

HARDSHELL ROOF TOP TENT

**USER MANUAL** 





## Thank you for purchasing a 23 ZERO Roof Top Tent

Congratulations on the purchase of 23ZERO's ARMADILLO AX Hardshell Roof Top Tent!

We strive to provide you with the ultimate camping experience. The ARMADILLO AX mounts directly to a roof rack, or aftermarket roof bars. It opens and is fully set up in seconds. Along with our innovative LST fabric, this hardshell tent is made with durable materials and high-quality fabrics that provide excellent water and wind protection.

**Warning:** During setup and first use, some aluminum shavings may be present inside the roof top tent. We make every possible attempt to expel all aluminum shavings; however, with vibrations caused by logistics, some residual shavings may dislodge and reappear. It is advised to remove and clean these during the first setup, wearing safety glasses. **PLEASE READ ALL INSTRUCTIONS PRIOR TO INSTALLING** 

### **IMPORTANT**

Before installing your 23Zero Roof Top Tent please ensure you are aware and understand the following:

- · Your vehicle's maximum roof load rating.
- Your roof rack's maximum load rating including off-road capacity.

The maximum amount of weight you can safely add to a vehicle's roof / cargo area differs according to make and type of vehicle including aftermarket additions such as roof racks / bars.

Note: Roof rack off-road limits are immensely different to normal road use load ratings. If in doubt, please contact your vehicle manufacturer and roof rack manufacturer / supplier for specified loading capacity of your vehicle and roof rack.

Not all factory roof racks or aftermarket roof bars can safely accommodate roof top tent models. The responsibility of fitting this roof top tent to rated roof racks or roof bars lays with the purchaser.

### Important: Use Thread Lubricant During Installation

To avoid serious issues during installation, be sure to apply a thread lubricant or anti-seize compound to all bolts and hardware before tightening. This is a critical step to prevent thread galling and cold welding—issues that can occur when metal threads seize under pressure, especially with stainless steel or similar materials.

Failure to do so may result in hardware seizing during installation. In such cases, the bolt may need to be cut off and replacement hardware may be required at the installer's expense, subject to availability, which may not always be easy to find or replace.

Taking this simple step helps ensure a smooth, problem-free installation.



## **Safety & Warnings**

**Important Notice:** Improper installation or use of the ARMADILLO AX roof top tent may result in serious injury or death. Follow these instructions carefully to ensure proper installation and safe use of the roof top tent.

### Vehicle Handling:

- Alterations such as roof racks and roof top tents may affect vehicle handling and characteristics.

**Manufacturer Disclaimer:** 23ZERO disclaims all responsibility for accidents and/or damage due to:

- Installation of a roof top tent to an underrated roof rack.
- Improper use.
- Improper maintenance.
- Failure to check the tightness and working condition of fastening hardware regarding the installation of the tent and the roof rack system.

### Inspections:

- Roof top tents have many moving parts, so regular maintenance checks are advised.
- During trips, regularly check that all nuts and bolts attaching the roof top tent to the vehicle, as well as hinges and locks, are tight and in good repair.

#### **Ladder Safety:**

- Ensure correct placement and angle of the ladder for your safety.
- The recommended ladder placement is a 4:1 ratio or approximately 75°.
- Adjust ladder height as needed depending on vehicle height. See "Ladder Adjustment" for details.
- DO NOT CLIMB ON THE LADDER UNTIL THE CORRECT ANGLE IS ACHIEVED.



# SAFETY WARNING



KEEP ALL FLAME AND HEAT SOURCES AWAY FROM THE TENT MATERIALS.

UNDER NO CIRCUMSTANCE SHOULD ANY NAKED FLAME SOURCES OR HEATING DEVICES

BE USED INSIDE OR NEAR THE TENT.

KEEP CAMP FIRES WELL AWAY FROM TENT.

KEEP A LOOK OUT FOR ANY AIRBORNE BURNING EMBERS THAT MAY COME INTO CONTACT WITH THE TENT.

KEEP A FIRE EXTINGUISHER OR WATER BUCKET NEARBY.

DO NOT SMOKE WITHIN THE TENT.

DO NOT OPERATE ANY DEVICE WHICH BURNS FUEL INSIDE OF THE TENT.

KEEP EXIT CLEAR.



## **Hardware & Accessories**

The ARMADILLO AX roof top tents includes a mounting kit with everything required to mount the roof top tent to most roof racks.

Note: Hardware may differ from illustrated depending on model.





## Fitting the ARMADILLO AX Roof Top Tent to Roof Rack

### 1. Determine Ladder Deployment Side:

- The ARMADILLO AX can be oriented to deploy from either the right or left side of the vehicle.
- Release all four locking clamps and raise the shell.
- Identify the rear of the tent (X frame side)

### 2. Locate Fixed Mounting Rails:

- Find the fixed mounting rails on the underside of the tent.

#### 3. Lift Tent onto Roof Rack:

- Ensure the ARMADILLO AX is closed and clamps are locked.
- With the help of minimum four people, lift the tent onto the vehicle's roof rack.

