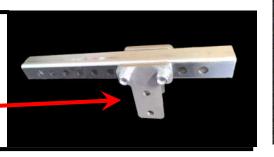
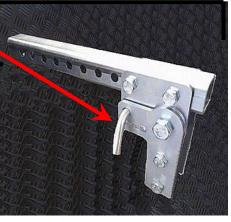
Fitting guide - GripSport Van-Rack - "Tilting" & "Fixed" Page 1

This is the top assembly of the "tilting" Van-Rack. NOTE the hinge mechanism and quick-release pin

This is the top assembly of the "fixed" Van-Rack. NO quick-release pin NO hinge mechanism





Once assembled, (instructions are included in your box <u>and</u> downloadable from our website) the actual 2-bike carrier will look like this

NOTE - this same carrier is used for both the "Tilting" and "Fixed" Van-Racks.



Once fitted to your van it should look like this

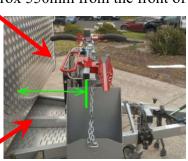
Positioning your carrier

Remember... when carrying bikes on a van, the aim is to *always* to have them sitting as low and as far back (as close to the body of the van) as possible.

So if your van has a very "flat", front face like this your new bike rack (and your bikes) will have to sit further away so things like handlebars and pedals can't touch the van. For vans like this we recommend positioning the rack (centre) at approx 550mm from the front of the van as indicated by the green arrows here

But of course most vans do <u>NOT</u> have that completely "flat" face... and on vans with an angled front face (like this) your rack and your bikes can be sitting closer to the van and we

recommend positioning the rack (centre) at approx 430mm from the front of the van as indicated by the green arrows here







Please note

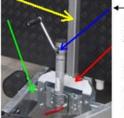
The distances quoted above are guides only. They *should* provide clearance for all bikes and handlebar widths *plus* the Van-Rack also has front-to-back adjustment that can be used *after* it's been fitted to your van (to fine-tune the position of your bikes). But we still advise you to measure carefully to ensure your particular bikes are going to fit without touching the front of your van. We recommend a minimum clearance of 100mm from end of handlebars to body of van and suggest you actually hold your bike up (in the position it's going to be travelling in) so as to position your new Van-Rack correctly.

Fitting method 1 (100% bolt-on)

If your van is suitable, our optional bolt-on mount should see your Van-Rack fitted in around 30 mins.

What is a "suitable" van?

Firstly... The bolt-on mount (red arrows) must only be fitted to a chassis rail (green arrows) measuring 75x50 or 100x50 Minimum length for this chassis rail = 350mm on side closest to car (see green arrows directly below)



Bolt-on mount (red arrow) fitted to the same chassis rail (green arrow) that holds the jockey wheel. NOTE - you will need to use a side-winding jockey wheel (blue arrow).

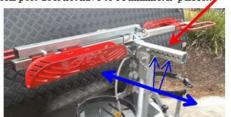
Bolt-on mount (red arrow) fitted to an empty chassis rail (green arrow) sitting behind the jockey wheel. NOTE - depending on clearance between the mount's vertical post and your jockey wheel, you <u>may</u> need to use a side-winding jockey wheel instead of the top-winding one shown (blue arrow).

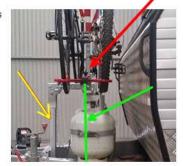


Secondly... The bolt-on mount (red arrows above) can *only* be used if it ends up positioning the main vertical post (yellow arrows above) in the correct spot to mount the actual 2-bike carrier.

Please refer back to <u>page 1</u> for how to position the actual carrier *AND* keep in mind that the position of the carrier (see green arrow below) is not the same thing as the position of the main vertical post (see yellow arrow below)... the carrier itself is *always* offset from the post. Tilting carriers must <u>always</u> be setup between the post and the van Fixed carriers can be setup on <u>either</u> side of the post.

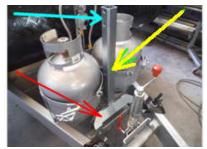
And remember... both the "Tilting" and "Fixed" Van-Racks have front-to-back adjustment so the positioning of the main vertical post does not have to be millimeter perfect.







Our bolt-on mount comprises a base unit (red arrow) which fits down over an existing chassis rail on your van and a vertical post (yellow arrow).



The vertical post is available in 2 lengths. Both are height adjustable.

The "long" post allows your carrier to sit over the tallest of boxes etc. (see pic A)

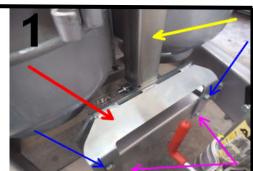
The "short" post is designed for vans and campers with beds that come out over the front of the "A" frame. (see pic B)

All vertical posts are pre-drilled (light blue arrow above) to allow the top assembly of the Van-Rack to bolt straight on.



Fitting the bolt-on mount

See pic 1 — Fit but don't tighten the two top bolts/nuts (blue arrows) — Slip bolt-on mount (red arrow) down onto chassis rail — Fit but don't tighten the two lower bolts/nuts (pink arrows) — Fit vertical post (yellow arrow) and its two bolts/nuts — Once in position, FULLY tighten everything.



