TCC 200 SERIES FACELIFT BULLBAR

SUITS TOYOTA LANDCRUISER 200 SERIES 2016 – 2021



IMPORTANT – PLEASE READ FIRST

- This product requires a moderate to high level of fitting ability.
- Inexperienced installers may find this task difficult.
- To ensure your Bull bar performs and last as intended, please follow these care and maintenance tips
- Ensure all components are properly adjusted and aligned during installation.
- Torque all bolts and recheck after the first 1,000 km, then every 10,000 km.
- Apply a protective lubricant like Lanolin to all exposed joints and moving parts.
- Avoid exposure to salt water or salty environments.
- Do not clean with harsh chemicals.
- Do not overload the product or use it outside its intended purpose.
- Torque specs for this product = M12 – 77nm , M10 – 44nm

If you believe a part is missing or you're unsure about a step, please contact our team for assistance.

TOOLS REQUIRED:

- General metric socket set
- General metric spanner set
- Sharpie / marker
- Masking tape
- 12 volt wiring consumables and equipment (if unsure, seek the help of a professional)
- Automotive grade double sided tape
- Zip ties

PARTS LIST:

- 200 SERIES BULLBAR
- RHS BRACING MOUNT
- LHS 'SHORT' BRACING MOUNT
- TOP MOUNT PINCHWELD BULB SEAL
- 2X HEAD LIGHT WASHERS
- RHS & LHS 2MM STEEL UNDER TRAYS
- 2X ROADVISION ACCESSORY LIGHTS
- 2X ROADVISION INDICATORS
- HARDWARE KIT

HARDWARE ITEMS:

- CLEVIS NUT X 2 CLEVIS BOLT X 2 8MM NUT PLATE WITH M12X1.25 FLANGE NUT WELDED IN
- M12X1.25 ALL THREAD CUT TO 250MM
- M10X1.25 FLANGE NUT X 8 M10 GOLD WASHER X 8 M12X1.25 FLANGE NUT X 2 M12 GOLD WASHER X 2
- M12 WASHER X 2
- M5 BUTTON HEAD X 12
- M5 NYLOC NUT X 12
- M5 WASHER X 24
- M12X1.25X50 X 11
- M12X1.25 NYLOC NUT X 4
- M12X1.25 NUT ON STICK X 1
- M10X1.5X35 X 4
- M10 GOLD WASHER X 4
- M10 NUT ON STICK X 4

STEP 1: REMOVE FACTORY BUMPER.

A. Remove the front number plate and number plate bracket.

B. In each front wheel arch, remove the 3 screws that hold the bumper to the inner guard. These are located along the edge of the guard liner. Remove all screws on both sides.

C. Remove the lower plastic trims under the bumper on both sides. These sit between the bumper and the underbody splash area. These trims are not reused. There is a small plastic nut on each side that needs to be opened with a flat screwdriver before the trim will release.

D. Remove all screws along the bottom of the bumper. These screws secure the bumper to the lower splash area.

E. Remove the plastic cover above the grille. Press down on the centre of each plastic clip to release it, then remove the cover.

F. Remove the screws across the top of the grille. Once the screws are removed, gently lift the top corners of the grille to release the clips. The grille will come off together with the bumper.

G. Remove the small splash guards near the factory tow hooks on both sides. These are also not reused.

H. Disconnect all wiring attached to the bumper. This may include fog light wiring, parking sensor wiring and headlight washer hoses.
If the vehicle has headlight washers, clamp the washer hose with a small pair of vice grips or a hose clamp to stop fluid running out when disconnected.

I. Check that all wiring looms, plugs and washer lines are fully disconnected and clear. Make sure nothing is still attached to the bumper.

