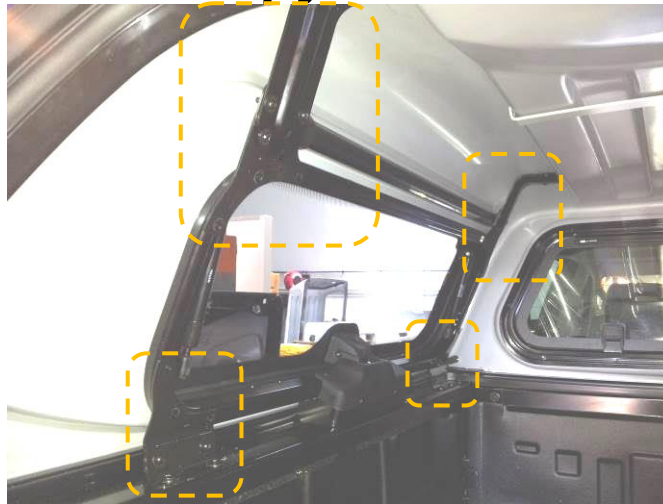


Ascent Canopy Internal Frames



Installation Time: Approx. 2 hours approx. Plus roof accessory fitment time

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

IMPORTANT:

- It is advisable to have the canopy internal frames fitted by an authorised dealer.
- This product is designed for fitment with either Ascent Canopy roof bars or roof racks. **These are vehicle specific and sold separately, refer to the application chart via you ARB dealer, or call ARB.**
- It may be necessary to readjust the Ascent Canopy's lift up window and door latches after fitment of roof racks due to deflection of the canopy through the tightening of bolts. Please refer to the Ascent Canopy fitting instructions in section entitled "Operational Checks and Adjustments for Windows and Doors" for latching adjustment steps. Call ARB for a copy if required.

CARE OF YOUR CANOPY:

Please refer to the "Owner's Manual Supplement" on the second last page of this instruction, to be given to the purchaser on installation.

OWNERS MANUAL SUPPLEMENTS:

Please fill out the "Owner's Manual Supplement" on the second last page of this instruction prior to giving this to the customer.

RECORDS OF FITMENT:

Please complete the last page of these instructions for the "Fitment Check List" and retain these records at the dealer.

WARRANTY:

Please refer to ARB "Warranty against defects" booklet contained within the hardware kit. Please ensure this booklet is given to the customer.

SAFETY:

The ARB Ascent Canopy Blade Brackets, ARB Ascent Canopy Racks, and ARB Ascent Canopy Roof bars (sold separately) must never be fitted to another product. These products MUST all be fitted with this internal frame support kit as fitted to ARB Ascent Canopies only.

HAVE AVAILABLE THESE SAFETY ITEMS WHEN FITTING PRODUCT:

Protective eyewear



Hearing protection



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:

• Torque Wrench 0-25Nm • Socket 10mm, extension bar and driver • Spanner 10mm • Tape Measure • T30, Torx Drive screwdriver and bits for socket drives and screw drivers • Power or pneumatic drill • 5mm & 6.5mm Drill bit • 20mm Hole saw • 10mm deep drill stops for 6.5mm bits • Deburring tool • Corrosion preventative touch up paint	• Pop-rivet gun • Cleaning cloths / rags • Clamps
--	---

FITTING THE INTERNAL FRAMES TO A CANOPY IS UNDERTAKEN IN 6 STAGES:

1. Preparing the internal frame brackets
2. Preparing holes in the roof
3. Fitting the lower frame brackets
4. Fitting the outer blade brackets/foot packs
5. Fitting the upper frame brackets
6. Clean, check list and sign off.

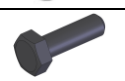
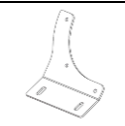
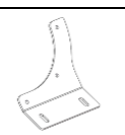
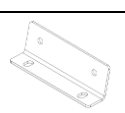
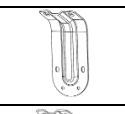
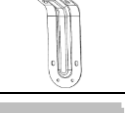
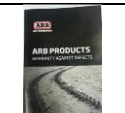
NOTE: DURING THE INSTALLATION IT IS NECESSARY TO DRILL SOME HOLES THROUGH SHEET METAL PARTS. IT IS RECOMMENDED THAT THESE ARE DE-BURRED AND PAINTED TO AVOID RUST & ANY SWarf LEFT OVER SHOULD BE CLEANED FROM TUB.

