

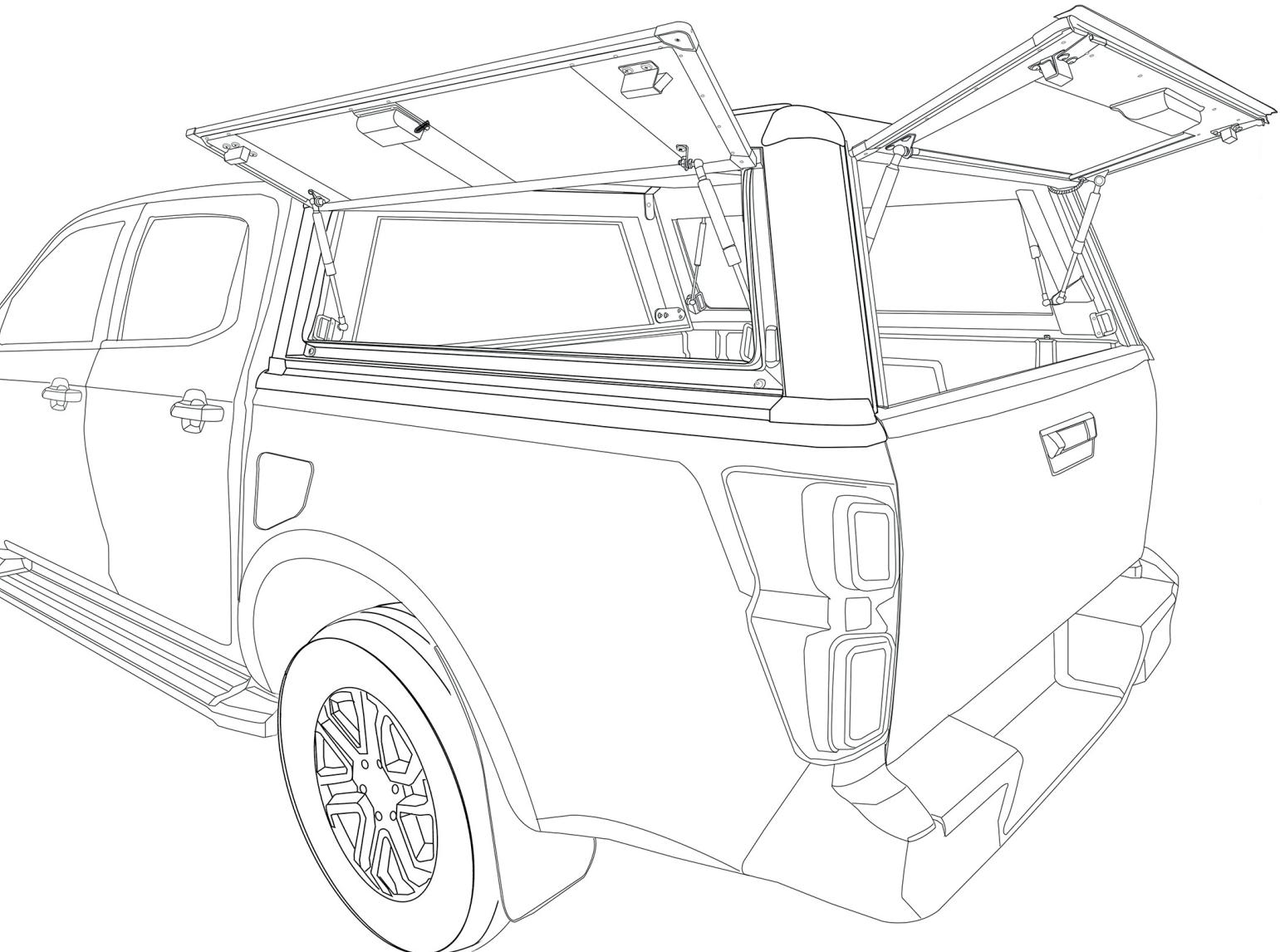
RIVAL

4x4 ACCESSORIES

ALUMINIUM MODULAR CANOPY INSTALLATION INSTRUCTIONS

RAM 1500 / 1500 TRX 2019+

PART NUMBERS: DCRIVCAN1500B,
DCRIVCAN1500B-S

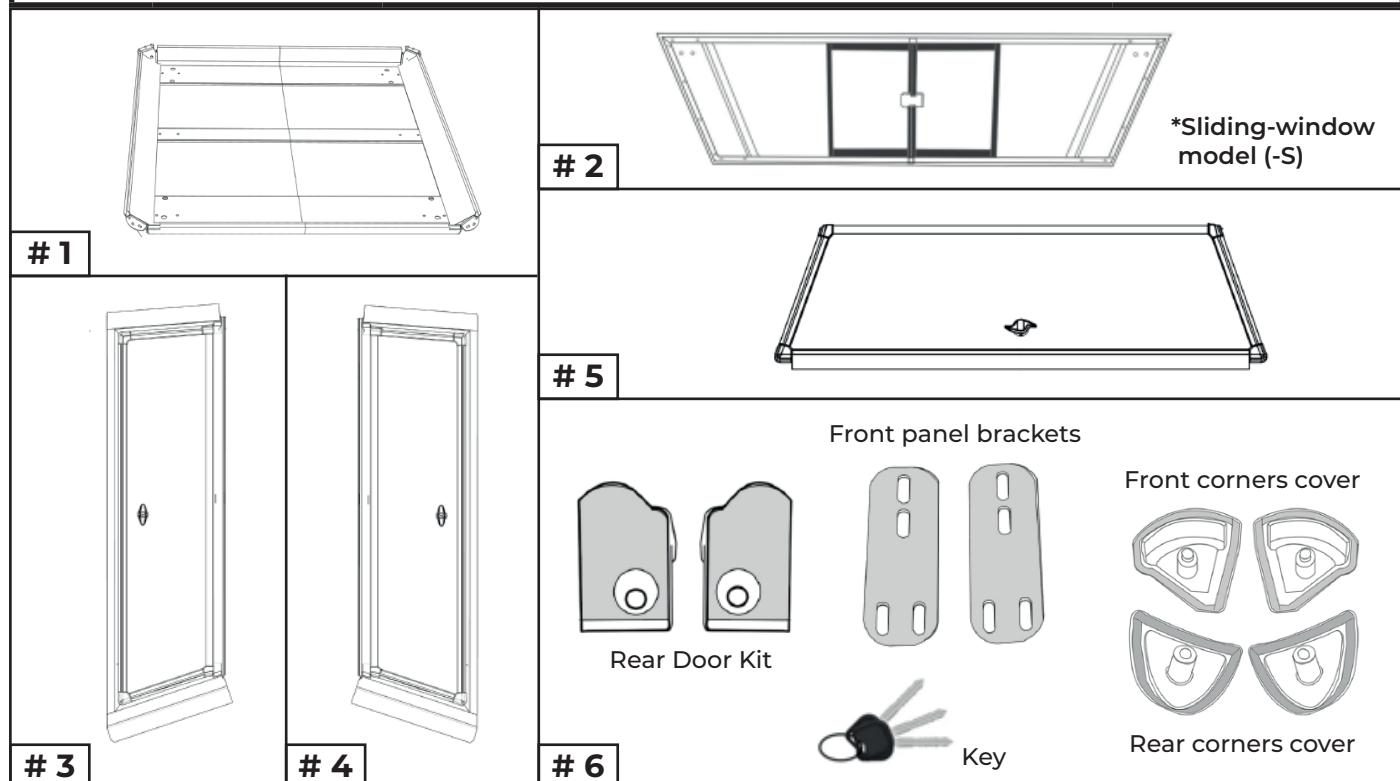


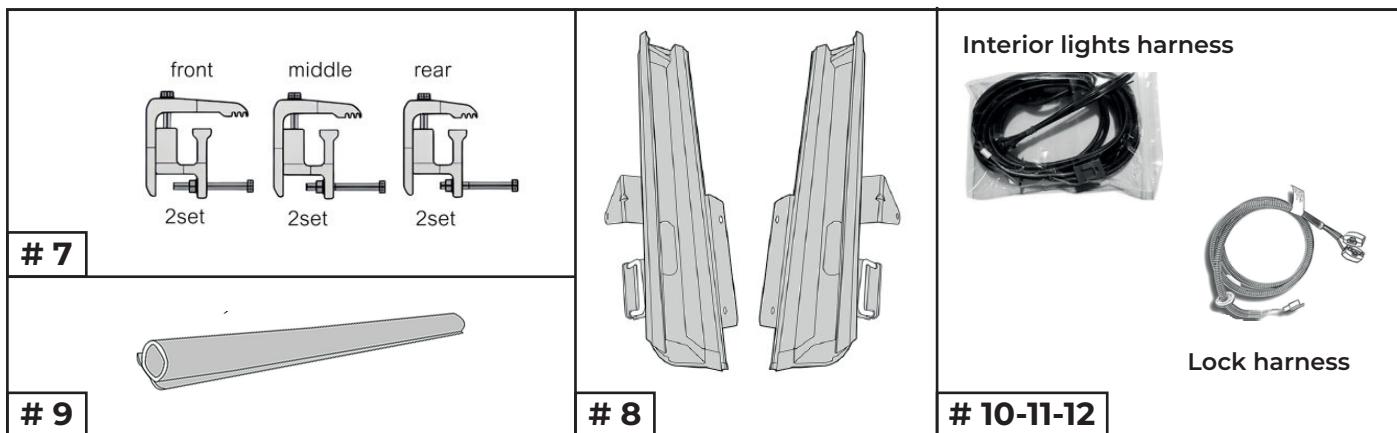
PATENT PENDING WORLDWIDE

CONTENT

ITEM #	QUANTITY	DESCRIPTION	TOOLS NEEDED
1	1	ROOF PANEL	13mm SOCKET
2	1	FRONT PANEL (SLIDING WINDOW OPTIONAL)	12mm SOCKET
3	1	LEFT SIDE PANEL	10mm SOCKET
4	1	RIGHT SIDE PANEL	RATCHET
5	1	REAR DOOR	TORQUE WRENCH
6	1	PARTS KIT #1	5MM ALLEN KEY
7	1	PARTS KIT #2	SCREW-DRIVER
8	1	PARTS KIT #3	T-25 TORX BIT
9	1	FRONT RUBBER PAD	
10	1	INTERIOR LIGHT HARNESS	
11	1	CENTRAL LOCK HARNESS	
12	1	BREAK LIGHT HARNESS	

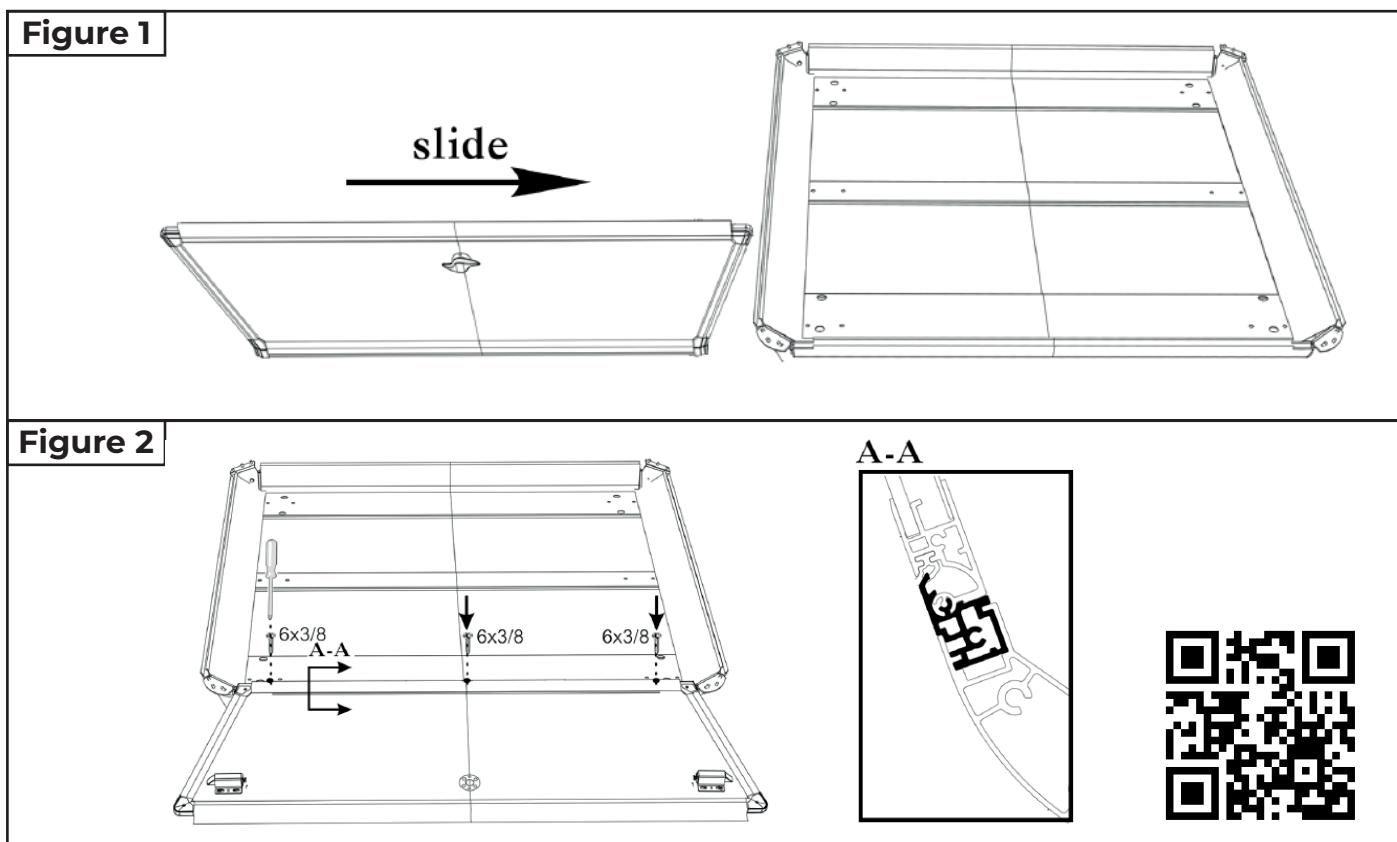
ANTI-SEIZE LUBRICANT MUST BE USED ON ALL STAINLESS STEEL FASTENERS TO PREVENT THREAD DAMAGE AND GALLING





PROCEDURE

