FR HJA61S

FR Richmat HJA61S Electric Recliner Lift Chair Motor User Manual

Model: HJA61S

1. Product Overview

The FR Richmat HJA61S is a replacement linear actuator motor designed for electric recliners and lift chairs. This motor facilitates the smooth and controlled movement of the chair mechanism, enabling recline and lift functions. It is engineered for durability and reliable performance in various compatible furniture models.

Key features include a 24V DC input, IP20 protection, and a maximum load capacity of 750N for both push and pull operations. It operates with a push speed of 55mm/s and maintains a low noise level of less than 50db. The motor features a 5-pin round female connection for the handset and a 2-pin male connection for the transformer.



Figure 1: Overview of the FR Richmat HJA61S Electric Recliner Lift Chair Motor. This image shows the full linear actuator motor assembly, including the motor housing, the linear shaft, and the connection cables.

2. Specifications

Parameter	Value
Model Number	HJA61S

Drive Type	Linear Actuator
Input Voltage	24V DC
Protection Category	IP20
Max. Load (Push)	750N
Max. Load (Pull)	750N
Push Speed	55mm/s
Noise Level	<50db
Duty Cycle	10% max, 2mins/18mins
Handset Connection	5 Pin Round Female
Transformer Connection	2 Pin Male
Stroke	333mm
Item Weight	4.5 pounds
Product Dimensions	21 x 7 x 4 inches

3. Installation and Setup

This section provides instructions for safely installing the HJA61S motor into your recliner or lift chair. Ensure the chair is unplugged from the power source before beginning any installation or maintenance.

3.1 Safety Precautions

- Always disconnect power to the chair before installation or service.
- Ensure all connections are secure and properly seated.
- Do not force connections; they should fit easily.
- Keep hands and loose clothing clear of moving parts during testing.
- If unsure, consult a qualified technician.

3.2 Installation Steps

1. **Identify the Existing Motor:** Locate the current motor assembly under your recliner or lift chair. Note how it is mounted and connected.
2. **Disconnect Power:** Unplug the chair from the wall outlet.
3. **Disconnect Cables:** Carefully disconnect the power cable from the transformer and the handset cable from the motor.
4. **Remove Old Motor:** Unbolt or unclip the old motor from its mounting points on the chair frame. This may involve removing pins or screws.
5. **Install New Motor:** Position the new HJA61S motor in the same location as the old one. Secure it using the existing mounting hardware or compatible replacements. Ensure the white moving block is correctly aligned with the recliner mechanism.



Figure 2: Close-up view of the HJA61S motor's label, showing specifications like voltage, stroke, and load. This label is important for verifying the correct model and specifications during installation.

6. **Connect Handset:** Connect the 5-pin round female connector from the handset to the corresponding port on the motor.



Figure 3: Detail of the 5-pin round female connector for the handset. This connection allows the user to control the motor's movement.

7. **Connect Transformer:** Connect the 2-pin male connector from the motor to the transformer.

