

# GUEST®

Cruiser Series

## Battery Switch

### EASY INSTALLATION BATTERY SELECTOR SWITCHES #2100, #2101, AND ON-OFF SWITCH #2102

Guest® selector switches are "make-before-break" single-pole, triple-throw switches that permit the selection between either of two batteries or banks of batteries, operation of both batteries or banks of batteries in parallel, or complete disconnect of both batteries or banks of batteries. The switches are rated for 6, 12, 24, or 32 volts:

| MODEL | AMPS      |            |
|-------|-----------|------------|
|       | MOMENTARY | CONTINUOUS |
| 2100  | 345       | 230        |
| 2101  | 345       | 230        |
| 2102  | 345       | 230        |

**NOTE:** To maintain listed ratings use 3/0 cable

Model 2100 switch features an alternator field disconnect which interrupts the alternator field when the switch is turned to the "off" position, thus preventing electrical surges in the armature circuit which might burn out the alternator diodes or ancillary equipment. Models 2101 and 2102 do not include this feature and should **never be turned to the "off" position with engine running.**

**NOTE:** These switches are designed as disconnect switches and are not to be used as load-breaking devices. If switch is used as load-breaking device in emergency situation (e.g., starter malfunction), the switch should be replaced to avoid possible future failure.

**MOUNTING:** Switch should be located as close to (within 40") the batteries as possible. The battery and starter cable should be as short as possible. Mount on a flat surface in an area that will remain dry and is protected from abuse.

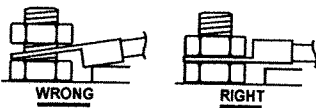
**WIRING:** The battery cable should be sized in accordance with the engine manufacturer's recommendations. Other guides to wire sizes and terminals may be obtained from the American Boat and Yacht Council electrical standards. The brass terminal studs for model 2100, 2101, and 2102 are 3/8" diameter. Be sure all connections are securely tightened. Align the terminals such that they do not cause undue twisting at the switch studs. See wiring diagram below for correct terminal installation. After connecting and mounting of switch, fasten the cables in position with a suitable cable clamp no more than 6" from the switch. Clamp the remainder of the cable not more than 18" apart.

Note: If the switch is mounted in such a way that the terminals are exposed, then the terminals should be taped or covered in order to comply with Federal Ignition Protection Codes.

**OPERATION:** Always reserve one battery for engine starting. Use the second battery for lights, appliances, and other ship's service. "Both" position parallels batteries for emergency use.

**CHARGING:** Switch setting indicates battery(ies) being charged when engine is running.

#### CABLE LUG INSTALLATION



**Remove Top Nut Only**

**Removing Bottom Nut Will Damage The Switch**  
Tighten nut to 70 in-lbs.

#### SUGGESTED WIRING DIAGRAM FOR ALTERNATOR FIELD DISCONNECT CIRCUIT

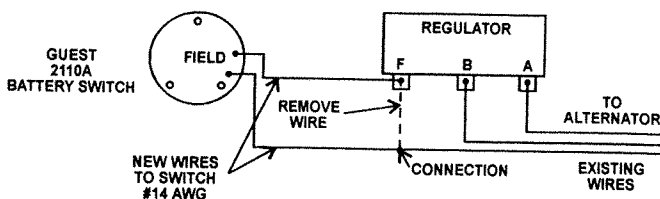
##### Alternators with EXTERNAL REGULATOR:

Remove regulator field wire (regulator "F" terminal) and connect to new wire leading to Guest® battery switch field terminal (either terminal). Add another wire from other switch field terminal and connect to regulator "F" terminal. Use #14 AWG wire for new circuit. Carefully tape connections for proper insulation.

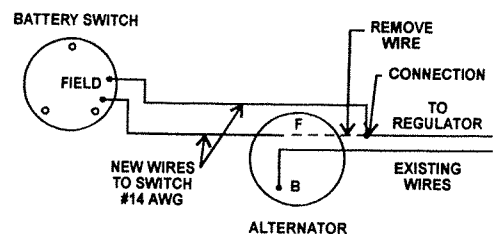
OR

If it is easier to reach the alternator, remove alternator field wire (alternator "F" terminal) and connect to new wire leading to Guest® battery switch field terminal (either terminal). Add another wire from other switch terminal and install to alternator "F" terminal. Use #14 AWG wire for new circuit. Carefully tape connections for proper insulation. Note: The function of #2100 selector switch will not be affected if the field circuit disconnect feature is not used.

