

Batt Maxx and Power Plant Models

INSTALLATION FOR MARINE INBOARDS AND RV'S

STEP 1. - SENSOR PLACEMENT

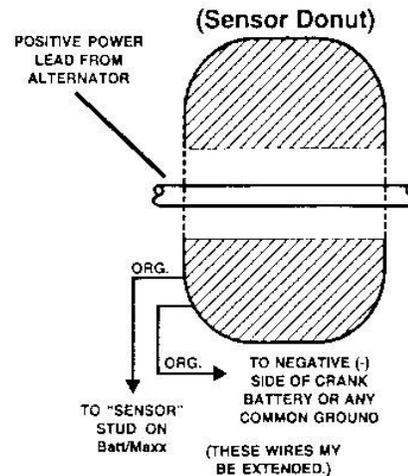
Follow the simple wiring diagram for your particular model. The (B+) alternator charge wire, on most inboard engines, is tied from the alternator to the battery (+) terminal on your starter. **Remove one end of this wire and pass it through the hole in the "sensor donut".** Put **NO** other wire through this hole. (Refer to the "Battery Charger - Inverter/Chargers" section on the last page of this instruction sheet.) If the positive (+) alternator wire runs from the alternator directly to the battery, place the sensor donut **between** the alternator and the battery. (The sensor donut **must not** be placed after the battery.) The sensor donut may be secured to the alternator wire with a plastic cable tie.

For **TWIN ENGINE** applications, duplicate the sensor donut installation of the second alternator charge wire. Use the same sensor stud on the unit.

PLEASE NOTE: If you have an existing battery selector switch on your boat or vehicle, you may disconnect the #2 battery from the switch to insure proper isolation through the Batt/Maxx or the *Power Plant*.

If the alternator wire runs to a battery switch, the sensor donut **must** be placed **between** the alternator and the switch.

SENSOR DETAIL



INSTALLATION INSTRUCTIONS FOR OUTBOARD MODELS

STEP 1. - SENSOR PLACEMENT

1. Disconnect the positive (+) power lead from the engine to the start battery, slide the sensor donut over the lead, secure the sensor donut with a plastic cable tie, and reconnect the lead to the start battery. If manual battery switches are installed, **install the sensor donut between the engine and the switch.**
2. Connect one orange lead from the sensor donut to the negative (-) side of the crank battery (or common ground). Connect the remaining orange lead to the "Sensor" stud on the right side of the Batt/Maxx or Power Plant. (See Step 2.) These leads may be extended.

NOTE: For twin engine applications, repeat items #1 and #2 for the second engine and its start battery.

PLEASE NOTE! If you have an existing battery selector switch on your boat or vehicle, you may disconnect the #2 battery from the switch to insure proper isolation through the unit.

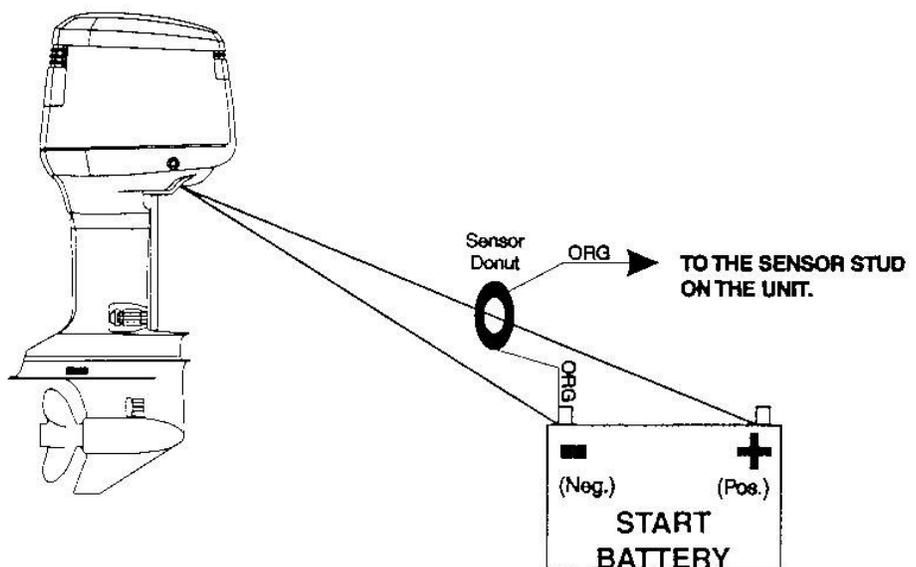
Your selector switch can now be used as an on/off switch, (position #1 will be your "ON" position).

