



# FITTING INSTRUCTIONS

Part Number: **4415100, 44151/10/20** F/kit(s): **6174078/79/80**  
Product **SIDE PROTECTION STEP/RAIL**  
Description: **STEP 4415100 MUST BE ACCOMPANIED BY A FRONT RAIL/END OPTION**  
Suited to **TOYOTA LANDCRUISER 200 SERIES (2015- on )**  
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.
- ◆ Always fit Right hand side of rail kit first to confirm alignment, then move to Left hand side.
- ◆ 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 SPANNER SET
ELECTRIC DRILL Ø 13 MM CAPACITY	Ø 4, 8.5, 12 mm DRILL BITS
PHILLIPS AND FLAT BLADED SCREW DRIVER SET	METRIC MEASURE TAPE
BLACK SILICONE	STEEL RULE 0-300 mm
HAMMER	JIGSAW/HACKSAW
CENTRE PUNCH	MARKER PEN
SCISSORS	SMALL FLAT & ROUND FILES
RUST PREVENTIVE PAINT	ALLEN KEY SET
TORQUE WRENCH 9-77Nm	STEP DRILL UP TO Ø 24mm

### 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 (lbft)
M6	9	7
M8	22	16
M10	44	32
M12	77	57

## PARTS LISTING

APPLICATION	PART #	QTY.	DESCRIPTION
<b>LC200 Side Step Assembly</b> <b>(4415100)</b> Fit Kit: 6174078	6562713	1	Rail side step assembly LC200 RHS
	6562714	1	Rail side step assembly LC200 LHS
	3194884	1	Plate SRail KDSS FL support
	3759071	1	Brkt SRail KDSS FL LC200
	4581044	1	Washer flat M8 ZP
	4581020	4	Washer flat M8 x 30
	4581046	5	Washer spring M8
	4581049	13	Washer flat M12
	4581064	3	Washer spring M12
	5811037	1	Sleeve mount bracket
	6151084	5	Bolt M8 x 1.25 x 40
	4654145	4	Nut Plate M8x1.25
	6151528	8	Nut Nyloc M12 x 1.75 ZP
	6151249	1	Bolt M12 x 1.75 x 140
	6151301	1	Nut cage M8
	6151305	2	Nut cage M12
	3194330	2	Cage Plate D40
	6151255	4	Bolt M12 x 1.75 x 40
	6151246	1	Bolt M12 x 1.75 x 25
	4721749	1	Tube Spacer 19mm
	6151785	3	U-Bolt FLAT M12 x x1.75 x 190W x 125H
	6500002	2	Plug rubber 60.3 Tube blank
	665051	3	Tape rib: 500 mm
6821178	6	Cable Tie 140 mm	
215637	2	ARB decal sticker	
<i>Optional:</i> <b>Integrated Return to step/chassis</b> <b>(4415120)</b> Fit Kit: 6174079	6562715R	1	Return Tube assembly RHS.
	6562715L	1	Return Tube assembly LHS.
	3195146	1	Tread plate Return R/H
	3195147	1	Tread plate Return L/H
	6250024	4	Spacer S/Step
	4581044	8	Washer flat M8
	4581046	4	Nut M8 nyloc
	4581072	16	Washer flat M6
	6151022	4	Bolt M8 x 25
	6151128	16	Nut flange M6
	6151256	16	Screw M6 x 16 Button head
	6500002	2	Plug rubber 60.3 Tube blank
<i>Optional:</i> <b>Front rail to step/bar (2015- On)</b> <b>(4415110)</b> Fit Kit: 6174080	6562716R	1	Front Rail Assembly LC200 RH
	6562716L	1	Front Rail Assembly LC200 LH
	3195144	1	Tread Plate S/Rail RH
	3195145	1	Tread Plate S/Rail LH
	6250024	4	Spacer S/Step LG Rad
	4581044	8	Washer flat M8
	4581072	16	Washer flat M6
	6151128	16	Nut flange M6
	6151256	16	Screw M6 x 16 Button head
	6151212	4	Nut M8 nyloc
	6151022	4	Bolt M8 x 25mm
	6582464	1	Clamp kit S/Rail NG LG RAD

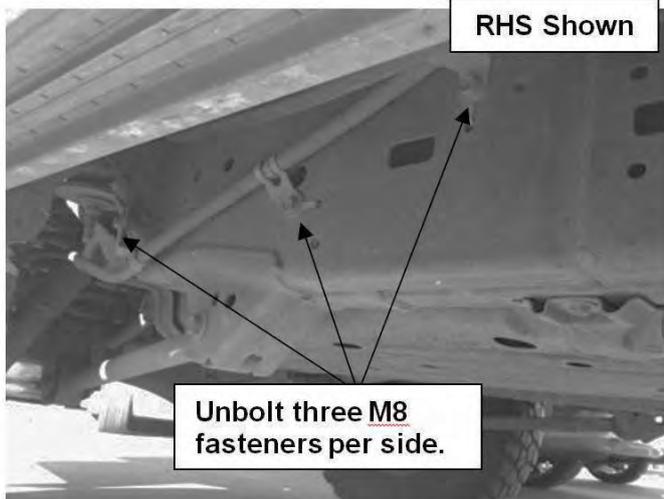
*\*Rear step (4415100) must be supplied with one of the optional front step/rail sections.*

## REAR STEP (4415100)

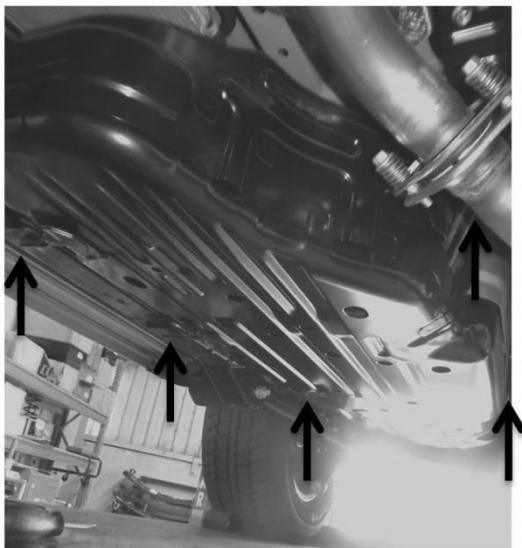
### VEHICLE PREPARATION for REAR STEP (4415100) only.



1. Remove and discard factory side steps by removing six M8 bolts per side as shown.
2. Refit the fasteners into the captive nuts in the vehicles body to seal against water ingress.



3. Unbolt the hand brake lines in the three places as shown on the drivers and passengers side. Retain fasteners for reuse.



4. Remove the fuel tank cover by unbolting five M8 fasteners as shown. Retain fasteners for reuse.

## VEHICLE PREPARATION

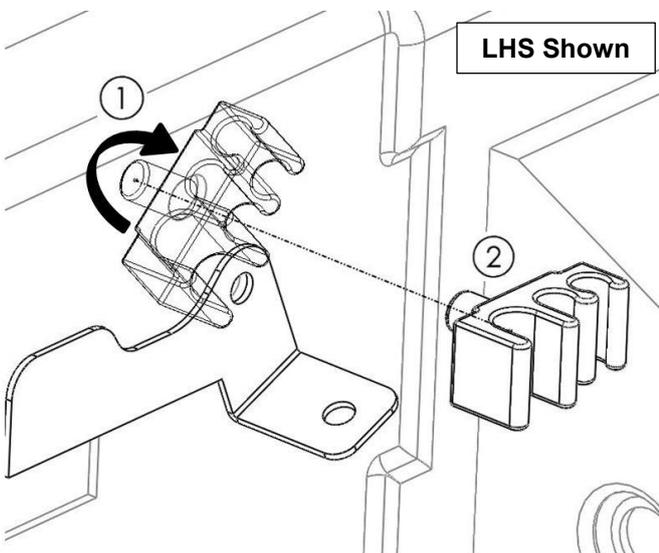


5. On the left hand side (LHS), inner side of the chassis & behind the transmission cross member, remove the brake line cover as shown.  
Retain fasteners and the brake line cover for reuse.



