# ARB FITTING INSTRUCTIONS

Part Number: **4423010/4423020/4423030**

Product(s) Description:
**4423010 – SUMMIT STEP SEC TACOMA | 16ON REQ 4423020/030**
**4423020 – SUMMIT F/RAIL TACOMA| 16ON SUITS 4423010**
**4412030 – SUMMIT RETURN TACOMA | 16ON SUITS 4423010**

Suited to vehicles:
**2016 TOYOTA TACOMA -**
- **ACCESS CAB W/ 6 FT BED**
- **DOUBLE CAB W/ 5 FT BED**

# WARNING

REGARDING VEHICLES EQUIPPED WITH SIDE AIR CURTAINS & SIDE AIRBAGS;

When installed in accordance with these instructions, the Side Step and Side Rail does not affect operation of the Side Air Curtains and Side Airbags.

ALSO, NOTE THE FOLLOWING:

- This product must be installed exactly as per these instructions using only the hardware supplied.
- In the event of damage to any Side Step and Side Rail component, contact your nearest authorized ARB supplier. Repairs or modifications to the impact absorption system must not be attempted.
- Do not use this product for any vehicle make or model, other than those specified by ARB.
- This product or its fixing must not be modified in any way.
- The installation of this product may require the use of specialized tools and/or techniques
- It is recommended that this product is only installed by trained personnel
- These instructions are correct as at the publication date. ARB Corporation Ltd. 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
- Work safely at all times
- Unless otherwise instructed, tighten fasteners to specified torque


# ARB 4x4 ACCESSORIES

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# GENERAL CARE AND MAINTENANCE

By choosing an ARB Side Step and Side Rail, you have bought a product that is one of the most sought after 4WD products in the world. Your step and rail is a properly engineered, reliable, quality accessory that represents excellent value. To keep your step and rail in original condition it is important to care and maintain it following these recommendations:

- Prior to exposure to the weather your step and rail should be treated to a Carnauba based polish on all exposed surfaces. It is recommended that this is performed on a six monthly basis or following exposure to salt, mud, sand or other contaminants.

As part of any Pre Trip Preparation, or on an annual basis, it is recommended that a thorough visual inspection of the step and rail and surrounding components is carried out, making sure that all bolts are torqued to the correct specification. Also check that nearby wiring and plumbing are free of damage. Replace any components as necessary. This service can be performed by your local authorized ARB supplier.

## FITTING REQUIREMENTS

### REQUIRED TOOLS FOR FITMENT OF PRODUCT:

| | |
|---|---|
| **Basic tool kit** | **Sikaflex or Silicon** |
| **Masking tape** | **Power drill – (Ø13mm Capacity)** |
| **Axle stands (optional)** | **Ø4, Ø8, Ø10 (or Ø11) & Ø12mm Drill Bits** |
| **Torque Wrench/Wrenches - (UP TO 100Nm)** | **Metric Stepped Drill (with Ø24mm Step)** |
| **Scissors or Stanley Knife** | **Hammer & Centre Punch** |
| **Rust Preventing Paint - Black** | **½" Drive Allen Key Set - (8mm Allen Key Bit).** |
| **Jack** | **Ring Spanners & Sockets; 13, 16 & 19mm** |

### HAVE AVAILABLE THESE SAFETY ITEMS WHEN FITTING PRODUCT:

| | |
|---|---|
| **Protective eyewear**  | **Hearing protection**  |

***NOTE: 'WARNING' notes in the fitting procedure relate to OHS situations, where to avoid a potentially hazardous situation it is suggested that protective safety gear be worn or a safe work procedure be employed. If these notes and warnings are not heeded, injury may result.***

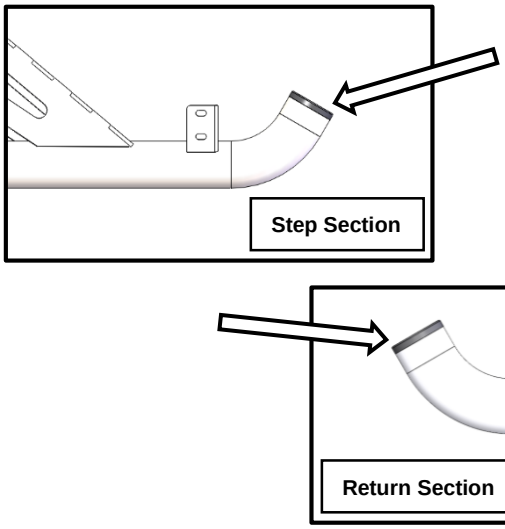
### UNLESS OTHERWISE SPECIFIED, FASTENER TORQUE SETTINGS:

| SIZE | Torque Nm | Torque ft-lb |
|---|---|---|
| M6 | 5 Nm | 7 ft-lb |
| M8 Nyloc Nuts | 22 Nm | 16 ft-lb |
| M12 | 77Nm | 57 ft-lb |
| M12 Nyloc Nuts | 77 Nm | 57 ft-lb |

