



船用推进器 用户手册

OWNER'S MANUAL

Should your motor be defective or a technical issue arise, please contact the local Haswing distributor for assistance. Visit www.haswing.com for the list of country distributors.

50731 Armada T 8.0HP/48V
50732 Armada T 10.0HP/48V

To The Owner

Thank you for selecting a Haswing electric outboard motor. It's designed for the purpose of superior performance, portability and environmental contribution. Enjoy using the Haswing Armada T!

This Owner's Manual contains important information pertaining to installation, correct operation and maintenance. Please read the manual before using this motor. If you have any questions contact your local Haswing distributor in the country of purchase.

★ We welcome comments regarding product improvement.

To avoid hazards and to obtain maximum performance and usage, special symbols are noted in this manual.



Failure to follow the instructions could cause severe injury.



Special precautions must be taken to avoid damage to the motor.



Information that makes the procedures easier and faster.

致用户

感谢您选购“汉飞”所生产的电动船用推进器。它具有低噪音、无污染、操作性强、方便携带等优点，充分满足广大船舶爱好者的需求。我们衷心希望您能尽情体验水上娱乐的美好时光。

本用户手册包含正确安装，操作，保养等重要说明。为使推进器操作顺畅，建议用户在使用前应彻底理解手册上的内容及重要事项。如对手册上的操作或维护事项有所疑问，请咨询汉飞客户中心。

