

INSTRUCTION SHEET
SHORE POWER CABLE SET

USE

1. Turn off the boat's shore connection switch before connecting or disconnecting shore power cable.
2. Connect shore power cable at the boat first.
3. If polarity warning indicator is activated, immediately disconnect cable and have the fault corrected by qualified electrician.
4. Disconnect shore power cable at shore outlet/receptacle first.

STORAGE

Your MARINCO shore power cable set is intended for use outdoors. To prolong the life of the set, store indoors when not in use.

MAINTENANCE

(Always disconnect from power source before performing maintenance.)

General:

The metallic parts of your MARINCO cable set are made to resist corrosion. In salt water environment, life of the product can be increased by periodically wiping the exposed parts with fresh water, drying and spraying with a moisture repellent.

A soiled cable can be cleaned with grease cutting household detergent. A periodic application of vinyl protector will help both ends and cable maintain their original appearance.

In case of Salt Water Immersion:

Rinse plug end and/or connector end thoroughly in fresh water, shake or blow out excess water and allow to dry. Spray with a moisture repellent before re-use.

REPAIR

If either plug or connector end requires replacement (component or molded type), it can be replaced with the following MARINCO devices:

CABLE RATING	PLUG	COVER	CONNECTOR	COVER
30A-125V 2 pole, 3 wire	305CRP	102	305CRC	103R
50A-125V 2 pole, 3 wire	6361CR	7717	6360CR	7715CR
50A-125/250V 3 pole, 4 wire	6365CR	7717	6364CR	7715CR

PERKO

BATTERY SWITCHES



INSTALLATION AND OPERATING INSTRUCTIONS

Fig. = 8501 Basic switch
 8502 with key lock
 8503 with alternator
 field disconnect
 8504 with lock & field
 disconnect

For use with alternators and generators rated 6-32 V.D.C. switch rating, 250 amperes continuous, 360 amperes intermittent.

Locate switch to keep battery cables short as possible.

All wiring to the switch shall be performed by a qualified marine electrician, and in accordance with the "Fire Protection Standard For Motor Craft,"

A. No. 302, The Standards of the American Boat and Yacht Council, Inc., and the USCG safety standards for boat electrical systems (R183)

CAUTION: (1) Make sure connections at terminals No. 1 and No. 2 are of the same polarity
 (2) Always STOP engines before switching to "OFF" position. Make-before-break feature allows switching between 1-all-2 positions with engine running.

Erratic operation, particularly after very long periods of idleness, can be cleared by rapidly switching back and forth briskly several times without any load connected

NOTE: If switch is to be mounted in an area subject to corrosion, it is recommended that a liquid electrical coating be applied to the terminal connections.

OPTIONAL ACCESSORIES

- (1) Key Lock Switch can be locked only in the "OFF" position. Key can be removed in either the locked or unlocked position
- (2) Alternator field disconnect is used to break the field current and protect the alternator diodes if the battery switch is inadvertently turned to the "OFF" position with engine running. Hook up instructions and applicability are explained in Diagram # 4.

The following diagrams illustrate typical installations.

