

CCLIFE 2105

CCLIFE 3-Piece Cooling System Vacuum Filler and Leak Tester

Model: 2105

1. INTRODUCTION

This manual provides detailed instructions for the safe and effective use of your CCLIFE 3-Piece Cooling System Vacuum Filler and Leak Tester. This tool is designed for quick and air-free refilling of vehicle cooling systems and for simultaneously checking system integrity for leaks. Proper use ensures optimal performance and longevity of your vehicle's cooling system.

2. SAFETY INFORMATION

- Always wear appropriate personal protective equipment, including safety glasses and gloves, when working on vehicle cooling systems.
- Ensure the engine is cool before attempting to open the radiator cap or work on the cooling system. Hot coolant can cause severe burns.
- Do not operate the tool with damaged components. Inspect all hoses, connections, and the gauge for wear or damage before each use.
- Keep the work area clean and well-lit.
- Dispose of old coolant responsibly according to local regulations.
- This tool is intended for professional use or by individuals with adequate mechanical knowledge.

3. PACKAGE CONTENTS

The CCLIFE 3-Piece Cooling System Vacuum Filler and Leak Tester kit includes the following components:

- Vacuum pump with integrated pressure gauge (with rubber protection)
- Flexible hose for coolant intake
- Universal rubber adapter cone
- Quick coupling for air supply

- Storage case

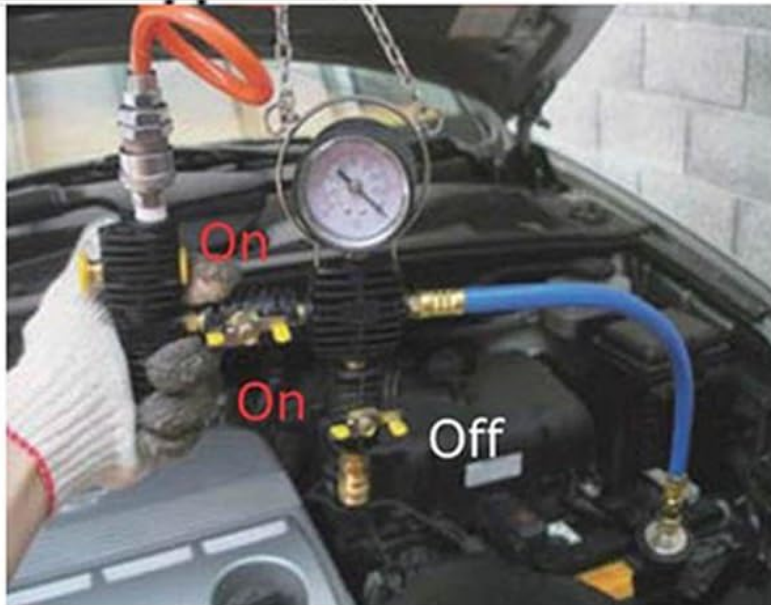


Image: The complete CCLIFE cooling system vacuum filler and leak tester kit, neatly organized within its durable blue storage case.

4. SETUP

1. Ensure the vehicle engine is completely cool and the ignition is off.
2. Carefully remove the radiator cap.
3. Select the appropriate universal rubber adapter cone and securely insert it into the radiator filler neck. Ensure a tight seal.
4. Connect the vacuum pump assembly to the adapter cone.
5. Connect an air compressor (not included) to the quick coupling on the vacuum pump. Ensure the air pressure is within the recommended range (typically 90-120 PSI).



Image: A composite view demonstrating the tool's setup and operation. The top left shows the adapter connected to the radiator. The top right illustrates the vacuum pump connected to an air source, creating a vacuum. The bottom image highlights the 'On' and 'Off' valve positions for controlling vacuum and coolant flow.

5. OPERATING INSTRUCTIONS

5.1 Creating a Vacuum

1. With the air compressor connected, open the vacuum valve on the tool (refer to the 'On' position in the image).
2. The vacuum pump will begin to draw air out of the cooling system. Monitor the pressure gauge; it should show a vacuum being created.
3. Continue until the gauge reaches the desired vacuum level, typically around 25-28 inHg (inches of mercury), or as specified by the vehicle manufacturer.
4. Once the desired vacuum is reached, close the vacuum valve (refer to the 'Off' position in the image) and disconnect the air compressor.

5.2 Checking for Leaks

1. After creating the vacuum and closing the valve, observe the pressure gauge for 2-5 minutes.

2. If the gauge needle remains steady, the cooling system is sealed and free of significant leaks.
3. If the gauge needle drops, there is a leak in the system. Identify and repair the leak before proceeding with coolant refilling.

5.3 Refilling the Coolant

1. Place the flexible hose into a container of new, pre-mixed coolant. Ensure the hose end is fully submerged.
2. Slowly open the coolant intake valve on the tool. The vacuum in the cooling system will draw the coolant into the system.
3. Monitor the coolant level in the container and the gauge. The gauge will gradually return to zero as the system fills.
4. Once the system is full and the gauge reads zero, close the coolant intake valve.
5. Remove the tool from the radiator filler neck and replace the radiator cap.
6. Start the engine and allow it to reach operating temperature. Check for any remaining air bubbles and top off coolant if necessary.

6. MAINTENANCE

- After each use, clean the tool components, especially the rubber adapter and hoses, with water to remove any coolant residue.
- Dry all components thoroughly before storing.
- Store the tool in its original case in a clean, dry place, away from direct sunlight and extreme temperatures.
- Regularly inspect hoses for cracks or wear, and connections for tightness. Replace any damaged parts immediately.

7. TROUBLESHOOTING

| Problem | Possible Cause | Solution |
|----------------------|---|---|
| No vacuum created | Air compressor not connected or insufficient pressure; vacuum valve closed; poor seal at radiator neck. | Check air compressor connection and pressure; open vacuum valve; ensure adapter cone is tightly sealed. |
| Vacuum drops quickly | Leak in the cooling system; loose connections on the tool. | Inspect cooling system for leaks and repair; check all tool connections for tightness. |
| Coolant not filling | Coolant intake hose not submerged; coolant intake valve closed; insufficient vacuum. | Ensure hose is fully submerged; open coolant intake valve; re-establish proper vacuum. |

8. SPECIFICATIONS

- **Model Number:** 2105
- **Manufacturer:** CCLIFE
- **Product Dimensions:** 40 x 30 x 10 cm
- **Item Weight:** 1.96 Kilograms
- **Gauge Accuracy:** +/- 2%
- **Compatibility:** Universal, fits most common vehicles

9. WARRANTY AND SUPPORT

For warranty information, technical support, or replacement parts, please contact CCLIFE customer service through their official website or the retailer from whom the product was purchased. Please have your model number (2105) and purchase date available when contacting support.