

**Toyota Hilux N80**  
**MY2015 on**  
**Predator & Toro Front Bar**

**IMPORTANT! – READ BEFORE INSTALLATION**

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

## GENERAL CARE AND MAINTENANCE

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

Plastic parts may be maintained with silicone spray.

Do not use acidic or alkaline based cleaning products.

It is important to perform regular checks (pre trip or on an annual basis) on the installed product. 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<br>+ REAR TOWBAR |           |
|--|-----------|
| Size   | Torque Nm |
| M10  | 57 Nm     |
| M12  | 100 Nm    |
| M14  | 164 Nm    |
| M16  | 248 Nm    |

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

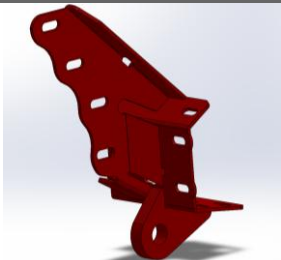
## PARTS LISTING

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

### Main Parts – In the Box

| Qty | Part Number           | Description                               | Image  |
|-----|-----------------------|---|--|
| 1   | FB-THL-N80-15-PR-ASM1 | Hilux N80 2015-2020 Predator Bar Weldment |    |
| OR  |                       |   |  |
| 1   | FB-THL-N80-21-PR-ASM1 | Hilux N80 2021+ Predator Bar Weldment     |    |
| OR  |                       |   |  |
| 1   | FB-THL-N80-15-PR-ASM1 | Hilux N80 2015-2020 Toro Bar Weldment     |  |
| OR  |                       |   |  |
| 1   | FB-THL-N80-21-PR-ASM1 | Hilux N80 2021+ Predator Bar Weldment     |  |

### Common Fitting Kit Parts All Years

| Qty | Part Number             | Description                 | Image   |
|-----|-------------------------|-----------------------------|---|
| 1   | FB-TFT-N160-21-PR-ASM2L | Fortuner Chassis Mount Assy |  |

|   |                         |                                      |   |
|---|-------------------------|--------------------------------------|---|
| 1 | FB-TFT-N160-21-PR-ASM2R | Fortuner 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-ASM0         | Number plate flip asm Small          |   |
| 1 | U-0009                  | Hilux N80 Bash Plate                 |   |
| 1 | U-0057L                 | Hilux Front Bar - Side Under panel   |  |



|   |                        |  |   |
|---|------------------------|--|---|
| 1 | U-0057R                | Hilux Front Bar - Side Under panel       |    |
| 1 | M-0002L                | Light Cover Mesh                         |    |
| 1 | M-0002R                | Light Cover Mesh                         |    |
| 1 | B-0886L                | Hilux N80 Headlight Corner Infill        |    |
| 1 | B-0886R                | Hilux N80 Headlight Corner Infill        |   |
| 2 | TK-FB-THL-N80-15       | Tape Kit - Hilux N80, 3M 5952, 2x 25x8mm | No Image  |
| 1 | TK-COM-PSEN-4          | Tape Kit - 4 Sensor Universal            | No Image  |
| 1 | FB-THL-N80-15-PR-ADRCP | ADR Compliance Plate Hilux N80           |  |

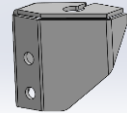
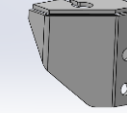
## 2015-2020 Specific Parts

| Qty | Part Number | Description                       | Image   |
|-----|-------------|-----------------------------------|---|
| 1   | B-0185R     | Toyota Style Fog Lamp Bracket RHS |  |
| 1   | B-0185L     | Toyota Style Fog Lamp Bracket LHS |  |
| 1   | B-0195      | Hilux Grille Support Bracket      |  |

## 2021+ Specific Parts

| Qty | Part Number | Description                                     | Image   |
|-----|-------------|---|---|
| 1   | B-0514L     | Hilux 21+ Style Fog Lamp Bracket LHS            |    |
| 1   | B-0514R     | Hilux 21+ Style Fog Lamp Bracket RHS            |    |
| 1   | B-0515      | Hilux 21+ Grille Support Bracket                |   |
| 1   | B-1137      | Hilux N80 Pan Brace                             |  |
| 1   | N-0009L     | Hilux MY21 Plastic Bolt on Headlight Infill     |  |
| 1   | N-0009R     | Hilux MY21 Plastic Bolt on Headlight Infill     |  |
| 2   | F-0032      | N80 Hilux / N160 Fortuner Parking Sensor Holder |   |

## Toro Additional Parts

| Qty | Part Number | Description                | Image   |
|-----|-------------|----------------------------|---|
| 1   | B-0631L     | Hilux Toro - Antenna mount |  |
| 1   | B-0631R     | Hilux Toro - Antenna mount |  |

## 2015-2020 Small Parts – Contained in Small Parts Kit Bag

| Qty | Part Number                      | Description   |
|-----|----------------------------------|---|
| 19  | M6 FLANGE NUT                    | Flange Nut, M6x1 G8.8 ZP  |
| 31  | M6 FLAT WASHER<br>BLACK ZINC     | M6 Flat Washer, 12x6.1x1, ISO4042 ZnNi<br>BLACK PASSIVATED FINISH                     |
| 31  | M6x16 BHCS<br>BLACK ZINC         | SCREW, BUTTON HEAD CAP, M6X16X1<br>GR12.9, ISO4042 ZnNi BLACK PASSIVATED<br>FINISH    |
| 8   | M12X40                           | Bolt Hex, M12X40X1.75, GR8.8 ZP   |
| 16  | M12 FW LHD                       | M12 FW Large Heavy Duty   |
| 8   | M12 Nyloc nut                    | M12 NYLOC NUT   |
| 10  | M6CN3MM                          | CAGE NUT M6x2.6-3.5   |
| 8   | M8X20                            | Bolt Hex, M8X20X1.25, GR8.8 ZP  |
| 8   | M8 FLAT WASHER                   | M8 FW   |
| 14  | M8 FLANGE NUT                    | Flange Nut, M8x1.25 G8.8 ZP   |
| 6   | M8 X 20 BHCS<br>BLACK ZINC       | SCREW, BUTTON HEAD CAP, M8X20X1.25,<br>ISO4042 ZnNi BLACK PASSIVATED FINISH           |
| 8   | M8 FLAT<br>WASHER- BLACK<br>ZINC | M8 FLAT WASHER, 16.5x8.4x1.2, ISO4042 ZnNi<br>BLACK PASSIVATED FINISH                 |
| 2   | M8 X 16 BHCS BZP                 | SCREW, BUTTON HEAD CAP, M8X16X1.25<br>GR12.9, ISO4042 ZnNi BLACK PASSIVATED<br>FINISH |
| 2   | M10X30 BHCS                      | SCREW, BUTTON HEAD CAP, M10X30X1.5<br>GR12.9 ZP                                       |
| 12  | M10 Flat Washer                  | M10 FW  |
| 12  | M10 FLANGE NUT                   | Flange Nut, M10x1.5 G8.8 ZP   |
| 2   | NP-THL-N80-15-<br>PR             | Nut Plate - Hilux Predator  |
| 6   | M12 FLAT<br>WASHER               | M12 FW  |
| 4   | M12X30                           | Bolt Hex, M12X30x1.75, GR8.8 ZP   |
| 10  | M10 x 30                         | Bolt Hex, M10X30x[1.5], GR8.8 ZP  |
| 2   | M12X30X1.25                      | Bolt Hex, M12X30x1.25, GR8.8 ZP   |

## 2021+ Small Parts – Contained in Small Parts Kit Bag

| Qty       | Part Number                      | Description   |
|-----------|----------------------------------|---|
| <b>25</b> | M6 FLANGE NUT                    | Flange Nut, M6x1 G8.8 ZP  |
| <b>37</b> | M6 FLAT WASHER<br>BLACK ZINC     | M6 Flat Washer, 12x6.1x1, ISO4042 ZnNi<br>BLACK PASSIVATED FINISH                     |
| <b>37</b> | M6x16 BHCS<br>BLACK ZINC         | SCREW, BUTTON HEAD CAP, M6X16X1<br>GR12.9, ISO4042 ZnNi BLACK PASSIVATED<br>FINISH    |
| <b>8</b>  | M12X40                           | Bolt Hex, M12X40X1.75, GR8.8 ZP   |
| <b>16</b> | M12 FW LHD                       | M12 FW Large Heavy Duty   |
| <b>8</b>  | M12 Nyloc nut                    | M12 NYLOC NUT   |
| <b>10</b> | M6CN3MM                          | CAGE NUT M6x2.6-3.5   |
| <b>8</b>  | M8X20                            | Bolt Hex, M8X20X1.25, GR8.8 ZP  |
| <b>8</b>  | M8 FLAT WASHER                   | M8 FW   |
| <b>14</b> | M8 FLANGE NUT                    | Flange Nut, M8x1.25 G8.8 ZP   |
| <b>6</b>  | M8 X 20 BHCS<br>BLACK ZINC       | SCREW, BUTTON HEAD CAP, M8X20X1.25,<br>ISO4042 ZnNi BLACK PASSIVATED FINISH           |
| <b>8</b>  | M8 FLAT<br>WASHER- BLACK<br>ZINC | M8 FLAT WASHER, 16.5x8.4x1.2, ISO4042 ZnNi<br>BLACK PASSIVATED FINISH                 |
| <b>2</b>  | M8 X 16 BHCS BZP                 | SCREW, BUTTON HEAD CAP, M8X16X1.25<br>GR12.9, ISO4042 ZnNi BLACK PASSIVATED<br>FINISH |
| <b>2</b>  | M10X30 BHCS                      | SCREW, BUTTON HEAD CAP, M10X30X1.5<br>GR12.9 ZP                                       |
| <b>12</b> | M10 Flat Washer                  | M10 FW  |
| <b>12</b> | M10 FLANGE NUT                   | Flange Nut, M10x1.5 G8.8 ZP   |
| <b>2</b>  | NP-THL-N80-15-<br>PR             | Nut Plate - Hilux Predator  |
| <b>6</b>  | M12 FLAT<br>WASHER               | M12 FW  |
| <b>4</b>  | M12X30                           | Bolt Hex, M12X30x1.75, GR8.8 ZP   |
| <b>10</b> | M10 x 30                         | Bolt Hex, M10X30x[1.5], GR8.8 ZP  |
| <b>2</b>  | M12X30X1.25                      | Bolt Hex, M12X30x1.25, GR8.8 ZP   |

## Toro- Additional Parts

| Qty      | Part Number                      | Description   |
|----------|----------------------------------|---|
| <b>4</b> | M8 FLAT<br>WASHER- BLACK<br>ZINC | M8 FLAT WASHER, 16.5x8.4x1.2, ISO4042 ZnNi<br>BLACK PASSIVATED FINISH       |
| <b>4</b> | M8 X 20 BHCS<br>BLACK ZINC       | SCREW, BUTTON HEAD CAP, M8X20X1.25,<br>ISO4042 ZnNi BLACK PASSIVATED FINISH |

TOOLS REQUIRED

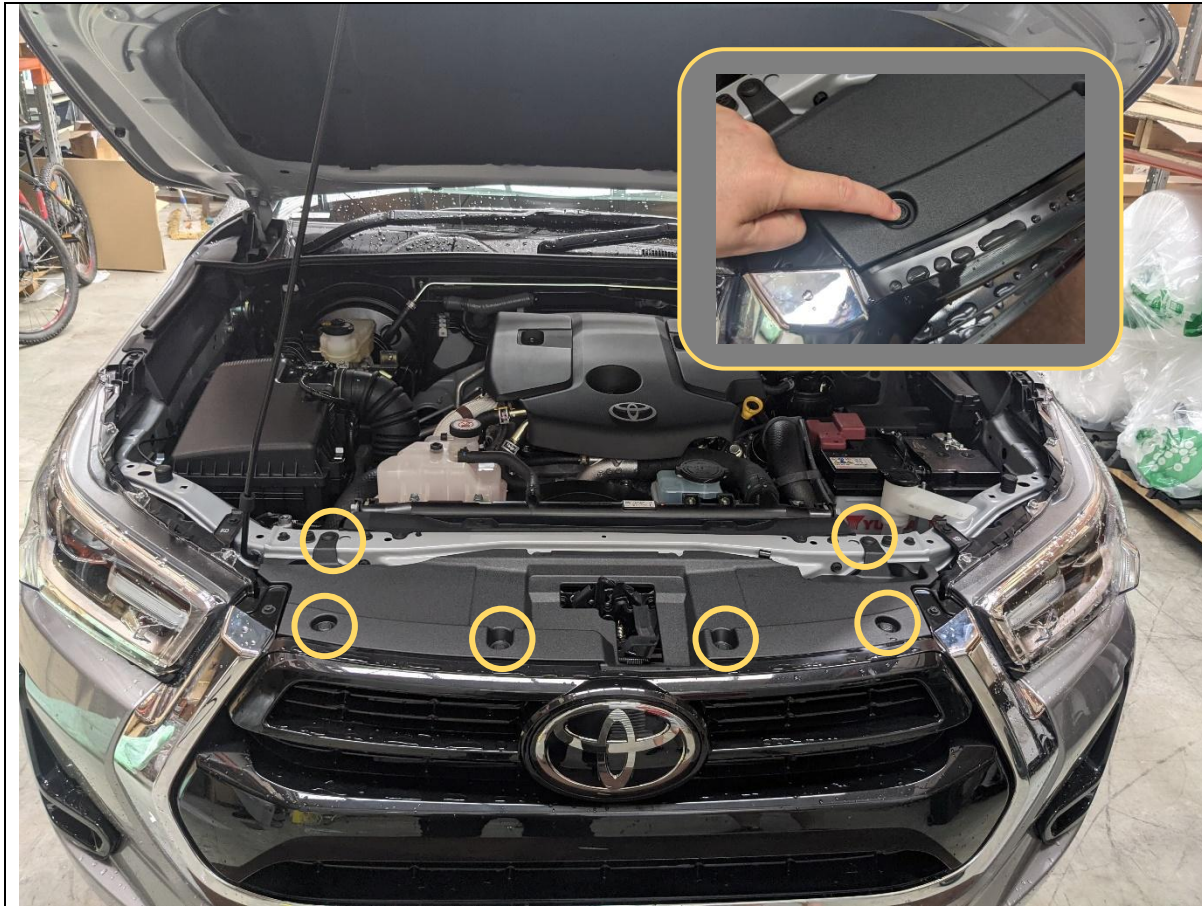
The following tools will be required to install the product.

| Hand Tools  | Power Tools   | Workshop Equipment   |
|---|---|--|
| Metric Socket Set 8-19mm<br>Socket Extension Bar<br>Metric Spanner Set 10-19mm<br>Hex (Allen) Key Set 4-8mm<br>Trim Puller Tool<br>Flat Blade Screwdriver set<br>Phillips Head Screwdriver set<br>Utility Knife | Electric/Air Impact Driver (Optional)<br><br>Air Hacksaw or Angle grinder | Panel Stand or Soft Blanket<br><br>Automotive Adhesive Sealant.<br><br>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. **Note** Most of these images show 2021-2023 model. 2015-2020 & 2024+ Models are similar. Where specific differences / extra steps exist, they will be pointed out.
2. Remove the Radiator shroud by removing the 6x clips securing it to the grille and cross member.
3. Push down on the center of the clips to release then remove with trim tool.

