

INSTRUCTION MANUAL: Industrial Series Piston Air Compressor

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Unpackaging & Handling

Be sure to carefully inspect the unit before accepting the shipment. If any damage has occurred document it with the trucking company immediately. Contact your Dayleap Distributor for additional assistance.

We recommend leaving the unit on its shipping skid until it is moved to the final installation site. Make sure the unit is properly handled and secured when moving.

DO NOT UTILIZE THE PUMP OR DRIVE AS A LIFT POINT.

Procedure for Handling Damaged Shipment:

1. The Customer, as the receiving point, MUST inspect the shipment for damage.
2. If the shipment is damaged, the customer should note so on the freight bill.
3. The Customer should request an inspector from the freight company to inspect the equipment immediately. It is best to send a confirming letter with the following information:
 - a. Freight Bill Number
 - b. Date Delivered, with Shipper's Name & Address
 - c. Description of Item(s) Damaged
 - d. Description of Damage, with Pictures if Possible
 - e. Copy of Customer's Invoice for the Equipment
4. After Inspection:
 - a. Get a Copy of the Inspection Report
 - b. Request the Unit be Shipped Back Free of Charge
 - c. Request a Credit For the Original Freight Bill
5. Call the Distributor and request a return goods Authorization(RGA)

Safety Guide

Compressor Safety Precautions:

1. Read and understand all instructions completely before operating this compressor.
2. Disengage power to mains and disconnect power lines to the machine prior to performing any work or maintenance on this unit.
3. Open tank discharge valve and relieve all pressure from tank and compressor lines. Do not attempt to remove any pressurized systems without first relieving the pressure within the unit.
4. Do not attempt to service any part while the machine is in operation.
5. Do not operate the compressor at pressures in excess of its indicated rating on the compressor nameplate.
6. Do not operate the compressor at speeds in excess of its indicated rating on the compressor nameplate.
7. Do not remove any guards, shields, or screens while the compressor is operating. If removed for maintenance, replace before resuming operation.
8. Observe the delivery pressure gauge daily to be sure the automatic control system is operating within the proper limits.
9. Periodically check all safety and relief devices for proper operation.
10. Do not play with compressed air. Pressurized air can cause serious injury or death to personnel.
11. Be sure that no tools, rags, or loose parts are left on the compressor or drive parts.
12. Do not use flammable solvents for cleaning parts.
13. Exercise cleanliness during maintenance when making repairs.
 - a. Keep dirt away from parts and exposed openings by covering with a clean cloth.
14. Install pressure relief valves in any isolated piping in the plant system.
15. Do not operate the compressor in areas where there is the possibility of ingesting flammable or toxic gases.
16. Check pipe for any signs of wear or deterioration before each use and make certain that all connections are secure.
17. Observe the prescribed maintenance intervals.
18. Only use genuine Dayleap parts, operating oils and operating material recommended by Dayleap.
19. Strictly observe the effluent disposal laws of your local authority when disposing of condensate.

Make sure to investigate the code requirements to ensure compliance prior to operating the compressor.

The owner, lessor, or operator of this compressor is hereby notified and forewarned that any failure to observe these safety precautions may result in injury, death and/or property damage.

Operating Instructions

The operating instructions form part of the machine and must be made available to the compressor operating personnel at all times. In order to receive the maximum performance and long life from your compressor, the following instructions should be carefully read and all points regarding installation and operation of the unit should be noted and observed. Careful reading of the manual, prior to connecting anything to the motor or compressor, will pay dividends in long-term trouble-free operation.

Installation Instructions

Inspection:

Check for possible damage in transit and see that the pulley turns freely by hand. Report any damage to delivering carrier at once.

Location:

Select a clean, dry, and lit location. In cold climates the compressor should be installed in a heated building. Insulate cold water or other low temperature pipes that pass overhead to avoid the possible collection and dripping of condensate onto the compressor and motor, which could cause rusting and/or motor shorting. Do not install compressor in a boiler room, paint spray room, or area where sandblasting is carried on. If air in the area where the compressor is to be installed is acid-laden or dust-laden the compressor intake should be piped to the outside. This intake pipe should be increased one pipe size for every twenty (20) feet of run and the intake filters should be installed at the end of the pipes with a hood to protect them from the elements.

