

Manual

Raceboat „Taifun“

X-Cat model to be powered by 2 Power Seven Engines

No. 2280



CE

Graupner

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For your notes

Introduction

Thank you for choosing a Graupner racing boat Typhoon. This is extremely versatile.

Read these instructions carefully to ensure the proper functioning of the module and above all to safely control your models. If any problems occur during operation, please refer to the manual or ask your dealer or the Graupner Service Center.

Due to technical changes, the information in this manual is subject to change without notice. Inform yourself in regular intervals on the Internet at www.graupner.de to stay up to date with the product and the instructions.

This product complies with the legal national and European requirements.

To maintain this condition and to ensure safe operation, you as a user must read and follow these instructions and the safety instructions before putting the product into operation!



NOTE

This manual is part of the product. It contains important instructions for commissioning and handling. Therefore, save the instructions for reading and give them to third parties when the product is distributed.

Service Addresses

Graupner-USA

3941 Park Dr Suite 20-571,
El Dorado Hills, CA. 95762
US

Servicehotline

☎ (+001) 855-572-4746

✉ service@graupnerusa.com

Graupner UK ✉ A.Brimingham@graupner.co.uk

Graupner in the Internet

You can find all addresses on our webside www.graupner.com

Intended use

The model is controlled by 2 remote control sticks and is intended for use only as a battery or battery-operated radio-controlled models, otherwise operation is not permitted. No warranty or liability is accepted for any improper use.

Read the entire instructions carefully before connecting and using the module.

Graupner / SJ is constantly working on the further development of all products; We must therefore reserve the right to change the scope of delivery in terms of form, technology and equipment.

target group

The product is not a toy. It is not suitable for children under 14 years. Installation and operation may only be carried out by experienced modelers. If you do not have sufficient knowledge of how to handle remote-controlled models, contact an experienced modeler or model-making club.

Package content

- ◆ hull fiberglass
- ◆ canopy fiberglass
- ◆ 2 motorhoods fiberglass
- ◆ linkages for Power Seven Engines
- ◆ Servomount Laserparts from wood
- ◆ 3 pcs. Decale Sheet
- ◆ Manual

Required components

- ◆ 2x Outboard Engines „Power Seven“ No.1996
- ◆ 1x Propeller left No.1996.1
- ◆ 1x Propeller right No.1996.2
- ◆ 2x Inline Motor No.6646
- ◆ 2x watercooling No.6645.1
- ◆ 2x ESC No.33770.D35
- ◆ 1x rudderservo No.7951
- ◆ 2x Battery No.78145.3
- ◆ 1x Transmitter S1002.PRO.77.DE (more please visit www.graupner.com)

No. 2280 Raceboat Taifun

Graupner/SJ declares that the product is conform to CE norms

Technical Data**Raceboat Taifun**

Battery recommendation	2 x 2S oder 2 x 3S Lipo
measures	900 x 285 x 170 mm with <i>Power Seven</i> engines
Weight	3.000g
Speed	depending on motors up to 70 km/h
required channels	2 (bzw. 1x Mixchannel or Y-cable)

**NOTE**

You will find the procedure of the mixing channel in the manual Part 2 of the transmitter.

function description

With the racing boat typhoon you have a thoroughbred Rennkatamaran at the start. The geometry of the hull gives the model extremely good handling on the water including sharp turns.

Both recommended outboards are connected via a linkage and controlled with only one strong servo.

The fuselage, hood and hood are laminated from laminated fiberglass and are dyed white and trimmed to install the RC components.

Two inline engines No.6645 to 6649 provide different speeds depending on the ability and experience of the rider.

It is essential to operate the motors together with the water cooling system No.6645.1 so that they do not overheat during operation and are damaged.

For the connection of the ESC's there are two ways:



1. Both controllers on channel 1 are operated via Y cable No.S8187. (First of all the controllers have to be taught in individually on the control stick)

2. Operate the controller via mixer on the remote control. To do this, the second controller is plugged into channel 6 and assigned via the free mixers. Only one controller may supply the receiver with BEC. For the second pull the red wire on the receiver cable! Insert the telemetry cable from the BEC control to channel 5 (on the GR-12).

