

ASCENT CANOPY BED SEAL REPLACEMENT



FITTING KIT: 668017SP SEAL KIT BED RAIL - ASCENT

Installation Time: Approx. 2 hours approx.

IMPORTANT

- ◆ This product must be installed exactly as per these instructions using only the hardware supplied.
- ◆ Failure to follow instructions precisely may lead to failure of the product.
- ◆ The installation of this product may require the use of specialized tools and/or techniques.
- ◆ During installation, it is the duty of the installer to check correct operation/clearances of all components.
- ◆ Work safely at all times.
- ◆ Vehicle bodies and vehicle specific installation can vary, so please read the following instructions as they refer to important information, which could affect the quality of the final installation.
- ◆ It is advisable to have the canopy fitted by an authorised dealer.
- ◆ The majority of installation can be completed by one person, **(However 4 people will be required to lift the canopy off and onto the vehicle).**
- ◆ IF IN DOUBT CONTACT YOUR DEALER FOR FURTHER INSTRUCTION.

HAVE AVAILABLE THESE SAFETY ITEMS WHEN FITTING PRODUCT:

- **Protective eye wear.**
- **Gloves suitable to use with cleaners and primers.**

NOTE: 'WARNING' notes in the fitting procedure relate to OHS situations, where to avoid a potentially hazardous situation it is suggested that protective safety gear be worn or a safe work procedure be employed. If these notes and warnings are not heeded, injury may result.

TOOL LIST FOR FITMENT:

<ul style="list-style-type: none">• Torque Wrench 0-25Nm• Sockets ¼", 10 & 13mm, extension bar and driver• Spanners, ratchet type, 10 and 13mm.• 300mm ruler• 150mm ruler• T30, T40, Torx Drive screwdriver and bits for socket drives and screw drivers• Scissors• Phillips head screwdrivers• Side Cutters• Non-permanent marker• Cleaning cloths / rags• Putty knife/ spatula	<ul style="list-style-type: none">• Cable ties 1 x 200mm long• Silicon Caulking Gun• <u>Neutral cure</u> Non Acetic Silicon• Plastic scraper• Roller
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FITTING THE BED SEAL AND CANOPY IS UNDERTAKEN IN 6 STAGES:

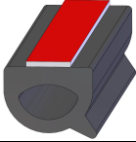


1. Removing the canopy
2. Re- sealing the front corners of the vehicle's tub
3. Removing the seal and sealant from the canopy and refitting the seal
4. Fitting the canopy to the vehicle
5. Operational checks and adjustment options for doors and windows.
6. Check list and sign off.

!! IMPORTANT !! other than specifically specified in this instruction

REQUIRED SCREW TORQUES: M6=9Nm M8=22Nm

Screw torques must be adhered to avoid warranty issues and should be checked at vehicle service intervals.

THE 668017SP FITTING KIT CONTAINS:

1. PARTS BAG	Part No	Picture	Qty	Description
	9009286		5 METERS	EXTRUSION RUBBER-MAIN BEDRAIL SEAL
	6602018		4	ALCOHOL SWAB SACHET
	665044		4	PRIMER PENCIL 3M 94 0.66mL

SECTION 1: REMOVING THE CANOPY

	<p>1.1) Locate the push button switch, (if a lift up window is fitted on the canopy), that is between the front of the canopy and the vehicle's tub. Open the window.</p> <p>Repeat on the opposite side if a double lift window canopy is optioned.</p>
	<p>1.2) Remove the 2 screws in the cover over the latch mechanism using a Philips screw driver and remove the 2 scrivets with a flat blade screw driver. Retain all hardware. Lift the cover off. Uncoil the loom inside to gain access to the mounting hole slot.</p> <p>Repeat this on the opposite side if a double lift window canopy is optioned.</p>
	<p>1.3) Inside the side window latch area (or centre of the base rail if pop out windows are fitted) undo the M8 torx screw, washers and nut and retain them.</p>
	<p>1.4) In the front corners of the canopy on both sides undo the M8 torx screw, washers and nut and retain them.</p>



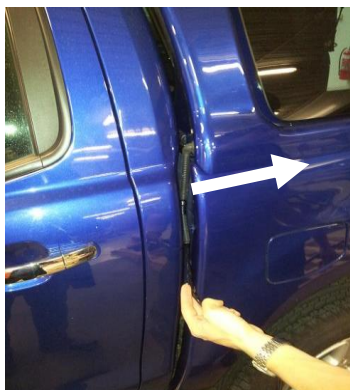
1.5) In the rear corners of the canopy undo both the M6 bolt on the rear corner cap and the M8 torx bolt on both sides of the canopy and retain all washers and nuts.