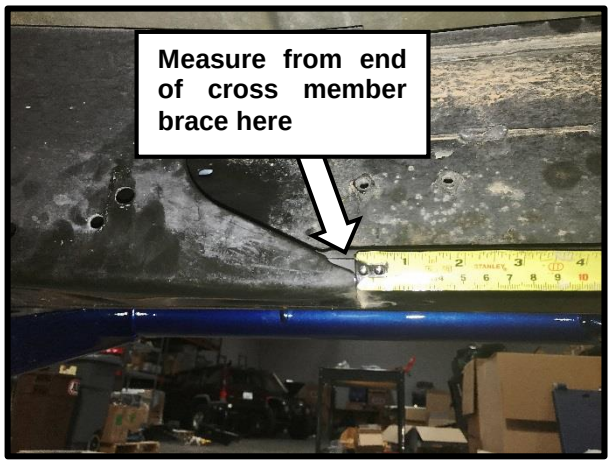
# PARTS LISTING

| APPLICATION. | PART NO. | QTY | DESCRIPTION |
|---|---|---|---|
| **SIDE STEPS TO VEHICLE (4423010)** | 6562750R | 1 | RAIL MAIN STEP WELDMENT RH |
| | 6562750L | 1 | RAIL MAIN STEP WELDMENT LH |
| | 6250034 | 6 | SPACER FRONT MOUNT |
| | 6250033 | 2 | SPACER FRONT MOUNT SUPPORT |
| | 3194945 | 4 | PLATE U-BOLT |
| | 3194946 | 2 | PLATE FRONT MOUNT NUT STICK |
| | 6500002 | 2 | PLUG RUBBER 60.3 TUBE BLANKING PLUG |
| | 6151807 | 4 | BOLT U M12 X 1.75P X 165 X 95 |
| | 4584363 | 10 | WASHER FLAT M12 X 26 X 4 |
| | 4581040 | 8 | WASHER FLAT M10 X 25 X 3 |
| | 4581064 | 2 | WASHER SPRING M12 |
| | 6151032 | 1 | NUT NYLOCK M8 X 1.25 |
| | 6151083 | 1 | BOLT M8 X 1.25 X 35 |
| | 6151492 | 8 | NUT NYLOC M12 X 1.75 |
| | 6151305 | 2 | NUT CAGED M12 X 1.75 |
| | 6151322 | 4 | NUT NYLOC M10 X 1.5 |
| | 6151577 | 4 | BOLT M10 X 1.5 X 150 |
| | 6151340 | 2 | BOLT M12 X 1.75 X 50 |
| | 4581302 | 3 | WASHER FLAT M8 X 24 X 4 |
| | 215637 | 2 | STICKER DECAL ARB SMALL |
| **FRONT RAILS TO SIDE STEP AND SUMMIT BAR (4423020)** | 6562752R | 1 | RAIL FRONT WELDMENT RIGHT |
| | 6562752L | 1 | RAIL FRONT WELDMENT LEFT |
| | 6582464 | 1 | CLAMP KIT S/RAIL NG LG RAD |
| | 3194951R | 1 | PLATE TREAD FRONT RAIL RIGHT |
| | 3194951L | 1 | PLATE TREAD FRONT RAIL LEFT |
| | 6250024 | 4 | SPACER S/STEP RETURN |
| | 6151022 | 4 | BOLT M8 X 1.25 X 25 |
| | 4581044 | 8 | WASHER FLAT M8 |
| | 6151032 | 4 | NUT NYLOC M8 X 1.25 |
| | 6151256 | 20 | SCREW BTN HD M6 X 16 SS |
| | 6151128 | 20 | NUT FLANGE M6 X 1.0 ZP |
| | 4581072 | 20 | WASHER M6 X 20 X 1.6 |
| | 3789336 | 1 | TEMPLATE S/RAIL CLAMP LG RAD |
| **SIDE STEP RETURNS TO SIDE STEP (4423030)** | 6562751R | 1 | RAIL RETURN WELDMENT RIGHT |
| | 6562751L | 1 | RAIL RETURN WELDMENT LEFT |
| | 3194950 | 2 | PLATE TREAD RETURN |
| | 6250024 | 4 | SPACER S/STEP RETURN |
| | 6500002 | 2 | PLUG RUBBER 60.3 TUBE BLANKING PLUG |
| | 6151022 | 4 | BOLT M8 X 1.25 X 25 GD 8.8 ZP |
| | 4581044 | 8 | WASHER FLAT M8 ZP |
| | 6151032 | 4 | NUT NYLOC M8 X 1.25 |
| | 6151256 | 20 | SCREW BTN HD M6 X 16 SS |
| | 6151128 | 20 | NUT FLANGE M6 X 1.0 ZP |
| | 4581072 | 20 | WASHER M6 X 20 X 1.6 |

# SIDE STEP FITMENT TO VEHICLE



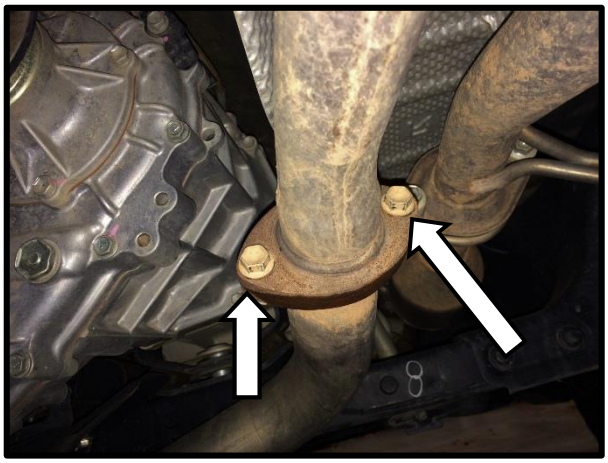

1. If fitted, remove factory side steps and discard. Factory side steps will not be re-installed later.
2. Install rubber plugs into rear-most ends of the side steps as shown.
3. If fitting Part No. 4423030; Install rubber plugs into the front most ends of the return sections as shown.

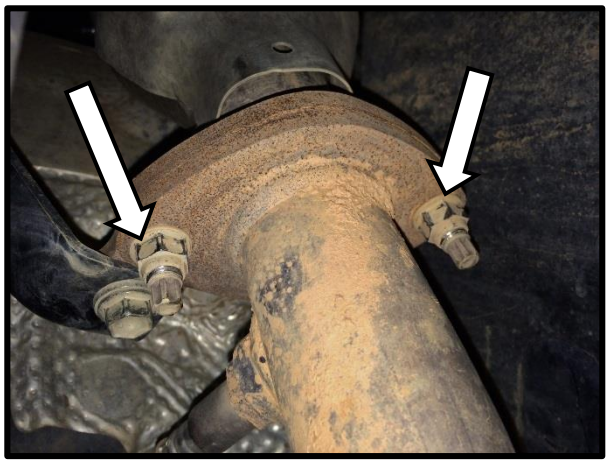



4. **Starting with the driver (left) side**, mark out 233mm and 765mm from the cross member brace, as shown, on the frame.
5. These marks will be the locations of the U-bolts to secure the middle and rear mount locations of the step weldment.

