

CCLIFE 2112

CCLIFE 28-Piece Cooling System Pressure Tester Kit

Instruction Manual - Model 2112

1. INTRODUCTION

This manual provides instructions for the safe and effective use of the CCLIFE 28-Piece Cooling System Pressure Tester Kit. This kit is designed for diagnosing leaks, testing pressure, and refilling cooling systems in a wide range of vehicles, including European, Japanese, and American models. Proper use of this tool ensures accurate system diagnostics and maintenance.

2. PACKAGE CONTENTS

The CCLIFE 28-Piece Cooling System Pressure Tester Kit includes the following components, neatly organized in a durable carrying case:

- 1 x Manual Pressure Pump with Color-Coded Gauge (0-35 psi / 0-2.5 bar)
- 1 x Universal Radiator Adapter with Color-Coded Vacuum Gauge (-76-0 cmHg / -1-0 bar)
- 17 x Color-Coded Radiator Adapters for various vehicle types
- 1 x Thermometer (up to 200°C / 400°F)
- 1 x Adapter Wrench
- 1 x Blue Cover Test Adapter (R123/R125)
- 1 x Black Cover Test Adapter (R123/R124)
- 3 x Bayonet Cooling System Adapters
- 1 x Rubber Cone Adapter
- 1 x Cooling System Filling Hose with Ground Suction Head (1600 mm)



Image: The complete CCLIFE 28-Piece Cooling System Pressure Tester Kit, including the manual pump, vacuum filler, various adapters, and thermometer, all stored within its blue carrying case.



Image: A detailed view of the diverse range of color-coded radiator adapters, pressure gauge, and vacuum gauge, highlighting the kit's comprehensive nature.

3. SAFETY INFORMATION

Always adhere to the following safety precautions when using this cooling system tester kit:

- **Personal Protective Equipment:** Always wear appropriate personal protective equipment, including safety glasses and gloves, to protect against splashes of hot coolant.
- **Cool Engine:** Ensure the engine is completely cool before attempting to open the radiator cap or perform any cooling system tests. Hot coolant can cause severe burns.
- **Pressure Limits:** Do not exceed the pressure specified by the vehicle manufacturer or the maximum pressure indicated on the gauge (35 psi / 2.5 bar). Over-pressurizing the system can cause damage.
- **Ventilation:** Work in a well-ventilated area.
- **Vehicle Manual:** Always consult your vehicle's service manual for specific cooling system procedures, pressure specifications, and coolant types.
- **Cleanliness:** Keep all components clean and free from debris to prevent contamination of the cooling system.

4. SETUP

Before beginning any testing or refilling procedures, familiarize yourself with the kit components and ensure they are in good working order.

1. **Unpack:** Carefully remove all components from the carrying case.
2. **Inspect:** Check all hoses, adapters, and gauges for any signs of damage, cracks, or wear. Do not use damaged equipment.
3. **Identify Adapters:** Use the provided diagram or color-coding to identify the correct radiator adapter for your vehicle's cooling system.