1.6) Remove 9 scrivets holding the LH wheel arch liner on the vehicle tub, and remove the wheel arch liner.



1.7) Disconnect the canopy wiring connector from the white connector of the canopy wiring harness at the wheel arch area on top of the LH chassis rail.



1.8) Pull the wiring loom out between the cabin and the vehicle's tub and tape it up on the side of the canopy's window. Close the side lift up windows and door.



1.9) Prepare a place on the ground to turn the canopy upside down on with a thick blanket to protect the canopy from paint damage. Lie the front window end towards the ground first and flip the canopy over on its back.
Use 4 people to lift the canopy from the car and place it upside down on its roof carefully protecting the paint.

SECTION 2: RE-SEAL THE FRONT CORNERS OF THE TUB.



- 2.1) Remove lumpy silicon at the join between the front black mount rail affixed to the front panel of the vehicle's tub.
- 2.2) Apply neutral cure silicon to the ends of the junction of the front mount rail and the sides of the tub, and spatula this down level to the top of the tub smoothly. Repeat this on the opposite side.

SECTION 3: REMOVING THE SEAL AND SEALANT FROM THE CANOPY



Observe caution – use protective eyewear and gloves using cleaners

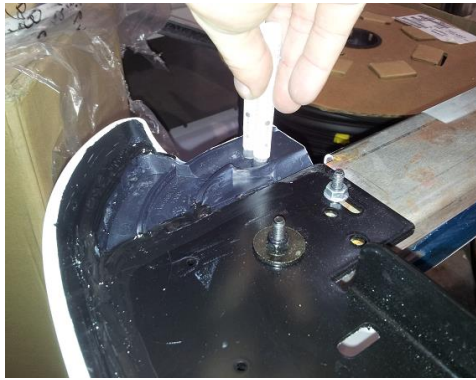
- 3.1) Remove the bulb seal from the underside of the canopy all the way around.

To remove the adhesive tape residue scrape with a plastic scraper. To assist you may use wax and grease remover solvent -SPARINLGY – do not allow solvent to contact the ABS canopy shell.

Scrape away silicon sealant in areas of the front corners of the canopy that were located against the bulb seal.



- 3.2) Using the alcohol swabs provided clean the perimeter of the underside of the canopy where the previous seal was located.
- 3.3) Prepare two 3M Primer 94 primer sticks (by pressing them on the dot's to wet out primer in the felt tip).



3.4) Apply 3M primer 94 starting at the recess for the bed rail seal in the rear corner end caps.



3.5) Apply primer between the rear end cap and the rear edge of the side base rail aluminium extrusion outboard of the 3 holes in the metal mount rails.



3.6) Apply primer down the side of the metal mount rail next to the aluminium extrusion, and around the front corner outboard of the 3 small holes in the metal base rails.



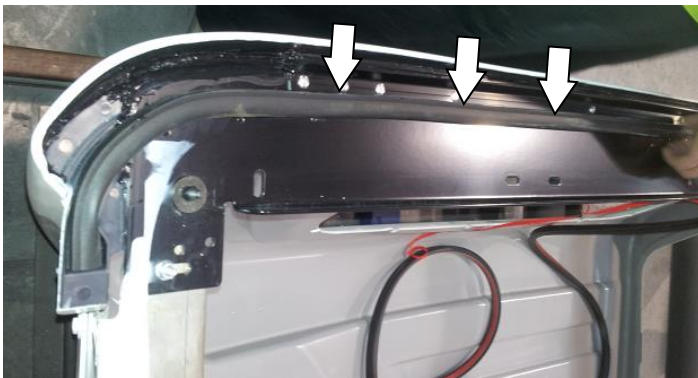
3.7) Apply primer across the front base rail in front of the scribed line in the front base rail, and down the opposite hand of the metal mount rail and to the recess in the opposite rear corner end cap.



