

DUAL CAB CENTRAL LOCKING CANOPY

Ascent Canopy AC12 – Suits Isuzu D Max
Ascent Canopy AC13 – Suits Mazda BT-50
(2020 Vehicle Production Onwards)



FITTING KIT: 6177552

! PLEASE PROVIDE A COPY OF THESE INSTRUCTIONS TO THE CUSTOMER !

IMPORTANT:

- Vehicle bodies and vehicle specific installation can vary. 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 onto the vehicle**).

FITMENT:

- For Bed Liners and accessory tie down rails additional time for fitting is required along with trimming of the bed liners. **Under rail bed liner fitting is compatible. Tailgate liners must have the over rail portion trimmed off to suit the fitting of the canopy.**
- Cabin Guards and Sports bars **must** be removed prior to canopy fitment. These components can be returned to the customer if required.

CARE OF YOUR CANOPY:

Please refer to the “owner’s manual supplement” to be given to the purchaser on installation, as per the details referred to in the second last page of these fitting instructions.

HAVE AVAILABLE THESE SAFETY ITEMS WHEN FITTING PRODUCT:

- Protective eyewear



- Hearing protection



NOTE: 'WARNING' notes in the fitting procedure relate to OH&S situations. 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:

- Torque Wrench 0-25Nm
- Sockets 10 & 13mm sockets
- 6mm, 3mm, 2mm Hex drive sockets
- Socket 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.
- Power or pneumatic drill
- Pneumatic rivet gun.
- Drill bits: 5.2 & 6.5 & 12mm
- 12mm deep drill stops for 5.2 & 6.5mm bits
- Jig saw
- Plastic de-burring tool or sander with disc
- Knife
- Sharp Scissors

- File or sheet metal de-burring tool
- Engineer's scribe
- Sheet metal vice grip clamp
- Quicklock G clamp
- Centre punch
- Silicon Caulking Gun
- Neutral cure Non-Acetic Silicon
- Phillips head screwdrivers
- Flat blade screwdrivers
- Side Cutters
- Non-permanent marker
- Electrical tape
- Masking tape
- Cleaning cloths / rags
- Putty knife/ spatula
- 30mm Hole Saw/ Step Drill

FITTING THE CANOPY IS UNDERTAKEN THE FOLLOWING STAGES:

1. Removing any sports bars, cabin guards and bed liners and sealing the vehicle's tub
2. Fitting the tailgate door stop extrusion assembly.
3. Fitting the tub mounting brackets.
4. Fitting vehicle wiring.
5. Fitting the canopy to the vehicle
6. Operational checks and adjustment options for doors and windows.
7. Recording of key code and owner's manual supplement.
8. Check list and sign off.

NOTE: DURING THE INSTALLATION IT IS NECESSARY TO DRILL SOME HOLES THROUGH THE VEHICLE'S TUB SHEET METAL. IT IS RECOMMENDED THAT THESE ARE DE-BURRED AND THE RUST INHIBITOR PROVIDED BE USED TO AVOID CORROSION. ANY SWarf LEFT OVER SHOULD BE CLEANED FROM TUB.

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

REQUIRED SCREW TORQUES: M6=9Nm (Clamps= 5Nm) M8=22Nm

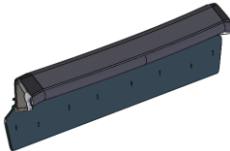

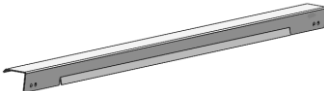











SCREW TORQUES: These must be adhered to avoid warranty issues and should be checked at vehicle service intervals.

THE FITTING KIT CONTAINS:

Packed under the canopy are 2 fitting kits:

6177547 contains the tailgate door stop sealing kit and tub front head board mounting rail 664306

6177552 contains the main hardware for mounting the canopy.

Kit No	Part No	Picture	Qty	Description
1. 6177547 TAILGATE AND HEAD BOARD KIT	664247		1	ASSEMBLY TAILGATE DOOR SEALING STOP
	668PB018		1	ROLL OF FOAM TAPE 2MMX26X1650MM
	664306		1	FRONT MOUNT RAIL FOR FRONT OF TUB
2. 6177552 MAIN CANOPY HARDWARE KIT	6602018		2	ALCOHOL WIPES
	665505		1	RUST INHIBITOR SACHET
	6151143		4	PHILLIPS WAFER HEAD 8-18 X 20 SELF DRILLING SCREW
	665076		2	BUMPON STRIP OF 5 PIECES
	6151625		18	M8 x 25 TORX PAN HEAD SCREW – BLACK
	6151622		4	M6 x 20 TORX PAN HEAD SCREW – BLACK
	4581085		18	M8 X 19 X 1.2mm FLAT WASHER BLACK
	4581303		6	M8 x 25.4 DIA x 3 WASHER -- BLACK
	4581082		8	M6 x 20 DIA x 1.2 FLAT WASHER -- BLACK
	6151212		6	M8 x 1.25 NYLOC NUT – BLACK
	6151173		4	M6 WIZZLOCK FLANGE NUTS – BLACK

6609087		4	RIVET 3/16 BLK
668PN021		6	C-CLAMP
668PB014		1	ROLL OF FOAM TAPE 26 x 6 x 1650mm
668PM005		1 PAIR	FRONT TUB CONER SEAL BRIDGE
665044		1	PRIMER PENCIL STICK
668PJ029		1	ELECTRICAL LOOM - VEHICLE HARNESS
668PB015		3	FOAM ANTI RATTLE 30mmx150mm STRIPS
668PJ015		1	ELECTRICAL RELAY BOX
665061		1 PAIR	REAR CORNER SEALING PADS – FOAM TAPE
6821293		1	CABLE TIE BASE
180302		12	CABLE TIES – 200mm
668PD140		2	BRACKET CENTRE TUB MOUNT
668PD137R		1	RH FORNT TUB CORNER BRACKET
668PD137L		1	LH FORNT TUB CORNER BRACKET
668PD138R		1	RH REAR CORNER MOUNTING BRACKET
668PD138L		1	LH REAR CORNER MOUNTING BRACKET
668PD139R		1	RH REAR TUB CORNER SEALING BRACKET
668PD139L		1	LH REAR TUB CORNER SEALING BRACKET

SECTION 1: PREPARING THE VEHICLE TUB – REMOVAL OF SPORTS BARS & BED LINERS AND SEALING THE TUB.

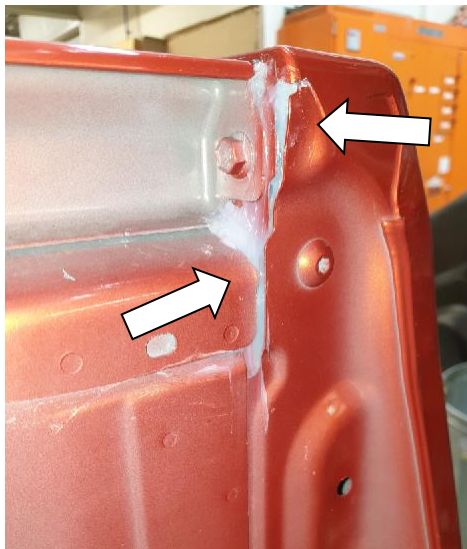
- 1.1) Remove any sports bars fitted on the front bed rail of the vehicle's tub.
- 1.2) The sports bar will need to be removed if fitted and returned to the customer if requested to do so.
- 1.3) Remove and retain all bed liner components and tie down hook hardware.

SEALING THE VEHICLE'S TUB

Inside front corner of tub



Outside front corner of tub

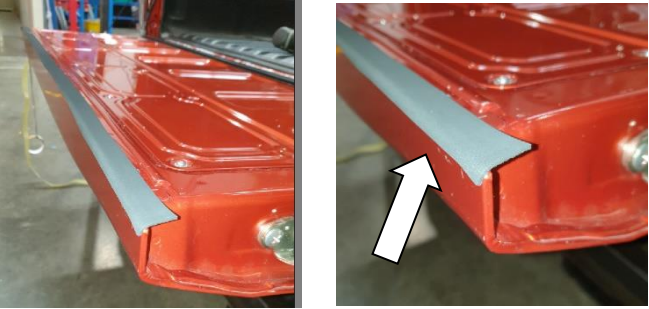





- 1.4) The front corners of the tub where the arrows are shown are not sealed ex-factory on both sides. It is necessary to seal these areas before the canopy is fitted.

Spray water using a spray bottle, down the front internal corner junction of the tub, to aid in applying silicon cleanly. Then apply non-acetic, neutral cure silicon (to avoid paint staining of the tub) to seal around all sheet metal panel gaps and clean up.

