AFTERMARKET OVERVIEW PROTECTING YOUR POWER



GENERAC

INDUSTRIAL POWER

GENERATOR MAINTENANCE PREVENTING FAILURES THAT LEAVE YOU IN THE DARK



COMMON CAUSES OF GENERATOR FAILURE

The primary cause of generator failure is lack of maintenance. Neglecting generator maintenance can lead to physical generator damage and catastrophic equipment failures costing you money and downtime.

That's why it's important to get on a scheduled generator maintenance program right after the installation process. By doing so, you preserve the operability of the generator and ensure that no unforeseen issues arise. Performing basic maintenance can prevent fuel problems, keep your machine running longer, increase efficiency and save you money in the long run.



An abrupt shutdown can be caused by a damaged belt or hose. A hose failure can cause the engine to overheat leading to physical generator damage. Visible indicators of belt damage are random cracking across the ribs and pulling of the belts.

Low or Dead Batteries

Battery failure is the number one source of a generator not starting. Battery failure can be caused by prolonged use, loss of plate capacity, and sediment buildup. Additionally, weather plays a big role in the duration of battery life and its usage. Extreme heat may cause accelerating positive grid growth, positive grid metal corrosion, negative grid shrinkage, and loss of acid/water.



Low Coolant, No Coolant, or Lack of Oil

One of the most common causes of generator shutdown during normal operation is low coolant or engine oil. The generator has a fail-safe that shuts it down, or prevents if from starting, when there is low coolant or engine oil which can cause permanent damage to the engine.



Lack of Fuel or Old/Bad Fuel

Diesel fuel must be maintained to be reliable. Sulfur, naturally occurring gums, waxes, soluble metallic soaps, water, dirt and temperature all degrade the diesel as it is handled and stored. These effects begin at the time of fuel refinement and continue until consumption.*

Weather or Pest Damage

Floods, high winds and extreme climates can all play a vital role in generator failure and lead to physical equipment damage. In extreme temperatures, generators require additional starting aids to be 100% operational such as a jacket water heater, battery charger and generator starting batteries. Additionally, pests can also cause damage by building nests in the generator's enclosure.

*Generac Professional Development Seminar Series GPS-200

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Dry, Cracking, and Deteriorating Belts & Hoses

COMMON MAINTENANCE

MYTH: A GENERATOR THAT DOES NOT FREQUENTLY **RUN DOES NOT REQUIRE REGULAR MAINTENANCE**

All generators require regular maintenance regardless of annual run time. Performing necessary maintenance can help guarantee, that when called upon, your unit works as designed. Directly following gen-set installation, Generac recommends the owner put into place a maintenance program for their back-up power system.

The Generac standard maintenance program includes at a minimum, a weekly exercise of at least 20 minutes to bring the unit up to operating temperature and lubricate all moving parts and bearings. Generac additionally recommends a six month inspection, which includes a comprehensive check of the unit, enclosure and transfer switch. Annually, Generac recommends changing engine oil and all filters as well as performing a load bank test by operating the unit for several hours at the designed power level. It's also important to note that some applications, such a hospitals and assisted living facilities, require federally mandated maintenance.

Whatever your application, Generac and your local distributor can provide recommended services with Generac Certified Technicians.

DIESEL FUEL VS. NATURAL GAS MAINTENANCE PLAN COMPARISON

In generator maintenance, it's also extremely important to consider fuel type. The chart below highlights key differences, in the required maintenance of diesel fuel compared to natural gas.

Maintenance Item	Diesel	Natural Gas
Visual Inspection	•	•
Check/Change Engine Oil	•	•
Change Engine Oil Filter	•	•
Check/Change Air Filter	•	•
Inspect/Change Belt & Hoses	•	•
nspect/Replace Starting Batteries	•	•
Replace Controller Battery	•	•
Inspect/Change Engine Coolant	•	•
Perform Load Bank Test	•	•
Change Fuel Filter	•	
Inspect/Clean Fuel Tank	•	
Analyze Fuel	•	
Diesel Fuel Treatment	•	
Fuel Polishing (Restore Old Fuel)	•	
Document Maintenance	•	•

