



FITMENT INSTRUCTIONS

Icarus Roof Conversion to Land Rover Defender 110

Installation Instructions

Preliminary information

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

Please follow the instructions and check 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 manufacturers curing time as per their technical data sheet.

These times may differ slightly from the times we have recommended.



Service Enquiries email
queries@alu-cab.com

Installation Instructions

Icarus Roof Conversion to Land Rover Defender 110 – Tools, Fasteners & Hardware

1.1

Tools & Items Required

| TOOLS |
|---------------------------|
| Ratchet |
| 13mm Socket |
| 13mm Ring Flat Spanner |
| Drill |
| Drill Bit Ø6.5mm |
| Lightweight mallet |
| 10mm Ring flat spanner |
| 17mm ring flat spanner |
| 6mm Allen key |
| Small quick grip |
| Stanley knife/ box cutter |

1.3

Items

| ITEM |
|-------------------------------------|
| Turpentine |
| Cloth |
| Black sealant, silicone or Sikaflex |

1.2

Fasteners supplied: (Included with Icarus)

| ITEM | QTY |
|---------------------------|-----|
| 6 x 60 Button Head Screws | 5 |
| 6 x 25 Button Head Screws | 30 |
| M6 Nyloc nuts | 35 |
| M6 Flat Washers | 42 |
| M6 Spring Washers | 42 |
| Ø4.8x15 black Rivets | 34 |

Installation Instructions

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1.4

Hardware Required: (Included with Icarus)

| ITEM | DESCRIPTION | QTY |
|--------------------------|-----------------------------|-----|
| 19x19x3 Alu Angle | internal trim piece 1 - RHS | 1 |
| 19x19x3 Alu Angle | internal trim piece 1 - LHS | 1 |
| 19x19x3 Alu Angle | internal trim piece 2 - RHS | 1 |
| 19x19x3 Alu Angle | internal trim piece 2 - LHS | 1 |
| Internal trim carpet RHS | - | 1 |
| Internal trim carpet RHS | - | 1 |
| Icarus roof conversion | - | 1 |
| Helpers shock brackets | 1 LHS & 1 RHS | 2 |
| Shocks | 150 N 450 mm long | 2 |
| Spring poles | 1140 mm long | 2 |

**IMPORTANT
NOTICE**



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.

Installation Instructions

STEP
1

Once you've checked the vehicle for any leaks, you can then 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 begin stripping the interior roof linings, seat belt mounts, and anything that may be attached or affected by the fact that you are about to remove the roof.



Installation Instructions

STEP
2

Be sure that when removing all interior window linings, sun visors, mirror mounts etc, that you store them in a safe place, as some of these parts will be re-installed during the installation of the Icarus roof conversion.



Installation Instructions

One needs to be sure that you strip all existing wiring to the existing roof as well as water lines that run to the back of the window washer, and plug points that may be attached to rear wiring

STEP
3



Installation Instructions

You will have to cut the line to the rear plug as the loom will not slide out the existing roof and rejoin it when the new roof is into position.

STEP
4



Installation Instructions

STEP
5

You can then set about the tedious task of loosening all the bolts that bolt the roof down to the A-frame, A-pillar, B-pillars and some of the gutter lengths that run down the vehicle's length.



Installation Instructions

You will then need to cut the glue line that joins the windscreen frame to the roof. Be cautious when doing so, as it is a thick strong layer of glue that bonds the roof to the window frame. Use a carpet knife, or Stanley knife, as some may know it. Be careful not to damage the paint on the windscreen frame.

STEP
6



Installation Instructions

STEP
7

Once the glue line is cut, you will have to force the roof upwards and away from the last part of binding glue. With the help of others, or machinery, you may remove the roof from the vehicle.



Installation Instructions

STEP
8

Now you will have to set about cleaning the remaining glue that sits on top of the vehicle frame where the roof was removed.



Installation Instructions

STEP
9

You will then need to place the new Icarus Roof Conversion into position, where the old OEM roof once was. Make sure it is seated correctly, and ensure all the corners are squared up, and in the right position for you to start marking up the drilling holes.



Installation Instructions

Mark and drill all your holes, in the Icarus Roof Conversion, using the existing holes in the mounting flange as reference for location and size. After this, you can drop your bolts in the front end to be sure that you are in the right position and that the back end is ready to drill.

Once drilling is complete and you are satisfied that you've marked and drilled all your holes, you can then remove the roof conversion in order to cleanup and prep with glue/bonding adhesive before final fitment.



Installation Instructions

STEP
10

Apply the bonding adhesive to the top edges, where the new roof conversion will seat down and seal in position. **In the windscreen area**, be sure to apply at least 3 layers of bonding adhesive to help to prevent the chance of wind or water blowing through between the roof and windscreen area. It is very important that when lowering the Icarus Roof Conversion into position, that you make sure that you try and land the square positions as close as possible, in order to prevent messing due to having to shift the roof around to try and locate into the correct position.



