



Jeep Grand Cherokee WK2

2011-2021

Roof Rack

IMPORTANT! – READ BEFORE INSTALLATION

- This product must be installed exactly as per these instructions using only hardware supplied.
- Take a few moments to read instructions thoroughly before beginning work.
- In the event of damage to any component please contact OFFROAD ANIMAL to arrange repair/replacement of components.
- Do not use this product for any vehicle make or model other than that specified on these instructions.
- Do not remove labels from this product.
- This product and its fixings must not be modified in any way unless stated in these fitting instructions.
- The installation of this product is recommended for trained personnel.
- These instructions are correct at time of publication. OFFROAD ANIMAL cannot be held responsible for the impact of any changes subsequently made by the vehicle manufacturer. If you find something has changed please contact us to let us know!
- During installation it is the duty of the installer to check correct operation/clearances of all components.
- If Instructions are to be printed for reference in the workshop, it is recommended that they are printed in colour, for best legibility.
- Fitting Time: 2 hours
- **This Rack is rated to 120kg dynamic (driving) load and 240kg static (sitting still)**

GENERAL CARE AND MAINTENANCE

Only wash the product with a PH neutral car wash to prevent paint damage and discolouration.

Plastic parts may be maintained with silicone spray.

Do not use acidic or alkaline based cleaning products.

It is important to perform regular checks (pre trip or on an annual basis) on the installed product. Checks include:

- Visual inspection for damage (eg. cracks, chips, dents etc.)
- Electrical wiring is not rubbing anything or worn out
- Bolts are torqued to correct specification (see torque guide below)

For touching up small stone chips, Offroad Animal recommends the following paint products:

- Dupli-Color Trim & Bumper Paint Black (TB101)
- VHT Hood, Bumper & Trim Paint Black (SP27)

BOLT TORQUE SETTINGS

Use the following bolt torques on all general fasteners, unless otherwise specified.

GENERAL FASTENERS	
Size	Torque Nm
M5	5 Nm
M6	9 Nm
M8	22 Nm
M10	44 Nm
M12	77 Nm

Use the following bolt torques on all structural front bar mount and tow point fasteners, and rear towbar fasteners, unless otherwise specified.

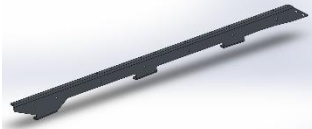
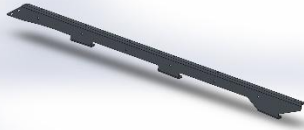
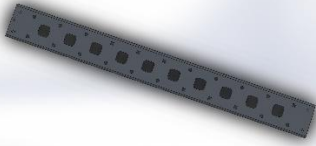
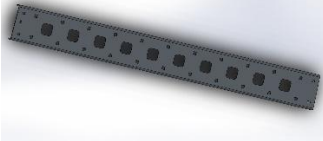
FRONT BAR MOUNTS AND TOW POINTS + REAR TOWBAR	
Size	Torque Nm
M10	57 Nm
M12	100 Nm
M14	164 Nm
M16	248 Nm

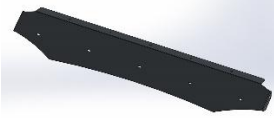
Always use a torque wrench to set correct torque settings. Ensure torque wrench is set to Nm unit of measurement. Otherwise perform conversion to lb-ft.

PARTS LISTING

IMPORTANT: Check all parts are present before beginning work! Contact OFFROAD ANIMAL if something is missing.

Main Parts – In the Box

Qty	Part Number	Description	Image
1	B-0005R	WK2 ROOF RACK SIDE RH	
1	B-0005L	WK2 ROOF RACK SIDE LH	
1	B-0008	WK2 ROOF RACK PANEL 1	
1	B-0009	WK2 ROOF RACK PANEL 2	
1	B-0010	WK2 ROOF RACK PANEL 3	
1	B-0011	WK2 ROOF RACK PANEL 4	
1	B-0012	WK2 ROOF RACK PANEL 5	

1	B-0007	ROOF RACK WIND DEFLECTOR	
1	B-0013L	WK2 ROOF RACK REAR PANEL LH	
1	B-0013R	WK2 ROOF RACK REAR PANEL RH	
1	B-0121	ROOF RACK WIND DEFLECTOR BRACE	
1	P-0055	REAR JOINER	
1	RR-JGC-WK2-11-ASM2L	ROOF MOUNT LH	
1	RR-JGC-WK2-ASM2R	ROOF MOUNT RH	

