

REGULATION OF MECHANICAL CLOCKS

Introduction

Providing mechanical clocks are regularly maintained by specialist engineers, they should keep excellent time. However periodic adjustment may be required to compensate for changes in atmospheric conditions that can effect mechanical clock movements.

Regulation is commonly required following any maintenance work as cleaning and oiling enables the gearing to move more freely sometimes effecting the time keeping characteristics of the movement

Due to the sensitive nature of the mechanism only small adjustments should be made each time the clock is regulated. A record should be kept of all adjustments and entered in the clock's Log Book.

Regulation

To make the clock go faster - **RAISE** the pendulum bob

To make the clock go slower - **LOWER** the pendulum bob

When raising or lowering the bob it is important to hold the pendulum rod firmly with one hand, just above the bob and, with the other hand, turn the wing nut beneath the bob.

It is important to hold the rod firmly to avoid any likelihood of twisting the suspension spring at the top of the pendulum. **If the spring is twisted, the clock will not keep to time.** On large pendulums, a second person will be required to hold the pendulum rod steady while the adjustment is made.

Only make small adjustments, say an eighth of a turn, and check the time keeping after 24 hours. Continue to make similar small adjustments until the clock keeps correct time.

Some pendulums are fitted with a weight tray. If present, this will be positioned at 1/3 rd of the total pendulum length, from the suspension spring. To correctly regulate clocks with this type of pendulum, adjust the bob as described above until the clock loses very slightly. Then, by adding small lead weights to the tray, the clock will gain. Add more weights until the clock keeps accurate time.

Adding weights to the pendulum bob itself will not make any significant difference to the time keeping.

If the clock fails to respond to the method of regulation described above, it indicates that a problem exists within the movement itself and will require specialist attention to rectify.