6. Unclip the lines from the chassis connector under the brake line cover. Use a screw driver to depress the plastic lock tabs carefully pulling the lines free as shown.

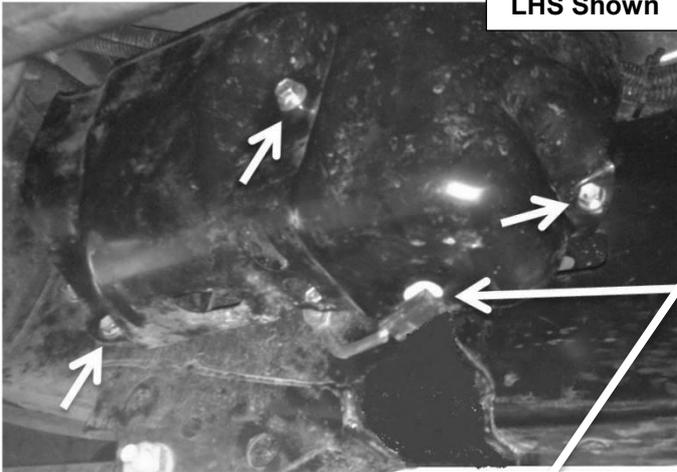
**CAUTION: Ensure not to break the plastic tabs or damage the lines.**



7. ① - Rotate the chassis line connector around inside the chassis by 90 degrees or until the long side is horizontal.  
② - Pull the clip outwards and remove from the chassis as shown.  
Set aside for reuse.

## VEHICLE PREPARATION

LHS Shown



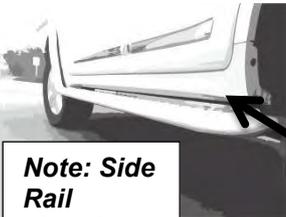
WIRE CONNECTOR

**Note: For KDSS equipped models only (KDSS\*).**

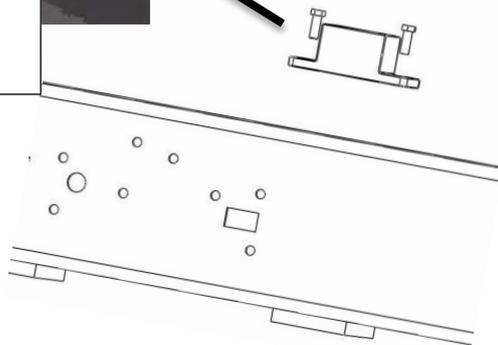
If the vehicle is not equipped with KDSS, skip to the following step.

8. **KDSS\*** - On the rear, inner side of the LHS chassis rail, remove three bolts to remove the cover panel as shown. Set aside for reuse.
9. Remove the wire connector from the rear of the cover panel and set the cover panel aside for reuse.

LHS Shown



**Note: Side Rail already fitted.**



RHS Shown

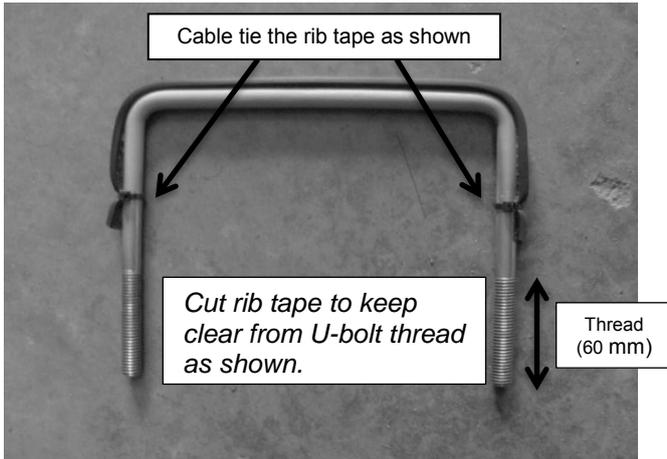


10. **KDSS\*** - Remove and discard the two bolts and the chassis/body block from the top of the LHS chassis rail located 200 mm in front of the rear tyre as shown.

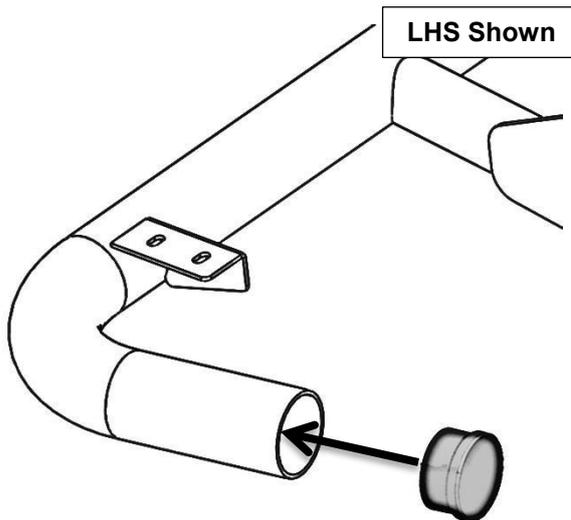
11. On the Top side of the RHS chassis rail, rearward of the transmission cross member - Unclip the fuel lines from the chassis connector using a screw driver to depress the plastic lock tabs. Then carefully pull the lines free. U-bolt will be installed behind plastic bridge and under the hard lines

**Caution: Ensure not to break the plastic tabs or damage the fuel lines.**

## REAR STEP (4415100) FITMENT for REAR STEP (4415120) only

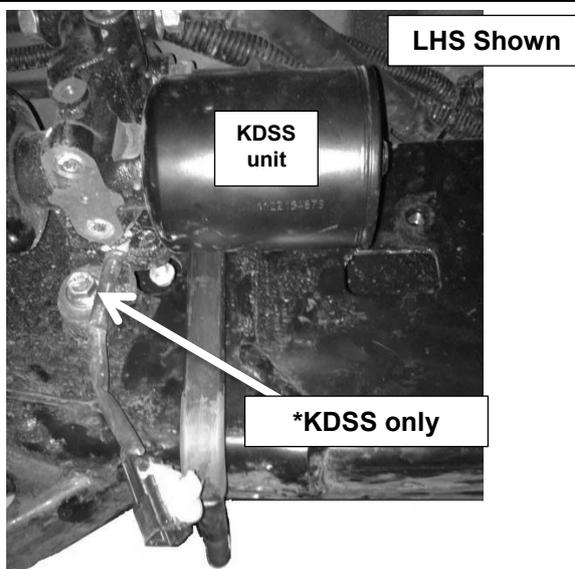


12. Apply rib tape to the outer side of all three U-bolts as shown using the cable ties supplied as shown.



13. Install a rubber plug into the rear of the LHS step as shown.

Repeat for RHS.

