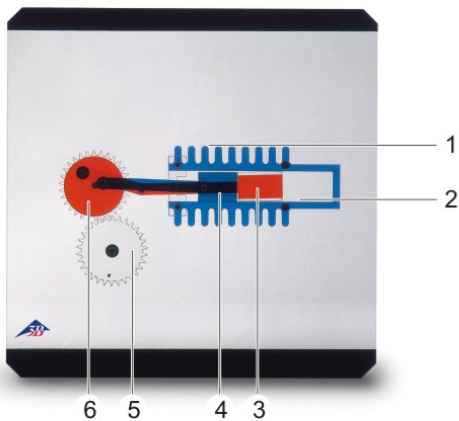


Stirling Engine, Transparent 1003000

Instruction sheet

04/12 JS



- 1 Cold side
- 2 Hot side
- 3 Working piston
- 4 Displacement piston
- 5 Flywheel
- 6 Crank shaft

1. Description

The way a Stirling engine works can be divided into four sections, or piston strokes.

- 1) Heat is fed to the system when the displacement piston pushes the air to the heated side of the displacement cylinder. At this time the piston is in a position known as top dead centre, here at its rightmost extreme.
- 2) Expansion of heated air drives the working piston towards the left. This causes mechanical work to be transferred via the crankshaft to the flywheel.
- 3) Heat is dissipated when the displacement piston causes the air to move to the cooler side of the displacement cylinder.
- 4) The cooled air is compressed as the working piston moves to the left, the mechanical energy (work) for this being provided by the flywheel.

2. Operation

Additionally recommended:

Overhead Projector (230 V, 50/60 Hz) 1003264
or
Overhead Projector (115 V, 50/60 Hz) 1003263

- Lay the transparency on the daylight projector.
- Move the components by hand to the places which correspond to the various strokes.

