

SKU: TL-FB-22CW-ASMO



# Fitting Instructions

Toyota Landcruiser 300 2022 on

**Crawler Bullbar** 

Australias Best Off Road Products
Created... Not Cloned

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# **Why Uneek**

# **Australian Designed and Built**

All our products are designed and manufactured right here in Australia, allowing us to have better lead times and better quality control than companies manufacturing overseas. By supporting us you're supporting to grow the Australian economy and our brand.

#### **Uneek Styling**

We do not design our bars to look the same across the vehicle range. We fully develop our own product to individually suit each vehicle. We take time in designing from scratch and then test all our bars to comply with all relevant ADRs and Australian Standards.

#### Lightweight Through Smart Engineering

Having a steel bar doesn't mean you have to add more weight than is required to the front of your vehicle. Our engineering practises ensure we have the right protection, designed the right way to ensure protection is at its maximum and weights at its minimum.

#### **Proven Off Road**

We take our products out and test them right here in the heart of our country in our Australian conditions so we know our products can withstand anything you throw at them.

#### **Increased Approach Angles**

Our bars are designed to give you the best advantage while off road, with increased approach angles means you can tackle those tough and steep angles better than you could with the original setup or other alternatives.

#### Warranty

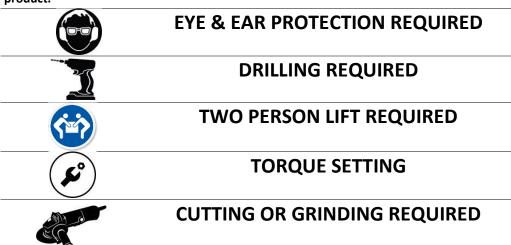
Uneek 4x4 backs itself as Australias leading steel bull bar manufacturer. This is why we provide you with the best steel bar warranty in Australia - 5 years.

# **Important Information**



#### PLEASE 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 Uneek 4x4 in regards to 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 instructions.
- The installation of this product is recommended for trained personnel.
- These instructions are correct at time of publication. Uneek 4x4 cannot be held responsible for the impact of any changes subsequently made by the vehicle manufacturer.
- During installation it is the duty of the installer to check correct operation/clearances of all components.
- Supplied tow points are designed as tow points only. Use in a recovery operation will be at operator's risk.
- Installation time: 5-6 hours.
- Vehicle specific notes: A flip up license plate kit may be required.
- Some images in the instructions are of a pre-production model and may not represent the final product.



**FASTENER TORQUE SETTINGS:** 

M6 – 9Nm (4lb ft)

M8 - 22Nm (16lb ft)

M10 - 44Nm (32lb ft)

M12 - 77Nm (57lb ft)

M12 (1.25 fine) - 89Nm (66lb ft)

BASIC TOOL KIT WITH SOCKETS, SPANNERS AND HEX KEYS, Power drill with 5mm and 9mm drill bit, rubber mallet, centre punch, hammer.

# **Components and parts**

MAIN COMPO	NENTS
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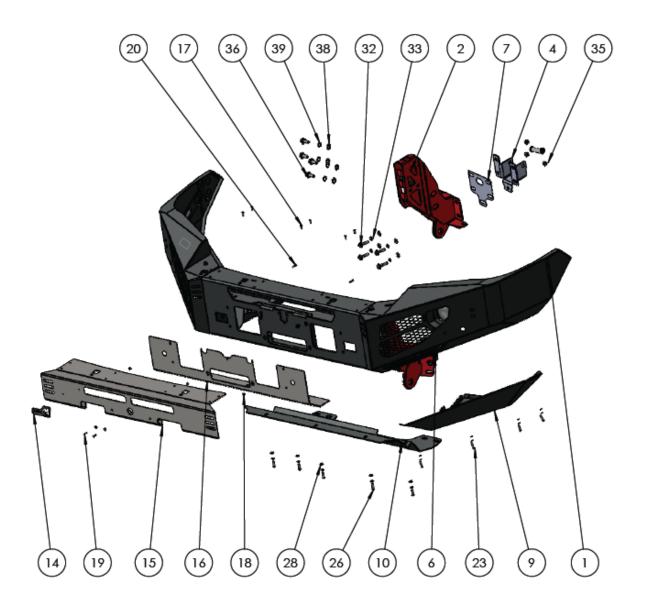
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TL-FB-CW22-ASM1	WELDED BAR ASSEMBLY	1
2	03-0906R	LC 300 MOUNT ASSEMBLY RH	1
3	03-0906L	LC 300 MOUNT ASSEMBLY LH	1
4	03-0911R	LC 300 MOUNT BRACE RH	1
5	03-0911L	LC 300 MOUNT BRACE RH	1
6	03-0916	LC 300 UNDERWING BRACKET	2
7	04-0762	LC 300 MOUNT SPACER	2
8	09-0235R	LC300 UNDER WING PANNEL RH	1
9	09-0235L	LC300 UNDERWING PANEL - LH	1
10	09-0236	LC 300 BASH PLATE	1
11	CARWAY DRL	DRL FOG LIGHT	2
12	09-0233MS	LC 300 TOP FASCIA M/S	1
13	09-0234MS	LC 300 LOWER FASCIA PANEL M/S	1
14	U LOGO PLATE BLACK	LOGO PLATE-1	1