1. Remove contents from box, verify if all parts listed are present and free from damage. Carefully read and understand all instructions before attempting installation. **Failure to identify damage before installation could lead to a rejection of any claim.**
2. With the roof panel secured on a flat surface, slide the rear door into the roof panel (**Fig. 1**).
3. Next, use a screwdriver to screw the three #6 x 3/8 pan head self-tapping screws from Parts Kit #1 (Item #6) to secure the rear door panel onto the roof panel. Cross section view A-A shows how the railing system works to attach these components together (**Fig. 2**).

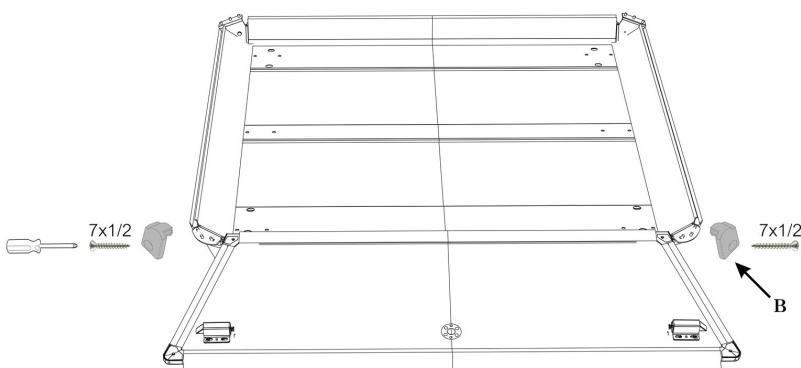
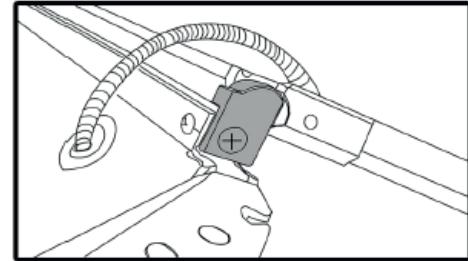
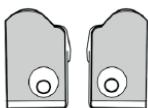


4. Screw in the rear door side covers using the two #7 x 1/2 flat head self-tapping screws from Parts Kit #1 (Item #6). The installation should look like the image below (**Fig. 3**).

