

SUBJECT: Portable Generators - GFCI Protection

Purpose: To clarify the exemption and/or the requirement for GFCI protection on portable or vehicle-mounted generators.

Scope: This instruction applies MNOSHA-wide.

Cancellation: This instruction supersedes STD 3-9.2, dated September 2, 2009.

Background: 1926.404(b)(1)(ii) requires GFCI protection for receptacle outlets on construction sites, unless the receptacles are on a two-wire, single-phase portable or vehicle-mounted generator rated not more than 5kW, where the circuit conductors of the generator are insulated from the generator frame and all other grounded surfaces.

ACTION:

Portable/vehicle-mounted generators in use on construction sites **must** be equipped with GFCI unless it meets **all** of the following criteria:

- A. The output is a two-wire, single phase system-both wires are normally current carrying.
 - 1. Note: reference to the two-wires does not include the ground or equipment grounding conductors
 - 2. Examples of systems that do not meet the criteria:
 - i. Systems with a neutral conductor
 - i. Three phase generators (have four wires)
 - ii. Dual voltage systems (120v/240v) (have three wires)
- B. The generator has a rating of 5kW or less.
 - 1. This information generally can be found on the manufacturer's nameplate on the generator.
- C. The circuit carrying wires of the generator are insulated and/or isolated (not connected) from the generator frame or other grounded surfaces.

If all criteria are not met for the portable/vehicle-mounted generator and the generator is not equipped with GFCI, a citation for 1926.404(b)(1)(ii) is issued.

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For the MNOSHA Management Team

Distribution: OSHA Compliance and WSC Director

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