

EMERGENCY GENERATOR CHECKLIST

A Homeowner's Guide to Maintaining & Troubleshooting Your Residential Standby Generator



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Introduction

When you invested in your home's standby generator, you invested in peace of mind during an outage. It can be incredibly frustrating when your unit doesn't keep you up and running when you need it most.

As standby generator experts, we're committed to empowering you to understand your standby generator—but also understanding that it's a complicated piece of machinery that requires expert service. This guide is designed to help homeowners conduct quick at-home assessments of their standby generator unit to determine the cause of minor issues. This isn't meant to supplement critical service or repairs, but to help you figure out whether or not you need to bring in the experts.

About National Standby Repair

National Standby Repair is a leading standby generator sales and repair company located in the New York Tri-State Area. We're committed to helping homeowners, business owners, and property managers keep their lights on when they need it most.

Over the past four decades, National Standby Repair has created a strong reputation for top-notch service and repairs across the Tri-State Area. Our professional team of certified technicians and reliable customer service specialists are proud to provide premier service around the clock for homes and businesses.

From single-family homes to corporate towers and medical facilities, we offer professional standby generator sales, service, rentals, and installations to meet all of your residential and commercial power needs.



Troubleshooting Common Standby Generator Problems

Are you experiencing a problem with your standby generator? This section can potentially help you identify the cause of the issue—and determine whether or not you need an expert standby generator service provider to resolve it.

There are a number of simple checks you can do to determine whether you're experiencing a simple problem (i.e. you're low on oil, low on fuel, etc.) or a more serious issue that requires a service professional.

Is your standby generator failing to start? Making strange noises? Emitting smoke or a strange odor? No matter what issue you're experiencing, the first two things to do are simple:

1. Check Your Fuel Gauge

Low fuel levels are the most common issue standby generator owners encounter. Check your fuel gauge on the top of the tank to see if it's at an adequate operational level.

Low on fuel? Call your regional gas or diesel provider to replenish your supply.

2. Check Your Oil Levels

Many common standby generator problems are caused by low or empty oil levels. To check your oil level, you'll need to open the generator housing and move the controller to "OFF/RESET" to shut down your generator.

Refer to your standby generator owner's manual to determine the location of the oil dipstick. If your oil level is low, slowly add oil to the oil fill until you've reached an appropriate operational level.

3. Write Down Any Fault Codes Your Standby Generator Displays

Standby generators use fault codes to report issues. Whether or not you require expert service, it's important to keep track of any faults that occur in your system to help inform both you and your service provider on any current or ongoing issues.

If your fuel and oil levels are normal and you're still experiencing issues with your generator—especially if your generator is showing a specific fault code—you may be experiencing a more serious problem.

Your standby generator isn't operating and all display lights are off.

If there are no lights showing up at all anywhere on your standby generator, it's likely because your battery is dead or you have a blown fuse. Depending on how often you use your unit and whether or not you have an [Annual Service Contract](#), your batteries may be due for replacement.

Regardless of the source of the problem, you'll need to call your professional standby generator service provider for an expert assessment and repair.

Your standby generator reports an overcranking fault.

If your generator is reporting a fault code related to "overcranking," that means your generator attempted to start but was unsuccessful. These codes typically relate back to low fuel levels or inadequate fuel pressure.

If your fuel levels were already at an adequate level, then you'll want to call an expert standby generator service provider to assess your system.

Your standby generator reports a low oil pressure fault.

A low oil pressure fault can be caused by a number of issues—some you may be able to fix yourself, others you'll need an expert service provider to address. Low oil levels may cause a low oil pressure fault, which you can remedy by following the steps outlined above in the "Check Your Oil Levels" section.

If your oil levels are adequate, you may be experiencing a failure with the oil pressure sensor, control board, or oil pump—all three of which will require an expert standby generator service provider to repair.

Your standby generator reports a high engine temperature fault.

When your standby generator overheats, it could be caused by a number of different issues. Your unit may be suffering from one of the following:

- Coolant Leaks
- Faulty Head Gasket
- Faulty Thermostat
- Fault Water Pump
- Faulty Coolant Temperature Sensor

First, check for any obvious coolant leaks in or around your unit. Call your service provider and let them know whether you have observed any obvious leaks. Regardless, they will likely need to service your unit to determine—and resolve—any issues.

Your standby generator reports an overspeed fault.