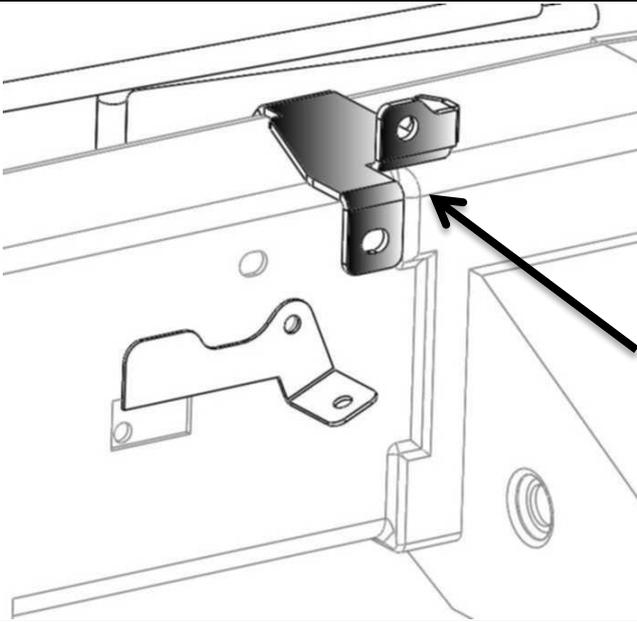


14. For the passenger's side (LHS). Place an M12 U-bolt into position as shown on the LHS of the chassis. Ensure that the U-bolt is rearward of the body block bolt/hole on the top of the chassis rail.

15. \*KDSS – To aid U-bolt insertion, temporarily remove of the bolts shown. Refit bolts once U-bolt has been installed into position as shown.

KDSS equipped vehicle shown.

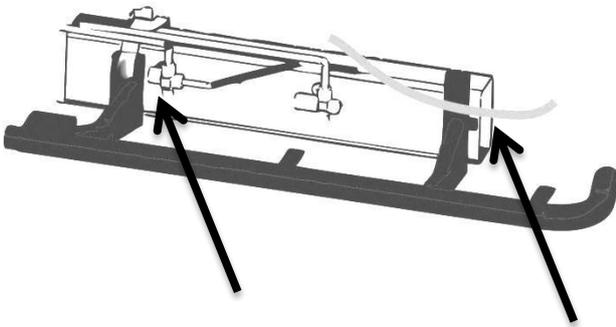
## REAR STEP (4415100) FITMENT for REAR STEP (4415120) only



16. Place the top LHS-front bracket over the chassis and into position as shown with the lines on the outside of the bracket.

**Hint: The lines should NOT be between the bracket and the chassis.**

KDSS equipped vehicle shown.



17. With the help of a friend - position the side step under the hand brake cable as shown, with the rear outer tube 50mm from the rear wheel arch. Support the step in place with the aid of jack stands.

18. Place the rear U-bolt through the rear chassis mount and loosely fix with M12 Nyloc nuts and flat washers.

**Hint: The rail may need to be moved fore and aft to aid insertion of the U-bolt through the bracket.**



19. Bend 2 x M8 nut plates so they can be inserted into chassis rail. Align these with the 10mm holes in the side of the rail and start M8 x 40 bolts with spring and flat washers. Trim tabs with side cutters at red arrows to insure tabs do not rattle on chassis. (RHS shown)

## REAR STEP (4415100) FITMENT for REAR STEP (4415120) only



20. Bend M12 cage nut plate so it can be inserted into chassis rail .Align with the square hole in the bottom of chassis rail and start M12 x 40 bolt with spring and flat washers.(RHS shown)

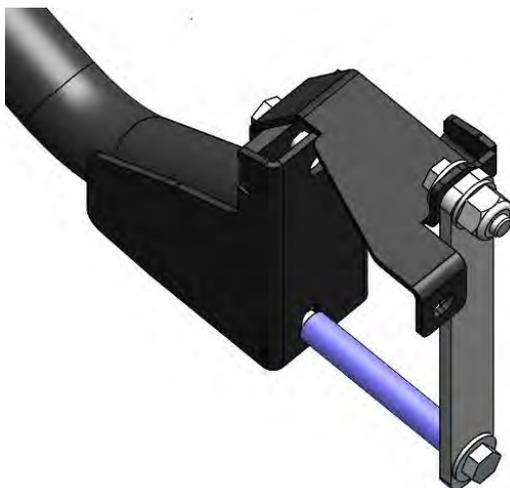


21. Place the top chassis bracket over the rail mount and start M12 x 25mm bolt with spring and flat washer.

Torque to specification.

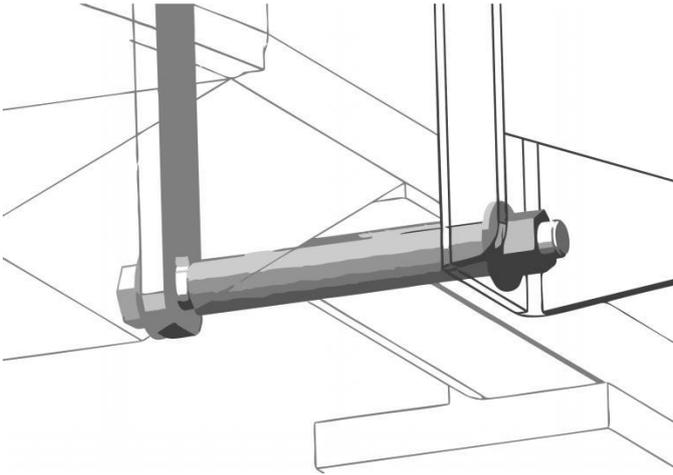


**M12 - 77 Nm.**



22. Insert the rear fixing plate underneath the pipes on the inside of the chassis then attach to the top bracket finger tight only, using an M12 x 40 mm bolt, nyloc nut and flat washers as shown.

## REAR STEP (4415100) FITMENT for REAR STEP (4415120) only



23. Place M12 x 120 mm bolt, flat washer through the rear fixing plate, attach the M12 sleeve over bolt then fix to bracket using M12 flat washers and a M12 nyloc nut as shown – finger tighten only.



24. Adjust side rail to the nominal fore and aft position by aligning the rear wheel arch with a straight edge and measuring 50mm forward of the rear tangent line of the side rail.



25. Fit the chassis line connector to the top bracket in reverse order to removal as shown. Clip the lines into position.

## REAR STEP (4415100) FITMENT for REAR STEP (4415120) only



26. Re-fit the rear KDSS unit - cover in reverse order to removal as shown.(If fitted)



27. Re-fit the LHS front hand brake cable with the M8 x 50 bolt with spring and flat washers. Add the 19 mm long spacer to the bolt as shown to clear the side rail mount.



28. On the RHS, locate the front U-bolt behind the transmission cross member, ensure the U-bolt is placed under the lines on top of the chassis rail as shown.

