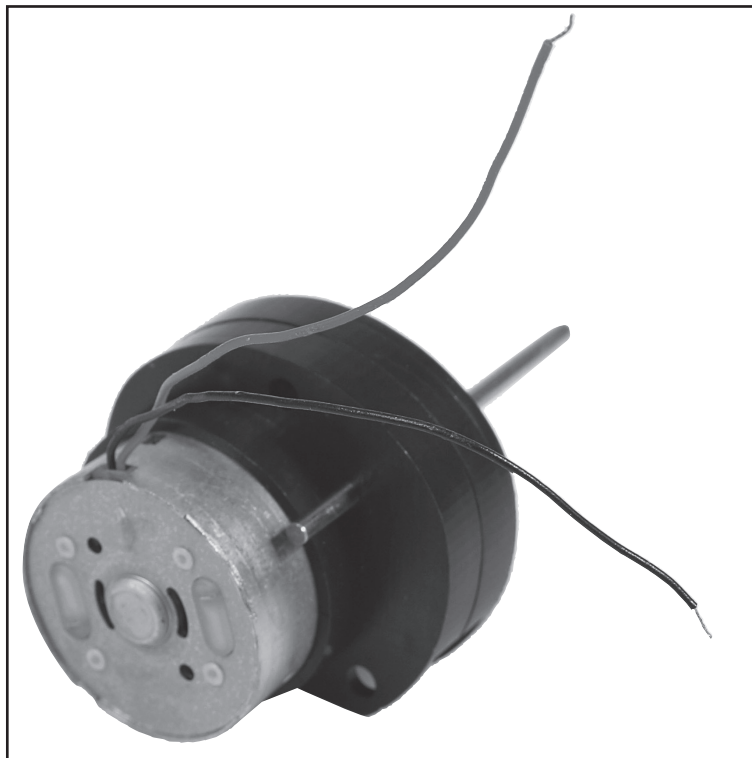


OPITEC

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:

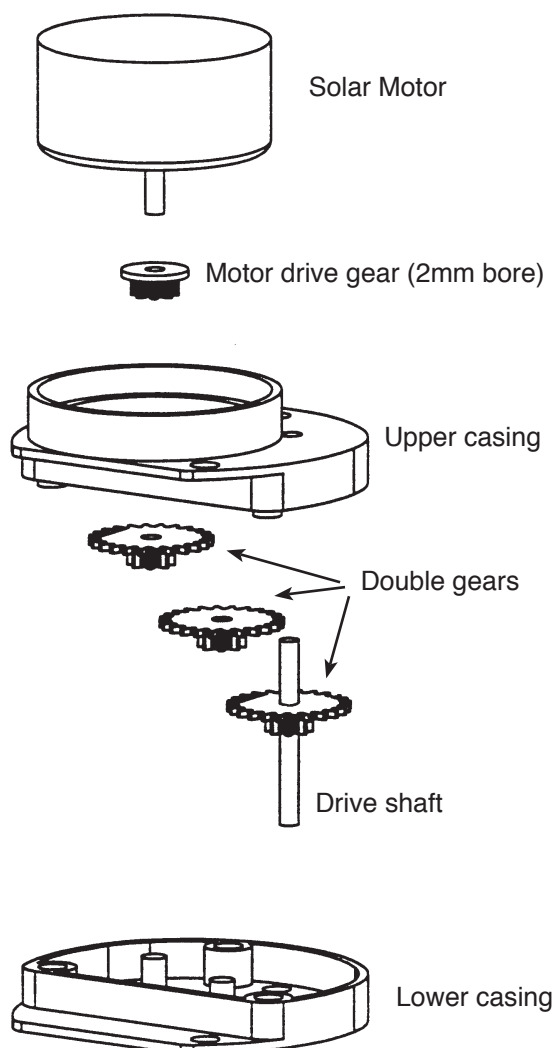
Description:	Material	Quant.	Size
Upper casing			
Lower casing	PVC	1	
Double gears	PVC	3	8/24 teeth (2 mm bore)
Spare gear	PVC	1	8/24 teeth (2 mm bore)
Motor drive gear	PVC	1	8 teeth (2mm bore)
Solar Motor		1	ø 25 x 12 mm
Drive shaft	Steel	1	ø 2 x 50 mm

2. Information:

Ratios 9 : 1 = 2 gears
 27 : 1 = 3 gears (shown in diagram)

Note: To achieve a quieter, smooth running of the gears and shaft, lubricate them with grease or sewing machine oil.

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