# **ELECTRIC MOTOR Estart+ Brushless 80lbs 12V**



# **USUAL MANUAL**



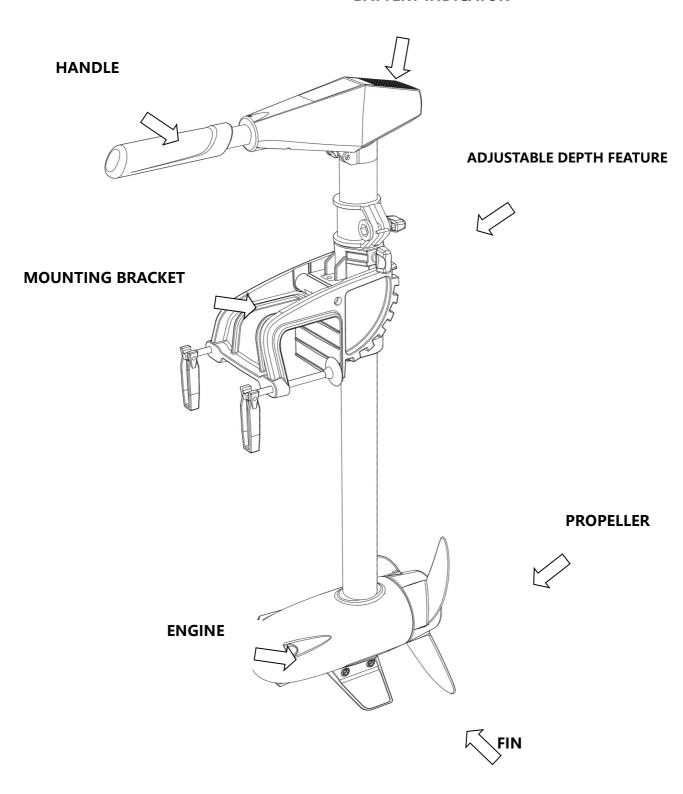
# **GENERAL INFORMATION**

Thank you for purchasing our product and wish you will enjoy it.

The trolling motors are designed and developed by professional engineering teams. With years of efforts. The power of trolling motor has widely covered from 18LBS to 150LBS in order to fit various costumers' requirements and provide different experiences.

Please read and retain this manual before using this electrical motor. The manual contains information that describes the procedure for safe operation and daily maintenance of your trolling motor. Safe operation will prevent from personal injury and product damage.

#### **BATTERY INDICATOR**



# FIRST TIME RUNNING

# **FIN INSTALLMENT (A)**

Take out the plastic fin out of the accessory box. Loosen off the screws. Find the screw holes on front endbell. Keep the fin and screw holes aligned. Insert the fin and re-tighten the screws.

Make sure the screws are properly tightened to prevent the fin from loosening.

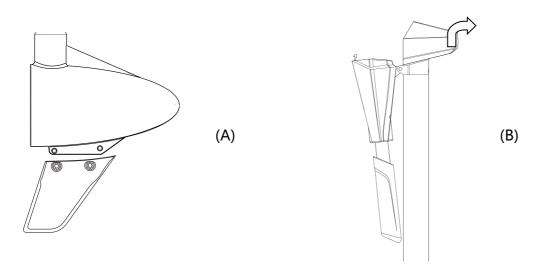
# **HANDLE INSTALLMENT (B)**

Turn the handle 90 degrees along the axis, clip it into the rear control box.

Keep the handle in horizontal and start to use.

Note: Do not fold the handle after installment, other-wise the self-lock could be damaged.

When need to repair, remove the sticker, pinch out the self-lock button, and fold the handle to save package size.



# **BATTERY CONNECTION METHOD**

Before connecting the motor's cables to the battery terminals, ensure all switches are in the OFF position. Stand clear of the propeller. Connect the red cable to the positive (+) terminal and the black cable to the negative (-) terminal. Make sure the terminals are clean before Connecting. A clean connection will minimize power wastage and give the maximum

power from the battery. (C)

Keep the battery in a well-ventilated location. Place a deep cycle marine battery is recommended for optimum performance.