29. Re-adjust the lines to give clearance and re-clip the fuel lines in place.

- **CRITICAL: RUBBER MUST BE BETWEEN U BOLT AND FUEL LINES**

## REAR STEP (4415100) FITMENT for REAR STEP (4415120) only

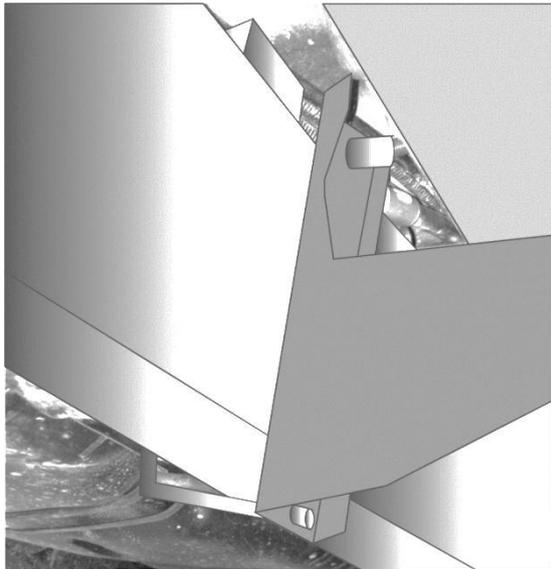


30. Bend 2 x M8 nut plates so they can be inserted into chassis rail. Align these with the 10mm holes in the side of the rail and start M8 x 40 bolts with spring and flat washers. Trim tabs with side cutters at red arrows and insure tabs do not rattle on chassis. (RHS shown)



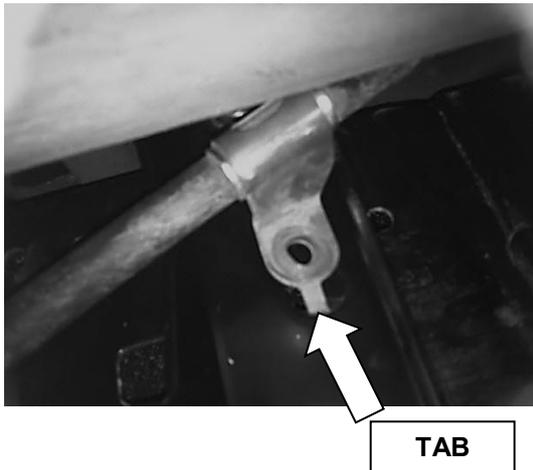
31. Bend M12 cage nut plate so it can be inserted into chassis rail. Align with the square hole in the bottom of chassis rail and start M12 x 40 bolt with spring and flat washers.(RHS shown)

## REAR STEP (4415100) FITMENT for REAR STEP (4415120) only

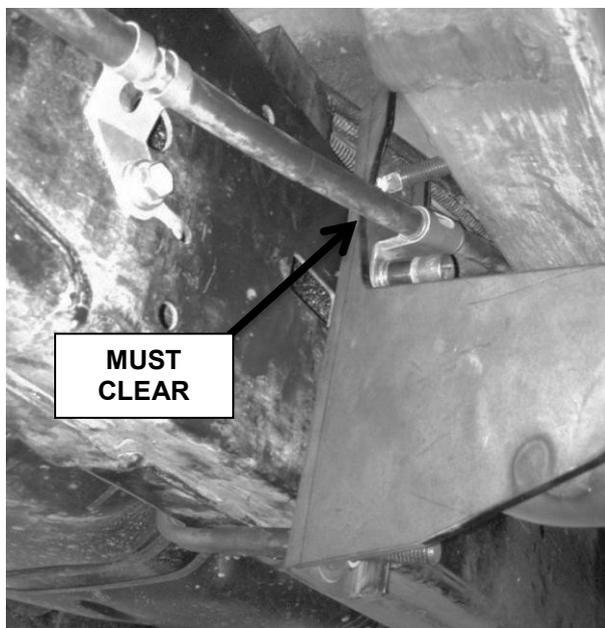


32. Slide a flat U-bolt through the gap between the fuel tank and chassis rail.

**Hint: Insert between fuel tank and chassis with U-bolt thread facing towards rear of vehicle. Rotate U-bolt anti-clockwise so the thread is located in front of the body block position. Ensure that the U-bolt is underneath the steel lines on top of the chassis rail.**



33. Cut locating tab off handbrake cable connector in line with the rear RHS bracket as shown.



34. With the help of an assistant position the driver's side step under the handbrake cable with the rear mount bracket aligned to the existing handbrake cable bolt as shown. Support the step in place using jack stands or equivalent.

35. Measure 50mm from rear tube face to the front of the rear wheel arch as done for the LHS.

36. Loosely fit M12 nyloc nuts and flat washers to the front and rear U-bolts as shown.

37. Re-attach the fuel tank cover using fasteners removed.

38. Reattach the handbrake cable with fasteners removed previously as shown, finger tight only.

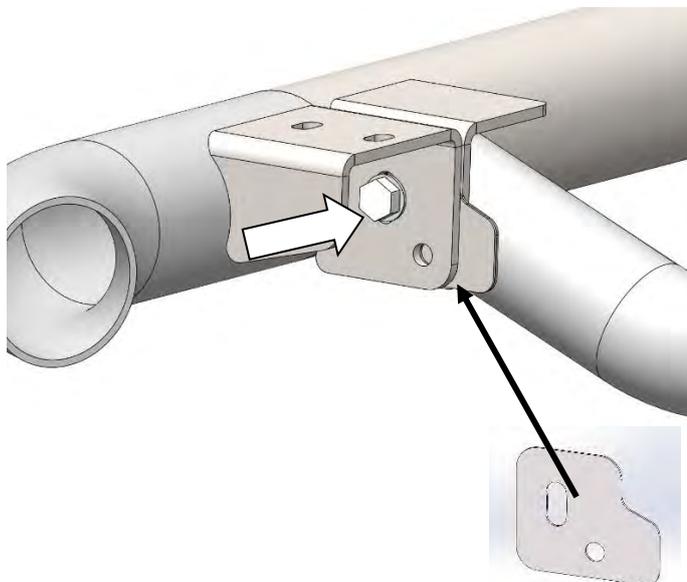
# IMPORTANT

**Do not tighten U-bolts & front LH bracket until instructed in one of the optional accessories instructions.**

*Find the fitting instructions in this booklet for the correct stand alone rail / integrated side rail / guard rail assembly and complete the fitment following these instructions.*

PART #	DESCRIPTION	PAGE #
4415120	INTEGRATED RETURN RAIL ASSEMBLY	14
4415110	FRONT GUARD RAIL ASSEMBLY (15 - / BULLBARS)	19

## INTEGRATED RETURN RAIL FITMENT TO VEHICLE (4415120)



### **FITTING CURVED END SECTIONS**

1. On the RH side fit the curved end section onto the side rail as shown and attach using an M8X20 Bolt, 2 x M8 Flat Washers and an M8 Nyloc Nut.

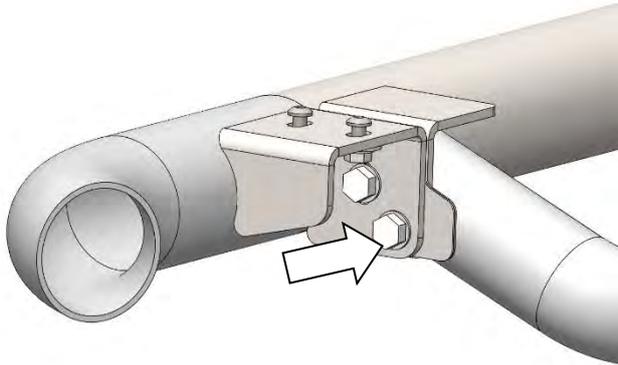
**Note:** Up to 3 x 6250024 - SPACER S/STEP / RETURN LG RAD may be installed between Side Step and Side Rail Brackets to obtain better fitment.

