



FITTING INSTRUCTIONS

Part Number: 4440210 / 4440220 / 4440230

Product 4440210 – SUMMIT STEP SUIT USA RANGER|INTEGRIT REQ 4440220/230
Description: 4440220 – SUMMIT F/RAIL SUIT USA RANGER|INTEGRIT SUITS 4440210
4440230 – SUMMIT RETURN SUIT USA RANGER|INTEGRIT SUITS 4440210

Suited to USA FORD RANGER ON19 SUITS XL, XLT AND LARIAT
vehicle/s:

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 authorised ARB stockist. 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 Stockist.

FITTING REQUIREMENTS

REQUIRED TOOLS FOR FITMENT OF PRODUCT:

METRIC SOCKET SET	METRIC COMBINATION & OFFSET SPANNER SET
POWER DRILL (Ø13mm CAPACITY)	Ø 4, 8.5, 12mm DRILL BITS
PHILLIPS AND FLAT BLADED SCREW DRIVER SET	METRIC MEASURE TAPE
BLACK SILICONE	STEEL RULE 0-300 mm
HAMMER	METRIC STEPPED DRILL (WITH Ø24mm STEP)
CENTRE PUNCH	DOUBLE SIDED TAPE
SCISSORS OR STANLEY KNIFE	SMALL FLAT & ROUND FILES
RUST PREVENTIVE PAINT - BLACK	ALLEN KEY SET
TORQUE WRENCH 9-77Nm	AXLE STANDS (OPTIONAL)

HAVE AVAILABLE THESE SAFETY ITEMS WHEN FITTING PRODUCT:

Protective eyewear		Hearing protection	
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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.

FASTENER TORQUE SETTINGS:

SIZE	Torque Nm	Torque lb/ft
M6	9Nm	7lbft
M8	22Nm	16lbft
M10	44Nm	32lbft
M12 U-BOLTS	44Nm	32lbft
M12	77Nm	57lbft

PARTS LISTING			
APPLICATION.	PART NO.	QTY	DESCRIPTION
SIDE STEPS TO VEHICLE	215637	2	STKR DECAL ARB SMALL
	3194330	6	CAGE PLATE D40 SIDE RAIL (400mm)
	3781941	1	US RNGR SUMMIT RAILS F/INST
	4581011	6	WASHER FLAT M12x27x4 ZP
	4584363	6	WASHER FLAT M12x26x4 HV300 TZP480
	4584414	1	US RNGR S/STEP REAR SUP PACKER
	6151305	6	NUT CAGED M12 3.3-4.7
	6151324	6	BOLT HEX HEAD M12 X 1.75 X 45 ZP
	6151376	2	BOLT U M12x1.75x(175x100) PC8.8 TZP
	6151574	6	NUT HEX NYLOC M12x1.75 TZP480
	6151578	1	BOLT U M12x1.75x(190x115) PC8.8 TZP
	6500002	2	PLUG RUBBER 60.3 TUBE BLANKING PLUG
	6562805L	1	US RNGR SUMMIT S/STEP ASSY LHS
	6562805R	1	US RNGR SUMMIT S/STEP ASSY RHS
FRONT RAILS TO VEHICLE	3194676L	1	PLATE STEP T6 LG RAD F/RAIL LH
	3194676R	1	PLATE STEP T6 LG RAD F/RAIL RH
	3789336	1	TEMPLATE S/RAIL CLAMP LG RAD
	4581044	8	WASHER FLAT M8x17x1.6 ZP
	4581072	16	WASHER FLAT M6x20x1.6 TZP
	6151022	4	BOLT HXHD M8x1.25x25 PC8.8 ZP
	6151032	4	NUT HEX NYLOC M8x1.25 TZP480
	6151128	16	NUT FLANGE M6x1.0 ZP SERRATED
	6151256	16	SCREW BHD M6x16 SS MG304
	6250024	4	SPACER S/STEP / RETURN LG RAD
	6582464	1	CLAMP KIT S/RAIL NG LG RAD
	6562807L	1	US RNGR F/RAIL SUMMIT ASSY LHS
	6562807R	1	US RNGR F/RAIL SUMMIT ASSY RHS
	SIDE STEP RETURNS TO VEHICLE	3194687L	1
3194687R		1	PLATE STEP T6 LG RAD RETURN RH
4581044		8	WASHER FLAT M8x17x1.6 ZP
4581072		16	WASHER FLAT M6x20x1.6 TZP
6151022		4	BOLT HXHD M8x1.25x25 PC8.8 ZP
6151032		4	NUT HEX NYLOC M8x1.25 TZP480
6151128		16	NUT FLANGE M6x1.0 ZP SERRATED
6151256		16	SCREW BHD M6x16 SS MG304
6250024		4	SPACER S/STEP / RETURN LG RAD
6500002		2	PLUG RUBBER 60.3 TUBE BLANKING PLUG
6562809L		1	US RNGR S/STEP RETURNS ASSY LH
6562809R		1	US RNGR S/STEP RETURNS ASSY RH

