

# GOAT Rack Medium Aussie Dual Cab Utes FITTING INSTRUCTION

# 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 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.
- It is the duty of the installer/owner to investigate if Tub strengthening is required when fitting a canopy to the tub of the vehicle



# **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
2	E-0006 - 1300	Scout Roof Rack – Cross Bar Extrusion 1300MM	
3	E-0006-1250	Scout Roof Rack – Cross Bar Extrusion 1250MM	
6	E-0006-370	Scout Roof Rack – Cross Bar Extrusion 370MM	
3	E-0006-1545	Scout Roof Rack – Cross Bar Extrusion 1545MM	
2	TB750PL	Polypropylene Tool box	
1	9-013037-01	L HANDLE	
1	3-18794	ROD LATCH	
1	DSCHMD1050MML SET	1050 MEDIUM DRAWER RUNNER SET LOCKING	

2	10MM PIPE SADDLE	10MM PIPE SADDLE	
1	PW-P-14X9-1180	Pinch Weld - Plain 14X9MM, Rubber, 1180mm Length	
1	B-0596R	EDGE PLATE RH	Terre
1	B-0596L	EDGE PLATE LH	
2	B-0594R	END CAP RH	
2	B-0594L	END CAP LH	
2	B-0595	T JOIN	
2	B-0612L	REO T BRACKET	
2	P-0237	72 DEG RIB	



# GR-MED-COM-ASM0 Fitting Instruction

# Medium Dual Cab Utes Medium GOAT Rack

2	B-0597	PLATFORM	
1	B-0604R	RACK INTERNAL BRACE RH	
2	B-0605	TOOL BOX LOWER SUPPORT	
1	B-0606	DRAWER	
1	P-0189	WINDOW	
1	B-0602L	ROD CATCH LH	
1	B-0602R	ROD CATCH RH	
1	B-0599	DOOR BRACE	
1	B-0598	REAR DOOR	



# GR-MED-COM-ASM0 Fitting Instruction

# Medium Dual Cab Utes Medium GOAT Rack

2	B-0603	STRUT SUPPORT	
1	B-0604L	INTERNAL BRACE LH	
4	P-0108	ROLLER SHUTTER T SLOT NUT	
8	P-0127	RHINO TRACK NUT PLATE M6	
4	P-0269	STAY OPEN ARM	
2	Butt Hinge	Butt Hinge	
2	GSK15-280-150N	Gas Struts 280mm long with 150N force	-
2	PWS-TOP-280	Pinch weld top bulb 280mm long	
2	L Track 1200	Tie Down L track 1200mm long with hooks	



# Small Parts - Contained in Small Parts Kit Bag

Qty	Part Number	Description	
18	M8 X 16 BHCS BZP	SCREW, BUTTON HEAD CAP, M8X16X1.25 GR12.9,	
		ISO4042 ZnNi BLACK PASSIVATED FINISH	
92	M8 NUT	Hex Nut, M8x1.25 G8.8 ZP	
84	M8 HD FLAT WASHER - BZP	M8 FLAT WASHER - High Tensile 19x8x2mm, ISO4042	
		ZnNi BLACK PASSIVATED FINISH	
70	M8 X 12 BHCS BZP	SCREW, BUTTON HEAD CAP, M8X12X1.25 GR12.9,	
		ISO4042 ZnNi BLACK PASSIVATED FINISH	
4	M6x12 BHCS	SCREW, BUTTON HEAD CAP, M6X12X1 GR12.9 ZP	
46	M6 FLAT WASHER BLACK ZINC	M6 Flat Washer, 12x6.1x1, ISO4042 ZnNi BLACK	
		PASSIVATED FINISH	
32	M6x20 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X20X1 GR12.9,	
		ISO4042 ZnNi BLACK PASSIVATED FINISH	
4	M6 NYLOC	NYLOC SELF LOCKING NUT, ST STL A2 ISO	
8	M8 FLAT WASHERBLACK ZINC	M8 FLAT WASHER, 16.5x8.4x1.2, ISO4042 ZnNi BLACK	
		PASSIVATED FINISH	
8	M8 X 20 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M8X20X1.25, ISO4042	
		ZnNi BLACK PASSIVATED FINISH	
50	M6 FLANGE NUT	Flange Nut, M6x1 G8.8 ZP	
12	M8 X 30 HEX	Bolt Hex, M8X30X1.25, GR8.8 ZP	
24	M8 HD FLAT WASHER	M8 FLAT WASHER - High Tensile 19x8x1.9mm	
12	M8 FLANGE NUT	Flange Nut, M8x1.25 G8.8 ZP	
12	M8 X 20 HEX	Bolt Hex, M8X20x1.25, GR8.8 ZP	
8	M8 SPRING WASHER	M8 SPLIT SPRING WASHER - High Tensile 14.80D 2mm	
		Thick	
13	M8 FLAT WASHER	M8 Flat Washer	
5	M8 NYLOC	NYLOC SELF LOCKING NUT, ST STL A2 ISO	
5	M8 X 40 HEX	Bolt Hex, M8X40X1.25, GR8.8 ZP	
12	M6 X 12 CSK	SCREW, COUNTERSUNK CAP, M6X12X1 ZP	
10	M6x16 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X16X1 GR12.9,	
		ISO4042 ZnNi BLACK PASSIVATED FINISH	
8	M5X15 BHCS	SCREW, BUTTON HEAD CAP, M5X15X0.8 GR12.9 ZP	
10	M5 FLANGE NUT	Flange Nut, M5x0.8 G8.8 ZP	
8	M5 Flat washer BZP	M5 Flat Washer, 10x5.3x1, ISO4042 ZnNi BLACK	
		PASSIVATED FINISH	
4	HDPE SPACER- BLACK	HDPE SPACER - OD 20 X ID 8 X 5MM THICK BLACK	
4	M8 NYW	Washer, M8, Nylon	
8	8Gx15, Pan Screw	SCREW, PAN HEAD PHILLIPS, M5X15 GR4.6 ZP	
2	M5 X 20 CSK	SCREW, COUNTERSUNK CAP, M5 X 20 X 0.8 ZP	