**TOOLS REQUIRED**

Trim Tool

**FASTENERS**

Push Center Clips





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

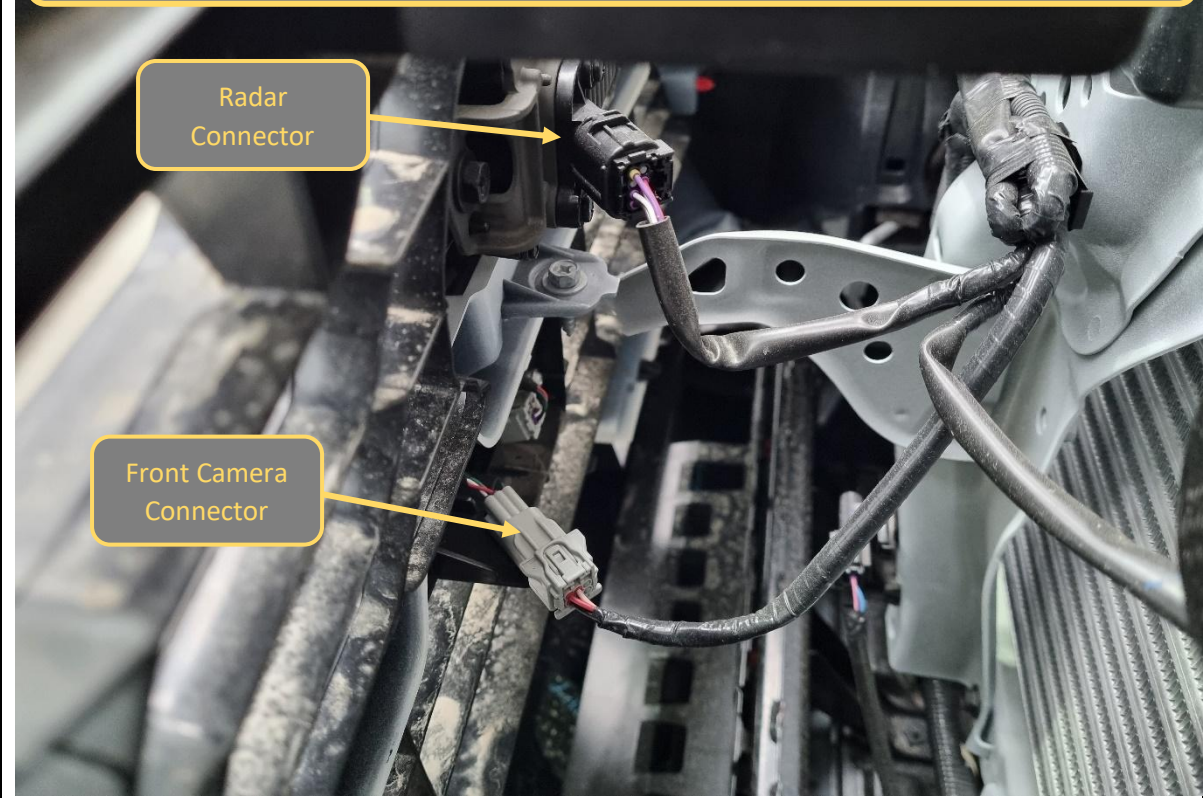
**TOOLS REQUIRED**

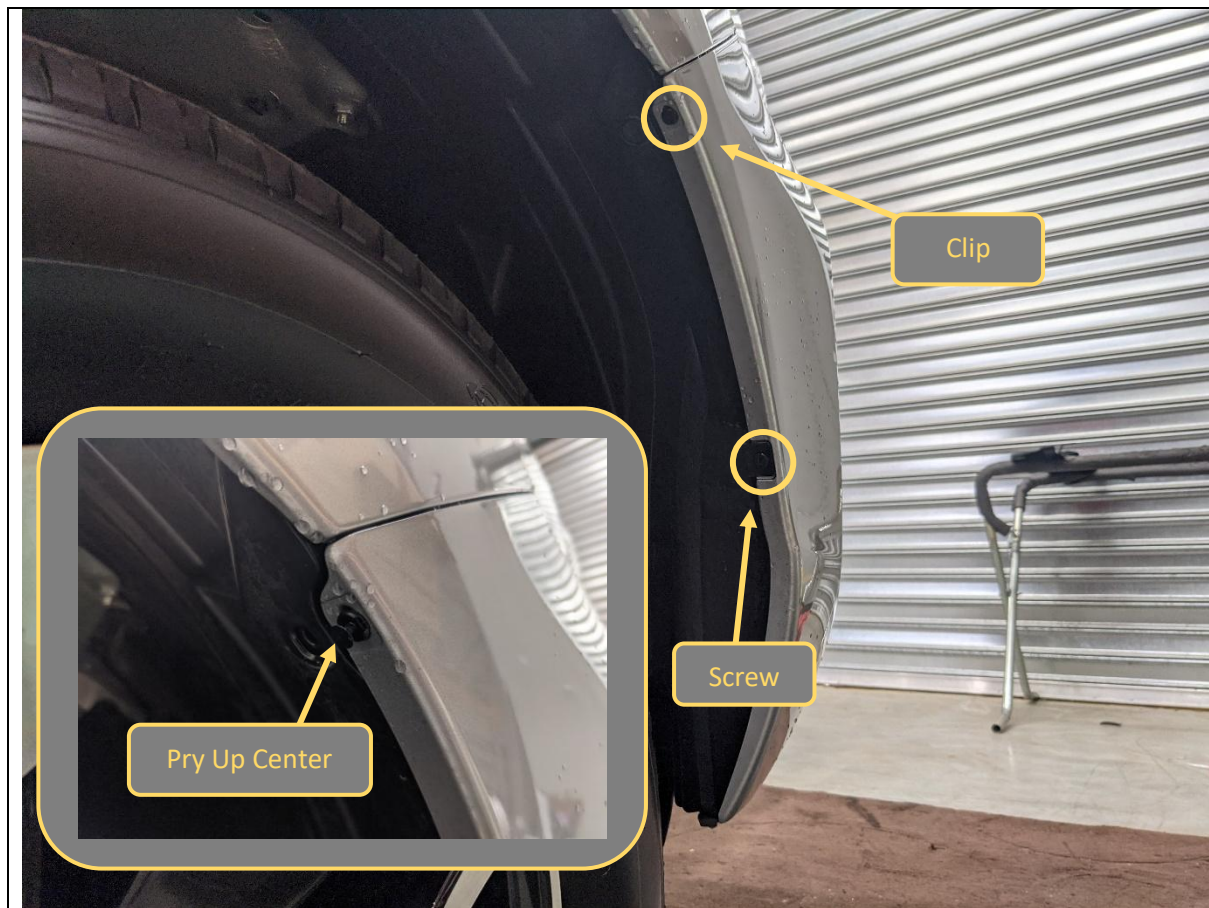
10mm Socket / Spanner

**FASTENERS**

10mm Head Screws



| 2021+ MODELS ONLY  |                |  |
|--|----------------|--|
|   |                |  |
| <div>6. Unplug the radar sensor module wiring connector, located on the back of the Toyota Badge / sensor.</div> <div>7. If Equipped unplug the front camera wiring connector.</div> | TOOLS REQUIRED |  |
|  | FASTENERS      |  |



8. Remove the small screw and clip securing the bumper to the inner wheel arch liner.
9. Clip is a center release type. Pry up the center section to unlock then remove.

**TOOLS REQUIRED**

8mm Socket  
Trim Tool

**FASTENERS**

Factory Clip and Screw



|   |  |
|---|--|
| <div>10. Remove the 3x 10mm head Screws securing bottom corner of bumper to inner wheel arch liner.</div> <div>11. Complete on both sides of Vehicle.</div> | <div>TOOLS REQUIRED</div> <div>10mm Socket / Spanner</div> |
|   | <div>FASTENERS</div> <div>Factory Screws</div>             |





|  |  |
|--|--|
| 12. Remove the 3x 10mm head Screws securing bottom center section of bumper to inner wheel arch liner. | <b>TOOLS REQUIRED</b><br><br>10mm Socket / Spanner |
|  | <b>FASTENERS</b><br><br>Factory Screws             |



13. 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**

10mm socket/spanner

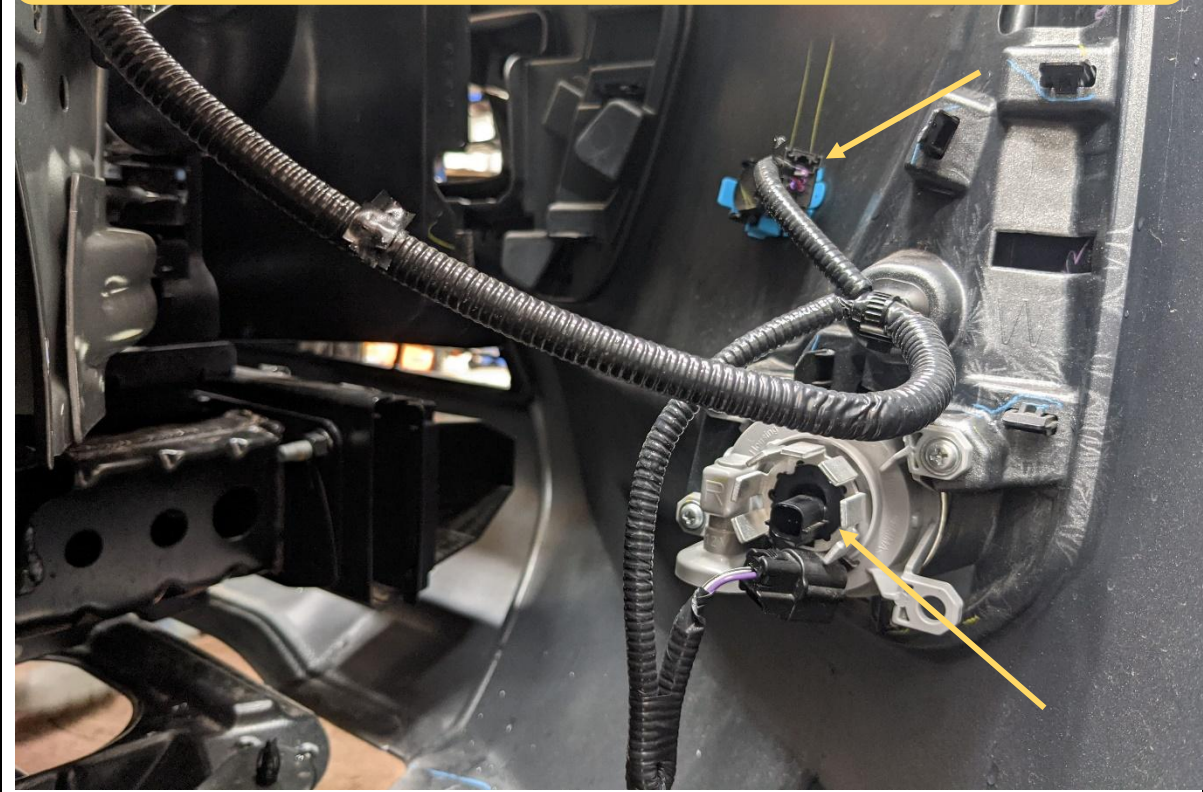
**FASTENERS**

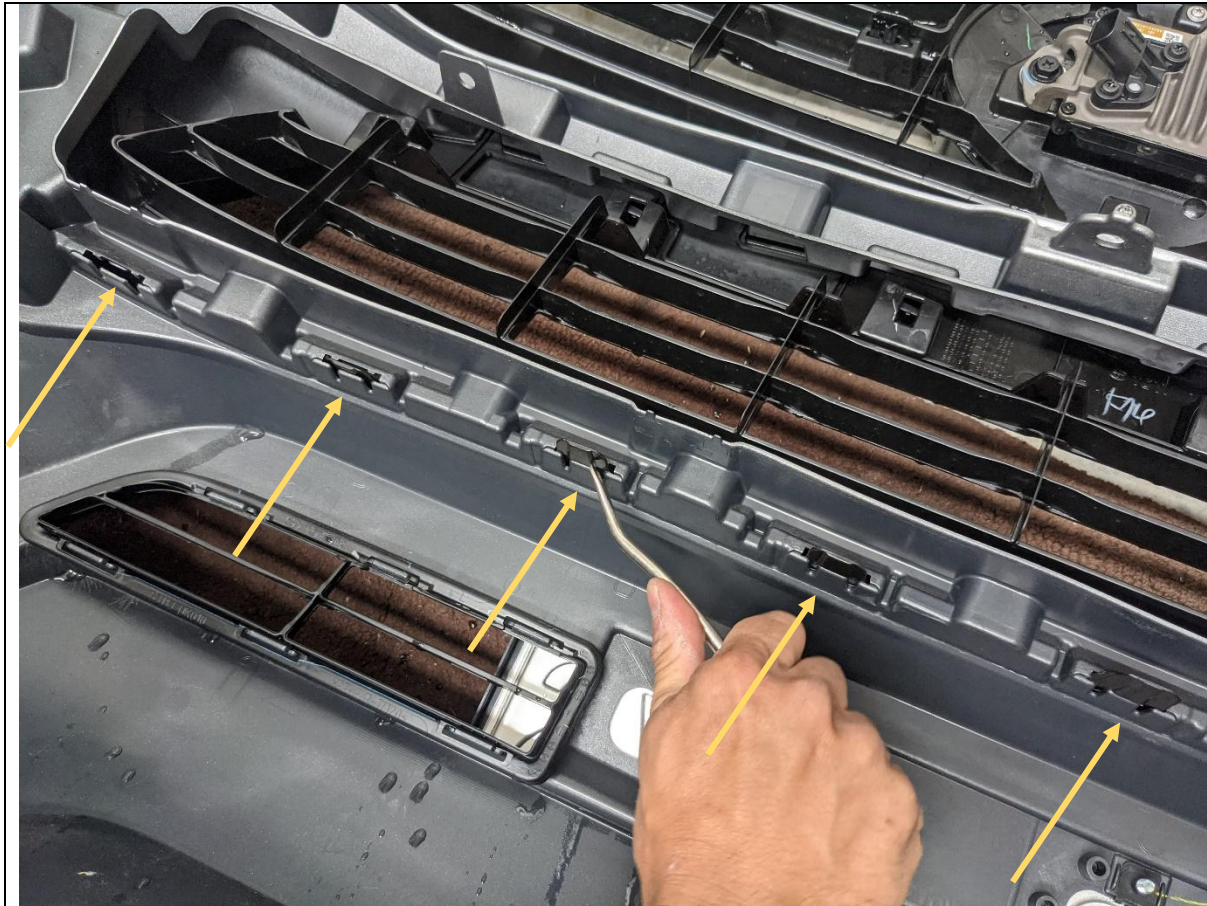
Factory screws



|   |                |
|---|----------------|
| 14. 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      |



| 2021+ MODELS ONLY   |                |
|---|----------------|
|    |                |
| <div>15. With assistance once the bumper is loose, unplug and release the parking sensor and fog light harnesses.</div> <div>16. 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.</div> <div>17. This needs to be done on both sides of the vehicle.</div> | TOOLS REQUIRED |
|   | FASTENERS      |



