

16. Check the springs and under-carriage for loose parts.
17. Carry a spare tire for both the trailer and towing vehicle. On extended trips, carry spare wheel bearings, seals, and grease. Carry the proper tools to complete the repairs.
18. When traveling, check the wheel hubs during stops at petrol stations, restaurants, or other places. If the hub feels abnormally hot, the bearing should be inspected before continuing the trip.

Note: All trailers used in salt or brackish waters must be rinsed off completely with fresh water immediately after use, to prevent rust and corrosion. Failure to rinse the trailer could cause cosmetic trailer damage that is not covered by your warranty.

WHEEL BEARINGS

The best protection you can give to your wheel bearings is to keep the hubs fully lubricated at all times. Periodically add fresh grease to the bearing buddy hubs with a water resistant wheel-bearing grease. Fill the hubs with grease to the manufacturer's specifications, as detailed in the trailer owner's manual.

This section of the manual includes information about your boat's electrical system. Your boat is designed with a safe electrical system to protect you from hazardous shocks and was checked carefully before it was shipped to your dealer. To protect yourself from electric shock, always have a qualified technician make any modifications to the system. If you have questions, see your dealer for more information.

12-VOLT DC BOAT SYSTEM

The 12-Volt DC electrical system is a 12-Volt, 2-wire, negative ground type system. The hot wire is positive, feeding the lights and appliances, for instance, and the negative return is by an insulated wire to the negative terminal of the battery.

12-VOLT TROLLING MOTOR SYSTEM

The 12-Volt DC electrical system is a 12-Volt, 2-wire, negative ground type system. The hot wire is positive, feeding trolling motor and lights (if so equipped), and the negative return is by insulated wire to the negative terminal of the battery. (See Bow Panel Installation Sheet in your owner's package for wiring diagram.)

The 12-Volt plug is located on the bow of your boat (Figures 4-1 and 4-2).



FIGURE 4-1
12- VOLT "MARLAN"
STYLE PLUG



FIGURE 4-2
12- VOLT "ECONO" BOW TROLLING PANEL

12 OR 24-VOLT TROLLING MOTOR SYSTEM

The 12 or 24-Volt electrical system is a 12 or 24-Volt, depending on selection, negative ground type system. Each hot wire is 12-Volt, feeding the trolling motor, and the negative return is by two insulated wires to the negative terminal of the batteries. (See Bow Panel Installation Sheet in your owner's package for wiring diagram.)

The 12 or 24-Volt plug is located on the bow of your boat (Figures 4-3 and 4-4).

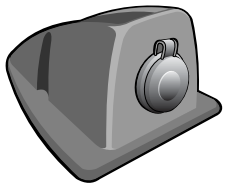


FIGURE 4-3
24 VOLT RECEPTACLE



FIGURE 4-4
12 OR 24 VOLT BOW TROLLING PANEL

12 OR 24-VOLT BOAT BOW TROLLING MOTOR PANEL UTILIZATION

The 12 or 24-Volt boat bow trolling motor panel comes equipped with a Marincos type receptacle, a Voltmeter and a tilt switch.

The Marincos™ receptacle allows you to quickly plug and unplug your trolling motor. (See Bow Panel Installation Sheet in your Owner's Package for wiring diagram)

The Tilt switch is a three-position switch. The upper position enables you to drive the back motor or stern drive out of the water for better trolling performance of your electric trolling motor. The lower position enables you to drive down the back motor or stern drive into the water for driving your boat.

The Voltmeter indicates the remaining voltage in either battery. The Voltmeter is activated by a three-position switch. The upper position gives you the remaining voltage for the first battery, and the lower position provides you with the remaining voltage for the second battery.

12, OR 36-VOLT TROLLING MOTOR SYSTEM

The 12, 24 or 36-Volt electrical system is a 12, 24 or 36-Volt, depending on selection, negative ground type system. The hot wire is 12-Volt, feeding the trolling motor, and the negative return is by three insulated wires to the terminal of the batteries. (See Bow Panel Installation Sheet in your Owner's Package for wiring diagram)

12, 24 OR 36-VOLT BOAT BOW TROLLING MOTOR PANEL UTILIZATION

The 12, 24 or 36-Volt boat bow trolling motor panel comes equipped with a Tilt switch, a Marincos type receptacle, a Battery Power Level gauge, a Battery Power Level Check switch, and a 1, 2 or 3 Battery Selector switch. (Figure 4-5)

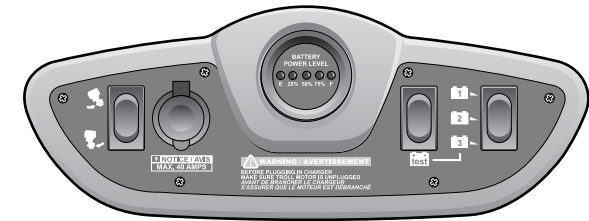


FIGURE 4-5 12, 24 OR 36 VOLT BOW TROLLING PANEL

The Marincos receptacle allows you to quickly plug and unplug your trolling motor. (See Bow Panel Installation Sheet in your Owner's Package for wiring diagram)

The Tilt switch is a three-position switch. The upper position enables you to drive the back motor or stern drive out of the water for better trolling performance of your electric trolling motor. The lower position enables you to drive down the back motor or stern drive into the water for driving your boat.

