

# **STRIKER**®



*Appearance may vary*

## **Electric Trolling Motor**

### **User Manual**

[Revision 1.0 January 2018]




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READ THIS MANUAL CAREFULLY BEFORE USE – FAILURE TO DO SO MAY RESULT IN INJURY, PROPERTY DAMAGE AND MAY VOID WARRANTY. • KEEP THIS MANUAL FOR FUTURE REFERENCE. • Products covered by this manual may vary in appearance, assembly, inclusions, specifications, description and packaging.

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# Safety

Safety messages are designed to alert you to possible dangers or hazards that could cause death, injury or equipment or property damage if not understood or followed. Safety messages have the following symbols:

 <p>You <b>WILL</b> be <b>KILLED</b> or <b>SERIOUSLY INJURED</b> if you do not follow instructions.</p>	 <p>You <b>CAN</b> be <b>KILLED</b> or <b>SERIOUSLY INJURED</b> if you do not follow instructions.</p>	 <p>You <b>CAN</b> be <b>INJURED</b> if you do not follow instructions or equipment damage may occur.</p>
<p>It is important that you read and understand the instruction manual before use and keep the manual in a safe place for future reference. Safety information presented here is generic in nature – some advice may not be applicable to every piece of equipment.</p> <p>All safety precautions must be observed to reduce the risk of personal injury when operating the equipment.</p> <p>The term “equipment” refers to your product, be it electrical mains, battery or petrol engine powered.</p> <p><b>IMPORTANT</b> – Handle the equipment safely and carefully.</p> <p><b>BEFORE USE</b> - If you are not familiar with the safe operation/handling of this equipment, or are in any way unsure of any aspect of suitability or correct use it for your application, you should complete training conducted by a person or organization qualified in safe use and operation of this equipment, including fuel/electrical handling and safety.</p> <p><b>WARNINGS</b></p> <ul style="list-style-type: none"> <li>• Read all safety warnings and all instructions. Failure to follow warnings and instructions may result in electric shock, fire and/or serious injury.</li> <li>• Never run a combustion engine in confined areas.</li> <li>• Do not operate the equipment in flammable or explosive environments, such as in the presence of flammable liquids, gases or dust. Engine and equipment may create sparks or heat that may ignite vapours, dust etc</li> <li>• Keep clear of moving parts.</li> <li>• This equipment may be a potential source of electric shock if misused.</li> <li>• Do not operate the equipment if it is damaged, malfunctioning or is in an excessively worn state.</li> <li>• Do not allow others to use the equipment unless they have read this manual and are adequately trained.</li> <li>• When using the equipment, basic safety precautions detailed here must always be followed to reduce the risk of fire, electric shock, personal injury and material damage.</li> <li>• When wiring electrically powered equipment, follow all electrical and safety codes.</li> <li>• Ensure all power sources conform to equipment voltage requirements and are disconnected before connecting equipment.</li> </ul>	<p><b>General Work Area Safety</b></p> <p>Work areas should be clean and well lit.</p> <p>Do not operate the equipment if bystanders, animals etc are within operating range of the equipment or the general work area.</p> <p><b>Personal Safety</b></p> <p>Keep packaging away from children - risk of suffocation! Operators must use the equipment correctly. When using the equipment, consider conditions and pay due care to persons and property.</p> <p>Prevent unintentional starting of the equipment - ensure equipment and power source switches are in the OFF position before connecting or moving the equipment. Do not carry equipment with hands/fingers touching any controls. Remove any tools or other items that are not a part of the equipment from it before starting or switching on.</p> <p>Stay alert and use common sense when operating equipment. Do not overreach. Keep proper footing and balance at all times. Do not use equipment when tired or under the influence of drugs, alcohol or medication. This equipment is not intended for use by persons with reduced physical, sensory or mental capabilities.</p> <p>You must wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect from serious injury, including eye injury, inhalation of toxic fumes, burns, and hearing loss. Always wear eye protection. Protective equipment such as respirators, non-skid safety shoes, hard hat, hearing protection etc should be used for appropriate conditions. Other people nearby should also wear appropriate personal protective equipment. Do not wear loose clothing or jewellery, which can be caught in moving parts. Keep hair and clothing away from the equipment.</p> <p>If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.</p> <p><b>General Equipment Use and Care</b></p> <p>Do not force the equipment. Use the correct equipment for your application. The correct equipment will perform better and be safer within its design parameters. Do not use the equipment if the ON/OFF switch malfunctions – any equipment that cannot be controlled with the ON/OFF switch is dangerous and must be repaired.</p>	<p>Use the equipment and accessories etc. in accordance with these instructions, considering working conditions and the work to be performed. Using the equipment for operations different from those intended could result in hazardous situations.</p> <p>Before use, inspect the equipment for misalignment or binding of moving parts, loose components, damage or any other condition that may affect its operation. If damaged, have the equipment repaired by an authorized service centre or technician before use.</p> <p>Always keep the equipment and accessories (cutting tools, nozzles, bits etc) properly maintained. Keep the equipment, controls and handles dry and free from dirt, oil and grease.</p> <p>Store the equipment out of reach of children or untrained persons. To avoid burns or fire hazards, let the equipment cool completely before transporting or storing. Never place the equipment in places where there are flammable materials, combustible gases or combustible liquids etc.</p> <p>The equipment is not weather proof, and should not be stored in direct sunlight, at high ambient temperatures or locations that are damp or very humid.</p> <p><b>Product Use and Care</b></p> <p><b>BATTERY TYPE</b></p> <ul style="list-style-type: none"> <li>• Recommended battery(s): 12-volt Deep Cycle battery or Marine battery. To extend running time either a larger capacity or an additional battery can be used. See section on battery connection method. NOTE: 90lbs/1 00lbs model requires a 24-volt battery.</li> </ul> <p><b>CIRCUIT PROTECTION</b></p> <ul style="list-style-type: none"> <li>• It is recommended to install a manual reset circuit breaker in the electric outboard motor leads within 1.8m (72 Inches) of the battery(ies).</li> </ul> <p><b>CABLE SIZE</b></p> <ul style="list-style-type: none"> <li>• If extending the standard battery cable supplied with the product, it is recommended to use 13mm<sup>2</sup> wire (8-gauge wire, AWG).</li> </ul>

