

# SECTION 7: TROUBLESHOOTING

## 7.1 GENERAL INFORMATION

The information contained in this section has been compiled from years' worth of information gathered from the field. It contains symptoms and usual causes for the most common types of problems that may occur. All available data concerning the trouble should be systematically analyzed before undertaking any repairs or component replacement.

A visual inspection is worth performing for almost all problems and may avoid unnecessary additional damage to the machine. The procedures which can be performed in the least amount of time and with the least amount of removal or disassembly of parts, should be performed first. Adherence to a routine maintenance regimen will minimize the occurrence of many common problems. Refer to **Section 6.3, Maintenance Schedule Table** for a typical maintenance regimen program.

Although Vanair® strives to anticipate situations that may occur during the operation life of the machine package, the **Troubleshooting Guide** may not cover all possible situations. Be aware that additional troubleshooting information may be found in other sources such as the Engine Operator's Manual. Should the situation remain unresolved after exhausting available sources, contact the Vanair Service Department at:

**Phone: 800-526-8817 (toll free)**

**Phone: 219-879-5100**

**Fax: 219-879-5335**

### NOTE

When contacting the Vanair Service Department, please have machine serial number on hand to quickly expedite service. See **Figure 7-1** for machine serial plate location.



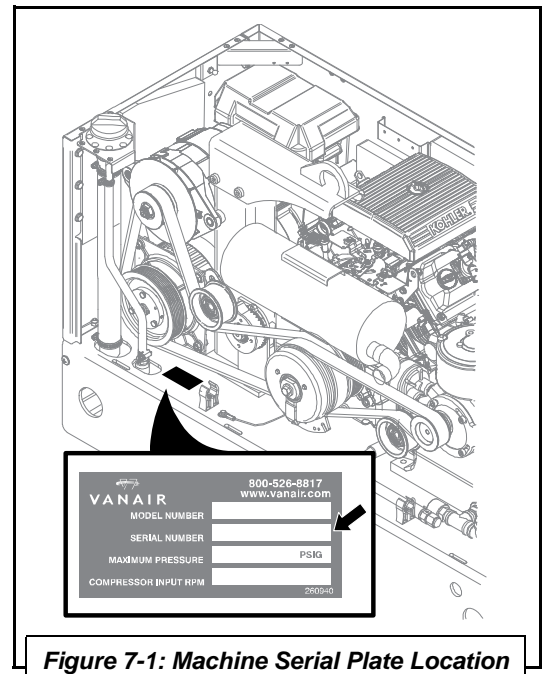
### WARNING

**DO NOT** operate any of the Air N Arc 300 Series All-In-One Power System's functions if there is a known unsafe condition. Disable the equipment by disconnecting it from its power source. Install a lock-out tag to identify the equipment as inoperable to other personnel to prevent accidental application.



### WARNING

**Before starting, performing maintenance, or replacing parts, relieve the entire system pressure by opening the air tank drain valve, which will vent all pressure to the atmosphere.**



