

CASE STUDY - PORSCHE 356

May 2008

We were contacted by a Mr Richard Scaldwell, who sent to us a box containing a really old starter motor and dynamo taken off his recently purchased Porsche 356. Richard had converted the car from 6 volt to 12 volt, and now needed to address the problem of starting and charging his electrical system. Initially, he wanted to know if we could re-wind his original units to 12 volt, but the cost implications were prohibitive, and would still not have given him the extra boost in power that he needed. We suggested to Richard that we could just as easily make him a starter and a **Dynalite** from scratch – an idea that he was instantly keen on!



Richard is a very good sport, and was good enough to give us unrestricted access to his Porsche and workshop facilities, where **Jason** set about designing a **Starter** and **Dynalite** around the original set up.

It is worth mentioning at this point that Richard Scaldwell is an expert in the field of historic and vintage racing cars, and has created a very successful business in restoring pre-war vehicles for competition and leisure pursuits. He is a well respected figure on the competition scene, and has been commissioned to work on many rare and valuable vehicles.

The Starter was comparatively easy – we already had the basic design of a Porsche unit (**RAC508**) so Jason adapted this base unit to fit to the 356 ring gear. First attempt and happy days – the unit “zinged” into life and turned over the 1.6 litre engine first time. Some minor amendments were required to the terminal connectors to ensure a good electrical contact, but the unit fitted and worked first go, and hasn’t been off since. The unit is now available from stock as part number **RAC510**.

And so on to the dynamo. The problem that presented itself came in the fitment of the original Bosch unit, as it sits neatly on to an upstand that also doubles up as the oil filler tank. The minimum body diameter of any Dynalite is 100mm, but the original unit had a diameter of 90mm. Not to be deterred (and we haven’t been beaten yet!) Jason and Richard came up with the idea to fit a different upstand – one that would have fitted on a Porsche 912 (the 912 dynamo would have had a slightly bigger body diameter). We knew that this upstand was a direct swap for the 356 unit, so after Jason had designed a new Dynalite based on the existing Porsche part, we offered the unit up for fitting. As you can see from the pictures, the unit fitted superbly, with absolutely no problems at all with the different upstand.



The new **Dynalite, RAC016** is now available to order and, if required, we can also supply the Porsche upstand on an exchange basis. The Dynalite kicks out around 45 amps (as opposed to the original 36 amps) and is approximately 4 kilos lighter. Also, and the whole basis of the Dynalite range, the new unit is an alternator and not a dynamo, meaning that it will charge across all rev ranges!

Suffice to say that Richard is chuffed to bits with the units that we designed for him, and has completely overcome his starting and charging problems. For more information on these units, please go to our **applications** page.