Ask Our Experts

Solutions to tech problems & answers to classic questions

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You name it, Sam's probably owned it, broken it and worked out how to mend it.

MGB GT

Why does my starter click?

Q When I try to start my 1980 MGB I just get a single click. If I try a couple more times, the car will start. Is the starter solenoid the problem? If so, can it be serviced or repaired?
Mark Staveley, Kings Somborne

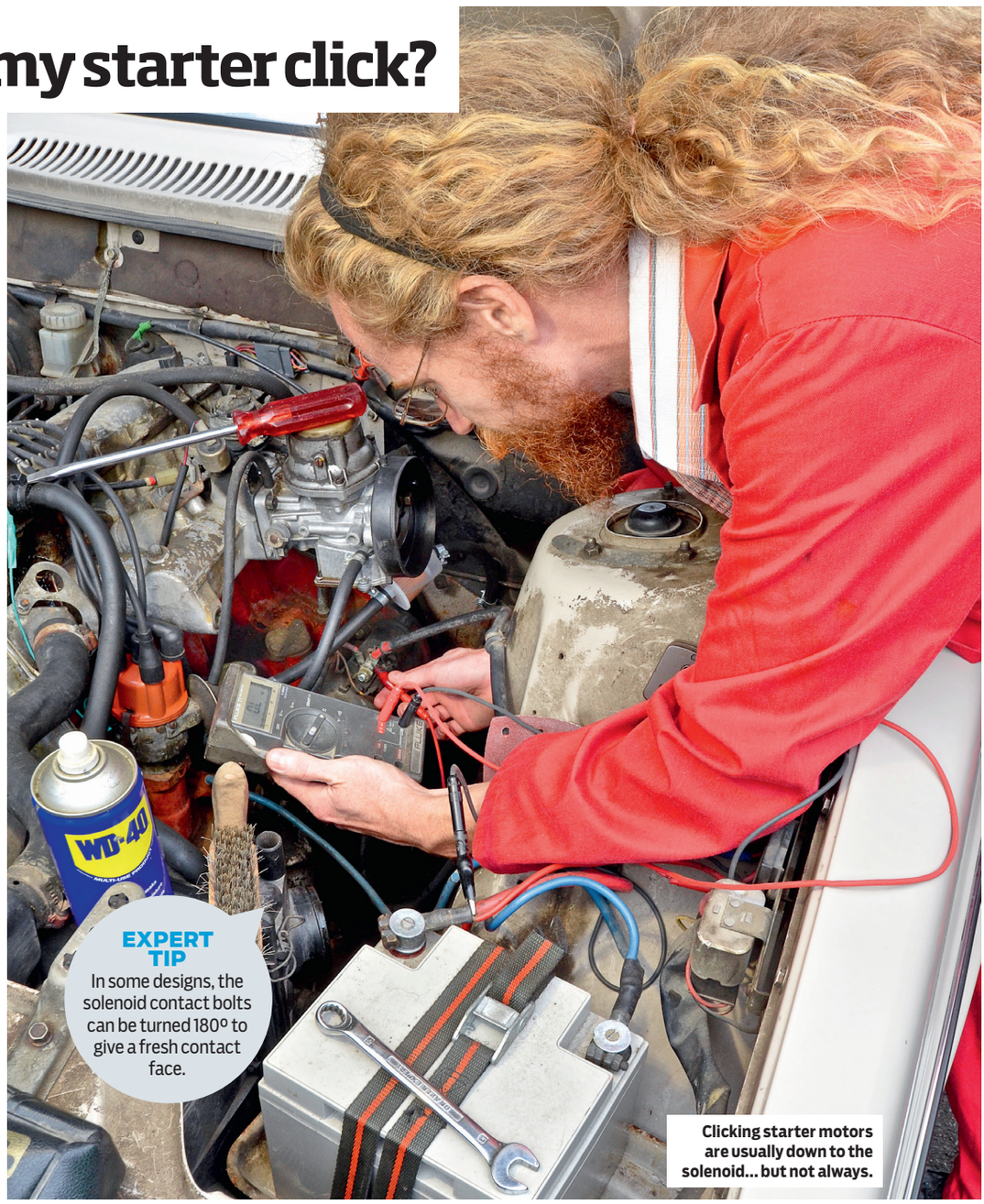
A **This is a problem we're all likely to experience at some stage, so we'll cover both common types of starter motor. A pre-engaged starter has the solenoid piggy-backed on the motor. The solenoid acts as a heavy-duty switch and also pushes the starter drive into contact with the flywheel.**

Other starters have a remote solenoid mounted in the engine compartment. Here, the rotation causes the drive gear to be thrown down a spiral groove – or Bendix drive – on the shaft and into the flywheel ring-gear.

The problem is most likely to be a high resistance somewhere in the circuit between the battery, the solenoid, the solenoid's internal contacts, the starter, the starter's carbon brushes and the earth strap back to the battery. If the problem is in the main feed wires (ie, the battery positive cable and the engine or battery earth strap) then other circuits will be affected. Try operating the starter with the headlamps on. If they go out, along with the dash warning lights, this indicates a fault here. 'Chattering' of the solenoid is also a telltale.

If that proves OK, take a stout screwdriver and bridge the two large connectors on the back of the solenoid with the ignition turned off and the car in neutral. Beware of sparking. If the starter operates reliably then this indicates a problem with the solenoid's internal contacts.

If the starter is unreliable when conducting this test, clean the connections to the solenoid terminals. If the problem persists, the carbon brushes may be worn out or stuck in their holders. Replacing them is easy – but you might need a soldering iron for the connecting leads.



EXPERT TIP
In some designs, the solenoid contact bolts can be turned 180° to give a fresh contact face.

Clicking starter motors are usually down to the solenoid... but not always.

Carefully unsolder the connection to get inside the starter solenoid.

If the aforementioned tests isolate the problem to the solenoid's internal contacts, then it can often be dismantled using a gas soldering iron or a heavy duty electric one (100W upwards). Remove the solenoid and take out the two screws that hold the Bakelite backplate in place. Apply heat to the soldered tag on the back of this plate. Gently pull the backplate free when the solder has melted.

Inside, you'll find the fixed contacts and the movable contact. The fixed contacts can usually be unscrewed and the contacts refaced on a sheet of abrasive paper on a flat surface. The moving contact may not be removable – so you might have to reface this in situ as best you can. On reassembly, clear the hole of old solder, carefully line up the wire, put the cap back on and re-solder.