

**HAIBO**  
**MARINE**

**HAIBO®**

**蝙蝠侠**

**系列电动船用推进器使用说明**

*B-Series Electric Motor's Owners Manual*

惊喜，一路相随！  
*Anywhere amazing happens!*

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CE

**BATMAN**

**Maintenance**

| Item                          | Interval        | Procedure   |
|-------------------------------|-----------------|---|
| Clear the whole unit          | After each use  | Clean the motor with fresh water after each use especially after use in saltwater.  |
| Clear behind prop             | After each use  | Remove prop and check for fishing line, weeds or other debris. Any debris wrapped around or shaft will cause a loss in power.   |
| Check all nuts, bolts, screws | Every two weeks | The screws and moving parts of the suspension assembly should be lubricated with non-aerosol lubricant.   |
| Clean terminal connection     | Every month     | Make inspection for loose or corroded terminals and/or frayed wires. Clean the terminals. Lack of this type maintenance will cause excessive heat and/or loss of power. |

**使用条件及保存**

本品若在盐碱水中使用，请在使用后用清水冲洗干净，以防止推进器部件腐蚀；请避免在杂物繁多、水下情况复杂的水系使用，以防止电机堵转烧毁；请避免将推进器作为剧烈碰撞类娱乐及长距离长时间的运输等高负载项目的主动力使用，以上此类使用所造成的产品问题将被视为误操作，我司将不给予免费保修服务。如长期不使用推进器，润滑螺丝及活动件，请选择一个通风良好并且干燥的地方储存。冬季推进器不能长期置于室外，这样会损坏马达系统中的磁性，降低性能。

**Using condition and storage**

Please wash the motor after using in salt water. Please do not use the motor in the water with many sundries and foul condition. Please do not use the motor as the main power of collision amusement and long time transport. Problems caused by these using conditions above will be deemed as operating errors. Haibo will not provide warranty to these conditions. Lubricate both moving parts and screws, then remove motor and store in a well-ventilated and dry place. Do not leave motor outside in winter for long periods of non use. This will damage the permanent magnet in the motor.

感谢你购买了我公司生产的便携式电动船用推进器！

此推进器由宁波海伯公司设计开发，根据型号大小，适合用于2~5米间小型船只的近距离推进，也可用于自重较小的中型船只的辅助动力。优质的材料、出众的设计及艺术的造型使推进器在各种环境下具有长期、可靠的性能。

为持续改进该产品，我们保留在无预先通知的情况下，更改零件或配件的权利。请仔细阅读本手册以避免潜在的误操作。

**Congratulations on your purchase of a easy-carrying electric boat motor!**

This motor was developed by Haibo and specially designed to suit for the use of easy-going. High quality materials, superior design and state-of-the-art engineering make this motor a long-lived and reliable companion in all situations.

As a means of constant product improvement, we reserve the right to change parts and components without notice. Please read this manual carefully to avoid potential operating errors.

**保修条款**

海伯公司提供自购买之日起两年的保修时间。（购买日以发票的日期为准）

本保修并不包括易磨损零件（电刷、螺旋桨组件、开关等）。误操作、事故及不正确的修理和改良等不包括在本保修范围之内。保修仅限于此推进器的非商业性使用。

任何修理或服务由宁波海伯公司提供。

**Warranty terms**

Haibo offers a two (2) year warranty on the Haibo electric boat motor, beginning on the date of purchase (valid only in connection with your purchase receipt).

The warranty does not extend to wearing parts, e.g. graphite brushes, props and switches. The warranty is limited to non-commercial use of the motor and does not apply in case of operating errors, accidents, improper repair or modification.

Any servicing or repair work must be carried out by Ningbo Haibo Company.

**安装**

将推进器安装在船尾，拧紧悬挂器上的两个夹紧螺栓。（A图）

推进器的角度可以按照以下操作调整。一只手握住推进器的头部，另一只手按下定位按钮。按住定位按钮并握住，调整到理想的角度后，手松开，按钮自动回复到原位，查看一下推进器是否固定牢固。（B图）

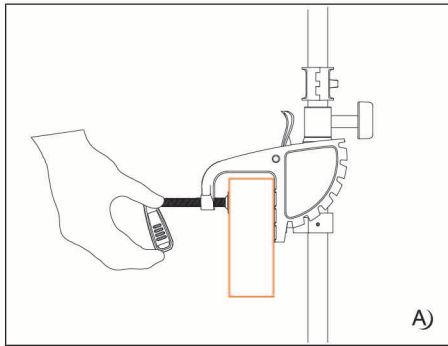
注意！当调整推进器倾斜角度时，不能把手放在连接管与船体之间 - 谨防受伤！在船体脱离水面前，务必将推进器卸下。在安装或卸下推进器时，请确保已断开电源。

