

RC MINIVAN

The laminate model of the minibus is inspired by the VW Transporter vehicle that has been manufactured for more than 60 years and is famous especially from the times of the hippie movement. With this kit you can build its functional model. No glue, soldering iron or other tools are needed, all parts are simply broken out of the boards and assembled by snapping together protrusions and holes. Characteristic round shapes can be achieved by bending the laminate boards. At the end, all you have to do is to insert 4 AAA batteries and your mobile minibus is born.

Follow the assembly instructions thoroughly.



Assemble carefully, some components are fragile.

Avoid contact with water.

Not intended for repeated assembling.



ASSEMBLY

The kit is delivered in flat plates, from which the individual parts are broken out. The boards are in several colors. There are always parts of the same color in each board.



LIST OF COMPONENTS



PRINTED CIRCUIT BOARD (LAMINATE):

1) 1x electronics board

- 2) 2x front wheel contains parts: F1 (circumferential and central part), F2 (circumferential and central part), F3, F4 three identical pieces, F5, F6, F7
- 3) 2x rear wheel contains parts: B1 (circumferential and central part), B2 (circumferential and central part),
 B3, B4 three identical pieces, B5, B6, B7
- (4) 1x center frame
- (5) 1x upper frame
- $\left(6
 ight)$ 1x front roof frame
- 7) 1x rear roof frame
- 8) 1x front lower part
- 9) 1x rear lower part
- 10 1x side part
- (11) 1x front upper part with windows
- 12 1x rear upper part with windows
- 3 **1x door** left and right part
- (14) **Roof** longitudinal parts: 1 (1x), 2 (2x), 3 (2x)
- (15) **Roof** transverse parts: 4 (1x), 5 (1x), 6 (6x), 7 (1x), 8 (1x)

INTERIOR:

- (16) 1x lower part of the front seat
- (17) 1x front seat
- (18) 1x front seat backrest
- (19) 1x upper partition between the seats
- 20) 1x center seat backrest
- 21) 1x center seat
- 22) 1x lower part of the center seat
- 3 1x back seat backrest
- $\overline{24}$ 1x upper partition behind the backrest
- 5) 1x rear seat
- (26) 1x lower part of the rear seat
- $\overline{27}$ 1x board for headlights
- 28) 1x board for rear lights
- 29 1x table top
- 30 1x table leg
- 3) 2x part for fixing the front bumpers
- Front bumper 3x wider bumper shape,
 1x narrower bumper shape, 2x part holding
 the bumper parts together
- 33) Rear bumper 3x bumper,
 - 2x part holding the bumper parts together
- (34) 1x steering wheel
- 5) 4x part per motor shaft
- 6) 1x part on the rear protrusion of the motor
- 37) 1x ring part for mounting the motor

CONNECTION:



) **Ix carbon rod for steering wheel** - 75 mm

3D PRINT:

- 0) 1x front wheel mechanism
 - right piece, left piece, middle piece
- (51) 4x cover on the center of the wheel
- 52) 2x shaft for rear wheel
- (53) **1x logo**
- 54) 2x front light large
- (55) **2x front light small**
- (56) 2x rear light

FRONT WHEELS ASSEMBLY



Fix parts F7, F6 and F5 to the 3D printed part of the front wheel mechanism (no. 50 - right and left part).



2. Put on bearing (no. 45).



Install the F4 parts - there are three identical pieces.



Install parts F3, F2 and F1.

4.



5.

Screw together screws and nuts. (no. 38 and nuts no. 39).



6.

Screw the 3D printed cover to the center of the wheel (no. 51).



9

Put the rubber band on the wheel circumference (no. 44).



Screw the assembled front wheel mechanism to the chassis (electronics board with electronics no. 1).



8.

Insert the wheels assembled in this way into the central 3D printed part (no. 50).



10.

Insert the servo into the hole in part no. 20.



Tighten the screws no. 42 and nuts no. 43.

12.

Snap the assembly into the holes in the electronics board.

13.

Connect the servo connector to the connector on the electronics board.





Pass the wire (no. 47) through the hole in the lever of the servo and through the hole in the center part of the front wheel mechanism.

15.

Insert the parts for fixing the front bumpers (no. 31) and the lower part of the front seat (no. 16) into the holes in the front part of the electronics board.

FRONT SEAT ASSEMBLY





1.

Assemble the front seat: seat (no. 17), backrest (no. 18) and upper partition (no. 19).

2.

Connect this front seat assembly to the relevant parts which are already attached to the chassis.





Snap the part with the headlight circuit (no. 27) into the plated holes in the front of the chassis.

4.

Assemble the rest of the seat - lower part (no. 22) and seat (no. 21) and snap it into the holes in the backrest and chassis.

