Alu-Cab™

MAKE IT BETTER

FITMENT INSTRUCTIONS

Silenus Roof Conversion to Ineos Grenadier

DISCLAIMER

PRELIMINARY INFORMATION

All rights reserved. No part of this document may be reproduced, translated, stored in a retrieval system. Or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of the owner.

Review all instructions information carefully before installation.

Any damages, direct or indirect to the installer and/or property due to incorrect installation of any parts are the responsibility of the installer. Due to the various application and fitment options available, the responsibility lies with the user to ensure all mounting points are secure and tight before every trip. If unsure, consult with your Distributor regarding the operations of our products.

Users are advised to be mindful of the load they are carrying and drive in accordance with road conditions.

Service Enquiries email
queries@alu-cab.com

DISCLAIMER

PRELIMINARY INFORMATION: SIKA

Alu-Cab recommends using Sika 552 AT. See the spec sheet here.

Installation and fitment instructions include the tools required, fasteners included in the kit, and the hardware included in the kit.

Please follow the instructions and check the installation steps with the images in this document.

Alu-Cab recommends that all sealing work is allowed to cure for 24 hours, after which you may drive the vehicle on normal paved roads. Before driving off-road with your Alu-Cab product or operating your roof conversion, an additional cure period of 48 hours is required.

Failure to follow these instructions will void your warranty. Please ensure that you follow the sealant manufacturer's curing time as per their technical data sheet. These times may differ slightly from the times we have recommended.

Alu-Cab™ MAKE IT BETTER

The tables below show the equipment, i.e. tools and fasteners required for the Silenus Roof Conversion fitment onto an Ineos Grenadier.

1.1

Tools and Items Required - Not Included

TOOLS
Ratchet/impact wrench
Nibbler
Drill and Bits - 5 & 8mm
Stepped drill bit
Rivnut gun
Grinder / Hand File
Reciprocating Saw
Star screwdriver
8,10,12 & 13mm Spanner
8,10,12 & 13mm Socket and Ratchet Wrench
4mm & 6mm Allen key
Quick grips
Hammer
Centre punch

ITEM
Gantry Crane - 1 tonne rated
Set of Lifting Slings - 500kg rated each
25mm & 50mm Masking tape
Rust preventative paint

Note: Use anti-seize lubricant or paste when installing stainless hardware if necessary.

Hardware Included - with Silenus

ITEM	DESCRIPTION	QTY
RC-IG-B	SILENUS MAIN ASSEMBLY	1
RC-IG-PL	SILENUS PACKING LIST	1

Alu-Cab™
MAKE IT BETTER

1.2.1

Silenus Main Assembly: Included with Silenus

NB: The color of the vehicle images might vary as additional improvements have been made over time.

ITEM	QTY
SILENUS ROOF ASSEMBLY	1
SILENUS BASE ASSEMBLY	1

1.2.2

Silenus Packing List: Included with Silenus

NB: The color of the vehicle images might vary as additional improvements have been made over time.

ITEM	QTY
SILENUS HANDLE BOX ASSEMBLY	4
SILENUS INTERNAL TRIM	4
AUXILIARY POWER POINT COVERS	8
SILENUS BASE SPONGE RUBBER 6x20mm	2

ITEM	QTY
M6x45 BUTTON HEAD BOLT S/S	12
M6x55 BUTTON HEAD BOLT S/S	12
M6 FLAT WASHER S/S	24
RIV-4815AS-B	48

DISCLAIMER

Modifications are subsequently made to the headliner and the roof panel between the B-pillar and the C-pillar, the deployment of the curtain airbag may no longer function as intended.

It is important to check for any leaks that may be occurring through the roof or door areas, before starting the roof conversion. This will ensure that you are aware of problem areas that may arise when the roof conversion is completed.

During the unboxing of the Silenus Roof Conversion, the internal brace bars and handle boxes must be removed in preparation for fitment of the Roof Conversion to an Ineos Grenadier.

STEP 1 :

For the interior, remove the window rubber linings, sun visors, seat belt mounts, mirror mounts etc. ensure they are stored in a safe place, as many parts will be re-used during the installation of the Silenus roof conversion. Trims that are adjacent to the headliner will need to be removed, in order to free the headliner.

