Toyota Landcruiser 200 Series
MY2015-2021 (Second Facelift)
Front Bar Fitting Instruction

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.

Fitment Note: TORO (Full Hoop) Version of the bar is NOT SUITABLE for GX models fitted with Halogen Headlights

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.

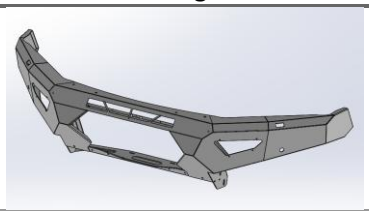
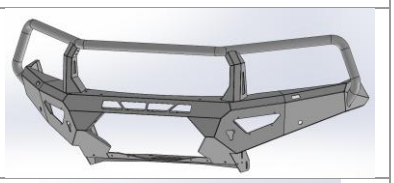
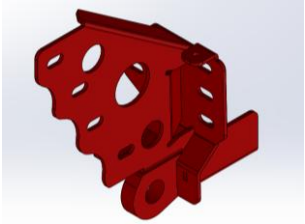
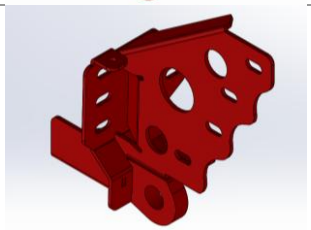
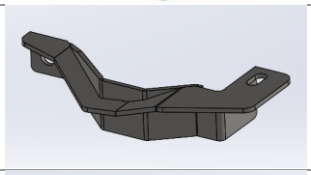
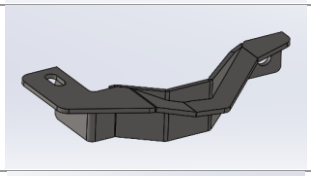
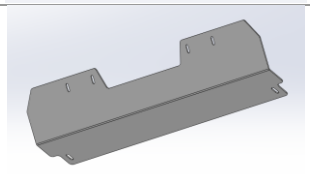
FRONT BAR MOUNTS AND TOW POINTS + REAR TOWBAR	
Size	**Torque Nm**
M10	57 Nm
M12	100 Nm
M14	164 Nm
M16	248 Nm

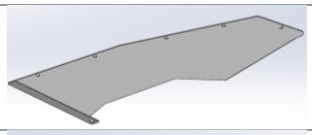
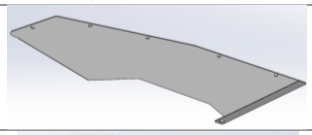
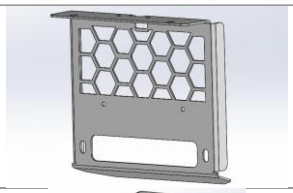
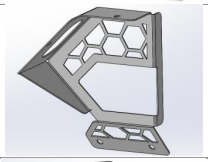
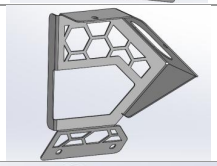
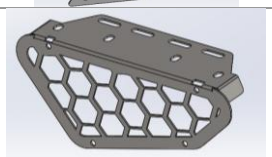
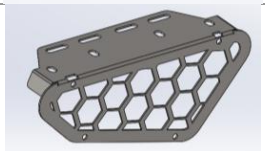
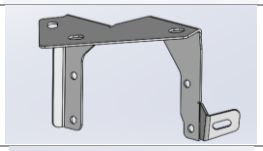
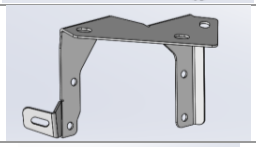
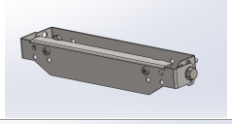
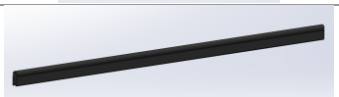
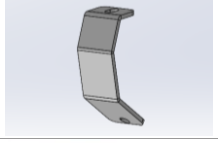
Always use a torque wrench to set correct torque settings. Ensure torque wrench is set to Nm unit of measurement. Otherwise perform conversion to lb-ft.

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-TLC-200-15-PR-ASM1	LC200 Front Predator Bar Weldment	
		Or	
1	FB-TLC-200-15-PRT-ASM1	LC200 Front Toro Bar Weldment	
1	FB-TLC-200-15-PR-ASM2L	LC200 Front Mount - Welded Assembly	
1	FB-TLC-200-15-PR-ASM2R	LC200 Front Mount - Welded Assembly	
1	FB-TLC-200-07-PR-ASM4L	LC200 Impact Brace Assembly	
1	FB-TLC-200-07-PR-ASM4R	LC200 Impact Brace Assembly	
1	U-0011	200 Series Bash Plate	

1	U-0008L	200 SERIES FRONT BAR - SIDE UNDERPANEL	
1	U-0008R	200 SERIES FRONT BAR - SIDE UNDERPANEL	
1	M-0007	LC200 Mesh Fairlead Mount	
1	M-0008L	LC200 Mesh Infill Panel LHS	
1	M-0008R	LC200 Mesh Infill Panel RHS	
1	M-0002L	Light Cover Mesh	
1	M-0002R	Light Cover Mesh	
1	B-0185L	Toyota Style Fog Lamp Bracket LHS	
1	B-0185R	Toyota Style Fog Lamp Bracket RHS	
1	NPF-COM-SM-ASM0	Number plate flip asm Small	
2	PWS-TOP-775	Pinch Weld – Top Bulb Seal 775mm	
1	B-0608	200 Series Front Bar - Center Section Brace	
1	FB-TLC-200-07-PR-ADRCP	ADR Compliance Plate 200 Series	

Predator Small Parts – Contained in Small Parts Kit Bag

QTY.	PART NO.	DESCRIPTION
30	M6 FLAT WASHER BLACK ZINC	M6 FW BLACK ZP
29	M6x16 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X16X1 GR12.9 BLACK ZP
20	M6 FLANGE NUT	Flange Nut, M6x1 G8.8 ZP
10	M6CN3MM	CAGE NUT M6x2.6-3.5
18	M8 FLANGE NUT	Flange Nut, M8x1.25 G8.8 ZP
14	M8 FLAT WASHER-BLACK ZINC	M8 FW- BLACK ZINC
4	M8 X 16 BHCS BZP	SCREW, BUTTON HEAD CAP, M8X16X1.25 GR12.9 BLACK ZP
10	M8 X 20 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M8X20X1.25 BLACK ZP
2	M8 X 25 HEX	Bolt Hex, M8X25x1.25, GR8.8 ZP
4	M8 FLAT WASHER	M8 FW
2	M10X20 BHCS	SCREW, BUTTON HEAD CAP, M10X20X1.5 GR12.9 ZP
2	M10 Flat Washer	M10 FW
2	M10 FLANGE NUT	Flange Nut, M10x1.5 G8.8 ZP
8	M12X30	Bolt Hex, M12X30x1.75, GR8.8 ZP
16	M12 FW LHD	M12 FW Large Heavy Duty
8	M12 Nyloc nut	M12 NYLOC NUT
1	M6x12 BHCS	SCREW, BUTTON HEAD CAP, M6X12X1 GR12.9 ZP
2	M8X20	Bolt Hex, M8X20X1.25, GR8.8 ZP
2	M12X100	Bolt Hex, M12X100x1.75, GR8.8 ZP
2	M12 FLAT WASHER	M12 Washer, Flat
2	T-0086	Toyota LC200 Impact Brace Crush Tube
2	NP-COM-M12-30-ASM0	M12 NUT PLATE SHORT, 30MM STEM
2	FB-TLC-200-15-PR-ASM4	Parking Sensor Plug Assy 200 Series
1	FB-TLC-200-15-PR-ASM3L	Headlight Washer Plug Assy 200 Series
1	FB-TLC-200-15-PR-ASM3R	Headlight Washer Plug Assy 200 Series

Toro Small Parts Kit – Contained in Small Parts Kit Bag

QTY.	PART NO.	DESCRIPTION
30	M6 FLAT WASHER BLACK ZINC	M6 FW BLACK ZP
29	M6x16 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X16X1 GR12.9 BLACK ZP
20	M6 FLANGE NUT	Flange Nut, M6x1 G8.8 ZP
10	M6CN3MM	CAGE NUT M6x2.6-3.5
18	M8 FLANGE NUT	Flange Nut, M8x1.25 G8.8 ZP
18	M8 FLAT WASHER-BLACK ZINC	M8 FW- BLACK ZINC
4	M8 X 16 BHCS BZP	SCREW, BUTTON HEAD CAP, M8X16X1.25 GR12.9 BLACK ZP
14	M8 X 20 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M8X20X1.25 BLACK ZP
2	M8 X 25 HEX	Bolt Hex, M8X25x1.25, GR8.8 ZP
4	M8 FLAT WASHER	M8 FW
2	M10X20 BHCS	SCREW, BUTTON HEAD CAP, M10X20X1.5 GR12.9 ZP
2	M10 Flat Washer	M10 FW
2	M10 FLANGE NUT	Flange Nut, M10x1.5 G8.8 ZP
8	M12X30	Bolt Hex, M12X30x1.75, GR8.8 ZP
16	M12 FW LHD	M12 FW Large Heavy Duty
8	M12 Nyloc nut	M12 NYLOC NUT
1	M6x12 BHCS	SCREW, BUTTON HEAD CAP, M6X12X1 GR12.9 ZP
2	M8X20	Bolt Hex, M8X20X1.25, GR8.8 ZP
2	M12X100	Bolt Hex, M12X100x1.75, GR8.8 ZP
2	M12 FLAT WASHER	M12 Washer, Flat
2	T-0086	Toyota LC200 Impact Brace Crush Tube
2	NP-COM-M12-30-ASM0	M12 NUT PLATE SHORT, 30MM STEM
2	FB-TLC-200-15-PR-ASM4	Parking Sensor Plug Assy 200 Series
1	FB-TLC-200-15-PR-ASM3L	Headlight Washer Plug Assy 200 Series
1	FB-TLC-200-15-PR-ASM3R	Headlight Washer Plug Assy 200 Series
1	B-0382L	200 Toro Antenna Bracket
1	B-0382R	200 Toro Antenna Bracket

TOOLS REQUIRED

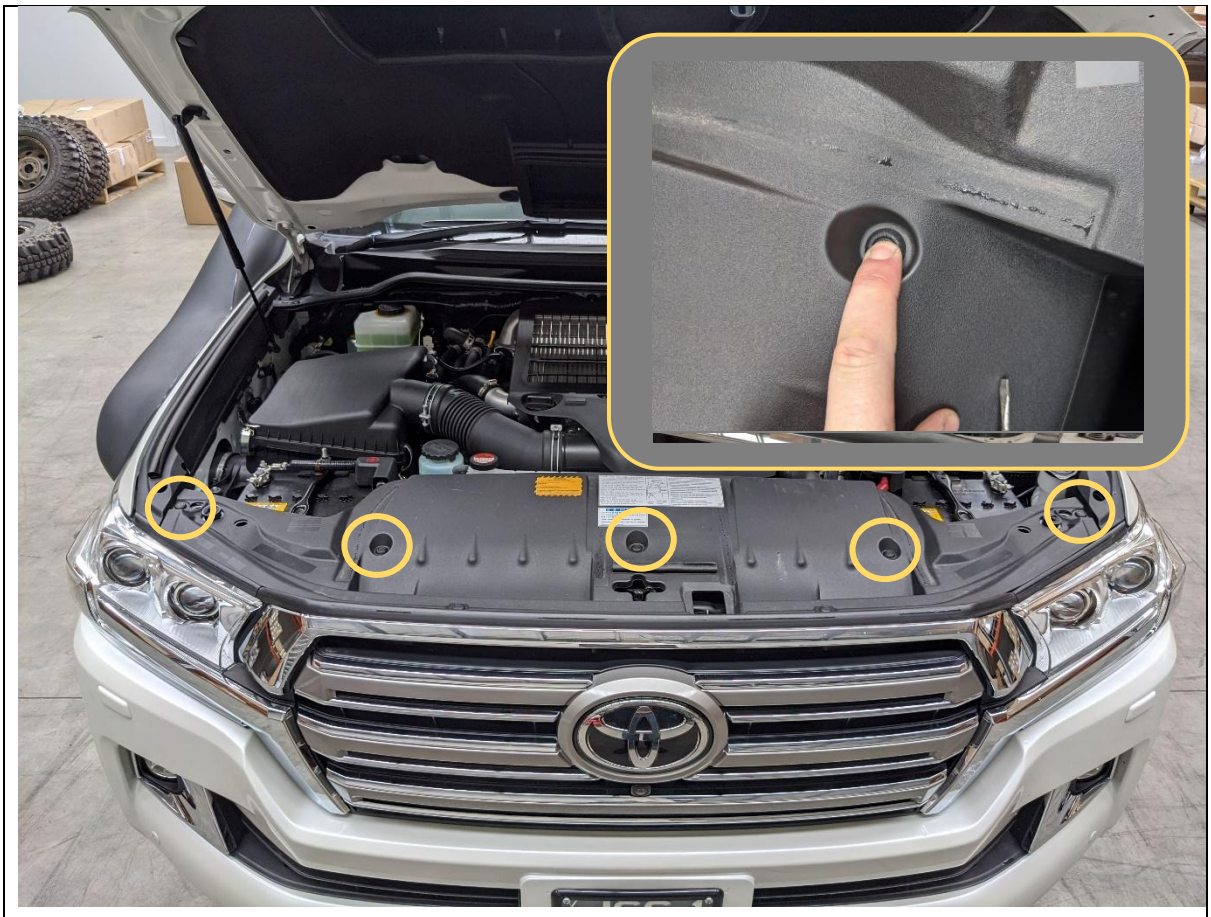
The following tools will be required to install the product.

Hand Tools	Power Tools	Workshop Supplies
Metric Socket Set 8-19mm Socket Extension Bar Metric Spanner Set 10-19mm Torx Drivers T25-T30 Hex (Allen) Key Set 4-6mm Trim Puller Tool Flat Blade Screwdriver set Phillips Head Screwdriver set Utility Knife Side Cutters Pliers	Electric Drill 6mm Drill Bit Air Hacksaw or Angle Grinder Electric/Air Impact Driver (Optional)	Double Sided Adhesive Tape Panel Stand or Soft Blanket Cable Ties Masking Tape Black Automotive paint Scotch Brite or Fine Sandpaper Automotive Sealant/Adhesive Bucket Hose Clamp

WORKSHOP SAFETY

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

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



1. Open the Bonnet.

2. Remove clips securing the top radiator cowling. Press down on the center button of clip to unlock, then remove clip with trim tool.

