

## DELCO LIGHT – ANOTHER CLUB ENGINE EMERGES.

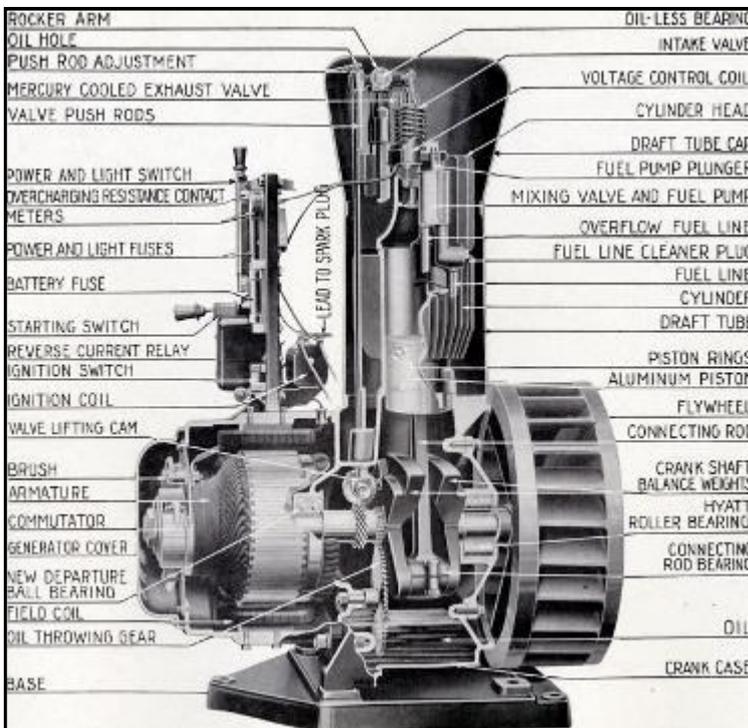


**Figure 1 Delco Light Plant donated by John Elliott**

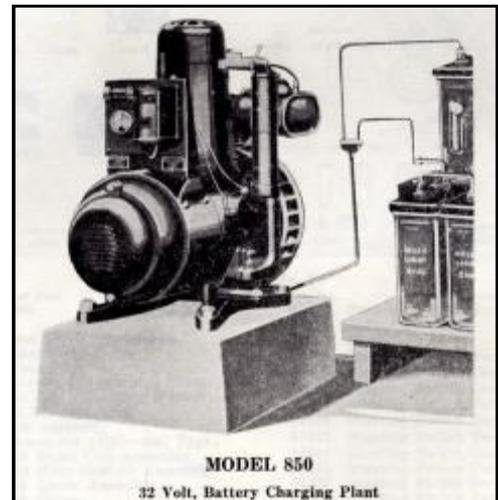
During a reshuffle at the Chook Shed on 28<sup>th</sup> March another of the club's treasures surfaced and attracted considerable attention. It is a Delco Light Plant donated to the club by our Stansbury member John Elliott, apparently to replace another which was beyond redemption. As shown in Figure 1 it is complete and mounted on a trolley (sorry about the dust John!).

A bit of research allows us to identify it as a Delco model 850 (serial number 194837) manufactured at Dayton, Ohio in November 1923. The Dayton Engineering Laboratories Company (DELCO) was established in 1909 initially to make electrical components for Cadillac before Charles Kettering designed and built 32 volt lighting plants. The plants were a huge success and 355,000 were made up to July 1931, the last being in 1947 (for wartime use). The company was bought out by United

Motors and later by General Motors who retained the Delco name.



**Figure 3 Cut-away diagram of single cylinder air-cooled Delco Light Plant**



**Figure 2 Illustration of Model 850. More than 25 models were produced.**

The generator operates in 2 modes:

1. As a motor during starting of the engine

When the engine is running, it automatically switches over to operate as a generator.

It is important that the engine is run with appropriate batteries to prevent damage to the wiring. Our friends at Battery World, Mt Barker can supply an 8 volt battery (as used in golf buggies) which we can be put in series with two 12 volt batteries to make up the required 32 volts. Some models were equipped with sensors which started the engine when the load increased (for example if a washing machine was switched on). When the load was switched off and the batteries were fully charged the engine would shut down. This process is admirably described in a You tube film clip found at: <http://www.youtube.com/watch?v=BxrnxoJ5VSo>

Judging by the enthusiasm shown at the Shed Day I will not be surprised if we have a new club exhibit at Power of the Past 2014.

Mark Randell