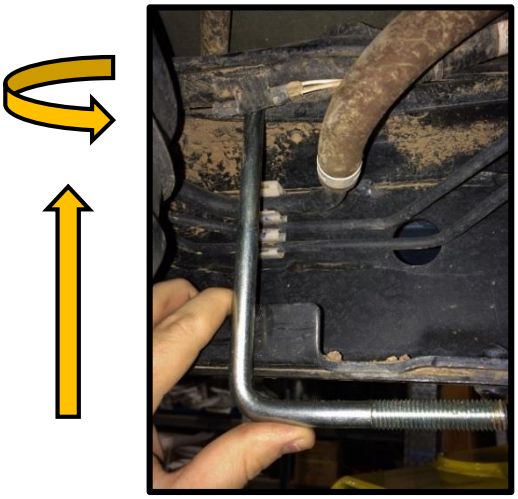
6. At the 765mm location on the driver side it is necessary to relocate the ground cable bolted to the top of the frame. Remove the hex screw and ground wire eyelet and reinstall on the opposite side of the frame using the same weld nut.

7. Use a bottle or trolley jack to support the center cross member.
8. Starting with the driver side remove the (2) cross member flange hex bolts. These nuts and bolts can be discarded.





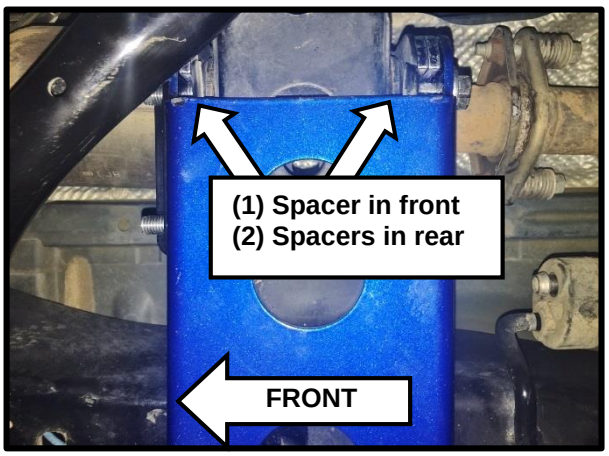
9. In order to reinstall the cross member through bolts in the correct orientation, it is necessary to loosen the section of the exhaust piping in that area.
10. Loosen the (2) hex screws at the two exhaust flanges.
11. Unhang the exhaust pipe from the rubber hanger.



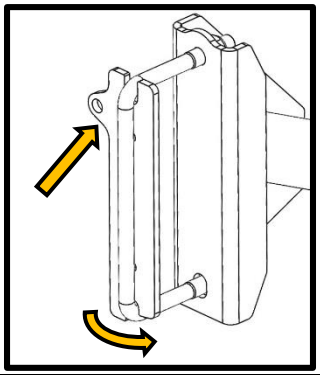
12. At the marked off locations on the driver side rail, insert the U-bolts upward between the wire harnesses and frame rail, as shown in the diagram, and then pivot the bolt so the threads point outwards.

**Warning: Be aware of the wiring harness, fuel line, and hand brake cable runs in this area.**

**Do not apply excessive force during this operation**




13. With the help of another person or using jack stands, hold the step section up to the vehicle and position the front mount around the center cross member. Install the (2) M10 x 1.5 x 150 bolts through from the rear side forward, as shown. Hand tighten the M10 x 1.5 nyloc nuts on the bolts, do not tighten at this point.
14. Slide the (3) spacer blocks in the space between the front mount and the cross member. (2) spacers towards the rear, (1) spacer towards the front.



15. Align the middle and rear mount holes onto the U-bolts and hand tighten M12 x 1.75 nyloc nuts to the U-bolts. Do not tighten at this point.
16. Insert the U-bolt load plates into place by locating the vertical slot onto the top of the U-bolt and turning the plate.

17. Insert the M12 x 1.75 cage nut in the front mount support nut plates.
18. Insert the front mount support nut plate into place, behind the frame rail as shown. Hand tighten the M12 x 1.75 x 25 bolt, M12 spring washer, and M12 flat washer into the nut plate.
19. Slide the front mount support spacer plate into place.

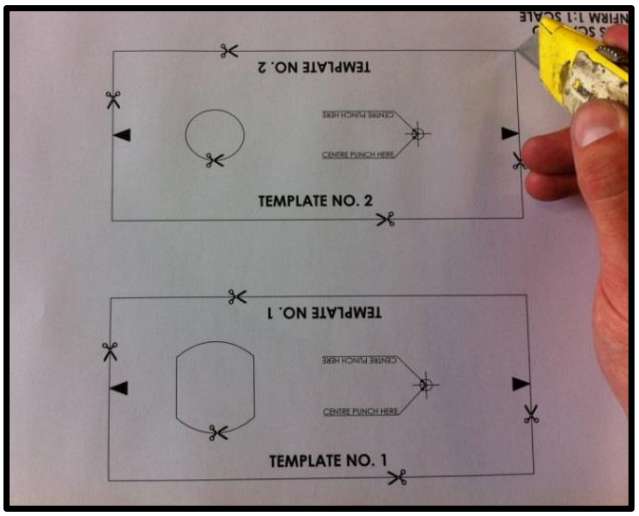
**NOTE: Leave all fasteners hand tight at this point.**