#### OPTIONAL COMPONENTS

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
15	09-0233	LC 300 TOP FASCIA PANEL S/S	1
16	09-0234	LC 300 LOWER FASCIA PANEL S/S	1

#### **FASTNERS**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
17	M5X16 CS	M5 COUNTERSUNK SCREW	12
18	M5 FN	M5 FLANGE NUT	19
19	M5X15 PSCREW	M5 X 15 PH SCREW	14
20	M5X20 PSCREW	M5 X 20 PH SCREW	3
21	M5 WASHER	M5 washer	17
22	M6 CN 3MM	CAGE NUT M6x2.6-3.5	8
23	M6 x 25 BHCS	M6 X 25 BHCS	8
24	M6 FW	FLAT WASHER 6MM	8
25	M6 SPRING WASHER	M6 SPRING WASHER z/p	8
26	M8X25 BHCS	M8X25 BHCS Z/P	5
27	M8 SW	M8 SPRING WASHER	9
28	M8 WASHER	M8 WASHER	9
29	M8X25	BOLT M8 X 25	4
30	M8 FN	FLANGE NUT M8	4
31	M12X110X1.75 hex	Hex M12X110X1.75	2
32	M10-1.5 x 40	M10x40 HEX BOLT Z/P 8.8	8
33	M10SW	M10 SPRING WASHER	8
34	M10 HD WASHER	M10 HD WASHER Z/P	8
35	M10 FN	M10 Flange nut	8
36	M12-1.75 x 30	M12x30-8.8 HEX BOLT Z/P	8
37	M12X30X1.25	M12 X 30 X 1.25 FINE PITCH BOLT	2
38	M12 FW	M12 FLAT WASHER	12
39	M12 SW	M12 SPRING WASHER	10
40	05-0296	CHASSIS SPACER LC300	2
41	M12 SW	M12 SPRING WASHER	2
42	M12 NUT	M12 X 1.75 FLANGE NUT	2
43	05-0297	17.20 x 2.3T x 18.00 CRUSH TUBE	4



# Step 1 - Install Preparation

- Test drive vehicle to ensure all driver assists are correctly working and gauge their effectiveness.
- Park on a flat level surface. Apply parking brake and lift bonnet.
- Ensure these instructions are left with the vehicle owner and/or operator.
- Tip: use painters' tape to cover all the surfaces that you may scratch during the removal and installation of this product. Headlights, panel corners sensors/cameras are recommended.

#### Step 2

- Remove eight (7) push/pull clips from top radiator trim.
- Remove trim and retain.



#### Step 3

#### - Removing the Bumper

- The front bumper and grille are easiest to removed as one whole piece.
- Remove the top and bottom bolts from the grille

brackets.





#### Step 3a

- Disconnect the grille harness by unplugging the 3 electrical connectors on the driver's side behind the grille. (Depending on trim level you may have less plugs)
- Make sure the headlight washer water line is unplugged on the other
   side of the grille (Depending)

side of the grille. (Depending on trim level)



#### Step 3b

 Remove the two lower valences (either side of the underneath of the bumper). (not required later)



#### Step 3c

- Remove the bottom bumper clips and bolts from the lower valence. (not required later)
- Do not remove the lower plastic/fibre bash plate unless you are installing the Uneek Bash plate kit.



# Step 3d

- Remove the fender flares from each side of the vehicle. (retain to be reinstalled later)
- Remove all clips the connect the bumper to the underguard trim.
   Make sure the clip in red is also removed.



# Step 3e

- Pull firmly on the sides of the bumper to unclip from bumper mounting brackets.
- Before fully removing double check for any clips on the center grille that may need to be unclipped.
- Remove the whole bumper from vehicle. Place in a

position and area that is easy to work on for later steps.