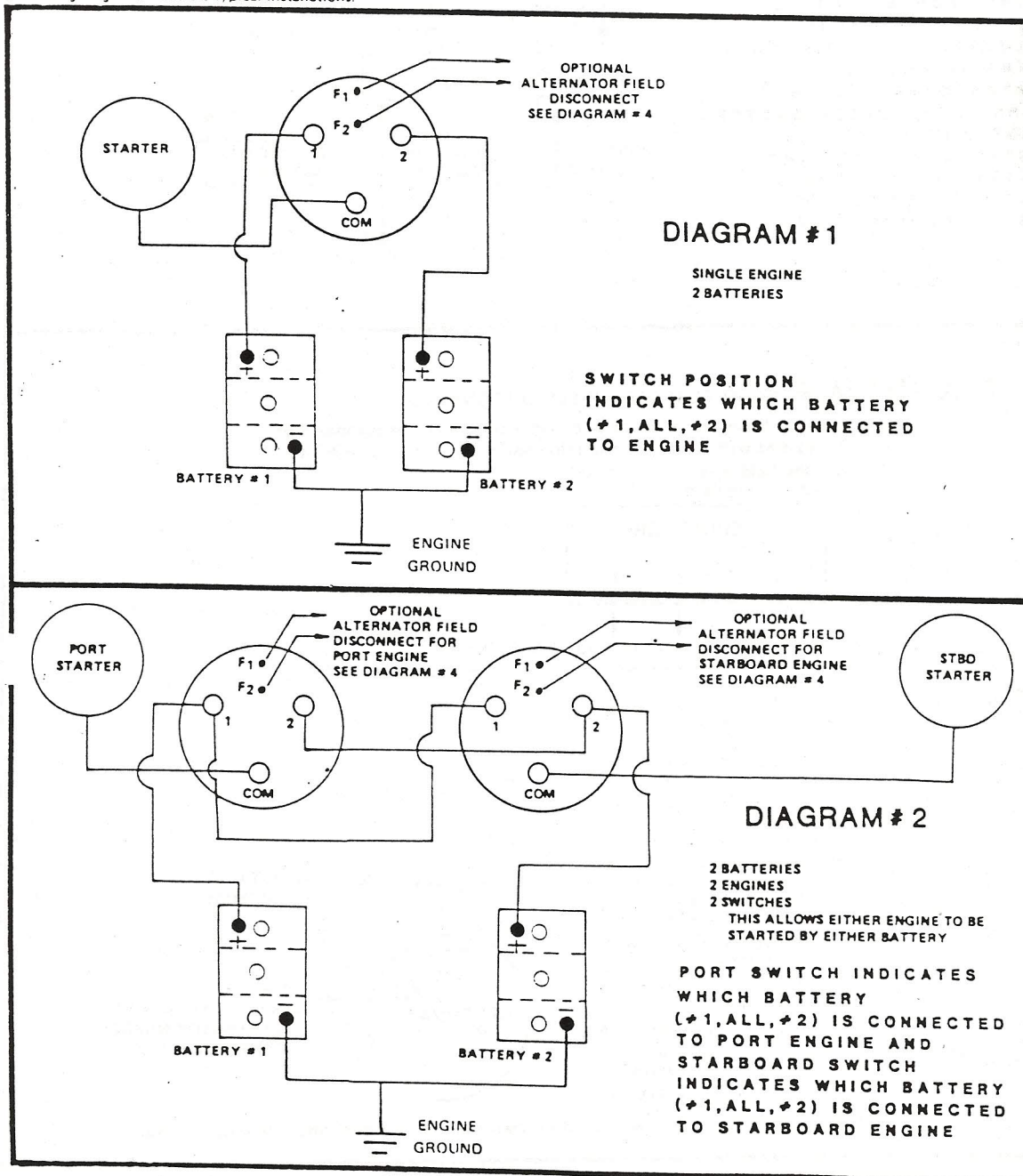


DIAGRAM # 3

2 SWITCHES
2 ENGINES
2 ENGINE BATTERIES AND
SEPARATE BANK OF LIGHTING
BATTERIES.

THIS ALLOWS BOTH ENGINES TO BE USED
TO CHARGE LIGHTING BATTERIES

PORT SWITCH INDICATES
WHICH BATTERY (PORT
ONLY, PORT & LIGHTING,
LIGHTING ONLY) IS
CONNECTED TO THE PORT
ENGINE AND THE
STARBOARD SWITCH
INDICATES WHICH BATTERY
(STARBOARD ONLY,
STARBOARD & LIGHTING,
LIGHTING ONLY) IS
CONNECTED TO THE
STARBOARD ENGINE

