Work Instruction: BWI-23-0004



# Boss 270 Awning to Boss Roof Top Tent RT1 Installation

### Important!

- 1. The following instructions apply to standard setups where the awing provides shade at the side and rear of the vehicle.
- 2. To suit a standard setup, left-hand-side and right-hand-side awnings must be mounted on the side of the vehicle specified by the awning description.
- 3. A left-hand-side awning is depicted throughout these instructions, mirror the instructions for a right-hand side mounted awning.
- 4. Any deviations from the subsequent fitting instructions must be approved by Boss Aluminium before proceeding.
- 5. All fasteners provided are of a specific grade and specification to suit the application, they must not be substituted! Replacements for any lost or damaged fasteners must be supplied or approved by Boss Aluminium before use.
- 6. Nyloc nuts must be replaced if fully installed and then removed.

Standard Kit Contents						
Item No.	Description	Qty	Image			
Pl	Boss 270 Awning Bag	1	R. D. L. C.			
P2	Boss 270 Awning	1				
	Optional Kit Contents (Sold Separately)					
	(201g 2e	paratel	y) 			
P3	Rear RT1 Awning Mount	1				
P4	Front RT1 Awning Mount	1				
P5	Backing Plate A	2				

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P6	Backing Plate B	2	
P7	Awning Mounting Plate	2	
P8	Loctite 243 Threadlocker 10ml	1	243 THIRADLOCKER SUPER NUT LOCK Median Freedan

## **Optional Kit Contents**

### (Awning to Roof Rack Mounting Bracket & Awning Mounting Plate Fasteners, Sold Separately)







Fr	Part A ont & Rear RT1 Awning Mount (Item P3 & P4) to Awn Mounting Plate (Item P7)	ing	II.	Part B 270 Awning (Item P2) to Awning to Awning Mo om P4) (Through 6mm Backing Plate at Hinge)	•
ltem No.	Description	Qty	Item No.	Description	Qty
F1	M8 x 30 Cap Head Bolt	8	F2	M8 x 30 Hex Head Bolt	4
F6	M8 Spring Washer	8	F4	M8 Large Flat Washer	8
F5	M8 Small Flat Washer	8	F7	M8 Nyloc Nut	4
Boss 2	Part C 270 Awning (Item P2) to Awning to Awning Mounting (Item P4) (Front End)	g Plate		Totals	-
Item No.	Description	Qty	Item No.	Description	Qty
F3	M8 x 25 Hex Head Bolt	4	F1	M8 x 30 Cap Head Bolt	8
F4	M8 Large Flat Washer	8	F2	M8 x 30 Hex Head Bolt	4
F7	M8 Nyloc Nut	4	F3	M8 x 25 Hex Head Bolt	4
			F4	M8 Large Flat Washer	8
			F5	M8 Small Flat Washer	16
			F6	M8 Spring Washer	8
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# Optional Kit Contents (Boss Roof Top Tent RT1Mounting Fasteners, Sold Separately)



Item No	Description	Qty	Item No.	Description	Qty
F1	M8 x 30 Cap Head Bolt	12	F7	M8 Nyloc Nut	12
F6	M8 Small Flat Washer	24			

Tools & Equipment (Not Included in Kit)					
Item No.	Description	Qty	Image		
T1	Centre Punch	1			
Т2	Ø4mm Drill Bit	1			
Т3	Ø8.5mm Drill Bit	1			
T4	Deburring Countersink	1			
T5	Power Drill	1			
Т6	13mm Socket/Ratchet	1			

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17	13mm Spanner	1	
Т8	Power Driver with 6mm Alley Key Bit (Recommended) or 6mm Allen Key	1	
Т9	Black Sealant (Sikaflex 252 Recommended)	1	P.L. Statler 252
T10	Caulking (Sealant) Gun	1	
TII	Masking Tape	1	
T12	Permanent Marker	1	Oppose Service
T13	Tape Measure	1	
T14	Scissors or Shears	1	

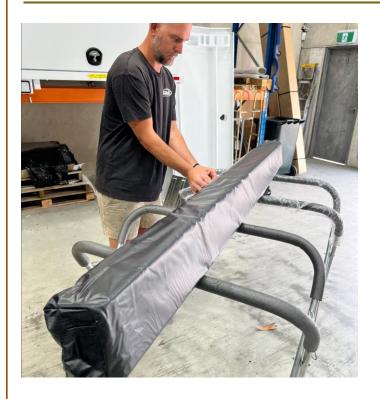
#### Important!

- 1. To maximize the stability of the awning, the Front and Rear RT1 Awning Mounts (Items P3 & P4) must be fitted to the very front and rear of the Boss RT1 Roof Top Tent.
- 2. Ensure the bolts for the rear Awning Mounting Plate (Item P4) pass through the 6mm hinge reinforcement plate on the inside of the awning.
- 3. For correct orientation of a standard setup, the hinge/back end of the awning must be positioned at the rear of the vehicle.
- 4. Before proceeding with the installation, inspect the vehicle and ensure there are no obstructions that could interfere with the awning in the open and closed positions once fully installed.