2. Ensure the top faces of the curved section and the side rail are parallel and tighten the fasteners.

**Torque to Specification.**



## INTEGRATED RETURN RAIL FITMENT TO VEHICLE (4415120)



- 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.

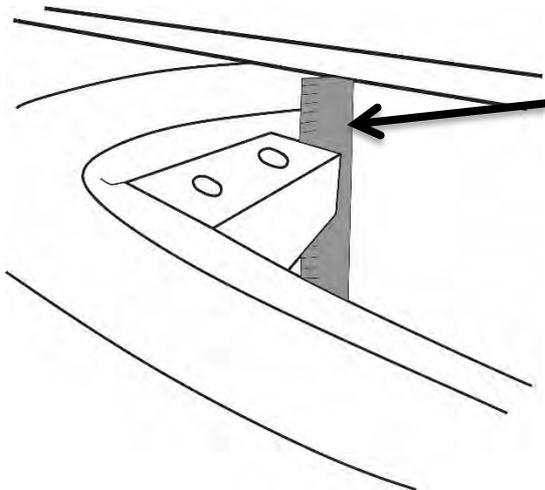
**NOTE: IT MAY BE NECESSARY TO TEMPORARILY REMOVE THE MUD FLAPS TO GAIN ACCESS WITH THE DRILL.**



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

- Apply paint or a rust preventative to the bare metal.
- 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.**



- Use a ruler to measure the distance between the checker plate brackets and the body sill as shown. Adjust distance to 30 mm nominal distance. Check the distance at each bracket to ensure distance is equal at the front and the rear of the vehicle.

Repeat for other side.

**Note: Side rail height can be set from 25 mm to 35 mm.**

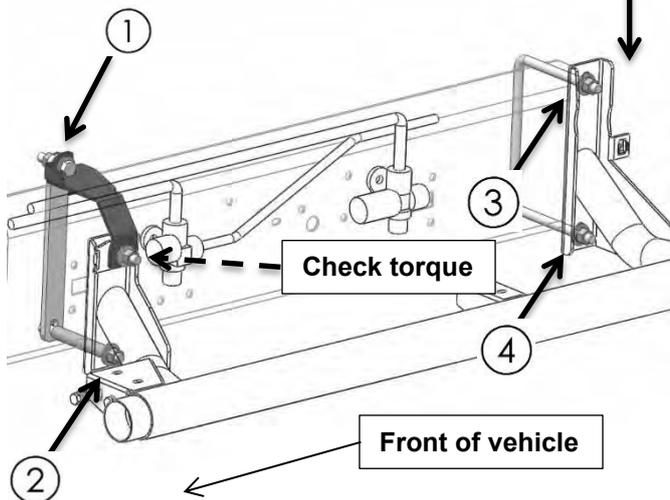
**CAUTION: DO NOT ADJUST GAP TO LESS THAN 25 mm.**

**Reducing the gap below 25 mm can damage the vehicle and may result in the fuel line(s) cracking / rupturing.**

## INTEGRATED RETURN RAIL FITMENT TO VEHICLE (4415120)

LHS shown

Cage Nut Location



7. Torque four bolts to specification in the order shown.

 **M12 - 44 Nm.**

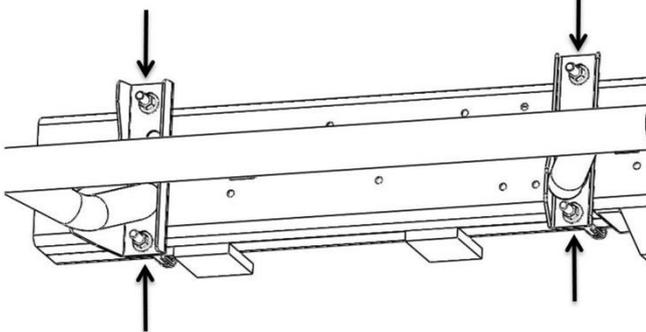
8. Recheck the bolt used on the front mount is torqued to the correct value.

 **M12 - 77 Nm.**

9. Place an M8 cage nut in the rear chassis mount bracket as shown and bolt the brake cable to the cage nut using the factory M8 bolt removed.

10. Reattach the handbrake cable into the chassis using the tubing spacer & M8 x 50 bolt provided.

RHS shown



11. Tighten the two U-bolts (four nuts) on the RHS.  
Torque to specification.

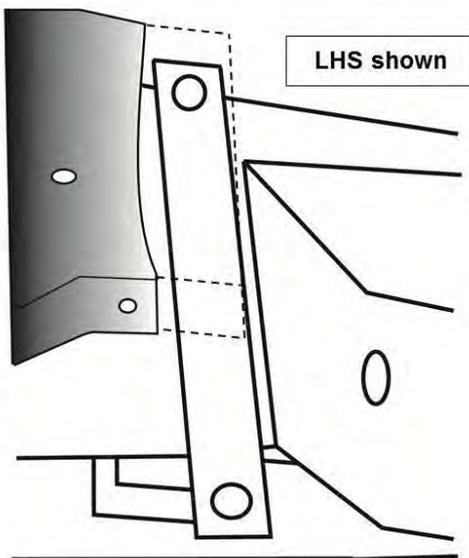
 **M12 - 44 Nm.**

12. Re-fit the fuel tank cover to the vehicle using the factory hardware removed.

13. Torque all M10 fasteners to specification.

 **M10 - 44 Nm.**

LHS shown



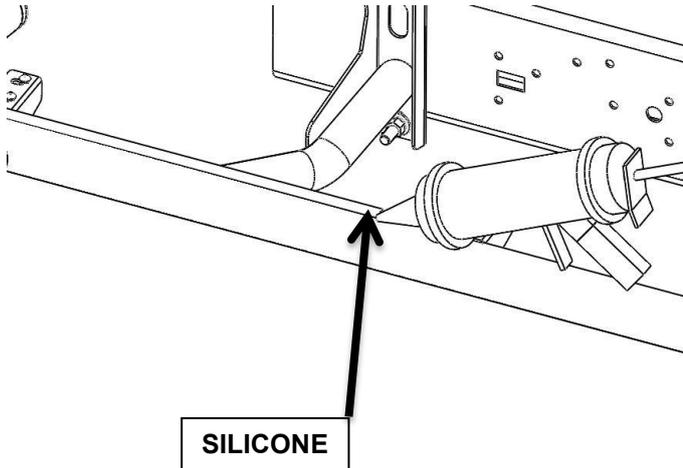
14. Trim the front of the LHS front cover panel 30 mm using a jigsaw / hacksaw or until the panel has a 5–10 mm clearance from the rear fixing plate as shown.

**Warning: Cutting operations can result in flying metal debris, safety equipment should be used.**



15. Re-fit the cover shield using the factory fasteners removed.

## INTEGRATED RETURN RAIL FITMENT TO VEHICLE (4415120)



16. Run a bead of silicon on the inside, top peak of the tube as shown. Place the tread plate under the vehicles lower sill with the flange facing upwards. Fasten in place using M6 x 16 mm button screws, flat washers and flange nuts.

Torque to specification.

 M6 - 7 Nm.

**Note: Immediately remove any excess / visible silicon using rag and cleaner.**

Repeat for other side.