The 3 indicator lights on the control box indicate 100%, 60%, 30% of battery status respectively. Make sure the battery is fully charged before use.

#### **AUDIO PATTERN**

AUDIO PATTERN	CONDITION
5 Beep	System ready
Continuous 2 beep	System ready but handle is not on the neutral position
Continuous 3 beep	High/low-voltage, high current condition, MOS problem
Continuous long beep	Motor stop operation, wait the handle back to neutral position



# **REPLACE THE PROPELLER (D)**

Hold the propeller blade and loosen the propeller knob. It can be done counter clock-wise manually without tools. Pull the propeller straight off. If prop is stuck, grasp one blade with one hand and tap on the backside of the opposite blade lightly with a rubber mallet, until the propeller comes off. If the propeller pin is bent, replace it. Align the new propeller with the propeller pin. Re-install the propeller knob and tighten firmly by hand clock-wise.

# ATTACHING THE MOTOR TO YOUR BOAT (E)

Attach the motor to the stern of the boat and tighten both mounting bolts securely while taking care not to over-tighten. To adjust the angle of the motor after attachment, hold the motor head with one hand and depress the positioning pin at the top of the mounting bracket with your other hand.

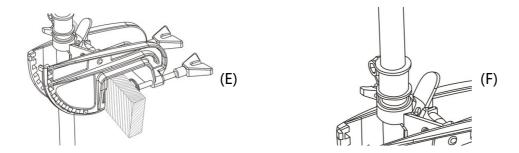
Press and hold the positioning pin until the desired angle has been reached next release the pin and ensure the mechanism locks securely.

Warning: Before the installation, make sure the area between column and bracket is clear.

# **DEPTH ADJUSTMENT (F)**

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Hold the motor shaft with one hand, loosen the depth adjustment screw and set the motor to the desired depth, then retighten the adjusting screw securely.



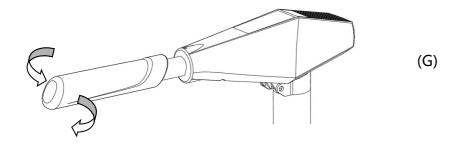
# **STEERING**

To adjust steering counter-force, simply loosen or tighten the counter force bolt. The ideal setting is one where the counter force bolt is just tight enough so that the boat will steer in the direction you are aiming without need for continual correction.

# SPEED CONTROL(G)

Align the arrow to the control of the handle to become neutral status. Make the handle to neutral position every-time before restart the motor.

Turn the handle anticlockwise the motor goes forward, turn the handle clockwise the motor goes reverse. The more you turn from 0, the faster motor will be.



# **TROUBLESHOOTING**

#### **POSSIBLE CAUSE/SOLUTION**

Speed loss	1: Check for line or weed on propeller.
	2: Check battery status.
	3: Check terminals on battery.
Motor noise/shake	1: Check propeller for line or weed.
	2: Check to see propeller is secure and not damaged.
	3: Check shaft to ensure it is not bent. Detach propeller and run
	motor visually to ensure shaft is not shaking. If shaft is damaged
	contact your retailer.

#### BRUSHLESS OUTBOARD X series USER MANUAL (2022)

Loss of speed setting	1: Check all wiring connections.
	2: Switch in motor may be burned, contact your retailer.
Tight steering	1: Loosen counter-force screw, apply lubricant and readjust.

#### **MAINTENANCE**

At the end of the day, wipe the motor down with a cloth soaked in warm water and then rinse unit with light spray from hose. Always check the propeller is clear of line or weed, regularly check all nuts, bolts and screws and lubricate all moving parts with an aerosol lubricant. Clean terminal connections regularly and check for frayed wires or loose connections.

# **STORAGE**

When storing the motor, lubricate all moving parts and screws and store in a well-ventilated, dry area. Do not leave the motor outside in winter for long periods, as this will damage the permanent magnet in the unit.

# **WARRANTY**

According to vendor's general condition of sale.

The motors are covered by a legal European warranty of 2 years (excluding defects in use).