



Toyota Hilux N80 Widebody MY2023 on Predator 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.

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-N8W-23-PR-ASM1	Hilux N80 Widebody Predator Bar Weldment	
1	FB-THL-N80-15-PR-ASM2L	Hilux Chassis Mount Assy	
1	FB-THL-N80-15-PR-ASM2R	Hilux Chassis Mount Assy	
1	B-0152L	Hilux Front Mount - Chassis Brace	
1	B-0152R	Hilux Front Mount - Chassis Brace	
1	M-0005	Hilux Mesh - Center Fairlead Support	

1	M-0006L	Hilux Mesh Infill LHS	
1	M-0006L	Hilux Mesh Infill RHS	
1	NPF-COM-SM-ASMO	Number plate flip asm Small	
1	U-0009	Hilux N80 Bash Plate	
1	U-0061L	Hilux Front Bar - Side Underpanel	
1	U-0061R	Hilux Front Bar - Side Underpanel	
1	M-0002L	Light Cover Mesh	
1	M-0002R	Light Cover Mesh	
1	B-0514L	Hilux 21+ Style Fog Lamp Bracket LHS	

<p>1</p>	<p>B-0514R</p>	<p>Hilux 21+ Style Fog Lamp Bracket RHS</p>	
<p>1</p>	<p>B-0814</p>	<p>Hilux Widebody Grille Support Bracket</p>	
<p>1</p>	<p>B-0886L</p>	<p>Hilux N80 Headlight Corner Infill</p>	
<p>1</p>	<p>B-0886R</p>	<p>Hilux N80 Headlight Corner Infill</p>	
<p>1</p>	<p>N-0009L</p>	<p>Hilux MY21 Plastic Bolt on Headlight Infill</p>	
<p>1</p>	<p>N-0009R</p>	<p>Hilux MY21 Plastic Bolt on Headlight Infill</p>	

Small Parts – Contained in Small Parts Kit Bag

Qty	Part Number	Description
40	M6 FLAT WASHER BLACK ZINC	M6 Flat Washer, IS04042 ZnNi BLACK PASSIVATED FINISH
28	M6 FLANGE NUT	Flange Nut, M6x1 G8.8 ZP
40	M6x16 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X16 GR12.9, ZnNi BLACK PASSIVATED FINISH
8	M8 FLAT WASHER	M8 FW
14	M8 FLANGE NUT	Flange Nut, M8x1.25 G8.8 ZP
8	M8X20	Bolt Hex, M8X20X1.25, GR8.8 ZP
12	M10 Flat Washer	M10 FW
12	M10 FLANGE NUT	Flange Nut, M12x1.5 G8.8 ZP
10	M10 x 30	Bolt Hex, M10x30x[1 .5], GR8.8 ZP
6	M 12 FLAT WASHER	M12 FW
2	M 12X30X1.25	Bolt Hex, M12X30x1.25, GR8.8 ZP
4	M 12X30	Bolt Hex, M12x30x1.75, GR8.8 ZP
2	NP-THL-N80-15- PR	Nut Plate - Hilux Predator
2	M10X30 BHCS	SCREW, BUTTON HEAD CAP, M10X30X1.5 GR12.9 ZP
8	M8 FLAT WASHER- BLACK ZINC	M8 FLAT WASHER, 16.5x8.4x1.2, IS04042 ZnNi BLACK PASSIVATED FINISH
6	M8 X 20 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M8X20x1.25, IS04042 ZnNi BLACK PASSIVATED FINISH
2	M8 X 16 BHCS BZP	SCREW, BUTTON HEAD CAP, M8X16x1.25 GR12.9, IS04042 ZnNi BLACK PASSIVATED FINISH
10	M6CN3MM	CAGE NUT M6x2.6-3.5
16	M12 FW LHD	M 12 FW Large Heavy Duty
8	M 12 Nyloc nut	M12 NYLOC NUT
8	M12X40	Bolt Hex, M12X40X1.75, GR8.8 ZP

TOOLS REQUIRED

The following tools will be required to install the product.

Hand Tools	Power Tools	Workshop Equipment
Metric Socket Set 8-19mm Socket Extension Bar Metric Spanner Set 10-19mm Hex (Allen) Key Set 4-8mm Trim Puller Tool Flat Blade Screwdriver set Phillips Head Screwdriver set Utility Knife	Electric/Air Impact Driver (Optional) Air Hacksaw or Angle grinder. Oscillating multi tool & Plastic blade.	Panel Stand or Soft Blanket Automotive Adhesive Sealant. Glue Removal Solvents

WORKSHOP SAFETY

It is the responsibility of the installer to always complete works in a safe manner. Make sure the following safety equipment is available and precautions are observed whilst fitting this product.

<p>Hearing Protection</p> 	<p>Always wear ear protection when using power tools.</p>
<p>Eye Protection</p> 	<p>Ensure eye protection is always worn when cutting or drilling.</p>
<p>Manual Handling</p> 	<p>Do not attempt to lift bar assemblies or rock sliders on your own.</p> <p>Always use two people to lift or use mechanical Lifting aid such as hydraulic lifting trolley.</p>
<p>Vehicle Support</p> 	<p>Always ensure vehicle is properly supported when working on it. Do not attempt to fit products whilst suspension work is being carried out. Do not work under a vehicle supported only by a jack.</p>



1. Remove the Radiator shroud by removing the 6x clips securing it to the grille and cross member.
2. Push down on the center of the clips to release then remove with trim tool.

TOOLS REQUIRED

Trim Tool

FASTENERS

Push Center Clips



3. Remove the 4x 10mm Head screws securing the top of the grille
4. Retain fasteners for re fitment.

TOOLS REQUIRED

10mm Socket / Spanner

FASTENERS

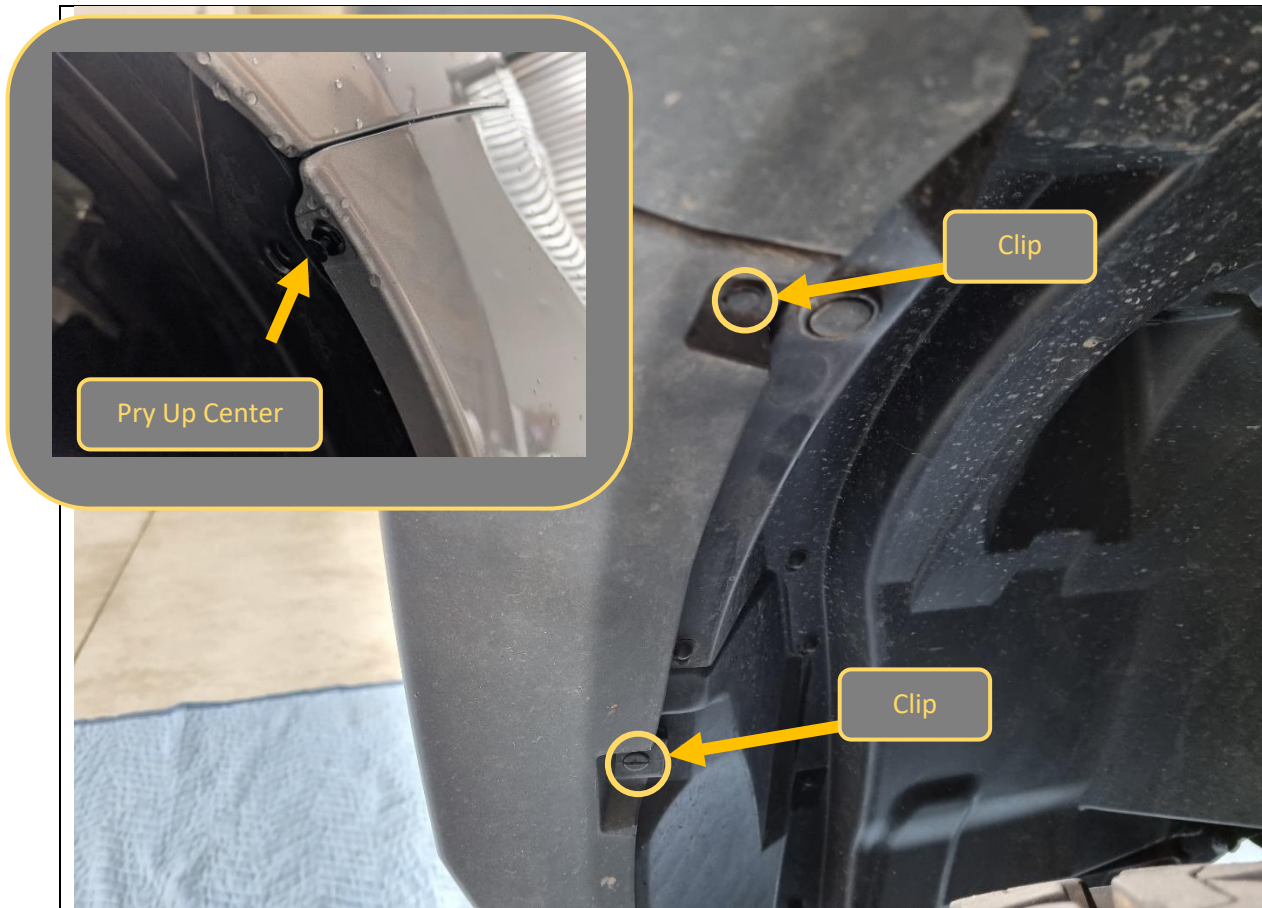
10mm Head Screws



5. Unplug the radar sensor module wiring connector, located on the back of the Toyota Badge / sensor.

TOOLS REQUIRED

FASTENERS



6. Remove the clips securing the bumper to the inner wheel arch liner.
7. The top clip is a center release type. Pry up the center section to unlock then remove.

TOOLS REQUIRED
Trim Tool

FASTENERS

Factory Clip and Screw



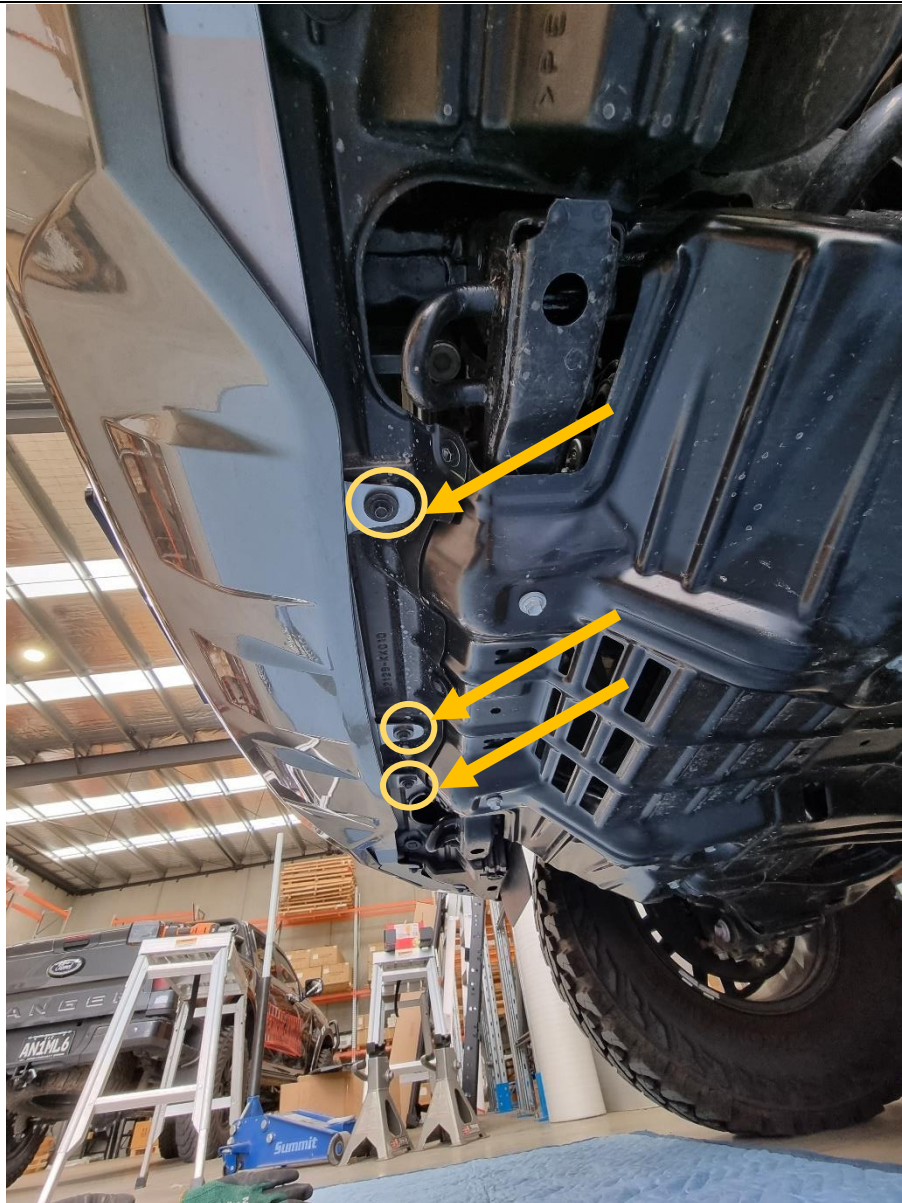
8. Remove the 3x Screws securing bottom corner of bumper to inner wheel arch liner with 10mm socket or large Phillips screwdriver.
9. Complete on both sides of Vehicle

TOOLS REQUIRED

10mm Socket / Spanner

FASTENERS

Factory Screws



10. Remove the 3x Factory Screws securing bottom center section of bumper to inner wheel arch liner. Use 10mm socket / spanner.

TOOLS REQUIRED
10mm Socket / Spanner

FASTENERS
Factory Screws



11. Remove the 2x 10mm Head/Phillips screws securing the bumper to crossmember.

These screws are located on the edge near the headlights behind the grille.