17. Ensure that any excess silicon is wiped off immediately.



18. Apply ARB sticker as shown ensuring it is level and flat.

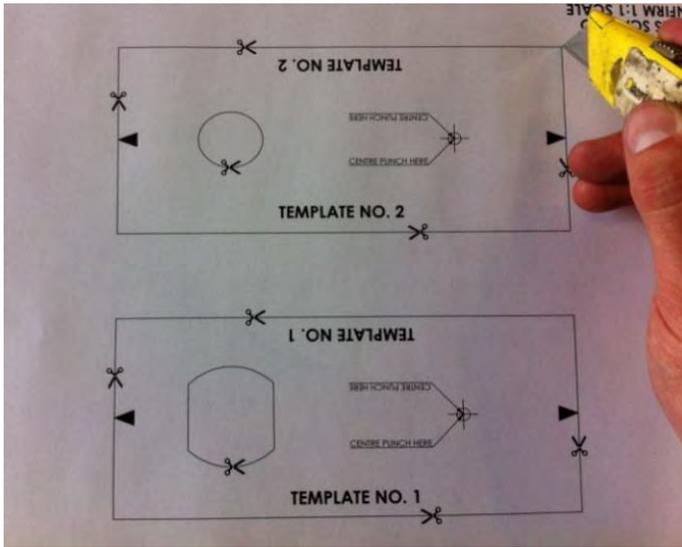
**Note: Clean the surface with a solvent cleaner prior to application to ensure appropriate adhesion.**

Repeat for other side.

**FITTED PRODUCT**  
*SIDE STEP & RETURN TUBE*



## FRONT GUARD RAIL FITMENT TO VEHICLE (4415110) (FIT RHS ASSEMBLY FIRST TO INSURE CLEARANCE IF AIR SHORKEL IS FITTED)

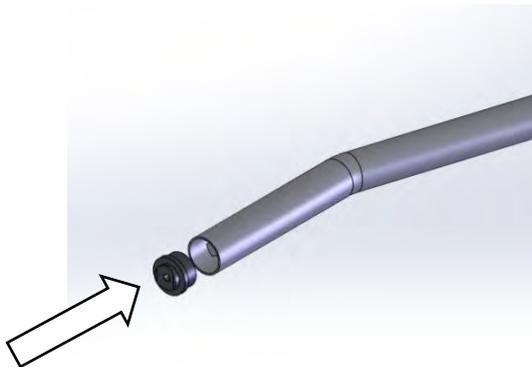


1. Using Scissors or a Stanley Knife carefully cut out Templates 1 and 2 including the 2 x pieces from the inside – (See image).



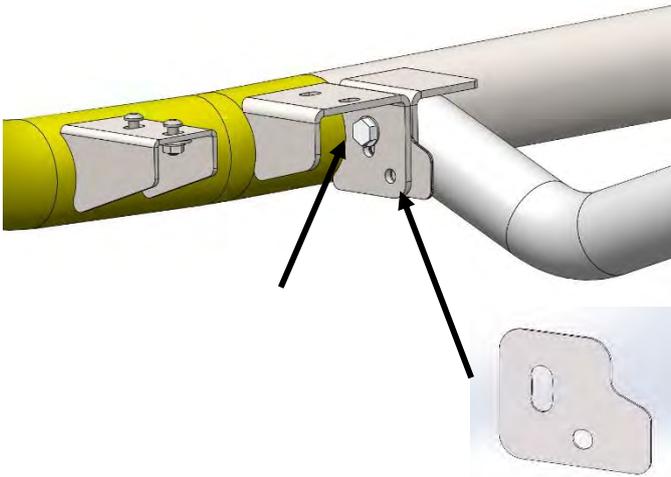
2. Use masking tape to wrap **1 x layer only** of tape around the Bull Bar Outer Frame to protect it from damage. Ensure masking tape is applied flat and without creases.

**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.



3. Install Tube Spigot into the front of the Side Rail – Install without spacers fitted.

## FRONT GUARD RAIL FITMENT TO VEHICLE (4415110)



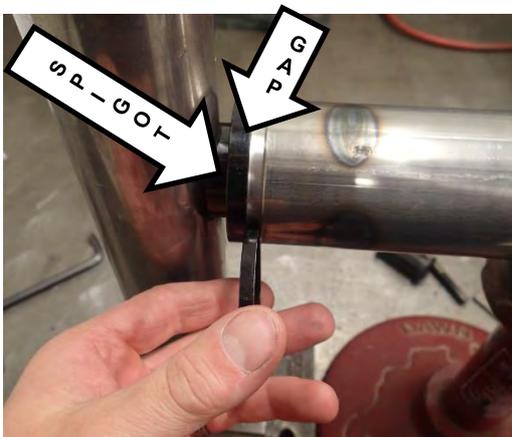
4. On the RH side, place the Front Side Rail assembly onto the end of the Side Step Rear section as shown and attach using an M8X20 Bolt, 2 x M8 Flat Washers and an M8 Nyloc Nut.

**Note:** Up to 3 x 6250024 - SPACER S/STEP / RETURN LG RAD may be installed between Side Step and Side Rail Brackets to obtain better fitment.

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



5. Hold Side 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.
6. 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.

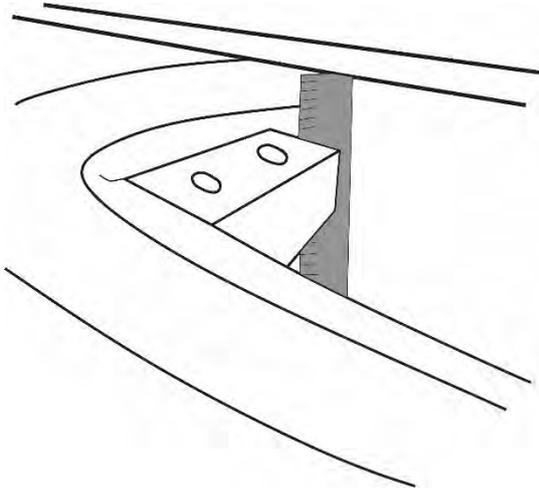


7. Assess the gap between the front end of the Side Rail and the Tube Spigot. Select the closest matching Spacer/Spacers to fill the gap. (Spacer options: Nil / 5mm / 10mm or 15mm (5mm + 10mm Spacers).

- **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.



8. **CRITICAL:**  
**Set distance from top face of the bull bar wing to bottom of rail to 58mm +/- 2mm for correct set up.**

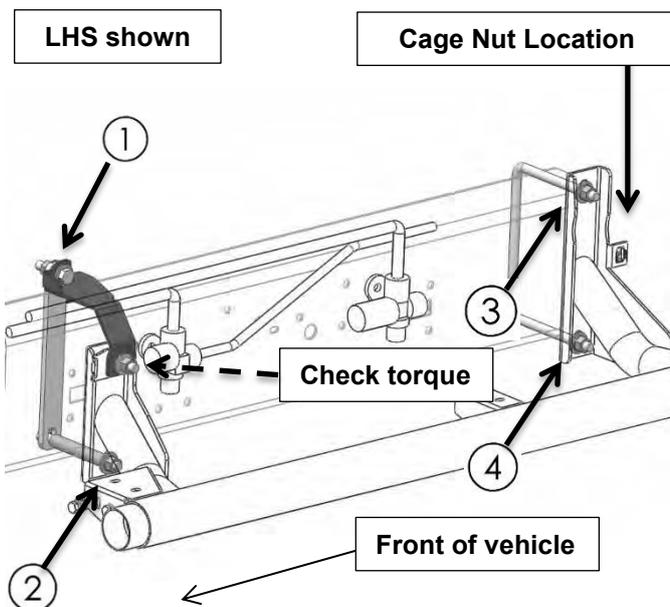


9. Use a ruler to measure the distance between the checker plate brackets and the body sill as shown. Adjust distance to 30 mm nominal distance. Check the distance at each bracket to ensure distance is equal at the front and the rear of the vehicle. Repeat for other side.