3.8) Remove backing paper from the base rail bulb seal and note the orientation of the seal when applied to the end cap, the lip on the seal must be facing towards the outside perimeter edge of the canopy



3.9) At the rear, apply the seal without puckering outboard of the 3 holes in the metal side base rail. The inside edge of the seal should line up with the out board edges of these holes. Push down firmly during application and avoid stretching the seal.



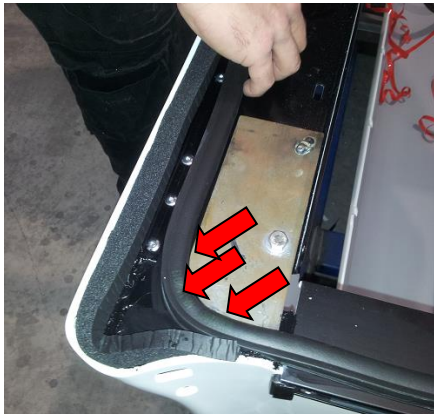
3.10) Apply the seal along the metal mount rail with the outboard edge of the seal aligning to the riveted edge of the aluminium extrusion



3.11) In the front corner apply the seal outboard of the 3 holes in the metal side base rail. The inside edge of the seal should line up with the out board edges of these holes. Push down firmly during application and avoid stretching the seal.



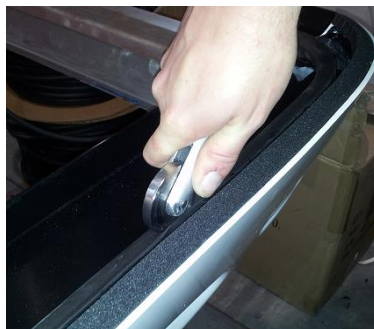
3.12) Apply the bulb seal across the front rail so the inner edge of the seal is forwards of the scribed line in the underside of the front aluminium base rail



3.13) Apply the bulb seal outboard of the 3 holes on the opposite side of the canopy and down along the opposite side.



3.14) Apply the bulb seal into the recess if the opposite rear corner end cap. Trim to length.



3.15) Apply pressure to the seal all the way around using a roller to promote tape adhesion.



3.16) Using non acetic silicon, in a caulking cartridge, apply sealant in behind the seal at the junction to the base rails 50mm either side of the joint between the side base rail and the front base rail. On both sides of the canopy.
Also seal the joint between the front base rail and the side base rails on either side of the canopy.



3.17) Apply sealant across the front of the seal on the outboard side junction to the base rails 50mm either side of the join between the front rail and side rails.

SECTION 4: FITTING THE CANOPY



- 4.1) Clean the front window of the canopy on the outside.
- 4.2) Clean the rear window of the vehicle's cabin.
- 4.3) Close the vehicle's tailgate.



- 4.4) Using masking tape, tape the harness up over the front LH corner of the canopy.



- 4.5) Close the canopy's rear door and turn it over **using 4 people**, lift the canopy and place it carefully down onto the vehicle's tub with the front rail moulding at the front of the canopy, level to the front rail on the vehicle's tub.

Be careful not to dislodge the foam tape around the inside edge of the canopy shell's lip perimeter.

Take care during this process to ensure the trim edge of the canopy shell is lowered down evenly and is not contacting the vehicle tub to avoid paint damage.

When re-positioning the canopy lift the canopy, to avoid dislodging the weather seal underneath.



Between the cabin the canopy, the lower point on the plastic end cap should align with the vertical face of the mount rail 668PD011.



- 4.6) Position the canopy rearward so the lower rear door sash seal JUST contacts the edges of the tub corners above the brake lights on the tub evenly. Measure with a ruler between the lower door sash to the tub to ensure this is even on both sides.

