



## Get Off Road with Phil Four-wheel-drive *fit out*

*Fitting out the interior of a four-wheel-drive usually ends up being a compromise.*

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**Y**ou want the most storage space and easy access to your gear while travelling, but need the car as a daily drive as the family taxi, for shopping and so forth. If you get it wrong, you will have spent a lot of money and it still won't work for you.

It took me a number of refits over the years before I got mine right. Why? I didn't really understand what type of off-road

driving I was going to enjoy and my interests changed over the years from local trips and overnights to extensive remote touring.

What should you do? How do you get it right? There are so many variables to consider:

- How many people will there be in the vehicle? A lay out for two people will be entirely different than that for two adults and two children.

- Will you be towing a camper trailer or off-road caravan? A trailer can carry lots of gear, food and water and will free up space in the vehicle.
- Will you be static camping or moving every day?
- What distances will you be travelling? Long distances bring problems of having enough water, food and fuel.

How did I set up my vehicle? It's always been just Mrs B and yours truly so the decision to remove all seats other than driver and front passenger was easy. After a few years of avoiding the expense of roller drawers we bit the bullet and fitted them; and we have used this setup for the last 20 years.

I didn't buy my drawer system off the rack, I built it with the help of my cabinet maker nephew. This not only saved money, but allowed me to maximise the space available. Commercial roller drawers tend to be one-size-fits-all, leaving lots of unused or hard to get at space either side of the drawers. With these, the only customising is that the top is cut to fit the shape of your vehicle, so there aren't any gaps.

I was also able to make the drawers to the exact height of plastic tubs I had been using, which enabled us to pack our tubs in the house and then just drop them into place.

I felt the space over the wheel arches in commercial drawer systems tended to be wasted and difficult to get into. I was also concerned that tall solid items could slide across the flat top of the drawer system and hit and break the side windows.

Using marine ply, we made a set of over wheel arch storage boxes with lids. These boxes are firmly secured by bolts through the floor.

Once the over wheel arch boxes were in place, we turned our attention to the main roller drawer system. The key measurement was the height of the plastic tubs, because that determined the height of the drawers. The vertical framework was made from 16 mm marine ply; we used steel flat bar to act as bracing across the bottom. We positioned the flat bar so that it sat across the now unused vehicle seat bolt holes in the floor. You can't get any stronger than that!

The width of the drawers was governed by the remaining space between the over wheel arch boxes, the thickness of the drawer framework and the width of the roller bearing runners. We had the drawers made up by a sheet metal fabricator using galvanised sheet metal.

Using small bolts and nyloc nuts, to prevent them coming loose, the roller bearing runners were fixed in place. We got our drawer hardware online; there are a number of suppliers including Ovesco that sell the runners as well as the handles and locking mechanism.

By covering the ply with marine carpet (available from Bunnings) we soon had the drawer system looking like a professional job. The total cost was around \$650 so, not only did we save money but we maximised the space in the back of the vehicle and had drawers at the height we wanted.

Feeling proud of myself, I put four empty plastic tubs into the drawers and then called Mrs B to come and see the finished product. She was delighted to say the least; then she said: 'You don't think you're going to put any tools or spare parts in these do you? These are going to be used for food and cooking gear!' My gear was then relegated to the side boxes and has been that way ever since!

Note: It may not be possible to remove both back rows of the seats in some new vehicles because of fitment of airbags and such, which may result in an unroadworthy vehicle. Check with your vehicle dealer about any issues with seat removal and also check with your state vehicle licensing authority seeking approval as you may need a permit from them.

I've always wanted to utilise the wasted curved ceiling space in my vehicle to store light objects and to keep emergency items quickly accessible. Removing the grab handles I discovered very strong captive nuts making for a very secure locker.

Using stiff cardboard and lots of trial and error, I developed cardboard patterns for the front and rear of the locker. My sheet metal mate soon had these folded; he also fitted a fold down door that was secured with a piano hinge.

Again, using cardboard, I produced a template that had the exact angle of the fixing brackets for fitment to the grab handles holes.

Rather than paint the metal shelf I opted for marine carpet. Over centre clips were fixed to each end of the fold down door to keep everything secure and some pinch weld (from Clark Rubber) was fitted to exposed edges making for a professional finish.

I hope that how I set up the rear of my vehicle has given you some ideas. As I have illustrated above, by making your own storage systems you can save yourself a lot of money, have a system that maximises space and that gives you personal satisfaction.

See you in the bush. ❖



Clockwise from far left: There are many great off-road tracks to explore. ❖ The drawer system designed by Phil. ❖ Getting off road with friends. A good fit out means you can take all your gear and stow it safely. ❖ Overhead locker with inverter. ❖ Wonders of the outback. An Aboriginal marker.

