NEWSLETTER
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WELCOME TO THE V8 NEWSLETTER

This month we have contributions from Victor Smith and myself on a very worthwhile upgrade to the MGBGTV8 twin 6v battery application, combined with the improvement of fitting a higher output alternator. I fitted the higher 75-amp alternator to my own V8 some months ago, which was covered in the April edition of Safety Fast! largely to improve the speed of the marginal cooling fans with the car at idle. My experiences of fitting the 12v battery conversion (in parallel) are chronicled here. Victor elected to have both the high output alternator and the twin 12v battery conversion installed by Manor Garage at Grove, near Wantage. Two different approaches with the same outcome.
We also have a contribution from John Henke on the fitting of a steel sump upgrade kit to his V8.

Twin 12v Battery Upgrade with Higher Output Alternator

Whilst driving north to Penrith Victor Smith was travelling round the east side of Birmingham on the M42 in very slow traffic conditions, with road works constraining the traffic to two lanes, with temporary concrete barriers on either side. Whilst the engine was idling in the 'stop-start' traffic the engine suddenly died. "Very fortunately my MGBGTV8 was on the inside lane at a point passing a junction on my nearside where a slip road was joining the M42. There was a triangular area of tarmac and a gap in the concrete barrier, so I was able to push the car onto it with my passenger steering, to get the car out of the motorway nearside lane. Relief - I was no longer blocking the nearside lane and the car was well clear of the traffic."
Victor called the AA but the response was that there was no rescue lorry available for an hour or more. After about 30 minutes another rescue lorry was passing on the slip road and the driver slowed up and called over to say a free rescue service for breakdowns was available. Soon another lorry stopped by and loaded the car and took it to a safe refuge in the large car park of a roadside café.
After an hour or so an AA man arrived and diagnosed a failed alternator. The AA man was surprised when Victor said "I have a spare AC Delco in the back!" Once fitted the V8 fired up and he was able to set off again."
After that painful experience Victor wondered what had caused the breakdown and the alternator failure? Here he explains what he found and the upgrades he has had made.

What caused the alternator failure?

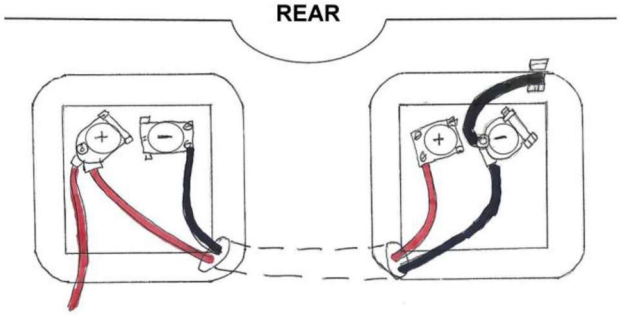
The AA man mentioned the 12v battery level was low and with the twin cooling fans roaring away cooling the radiator, the load on the alternator was high, particularly when the engine was idling in the very slow moving heavy traffic. Upon reflection Victor realised the single 12v battery upgrade he had carried out to replace the original twin 6v batteries in series was made some years ago. With relatively modest use and with a battery conditioner maintaining the battery whilst the V8 was parked up for periods in the garage, Victor had made the mistake of thinking that the battery condition would still be fine and reliable. *(Scribe note: I know the feeling, the same happened to me in 2020.)*
Reflecting on that breakdown experience Victor decided to go for two upgrades – first greater battery capacity with twin 12v batteries in parallel and second an uprated alternator with a much higher generating output. He also put a reminder in a framed document on the wall in his study showing when the batteries were fitted and should be replaced! The RAC website recommends replacement after 5 or 6 years.

