QUICK TROUBLESHOOTING GUIDE
FOR RECIPROCATING COMPRESSORS

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1. **COMPRESSOR WILL NOT START**
   - Check power supply, switchgear, and the control panel.
   - Verify proper oil pressure to ensure oil-pressure shutdown has cleared.
   - Ensure all starting permissive circuitry has been satisfied.
   - Ensure nothing is blocking running gear or engine.

2. **LOW OIL PRESSURE**
   - Check all local pressure gauges for proper operation
   - Verify proper operation of oil pump.
   - Inspect pump for wear, and repair or replace if needed.
   - Check for proper frame oil level. Drain or fill as needed.
   - Check lube-oil filter differential pressure. Change elements as needed.
   - Check setting of lube-oil pump relief valve. Increase if needed.
   - Inspect frame lube-oil strainer.

3. **FRAME KNOCKS**
   - Verify proper running-gear clearances.
   - Inspect running-gear components.
   - Check for proper oil pressure and temperature.
   - Inspect cylinder, piston end clearance, piston nut, or crosshead nut.

4. **NOISE IN CYLINDER**
   - Check end clearance.
   - Check piston and crosshead nuts.
   - Inspect for broken or leaking valves.
   - Inspect piston rings and rider bands.
   - Verify valves are installed correctly.
   - Verify un-loader plugs are seating properly.
   - Open discharge bottle drains to ensure no liquid in cylinder.
5. EXCESSIVE PACKING LEAKAGE
   • Inspect packing rings for wear, replace as necessary.
   • Check for proper lubrication and adjust accordingly.
   • Inspect packing case for dirt or debris.
   • Verify packing properly assembled.
   • Check packing vent line for obstruction.
   • Inspect for damaged piston rod and repair or replace as necessary.
   • Check packing clearances.
   • Check piston-rod run-out.

6. PACKING OVERHEATS
   • Inspect packing for contamination.
   • Inspect rod for damage.
   • Inspect packing clearances, on the rod and in the packing case.

7. HIGH DISCHARGE TEMPERATURE
   • Inspect suction and discharge valves for leakage.
   • Inspect cylinder water jackets, clean if needed.
   • Check suction start-up screen.

8. LOW SUCTION PRESSURE
   • Check inlet filter differential pressure, shift filters as needed.
   • Inspect isolation valves for proper operation.

NOTE: This 2-pg. troubleshooting symptom-and-reaction list is offered as a basic guide only. Reflecting the eight most common issues with their most probable remedies, the guide may be expanded to address specific installations, package configurations, and actual operating conditions.

... HPB