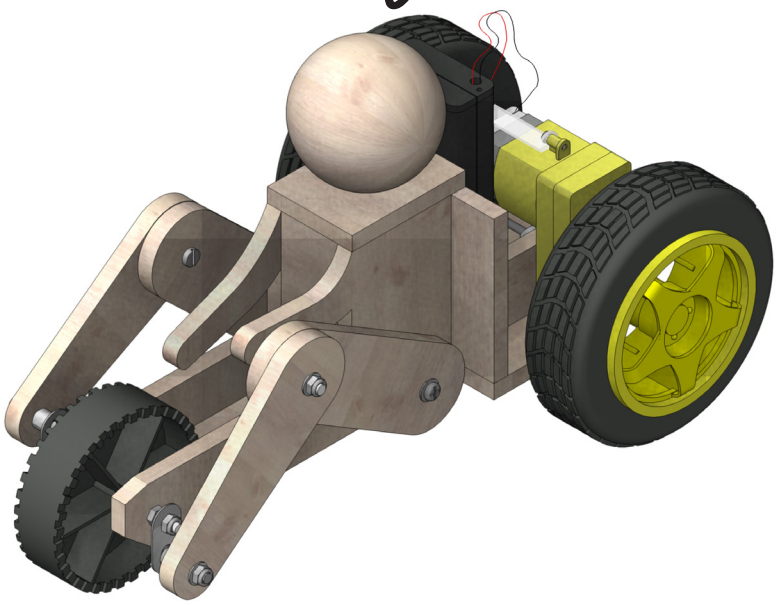
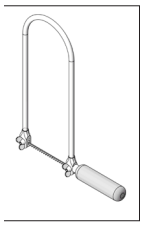
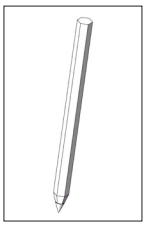
120.841

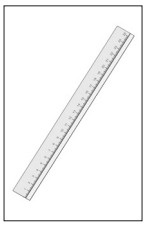
Reclining Vehicle with Gear Motor



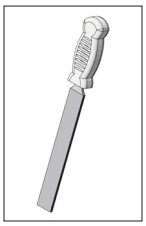
Tools Required:

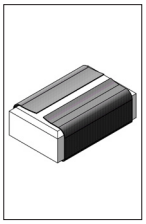

Fretsaw or Fine Saw

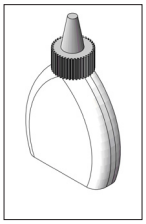

Pencil

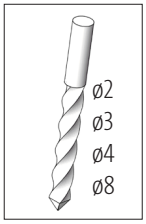

Ruler


Soldering Iron and Solder

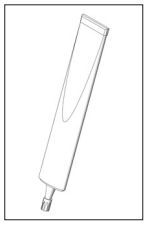

File

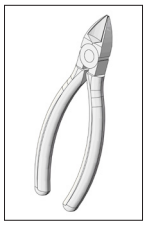

Sandpaper


Wood Glue



Drill


Superglue


Side Cutter


Phillips Screwdriver


Spanner

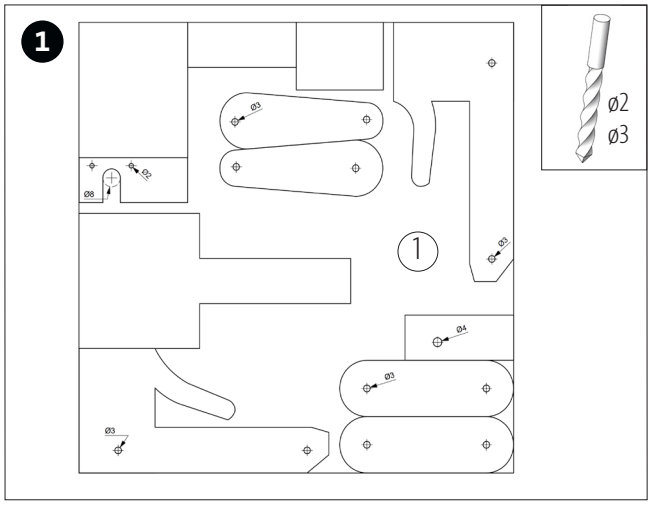

Slot Screwdriver

Please Note!