★ 为提高产品质量，我们欢迎广大用户给予评价及改进建议。

为确保操作顺畅，防止意外发生，在用户手册及产品上注有特别符号信息。符号类别如下：



表示如不遵守指示可能导致操作人员及他人严重受伤。



表示必须采取特殊措施以免推进器损坏。



表示使程序更容易，更快捷地完成。

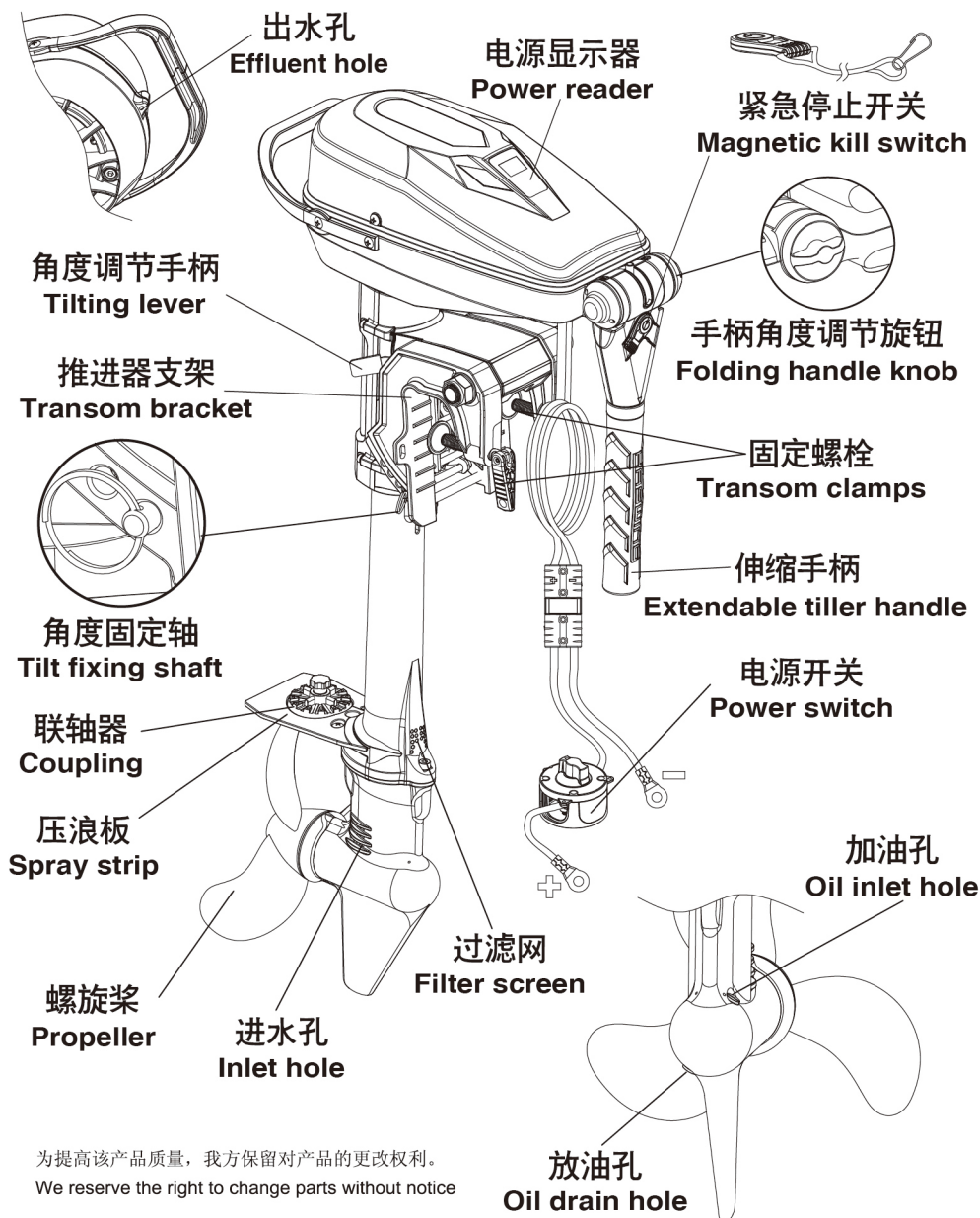
Contents

Product features	1
Before operating	2
Installation	
❶ Installing the propeller	2-3
❷ Mounting the motor	3
❸ Battery connection	3
❹ Power reader	3
How to operate the motor	4-5
Trouble shooting	5-6
Audio Pattern & Maintenance	6
Specification & Electric circuit diagram	11
Package contents	12

目录

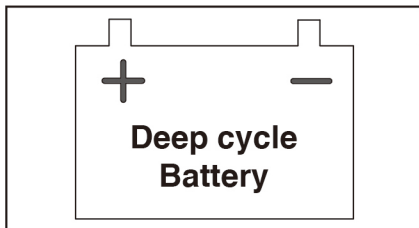
部件图	1
注意事项	7
安装	
❶ 螺旋桨安装	7
❷ 推进器的安装	8
❸ 电源安装	8
❹ 电压显示	8
推进器操作方式	8-9
故障与修复	9-10
蜂鸣模式 & 维护与保养	10
产品规格表 & 推进器电路图	11
装箱清单	12

主要部件说明
Product features

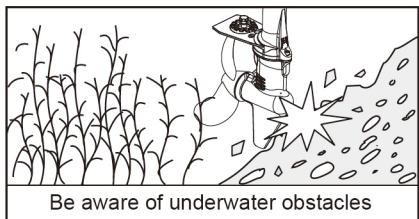


为提高该产品质量，我方保留对产品的更改权利。
We reserve the right to change parts without notice

Before operating the motor



Only use deep cycle battery or batteries to power the motor. Incorrect or improper use, or connection of the battery could cause damage to the motor. Disconnect the battery when stowing the boat or not using for an extended period.



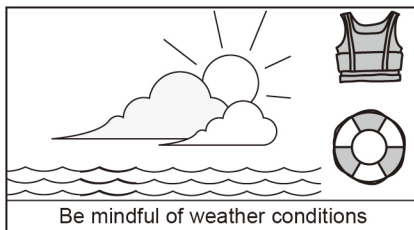
When motoring with the electric trolling motor in shallow water or around obstacles, reduce speed. Raise or retract the motor when in shallow water. Be aware of swimmers in close proximity to your vessel.



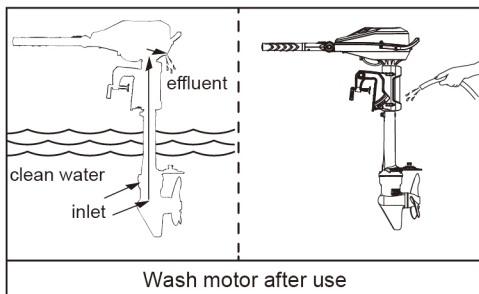
IP65 waterproof level for general



For safety, please unscrew the propeller.



Always wear an approved life vest or PFD (personal flotation device) and comply with local boating regulations.



Clean the propeller after using the motor, and run the motor in clean water for 1 minutes to exhaust dirty water, which may block the pipe. Flush the motor with clean water, especially after being used in sea.

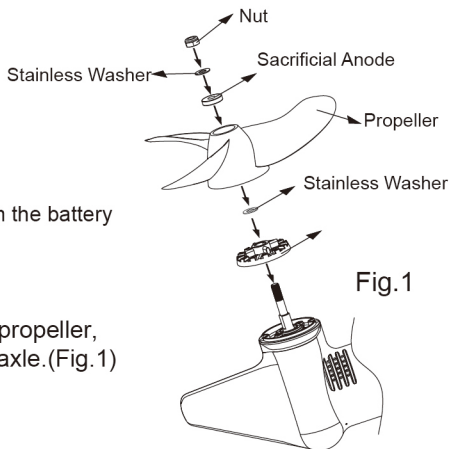
Installation

1 Propeller installation



Make sure the motor is disconnected from the battery before installing or replacing the prop.

Please install coupling onto motor axle, then install propeller, sacrificial anode, stainless washer and nut onto the axle. (Fig. 1)





Use the hand tool supplied with the motor : 10mm wrench for the installation.

Warning: Do not over-tighten the self-locking nut.

