

# Maintenance Checklist for Portable Compressors



**Don't treat service as a once-a-year requirement.**

Compressors can be divided into six sub-assemblies (seen below), and must be checked and maintained on a regular basis. This checklist acts as a guide for regular maintenance, to keep your machine running smoothly and efficiently.

## 1. Pump or Airend - the unit's compression mechanism.

**Rotary Screw Airend** - compresses air internally using two helical lobe rotors inside a housing.

- Check for mechanical seal leakage
- Check for inlet valve wear
- Check for excessive bearing "play."
- Recommended rebuild: **50,000 to 100,000 hrs**

## 2. Engine - the internal combustion engine provides the energy to turn the airend that compresses air.

- Check engine lubricant level
- Check air intake filter contamination alarm
- Clean and replace air intake filter regularly
- Adjust valve clearance
- Check and adjust engine fan belt tension
- Inspect the fuel injectors
- Recommended engine lubricant change interval: **500 hrs**
- Recommended engine lubricant filter change interval: **500 hrs**

## 3. Chassis - the frame and housing for compressor components.

- Check tire pressure and inspect for excessive tread wear
- Tighten wheel bolts if necessary
- Grease coupling head, joints and tow bar

## 4. Lubricants - Lubricants in the airend cool, seal, lubricate and remove contaminants.

- Use proper grade (see manufacturer's manual)
- Drain existing lubricant before refilling
- Draw lubricant samples at regular intervals to determine maximum lubricant life
- Use synthetic lubricant for maximum service life

## 5. Compressor Filters

**Compressor Air Filter** - generally located before the airend inlet valve and removes bulk contaminants from the air entering the airend.

- Use proper micron rating as specified by OEM
- Check pressure differential and, if necessary, carefully clean according to manufacturer's recommendations
- Check for worn/damaged seals
- Check structural integrity
- Recommended air filter change interval: **500 hrs**

**Compressor Lubricant Filter and Lubricant Separator** - the compressor lubricant filter removes particles from the lubricant circulated in the airend. The lubricant separator removes lubricant from the air before it is discharged.

- Caution: do not change filters or check fluids while the compressor is running. Spraying fluids such as oil can cause serious burns or injury.
- Check the lubricant level and change regularly
- Replace compressor lubricant filter
- Change the lubricant separator cartilage in the lubricant separator
- Clean the lubricant cooler
- Use only genuine replacement parts
- Recommended lubricant change interval: **1,000 hrs**
- Recommended compressor lubricant filter change interval: **1,000 hrs**
- Recommended lubricant separator cartridge change interval: **2 yrs or 1,000 hrs**

## 6. Cooler - provides cooling for the engine and, in some cases, will provide compressor fluid cooling.

- Check the engine coolant level
- Check for visible contamination and clean regularly
- Check the anti-freeze protection and change coolant, if necessary
- Inspect hoses and hose clamps for wear

## 7. Other Components

- Check the battery's electrolyte and pole connections
- Check the fitting frame
- Check hoses for wear and tightness
- Check all accessible screw connections, pipelines and clamps for wear and tightness
- Grease the canopy hinges
- Ensure that pressure and temperature gauges are working