

## A Choice Of One

One of the claimed advantages of the demountable concept in a motorcaravan is that the base vehicle can be changed without having to make an unnecessary change to the caravan element as well - especially useful if you have invested a lot of time and/or money in personalising the caravan, adding accessories, etc.. Theoretically this is true of course but, as is so often the case, it's not quite as simple or easy as it sounds. Having recently upgraded the pickup with which we carry our demountable, this account of the process and problems may be useful to people contemplating a similar change or to readers who may already have a pickup and are wondering about looking for a second-hand demountable body to put on it.



Our demountable is a Suntrekker, built by Island Plastics and supplied to the original owner in 1995. We bought it in 2004, still attached to the '92 Ford P100 pickup to which it was first fitted. Both parts of the combination had been very well cared for but

even so, although the Suntrekker was almost as good as new, the P100, which had clearly seen a much harder life, was already on its second engine and beginning to feel distinctly tired. So when we bought the complete outfit we did so knowing that before too long we would want to replace the pickup. The question then was: with which one of the currently available pickups? - the priority of course being that the Suntrekker would fit *it* and that *it* could carry the Suntrekker. So began our process of research.



### **Will any demountable fit any pickup?**

The short answer is "No". Almost all demountables have some aspect of their design which is vehicle specific. In some cases it may be that the demountable body is designed for only one particular base vehicle (e.g. Tischer's Trail 280 for the VW T5). In others, although the body may be designed for a generic group of pickups (e.g. double-cabs), there is likely to be a brand-specific fixing kit.

In its handbook our Suntrekker was described by Island Plastics as having been "developed for use with most one ton pick-up trucks" - a claim that was supported by a surprisingly long list of ten pickups available at the time. However their explanation that "dimensions vary according to your base vehicle" indicates that it was far from one-size-fits-all and in fact they supplied "vehicle conversion packages" for all of the listed makes. I've not been able to find out what the differences between these packages were but, on the evidence of the huge range in the 1995 prices (from £252.63 for two-wheel drive pickups like the Ford P100 or the VW Taro, to £452.38 for the short- or long-wheelbase Land Rover), it seems likely that the various packages had significantly different specifications.

I did so without any expectation of success but I thought it worth starting by contacting Island Plastics to see if Suntrekker conversion packages for any other vehicles were still available. Not surprisingly they were not - they did stop making them over a decade ago after all and never made that many of them anyway. So I knew I was going to have start from scratch.

### Weight and size

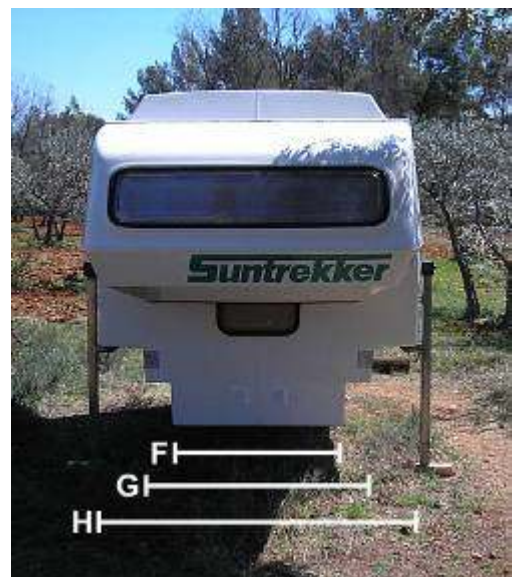
Because the Suntrekker was “developed for ... one ton pick-up trucks” it seemed safe to assume that any of the currently available one tonne (as they now are) vehicles would carry it quite happily, but in a project of this sort and expense assumptions aren't really a very good idea. I wanted to know for sure what I was dealing with. Although the handbook that came with our Suntrekker specifies the Gross Vehicle Weight and unladen weight of the combination, i.e. of the P100 and Suntrekker together, it doesn't actually give the weight of the demountable unit on its own. A curious oversight, I thought, but then, given the notorious approximation of unladen weights and payloads (acknowledged in the handbook to be fair), perhaps it was not so surprising. However, a simple deduction of the P100's claimed kerbweight from the unladen weight quoted by Island Plastics gave me the reassurance that I needed, albeit not kilo-perfect.

When it came to size though, there was nothing useful to be gleaned from the handbook. Those measurements given were, again, only of the Suntrekker and P100 together and were therefore not going to be of any use to me. As far as I could see there were eight critical dimensions of the demountable unit which I would need to know and to compare with any potential pickup. (These are illustrated 'A' to 'H'.)