# Step 4 - Component Removal

- Remove the remaining air damns from front of vehicle.
- The top air damns around the headlights can stay but are easier to install later and can free up extra space for activities.



• Remove intercooler air damns (retain) and lower crash bar plastic cover (not required later).

#### Step 5

#### - Crash Bar Removal

- Remove the lower aluminium crash bar. This bar has brackets both top and bottom remove them as well. (Not required later)
- Whilst you're there, remove both tie down points (as you will have rated recovery points included). Remove all bolts circled.



• Hang on to these bolts as they can be used later.





#### - Front Trim Removal

• Remove the bumper retainer brackets. Keep aside for later use.



# Step 6a

 Remove the lower grill bracket support. This is a combination of bolts and clips. It can be easier to remove this in two parts as some fasteners are tricky to get to.

(Not required later)



# Step 6b

 Your vehicle should look like this with everything removed



# Installing the bar

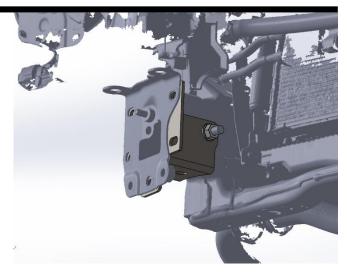
Note: When installing the bar its best to loosely install all the fasteners and only fully tighten when the bar is in the correct alignment.

• Insert the tube spacer inside the chassis from the inside out. Make sure the spacer tube is central. You may need to hold this tube from the front access hole whilst you insert the next bracket.



# Step 8 - Installing Mount Brace

 Install the chassis brace bracket 03-0911R/L (both sides) from underneath the chassis rail.
 Ensure the correct hands are used, you can double check by making sure the mounting faces



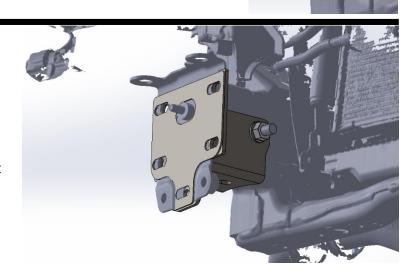
are all flush. This bracket comes under folded to allow for easier fitment and will clamp together when the bolts are finally tightened. When installing bracket it is easiest to hold the tube spacer through the front access hole as it can fall inside the chassis rail.

• Secure the M12x110 bolt with a spring washer and flat washer on the outside of the vehicle and the flange nut on the inside.

 The bottom of the bracket can also be fastened with an M12x30x1.5 (fine). Leave loose at this stage to maintain flexibility.

# Step 8a

 Place the mount spacer bracket on the mount.
 Ensure all the holes line up. The bracket is offset and can be flipped for better alignment.



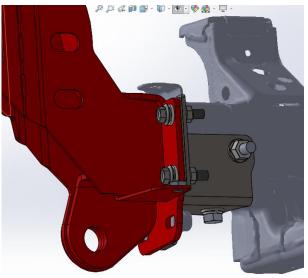
#### - Installing Mount Brackets

- Fit the mount bracket on and secure with the bolts provided.
- Its easiest to bolt in two very accessible bolts and tighten down to allow all the brackets to pull tight together. This will make it easier to install the remaining bolts. To help with the bar alignment once all bolts are



installed back off the bolts slightly to allow the mount bracket to move side to side.

- The mount bolts together with 4x M10x40 with a spring washer, flat washer and flange nut each.
- The very bottom two bolts are not used in this variant but can be fastened with the factory bolts retained in a previous step. These bolts are M12 super fine thread (for reference). To install these, the bracket will have to be loose and lifted up, to allow all the holes to line up.



- Trim the intercooler air damns and re fit to the intercoolers.
- Use the images as a guide, but its best to cut less and test fit. We are only trying to be careful to leave the outside (to the vehicle) of the air dam. But the more left the better.





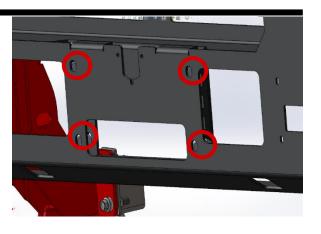
The air damn shown is the passenger side.

Viewing the computer version is recommended to see the lines clearly.

