OPTION ONE: SINGLE 24 VOLT BATTERY BANK
1. Mount Converter/Equalizer close to the battery bank.
2. Connect the ground terminal of the Converter/Equalizer directly to the 12V "A" battery ground.
   (CAUTION: Do not connect to chassis ground. Improper operation may result).
3. Connect the 12V positive terminal to the 12V "A" battery positive post.
4. Connect the 24V output terminal to the 24V "B" positive post.
5. Connect the ignition terminal to a 12V ignition source. (This circuit activates the Converter/Equalizer only - does not act as an on/off switch for the 24V accessories).
7. Connect all 12V loads to "A" battery positive post. Connect all 24V loads to "B" battery positive post.

OPTION TWO: SEPARATE 24 VOLT BATTERY BANK WITH COMMON GROUND
1. Mount Converter/Equalizer close to the main 12V chassis battery.
2. Connect the ground terminal of the Converter/Equalizer directly to the main 12V chassis battery ground.
   (CAUTION: Do not connect to chassis ground. Improper operation may result).
3. Connect the 12V positive terminal of the Converter/Equalizer to the 12V chassis battery positive post.
4. Connect the 24V output terminal to the 24V "B" battery positive post. (CAUTION: Do not connect 12V loads to "A" battery of 24V battery bank, an imbalance condition will result, affecting battery life).
5. Connect ignition terminal to a 12V ignition source.
6. Confirm all connections. Separate 24V battery bank for 24V loads only.

TESTING
1. Start engine.
2. Assure that 12V is present at "IGN" terminal of Converter/Equalizer.
3. Apply 10 amps of 24V load.
4. Measure the 12V input voltage and the 24V output voltage. The 24V output voltage should be two (2) times the 12V input voltage. (Tolerance of ± 0.3 volt.)
5. Adjust if required.

ADJUSTMENT
The voltage adjustment will allow adjustment of the 24V output with respect to the 12V. This adjustment is pre-set at the factory. If adjustment is necessary, it should be made when normal charge voltage is present at the 12-volt battery (14-volt). Adjust the 24V under light load to 27.5 to 28V. An isolator may be used in the 24V output. If this is done, the 24V must be adjusted to compensate for the isolator.

CAUTION
24V loads drawing current in excess of the rating of the Converter/Equalizer are permissible for short periods of time (minutes) only. Prolonged use of these loads will result in improper battery charge and eventual battery deterioration, and possible damage to the Converter/Equalizer.

DO NOT WELD ON VEHICLES EQUIPPED WITH CONVERTER/EQUALIZER SYSTEM. PERMANENT DAMAGE MAY RESULT TO THE CONVERTER/EQUALIZER SYSTEM. REMOVE ALL CONVERTER/EQUALIZER FUSES BEFORE WELDING.
TYPICAL WIRING DIAGRAM
CONVERTER/EQUALIZER - 41000 SERIES (12-24 VOLTS)
MULTI-VOLTAGE MANAGEMENT SYSTEM

OPTION ONE: SINGLE 24 VOLT BATTERY BANK

OPTION TWO: SEPARATE 24 VOLT BATTERY BANK WITH COMMON GROUND

SURE POWER ONE-YEAR LIMITED WARRANTY.
Sure Power Industries, Inc. warrants each new product against factory defects in material and workmanship for one year after date of purchase. The owner will be responsible for removing from the vehicle and returning any defective unit(s), transportation costs prepaid to Sure Power Industries, Inc. factory or a factory authorized servicing distributor. Sure Power Industries, Inc. will, without charge, repair or replace at its option, unit(s) which its inspection determines to be defective. All transportation charges must be borne by the purchaser. A copy of the purchaser’s receipt must be returned with the defective unit(s) in order to qualify for warranty coverage. Exclusions from this warranty are the finish and any condition(s) determined by Sure Power Industries, Inc. to have been caused by abnormal use or service. This warranty shall not apply to any Sure Power product which has been improperly installed.

There are no warranties, expressed or implied (including any implied warranties of merchantability or fitness), which extend beyond this warranty period. The loss of use of the product, loss of time, inconvenience, commercial loss or consequential damages are not covered. Sure Power Industries, Inc. reserves the right to change the design of any product without assuming any obligation to modify any product previously manufactured.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state. Some states do not allow limitations on how long an implied warranty lasts. Some states do not allow the exclusion of limitation of incidental or consequential damages. Therefore, the above limitation(s) may not apply to you.