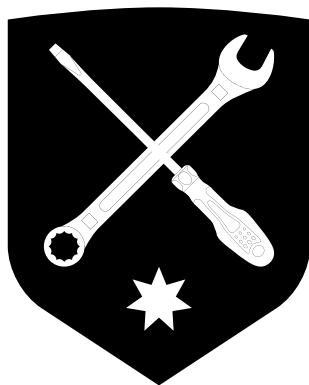


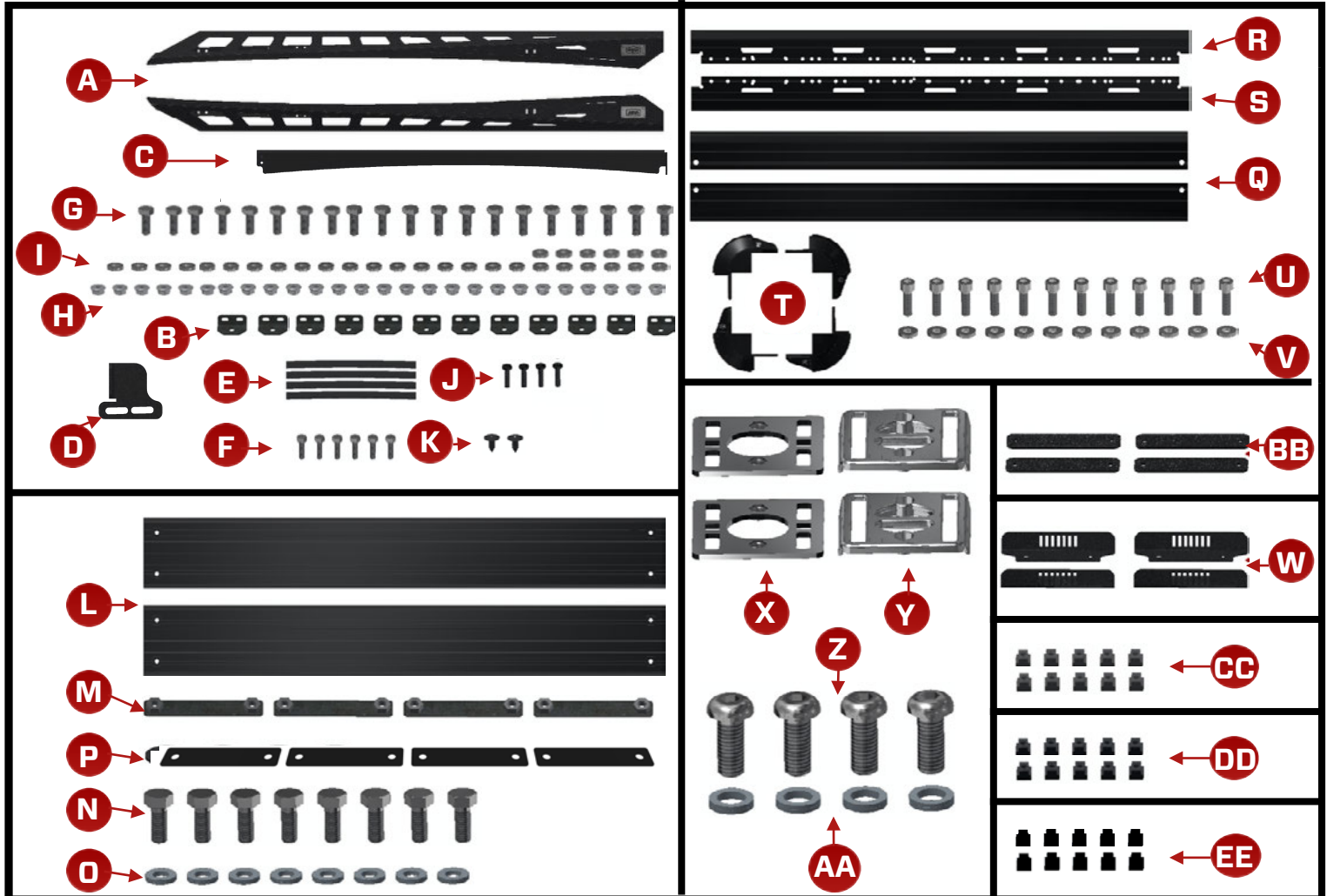


# **WK2 ROOF RACK**

## INSTALL INSTRUCTIONS

**REVISION I**  
7 APRIL 2021





REF	QTY	DESCRIPTION	REF	QTY	DESCRIPTION
		MOUNTING RAILS			
<b>A</b>	2	Mounting Rail (Left + Right)	<b>S</b>	1	Frame Rail (Right)
<b>B</b>	12	Mounting Rail - Angle Bracket	<b>T</b>	4	Frame Corner
<b>C</b>	1	Hidden Air Dam	<b>U</b>	16	M6 x 20mm H5 Socket Cap Head 12.9 Screw (Zinc)
<b>D</b>	1	Bracket, Hidden Air Dam	<b>V</b>	16	M6 Wedge-Lock Extended Washer
<b>E</b>	4	EPDM Rubber U-Channel Strip			4x PLANK END-CAP KIT — SLOTTED
<b>F</b>	6	M6 x 20mm Hex Head 8.8 Bolt (Black)	<b>W</b>	4	Plank End-Cap (Slotted)
<b>G</b>	20	M6 x 16mm Hex Head 8.8 Bolt (Zinc)			2x TIE-DOWN PLATE KIT
<b>H</b>	26	M6 CL8 Hex Flange Nut (Zinc)	<b>X</b>	2	Tie-Down (Bottom Plate)
<b>I</b>	30	M6 Wedge-Lock Extended Washer	<b>Y</b>	2	Tie-Down (Top)
<b>J</b>	4	M6 x 25mm TORX T30 Button Head 8.8 Screw (Black Oxide)	<b>Z</b>	4	M8 x 20mm H5 Socket Button Head Screw (SS316)
<b>K</b>	2	M8 x 20mm Plastic X-Mas Tree Plug (20mm Head)	<b>AA</b>	4	M8 Wedge-Lock Extended Washer
-	1	4g Anti-Seize Pouch			ROOF TOP TENT KIT
-	1	Chief Products Shop Rag	<b>BB</b>	4	Roof Top Tent Bracket
		2x PLANK KIT — 1146mm			T-NUT KIT
<b>L</b>	2	Plank	<b>CC</b>	10	M6 T-Nut 10.9 (Black Oxide)
<b>M</b>	4	M8 Fastening Plate	<b>DD</b>	10	M8 T-Nut 10.9 (Black Oxide)
<b>N</b>	8	M8 x 20mm Hex Head 8.8 Bolt (Zinc)	<b>EE</b>	10	M10 T-Nut 10.9 (Black Oxide)
<b>O</b>	8	M8 Wedge-Lock Extended Washer			
<b>P</b>	4	Rubber Isolater Strip			
		PLATFORM FRAME KIT			
<b>Q</b>	2	Frame Rail (Front + Rear)			
<b>R</b>	1	Frame Rail (Left)			

