



## KIA TASMAN TK MY25 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 vehicle's SRS airbags.
- This product must be installed exactly as per these instructions using only hardware supplied.
- Take a few moments to read instructions thoroughly before beginning work.
- In the event of damage to any bar component please contact OFFROAD ANIMAL to arrange repair/replacement of components.
- Do not use this product for any vehicle make or model other than that specified on these instructions.
- Do not remove labels from this product.
- This product and its fixings must not be modified in any way unless stated in these fitting instructions.
- The installation of this product is recommended for trained personnel.
- These instructions are correct at time of publication. OFFROAD ANIMAL cannot be held responsible for the impact of any changes subsequently made by the vehicle manufacturer. If you find something has changed please contact us to let us know!
- During installation it is the duty of the installer to check correct operation/clearances of all components.
- If Instructions are to be printed for reference in the workshop, it is recommended that they are printed in colour, for best legibility.

## GENERAL CARE AND MAINTENANCE

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.

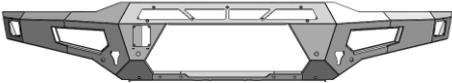
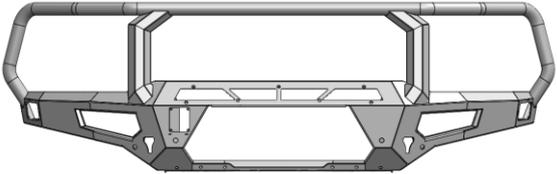
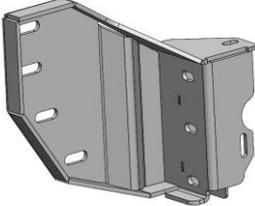
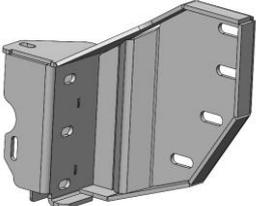
FRONT BAR MOUNTS AND TOW POINTS + REAR TOWBAR	
Size	Torque Nm
M10	57 Nm
M12	100 Nm
M14	164 Nm
M16	248 Nm

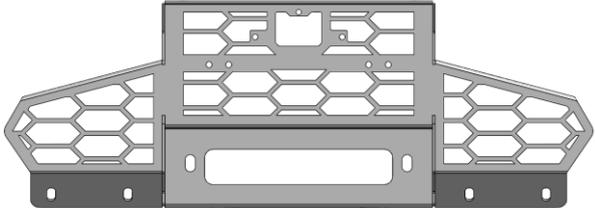
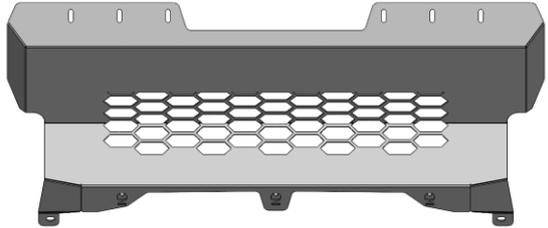
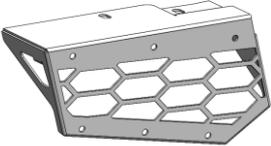
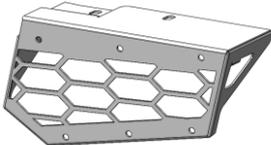
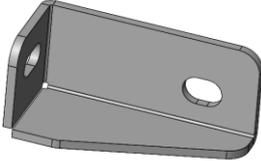
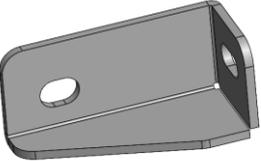
**Always use a torque wrench to set correct torque settings. Ensure torque wrench is set to Nm unit of measurement. Otherwise perform conversion to lb-ft.**

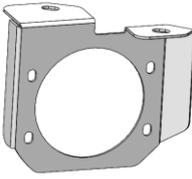
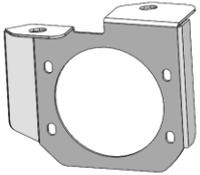
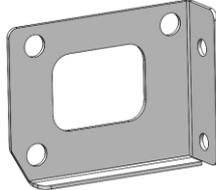
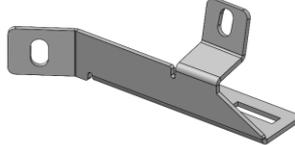
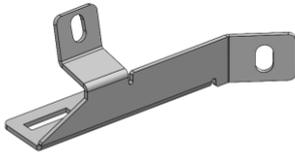
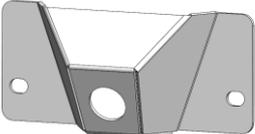
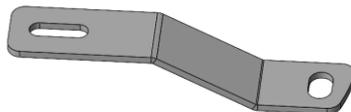
## PARTS LISTING

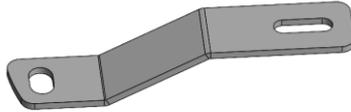
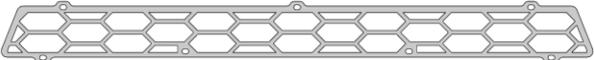
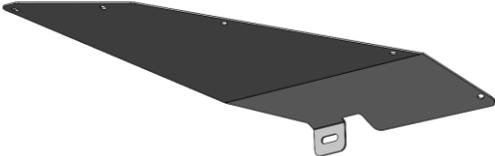
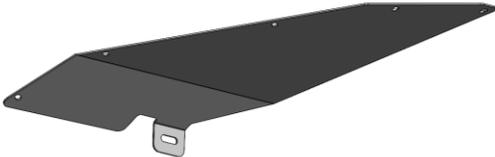
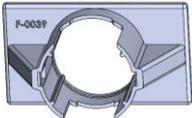
**IMPORTANT:** Check all parts are present before beginning work! Contact OFFROAD ANIMAL if something is missing.

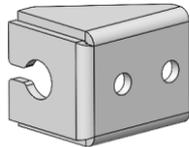
### Main Parts – In the Box

Qty	Part Number	Description	Image
1	FB-KTA-TK-25-PR-ASM1	Kia Tasman TK Predator Bar Weldment	
<b>OR</b>			
1	FB-KTA-TK-25-TOR-ASM1	Kia Tasman TK Toro Bar Weldment	
1	FB-KTA-TK-25-PR-ASM2R	Kia Tasman TK Impact Assembly Weldment RH	
1	FB-KTA-TK-25-PR-ASM2L	Kia Tasman TK Impact Assembly Weldment LH	
1	FB-KTA-TK-25-PR-ASM3R	Kia Tasman TK Tow Point Weldment RH	
1	FB-KTA-TK-25-PR-ASM3L	Kia Tasman TK Tow Point Weldment LH	

1	FB-KTA-TK-25-PR-ASM4	Kia Tasman TK Mesh Fairlead Weldment	
1	FB-KTA-TK-25-PR-ASM5	Kia Tasman TK Bash Plate Assembly	
1	M-0081R	Kia Tasman TK Predator Wing Mesh Panel RH	
1	M-0081L	Kia Tasman TK Predator Wing Mesh Panel LH	
1	B-1739R	Kia Tasman TK Predator Outer Chassis Brace RH	
1	B-1739L	Kia Tasman TK Predator Outer Chassis Brace LH	
1	B-1740R	Kia Tasman TK Predator Inside Chassis Brace RH	
1	B-1740L	Kia Tasman TK Predator Inside Chassis Brace LH	

<b>2</b>	B-1743	Kia Tasman TK Predator Pan Brace	
<b>1</b>	B-1734R	Kia Tasman TK Type A Fog Light Bracket RH	
<b>1</b>	B-1734L	Kia Tasman TK Type A Fog Light Bracket LH	
<b>1</b>	B-1735	Kia Tasman TK Predator Center Radar Mount Bracket	
<b>1</b>	B-1738R	Kia Tasman TK Predator Side Radar Mounting Bracket RH	
<b>1</b>	B-1738L	Kia Tasman TK Predator Side Radar Mounting Bracket LH	
<b>1</b>	B-1741	Kia Tasman TK Predator Camera Mount Bracket	
<b>1</b>	B-1742	Kia Tasman TK Predator Camera Cover Panel	
<b>1</b>	B-1744	Kia Tasman TK Lower Bash Plate Support	
<b>1</b>	B-1825R	Kia Tasman TK Grille Support Bracket A RH	

1	B-1825L	Kia Tasman TK Grille Support Bracket A LH	
1	B-1826R	Kia Tasman TK Grille Support Bracket B RH	
1	B-1826L	Kia Tasman TK Grille Support Bracket B LH	
1	B-1446	Number Plate Flip - Large	
1	B-1458	Number Plate Flip Base	
1	P-0488	32" Lightbar Mesh Infill	
1	U-0121R	Kia Tasman TK Side Underpanel RH	
1	U-0121L	Kia Tasman TK Side Underpanel LH	
6	F-0039	Kia Tasman TK Parking Sensor Holder	
12	Fir Tree Clip 4.5mm Hole	Fine-rib push-in rivet, WURTH 0500827023	
1	FB-KTA-TK-25-PR-ADRC	ADR Compliance Plate Kia Tasman TK	

1	OFA-LOGO	Offroad Animal Metal Logo	
1	N-0025	Kia Tasman TK Predator Center Radar Plastic Cover	
2	N-0026	Kia Tasman TK Predator Side Radar Plastic Cover	
2	PSE01-2	Parking Sensor Extension PSE01 - 2 Pack	
1	RAD11	Kia Tasman Front Radar Extension Harness - 50cm	
1	TK-FB-FRA-NG-22	Tape Kit - 3M 5952 2x 100x6mm	N/A
1	TK-COM-PSEN-6	Tape Kit - 6 Sensor Universal	N/A
<b>TORO ONLY</b>			
2	B-0523	Toro Antenna Bracket - 90 Degree	

**PREDATOR Fasteners – Contained in Small Parts Kit Bag**

Qty	Part Number	Description
2	M4 FLANGE NUT	Flange Nut, M4
2	M4 FLAT WASHER	Flat Washer M4, 8mmODx0.8mm T
2	M4X12 PAN	SCREW, PAN HEAD PHILLIPS, M4X12X0.7 GR4.6 ZP
3	M5X15 PAN	SCREW, PAN HEAD PHILLIPS, M5X15X0.8 GR4.6 ZP
4	M5 X 16 HEX BZP	M5X16 HEX BOLT, Grade 8.8, ISO4042 ZnNi BLACK PASSIVATED FINISH
4	M5 Flat washer BZP	M5 Flat Washer, 10x5.3x1, ISO4042 ZnNi BLACK PASSIVATED FINISH
3	M5 Flat washer M5	M5 FW
7	M5 FLANGE NUT	Flange Nut, M5x0.8 G8.8 ZP
11	M6 X 12 CSK BZP	SCREW, COUNTERSUNK CAP, M6X12X1 Black ZP
12	M6x12 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X12X1 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
38	M6x16 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X16X1 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
52	M6 FLAT WASHER BLACK ZINC	M6 Flat Washer, 12x6.1x1, ISO4042 ZnNi BLACK PASSIVATED FINISH
2	M6 NYLOC	NYLOC SELF LOCKING NUT, ST STL A2 ISO
2	M6 NYLON WASHER	Nylon Flat Washer, M6x12x1mm
33	M6 FLANGE NUT	Flange Nut, M6x1 G8.8 ZP
10	M6CN3MM CAGE	CAGE NUT M6x2.6-3.5
10	M8 HD FLAT WASHER - BZP	M8 FLAT WASHER - High Tensile 19x8x2mm, ISO4042 ZnNi BLACK PASSIVATED FINISH
6	M8 X 25 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M8X25X1.25, ISO4042 ZnNi BLACK PASSIVATED FINISH
2	M8 X 16 HEX BZP	Bolt Hex, M8X16x1.25, GR8.8 ISO4042 ZnNi BLACK PASSIVATED FINISH
4	M8 X 16 HEX	Bolt Hex, M8X16x1.25, GR8.8 ZP
4	M8 X 16 BHCS BZP	SCREW, BUTTON HEAD CAP, M8X16X1.25 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
2	M8 X 20 HEX	Bolt Hex, M8X20x1.25, GR8.8 ZP
3	M8X30 CAP SCREW	CAP SCREW, M8X30X1.25 GR10.9 ZP
9	M8 HD FLAT WASHER	M8 FLAT WASHER - High Tensile 19x8x1.9mm
2	M8 FLAT WASHER- BLACK ZINC	M8 FLAT WASHER, 16.5x8.4x1.2, ISO4042 ZnNi BLACK PASSIVATED FINISH
3	M8 Cage nut	NUT, CAGE, M8X1.25 ZINC PLATE
8	M8 FLANGE NUT	Flange Nut, M8x1.25 G8.8 ZP
12	M10 FLANGE NUT	Flange Nut, M10x1.5 G8.8 ZP
26	M10 FW LHD	WASHER, FLAT M10X28.5X2.5
10	M10 x 30	Bolt Hex, M10X30x1.5, GR8.8 ZP
2	M10 X 45	Bolt Hex, M10X45X1.5, GR8.8 ZP
4	M10x25x1.25	Bolt Hex, M10X25x1.25, GR8.8 ZP
6	M10X35X1.25	Bolt Hex, M10X35X1.25, GR8.8 ZP
4	M10X45X1.25	Bolt Hex, M10X45X1.25, GR8.8 ZP
4	M12X45	Bolt Hex, M12X45X1.75, GR8.8 ZP
10	M12 FLANGE NUT	Flange Nut, M12x1.75 G8.8 ZP

<b>6</b>	M12 FW HT	M12 FW High Tensile
<b>8</b>	M12 FW LHD	M12 FW Large Heavy Duty
<b>10</b>	M12X30 Bolt	Bolt Hex, M12X30x1.75, GR8.8 ZP
<b>2</b>	NP-COM-M12-300-ASM0	M12 NUT PLATE 300MM STEM
<b>2</b>	NP-COM-M12-40-ASM0	M12 NUT PLATE SHORT, 40MM STEM ROUNDED

**TORO Fasteners – Contained in Small Parts Kit Bag**

Qty	Part Number	Description
2	M4 FLANGE NUT	Flange Nut, M4
2	M4 FLAT WASHER	Flat Washer M4, 8mmODx0.8mm T
2	M4X12 PAN	SCREW, PAN HEAD PHILLIPS, M4X12X0.7 GR4.6 ZP
3	M5X15 PAN	SCREW, PAN HEAD PHILLIPS, M5X15X0.8 GR4.6 ZP
4	M5 X 16 HEX BZP	M5X16 HEX BOLT, Grade 8.8, ISO4042 ZnNi BLACK PASSIVATED FINISH
4	M5 Flat washer BZP	M5 Flat Washer, 10x5.3x1, ISO4042 ZnNi BLACK PASSIVATED FINISH
3	M5 Flat washer M5	M5 FW
7	M5 FLANGE NUT	Flange Nut, M5x0.8 G8.8 ZP
11	M6 X 12 CSK BZP	SCREW, COUNTERSUNK CAP, M6X12X1 Black ZP
12	M6x12 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X12X1 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
38	M6x16 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X16X1 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
52	M6 FLAT WASHER BLACK ZINC	M6 Flat Washer, 12x6.1x1, ISO4042 ZnNi BLACK PASSIVATED FINISH
2	M6 NYLOC	NYLOC SELF LOCKING NUT, ST STL A2 ISO
2	M6 NYLON WASHER	Nylon Flat Washer, M6x12x1mm
33	M6 FLANGE NUT	Flange Nut, M6x1 G8.8 ZP
10	M6CN3MM CAGE	CAGE NUT M6x2.6-3.5
14	M8 HD FLAT WASHER - BZP	M8 FLAT WASHER - High Tensile 19x8x2mm, ISO4042 ZnNi BLACK PASSIVATED FINISH
6	M8 X 25 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M8X25X1.25, ISO4042 ZnNi BLACK PASSIVATED FINISH
2	M8 X 16 HEX BZP	Bolt Hex, M8X16x1.25, GR8.8 ISO4042 ZnNi BLACK PASSIVATED FINISH
4	M8 X 16 HEX	Bolt Hex, M8X16x1.25, GR8.8 ZP
4	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
2	M8 X 20 HEX	Bolt Hex, M8X20x1.25, GR8.8 ZP
3	M8X30 CAP SCREW	CAP SCREW, M8X30X1.25 GR10.9 ZP
9	M8 HD FLAT WASHER	M8 FLAT WASHER - High Tensile 19x8x1.9mm
2	M8 FLAT WASHER- BLACK ZINC	M8 FLAT WASHER, 16.5x8.4x1.2, ISO4042 ZnNi BLACK PASSIVATED FINISH
3	M8 Cage nut	NUT, CAGE, M8X1.25 ZINC PLATE
8	M8 FLANGE NUT	Flange Nut, M8x1.25 G8.8 ZP
12	M10 FLANGE NUT	Flange Nut, M10x1.5 G8.8 ZP
26	M10 FW LHD	WASHER, FLAT M10X28.5X2.5
10	M10 x 30	Bolt Hex, M10X30x1.5, GR8.8 ZP
2	M10 X 45	Bolt Hex, M10X45X1.5, GR8.8 ZP
4	M10x25x1.25	Bolt Hex, M10X25x1.25, GR8.8 ZP
6	M10X35X1.25	Bolt Hex, M10X35X1.25, GR8.8 ZP
4	M10X45X1.25	Bolt Hex, M10X45X1.25, GR8.8 ZP

<b>4</b>	M12X45	Bolt Hex, M12X45X1.75, GR8.8 ZP
<b>10</b>	M12 FLANGE NUT	Flange Nut, M12x1.75 G8.8 ZP
<b>6</b>	M12 FW HT	M12 FW High Tensile
<b>8</b>	M12 FW LHD	M12 FW Large Heavy Duty
<b>10</b>	M12X30 Bolt	Bolt Hex, M12X30x1.75, GR8.8 ZP
<b>2</b>	NP-COM-M12-300-ASM0	M12 NUT PLATE 300MM STEM
<b>2</b>	NP-COM-M12-40-ASM0	M12 NUT PLATE SHORT, 40MM STEM ROUNDED

## TOOLS REQUIRED

The following tools will be required to install the product.

<b>Hand Tools</b>	<b>Power Tools</b>	<b>Workshop Equipment</b>
Metric Socket Set 8-19mm	Electric/Air Impact Driver (Optional)	Panel Stand or Soft Blanket
Socket Extension Bar	Air hacksaw or Jigsaw or Multi-tool or Angle grinder	Lifting Trolley
Metric Spanner Set 8-19mm	Electric/Air Drill	Isopropyl Alcohol
Hex (Allen) Key Set 3-8mm		Clean Workshop Rag
Trim Removal Tool		Marker Pen
Flat Blade Screwdriver Set		Measuring Tape
Phillips Head Screwdriver Set		Masking Tape
Auto Trim Tool		Cable Ties
6mm Drill Bit		Electrical tape
Utility Knife		Sikaflex adhesive
Side Cutters		
Deburring Tool		
Wire Strippers		
Crimping Tool		

# 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>



<p><b>WARNING:</b> Do not attempt to turn on and move the vehicle while the radars, sensors and camera are disconnected. Do not drop or impact any of these parts. Failure to do so may cause sensor malfunctions that can only be rectified by a KIA dealer.</p>	<p><b>TOOLS REQUIRED</b></p> <p>Phillips head screwdriver</p>
<ol style="list-style-type: none"> <li>1. Remove number plate from bumper and set it aside.</li> <li>2. Open the bonnet using the lever under the steering wheel on the driver's side.</li> </ol>	<p><b>FASTENERS</b></p>



3. Remove the 10x center lift clips securing the back edge of the radiator top cover. Use a trim tool or flat screwdriver to pry up the center section, then use a trim tool to remove.
4. Remove the radiator top cover by carefully pulling upwards to release the molded plastic clips along the front edge of the cover. Work progressively from outside until all clips are released.

**TOOLS REQUIRED**

Plastic trim tool  
Flat Screwdriver

**FASTENERS**

10x Plastic center lift clip  
Retain for reassembly



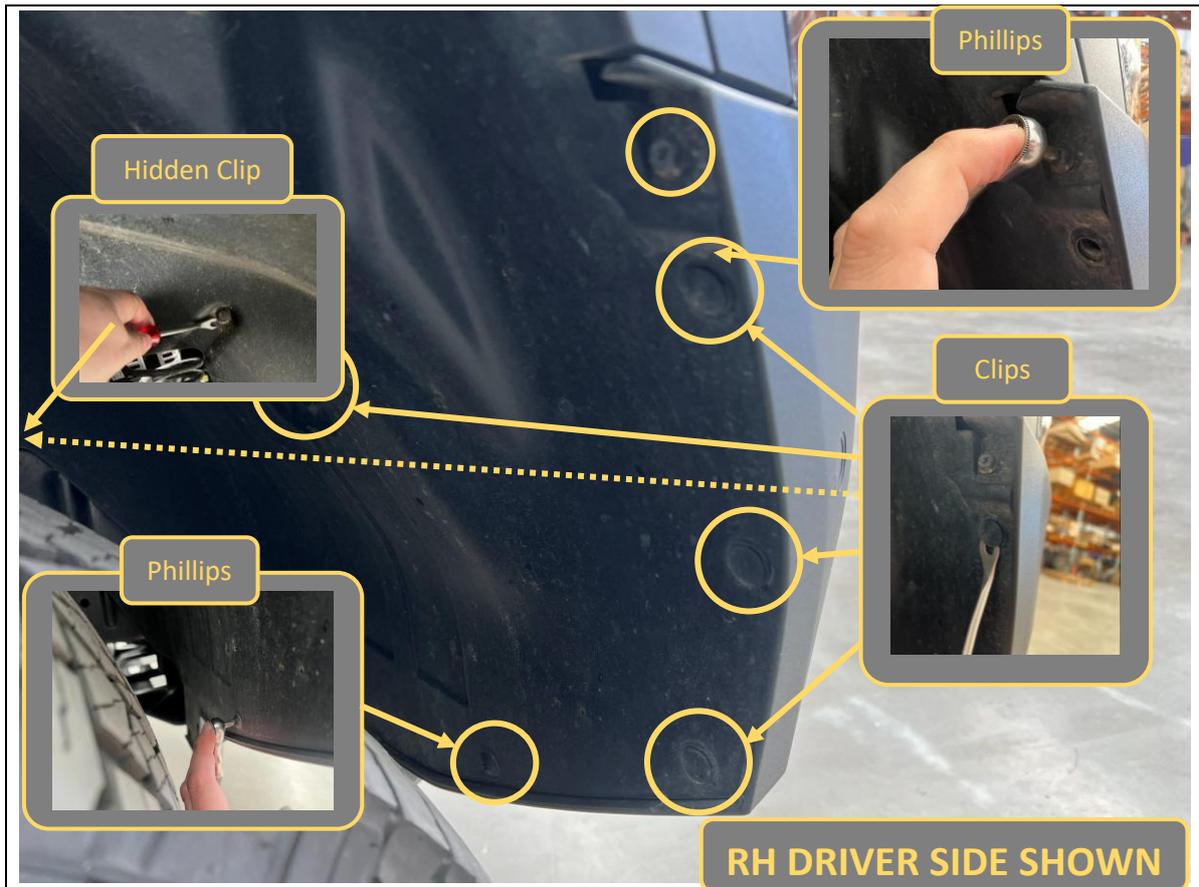
5. Remove the 8x silver M6 Bolts securing the top edge of the bumper to the vehicle using 10mm socket / spanner

**TOOLS REQUIRED**

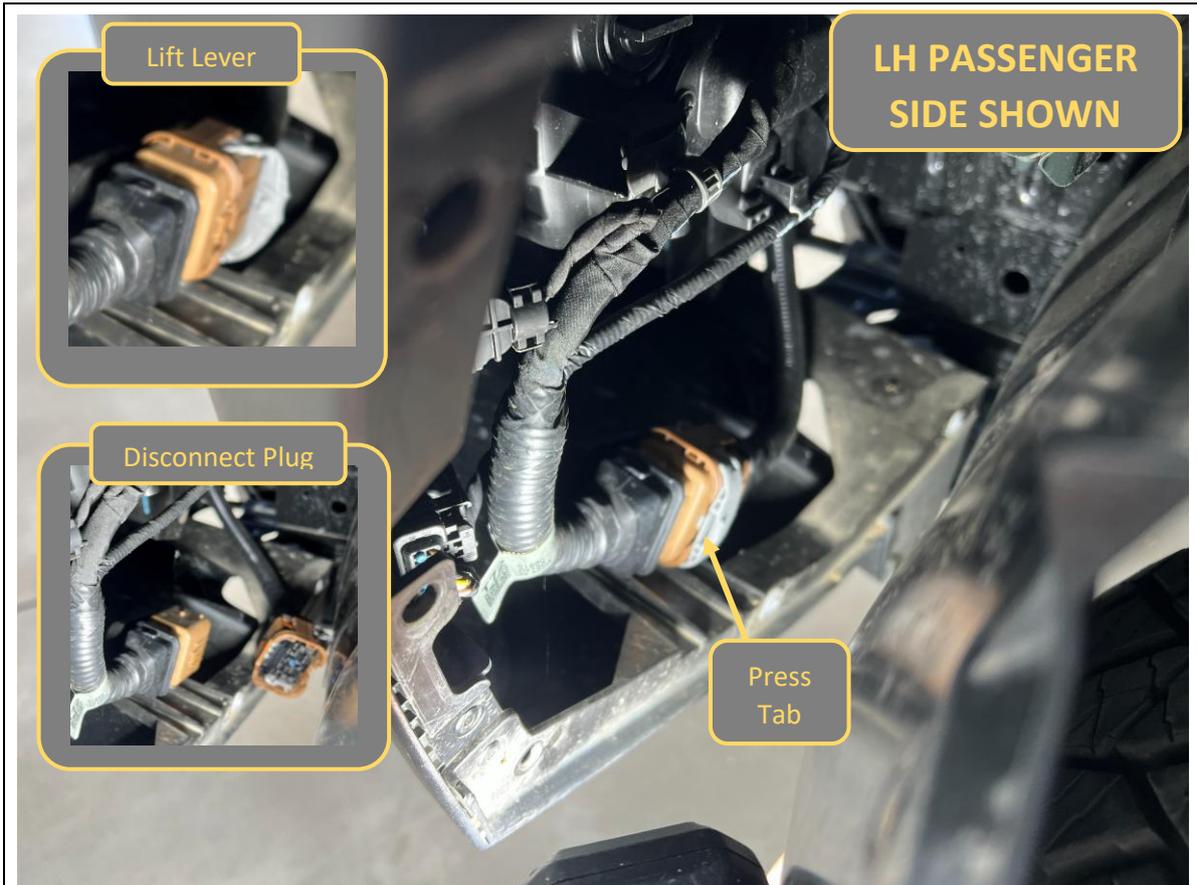
10mm Socket / Spanner

**FASTENERS**

8x M6 OE Bolt (Silver)  
Retain for refitment



<p>6. Remove the 5x center lift clips securing the inner wheel arch liner to the bumper/body. Use a trim tool or flat screwdriver to pry up the center section, then use a trim tool to remove.</p>	<p><b>TOOLS REQUIRED</b></p> <p>10mm socket/spanner</p>
<p>7. Remove 2x Phillips head screws securing the arch liner to the bumper / body.</p> <p>8. Complete for both sides of the vehicle.</p>	<p><b>FASTENERS</b></p> <p>5x Plastic center lift clip Retain for reassembly</p> <p>2x Phillips Screws Discard</p> <p>Per Side</p>