!! 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 BOX FITTING KIT CONTAINS:

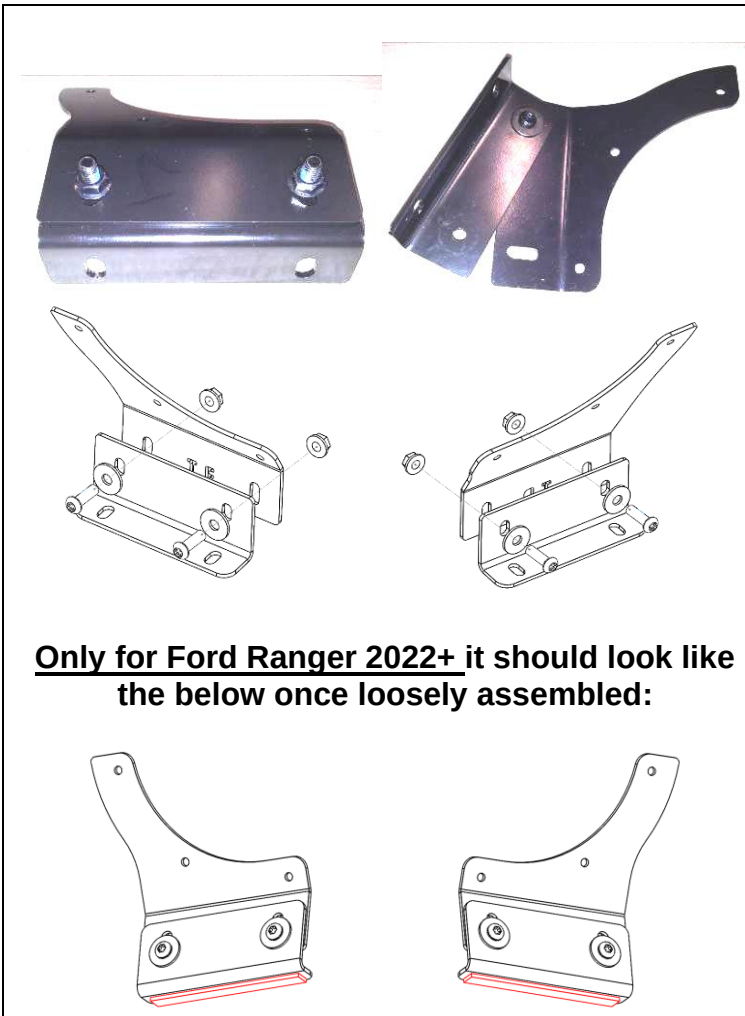
1. SMALL PARTS BAG	Bag Kit number:		6173772	6177800	6178457	Description
	Part No	Picture	Qty	Qty	Qty	
	6609088		24	24	24	RIVET POP 4.8 DIA x 13.8 BLACK
	6151223		8	-	8	M6X1.25 BLACK NYLOC NUT
	6151623		28	20	20	M6 X 16 TORX PAN HEAD SCREW - BLACK
	6151213		-	-	8	BOLT HEX M6x20 BLACK
	4584378		-	-	8	WASHER FLAT M6x16 BLACK
	4581082		36	20	28	WASHER M6X20 16G BZP
	6151173		20	20	20	M6 WIZZ LOCK FLANGE NUTS - BLACK
	6602018		-	2	-	ALCOHOL WIPE
2. FRAME BRACKETS	A*		2			RH- BRACKET LH LOWER
	B*		2			LH- BRACKET RH LOWER
	C*		4			BRACKET LOWER MOUNT
	D*		4			UPPER PLATE
	E*		*			BRACKET UPPER FRONT
	F*		*			BRACKET UPPER REAR
	2125583 or 2125823		2			COMPLIANCE STICKER (LOAD RATING STICKER)
	216097		1			WARRANTY BOOKLET

Application list for all brackets and bag kit:

