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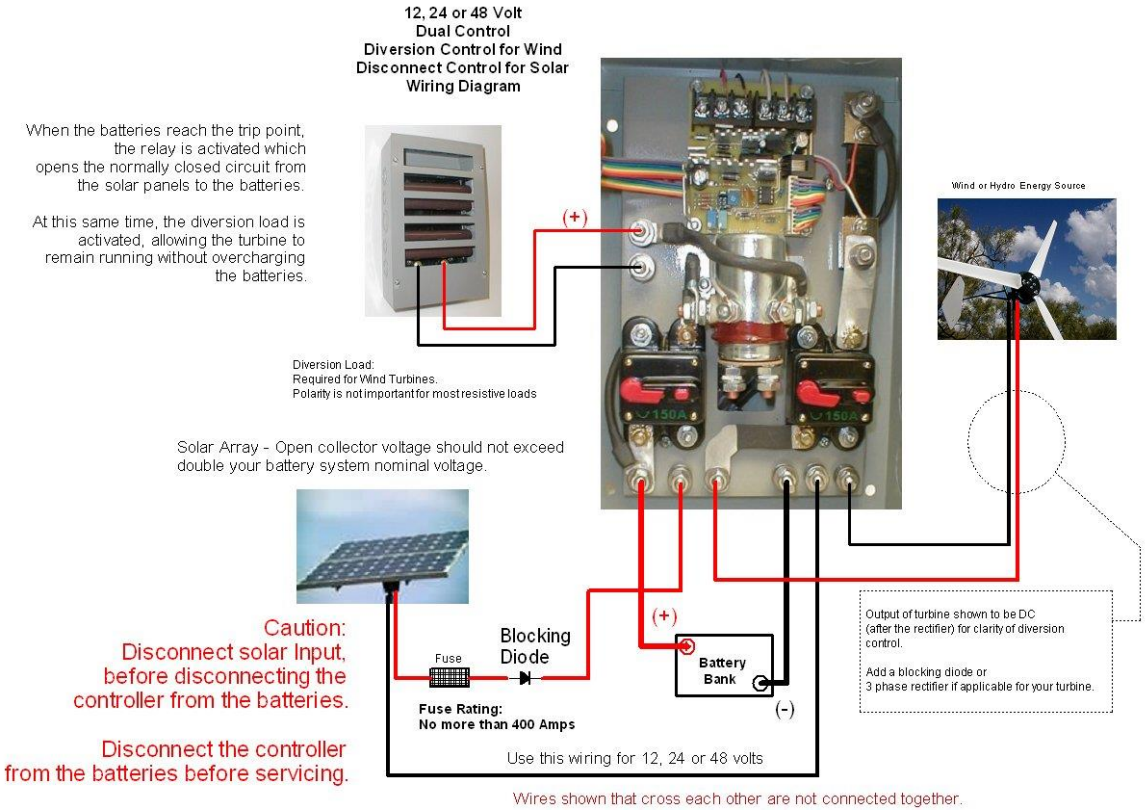

440 Amp - Diversion (Charge) Regulator with:

- Two High contrast Meters (both Volts and Amps)
- Two D/C breakers/disconnects.

Fully wired, ready to go for both wind and solar. Works directly with 12, 24 and 48 volt systems!

440A 12/24/48V Wind/Solar Diversion-Charge Controller with Volt and Amp Meter

- Wind/Solar Diversion-Charge Load Controller.
- 440 Amp 12, 24 or 48 volts.
- High contrast LED dual volt/amp meters with on/off switch.
- Built in D/C Breakers.
- Factory wired for both wind and solar.
- 10,000 Watts! 8 x 12 Hoffman Box.

- Reverse polarity protected.

This diversion controller is the result of our many attempts to use the controllers currently on the market (offered by some of the largest names in the business), to work in conjunction with our wind turbines. None of the other diversion controllers on the market did what we needed a diversion controller to do. So we designed our own and added all of the features that are truly needed in a diversion controller.

Built around a solenoid that we have tested (tortured) in-house at over 460 amps, this controller is user adjustable, has a large enclosure, microprocessor controlled, test button and battery status indications -- There is no other controller on the market like this one, well other than our own C440 of course.

Use this controller to regulate and prevent battery overcharge in:

- Solar Systems
- Wind Systems
- Hydro Systems

Some of the key features of this controller are:

- Microprocessor controlled -- This is very important for both stability and functionality.
- User changeable settings -- Several controllers on the market set the dump level, and that's that!
- Super High amp rating - **440 Amps, up to 10,000 watts. 440 amps surge, 125 amps continuous.
- Works directly with 12, 24 or 48 volt systems. -- The relay contacts can handle open collector voltages of up to 120 volts.
- High Contrast LED battery voltage. - Several controllers do not tell you what's going on - This one does!
- High Contrast LED turbine amperage meter -- Measures 3 digits to the left of the decimal, 2 digits to the right.
- Meters can be shut using the on/off switch.
- Two factory installed, fully wired D/C breakers and disconnects.
- Entire unit is wired and ready to go for both wind and solar.
- Battery status LED
- Push to test. -- Ever wonder if your controller & load are working OK?
- Large (8" x 12") solid steel enclosure, with multiple conduit knockouts
- Large enough terminal blocks that you can actually terminate large wire (See notes below.)
- The electronics are fully isolated from the enclosure, no ground loops.
- Draws almost no energy while monitoring (all electronics must use some power, to work -- this is a miser)
- Reverse Polarity protected.

Some specifics about the points made above:

The microprocessor is the heart of the controller. It is given the battery voltage and the user changeable trip points. This information is analyzed and acted upon.

The Battery level is checked, and based on that info, the Green LED flashes or is illuminated as follows

1. (One) Flash indicates the battery is less than 12 volts (12 volt system - Double for 24 etc)
2. (Two) Flashes indicates the battery is 12 to 12.5V
3. (Three) Flashes indicates the battery is 12.6 to 13v
4. (Four) Flashes indicate the battery is 13.1 to 13.5V
5. (Five) Flashes indicates the battery is above 13.5V but less than 13.9V (Settings are adjustable)

Steady green means the battery is full.
The red LED is illuminated when the battery is being dumped at 14.5v (or the charge source diverted.)
The dump remains active for a minimum of 5 seconds, at which time it is checked by the microprocessor. If battery voltage drops below the "Dump Cancel " level, the dump is disabled, otherwise the dump is continued and rechecked every 5 seconds.

When you click the "TEST" push-button - the 5 second cycle is started (one time, unless the batteries are within the "Dump Start" and "Dump Cancel" zone.)
Settings are user changeable! By simply turning a simple potentiometer with a small screwdriver, you can quickly adjust the trip point.
This controller is capable of handling ten, 1000 watt wind turbines, or up to **125 Amps of continuous solar power,** or both at the same time. **Note: 440 amps is not continuous, but is limited to 20% duty time.**
150 amp heat activated breakers have been installed to limit continuous current to 150 amps. Instantaneous current handling of this unit not to exceed 440 amps.
**The solenoid in this unit has been tested to over 440 amps. We have installed two 150-amp breakers as a standard configuration.
This allows for 9000 watts of wind power in a 48-volt system, 4500 watts in a 24-volt system and 2250 watts in a 12-volt system. Solar systems should be designed for no more than 125 amps continuous current.
The enclosure is heavy gauge, solid steel, ready to mount. -- No plastic, no junk, simple and rugged.
This Hoffman pull box is perfect for terminating larger wire. It has multiple knockouts on each side of the box.
The box measures 8.25" x 12". The electronics are fully isolated from the box.