| | |
|---|---|
| | 20. Starting from the front working towards the rear, tighten each fastener to the recommended torque value. Before torqueing fasteners ensure the rail is level and parallel to the vehicle.<br><br>**Warning: Be aware of any wiring harness, fuel line, and hand brake cable runs in the area surrounding the U-bolts.**<br><br>**Ensure that nothing is between the bolts or load plates before tightening**<br><br>**Torque to Specification.**<br><br>M12 - 22Nm M12 Nyloc - 77Nm |
| | 21. Re-tighten all loosened exhaust bolts and re-install rubber exhaust hanger.<br><br>**Torque to Specification.**<br><br>M10 - 44Nm |
| | 22. Repeat measurements from step 4 onto the passenger side frame rail. |
|  | 23. Release the hand brake by depressing the button on the hand brake lever and pushing the lever forward. Ensure the vehicle is in 'PARK' and chock wheels.<br><br>24. Remove the handbrake cable bracket on the top of the frame rail by removing the (1) M8 hex bolt. |
| | 25. Repeat steps 13-20 to install the passenger side step section. Ensure the hand brake cable is not trapped on the top of the frame rail near the U-bolt while installing. |


26. Re-locate the handbrake cable bracket previously on the top of the frame rail onto the corresponding load plate using the supplied M8 x 25 hex bolt and M8 nyloc nut. Stack (3) M8 Flat washers in between the load plate and hand brake bracket as shown in the diagram. Slightly bend the near handbrake bracket located on the crossmember to straighten the cable out as much as possible.

27. If fitting front rail proceed to step 28. If fitting return, skip to step 62.

## FRONT SIDE RAIL FITMENT TO VEHICLE

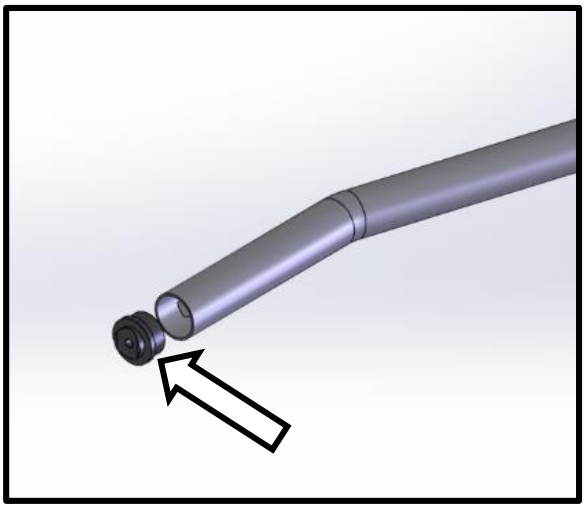



28. From Template sheet 3789336 use Scissors or a Stanley Knife to carefully cut out Templates 1 and 2 including the 2 x pieces from the inside – (See image at left).

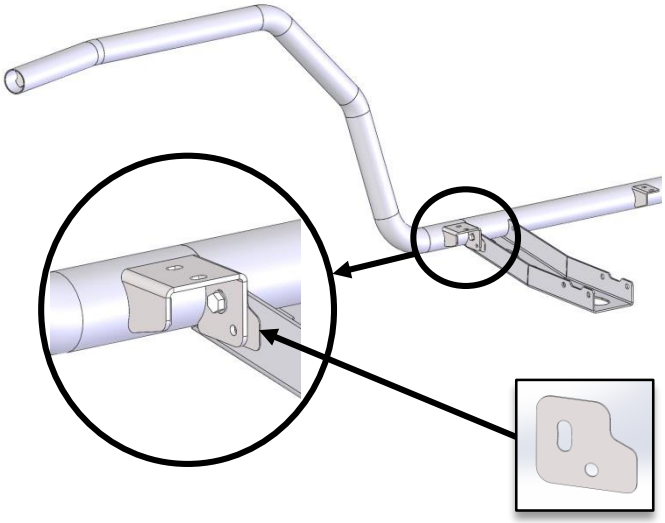
**NOTE: Complete Steps 27 to 61 if fitting Front Rails. Otherwise proceed to Step 62 if fitting Returns.**

29. Use masking tape to wrap **<u>1 x layer only</u>** of tape around the Bull Bar Outer Frame to protect it from damage. Ensure masking tape is applied flat and without creases.

**WARNING: If more than 1 x layer of masking tape is applied and/or creases are present it will affect the use of the drilling templates and could result in the Bull Bar being incorrectly drilled and not serviceable.**



30. Install tube spigot into the front of the Side Rail – Install without spacers fitted.

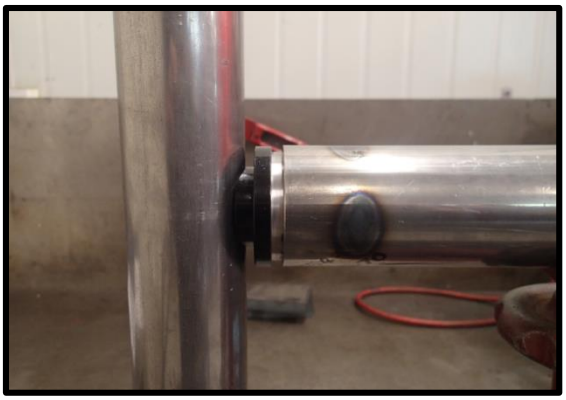


31. Place the Front Side Rail assembly onto the end of the Side Step Rear section as shown.

    When the Step and Side Rail tubes butt together, assess if any gap exists between the bracket faces. Should a gap exist, up to 2 x 1mm spacers (6250024) per side may be installed between the Side Step and Side Rail brackets to obtain correct fitment.