FITTING PROCEDURE - PREPARATION TO VEHICLE

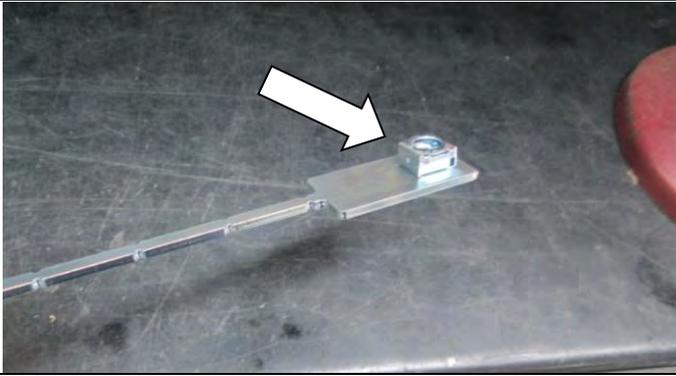


1. If fitted, remove the factory running boards/side steps retaining all fasteners (6 per step).



2. Refit the fasteners into the captive nuts in the vehicles body to seal against water ingress.

FITTING PROCEDURE - SIDE STEP FITMENT TO VEHICLE



1. Place an M12 caged nut into each of the 6 nut plates.



2. Starting on the front right hand (RH) side of the vehicle, locate the holes noted by arrows in the picture.

Note: Some holes are located on the inside face of the chassis.

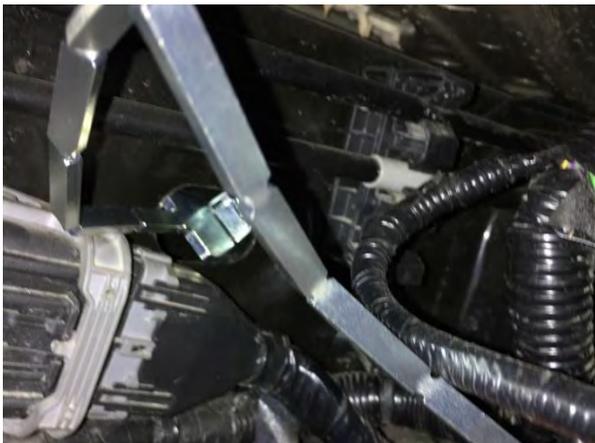
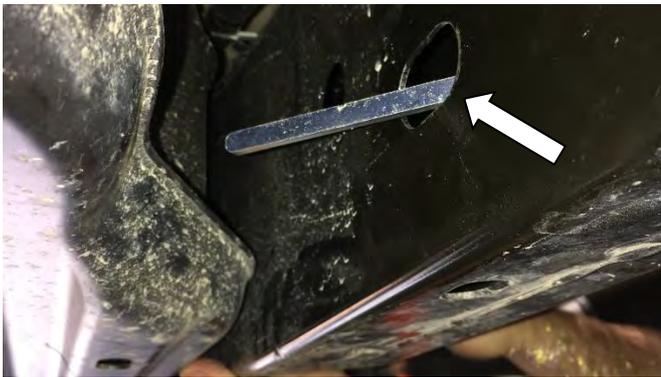


3. Fit the rubber plugs into the rear most ends of the side rails.

Note: If installing Side Step Returns (P No. 4440230), install rubber plugs as well.



FITTING PROCEDURE - SIDE STEP FITMENT TO VEHICLE - CONTINUED



4. LHS (Left Hand Side) Rear Only - Place the chassis packer plate in the embossed slot, in the same orientation as the chassis slot by using silicon or double sided tape.

5. LHS Rear Only – Bend the tail of the nut plate in accordance with the image below. Insert the nut plate through the hole located on the outer wall of the chassis.



6. LHS Rear Only – Bend the tail of the nut plate in accordance with the image below. Insert the nut plate through the hole located on the inner wall of the chassis.



