

# How to use the Meccano Magic Motor

Before winding the Motor, oil the bearings and gears with thin sewing-machine oil. This oiling should be repeated at intervals, using only a small quantity of oil each time. See that the brake lever 1 (Fig. 1) is pressed down. Then press the key on to the winding shaft 2 to its fullest extent and wind **anti-clockwise** only, as indicated by the arrow on the side-plate. **Do not turn the key clockwise.**

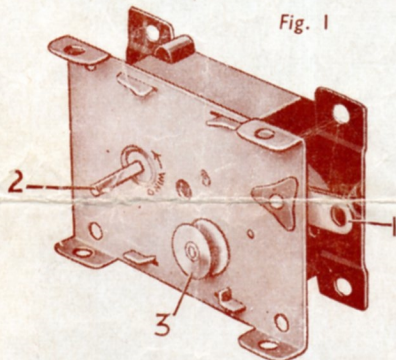


Fig. 1

To start the Motor release the brake lever.

When the Motor is used to drive models the extra Pulley supplied with it should be secured to the driven Axle Rod by means of the grub screw. A Driving Band of suitable length is passed over this Pulley and round the pulley 3, and then serves as a driving belt. Three pairs of Driving Bands of different length are supplied with the Motor.

If the above instructions are carried out the Magic Motor will give excellent service.

Examples of two methods of mounting the Magic Motor in models are given in this leaflet. The motor can be made to drive most of the working models built with the smaller Outfits, and by arranging suitable pulley systems the drive from the Motor can be taken to any part of the model.

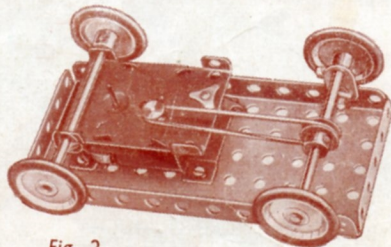


Fig. 2

On models that travel, it is generally convenient to mount the Motor beneath the model. Fig. 2 is an underneath view of a small cart, and shows clearly how a drive can be arranged. A short Driving Band is passed from the Motor pulley to the  $\frac{1}{2}$ " Pulley on the axle of the travelling wheels. In fitting the Band it should be twisted correctly to ensure that the model travels in the required direction. **The Band must not be too tight.**

Fig. 3 shows a method of driving a Rod that is not conveniently placed for a direct drive. The Motor is shown mounted in position on the base of a model Drilling Machine. A Driving Band of medium length is passed round the Motor pulley, and round a 1" Pulley Wheel. The Rod carrying this Pulley is fitted with the  $\frac{1}{2}$ " Pulley 1 that is supplied with the Motor. A long Driving Band passes round the Pulley 1 and over two guide Pulleys 2, before passing round the 1" Pulley at the head of the Rod representing the drill. It is necessary for one of the guide Pulleys to be free on its Rod, as the two rotate in opposite directions. The free Pulley is retained on the Rod by a Spring Clip. Two Angle Brackets 3, or a Double Bracket, form the lower bearings for the drill Rod and are bolted to a  $2\frac{1}{2}$ " Strip attached to the vertical member of the Drilling Machine:

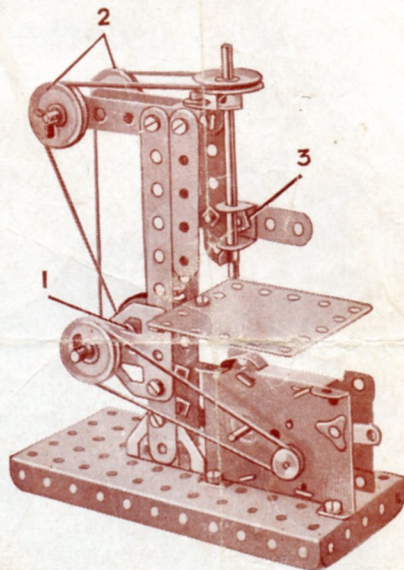


Fig. 3

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