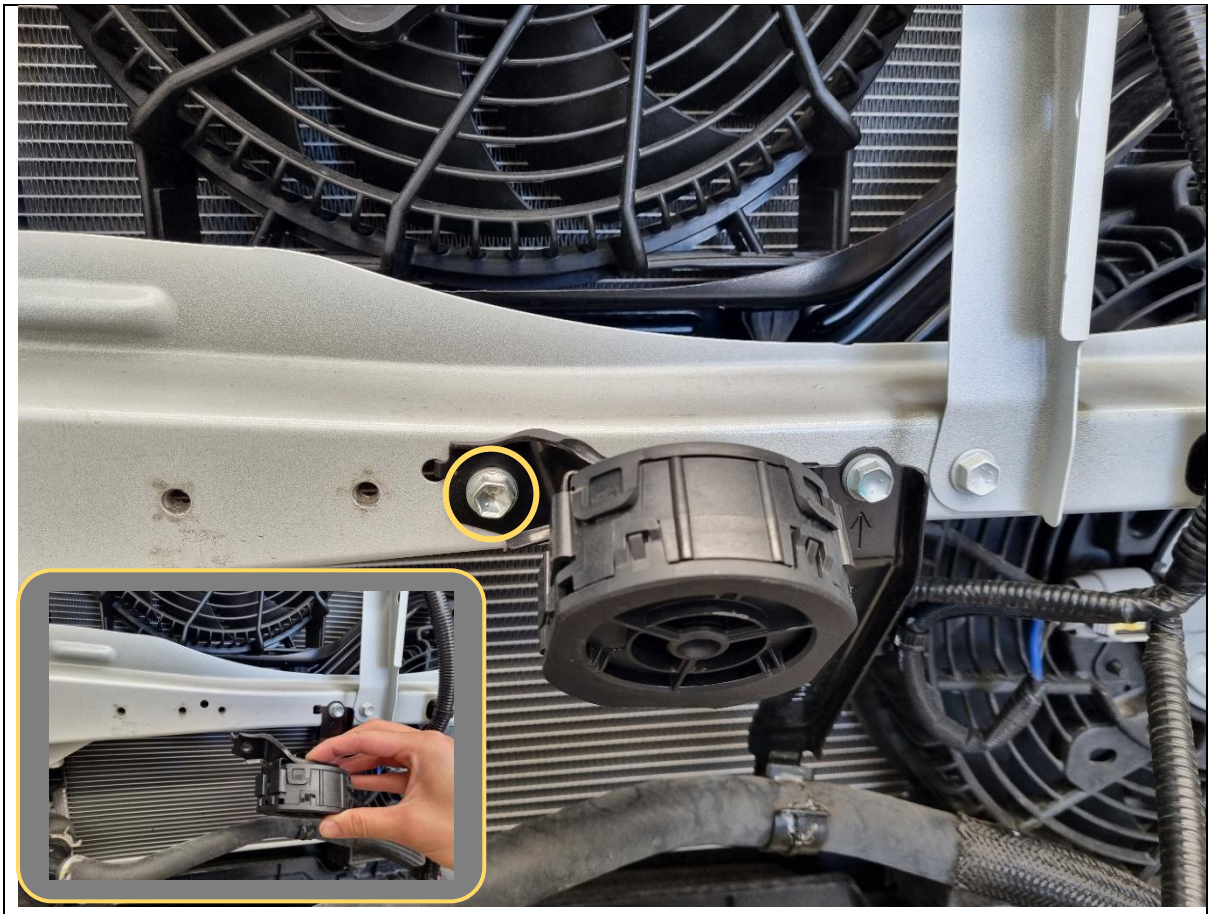
18. Use a flat blade screwdriver and remove 4x plastic blanking caps covering holes in the chassis rail.

    2x per chassis rail, 1x outer and 1x inner.

TOOLS REQUIRED

Flat head screwdriver

FASTENERS



19. Locate the pedestrian alert speaker in the middle and remove 1x 10mm hex bolt holding it to the frame.

    Retain this bolt.

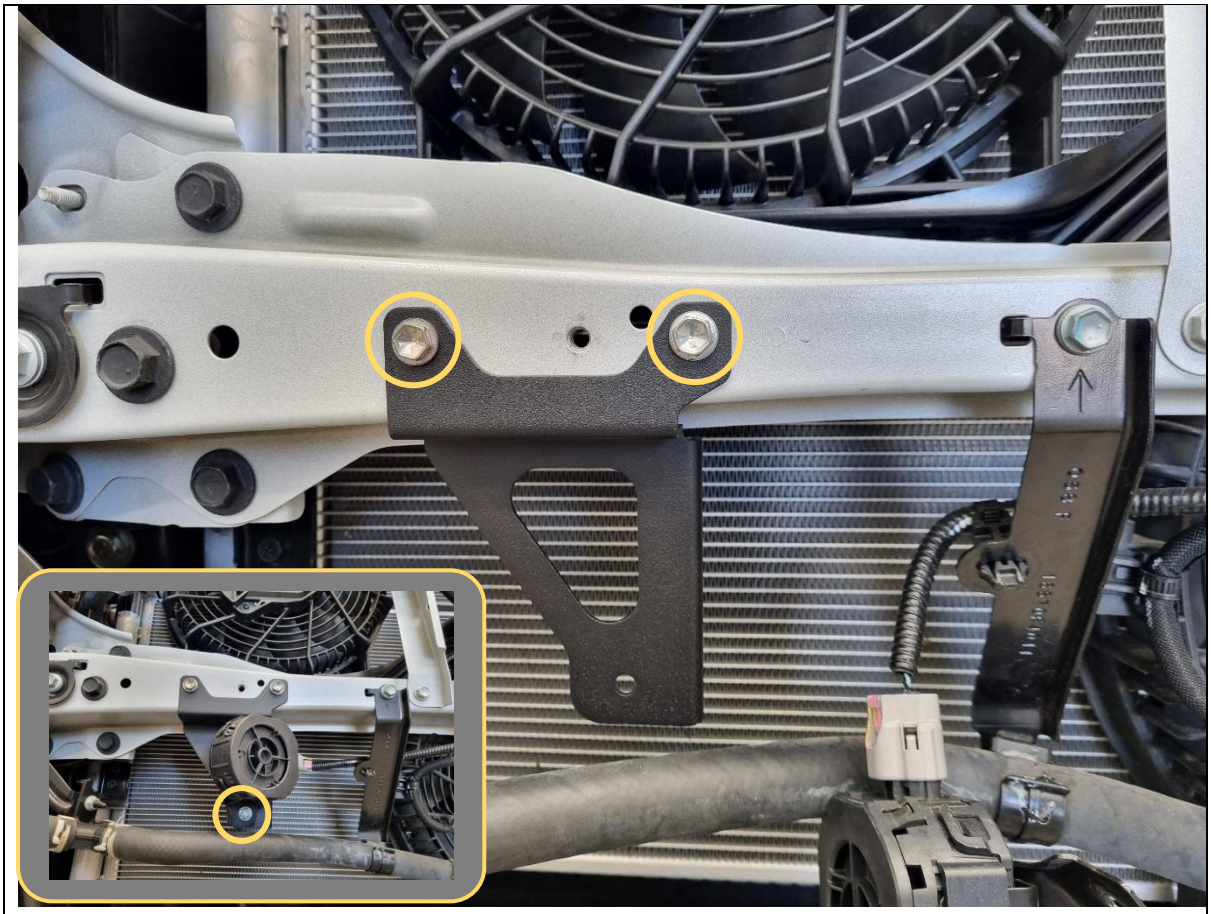
TOOLS REQUIRED

10mm socket/spanner

FASTENERS

1x 10mm hex bolt

Retain



20. Bolt the supplied speaker relocation bracket to the frame, re-using 2x factory 10mm hex bolts from Step 6 and 19.

21. Rotate and position the speaker as shown in the inset photo, then secure to the bracket using 1x M6x20 hex bolt, flat washer and flange nut.

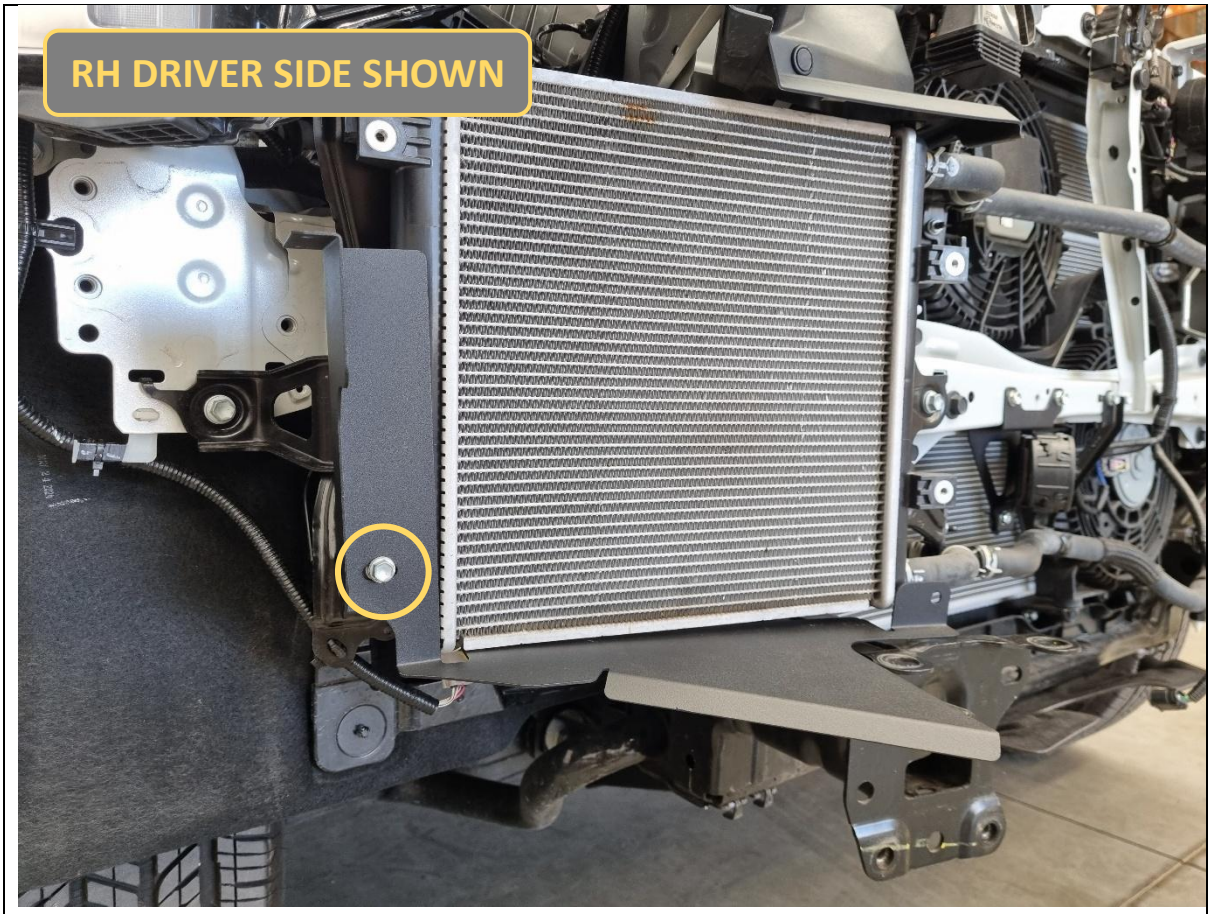
TOOLS REQUIRED

10mm socket/spanner

FASTENERS

2x factory 10mm hex bolts

1x M6x20 hex bolt
1x M6 flat washer
1x M6 flange nut



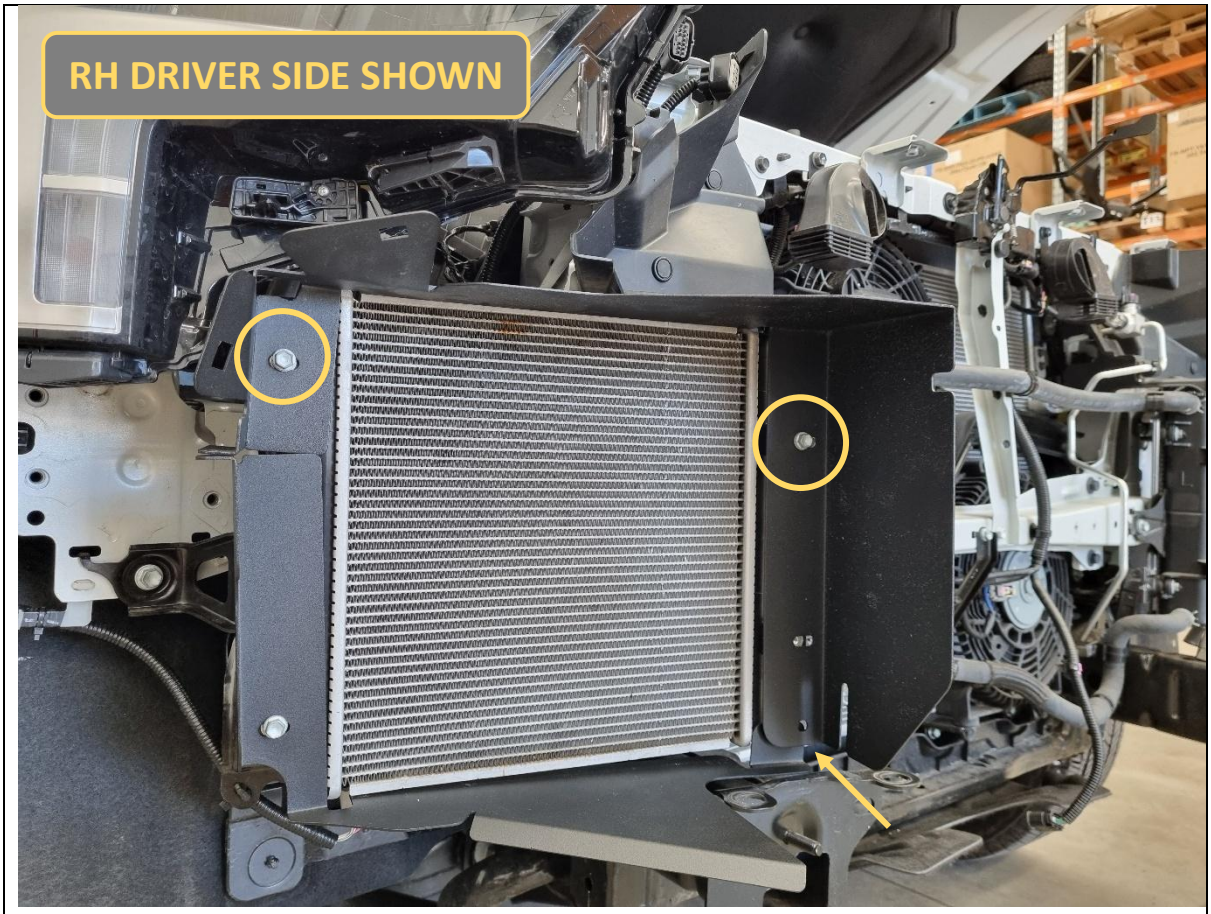
22. Loosely fit the B-1670 outer intercooler air guide to the intercooler with 1x of the factory 10mm hex bolts from Step 16.

    Leave finger tight.

TOOLS REQUIRED

FASTENERS

1x factory 10mm hex bolt



23. Loosely fit the B-1669 inner intercooler air guide to the intercooler with 2x of the factory 10mm hex bolts from Step 16.

    Make sure the bottom inside corner sits in front of the outer air guide.

    Leave finger tight.

TOOLS REQUIRED

FASTENERS

2x factory 10mm hex bolt



24. Join the 2x air guide halves with 2x M6x12 hex bolts, flat washers and flange nuts.

    Leave finger tight.

TOOLS REQUIRED

FASTENERS

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



25. Fit the B-1663 lower grille shutter mount to the bottom inside corner of the air guides. Slide the bracket through the slot in the air guide.

26. Loosely secure to the intercooler and both air guides by re-fitting 1x factory 10mm hex bolt retained from Step 16 at the top, and 1x M8x20 hex bolt, flat washer and flange nut at the bottom.

    Leave finger tight.

TOOLS REQUIRED

FASTENERS

1x factory 10mm hex bolt

1x M8x20 hex bolt
1x M8 flat washer
1x M8 flange nut

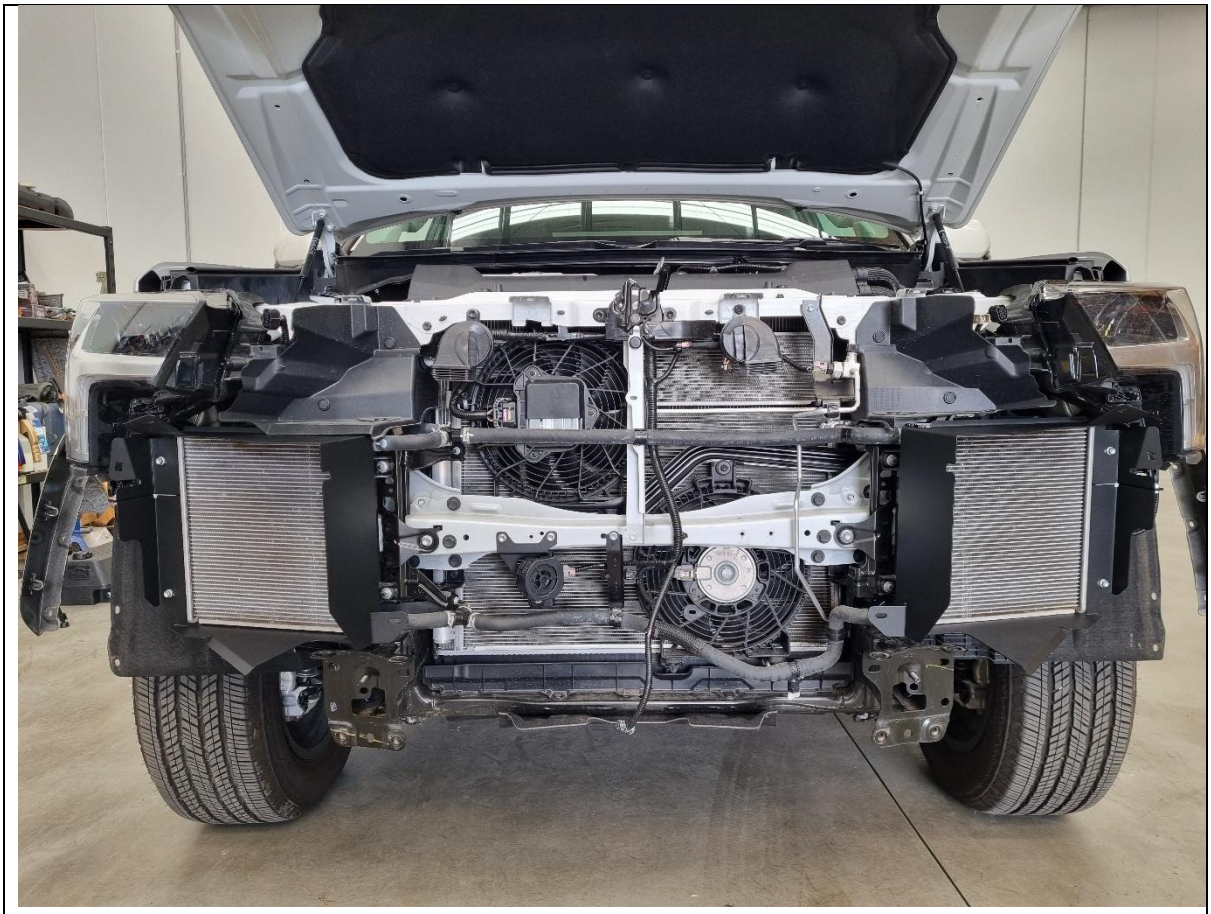


27. Position and centralise the air guides over the intercooler, then tighten all 5x bolts.

TOOLS REQUIRED

10mm socket/spanner
13mm socket/spanner

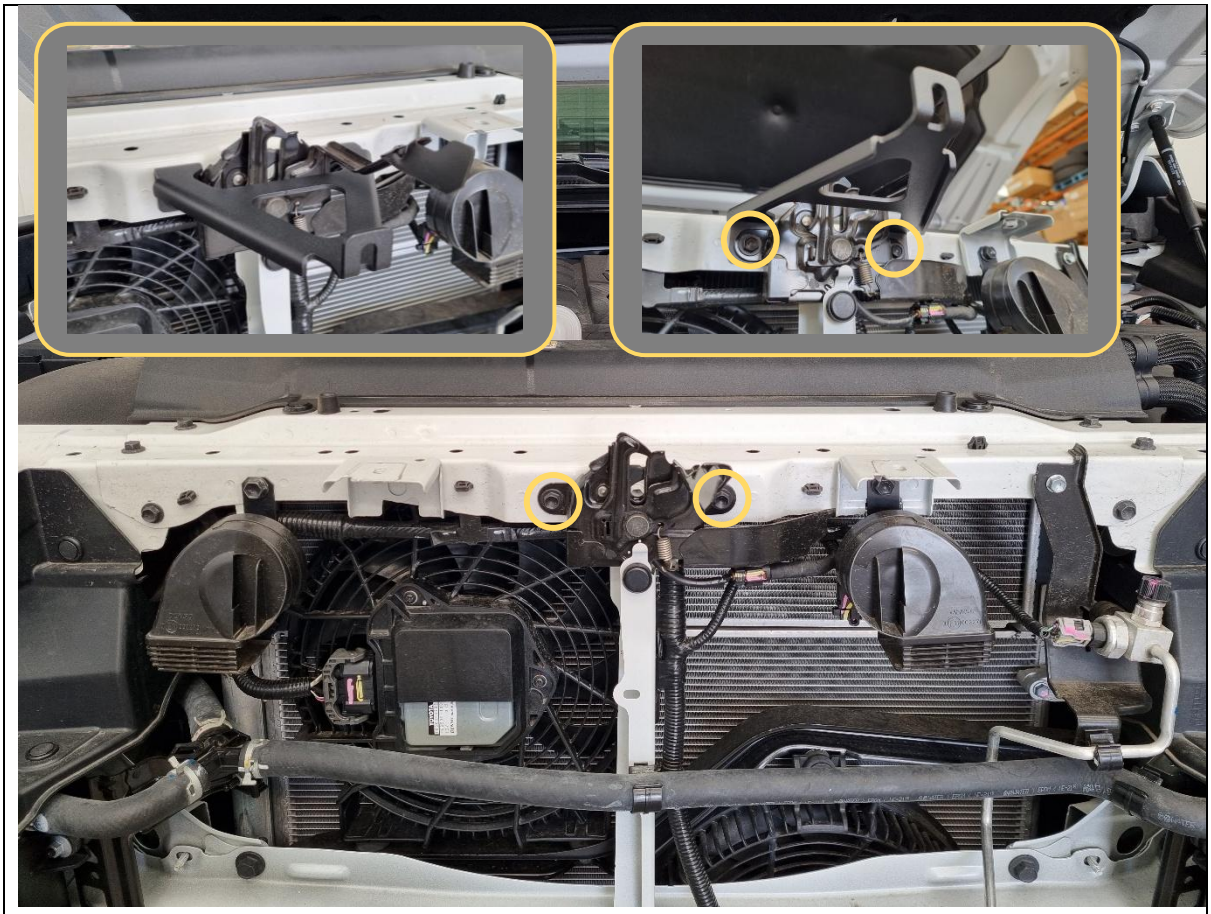
FASTENERS



28. Repeat the same procedure with the other side of the car.

TOOLS REQUIRED

FASTENERS



29. Remove 2x 10mm hex bolts holding the bonnet catch to the body.

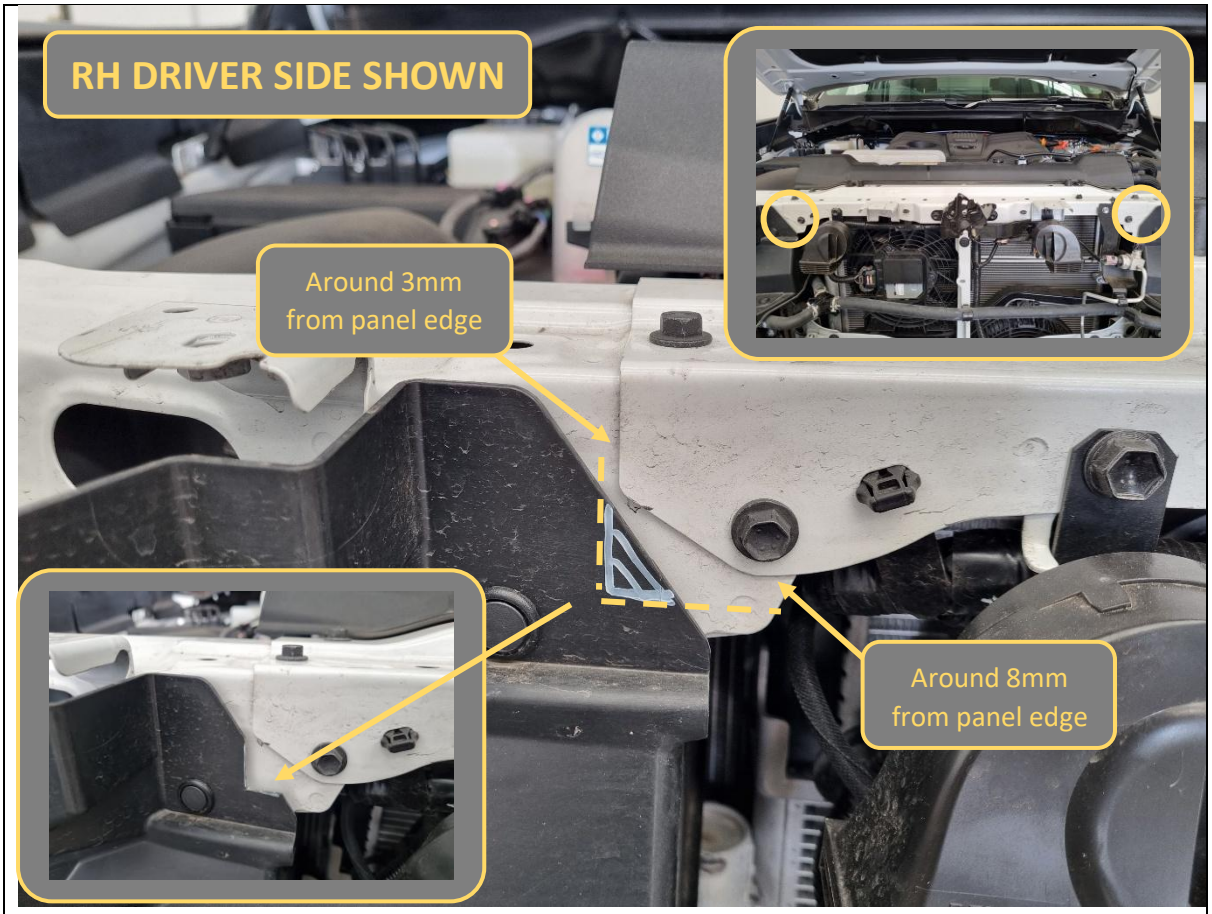
30. Fit the B-1666 centre grille shutter mount in between the bonnet catch and body, then secure with the factory 10mm hex bolts.

    Check the position of the bonnet catch to ensure the bonnet can still be shut and securely latched.

