



MEMBER BULLETIN

April 20, 2016

Electrical Safety Authority – Grounding Portable Generators

As construction season swings into high gear, please consider the attached notice from the Electrical Safety Authority (ESA) regarding the grounding of portable generators. According to the attached Bulletin, the frame of a portable generator need not be grounded (connected to earth) and may serve as the ground (in place of the earth, rather than connect to a grounding electrode system) if the following two criteria are met:

1. The generator supplies only equipment mounted on the generator and/or cord and plug-connected equipment through receptacles mounted on the generator; and,
2. The noncurrent-carrying metal parts of equipment (such as the fuel tank, the internal combustion engine, and the generator's housing) are **bonded** to the generator frame, and the equipment grounding conductor terminals (of the power receptacles that are a part of [mounted on] the generator) are **bonded to the generator frame**.

If these conditions do not exist, then a grounding electrode such as a ground rod, is required. If the portable generator is providing electric power to a structure by connection via a transfer switch to a structure (home, office, shop, trailer, or similar) it must be connected to a grounding electrode system, such as a driven ground rod. The transfer switch must be approved for the use and installed in accordance with the manufacturer's installation instructions by a qualified electrician.

Construction Regulation Requirements

The electrical section of the regulations references portable generators and grounding/bonding under the following section:

195.2 When a portable electrical tool is used outdoors or in a wet location,

- (a) if the source of power is an **ungrounded portable generator** having a maximum output of 1.8 kilowatts or less, a ground fault circuit interrupter of the Class A type shall be **located in the cord** feeding the tool, as close to the tool as possible;



(b) in all other cases, the tool shall be plugged into a receptacle protected by a ground fault circuit interrupter of the Class A type. O. Reg. 627/05, s. 7.

Under Occupational Health and Safety Act

The employer is required to ensure that equipment, materials, and protective devices provided by the employer are used as prescribed. Additionally, it is the responsibility of the employer to take every precaution reasonable in the circumstances for the protection of a worker.

If you have any questions about this bulletin, please contact Patrick McManus (patrick.mcmanus@oswca.org or 905-629-7766 ext. 222).