The following tools will be required to install the product.

Hand Tools	Power Tools	Workshop Supplies
Metric Socket Set 8-19mm	Power Drill	Automotive/ All-
		purpose Grease
Socket Extension Bar		
		10mm Drill Bit
Metric Spanner Set 10-19mm		5 5 . 5
Hay (Allan) Kay Sat 2 Coops		Paint Pen or Felt pen
Hex (Allen) Key Set 3-6mm		

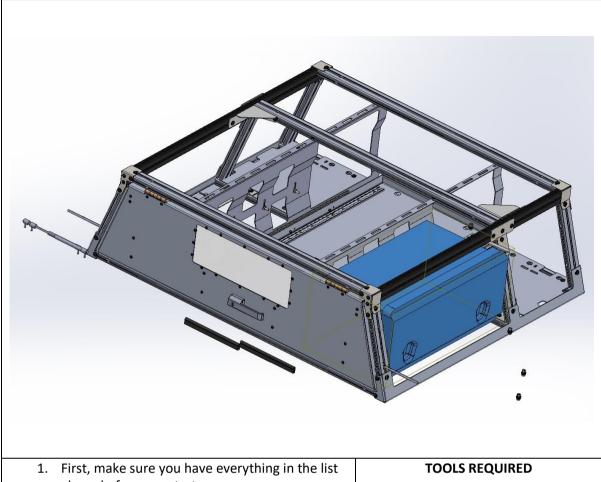


# WORKSHOP SAFETY

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.





above before you start.





Fit the 1545mm extrusion to part B-0596L and B-0596R.

Slide M8 nuts into the T-slot in the extrusion.

Then use M8x16 black button head bolts and black washers into the nuts.

- 3. Repeat for other end so you have a box frame
- 4. Leave finger tight.

# **TOOLS REQUIRED**

5mm Hex Key

#### **FASTENERS**

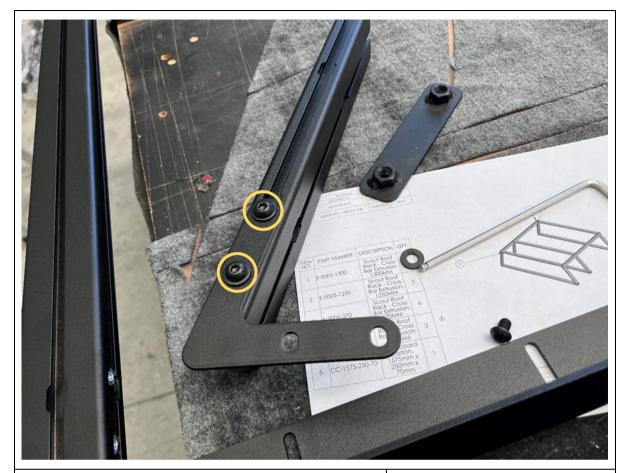
4x M8x16 black button head bolt. 4x M8 black flat washer 4x M8 nut



5. Place 3rd piece of 1545mm extrusion on as shown and grab part P-0237.

**TOOLS REQUIRED** 





- 6. Fit P-0237 to 370mm (or 350mm if supplied) extrusion as shown using 2x M8x12 black button head bolts, washers and nuts in the T-slots.
- 7. Repeat for other side, but opposite end so they are handed.

