

### V8NOTE122

#### Laying up an MGBGTV8 – a corrosion engineer's thoughts

Geoff Seaton (Black 2896) from Berkshire was until recently an engineer with British Airways and is very familiar with the care and attention needed on maintaining quality machinery. Here he sets out some ideas on lay up products. (Oct 83)

As we are half way through the year and the dread of Winter draws ever closer, I thought the following information may be of interest to those intending to lay up their V8 for the Winter months. A worse fate I cannot imagine! However with an uncanny knowledge of our habits, Perkins Engines offer a range of engine care products specially designed for engines that are laid up.

- **Lay Up 1** will be mainly for the boating fraternity as it is for diesel engines.
- **Lay Up 2** comes in an aerosol for injecting into petrol engine cylinders, gearboxes, axles and other key parts that are laid up. In a properly sealed systems, it will protect for up to ten years!
- **Lay Up 3** is an aerosol wax for exterior protection.

All the lay up kits above come in the Perkins Power range from JE Duffield & Partners at 304 Constitution Hill, Norwich, Norfolk NR6 7RH or on Norwich 44266 extension 41.

These products will not stop the tendency for the clutch to seize on the MGBGTV8 after a lay up. Modern cars seem so prone to clutch seizure after periods on standing or lay up these days.

### V8NOTE222

#### Lay-up and storage concerns for the MGBV8 enthusiast

Many members take their MGBV8s off the road for the winter period to avoid the ravages of salt on the bodywork but a number of difficulties can arise when the car is fired up for an airing after a lengthy lay-up. Whilst the motivation for members laying up their V8s in winter is clear (they want to avoid the bodywork ravages from the salt spread on winter roads), it is just as important to ensure the car is kept dry whilst it is stored in the garage. Keeping the air moving under and around the car is a worthwhile precaution and an electric fan connected to a timer provides a useful period of breeze around the car each day. Here Dave Wellings (Black V8 0974) provides some very useful tips. (October 00).

I must admit I do not use my V8 as much as I would like. Problems can and will occur if you leave your V8 idle for long periods so I will run through four common difficulties – a sticking clutch release mechanism, petrol deterioration, batteries and the familiar difficulty with the SU petrol pump.

**Clutch release difficulties** are probably the most frequent of the lay-up problems when the clutch driven plate sticks to the flywheel or pressure plate, or both. There are various methods of freeing the clutch. I personally favour having the car on axle stands with the car fully warmed up. Then start up in gear and with plenty

of revs, hit the footbrake, clutch and handbrake simultaneously, while maintaining the revs. Three legs are an advantage! This will usually free things off. Others prefer a similar process on the road, but that method can be more brutal on the mechanical components.

**Petrol deterioration** is something I had heard stories of but until this year I had no experience of it myself. I took the view that it might take several years before problems would arise – Not so! The fuel in my tank had been there a couple of years, but I didn't expect what happened. I had left something less than a gallon in the tank. Perhaps a small quantity of fuel and a lot of air in the tank accelerates the process. I was reluctant to store the car with a full tank, simply because ten gallons of degraded fuel will take some getting rid of.

The first sign of trouble was when starting became difficult with very erratic running. I bled off a sample of fuel by disconnecting the petrol feed pipe and using the fuel pump into a container. I was surprised to find that what came out neither looked like nor smelt like petrol! What emerged was a yellow liquid with a much less intense smell than petrol. So nothing for it but to pump the tank dry. This took quite a while and even with a gallon of degraded fuel you need to take care with the disposal. I stripped the carbs to check the damage and found that everything was covered with a waxy greeny-yellow deposit. This included the jets and the needles. The build up of deposits was seriously weakening the mixture – hence the erratic running. It took some time to clean the offending components and restore good running. I also treated the fuel system to a cleaner/conditioner – Halfords do a good selection from reputable manufacturers and I hope this treatment has permeated all those inaccessible corners. It might be that simply filling the tank with fresh fuel will dilute the residue and dissolve the waxy deposit. I just didn't want to risk it.

