

# Arctic Tern Window Installation & Operation Guide



DO NOT attempt to install this window before completely reading and understanding <u>ALL</u> Instructions and Considerations for Fitment (Found on our website Library Page).

Almost ALL issues of damage, leaking, and improper function are due to improper installation. A great deal of time has gone into creating this document to ensure your installation will be easy and successful.

# READ ENTIRE INSTALLATION GUIDE BEFORE ATTEMPTING INSTALLATION.

Issues due to improper installation are not covered under the product warranty.



## **Arctic Tern** Window Installation & Operation Guide

Thank you for purchasing an Arctic Tern Window from Tern Overland! We hope you have a great experience installing and enjoying your window for years to come. Here are some tips and guidance. Please review before installing.

Consider the placement of the window carefully to avoid conflicts with cabinets, wall struts, or other existing components. Allow a minimum of 2" above and below the cut hole on the inside. This is to allow for installation of the screen / blind assembly. Allow a minimum of 1 inch at each side. Refer to Figures 1 and 2.



**Note:** Before cutting any holes, read and understand the STOP document "Considerations for Fitment" on our website Library page! Proper placement of the hole is critical in some cases!

#### **Step 1: Cutting the hole for the window:**

Create a template for the hole out of cardboard. Use the inner window frame as your pattern, and then test fit the cardboard over the window to ensure a good fit. Once the fit to the window is verified, use tape to position the template on the wall panel to be cut. Transfer the cut line with a felt pen. Cut the wall. Keep the cut line as close to the window size as possible.

Note: Generally the cut hole size is the window size plus 3mm. Example: a 300 x 500 window would require a hole 303mm x 503mm. The corner radius for cut hole is 70mm (2.75"). Additional dimensions can be found on our Library Page.

**Note:** There is a weld at the top of the window frame that will require a little notch in the hole to slide in.

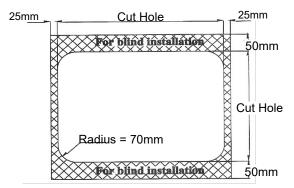


Figure 1

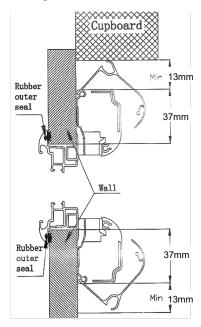


Figure 2

**Step 2: Securing your spacer:** All sheet metal (van) installations require a spacer frame! The best materials to use for these spacer frames are hardwood or metal tubing. The spacers should be mounted into place inside the van, prior to window installation. A high strength polyure-thane adhesive, such as Bostik Adhesive distributed by Tern Overland, Sikaflex 252, or 3M 5200 Quick Cure may be used, but we have found that Very High Bond (VHB) bonding tape is a quick and effective solution to attaching these frames. The frame/spacer should be clamped to the sheet metal to pull it flat, so that the window clamps to a flat surface. These frames can be as simple as four pieces of aluminum or wood. \*\*Do not use adhesive on the window, only the spacer frame. *Refer to figure 4* for installation diagram.

**Step 3: Installing the window:** Place the window assembly into the hole and tape it into place securely using wide masking tape. From the inside of the camper, fit the inner frame ring into place. Verify that the inner frame provided is correct for the wall thickness. It should fit flush against the wall. The inner frame has hooks on the top to locate the blind assembly. The window is supplied with two lengths of screws depending on the thickness of your walls (M4 x 14 or M4 x 20). Extra screws are provided as spares. Using the wrong screws can damage your window and can be a potential cause of leaking. *Refer to Figure 3* to choose the correct screws.

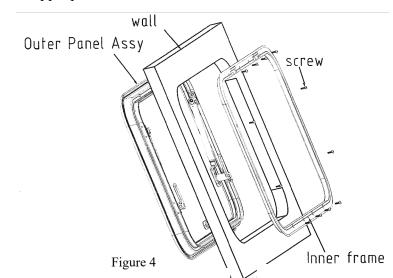
DO NOT use adhesive / silicone to install the window. This will damage the rubber gasket on the window and will cause leaking. The seal on the window is 100% water tight with only screws.

Guide the screws into the interior ring holes and align with the threaded inserts in the window. It is recommended to use a magnetic hand screwdriver to prevent over-tightening. Do not use a cordless screw gun. Window screws should be coated with a metal based anti-seize lubricant. Teflon based anti-seize is not recommended. Permatex Anti-Seize Lubricant is available at hardware or auto part stores.

DO NOT OVER-TIGHTEN! The screws must not bottom in the holes! Screws should be snugged down to produce approximately 50% - 75% compression of the gasket.