Adjust the slots between the propeller and clutch,hold one blade to stop the propeller from rotating, then tighten up the nut with the wrench supplied to fix the propeller. (Fig.2)

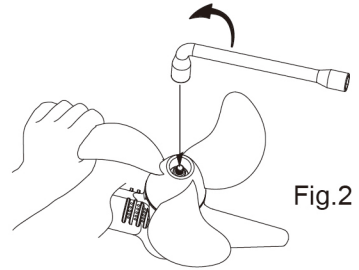


Fig.2

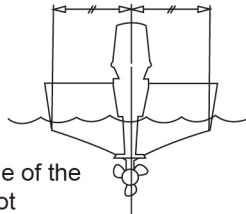


If you need to remove or replace the propeller, please undertake the above steps in reverse.

2 Mounting the motor



Ensure that the battery is not connected when initially installing or when mounting the motor using the Quick Release Bracket. If not using the motor for extended period or when storing the vessel, disconnect the battery.



Mount the Ultima motor on the centre line of the transom,tighten the clamps (Fig.3).Do not over-tighten,just firm hand tight is sufficient.

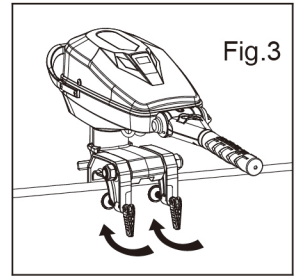


Fig.3

3 Battery connection



Before turning on the battery,ensure that the speed control is in the "0" position.

Only use a deep cycle battery of the correct voltage for the motor. Lead acid technology and lithium technology batteries are both suitable. Incorrect battery voltage or connection could damage the motor's electronics.

Connect the battery (+) to the positive (red) terminal, (-) to the negative (black) terminal. The ring connector should always be in the bottom most location with any washer sitting above the ring connector and then the nut. (Fig. 4)

Always make sure that the battery or batteries are secured and free from contact with metal objects to prevent shorting out. A battery box is recommended. Lead acid technology batteries such as AGM may require ventilation.

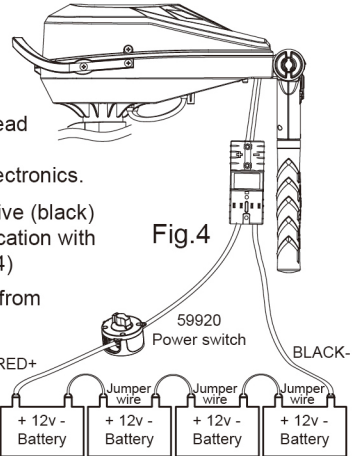


Fig.4



For the installation of the power switch,please refer to the insert of "59920 Power switch".



Always disconnect the motor from the battery when recharging the battery. Failure to do so could damage the motor's electronics.

4 Power reader

The motor has a power reader (LCD) to display the current voltage of the battery level. (Fig.5)



When the voltage is over 58.2V,the motor will cease working under high voltage protection mode.When the voltage is below 40V,please charge the battery.When the voltage is below 34.2V,the motor will cease working under low voltage protection mode.

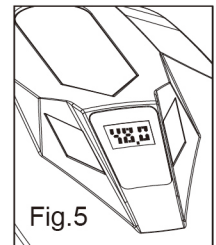


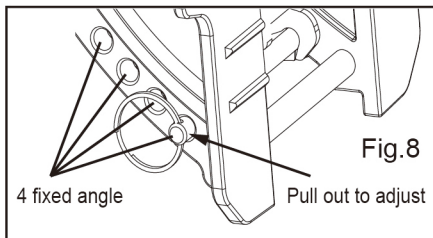
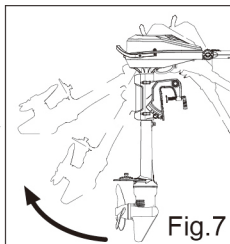
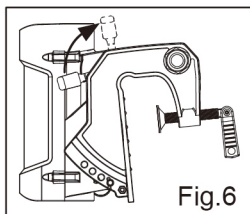
Fig.5

Correct operation of the motor

1. Tilting the motor

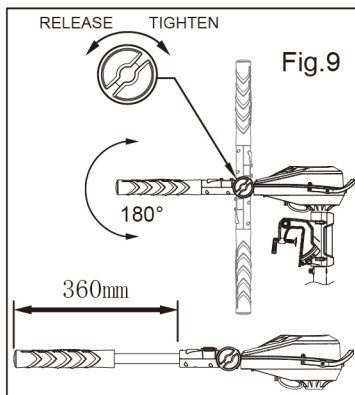
Pull up the angle adjusting lever, tilt the motor to a proper angle (there are 3 moveable and 4 fixed angle positions on motor bracket) and release it.