Symbols explication



Always observe the information marked with this warning pictogram. Especially those which are additionally marked by CAUTION or WARNING. The signal word WARNING alerts you to possible serious injuries, the signal word CAUTION for possible minor injuries.



Note warns you of possible malfunctions.

Attention warns you about possible property damage.

Safety notes



These safety instructions are not only for your own safety and the safety of others, but also for the protection of the product. Therefore, read this chapter carefully before using the product!

Do not leave the packing material careless, this could be a dangerous toy for children.

Persons, including children, who due to their physical, sensory or mental capabilities or inexperience or ignorance are unable to operate the transmitter safely, may not use the transmitter without supervision or instruction by a responsible person.

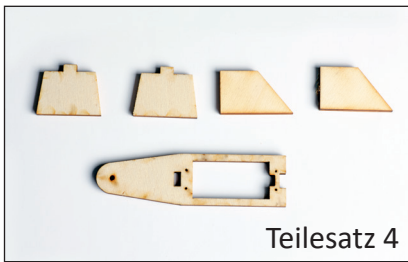
The operation and operation of remote-controlled models must be learned! If you have never steered such a model, be very careful and familiarize yourself with the model's responses to the remote commands. Always act responsibly. It also means that you have a liability insurance for your own protection.

Protect all devices from dust, dirt and moisture. Never expose it to vibration, excessive heat or cold. Remote control operation may only be carried out at „normal“ outdoor temperatures, ie. H. in a range of -10 ° C to +55 ° C. The racing boat Typhoon was developed for use in model making and may be used according to its intended use only there.

Please note that the model may only be operated within the specified limits (see technical data).

Check the correct operation of the model before each use.

