

Washington Office Location21850 88th Place South

Kent, WA 98031

Office: (253) 872-2000

Fax: (253) 872-7033

Email: info@nwindustrialrepair.com

**Additional Locations**

Eastern Washington: (509) 949-3368

Idaho & Montana: (208) 360-3833

Oregon: (503) 708-9609

Rotary Positive Displacement Blower Troubleshooting Guide

PROBLEM	PROBABLE CAUSE	SOLUTIONS
Loss of oil	Gear housing not tightened properly.	Tighten gear housing bolts.
	Lip seal failure.	Disassemble and replace lip seal.
	Insufficient sealant.	Remove gear housing and replace sealant. See blower operator manual for disassembly/reassembly instructions.
	Loose drain plug.	Tighten drain plug.
Excessive bearing or gear wear	Improper Lubrication.	Correct oil level. Replace dirty oil.
	Excessive V-belt tension.	Check belt manufacturer's specifications for tension and adjust accordingly.
	Direct coupling misalignment.	Check carefully. Re-align if necessary.
Lack of volume	Slipping belts.	Check belt manufacturer's specifications for tension and adjust accordingly.
	Worn lobe clearances.	Check for proper clearances. Refer to blower manufacturer's assembly clearances.
	Speed too low.	Increase blower speed within limits.
	Obstruction in piping.	Check system to ensure an open flow path.
	Broken drive shaft.	Replace drive shaft.
Knocking	Blower out of time.	Re-time.
	Distortion due to improper mounting or pipe strains.	Check mounting alignment and relieve pipe strains.
	Excessive pressure differential.	Reduce to blower manufacturer's recommended pressure. Examine relief valve and reset if necessary.
	Worn gears.	Replace timing gears. Refer to blower manufacturer's disassembly instructions.
Excessive blower temperature	Too much or too little oil in gear reservoir.	Check oil level.
	Too low operating speed.	Increase blower speed within limits.
	Clogged filter or silencer.	Remove cause of obstruction.
	Excessive pressure differential.	Reduce pressure differential across the blower.
	Elevated inlet temperature.	Reduce inlet temperature.
	Worn lobe clearances.	Check for proper clearances. Refer to blower manufacturer's assembly clearances.
Rotor end or tip drag	Insufficient assembled clearances.	Correct clearances. Refer to blower manufacturer's assembly clearances.
	Case or frame distortion.	Check mounting and pipe strain.
	Excessive operating pressure.	Reduce pressure differential.
	Excessive operating temperature.	Reduce pressure differential or reduce inlet temperature.

Washington Office Location21850 88th Place South

Kent, WA 98031

Office: (253) 872-2000

Fax: (253) 872-7033

Email: info@nwindustrialrepair.com

**Additional Locations**

Eastern Washington: (509) 949-3368

Idaho & Montana: (208) 360-3833

Oregon: (503) 708-9609

Rotary Positive Displacement Blower Troubleshooting Guide

PROBLEM	PROBABLE CAUSE	SOLUTIONS
Vibration	Belt or coupling misalignment.	Check carefully. Re-align if necessary.
	Lobes rubbing.	Check cylinder for hot spots and then check for lobe contact at these points. Correct clearances. Refer to blower manufacturer's assembly clearances.
	Worn bearings or gears.	Check condition of gears and bearings. Replace if necessary.
	Unbalances or rubbing lobes.	Possible build-up on casing or lobes, or inside lobes. Remove build-up and restore clearances.
	Drive or blower loose.	Check mounting and tighten if necessary.
	Piping resonance.	Check pipe supports, check resonance of nearby equipment, and check foundation.