



ADD-A-BATTERY

Don't get stranded
with a dead battery

You Can Do it
PROJECT



Don't get stranded with a dead battery!

A dead starting battery is a common reason for needing a tow. Don't let it happen to you! Avoid the inconvenience and cost of a tow by adding a second battery to your boat's electrical system.

Adding a second battery will help you avoid being stranded. The Add-A-Battery is a simple approach that helps keep you and your boat safe.

The Add-A-Battery includes a Dual Circuit Plus™ Battery Switch and an Automatic Charging Relay. These components simplify switching and automate charging, so that all you have to do is turn the battery switch ON when you board and OFF when you leave.

Adding a second battery is a straightforward project that takes the worry out of battery management so you can enjoy the boating experience.

SUPPLIES NEEDED

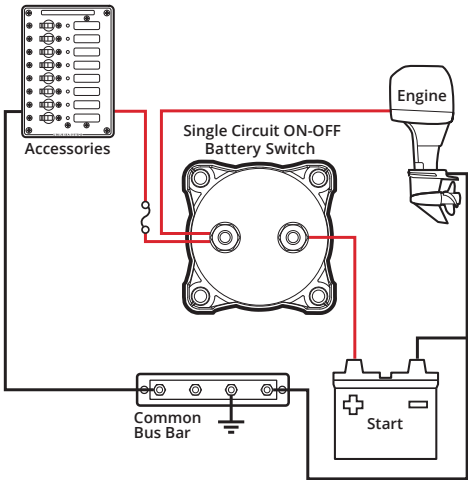
- Add-A-Battery Kit 7649 or 7650
- Battery
- Battery terminals
- Cable for second battery, battery switch, and ACR connections
- Fuses
- Common bus bar
- Cable and wire terminals
- Cable clamps and ties
- Heat shrink tubing
- Mounting hardware
- LED (optional) 8172
- Wire for ground connection
Optional - wire for Start Isolation and/or remote LED
- Conduit or sheathing if feed cables to fuses are longer than seven inches.

TOOLS NEEDED

- Wire cutter
- Wire stripper
- Wire terminal crimper
- Power drill or driver
- Screwdrivers
- SAE socket set or wrenches
- Heat gun

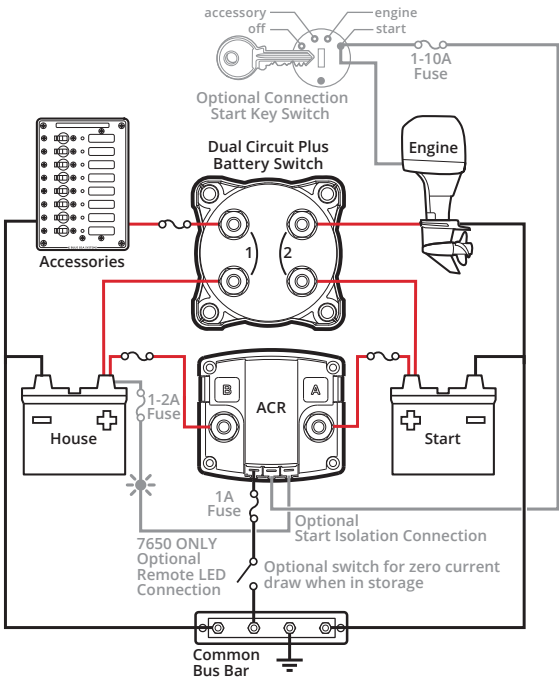
GO FROM HERE

Single battery with a single ON/OFF switch



TO HERE

Two batteries, with the Add-A-Battery



Wire Color Legend

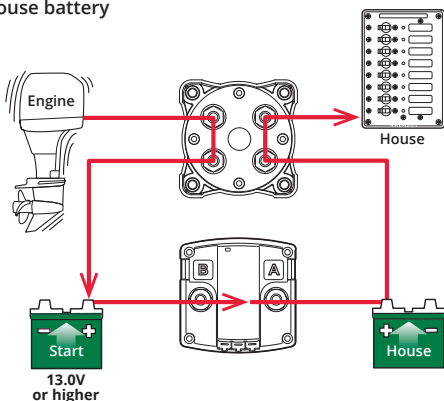
Negative	—
Positive	—
Optional Connection	—

WHAT DOES IT DO?

The Add-A-Battery kit makes it easy to add an additional battery to your electrical system. A second battery will help prevent getting stranded with a dead start battery. The Add-A-Battery kit offers a simple way to switch two batteries with the Dual Circuit Plus™ Battery Switch, and to share a single source of charging between the two batteries with the Automatic Charging Relay.

