Skate drived by a propeller

C-6143

Check all the parts before beginning assembly

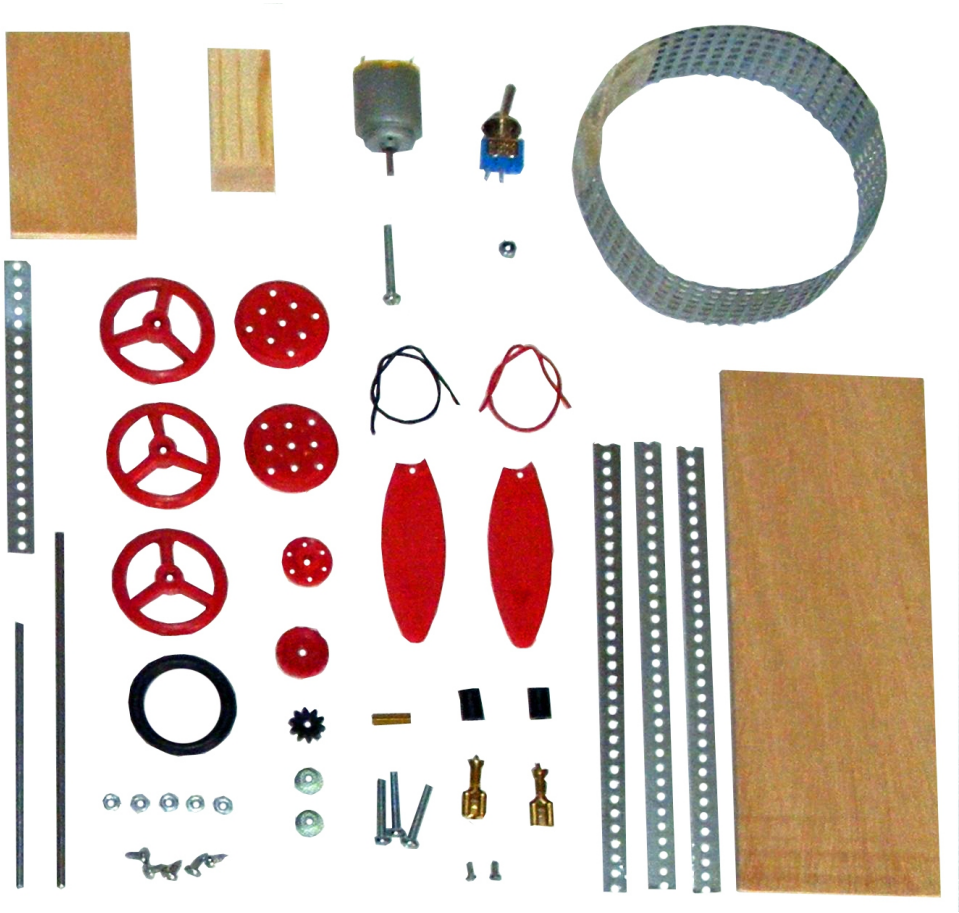
Tools required to mount the Patinete

1. Punch
2. Drill machine
3. Drill 3mm
4. Drill 6mm
5. Lime
6. Sandpaper 120 gr.
7. Block sanding
8. Star screwdriver tip
9. Flat nose pliers
10. Cutters
11. Vise
12. White Wood glue or glue gun
13. Welder and tin
14. Pliers for cutting sheet metal or shear
15. Saw
16. Spanner or wrench

Materials included in the kit

Nº	Quantity	Description	Aplication
1	2	Cylindrical plastic separator 10 mm	(Control front axle)
2	1	Axis Ø3 x 90 mm	(Axis direction)
3	1	Axis Ø3 x 120 mm	(Axis rear)
4	7	Self-threading 2,9 x 6,5 mm	
5	2	Terminals 6,3mm	(Battery connection)
6	1	Pneumatic Ø24 x 5 mm	(Front wheel)
7	1	Switch	(On / Off)
8	1	Crown gear hole 2,9 mm	(Wheel spin)