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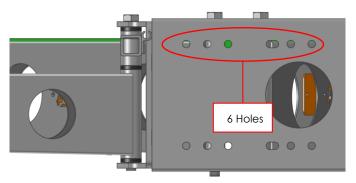
### 1. Fit Awning Mounting Plates (Item P4) to Boss 270 Awning (Item P2)



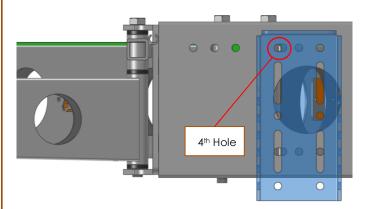
- 1. Ensure the awning is oriented correctly in the bag, the 'Boss Aluminium' logo must be located at the front end of the awning.
- 2. Ensure the awning and bag are fully aligned, remove any twists or creases along the length of the bag.
- 3. Locate the hinge/back end of the awning and pull the bag towards it so that the front end of the bag is approximately 10mm from touching the front of the awning.

<u>Tip:</u> It is easier to slide and align the awning while the bag is zipped up.

4. Carefully flip the awning onto the front face.



5. Feeling through the bag at the hinge/back end of the awning, locate the group of 6 holes at the top of the back face as shown.



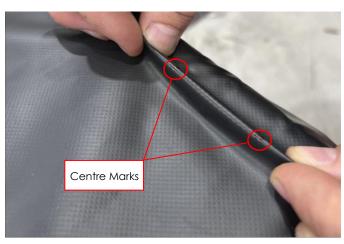
6. Position the Awning Mounting Plate (Item P4) over the 4th hole from the hinge/back end of the awning and align the bracket to the other 3 hole/slots in the group as shown.

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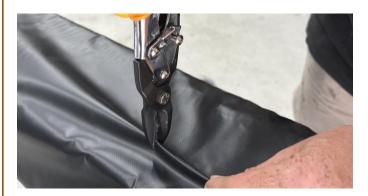




7. With a permanent marker, mark the centres of the two holes and two slots as shown.



8. Remove the bracket and pinch the bag with the crest crossing through the hole centre marks as shown.



9. At each hole centre mark, cut approximately 5mm down from the crest of the fold to create an 10mm slit in the bag.





10. Cut another 10mm slit perpendicular to the last at each centre mark to form a cross slit.

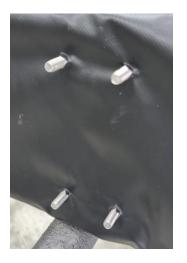
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11. With the awning flipped up-side-down, unzip the bag, and partially open the awning to gain access to the Awning Mounting Plate (Item P4) mounting holes.

<u>Important:</u> Ensure the awning arms are supported when open.



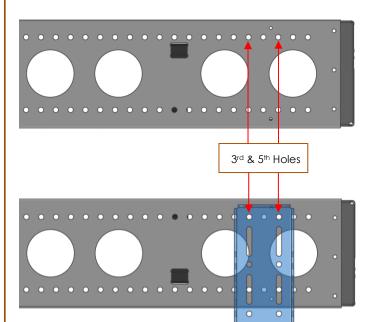


12. Feed four (4) M8 x 30 Hex Head Bolts (Item F2) through the hinge/back end of the awning and bag as shown.

<u>Important:</u> Ensure the bolts pass through the 6mm hinge reinforcement plate on the inside of the awning.

Do not mix up front and rear fasteners! Shorter bolts are used on the front bracket as there is no 6mm reinforcement plate at the front end of the awning.

13. Fit the Awning Mounting Plate (Item P4), M8 Large Flat Washer (Item F4) and the M8 Nyloc Nut (Item F7) to the bolts, tighten using the 13mm socket and spanner.



14. Feeling through the bag at the front end of the awning, locate the 3<sup>rd</sup> & 5<sup>th</sup> hole from the front at the top of the back face as shown.

15. Position and align the 2nd Awning Mounting Plate (Item P4) over the 3<sup>rd</sup> and 5<sup>th</sup> hole as shown.

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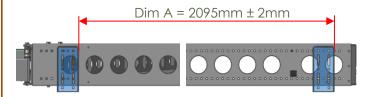




16. With the front Awning Mounting Plate (Item P4) resting in place, measure and record the distance (Dim A) between the Front & Rear Awning Mounting Plates (Item P4) as shown.

Dim A (mm) =

<u>Important:</u> Dim A should be <u>2095mm ± 2mm</u>, contact Boss Aluminium for support if not.



17. Provided the Dim A is <u>within tolerances</u>, repeat Steps 7 to 11 for the front bracket.





- 18. Feed four (4) M8 x 25 Hex Head Bolts (Item F3) through the front end of the awning and bag as shown.
- 19. Fit the Awning Mounting Plate (Item P4), M8 Large Flat Washer (Item F4) and the M8 Nyloc Nut (Item F7) to the bolts, tighten using the 13mm socket and spanner.