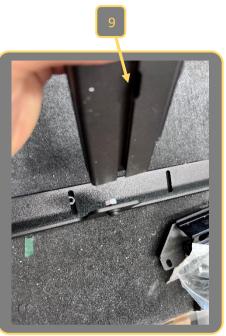
5mm Hex Key

# **FASTENERS**

4x M8x12 black button head bolt. 4x M8 black flat washer 4x M8 nut







- 8. Position the 370mm (or 350mm if supplied) extrusion with P-0237 as shown and secure to the B-0596 bracket with 1x M8x16 black button head bolt, black washer and nut, per side.
- Easy way to fit bolt is to feed bolt and washer into the outside part then thread on the nut very loosely so you can then slide the extrusion into place.
- 10. Leave all bolts finger tight.

5mm Hex Key

#### **FASTENERS**

2x M8x16 black button head bolt 2x M8 black flat washer 2x M8 nut



- 11. Secure the 1545mm extrusion cross piece with part P-0237 as shown. Part P-0237 goes on the long side of B-0596.
- 12. Repeat for other side.
- 13. Leave all bolts finger tight

5mm Hex Key

#### **FASTENERS**

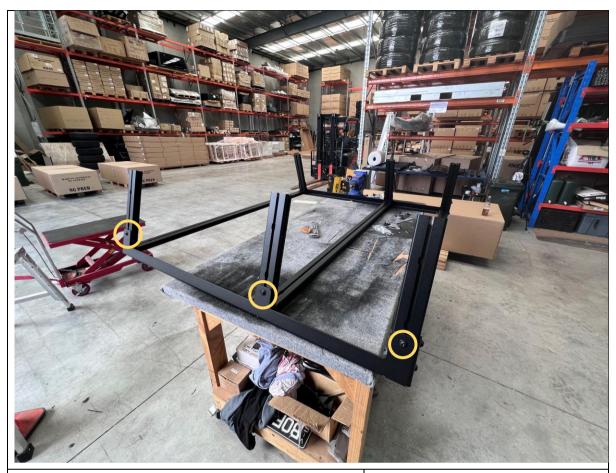
4x M8x12 black button head bolt 4x M8 black flat washer 4x M8 nut



14. For each corner thread in 2x M8x16 black button head bolts, black washers and nuts as shown.

# **FASTENERS**

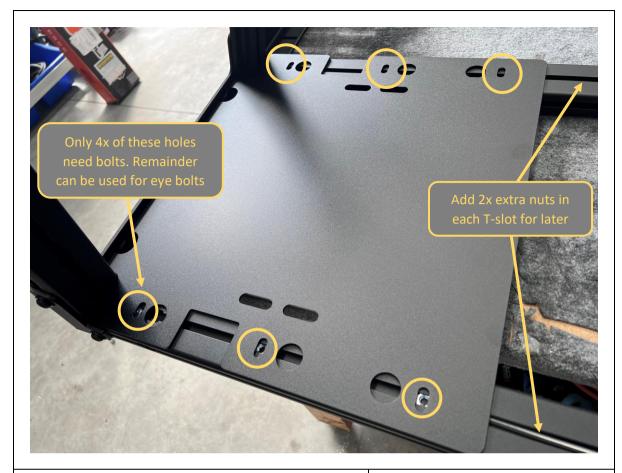
8x M8x16 black button head bolt 8x M8 black flat washer 8x M8 nut



- 15. Insert remaining 4x 370mm (or 350mm if supplied) extrusion uprights as shown.
- 16. If using the shorter 350mm extrusion, lift it 10mm off the bottom extrusion.
- 17. Leave all bolts finger tight.

