

# Building Instructions Policeboat WSP 47 Order-No. 20360

Congratulations for buying this model kit of the police boat WSP 47. This model is mainly designed for the beginner, but is also a very interesting kit for more experienced modellers as a basis for own ideas.

For building this model you should have following glues, fillers and paints:

- Superglue Krick ruck-zuck 20g thin (80491)
- Superglue Krick ruck-zuck 20g medium (80495)
- 5min-Epoxy glue 100g (80479)
- wood glue UHU Holz waterresistant 75g (48515)
- 2-component glue UHU-Plus acrylit 30g (48315)
- Filler Micro-Fill white 295 ml (80480)
- Primer (Lord Nelson 80110)
- Clear Varnish for stairs, doors, (80112)
- paint spray blue (320053), light grey (Primer and for deck), and white (320010)
- lacquer red, grey, silver and black for fittings

Following tools are recommended for building WSP 47

- modelling knife (416002)
- hand drill (473841)
- sandpaper files (491016)
- sanding block (490080)
- sand paper of grane 180, 320, 400 and 600 (Set 490190)
- round file ca. Ø 6 mm
- drills Ø 1 mm, 1,5 mm, 2 mm, 3 mm, 4 mm, 6,5 mm
- wet sand paper 400 und 600 for filler, primer and paints
- side cutter (455550)

When painting use masking tape to cover the areas not to be painted. Use a 3 mm wide tape should be used for the water line. For running and radio control you should have following parts:

- 2 channel radio control including one Servo
- electronic speed control 20 A, forward/back including BEC
- battery pack 7,2V NiCd, NiMH or lead battery 6V/1,1 Ah
- charger 220V AC or 12V DC

If you like to install the special features such as

- rotating radar
- Lighting
- And working fire monitor,
- You will also need following items:
- Pump ( 65150)
- Mini lights
- Geared motor 1:300 (42203)

If you wish to install these items you will also need a 4/6 radio control

Pictures in the following instruction should help to make the building of the model as easy as possible.

For identifying the laser cut parts in the wooden sheets, there is a drawing at the end of this instruction book. Before you start building you should identify all wooden parts and mark the part nos. on the part with a soft pencil. During the building process you should carefully cut out the required parts only. Cut at the tabs with a sharp knife.

Starting this hobby is much easier, if you have an experienced modeller to call on. Often the best way is to join a local model boat club. We wish you good fun and success with building this nice model.

# I. BOAT STAND and HULL

#### 1. Boat stand



First build the boat stand with parts 2, 3 and 4. After the glue is dry carefully sand and varnish the stand several times. As you will later place your wet model on the stand, it is important to have this water resistant. To protect the model you can use some pieces of foam tape on the stand parts which will come in contact with the hull.



# 2. Hull

Mark the positions of the rudder tube and of the prop shaft on the hull (1). First measure the centre line of the hull and mark. Then mark the rudder tube position 35 mm from the stern of the hull. Mark the position of the prop shaft 15 mm down from keel end.



Now drill the holes for prop shaft and rudder tube.

First use a small drill of about 2 - 3 mm and then enlarge to the correct size – rudder tube 4 mm and prop shaft tube 6 mm. You can do this best with a round file to stop the hull from splitting.

# 3. Deck

Now fit the deck to the inside of the hull (5). At the area of the bow it is necessary to chamfer the deck so it is a snug fit and sits in the hull without any pressure being applied.



Now place the deck into the hull and mark a line on the sides 2 to 3 mm over deck level. Cut the hull down only until to this line with a sharp knife or strong scissors.



Now place strips (6 to 9) on the underside of the deck around the inner cut out. Place a weight on the deck until the glue is dry so the deck cannot twist.



Now the coaming strips (10 to 13) have to be glued vertical to the strips so that they are flush on the underside and protruding on the upper side. The superstructure will sit over this so that no water can ingress the hull.