If you want to adjust back, push the lever down. (fig.6~8)



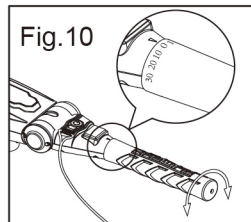
2. Trolling handle

The tiller handle is telescopic, easily extended if required by 400mm. Simply pull or push the tiller handle for the desired length. The handle is also angle adjustable through 180°. You must release the knob on the side of the tiller handle prior to adjusting the angle. Failure to release the knob can cause damage to the tiller handle mounting structure. Once the tiller handle is at the desired angle, re-tighten the knob to lock the handle into position. (Fig.9)



3. Speed control

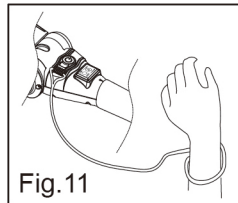
The Ultima has step-less speed control in forward and reverse modes. There is "0" for neutral, Forward and Reverse markers on the tiller handle at the throttle control. These work in the same direction as a petrol outboard, so if you have been used to using a petrol outboard, these controls are very similar, except you simply turn the control handle the opposite direction to go in reverse. Turn the throttle control counterclockwise to go forward and clockwise for reverse. (Refer Fig.10)



The motor won't start unless the throttle control is in the "0" position and the magnetic kill switch is correctly positioned (as shown). If either or both are not done, the motor will beep repeatedly.



For safety sake, please attach the safety lanyard around your wrist when operating the motor. Should you go overboard, the safety switch will stop the motor and you can safely swim to the boat. (Fig.11)



4. Change gear oil

Gear oil must be changed after 1st 100hours working, then change it every 200 hours. When you change the gear oil, unscrew nut of oil drain hole, drain used gear oil, screw nut back. (Fig.12) Then unscrew nut of oil inlet hole, put in 100ml new gear oil, screw nut back.(Fig.13)



Make sure power is disconnected and propeller is uninstalled.

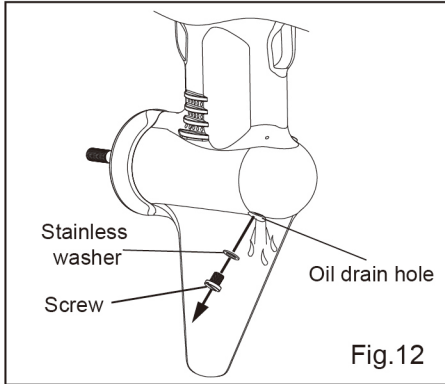


Fig.12

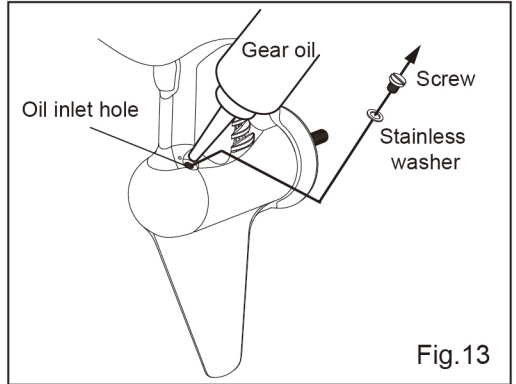


Fig.13

Trouble shooting

1. Motor fails to run or lack of power

Make sure that the power cable from the battery is connected correctly.

Check that the terminals are clean and corrosion free.

Make sure that the battery is full. If flat or low voltage, please recharge.

Make sure that there is no fishing line or weeds caught up in the propeller. Please detach and clean up the propeller if there is debris got caught up inside the propeller. Warning - Make sure the motor is disconnected from the battery.



Make sure that the propeller drive pin is in good condition.

2. Hard to steer

Check is the steering tension clamp is too tight.If so,loosen a little until motor can steer freely.

Clear the shaft and apply lubricant to tension points regularly.

If motoring when this happens,ensure that the motor is free from underwater obstructions.

3. Motor vibration

Make sure that the propeller is installed correctly. Inspect the propeller and the drive/shear pin condition and if necessary,replace worn or faulty part.

Disconnect the battery cable and examine the motor by manually turning the propeller. The propeller should turn freely with some magnetic resistance. If there is strong resistance, there may be internal damage. If locked up or excessive resistance, please contact our customer service or the dealer.

4. Operation error warning signal

The motor has an operation error function to protect your motor,there fore the motor will automatically stop operating if an error occurs.Please inspect the following:

- ❶ If the power indicator doesn't light and the motor doesn't work, please check if the power cable is properly connected. If the LED lights on the battery do not light up or only the red one is lit, and the motor still doesn't work, please check the voltage of the battery.
- ❷ The motor has a voltage protection function, if it is triggered the motor won't work. Return the control handle to neutral to reset the motor. It should now operate as normal.
- ❸ If the motor suddenly stops whilst at speed, return the control handle to neutral and restart again. If it happens again, it is likely that there is something obstructing the propeller such as weed or fishing line. Check the propeller for debris and clear away as necessary. Best method is to remove the propeller and clear away any foreign matter.