5mm Hex Key





- 18. Position B-0597 on to the frame as shown, with 4x M8 nuts in the T-slots aligned with the holes in the plate (2+2 arrangement).
- 19. Also insert 2 extra nuts into each 1545mm extrusion and push them into the middle as they'll be used very soon.
- 20. Insert M8x12 black button head bolts and black washers into 4x of the holes with nuts. You can leave the other ones for M8 Eye bolts if you prefer as only 4 bolts are needed to hold down the plate.
- 21. Leave all finger tight.
- 22. Note these may need to come off later depending on how you're mounting it to the vehicle.

5mm Hex Key

#### **FASTENERS**

8x M8x12 black button head bolt 8x M8 black flat washer 14x M8 nut





23. Position B-0605 as shown between the B-0597 plate and rear extrusion, and secure with 1x M8x12 black button head bolt, black washer and nut at either end.

Also insert an extra nut inboard of B-0605 at the rear and push it into the middle as it be used very soon.

24. Leave finger tight and repeat on other side.

# **TOOLS REQUIRED**

5mm Hex Key

#### **FASTENERS**

4x M8x12 black button head bolt 4x M8 black flat washer 6x M8 nut



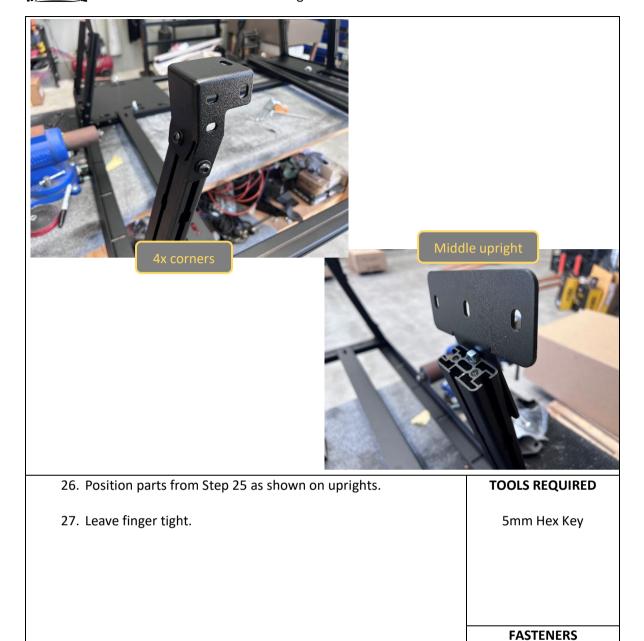


- 25. Prepare the following parts as shown with M8x12 black button head bolts, black washers and nuts:
  - a. 2x B-0594L
  - b. 2x B-0594R
  - c. 2x B-0595

5mm Hex Key

#### **FASTENERS**

12x M8x12 black button head bolt 12x M8 black flat washer 12x M8 nut





- 28. Position 1300mm extrusion on the sides as shown, and secure with M8x20 black button head bolts and black washers into threaded ends.
- 29. Leave all bolts finger tight.

5mm Hex Key

#### **FASTENERS**

8x M8x20 black button head bolt 8x M8 black flat washer



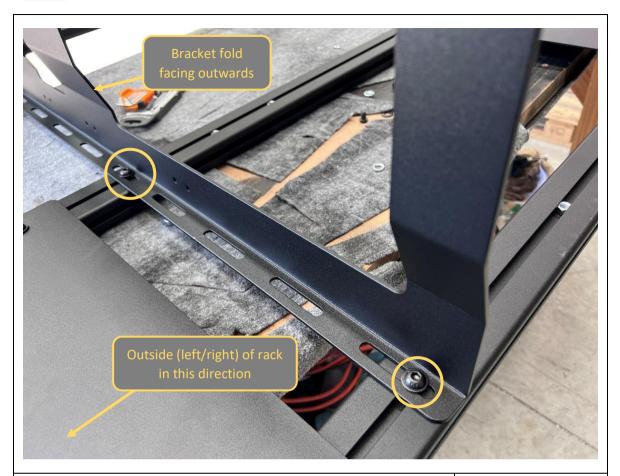
- 30. Place 3x nuts per side as shown, and lift part B-0595 up to them and thread in corresponding M8x12 black button head bolts and black washers.
- 31. Repeat for other side.

