

I want to go Rally/Touring

Part 5 – Tools & First Aid

An occasional series intended for the new or current rider who wants to take up motorcycle rally/touring. It is not a definitive on how or what to do, rather provide you with a starting point to get out on the road, gravel or trail.

Note: I have jumped my planned Part 4 Food & Cooking. During a review of a recent ride of ~ 10 members, one rider got a flat tyre and recovered some hours later using his BMW Road Side Assist (card). Whilst not on this ride I was surprised to hear that no one had a tyre repair kit. Given the ride was ½ day and ~200 kilometres – it was probable that no one had a first aid kit either. In my opinion, two must have items for any but the shortest of rides.

Disclaimer

Product and brand names are likely the ones I have used or are using now but otherwise representative of the concept. There will be cheaper, equal or more expensive alternatives in the marketplace and therefore not a recommendation. Look around and talk with others on their experiences when making your choice.

Tools of Yesteryear

BMWs used to come standard with a tool kit the envy of every touring motorcyclist and capable of disassembling your motorcycle on the side of the road. With the addition of a couple of tools for example BMW combination steering head & swing arm bearing spanner you could also put it back together albeit without the use of a torque wrench – but then it was the era of steel frames and proper aluminium ☺. Often the Tourer would carry assorted spare clutch, brake and throttle cables, spark plugs, carburettor diaphragm rubbers (anecdotally a condom will also work), oil and fuel filters along with 500ml of engine oil and some even gearbox/drive oil.



Figure 1 - The R100xx tool kit with supplements for touring.

Rally trivia: At a long ago Wombat Rally (Oallen Ford) we repaired a rock holed engine sump with a flattened beer can, tube of silicon and combined 500ml' of engine oil.

My 1981 R100RS came complete with a set of spare globes, tyre repair kit, manual pump and first aid kit along with the tool roll. It was too new to get the earlier models embroidered BMW cloth towel. Perhaps replaced by the BMWTC Flowel in recent times.

My latest BMW came with 3-year Road Side Assist (card), a combo screwdriver and a couple of suspension spanners that require the strength of Hercules to use. Unused I may convert them to axes in the future.

Tools for Today

The introduction of motorcycle fuel injection paralleled the demise of roadside mechanical repairs other than basic battery and fuel (quality and type not delivery) faults and flat tyres. Add an assortment of cable ties and roll of duct tape and you will have most contemporary mechanical issues covered.



Figure 2 - The 'toolkit' from a 2018 RnineT Urban G/S. Road Side Assist card not shown for clarity.

You and others may have undertaken complex roadside mechanical repairs, but what I have experienced, seen or assisted in over recent years more often than not involve these three.

Battery. As a weekend and infrequent rider I leave my current bikes connected to a 'smart charger' when in the garage. Whilst a fan of Ctek chargers there are other brands including BMW but the cheaper one's may not be so smart and can kill an otherwise good battery. At the first sign of trouble – like slow cranking speed, delay in starting or 5+ years of age – consider buying yourself a new battery. The ~\$200 may save you the embarrassment of failing to proceed. Modern AGM batteries can and do fail with little notice and worn ones are not doing your motorcycles electronics any favours either.

Clearly not a BMW Tourer solution so get yourself a set of 20A motorcycle jumper leads from bike shop, online or made up vs car rated 200A ones. BMW decided to put the F800GS battery in some inaccessible, if safe, position under screwed covers so I have added an Anderson Plug & cap extension lead to an accessible area, same on my RnineT Urban G/S. Own a R100xx or R1200xx then simply open/remove the seat.



Figure 3 - Motorcycle 'jumper' leads & portable battery packs do not require being car sized.

So the next time you see another rider stranded at a cold winter rally on Sunday morning you will be ready and capable to assist.

Fuel. I choose to purchase fuel from branded service stations, who if nothing else have their brand name to protect and if riding off the main roads suggest you regularly replace your bikes fuel filter(s) and look for the service station that has the appearance of being maintained at least above ground. However, when you need fuel even half a tank is easier than pushing your motorcycle.

Service stations offer E10, 91, 95 and 98 RON Petrol and Diesel at most combination bowsers. Your bike will likely run better on one of the petrol variants than diesel and the shortest queue at the pump, stained dirt or concrete beside the pump may be a telling factor in helping your fuel selection, or so I heard.

Flat Tyres. Most of my flat tyres occurred in the last 1000km of tyre life whilst trying to squeeze in that one last ride. Today, not having to commute, more conscious of tyre performance vs degradation and able to afford them, change tyres on a more conservative basis.

That does not mean I have not had flat tyres whilst riding. Of my three probable causes for your enforced stop, tyre punctures are the least predictable if not a certainty on kilometres ridden/time. Moreover, in the majority of cases repairable by any rider with basic mechanical skills using nothing more than a multi-tool and tyre repair kit on the side of the road. I will dispense with the 'how to' as there are hundreds of You Tube videos on your preferred or optioned fix, failing that read the instructions.

