

AMAREW[®]



EMPOWERS YOU

Thank you for choosing our AM-series.

www.amarew.com



Figure A

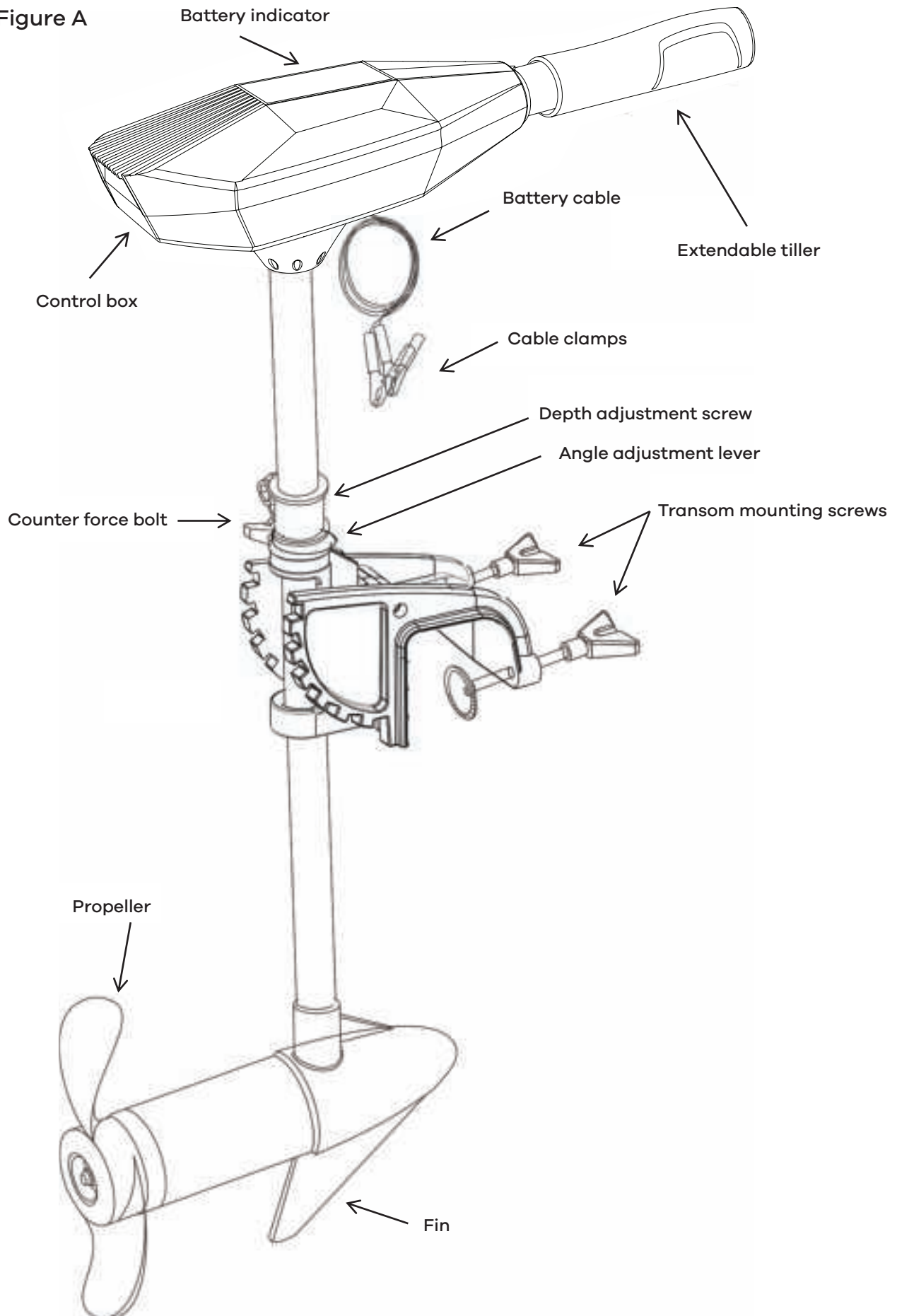




Table of contents

General information	p.4
Safety information	p.4
Wiring and battery recommendation	p.4
First time running	p. 5
Propeller installment	p. 5
Fin installment	p. 5
Tiller handle installment	p. 6
Usage instructions	p. 6
Attaching the motor to your boat	p. 6
Depth and steering adjustment	p. 7
Connecting a battery	p. 7
Battery indicator	p. 8
Speed control	p. 8
Replacing the propeller	p. 9
Maintanance	p. 9
Storage	p. 10
Technical data	p. 11
Warranty	p. 12