**Note: Side rail height can be set from 25 mm to 35 mm.**

**CAUTION: DO NOT ADJUST GAP TO LESS THAN 25 mm.**

**Reducing the gap below 25 mm can damage the vehicle and may result in the fuel line(s) cracking / rupturing.**



10. Torque four bolts to specification in the order shown.

 **M12 - 44 Nm.**

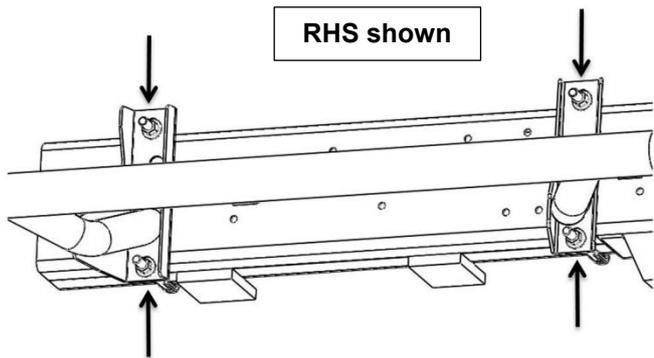
11. Recheck the bolt used on the front mount is torqued to the correct value.

 **M12 - 77 Nm.**

12. Place an M8 cage nut in the rear chassis mount bracket as shown and bolt the brake cable to the cage nut using the factory M8 bolt removed.

13. Reattach the hand brake cable into the chassis using the tube spacer & M8 x 50 bolt provided. Hand brake cable must clear chassis corners & brackets (10mm clear).

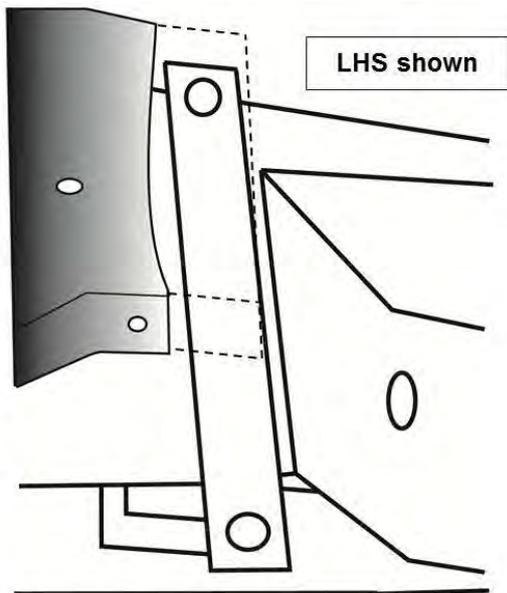
## FRONT GUARD RAIL FITMENT TO VEHICLE (4415110)



14. Tighten the two U-bolts (four nuts) on the RHS.  
Torque to specification.

 **M12 - 44 Nm.**

15. Re-fit the fuel tank cover to the vehicle using the factory hardware removed.



16. Trim the front of the LHS front cover panel 30 mm using a jigsaw / hacksaw or until the panel has a 5–10 mm clearance from the rear fixing plate as shown.

**Warning: Cutting operations can result in flying metal debris, safety equipment should be used.**

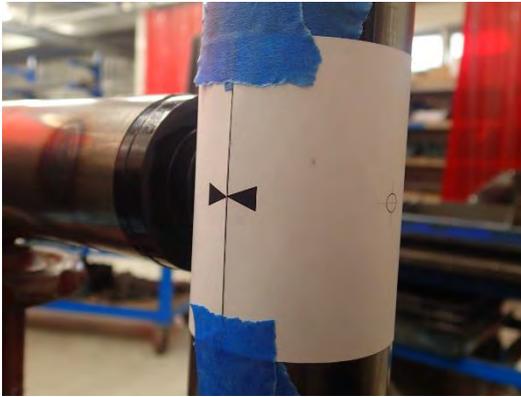


17. Re-fit the cover shield using the factory fasteners removed.



18. 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 in this instance).

## FRONT GUARD RAIL FITMENT TO VEHICLE (4415110)



19. 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).**



20. Using a Centre Punch, carefully Centre Punch the outer frame at the centre mark of “TEMPLATE 1”.

21. Remove Side Rail and set aside.

22. Remove “TEMPLATE 1”.

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



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

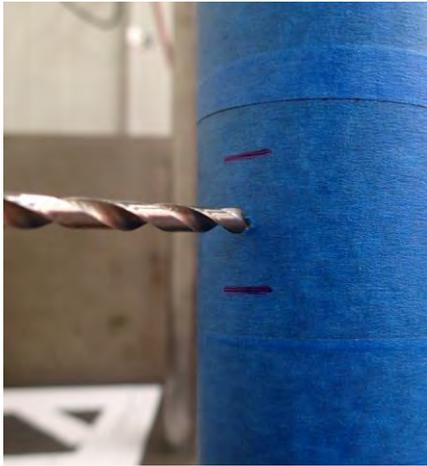
- **Note: These marks on the outer frame give an indication of how far to drill with the Stepped Drill.**

24. 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.**



## FRONT GUARD RAIL FITMENT TO VEHICLE (4415110)



25. At the location of the Centre Punch mark, use an  $\text{\O}4\text{mm}$  (or similarly sized) Drill Bit to drill a pilot hole through the front face of the Bull Bar outer frame.



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



26. Use a Stepped Drill Bit to drill the  $\text{\O}4\text{mm}$  pilot hole out to  $\text{\O}24\text{mm}$ .

**WARNING - Do not drill past the 24mm marks on the outer frame or the  $\text{\O}24\text{mm}$  mark on the Stepped Drill - Drilling too far will destroy the Bull Bar.**



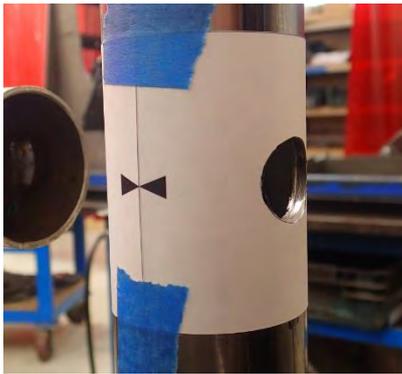
**Warning:** Drilling operations can result in flying metal debris, safety glasses should be worn.



27. Using a small Round or Half-Round File carefully remove any burrs from the edge of the  $\text{\O}24\text{mm}$  hole.

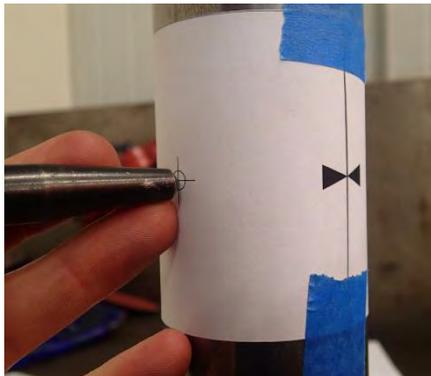
**-Note:** Care should be taken to avoid damaging the outer frame paintwork surrounding the  $\text{\O}24\text{mm}$  hole.