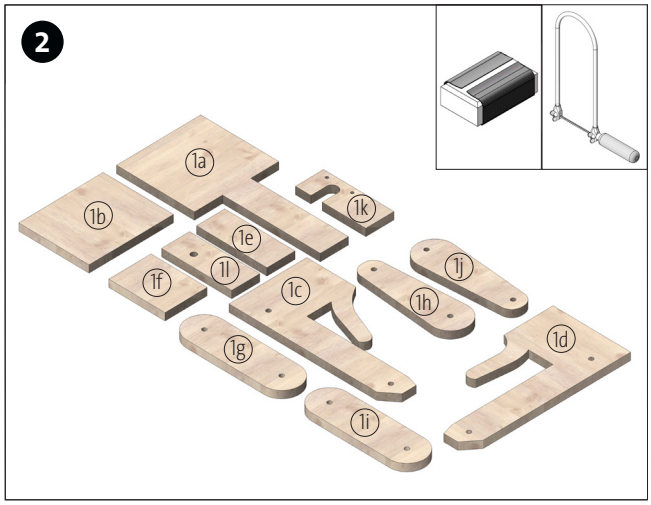
Bei den OPITEC Werkpackungen handelt es sich nach Fertigstellung nicht um Artikel mit Spielzeugcharakter allgemein handelsüblicher Art, sondern um Lehr- und Lernmittel als Unterstützung der pädagogischen Arbeit. Dieser Bausatz darf von Kindern und Jugendlichen nur unter Anleitung und Aufsicht von sachkundigen Erwachsenen gebaut und betrieben werden. Für Kinder unter 36 Monaten nicht geeignet. Erstickungsgefahr!

Parts List	Quantity	Size (mm):	Description	Part No.
Plywood	1	200x200x5	Base Plate	1
Wooden Ball	1	ø40	Head	2
Threaded Rod	1	ø3x100	Front Axis	3
Gear Motor	1		Drive	4
Welding Wire	1	ø2x100	Rear Axis	5
Large Wheel	2	ø70	Rear Wheel	6
Steering Wheel	1	ø51	Front Wheel	7
Flat Rod	2		Drive Legs	8
Battery Holder with Switch	1		Power Source	9
Pan head countersunk-head tapping screw	4		Mounting Gear/Legs	10
Reducing Pieces	1	4/2	Reduction Rear Wheel/Axle	11
Distancde Rollers	4	5	Spacers	12
Cylinder Head Screw	4	ø3x16	Screw Connection	13
Washer	10	7/3,2	Bracket	14
Nut	4	M3	Bracket	15
Stop Nut	6	M3	Bracket	16