Please note roof clips are prone to breaking, it is advised to have a spare set on-hand before starting the installation

STEP 2 :

From the exterior; remove the plastic roof runners, snorkel, grab handles boxes and unplug the auxiliary connectors.

Repeat this step for each of the grab handle boxes on the roof. Set the auxiliary power point loom and grommet aside for later re-use.

STEP 3 :

Set about preparing the vehicle by covering any areas inside the vehicle that may be susceptible to damage when removing the roof. Once all the parts are covered you can start the conversion process.

Below is an example of the protection necessary for the cutting operation:

STEP 4 :

Identify the corners of the roof that intersect with the horizontal brace bars behind the B Pillar and in front of the D Pillar.

Drill a locating holes in each respective corner, as shown in the images below:

STEP 5 :

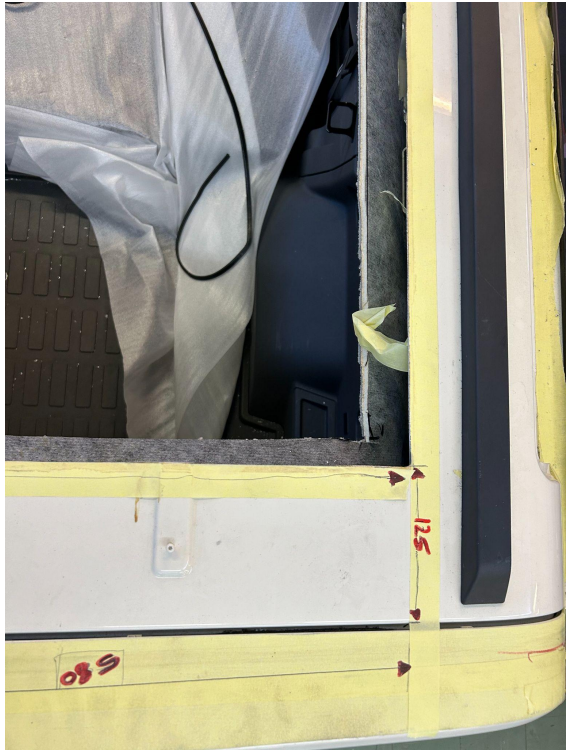
Using a stepped drill bit, enlarge the hole sizes from Step 3, to a sufficient size for access of a Sheet Metal Nibbler Tool.

Repeat this step for each locating hole drilled from Step 3.

STEP 6 :

Mask and measure the roof, start by finding the horizontal centre, and measure 580mm to the left and right of centre. Secondly, identify the rear edge of the roof panel, and measure 125mm forward. Lastly, measure 1610mm forward from the 125mm rear line. Mark out along the measured edge, to serve as guide for trimming the roof.