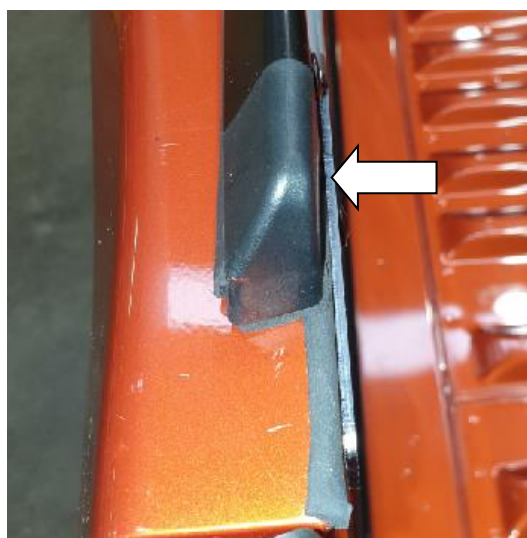
(Tub shown removed from vehicle for clarity).

SECTION 2: FITTING THE TAILGATE EXTRUSION DOOR STOP ASSEMBLY

	<p>2.0) Clean the top of the vehicle's tailgate and the inside face. Fit foam tape (668PB018) (from the tailgate kit 6177547) on the inside of the tailgate by aligning one top edge of the tape to the start of the radius on the top face on the tailgate and wrap it over onto the back inside face of the tailgate.</p>
	<p>2.1) Trim the ends of the tape back to match the curve on the inside of the tailgate.</p>
	<p>2.2) Align the ends of the bracket on the tailgate door sealing stop assembly (664247) to the ends on the tailgate at both sides and check this is equidistant at both ends to the sides of the tailgate.</p>
	<p>2.3) Push down firmly on the door stop assembly against the top of the tailgate, so it seals against the foam tape applied on the back of the tailgate and also ensure the rubber "U" extrusion mounted on the front of the assembly contacts the top of the tailgate to provide a seal.</p>

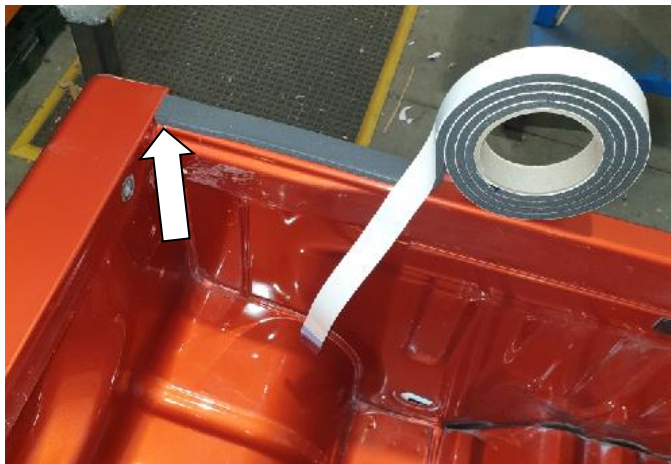


- 2.4) While pushing down firmly, drill in the 4 self-drilling 8G x 20mm black tek screws (6151143) (contained in the main hardware kit 6177550) through the holes in the bracket into the tailgate's face, with the tailgate open.



- 2.5) Apply neutral cure silicon to the join between the end cap on the door stop assembly and the rubber extrusion on the bottom of the assembly at both ends of the rubber extrusion and also on the inside between the gap in the end caps to the steel bracket. Wipe in cleanly and clean off excess with wax and grease remover on a damp cloth.

SECTION 3: FITTING THE CANOPY'S TUB MOUNTING BRACKET SYSTEM



- 3.0) Clean the front tub rail at the back of the vehicle's cabin with Isopropyl Alcohol wipes and a lint free rag.

Starting from the inside edge of the side tub rails, apply soft foam tape (668PB014) along the top face of the front of the tub, along the centre across it's width. Trim tape level to butt up to the inside of the side tub rail on the opposite side.

Tightly butt the tape to the side walls of the tub.



- 3.1) Apply neutral cure silicon to the ends of the foam tape on both sides of the tub, and smooth this down level to the top of the foam tape.

It is important that the area between the tape and the sheet metal is also well sealed on the sides of the foam tape and across the width of the tape, in front and behind the tape to prevent water leaks.

Repeat this on the opposite side.



- 3.2) Place (664306) front tub mount rail over the front of the tub, foam tape. The “C” section shape of the bracket is to point down and the small flange lip on the bracket is to be orientated to the inside of the tub (to retain the top edge of any bed liner if fitted).

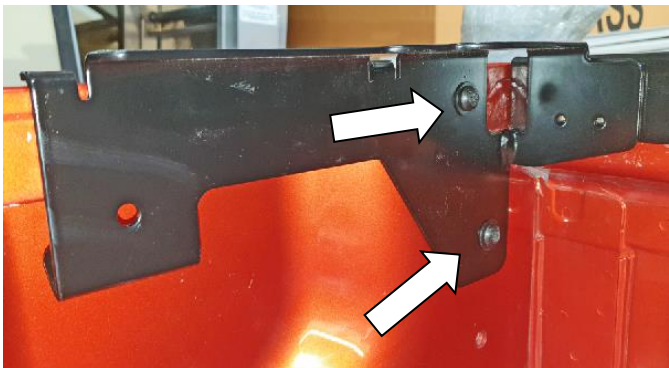
Align the front tub mount rail so the ends of it have equal gaps to the vehicle's side tub walls.

!! IMPORTANT !!

Push down on the front mount rail at each of the ends so that it is level to the top face of vehicle's side tub walls. A clamp and some packers can be used to hold the front rail level with the top face of the side tub walls.



- 3.3) To a pair of front corner tub mounting brackets (668PD137R&L), apply 2 self-adhesive bumpons (665076) to the tabs on each bracket. These tabs are to sit with the bumpons face down touching the top edge of the vehicle's tub, once the bracket is fitted.



- 3.4) Remove the top front corner bolt in the vehicle's tub and discard. Place in the LH front corner of the tub the front tub mounting bracket (668PD137L).

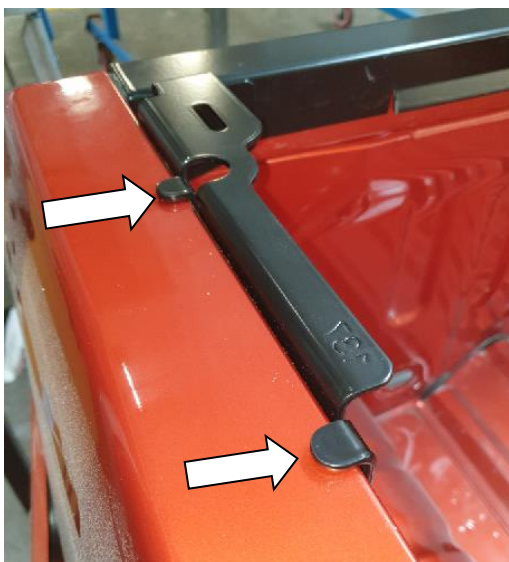
Ensure the bracket's side tabs with bumpons are in contact with the top side rails of the tub.

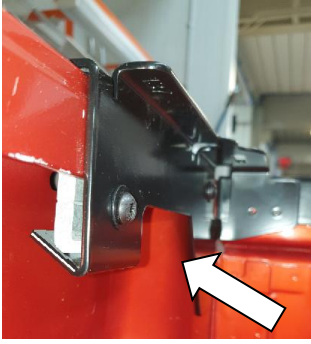
Fit M8 x 25 Torx head screws (6151625) (use T40 bit) with M8 x 19mm flat washers (4581085) under the screw heads to the two holes.

Do up the top screw first.

Tighten all screws to 22Nm

Repeat on the opposite side using the opposite hand tub mounting bracket



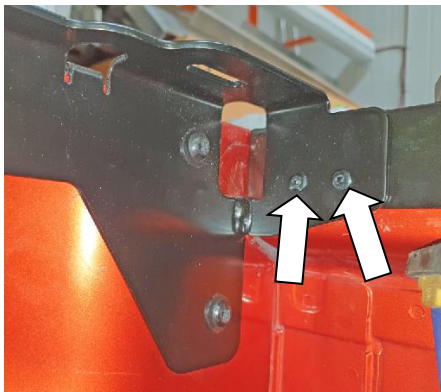


- 3.5) At the rear end of the bracket, fit C- Clamp (668PN021) to the inside of the tub lip and up to the bracket, using an M8 x 25 Torx head screw (6151625) (use T40 bit) with M8 x 19mm flat washer (4581085) under the screw head.