Assembling of the model

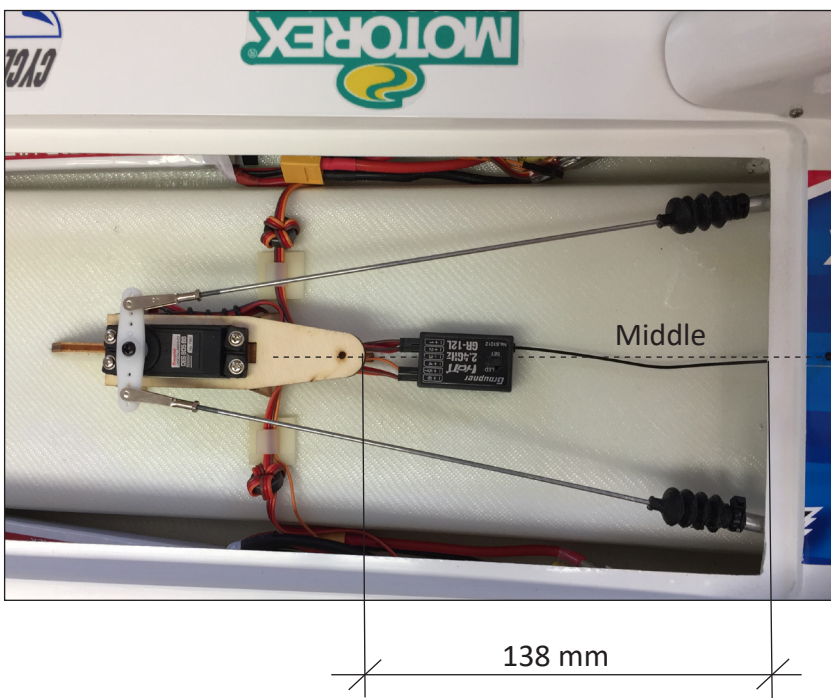


Teilesatz 4

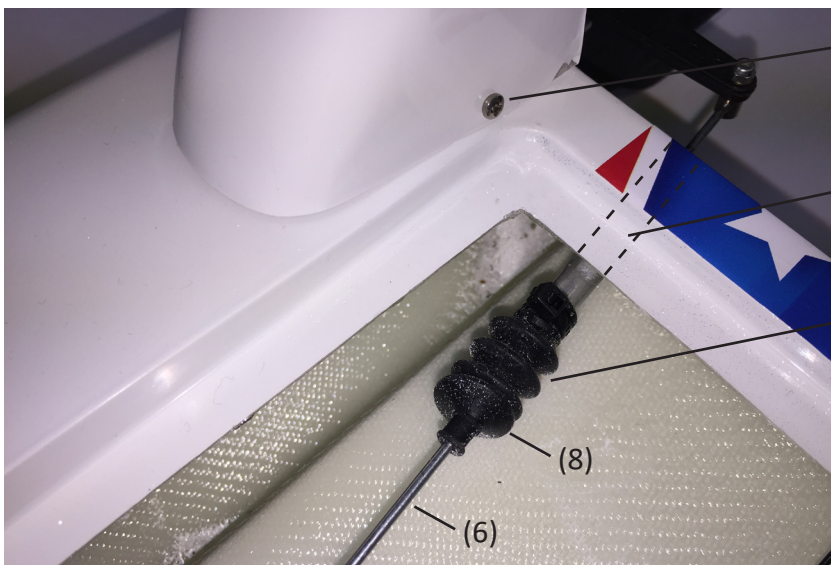
The fiberglass parts are all finished cropped. The wood laser parts are glued together using the pictures (superglue No. 5821)

To install the servo base (4) in the fuselage, Stabilit Express no. 960.85. The position of the base is provided centrally in the fuselage. Rear cut-out hull hull to end socket is 138 mm.

Also with Stabilit Express, the two aluminum tubes (7) for the rudder links are glued into the existing holes.



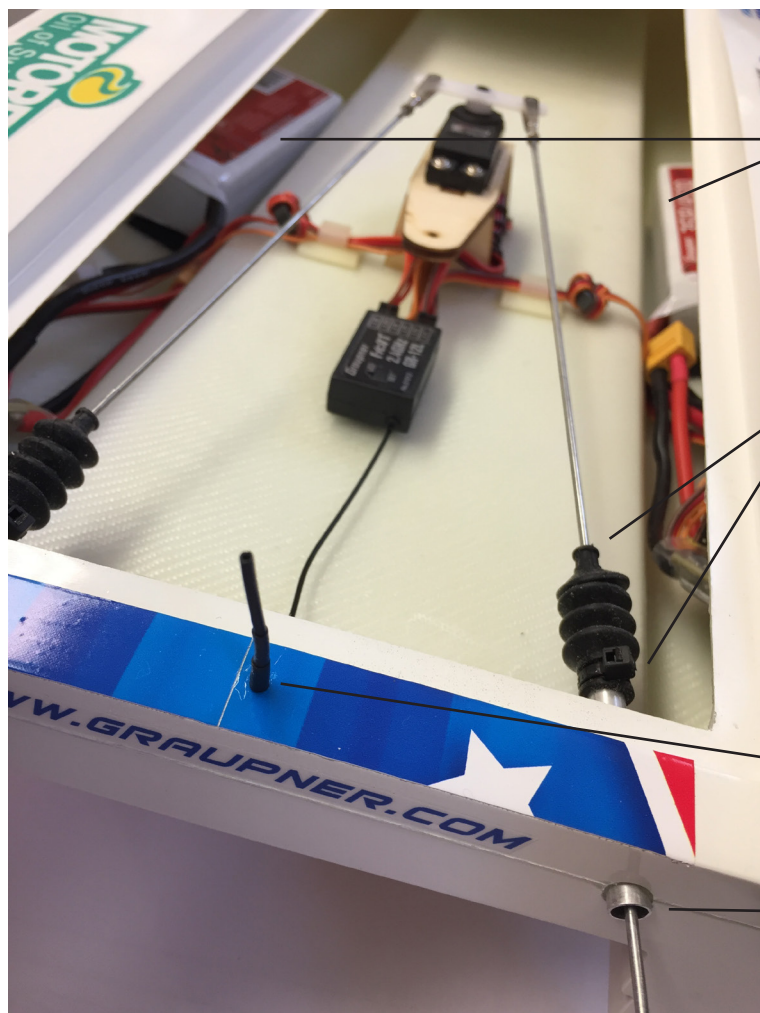
Glue the pre-glued servo base in the middle of the fuselage at a distance of 138 mm from the rear cut-out edge. Prior to this, connect both linkage systems as a test. Align the aluminum tubes so that they do not touch the poles. Only then glue and push on the rubber grommets.