So it was out with tape measure, paper and pencil to get these eight measurements as accurately as possible and then onto the internet and off to dealerships to check them against available vehicles.

### The first problem – exactly what *is* available?

Pickups have become what I imagine someone in marketing might call a 'lifestyle product'. I have absolutely no idea what this actually means, but what it means in practice is that manufacturers now change their designs and modify their models with the same tiresome frequency as with every other kind of car. When we started looking there were basically four market leaders in the UK - Mitsubishi L200, Nissan Navarra, Ford Ranger (badged also as Mazda B2500), and Toyota Hilux. By the time we were ready to buy, six months later, Mitsubishi had launched a new L200 and Ford were promising a new Ranger within the following three months, and as I



write this, just over a year since we began, Toyota has updated its range. The consequence of this is that, at any one time, there may be apparently similar vehicles on the market (same year, same model, etc.) but they may actually be quite differently specified. If you're buying for a very specific purpose or, like us, for a very specific demountable, it is essential to ensure that any critical feature or dimension that you need is on the actual vehicle you're looking at. Don't assume that the one on eBay is the same as the one in the showroom!

## Length

Despite each motor manufacturer's ability to invent a different name for the same thing, pickup cabs basically only come in three lengths - single-cab, cab-and-a-half and double-cab - and each of these options subsequently affects the length of the cargo bed available for a demountable to sit on. The trend at the moment is undoubtedly towards bigger cabs and smaller beds to the extent that the latter is sometimes little more than an open boot. Newer demountables are designed and made to fit these shorter cargo beds, in many cases with bodywork which drops down to the rear of the bed (the tailgate having first been removed) and extends behind the pickup. In contrast, the length of the Suntrekker body (**A**) was designed to fit almost entirely *within* the bed of a contemporary single-cab pickup (again with the tailgate removed), extending beyond it just sufficiently to allow the demounting legs and access steps to be attached.

Having discovered the limitations of a single cab, and endured them for two years, we knew that we wanted the benefit of some additional secure and dry luggage space and the ability to very occasionally carry passengers. However we also knew that we did not want half, or even more, of the Suntrekker hanging precariously off the back end of a double-cab pickup. So we were inevitably drawn to the compromise cab-and-a-half which offers a little more cab space while maintaining a reasonably long cargo bed. This excluded the Toyota from our list of possibilities. At that time their range did not include a cab-and-a-half, though it now does. As it happened, in the case of the pickup we finally chose, the combined length of the cargo bed and its lowered tailgate very closely matched the length of the P100's bed and therefore would accommodate the flat underside of the Suntrekker without us having to remove the tailgate (We specifically wanted to avoid this if we could.), and yet three-quarters of the main demountable body would still sit within the pickup bed.



Any demountable is going to add something to the overall length of the pickup and, more significantly, is going to add to the load carried by the rear axle. This will affect the way the vehicle drives even if care is taken to keep the load within the pickup's specified capacity. What should be borne in mind is that: the longer the overhang, the greater is the load on the rear axle; the lower the overhang, the greater is the risk of 'bottoming out' on rough roads or speed bumps; and the shorter the length of demountable contained within the pickup bed, the fewer are the opportunities for secure fixing.



## Widths and wheel arches

Though the length of a one tonne pickup's cargo bed may have become a variable option, its width will be within a few millimetres of a standard (145-147 cm). We found that the differences in overall, internal width from one model or manufacturer to another are negligible and there has been little change between older and newer pickups. Our Suntrekker's main body width (**G**) could have fitted comfortably in the bed of any of the available vehicles.

Rear wheel arches always intrude from the sides of the pickup into the cargo space. Obviously this limits the width of any demountable that can slide between them but, again, we found very little variation and the lower body of the Suntrekker (**F**) would have fitted any of the pickups we looked at. The more significant measurement of a wheel arch is its height from the pickup floor because this will need to be compatible with the height (**C**) of the cutaway that all demountable units have in order to accommodate the wheel arches. In many cases, including the Suntrekker, this will not extend all the way to the rear of the unit and, in such cases, it is also essential to check that the distance from the back of the wheel arch to the front of the pickup bed is equal to, or less than, the length of that cutaway (**B**). If you were trying to fit a demountable designed for a short bed onto the long bed of a single-cab pickup this could potentially be a problem.