Small Parts – Contained in Small Parts Kit Bag

Qty	Part Number	Description
2	OFA-LOGO	OFFROAD ANIMAL METAL LOGO
1	PINCH WELD BLACK 3M	PINCH WELD BLACK 14MM X 9MM X 3M
39	M6 FW BZ	M6 FLAT WASHER BLACK ZINC
39	M6 FN	M6 FLANGE NUT
34	M6X25 BHCS BZ	M6 X 26 BUTTON HEAD CAP SCREW BLACK ZINC
5	M6 X 16 BHCS BZ	M6 X 16 BUTTON HEAD CAP SCREW BLACK ZINC
12	M6 X 20	M6 X 20 HEX ZINC 8.8
12	M6 MUD WASH	M6 MUD GUARD WASHER
12	M8 CN	M8 CAGE NUT
12	M8 FW	M8 FLAT WASHER
12	M8 X 25	M8 X 25 HEX BOLT ZINC 8.8
12	M8 SW	M8 Spring Washer

TOOLS REQUIRED

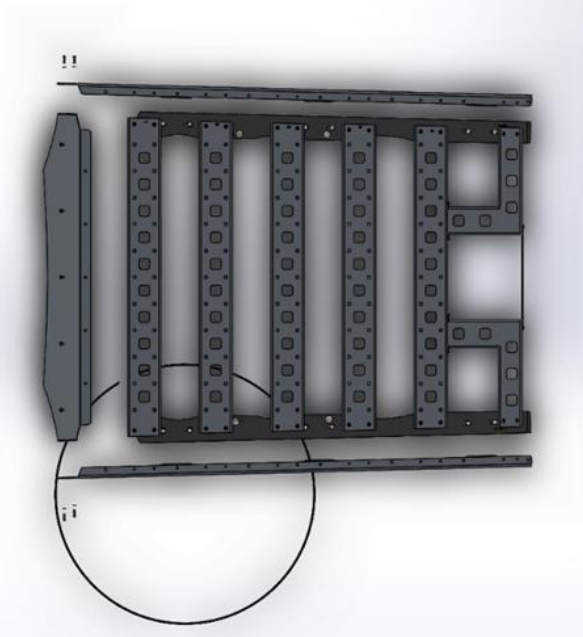
The following tools will be required to install the product.

Hand Tools	Power Tools	Workshop Equipment
-T30 Torx Bit -10mm Spanner -10mm Socket and ratchet driver -13mm Spanner -13mm Socket and ratchet driver -4mm Allen Key -Side Cutters M6 Tap (recommended only)		WD40

WORKSHOP SAFETY

It is the responsibility of the installer to always complete works in a safe manner. Make sure the following safety equipment is available and precautions are observed whilst fitting this product.

Hearing Protection 	Always wear ear protection when using power tools.
Eye Protection 	Ensure eye protection is always worn when cutting or drilling.
Manual Handling 	Do not attempt to lift bar assemblies or rock sliders on your own. Always use two people to lift or use mechanical Lifting aid such as hydraulic lifting trolley.
Vehicle Support 	Always ensure vehicle is properly supported when working on it. Do not attempt to fit products whilst suspension work is being carried out. Do not work under a vehicle supported only by a jack.

		
1. Lay all parts out as shown ready to be bolted together. Panels are labeled with numbers 1-5, with 1 being towards the front. As can be seen, the entire rack is dove tailed to suit Jeeps roof. Front is wider than back.	TOOLS REQUIRED	
	FASTENERS	

		
2. Remove factory rails on both sides. 4 screws in each. Once all screws have been removed pull forward then lift.	Tools Required T30 Torx Bit	
	Fasteners Retain only if you want to refit these later	



3. Lift off Rails and save only if you want to reuse later. Otherwise discard or sell. Clean roof as it's always filthy under there.
4. Clean out your roof buttons / rivnut threads with a M6 tap to make sure they are clear of residual loctite that would cause over torque of the rivnut (may even spin it) without achieving the desired rail to rivnut clamping force.

A wire brush may also help remove some of the built up rust.