Figure 3

Flat Head Tapping Screw 7x1/2 = 2 pcs.

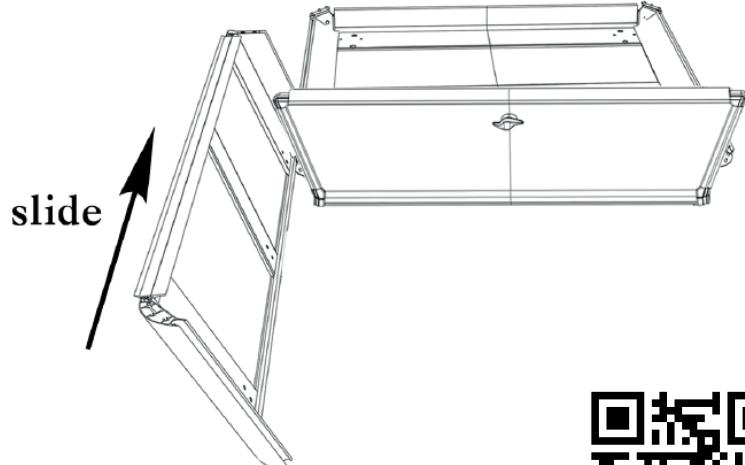
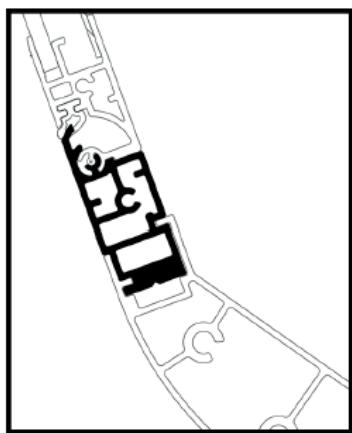
Pan Head Tapping Screw 6x3/8 = 3 pcs.



5. While lifting the rear door up, slide the left panel into the railing system. Section view A-A shows how the left panel slides into the roof panel (**Fig. 4**).

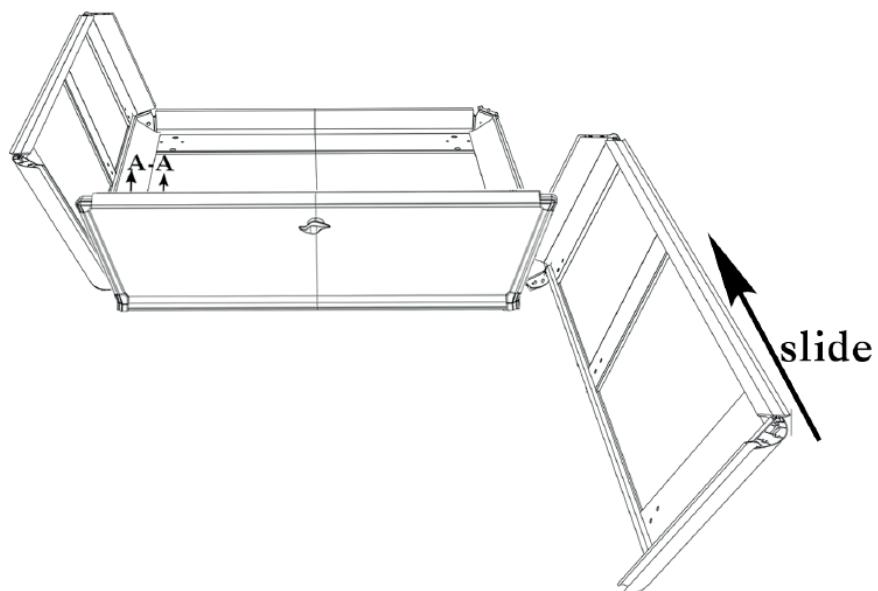
Figure 4

A-A



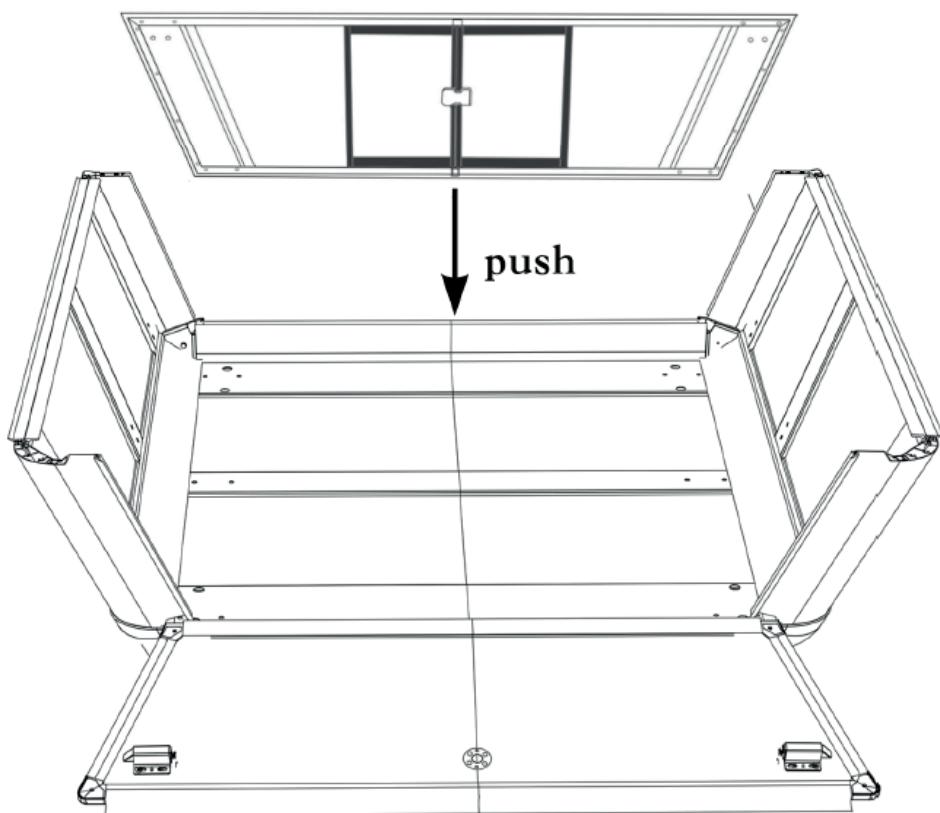
6. Repeat step 5 for the right panel (**Fig. 5**).