Nº	Quantity	Description	Aplication
9	3	Red steering wheel 36 mm	(Wheel and rear wheels)
10	1	Red wire 125 mm	(Motor-battery connection)
11	1	Black wire 125 mm	(Motor-battery connection)
12	3	Perforated metal strip 150 mm	(30 holes)
13	1	Perforated metal strip 100 mm	(20 holes)
14	1	Perforated plate 400 x 53 mm	(78 x 6 holes)
15	2	Blades	(Propeller driving)
16	1	Brass tube 12mm	(Front wheel bearing)
17	1	Motor 4,5V	
18	1	Self-locking nut M3	(Screw front wheel)
19	5	Nuts M3	
20	1	Buje, hole 1,9/2,9 mm	(Propeller driving)
21	1	Plywood wood 70x40x6mm	(Seat)
22	1	Plywood wood 175x65x6mm	(Wood base)
23	1	Wood 40x23x18mm	(Motor socket)
24	3	Screws M3 x 20 mm	(Steering wheel and Axis)
25	1	Screws M 3 x 25 mm	(Front axis)
26	2	Screws M2 x 5 mm	(Fixing blades)
27	2	Mini wheel flange Ø8,5 x 2,9 mm	(Lock axis direction)
28	2	Mini wheels flange Ø30/25 mm x 3,9 mm	(Front wheel)
29	1	Gear 10 teeth - hole 2,9 mm	(Front wheel steering)



Mounting

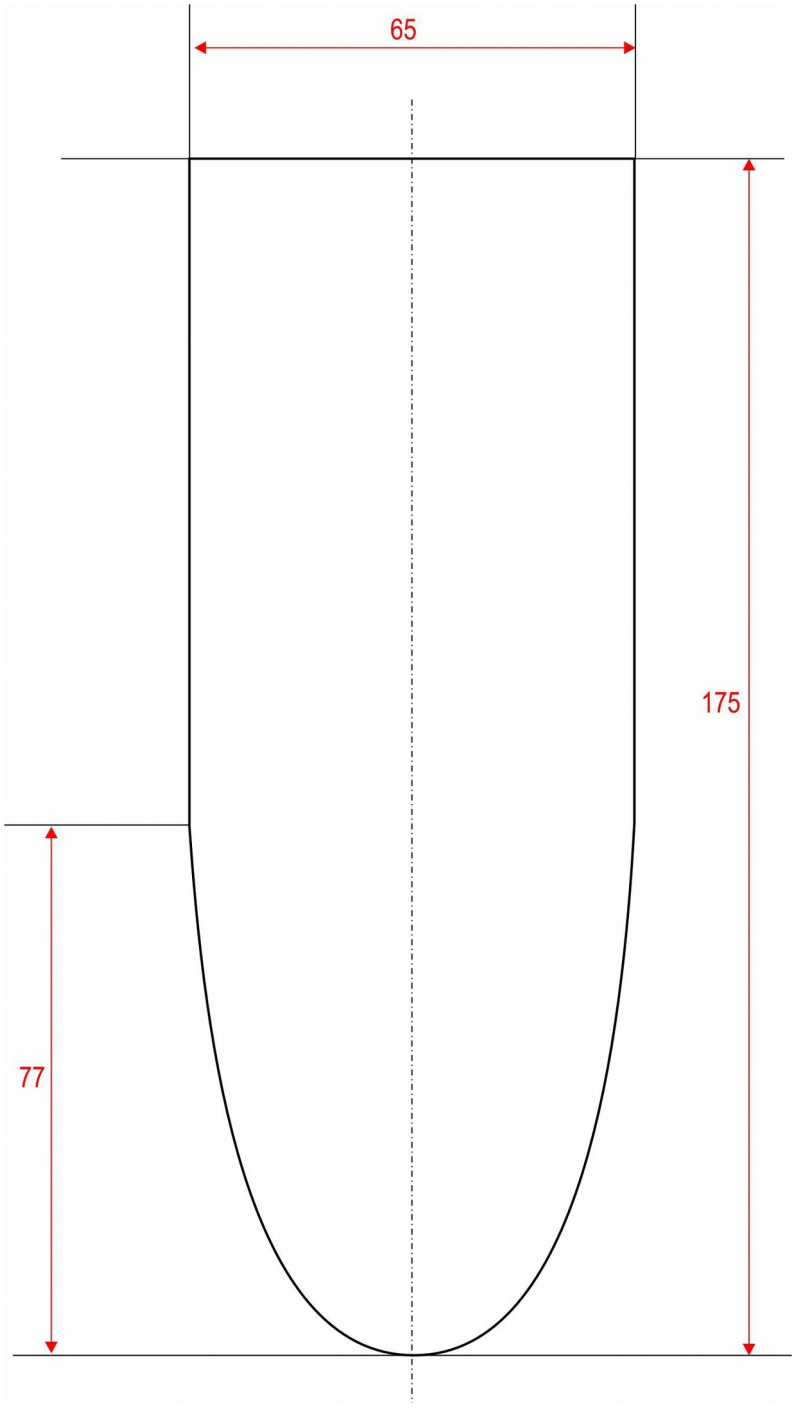
NOTE:

1 - When you start to assemble the scooter, it is advisable to do so on a board or cardboard.

