INSTRUCTIONS

FOR AERO CLOCKWORK MOTOR No. 2

Aero Clockwork Motor No. 2 is designed to fit in the fuselage of Aeroplane Constructor models. It provides a high-speed drive for the Propeller of the machine, and at the same time rotates the landing wheels so that the complete model taxies along the floor or table under its own power in a most realistic manner.

The Motor should NOT BE WOUND UP until it is fitted into a model with the propeller control rod in the "Forward" or "Stop" position as described below.

The driving assembly is shown in Fig. 1, while Fig. 2 illustrates the Motor mounted in position in the fuselage and coupled to the propeller shaft and landing wheel axle. The drive assembly comprises the Motor unit 1 which is fitted with a double contrate drive; the propeller shaft 2 fitted with special pinion; the landing wheel axle 3 also fitted with special pinion; the propeller control rod and extension piece and the Adjustable Tail Wheel 12. The longer of the two propeller shafts provided with this Motor is for use in models built with the Special Aero Outfits and fitted with a Radial Engine. The Propeller 10 and Collar 6 are contained in the standard and Special Aeroplane Constructor Outfits.

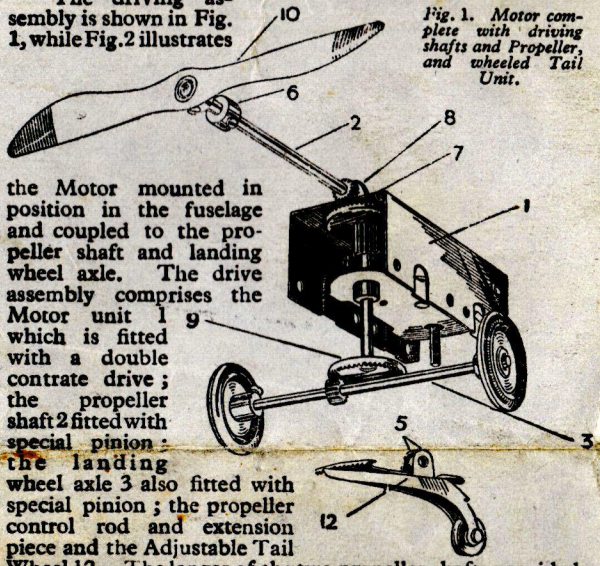

Fig. 1. Motor complete with driving shafts and Propeller, and wheeled Tail Unit.

A propeller control rod is supplied with the Motor and this must be fitted to the Fuselage Top Front and Fuselage Front before the propeller shaft and Motor are incorporated. The plain end of the propeller control rod is pushed down through the slot in the Fuselage Top Front and continued through the small hole to the Fuselage Front. The extension piece is then assembled to the looped end of the propeller control rod by means of nuts from the Aeroplane Set—one nut in front and one at the rear of the screwed portion. This extension piece will then enable the control rod to be manipulated quite easily. Next, the Collar 6 is placed on the propeller shaft 2 and locked in position. Collar 6 should be adjusted so that the special pinion on the end of the shaft meshes with the contrate wheel 7 of the Motor, when the Collar 6 rests against the inside of the Fuselage Front. The end of the propeller shaft 2 complete with Collar 6 is then pushed through the upper hole in the Fuselage Front. Next, the end of the propeller shaft 2 is passed through the hole in the bearing lug 8 on the top of the Motor, so that the pinion on the shaft 2 meshes with the contrate wheel 7.

The Motor is next lowered into position, and at the same time the Undercarriage V Struts, are placed on each side of the fuselage. The Motor and V Struts are held in place by means of 7/32" bolts passed through the lower holes in the Fuselage Sides. For Special models Nos. S2, S4, S5, S12 and S16, the undercarriage must be moved back one hole in order to fit the Motor into the model. The Fuselage Underside Middle section must be omitted from all Special models in which the Motor is fitted. The landing wheel axle 3 is placed in position as illustrated in Fig 2. The Propeller 10 may now be placed on the end of the shaft 2 that projects through the Fuselage Front, and locked in position by means of a grub-screw in its boss. The Landing Wheel complete with Rubber Tyre should be placed on each end of the landing wheel axle 3. The Landing Wheels should be adjusted so that the special pinion on the axle 3 engages with the contrate wheel 9 attached to the driving shaft of the Motor. Care should be taken to see that the shafts 2 and 3 are free to turn in their bearings. A little oil applied to the teeth of the contrates 7 and 9 will improve the running.

By moving the Adjustable Tail Wheel the direction in which the model travels can be altered at will, and smooth running obtained. The Tail Wheel is secured to the tail of the fuselage by means of a ¼" Bolt 11. The Bolt is passed through the rear lower holes in the Fuselage Side Rear sections and through the two perforated lugs 5 attached to the Tail Wheel. By adjusting the position of the wheel frame 12 on the toothed rack 13 the model may travel in any forward direction.

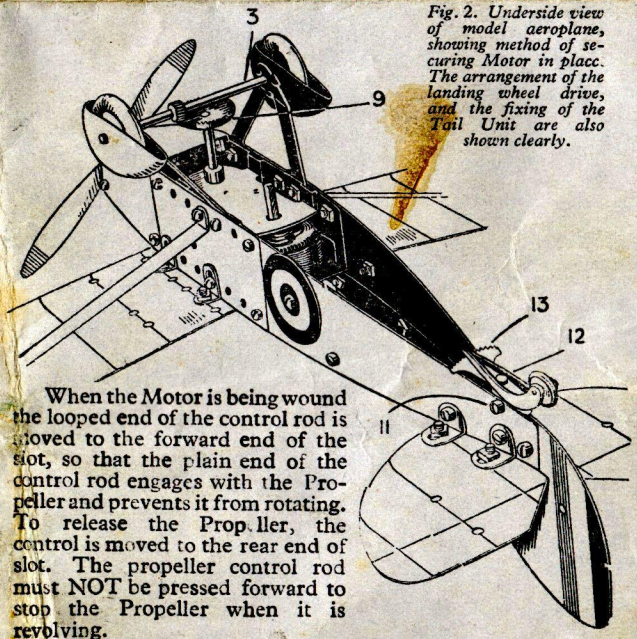

Fig. 2. Underside view of model aeroplane, showing method of securing Motor in place. The arrangement of the landing wheel drive, and the fixing of the Tail Unit are also shown clearly.

When the Motor is being wound the looped end of the control rod is moved to the forward end of the slot, so that the plain end of the control rod engages with the Propeller and prevents it from rotating. To release the Propeller, the control is moved to the rear end of slot. The propeller control rod must NOT be pressed forward to stop the Propeller when it is revolving.

Manufactured by

MECCANO LIMITED - Binns Road - LIVERPOOL 13

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