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#### **GENERAL INFORMATION**

Thank you for having our product and wish you enjoyed it.

NERAUS™ trolling motors are designed and developed by professional engineering working teams. With years of efforts the power of NERAUS™ trolling motor has widely covered 32LBS, 36LBS, 40LBS, 46LBS, 50LBS, 55LBS and 86LBS in order to fit various costumers' requirements and provide different experiences.

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

### **SPECIFICATIONS**

ITEMS-NO.	THRUST IN LBS	THRUST IN KG	INPUT	INPUT POWER	MAX SPEED*
NRS-32X	32	14.5	12V, 26A	312W	5 KM/H
NRS-36X	36	16.3	12V, 29A	348W	6.5 KM/H
NRS-40X	40	18.1	12V, 34A	408W	7.8 KM/H
NRS-46X	46	20.9	12V, 40A	480W	9.5 KM/H
NRS-50X	50	22.7	12V, 46A	552W	12 KM/H
NRS-55X	55	25.0	12V, 52A	624W	14.5 KM/H

<sup>\*</sup> Since speed depends on many factors, such as loading, water condition and wind speed etc., it would be difficult to give an accurate speed rating, we give the speed for reference purposes: Boat size, 2.3m\ Loading, 90kg\ Quiet water.

### WIRING AND BATTERY RECOMMENDATIONS

### **Battery Type**

Recommended battery(s): 12-volt Deep Cycle battery or Marine battery, battery should has at least 50-ampere hour rating or higher. To extend running time an additional battery can be used. See section on battery connection method.

#### Circuit Protection

It is recommended to installing a 50 amp manual reset circuit breaker in the electric outboard motor leads within 1.8m (72 Inches) of the battery(s).

### Cable Size

If extending the standard battery cable supplied with the product NERAUS™ recommends the use of 13mm₂ wire (6-gauge wire, AWG).



## WARNING

Batteries contain sulphuric acid, which can cause severe burns. Avoid contact with skin, eyes and clothing. The battery also produces hydrogen and oxygen gases when being charged. This potentially explosive mixture escapes through the fill vent cell caps and may form an explosive atmosphere around the battery for several hours after it has been charged. Electrical arcing or flames can ignite the gas and cause an explosion, which may shatter the battery and could cause blindness or other serious injury.



Be sure all switches are in the OFF position before connecting to battery or batteries. Electrical arcing near the battery could ignite hydrogen gas and cause the battery to explode.

### **SAFETY INFORMATION**

Do not allow children to operate the electric outboard motor.

## Do not modify the unit in any way or add accessories not intended for this product.

Never fully submerse the unit, if unit is accidentally submersed disconnect battery and leave to dry.



Always disconnect power from the motor when replacing propeller, removing debris around the prop, charging batteries, transporting boat or when the motor is not in use.

To prevent accidental damage of the fiberglass shaft, do not over tighten the mounting bracket. Only use this product between the temperatures of -20C to +45C (-4F to +113F).

## User(s) should always wear approved Life Jackets.

#### FIRST TIME RUNNING

- 1. Place Electric Outboard onto the back of the vessel in Stow away position.
- 2. Loosely tighten Transom Mounting Screws till they grip the Transom Mount.
- 3. Press the Tilt Lever and slowly let the motor enter the water.
- 4. Use the Depth Adjuster Collar to adjust the height of motor (Recommend running depth 150mm and 300mm below the waterline).
- 5. When you are satisfied that the motor is at a safe depth and isn't too close or in danger of hitting the bottom of the lake, river or other water ways you may proceed to tighten the Transom Mounting Screws.
- 6. Once this is done it should be safe to connect the battery to the motor. Ensure that the twist grip is in the neutral position and that the nuts are tight on the terminals to prevent a poor connection.

- 7. Select the desired speed and direction using twist grip on the tiller arm.
- 8. Do not go from full forward speed to full reverse speed without letting the propeller stop turning first or motor damage may occur.

