

THE TWO RATIO GEARBOX & MOTOR KIT

DESCRIPTION

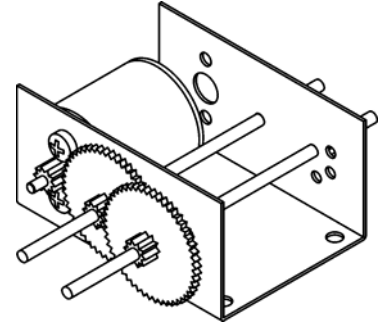
The *TWO-RATIO GEARBOX* provides a choice of 2 gear ratios.
Note: the Gearbox is pre-assembled - the motor needs to be assembled to the Gearbox.

The choice of ratios available at the „Output” shaft are:

- Single reduction (shaft A) = 1:5
- Double reduction (shaft B) = 1:25

The motor, under load, turns at approximately these speeds.

- with 3 Volts (2xAA batteries) 6,500 RPM
- with 6 Volts (4xAA batteries) 12,600 RPM



1. COMPONENTS SUPPLIED. *The following components are supplied in this kit, and need to be assembled:*

- | | |
|--------------------------------------|--------------------------------|
| 1x Two-ratio Gearbox (pre-assembled) | 1x 4.5V Electric Motor (round) |
| | 2x M2.6x 4 self-tapping Screws |
| | 1x 10T Pinion Gear 1.9 hole |

2. ASSEMBLING THE GEARBOX

Before starting assembly, the following must be done (based on the intended use of the gearbox):

- select the desired gearbox ratio – one of the two available
- cut off the other excess shaft

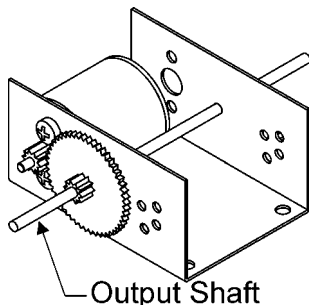
2.1 Press the 10T pinion onto the motor shaft.

HINT: Place the gear on the bench, insert the motor shaft into the worm gear's hole and gently tap the end of the shaft (where it exits the motor) with a small hammer. Stop when the worm gear is 3mm from the motor's body.

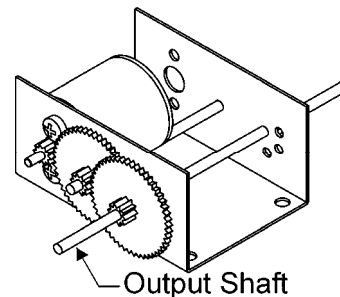
WARNING: Don't just push the motor down by hand as this can push the motor armature out of its bearings and jam the motor.

2.2 Solder a suitable length of wire to each of the motor's terminals – prior to installing the motor in the gear case.

2.3 Secure the motor to the gearbox case using the two self-tapping screws.

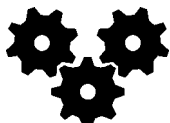


SINGLE REDUCTION
(Low ratio = high speed)



DOUBLE REDUCTION
(High ratio = low speed)

Note: a range of Multi-ratio Gearbox kits, with a wide range of different gear ratios, and a choice of motors is also available. Refer to our website or latest catalogue



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