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

19. 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





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

**TOOLS REQUIRED**

Trim Tool  
Phillips Screwdriver  
10mm socket

**FASTENERS**



24. Replace the forward bolt to re-secure the headlight to the wing.

25. Complete on both sides of the vehicle

**TOOLS REQUIRED**  
**10mm Socket**

**FASTENERS**

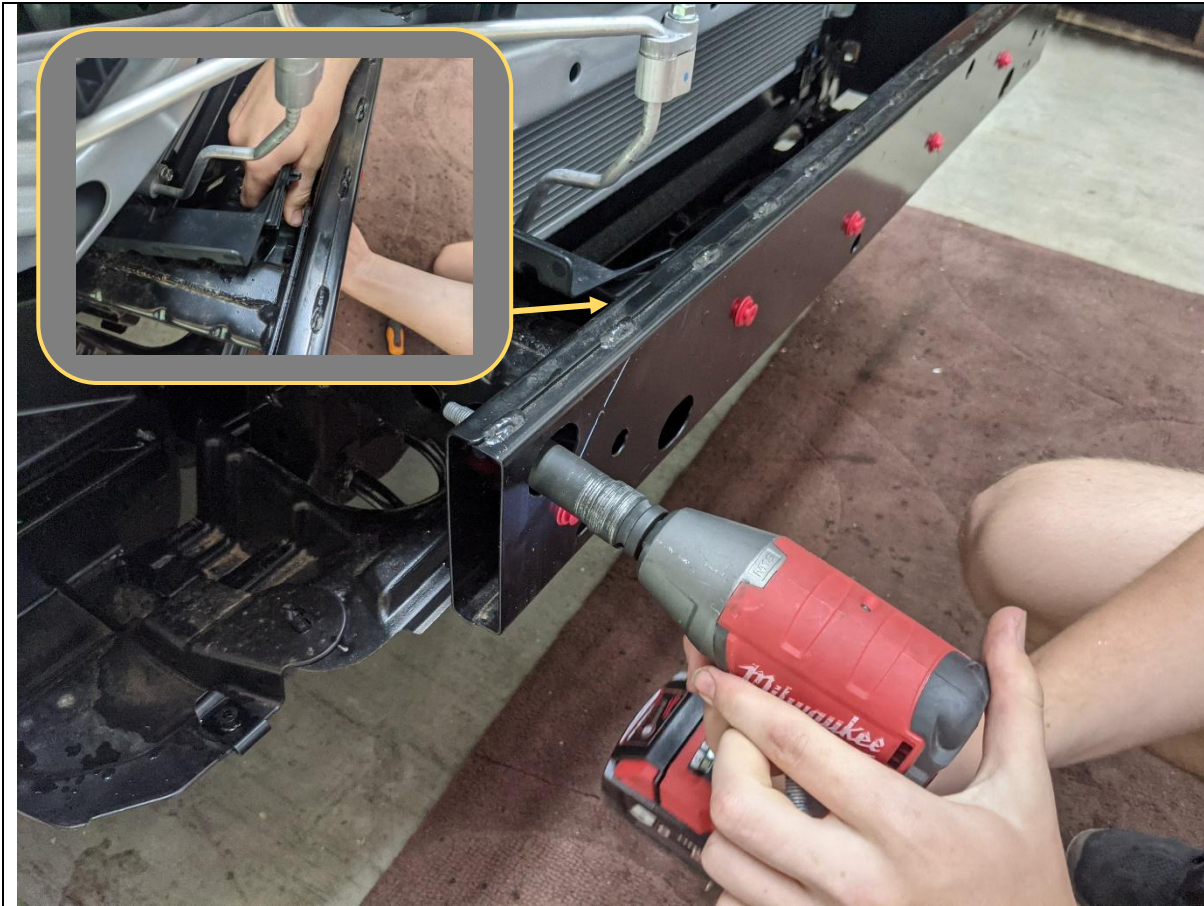


26. Remove the plastic cover from the impact beam by strongly pulling in the direction shown to release it from the clips

**TOOLS REQUIRED**

**FASTENERS**





27. Remove the impact beam by removing the 4x Factory flange bolts securing it to the chassis rail

28. Release plastic clips on behind the impact beam in the air guides.

**TOOLS REQUIRED**

15mm Socket  
Trim Tool

**FASTENERS**

Factory flange bolts  
  
Retain



|   |                |
|---|----------------|
| 29. Take impact beam off car and discard. | TOOLS REQUIRED |
|   | FASTENERS      |





30. Vehicle chassis rails should now be totally exposed as shown.
31. 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**



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

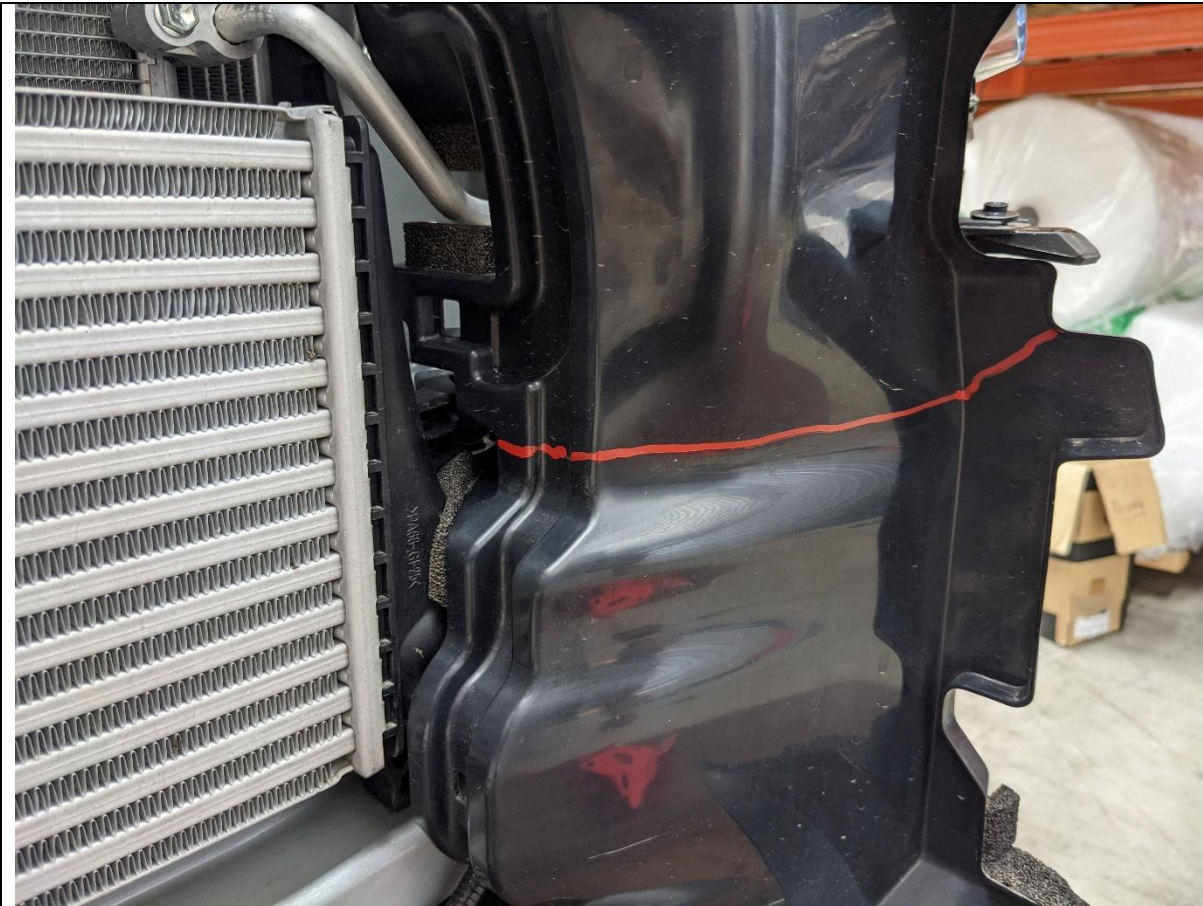
33. Remove air guide from vehicle by releasing the 3x clips holding it to the chassis.

**TOOLS REQUIRED**

Paint Marker  
Trim tool

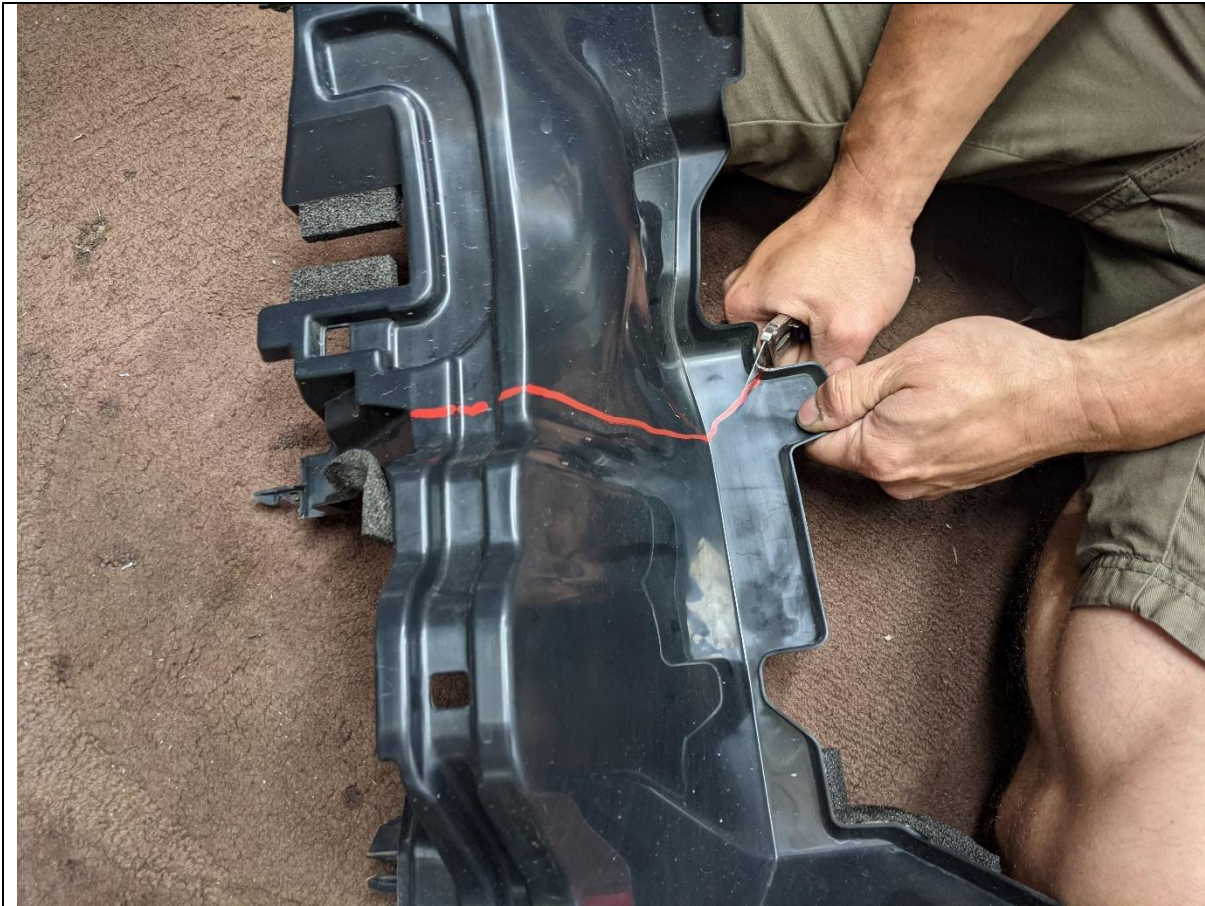
**FASTENERS**





|   |  |
|---|--|
| <div>34. Mark air guide on Left hand side of vehicle as shown in the above image.</div> <div>35. Remove air guide from vehicle by releasing the 3x clips holding it to the chassis.</div> | <div>TOOLS REQUIRED</div> <div>Paint Marker</div> <div>Trim tool</div> |
|   | <div>FASTENERS</div>   |



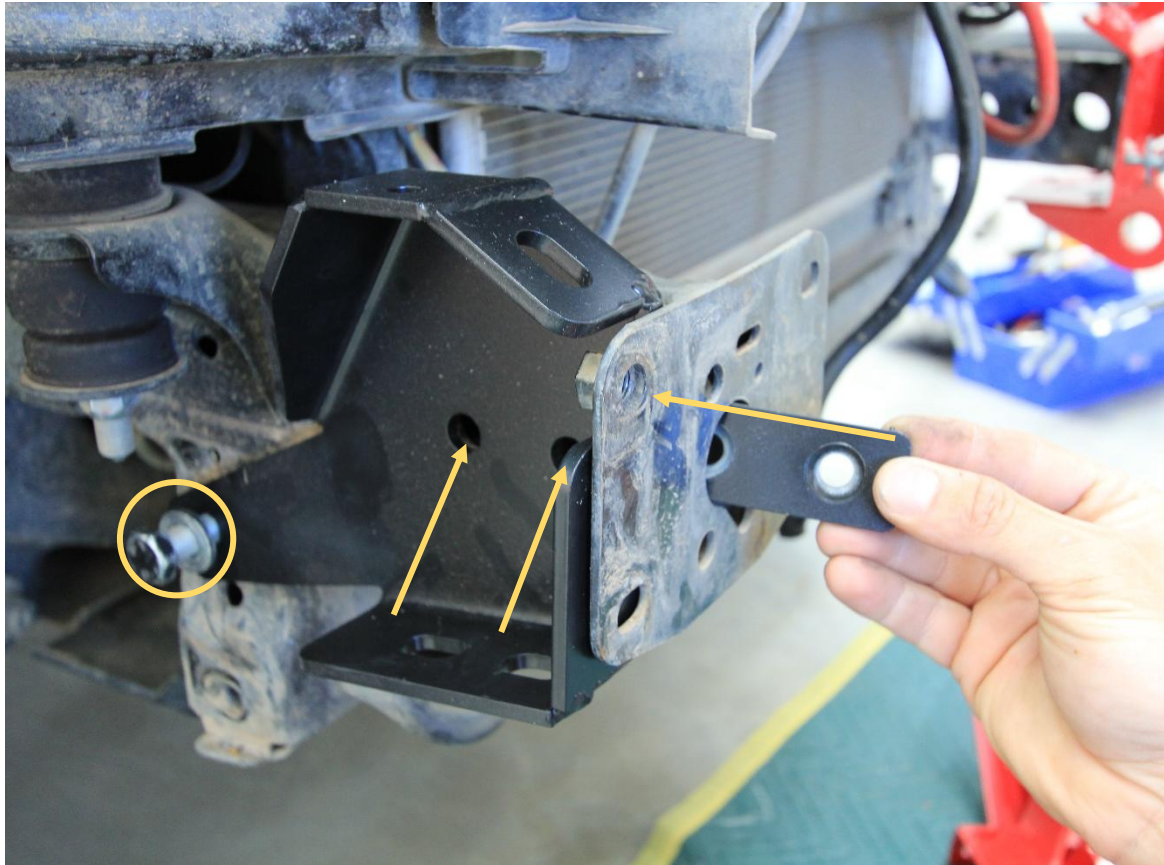


36. Trim the air guides along the lines marked, using a sharp utility knife or air hacksaw.
37. Re-Fit the top half of the air guides trimmed to the vehicle.

