Samsung NF54K9151AMASH

Samsung NF54K9151AMASH Refrigerator Compressor User Manual

Model: NF54K9151AMASH

1. Introduction

This manual provides essential information for the Samsung NF54K9151AMASH Refrigerator Compressor, R-600A. This component is a genuine Original Equipment Manufacturer (OEM) part designed for Samsung refrigerators. It functions as a positive displacement pump, compressing refrigerant within the refrigerator's sealed cooling system.

The NF54K9151AMASH compressor is a functional equivalent and replacement for prior parts, including NF54K9151AME01.



Image of the Samsung NF54K9151AMASH Refrigerator Compressor, R-600A. This component is a key part of the refrigerator's cooling system.

2. Safety Information

WARNING: Installation and servicing of this refrigerator compressor must be performed by a qualified and certified appliance service professional. Attempting to install or repair this component without proper training, tools, and certification can result in serious injury, property damage, or death.

- This compressor uses R-600A refrigerant, which is flammable. Handling R-600A requires specialized knowledge, equipment, and adherence to strict safety protocols.
- Always disconnect power to the appliance before attempting any service.
- Refer to your specific appliance service manual for detailed safety instructions and procedures.
- Ensure proper ventilation when working with refrigerants.

3. Package Contents

The package for the Samsung NF54K9151AMASH Refrigerator Compressor, R-600A typically includes:

- One (1) Samsung NF54K9151AMASH Refrigerator Compressor, R-600A

No additional components or installation hardware are typically included with the compressor unit itself.

4. Specifications

Specification	Value
Brand	Samsung
Model Number	NF54K9151AMASH
Item Type Name	Compressor, R-600A
Refrigerant Type	R-600A
Voltage	115 Volts (AC)
Speed	3600 RPM
Horsepower	0.17 Horsepower
Item Dimensions (W x H)	11.69"W x 9.09"H
Item Weight	0.1 Kilograms

5. Installation and Setup

The installation of a refrigerator compressor is a complex procedure that requires specialized tools, knowledge of refrigeration systems, and handling of refrigerants. It is critical that this task be performed exclusively by a qualified appliance service professional.

- **Professional Installation Required:** Do not attempt to install this compressor yourself. Contact a certified technician.
- **Part Number Validation:** Before installation, the service professional should validate the needed part number for your specific appliance model by referring to the appliance service manual or contacting the appliance manufacturer.
- **System Evacuation and Recharge:** The sealed refrigeration system must be properly evacuated and recharged with the correct type and amount of R-600A refrigerant after compressor replacement.
- **Leak Detection:** Thorough leak detection must be performed after installation to ensure system integrity.

6. Operation

The Samsung NF54K9151AMASH Refrigerator Compressor operates automatically as an integral part of your refrigerator's cooling system. It is not directly user-operable.

- The compressor engages and disengages based on the temperature demands set by the refrigerator's thermostat.
- Its function is to circulate refrigerant, compressing it to raise its temperature and pressure, allowing it to release heat outside the refrigerator and absorb heat from inside.
- Normal operation may involve periodic cycling (turning on and off) and a low humming sound.

7. Maintenance

The compressor itself is a sealed unit and does not require routine user maintenance. Any maintenance related to the refrigeration system should be performed by a qualified service professional.

- **Professional System Checks:** Regular professional checks of the overall refrigeration system can help ensure optimal performance and longevity.
- **Condenser Coil Cleaning:** Ensure the refrigerator's condenser coils are kept clean to prevent the compressor from overworking. Refer to your refrigerator's user manual for instructions on cleaning condenser coils.
- Do not attempt to open or repair the compressor unit.

8. Troubleshooting

If your refrigerator is experiencing issues such as insufficient cooling, unusual noises from the compressor area, or failure to start, these symptoms indicate a potential problem with the sealed refrigeration system, including the compressor.

- **Contact a Professional:** Do not attempt to diagnose or repair sealed system issues yourself. Contact a qualified appliance service professional immediately.
- **Power Check:** Ensure the refrigerator is properly plugged into a functioning power outlet.
- **Thermostat Settings:** Verify that the refrigerator's temperature settings are correct.

A service professional will have the necessary diagnostic tools and expertise to identify the root cause of the problem and perform appropriate repairs.

9. Warranty and Support

This Samsung NF54K9151AMASH Refrigerator Compressor is an authorized, brand new, genuine Samsung part. For specific warranty information, please refer to the documentation provided with your purchase or contact Samsung customer support directly.

- **Samsung Support:** Visit the official Samsung website for support resources, service center locations, and contact information.
- **Proof of Purchase:** Keep your proof of purchase for any warranty claims.

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