



2023+ INEOS GRENADIER SCRUB RAILS

IMPORTANT! – READ BEFORE INSTALLATION

- This product must be installed exactly as per these instructions using only hardware supplied.
- Take a few moments to read instructions thoroughly before beginning work.
- In the event of damage to any bar component please contact OFFROAD ANIMAL to arrange repair/replacement of components.
- Do not use this product for any vehicle make or model other than that specified on these instructions.
- Do not remove labels from this product.
- This product and its fixings must not be modified in any way unless stated in these fitting instructions.
- The installation of this product is recommended for trained personnel.
- These instructions are correct at time of publication. OFFROAD ANIMAL cannot be held responsible for the impact of any changes subsequently made by the vehicle manufacturer. If you find something has changed please contact us to let us know!
- During installation it is the duty of the installer to check correct operation/clearances of all components.
- If Instructions are to be printed for reference in the workshop, it is recommended that they are printed in colour, for best legibility.
- Fitting time estimated 1-2 hours

GENERAL CARE AND MAINTENANCE

Use caution when cleaning with pressure washers, as they may compromise the product coating's integrity. Exercise care to avoid surface damage.

Only wash the product with a PH neutral car wash to prevent paint damage and discolouration.

Do not use acidic or alkaline based cleaning products.

Plastic parts may be maintained with silicone spray.

It is important to perform regular checks (pre/during/post trip or on an annual basis) on the installed product. More frequent checks may be required in extreme use cases. Checks include:

- Visual inspection for damage (eg. cracks, chips, dents etc.)
- Electrical wiring is not rubbing anything or worn out
- Bolts are torqued to correct specification (see torque guide below)

For touching up small stone chips, Offroad Animal recommends the following paint products:

- Dupli-Color Trim & Bumper Paint Black (TB101)
- VHT Hood, Bumper & Trim Paint Black (SP27)

BOLT TORQUE SETTINGS

Use the following bolt torques on all general fasteners, unless otherwise specified.

GENERAL FASTENERS	
Size	Torque Nm
M5	5 Nm
M6	9 Nm
M8	22 Nm
M10	44 Nm
M12	77 Nm

Use the following bolt torques on all structural front bar mount and tow point fasteners, and rear towbar fasteners, unless otherwise specified.



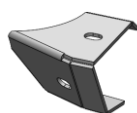

FRONT BAR MOUNTS AND TOW POINTS + REAR TOWBAR	
Size	Torque Nm
M10	57 Nm
M12	100 Nm
M14	164 Nm
M16	248 Nm

Always use a torque wrench to set correct torque settings. Ensure torque wrench is set to Nm unit of measurement. Otherwise perform conversion to lb-ft.

PARTS LISTING

IMPORTANT: Check all parts are present before beginning work! Contact OFFROAD ANIMAL if something is missing.

Main Parts – In the Box

Qty	Part Number	Description	Image
1	SR- IGR-G1-23-ASM1R	Ineos Grenadier Side Rail Weldment	
1	SR- IGR-G1-23-ASM1L	Ineos Grenadier Side Rail Weldment	
2	SR-COM-SPG-90-40NB	90 Degree Side Rail Spigot - 40NB Tube	
1	B-1842R	Ineos Grenadier Side Rail Cover Plate	
1	B-1842L	Ineos Grenadier Side Rail Cover Plate	
2	T-0069	Crush Tube 65mm 16x1.6mm	
2	M10 Saddle Washer	Black Nylon Saddle Washer	
2	PW-P-14X9-180	Pinch Weld - Plain 14X9MM, Rubber, 180mm Length	N/A

Small Parts – Contained in Small Parts Kit Bag

Qty	Part Number	Description
2	M10 FW LHD BLACK ZINC	WASHER, FLAT M10X28.5X2.5, ISO4042 ZnNi BLACK PASSIVATED FINISH
2	M10X100 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M10X100X1.5 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH

TOOLS REQUIRED

The following tools will be required to install the product.