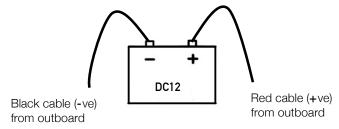
### **MOTOR USAGE**

The motors package does not include batteries; please choose battery with 12V (24V for 86LBS motor) output to fit this motor, the recommended type of battery is deep cycle battery or marine battery, as they will last much longer and hard to break.

## **Battery Connection Method**

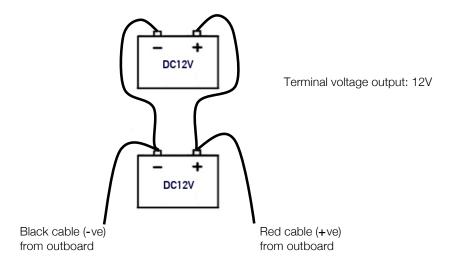
### Connect with one battery (DC12V)

The red wire should connect to anode; the black wire should connect to cathode. (It is recommended install 50 amp circuit breaker in line with positive lead.)



### Connect with two batteries in parallel (DC12V)

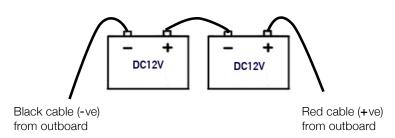
The red wire should connect to anode; the black wire should connect to cathode. (It is recommended install 50 amp circuit breaker in line with positive lead.)



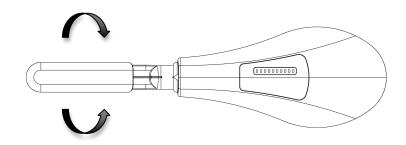
### Connect with two batteries in series (DC12V)

The red wire should connect to anode; the black wire should connect to cathode. (It is recommended install 50 amp circuit breaker in line with positive lead.)

Terminal voltage output: 24V



## How To Control The Motor





Remember always disconnect from batteries once the motor leaves water as a rotating propeller can cause personal injury.

## On/Off Speed Control

Rotate handle clockwise to obtain any of the 5 forward speeds. Rotate handle anticlockwise for any of the 3 reverse speeds. To stop the motor from running, position the handle following the arrow marker and position on level 0.

## Battery Level Indicator

There are 10 white LED lights on the top cover. When seven (7) LED's are out, the meter is indicating that the input voltage is less than 9.5V (normal voltage draw, 12V). It is advised to disconnect the motor from the battery to prevent damage to the battery and recharge.

## Adjusting Motor Depth

Position the depth adjustment collar so the propeller blades will be submerged 150mm - 300mm (6inches - 12inches) below the waters surface.

## Raising The Motor

It is recommended to disconnect the battery before carrying out this procedure to prevent accidental running of the motor. To raise the motor out of the water push and hold the tilt lever and with the other hand push down on the end of the handle to bring the motor up and of the water. Then release the tilt lever to lock in place.

## Lowering The Motor

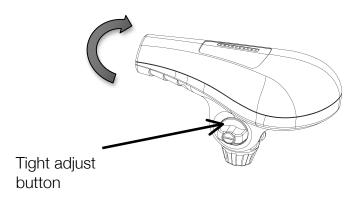
It is recommended to disconnect the battery before carrying out this procedure to prevent accidental running of the motor. Press the tilt lever while with the other hand; hold onto the end of the handle to steady the motor into the water. Once lowered release the tilt lever to lock into position.



## **CAUTION**

Remember to wash the motor by using fresh water after used it in salt water as it can greatly reduce the possibility of corrosions.

## Adjust The Angle Of Handle



Maritim X series motor is able to adjust the angle of handle to make comfortable for user's control. Please follow these steps to make adjustment.

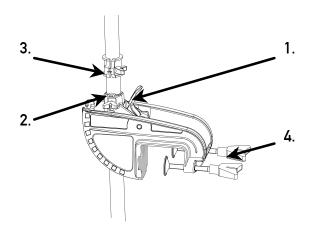
- 1. Loose the button so that the handle can move upwards and downwards freely.
- 2. Keep the handle to the adequate angle that is suitable to control.
- 3. Tight the button to finish the adjustment.



