



The OMC-5 An Eight Pulse Revolving Armature Engine

Following Paul Gustave Froment's discovery in 1844 of the revolving armature engine, a logical development of the original design was to introduce a second bank of coils on the opposite side of the flywheel and at an angle that achieved eight power pulses per rotation when the wheel was fitted with four armatures.



By the mid 1800's several versions of this arrangement had been tried and the OMC-5 Revolving Armature Engine is an example of this development.

This design, that uses two banks of coils, also requires two sets of cam and timing blade arrangements and these are operated from a common shaft.

Each set of timing blades is adjustable with a moving bracket within a fixed slide. This allows for individual timing of each coil bank and the establishment of minimum mechanical resistance at the cams.

Further fine tuning is possible with the timing plate screw that establishes how long the timing blades are in contact.

The model is supplied with a period on/off switch and all the other parts are in keeping with the times.

This OMC-5 Revolving Armature Engine works on 4.5 volts DC and is available, in kit form, from the Old Model Company, in England

A "spares packet" is supplied containing the smaller parts most commonly "lost" during the assembly

Technical Specification

The kit contains over 165 parts that need to be assembled. These parts are supplied in numbered packages that relate to corresponding numbers in the instruction manual.

A very detailed and illustrated instruction manual is provided that also becomes a record of construction.

No machining or soldering is necessary. Only hand tools are required. A BA spanner tool is provided in the kit.

The packing converts to an assembly jig to support the model while working on the underside. This packing box measures 30cm (12in) x 30cm x 5cm (2in) approximately.

The hardwood base is unfinished and will need drilling (template provided). It will also need polishing or varnishing. The base measures 15cm (6in) x 22cm (8,3/4in).

The finished model stands 10cm (4in) high. The flywheel had a diameter of 6cm (2, 3/8in).

The timing system is adjustable with a moving bracket within a fixed slide with further fine adjustment possible with the timing plate screw which acts upon one of the timing blades.

The model operates on voltages between 3 and 6 volts dc and is supplied with a battery box that accepts 3 x AA batteries (not supplied).

This model is not a toy and because of the number of small components this kit is not suitable for youngsters under the age of 12 years unless supervised by an adult.

A “spares packet” is supplied containing the smaller parts most commonly “lost” during the assembly

The Old Model Company reserves the right to change the specification at any time without notice.