

ELECTRIC GENERATOR

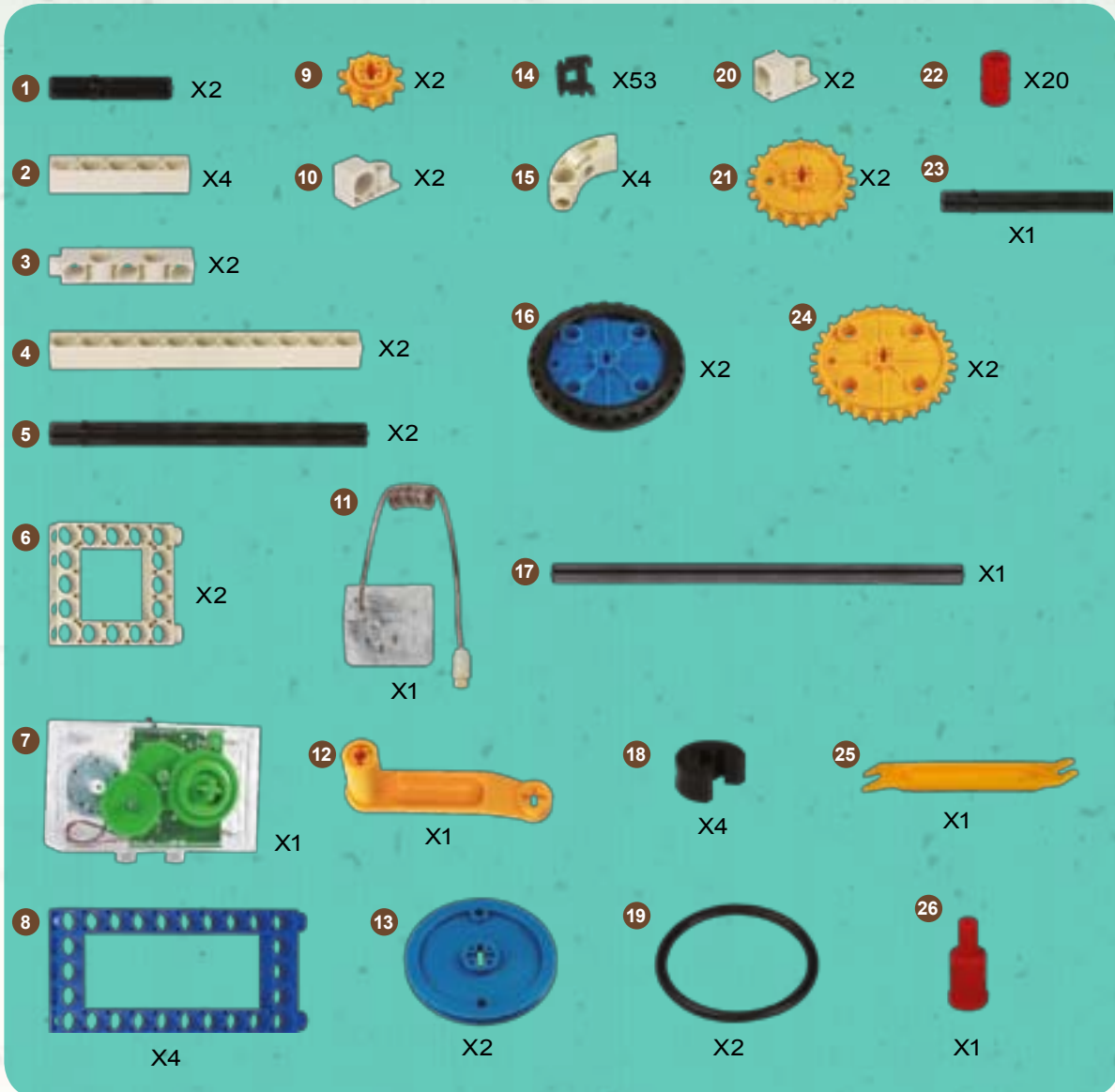


Instruction Book

Thames & Kosmos



Parts List | ELECTRIC GENERATOR



No	PARTS NAMES	PCS	No	PARTS NAMES	PCS
1	SMALL AXLE	2	15	CURVED ELBOW ROD	4
2	5-HOLE ROD	4	16	WHEEL AND TIRE	2
3	3-HOLE DUAL ROD	2	17	EXTRA LONG AXLE	1
4	11-HOLE ROD	2	18	AXLE LOCK	4
5	LARGE AXLE	2	19	O RING LARGE	2
6	SQUARE FRAME	2	20	90 DEGREE CONVERTER - R	2
7	HAND-CRANKED DYNAMO	1	21	MEDIUM SPROCKET	2
8	SHORT FRAME	4	22	ANCHOR PIN	20
9	SMALL SPROCKET	2	23	MEDIUM AXLE	1
10	90 DEGREE CONVERTER - L	2	24	LARGE SPROCKET	2
11	MOTOR AND GEARBOX WITH WIRE	1	25	PART SEPARATOR TOOL	1
12	CRANK	1	26	SHAFT PIN	1
13	LARGE PULLEY	2			
14	CHAIN UNIT	53			
			TOTAL		122



ATTACHING BASE PLATES, RODS, AND FRAMES

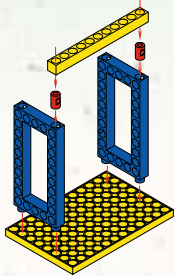


Fig. 1

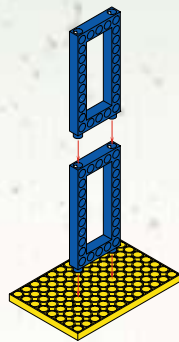


Fig. 2

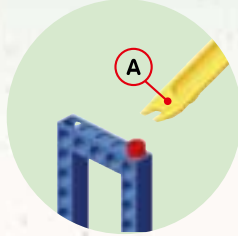


Fig. 3

1. The anchor pin can be used to join rods and frames (Fig. 1).
2. Frames can be connected directly to each other end to end (Fig. 2).
3. You can use the end "A" of the part separator tool to pry an anchor pin out of a hole (Fig. 3).

ATTACHING GEARS

Attaching gears to the frame

When connecting gears onto the frame with a drive axle, be sure to keep a proper gap (about 1 mm) between the gears and the frames. Try to turn the gear and confirm that every gear in the gear train turns smoothly so that friction is minimized. This is how you can achieve efficient power transmissions (Fig. 4 & 5).