32. Attach using an M8x25 bolt, 2x M8 flat washers and an M8 nyloc nut.

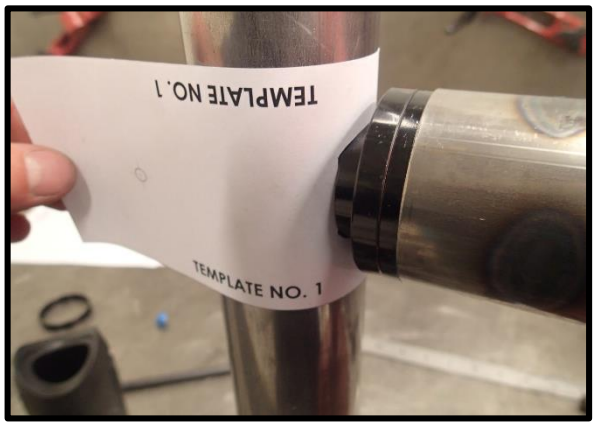
**Note: Do not fully tighten at this stage.**

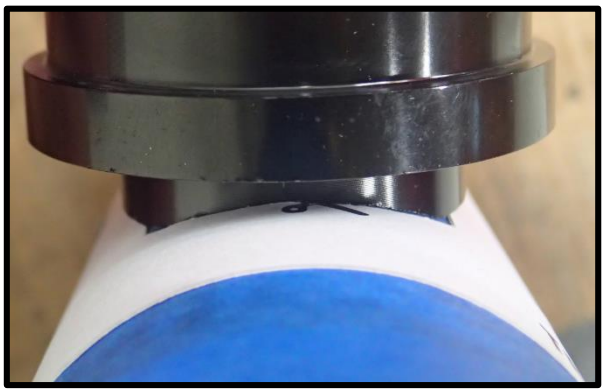


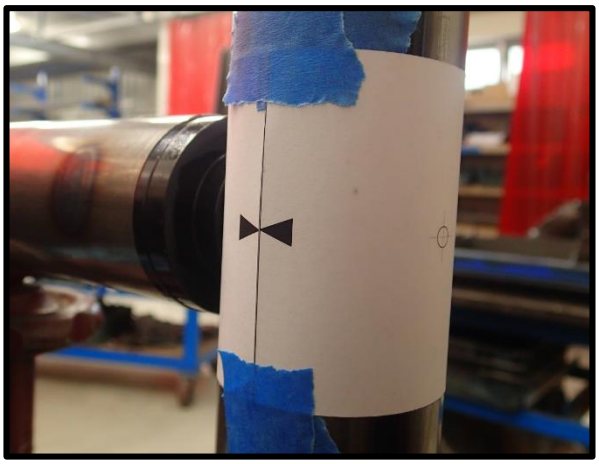
33. Hold Side Rail so that when viewed from the side of the vehicle the top tube runs parallel to the installed Side Steps and the Side Rail sits as desired against the side of the vehicle.

34. Offer Side Rail/tube spigot up to the back of the Bull Bar outer frame. – If a gap exists slide tube spigot forwards until it contacts the Bull Bar outer frame.

35. **CRITICAL:** Set distance from top face of the bull bar wing to bottom of rail to 85mm +/- 2mm for correct set up.

| | |
|---|---|
|  | 36. Assess the gap between the front end of the Side Rail and the tube spigot. Select the closest matching spacer/spacers to fill the gap. (Spacer options: None / 5mm / 10mm or 15mm (5mm + 10mm spacers).<br><br>**Note: If the gap is too large for the Spacers to fill or too small (ie. the tube spigot cannot be fitted) adjustment of the Bull Bar may be required.** |
|  | 37. Swing the Side Rail outwards and away from the vehicle allowing installation of appropriate/selected spacer into gap between the front end of the Side Rail and the tube spigot. (5mm shown in this instance). |
|  | 38. Swing the Side Rail inwards and install “TEMPLATE 1” between the end of the tube spigot and the Bull Bar outer frame |





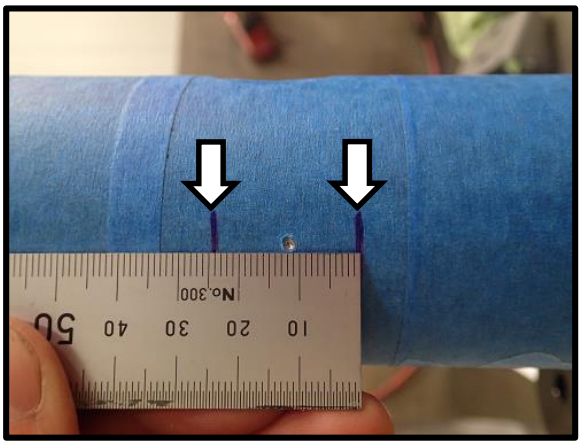
39. Carefully align and center “TEMPLATE 1” with the end of the tube spigot and wrap around the outer frame tube.

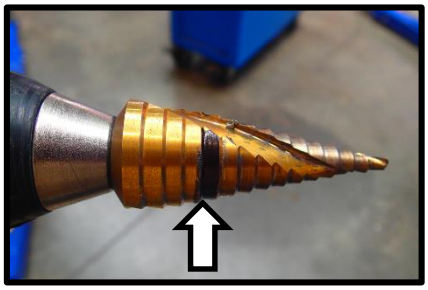
**Note: Ensure the indicator arrows are aligned before taping into position with masking tape – (AS SHOWN BELOW).**

40. Using a center punch, carefully punch the outer frame at the centre mark of “TEMPLATE 1”.
41. Remove Side Rail and set aside.
42. Remove “TEMPLATE 1” and retain.