TOOLS REQUIRED

10mm socket/spanner

FASTENERS

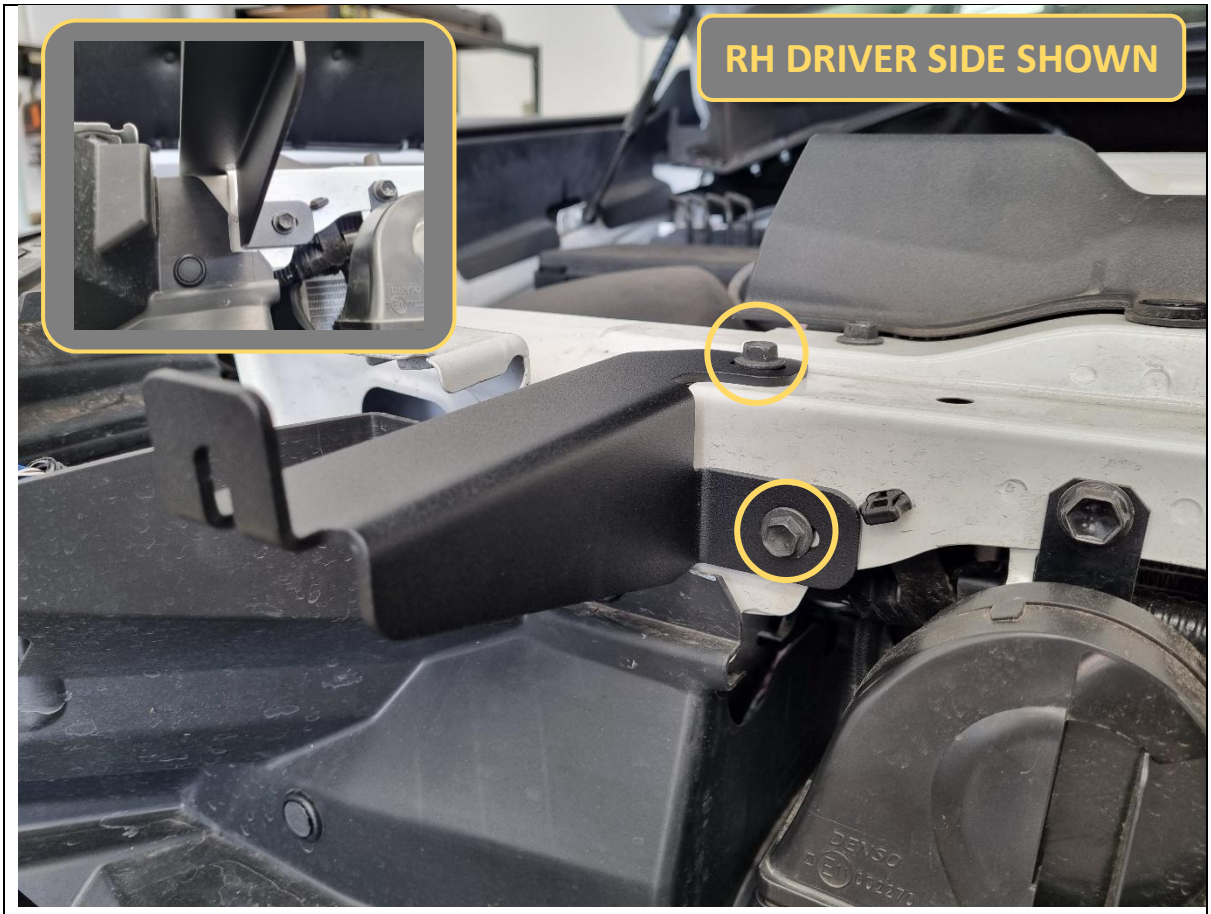


31. Mark and trim the same corner of both plastic air dams with a utility knife, as shown.

TOOLS REQUIRED

Marker pen
Utility knife

FASTENERS



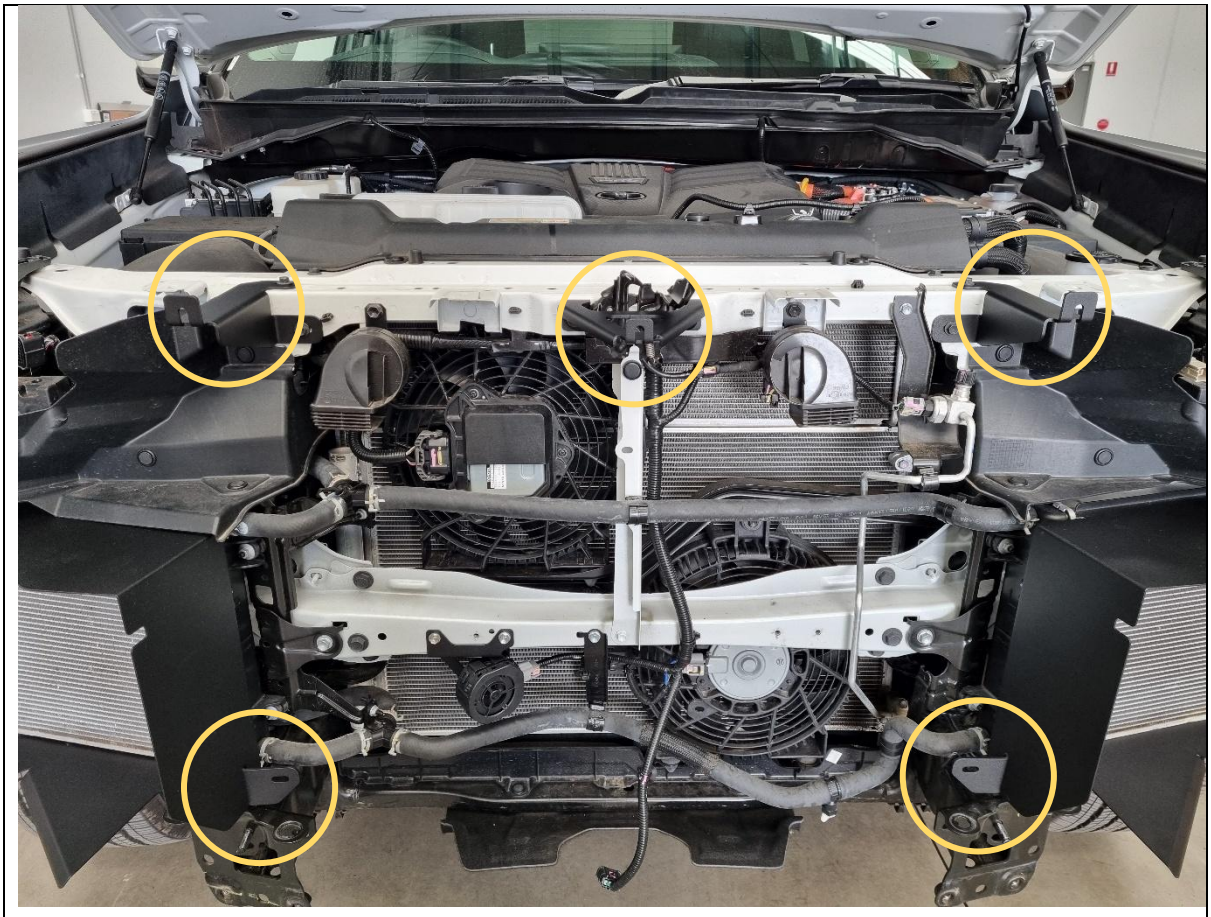
32. Remove 2x 10mm hex bolts on each corner of the top cross member on the body, then fit the B-1665 outer grille shutter mount brackets using the same bolts.

    Centralise the bracket on the slots then tighten.

TOOLS REQUIRED

10mm socket/spanner

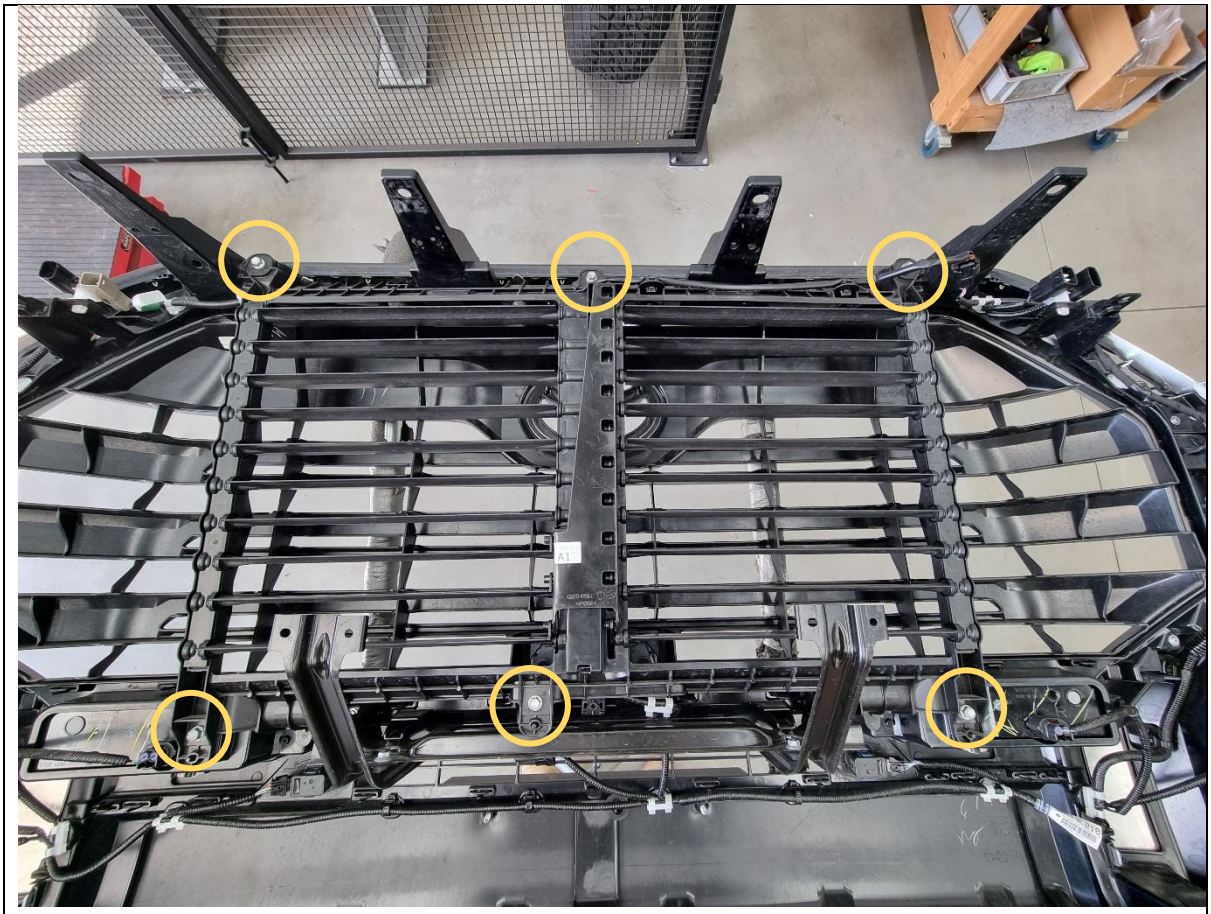
FASTENERS



33. The front end of the vehicle should now look like this, with 5x mounting locations for the active grille shutter (AGS) system.

TOOLS REQUIRED

FASTENERS



34. Remove 6x 10mm hex bolts holding the active grille shutter (AGS) system to the back of the grille.

TOOLS REQUIRED

10mm socket/spanner

FASTENERS

6x 10mm hex bolt

Discard

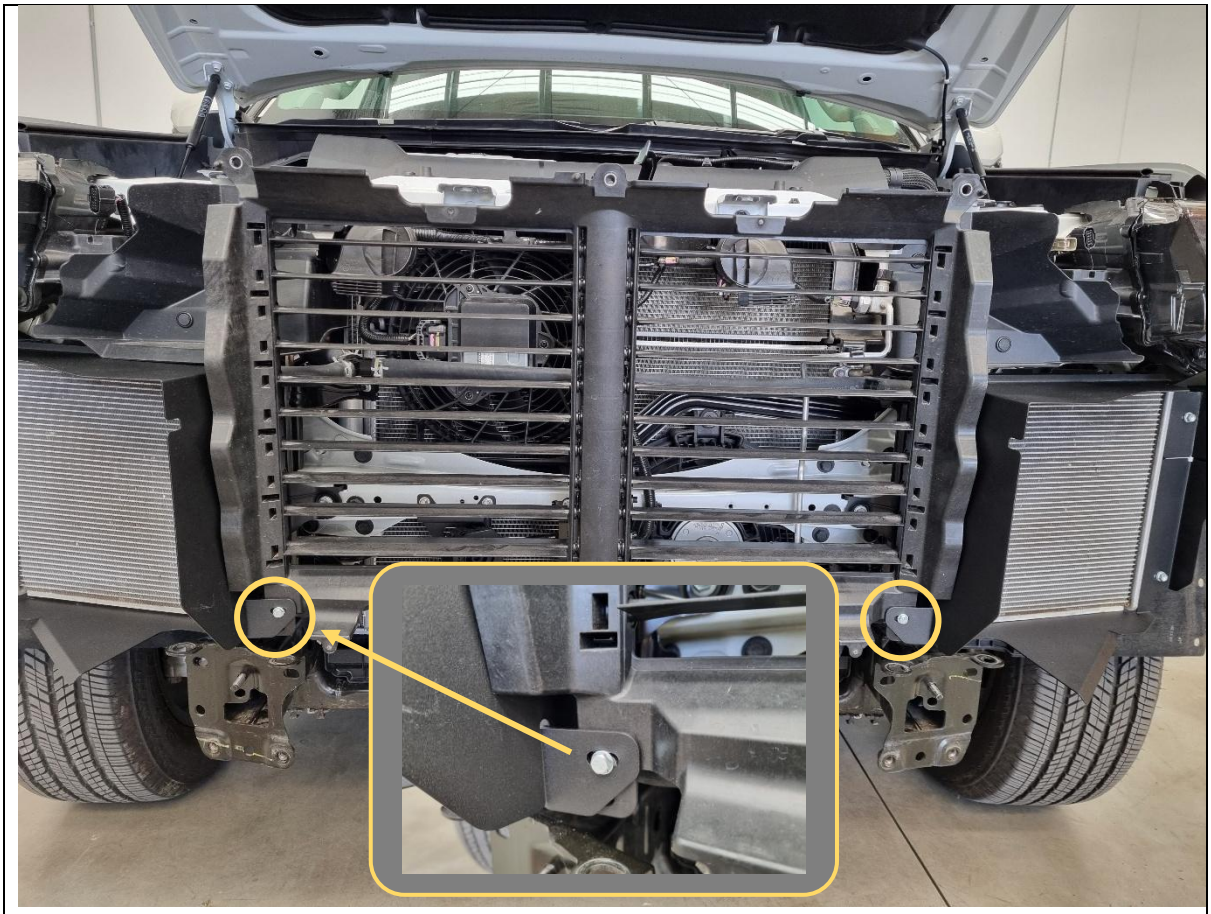


35. Unplug the AGS connector on the top right hand corner (driver side).

36. Lift out and remove the AGS system from the grille.

TOOLS REQUIRED

FASTENERS



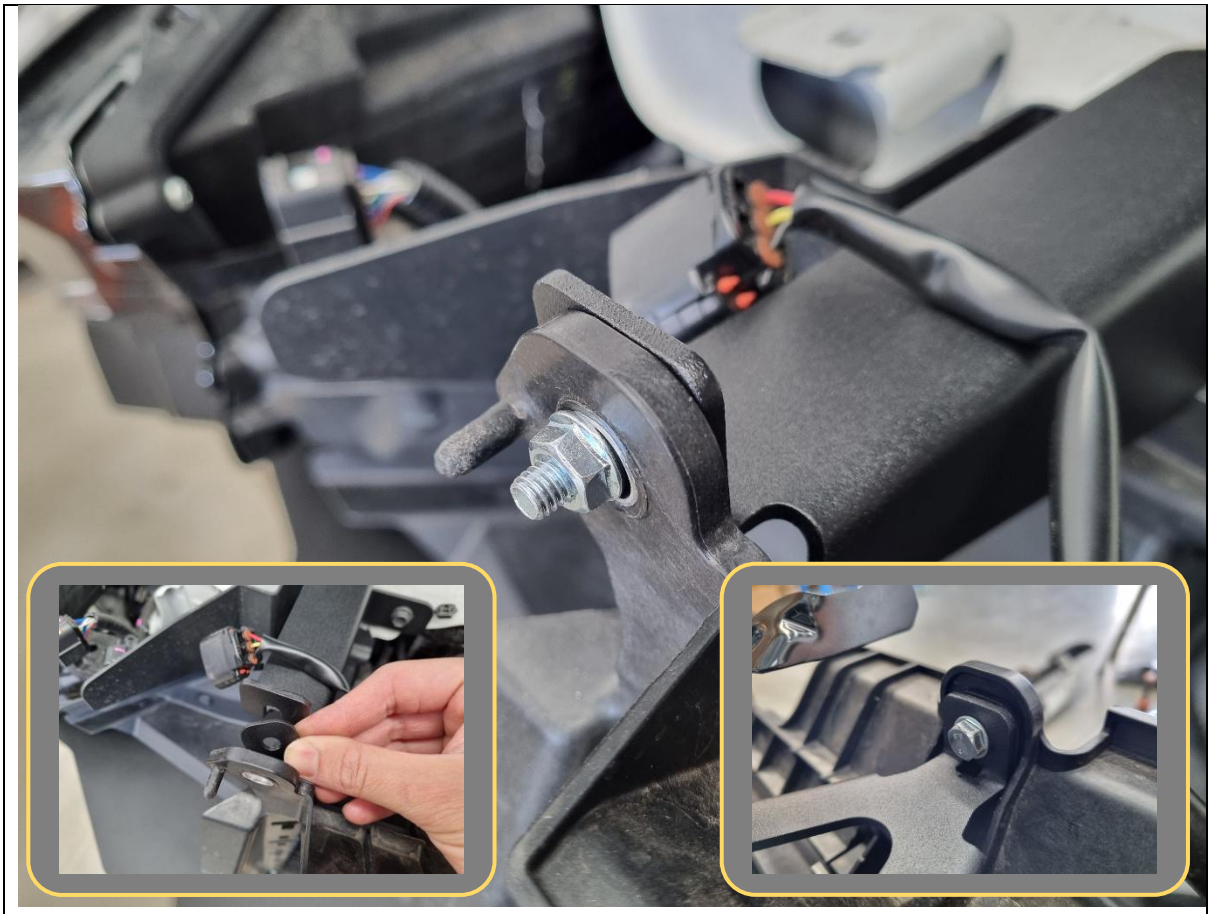
37. Position the AGS system onto the front of the vehicle.

38. Loosely secure the bottom outside corners with 2x M6x20 hex bolts, flat washers and flange nuts.

TOOLS REQUIRED

FASTENERS

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



39. For the top 3x mounting locations, insert 1x of the square P-0501 spacer plates in between the AGS and mounting bracket.

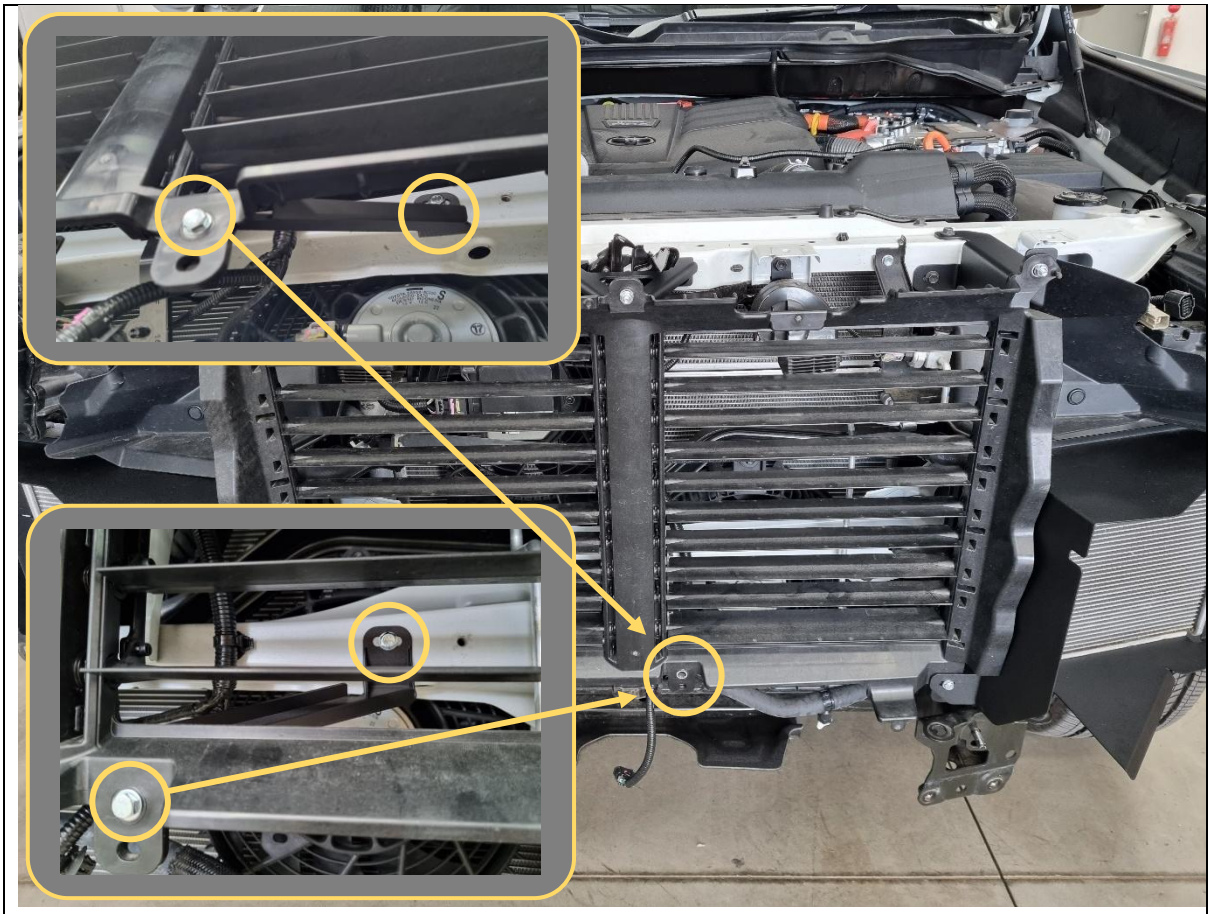
40. Then secure each location with 1x M6x20 hex bolt, flat washer and flange nut.

TOOLS REQUIRED

FASTENERS

3x P-0501 spacer plate

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



41. Fit the lower centre grille shutter mount as shown.

42. Secure the bracket to the body where the lower grille bracket was in Step 6, re-using the factory 10mm hex bolt.

43. Secure the AGS to the grille shutter mount using 1x M6x20 hex bolt, flat washer and flange nut.

44. Tighten all 6x AGS mounting bolts.

TOOLS REQUIRED

10mm socket/spanner

FASTENERS

1x factory 10mm hex bolt

1x M6x20 hex bolt
1x M6 flat washer
1x M6 flange nut

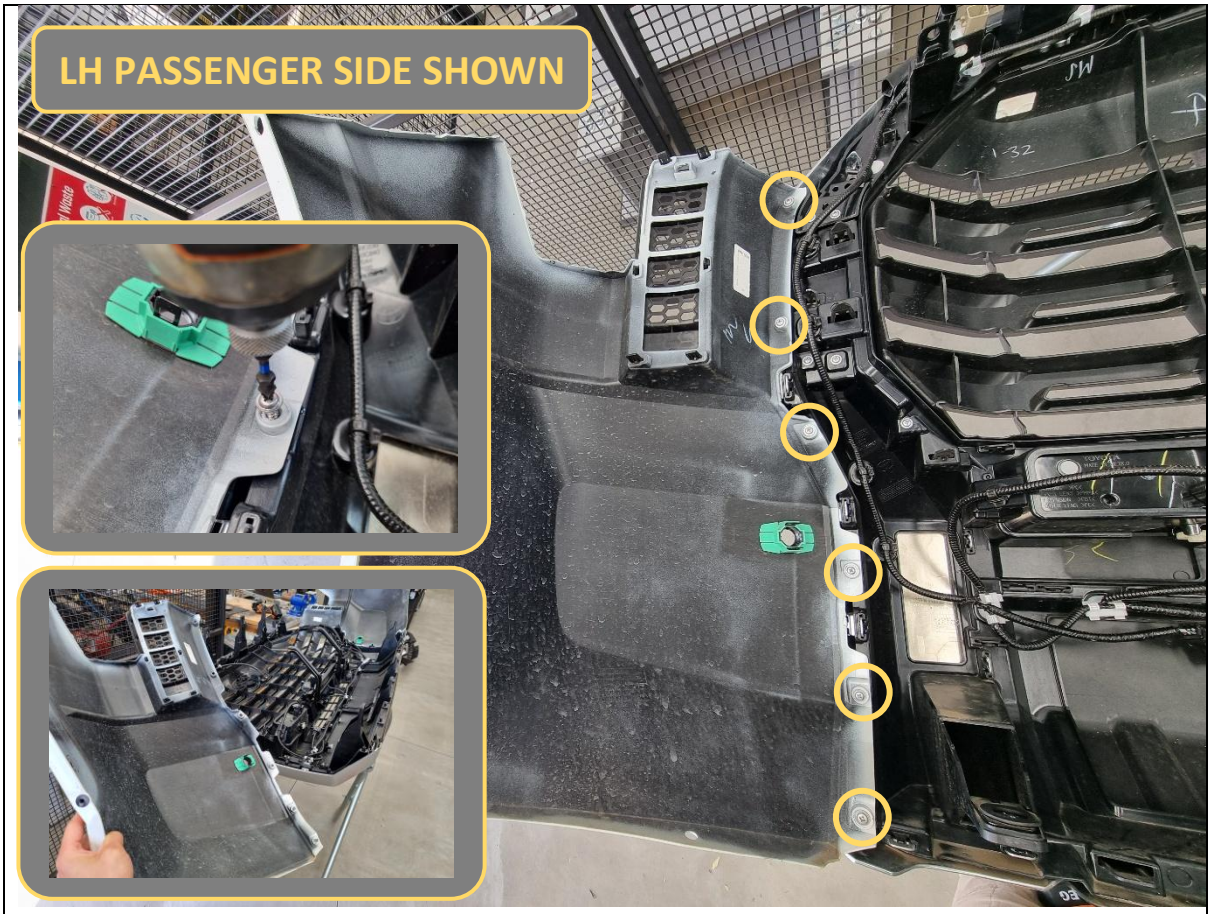


Time to strip and disassemble the bumper/grille.

45. Unclip the 2x outer parking sensors. Spread the 2x black tabs on the green housing apart and push the parking sensor out the back of the bumper.

TOOLS REQUIRED

FASTENERS



46. Remove 6x screws holding each bumper side trim, then remove panels from main bumper/grille assembly.

    Retain 4x of these screws.

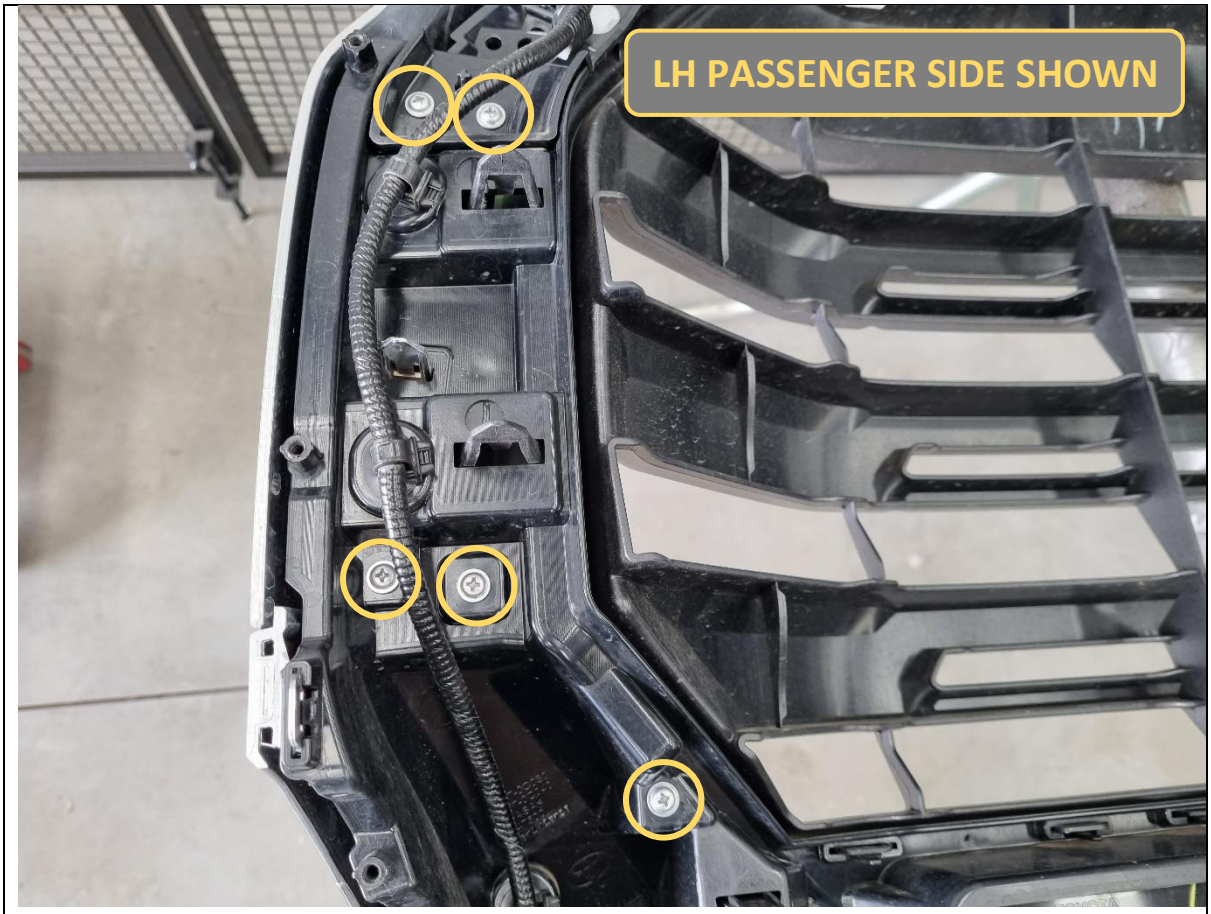
TOOLS REQUIRED

Phillips head screwdriver

FASTENERS

12x screws

Retain 4x



47. Remove 5x screws holding the outer top grille trim panel on each side.

    Retain the screws for re-assembly.