## WARNING

The angle adjustment range is  $\pm$  30°, do **NOT** exceed this limit; force to rotate the handle will cause the motor damage.

## TRANSOM MOUNT INSTALLATION





## **CAUTION**

Before the installation, Make sure the area between column and bracket is clear.

- 1. Tilt Position Lever The lever allows the user to adjust the tilt (angle) of the motor. Push tilt position lever, adjust tilt of motor, release lever.
- 2. Steering Tension Adjustment -To adjust the steering resistance, simply tighten or loosen the tension knob located on front of the mount.
- 3. Depth Adjustment Collar -The depth of the motor can be adjusted up and down by loosening the depth collar tension knob located on the column directly above the mount. The column can be adjusted and the motor can be positioned at the desired depth by retightening the tension knob.
- 4. Transom Screws -The transom clamp screws allow for easy motor removal and installation. Mount your motor on the transom then tighten the transom clamp screws securely.



# **CAUTION**

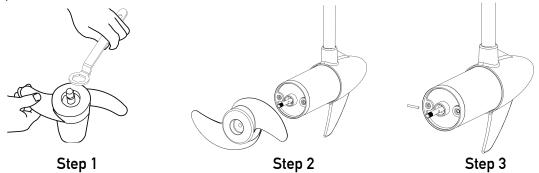
The motor can only be used in water that deeper than 0.7m.

## **HOW TO REPALCE THE PROPELLER**



Make sure that the motor has been disconnected from batteries.

Hold the propeller blade and loosen the propeller nut using the prop spanner supplied or a set of needle nose pliers. Remove the propeller nut. 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. Reinstall the propeller nut and tighten firmly by hand, tighten with spanner another 1/4 turn.





Do not strike bent prop pin with hammer to remove pin. Damage to motor armature may occur that would not be covered by warranty.

## **DAILY MAINTAINANCE**

- 1. Check behind the propeller after each day for weeds, fishing line or other debris that may get wrapped behind the propeller.
- 2. Lubricate all the pivot points with a **non-aerosol** lubricant. Never use aerosol lubricants to grease or oil any part of the unit. Many spray lubricants contain harmful propellants that can cause damage to various parts of your fishing motor.
- 3. Check tightness of the battery lead connections.
- 4. Visually check condition of main battery cables.

- 5. Inspect for loose or corroded wiring connections.
- 6. Always thoroughly rinse your electric outboard motor with fresh water after every use in salt water. Only rinse the areas that have been in contact with salt water, avoid getting the top cover wet as this may damage the circuitry inside.
- 7. Make visuals inspections for tightness of all nuts, bolts and screws.
- 8. Recharge batteries after each use. Follow the battery manufacture's recommendations for battery maintenance.
- 9. During freezing temperatures, when your electric motor is not being used, it should be stored in an area where it will not freeze.
- 10. Never connect the wire with wrong electrode. Must disconnect with battery during maintenance.

### TROUBLE SHOOTING

### Loss Of Power

Propeller may be fouled. Remove propeller, clean and replace.

Battery connections may be corroded.

Battery has low voltage. Recharge.

Battery may be faulty, recharge and check.

Insufficient cable size from battery to motor wiring, 13mm<sup>2</sup> thickness / 6 gauge wire (AWG) recommended.

Bad or faulty connection in boat wiring or electric motor wiring

Permanent magnet cracked or chipped. Motor will whine or grind.

### Motor Makes Excessive Noise Or Vibration

Propeller may be fouled.

Propeller by be damaged or unbalanced.

Check to see if propeller is secured.

Bent armature. Remove propeller, set at medium speed, turn unit on and watch armature wobble.

Turn propeller by hand. It should turn freely with a slight magnetic drag.

Bearing\bushes may be worn out.

### Motor Fails To Run

Check fuse\circuit breaker on boat for electric motor.

Check for loose or corroded connections.

Check plug for loose or bad connection.

Test main rotary switch.