    **Note: <u>Do not discard.</u>** Template will be re-used for the opposite side clamp installation.

**Important: Cover the upper surfaces of the bulbar wing with masking tape of rags to prevent damage from drill swarf.**

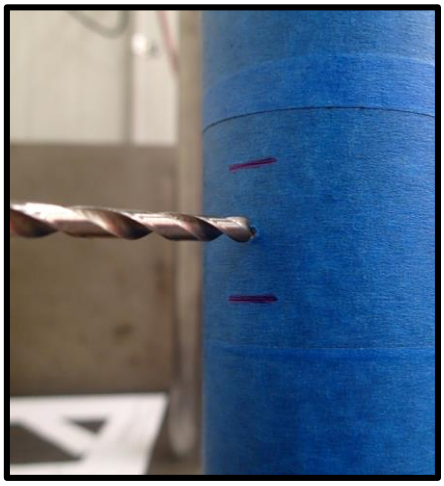




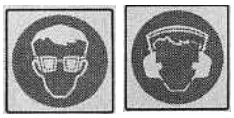
43. Using a marker pen, mark the outer frame 12mm above and below the center punch mark (12mm + 12mm = 24mm).

44. Using a marker pen, mark the Ø24mm step on the stepped drill.

**Note: These marks on the outer frame and stepped drill bit give an indication of how far to drill with the stepped drill.**



45. At the location of the center mark, use a Ø4mm (or similarly sized) drill bit to drill a pilot hole through the ***FRONT*** face of the Bull Bar outer frame.

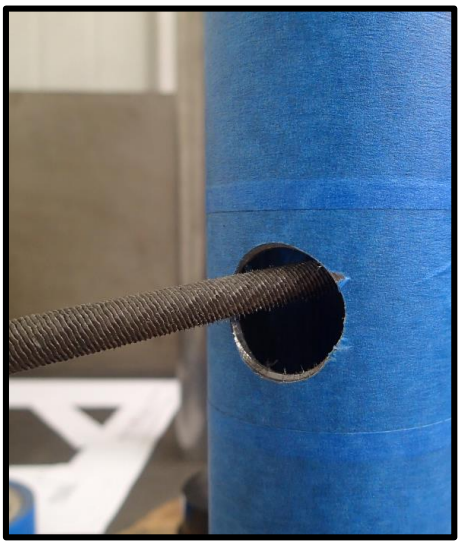


**Warning: Drilling operations can result in flying metal debris, safety glasses should be worn.**

46. Use a stepped drill bit to drill the Ø4mm pilot hole out to Ø24mm.

**WARNING - <u>Do not drill past the 24mm marks on the outer frame or the Ø24mm mark on the stepped drill - drilling too far will destroy the Bull Bar.</u>**

**Warning: Drilling operations can result in flying metal debris, safety glasses should be worn.**

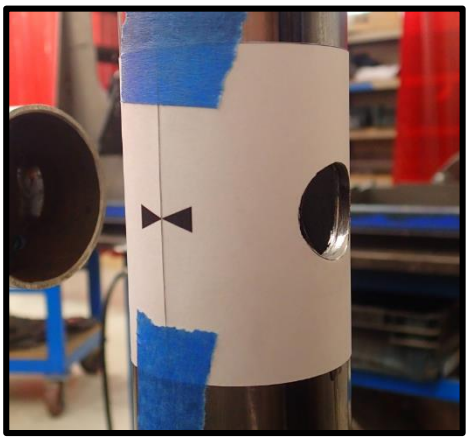


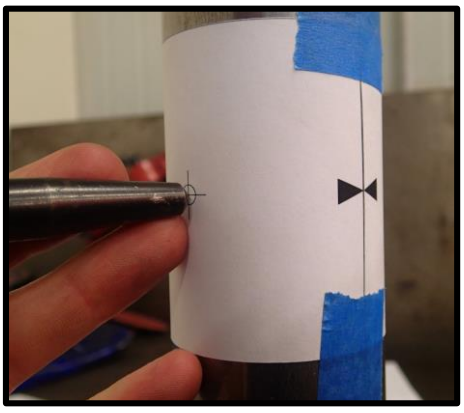
47. Using a small round or half-round file carefully remove any burrs from the edge of the Ø24mm hole.

**Note: Care should be taken to avoid damaging the outer frame paintwork surrounding the Ø24mm hole.**

48. Carefully align “TEMPLATE 2” and center over the Ø24mm hole. Wrap around the outer frame tube.

**Note: Ensure the indicator arrows are aligned before taping into position with masking tape – (AS SHOWN).**



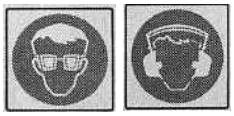


49. Using a center punch, carefully center punch the outer frame at the center mark of “TEMPLATE 2”.
50. Remove “TEMPLATE 2” and retain.

**Note: <u>Do not discard.</u>** Template will be re-used for the opposite side clamp installation.

51. At the location of the center punch mark, use an Ø4mm (or similarly sized) drill bit to drill a pilot hole through the ***REAR*** face of the Bull Bar outer frame.

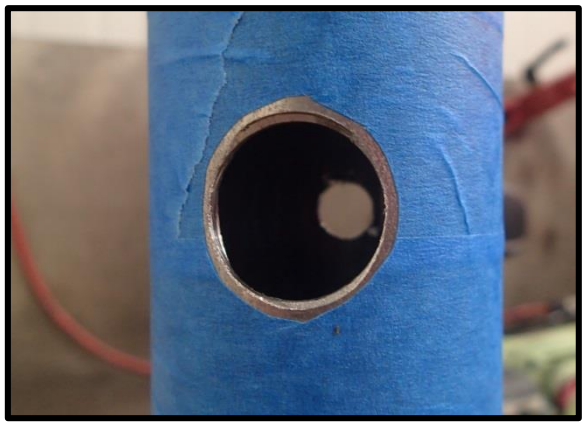
52. Use a Ø12mm drill bit to drill the Ø4mm pilot hole out to Ø12mm.



