

Robinair 16009

Robinair 16009 134R DiscovR Refrigerant Identifier User Manual

Model: 16009

1. INTRODUCTION

This manual provides comprehensive instructions for the safe and effective operation, maintenance, and troubleshooting of the Robinair 16009 134R DiscovR Refrigerant Identifier. This device is designed to protect A/C service equipment by verifying the purity of R134a refrigerant before vehicle servicing.

2. SAFETY INFORMATION

Always adhere to the following safety guidelines when operating the Robinair 16009 DiscovR Refrigerant Identifier:

- Wear appropriate personal protective equipment (PPE), including safety glasses and gloves, when handling refrigerants.
- Ensure adequate ventilation in the work area to prevent the accumulation of refrigerant vapors.
- Do not expose the device to extreme temperatures, moisture, or direct sunlight.
- Only use the identifier with R134a refrigerant as specified.
- Disconnect the device from the power source before performing any maintenance or cleaning.
- Refer to local regulations for proper handling and disposal of refrigerants.

3. PRODUCT FEATURES

The Robinair 16009 DiscovR Refrigerant Identifier offers several key features:

- **Refrigerant Purity Verification:** Identifies whether R134a refrigerant is pure enough for recovery.
- **A/C Equipment Protection:** Guards against damage to R134a recovery, recycle, and recharge machines from contaminated refrigerant.
- **Air Contamination Detection:** Notifies the user if the system contains excessive air.
- **Clear Indicators:** Features "PASS" and "FAIL" lights for immediate results.
- **Compact Design:** Portable and easy to use in various automotive service environments.

4. DEVICE OVERVIEW

Familiarize yourself with the components and indicators of the Robinair 16009 DiscovR Refrigerant Identifier.



Figure 1: Robinair 16009 DiscovR Refrigerant Identifier. The device features a display with "PASS" and "FAIL" indicators, along with status lights for "WARM UP", "CALIBRATING", "ANALYZING", "FAULT", and "EXCESS AIR". A "NEXT" button is also visible. The unit is connected to a hand-operated bulb pump via clear tubing.

4.1 Display Indicators

- **PASS:** Illuminates when the refrigerant is determined to be pure R134a.
- **FAIL:** Illuminates when the refrigerant is contaminated or contains excessive air.
- **WARM UP:** Indicates the device is heating to its operating temperature.
- **CALIBRATING:** Indicates the device is performing an internal calibration.
- **ANALYZING:** Indicates the device is actively testing the refrigerant sample.
- **FAULT:** Indicates an error or malfunction within the device.
- **EXCESS AIR:** Illuminates when the refrigerant sample contains a high level of air.
- **NEXT Button:** Used to advance through operational steps.

5. SETUP

1. **Unpack the Device:** Carefully remove the Robinair 16009 DiscovR Refrigerant Identifier and all accessories from its packaging.
2. **Inspect for Damage:** Check the device and its components for any visible damage. Do not use if damaged.
3. **Connect Power:** Connect the device to a 12-volt DC power source.
4. **Connect Sample Hose:** Attach the sample hose with the hand-operated bulb pump to the designated inlet port on the identifier. Ensure a secure connection.

6. OPERATING INSTRUCTIONS

Follow these steps to accurately identify R134a refrigerant:

1. **Power On:** Turn on the device. The "WARM UP" indicator will illuminate. Allow the unit to reach its operating temperature. This may take several minutes.
2. **Calibration:** Once warm-up is complete, the "CALIBRATING" indicator will illuminate. The device will perform an automatic calibration. Wait for this process to finish.
3. **Connect to System:** Connect the sample hose to the R134a A/C system or refrigerant container you wish to test. Ensure the connection is leak-free.
4. **Draw Sample:** Use the hand-operated bulb pump to draw a sample of refrigerant into the identifier. Pump the bulb several times to ensure a representative sample.
5. **Initiate Analysis:** Press the "NEXT" button to begin the analysis. The "ANALYZING" indicator will illuminate.
6. **Review Results:**
 - If the "PASS" light illuminates, the refrigerant is pure R134a and suitable for recovery.
 - If the "FAIL" light illuminates, the refrigerant is contaminated. The "EXCESS AIR" light may also illuminate if air contamination is detected. Do not recover contaminated refrigerant into your RRR machine.
7. **Disconnect:** Safely disconnect the sample hose from the system or container.
8. **Power Off:** Turn off the device after use.

