

Frassie MD140-02-L1-157-307

Frassie Limoss 450312 Actuator MD140-02-L1-157-307 Power Recliner Lift Chair Motor Instruction Manual

Model: MD140-02-L1-157-307

Brand: Frassie

1. INTRODUCTION

This manual provides instructions for the installation, operation, and maintenance of the Frassie Limoss 450312 Actuator, Model MD140-02-L1-157-307. This product is designed as a replacement motor for power recliner lift chairs. Please read this manual thoroughly before installation and operation to ensure safe and correct usage.

2. SAFETY INFORMATION

Observe the following safety precautions to prevent injury or damage to the product:

- **Disconnect Power:** Always unplug the recliner from the wall outlet before performing any installation, maintenance, or inspection.
- **Secure Connections:** Ensure all electrical connections are secure and properly insulated to prevent electrical hazards.
- **Moving Parts:** Keep hands, hair, loose clothing, and other objects clear of all moving parts of the actuator and chair mechanism during operation.
- **Inspect for Damage:** Do not operate the actuator if it appears damaged or if any wires are frayed.
- **Professional Assistance:** If you are unsure about any step of the installation or troubleshooting process, consult a qualified technician.

3. PRODUCT OVERVIEW

The Frassie Limoss 450312 Actuator is a linear motor specifically designed for power recliner lift chairs. It facilitates the reclining and lifting functions of the chair. Understanding its components and specifications is

crucial for proper installation and operation.

Components and Dimensions



This image displays the Frassie Limoss 450312 Actuator, highlighting its key dimensions: a minimum installation size of 157 mm (6.18 inches) and a stroke length of 307 mm (12.09 inches). These measurements are crucial for ensuring compatibility with your recliner chair frame.



This image shows the product label on the motor actuator. It specifies the model number MD140-02-L1-157-307, input voltage (18-35V, 5A Max), duty cycle (Max. T_on: 2min, Min. T_off: 18min), and maximum load (Push: 3000N, Pull: 3000N). The part number 450312 is also clearly visible.



This image illustrates the 5-pin connector port on the actuator, designed for connecting the recliner's hand control unit. Ensure your existing hand control has a compatible 5-pin plug.



This image shows the 2-pin flat round connector for the power transformer. Verify that your power supply unit has a matching 2-pin flat round plug for proper power connection.

4. SPECIFICATIONS

Brand	Frassie
Model Name	450312
Item Model Number	MD140-02-L1-157-307
Stroke	307 mm (12.09 inches)
Minimum Install Dimension	157 mm (6.18 inches)
Max Load (Push/Pull)	3000N
Input Voltage	18-35V
Max Current	5A

Duty Cycle	Max. T_on: 2min, Min. T_off: 18min
Hand Control Connection	5-pin plug
Power Connection	2-pin flat round
Material	Aluminum
Item Weight	5.88 pounds
Product Dimensions	14 x 5 x 3 inches

5. SETUP AND INSTALLATION

Follow these steps carefully to install the Frassie Limoss 450312 Actuator:

1. **Step 1: Disconnect Power.** Ensure the recliner is completely unplugged from the wall outlet to prevent electrical shock.
2. **Step 2: Access Existing Actuator.** Carefully turn the recliner over or tilt it to gain access to the underside where the existing actuator is located.
3. **Step 3: Verify Compatibility.** Before proceeding with removal, compare the label on your existing actuator with the specifications of the Frassie Limoss 450312 (MD140-02-L1-157-307). Confirm that the model number, stroke, and minimum install dimensions match or are compatible. Crucially, ensure your hand control uses a 5-pin plug and your power transformer uses a 2-pin flat round plug.
4. **Step 4: Disconnect Old Actuator.** Disconnect the 5-pin hand control plug and the 2-pin power transformer plug from the old actuator. Remove any bolts, pins, or clips securing the old actuator to the chair frame. Keep these fasteners for the new installation if they are in good condition.
5. **Step 5: Install New Actuator.** Position the new Frassie Limoss 450312 actuator in the same location as the old one. Secure it to the chair frame using the appropriate bolts and pins. Ensure it is firmly mounted and aligned correctly with the chair's mechanism.
6. **Step 6: Connect Wiring.** Connect the 5-pin hand control plug to the corresponding port on the new actuator. Connect the 2-pin flat round power transformer plug to its port. Ensure all connections are snug and fully inserted.
7. **Step 7: Test Functionality.** Carefully return the recliner to its upright position. Plug the recliner back into the wall outlet. Test the recliner's functions using the hand control to ensure the actuator operates smoothly through its full range of motion (recline, lift, extend, retract).
8. **Step 8: Final Check.** Observe the actuator during operation to ensure there are no obstructions, unusual noises, or binding in the chair mechanism.

6. OPERATION

The Frassie Limoss 450312 Actuator operates in conjunction with your recliner's hand control unit and power transformer. The operation is straightforward:

- **Recline/Extend:** Press and hold the appropriate button on your hand control to extend the footrest and recline the chair back.
- **Lift/Retract:** Press and hold the appropriate button to retract the footrest, bring the chair back to an upright position, and then lift the chair for easier egress.
- Release the button at any desired position to stop the movement.

Note: Adhere to the duty cycle of Max. T_on: 2 minutes, Min. T_off: 18 minutes to prevent overheating and prolong the life of the actuator.

7. MAINTENANCE

Proper maintenance ensures the longevity and reliable performance of your actuator:

- **Regular Inspection:** Periodically inspect the actuator, its mounting points, and all electrical connections for any signs of wear, damage, or looseness.
- **Cleaning:** Keep the actuator free from dust, dirt, and debris. Use a dry, soft cloth for cleaning. Do not use liquid cleaners directly on the motor or electrical components.
- **Lubrication:** The actuator is designed to be maintenance-free regarding lubrication. Do not apply lubricants unless specifically instructed by the manufacturer.
- **Cable Management:** Ensure all cables are routed safely, are not pinched, tangled, or subjected to excessive tension.

8. TROUBLESHOOTING

If the recliner is not operating correctly, perform the following checks:

- **No Power:**
 - Verify the recliner is securely plugged into a working wall outlet.
 - Check the power transformer for any visible damage or loose connections.
 - Ensure the 2-pin flat round power plug is firmly connected to the actuator.
- **No Movement (Motor Hums):**
 - Check for any physical obstructions preventing the chair from moving.
 - Inspect the mechanical linkages of the chair for damage or dislodgement.
- **No Movement (No Sound):**
 - Check the 5-pin hand control plug connection to the actuator.
 - Inspect the hand control unit for damage or malfunction.
 - If the power transformer has an indicator light, ensure it is illuminated.
- **Intermittent Operation:**
 - Check all wiring connections for looseness or damage.
 - Ensure the duty cycle (2 minutes on, 18 minutes off) is respected to prevent overheating.
- **Unusual Noises:**
 - Stop operation immediately. Inspect the actuator and chair mechanism for any foreign objects or mechanical issues.

If troubleshooting steps do not resolve the issue, contact Frassie customer support for further assistance.

9. WARRANTY AND SUPPORT

For warranty information or technical assistance regarding your Frassie Limoss 450312 Actuator, please contact Frassie customer support. Refer to your purchase documentation for specific warranty terms and conditions.

You can visit the Frassie store on Amazon for more information and contact options:[Frassie Store](#).