

## DIY repairs – Beware the unexpected

Owners of older Land Rover vehicles will be used to performing some of their own repairs. This may be just to save money or because the location of the vehicle makes it difficult to access skilled labour. Getting a mechanic to drive a considerable distance to you will not be cost free so if you have the necessary parts etc, a DIY fix is more than tempting.

The key to success is to confine DIY work to things where personal knowledge and experience will enhance the chances of getting the desired result. Or to put it another way, don't take on jobs beyond your skill level. Also, if you are not doing this sort of work on a daily basis, it is easy to overlook some critical step.

Even with appropriate experience, things can still go wrong, many times for unexpected reasons. Maybe someone has previously changed the location or mounting of a component, installed an aftermarket component, or perhaps painted something that obscures easy identification. This is especially true for electrical systems, but it can frequently apply to other parts of the vehicle.

This article is not the place to review every possible DIY repair, but here are some simple examples to illustrate the possible pitfalls:

**Your (low beam) lights fail.** If only one lamp has failed, it will almost certainly be a blown globe. If both headlights have failed, a fuse is the likely culprit, but even if you find one there will be a reason why it blew so if it blows again, you will need to investigate for a short circuit in the wiring. If the side lights still work, the most likely source of failure is between the relay and the lamps.

A test lamp or multimeter will allow you to trace wires back from the lights along the loom and in doing so it is quite likely you will find where a wire has chafed. Do not overlook the possibility of a broken ground wire (usually black). Once you detect a break in a wire with the meter, you can usually rig a jury wire to get you home

*Beware of someone's previous wiring attempts where the wire you see may not be what was originally designed.*

**A radiator hose or belt fails.** Because they are tough, a failure is usually a symptom of inadequate inspection at the last service. Short term DIY fixes are always possible. You may not have the correct spare hose, but several turns of "rescue" tape can probably seal it enough, especially if you put a hose clamp over it.

Belts are trickier. Using pantyhose can cause more trouble than it solves. Rescue tape is tougher and might just keep the fan and alternator turning. Be careful not to *let your temporary repair chafe the fan or the alternator or whatever.*



**Look before you drill.** Bad things can happen even in your own workshop. It would seem very simple job to drill a hole to mount a relay or a reinforcing bracket. Surely a highly experienced DIY operator would not be stupid enough to drill through a body plate and damage the copper pipe behind it that someone painted black and hid just below any line of sight? Sliding in a “guard” plate would be such a simple precaution but forget to do that and you are potentially in for great inconvenience and probably cost. Apart from the hassles of dismantling it, getting the damaged item repaired might not be simple. For example, an aircon dryer and re-gas could set you back several hundred dollars. Beware the unexpected.



And while we are at it, attempting to repair the damaged pipe yourself might not be a terribly good idea. R134a air conditioning gas is pressurised to 300PSI and if your repair fails, it will cost another \$200+ for yet another drier and gas refill.

**Broken exhaust brackets.** Duct t tape or zip-ties are not a good idea – don’t laugh – someone will have tried these and discovered that they melt or burn! A temporary fix using fencing wire should get you home (just don’t cut the farmer’s fence to obtain it). A wire coat-hanger will do or a couple of large hose clamps hooked together will also work

Do remember this is, at best, a temporary fix and the fuzz have no sense of humour when finding the exhaust and its retaining wire dragging on the road. Also, if the pipe falls off and starts a fire, it could do more than spoil your day. You might get a few months in the slammer instead.

In a time of need, the experts at your regular independent service shop should be thought of as your best friends. Only rip-off merchants will refuse to provide advice over the phone about safe, temporary repairs to get you home. Graeme Cooper Automotive will quite obviously avoid suggesting fixes that are illegal or potentially dangerous but there are many simple, practical solutions that should work for you. Please just be respectful and don’t waste their professional time unless it is really necessary