**Figure 7-1: Machine Serial Plate Location**

| <b>7.2 TROUBLESHOOTING GUIDE</b> |  |  |  |
|----------------------------------|--|--|--|
| <b>Fault/Malfunction</b>         | <b>Possible Cause</b>  | <b>Corrective Action</b>   |  |
| <b>ENGINE</b>                    |  |  |  |
| Engine will not crank            | Faulty battery connection.   | Check for proper battery connections and battery charge.   |  |
|                                  | Battery out of power   | Recharge or replace battery.   |  |
|                                  | Engine fuse blown or faulty  | Check engine fuse: See <b>Section 6.6, Servicing the System Fuses and Circuit Breakers</b> , and/or consult the Engine Operator's Manual.  |  |
|                                  | Machine hood shutdown safety switch prevents start-up of engine              | Close hood panel or check if roof switch is faulty. See <b>Section 1.11, Machine Canopy Access Safety Switches</b> .   |  |
| Engine will crank, but not start | Low fuel and/or oil supply   | Check fuel gauge. Check engine oil level; refer to <b>Section 6.5.13, Checking the Engine Oil</b> . Replenish as necessary. Consult the Engine Operator's Manual for additional information on engine maintenance. |  |
|                                  | Pinched fuel line  | Replace or reroute if necessary.   |  |
|                                  | Plugged fuel filter(s)   | Replace if necessary. Refer to <b>Section 2.4, Engine</b> , and the Engine Operator's Manual for additional information on engine maintenance.   |  |
|                                  |  | Low battery voltage  | Recharge or replace if necessary.  |
|                                  |  |  | Loose connections; tighten connections.<br>Dirty connections; clean connections. |
|                                  | Plugged engine air filter  | Replace engine air filter. Refer to Engine Operator's Manual.  |  |
|                                  | Defective oil pressure switch  | Check continuity, and replace if necessary.  |  |
|                                  | Blown fuse   | Check continuity, and replace if necessary. See <b>Section 6.6, Servicing the System Fuses and Circuit Breakers</b> , and/or consult the Engine Operator's Manual.   |  |
|                                  | Poor ground connection   | Check and clean/renew connection.  |  |
|                                  | Machine belt access panel shutdown safety switch prevents start-up of engine | Close door or check if door switch is faulty. See <b>Section 1.11, Machine Canopy Access Safety Switches</b> .   |  |
| <i>Continued on next page</i>    |  |  |  |

| <b>7.2 TROUBLESHOOTING GUIDE</b>                         |                                   |   |
|--|-----------------------------------|---|
| <b>Fault/Malfunction</b>                                 | <b>Possible Cause</b>             | <b>Corrective Action</b>  |
| <b>ENGINE (CONTINUED)</b>                                |                                   |   |
| Improper Control Operation:<br>Engine does not speed up  | Throttle solenoid stuck           | Check throttle solenoid. Replace if necessary.  |
|  |                                   | Check throttle relay; replace if necessary. Refer to <b>Section 6.6, Servicing the System Fuses and Circuit Breakers</b> .  |
|  | Governor stuck                    | Free governor and lubricate if necessary.   |
|  | Fuel filter partly plugged        | Replace fuel filter. Refer to <b>Section 2.4, Engine</b> , and the Engine Operator's Manual.  |
| Improper Control Operation:<br>Engine does not slow down | Leak in control line              | Check for leaks; replace line if necessary.   |
|  | Pressure switch out of adjustment | Adjust to proper pressure setting. Refer to <b>Section 2.2.7, Adjustable Pressure Switch</b> , and <b>Section 6.5.15, Adjusting the Pressure Setting</b> . Replace if switch continues to deviate from setting. |
|  | Pressure switch faulty            | Replace pressure switch.  |
|  | Throttle solenoid stuck           | Check throttle solenoid. Replace if necessary.  |
|  |                                   | Check throttle relay; replace if necessary. Refer to <b>Section 6.6, Servicing the System Fuses and Circuit Breakers</b> .  |
|  | Governor stuck                    | Free governor and lubricate if necessary.   |
| Engine overheats   | Located too close to obstruction. | Move further from obstruction.  |
|  | Engine oil filter plugged         | Replace engine oil filter. Refer to <b>Section 2.4, Engine</b> , and the Engine Operator's Manual.  |
|  | Low oil level                     | Check engine oil level; refer to <b>Section 6.5.13, Checking the Engine Oil</b> . Replenish as necessary. Consult the Engine Operator's Manual for additional information on engine maintenance.                |
|  | Restricted cooling air in or out  | Clean engine intake grill. Refer to <b>6.5.12</b> .   |
|  | Engine oil cooler plugged         | Clear debris/dirt from cooler core/flush shroud. Refer to <b>6.5.12</b> .   |
| <i>Continued on next page</i>                            |                                   |   |

