WL74 ROOF RACK

INSTALL INSTRUCTIONS

REVISION I
30 May 2024

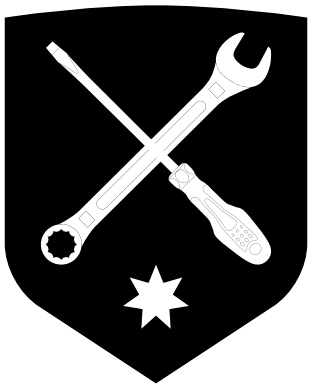


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PRODUCT INFORMATION

MODULAR DESIGN + GROUNDBREAKING CONFIGURABILITY

The modular nature of Chief Products' Roof Racks and Roof Rack Accessories, gives the user a vast amount of options depending on the application required. T-Nuts, Tie-Down Points, and Adjustable Load Rails can be quickly and easily repositioned as needed.

EXTENSIVE MOUNTING LOCATIONS

Chief Products' Roof Racks and Roof Rack Accessories, provide extensive mounting locations that can be used to easily mount most aftermarket accessories (Recovery Boards, Bike Holders, Jerry Can Holders, Kayaks, etc.).

IMPORTANT

PROPER INSTALLATION IS ESSENTIAL TO THE PERFORMANCE OF THIS PRODUCT.

ONLY INSTALL THIS PRODUCT ON THE DESIGNATED VEHICLE(S).

ONLY USE THE PROVIDED HARDWARE FOR INSTALLATION.

CHECK PRODUCT REGULARLY FOR DAMAGE. REPLACE IMMEDIATELY AT FIRST SIGN OF DAMAGE.

CHECK FASTENER TIGHTNESS REGULARLY AND TIGHTEN IF REQUIRED.

ATTENTION

WHEN PROPERLY INSTALLED THIS ROOF RACK DELIVERS INDEPENDENTLY TESTED LOAD RATINGS OF 150KG (Dynamic) & 460KG (Static). Testing results are certified to comply with Australian Standard (AS 1235-2000) as well as international standards (ISO / PAS 11154 : 2009:2006) and (DIN 75302/02: 1991).

FOR MAXIMUM SAFETY DO NOT EXCEED MANUFACTURERS ROOF WEIGHT LIMITS. Our load ratings represent the maximum mechanical forces this roof rack system can withstand before failure. Our load ratings do not address vehicle safety during high-speed manoeuvres, or changes to vehicle dynamics caused by a higher centre of gravity.

FOR MAXIMUM SAFETY, LOADS SHOULD BE EVENLY DISTRIBUTED AND PROPERLY SECURED TO AVOID SHIFTING DURING TRANSPORT. Before using your roof rack, it is important to familiarise yourself with the proper load securing techniques and be constantly safety oriented. Please note, all of our load ratings are based on an evenly distributed load.

BEFORE STARTING INSTALLATION

CHECK ALL PARTS HAVE ARRIVED.

CHECK REQUIRED TOOLS.

HELPFUL TIPS

LEFT & RIGHT SIDES ARE DEFINED FROM THE DRIVER'S POSITION.

DO NOT OVER-TIGHTEN FASTENERS.

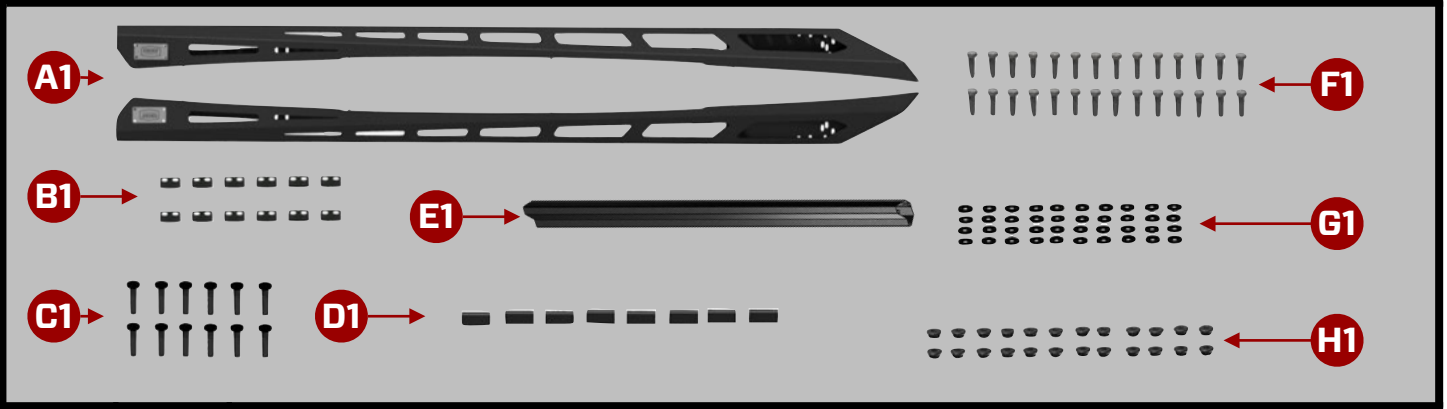
FINAL TIGHTENING OF FASTENERS is best done after fitting all components into place and gradually tightening to achieve the best fit.

ANTI-SEIZE will prevent fasteners from becoming seized and ensure ease of disassembly in future.

PHOTOS ARE REPRESENTATIVE ONLY. Photos may show prototype parts, may be taken from multiple vehicles, and may be different than your vehicle. Due to global vehicle variances, model year changes and differing model options (engine, options, etc.) it is impossible to provide photos that are 100% accurate for all customers.

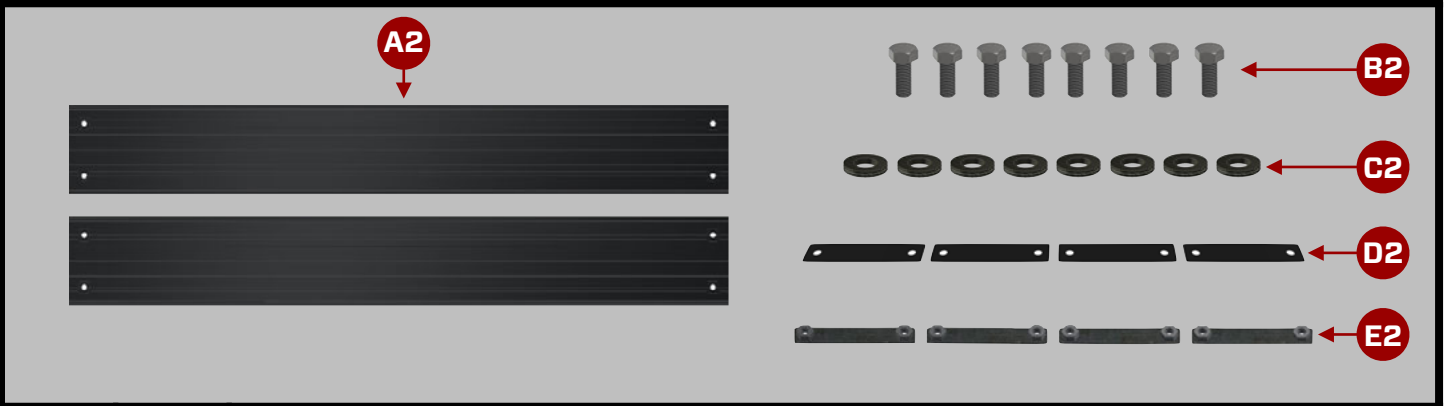
MOUNTING RAILS

BOX



REF	QTY	DESCRIPTION
A1	*2*	Mounting Rails (Left + Right)
B1	*12*	Angle Brackets
C1	*12*	M6 x 25mm Button Head TORX Bolt (SS316)(BLACK)
D1	*8*	EPDM Rubber U-Channel Strip
E1	*1*	ROOF RACK (Stealth Air-Dam)
F1	*28*	M6 x 20mm Hex Head CL70 Bolt (SS316) (BLACK)
G1	*40*	M6 Wedge-Lock Extended Washer (SS316)(BLACK)
H1	*24*	M6 CL70 Flange Nut (SS316)(BLACK)
-	*1*	4g Anti-Seize Pouch
-	*1*	Chief Products Shop Rag