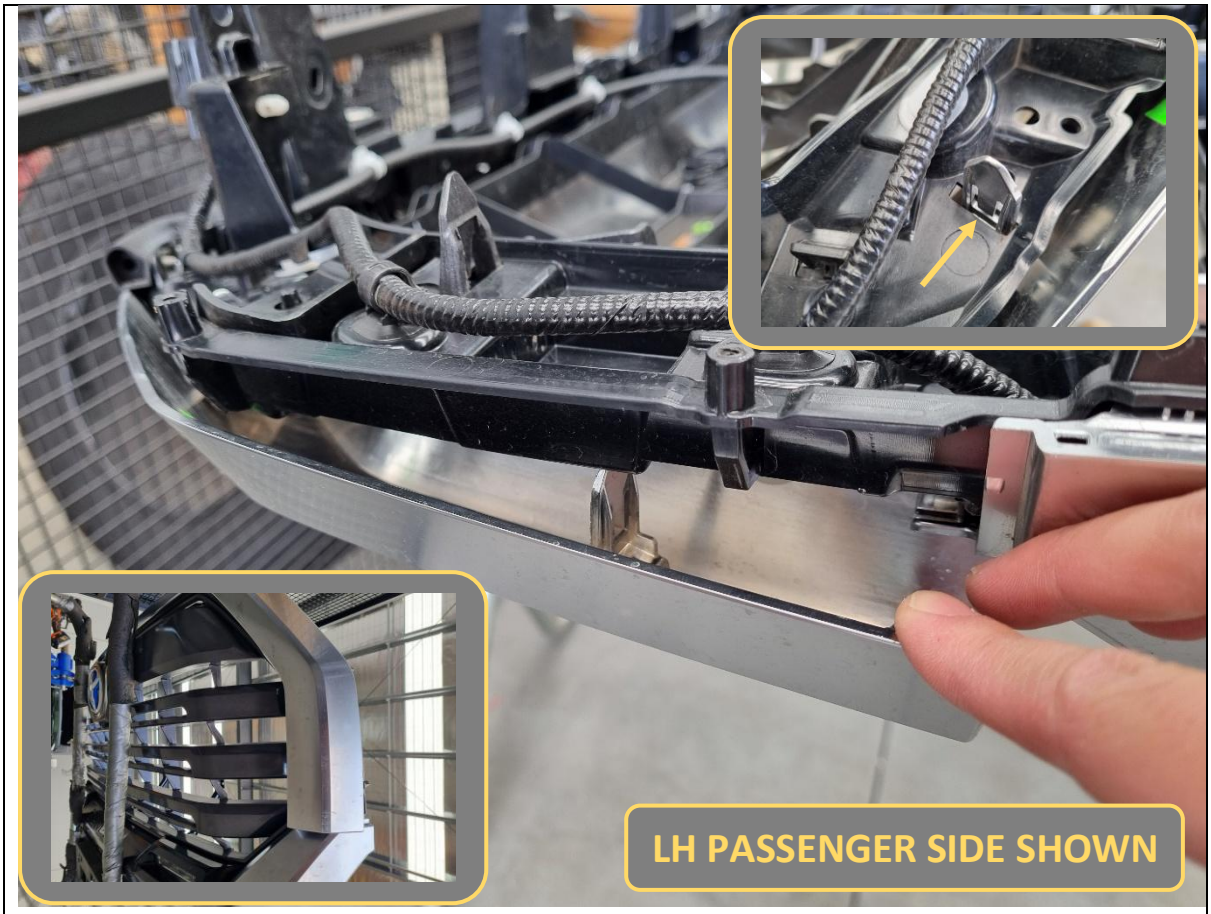
TOOLS REQUIRED

Phillips head screwdriver

FASTENERS

10x screws

Retain for re-assembly

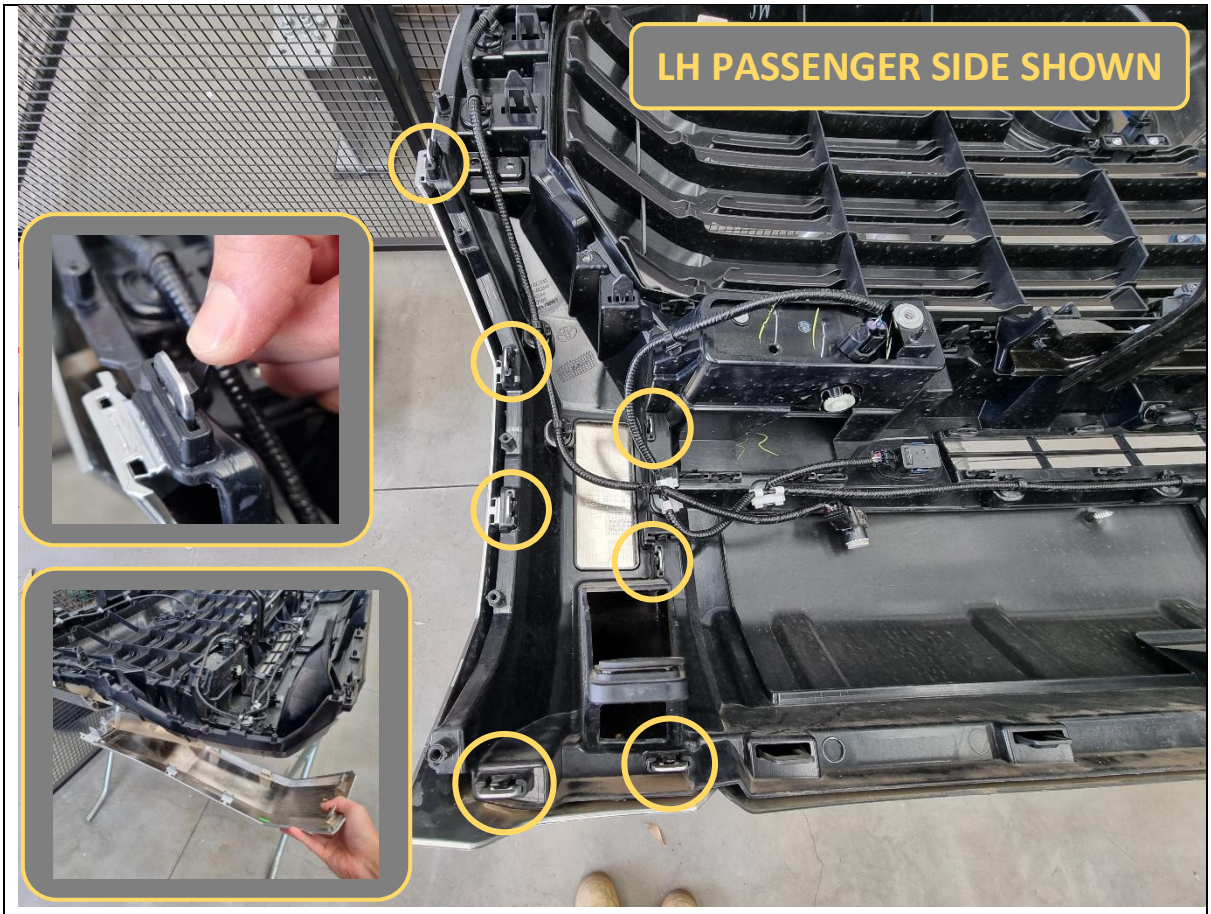


48. Release 1-2x tabs holding the bottom half of the outer top grille trim in order to expose the bottom outer trim.

TOOLS REQUIRED

Flat blade screwdriver
or
Trim tool

FASTENERS

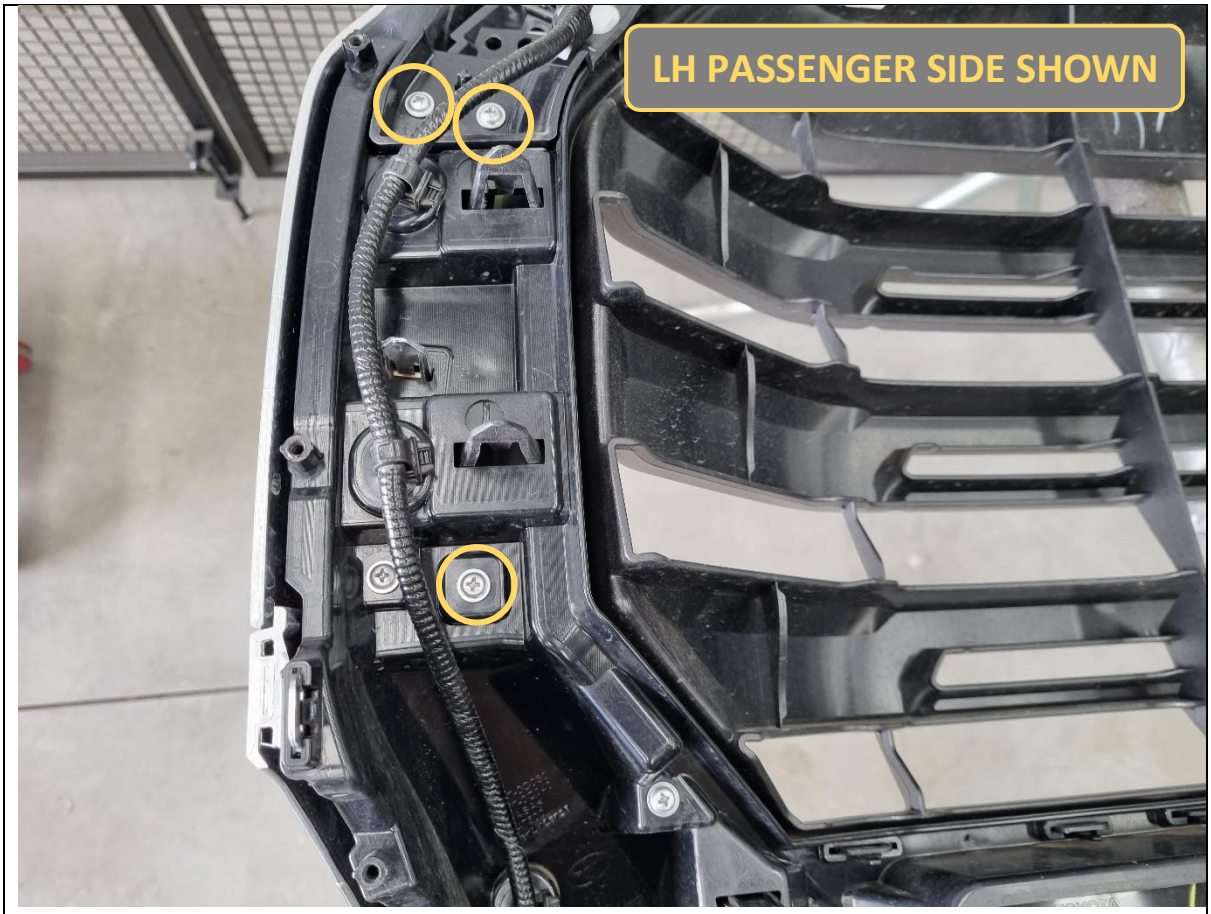


49. Release 7x tabs holding each bottom outer trim panel.

TOOLS REQUIRED

Flat blade screwdriver
or
Trim tool

FASTENERS



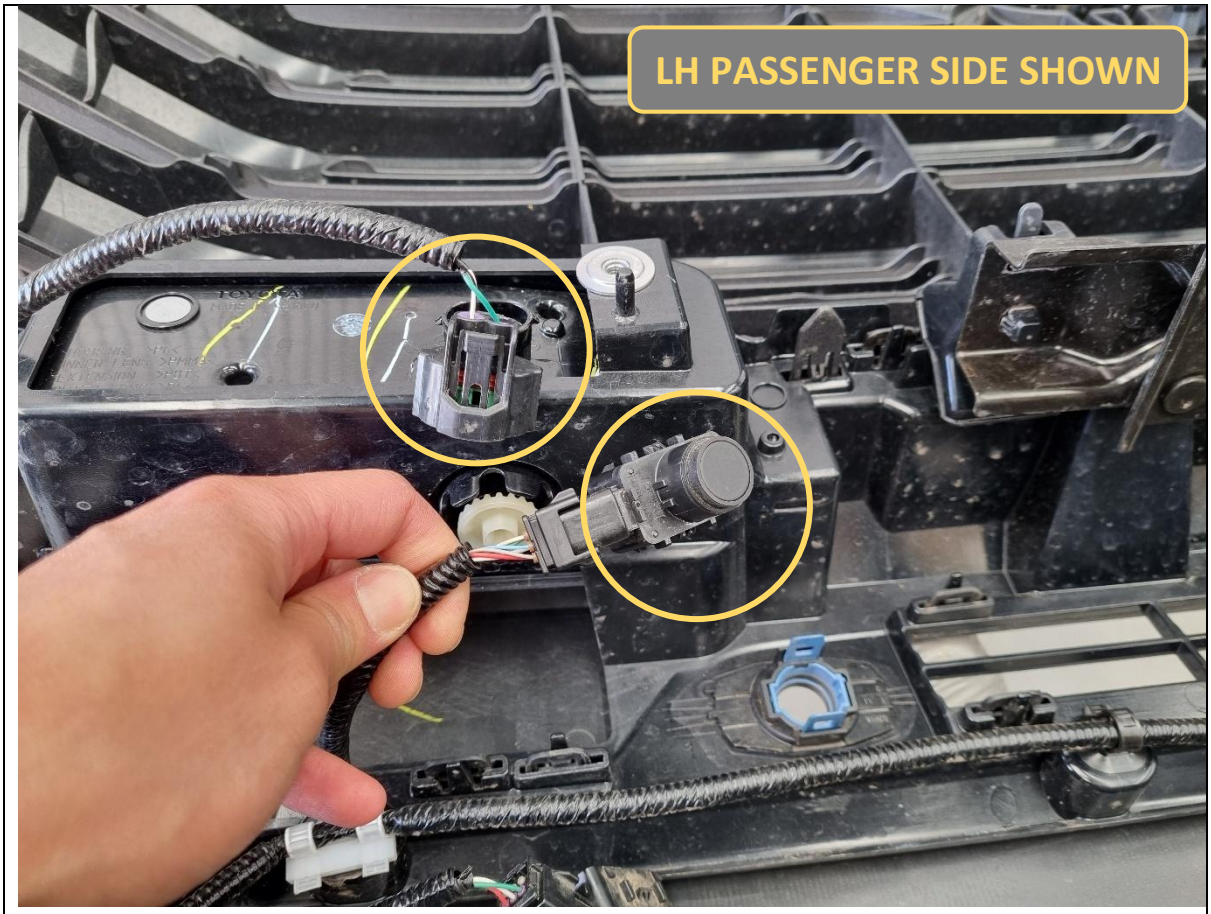
50. Re-clip in the outer top grille trim and re-fit the 3x screws on each side.

TOOLS REQUIRED

Phillips head screwdriver

FASTENERS

6x screws (retained)

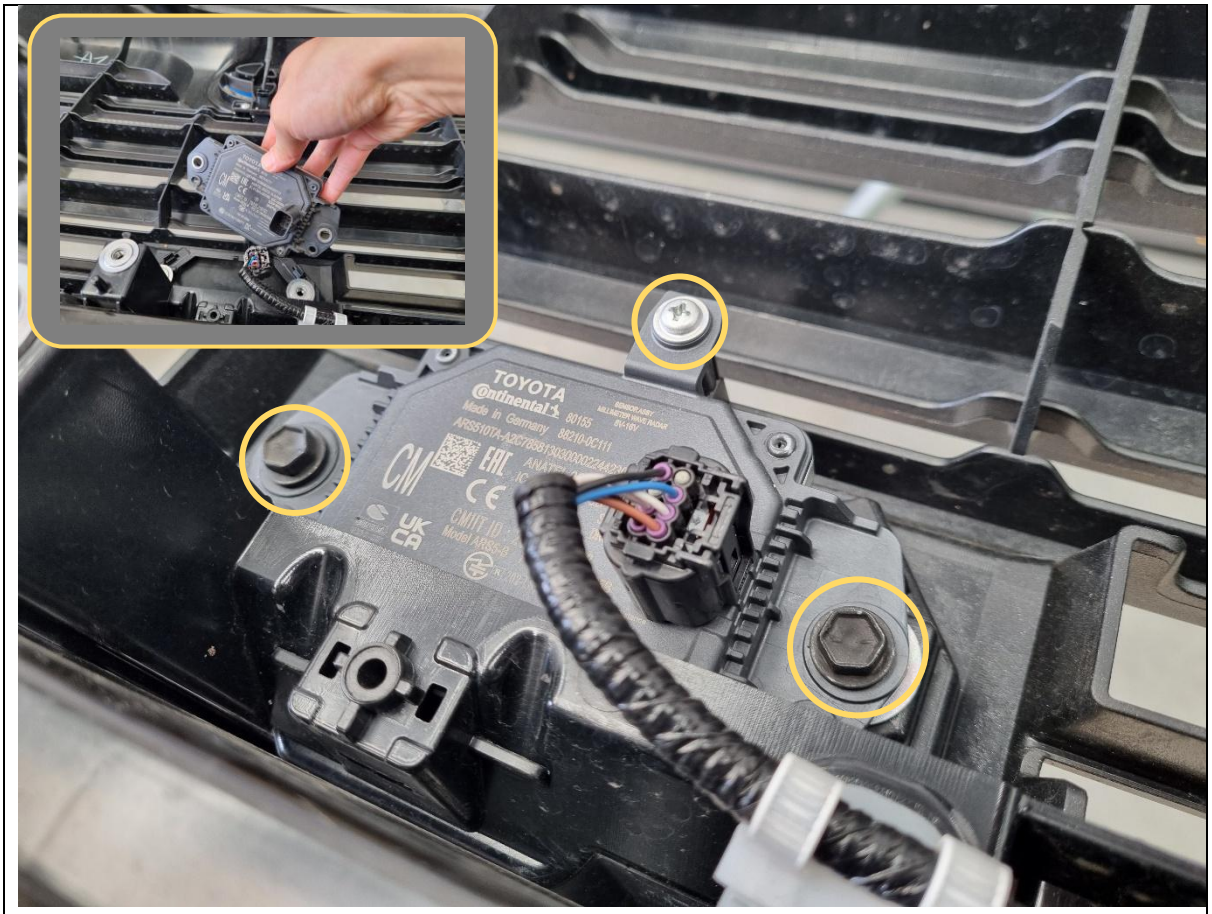


51. Unclip the 2x inner parking sensors. Label the sensors to differentiate inner/outer if required.

52. Unplug the 2x (inactive) fog lights. These will not be re-used.

TOOLS REQUIRED

FASTENERS



53. Unplug the centre radar.

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

55. Remove the radar and place it somewhere safe.

DO NOT DROP OR IMPACT THE RADAR.

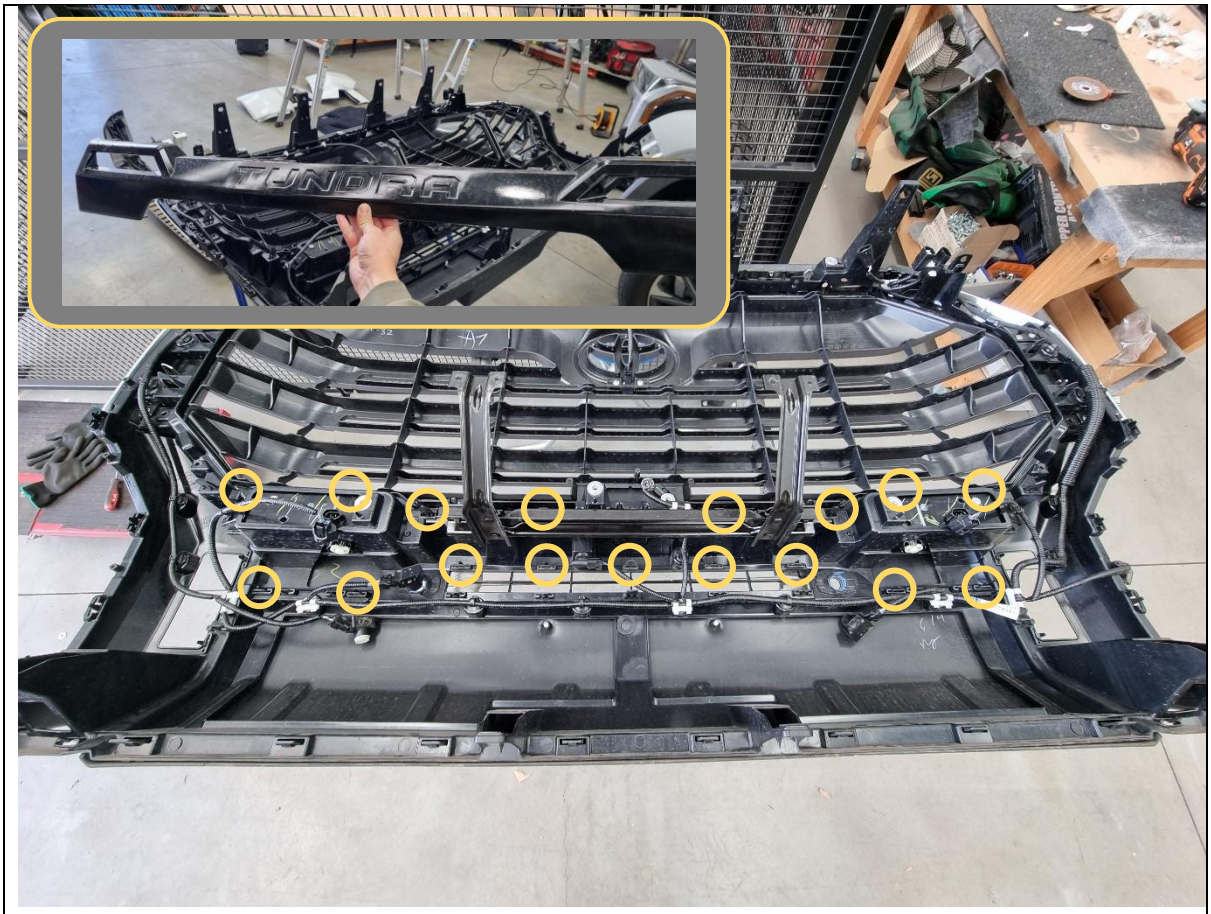
TOOLS REQUIRED

10mm socket/spanner
Phillips head screwdriver

FASTENERS

2x 10mm hex bolt
1x screw

Discard

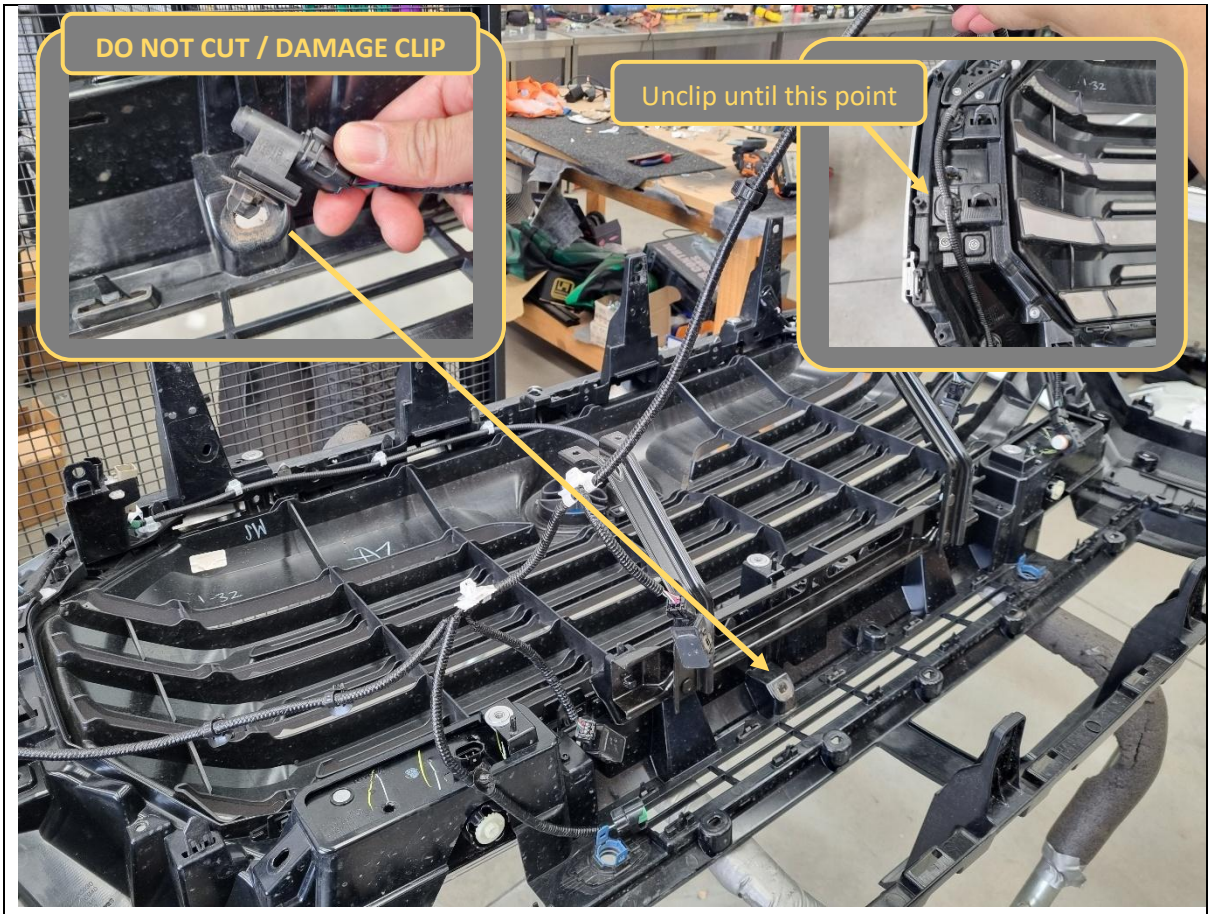


56. Remove 17x tabs holding the fog light outer trim panel.

TOOLS REQUIRED

Flat blade screwdriver
or
Trim tool

FASTENERS



57. Unclip the lower half of the bumper loom, up until you reach the outer top grille trim.

    Note: Do not damage the clip for the air temperature probe (see top left inset photo) as it will be re-used in the bull bar.

    You can cut through the rest of the clips with side cutters (be careful to not cut into loom wiring), or remove the bottom bumper panel to unclip the remaining loom clips.