## Electric Trolling Motor

**WARNING**

- Batteries contain sulfuric 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.
- 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 submerge the unit, if unit is accidentally submersed disconnect battery and leave to dry.
- To prevent accidental damage of the glass fibre 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.
- 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.

**General Service Information**

- Have the equipment serviced or repaired at authorized service centres by qualified personnel only.
- Replacement parts must be original equipment manufacturer (OEM) to help ensure that equipment safety is maintained.
- Do not attempt any maintenance or repair work not described in this instruction manual.
- After use, the equipment and components may still be hot – allow the equipment to cool and disconnect spark plugs and/or electrical power sources and/or batteries from it before making adjustments, changing accessories or performing repair or maintenance.
- Do not make adjustments while the equipment is running.
- Perform all service related activities under suitable conditions, such as a workshop etc.
- Replace any worn, damaged or missing warning labels immediately.
- Do not clean equipment with solvents, flammable liquids or harsh abrasives.

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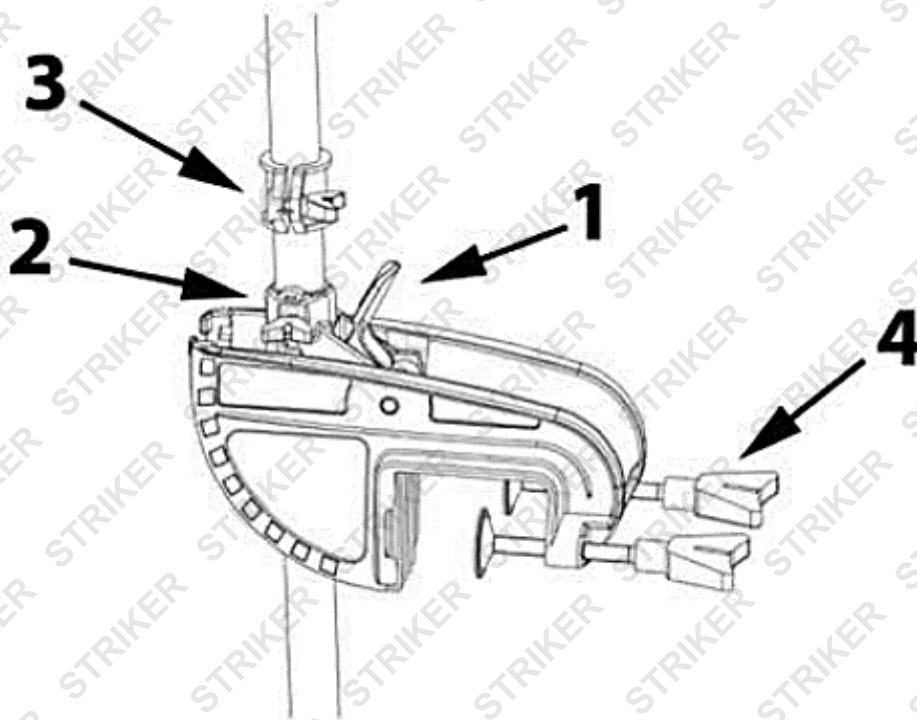
# Assembly