General information

Congratulations! And thank you for choosing an AMAREW® electric outboard motor. We hope you will love using it. AMAREW® Electric outboard motors are designed and developed by our specialized engineering team. After years of effort, we have succeeded in producing superior electric outboard motor series that fit various customers' requirements and provide a high level user experience.

Please read and retain this manual before using your motor. This manual contains information that describes the procedures for a safe operation and the daily maintenance of your electric outboard motor. A safe operation will prevent personal injuries and product damage.

Safety information

Do not allow children (<18 years old) to operate the electric outboard motor. Do not modify the unit in any way or add accessories that are not intended for this product. Never fully submerge the unit. If the unit is accidentally submersed, disconnect the battery(ies) and leave it to dry.

Warning: Always disconnect the power cables from the motor when replacing the propeller, removing debris around the propeller, charging the battery(ies), transporting the boat or when the motor is not in use.

Wiring and battery recommendation

For AM-series motors up to 66LBS, AMAREW® recommends to use a 12 volt deep cycle marine battery. For AM-series motors with a thrust over 66LBS, the deep cycle marine battery should be 24 volt. Each battery should at least have an 50 ampere rating or higher. To extend running time an additional battery could also be used.

Warning: Be sure that the speed control handle is in the zero ("0") position before connecting to the battery(ies), as a rotating propeller can cause personal injury.



First time running

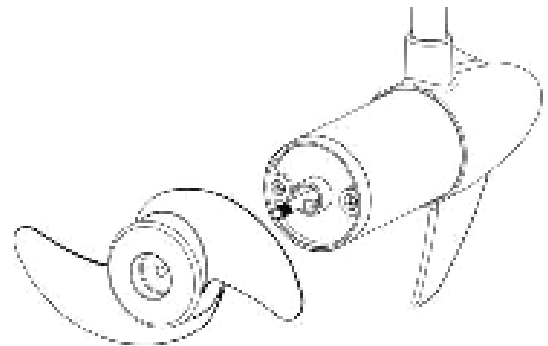
Propeller installment:

Make sure the propeller and the pin are aligned correctly. Otherwise the propeller cannot be properly fixed. Place the propeller, washer and knob respectively. Then hold the propeller with one hand and tighten the knob with your other hand, by turning it clockwise (see figure B).

Warning: Always disconnect the power when installing the propeller. Watch out for the sharp edges of the propeller during the installation.



Figure B



Fin installment:

Take the plastic fin out of the accessory box (see figure C). Disconnect the screws and find the screw holes on the bottom side of the lower unit. Keep the fin and screw holes aligned. Then insert and tighten the screws with a wrench or spanner. Make sure the screws are properly tightened to prevent the fin from loosening.



Figure C



Tiller handle installment:

Find the sticker securing the marble on the aluminum pipe and carefully tear it off. Keep the tiller handle aligned with the aluminum pipe. Adjust the direction in accordance with the plastic part on top of the aluminum pipe (see figure D). Adjust the angle to push the aluminum pipe in to the handle. Lightly press down the marble to get it through the handle. Once you hear the "click" and the handle is pushed to the end, the handle is fully in place.

Warning: This is a one-way installment. Once installed, do NOT attempt to pull out the handle again, since the controls could be damaged.



Figure D

Usage instructions

Attaching the motor to your boat:

Attach the motor to the stern of the boat and tighten the two transom mounting screws securely while taking care not to over tighten. To adjust the angle of the motor after you attached it to the stern of the boat, hold the motor head with one hand and press the angle adjustment lever with your other hand (see figures A and E). Press and hold the angle adjustment lever until the desired angle has been reached. You can now release the lever while ensuring the mechanism locks securely.

Warning: When adjusting the angle of the electric outboard motor, make sure the area between the shaft and the hull of the boat is clear, as you might get injured. When mounting or detaching the electric outboard motor, make sure that the battery is disconnected.