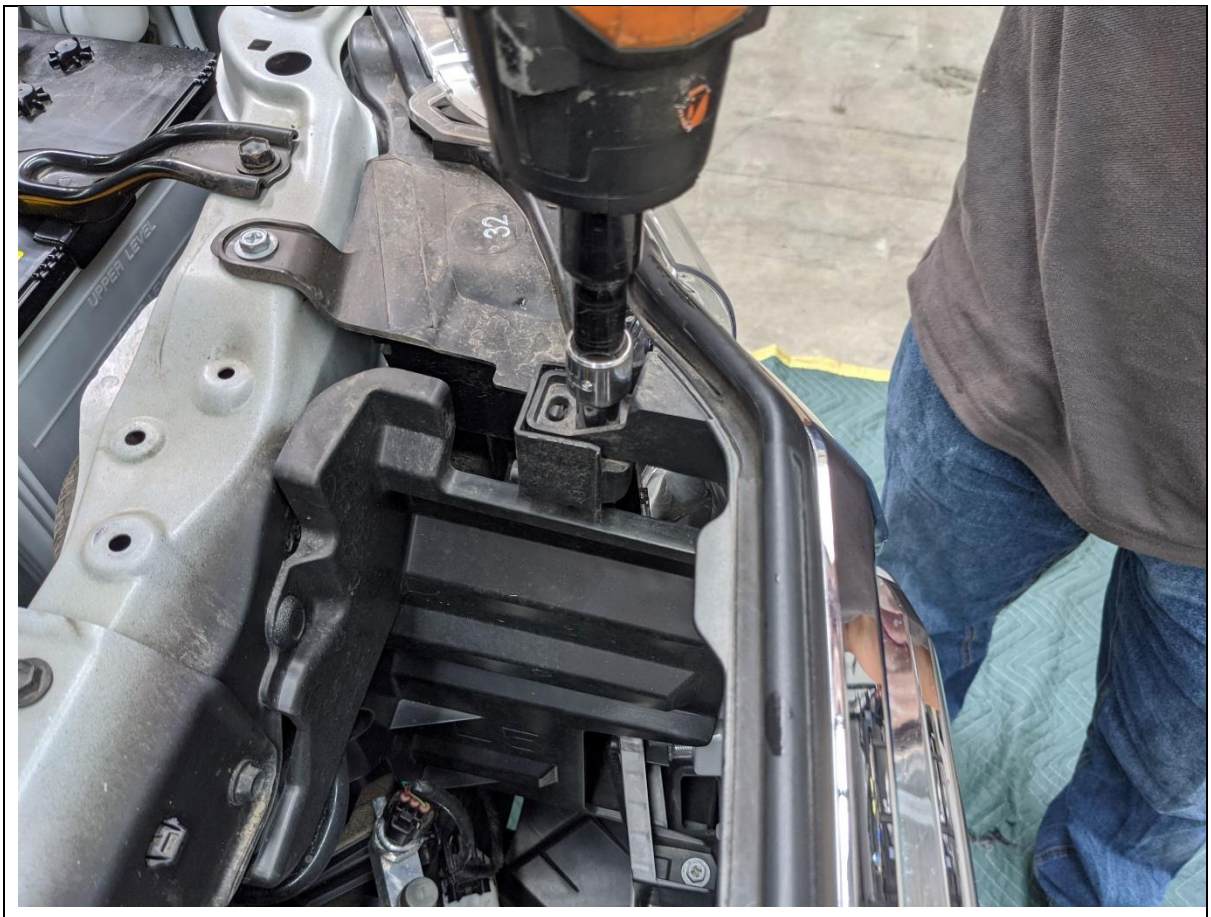
3. Retain all clips for reassembly

TOOLS REQUIRED

Trim Tool

FASTENERS

Retain Factory



4. Remove the 2x Bolts securing top grille to body using 10mm socket.

TOOLS REQUIRED

10mm socket

FASTENERS

Retain Factory



5. Using a rag to protect the chrome finish, carefully pry the L shape headlight trim to release the clips.

6. Complete for both sides of the vehicle.

TOOLS REQUIRED

Trim Tool

FASTENERS



7. Remove the 10mm head screws securing the bumper to the underbody bash plate.

8. Removal of the shrouds surrounding the tow point is also required. These use the same bolts.

TOOLS REQUIRED

10mm socket

FASTENERS

Factory Bolts (Discard)



9. Remove the T30 Torx screws securing bumper to the wheel arch liner.

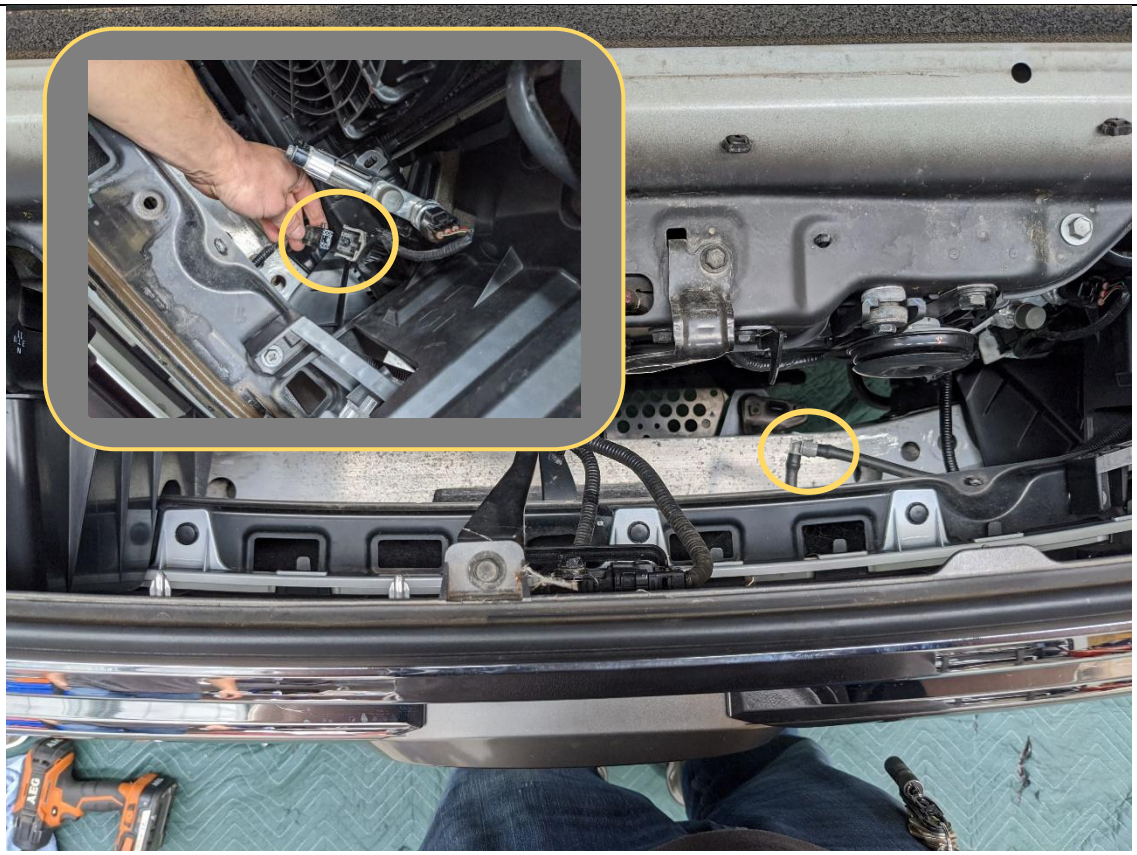
10. Complete on both sides of the vehicles

TOOLS REQUIRED

T30 Torx Driver

FASTENERS

Factory Torx Screws (Discard)



11. Disconnect the main electrical harness, located on the LHS of vehicle near bottom of grille.

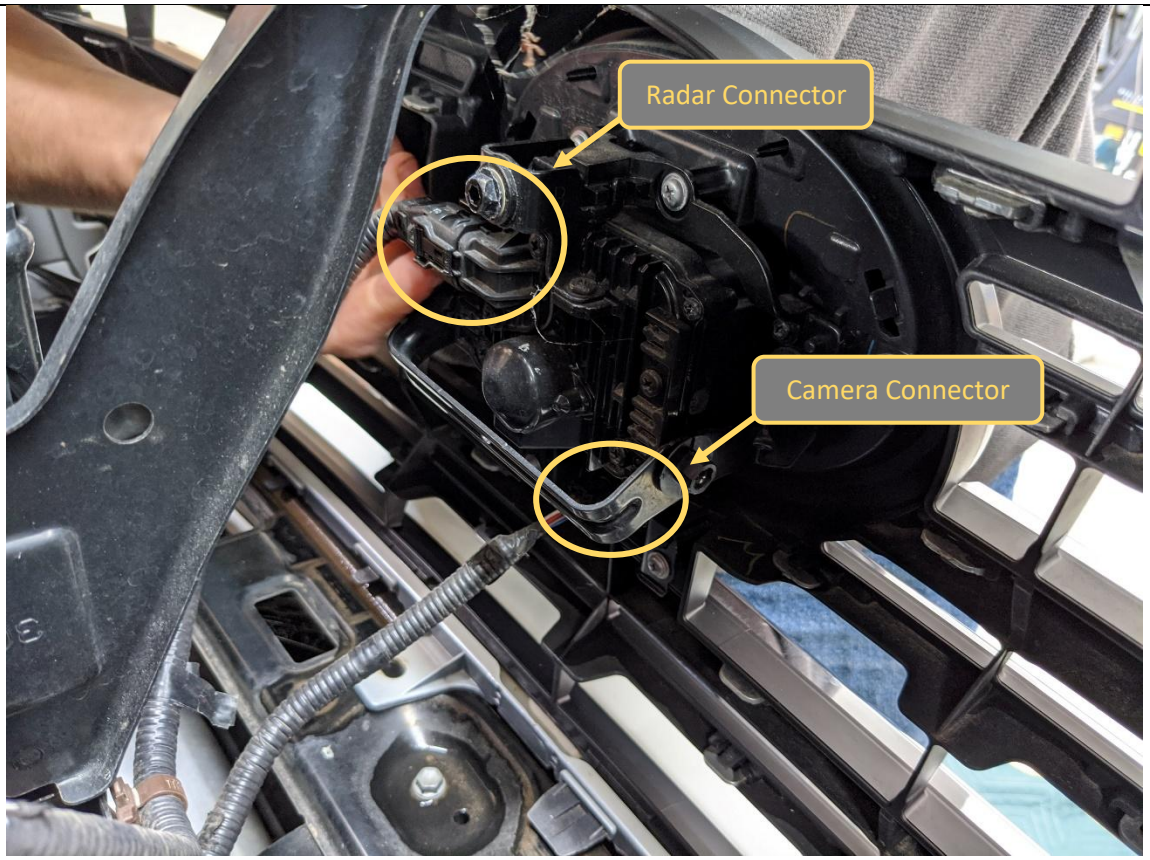
12. For vehicles equipped with headlight washers, disconnect the headlight washer hose at the quick connect fitting.

    If there is any washer fluid in the reservoir it will spill out. Have a bucket on hand to drain the washer fluid or use a hose clamp to prevent the fluid from leaking.

TOOLS REQUIRED

Bucket or Hose Clamp

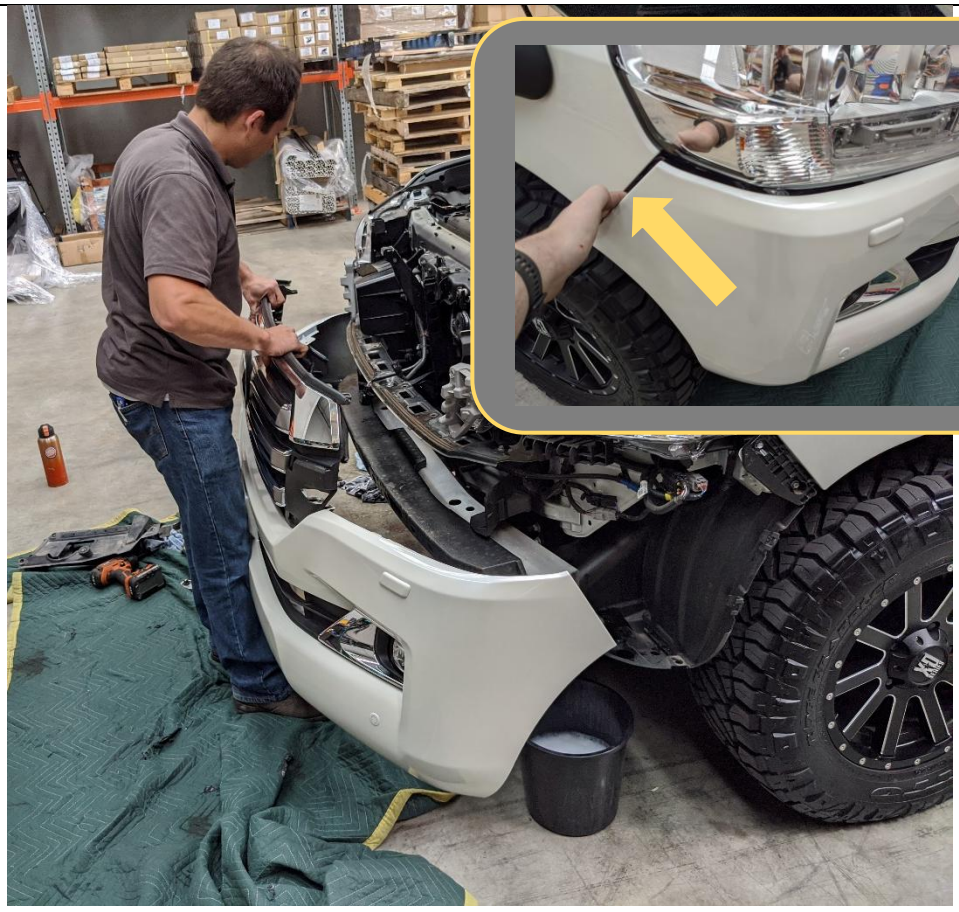
FASTENERS



13. For vehicles equipped with Adaptive cruise radar sensor and / or front camera, disconnect the electrical harness connectors located on the back of the sensors, behind the grille.

TOOLS REQUIRED

FASTENERS



14. Starting from the wheel arch, carefully pull the bumper away from the body of the vehicle to release the clips.

15. Once all clips are released, carefully lift the bumper from the car and set aside on a soft surface.

TOOLS REQUIRED

FASTENERS



16. Remove the grille from the bumper by pinching and pushing forward the clips securing the bottom edge of grille to bumper.

TOOLS REQUIRED

FASTENERS



17. Re-fit grille to vehicle, Secure the grille using the factory fasteners removed earlier.

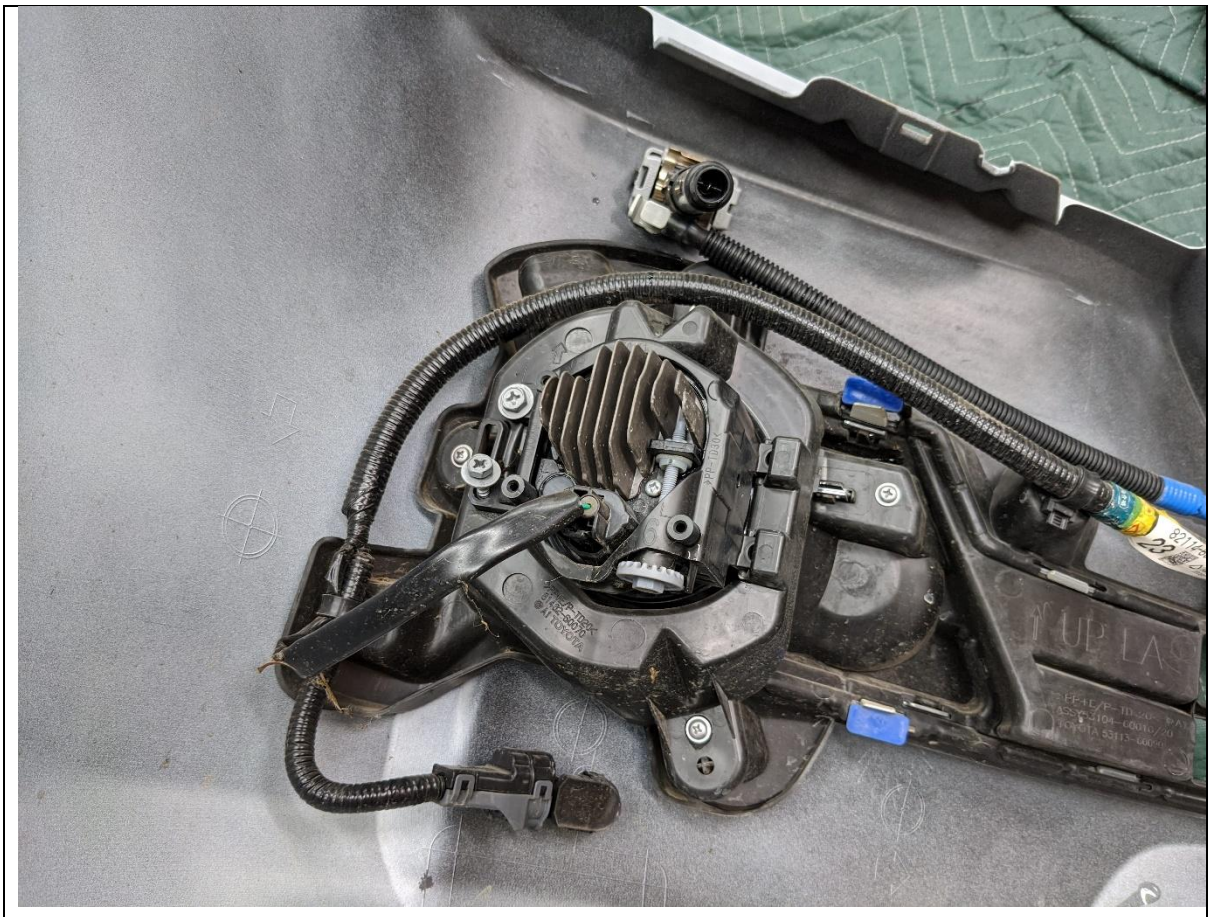
18. Ensure the grille is located correctly on the locating lugs just above the bolt hole.