NO! (without a space)

Fig. 4



YES! (with a space)

Fig. 5

Holding gears in place

Axle locks are designed to prevent a pulley wheel or gear from moving along the axle, or slipping. They are easy to install without removing the wheel or axle (Fig. 6).



Fig. 6

Lengthening drive axles

Use a small sprocket to connect two drive axles together to lengthen when necessary (Fig. 7).



Fig. 7

Arranging gear wheels symmetrically

When you use a motor to drive a wheeled vehicle, the gear wheels should be arranged symmetrically (the holes on the two opposite chain gear wheels must be placed in a horizontal line parallel to the axle) and be kept at the same driven speed, or the motor will stall and the vehicle won't move (Fig. 8).

TIP! These two holes must be placed in a horizontal line.

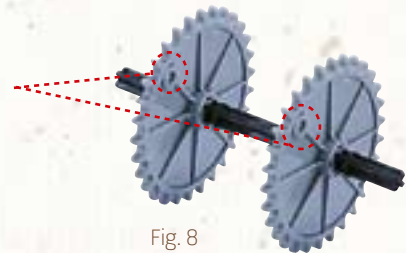


Fig. 8

Meshing gears at 90°

When the two red gears mesh with each other at 90°, the one on the drive axle must be assembled as close as possible to the outer end of the axle so that a good mesh can be ensured (Fig. 9).



Fig. 9

Connecting chain links

Make sure that you attach the chain links together with the smooth side always on the inside, so that the transmission can run efficiently and smoothly (Fig. 10).