<p>9. On the LH passenger’s side, pull back the wheel arch liner to reveal the main bumper wiring harness connector.</p> <p>10. Disconnect the wiring harness plug. First depress the locking tab of the plug lever. Whilst holding tab, lift the locking lever. Once fully disengaged, disconnect the multipin plug.</p>	<p><b>TOOLS REQUIRED</b></p>
	<p><b>FASTENERS</b></p>



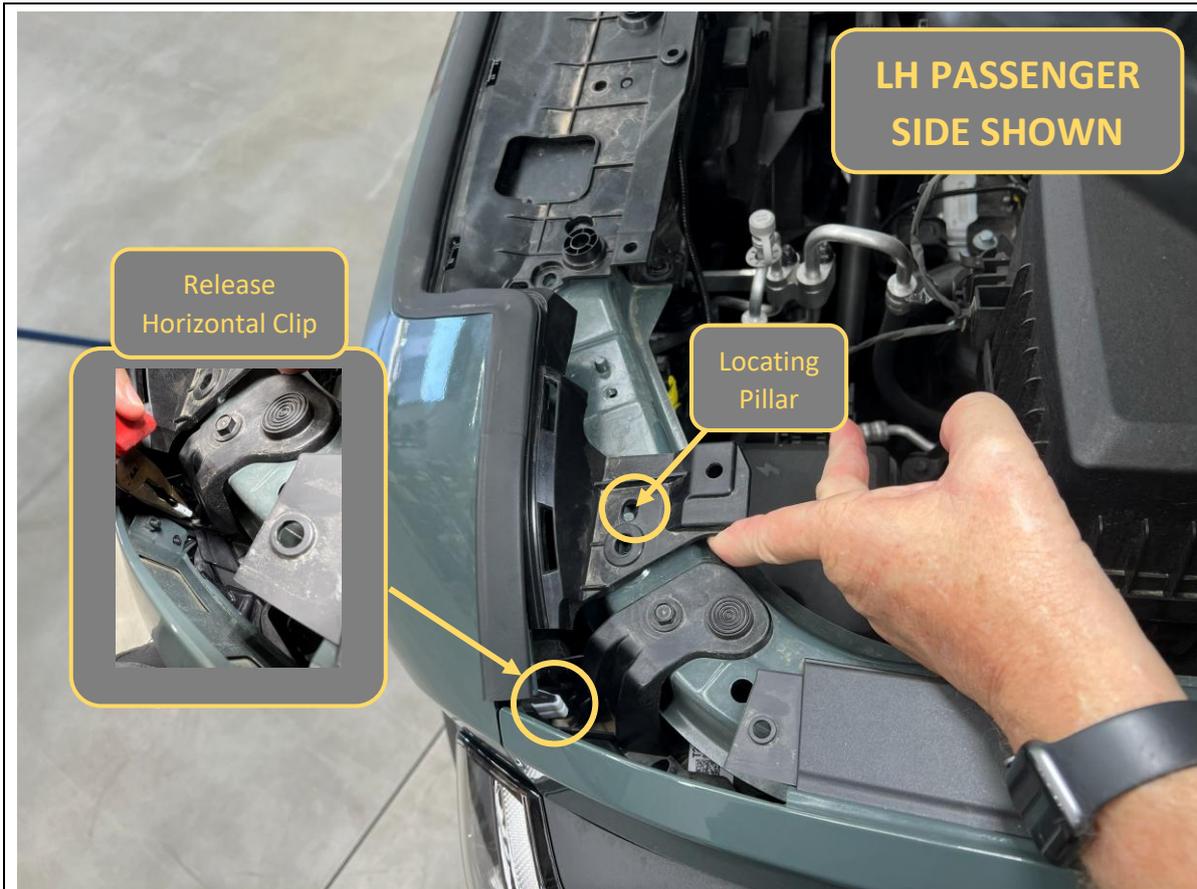
11. Remove 3x M8 Flanged head hex bolts securing the bottom edge of the bumper to the bash plate / impact beam using a 12 mm socket / spanner.

**TOOLS REQUIRED**

12mm socket/spanner

**FASTENERS**

M8 Flanged head hex bolts  
Discard



<p>12. Lift the top corner of the bumper and disengage the locating pillar from the molded retaining feature.</p> <p>13. Release the white horizontal clip securing the bumper to the body. It can help to squeeze the back of this clip with pliers, whilst pulling forward to release.</p> <p>14. Complete on both sides and leave the corners of the bumpers slightly pulled forward.</p> <p><b>Hint:</b> It is possible for the bumper to “re clip” itself whilst releasing the other side. Check both sides are loose before proceeding.</p>	<p><b>TOOLS REQUIRED</b></p> <p>Long Nose Pliers (optional)</p>
	<p><b>FASTENERS</b></p>



**RH DRIVER SIDE SHOWN**

15. Firmly but carefully pull outward from the edge of the bumper to release the clips securing the bumper to the underside of the headlight.

Complete on both sides and the bumper should be loose.

**TOOLS REQUIRED**

**FASTENERS**

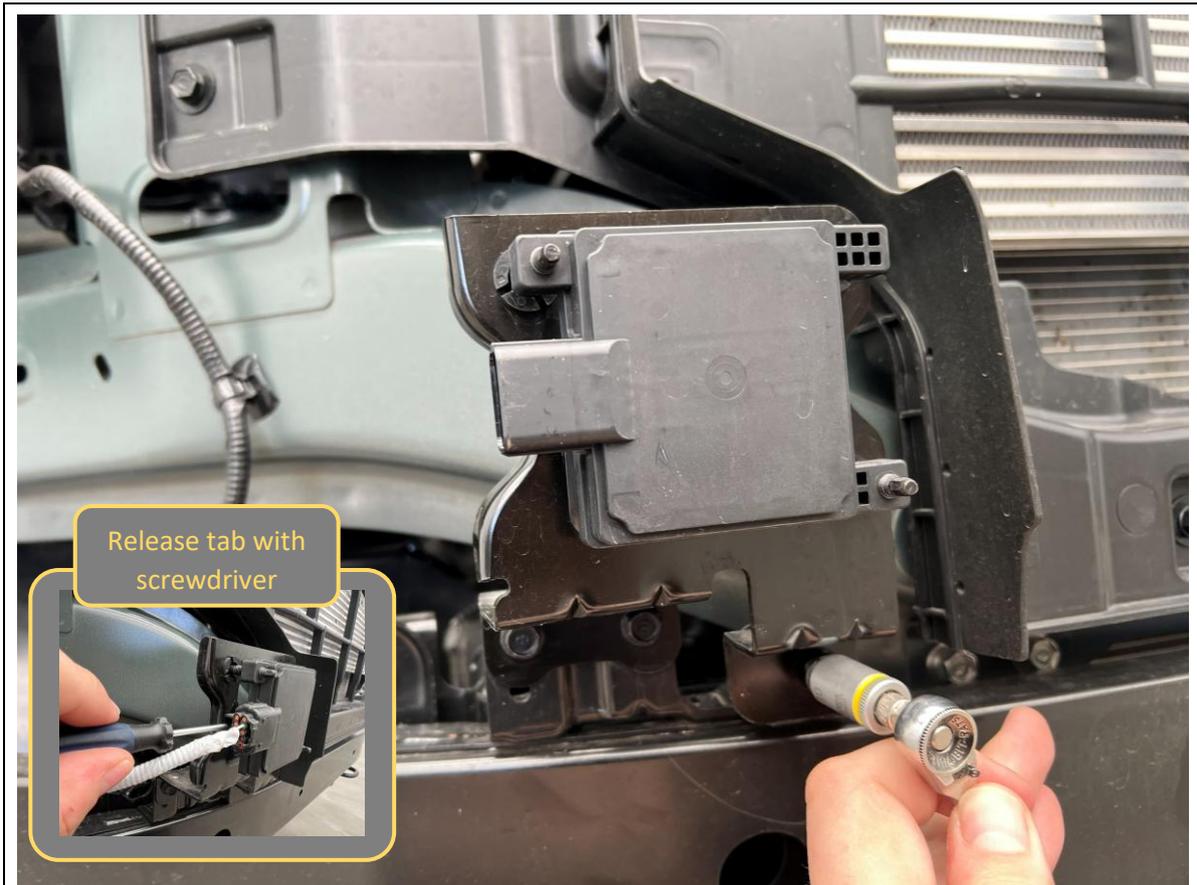


16. With assistance, lift the bumper off the vehicle and place on panel stand or soft blanket.

**TOOLS REQUIRED**

Assistance from another person  
Panel stand or soft blanket.

**FASTENERS**



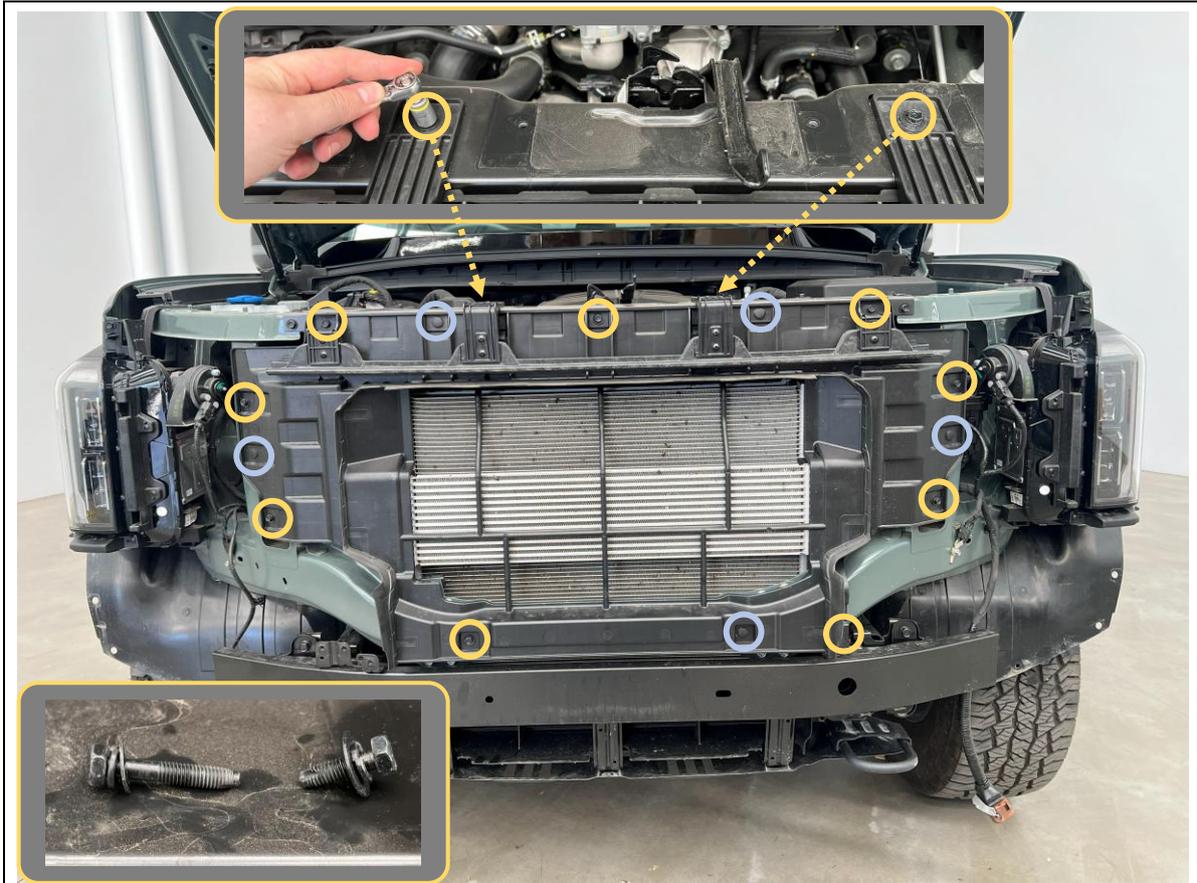
17. Use a small flat blade screwdriver to lift the locking tab on the wiring connector and disconnect the radar harness from the radar module.
18. Remove the radar bracket from the impact beam, by removing the 3x M6 Bolts securing it using a 10mm socket.
19. Unclip the radar loom from the body using a trim tool.
20. Set radar module aside in safe location for later refitment to bar.

**TOOLS REQUIRED**

Flat blade screwdriver  
10mm socket  
Trim Tool

**FASTENERS**

3x Factory M6 Flange Bolt



<p>21. Remove the radiator air guide. It is secured to the body by 11x M6 Bolts and 5x Center Lift clips.</p> <p>22. Remove M6 bolts, circled yellow in above image, using 10mm socket / spanner. 2x of the bolts are longer than others, Note position of long bolts for re-assembly.</p>	<p><b>TOOLS REQUIRED</b></p> <p>10mm socket/spanner Trim Tool / Flat screwdriver</p>
<p>23. Remove clips, circled blue in above image. Use a trim tool or flat screwdriver to pry up the center section, then use a trim tool to remove.</p> <p>24. Retain all fasteners for re-assembly.</p>	<p><b>FASTENERS</b></p> <p>9x OE 10mm hex bolts Short 2x OE 10mm hex bolts Long 5x Center Lift Clips</p> <p>Retain</p>



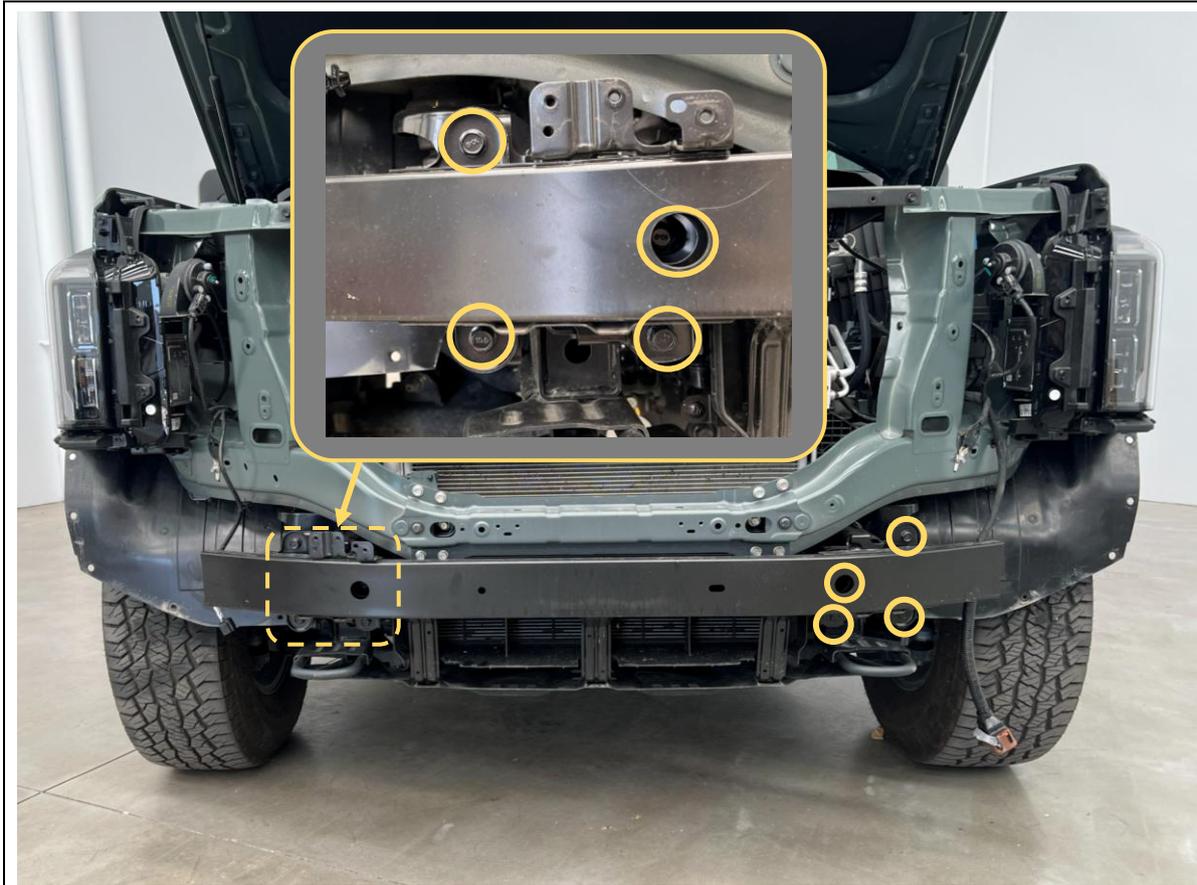
- 25. Remove the bumper retainer bracket from the bottom of the headlights. It is secured to the body by 2x phillips head screws.
- 26. Remove on both sides of the vehicle.
- 27. Discard bracket and fasteners.

**TOOLS REQUIRED**

Phillips Head Screwdriver

**FASTENERS**

2x Phillips head screw  
Discard



<p>28. Remove the Impact beam from the vehicle. It is secured to the body by 8x M10 fine pitch flange bolts.</p> <p>29. Remove M10 fine pitch flange bolts using 14mm socket &amp; Extension bar.</p> <p>30. Discard impact beam and fasteners.</p>	<p><b>TOOLS REQUIRED</b></p> <p>14mm Socket Extension Bar</p>
	<p><b>FASTENERS</b></p>



31. Remove the lower bash plate by removing the 4x M8 flange head bolts securing it to the tow points and crossmember using a 12mm socket / spanner.

**TOOLS REQUIRED**

12mm Socket / Spanner

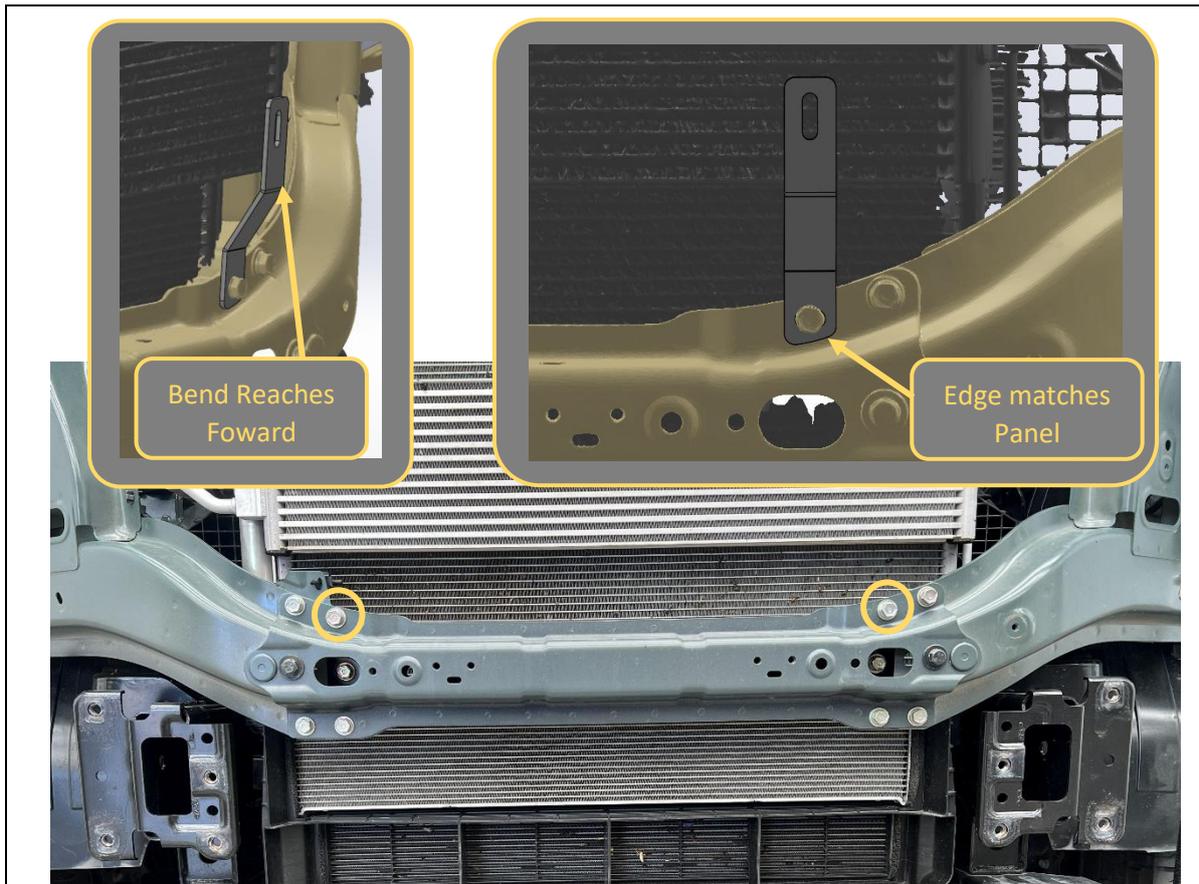
**FASTENERS**

4x M8 OE Flange Head Bolts

Discard



<p>32. Remove the tow points by removing the 2x M10 fine pitch flange head bolts securing it to the chassis using a 14mm socket.</p> <p>33. Remove the tow point on both sides of vehicle.</p>	<p><b>TOOLS REQUIRED</b></p> <p>14mm Socket</p>
	<p><b>FASTENERS</b></p> <p>2x M10 fine pitch flange head bolts</p>



34. Remove 2x M8 bolts shown from the lower radiator crossmember, using 12mm socket or spanner.
35. Fit B-1825L/R Grille Support Bracket A to the threaded point in the chassis, using the OE bolt removed.

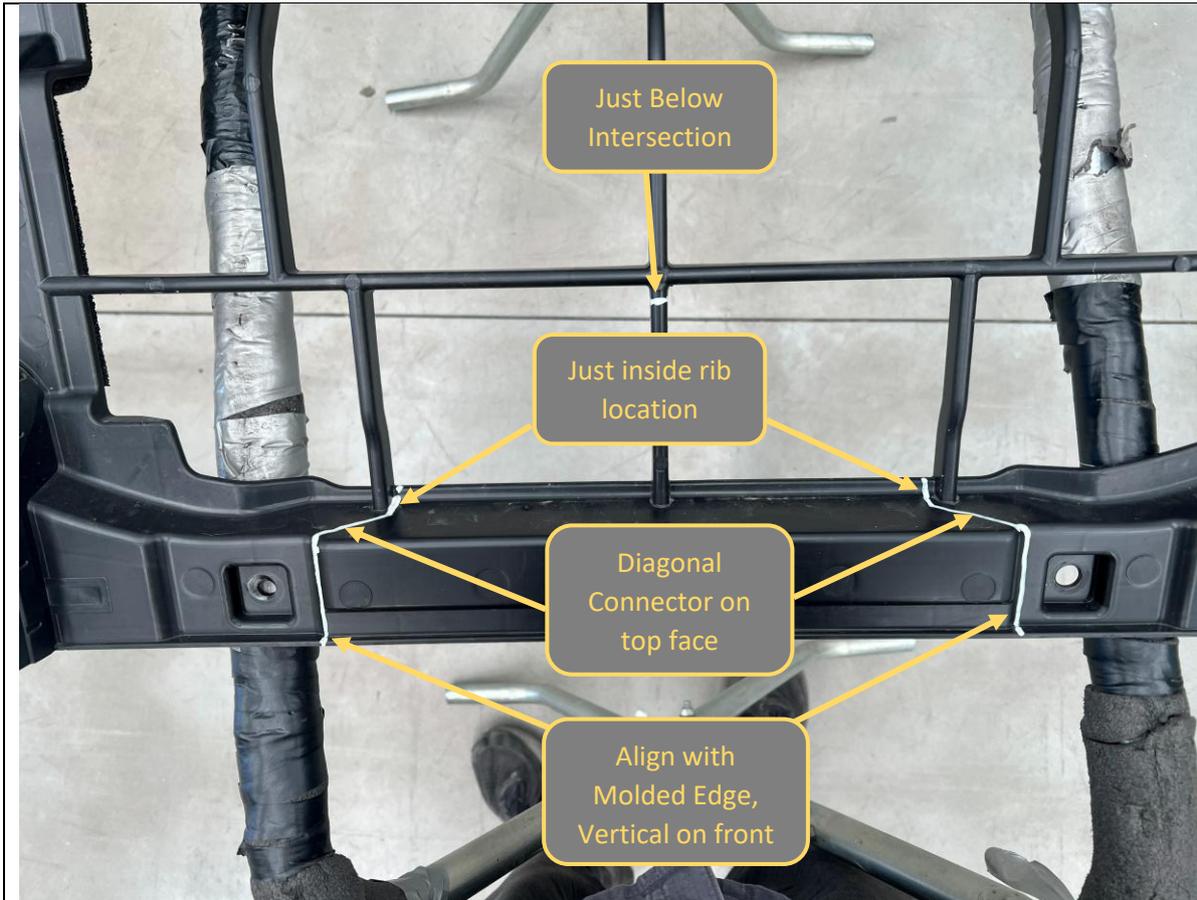
Ensure correct hand is fitted to each side. The bottom of the bracket should align with the curve in the panel, and the bend should reach forward.