### 4. Position T-Bolts: See pic below

- Slide four 55mm M8 T-Bolts into each bottom mounting rail using the provided slide plates.
- Position two bolts toward the front and two bolts toward the rear of the tent on each rail.
- Tilt the tent to allow the inner bolts to cross over onto the inside of the roof bars.

### 5. Inspect and Adjust Position:

Ensure the tent opens in the desired position.

#### 6. Secure Tent:

- Place a mounting plate under the roof bar and locate the bolts.
- Hand tighten the Nylok nuts.
- Repeat for all four corners.
- Double-check the tent's position and securely tighten all nuts with the provided 13mm wrench. Do not use a powered device to tighten.
- Ensure bolts are straight during tightening to avoid stainless steel galling.

### 7. Insert End Caps:

- Insert end caps into the ends of the mounting rails, using light taps with a soft blow hammer if needed.

#### 8. Final Checks:

- Re-check all bolts and fasteners for tightness and good repair, including factory-fitted mounting rail bolts under the mattress.
- Lift the mattress to check the top nut.

### 9. IMPORTANT:

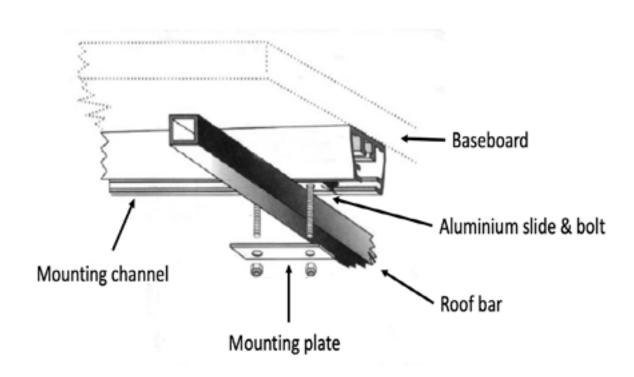
- Regularly check all fixings for tightness and good repair during trips.
- By following these steps, you ensure that your ARMADILLO AX roof top tent is securely mounted and ready for use.

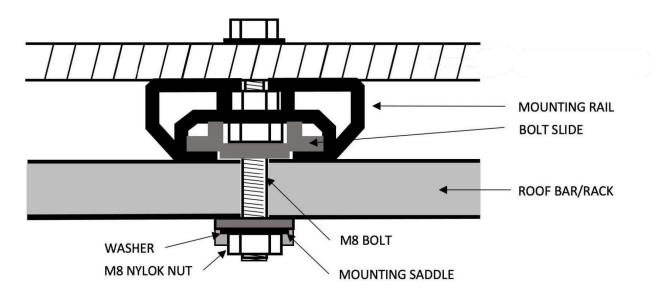


# Fitting the ARMADILLO AX Roof Top Tent to Roof Rack

Important: Ensure the ARMADILLO AX is closed during fitment..

Fit 8 x M8 bolts into 8 x slide plates and slide each into bottom mounting rail. Position these so there are 2 sets of bolts in each corner of the tent. Lift / tilt the roof top tent to allow the inner bolts to cross over onto the inside of the roof bars, See pic below. (mounting plate replaced by mounting saddle)







# Opening & Set up

### **Step 1: Release Locking Mechanism**

- Locate the four over center locking latches
- Release each latch, one at a time, on all four corners





Step 2: Lift Shell

Lift the shell until the gas struts take over.

Lower the pack up assisting shock cord and attach it to the retainer on each corner of the base-board.









### **Use Ladder to Deploy Tent**

- 1. Release ladder strap and fully extend out the ladder
- 2. Using the ladder as a lever, pull down & out to unfold inner baseboard
- 3. IMPORTANT: Set and secure ladder beofre proceeding. See "Ladder Adjustment"









4. Locate the internal canopy hoop and fully extend out, in line with the seam until locked.







5. Locate 2 x canopy stay pole points at front of baseboard and insert into front window stay pole point, flex and feed hooks into the front eyelets.





6. Locate window stay pole holes on baseboard and insert window stay poles. Flex pole and feed hook end through eyelet on window canopy. Repeat both sides. *TIP:* This can be done through windows from inside tent.







Set up complete.





### 1. Remove Window Rods:

A. From within the tent, remove all window rods and store them in the provided sleeve. Place the sleeve under the mattress towards the rear of the tent.

### 2. Open Windows:

A. Partially unzip and open window panels by 30 to 50% to allow internal air to escape. The fly screens can remain zipped up.