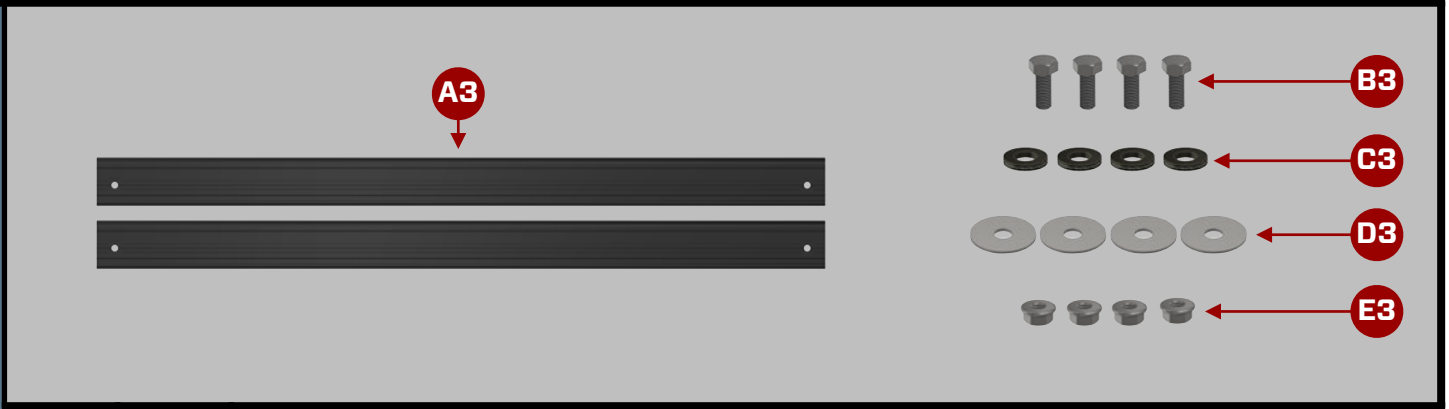
ROOF RACK (2x PLANKS) [1146mm]



REF	QTY	DESCRIPTION
A2	*2*	Plank
B2	*8*	M8 x 20mm Hex Head CL70 Bolt (SS316)
C2	*8*	M8 Wedge-Lock Extended Washer (SS316) (BLACK)
D2	*4*	Rubber Isolater Strip
E2	*4*	M8 Fastening Plate

ROOF RACK (2x HALF-PLANKS) [1146mm]

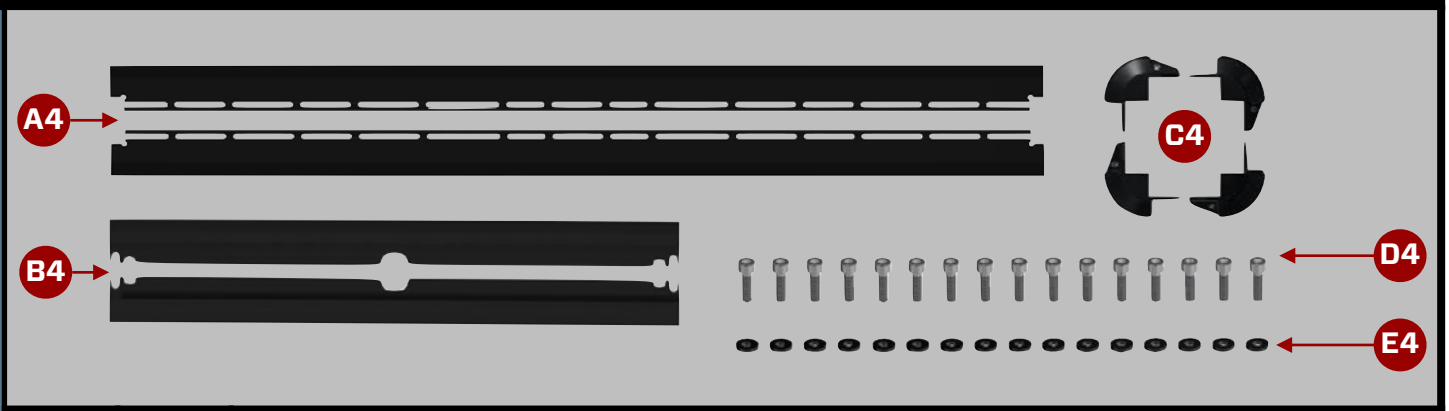
BOX



REF	QTY	DESCRIPTION
A3	*2*	Plank
B3	*4*	M8 x 25mm Hex Head CL70 Bolt (SS316)
C3	*4*	M8 Wedge-Lock Extended Washer (SS316) (BLACK)
D3	*4*	M8 x 32mm Washer (SS316)
E3	*4*	M8 Flange Nut

ROOF RACK (Platform Frame) [7 Plank]

BOX



REF	QTY	DESCRIPTION
A4	*2*	Frame Rail (Left + Right)
B4	*2*	Frame Rail (Front + Rear)
C4	*4*	Frame Corner
D4	*16*	M6 x 20mm H5 Socket Cap Head CL70 Screw (SS316)
E4	*16*	M6 Wedge-Lock Extended Washer (SS316)(BLACK)

ROOF RACK (4x PLANK END-CAPS)

SATCHEL



REF	QTY	DESCRIPTION
A5	*4*	Plank End-Cap (Slotted)

ROOF RACK (4x HALF PLANK END-CAPS)

SATCHEL



REF	QTY	DESCRIPTION
A6	*4*	Half Plank End-Cap (Slotted)

REQUIRED TOOLS

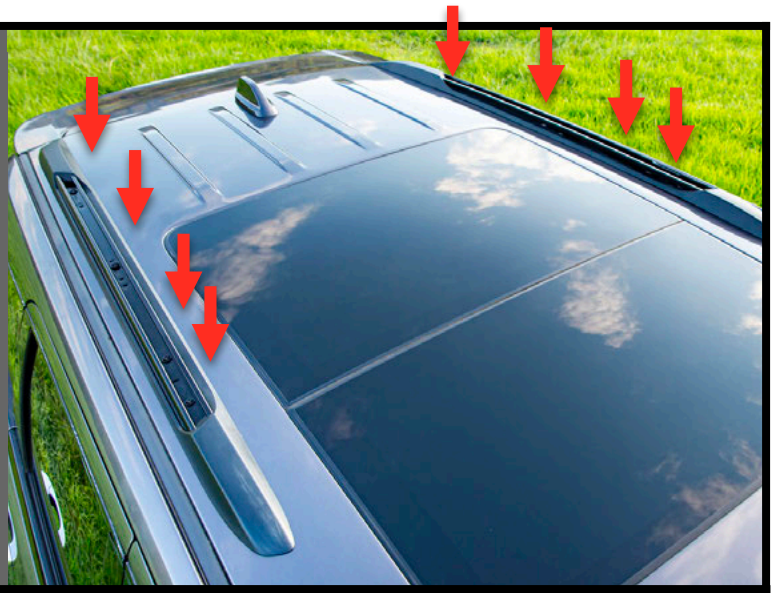
- Socket Wrench
- 13mm Socket
- 10mm Socket
- 100mm Socket Wrench Extension
- 13mm Spanner
- Masking Tape
- Torque Wrench
- Tape Measure
- Pencil

1

Remove OEM ROOF RAILS.

1. Remove (8) T30 TORX Screws (inside OEM roof rail channels).
2. Slide OEM Rails backward then up to release from front & rear location posts.

NOTE
TAKE CARE!! If too much force is applied, roof OEM nutserts can break free (spin in place). We advise using a penetrant oil to help release any 'stuck' roof fasteners. On older vehicles, the first and last roof nutserts may have collected dirt and corrosion. If so, cleaning is required or the bolts will not install fully. If highly corroded, a thread tap can be used.

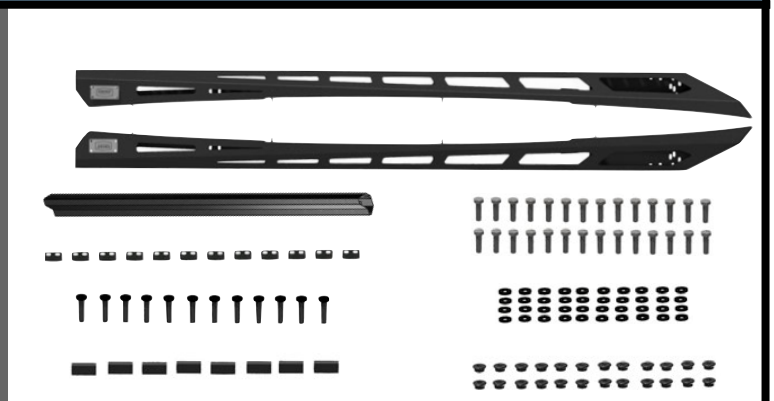


FASTENER THREADS:
- We recommend applying Anti-Seize onto the threads of all fasteners that use Wedge-Lock Washers. This will help prevent corrosion.

2

Prepare ALL PARTS & COMPONENETS

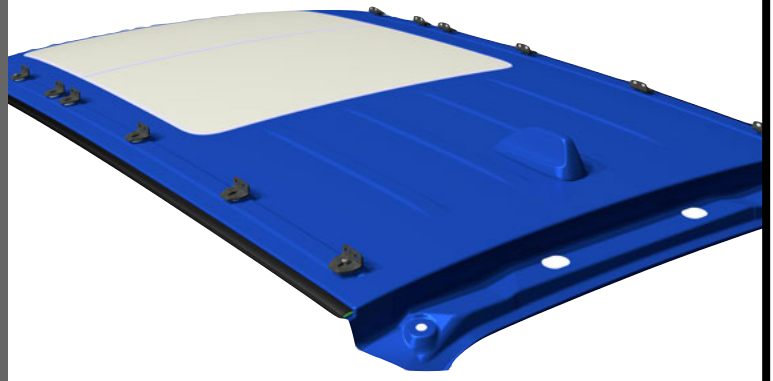
1. Layout all parts and components to ensure that they are all present and correct.
2. Ensure that you have identified both the LHS & RHS side rails. This is Important when ensuring the correct fitment to the roof rack.



