

PowerTech PW200 Tailgate Motor Kit User Manual

Model: PN28021414015119295

Information	Components	Setup	Introduction	Safety	Operating	Maintenance	Troubleshooting	Specifications	Warranty
& Support									

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your Cablematic PowerTech PW200 Tailgate Motor Kit. This kit is designed to automate the opening and closing of tailgates or light gates, supporting a maximum weight of 200 kg. Please read this manual thoroughly before beginning any installation or operation to ensure safe and efficient use of the product.

2. SAFETY INFORMATION

Important Safety Instructions:

- Professional Installation Recommended:** Installation of this motor kit involves electrical wiring and mechanical components. It is highly recommended that installation be performed by a qualified professional to ensure safety and proper functionality.
- Electrical Safety:** Disconnect power before performing any installation, maintenance, or troubleshooting. Ensure all electrical connections comply with local electrical codes.
- Moving Parts:** Keep hands, clothing, and other objects clear of the motor and moving gate/tailgate during operation.
- Children and Pets:** Do not allow children or pets to play near the motor or the gate/tailgate. Keep remote controls out of reach of children.
- Emergency Stop:** Familiarize yourself with the emergency stop procedure or manual override mechanism.
- Weight Limit:** Do not exceed the maximum supported weight of 200 kg. Exceeding this limit can damage the motor and pose a safety risk.

3. COMPONENTS OVERVIEW

The PowerTech PW200 Tailgate Motor Kit typically includes the following main components:

- Linear Actuator Motor:** The primary mechanical component responsible for moving the tailgate/gate.
- Control Unit:** The electronic brain that manages the motor's operation, receives signals from remote controls, and handles safety features.
- Mounting Hardware:** Brackets, screws, and other fasteners necessary for securing the motor and control unit.
- Remote Controls:** (If included) Devices for wireless operation of the tailgate/gate.





Figure 3.1: Overview of the PowerTech PW200 Motor Kit, showing both the linear actuator motor and the control unit.



Figure 3.2: Close-up view of the PowerTech PW200 linear actuator motor, which provides the mechanical force for movement.



Figure 3.3: The PowerTech PW200 control unit, housing the electronic circuitry for system management.

4. SETUP AND INSTALLATION

Note: Due to the complexity of electrical and mechanical installation, it is strongly recommended to consult a qualified professional for setup.

1. **Site Assessment:** Before installation, assess the tailgate/gate structure to ensure it is robust enough to support the motor and its operation. Verify there are no obstructions in the path of movement.
2. **Mounting the Motor:** Securely attach the linear actuator motor to the tailgate/gate and its fixed support structure using the provided mounting hardware. Ensure the motor is level and aligned for smooth operation.
3. **Mounting the Control Unit:** Install the control unit in a dry, protected location, away from direct weather exposure. Ensure it is easily accessible for wiring and maintenance.
4. **Electrical Wiring:** Connect the motor to the control unit and the control unit to the main power supply according to the wiring diagram provided with your specific kit. Ensure all connections are secure and insulated.
5. **Limit Switch Adjustment:** Adjust the motor's limit switches (if applicable) to define the fully open and fully closed positions of the tailgate/gate. This prevents over-extension or over-retraction.
6. **Remote Control Pairing:** If your kit includes remote controls, follow the specific instructions provided with the control unit to pair them.

7. **Initial Test:** With power connected, perform a slow, controlled test run to ensure the tailgate/gate moves smoothly and stops correctly at the defined limits. Observe for any unusual noises or resistance.

5. OPERATING INSTRUCTIONS

Once installed and configured, operating the PowerTech PW200 motor kit is straightforward:

- **Using Remote Control:** Press the designated button on your remote control to initiate the opening or closing sequence. Pressing the button again during movement will typically stop the tailgate/gate.
- **Manual Override:** In case of power failure or malfunction, locate the manual release mechanism on the motor (refer to specific kit documentation for location and procedure). This allows you to manually open or close the tailgate/gate.
- **Safety Features:** The system may include safety features such as obstacle detection. If the tailgate/gate encounters an obstruction during movement, it should stop or reverse. Do not rely solely on these features; always ensure the path is clear.

6. MAINTENANCE

Regular maintenance ensures the longevity and reliable operation of your PowerTech PW200 motor kit.

- **Monthly:**
 - Inspect the motor and mounting points for any signs of wear, corrosion, or loose fasteners. Tighten as necessary.
 - Clean the motor housing and control unit exterior to remove dust, dirt, and debris.
 - Check the tailgate/gate's movement path for any new obstructions.
- **Quarterly:**
 - Lubricate moving parts of the motor and tailgate/gate hinges with a suitable lubricant (e.g., silicone spray or grease, as recommended by the manufacturer).
 - Inspect electrical wiring for fraying, damage, or loose connections.
 - Test safety features, such as obstacle detection, to ensure they are functioning correctly.
- **Annually:**
 - Consider a professional inspection to ensure all components are in optimal condition and to address any potential issues.

Always disconnect power before performing any maintenance.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your PowerTech PW200 motor kit. For complex problems, contact a qualified technician.

Problem	Possible Cause	Solution
Motor does not respond to remote control.	No power to the unit. Remote control battery is dead. Remote control not paired. Safety sensor triggered.	Check power supply and circuit breaker. Replace remote control battery. Re-pair remote control (refer to setup section). Check for obstructions or misaligned safety sensors.

Problem	Possible Cause	Solution
Tailgate/Gate moves partially then stops.	Obstruction in path. Limit switches misadjusted. Motor overload.	Clear any obstructions. Adjust limit switches (refer to setup section). Ensure tailgate/gate moves freely manually; check for excessive friction.
Unusual noises during operation.	Lack of lubrication. Loose mounting hardware. Worn components.	Lubricate moving parts (refer to maintenance section). Tighten all mounting bolts and screws. If noise persists, contact a professional for inspection.

8. SPECIFICATIONS

Key technical specifications for the PowerTech PW200 Tailgate Motor Kit:

- **Model:** PN28021414015119295
- **Brand:** Cablematic
- **Maximum Supported Weight:** 200 kg
- **Type:** Linear Actuator Motor Kit
- *(Additional specifications such as voltage, power consumption, stroke length, and speed would typically be found in the product's detailed technical sheet.)*

9. WARRANTY & SUPPORT

Warranty Information:

Warranty terms and conditions for the PowerTech PW200 Tailgate Motor Kit are typically provided at the time of purchase by the seller or manufacturer. Please refer to your purchase documentation or contact your point of sale for specific warranty details, including coverage period and conditions.

Customer Support:

For technical assistance, spare parts, or service inquiries, please contact Cablematic customer support or the authorized dealer from whom you purchased the product. Provide your model number (PN28021414015119295) and a detailed description of the issue when seeking support.