**TOOLS REQUIRED**

Utility Knife

**FASTENERS**



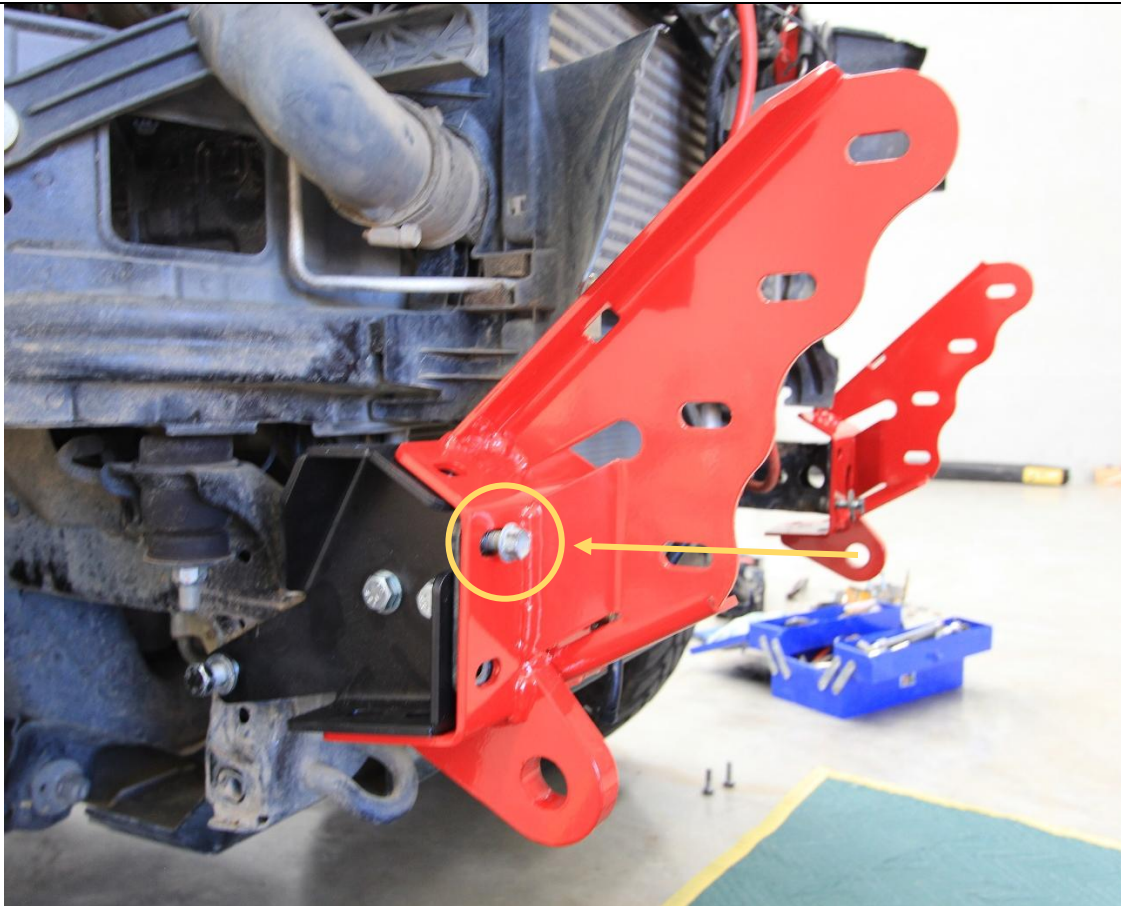
38. Take the chassis brace and fit loosely to the threaded M12 fine pitch insert in chassis, using M12x30x1.25 Bolt and flat washer.
39. Insert the Nut Plate into the chassis rail through the opening on the front of the chassis.
40. Secure the nut plate with M12x30 standard pitch bolts and flat washers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

#### TOOLS REQUIRED

#### FASTENERS

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

Per side



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

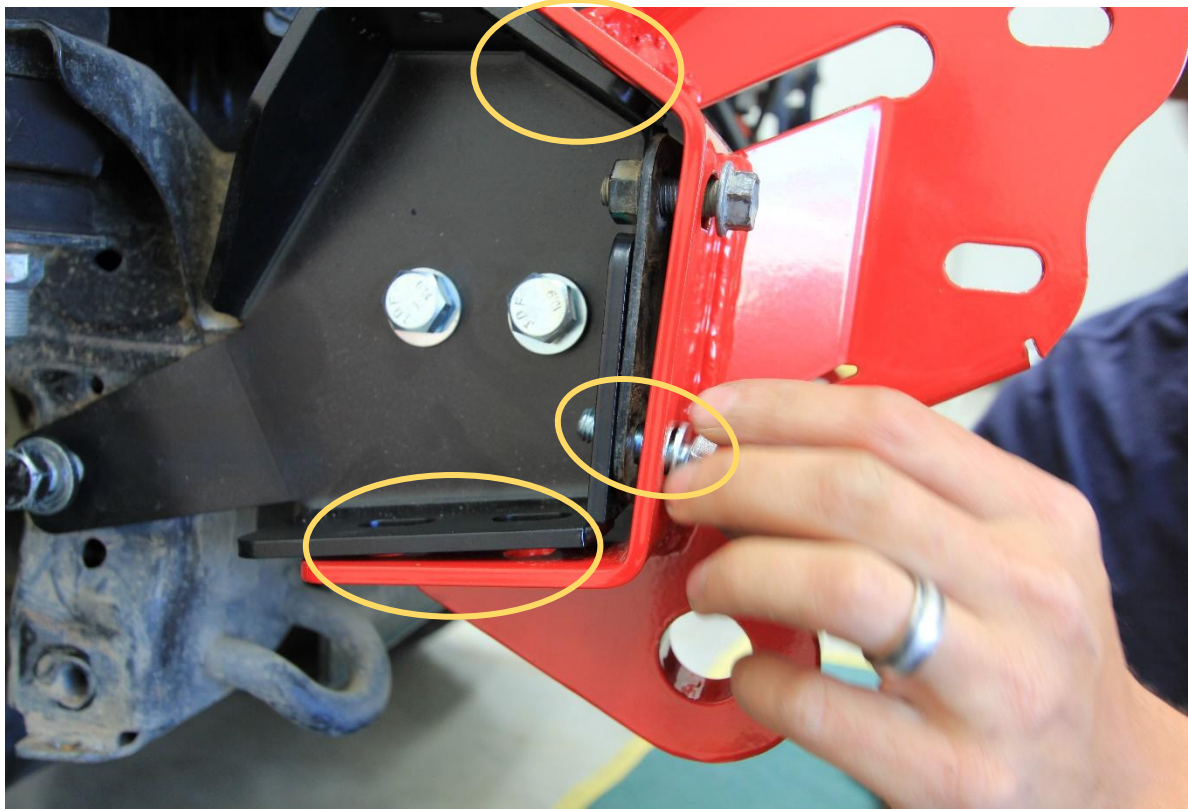
**TOOLS REQUIRED**

**FASTENERS**

2x Factory M10 flange  
bolt

Per side





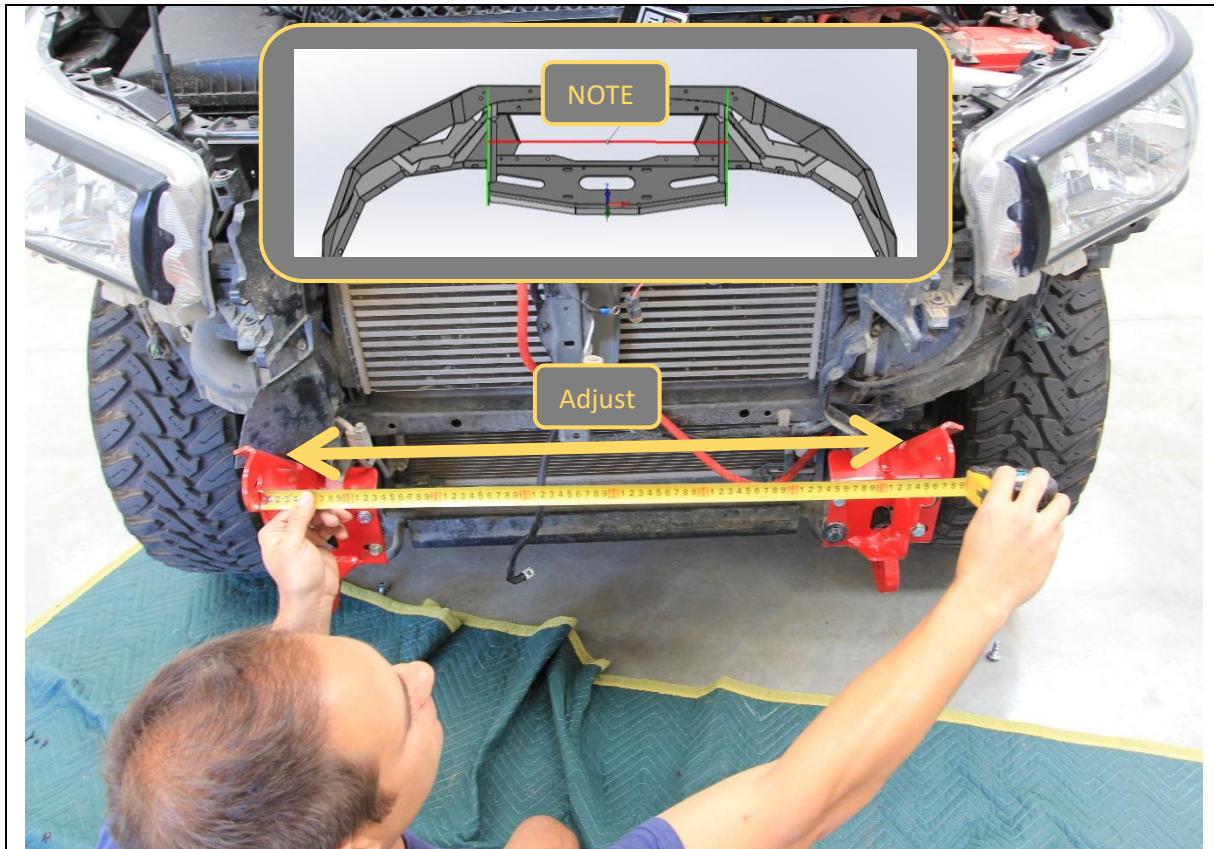
45. Fit remaining bolts to the impact assembly. 2x M10x30 Bolts, 2x Flat washers and 2x flange nuts to front face.
46. Fit 2x M10x30 Bolts, 2x Flat washers and 2x flange nuts to Bottom face.
47. Fit 1x M10x30 Bolt, 1x Flat washer and 1x flange nut to Top face.

**TOOLS REQUIRED**

**FASTENERS**

5x M10x30 Bolt  
5x M10 Flat washer  
5x M10 Flange nut

Per side



48. Measure the distance between the outside faces of the uprights on the bar. Note this distance

Bar uprights \_\_\_\_\_mm

49. Adjust the distance between the impact assemblies to be approx. 1-2mm greater than the upright distance on the bar.

50. Tighten bolts on the impact assemblies and re-check distance. Loosen and adjust as required until the distance between mounts when mounts are tight is correct.

#### TOOLS REQUIRED

Tape measure  
16mm Spanner  
16mm Socket

#### FASTENERS



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

**TOOLS REQUIRED**

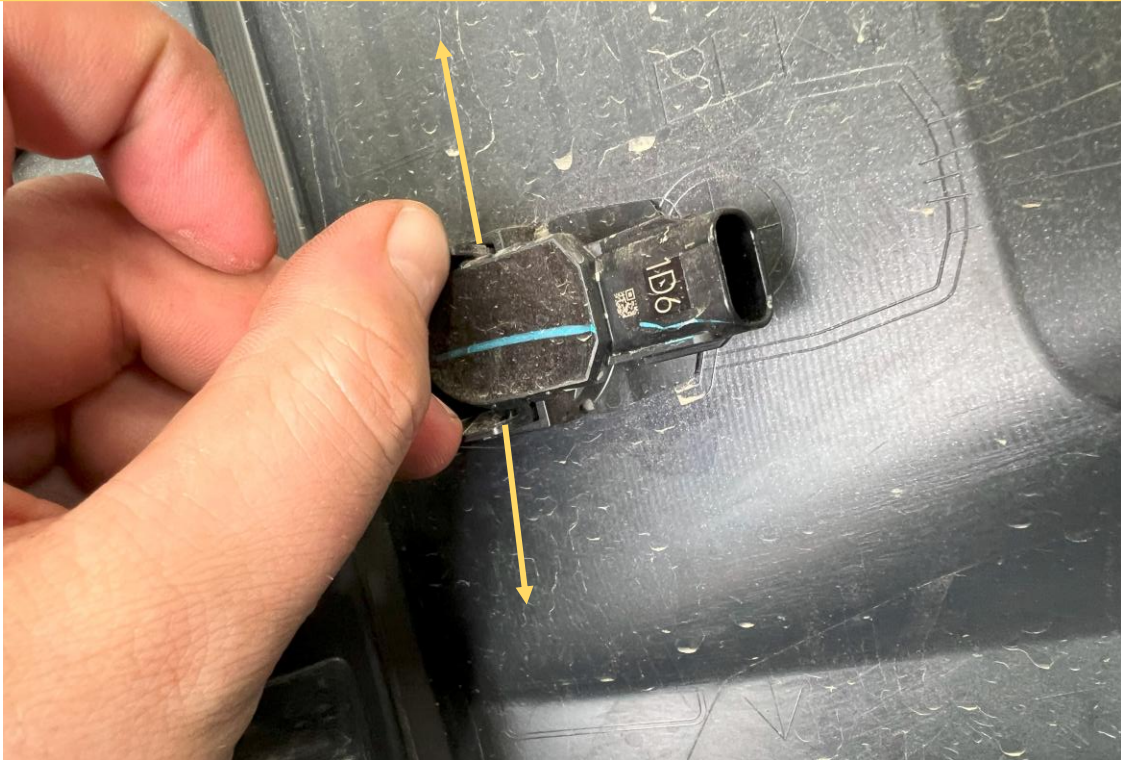
Screwdriver

**FASTENERS**

Factory Screws



## 2021+ MODELS ONLY



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

### TOOLS REQUIRED

### FASTENERS

## 2021+ MODELS ONLY



53. Fit the parking sensors to the supplied F-0032 Parking sensor housings. Ensure the sensor fully clips into the housing and is straight.

54. Ensure the locating rib in the sensor is aligned with the slot on the sensor housing

### TOOLS REQUIRED

### FASTENERS



## 2021+ MODELS ONLY



55. Clean the areas on the inside of the bullbar adjacent to the round parking sensor holes with isopropyl alcohol.
56. Break the bulb of the supplied Primer 94 ampule to activate the primer dispensing.
57. Apply Primer 94 to all areas adjacent to the parking sensor locations, on both the bar and the sensor housings.  
  
**Important:** allow at least 5 minutes for the primer to chemically bond to the surfaces.
58. Apply supplied VHB tape pads to all sensor housings as shown in the inset photo.
59. Dry fit sensors to bar to check if enough room to connect loom.
60. Remove backing and adhere sensors in position in bar. Apply pressure for 10-30sec after positioning for best adhesion.

