## TROUBLE SHOOTING GUIDE

## Trouble Shooting Guide

Check	Look For	Remedy
BLOWER  FC - DWDI	RPM (Measure or check pulley ratio)	Increase blower RPM     Close adjustable pulley or reduce blower pulley
	Rotation - Direction (Arrow on blower housing)	- Reverse motor rotation change driv side
	Wheel Loose	- Tighten wheel set screw - Replace wheel/shaft/bearings if worn
	Wheel Dirty (Clogged)	- Clean
	Size	- Increase blower RPM or replace if necessary
BLOWER MOTOR	Overload Trips	- Reduce belt tension
	Insufficient HP	- Replace with proper HP
FILTERS, COILS	Dirty - Clogged	- Clean or replace
DUCT - SUPPLY & RETURN	Blockages	- Remove
	Size	- Streamline restrictions - Increase blower RPM
SPACE	Under Negative or Positive Pressure Doors are Hard to Open or Close	- Provide adequate exhaust opening or return duct.
ROBLEM: EXCESSIVE AIR		
Check	Look For	Remedy
BLOWER	Excessive Blower RPM (Measure or Check Pulley Ratio)	Decrease Blower RPM     Open adjustable motor pulley or increase blower pulley
DUCTING	Missing Components (Filters, Grills)	- Install
	Oversize	- Decrease blower RPM

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Check	Look For	Remedy
BLOWER	Excessive Belt Tension	- Slacken belt
	Excessive Blower RPM	- Decrease blower RPM
DUCTING	Overestimated Resistance	- Decrease blower RPM
MOTOR	Motor/Supply Voltage Mismatch	Install proper motor     Correct voltage supply
	Insufficient HP (Check specifications against blower performance curves)	- Replace with proper size motor
	Faulty	- Replace
PROBLEM: NOISY BLOWER OPERA	TION	
Check	Look For	Remedy
WHEEL	Hitting Loose on Shaft Loose or Broken Part	- Adjust - Tighten set screws - Replace wheel
PULLEY - MOTOR OR BLOWER	Loose on Shaft	- Tighten - Replace if worn
BELT	Pulley Alignment Loose - Floppy Tight - Bearing Grind Uneven	- Line up with straight edge - Replace
DAMPERS	Rattles	- Adjust
MOTOR	Hum or Rattles	- Adjust or Replace
DUCT	Transmitting Vibration	- Install flexible duct connections
BLOWER HOUSING	Loose Part Transmitting Running Vibration Vibrating Excessively Foreign Material in Housing	<ul> <li>Adjust</li> <li>Install vibration isolators</li> <li>Replace pulley</li> <li>Align and/or replace belts</li> <li>Replace wheel, shaft and bearings</li> <li>Remove foreign material</li> </ul>
BEARING NOISE	Play in Bearing Loose Bearing Collar	- Replace shaft and bearings - Tighten
WHISTLES IN AIR SYSTEM	All Ducts and Cabinets	- Seal holes

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GENERAL NOISE	Blower Too Close to Listener	- Move to more remote location		
PROBLEM: PREMATURE BEARING FAILURE				
Check	Look For	Remedy		
BELT	Belt Too Tight  With Multiple Belts Check Against Requirement	<ul> <li>Replace shaft and bearings, adjust belt to Delhi recommendations.</li> <li>Possibly reduce number of belts to prevent bearing preloading when tightening belts</li> </ul>		
BLOWER WITH SLEEVE BEARINGS	Plaster Dust or Other Gritty Dirt Around Sleeve	<ul> <li>Replace shaft and bearings</li> <li>Clean up dirt - Install filter</li> <li>If used in dirty environment change to ball bearings</li> </ul>		
BLOWER OPERATION COLLARS - SLEEVE BEARINGS	Excessive Vibrations Missing or Worn Leather Washer	- Replace shaft and bearings - Replace		
COLLARS - BALL BEARINGS	Loose Collar	- Lock eccentric collar and tighten set screw		