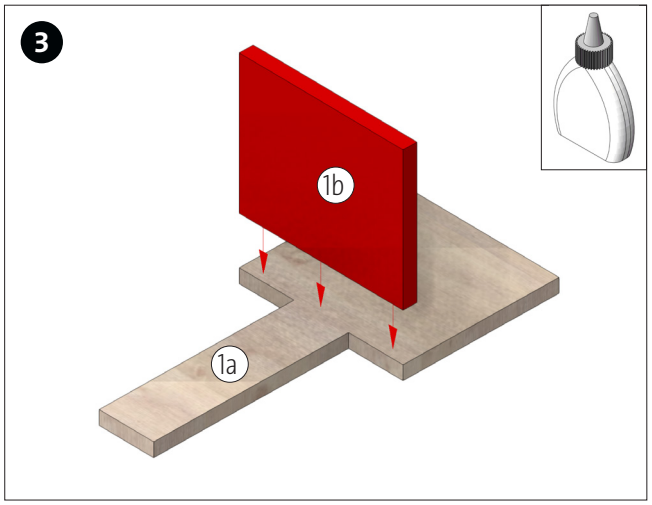
OPITEC



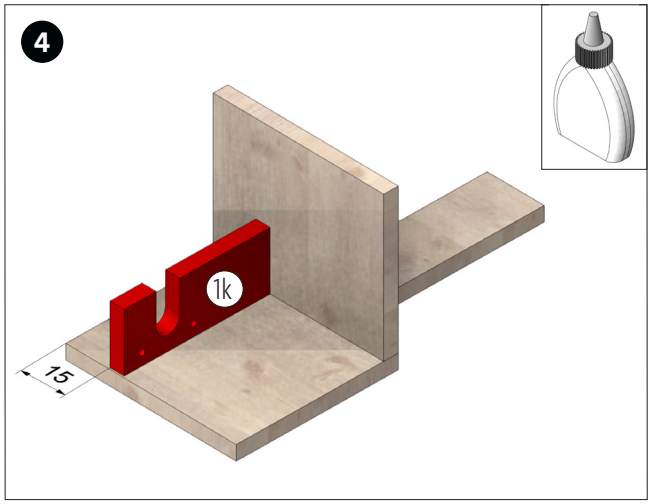
Transfer the template (A) to the base plate (1). Drill all holes (ø2, ø3mm).



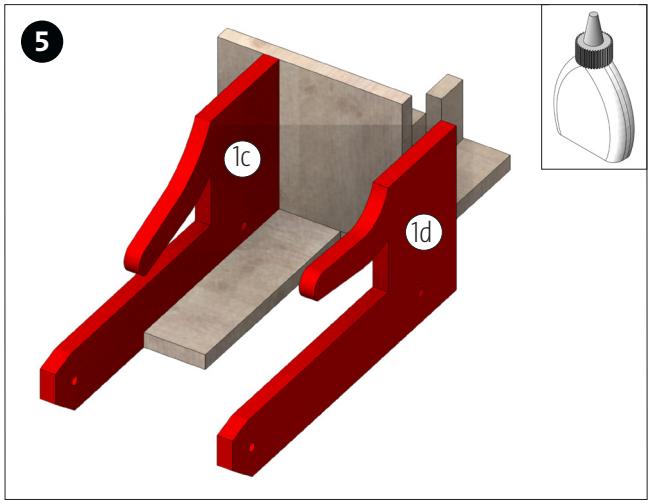
Saw off all parts and clean with sandpaper.



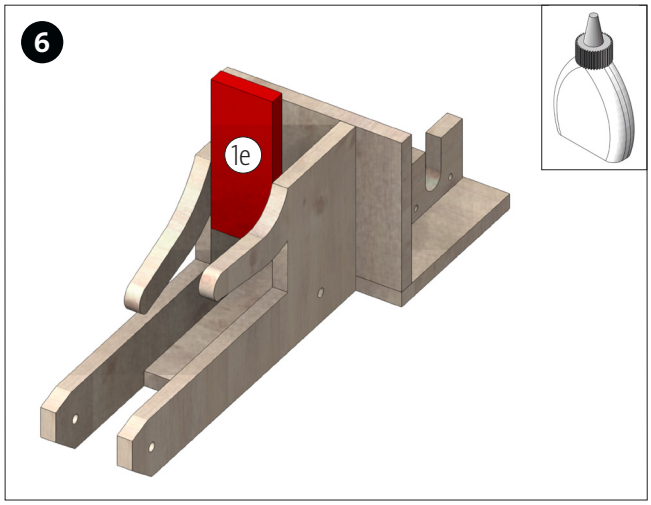
Apply the back wall (1b) to the base plate (1a) as shown.