**REQUIRED TOOLS**

13mm Socket	Torque Wrench
10mm Socket	Tape Measure
Ratchet & Extension	
10mm Wrench	
T30 Torx (long shaft; 100mm+)	
H5 Hex Key	

**NOTES**

- DO NOT OVER-TIGHTEN FASTENERS.
- LEFT & RIGHT SIDES ARE DEFINED FROM THE DRIVERS POSITION.
- 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.

## IMPORTANT

- PROPER INSTALLATION IS ESSENTIAL TO THE PERFORMANCE OF THIS PRODUCT.
- ONLY INSTALL THIS PRODUCT ON A 2011-2021 JEEP GRAND CHEROKEE.
- ONLY USE THE PROVIDED HARDWARE FOR INSTALLATION.
- DO NOT MODIFY THE STRUCTURE OF THIS PRODUCT IN ANY WAY.
- CHECK PRODUCT REGULARLY FOR DAMAGE. REPLACE IMMEDIATELY AT FIRST SIGN OF DAMAGE.
- CHECK FASTENER TIGHTNESS REGULARLY AND TIGHTEN IF REQUIRED.
- WK2 ROOF RACK DELIVERS INDEPENDENTLY TESTED LOAD RATINGS OF 150KG (Dynamic) & 600KG (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 our 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.

**1**

### Remove OEM ROOF RAILS.

1. Remove (8) T30 TORX Screws (inside OEM roof rail channels). Retain for Angle Bracket installation (Step 2). Discard any non-captive washers.
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.



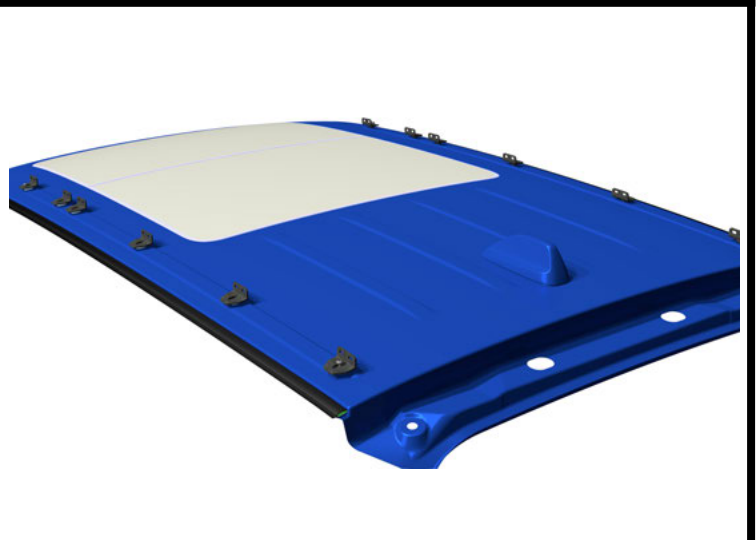
#### FASTENER THREADS:

- We recommend applying Anti-Seize onto the threads of all fasteners that use Wedge-Lock Washers. This will help prevent corrosion.
- For the (8) OEM T30 TORX Screws (without Wedge-Lock Washers) we recommend Mid-Strength Loctite (or similar) instead of Anti-Seize.

**2**

### Install ANGLE BRACKETS.

1. Create (4) Screw & Washer Combos, by adding (1) M6 Wedge-Lock Extended Washer [I] to (1) M6 x 25mm TORX T30 Button Head Screw [J].
2. Install (1) Angle Bracket [B] using Screw & Washer Combo onto front nutsert on each side (left & right). Repeat on rear nutserts.
3. Install (8) Angle Brackets [B] using (8) OEM T30 TORX Screws (from Step 1) into the next (4) nutserts (on each side).
4. Position Angle Brackets [B] so the upper flange is located inboard. LEAVE ALL BRACKETS LOOSE.



**3**

### Prepare MOUNTING RAILS.

1. Insert (2) M8 x 20mm Plastic X-Mas Tree Plug [K] into M6 nutserts on front face of Mounting Rails [A].



## 4

### Prepare MOUNTING RAILS.

1. Fit (4) EPDM Rubber U-Channel Strips [E] to the lower front & rear outer edges of Mounting Rails [A].
2. Align EPDM Rubber U-Channel Strip [E] ends with front & rear ends of Mounting Rails [A].

#### NOTE

Trimming of the Rubber U-Channel Strip "Ends" to match the Mounting Rail Front & Rear Ends, provides a clean finish to your install.