The rivnuts are a known weakness on the WK2 Grand Cherokee and excessive torque, or loosening a rusted thread, has been known to cause some rivnuts to spin.

Once the rivnut threads are clean and dry, and you are ready to install, also consider applying, some kind of anti seize thread lubricant to the bolts we supply.

TOOLS REQUIRED

FASTENERS



5. Fit Pinch weld to short edge of roof rails. Trim excess off with side cutters.

TOOLS REQUIRED

Side cutters

FASTENERS

		
6. Fit nutserts as shown in both rails (6 per rail). You can use needle nose pliers or screwdriver to push one end of cage in from side.	TOOLS REQUIRED Needle nose pliers or flat head screwdriver	
	FASTENERS M8 Nutserts (12)	



7. Lift steel rail onto roof as shown. Repeat for other side.
8. When installing the rails, they should sit somewhere between the middle to the outside of the long black molding piece near the gutter. See picture.

Pushing the rails outboard will help flatten the rail, horizontal to the nutsert head.

TOOLS REQUIRED**FASTENERS**

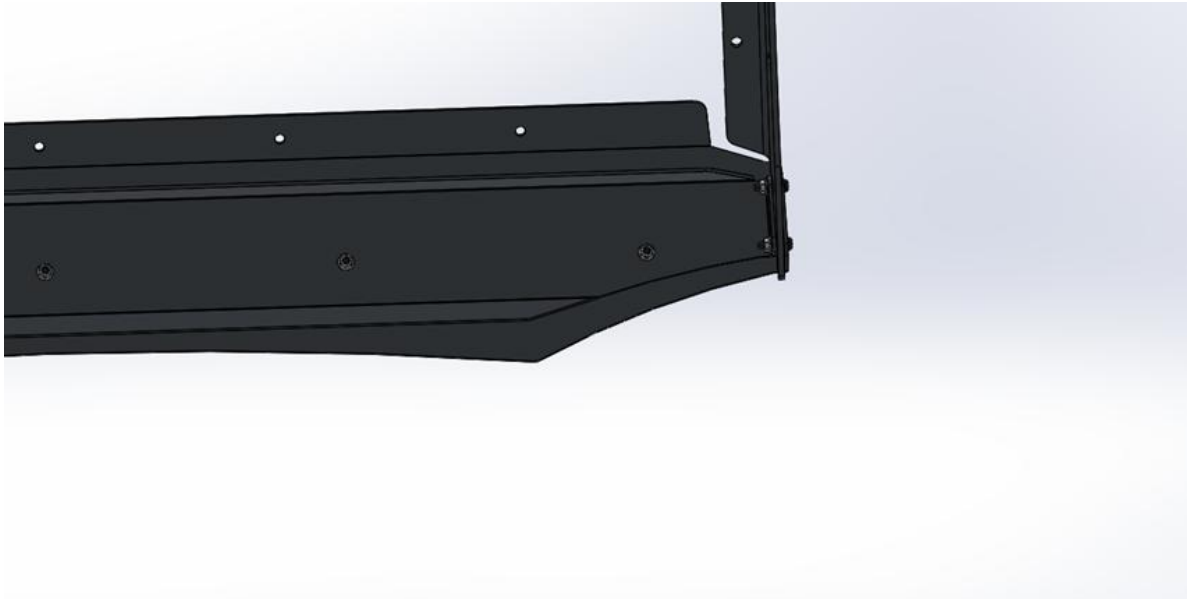


9. Loosely fit Rails to roof with M6 Hex bolts and mud guard washers. Do not torque down yet. 6 per side. Take care not to strip thread, and advised to spray WD40 or similar in thread first.
10. Do not tighten using any kind of power tool on the M6 bolts threaded into the roof nutserts, or the M8 bolts threaded into the cage nuts supplied by Offroad Animal. Hand tools are much better to reduce risk of over torquing the rivnuts and to provide the control desired.