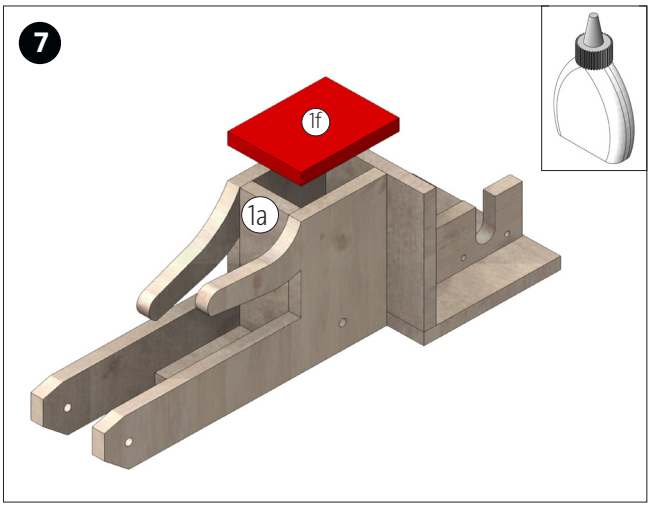
Apply glue to the rear trim (1k) according to dimensioning or illustration. Let the glue dry well.



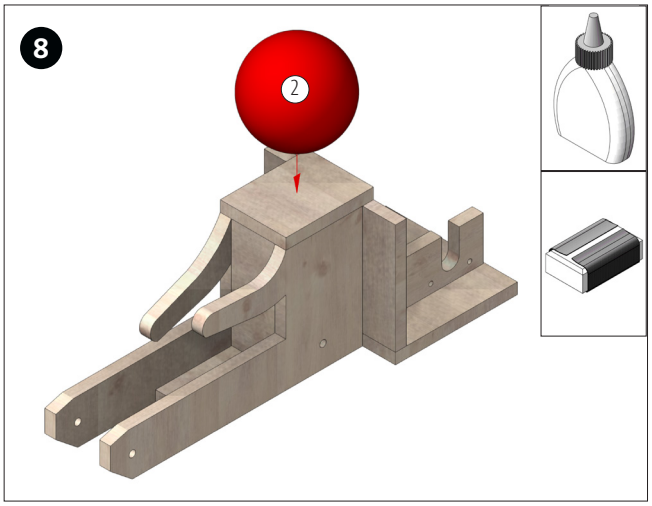
Glue the two side parts flush with the lower edge of the base plate (1a) and level with the rear wall (1b) as shown. Let the glue dry well.



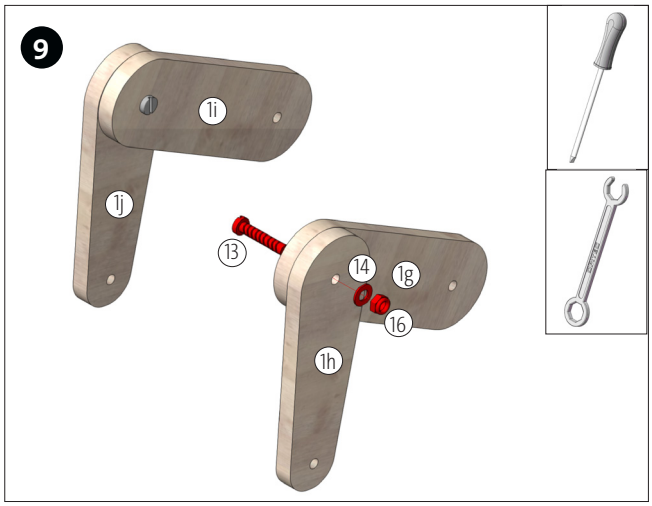
Glue the vertical middle section (1e) from above as shown.



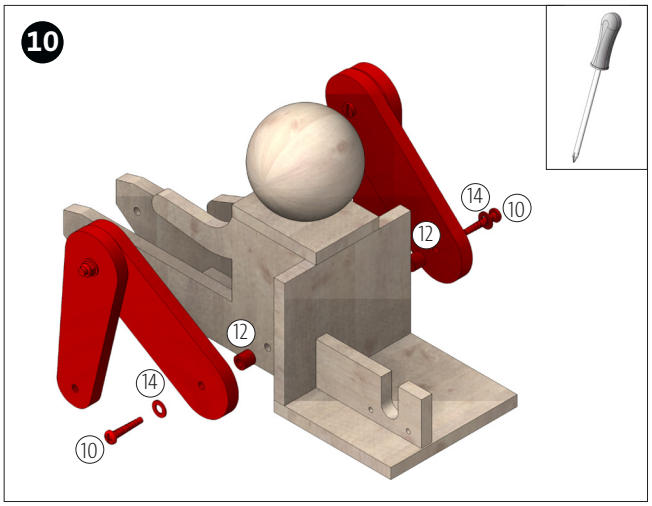
Glue the cover plate (1f) centered on top of the part (1e).