Hand Tools	Power Tools	Workshop Equipment
16mm Metric Socket / Spanner 5+6mm Hex (Allen) Key Centre Punch Deburr Tool Side Cutters	Electric Drill 6mm Drill Bit Step Drill (6-18mm min. range) Electric/Air Impact Driver (Optional)	Masking Tape Marker Pen Workshop Rag Paint Pen/Rust Inhibitive Paint

WORKSHOP SAFETY

It is the responsibility of the installer to always complete works in a safe manner. Make sure the following safety equipment is available and precautions are observed whilst fitting this product.

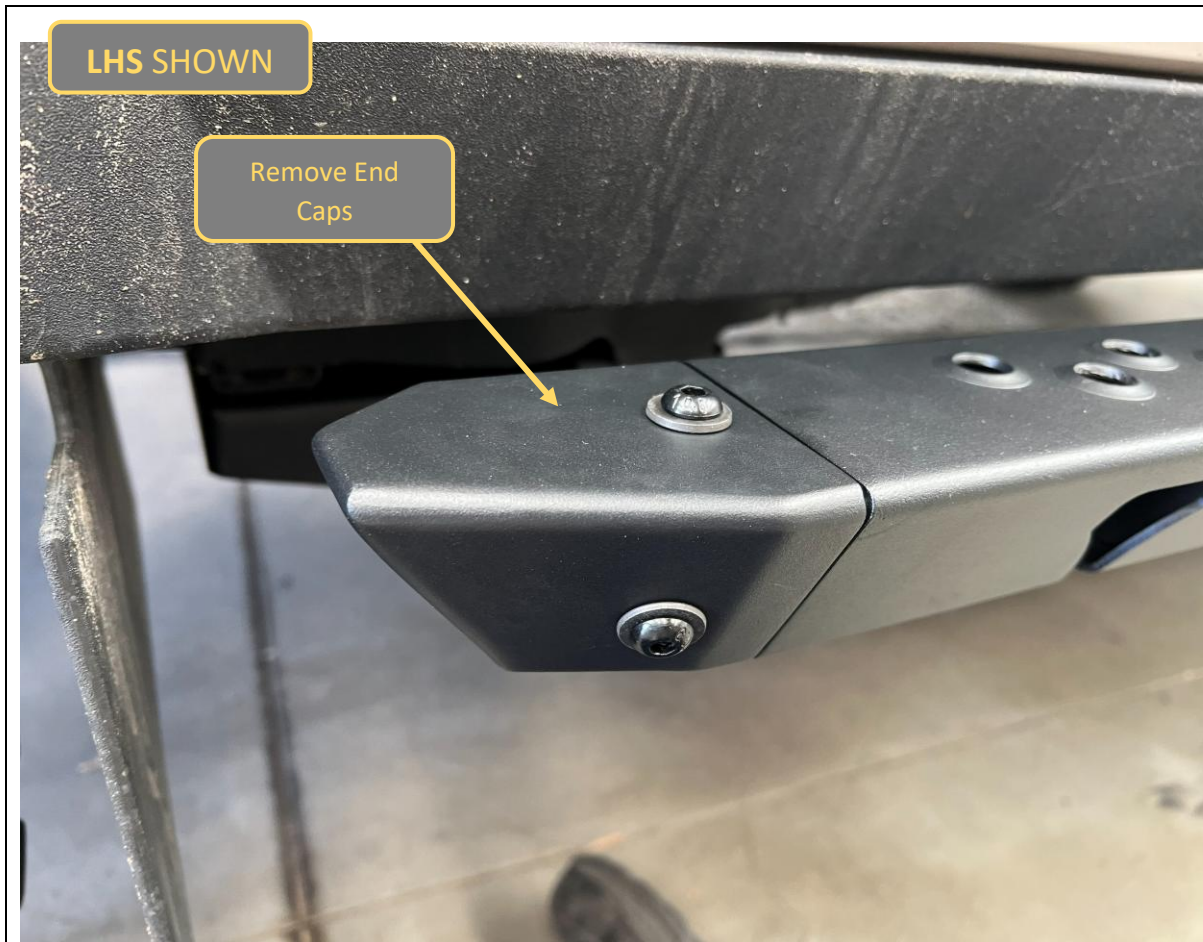
<p>Hearing Protection</p> 	<p>Always wear ear protection when using power tools.</p>
<p>Eye Protection</p> 	<p>Ensure eye protection is always worn when cutting or drilling.</p>
<p>Manual Handling</p> 	<p>Do not attempt to lift bar assemblies or rock sliders on your own.</p> <p>Always use two people to lift or use mechanical Lifting aid such as hydraulic lifting trolley.</p>
<p>Vehicle Support</p> 	<p>Always ensure vehicle is properly supported when working on it. Do not attempt to fit products whilst suspension work is being carried out. Do not work under a vehicle supported only by a jack.</p>