MOTOR ASSEMBLY



1.

Place the 3D printed parts (no. 52) on the shafts and place 2 pieces of parts (no. 35) on each side for connection to the electronics board, place part no. 36 with a hole for a protrusion in the plastic motor cover at the back. Place the part no. 37 on the front - first pass the motor wires through it and then slide the part up to the protrusions on the plastic part of the motor.



Snap the entire motor assembly into the holes in the electronics board.

3.

Connect the connector of the motor to the connector on the electronics board.

REAR WHEELS ASSEMBLY



1.

Put parts B1, B2, B3, B4 (three identical pieces), B5, B6 and B7 together.

2.

Insert the screws (no. 38) into the holes, attach the nuts (no. 39) on the other side and screw them together and put the rubber band on the circumference of the wheel.

REAR WHEELS AND BACK SEAT PLACEMENT





1.

Place the assembled wheels on the 3D printed parts extending the motor shaft.

2.

Screw the 3D printed cover to the center of the wheel (no. 51), this will automatically fix the central parts B1 and B2.





Connect the backrest of the rear seat (no. 23) to the upper partition (no. 24) and snap it around the engine into the electronics board.

4.

Connect the seat (no. 25) to the lower part of the seat (no. 26) and snap it all into the backrest and electronics board. Snap the part with the rear light circuit (no. 28) into the plated holes in the rear of the chassis.

CENTER FRAME AND SIDES ASSEMBLY





2.

Put on the center frame (no. 4).

1.

Snap the side part (no. 10) onto the protrusions in the frame and the electronics board.



Connect the leg of the table (no. 30) to the plate (no. 29) and snap them into the hole in the side part and in the electronics board.





Attach the front part (no. 8) to the middle protrusions of the frame and electronics board.

5.

Gently bend the front part around the frame and snap the relevant protrusions of the center frame and electronics board into it.





Attach the rear part (no. 9) to the middle protrusions of the frame and the electronics board.

7.

Gently bend the rear part around the frame and snap the relevant protrusions of the center frame and the electronics board into it.





Slightly bend the upper front part with windows (no. 11) and snap into the holes in the center frame.

9.

Slightly bend the upper rear part with windows (no. 12) and snap it into the holes in the center frame.





Insert the door (no. 13) into the round holes on the side of electronics board.

11.

Place the upper frame (no. 5) onto the assembly and snap all the protrusions into it.

STEERING WHEEL ASSEMBLY





1.

Connect the the carbon rod (no. 49) to the steering wheel (no. 34).

2.

Pass the steering wheel rod through the holes into the center frame and into the headlight circuit board.

ROOF ASSEMBLY



Snap the longitudinal parts of the roof (no. 14:1 - two identical pieces, 2 - two identical pieces, 3 - one piece) into the holes of the shorter transverse parts (no. 15: 4 - one piece, 5 - one piece, 6 - six identical pieces, 7 - one piece, 8 - one piece).

Glue the small magnets to the roof frame as in the picture.





Snap the protrusions of the joined roof parts into the front (no. 6) and rear (no. 7) parts of the roof frame.

4.

Snap the assembled roof into the upper frame of the minivan.

BUMPERS ASSEMBLY



1.

Place 3 identical parts of the front bumper together (no. 32) and insert them into the wider groove of the part that holds them together, insert the narrower part of the bumper into the narrower groove of the part.



Insert the protrusions of the front bumper parts through the gap in the body bend and snap them into the holes of the parts for fixing the bumpers located in the electronics board.



Place 3 identical parts of the rear bumper (no. 33) together and insert them into the groove of the part that holds them together.



Insert the protrusions of the rear bumper parts through the gap in the body. Bend and snap them into the holes in the board for rear lights located in the electronics board.

LOGO AND HEADLINES PLACEMENT





1.

Insert the logo (no. 53) and the headlights - large (no. 54) and small (no. 55) into the holes in the head of the front lower part.

2.

When inserted, turn the logo and lights 90° to secure them in place so that they do not fall out.

REAR LIGHTS PLACEMENT





1.

Insert the rear lights (no. 56) into the holes in the back of the rear lower part.

2.

When inserted, turn the lights 90° to secure them in place so that they do not fall out.

REMOTE CONTROL ASSEMBLY





]. Attach the plastic joystick cover.

2.

Insert the batteries into the remote control board.



Insert batteries into the minibus electronics board.

CONTROLING WITH JOYSTICK



FORWARD car moving forward

BACKWARD car moving backward

LEFT turning left

RIGHT turning right

CONTROLING WITH BUTTONS



UP

switching between low beam and high beam

DOWN

switching between brake lights and sidelights

LEFT

on/off switch of front and back lights

RIGHT

switching RGB backlight in preset modes

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