3

Install ANGLE BRACKETS.

1. Create (14) Screw & Washer Combos, by adding (1) M6 Wedge-Lock Extended Washer [G1] to (1) M6 x 25mm TORX T30 Button Head Screw [C1].
2. Install (14) Angle Bracket [B1] using Screw & Washer Combo onto the front nutsert on each side (left & right). Repeat on all nutserts.
3. Position Angle Brackets [B1] so the upper flange is located inboard. LEAVE ALL BRACKETS LOOSE.

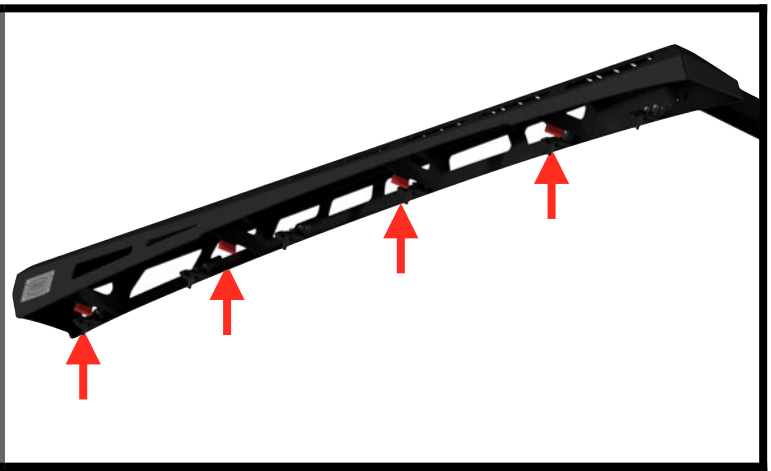


4

Prepare MOUNTING RAILS.

1. Fit (4) EPDM Rubber U-Channel Strips [D1] to the gussets of Mounting Rails [A1] on each side.

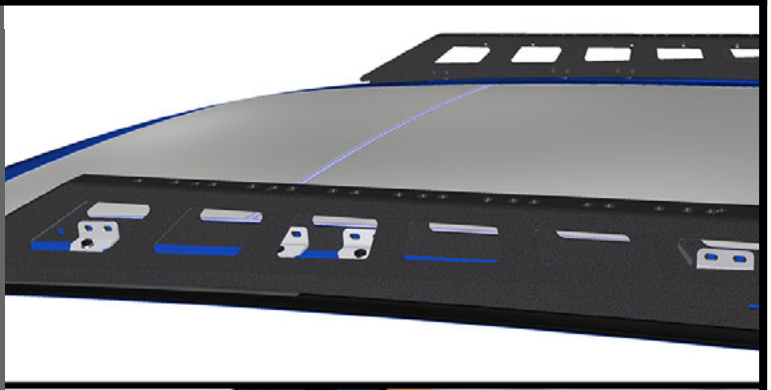
NOTE
See red arrows pointing to highlighted rubber U-channel strips.

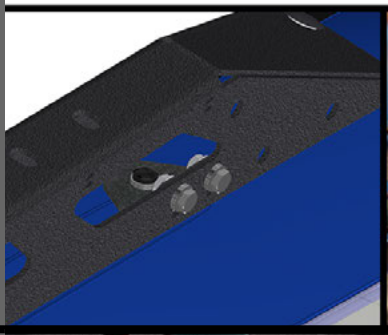


5

Install MOUNTING RAILS.

1. Place Mounting Rails [A1] on vehicle so angled face is forward, and Angle Brackets [B1] (highlighted in grey) are resting against inside face of Mounting Rail [A1].
2. Create (24) Bolt & Washer Combos, using M6 x 20mm Hex Head Bolt [F1] and M6 Wedge-Lock Extended Washer [G1].
3. Insert Bolt & Washer Combo through outside face of Mounting Rails [A1] and Angled Brackets [B1]. Place M6 Wedge-Lock Extended Washer [G1] and Hex Flange Nut [H1] on Bolt and loosely tighten against inside face of Angled Brackets [B1].





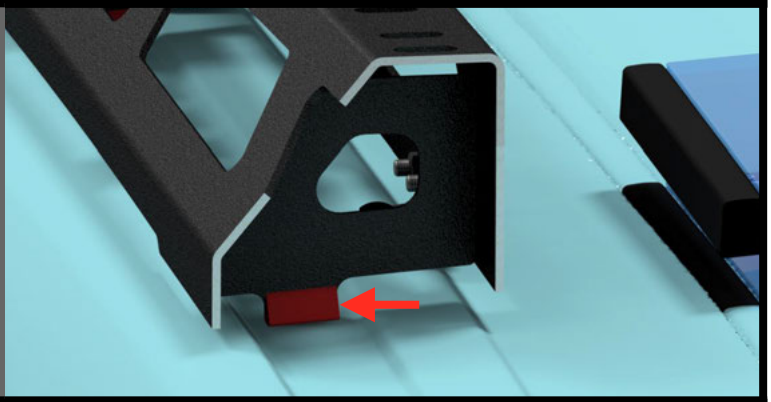


6

Prepare MOUNTING RAILS.

1. When placing the mounting rails on the vehicle make sure that the Rubber U-Channel Strips [D1] are pressing firm against the vehicle roof.

NOTE
Make sure that at least the front and rear feet are touching the roof.



DAD JOKE

I wanted to buy a pair of camouflage pants...
But I couldn't find any!

ATTENTION: SUN ROOF OPTIONS

- If you have the Dual-Pane Panoramic Sunroof option on the WL74 go to step 7
- If you do not have the sunroof go to step 9
- This is important to not interfere with the sunroof function and to avoid damage to the vehicle
- See TIPS & TRICKS for more help with the Stealth Air-Dam positioning (see page 17)

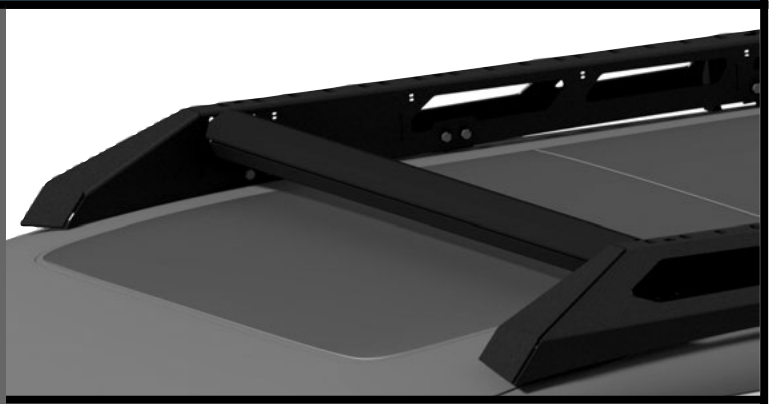
7

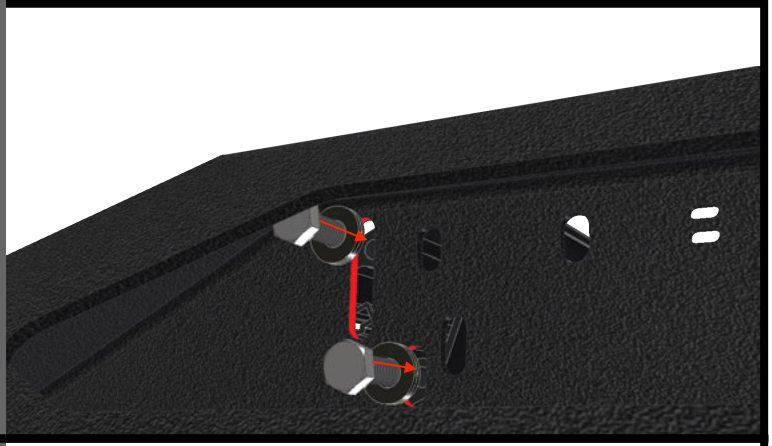
Attach STEALTH AIR DAM WITH SUNROOF

1. Open the Dual-Pane Panoramic Sunroof so that the sunroof glass sits directly below the Stealth Air Dam mounting position. SEE NOTE.
2. Place Stealth Air Dam [E1] in the position shown in the **TOP** image.
3. Assemble the bolt combo's using (4) of M6 x 20mm Hex Head CL70 Bolts [F1] and M6 Wedge-Lock Extended Washers [G1].
4. Attach (2) bolts to each side on the Stealth Air Dam [E1].
5. Tighten all (4) bolts to "Finger Tight"

NOTE

- You must install the Stealth Air-Dam with the Dual-Pane Panoramic Sunroof **open**, with the sunroof glass positioned directly below the Stealth Air-Dam position.
- This is to ensure enough clearance between the Stealth Air-Dam and Dual-Pane Panoramic Sunroof.
- To avoid any accidental damage during assembly, place a towel where you are working on the roof/sunroof.