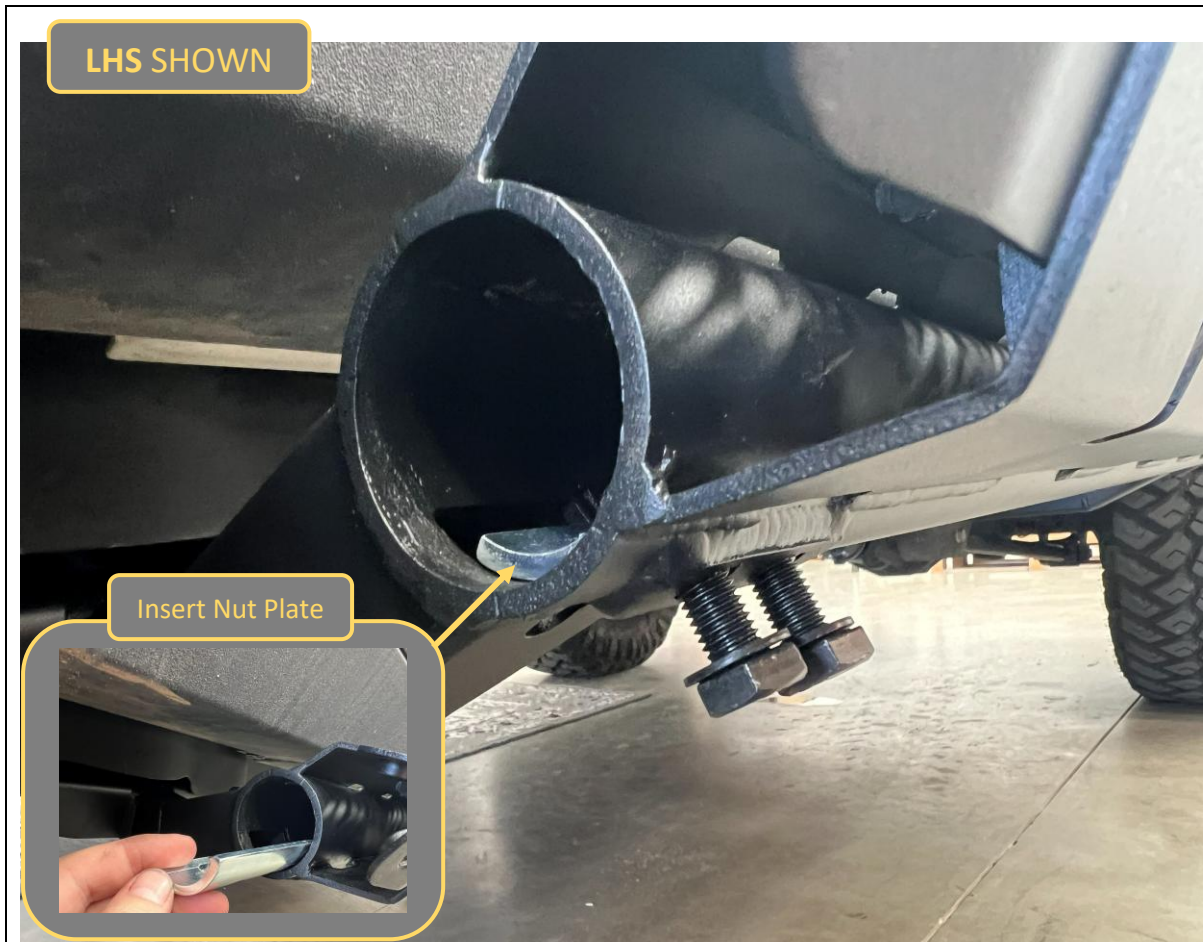
1. Offroad Animal Toro Bar (Part Nos. **FB-IGR-G1-23-TOR-ASM0**) and Steel Rock Sliders (Part No. **RSW-IGR-G1-23-ASM0**) must be fitted to the vehicle prior to fitment of these scrub rails.
2. These scrub rails are not compatible with any other variants of rock sliders and front bars.