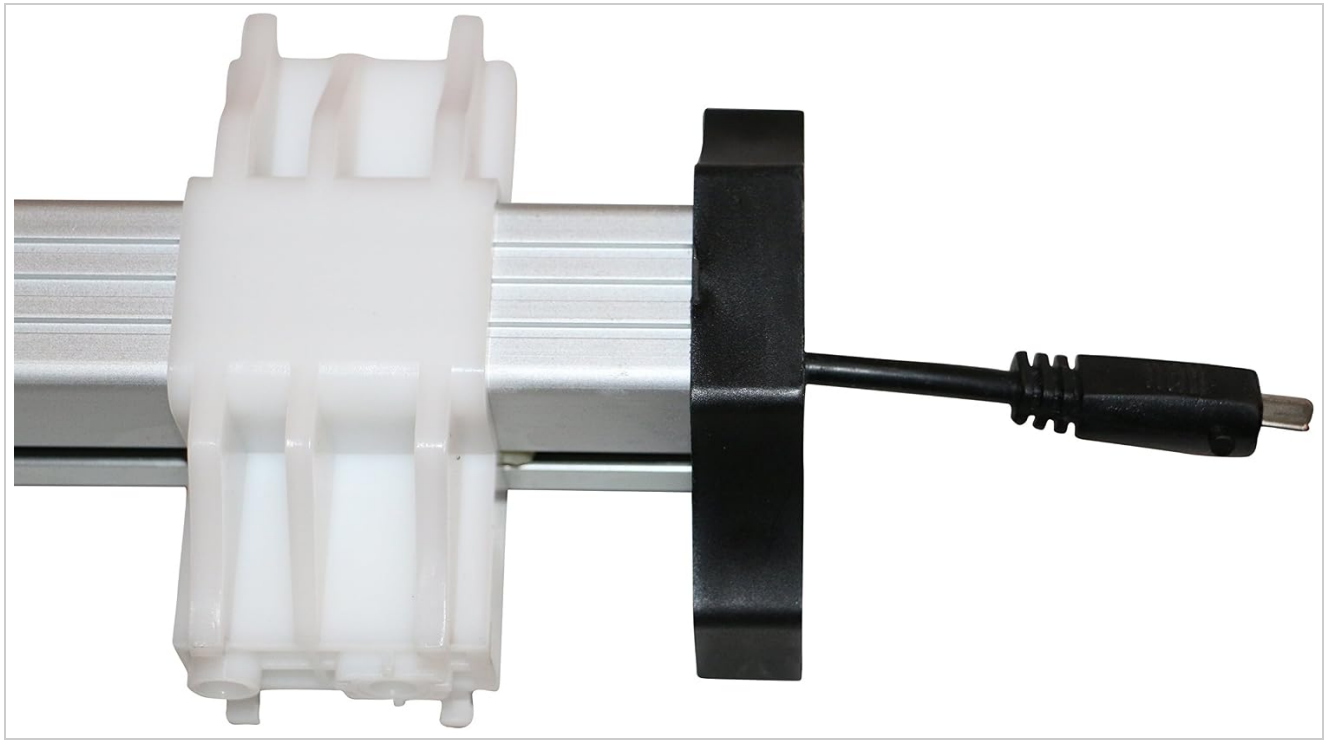


Figure 4: Detail of the 2-pin male connector for the transformer. This connection provides power to the motor from the transformer.

8. **Test Functionality:** Plug the chair back into the wall outlet. Carefully test the recliner's functions using the handset to ensure smooth operation and proper movement.

4. Operating Instructions

Once installed, the HJA61S motor operates in conjunction with your chair's existing handset and power supply. The motor extends and retracts the linear shaft to control the chair's position.

4.1 Basic Operation

- **Recline:** Press and hold the appropriate button on your chair's handset to extend the motor's shaft, causing the chair to recline. Release the button when the desired position is reached.
- **Lift/Return to Upright:** Press and hold the appropriate button on your chair's handset to retract the motor's shaft, causing the chair to return to an upright position or lift for easier egress. Release the button when the desired position is reached.

4.2 Duty Cycle

The HJA61S motor has a duty cycle of 10% max, meaning it can operate for a maximum of 2 minutes within an 18-minute period. This is to prevent overheating and ensure longevity. Avoid continuous operation beyond this limit.

5. Maintenance and Care

Proper maintenance ensures the longevity and optimal performance of your HJA61S motor. Minimal maintenance is required for this sealed unit.

5.1 Cleaning

- Wipe the exterior of the motor with a dry, soft cloth to remove dust and debris.
- Do not use liquid cleaners or solvents directly on the motor.
- Ensure no liquids enter the motor housing.

5.2 Inspection

- Periodically inspect the motor and its connections for any signs of wear, damage, or loose wiring.
- Check mounting points to ensure the motor remains securely fastened to the chair frame.
- Ensure the linear shaft moves freely and is not obstructed by any foreign objects.

5.3 Storage

If storing the motor separately, keep it in a dry, cool environment away from direct sunlight and extreme temperatures.

6. Troubleshooting

This section provides solutions to common issues you might encounter with your HJA61S motor.

Problem	Possible Cause	Solution

Motor does not operate.	No power to the chair. Loose or disconnected cables. Faulty handset. Overheated motor (duty cycle exceeded).	Ensure chair is plugged into a working outlet. Check all connections (power, handset, transformer) are secure. Test handset if possible, or try a known working handset. Allow motor to cool down for at least 18 minutes before attempting operation again.
Motor operates slowly or with difficulty.	Low power supply. Obstruction in mechanism. Motor nearing end of life.	Verify power supply is stable. Inspect chair mechanism for any obstructions preventing smooth movement. If motor is old and has been heavily used, replacement may be necessary.
Unusual noise from motor.	Loose mounting. Internal mechanical issue.	Check and tighten all mounting bolts/screws. If noise persists and is significant, the motor may require replacement.

If the problem persists after attempting these solutions, contact customer support for further assistance.

7. Warranty Information

Specific warranty details for the FR Richmat HJA61S motor are typically provided at the point of purchase or by the seller. Please refer to your purchase documentation or contact the retailer/manufacturer for precise warranty terms and conditions. Generally, warranties cover defects in materials and workmanship under normal use.

8. Customer Support

For additional information, technical assistance, or bulk pricing inquiries, please contact FR customer service. You can often find contact details on the seller's page or the product's original packaging.
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