2 - For gluing the pieces they can with white wood glue or a glue gun.

Based wood construction

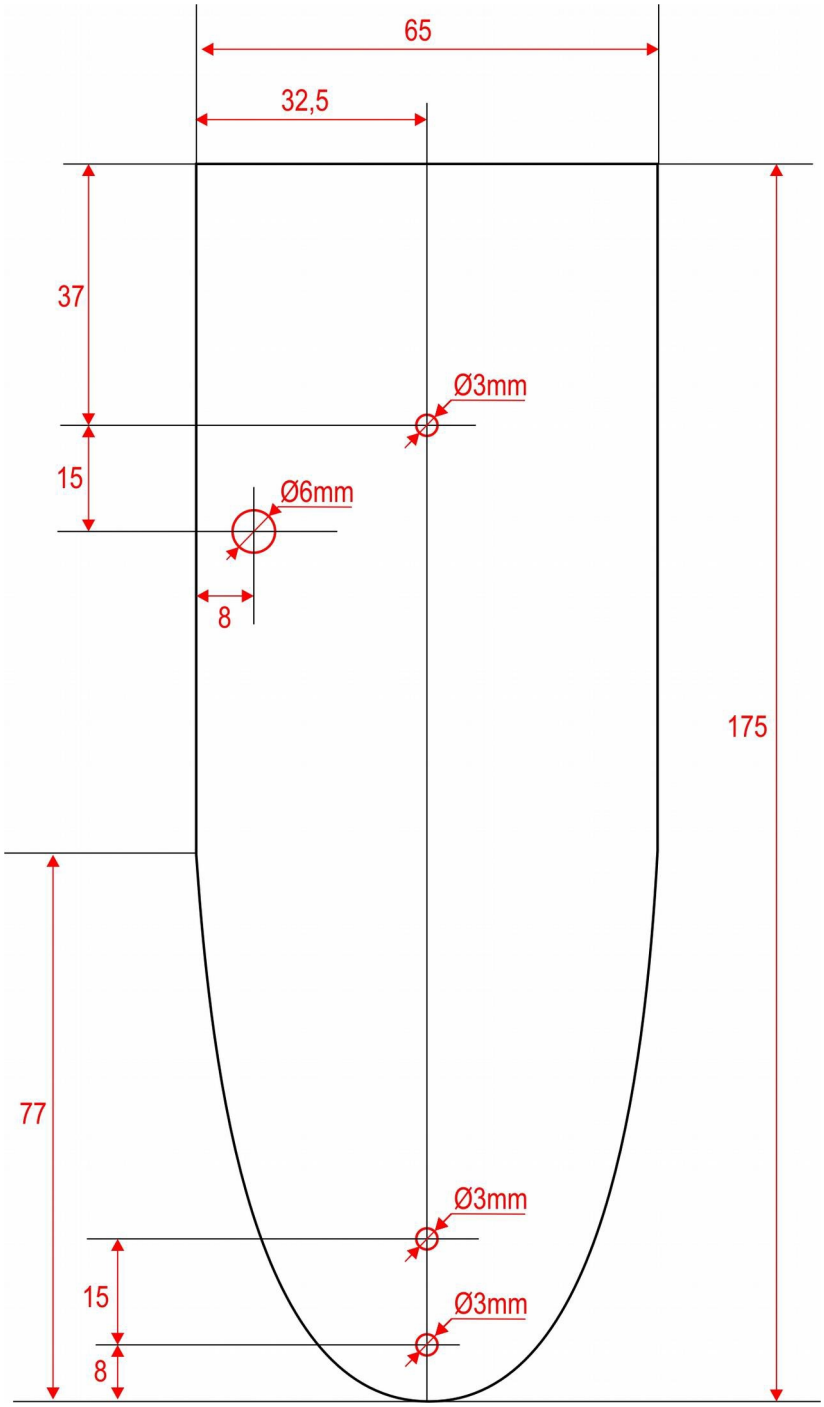
A) For the construction of the wooden base of the scooter, use timber 175 x 65 x 6 mm. and you can use the scheme to cut wood into the shape of the scooter.
Once the wood cut, puliremos all songs and see that side of the wood is better to put it put it in the upper part.



C) Now you have to make holes 3mm front and centered in the skate. See diagram.

D) The hole for cables 3mm to 37mm will rear part centered. See diagram.