**Assembly**

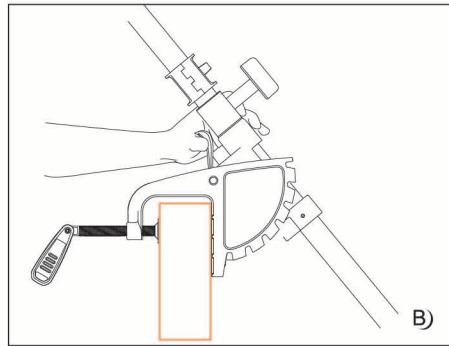
Attach the motor to the stern of the boat. Make sure you tighten both mounting bolts securely. (fig. A)

To adjust the angle of the motor following attachment, hold the motor head with one hand and depress the positioning pin with your other hand. Press and hold the pin until the desired angle has been reached. Release the pin and verify that the mechanism engages securely. (fig. B)

**Caution! When adjusting the tilt angle of the motor, NEVER put your hands between the shaft and the hull of the boat - you might be injured! Make sure you detach the motor before taking the boat out of the water. When mounting or detaching the motor, make sure that the battery is disconnected.**



A)



B)



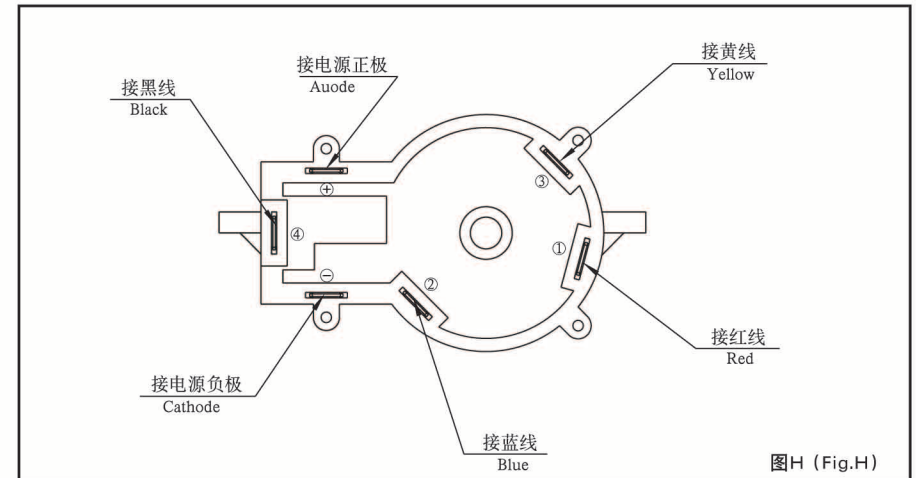
Motor loss one or more speeds

1. Loose connection in wiring. Please check and correct.
2. Switch may be burned, please change a new one and see the below sheet of lines connection. ( fig.H )
3. Speed coils in motor unit may be burned, please contact Haibo Service Department.

Motor is hard to steer

1. Loosen counterforce screw, then readjust and apply some lubricant.

For all other problems not listed above, please contact Haibo Service Department.



**维护**

| 维护对象     | 时间间隔  | 维护过程   |
|----------|-------|--|
| 冲洗整个组件   | 每次使用后 | 用清水彻底清洗推进器，尤其是在盐水中使用后。                               |
| 清洗螺旋桨背面  | 每次使用后 | 螺旋桨卸下后，查看是否有钓鱼线、水草或其它残留物缠绕在上面。在螺旋桨或主轴上的任何附着物会导致动力下降。 |
| 螺丝和活动件   | 每两个星期 | 将所有的活动件用非气雾式的润滑剂润滑。                                  |
| 清洁电器连接终端 | 每个月   | 检查电器连接终端是否有松动、生锈或电线擦伤现象。清洁连接终端。若缺此项维护，很可能导致过热或动力下降。  |

## 推进器使用中一般问题的解决方法

|                                |   |
|--------------------------------|---|
| <p><b>问题</b><br/>螺旋桨运转“停滞”</p> | <p><b>可能引起的原因 / 解决方法</b><br/>1.检查是否有线或水草缠绕在螺旋桨上。清洗螺旋桨。<br/>2.检查蓄电池电压状态。<br/>3.检查蓄电池上的连接终端，清洗连接终端。</p>   |
| <p>推进器噪音过大、晃动过大</p>            | <p>1.检查是否有线或水草缠绕在螺旋桨上。清洗螺旋桨。<br/>2.检查螺旋桨是否安装牢固，如有需要，重新安装螺旋桨。<br/>3.检查马达主轴是否弯曲。卸下螺旋桨，启动马达，目测主轴是否抖动。如果变形，请联系海伯公司客户服务部门。<br/>4.断开电源，用手转动螺旋桨，螺旋桨应能转动自如并带有轻微的磁作用力。如果受到阻碍或锁住，马达内可能有碎磁或其它异物，请联系海伯公司客户服务部门。</p> |
| <p>速控开关失效</p>                  | <p>1.电线松动或接触不良。<br/>2.开关烧毁或短路，应更换开关，开关线路安装方法见(图H)。<br/>3.马达系统中的速度线圈可能被烧坏了，请联系海伯公司客户服务部门。</p>  |
| <p>推进器很难掌舵</p>                 | <p>1.将反作用力螺丝旋松，重新调整并添加润滑剂。</p>  |