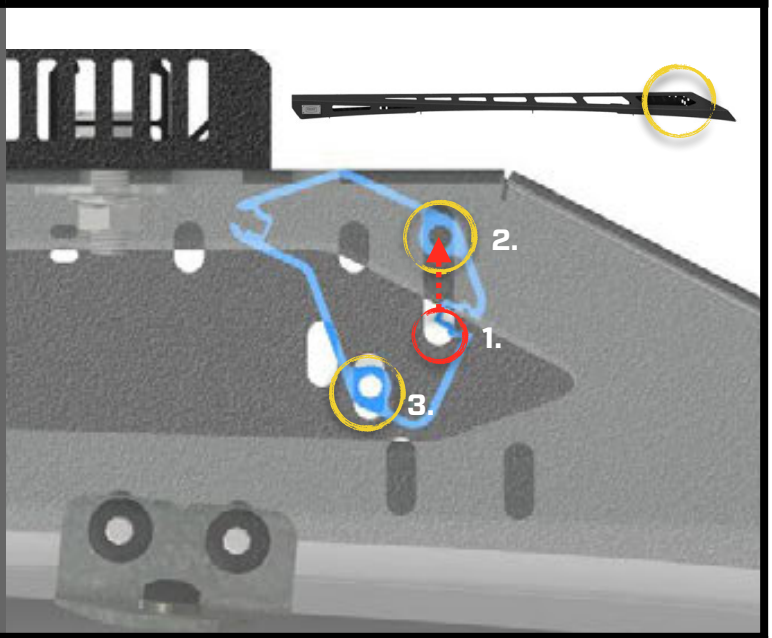
8

STEALTH AIR DAM WITH SUNROOF Positioning

1. To assist with the installation of the Air-Dam, the 1st screw can be attached at the bottom of the slot (highlighted red) [1.] and slid upwards to the yellow position [2.], then attach the second bolt [3.].
2. Double check the orientation you have of the air-dam. Do this with the sunroof open in its high position to be sure you have a small amount of clearance to the sunroof.
3. Make sure that the hardware are in the positions highlighted in yellow.

NOTE

- The correct positioning of the Stealth Air-Dam is crucial to eliminating any wind noise coming from the Rails.

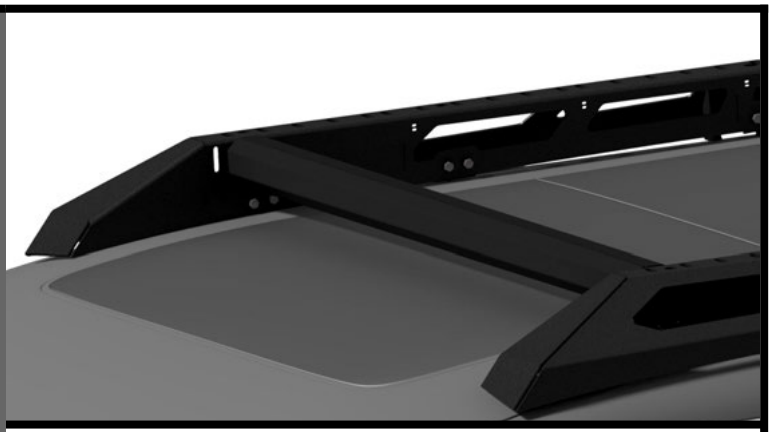


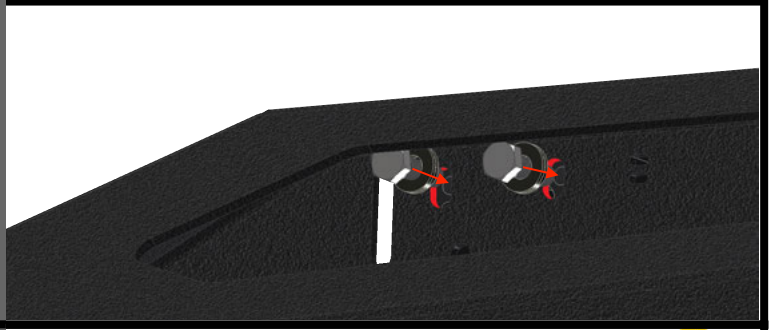
CONTINUE TO STEP 11

9

Attach Stealth AIR DAM WITHOUT SUNROOF

1. Place one Stealth Air Dam [E1] in the position shown in the **TOP** image.
2. Assemble the bolt combo's using (4) of M6 x 20mm Hex Head CL70 Bolts [F1] and M6 Wedge-Lock Extended Washers [G1].
3. Attach (2) bolts to each side on the Stealth Air Dam [E1].
4. Tighten all (4) bolts to "Finger Tight"



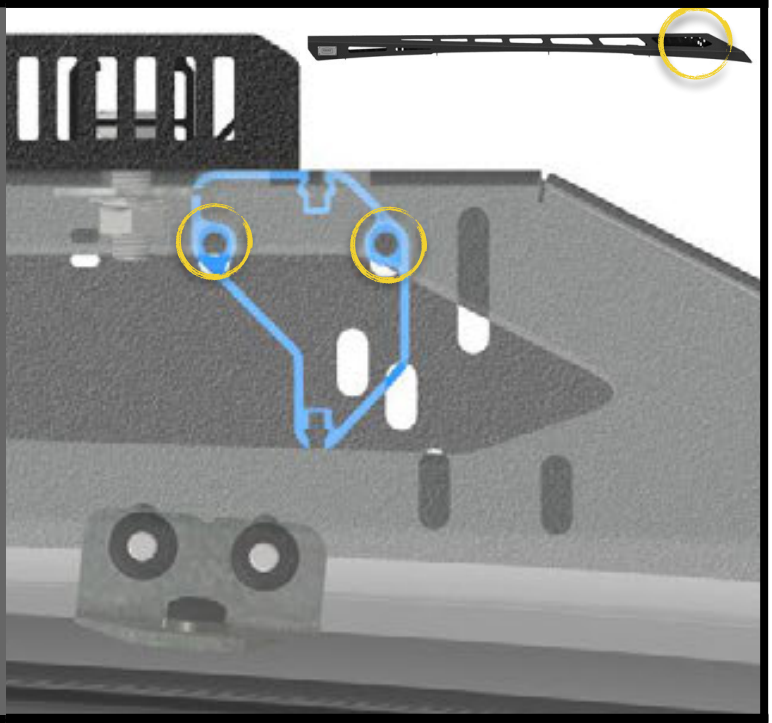


10

Attach Stealth AIR DAM WITHOUT SUNROOF

1. Double check the orientation you have of the air-dam.
2. Make sure that the hardware are in the positions highlighted in yellow.

NOTE
- The correct positioning of the Stealth Air-Dam is crucial to eliminating any wind noise coming from the Rails.



11

Position planks

1. Place (1) Plank [A2] towards the front of the mounting rails. SEE NOTE.
2. Place (1) Plank [A2] towards the rear of the mounting rails. SEE NOTE.

NOTE
Avoid placing planks directly above the 6 mounting points on each side to allow Torx tool access. This is a temporary assembly to aid in installation.

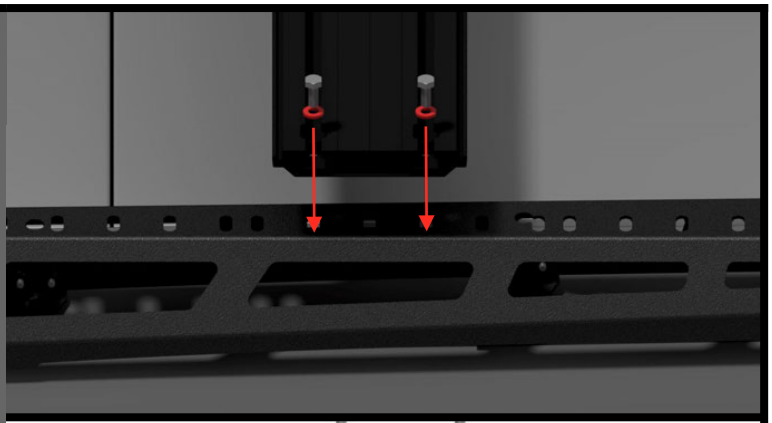


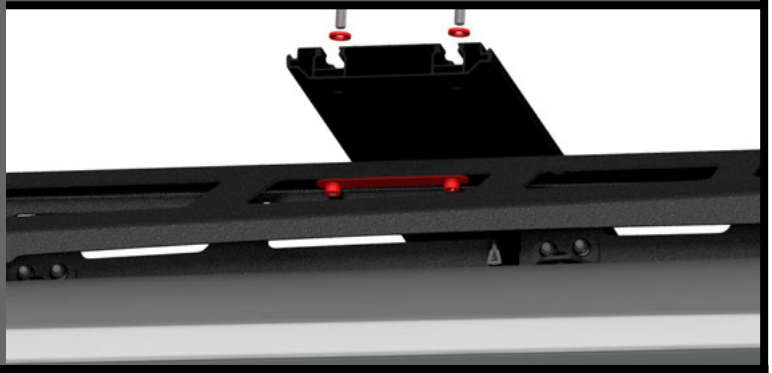
12

Attach 2 PLANKS

1. Create (4) Bolt & Washer Combos, by adding (1) M8 Wedge-Lock Extended Washer [C2] to (1) M8 x 20mm Hex Head Bolt [B2].
2. Using (2) Bolt & Washer Combos and (1) M8 Fastening Plate [E2] secure the end of each Plank [A2]. Place M8 Fastening Plate [A2] on underside of top face of Mounting Rail [A1] (bottom photo - M8 Fastening Plate in red). SEE NOTE.
3. Do this for the end of each Plank [A2].