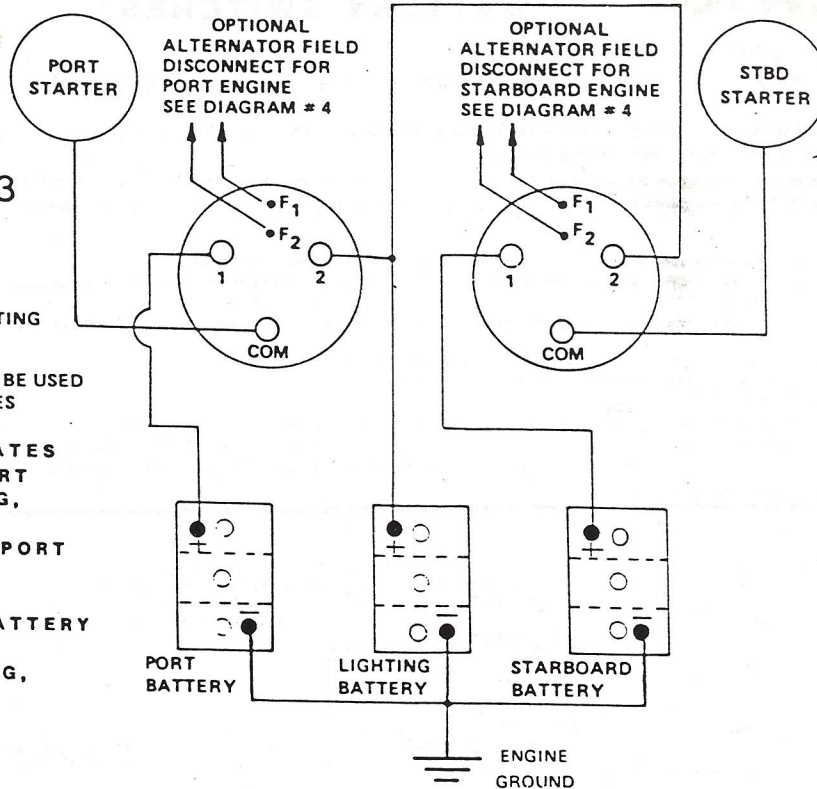
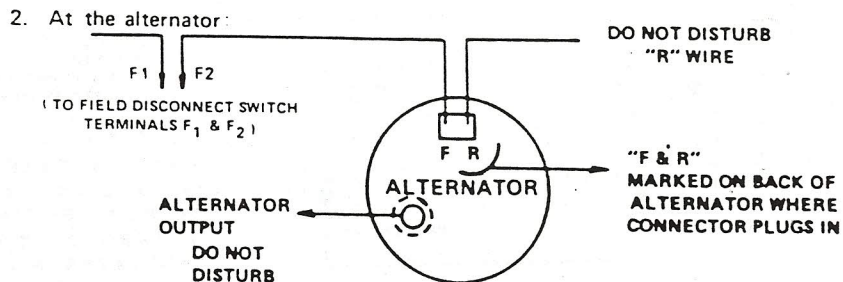
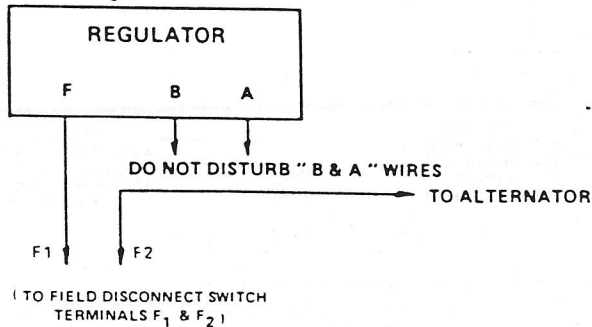


DIAGRAM # 4 ALTERNATOR FIELD DISCONNECT

- A. Use min. 14 awg wire, suitable for use in marine engine compartments.
- B. On systems with a separate regulator, splice the field disconnect switch into the field wire "F", as shown:
 1. At the regulator:



2. At the alternator:
 1. At the alternator:
- C. On unitized alternators with built-in regulator – a field disconnect cannot be installed.

INSTALLATION INSTRUCTIONS

15 AMP SWITCHING BATTERY CHARGER - MODEL #2615

DISCONNECT A.C. POWER BEFORE BEGINNING INSTALLATION

DISCONNECT POSITIVE WIRES FROM BATTERIES

MOUNTING -(SEE DIAGRAM A)

1. Choose a mounting location which allows maximum air flow across the charger and through the cooling fins. Mount in vertical position only with the cooling fins running vertically. Do not mount in an airtight environment.
2. Avoid mounting the charger near a compass.
3. Referring to the mounting hole arrangement in Diagram A, drill four 1/4" diameter holes.
4. Mount the charger using the hardware recommended in diagram A.

ELECTRICAL CONNECTIONS - (SEE DIAGRAM B)

1. Remove the two screws from the terminal cover. Remove the cover exposing the AC and DC terminals.
2. Refer to the ABYC chart attached, describing proper wire sizes.
3. Follow the ABYC recommended practices covering AC and DC electrical systems on boats. Section E-9.15h states that "conductors shall be supported throughout their length or alternatively shall be secured at least every 18 inches.." (by clamps).

It is recommended that the charger wiring be clamped to the mounting surface close to the base of the charger. (Within two inches of the base)

4. If the wiring is done with sheathed cable, strip the sheath near the clamp and run individual wires to the charger terminals. (As shown in diagram B.)
5. Cut the wires to length leaving enough slack to run the wires without kinking or stretching.