TOOLS REQUIRED

FASTENERS



<p>3. If fitting scrub rails to a vehicle with existing Toro bullbar and slider fitment, remove the slider end caps from the rock sliders. Follow the fitment steps in reverse on the slider instructions.</p> <p>4. If fitting scrub rails to vehicle at the same time as Toro bullbar & sliders install products in the following order</p>	<p>TOOLS REQUIRED</p> <p>5mm Hex Key 16/17mm socket</p>
<p>1st - Toro Bull Bar 2nd – Rock Sliders 3rd – Scrub Rails</p>	<p>FASTENERS</p> <p>Supplied with Rock Slider Kit</p>



5. Insert the tubular nut plate (supplied in rock slider kit) into the end of the main rock slider tube.
6. Align with the holes in the main tube and thread on 2x M10x35 Black Hex Bolts with Black HD washers (supplied in rock slider kit). Leave the bolts very loose, with plenty of thread showing below the tube, as shown in the image.

TOOLS REQUIRED

FASTENERS

- 2x M10x35 Black Hex Head Bolts
- 2x M10 Black Flat Washers
- 1x Tubular Nut Plate

Supplied in Rock Slider Kit

<ol style="list-style-type: none"> 7. Push up on the 2x M10x35 Black Hex bolts to create a gap between the main slider tube and the nut plate. 8. Fit the side rail to the rock slider from the front, ensuring the tube sits in the gap between the main slider tube and the nut plate. 	<p>TOOLS REQUIRED</p>
<p>Carefully allow side rail to rotate away from the vehicle until it rests in place without further support.</p>	<p>FASTENERS</p>



9. Apply masking tape to the toro bullbar tube in the area where the scrub rail will join, as indicated in diagram above.
10. Align the scrub rail with the vehicle to perform a dry test fit. Manipulate the position of the scrub rail to achieve the target alignment. Scrub rail should be
 - Approx 25mm clearance to the vehicle body above the tyre.
 - Parallel to the top face of the Rock slider.

Ensure the end spigot is included between the end of the side rail and the toro tube, either with an optional M10 bolt, or held in position by an assistant.
11. Once happy with position, snug the M10x35 bolts at the rock slider -> side rail interface just tight enough to prevent the side rail tube from moving.