Turn prop by hand. It should turn freely with a slight magnetic drag.

Total battery failure. Recharge and check voltage.

Propeller Fouled.

## Motor Loses One Or More Speeds

Lose wire on rotary switch. Check wiring diagram.

Lose connection in top housing.

Rotary switch damaged.

Speed coils in lower unit may be burned.

#### WARRANTY

## **Duration Of Coverage**

This Limited Warranty provides coverage for two (2) years from the date the product is first manufactured from factory. Therefore the ultimate purchaser may have limited warranty coverage period for less than two (2) years due to the time of transferring, sale and storage. The only reference for duration of warrant coverage is the serial No., which is imprinted on the surface of motor's transom mount. The repair or replacement of parts, or the performance of service under this warranty, does not extend the life of this warranty beyond its original expiry date.

# Conditions That Must Be Met In Order To Obtain Warranty Coverage

Warranty coverage is only available from an authorized dealer to distribute the product in the country in which the sale occurred. Routine maintenance out-lined in the Operation and Maintenance section must be performed in order to maintain warranty coverage. If the retail customer performs maintenance, NERAUS™ reserves the right to make future warranty coverage possible only with proof of proper maintenance.

## How To Obtain Warranty Coverage

Delivering the product to an authorized dealer for inspection should make warranty claims; proof of purchase will be required to receive warranty.

The dealer will then arrange for the inspection and any necessary repair. The purchaser in that case shall pay for all related transport charges and/or travel time. If the service provided is not covered by the warranty, purchaser shall pay for all related labor and material, and any other expenses associated with that service.

#### What Is Not Covered

This limited warranty does not cover routine maintenance items, adjustments, normal wear and tear, damage caused by abuse, abnormal use, operation of the product in a manner inconsistent with the recommended operation/duty cycle section of the Operation and Maintenance Manual, neglect, accident, submersion, improper installation (proper installation specification and techniques are set forth in the Operations and First time running sections in this manual), improper service, use of an accessory or part not manufactured or sold by us, or alteration or removal of parts. Expenses related to haul-out, launch, towing, storage, telephone, rental, inconvenience, slip fees, insurance coverage, loan payments, loss of time, loss of income, or any other types of accidental or consequential damages are not covered by this warranty.

Check the following chart to see what parts are in warrant coverage.

Motor Rotor	Free Deplete within 2 Veers Durge dietributer must keep faultu part
MOTOL HOTOL	Free Replace within 2 Years, By sea, distributor must keep faulty part
	for inspection
Motor Magnet	Free Replace within 2 Years, By sea, distributor must keep faulty part
	for inspection
Speed Switch	Free Replace within 1 Year, By sea, distributor must keep faulty part
	for inspection
Carbon Brush Holder	Free Replace within 1 Year, By sea, distributor must keep faulty part
	for inspection
Propeller	Not available, the end-user should pay for it.
Screw	Not available, the end-user should pay for it.
Telescoping Handle	Free Replace within 1 Year, By sea, distributor must keep faulty part
	for inspection
10 Points Battery Meter	Free Replace within 1 Year, By sea, distributor must keep faulty part
	for inspection
Plastic Control Box	Free Replace within 1 Year, By sea, distributor must keep faulty part
	for inspection
Electrical Wire	Free Replace within 1 Year, By sea, distributor must keep faulty part
	for inspection
Sticker	Not available, the end-user should pay for it.
Rubber Band	Not available, the end-user should pay for it.
Other Electrical Parts	Free Replace within 1 Year, By sea, distributor must keep faulty part
	for inspection
Other Metal Parts	Free Replace within 1 Year, By sea, distributor must keep faulty part
Other Metal Parts	Free Replace within 1 Year, By sea, distributor must keep faulty part for inspection

