



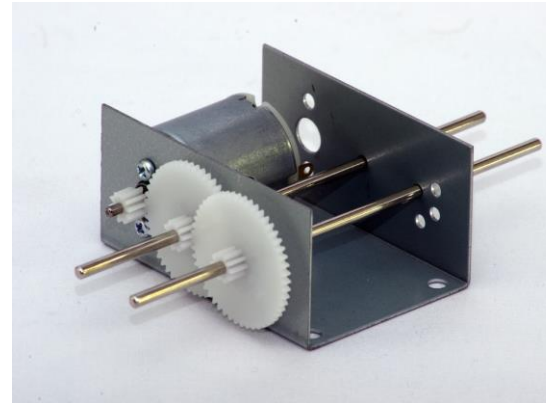
TWO RATIO GEARBOX KIT (Code: GTWORKIT)

DESCRIPTION

The *TWO-RATIO GEARBOX KIT* provides a choice of 2 gear ratios.

(This gearbox kit replaces the previously pre-assembled gearbox and motor kit GTWOR.)

This kit provides the parts needed to assemble a simple gearbox with a choice of 2 ratios (as below).

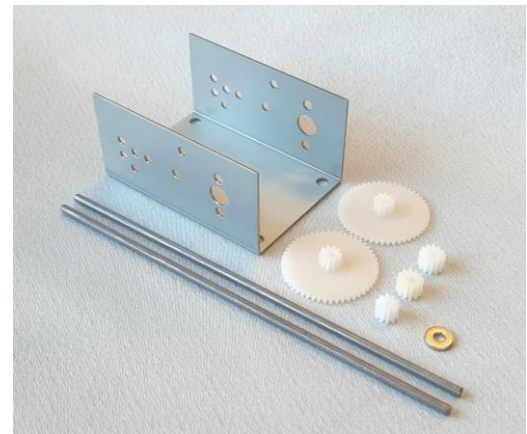


Ratios available	1:5	1:25
-------------------------	-----	------

LEVEL:	Introductory
HOURS TO CONSTRUCT:	1 - 2 hours
SKILL DEVELOPMENT:	<ul style="list-style-type: none"> • Manufacturing • Mechanical

WHAT'S IN THE KIT?

- All the mechanical components required to make one of the 2 gearbox ratios
- A detailed teaching unit with a complete parts list and assembly diagram for each of the possible gear ratios.



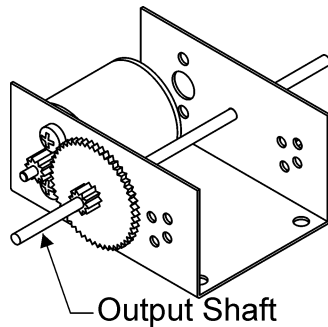
ABOUT THE PROJECT

The gearbox is designed to be part of a larger project. Defining that project will allow the designer to determine which of the 2 gearbox speeds will be used, as well as whether the axle shaft will be two sided (such as for a vehicle's rear axle) or single sided (such as a windmill), and what the length either side needs to be.

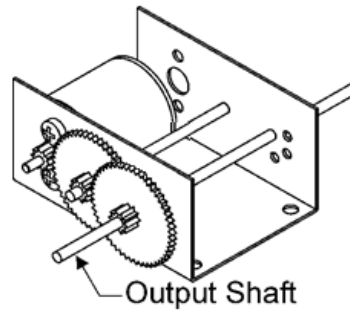


OVERVIEW – Two Ratio Gearbox Kit

These are the available ratios – one must be selected:



SINGLE REDUCTION (1:5)
(Low ratio = high speed)



DOUBLE REDUCTION (1:25)
(High ratio = low speed)

WHAT ELSE IS NEEDED?

The following items are required in addition to the kit and must be supplied by the maker – some are available from Scorpio Technology, but need to be ordered separately:

ADDITIONAL REQUIREMENTS	ORDERING CODE
The electric Motor: NOTE: Three different motors are available – the motor must be selected before starting assembly and must be purchased separately. This gearbox kit can be used with either the MOT17, MOT22 or the high-performance MOT30 motor	MOT17 or MOT22 or MOT30
Multi strand hook-up wire in assorted colours	WIREHU10
Battery holders to match the motor and the project – with the option to use switched or unswitched Battery holders	BH2AA / BH2AAF, BH3AA / BH3AAF, BH4AA / BH4AAF, BH6AA
?? x AA Batteries	BATTAA, BATTALK, BATTALK40

NOTE: Before starting assembly, the desired motor option and the gear ratio must be selected, as this defines the parts to be used, the assembly side and the assembling procedure.

TOOLS REQUIRED

The following tools are required to assemble the Gearbox and Motor, and connect it to your project. Several of these tools are available from Scorpio Technology, and can be ordered separately if required:

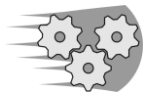
REQUIRED TOOLS	ORDERING CODE
Assorted hand tools (depending on materials used)	-
Hammer	HAMMERC/HAMMERCL
Phillips Screwdriver #1 point	SCREWDRPH1/80
Block of wood to support the motor at the assembly stage. At least 25mm thick, that holes can be drilled into.	---



**SCORPIO
TECHNOLOGY**

OVERVIEW – Two Ratio Gearbox Kit

Soldering Iron and Soldering iron stand: – a good quality soldering iron, with a fine tip or	SOLDIRN SOLDIRNSTD
Soldering station	SOLDSTN
Solder - 0.71mm 60/40 solder is recommended	SOLD500
Wire strippers	WIRESTR
Side cutters	SIDECUT or SIDECUTM
Mini Bolt Cutters	BOLTCUTM



SCORPIO TECHNOLOGY VICTORIA PTY. LTD.

A.B.N. 34 056 661 422

Issued: 29 February 2024

www.scorpiontechnology.com.au

sales@scorpiontechnology.com.au