## First Use Set-Up

1. Place Electric Trolling Motor onto the back of the vessel in the Stow away position.
2. Tighten the 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 the motor (Recommended running depth between 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 a lake, river or other water way, 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 the twist grip on the tiller arm.
8. Do not go from full forward speed to full reverse speed without letting the propeller stop rotating first, otherwise motor damage may occur.

## Transom Mount Installation

**CAUTION!** Before the installation, make sure that the area between the column and bracket is clear.



1. **Tilt Position Lever** - This lever allows the user to adjust the tilt (angle) of the motor. Push tilt position lever, adjust tilt of motor, the release the 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 re-tightening 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 deeper than 0.7m.

# Operation

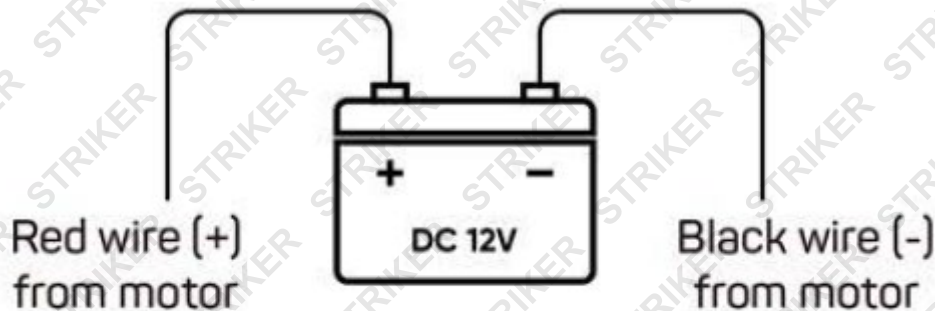
## Motor Usage

The motors' packaging does not include batteries; please choose a battery with 12V (24V for 90LBS and 100LBS motor) output to fit this motor. The recommended type of battery is a deep-cycle battery or a marine battery, as they will last much longer and are designed for this type of application.

## Battery Connection Method (12V only)

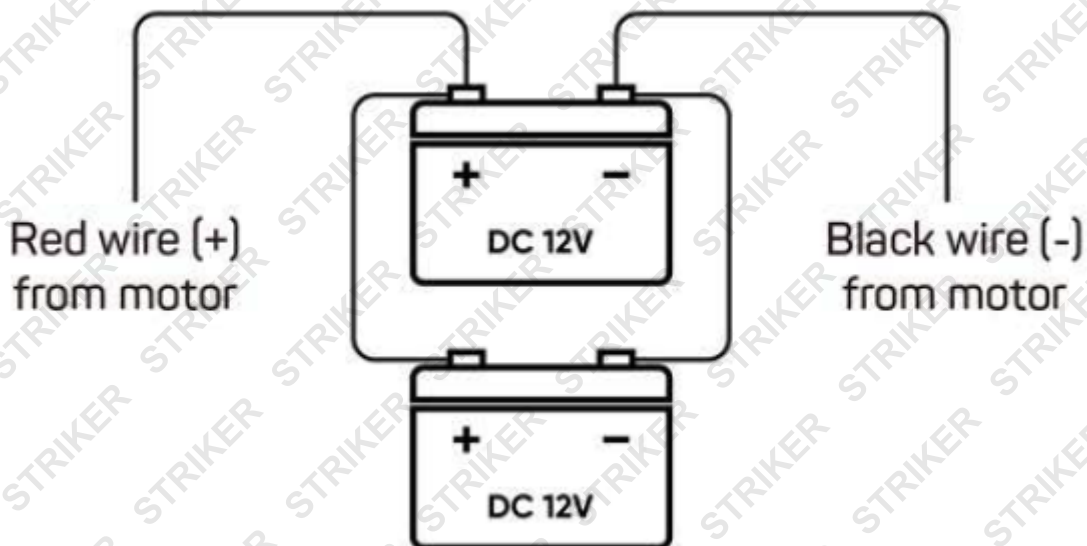
### Connection with One Battery (12V DC)

The red wire should connect to the positive node while the black wire should connect to the negative node. (It is recommended to install in-line with the positive node.)