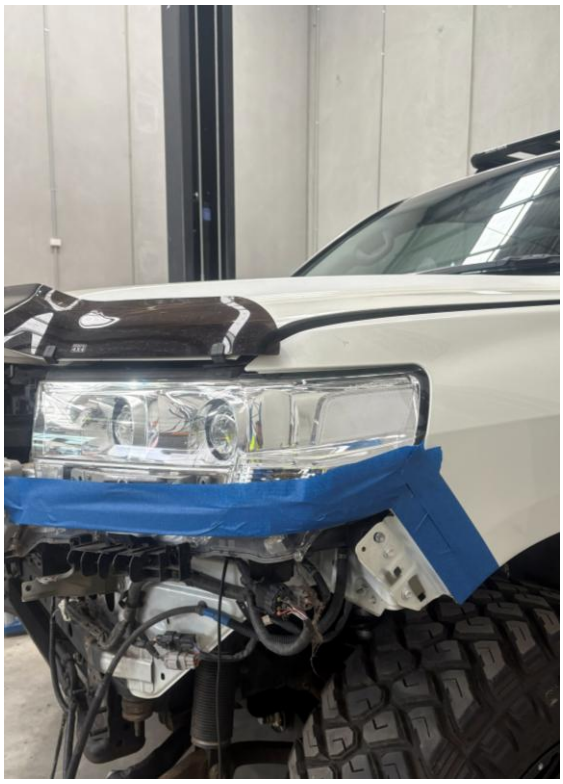
J. With a second person, grab the bumper at each side and pull outwards to release the side clips. Once the sides have popped free, lift the bumper and grille assembly away from the vehicle.
Place the bumper face-down on a soft surface to avoid scratching.

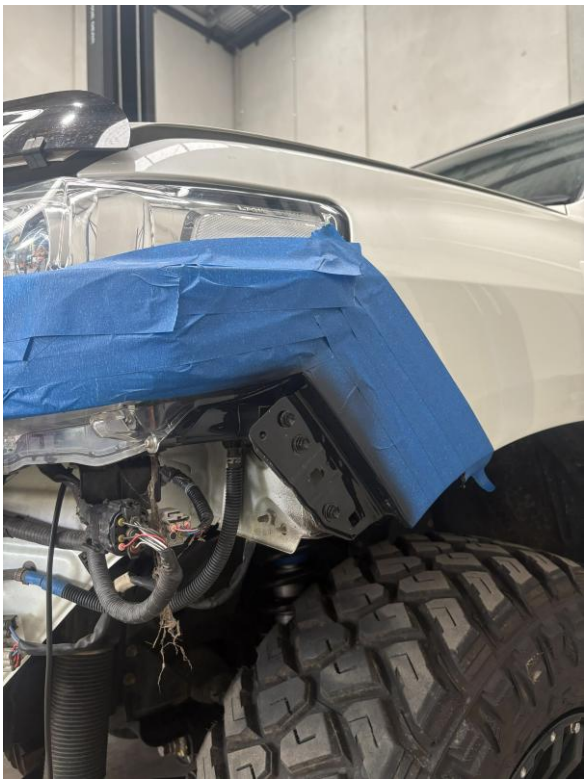
K. Remove and keep all components from inside the bumper that will be reused. This includes parking sensors and their wiring looms.
Label the left and right sides to make reassembly easier.

STEP 2: REMOVE GRILL FROM BUMPER AND REFIT GRILL BACK ON VEHICLE.

STEP 3: REMOVE FACTORY TOW POINTS UNDER CHASSIS.

STEP 4: (OPTIONAL) : PREP AND PAINT UNDER THE FACTORY BUMPER ON THE GUARDS AND UNDER HEADLIGHT.





STEP 5: INSTALL WINCH.

If you are wanting to run a winch in your bull bar, it needs to be bolted into the bull bar at this stage prior to the bull bar going onto the vehicle.

STEP 6: INSTALL SENSORS

At this stage we need to take all the sensors and sensor housings we removed earlier and install them into the bull bar
install the housing through the front of the bar , some models have different style/size sensors , if this is the case , file or die grind the hole to suit the sensor housing making sure the sensor is in the correct position
next we can install the sensor its self into the housing , by pushing it in through the back of the housing making sure the sensor clips in correctly

some sensors may require a small amount of Sikaflex to hold the housing in from the back side

Ensure each sensor is going back in its original location (left and right)

If indicators or accessory lights are not mounted into the bull bar, please mount them into the bull bar at this stage as you will lose access once the bull bar is on the vehicle.

