



## Mounting Tips for both Galaxy 18sqm TT6ax1 + 24sqm TT6ax6 Camper Trailer Tent Tops 19-Dec-2009

### **Step 1:**

Remove the tent-top from the cardboard shipping carton, either while on the ground or while mounted on the trailer. Just try and protect any new paintwork you've invested in.

If you're unpacking while on the ground, follow the steps below to place only two of the four D-shaped rubber seals down each under-side of the tent-top 20mm frame, knowing which set of rails are properly chosen according to the width of your trailer top rail centre to centre.

If you're unpacking while it's still sitting on your trailer, ensure that the Galaxy logo is at the rear, as that will position the tent to open correctly out to the driver's side. It should be flush with the tail-gate or any protrusions like bike racks or tie-down bars.

When the tent-top is on your trailer, a tip is to lift the four corners and place a firm tennis ball under each corner (tearing away a section of cardboard so the tennis ball touches the marine-ply base-board. You could also add two more tennis balls mid-way down each side of the trailer as well.

If you haven't already placed at least the two side (longitudinal) strips of D-shaped rubber seal (when the whole carton was upright, and the carton opened from the bottom), you should leave some cardboard to act as protection from scratching your trailer's paint-work. You could then put the self-adhering seals on later after you've done the gas-struts.

It's been found best to leave off the front and back D-shaped rubber seals until you've finished both the hinge mount and gas-strut mount and you can then properly line up these two seals as the top front and rear rails are often usually only just a bit wider than the 19mm seal, besides, often you might have a drop-down tail-gate for which you'll quite often need a different type of seal anyway. Often, we try and specify a bar that runs across the rear.

If you have a left-hinging tail-gate, we've also sourced another type of seal that works well.

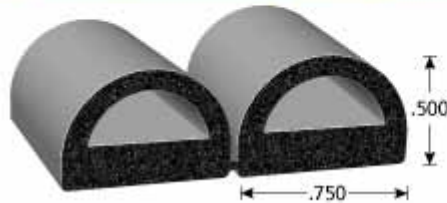
### ***No 040 Pinch-Weld Tail-Gate Sealing Rubber***

*Supplier: Industrial Rubber Supplies of Briggs St, Welshpool*

*Typically, we require about 3.7 metres on a LH swing tailgate with rounded edges.*

Once you have the front of the tent-top lined up so that it doesn't over-hang the front too much and that the 20mm square tubing frame underneath, matches up with the front rail of the trailer, you could use the 'floating' tennis ball tip above to more easily tickle the tent-top into its final resting position. Just ensure the rear flap that goes over the tail-gate won't foul.

Once you've measured from the outside edges of the trailer top to the 20mm square tubing frame underneath, and all looks equal, you should be able to remove all 6 tennis balls, middle ones first, then each corner, being careful to only lift upwards, and slowly let the tent-top rest on the top of the trailer.



**Product Name:** X-125HT, RUBBER SEAL, DUAL WITH "HT" TAPE  
**Product ID:** X-125HT  
**Description:** X-125HT EPDM Sponge Rubber Seal with "HT" Tape, Dual Strand

This acrylic based adhesive is best used to hold the rubber seal in place while installing it in a static application or compressed between two stationary objects. May be used in some light duty dynamic applications against a variety of substrates. Good heat performance -20F to +158F. Please Note: During application ambient temperature must be above +60F.

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**Step 2:**

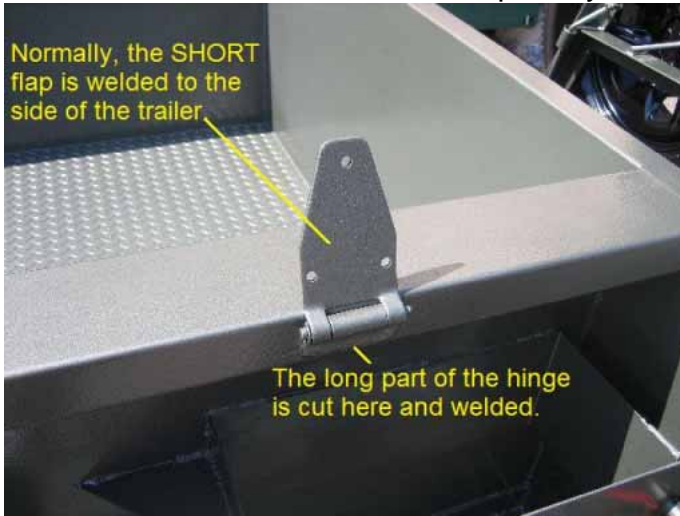
Bolt your hinges through to either Tee-nuts or stronger plates with welded or captive nuts.