The sensor donut must be placed between the engine and the battery switch.

IMPORTANT

Now is a good time to check the entire DC electrical system in your boat or recreational vehicle.

- ◆ Make sure all connections are tight, clean and secure - this includes your new Automatic Battery System, batteries, circuit breakers, etc.
- ◆ Check the fluid levels in the batteries.
- ◆ Check for any frayed wires or wire insulation.
- ◆ Be sure you use large enough (gauge) wire for all battery connections and "runs" to equipment.



The Power Plant wiring is the same as the Batt Maxx.

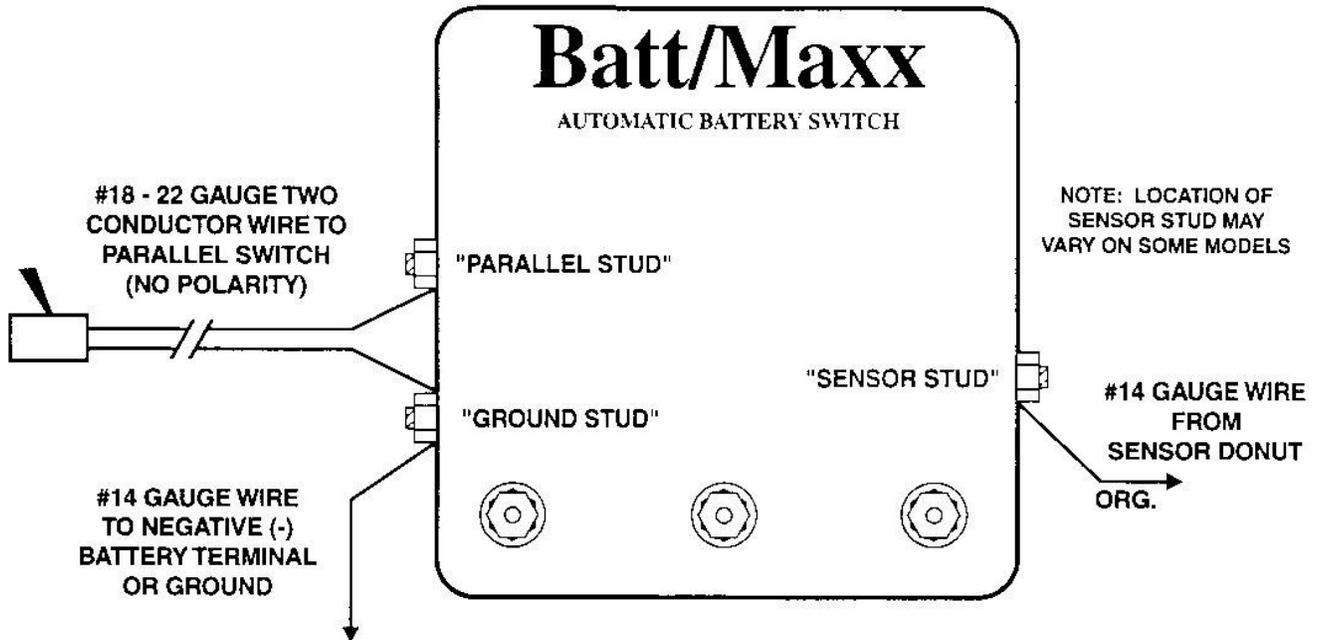
BATT MAXX AND POWER PLANT INSTALLATION INSTRUCTIONS

STEP 2. - PARALLEL, GROUND AND SENSOR WIRING

1. Connect a #14 gauge wire (or larger) (not supplied) to the "GROUND" terminal on the unit, and connect the other end to the negative (-) terminal on any of the batteries.