APPLICATION	BAG KIT	BRKT“A”	QTY	BRKT“B”	QTY	BRKT“C”	QTY	BRKT“D”	QTY	“BRKT”E	QTY	BRKT “F”	QTY
Ford Ranger PX 2011-22	6173772	668PD028R	2	668PD028L	2	668PD029	4	668PD030	4	668PD031	2	668PD032	2
Mazda BT50 2011+	6173772	668PD028R	2	668PD028L	2	668PD029	4	668PD030	4	668PD031	2	668PD032	2
GM Colorado 2012+	6173772	668PD028R	2	668PD028L	2	668PD029	4	668PD030	4	668PD032	2	668PD032	2
Isuzu DMax 2012+	6173772	668PD028R	2	668PD028L	2	668PD029	4	668PD030	4	668PD032	2	668PD032	2
Nissan Navara 2015+	6173772	668PD028R	2	668PD028L	2	668PD029	4	668PD030	4	668PD032	2	668PD032	2
Mits Triton 2015+	6173772	668PD073 L/R	1 OF EACH	668PD074 L/R	1 OF EACH	668PD029	4	668PD072	4	668PD071	2	668PD071	2
Amarok 2010+	6173772	668PD074L	2	668PD074R	2	668PD029	4	668PD089	4	668PD032	2	668PD032	2
Merc X class 2018+	6173772	668PD028R	2	668PD028L	2	668PD129	4	668PD030	4	668PD032	2	668PD032	2
Isuzu DMax & Mazda BT-50 2020+	6173772	668PD028R	2	668PD028L	2	668PD029	4	668PD089	4	668PD032	2	668PD032	2
Nissan NP300 2021+	6173772	668PD028R	2	668PD028L	2	668PD029	4	668PD146	4	668PD032	2	668PD032	2
Ford Ranger 2022+	6177800	668PD028R	2	668PD028L	2	668AQ029	4	668PD162 R/L	1 OF L/R	668PD071	2	668PD071	2
VW Amarok 2023+	6177800	668PD028R	2	668PD028L	2	668AQ029	4	668PD089	4	668PD031	2	668PD032	2
Mits Triton 2024+	6178457	668PD190R	2	668PD190L	2	668PD196	4	668PD089 FRONT 668PD189 REAR	2 2	668PD031	2	668PD071	2

BEFORE STARTING, READ ALL STEPS OF THE INSTRUCTIONS CAREFULLY AND CHECK ALL PARTS

SECTION 1: PREPARING THE FRAME BRACKETS:



- 1.1) Using 2 x **M6x16 Torx** screws, 2 x **M6x20** washers, and 2 x **M6 Flange** nuts

Loosely fit the "BRACKET LOWER MOUNT" to the "BRACKET LH LOWER"

The brackets should still be able to slide over each other

Repeat with "BRACKET RH LOWER" to assemble as a mirror image to that shown opposite.
Complete this for all 4 bracket assemblies required.

Note: Ford Ranger 2022+ (Kit part no: 4140090) has specific arrangement as per opposite

- 1.2) Using 2 x **M6x16 Torx** screws, 2 x **M6x20** washers, and 2 x **M6 Flange** nuts

Loosely fit the "BRACKET UPPER FRONT OR REAR" to the "UPPER PLATE"

Repeat for the opposite side as shown opposite to create a mirror image pair of assemblies.

All the 4 bracket assemblies should still be able to slide over each other.

See step 4.1 specifically for Ford Ranger 2022+ Only.



SECTION 2: PREPARING HOLES IN THE ROOF:



- 2.1) On the interior roof of the canopy, locate the dimples at the front and rear corners of the canopy shell.

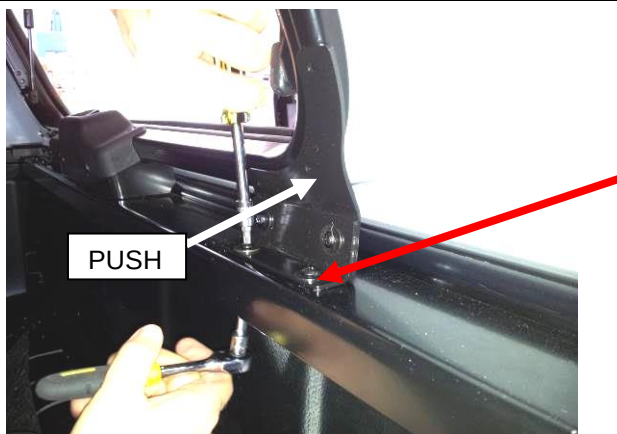
These will roughly be in line with the front and rear edge of the window frame

Using the dimples as a drill centre point, hole saw a 20mm hole in the roof. Repeat for the remaining 7 points

Debur the holes after drilling to remove swarf and create a clean edge.