5mm Hex Key

# **FASTENERS**

6x M8x12 black button head bolt 6x M8 black flat washer 6x M8 nut



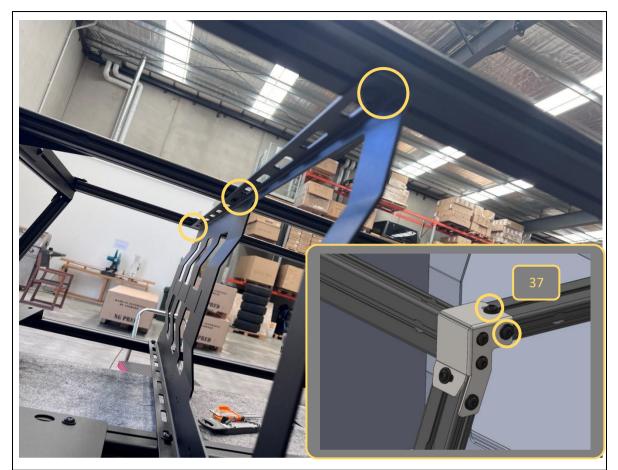


- 32. Position B-0604L and B-0604R as shown.
- 33. Secure into the extra nuts in the middle of the base frame from steps 19 and 23 with M6x12 black button head bolts and black washers.
- 34. Leave all bolts finger tight.

5mm Hex Key

#### **FASTENERS**

6x M8x12 black button head bolt 6x M8 black flat washer



- 35. Fit 3 x 1250mm Extrusion sections to the top of the frame as shown.
- 36. Fit 2x nuts to the underside of each 1250mm extrusion and secure to B-0604L and B-0604R with 6x M8x12 black button head bolts and black washers.
- 37. Fit 2x nuts to the 1250mm extrusion in each of the 4x corners of the frame, and use M8x12 black button head bolts and black washers to attach the 1250mm extrusion to the B-0594R/L corner pieces.
- 38. Leave all bolts finger tight

5mm Hex Key

#### **FASTENERS**

14x M8x12 black button head bolt 14x M8 black flat washer 14x M8 nut



39. Position the B-0612L brackets onto the middle 1250mm extrusion of the frame as shown.

Feed in 2x nuts into each 1300 extrusion to the locations shown, then secure each bracket to each 1300mm extrusion with 2x M8x12 black button head bolts and black washers.

40. Leave finger tight.

# **TOOLS REQUIRED**

5mm Hex Key

#### **FASTENERS**

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

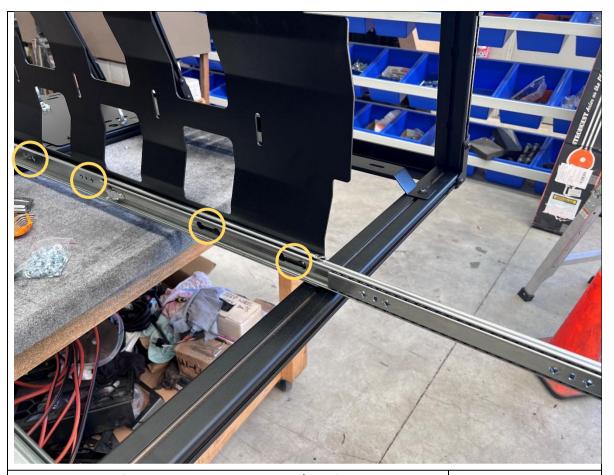


- 41. Secure each B-0612L bracket to the 1250mm extrusion cross member with 2x M6x12 black button head bolts, black washers and flange nuts.
- 42. Leave these fingers tight

5mm Hex Key

#### **FASTENERS**

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



- 43. Position drawer runners on to B-0604R/L as shown.
- 44. The lever to release the lock should be in the up position and then pushed down to unlock the runner.
- 45. Secure each drawer runner to B-0604R/L with 5x M6x16 black button head bolts, black washers and flange nuts.
- 46. Torque bolts.

4mm Hex Key

#### **FASTENERS**

10x M6x16 black button head bolt 10x M6 black flat washer 10x M6 flange nut



47. You'll need to open each runner to get to all the bolt holes.

**TOOLS REQUIRED** 



- 48. Position B-0606 on the drawer runners and secure each side with 4x M5 button head bolts, black washers and flange nuts.
- 49. You'll need to open the runners to get to all the bolt holes.
- 50. Torque down bolts.