TOOLS REQUIRED

10mm Socket

FASTENERS

Re-Use Factory



19. Disconnect the Fog light harness from the fog light.

20. Remove the fog lights from the bumper, by removing the two Philips head screws.

21. Remove both the electrical harness, and headlight washer pipes from the bar, by prying out the clips using trim tool.

22. Complete on both sides of bumper.

TOOLS REQUIRED

Phillips head Screwdriver
Trim tool

FASTENERS

Discard Factory Screws

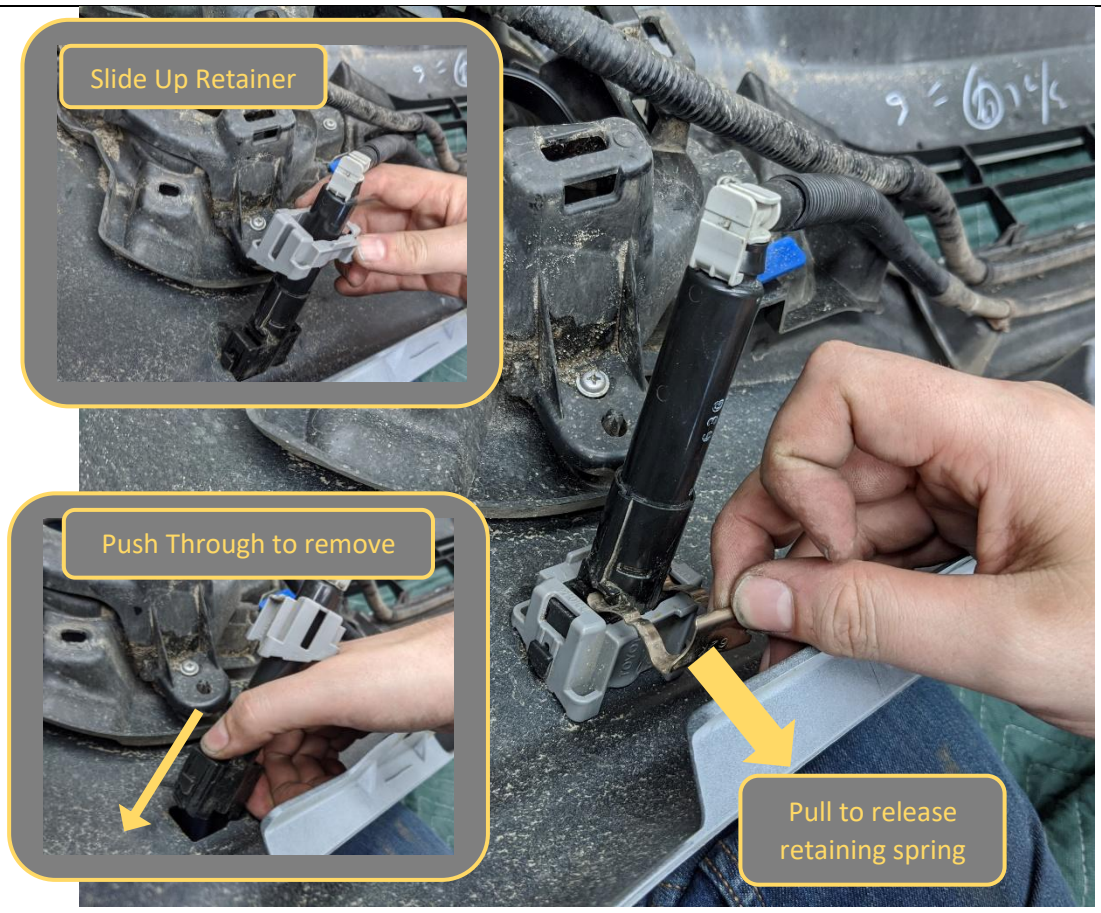


23. Disconnect the parking sensors from the loom by first prying open the plastic housing, then disconnecting the multi plug connector.

24. Squeeze the small retaining tabs on the sensor housing whilst pushing the sensor forward, through the bumper. The tabs should release and allow the sensor to be removed from the front of the bumper as shown.

TOOLS REQUIRED

FASTENERS



25. If vehicle is equipped, remove headlight washers from the bumper. Start by disconnecting the supply hose.

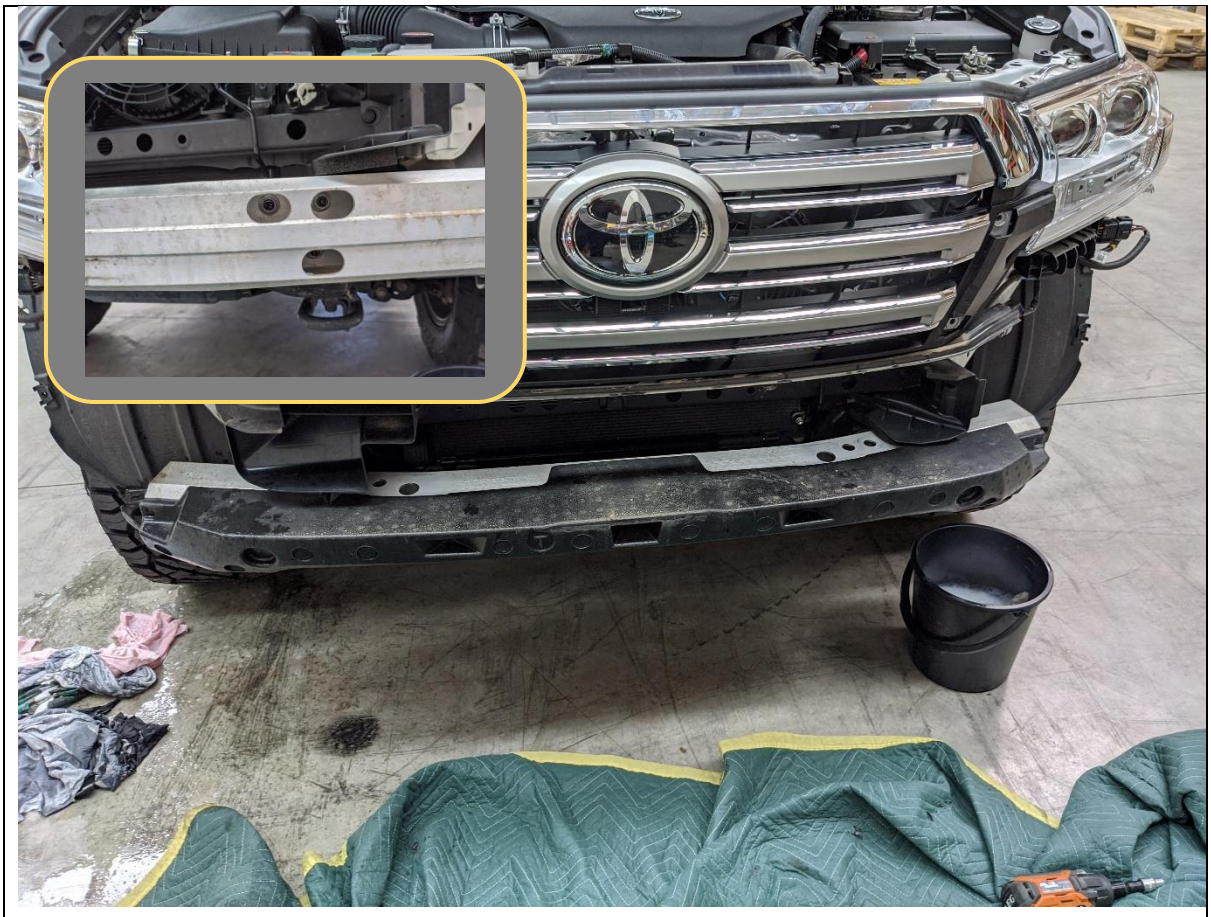
26. Release the retaining spring by firmly pulling it as shown in the image.

27. Next slide up the grey plastic retainer.

28. Once loose push the headlight washer through the bumper to remove.

TOOLS REQUIRED

FASTENERS



29. Remove the foam covering the impact beam assembly by lifting it off.

30. Remove the 6x 14mm head bolts holding the impact beam to the impact beam brackets.

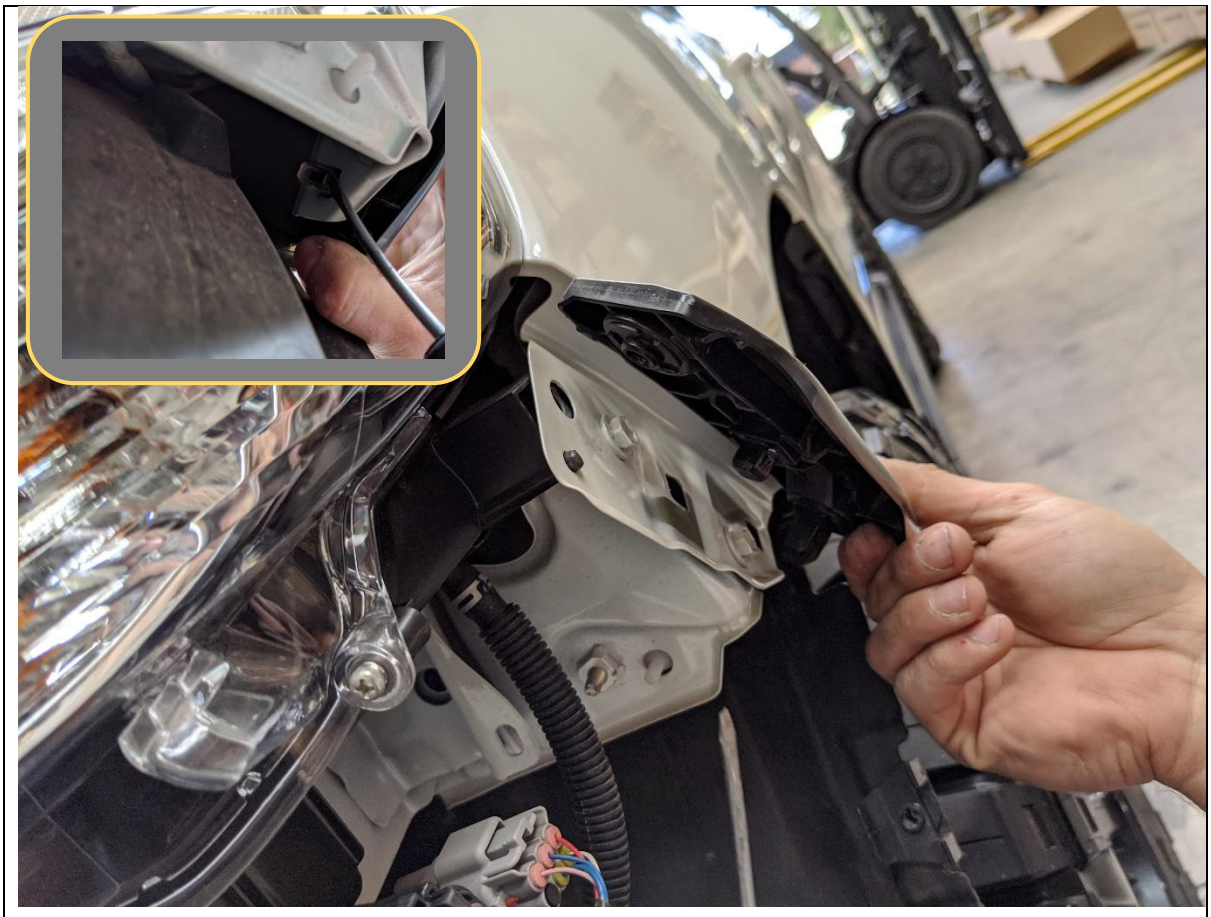
31. Remove and set aside the aluminum impact beam.

TOOLS REQUIRED

14mm Socket
Extension Bar

FASTENERS

6x 14mm Head factory bolts



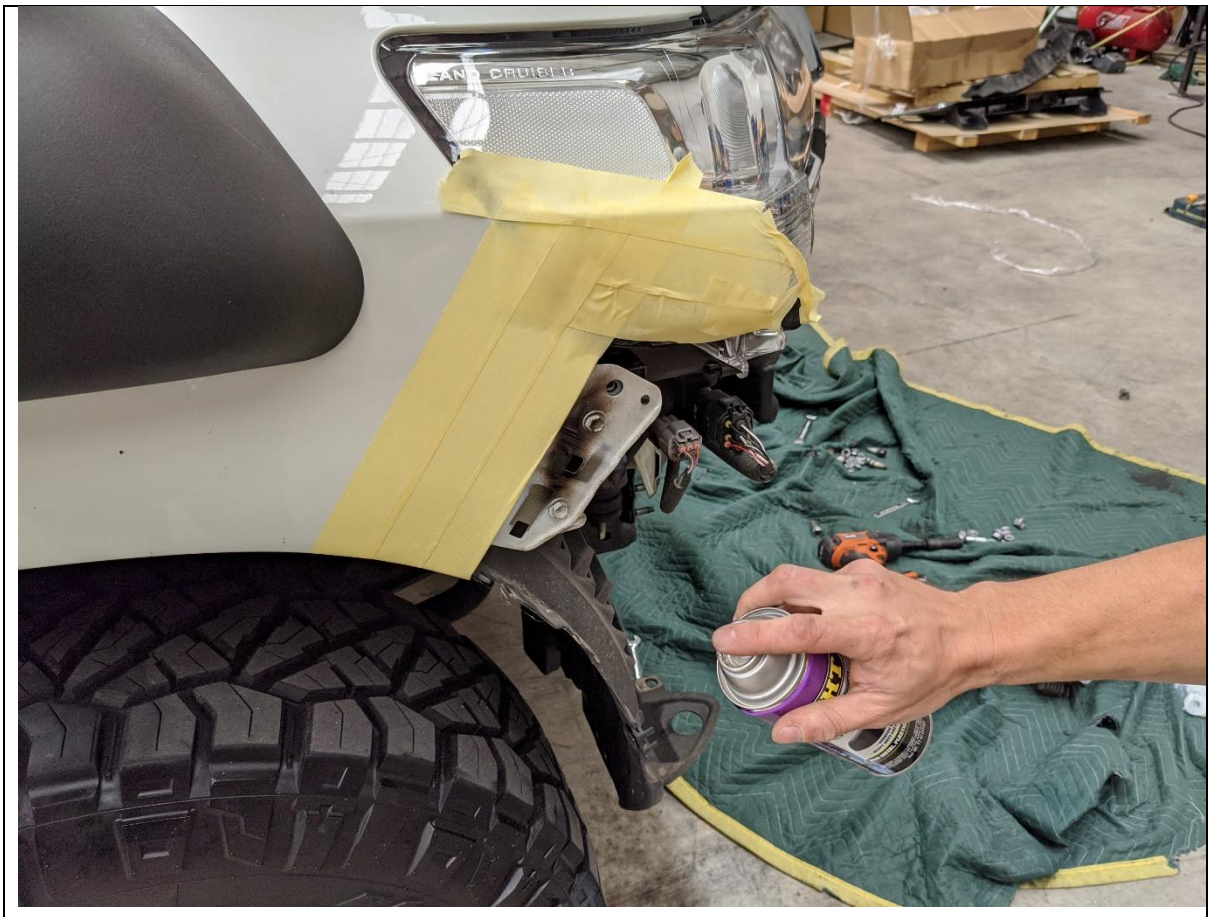
32. Remove the plastic bumper retainers by removing the Philips head screw, then prying out the large clip from behind using trim tool.