7. MAINTENANCE

Regular maintenance ensures the longevity and accuracy of your identifier.

- **Cleaning:** Wipe the exterior of the device with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- **Storage:** Store the identifier in a clean, dry environment away from extreme temperatures and direct sunlight.
- **Hose Inspection:** Periodically inspect the sample hose and connections for wear, cracks, or leaks. Replace if necessary.
- **Calibration:** The device performs automatic calibration. If consistent inaccurate readings are suspected, contact customer support.

8. TROUBLESHOOTING

Refer to the following table for common issues and their solutions:

Problem	Possible Cause	Solution
Device does not power on.	No power supply or faulty connection.	Check 12V DC power connection. Ensure power source is active.
"WARM UP" indicator remains on for an extended period.	Ambient temperature is too low or internal heating element issue.	Allow more time for warm-up in cold environments. If persistent, contact support.
"FAULT" indicator flashes.	Internal error or sensor malfunction.	Disconnect power, pump the bulb several times (e.g., 10 times), wait 30 minutes, then reconnect. If fault persists, contact technical support.
Inaccurate "PASS"/"FAIL" readings.	Improper sampling, air in sample, or device calibration issue.	Ensure proper sample drawing technique. Verify connections are sealed. If issues persist, contact support.
"EXCESS AIR" indicator illuminates frequently.	Air in the A/C system or sample line.	Ensure the system is properly evacuated before testing. Check sample line for leaks.




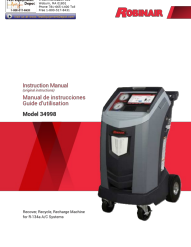

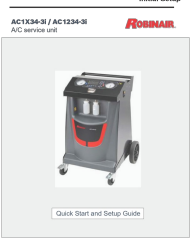
9. SPECIFICATIONS

Feature	Detail
Model	16009
Refrigerant Type	R-134a
Power Source	12 Volts (DC)
Item Weight	1.5 Pounds
Product Dimensions	8.5 x 9 x 2.4 inches
Special Features	Compact design
Manufacturer	Sunpro (Brand: Robinair)

10. WARRANTY AND SUPPORT

For warranty information, technical assistance, or to order replacement parts, please contact Robinair customer support. Keep your purchase receipt as proof of purchase.

Refer to the official Robinair website or your product documentation for the most current contact information and warranty details.

	<p>Robinair Machine Pre-Season Maintenance Checklist</p> <p>A comprehensive checklist for performing pre-season maintenance and checks on Robinair HVAC service equipment, covering machine inspection, filter life, vacuum pump oil, scale calibration, leak checks, software updates, and refrigerant identifier maintenance. Includes model numbers and part numbers.</p>
	<p>Robinair AC1234-9: R1234yf A/C Service Machine Instruction Manual</p> <p>This instruction manual provides detailed operational guidance for the Robinair AC1234-9, a professional machine designed for the recovery, recycling, and recharging of R1234yf refrigerant in automotive air conditioning systems, meeting SAE J2843 standards.</p>
	<p>ROBINAIR 16330 UV Leak Detection HVAC/R Master Kit</p> <p>Comprehensive guide to the ROBINAIR 16330 UV Leak Detection HVAC/R Master Kit, featuring true UV LED technology for efficient leak detection in heating, ventilation, air conditioning, and refrigeration systems. Includes kit contents, specifications, and optional accessories.</p>
	<p>Robinair 34998 R-134a A/C System Recover, Recycle, Recharge Machine Instruction Manual</p> <p>This manual provides detailed instructions for operating, maintaining, and troubleshooting the Robinair Model 34998 machine, designed for recovering, recycling, and recharging R-134a automotive air conditioning systems. It includes safety precautions, setup procedures, operating guidelines, maintenance schedules, and a troubleshooting guide.</p>
	<p>Robinair 17800C Recover, Recycle, Recharge Machine Manual</p> <p>Comprehensive guide for the Robinair 17800C machine, detailing its features, setup, operating instructions, maintenance, and troubleshooting for recovering, recycling, and recharging A/C systems.</p>
	<p>Robinair AC1X34-3i / AC1234-3i A/C Service Unit Quick Start and Setup Guide</p> <p>This guide provides initial setup instructions for the Robinair AC1X34-3i and AC1234-3i A/C service units, covering unpacking, connections, power-up, language and unit selection, date/time settings, print header configuration, automatic internal clearing, oil injection programming, tank filling, and WiFi configuration.</p>