NOTE
Avoid placing planks directly above the 6 mounting points on each side to allow Torx tool access. This is a temporary assembly to aid in installation.



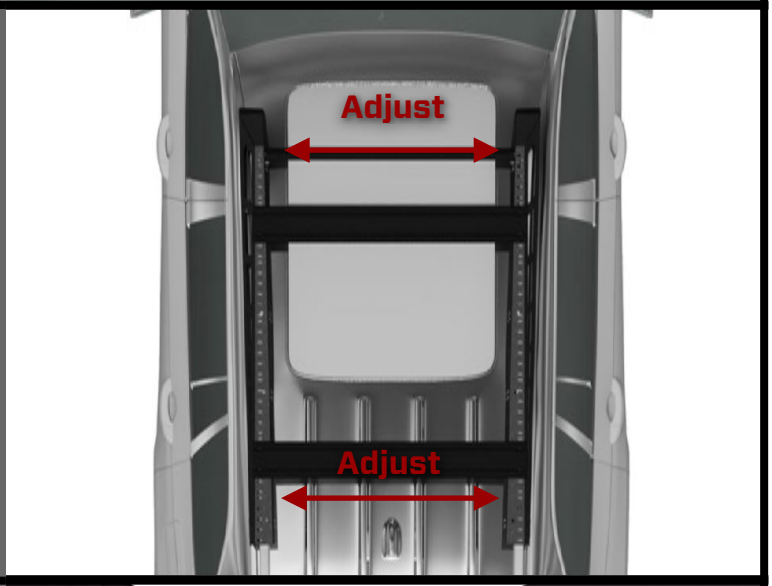


13

Align MOUNTING RAILS.

1. Ensure the Planks [A2] and Mounting Rails [A1] assembly are centred on the roof of the vehicle.
2. Tighten (2) M8 Bolts at each end of the Planks [A2].

NOTE
- Recommended M8 Bolt Torque = 23Nm (Dry) or 18Nm (Anti-Seize).
- Before tightening all fasteners, put some weight on the roof rack to ensure that the Rubber U-Channel feet are firmly pressed against the roof of the vehicle. Then tighten all attachment points. This will avoid any possible vibrations caused from improper assembly.

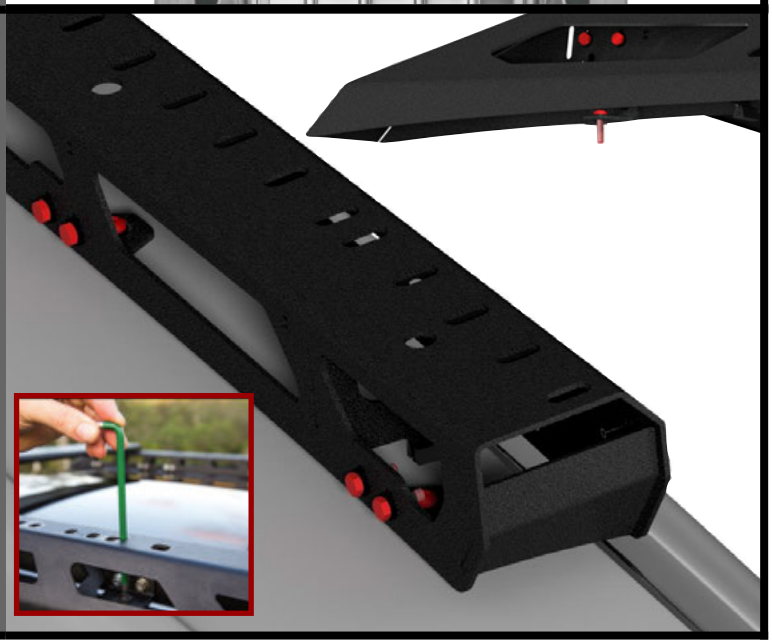


14

Finalize ALL ATTATCHMENTS

1. Tighten (12) M6 TORX [C1]Roof Bolts. A long shaft (100mm+) T30 Torx will be required to tighten Roof Bolts, (inset photo).
2. Tighten (24) M6 Hex Bolts [F1].
3. Tighten Stealth Air Dam fasteners on the mounting rails and then tighten the Mounting Rail fasteners.

NOTE
Recommended M6 Bolt Torque = 14Nm (Dry) or 11Nm (Anti-Seize). Be sure to follow tightening sequence, otherwise joints may not sit flush. If it is difficult to tighten M6 Roof Bolts, read NOTE from STEP 1.

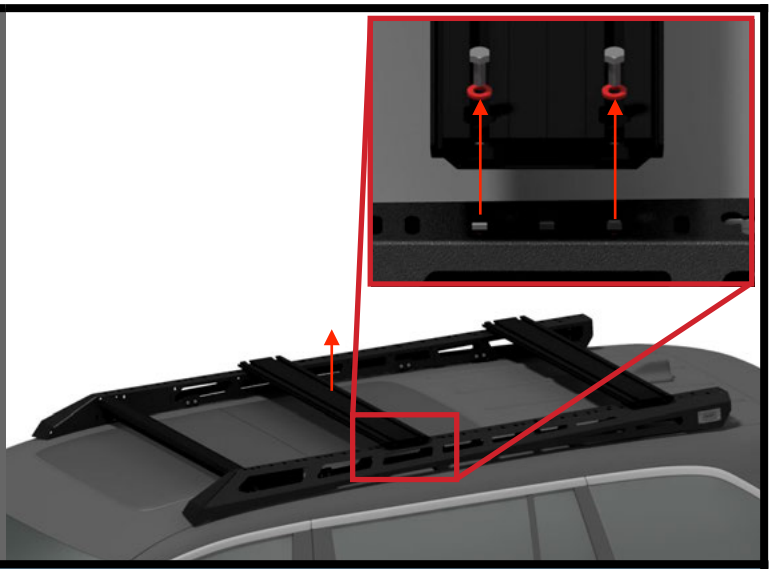


15

Remove attached PLANKS

1. Remove the Bolt [B2] and washer [C2] combo's from each end of the attached planks [A2] (Keep these to one side, you will need them later).
2. Remove both planks [A2] from the mounting rails [A1]

NOTE
Keeping the bolt combo's with the planks will make it easier when properly installing the planks.



IF YOU'RE INSTALLING:

- APEX EDITION *(Go To Step 16).*
- SAFARI, OVERLAND, ROOF TOP TENT OR BARE BONES EDITION *(Go To Step 20).*

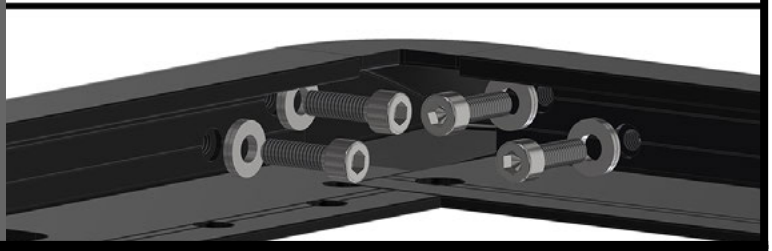
16

Prepare PLATFORM FRAME.

1. Place (2) Frame Rail (Front + Rear) [B4], (2) Frame Rail (Left + Right) [A4] and (4) Frame Corner [C4] in position (top photo).
2. Install (1) Frame Corner [C4] into each end of each Frame Rail (Front + Rear) [B4].
3. Create (16) Screw & Washer Combo's, by adding (1) M6 Wedge-Lock Extended Washer [E4] to (1) M6 x 20mm H5 Socket Cap Head Screw [D4].
4. Insert (2) Bolt & Washer Combo through inner face of the Frame Rail (Front + Rear) [B4] and tighten into Frame Corner [C4]. Do this for each Frame Corner [C4].

NOTE
Place parts on blanket to avoid scratches during installation.
Recommended M6 Bolt Torque = 18Nm (Dry) or 11Nm (Anti-Seize).





17

Prepare PLATFORM FRAME.