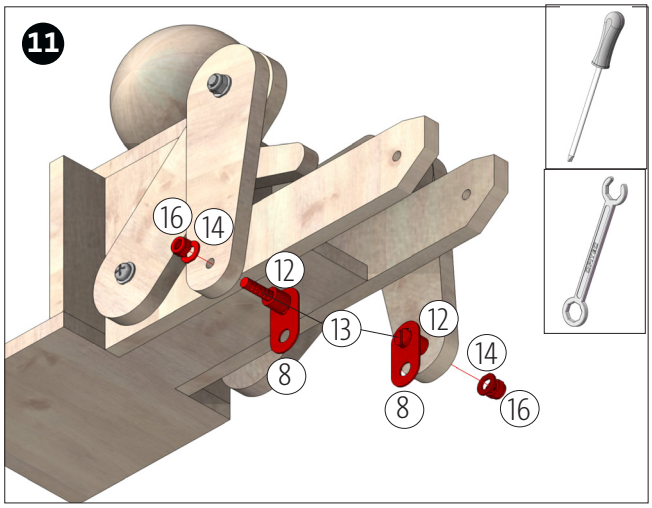
Flatten the wooden ball (2) on one side with sandpaper and glue on the center of part (1f)



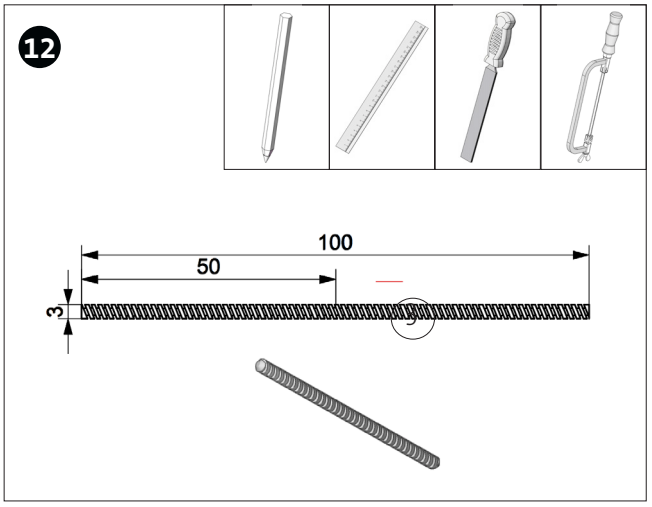
Screw the parts for the legs (1g-1j) with one screw (13), one washer (14) and one stop nut (16) as shown so that the parts are free.



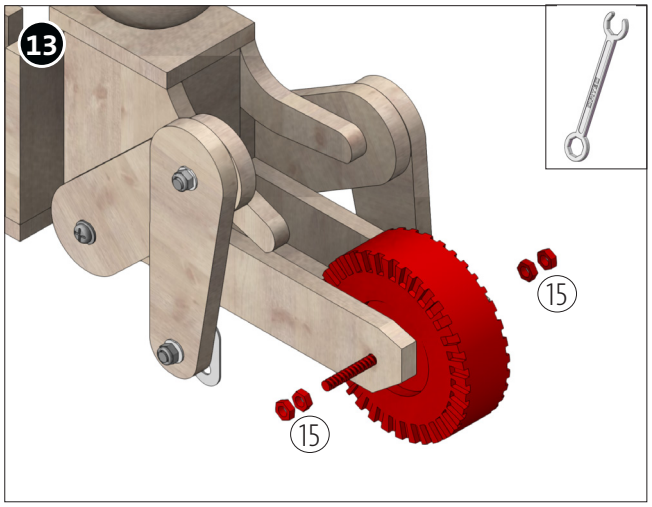
Screw both legs together with one screw (10), one washer (14) and one spacer roller (12) so that the legs are free.