With a dry tank it is possible to remove and examine the sender unit and have a look inside. To do this you will need to jack up the offside of the car and place on axle stands. Then using a small torch (no naked flames!) look inside. There was evidence of surface corrosion at the lowest point. That means the front edge of the bottom of the tank, and around the fuel pick up recess. I attached a small brush to a fibreglass rod and applied antirust primer to the offending patches. (Editor: we understand Dave checked beforehand that the chosen antirust product was petrol resistant).

**Batteries** can also be a problem with long term storage. A couple of years ago I invested in a battery management charger unit. It's been excellent and the batteries are now always fully charged. See V8 Workshop Note 214 for information on battery management units.

**The SU fuel pump** has always been a problem but I didn't favour switching to a plastic solid state alternative, simply because I am a bit of a purist and like the look of the original SU pump. So I struggled on with sticking points – that was until the SU

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conversion kit came onto the market. I just had to get one. Fitting was simple. Throw away all the bits at the points end of the fuel pump, then a magnet is screwed on (with a locknut allen bolt) to the plunger where the points normally fit. A simple looking printed circuit board goes over the top. A small metal magnet "shield" is then rotated until the pump starts working at a specified current (you need an ammeter). It is really that simple and the pump now responds immediately to the ignition key. No more laying down by the offside wheel arch with the leather mallet to free the points? – we'll see!

### V8NOTE346

#### Storing a V8 over winter

An interesting thread on keeping moisture off a V8 when stored in a garage during the Winter months ran on the V8BB in January. It was started by Peter Garton from Germany and attracted many interesting contributions. This note captures them for the series and illustrates how useful the V8BB can be – compiled by Victor Smith. (Jan 06)

The suggested ways of controlling the humidity in the garage ranged from a moisture absorbent cartridge to dehumidifiers plus the use of a desk top fan to blow air through the car from time to time.

#### Moisture absorbent cartridge

Peter Garton from Germany set the thread rolling by noting his garage "appeared" quite dry but he nevertheless places a moisture absorbent cartridge in the passenger footwell of the RV8 when the car is tucked away for the Winter. It is manufactured by Henkel in Germany. It is advisable to check the situation occasionally which he mentioned he duly did the previous Sunday when he found the receptacle was half full of water. He emptied it and inserted replacement sachet. Peter offered a word of warning - the liquid/solution extracted from the atmosphere in the garage is extremely aggressive to metal and paintwork (saline) and so it is important to put a good layer of plastic film on the carpet and then put the receptacle in its own container. This would avoid difficulties if the receptacle were to be tipped over accidentally.

#### Dehumidifiers

Peter Berry posted a note saying "I have an electric dehumidifier in the garage, with adjustable humidity sensor. It draws in damp air at the rear and blows out dry air from the front, straight under the V8. In the Autumn the collection tank (approx 12 litres capacity) fills in 3 to 4 days. At this time of the year (January) it is slower but still needs regular emptying, once every ten days or so. If the temperature gets too low the unit does ice up quickly but as it is in an integral garage, it is not much of a problem. It keeps the atmosphere dry, is about 10 years old now and still going strong!"

On the effectiveness of dehumidifiers, Victor Smith posted a note on his experience with a dehumidifier used to dry out a very wet car – "I recall on one occasion taking the V8 to Cumberland for a week when I was walking on the fells and naturally the car got a good soaking whilst it was there. For those overseas, I should mention that this area of the UK gets over 115 inches of rain pa. On my return home I hired a dehumidifier from the local hire shop for four days and was staggered by

the buckets of water I collected. But at least the car was drier after those four days".

Terry Starkey followed this up with a note – "Interesting stuff! I had a dehumidifier once but it had to be emptied once or twice a week, then it broke. I now place a small 60W greenhouse heater inside the cockpit and one under the engine all through the Winter months. The car is also covered by a tailored cotton cover. I find it is as dry as a bone and absolutely fine".

