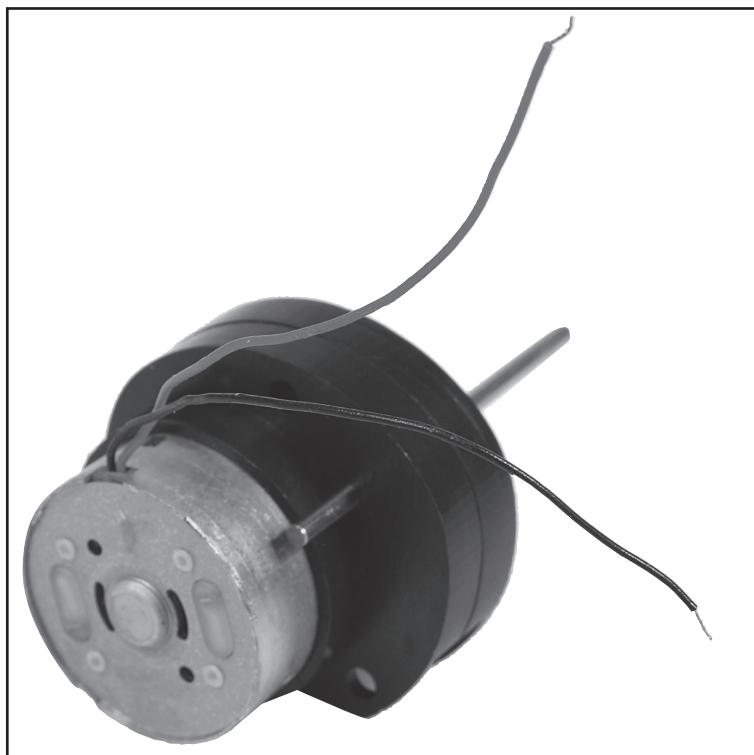


OPITEC

Hobbyfix

1 2 4 . 1 6 6
*Solar motor
and gearbox*



Please Note

The OPITEC range of projects is not primarily intended as toys for young children. It is for teaching, designing and making to ensure that pupils experience a range of tools and processes.

1. Parts list:

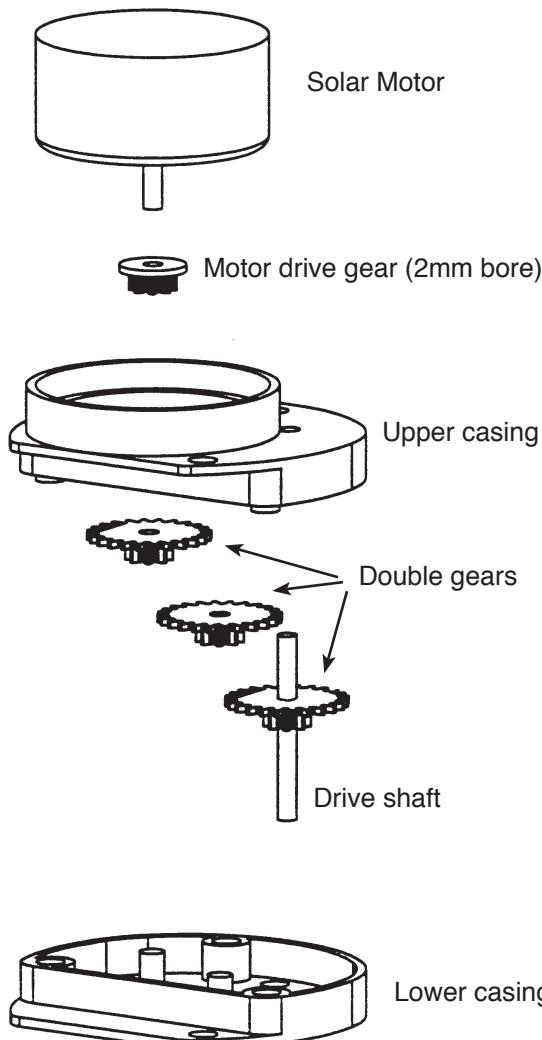
Description:	Material	Quant.	Size
Upper casing			
Lower casing	PVC	1	
Double gears	PVC	3	8/24 teeth (2 mm bore)
Spare gear	PVC	1	8/24 teeth (2 mm bore)
Motor drive gear	PVC	1	8 teeth (2mm bore)
Solar Motor		1	$\varnothing 25 \times 12 \text{ mm}$
Drive shaft	Steel	1	$\varnothing 2 \times 50 \text{ mm}$

2. Information:

Ratios	9 : 1 = 2 gears 27 : 1 = 3 gears (shown in diagram)
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Note:	To achieve a quieter, smooth running of the gears and shaft, lubricate them with grease or sewing machine oil.
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3. Assembly:



Assembly:

- remove and clean up parts
- remove the plastic ring from the solar motor
- Insert the drive shaft into one of the double gears. (gear should be mounted as shown)
- insert the motor and drive gear (2 mm bore) into the upper casing and adjust the the drive gear according to the required ratio so that it will mesh correctly.
- should the motor move in the housing (eg. be a little loose) either hold it place with a small bead of glue, or place a small strip of sellotape around the motor, before inserting it.
- once the gears are assembled check that they will turn easily and and then glue the upper and lower casing together