Ensure the C-Clamp is the correct orientation vertically as shown.

Tighten clamp screws to 5 Nm

Repeat on the opposite side.



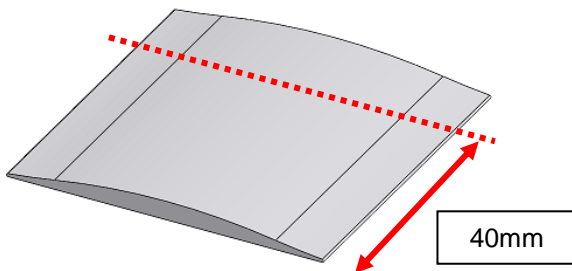
- 3.6) **!! IMPORTANT !!**
Push down on the front mount rail (664306) at each of the ends so that it is level to the top face of vehicle's side tub walls. A quick lock clamp can be used to hold the front rail level with the top face of the side tub walls.

Drill 5.2mm holes through the holes in the front corner brackets, through the front tub header rail and through the vehicle's tub with 12mm drill stop fitted.

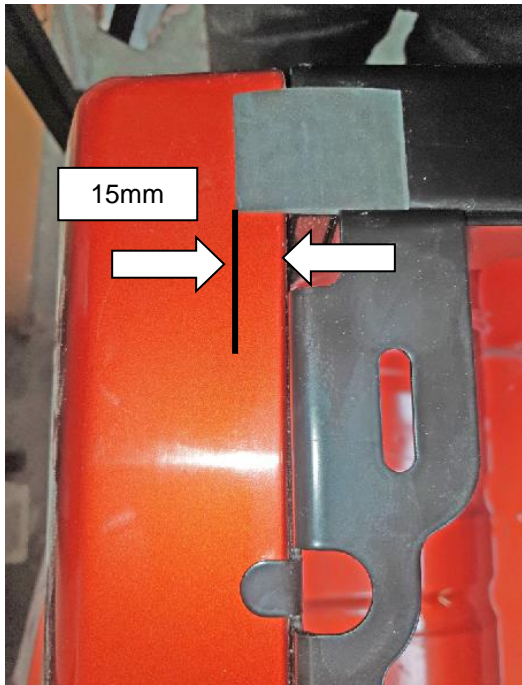
Apply rust inhibitor to the holes. (665505).

Insert rivets (660987) through the holes in the front corner brackets on both sides (2 per side) and assemble.

If fitting a bed liner, it is best trimmed to suit fitment around the front bracket canopy mounting system and lift the rear of the bed liner up and slide the front of the bed liner under the front corner brackets and under the lip of the front header rail, before fitting the rear tub mounting brackets.



- 3.7) Cut a pair of rubber tub bridge seals (668PM005) down to 40mm width as shown.

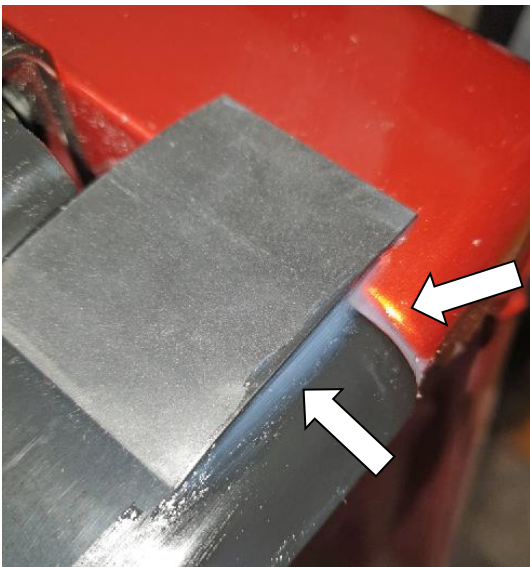


3.8) Apply to either end on top of the front mount rail the cut down bridge seal (668PM005), by removing the backing paper off the adhesive side and sticking it down to the dimensions shown opposite, ensuring its rearward facing edge is up against the front leading edge of the front corner bracket.

The ramp curved profile should go between the front header rail and the side of the tub as a “bridge”.

!! IMPORTANT !!

POSITION THE SEAL BRIDGE EXACTLY AS SHOWN OR FRONT CORNER WATER LEAKS COULD OCCUR

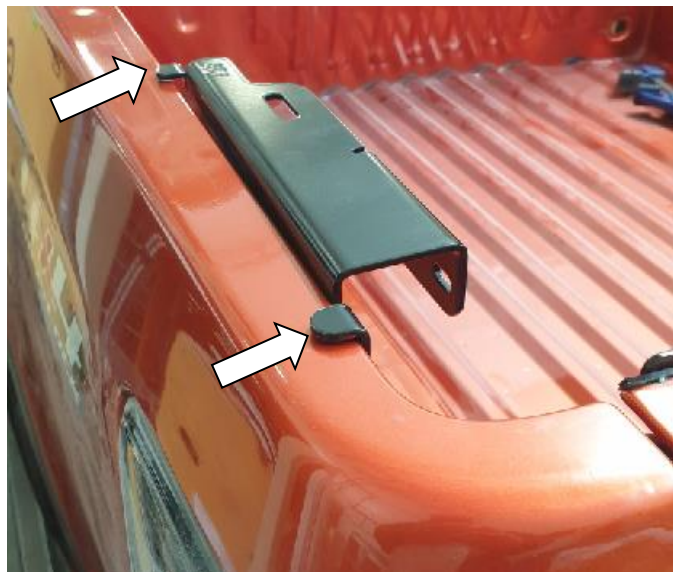


3.9) Apply silicon to the front head rail to tub side join areas underneath the bridge seal to stop water leaks.

The bridge seal provides a transition from the front tub mount rail to the top of the side tub walls to provide a sealing surface to the bed seal that is fitted between the canopy and the tub.



- 3.10) Prepare a pair of rear tub mounting brackets (668PD138R&L) with self-adhesive bumpons (665076) applied in 3 places as shown. These tabs are to sit with the bumpons face down touching the top edge of the vehicle's tub once the bracket is fitted.



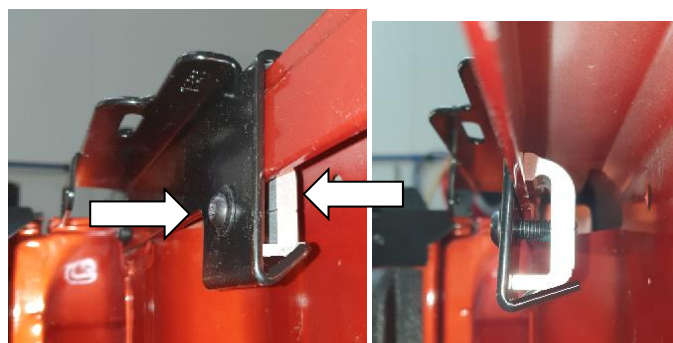
- 3.11) Remove the existing screw in the vehicle from the rear top corners of the tub. Place rear tub mounting bracket (668PD138L) to align it's rear hole to the threaded hole in the tub.

Ensure the bracket's side tabs with bumpons are in contact with the top side rails of the tub.

Fit M8 x 25 Torx head screw (6151625) (use T40 bit) with M8 x 19mm flat washer (4581085) under the screw head.

Tighten the screw to 22Nm

Repeat on the opposite side using the opposite hand tub mounting bracket

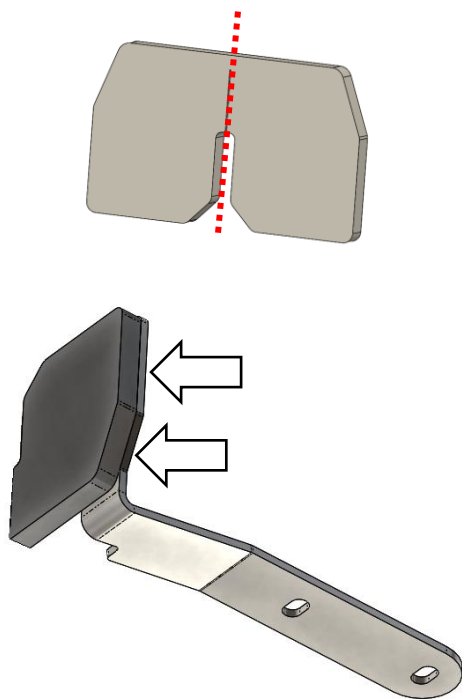


- 3.12) At the front end of the rear corner bracket, fit C-Clamp (668PN021) under the tub lip and up to the bracket using an M8 x 25 Torx head screw (6151625) (use T40 bit) with M8 x 19mm flat washer (4581085) under the screw head.