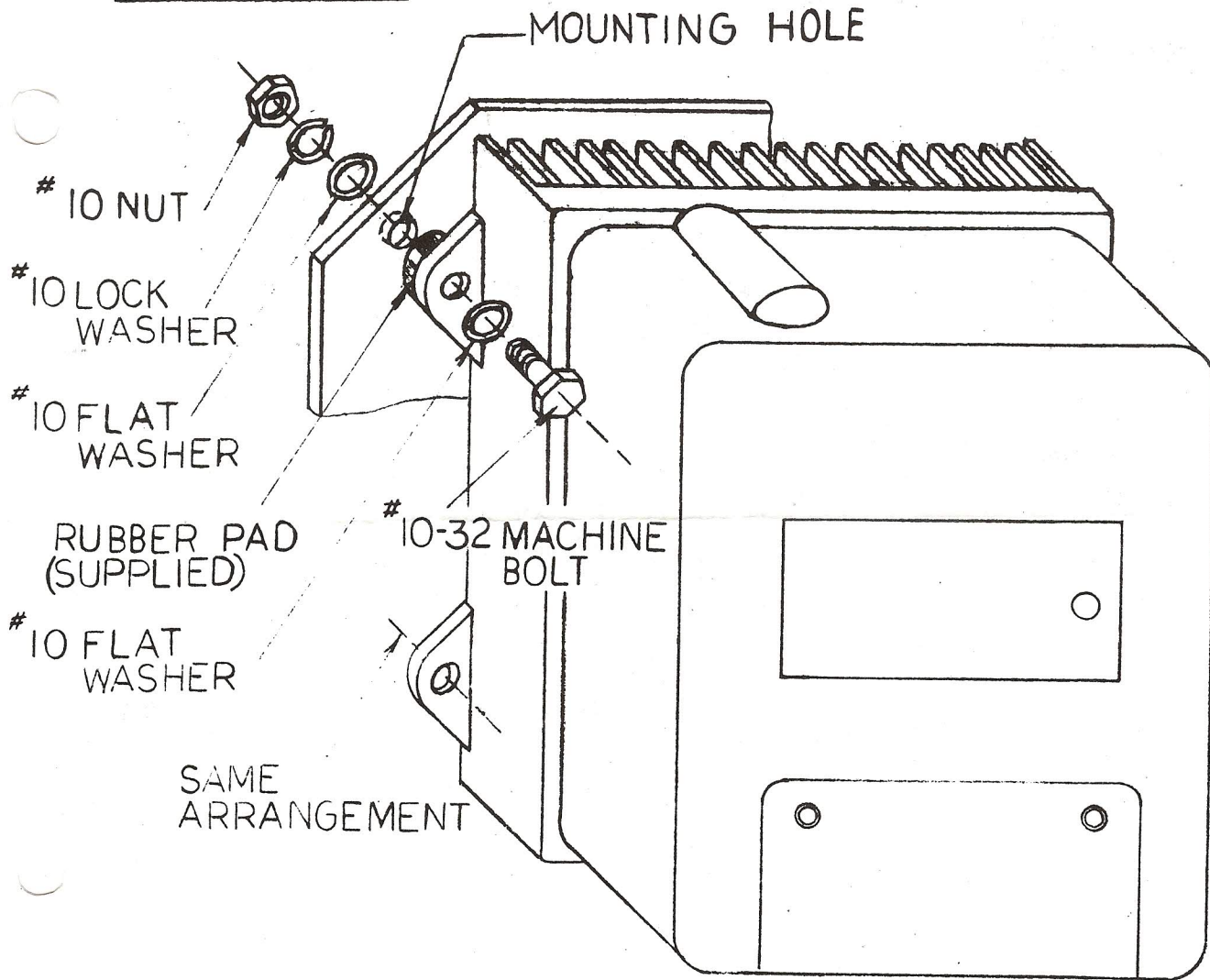
6. Strip the insulation from the ends of the wires leaving 1/4 " of exposed conductor.
7. Securely attach the crimp-on ring terminals to the stripped wires with a crimping tool. (See DIAGRAM D for recommended terminal type and size).
8. Remove the top nut and flat washer from the terminal studs. DO NOT ATTEMPT TO LOOSEN THE LOWER NUT! Loosening the lower nut will allow the stud to rotate and will require disassembly to correct the condition.
9. Securely fasten all ring terminals to their appropriate terminal locations using the washers and nuts removed in the previous step.
10. Replace the terminal cover and securely fasten with the two screws removed in step #1.
11. If the wiring clamps were removed for ease of wiring, replace the clamps and securely fasten in place.
12. Make all AC connections at the circuit breaker panel. Recommended breaker size is 5 AMPS.
13. Connect the DC + outputs of the charger to the pos. terminals of the appropriate batteries or on the battery (output) side of the battery isolator. (see diagrams C-1, C-2, C-3)
14. Connect the DC ground output of the charger to the engine block. (see diagrams C-1, C-2, C-3).
15. Check all wiring to verify connections.
16. Apply AC power to the charger. The red LED should light, indicating proper operation. If you suspect a problem or wish to double check your installation, measure the DC output voltage of the charger. Depending on the state of charge of the battery(ies), the voltage should be between 12.0 and 14.5 volts.