E) We will make the hole for the switch with a 6mm bit. He will go to the side 8mm and 52mm back. see diagram



F) Once completed all the holes, go back to the sandpaper, so they are all smooth holes.

Mounting the seat and engine support

A) will cut wood 70 x 40 x 6 mm to form the seat of 20 x 40 x 6 mm and back 50 x 40 x 6 mm.

B) The basis of the support should be ground obliquely. The same part of the seat that fits the backup. So that the seat is better, it is preferable to round the corners with sandpaper. See images.

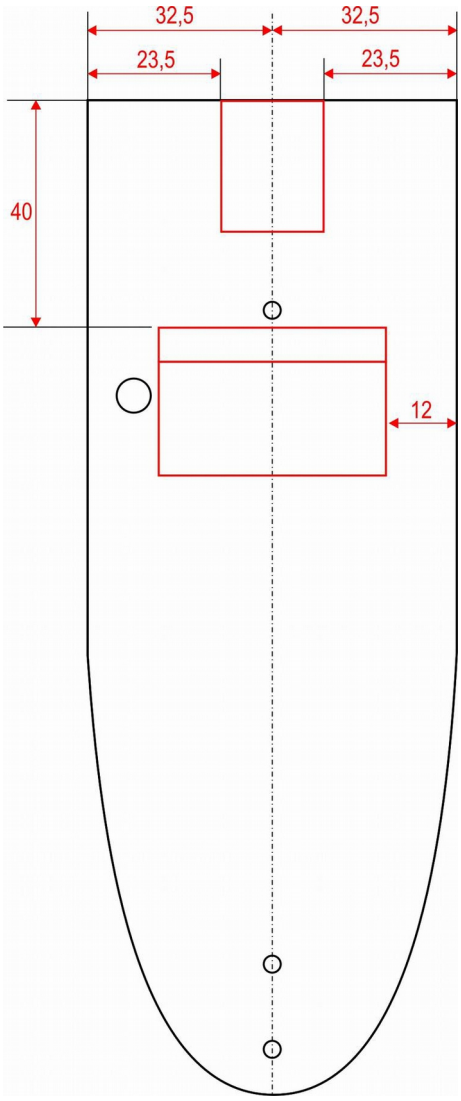
C) Paste the oblique side of the seat 5 mm from the edge of the backrest.

D) Once dry, I suggest that you paint.

E) also you must polish the wood that will serve to support the engine.

F) Stick it to the back of the base. See diagram.

G) Once the seat is dry, it will stick as measured by the scheme.