Dave Wellings noted that he has had a dehumidifier in the garage for about three years, and would say it is the best accessory he had ever bought, rivalling his battery manager. The humidistat allows adjustment and it spends a fair amount of time idle. Nonetheless in Winter it produces prodigious amounts of distilled water which Dave uses for battery top up, cooling systems, rinsing the car off (he is in a hard water area), and watering his lime hating plants. There is no corrosion, even the brake discs stay shiny after three months of inactivity. It has never frozen even though his brick garage is unheated. Dave concluded by mentioning his dehumidifier is an EBAC.

Peter Berry added a further posting that he fully concurred with Dave Wellings' findings on the dehumidifier. He has had no corrosion on the brake discs or surface rust at all with the car in the garage over the last ten years. Not that it stays there for ALL that time! He also believes there is a danger in heating a garage because, as Gavin Bailey had pointed out, the prospect of condensation from temperature changes is a serious matter. As far as humid air entering the garage when it is opened; well that is a fact of life and the dehumidifier cuts in to combat increased humidity levels as much as possible until the door is shut again. Then gradually the pre-set humidity level is once again restored and the machine cuts out. Quite brilliant! Interestingly the machine does see some action during the Summer months when we seem to get more hot, humid weather than ever before. Again, as Dave Wellings noted, the by-product of distilled water has numerous uses around the house rather than having to be disposed of - as in the case of Peter Garton's saline solution. Strong advice to V8 owners: Buy a dehumidifier!

Bob Owen, a V8 member who lives in an old house where cold damp conditions are a potential annual challenge, posted a useful note that he is also a believer in de-humidifiers. The UK DIY store B&Q do a reasonable range at good prices. You must buy one with a humidistat - most have one. Also, if you are lazy, check it has a drain facility - you can then just run a plastic pipe to the outside of the garage and save the hassle of emptying the tank. This is especially valuable if you are away for some days when the tank would fill and the de-humidifier switch off. The relative humidity level to aim for is 55-60%. If the stat is uncalibrated you can get a battery digital humidity meter for a few pounds and use this as a check.

Incidentally, if you have a wooden garage, or an ash framed car, the low relative humidity also protects

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against woodworm. Like any living creature they need water. With air at a RH of 55-60% the moisture content in wood will settle around 10% which is too dry for woodworm to survive. The low RH due to central heating (and the lack of real wood!) is why woodworm is no longer the bane of older houses it once was. Bob added he has a listed house which is poorly insulated and it is cheaper to keep the worm at bay by achieving low RH with de-humidifiers than with heating; the low relative humidity also makes rooms feel "warmer" even if they are not but they are not "cold and damp".

David Biddle made a brief posting saying he had been following this topic with some interest. He noted he has both a spare refrigerator and a freezer in his garage so for him heating is not a very good option! It would be useful to the rest of us if contributors could quote the make model and price paid of their 'kit'. For information, there is an evaluation of humidifier on the Auto Express website at:

[http://www.autoexpress.co.uk/product\\_test/61880/dehumidifiers.html](http://www.autoexpress.co.uk/product_test/61880/dehumidifiers.html)

Gordon Hesketh-Jones lives at Helston, down in the south west of England, near to the sharp end of the Cornish peninsular where he is surrounded by the sea so dehumidifiers are absolutely essential. He has three in the house and one each in the garage and in his wife's summerhouse and quilting room. The choice of dehumidifier is however important as Gordon found the De Longhi units sold by B&Q etc are not repairable, so once one goes wrong you have to throw it away. Dave Wellings mentions the EBAC range and these are (incredibly) still made in England so spares and repairs are OK. Another point about the EBAC range is that if you do not need to collect the distilled water, you can plumb them in so that the waste water goes out through the wall or into the drains whichever is most convenient - this saves having to empty the container all the time. Gordon also has a hygrometer in the garage and the dehumidifier is set to keep the RH reading at between 55% and 60% as mentioned by Bob Owen.

Gary Coates noted that having read the messages about humidity in the garage, he decided it was about time he invested in a dehumidifier. He bought a Ruby-Dry unit from Dry-It-Out Ltd and placed it in the garage for the first time yesterday. This morning he emptied the 6 litre tank and found it was almost full! His comment was "I only wish I had invested in one when I bought my RV8. Anyway, thanks to everyone for the good information".