TOOLS REQUIRED

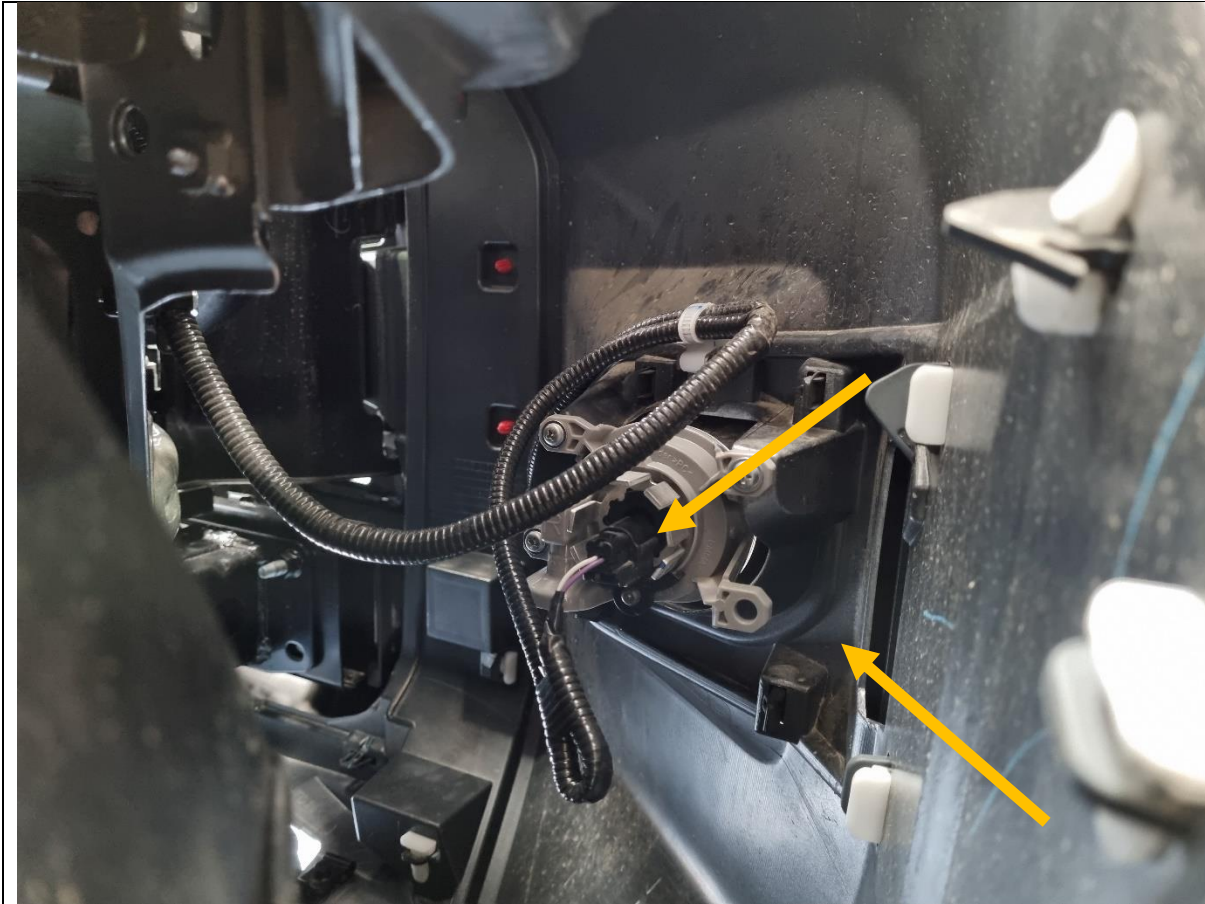
FASTENERS



12. Remove the bumper. Start by pulling from the outside where the bumper meets the wheel arch and work towards the center from both sides.

TOOLS REQUIRED

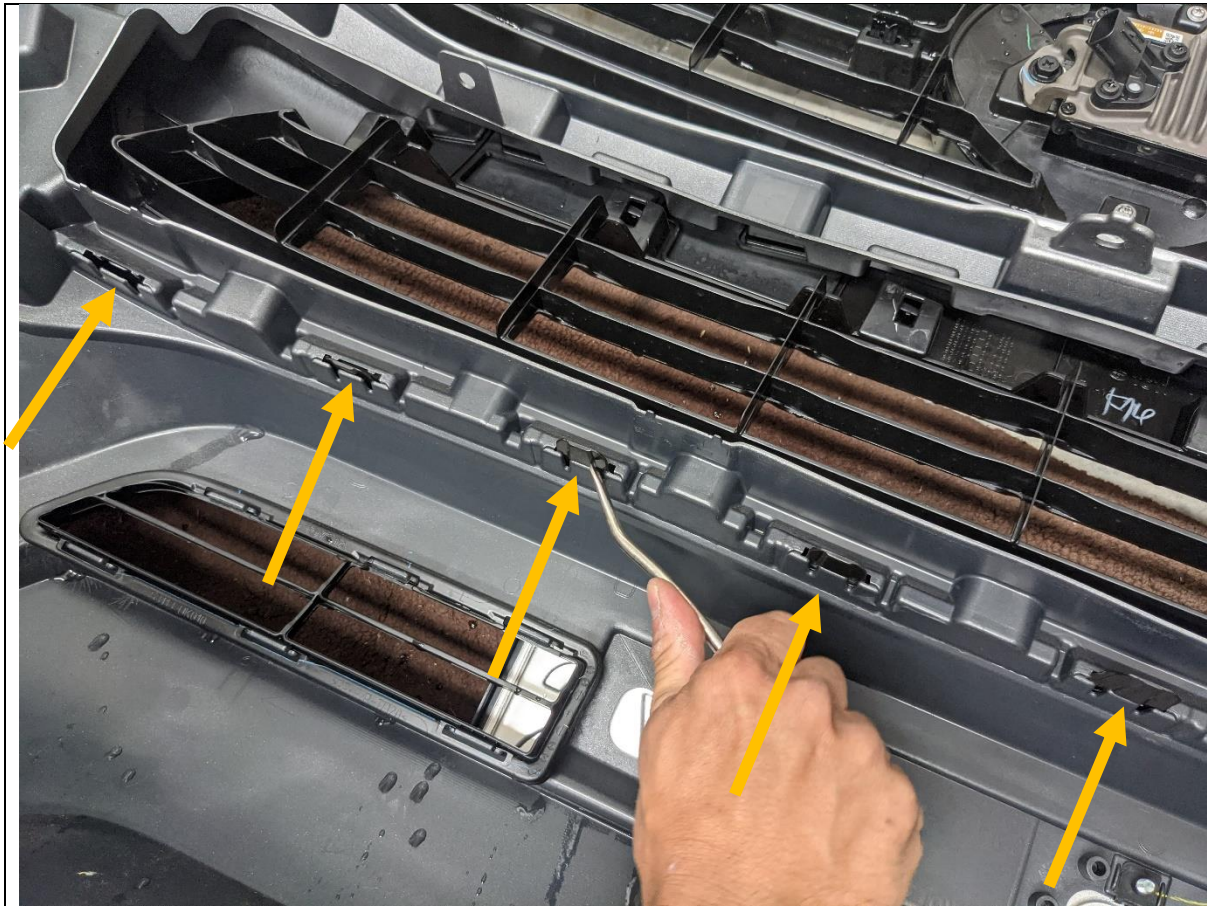
FASTENERS



- 13. With assistance once the bumper is loose, unplug and release the parking sensor and fog light harnesses.
- 14. It is easiest to remove the sensor from the bumper by releasing the clips on back side then pushing sensor through the bumper, leaving it hanging on the cable.
- 15. This needs to be done on both sides of the vehicle.

TOOLS REQUIRED

FASTENERS



16. Once bumper is removed set aside on soft non marking surface or panel stand.

17. Release the bumper from the grille by releasing all the clips along the bottom of grille with a trim tool

TOOLS REQUIRED

Trim Tool

FASTENERS



18. Remove the front bumper support plastic fasteners using trim tool and Phillips screwdriver to pry whilst loosening as shown.
19. Remove the forward bolt using 10mm socket.
20. Remove the bumper supports using a trim tool.
21. Complete on both sides of the vehicle.

TOOLS REQUIRED
Trim Tool
Phillips Screwdriver
10mm socket

FASTENERS



- 22. Replace the forward bolt to re-secure the headlight to the wing.
- 23. Complete on both sides of the vehicle

TOOLS REQUIRED
10mm Socket

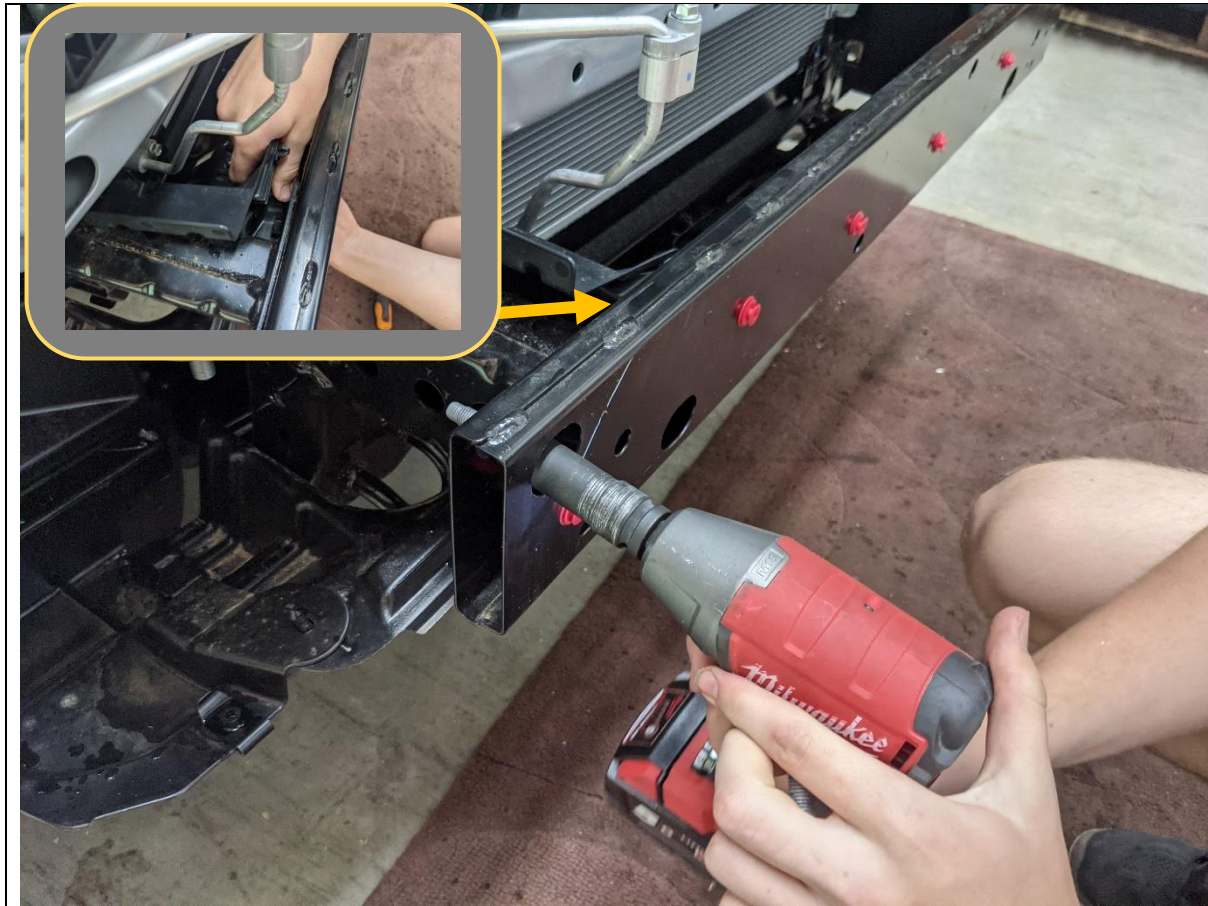
FASTENERS



24. Remove the plastic cover from the impact beam by strongly pulling in the direction shown to release it from the clips

TOOLS REQUIRED

FASTENERS



- 25. Remove the impact beam by removing the 4x Factory flange bolts securing it to the chassis rail
- 26. Release plastic clips on behind the impact beam in the air guides.