Figure 5



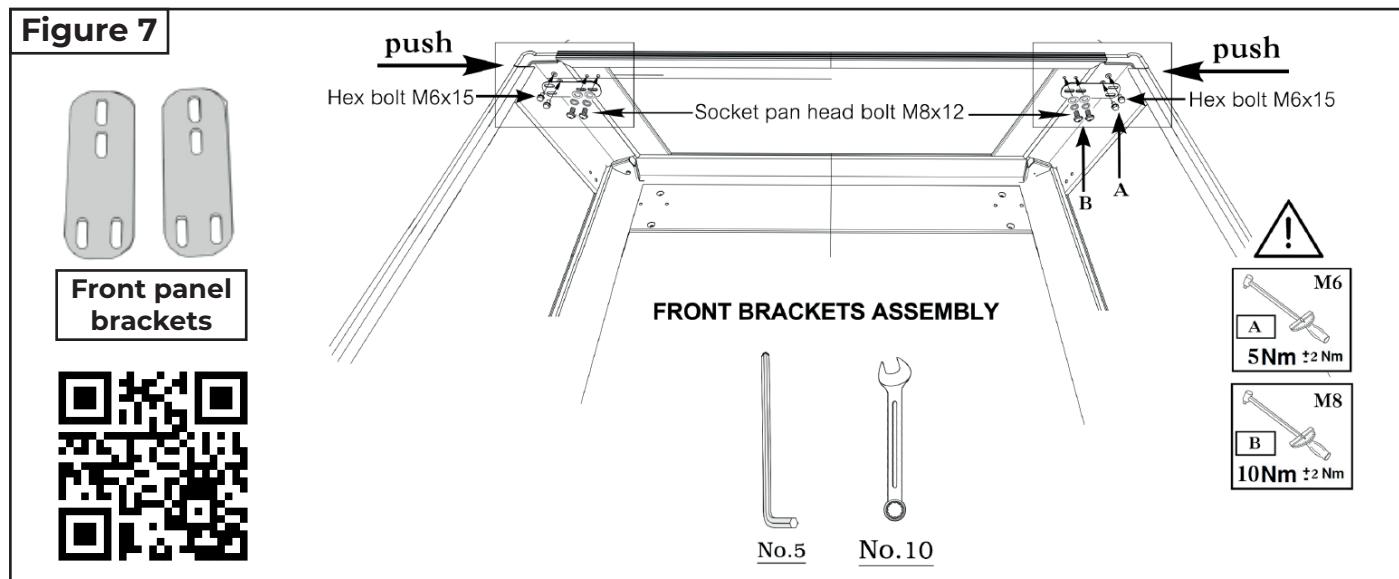
7. Next, push the front panel into the roof panel (**Fig. 6**).

Figure 6

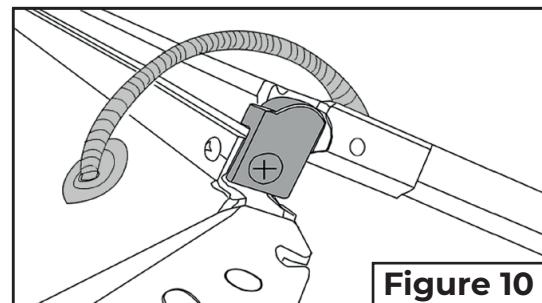
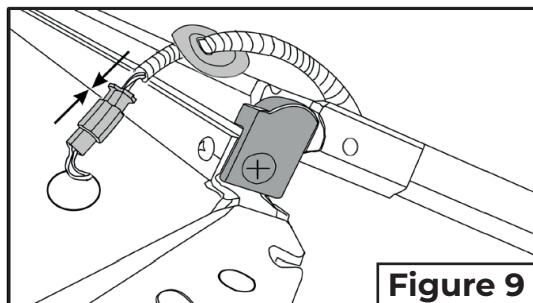
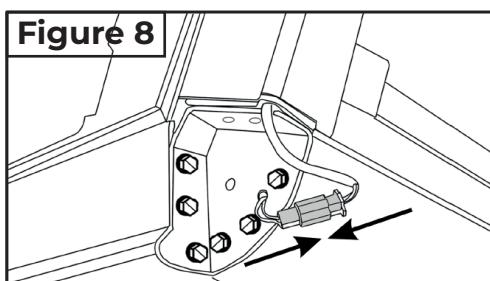


8. Push the left panel inwards towards the front panel. Using a front panel bracket, two M8 x 12 socket pan-head bolts, two M8 split washers, two M8 flat washers, two M6 x 15 hex bolts, two M6 split washers, and two M6 flat washers provided in Parts Kit #1 (Item #6), fasten the left panel to the front panel. Use a 5mm Allen Key and 10mm socket to initially tighten the bolts, then use a torque wrench to torque the M8 bolts to 10Nm (8ft-lbs) and the M6 bolts to 5Nm (4 ft-lbs). Repeat this process to fasten the right panel to the front panel (**Fig. 7**).

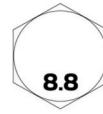
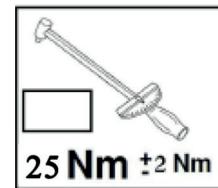
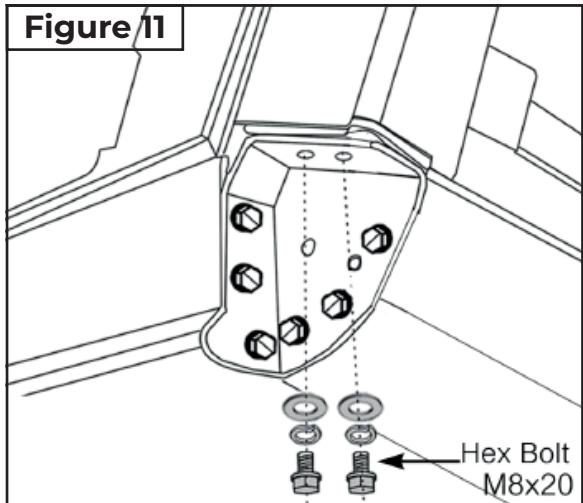
CAUTION: MAKE SURE TO USE THE M8 X 12 SOCKET PAN-HEAD BOLTS FOR THE MOUNTING HOLES ON THE FRONT GLASS, THEY REQUIRE A 5MM ALLEN KEY TO FASTEN. DO NOT USE THE M8 X 20 HEX BOLTS AS THIS MAY DAMAGE THE FRONT GLASS PANEL.



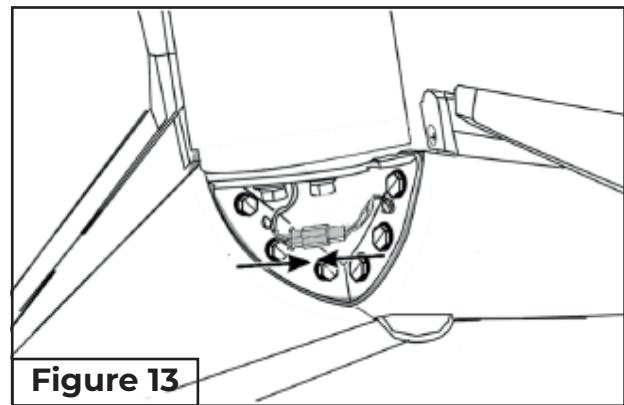
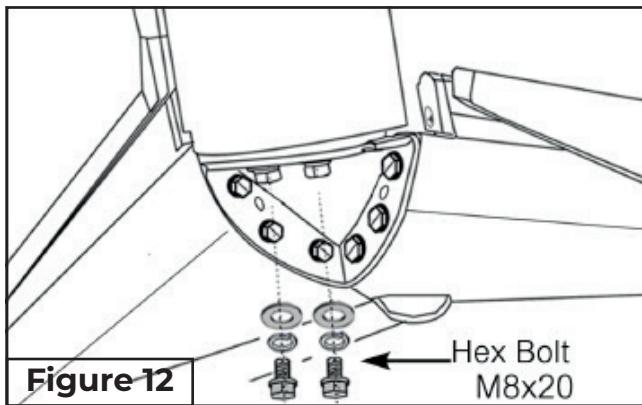
9. Connect the front wire found at the corner of the roof panel and front panel (**Fig. 8**). Then connect the rear wire (**Fig. 9**) and tuck the connectors into the roof panel (**Fig. 10**).



