# Morris Cowley 1932 - GY3535

### **Fuel Additives**

Cars of this age were designed to use leaded fuel. When using unleaded fuel it is necessary to add a Lead Replacement Additive in proportion to the amount of petrol being added. I have generally used Redex for this. The correct quantity is best added to the tank before the unleaded fuel is poured in. That way the additive and fuel get mixed more quickly.

Another problem with modern fuels is the addition of ethanol. This causes all sorts of problems. One is corrosion of all metals with which it comes into contact and another is that stored fuel goes off. Again another additive is desirable especially when winterising the car and storing it during the winter season. Here I have used 'Sta-Bil' though there may be better alternatives.

I have found that starting the engine for the first time each day on any such modern treated unleaded fuel can sometimes be noticeably more difficult than was the case with leaded fuel. However, after it has started and warmed up, restarting is always 'on the button'.

#### Antifreeze

The capacity of the cooling system is such that a lot of antifreeze is needed. If use of the car is intended only for the summer months then no such treatment is necessary. There is no antifreeze in the radiator. However to stop a slight radiator dribble use of Holts RadWeld is advised. At season end I have tended to drain and then store the radiator contents complete with the added RadWeld for use from one year to the next. It lasts some time and does not accumulate rust.

### Starting the engine

1. There is a safety electrical master switch fitted above the driver's right knee which isolates all electrics apart from the starter (and the added 'cigarette lighter' charging socket). This needs to be <u>turned on</u> (clockwise).

2. The Cowley is fed with petrol from the Autovac which in turn is operated by the vacuum present at the carburetter inlet when the engine is running. Fuel drawn from the rear tank is stored in the Autovac and then flows to the carburetter float chamber under gravity. An on/off tap under the Autovac opens the fuel flow. It should be shut off when the car is parked. It must first be turned on to be able to start the car. The tap is stiff at present because it is newly re-corked. It might first need a small screwdriver to allow this to be opened by one's finger.

The Cowley carburetter is situated on the opposite side of the engine to the inlet and exhaust valves and so it can take some time to pull fuel through if only the starter is used. When starting from cold and when using modern treated unleaded fuel it is often better to pull out the choke fully and then to turn the engine over with the starter <u>without</u> the ignition on for a little while so as to draw fuel in to the cylinders and have it ready to fire. Alternatively use the starting handle first with full choke to draw in fuel.

Then turn the ignition on, give it full choke and gently pump the accelerator pedal and press the starter until the engine starts – pausing if necessary to avoid overheating the dynastarter. It may splutter. Let the engine warm up before driving. Remember that the cork clutch runs in oil and is newly corked. It might therefore snatch a little. Indeed if after a winter layup the clutch does not release sufficiently to allow a gear to be engaged with the engine running, simply stop the engine, put the car in gear, clutch pedal down, handbrake on and press the starter as if to release the clutch. Then restart the engine.

## Tuning the carburetter

The choke linkage has recently been refitted so the carburetter may soon benefit from tuning by moving the adjusting nut up or down according to the usual SU tuning procedure. An SU tool kit for this is included in the under-bonnet tool box.

## Miscellaneous

A combination padlock secures the spare wheel mounted mirror against casual theft. Its combination is 439. A set of four spark plug testers is also included in the toolbox. The car is spray painted using cellulose paint. For touch up purposes the Black is identical to Halford's ordinary black spray paint (which is cellulose). The Blue has to be custom matched by a supplier. The coil ignition system currently uses its inbuilt auto-advance (which is sensitive and can sometimes trigger spluttering on starting) but the linkage is there to allow use of the original manual advance/retard.