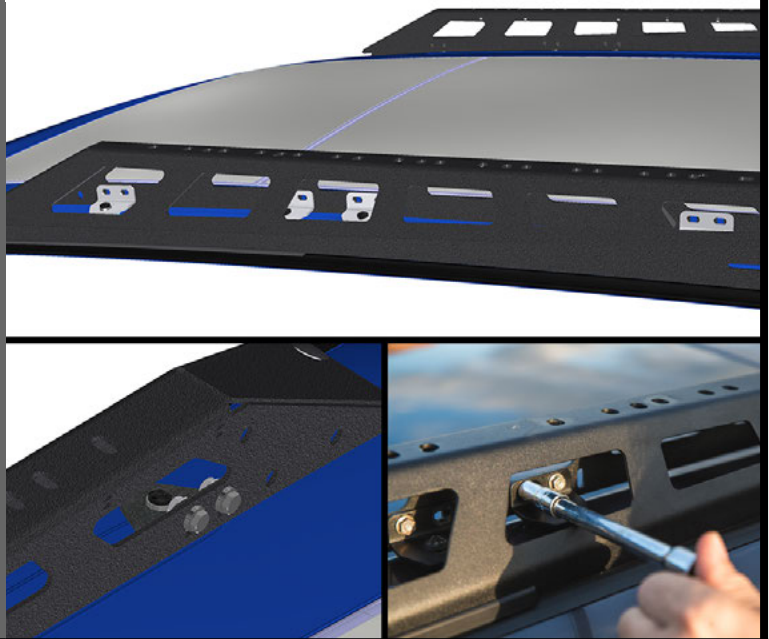
## 5

### Install MOUNTING RAILS.

1. Place Mounting Rails [A] on vehicle so angled face is forward, and Angle Brackets [B] (highlighted in grey) are resting against inside face of Mounting Rail [A].
2. Create (20) Bolt & Washer Combos, using M6 x 16mm Hex Head Bolt [G] and M6 Wedge-Lock Extended Washer [I].
3. Insert Bolt & Washer Combo through outside face of Mounting Rails [A] and Angled Brackets [B]. Place M6 Hex Flange Nut [H] on Bolt and loosely tighten against inside face of Angled Brackets [B].

#### NOTE

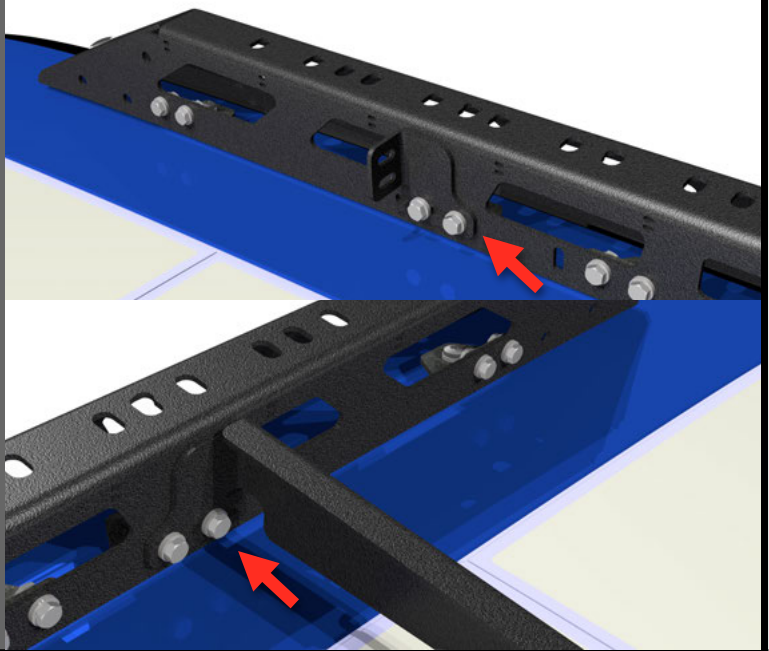
Leave second mounting rail bracket from the front for the Hidden Air Dam (check next step for location).



## 6

### Install HIDDEN AIR DAM.

1. Create (4) Bolt & Washer Combos, using M6 x 20mm Hex Head Bolt [F] and (4) M6 Wedge-Lock Extended Washer [I].
2. Loosely screw Bracket, Hidden Air Dam [D] using (2) M6 x 20mm Hex Head Bolts [F], M6 Wedge-Lock Extended Washer [I], and M6 Hex Flange Nut [H] combo onto Mounting Rails [A] on the drivers side.
3. Fit and loosely screw the Hidden Air Dam [C] to the Mounting Rails [A] on the passenger side using the same combination of fasteners as the previous step.



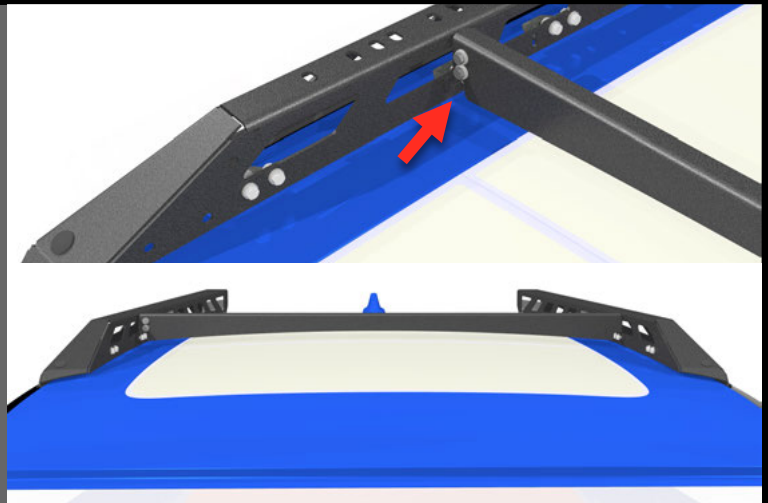
#### DAD JOKE

DAD: *\*loudly\** I HATE YOU AND YOUR ENTIRE FAMILY!!  
 SON: *\*rushing into the room\** Who are you talking to?!  
 DAD: *\*calmly\** A mosquito.