| <b>7.2 TROUBLESHOOTING GUIDE</b>  |                                  |  |
|---|----------------------------------|--|
| <b>Fault/Malfunction</b>  | <b>Possible Cause</b>            | <b>Corrective Action</b>   |
| <b>ENGINE (CONTINUED)</b>   |                                  |  |
| Engine stops during operation   | Low oil level                    | Check engine oil level; refer to <b>Section 6.5.13, Checking the Engine Oil</b> . Replenish as necessary. Consult the Engine Operator's Manual for additional information on engine maintenance. |
|   | Engine shutdown switch activated | Confirm that access door is properly in place. Replace faulty engine shutdown switch; see <b>Section 1.11, Machine Canopy Access Safety Switches</b> .   |
|   | Low fuel                         | Check fuel gauge. Fill as necessary.   |
| Engine will not throttle up for various functions   | Faulty throttle solenoid         | Check throttle solenoid; replace if necessary.   |
|   |                                  | Check throttle relay; replace if necessary. Refer to <b>Section 6.6, Servicing the System Fuses and Circuit Breakers</b> .   |
| Gradual loss of engine power  | Contaminated fuel                | Draw and replace fuel supply.  |
|   | Wrong fuel type fill             | Use only gasoline—do not use E85, etc. Refer to Engine Operator's Manual for information on engine fuel type to use.   |
|   | Engine air filter contaminated   | Check air filter. Replace if necessary (refer to the Engine Operator's Manual).  |
|   | Fuel filter(s) contaminated      | Check fuel filters. Refer to <b>Section 2.4, Engine</b> , and the Engine Operator's Manual for additional information on engine maintenance.   |
|   | vapor lock                       | Machine overloading. Allow to cool.  |
| Refer to overheating section in this Troubleshooting Guide.   |                                  |  |
| <b>For additional information concerning an engine problem, consult the Engine Operator's Manual.</b>   |                                  |  |
| <b>COMPRESSOR</b>   |                                  |  |
| Compressor overheats<br>This will cause a compressor shutdown and compressor fault light to turn on. Before restarting the compressor, determine the cause for overheating. | Low compressor fluid level       | Check oil level and refill to proper level if necessary (ensure machine is parked on a level surface). Refer to <b>Section 6.5.3, Checking the Compressor Oil</b> .                              |
| <b>Continued on next page</b>   |                                  |  |

| <b>7.2 TROUBLESHOOTING GUIDE</b>   |                                   |  |
|--|-----------------------------------|--|
| <b>Fault/Malfunction</b>   | <b>Possible Cause</b>             | <b>Corrective Action</b>   |
| <b>COMPRESSOR (CONTINUED)</b>  |                                   |  |
| Compressor overheats<br><br>This will cause a compressor shutdown and compressor fault light to turn on. Before restarting the compressor, determine the cause for overheating (continued) | Defective switch                  | Replace switch.  |
|  | Obstructed fluid cooler           | Clear debris/dirt from cooler core/flush shroud.   |
|  | Obstructed cooler fins            | Clear/clean if required. Refer to <b>Section 6.5.12</b> .  |
|  | Insufficient air flow over cooler | Check for obstructions (frame, body, etc.) to cooling air flow.  |
|  | Compressor oil filter plugged     | Replace filter; refer to <b>Section 6.5.4, Replacing the Compressor Oil Filter Element</b> .   |
|  | Input rpm too high                | Adjust to proper setting; refer to <b>Section 6.5.14, Adjusting the Engine Speed</b> , and the Engine Operator's Manual.   |
|  | Fan not operating                 | Check fan fuse for continuity, and replace if necessary. See <b>Section 6.6, Servicing the System Fuses and Circuit Breakers</b> .<br><br>Check fan switch for continuity. Replace if necessary.<br><br>Check fan motor.<br><br>Check fan relay for continuity. Replace if necessary.<br><br>Check all electrical connections and lines; clean/renew connections where needed. |
| Compressor shuts down with air demand present  | Compressor temperature switch     | Check for loose wire; verify wire connections.   |
|  |                                   | Faulty temperature switch. Replace switch.   |
|  | Restricted cooling air intake     | Reposition machine.  |
|  | Fan not operating                 | Check fan fuse for continuity, and replace if necessary. See <b>Section 6.6, Servicing the System Fuses and Circuit Breakers</b> .   |
| Check fan switch for continuity. Replace if necessary.   |                                   |  |
| Check fan relay for continuity. Replace if necessary.  |                                   |  |

