

ROYCE AIR COMPRESSOR 415VOLT/3 PHASE OPERATIONS MANUAL



**PLEASE KEEP AND READ CAREFULLY
BEFORE INSTALLING COMPRESSOR**

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MODEL - RC130



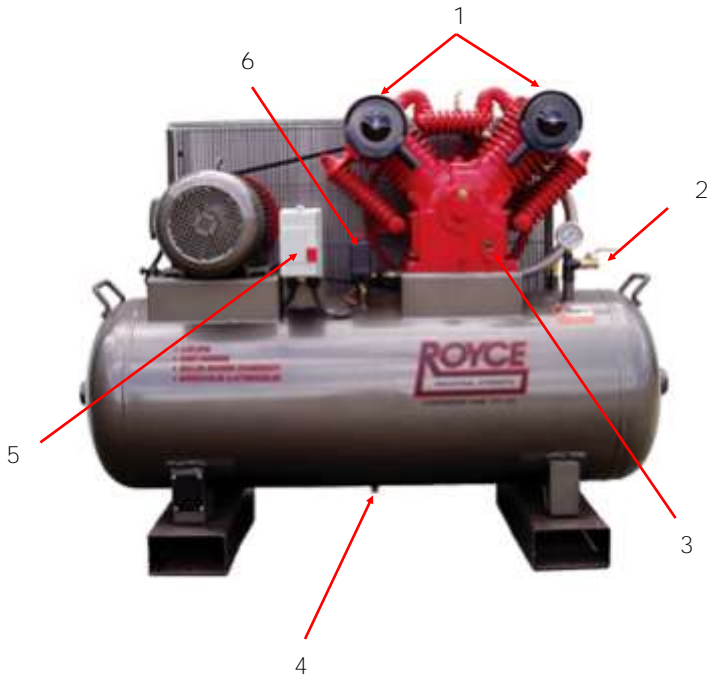
This Model has the same specs as Model RC66.



Control Box Settings

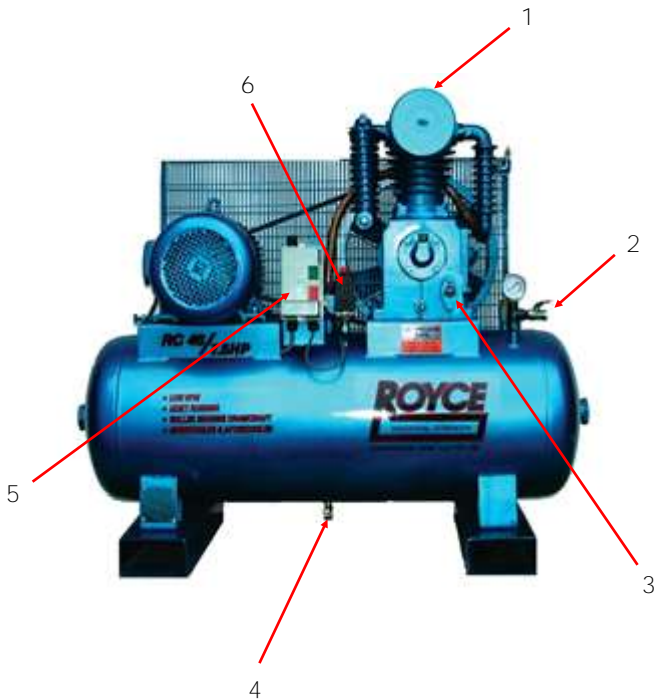
1. Compressor 2 only;
2. Compressor 1 & 2 off;
3. Compressor 1 only;
4. Compressor 1 starts first, then Compressor 2 starts 3 - 4 seconds later.

MODEL - RC66



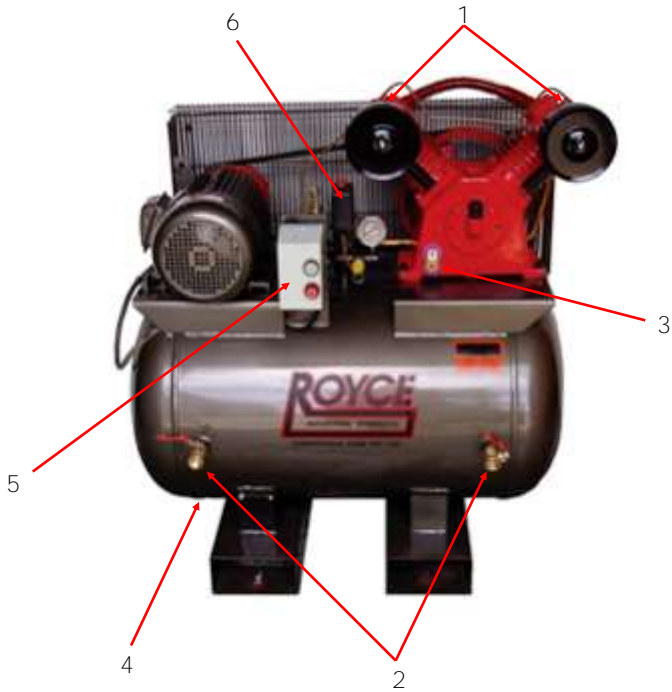
1. Air Filters;
2. Tank Outlet;
3. Oil Sight Gauge;
4. Tank Drain Valve;
5. DOL Starter;
6. Pressure Control Switch with On/Off button.