# 4. Rudder Tube

Glue the rudder tube (14) to the 2 supports (15). Use medium or thick super glue or UHU plus acrylit glue for this. Place the parts onto a flat surface. Once dry place the assembly into the hull along with the third support. Glue this support to the rudder tube, but do not yet glue into the hull.





# 5. Rudder



Make the rudder from parts 160 - 163. First glue parts 162 and 161 to each other.





Then glue these inner parts onto one outer side (160) that a gap remains for the rudder shaft.



Roughen well the rudder shaft on the area, which will be glued into the rudder.



Now glue in the rudder shaft with Uhu Acrylit and the second outer plate (160) on top.



Now make a profile on the rudder, sharp at the end and round at the front.

# 6. Motor Mount

Make the motor mount / Servo tray assembly from parts 16-17 and 18 and glue. You will find on the laser sheets two different motor mounts. First compare with the motor, which motor mount is the correct one for your motor. For 400 motors there are parts on sheet 2.For 500/600 motors on sheet 3.





Now make the battery and receiver tray with parts 19, 20 and 21.





All parts for the inside of the hull should be ready now. Please varnish them 2 to 3 times and sand between each application so that they are water proofed. Also the deck should be varnished on the underside.



Place the Servo temporarily into the tray and drill the holes with 1.5 mm drill for the Servo screws.





#### 7. Preparation of the Motor

Solder on the motor the suppression capacitors 103 (10nf) to the connections and to the motor housing as shown. Sand before soldering, to ensure a good connection for the solder. Then solder the third capacitor 473 (47 nf) between the two motor connections. Place insulation tube on the ends before soldering.



Now solder motor wires to the connections.



After that you can assemble the motor to the motor frame.

# 8. Fitting out the Hull

Push the prop shaft through the hole in the hull and fit the motor on the motor mount. Now attach the brass coupling between Motor and prop shaft with grub screws M3. Please check that there is a gap of about 1 mm between motor housing and coupling.

Now align the motor together with motor mount, prop shaft and tube inside the hull. The whole setup should be placed in the centred of the hull so that the tube of the prop shaft is protruding 25 mm out of the hull.

Before proceeding double check that the assembly is placed in the centre of the hull.



Now fix the tube and the motor mount with UHU Plus Acrylit inside the hull and fill the end of the hull around the shaft with glue so that it is water tight.



After the glue is set, you can also fix the rudder shaft and the battery platform in the same way.

## 9. Gluing the Deck

Now all interior is placed correctly inside the hull. So it is time to fix the deck permanently on the hull. Fix the deck with adhesive tape to the hull in a way, that the side walls of the hull are pressed equally to the deck without getting waves.



Fix the deck at several points with thin superglue. After that you can fix the deck complete with medium superglue You can use an activator spray to shorten the drying process.



After the glue is dry you should sand the overlying border of the hull down to deck level. If gaps appear, you can fill them with a wood filler.





## **II SUPERSTRUCTURE**

#### 1. Cabin

For the first step of building the superstructure you will need parts 32, 33, 34 und 40.

Now draw the outline of the windows to the glazing material of PVC (100). Make them slightly oversize to allow for gluing to the frames.



Dry fit the parts first. If necessary sand the slots or tenons for a perfect fit. Now first glue the side walls to the frame and back wall. When the gluing points are dry you can glue the bar (40) in place.





# 2. Cabin Roof Front

Now place the front roof (35) with its cut out corners between the two side walls and glue only at the cut outs.





Fix the roof at its cut outs with superglue.



When the glue is dry, bend the side to the curve of the roof and fix with superglue.



When the glue is dry, do the same on the other side. After this apply glue from inside, and then fix with clamps.

Now fit the front part (37) to the superstructure. The upper edge needs to be sanded at an angle to fit correctly.







Now sand the flush the overlaying ends.

#### 3. Front Windows

In the next step the front windows 38 and 39 will be fitted..



First bevel the lower edge of the centre part about 45 degrees.



The front windows at the side have to be bevelled at the lower edge and at the edge to the centre window.



