

the SEA CLOCK

Stage I - the pendulums and escapewheel

The pack contains: - LH and RH pendulums
- 2 retaining screws
- large escapewheel

NOTE This assembly is the heart of the clock and final adjustment in this area is crucial. Therefore, we have assembled the arms and proved them on our test rig BUT as each clock is hand-built, there will be subtle differences in them so some slight adjustment is to be expected

left-hand pendulum

Right-hand pendulum(part)

pallet weight

pallet weight

(i) See the difference in the 2 arms as drawn. Put one arm on the shaft (see page 9) and fit the screw. This arm will move from the vertical, so you will need to move it back to the vertical as you fit the second arm.

(ii) Carefully fit the escapewheel onto the centre shaft, moving the pallets if necessary to ensure engagement as drawn. (When the clock is at rest, the pallets are usually in this position i.e. the left - hand pallet just holding the wheel, the right - hand pallet free.) Centre the wheel onto the two pallets and screw to the shaft.

(iii) Check the springs are correctly pushing the pallets into the wheel.

FINAL ADJUSTMENT

The pallets swing in and out of engagement using a mixture of spring tension and gravity. The springs rarely need further adjustment, unless greatly disturbed, but clocks will vary and might need adjustment to the pallet weight to ensure a free action. This is a delicate operation. First, always prevent the escapewheel moving by threading a screwdriver through the top spokes. Second, hold both the arm and the pallet in one hand and move the weight very slightly to the left if less depth of engagement is required, or to the right if deeper engagement is needed (for both pallets). Gentle movement of the arms will show the action. When satisfied, remove the screwdriver, repeat the arm movements several times to check, then put several clicks on the barrel with the key - and check again!