Ensure the C-Clamp is the correct orientation vertically as shown.

Tighten clamp screws to 5 Nm.

Repeat on the opposite side.



- 3.13) Separate the foam tape pad (665061) in half. Remove the backing paper on one side.
- 3.14) Apply the self-adhesive side to the rear tailgate sealing corner bracket (668PD139L).
- 3.15) Align the edge of the foam tape to the bottom edge of the bracket and leave it long of the top of the bracket as shown.
- 3.16) Repeat this for the opposite hand.



- 3.17) Mount the rear corner tailgate sealing bracket 668PD139R up to the inside face of the rear corner tub mounting bracket 668PD138R that is already mounted to the vehicle using two M6x20 torx screws (6151622) and M6x20 washers (4581082) under the screw heads. On the inside place on more M6x20 washers and M6 flange nuts (6151173)

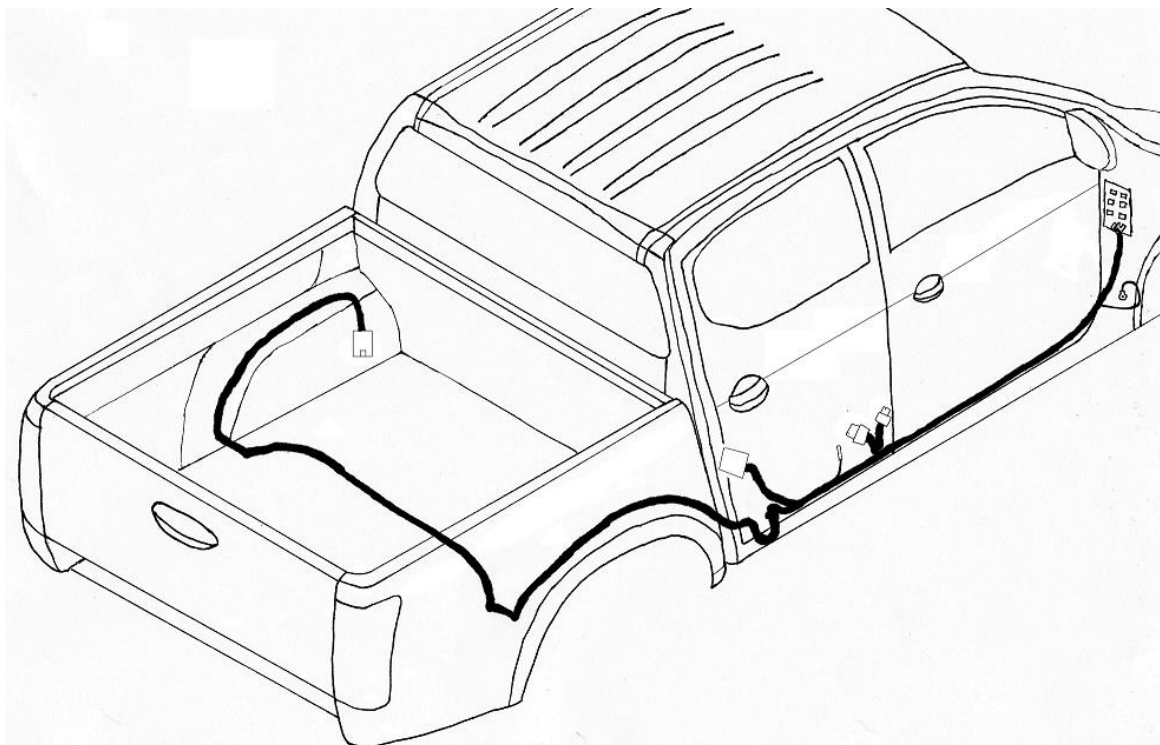
- 3.18) Slide the bracket rearwards to engage the closed tailgate so that the foam tape pad on the bracket seals against the end cap on the tailgate door stop assembly.



- 3.19) Do up the nuts to 9Nm.
- 3.20) Repeat on the opposite side.
- 3.21) Ensure the tailgate on the vehicle can be closed without excessive force to close.

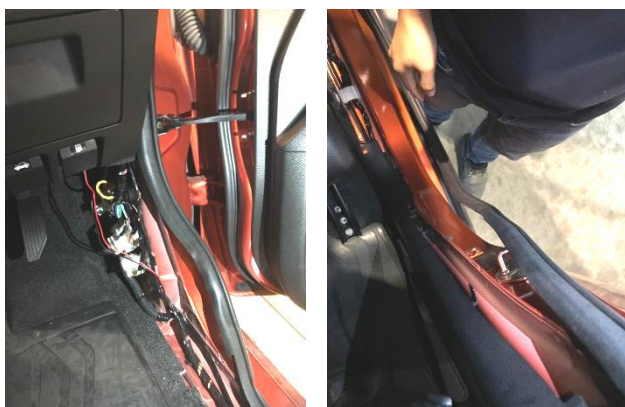
SECTION 4.0: FITTING THE CANOPY WIRING LOOM

The diagram below offers a reference to assist the routing of wires



4.0) Go to the RH (driver's) side of the vehicle. Open the front and rear doors and remove the lower scuff plate plastic mouldings by prising them upwards.

NOTE: Front & Rear Scuff Plates to be removed



4.1) Peel back the pinch weld door seal at both the front kick panel area and at the back and front of the "B" pillar of the doors.



- 4.2) Pull back the B-Pillar cover trim panels on the inside so they are loose (between front and rear doors)

Remove the bolt holding the Seat Belt at the base to remove the cover completely for ease of access.



- 4.3) Pull Remove the front kick panel next to the accelerator pedal and remove the storage compartment above to expose the fuse box.



- 4.4) At the fuse box remove and retain the 15 AMP fuse as shown.



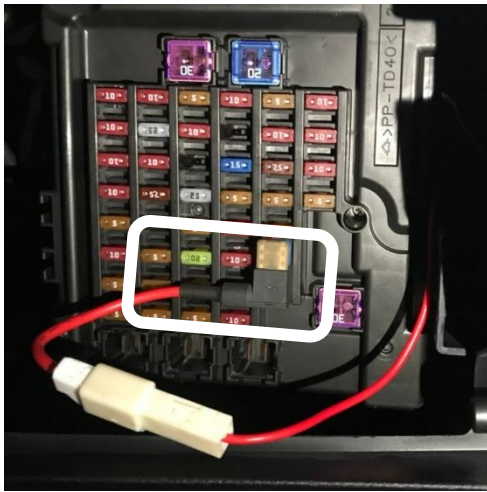
- 4.5) From the separate small bag (within the 668PJ029 kit bag) take the blade fuse adaptor along with the 7.5 Amp fuse provided and the 15 Amp fuse from the vehicle.



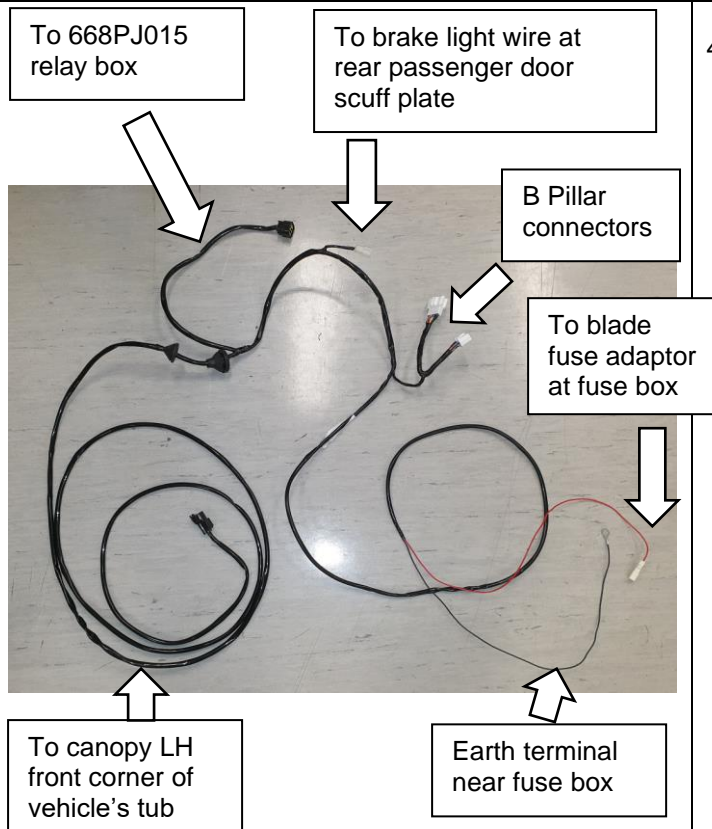
- 4.6) Insert the 15 Amp fuse in to the spade side of the adaptor and the 7.5 Amp fuse into the wire side of the adaptor as shown.