Gary later added more information on the unit he had bought. He bought his dehumidifier online from Dry-It-Out Ltd. at [www.dry-it-out.com](http://www.dry-it-out.com) which is a very good website. His dehumidifier was delivered the next day. The unit he bought is the Ruby-Dry DH600 at £199. This particular dehumidifier was given "the best buy" by Auto Express and you can read the write-up via a link on the Dry-It-Out web site. The power consumption is 400-500W and the unit has an adjustable humidistat and three fan speeds. Gary added that "I'm just hoping that if I don't open the garage side door too often I won't have to empty the tank every day, although the Ruby-Dry does have a continuous drain option".

Bob Owen, who runs an electronics company (TE Electronics which supplies the low brake fluid sensors for V8 members), provided some technical information. "The

killer for water volume and hence running cost is likely to be through draught rather than the occasional opening of the side door. There is not a lot you can do about the main doors, especially if they're the up and over type, but you can probably ensure there are no other gaps, so avoiding continuous air changes. So draught-proof your side door, and any windows, and seal up any gaps at the eaves. Note that the de-humidifier will not be running all the time, so the 500W will be considerably less on average. A 500W unit would be 0.5 units per hour, which is 3.5p per hour or about 80p/day. At 50% duty cycle it would be 40p/day or pro rata if in operation for a lesser proportion of the time. Note also that in freezing weather the moisture is frozen out of the air so the dehumidifier does not need to strike up". Shortly following this posting, Gary Coates posted a brief note to say he had just returned from the DIY store with his arms full of sealant and filler!

### Carcoon system

Dr Gavin Bailey has adopted a different approach as he has been storing his RV8 in a Carcoon over the past few Winters. He comments "It's not something that you take the car in and out of on a regular basis - I tend to put the car away in November and bring it out in the Spring. You can read more about the Carcoon on their website, but it works by buffering the car against changes in temperature and thus stops any condensation on the car body of interior upholstery. The problem with dehumidifiers is that unless your garage is well sealed, you are always fighting a battle with humid air entering from the outside through gaps or when the garage door is opened.

**Heating the garage** is fine as long as the temperature maintained is constant as it is warm air condensing on cold metal that really does the damage during storage. No doubt this contribution may spark quite a debate, however in my experience the Carcoon works well and I have always taken the car out in perfect condition even after four months storage. The Carcoon power unit also incorporates a battery charging unit which cycles the battery as well as powering the fans in the Carcoon unit itself". See more details of these units at

<http://www.carcoon.co.uk/>

### Table fan

Victor Smith mentioned he has a large table fan on the garage floor just in front of the overrider and it is plugged in to a timer so it blows a stream of air through the car twice a day for 20 minutes each time. With a waxed cotton cover over the car, this daily breeze seems to keep the engine bay and other metal parts free of damp. He noted the garage is attached to his house but is not heated.

### Battery conditioners

A useful note on low cost battery conditioners was mentioned by Paul Mascall, an Australian member. He bought one of these units a couple of years ago for about \$A40.00 - which is something around GBP16.00. The unit is called a Battery Fighter Junior and apparently comes from Hong Kong. Their website is at [www.batteryyfighter.com](http://www.batteryyfighter.com) but I am sure

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the product must be available in the UK. Mine continues to work perfectly.

Terry Starkey mentioned he has a smart trickle charger permanently connected to the battery. He got it from Panks of Norwich for £25 which was far cheaper than the B&G one on offer and just as good". Panks Auto Electrical is at 15 Heigham Street, Norwich NR2 4TE who can be contacted by telephone on 01603 629967. Terry does not think they have a website but says they are a 'proper' old fashioned company and they really know their stuff! He would recommend them most highly. The battery charger from Panks in Norwich is a RING Powering Smart Charger 4 and distributed in the UK by Ring Automotive Limited, Geldert Road, Leeds LS12 6NB. The contacts are 0113 276 7676 (tel) and by email to [autosales@ringautomotive.co.uk](mailto:autosales@ringautomotive.co.uk)

This note was also added to the RV8NOTES series as RV8NOTE237.