

## ELECTRICAL INSPECTION BULLETIN

**Bulletin No.** 10-5-0

**Effective Date:** April 1<sup>st</sup>, 2015

### Portable Standby Generators

**Page:** 1 of 2

If **improperly** installed, connecting a *portable* standby generator to your permanent electrical wiring system can result in fire, personal injury or property damage.

This bulletin applies to portable standby generators not intended for “*Life safety systems*” as defined by the National Building Code of Canada.

The NB electrical inspection branch of the Department of Public Safety can ensure that your installation is compliant with the minimum requirements of the Canadian Electrical Code when it is done under a wiring permit. It is illegal in NB for non-qualified persons to install electrical equipment and:

- 1) All electrical work shall be completed under a wiring permit by a licenced electrician working for an Electrical Contractor,
- 2) A manual or automatic transfer switch shall be used to prevent the utility lines from being energized during a power outage and will prevent the generator from being destroyed when utility is restored,
- 3) The transfer switch shall be ‘Service Entrance’ rated if installed between the meter and the panel
- 4) The transfer switch *and* generator shall be approved for Canada, compatible with each other, properly rated and configured
- 5) 120/240V three pole transfer switches (‘Switched Neutral’) shall be connected to a generator with a neutral bonded to frame and the generator ground terminal shall be attached to the permanent system ground electrode with a #6AWG green conductor,
- 6) 120/240V two pole transfer switches (‘Solid Neutral’) shall be connected to a generator with a floating neutral and connection to the permanent system ground electrode is not required as it is already established at the main service
- 7) Portable generator receptacles shall be configured as 120/240V, 4 wire, and
- 8) Permanent warning labels shall be installed at the generator panel and generator receptacle to identify the system configuration as either ‘Switched Neutral’ or ‘Solid Neutral’.

WARNING: Solid Neutral system; Connect only to a generator with a FLOATING NEUTRAL

OR

WARNING: Neutral is switched; Connect only to a generator with its NEUTRAL BONDED TO FRAME and ground the generator to the permanent system ground electrode with a #6AWG green conductor

Portable Standby Generators					
<b>Bulletin No.:</b> 10-5-0		<b>Reviewed by:</b>		Pierre Daigle <i>Pierre Daigle</i>	<b>Date</b> Mar 5 <sup>st</sup> , 2015
<b>Prepared by:</b>	Pierre Doucet <i>Pierre Doucet</i>	<b>Date</b> Mar 1 <sup>st</sup> , 2015	<b>Approved by:</b>	Jake LeBlanc <i>Jake LeBlanc</i>	<b>Date</b> Mar 12 <sup>th</sup> , 2015

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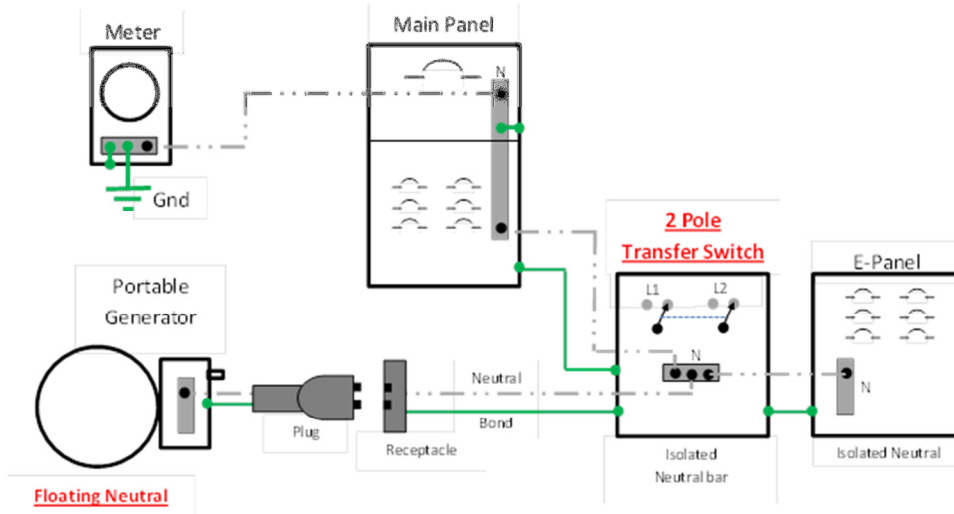


Figure 1: Portable generator with Floating Neutral

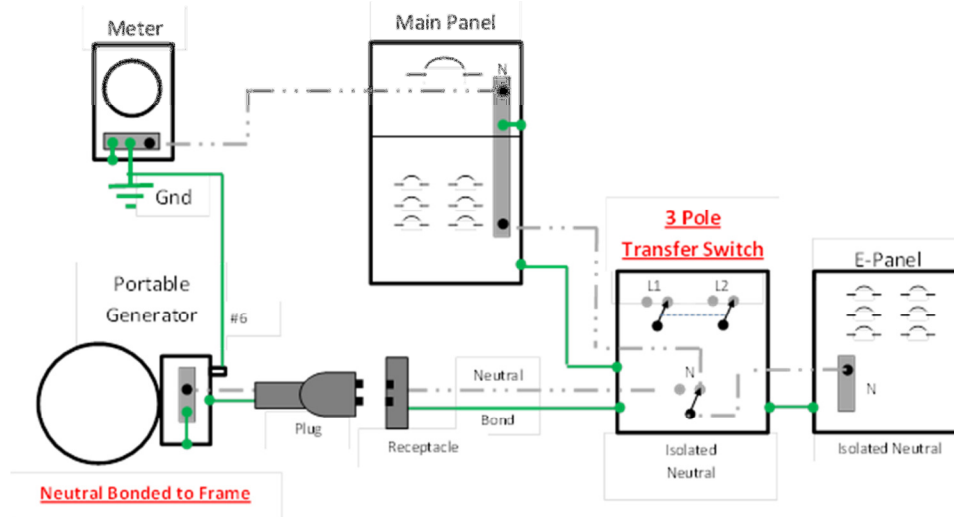


Figure 2: Portable generator with Neutral bonded to frame and grounded to earth with #6AWG

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