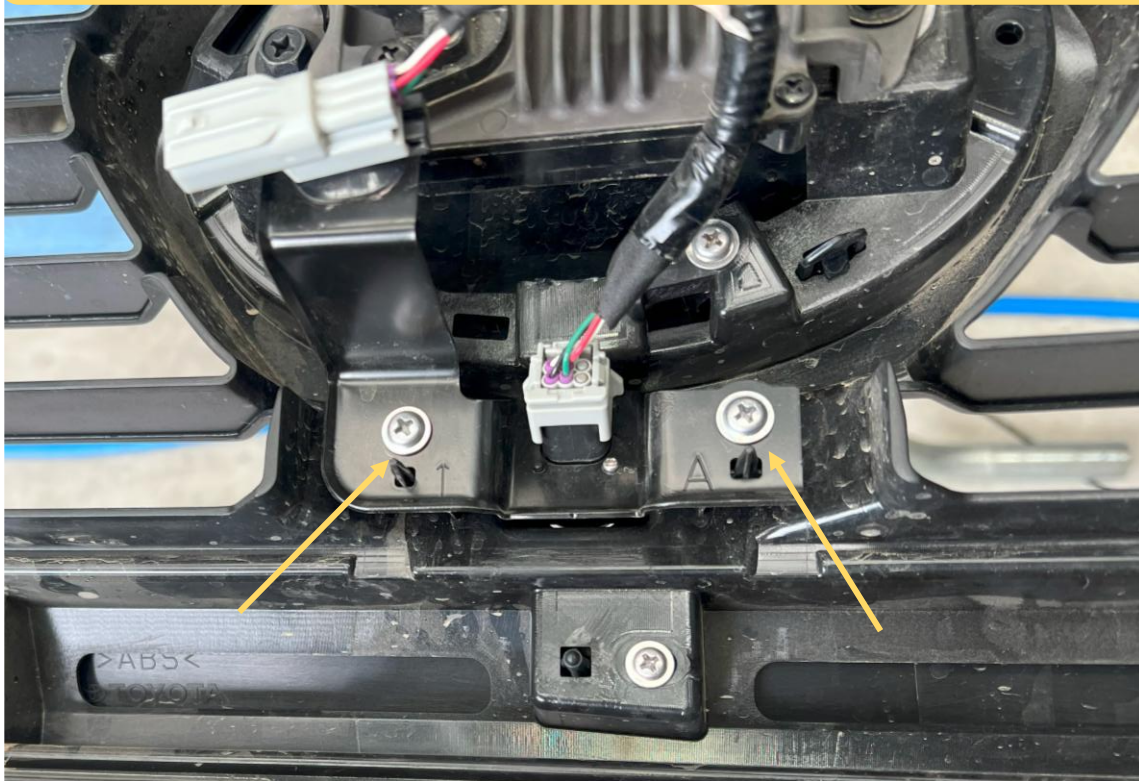
### TOOLS REQUIRED

Isopropyl alcohol  
Rag

### FASTENERS

VHB Tape pads  
Primer 94 Ampule

## 2021+ MODELS ONLY



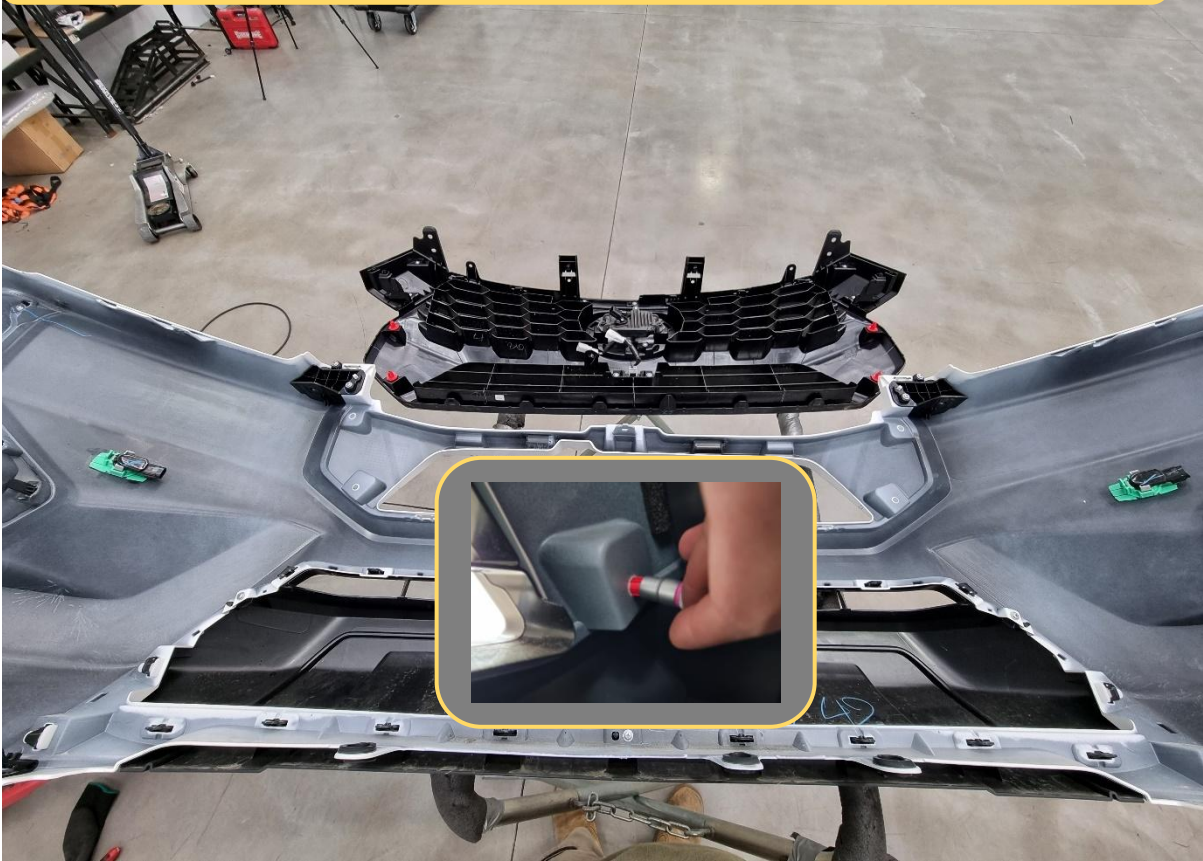
61. If fitted to MY21-23 you can choose to relocate the front camera to the fairlead mesh panel. This will improve the camera field of view.
62. If fitted to MY24+ you NEED to relocate the front camera to the fairlead mesh panel. The factory camera position is lower on these models and bar will almost completely obstruct camera view if left in OE location.
63. If relocating the camera remove module from the grille with 2x Phillips head screws.
64. Unclip wiring harness from bracket but leave the camera attached to the bracket.

### TOOLS REQUIRED

Phillips head screwdriver  
Trim tool

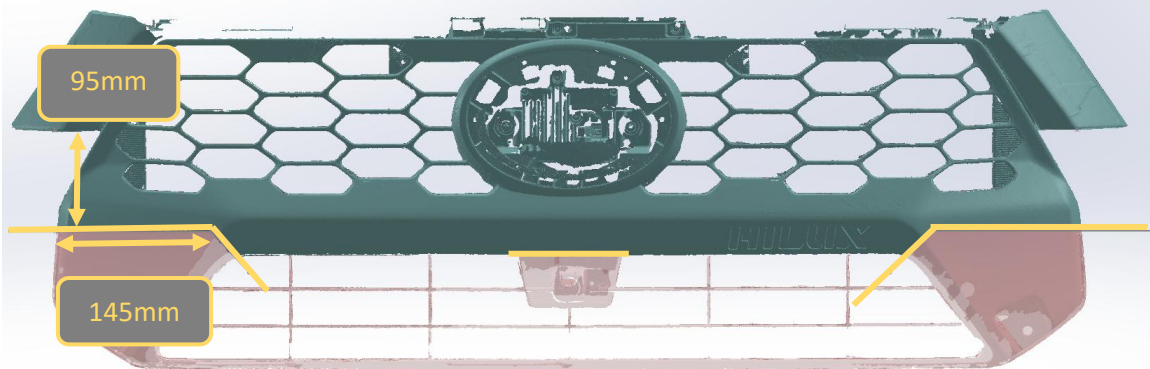
### FASTENERS

Factory Screws  
  
Retain

| 2024+ MODELS ONLY   |  |  |
|---|--|--|
|    |  |  |
| <p>65. Separate grille from bumper by releasing the 4x Red clips. It can be helpful to push the clips from behind using a small socket to avoid marking the grille.</p> | <b>TOOLS REQUIRED</b><br><br>Trim Tool<br>Small Socket |  |
|   | <b>FASTENERS</b>                                       |  |



## 2024+ MODELS ONLY



66. Apply masking tape over cut areas.

67. Mark out the grille cut as denoted by lines in image. Ensure it is symmetrical, reposition the tape if required. Green area is to be retained, red to be removed.

68. Using angle grinder or air hacksaw, cut along edge of the tape.

Ensure cut is neat and free of jagged edges.

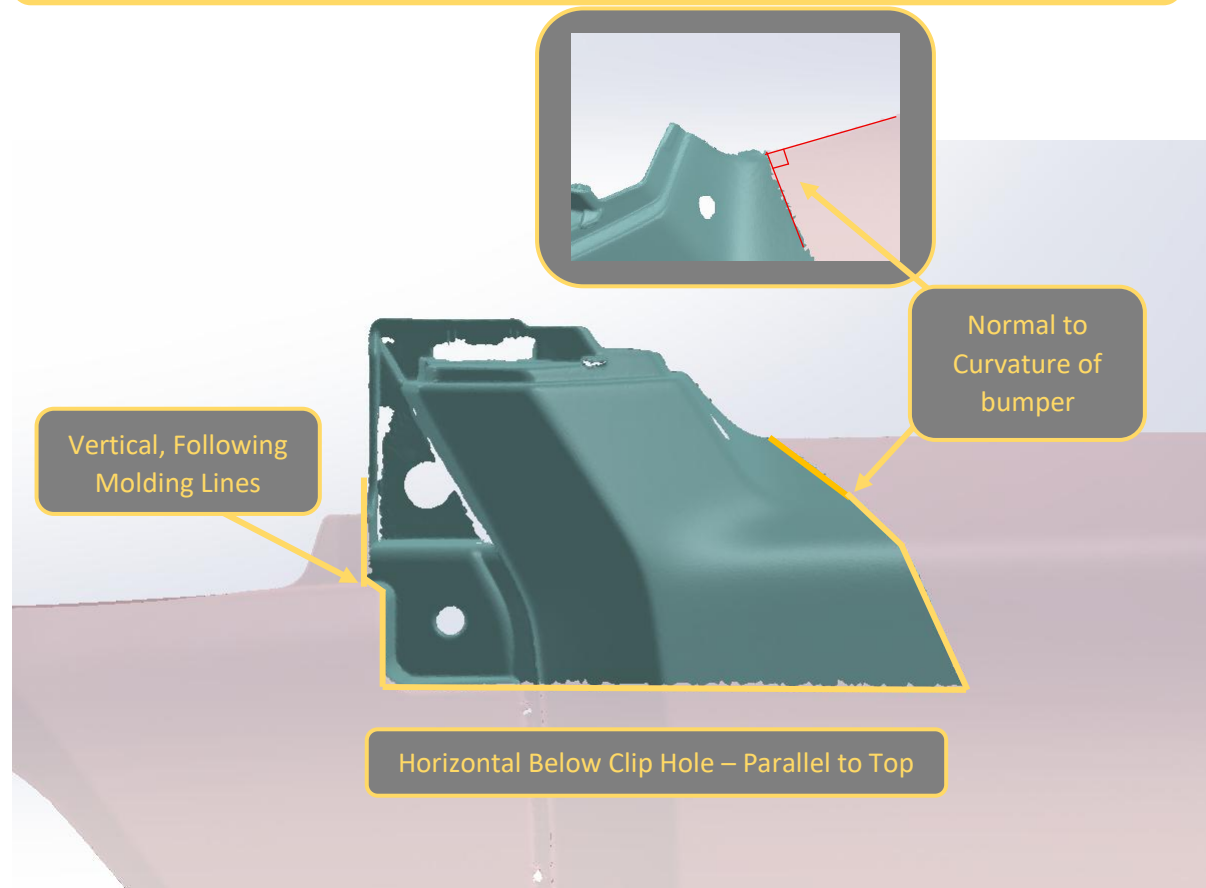
69. Cut all vertical slats just below horizontal bar to allow the grille to separate into two pieces.

### TOOLS REQUIRED

Angle Grinder  
or  
Air Hacksaw

Masking Tape  
Marker

### FASTENERS

| 2024+ MODELS ONLY   |   |
|---|---|
|    |   |
| <p>70. On the bumper, apply masking tape over cut areas.</p> <p>71. Mark out the Bumper cut as denoted by lines in image. Ensure it is symmetric, only 1 side is shown in image, reposition the tape if required.</p> <p>Green area is to be retained, red to be removed.</p> <p>72. Using angle grinder or air hacksaw, cut along edge the marked lines.</p> <p>Ensure cut is neat and free of jagged edges.</p> | <p><b>TOOLS REQUIRED</b></p> <p>Angle Grinder<br/>or<br/>Air Hacksaw</p> <p>Masking Tape<br/>Marker</p> <p><b>FASTENERS</b></p> |

## 2024+ MODELS ONLY



73. Refit the cut bumper segments to the trimmed portion of the grille, re using the factory molded clip at the top and red clip below.

74. The grille is now ready for refitment to the vehicle.

### TOOLS REQUIRED

### FASTENERS

## 2021-2023 MODELS ONLY



75. Place masking tape on the grille, in the location shown just below the center horizontal bar.
76. Then mark out the grille cut as denoted by lines in image. Ensure it is symmetric, reposition the tape if required.

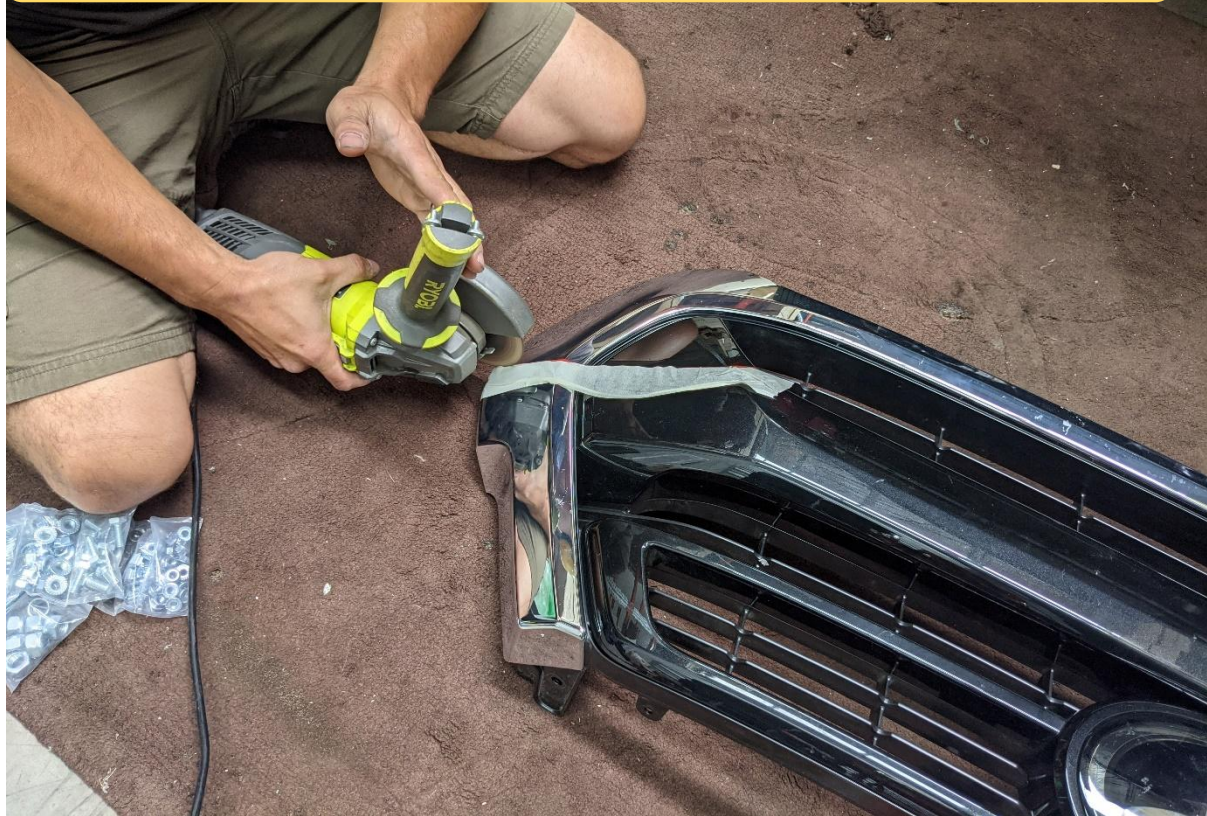
### TOOLS REQUIRED

Masking Tape

### FASTENERS



## 2021-2023 MODELS ONLY



77. Using angle grinder or air hacksaw, cut along edge of the tape.

Ensure cut is neat and free of jagged edges.

78. Cut all vertical slats just below horizontal bar to allow the grille to separate into two pieces.

### TOOLS REQUIRED

Angle Grinder  
or  
Air Hacksaw

### FASTENERS

## 2018-2020 MODELS ONLY



79. Using Similar technique as explained for 2021+ models cut the grille along the top edge of the horizontal bar below the badge, as shown in the above image.

Ensure cut is neat and free of jagged edges.

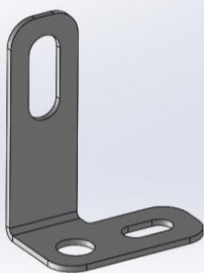
### TOOLS REQUIRED

Angle Grinder  
or  
Air Hacksaw

### FASTENERS



## 2021-2023 MODELS ONLY



Production Bracket



Note: Prototype  
part shown in  
photo

80. Fit the bottom grille support bracket to the middle of the top section of the grille, under the adaptive cruise radar sensor.