In the next step you have to sand the contour of the main roof on top of the front windows in the same way as the contours of the frame and back wall. Then sand the side edges flush with the side walls.



#### 4. Cockpit

At this stage you will make the cockpit. For this you will need parts 49, 50 and 51.





Now glue the cockpit to the superstructure.





Then fit the hand rail 52.

# 5. Roof

The last step for the superstructure starts with gluing the main roof (36) on top.



Now the body shell of the superstructure is ready.

# 6. Alignment to Deck

At this stage the superstructure will be placed on the deck and the curve of the lower edge has to be aligned with the curve of the deck. This has to be done mainly in the front area. For this you can mark the deck line to the superstructure with a pencil, laid flat onto the deck. Then sand the curve.



## 7. Mast



Prepare the mast from the two halves 41 and 42. First glue parts 42 on part 41. Take care to get two mirrored halves.



If you are interested to light the ships lamps on the mast with bulbs or LEDs it is recommended to open the ends of the prepared channels for the cables now so that the cables can be pushed through later. For this open the bar at the bottom. At all the cable entrance places you can file out curves with a round file and drill the holes open later, when needed.



For the Radar file out the opening 12 mm behind the upper front edge of the mast base or drill a 4 mm hole later.



Now the two halves can be glued together.



With a 90deg square check that the mast stands vertically.



Drill two 2mm holes at both ends of the mast yard (45) fort he antenna base (46).



Fit the yard into the mast, both ends equal.



Now fix the yard into the mast with superglue and both antenna bases into the yard. After the glue is dry the yard ends can be carefully bent to the rear.



The last step is to glue the lamp board and the mast top onto the mast. Take car that the hole of the plate and the mast opening are at the same place.

Now the mast can be sanded and glued to the roof.



# 7. Painting

Now the superstructure can be sprayed with filler and sanded several times and afterwards you can use a lacquer for the finish in the wished colour.

# 2.Rail



Sand the stanchions (140) at their lasered edges, to allow the paint to adhere. Place the stanchions into the cut outs of the deck, but don't glue them yet.



## III. Details

In the following steps the accessories will be made.

Door, rail, radar, anchor winch, bow reel, stairs, ladder.

#### 1. Door

Sand and varnish the door (62) and glue it to the painted back wall. Then bend the door handle from brass wire 1,5x15 mm (108) and slide a brass tube 2x1,5x7 mm (104) over it for a thicker handle.





Slide the rail wire through the holes and bend it in the correct way at the ends. Fix the wire with superglue to the stanchions. For painting you can now take the Rail off.

#### 3. Radar

Now make the radar and possibly the gear for it from parts 63 to 75.



Chamfer the edges of parts 65 and 67 all around.



Now glue parts 63 to 76 all together, aligned by the hole in the centre.



The next step is to fit the brass tube into the radar housing as a bearing for the radar shaft with superglue or epoxi. At the top the brass tube should protrude about half a millimetre.



Sand the rear edge of the radar bar 68 round.



Glue the radar shaft 70 into the bar with superglue.



If you wish to make the radar working, you also have to do the following steps and order the optional geared motor.

Make the motor mount from parts 72 and 73 and prepare the slot parts 74.



Fix the motor with screws to the motor mount. Then fit the coupling tube 71 onto the shaft of the motor.



For fixation of the slotted supports to the sides of the cabin place slide the radar shaft (70) into the coupling tube (71) and align the motor mount inside the cabin. Then fix the supports (74) at the side walls of the cabin with superglue.







Take out the motor mount and finally glue the supports (74).

# 4. Anchor Winch

Build up the anchor winch from parts 76, 77, 78, 79, 80 and 81.



Glue the main part (76) to the sides (77).



Then place and glue the base (78).



Glue the motor plate (79) to the right side as shown.



Now the wooden parts should be filled sanded and painted white or grey.

Now the wooden parts should be painted with sanding sealer and sanded. Afterwards place the motor (80) and capstan (81) with super glue.