# 7

## Install HIDDEN AIR DAM.

1. Loosely fit Hidden Air Dam [C] to Bracket, Hidden Air Dam [D] using the same fastener combo as the previous step.
2. Locate the Hidden Air Dam [C] to the most forward position and ensure it is parallel to the plank, adjusting the width to suit.



### IF YOU HAVE:

- FULL ROOF RACK SYSTEM (Go To Step 9).
- SAFARI EDITION, OVERLAND EDITION, ROOF TOP TENT EDITION or BARE BONES EDITION (Go To Step 16).
- [MOUNTING RAILS ONLY] (Go To Step 13).

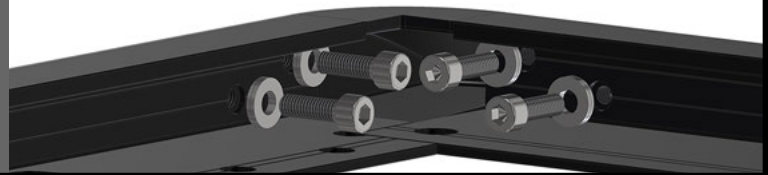
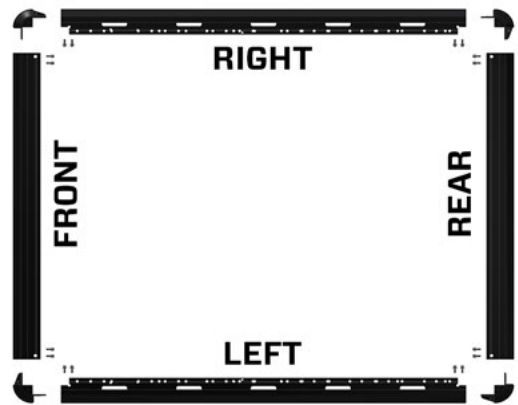
# 9

## Prepare PLATFORM FRAME.

1. Place (2) Frame Rail (Front + Rear) [Q], Frame Rail (Left) [R], Frame Rail (Right) [S] and (4) Frame Corner [T] in position (top photo).
2. Install (1) Frame Corner [T] into each end of each Frame Rail (Front + Rear) [Q].
3. Create (16) Screw & Washer Combos, by adding (1) M6 Wedge-Lock Extended Washer [V] to (1) M6 x 20mm H5 Socket Cap Head Screw [U].
4. Insert (2) Bolt & Washer Combo through inner face of Frame Rail (Front + Rear) [Q] and loosely tighten into Frame Corner [T]. Do this for each Frame Corner [T].

### NOTE

Place parts on blanket to avoid scratches during installation.



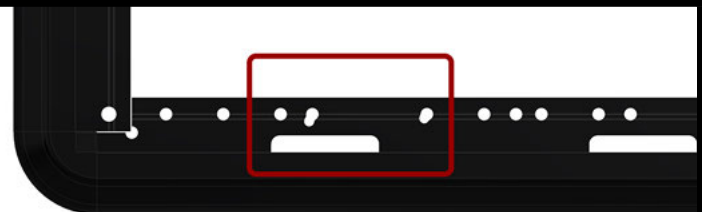
# 10

## Prepare PLATFORM FRAME.

1. Locate FRONT-LEFT corner of Platform Frame, (observe hole pattern shown in top photo).
2. Place Platform Frame on Mounting Rails [A]. Align rear edge of Platform Frame with rear edge of Mounting Rails [A], (red arrow bottom photo).
3. Tighten fasteners for each Frame Corner [T].

### NOTE

Recommended M6 Bolt Torque = 14Nm (Dry) or 11Nm (Anti-Seize).



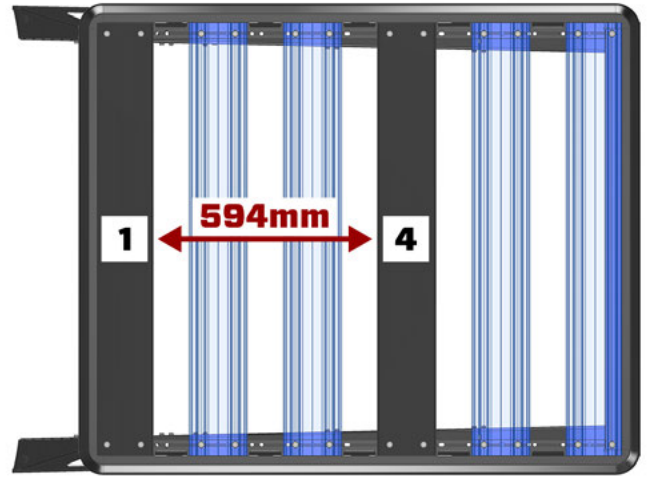
# 11

## Position PLANKS.

1. Place (1) Plank [L] into the front most location in the Platform Frame.
2. Place (1) Plank [L] approximately 594mm (23.39") behind the 1st Plank.

### NOTE

Do not install remaining Planks at this time. This simple (2) Plank configuration provides the best access when tightening the Roof + Mounting Rail fasteners.