TOOLS REQUIRED

15mm Socket
Trim Tool

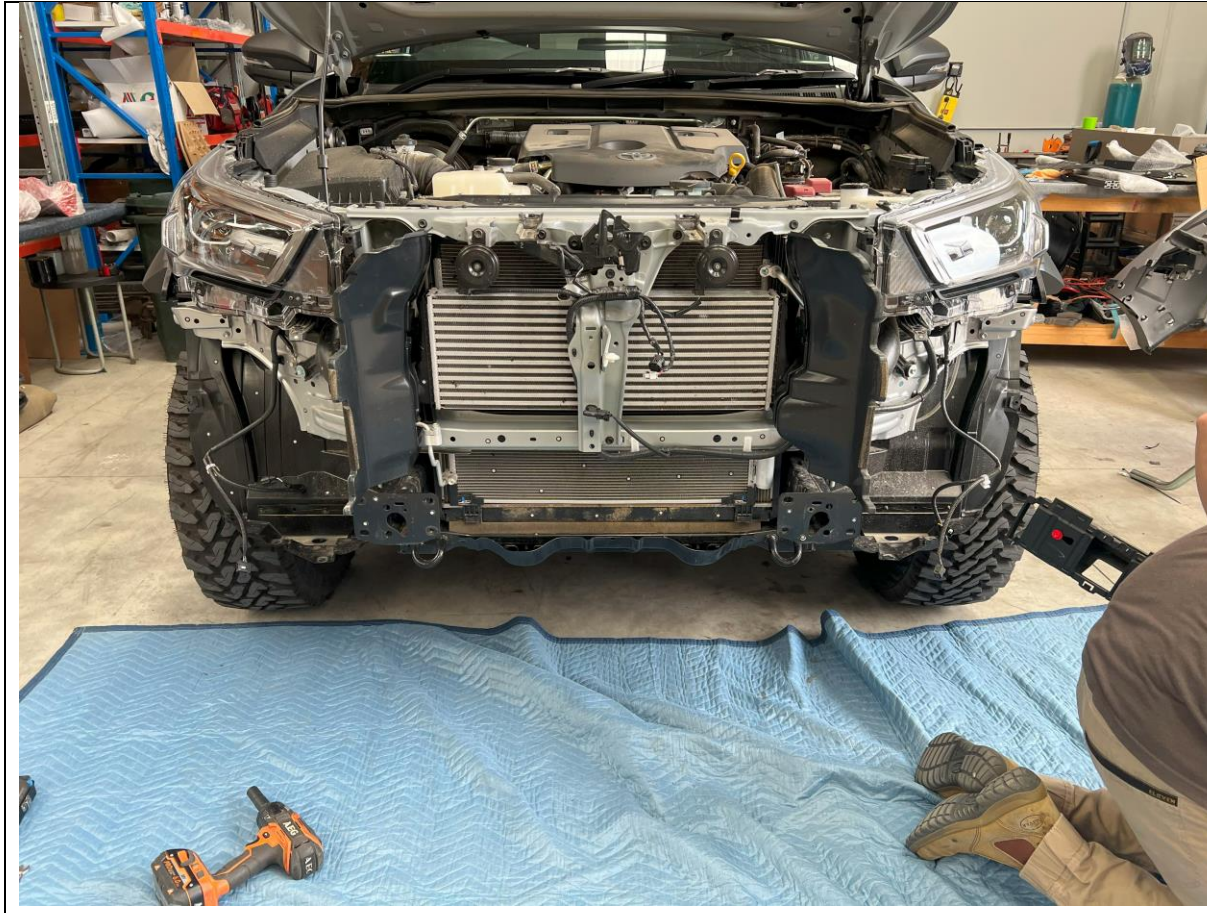
FASTENERS



27. Take impact beam off car and discard.

TOOLS REQUIRED

FASTENERS



- 28. Vehicle chassis rails should now be totally exposed as shown.
- 29. For light colored vehicles it is a good idea to paint the exposed panels beneath the headlight black, to ensure neat appearance once bar is fitted.

TOOLS REQUIRED

FASTENERS



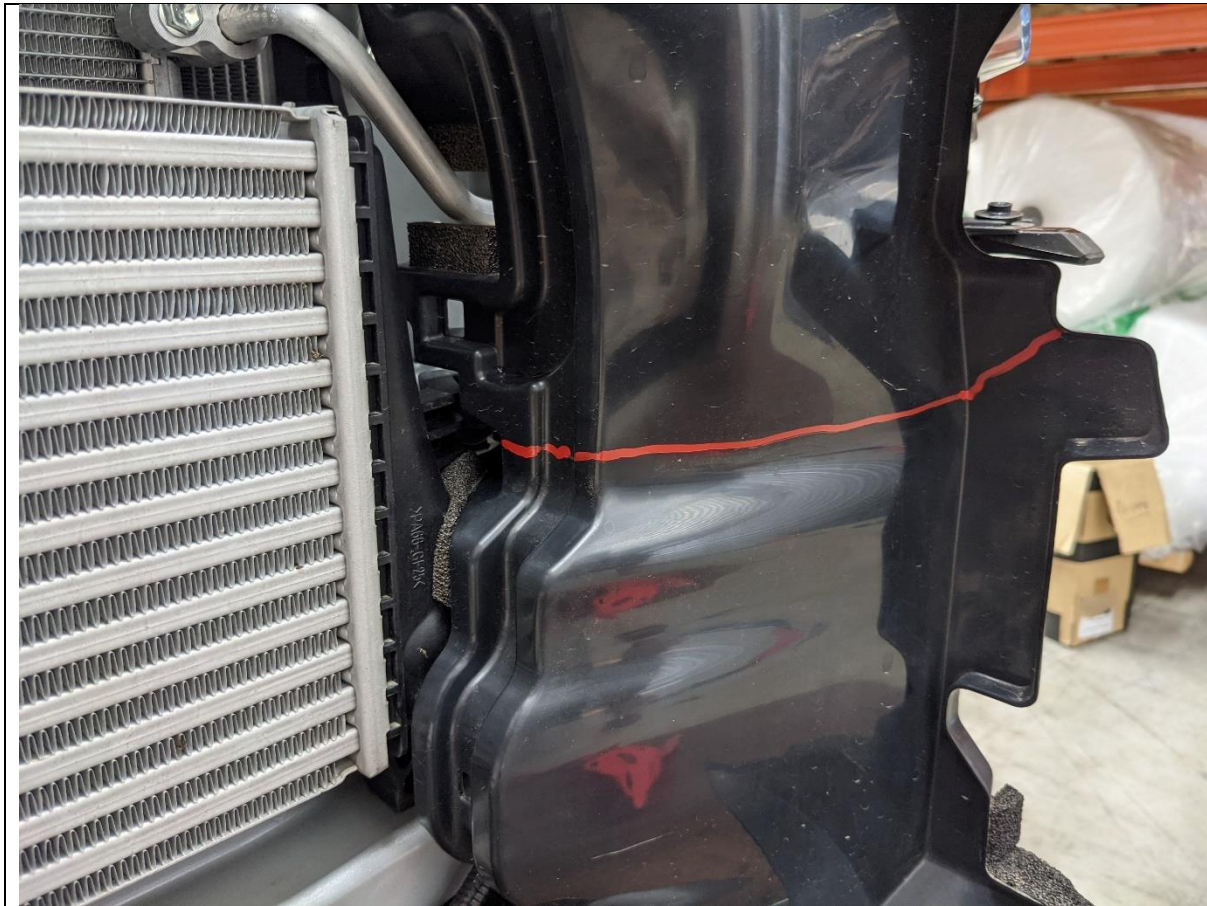
30. Mark air guide on Right hand side of vehicle as shown in the above image.

31. Remove air guide from vehicle by releasing the 3x clips holding it to the chassis

TOOLS REQUIRED

Paint Marker

FASTENERS



- 32. Mark air guide on Left hand side of vehicle as shown in the above image.
- 33. Remove air guide from vehicle by releasing the 3x clips holding it to the chassis

TOOLS REQUIRED

Paint Marker

FASTENERS



34. Trim the air guides along the lines marked, using a sharp utility knife or air hacksaw.

35. Re-Fit the top half of the air guides trimmed to the vehicle,

TOOLS REQUIRED
Utility Knife

FASTENERS



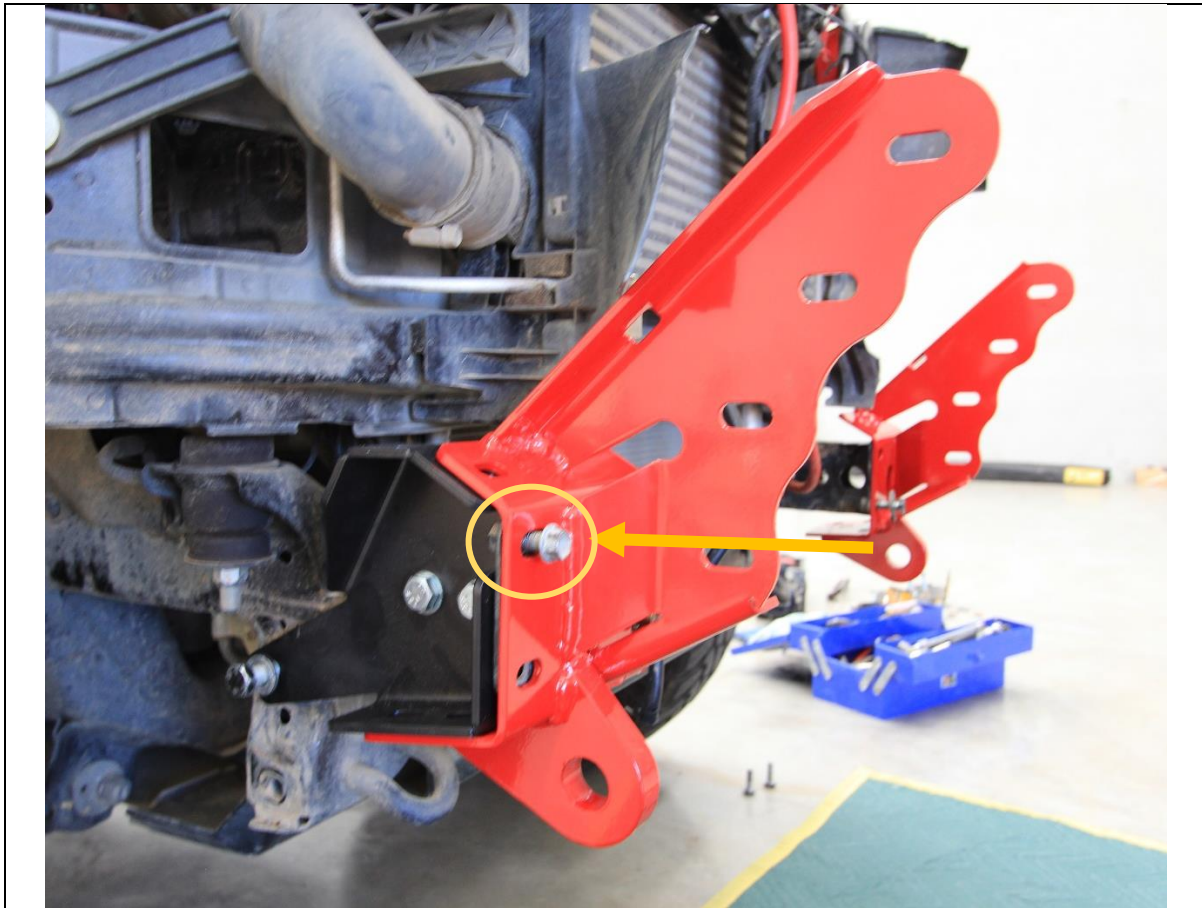
- 36. Take the chassis brace and fit loosely to the threaded M12 Fine pitch point in chassis, using M12x30x1.25 Bolt and flat washer.
- 37. Insert the Nut Plate into the chassis rail through the opening on the front of the chassis.
- 38. Secure the nut plate with M12x30 Standard pitch bolts and flat washers through the holes shown. Leave finger tight at this stage.
- 39. Repeat for other side of vehicle.

TOOLS REQUIRED

FASTENERS

- 1x M12x30x1.25p Bolt
- 2x M12x30x1.75p Bolt
- 3x M12 Flat washer.

PER SIDE

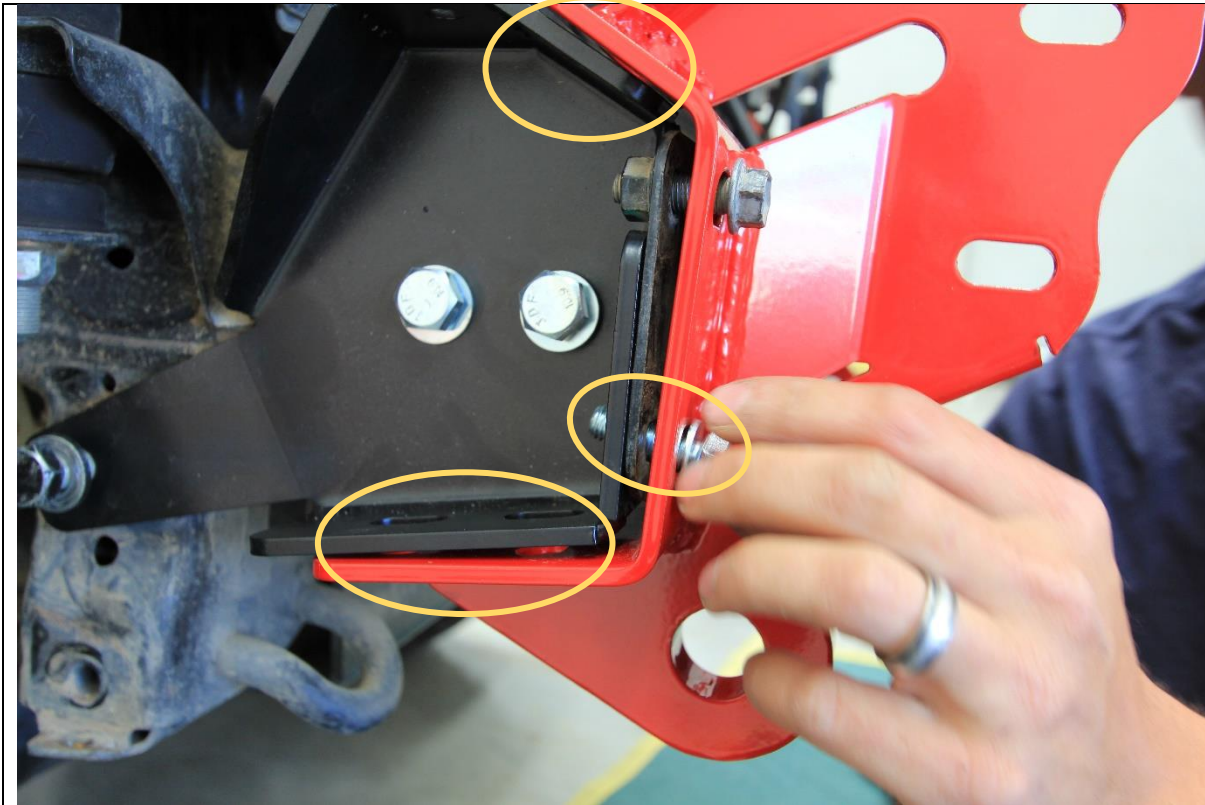


- 40. Fit the impact assembly to the end of the chassis rail.
- 41. Secure finger tight with the original M10 bolts in the threaded inserts in chassis.
- 42. Repeat for other side of vehicle

TOOLS REQUIRED

FASTENERS

2x Factory M10 flange bolt
per side.