3mm Hex Key

# **FASTENERS**

8x M5x15 button head bolt 8x M5 black flat washer 8x M5 Flange nut



- 51. Fit L Track to B-0606 as shown and secure with 6x M6x12 counter sunk bolts and flange nuts.
- 52. Repeat for other side.
- 53. Torque down fasteners

4mm Hex Key

#### **FASTENERS**

12x M6x12 counter sunk bolt 10x M6 flange nut



54. Fit L handle to B-0598 rear door as shown with 2x M5x20 counter sunk bolts and flange nuts.

55. Torque bolts.

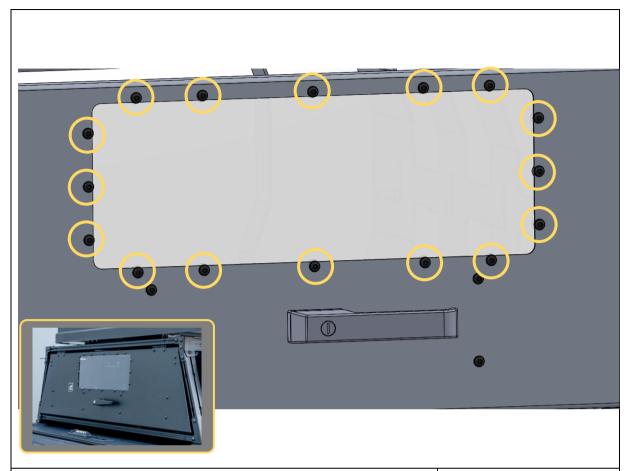
**TOOLS REQUIRED** 

3mm Hex Key

# **FASTENERS**

2x M5x20 counter sunk bolt 2x M5 flange nut





**Fitting Instruction** 

56. Fit the acrylic rear window to the inside of the rear door and secure with 16x M6x20 black button head bolts, black washers and flange nuts.

57. Torque bolts.

# **TOOLS REQUIRED**

4mm Hex Key

# **FASTENERS**

16x M6x20 black button head bolt 16x M6 black flat washer 16x M6 flange nut





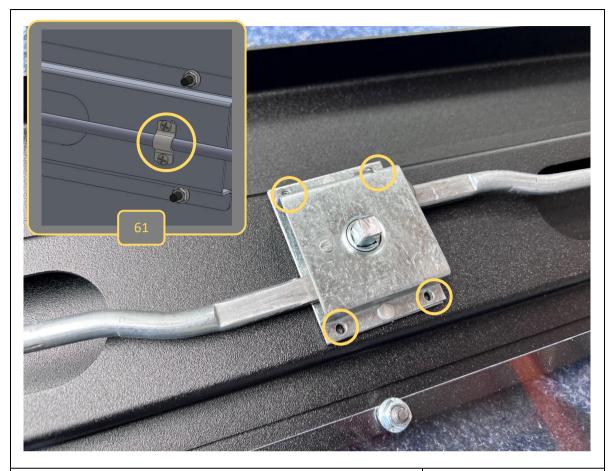
- 58. Position B-0599 to the inside of the B-0598 rear door as shown and secure with 8x M6x20 black button head bolts, black washers and flange nuts.
- 59. Torque bolts.

4mm Hex Key

#### **FASTENERS**

8x M6x20 black button head bolt 8x M6 black flat washer 8x M6 flange nut





- 60. Position Rod latch to the back of B-0599 in the middle as shown and secure with 8Gx15 self tapping screws.
- 61. Position the U-shaped saddles on the ends to secure the rods in place outside of the middle with the same screws.

Phillips head screwdriver

# **FASTENERS**

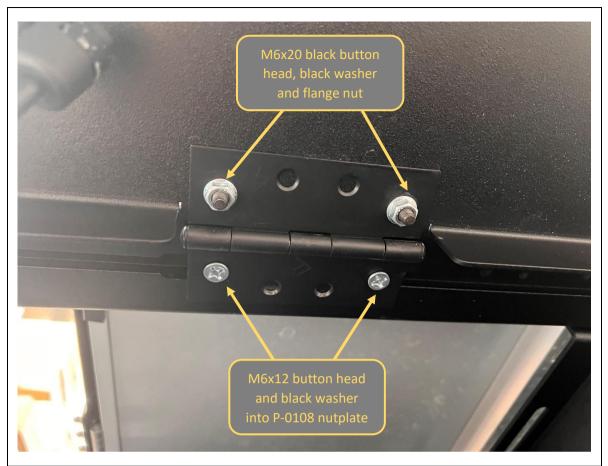
8x 8Gx15 self tapping screws



62. Place 4x P-0108 M6 rectangular nuts into the underside of the rear top 1250mm extrusion as shown, these will support the hinge for the door.

**TOOLS REQUIRED** 





63. Fit hinges as shown to connect the inside of the door to the bottom of the extrusion.

Use 2x M6x20 black button head bolts, black washers and flange nuts for joining the door to each hinge.