**TOOLS REQUIRED**

12mm Socket / Spanner

**FASTENERS**

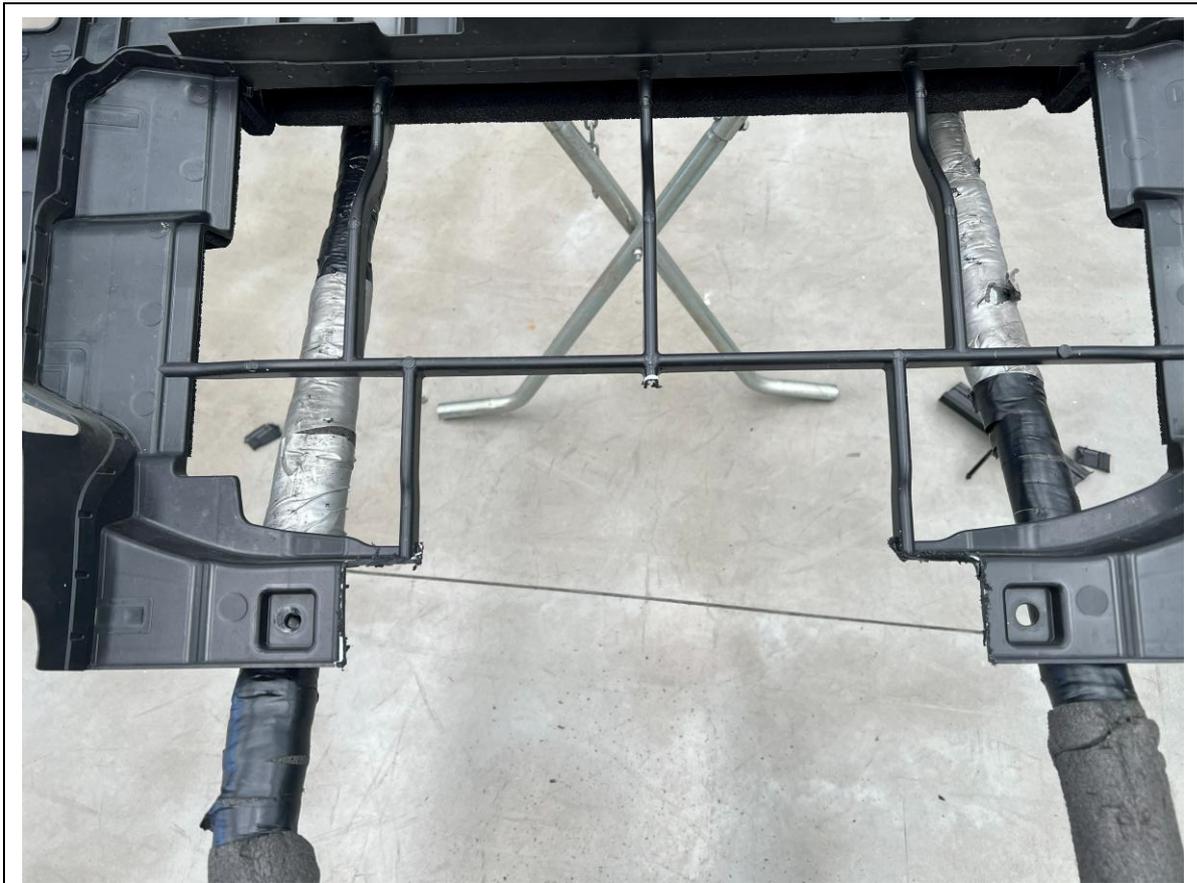
M8 OE Bolt



36. If you are fitting a winch, the plastic radiator air guide needs to be trimmed. Even if not fitting winch now, perform the trim to allow winch to be fitted easily in the future.
37. Mark out the section to be trimmed on the air guide, as per the image above.

**TOOLS REQUIRED**

**FASTENERS**



<p>38. Using a suitable plastic cutting power tool, such as an oscillating multi tool or air hacksaw, cut along the lines marked in the previous step.</p> <p>39. Clean up the trimmed edges with a deburring tool or utility knife.</p>	<p><b>TOOLS REQUIRED</b></p> <p>Oscillating multi-tool, Air Hacksaw or similar plastic cutting tool</p> <p>Deburring tool or Utility knife</p>
	<p><b>FASTENERS</b></p>



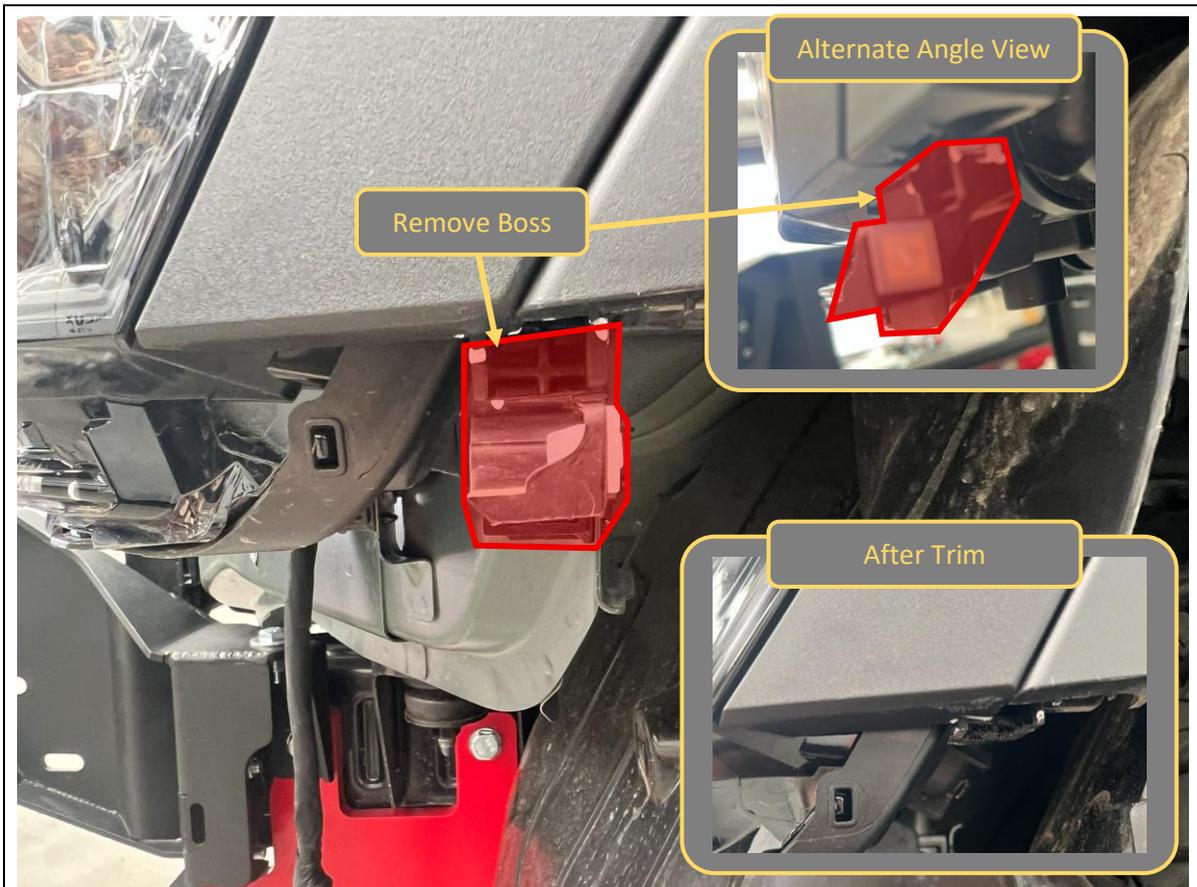
40. Re-fit the radiator air guide. Re secure to the body using the 11x M6 Bolts and 5x Center Lift clips removed earlier.

**TOOLS REQUIRED**

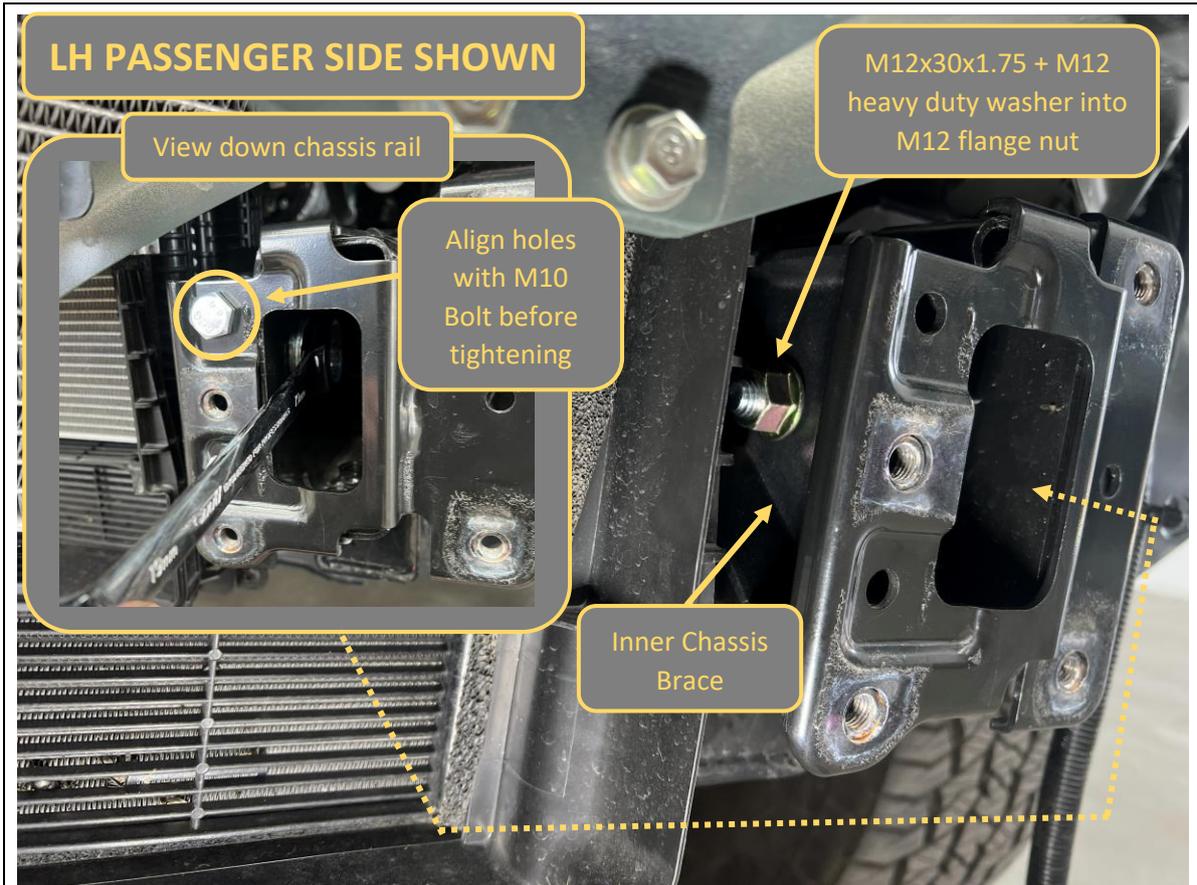
10mm socket/spanner

**FASTENERS**

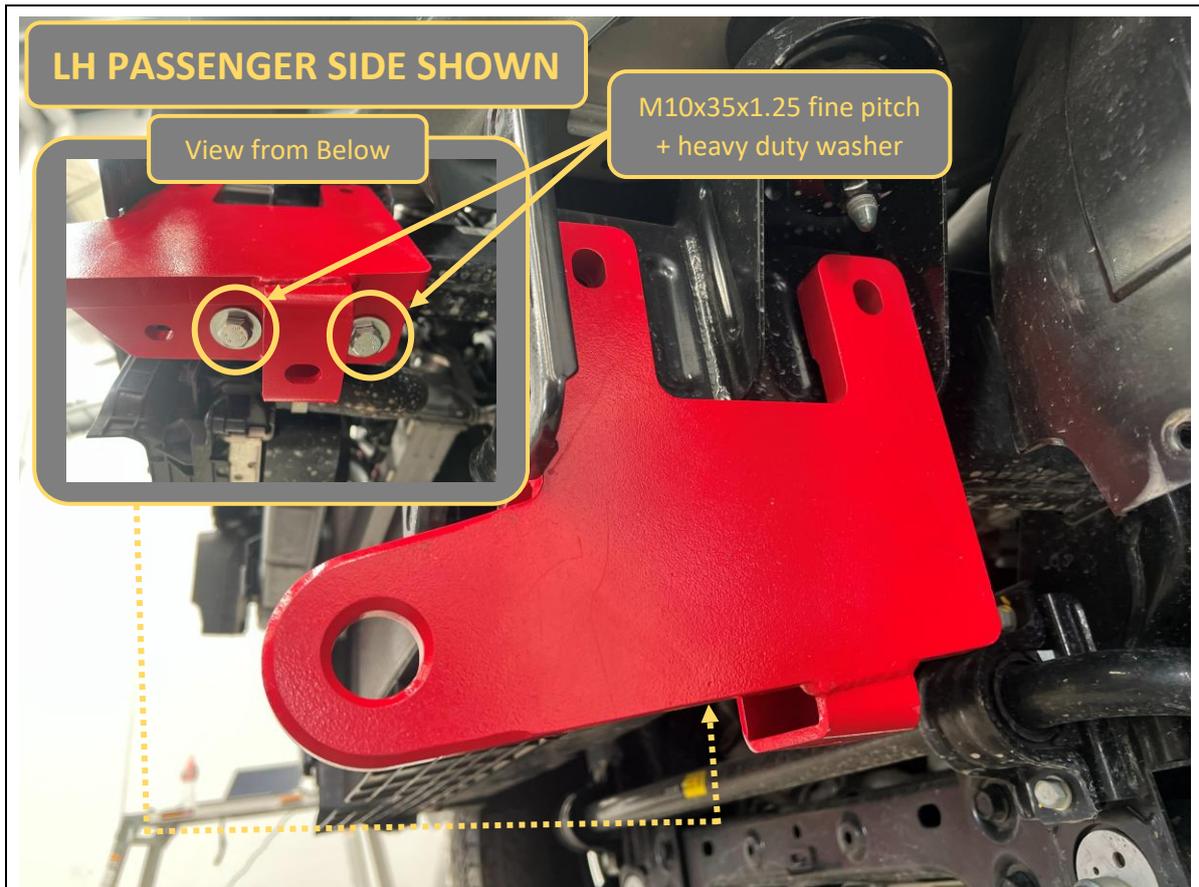
9x OE 10mm hex bolts Short  
2x OE 10mm hex bolts Long  
5x Center Lift Clips



<ol style="list-style-type: none"> <li>41. Using a suitable plastic cutting power tool, such as an oscillating multi tool or air hacksaw, carefully remove the screw retainer boss from the underside of the headlight.</li> <li>42. After trimming it should be close to flush with underside of fender flare.</li> <li>43. Complete trim for both sides.</li> </ol>	<p><b>TOOLS REQUIRED</b></p> <p>Oscillating multi-tool, Air Hacksaw or similar plastic cutting tool</p>
	<p><b>FASTENERS</b></p>



<p>44. Finally, time to start fitting some new bits!</p> <p>45. Fit inner chassis brace to the inside face of the chassis rail, adjacent to the cooling pack as shown.</p> <p>46. Secure to chassis with 1x M12x30x1.75 + M12 heavy duty washer into M12 flange nut. Ensure the fasteners go in the direction shown, with the bolt head on the inside of the chassis rail.</p>	<p><b>TOOLS REQUIRED</b></p> <p>18/19mm spanner</p>
<p>47. Align the inner chassis brace with the holes in the chassis horn using M10 bolts from the bolt kit.</p> <p>48. Tighten chassis brace from inside the chassis rail using 18/19mm spanner.</p>	<p><b>FASTENERS</b></p> <p>1x M12x30 hex bolt 1x M12 heavy duty washer 1x M12 Flange nut</p>



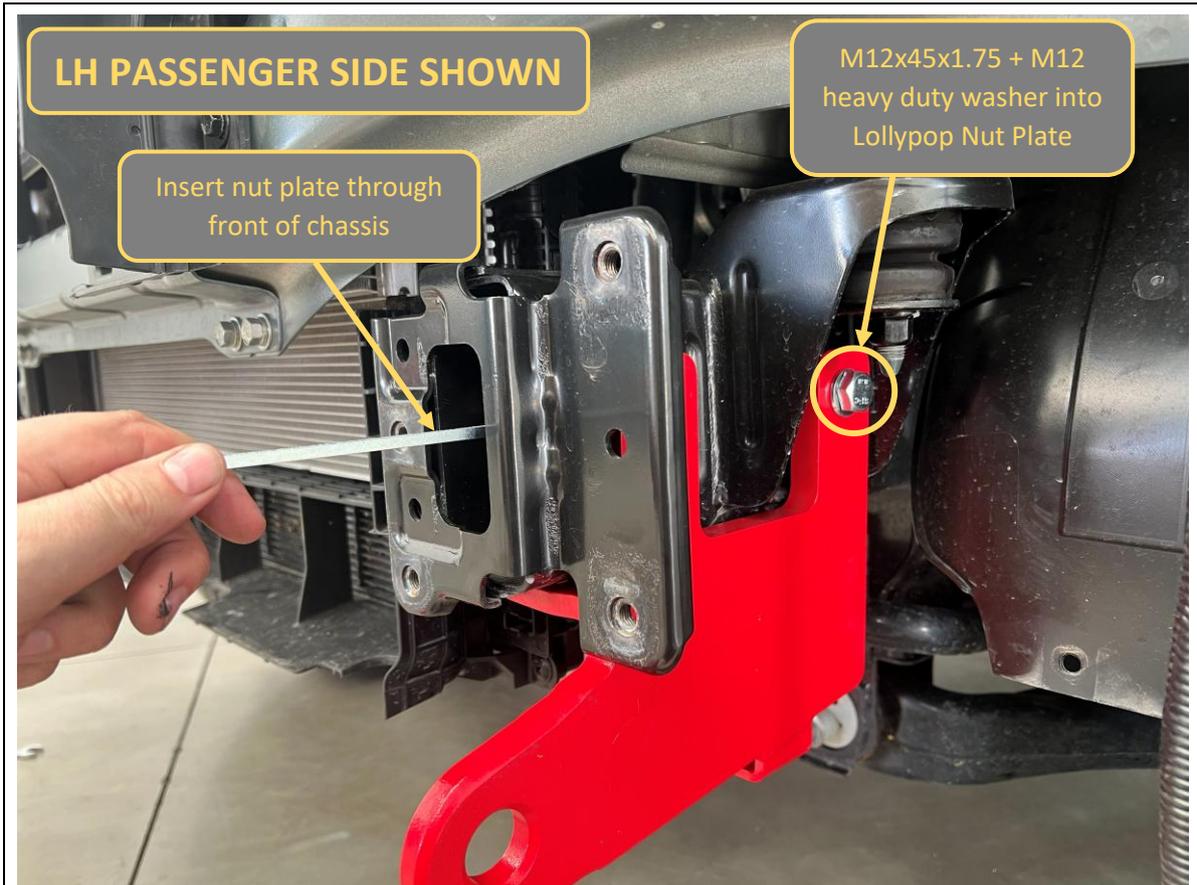
49. Fit the tow point to the bottom of the chassis using 2x M10x35x1.25 fine pitch hex bolts + M10 heavy duty washers, into the chassis threads.

50. Leave bolts finger tight at this stage.

**TOOLS REQUIRED**

**FASTENERS**

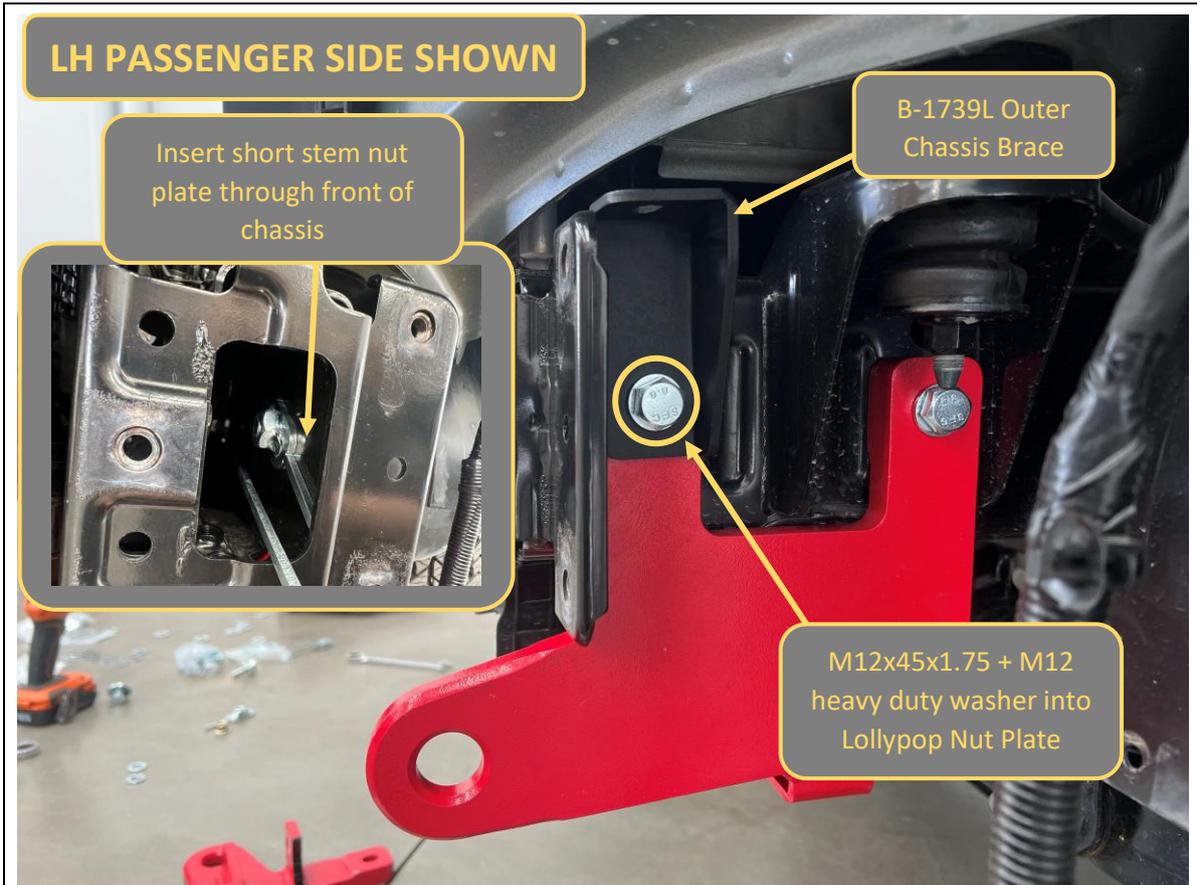
2x M10x35x1.25 hex bolt  
2x M10 heavy duty washer



51. Secure the rear side of the tow point to the chassis using M12x45x1.75 Hex bolt + M12 heavy duty washer into Long M12 Lollipop Nut Plate inserted through the front of the chassis, as shown in the image.
52. Leave finger tight.

**TOOLS REQUIRED**

- FASTENERS**
- 1x M12x45x1.75
  - 1x M12 heavy duty washer
  - 1x M12 Long Stem Lollipop Nut Plate



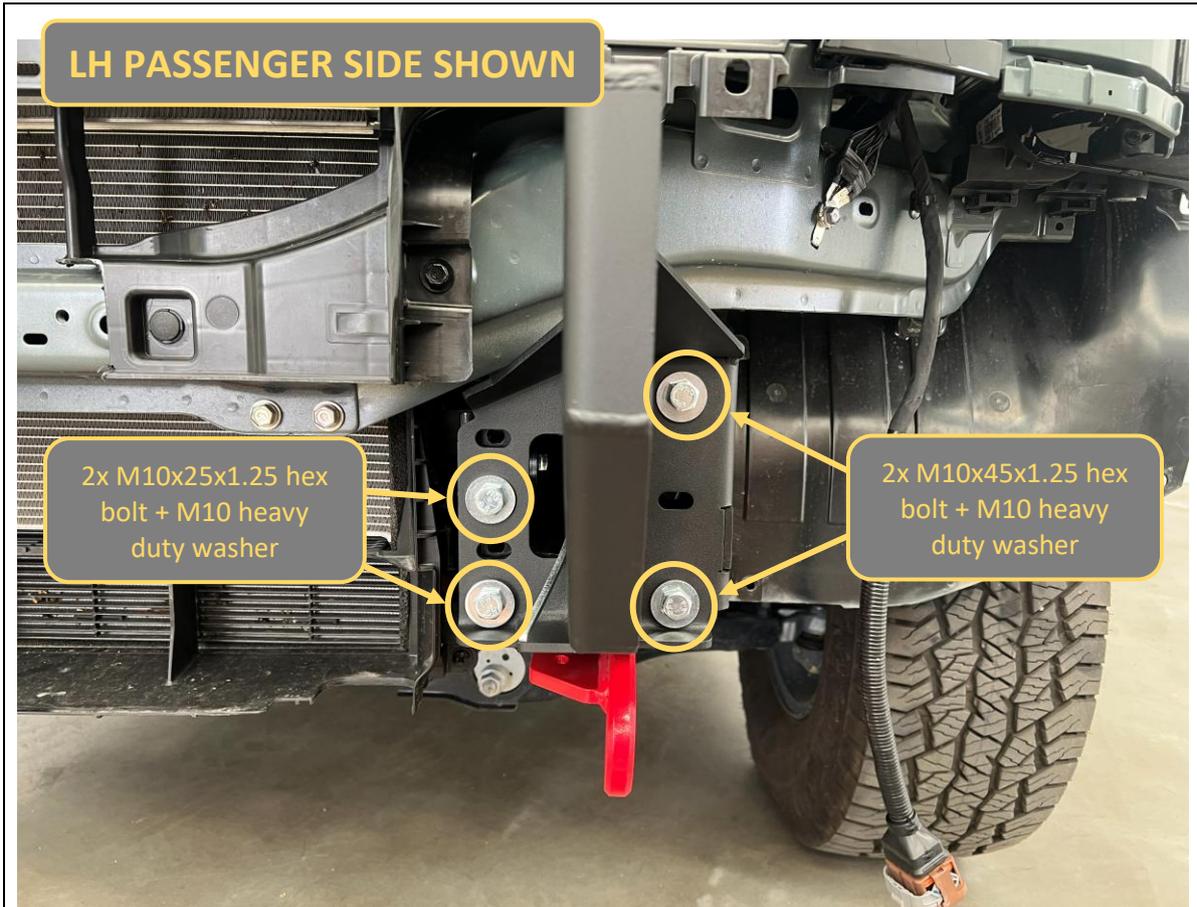
53. Secure the front side of the tow point and B-1739L/R Outer Chassis Brace to the chassis using a M12x45x1.75 Hex bolt + M12 heavy duty washer into short M12 Lollypop Nut Plate inserted through the front of the chassis, as shown in the image.