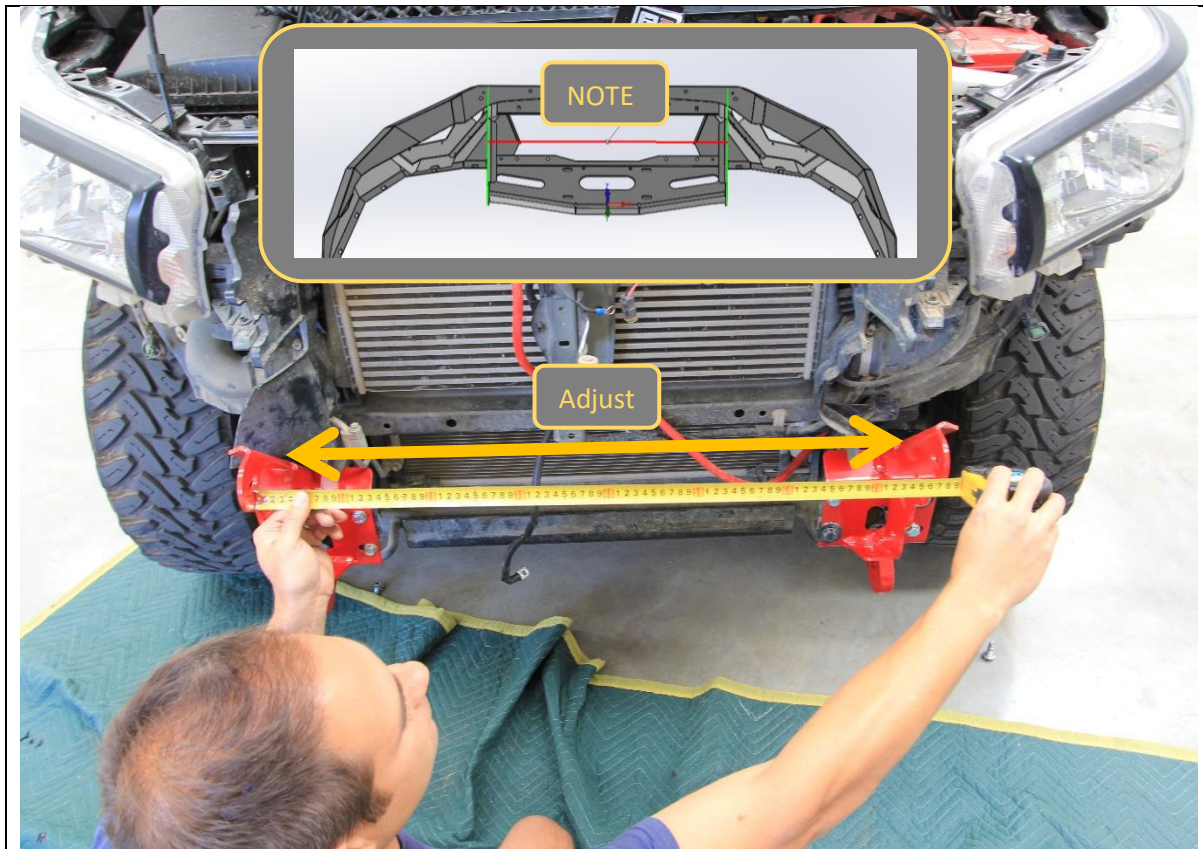
- 43. Fit remaining bolts to the impact assembly. 2x M10x30 Bolts, 4x Flat washers and 2x Nyloc nuts to front face.
- 44. Fit 2x M10x30 Bolts, 4x Flat washers and 2x Nyloc nuts to Bottom face.
- 45. Fit 1x M10x30 Bolt, 2x Flat washers and 1x Nyloc nuts to Top face.

TOOLS REQUIRED

FASTENERS

5x M10x30 Bolt
10x M10 Flat washer
5x Nyloc Nut

per side.



<p>46. Measure the distance between the outside faces of the uprights on the bar. Note this distance</p> <p>Bar uprights _____mm</p> <p>47. Adjust the distance between the impact assemblies to be approx. 1-2mm greater than the upright distance on the bar.</p>	<p>TOOLS REQUIRED</p> <p>Tape measure 16mmSpanner 16mm Socket</p>
<p>48. Tighten bolts on the impact assemblies and re-check distance. Loosen and adjust as required until the distance between mount when mounts are tight is correct.</p>	<p>FASTENERS</p>



49. Remove the 3x Screws securing the fog lights to the bumper, then remove the fog light from the bumper

TOOLS REQUIRED
Screwdriver

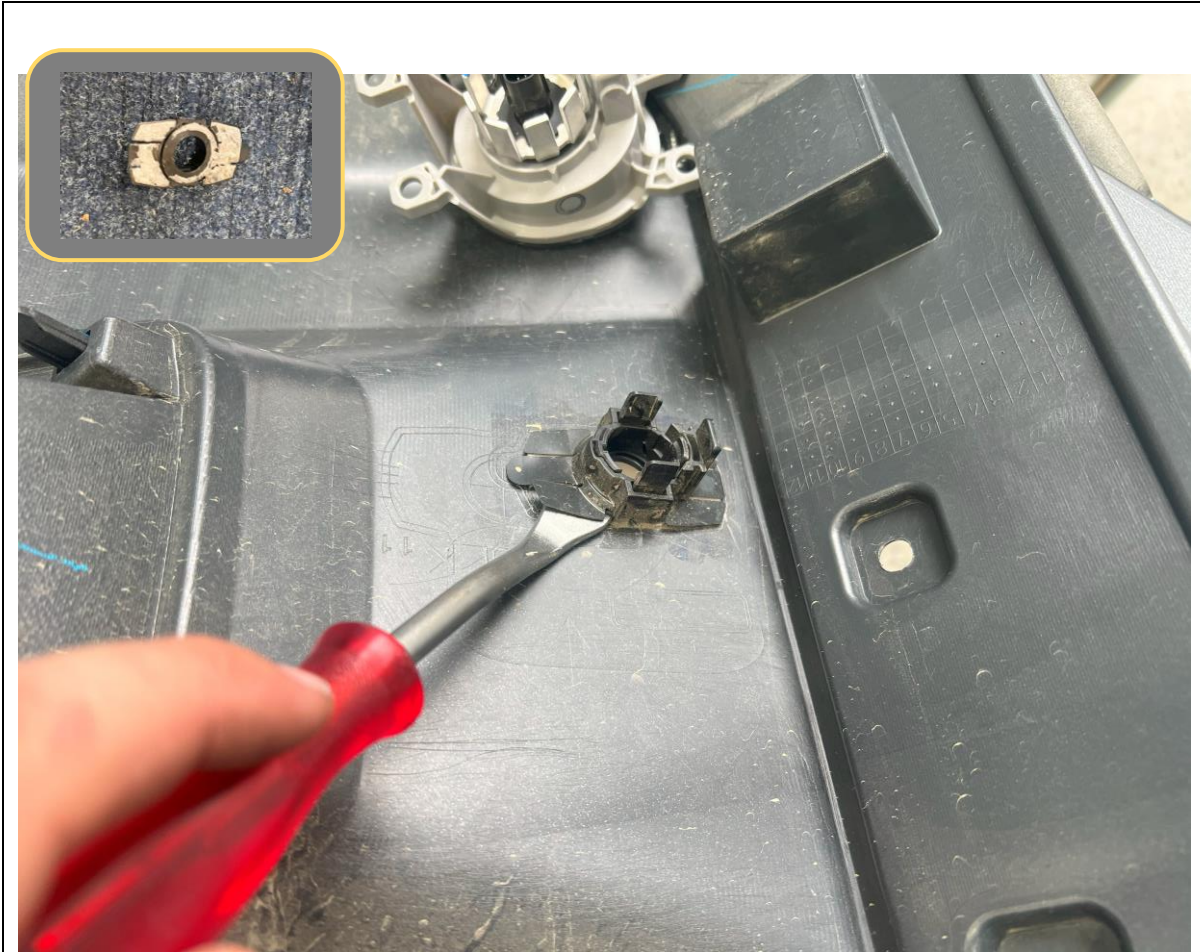
FASTENERS
Factory Screws



50. Remove parking sensors from housings, by prying apart the locking tabs, whilst pushing sensor from front side of bumper.

TOOLS REQUIRED

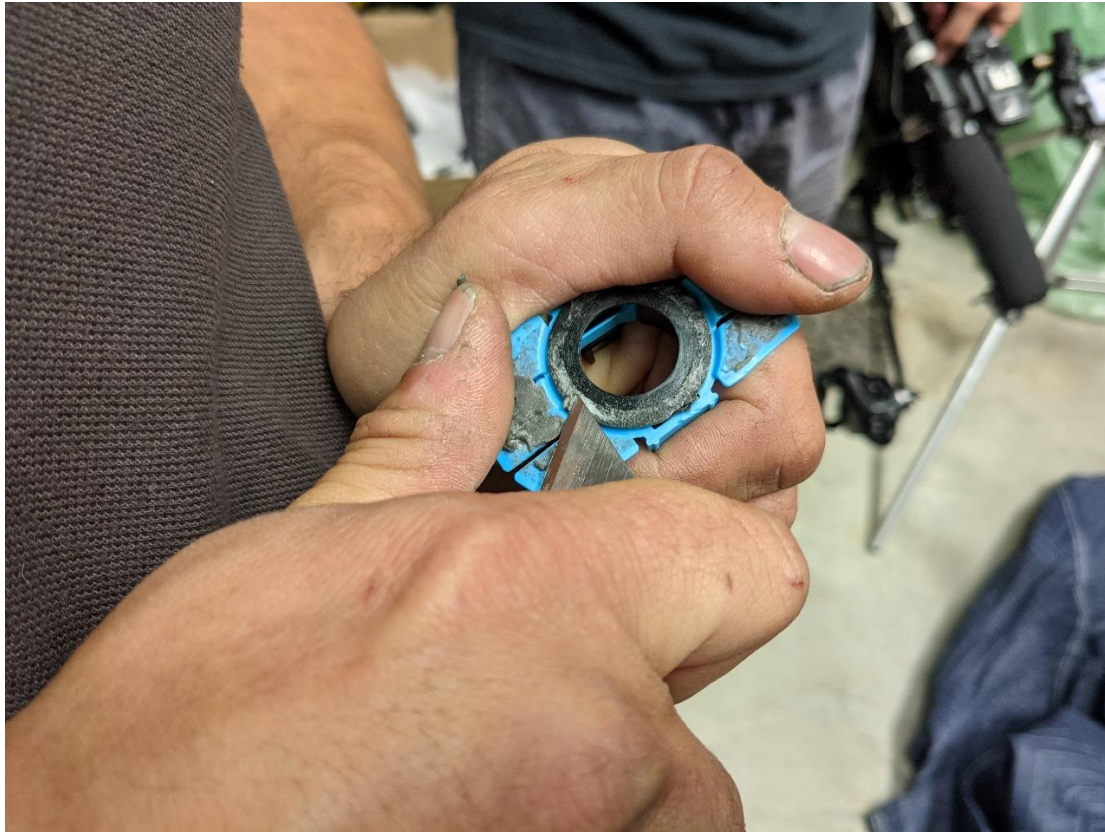
FASTENERS



51. Carefully pry the sensor housings away from the back of the bumper, using a trim tool or similar.

TOOLS REQUIRED
Trim Tool

FASTENERS

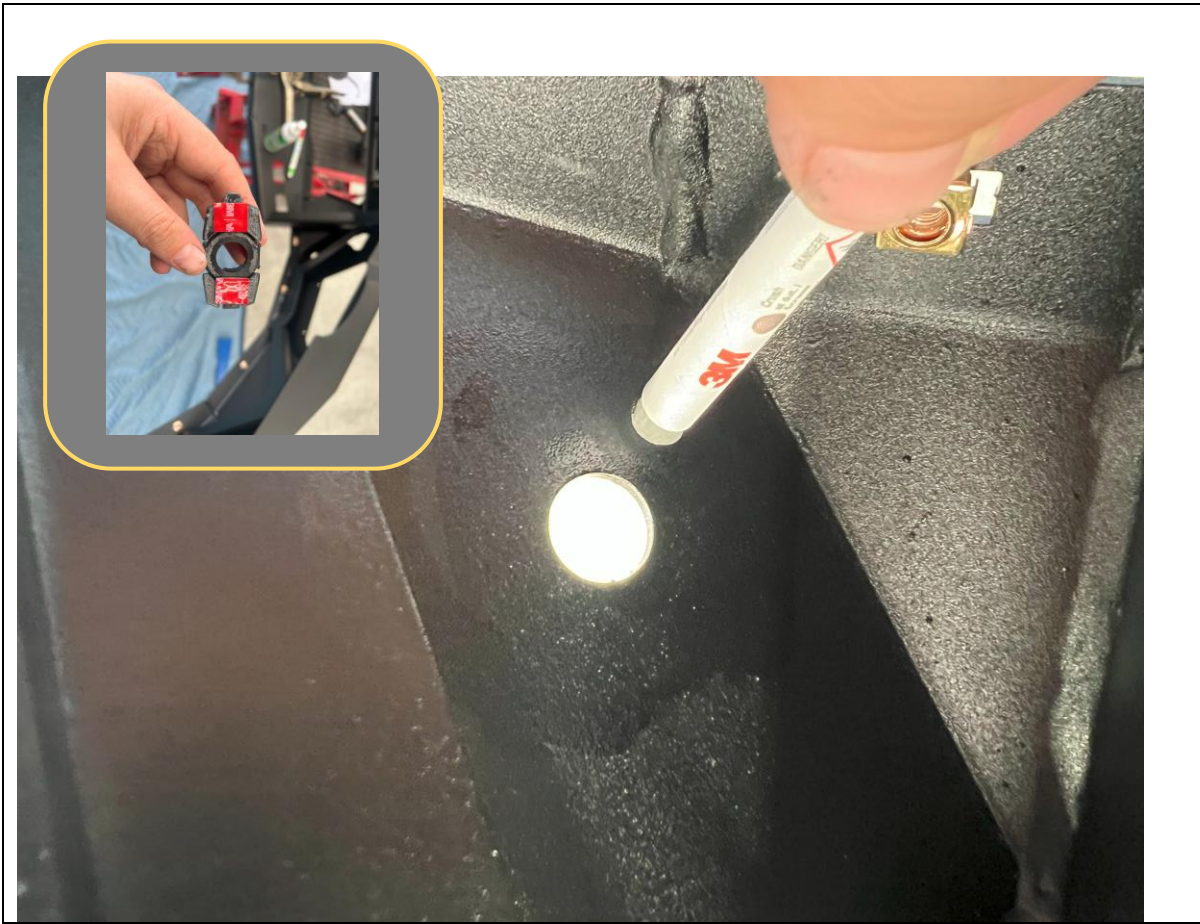


52. Remove remnant adhesive from the face of the sensor housing, using a utility knife and / or solvents.

TOOLS REQUIRED

Utility Knife
Solvents

FASTENERS



- 53. Break the bulb of the supplied Primer 94 ampule to activate the primer dispensing.
- 54. Apply Primer 94 to all areas adjacent to the parking sensor locations, on both the bar and the sensor housings.
- 55. Apply supplied VHB tape pads to all sensor housings as shown in the inset photo.