If the voltage is below 12.0 volts but is slowly increasing, this indicates that the battery was deeply discharged but is accepting charge current.

If the voltage is less than one volt, a very heavy overload condition exists. The charger has shut itself down and is in a low voltage, low current, safe condition. Check the condition of the battery(ies) and re-check the wiring from the charger to the battery(ies).

To get out of this shut-down condition, shut off the AC power to the charger, disconnect the battery(ies) and re-apply the AC power.

DIAGRAM A.



MOUNT IN VERTICAL POSITION ONLY, AS SHOWN WITH THE HEAT SINK COOLING FINNS RUNNING VERTICALLY.

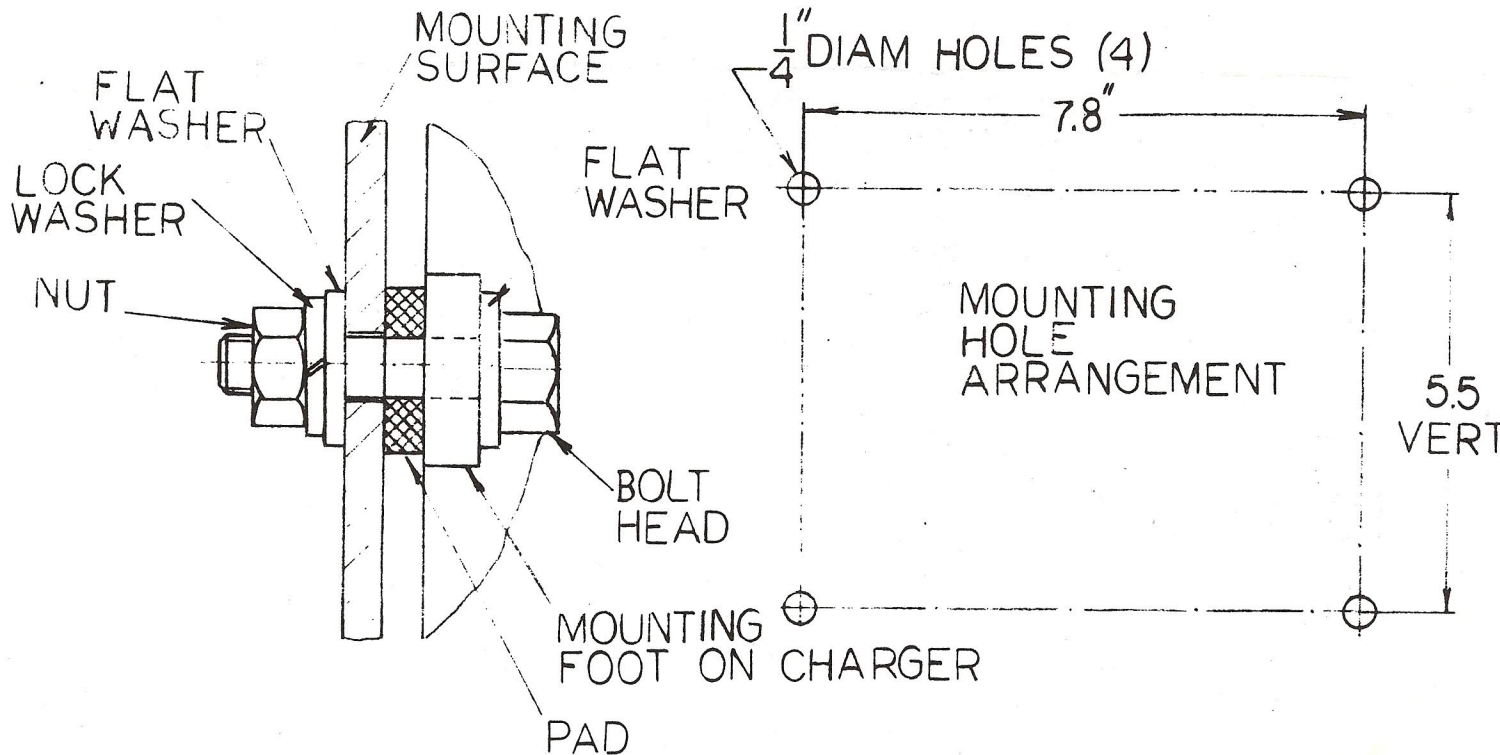
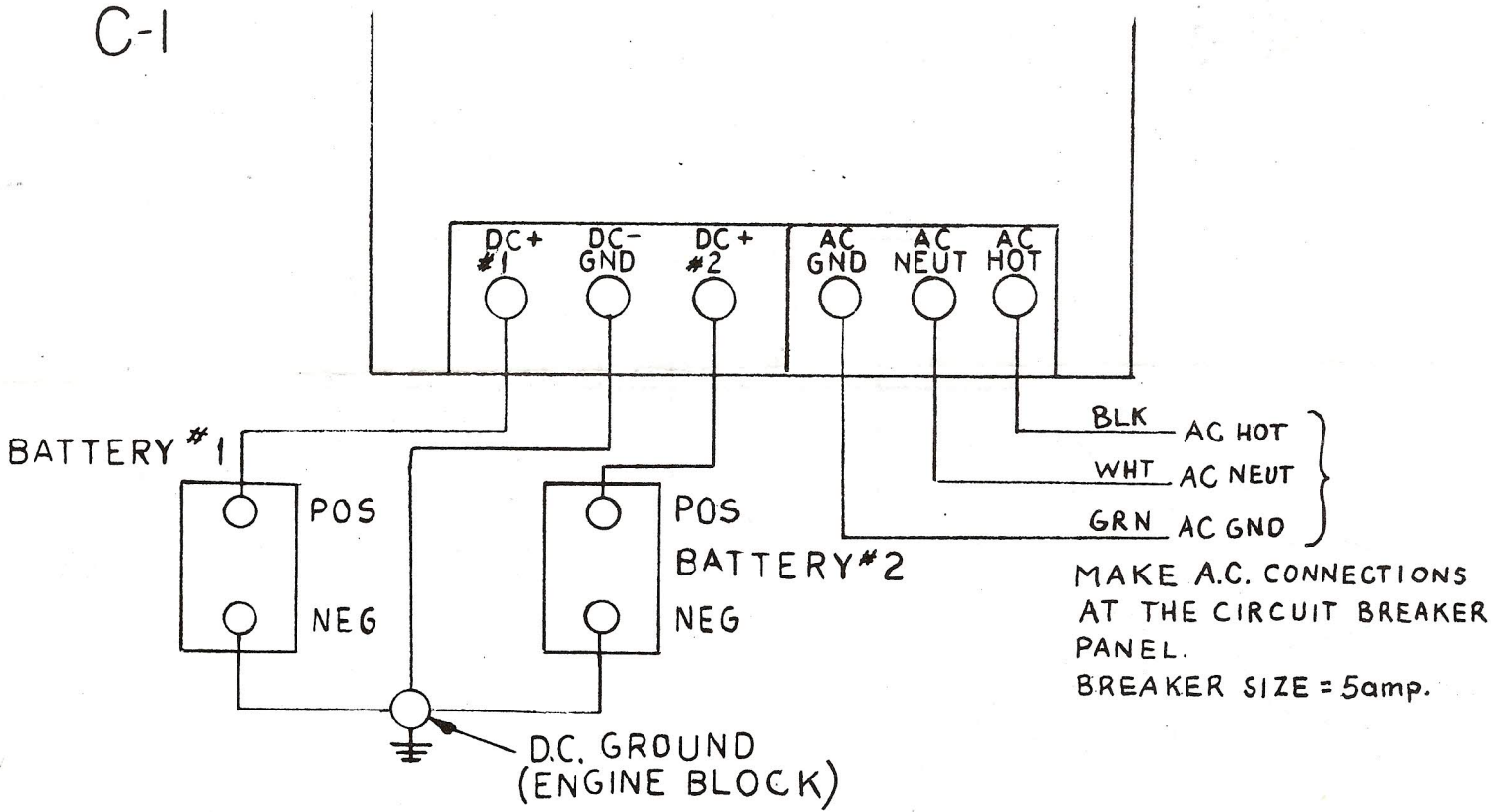