##### WIRING CHANGE AT REGULATOR



##### OR WIRING CHANGE AT ALTERNATOR

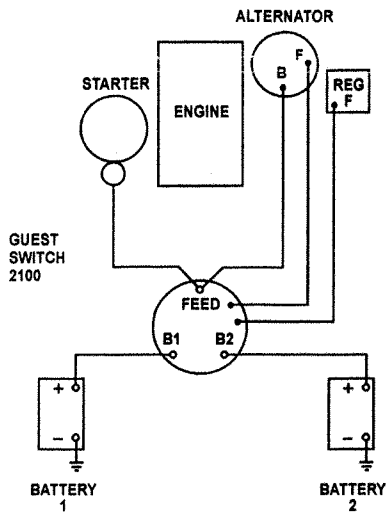


**Alternators with INTERNAL REGULATOR:**

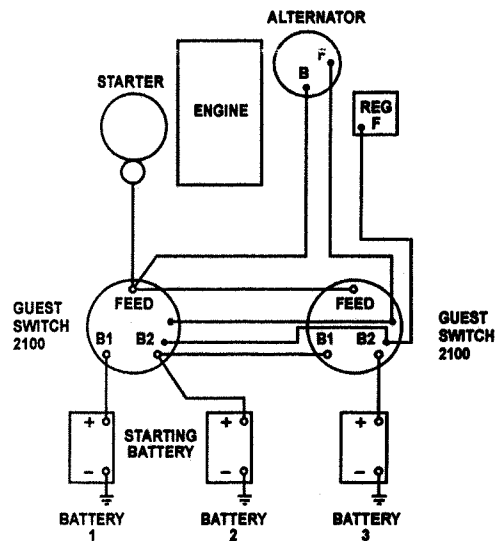
The field circuit wire on alternators with internal regulators is located within the alternator housing and it is impractical to use the field disconnect feature. Protection of the alternator diodes can be achieved by installing a Guest® Isolator #2401A (for 70 ampere alternators) or other appropriate model.

See below for various wiring diagram for alternators with internal regulator:

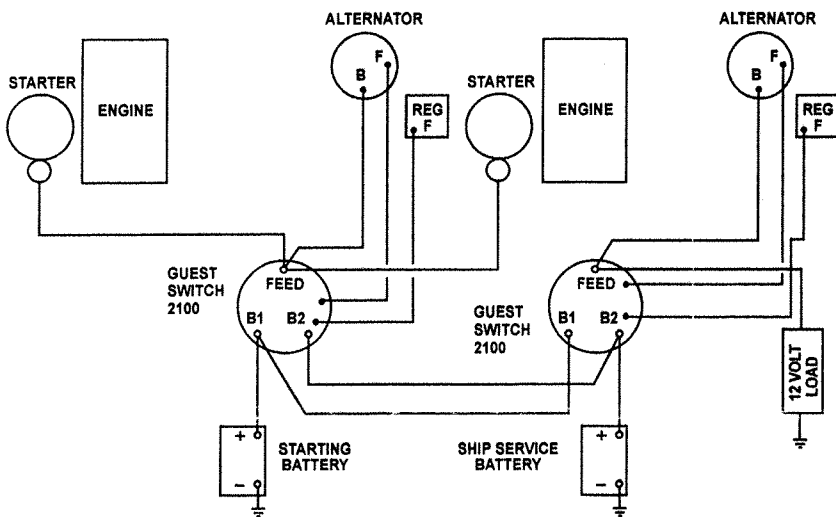
**1-ALTERNATOR 2-BATTERIES  
1-SWITCH**



**1-ALTERNATOR 3-BATTERIES  
2-SWITCHES**



**2-ALTERNATORS 2-BATTERIES  
2-SWITCHES**



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