

Lithium-Ion Battery Usage

Honda Outboard Motors

The use of lithium-ion batteries is becoming more popular in the marine industry. Honda outboard motor electrical systems were originally developed to use traditional lead acid (including AGM and gel) type batteries that have different installation and usage requirements compared to lithium-ion batteries, so it is important to understand the differences between the two types of batteries.

Always consult the lithium-ion battery manufacturer to ensure you have the information required for safe and proper battery installation, usage, and maintenance.

The information below provides examples of how lithium-ion batteries differ from traditional lead-acid batteries and why it is extremely important to make sure a lithium-ion battery is installed and used properly.

Installation

A properly sized lithium-ion battery that meets the amp hour (Ah) and cold cranking amp (CCA) requirements of the outboard motor must be installed in a location that resists shock or vibrations, and where temperatures are within the acceptable parameters set by the battery manufacturer. An appropriate battery management system must be used to prevent damage to the battery and provide for battery shutoff if potentially dangerous conditions exist. Certain parts required for proper installation may not be available from Honda Marine and must be acquired through either the battery manufacturer or by using appropriate commercially available parts.

Usage

Lithium-ion battery systems should not be operated outside the manufacturer's defined operating limits and have appropriate safeguards in place.

Maintenance

Battery voltage must be maintained using a lithium-ion compatible battery charger that is recommended or approved by the battery manufacturer. Charging output should be within the battery manufacturer's specified ranges. Using a battery charger that is not designed for use with lithium-ion batteries may result in safety risks to the boat operator or passengers, as well as damage to the battery or the boat's electrical system.

▲ WARNING

Improper installation, operation, or charging of a lithium-ion battery may cause a thermal event such as a fire or explosion if you do not follow the instructions and guidelines set by the battery manufacturer.

You can be seriously hurt or killed if you are near a lithium-ion battery that catches on fire or explodes.

Always follow the battery manufacturer's guidelines and the considerations provided by the American Boat & Yacht Council (ABYC) if a lithium-ion battery is to be installed.

If you are a member of the ABYC, you may refer to their Technical Information Report (TE-13, July 2020) on lithium-ion batteries for free by visiting their website at www.abycinc.org.