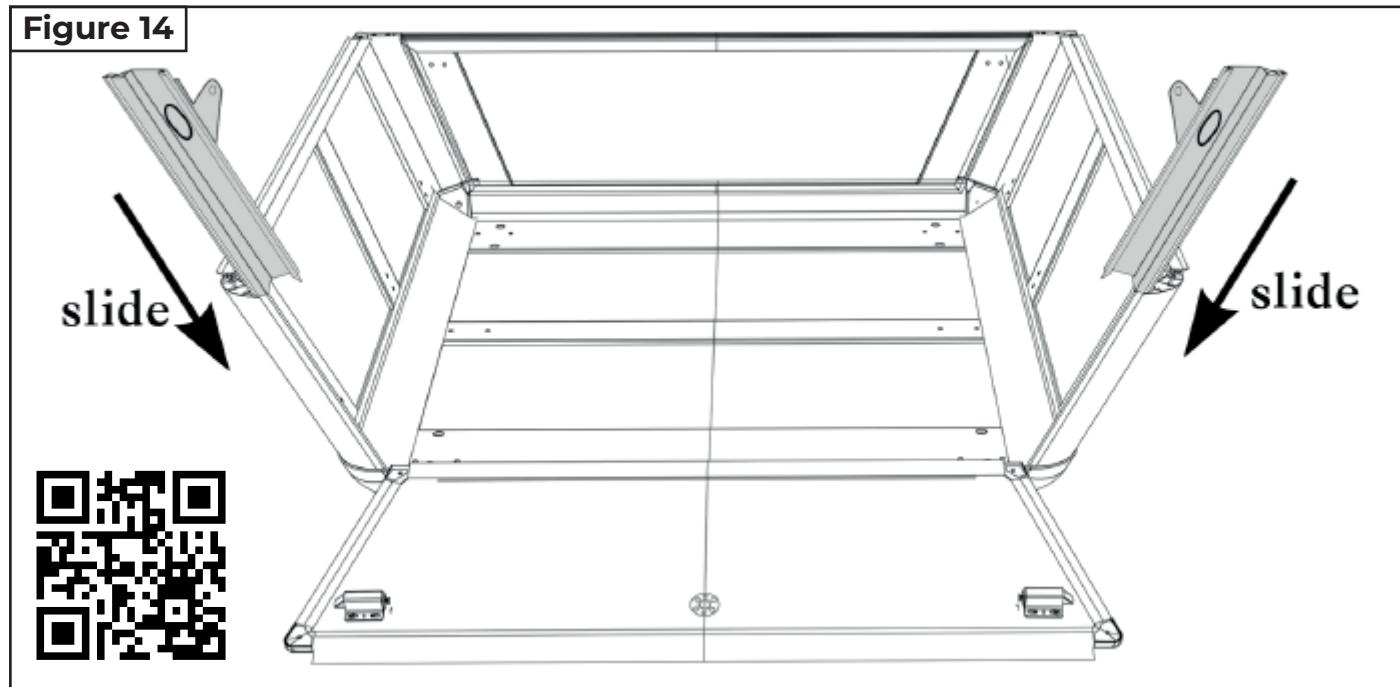
10. Next, use two M8 x 20 Grade 8.8 hex bolts, two M8 split washers, and two M8 flat washers to fasten the front panel to the roof panel at one corner. Use a 13mm socket to initially tighten the bolts, then torque the bolts to 25Nm (19ft-lbs). Repeat this process for the other corner where the roof panel and front panel meet (**Fig. 11**).



11. Repeat Step 10 for both corners where the roof panel and rear door meet. Use the same kind of hardware as in the previous step (**Fig. 12**). Connect the roof panel wire to the rear door connector as shown below (**Fig. 13**).

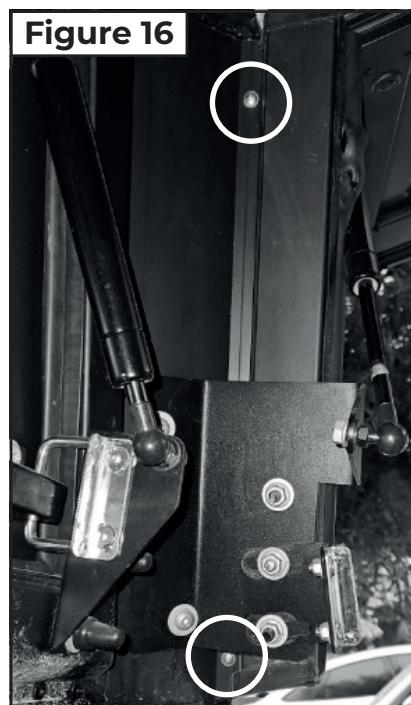
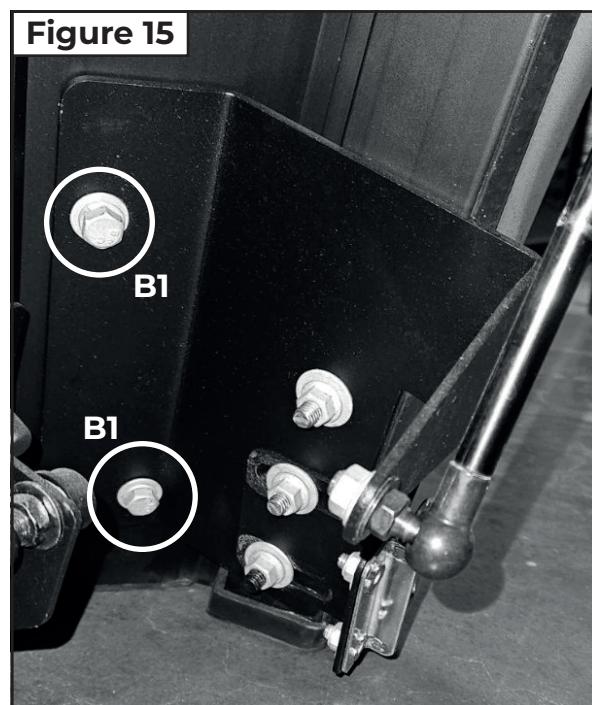


12. Slide the water channels downwards on the left and rear panels toward the rear door (**Fig. 14**). The water channels are found in Parts Kit #3 (**Fig. 15**).

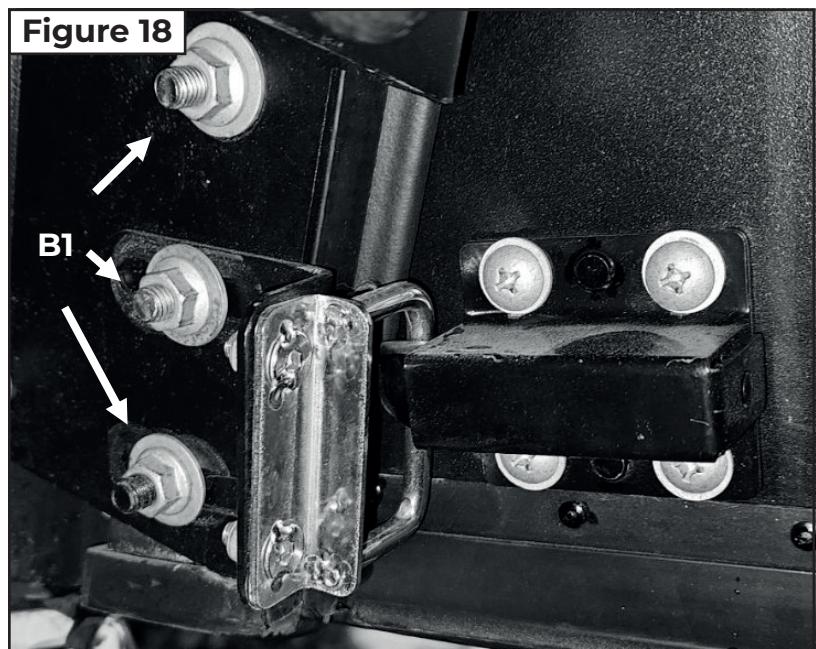
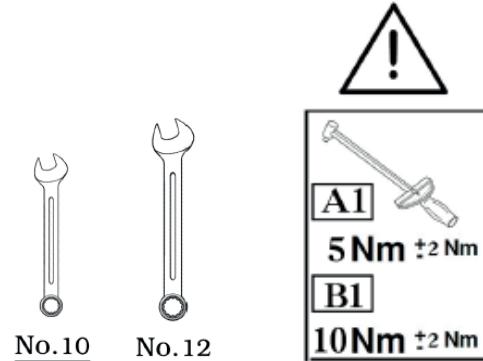
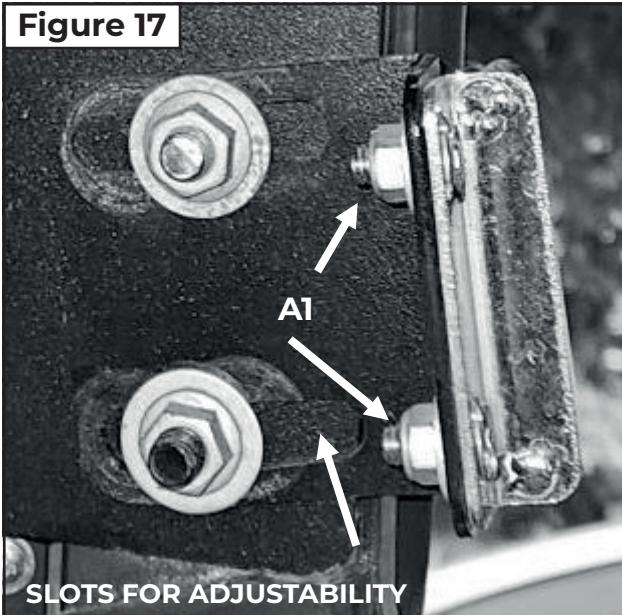