#### 10. Bow Reel

Identify parts 83, 84, 85 and 86.



Glue the sides 83 to the main piece 84.



After sanding and painting place reel and pin and fix the pin with a drop of medium super glue. If necessary you have to sand down the reel on both sides to fit between the two sides.



#### 7. Assembly of ladders



Make the ladders from parts 115, 116, 118 and 119. Glue the strips on top and bottom of the laser cut ladder. After the glue is dry carefully sand the edges flush.

## 8. Navigation light boards



Make the boards from parts 111, 112 und 113.

# 9. life saver supports

# 11. Stairs

Glue the parts 59 and 60 to build the stairs. Then varnish and sand the assembly





Make the life saver supports from parts 109 und 110. Sand the lasered edges very carefully before painting.

#### 10. Firemonitor

Now build the fire monitor from parts 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131 and 132.







Next glue the bottom tube into the base.



Now fit brass parts 128 und 129 together.





Press jet 128 into tube 129.

Now glue the upper angle to the base.



After painting slide the tube through the upper angle and slide it into the black silicon tube 134. Then glue the tube into the upper angle.



At last glue the axle 131 into the hand wheel 132 and fix it to the monitor.





# 11. Lamps

12. Blue lamp

153, 154 and 155.

Paint and glue the lamps from parts 146, 147, 148 and 153. Make 5 Lamps with the base 146 uand 2 Lamps for mast yard with the round base 153.



Paint and glue the blue light from parts 148,

# 13. Tow bollard

Combine parts 134, 135, 136 and 137 to the tow bollard.



Drill two holes 4 mm into the supports 135.



# Then glue the parts together





# 14. Miscellaneous fittings

Finally fit the rest of fittings to deck and superstructure. Please note the following pictures as a reference.



139



















#### 14. GPS antenna

Make the GPS antenna from parts 149.1 to 149.5.



Glue the parts together concerning there size.



Then sand the glued parts round to a hemi-sphere.

## **Stickers and letters**

The letters are cut from weatherproof self adhesive foil. Cut out the full word from the foil and then tear off the rest material around the letters. To leave the letters in exactly the same distance to each other, when removing the support material, glue some tape over the letters, which you can tear off later. The letters do not need to be covered 100%. It is advisable to leave the upper or lower edges of the letters free for exact positioning of the letters. Then carefully tear off the support material and place the letters exactly into place. Finally remove the tape carefully from the letters.

Cut out the emblem exactly and glue it to each side of the cabin.

#### IV. Installation of the pump

The pump to make the fire monitor working is available as an extra accessory.

Drill a 4 mm hole into the hull directly behind the propeller for adding the brass tube 159 and glue this with Uhu Acrylit into the hull.



Make from 3 mm rest plywood two triangular pieces with 5 mm hole inside to fix the water tube along the corner in the hull to the pump. Adapt the triangular pieces to the shape of the hull and glue them with Uhu Acrylit.



The pump will be placed on the RC board in front of the battery box.



Fit the input and output tube (from the monitor) to the pump

For the control of the pump you will need an extra electronic switch for use at one channel of the radio control.

#### V. Radio Control

For running your model on the water, you will need a 2 channel radio control system with one servo.

For the control of the motor you will need an electronic speed control with forward and reverse control. This should have a constant capacity of minimum 20 Ampere and should be equipped with BEC.

The steering servo needs to be fitted to the motor mount. Before assembly you should check it is standing in the neutral position, as adjusting later will be difficult.

For steering the rudder first the rudder lever (97) needs to be fixed to the rudder shaft and combined with the steering rod, made of parts 98, 99 and 107, then aligned. Please check that the rudder turns to the left when the radio command is left. If not you should be able to revers the servo with the channel reversing switch on your transmitter. Fix the receiver to the front of the battery with double sided adhesive tape.

The electronic speed control should also be fixed with double adhesive tape to one side of the motor mount. It should be positioned so that switches or potentiometers can easily be adjusted.

