



### Step Two

The motors and gearbox are sold separately and must be assembled. Accompanying the gearbox is a loose small metal gear and a plastic spacer. The gear must be stuck onto the spindle protruding from the motor. Apply some Cyanoacrylate ('Super glue') adhesive to the bore through the gear and place it onto the motor shaft, with the countersink, on the gear, away from the motor. Use the thin end of the spacer to distance the gear correctly from the motor body as shown in the

diagram. Leave the glue two or three hours to dry thoroughly

### Step Three

Mount the motor (and gear) onto the gearbox with the motor leads towards the wider end of the gearbox. Two screws are provided with the gearbox for this purpose. Be careful to mesh the protruding gear with the internal gears in the gearbox as you press the motor home.

Use the M5 bolts to mount the gearbox in the plastic case. The

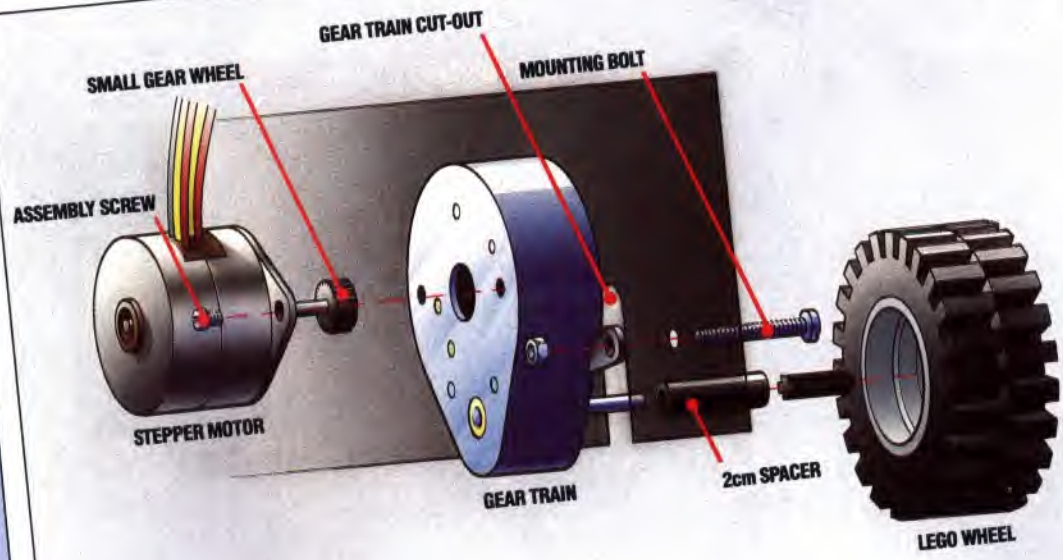
gearbox is not bolted directly to the case, but held on the bolt which is itself clamped in the case. This makes the gearbox, and therefore the wheel, adjustable.

The wheels mount only onto the special x-sectioned Lego axles. Slip a 2cm length of a plastic ball-point pen case of suitable diameter over the gearbox spindle as a sleeve. Secure it with some Super glue. Now glue a Lego axle into the end of the sleeve. Use the shortest of these axles. The wheels are a 'push' fit onto the axle

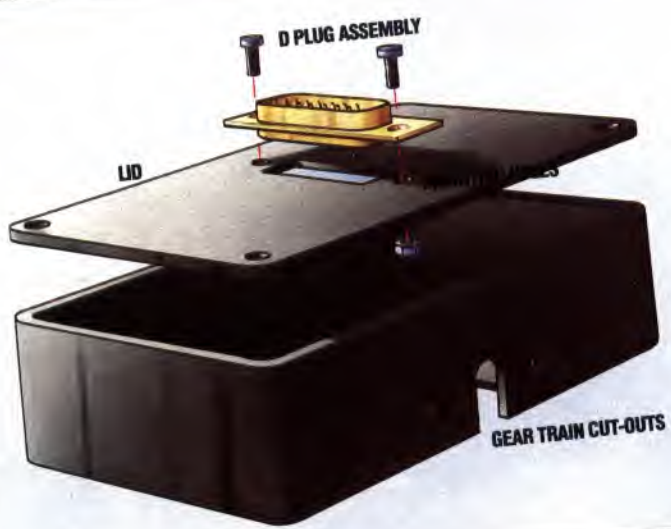
### Step Four

Bolt the male (plug) D connector in place in the lid with the pins facing upwards using the 6BA bolts and nuts. Finally mount the two balancing feet, using a 2BA bolt through each foot and fastening it inside the case with a nut. The feet should be spaced with the base of the feet 3cm from the bottom of the case. Spacing can be achieved by placing 2cm sleeves between the foot and the bottom of the case. Alternatively, two lock nuts may be used

### 2 And 3



### 4



### 4



KEVIN JONES