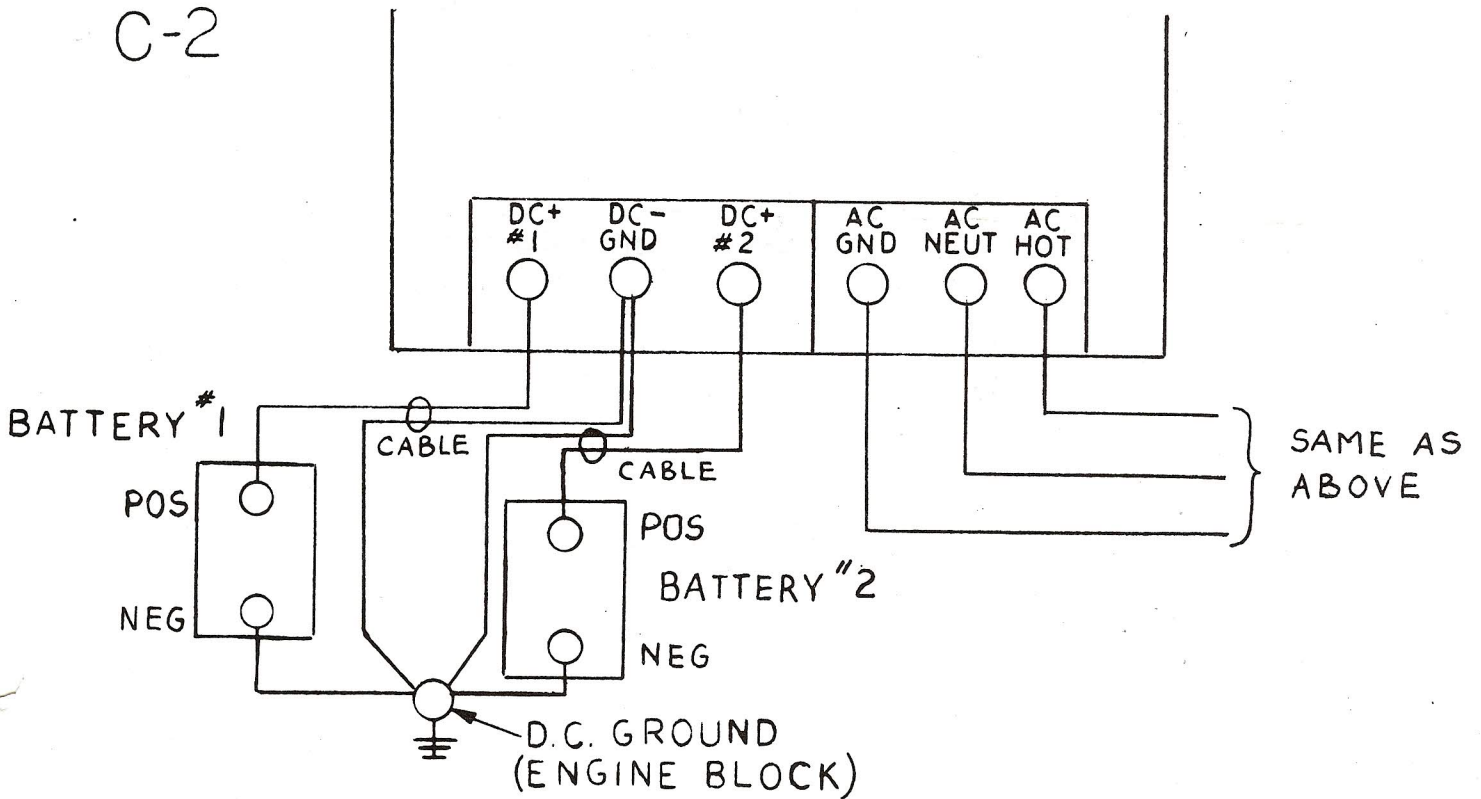
DIAGRAM C.