13. An inside corner of the rear door and side panel is shown below. Using the contents of Parts Kit #3 (Item #8) and a 12mm socket, fasten two M8 x 20 hex bolts through the water channel bracket and into the side panel, torque to 10Nm (8ft-lbs) (**Fig. 15**).

Next, use two #6 x 3/8 pan head self-tapping screws and fasten the water channels to the side panels. (**Fig. 16**). Repeat this step for the other side of the canopy.



14. Torque the nuts on the door latch to 5Nm (4ft-lbs) using a 10mm socket. There are slots on the door latch bracket that allow for the latch to be adjusted so the rear door can close correctly (**Fig. 17**). Once the rear door is shut and the door latch is adjusted properly, torque the bolts in **Fig. 18** to 10Nm (8ft-lbs).



15. Next, clean the surface of the perimeter of the corner where the roof panel and left panel meet. Locate the silicone corner covers in Parts Kit #1 (Item #6) and remove the tape over the adhesive on the covers. While tucking the wires inward into the roof panel, firmly press the cover over the corner (**Fig. 19**). Fasten the corner cover to the canopy assembly using one (1) M6 x 10 pan head bolt and one (1) M6 flat washer also found in the same parts kit. The hardware fastens from the inside of the canopy assembly. Repeat this step for installing the corner cover on the other side where the right panel meets the roof panel (**Fig. 20**).

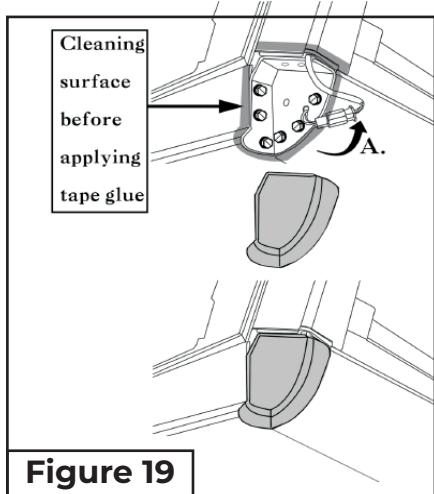


Figure 19

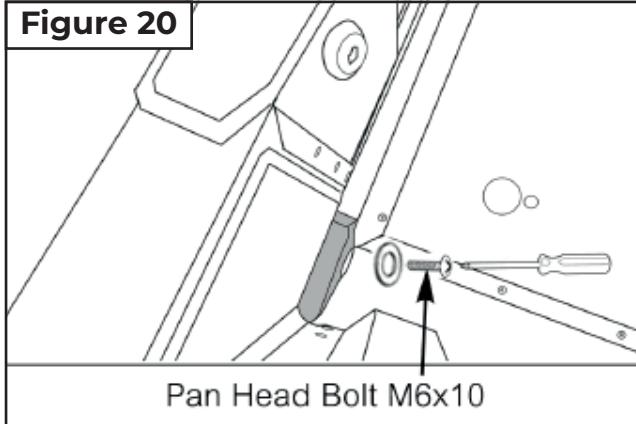


Figure 20



16. Repeat the process in Step 14 to install the corner covers on the rear corners of the canopy assembly (**Fig. 21**).

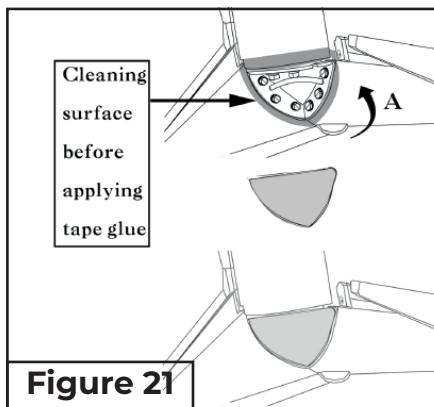


Figure 21

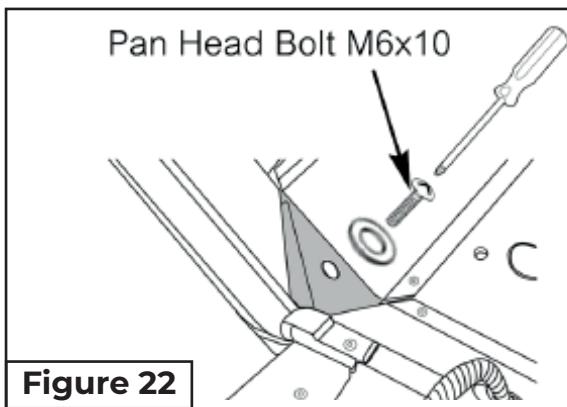


Figure 22

17. Attach the front rubber pad (Item #9) to the front bed panel (**Fig. 23**).

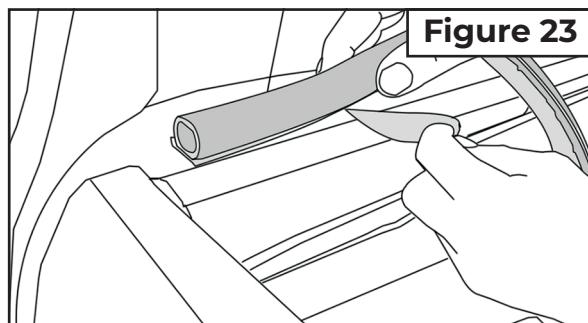
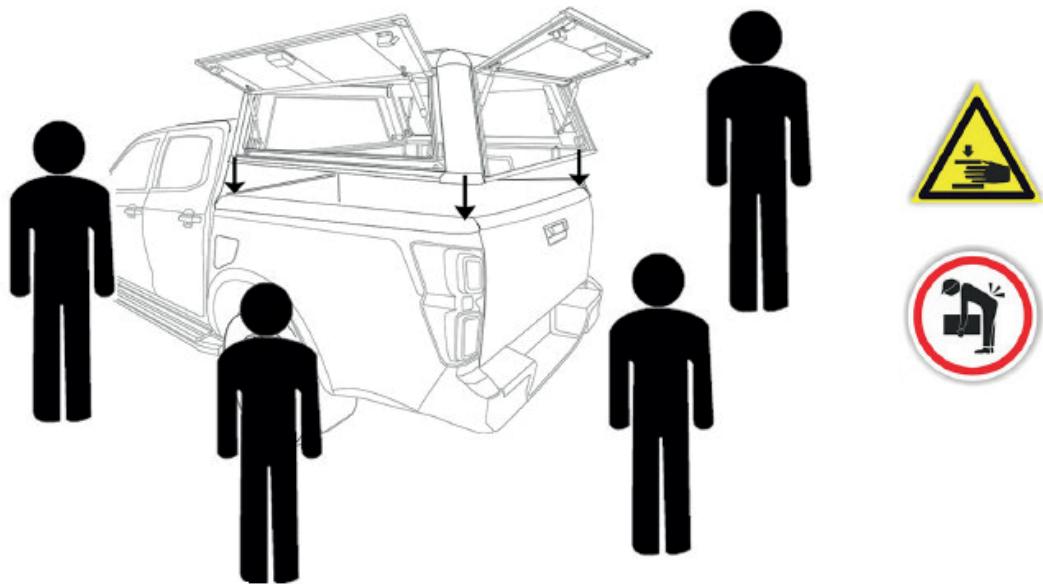