Audio Warning Pattern

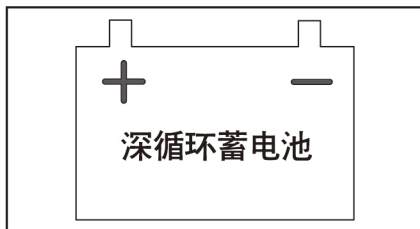
AUDIO PATTERN	STATUS
Three (3) beep	System ready
Continuous short beep	<ul style="list-style-type: none"> ● High-voltage protection. ● Low-voltage protection. ● System ready but throttle is not on neutral position. ● There is no Kill Switch on this motor.
Continuous "fast short" beep	Motor running on high (Amp) current condition.
Continuous long beep	<ul style="list-style-type: none"> ● Motor stop operation, wait the throttle back to neutral position. ● Motor will enter a 30seconds standby mode after gear being blocked 10 times.

★ For all other malfunctions not listed above, please contact Haswing customer service center.

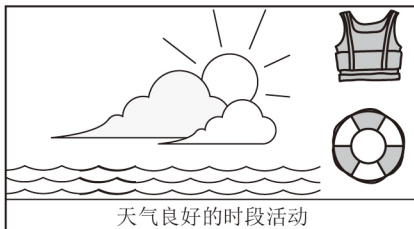
Maintenance

1. Wash and clean the motor and propeller thoroughly after use, especially after use in saltwater. Whilst the motor is manufactured for use in saltwater, proper care and maintenance is highly recommended to ensure years of trouble-free operation. Improper use or surface corrosion is not covered by warranty. (Refer page 2)
2. Remove any debris such as weed from around the propeller or propeller drive shaft after every use. (Refer page 2 "Cleaning Motor")
3. Apply suitable lubricant to the turning parts regularly and use the correct tools to fasten parts if required.
4. Regularly apply corrosion prevention spray to help protect your motor.
5. Store the motor in a dry, well ventilated place. The motor can be stored in almost any position, as there is not fuel to worry about leaking.
6. Do not crush or put heavy items on top of the motor.
7. This product is designed for outdoor use only.
8. This motor is designed for outdoor amusement only. Continuous long distance transport is not permitted.

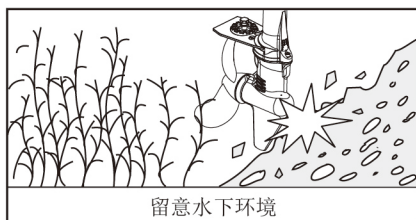
操作注意事项



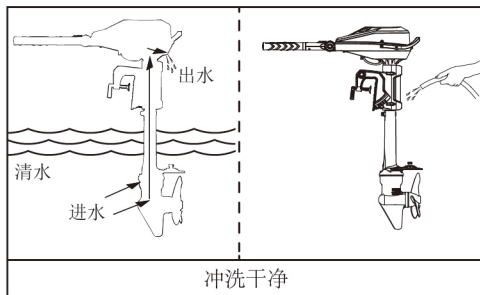
请使用深循环蓄电池；使用电压不符或不稳定的蓄电池可能会导致电机或电池的损坏。请勿在岸上接通电源或启动电机，以防意外发生。