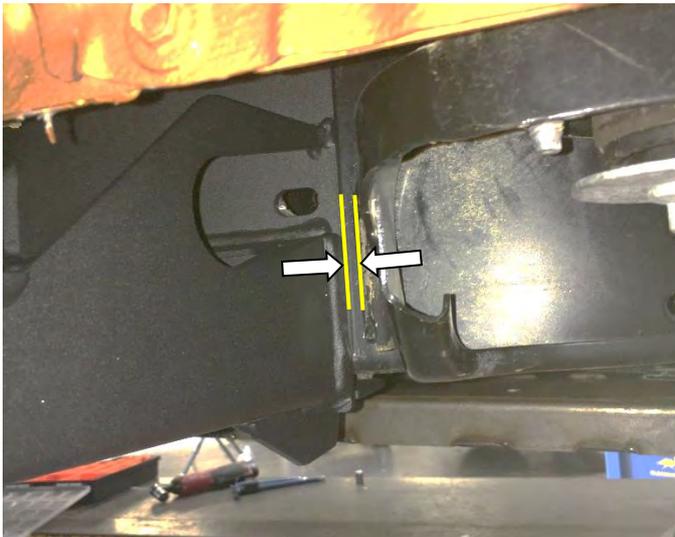
7. RHS & LHS - Bend the tail of the nut plate in accordance with the images below. Insert the nut plates through the hole located on the inner wall of the chassis.



FITTING PROCEDURE - SIDE STEP FITMENT TO VEHICLE - CONTINUED



8. Place side steps up against outer chassis face, roughly in the correct position. Use adjustable axle stand or a second person to hold the steps in place. (RHS SHOWN).



9. Align the side step front mount with the chassis body mount, allowing for a 4-8mm gap.



10. Attach the front mount of the side step to the chassis using M12 bolts and M12 Flat Washers into the cage nut plates adjusted in step 7. **Leave loose at this stage.**

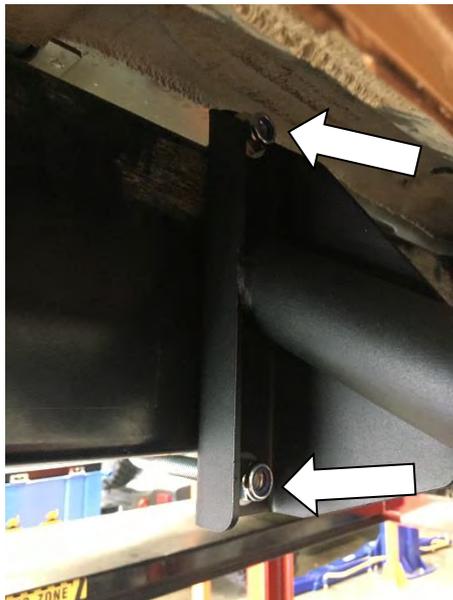


FITTING PROCEDURE - SIDE STEP FITMENT TO VEHICLE - CONTINUED



11. RHS Rear Only - Attach the rear mount of the step to the chassis using a U bolt, M12 flat washers and M12 nyloc nuts. **Leave loose at this stage.**

Note: M19 Offset Ring Spanner may be best suited for tightening the top nyloc nut.



12. Attach the middle mount of the step to the chassis using a U bolt, M12 flat washers and M12 nyloc nuts.



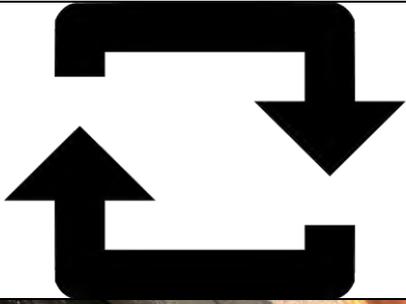
13. Adjust the rail so that it is level with the vehicle and tighten **all** fasteners to specified torque settings.

Torque to specification.

 M12 77Nm (BOLTS)

 M12 44Nm ("U" BOLTS)

