



Actions which must precede start of work on generator

◆ Don't start the work on generator without this.

- ◆ Disconnect all energy sources before working on power generation equipment.
- ◆ Bring generators in a safe, de-energized, zero-stored-energy state.
- ◆ Do not trust "OFF" and "EMERGENCY STOP" push buttons on software and microprocessors as safety devices.
- ◆ Similarly, do not trust that a switch is open while in the "OFF" position.
- ◆ Always test and try operating the product prior to servicing as an alternative to ensuring the product is in a zero-stored-energy state.
 - ◆ All AC and DC circuits entering and leaving the product shall be opened and secured with the appropriate LOTO device, thus electrically isolating the equipment to be serviced.
 - ◆ Engine generator set packages shall have the battery cables removed from the batteries at the battery ends, and the battery cable ends shall be secured with the appropriate LOTO device.
 - ◆ Gas and diesel fuel lines and air start lines shall be closed, and the valves shall be secured with the appropriate LOTO device.
 - ◆ Any fuel or air between the valve and the engine shall be drained or vented.
 - ◆ Remember to remove power from all attachments such as battery chargers, jacket water heaters and generator space heaters.
 - ◆ Verify there is no stray voltage anywhere on the package and that all voltage sources are properly secured in the "OFF" or "OPEN" position with the appropriate LOTO device.
 - ◆ Open the product's output circuit breaker and secure it with the appropriate LOTO device to prevent an external source from energizing the product or starting a generator set package's engine.

◆ Ensure proper grounding

- ◆ Ensure the product is always properly grounded and the conductive surfaces surrounding the work are also bonded to the product's grounding system to prevent any difference in electrical potential between the conductive surfaces and hence any chance of electric shock or electrocution.

◆ Connect your work with that of others

- ◆ With multiple jobs going on at a jobsite, it is important to be aware of the other job tasks and associated processes that are being performed near or around you. Always look for the following:
 - ◆ Is there any work by others going on overhead?
 - ◆ What potentially dangerous work environment changes are others making that could jeopardize your safety?
 - ◆ What work environment changes are you making that could jeopardize the safety of others?



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◆ **IMPORTANT – Generators and Distribution Systems Rated ABOVE 600 Volts:**

- ◆ Prior to working around exposed bus bars and load cable terminations, ensure all stored energy has been discharged from the generator windings, bus bars and cables. Medium and high voltage windings and cables store electrical energy that could cause death or personal injury. Wear proper PPE and use properly rated tooling and equipment to discharge the windings, bus bars and cables.