81. Remove the existing Philips head screw, then re fit with bracket in place.

### TOOLS REQUIRED

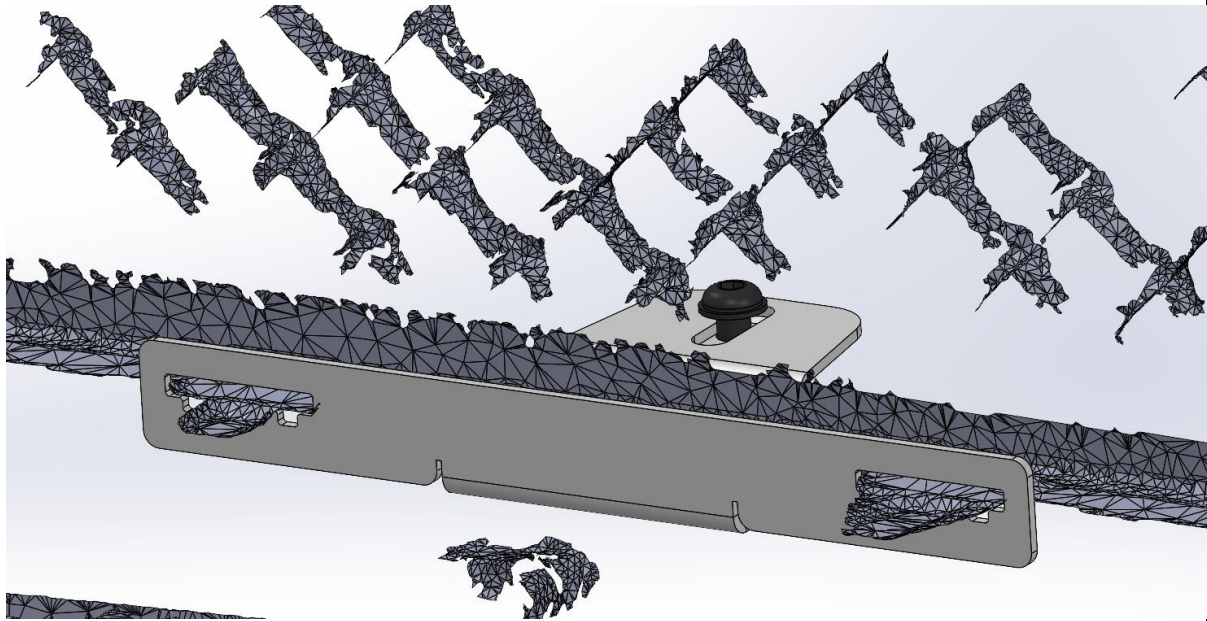
Phillips head screwdriver

### FASTENERS

Factory screw



## 2015-2018 MODELS ONLY

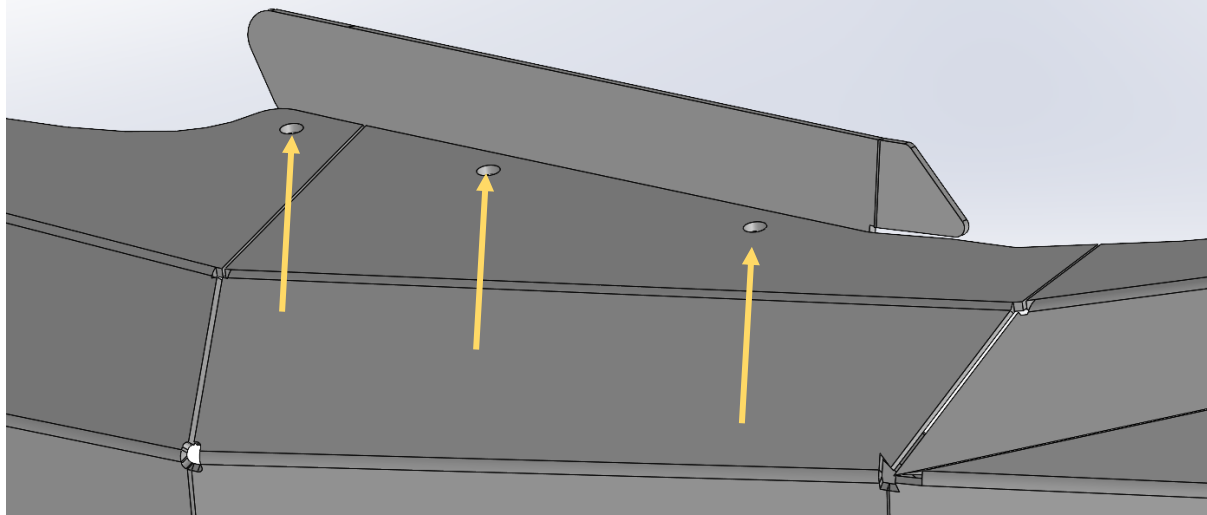


82. Clip the grille support bracket into the tabs on the back side of the grille.

**TOOLS REQUIRED**

**FASTENERS**

## 2021+ SR5 MODELS ONLY



83. 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

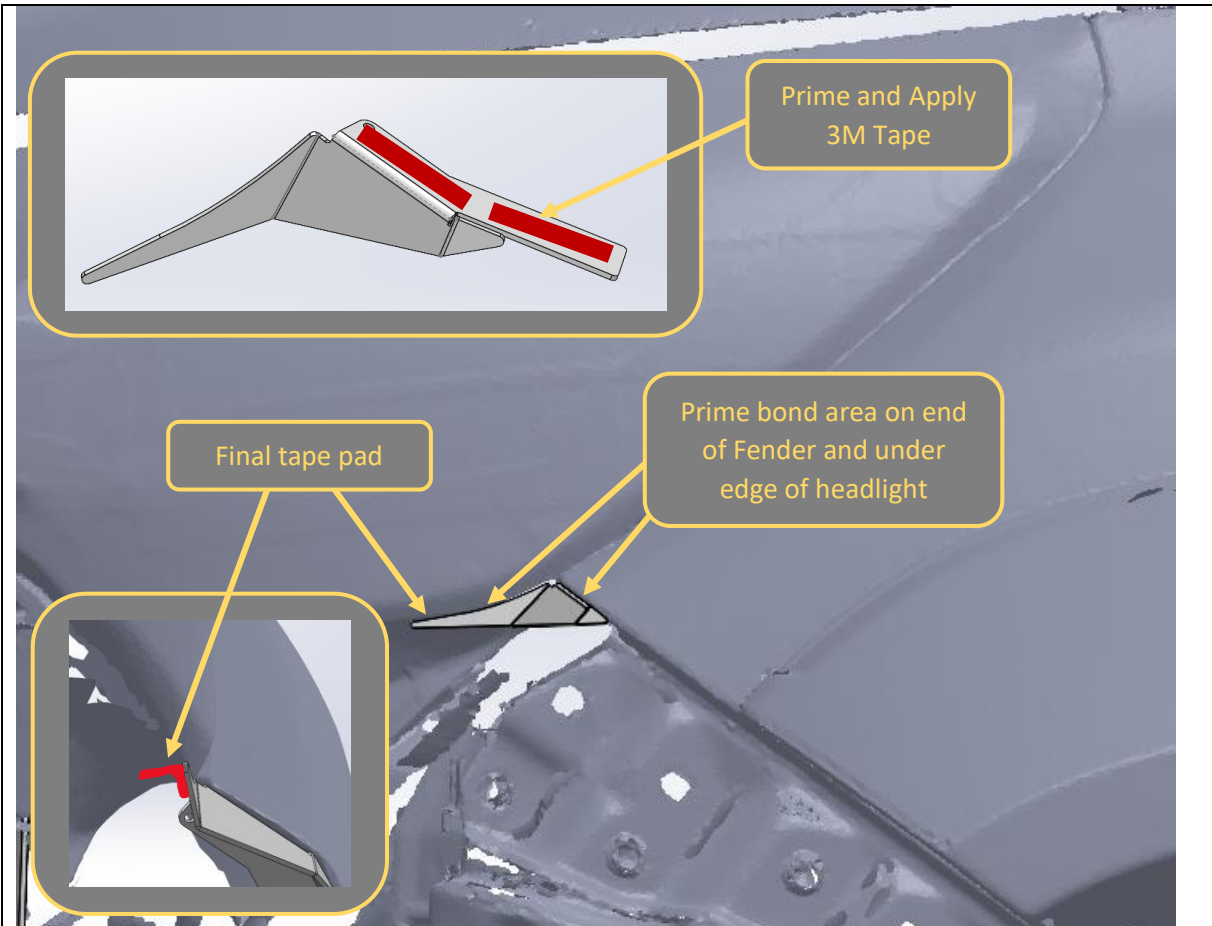
### FASTENERS

3x M6x16 Black button head

3x M6 Black washer

3x Flange Nut

Per side

|   |   |
|---|---|
|    |   |
| <p>84. Using 3M primer stick from parking sensors, apply primer to end of fender panel and small headlight infill in the bonding area as shown.</p> <p><b>Important:</b> allow at least 5 minutes for the primer to chemically bond to the surfaces.</p> <p>85. Cut and apply length of 3M tape to the small headlight infill panel as shown in the top inset image.</p> <p>86. Fit the headlight infill using the 3M tape. Apply pressure for 10-30 seconds to ensure strong bond.</p> <p>87. Use final tape pad to secure the backside edge of the infill to the underside of the headlamp.</p> | <p><b>TOOLS REQUIRED</b></p>                            |
|   | <p><b>FASTENERS</b></p> <p>3M Primer 94<br/>3M Tape</p> |





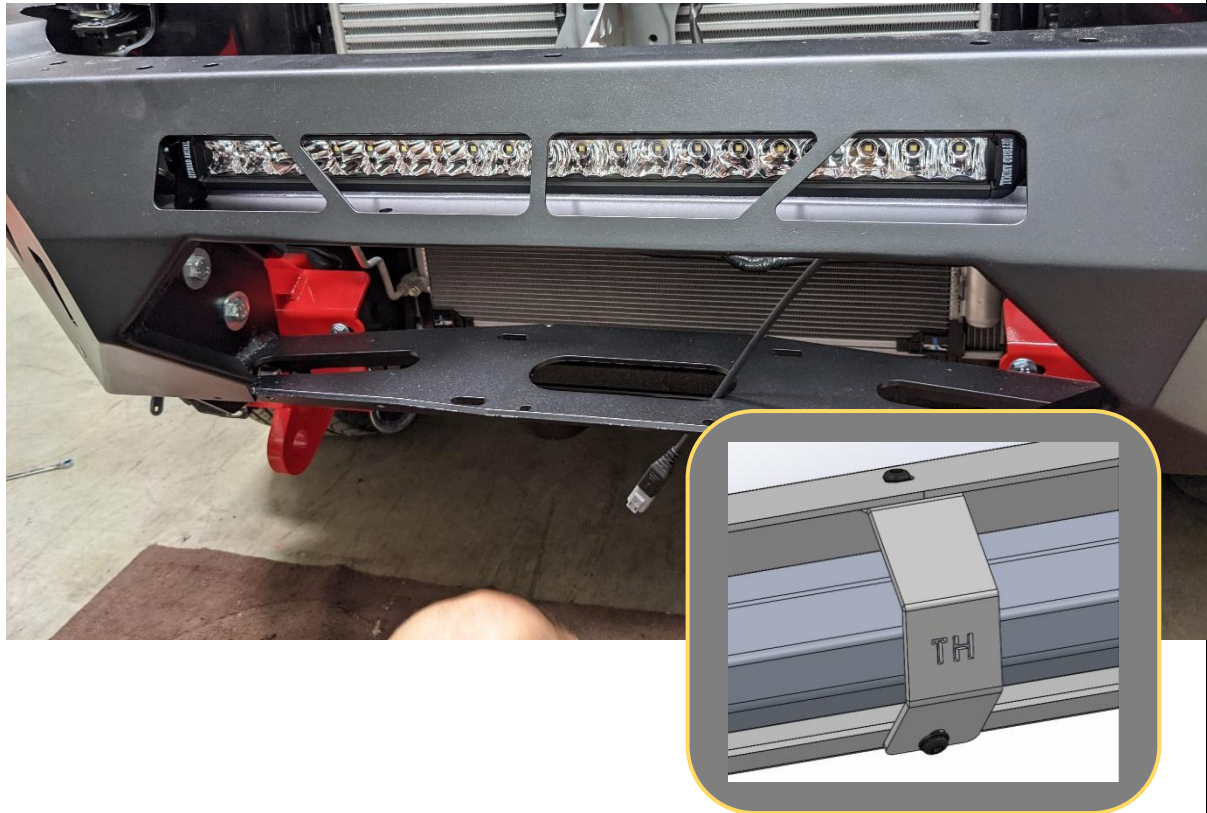
88. Re fit the trimmed section (2018+) of the grille to the vehicle. For 2015-2018 Models just refit grille as removed from bumper.
89. Secure top of grille using original 10mm Fasteners.
90. Secure the grille support bracket to the plastic insert in the using a self tapping Philips screw (2015-2023 Models)
91. 2024+ Models only, secure the trimmed section of the bumper (clipped to the grille) to the original support locations in the corners using original Fasteners.

#### TOOLS REQUIRED

10mm Socket  
Phillips screwdriver

#### FASTENERS

Re-use OE Fasteners



92. If fitting a light bar to the center section of the bar, do so at this stage, before fitting the bar to the car.
93. Use hardware provided with the Lights to fit to the bar.
94. This is also the best time to fit driving lights or top hoop to the bar.
95. After fitment of driving lights fit the pan brace between the gusset and Top pan using supplied M6 hardware as shown.
96. (Optional) Fit the pinch weld rubber to the top edge of the bar/wings.

