



Manuals.plus /

› UpStart Components /

› UpStart Components DA31-00146E Evaporator Fan Motor Replacement Manual

UpStart Components AP-DA31-00146E-DL99

UpStart Components DA31-00146E Evaporator Fan Motor Replacement Manual

Model: AP-DA31-00146E-DL99

INTRODUCTION

This manual provides essential information for the installation, function, and maintenance of the UpStart Components DA31-00146E Evaporator Fan Motor. This replacement part is designed for compatibility with Samsung RS25J500DBC/AA (0000) refrigerators and other models using the DA31-00146E fan motor. It is crucial to read and understand all instructions before proceeding with installation to ensure safe and proper operation.

SAFETY INFORMATION

WARNING: Risk of Electric Shock and Injury.

- Always disconnect power to the refrigerator before attempting any installation, repair, or maintenance. Failure to do so can result in serious injury or death.
- Wear appropriate personal protective equipment, including gloves and eye protection, during installation.
- If you are unsure about any step, consult a qualified appliance technician.
- Handle the motor carefully to avoid damage to the shaft or electrical connectors.

PRODUCT OVERVIEW

The DA31-00146E Evaporator Fan Motor is a critical component in your refrigerator's cooling system. It circulates air over the evaporator coils, facilitating heat exchange and maintaining consistent temperatures within the freezer and fresh food compartments.



UPStart

Components



Figure 1: UpStart Components DA31-00146E Evaporator Fan Motor (packaged).



Figure 2: Angled view of the fan motor, highlighting the motor shaft and identification label.

INSTALLATION INSTRUCTIONS

This section outlines the general steps for replacing the evaporator fan motor. Specific disassembly and reassembly procedures may vary slightly depending on your refrigerator model. Refer to your refrigerator's service manual for detailed instructions if needed.

Tools Required:

- Screwdrivers (Phillips and/or Flathead)
- Nut drivers or socket set (if applicable)
- Pliers

- Gloves

Procedure:

1. **Disconnect Power:** Unplug the refrigerator from the wall outlet or turn off the circuit breaker supplying power to the refrigerator. Verify power is off before proceeding.
2. **Access Freezer Compartment:** Open the freezer door and remove all food items, shelves, and ice maker components to gain access to the rear panel.
3. **Remove Evaporator Cover:** Locate and remove the screws securing the evaporator cover (usually at the back of the freezer compartment). Carefully detach the cover, which may also contain the fan assembly.
4. **Disconnect Old Motor:** Locate the existing evaporator fan motor. Disconnect the electrical connector from the motor. Note the orientation of the wiring.
5. **Remove Old Motor:** Unscrew or unclip the old fan motor from its mounting bracket or housing. Carefully remove the motor and fan blade. You may need to gently pull the fan blade off the motor shaft.
6. **Install New Motor:** Attach the fan blade to the shaft of the new UpStart Components DA31-00146E motor. Ensure it is securely seated and oriented correctly.
7. **Mount New Motor:** Secure the new motor into the mounting bracket or housing using the original screws or clips.
8. **Connect Wiring:** Reconnect the electrical connector to the new motor, ensuring a snug fit.
9. **Reassemble:** Carefully reattach the evaporator cover, ensuring all screws are tightened. Replace shelves, ice maker components, and food items.
10. **Restore Power:** Plug the refrigerator back into the wall outlet or turn on the circuit breaker.
11. **Test Operation:** Listen for the fan motor to operate. The refrigerator should begin cooling normally. Allow several hours for the temperature to stabilize.



Figure 3: Top view of the fan motor, showing mounting points.