TOOLS REQUIRED

Flat blade screwdriver
or
Trim tool

Side cutters

FASTENERS



58. Remove 2x screws holding the front camera to the grille, then unclip the camera loom from the back of the grille.

    Set camera and loom aside in a safe place.

TOOLS REQUIRED

Phillips head screwdriver

Flat blade screwdriver
or
Trim tool

FASTENERS

2x screws (discard)



59. The grille will need to be cut as shown. You will be cutting just below the outer top grille trim panel, and through the vertical slats across the horizontal span of the grille.

    The above images are for the ‘Limited’ model. The next page shows the ‘Platinum’ model.

TOOLS REQUIRED

FASTENERS

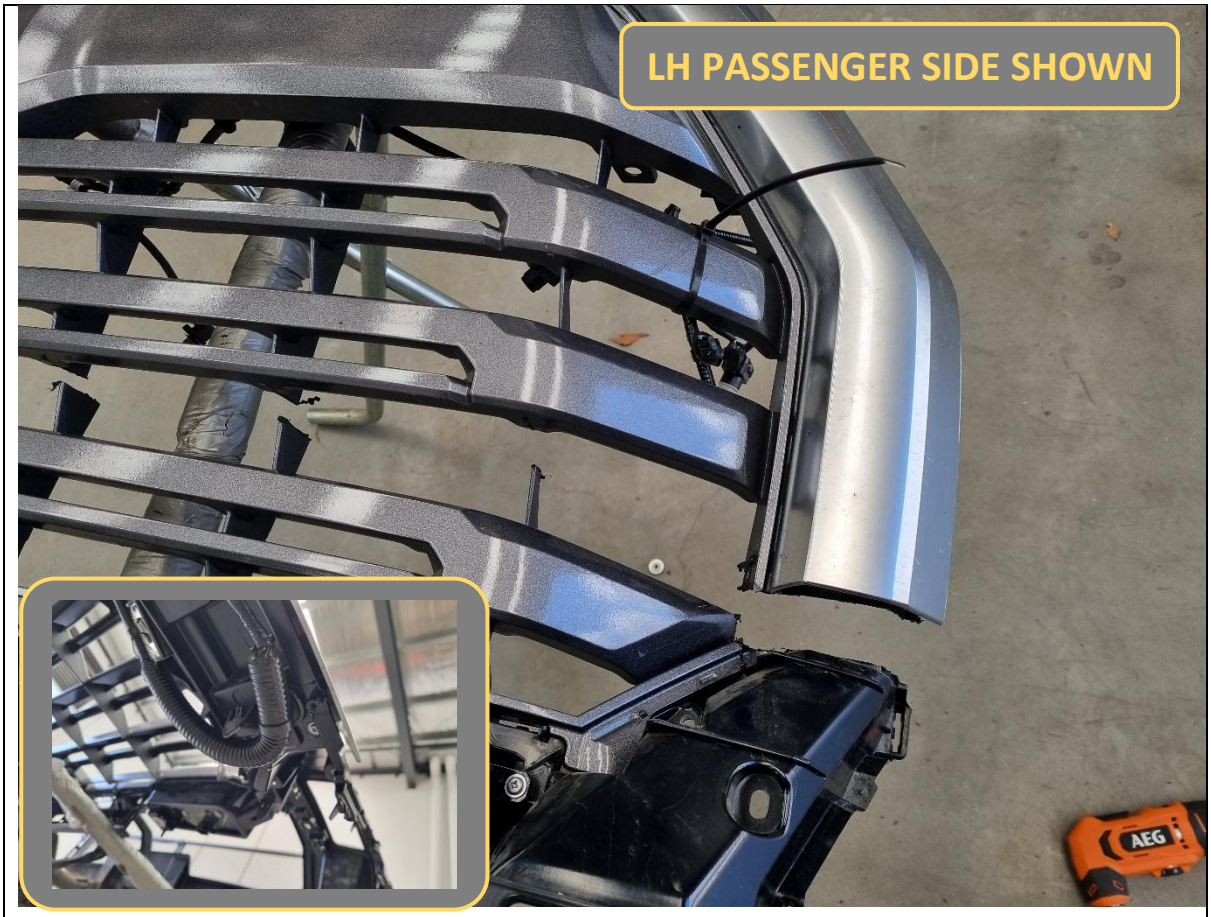


60. Grille cut for 'Platinum' model shown.

    Same as the 'Limited', you will be cutting just below the outer top grille trim panel, and through the vertical slats across the horizontal span of the grille.

TOOLS REQUIRED

FASTENERS



61. Cable tie the bumper loom out of the way so you won't accidentally cut into it.

62. Use an oscillating multi-tool or similar cutting tool and cut the grille as shown.

TOOLS REQUIRED

Cable ties

Safety glasses

Air Hacksaw
or
Oscillating Multi Tool
or
Angle Grinder
or
Jigsaw

FASTENERS



63. Discard the lower half.

64. Deburr the cut edges for a clean and smooth edge.

65. Cut the cable ties that were used to temporarily hold the loom of the way.

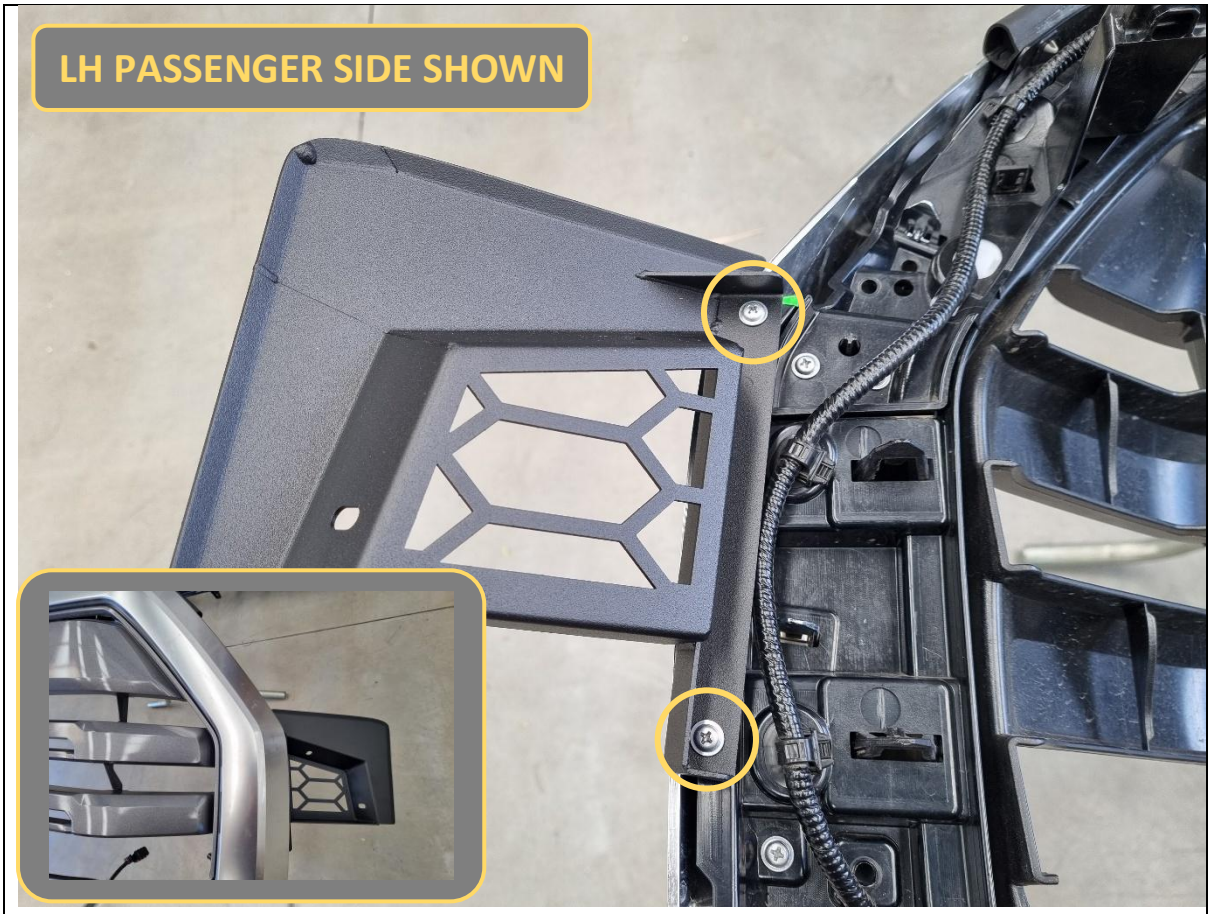
66. Fit the supplied round plastic blanking plug into the hole under the badge where the camera was.

TOOLS REQUIRED

Deburring tool
or
Utility knife

Side cutters

FASTENERS



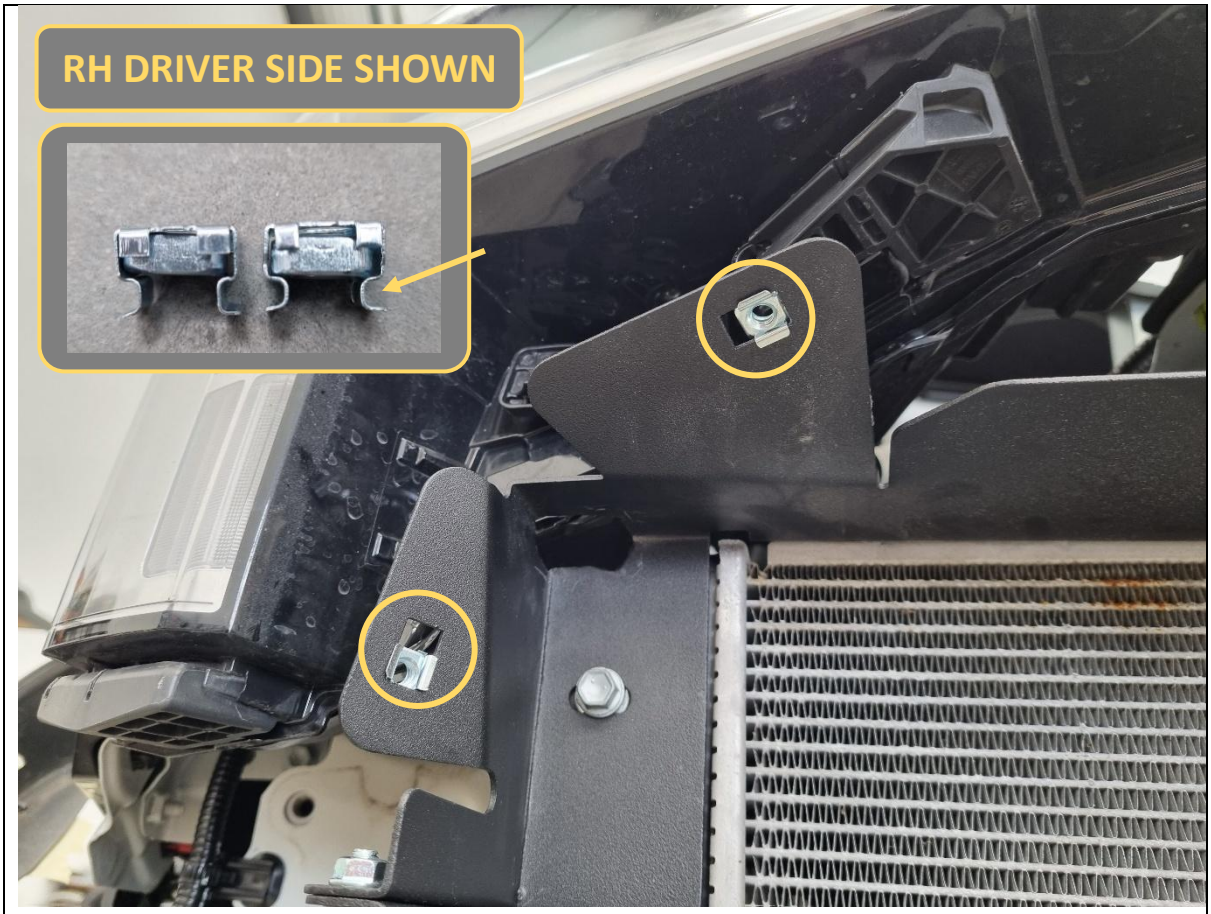
67. Fit the headlight infills to the sides of the grille, and secure each one re-using 2x Phillips head screws retained from Step 46.

TOOLS REQUIRED

Phillips head screwdriver

FASTENERS

4x screws



68. The headlight infills will be attached to the outer intercooler air guide.

69. Fit 2x thin M6 cage nuts to the rectangular slots in each air guide. Use a flat blade screwdriver to assist.

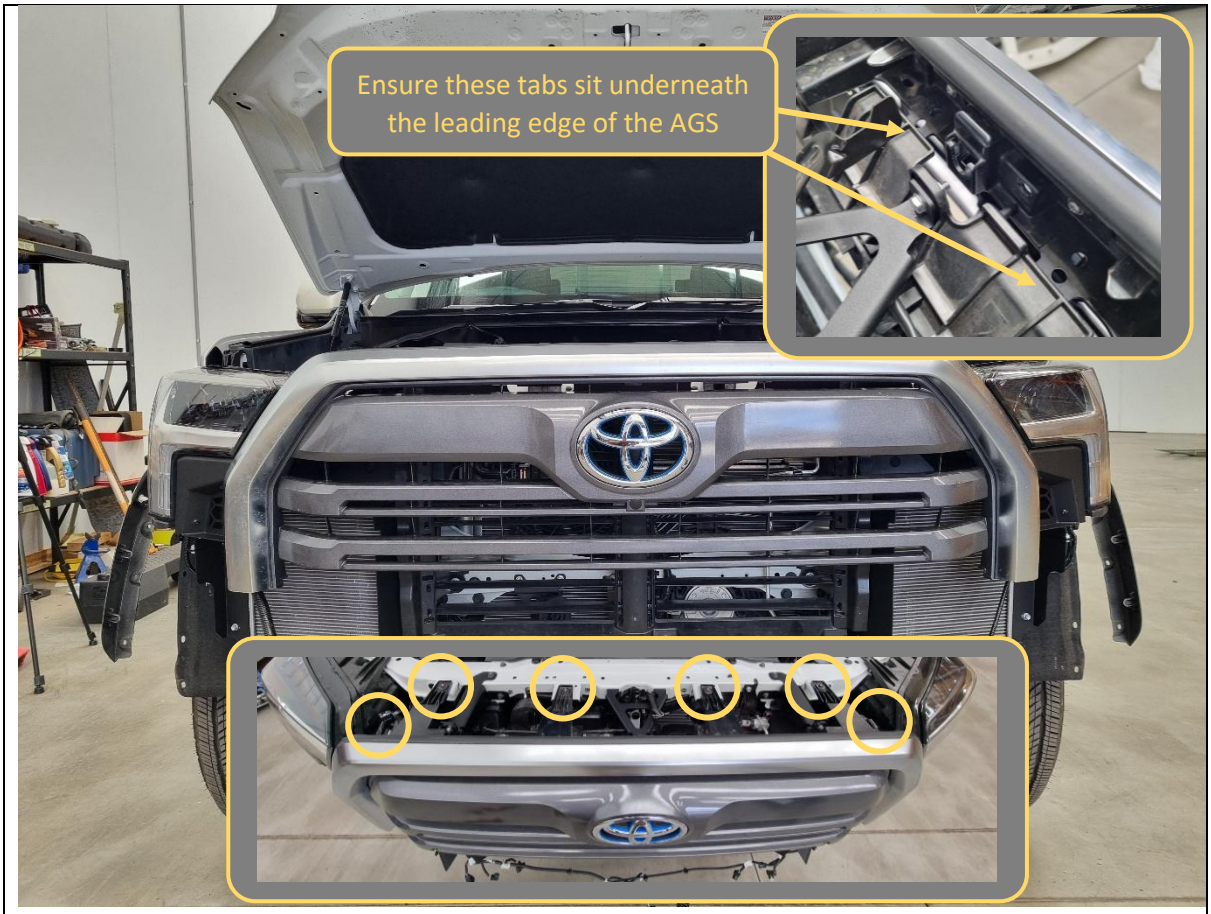
    Note There are 2x types of M6 cage nut supplied. 4x of the 'thin' style to be used here with narrow feet to suit thinner sheet metal, and 10x of the 'normal' style for the bull bar wings outlined later. Ensure the correct type is used.

TOOLS REQUIRED

Flat blade screwdriver

FASTENERS

4x thin M6 cage nut



70. Re-fit the trimmed grille to the vehicle.

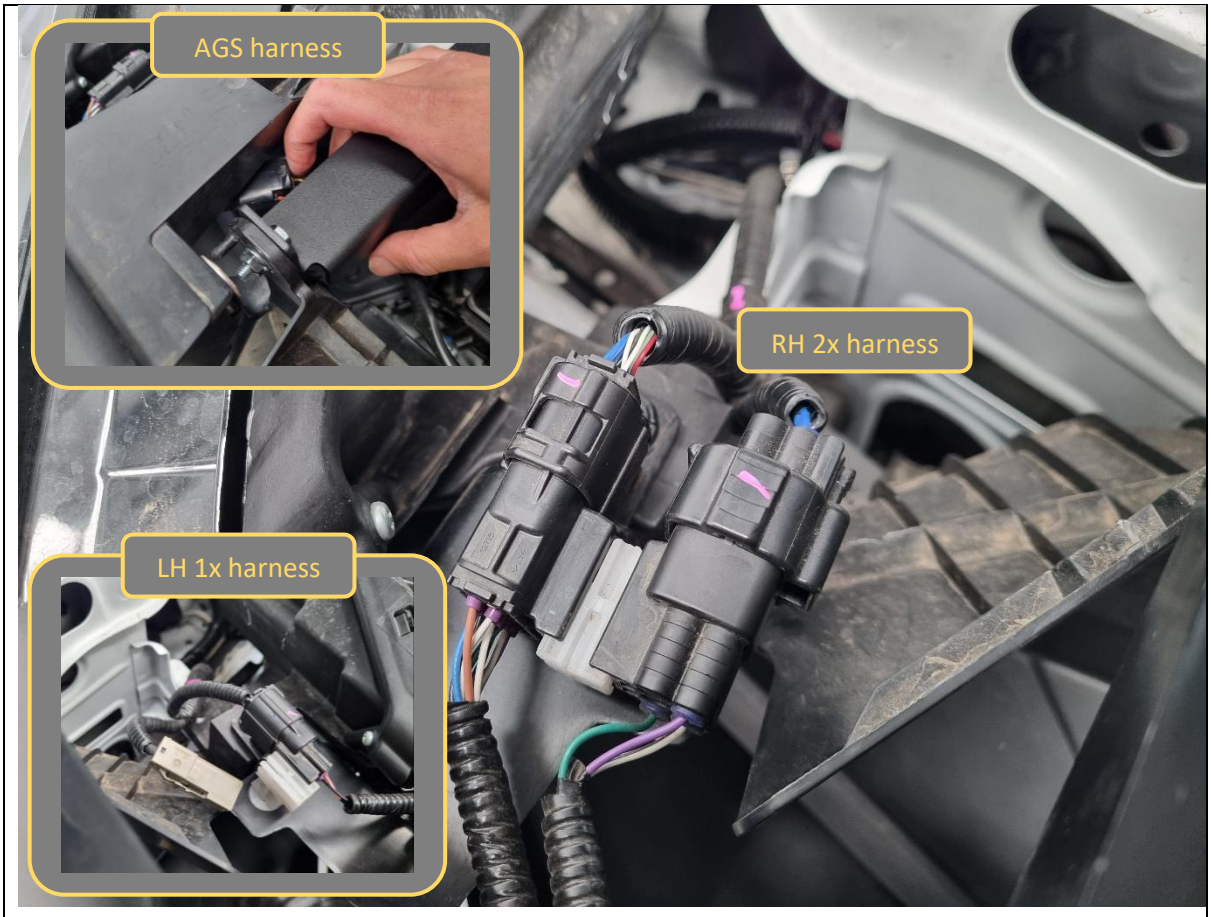
71. Secure the top re-using the 4x 10mm hex bolts and 2x plastic push clips from Step 3 and 4.

TOOLS REQUIRED

10mm socket/spanner

FASTENERS

4x factory 10mm hex bolt
2x plastic push clip



72. Re-plug in the AGS harness, 2x bumper harnesses on the RH side and 1x bumper harness on the LH side.

    Only the camera harness will be left unplugged for later.

TOOLS REQUIRED

FASTENERS



73. Secure each headlight infill to the intercooler air guide with 2x M6x16 black button head bolts and black washers.

TOOLS REQUIRED

4mm hex/Allen key

FASTENERS

4x M6x16 black button head
4x M6 black washer



74. Remove 1x 10mm hex bolt holding the outer bumper clip to the quarter panel.

75. Rotate the red plastic clip anticlockwise with a Phillips head screwdriver to release.

76. Use a flat blade screwdriver to pry up the tabs of the remaining clip.

77. Remove and discard the bumper clip. Repeat for other side.

TOOLS REQUIRED

10mm socket
Phillips head screwdriver
Flat blade screwdriver

FASTENERS

2x 10mm hex bolt

Discard



78. For light coloured vehicles, it is a good idea to paint the guards black for a better visual appearance.

    Clean the surface to be painted, then mask off the area shown and apply black spray paint.

    Offroad Animal recommends the following paint products:
    a. Dupli-Color Trim & Bumper Paint Black (TB101)
    b. VHT Hood, Bumper & Trim Paint Black (SP27)

    Remove masking tape after paint is dry.

TOOLS REQUIRED

Masking tape
Black spray paint

FASTENERS



79. Apply 1x 100mm double sided tape strip from the TK-FB-FRA-NG-22 tape kit to the back edge of the bumper infill.

80. Peel back the backing film of the tape with a utility knife, then fit the bumper infill up to the quarter panel/headlight.

81. Insert the tab of the infill into the gap at the top corner.

82. Align the infill so it sits flush up against the quarter panel and headlight, then secure with 1x M6x16 black button head bolt, black washer and flange nut.

83. Repeat procedure for other side.

TOOLS REQUIRED

Utility knife
4mm hex/Allen key

FASTENERS

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



84. Use an oscillating multi-tool or similar cutting tool and cut the flares along the marked lines from earlier.

85. Deburr the cut edges for a clean and smooth edge.

TOOLS REQUIRED

Safety glasses

Air Hacksaw
or
Oscillating Multi Tool
or
Angle Grinder
or
Jigsaw

Deburring tool
or
Utility knife

FASTENERS



86. Re-clip in the trimmed flare.

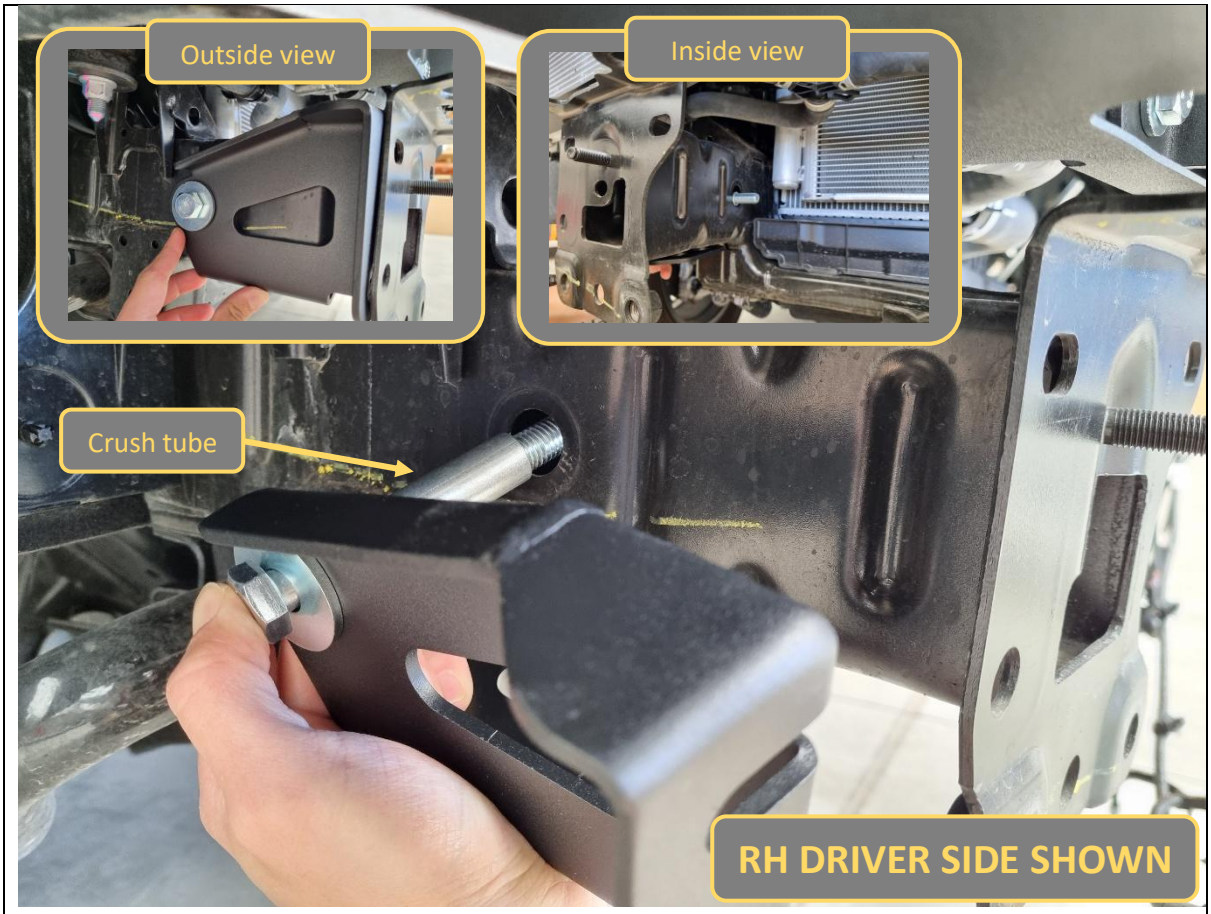
87. Re-fit any factory 10mm hex screws that were removed earlier in Step 10.

TOOLS REQUIRED

10mm socket/spanner

FASTENERS

Factory 10mm hex screws



Time to fit the mounts.

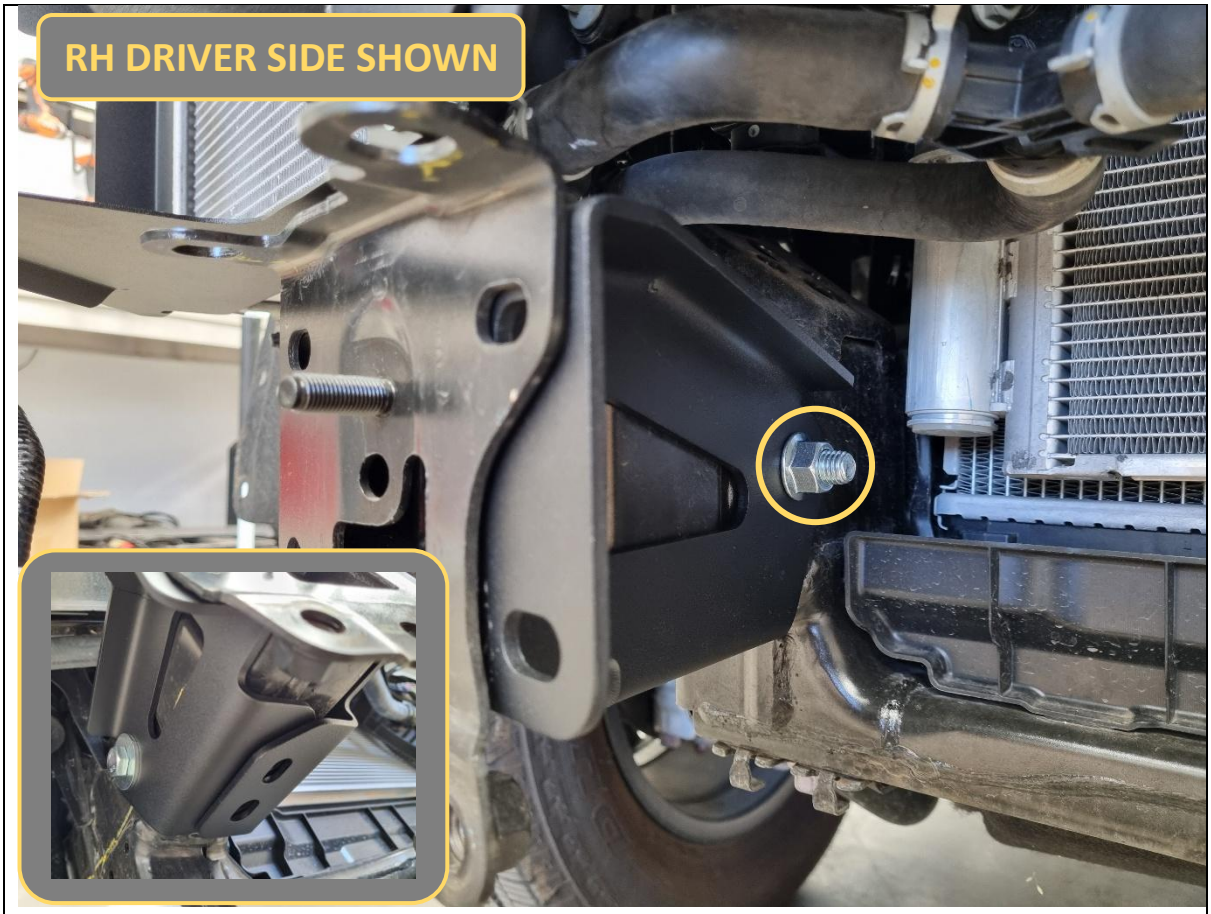
88. Fit 1x M12x100 hex bolt and flat washer to the B-1657 outer chassis support bracket, then slide 1x crush tube onto the bolt on the inner face.