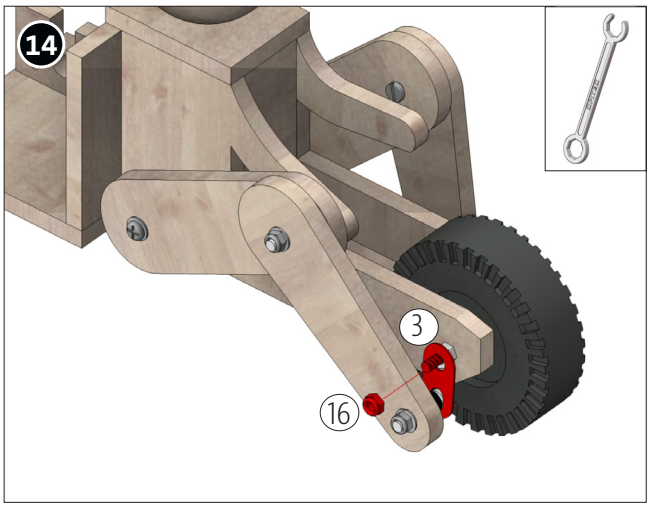
Attach a flat bar (8) to each leg end, as shown above, with a screw (13), a spacer (25), a washer (14) and a stop nut (16) so that the parts are free.



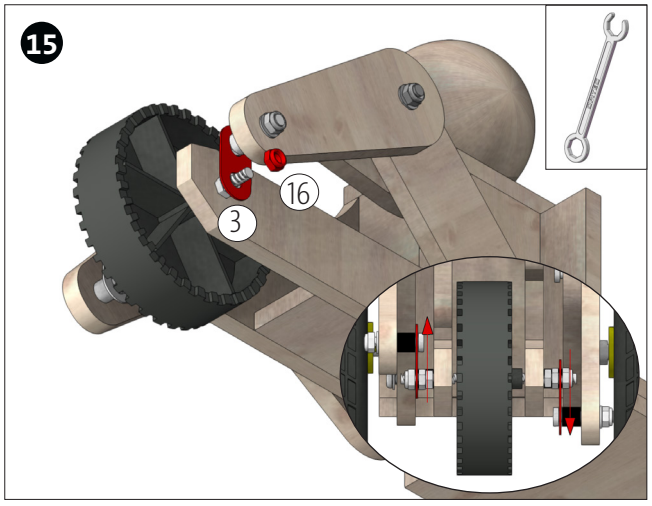
Cut to length 50mm from the threaded rod (3) and then deburr both ends with the workshop file.



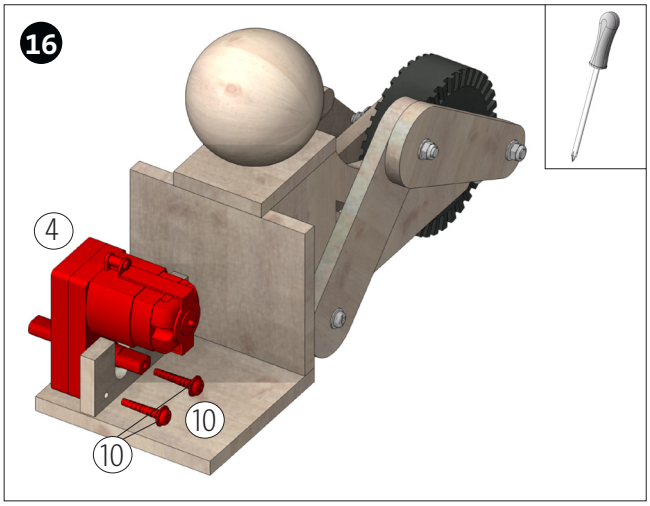
Place the cut threaded rod with the front wheel (7) between the fork. Fix from both sides with two nuts each (15) so that the wheel can rotate freely.



