CONNECTING YOUR PORTABLE GENERATOR SAFELY

Last week we discussed how generators can surge and cause electricity to jump across contacts such as receptacles, and how some of the surges can cause fires. This is why transfer switches have three positions, utility, off, and generator.

This week we will discuss different alternatives in connecting your portable generator safely and legally.

It is important to remember when using a portable generator, it usually means the power is out, and utility workers are working on power lines. These same lines that bring power into your house, will also take power from your house to the utility workers. The transformer that steps the voltage to a safe level coming into your home, will also take your voltage and step it up to an unsafe level (tens of thousands of volts) to the utility workers working on restoring your power.

Extension Cords. The most cost effective method is to plug an extension into your generator and into your appliance such as your refrigerator. However, this is not too practical, as energizing your furnace and other equipment without plugs is difficult

Gentran. This unit has individual breakers which you would transfer selected circuits from your panel to the Gentran. These selected circuits would be the only circuits energized with your generator. A generator plug would be installed outside in which you would plug your generator into that would energize the Gentran.

Whole House Manual Transfer Switch. This transfer switch, like the Gentran, has the three positions, but transfers the power to the whole house. This unit is installed between your meter and panel. This unit also uses a generator plug that receives power from your generator. With this setup, you can energize your whole house up to the capacity of your generator.

GENERLINK. This unit goes behind the meter, with no wiring involved (except for the neutral), takes about 15 minutes to install, safe and convenient. This unit has a plug built into it which you plug your generator when you lose your power. This unit cannot back feed, and energizes your whole house up to the capacity of your generator.

Panel Plate. This method utilizes a plate that is installed in the panel at the main breaker. A breaker is used to allow the power from your generator to feed your power directly without a transfer switch. This plate is designed to prevent the generator breaker from being turned on without the main breaker being shut off first. Although this method is legal, it lacks the safety of a transfer switch, and does not have the three positions. The generator could surge, and jump the main breaker that has been turned off, and injure or even cause a fatality. Some installers will not install these anymore for this reason.

Unsafe Practices: There are also many unsafe and illegal methods used, such as plugging the generator into a dryer or welder outlet, and people feel that it is acceptable because they never had a problem, and make sure they shut the main off first. This does not protect the line worker, and if something did happen, you could be held responsible

Call any reputable generator specialist to come out and evaluate the safety of your setup, or ideas for a new installation. Most will do this at no charge

Is your automatic generator sized properly? How do you determine the size of the generator you need? We will be discussing that next week.

If you have any questions, please forward them to dirfygenerators@yahoo.com, and we will try and answer them. We will also answer some of the questions in future articles