Where significant variations in width *do* exist between models and makes is on the *outside* of the cargo bed. The wheels and tyres fitted to pickups have become bigger and wider than they used to be (particularly in four-wheel-drive variants) and this increase has been accommodated by wheel arch extensions on the outside of the pickup rather than inside the bed. These (sometimes extremely bulbous) extensions invariably represent the maximum width of the pickup (apart from the mirrors) and as such they have to be able to fit between the extended legs of the demountable unit. More than that, they have to be able to fit *with room to manoeuvre*. In trying to match a pickup to the Suntrekker the limitation of this distance (**H**) presented a serious challenge which most contenders failed. This included the Nissan and all of the Ford and Mitsubishi ranges with gladiatorial names like Animal, Thunder, Trojan and Warrior (Why do pickup manufacturers assume we all aspire to be Conan the Barbarian?!) which not only had wide wheel arch extensions but no end of shiny bars, accessories and other lumpy bits which got in the way. For a short while we did wonder whether this was going to scupper the whole project - the re-engineering of the Suntrekker's detachable, telescopic legs was not really a practicable alternative - but fortunately the bottom-of-the-range, no-frills Mitsubishi and Ford models (just) passed the width test.



## Heights and the luton

Although, as we've seen, the width (**G**) of a demountable unit designed for a pickup (as opposed to a flatbed) truck will sit *within* the side walls of the cargo bed, its body will also extend beyond those walls above a certain height (**D**). It's fairly obvious therefore that this

height is one of the dimensions to check against any potential pickup carrier. Having said that, it is unlikely to be problematic as cargo beds continue to have a standard depth of around 40 cm. Our Suntrekker could quite easily have fitted either of the two pickups that remained in our list of possibilities, if this had been the only critical height. Sadly it wasn't.

Their cargo beds may not have got any bigger during the last decade but pickups themselves certainly have. They've become longer and wider, but they've also become significantly higher than their predecessors. Obviously the popularity of four-wheel drive is a factor here - practicality, and fashion, demanding a high ground clearance. But the need to see over the obligatory long bonnet of the current crop of designs has also resulted in a move towards a more upright driving position. This, combined with the need to provide headroom for rear seat passengers in the larger cabs, has produced high cab roofs. The single-cab driving environment of the P100, in contrast, was basically the same as that of the contemporary Ford Sierra, i.e. with a prone driving position and therefore a comparatively low roofline. In fact it was very nearly 15 cm lower, measured from the floor of its cargo bed (E), than the roof of any currently available pickup.



Fortunately when Island Plastics made the Suntrekker's over-cab luton they gave it a hollow skirt, presumably so that only that needed to be cut in order to achieve a snug fit on each of the different cab roof profiles on offer. It certainly followed and fitted the roof of the P100 very closely. By adopting the same principle and cutting this skirt as high as the floor of the luton would allow, I was able to gain about 10 cm of the height I needed, but in the end I still had to construct a 5 cm timber sub-frame for the demountable to sit on in the pickup bed in order to

get sufficient clearance over the cab. Although this has minor disadvantages - i.e. it very slightly raises our centre of gravity and our overall weight - on the positive side it ensures that none of the demountable's weight rides on the tailgate, which is not designed to carry such a load, and incidentally overcomes the problem of accommodating the Propex heater's intake and exhaust pipes. More importantly, it makes possible the whole project - the luton floor being an absolute; fixed and inviolable.



### Fixing hardware: "And the winner is ..."

Hardware to securely fix the demountable unit to the pickup, as you might expect, varies from manufacturer to manufacturer. Some rely on turnbuckles attached to a hook or staple bolted, or even welded, to the pickup bed. Some of the larger American units rely on chains which connect to outriggers fixed directly to the truck's chassis, not to the cargo bed at all. Both are flexible systems - allowing some adjustment of the demountable's position and relying on tension in the turnbuckle or chain to secure it. By contrast, the Suntrekker, as supplied on the Ford P100, was secured by a rigid system - solid brackets (two per side) clipped under the rolled, upper edge of the P100's cargo bed and bolted into captured nuts

built securely into the body of the demountable. Having established that, whichever pickup we bought, we were going to have to make some fairly drastic and irreversible modifications to the demountable, we wanted to avoid any alteration at all to the vehicle, particularly as by now we had concluded that we would buy *new* - a first for us. So the Suntrekker's existing system had an obvious advantage, i.e. it required no physical change to the pickup - as long as it, like the P100, had something substantial at the top of its cargo bed to which we could attach brackets.