Figure 23

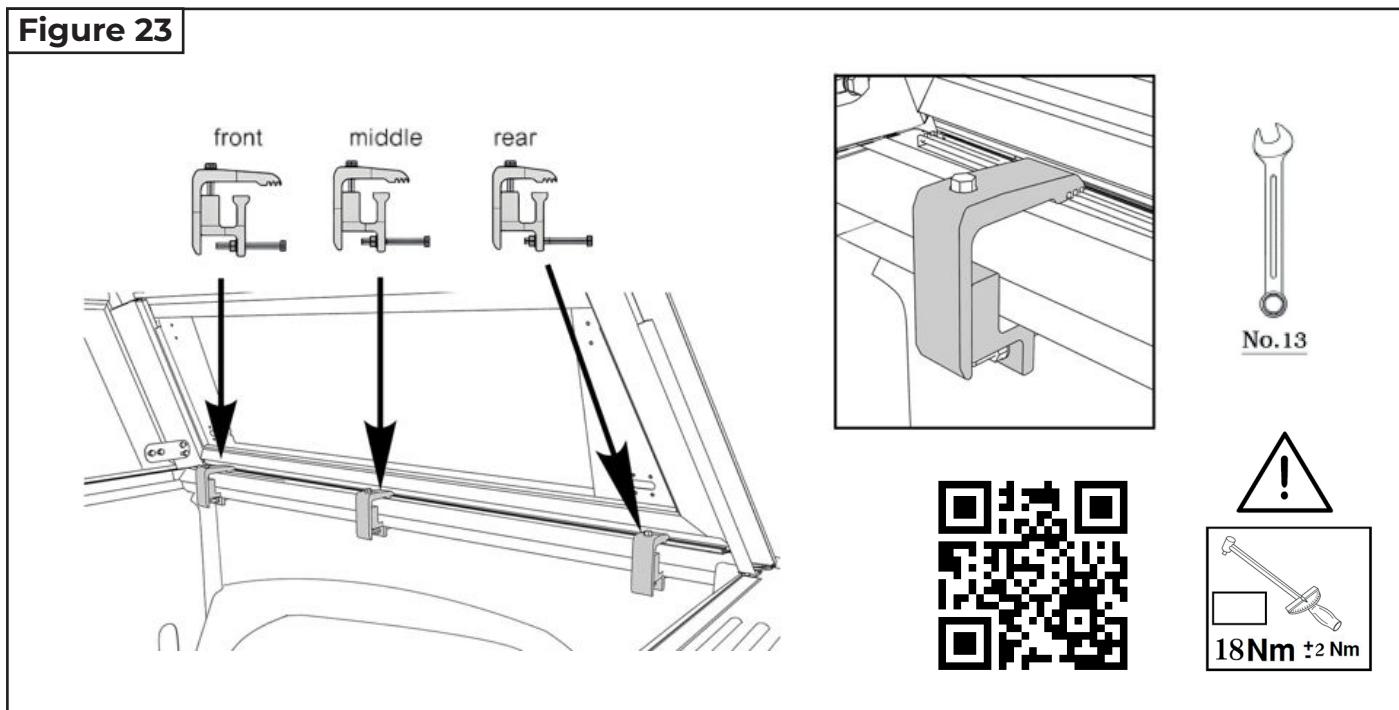


18. Open the left, right, and rear panels before placing the canopy onto the pick-up bed. A minimum of four people are recommended for this installation. Make sure to avoid dragging the canopy across the pick-up bed rails. Handle with care to avoid hand injury and to prevent damage to the canopy assembly and vehicle.



19. Take the parts from Parts Kit #2 (Item #7). Position and fasten the clamps as shown. Use a 13mm socket to initially tighten the clamps (**Fig. 23**).

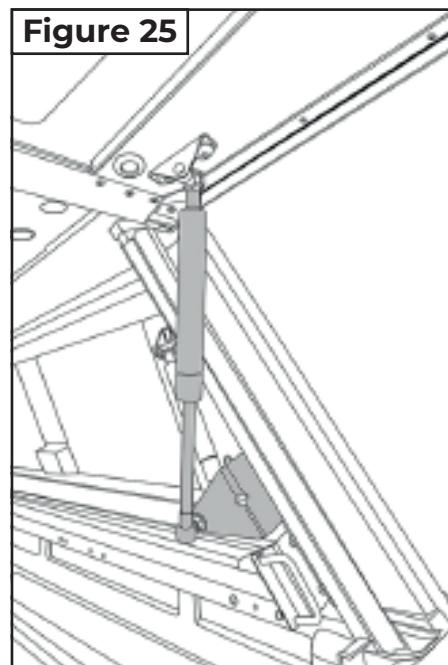
Figure 23



20. Once the bed canopy is placed on the vehicle, adjustment may be required to allow for the canopy to sit well onto the bed rails. If adjustment is needed, loosen the front bracket and push the side doors inward towards each other and make sure the gap (**circled in Fig. 24**) closed. Tighten the front bracket as mentioned in Step 8.



21. Use the nuts already installed on the end of the gas struts to secure the studs to the rear door using a 12mm socket (**Fig. 25**).



CANOPY CENTRAL LOCK WIRING CONNECTION

21. Plug the Central Lock Harness (Item #11) into the wire coming from the left side front corner of the canopy (**Fig. 26**). Tuck the connector into the canopy using the provided rubber grommet. Reference the procedure shown in the video tutorial (see qr-code).



22. To enable the canopy's central lock feature, remove the left side door sill panel (**Fig. 27**). Lift the left side floorboard carpet, and the carpet under it, and locate the gray plastic cover (**Fig. 28-29**).

23. Drill a small hole through the cover from above the floorboard.



24. Next, route the canopy's wiring harness from the front left of the canopy, to underneath the vehicle, towards the left side floor board. Remove the splice connectors and feed the harness from under the vehicle, through the hole drilled in the plastic cover, and into the driver floor area (**Fig. 30**). Make sure the harness is safely secured to the vehicle's frame and does not make contact with any exhaust or moving components.

25. Use silicon sealant to seal the hole which makes the floorboard waterproof.

26. Open the black plastic housing at the door sill, and locate the two strands of wiring harness within it. Remove a portion of the cloth wrap from the larger strand only (**Fig. 31**).

27. Use the provided splice connectors to splice the red canopy wire to the lime green wire with a dark green stripe. Next, splice the black canopy wire to the purple wire with a green stripe.