NOTE: The negative (-) terminals of all batteries must be connected to each other.

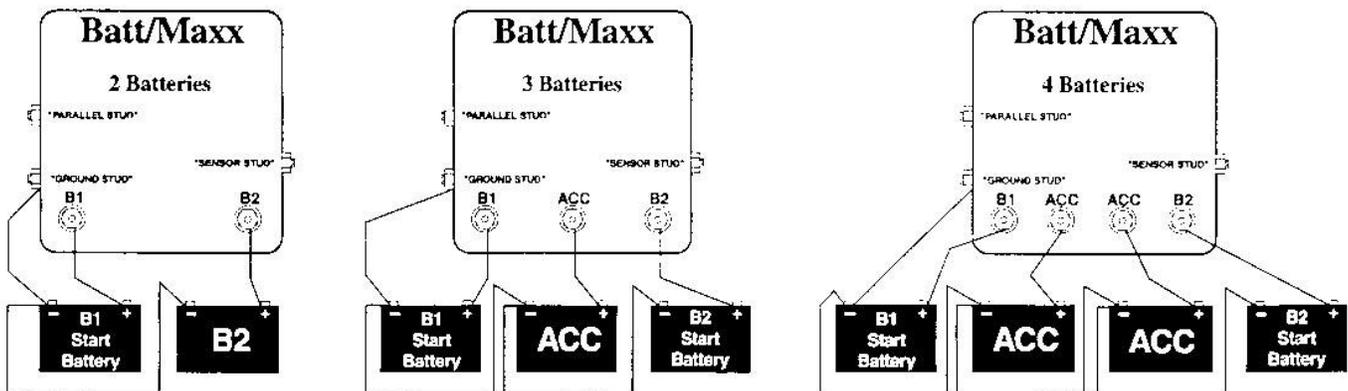
2. Install the Parallel Switch at the helm and wire it to the unit as illustrated below.
3. Attach the orange wire from the sensor donut to the sensor stud on the right side of the unit, as illustrated below.



INDICATOR LIGHT: "When Lit" - The batteries are charging in parallel.
 "When Out" - The batteries are isolated from each other.

STEP 3. - BATTERY CABLE CONNECTIONS

1. Connect the terminals on the unit to the Battery terminals as illustrated below. Use #4 gauge wire or larger.



The Power Plant wiring is the same as the Batt Maxx. Use heavier gauge wire for the Power Plant wiring.

NOTE: The negative (-) terminals of all batteries must be connected to each other.

NOTE: The "B2" terminal may be used as an additional house or accessory battery, as well as a second start battery, as shown.



WHEN USING A BATTERY CHARGER, DO NOT USE SPRING CLIPS FOR CONNECTION TO THE BATT/MAXX or POWER PLANT!

INSTALLATION INSTRUCTIONS

Batt Maxx & Power Plant



IMPORTANT BEFORE INSTALLATION!



PLEASE READ

We are proud to have our Automatic Battery System on your boat or vehicle. To help insure long lasting, trouble free battery power, it is very important to follow this simple set of instructions.

Please remove all DC loads from your start batteries. Designate these batteries as dedicated engine starting batteries. Put all other loads on the accessory (house) batteries. This will insure your Automatic Battery System's most important function — to protect the start battery and get your engine running.

Never use spring clips on Batt Maxx or Power Plant terminals.



Improper use of a single wrench or over tightening of the terminal can cause the terminal to turn and break connections inside the unit. This could cause wiring shorts and/or system failure!

IMPORTANT

The proper way to tighten nuts on the Automatic Battery System uses two wrenches as shown below— **DO NOT USE ONE WRENCH!**

WRONG!