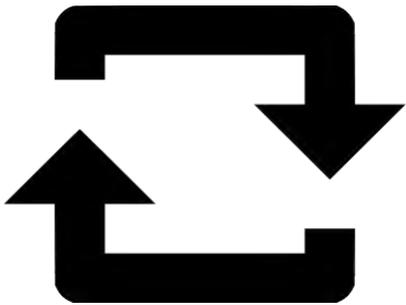
FITTING PROCEDURE - SIDE STEP FITMENT TO VEHICLE - CONTINUED



14. Repeat steps 8, 9 and 10 on the LHS of the vehicle.

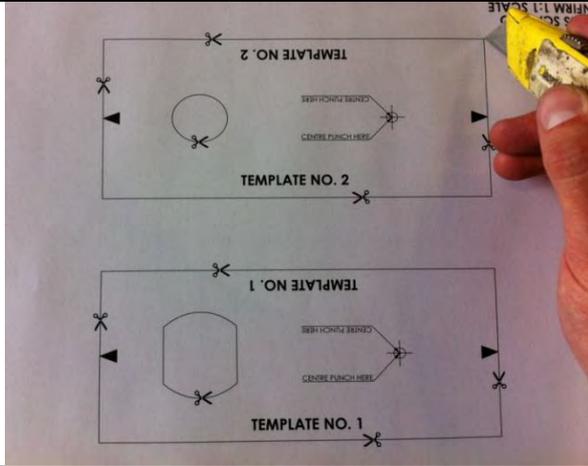


15. LHS Rear Only - Attach the rear of the rail to the chassis using M12 Bolts and M12 Flat Washers into the cage nut plates adjusted in the steps 4, 5 and 6. **Leave loose at this stage.**



16. Repeat steps 12 and 13 on the LHS of the vehicle.

FITTING PROCEDURE - FRONT RAIL TO VEHICLE



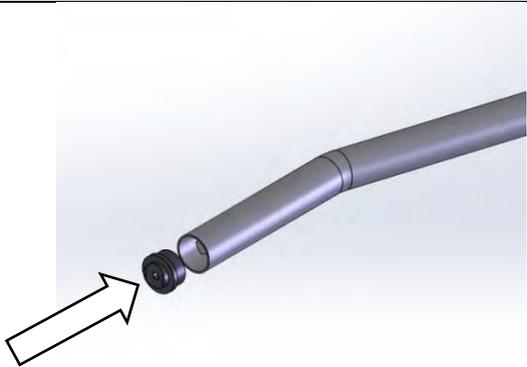
Note: If installing Front Rails (4440220), continue to Step 17, otherwise go to Step 51

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

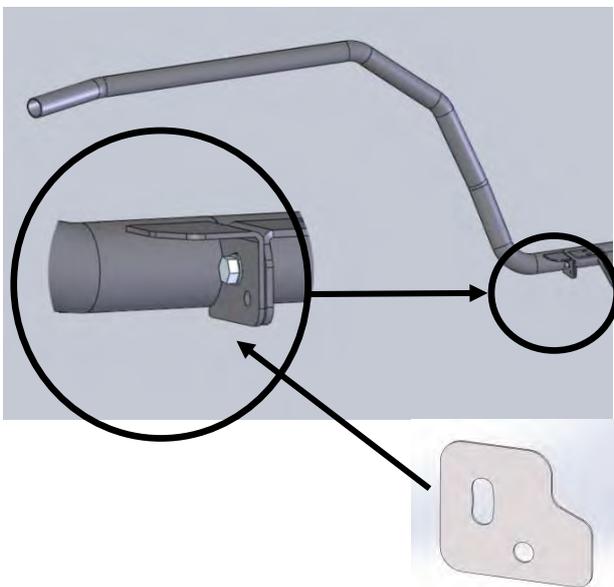


18. Use masking tape to wrap **1 x layer only** of tape around the bull bar outer frame to protect it from damage. Ensure masking tape is applied flat and without creases.

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.



19. Install tube spigot into the front of the side rail – Install without spacers fitted.



20. Place the front rail assembly onto the end of the side step section as shown in the image to the left.

When the step and front 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 Side Step and Side Rail brackets to obtain correct fitment.

21. Attach using an M8X20 bolt, 2 x M8 flat washers and an M8 nyloc nut.

Note: Do not fully tighten at this stage.

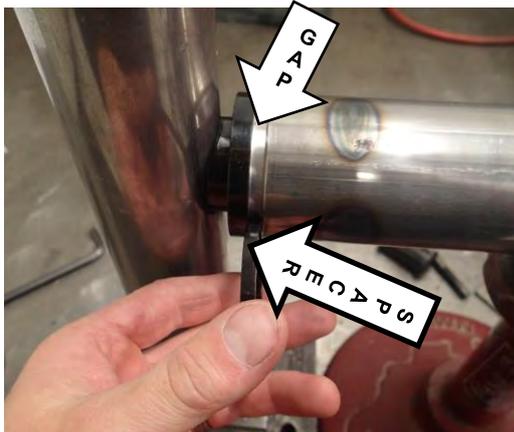
FITTING PROCEDURE - FRONT RAIL TO VEHICLE - CONTINUED



22. Hold front rail so that when viewed from the side of the vehicle the top tube is horizontal (**parallel to the ground**) and the side rail sits as desired against the side of the vehicle.
23. 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.



24. As a guide, set distance from top face of the bull bar wing to bottom of rail to approximately 85mm for correct set up.



