SECTION 6: TROUBLESHOOTING

6.1 GENERAL INFORMATION

The information contained in the Troubleshooting chart has been compiled from field report data and factory experience. It contains symptoms and usual causes for the described problems. However, **DO NOT** assume that these are the only problems that may occur. All available data concerning the trouble should be systematically analyzed before undertaking any repairs or component replacement procedures.

A detailed visual inspection is worth performing for almost all problems and may avoid unnecessary additional damage to the compressor.

1. Check for loose fitting.
2. Check for damaged piping
3. Check for parts damaged by heat or an electrical short circuit, usually apparent by discoloration or a burnt odor.
4. Should your problem persist after making the recommended check, consult your nearest Vanair® representative or the Vanair Service Department.

Vanair Service Department

Phone: 800-526-8817 (toll free)

Phone: 219-879-5100, ext. 400

Fax: 219-879-5335

NOTE

When contacting the Vanair Service Department, please have machine serial number on hand to quickly expedite service (refer to *Figure 6-1*).

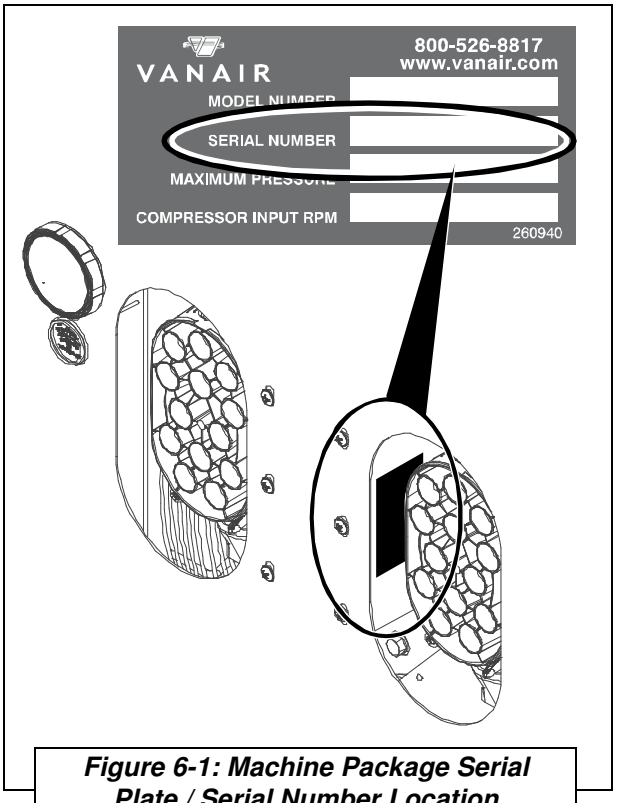

Figure 6-1: Machine Package Serial Plate / Serial Number Location

6.2 TROUBLESHOOTING GUIDE

Fault/Malfunction	Possible Cause	Corrective Action
COMPRESSOR SHUTS DOWN WITH AIR DEMAND PRESENT	Compressor Discharge Temperature Switch is Open	Cooling air flow is insufficient; clean cooler and check for proper ventilation. Low fluid sump level; add fluid. Dirty fluid; change fluid. Clogged fluid filter; change element. The temperature regulating valve is not functioning properly. Defective discharge temperature switch; check for a short or open circuit to the engine ignition coil. Should this check out normal, it would be possible that the temperature switch is defective.
COMPRESSOR WILL NOT BUILD UP PRESSURE	Air Demand is Too Great	Check demand service lines for leaks or open valves.
	Dirty Air Filter	Check the filter indicator and change element if required.
	Pressure Regulator Out of Adjustment	Adjust regulator according to control adjustment instructions in the Maintenance section.
	Defective Pressure Regulator	Check diaphragm and replace if necessary (kit available).
	Defective Minimum Pressure Valve	Check that piston is moving freely.
	Pilot Valve Out of Adjustment	Adjust pilot valve according to control adjustment instructions.
IMPROPER UNLOADING WITH AN EXCESSIVE PRESSURE BUILD-UP CAUSING PRESSURE RELIEF VALVE TO OPEN	Pressure Regulating Valve is Set Too High	Readjust.
	Leak in the Control System Causing Loss of Pressure Signal	Check control line. Defective pressure regulating valve; repair valve (kit available).
	Inlet Valve Jammed	Free or replace valve.
	Restriction in the Control System	Check all control lines and components. Ice and other contaminants could cause restrictions.
	Defective Pressure Relief Valve	Replace pressure relief valve.
	Pilot Valve Out of Adjustment	Adjust pilot valve according to control adjustment instructions.
INSUFFICIENT AIR DELIVERY	Plugged Air Filter	Clear or replace.
	Plugged Air/Fluid Separator	Replace separator element and also change compressor fluid and fluid filter at this time.

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6.2 TROUBLESHOOTING GUIDE

Fault/Malfunction	Possible Cause	Corrective Action
INSUFFICIENT AIR DELIVERY (CONTINUED)	Filter Pilot Valve Out of Adjustment	Adjust pilot valve according to control adjustment instructions.
	Defective Pressure Regulator	Adjust or repair.
	Power Source Speed Too Low	Readjust engine speed.
	Filter Pilot Valve Out of Adjustment	Adjust pilot valve according to control adjustment instructions.
EXCESSIVE COMPRESSORFLUID CONSUMPTION	Clogged Return Line	Clear line.
	Separator Element Damaged or Not Functioning Properly	Change separator element.
	Leak in the Lubrication System	Check all pipes, connections and components.
	Defective Blowdown Valve	Replace valve.
COMPRESSOR OVERHEATING	Dirty Fluid Cooler Core	Clean core thoroughly.
	Faulty Thermostat in Thermal Valve	Change thermostat element.
	Plugged Fluid Cooler Tubes (Internal)	Clean tubes thoroughly.
	Low Sump Fluid Level	Fill to proper level.
	Plugged Compressor Fluid Filter	Change element.
	Plugged Fluid Return Line	Clean orifice.