Twin 12v batteries in parallel as an upgrade

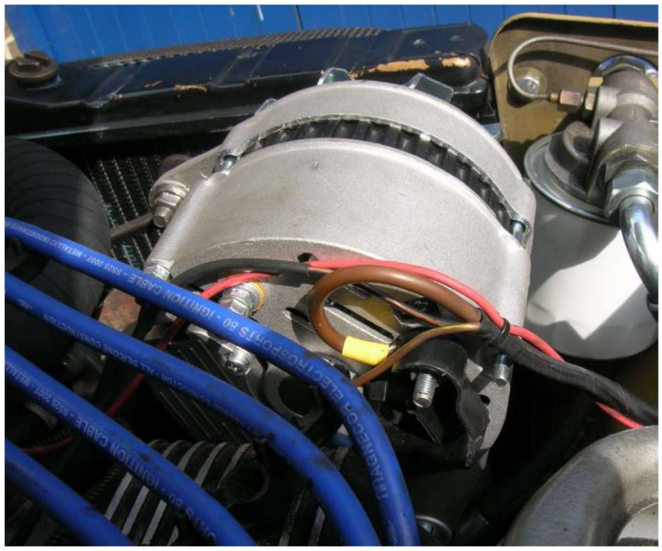
In every issue of Safety Fast! you will see Manor Garage at Grove near Wantage, not far from Abingdon, has an advert for its twin 12v batteries upgrade kit. So Victor called Richard Chapman and arranged to take his MGBGTV8 there in early April on a fine day and had the the upgrade kit and two Bosch 12v 063 batteries fitted.
Returning home the V8 felt much better and the sound of the cooling fans was a louder roar as they were running faster and cooling the radiator more effectively as shown by the temperature gauge on the dashboard.
Bosch S4 car batteries are a high quality, premium replacement and their 063 size fits the battery boxes in an MGBGTV8. The Bosch S4 range has up to 15% more 'Cold Cranking' power than the original equivalent, and up to 20% longer service life, thanks to Bosch's innovative 'Power Frame' technology. All Bosch S4 batteries are maintenance-free, meaning you do not need to top up or change the water. Particulars are as follows:

Amp Hours: 44Ah
Cold Cranking Amp: (CCA): 440
063 size: 207mm (L), 175mm (W) & 175mm (H).

With two 12v batteries in parallel you have double the capacity which provides reliable starting power. The batteries fit the existing battery boxes with minimal extra wiring, although this is provided by Manor Garage, as a kit. Tthe wiring layout is illustrated below.



There is also a protective sleeve through the tunnel over the propshaft, replacing the now redundant metalic slave for the old cable, which can now be removed from the car.. A larger copy of the illustrated guide to installing the twin 12v kit is available online.
Manor Garage also fitted the higher ouput 75 amp alternator. Installation involved removing the AC Delco unit and fitting a new connector to the back of the new high output alternator. A good crimping tool is needed.



Victor has also purchased a battery & alternator tester which he uses to check on the battery condition and the performance level of the alternator to avoid future problems by overlooking the reduced battery performance as it ages. Following fitting the two upgrades – two new Bosch 12v batteries and an uprated alternator – the readings on the tester were as follows:

Battery with ignition on, engine not running: **12.5v**
Battery with engine running on idle **14.3v**
Alternator with engine running on idle **14.3v**
Battery with engine at idle with fans running **13.6v**
Alternator with engine at idle with fans running **13.6v**

The tester (model no.CBAT2 & part no. 6260106) is available from Clarke International in Essex.

As a footnote, in V8NOTE527 Colin Goodey describes fitting an uprated 75-amp alternator which delivers about 10% more power at tick-over and in real terms. Tests showed the twin cooling fans were spinning at over 200 rpm higher than with the standard AC Delco. Colin saw an improvement in the performance of the cooling fans, with the fans cycling rather than being permanently on in the warmer weather.
Colin now supplies these units through his company, **Just MGB**, as an outright sale. Fitting is straightforward and retains the original fan belt. The part number and description is 'GEU2218U – 75 Amp Brand New Alternator MGBGTV8 or MGB V8 Roadster'.

My own experiences of fitting the twin 12v batteries are at a DIY level but should be easily achievable by most owners. For some years I'd followed the advent of the twin 12v battery conversion for my V8. I was caught out unexpectedly just under 5 years ago when my twin 6v batteries packed up when I was half way up the country on a long weekend break. The car had started successfully four times that day but on the fifth occasion, nothing! The attending AA man told me I had 3 volts in one battery and 4 volts in the other. No wonder they gave up between them – and not dissimilar to Victor's experience. The story had a happy ending and was covered in this column in August 2024. On that occasion the fitting of two new 6v batteries was the only quick solution to continue the holiday, so the 12v conversion was delayed again.

Having heard about Victor's troubles and his 12v battery conversion, I figured I could do the work myself, so I also contacted Manor Garage, who supplied the batteries and the revised wiring cable harness, complete with instructions very promptly. All packaged up with two new Bosch S4 001 12-volt batteries. How difficult could it be? Well, there were a few unexpected hiccups along the way but overall, the job went pretty well.
The first problem was that the kit came with an eyelet connector, which was to be crimped and soldered to the existing positive lead from under the car. Although I possess a couple of soldering irons, neither were going to be up to the job of soldering the 25mm^2 copper cable into this eyelet lug. So, I hunted around on the internet and eventually came up with a so-called 're-usable welding cable lug' (sic) as shown above, which had the correct sized hole for attaching to the battery terminal connector (also supplied) and a sturdy twin-screw connector for securing the cable wire to the lug. (You will need the 25mm^2 item.) It's fair to say that with the connection made, the resulting cable was only just long enough to reach the terminal connector. This was probably my own fault when I cut and removed the original 'top-hat' connectors around 35 years ago. (Why did BL ever fit these things? With a central self-tapping screw winding down into the soft lead battery terminal, the connection would soon work loose and cause all manner of problems!)
After removal of the twin 6v batteries, using my Sealey Battery Carrier (referred to in last month's column – an absolute must) the next job was to remove the original link cable, complete with armoured protection cover, which connected the two batteries together in series. This is held to the underside of the transmission tunnel with a single 'P' clip and a 7/16" AF bolt. This required jacking the car up, securing it on axle stands and wriggling underneath to the centre of the car. With a torch and a long extension bar from my socket set, I reached up and over the prop-shaft to locate one of the very few bolts which has never been removed