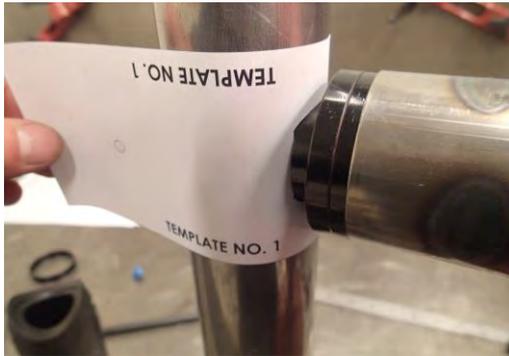
25. Assess the gap between the front end of the side rail and the tube spigot. Select the closest matching spacer(s) to fill the gap. (Spacer options: Nil / 5mm / 10mm or 15mm (5mm + 10mm Spacers)).

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 and/or Side Step may be required.

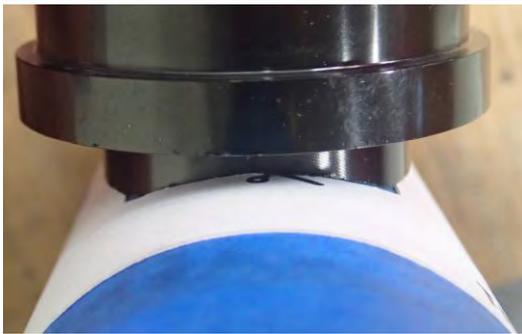


26. Swing the front rail outwards and away from the vehicle allowing installation of appropriate/selected spacer into gap between the front end of the front rail and the tube spigot. (5mm spacer illustrated in the image to the left).

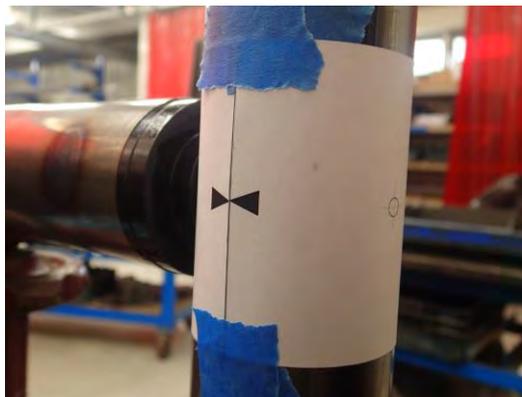
FITTING PROCEDURE - FRONT RAIL TO VEHICLE - CONTINUED



27. Swing the side rail inwards and install "TEMPLATE 1" between the end of the tube spigot and the bull bar outer frame.



28. Carefully align and centre "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).**

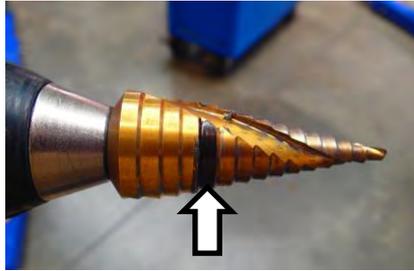
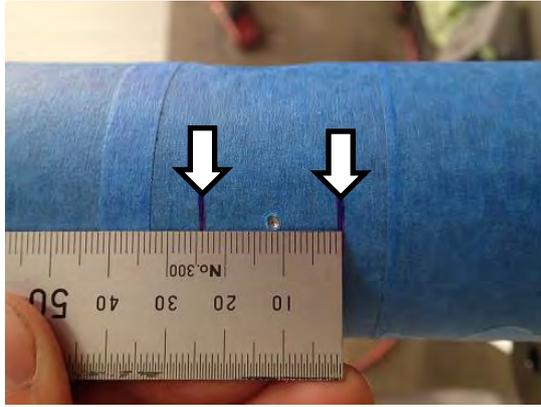


29. Using a centre punch, carefully centre punch the outer frame at the centre mark of "TEMPLATE 1".
30. Remove the front rail and set aside.
31. Remove "TEMPLATE 1".

Note: Do not discard. Template will be re-used for the opposite side clamp installation.

IMPORTANT: COVER THE UPPER SURFACES OF THE BULLBAR WING WITH MASKING TAPE OR RAGS TO PREVENT DAMAGE FROM DRILL SWarf.