### 3. Remove items:

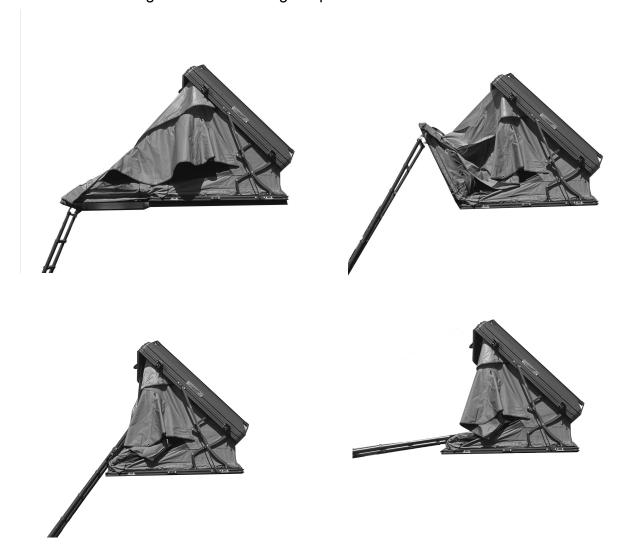
- A. Remove valuables, personal items, and additional bedding. Ensure the tent is vacant and clear of sharp objects.
- B. Important: Retract the internal canopy hoop, and lock it before folding over the tent.







- 4. Prepare the Ladder:
  - A. Fully extend the ladder outwards so it is at its maximum length and all rungs are in lock position.
- 5. Fold Tent:
  - A. Standing behind the ladder, lift it from below up and over until the baseboard folds over.
  - B. From the bottom rung, depress the lock buttons and retract the ladder, keeping fingers well away until it is fully closed.
  - C. Secure the ladder rungs with the retaining strap attached.





### 6. Close tent:

- A. Locate the pack down shock cord at the retainer brackets and pull it over the canvas, ensuring the windows are tucked away under tension. Make sure the bungee cord has also been pulled in at the back.
- B. Pull down on the lid strap and close the tent, tucking away any bellowing canvas under the lid
- C. Ensure mattress strap is attached to the mattress















7. Secure all four locking clamps by pushing against them with your palm to engage the latch





### PACK UP COMPLETE.

**IMPORTANT:** Ensure the ARMADILLO AX is packed dry at all times. If weather conditions dictate a wet pack up, open the tent and allow to dry fully as soon as possible.





### Ladder adjustment

For your safety and protection, ensure correct placement and angle of ladder. See diagrams below. Recommended ladder placement is a 4:1 ratio or approx. 70° to 75°.

*NOTE:* Under no circumstances should anyone be inside the roof top tent if the ladder is not locked and secured at the correct angle.

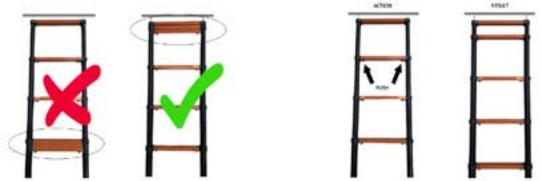


The ladder may need to be adjusted to achieve the correct angle depending on the height of your setup. If shortening is required, the adjustment must be done from the top.

Ensure the ladder is fully extended and all rungs are locked in place. Press the first set of locking buttons (second rung from the top) and allow the ladder to compress until a gap of approx. 85mm is achieved between rung 1 & 2.

Note: The ladder will only lock in the downward position.

Swing in the bottom of the ladder until it supports the weight of the roof top tent. If the angle of the ladder is between 70° and 75°, the adjustment is complete.



If further shortening is required press the second set of locking buttons (third rung from the top). This will close the 85mm gap until rung 1 & 2 are now touching. Swing in the bottom of the ladder until it supports the weight of the roof top tent. If the angle of the ladder is between 70° and 75°, this adjustment is complete.



**NOTE:** When height adjusted, the ladder will only lock in the downward position. If further adjustment is required, repeat the above steps by continuing the sequence by depressing the next set of locking buttons.



## Warranty

23ZERO will replace or repair any product at its discretion that is subject to faulty manufacturing or workmanship including materials.

#### **Exclusions**

The above warranty is limited to manufacturing and material defects. The warranty does not cover ordinary wear and tear, damage caused by improper use, storm damage, improper cleaning, accidents, lack of general or improper maintenance, driving under car parks, hitting products against hard surfaces, damage caused by car washes, fires, sparks, abuse, alterations, animal attacks, acts of God, UV exposure, or zipper wear. This also excludes broken poles and damage caused by a jammed, snagged zipper or excessive force applied to zipper causing failure. Using 23Zero products for full-time, commercial, or rental situations voids all warranties. 23Zero reserves the right to determine quality standards under this warranty policy.

\*Due to our policy of continual product development, the specifications, colors and feature may vary.

Please visit https://23zero.com/returns/ to see full details.

### Making a claim

To make a claim in relation to the above manufacturers warranty please ensure you retain your sales receipt of purchase. Please contact us stating the nature of your claim and we will be in touch with you shortly. If you require additional assistance, please call 801-349-1099 to discuss and arrange your claim. Product subject to warranty will be sent to 23ZERO USA, 2195 S Presidents Dr. Ste B. West Valley City, UT 84120. All freight costs associated with return of product for assessment is payable by the customer.