## FRONT GUARD RAIL FITMENT TO VEHICLE (4415110)



28. 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).**



29. Using a Centre Punch, carefully Centre Punch the outer frame at the centre mark of "TEMPLATE 2".

30. Remove "TEMPLATE 2".

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



31. At the location of the Centre Punch mark, use an Ø4mm (or similarly sized) Drill Bit to drill a pilot hole through the front face of the Bull Bar outer frame.

32. Use an Ø12mm Drill Bit to drill the Ø4mm pilot hole out to Ø12mm.



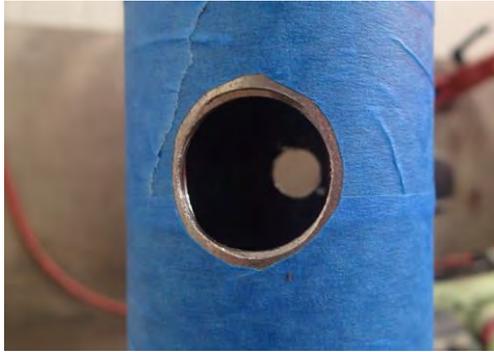
**Warning: Drilling operations can result in flying metal debris, safety glasses should be worn.**

## FRONT GUARD RAIL FITMENT TO VEHICLE (4415110)



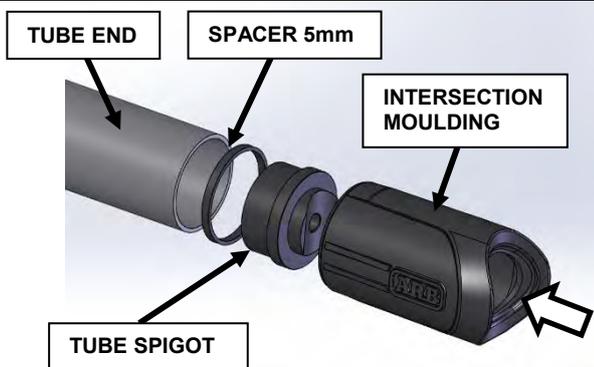
33. Using a small Flat or Half-Round File carefully remove any burrs from the edge of the Ø12mm hole.

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

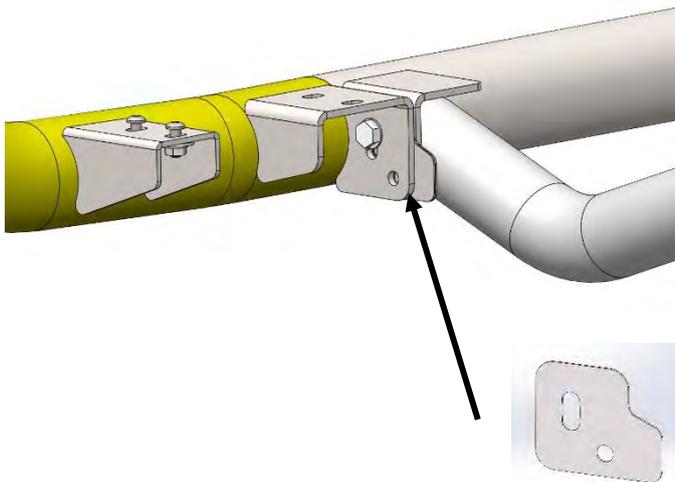


34. Clean and paint with Rust Preventative Paint any exposed/bare metal surfaces left after drilling.

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



35. Install Tube Spigot, selected Spacer/Spacers and Intersection Moulding into place on the Side Rail.



36. Install Side 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:** Up to 3 x 6250024 - SPACER S/STEP / RETURN LG RAD may be installed between Side Step and Side Rail Brackets to obtain better fitment.

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

## FRONT GUARD RAIL FITMENT TO VEHICLE (4415110)



37. Install Submerged Bush and M10 Bolt.

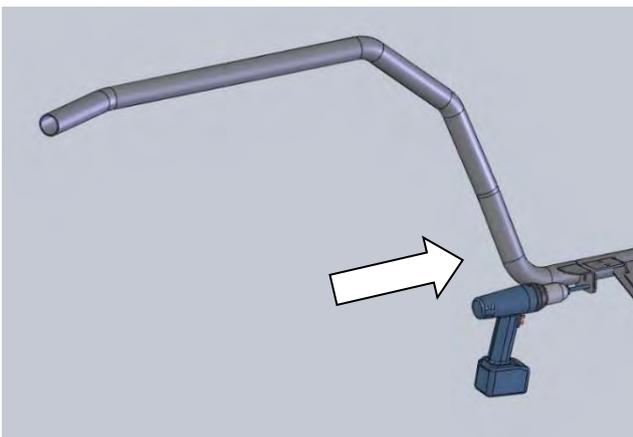
**Torque to Specification.**



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



38. Tighten M8 Bolt ensure the slot and holes in the 6250024- SPACER S/STEP / RETURN LG RAD are aligned with the holes in the Step / Side Rail Brackets.



39. 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.

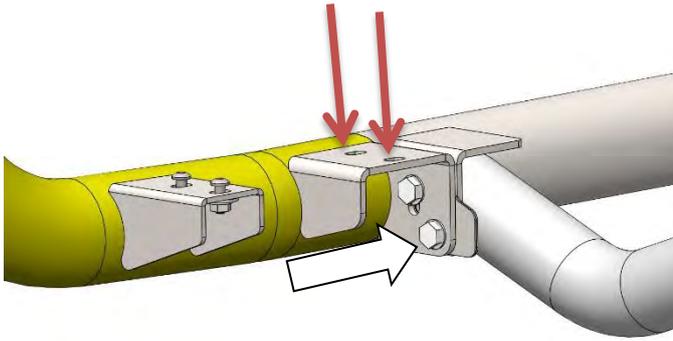
**NOTE: IT MAY BE NECESSARY TO TEMPORARILY REMOVE THE MUD FLAPS TO GAIN ACCESS WITH THE DRILL.**

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



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

## FRONT GUARD RAIL FITMENT TO VEHICLE (4415110)



41. Pin the front side rail to the rear section using an M8X20 Bolt, 2 x M8 Flat Washers and an M8 Nyloc Nut.
42. Slots indicated by red arrows are not used in this assembly.

**Torque to Specification.**



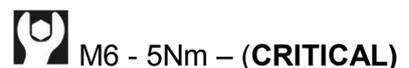
43. Slots indicated by red arrows are not used in this assembly to fix tread plates down. There are no holes in the tread plates to align with these slots. Use front mount bracket only.

### ***THE FOLLOWING STEPS APPLY TO BOTH SIDE RAIL AND FRONT SECTION FITMENT***

44. Run a bead of silicon along the top of the rail where the Tread Plate will sit. (This will help prevent vibration).
45. 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.**



## FRONT GUARD RAIL FITMENT TO VEHICLE (4415110)



46. If fitting front rails, apply the supplied ARB decals here on both the RH and LH sides of the vehicle.



47. If fitting curved front sections, apply the supplied ARB decals here on both the RH and LH sides of the vehicle.

## FITTED PRODUCT