TOOLS REQUIRED

Masking tape
16mm Socket / Spanner

FASTENERS

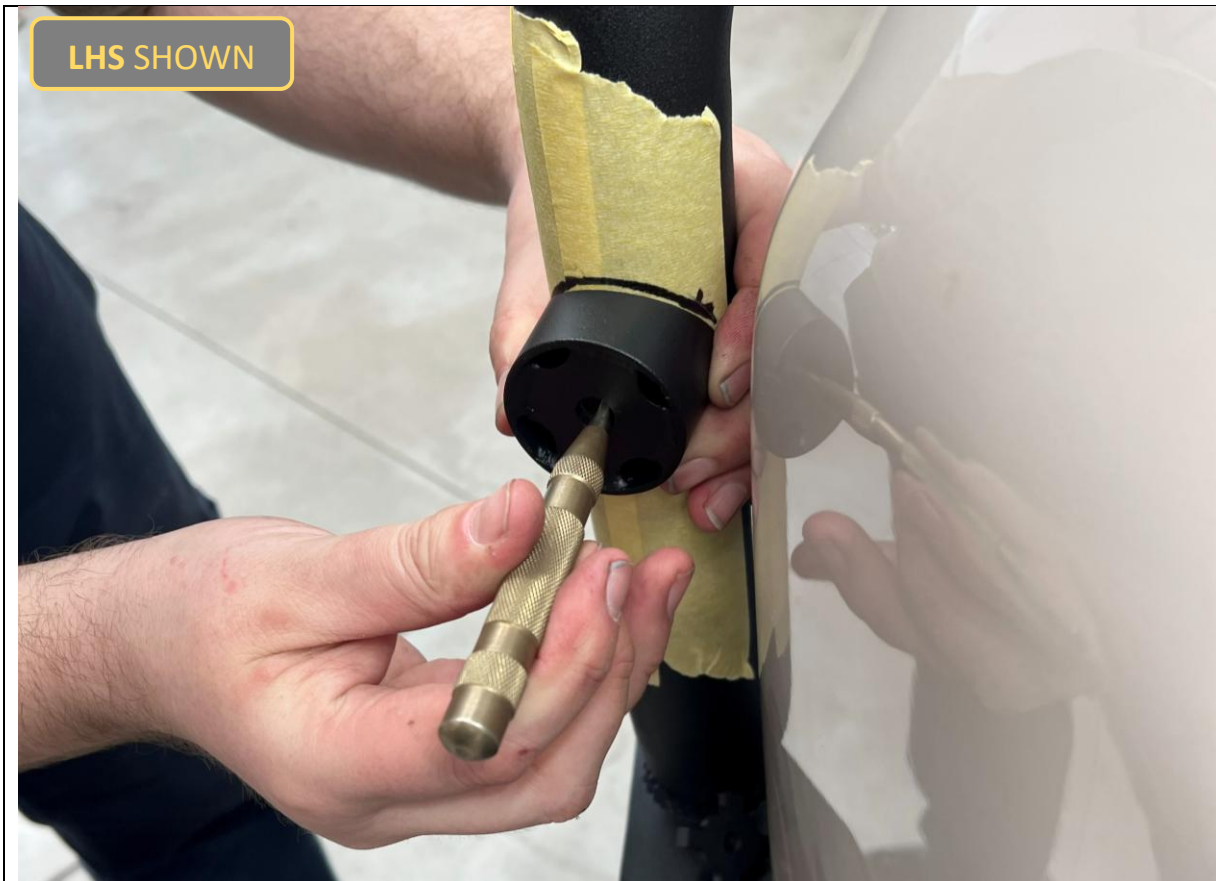


12. Whilst holding scrub rail + Spigot in desired position, Use marker pen to trace the outline of the spigot onto the masking tape placed on the Toro bar tube.

