## SAVVA Technical Tip - 181 Battery life

One often hears the complaint – batteries aren't what they used to be - absolutely true, but it's not because modern batteries are poorer in quality, but because modern car batteries have a different requirement to our earlier car batteries.

The problems we have with our older cars using modern batteries is because our cars are not used regularly enough and the batteries are allowed to lose charge resulting in under-voltage and a shortened life.

Let's look at a modern car's requirement – firstly, and perhaps most importantly, they are in regular use. They have starter motors that can swing high compression engines at an alarming rate and they must also cater for electric windows, air conditioning, computers, powerful quartz and halogen lights plus numerous other electronic this and that's. Once the engine has started the alternator takes over and produces in excess of 40 amps to recharge the battery - even at low revs the battery is usually fully recharged within a few kilometers.

Older cars by comparison, once started, only require a few amps for the coil to keep them mobile, and another few amps to re-charge the battery. The poor old generator probably generates no more than 10 to 30 amps at a good 30 mph - which is about all the old generator can manage. The voltage and current regulation on generators is very speed dependent, which means the generator is only effective at higher engine revolutions. The usual monthly trip to the club and back a few kilos away equals poor battery life and most of the time a half-charged battery.

Basically, modern batteries are excellent for the purpose they are made and last years - BUT, they are not designed to stand around unused in old cars and if they stand discharged for any length of time they may not recharge to their original voltage.

If we are to use modern batteries, we should use a "smart charger" the price of good ones has come down dramatically and they are now affordable. In fact, half the price of a new battery.

The picture is of an inexpensive Optimate battery maintenance charger. This model maintains the battery at 12.8 volts even while the car is not being used.

NOTE! Beware of "El Cheapo" chargers that are flooding the market. Just remember – goed koop is deur koop!

