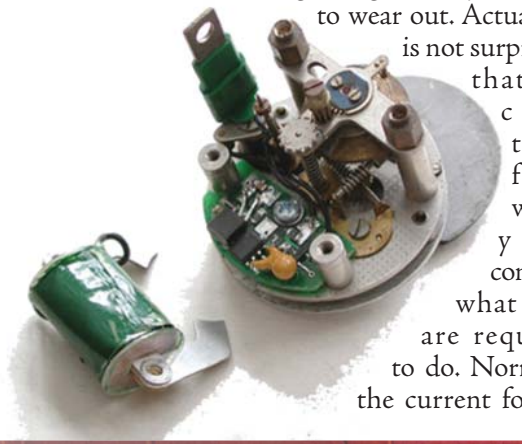
Marking Time

I am presently restoring Continental Cars' 1955 Slough built Traction Commerciale. This car is the only Big Boot, right hand drive Traction Commerciale ever built by the factory. I doubt that it will spend a lot of time on the road, even once the restoration is complete. Despite this, it is my desire is to achieve a restoration that pretty much resembles what it would have been like when the car was built. Now I know that the Buntings probably do not give a Rat's Rear End whether the clock works or not; for me, it is a matter of principle; following a restoration, every thing should work.

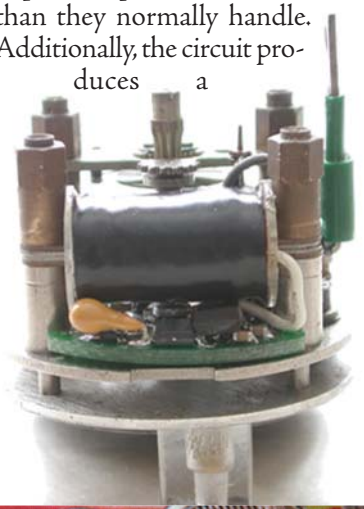
The Smith / Jaeger clock fitted to all circular instrument dash English Tractions never worked for very long. The electrical contact is the weak link in these clocks, so they never seem to run long enough for anything else to wear out. Actually, it is not surprising that the contacts fail, when you consider what they are required to do. Normally, the current for the coil passes directly through the contacts, which close and open five times per second. Each of these cycles causes a spark, which is easily visible. At the rate of five per second, this spark occurs 18,000 times per hour, 432,000 times a day, and 157,680,000 times per year!



No wonder they fail so quickly.

A very long search on the internet with Google revealed that this clock mechanism is the same as that fitted to early E Type Jaguars. So it made sense that no Jaguar restorer would settle for an inoperative clock, so I searched for Jaguar clock repairers.

I came up with two very promising repairers, but one stood out, as he modified the electrics so that the contacts act as a trigger for an integrated circuit [IC], which actually provides the power pulse to the coil. The contacts are required to pass much less current than they normally handle. Additionally, the circuit produces a constant width electrical pulse to the coil, which gives the balance wheel a solid kick, no matter how bouncy or dirty the contacts are.



They use a custom printed circuit board that uses surface mount techniques to shrink the circuit down to the size where it will fit inside the clock. None of the original clock parts are removed, so the installation is totally reversible, in case you ever want a non-functional clock again!

They use a state-of-the-art electronic calibrator to adjust your clock.

The calibrator is a microcontroller-based device which counts the number of ten-millionths of a second in a single tick. To fine-tune the adjustment, the calibrator also keeps a running total of 10, 100, 1000, 10,000 and 100,000 ticks. This provides an average over time, integrating variations in individual ticks, which allows them to adjust it so it will perform accurately when installed in your car. However, since the clock still uses a balance-wheel, it will never be as accurate as a crystal controlled digital clock.

In order to ensure that you clock keeps time accurately, however they do like to keep it for two weeks. This means that the turnaround time from Australia is likely to be between four and six weeks.

What is also important as it doesn't matter whether you car is still positive earth [as original], or has been changed to negative earth, it will work either way.

The Company is called jaguarclock.com, and is run by Mike Eck, who is extremely polite and helpful. He will clean, oil, upgrade and calibrate your early clock for US$85 return postpaid to Australia. I personally think that's a bargain. You can pay for the repairs by MasterCard on his website.

The Commerciale clock is now completed and on its way home from the US, and this will complete the Fuel / Amp / Clock instrument cluster. Both dash instruments have been fitted with the new CCOCA instrument faces, expertly reproduced by Rob Little, and will bring that part of the restoration to a very satisfactory conclusion.

Mike's address in the US to post you clock is:
Mike Eck, 71 Hillcrest Road, Martinsville, NJ 08836. USA.

The finished and fully functioning clock, returned to its rightful place in the instrument panel of the Bunting's Com-

Greg