Taken from TVMGOC newsletter July 2013

HOW TO STOP YOUR CLASSIC'S BATTERY GOING FLAT

A flat battery can easily put paid to your MG outing. This is a step by step guide to show you how to find out why it is going flat, or that you need a new battery.

Your Charging Routine

(1) Occasional Use.

If the MG hasn't moved for some weeks or months, there may not actually be a fault. Hook it up to a trickle charger or remove the battery each month and give it an overnight charge. Always check the acid levels.

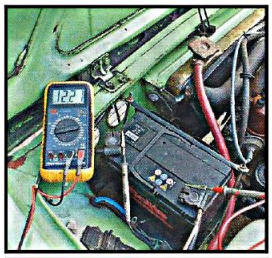
(2) Short Run.

An MG that only does short runs will never make up for the electricity used by the starter motor. Try to detect when the battery is running down and charge it overnight.

(3) Top Up Charge.

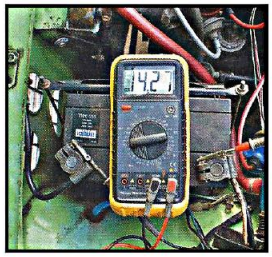
A dynamo-equipped MG in daily use for short runs will benefit from a weekly or fortnightly charge. An alternator MG can be charged once a month, or taken for a longer run. (hint– a Club Run!)

Check Charging Rates



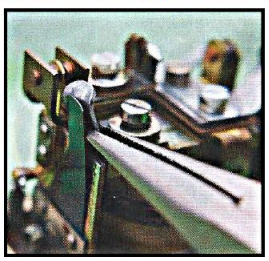
(1) Ignition Off.

Start by connecting a multimeter to the battery. Set it to the 20v DC range and secure the probes to the terminal clamps. Note the reading with the engine off. It should be reading between 12.0v and 12.5v.



(2) Fast Idle.

Now start the engine and run it at about 2500rpm for a minute. Recheck the voltmeter - It should now be reading 13.8v to 14.4v. Keep the engine revs there and turn your headlights on. It should only drop by 0.5v.



(3) Fix the Problems.

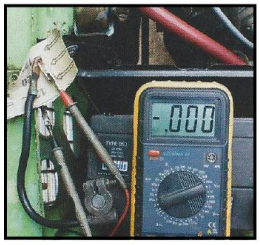
If the voltage is much less, the charge rate is too low. Check and adjust the drive belt tension: check dynamo/alternator brushes: (Mechanical type) or replace (Electronic type) voltage regulator.

Test For Leakage

(1) Accidental Drains.

If your charging system is fine, the battery may be being drained by something that's permanently on. A faulty boot light is the most common, or a radio left on minimum volume will flatten it over a few weeks.

(2) Connect Meter.



To check current drain, disconnect the battery earth and redirect it through a multimeter. Set it to 10A DC first, then gradually step it down to a lower ranges (2A; 200mA) to prevent overloading.

(3) Check Current.

Turn everything off again and close all doors and boot so that the courtesy lights are extinguished. If the ammeter reads zero on it's

Track Down The Leakage

(1) Small Loads.

A drain, say 50mA (0.05DA) might be down to a clock or radio, to maintain its setting. Removing the fuses the reading should go to zero.

(2) Courtesy Light.

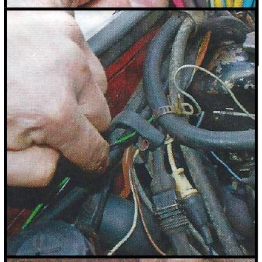
A larger drain indicates a problem. One courtesy light will read from 0.3A to 0.5A, some cars have boot, bonnet and glovebox lights, you can stop the drain by removing the bulbs.

(3) Narrow It Down.

If the problem persists, remove fuses one at a time, until you find the bad circuit. You will need the cars handbook to check for each fuse job. Now replace the fuse. The current will rise again, disconnect the wire from the fuse, one at a time until the meter goes to zero. You have traced the fault to

(4) Don't Lose Track!.

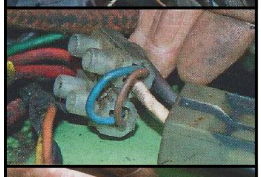
Solenoids for inertia starter motors are mounted differently. This MG Midget' solenoid has connections for the battery and charge circuits, although its discharge feed should be taken from the dynamo's regulator control box.



Common Faults to Look For

(1) Dodgy Wiring.

Look for frayed insulation where wires rub against the body or fittings.



(2) Sticky Contacts.

Regulators, fuse-boxes, motors, control boxes and relays are prone to the build-up of damp and other debris. Blow out and then clean and dry.