\*\*\*Refer to Figure 3 to determine appropriate screws. \*\*\*

Wall Thickness (mm)	Screw Specifications
24-30 mm	M4X14
30-34 mm	M4X20
34-39 mm	M4X14
39-44 mm	M4X20
44-49 mm	M4X14
49-54 mm	M4X20
64-69 mm	M4X14
69-74 mm	M4X20



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Page 3 | 7

Arctic Tern Window Installation & Operation Guide

**Step 4: Mounting the blind and screen assembly:** Consider whether you want the blind on top or on bottom. The choice is yours. The blind on the bottom allows a view through the window while providing privacy. The blind on top cuts severe glare from your eyes better. In either case, you can always reverse them later by simply removing and flipping them over.

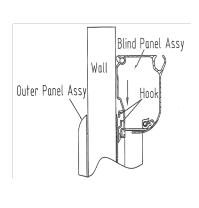
Open the blind covers by lifting at the inside corner. There is a video in our website Library that shows this. *Refer to Figures 5 & 6.* Position the blind / screen assembly over the hooks on the inner frame. This locates the blind correctly until the mounting screws are installed. Center the blind on the window. There is a screw hole in each corner, through the grey plastic. A pilot hole for the screw into the wall may be needed. Hand tighten the four mounting screws. Snap the covers closed. There needs to be two snaps to completely close the cover.

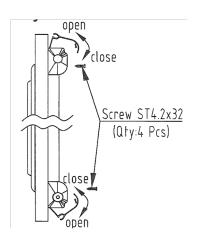






Diagram 5





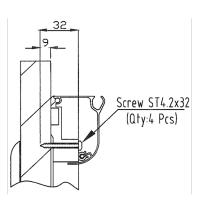


Figure 6

**Step 5: Testing operation:** Test the function of the window and the blind for smooth operation. Take some photos and let us know how the installation went! There is a video in our website Library that explains correct blind and screen function. Enjoy!!

Please review the Operation Instructions so that you can have optimal functionality of your window.

#### **To Open Window:**

**Step 1:** Push button on the handle and rotate to unlock as per photo. *(Figure 1)* 

**Step 2:** Push acrylic panel outwards. Panel will click at different positions of opening. 300mm high windows have two opening positions, other windows have three. (*Figure 2*)

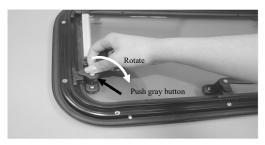


Figure 1

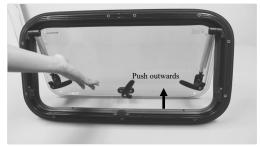


Figure 2

#### **To Close Window:**

**Step 1:** Push acrylic panel outwards a little to release from lock position, then pull inwards to the full lock position, as per diagram. (Figures 3&4)

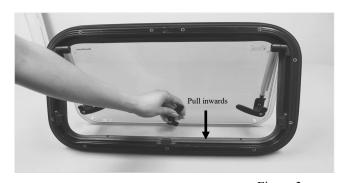


Figure 3

All windows are equipped with semi-lock position, providing ventilation and preventing wind damage while parked (Figure 5). Windows must be fully closed, and handles must be locked while traveling.



Figure 4



Figure 5

#### **Blind and Screen Information**

#### **Features**

This specially designed panel has three functions:

- 1. The blind prevents light entry and provides privacy.
- 2. Screen delivers protection from bugs.
- 3. It can act as an emergency exit when the blind and screen are unlocked and window is open.

#### **Instructions**

Use the central handle, to pull or push the blind upwards or downwards in any position. (Figure 6)

The blind and screen can be locked together by joining middle catch. Once locked together, they can be positioned as required. (Figure 7)

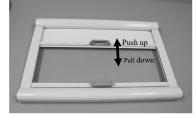


Figure 6



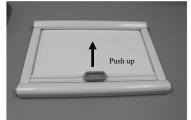




Figure 7

To unlock, press down on the catch in the handle. (Figure 8)

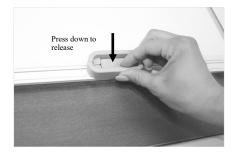


Figure 8

**Note:** Rain will enter the cabin through the window if it is fully open. Use the semi-lock ventilation position or 1st click position if you need the window open while it is raining.

#### Acrylic Window Care

## Following these simple steps will ensure long service life from your acrylic windows.

- 1. Always rinse abrasive dust from the window before cleaning.
- 2. Never use glass cleaner to clean acrylic unless it specifically says it is meant for acrylic. Ammonia based cleaners are especially damaging. A better solution is a few drops of dish washing liquid in water. Dry with a soft towel or chamois.
- 3. Automated car washes should be avoided due to the possible abrasives in the wash wheels. These are not so good for your paint either!
- 4. We recommend Novus brand plastic cleaners and polishes:
  - **Novus 1** is for day to day cleaning. It leaves a bright, static free surface that resists fogging and finger prints.
  - **Novus 2** is for polishing out fine scratches. It should always be followed by Novus 1
  - **Novus 3** is for removing deeper scratches. It should always be followed Novus 1 and 2

We are an authorized NOVUS Distributor. Our Other Components website page has all the details. Call Tern Overland to order your NOVUS Kit today!