



## 300 Series Rear Bar installation

### FITTING INSTRUCTIONS:

300 Series Rear Bar

### INSTALL TIME:

Approximately 5-8 hours.

### EQUIPMENT REQUIRED:

- Step drill bit - up to 16mm + Drill.
- Torx bit set
- Black etch primer paint for chassis.
- 8-10-12-14-16-18-21-22mm spanners and sockets
- Large adjustable shifter
- Allen key set
- Plastic trim removal tools
- Hammer
- Angle grinder or oscilating multi-tool for cutting bumper (multitool for cleaner cut)
- Masking Tape
- Tape measure
- Bearing grease
- Loctite

### STEP 1: FACTORY REAR BAR REMOVAL

Remove existing rear bar/factory setup. This will require a number of trim removal tools and torx bits. Place safely aside.



### STEP 2: DRILLING

Unbolt circled bolt on the Drivers side of the chassis then drill holes pointed by the arrows to 12mm on both ends of the chassis. Repeat on the passenger side



### STEP 3: DRILLING

Drill holes into the chassis large enough to fit your 16mm spanner into the chassis. You may like to shave down the size of your 16mm spanner if you'd like a smaller opening. Wipe area with cleaning agent and immediate paint with black etch primer to prevent rust. Ensure you completely cover all bare metal.



### STEP 4: PRE FIT

Before installing the bar pre fit your lights (reverse lights if optional) Latch hooks, Strut balls for gas struts





### STEP 5: BAR INSTALL

READ ALL BEFORE BEGINNING! Using 2-3 people mount the rear bar, to prepare ensure you have:

- 6x m10 bolts
- 6x m10 nuts on sticks
- The provided aluminium shims that match the mounting bar holes.

Put loctite on all bolts then using two people to hold the bar in place; slide the bolts through the holes and thread them into the nuts on sticks. Use even numbers of shims between the bar and chassis to ensure even left and right alignment. DO NOT TIGHTEN FULLY



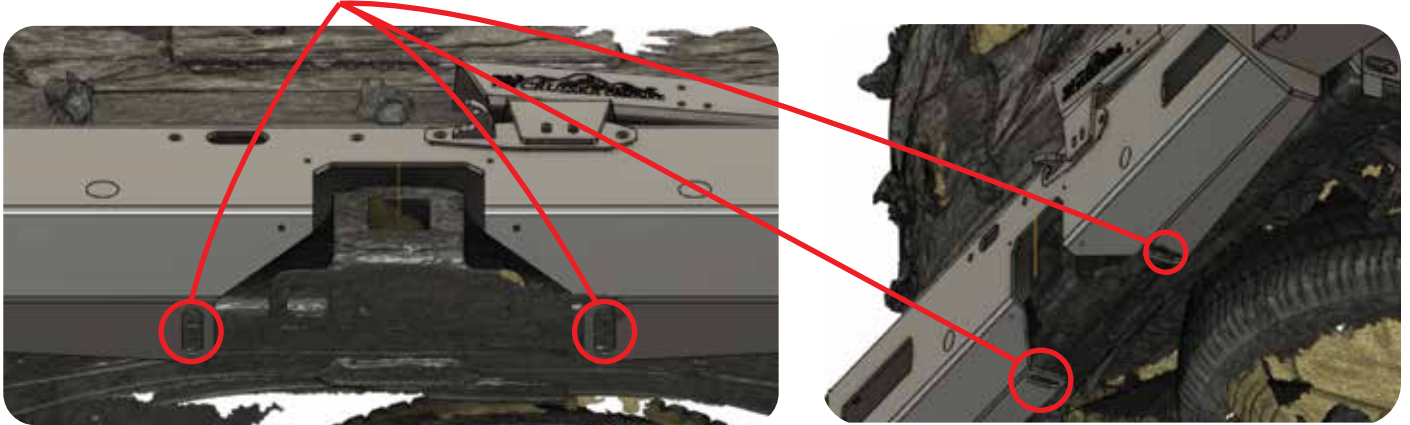
### STEP 6: WING TO CHASSIS PLATE

Mount the wing to chassis plates loosely, loctite all bolts. You will need to unbolt the bracket below to allow the chassis clamp to fit through.



### STEP 7: FINAL BOLTS AND TIGHTEN

Locate the two holes under the bar that go up into the chassis. You may use Rivnuts if you have access to the tools to use a m10 rivnut. Otherwise you will need to bend the nut on stick accurately to locate it on the otherside of the hole, once in place loctite bolts and proceed to do up ALL BOLTS ON THE BAR base that were previously left loose. Take care to align everything correctly.



### STEP 8: SENSORS

Remove all the factory sensors from the bumper bar including the flat double sided taped on part, install them in our rear bar, you may need to extend the loom if you are finding it is too tight to reach to all corners. You can cut and solder in an extension. Use high strength sika to bond the flat parts of the sensor mounting plate to the bar, DO NOT LEAVE THE SENSOR IN THE HOUSING WHILE USING SIKA.



### STEP 9: 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 10mm from your measurement, this will allow space for the pinch weld to meet the bar. We recommend using an 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

Assembly your carrier arms with your chosen accessories. Install your latch drop downs and latches as shown in the picture below. Install your gas strut balls.



### 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 call if you face any issues.