STEP 7: INSTALL COMPONENTS

If indicators and accessory lights are not preinstalled , install these now
Install washer jet assembly into the 2 8mm holes it the wings facing the headlights , these will need to be adjusted once the bar is on the car
to adjust the washer jet get a pin or small flat blade screw driver and aim the jet nozzle towards the headlight





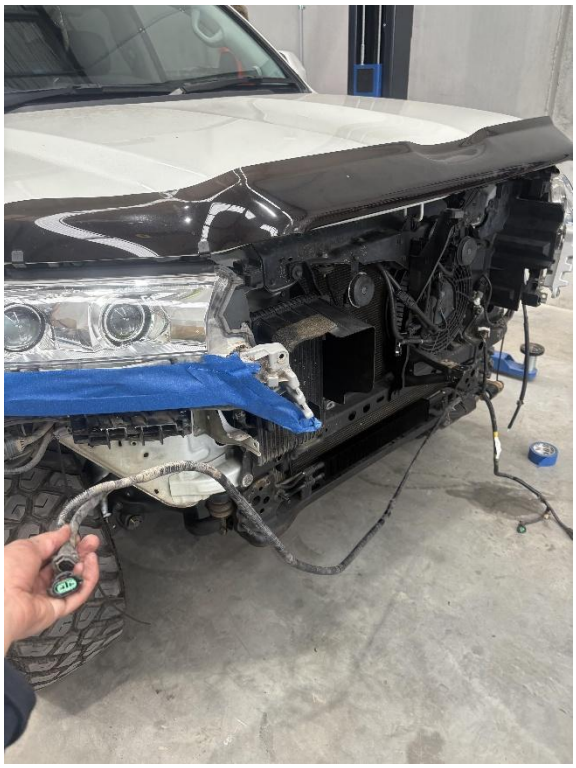
STEP 8: WIRE LIGHTS IN BULL BAR.

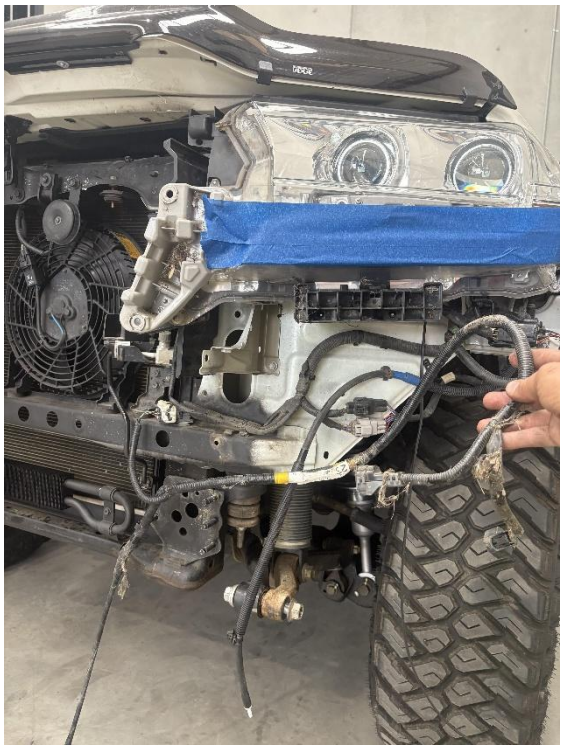
Prepare the wiring on the vehicle to power the lights in the bull bar. The accessory lights in the bull bar should be wired as driving lights.

If you are unsure of how to wire 12 volt, please seek the help of a professional.

STEP 9: PREPARE THE CAR FOR THE BAR

plug the factory sensor harness in and connect the washer jet hose and run along the body up to the headlight area on the left and right side of the vehicle , make sure they aren't on any sharp edges or pinch points and cable tie appropriately , remove the factory washer jet fitting from each end of the hose as this will join straight onto our barb fitting





Trim the lower half off the cooler shroud to clear the internal brace of the bull bar



STEP 10: INSTALL CLEVIS NUT AND BOLT

install the clevis nut from the inside of the chassis rail though the rectangle hole sliding it in horizontally and then rotate vertically to lock in position , repeat on the opposing side

insert the clevis bolt through the large hole in the front of the chassis with 2 nut locked together to tighten into the clevis nut , holding the clevis nut to help locate the clevis bolt tighten , once in and tight remove the 2 nuts and repeat on the opposing side leaving an additional stud on either side











STEP 11: INSTALLING THE BAR

At this stage it is a good idea to protect any painted surfaces with masking tape in case you contact the body whilst installing.