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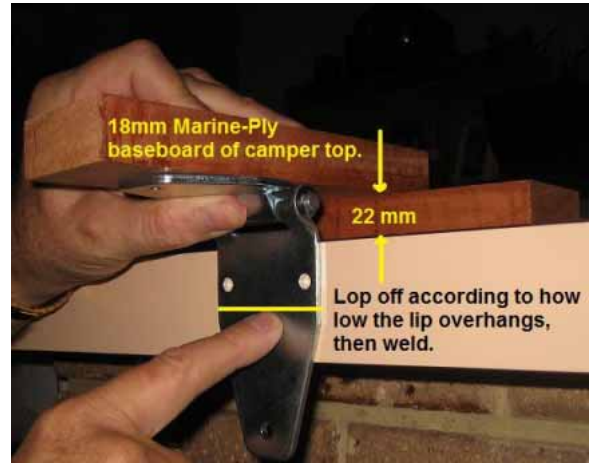
In some configurations, you might decide to leave your hinges flush with the top of your trailer, if you felt that at some time in the future, you might decide to unbolt the tent top from the trailer and use the trailer as a general purpose trailer to carry other large objects. In this case, you would need some hard-wood 22mm thick spacer blocks to go between the hinge

and the 18mm marine-ply bed-board. Shape this timber so that it's just outside the widest part of your hinge by 10-15mm, at least.

The hinges we recommend are three-holed triangular looking hinges where the **shorter** part of the hinge extends horizontally outwards from two positions on the driver's side of the trailer. Use 6 coach screws to temporarily hold the tent down and prevent any movement.



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You should partially open your tent, being careful not to pull it too hard, as it might shift the tent from its un-anchored position on the trailer top that you've previously measured carefully. See the tip above about using coach screws.

Allow yourself room to get between the tent-top side flap and the area where the hinges are, either through the U-shaped zippered access or otherwise and prepare yourself with a protection sheet that stops 'hot' metal drilling burrs from bumping into the PVC rip-stop flooring of the tent. We won't accept any warranty returns from any of this behaviour, sorry.

Remove the mattress from the bed-base and you could keep it in the living area and use it on its side to help prop up that area while you're working on the hinging exercise.

You've already purchased an adequate quantity of 3/8-inch Tee-nuts along with 3/8 bolts and a handful of spacer washers, so position the hinge flap, so that preferably the outer hole lines up with the 20mm square tubing of the tent frame, then drill using a 3/8" bit into the existing 5/16-inch holes in the hinge right up through the 18mm marine-ply, being careful not to let the drill touch any of the canvas inside the tent. Ignore the bit above about the 20mm tubing, if you're short flange of the hinge is flush up to the bed-board.



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What you could do next is entirely up to you, but my step was to secure this one outer hinge hole with a Tee-Nut by first drilling it out (including marine-ply) to 3/8-inch, then using a 1/2-inch bit, drill down from the top only enough to cater for the diameter at the outer shank of the Tee-nut thread, belted the Tee-Nut in with a sledge-hammer, by using a quite long piece of 3/8 threaded rod (4-inches), or bolt extending downwards through the marine-ply and then hinge, where the top of the thread level is just below the Tee-nut top flange, then remove this temporary thread and fit enough washers onto a 3/8 bolt and tighten that one up, then proceed on with the other two bolts and Tee-nuts. Or use your 3/8" bit by wiggling.

You'll find that if you excessively tighten the bolt into the Tee-nut, then the Tee-nut flange will depress into the marine-ply and that's ok, so long as the bolt end doesn't protrude up too much so that it damages the mattress, and if so, you may need to remove the bolt and add more spacer washers.

If you feel that you're going to travel consistently over rough and bumpy or corrugated terrain at speed, you may want to strengthen the hinging by using a flat 4mm plate with welded nuts above the marine-ply, that would take the pounding more safely, besides, on that type of terrain, one would normally use a set of ratchet-straps going front to rear and side to side, as a matter of course, to be sure and safe. Also helps to minimise billowing.



**Step 3:** Prepare for mounting your gas-struts, or put in your hook bolts for over-catch locks.

Two(2) x 1000 Newton 816mm long are suitable for the 24sqm (187kg) tent-top, while 2 x 700 Newton 816mm long are suitable for the 18sqm tent-top.