用户应选择天气良好的时段活动，活动时应配备个人救生衣。



当船只进入浅水区或靠岸时，请关闭电机减慢航速，调整推进器与水面的角度，以免电机碰撞受损。推进器运行时要留意游泳者以及周围环境。



使用推进器后应清理螺旋桨上的杂物并在清水下启动1分钟将污水排出，防止浑浊污水堵塞水管。最后用清水冲洗推进器，特别在海水使用后要彻底冲洗干净。

注意
CAUTION

推进器整机防水性能：IP65。

安装

1 螺旋桨安装

警告
WARNING

在安装更换及保养螺旋桨前必须断开电源。

首先将联轴器器和垫片装在电机轴上，再把螺旋桨装入电机轴上，最后把阳极片、垫片和螺母套入电机轴上。（如图.1）

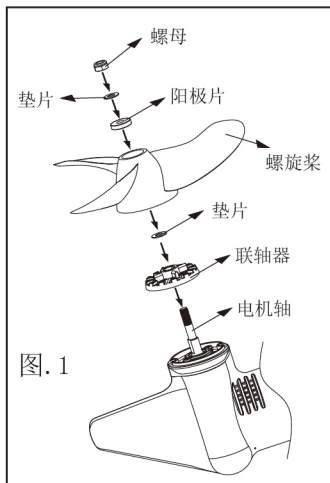


图.1

警告
WARNING

为了安全起见，请先将螺旋桨卸下。

注
NOTE

请使用我司提供的专用工具10mm扳手作安装用途。

（切勿使用其他不恰当的工具以免损坏配件）

先用手轻轻转动一下螺旋桨，让螺旋桨与联轴器齿位啮合，然后用手握住螺旋桨叶的一段以防转动，最后用专用扳手拧紧螺母固定螺旋桨。（如图.2）

注
NOTE

如要卸下或更换螺旋桨及其他配件，请按以上方法反步骤进行。

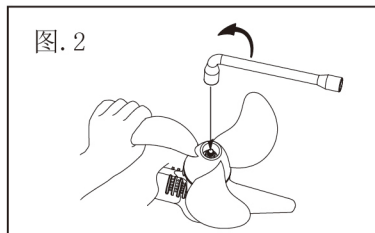
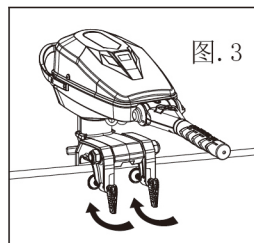
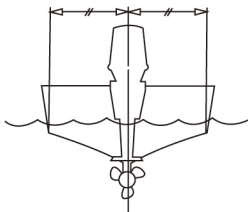


图.2

2 推进器的安装

警告 请勿在安装及卸载推进器时接通电源或启动电机，以防意外发生。

请将推进器安装在船尾板的中段位置，再拧紧推进器支架上的两个螺栓。（如图.3）



3 电源安装

警告 在接通电源前，务必确保调速手柄上的档位为0档。

选择合适电源——请使用深循环蓄电池。使用电压不符或不稳定的蓄电池可能导致电机或电池损坏。

连接电源——请将红色（+）正极电源线末端连接至电池的正极处（+），黑色（-）负极电源线末端连接至负极处（-）并固定。（如图.4）

把电池放置在通风干爽的位置。

注意 电源开关的安装详见《59920电源开关》插页。

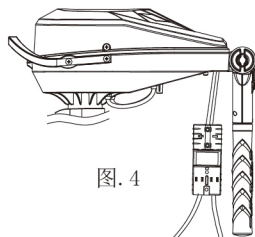
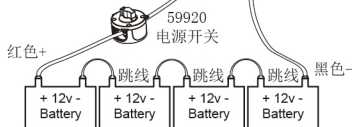


图.4



4 电压显示

推进器设有一个实时检测电压的LCD显示屏，可以随时了解电池电压的实时情况，简单直观，方便快捷。（如图.5）

注意 当电压读数大于58.2V时，推进器进入高压保护，电机不工作；
当电压读数小于40V时，推进器电压不足，应及时充电；
当电压读数小于34.2V时，推进器进入低压保护，电机不工作。

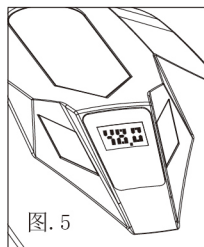


图.5

操作方式

1. 调节推进器与水面的角度

将角度调节柄往上拉，用手抓住机头把手往上翘动，将推进器电机的角度调至合适的位置（推进器支架上共有3个活动角度位置、4个固定角度位置）然后松手即可；如需反向操作则将角度调节柄向下拨回，反步骤操作即可。（如图.6-8）

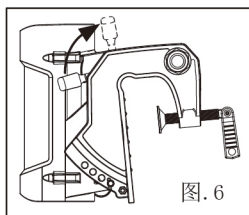


图.6

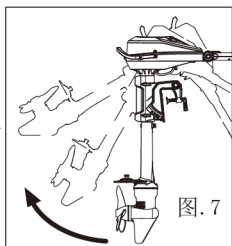


图.7

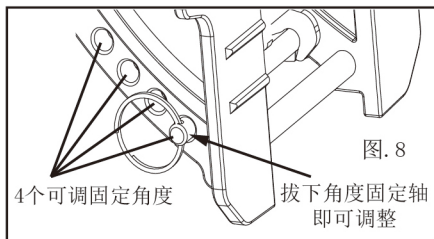


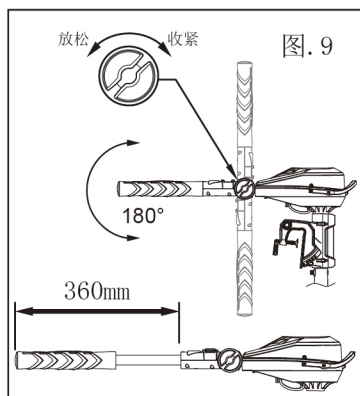
图.8

4个可调固定角度

拔下角度固定轴即可调整

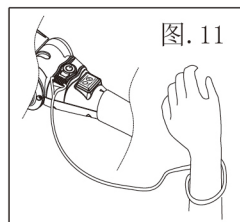
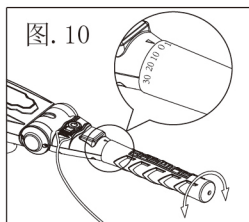
2. 手柄的角度及长度调节

手柄上设有角度调节与可伸缩功能。用户可按照个人的操作习惯更改手柄的角度和长度（调节角度范围为180度，延伸总长为360mm）以便船上作业。用户还可使用手柄角度调节旋钮来调节其收放的顺畅性。（如图.9）