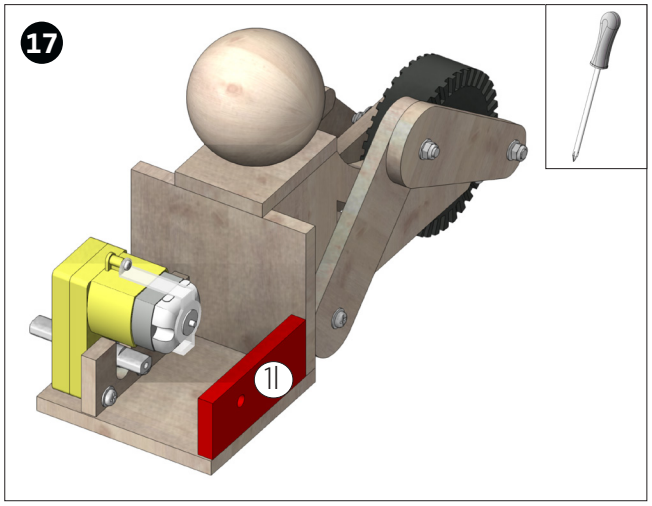
Attach the flat bar (8) of the left leg to the front axle (3) and secure it with a stop nut (16).



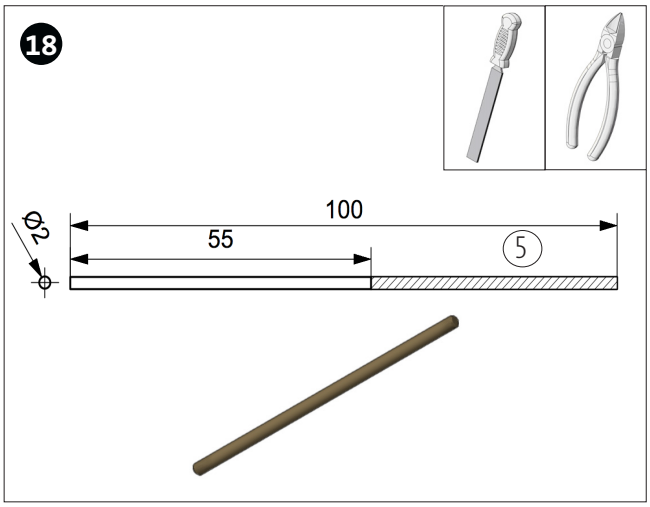
Fix the right leg as described in point 14 as well.
Note: 1 Make sure that the position of the flat bar is 180° offset from the opposite flat bar.



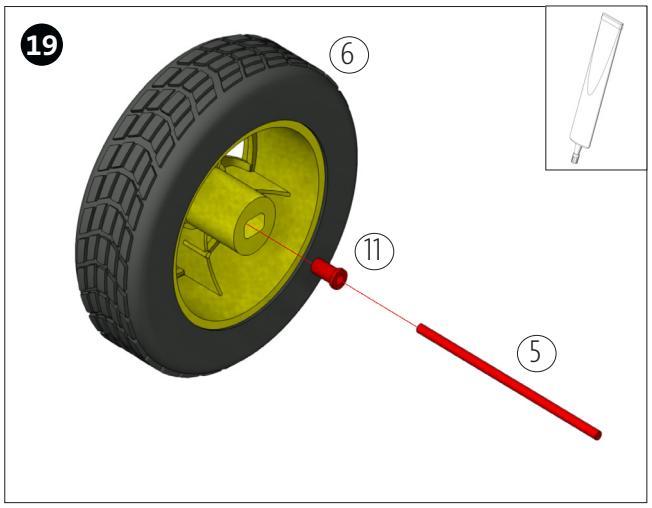
Screw the geared motor (4) to the rear part 1k with two screws (10) and two washers (14) as shown.