TOOLS REQUIRED

Phillips head screwdriver
Trim Tool

FASTENERS

Phillips Head screw



33. On vehicles with light colour paint, such as the car shown. It is recommended to paint the under headlight areas that will be visible through bar clearance gaps and mesh panels.

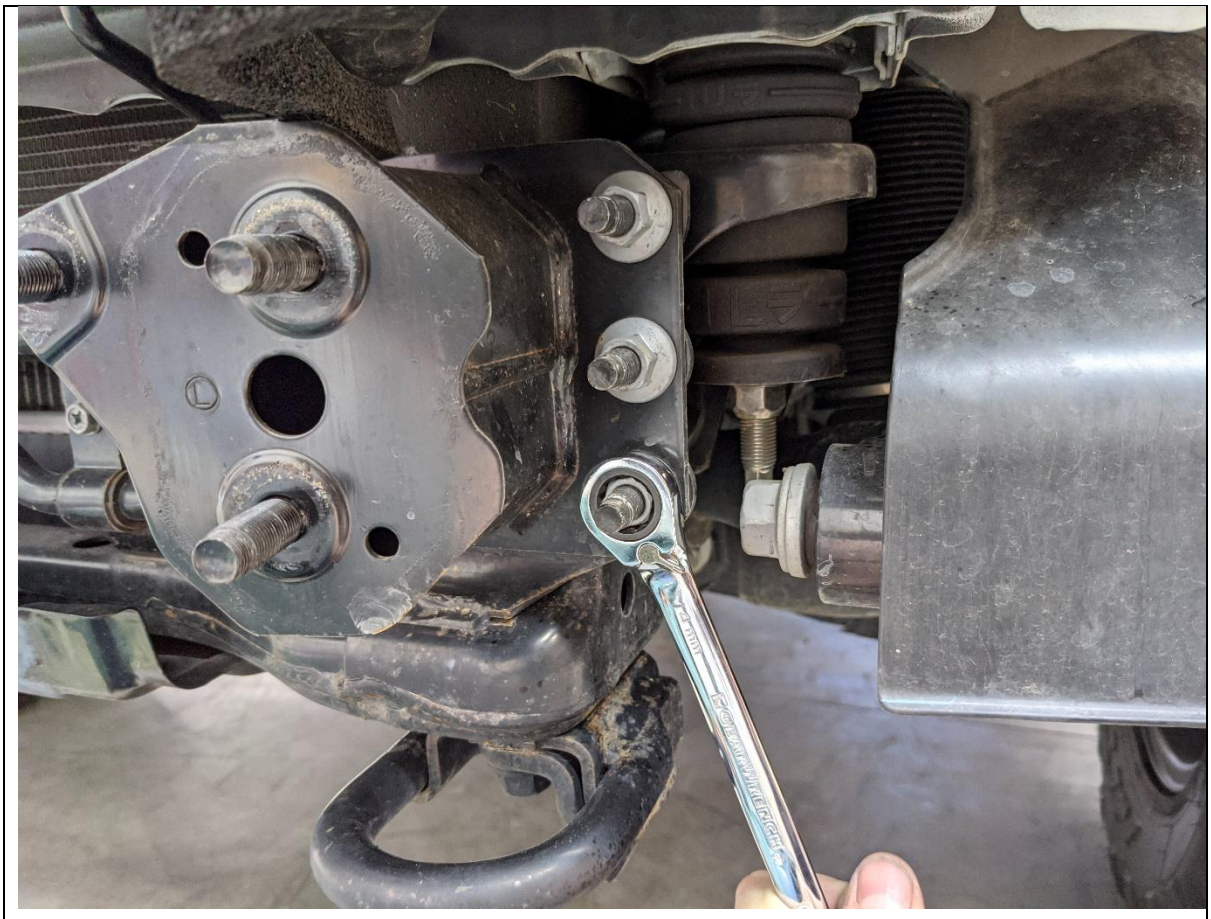
34. Mask off headlight and panel using masking tape as shown.

35. Paint area using matte black automotive grade paint.

TOOLS REQUIRED

Masking Tape
Black Automotive Paint

FASTENERS



36. Remove Steel impact beam mounts by removing the 5x 14mm head flange nuts on each side.

37. Retain nuts for fitment of bullbar mounts.

TOOLS REQUIRED

14mm Spanner

FASTENERS

14mm Head Factory Flange Nuts



38. Remove the Factory tow point, by removing the 17mm head factory bolts.

39. Retain bolts for fitment of bullbar mounts.

TOOLS REQUIRED

17mm Socket

FASTENERS

17mm Head Factory Bolts



40. Plastic air guides need to be trimmed to allow clearance for the bullbar mounts.

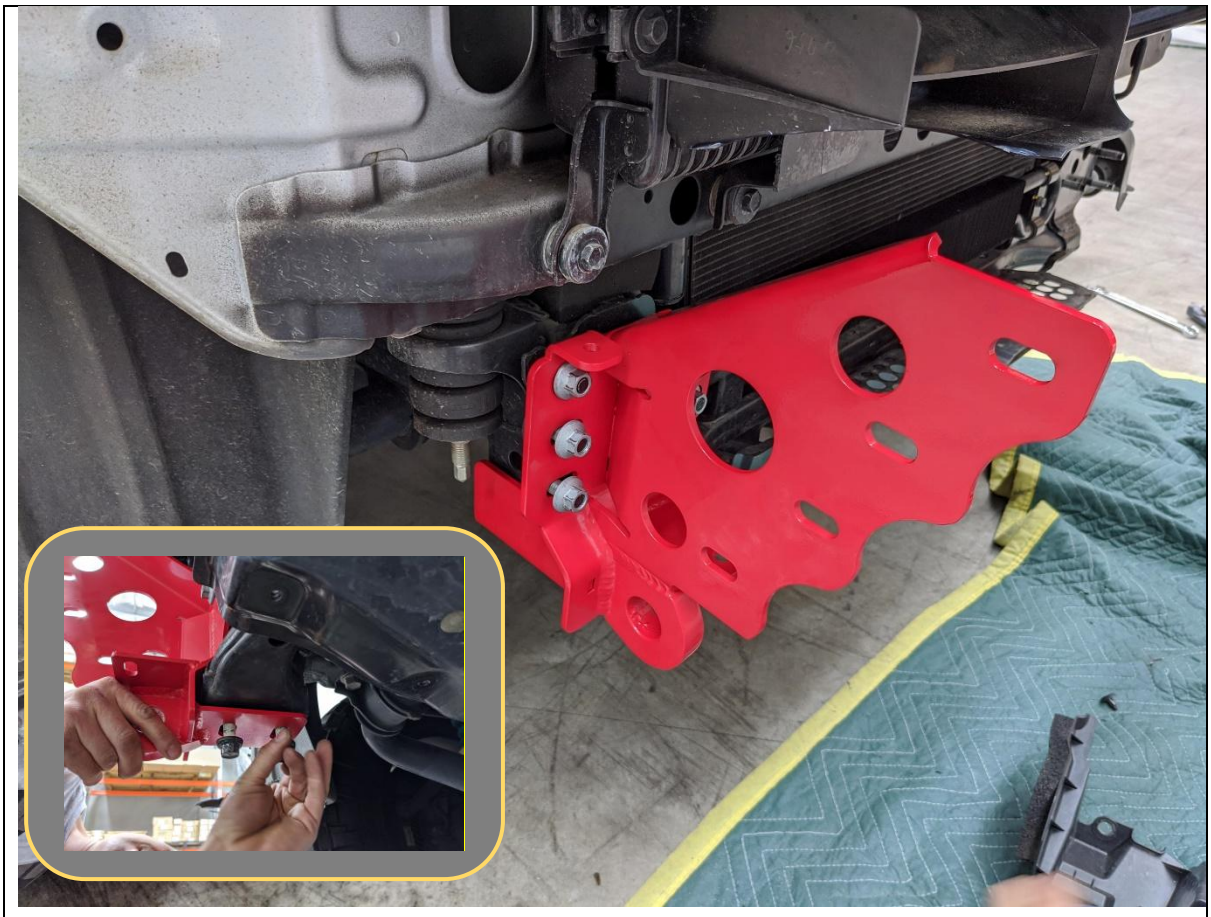
41. Using a sharp utility knife or an air hacksaw, cut along the corners as shown in the image.

42. Repeat for both sides of the vehicle.

TOOLS REQUIRED

Utility knife
Or
Air Hacksaw

FASTENERS

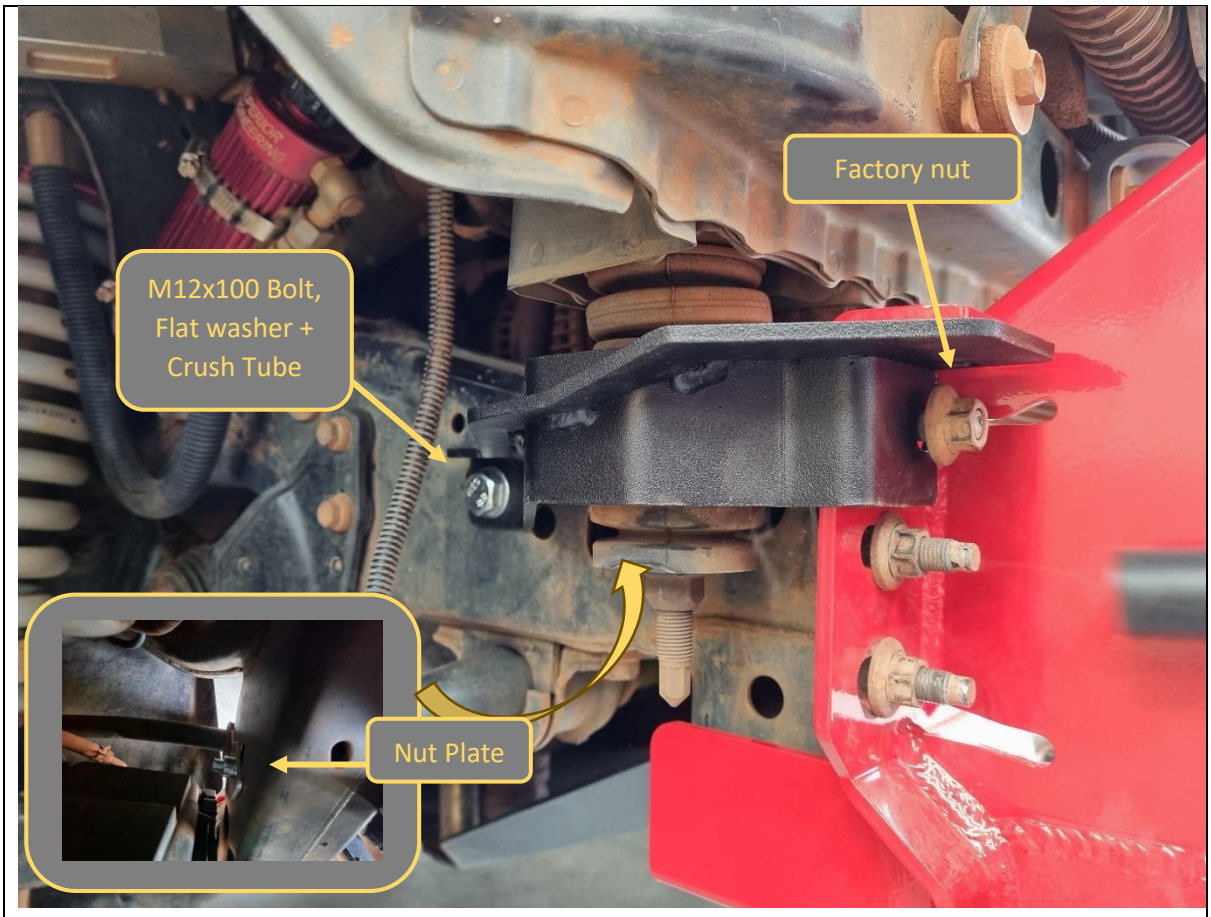


43. Fit the Impact mounts to the chassis, re using the original factory flange nuts (front) and Bolts (Bottom) as shown.

44. Leave bolts finger tight at this stage.

TOOLS REQUIRED

FASTENERS



45. Fit the chassis brace between the impact assembly and the square slot in the chassis as shown, Secure at the front using the factory nut.

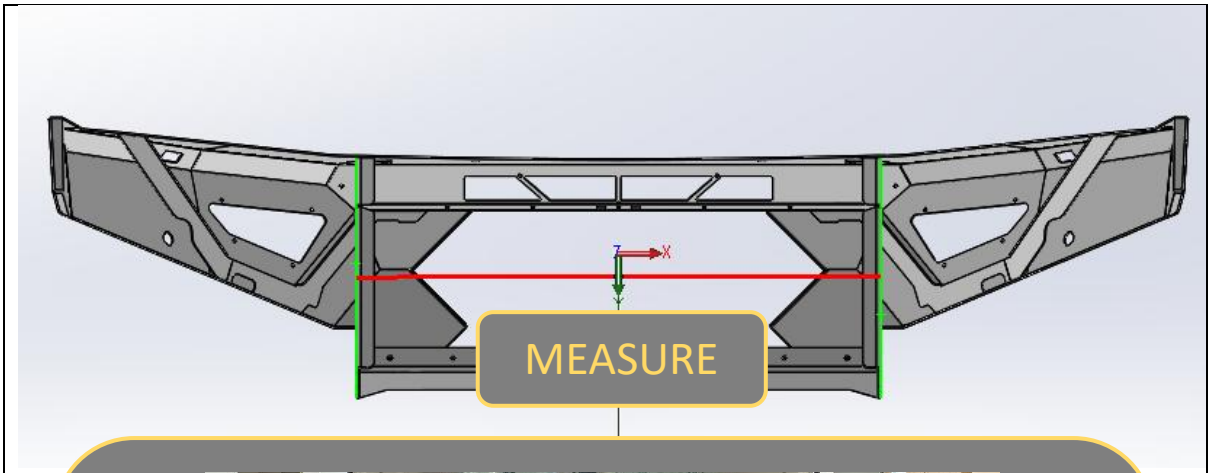
46. Using supplied nut plate, secure M12x100 bolt through chassis rail. You will need to reach behind the cooling pack with the nut plate to reach the location where the M12x100 bolt comes through on the other side of the chassis rail.