89. Fit the bracket, bolt and crush tube through the hole in the side of the chassis rail from the outside.

TOOLS REQUIRED

FASTENERS

1x M12x100 hex bolt
1x M12 flat washer
1x crush tube



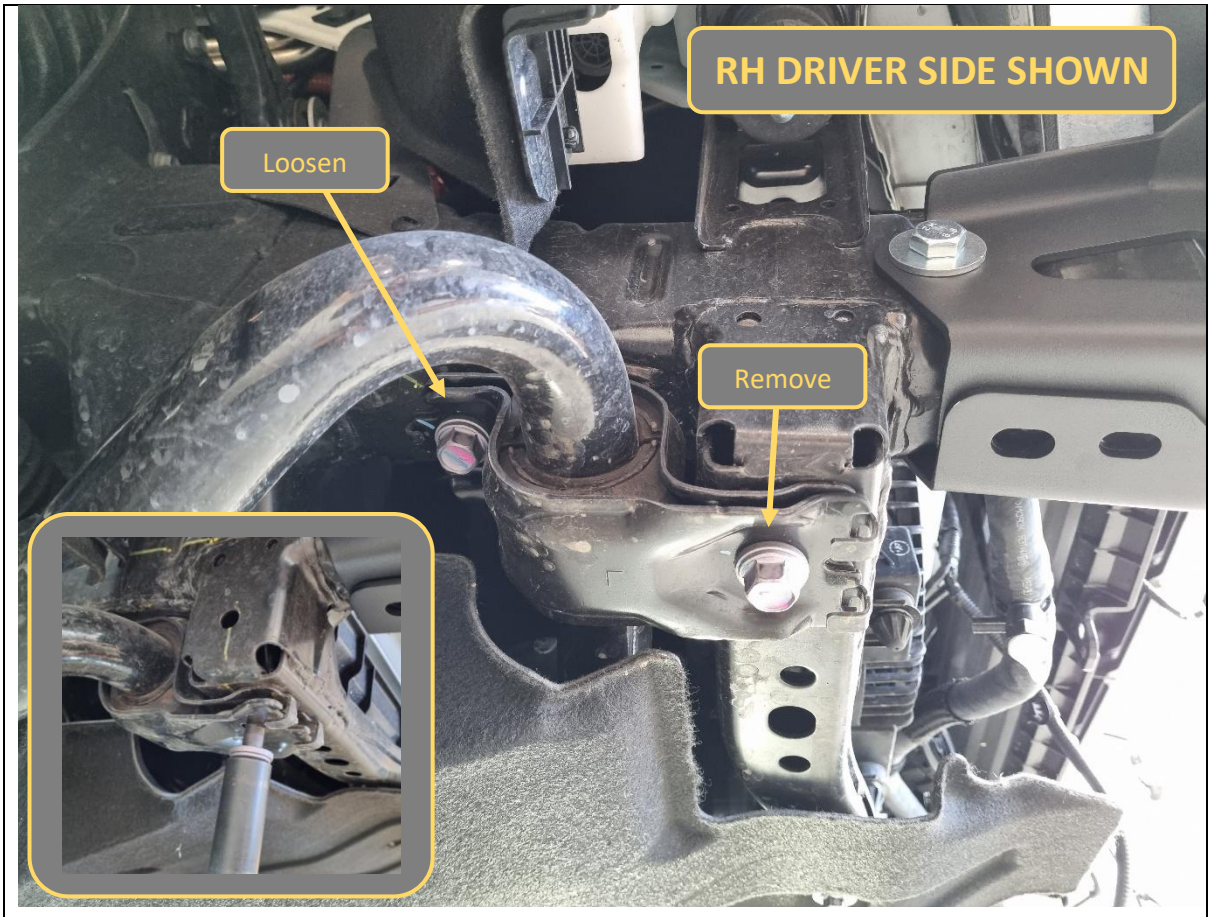
90. Fit the B-1658 inner chassis support bracket to the chassis rail from the inside. Loosely secure to the M12x100 hex bolt with 1x M12 flange nut.

Note: Inner bracket sits over the outer bracket when viewed from underneath (see inset photo).

TOOLS REQUIRED

FASTENERS

1x M12 flange nut

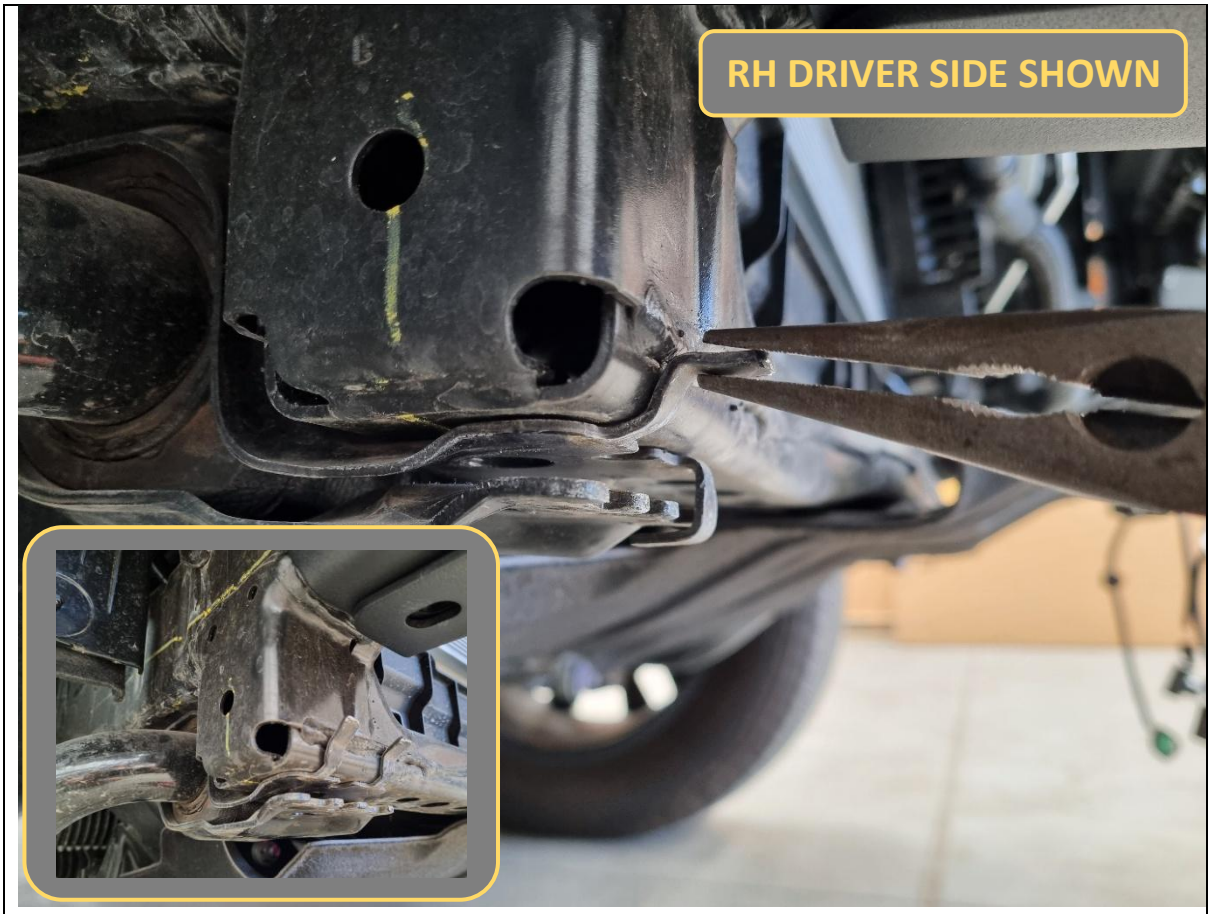


91. Remove the front 17mm hex bolt holding the sway bar bracket and loosen the rear 17mm hex bolt.

TOOLS REQUIRED

17mm socket/spanner

FASTENERS

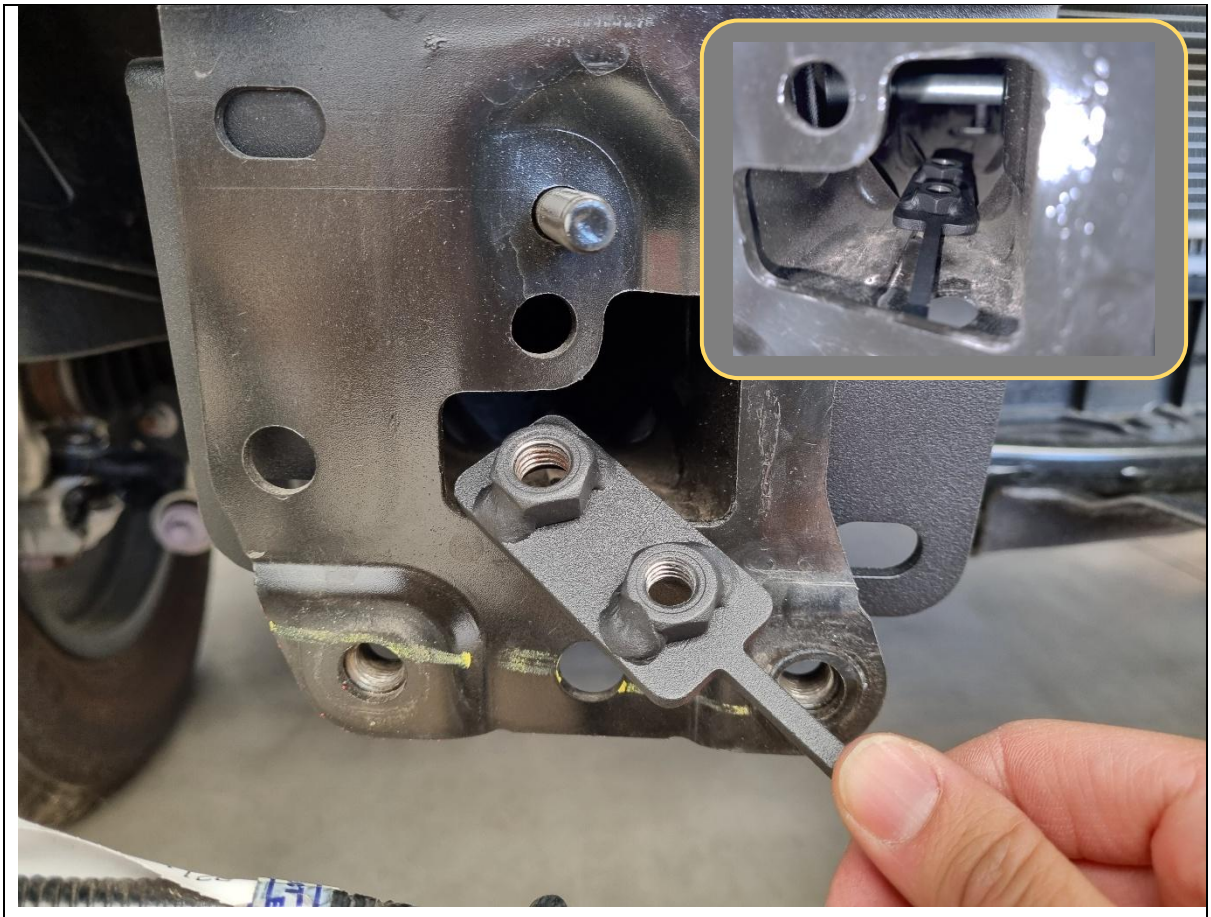


92. Use pliers and/or a hammer and bend the 2x metal prongs of the sway bar bracket up in front out of the way.

TOOLS REQUIRED

Pliers
or
Hammer

FASTENERS

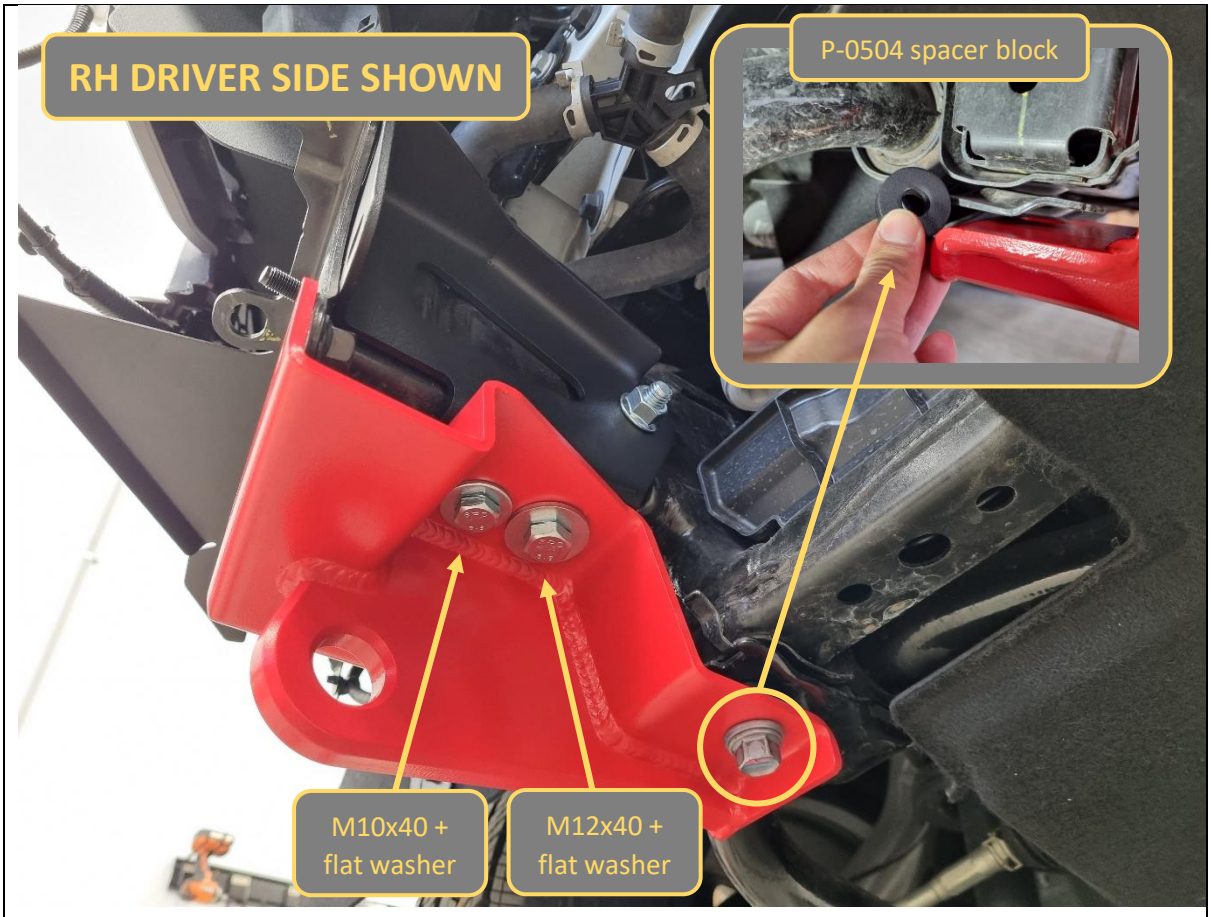


93. Insert the dual nutplate through the opening in the front of the chassis rail and position it over the 2x holes on the bottom face.

TOOLS REQUIRED

FASTENERS

1x Dual nutplate



94. Fit the tow point to the bottom of the chassis rail.

95. Loosely secure through the chassis support brackets and into the nutplate from the previous step with 1x M10x40 hex bolt + flat washer and 1x M12x40 hex bolt + flat washer.

96. At the rear, insert 1x P-0504 10mm thick spacer block between the tow point and sway bar bracket, then loosely re-fit the factory 17mm hex bolt from Step 91.

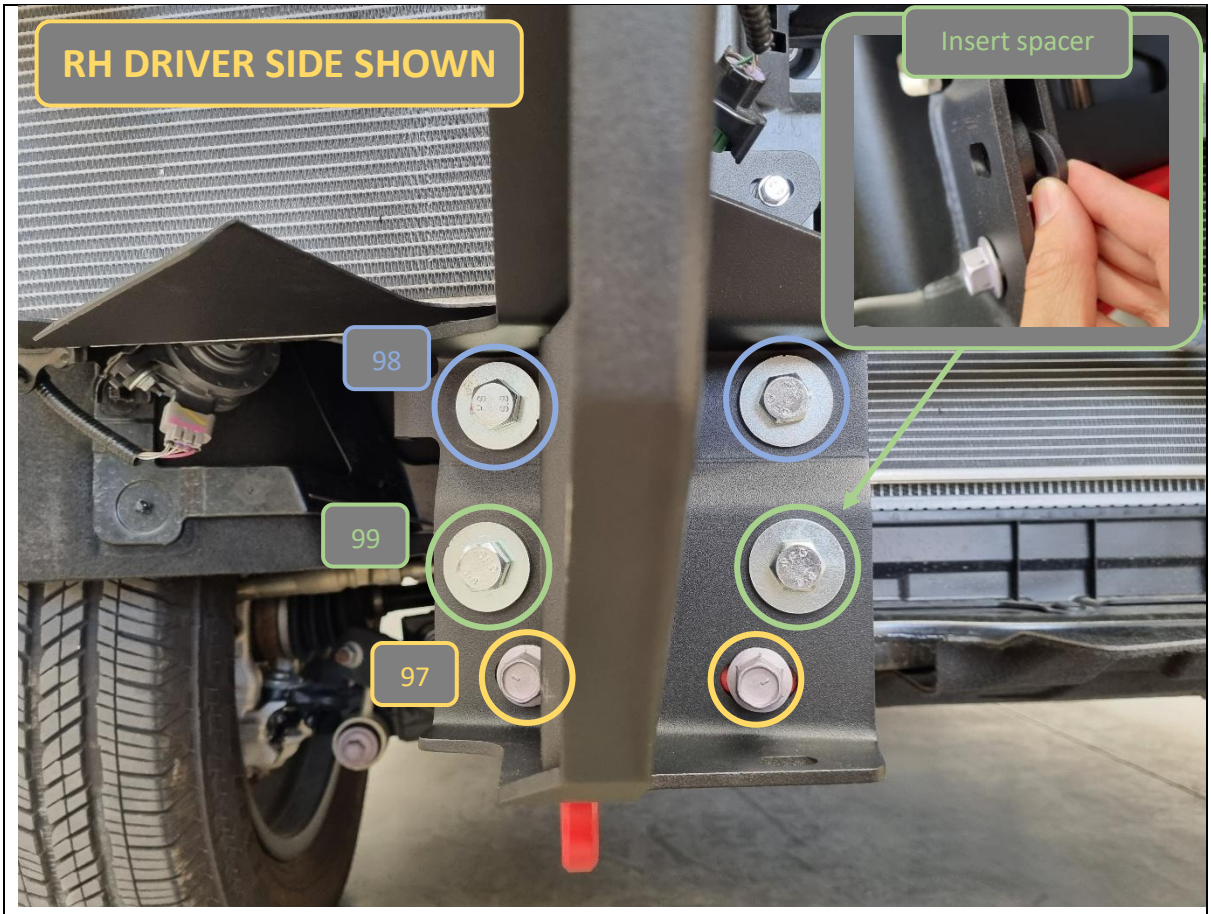
    Note: Thread is fine pitch and easy to cross thread. Take care and only fit the bolt by hand, no power tools at this stage.

TOOLS REQUIRED

FASTENERS

1x M10x40 hex bolt
1x M10 flat washer
1x M12x40 hex bolt
1x M12 flat washer

1x factory 17mm hex bolt
1x P-0504 spacer block



97. Loosely fit the impact assembly to the front of the chassis and secure to the weld nuts through the bottom 2x slots with 2x factory 17mm hex bolts retained from Step 15.

98. Next loosely fit 2x M12x30 hex bolts, flat washers and flange nuts to the top 2x slots.

99. Finally fit 2x M12x40 hex bolts, flat washers and flange nuts to the middle 2x slots.

    Note: For inner bolt, also fit 1x P-0503 4mm thick spacer block between the impact assembly and inner chassis support before installing the bolt (see inset photo).

TOOLS REQUIRED

FASTENERS

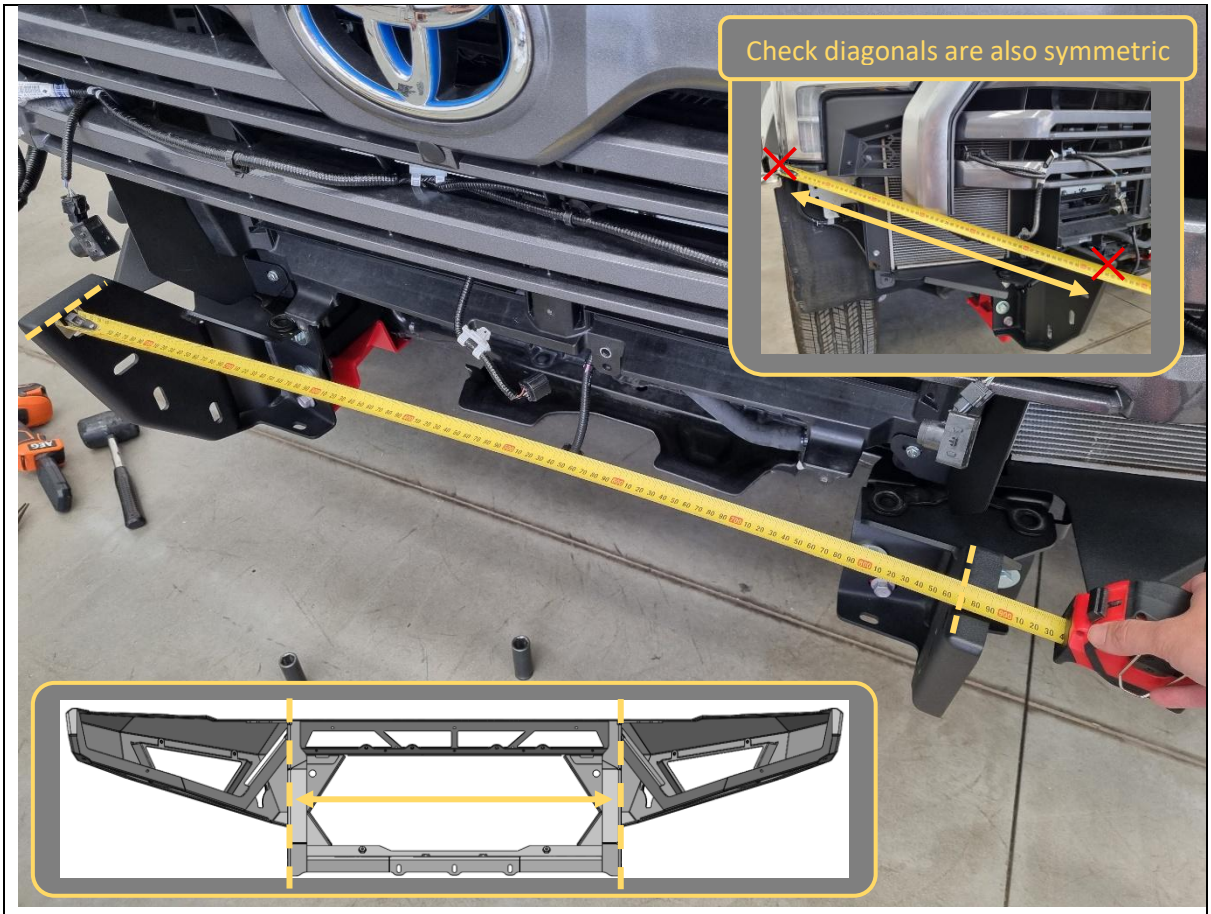
2x factory 17mm hex bolt
2x M12x30 hex bolt
2x M12x40 hex bolt
4x M12 flat washer
1x P-0503 spacer block



100. Repeat installation of chassis support brackets, tow point and impact assembly on other side of vehicle.

TOOLS REQUIRED

FASTENERS



101. 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:

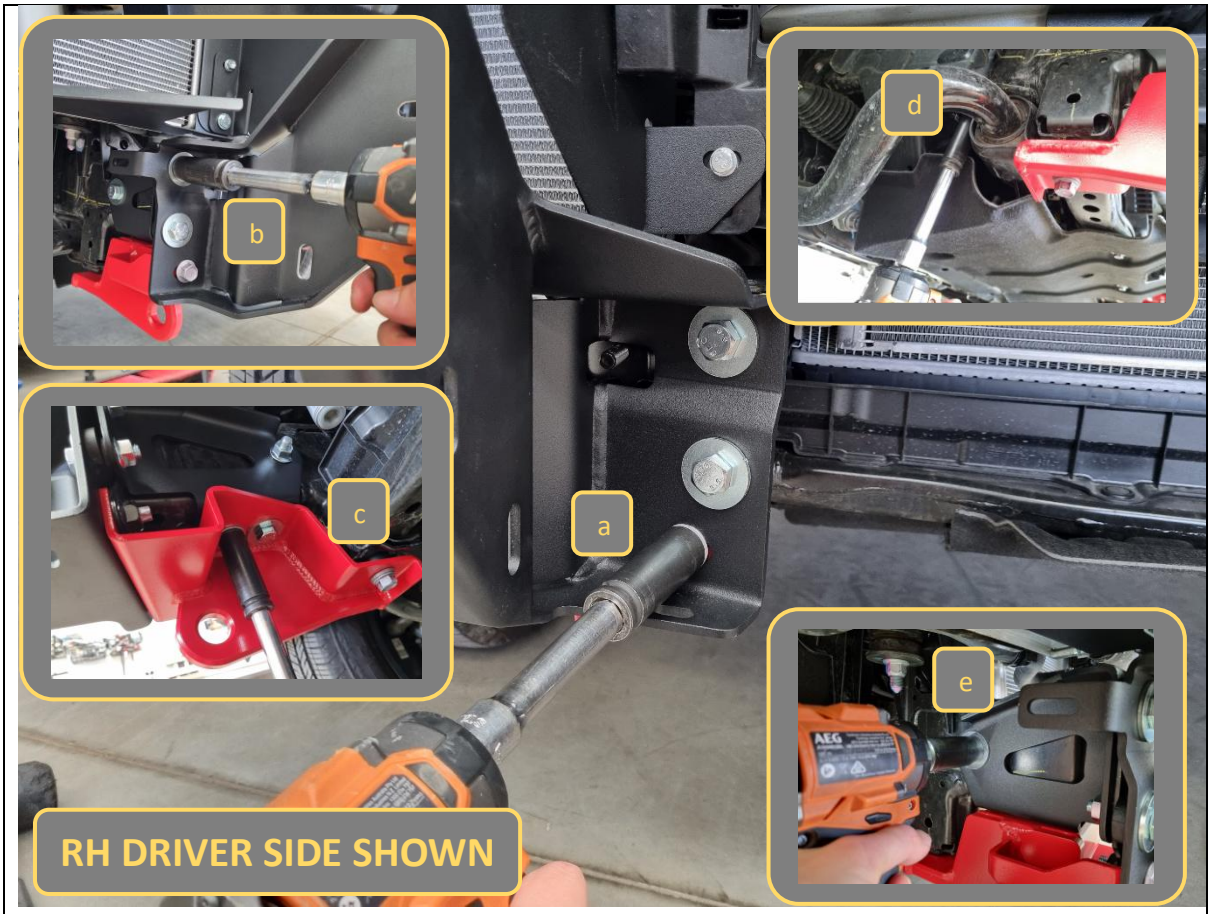
Bar upright width = _____ mm

102. Adjust the impact assemblies by sliding left/right on the slots, such that the distance between the inner mounting faces of the impact assemblies are 2-5mm more than the bull bar distance. Ensure the mount faces are vertically upright and symmetric left/right on the vehicle (measure to the corners of the headlights or similar to check).