Lift the bull bar up to the body and align it with the chassis mounts. The clevis bolt may need assistance finding the hole

Use the M10 flange nuts with large washers to hold the bull bar in place



Align the bar with the body from left to right ensure the gap is the same

If you find the bull bar is sitting closer to the guard on one side vs the other, add shims to the chassis mount on the same side that is too close to balance the gap left and right.

If looking from the side view and you find that the angle of the bull bar does not perfectly match the angle of the guard, shim the chassis mount either top only or bottom only to adjust the fitment to guard accordingly.

The gap to the body is intentional as the body will have significant movement on corrugations / large bumps

Using the remaining m10 and m12 nuts and washers install and tighten , double check the fitment to the body , if you need to re adjust do so now

Torque all nuts to the specs below:
M12 – 77nm , M10 – 44nm



STEP 12: BOLT 'BRACING' MOUNTS TO CHASSIS AND BULL BAR.

Now that the bull bar is bolted in place, the bracing plates can be installed.
Remove the sway bar mounts and lower the sway bar , if your car has kdss you must loosen the screw on the kdss valve towards the rear of the car before removing the sway bar

Install the longer brace on the RHS of the chassis with the 2 m12 bolts into the captive nuts on the under side of the chassis
M12 nut and bolts into the bullbar
Using a M12 nut on stick behind the clevis hook hook it under to the hole next to the clevis nut , pre bending the shape next to the hole to get it in the correct spot
Using 2 m10 nuts on sticks pre bend and feed them through a hole in the chassis to

reach the correct location and install the m10 bolts
Nuts on sticks can be very fiddly and time consuming

install the short brace on the LHS of the chassis with the 2 m12 bolts into the captive nuts on the under side of the chassis , the 2 m12 nuts and bolts into the bullbar and the 2 m10 nuts on sticks

reinstall the sway bar , the RHS will sit on top of the brace



Plug in pre done wiring and washer jet lines , cable tie everything neatly up and out of the way making sure the wires and not tight between the car and bar

double check the function of all lights and washers before the under trays incase changes need to be made.

STEP 13: INSTALL UNDER TRAYS.

At this stage we have the bull bar fully bolted up to the chassis. Now we need to install the under trays.

The under trays bolt to the bulbar from the inside and are mounted with 5x M5x15mm button head allen key bolts and nuts / washers

To mount the undertrays, they need to be slid in behind the bull bars wing and held in place so that the bolt holes align.

Please note that the 2mm steel undertrays may not perfectly match the exact fold angles of the bull bar itself due to being produced separately to the bull bar, however the under tray will pull in and match the bull bar perfectly as the bolts are tightened.

Once the holes are aligned, the under trays need to be bolted on (bolt head on outside of the bar) with the m5 bolts. Ensure a washer is used on the bolt head side and nut side. It can be easiest to first bolt the end closest to the chassis and work your way out. It is recommended to leave the bolts loose until you have all nuts threaded on, at that stage you can work your way through tightening them all.

Once the under trays are bolted up, we need to trim the guard liner as it will be hanging down.

To trim the guard liner, hold it up against the under tray and from the front side run a marker down the guard liner to mark a cut line. Naturally this cut line will end up below the under tray, but that is good as it will create a small amount of tension on the guard liner once it is tucked into the under tray and prevent any movement or rattles.

Once the guard liner is marked, you can pull it back towards the wheel and use some heavy-duty scissors to trim it.

Once it is trimmed, it can be tucked into the guard liner

STEP 14: MOUNT NUMBER PLATE.

Now that the bull bar is mounted, we can mount the number plate on the front face of the bull bar.

In the centre of the front face at the top there are 2x 6mm holes. Use these holes along with m5 bolts, washers and nuts to mount the number plate to the bull bar.

Install complete.