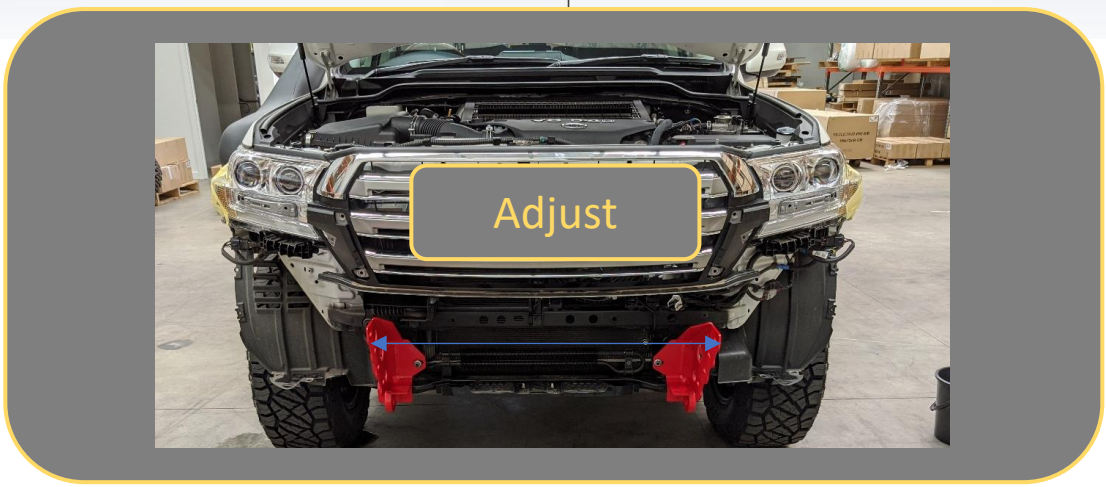
47. Leave bolts finger tight at this stage.

TOOLS REQUIRED

FASTENERS

2x M12x100 hex bolt
2x M12 flat washer
2x Crush tube
2x nutplate





48. Measure distance between outside edges uprights on bar using tape measure. Write distance below for reference if required.

    Bar Upright Width = _____mm

49. Adjust mounts by sliding mounts on slots, such that distance between outside edges of mounts is approximately 2mm more than bar.

50. Secure and tighten mounts. First tighten front face mount bolts, then tighten chassis brace bolt.

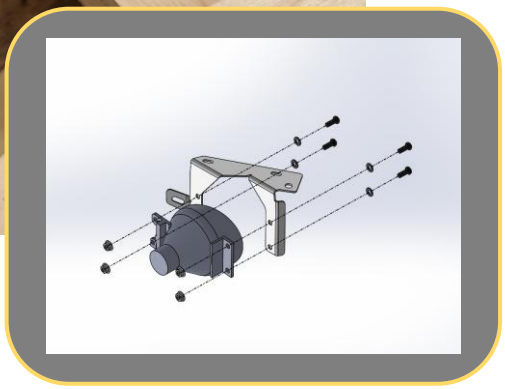
TOOLS REQUIRED

Tape measure

FASTENERS

Factory nuts to secure mounts





51. Re-Fit fog lamps to the Fog light brackets (B-0186L/R) using M6X16 Button head Bolts, Flat washers and Flange nuts from the Small Parts Kit.

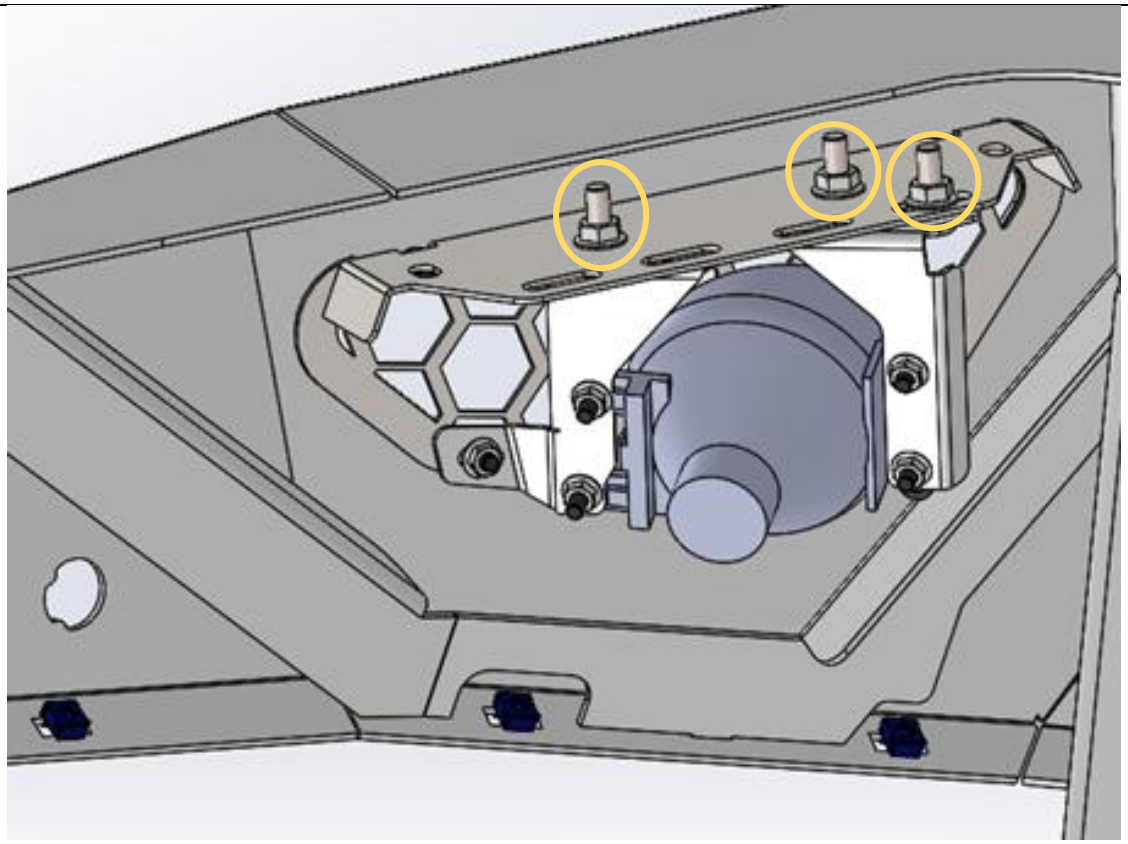
52. Secure and tighten using 4mm Allen Key and 10mm Spanner.

TOOLS REQUIRED

4mm Allen Key
10mm Spanner / Socket

FASTENERS

4x M6x16 BHCS – Black
4x M6 Flat Washer
4x M6 Flange Nut



53. Fit fog light bracket, with fog light in place to the Mesh panel using 3x M8x25,

54. Secure and tighten using 13mm Spanner or socket.

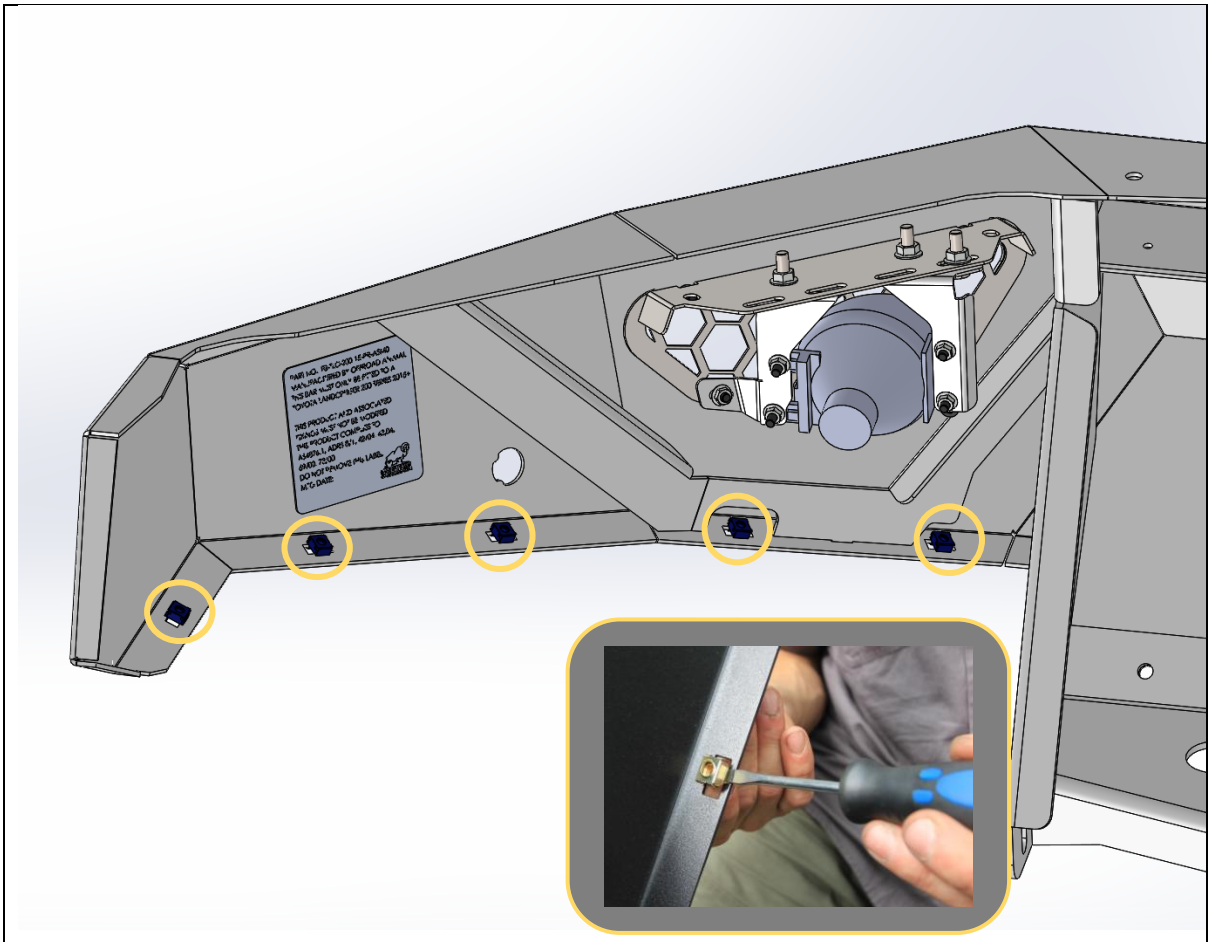
55. Repeat for other side of bar.

TOOLS REQUIRED

13mm Spanner / Socket

FASTENERS

3x M8x25 Hex
3x M8 Flat Washer
3x M8 Flange Nut



56. Fit 5x Cage nuts from small parts kit to rectangular slots in bottom of wing.

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

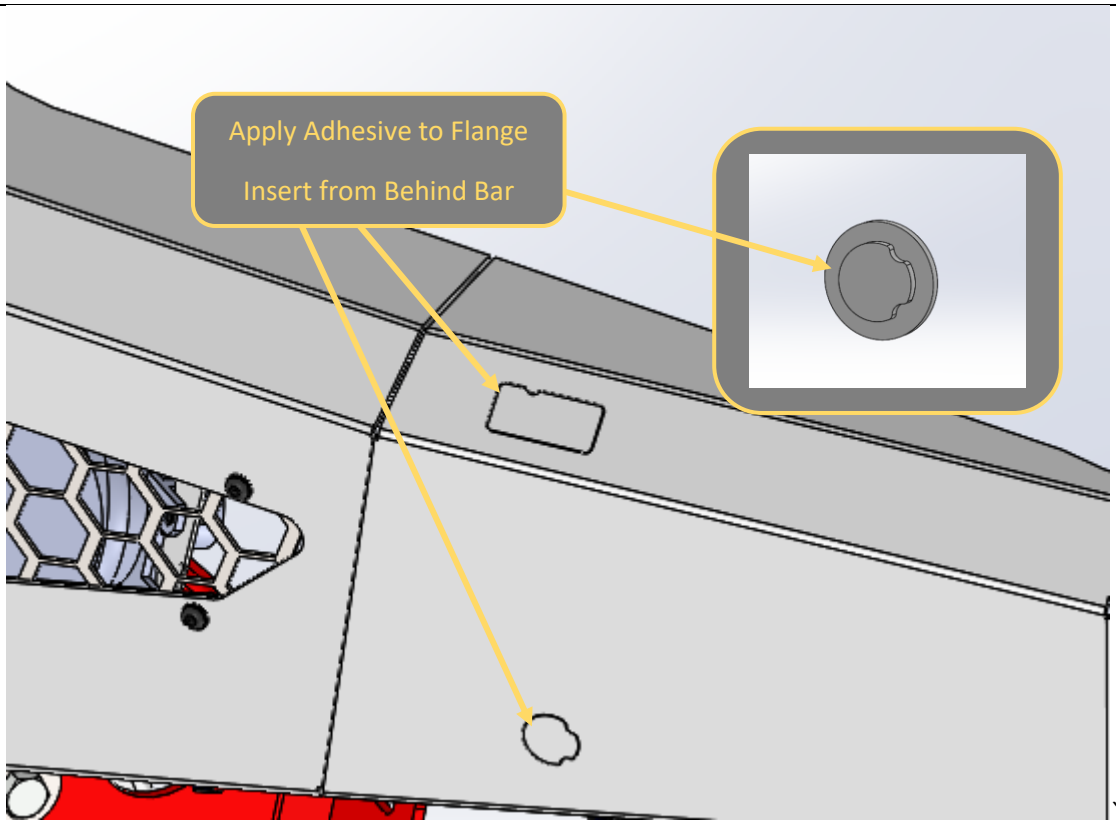
57. Repeat for other side of Bar

TOOLS REQUIRED

Small Flat Bladed Screwdriver

FASTENERS

5x M6 Cage Nut

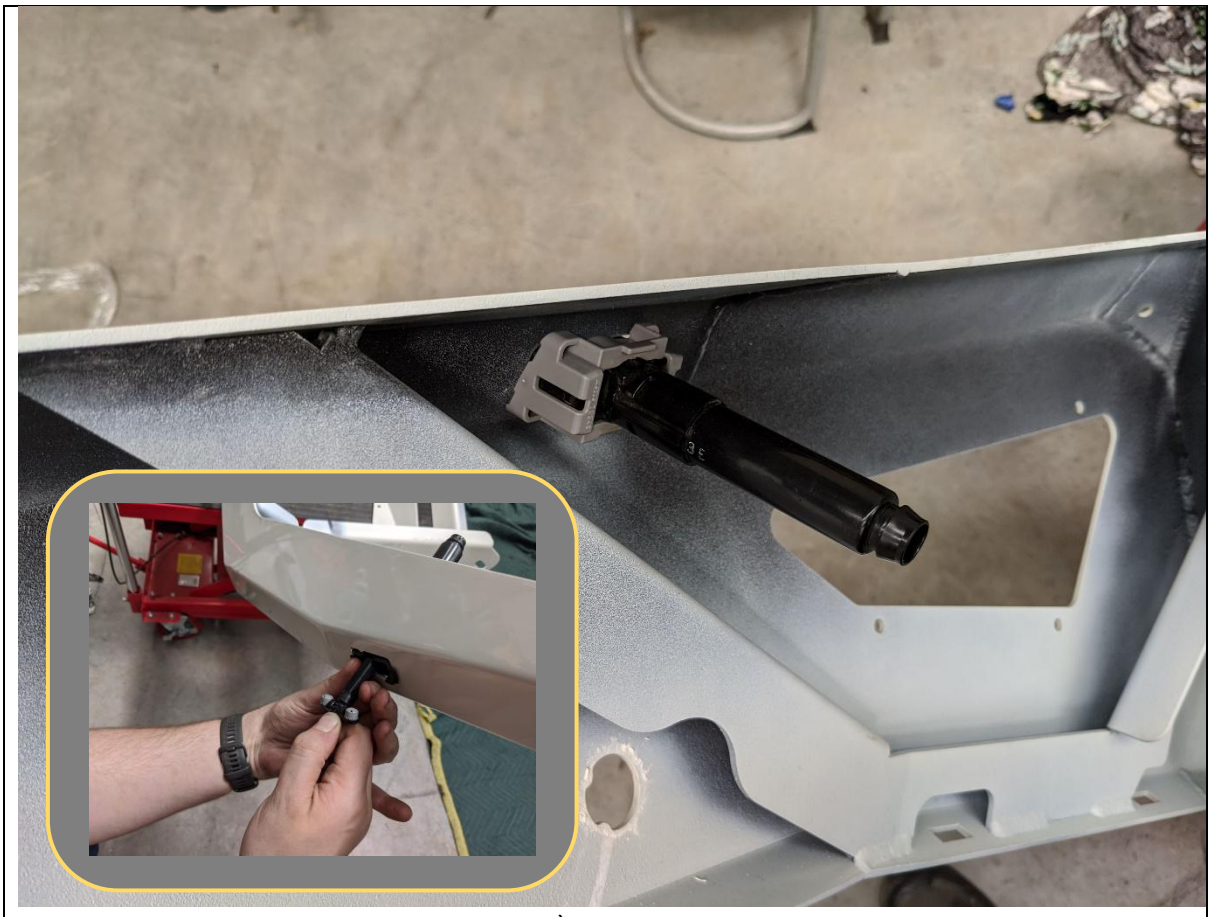


58. If not fitting sensors / washers install supplied plug plates, using Automotive grade adhesive

TOOLS REQUIRED

Automotive adhesive

FASTENERS



59. If equipped re-fit headlight washers to bar.

60. Washers need to be fitted upside down to match the angle of bar correctly. Follow the reverse of removal procedure to re-fit.