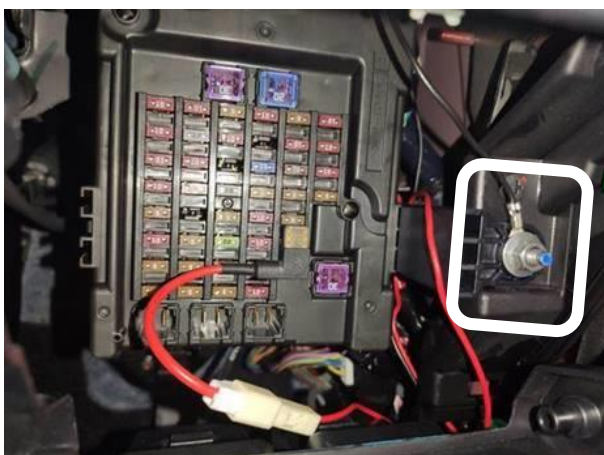
- 4.7) Connect the one pin male connector plug from the adaptor into the one pin female connector housing on the main loom (red lead of 668PJ029) when routed behind the dash board.



- 4.8) The photo opposite shows the blade fuse adaptor fitted to the fuse box
- 4.9) Behind the dash, cable tie the wires neatly away from sharp or moving parts. **!!!IMPORTANT!!** Ensure all wires are well away from foot zones and away from interference to the brake and accelerator pedals



- 4.10) The opposite shows the 668PJ029 loom and where the various connectors are to be located



- 4.11) Locate the M8 silver bolt used to mount the fuse panel. Remove the nut.
- 4.12) Route the loom's black ground wire along the floor behind and over the top of the fuse box. Neatly fit the eye terminal to the M8 silver bolt and do it back up.
- 4.13) Cable tie the wires neatly away from sharp or moving parts.
- !!!IMPORTANT!! Ensure all wires are well away from foot zones and away from interference to the brake and accelerator pedals.**

Mark hole centre & drill here

30mm



- 4.14) Go to the rear door. Immediately in front of the "C-Pillar" cover (on the rear side of the rear door). Mark out by measuring off the rear plastic clip, a new hole centre 30mm forward of this position inboard of the door pinch weld.
- 4.15) Drill out the new centre mark using a 32mm (1-1/4") hole saw or step drill, to make a large hole through the floor pan sill panel between the flange the pinch weld seal goes onto and the edge of the carpet.
- 4.16) Clean away swarf de-burr the hole and apply corrosion inhibitor



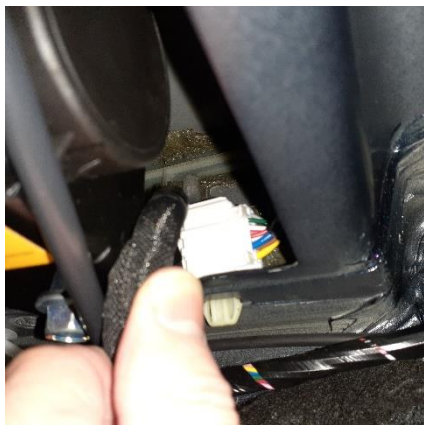
- 4.17) Look underneath the vehicle at the lower sill. Remove the grommet which aligns closest to the hole previously drilled above it inside the rear door area.



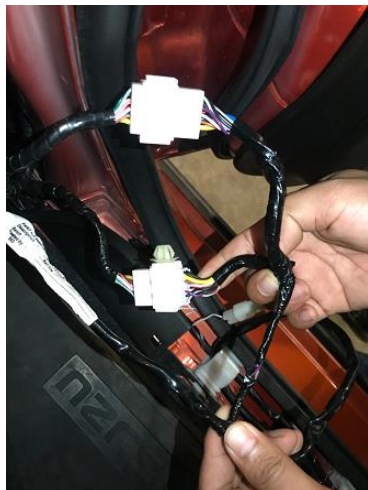
- 4.18) From the front kick panel and behind the B pillar panel, feed the 4 pin connector on the end of the loom which goes to the canopy through the drilled hole and out of the lower hole in the sill panel under the vehicle.



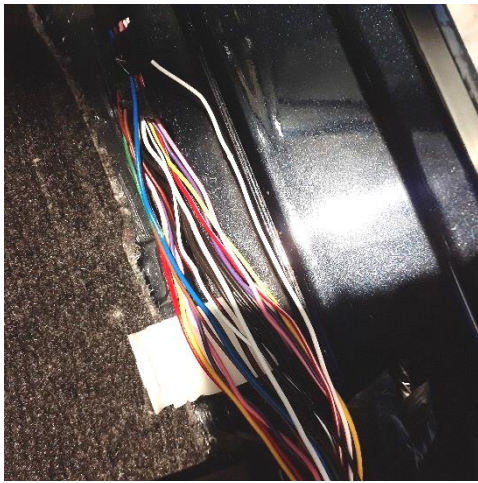
- 4.19) Continue to pull the loom through and fit the small grommet on the loom in the hole in the sill underneath the vehicle, and the large grommet into the drilled hole drilled in the top side of the floor pan sill.



- 4.20) Look at the base of the B-Pillar. Locate the white connector inside the pillar panels. You may need to disconnect the connector to access the wires.



- 4.21) From the wiring kit wiring loom 668PJ029 patch in the loom to connect between each half of the connectors on the vehicle's wiring loom.
- 4.22) Wrap the loose connectors in a small amount of anti-rattle foam tape (cut one strip of foam tape 668PB015) in half.
- 4.23) Neatly place the connectors back under the B pillar cover to avoid rattles.

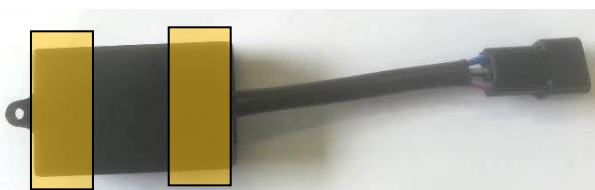


- 4.24) At the rear passenger door scuff plate area, find the wiring loom heading towards the rear of the vehicle and remove the tape bundling the loom together.
- 4.25) Find the WHITE wire heading towards the CHMSL (Brake High Mount Stop Light on the rear of the cabin). Cut the wire in line in terms of position to the one-way connector on the wiring kit loom.

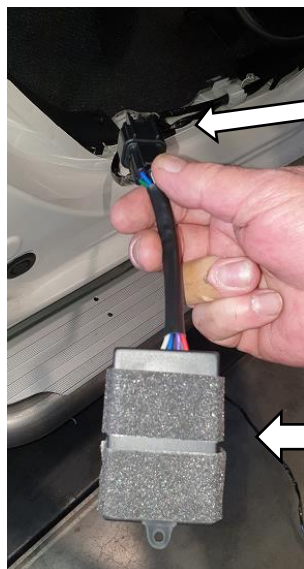
****NOTE:- THERE ARE 2 WHITE WIRES. CHECK FOR THE CORRECT ONE WITH A MULTIMETER OR TEST LIGHT PRIOR TO CUTTING WIRE *****



- 4.26) Strip the WHITE wire end on the FORWARD END (LIVE) SIDE of the vehicle's wiring.
- 4.27) Fold back the other cut end of the white wire and rebind the vehicle's wiring loom in electrical tape
- 4.28) Find the 0.25" Quick Connect Female terminal and housing supplied in the hardware kit (within the small bag supplied with the 668PJ029 loom kit)
- 4.29) Crimp the supplied terminal on the FORWARD END (LIVE) SIDE of the WHITE wire.
- 4.30) Connect the male connector to the corresponding female connector on the canopy kit harness 668PJ029.



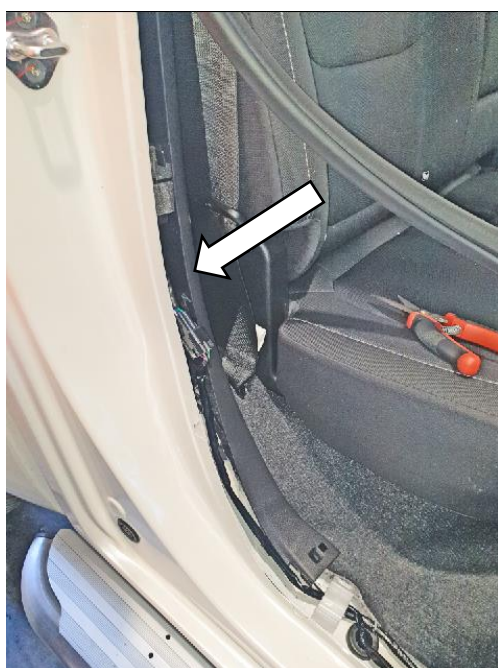
- 4.31) From the kit wrap 668PJ015 latch relay on both ends with 668PB015 anti-rattle foam strip.