3. 控制推进器的速度

推进器速度控制为“无极调速”。手柄上印有“0”位标记和正反转调节刻度线，当箭头对齐“0”位时机器处静止状态。手柄由“0”位顺时针转动为前进，调节角度90°；手柄由“0”位逆时针转动为后退，调节角度90°；推进器随手柄调节角度的不同，行驶速度会做相应变化。（如图.11）



注 每次启动推进器前需将手柄归“0”档，且将急停开关安放在手柄固定位置，方可启动推进器。

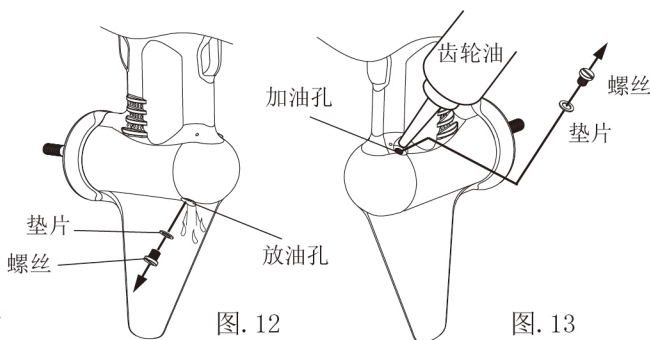


急停开关的绳扣应系在操作人员手上，以防意外发生时无法停机。（如图.12）

4. 齿轮油的更换

首次使用100小时后，必须更换齿轮油，往后使用按200小时更换一次。更换时请将放油孔的螺丝拧开卸油，卸完油后拧回螺丝；（如图.12）再将加油孔螺丝拧开，加入100毫升齿轮油，拧好螺丝即可。（如图.13）

警告 在更换齿轮油前，务必将电源关闭并卸掉螺旋桨。



故障与修复

1. 电机运行艰难或停止运作

查看电源是否按正确方式牢固连接。

如发现蓄电池与主电源线的接触点附着异物或生锈，应当给予清洁。

查看蓄电池电量是否充足。如电量过低时请充电。

检查螺旋桨是否被线或水草缠绕。如有异物阻塞螺旋桨内部，请卸下螺旋桨进行清洗。
（“警告”清洗螺旋桨时请先切断电源）

检查螺旋桨固定销是否损坏。

2. 推进器难以掌舵

查看方向定位上的螺栓是否松开。

检查推进器电机支杆上是否附有异物，清洁干净后再转向的位置及其连接关节上打上润滑剂。

检查在水底使用过程中是否有障碍物妨碍推进器电机或影响转向。

3. 推进器噪音或晃动大

检查螺旋桨是否安装牢固。

查看螺旋桨及其固定销是否弯曲变形，如损坏严重建议更换配件。

断开电源，用手转动螺旋桨，如受阻或卡住，表面电机内部可能受损。请停止使用并联系汉飞客服中心。

4. 操作故障指示

本机还设有“操作故障检测功能”。如因使用不当导致故障时，推进器会自动停止运转，这时应对其功能进行以下事项检查：

❶ 在电源接法正确的情况下，如果所有电源指示灯不亮且机器无任何动作。请检查电源是否正确连接好。如果指示灯只亮红灯且机器无任何动作，请检查电池的电压是否处于有电状态。

❷ 此推进器还设有高压及低压保护，一旦发生保护，此推进器都不工作。如果电压正常，请检查控制手柄箭头有没有指到中央位置（0档）；如果没有，请把手柄转到中央位置（0档），便可启动。

❸ 如推进器在行驶过程中，突然停止运作，但将控制手柄回中后过几秒钟又可以正常工作。表示螺旋桨受阻导致电流过高后机器启动了保护程序。请检查是否超载或被钓鱼线、水草缠绕。如有异物阻塞螺旋桨内部，请卸下螺旋桨进行清理。

蜂鸣模式

蜂鸣模式	蜂鸣响声说明
短响3声	机器上电时进入正常工作状态
连续短响声	高压保护；低压保护；电机在通电时手柄不在0位；未放置紧急停止开关
连续快速短响声	机器进入大电流状态
连续长响声	机器进入保护停机状态，等待手柄恢复0位；齿轮卡死堵转10次机器进入30秒待机状态