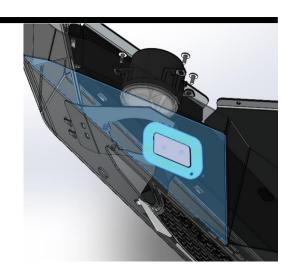


#### Step 11 - Winch Fitment

- If fitting a winch, fit it now.
- Ensure the winch spacer tubes (05-297 crush tube) are used. These are best installed before the winch to allow for full access to these locations.
- The tubes allow a clamping between the two mounting surfaces and a stronger centre section.



- If the vehicle did not come with headlight washers, the headlight washer blanking plate should be attached now.
- This part is simply glued onto the back of the bar with the raised section filling the cut-out.
- Ensure the correct hand is placed on the correct side.



#### Step 13 - Bar Fitment

- Fit the bar to the mounts. This bar should be lifted with two people or with the help of a trolley. Have the 8 M12x30 bolts on hand with the spring washers and flat washers ready to go.
- Get the bar secure with at least 2 bolts a side and adjust to a desired fitment.
- Use the gap between the bar and the headlights to measure proper fitment. The bar should sit level on either side and should be a 20 mm gap or larger. For serious offroad the bar can be dropped a little more but during our testing we found this

Ensure the bar is square with the vehicle.

to be adequate.

Adjusting the bar with a gap smaller than this will result in the bar contacting the headlights. This may cause damage to the headlight.

- Once the alignment is correct makes sure all 8 M12x30 bolts are installed and torqued to the correct spec.
- Make sure to tighten all mount fasteners fully.



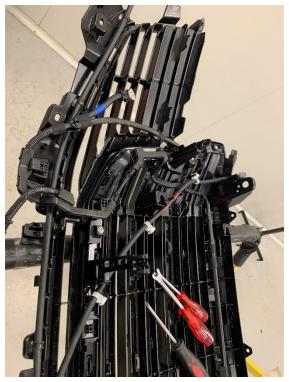


#### - Grille and Sensors

- To refit the OEM sensors (camera and parking sensors), the wiring harness on the back of the grille needs to be disassembled slightly.
- To do this first disconnect the grille from the main bumper assembly.
   You will next need to disconnect all parking sensor plugs, fog light plugs and headlight washer lines (if fitted).
   Then you can remove the grille by locating the lower trim tabs and unclipping them from the bumper. The grill should come away with the side vents attached.
- Remove the side grill vents from the main grille assembly.
- Remove the camera and the headlight washer tubing from the grille.

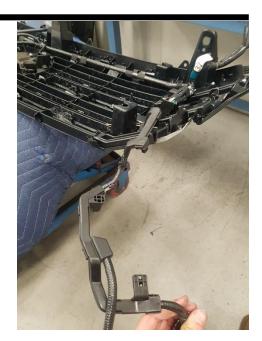








- To allow all the wiring to reach the new locations of the sensors and accessories, the grille loom needs to be assembled slightly.
- The plastic casing of the parking sensor/fog light loom needs to be removed to free up the wiring and give us a little more length. This can be pried apart using a screwdriver, being careful not to puncture any wiring.



#### Step 16

- The camera loom, (if fitted) needs to be separated and totally removed from the general loom. It's recommended to unwrap the loom carefully rather than cutting as the wiring is easy to puncture. The extra length is needed to reach the cameras new location.
- The camera wiring is one solid tube. Do not cut into this tube!
- The radar and sensor loom can be retaped with electrical tape for a neat finish.

#### Step 17 - Grille Cut

- Grille Cut
- Cut the grille as shown. Cut <u>below</u> the 3rd sliver trim cross piece. You can trim lower to start with and test fit until you are satisfied with the clearance. The grille sits slightly



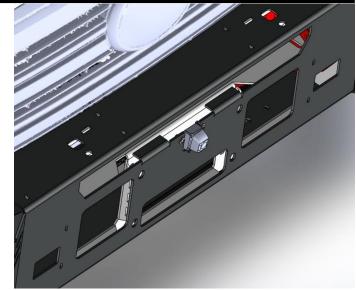
behind the rear edge of the bar so it is recommended to cut it a little lower than the bars rear edge.

Be careful not to cut any wiring during this process.



# Step 18 - Camera Installation

- Fit the camera to the centre pan as shown. The metal bracket will slot in between the front channel and the winch brace. \*
- Plug the camera cable into the camera before placing the camera down into the slot.



The cable fits snug in between the bar surfaces.