54. Leave finger tight.

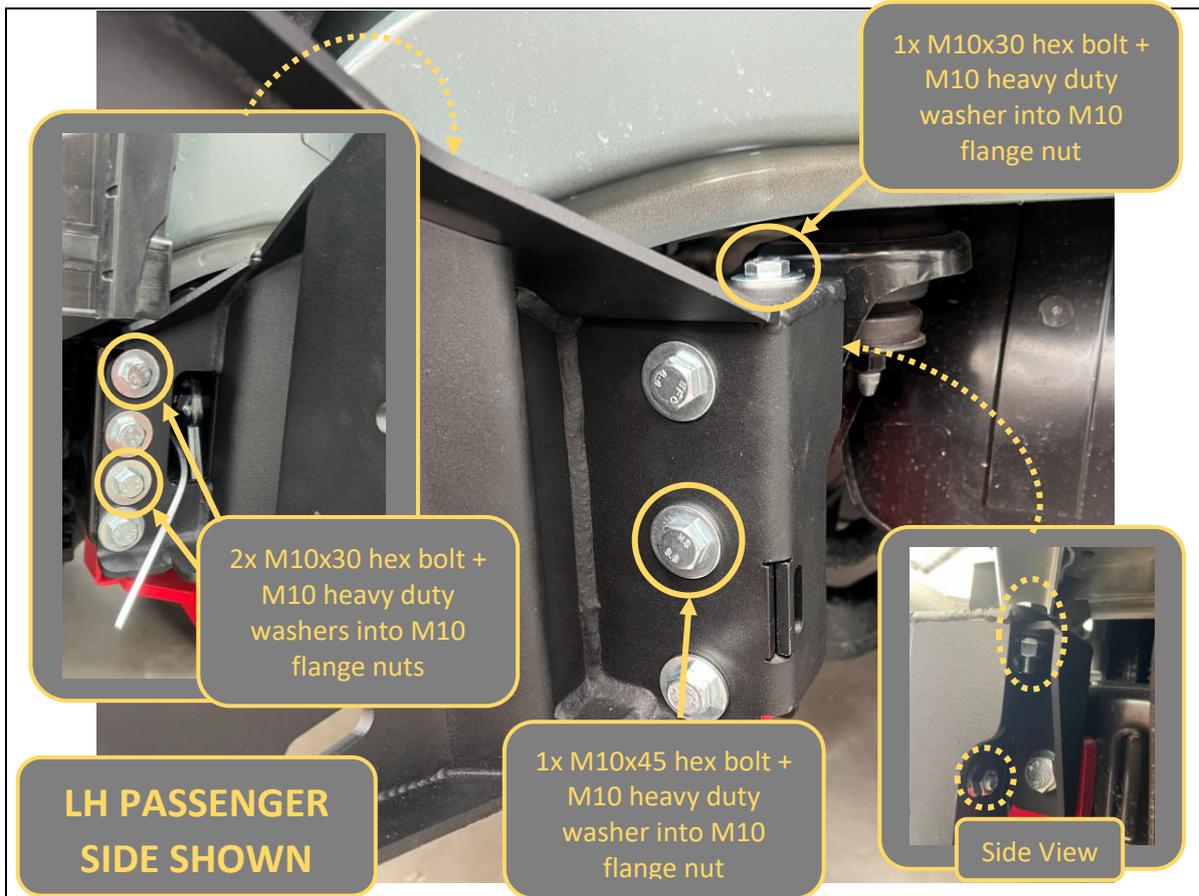
**TOOLS REQUIRED**

**FASTENERS**

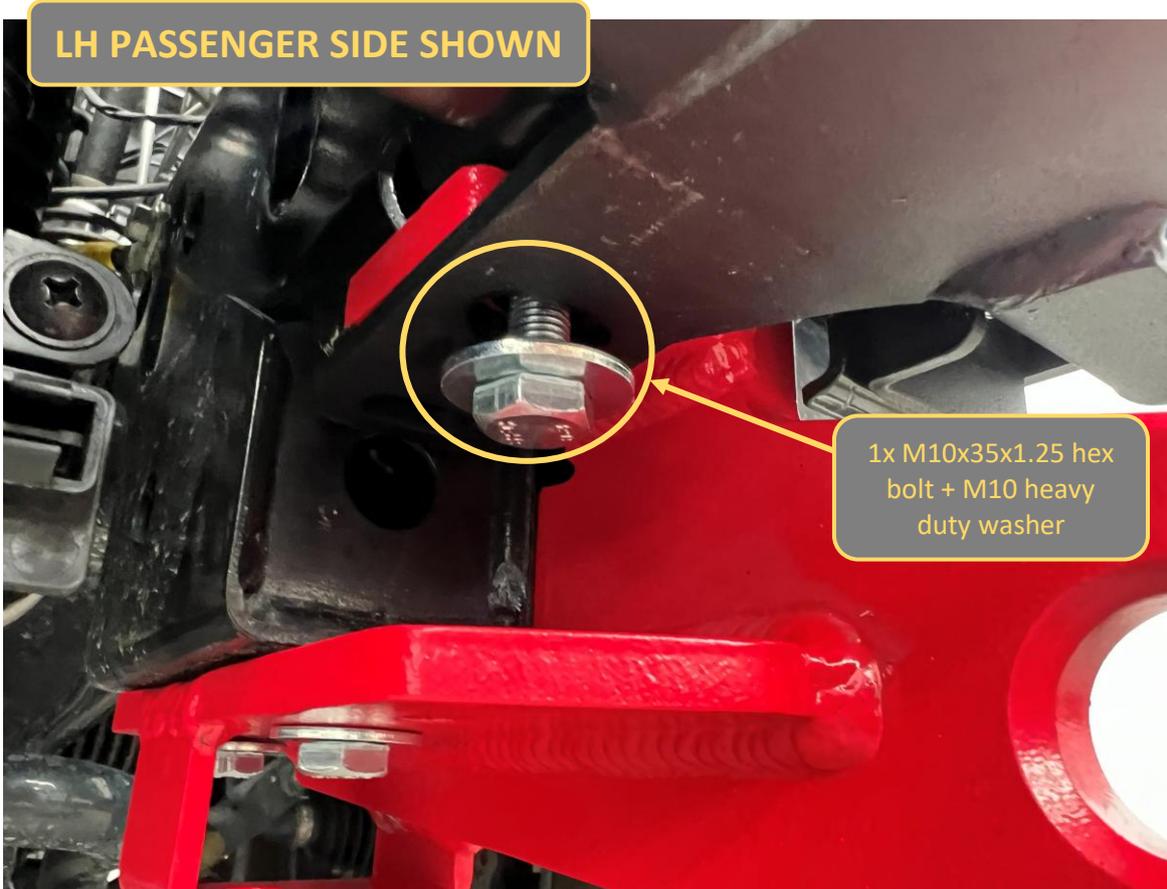
- 1x M12x45x1.75
- 1x M12 heavy duty washer
- 1x M12 Long Stem Lollypop Nut Plate

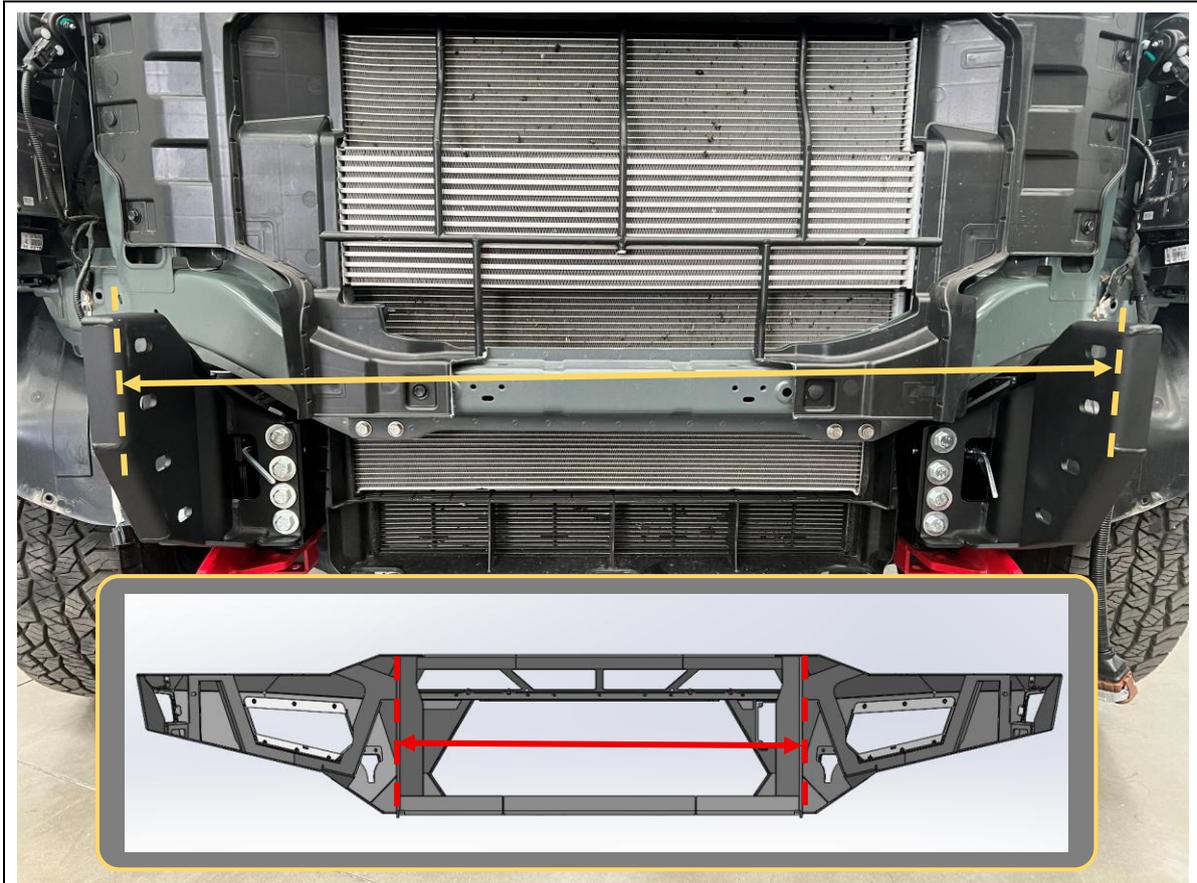


<p>55. Fit the impact assembly to the end of the chassis rail.</p> <p>56. Loosely secure with 2x M10x25x1.25 fine pitch bolts &amp; HD washers into Chassis M10 Fine pitch captive nuts on the inner flange.</p> <p>57. Loosely secure with 2x M10x45x1.25 fine pitch bolts &amp; HD washers into chassis M10 Fine pitch captive nuts on the outer flange.</p> <p>58. Leave all bolts loose at this stage.</p>	<p><b>TOOLS REQUIRED</b></p>
	<p><b>FASTENERS</b></p> <p>2x M10x25x1.25 hex bolt 2x M10x45x1.25 hex bolt 4x M10 HD washers</p>



<p>59. Fit the rest of the bolts for the impact assembly as shown.</p>	<p><b>TOOLS REQUIRED</b></p>
<p>60. Inner front face, 2x M10x30 hex bolts, HD washers into M10 Flange Nuts seated behind inner chassis brace.</p> <p>61. Outer front face, 1x M10x45 hex bolt, HD washers into M10 Flange Nut seated behind outside chassis horn.</p> <p>62. Top Face, 1x M10x30 hex bolt, HD washers into M10 Flange Nut seated below B-1739L Outer Chassis Brace.</p>	<p><b>FASTENERS</b></p>

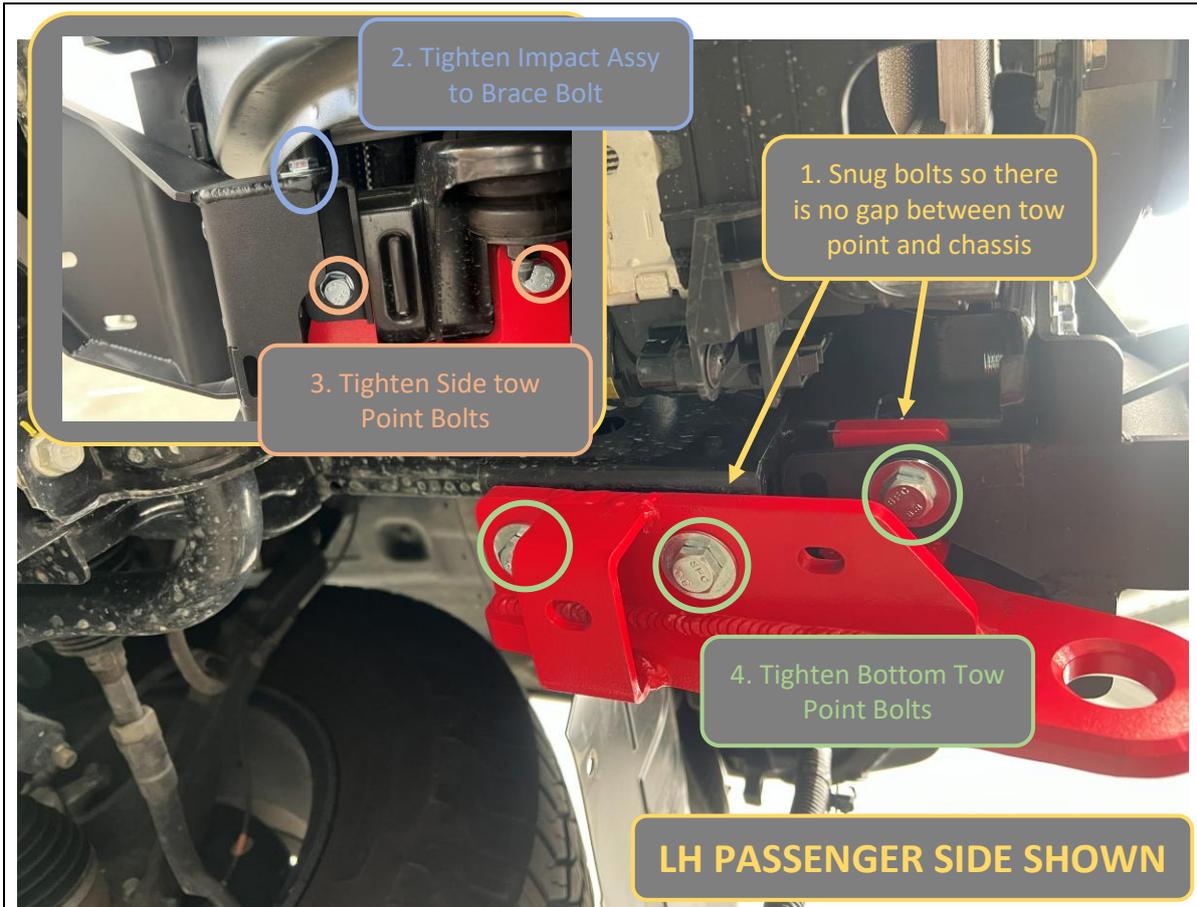
	
<p>63. Fit the final securing bolt to the impact assembly / tow point, located on the underside of the chassis rail.</p> <p>64. Loosely 1x M10x35x1.25 fine pitch bolts &amp; HD washers into Chassis M10 Fine pitch captive nut in underside of chassis rail.</p> <p>65. Complete tow point and impact assembly fitment for other side of vehicle.</p>	<p><b>TOOLS REQUIRED</b></p>
	<p><b>FASTENERS</b></p> <p>1x M10x35x1.25 hex bolt 1x M10 HD washers</p>



<p>66. Measure the distance between the outside faces of uprights on bar using tape measure. Write distance below for reference if required.</p> <p>Bar Upright Width = _____mm</p>	<p><b>TOOLS REQUIRED</b></p> <p>Tape measure</p>
<p>67. Adjust mounts by sliding left/right on the slots, such that distance between inner faces of mounts are between 2-5mm more than bar. Ensure the mount faces are vertically upright.</p> <p>68. Also check and measure the diagonal distance between the tip of the mount and a symmetric location on the body (eg tip of headlight or a symmetric body seam).</p> <p>Ensure this distance is equal and symmetrical on both RH and LH side of the vehicle.</p> <p>Adjust the mounts left/right whilst maintaining the horizontal spacing distance between them to ensure bar is centered on the vehicle.</p>	<p><b>FASTENERS</b></p>



<p>69. Once happy with alignment, begin tightening bolts and nuts.</p> <p>70. First tighten the 4x M10 fine pitch bolts (yellow) that are secured into the chassis rail threads. Do this on both sides.</p> <p>71. Check and confirm the positioning is still within range with a tape measure.</p>	<p><b>TOOLS REQUIRED</b></p> <p>16/17mm socket Socket extension bar Tape measure</p>
<p>72. Once happy, tighten the 3x M10 Standard bolts (blue).</p>	<p><b>FASTENERS</b></p>



<p>73. Next tighten the tow point bolts in the following order.</p> <p>74. First snug the bottom tow point bolts such that there is no gap between the tow point and the chassis.</p> <p>75. Next Tighten the M10 impact assembly to Outer chassis brace bolt (blue).</p>	<p><b>TOOLS REQUIRED</b></p> <p>16/17mm socket 18/19mm socket Socket extension bar</p>
<p>76. Then Tighten the 2x M12 side tow point bolts (orange).</p> <p>77. Finally tighten the 3x M10 Fine pitch bottom tow point bolts (green).</p> <p>78. Torque all bolts on impact assembly and tow point according to torque table at beginning of instructions.</p>	<p><b>FASTENERS</b></p>



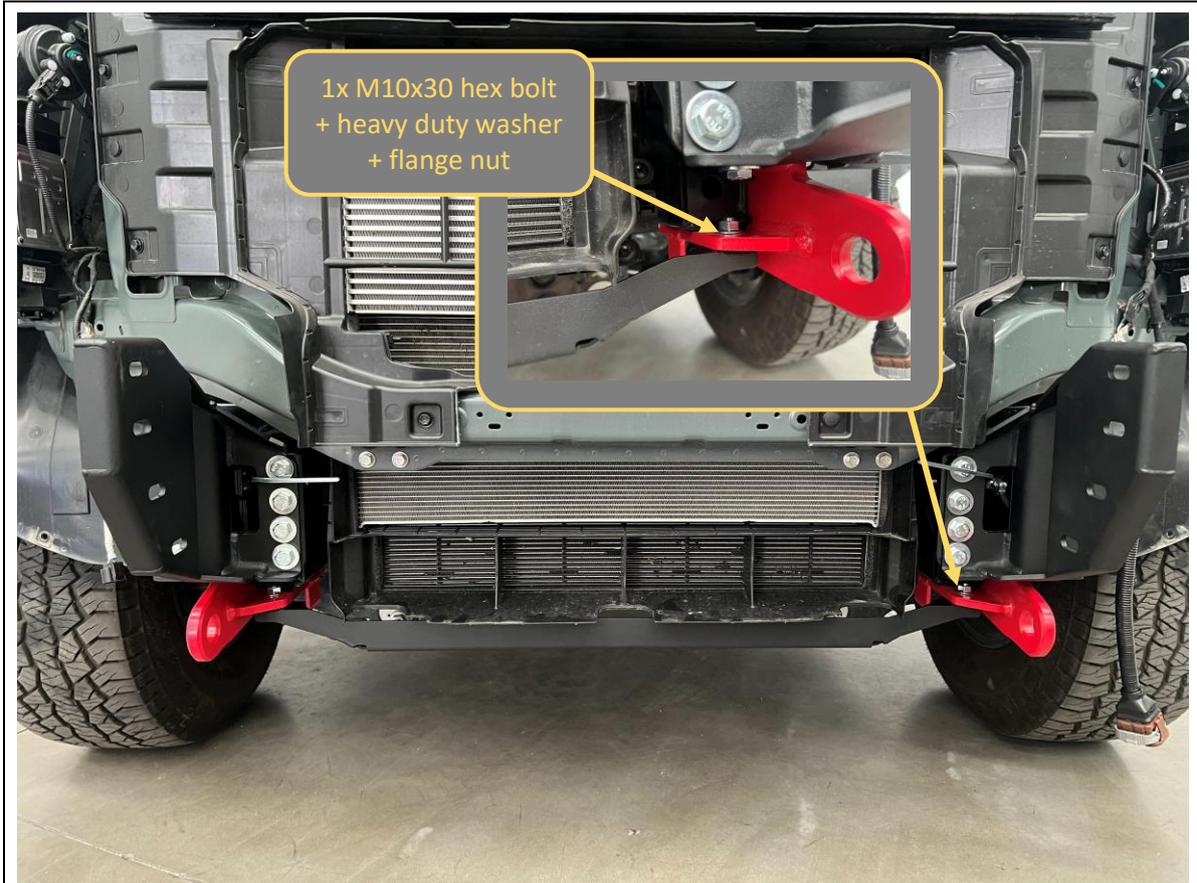
79. Fit 3x M8 cage nuts to the inside of the B-1744 Lower Bash Plate Support bracket as shown. Use a flat blade screwdriver to assist.