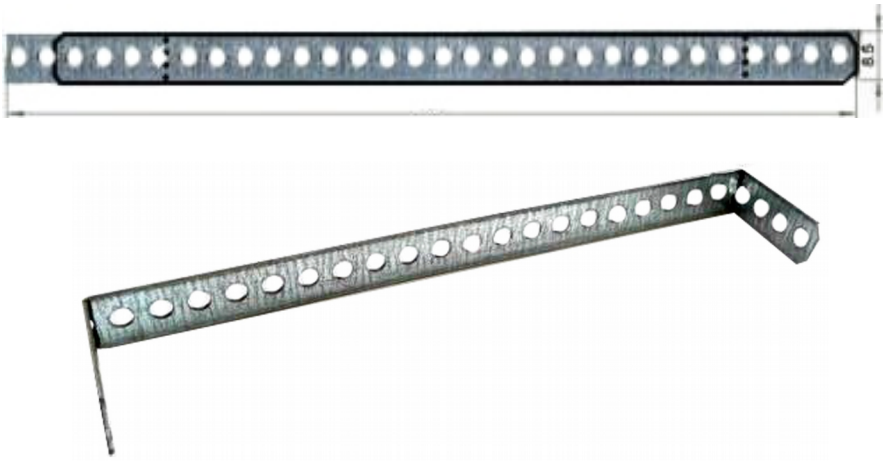


Construction of metal parts

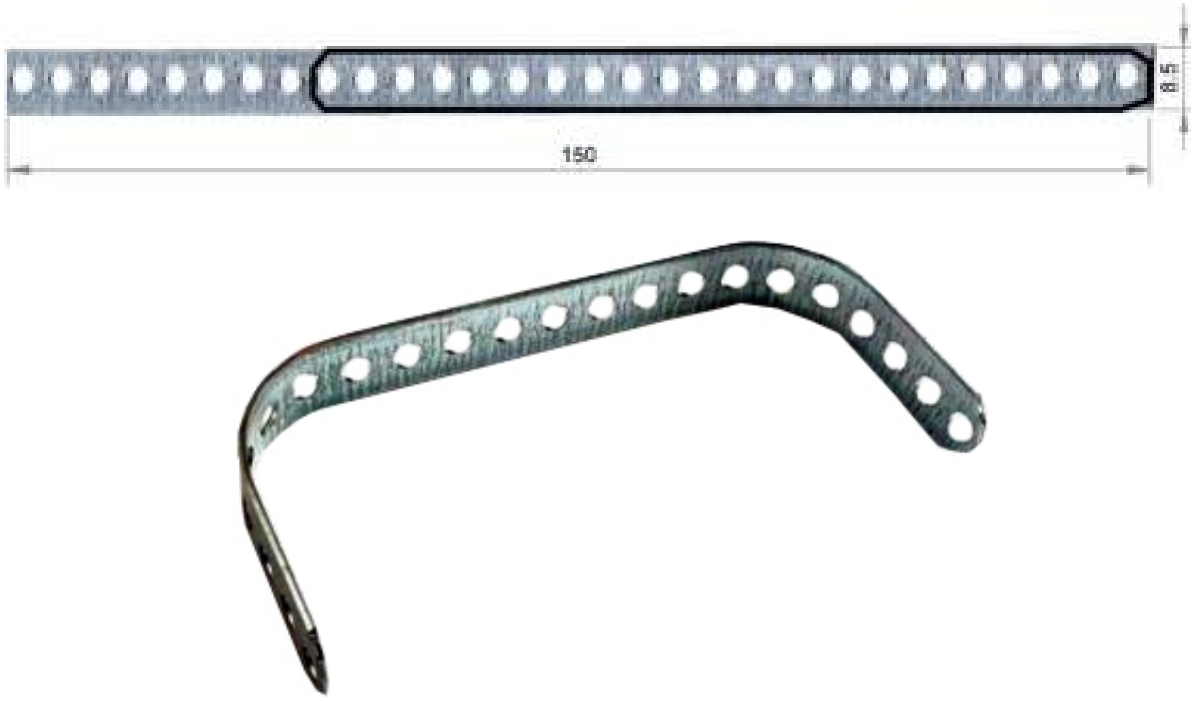
NOTE: Remember that before beginning assembly and once cut all the pieces, you have to polish well all the songs, so that ye do not cut

- Will cut the four corners of the strip diagonally, the puliremos and if necessary the straight would put. See images
- To give shape to the strip, we will use the vise.
- You have to bend the strip U-shaped or L, and will double by where we have made the marks.

A) perforated strip 150 mm = Support the rear axle
Make the U-shaped part



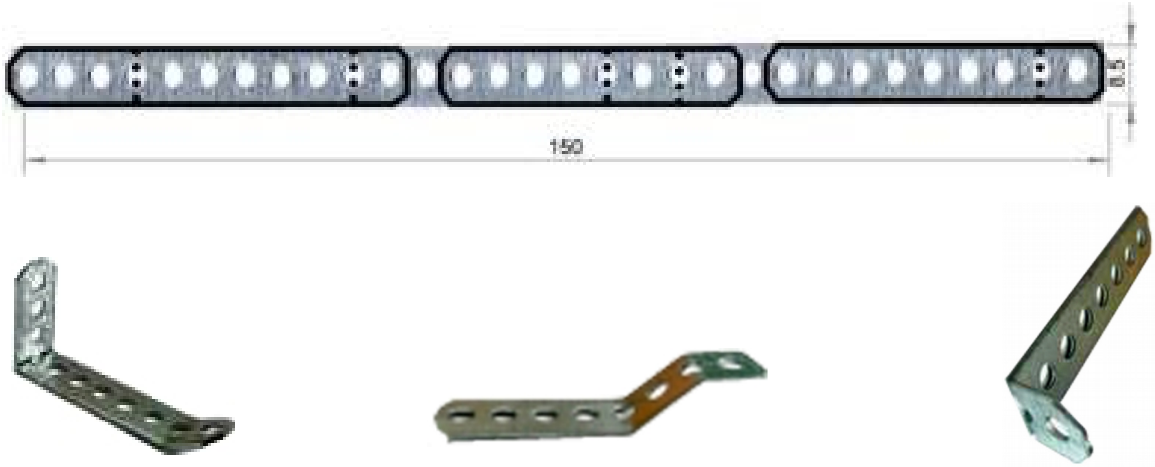
B) Perforated strip, 150mm = flat stack support: need to support the flat stack, a strip perforated with 22 holes. Once cut the strip, the focus on the pile and the bend on both sides.



