2 Preparations

2.1 Selecting the Battery

Lithium-based and lead-acid batteries can be used to supply power for Pod Drive 3.0. Considering the high performance in energy density and discharge ability, lithium-based batteries are more preferable. To ensure that Pod Drive 3.0 can work at its full power continually, the batteries are required to possess over 62.5A of continuous discharge current. To ensure longer operating duration, the battery capacity is recommended to be 3000Wh or above.

The rated continuous discharge current is affected by the battery type and quantity of parallel batteries. To use lead-acid batteries, conventional lead-acid or AGM or GEL batteries are acceptable, while starter batteries are not recommended. Traction batteries or deep cycle batteries are more preferable as they give power over sustained period of time. Besides, the deep cycle marine batteries are also capable.

Battery capacity is a major factor that affects trip duration and distance. For instance, a battery with 48V of rated voltage completely discharges at a continuous current of 62.5A in 1 hour, so its rated capacity is 3000Wh (62.5Ah*48V=3000Wh), we also can say its rated capacity is 62.5Ah. The maximum power of Pod Drive 3.0 is 3KW which means the system can be running at full power for about 1 hour when using this battery. You can select a battery with proper capacity based on your requirements for travelling time and distance. Note that the operating time and distance are also affected by the input power of the motor plus the external environment and temperature. In addition, the type and tonnage of boats also play important roles.

Users can choose NAVY Battery. It is a lithium-ion battery with 3000Wh capacity specially designed for NAVY series motors. When using with Pod Drive 3.0, one or more sets of NAVY Batteries are required. When more than one NAVY Batteries are used in parallel, communication cables should be used to connect NAVY Batteries and Pod Drive 3.0 for internal information exchange.

Users can also connect four 12V batteries in tandem to make a 48V battery set and use it to supply power for Pod Drive 3.0. Users can also enlarge the battery capacity by parallel configuration.

⚠ When using with NAVY Batteries, the batteries will work properly when correctly connected. When using non-ePropulsion batteries, before starting the pod drive, users should configure the batteries via the Remote Control for the first time use, otherwise the batteries may not work properly.

⚠ Only use the same batteries (same model, same capacity, same age and same manufacturer) in series or in parallel configuration. Variations in the batteries will cause damage to them.

2.2 Checking the Propeller

The propeller is assembled on the pod. Before use, check the propeller and if necessary, e.g. the original propeller is broken, change a new propeller. Follow instructions in Figure 2-1 to assemble a propeller properly.

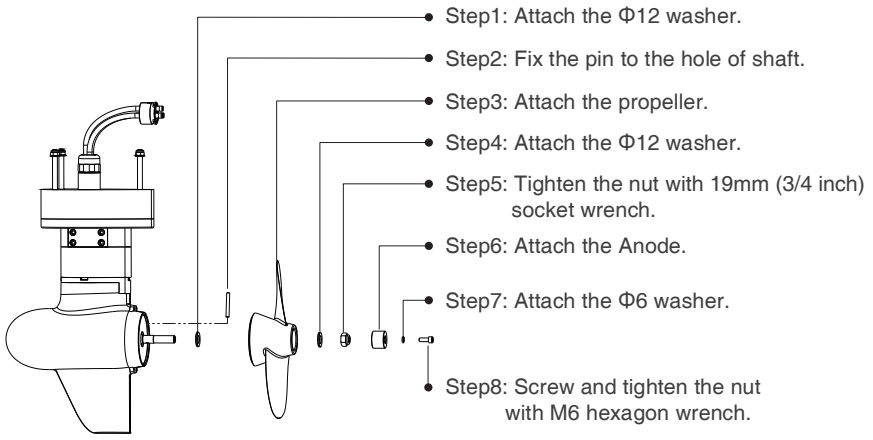

Figure 2-1