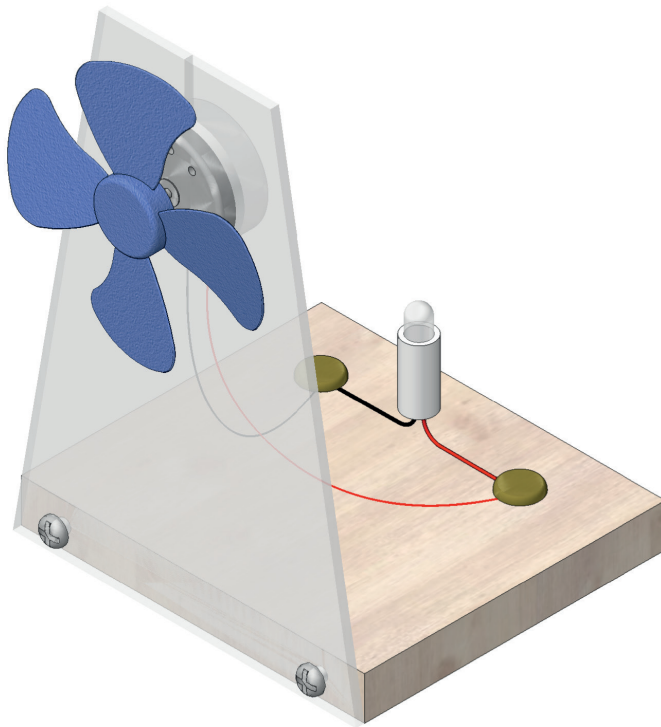


116.655

Wind Generator



Tools required:



Screwdriver



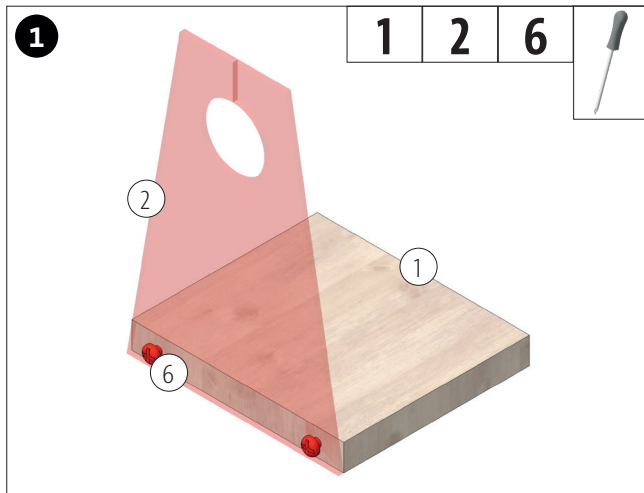
Hammer

NOTE:

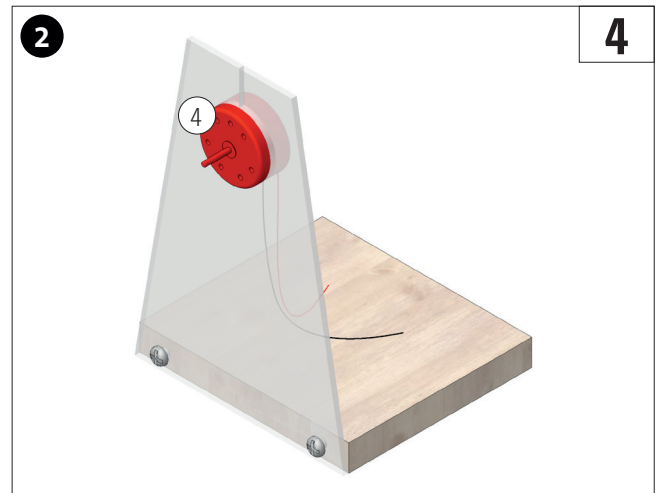
After completion, the OPITEC work kits are not articles with toy character of a generally commercial kind, but teaching and learning aids to support educational work. This kit may only be built and operated by children and young people under the guidance and supervision of competent adults. Not suitable for children under 36 months. Danger of suffocation!

Parts list	Quantity	Dimensions (mm)	Designation	Part no.
plywood	1	80x70x10	baseplate	1
acrylic glass	1	115x80x2	motor Holder	2
low voltage LED blue or yellow	1	ø5	lamp	3
motor	1		generator	4
windmill	1	ø60	windmill	5
screw	2	2,9x13	attachment	6
drawing pin	2		attachment	7