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| <b>7.2 TROUBLESHOOTING GUIDE</b>                          |   |  |
|---|---|--|
| <b>Fault/Malfunction</b>                                  | <b>Possible Cause</b>   | <b>Corrective Action</b>   |
| <b>COMPRESSOR (CONTINUED)</b>                             |   |  |
| Compressor shuts down with air demand present (continued) | Fan not operating (continued)   | Check all electrical connections and lines; clean/renew connections where needed.  |
|   | Compressor oil filter plugged   | Replace filter; refer to <b>Section 6.5.4, Replacing the Compressor Oil Filter Element.</b>  |
|   | Soiled cooler core  | Clean cooler core.   |
|   | Internally contaminated cooler core   | Consult the Vanair Service Department for assistance in cleaning/flushing the cooler core.   |
|   | Defective engine oil pressure switch  | Replace engine oil pressure switch. Refer to the Engine Operator's Manual.   |
| Compressor will not build up pressure                     | Compressor system is not receiving enough operating power   | If running more than one function simultaneously, turn off competing function.   |
|   | Air demand too high   | Check for leaks and take corrective action.  |
|   |   | Check air tools for wear, damage, or malfunctions. Replace or repair.  |
|   | Compressor capacity too low to accommodate demand   | Substitute larger capacity compressor system.  |
|   | Compressor air filter plugged   | Check air filter. Replace if necessary; refer to <b>Section 6.5.1, Compressor Air Filter.</b>  |
|   | Pressure switch out of adjustment   | Reset pressure switch. Refer to <b>Section 2.2.7, Adjustable Pressure Switch</b> , and <b>Section 6.5.15, Adjusting the Pressure Setting.</b> Replace if switch continues to deviate from setting. |
|   | Belt(s) slipping  | Re-situate and adjust belt tension, or replace belt if necessary. Consult <b>Section 6.5.16, Replacing and Re-tensioning the Serpentine Belts</b>  |
|   | Defective pressure switch   | Replace pressure switch.   |
|   | Engine governor stuck   | Free governor and lubricate if necessary. Consult the Engine Operator's Manual.  |
| Faulty throttle solenoid                                  | Check throttle solenoid; replace if necessary.  |  |
|   | Check throttle relay; replace if necessary. Refer to <b>Section 6.6, Servicing the System Fuses and Circuit Breakers.</b> |  |
| <i>Continued on next page</i>                             |   |  |

| 7.2 TROUBLESHOOTING GUIDE   |  |   |
|---|--|---|
| Fault/Malfunction   | Possible Cause   | Corrective Action   |
| COMPRESSOR (CONTINUED)  |  |   |
| <p>Compressor system over-pressures</p> <p>This condition will cause a compressor shutdown, and a fault light will turn on. Before restarting the compressor, determine the cause of the over-pressure.</p> | Pressure switch setting too high   | Reset pressure switch. Refer to <b>Section 2.2.7, Adjustable Pressure Switch</b> , and <b>Section 6.5.15, Adjusting the Pressure Setting</b> . Replace if switch continues to deviate from setting. |
|   | Pressure switch malfunction  | Check for operation/damage: repair or replace.  |
|   | Unload solenoid valve defective  | Rebuild or replace solenoid valve. Refer to <b>Section 6.5.8</b> .  |
|   | Leak in air control line   | Check for leaks and take corrective action.   |
|   | Damaged/kinked control line  | Check line for damage (wear, kinks, etc.). Re-route, re-tie or replace if necessary (refer to <b>Appendix A.6, Hose Installation Guide</b> for assistance in running or checking hose lines).       |
|   | Restriction in control line  | Clean if soiled; if ice is present, clear and remove.   |
|   | Control line connections are not properly seated/poor connection quality | Check lines for proper seating/ensure line ends have been cut cleanly and are square ( <b>DO NOT</b> use wire cutters: use a loom cutting tool or a clean, sharp razor blade).                      |
|   | Inlet valve Teflon “O” ring popped out of groove                         | Replace “O” ring: Refer to <b>Section 6.5.2, Repairing the Air Inlet Valve</b> . Order inlet valve repair kit—see <b>Table 9A: Recommended Spare Parts List</b> .                                   |
|   | Inlet valve piston is stuck in down position.                            | Check for proper operation with an auxiliary air source—replace or rebuild inlet valve. Consult <b>Section 6.5.8</b> .  |
|   | Compressor shaft seal is leaking   | Replace shaft seal with available kit. Refer to <b>Section 6.5.7</b> .  |
|   | Minimum pressure/check valve is malfunctioning                           | Rebuild or replace check valve: Refer to <b>Section 6.5.11</b> ; order check valve repair kit—see <b>Table 9A: Recommended Spare Parts List</b> .   |
|   | Pressure gauge is malfunctioning   | Check for proper operation with an auxiliary air source. Replace if necessary.  |
| Check pressure gauge function/control line routing: adjust, repair or replace as necessary.   |  |   |
| <i>Continued on next page</i>   |  |   |