FITTING PROCEDURE - FRONT RAIL TO VEHICLE - CONTINUED

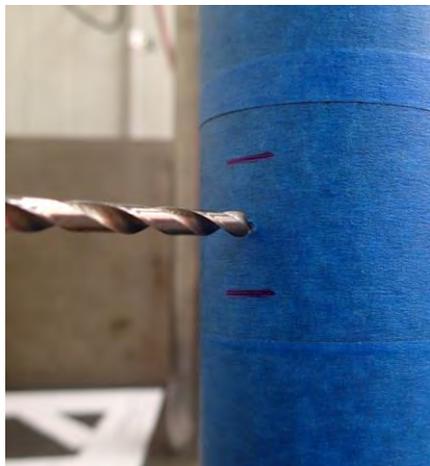


32. Using a marker pen, mark the outer frame 12mm above and below the Centre Punch mark (12mm + 12mm = 24mm).

Note: These marks on the outer frame give an indication of how far to drill with the Stepped Drill.

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

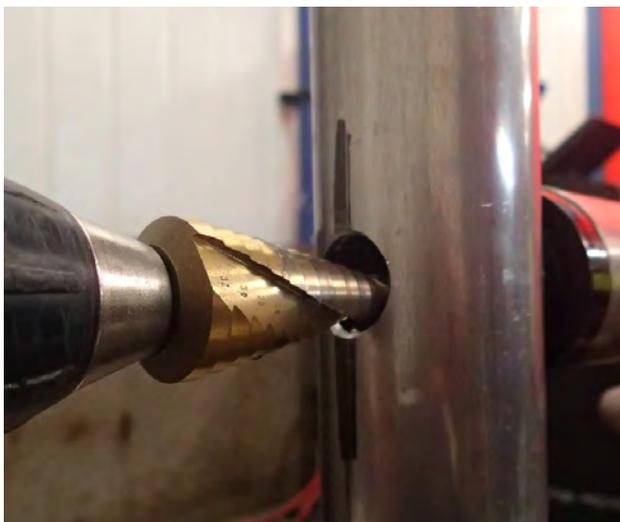
Note: These marks on the stepped drill give an indication of how far to drill to achieve the correct diameter hole in the outer frame.



34. At the location of the centre punch 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.



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

WARNING - 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.



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

FITTING PROCEDURE - FRONT RAIL TO VEHICLE - CONTINUED



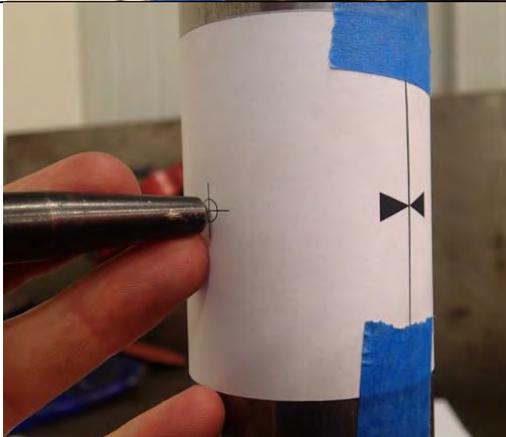
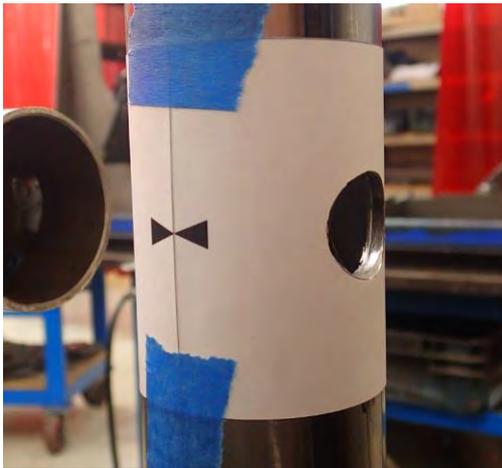
36. Using a small round or half-round file carefully remove any burrs from the edge of the Ø24mm hole.

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



37. Carefully align "TEMPLATE 2" and centre 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).



38. Using a centre punch, carefully centre punch the outer frame at the centre mark of "TEMPLATE 2".

39. Remove "TEMPLATE 2".

Note: Do not discard. Template will be re-used for the opposite side clamp installation.

FITTING PROCEDURE - FRONT RAIL TO VEHICLE - CONTINUED



40. At the location of the centre punch mark, use a $\text{\O}4\text{mm}$ (or similarly sized) drill bit to drill a pilot hole through the front face of the bull bar outer frame.
41. Use a $\text{\O}12\text{mm}$ drill bit to drill the $\text{\O}4\text{mm}$ pilot hole out to $\text{\O}12\text{mm}$.