GENERALIZED WIRING DIAGRAMS

C-1



C-2



C-3

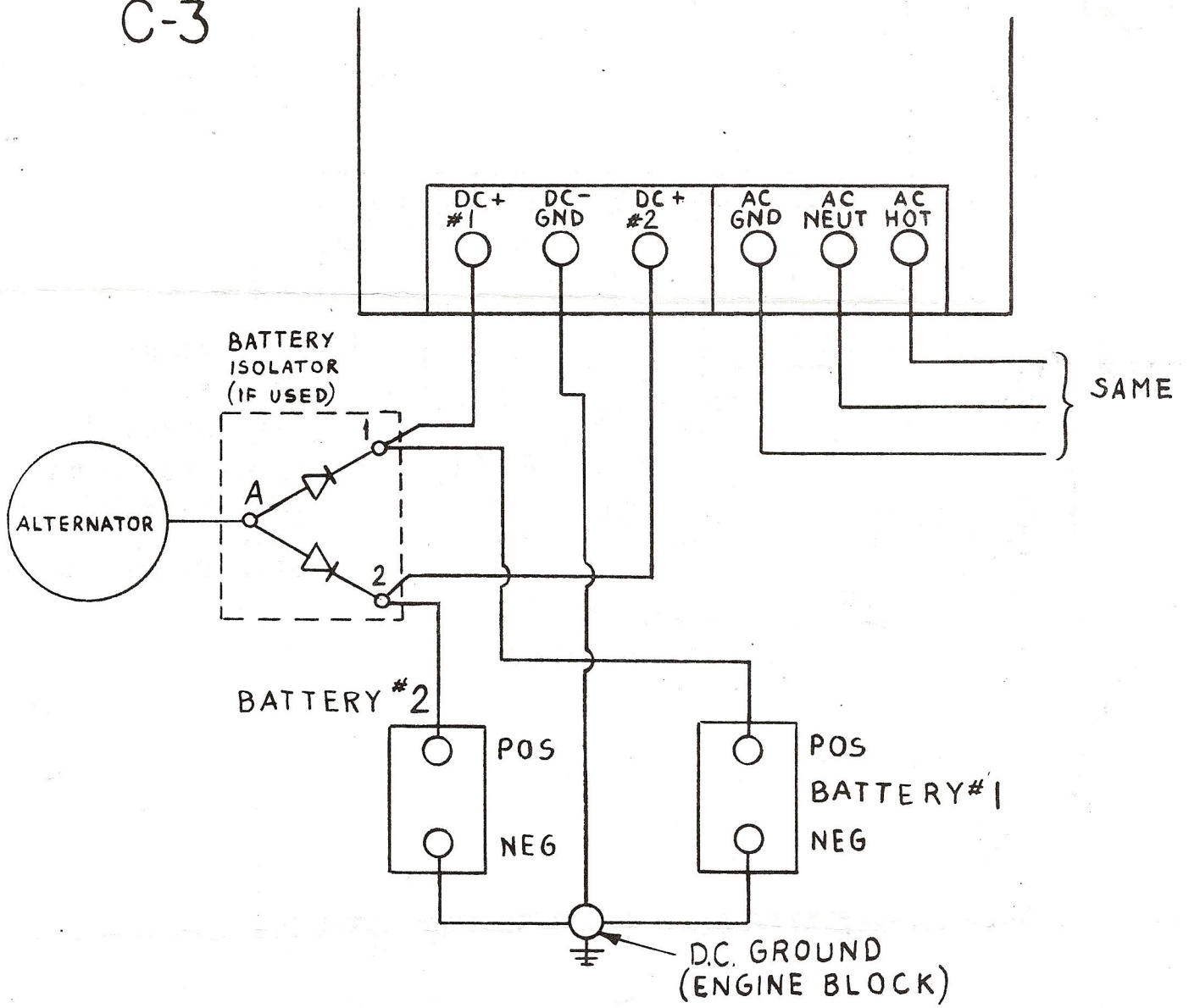
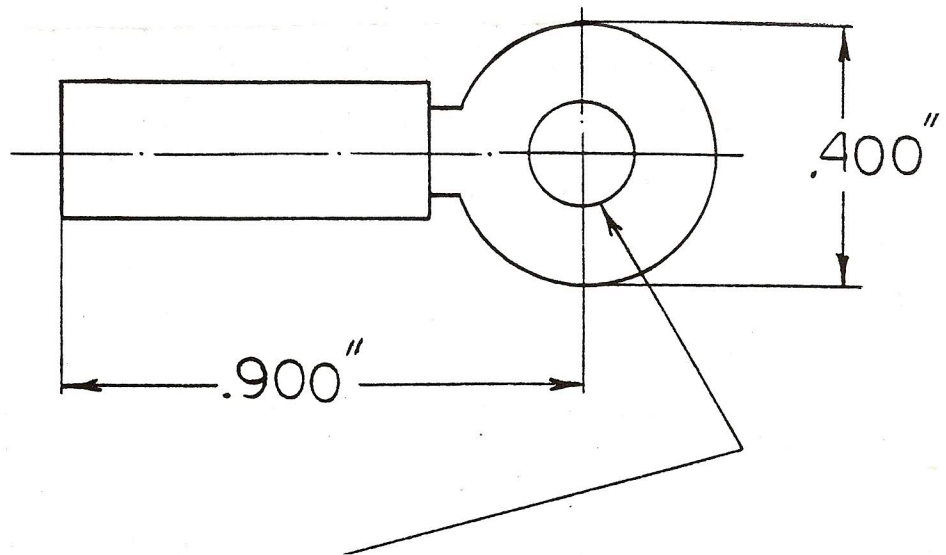


DIAGRAM D.



HOLE SIZE

- A.C. WIRING - HOLE FOR #6 STUD
- D.C. WIRING - HOLE FOR #10 STUD

Choose an insulated ring terminal for the wire size that is being used (typically #10 or #12 AWG)

Choose a terminal whose dimensions do not exceed those shown above.