If the compressor has to be located where the motor will be exposed to appreciable quantities of water, oil, dirt, acid, or alkaline fumes the motor must be of special construction to avoid rapid deterioration.

Bolt the unit securely and evenly to a level base, using shims if required.

Allow sufficient space around compressor so that it is accessible from all sides for maintenance. Mount the unit with pulley side toward the wall, but at least six (6) inches from it.

Starting:

A. If compressor is shipped without oil in the crankcase, before starting, fill crankcase to the high level mark on the sight glass with 30W compressor oil meeting the following specifications:

AMBIENT OR ROOM TEMP. °F	VISCOSITY AT 100° F S.S.U.	FLASH POINT °F (Min.)	POUR POINT °F (Min.)	CARBON RESIDUE %/o (Max.)	PREFERRED BASE
55 to 120	490 to 600	430	*20	15	Naphthenic
32 to 55	290 to 350	390	*5	10	Naphthenic
Oto 32	160 to 230	350	-10	.05	Naphthenic
Above 120 or below 0	CONSULT FACTORY				

- A. For operation in damp or humid conditions, addition of rust inhibitor is recommended.
- B. Turn compressor over a few revolutions by hand to make sure all parts are free and in running condition.
- C. Check the tension of the belts.
- D. Remove tools, rags, and other objects from the vicinity of the compressor.
- E. Never put hands or tools on the belts of idle units unless the main power is disconnected and locked.
- F. Note directions of arrow on flywheel and be sure the direction of rotation is correct when machine is started. Correct direction is counter-clockwise when facing the flywheel. Air should be drawn through the intercooler onto the cylinders for maximum cooling.

Maintenance

To obtain reliable and satisfactory service, this unit requires a consistent preventative maintenance program. Maintenance schedule pages should be used to aid in keeping proper records.

General:

1. Check your compressor regularly!
2. Check the entire system for air leakage around fittings, connections, and gaskets, using soap and water solution.
3. Remove rust and oil soiling.
4. Check fastener tightness by using torque wrench to the corresponding values within the full operations manual.

Compressor Oil:

- Check oil level every week and top off if necessary. Fill the oil tank with recommended oil until the sight glass is % full.

Use the Same Brand Oil Every Time, Do Not Mix Oil Types, Weights, or Brands!

- Compressors are filled with LP break-in lubricant. This is an ISO non-detergent industrial lubricant with rust and oxidation inhibitors specifically formulated for reciprocating compressors.

- Normal break-in period of dayleap air compressors is 25 hours. After which, the compressor oil needs to be drained and replaced with compressor Synthetic Lubricant.

o Compressors must run for a 25-hour break-in period, using ISO 100 oil.

o After 25 hours, thoroughly drain existing oil from crankcase, and replace with synthetic lubricant. o Run compressor for 200 hours. Thoroughly drain and replace again with synthetic lubricant.

- For the first 500 hours of compressor operation, a careful and regular check of the oil level should be made. Maintain full oil level at all times.

- After the first 500 hours the compressor is now ready to run for extended periods before next lubricant change is required. Maintain full oil level at all times in between oil changes.

- Frequency Of Oil Changes: o Change oil every 3000 operating hours.

o For constant run applications in daily use or units subjected to extremely heavy use, change oil monthly.

Air Filter: - Check and clean air filter every month, making sure the filter is free from debris and functioning properly.

- Replace filter element every 1500 hours or every year, whichever occurs first.

Maintenance Intervals:

- Check and record each maintenance task in the table below.

Maintenance work	Maintenance intervals dependent on usage		
	either after	or	
	Operating hours	weekly / monthly	yearly
Check oil level and top up, if necessary		weekly	
Check suction filter and clean, if necessary	500	monthly	
Replace suction filter cartridge	2000		X
Check safety valve	2000		X
Check cooler for soiling and clean, if necessary	500	monthly	
Change oil *	1.000		every 1 years
Check V-belt for damage and replace, if necessary	2.000		X