

UAC KT 2938

UAC KT 2938 A/C Compressor and Component Kit Instruction Manual

Model: KT 2938 | Brand: UAC

1. INTRODUCTION

This manual provides essential instructions for the proper installation, operation, and maintenance of your UAC KT 2938 A/C Compressor and Component Kit. This kit is designed as an OE replacement for specific vehicle air conditioning systems. Adherence to these instructions is crucial for optimal performance and longevity of the components.

2. SAFETY INFORMATION

Warning: Automotive air conditioning systems contain refrigerants under high pressure. Improper handling can cause severe injury, including frostbite and chemical burns. Only qualified personnel with appropriate training and equipment should perform A/C system service.

- Always wear appropriate personal protective equipment (PPE), including safety glasses and gloves.
- Ensure the vehicle's engine is off and the battery is disconnected before beginning any work.
- Never discharge refrigerant into the atmosphere. Use proper recovery equipment.
- Refer to your vehicle's service manual for specific procedures and torque specifications.
- Keep all components clean and free from debris during installation.

3. KIT CONTENTS

The UAC KT 2938 A/C Compressor and Component Kit typically includes the following items:

- A/C Compressor with Clutch
- Drier / Accumulator
- Expansion Device (Orifice Tube / Expansion Valve)
- 8oz Bottle of PAG Oil (PAG 46)
- Seal Kit (O-rings and Gaskets)



Figure 1: Contents of the UAC KT 2938 A/C Compressor and Component Kit. This image displays the main components including the A/C compressor with its clutch, a drier/accumulator, an expansion device, a bottle of PAG 46 oil, and a comprehensive seal kit with various O-rings and gaskets.

4. SETUP AND INSTALLATION

4.1. Pre-Installation Procedures

1. **Verify Compatibility:** Confirm that the KT 2938 kit is compatible with your vehicle's make, model, and year.
2. **Recover Refrigerant:** Safely recover all refrigerant from the existing A/C system using certified equipment.
3. **Inspect System:** Thoroughly inspect all A/C system components (hoses, condenser, evaporator) for damage, leaks, or contamination. Flush the system if contamination is suspected.
4. **Drain Old Compressor Oil:** If replacing an existing compressor, drain and measure the amount of oil from the old compressor to determine the correct amount of new oil needed.

4.2. Component Installation Steps

1. Compressor Installation:

- Remove the old compressor.
- Drain any shipping oil from the new UAC compressor. Measure the amount.
- Add the appropriate amount of new PAG 46 oil (from the included bottle) to the new compressor. Refer to your vehicle's specifications for total system oil capacity. The compressor may come charged with shipping oil to keep the part lubricated during transit - drain and replace according to your system's requirements.
- Install the new compressor, ensuring all mounting bolts are torqued to manufacturer specifications.

2. Drier / Accumulator Replacement:

- Remove the old drier/accumulator.
- Install the new drier/accumulator. This component should always be replaced when the A/C system is opened.

3. Expansion Device Replacement:

- Locate and remove the old expansion device (orifice tube or expansion valve).
- Install the new expansion device. Ensure proper orientation and sealing.

4. Seal Kit Usage:

- Replace all O-rings and gaskets at every connection point that was opened during the repair.
- Lubricate new O-rings with clean PAG oil before installation to prevent damage and ensure a proper seal.

5. System Evacuation:

- After all components are installed, evacuate the A/C system using a vacuum pump for at least 30-60 minutes to remove air and moisture.
- Perform a vacuum decay test to check for leaks. The system should hold vacuum for at least 15-30 minutes.

6. Refrigerant Charging:

- Charge the system with the correct type and amount of refrigerant (R-134a) as specified by your vehicle manufacturer.
- Monitor system pressures during charging to ensure proper operation.

7. **Leak Detection:** After charging, use a leak detector to check all connections and components for refrigerant leaks.

5. OPERATING CONSIDERATIONS

Once the A/C system has been properly installed and charged, perform the following checks:

- Start the vehicle and turn on the A/C system to its maximum cooling setting.
- Verify that the compressor clutch engages and disengages smoothly.
- Check for cold air output from the vents.
- Monitor system pressures (high and low side) to ensure they are within the vehicle manufacturer's specifications.
- Listen for any unusual noises from the compressor or other components.

6. MAINTENANCE

Regular maintenance helps ensure the longevity and efficiency of your A/C system:

- **Annual Inspection:** Have your A/C system inspected annually by a qualified technician for proper refrigerant levels, leaks, and component wear.

- **Drier/Accumulator Replacement:** The drier/accumulator should be replaced whenever the A/C system is opened for major repairs, or every 3-5 years as preventative maintenance, as it absorbs moisture and filters debris.
- **Condenser Cleaning:** Keep the condenser fins clean and free of debris to ensure efficient heat transfer.
- **Belt Inspection:** Check the compressor drive belt for cracks, fraying, or proper tension.

7. TROUBLESHOOTING

Symptom	Possible Cause	Solution
No cold air	Low refrigerant charge, compressor not engaging, clogged expansion device, electrical issue.	Check for leaks and recharge system. Inspect compressor clutch wiring. Replace expansion device if clogged. Consult a technician for electrical diagnostics.
Compressor making noise	Insufficient oil, internal compressor damage, worn clutch bearing, incorrect belt tension.	Verify correct oil level. Inspect compressor for damage. Check clutch bearing and drive belt. Professional diagnosis recommended.
A/C system cycles frequently	Low refrigerant, faulty pressure switch, overcharged system.	Check for leaks and correct refrigerant level. Test pressure switches. Ensure correct refrigerant charge.

For complex issues or if you are unsure about any repair, it is recommended to consult a certified automotive A/C technician.

8. SPECIFICATIONS

- **Model:** KT 2938
- **Brand:** UAC
- **Refrigerant Type:** R-134a (System dependent)
- **PAG Oil Type:** PAG 46 (Included 8oz bottle)
- **Item Weight:** Approximately 19 pounds
- **Product Dimensions:** Approximately 17 x 14 x 12 inches (Packaging)
- **Quality Standard:** ISO/TS 16949

9. WARRANTY INFORMATION

This product is backed by an industry-leading warranty. For specific warranty terms, conditions, and claim procedures, please refer to the warranty documentation included with your purchase or visit the official UAC website. Keep your proof of purchase for warranty claims.

10. SUPPORT

If you require further assistance or have questions regarding the UAC KT 2938 A/C Compressor and Component Kit, please contact UAC customer support through their official website or the retailer from whom the product was purchased. Please have your model number (KT 2938) and purchase details ready.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

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