**Warning: Drilling operations can result in flying metal debris, safety glasses should be worn.**

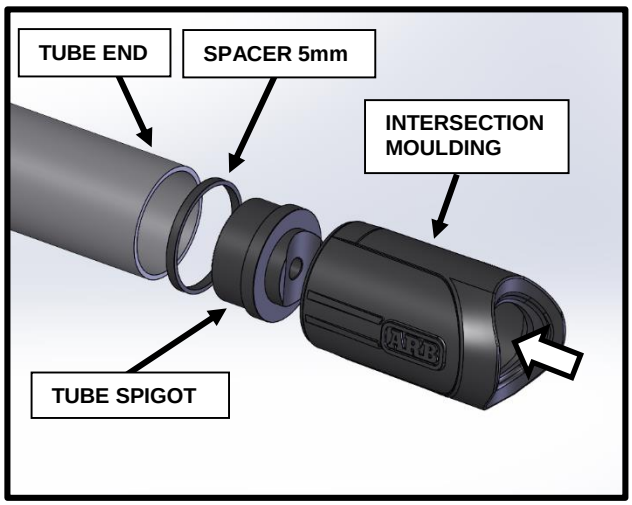
53. Using a small flat or half-round file carefully remove any burrs from the edge of the Ø12mm hole.

**Note: Care should be taken to avoid damaging the outer frame paintwork surrounding the Ø12mm hole.**

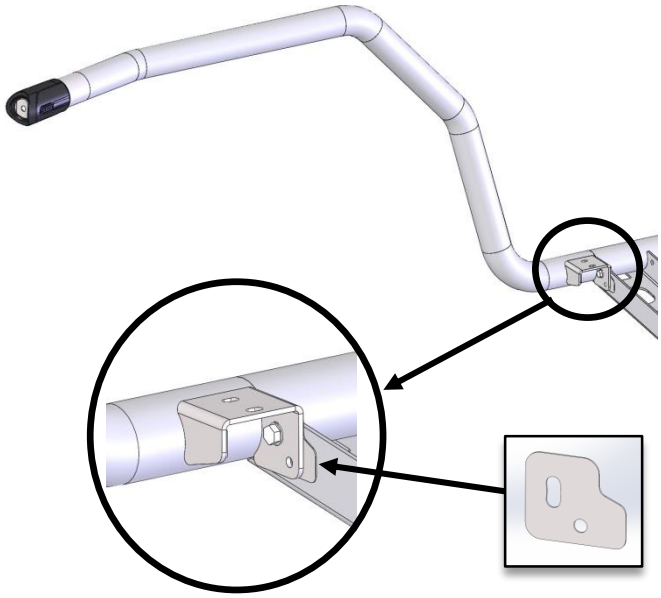


54. Remove all drill/file swarf and then clean and paint with rust preventative paint any exposed/bare metal surfaces left after drilling.

**Note: Use tape/paper to mask surrounding areas to avoid getting paint overspray in undesired locations.**




55. Install tube spigot, selected spacer/spacers and intersection moulding into place on the Side Rail.



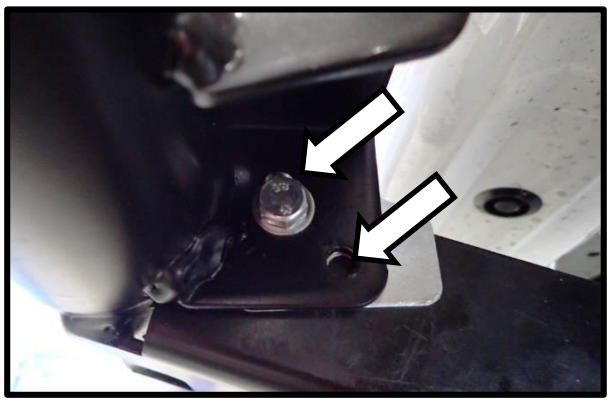
56. Install Side Rail (with clamp components fitted) onto Side Step spigot and attach using an M8x25 Bolt, 2x M8 flat washers and an M8 nyloc nut.

**Note:** Install front rail spacers between front tail and step sections if a gap is present. Do not fully tighten at this stage.

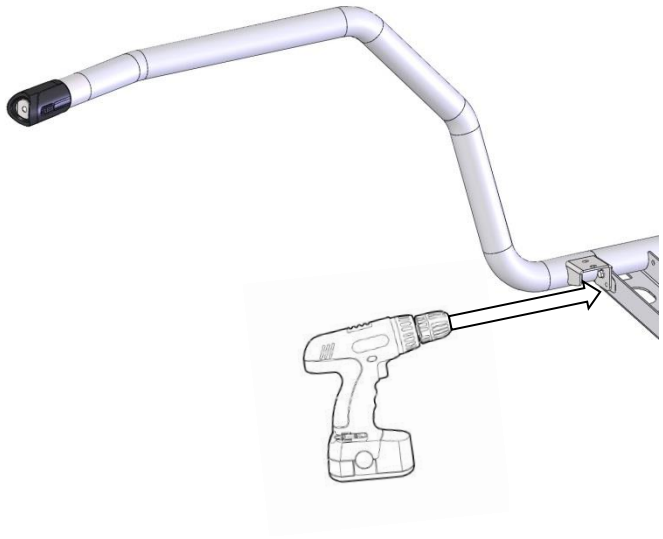
57. Install submerged bushing and M10 socket head cap screw.

**Torque to Specification.**

M10 - 57Nm **(CRITICAL).**



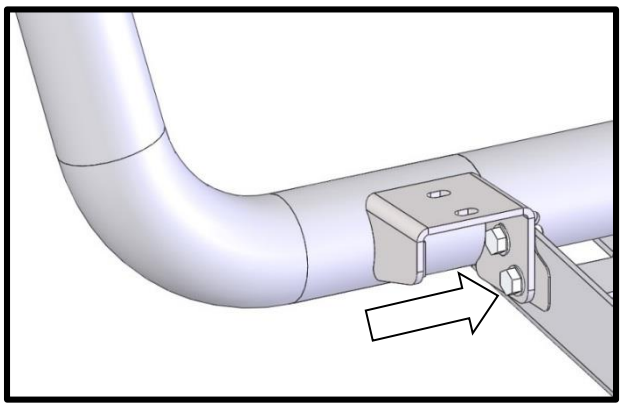
58. Tighten M8 bolt connecting the front rail to the step section ensuring the slot and holes in the spacers (if fitted) are aligned with the holes in the step sections and front rail.



