



150 Series Rear Bar installation

FITTING INSTRUCTIONS:

150 Series Rear Bar

INSTALL TIME:

Approximately 5-12 hours. (Depending on reverse sensor wiring and rear camera relocation.)

EQUIPMENT REQUIRED:

- Step drill bit - up to 16mm + Drill.
- Floor Jack (to help lift your tow bar if needed)
- Black etch primer paint for chassis.
- 8-10-12-14-16-18-21-22mm spanners and sockets
- Large adjustable shifter
- Allen key set
- Hammer
- Angle grinder or oscilating multi-tool for cutting bumper (multitool for cleaner cut)
- Masking Tape
- Tape measure
- Bearing grease
- Loctite (Hi strength preferred)



STEP 1: FACTORY REAR BAR REMOVAL

Remove existing rear bar/factory setup. This is a relatively straight forward job, just follow the plastic clips and 10mm bolts. The plastic tred plate unclips to reveal more 10mm bolts. Unplug sensors and you're done.

STEP 2: LOOSEN TOW BAR.

Observe the mounts on our bar and where the tow bar mounts, remove the interfering m12 bolts and leave the others in place



STEP 4: CHASSIS CLAMPS

Install the chassis clamps in the wheel well area using the m10 shank bolts provided.



STEP 5: PRE FIT

Before installing the bar pre fit (in this order) gas struts balls your br200 lights (reverse lights if optioned) Latch hooks.



STEP 6: SENSOR INSTALL

If applicable install your reverse sensors in the following locations. You will need to remove them from the factory bumper. They are double sided taped on, you can use a "goo remover" to assist the removal as it can be quite difficult. You can reinstall using fresh VHB double sided tape or sika flex, ensure the area is lightly sanded if using sika and wax and grease removed is used. use masking tape to hold them in place while the sikaflex is drying.