61. Once fitted, pull out the washer assembly with long nose pliers and adjust the washer nozzles to squirt towards the headlights, final adjustment can be performed when the bar is fitted to the car.

TOOLS REQUIRED

Long Nose Pliers

FASTENERS



62. Re Fit parking sensors to the bar. Insert the sensor from the front of the bar. Push the sensor through and allow the tabs to expand and hold the sensor in place.

63. Re fit electrical harness and Headlight washer hose to bar. Secure using cable ties.

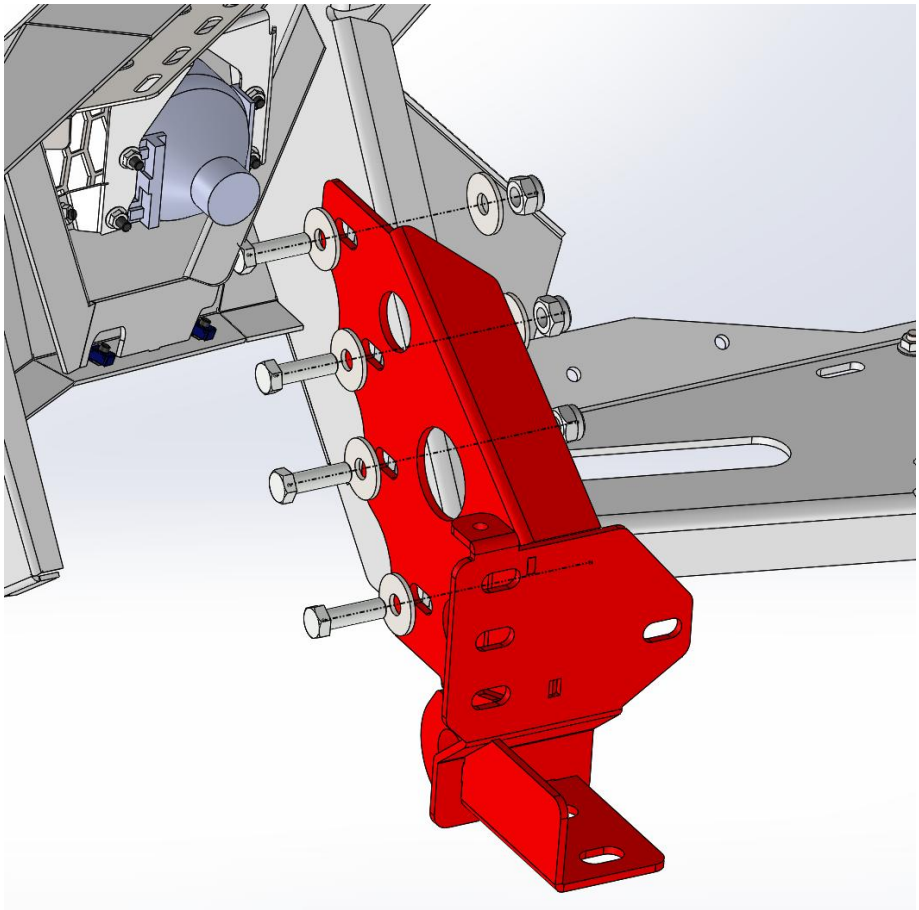
64. Fit Pinch Weld to bar. Position on wings under area where headlights will be.

TOOLS REQUIRED

Automotive adhesive

FASTENERS

Cable Ties



65. With assistance, either from another person, or a lifting trolley, lift the bar onto the mounts on the vehicle.

66. Secure with 4x M12x30 Bolts, Heavy Duty washers and M12 Nyloc Nuts per side, Finger tight at this stage.

TOOLS REQUIRED

Lifting Trolley

FASTENERS

8x M12x30 Bolt
16x M12 Heavy Duty Large Washer
8x M12 Nyloc Nut



67. With assistance from another person, align the bar with the edges of the vehicle. Adjust such that the clearances are neat and even side to side.

    Acceptable range of clearances shown in image above. Ensure minimum clearances are maintained all the way across the headlamps.

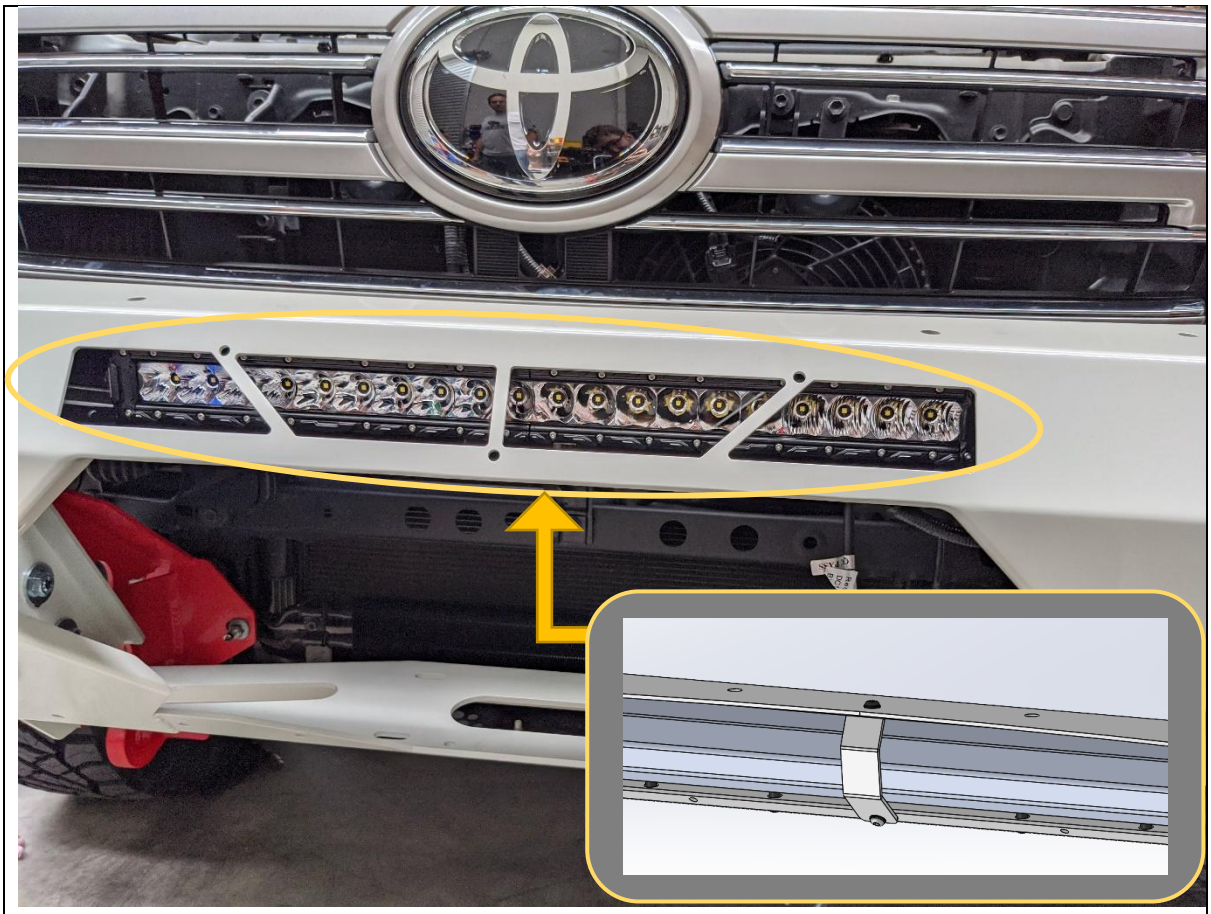
68. Once in position, tighten the M12 Bolts using socket and spanner. An impact driver may be used to speed up this process.

TOOLS REQUIRED

Lifting Trolley
19mm Socket and Spanner

FASTENERS

8x M12x30 Bolt
16x M12 Heavy Duty Large Washer
8x M12 Nyloc Nut



69. If fitting an integrated light bar, do so now. Leave bolts loose at this stage to allow fitment of mesh panels.

70. The bar is designed to fit a STEDI ST3K 21.5 inch light bar. If fitting this light bar, assemble bar with legs inward, and it will line up with the slots in the center gusset. Secure with M8 Fasteners supplied with the light bar.

71. The bar can accommodate most other “20 inch” size light bars.

72. Fit the center pan support brace, using M6x12 Button Head bolts, Flat Washer and Flange nut to gusset and M6x16 Black Button head bolt to Pan.

    NOTE: If your bar does not come with the pan support brace, please contact Offroad Animal for retrofittable version.

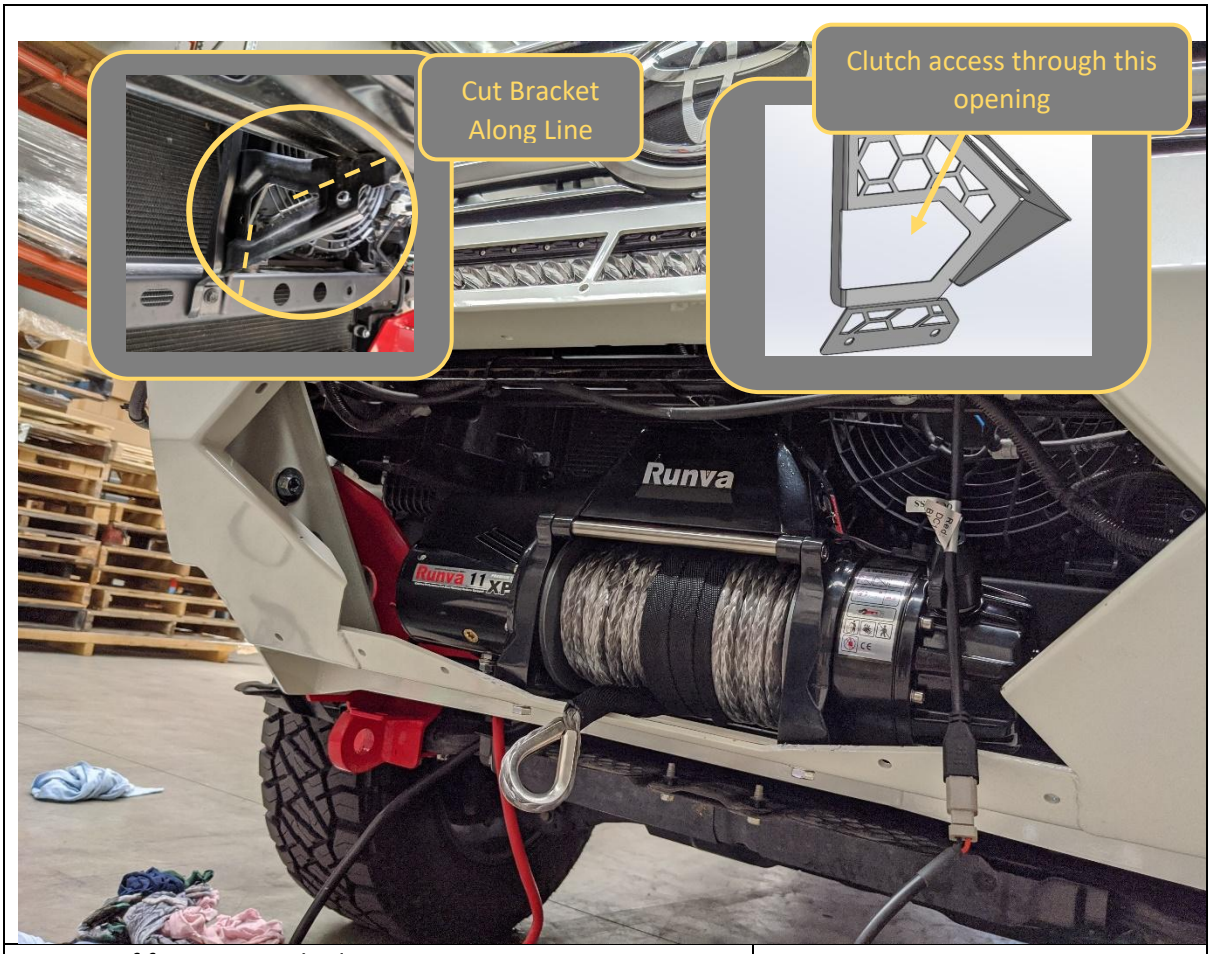
TOOLS REQUIRED

13mm Spanner / Socket
4mm hex/Allen key

FASTENERS

Supplied with Light Bar

1xM6x12 BHCS
1x M6x16 Black BHCS
2x M6 Flat Washer
2xM6 Flange Nut



73. If fitting a winch, do so now.

74. The bar is designed to fit most low mount winches, in foot down configuration. WARN ZEON 10 is largest winch confirmed to fit.

75. The control box can be mounted on top of the winch. Winches usually come with a bracket to allow this. Refer to winch manufacturer.

76. If fitting winch with top mounted control box, bumper support bracket shown in inset photo must be removed. Cut bracket with air hacksaw or grinder.

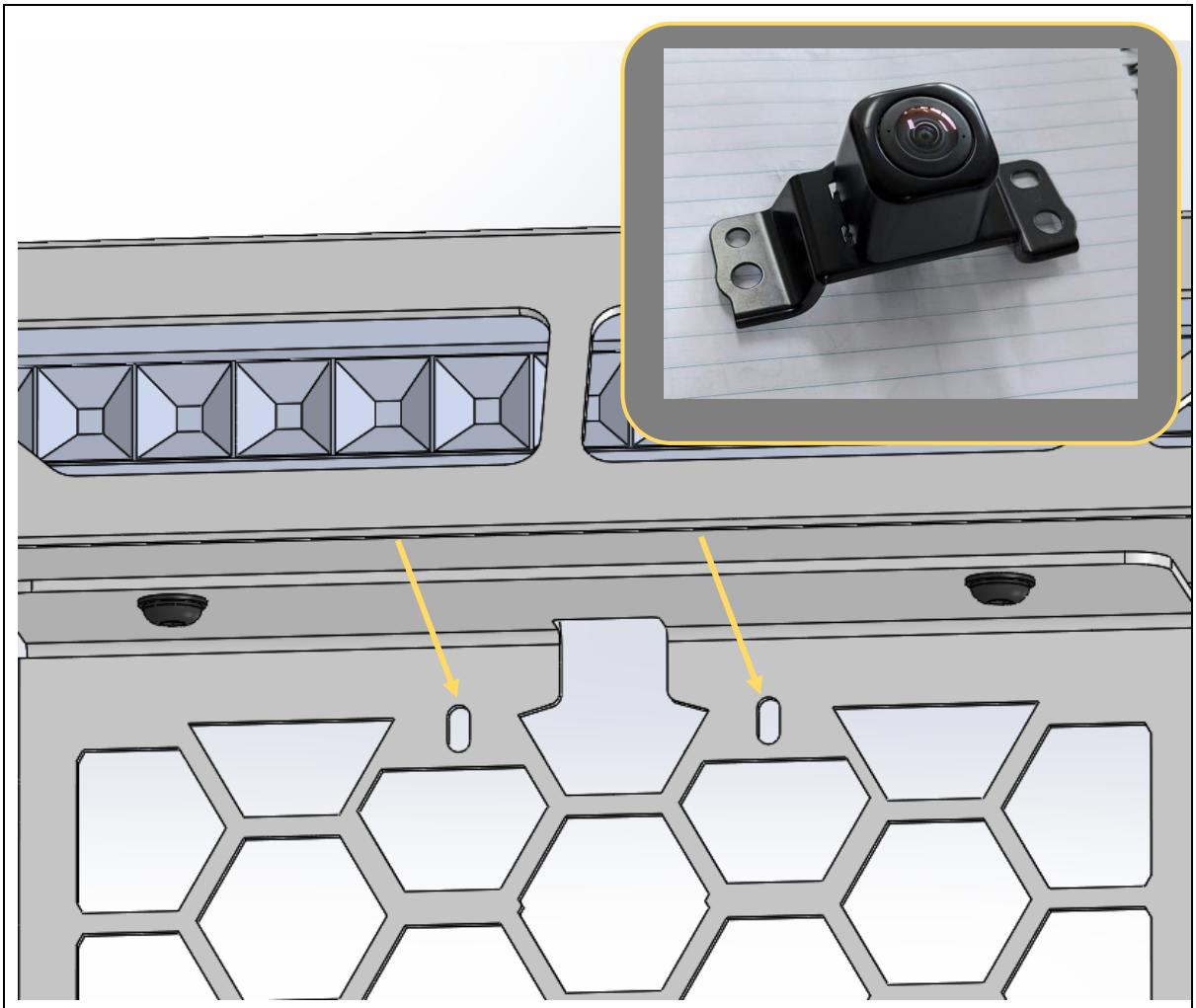
77. Ensure clutch handle will be accessible through access hole in front mesh panel. Refer to winch instructions regarding changing clutch handle location.