If when the battery is already set in place moves a little, he would have to fix to make it fixed.
Place the bracket with the 2 self-threading 2.9 x 6.5 mm of screws.

C) 150mm perforated strip = Mounting direction and steering wheel

top bracket lower bracket Support wheel



D) Strip perforated front wheel 100mm = Support: To support bridge-shaped bend must carefully so that it is exactly the same on both sides. Signaling follow exactly to the distance between the two vertical bars is 12 mm. The wheel must turn without rubbing anywhere.

E) Protection of the helix:
The perforated plate 400 x 54 mm, included in the kit, we have to mold, cut off all external projections that have on the plate and also we polish well, to spare cuts.
You must fix the plate to the wooden base with screws 2.9 x 6.5 mm.
You can see the image as mounting the plate on the scooter.

Front wheel assembly

A) We need both flanged wheels 30/25 with hole 3.9, a brass tube Ø4 x12mm and a rubber ring.

B) Insert the brass tube 12 mm in the central hole of the wheel flange 30/25. It is necessary to tighten up the rears 2mm brass tube on the side of the tab. Introduce the long end of the brass tube to the other wheel flange, so that both wheels touch the part without tab.

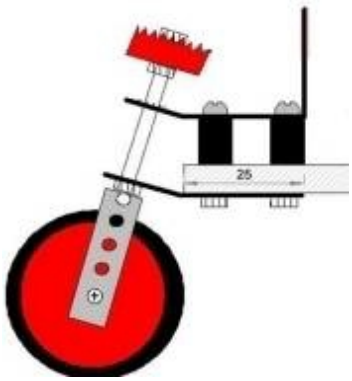
C) Place the rubber ring 24 x 5 mm. Adjust the brass tube to protrude 2 mm on each side.

D) How to fit the front wheel support.
Insert from inside a screw bridge M 3x 25mm and M3 will block with a nut. Tighten.

E) Mount the wheel on the inside of the metal support. Inside the metal bridge is 12mm, just as brass tube. We will post the wheel with the screw M3x20 and lock nut. We must stop play in this screw so that the wheel turns freely. View image .

Mounting the steering gear

A) We set the two drilled in the front of the scooter metal strips. Look well the differences between the top and the bottom. Fix the two strips with two M3x20mm screws and two black plastic spacers 1 10mm. M3 screwing with nuts at the bottom of the base.



B) Insert the top screw of the front wheel on the two brackets. If the wheel is crooked or is forced, it will be necessary to tweak some strips until it works without friction.

C) When work well close with a nut M3. Leave about 1 mm apart.

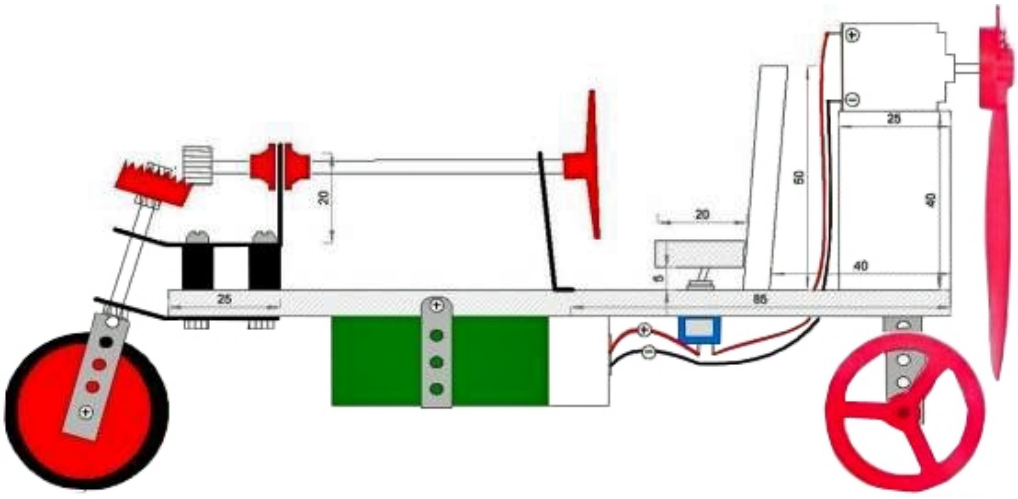
D) Insert just above the crown gear and lock it with another nut M3, which clench well. View image.

E) Axis Ø3x90mm.
Ø8,5 insert a mini wheel flange, the entered about 20 mm approx. by her widest part. Then insert the sprocket 10 teeth, and introduce the shaft into the top bracket. Adjust the wheel mini Ø8,5mm tab to the sprocket fits well with the crown.