## **LIABILITY FREE CLAUSE**

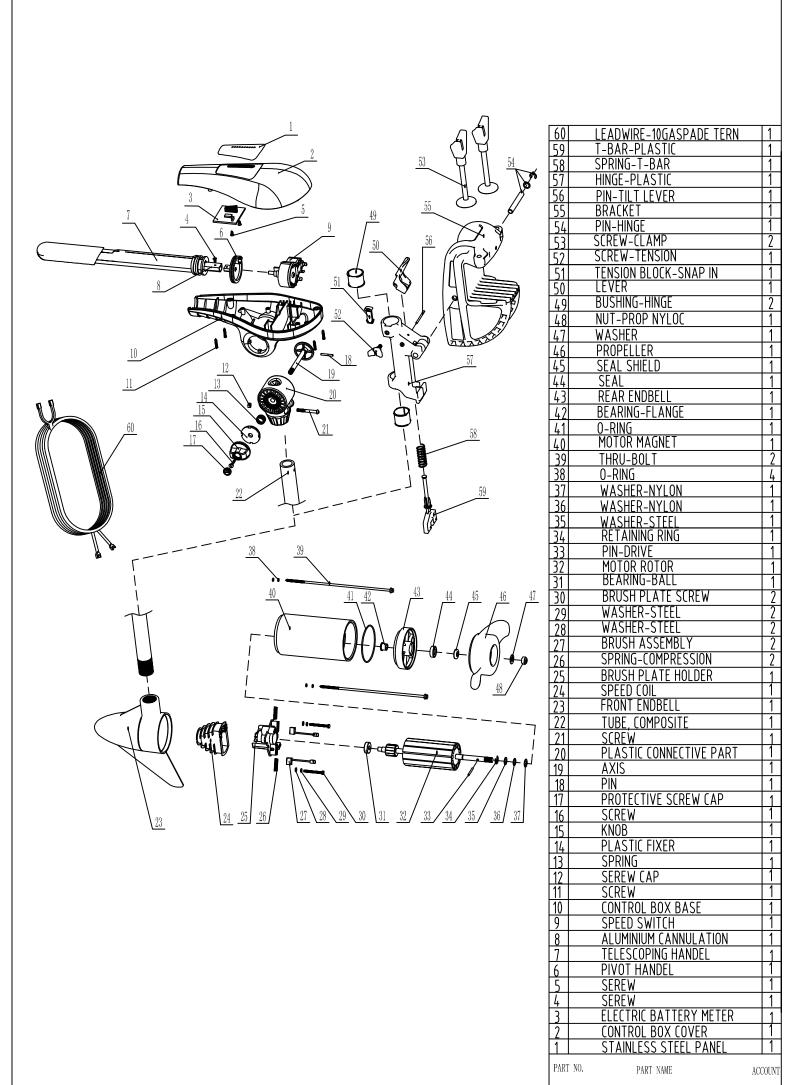
The damage caused by falling down, crash, cut, pierce or other man-made behaviors;

The end-user did not follow the instruction manual;

The end-user ignored our warning information;

Placed or changed the motors under wet circumstance may damage the batteries, the circuit or other electric parts.

Used the parts or accessories that are not from us



## **Declaration of Conformity for Recreational Craft Propulsion Engine with the requirements of Directive** 89/392/EEC as amended by 89/336/EEC.

Name of Engine manufacturer: Neraus Sports & Leisure Article Company Ltd,

Address: No. 1888 TongTu Road, Ningbo, China

Engine type approved according to: Directives 89/392/EEC, 89/336/EE

Description of Engine(s) and Essential Requirements

Engine Type: Outboard Engine Fuel Type: Electric

This declaration of conformity is issued under the sole responsibility of the manufacturer. I declare on behalf of the manufacturer that the motor(s) is (are) in conformity with the type(s) for which above mentioned EC, EMC and ROHC type-examination or type approval certificate(s) has (have) been issued and it will meet the requirements of Directive 89/392/EEC, 89/336/EEC as amended when installed in a recreational craft, in accordance with the manufacturer's supplied instructions

For and on behalf of NERAUS SPORTS & LESURE ARTICLES COMPANY LIMITED NERAUS SPORTS & LESURE ARTICLES COMPANY LIMITED ART