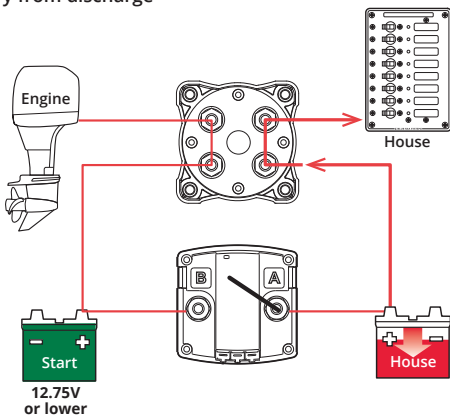
ENGINE ON

ACR combines batteries, sharing charge with the House battery



ENGINE OFF

ACR isolates batteries, protecting the Start battery from discharge



DC Current



The diagrams above illustrate how the 7650 and 7649 Add-A-Battery Kits work and are intended for reference only. Consult an ABYC certified marine electrical professional for system design and circuit protection.

HOW IT WORKS



7649

Mini Add-A-Battery
For most outboards



7655

Mini Add-A-Battery Plus
For most outboards



7650

Add-A-Battery
For outboards up to 350HP or inboards with stock alternators

Dual Circuit Plus™ Battery Switches (Rated IP67)

- Combines batteries for emergency starting
- Isolates start and house circuits
- Simplifies switching



m-Series 6011

675A Cranking* (30 sec.)
450A Intermittent* (5 min.)
300A Continuous*
32V DC Maximum

* Per circuit



E-Series 5511E

700A Cranking* (30 sec.)
525A Intermittent* (5 min.)
350A Continuous*
32V DC Maximum

Automatic Charging Relays (Rated IP67)

- Automatically combines batteries during charging
- Disconnects when no charge is present
- Dual sensing - senses charge on two battery banks
- Start isolation protects sensitive electronics



m-ACR 7601

115A Intermittent (5 min.)
65A Continuous
12V or 24V DC Nominal



SI-ACR 7610

210A Intermittent (5 min.)
120A Continuous
12V or 24V DC Nominal

BatteryLink Charger (Rated IP67)

- Integrated ACR provides DC charging from engine alternator
- AC plug-in while at the dock
- Battery temperature compensation prolongs battery life
- Start isolation protects sensitive electronics
- Remote LED panel included

BatteryLink Charger 7605

115A ACR Intermittent (5 min.)
65A ACR Continuous
10A Charger
12V DC Nominal



BatteryLink Charger 7608 also available
- 20A Charger / 170A ACR

INSTALLING THE ADD-A-BATTERY

STEP 1

Plan your layout

- Mount the Dual Circuit Plus™ Battery Switch in a convenient location and the Automatic Charging Relay or BatteryLink Charger close to the batteries in a well-ventilated location. Refer to specific product instructions for mounting and clearance recommendations.

STEP 2

Minimum connections for operation

- Refer to specific product instructions for wire sizing and fuse ratings.
- Connect one battery bank to the ACR stud terminal A, through a fuse.
- Connect the other battery bank to the ACR stud terminal B, through a fuse.
- Connect the terminal marked Ground or Battery Negative to the battery negative terminal or bus through a fuse.
- Connect cables from each battery positive terminal to the Dual Circuit Plus Battery Switch input terminals.
- Connect the starting circuit positive cable to the starting circuit output terminal of the battery switch.
- Connect the house circuit positive cable through a fuse to the house circuit output terminal of the battery switch.

STEP 3

Optional connections

Engine starting causes voltage sags and spikes in the starting circuit. If engines are started when batteries are combined, the resulting sag or spike may reset navigation equipment, and could damage sensitive electronics. Because of this, it may be desirable that batteries be isolated when starting engines.

Start Isolation Wire

- The Automatic Charging Relays can be configured to automatically disconnect when the starting circuit is engaged.
- Connect a wire from the quick connect terminal marked Start Isolation to the Ignition/Start terminal of the ignition switch or starter solenoid through a 1A–10A in-line fuse.

Remote Indicator Lamp, (7650/7655 ONLY)

- Connect the red wire of the LED to a 12/24V positive source through a 1A–2A in-line fuse.
- Connect the yellow wire of the LED to the quick connect terminal marked LED.

USING THE ADD-A-BATTERY

- Turn the Dual Circuit Plus Battery Switch to the ON position when you get on the boat, and OFF when you leave. The Automatic Charging Relay or BatteryLink Charger will manage the charging of your house and start batteries when the boat is underway and also while at the dock or driveway when connected to a charger.
- In the unlikely event you need to use your house battery to start your engine, turn the Dual Circuit Plus Battery Switch to the COMBINE BATTERIES position. This will combine the batteries for engine starting.
- Mini Add-A-Battery Plus Only: Plug in the AC cord to provide 10A of charging output for batteries while at the dock or driveway.



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more about
Add-A-Battery
products



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