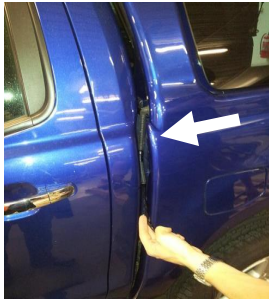


- 4.7) Measure the trim edges of the canopy at the rear sides and at the front both sides, to the vehicle's tub **and make this measurement even on both sides of the canopy.**

Look in the interior and ensure the mounting holes in the steel mount rails on the canopy align to holes in front tub corner mounting brackets and the rear corner tub mounting brackets on both sides of the vehicle.



- 4.8) Stand back and walk around the canopy and check uniform balanced fit to the tub and cabin.
- The canopy is central on the Ute body.
 - Alignment between cab and canopy is even both sides
 - The rear door seals against the tailgate just and evenly both sides without excessive force on glass to close.
 - The gap is even between the door and frame both sides.



4.9) Drop the canopy harness loom down between the cabin and the tub on the LH side.



4.10) Connect the canopy wiring connector to the white connector of the canopy wiring harness 668PJ012, at the wheel arch area on top of the LH chassis rail.

4.11) Go to the door and press the door push button pad. Check the door opens and the actuator functions to unlock the canopy door

4.12) Turn the interior light to the position that the interior light turns off when the door is closed.

4.13) **Press the key fob of the car to the unlock position.**



4.14) 2 people are required for this step. Check the gap on the rear door on the sides of the glass is even to the canopy shell. This can be made even by pushing out on the canopy shell mount rail inside and doing up the screws.
Using M8x25 Torx pan head screw and M8x19mm (smaller) washer screw the canopy down at the rear, tightly through the canopy mount rail holes to the rear corner tub mounting brackets with an M8 nyloc nut and M8 x25mm (larger) washer on the underside.

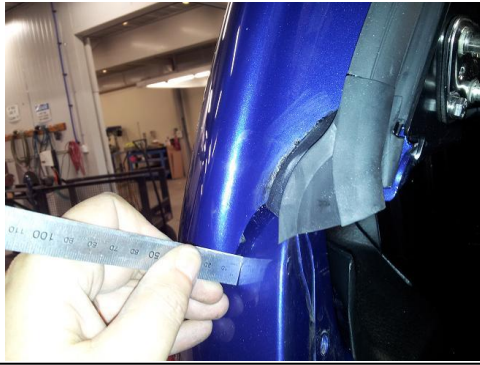
Repeat this on the opposite side.



Press the button underneath to check the door releases on the actuator and the pressure is not too high to stop it unlatching.

4.15) **It may be necessary now to adjust the canopy aft to reduce the pressure on the actuator mechanism to allow the door to open properly and evenly both sides.** In doing so please ensure the best seal between the tailgate sash seal on the canopy's door and the vehicle tub at the sides is maintained. 2 people will be required for this to re-adjust the door glass gap at the sides if the canopy has to be moved.





4.16) Check the gap of the canopy shell to the tub in the rear corners near the tailgate above the brake lights the gap **must not be below 5mm**. It should be even on both sides of the canopy.



4.17) Once satisfied with door operation and the canopy is even, **do up the M8 Torx screws to 22Nm**.

If there are issues with the rear door operation being uneven on each side, refer to Section 5.

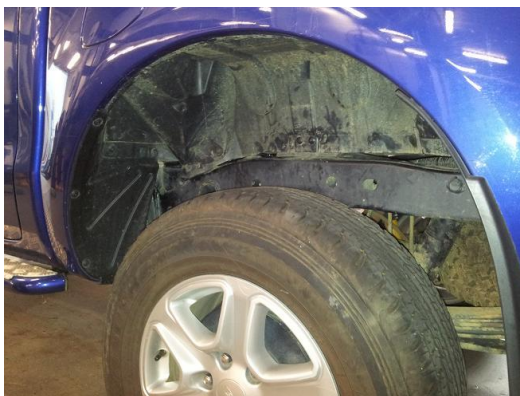


4.18) Using the **retained** M6 x 25 screw, M6 washer, and M6 larger washer on the bottom and M6 flange nut, screw the corner wing on the injection moulded corner piece down through the rear corner tub mounting bracket on the inside and **do up to 7Nm only**.