如有以上未列明的问题，请与海伯公司客户服务部门联系。

## Trouble shooting guide

| <b>Problem</b>                            | <b>Possible cause/solution</b>   |
|---|--|
| <p>Propeller action might be "stiff"</p>  | <p>1.Check to see if line or weeds have got caught in the propeller. Clean propellers.<br/>2.Check the battery charge status.<br/>3.Check the terminals on the battery cable.</p>  |
| <p>Motor sounds too loud and/or shake</p> | <p>1.Check to see if line or weeds have got caught in the propeller. Clean propellers.<br/>2.Check if the propeller is secure. Replace the propeller if necessary.<br/>3.Check to see if the shaft is bent. Detach propeller and rerun motor visually check if the shaft shake or not. If shaft deformed, please contact Haibo Service Department.<br/>4.Disconnect the battery cable. Turn the propeller by hand, it shall turn freely with a slight magnet drag. If it binds or is locked up, chipped magnets or other debris maybe in the motor, please contact Haibo Service Department.</p> |

## 调节深度

用一只手握住连接管，旋松深度调节螺栓，将推进器调节至理想的深度，再拧紧螺栓。(C图1)

## 调节掌舵力度

调节反作用力，只需旋松或者拧紧反作用力螺栓。(C图2)

## 调节航速

可伸缩手柄最长可延伸15CM。在可旋转手柄上具有速控功能(5档正转, 3档反转)。顺时针转动手柄可以选择正转档速, 逆时针转动手柄可以选择逆转档速。转动手柄至正中间位置, 则推进器自动停止转动。(D,E图)

## Adjusting the depth

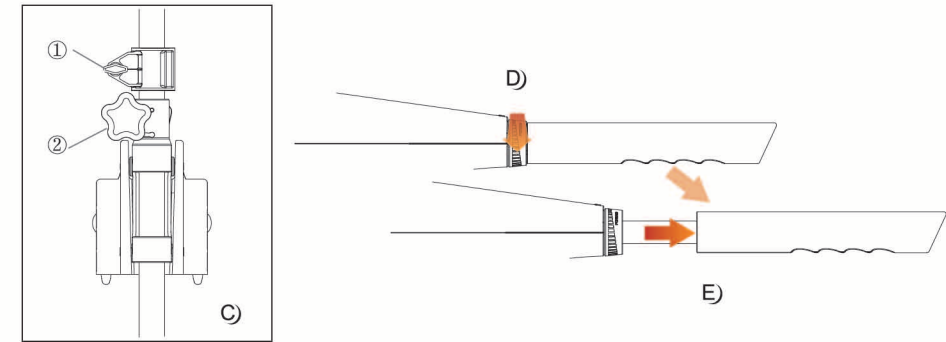
Hold the motor shaft with one hand, then loosen the depth adjustment screw and set the motor to the desired depth. Then retighten the adjusting screw securely.(fig. C ①)

## Adjusting the steering force

To adjust steering-counterforce, simply loosen or tighten the counterforce bolt.(fig.C ②)

## Adjusting the sailing speed

The telescopic tiller can be extended up to a length of 15 cm. The speed control (5 forward and 3 reverse speeds) is integrated in the turning handle. Turn the handle clockwise to select forward speeds. Turn the handle counter-clockwise to select reverse speeds. Turning the handle into the neutral position automatically stops the motor.(fig.D,E)



## 更换螺旋桨

注意：在更换螺旋桨之前务必将电源断开。

## 拆卸螺旋桨

用海伯公司提供的专用扳手旋松并拆掉防松螺母，注意需用一只手握住螺旋桨以防它转动。不要用锤子或类似的工具旋防松螺母，否则会损伤防松螺母或主轴。(F图) 防松螺母拆掉后，螺旋桨就可以很容易的拿下来。在安装新螺旋桨时注意查看槽和插销是否正确配合，否则螺旋桨不能正确配合。(G图)

