

The following are some tips on preparing for a rally kindly put together by Gerry Hawkrige.

Success in motorsport starts with preparation, and with new adventurers squaring up to take on this challenge, here are a few tips that could make all the difference.

Obviously whatever car you take on such a demanding trip, you must do all you can to ensure it's well prepared and won't let you down. Enthusiasts who have built their own car have an advantage - who could possibly know it better?.

The first thing is to draw up a complete check-list and then go through it on the car. Engine, gearbox, clutch, hydraulics, cooling, electric's and of course brakes. It's amazing how you can find an odd loose nut or bolt, cracked grommet, dodgy connection or loose union.

Try to standardise as much as possible on nut and bolt sizes, threads etc. Carefully go through the car and as you do so, put to one side the spanners you would need for a potential fix. You will hopefully find your tool kit can be much smaller than you thought.

You cannot possibly carry all the spares required to meet every eventuality but you can certainly be prepared for the most likely problems. The following is a suggested list to which you can add or subtract as you see fit.

Always try to mount spares near to where they will be required. It saves time emptying the boot, searching for spanners and spares and repacking. This will always speed up problem solving and if you suffer a problem in a timed section, lost minutes are important. Even more important is to check beforehand that spares work!

Fan belt. Why not tape it to a suitable area of the chassis or underbonnet area near to where it will be needed?

Cooling fans. Why not fit a manual override on/off switch on the dashboard just in case the thermo switch or control plays up?

Spare fuses. Tape spare fuses to the fuse box lid or in a small plastic box near the fuse box. Similarly tape a spare relay next to each relay in your loom.

In most European countries, carrying a spare set of bulbs is a legal requirement. You can save time by putting spare head and side lamp bulbs in a bit of foam and tucking them in the head lamp bowl behind the light unit. Rear bulbs can be put in a plastic bag and taped to the rear light units.

Attach a spare coil next to the existing one. If you overlap the mounting brackets you will only need one extra hole for the fixing. Check the wires are long enough to reach the spare unit and that the terminals are the same.

Spare spark plugs, leads, rotor arm and if applicable, points and a condenser, can be packed in a strong plastic bag and taped securely to the chassis, bulkhead.

A spare front wheel bearing kit complete with sachet of grease and a spare split pin can be wrapped in plastic and secured in a suitable underbonnet place. It's amazing how much boot space can be saved by storing things under the bonnet but the biggest advantage remains time if things are easy to get at when you need them. An emergency wheel bearing fix will have to do without the refinement of a torque wrench but a pry-bar slipped between two wheel studs will enable you to fit it tightly until it can be properly checked. This too can be taped to a chassis tube.

It's always a good idea to take a spare fuel pump and if space permits to mount it next to the existing one. At the same time you must clean and check your fuel system thoroughly making sure the pipe is well routed and not likely to chaff or rub on any moving components, that it is securely clipped to the chassis or body, that all unions are tight and that there are no leaks. Also make sure there is a good return spring on the accelerator and while you're at it, you've guessed - tape a spare one nearby.

Take a Finilec canister or similar product as well. If you use your spare, then at least you can get going again. Finilec actually seals small punctures in tubeless tyres. For tubed ones, a spare tube and patches is a must and don't forget the tyre levers. Similarly a foot pump will be handy or one of the small electric ones that run off the cigar lighter socket or direct from the battery.

It's always worth having a spare set wheel studs and nuts. Put them in a plastic bag by your spare wheel.

For cars with powerful engines it might be worth taking a spare universal joint for the propshaft if applicable or a spare CV joint with a sachet of grease.

If the event involves night driving make sure the navigator has a decent interior map reading light which can work off the car battery and which leaves his hands free for holding the map and checking the route.

Spare hoses, water and petrol, are a good idea as well as jubilee clips. In addition radiator sealant and a bottle of water. If you carry a container for drinking water, it can be dual purpose. I'm sure your engine would appreciate a litre of cool, clear Evian given the crap that comes out of it!

Also on the fluid side, it's a good idea to take some engine oil, brake fluid and axle oil. You can transfer them to smaller plastic bottles for easier storage which must be secure to prevent spillage's. A tin of brake fluid can be taped near the reservoir but make sure everything is clear of the exhaust.

Wrap starter motors, exhausts etc. in one of the available heat protective materials and if any wires or fluid pipes run near the exhaust, protect them either with insulation or a heat shield.

Things like roll cages are fairly obvious and would certainly be necessary on rallies. For these strenuous events you must decide what you feel is appropriate or what the rules dictate. In any event, when driving open cars, crash helmets are always a prudent precaution.

Consider your passenger or navigator's comfort. Padding on roll bar support tubes on door hinges and dashboards can make all the difference. In open cars, consider wind deflectors. Make sure you have some good, easy storage in the cockpit for all the maps and route books. In an open car it's amazing how easily these things can blow away at speed. Make up a pocket or pouch that is secured in the footwell or by the transmission tunnel. Also find a place to store a bottle of water where access is easy without removing seat belts etc.

A decent Brantz rally meter is pretty well essential for accurately following tulip directions and make sure the reset button is within easy reach for the navigator especially if you have four-point harnesses.

Make sure you have good, strong and easily accessible towing eyes at each end and that a tow rope will not damage adjacent bodywork.

Make sure the exhaust is mounted as high as possible to maximise ground clearance and make sure all undercar cables, pipes and wires are clipped securely and safely out of harm's way.

I could go on forever with a list of handy things to take but you have to decide what is appropriate for the event you are contesting as well as where it will go. In Europe you'll never be too far from a garage with a full range of spares.

Similarly, you can take too much. The best advice I can give is to suggest everything and let you pick and choose as you see fit but it all comes back to preparation. If you've done a thorough job, there's no reason why the car should encounter mechanical problems. However, that simple outlook doesn't take account of Sod's Law and all you can do is be like a Boy Scout and Be Prepared. Good luck.

In most European countries it is a legal requirement to carry spare bulbs, a warning triangle, a fire extinguisher and a First Aid kit (we've also been told reflective vests are now a legal requirement).

Then there are:

Duck tape	Jack
Cable ties	Wheel chock
A few nuts and bolts, preferably Nylocs.	Spare throttle cable
Exhaust clamps	Any special gaskets
Exhaust rubbers	Tube of gasket sealer
A length of tube for syphoning petrol.	Brake pads
Spare wire cable and terminals	Additives for cheap petrol
Jump leads	Decent penknife with a can opener
Bungee cord or rope	Necessary tool kit
Plastic sheet	Good torch or battery fed light
Tube of hand cleaner	A few pairs of latex gloves

To all those entering and competing on this next endurance rally, I wish you the very best of luck and hope these suggestions get you thinking along the right lines. I also hope you don't need to rely on any of

it and that you have trouble free run. *Gerry Hawkrige*

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