When your generator reports an “overspeed” fault, it means the engine is running faster than it’s supposed to. This can be caused by a number of issues, including:

- Faulty Stepper Motor
- Faulty Governor Control (the automatic throttle that controls engine frequency)
- Faulty Mag Pick-Up (the magnetic speed sensor that runs off the engine ring gear)

Regardless of the cause, an overspeed fault requires expert service. Shut down your unit and call your standby generator service provider for a professional evaluation.

Your standby generator reports an auxiliary fault.

Auxiliary faults could result from a number of different issues. When an auxiliary fault occurs, an outlying component, element, or feature outside of the main generator system has failed. Auxiliary faults may be caused by:

- Low Coolant Levels
- Lack of Voltage
- Dead or Faulty Battery

First, check your coolant levels. If there is low supply, refill to an appropriate level. If the levels are normal, there's likely another underlying issue that requires the experts. Contact your standby generator service provider to evaluate your unit.

Your standby generator reports an overvoltage or undervoltage fault.

If your standby generator voltage level is at an irregular level, there are a number of potential causes:

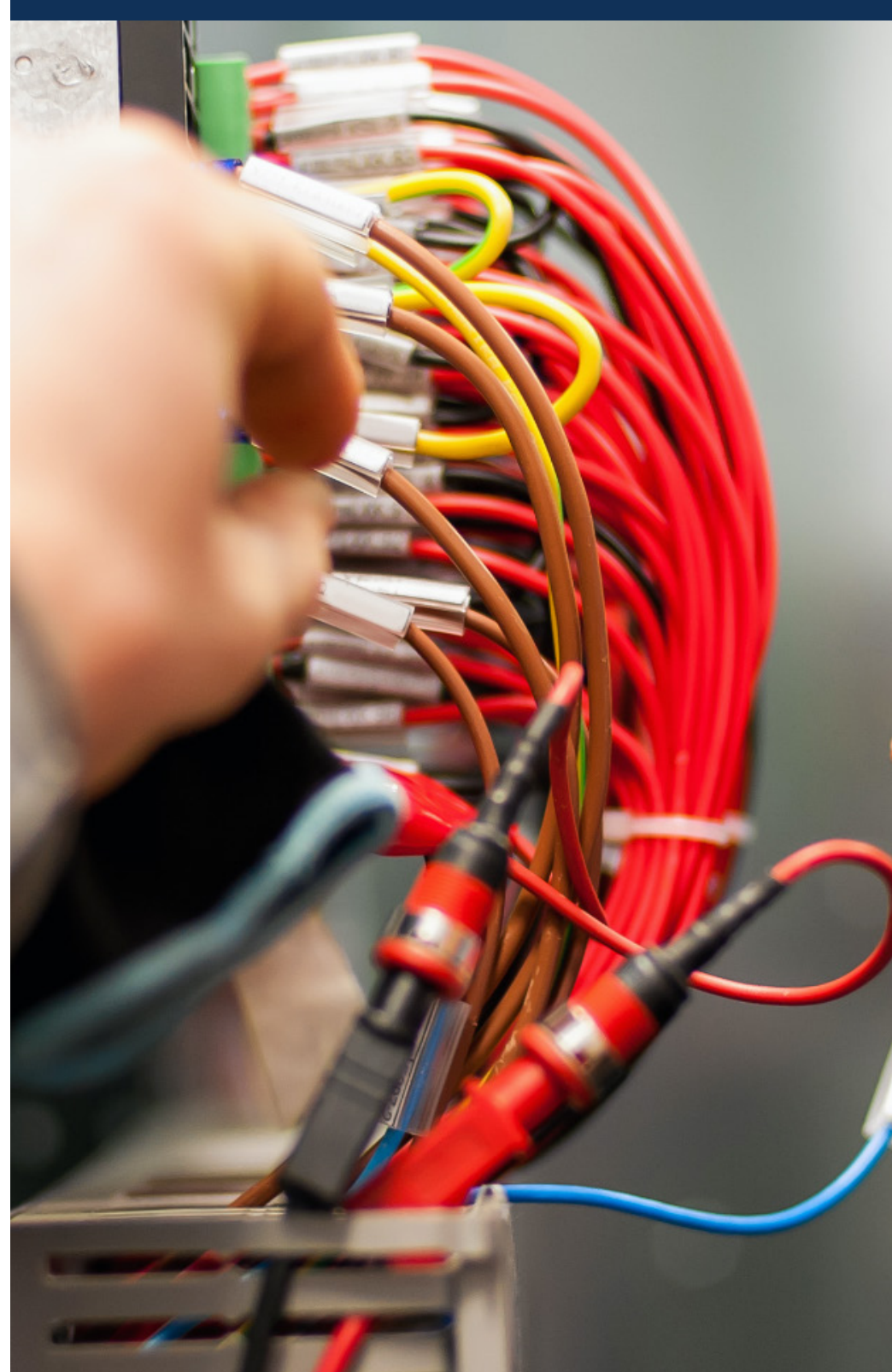
- Electrical System Issues
- Faulty Voltage Regulator

Both of these causes require professional standby generator service. Contact your provider so they can identify and repair the issue.