推进器使用之后，清洁可能缠绕在螺旋桨上的钓鱼线、水草等物。每次使用后，用流水彻底冲洗推进器，尤其是在盐水中使用后。

## Changing propellers

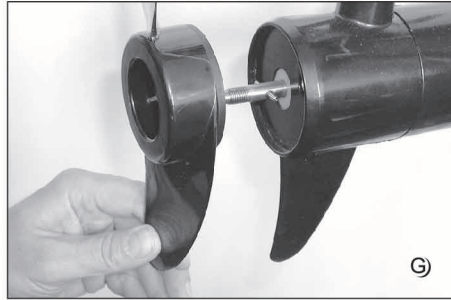
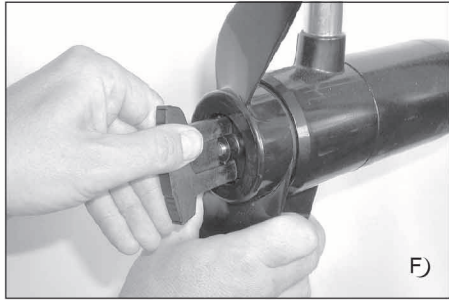
**Caution: ALWAYS disconnect the battery prior to changing the propeller.**

## Detaching the propeller

Unscrew and remove the locknut using the propeller wrench supplied, taking care to hold the propeller with one hand to prevent it from revolving. Do not loosen the locknut with a hammer or similar tool, as this may cause damage to the locknut or shaft. (fig. F)

Once the locknut has been removed, the propeller can be taken off easily. Verify proper fit of the groove and shearing pin when mounting the new propeller, otherwise the propeller will not attach properly. (fig. G)

After using the motor, always check for fishing line or weeds that may have got caught in the propeller and remove. Wash off the motor thoroughly with running water, especially after using it in saltwater venues.



**蓄电池的连接方式**

在接通电源前请确保所有的开关都是关的。  
将红色电源线末端的夹子(A)连接在蓄电池的正极处(+), 黑色电源线末端的夹子(B)连接在蓄电池的负极处(-)。  
海伯公司建议在红线处安装一个50安培的断路器再与正极相连, 这样可以避免在使用过程中的一些问题。  
蓄电池应该放在通风良好的位置。我们推荐使用海用蓄电池以达到理想的性能。海伯公司推荐推荐的蓄电池规格见表格一。

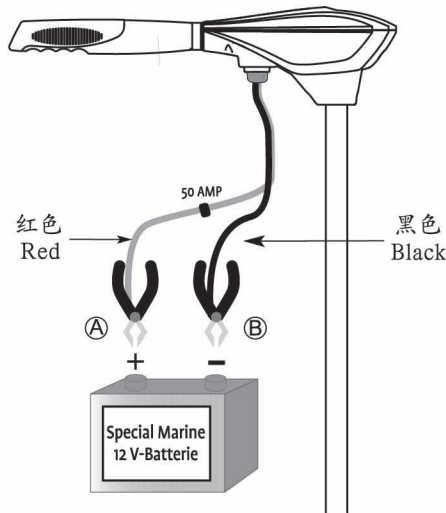
**Electrical connections (Diagram). For prescriptive battery only!**

Prior to making electrical connections, please ensure that all switches are in the OFF position.

Connect the red battery cable (A) to the positive battery terminal (labeled (+) on the battery). Connect the black battery cable (B) to the negative battery terminal (-).

Haibo recommends installing a 50 Amp breaker to the red battery cable. Connect the terminal clamps securely. Otherwise you may have trouble using the motor.

The battery should always be kept in a well-ventilated location. We recommend using special low charge marine battery for optimum performance. Please see below sheet of recommended battery specification.



表格一:

| 型号<br>Model | 最大推力(kg)<br>Maximum Thrust | 控制方式<br>Control Method | 变速档<br>Various Speed  | 电压(V)<br>Voltage | 最大电流(A)<br>Maximum Current | 船体与推进器之间的固定方式<br>Fixing Way Between Boat and Motor | 推荐蓄电池规格<br>Recommend Battery Specification | 蓄电池数量<br>Battery Quantity |
|-------------|----------------------------|------------------------|-----------------------|------------------|----------------------------|--|--|---------------------------|
| B35         | 15.4                       | 手控<br>by Hand          | 前 5/后 3<br>For 5/Re 3 | 12               | 32                         | 悬挂式<br>Mount Assembly                              | 12VX60AH                                   | 1                         |
| B45         | 20.0                       | 手控<br>by Hand          | 前 5/后 3<br>For 5/Re 3 | 12               | 40                         | 悬挂式<br>Mount Assembly                              | 12VX80AH                                   | 1                         |
| B55         | 24.5                       | 手控<br>by Hand          | 前 5/后 3<br>For 5/Re 3 | 12               | 52                         | 悬挂式<br>Mount Assembly                              | 12VX100AH                                  | 1                         |
| B65         | 29.5                       | 手控<br>by Hand          | 前 5/后 3<br>For 5/Re 3 | 12               | 45                         | 悬挂式<br>Mount Assembly                              | 12VX100AH                                  | 1                         |