The Battery Power Level gauge indicates the remaining percentage of voltage in the selected battery. It is activated by the Test switch and the Battery Selector switch. In order to know the remaining voltage of a battery, set the Battery Selector switch to the desired battery 1, 2 or 3, press and hold the Test switch; the remaining voltage will be indicated in the Battery Power Level gauge.

IMPORTANT: It is recommended that you unplug any components, such as the trolling motor, to avoid battery drainage when not in operation.

IMPORTANT: The electrical system is wired at the factory to handle factory-installed electrical equipment. It is recommended that you have your dealer install any additional equipment. An error in wiring the electrical circuits may cause a fire or damage electrical system components. Have your dealer repair the electrical system and install additional equipment.

WARNING

Fire or Explosion Hazard! Electrical system parts are designed and manufactured to minimize risks of fire or explosion. **Never substitute automotive parts for marine parts.** Automotive parts do not provide the necessary ignition spark protection.

BATTERY

⚠ WARNING

Poison! Sulfuric acid in batteries can cause severe burns. Avoid contact with skin, eyes, or clothing. Wear goggles, rubber gloves, and protective apron when working with batteries. In case of skin contact, flush with water at least 15 minutes. If swallowed, drink large quantities of water or milk. Follow with Milk of Magnesia, beaten egg, or vegetable oil. Get medical attention immediately.

⚠ WARNING

Fire or Explosion Hazard! Only qualified personnel should install batteries and perform electrical system maintenance. Do not expose batteries to open flame or sparks. Do not smoke near batteries.

Your dealer has installed a battery or batteries which supply power to the DC electrical system. Marine batteries provide high reserve capacity plus cold cranking performance. When the engine is running, the battery is charged automatically.

Batteries produce hydrogen and oxygen gases while they are being charged. These volatile gases escape through the vent/fill caps and may form an explosive atmosphere around the battery if ventilation is poor. These gases may remain around the battery for several hours after charging. Sparks or flames can ignite the gases and cause an explosion.

Note: Never disconnect the battery cables while the engine is running. Doing so may damage the electrical or the electronic system of the boat or engines. Turning the ignition switch off does not cut off power to all components. Powered components can draw down the battery if they are left on for an extended period without running the engine. It is recommended that you unplug any components, such as the trolling motor, to avoid battery drainage.

AC/DC BATTERY CHARGER

Your boat may have a battery charging system which operates off 120-volt AC power from shore. This battery charger, if in fact installed on your boat, is designed only to charge the deep cycle battery that is used for your electric trolling motor. Turn the charger on whenever your boat is connected to shore power to keep batteries fully charged. The charging system is fully automatic and permanently wired into the 12-volt DC system. If the monitored battery level drops under the full charge range, the charger automatically turns ON and restores the battery to FULL charge status.

IMPORTANT: Before plugging in battery charger, make sure all trolling motors are unplugged. Failure to do so could damage trolling motor. Never use an automobile battery charger.

BATTERY CHARGING

The main engine alternator will recharge the main engine battery when the engine is running. On some models a voltage regulator controls the rate of charge by sensing battery voltage and increasing or decreasing alternator output accordingly.

⚠ WARNING

To avoid any risk of explosion due to hydrogen vapors when changing a battery, always leave the cover of the battery compartment open. To prevent personal injury, do not attempt to start your main engine with jumper cables. The use of jumper cables could create dangerous sparks, which could cause the battery's hydrogen vapors or fumes to explode.

OVERLOAD PROTECTION

The main engine is equipped with a fuse or circuit breaker to protect the engine wiring harness and instrumentation power leads. If an electrical overload occurs, a circuit will "open" and interrupt current flow when the current draw exceeds the rated amperage. Refer to your main engine manual for breaker location, resetting procedure, or for fuse rating and replacement procedure.

TROLLING MOTOR

Some Princecraft boats have a trolling motor receptacle located at the bow of the boat. This receptacle is to be used only when the trolling motor is in use. Running from the receptacle is a copper wire harness that extends back to your batteries. This wire assures you of maximum thrust and longer battery life. All of our boats feature an electrical device that protects this harness, which is located near the trolling motor batteries.

Note: To prevent equipment damage and possible injury, always connect the trolling motor and batteries by using the factory-supplied wiring.

Mounting Trolling Motor

The front deck of your boat has been reinforced to withstand the maximum thrust put out by today's heavy-duty trolling motors. Follow manufacturer's directions when mounting trolling motor bracket. Always use washers on the underside of the deck when bolting on a trolling motor, and use all available bolt holes for maximum strength.

Detachable Trolling Motor Mount

Some models are equipped with a device that allows removal of the trolling motor. Please refer to the Owner's Manual for proper mounting and securing instructions.