59. Using an electric drill with an Ø8mm drill bit and the pre-cut hole in the front side rail bracket as a guide, drill through the rear step section.

60. Apply paint or a rust preventative to the bare metal.

**Warning: Drilling operations can result in flying metal debris, safety glasses should be worn.**

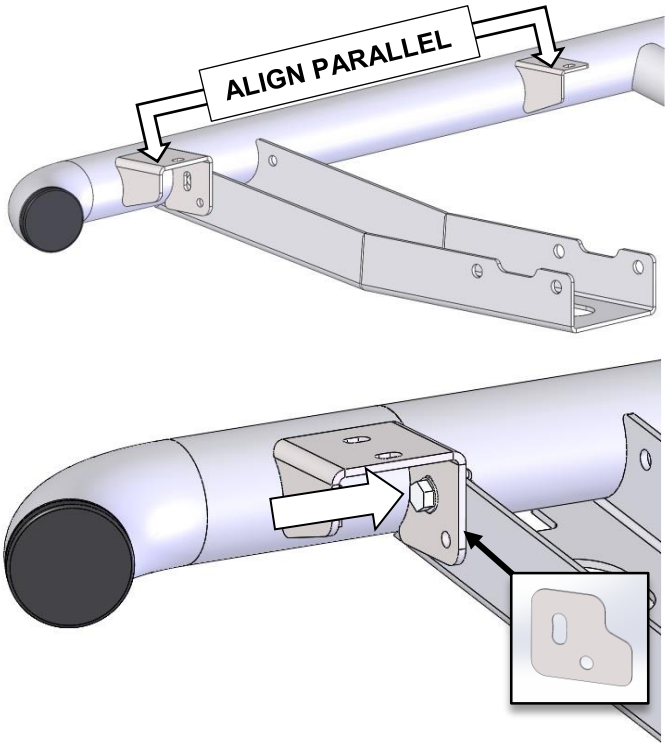


61. Pin the front side rail to the rear section using an M8x20 bolt, 2x M8 flat washers and an M8 nyloc nut.

**Torque to Specification.**

M8 - 22Nm

## RETURN FITMENT



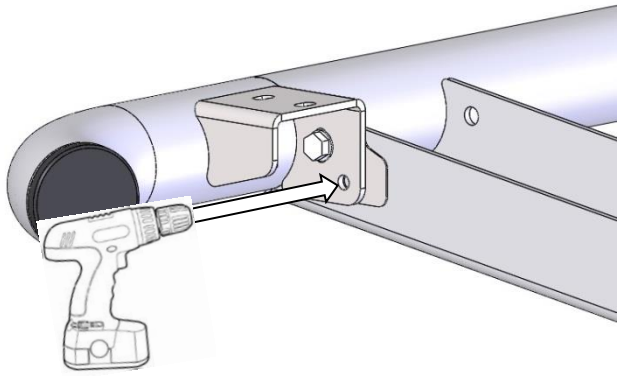

**Fitment of Return Section only, if front rail is fit to vehicle proceed to step 64.**

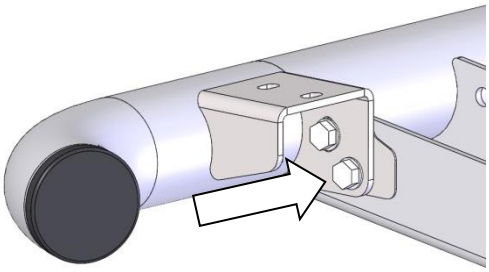
62. Place the Front Return Rail assembly onto the end of the step section as shown.

    When the Step and Return Rail tubes butt together, assess if any gap exists between the bracket faces. Should a gap exist, up to 2 x 1mm spacers (6250024) may be installed between step section and return brackets to obtain correct fitment.

63. Attach using an M8 x 20 Hex Bolt, x2 M8 Flat Washers and an M8 nyloc nut. Ensure the top mounting faces of the Return bracket and the Step Section are **PARALLEL**. Tighten the M8 bolt ensuring the slot and holes in the 1mm spacers (if fitted) are aligned with the holes in the Step / Return brackets.

# FRONT SIDE RAIL & SIDE STEP RETURN FITMENT





64. Using an electric drill with an Ø8mm drill bit, using the pre-cut hole in the Return Bracket as a guide, drill through the rear step section.

**Warning: Drilling operations can result in flying metal debris, safety glasses should be worn.**

65. Apply paint or a rust preventative to the bare metal.

66. Pin the return to the step section using an M8x25 bolt, 2x M8 flat washers and an M8 nyloc nut.

**Torque to Specification.**

M8 - 22Nm

67. Run a bead of silicon along the top of the rail where the tread plate will sit. (This will help prevent vibration).

68. Position the Tread Plate on the step, aligning the bolt holes with the corresponding holes in the side step. Starting at the front of the step, secure the checker top with stainless steel M6x16 button head cap screws, M6 flat washers and M6 flange nuts.

**Note: Over tightening of bolts may result in damage to the Tread Plates**

**Torque to Specification.**

M6 - 5Nm – (**CRITICAL)**


69. Apply the supplied ARB decals at the rear of the Side Step on both the RH and LH sides of the vehicle as indicated.

# FITTED PRODUCT


**Side Steps with Front Rail Fitted – (Shown Above).**

**Side Steps with Return Fitted – (Shown Below).**