

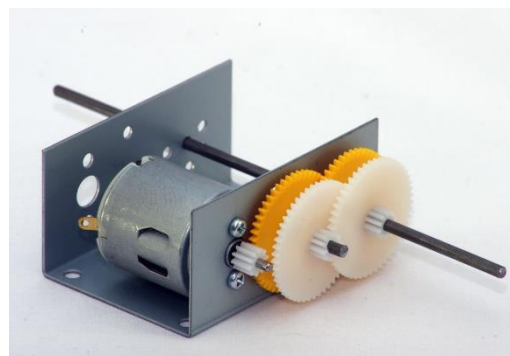


MULTI RATIO ADVANCED GEARBOX KIT (Code: GADVAN)

DESCRIPTION

The *MULTI-RATIO ADVANCED GEARBOX Kit* provides a choice of 4 gear ratios to choose from. There are also two motor options available (which must be purchased separately).

Additional ratios can be added by using more of the yellow gears.

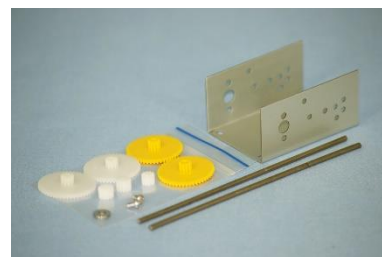


Ratios available	1:5	1:18	1:64	1:228
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LEVEL:	Introductory
SKILL DEVELOPMENT:	<ul style="list-style-type: none"> • Manufacturing • Mechanical

WHAT'S IN THE KIT?

- All the mechanical components and the motor required to make one of the 4 gearbox ratios
- A detailed teaching unit with a complete parts list and assembly diagram for each of the possible gear ratios.



WHAT ELSE IS NEEDED?

The following material is to be supplied by the student / teacher:

- Standard Motor (MOT17) or High Power Motor (MOT30)
- Additional spur gear 50T/10T – yellow 2.6mm hole, to create fifth, sixth etc. ratios.
- Block of wood to support the motor at the assembly stage. At least 25mm thick, that holes can be drilled into.

TOOLS REQUIRED

The following tools are required:

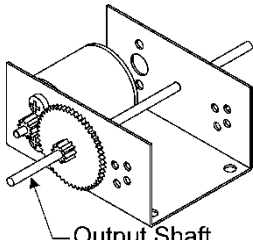
REQUIRED TOOLS	ORDERING CODE
Small Hammer (Claw or Cross pein)	HAMMERCL / HAMMERC
Phillips screwdriver #1 point	SCREWDRPH1/80
Mini Bolt Cutters (200mm)	BOLTCUTM

ABOUT THE PROJECT

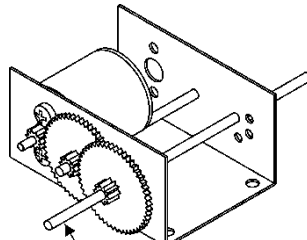
The gearbox is designed to be part of a larger project. Defining that project will allow the designer to determine which of the 4 gearbox speeds will be used, as well as whether the axle shaft will be two sided (such as for a vehicle's rear axle) or single sided (such as a windmill), and what the length either side needs to be.



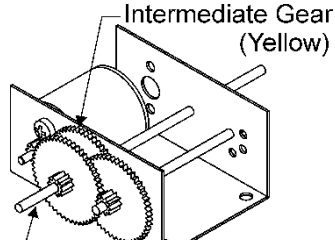
These are the available ratios – one must be selected:



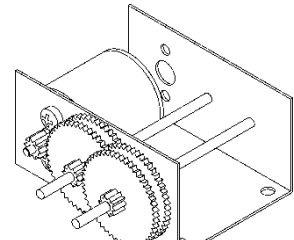
Output Shaft
**SINGLE
REDUCTION**
(Low ratio = high
Output speed)



Output Shaft
**DOUBLE
REDUCTION**



Intermediate Gear
(Yellow)
Output Shaft
TRIPLE REDUCTION



**FOURTH
REDUCTION**
(High ratio = low
Output speed)