Use 2x M6x12 button head bolts and black washers for joining each hinge to the extrusion.

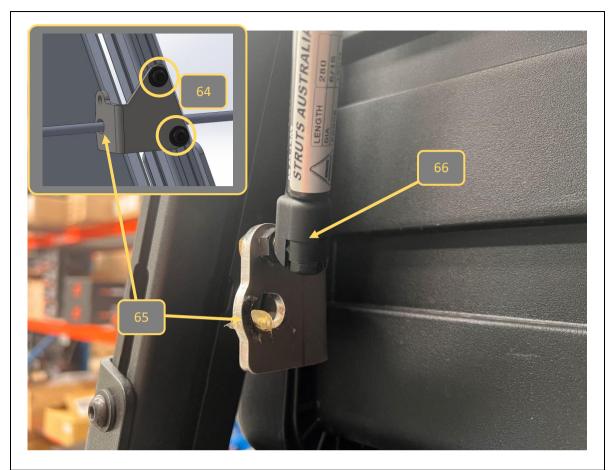
# **TOOLS REQUIRED**

4mm Hex Key

# **FASTENERS**

4x M6x12 button head bolt 4x M6x20 black button head bolt 8x M6 black flat washer 4x M6 flange nut





- 64. Position B-0602L and B-0602R on the back extrusion as shown. Loosely secure each bracket with 2x M8x12 black button head bolts, black washers and nuts.
- 65. Adjust it so that the Rod latch rods run through the slot in the bracket. Once the position is set and the rod runs smoothly when operating the L handle, add a dab of grease to the bracket and the rod to prevent squeaking/rattling.
- 66. Fit gas strut ball joint to top of bracket as shown.
- 67. Repeat for the other side.

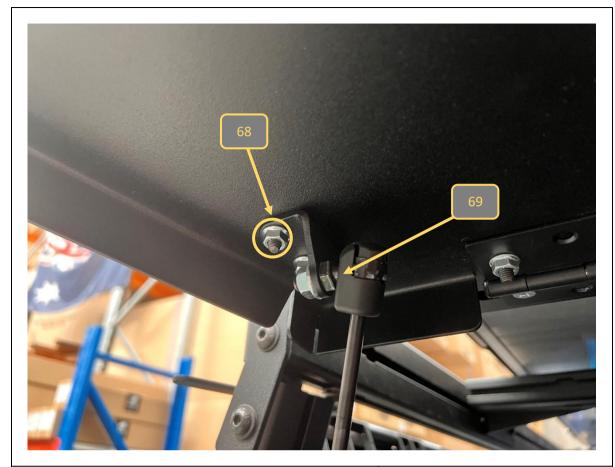
5mm Hex Key

Grease

#### **FASTENERS**

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





- 68. Fit B-0603 to the door as shown with 2x M6x20 black button head bolts, black washers and flange nuts.
- 69. Fit gas strut ball joint.
- 70. Torque all bolts on both ends for the gas strut assembly.
- 71. Repeat for other side.

4mm Hex Key

#### **FASTENERS**

4x M6x20 black button head bolt 4 x M6 black flat washer 4x M6 flange nut



72. Fit pinch weld at the rear as shown.

73. Repeat for other side.

TOOLS REQUIRED



74. Loosely fit 2x P-0269 to the underside of the 1300mm side extrusions, per side.

These hold up the lid to the toolbox. Once the toolbox is on you can torque them down.

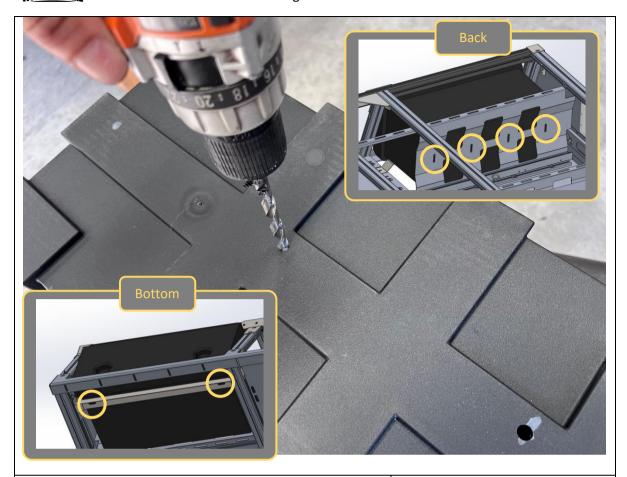
The order is M8x20 hex bolt, small M8 nylon washer, P-0269 metal plate, then large nylon washer into hex nut in extrusion T-slot.