TOOLS REQUIRED

Tape measure

FASTENERS



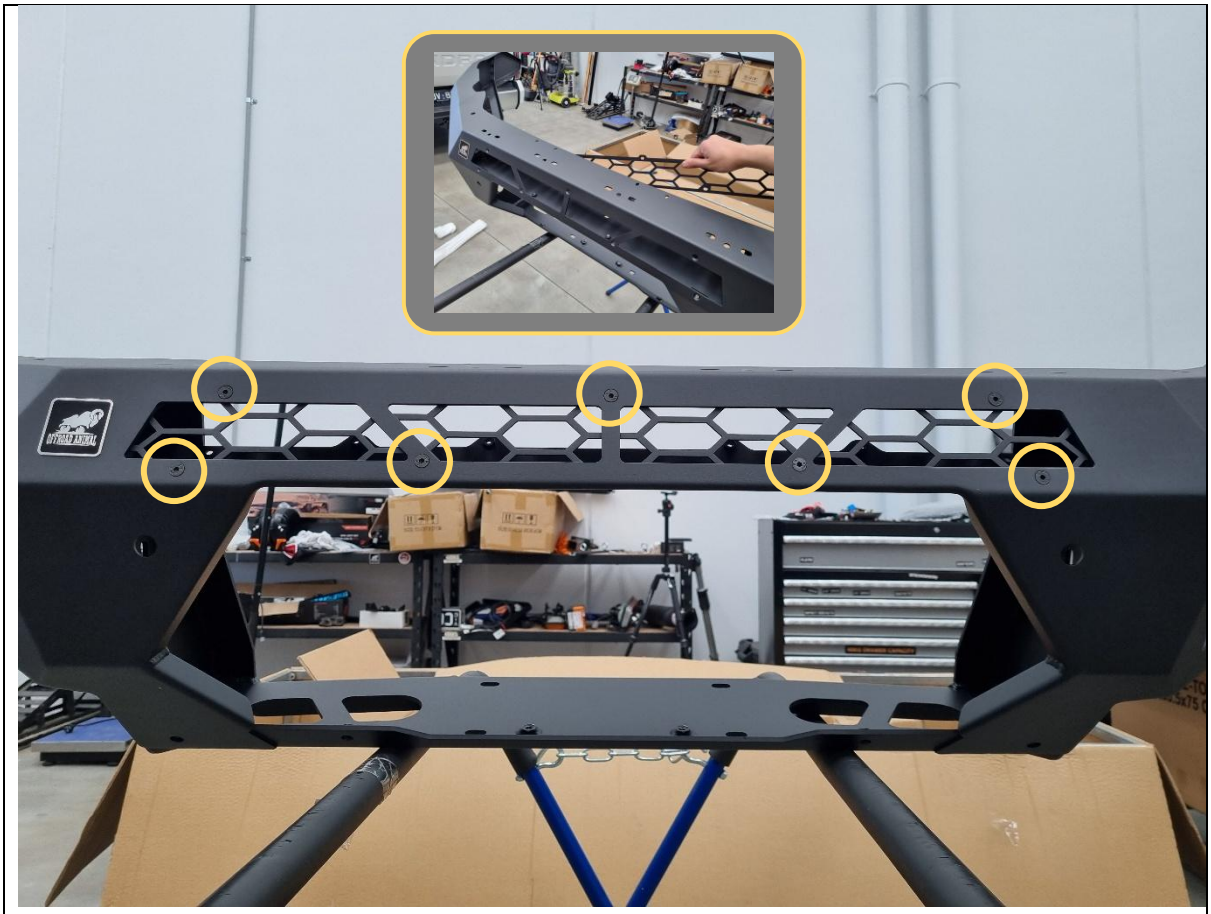
103. Once happy with alignment, tighten all bolts holding chassis support brackets, tow points, impact assemblies and sway bar in the following order:
    a. Front factory 17mm hex bolts
    b. Front M12 bolts (make sure chassis brace pulls up flush to the back of the chassis horn)
    c. Bottom tow point bolts
    d. Rear sway bar bolt
    e. Chassis support bracket side bolt

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

TOOLS REQUIRED

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

FASTENERS



105. Fit the P-0488 light bar mesh infill to the inside of bar, and secure to the front face with 7x M6x12 black countersunk bolts and flange nuts.

TOOLS REQUIRED

4mm hex/Allen key

FASTENERS

7x M6x12 black countersunk bolt
7x M6 flange nut



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

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

Fitment space is tight. Bracket may need to be loose and rotated to be able to pivot the light bar in.

107. This bar can accommodate most other "30-32inch" size single row light bars. Stedi ST3K light bars require legs facing outwards.

TOOLS REQUIRED

Supplied with accessories

FASTENERS

Supplied with accessories



108. 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.

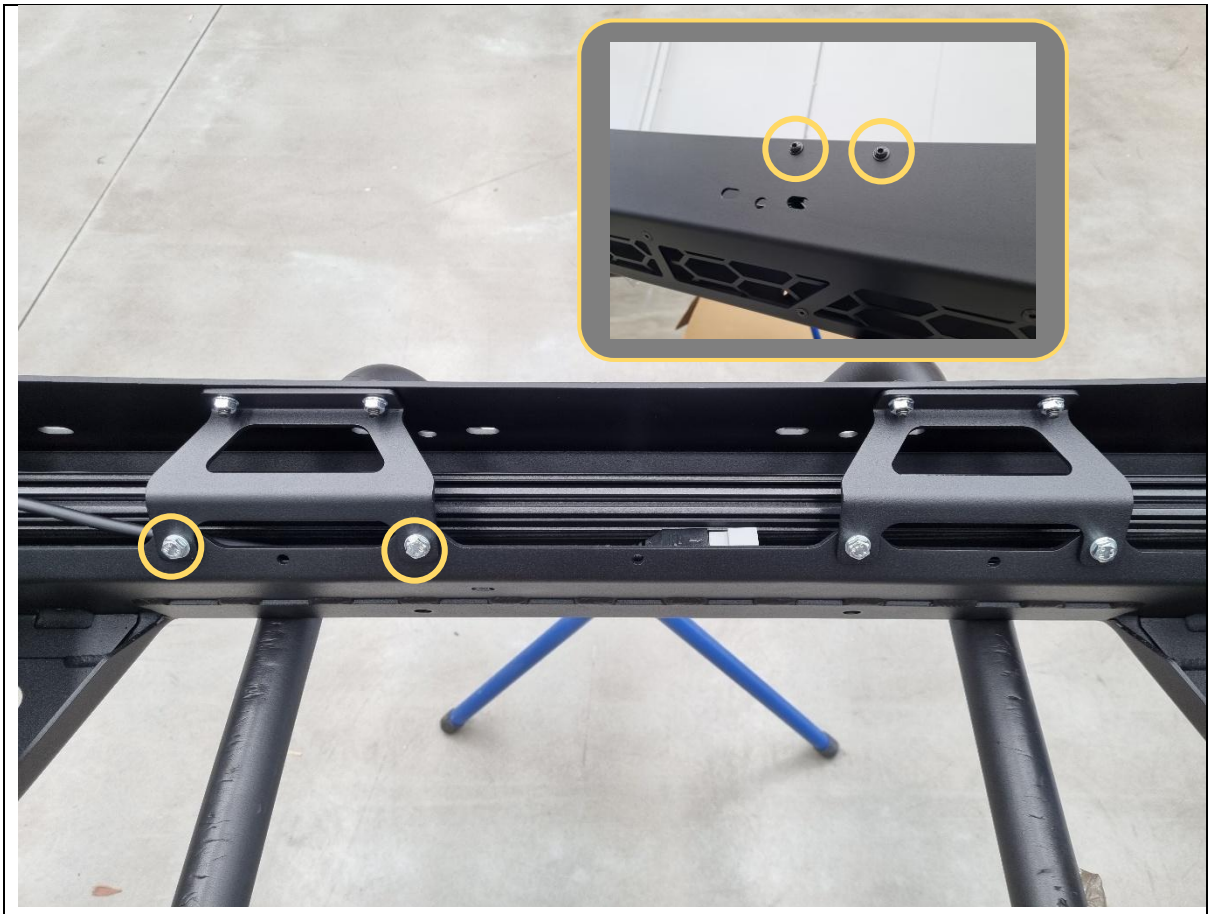
Note: The Tundra Limited and Platinum models sold in Australia use CAN bus for the headlight signals. Offroad Animal can supply a module (sold separately) to connect driving lights to be switched on with high beams.

TOOLS REQUIRED

Supplied with accessories

FASTENERS

Supplied with accessories



109. Fit the pair of pan braces to the back of the light bar mounting area in the bull bar.

110. Secure the bottom of each pan brace to the embedded nuts in the bull bar with 2x M6x12 hex bolts and flat washers.

111. Secure the top of each pan brace to the bull bar with 2x M6x16 black button head bolts and black 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



112. Fit 10x M6 'normal' cage nuts into the rectangular slots in bottom of wing (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 nut



113. Unplug all 4x parking sensors from the bumper loom.

Note down which plug goes where (inner or outer) with masking tape or similar.

TOOLS REQUIRED

FASTENERS



114. Clean the mounting surfaces of the 4x supplied F-0022 parking sensor holders and the corresponding mounting locations on the inside of the bull bar with isopropyl alcohol or similar and let it dry.

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

TOOLS REQUIRED

FASTENERS



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

116. Apply supplied 3M VHB tape from the universal parking sensor tape kit to the F-0022 parking sensor holders as shown.

117. Clip the parking sensors into the sensor holders.

TOOLS REQUIRED

FASTENERS



118. 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.

    Ensure the sensor plug orientation matches the installation in the factory bumper.

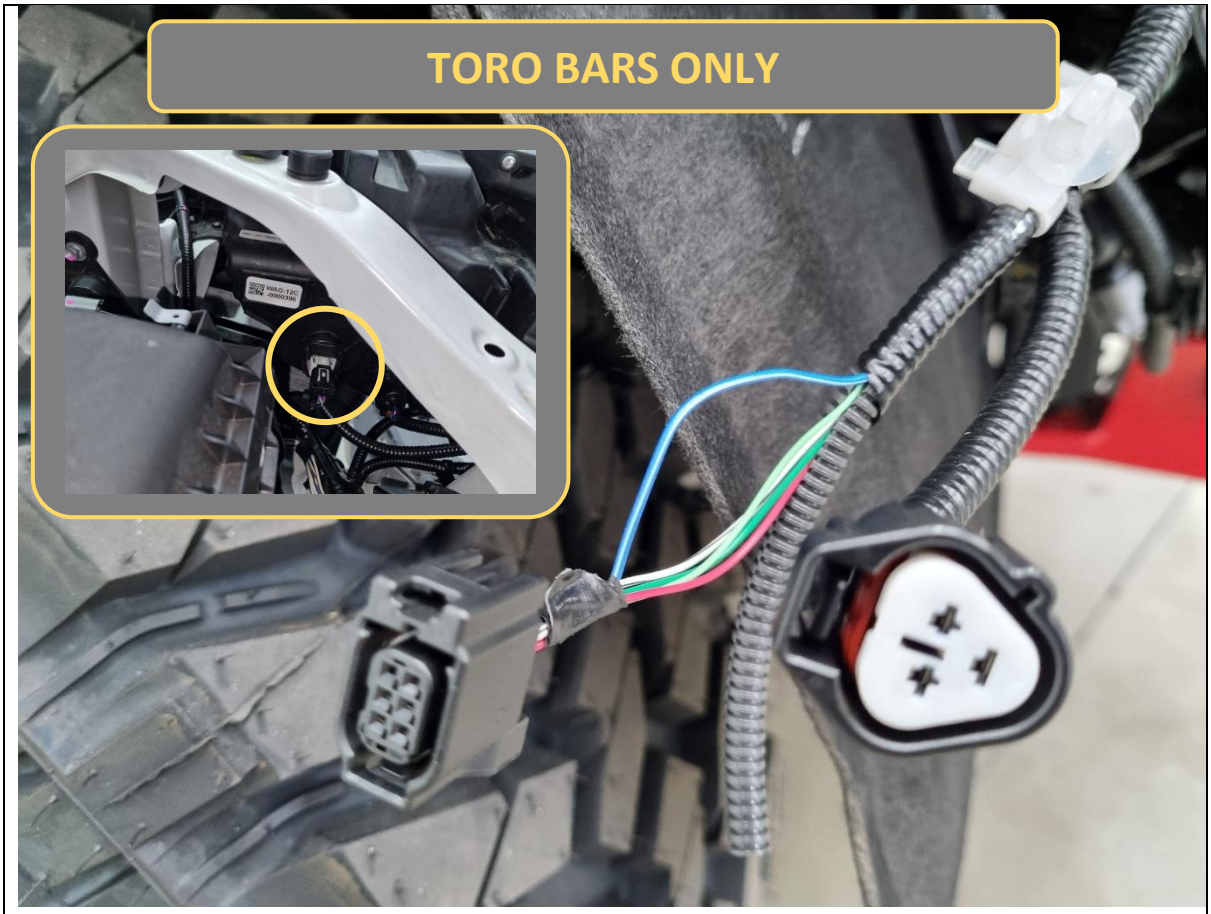
119. Add a pea-sized blob of automotive adhesive sealant (we recommended Sikaflex 227) over the sensor holders and inside face of bar to hold to ensure the tape holds position.

TOOLS REQUIRED

Utility knife

Automotive adhesive sealant (eg. Sikaflex)

FASTENERS



Toro bars come with indicator lamps and need to be wired up.

120. **Toro only.** Locate the plug on the back of each headlight and disconnect (and unplug headlight levelling motor and unclip loom for better access).

121. **Toro only.** Probe with a test light to confirm indicator signal. Use the hazard light switch instead of turning the ignition on since the radar and camera are still disconnected.

The pin location on LH and RH headlight plugs are the same, but wire colours are different.

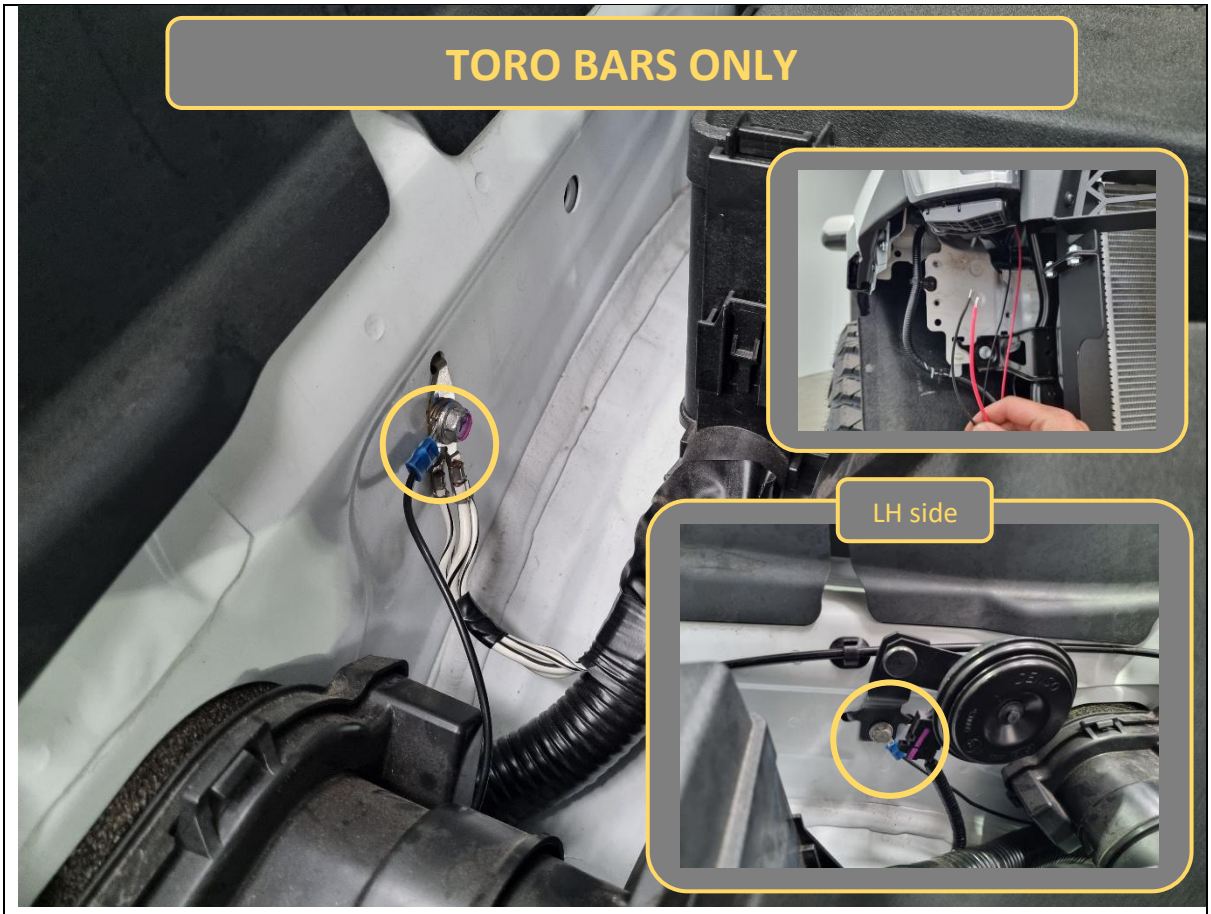
RH side should be medium blue with a light blue trace.
LH side should be medium blue with a grey trace.

122. **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



123. **Toro only.** The indicators will need to be grounded to points in the engine bay.

124. **Toro only.** Locate the grounding point on each side of the engine bay next to the airbox (LH side also has the horn) and fit the ground wire with a ring terminal crimped on the end.

125. **Toro only.** Route both signal and ground wires to underneath the front of headlights to connect up to the bull bar later.

TOOLS REQUIRED

10mm socket/spanner
Crimping tool
Ring terminals
Automotive electrical wire

FASTENERS



126. **Toro only.** Fit the supplied indicator repeater lamps to the wing mesh panels. Use the double sided tape pad, then 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



127. Fit the wing meshes to the inside of the bull bar wings and secure each one to the embedded nuts with 4x M6x12 hex bolts and flat washers.

TOOLS REQUIRED

10mm socket/spanner

FASTENERS

8x M6x12 hex bolt
8x M6 flat washer



As of Nov 2025, Tundra Limited and Platinum models sold by Toyota Australia have factory fog lights deactivated at the ECU level. Therefore, the bull bar is not compatible with fog lights.

128. **Optional.** Each wing mesh can support up to 2x cube lights or 1x 8” single row light bar. Fit these now to the wing meshes.

Note: The wing mesh opening is also a main source of airflow/cooling for the intercoolers. If intending to do heavy towing with the vehicle, it is recommended to leave this area empty for maximising cooling performance.

TOOLS REQUIRED

Refer to instructions supplied with lights

FASTENERS

Supplied with lights



129. Fit the B-1671 air guides to the inside of the bull bar wings, next to the wing mesh. Secure each one with 2x M6x12 hex bolts, flat washers and flange nuts.

TOOLS REQUIRED

10mm socket/spanner

FASTENERS

4x M6x12 hex bolt
4x M6 flat washer
4x M6 flange nut



130. **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.

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

TOOLS REQUIRED

5mm hex/Allen key

FASTENERS

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



132. 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.

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

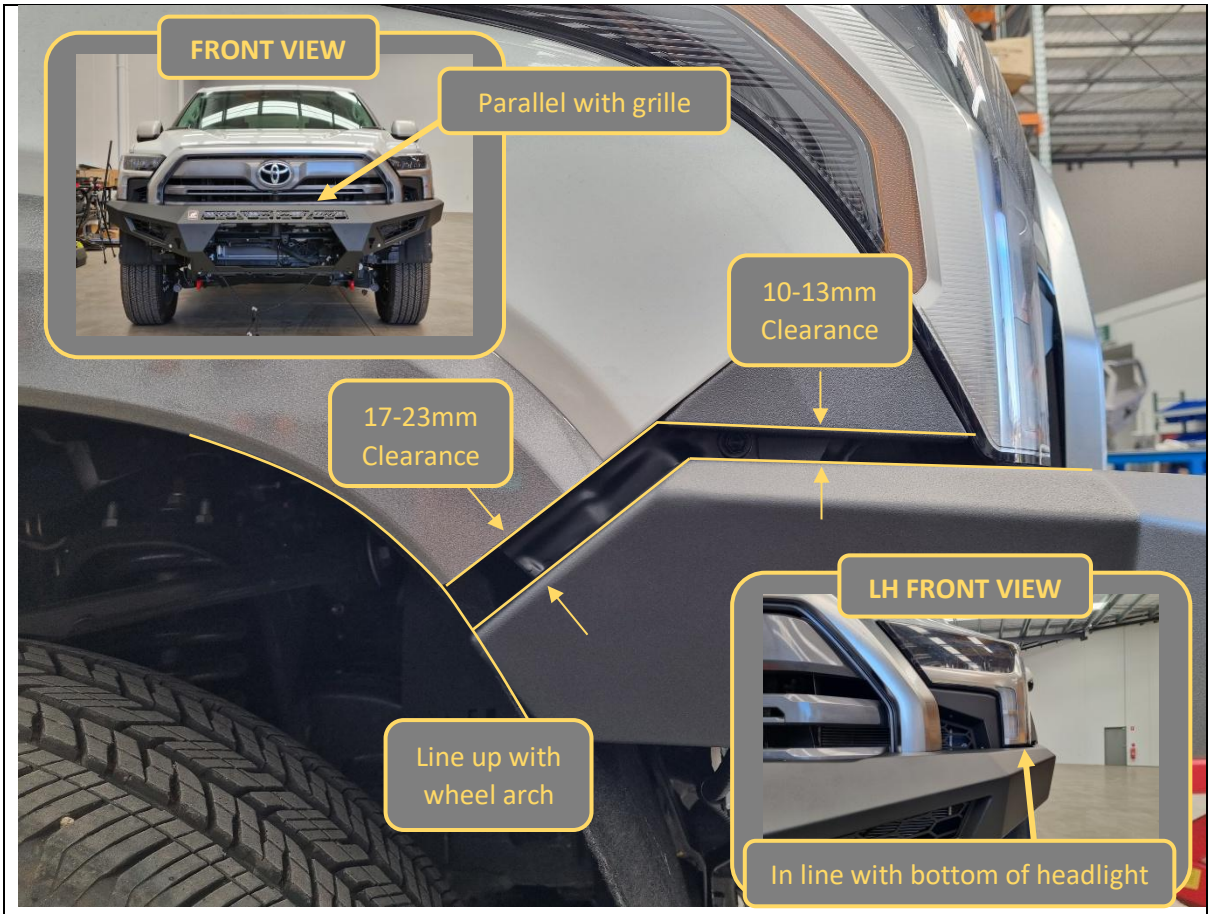
Note: Use a washer on both bolt and nut side for the Nyloc nut. 1x Nyloc required per side of the bar. 1x washer on the bolt side is all that is required with flange nuts.

TOOLS REQUIRED

Lifting trolley

FASTENERS

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



134. 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 and parallel with the grille. The wings of the bull bar should be in line with the bottom of the headlights.

Side view: The end of the bar wing should be in line with the wheel arch liner. The back of the wing should be parallel to the quarter panel, with 17-23mm clearance. The top of the wing should be parallel to the bumper infill, with 10-13mm clearance.

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

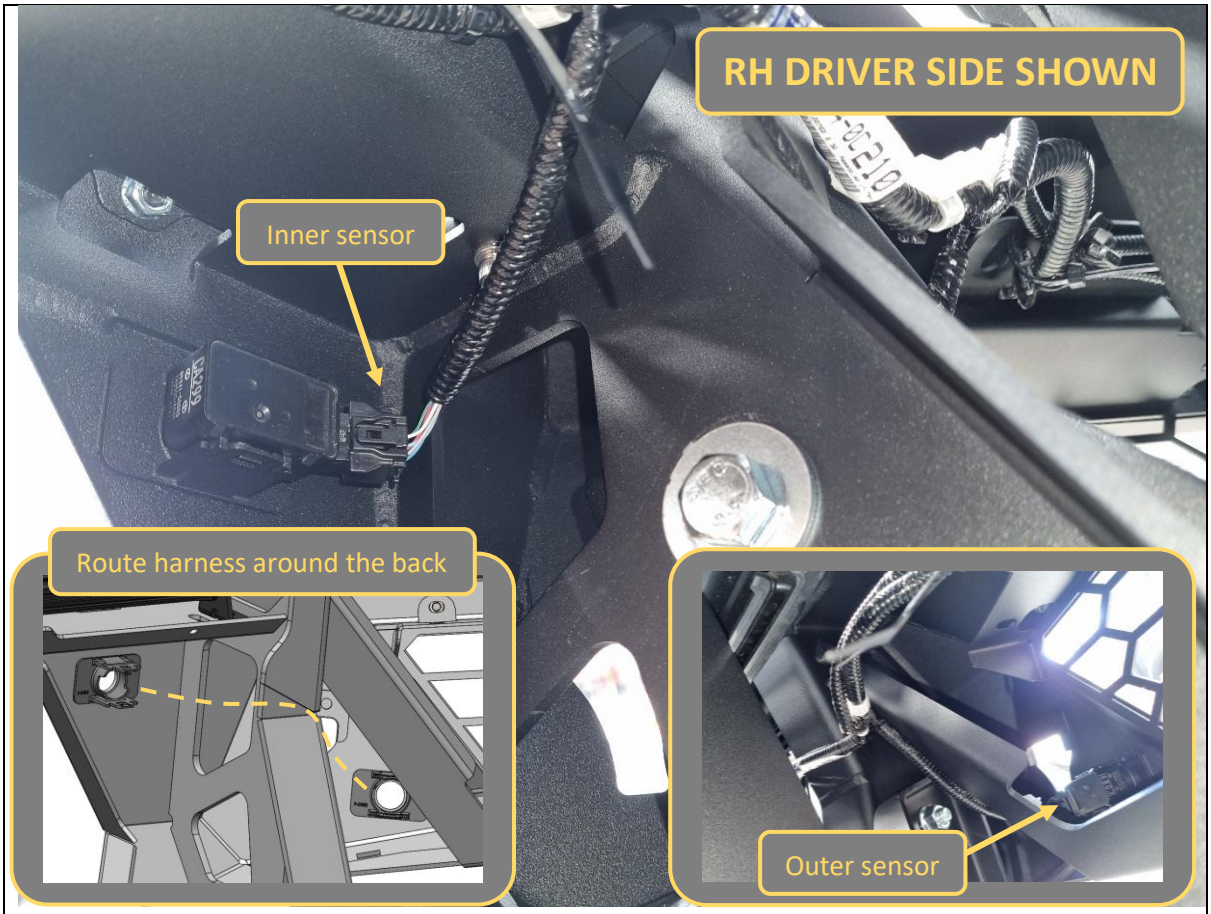
135. Once happy with alignment, tighten all 8x M12 bolts.