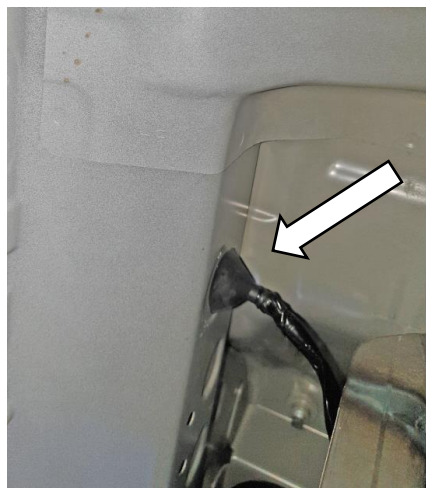
6 pin connector
on hardware kit
canopy vehicle
loom

(668PJ015)
Relay box

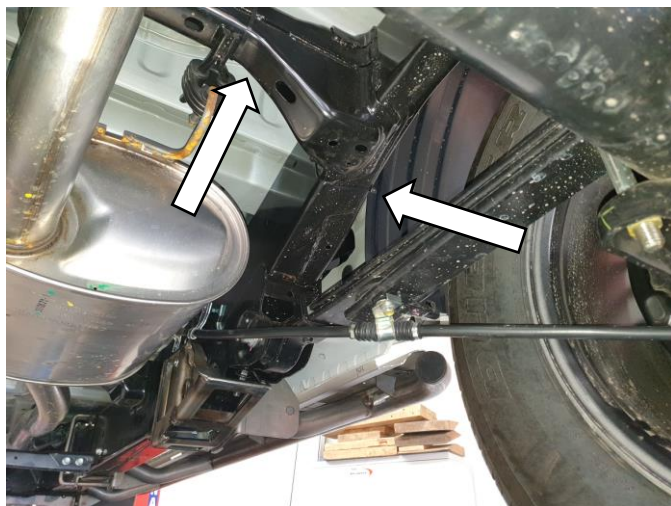
4.32) At the rear door on the driver's side, connect the latching relay (668PJ015), to the 6-pin connector on the canopy wiring harness installed in the vehicle



4.33) Peel back the rear pillar ("C" Pillar) moulding and place the relay box and the connector inside the pillar moulding locating it to avoid rattles.



4.34) From underneath the vehicle from where the wiring grommet comes out the lower sill of the vehicle, run the loom backwards along the top of the chassis rail



- 4.35) Run the loom over the chassis cross member near the front of the vehicle tub and tie off the loom with cable ties on the side chassis member and the cross member. **Ensure the loom is secured with cable ties well away from pipes, moving parts and hot areas such as exhausts systems.**






- 4.36) Run the loom over the chassis cross member above the fuel tank and secure with cable ties.



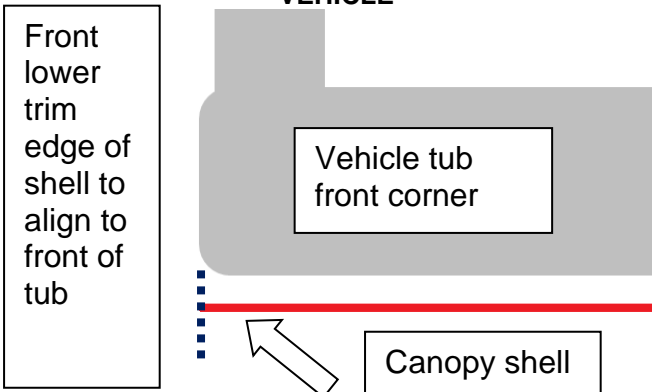
- 4.37) Run the canopy vehicle loom to the area in the lower left-hand corner of the vehicle's tub.
- 4.38) Re-assemble the vehicle interior and all pillar covers and scuff plates.

SECTION 5: FITTING THE CANOPY

	<p>5.1) Unscrew the canopy on the pallet by removing the 4 wood screws in each corner. Gain access to screws via opening the rear door and front lift up window</p> <p>5.2) The front lift up window can be unlatched by reaching in underneath the canopy on the pallet and pushing forward on the glass in car position to push the latch button upwards on both latches to unlock the window.</p>
 <p>Clean.</p>	<p>5.3) Clean the front window of the canopy on the outside.</p> <p>5.4) Clean the rear window of the vehicle's cabin.</p> <p>5.5) Close the vehicle's tailgate.</p>
	<p>5.6) Cut the cable tie holding the wiring harness to the window frame bracket inside the front corner of the canopy. Using masking tape, tape the harness up over the front LH corner of the canopy.</p>



TOP VIEW OF FRONT CORNER OF CANOPY ON VEHICLE



- 5.7) Close the canopy's rear door and **USING 4 PEOPLE**, lift the canopy from the pallet and place it carefully down onto 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.

POSITIONING OF CANOPY ON TUB:

The canopy should be positioned so the lower door edge's sash seal is sealing well and evenly along it's length to the tailgate door stop extrusion assembly mounted on the vehicle's tailgate and even side to side so the tailgate closes with clearance between the door frame seals at the sides of the canopy.

Then review the front leading lower edge corners of the canopy are aligned just to the beginning of the edge radius at the front of the tub.



- 5.8) Measure the trim edges of the canopy at the rear sides and at the front both sides, to the vehicle's tub.

This measurement even on both sides of the canopy.



- 5.9) 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.



5.10) 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 evenly both sides without excessive force on glass to close.
- The gap is even between the door and shell on both sides.

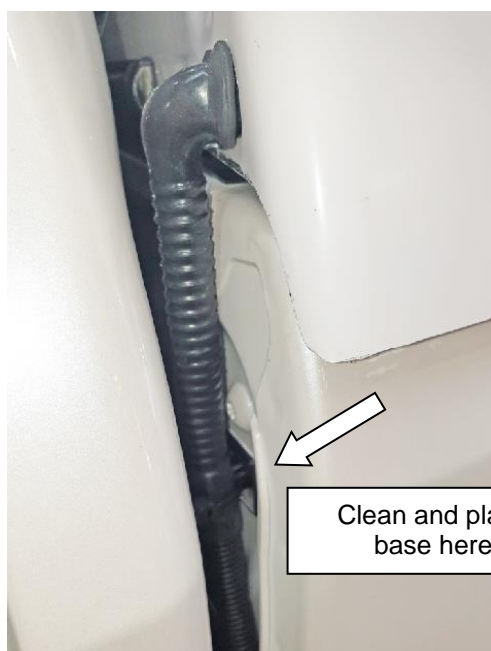


5.11) Cable tie the 6821293 Cable Tie Base to the canopy loom in the location shown (on the base of the rubber grommet) tight enough to not allow it to fall down the loom and in the orientation shown.

5.12) Reaching between the tub and cabin on left hand side with an alcohol wipe, clean an area on the front of the tub level to where the cable tie base will be fitted.

5.13) Peel the protection film off the cable tie base 6821293 and drop the canopy loom down between the cabin and tub on the LH side.

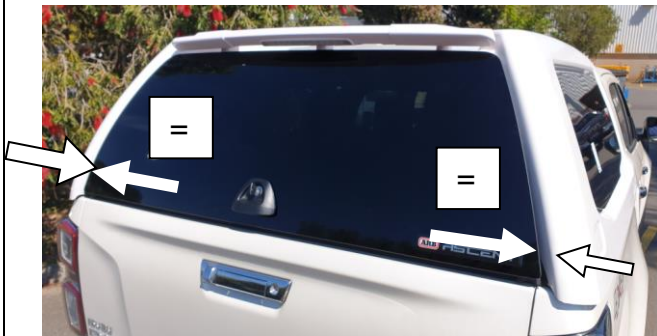
5.14) Reaching in between the cabin and the tub, press the cable tie base firmly onto the front of the tub and ensure it has adhered firmly.