- Run the cable across the inside of the bar through the wince brace. For a more secure fit cable tie the cable to the brace cut-outs.
- To fasten the camera, use a spanner to hold the flange nut behind the camera and insert the M5x15 PH Screw and M5 washer through the front.

\*If the camera is too tight in this spot you can mount the camera bracket on the outside of the front channel **however it is unadvised**. The two flanges of the metal tab will need to be cut off with an angle grinder. The front fascia will sit tight on the camera in this configuration, but it will be protected by the plastic casing.

#### - Light Bar

• If installing a light bar, do it now. The mounting holes cut into the winch brace suit a Narva Explora 22inch. For other light bars you may have to be drill new mounting holes which is easier to do with the bar off the vehicle.

### Step 20 - Parking Sensors

- To install the parking sensors in the crawler bar we reuse the factory parking sensors and housings.
- First remove the parking sensors from their housing, labelling factory sensor location on each sensor.
   These should be placed back in the same orientation ie. Drivers' outer, Drivers' Centre etc.

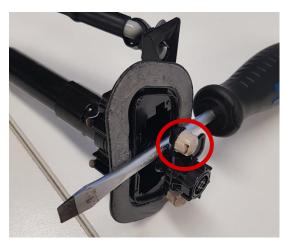


- Next use a blade to carefully pry up the old sensor housing. This shouldn't need too
  much force to separate from the bumper. You will need to remove all 4 sensors
  housings.
- Clean up the sticky surface (can leave old adhesive tape on but take care to remove large obstructions or hanging pieces.)
- Place the sensors back in their housings and apply a small amount of super glue to the adhesive.
- Fit the old sensor housings onto the bar, 2 in either wing, and 2 on the lower fascia. For the lower fascia it can be easier to do this when the fascia is installed on the bar to make sure you have enough clearance around the rectangle cut out in the centre pan.
- Use the parking sensors in the housing as a guide for how they should sit. Face the plug side towards the bar mounts on either side.
- When re fixing the sensor housing you must put a decent amount of pressure on the entire housing mating surface to ensure complete adhesion.

#### - Headlight Washers

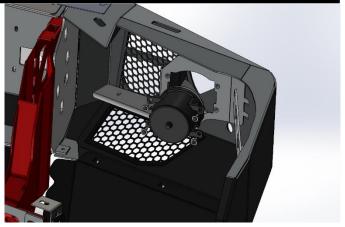
- If fitted with headlight washers remove these from the bumper as well. The unit should come away as one complete unit.
- Remove the top cover of the washer unit. If your bar is not colour coded it may be advisable to paint this panel black to match the bar.
- The headlight washer will be placed on a very different plane to its original position on the bumper. To ensure the nozzles still spray on the headlight, the nozzles must be rotated. This can be done by turning the nozzle arm (circled) with some pliers. These do pop on and off so don't be alarmed.
- Fit the headlight washers similarly to the parking sensors by applying some extra glue to the adhesive and reattaching to the bar.





# Step 22 - Fitting Fog Lights

 Before we refit the grille use the time now when you have good access to the bar to install all other accessories. Install the

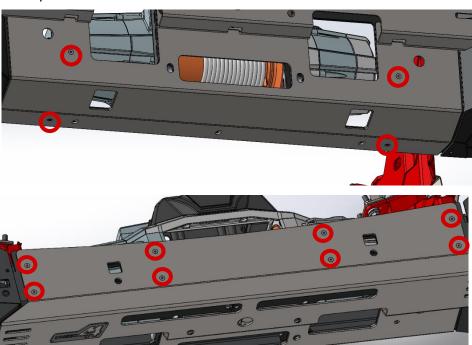


fog lights with the 4 M5x15 PH Screws and Washers into the back of the light housing, through to the nutserts.

#### - Front Fascia

- If you haven't already done so fit the front fascia panels now.
- Install the bottom fascia first fastening it with only the bottom 4 counter sunk M5 screws and Flange nuts
- Install the top fascia second over the top of the bottom and fasten with the 8 top counter sunk screws and flange nuts.
- There are additionally 3 front fastening points that attach the fascia's and centre pan together. These use PH screws. The two side points are fastened from the back, and the centre is easiest from the front back, using a ratcheting spanner.

Be careful of the camera lens that it isn't being pressed on when tightening the panel.