TOOLS REQUIRED

- FASTENERS**
- VHB Tape pads
 - Primer 94 Ampule

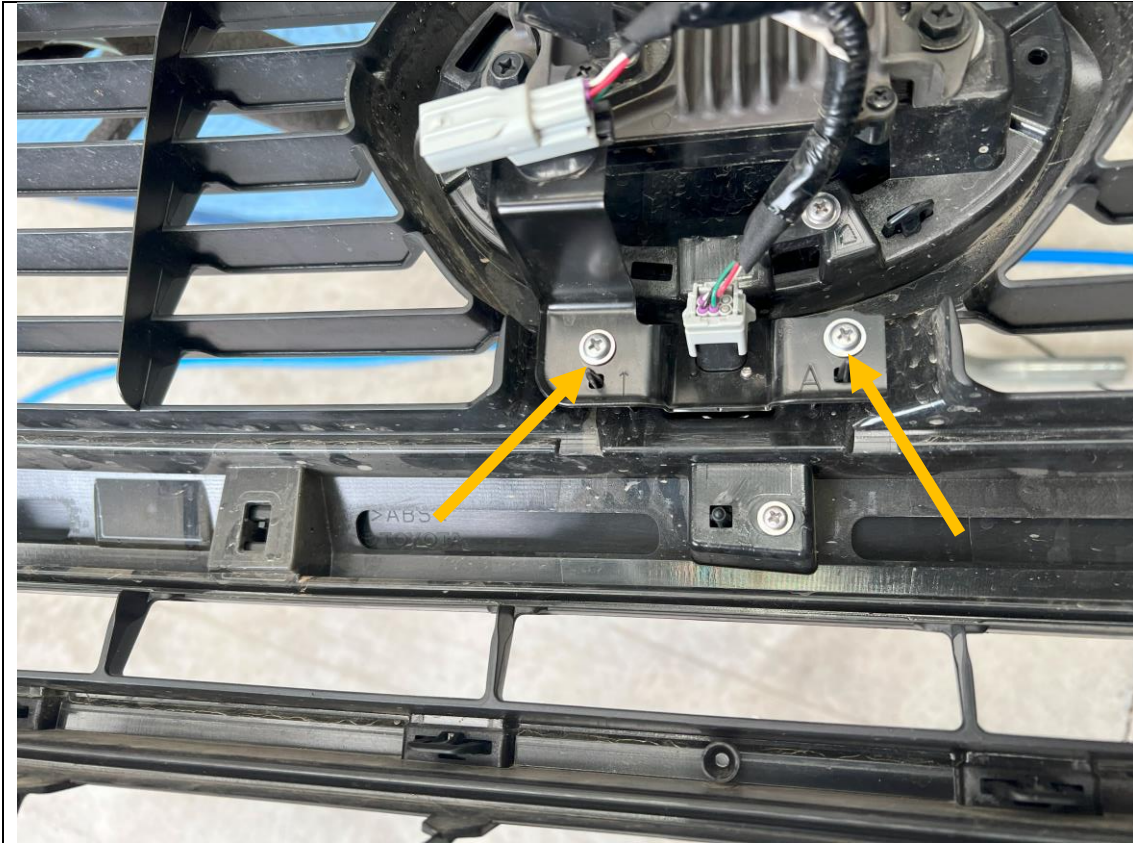


56. Fit sensors housing, then dry fit to bar to check plug position is as per above photo.

57. Remove backing and adhere sensors in position in bar. Apply pressure for 10-30sec after positioning for best adhesion.

TOOLS REQUIRED

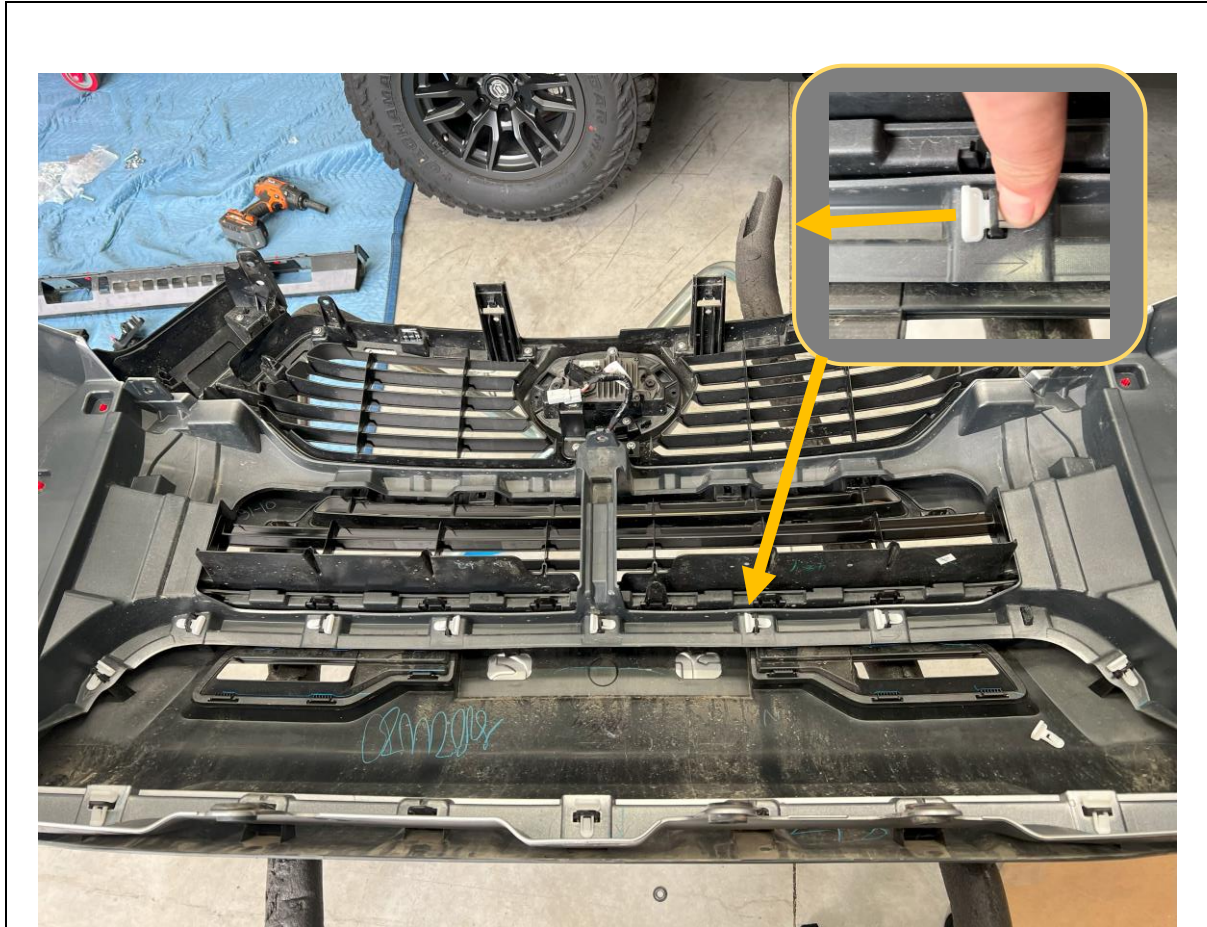
FASTENERS
VHB Tape pads
Primer 94 Ampule



- 58. Remove the front camera module by removing the 2x Phillips head screws securing in.
- 59. Retain screws for fitment of grille support bracket.

TOOLS REQUIRED
Phillips Head Screwdriver

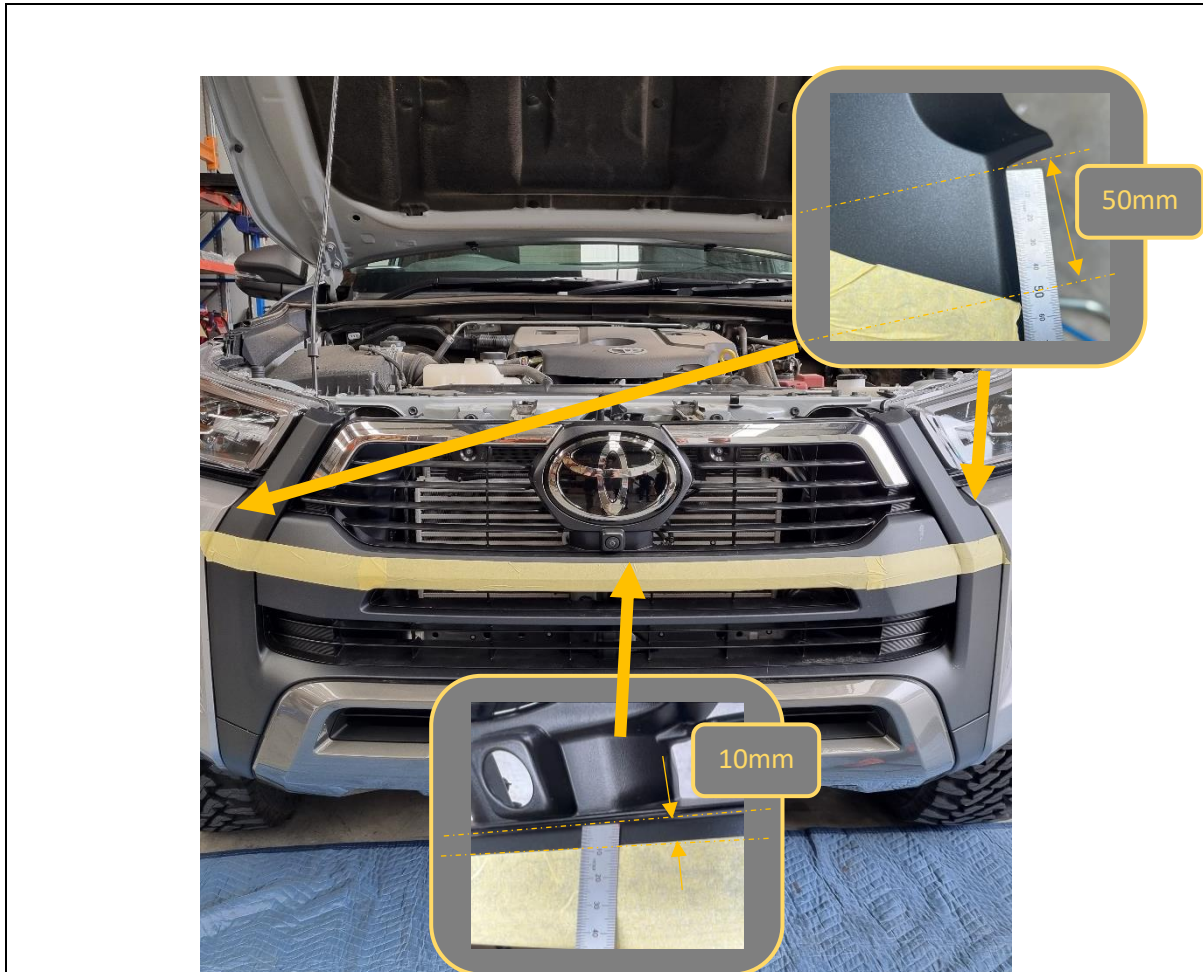
FASTENERS
Factory Screws – retain.



- 60. Separate the center grille from the rest of the bumper.
- 61. Release all the “Wedge” Clips by pressing down on the locking tab and sliding sideways

TOOLS REQUIRED

FASTENERS



- 62. Mark out positions shown on the front grille. On each edge, place mark 50mm from corner as shown in inset image.
- 63. In center place mark 10mm down from bottom of lower slat edge, as shown in inset image.
- 64. The Mark out the grille cut as denoted by horizontal line joining the marked points. This is best marked by using the edge of a long straight length of masking tape to mark the cut line.