20. Pack up the awning for fitment to the vehicle.

**Important:** Ensure to secure the awning arms with the Velcro straps before zipping up the bag.

To avoid potential damage to canopy doors when open, terminate the zip at either end of the awning, not the centre.

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### 2. Fit Front & Rear RT1 Awning Mounts to Boss RT1 Tent



1. Open the tent and remove all contents including the mattress and bedding and fold back the optional Aero Mesh Mattress Liner as shown if fitted.

<u>Important:</u> Do not attempt to remove the carpet, it is bonded to the tent shell.



2. Apply Masking Tape (Item T6) to the side face of the tent, approximately 300mm from the front and rear ends as shown.

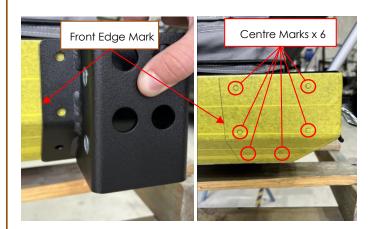


3. Position the Rear RT1 Awning Mount (Item P3) on the side of the tent so that the rear face of the mount is flush with the rear face of the tent.



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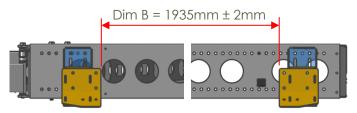


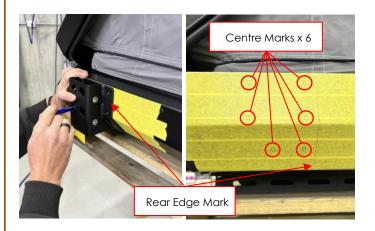


4. With a pen or permanent marker, mark the centres of the six (6) Ø8.5mm holes and the front edge of the Rear RT1 Awning Mount (Item P3) as shown.



Measure 1935mm ± 2mm from the Front Edge Mark drawn in the previous step and mark a vertical line.
 Important: The position must be within the specified tolerance!





- 6. Position the Front RT1 Awning Mount (Item P4) with the rear edge sitting on the line drawn in the previous step.
- 7. With a pen or permanent marker, mark the centres of the six (6) Ø8.5mm holes in the Front RT1 Awning Mount (Item P4) as shown.

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8. Centre punch and drill a Ø4mm pilot hole located at each centre mark drawn at the front and rear of the tent.



9. Drill all pilot holes out to Ø8.5mm.



- 10. Remove the masking tape from both ends of the tent.
- 11. Countersink the inner and outer edges of the Ø8.5mm holes to deburr the edges and to create a cavity for sealant to form a positive seal.



12. Clean up all swarf from the tent interior and exterior at both ends.

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13. Apply a complete ring of sealant around all six (6) Ø8.5mm holes on the back face of the Rear RT1 Awning Mount (Item P3).





- 14. Insert four (4) of the M8 x 30 Cap Head Bolts (Item F1) into the top four (4) Ø8.5mm holes in the Rear RT1 Awning Mount (Item P3).
- 15. Fit the mount to the rear of the tent.
- 16. Push firmly on the mount so that the sealant compresses and spreads enough for the mount to stick to the side.



17. Fit the bottom two (2) M8 x 30 Cap Head Bolts (Item F1).





Apply a complete ring of sealant around all four (4) Ø8.5mm holes on the back face of Backing Plate A (Item P5) & Backing Plate B (Item P6).

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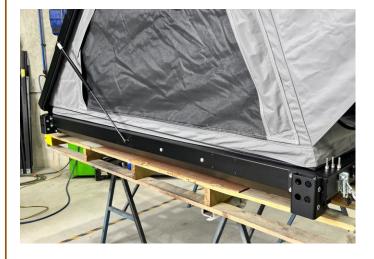
18. Fit Backing Plate A (Item P5) & Backing Plate B (Item P6) to the inside of the tent as shown.





19. Fit the M8 Small Flat Washer and Nyloc Nuts (Item F6 & F7) and tighten with the 13mm spanner and a 6mm Allen Key.

**Important:** It is ok for the sealant to ooze out the edges of the mount, this is a good indication that the right amount of sealant has been used and that a proper seal has formed.



20. Repeat steps 14 to 20 to install the Front RT1 Awning Mount (Item P4).

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3. Fit Awning Mounting Plate (Item P4) / Boss 270 Awning (Item P2) to the Front & Rear RT1 Awning Mount (Item P3 & P4).





- Cover the thread of the M8 x 30 Cap Head Bolts (Item F1) with a generous amount of Loctite (Item P5)
- 2. Lift the awning onto the tent and fasten the Awning Mounting Plate (Item P4) to the Front & Rear RT1 Awning Mounts (Item P3 & P4) with four (4) M8 x 30 Cap Head Bolts (Item F1), M8 Spring Washers (Item F6) and M8 Small Flat Washers (Item F5) per bracket.



3. Open the awning to check swing clearances.

Installation complete!

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