F) Will insert the other wheel flange, entering it through the wide part. The will move until it stops with the metal support. Let have half a millimeter of play.

G) Insert the shaft into the last hole of the wheel support. Find the correct position and fix this bracket with a screw 2.9 x 6.5mm.

H) Finally insert the wheel at the free end of the shaft.

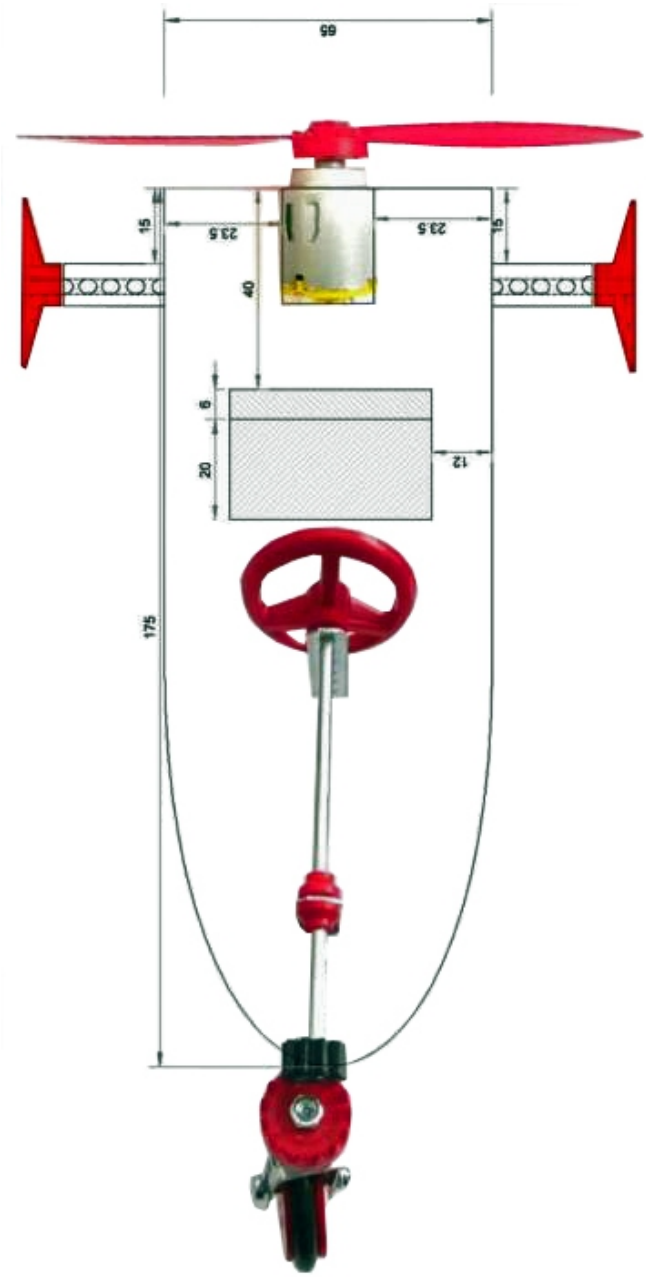


Propellers

A) The two blades are fixed to the hub with screws M 2 x 5 mm. Place the blades as you can see in the picture, the smooth side of the blades to the outside.

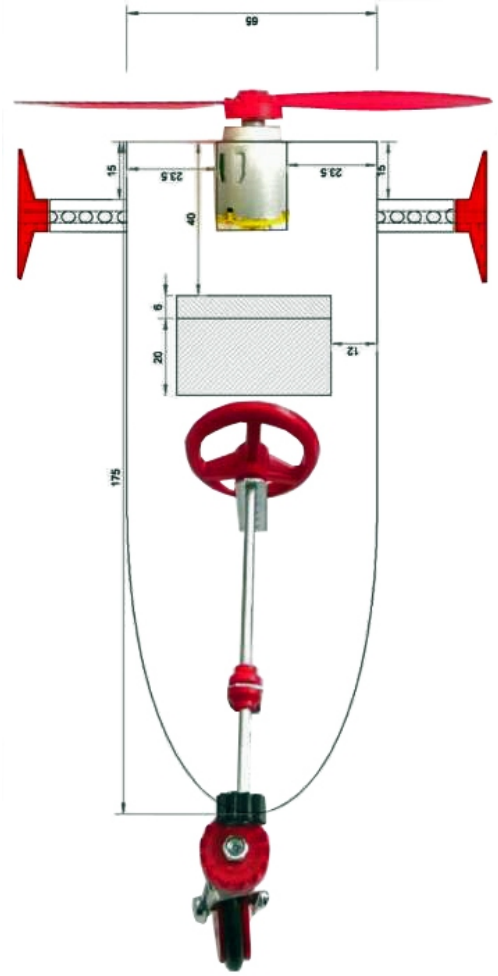
B) Now we have to insert the hub to the motor shaft.

