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## Choosing accessories

Why would anyone want to “customise” an expensive car? Well. Actually there are two main reasons, one of which is to make it look more individual, thus suiting the personality of the owner and then there are the arguably more essential enhancements to make it perform in a way that best suits the way in which the vehicle is used. In the former category, there is virtually no limit to the amount of money that may be spent on special paint, trims, wheels, custom interiors, sound systems and perhaps custom exhausts and mufflers might be included in the list, if their purpose is merely to change the sound. For examples of the range of custom items available, ideas may be gained from the leaders in this field like Overfinch or Project Kahn -

<http://www.kahndesign.com/automotive/projectkahn/>



This article, however, focuses on the more practical aspects of customisation, where enhancements to suspension, lights, engine management, storage and protection are just some of the changes to make your Land Rover better suited to non-urban lifestyles. As a starting point, it is best to realise that all vehicles are built to a price point. As silly as it might appear, take the example of an oil line. To a typical buyer, this hidden item is not going to make any difference to a buying decision. At design time, the engineers might prefer a compression fitting, but if a cheaper O-ring fitting will save, say, one dollar, then over a production run of 100,000 vehicles, \$100,000 has just been added to the profit. This does not imply that every doubtful item of engineering must be changed, but if the vehicle is to be used in remote or extreme conditions, there will be some items where an upgrade will be good policy. The following is by no means an exhaustive list and expert advice should be sought about the cost/benefit relationship of any item under consideration.

### Electrical power

In older vehicles the bad news is that more gremlins lurked in this department than in most others. The good news is that repairs or replacements were relatively simple. Today, solid-state components generally cannot be repaired, even with specialised equipment so upgrades might consist of the following:

- Up-rated alternator
- Dual batteries and isolator to run fridge and other electrical items without discharging the starting battery.
- Professionally wired extension sockets for auxiliary power

### Engine management

- If an extended trip is being prepared, it is only sensible to ensure the vehicle is completely reliable. Additionally, one might consider fitting a HALTEC management system so facilitate tuning for optimum performance. There are separate articles within the Graeme Cooper website dealing with this topic

## Fuel capacity

The standard fuel tank on most vehicles is probably not suited to the needs of remote driving. Options include larger capacity tanks or separate auxiliary tanks.



## Body protection

The heavy steel bull-bar is the item of choice for the Rambo's of the outback but the modern plastic is better in many ways. Unlike metal, it will deform predictably on impact and will not cause damage if it is wrapped around the front of the vehicle. Most come with accessory mounts for lights, fishing rod holders etc.

## Lights

The range of accessory lights includes fog-lamps, spots and floods, each type with a variety of power and different bulb types. However, modern XENON replacement lights are now available as after-market accessories for around \$500.. The efficiency of these lights compares favourably with a bar full of spots costing considerably more. Regardless of which type of additional lights are installed, it is essential to include repays in the circuits to provide adequate power without destroying the wiring loom and draining the battery.



## Potable (drinking) water

Finding an adequate supply of drinking water is a problem not just confined to the outback. Carrying your own modest supply will eliminate trying to get the vehicle next to the hose in the camping spot and will ensure that you know what you are drinking. However, water is heavy so carrying containers on a roof rack is not recommended. Custom tanks designed for each model of Land Rover are available at quite reasonable prices.



## Snorkels & breathers

For anyone considering wading rivers, this becomes an essential item and there are as many snorkel and elevated air intake devices available as there are vehicle models.

## Storage & access to it

Selection is mainly a matter of preference, ranging from custom-built off-road trailers, to roof racks and pods, to internal cargo drawers. One of the major advantages of an external wheel carrier is that it releases a massive amount of interior load space in most vehicles, as well as allowing a wheel change without removing just about all of the interior load. If roof-carrying systems are selected, a fitted ladder will make access far easier.



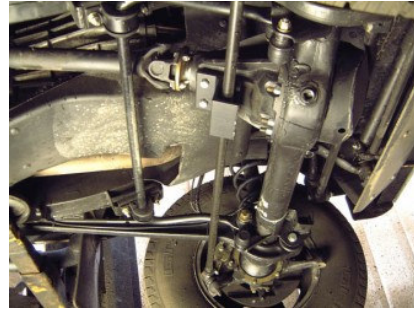
## Suspension

Raising a vehicle 200 mm or more may look sexy to some, but a wiser approach is to seek expert advice about the best suspension modifications to suit the kind of driving anticipated. This may include a body lift but when rough tracks are expected, especially with a heavy load, a combination of several items might be needed, like twin gas shocks, up-rated springs, HD tie rods and drag links



## Transmission

There is little point in having increased engine power if it does not end up at the wheels. The line between upgrade and accessory gets blurred here, but the simpler items include Maxi-Drive splines and HD axles. A pre-trip check is the best all round insurance to check for cracked or worn bushes, drive-shaft universals, CV joints, swivel-joints and wheel bearings



## Tyres

There will be more argument and conflicting advice about tyres than just about any other subject. Whether tyres can even be included in the topic of accessories is debatable. However, the standard tyres fitted to the new vehicle will be the ultimate compromise between price and effectiveness, with strong bias towards the “general public” driving most of the time on bitumen. For off-road work, or even extended cruising that includes gravel roads, the selection becomes more difficult. Driving conditions must be also considered. Fine weather driving is a very different proposition to snow and mud. Tyre width, tread depth and pattern will greatly affect performance on sand and this will be a poor choice for deep mud and so on. The author of this article has experienced 10 different brands of tyre during the life of 8 Range Rovers and a couple of Series Land Rovers and swears by BFG All Terrains. However, the next guy with as much if not more off-road experience might prefer Coopers, or whatever. Website forums are a good place to gain input from others, but as usual. Advice must be considered in context – what suits one driver may be quite wrong for another.