Drill 4 holes for attaching the trims (3). Use screws (19)

Glue the aluminum tube (7) into the fuselage. Overhang on the outside about 2-3 mm

The rubber grommet (8) is mounted on the tube and fixed with a drop of superglue, as well on the linkage to the outboard.



Use the hook and loop strap (20) to attach the batteries.

The rubber sleeves (8) can be fixed with some superglue or alternatively with cable ties (optionally available under No. S8436)

Always place the antenna of the receiver outwards and as far up as possible, as the water surface can strongly reflect the radio signal.

Seal the antenna bushing with some Fixogum No.575.

Align and glue the aluminum tubes (7) slightly overhanging.



Thread the motor connection cables through the socket on the fuselage. Then close the maintenance opening of 20 mm with the waterproof adhesive tape.

Secure all screws well with screw lock (No. 952)

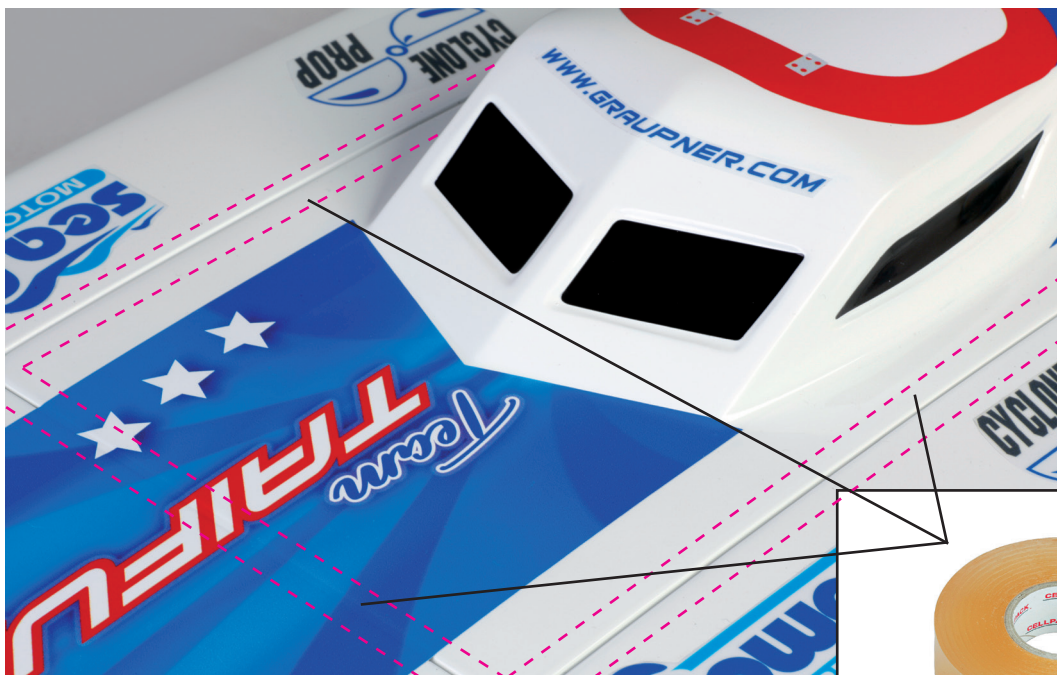
On the engines the heat sink no. Mount 6645.1 and the nipples for feeding with silicone hose no. 1668.3 connect.

The discharge from the heat sink is in turn out of the housing of the outboard motor. To do this, use the lower recess on the rear of the hood to guide the hose outwards.

Both outboards are connected via clevises (5) and threaded rod (15). The outboards themselves are screwed to the hull via the 8 screws (16).

