Optimising your car ignition system

Technical talk on the most basic of systems; the ignition system at the Clubhouse by Frank Dreher.

Frank explained that it was firstly imperative to ensure that all of the wiring was in good condition as voltage drop could cause starting and other problems. The coil requires 120 V to start your car and if the wiring is not at its best can result in a voltage drop.

Many owners have found to their frustration and surprise that new parts can be faulty – especially points and condenser. When fitting new points it is vital to lubricate the fibre block that runs on the cam of the distributor; every point set comes with a small tube of lubricant; too often discarded but if the fibre end of the points wears down, the points gap quickly closes and your car's performance is adversely affected.

Make sure that your Feeler gauge it is clean and not rusted to ensure that you set the gaps correctly. A Dwell angle meter is the most efficient method of setting points gap, as it compensates for wear in the system, but check that the distributor has no play in the deck as it could give incorrect readings.

Spark plugs; ideally measure the resistance of your new plugs before fitting. If your car does not run smoothly it could be a compression ratio that is too high- in which case open plug gap to 0.28 instead of 0.25 thou.

Lead oxide was a frequent cause of plug wear in the past but with modern fuels plugs easily last 20,000 km or more.

To check your coil connect coil to + battery terminal, let coil lead dangle over the engine block; touch other end to earth and if the coil is OK you should get a fat spark. Frank says a Bosch Blue coil will last indefinitely and is freely available from Diesel Electric.