| <b>7.2 TROUBLESHOOTING GUIDE</b>   |   |   |
|--|---|---|
| <b>Fault/Malfunction</b>   | <b>Possible Cause</b>   | <b>Corrective Action</b>  |
| <b>COMPRESSOR (CONTINUED)</b>  |   |   |
| Compressor system over-pressures (continued)<br>This condition will cause a compressor shutdown, and a fault light will turn on. Before restarting the compressor, determine the cause of the over-pressure. | Defective safety valve  | Replace safety valve.   |
|  | Plugged coalescer   | Replace coalescer. Refer to <b>Section 6.5.6, Replacing the Spin-on Air/Oil Coalescer.</b>  |
|  | Pressure switch setting too high, or switch is malfunctioning   | Adjust pressure switch setting. Refer to <b>Section 2.2.7, Adjustable Pressure Switch</b> , and <b>Section 6.5.15, Adjusting the Pressure Setting.</b> Replace if switch continues to deviate from setting. |
| No service air output  | If equipped, OSHA valve/velocity fuse, not functioning properly | Reset or replace OSHA valve.  |
|  | Clutch malfunctioning   | Check clutch. Replace if necessary.   |
|  | Wiring  | Check wiring: Loose—secure ; faulty—replace.  |
|  | Fuses and/or relays   | Check fuses and relays for continuity. Replace if necessary.  |
|  | Belt(s)   | Belt(s) out of position or malfunctioning. Consult <b>Section 6.5.16</b> , and its sub-sections.  |
| Low service air output   | Clogged compressor air filter                                   | Check air filter. Replace if necessary; refer to <b>Section 6.5.1, Compressor Air Filter.</b>   |
|  | Solenoid valve sending continuous signal to inlet valve         | Rebuild or replace solenoid valve if defective. Refer to <b>Section 6.5.8.</b>  |
|  | Incorrect compressor speed                                      | Adjust speed. Refer to <b>Section 6.5.14.</b>   |
| Compressor stalls  | Pressure switch setting too high                                | Adjust pressure switch setting. Refer to <b>Section 2.2.7, Adjustable Pressure Switch</b> , and <b>Section 6.5.15, Adjusting the Pressure Setting.</b> Replace if switch continues to deviate from setting. |
|  | Speed is set too low  | Check to see if compressor goes to high speed.  |
| System operating pressure below specified minimum  | Air demand too high   | Check air tools for wear, damage, or malfunctions. Replace or repair.   |
|  | Compressor capacity too low to accommodate demand               | Substitute larger capacity compressor system.   |
| <i>Continued on next page</i>  |   |   |