Installation Instructions

STEP
11

Once you are certain the Icarus Roof Conversion is now in the correct position, you can start bolting the roof conversion to the body. While bolting down the roof you can also set about replacing the door seals and checking if all doors are fitting correctly and that they are all lining up as they should.

You will notice that there is no angle plate or aluminum for you to mount the door seals at the top of the door on the front 2 doors. These angles we supply separately. You will need to drill these into position, and apply bonding adhesive behind the plates. Once you have fitted the Icarus Roof Conversion, you can align the rubber door seal mount with the existing Land Rover's door seal mount area.



Installation Instructions

STEP
12

Now you can set about installing your map shelf and sun visors. This should be simple as you have pre-drilled the holes, so it should easily bolt into position.

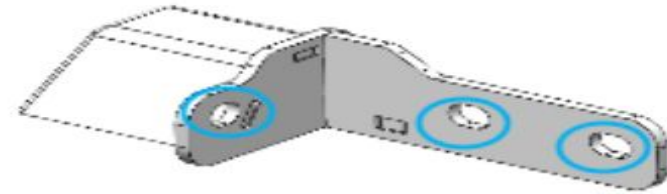
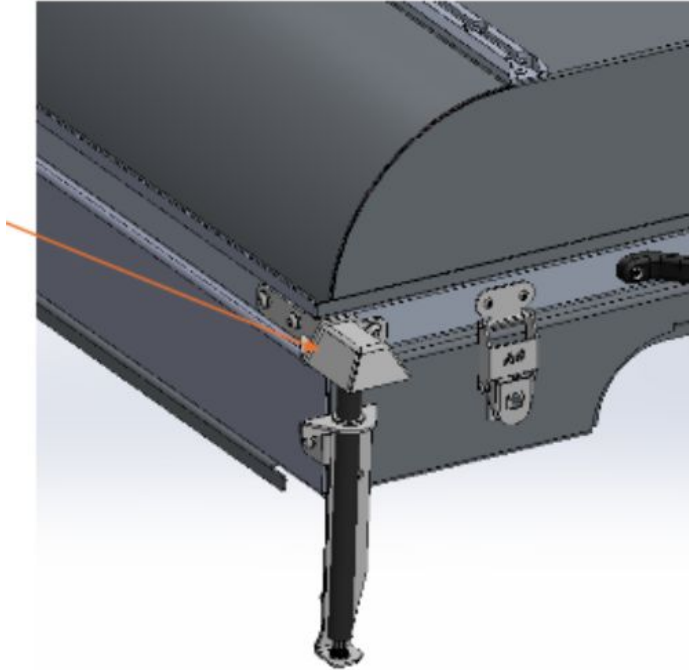
It is important to drill up at the front area where the sun visor will mount, using the existing holes from the sun visor. We recommend using a 7mm hole which will help to allow you to mount the roof console when fitting the final parts.



Installation Instructions

STEP
13

Fasten your 312-HLP-SHK-TOP-A02 in place using the supplied bolts. 3 off M8x45 Button Head bolts, 2 off Flat washers and a nylock nut internally. Use the pre-drilled holes in the lid. Repeat this on LHS/RHS Ensure to apply some Sikaflex to the bracket and bolts to prevent any leaking



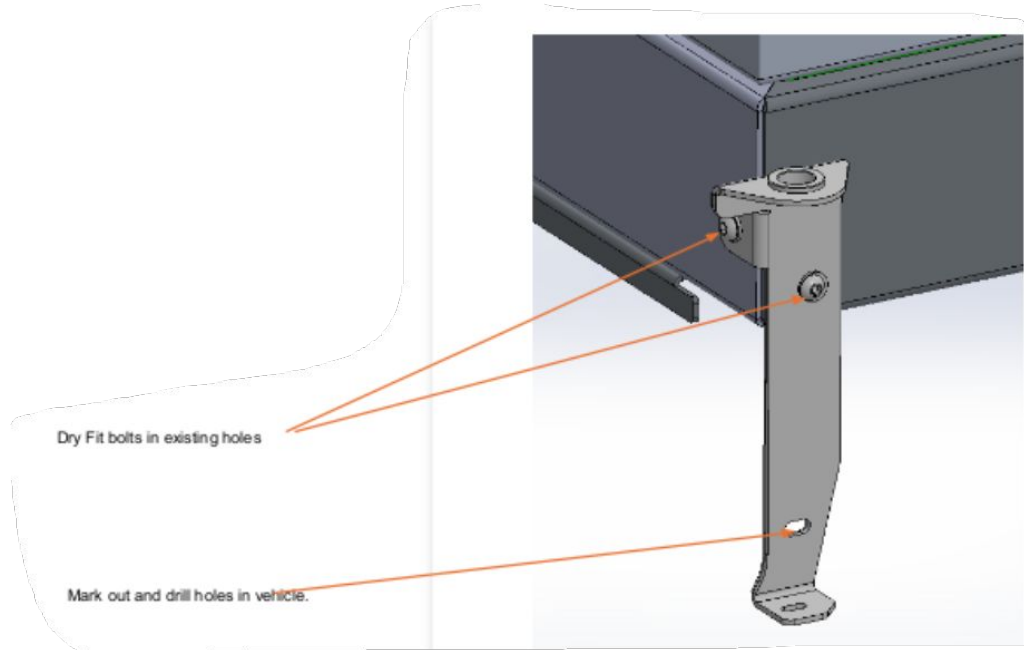
Sikaflex application to bracket



Sikaflex application to bolt and washer, around the entire diameter of thread, under flatwasher