ENGINE ALARM SYSTEM

Some engines are equipped with an audible warning alarm (Guardian) that may have up to 40 electronic sensors. An alarm will sound and the engine power will be reduced significantly, if any one of the following occurs: 1) revolutions are too high, 2) overheating, 3) oil supply is too low. If the alarm sounds, quickly observe gauges for an abnormal reading, then stop engine immediately. You may also refer to your digital message center if your boat is so equipped. If all gauges read normal, then refer to your engine manual to aid in finding and correcting the problem.

If the cause for the alarm cannot be found, consult your dealer. To prevent possible damage to an engine, do not restart engine until the cause for the warning has been ascertained and corrected. In an emergency situation, continue at low speed.

Note: Refer to Engine Owner's Manual for additional information.

CORROSION

Corrosion of metal parts, especially those exposed to brackish water, is common for boats. Corrosion may be caused by stray electric currents from shorepower installations, improperly grounded AC lines and circuits, and poorly insulated DC-powered equipment from your boat or from boats moored nearby.

Corrosion is accelerated when electric current is present. For example, in the following list (next page), aluminum is less noble than copper. This means the aluminum will corrode faster than copper if the two are submerged in water.

IMPORTANT: Never connect a ground to the boats hull or frame as is commonly done in the automotive industry.

Sacrificial Zinc Anode System

The anode is used to reduce corrosion as protection for underwater metal parts. An anode made of an active metal in the galvanic series is attacked by corrosion while a nobler metal is protected, such as aluminum. Periodic replacement of the anode component is considered a part of normal maintenance. Ask your dealer for the replacement frequency.

NOTICE DO NOT PAINT ANODES

Galvanic Series of Metals

The metals in the chart range from the Least Noble (Anode Active) to the Most Noble (Cathode Passive). Combinations of any of them will show you what to expect relative to Active and Passive Corrosion.

This information is important to know when adding or replacing hull fittings: use metals that are close to each other in the galvanic series. The best way to avoid corrosion is to use genuine replacement parts. When adding accessories not supplied by us, consult your dealer regarding selection and proper installation.

Least Noble (Anode-Active)	1. Zinc
	2. Aluminum Alloys
	3. Cadmium
	4. Mild Steel
	5. Wrought Iron
	6. Cast Iron
	7. Stainless Steel, Type 304 (active)
	8. Ni-Resist
	9. Mo Stainless Steel, Type 316 (active)
	10. Naval Brass
	11. Yellow Brass
	12. Red Brass
	13. Tin
	14. Copper
	15. Admiralty Brass
	16. Manganese Bronze
	17. Silicon Bronze
	18. Lead
	19. Nickel
	20. Stainless Steel, Type 304 (passive)
	21. Stainless Steel, Type 316 (passive)
	22. Hastelloy C
	Most Noble (Cathode-Passive)

AM/FM/CD PLAYER, SIRIUS AND MP3 READY

We recommend the radio switch be turned off while the boat is not being used to avoid battery drainage. (See section 6 for switches)

TROUBLESHOOTING

DC Electrical System

CAUTION

Electric Shock! Equipment Damage! Disconnect battery cables before performing all inspections, checks, and repairs to avoid possible personal injury and damage to equipment.

Problem	Cause	Solution
No power to 12-V equipment	Weak or dead battery	Recharge battery
Battery not charging (engine running)	Engine alternator malfunction	See dealer
Battery not holding a charge	Bad battery	Replace battery
12-V device not working	Burnt fuse	Replace fuse with the same type
	Circuit breaker for device is open	Reset Breaker
	Weak or dead battery	Charge battery
	Faulty electrical connection	Check 12-V connections. Tighten or repair as needed
	Device is not connected	Verify all wires are connected

If the problem persists consult your dealer

BOAT EQUIPMENT

This chapter discusses major systems or components on your boat. Information about boat controls is in Chapter 6. Equipment discussed in this chapter is standard or optional on some models and not available on others. See your dealer for more information.

ENGINES

Your boat may be available with a range of engine options. In your Owner's Packet is an Owner's Manual for the engine. Refer to that manual for information about engine care and maintenance.

Affixed to your boat is a capacity plate that states the maximum size engine that can be used on your boat. Do not overpower your boat.

Keep your engine well tuned to decrease exhaust hydrocarbon emissions that pollute the air and water.

Your dealer employs factory trained technicians certified to service the engine. If you choose to do so, you may handle basic servicing such as checking engine oil. But with today's ever-advancing engine technology, these technicians have the tools and the expertise required for efficient and safe engine service.

WARNING

Do not attempt to maintain or adjust an engine while it is running. Failure to shut off the engine for maintenance or adjustment can result in serious injury or death.

FUEL SYSTEM

The fuel system is designed to prevent fire and explosion and to provide a continuous flow of clean fuel to the engine. It meets or exceeds the applicable requirements of the U.S. Coast Guard at the time of manufacture. The system is also certified by the National Marine Manufacturers Association (NMMA) and the Canadian D.O.T. Every fuel tank must pass strict trials and inspections by the tank manufacturer.

Before you take delivery, check that your dealer has completed a full inspection of the entire fuel system. You should also inspect the entire system at least once a year.