580
118
236
580
1160
125

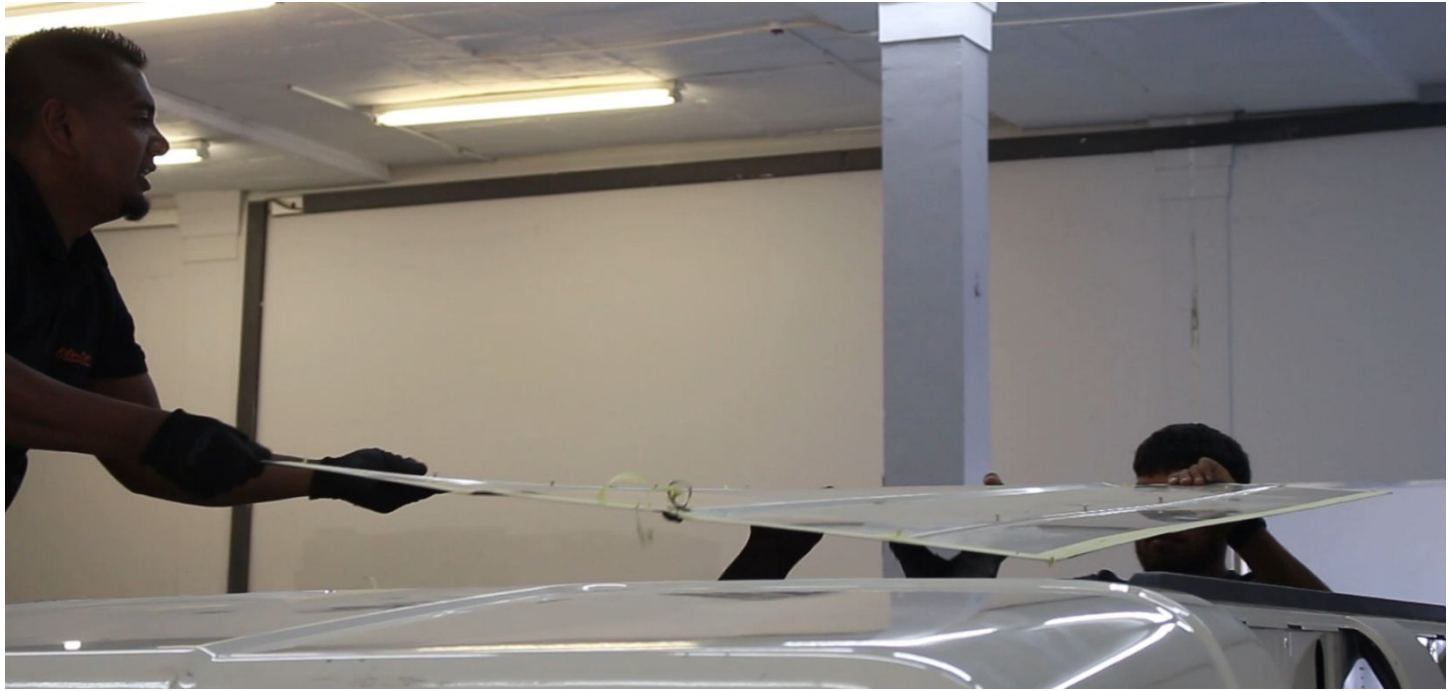

580
125

STEP 7 :

Proceed to cut the roof along the masked guide line using the Nibbler tool as shown below.

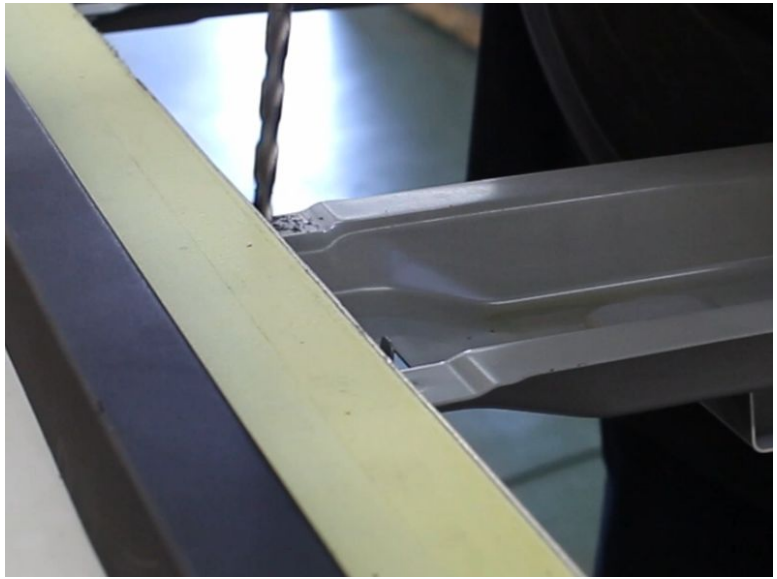
STEP 8 :

The roof cutout can now be removed from the vehicle.



STEP 9 :

Drill out the spot welds on the horizontal cross-brace bars. Remove horizontal cross-brace bars.



STEP 10 :

Measure and mark the top hat mounts, inline with the roof cut line. Using a Reciprocating Saw, cut the top hat mounts along the masked guideline.

STEP 11 :

Debur the cut edge, using a hand file or orbital sander. Apply anti-rust paint along the cut perimeter, on all exposed raw metal edges.