TOOLS REQUIRED

Marker pen

FASTENERS



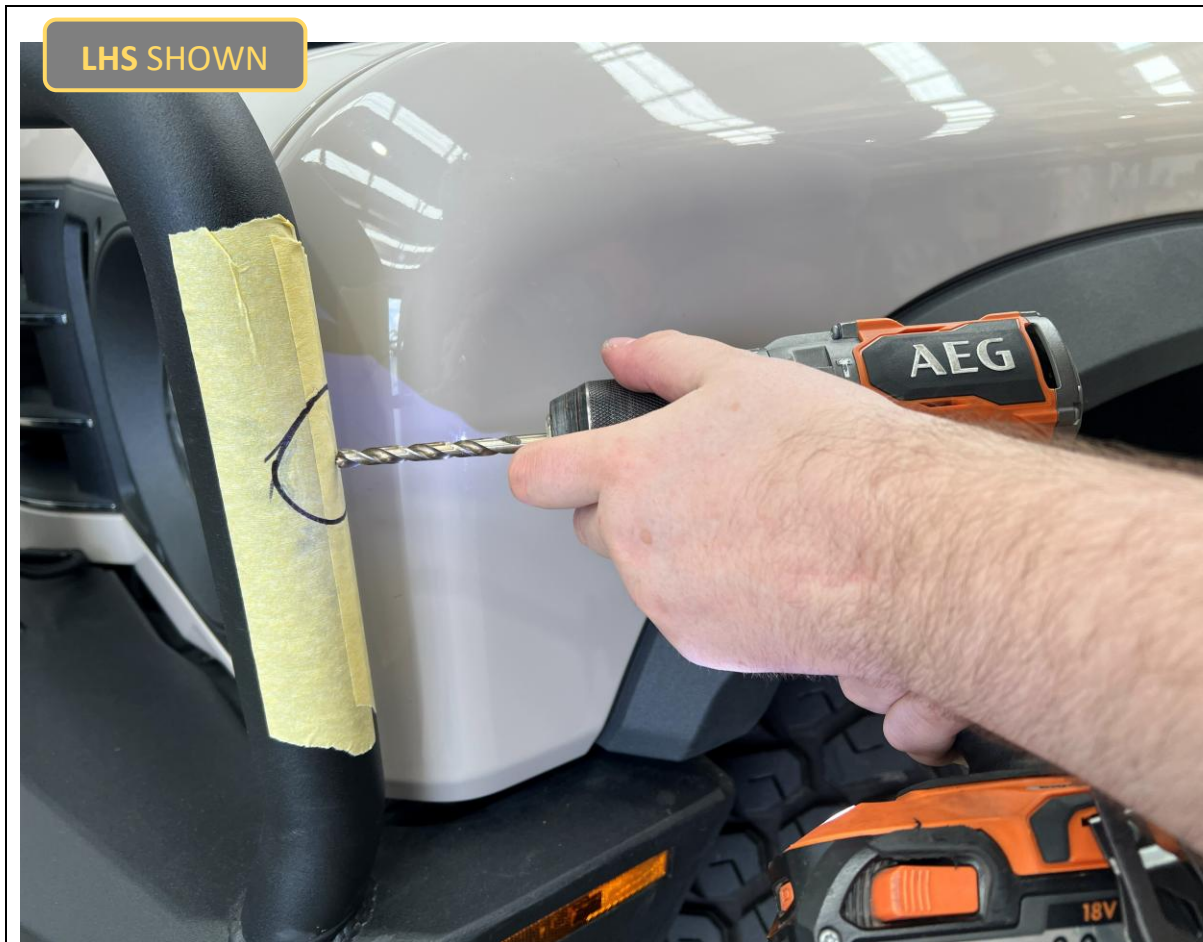
13. Remove the scrub rail and spigot from the vehicle.
14. Hold the spigot back up against the Toro bar by hand and align with the outline traced earlier.

Mark the position of the hole in the center of the spigot onto the Toro bar with a pen or scribe.
15. Use a center punch to mark the hole location on the Toro bar tube. It can be helpful to use a square to keep the center punch square to the tube.

