



## Gardner Denver Cycloblower Installation Manual

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**INSTALLATION SPECIFICATION SHEET.**

### ***OPERATING INSTRUCTIONS.***

DO NOT START BLOWER UNDER LOAD.

DO NOT STOP BLOWER UNDER LOAD.

DO NOT OPERATE BLOWER BELOW CORRECT SPEED SETTING.

DO NOT OPERATE BLOWER ABOVE CORRECT SPEED SETTING.

DO NOT OPERATE BLOWER OVER 110 kpa.

### **PRESTARTING CHECK.**

Blower turns freely.

Air Filter and fittings are tight.

Air Filter is serviced.

All bolts are tight.

Proper oil level in gear case.

Check valve okay.

Relief valve okay.

Fusible plug okay.

### **STARTING PROCEDURE.**

Ensure boost valve and 2-3 aeration lines are open – blower must **NOT** start under load.

Idle the truck engine at low idle.

Slowly engage the power take-off or start diesel engine.

Warm up the blower at idle and zero pressure.

Set engine to operating revs – consult specification sheet for correct speed setting.

Check for severe vibration, unusual noise, leaks and undue temperature increase.

With the blower at operating revs, close boost valve on tanker to pressurise the vessel.

Ensure rpm and pressure is correct during operation.

### **SHUTDOWN PROCEDURE.**

Ensure the boost valve and 2-3 aeration lines are open on the tank.

Bleed tank pressure to zero.

Idle the truck engine.

Allow the unit to cool down at idle for several minutes (blower at zero pressure).

Disengage the PTO or shut diesel engine down.

**EMERGENCY SHUTDOWN PROCEDURE.**

Fully open dump valve on blower.

Idle the truck engine.

Allow the unit to cool down at idle for several minutes (blower under NO load).

Slowly disengage PTO or shut diesel engine down.

## ***SERVICE INFORMATION.***

Gardner Denver blowers are manufactured to exacting standards and are renowned for high performance, reliability and quality. As such, inspection and maintenance play a major role in ensuring this blower provides the service life and level of performance it was designed for. Cared for correctly, this unit will provide many years of trouble free service. Ensure that the recommended lubricants are used to support your maintenance program.

To prevent over-heating it is critical to ensure that the blower is not over-revved (above 2000rpm), under-revved (below 1600rpm) or run at too high pressure (above 124 kPa). It is important that the blower is not started or stopped under load. A fusible plug is fitted to the blower to relieve pressure if it overheats. This should not be replaced with a solid plug.

To help protect the blower, a check valve and pressure relief valve are fitted. The lid of check valve should be removed to inspect the flap and pin routinely. The pressure relief valve should fully relieve at 120 kPa. Its function should also be tested regularly.

Regular and correct maintenance of your blower is important to ensure it provides trouble free service.

## **LUBRICATION.**

### **Discharge end (Gear End).**

Gears and gear end bearings are oil splash lubricated. **Correct oil type & level is critical!**

The oil level required is approximately 2.4 L and should half cover the sight glass on the end case. Do not over fill.

Recommended Oil.      MOBIL SHC-630 Synthetic Gear Oil

Quantity:                      Approx. 2.4 L.

# Check gear case oil level daily.

Oil change interval = ~ 1000 service hours.

More often if moisture and dust conditions are severe.

(Gear case should be flushed clean with solvent every 4 oil changes)

### **Inlet End.**

Inlet end bearings are grease lubricated with a high temp. Lithium Complex or Lithium-12 hydroxy based grease.

***Recommended grease = Mobil XHP222 grease. (Available from Convair)***

Regrease bearings every 250 hours of operation. Fill the bearing cavity with grease until it begin to come out of the grease relief fitting.

# Grease must be used rated to 150 degrees Celcius.

***SPARE PARTS.***

**Gardner Denver Cycloblower**

Model T5CDL9L: Part No. GDB-9L



Model T5CDL12L: Part No. GDB-12L



**Companion Flange.**

Part No: C068-1



**Outlet Gasket**

Part No: GD160



**Fusible Plug**

Part No: GD146



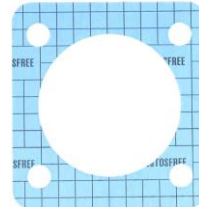
**Check Valve**

Part No. VA0011



**Check Valve Gaskets**

Part No: C044



**Pressure Relief Valve**

Protects the blower against over pressure. The relief valve should be tested monthly to ensure pressure does not exceed 137kPa.

Convair Part Number C023-3





## Recommended Oil

Part No: LU-003

Note: 20L drum shown, sold per litre.



**Air Filter**, A Donaldson Powercore PSD100031 is installed. The air cleaner incorporates a pre-filter in the intake end of the housing.

Convair Part Number - AF-026



**Air Filter Element**, install the new element Donaldson part number P608676. (Air filters should provide between 50 to 300 hours, depending upon conditions).

Convair Part Number AF-024

*The inlet restriction indicator should be used as guide to replace the element.*



### **Air Filter Safety Element**

Convair Part Number AF-025



### **Air Filter Restriction Indicator**

This gauge measures the restriction created by the inlet filter. Normal restriction is 5-10" of water.

Restriction must not exceed 25mbar.

Convair Part Number - AF-033