Join the cables from the motor with the cables from the speed control in the shortest possible way and solder together.

Please note the instruction of the speed control for the adjusting and use of it. If a BEC is supplied wit the speed control, you will not need an extra battery for your receiver.

#### VI. Final Work

When all installation is done, please make a final check all over your model. All joints and installations should be checked for their clear and stabile fit and if necessary corrected. Also please make a test of the trim of the model in the bath tub before you go to a lake for the first run. The trim normally needs to be adjusted with some weights of lead.

Before the first run on the water please make a range check of your radio. For this place the model onto the stand. Switch on the transmitter and receiver, but leave the antenna of the transmitter short. Now let the motor run full speed and use the rudder lever slowly but constantly left and right. If the rudder also moves without any tremor, your radio works well. Now the first sail can start. We wish you all the best with your "WSP 47".

For any questions and help you can contact us.

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## Parts list Police Boat WSP 47

Attention, the part nos. Are not consecutively numbered **Position Description Material** 

Position	Description	Material	Measures	Qty.
1	Hull	ABS	Vacuum formed	1
2	Boat stand front	Plywood	Laser sheet (1) 5 mm	1
3	Boat stand aft	Plywood	Laser sheet (1) 5 mm	1
4	Boat stand sides	Plywood	Laser sheet (1) 5 mm	2
5	Deck	Plywood	Laser sheet (2) 3 mm	1
6	Reinforcing Strip	Pine	3 x 5 x 310 mm	2
7	Reinforcing Strip	Pine	3 x 5 x 83 mm	2
8	Reinforcing Strip	Pine	3 x 5 x 86 mm	1
9	Reinforcing Strip	Pine	3 x 5 x 116 mm	1
10	Coaming	Plywood	Laser sheet (5) 1,5 mm	2
11	Coaming	Plywood	Laser sheet (5) 1,5 mm	2
12	Coaming	Plywood	Laser sheet (5) 1.5 mm	1
13	Coaming	Plywood	Laser sheet (5) 1.5 mm	1
14	Rudder Tube	Brass tube	4 x 3.1 x 35 mm	1
15	Support	Plywood	Laser sheet (2) 3 mm	3
16	Motor Mount	Plywood	Laser sheet $(2 + 3) 3 \text{ mm}$	1
17	Motor Mount Side	Plywood	Laser sheet (2) 3 mm	1
18	Servo Trav	Plywood	Laser sheet (2) 3 mm	1
19	Base	Plywood	Laser sheet (4) 3 mm	1
20	Front & Back	Plywood	Laser sheet (3) 3 mm	2
20	Sides	Plywood	Laser sheet (3) 3 mm	2
22	Electric Motor	Finished part		1
23	Suppression Capacitors Set	Finished part		1
20	cables	Finished part		2
25	Screws for Motor	Finished part	Stel M 2.5 x 6 mm	2
26	Prop shaft & tube	Finished part		1
20	Set Collar with Screw 3*3 mm	Finished part		1
28	Propeller 40 mm	Finished part		1
31	Coupling complete	Finished part		1
32	Superstructure Side	Plywood	Laser sheet (3) 3 mm	2
33	Superstructure Frame	Plywood	Laser sheet (3) 3 mm	1
34	Superstructure Back	Plywood	Laser sheet (3) 3 mm	1
35	Superstructure Boof front	Plywood	Laser sheet (3) 3 mm	1
36	Superstructure Main Roof	Plywood	Laser sheet (5) 1 5 mm	1
37	Superstructure Front	Plywood	Laser sheet (3) 3 mm	1
38	Superstructure Window Centre	Plywood	Laser sheet (2) 3 mm	1
30	Superstructure Window Sides	Plywood	Laser sheet (2) 3 mm	2
40	Strengthening Piece	Plywood	Laser sheet (2) 3 mm	1
40	Mast	Plywood	Laser sheet (5) 1.5 mm	2
42	Mast inner part	Plywood	Laser sheet (1) 5 mm	2
42	Lamp board	Plywood	Laser sheet (1) 5 mm	2
43	Mast top	Plywood	Laser sheet $(5)$ 1,5 mm	1
44 45	Mastvard	Brass tubo	$3 \times 2 \times 85 \text{ mm}$	1
45	Antenna base	Brass tube	$2 \times 1 \times 10 \text{ mm}$	י 2
40	Antenna	Stablwire		2
47	Cockpit Floor	Pluwood	1  as or shoot (4) 3  mm	2
49 50	Cockpit Fides	Plywood	Laser sheet (4) 3 mm	י 2
51	Cockpit Back	Plawood	Laser sheet (2) 3 mm	ے ۱
52	Hand Pail	Pino		ן ס
50	Staire Sides	Physoad	$2 \times 7 \times 13$ IIIII	ა ი
60	Stair Stope	Plywood	Laser sheet $(5)$ 1,5 mm	2
62	Door	Pluwood	Laser sheet (5) 1,3 $\Pi\Pi\Pi$	3
62	Duul Raaa Radar	Plywood	Laser sheet (5) $1,3$ [[[[]]	1
03	Dase Rauar	Flywood	Laser sneet (5) 1,5 mm	1