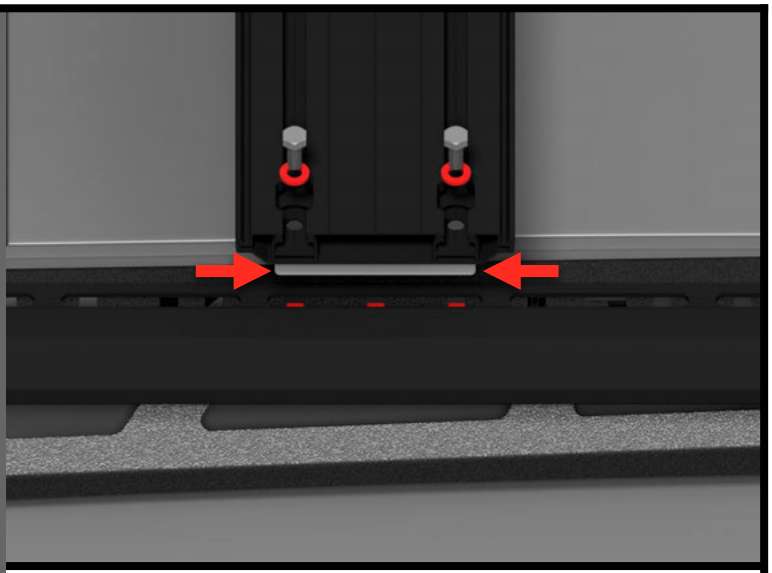
1. Place Platform Frame on Mounting Rails [A1]. Align rear edge of the Platform Frame 15mm from the rear edge of Mounting Rails [A1], (red arrow bottom photo).

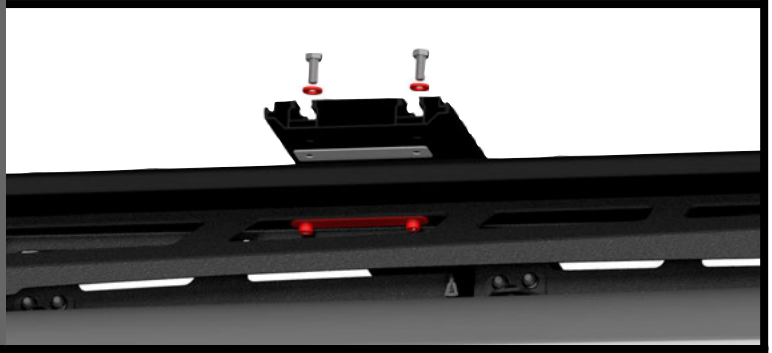


18

Install PLANKS

1. Create (4) Bolt & Washer Combos, by adding (1) M8 Wedge-Lock Extended Washer [**C2**] to (1) M8 x 20mm Hex Head Bolt [**B2**].
2. Using (2) Bolt & Washer Combos and (1) M8 Fastening Plate [**E2**] secure the end of each Plank [**A2**]. Place M8 Fastening Plate [**E2**] on underside of top face of Mounting Rail [**A1**] (bottom photo - M8 Fastening Plate in red). Insert each Bolt & Washer Combo through Plank [**A2**], through (1) Rubber Isolator Strip [**D2**] (red arrows), through Platform Frame, through Mounting Rail [**A1**] and into M8 Fastening Plate [**E2**] (top photo). Loosely assemble.
3. Do this for the end of each Plank [**A2**].





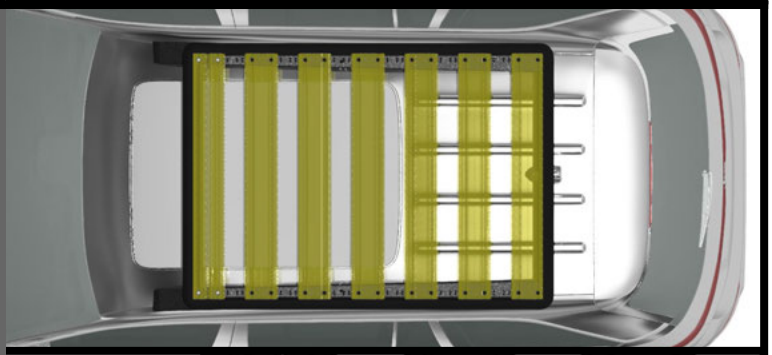
NOTE
Ensure the front lip of your Plank tucks into the Platform Frame. You may need to angle the Plank slightly so the front lip of the Plank slips under the top face of the Frame.

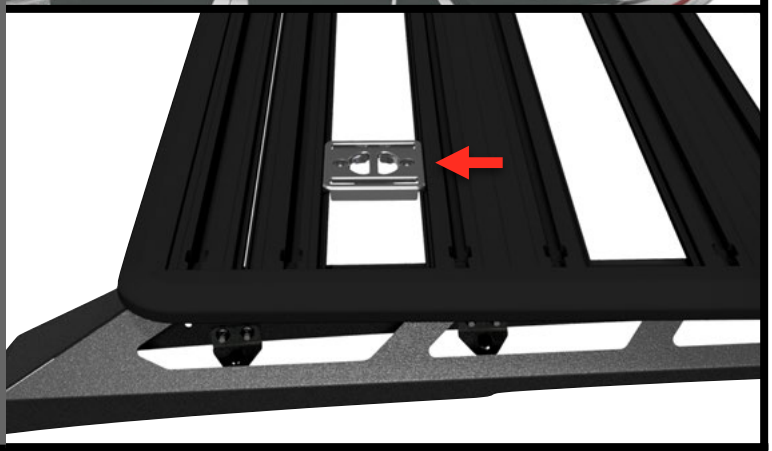
19

Install PLANKS.

* *You can now install your Planks in whatever configuration best meets your needs.*

1. Repeat 15.1 and 15.2 for each Plank [**A2**].
2. Tighten all fasteners.





TIP
If you have Tie-Down Plates, use the Tie-Down plates to get perfect spacing between Planks to ensure Tie-Down plates can move freely when adjusting their position.

TIP
See tips and tricks (page 17) for the best positioning planks.

NOTE
Recommended M8 Bolt Torque = 23Nm (Dry) or 18Nm (Anti-Seize). If you're installing Tie-Down Plates, you can use a Tie-Down (Top) to ensure perfect spacing between each Plank (BOTTOM PHOTO).

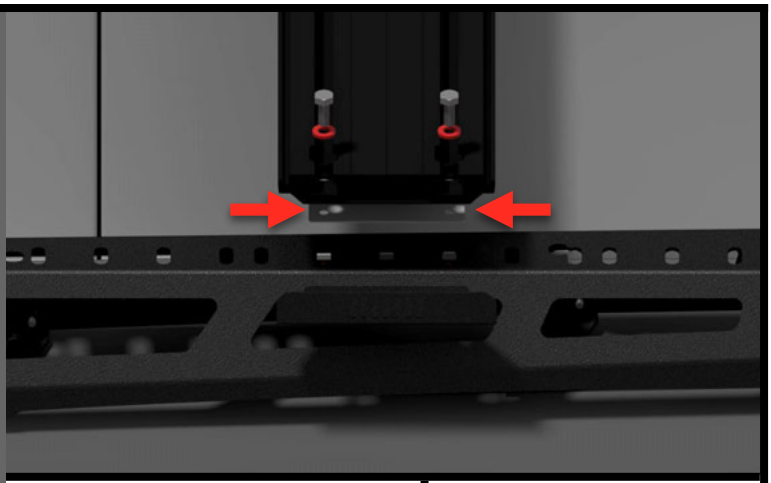
ROOF RACK (Apex) is now fully installed

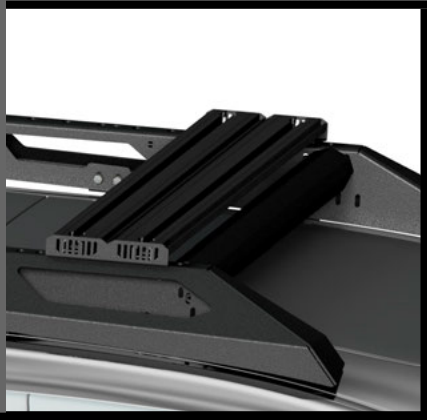
20

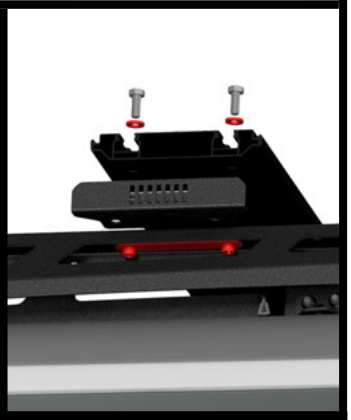
Install PLANKS.