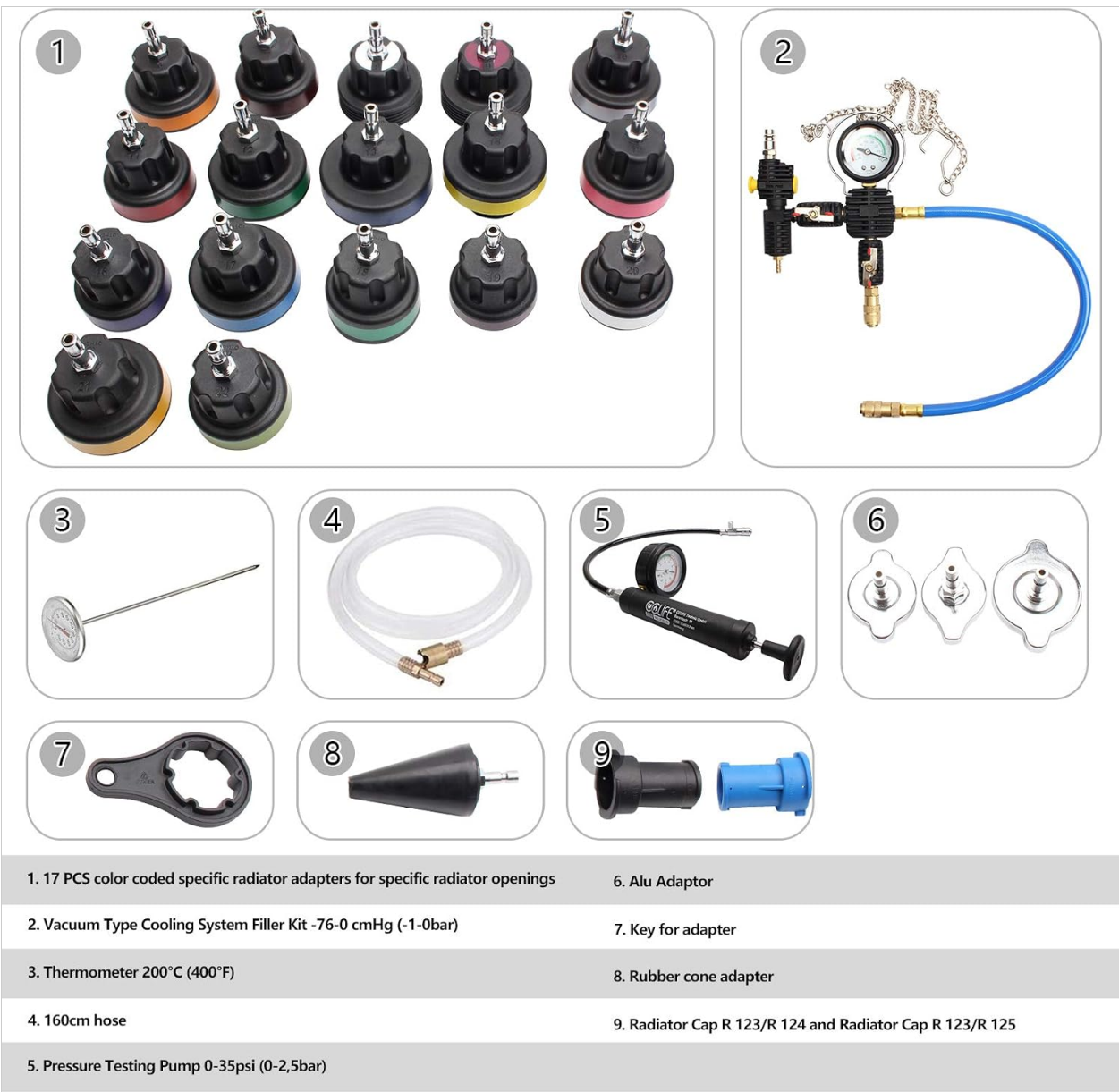


Image: A visual guide to the kit's components, including various radiator adapters, the vacuum type cooling system filler, thermometer, hose, pressure testing pump, and other specialized adapters.

5. OPERATING INSTRUCTIONS

5.1. Cooling System Pressure Testing

This procedure helps identify leaks in the radiator, heater core, hoses, and head gasket.

1. **Engine Cool Down:** Ensure the engine is completely cool.

2. **Remove Radiator Cap:** Carefully remove the radiator cap.
3. **Select Adapter:** Choose the appropriate adapter from the kit that fits your vehicle's radiator neck. Securely attach it to the radiator.
4. **Connect Pump:** Connect the manual pressure pump to the selected adapter.
5. **Apply Pressure:** Pump the handle to build pressure in the cooling system. Refer to your vehicle's service manual for the recommended operating pressure. Do not exceed 35 psi (2.5 bar).
6. **Observe Gauge:** Once the desired pressure is reached, stop pumping and observe the pressure gauge for at least 5-10 minutes.
7. **Identify Leaks:** A drop in pressure indicates a leak. Visually inspect all cooling system components (radiator, hoses, connections, heater core, water pump) for signs of coolant leakage.
8. **Release Pressure:** After testing, carefully release the pressure by pressing the pressure relief valve on the pump.
9. **Remove Equipment:** Disconnect the pump and adapter.