STEP 12 :

At this stage, the headliner can be refitted temporarily, to trim the corresponding cut-out in the headliner. The roof cut-out dimensions can be **offset by 25mm** for the headliner cut-out.

Remove the headliner once cut-out is made.

STEP 13 :

Fit the Silenus base to the Ineos Grenadier roof, without the handle box assembly. Ensure that the base rubber is not pinched in an unnatural manner, that may result in leaking. The front edge of Silenus must align with the front window rubber trim. The rear edge of Silenus must align with the panel line that runs roughly 60mm from the back.

Please note the below image is from an early sample and does not represent the complete Roof Conversion

STEP 14 :

For vehicle with a roof antenna in the front centre, it must be removed in order to install the Silenus roof conversion. The roof cut-out for the antenna must be closed with a tape that can protect against ingress.

Roof Corner Rubbers must be trimmed to allow the fitment of the Silenus Roof conversion. Refer to the below guide on the cut-out that is required. Note these corners require the application if Sika 552 AT at a later stage.

STEP 15 :

Fit the handle box assembly, into the four respective position on the left and right side of the vehicle.

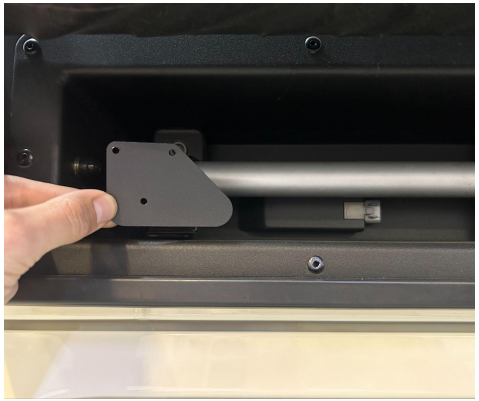
For OEM Auxiliary roof power points, install the OEM loom and grommet into the round knockout in the handle box.

STEP 16 :

Silenus installation makes provision for OEM auxiliary power points in the handle box. The Packing List includes the Connector Cover and Blank Off Cover for either installation configurations.

Dry fit the cover over the connector, align the rivet holes and insert the rivets to align the connector position. Proceed to fix the rivets once the position has been validated. Sika 552 AT may be used around the rivet holes.

The Blank Off Cover is shown below as an alternative for vehicle without the auxiliary roof power points.



STEP 17 :

Position and secure the handle box assembly, using the M6 Hex Bolt on the inside face of the handle box:

STEP 18 :

Install the grab handles, back into the designated positions.

- M6x45 Button Head bolts are used in the top fixing location.
- M6x55 Button Head bolts are used in the bottom fixing location.

STEP 19 :

Drill the corresponding holes into the base, that align with the handle box assembly. Secure the handle box assembly to the base, with the rivets provided in the Packing List. There is a pre-installed gasket on the handle box, however it is recommended to further seal the perimeter with Sika 552 AT for added ingress protection.

STEP 20 :

Reconnect the Auxiliary Roof Power Point Looms to the vehicle loom from the inside of the vehicle.

STEP 21 :

Position and align the internal side trim pieces with the bottom of the base. The trim flange should face outward, that the mounting holes are visible. Clamp the trim to the base, to secure it for installation.

STEP 22 :

Drill corresponding mounting holes into the base, that align with the side trim piece holes. Rivet the side trim pieces into the bottom of the base, to secure it in place. Ensure that the grommet rubber is fitted, prior to installation.

STEP 23 :

Repeat the procedure for the front and rear trim pieces. Position, align, secure, drill and fix the trims in the same sequence as followed for the side trim pieces.

STEP 24 :

In order for the rear trim piece to be fitted, the door lock latch plastic cover must be trimmed to seat behind the rear trim piece.

Refer to the below reference line of where the plastic cover must be trimmed:

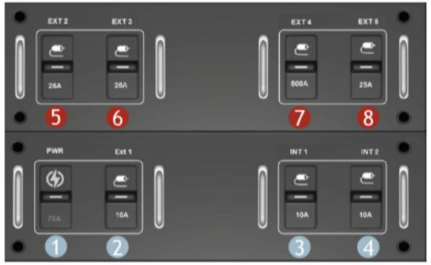
STEP 25 :

To supply power to the Roof Conversion, it is recommended to tie into the INT 1 (3) power supply point, that is located in the front left footwell.