#### TOOLS REQUIRED

4mm Hex  
10mm Socket / Spanner

#### FASTENERS

2x M6x16 Button Head  
2x M6 Flat Washer  
2x M6 Flange nut



97. 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**

5x M6 Cage Nuts

Per side





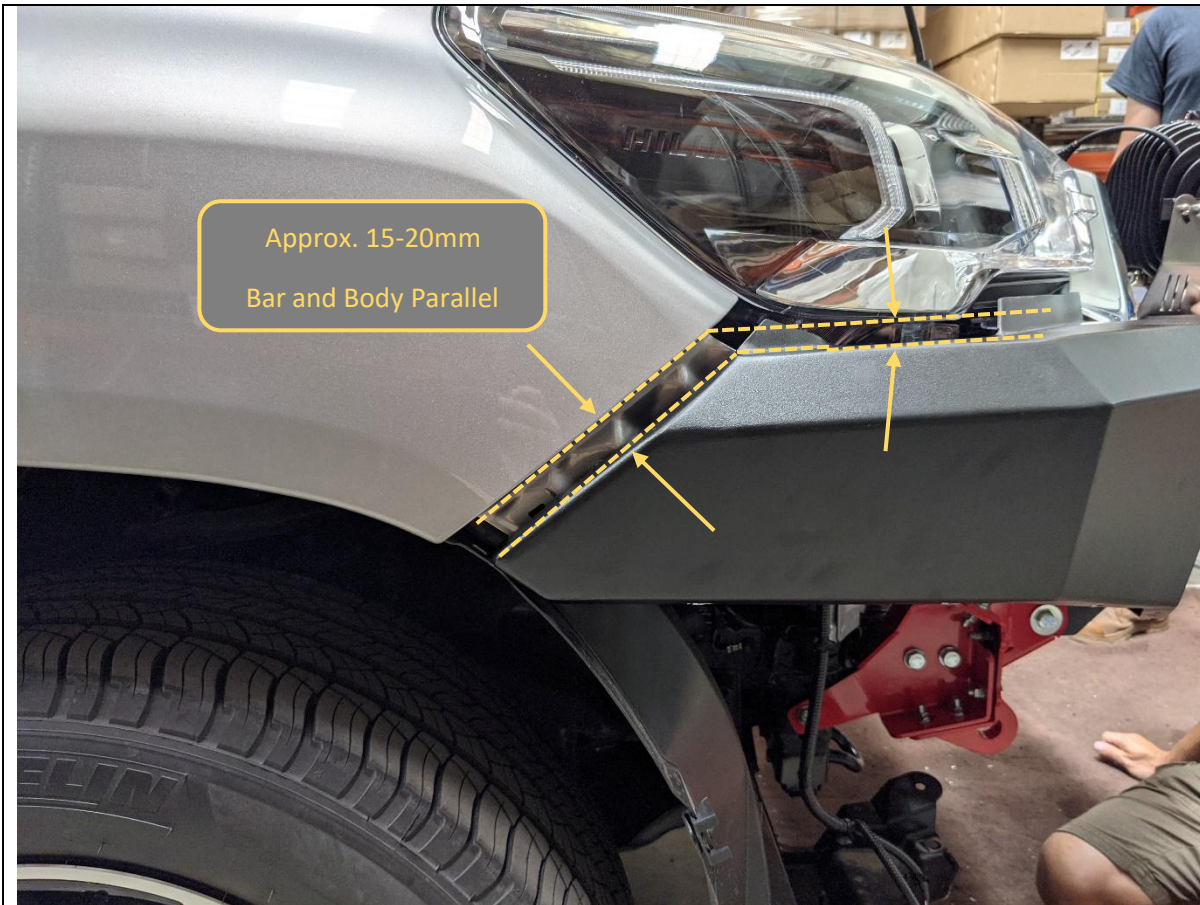
98. With assistance, from either another person or mechanical lifting aid such as a lift trolley, offer the bar up to the mounts.
99. Secure the bar to the mounts using single M12x30 Bolt, 2x M12 Heavy Duty flat washers and M12 Nyloc Nut per side.
100. Loosely fit the other 3x M12x30s Bolt 6x M12 Heavy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



101. 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.

**NOTE:** The appearance will differ slightly from the above image due to the new body mounted infill

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

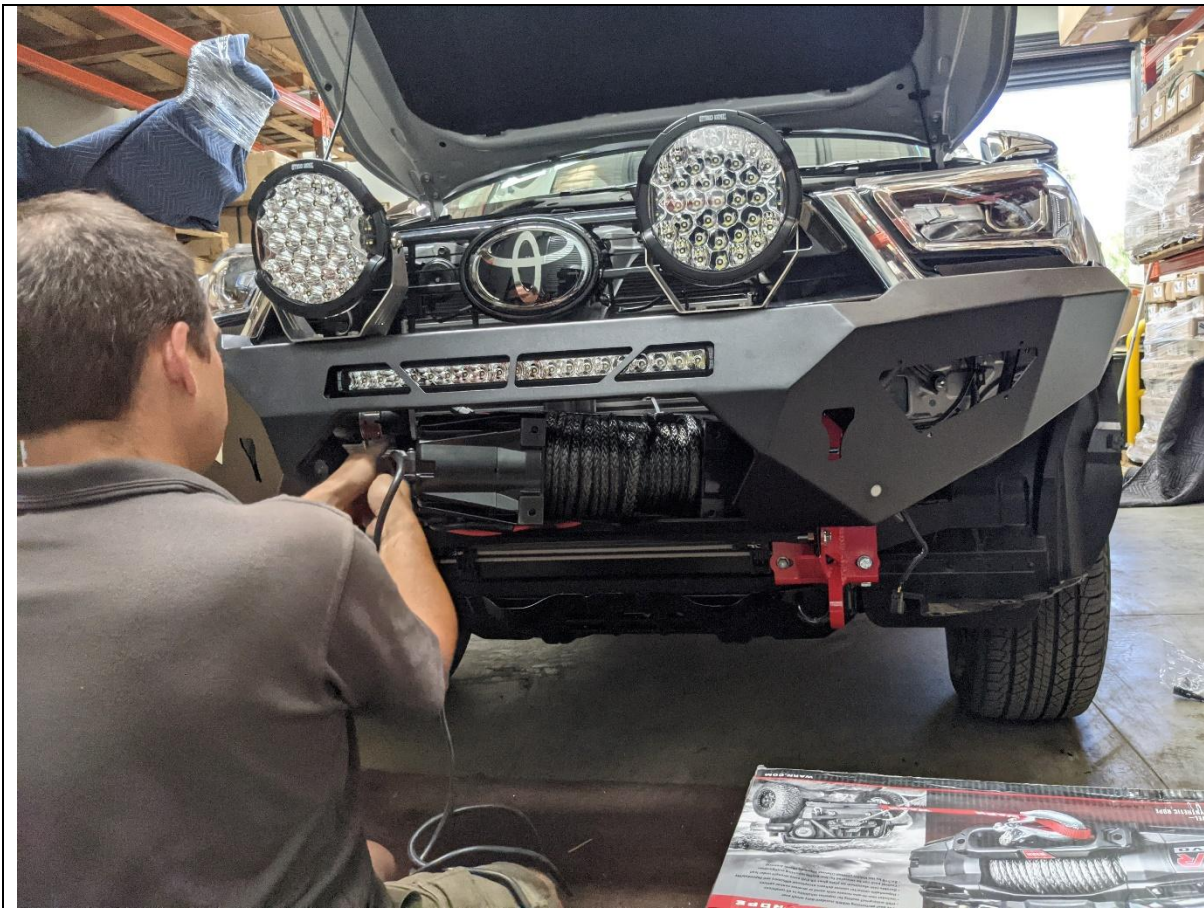
An Electric Impact wrench makes this process much easier.

#### TOOLS REQUIRED

19mm socket  
19mm spanner

#### FASTENERS





103. If fitting a winch to the bar, do so at this stage. Follow the winch manufacturer's instructions.
104. The winch mounts feet down and is inserted through the front opening of the bar.
105. 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





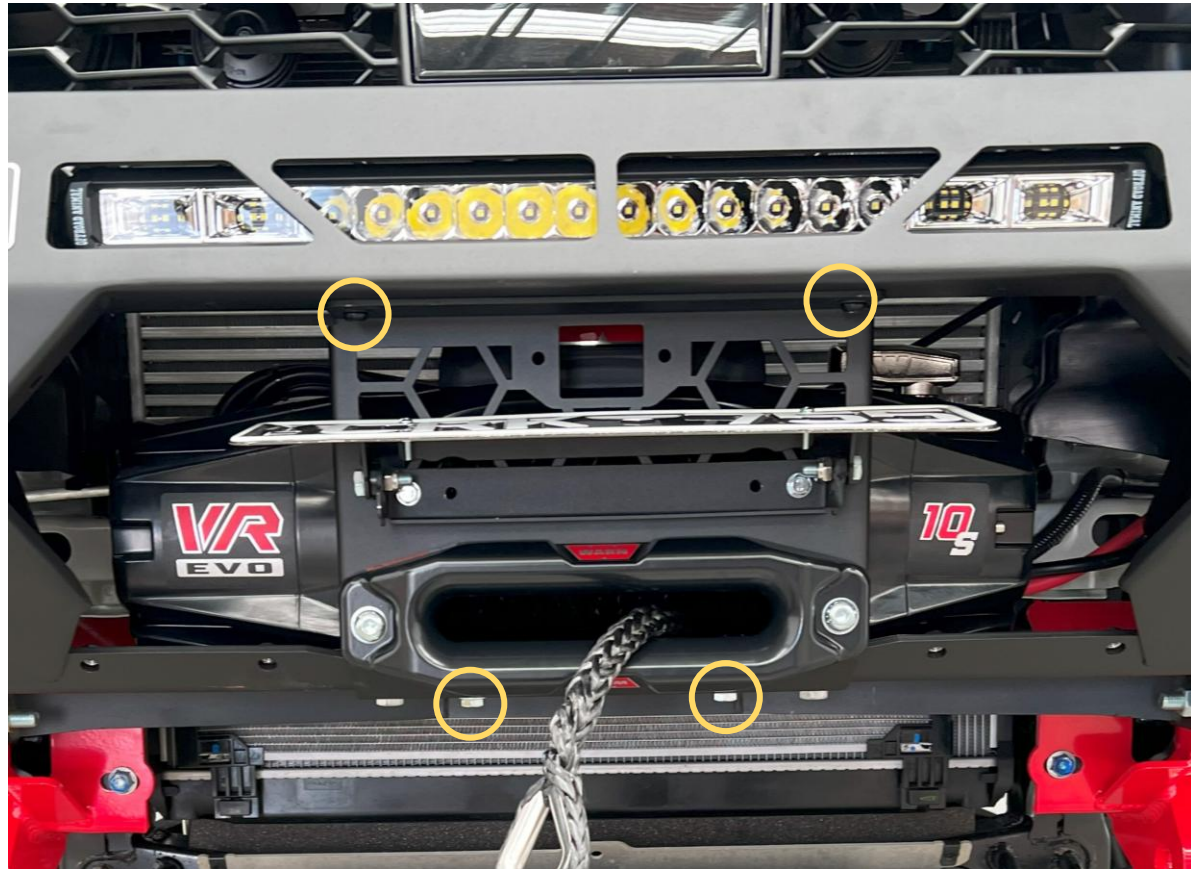
106. If relocating the camera module, fit to the center mesh panel, using the original bracket, and supplied M6x16 button head screws, flat washers, and flange nuts.
107. If fitting winch, attach fairlead to center mesh panel using bolts supplied in winch fitting kit.
108. Fit number plate flip to mesh 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



109. Fit Mesh panel to the bar. Secure with 2x M8x16 Black Button Head Screws and M8 black washers to the threaded inserts at top and 2x M8x20 hex bolts and M8 Flat washer to the threaded inserts at Bottom.

110. If equipped re-connect camera module harness.

#### TOOLS REQUIRED

5mm Hex Key  
13mm Spanner

#### FASTENERS

2x M8x16 Button Head  
2x M8 Black Flat Washer  
2x M8x20 hex bolt  
2x M8 Flat Washer





111. 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, 2x Black M6 Flat washer and 1x flange nut.
112. Repeat for other side of vehicle.
113. Fit Number Plate to number plate flip, using M5 fasteners supplied with number plate flip.

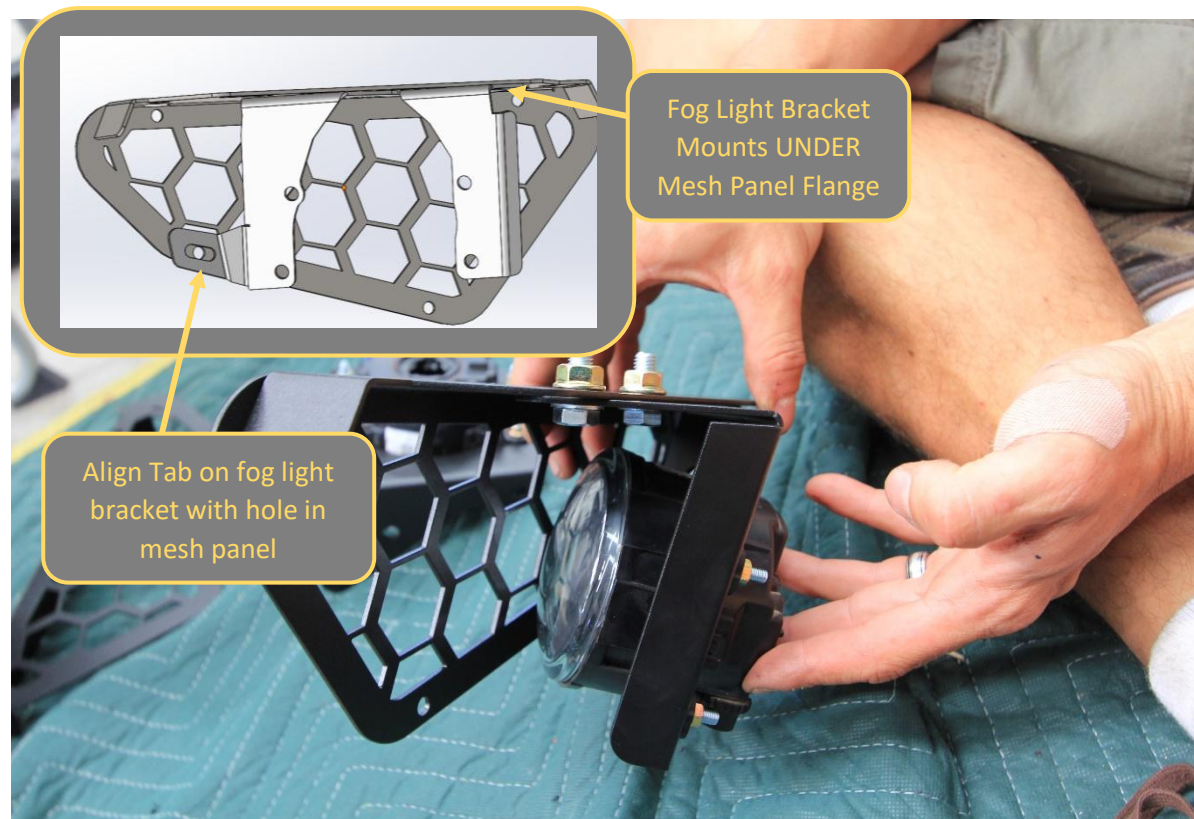
**TOOLS REQUIRED**

4mm Hex Key  
10mm Socket  
10mm Spanner

**FASTENERS**

4x M6x16 Button Head  
4x M6 Black Flat Washer  
2x M6 Flange Nut





114. If re-fitting factory fog lamps, fit the fog lamps to the supplied fog lamp brackets using the M6x16 black button head bolts, black washers and Flange nuts provided.
115. Fit the fog lamp brackets to the light mesh panels using 2x M8x20 Hex head bolts at the top.
116. If fitting own lamps in light mesh, fit now using slots on panel, and hardware provided with lights.
117. Repeat for both sides of vehicle.