**TOOLS REQUIRED**

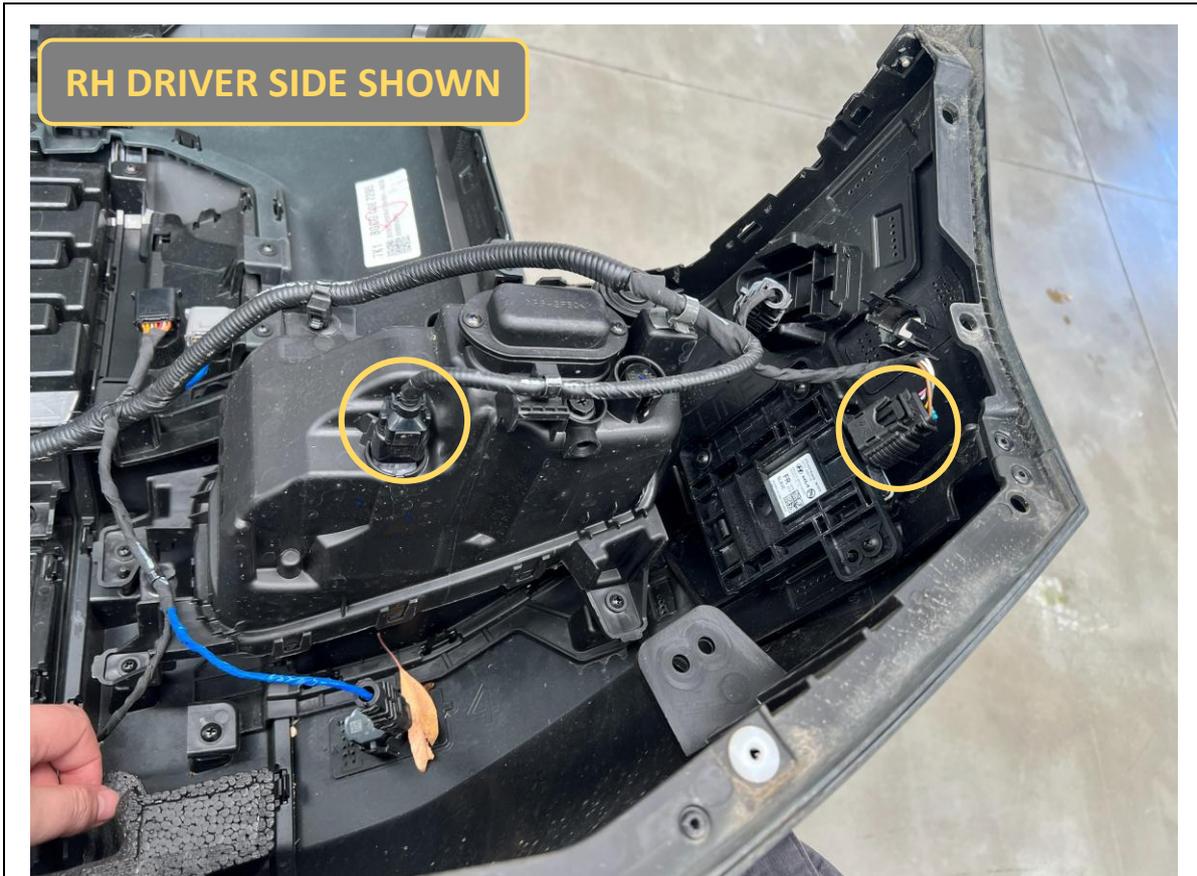
Flat blade screwdriver

**FASTENERS**

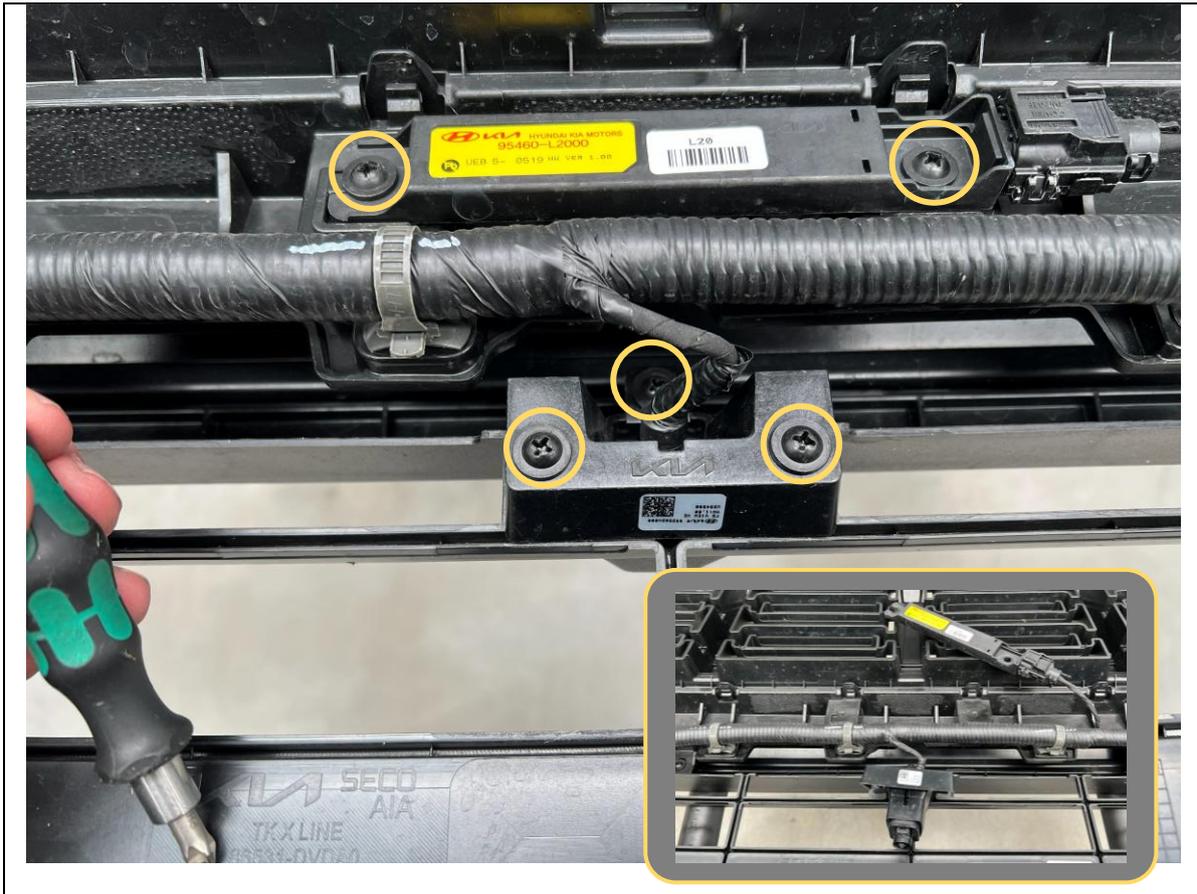
3x M8 cage nut



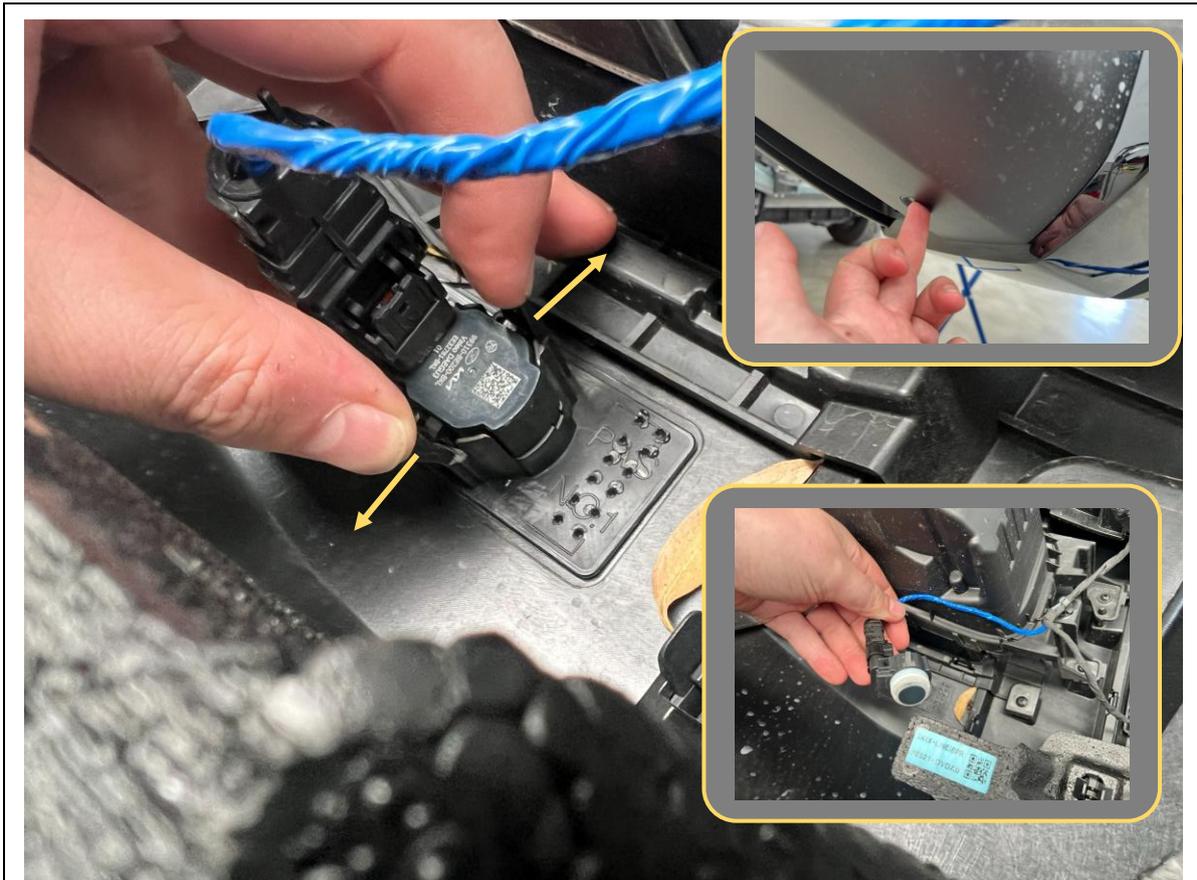
<p>80. Fit the bash plate reinforcement bracket to the tow points.</p> <p>Ensure it sits in the correct orientation; the vertical flange of the bracket should be closest to the front of the vehicle.</p>	<p><b>TOOLS REQUIRED</b></p> <p>16mm Socket / Spanner</p>
<p>81. Secure bracket to the tow points with 2x M10x30 hex bolts, heavy duty washers and flange nuts.</p>	<p><b>FASTENERS</b></p> <p>2x M10x30 hex bolt 2x M10 heavy duty washer 2x M10 flange nut</p>



<p>82. Now the car is ready for the bar, we need to get the bar ready for the car! Time to strip the bumper.</p> <p>83. First unplug the wiring harness connectors from the Fog light and side radar modules. Press on the tabs to unlock before unplugging.</p> <p>84. Complete on both sides of bumper.</p>	<p><b>TOOLS REQUIRED</b></p>
	<p><b>FASTENERS</b></p>



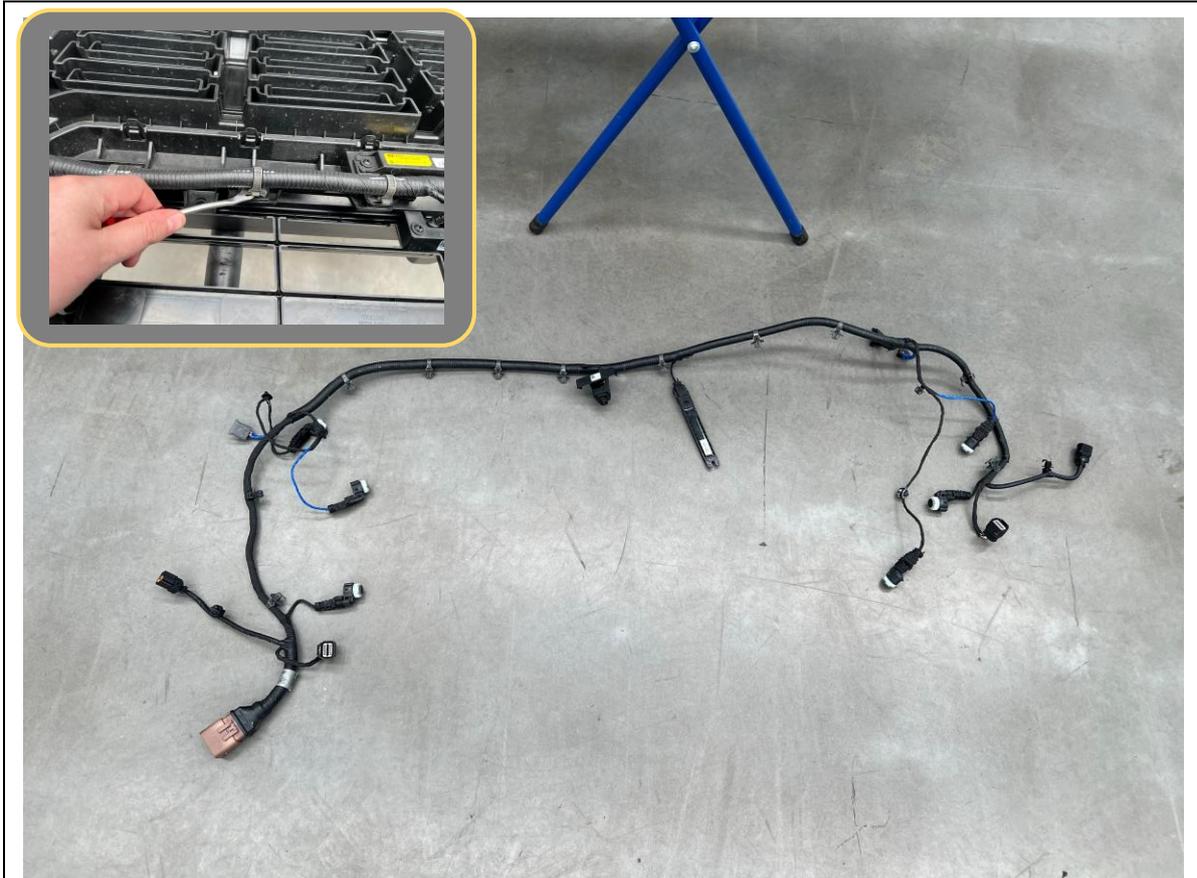
<p>85. Next remove 3x Phillips head screws holding the front park assist camera to the bumper.</p> <p>86. Remove the 2x Phillips head screws holding the electronic module to the bumper.</p> <p>87. Loosen and remove the camera and module from the bumper.</p>	<p><b>TOOLS REQUIRED</b></p> <p>Phillips head screwdriver</p>
	<p><b>FASTENERS</b></p> <p>5x Phillips head screws</p> <p>Discard</p>



- 88. Unclip the 6x parking sensors from the bumper. Spread the tabs on the bumper apart and push the sensor out the back.
- 89. Leave the sensors plugged into the loom at this stage.

**TOOLS REQUIRED**

**FASTENERS**

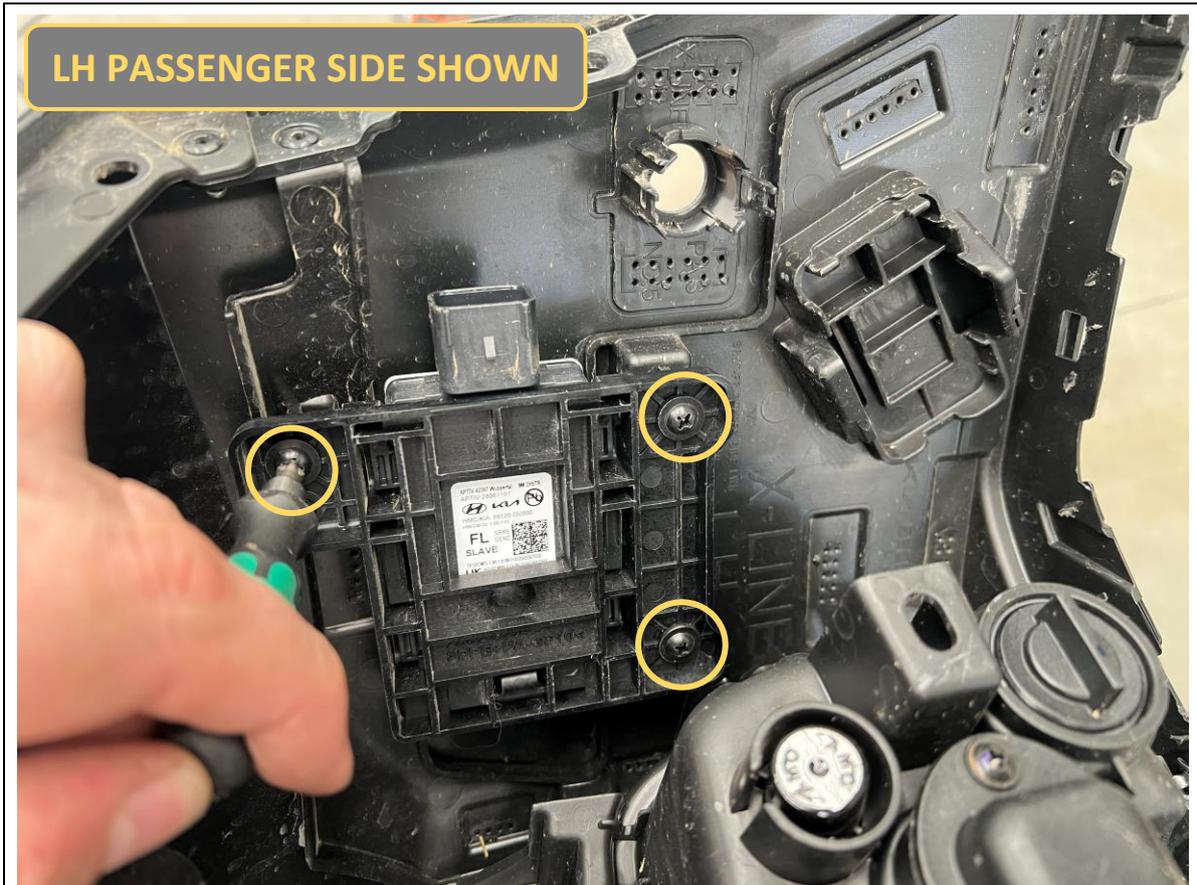


90. Unclip the wiring harness from the bumper using a trim tool.
91. Place the wiring harness aside in a safe area for later re-fitment to the front bar.

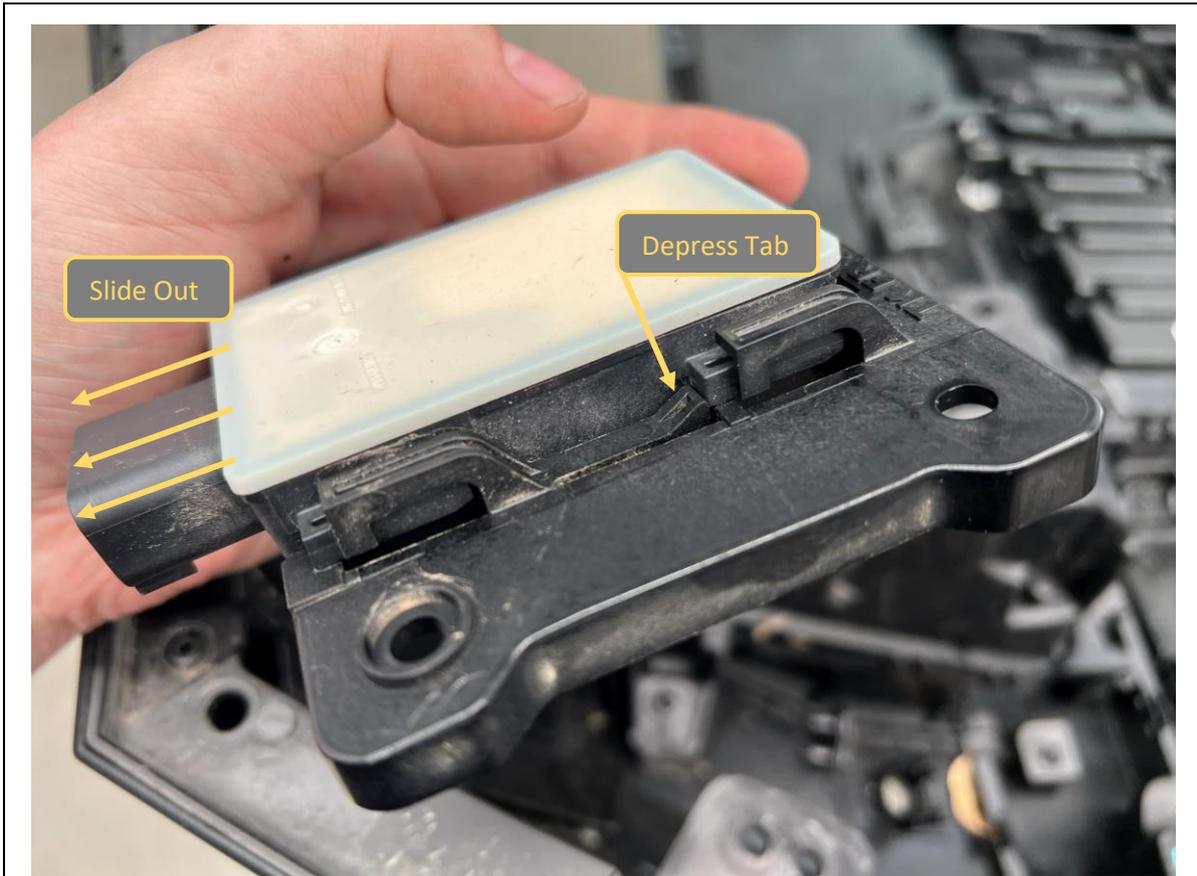
**TOOLS REQUIRED**

Trim tool.

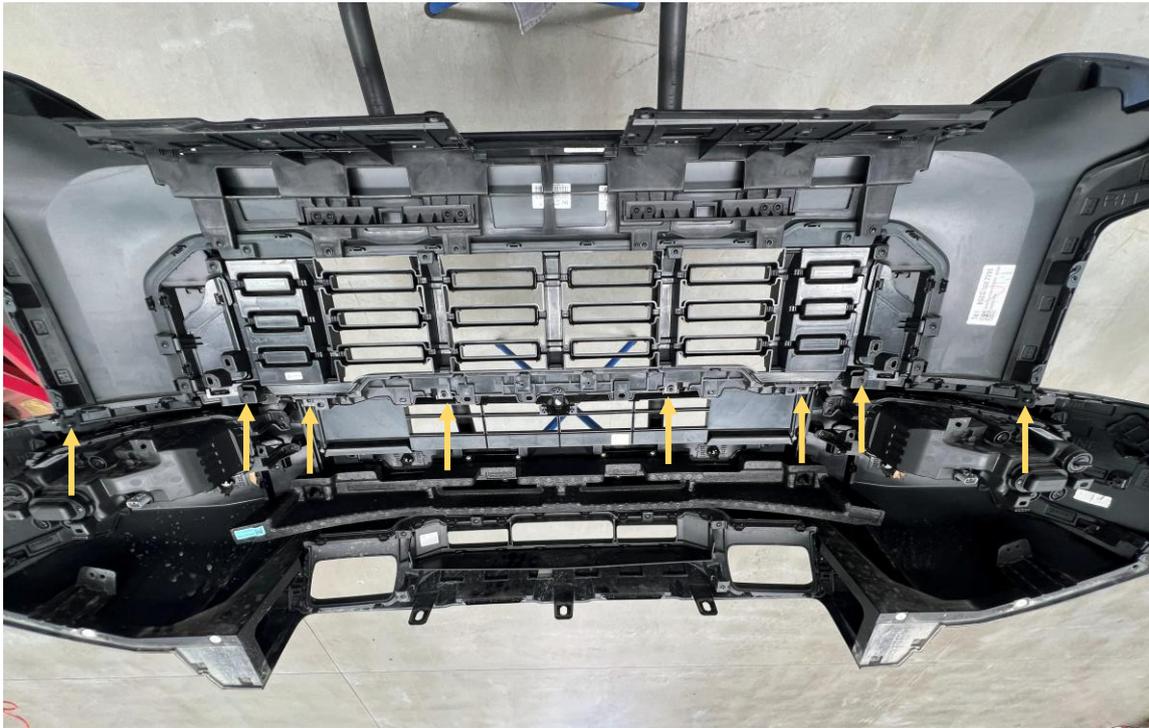
**FASTENERS**



<p>92. Remove the side radar modules, by removing the 3x Phillips head screws securing it to the bumper.</p> <p>93. The third screw can be removed with a mini ratchet driver without removing the fog lamp.</p> <p>94. Take care to not drop or impact the radar unit.</p> <p>95. Remove side radar unit from other side of bumper also.</p>	<p><b>TOOLS REQUIRED</b></p> <p>Phillips head screwdriver</p>
	<p><b>FASTENERS</b></p> <p>3x Phillips head screws, Per side Discard.</p>



<p>96. Release the side radar from the holder bracket. First depress the locking tabs (on both sides of the module) whilst applying pressure to slide the module out of the holder as shown.</p> <p>97. Complete for both side radar modules.</p> <p>98. Set radar modules aside in safe location for later refitment to bar.</p>	<p><b>TOOLS REQUIRED</b></p>
	<p><b>FASTENERS</b></p>



99. Remove the 8x Phillips head screws securing lower section of bumper to grille.

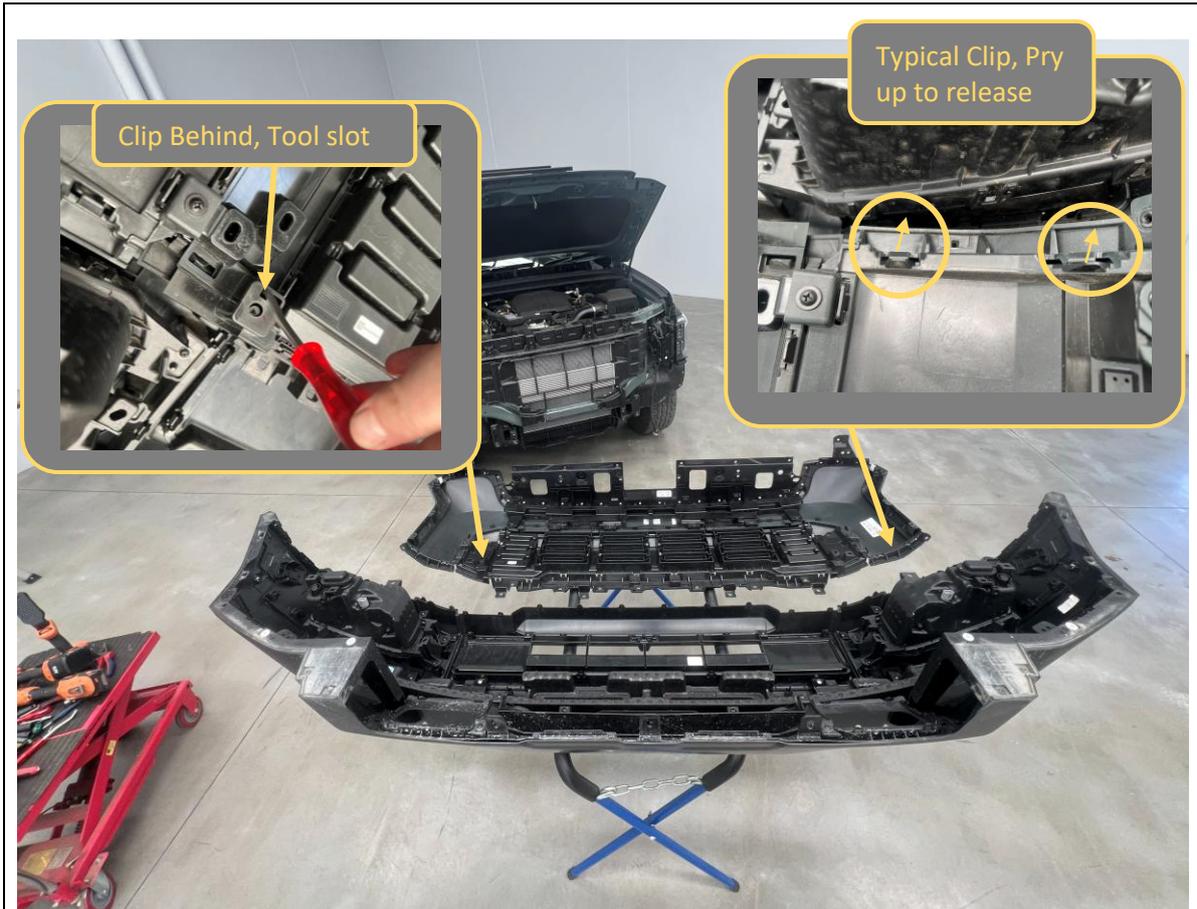
**TOOLS REQUIRED**

Phillips head screwdriver

**FASTENERS**

8x Phillips head screws

Discard

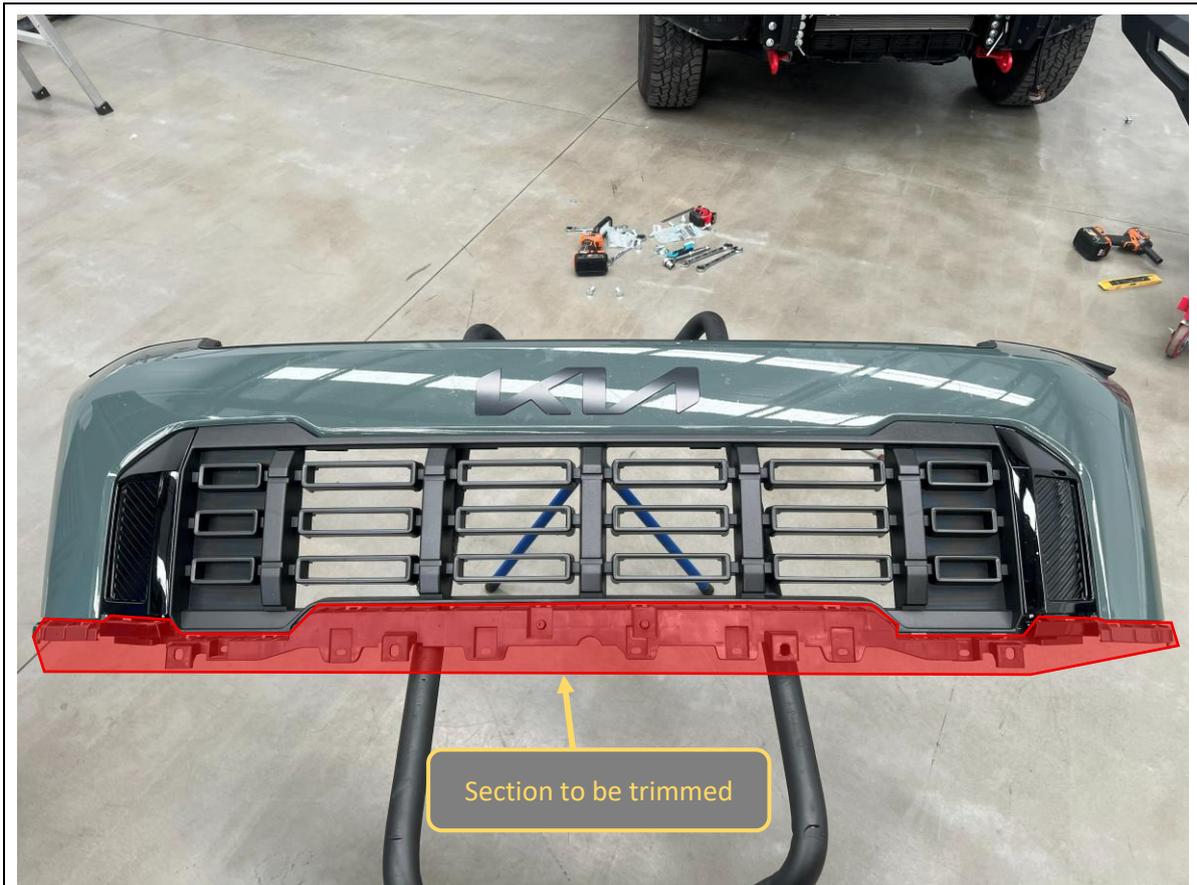


100. Use a trim tool or flat screwdriver to release the clips/tabs holding the Grille to the lower part of the bumper. Work progressively from the edges toward the center until the grille is separated.
101. In one location, adjacent to one of the screws the clip/tab is obstructed by the structure of the bumper. There is a small slot to insert a trim tool to assist in releasing tab at this location.

