

## Rolair JC20

# Rolair JC20 Portable Air Compressor User Manual

Model: JC20

## 1. INTRODUCTION

This manual provides essential information for the safe and efficient operation, maintenance, and troubleshooting of your Rolair JC20 Hand Carry Portable Air Compressor. Please read this manual thoroughly before operating the unit to ensure proper use and to prevent injury or damage.

The Rolair JC20 is an oilless, 2 horsepower electric air compressor designed for light-duty framing and roofing work. It features a two-cylinder pump, a low-amp draw motor, a heavy-duty roll-cage, integrated cord wrap, upward-facing gauges, and a quarter-turn drain valve, all contributing to its quiet operation at only 70 dB.

## 2. SAFETY INFORMATION

Always observe the following safety precautions to reduce the risk of electric shock, fire, or serious injury.

- **Read All Instructions:** Familiarize yourself with the compressor's controls and proper operation.
- **Electrical Safety:** Ensure the power source matches the compressor's voltage (115 Volts AC). Do not operate in wet conditions. Always use a grounded outlet.
- **Personal Protective Equipment:** Wear safety glasses or goggles when operating the compressor or using air tools. Hearing protection is recommended, especially during prolonged use.
- **Operating Environment:** Operate the compressor in a well-ventilated area. Keep children and bystanders away. Do not operate near flammable liquids or gases.
- **Pressure Safety:** Never exceed the maximum operating pressure of any air tool or accessory. Do not attempt to modify the pressure relief valve.
- **Maintenance:** Disconnect power before performing any maintenance or repairs.
- **Hot Surfaces:** The compressor pump and motor can become hot during operation. Avoid contact with hot surfaces.

## 3. KEY FEATURES AND COMPONENTS

The Rolair JC20 is engineered with several features for performance and durability:

- **Super Quiet Operation:** Single-stage oilless design with only 70 dB noise level.
- **Durable Pump:** Cast aluminum cylinder with stainless steel reed valves.
- **Efficient Motor:** 1700 RPM low-amp draw motor with automatic overload protection.
- **Protective Roll-Cage:** Heavy-duty design to protect the pump and motor.
- **Integrated Cord Wrap:** For convenient storage and transport.
- **Upward-Facing Gauges:** For easy monitoring of tank and regulated pressure.
- **Quarter-Turn Drain Valve:** For easy moisture drainage from the tank.



*Figure 3.1: Front view of the Rolair JC20 Air Compressor, showing the green tank, motor, gauges, and protective roll-cage.*



*Figure 3.2: Angled view highlighting the two-cylinder pump heads and motor assembly.*



Figure 3.3: Side view of the Rolair JC20, illustrating the compact design and component layout within the roll-cage.

## 4. SETUP

1. **Unpacking:** Carefully remove the compressor from its packaging. Inspect for any shipping damage. Report any damage to your dealer immediately.
2. **Placement:** Place the compressor on a firm, level surface in a clean, dry, and well-ventilated area. Ensure adequate clearance around the unit for air circulation.
3. **Electrical Connection:**
  - Verify that the power supply voltage matches the compressor's requirements (115 Volts AC).
  - Plug the power cord into a grounded electrical outlet. Avoid using extension cords if possible. If an extension cord is necessary, use a heavy-duty, grounded cord of appropriate gauge for the distance.
4. **Initial Drain:** Before first use, ensure the quarter-turn drain valve at the bottom of the tank is closed.

## 5. OPERATING INSTRUCTIONS

1. **Power On:** Locate the ON/OFF switch (typically a rocker switch or pressure switch) and turn the compressor ON. The compressor will begin to build pressure.
2. **Pressure Build-Up:** Allow the compressor to run until it reaches its maximum pressure and the motor automatically shuts off. This indicates the tank is fully charged.
3. **Connecting Air Tools:**
  - Attach your air hose to the quick-connect coupler on the compressor.
  - Connect your air tool to the other end of the hose.
4. **Adjusting Output Pressure:** Use the pressure regulator knob to set the desired output pressure for your air tool. Monitor the regulated pressure gauge.

5. **Operation:** Begin using your air tool. The compressor will cycle on and off automatically to maintain tank pressure as air is consumed.
6. **Power Off:** When finished, turn the compressor OFF using the ON/OFF switch.
7. **Depressurize:** Disconnect the air hose and tool. Allow any remaining air in the tank to escape through the drain valve or by briefly opening the regulator.

## 6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Rolair JC20 compressor. Always disconnect the power before performing maintenance.

- **Daily: Drain Moisture from Tank:**
  - With the compressor off and tank depressurized, open the quarter-turn drain valve located at the bottom of the tank.
  - Allow all accumulated moisture to drain completely.
  - Close the drain valve securely.
- **Weekly/Monthly: Inspect Air Filter:**
  - Check the air intake filter for dirt and debris.
  - Clean or replace the filter as necessary. A clogged filter can reduce compressor performance and lifespan.
- **Periodically: Inspect for Leaks:**
  - With the compressor pressurized, apply a soapy water solution to all fittings and connections.
  - Bubbles indicate a leak. Tighten connections or replace seals as needed.
- **Storage:** Store the compressor in a clean, dry location. Ensure the tank is drained of moisture before storage.

## 7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Compressor does not start or stops unexpectedly.	No power to unit. Thermal overload activated. Low voltage.	Check power cord, outlet, and circuit breaker. Allow compressor to cool down. Reset if applicable. Ensure proper voltage supply. Avoid long/thin extension cords.
Compressor runs continuously or cycles too frequently.	Air leak in system. Pressure switch malfunction. Clogged air filter.	Check all connections and hoses for leaks (use soapy water). Contact qualified service personnel. Clean or replace air filter.
Reduced air pressure or flow.	Clogged air filter. Air leak. Regulator set too low.	Clean or replace air filter. Check for and repair air leaks. Adjust pressure regulator to desired setting.

Problem	Possible Cause	Solution
Excessive noise or vibration.	Loose components. Unit not on a level surface.	Inspect and tighten all fasteners. Ensure compressor is on a stable, level surface.

## 8. SPECIFICATIONS













Feature	Detail
Model	JC20
Brand	Rolair
Power Source	Electric
Voltage	115 Volts (AC)
Motor Horsepower	2 HP
Air Flow Capacity (CFM @ 90 PSI)	4.5 CFM
Noise Level	70 dB
Pump Type	Oilless, Two-Cylinder
Item Weight	68 Pounds
Product Dimensions (L x W x H)	20"L x 20"W x 15"H
Color	Green
Special Feature	Quiet Operation, Portable, Roll-Cage Design
UPC	662865012118

## 9. WARRANTY AND SUPPORT

For warranty information, please refer to the documentation included with your purchase or visit the official Rolair website. For technical support, parts, or service inquiries, please contact Rolair customer service or your authorized dealer.

**Manufacturer:** ROLAIR

**Contact Information:** Please refer to the contact details provided on the Rolair official website or your purchase receipt for the most current support options.

 <p>PORTABLE AIR COMPRESSOR OWNER'S MANUAL</p> <p>MANUAL D'INSTRUCTIONS FRANÇAIS - PAGE 16 MANUAL DE INSTRUCCIONES EN ESPAÑOL - PÁGINA 16</p> <p>MODEL: JC20 SERIAL NUMBER: _____</p> 	<p><a href="#">ROLAIR JC20 Portable Air Compressor Owner's Manual</a></p> <p>This owner's manual provides essential safety warnings, operating instructions, system controls, and specifications for the ROLAIR JC20 portable air compressor. Learn how to safely use, maintain, and troubleshoot your ROLAIR compressor.</p>
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