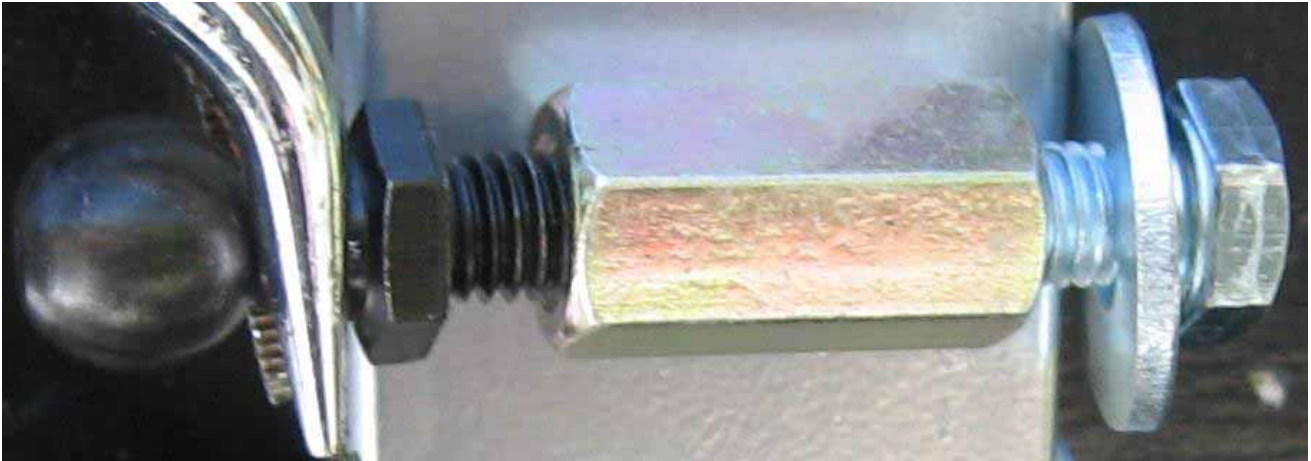
Calculation for the 24sqm tent-top is  $187 \times 10 = 1870 / 2 = 935$  Newtons required to lift, therefore choose next highest available gas-strut - 1,000 Newtons.

Calculation for the 18sqm tent-top is  $127 \times 10 = 1270 / 2 = 635$  Newtons required to lift, therefore choose next highest available gas-strut - 700 Newtons.

Instead of using multi-holed Brownbuilt shelving angle bolted through the centre of the two outside panels under the tent base, we have devised a cheaper, but far stronger method by using hexagonal threaded rod extensions resting inside the 40mm\*20mm tubing to support the top of the gas-strut. Remember that the gas-strut requires that the body be upwards so that the oil falls down to the bottom seal and lubricates that when it's being used. The narrow push-rod should be connected to the trailer end.

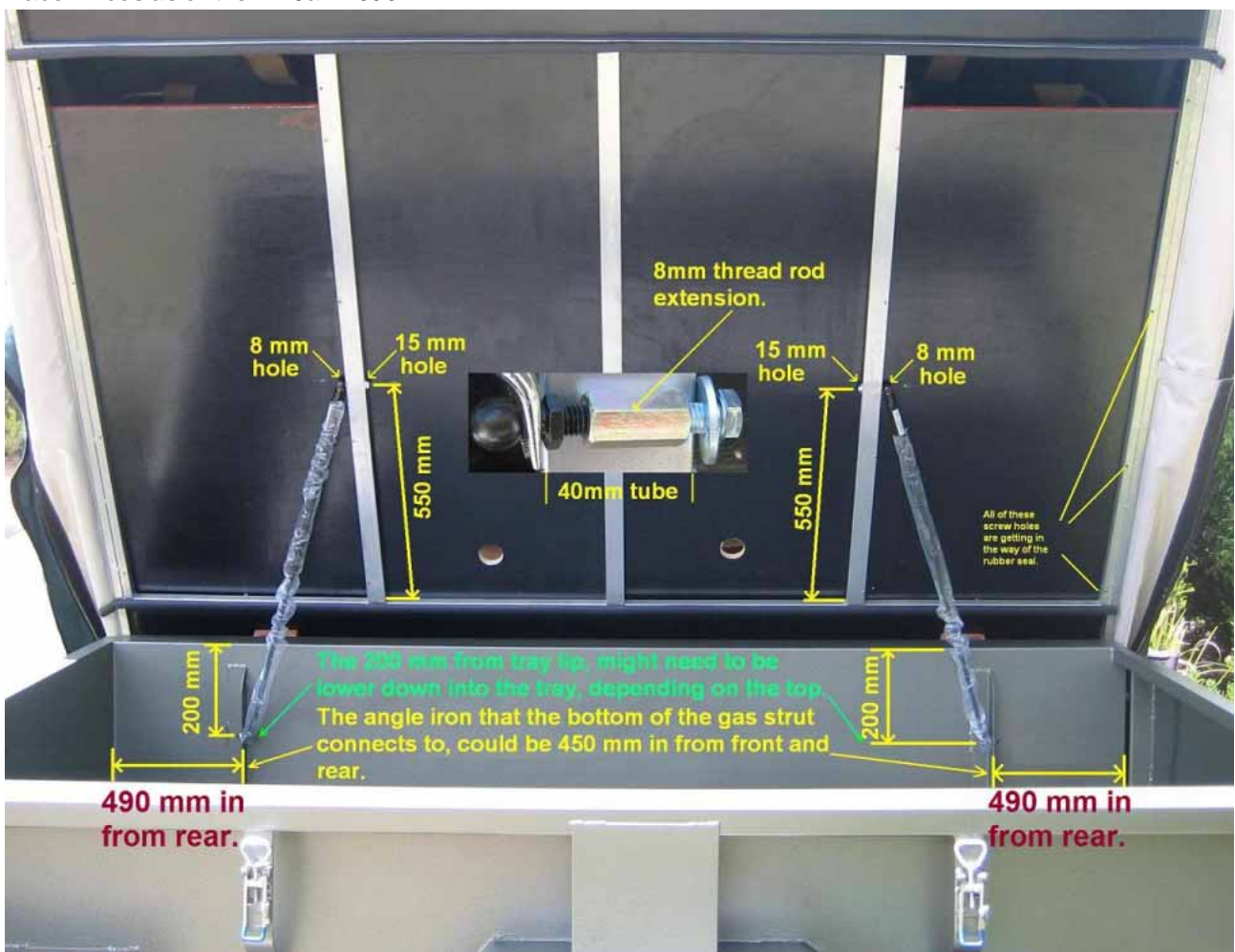
In previous configurations, we have used 250mm long, 40x40mm Brownbuilt shelving angle mounted in the middle of the two panels either side of the loose lift-up panels that allows access to the inside of the trailer, but we've found that the 1000 Newton upwards 'pushing' force of the gas-struts may dislodge these panels, as the screws aren't substantial enough and may cause the panel/s to come adrift, but would be stopped by the mattress anyway.

