

USE CAUTION WITH EMERGENCY GENERATORS

Emergency generators are getting much attention lately with all the concern about "Y2K." The most critical concern for the installation of emergency generators is to make sure that they are isolated from the utility lines for very important safety reasons. If a lineman is working on the repair of a line, he knows that the power is off from the utility generator but if the lines are being fed from an emergency generator somewhere on the system, he can be in grave danger.

Specifically, the emergency generator must be installed with a double throw switch. The lines from the utility are installed on one side of the switch and the lines to the generator are installed on the other side of the switch and the lines to the greenhouse are installed on the middle set of connectors. In this fashion, energy is going to the greenhouse from the emergency generator or from the utility lines. The emergency generator fan should never then be connected to the utility line and cause a problem. The diagram indicates how this is done.

Another concern is for the safety of the emergency generator operation. Never refuel the generator while it is operating. Always shut down the system during this time. Make sure that the combustion gases from the generator or from the tractor driving the generator through the PTO are vented to the outside to avoid any dangers of carbon monoxide poisoning.

A recent communication from my local utility indicated that customers who improperly install, operate or maintain a generator are responsible for any injury or damage suffered by themselves, their neighbors and the Utility. Words of wisdom. The most important thing of course is not to injure linemen risking their lives working on the pole during a storm or other emergency situation.

It's a good idea to have a competent licensed electrician install the generator switch and another good idea is to run the generator often during the season so that when it is needed it will start and

be ready to function. Automatic switching equipment is available but quite expensive. In the absence of such a switching system, emergency alarms are needed to alert personnel that power is off. This can be done with a system which dials up to three phone numbers in sequence and relays a message that the system is down. Regardless of the time, day or night, someone is alerted to come look over the situation and start the generator if needed and avoid a serious problem, particularly on a very cold, windy night.

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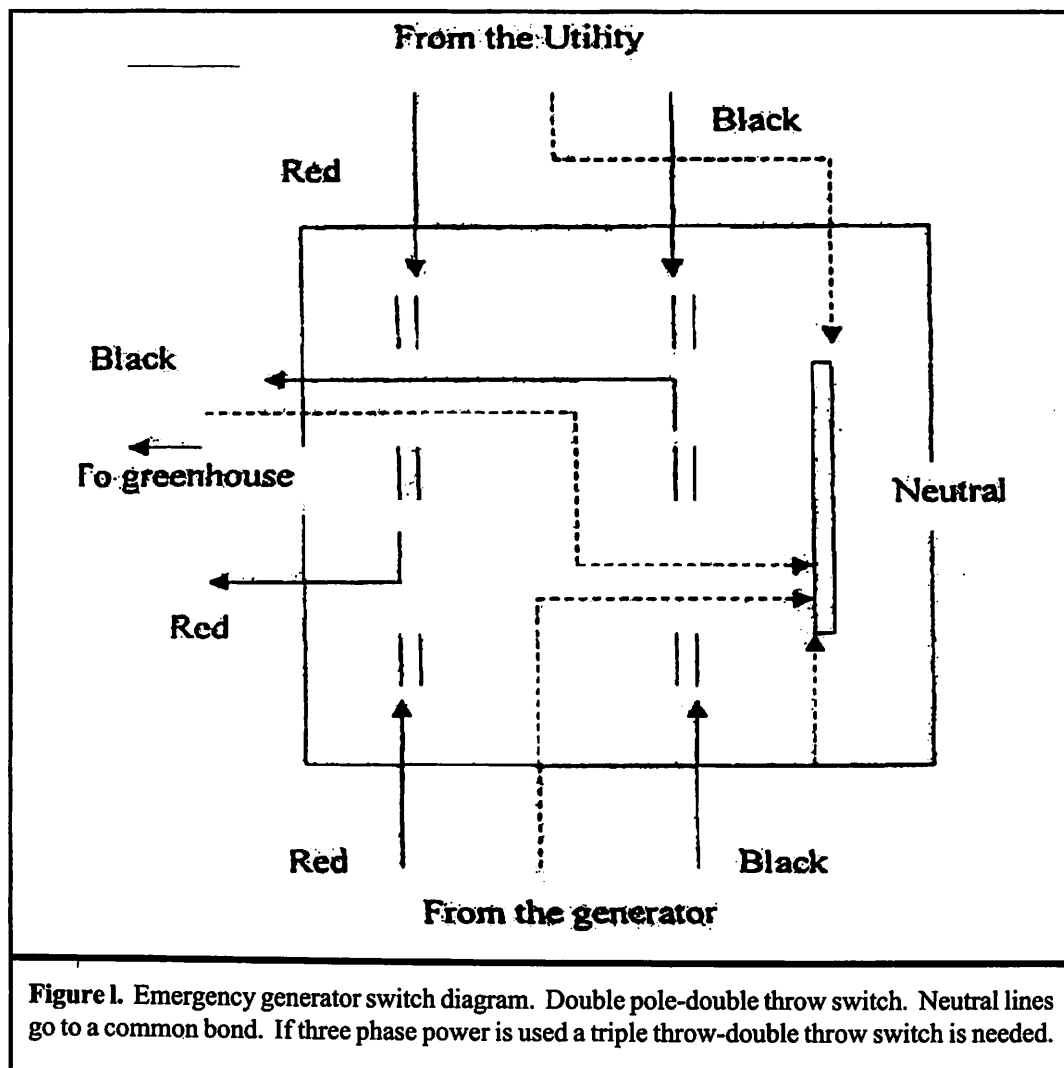


Figure 1. Emergency generator switch diagram. Double pole-double throw switch. Neutral lines go to a common bond. If three phase power is used a triple throw-double throw switch is needed.