# **TOOLS REQUIRED**

13mm spanner

# **FASTENERS**

4x M8x20 hex bolt. 4x M8 small nylon washer 4x large nylon washer 4x M8 hex nut



- 75. Put toolbox up to the GOAT Rack in its place and while holding it in place get someone to mark all the mounting holes from the other side.
- 76. Drill 10mm holes for each mark. 4x for the back and 2x for the bottom.
- 77. Then mount the toolbox and secure with 6x M8x30 hex bolts, flat washers and flange nuts.
- 78. Adjust the position of the P-0269 plates so they can support the toolbox lid up, then tighten bolts once in correct position.
- 79. Repeat for other toolbox.

Felt Pen or Paint Pen Power Drill 10mm Drill bit

13mm spanner

#### **FASTENERS**

12x M8x30 hex bolt 12x M8 flat washer 12x M8 flange nut



80. Lift the GOAT Rack onto the vehicle.

81. If fitting onto a roller shutter you can use our supplied P-0127 square nuts, or you may need to source different ones depending on the type required to suit the specific roller shutter you have.

If not fitting to a roller shutter skip to step 83.

**TOOLS REQUIRED** 

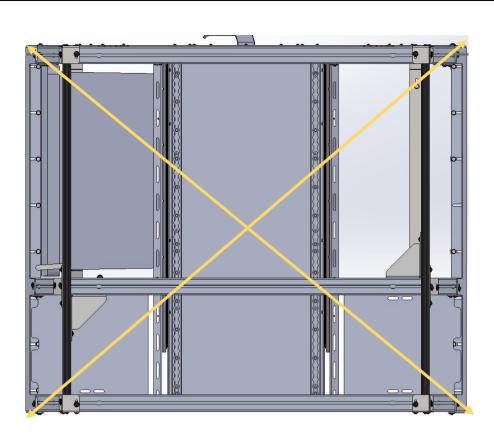


82. If your roller shutter has a large handle that will not clear the bottom of the GOAT Rack.

Let Offroad Animal know and we can supply you with a spacer to suit.

**TOOLS REQUIRED** 

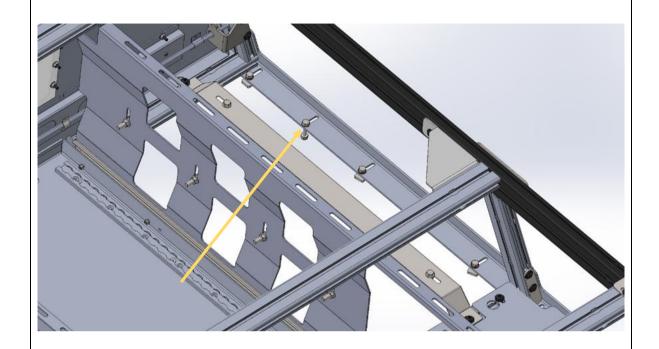




- 83. Now is time to square up the rack. Measure the Diagonals on the top of the rack.
- 84. Compare the two figures and push/pull the rack into position while all the screws are loose until you have no more than an 8mm difference between the two dimensions.
- 85. Once into shape, torque down all the finger tight bolts in the GOAT rack. Take care not to miss any.

5mm Hex Key Tape Measure





- 86. If your ute requires a tub brace kit for any extra weight like a canopy, make sure this is already fitted.
- 87. If you haven't already, then lift the rack onto the back of the ute and push it forward allowing for at least a 50mm gap to the back window of the cab.
- 88. If no roller shutter is required, mark at least 3 holes per side in the slots, spread out as evenly as possible.
  - Drill holes and secure down to the top of the tub with M8x40 hex bolts, flat washers and Nyloc nuts.
- 89. If using a roller shutter, match at least 3 points per side (as evenly as possible) and secure down with suitable bolts.

Power Drill 10mm Drill bit

13mm socket and spanner

#### **FASTENERS**

6x M8x40 hex bolt 6x M8 flat washer 6x M8 Nyloc nut





- 90. Make sure everything works, like pull out tray, toolbox lids, rear door.
- 91. Fit roof top tent now if required.
- 92. Fit jerry can holders now if required.
- 93. Fit awning now if required.
- 94. Enjoy!

**FASTENERS** 

For contact details see www.offroadanimal.com.au