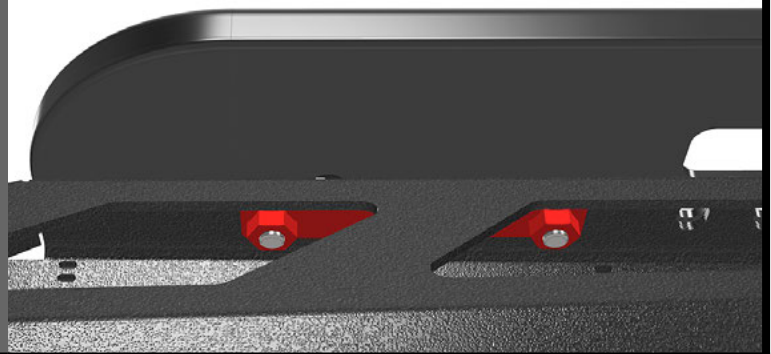
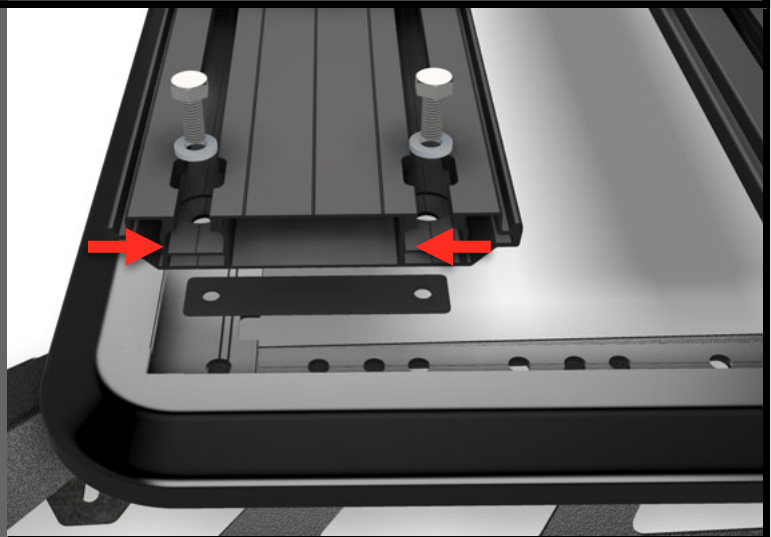
# 12

## Install 2 PLANKS.

1. Create (8) Bolt & Washer Combos, by adding (1) M8 Wedge-Lock Extended Washer [O] to (1) M8 x 20mm Hex Head Bolt [N].
2. Using (2) Bolt & Washer Combos and (1) M8 Fastening Plate [M] secure the end of each Plank [L]. Place M8 Fastening Plate [M] on underside of top face of Mounting Rail [A] (bottom photo - M8 Fastening Plate in red). Insert each Bolt & Washer Combo through Plank [L], through (1) Rubber Isolator Strip [P] (red arrows), through Platform Frame, through Mounting Rail [A] and into M8 Fastening Plate [M] (top photo). Loosely tighten.
3. Do this for the end of each Plank [J].

### 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.



# 13

## Align MOUNTING RAILS.

1. Align as close as practical to the centre of the Channel roof strip for the FRONT and REAR of the Mounting Rails [A].
2. Ensure the Platform Frame, Planks [L] and Mounting Rails [A] are centred on the roof of the vehicle.
3. Tighten (2) M8 Bolts at each end of the Planks [L].

### NOTE

Recommended M8 Bolt Torque = 23Nm (Dry) or 18Nm (Anti-Seize).



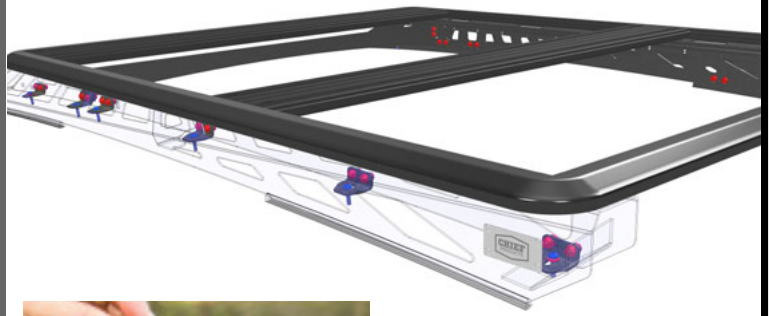
# 14

## Secure MOUNTING RAILS.

1. Tighten (12) M6 Roof Bolts, (blue in photo). A long shaft (100mm+) T30 Torx will be required to tighten Roof Bolts, (inset photo).
2. Tighten (24) M6 Hex Bolts [G], (red in photo).
3. Tighten Hidden Air Dam fasteners on the mounting rails and then tighten the Bracket, Hidden Air Dam 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

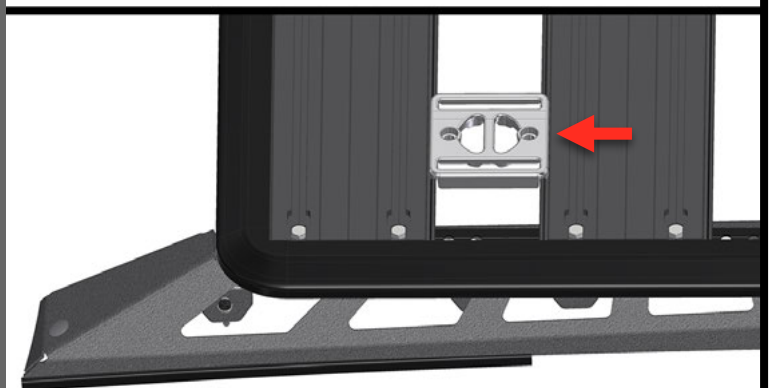
## Install PLANKS.

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

1. Create (4) Bolt & Washer Combos, by adding (1) M8 Wedge-Lock Extended Washer [O] to (1) M8 x 20mm Hex Head Bolt [N].
2. Using (2) Bolt & Washer Combos and (1) M8 Fastening Plate [M] secure the end of each Plank [L]. Place M8 Fastening Plate [M] on underside of top face of Mounting Rail [A]. Insert each Bolt & Washer Combo through Plank [L], through Rubber Isolator Strip [P], through Platform Frame, through Mounting Rail [A] and into M8 Fastening Plate [M] (See Photos from Step 12).
3. Repeat 15.1 and 15.2 for each Plank [L].
4. Tighten all fasteners.