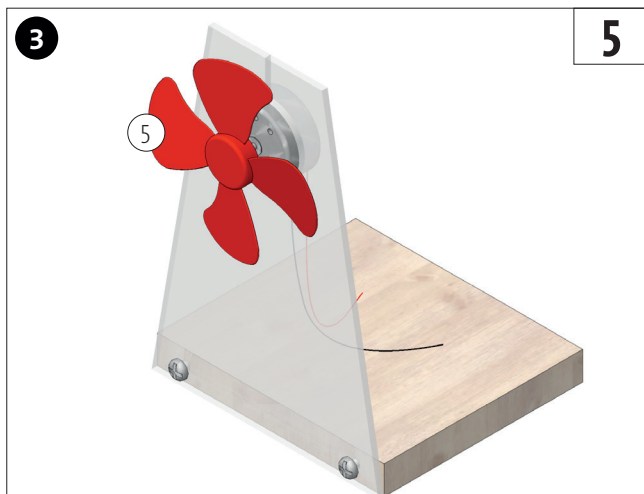
Instructions 116.655
Wind Generator



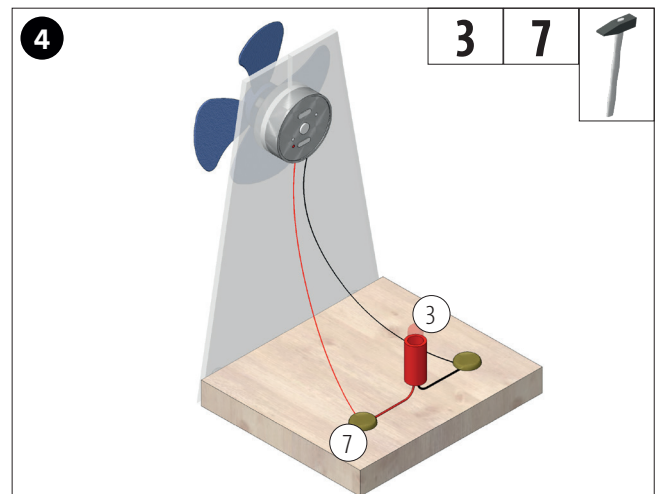
Fix the prefabricated acrylic plate (2) to the broad sides of the plywood baseplate (1) by using the two screws (6).



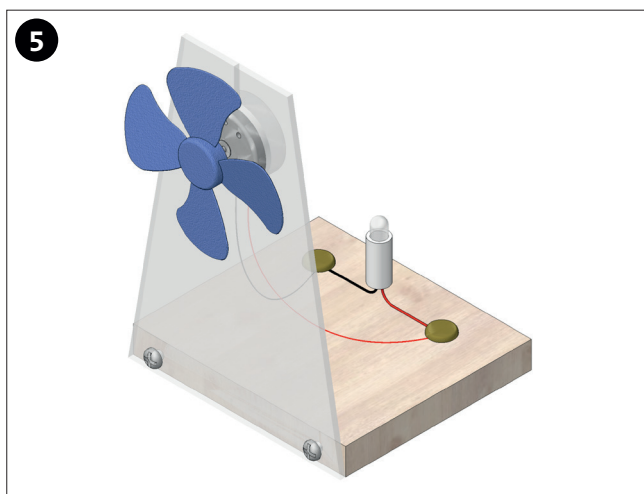
Mount the motor (4) from behind into the opening of the acrylic plate as depicted.



Attach the fan (5) from the front side to the motor shaft.



Connect the black cable from the motor to the red cable of the LED (3). Connect the red cable from the motor to the black cable of the LED. Then fix the LED to the base plate with the tacks (7).

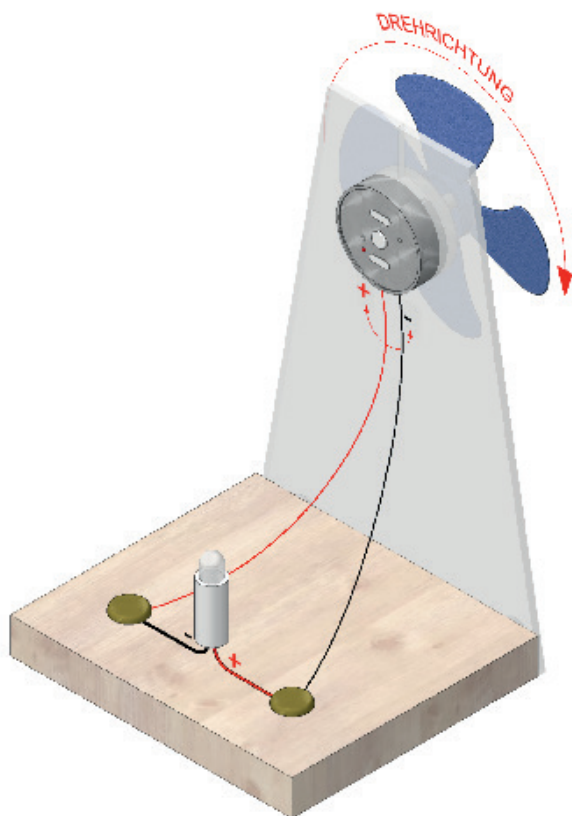


DONE!

How it works:

Propel the fan by blowing, wind or another fan. The LED lights up as soon as the generator (motor) provides sufficient electricity. (e.g., with a hair dryer on the cool setting).

If the LED does not light up, increase the rotation speed of the fan wheel (a hairdryer or fan can also be used for this purpose).



Functionality depending on the direction of rotation:

The solar motor is equipped with two connection cables. The red cable indicates the positive pole, the black cable the negative pole of the motor.

In this wekrpacking, the solar motor serves as a generator, which means that the direction of rotation and therefore the polarity of the motor changes.

This means that the black connection cable of the motor must now be connected to the red wire of the LED (anode = plus) and the red connection cable of the motor to the black wire of the LED (cathode = minus).