### Connection with Two Batteries in Parallel (12V DC)

The red wire should connect to the positive node while the black wire should connect to the negative node. (It is recommended to install the circuit breaker in-line with the positive node.)

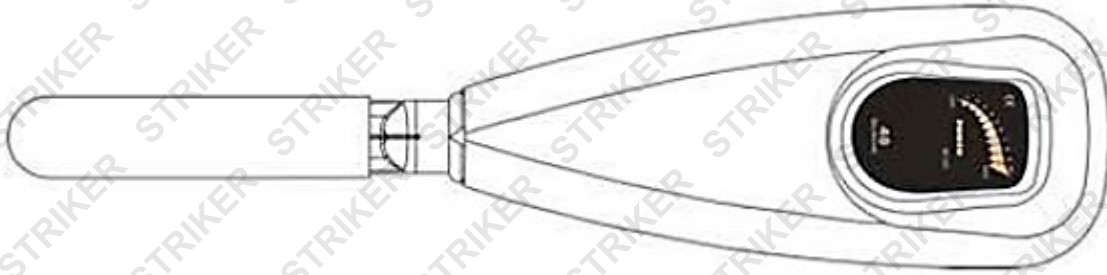




Electric Trolling Motor

## Controlling the Motor

Rotate the handle to make the motor work.



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**WARNING!** Remember to always disconnect the motor from the battery(ies) once the motor leaves the water, as a rotating propeller can cause serious injuries.

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## On/Off Speed Control

Rotate the handle clockwise to obtain any of the 5 forward speeds. Rotate the handle counter-clockwise 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 LED lights on the top cover, when four green LED's are out, the meter is indicating that the input voltage is less than 9.5V (normal voltage should be 12V). It is advisable to disconnect the motor from the battery to prevent damage to the battery and then recharge it.

## Adjusting the Motor Depth

Position the depth adjustment collar so the propeller blades are submerged 150 – 300mm (6 – 12inches) below the water's surface.

## Raising the Motor

It is recommended to disconnect the battery first 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 out of the water. Then release the tilt lever to lock in place.

## Lowering the Motor

It is recommended to disconnect the battery first before carrying out this procedure to prevent accidental running of the motor. Press the tilt lever and 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.

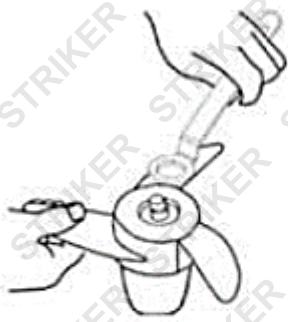
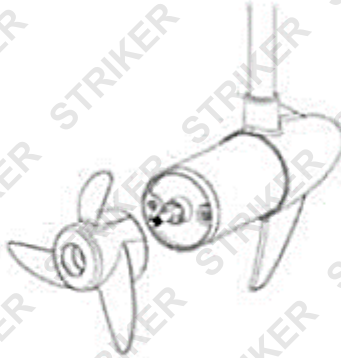
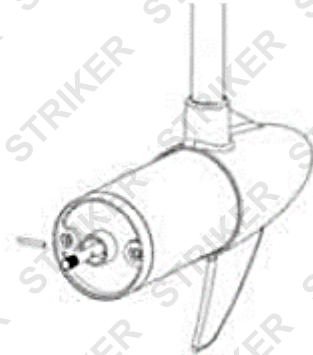
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**CAUTION!** Remember to wash the motor by using fresh water after being used in salt water as it can greatly reduce the possibility of corrosion.

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## Replacing the Propeller

**CAUTION!** Make sure that the motor has been disconnected from batteries.

**STEP 1****STEP 2****STEP 3**

1. 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.
2. 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.
3. Align the new propeller with the propeller pin. Re-install the propeller nut and tighten firmly by hand, tighten with spanner another  $\frac{1}{4}$  turn.

**CAUTION!** Do not strike a bent prop pin with hammer to remove the pin. Damage to motor armature may occur and will not be covered by warranty.

## About the Circuit Breaker (50amp)

During the usage of the electric trolling motor, the propeller can sometimes get stuck by weeds, fishing lines, or fishing webs. Sometimes, due to the variance of the water depth, the propeller can become covered by silt. If those situations occur, quickly disconnect the battery and clean up the propeller. (Please **DO NOT** skip steps and increase the thrust of electric outboard motor to solve the problem, or it may cause permanent damages to the electric trolling motor.)