OK, so we've still got two contenders in the pickup stakes but we're about to get to the golden envelope. Neither of the two vehicles we were still looking at had the strong outer 'lip' of the P100's cargo bed - indeed no current pickup has. The Mitsubishi further pursued the present trend in design by putting any rope hooks or other lashing facilities *inside* the cargo bed, thus giving the outside a completely smooth and uninterrupted (car-like) look. The Ford on the other hand adopted a rather more old-fashioned but, in my book, eminently more sensible approach (these are supposed to be commercial vehicles after all) of providing a solid rope rail and hooks along the outside of the bed. After close inspection and reflection it seemed to me that that rail, with re-fabrication of the demountable's fixing brackets, could secure our Suntrekker in the pickup. So finally we had our winner (another Ford as it happened) and felt able, nervously, to place an order - for a white Ranger pickup with four-wheel-drive and Supercab (Ford-speak for a cab-and-a-half).



In order to be *absolutely* certain of my measurements I waited until we had actually taken delivery of the Ranger, so that I could check, re-check and check again, before finally going along to a local blacksmith / agricultural engineer with drawings of the brackets (four off) to be fabricated and galvanised. In the meantime (by way of adding a belt to the braces the blacksmith

was making) I modified a couple of the old brackets to make attachments for a turnbuckle and security chain at the rear of each side of the demountable - taking advantage of the fact that Island Plastics had built three captured nuts into each side of the Suntrekker even though only two were required by the rigid brackets.



### **More hardware: legs and steps**

The jacking legs of a demountable, of course, have to be capable of lifting the camper unit clear of the carrying pickup. The telescopic legs, as supplied with the Suntrekker, were designed to *just* clear the P100's bed - when extended to their wobbly maximum! In my view, they were not wholly adequate even for use with the P100 and I would always carry a few small blocks of wood in order to be sure of being able to get enough lift in all circumstances.

On a four-wheel-drive pickup, with its increased ground clearance, you would reasonably expect that the cargo bed would be higher from the ground than that of a two-wheel-drive equivalent, but in fact the height of our new Ford Ranger's bed is virtually the same as that



of our old P100 - the comparatively crude rear suspension of the latter giving an extreme tail-up, nose-down stance when unloaded but levelling perfectly when under load. However, the necessary use of the timber sub-frame, described above, has effectively raised the Ranger's cargo bed floor by another 5+ cm. It was obvious from the outset that there was no way the Suntrekker's legs were going to clear that safely. To get permanent extensions welded to the legs would have been one alternative - in some ways the ideal one - but then they would no longer fit in the Suntrekker's made-for-the-purpose, underfloor storage space. On the other hand, nor did I want to have to carry the bulk and weight of enough blocks of wood to give us the lift we needed.

I don't know yet whether this will be my permanent solution, time will tell, but for now the Fiamma catalogue has provided me with an answer. I bought a set of four levelling jacks, sold primarily I think for steadying parked caravans and motorcaravans. Available in plastic or aluminium, and each with a load capacity of 750kg, three or four of them will easily take the load of most demountables. I have taken out the metal jacking section and just use the 'pyramid' bases (I bought plastic because they are lighter), one under each of the four feet of the Suntrekker. These give me an extra 24 cm of height to play with and yet are compact (they stack) and light enough to carry around.



Bed height also has a bearing on access in and out of the mounted camper unit of course. The steps that came as original equipment with our Suntrekker fitted perfectly when it was



on the P100 but were very short and consequently dangerously sloping on the Ranger. To be honest, getting rid of them was no loss - they were really well engineered but always a pain to carry around being both heavy and bulky - but although an easily available, free-standing replacement could be a lot lighter it would be unlikely to be any less bulky, the opposite in fact. I decided to overcome this problem by making a folding step that hangs from the original steps' brackets on the demountable and attaches forward to the tow hitch of the pickup. (It incidentally carries a

lighting board supplementing the pickup's rear lights.) I confess that I made this quite quickly and somewhat tentatively, unsure that it would work, but in practice it works extremely well and so at some point I shall make an improved Mark2 with a little more care. The fact that it has to be detached before the Suntrekker can be demounted is not a problem for us. It adds less than five minutes to the demounting process.

### **And finally**

It's worth pointing out that no matter how careful you are in a project of this sort there is always going to be some risk involved. Foresight and thoroughness can anticipate problems and minimize difficulties but until you are actually able to fix the demountable into

the pickup it is simply not possible to know how well, or badly, the combination of the two will work, particularly on the road. How about in our case? Does the combination work?

Well, the Suntrekker fits neatly and rides securely on the back of the Ford and, for my money, looks as though it belongs there; the Ranger's turbo-diesel engine (2.5 as opposed to the P100's 1.8 litres) simply ignores the demountable's presence; and its suspension, which I can only assume works by witchcraft, is soft enough to smooth out bumps and potholes but hard enough to prevent undue rocking and rolling on roundabouts, tight corners and rough ground. Does it work? Hell yeah! We may have had a choice of only one, but it certainly seems to be the right one.



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