64	Support Radar	Plywood	Laser sheet (1) 5 mm	1
65	Lower housing Radar	Plywood	Laser sheet (2) 3 mm	1
66	Mid housing Radar	Plywood	Laser sheet (5) 1,5 mm	1
67	Upper housing Radar	Plywood	Laser sheet (1) 5 mm	1
68	Radar bar	Plywood	Laser sheet (1) 5 mm	1
69	bearing	Brass tube	3 x 2 x 30 mm	1
70	Radar shaft	Brasswire	2 x 75 mm	1
71	Coupling tube	Silicon	5 x 2 x 30 mm	1
72	Motor mount	Plvwood	Laser sheet (3) 3 mm	1
73	Streangthening wall	Plywood	Laser sheet (2) 3 mm	1
74	Support	Plywood	Laser sheet (2) 3 mm	2
75	Geared motor	Finished part	Accessory 42203	_
76	Anchor Winch Centre	Plywood	Laser sheet (5) 1.5 mm	1
77	Anchor Winch Housing	Plywood	Laser sheet (3) 3 mm	2
78	Anchor Winch Base	Plywood	Laser sheet (5) 1.5 mm	1
79	Anchor Winch Motor Plate	Plywood	Laser sheet (5) 1.5 mm	1
80	Motor	Finished part	Casting	1
81	Canstan	Finished part	Casting	1
82	Anchor	Finished part	Metal	1
83	Bow reel Sides	Plywood	Laser sheet (5) 1 5 mm	2
84	Bow reel Centre	Plywood	Laser sheet (3) 3 mm	1
85	Reel	Finished part	Brass	1
86		Brasswire	2 x 10 mm	1
00 Q1	Life Belt	Finished part	Plastik	2
02	Horn	Finished part	Plastik	2
92	Searchlight	Finished part	Plastik	1
95	bitt	Finished part	Plastik	י א
95	Ditt Budder Arm	Finished part	FIASUK	4
97		Finished part	Motol	ו ר
90	Autok Link	Finished part	Motol	2
99 100	Quick Link Window Motorial	Finished part		1
100		Bross tubo		2
104		Diass lube	2 X 1,5 X 7 11111	ວ 1
107	Connecting Cilp	Proce	1 E x 1 E mm	1
100		Diass		1
109	Opper life belt support	Plywood	Laser sheet (5) 1,5 mm	2
110	Lower life belt support	Plywood	Laser sheet (2) 3 mm	2
111	Lamp board rear	Plywood	Laser sheet (5) 1,5 mm	2
112	Lamp board rear	Plywood	Laser sheet (5) 1,5 mm	2
113	Lamp board side	Plywood	Laser sheet (5) 1,5 mm	2
114		Plywood	Laser sheet (5) 1,5 mm	4
115	Ladder long	Plywood	Laser sheet (5) 1,5 mm	1
110	Strips of ladder long	Plywood	Laser sheet (5) 1,5 mm	4
117	Support of Ladder	Plywood	Laser sheet (2) 3 mm	4
118	Ladder Short	Plywood	Laser sheet (5) 1,5 mm	1
119	Strips of ladder short	Plywood	Laser sneet (5) 1,5 mm	4
120		Plywood	Laser sneet (1) 5 mm	4
121	Fire monitor base	Plywood	Laser sneet (5) 1.5 mm	1
122	Support	Plywood	Laser sheet (5) 1,5 mm	4
123	Side part upper angle	Plywood	Laser sheet (5) 1,5 mm	2
124	Base plate upper angle	Plywood	Laser sheet (5) 1,5 mm	1
125	Head piece upper angle	Plywood	Laser sneet (5) 1,5 mm	1
126	Sreangthening piece	Plywood	Laser sneet (5) 1,5 mm	1
128	Jet	Brass	Finished part	1
129	T 1			1
400	Tube	Brass tube		1
130	Tube Stand tube	Brass tube	4 x 3 x 45 mm 7 x 6 x 32 mm	1
130 131	Tube Stand tube Axle	Brass tube Brass tube Brass	4 x 3 x 45 mm 7 x 6 x 32 mm 1,5 x 10 mm	1

