

PORTABLE GENERATOR SAFETY

Portable generators are useful when temporary or remote electric power is needed, but they can be hazardous. The primary hazards to avoid when using them are carbon monoxide poisoning, electric shock or electrocution, and fire. Whether it is due to power outage or lack of proper power supply, portable generators can be a very valuable piece of equipment when working in areas without access to power

General Safe Work Practices

- Maintain and operate portable generators in accordance with the manufacturer's use and safety instructions.
- Make sure your generator is properly grounded to avoid electrical shocks. Check the generator owner's manual for correct grounding information.
- Inspect portable generators for damage or loose fuel lines that may have occurred during transportation and/or handling. Remove defective equipment from service and mark or tag it as unsafe for use.
- Before refueling, shut down the generator

Avoiding Electrical Hazards:

- Always plug power tools directly into the generator using the manufacturers supplied cords. If extension cords are required use only a heavy-duty outdoor rated extension cord with grounded, 3-prong plugs. Inspect the cord to make certain it is free of cuts or tears and the plugs are in proper condition.
- Keep the generator dry. Operate on a dry surface under an open, canopy- like structure.
- Dry your hands before touching the generator.
- NEVER plug the generator into a wall outlet. This practice, known as back feeding, can cause an electrocution risk to utility workers and others served by the same utility transformer.
- If necessary to connect the generator to house wiring to power appliances, have a qualified electrician install appropriate equipment. Or, your utility company may be able to install an appropriate transfer switch.
- Use ground-fault circuit interrupters (GFCIs) as per the manufacturer's instructions.

Avoiding Fire Hazards:

- Before refueling the generator, turn it off and let it cool. Fuel spilled on hot engine parts could ignite.



- Always store fuel outside of living areas in properly labeled, non-glass containers.
- Store fuel away from any fuel-burning appliance.

Carbon Monoxide Poisoning and Avoiding CO Hazards

Carbon monoxide (CO) is a colorless, odorless, toxic gas. Many people have died from CO poisoning because their generator was not adequately ventilated.

THINGS YOU SHOULD DO IN THE WORKPLACE:

- Get to fresh air immediately and seek medical attention, if you or others show symptoms of CO poisoning – dizziness, headaches, nausea, tiredness
- Always use generators outdoors, away from doors, windows and vents
- Follow manufacturer's operational instructions
- Test CO alarms often and replace batteries when needed

THINGS YOU SHOULD NOT DO IN THE WORKPLACE:

- Do Not use generators in homes, garages, basements, crawl spaces, or other enclosed or partially enclosed areas, even with ventilation
- Do Not use a generator indoors
- Do Not store fuel indoors
- Do Not attach a generator directly to the electrical system of a structure (home, building or trailer) unless the generator has a properly installed transfer switch because this creates a risk of electrocution for utility workers

REVIEW QUESTIONS

- 1) Fuel should not be stored indoors?
 - a) True
 - b) False
- 2) To avoid electrical and fire hazards, the following precautions should apply?
 - a) Keep the generator dry
 - b) Plug power tools directly into the generator
 - c) Before refueling the generator, turn it off and let it cool
 - d) All the above
- 3) The generator should be cool when refueling?
 - a) True
 - b) False

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