<u>ALL</u> bolts, washers and locking (Nyloc) nuts needed to attach the Bolt-On mount to the chassis and then the Van-Rack itself to the mount, are supplied. They must all be *fully* tightened and, like anything else "bolted to your van", checked regularly.

Fitting method 2 (some welding required)

This method also uses our optional bolt-on mount (see Fitting Method 1 on previous page), but is used when there is no existing/suitable chassis rail on your "A" frame for our bolt-on mount to attach to... in which case one needs to be welded in per the details below.

But don't panic... this is ridiculously simple, perfectly safe and will **not** affect the strength of your chassis in any way. If you're a competent welder it's a simple DIY project... OR it can be done by us in around 1 hour (including painting of the small welded areas) OR, if you're not local to us it can be done by your own caravan repair/service centre or by any decent welding/fabrication shop in your area.

1/ The "new" chassis rail is one simple piece of 75x50x3 or 100x50x3 RHS (Rectangular Hollow Section) gal tubing. This is available at any steel merchant or through any welding/fabrication shop.



2/ Refer back to the "positioning guide" on Page 1 to work out exactly where this new chassis rail is going to sit in (or on) your "A" frame.

<u>But remember</u>... the Van-Rack itself has front to back adjustment that can be used after it's been fitted... so the placement of the new chassis rail does NOT have to be millimeter perfect. It just needs to be somewhere that allows room for the bolt-on mount to <u>fit</u> (around things like gas bottles, anti-sway fittings and jockey wheels etc).

The two photos below show just how flexible the positioning of the new chassis rail can be.





3/ Once the "new" chassis rail is welded in, paint the weld areas with "cold gal" and a "bright silver" top coat. This is a perfect match for a galvanized chassis.

4/ Refer to Page 2 for instructions on how to fit the bolt-on mount to your newly installed chassis rail.

Fitting method 3 (fully welded mounting)

Don't be put off... by the thought of having to weld something to your van's chassis. This is by far the most common way of fitting the Van-Rack and, unless you are certain that the bolt-on mount (fitting method 1 & 2 on previous pages) <u>can</u> actually fit on your van, this is the fitting method we recommend to most people. And despite what you may have heard from so-called "experts", it will <u>not</u> affect the strength of your chassis in any way. And besides being completely safe, mounting your bike rack this way just isn't rocket science at all.

If you're a competent welder it's a good DIY project... OR it can be done by us in less than one day (including painting) OR, if you're not local to us it can be done by your own caravan repair/service centre or by any decent welding/fabrication shop in your area - just give them this fitting guide to work from

1/ Refer back to the "positioning guide" on Page 1 to work out exactly where your Van-Rack needs to sit.

2/ Hold the top assembly in the approximate position it's going to be sitting in once it's fitted/mounted.



3/ Measure *down* from the top assembly to the "A" frame.

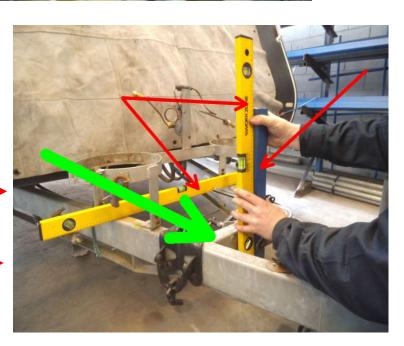
NOTE - you need to measure down from a point **above** the two holes in the top assembly... or in other words, from the red line shown in the photo.



4/ The main vertical post is a piece of 50x50x4 SHS (Square Hollow Section) tubing.

Cut to correct length (measured at step 3) and level or square up post as indicated by the red arrows

NOTE – if there isn't already a suitable chassis rail on the "A" frame to weld this vertical post onto (see green arrow) you will need to weld one on. For details... refer back to "Fitting Method 2" on previous page.



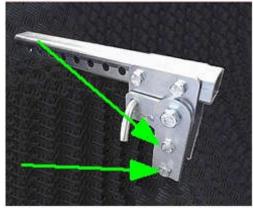
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Fitting method 3 (fully welded mounting) - continued

- 5/ Drill 2 holes in the main vertical post (red arrow) to suit bolts in top assembly (green arrows)
- * Holes = 12.5mm or 1/2" at 50mm centre-to-centre.
- * Drill right through both sides.
- * Centre of top hole should be 12mm down from top of post.

6/ Fully weld vertical post to caravan chassis (green arrow) and loosely bolt top assembly to post (red arrow)







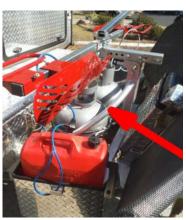


7/ Make & fit <u>at least</u> one angled brace (per red arrows) going from as high as possible on vertical post down to caravan chassis.

NOTE - brace(s) can go in either direction (front or back) and can be bent or shaped to fit around objects on "A" frame.







8/ Mask off and paint. <u>NOTE</u> - An undercoat of "cold-gal" then a top coat of "bright silver" will give a good match to most galvanised chassis.