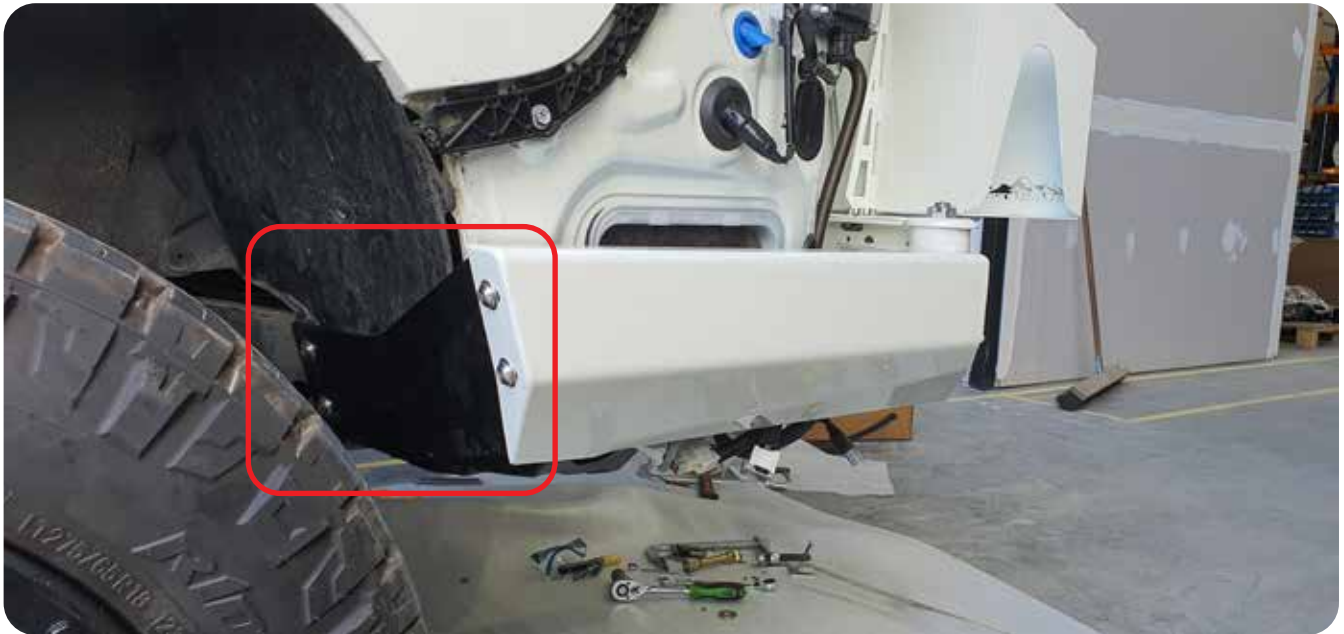
STEP 6: REAR BAR INSTALL

Check your tow bar bolts have been removed and mount the rear bar using the grade 10.9 m12x60 bolts supplied. Ensure loctite is used on every bolt. If you have the toyota towbar you may need to clearance the bar to fit around the neck of the tow bar (first batch only) LEAVE ALL BOLTS LOOSE.



STEP 7: INSTALL THE REAR BAR

Install the wing to chassis plate to the chassis clamp previously installed. You may need to slide the bar forward or backwards to ensure a good fit. The plate can be installed on the inside or outside of the wing end. **TIGHTEN ALL BOLTS!**



STEP 8: BUMPER CUT

READ ALL BEFORE BEGINNING:

Measure the distances marked by the yellow arrows and transfer them to your factory rear bumper. Use masking tape along the plastic bumper and draw a line linking the bottom of all the measurements. This will be your cut line if you DON'T USE PINCH WELD, if you DO USE PINCH WELD remove 20mm from your measurement, this will allow space for the pinch weld to meet the bar.. We recommend using a oscillating multitool for this job as it will give the cleanest cut. The area where the bumper bar meets the boot door is the most difficult area. We recommend test fitting before cutting this area to determine how you would like the factory bar to meet your new rear bar. See the next page for images of how we integrated this area





STEP 10: LATCH PRE ASSEMBLY

Assemble the Latches as shown in the pictures below. Do not install the eyelet bolt yet as it obstructs access to bolting the latch base on. Take special note of the washers being used to space the pins out, these washers are on your eyelet bolts. Please use a grease between all the surfaces to ensure long term smooth operation. Once fully assembled bolt them to the latch drop downs and adjust to suit.



STEP 11: LOWER BEARING INSTALL

Grease the stubs, inside of the sleeves and pack the bearings. Fit the large bearing in the bottom then fit the seal using a block of wood to evenly tap it down, use a series of soft blows making sure you keep bearing level with the sleeve. If it tilts over reset its position and continue. Once it begins to seat you may hit it harder into place until it is flush with the bottom of the sleeve.



STEP 12: CARRIER ARM ASSEMBLY

Assemble your carrier arms with your chosen accessories. Install your latch drop downs with the supplied m14x 30 and latches with the stainless button head m8's as shown in the picture below. Install your gas strut balls and gas struts. Install the m10x35 with 2x nuts into the hole on the carrier arm that hits the bump stop. **DO NOT LET YOUR CARRIER ARM FREELY SWING OPEN AND STRIKE THE BUMP STOP.** You should always guide your carrier arm out for the safety of others and to ensure a long life span of the bump stop.



STEP 13: CARRIER ARM INSTALL

Gather the remaining parts of your bearing kit (castle nut, small bearing, washer, split pin and tin cap). Ensuring the small bearings are pre greased, install the arm onto the stub. Place the washer and castle nut on and tighten until tight, then swing the arm open and close until moving freely again (this is done to ensure the bearing seats properly on the stub, skipping this step can lead to play in your carrier arm). Tighten again and check movement, repeat the previous step if arms still move too freely. Once they feel snug you will need to either tighten or back the nut off slightly to align the split pinhole as seen below. Take note of how much thread is showing below the split pin.



STEP 14: BEARING CAP

Install the tin cap, we recommend finding something that will go around it and just contact the flange marked below.



STEP 15: LIGHT WIRING

If you are not confident in your ability to wire the lights into the car we recommend using a local auto electrician to install your rear tail lights. They can be wired into your trailer plug or into the back of your tail lights.

STEP 16: BOLT CHECK

Bolt check! Double check every bolt on the bar. We also recommend checking again after 100km of driving.

STEP 17:

ENJOY, don't forget to send us photos and feel free to call through for any assistance.