The characteristics between the electric outboard motor and gasoline outboard motor are different. If the propeller of the motor gets stuck, the gasoline outboard motor will shut down to not cause any permanent damage to the motor itself. However, the electric outboard will draw extremely large currents due to the motor stall and can generate large amounts of heat that can damage important components in the motor such as the switch, rotor and other connecting parts or can even cause dangerous battery explosions.

In some muddy water areas, it can be hard for the user to recognize that the motor is stalled. To prevent these situations from occurring, it is strongly recommended to use the circuit breaker to protect the electric trolling motor. If the current draw of the electric trolling motor exceeds the limit of normal usage, the circuit breaker will cut off the power automatically to prevent any possible damage to the electric trolling motor. The circuit breaker has a reset button and is therefore reusable.

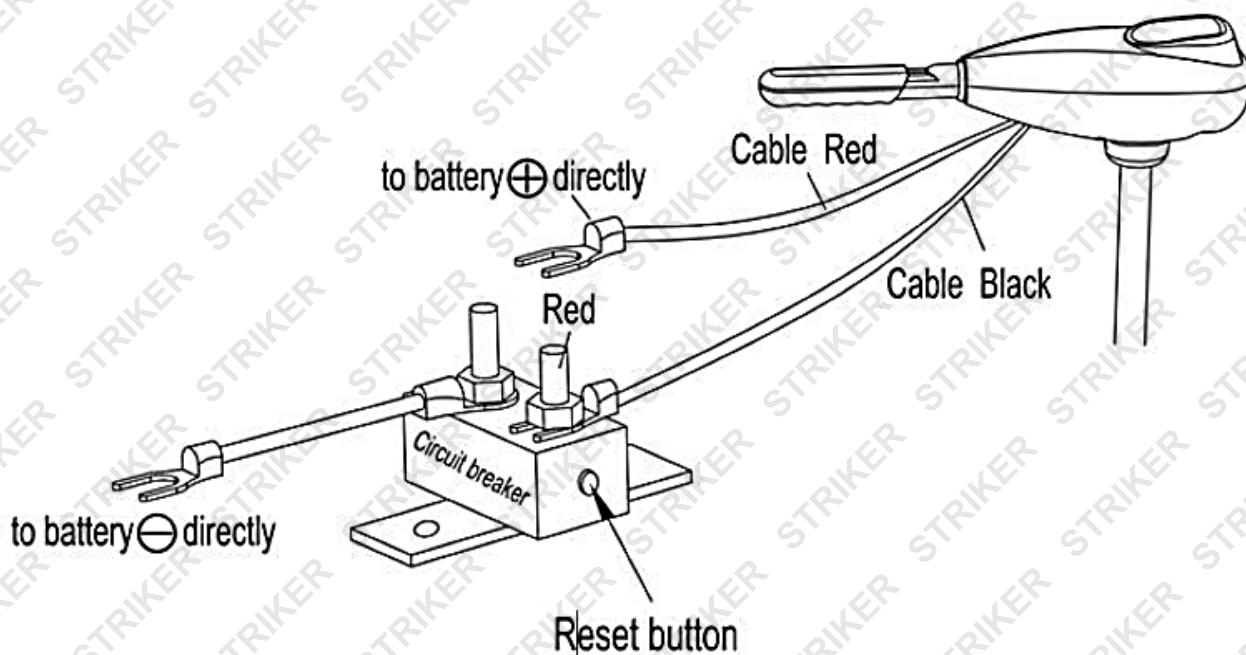
To prevent the rotor coil from damage because of exceeding the current, it is highly recommended to use a circuit breaker to protect the electric trolling motor.

### Circuit Breaker Function

When the electric trolling motor is being used, when the propeller is stuck by the weeds, small stones, fishing lines, etc., the circuit breaker will cut off the power automatically to prevent damage to the motor's electrical parts.

If the circuit breaker cuts off the power, please disconnect the battery first, then check and clear any obstacles. Then, press the reset button on the circuit breaker and reconnect the battery, the electric outboard motor will now be able to continue functioning properly.





## Maintenance

- Check behind the propeller after each day for weeds, fishing lines or other debris that may get wrapped up behind the propeller.
- Lubricate all the pivot points with a non-aerosol lubricant. Never use an aerosol lubricant as many types contain harmful propellants that can cause damage to various parts of your electric motor.
- Check the tightness of the battery lead connections.
- Visually check the condition of the main battery cables.
- Inspect for loose or corroded wiring connections.
- Always thoroughly rinse your electric trolling 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.
- Inspect for tightness of all nuts, bolts and screws.
- Recharge batteries after each use. Follow the battery manufacturer's recommendations for battery maintenance.
- During freezing temperatures, when your electric motor is not being used, it should be stored in an area where it will not freeze over.
- Never connect the wires to wrong battery terminals. Always disconnect the battery during maintenance.