**TOOLS REQUIRED**

Flat blade screwdriver  
or  
Trim tool

**FASTENERS**



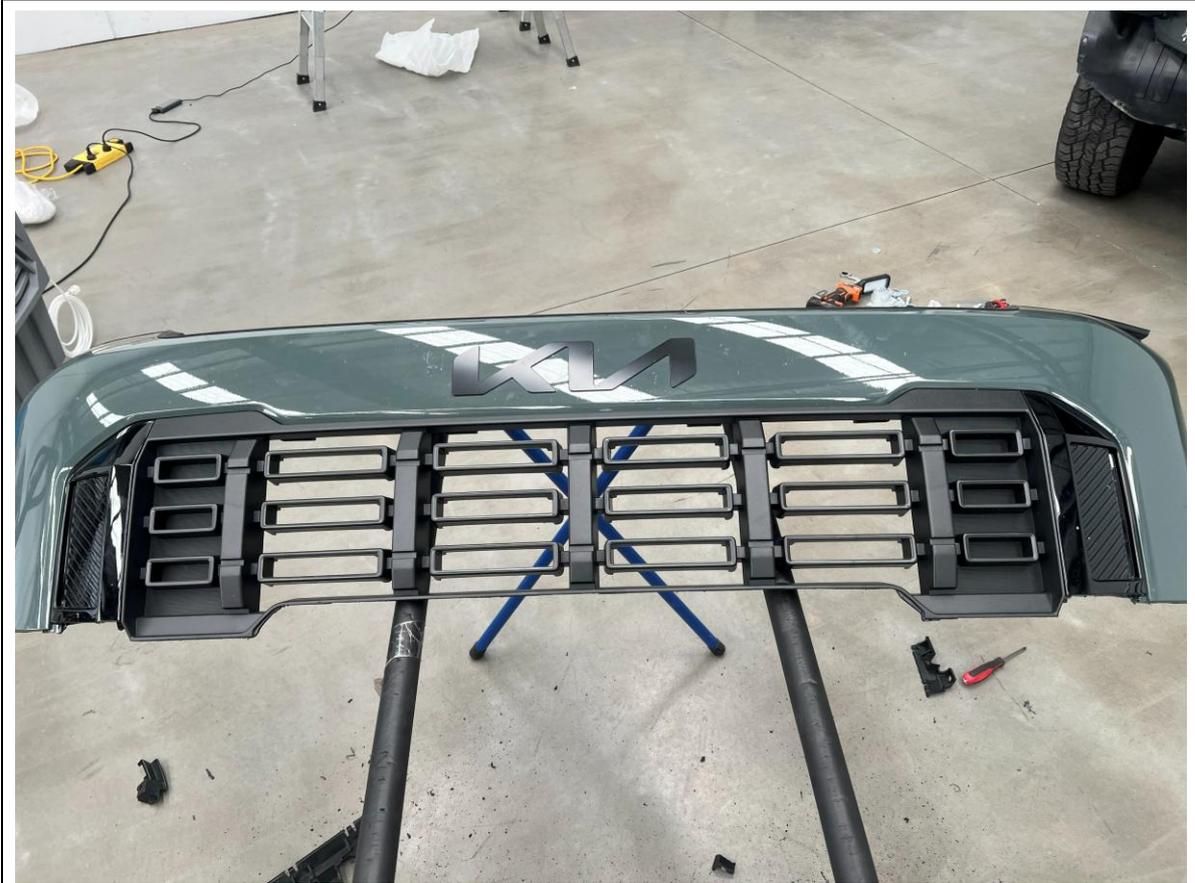
102. Setup the grille on a panel stand and mark out the trim as line as shown in the image above.

The cut line is to follow the “Ditch” formed by the clip mating surface below the finished top section of the grille.

**TOOLS REQUIRED**

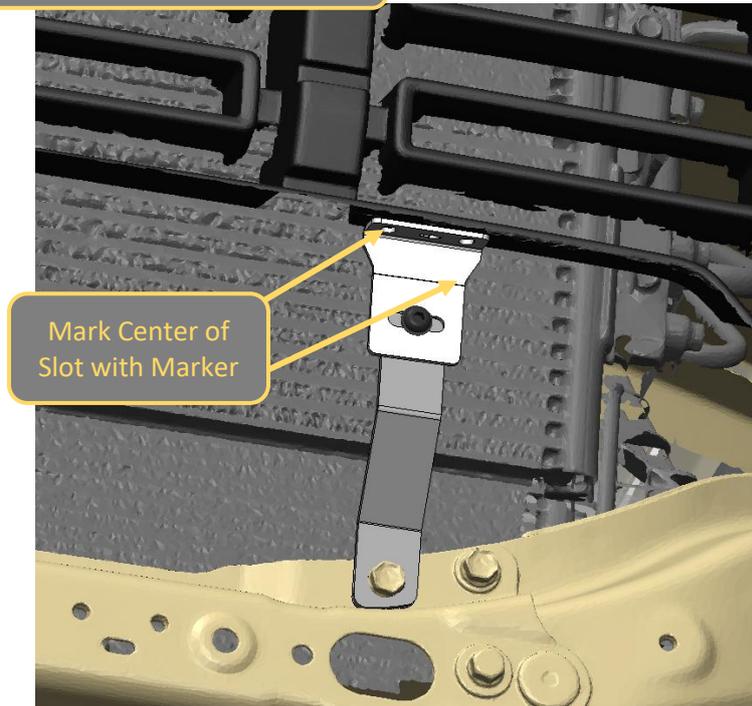
Marker pen

**FASTENERS**

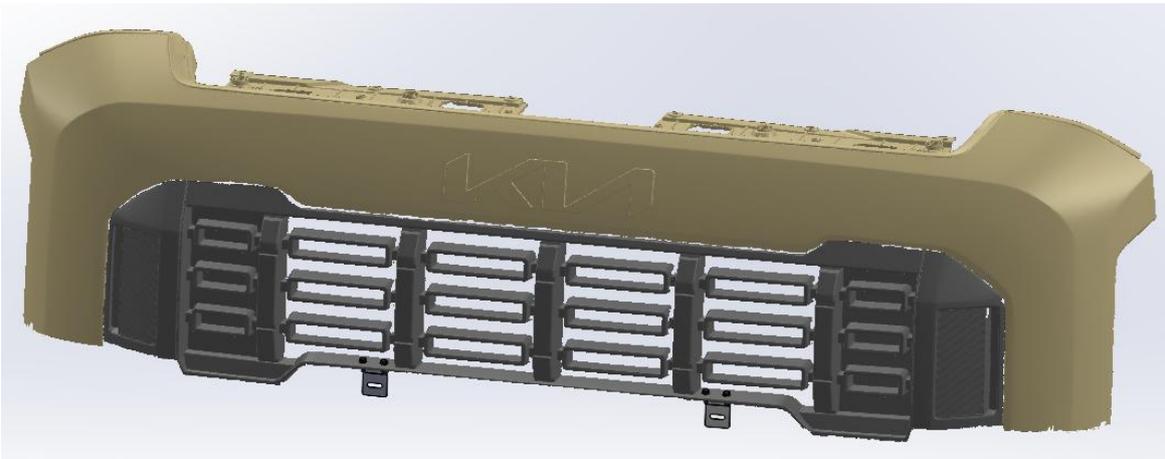
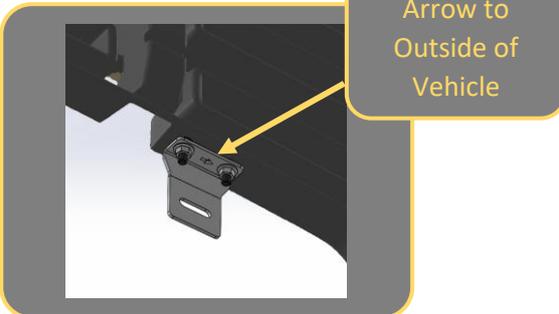


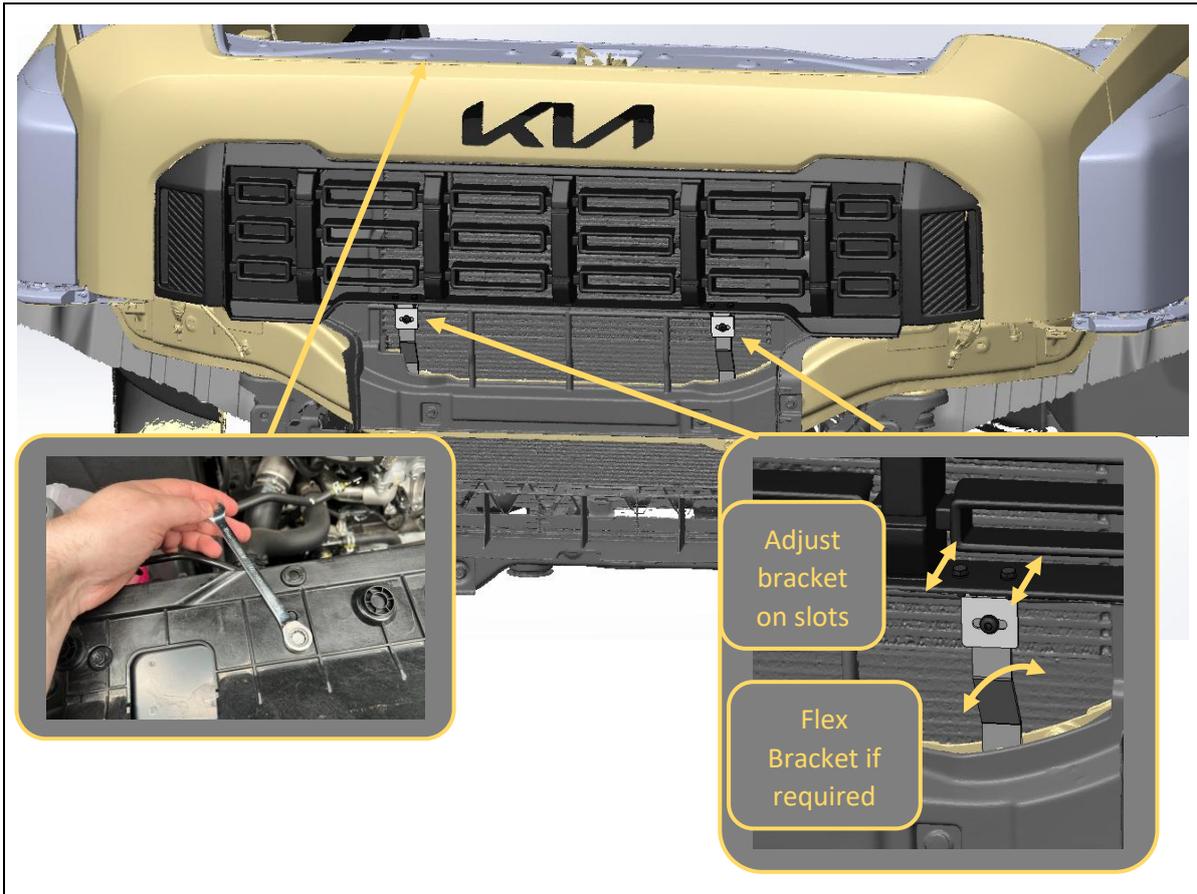
<p>103. Trim the grille along the line marked with an oscillating multi-tool or other suitable plastic cutting power tool.</p> <p>104. Clean up the trimmed edges with a deburring tool or utility knife</p>	<p><b>TOOLS REQUIRED</b></p> <p>Oscillating multi-tool or similar</p> <p>Deburring tool or Utility knife</p>
	<p><b>FASTENERS</b></p>

**LH PASSENGER SIDE SHOWN**



<p>105. Dry fit the trimmed grille to the vehicle. Ensure bumper is correctly located on locating posts.</p> <p>106. Fit B-1826L/R Grille support bracket B to previously fitted B-1825L/R Grille support bracket A, using M6x16 button head bolt, M6 Black Flat washer and M6 Flange Nut.</p>	<p><b>TOOLS REQUIRED</b></p> <p>4mm Hex/Allen Key Marker Pen</p>
<p>107. Align position of grille support bracket with bottom of grille as shown.</p> <p>108. Using a marker pen, mark the hole locations in the center of the slots.</p> <p>109. Complete for both sides of grille, then remove grille and Support Bracket B.</p>	<p><b>FASTENERS</b></p> <p>1x M6x16 Button Head 1x M6 Black washer 1x M6 flange nut</p>

	
	 <p style="text-align: right; color: yellow;">Arrow to Outside of Vehicle</p>
<p>110. Using Electric drill, Drill 2x 6mm Holes in locations marked on the grille in the previous step.</p> <p>111. Fit the Grille support bracket B to the grille using M5x16 Black Hex Bolts, Black M5 Washers and M5 Flange Nuts. Leave finger tight at this stage.</p> <p>112. Ensure correct side brackets are used, the indicator arrow should point to the <b>OUTSIDE</b> of the vehicle.</p>	<p><b>TOOLS REQUIRED</b></p> <p>Electric Drill 6mm Drill Bit</p> <hr/> <p><b>FASTENERS</b></p> <p>2x M5x16 Black Hex Bolts, 2x Black M5 Washers 2x M5 Flange Nuts</p> <p style="text-align: center;">Per side</p>



<p>113. Re-Fit the grille to the vehicle, ensuring it is seated correctly in the upper horizontal clips and locating posts.</p> <p>114. Re secure bumper top edge with the 8x Silver OE M6 Bolts removed earlier.</p> <p>115. Secure Bumper support bracket B to support bracket A using M6x16 Button head bolt, M6 Washer and M6 Flange Nut, Complete for both sides</p>	<p><b>TOOLS REQUIRED</b></p> <p>8mm Spanner 10mm Socket / Spanner</p>
<p>116. Adjust position of brackets such that the support bracket is not placing any strain on the bottom edge of the bumper. This can be done by moving support bracket B on its slots, and slightly bending support bracket A fore or aft if necessary.</p> <p>117. Once adjusted tighten support bracket fasteners using 8MM spanner and 4mm hex Key</p>	<p><b>FASTENERS</b></p> <p>8x Silver OE M6 Bolt 1x M6x16 Button Head 1x M6 Black washer 1x M6 flange nut (From Step 106)</p>



118. Time to dress the bar. Fit the light bar mesh plate to the inside of the central cutout, and secure using 7x M6x12 black countersunk bolts and flange nuts.

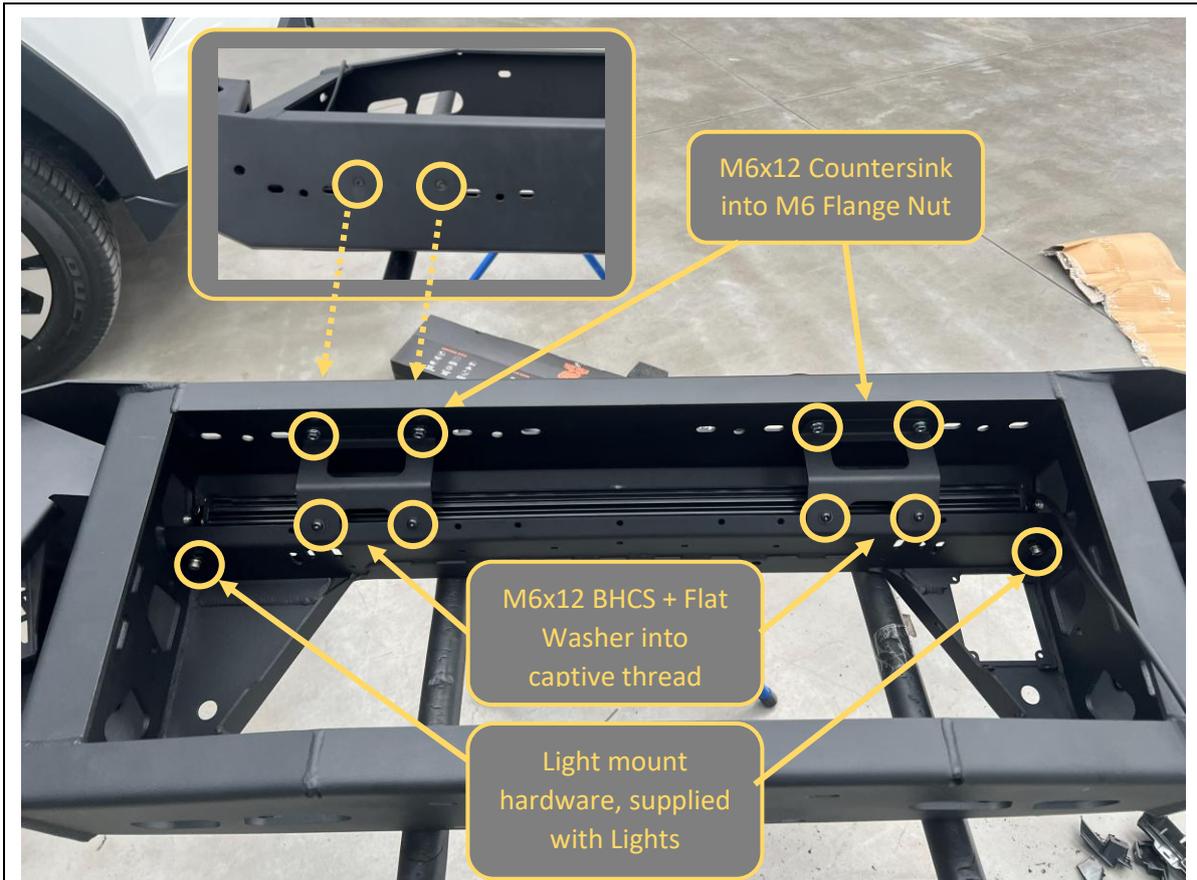
**Note:** This is a structural part and fitment is mandatory.

**TOOLS REQUIRED**

4mm Hex/Allen key

**FASTENERS**

7x M6x12 black countersunk bolt  
7x M6 flange nut



<p>119. If fitting an integrated light bar, do so now.</p> <p>This bar is designed to fit the Offroad Animal 32-inch light bar. If fitting this light bar, assemble the light bar with legs facing <u>inwards</u>, and line it up with the slots in the center gusset. Secure with M6 fasteners supplied with the light.</p> <p>This bar can accommodate many other “30-32inch” size single row light bars. Stedi ST3K light bars require legs facing <u>inwards</u>.</p>	<p><b>TOOLS REQUIRED</b></p> <p>Supplied with accessories 4mm Hex/Allen Key</p>
<p>120. Fit the 2x Pan Braces between the gusset and top face, using M6x12 Button Head Screws, &amp; Flat washers on the bottom and M12 Countersunk screws &amp; M6 Flange Nuts on the top.</p>	<p><b>FASTENERS</b></p> <p>Supplied with accessories for light 4x M6x12 Button Head Screws 4x M6 Black Flat Washer 4xM6x12 Countersunk screws 4x M6 Flange Nut</p>



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

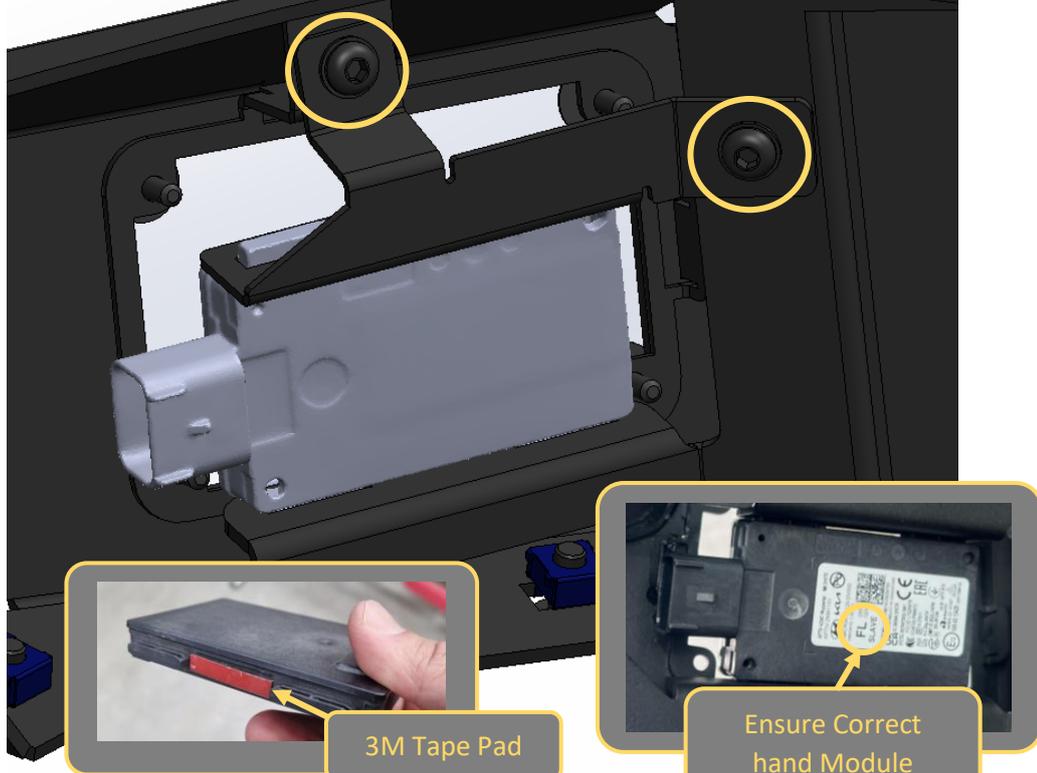
Use a small flat blade screwdriver to push the edge of the cage to engage with the slot to aid fitting.

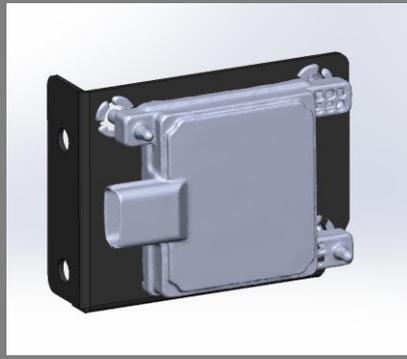
**TOOLS REQUIRED**

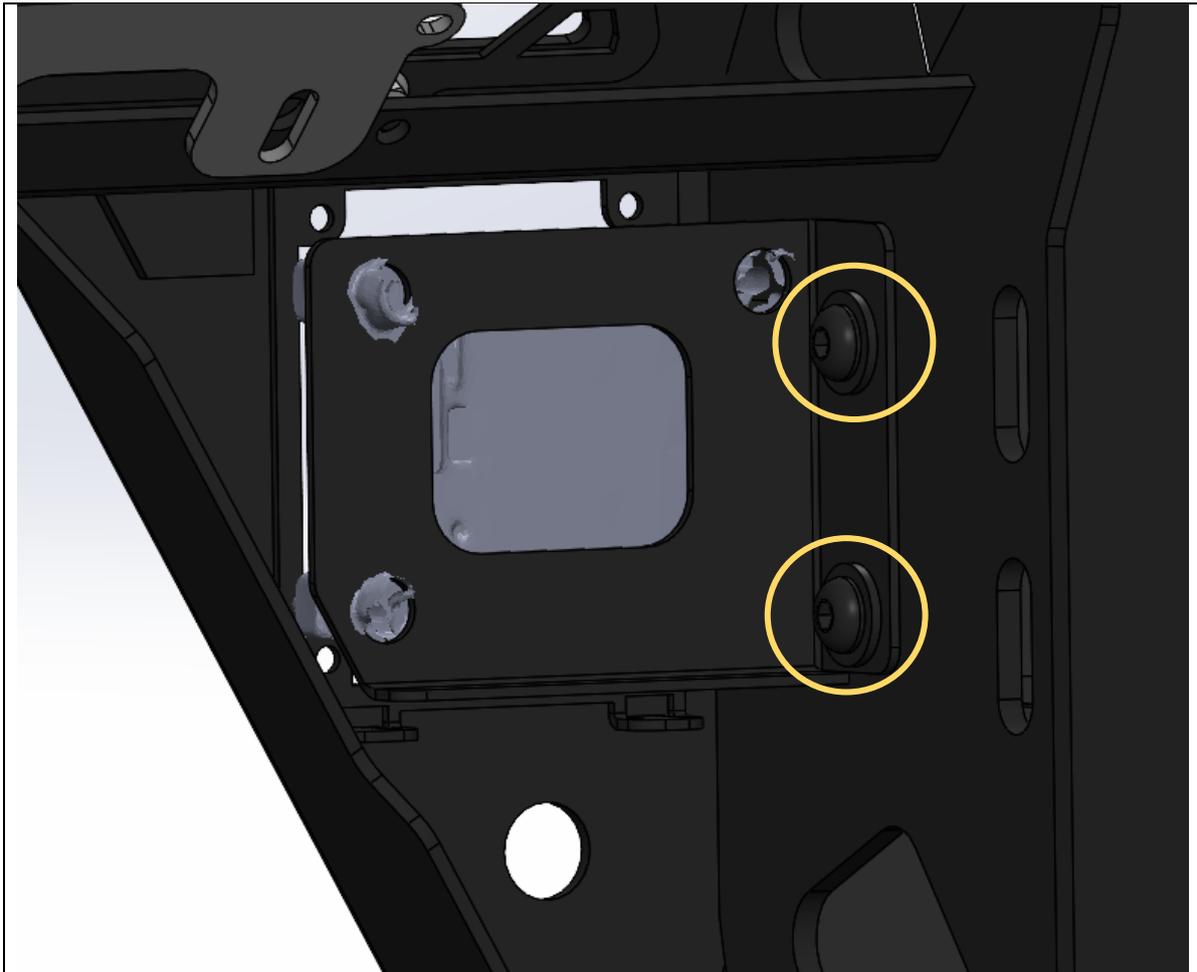
Flat blade screwdriver

**FASTENERS**

10x M6 cage nut

<div data-bbox="223 212 782 302" style="border: 1px solid black; padding: 5px; background-color: #ffff00; display: inline-block;"> <b>LH PASSENGER SIDE SHOWN</b> </div> 	
<p>122. Cut one of the 100x6mm 3M Tape pads into approximately 30mm sections and stick to the top and bottom of the side radar module, in between the locating tabs.</p> <p>123. Fit the side radars to the bar. Peel off tape backing then position radar module tabs into cutouts in wing brace as shown then secure with side radar support bracket from above.</p> <p style="padding-left: 40px;">Ensure the correct hand modules are fitted to each side with plugs facing outward</p> <p>124. Secure side radar support bracket to bar with 2x M6x12 Button head cap screws, black washers and Flange Nuts.</p> <p>125. Complete side radar fitment on both sides.</p>	<div data-bbox="997 996 1300 1097" style="border: 1px solid black; padding: 5px; background-color: #ffff00; display: inline-block;"> <b>Ensure Correct hand Module</b> </div> <p style="text-align: center;"><b>TOOLS REQUIRED</b></p> <p style="text-align: center;">4mm Hex/Allen Key Scissors / Utility Knife</p> <hr/> <p style="text-align: center;"><b>FASTENERS</b></p> <p style="text-align: center;">2x M6x12 Button Head Screw 2x M6 Black washers 2x M6 Flange Nuts <b>Per Side</b></p>

	
	
<p>126. Using a trim tool, carefully pry off the center front radar module from its mounting studs.</p> <p>127. Remove the 3x ball stud retaining clips from the OE radar bracket. Squeeze all sides of the clip whilst pushing from behind to remove. Pliers can help with this, but be gentle, as you don't want to damage the clips.</p> <p>128. Re-fit the ball stud retaining clips to the Offroad Animal center radar bracket, by pushing clips into the holes until fully seated.</p> <p>129. Fit the radar module to the bracket by aligning studs with the clips, then applying firm even pressure until the ball ends "Click" into place and are fully seated.</p>	<p><b>TOOLS REQUIRED</b></p> <p>Trim Tool Pliers</p> <hr/> <p><b>FASTENERS</b></p>



130. Fit the radar bracket (with radar) to the bar, using M8x16 Button Head Bolts, Black Flat Washers & M Flange Nuts.

131. Connect the radar extension loom to the radar module.

**TOOLS REQUIRED**

5mm Hex/Allen Key

**FASTENERS**

2x M8x16 Button Head Bolts  
2x M8 Black Flat Washers  
2x M8 Flange Nuts.



