

# *Prepare to Finish or Fun, Adventure and Competition!*

by Andrew Pearce

Part 1 covered the choice of car and featured the most important aim – reliability. This issue we continue looking at the same theme preparing a car (with reference to my 2500TC) for long distance endurance rallies.

## **Anything that will stop the car running!**

By this I mean the engine ancillaries, and “silly bits”. On the London-Lisbon a Renault Alpine fancied to do well with its experienced crew dropped off the leader board on the first day. This was due to failed contact breaker points. I stopped to help, and see if we could adapt some of the many spare Lucas items I was carrying to fit, but to no avail. Basically the competitive part of their rally was over for the sake of a set of points! DOH! A lesson learnt there.

**Ignition system** – (check with your regulations if electronic systems are allowed) new coil fitted, spare unit bolted near the existing wiring to allow a quick swap, HT leads, rotor arm, distributor cap condenser, points all new - obvious really! (The distributor was a refurbished unit fitted as part of the engine upgrade.) Spade connectors, etc, replaced and re-soldered/crimped before being waterproofed. (Use clear silicon to encapsulate the connectors/crimps, etc, once they are terminated.)

**Fuel pump / carburetors** – refurbished, in the case of the carbs they were treated to repair kits plus new needles and jets to match the engine upgrade. I also carried a length of petrol hose long enough to run from the tank to the pump. This was later loaned to a Peugeot 205 in the Sahara. We ran the petrol pipe straight from the tank filler, over the roof, under the bonnet, and onto the fuel pump in the engine bay! This was due to the under body fuel line being squashed flat by a rock! (See under body protection in Part 3.)

**Battery / Charging circuit** – again old parts replaced; you may end up doing more night driving than you intended if you get lost! Also worth thinking about is up-rating the alternator/battery, especially if running extra lighting. I wasn't, so kept it standard, but took a spare “rectifier pack” out of a known working alternator.

**NB.** Older cars with dynamos – swap to alternator if the regulations will allow!

**Cooling** – uprated radiator with extra “gills”; after all, it was a hot country we were going to! New water pump, new viscous coupling. I've had one go through the radiator before. Think about an auxiliary electric fan if the regulations allow, also think about debris hitting the radiator. On both cars I used heavy duty “garden mesh”

mounted in front of the radiator, to stop or deflect larger objects heading their way.

Don't forget that when fording deep water the fan can act as a propeller dragging itself into the radiator. To get round this you can take the blades off, or the fan belt. (Don't forget to get it spinning again after the ford!) With an electric fan try and make sure it's well waterproofed and you can turn it off (or isolate it) before crossing.

## **Suspension**

Front end: up-rated struts sourced from Chris Witor as exchange units (Monroe inserts).

Rear end: up-rated estate springs (575 lb/in, again from Chris who is very helpful) and adjustable shock absorbers, the reckoning behind this being to firm up the handling, but keep a decent ride height with the car fully laden (crew, spares and our kit to last three weeks). All the bushes were replaced with “super flex” items. In the case of the world cup car I sourced some harder springs and dampers for the 2002 event. I discovered these were not as good quality as the original Daewoo units (which were more expensive). When I returned to the car after a 50km section through Slovenian forest I found two pools of oil underneath the rear dampers! We then had a frenzied morning on the rest day in Dubrovnik chasing spares, a story in itself which I will tell in later articles!

Handling is quite a personal thing. I like the set up I have on the 2500TC. You can tackle undulating single track roads at 60mph+, still with a fair amount of weight in the car and not bottom out. I tested this extensively in my home county of Cumbria to the derision of my Golf GTi driving mate who was bottoming out behind me! In the corners it handles flat, although some people who have driven it find it a bit twitchy, as you seem to get a bit less warning of imminent oversteer. The trick is to find a set up that:

- a) works on the surfaces you will be tackling
- b) one that suits your driving style enabling you to feel confident throwing about for 10 hours a day!

You might have to find a compromise when facing a mixture of surfaces. If that is the case, get the car ready in time to test it, allowing some time for adjustments! Two things to remember: ground clearance is always good on rutted rough roads, fit the best quality components you can afford, they will take a pounding. (If you set off with six inches ground clearance you will come back with four!)

Part 3 follows in the next *Club Torque*.