

# **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***