Standby Generator Maintenance & Prevention

Standby generators are sophisticated pieces of machinery. The only way you can ensure safe, thorough maintenance and repairs is by contacting a professional.

Beyond your repairs, standby generators require ongoing maintenance. Without effective testing and systems checks, you're putting yourself in jeopardy. Some of the risks associated with lack of maintenance include carbon monoxide poisoning, electrocution, damage to delicate electrical components inside of your home, and fires.



Monthly Visual Inspections

Homeowners should use this monthly visual inspection checklist to assess the health of their standby generator on a regular basis. These simple, at-home checks can help you identify potential issues before they become major problems and extend the lifespan of your system.

- Check Fuel Level
- Check Oil Level
- Check Coolant Level
- Clear the Surrounding Area of Debris
- Check Batteries for Corrosion
- Check for Internal or External Fluid Leaks
- Check for Fault Codes

Annual Expert Maintenance & Service

There are countless reasons to invest in an Annual Maintenance Contract. Here at National Standby Repair, we can't stress enough how important it is for standby generator owners to ensure they're relying on the experts to assess, repair, and service their systems on a regular basis.

With regular preventative maintenance, you can significantly extend the lifespan of your standby generator. A well-maintained emergency power system can provide decades of service and save thousands of dollars in repair and replacement costs.

When you sign up for an Annual Service Contract with National Standby Repair, your service fees are 100% covered during normal business hours, and our fixed annual rates guarantee no unexpected labor fees during normal business hours. Plus, when you sign up for our Annual Service Contract, we will warranty your generator for a full year, even if your manufacturer warranty has expired (excludes parts).

Our Annual Service Contract

Engine Ignition System

- Check/Replace Spark Plugs
- Check/Replace Ignition Points
- Check Distributor & Spark Plug Wires
- Oil/Grease Distributor
- Change Rotor, Condenser & Cap

Lubrication System

- Check Oil Levels
- Change Oil
- Replace Oil Filter
- Lubricate Governor
- Service Air Cleaner
- Grease Water Pump, Idler Pulley & Fan Hub
- Oil/Grease Generator Bearings
- Check Unit for Oil Leaks

Cooling System

- Check Belts for Condition & Adjustment
- Check Coolant Level & Leakage
- Check & Record Anti-Freeze Protection
- Check All Hoses & Tighten Hose Clamps
- Check Ventilation Louver Operation
- Check Engine Block Heater & Thermostat
- Check & Clean Radiator Fins
- Check Standpipe & Flex Connections
- Check Discharge Flow Rate (City Water)
- Check Damper Motors for Adjustment
- Pressure Test System

Mechanical & Exhaust Systems

- Check Flexible Exhaust Connection
- Drain Condensation Traps
- Check All Hangers & Brackets
- Check Generator Flex Plate
- Check for High Temperature Hazards
- Check Rain Cap & Leakage
- Check Turbo Charge Runout & End Play
- Check Mount Hardware
- Check Engine Mounting Hardware
- Set Governor No Load Buffer
- Seal All Wire Ports

Battery System

- Clean Posts & Terminals
- Neutralize & Clean Excess Acid
- Check Electrolyte Level
- Check Charger Float Setting
- Load Test Batteries
- Battery Charger Charge Rate
- Engine Charge Rate
- Evaluate Battery Condition
- Check Alternator

Electrical System

- Check Control Panel Mounts
- Check AC Splice Connections
- Check Starter Operation
- Check Engine Motor Gauges
- Check Buss & Breaker Connections
- Check AC & DC Brushes

- Clean Slip Rings & Commutator
- Check AC Output & Calibrate Meters
- Check & Set Frequency
- Check All Wire Termination Points
- Check Rotating Diode Assembly
- Check Exciter Components

Transfer Switch

- Exercised Clock Setting
- Time Delay Relays
- Load & Power Failure Test
- Check Contactor with Load
- Return All Switches to Automatic Mode
- Check Wire Termination Points in Switch

Operational Checks

- Run Unit to Normal Operating Temperature
- Observe All Meters & Gauges
- Prove Out All Safety Shutdown Controls

Fuel System

- Check Fuel On Hand & Report
- Check Day Tank Float Switch Adjustment
- Check Transfer Pump & Check Valve
- Check System for Water at Main & Day Tank
- Change Fuel Filters
- Check Fuel Regulator Valve Vent
- Check Flexible Fuel Connections

Contact the Standby Generator Experts

National Standby Repair is an all-in-one standby generator solution provider for homeowners in the Hudson Valley, New York City, Connecticut, and Northern New Jersey.