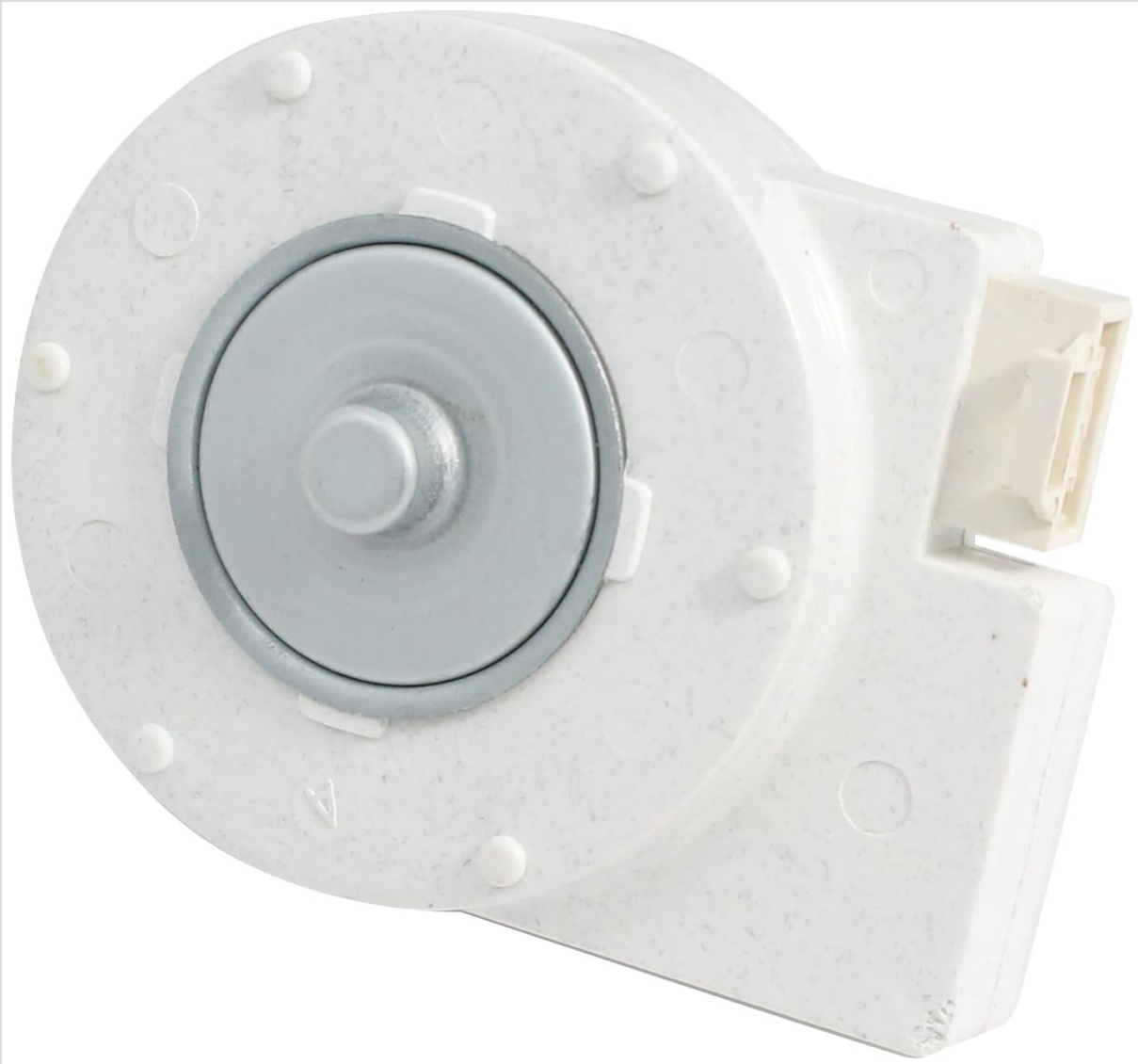


Figure 4: Side view of the fan motor, illustrating the electrical connector for wiring.

OPERATING PRINCIPLES

Once installed, the DA31-00146E Evaporator Fan Motor operates automatically as part of your refrigerator's cooling cycle. It is controlled by the refrigerator's thermostat and defrost timer. When the compressor runs, the fan motor activates to draw air over the cold evaporator coils, distributing the chilled air throughout the freezer and fresh food compartments. During defrost cycles, the fan typically stops to allow the defrost heater to melt any accumulated ice on the coils.

MAINTENANCE

The DA31-00146E Evaporator Fan Motor is a sealed unit and does not require routine lubrication or maintenance. If the motor begins to make unusual noises, fails to spin, or the refrigerator experiences cooling issues, it typically indicates the motor needs replacement.

Regularly inspect the fan blade for any debris or ice buildup that might impede its rotation. Ensure the evaporator coils are free of excessive frost, which can restrict airflow and overwork the fan motor.

TROUBLESHOOTING

| Problem | Possible Cause | Solution |
|--|---|--|
| Refrigerator not cooling properly (freezer warm) | Fan motor not running or running slowly. | Check if the motor is receiving power. Inspect for obstructions to the fan blade. If motor is faulty, replace it. |
| Loud noise from freezer compartment | Fan blade hitting ice buildup or foreign object; worn motor bearings. | Defrost the refrigerator to remove ice. Clear any obstructions. If noise persists, replace the motor. |
| Fan motor runs intermittently | Faulty motor or control board issue. | Verify motor connections. If motor is confirmed faulty, replace. Consult a technician if control board is suspected. |

For issues not listed here, or if troubleshooting steps do not resolve the problem, it is recommended to consult a qualified appliance repair technician.

SPECIFICATIONS

| Attribute | Value |
|-------------------------|--|
| Part Number | DA31-00146E |
| Compatible Part Numbers | AP4136569, 1486536, DA31-00146G, DREP3020LA/HAL, PS4138376 |
| Voltage | DC12V |
| Power | 3.21W |
| Current | 0.268A |
| RPM | 2520 RPM |
| Manufacturer | UpStart Components |
| Model Number (Internal) | AP-DA31-00146E-DL99 |

WARRANTY AND SUPPORT

This product is an UpStart Components Brand replacement part. Any warranties for this product are offered solely by UpStart Components. This product is not affiliated with any original equipment manufacturers (OEMs) and is not covered under any warranties offered by the original manufacturers.

For warranty claims or technical support, please contact UpStart Components directly through their official support channels. Refer to your purchase documentation for specific warranty terms and contact information.