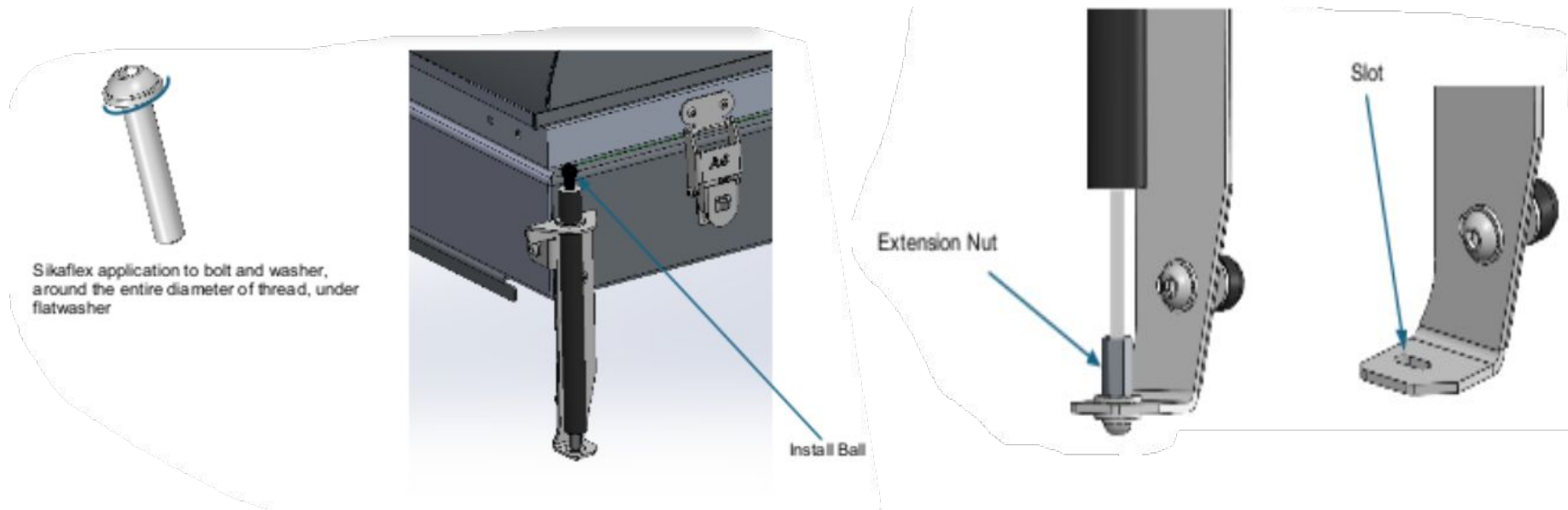
Installation Instructions

The next step in the fitment is to align the bottom support bracket so that a hole can be drilled into the body of the vehicle. Dry fit the helper shock bracket using the two holes predrilled in the base of the Icarus extrusion. Mark out the hole that needs to be drilled in the vehicle's body and use a Ø8mm drill bit to drill through. Apply anti rust paint to the area and let it dry. Repeat on LHS / RHS



Installation Instructions

Fit Base bracket of the shock helper assembly using supplied fasteners, 2 off M8x25 into the base section of the Icarus roof conversion. It is not necessary to apply Sikaflex to the base bracket, but please apply it to the bolts as indicated below. Use an M8x25 bolt to secure the bracket through the vehicle of the body and secure it in place using the supplied flat washers and nylock nuts. **Install the shock, with the rod side facing down.** Screw the rod into the the M6 extension nut and secure using a M6x10 Button head bolt, spring washer and two flat head washers to secure it. Note there is a slot in the bottom hole of the bracket, this allows the shock to be adjusted. Adjust the shock so that it is vertical. Ensure to install the ball on the top end of the strut, and the installation is complete. Repeat on LHS / RHS



Installation Instructions

STEP
14

Once you've completed bolting down your Icarus Roof Conversion, you can now bolt in the internal panels that close off the roof conversion and give it a nice finished look. You have now basically finished the installation and have to put back the original plastics and panels that have been removed. Some may require trimming where they do not line up 100% with the new conversion.



Installation Instructions

By now you should have successfully fitted your

Land Rover Icarus Roof Conversion.

All that's left to do is pull the vehicle outside, pop open your new roof, fit the spring poles and see how well your new roof conversion works.



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Review all instructions information carefully before installation.

Any damages, direct or incidental to the installer and/or property due to incorrect installation of any parts are the responsibility of the installer. Due to the various applications 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.

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.

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