TOOLS REQUIRED

Marker Pen
Centre Punch

FASTENERS



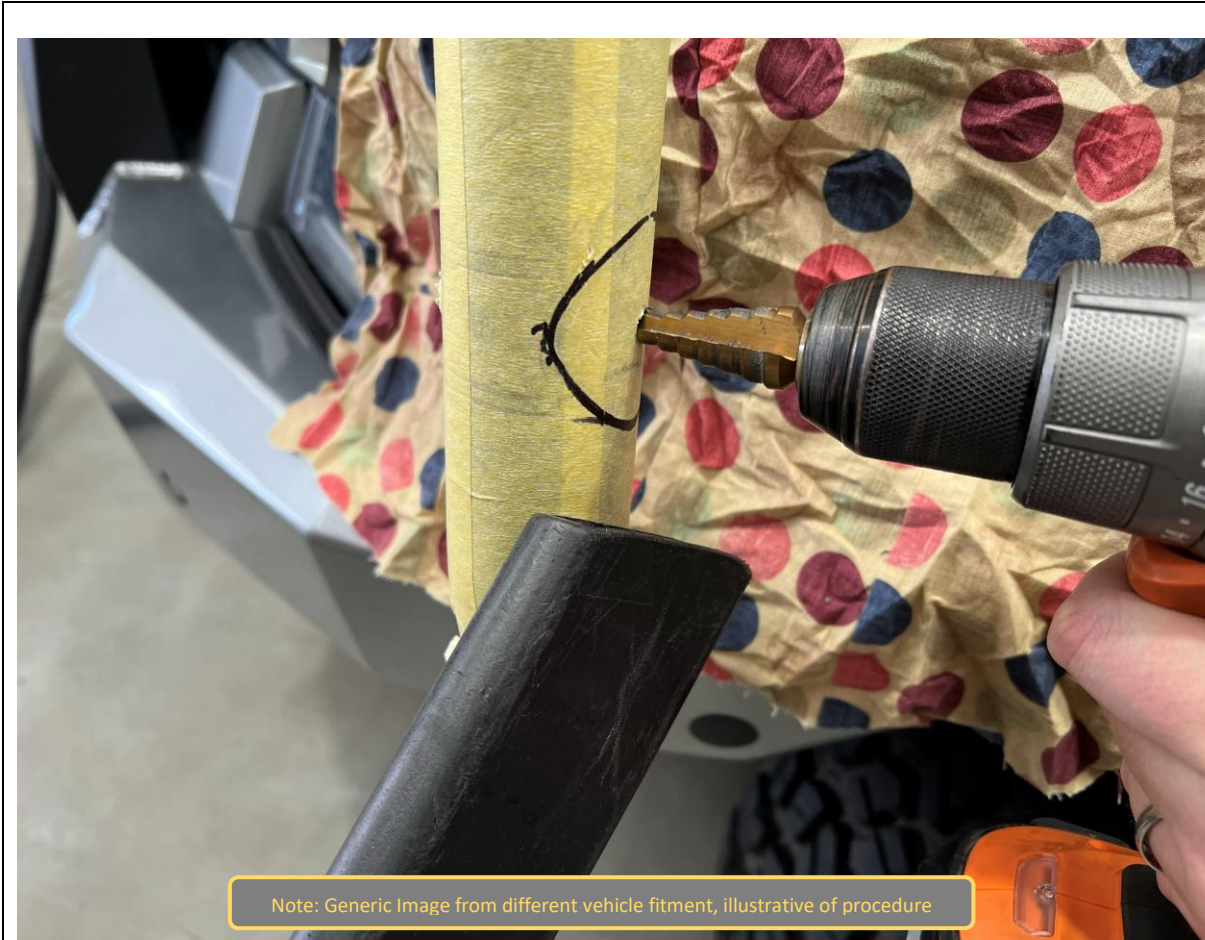
LHS SHOWN

- 16. Drill 6mm pilot hole through both sides of the Toro tube at the center punch location. It is a good idea to use a rag over the car to protect from metal swarf.
- 17. Take care to ensure the drill always remains perpendicular to the tube, so that the hole is aligned in the direction of the spigot/scrub rail.

TOOLS REQUIRED

Electric Drill
6mm Drill Bit
Workshop Rag

FASTENERS



18. Open the holes on both sides to 18mm using a step drill.

TOOLS REQUIRED

Electric Drill
Step Drill

FASTENERS



- 19. Remove Masking tape then deburr and paint edges of holes to prevent rust.
- 20. Ensure all swarf from drilling process is cleaned up.

TOOLS REQUIRED

Deburr tool
Rust inhibitive paint

FASTENERS



21. Fit supplied pinch weld around the curved edge of the spigot. Trim with side cutters as required.

Ensure the pinch weld is pushed all the way onto the edge of the spigot.