#### TOOLS REQUIRED

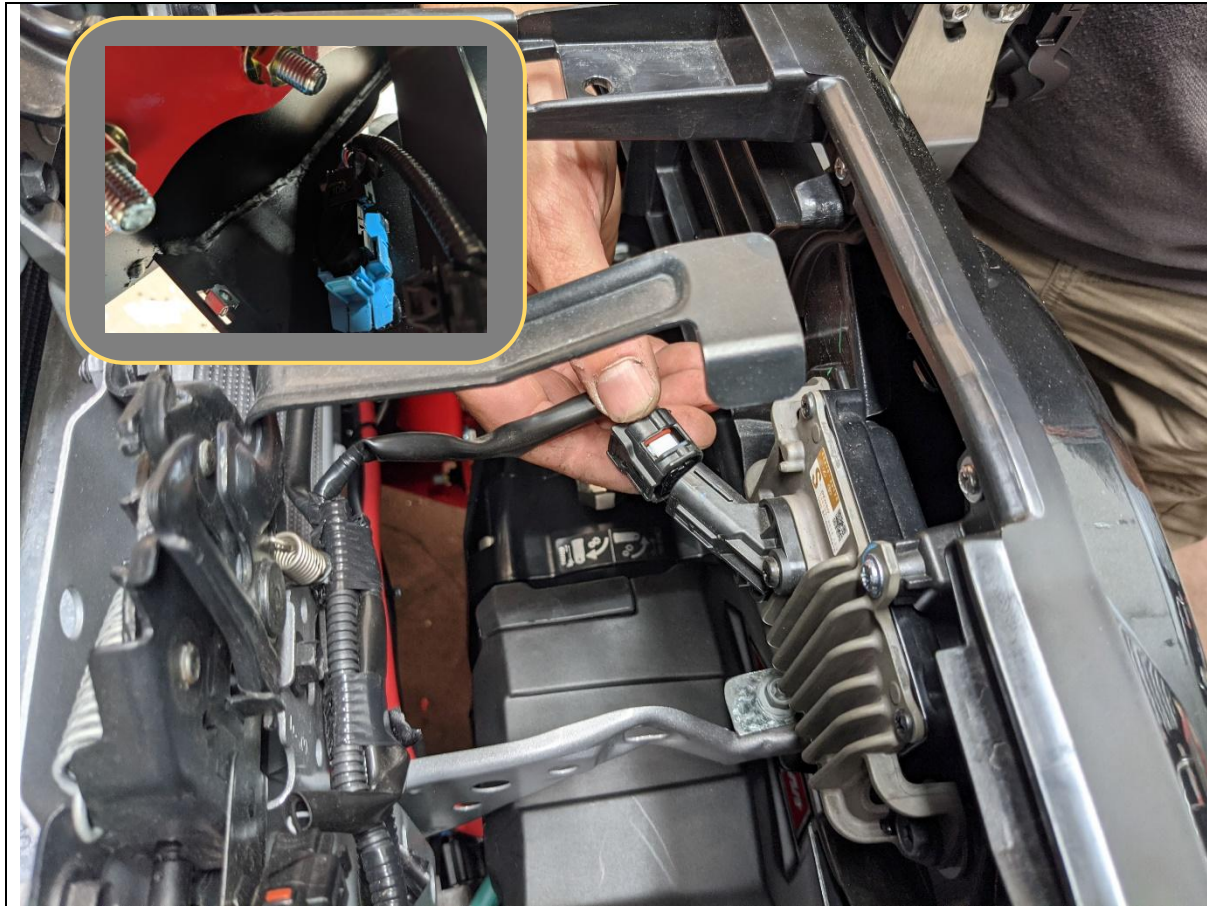
4mm Hex Key  
10mm Spanner  
13mm Spanner

#### FASTENERS

(if fitting fog lamp)  
4x M6x16mm black button head  
4x M6 black washer  
4x M6 Flange Nuts  
  
2x M8x20mm Button head bolts  
2x M8 Flat Washer  
2x M8 Flange Nuts

Per side

|  |  |
|--|--|
|   |  |
| <p>118. 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, M6 black washers and M6 Flange Nuts.</p> <p>119. Repeat for other side of vehicle.</p> <p>120. Reconnect fog lights, or additional driving lights, depending on what was fitted.</p> | <p><b>TOOLS REQUIRED</b></p> <p>4mm Hex Key<br/>10mm Spanner</p>   |
|  | <p><b>FASTENERS</b></p> <p>4x M6x16mm Button head bolt<br/>4x M6 black washer<br/>4x M6 Flange Nut</p> <p>Per side</p> |



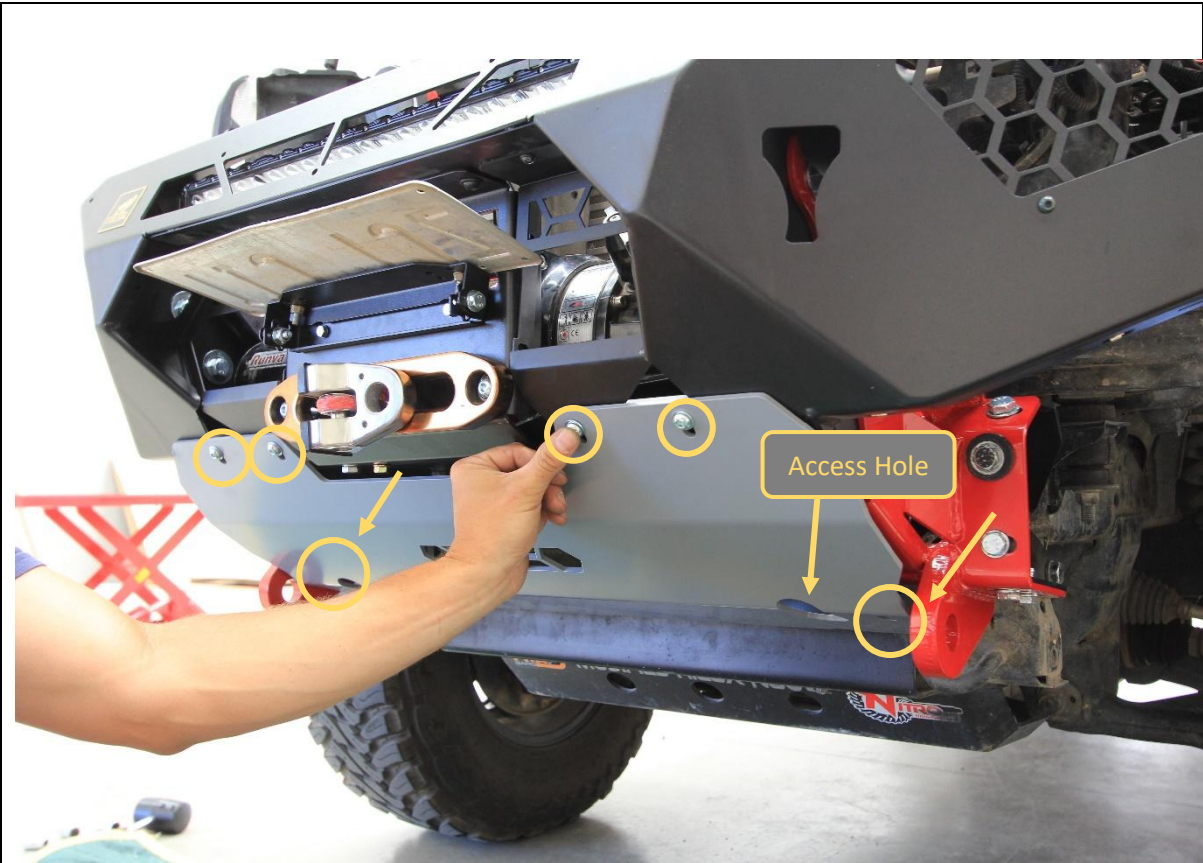
121. Re-connect all wiring harnesses to the adaptive cruise sensor, parking sensors and fog lights.

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

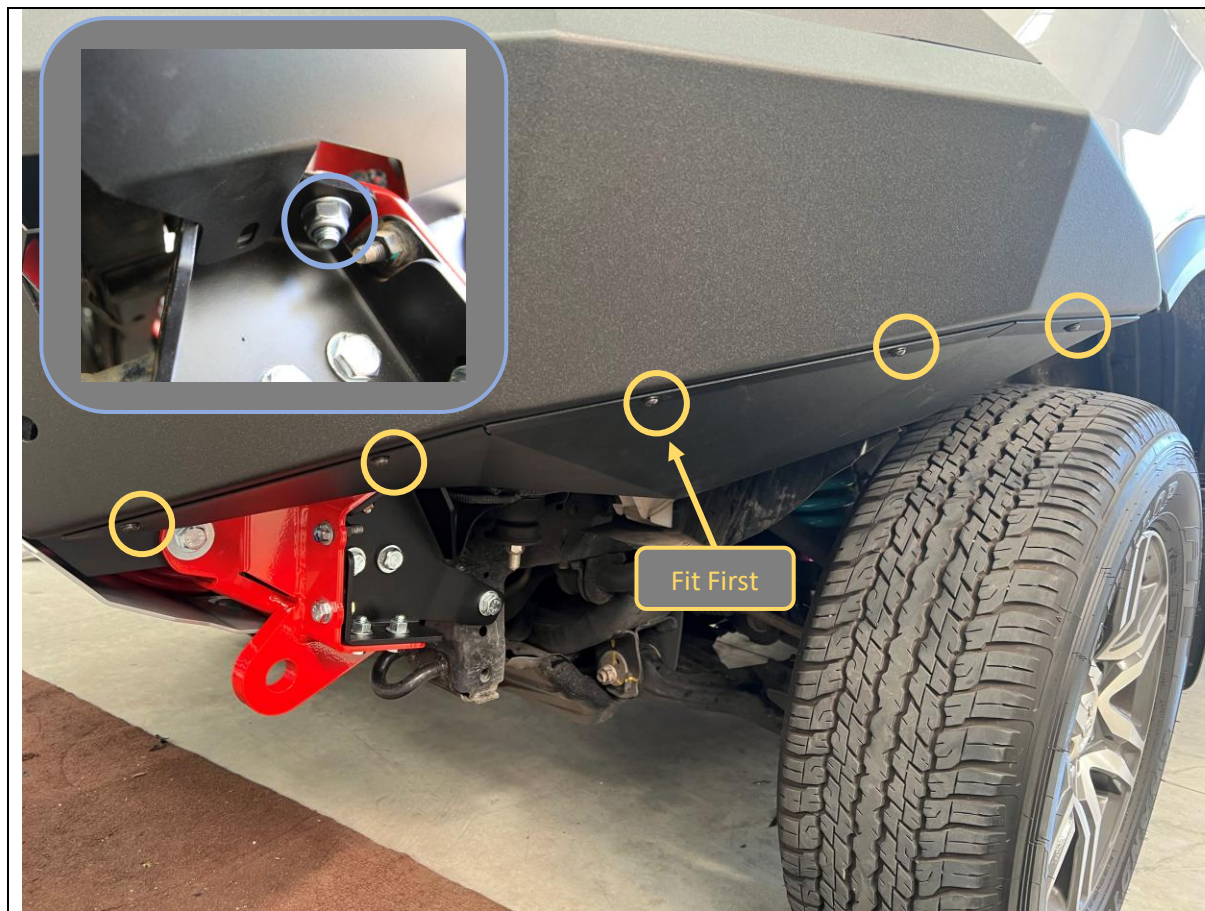
**TOOLS REQUIRED**

**FASTENERS**





|   |  |
|---|--|
| <p>123. Fit bash plate to vehicle.</p> <p>124. First secure the top of the bash plate to the bottom of bar, with the mesh panels sandwiched in between. Secure with M8x20 black button head bolts and black washers into the threaded inserts in the bar.</p> <p>125. Secure bottom of bash plate to mounts using M10x30mm Button head Bolt, Flat washer and M10 Flange Nut. Insert nut through access hole in bash plate as shown.</p> | <p><b>TOOLS REQUIRED</b></p> <p>5mm Hex key<br/>6mm Hex key<br/>15mm Spanner</p>   |
|   | <p><b>FASTENERS</b></p> <p>4x M8x20 Button head Bolt<br/>4xM8 Flat washer</p> <p>2x M10x30 Button head Bolt<br/>2x M10 Flat washer<br/>2x M10 Flange nut</p> |



126. Fit side under panels to bar and secure with 5x 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.

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

128. Repeat for other side of vehicle.

#### TOOLS REQUIRED

4mm Hex Key  
13mm Spanner / Socket

#### FASTENERS

10x M6x16 Button head bolt  
10x M6 Flat Washer

2x M8x20 Hex head  
2x M8 Flat Washer  
2x M8 Flange nut



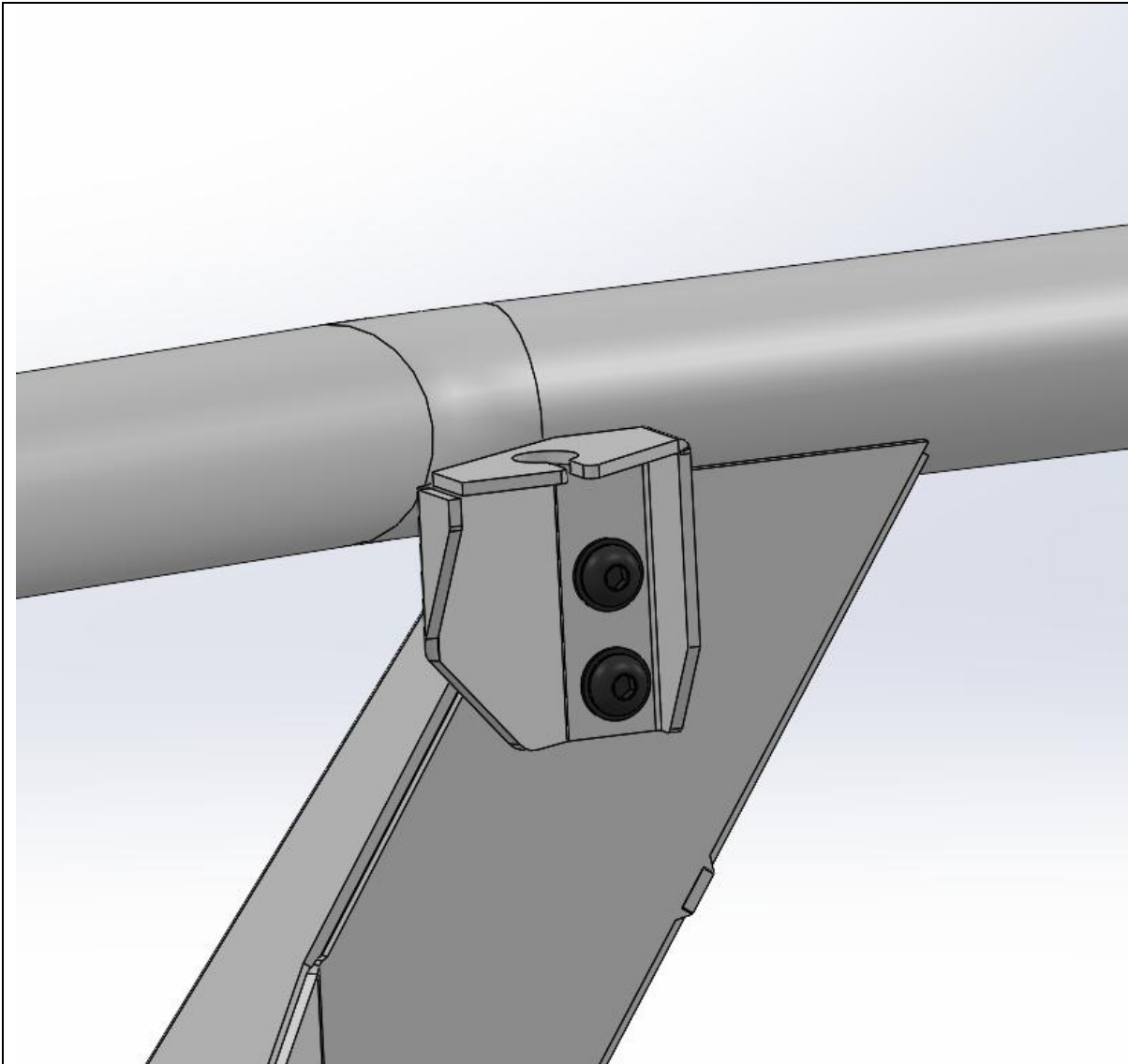
129. Mark where wheel arch liner intersects with side under panel with paint pen or other marker.
130. Create line offset approximately 20mm below intersection point.
131. Trim wheel arch liner to this line using utility Knife.
132. Insert wheel arch liner behind flange on side under panel.

**TOOLS REQUIRED**

Marker  
Utility Knife

**FASTENERS**





133. **Toro only.** Fit antenna brackets to Toro uprights using M8x20 black button head bolts and black washers.

**Note:** Due to close fitting nature of bar oversized UHF antenna bases are not suitable for fitment.

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

**TOOLS REQUIRED**

5mm Hex Key

**FASTENERS**

2x M8x20 Black Button head  
2xM8 Black Flat Washer

Per side



|   |                              |
|---|------------------------------|
| <p>135. Fit the logo plate to the front of the bar as shown.</p> <p>136. 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.</p> <p>137. Review fitment and double check all bolts are tight.</p> | <p><b>TOOLS REQUIRED</b></p> |
|   | <p><b>FASTENERS</b></p>      |



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