### NOTE

If you're installing Tie-Down Plates, you can use a Tie-Down (Top) [V] to ensure perfect spacing between each Plank (BOTTOM PHOTO).



### IF YOU'RE INSTALLING:

- TIE-DOWN PLATES (Go To Page 10).
- ROOF TOP TENT KIT (Go To Page 11).
- T-NUTS (Go To Page 11).

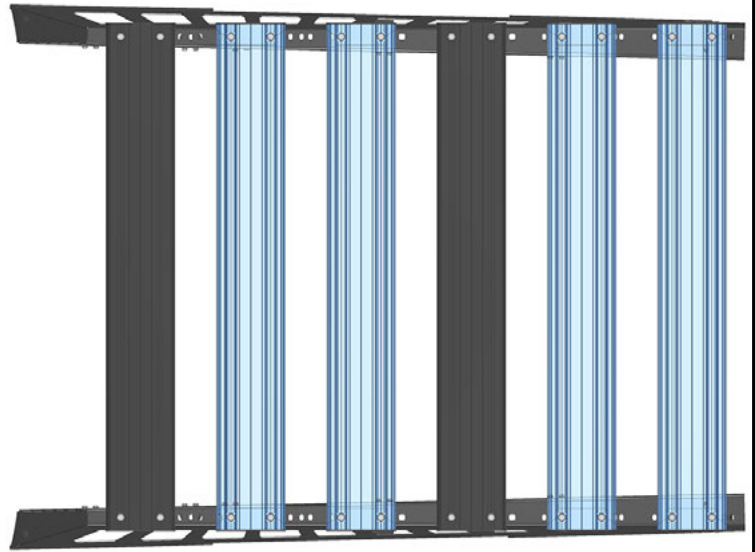
# 16

## Position PLANKS.

1. Place (1) Plank [L] into the location that best suits your needs.
2. Place (1) Plank [L] into the 2nd location that best suits your needs.

### NOTE

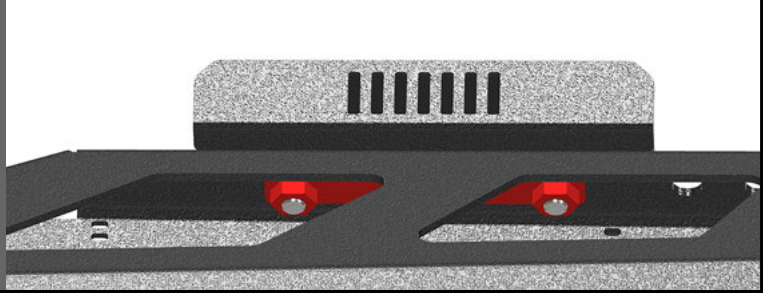
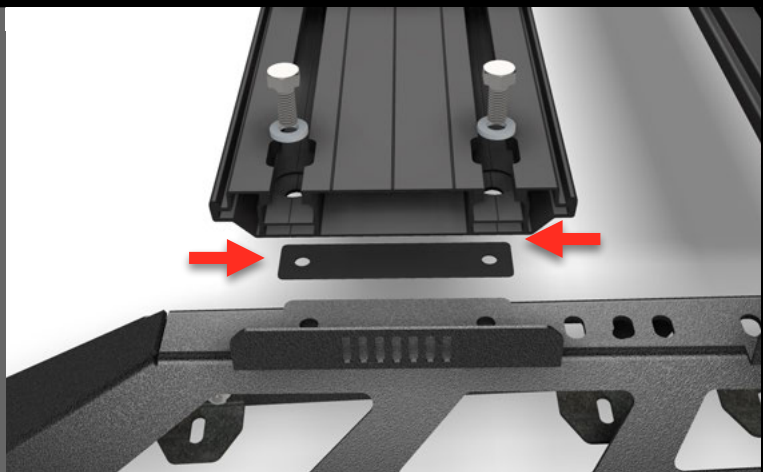
Do not install remaining Planks at this time. This simple (2) Plank configuration provides the best access when tightening the Roof + Mounting Rail fasteners.



# 17

## Install 2 PLANKS.

1. Create (8) Bolt & Washer Combos, by adding (1) M8 Wedge-Lock Extended Washer [O] to (1) M8 x 20mm Hex Head Bolt [N].
2. Using (2) Bolt & Washer Combos and (1) M8 Fastening Plate [M] secure the end of each Plank [L]. Place M8 Fastening Plate [M] on underside of top face of Mounting Rail [A] (bottom photo - M8 Fastening Plate in red). Insert each Bolt & Washer Combo through Plank [J], through (1) Rubber Isolator Strip [P] (red arrows), through End Cap [W], through Mounting Rail [A] and into M8 Fastening Plate [M] (top photo). Loosely tighten.
3. Do this for the end of each Plank [L].



# 18

## Align MOUNTING RAILS.

1. Align as close as practical to the centre of the Channel roof strip for the FRONT and REAR of the Mounting Rails [A].
2. Ensure the Planks [L] and Mounting Rails [A] are centred on the roof of the vehicle.
3. Tighten (2) M8 Bolts at each end of the Planks [L].

### NOTE

Recommended M8 Bolt Torque = 23Nm (Dry) or 18Nm (Anti-Seize).





# 19

## Secure MOUNTING RAILS.

1. Tighten (12) M6 Roof Bolts, (blue in photo). A long shaft (100mm+) T30 Torx will be required to tighten Roof Bolts, (inset photo).
2. Tighten (24) M6 Hex Bolts [G], (red in photo).
3. Tighten Hidden Air Dam fasteners on the mounting rails and then tighten the Bracket, Hidden Air Dam 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.