★ 如有其它问题，请与汉飞客服中心联系。

维护与保养

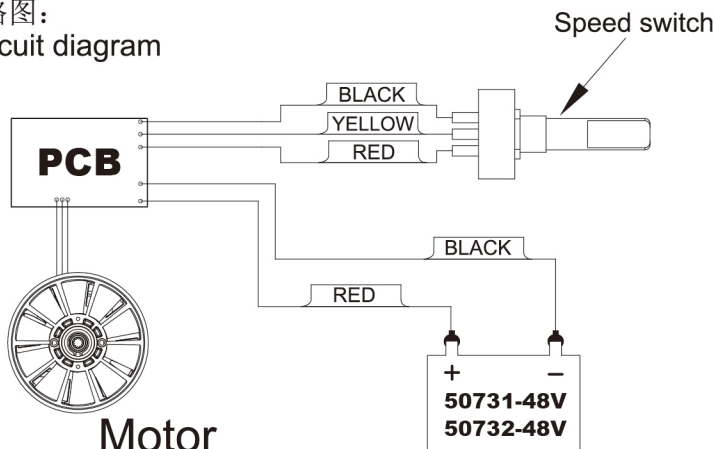
1. 在推进器每次使用后应该按说明书要求冲洗保养，冲洗过后应保持整洁，因不当使用导致电机表面腐蚀或损坏属保修无效。（请参考P.7）
2. 每次使用后，用水彻底冲洗，将附着螺旋桨的线、水草和阻塞于螺旋桨内部的杂物等清洁干净。（清洗部位请阅P.7“冲洗干净”）
3. 用户应定期对各个活动关节部分给予润滑，使用专业工具（如：螺丝刀，扳手等）调紧松脱的部位。
4. 使用后应在电池与主电源线的连接处给予防锈处理。
5. 请把推进器存放在干爽通风的环境下。
6. 请勿在环境复杂的水域里使用，以免损坏推进器。
7. 请勿使推进器受重压或撞击。
8. 本产品纯属户外娱乐设备。用户不得将其作为长时间长距离或超负荷营运使用。

产品规格表 Specification

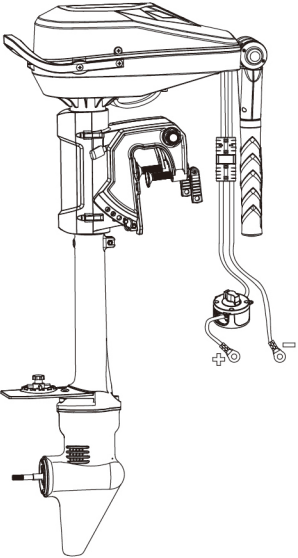
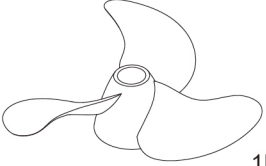
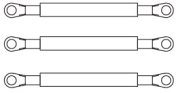
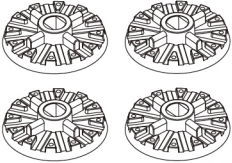





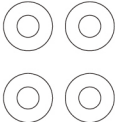
参数 Parameter	型号 Model	50731 Armada T 8.0	50732 Armada T 10.0
额定电压 Voltage -Rated/Max		48V	48V
额定功率 Input Power Watts		4320W	6000W
峰值推力 Peak Thrust in Lbs		250LBS	300LBS
等效汽油舷外机推力 Comparable Gasoline Outboards(Thrust)		10HP	12HP
最大杆长 Max Shaft Length		670mm	670mm
操控模式 Control Type		无级变速 前进/后退 Stepless Speed F/R	无级变速 前进/后退 Stepless Speed F/R
转向模式 Driving Type		连续 360° 360° Lockable	连续 360° 360° Lockable
电机类型 Motor Type		无刷电机 Brushless Motor	无刷电机 Brushless Motor
产品净重 Product Net Weight		27.3kg	28.8kg
电池配置 (推荐) Battery Type (Suggestion)		4X120AH深循环蓄电池 4X120AH Deep Cycle Battery	4X250AH深循环蓄电池 4X250AH Deep Cycle Battery
船长 (推荐) Max Boat Length(Suggestion)		9M	9M

推进器电路图:

Electric circuit diagram



维护与保养 Packing List

<p>主机 Trolling Motor</p> 	<p>螺旋桨 Propeller</p>  <p>1PCS</p>	<p>跳线 Wire jumper</p>  <p>3PCS</p>
<p>联轴器 Coupling</p>  <p>4PCS</p>	<p>说明书 Owner's Manual</p>  <p>1PCS</p>	<p>多用扳手 Propeller Wrench</p>  <p>1PCS</p>
<p>急停开关 Magnetic kill switch</p>  <p>1PCS</p>	<p>阳极片 Sacrificial Anode</p>  <p>2PCS</p>	<p>防滑螺母 Nut</p>  <p>2PCS</p>
<p>垫片 Stainless Washer</p>  <p>4PCS</p>		

中山市雅太电器有限公司

Yatai Electric Appliances Co.,Ltd.

地址：中国广东省中山市三乡镇南龙新龙街四号

Add:No.4 Xinlong St.Nanlong, Sanxiang,
zhongshan,guangdong Province,China.

邮编/Postcode:528463

电话/Tel: +86 760 86692666

传真/Fax: +86 760 86692996

WWW.HASWING.COM

Printed in China

适用于: 50731-50732-A01

Suitable for: 50731-50732-A01