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## Your Generator Won't Start – Determining If The Problem Is Mechanical Or The Fuel

Generators can experience no-start or no-run issues but blaming "bad fuel" is often an oversimplification. Before committing to expensive fixes like fuel disposal or replacing expensive parts, try following these steps to have a better shot at identifying the real issue and avoiding unnecessary costs.

### **Eliminate These Possible Mechanical Causes First**

**Check the Fuel Filters:** Replace the primary and secondary filters and see if the problem is resolved. Also, cut open the old filters to check for black or clear slime, a sign of microbial growth that usually indicates presence of contamination and water. Treat the tank with a biocide if needed.

**Inspect the Fuel Line:** Blow air through the line to ensure it's not obstructed. Also, check the foot or inline valves for blockages and clean or replace them as necessary. See if the problem is resolved.

Replace Inline Filters: If your system has an additional inline filter, replace it to rule out blockages.

#### **Look for Microbial Contamination**

Microbial contamination won't usually affect no-start/no-run situations but often leads to other operational problems.

**Examine fuel and water separator filters** for black residue, sour odors, or cloudy liquid. These filters are prime areas for microbial contamination to develop or spread. **Confirm contamination with ATP microbial testing** and treat the tank with a biocide if results are positive.

# Test the Fuel To See If It Is Really The Problem Cause

If you've gone through these steps and the problem persists, now is the time to examine the fuel to see if it really is the problem. Before committing to the expense of having the fuel disposed of and replaced, do some fuel testing that will confirm whether it's the problem or not. If these tests show the fuel meets ASTM standards, it's unlikely to be the cause of your issue.

Lab Testing Is Your Real Confirmation: Send a sample to a qualified third-party lab to evaluate the fuel properties for a definitive answer. Have the lab test run ASTM tests for combustion properties (flash point, cetane rating, and distillation curve) and excess contamination (water content, sediment, and particulate levels).

If you're not sure which lab to use, Bell Performance can suggest some qualified labs.

When you do this, remember that **Sampling Matters**: Take samples 3-6 inches above the tank bottom to avoid skewed results from existing sediment/water that isn't the problem cause because it doesn't affect operation.

## **Need Help?**

If you've run through these steps and your problem persist, now is the time to consult with a fuel+mechanical expert. Bell Performance can assist with this. Contact us at BellPerformance.com or call 407-831-5021.