1. Create (4) Bolt & Washer Combos, by adding (1) M8 Wedge-Lock Extended Washer [**C2**] to (1) M8 x 20mm Hex Head Bolt [**B2**].
2. Using (2) Bolt & Washer Combos and (1) M8 Fastening Plate [**E2**] secure the end of each Plank [**A2**]. Place M8 Fastening Plate [**E2**] on underside of top face of Mounting Rail [**A1**] (bottom photo - M8 Fastening Plate in red). Insert each Bolt & Washer Combo through Plank [**A2**], through (1) Rubber Isolator Strip [**D2**] (red arrows), through End Cap [**A5**], through Mounting Rail [**A1**] and into M8 Fastening Plate [**E2**] (top photo). Loosely tighten.
3. Do this for the end of each Plank [**A2**]
4. The most ideal front plank position for minimising wind noise is directly behind the Air Dam (see image bottom left).

NOTE
If you are installing Half Planks, make sure to check page 10 for installation and tips.





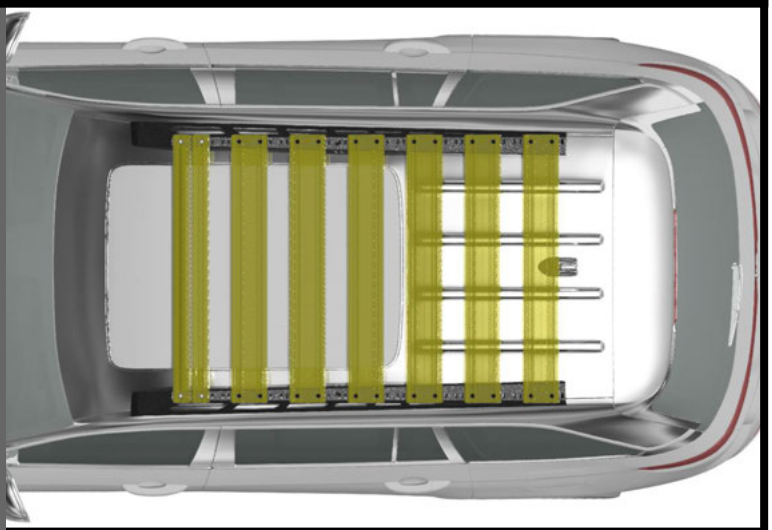


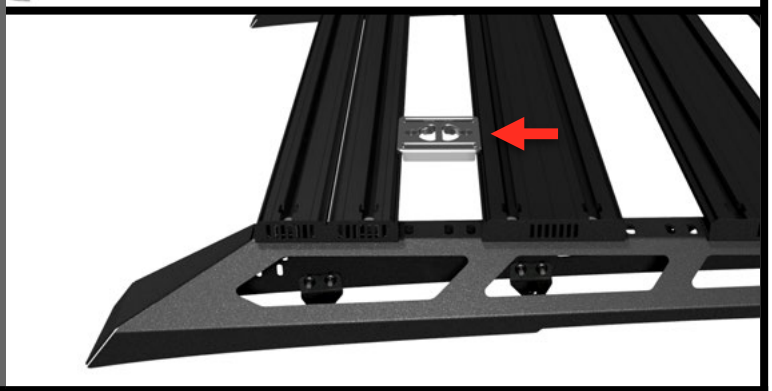
21

Install PLANKS.

* *You can now install your Planks in whatever configuration best meets your needs.*

1. Repeat 17.1 and 17.2 for each Plank [**A2**].
2. Tighten all fasteners.





TIP
If you have Tie-Down Plates, use the Tie-Down plates to get perfect spacing between Planks to ensure Tie-Down plates can move freely when adjusting their position.

TIP
See tips and tricks (page 17) for the best positioning planks.

NOTE
Recommended M8 Bolt Torque = 23Nm (Dry) or 18Nm (Anti-Seize).
If you're installing Tie-Down Plates, you can use a Tie-Down (Top) to ensure perfect spacing between each Plank (BOTTOM PHOTO).

WL74 ROOF RACK is now fully installed

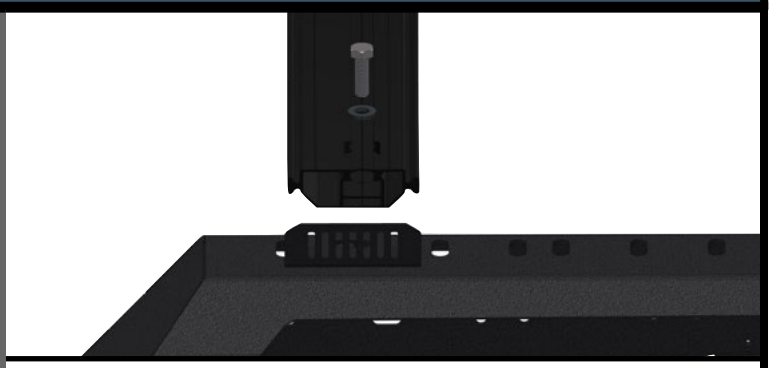
HALF-PLANKS

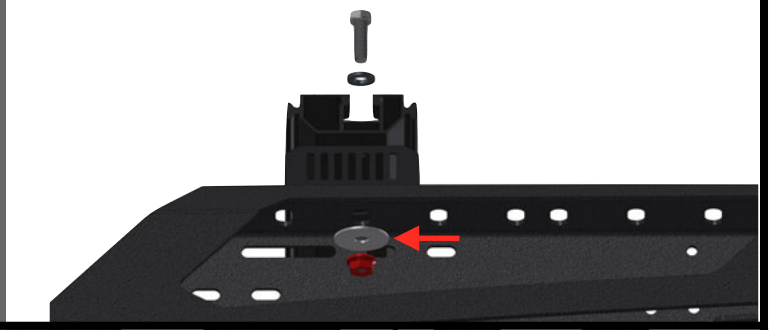
[START]

1

Install HALF-PLANKS

1. Create (2) Bolt & Washer Combos, by adding (1) M8 Wedge-Lock Extended Washer [**C3**] to (1) M8 x 25mm Hex Head Bolt [**B3**].
2. Using (1) Bolt & Washer Combos and (1) M8 Flange Nut (highlighted red)[**E3**] secure the end of each Plank [**A3**]. Place M8 Flange Nut [**E3**] beneath the M8 x 32mm Washer [**D3**] on the underside of top face of Mounting Rail [**A1**] (bottom photo). Insert each Bolt & Washer Combo through Plank [**A3**], through End Cap [**A6**], through Mounting Rail [**A1**], through M8 x 32mm Washer [**D3**] (red arrow) and into M8 Flange Nut [**E3**]. Loosely tighten.
3. Do this for the end of each Plank [**A3**].

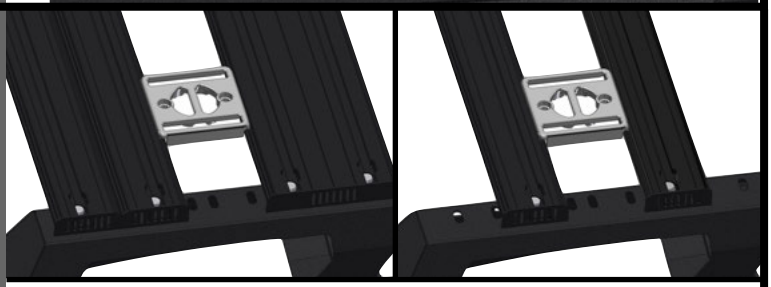


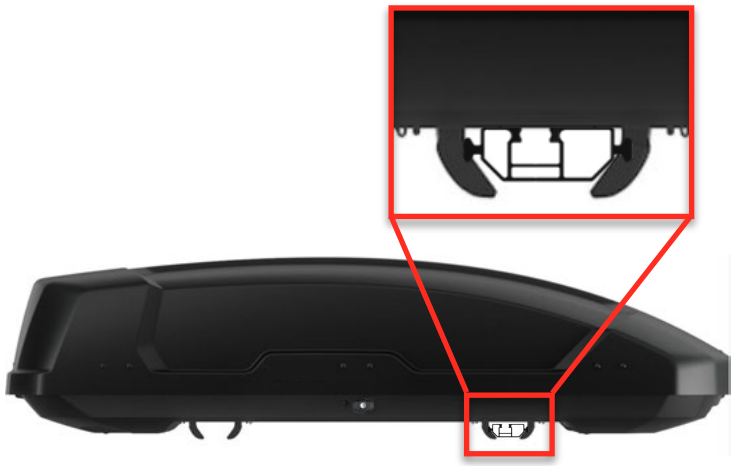


2

Half Plank uses

1. Half Planks can be assembled together to function the same as Full Planks or seperate to use with accessories that clamp around more standard roof bars.
2. Compatible with all other Chief Products attachment accessories.