TOOLS REQUIRED

Refer to winch fitting instructions

FASTENERS

Supplied with winch



78. If vehicle is fitted with front camera, the bar will obscure bottom part of front camera image. Additionally, if a large light bar is fitted this will also obscure image in default badge location.

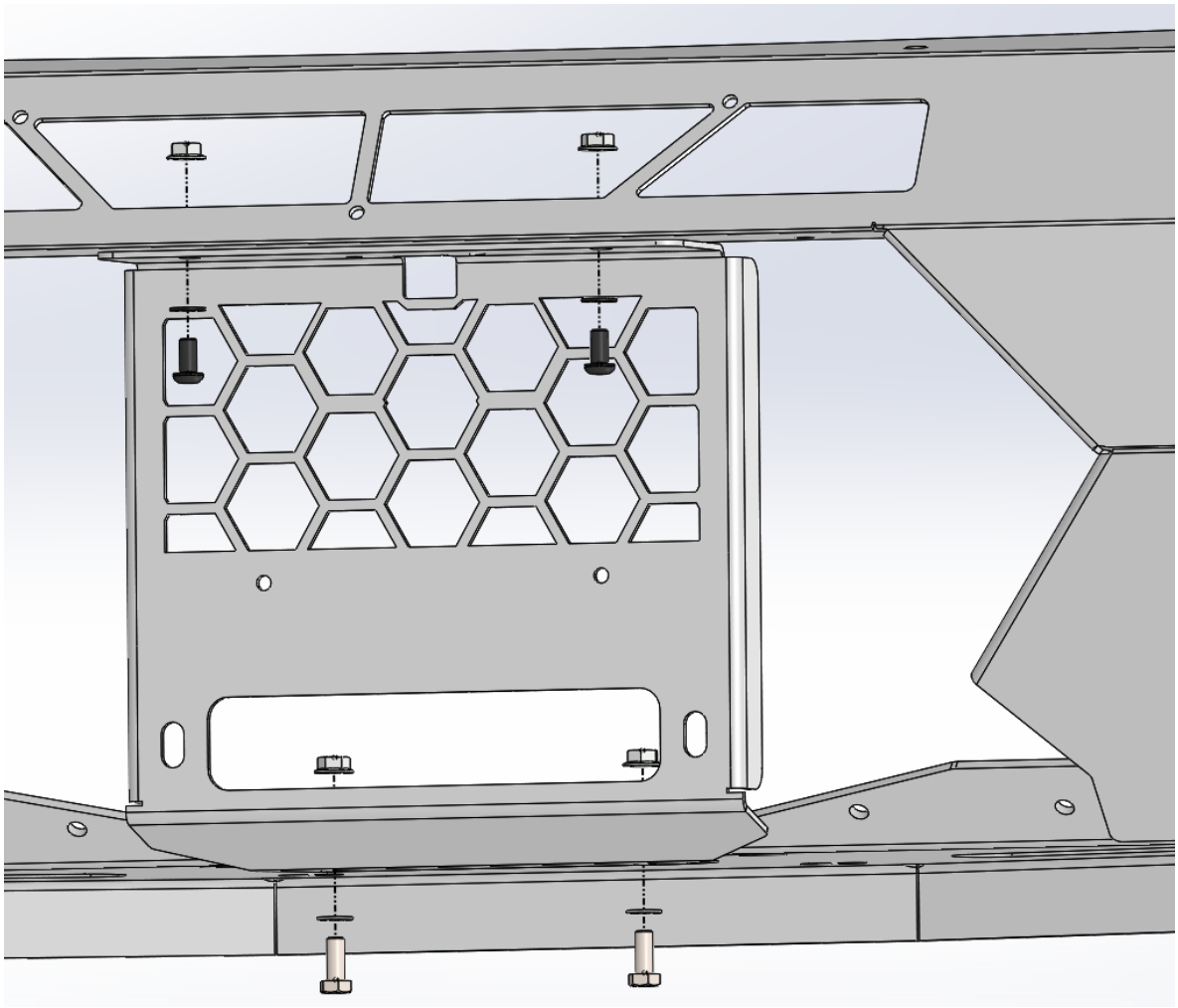
    The camera will not be as well protected in the relocated location so Offroad animal recommends leaving in default location for heavy off-road use.

79. You can optionally re-locate the front camera to the mesh panel. Secure the camera to the mesh using the slots shown and original fasteners.

80. Re- connect harness.

TOOLS REQUIRED

FASTENERS



81. If required, fit winch fairlead to Mesh Fairlead Mount (M-0007). Use M10 or 3/8” Fasteners supplied with winch. The bar is only compatible with Hawse type fairleads.

82. Fit the Mesh Fairlead Mount (M-0007) to the center of the bar, using M8x16 Button head (Top), M8x20 Hex (Bottom) M8 Flat washers and M8 Flange Nuts.

83. Tighten fasteners using 13mm socket / spanner and 5mm Allen Wrench.

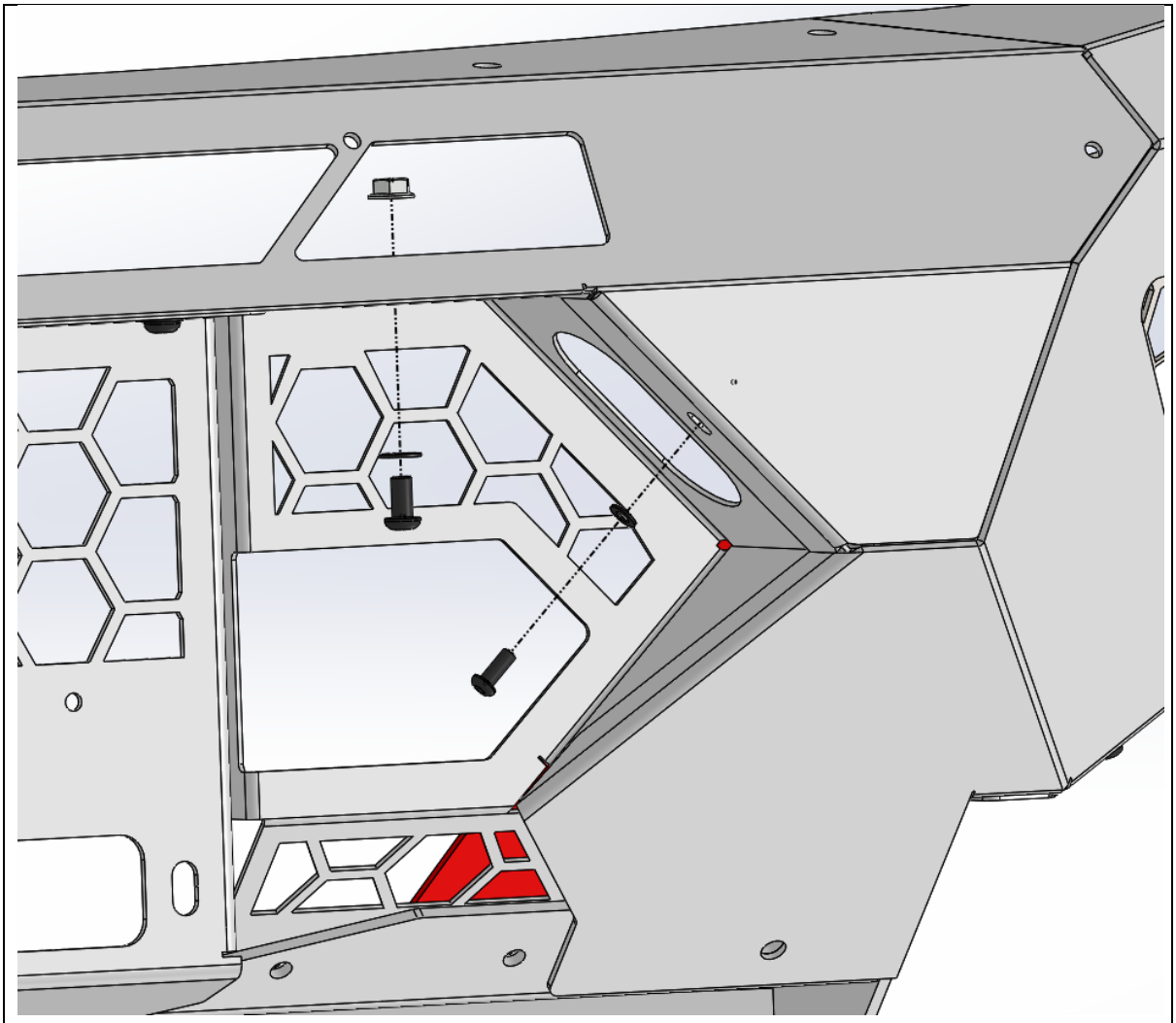
84. Fit Number plate flip kit to fairlead mount, using fasteners supplied in kit.

TOOLS REQUIRED

13mm Spanner
5mm Allen Wrench

FASTENERS

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



85. Fit Mesh Infill Panels (M-0015L/R). Use M8x16 Button head bolt and M8 flat washer into the threaded insert in bull bar for top mount and M6x16 button head, M6 flat washer and M6 Flange nut for side bolt.

86. Don't fit any bolts to bottom holes at this stage.

87. Tighten top fasteners using 5mm Allen Wrench.

88. Tighten side fasteners using 10mm socket / spanner and 4mm Allen Wrench. Reach through access hole in mesh panel to reach nut.