since my car left the factory 52 years ago. To my complete surprise, the bolt loosened very easily and was soon out. No further access is required to this area to complete the job – unless you are going to clean up and paint the battery 'cages' from under the car.

Original 6v battery link cable armoured protection casing

Next comes installation of the new (supplied) cable harness, which is set up for the 'parallel' installation of the twin 12v batteries. The harness comes complete with all positive and negative terminal connectors and a protective rubber tube with cable ties at either end, as mentioned by Victor, which pass through the bodywork openings. Although the appropriate battery connector will just about fit through the body apertures for these cables, it's a tight fit, with much angling of the connector required to get it through the hole. With the stiff cable attached to it, the awkward position and the fact that unless you have taken both seats out of the car (I didn't!) you will be doing all of this with an arched back and some fairly unusual upper body twists and angles. On balance, I decided to remove the connector, pass the cable through the bodywork and reconnect the connector on the other side. Once again, this is easier said than done, as all the small copper cable strands must (should) be fed into the connector before the crimping screws are tightened down again. (I think I may have missed around half a dozen strands, which were neatly cut away, flush with the terminal end.)

The remainder of the job is quite straight forward and didn't present any other surprises along the way. Installation of the batteries with my Sealey Battery Carrier is next, holding the cables out of the way with the other hand. A second pair of hands can be quite useful at this stage, as your back will be protesting a little by now. Connect up the 'J' clamps once again, (I use stainless steel items to prevent corrosion next to the batteries) and this is where a great deal of patience (and three hands) is vital, as anyone who has done this will know.

New 12v Bosch batteries at top, showing a very similar size to the 2x 6v Bolt batteries removed from my V8

My car has a battery conditioner connected, with the leads connected directly to the batteries and the connector point exiting from beneath the back seat. Richard Chapman of Manor Garage advised that these leads can be connected to either of the positive and negative terminals to condition both batteries simultaneously. Others prefer to use the cigar lighter as the connection point (which works very well) but the cigar lighter has given way to a clock in my car.

So, there we are; the DIY approach to the twin 12v battery conversion. It's not difficult, just a little time consuming (I split the work over two days) and the necessity for a hot bath afterwards! Now is the time of the year to complete this work. If you run your car through the winter, you do not want to do this job then, when the batteries have unexpectedly given up at an inopportune time and in the 'wrong' place. Think ahead and plan in advance is my considered advice. Obviously this 12v battery upgrade can be applied to the 1800 MGB and the MGC, so plenty of applications on this one.

As a footnote, it's worth mentioning that the original armoured link cable casing was used to prevent chafing of the cable against the prop-shaft during full suspension compression, with obvious results. This is worth very careful thought as a safety consideration.

How often should I replace my battery?

Victor Smith has also contributed the following advice, with a warning not to forget the age of your battery(s).

Car batteries can last for five years or more when properly cared for, depending on how you use your car. With modern cars, often used on a daily basis, other than starting the engine, the battery also powers various electrical systems in the vehicle including lights, radio and infotainment screens, entertainment systems, heated windows, windscreen wipers, air conditioning, power windows, electrical power steering, etc. The list is extensive. With a classic car the systems that need electrical support are less sophisticated but can include a heated rear window, heater blower motor, windscreen wipers, radio and radiator cooling fans plus any added modern devices used in the car. Some MGV8s have electrical power steering fitted as a retrofit upgrade, often on RV8s.

Using a battery conditioner

With a classic car like an MGV8 doing typically 2,000 to 5,000 miles a year, that is significantly lower than say 8,000 to 12,000 miles seen with a modern car, with more frequent use. So, a classic car will tend to spend time, sometimes for extended periods in the winter months, parked up in a garage with the engine only occasionally run as a maintenance routine. Helping to maintain the battery during those lay-up periods is therefore essential.