HALF-PLANKS

[END]

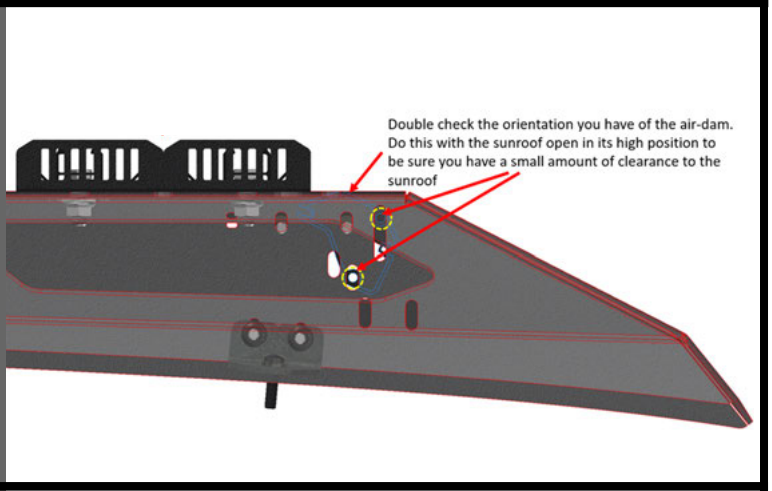
TIPS & TRICKS

[START]

1

WIND NOISE / VIBRATION (BEST PLANK POSITIONING)

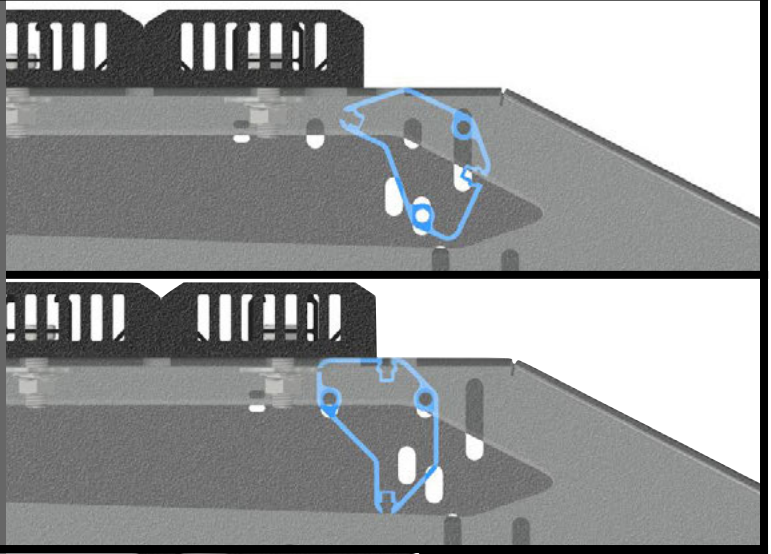
1. Make sure that the stealth air-dam is positioned in the correct position. The air-dam will be turned around the other way if your vehicle has a sunroof.
2. For the quietest driving experience when the rack is unloaded, position one plank at the most forward position.
3. Adjusting plank forward or rearward can give different results regarding wind noise



1

DIFFERENCES - SUNROOF VS NO SUNROOF

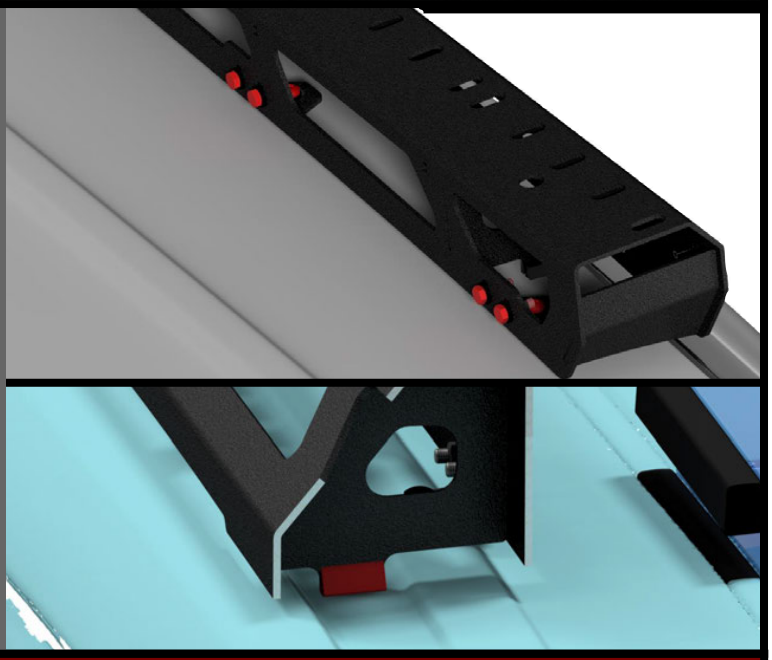
1. Top image is the orientation of how the Stealth Air-Dam needs to be with the sunroof.
2. The bottom image is the orientation of how the Stealth Air-Dam needs to be without a sunroof.
3. Make sure that the different orientations are observed and make sure that the correct position is used for your situation!



1

NOW IF YOU DO THE ABOVE AND YOU STILL HAVE A VIBRATION IT IS LIKELY YOU NEED TO GET THE RACK SEATED FIRMER ONTO THE ROOF.

1. One way you can do this is by using a roof box set in the centre of the roof rack. Then loading it with approximately 45-70kg (100-150 pounds).
2. Now loosen all of the m6 hex bolts that connect the angle brackets to the Mounting rails (not the torx screws that go into the roof).
3. The above steps will allow the rack to rest firmly on the roof and remove any gaps that may allow vibration.
4. Now re-torque the m6 hex bolts as specified.



TIPS & TRICKS

[END]

TROUBLESHOOTING

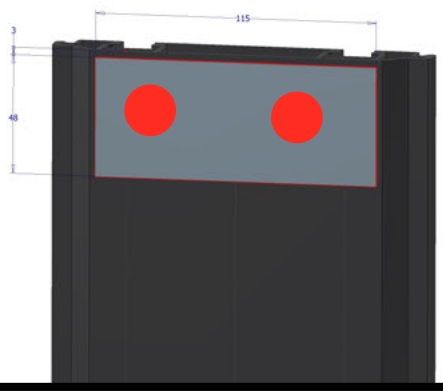
[START]

1 TROUBLESHOOTING

NOISE —> VIBRATIONS (HUMMING SOUND 50-80kph)

1. Check that all Rubber Isolator Strip [**D2**] have been installed properly. They should be positioned between Plank [**A2**] and Platform Frame or End Cap [**A5**].
2. If vibration persists; loosen (without removing) all fasteners retaining Planks [**A2**] and Mounting Rails [**A1**]. Tighten fasteners securing Mounting Rails [**A1**], then tighten fasteners securing Planks [**A2**].

NOTE
Mounting items on your rack will eliminate Plank vibrations.



1 TROUBLESHOOTING

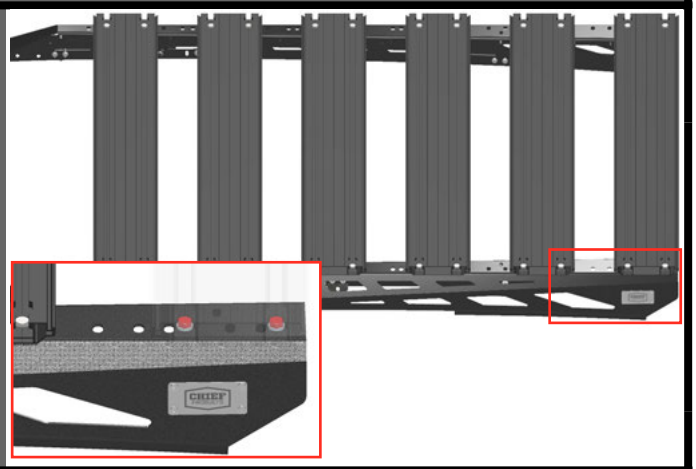
NOISE —> WIND (WHISTLING)

1. Check that all End-Caps [**A5** & **A6**] have been installed properly (Step 15). Open ended Planks can cause whistling noise.

1 TROUBLESHOOTING

SAFARI EDITION NOISE

1. Mounting the planks in the furthest back position while keeping standard plank spacing is the quietest setup for Safari edition users that encounter whistling.



TROUBLESHOOTING

[END]

MAINTENANCE

FASTENERS
- Check fastener tightness regularly and tighten if required. We recommend checking fasteners after every large off-road trip.

CORROSION PROTECTION
- After an off-road trip; rinse all mud, sand or debris off the product.
- After driving in salt water; rinse product thoroughly with fresh water.

EXTRA CARE
- If you're planning to drive in a salty environment; spray fasteners with WD40 or an equivalent.
- If you're planning to drive in a salty environment; spray product with Lanolin or an equivalent.
- Spray deep scratches (before they rust) with touch up paint to help inhibit corrosion.

SUPPORT

Find answers online.
www.chiefproducts.com.au/pages/support

Having troubles? Make sure you've downloaded the most recent version of these instructions from our website. We occasionally make updates.
www.chiefproducts.com.au/installation/wl74-roof-rack.pdf

If you need additional help, send us an email.
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SHARE

Looking to share epic photos of your JEEP?
Send us your photos - Unboxing, Fully Installed, Painted-In-Mud or out Adventuring in some beautiful location. If you share with us, we'll share with our followers.

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