Clean and place
base here



- 5.15) Connect the canopy wiring connector to the end connector of the canopy wiring harness 668PJ029 fitted to the vehicle, at the front lower LH corner of the tub.
- 5.16) Cable tie the remaining harness up under the front LH corner of the tub at the lower corner behind the wheel arch liner and the tub's sheet metal panels.
- 5.17) **Press the key fob of the car to the UNLOCK POSITION TWICE.**
- 5.18) Go to the door and press the door push button pad. Check the door opens and the actuator functions to unlock the canopy door
- 5.19) Turn the interior light to the position that the interior light turns off when the door is closed.



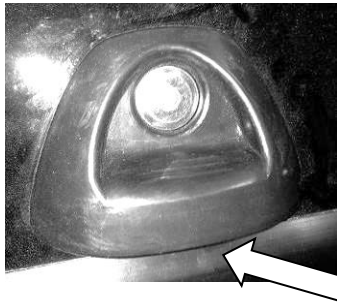
- 5.20) 2 people are required for this step. Check the gap on the rear door on the sides of the glass is even to the canopy shell. This can be made even by pushing in on the canopy shell rear pillars and on the inside doing up the screws.
Using M8x25 Torx pan head screw (6151625) and M8x19mm (smaller) washer (4581085) under the head, 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 (6151212) and M8 x25mm (larger) washer (4581303) on the underside.

Repeat on the opposite side.



- 5.21) It may be necessary now to adjust the canopy backwards to reduce the pressure on the lower door edge seal and therefore the door actuator mechanism. This will allow the door to open properly and evenly both sides.

2 people will be required to re-adjust the door glass gap at the sides if the canopy has to be moved.



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



5.22) Check the gap of the canopy shell's trim edge to the tub in the rear corners. It should be even on both sides of the canopy.

!! IMPORTANT !!

The gap must not be below 5mm. Move the canopy rearward if required

If there are issues with the rear door operation being uneven on each side, refer to Section 6.

Tighten the Torx screws through the rear corner brackets to 22 Nm to secure the canopy's position.

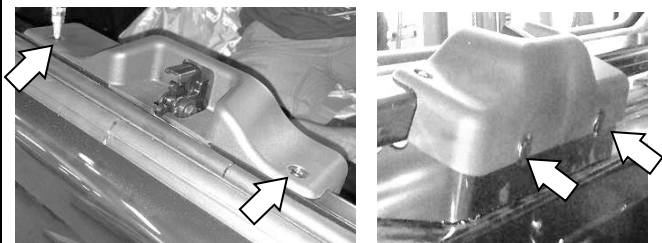


5.23) Using M8x25 Torx pan head screw and M8x19mm (smaller) washer (4581085) screw the canopy **down at the front** tightly through the canopy mount rail holes to the front corner tub mounting brackets with an M8 nyloc nut and M8x25mm (larger) washer (4581303) on the underside.
Tighten to 22Nm.

Repeat on the opposite side.

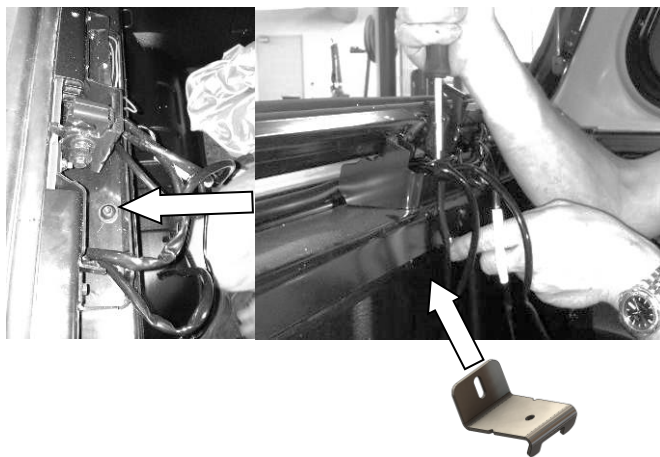


5.24) **Position the canopy so the lower rear door glass edge's sash seal is sealing well and evenly along it's length to the sheet metal tailgate door stop extrusion assembly mounted on the sheet metal vehicle's tailgate. Measure with a ruler vertically between the glass edge to the top of the tailgate to gain an even distance (15mm for reference or not less than 8mm).**



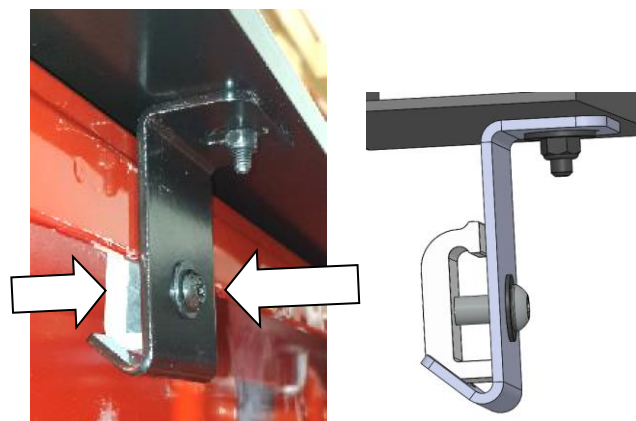
- 5.25) Remove the 2 screws in the cover over the latch mechanism for the lift up window using a Philips screwdriver and remove the 2 scrivets with a flat blade screwdriver. Retain all hardware and lift the cover off. Uncoil the loom inside to gain access to the mounting hole slot.

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



- 5.26) Place an M8x19mm (smaller) washer (4581085) over an M8x25 Torx pan head screw and locate this into the slot in the canopy mount rail from the top in the slot in the mount rail that has the freest access. Hold this in place using a screw driver and T40 Torx bit.

- 5.27) Bring the centre mount rail bracket (668PD140) up onto the screw via the slotted hole in the bracket and secure in place with M8x25mm (larger) washer (4581303) and M8 nyloc nut while tightly pushing the bracket hard up to the tub flange.



- 5.28) Fit to the centre tub mounting bracket, C- Clamp (668PN021) using an M8 x 25 Torx head screw (6151625) (use T40 bit) with M8 x 19mm flat washer (4581085) under the screw head.

- 5.29) Ensure the C-Clamp is the correct orientation vertically as shown.

Tighten the side clamp screws to 5 Nm.

Tighten the top screws to 22 Nm.

Repeat on the opposite side.

If a Pop out window is optioned on the canopy, locate the slots in the mid-point of the centre mount rail and repeat steps 5.26 to 5.29.



5.30) Open and close the tailgate. **Ensure the tailgate door stop extrusion assembly mounted on the vehicle's tailgate has enough clearance the sheet metal lower door frame corner seals. Reposition the rear of the canopy to gain this in necessary.**







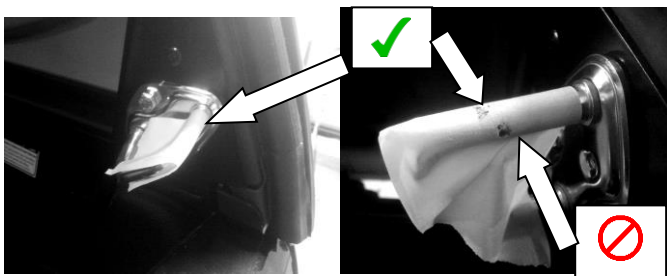
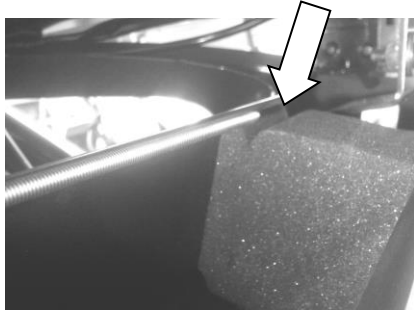
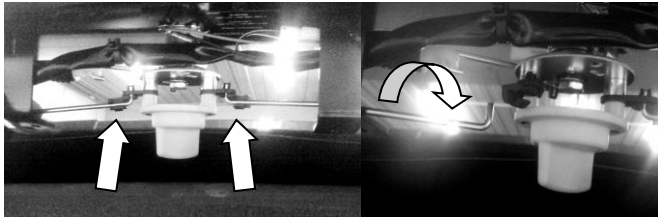
5.31) Water test the canopy around all windows and joins to the tub with high pressure hose and close any leaks found

5.32) **Ensure the last 2 pages of this instruction are discussed with the customer and are given to the customer.**

SECTION 6: OPERATIONAL CHECKS AND ADJUSTMENT OF DOORS AND WINDOWS

Operational checks need to be undertaken as follows.

	<p>6.1) 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.</p>
	<p>6.2) Depress the vehicle's brake pedal and have a second person check that the brake light in the spoiler works.</p>
	<p>6.3) Remove the key from the rear door handle and combine this with the key taped inside the canopy on top of LH base rail. The 2 keys should then be added to the customer's key ring.</p> <p><u>!! IMPORTANT !!</u> <u>Check BOTH keys work manually in the rear door lock.</u></p>
 <p>Press the button underneath to operate electric door actuator mechanism.</p>	<p>6.4) 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:</p> <ul style="list-style-type: none">• 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 both of the latch pawls on the sides of the door glass with your fingers. Slowly turn the interior door release handle and listen to hear if both latches click open at the same time with the door cover pushed back up to the glass whilst ensuring the latch rods are located into the foam blocks on the door cover.

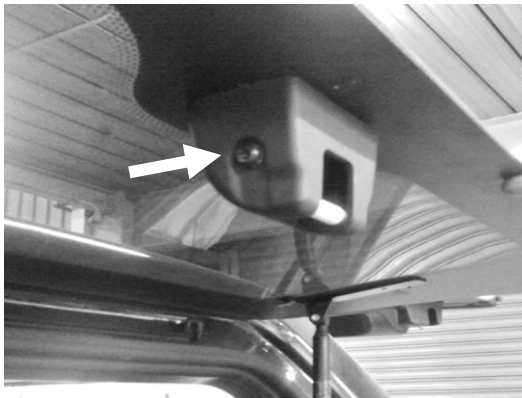
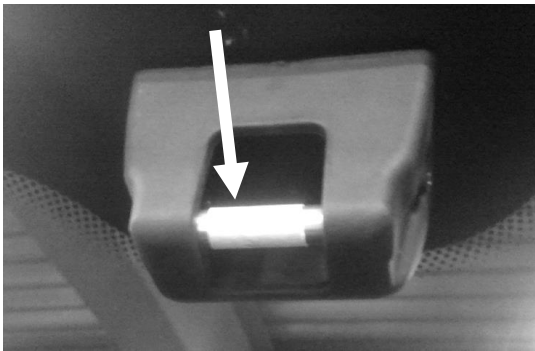
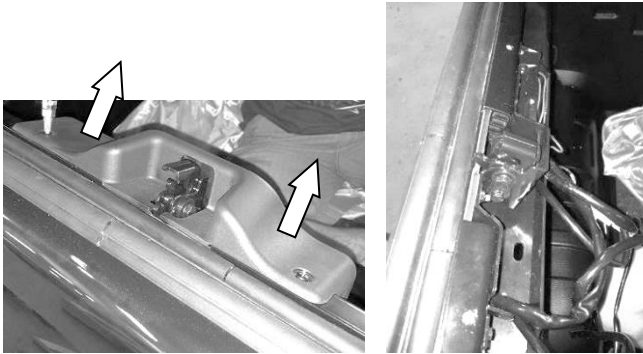


- If the latches do not operate simultaneously, locate the black plastic clips on each end of the pull rods to the latches, unclip a pull rod, lengthen or shorten it by winding it in/out and re-clip in. Close the latches with your fingers again and test operation via the interior rear door handle to operate simultaneously.
- Once satisfied, refit the door cover lower portion with the scriveners, 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.



6.5) 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.
- 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 shows signs of wear through on the top or underside 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 M6 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. Loosen the bolts through the latch and move the latch out 1mm at a time and **re-tighten 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 SCREW TORQUES PERIODICALLY TO MAKE SURE THEY ARE TIGHT, AS SOME SETTLING MAY OCCUR



SECTION 7: OWNERS MANUAL SUPPLEMENT (Fill in and give to customer).

ARB - Ascent Canopy AC12 Isuzu DMax 2020+ and AC13 Mazda BT50 2020+

KEY CODE (Write it in boxes opposite)

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Warranty

- Refer to ARB Products “Warranty Against Defects” booklet contained within the hardware kit, to be delivered to the customer upon purchase.
- ARB provides a 3 year warranty with this product from date of purchase via the original purchaser.
- One year warranty is provided on gas struts.
- This warranty does not cover modifications / alterations, improper installation, use of non-genuine ARB accessories, abuse / misuse, accident, lack of maintenance, normal wear and tear and exposure to chemicals or solvents harmful to plastics.
- Loss of contents within the tub and canopy due to use, breakage during theft, leaving the canopy unlocked, lack of maintenance or mis-use of the product is the responsibility of the vehicle operator.
- Normal wear and tear from the vehicle’s operation with the canopy can occur and paint rub result on the canopy or the tub over time. It is recommended that the customer observes wear on tailgate protection tape and periodically replaces it.

Safety Warnings

- **The canopy will only unlock on the remote key fob when the unlock button is pressed twice.**
- Do not drive with windows or doors open, other than the pop out window. All doors and lift up windows should remain closed and latched.
- Do not sit, rest or stand on the canopy roof, or rest heavy objects on the roof without these being loaded on ARB genuine roof bars or racks systems.
- Do not fit any roof bar or roof rack system other than ARB genuine accessories designed for this canopy.
- Do not use the vehicle’s tub with a canopy fitted as a passenger compartment.
- Do not transport or store volatile materials such as solvents, chemicals or liquids, as fumes may cause damage inside the canopy, or cause fire, due to reduced ventilation.
- Do not fill fuel containers inside the canopy as static electricity can build up causing a fire.
- Do not allow solvents, chemicals or oils to contact the canopy as damage can occur. Clean interior canopy surfaces with water and mild detergent.
- Do not depress lift up window or rear door push button switches for a period of time other than to function their operation. Do not operate them simultaneously, as damage may result. Overload switches on locking systems should reset after 30 seconds.

Maintenance Requirements

- At routine vehicle service schedules, screw torques as described in this fitting instruction should be checked. (Please ask the company that fitted your canopy for a copy of the fitting instructions).
- At routine vehicle service schedules, or as conditions dictate, lubricate the handle lock with Teflon spray e.g. SuperLube multipurpose Aerosol or 3-in-1 Professional Lock Lubricant or Isoflex Topas L32 grease. Latches and hinges may be serviced with Isoflex Topas L32 grease. Vaseline may be used sparingly on rotary latches. Molybond 122 on hinges. Do NOT use any other greases, oils or aerosols as failure may result voiding warranty.
- Ensure functional checks of the rear door lift up windows, interior light 3 way switch on door opening and brake light are carried out at vehicle service schedules.
- To clean, only use quality car care mild detergents, waxes and polishes. Do not use abrasive compounds on painted surfaces unless conducting repairs. If paint repairs are undertaken only bake at 60oC. Use only paint systems that are suitable for ABS plastic.
- Ensure gas struts are only ever connected with the cylinder end to the glass and the rod end to the canopy’s window frames. Failure to do so will cause premature failure of gas struts.
- Clean gas strut rods with a damp cloth only when regularly cleaning the vehicle. Seal failure of the strut can occur if cleaned with solvents or greased or left uncleaned.



SECTION 8: ARB FITMENT CHECKLIST (TO BE FILLED IN - RETAIN THIS RECORD).

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

ARB - Ascent Canopy AC12 Isuzu DMax 2020+ and AC13 Mazda BT50 2020+			
Dealer Name and code:		Date:	
Vehicle registration:		Vehicle Vin No:	
Vehicle make:			
Number of Kms:		Order No:	
Canopy serial number: (left inside corner on canopy pillar on inside of ARB badge recess)		Canopy window type (tick): AC12/13A Double pop out <input type="checkbox"/> AC12/13B Lift up /pop out <input type="checkbox"/> AC12/13C Double lift up <input type="checkbox"/>	
Canopy Key Serial No (Printed on bag stating with letter L)	L _____	Canopy Colour:	
Vehicle damage / condition check (details):			
(Tick)			
Vehicle tub sealing is done as per Section 1 and the rear tailgate door stop extrusion assembly is fitted correctly as per Section 2.			
Door lower sash seal contacts the tailgate tub stop assembly evenly and there is not less than an 8 mm gap between the lower edge of the glass and the top of the tailgate all the way along it. The gap should look even all the way along the edge of the glass.			
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 6)			
Key fob once pressed, unlocks the canopy. (twice pressed once first connected to reset the system)			
Door rear door push button switch functions to open the door both sides simultaneously.			
Door functions with both keys to turn to open.			
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.			
The roof vent functions and water seals.			
Water test with high pressure hose has been completed around all windows and join to canopy bed and at the roof vent with no leaks other than through unsealed tailgate sides.			
Spoiler rear brake light operates when brake pedal is pressed.			
Canopy keys added to customer's key ring.			
Serial number recorded on the owner's supplement pages and owner's manual supplement copy given to the customer and explained.			
Comments:			
Fitted by:			
Checked by:			