Repeat on the opposite side of the canopy.



4.19) Roll the remaining harness up in the LH wheel arch and secure with a 200m cable tie behind the wheel arch liner.



4.20) Refit the wheel arch liner with 9 scrivenets retained.

Wiring is now complete.



4.21) Using M8x25 Torx pan head screw and M8x19mm (smaller) washer screw the canopy **down at the front** tightly through the canopy mount rail holes to the front corner tub mounting brackets with an M8 nyloc nut and M8x25mm (larger) washer on the underside.

Do up to 22Nm.

Repeat on the opposite side.



4.22) Locate the push button switch, (if a lift up window is fitted on the canopy), that is between the front of the canopy and the vehicle's tub. Open the window.

Repeat on the opposite side if a double lift window canopy is optioned.



4.23) Place the retained M8x19mm (smaller) washer over a M8x25 Torx pan head screw and locate this into the slot in the canopy mount rail from the top. Hold this in place using a screw driver and T40 Torx bit. On the underside of the tub mounted bracket, secure in place with M8x25mm (larger) washer and M8 nyloc nut and do up to **22Nm**.

If a Pop out window is optioned on the canopy, locate the slots in the mid point of the centre mount rail and bolt using the hardware above to the tub mounted bracket.



4.24) Refit the lock mechanism cover, 2 self-drilling philips screws and 2 scrivenets after re-coiling the loom inside the bracket on the window frame underneath the cover. Ensure the wiring is positioned where it cannot interfere with the operation of the locking mechanism.

Repeat on the opposite side if a double lift window canopy is optioned.



- 4.25) Open and close the tailgate. See if the corner seals on the lower frame get jammed in the tailgate. Trim these until satisfied with the clearance to the tailgate with sharp scissors.
- 4.26) Water test the canopy around all windows and joins to the tub, with high pressure hose.
- 4.27) **Ensure the last page of this instruction is completed and retained for records.**

SECTION 5: OPERATIONAL CHECKS AND ADJUSTMENT OF DOORS AND WINDOWS

Canopy and wiring fitment is now complete. Operational checks need to be undertaken as follows.



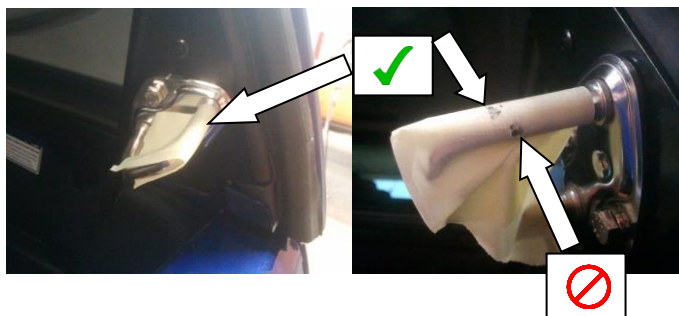
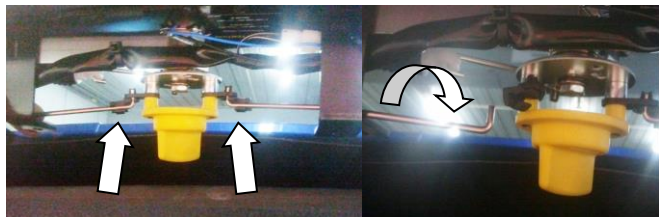
- 5.1) Move the interior light switch to the position where it will turn off when the door is closed and turn on when the door is opened.



- 5.2) Depress the vehicle's brake pedal and have a second person check that the brake light works in the spoiler.



Press the button underneath to operate electric door actuator mechanism.