Our team of factory-trained standby generator experts are equipped to carry out any necessary repairs for any brand of standby generator. For over 40 years, we've provided the Tri-State area with personal, reliable standby generator service, repairs, and maintenance.

National Standby is here to help you overcome even the most unanticipated standby generator problems.

Plus, we offer warranty service on all leading generator brands.

Our fully certified generator technicians provide quick, easy warranty repair service on Kohler, Cummins, Generac, Onan, Briggs & Stratton, GE, and Winco standby generators.

We not only take care of any necessary repairs, but we also send the bill to the manufacturer—guaranteeing a pain-free process.

Contact us today for the highest quality expert standby generator repairs—and don't forget to ask about our Annual Service Contract. A well-maintained generator can provide decades of service, and National Standby's Annual Service Contract can save you thousands of dollars in repair and replacement costs.

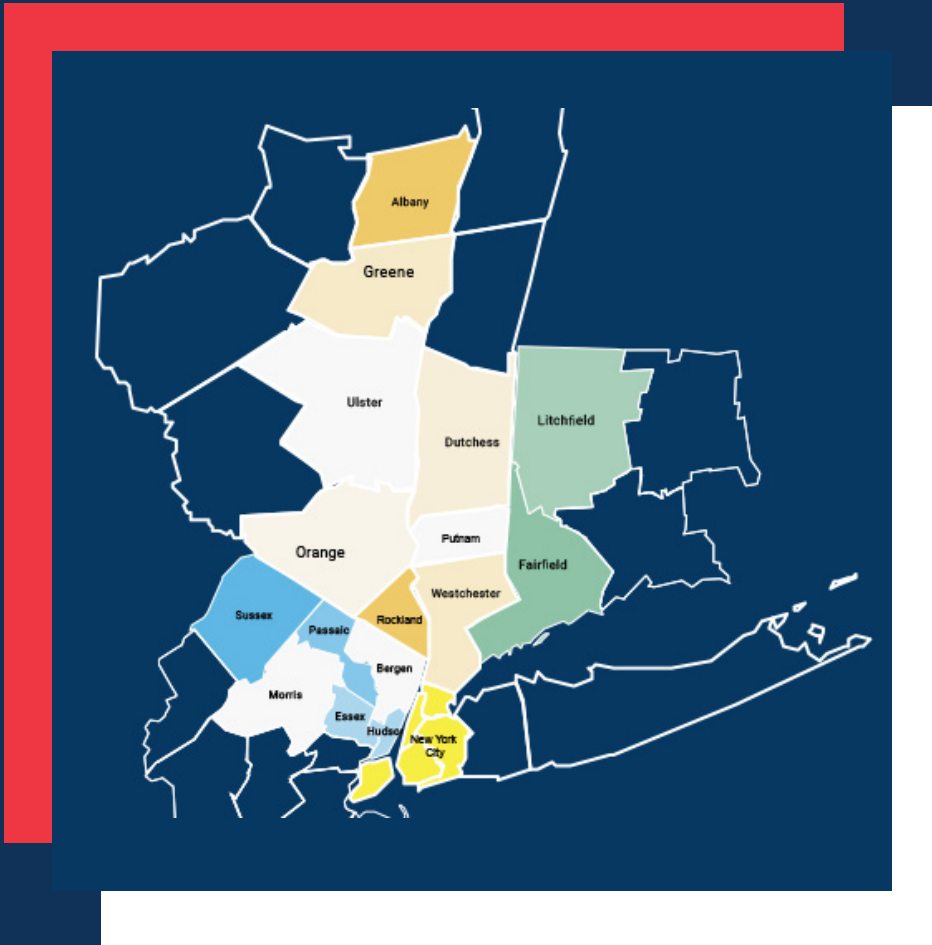


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Normal Business Hours:
Monday – Friday: 8:00 AM – 4:30 PM

Where We Work



Hudson Valley

Westchester
Rockland
Dutchess
Putnam
Orange
Ulster
Greene
Albany

New York City

Bronx
Manhattan
Brooklyn
Queens
Staten Island

Connecticut

Fairfield
Western Litchfield

Northern New Jersey

Bergen
Sussex
Passaic
Essex
Morris