The Roof Conversion loom is located on the LHS, at the C-Pillar of the vehicle. It can be routed down the C-Pillar, underneath the floor trim, up to the LHS front footwell.

Consult your preferred authorised auto-electrician for connecting the Solar System according to your vehicle requirements.

OVERHEAD CONTROL PANEL - AUXILIARY SWITCHES



The auxiliary switches are pre-wired, making it easier to retrofit accessories such as a light bar or winch.

Auxiliary Switch Panel & Electrical Preparation (standard)

1 Power switch leaves 12V / USB power on when vehicle is switched off

2 3 4 10 Amp with wiring to under the bonnet, footwell area and fuse box

High Load Auxiliary Switch Panel & Electrical Preparation (Optional)

5 25 Amp for front LED light bar

6 25 Amp for side & rear LED light bars

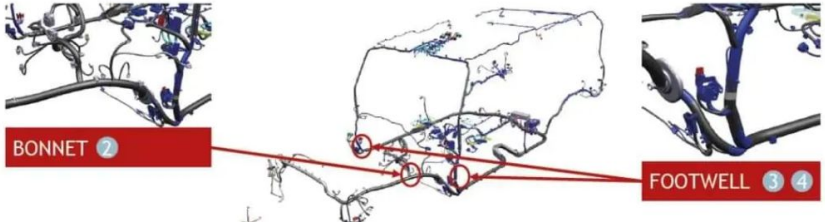
7 500 Amp for Winch

8 25 Amp with wiring to bonnet and fuse box

WIRING PREPARATION - OUTLETS

The standard electrical wiring preparation has 2 interior outlets and one exterior, shown by the labels on the overhead switches.

The locations of the outlets are shown in the electrical diagram below;



STEP 26 :

To complete the installation, refit all trims, components and headliner that were removed during Step 2. Clean the inside and outside of the vehicle from any burr or foreign ingress that may compromise the integrity of the Roof Conversion.

Apply Sika 552 AT to the corner rubbers that were trimmed in Step 13, to ensure sealing on the roof corners.

Ensure that all fasteners are fixed in accordance with the applicable specifications and standards.

NB: Alu-Cab recommends that all sealing work is allowed to cure for 24 hours, after which you may drive the vehicle on normal paved roads.

Before driving off-road with your Alu-Cab product or operating your roof conversion, an additional cure period of 48 hours is required.

Pressured Water Testing should be conducted after curing to ensure that the installation is watertight.

By now you should have successfully fitted your Ineos Grenadier Silenus Roof Conversion.

All that's left to do is pull the vehicle outside, pop open your new roof conversion, fit the spring poles and EXPLORE!

DISCLAIMER

WARNING

Always wear appropriate PPE (Personal protection equipment) when fitting our products. Although the mounting kit is designed to be DIY, if you have any doubts or concerns, contact an accredited fitment centre to carry out the work. Alu-Cab will not be liable for any injury to persons, and/or damage to products and/or vehicles.

While Alu-Cab Holdings takes reasonable measures to ensure that the contents of this Website are accurate and complete, Alu-Cab Holdings makes no representations or warranties, whether express or implied, as to the quality, timeliness, operation, integrity, availability or functionality of this Website or as to the accuracy, completeness or reliability of any information on this Website. Alu-Cab Holdings reserves the right to make changes, corrections and/or improvements to the information and to the products and programs described in such information, at any time without notice.

Alu-Cab Holdings will use reasonable endeavours to maintain the availability of the Website, except during scheduled maintenance periods, and reserves the right to discontinue providing the Website or the service or any part thereof with or without notice to you. Any person who accesses this Website or relies on this Website or on the information contained in this Website does so at his or her own risk.

Occasionally, at our discretion, we may include or offer third-party products or services on our website. These third-party sites have separate and independent privacy policies. We therefore have no responsibility or liability for the content and activities of these linked sites. Nonetheless, we seek to protect the integrity of our site and welcome any feedback about these sites.