SUPPORT

- - Over 4,000 certified technicians globally

APPROVED PARTS

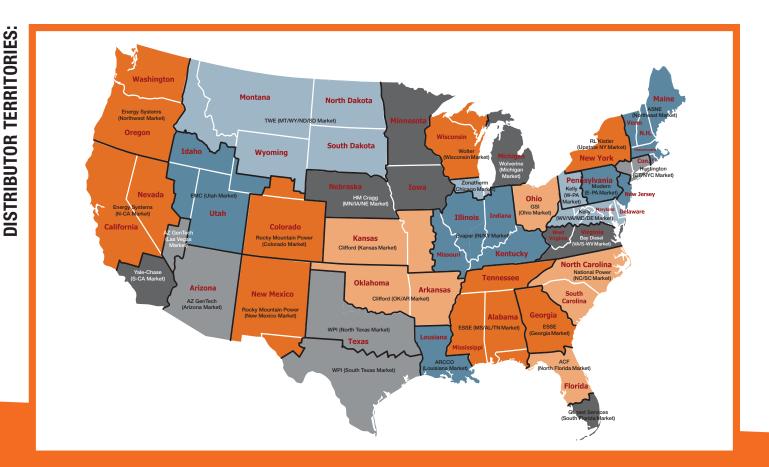
- through your local Generac distributor

PREVENTATIVE MAINTENANCE PROGRAM

- by Generac factory certified technicians
- Fixed pricing with a standard scope of work
- Automatically scheduled maintenance meets national regulations
- Ensures your back-up power system is ready at all times

DISTRIBUTOR NETWORK STRENGTH

Having a solid generator maintenance plan in place prevents system failure and ensures that your business is up and running when the power goes out. With 30+ Generac Industrial Distributors globally, an expert in your area can help you create a maintenance plan giving you the peace of mind you deserve. They are there to support your maintenance needs 24/7/365 ensuring that your back up power assets are protected.



TRUE PARTNERSHIP WE'RE HERE TO HELP

From initial project planning and design to post-installation, Generac Industrial Power supports the customer at every stage of the power system life cycle.

 Technical experts are there to stand behind you 24/7/365 to support with service and parts · Generac has a vast dealer network with the unique skills to service and maintain your generator

• We offer a complete array of Generac approved parts and accessories that can be purchased

Our approved parts are designed specifically to work with your Generac generator prolonging its lifespan

• Generac maintenance contracts include recommended maintenance to be completed

GENERAC APPROVED PARTS, KITS & ACCESSORIES

GENERAC'S PREVENTATIVE MAINTENANCE PROGRAM

Maintaining your equipment with manufacturer approved parts enhances performance and the reliability you count on when the lights go out.

- Oil & Fuel Filters
- Hoses, Belts & Block Heaters
- Air Filters
- Oil & Coolant (5W 30 Full Synthetic)
- Batteries
- Fuel Treatment



This program eliminates the time consuming, and often overwhelming, administrative work maintenance management requires in regards to scheduling, forecasting and budgeting. Tailored to your unit's application, this program includes minor six month inspections and major annual service.

ALL MAKES AND MODELS

Our maintenance program covers all generators, regardless of the manufacturer. Our service technicians are certified and knowledgeable on a wide variety of products including transfer switches and switchgear.

SINGLE POINT OF CONTACT

Whether you have one location or a thousand, having a single point of contact is key. Gain piece of mind with record retention and consistency with one source for all your service and parts needs.

EMERGENCY ASSISTANCE

Having service available 24/7/365 is crucial to the success of your power system. While downtime is unexpected, it is also unacceptable. With Generac's Preventative Maintenance Program, emergency response times will be contractually enforced.

PROVEN SOURCE. POWERFUL SOLUTIONS.

We are a global company with more than 4.6 million square feet of vertically integrated manufacturing and distribution capacity. We are one of North America's largest suppliers of power generation equipment with an intense focus on innovation that creates a disruptive force in the marketplace. We design and manufacture natural gas, diesel and bi-fuel generators that can work alone or be paralleled to provide you with a more robust gen-set solution. We also provide a world-class Industrial Distribution Network that stands behind you 24/7/365, as well as access to our in-house engineers and technical support.

Our inventive Industrial Power gen-sets are standing by, ready to meet virtually any application.

For more information or to learn more, visit us online or call us at:



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