SECTION 3: FITTING THE LOWER FRAME BRACKETS

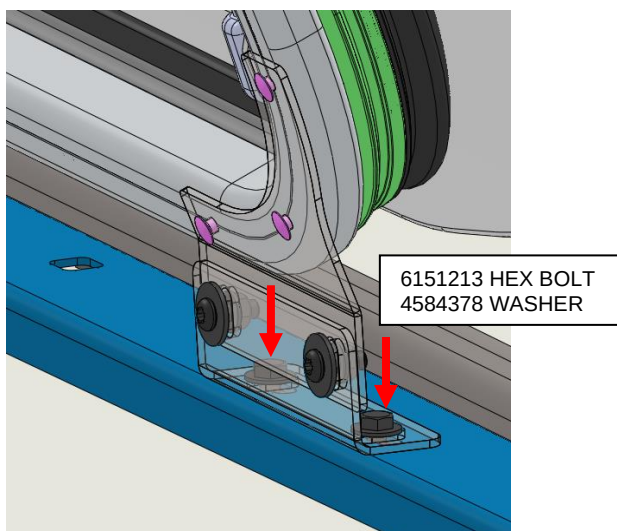


- 3.1) **For all applications other than Ford Ranger 2022+ and VW Amarok 2023+ and Mitsubishi Triton 2024+ ONLY,** go to the lower rear corner of the right-hand window frame.

Using 2 x **M6x16 Torx** screws, 4 x **M6x20** washers, and 2 x **M6 Nylock** nuts, **loosely** fit the BRACKET LOWER assemblies to the existing slots in the canopy mount rails

The bolts should still be able to slide over each other.

- 3.2) Push the "BRACKET LH or RH LOWER" assembly against the window frame.



- 3.3) **Only For Mitsubishi Triton 2024+:**

Fix bracket 668PD196 to the slots in the base rail in four places by loosely assembling:

From top side:

Use 2 x Hex Bolt M6x20 (6151213)
Use 2 x Flat Washer M6x16 (4584378)

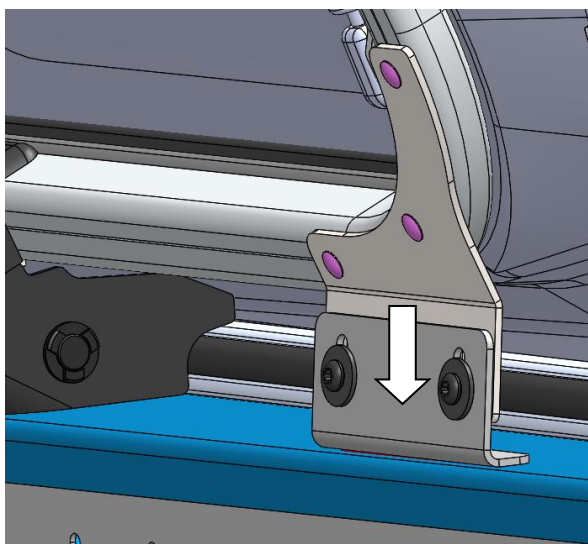
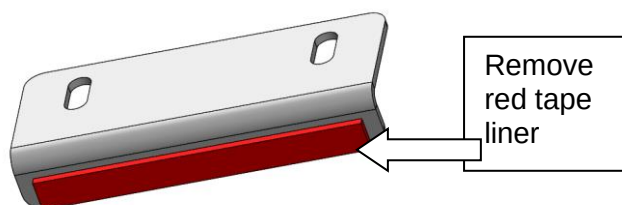
From bottom side:

Use 2 x M6 Nyloc (6151223)
Use 2 x Flat Washer M6x20 (4581082)



- 3.4) Using a clamp to hold the loosely assemble lower brackets securely, align the holes in the "BRACKET LH or RH LOWER" to best fit the central groove in the window frame.

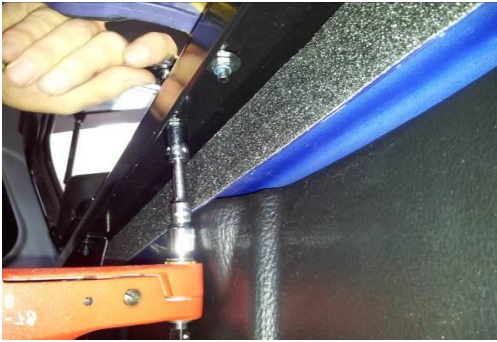
!IMPORTANT!- The holes in the bracket must align very accurately to the groove in the window frame or the rivets may foul on the internal structure inside the window frame extrusion.