# Troubleshooting

The following information may assist in identifying a problem and rectifying it.

## Loss of Power

Possible Fault	Action
<i>Propeller may have debris on it or damaged.</i>	Remove propeller, then clean and/or replace it.
↓	
<i>Battery connections may be corroded.</i>	Replace battery connections
↓	
<i>Battery has low voltage.</i>	Recharge the battery
↓	
<i>Battery may be faulty.</i>	Recharge and check the battery.
↓	
<i>Insufficient cable size from battery to motor wiring.</i>	13mm <sup>2</sup> thickness / 6-gauge wire (AWG) is recommended.
↓	
<i>Bad or faulty connection in boat wiring or electric motor wiring</i>	Fix and/or replace faulty connection.
↓	
<i>Permanent magnet cracked or chipped. Motor will whine or grind.</i>	Replace.

## Motor Makes Excessive Noise Or Vibration

Possible Fault	Action
<i>Propeller may have debris on it or damaged.</i>	Remove propeller, then clean and/or replace it.
↓	
<i>Propeller may be unbalanced.</i>	Secure the propeller properly.
↓	
<i>Bent armature.</i>	Remove the propeller, set at medium speed, turn unit on and check for armature wobble. Turn propeller by hand. It should turn freely with a slight magnetic drag.
↓	
<i>Bearing bushes may be worn out.</i>	Replace.

## Motor Fails To Run

Possible Fault	Action
	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.
↓	

## Electric Trolling Motor

Total battery failure.	Recharge and check voltage. Replace, if needed.
↓	
Propeller may have debris on it or damaged.	Remove propeller, then clean and/or replace it.

## Motor Loses One or More Speed

Possible Fault	Action
Lose wire on rotary switch.	Check wiring diagram.
↓	
Lose connection in top housing.	Check the connection.
↓	
Rotary switch damaged.	Repair or replace the rotary switch.
↓	
Speed coils in lower unit may be burned.	Repair or replace the speed coils.

# Specifications

## TR100

Input Power	1152W
Battery Required (Input)	24V 48A
Thrust Force	40.8kg / 90lbs
Maximum Speed	24km/h

## TR60

Input Power	408W
Battery Required (Input)	12V 34A
Thrust Force	20.4kg / 45lbs
Maximum Speed	8km/h

## TR80

Input Power	684W
Battery Required (Input)	12V 52A
Thrust Force	27.2kg / 60lbs
Maximum Speed	15km/h



**Some experts believe that the incorrect or prolonged use of almost any product may cause serious injury or death. To help reduce your risk of serious injury or death, refer to the information below. For more information, see [www.datastreamserver.com/safety](http://www.datastreamserver.com/safety)**

- Consult all documentation, packaging and product labelling before use. Note that some products feature documentation available online. It is recommended to print and retain the documentation.
- Before each use, check the product for loose/broken/damaged/missing parts, wear or leaks (if applicable). Never use a product with loose/broken/damaged/missing parts, wear or leaks.
- Products must be inspected and serviced (if applicable) by a qualified technician every 6 months. This is based on average residential use by persons of average size and strength, and on a property of average metropolitan size. Use beyond these recommendations may require more frequent inspections/servicing.
- Ensure that all users of the product have completed a suitable industry recognised training course before being allowed access to the product.
- The product has been supplied by a general merchandise retailer that may not be familiar with your specific application or description of application. Be sure to attain third-party approval from a qualified specialist for your application before use, regardless of any assurances from the retailer or its representatives.
- This product is not intended for use where fail-safe operation is required. As with any product (for example, automobile, computer, toaster), there is the possibility of technical issues that may require the repair or replacement of parts, or the product itself. If the possibility of such failure and the associated time it may take to rectify could in any way inconvenience the user, business or employee, or financially affect the user, business or employee, then the product is not suitable for your requirements. This product is not intended for use where incorrect operation or a failure of any kind, including but not limited to, a condition requiring product return, replacement, parts replacement or service by a technician may cause financial loss, loss of employee time or an inconvenience requiring compensation.
- If this product has been purchased in error when considering the information presented here, contact the retailer directly for details of their returns policy, if required.



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