You will need a **Multi-tool** or needle-nose plier equivalent to remove the cause of your flat tyre. Most probably a hardened point self-drilling screw, but other causes include hi-tensile fence wire or that unseen rock in the creek bed. By the time you realise your tyre is flat, the offending item will have ground down to be level with or slightly below the tyre surface or may be found hiding at the bottom of the tread. Sidewall tears and dinged rims are also contributors to flat tyres.

Tyre Repair kits include combination micro sealant and air in a can, plug and bead kits or liquid micro sealant used with compressed gas cartridges or 12-volt plug in air compressor to reinflate the tyre.

- I can recommend [Slime liquid sealants](#) that unlike earlier similar products does simply wash off with water when you change the tyre out. The

simplest type is the single use Slime QuickSpair - remove the cause of the flat, screw on the QuickSpair can and press the button, ride immediately for 20+ kilometres, check and adjust your tyre pressure at the next opportunity. Plug/patch or replace the tyre when home or next town.

- Tyre Plugs or Bead (aka rope, dog turd). Most motorcycle dealers or accessory shops have these or easily found online individually or as kits. Remove the cause of puncture with



Figure 4 - a successful 'plug' to a damaged tubeless rim after the rider hit a rock in a dry creek crossing on the Birdsville Track



Figure 5 - the National Motorrad Rally 2014 'Registrant' Multi-tool with variants widely available. Buy a good quality one.

your multi-tool and kit rounded file to clean out the hole and kit second tool to push the plug or rope in to position. You can trim off or leave a small amount of the rope sticking out. Make sure to wear your gloves if reinflating the tyre with gas cartridges to protect against the risk of freeze burn or use a 12-volt plug in air compressor. My preference is the rope type as they adapt to odd shaped holes or when fixing rim/bead and tyre sidewall punctures. The addition of liquid Slime/sealant will increase the likelihood of successful patching of larger or odd shaped punctures.

Note: BMW CANbus system and Merit accessory socket will not power any 12-volt handheld air compressor. Revisit the battery/jumper lead/extension lead combo Anderson Plug section.

- **Tubed Tyres** can/may be repaired using liquid sealants, but more likely require the removal of the front wheel with the aid of a rock or log pile, panniers or other jacking system and use of rim guards, tyre levers, adhesive patches or new tubes and air compressor / hand pump. Your rear wheel should be sitting in the air if you have a centre stand.

Rally Trivia: it takes ~300 strokes of a BMW hand air pump to inflate a R100 3.25 x R18 tubed front tyre.

Finally, throw in a pair of nitrile gloves or detergent/soap to clean your hands and detergent will help re-bead your tubed tyre.



Figure 6 - Tyre repair options (L) Plug & CO2 kit (C) liquid tyre sealant (also available in single use pressure pack), (R) 12 volt air compressor

First Aid Kits

Whilst it is important to have a first aid kit, it is just as important to know how to use it. A 2 day (one online, one classroom) accredited first aid course can cost as little as \$100 per person. These include a CPR component with trainers, professionals and statistics telling us that ANY ATTEMPT at first aid is ALWAYS better than doing nothing.

You can find first aid kits in various sizes and types in shops or online, larger kits have more options, and do not forget to take your prescription medicine (and scripts) sufficient for the duration of the ride with spares for that unexpected or delayed return. If you are riding in a group, tell at least one person that you are on prescription meds and under what circumstance you may need them.

- If lucky, you will only need something to remove a splinter or application of antiseptic & Band-Aids in various shapes or that bottle of sterile eyewash.
- The next level may include treating some sort of reaction to an insect bite warranting an over the counter antihistamine or minor burn, cut or graze requiring a sterile gauze dressing and bandage. Snakebites usually involve you chasing the snake not



Figure 7 - Atypical First Aid Kit. Buy one suitable for your riding risk.

the other way around. Snakes go in to tents by mistake not intent, leave the door open or close them in the first place. Boots left on their sides or bags open under the tent fly also make an attractive if temporary home.

- Motorcycle touring is a lot of fun but not without risks including significant self-inflicted or imposed trauma. First aid requires cool heads and best outcomes have a number of people involved and a lesson here in the dangers of sole riding. If you come across a serious accident then expect to be there for some time and prepared to deploy your last line of immediate first aid tools the combination of sterile dressings and 1+ triangular bandages to stabilise the injury.

Having been sold into the nations service (Navy) at 15 I was subjected over the years to the merits and many uses of the Australian Department of Defence 'shell' dressing', post Navy I came across the Israeli Defence Force (IDF) 'combat dressing' that is a quarter of the size when packed or smaller than a packet of cigarettes. These are for sale individually on eBay (vs UK MOD minimum 20 000 order) and can attest to



Figure 8 - IDF 'Combat' Sterile Dressing

their use on a non-motorcyclist split forehead injury during a Cairns stopover on the way to OCR 2012 and swathed dressing drawing favourable comment from the Queensland paramedics when they arrived. How you can get that much sterile dressing and metres of bandage into one pack must require the use of a tank or tank equivalent.

Lastly, once the excitement of immediate first aid has passed, you will need to turn your mind to rider and then motorcycle recovery. However, that is a story for another day.

Happy riding

Garry Smee