5.3) Operate the door push button switch to open and close the door. **If one side opens before the other, the lock mechanism can be adjusted so that both sides of the door open simultaneously if the following is done:**

- Open the door. Remove the 4 scrivenets retaining the lower section of the door interior cover using a flat blade screw driver under the head. Slightly pry the door cover down away from the glass.
- Close the latch pawls on the sides of the door glass with your fingers on both sides. Slowly turn the interior door release handle and listen to hear if both latches click open at the same time.
- If the latches do not operate simultaneously, locate the black plastic clips on each end of the pull rods to the latches, unclip a pull rod and length or shorten it by winding it in / out and re-clip in. Close the latches with your fingers again and test operation via the interior rear door handle to operate simultaneously.
- Once satisfied, refit the door cover lower portion with the scrivenets but ensure to guide the pull rods into slits in the foam blocks on the door cover at both ends.

If the latches can be seen to bind on the door frame strikers, it may be necessary to adjust the door frame strikers. Do this by the following:

- Place one thickness of masking tape around the striker bar where the latches contact. Open and close the door. If the tape shown signs of wear through on the top side or underneath of the striker bar, it is necessary to adjust the striker away from the side on which the wear is shown. The aim is only to have wear on the outward face of the striker bar.
- Undo the M6 screws slightly on the strikers and adjust their position slightly. Re-torque screws to 9Nm.
- Test the door again and adjust via the above methods until satisfied.



5.4) Operate the push button switch on side lift up windows. If the windows will not open, and the solenoid can be heard working, the latch can be adjusted in the following steps.

- Remove the rotary latch cover (see step 5.24).

- Operate the window with a person outside pushing the button and closing the window slowly. Look to see the striker bar on the glass does not scuff the leg on the rotary latch pawl as the window closes. The striker bar should close into the middle of socket on the rotary latch on the frame. Place one thickness of masking tape around the striker bar where the latches contact. Open and close the window. If the tape shown signs of wear through on the top side or underneath of the striker bar, it is necessary to adjust the striker away from the side on which the wear is shown. The aim is only to have wear on the outward side of the striker bar not above or below in closed position.

- Two Torx screws can be undone with T30 bit and re-tightened to 7Nm on the glass mounted striker on either side to move the position of the striker up and down on the glass.

- The rotary latch provides window in/out adjustment. Measure the distance between the back of the rotary latch and it's mounting bracket and take note of it. Undo the screws and move the latch out a 1mm at a time and retighten to 9Nm and test the window until it opens and closes.

- Refit the cover over the latch mechanism and ensure wiring inside is coiled up neatly and cannot interfere with the latch mechanism.

IMPORTANT: CHECK ALL SCREWS TORQUES PERIODICALLY TO MAKE SURE THEY ARE TIGHT, AS SOME SETTLING MAY OCCUR



SECTION 6: ARB FITMENT CHECKLIST (TO BE FILLED IN - RETAIN THIS RECORD).

To be completed by the installer and records kept at the dealer.

ARB - Ascent Canopy AC54 - Ford Ranger PX (Seal replacement undertaken)			
Dealer Name and code:		Date:	
Vehicle registration:		Vehicle Vin No:	
Number of Kms:		Order No:	
Canopy serial number: (left inside corner on canopy pillar on inside of ARB badge recess)		Canopy window type (tick): AC54A Double pop out <input type="checkbox"/> AC54B Lift up /pop out <input type="checkbox"/> AC54C Double lift up <input type="checkbox"/>	
Canopy Key Serial No (Printed serial sticker starting with letter L)	L _____	Canopy Colour:	
Vehicle damage / condition check (details):			
(Tick)			
Canopy positioned on tub front to back and side to side evenly and there is adequate clearance to the vehicle's cabin.			
All screw torques completed as detailed in the instructions – ! Important !			
Rear door gaps down the sides are aligned to canopy shell, and door latches both sides simultaneously on closing and releases simultaneously on opening. (See section 5)			
Door rear door push button switch functions to open the door both side simultaneously.			
Door functions with both keys to turn to open.			
Door lower sash seal contacts the tailgate evenly.			
3 way position interior light switch is set to come on with door open.			
Lift up windows operate via push button to pop out open and close manually.			
Pop out window latch functions to lock in the open position and will lock in closed position.			
Water test with high pressure hose has been completed around all windows and join to canopy bed with no leaks other than through unsealed tailgate sides.			
Spoiler rear brake light operates when brake pedal is pressed.			
Comments:			
Fitted by:			
Checked by:			