# 20

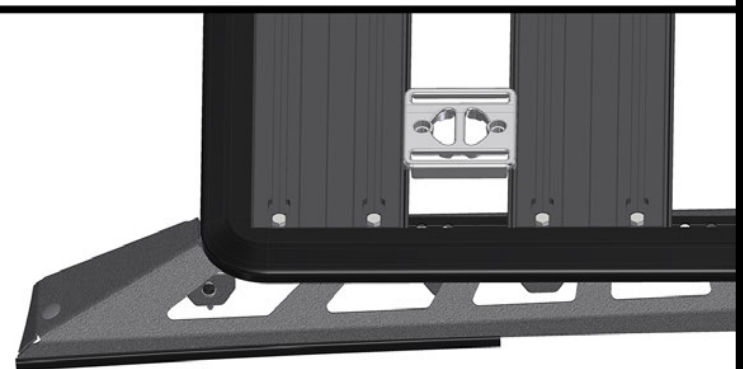
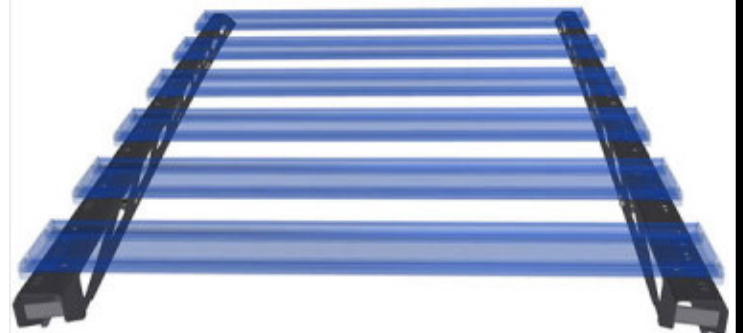
## Install PLANKS.

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

1. Create (4) Bolt & Washer Combos, by adding (1) M8 Wedge-Lock Extended Washer [O] to (1) M8 x 20mm Hex Head Bolt [N].
2. Using (2) Bolt & Washer Combos and (1) M8 Fastening Plate [M] secure the end of each Plank [L]. Place M8 Fastening Plate [M] on underside of top face of Mounting Rail [A]. Insert each Bolt & Washer Combo through Plank [L], through Rubber Isolator Strip [P], through Platform Frame, through Mounting Rail [A] and into M8 Fastening Plate [M] (See Photos from Step 12).
3. Repeat 15.1 and 15.2 for each Plank [L].
4. Tighten all fasteners.

**NOTE**

If you're installing Tie-Down Plates, you can use a Tie-Down (Top) [V] to ensure perfect spacing between each Plank (BOTTOM PHOTO).



WK2 Roof Rack is now fully installed.

**IF YOU'RE INSTALLING:**

- TIE-DOWN PLATES (Go To Page 10).
- ROOF TOP TENT KIT (Go To Page 11).
- T-NUTS (Go To Page 11).

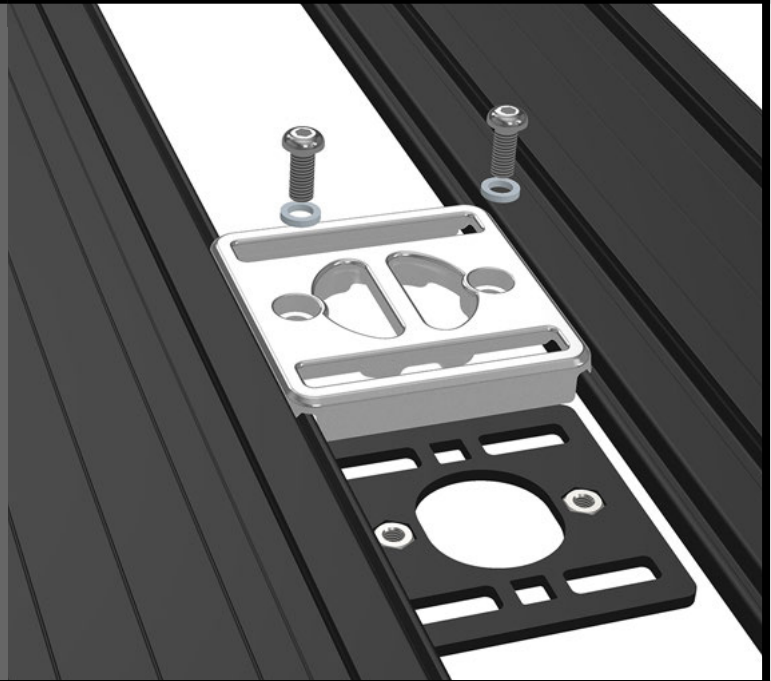
## TIE-DOWN PLATES

[START]

### 1 TIE-DOWN PLATES

#### Install TIE-DOWN PLATE.

1. Install Tie-Down (Top) [Y] so the edges hook over the edges of the Planks [L] (See Photo).
2. Position Tie-Down (Bottom Plate) [X] under Tie-Down (Top) [Y] with flush face facing upwards.
3. If installing T-Nuts [CC, DD, & EE] into Tie-Down Plate, see Step 2 now.
4. Create (2) Bolt & Washer Combos, by adding (1) M8 Wedge-Lock Extended Washer [AA] to (1) M8 x 20mm H5 Socket Button Head Screw [Z].
5. Secure Tie-Down Plate to Planks [L] by inserting Bolt & Washer Combo through Tie-Down (Top) [Y] and into Tie-Down (Bottom Plate) [X].
6. Position Tie-Down Plate in desired location. Tighten fasteners.