TOOLS REQUIRED

WD40

FASTENERSM6 x 20 Hex bolts (12)
M6 mud guard washers
(12)

	
11. Fit deflector brace to deflector using M6 x 16 button head cap screws washers and flange nuts. 12. Fit Wind Deflector to side rails using M6 x 25 button head cap screws washers and flange nuts. 13. You may need to put some washers as spacers to ensure these screws torque up nice and tight. Use up to 2 washer per screw if required.	TOOLS REQUIRED 4mm Allen Key 10mm Spanner
	FASTENERS M6x16 BHCS (5) M6x25 BHCS (4) M6 washers black (9) M6 flange nuts (9)



14. Bolt rest of rack together with M6x25 button head cap screws, washers and flange nuts.

TOOLS REQUIRED

4mm Allen Key
10mm Spanner

FASTENERS

M6x25 BHCS (28)

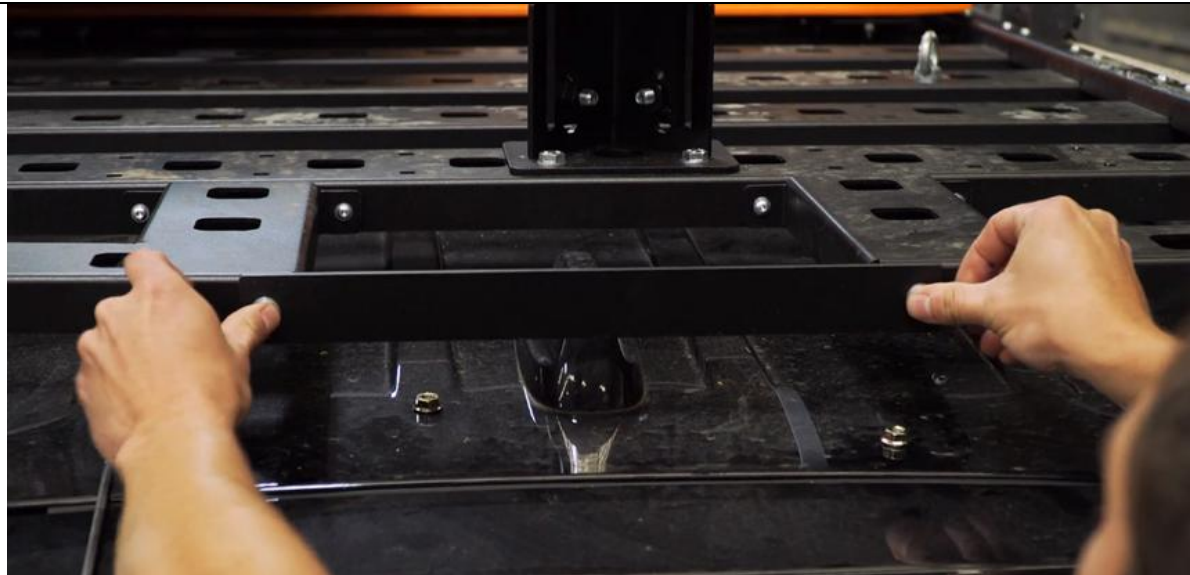


15. With the help of a friend lift roof rack on to Jeep.

TOOLS REQUIRED**FASTENERS**

		
16. Loosely fit M8 bolts spring washers and washers through rack into nutserts fitted to steel rail.	TOOLS REQUIRED	
	FASTENERS M8x25 hex bolts (12) M8 Flat Washers (12) M8 Spring Washers (12)	

		
17. Position rack, and ensure all fasteners are threaded in, then torque down each M8 and M6 fastener.	TOOLS REQUIRED 10mm Spanner 13mm Spanner	
	FASTENERS	



18. Fit rear secure bar with M6 x 25 button head cap screws washers and flange nuts and torque down.

19. If you get a whistle coming from the unloaded rack there are a few things you can do to remove this.

- a) Try moving the rack all the way forward on the rails
- b) Try lifting or lowering the air deflector to it's extents
- c) Add a bit of foam to the centre of the air deflector on the inside see pic

TOOLS REQUIRED

4mm Allen Key
10mm Spanner

FASTENERS

M6 x 25 BHCS (2)
M6 flat washers (2)
M6 flange nuts (2)



20. The base rack is now on. Feel free to mount all matter of goodies up there. Offroad Animal has dedicated accessories to fit which can be found on our website www.offroadanimal.com or www.offroadanimal.com.au
21. Competitor products will also fit, but may require drilling.
22. The small square holes in the panels are designed to fit an M10 cup head or coach bolt and lock into place with a nut above.

TOOLS REQUIRED**FASTENERS**