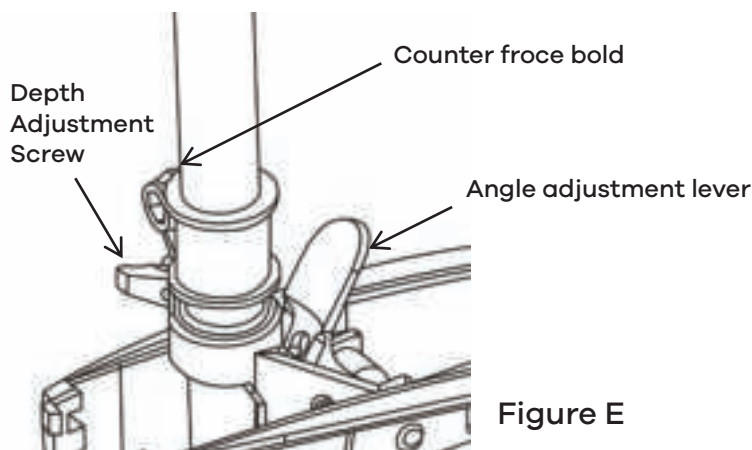


Figure E

Depth and steering adjustment:

Hold the motor shaft with one hand, loosen the depth adjustment screw and set the motor to the desired depth. After the desired depth is reached, retighten the depth adjustment screw securely. Adjust the steering force according to your needs by loosening or tightening the counter force bolt (see figures A and E).

Warning: The motor can only be used in waters with a depth of at least 80 cm

Connecting a battery:

Before connecting the cable clamps to the battery terminals, ensure that the speed control handle is in the zero ("0") position and be sure to stand clear of the propeller. Make sure that the battery terminals are clean, as a clean connection will minimize power waste and extracts maximum power from the battery. If required, connect the batteries in series first.

Then connect the red cable to the positive (+) terminal and the black cable to the negative (-) terminal (see figure F). You will see that the battery indicator has turned on. The motor is now powered up.

Warning: Make sure to always have the speed control handle in the zero ("0") position before connecting the battery(ies), as a rotating propeller can cause personal injury. Remember to always disconnect the motor from the battery(ies) before the motor leaves the water, as a rotating propeller can cause personal injury.



Battery indicator:

The battery indicator (see figure A) represents the actual battery voltage. The remaining battery capacity depends on the type and the specifications of the battery that is being used. Please refer to your battery specifications in order to obtain a thorough understanding of the remaining power.

Warning: Make sure to test the range of your battery(ies) carefully, as the motor will only have limited power once the battery(ies) is drained.

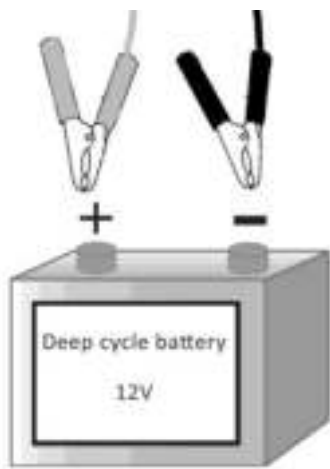


Figure F

Speed control:

Make sure the speed control handle is in the zero ("0") position. If you see that the battery indicator is turned on, this means that the motor can be started any time. You can now adjust the speed according to your wish, in five forward and three reverse speeds, by turning the handle. Turn the handle clockwise to move forward and anticlockwise to go backwards (see figure G). When you don't want to move, set the handle back into the zero ("0") position. No power will be used in this setting. The telescopic tiller can be extended up to 14cm, to accommodate your needs, simply by pulling out the handle.

Warning: Always disconnect the battery(ies) once the motor leaves the water, as a rotating propeller can cause personal injury.

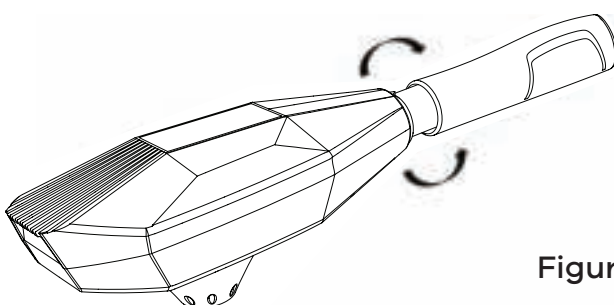


Figure G



Replacing the propeller

Hold the propeller blade and loosen the propeller knob. It can only be done counter clockwise and manually, without tools. Pull the propeller straight off. If the propeller is stuck, grasp one blade with one hand and tap lightly on the backside of the opposite blade with a rubber mallet until the propeller comes off. If the propeller pin is bent or broken, replace it. Align the new propeller with the propeller pin. Reinstall the propeller knob and tighten it manually and clockwise (see figure B).