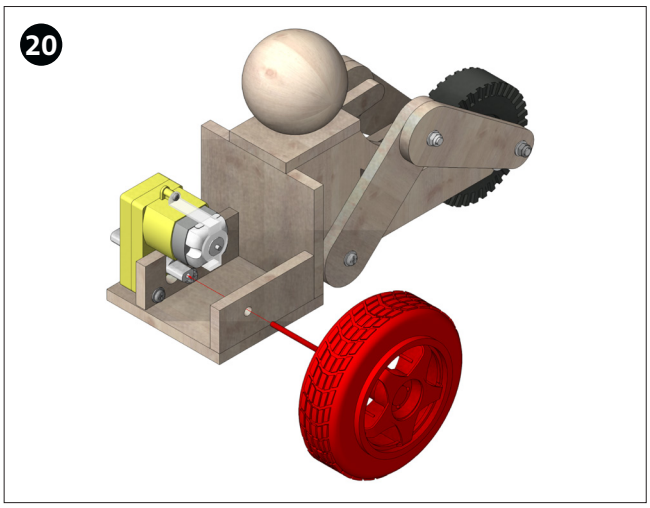
Then glue part (1l) flush with the side edge as shown.



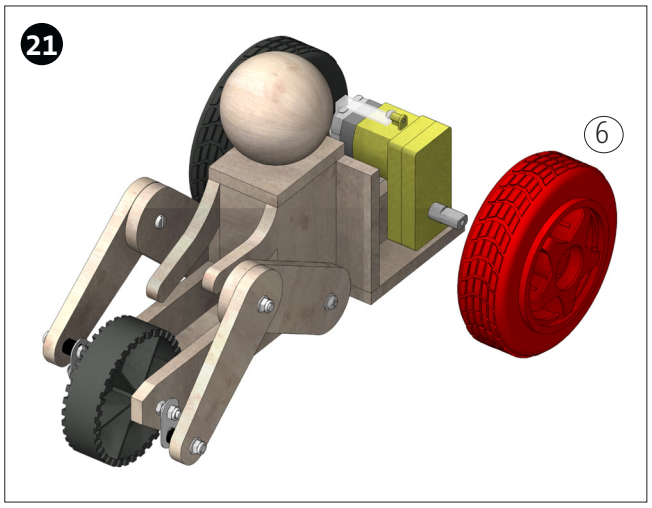
Cut 55mm from the welding wire (5) and deburr both ends with the workshop file.



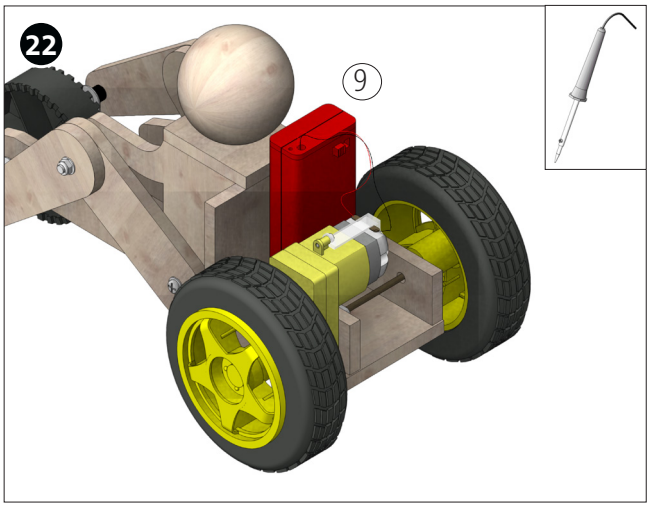
Insert the axle into the reducer (11) and then insert into the bore of a rear wheel (6). If necessary, glue in the reducer with superglue.



Then guide the axle with the wheel through the hole in the part (1l) and insert it in the shaft of the gearbox.



Attach the second rear wheel (6) to the transmission axle as shown.



Solder the red cable of the battery holder (9) to the positive pole of the motor (in the front direction of travel) and the black cable to the negative pole (in the rear direction of travel).

Done!