TOOLS REQUIRED

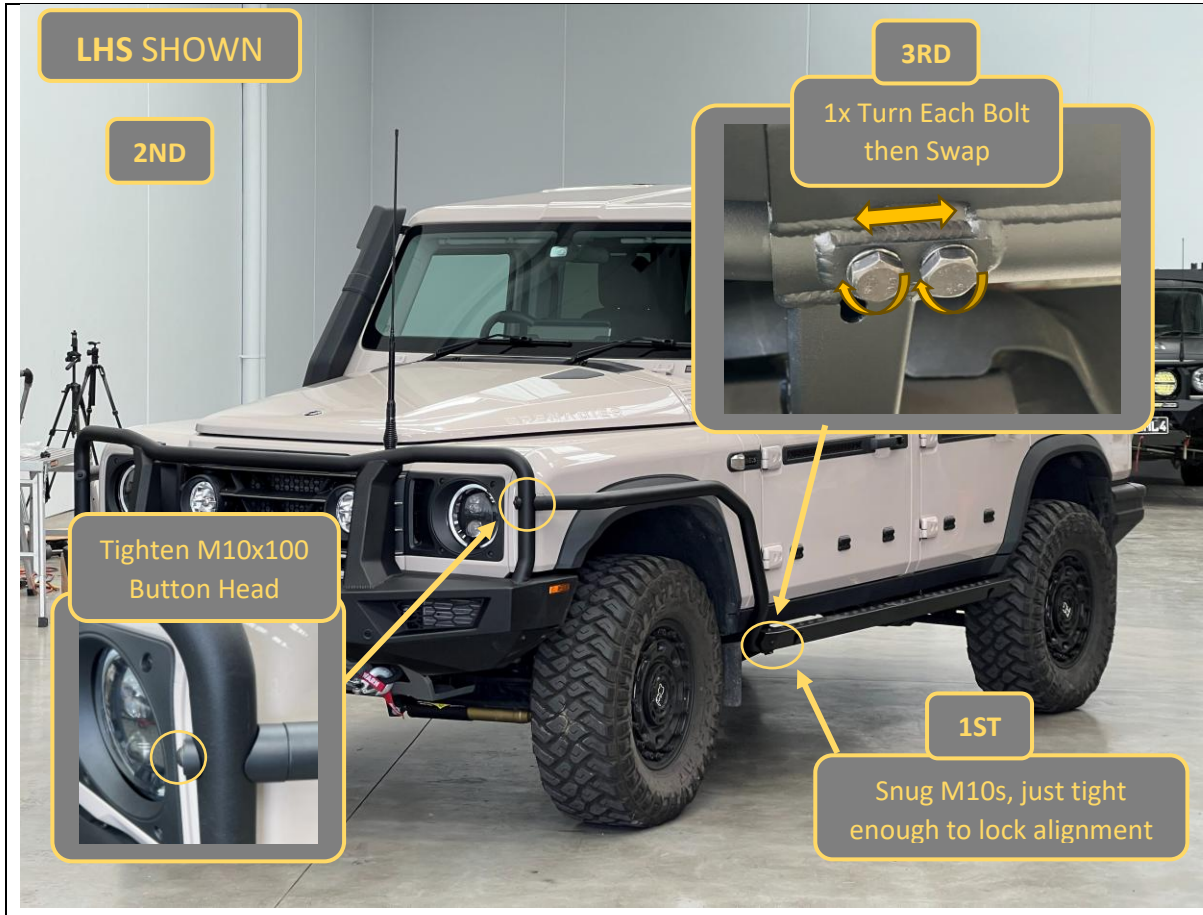
Side Cutters

FASTENERS



Note: Generic Image from different vehicle fitment, illustrative of procedure

<p>22. Loosely position the spigot with the Toro bar and hold in place with 1x M10x100 black button head, flat washer, nylon saddle washer and crush tube, through the 18mm drilled hole in the bar.</p>	<p>TOOLS REQUIRED</p>
	<p>FASTENERS</p> <ul style="list-style-type: none"> 1x M10x100 black button head 1x M10 black flat washer 1x M10 nylon saddle washer 1x crush tube



23. Refit the scrub rail to the rock slider, using the same procedure as earlier.
24. Secure the scrub rail to the spigot/Toro bar with the M10x100 button head bolt into the embedded nut on the flat end of the scrub rail.
25. Re-check and adjust alignment between scrub rail, rock slider and Toro bar. Ensure correct alignment as mentioned in step 10 is maintained.
26. Once happy with alignment, tighten bolts in the following order.
 - Snug tight M10x35 bolts to prevent side rail from moving.
 - Tighten M10x100 Spigot Bolt.
 - Progressively tighten M10x35 Bolts, one turn then alternate, until the nut plate fully bottoms out.

TOOLS REQUIRED

6mm hex/Allen key
16/17mm Socket / Spanner

FASTENERS



- 27. Fit the Front Trim Bracket to the captive threads in the rock slider. Secure with M8x20 Black Button head bolts and M8 Black Flat Washers.
- 28. Complete the entire scrub rail install again for the other side of the car.
- 29. After that you are done!

TOOLS REQUIRED

5mm Hex / Allen key

FASTENERS

2x M8x20 black button head
2x M8 black flat washer



Congratulations!
Head for the tracks and enjoy your newly protected Grenadier!