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



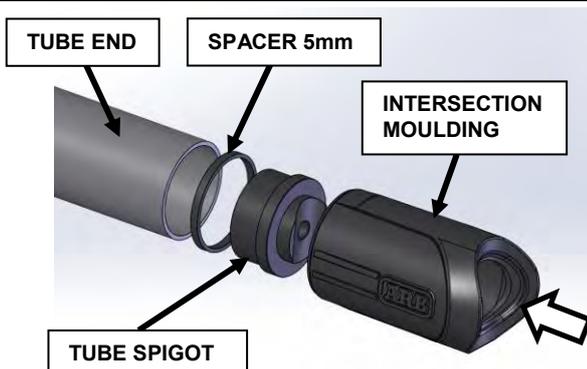
42. Using a small flat or half-round file carefully remove any burrs from the edge of the $\text{\O}12\text{mm}$ hole.

Note: Care should be taken to avoid damaging the outer frame paintwork surrounding the $\text{\O}12\text{mm}$ hole.



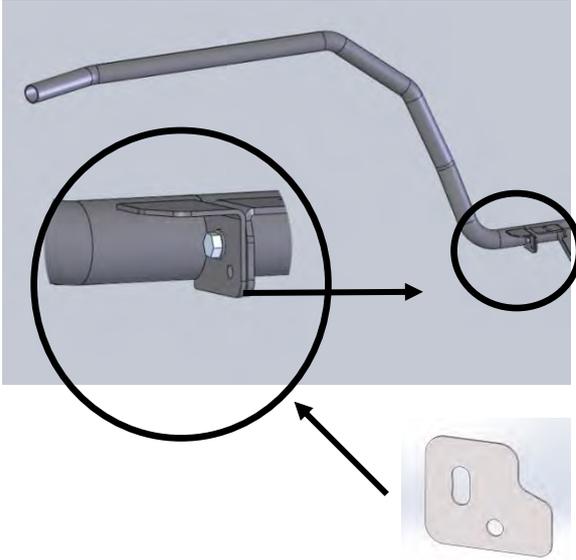
43. Remove all drill/file swarf and then clean and paint with rust preventative paint any exposed/bare metal surfaces left after drilling.

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



44. Install tube spigot, selected spacer(s) and intersection moulding into place on the side rail.

FITTING PROCEDURE - FRONT RAIL TO VEHICLE - CONTINUED



45. Install front rail (with clamp components fitted) onto side step spigot and attach using an M8X20 bolt, 2 x M8 flat washers and an M8 nyloc nut.

Note: Install spacers.

Note: Do not fully tighten at this stage.



46. Install submerged bush and M10 bolt.

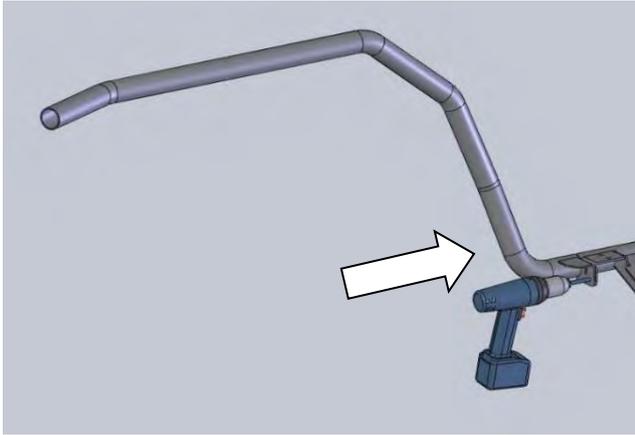
Torque to Specification.

 M10 57Nm **(CRITICAL)**.



47. Tighten M8 bolt ensuring the slot and holes in the 6250024 1mm spacers (if fitted) are aligned with the holes in the step / front rail brackets.

FITTING PROCEDURE - FRONT RAIL TO VEHICLE - CONTINUED



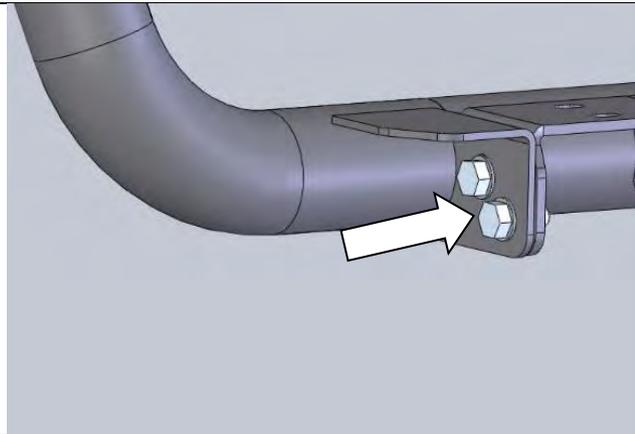
48. Using an electric drill with an Ø8mm drill bit and the pre-cut hole in the front side rail as a guide, drill through the rear section.