TOOLS REQUIRED
Masking Tape

FASTENERS

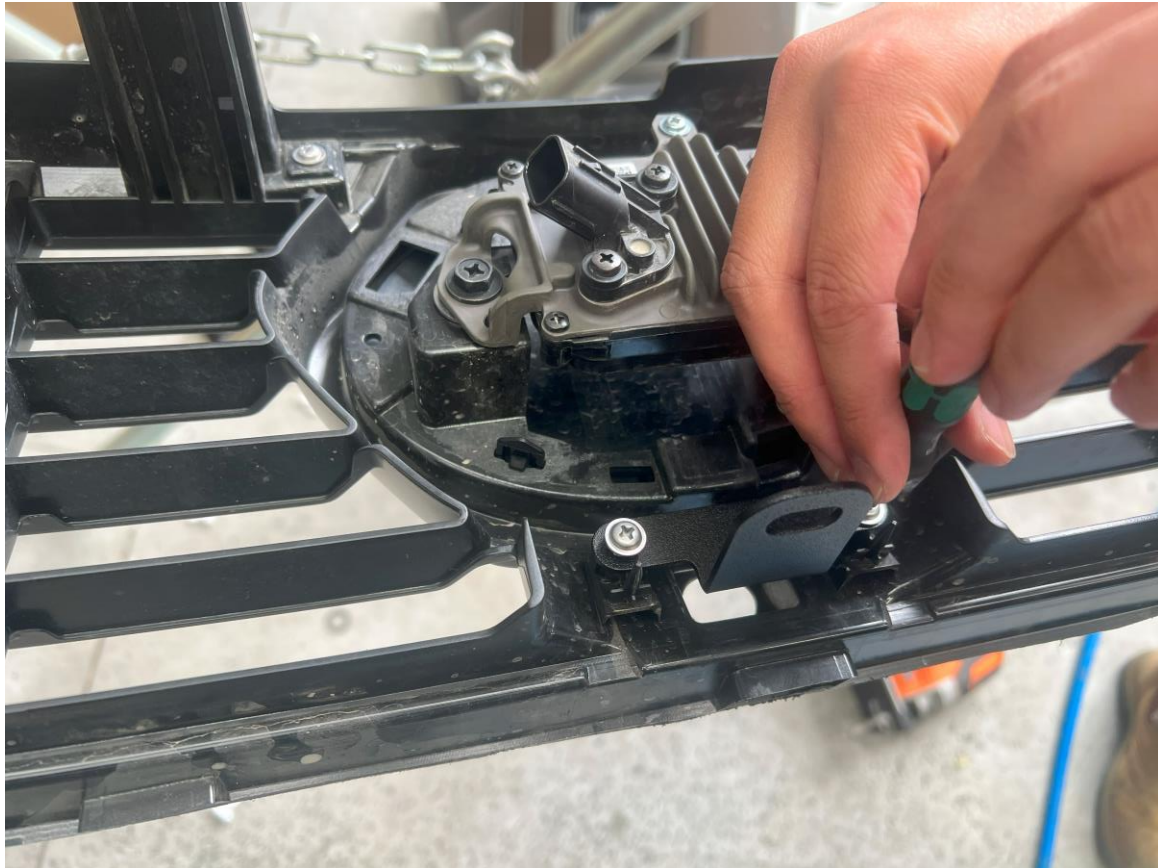


65. Using angle grinder, oscillating multi tool or air hacksaw, cut along marked cut line.

66. Ensure cut is neat and straight.

TOOLS REQUIRED
Angle Grinder or Air Hacksaw

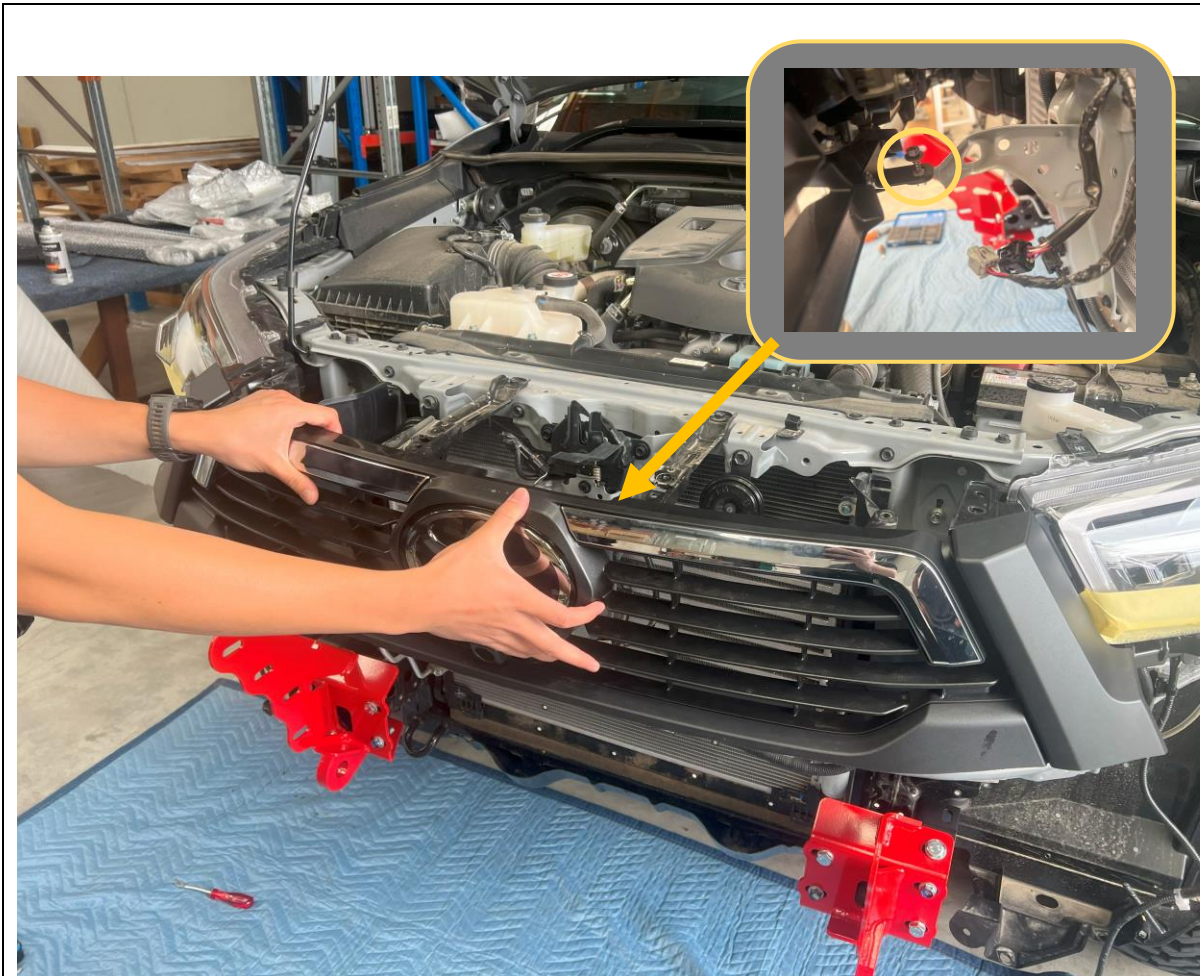
FASTENERS



- 67. Fit the bottom grille support bracket to the middle of the top section of the grille, under the adaptive cruise radar sensor.
- 68. Remove the existing Philips head screws, then re fit with bracket in place.

TOOLS REQUIRED
Phillips head screwdriver

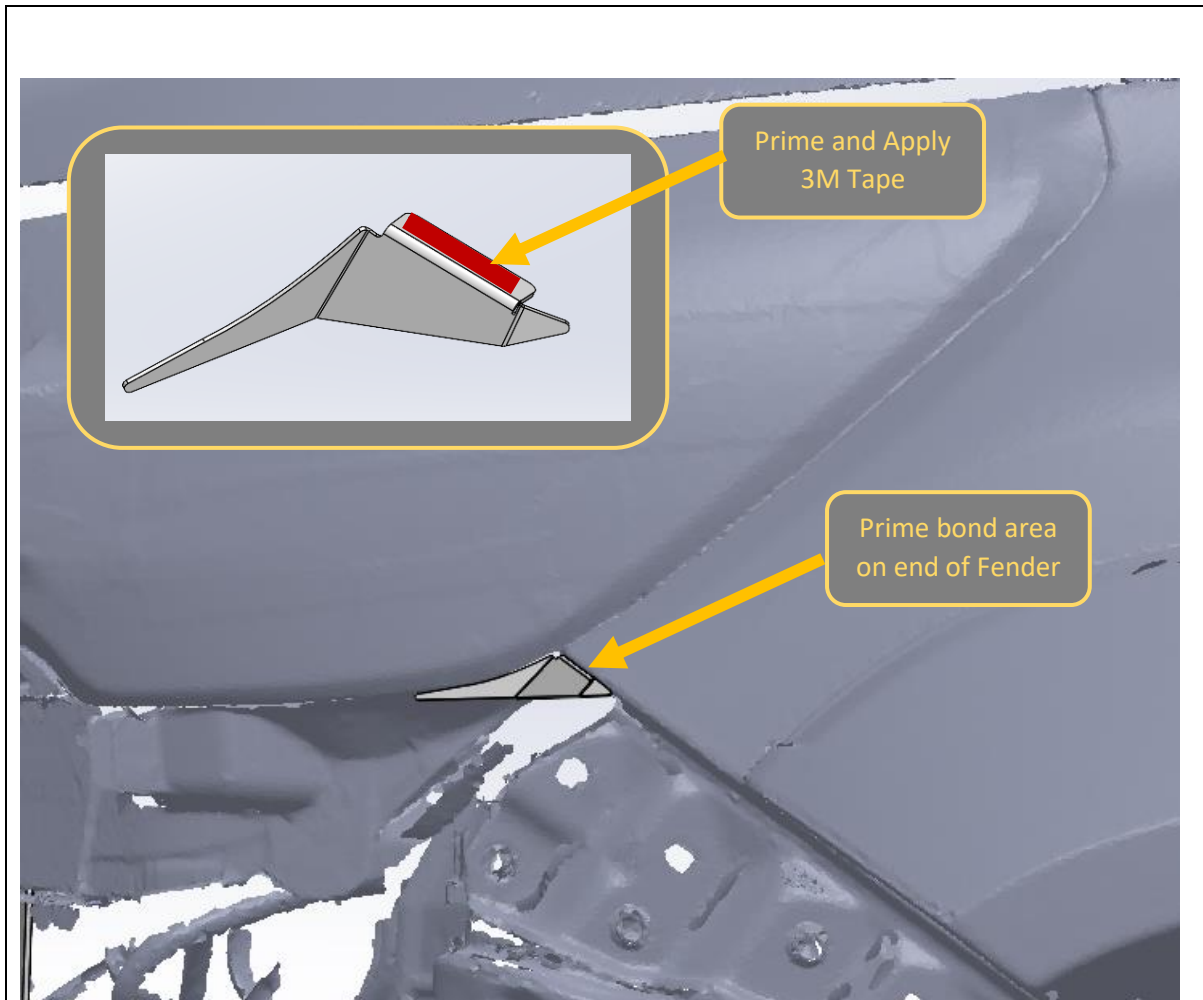
FASTENERS
6x M6 Cage Nuts



- 69. Re fit the trimmed section of the grille to the vehicle.
- 70. Secure top of grille using original 10mm Fasteners.
- 71. Secure the grille support bracket to the plastic insert in the using a self tapping Philips screw

TOOLS REQUIRED
10mm Socket
Phillips screwdriver

FASTENERS

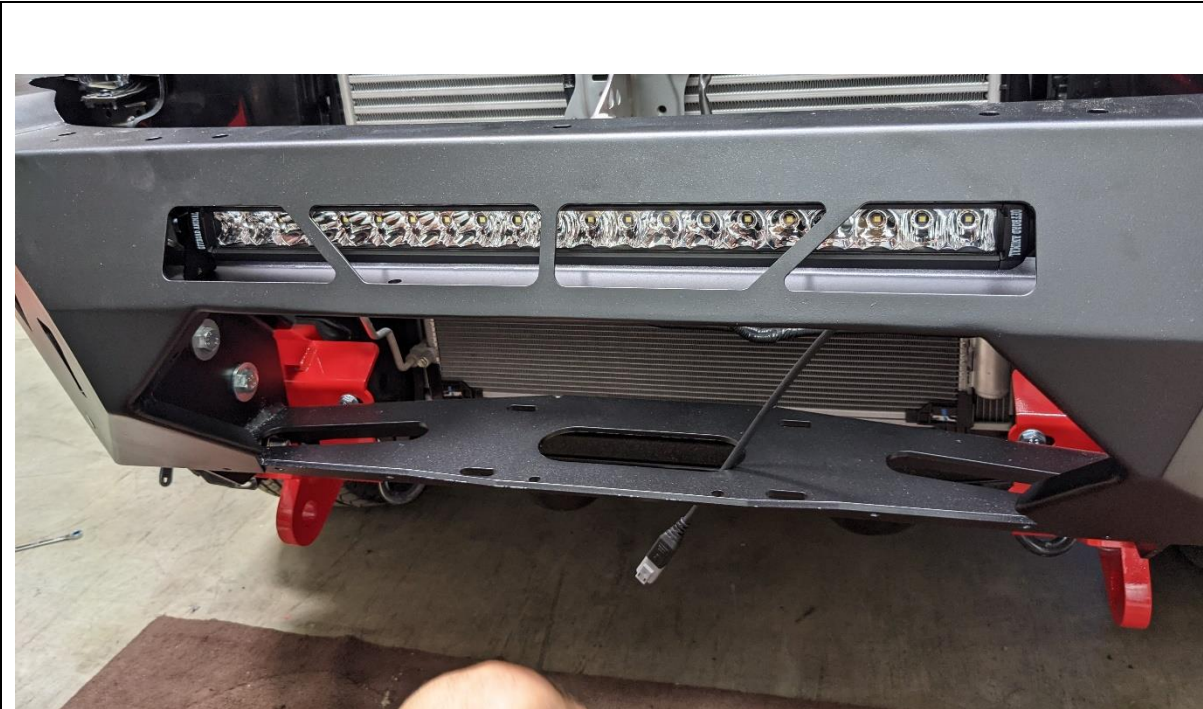


- 72. Using 3M primer stick from parking sensors, apply primer to end of fender panel and small headlight infill in the bonding area as shown.
- 73. Cut and apply length of 3M tape to the small headlight infill panel as shown in the inset image.
- 74. Fit the headlight infill using the 3M tape. Apply pressure for 10-30 seconds to ensure strong bond.

TOOLS REQUIRED

- 3M Primer 94
- 3M Tape

FASTENERS



- 75. If fitting a light bar to the center section of the bar, do so at this stage, before fitting the bar to the car.
- 76. Use hardware provided with the Lights to fit to the bar.
- 77. This is also the best time to fit driving lights or top hoop to the bar.

