



Twin 12V batteries in parallel upgrade and a higher output alternator

Victor Smith recalls that whilst travelling in his MGBGTV8 on the M42 in very slow traffic conditions with road works constraining the traffic to two lanes, the engine was idling in the “stop-start” traffic but then suddenly died. Several hours later, when rescued and taken by a flat truck to a safe place, an AA rescue man arrived and diagnosed a failed alternator. Here Victor Smith explains the upgrades he has had made – they are better battery capacity with a twin 12v batteries in parallel upgrade and an uprated 75amp alternator.

What caused the alternator failure?

From the tests made by the AA rescue man he also mentioned the 12v battery level was low and with the twin cooling fans roaring away trying to cool the radiator, the load on the alternator was high, particularly when the engine was idling in the very slow traffic. He felt with the combination of the heavy electrical load of the twin cooling fans with a weak 12v battery had put a heavy load on the original AC Delco alternator (45amp) which then failed.

Upon reflection I realised the single 12v battery upgrade been made some years ago, and with relatively modest use and with a battery conditioner maintaining the battery whilst the V8 was parked up for periods in my garage, I had made the mistake of thinking my battery condition would still be fine and reliable.

Reflecting on that breakdown experience I decided to get two upgrades – first greater battery capacity with a **twin 12v batteries in parallel upgrade** and second an **uprated alternator with a much higher 75amp generating output**. I also put a reminder in a framed document on the wall in my study showing when the batteries were fitted and should be replaced! The RAC

website recommends replacement after 5 or 6 years, possibly up to 10 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 I telephoned Richard Chapman and arranged to take my MGBGTV8 there in early April on a fine day and he **fitted the upgrade wiring kit and two Bosch 12v 063 batteries**. 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 I could see from the temperature gauge on the dashboard.



Bosch Car Battery 063 (S4 001)

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.

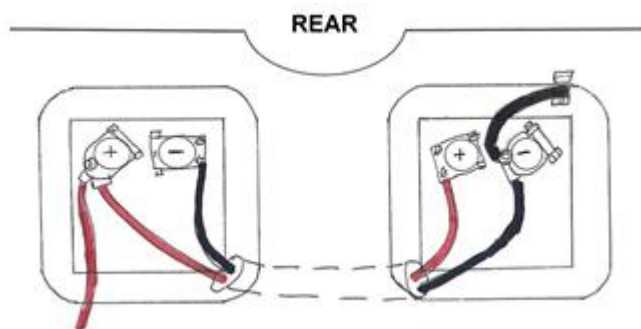
Amp Hours: 44Ah

Cold Cranking Amp: (CCA): 440

063 size: 207mm (L), 175mm (W) & 175mm (H).

Using the twin 12v batteries upgrade kit

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 provided as a kit by Manor Garage – the layout of the wiring is illustrated below.



There is a protective sleeve through the tunnel over the propshaft. A larger copy of the illustrated guide to installing the twin 12v battery wiring kit is available online. [See link to the wiring layout](#)



High output alternator as an upgrade

Manor Garage ordered a new high output 75 amp alternator and in late April, on another fine day, I went down to Grove to have it fitted as a replacement. The installation involved removing the 25amp AC Delco and fitting a new connector to the back of the new high output alternator. A good crimping tool is needed.

Alternative high output alternator

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. See a copy of V8NOTE527. [More](#)
Feature article in the [V8 Newsletter in April 2025](#)

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 MGBGV8 or MGB V8 Roadster

Link to Just MGB website: [Just MGB](#)

Checking the battery and alternator condition

I now have a battery and alternator tester which I use to make checks on the battery condition and the performance level of the alternator to avoid another mistake of overlooking the reduced battery performance as they age.



Following fitting the two upgrades – two new Bosch 12v batteries and an uprated alternator – the readings on the tester were:

Battery with ignition on but no engine running:	12.5v
Battery with engine running on idle	14.3v
Alternator with engine running on idle	14.3v
Battery – engine on idle with fans running	13.6v
Alternator – engine on idle with fans running	13.6v

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

www.clarkeinternational.com & [copy of user guide](#)

DIY twin 12V batteries in parallel upgrade and a high output alternator

See also an illustrated article contributed by Peter Berry describing his experience with installing a twin 12v batteries in parallel upgrade himself using the wiring kit and batteries supplied by Manor Garage. [Article](#)

Fitting a fan guard on an uprated replacement alternator

See also V8NOTE680 from by Jim Livingstone. [Article](#)