TOOLS REQUIRED

Lifting Trolley

18/19mm socket/spanner

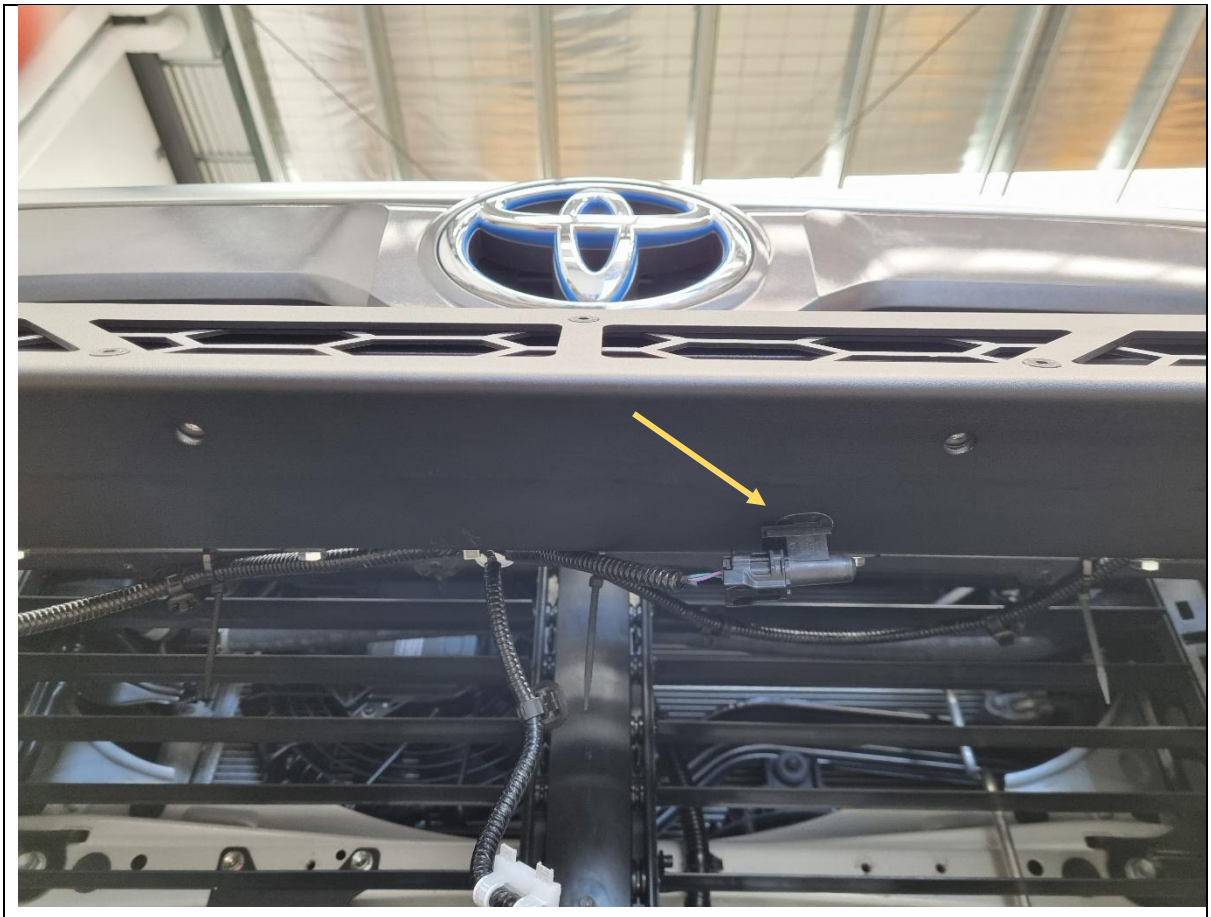
FASTENERS



136. Route the bumper harness either side around the back of the bull bar uprights and plug in the connectors to the 4x parking sensors.

TOOLS REQUIRED

FASTENERS



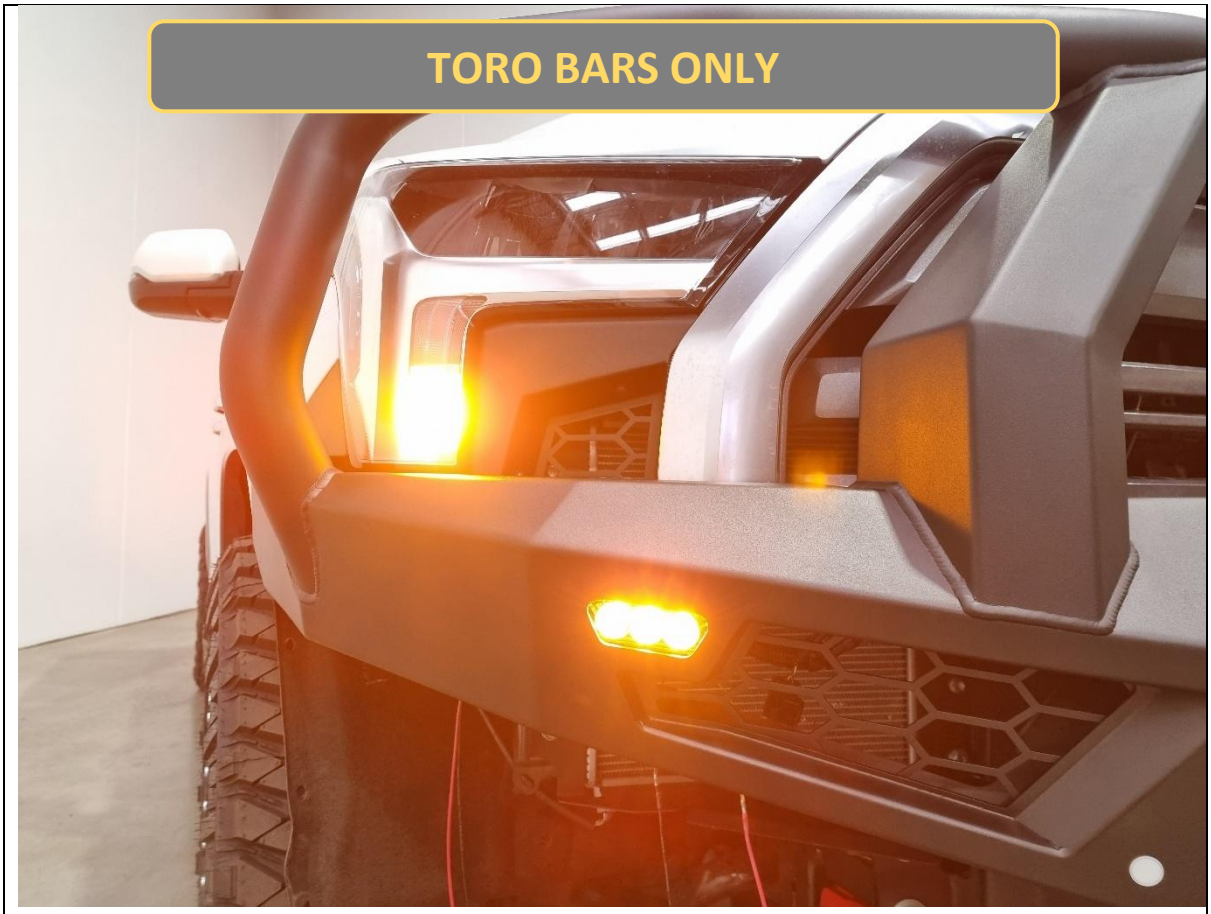
137. Clip in the air temperature probe to the slot underneath the centre of the light bar mounting area.

138. Tidy up harness routing and cable tie to the bar/grille. Ensure there is a little bit of slack everywhere to account for vibrations/movements.

TOOLS REQUIRED

Cable ties

FASTENERS

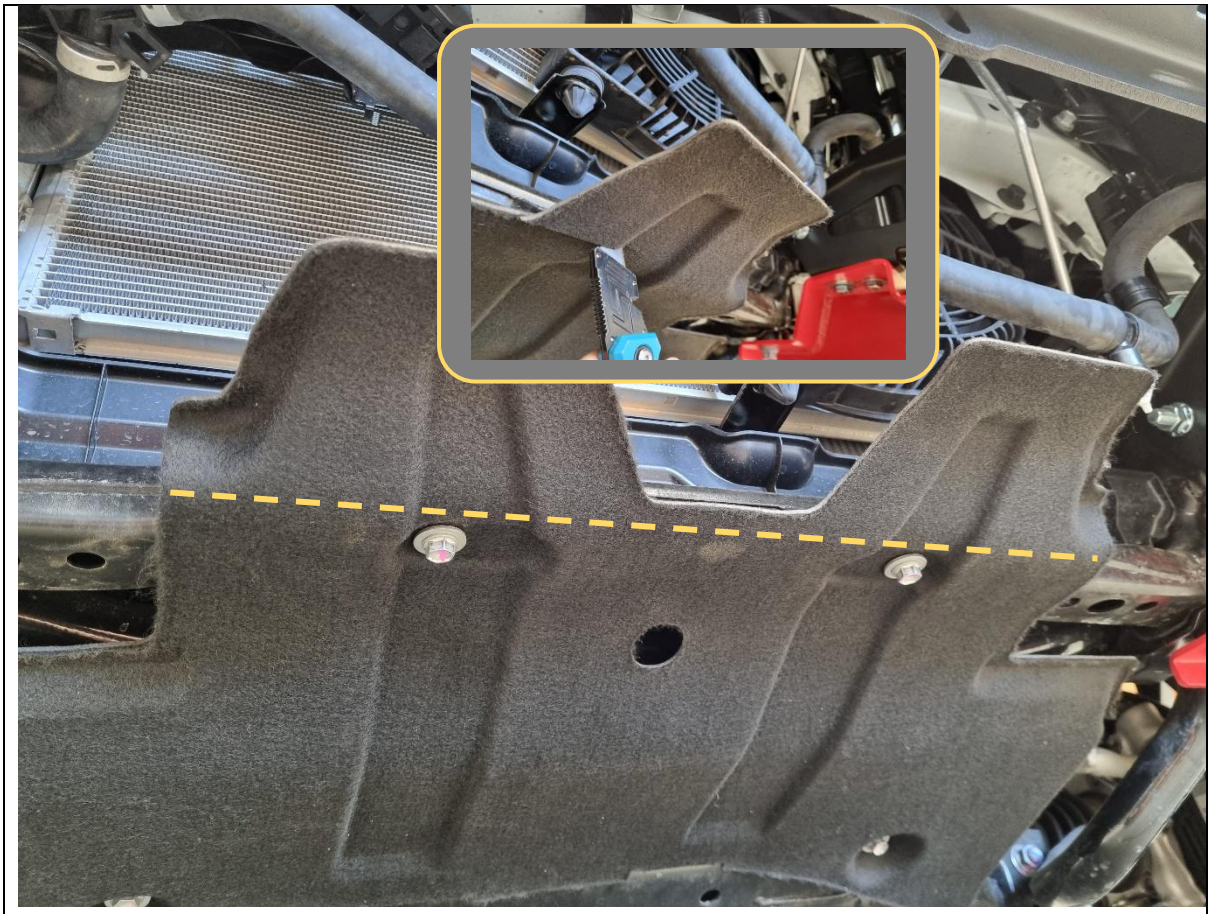


139. **Toro only.** Connect the indicator repeater lamps to the signal/ground wires from earlier (solder/crimp together, ensure well insulated). Refer to packaging on indicator lamps for pinout.

140. **Toro only.** Confirm function of indicators by turning on the hazard lights. <u>Do not turn the ignition on yet since the radar and camera are still disconnected.</u>

TOOLS REQUIRED

FASTENERS



141. Using a utility knife, trim off the front of the felt splash shield along the line shown.

TOOLS REQUIRED

Utility knife

FASTENERS



142. Remove the 2x 12mm hex bolts holding the front of the splash shield.

143. Fit the back of the B-1672 winch strap in between the splash shield and chassis cross member, then secure re-using the 12mm hex bolts.

144. Fit the front of the winch strap to the back lip of the bull bar winch cradle and secure with 3x M10x30 hex bolts, flat washers and flange nuts.

TOOLS REQUIRED

12mm socket/spanner
16/17mm socket/spanner

FASTENERS

2x factory 12mm hex bolt

3x M10x30 hex bolt
3x M10 flat washer
3x M10 flange nut



145. Fit the U-0119 lower splash guard to the winch strap and secure to the embedded nuts with 4x M8x20 button head bolts and flat washers.

TOOLS REQUIRED

5mm hex/Allen key

FASTENERS

4x M8x20 button head
4x M8 flat washer



146. If fitting a winch, do so now.

Ensure the radar harness does not get squished.

This bar is designed to fit most low mount winches, in foot down configuration. Carbon Scout Pro 15,000lb 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.

Note: The battery on the Tundra is located under the LH rear passenger seat. Extension cables will be required to power up the winch.

TOOLS REQUIRED

FASTENERS



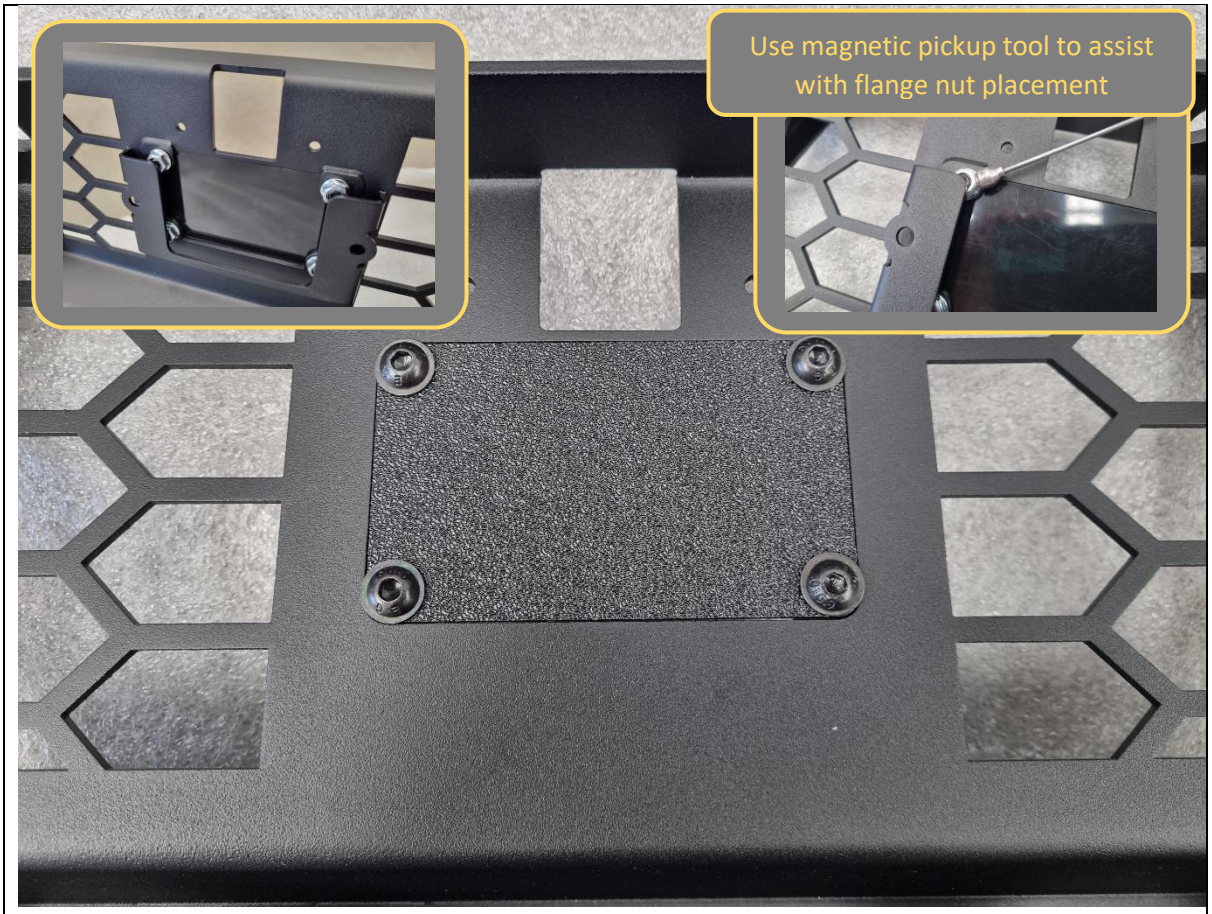
147. If fitting a winch, fit the hawse fairlead to the centre mesh now using M10 or 3/8” fasteners supplied with the winch. This bar is only compatible with hawse type fairleads.

TOOLS REQUIRED

Refer to instructions supplied by winch

FASTENERS

Supplied with winch



148. Fit the N-0017 plastic radar cover to the open window in the centre mesh, textured face on the outside.

149. Secure using 4x M6x12 black button head bolts, black washers and flange nuts.

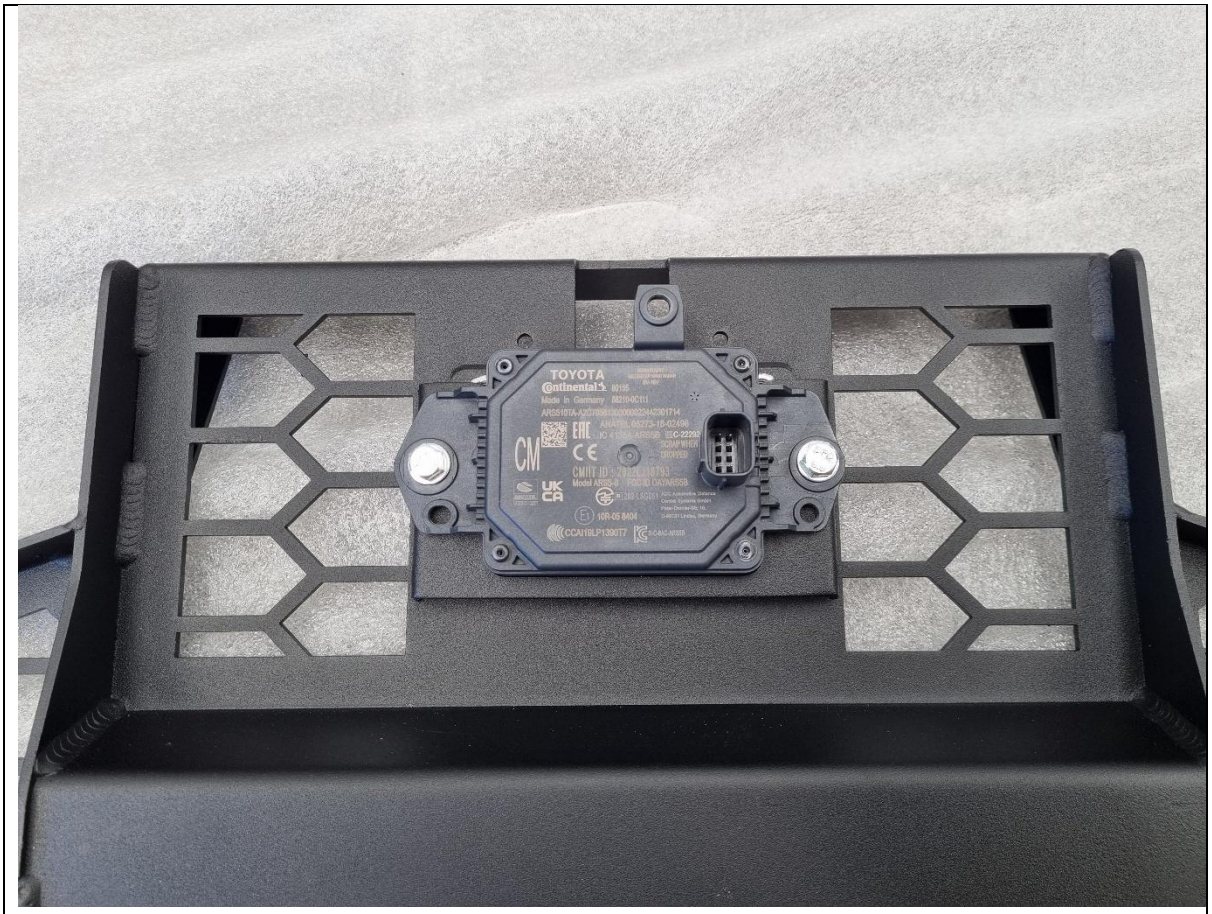
    It is recommended to use a magnetic pickup tool or similar to assist with flange nut placement.

TOOLS REQUIRED

4mm hex/Allen key
Magnetic pickup tool

FASTENERS

4x M6x12 black button head
4x M6 black washer
4x M6 flange nut



150. Fit the radar to the back of the centre mesh in the orientation shown.

151. Secure with 2x M6x12 hex bolts, flat washers and flange nuts.

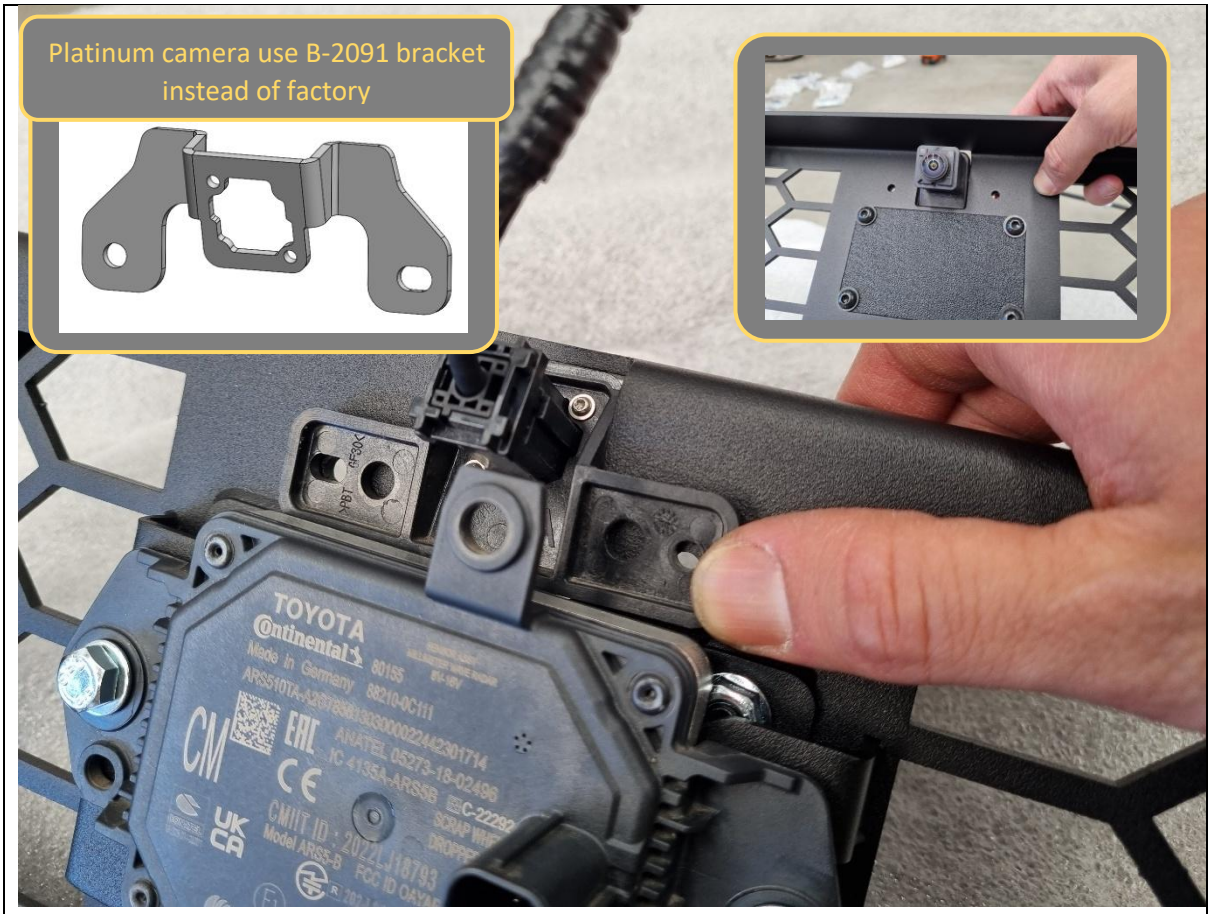
Again, it is recommended to use a magnetic pickup tool or similar to assist with flange nut placement.

TOOLS REQUIRED

10mm socket/spanner
Magnetic pickup tool

FASTENERS

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



152. Insert the camera through the back of the opening at the top of the centre mesh and line up with the holes.

NOV 2026 UPDATE: Platinum models have a factory bracket with holes in a different location, which won't line up with the centre mesh.

Remove the camera from the factory bracket and attach it a to the B-2091 Platinum camera relocation bracket instead. Use the small factory T6 Torx fasteners.

TOOLS REQUIRED

FASTENERS



153. Fit the B-1661 camera housing to the front of the centre mesh, then secure the camera to the embedded nuts in the housing with 2x M4x12 hex bolts and flat washers.

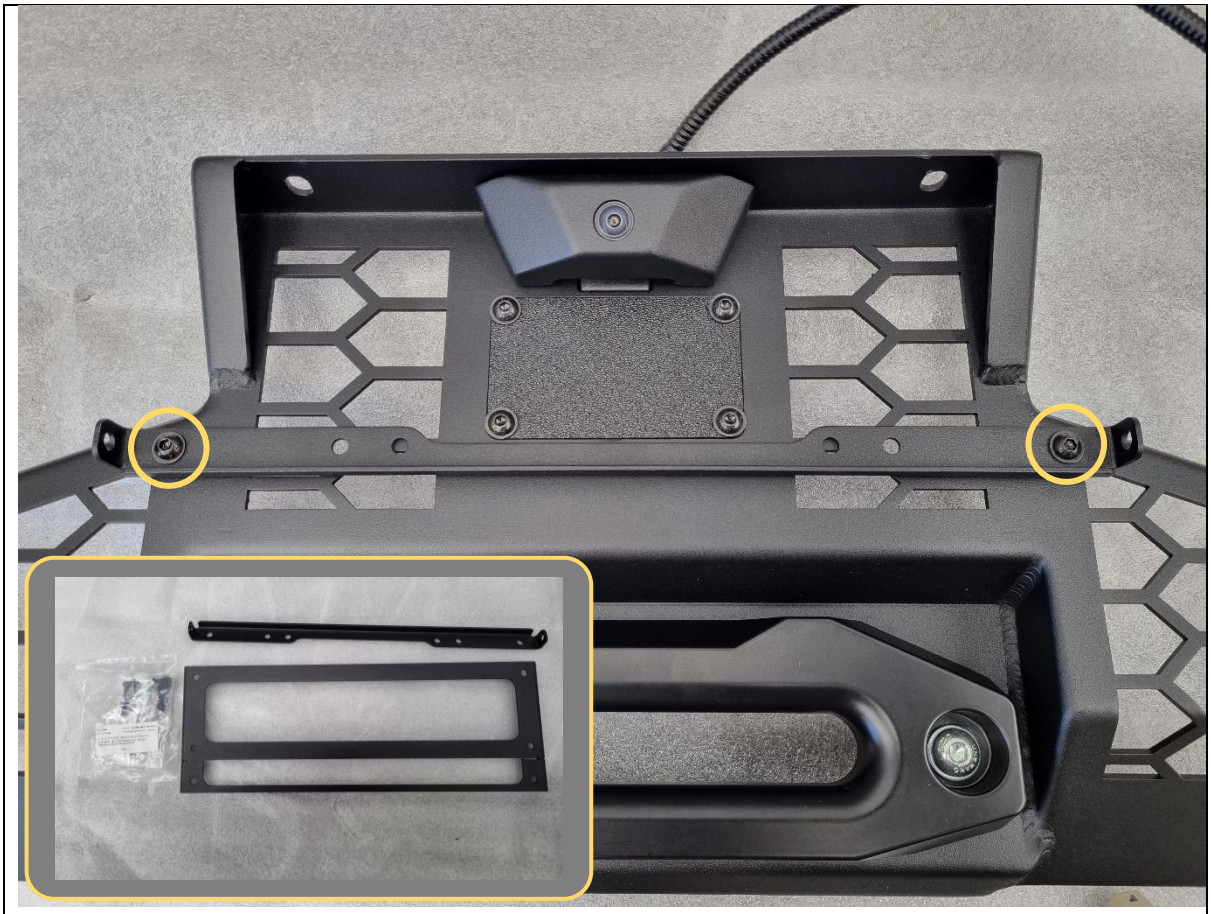
Note: Back of camera bracket is recessed so a spanner won't work. 7mm socket is required.