132. Fit the wing meshes to the inside of the bar. Secure with 6x M6x16 Black Button head bolts and Black flat washers.

**TOOLS REQUIRED**

4mm Hex/Allen Key

**FASTENERS**

6x M6x16 Black BHCS  
6x M6 Black flat washer  
Per Side



<p>133. Original Equipment fog lights are too bulky to be re-fitted. Instead, the bar can accommodate optional "Type A" Stedi or Narva Fog lamps.</p> <p>134. If fitting fog lamps, fit to the supplied brackets and secure with 4x M6x16 black button head bolts, black washers and flange nuts. The body of the fog light should sit to the back side of the bracket.</p>	<p><b>TOOLS REQUIRED</b></p> <p>4mm Hex/Allen key</p>
	<p><b>FASTENERS</b></p> <p>4x M6x16 black button head bolt 4x M6 black flat washer 4x M6 flange nut</p> <p>Per Side</p>



135. Fit the fog lights in their brackets to the back of the wing mesh. Secure with 2x M8x12 Hex Bolts, M8 HD Washers and Flange nuts per side.

136. Complete for Mesh and light fitment for both sides.

**TOOLS REQUIRED**

13mm socket/spanner

**FASTENERS**

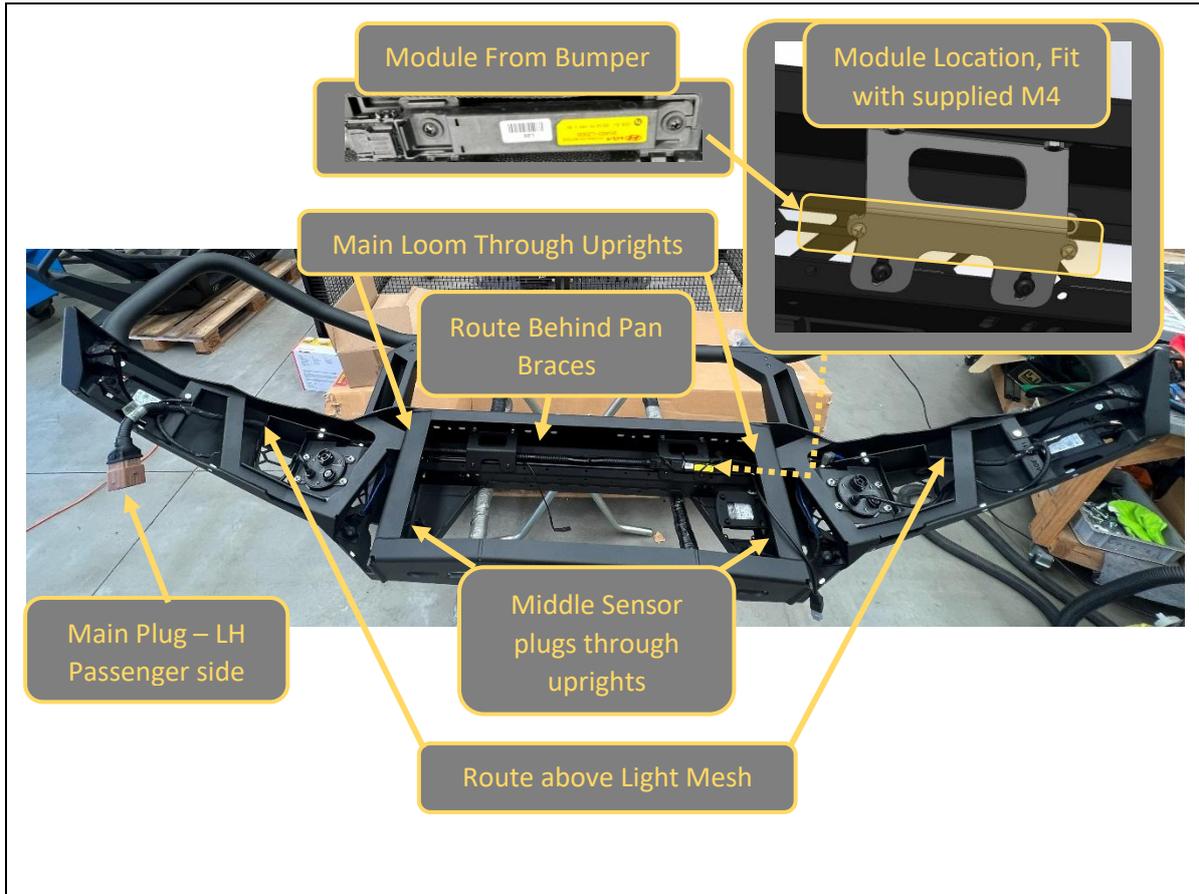
2x M8x12 hex bolt  
2x M8 heavy duty washer  
2x M8 flange nut  
Per side



<p>137. The wing meshes also support cube lights or an 8in light bar instead of fog lights.</p> <p>Up to 2x Cube Lights or 1x 8” Light Bar can be fitted to each wing mesh</p> <p>Bolt them to the underside of the wing mesh flange using fasteners supplied with the lights.</p>	<p><b>TOOLS REQUIRED</b></p> <p>Supplied with accessories</p>
<p><b>Note:</b> For Stedi C4 lights (not pictured), spacers are needed to shift the light downwards so they align with the opening in the bull bar. Offroad Animal brand cube lights (pictured) do not need spacers.</p> <p><b>Wiring Note:</b> Alternate lights in this locaton cannot be used with fog light circuit and must be wired seperatly as driving lights (high beam switched).</p>	<p><b>FASTENERS</b></p> <p>Supplied with accessories</p>



<p>138. Time to prepare the loom for fitment.</p> <p>139. Carefully cut or peel back the electrical tape securing the camera plug into the center of the loom. <b>DO NOT</b> use a knife to do this, as it risks damaging the insulation on the wires within.</p> <p>140. Strip back the camera wire out of the split tubing approximately 30-50cm to allow room to position and re-plug the front camera once fitted to the bullbar.</p> <p>141. Re-Tape loom up once complete.</p>	<p><b>TOOLS REQUIRED</b></p> <p>Precision Side cutters Electrical Tape</p>
	<p><b>FASTENERS</b></p>



<p>142. Feed the loom through the bar, following the path shown in the image above.</p> <p>143. Fit the Electronic module from the bumper to the tabs on the pan brace, using supplied M4 Fasteners.</p> <p>144. Once routed, plug in side radar sensor modules.</p> <p>145. Connect the 2x Parking sensor extension looms to the outermost sensor plug on each side.</p>	<p><b>TOOLS REQUIRED</b></p> <p>Phillips head screwdriver</p>
	<p><b>FASTENERS</b></p> <p>2x M4x12 Pan Screw 2x M4 Washer 2x M4 Flange Nuts</p>



- 146. Clean the mounting surfaces of the 6x supplied parking sensor holders and the corresponding mounting locations on the inside of the bull bar with isopropyl alcohol or similar. Let it dry.
- 147. Press down on the arrow location and break the bulb of the supplied 3M Primer 94 ampule to activate the primer dispensing.
- 148. Apply 3M Primer 94 to all areas adjacent to the parking sensor locations, on both the bullbar and the sensor housings.

**TOOLS REQUIRED**

Isopropyl alcohol  
Rag

**FASTENERS**

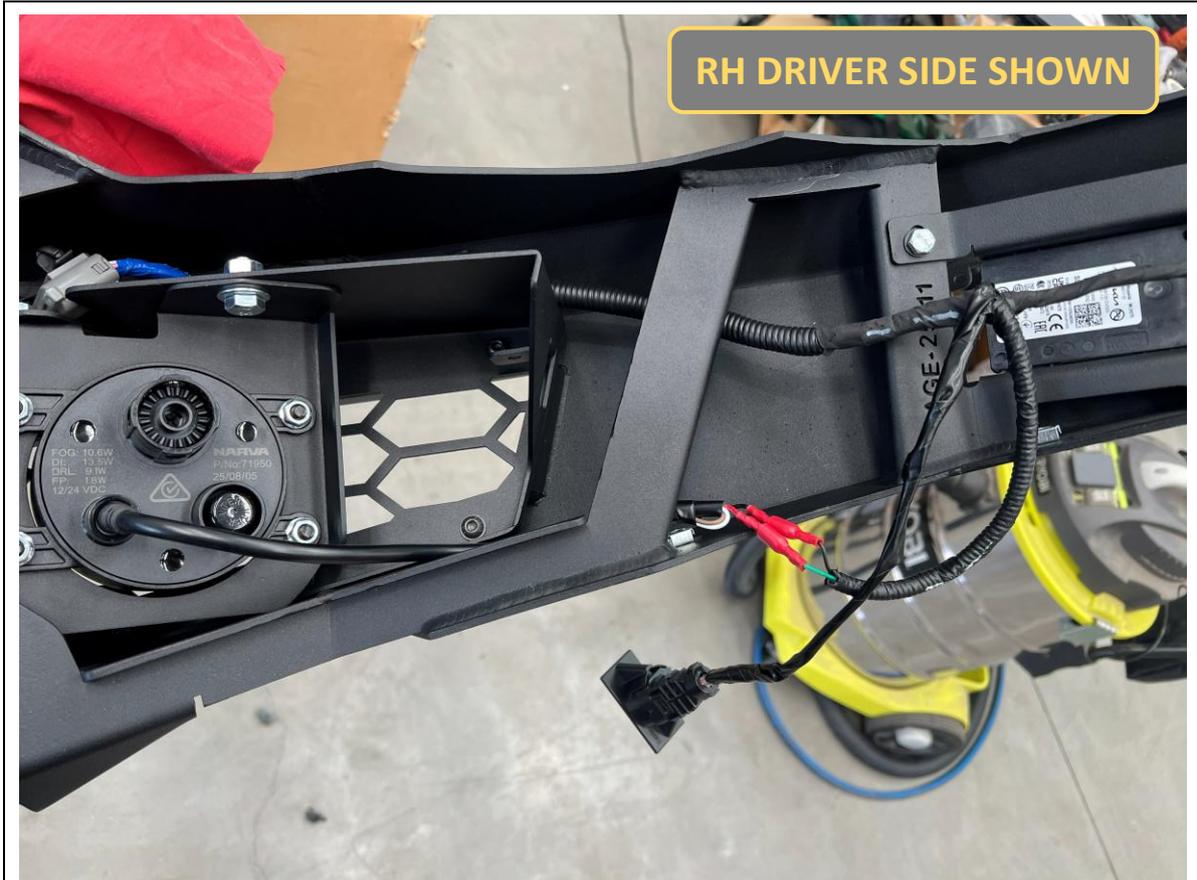
3M Primer 94



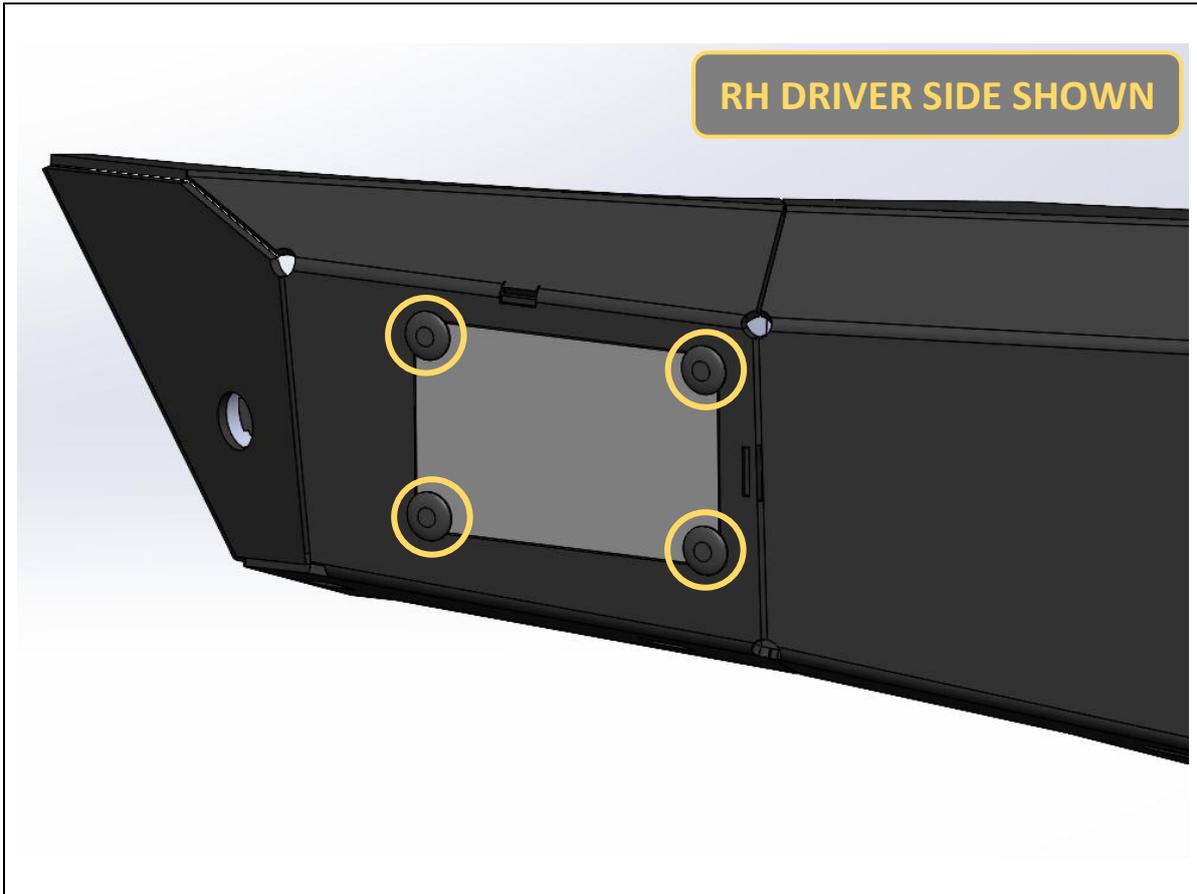
<p><b>Important:</b> Allow at least 5 minutes for the primer to chemically bond to the surfaces.</p> <p>149. Apply supplied VHB tape pads to all 6x sensor housings as shown.</p> <p>150. Fit parking sensors into plastic sensor housings. Ensure the rubber isolating ring is seated correctly.</p>	<p><b>TOOLS REQUIRED</b></p>
	<p><b>FASTENERS</b></p>



<p>151. Plug in all parking sensors into the loom. Dry fit parking sensors to determine plug orientations and ensure sufficient clearances.</p> <p>152. Remove backing film on VHB tape (Tip: use a knife to help start to peel off) and adhere parking sensors in position in bar. Apply pressure for at least 10 seconds after positioning for best adhesion.</p>	<p><b>TOOLS REQUIRED</b></p> <p>Utility knife</p> <p>Automotive adhesive sealant (eg. Sikaflex)</p>
<p>153. Take care to ensure that all rubber isolation rings are not pinched and sit evenly in the cutout.</p> <p>154. Add a pea-sized blob of automotive adhesive sealant over the sensor holder and inside face of bar to hold to ensure the tape holds position.</p>	<p><b>FASTENERS</b></p>



<p>155. If fitted, connect the fog lights to the wiring harness.</p> <p>156. This requires cutting off the OE fog light plug and replacing it with your choice of connector. We have used crimp on terminals for this vehicle, but any automotive wiring techniques are suitable.</p> <p>157. Tidy and tie up loom to bar bracing using cable ties.</p>	<p><b>TOOLS REQUIRED</b></p> <p>Side Cutters Wire strippers Crimping tools or Soldering iron Cable Ties</p>
	<p><b>FASTENERS</b></p>



<p>158. Fit the N-0026 plastic radar covers to the open windows in each bull bar wing, textured face on the outside.</p> <p>159. Secure each cover with 4x fir tree clips supplied.</p>	<p><b>TOOLS REQUIRED</b></p>
	<p><b>FASTENERS</b></p> <p>8x fir tree clips</p>



160. If fitting driving lights to this bar, this is also the most convenient time to do so. It is still possible later, but it is a little more difficult.

These bars support up to 4x 9" round driving lights.

**TOOLS REQUIRED**

Supplied with accessories

**FASTENERS**

Supplied with accessories

	
	
<p>161. <b>Predator only.</b> If you are fitting top tubes (Stealth Hoop or Rally Hoop) to the Predator bar, now is the best time to do so. It is still possible later, but it is more difficult.</p>	<p><b>TOOLS REQUIRED</b></p> <p>Supplied with accessories</p>
	<p><b>FASTENERS</b></p> <p>Supplied with accessories</p>



<p>162. <b>Toro only.</b> 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.</p> <p>163. <b>Toro only.</b> 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.</p>	<p><b>TOOLS REQUIRED</b></p> <p>5mm Hex/Allen key</p>
	<p><b>FASTENERS</b></p> <p>4x M8x20 black button head bolt 4x M8 black flat washer</p>



164. 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.

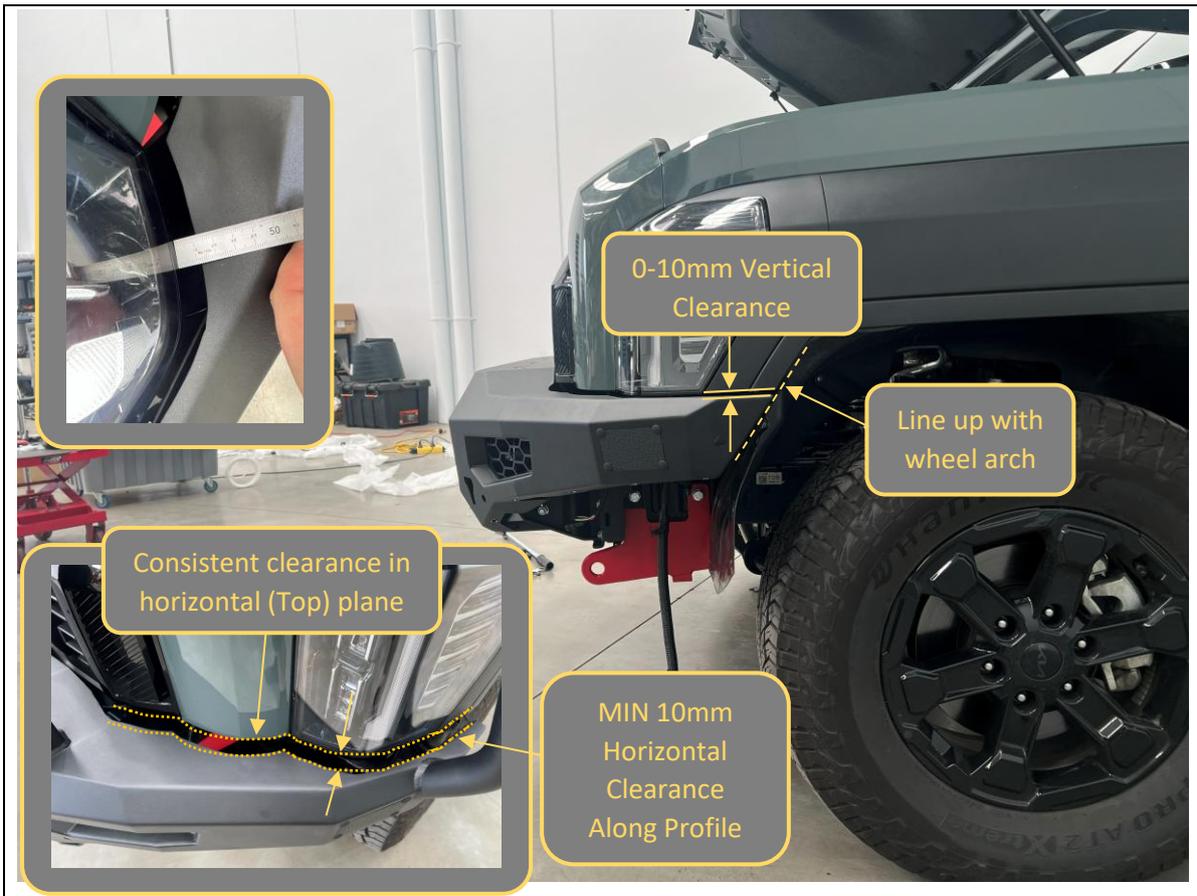
165. Secure the bar to the mounts with 8x M12x30 bolts, heavy-duty washers and Nyloc + flange nuts. Leave finger tight at this stage.

**TOOLS REQUIRED**

Lifting trolley

**FASTENERS**

8x M12x30 hex bolt  
8x M12 heavy duty washer  
8x M12 flange nut



166. 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. Acceptable range of clearances are outlined below. **Ensure clearances are maintained all the way below the headlight.**

**Front view:** The bar should sit horizontally level. The top edge of the wings should be between 0-10mm below the bottom of the headlight.

**Side view:** The bar should be parallel to and have 0-10mm vertical clearance to end of the fender flare. The end of the bar wing should be in line with the wheel arch liner.

**Top view:** The bar should follow the profile around the headlight and outer section of the grille. Bar MUST maintain minimum 10mm horizontal clearance from grille & headlight. Ideal clearance is 10-15mm

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

**TOOLS REQUIRED**

Lifting Trolley  
18/19mm socket/spanner

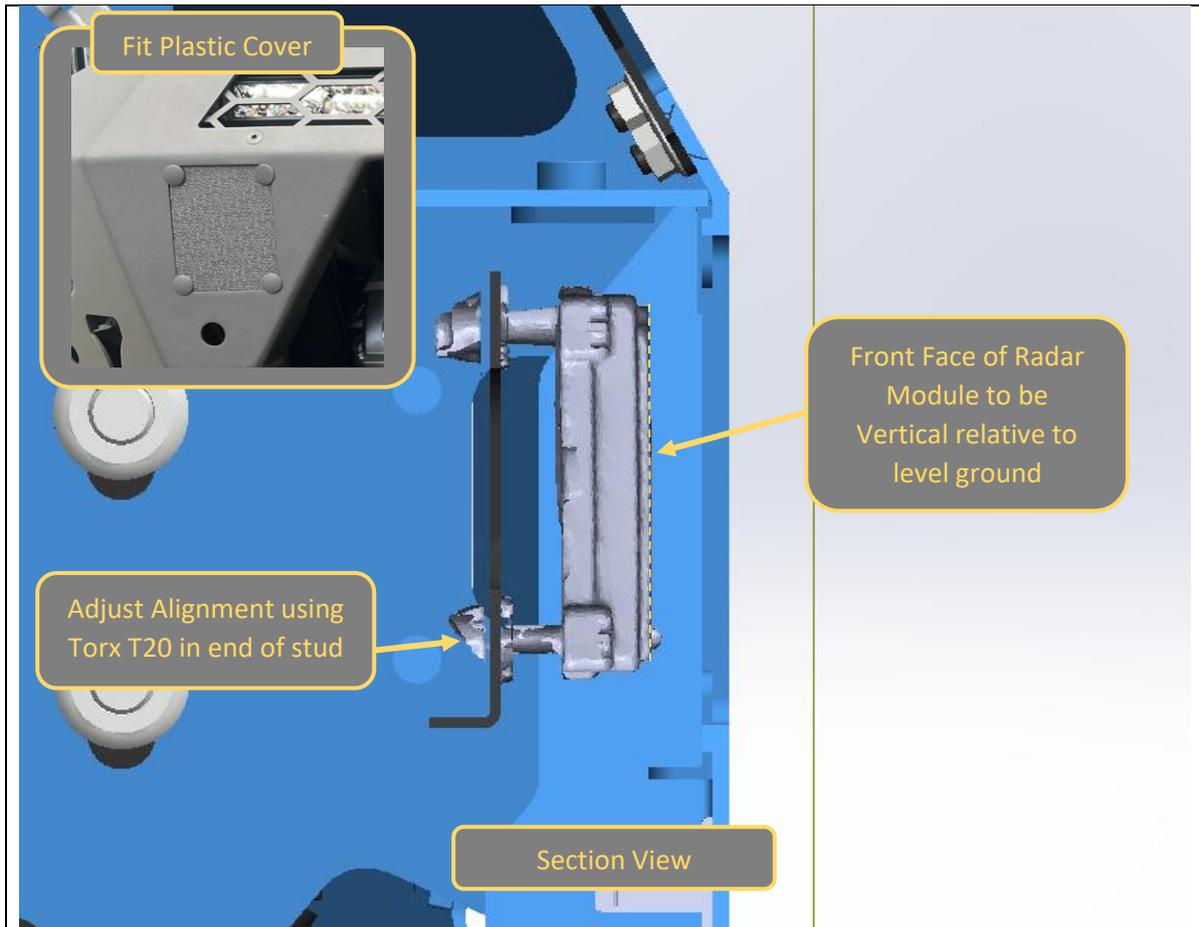
**FASTENERS**



- 168. Re-connect the bumper harness back to the vehicle.
- 169. Connect the radar extension loom harness to the radar plug on the main vehicle harness.