TOOLS REQUIRED
Flat bladed screwdriver

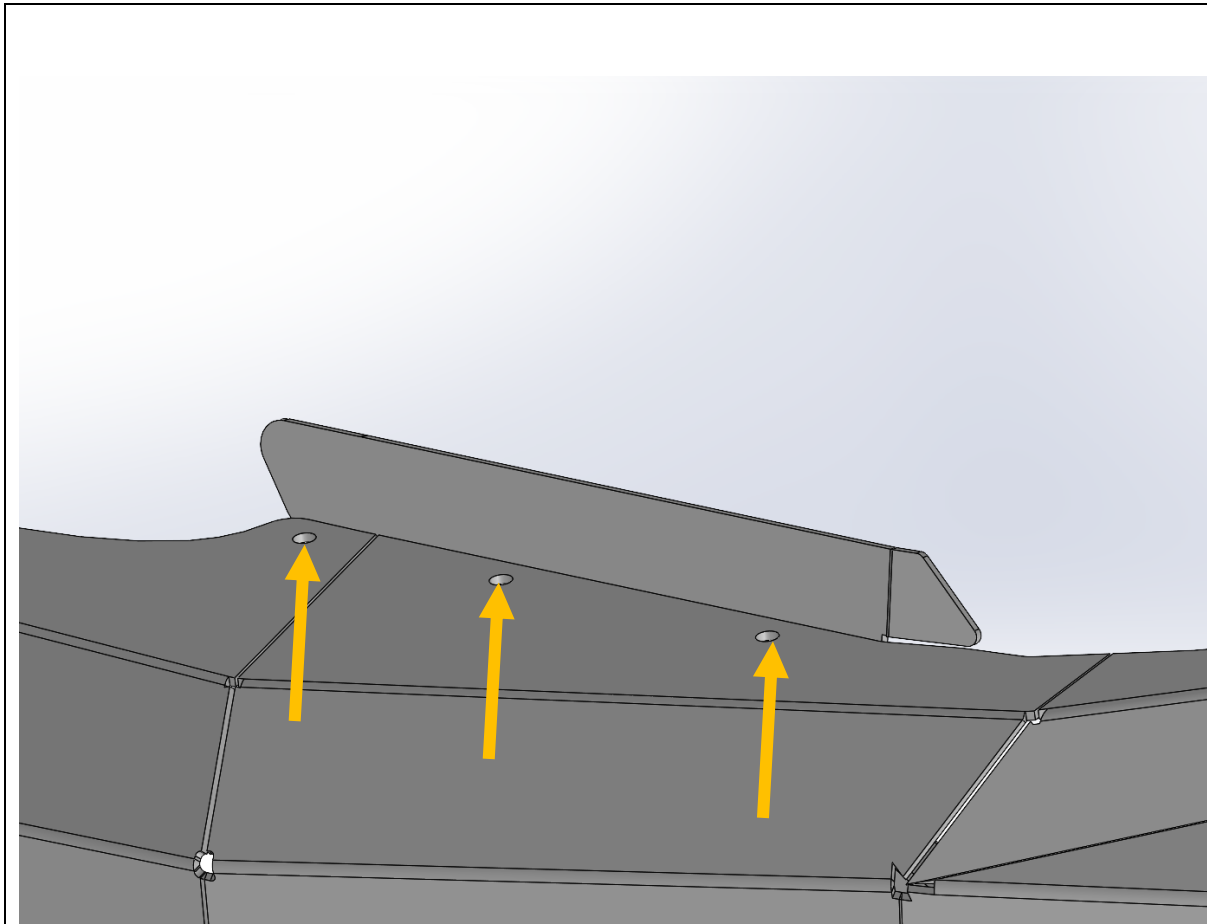
FASTENERS
6x M6 Cage Nuts



78. Insert cage nuts to square slots in bottom of wings. Seat cage nut against one edge of slot then push other edge in with flat bladed screwdriver.

TOOLS REQUIRED
Flat bladed screwdriver

FASTENERS
6x M6 Cage Nuts

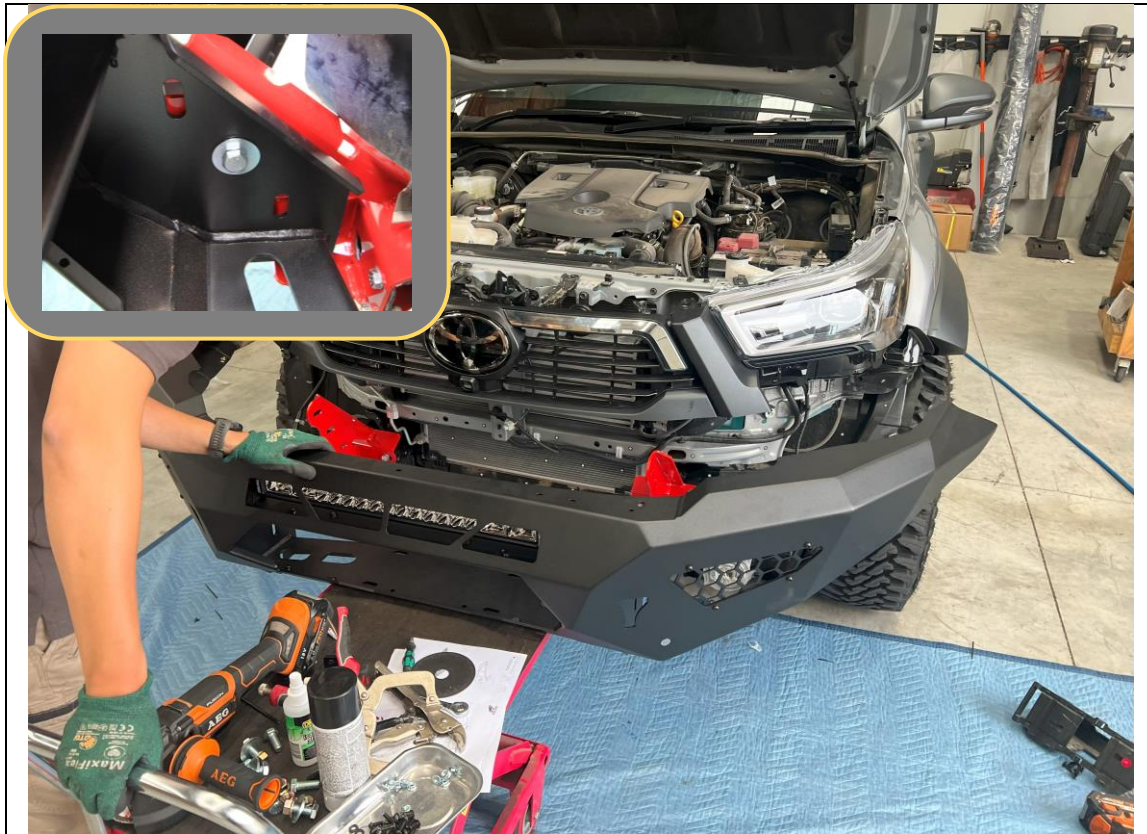


79. Fit the plastic infill panels to the bar, using supplied M6x16 Black Button head bolts, Black washers, and flange nuts.

TOOLS REQUIRED
4MM hex key

FASTENERS
3x M6x16 Black button head
3x M6 Black washer
3x Flange Nut

Per side

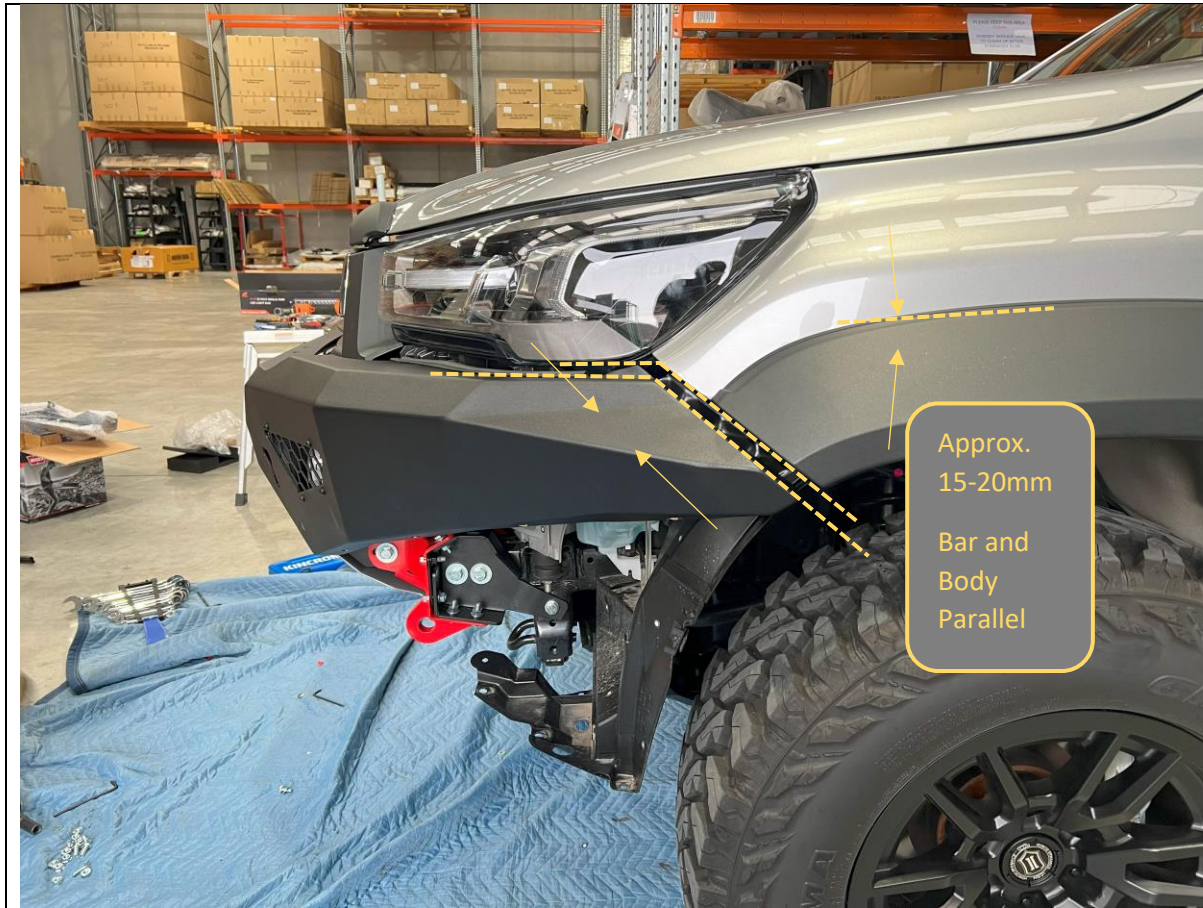


- 80. With assistance, from either another person or mechanical lifting aid such as a lift trolley, offer the bar up to the mounts.
- 81. Secure the bar to the mounts using single M12x30 Bolt 2x M12 Heavy Duty flat washers and M12 Nyloc Nut per side
- 82. Loosely fit the other 3x M12x30s Bolt 6x M12 Heavy Duty flat washers and 3xM12 Nyloc Nuts per side.

TOOLS REQUIRED
Lifting trolley

FASTENERS

8x M12x30 Bolt
16x M12 HD Washer
8x M12 Nyloc Nuts



83. Align the bar with the body. Aim for 15-20mm clearance between the wing and body.

IMPORTANT: It is the installers responsibility to ensure clearances are set so that no part of the bar touches the vehicle. Remember that body is rubber mounted and will move relative to bar in use.

84. With assistance, Hold the bar in position and tighten all the Bar to mount bolts, using 18/19mm socket and spanner.

An Electric Impact wrench makes this process much easier.

TOOLS REQUIRED
18/19mm socket
18/19mm spanner

FASTENERS



- 85. If fitting a winch to the bar, do so at this stage. Follow the winch manufacturer’s instructions.
- 86. The winch mounts feet down and is inserted through the front opening of the bar.
- 87. Most winches will fit underneath the triangular cross brace. Warn Zeon 10 winches will need to trim this cross brace to gain sufficient clearance.

TOOLS REQUIRED
Refer to winch Instructions

FASTENERS
Refer to winch Instructions



88. Fit the camera module to the center mesh panel, using the original bracket, and supplied M6x16 button head screws, flat washers and flange nuts.

89. If fitting winch, attach fairlead to center mesh panel using bolts supplied in winch fitting kit. Ensure winch rope is fed through fairlead.