RIGHT!



Battery Maintenance Tips

1. Loose battery terminals and battery connections cause heat, loss of battery power, and “shorts”, which can damage your electronics, wiring, etc. It is very important that all electrical connections be tight and secure. They must be checked frequently, because motion, vibration, etc. may cause loosening of connections.
2. Wire Size — Be sure you use large enough (gauge) wire for all battery connections and “runs” to equipment.
3. Exposed or “bare” wire, loose tools or “debris” near batteries can get caught in the wiring and cause “shorts”.
4. Keep batteries and adjoining areas clear and free of moisture.

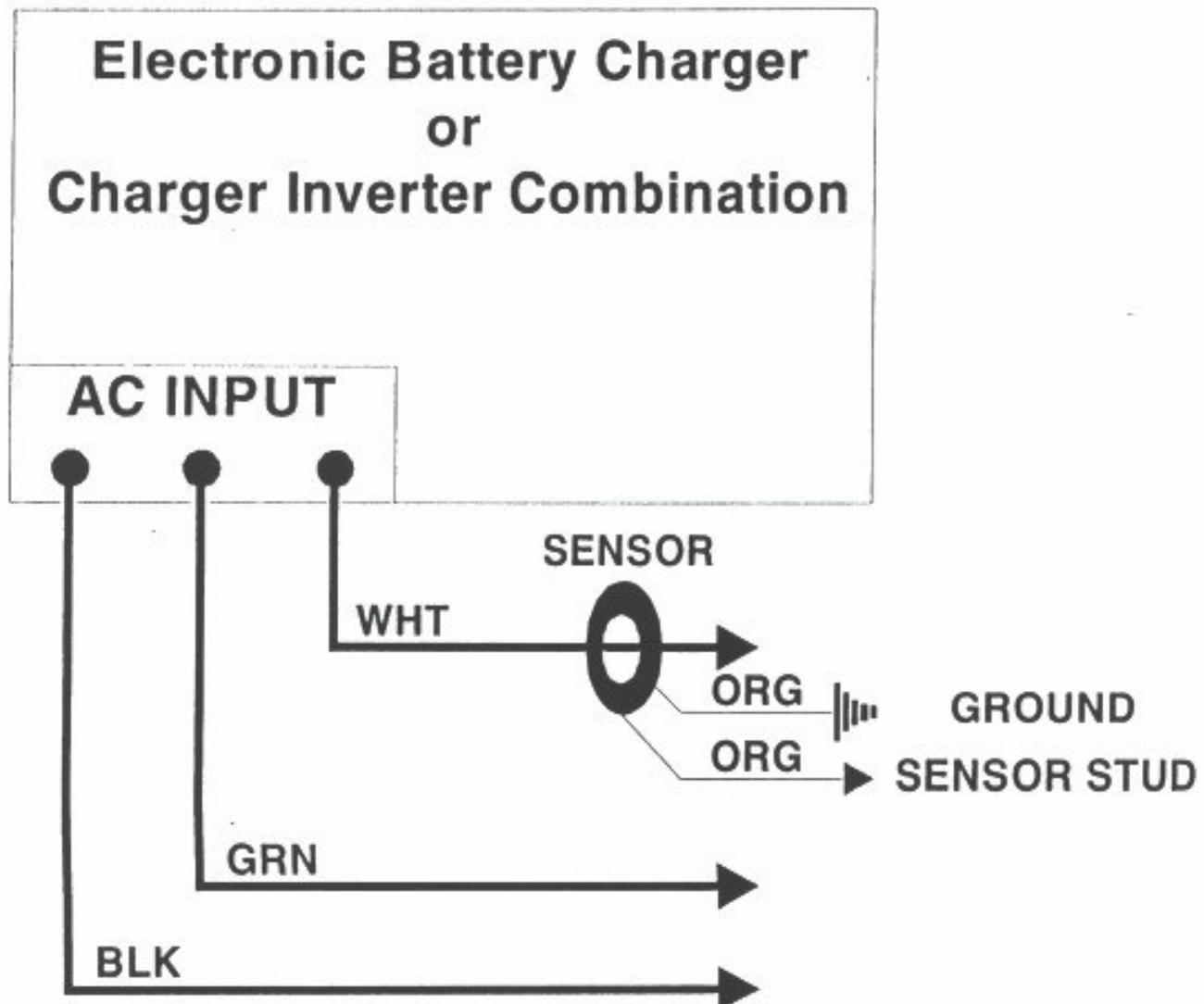
BATTERY CHARGER - INVERTER/CHARGERS for all Wells Marine Automatic Battery Systems