**TOOLS REQUIRED**

**FASTENERS**



<p>170. Ensure the vehicle is on its wheels, on a level surface before performing the following steps. Do not attempt whilst vehicle is supported on a hoist.</p> <p>171. Using a small combination square with level bubble or small spirit level with square end, check that the front face of the main radar module is sitting vertically relative to the ground.</p>	<p><b>TOOLS REQUIRED</b></p> <p>Small combination square or Spirit level with square end</p> <p>T20 Torx</p>
<p>172. If required adjust the alignment of the radar using the bottom adjustment stud, with a T20 Torx bit.</p> <p>173. Once satisfied radar module is vertical, fit the plastic N-0025 cover panel and secure with 4x Fir Tree Clips.</p>	<p><b>FASTENERS</b></p> <p>4x Fir Tree Clips</p>



174. If fitting a winch, do so now. Lift the winch into the opening at the front of the bull bar.

This bar is designed to fit most low mount winches, in foot down configuration. Secure the winch with bolts underneath the cradle.

WARN ZEON 12 is the largest winch confirmed to fit.

Bushranger Covert winches will **NOT** fit due to the additional depth of their integrated control pack.

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

**TOOLS REQUIRED**

Refer to instructions supplied by winch

**FASTENERS**

Supplied with winch



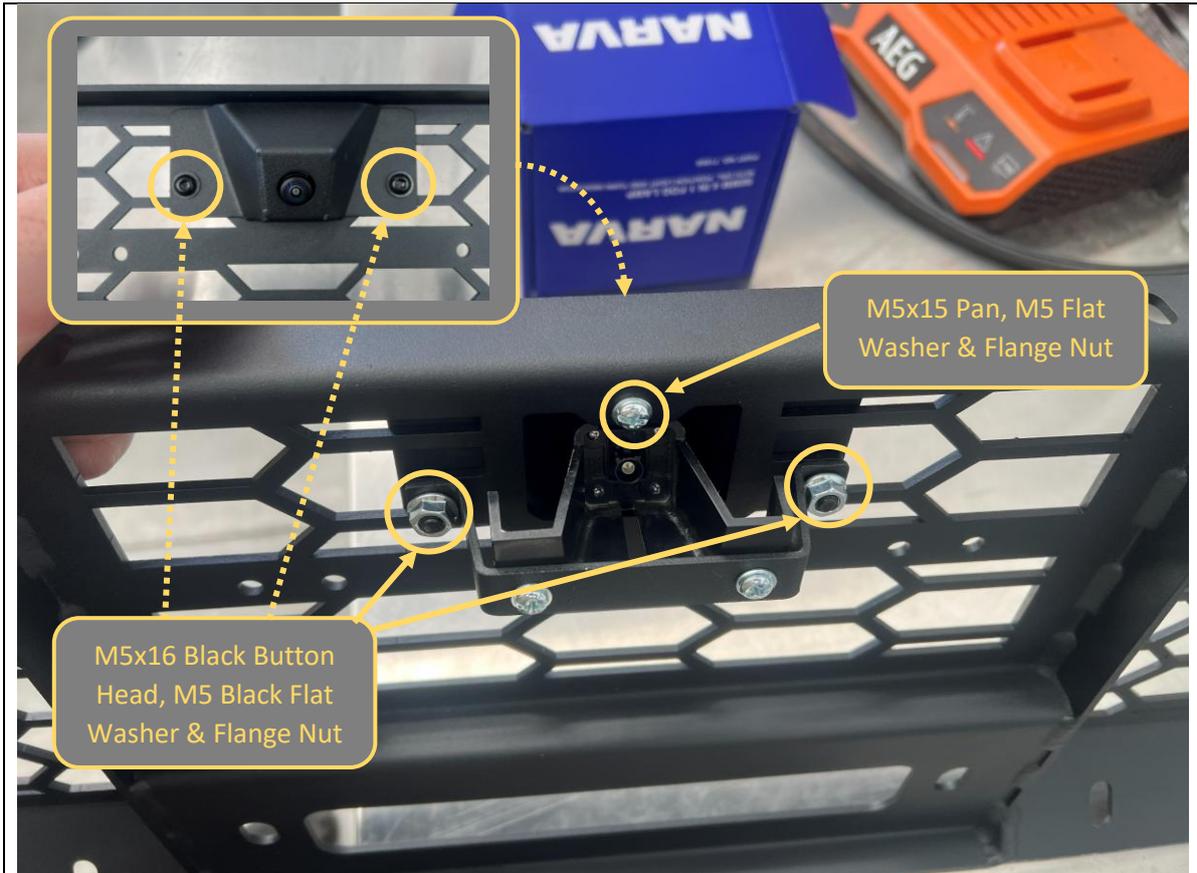
175. Fit the Camera Mount Bracket to the front camera module removed from the bumper using supplied M5x15 pan head screws, flat washers and Flange Nuts

**TOOLS REQUIRED**

Phillips Screwdriver

**FASTENERS**

2x M5x15 pan head screws  
2x M5 flat washers  
2x M5 flange nuts



<p>176. Insert the camera module through the cutout in the center mesh panel, you will need to rotate to get the center mounting tab in front of the panel.</p> <p>177. Secure the center tab to the panel using M5x15 Pan, M5 Flat Washer &amp; Flange Nut.</p> <p>178. Align the camera / bracket with the lower holes in the mesh panel, then secure by fitting the camera cover using 2x M5x16 Black Button Head, 2x M5 Black Flat Washer &amp; 2x M5 Flange Nuts.</p> <p>179. Tighten all camera bolts using 3mm Hex Key and phillips head screwdriver</p>	<p><b>TOOLS REQUIRED</b></p> <p>Phillips screwdriver 3mm Hex/Allen Key</p>
	<p><b>FASTENERS</b></p> <p>1x M5x15 Pan screw 2x M5x16 Black Button Head 1x M5 Flat Washer 2x M5 Black Flat Washer 3x M5 Flange Nut.</p>



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

**TOOLS REQUIRED**

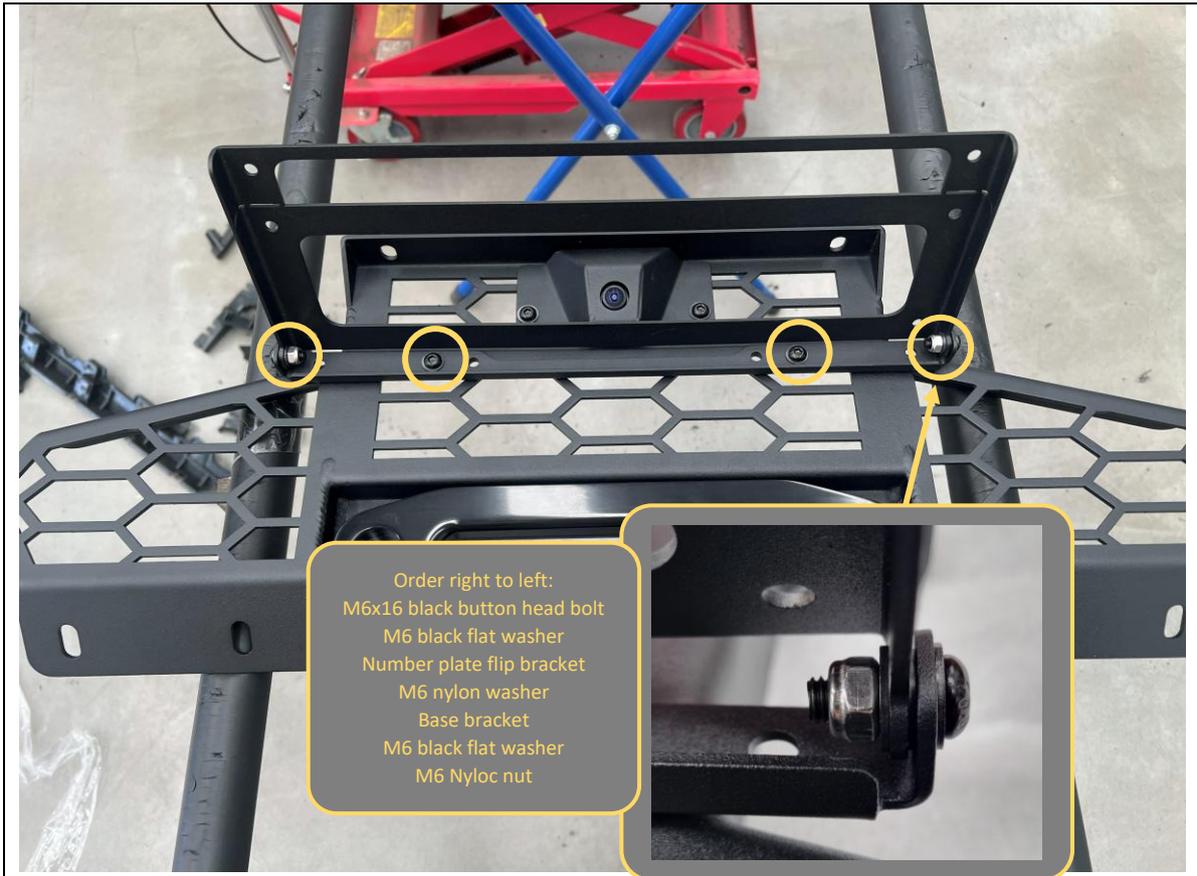
Refer to instructions supplied by winch

**FASTENERS**

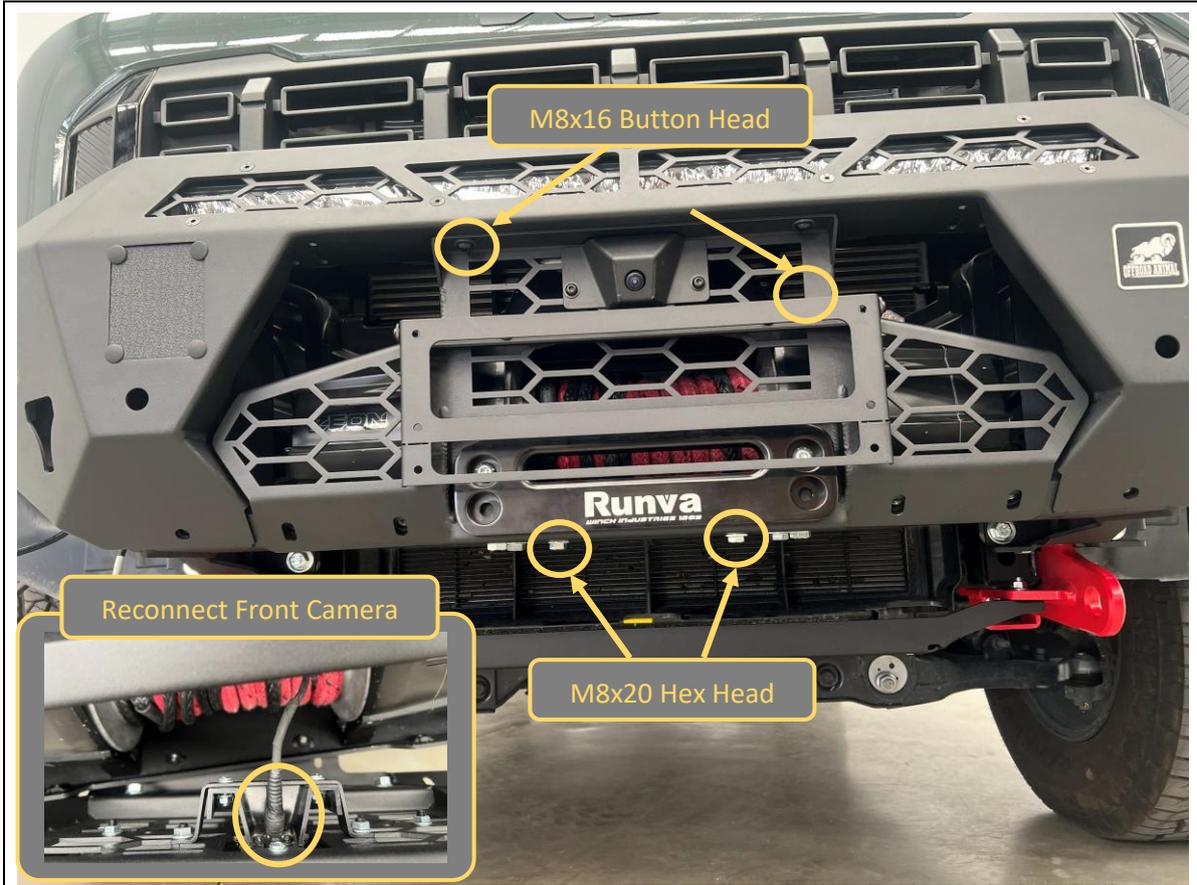
Supplied with winch



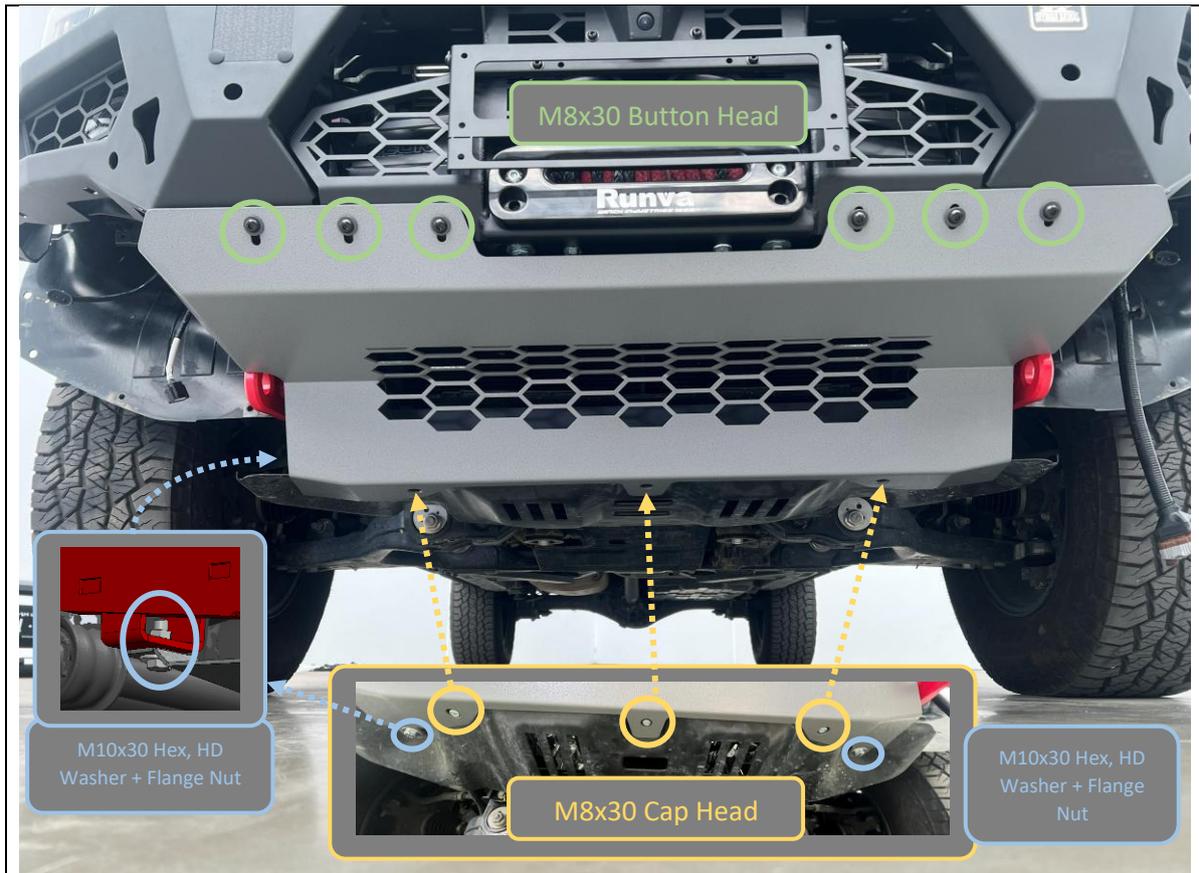
<p>The number plate flip bracket is designed to be compatible with both standard and slimline number plates.</p> <p>181. If fitting to a slimline plate, use an angle grinder to cut the bottom section of the bracket off along the laser cut grooves.</p> <p>182. Deburr the cut edges, then paint over to prevent rust.</p>	<p><b>TOOLS REQUIRED</b></p> <p>Angle grinder</p> <p>Deburring tool</p> <p>Black spray paint</p>
	<p><b>FASTENERS</b></p>



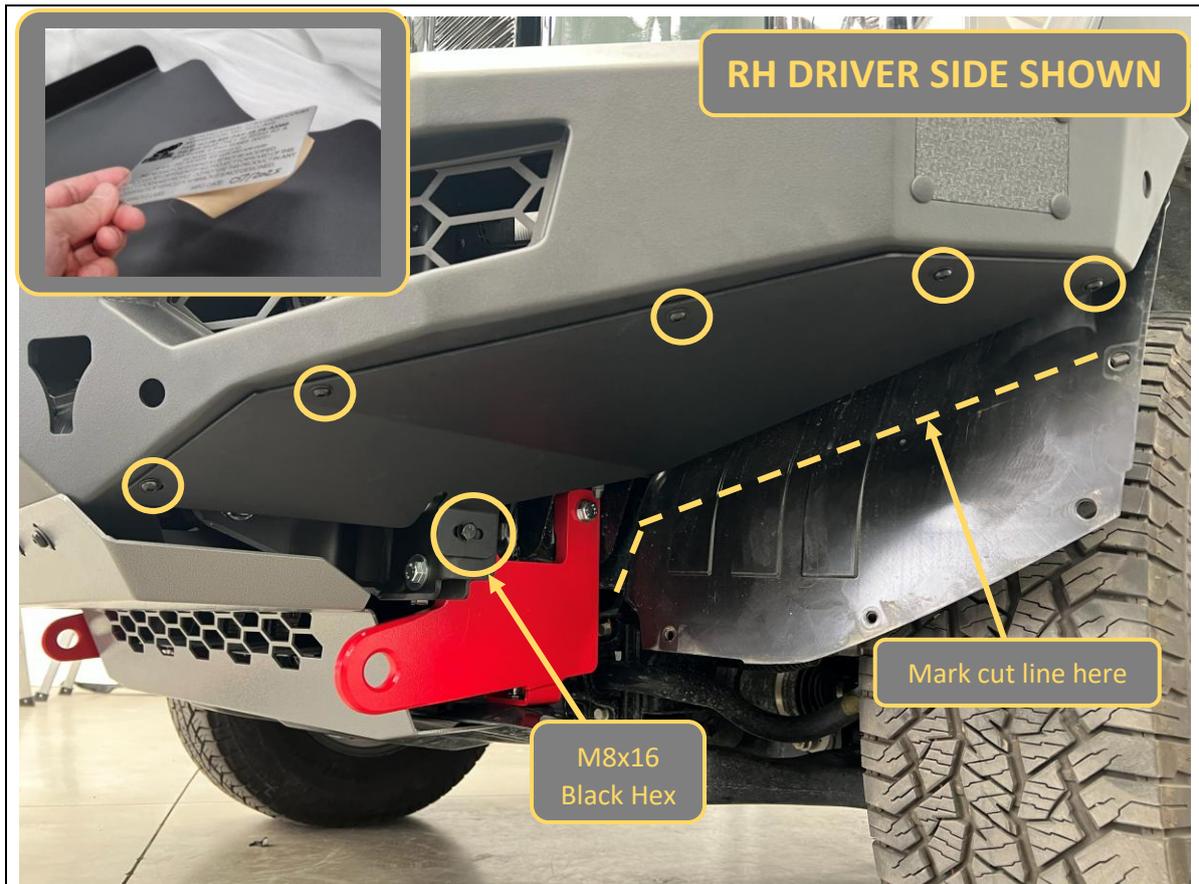
<p>183. Fit the base number plate base bracket to the center mesh and secure with 2x M6x16 black button head bolts, black washers and flange nuts.</p> <p>184. Fit number plate flip bracket to base bracket as shown above. Tighten bolts so that flip bracket can be moved by hand with some friction resistance.</p>	<p><b>TOOLS REQUIRED</b></p> <p>4mm Hex/Allen key</p>
	<p><b>FASTENERS</b></p> <p>4x M6x16 black button head bolt 6x M6 black flat washer 2x M6 flange nut 2x M6 nylon washer 2x M6 Nyloc nut</p>



<p>185. Present the center mesh up to the center opening of the bar. If a winch is fitted, feed the winch rope through the hawse fairlead and fit the winch hook.</p> <p>186. As the center mesh is being presented, connect the front camera to the bumper harness. Ensure the wiring harness does not get pinched during the fitment.</p>	<p><b>TOOLS REQUIRED</b></p> <p>13mm socket/spanner 5mm Hex/Allen key</p>
<p>187. Secure the center mesh to the bar using 2x M8x16 black button head bolts + black washers (top), 2x M8x20 hex head bolts + heavy duty washers (bottom).</p> <p>188. Check all wiring is connected. Start vehicle and test that fog lights &amp; parking sensors &amp; camera are all functional.</p>	<p><b>FASTENERS</b></p> <p>2x M8x16 black button head 2x M8 black flat washer</p> <p>2x M8x20 hex head 2x M8 heavy duty washer</p>



<p>189. Re-fit the factory lower bash plate to the suspension crossmember using 2x OE M8 Flange head bolts.</p> <p>190. Fit the bash plate to the underside of the bar.</p> <p>191. Secure the top to the bullbar using 6x M8x30 black button head bolts and black washers.</p>	<p><b>TOOLS REQUIRED</b> 12+16mm Socket / Spanner 5+6mm Hex/Allen key</p>
<p>192. Secure the bottom, through the factory lower bash plate, to the reinforcement bracket using 3x M8x30 Cap head screws and heavy-duty washers.</p> <p>193. Secure the bottom outer points, through the factory lower bash plate, to the tow points, using 2x M10x30 hex head bolts, heavy duty washers and Flange Nuts</p>	<p><b>FASTENERS</b> 2x OE M8 Flange Bolt 6x M8x30 black button head bolt 6x M8 black flat washer  3x M8x20 button head bolt 3x M8 HD washer 2x M10x30 hex head bolts 2x M10 HD Washer 2x M10 Flange Nut</p>



<p>194. Peel off the backing film and affix the ADR compliance plate to the inside of the one of the side under panels.</p> <p>195. Fit the side under panel to the underside of the bull bar wing.</p> <p>196. Loosely secure with 5x M6x16 black button head bolts and black washers, plus 1x M8x16 Hex head bolt, black washer and flange nut.</p> <p>197. Apply masking tape to the wheel arch liner, then mark out a cut line that matches the profile of the side underpanel, approximately 20-30mm below.</p>	<p><b>TOOLS REQUIRED</b></p> <p>Masking tape Marker pen</p>
	<p><b>FASTENERS</b></p> <p>10x M6x16 black button head 10x M6 black flat washer</p> <p>2x M8x16 black hex head bolt 2x M8 black flat washer 2x M8 flange nut</p>



<p>198. Remove the side underpanel.</p> <p>199. Hold wheel arch liner up to bar and mark a cut starting approximately 10mm above the bottom of the bar, extending horizontally approx. 20-30mm as shown. Finish with an approx. 45 degree diagonal line that will intersect the cut marked on the other side.</p>	<p><b>TOOLS REQUIRED</b></p> <p>Oscillating multi-tool or similar</p> <p>Deburring tool or Utility knife</p>
<p>200. Cut the wheel arch liners along the marked lines with an oscillating multi-tool or other suitable cutting tool.</p> <p>201. Clean up the cut edge with a deburring tool or similar.</p>	<p><b>FASTENERS</b></p>



<p>202. Re-fit and fully tighten the side under panel. Ensure the wheel arch liner is tucked inside the flanges on the back of the side under panels and bull bar.</p> <p>203. Ensure the trimmed wheel arch liner does not contact any of the plugs / or loom components on the bar. Remove under panel and re-trim arch liner as required for additional clearance if necessary.</p>	<p><b>TOOLS REQUIRED</b></p> <p>4mm Hex/Allen key 13mm socket / spanner</p>
<p>204. Complete under panel fitment and wheel arch liner trim for both sides of the vehicle.</p> <p>205. Refit the number plate to the vehicle, using supplied M6x12 Button head screws, Black Flat Washers and Flange Nuts.</p> <p>206. The fitment is now complete. Double check all fasteners are tight and you are good to go!</p>	<p><b>FASTENERS</b></p> <p>4x M6x12 Black BHCS 4x M6 Black Washer 4x M6 Flange Nut</p>



**Congratulations! You're done! Get out and explore in your tougher Tasman!**