We've come up with a far better and more practical installation idea, and that's to use the strength of the 40mm x 20mm square tubing, drill the appropriate holes (8mm and 15mm), use 8mm Threaded Rod Joiners and set your gas struts as shown in the pictures below.



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L & T Venables Pty Ltd, Malaga  
**8MM THREADED ROD JOINER Part# 249608 \$2.58 each ex-Tax**  
**BOLT ONLY MS M 8X 20 ZP Part# 927022 \$0.99 each ex-Tax**  
 Trade Prices as of the 22-Jan-2009



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**Step 4:** Prepare for mounting your hook-bolts used with your over-catch latches that hold the whole tent-top down onto your trailer.

**WARNING:** The hook-bolt method is entirely safe for the average camper travelling on sealed roads, but as soon as you venture onto bumpy or corrugated roads, a safety warning would be to use at least two ratchet straps front to back to ensure there's no movement.

The hook-bolt method is a convenient way of easily un-latching the tent-top and lifting it upwards if you need quick access to items from inside, particularly up near the front of the trailer while you've pulled over or even for loading or un-loading gear into or out of your trailer.

If you happen to stop by some country hotel for a pub-lunch, you might want to consider putting some small pad-locks onto each of the two over-catch locks and on your tail-gate as well.

Mounting the hook-bolts is reasonably self explanatory from the photos and is usually done after you've mounted your gas-struts and you are successfully pushing the tent-top upwards with about a 15kg pressure, when it's near the resting position. You might also do it before you fit your gas-struts and while the tent is still open, because once the gas-struts have been fitted and your tent has been left open, you'll find it will be a hell of a job working on your hook bolts as there's hardly any weight for the gas struts to lift and they'll want to keep the tent open, so if you've done that, temporarily disconnect the bottom end of the struts.

Most hook-bolts come where the hook part is a bit too long, so you should trim it and cut it off by about an inch, using your metal angle grinder.

One idea that seems to work, when the tent-top is pushed up to about 45 degrees, is to loosen the one or two screws holding a small marine-ply panel up in the top right and left hand comers, remove this panel temporarily by turning it on its side, then you can reach inside to put the Tee-nut onto your hook-bolt and tighten it up so that the flange feels flush with the timber, by testing if your thumbnail can get under the flange.

A tip for when you're packing up and loading your trailer, is to put the much heavier poles and peg bags onto the hinged side of the trailer and inside the trailer, putting the heavy items such as batteries and fridges on the passenger side of the side from which you push up the tent-top.



**Disclaimer:** This manual is a guide only. No responsibility will be taken for any accidents or damage as a result of faulty workmanship or engineering mal-practice resulting from instructions taken from these mounting tips.