Warning: Make sure that the motor has been disconnected from the battery(ies) before replacing the propeller. Do not strike the propeller pin with a hammer to remove the pin. Damaging the motor in this way will not be covered by warranty.

Maintenance

1. Before each use, make sure to check the wiring. Check for loose connectors, wire rust, scratches and cracks in the cables and connectors. Clean the connectors if they are not 100% clean and replace the cables and connectors whenever necessary.
2. After each use, wash the engine thoroughly with fresh water. Especially after usage in salt water.
3. Every month, add grease to all the moving parts in order to prevent corrosion.
4. When the propeller breaks, remove the propeller and replace the pin (see previous next section).

Warning: A lack of maintenance on the wiring and connectors may cause the wiring and connectors to overheat or even burn.

Warning: Remember to wash the motor with fresh water each time after it has been used in salt water, as it this greatly reduces the possibility of corrosion.



Storage

When storing the motor, lubricate all moving parts and screws and store it in a well ventilated, dry area. Do not leave the motor outside for more than one day, especially not in the water as this will damage the lower unit.

Problem	Solution
Speed loss	1: Check for line or weed on the propeller.
	2: Check the battery status.
	3: Check the battery terminals, the cable clamps and the battery cable.
Motor noise/shake	1: Check for line or weed on the propeller.
	2: Check whether the propeller is secure and not damaged.
	3: Check the shaft to ensure it is not bent. Detach the propeller en run the motor to visually make sure that the shaft is not shaking. If the shaft is damaged, contact your dealer.
Loss of speed setting	1: Check the battery terminals, the cable clamps and the battery cable.
	2: The speed controller in the control box might be damaged, contact your dealer.
Tight steering	1: Loosen the counter force screw, apply lubricant and readjust.



Technical data

AMAREW® electric outboard motor	AM30	AM40	AM48	AM58	AM66	AM86
Input power in W	288	408	504	612	660	960
Static thrust in lbs	30	40	48	58	66	86
Voltage in V	12					24
Maximum current in A	24	34	42	51	55	40
Total weight in kg	7	9	9	11	11	13
Control	Tilt + Extendable Tiller					
Speed control (FWD/REV)	5/3					
Shaft length in cm	76					
Battery gauge	Yes					
Overheat protection	No					
Low-voltage protection	No					
Stall protection	No					
Start protection	No					
Reverse connection protection	No					



Warranty

Limited warranty coverage (2 years):

AMAREW® warrants its products against defects in material or workmanship. This warranty offers coverage for two years from the date of purchase, depending on the specific parts for which warranty is requested (see the table below). The reference for the coverage period is the product serial number together with your original proof of purchase. The repair or replacement of parts or the provision of service under this warranty, does not extend the duration of the warranty compared to the original expiration date.

Conditions that must be met in order to obtain warranty coverage

Warranty coverage is available only from authorized AMAREW® dealers and resellers. Routine maintenance, as discussed in this manual, is mandatory to maintain warranty coverage.

How to obtain warranty coverage

Please return the product to an authorized dealer for inspection if the product is not working properly. A proof of purchase must be shown in order to obtain warranty. The dealer then takes care of inspection and any necessary repairs.

If the services provided are not covered by the warranty, the buyer must pay for all labor, all material and all other expenses related to the provided service. The buyer has to pay for all related transportation and / or travel time.

This warranty does not cover the following aspects

This warranty does not cover routine maintenance, adjustments, damage due to misuse, abnormal use, use of the product that is not specified in this manual, renunciation, immersion, installation in a way that is not specified in this manual, charging the battery without detaching motor, handling, improper maintenance or repair, use of an accessory or part that is not made or sold by AMAREW®, extending or trimming of cables, or the modification and/or removal of parts.