## 7.2 TROUBLESHOOTING GUIDE

| Fault/Malfunction   | Possible Cause                                   | Corrective Action  |
|---|--|--|
| COMPRESSOR (CONTINUED)  |  |  |
| System operating pressure below specified minimum (continued) | System leaks or is damaged                       | Inspect for leaks. Repair and/or replace damaged parts as necessary. Use <b>Section 9, Illustrated Parts List</b> to visually confirm/identify any part that needs to be replaced before ordering part.      |
|   | Pressure switch set too low/malfunction          | Adjust pressure switch setting. Refer to <b>Section 2.2.7, Adjustable Pressure Switch</b> , and <b>Section 6.5.15, Adjusting the Pressure Setting</b> . Replace if switch continues to deviate from setting. |
|   | Input rpm too low                                | Adjust to proper setting.  |
|   | Inlet valve Teflon "O" ring popped out of groove | Replace "O" ring: Refer to <b>Section 6.5.2, Repairing the Air Inlet Valve</b> . Order inlet valve repair kit—see <b>Table 9A: Recommended Spare Parts List</b> .  |
|   | Inlet valve piston stuck in down position.       | Check for proper operation with an auxiliary air source—replace or rebuild inlet valve.  |
|   | Leaking compressor shaft seal                    | Replace shaft seal with available kit. Refer to <b>Section 6.5.7, Repairing the Compressor Shaft Seal</b> . Order shaft seal kit—see <b>Table 9A: Recommended Spare Parts List</b> .                         |
|   | Soiled inlet valve                               | Remove valve and clean piston. Refer to <b>Section 6.5.2, Repairing the Air Inlet Valve</b> . Order inlet valve repair kit—see <b>Table 9A: Recommended Spare Parts List</b> .                               |
|   | Inlet valve fails to open                        | Repair/replace inlet valve. Refer to <b>Section 6.5.2, Repairing the Air Inlet Valve</b> . Order inlet valve repair kit—see <b>Table 9A: Recommended Spare Parts List</b> .                                  |
| Excess amount of oil in air discharge                         | Inlet valve frozen                               | Repair/replace inlet valve. Refer to <b>Section 6.5.2, Repairing the Air Inlet Valve</b> . Order inlet valve repair kit—see <b>Table 9A: Recommended Spare Parts List</b> .                                  |
|   | Machine not on level surface                     | Move machine to level surface.   |

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| 7.2 TROUBLESHOOTING GUIDE                         |  |  |
|---|--|--|
| Fault/Malfunction                                 | Possible Cause   | Corrective Action  |
| COMPRESSOR (CONTINUED)                            |  |  |
| Excess amount of oil in air discharge (continued) | Compressor oil level too high  | The correct oil level is the half-way mark on the dipstick with the compressor shut down, and the machine on a level surface. Drain excess oil to correct level.   |
|   |  | Tank not positioned with the drain at its lowest point. Reposition machine. <b>NOTE:</b> machine must be operated while on a level surface in order for proper compressor oil circulation throughout the system. |
|   | Coalescer element plugged or damaged   | Replace the coalescer element. Consult <b>Section 6.5.6, Replacing the Spin-on Air/Oil Coalescer</b> . Order replacement coalescer element—see <b>Table 9A: Recommended Spare Parts List</b> .                   |
| Excessive moisture in the compressed air          | Moisture accumulating in air tank  | Drain water from air tank. Refer to <b>Section 6.5.9, Draining the Air Tank</b> .  |
| Compressor system fails to build-up pressure      | Service valve is open  | Close service valve.   |
|   | Pressure gauge is malfunctioning   | Check pressure gauge function/control line routing: adjust, repair or replace as necessary.  |
|   |  | Check for proper operation with an auxiliary air source. Replace if necessary.   |
|   | Inlet valve Teflon “O” ring popped out of groove   | Replace “O” ring: Refer to <b>Section 6.5.2, Repairing the Air Inlet Valve</b> . Order inlet valve repair kit—see <b>Table 9A: Recommended Spare Parts List</b> .  |
|   | Inlet valve piston stuck in down position.   | Check for proper operation with an auxiliary air source—replace or rebuild inlet valve.  |
|   | Discharge piping leaks   | Tighten connections; replace faulty piping.  |
| Leaking compressor shaft seal                     | Replace shaft seal with available kit. Refer to <b>Section 6.5.7, Repairing the Compressor Shaft Seal</b> . Order shaft seal kit—see <b>Table 9A: Recommended Spare Parts List</b> . |  |
|   | Soiled inlet valve   | Remove valve and clean piston. Refer to <b>Section 6.5.2, Repairing the Air Inlet Valve</b> . Order inlet valve repair kit—see <b>Table 9A: Recommended Spare Parts List</b> .                                   |
| <i>Continued on next page</i>                     |  |  |