NOTE: IT MAY BE NECESSARY TO TEMPORARILY REMOVE THE MUD FLAPS TO GAIN ACCESS WITH THE DRILL.

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



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

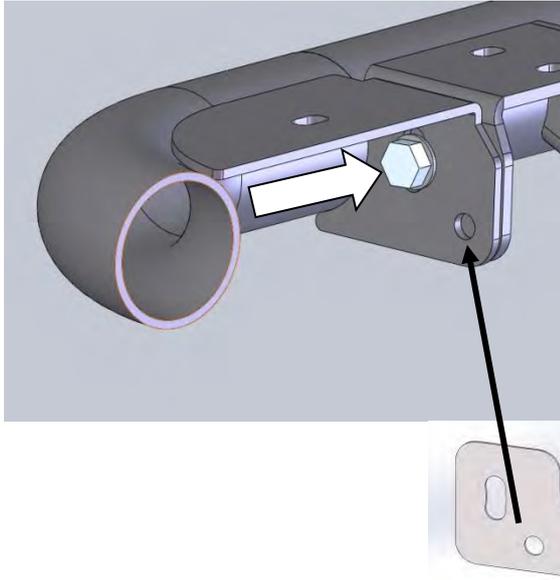


50. Pin the front of the side step to the rear section of the front rail using an M8X20 bolt, 2 x M8 flat washers and an M8 nyloc nut.

Torque to Specification.



FITTING PROCEDURE – SIDE STEP RETURN TO VEHICLE



FITTING RETURNS

51. Place the return tube onto the end of the side step section as shown.

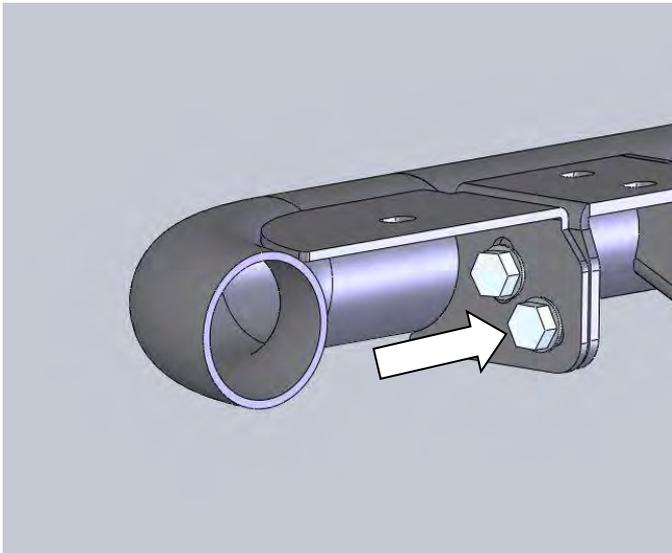
When the step and return tubes butt together, assess if any gap exists between the bracket faces. Should a gap exist, up to 2 x 1mm spacers (6250024) may be installed between side step and return tube brackets to obtain correct fitment.

52. Attach using an M8X20 bolt, 2 x M8 flat washers and an M8 nyloc nut. Ensure the top faces of the return tube and the side step are parallel. Tighten the M8 bolt, ensuring the slot and holes in the spacers (if fitted) are aligned with the holes in the step / return tube brackets.

Torque to Specification.



M8 22Nm



53. Using an electric drill with an Ø8mm drill bit and the pre-cut hole in the curved end section as a guide, drill through the rear section.

NOTE: IT MAY BE NECESSARY TO TEMPORARILY REMOVE THE MUD FLAPS TO GAIN ACCESS WITH THE DRILL.



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

54. Apply paint or a rust preventative to the bare metal.
55. Pin the curved end section to the rear section using an M8X20 bolt, 2 x M8 flat washers and an M8 nyloc nut.

Torque to Specification.



M8 22Nm

FITTING PROCEDURE – FRONT RAIL & SIDE STEP RETURN TO VEHICLE



THE FOLLOWING STEPS APPLY TO BOTH FRONT RAIL AND RETURN TUBE SECTION FITMENT

56. Run a bead of silicone along the top of the side step where the Tread Plate will sit. (This will help prevent vibration).
57. 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 S/Steel M6X16 Button Head Bolts, 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)



58. Apply the supplied ARB decals here on both the RH and LH sides of the vehicle.

FITTED PRODUCT