Fig. 10

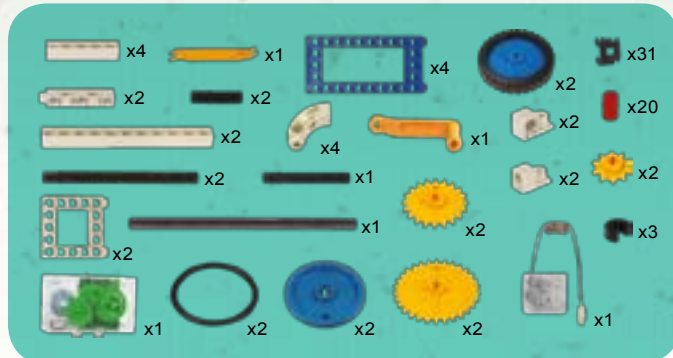


ELECTRIC GENERATOR | Model 4 Satellite Car

Satellite Car

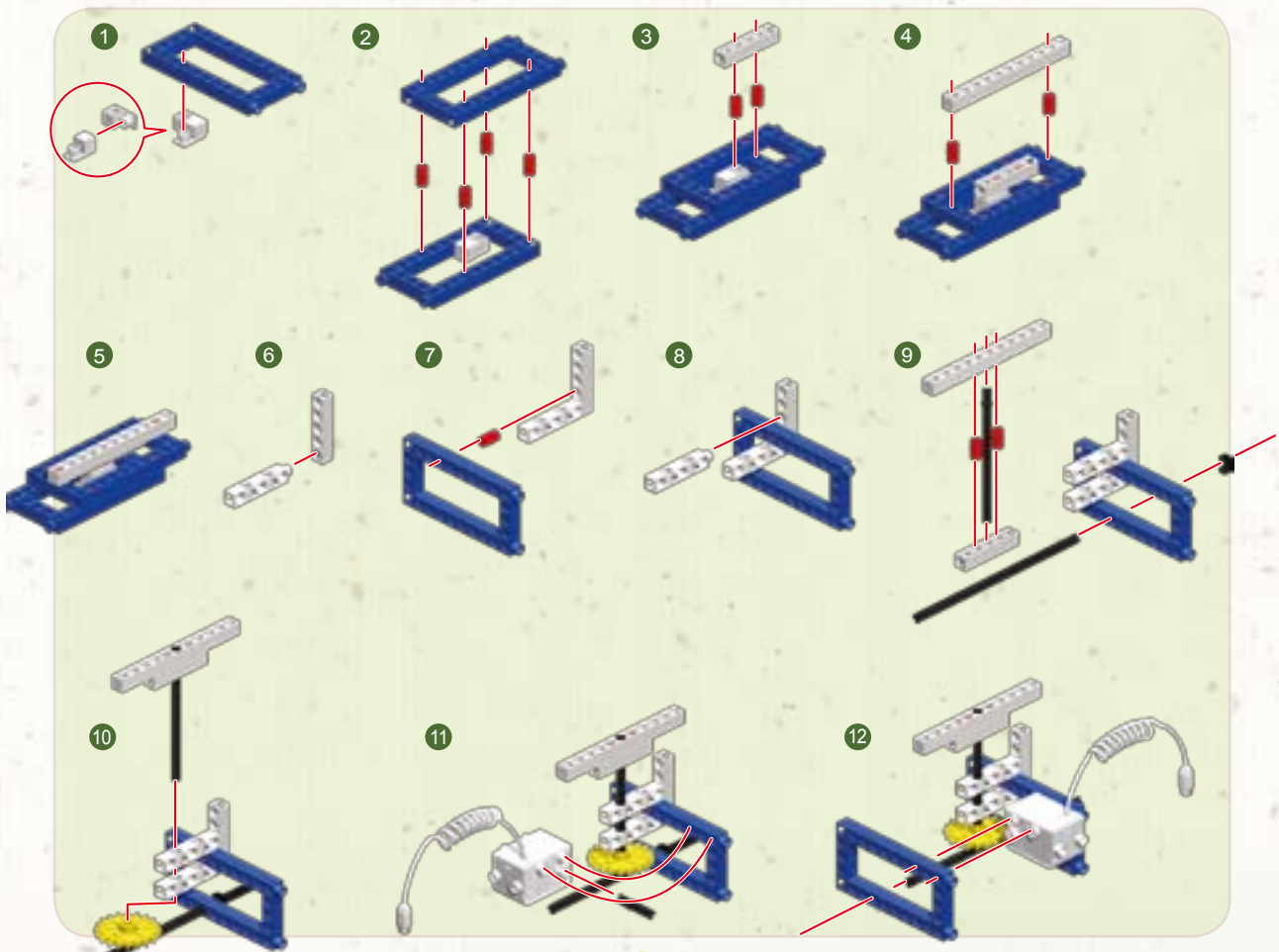


Parts Needed



Notes for Assembly

1. The sprockets should be well meshed with each other in order for the model to operate smoothly.
2. Note that the gears must be aligned so that the chain can operate smoothly.



Model 4 Satellite Car | ELECTRIC GENERATOR