You may wish to have your Automatic Battery System activated by the boat or RV's "on-board" chargers, thus charging all of the batteries from a single battery charger. To do this:

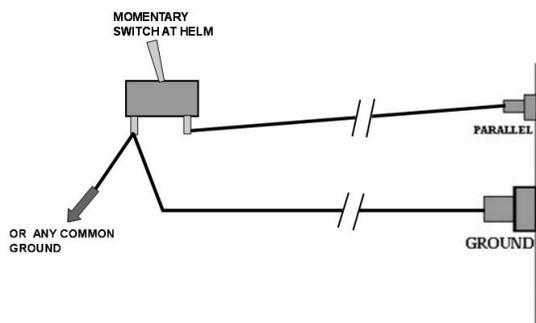
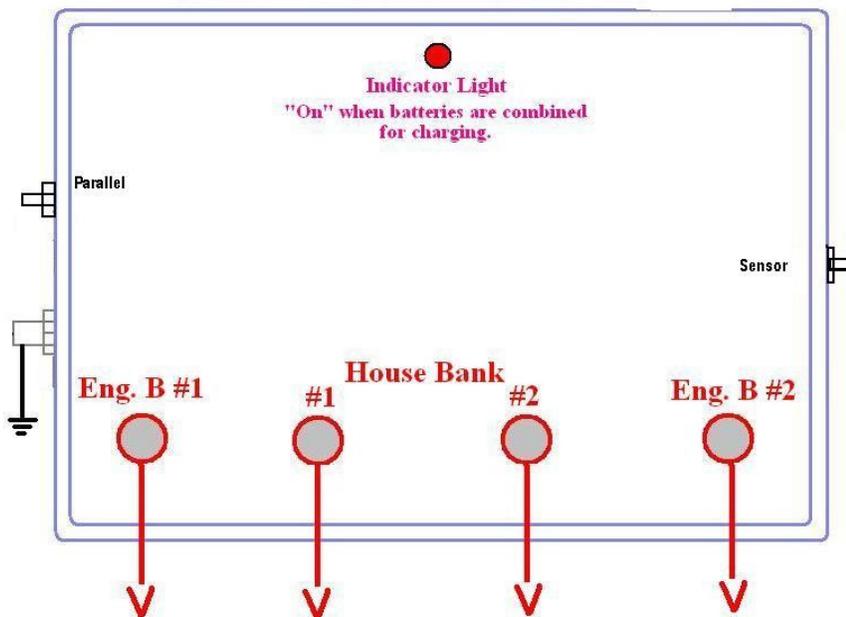
1. **For Most Ferroresonant Battery Chargers** - Simply pass the positive (+) wire from the charger through the sensor and back to the positive (+) battery terminal.
2. **For new electronic chargers and inverter/charger combinations** - Pass the white wire from the **AC input** through a sensor. Connect one of the orange sensor leads to a common ground, and the other orange sensor lead to the "Sensor" stud on the unit. (See Illustration.)

Note: If it is inconvenient to use the alternator sensor because of mounting location, additional sensors may be obtained from Wells Marine Technology, Inc.

Advantage — This will allow all batteries connected to the Batt/Maxx to charge when the charger is "on", and will isolate these batteries when the charger is "off."



Battmaxx W/Sensor 4 Battery



PARALLEL SWITCH WIRE DIAGRAM