

ENLIGHTENMENT

Garry Ellis HMCCQ

'JOSEPH LUCAS, PRINCE OF DARKNESS' is another somewhat more common slogan particularly among owners of old British Motor Bikes. These and other sobriquets, some of which are less printable, are heaped upon the shoulders of Joseph Lucas Ltd of Birmingham. This is really quite unfair, and displays a basic ignorance of the principles of motor vehicle electrics. Forget all the nonsense about magnetic fields and the flow of electrons along conductors, for it is just a lot of eyewash! A myth put about by auto electricians to support their lavish lifestyle at your expense!

The reality is **SMOKE!** When you think about it, it all becomes startlingly obvious – smoke makes all electrical things function. If the smoke escapes, the component stops working. For example, the last time you had a grovel under your car to replace the starter motor, didn't it start smoking before it ceased working? Of course!

The wiring loom in your car carries smoke from one component to another, pumped around the system by the dynamo, and when a wire springs a leak, it lets all the smoke out and everything stops. The starter motor needs a lot of smoke to work properly, and so it has a very thick wire going to it. The battery stores up large quantities of smoke dissolved in 'battery acid', which is why they were called accumulators, until it became apparent that we home mechanics would twig to the secret. Naturally if you try to dissolve too much smoke in your battery it will escape through those holes in the top – this is why those new fangled batteries with sealed tops explode when they get too much smoke in them.

But, with regard to Joseph Lucas and his sullied reputation – why is he so maligned? Why are Lucas components more likely to leak smoke than Bosch or Marelli?

Because Lucas is British and all British things leak. British engines leak oil, British sports cars leak rain, British hydrolastic units leak fluid, and British electrical components leak **SMOKE!**