2x Gestängeanschluß(9)
2x Sicherungsmutter (10)

Apply the stickers:



The hood is closed after connecting the batteries with adhesive tape No.531.19. It can also be installed the jumper No.21000.16 for better handling during the use of the model.



waterresistant tape
No.531.19

Partlist

Position number	Name	pieces
1	hull fiberglass No.2280.7	1
2	canopy fiberglass No.2280.8	1
3	hoods fiberglass No.2280.9	2
4	Servomount wood No.2280.10	1 Set
5	Clevis, metal No. 3548	2
6	Threated shaft M2 x 500 mm	1
7	Aluminum tube 6 x 0,5 mm	2
8	rubber sealing, black No.3356	2
9	Threated rod 2- 3mm No. 3524	2
10	Safety nut M3 No. 712	2
11	grub Screw M3 x 3mm No. 107	2
12	ball joint rod connection	2
13	Sechskantmutter M2	2
14	rod connection	2
15	Threated shaft M2 x 200 mm	1
16	Tapping screw 2,9 x 13 mm	8
17	Foamboard 10 mm and plate	2
18	Tapping screw 2,2 x 13 mm	4
19	Tapping screw 2,2 x 6,5 mm	4
20	Velcro tape 25 cm	2
21	Decal set No.2280.14	1
22	Boatstand, wood No.2280.15	1
	accessories:	
	water restitant tape No. 531.19	
	Fixogum No. 575	
	Power Seven Outboard Engine No.1996	
	Brushless Motor No.6646	
	Watercooling No.6645.1	
	Propeller left 29 mm No.1996.1	
	Propeller right 29 mm No. 1996.2	
	Silicon tube No.1668.3	
	Rudderservo DES 804 No.7950	
	ESC Brushless Control 70 No.33770.D35	
	Battery LiPo 3S/4.500Ah No. 78145.3	

Electric wiring

Controlling the two motors

Each brushless motor is powered by its own ESC. The connection to the gas channel can be done in two ways:

1. The two controllers are connected to channel 1 via a Y cable No.S8188.
2. The controllers are controlled by free mixers. To do this, set controller 1 to channel 1. Controller 2 on channel 6. For programming, see the instructions for the transmitter.

Telemetry

The enormous advantage of our Graupner Hott system is the monitoring of all parameters by the specially developed sensors. The telemetry cable of either controller is plugged into channel 5. With it voltage, current and regulator temperature can be controlled while driving. It makes sense to set warning thresholds. As an example:

Max. ESC temperature: 60 degrees Celcius

Max. Motor current: 70 A (No.33770.D35)

minimum Battery voltage at 3S: 10.5V

Should one of the values reach the threshold, the transmitter warns acoustically and visually - before components are damaged.

Spareparts:



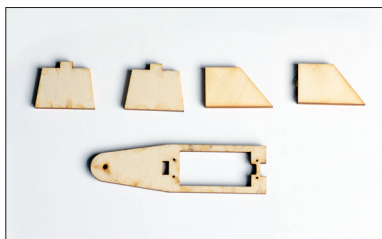
Hull No. 2280.7



Hoods No. 2280.9



Canopy No. 2280.8



Servomount No. 2280.10



Decal Set No. 2280.14



Boatstand No. 2280.15

Optionparts:



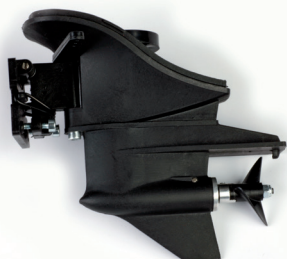
X8-E No.S1008.DE



mz-12Pro No.S1002.Pro77DE



100 A ESC No. S3030



Power Seven No. 1996



Hood white No. 1996.7



Hood red No. 1996.5



Hood grey No. 1996.6



Watercooling No. 6645.1



Motor 4.300 KV No.6645



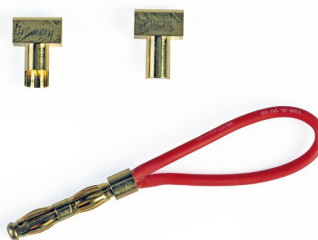
Battery No. 78145.3



Propeller 31 mm No. 1996. 3



Propeller 29 mm No.1996.2



Battery Plug No.21000.16



MOTOREX All Clear
No.95464



MOTOREX Dry Run
No.95464



MOTOREX Aqua Joker
No.95464



MOTOREX Extreme Power
No.95464