C) Paste the engine in the socket, with silicone.



Axis Rear

A) The perforated strip have manufactured first is to support the rear axle skate.
The focus will place 15 mm and the rear end.
We Will Set at the bottom of the base with two screws 2.9 x 6.5mm.



B) Post the last Ø3x120mm shaft hole of the perforated strip on each side.
Then we insert the two steering wheels, which serve as wheels. These profile wheels so little have the advantage that hardly cause friction.

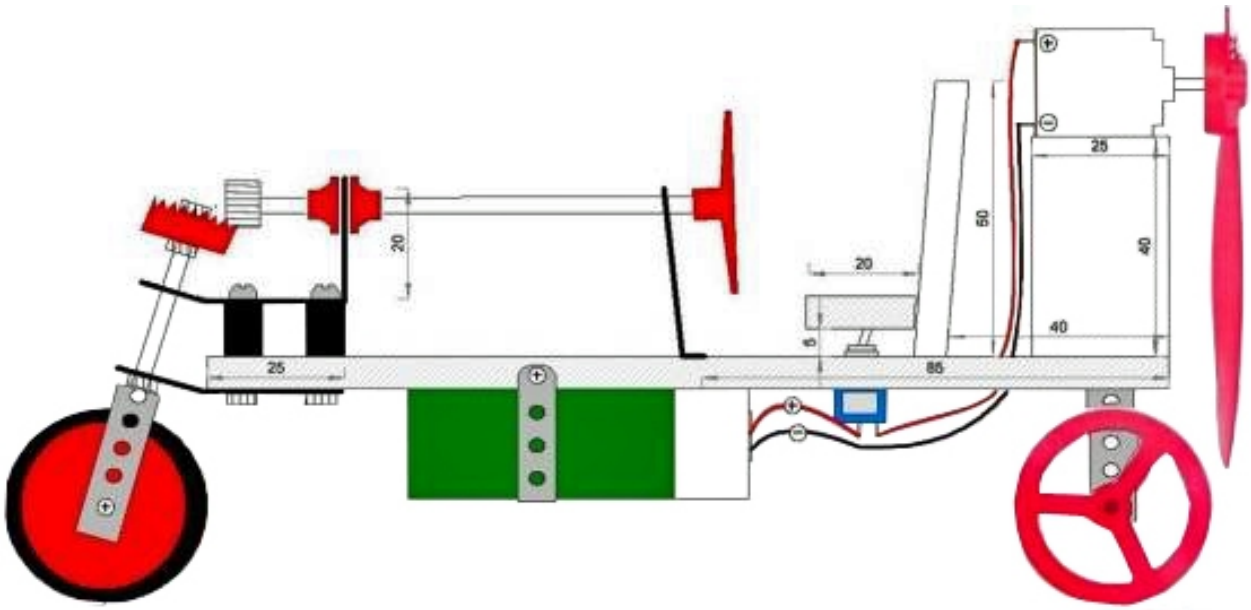
Electric connection

A) Mount the switch on the 6mm hole which is next to the driver's seat.

B) The battery is mounted under the wooden base. To do this we will fix the battery holder support that we have made with the perforated strip. The support is fixed with two screws 2,9x6,5mm If the battery is too loose will bend a little support for the center or fix the stack.

C) Let solder wires. The solder black wire to the negative (-) engine. And the other end to terminal 6.3.

D) The red wire we cut it. First we will look at the point where it will cut so that none of the two sections fall short. The longest stretches of red wire to solder the positive (+) terminal of the motor and the other end to one of the terminals of the switch. The short section of the red wire solder it to the other terminal of the switch and the other end to terminal 6.3 is missing. Then the terminal 6.3 enchufaremos red cable to the positive terminal of the battery (short end). And the terminal 6.3 of the black cable to the negative terminal of the battery (long terminal). View image.



Educational Kit wood and metal:
Kit school educational wooden scooter, which is driven by the rear propeller.
You will need shaping, and polishing the wood pieces to form the base, and other accessories scooter. Battery not included.

NOTE : This kit is recommended for children from 10 years if accompanied by an adult.

Notas: