

TOYOTA FJ CRUISER 2011-2016 SCOUT 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 bar 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.

PARTS LISTING

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

Parts - In the Main Box

Qty	Part Number	Description	Image
1	B-1497R	FJ Cruiser Scout Rack Side Rail RH	
1	B-1497L	FJ Cruiser Scout Rack Side Rail LH	
1	B-1498	FJ Cruiser Scout Rack Front Panel	
1	B-1499	FJ Cruiser Scout Rack Wind Deflector	
1	B-1500R	FJ Cruiser Scout Rack Front Mount Bracket RH	
1	B-1500L	FJ Cruiser Scout Rack Front Mount Bracket LH	
1	B-1501R	FJ Cruiser Scout Rack Mid Mount Bracket RH	
1	B-1501L	FJ Cruiser Scout Rack Mid Mount Bracket LH	M N
1	B-1502R	FJ Cruiser Scout Rack Rear Mount Bracket RH	

1	B-1502L	FJ Cruiser Scout Rack Rear Mount Bracket LH	
1	B-1636R	FJ Cruiser Scout Rack Light Mount Bracket RH	
1	B-1636L	FJ Cruiser Scout Rack Light Mount Bracket LH	
1	RR-TFJ-J15-11- ASM4R	FJ Cruiser Scout Rack Light Pod Housing Weldment LH	
1	RR-TFJ-J15-11- ASM4L	FJ Cruiser Scout Rack Light Pod Housing Weldment RH	
2	OFA-LOGO	Offroad Animal Metal Logo	

Cross Bar Kit

Qty	Part Number	Description	Image
7	E-0006-1250	Scout Roof Rack – Cross Bar Extrusion 1250MM	

Fasteners – Contained in Small Parts Kit Bag

Qty	Part Number Description	
6	M6x12 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X12X1 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
10	M6x16 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X16X1 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
2	M6x35 BHCS SCREW, BUTTON HEAD CAP, M6X35X1 GR	
2	M6 FLAT WASHER M6 FLAT WASHER	
16	M6 FLAT WASHER BLACK ZINC	M6 Flat Washer, 12x6.1x1, ISO4042 ZnNi BLACK PASSIVATED FINISH
10	M6 FLANGE NUT Flange Nut, M6x1 G8.8 ZP	
2	M6CN2MM	CAGE NUT M6x1.6-2.5
16	M8 X 12 BHCS BZP	SCREW, BUTTON HEAD CAP, M8X12X1.25 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
14	M8 X 16 BHCS BZP	SCREW, BUTTON HEAD CAP, M8X16X1.25 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
40	M8 X 20 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M8X20X1.25, ISO4042 ZnNi BLACK PASSIVATED FINISH
12	M8X30 CAP SCREW	CAP SCREW, M8X30X1.25 GR10.9 ZP
12	M8 HD FLAT WASHER	M8 FLAT WASHER - High Tensile 19x8x1.9mm
70	M8 HD FLAT WASHER - BZP	M8 FLAT WASHER - High Tensile 19x8x2mm, ISO4042 ZnNi BLACK PASSIVATED FINISH
23	M8 FLANGE NUT	Flange Nut, M8x1.25 G8.8 ZP
7	M8 NUT	Hex Nut, M8x1.25 G8.8 ZP
12	M8 Cage nut	NUT, CAGE, M8X1.25 ZINC PLATE

The following tools will be required to install the product.

Hand Tools	Power Tools	Workshop Equipment
10mm Metric Socket/Spanner	N/A	Soft Blanket
Socket Extension Bar		Isopropyl Alcohol
Hex (Allen) Key Set 4-6mm		Clean Workshop Rags
Plastic Auto Trim Tool Set		Automotive Sealant
Flat Blade Screwdriver		(Sikaflex 227 or equivalent)
		Thread Sealant (Loctite 577 or equivalent)

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 out main parts of roof rack on a table/open space.

TOOLS REQUIRED



2. Bring the rack side in line with the cross bar extrusions and loosely secure each extrusion end with 2x M8x20 black button head bolts and black washers through the pre-threaded holes on the side.

TOOLS REQUIRED

5mm hex/Allen key

FASTENERS

28x M8x20 black button head 28x M8 black flat washer



- 3. Insert 1x M8 flange nut into the top T-slot of each extrusion end.
- 4. Slide the nut so that it lines up with the hole on the top of the rack side.
- 5. Loosely secure the top of each rack side to the nut in the extrusion T-slot with 1x M8x16 button head bolt and black washer.

5mm hex/Allen key

FASTENERS

14x M8x16 black button head 14x M8 black flat washer 14x M8 flange nut



- 6. Insert 5x M8 hex nuts into the front T-slot of the forward-most extrusion.
- 7. Roughly align them with the corresponding holes in the front panel.

FASTENERS

5x M8 hex nut



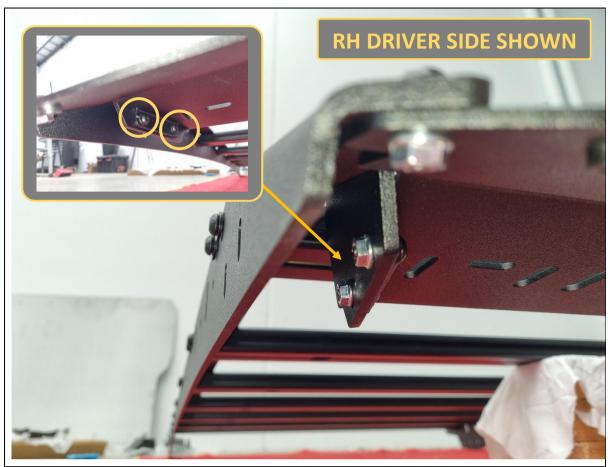
- 8. Secure the front panel to the M8 nuts in the front T-slot with 5x M8x12 black button head bolts and black washers.
- 9. Secure the outer corners of the front panel to the rack sides with 1x M6x16 black button head bolt, black washer and flange nut (each).

4mm hex/Allen key 5mm hex/Allen key

FASTENERS

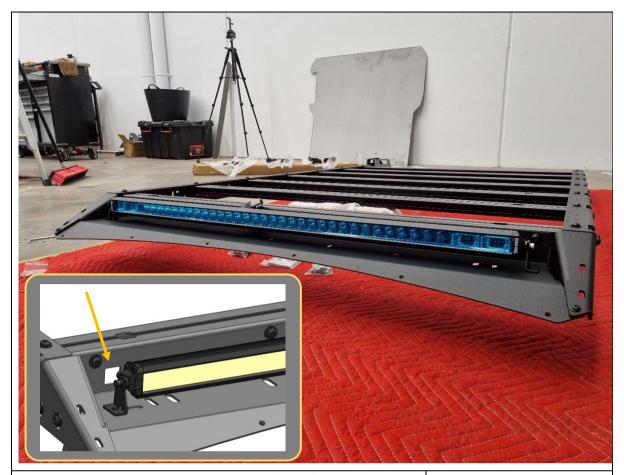
5x M8x12 black button head 5x M8 black flat washer

2x M6x16 black button head 2x M6 black flat washer 2x M6 flange nut



- 10. On the underside, secure the front panel to each rack side with 2x M6x16 black button head bolts, black washers and flange nuts (each).
- 11. Fully tighten these bolts.

4mm hex/Allen key



12. If fitting lights or a light bar to the front of the roof rack, now is the best time to do so. It is still possible to install it once on the roof, but it may be more difficult to access bolts and nuts with tools.

The front panel supports up to a 42" light bar, or 7x smaller pod lights.

A square cutout is provided on both ends for discreetly routing cables to the underside of the roof rack (see inset photo).

TOOLS REQUIRED

Supplied with accessories

FASTENERS

Supplied with accessories



- 13. If not fitting a light bar, insert 5x M8 flange nuts into the top T-slot of the forward-most extrusion.
- 14. Roughly align them with the corresponding holes in the wind deflector.

FASTENERS

5x M8 flange nuts



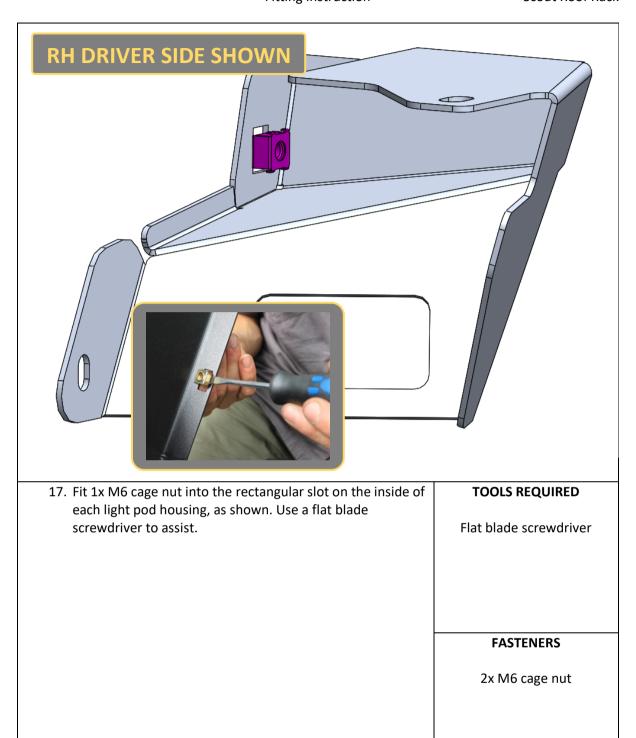
- 15. Fit the wind deflector to the roof rack. Secure the top to the M8 nuts in the front T-slot with 5x M8x12 black button head bolts and black washers.
- 16. Secure the bottom to the embedded nuts in the front panel with 6x M6x12 black button head bolts and black washers.

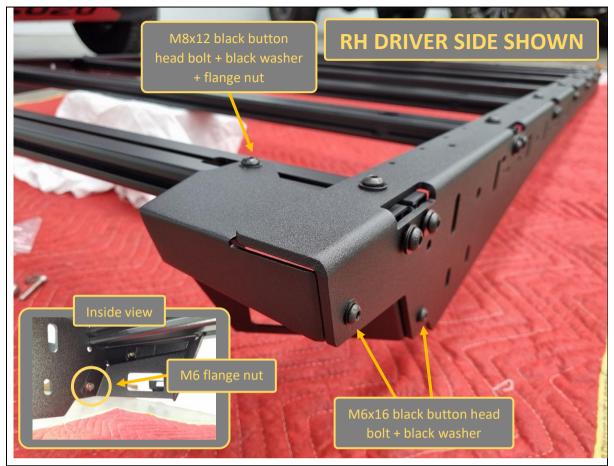
4mm hex/Allen key 5mm hex/Allen key

FASTENERS

5x M8x12 black button head 5x M8 black flat washer

6x M6x12 black button head 6x M6 black flat washer





- 18. Insert 1x M8 flange nut into each end of the top T-slot in the rear-most extrusion.
- 19. Fit the light pod housings to the rear of the roof rack.

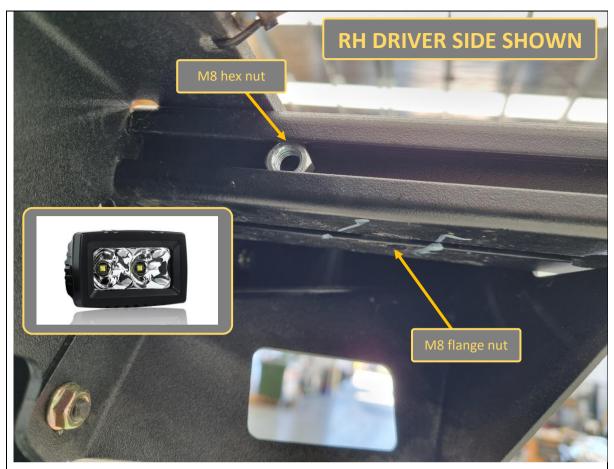
 Secure the top to the nut in the extrusion with 1x M8x12 black button head bolt and black washer.
- 20. Secure the outside face to the rack side with 2x M6x16 black button head bolts and black washers. One of the bolts goes into the cage nut installed previously. Use the other with 1x M6 flange nut.
- 21. Do this for both sides.

4mm hex/Allen key 5mm hex/Allen key

FASTENERS

2x M8x12 black button head 2x M8 black flat washer 2x M8 flange nut

4x M6x16 black button head 4x M6 black flat washer 2x M6 flange nut



- 22. The roof rack is compatible with Offroad Animal 2" work lights at the rear for campsite illuminiation. These lights are optional extras.
- 23. If choosing to install these lights, insert 1x M8 flange nut into the bottom T-slot and 1x M8 hex nut into the side T-slot at the rear of the roof rack, as shown. Do this for both sides.

FASTENERS

2x M8 hex nut 2x M8 flange nut



- 24. Fit the light mount bracket to the extrusion and align it by pressing it firmly up against the inside face of the rack side.
- 25. Secure with 2x M8x12 black button head bolts and black washers into the nuts inserted into the T-slots previously.
- 26. Repeat for other side.

5mm hex/Allen key

FASTENERS

4x M8x12 black button head 4x M8 black flat washer



- 27. Install the Offroad Animal 2" work lights. Do not use the hardware provided in the box.
- 28. Instead, secure each work light to its mounting bracket with 1x M6x35 button head bolt, flat washer and flange nut.
- 29. Ensure the work light is aligned evenly with the cutout on the outside of the light pod housing (see inset photo).

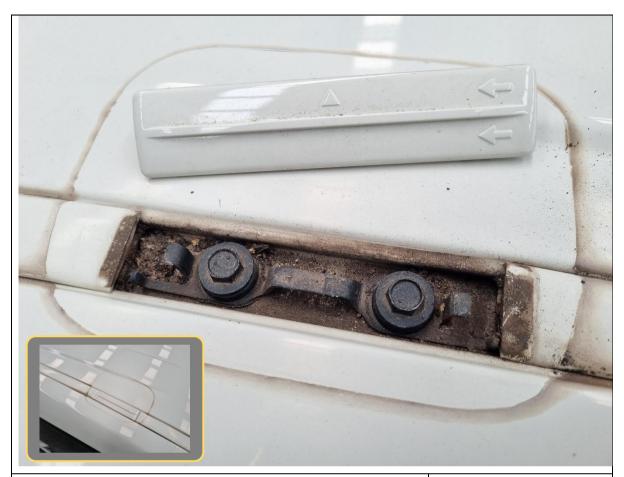
4mm hex/Allen key

FASTENERS

2x M6x35 button head 2x M6 flat washer 2x M6 flange nut

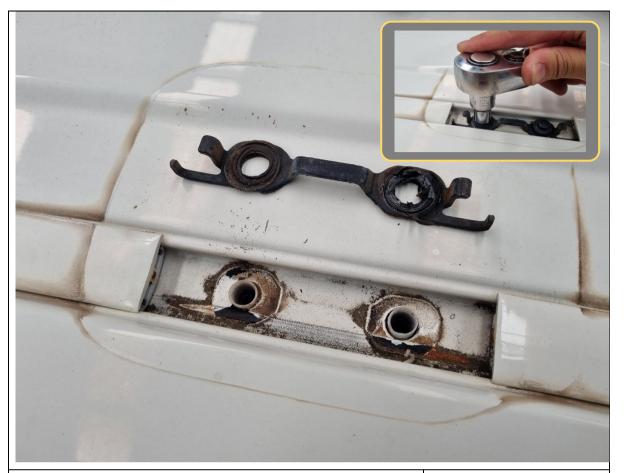






- 31. There are a total of 6x mounting points on the roof (3x per side).
- 32. If there are plastic covers installed, use a plastic trim tool (or flat blade screwdriver wrapped in a rag) and unclip these covers. Follow the arrows marked on the covers for removal direction.

Plastic trim tool



33. Remove the 2x 10mm hex bolts holding each of the 6x mounting brackets to the roof.

Note: The bolts are holding on to a floating nut plate inside the roof. Loosen each bolt 1x turn at a time, switching between each other. Do <u>not</u> use power tools for this step.

Failure to do so may result in the nutplate falling into the roof space and requiring the head liner to be removed to retrieve them.

34. Retain these bolts. The mounting brackets can be discarded.

TOOLS REQUIRED

10mm socket

FASTENERS

12x factory 10mm hex bolt



35. Using isopropyl alcohol and a clean workshop rag, clean away all the dirt from the roof gutters.

Take care not to push the white plastic tubes connecting to the nutplate down into the roof.