28. Test that the canopy locks and unlocks with the vehicle's key fob and doors.

29. Use electrical tape or similar harness tape to wrap the large strand vehicle wiring harness and the canopy's wires.

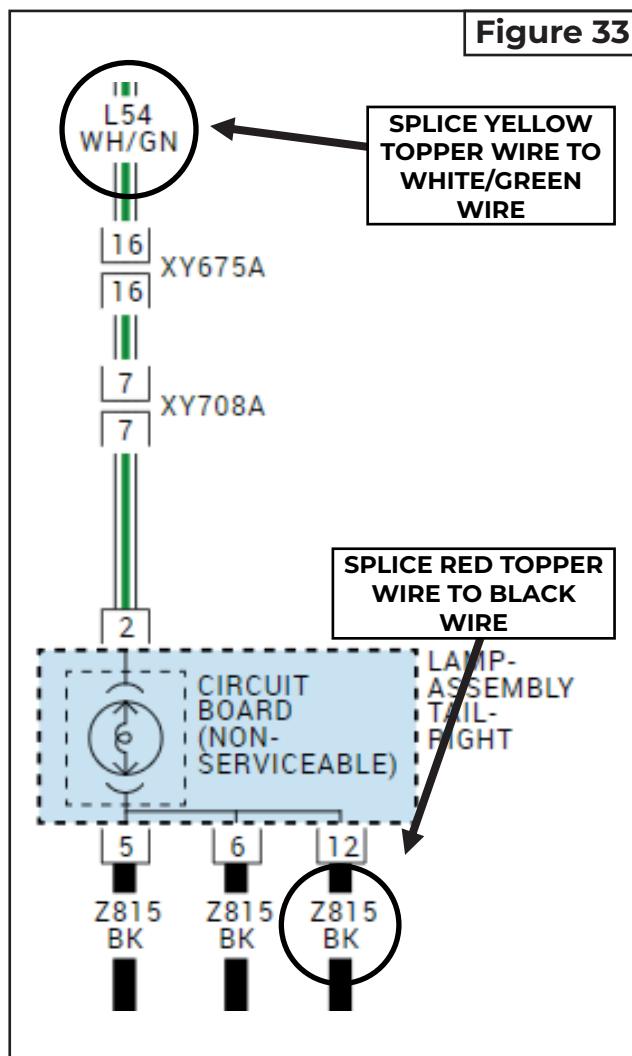
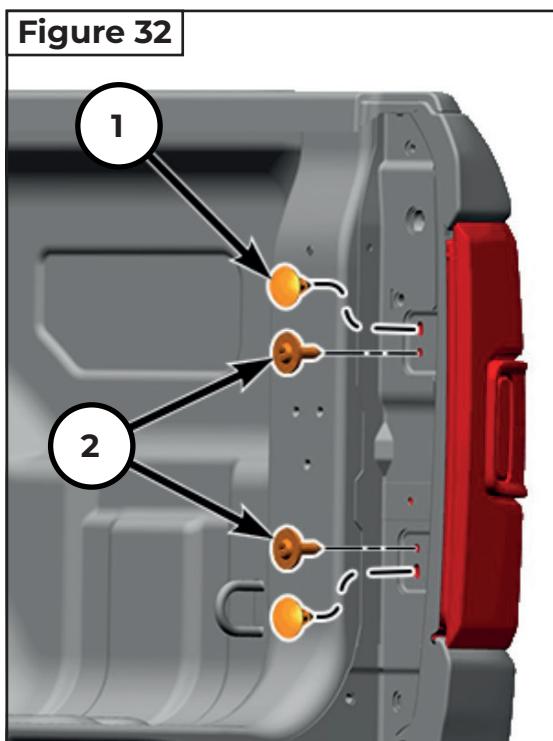
30. Place the two strands back into the black plastic housing, clip the carpet back onto the housing, and reinstall the left side door sill panel.



CANOPY BREAK LIGHT WIRING CONNECTION

31. Remove the tail light by removing the fasteners and clips, locate the tail light connector (**Fig. 32**).
32. Then, splice the yellow wire from the canopy's harness into the white/green of the tail light, splice the red canopy wire into the one of the black wires (**Fig. 33**). Finally, test and make sure the brake light works correctly.
33. Reinstall the brake light.

Note: Brake light will flash with right turn signal.



LED INTERIOR LIGHT

34. Plug the supplied interior-light harness (Item #10) into the connector from the rear left side of the canopy (**Fig. 34**). Tuck the harness into the canopy using the rubber grommet (**Fig. 35**). The other end of the harness will need to go to the vehicle's battery. Route the harness underneath the vehicle, ensuring it is kept clear of moving or hot components.

A set of keys is included with the canopy.

Installation of your RIVAL ALUMINIUM CANOPY is complete!

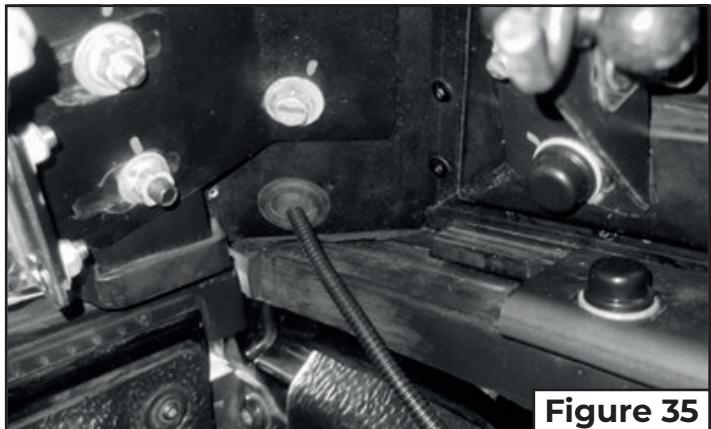
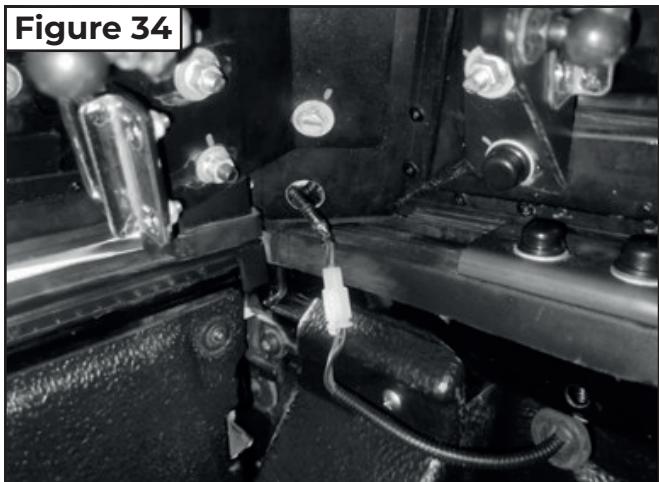
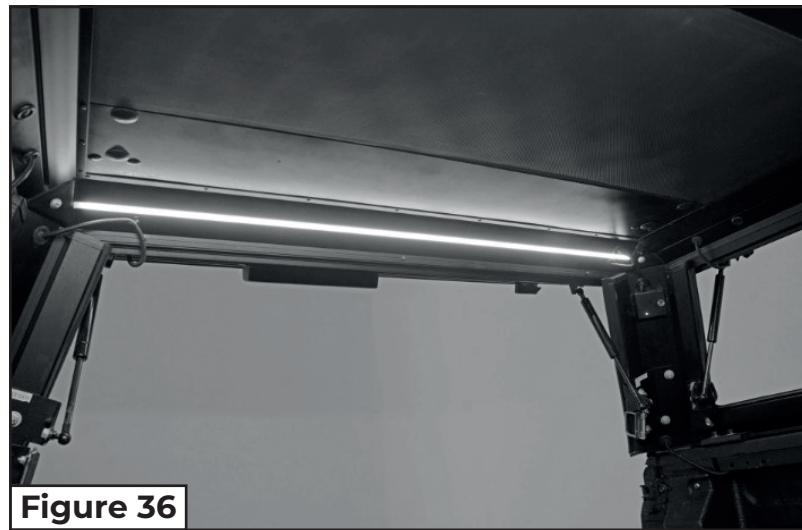


Figure 35



WARNING

Failure to follow these instructions could lead to death, personal injury, and / or property damage.

FASTENERS AND TORQUE:

- All RIVAL - supplied fasteners must be used and installed strictly according to the installation instructions. Apply torque to the specified values.
- **Double-check all fasteners before first use, and inspect them periodically to maintain proper function and safety.**
- Re-check fasteners after the first 50 km and at regular service intervals.

DRILLING

- Most RIVAL products do not require drilling. If drilling is specified, proceed with caution.
- **Failure to inspect the area before drilling may result in personal injury and/or vehicle damage.**

ELECTRICAL (IF EQUIPPED)

- Disconnect the battery before wiring the third brake light, interior light, or central locking.
- Protect all circuits with appropriate fuses and route looms away from heat/moving parts.

LOADS AND USE

- Do not exceed the lower of: vehicle manufacturer limits, roof-bar/cross-bar ratings, and the hard-top's dynamic/static load ratings.
- Evenly distribute cargo and secure it to prevent shifting. Off-road use may require lower dynamic loads.

VEHICLE SYSTEMS

- After installation, verify correct operation of the rear camera, sensors, tailgate, and defroster (if applicable).