Many owners do that by connecting a battery conditioner, such as a CTEK or an Accumate, which monitors the battery and automatically charges it for periods when necessary to maintain a good level of charge. That helps support a longer

lasting battery condition, so you get the most from your vehicle's battery and maximise its lifespan. However, with a battery conditioner providing that reassurance it can be easy to forget how the batteries are ageing. So do put a reminder in your diary or on a calendar with the date the current battery or batteries were installed and then you will be aware of their age and the need for a replacement!

MGBGTV8 Engine Steel Sump Upgrade Kit

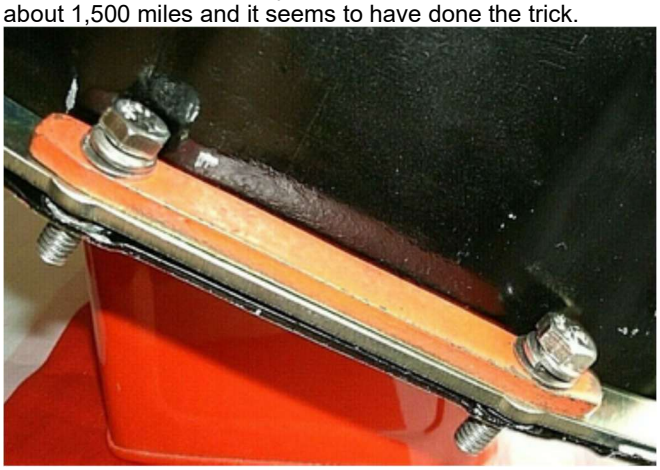
John Henke has been in touch with the V8 Register with a note regarding his experience of the sump gasket leak. John takes up the story:

My MGBGTV8 leaked oil from several places which, of course, is not unusual! The most annoying leak was from the sump. I studied Tony Lake's excellent article on the attributes, or otherwise, of the V8 pressed steel sump and the use of stiffening pieces to overcome the problem. I was about to have the stiffening pieces made up when I came across **Classeparts** of Leighton Buzzard who sell a "Rover V8 Engine Steel Sump Upgrade Kit" costing about £125.

The kit comprises a sump gasket, a mild steel plate (with a zinc and colour passivate surface finish) and a set of stainless-steel fittings, comprising nuts, bolts (longer than the originals to account for the thickness of the plate), studs and washers. The steel support plate is 5/8" x 11/64" with 18 bolt holes at 25/64" with a plated finish.

Classeparts' new steel support plate has been produced to fit snuggly between the sidewall of the sump pan & the short 90 degree outer flange.

The kit is supplied in variants for most vehicles using the Rover V8 engine power, including the MGBGTV8. Options for gasket material are cork, rubber or composite. I opted for the composite, which Classeparts suggest is the best option. I had this fitted in February 2024 and since have covered about 1,500 miles and it seems to have done the trick.



The O/E support plate supplied and fitted to the rear of the sump pan. There are 2 extra UNC bolts in the fitting kit if you wish to retain this part.

Tony Lake's useful Workshop Note is number 509 and Classeparts can be found at www.classeparts.com Their webpage for the MGBGTV8 shows the current price (at the time of going to press) as £99.75 including VAT plus the delivery cost.

Photos courtesy of Classeparts

MG Fest North 2025

This event will be a major Club event for 2025 celebrating 95 years of the MG Car Club. It will be held at Croft Circuit, just south of Darlington and east of Scotch Corner on the A1 on Saturday 6th and Sunday 7th September. The V8 Register will be supporting the event and will have a gazebo on site there to welcome you. The V8 Register will also be holding its AGM at the event on the Sunday at noon in the V8 gazebo - all members are invited to attend.

A two-day action-packed festival promises something memorable for every MG enthusiast over this weekend. There will be a full weekend race programme, provided by the BRSCC, featuring a variety of races, including MGs battling it out on track. There will also be a 95th Anniversary car display, a Pride of Ownership competition, parade laps and much, much more; in all, an excellent family day out. See our 'More' webpage for event information and a location map.

To receive your MG Car Club member discount when booking your tickets, you will need to enter your Club membership number in the PROMO box on the ticket sales website at https://croftcircuit.ticketco.events/uk/en/e/mg-fest-north? Each membership number can be used only once for ticket purchases.

Enjoyable V8 Dales Tour 2025

In sunny conditions, driving along rural routes in the North Yorkshire Dales made for a wonderful V8 Dales Tour. Visiting a number of interesting places, the tour was based at the Ripon Inn and was planned and arranged by Tony Smith with the support of Ian Lindley.

Around 12 MGBGTV8s and 7 MGRV8s attended, together with a lone Midget and an MG TF 85th. You can see a photo report via a link on the 'More' webpage on the V8 Website, contributed by Richard Jenner, who drove the 1500 Midget. https://www.v8register.net/more.htm