

Portable Generators

It has come to the attention of the Electrical Safety Authority, portable generators that do not have the neutral or white conductor bonded to the case are being purchased and rented for use as stand alone electricity supply for portable electrical devices. **This situation presents a very real hazard in that the overcurrent protection will not operate under a phase to ground fault exposing a worker to electric shock or electrocution.**

Generators with no connection between the neutral and the case shall not be used for a stand alone electrical supply for the operation of portable electrical equipment. **Generators supplied by equipment rental stores for use as a stand alone supply to portable electrical devices shall be a generator with the neutral bonded to the case to facilitate the operation of the overcurrent protection device(s).**

Generators with no connection between the neutral and the case are intended to be connected to a distribution system through a transfer switch such as a standby back up system in a residential home, upon failure of the utility supply.

For further clarification and information consult the Ontario Electrical Safety Code Bulletin 10-10-*

Information or marking on the status of the interconnection between neutral and ground is required to be marked on the generator, by Canadian Standards Association Standard C22.2 No 100-95.

11.3.2

The following additional information or instructions shall be provided:

- (a) a suitable diagram;
- (b) the status of the neutral conductor shall be marked on each machine as follows: NEUTRAL FLOATING or NEUTRAL BONDED TO FRAME.

The label indicating the status of the neutral should be located in close proximity to the generator nameplate.

Note:

Generators approved with a floating neutral and converted to a bonded neutral require field evaluation by a recognized approval agency.

FLASH NOTICE

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The Ontario Occupational Health and Safety Act requires portable electrical tools used outdoors or in wet locations be fed from a circuit having a ground fault circuit interrupter, installed at the receptacle or on the circuit at the panel.

ESA recommends all wiring connected to a stand alone generator have ground fault circuit interrupter protection.