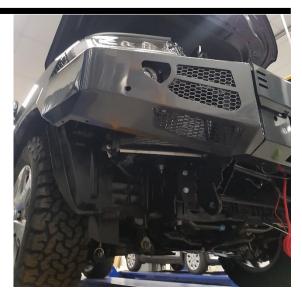
#### - Refit the Grille

- Next re fit the grille. It is necessary to do this now as we must run the wiring which is attached to the grille through the bar.
- Place the grill in position but don't fasten down the top three bolts.
- Run the parking sensor wiring down the outside of either mount bracket (outside of the vehicle).
- The centre sensors will have the wiring pass through the hole in the centre uprights and then passes through the mount bracket. This can be a bit fiddley, but it can be made easier if the large plastic cases around the plug ends are removed (not the plug itself!). These can be reinstalled after the wiring is passed through.
- The exterior sensor wiring can be run up to the outside sensors. The wiring can be secured to the wing brace with cable ties using the small holes cut.
- Run the fog light wiring and re wire the plug to suit the supplied fog light.
- Run the headlight washer piping if vehicle is equipped.

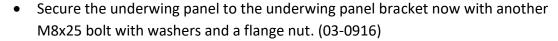
#### Step 25

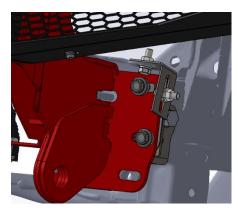
#### - Underwing Panels

- The underwing panels can be fit up now.
- Before installing you need to fit the underwing brace bracket (03-0916). This bolts to the top of the chassis member with M8x25 bolt washers and flange nut. Secure these top fasteners now.



- To prepare the underwing panels for fitment you must insert the supplied M6 Cage Nuts to the underwing panels. This can be done easily using a flat screwdriver to push the clips into place.
- The underwing panels are installed on the internal edge of the wing.
- Before installing the drivers side panel you may be required to remove the plastic casing around the intercooler water pump. The pump itself should not need to be moved and the panel should not interfere on the pump.
- Fasten the panels down with M6x25 button head bolts with flat and spring washers.





- Once the underwing panels are installed the inner guard liners can be cut and secured. To determine the cut line cut a good inch or two bellow where the bottom surface of the underwing panel meets the guard liner.
- Once cut the inner guard can be pushed into position. You want a tight fit, so it doesn't come loose. Cut off extra if you're having trouble.
- To have a more secure fit there are holes cut in the underwing panel for cable tie access if desired.



#### - Bumper Cut

• The bumper retainer brackets need to be re installed to the body of the car. To do this the plastic pieces must be cut at the bottom.

 It will depend on the fitment of the bar to where exactly you cut. However, if you draw a line straight through the lower two clip holes and cut that line you should be looking good. This bracket can be cut shorter as the bumper panel will cover it.

- As the two main clips are now cut off you will need to secure the bracket with an additional fastener. You will need to drill a hole in the bracket. It is advised to drill this hole in the lower rear most square as shown.
- Once drilled cover the bare metal with some paint or lacquer to prevent rust.
- Fasten through this hole using an M6 bolt and nut with washers either side as provided. You can reach this point through the gap between the underwing panel and the inner guard liner.
- Trim the bumper corners to suit the gap that you desire. Secure to the bumper retainer bracket using the side clips and use the double-sided tape as required.
- To finish off trim place some pinch weld over the external edge of the panel. For a better finish, trim the inside edge of the pinch weld ends more to create a flush finish.

Send us feedback if you would like to see a Sheetmetal panel to cover this area instead. Email info@uneek4x4.com.au .



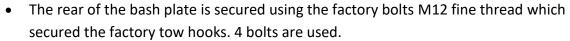
#### - Fender Flares

- Reinstall the fender flares by clipping the lower section into the guard. Determine
  the best cut line with how the bar sits in comparison to the flare.
- Trim to suit.
- Place some pinch weld over the cut edges of the flares for a cleaner look.

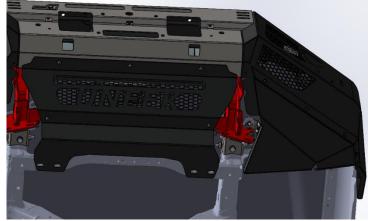
#### Step 29 - Bash Plate

- Fit the bash plate to the vehicle using 3 M8x25 button head bolts, flat washer and spring washer.
- The bash plate fits to the outside of the bar over the





• In the middle of the plate there are two additional mounting points which secure the bash plate to the mounts. These are secured using M8x25 Button head with washers, and fasten into a root nut.



# **Finished Product**

Get out there and enjoy the trails!



Revised: 28/03/2022

# Australia's Best Off Road Products Created... Not Cloned

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