| <b>7.2 TROUBLESHOOTING GUIDE</b>                         |   |   |
|--|---|---|
| <b>Fault/Malfunction</b>                                 | <b>Possible Cause</b>   | <b>Corrective Action</b>  |
| <b>COMPRESSOR (CONTINUED)</b>                            |   |   |
| Compressor system fails to build-up pressure (continued) | Inlet valve fails to open   | Repair/replace inlet valve. Refer to <b>Section 6.5.2, Repairing the Air Inlet Valve</b> . Order inlet valve repair kit—see <b>Table 9A: Recommended Spare Parts List</b> .   |
|  | Inlet valve frozen  | Repair/replace inlet valve. Refer to <b>Section 6.5.2, Repairing the Air Inlet Valve</b> . Order inlet valve repair kit—see <b>Table 9A: Recommended Spare Parts List</b> .   |
| Compressor relief valve opening                          | Safety switches not operating (these should shut down the compressor before the relief valve opens) | Check pressure safety switch/control box. Replace if necessary.   |
| <b>WELDER</b>  |   |   |
| Welder and/or battery charger behave erratically         | Connection cables or receptacles are soiled/contaminated  | Check for twisted cables and/or soiled/contaminated or loose receptacle connections.<br><br>Untwist and/or straighten out any suspected cable tensions. Carefully wipe off any contaminants to receptacle connectors before re-connecting. Replace any worn or damaged cables or receptacles. Contact Vanair® Mfg., Inc. Service Department if behavior persists. |
|  | Welding function is not drawing enough operating power  | If running more than one function simultaneously, turn off competing function.  |
| No welder output   | Fuse at welder field blown  | Replace the welder field fuse. Refer to <b>Section 6.6, Servicing the System Fuses and Circuit Breakers</b>   |
| Display not working                                      | Loose or faulty wiring  | Check wiring: Loose—secure ; faulty—replace.  |
| Lights do not turn off                                   | Battery charge low  | Flip AC generator switch to bring engine to high rpm, and charge battery.   |
| <b>AC GENERATOR</b>                                      |   |   |
| No AC generator output                                   | Serpentine belt out of position or malfunctioning   | Re-situate and adjust belt tension, or replace belt if necessary. Consult <b>Section 6.5.16, Replacing and Re-tensioning the Serpentine Belts</b> . Order replacement belt—see <b>Table 9A: Recommended Spare Parts List</b> .  |
| <i>Continued on next page</i>                            |   |   |

| <b>7.2 TROUBLESHOOTING GUIDE</b>      |                                  |  |
|---------------------------------------|----------------------------------|--|
| <b>Fault/Malfunction</b>              | <b>Possible Cause</b>            | <b>Corrective Action</b>   |
| <b>AC GENERATOR</b>                   |                                  |  |
| No AC generator output<br>(continued) | Loose or faulty wiring           | Check wiring: Loose—secure ;<br>faulty—replace.  |
|                                       | Circuit breaker blown            | Replace the circuit breaker. Refer to<br><b>Section 6.6, Servicing the System Fuses<br/>and Circuit Breakers</b>           |
| Low AC voltage                        | Engine speed too low for demand  | Adjust speed control. Consult <b>Section<br/>6.5.14, Adjusting the Engine Speed</b> , and<br>the Engine Operator's Manual. |
| High AC voltage                       | Engine speed too high for demand | Adjust speed control. Consult <b>Section<br/>6.5.14, Adjusting the Engine Speed</b> , and<br>the Engine Operator's Manual. |