MODEL - RC46



1. Air Filters;
2. Tank Outlet;
3. Oil Sight Gauge;
4. Tank Drain Valve;
5. DOL Starter;
6. Pressure Control Switch with On/Off button.

MODEL - RC27



1. Air Filters;
2. Tank Outlet;
3. Oil Sight Gauge;
4. Tank Drain Valve;
5. DOL Starter;
6. Pressure Control Switch with On/Off button.

WARNINGS

- ◆ ELECTRICAL AND MECHANICAL REPAIRS AND/OR MAINTENANCE SHOULD BE CARRIED OUT BY QUALIFIED PERSONNEL.

- ◆ FOR ROUTINE CHECKS ENSURE THAT ELECTRICAL POWER IS TURNED OFF AT THE WALL AND AIR PRESSURE IN TANK IS RELEASED.

INSTALLATION

Your new Royce Air Compressor has been assembled with **care. It has been test run and fully checked as 'A-OK' before** leaving the factory.

On receiving your compressor, check that there is no obvious transportation damage (filters or fittings broken, belt guard rubbing on flywheel etc).

Notify your carrier immediately if damage has occurred.

PREPARATION

The compressor should be situated in a clean, dry and well ventilated position.

It is extremely important that the compressor is level along the length as well as the width. If base is not level it is possible that lubrication will not be effective.

The most favored compressor position is along a wall with the oil sight glass and the pressure gauge facing the operator. To ensure adequate cooling , place the compressor at least 40cms from wall. Under no circumstances should compressor be located in hot, unventilated areas, e.g. small garden type shed in the direct sun with door closed.

STARTING, RUN-IN

STARTING

Electrical installation should be carried out by a qualified electrician.

Before starting:-

1. Check that the oil level is in the red circle of the sight glass.
2. Ensure that belt guard will not rub on the flywheel.
3. Check that all attached air hoses etc are double clamped and tight.

RUN-IN

1. Open air outlet so that pressure DOES NOT build up.
2. Ensure that pulley is running in direction of the arrow stamped into top of belt-guard.
3. Run compressor for 30 minutes with nil load (pressure).
4. Close tank valve allowing compressor to build up pressure and cut off.
5. Ensure that unloader works. You will hear a hiss of air from under the pressure switch, this hiss will stop after a few seconds.
6. Check that all nuts and bolts are tight, belt tension is correct (10mm - 25mm deflection in centre), fittings are tight and there are no oil leaks.

MAINTENANCE

ENSURE COMPRESSOR IS SWITCHED OFF BEFORE ATTEMPTING ANY MAINTENANCE.

DAILY MINIMUM - Check oil level and drain tank.

Drain oil and flush crankcase after first 20 hours of operation.

Change oil with 68 Grade Hydraulic Oil

- every 6 months for moderately working units
- every 3 months for hard working units

Check that oil level is to red circle on sight glass.

Check that pressure switch cuts in at approximately 600kPa (85psi or 6Bar) and cuts out at approximately 800kPa (120psi or 8Bar). This is the standard pressure working range.

Check belt deflection—10mm to 25mm at centre.

Check that unloader valve is operable (audible hiss when motor stops).

Check air filters clean or replace when necessary.

Check safety valve and pressure gauge.

TROUBLESHOOTING

SYMPTOM

Motor won't start;
Running slow;
Getting hot.

POSSIBLE CAUSE

Fault in wiring;
Voltage drop;
Faulty unloader;
Faulty pressure switch;
Faulty starter;
Faulty motor.

SYMPTOM

Compressor flywheel will not turn.

POSSIBLE CAUSE

Pump seized;
Low oil;
Foreign obstruction.

SYMPTOM

Vibration

POSSIBLE CAUSE

Uneven location;
Loose mounting bolts;
Internal pump damage;
Wear in pump;
Belts worn or loose.

TROUBLESHOOTING

SYMPTOM	Discharge capacity decreased
POSSIBLE CAUSE	Motor running too slow; Belts slipping; Air filters blocked; Air leaks; Exhaust line leak; Damaged head / valve gasket; Valve / valve seat worn; Piston ring / cylinder worn.

SYMPTOM	Excessive oil consumption
POSSIBLE CAUSE	Oil leaks; Crankcase breather blocked; Oil level too high; Incorrect oil type / grade; Piston ring / cylinder worn.

SYMPTOM	Pump getting hot
POSSIBLE CAUSE	Insufficient ventilation; Air discharge restricted; Work cycle too high; Low oil level; Internal pump damage.



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