

TROUBLESHOOTING

This section contains instructions for troubleshooting the equipment following a malfunction. The troubleshooting procedures are to be performed on the equipment are listed below. Each symptom of trouble for a component or system is followed by a list of probable causes of the trouble and suggested procedures to be followed to identify the cause.

In general the procedures listed below should be performed in the order in which they are listed, although the order may be varied if the need is indicated by conditions under which the trouble occurred. In any event, 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.

MACHINE WILL NOT START

1. Check fuel level and add fuel if necessary.
2. Plugged fuel filter and replace if necessary.
3. Low battery voltage, recharge if necessary.
4. Loose battery cables, tighten cable; dirty battery cables should be cleaned thoroughly.
5. Plugged air filter, replace the element.
6. Engine problems may have developed, refer to your Engine Manual.
7. Defective engine oil pressure switch, check continuity and replace if necessary.
8. Blown fuse in wiring harness, check the continuity of fuse and replace if necessary. Fuse located by engine starter solenoid.
9. Bad compressor high discharge temperature switch – this switch is normally closed. Check for continuity across both terminals. Replace if it shows no continuity (normally open.)

HIGH COMPRESSOR DISCHARGE TEMPERATURE

1. Check compressor oil level. Add oil if required (see section for oil specifications.)
2. Check electric fan and switch.
3. Clean outside of oil cooler.
4. Clean oil system (cooler) internally.
5. Plugged compressor oil filter. Change element.
6. Plugged oil return line, clean orifice and check valve.

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INSUFFICIENT AIR DELIVERY

1. Plugged air filter, clean or replace.
2. Plugged air/oil separator. Replace separator element and also change compressor oil and oil filter at this time.
3. Defective pressure regulator, adjust or repair.
4. Engine speed too low, readjust engine speed.

UNPLANNED SHUTDOWN

When the operation of the machine has been interrupted by an unexplained shutdown, check the following:

1. Check to determine if compressor oil is at proper level.
2. Check oil cooler for dirt, slush, ice on the fins, or any other obstructions to cooling airflow.
3. Make a thorough external check for any cause of shutdown such as broken hose, broken oil lines, loose or broken wire, etc.
4. Check compressor for high discharge temperature switches; it should be normally closed. C.D.T. switch located in piping on end of receiver/sump.
5. Check electric fan motor and wiring.
6. Check fuses in wire harness, check continuity of fuse and replace if necessary. Fuse located by starter solenoid.
7. Remove wire from engine oil pressure switch and try to start. If unit starts, add pressure gauge at pressure switch port to verify low pressure or take unit in to Kohler deal for inspection.

If discharge pressure is too low, check the following:

- Too much air demand.
- Service valves open blowing to atmosphere.
- Leaks in service line.
- Restricted compressor inlet air filter.
- Faulty control system operation (regulator, inlet valve, etc.)
- Low engine speed.

If discharge pressure is too high or safety valve blows, check the following:

- Oil separator plugged up.
- Faulty safety valve.
- Faulty regulator or set too high.
- Inlet valve leaking, or partially open. Loss of pressure signal to inlet valve from regulator causing inlet valve to stay open.

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BLOW DOWN VALVE

If after the compressor is shutdown, pressure does not automatically blow down, check for:

- Automatic blow down may be inoperative.
- Blockage in air line from compressor to blow down valve at coalescer head.
- Muffler at blow down clogged.

ENGINE OVERHEATING

If the engine is overheating, check for:

- Low oil level, refill.
- Air blockage into engine from blower/PTO side.
- Air blockage from exhaust side of engine.
- Dirty oil in engine.

OIL CONSUMPTION

Abnormal oil consumption or oil in service line, check for the following:

- Over filling of oil sump.
- Leaking oil lines or oil cooler.
- Plugged oil return line: check entire line and check valve/orifice fitting at compressor port.
- Defective separator element.
- Compressor shaft seal leakage.
- Discharge pressure below 55 PSI.

SEPARATOR PLUGGING

If the separator element has to be replaced frequently because it is plugging up, it is an indication that foreign material may be entering the compressor inlet or the compressor oil is breaking down.

Compressor oil can break down prematurely for any number of reasons:

- Extreme operating temperature.
- Negligence in draining condensate from oil sump.
- Using the improper type of oil.
- Dirty oil.

The complete inlet system should be checked out for leaks.