TOOLS REQUIRED

7mm socket

FASTENERS

2x M4x12 hex bolt
2x M4 flat washer



Locate the number plate flip brackets and fastener kit.

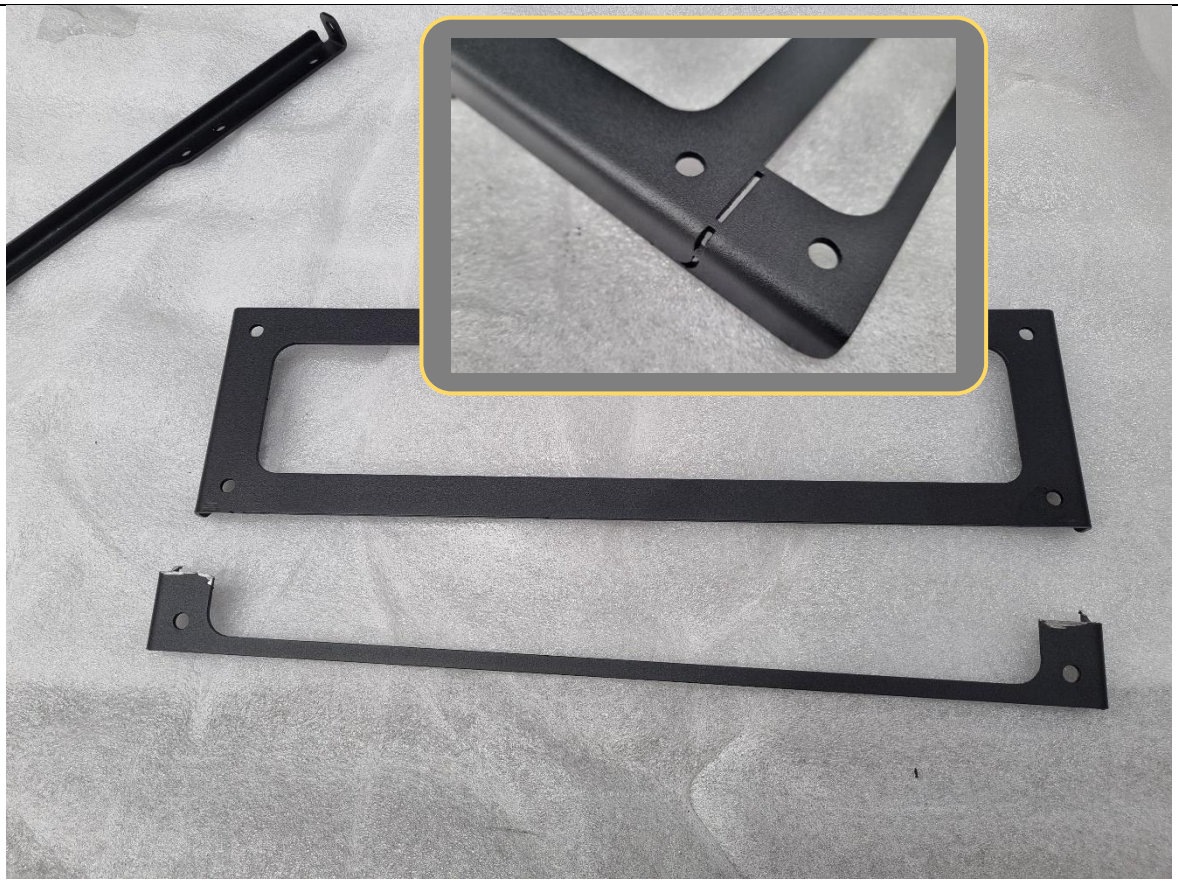
154. Fit the base bracket to the centre mesh and secure with 2x M6x16 black button head bolts, black washers and flange nuts.

TOOLS REQUIRED

4mm hex/Allen key

FASTENERS

2x M6x16 black button head bolt
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.

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

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

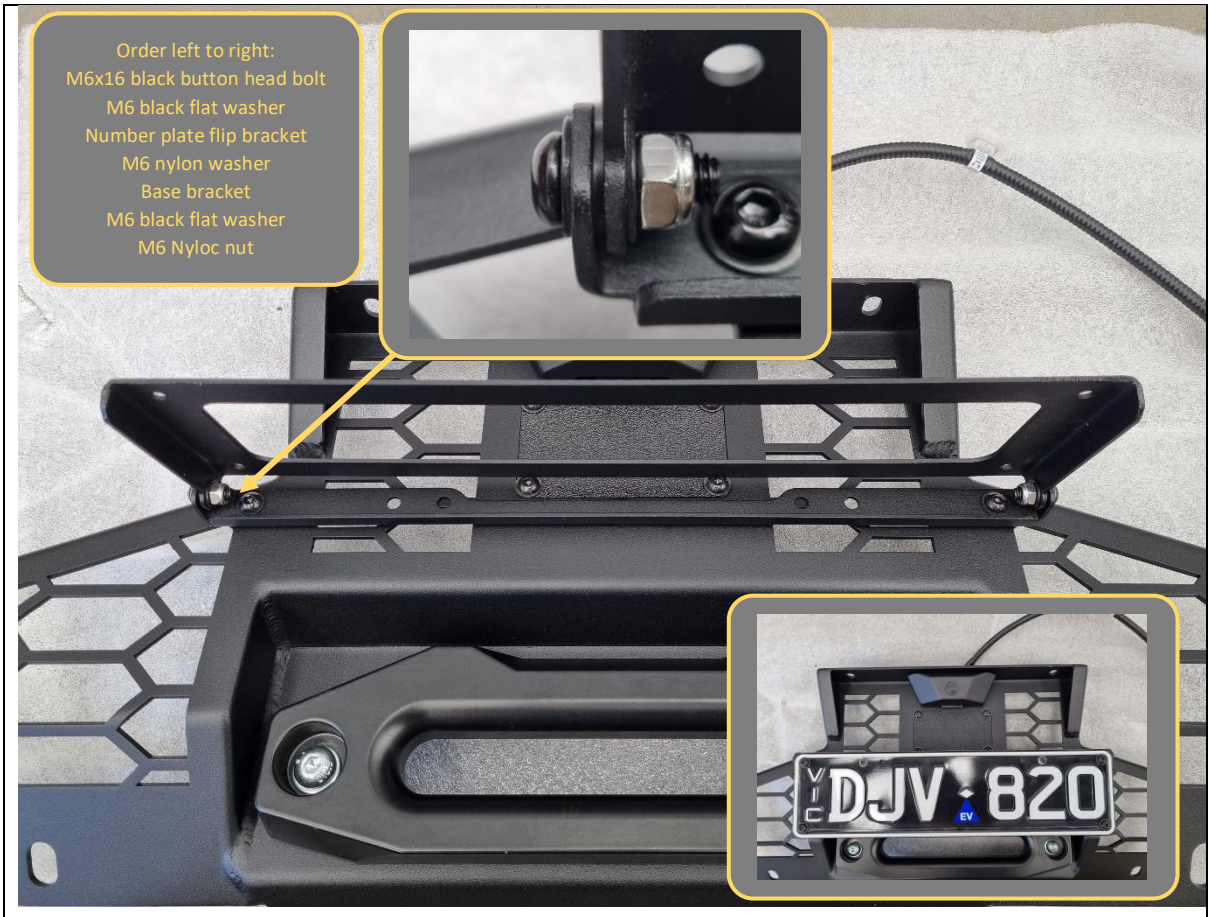
TOOLS REQUIRED

Angle grinder

Deburring tool

Black spray paint

FASTENERS



157. 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.

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

TOOLS REQUIRED

4mm hex/Allen key
10mm spanner

FASTENERS

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



159. 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.

160. Connect the radar to the bumper harness.

161. Secure the centre mesh to the bar using 2x M8x16 black button head bolts + black washers (top), 2x M8x20 hex head bolts + flat washers (bottom).

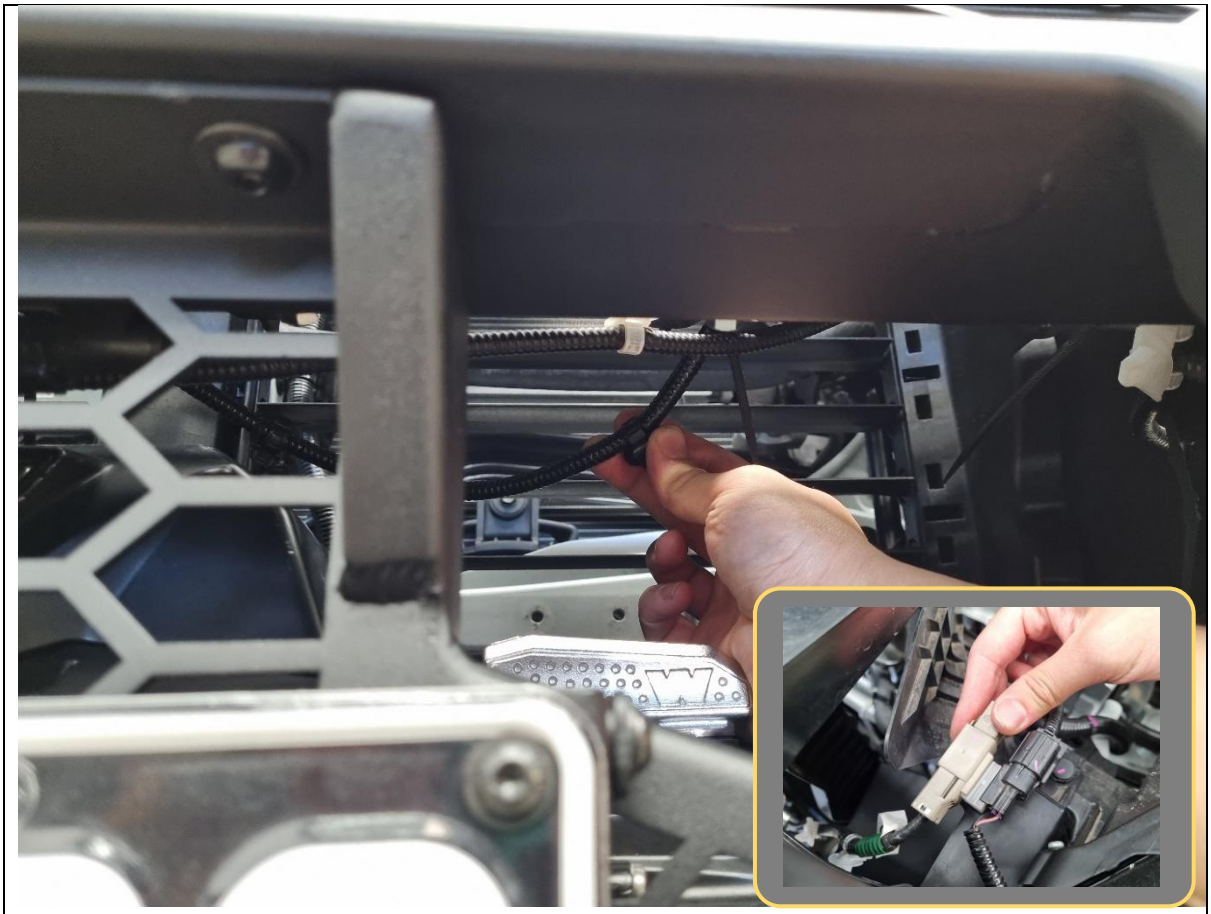
TOOLS REQUIRED

13mm socket/spanner
5mm hex/Allen key

FASTENERS

2x M8x16 black button head
2x M8 black washer

2x M8x20 hex head
2x M8 flat washer



162. Route the camera harness up behind the grille and reconnect to the main harness at the top.

Note: Ensure the harness does not pass through the AGS louvres otherwise the cable will get squished.

163. Once all the parking sensor, radar and camera cables are connected, turn the car on to test the operation of the camera and parking sensors.

TOOLS REQUIRED

FASTENERS



164. Peel off the backing film and affix the ADR compliance plate to the inside of bash plate.

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

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

167. Secure to the impact assemblies at the rear with 2x M10x25 button head bolts, flat washers and flange nuts.

    Reach in through the centre winch opening to fit the flange nut (see inset photo).

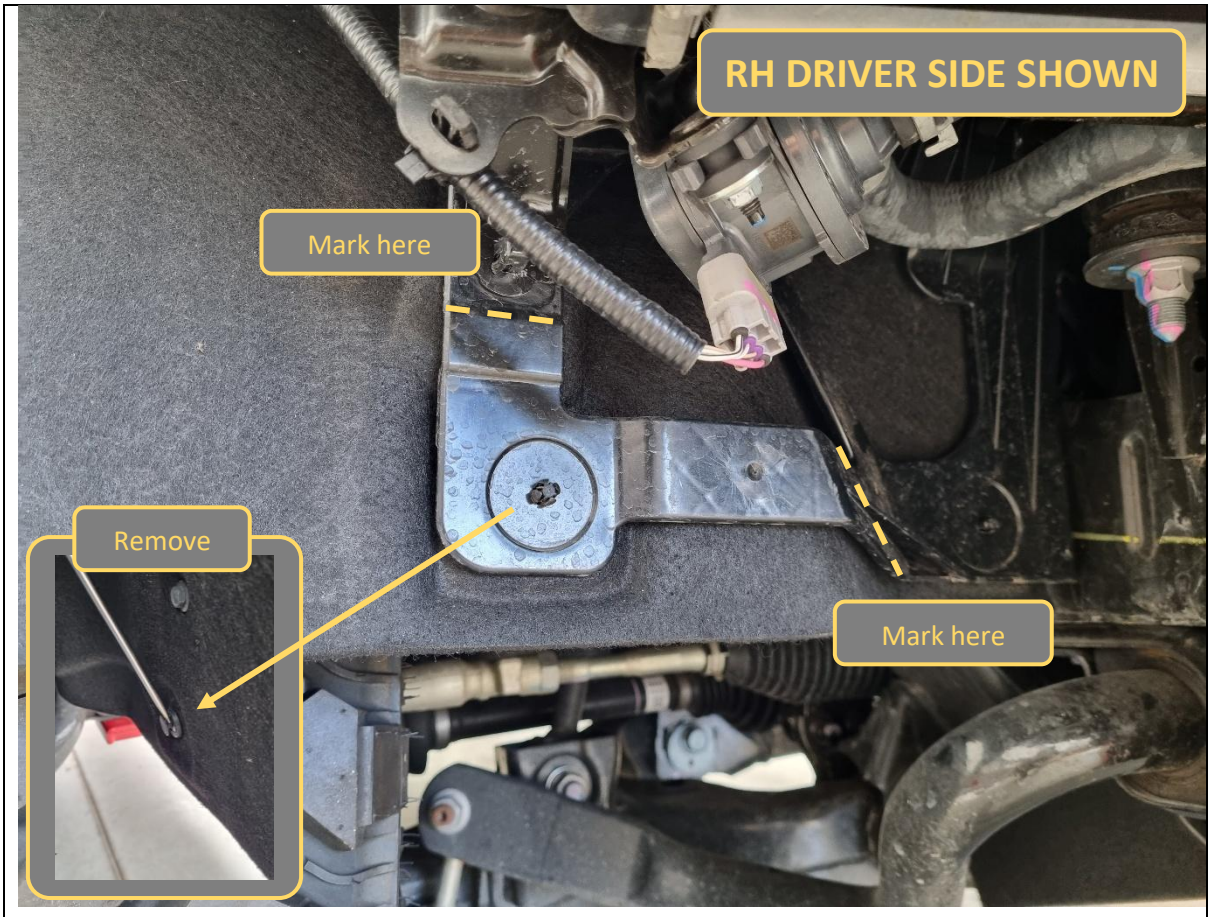
TOOLS REQUIRED

5mm hex/Allen key

FASTENERS

4x M8x30 black button head
4x M8 black washer

2x M10x25 button head
2x M10 flat washer
2x M10 flange nut



The plastic wheel arch supports beneath the side intercoolers need to be trimmed before fitment of side underpanels.

RH and LH are not symmetric. RH is shown here first.

168. Remove 1x plastic push clip holding the wheel arch liner.

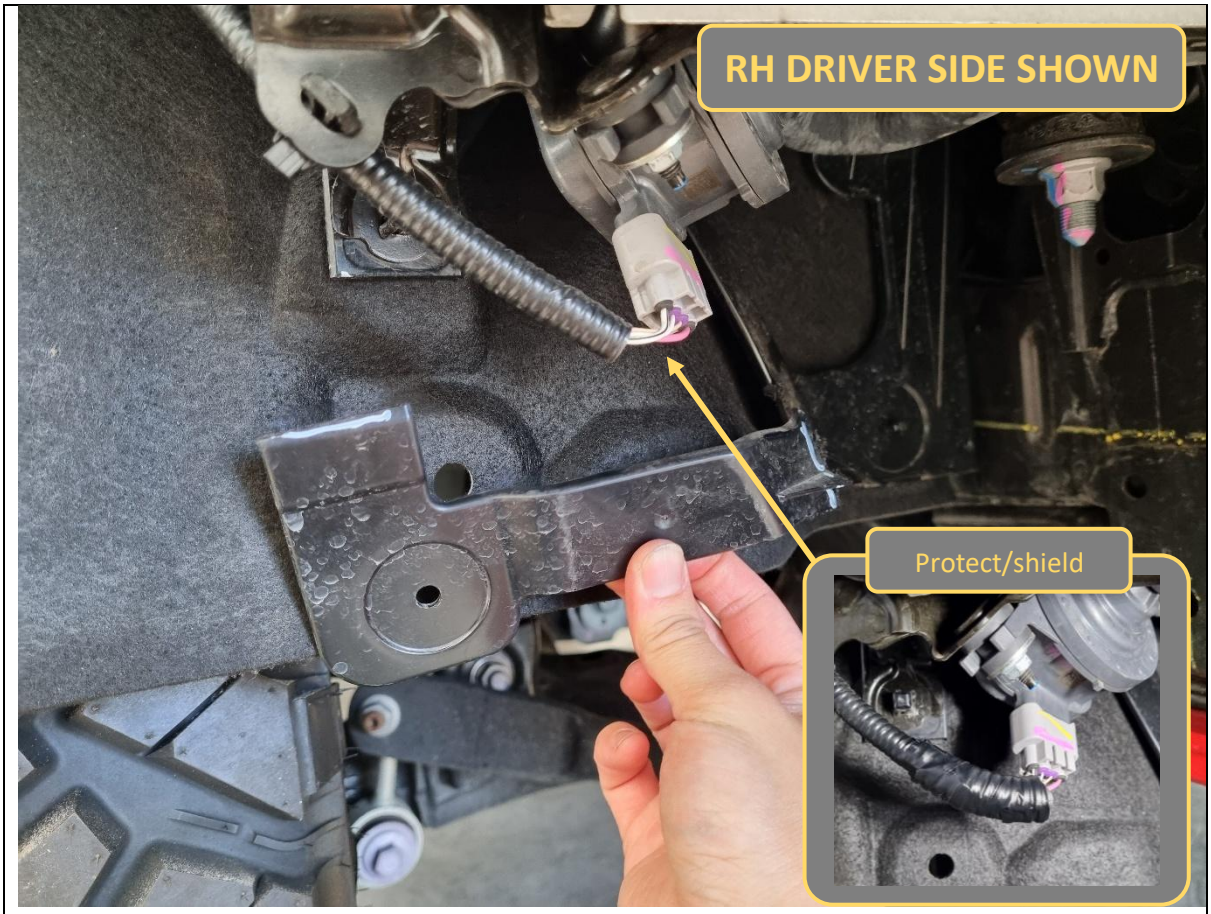
169. Mark the 2x cut lines shown above with a marker pen.

TOOLS REQUIRED

Flat head screwdriver
or
Trim tool

Marker pen

FASTENERS



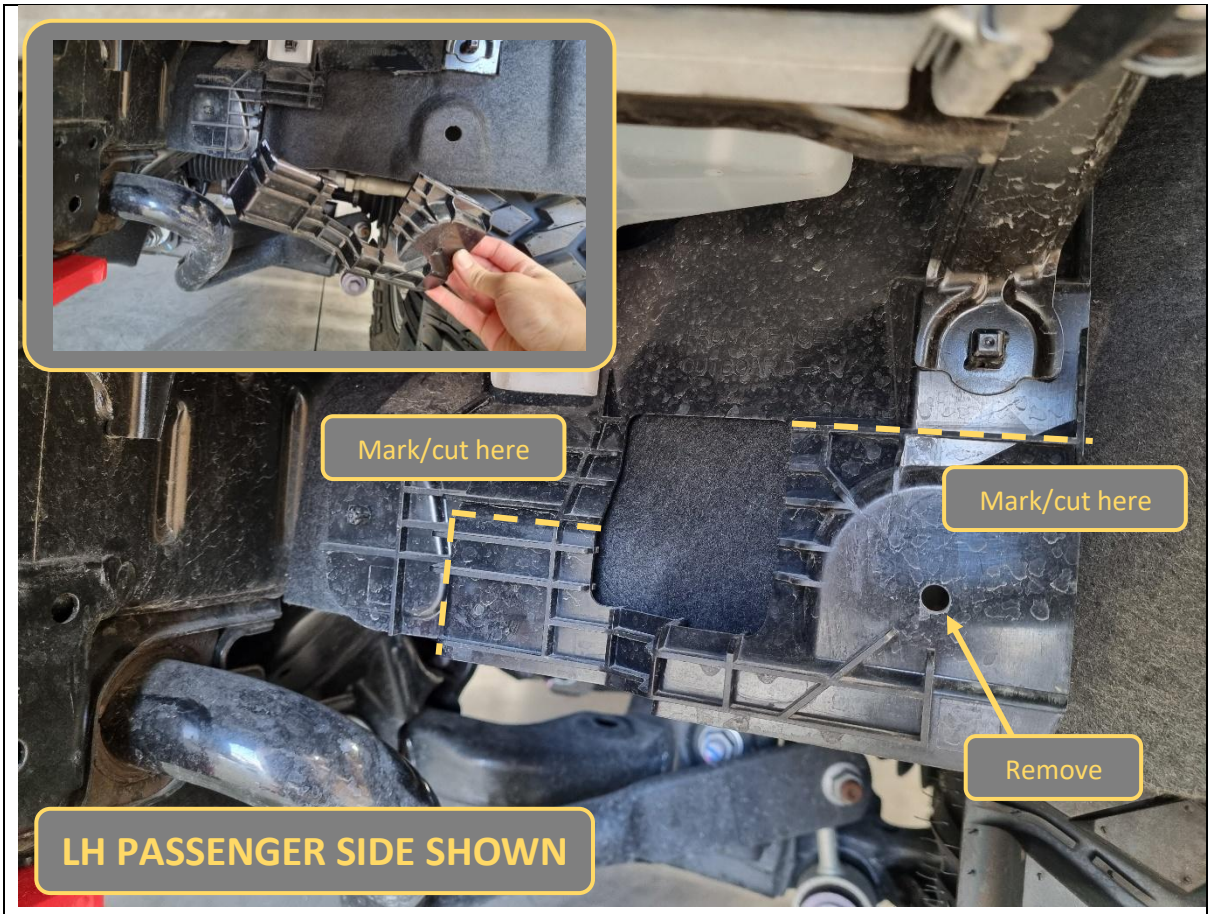
170. Using a utility knife, cut off the bottom section of the plastic wheel arch support.

171. Add some corrugated tubing or similar to protect the wiring at the bottom of the intercooler pump (see inset photo).

TOOLS REQUIRED

Utility knife

FASTENERS



LH wheel arch support shown below.

172. Remove the 1x plastic push clip on the bottom outer corner.

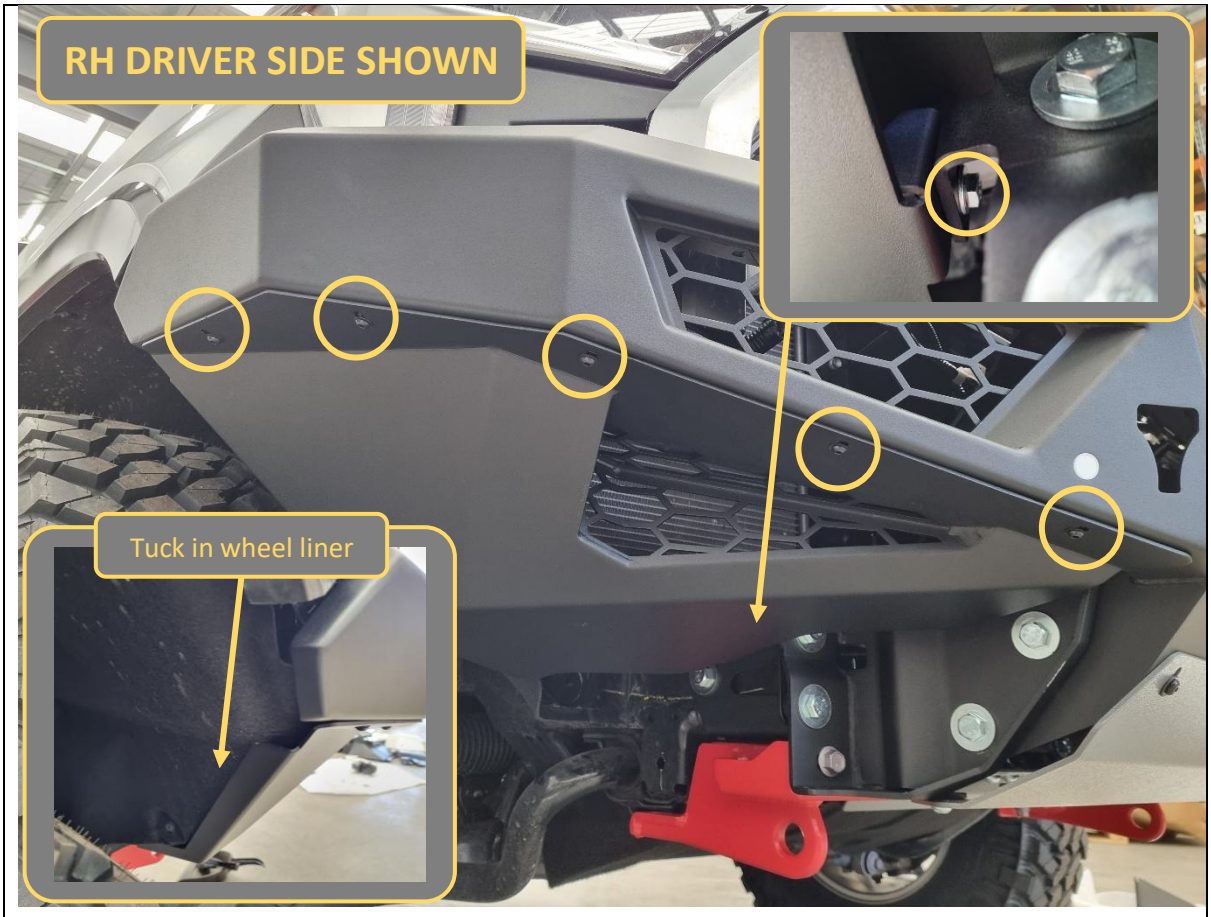
173. Mark and cut the bottom of the plastic wheel arch support along the lines shown.

TOOLS REQUIRED

Flat head screwdriver
or
Trim tool

Marker pen
Utility knife

FASTENERS



174. Fit the side underpanels to the underside of the bull bar wings. Tuck in the wheel arch liner in behind the bull bar and side underpanel.

175. Secure each side underpanel to the underside of the bull bar with 5x M6x16 black button head bolts and black washers.

176. Reach in from underneath and secure each side underpanel to the impact assembly (see top right inset photo) with 1x M8x20 hex bolt, flat washer and flange nut.

177. The fitment is now complete. Double check all fasteners are done up and torqued correctly.

TOOLS REQUIRED

4mm hex/Allen key
13mm spanner

FASTENERS

10x M6x16 black button head
10x M6 black washer

2x M8x20 hex bolt
2x M8 flat washer
2x M8 flange nut



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