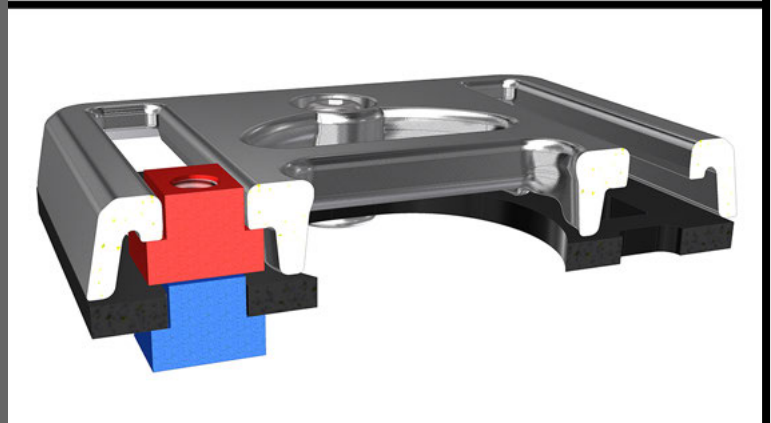
### 2 TIE-DOWN PLATES

#### Install T-NUTS.

1. Choose T-Nut location for intended use.
  - Upper position will capture T-Nut [CC, DD, & EE] within the adjustment slot and is suitable for most fastening requirements, (red in photo).
  - Lower position (below Bottom Plate) is not captive but is available for Heavy Duty applications (large spare tyre), (blue in photo).
2. If using Upper Position, position T-Nut [CC, DD, & EE] into adjustment slot, between Tie-Down (Top) [Y] and Tie-Down (Bottom Plate) [X]. Tighten Tie-Down Plate fasteners. T-Nut can slide in adjustment slot, but cannot fall out.
3. If using Lower Position, hold T-Nut [CC, DD, & EE] below Tie-Down (Bottom Plate) [X] of a fully installed Tie-Down Plate. Insert Bolt through Tie-Down Plate adjustment slot and into T-Nut.

#### NOTE

Only install T-Nuts when they are going to be used, otherwise they will move and make noise.



## TIE-DOWN PLATES

[END]

## ROOF TOP TENT KIT [START]

### 1 ROOF TOP TENT KIT

#### Position PLANKS.

1. Position each Plank (front & rear) to best suit your Roof Top Tent Manufacturers Recommendations.

#### NOTE

It is recommended that you position your Planks as far apart as possible for maximum support of your roof top tent.



### 2 ROOF TOP TENT KIT

#### Install BRACKETS.

1. Position (1) Roof Top Tent Bracket [BB] underneath your Plank [L] at each corner of your Roof Top Tent.
2. Insert the fasteners from your Roof Top Tent down through each Roof Top Tent Bracket [BB] and tighten finger tight. Once all (4) are installed, tighten the fasteners at each corner.

#### !!IMPORTANT!

If you have a sunroof, ensure your fasteners do not extend more than 20mm below the Roof Top Tent Brackets. If they do, they could cause interference when opening the sun roof.



## ROOF TOP TENT KIT [END]

## T-NUTS [START]

### 1 T-NUTS

#### Using T-NUTS.

1. When using T-Nuts with a Plank [L], drop them into one of the (2) square holes at the end of each Plank. Slide T-Nut in the track to the desired position.
2. When using T-Nuts with a Tie-Down Plate, see Step 2 of Tie-Down Plate instructions (above).

#### NOTE

Only install T-Nuts when they are going to be used, otherwise they will move and make noise. T-Nuts are Grade 10.9 for maximum strength.



## T-NUTS [END]

# TROUBLESHOOTING

[START]

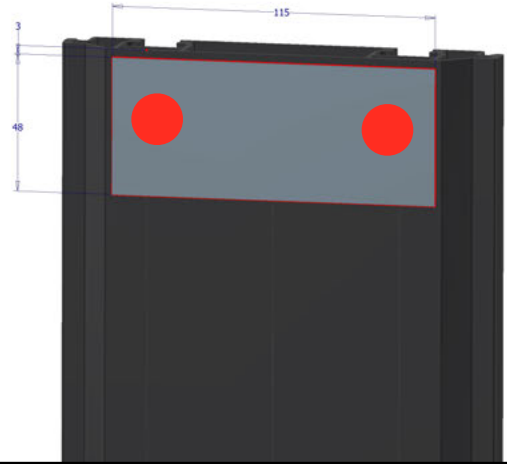
## 1 TROUBLESHOOTING

### NOISE → VIBRATIONS (HUMMING SOUND 50-80kph)

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

#### NOTE

Mounting items on your rack will eliminate Plank vibrations.



## 1 TROUBLESHOOTING

### NOISE → WIND (WHISTLING)

1. Check that all End-Caps [W] have been installed properly (Step 20). Open ended Planks can cause whistling noise.

## 1 TROUBLESHOOTING

### NOISE → WIND (WHOOSHING 80kph+)

1. Check that the Hidden Air Dam [C] has been installed properly, (Step 6 & Step 7). The Hidden Air Dam [C] should be positioned behind the front most Plank and run parallel. The fasteners should be screwed tightly.
2. Some Plank combinations/positions produce more wind noise than other combinations/positions. If wind noise persists; try repositioning your Planks or changing your Plank configuration.
3. When properly installed the WK2 Roof Rack has been designed (and extensively tested) to produce very little wind noise. When you install lights, gear, etc. it can have a dramatic effect on the amount of wind noise you experience. If you have excessive wind noise, try repositioning the items on your rack.

#### NOTE

All roof racks generate some wind noise. The wind noise will get louder the faster you travel or whenever there are large gusts of wind. Most of the wind noise coming from the WK2 Roof Rack is caused by high winds flowing between the Roof and the Planks. Disrupting (or blocking) this flow of air can significantly reduce the sound produced.

# 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](http://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/wk2-roof-rack.pdf](http://www.chiefproducts.com.au/installation/wk2-roof-rack.pdf)

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

[support@chiefproducts.com.au](mailto:support@chiefproducts.com.au)

# SHARE

**Looking to share epic photos of your WK2?**

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.

## UPLOAD

[www.chiefproducts.com.au/share](http://www.chiefproducts.com.au/share)

## EMAIL

[connect@chiefproducts.com.au](mailto:connect@chiefproducts.com.au)

## HASHTAG

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