TOOLS REQUIRED

Isopropyl alcohol Clean workshop rags



- 36. Identify all 6x mounting brackets. They are marked with 'F' for front, 'M' for middle and 'R' for rear.
- 37. Install 2x M8 cage nuts into the rectangular slots in each mounting bracket. Use a flat blade screwdriver to assist.

Flat blade screwdriver

FASTENERS

12x M8 cage nut



- 38. Remove the rubber sealing washers and rings from the factory mounting bracket bolts.
- 39. Fit these to the supplied 12x M8x30 socket head bolts.

Note: If the rubber sealing washers are damaged or missing, use the supplied plain colour M8 flat washers instead.

TOOLS REQUIRED

FASTENERS

12x M8x30 socket head



40. Apply a generous amount of automotive grade sealant (Offroad Animal recommends Sikaflex 227) around the 2x holes at each of the 6x mounting locations.

TOOLS REQUIRED

Automotive sealant (eg. Sikaflex 227)



- 41. Fit each mounting bracket to its corresponding location on the roof. The arrow cutout in each bracket indicates the front of the vehicle, and cage nut slots will always be on the outside of the vehicle, with the roof mounting holes in the inside.
- 42. Loosely fit 2x M8x30 socket head bolts (including rubber sealing washer or flat washer) to the mounting bracket and into the nutplate in the roof.

Again, tighten bolts progressively one turn at a time, switching between each bolt, to prevent dislodging the nutplate.

43. If rubber sealing washers are <u>not</u> used, apply a drop of thread sealant or thread locker (eg. Loctite 222 or 577) between the bolt head and washer, plus between washer and mounting bracket.

TOOLS REQUIRED

6mm hex/Allen key

Thread sealant or low strength thread locker

FASTENERS

12x M8x30 socket head



44. Image showing all 6x mounting brackets in position. Do not fully tighten bolts yet.

TOOLS REQUIRED



- 45. Place a soft blanket on the roof between the mounting brackets to protect the paintwork while the roof rack is installed.
- 46. With your mate's assistance (or other lifting device), lift and place the roof rack onto the roof.
- 47. Position the rack such that the rack sides sit on the <u>outside</u> of the mounting brackets.

Soft blanket



- 48. Loosely secure the roof rack to the M8 cage nuts in all 6x mounting brackets using 12x M8x20 black button head bolts and black washers.
- 49. At this stage, leave all bolts loose.

5mm hex/Allen key

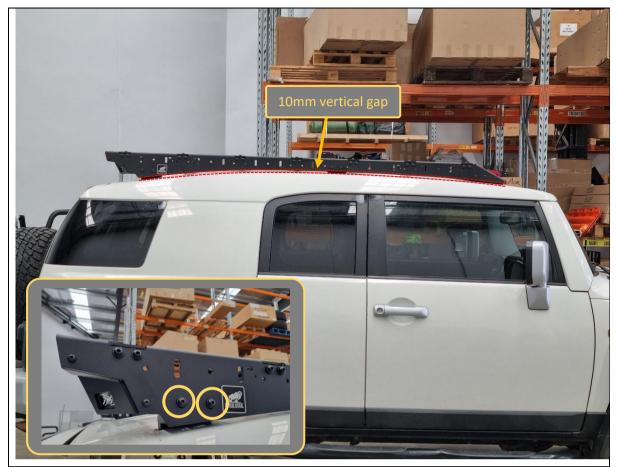
FASTENERS

12x M8x20 black button head 12x M8 black flat washer



- 50. Fully tighten all 12x M8x30 socket head bolts holding the mounts into the roof with a 6mm hex/Allen key. Do not use power tools.
- 51. The front mount bolts are accessed through the slots on the top of the rack sides (see inset photo).

6mm hex/Allen key



- 52. Align the roof rack so there is an even vertical gap of around 10mm between the rack side and the roof, for both sides.
- 53. Also ensure around 10mm clearance between the front edge of the rack and roof.
- 54. Once happy with alignment, fully tighten all 12x M8x20 black button head bolts holding the roof rack to the mounts.
- 55. Double check all other fasteners are properly tightened and secure.

5mm hex/Allen key



Congratulations! You're done!

Go out bush and enjoy carrying all your gear on our light weight, low profile and quiet Scout

Roof Rack for your Toyota FJ Cruiser!