133	Pump	Not included	Accessory 65150	1
134	Silicon tube	Finished part	5 x 3 x 500 mm	1
135	Bollard Support	Dowel	8 x 25 mm	2
136	Bollard bar	Dowel	4 x 63 mm	1
137	Bollard cap	Plywood	Laser sheet (5) 1,5 mm	2
138	Bollard base	Plywood	Laser sheet (5) 1,5 mm	1
139	Bollard	Plywood	Laser sheet (5) 1,5 mm	1
140	Stanchion	Plywood	Laser sheet (5) 1,5 mm	22
141	Upper rail wire	Brasswire	1,5 mm	4
142	Lower rail wire	Brasswire	1 mm	4
143	Nameplate	Plywood	Laser sheet (5) 1,5 mm	2
144	Flagg mast	Finished part	Plastic	1
146	Lamp base scuare	Plywood	Laser sheet (5) 1,5 mm	5
147	Lamp glass	Plexi		7
148	Lamp top	Plywood	Laser sheet (5) 1,5 mm	8
149	GPS			
149.1	GPS	Plywood	Laser sheet (5) 1,5 mm	1
149.2	GPS	Plywood	Laser sheet (3) 3 mm	4
149.3	GPS	Plywood	Laser sheet 1.5 mm	1
149.4	GPS	Plywood	Laser sheet 1.5 mm	1
149.5	GPS	Plywood	Laser sheet 1.5 mm	1
150	Hatch	Plywood	Laser sheet (3) 3 mm	1
151	Hinge	Brass tube	2 x 10 mm	2
152	Handle	Brass	1,5 x 20 mm	2
153	Lamp base round	Plywood	Laser sheet (5) 1,5 mm	3
154	Lamp glass blue	Plexi	6 x 6 mm	1
155	Lamp base	Brass	3 x 10 mm	1
156	Ventilator	Plastic	Finished part	2
157	Flagg	Cloth	Finished part	1
158	Flagg cord	Yarn	0,5 mm	1
159	Water intake	Brass tube	4 x 3 x 25 mm	1
160	Rudder blade outer	Plywood	Laser sheet (6) 1,5 mm	2
161	Rudder blade inner front	Plywood	Laser sheet (6) 1,5 mm	2
162	Rudder blade inner rear	Plywood	Laser sheet (6) 1,5 mm	2
163	Rudder shaft	Brass	3 x 85 mm	1
164	Emblem	Sticker		2
165	Name letters	Sticker		1

# Part numbers of Laser Parts





Laser sheet 5