- 3.5) **For Ford Ranger 2022+ and VW Amarok 2023+ ONLY** clean the base rail under the BRACKET LOWER MOUNT (668AQ029) with an alcohol wipe (6602018) and allow to dry. Peel the red liner off the double sided tape on the base of the BRACKET LOWER MOUNT (668AQ029).

Ensure the BRACKET RH/LH LOWER is well clamped to the frame, then lower the lower bracket with the tape down to contact the top of the canopy base rail. Press very firmly to gain tape adhesion.

!IMPORTANT!- The holes in the BRACKET RH/LH LOWER bracket must align very accurately to the groove in the window frame or the rivets may foul on the internal structure inside the window frame extrusion.

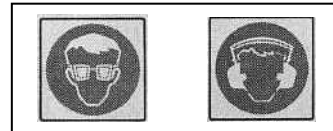


- 3.6) Use a torque wrench to tighten **all** the **M6** hardware on the lower mount brackets to **9Nm**.



- 3.7) Use a **5mm bit** to drill through the first wall of the window frame, using the three holes in the bracket as guides.

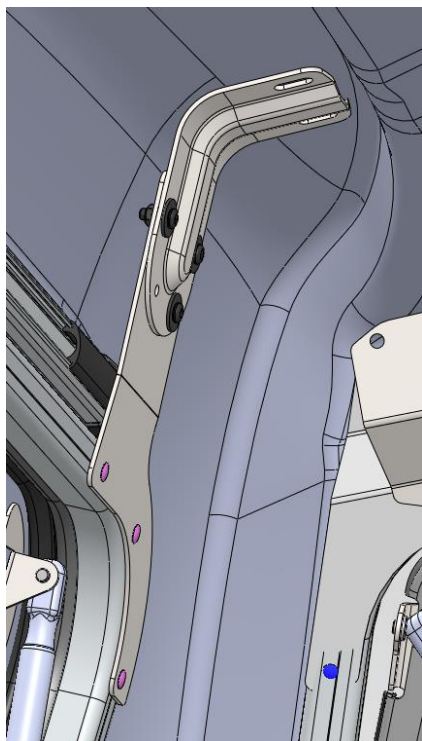
Hint : Loosely fit a rivet in holes already drilled to prevent the plate from wandering during drilling



- 3.8) Pop rivet "BRACKET LH or RH LOWER" into place against the window frame using the black pop rivets.
- 3.9) Repeat steps 3.1 to 3.6 for **all the lower frame bracket assemblies in each of the 4 corners of the canopy at the lower window frame points.**

SECTION 4: FITTING THE UPPER FRAME BRACKETS

! NOTE !: THIS SECTION REQUIRES FITMENT OF THE ROOF RACK BLADE BRACKETS / ROOF BAR MOUNT FEET, WHICH ARE SEPARATELY SOLD KITS.



- 4.1) Go to the rear upper corner of the RH window frame.

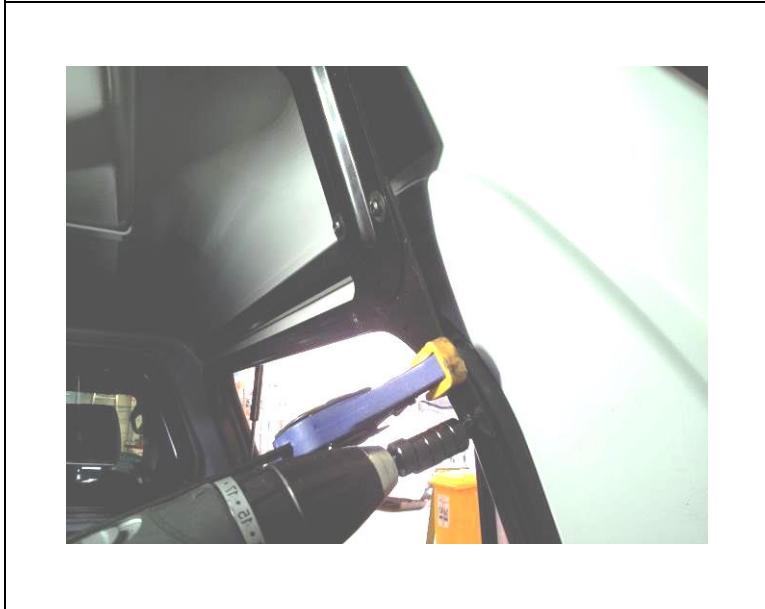
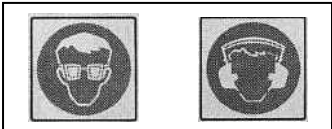
Loosely fit the “**BRACKET UPPER REAR (LONGER)**” assembly (when the kit contains longer rear brackets) through the roof to the Roof Rack blade brackets or Roof bar foot packs, using the instructions and hardware in the separately sold kits.

The brackets should still be able to slide on the roof line

Push the “UPPER PLATE” against the window frame

If the bolt interferes with a lift up window hinge end cap inside, on the canopy shell, it may be removed.

Specific to Ford Ranger 2022+ Only, the upper bracket assembly will look like that in the picture opposite once assembled

	4.2) Using a clamp to hold securely, align the holes in the “UPPER PLATE” to best fit the central groove in the window frame !!IMPORTANT!- The holes in the bracket must align very accurately to the groove in the window frame or the rivets may foul on the internal structure inside the window frame extrusion.
	4.3) Use a torque wrench to tighten bolts through the roof, to the torque specified in the fitting instructions for the separately sold kits for either the Rack Blade Brackets or Roof Bars.
	4.4) Use a torque wrench to tighten the two M6 screws on the upper mount brackets to <u>9Nm.</u>
	4.5) Use a 5mm bit to drill through the first wall of the window frame, using the three holes in the bracket as guides Hint : Loosely fit a rivet in holes already drilled to prevent the plate from wandering during drilling !!IMPORTANT!- The holes in the bracket must align very accurately to the groove in the window frame or the rivets may foul on the internal structure inside the window frame extrusion. 



- 4.6) Pop rivet "UPPER PLATE" into place against the window frame using the black pop rivets.

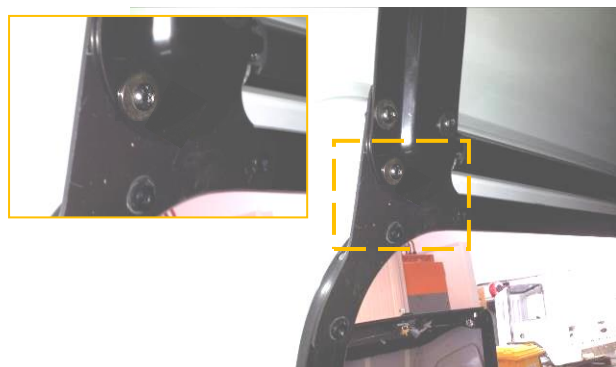


- 4.7) Using a **6.5mm drill** and **10mm drill stop** to drill through the "UPPER PLATE", using the **OUTERMOST HOLE OF THE** hole of the "BRACKET UPPER" as a guide

NOTE: NISAN NP300 REQUIRES THE HOLE DRILLED OFFSET IN THE UPPER PLATES

!IMPORTANT! - DRILLING THE INNER HOLE WILL RESULT IN THE BOLT AND NUT NOT FITTING

Debur the hole and paint with corrosion inhibitor

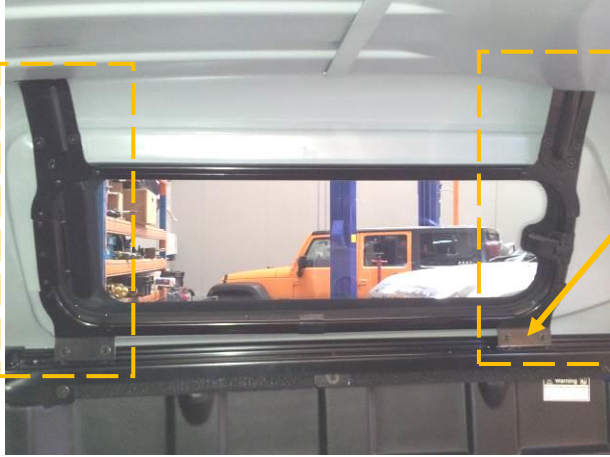


- 4.8) Use a **M6x16 Torx** screw, **M6x20** washer, and 2 x **M6 Flange** nut, to pin the brackets together and tighten to **9Nm**.

- 4.9) Repeat steps 4.1 to 4.8 **for all the upper frame bracket assemblies in each of the 4 corners of the canopy at the upper window frame points.**

NOTE: Leave the INNER holes in the upper pressed brackets. DO NOT drill or apply fasteners to these holes

SECTION 5: CHECK AND CLEAN UP:



- 5.1) Check bolt torques of all bolts.
- 5.2) **Stick the load rating compliance sticker on the face on the rear most internal frame bracket on both sides at the back of the canopy so it is able to be read when standing at the back of the car.**
- 5.3) Remove all swarf from the canopy and inside the tub
- 5.4) Open and close all windows gently check for any resistance to opening from drag on latches.

If any lift up window or door latch adjustment is required, refer to the Ascent Canopy fitting instructions for adjustment procedure.
- 5.5) Perform leak test at mount points in the roof from outside using a garden hose.
- 5.6) **Fill in the last page of these fitting instructions “Check List” and retain records at the dealer.**
- 5.7) **Fill in the second last page of these fitting instructions “Owner’s Manual Supplement” and give this copy to the customer.**
- 5.8) **Place a copy of these fitting instructions in the vehicles owner’s manual.**



SECTION 6: OWNERS MANUAL SUPPLEMENT (Fill in and give to customer).

ARB - Ascent Canopy Internal Frames

Canopy kit part number

4

1

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.
- This warranty does not cover modifications / alterations, improper installation, abuse / misuse, accident, lack of maintenance, normal wear and tear and exposure to harsh chemicals or solvents.

Safety Warnings

- Always load roof racks and roof bars in accordance with their provided specifications.
- This product is only to be used on ARB Ascent Canopies.
- This product is **rated to a net payload as is stated on the load rating sticker as applied to this product**, when fitted with an ARB roof rack or ARB supplied Thule or Rhino Vortex roof bars.
- **Roof payload must be evenly distributed over the loading area, with the centre of gravity kept as low as possible. Narrow and heavy load should be kept close to the mounting feet.**
- Always observe local safety laws for long/overhanging loads.
- **Always tie down loads with quality straps. Check and retighten loads during the journey. Elastic straps are not suitable for securing loads**
- **Large objects such as surfboards should preferably stacked, instead of laid side by side. This reduces the aerodynamic lifting force. They should be strapped both front and rear.**
- **For carrying special items such as bicycles, skis and kayaks, specially designed carriers are recommended to be used.**
- **Loaded roof rack systems will affect the vehicles cross wind sensitivity, cornering and braking characteristics. Driving techniques should be altered to suit by reducing corner speed and increasing braking distance.**
- **Do not make any modifications to interior frame brackets such as drilling or bending.**
- ARB recommends only fitting ARB approved accessories, designed for your canopy and frame system
- **Do not use internal frame bracket systems as hanging points or tie down points for loads**
- Do not allow solvents, chemicals or oils to contact the canopy or internal frames, as damage can occur. Clean interior canopy surfaces with water and mild detergent.

Maintenance Requirements

- **After the first 500km and 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) or contact ARB.**
- To clean, only use quality car care mild detergents, waxes and polishes. Do not use abrasive compounds on painted surfaces unless conducting repairs.
- **Interior frame brackets and roof carrier systems are highly structural, routinely check for signs of corrosion and movement. Consult you ARB dealer immediately if you have concerns**



SECTION 7: ARB INTERNAL FRAME FITMENT CHECKLIST (TO BE FILLED IN - RETAIN THIS RECORD).

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

ARB - Ascent Canopy Internal Frames			
Vehicle make and model:			
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): ACXXA Double pop out ☐ ACXXB Lift up /pop out ☐ ACXXC Double lift up ☐	
Roof top accessories (tick):	Aluminium Rack: ☐ Steel Rack: ☐ Thule Roof bars: ☐	Rooftop tent: ☐ Awning: ☐	Other: (specify)
Vehicle pre-existing damage / condition check (details):			
			(Tick)
All screw torques completed as detailed in the instructions – ! Important !			
Lift up windows operate via push button to open and close manually, without latches binding.			
Door operates via push button to pop open and close manually, without latches binding.			
Water test with high pressure hose has been completed around all mounting point holes in the roof of the canopy.			
The owner's manual supplement page, a copy of the fitting instructions and the ARB warranty booklet has been given to the customer and explained.			
Comments:			
Fitted by:			
Checked by:			