Image: The manual pressure testing pump, featuring a clear gauge displaying pressure in psi and bar, and a pressure relief valve for safe operation.

5.2. Cooling System Vacuum Filling

This procedure allows for quick and air-free refilling of the cooling system after repairs or maintenance.

1. **Engine Cool Down:** Ensure the engine is completely cool and the cooling system is drained.
2. **Remove Radiator Cap:** Remove the radiator cap.
3. **Select Adapter:** Choose the appropriate adapter for your vehicle's radiator neck and securely attach it.
4. **Connect Vacuum Filler:** Connect the universal radiator adapter with the vacuum gauge to the selected radiator adapter. Ensure all connections are tight.
5. **Connect Air Supply:** Connect an air compressor (not included) to the vacuum filler tool.
6. **Create Vacuum:** Open the valve on the vacuum filler to draw a vacuum in the cooling system. The vacuum gauge should indicate a stable vacuum (e.g., -76 cmHg / -1 bar). Close the valve once the desired vacuum is achieved.
7. **Check for Leaks (Vacuum Test):** Observe the vacuum gauge for 2-5 minutes. If the vacuum holds steady, the system is sealed. A drop in vacuum indicates a leak that needs to be addressed before filling.
8. **Prepare Coolant:** Place the filling hose with the suction head into a container of pre-mixed coolant.
9. **Fill System:** Open the coolant intake valve on the vacuum filler. The vacuum will draw coolant into the system. Monitor the coolant level in the container.
10. **Complete Filling:** Once the system is full and the vacuum gauge returns to zero, close the coolant intake valve and disconnect the air supply.
11. **Remove Equipment:** Carefully remove the vacuum filler and adapter. Replace the radiator cap.



Image: The vacuum type cooling system filler, showing its gauge, air inlet, coolant intake hose, and connections for efficient and air-free coolant refilling.

6. MAINTENANCE

Proper maintenance ensures the longevity and accuracy of your CCLIFE Cooling System Pressure Tester Kit.

- **Cleaning:** After each use, wipe down all components with a clean cloth to remove any coolant residue. Avoid using harsh chemicals that could damage rubber seals or plastic parts.
- **Storage:** Store all components neatly in the provided carrying case. Keep the kit in a dry, cool place, away from direct sunlight and extreme temperatures.
- **Inspection:** Periodically inspect hoses for cracks or hardening, and check adapters for wear or damage. Replace any worn or damaged parts immediately.

7. TROUBLESHOOTING

Refer to the following common issues and solutions:

Problem	Possible Cause	Solution
Pressure drops quickly during testing.	Leak in the cooling system or loose connection.	Visually inspect all hoses, clamps, radiator, heater core, and engine components for coolant leaks. Ensure the adapter is securely attached to the radiator neck and the pump connection is tight.
Cannot build pressure with the manual pump.	Loose connections, faulty pump, or open system.	Check all connections for tightness. Ensure the radiator cap or adapter is properly sealed. Inspect the pump for damage.
Vacuum does not hold during vacuum filling.	Leak in the cooling system or vacuum filler connections.	Check all connections on the vacuum filler and radiator adapter. Inspect the cooling system for leaks before attempting to fill.
Coolant does not draw into the system during vacuum filling.	Coolant intake valve closed, insufficient vacuum, or clogged hose.	Ensure the coolant intake valve is fully open. Verify a stable vacuum is present in the system. Check the filling hose for obstructions.

8. SPECIFICATIONS

- **Model Number:** 2112
- **Pressure Gauge Range:** 0-35 psi (0-2.5 bar)
- **Vacuum Gauge Range:** -76-0 cmHg (-1-0 bar)
- **Thermometer Range:** Up to 200°C (400°F)
- **Product Dimensions (L x W x H):** 54 x 48 x 12 cm
- **Item Weight:** 5 kg

9. WARRANTY AND SUPPORT

For technical assistance, product inquiries, or information regarding warranty coverage, please contact CCLIFE customer service. Keep your purchase receipt as proof of purchase.

You can visit the official CCLIFE store for more information: [CCLIFE Store on Amazon](#)