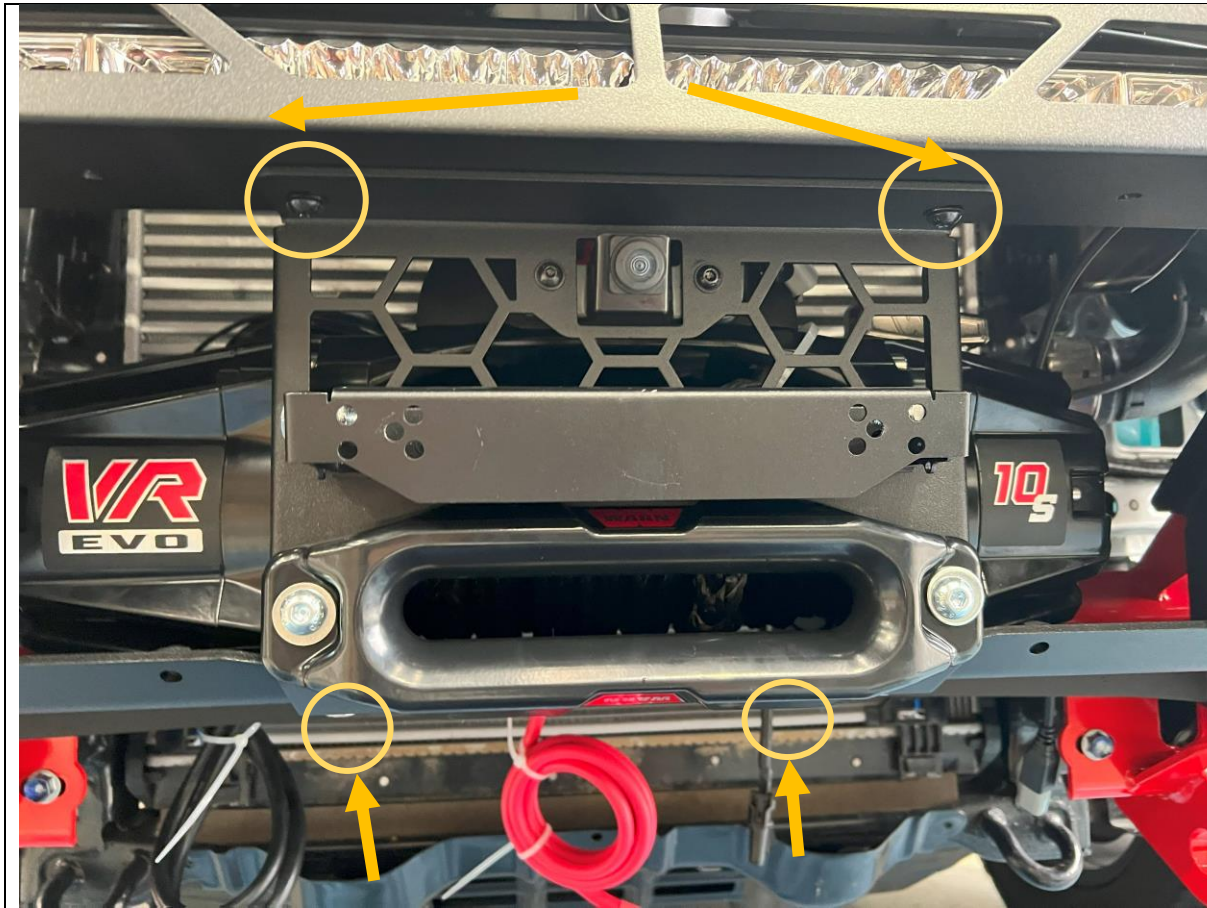
90. Fit number plate flip to mesh panel using M6x20 Hex bolt, Flat washer, and flange nut, supplied in number plate flip kit.

TOOLS REQUIRED

- 10mm Socket
- 4mm hex key

FASTENERS

- 2x M6x20 Hex Bolt
- 4x M6 Flat washer
- 4x M6 Flange Nut
- 2x M6x16 Black Button Head



- 91. Fit Mesh panel to the bar. Secure with 2x M8x16 Black Button Head Screws, M8 Flat washer and M8 Flange nuts at top and 2x M8x20 Hex Bolts M8 Flat washer and M8 Flange nuts at Bottom.
- 92. Re-connect the camera harness to the relocated camera module

TOOLS REQUIRED
5mm Hex Key
13mm Spanner
10mm spanner

FASTENERS
2x M8x16 Button Head
2x M8x20 Button Head
4x M8 Black Flat Washer
4x M8 Flange Nut



93. Fit the side mesh panel to the bar, using only the top and side points at this stage. Secure with 2x M6x16 Black Button head, bolts, Black M6 Flat washer and flange nut.

94. Repeat for other side of vehicle.

95. Fit Number Plate to number plate flip, using M5 fasteners supplied with number plate flip

TOOLS REQUIRED

- 4mm Hex Key
- 10mm Socket
- 10mm Spanner

FASTENERS

- 4x M6x16 Button Head
- 4x M6 Black Flat Washer
- 4x M6 Flange Nut



- 96. If re-fitting factory fog lamps, fit the fog lamps to the supplied fog lamp brackets using the M6x16 screws and Flange nuts provided.
- 97. Fit the fog lamp brackets, to the light mesh panels using 3x M8x16 Button head bolts,
- 98. If fitting own lamps in light mesh, fit now using slots on panel, and hardware provided with lights.
- 99. Repeat for both sides of vehicle.

TOOLS REQUIRED
4MM Hex Key
10mm Spanner

FASTENERS
(if fitting fog lamp)
4x M6x16mm screw
4x M6 Flange Nuts

3x M8x16mm Button head bolts
3x M8 Flat Washer
3x M8 Flange Nuts

Per side



<p>100. Fit light mesh panels to the bar. Position the panel from underneath the bar and align with the mounting holes in the wing. Secure with 4x M6x16mm Button head bolts and M6 Flange Nuts</p> <p>101. Repeat for other side of vehicle.</p> <p>102. Reconnect fog lights, or additional driving lights, depending on what was fitted.</p>	<p>TOOLS REQUIRED 4mm Hex Key 10mm Spanner</p>
	<p>FASTENERS 4x M6x16mm Button head bolt 4x M6 Flange Nut</p>



103. Re-connect all wiring harnesses to the adaptive cruise sensor, parking sensors and fog lights

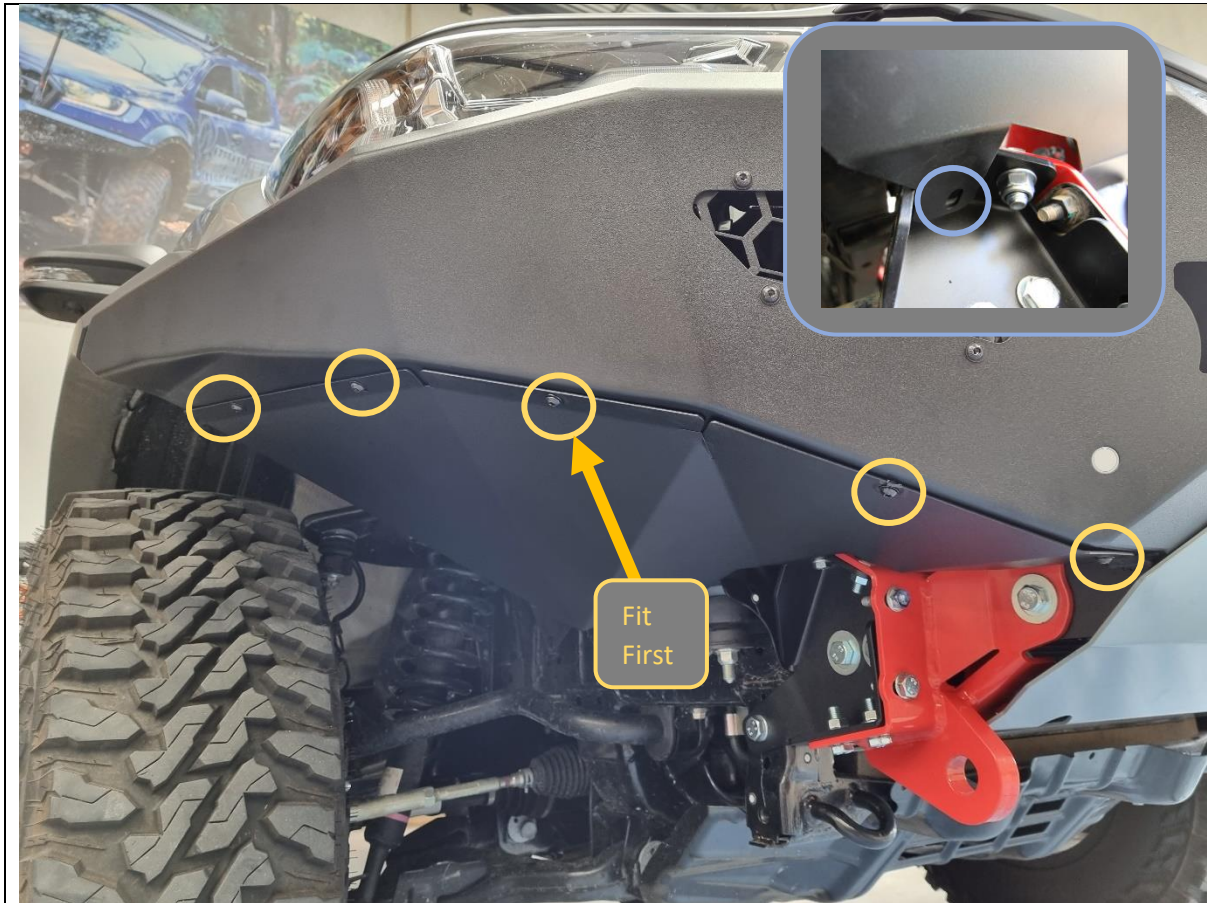
104. Replace the radiator shroud to top of grille, Secure with factory push center clips.

TOOLS REQUIRED

FASTENERS



<p>105. Fit bash plate to vehicle.</p>	<p>TOOLS REQUIRED 5mm Hex 6mm Hex 13mm Spanner & Socket 15mm Spanner</p>
<p>106. First secure the top of the bash plate to the bottom of bar, through Shim plate, Mesh panel, then bar itself. Secure with M8x20 Button head bolts, Flat washer into welded nuts in bar.</p> <p>107. Secure bottom of Bash plate to mounts M10x30mm Button head Bolt, Flat washer and M10 Flange Nut. Insert nut through access hole in bash plate as shown.</p>	<p>FASTENERS 4x M8x20 Button head Bolt 4xM8 Flat washer 2x M10x30 Button head Bolt 2x M10 Flat washer 2x M10 Flange nut</p>



108. Fit side under panels to bar and secure with 4x M6x16 Button head bolts and M6 Flat washers, into M6 cage nuts fitted earlier.

Fitting center bolt first will make it easier to align panel to bar.

109. Secure the back corner of under panel to mount using M8x20 Hex bolt, Flat washer and M8 Flange Nut.

110. Repeat for other side of vehicle.

TOOLS REQUIRED

4mm Hex Key
13mm Spanner / Socket

FASTENERS

5x M6x16 Button head bolt
5x M6 Flat Washer
1x M8x20 Hex head
1x M8 Flat Washer
1x M8 Flange nut
Per side



- 111. Mark where wheel arch liner intersects with side under panel with paint pen or another marker.
- 112. Create line offset approximately 20mm below intersection point.
- 113. Trim wheel arch liner to this line using utility Knife.
- 114. Insert wheel arch liner behind flange on side under panel.

TOOLS REQUIRED

Marker
Utility Knife

FASTENERS

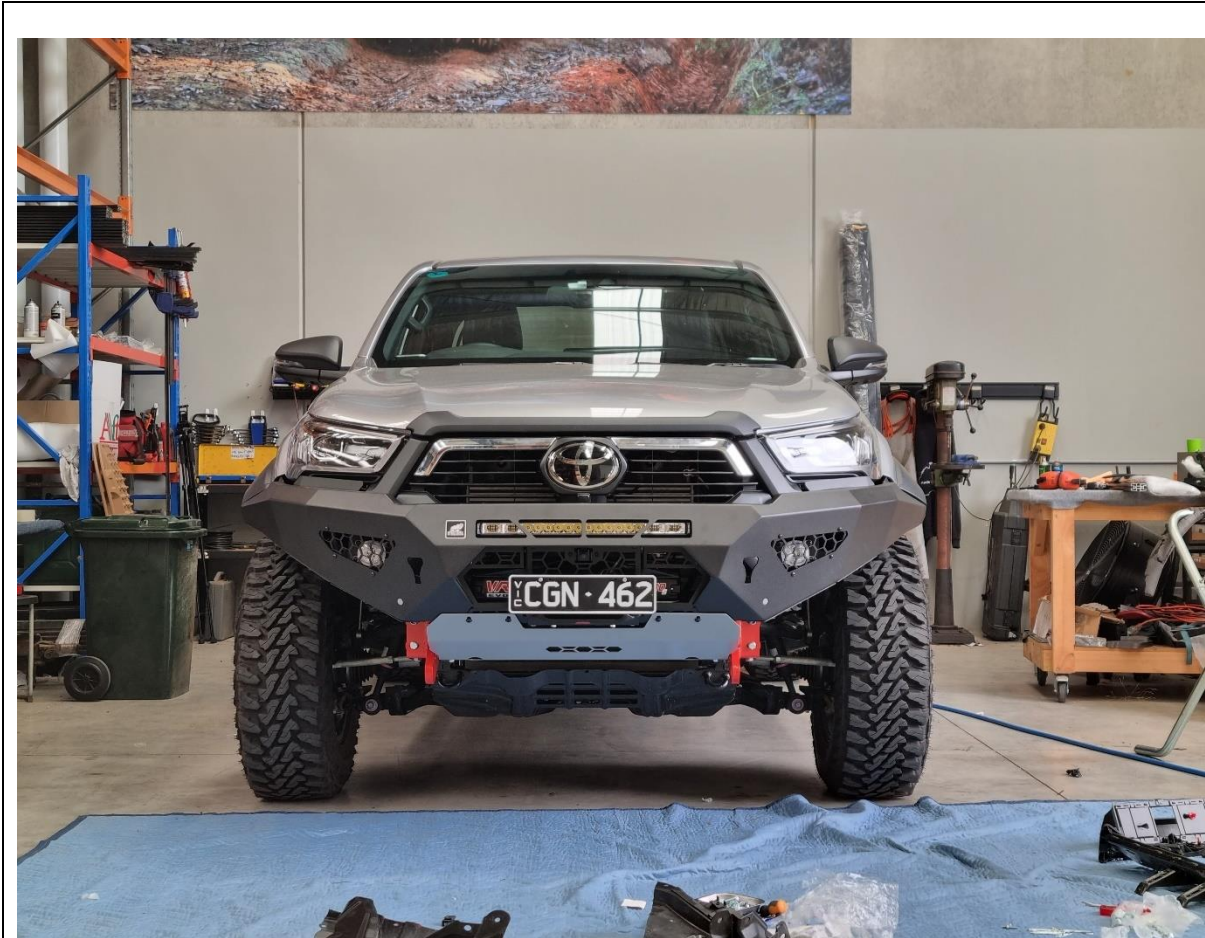


- 115. Fit the logo plate to the front of the bar as shown.
- 116. Fit the Compliance plate in a visible location on the underside of the bar. We recommend placing it on the bottom of the center bash plate.
- 117. Review fitment and double check all bolts are tight.

TOOLS REQUIRED

- Marker
- Utility Knife

FASTENERS



Congratulations!
Head for the tracks and enjoy your newly protected Toyota Widebody Hilux!