TOOLS REQUIRED

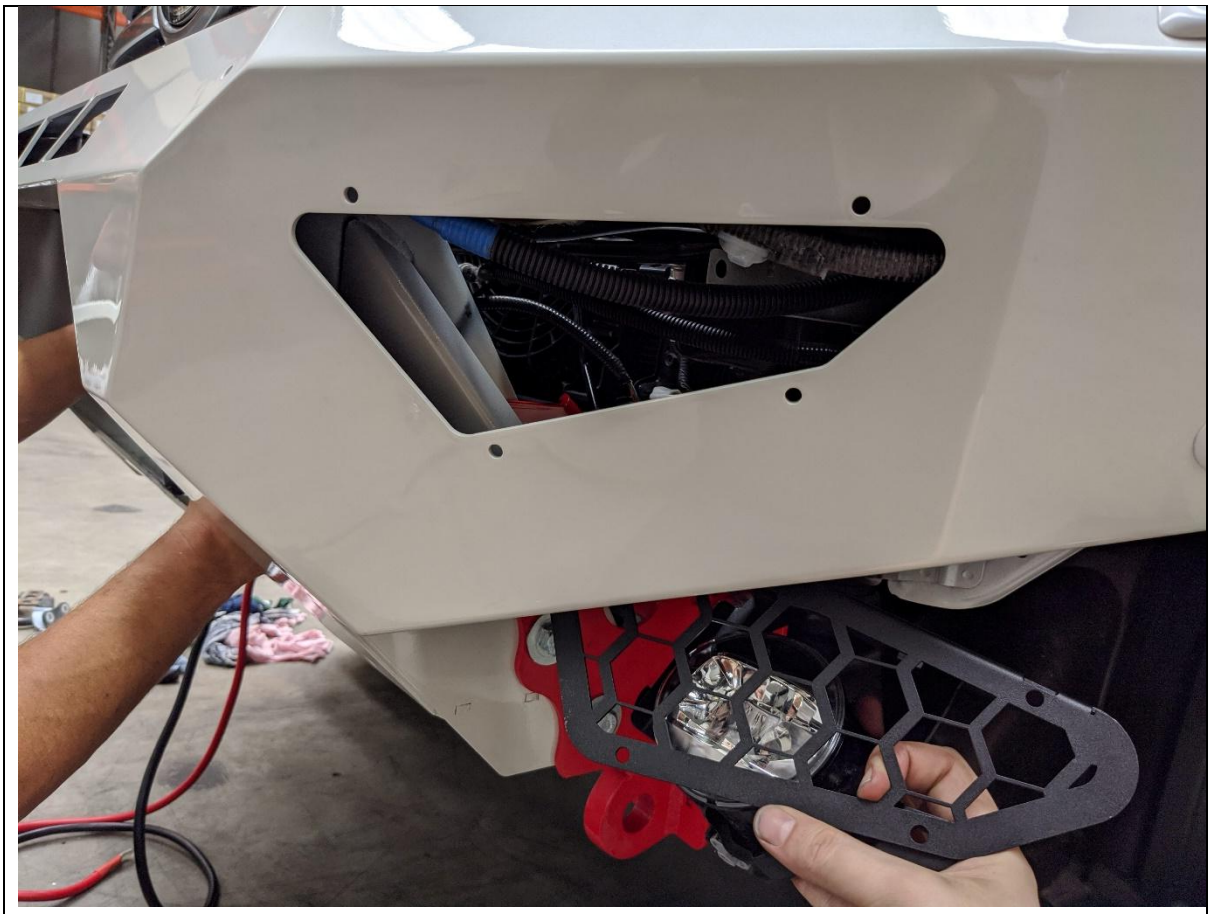
5mm Allen Wrench

10mm Spanner
4mm Allen Wrench

FASTENERS

2x M8x16 Button Head
2xM8 Flat Washer

2x M6x16 Hex Head
2xM6 Flange Nut
2xM6 Flat washer



89. Fit Light cover mesh to bar using 4x M6x16 Button head bolts, Flat washers and M6 Flange Nuts

90. Secure and tighten using 5mm Allen Key and 10mm Spanner

TOOLS REQUIRED

4mm Allen Key
10mm Spanner / Socket

FASTENERS

4x M6x16 BHCS – Black
4x M6 Flat Washer
4x M6 Flange Nut

Per side



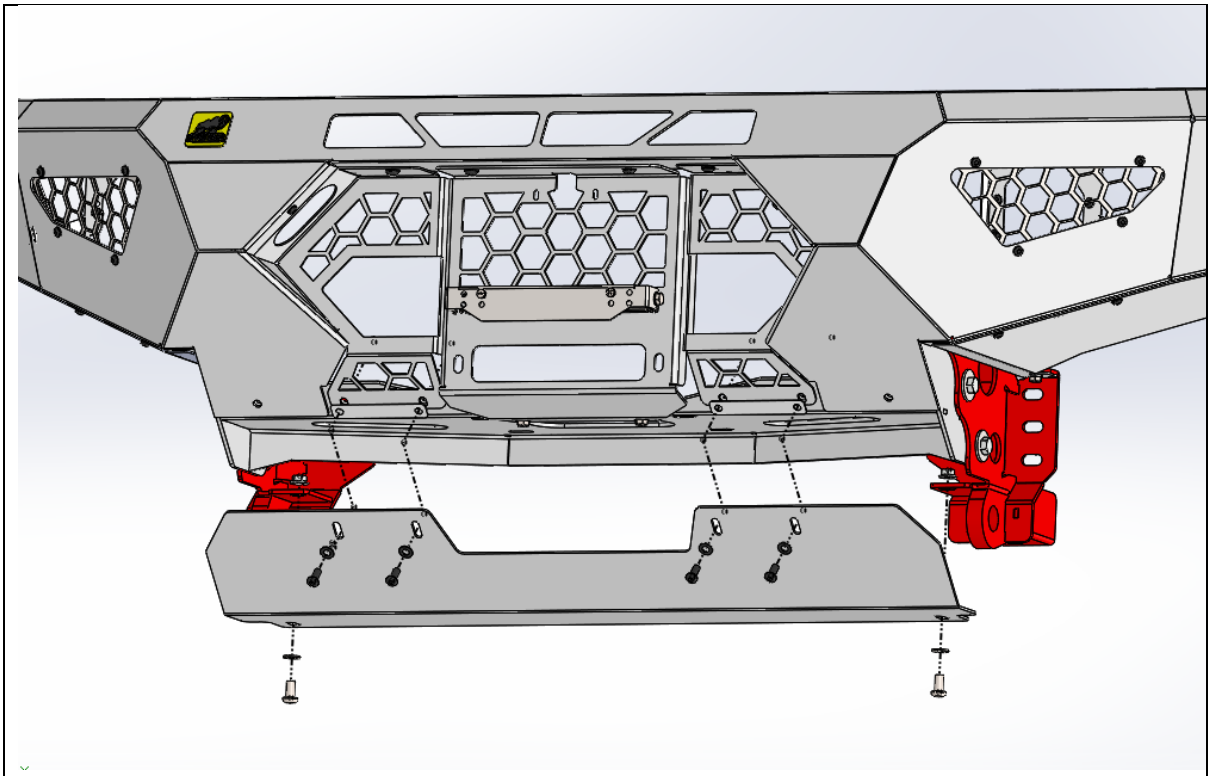
91. Re Connect Electrical Harness and headlight washers behind grille. If equipped also reconnect Radar and Camera harnesses.

92. Replace upper radiator cowl using original clips.

TOOLS REQUIRED

FASTENERS

Factory clips (re-use)



93. Fit Center Bash Plate (U-0011) using 4x M8x30 button head and flat washers to front face. Ensure these fasteners pass through the side mesh panels also into the threaded inserts in the bar.

94. Secure back of Center Bash Plate (U-0011) using M10x20 Button head, Flat washers and M10 Flange nuts.

95. Tighten Bottom fasteners using 6mm Allen wrench and 16mm spanner

96. Tighten front fasteners 5mm Allen Wrench.

TOOLS REQUIRED

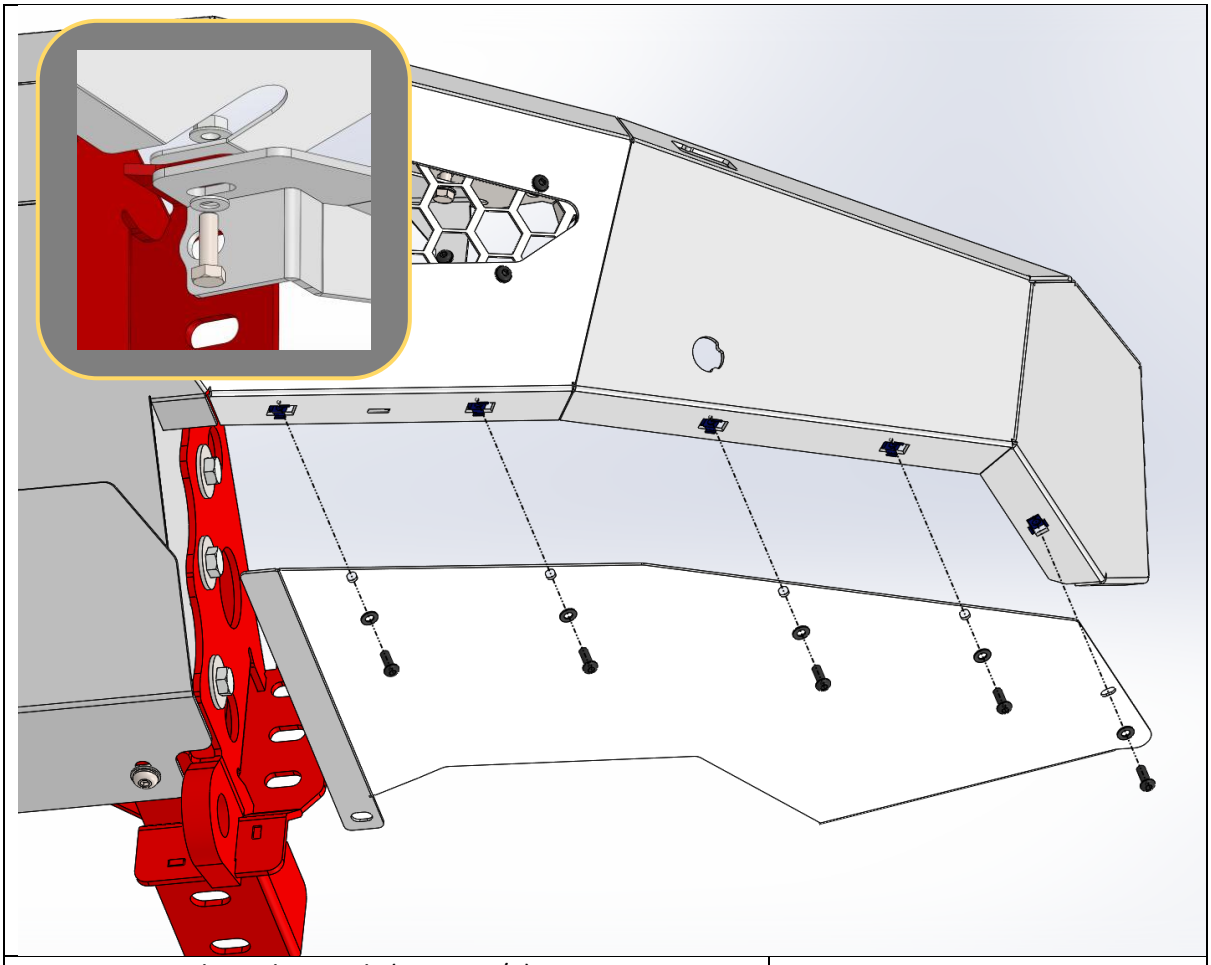
15mm Spanner
6mm Allen Wrench

5mm Allen Wrench

FASTENERS

2x M10x20 Button Head
2x M10 Flat Washer
2x M10 Flange Nut

4x M8x30 Button Head
4x M8 Flat Washer



97. Fit Side Underpanels (U-0008L/R) using, M6x16 button head and flat washer into the cage nuts placed earlier.

98. Tighten with 4mm Allen wrench

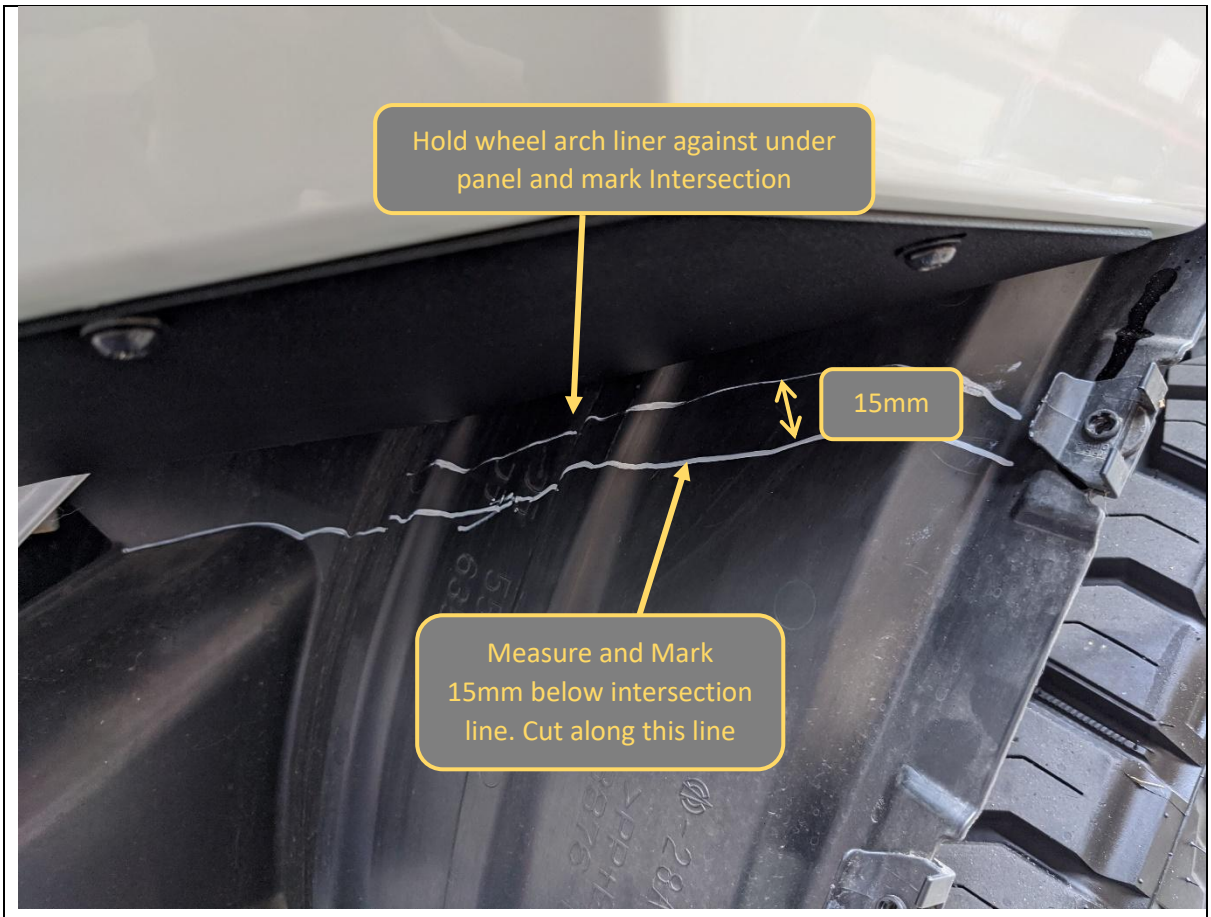
99. Secure back of side under panel to mount using M8x25 Hex Bolt, Flat washer and M8 Flange Nut.

100. Leave finger Tight at this stage

TOOLS REQUIRED

FASTENERS

10x M6x16 Button Head
10x M6 Flat Washer
2x M8x25 Hex Head
2x M8 Flange Nut
2x M8 Flat Washer



101. Using the edge of the under panel as a guide, mark the wheel arch liner, approximately 15mm beyond the intersection of the under panel.

102. Cut along line as marked using utility Knife

103. Tuck the wheel arch liner behind the flange on the under panel

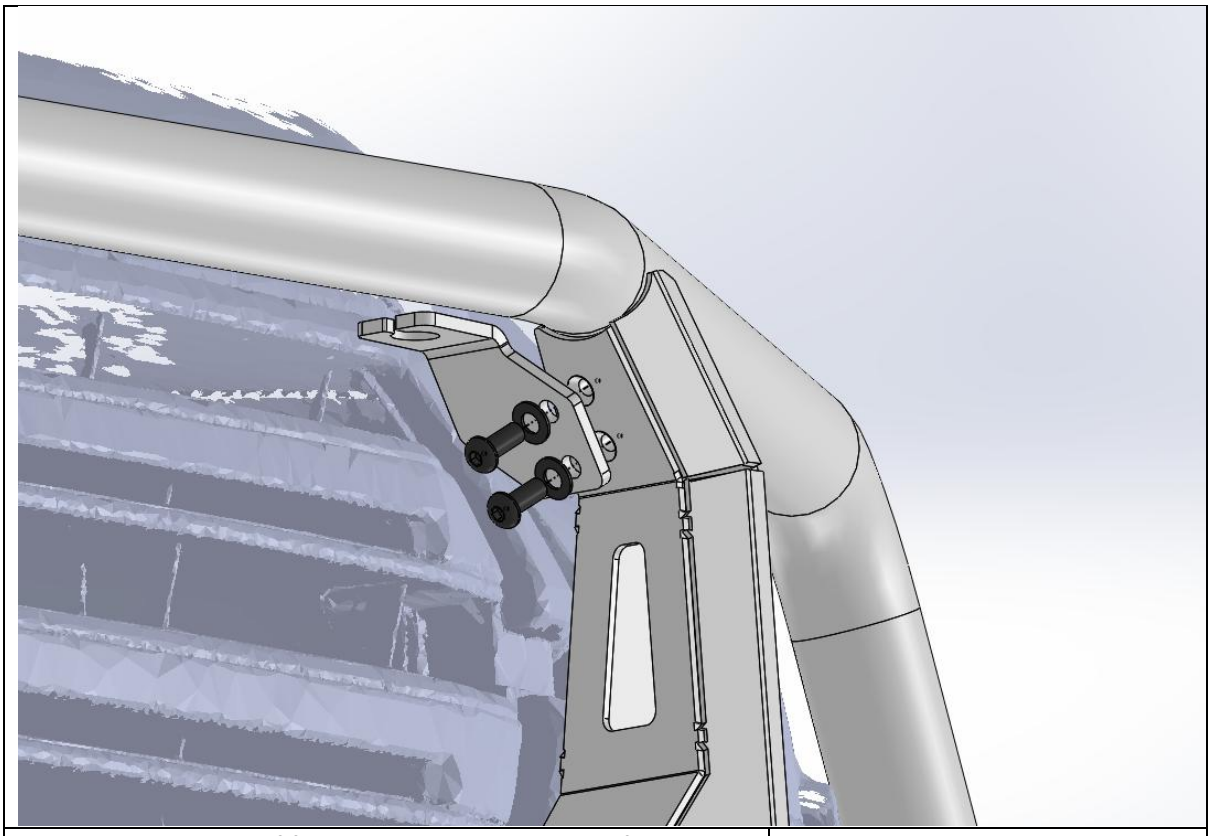
104. Tighten all under panel bolts

105. Complete for other side of vehicle.

TOOLS REQUIRED

Utility Knife
13mm Spanner
4mm Allen Wrench

FASTENERS



106. **Toro only.** If fitting antenna to Toro bar, fit the antenna brackets to the M8 Threaded inserts in the uprights. Note that brackets are handed.

107. **Toro only.** If not fitting antenna brackets, fit the M8x20 Button head screws and Flat washers to the threaded points in the uprights to protect the threads. Supply the brackets to the customer for future use

108. **Toro only.** Tighten with 5mm Allen wrench

109. **Toro only.** Fit Antenna to the bracket as per antenna manufacturer's instructions

110. **Toro only.** Retain unused brackets for future use.

TOOLS REQUIRED

5mm Allen Key

FASTENERS

2x M8x20 Button Head Screw
2x M8 Black Flat Washer



111. Check all Fasteners are tight.

112. Fit ADR compliance plate in a visible location. We recommend the underside of the bash plate.

113. Re-Fit number plate to number plate flip.

114. Head Bush and Enjoy your newly protected 200 series!

For contact details see www.offroadanimal.com