

Garage Door Opener



Equipment Description

A garage door opener consists of a power unit that contains an electric motor that is attached to a track that guides the door up or down using a chain, belt or screw type drive mechanism. Counterbalance springs are attached to the door and provide lifting power to move the door. Typically, small wheels are attached to side edges of the door and ride along metal tracks which guide the door through a consistent route from its closed position to its open position and back. A wireless remote control is programmed with a secure digital code which communicates with the power unit. When the user presses the control button, a radio signal is sent to the power unit which tells the motor to begin operating to either open or close the garage door.

Loss Scenario

A common problem experienced with garage door openers is lack of power to the unit. If this happens, make sure the unit is still plugged in and that there are no breakers or ground fault interrupters (GFIs) that have tripped. If the unit has power, make sure that the safety eyes near the bottom sides of the garage door opening are properly aligned, working, and not obstructed. Also check the tracks for blockage or obstructions. If none of these point to the problem, a circuit board or motor may have failed. Call a professional to troubleshoot the problem and make repairs.

Size and Carbon Footprint

Garage door opener motors come in three sizes: 1/3 Horsepower (Hp) [475 Watts], good for single garage doors; 1/2 Hp [650 Watts], preferred for double-doors; and 3/4 Hp [900 Watts] for unusually large or heavy doors. Direct current-powered garage door openers use less electricity and may include battery backup for power outages. Operating a typical 1/3 Hp garage door opener four times a day uses about 0.3 kilowatt-hour (kWh) per month, or 3.6 kWh per year. That equates to approximately 5.5 pounds of carbon dioxide (CO₂) emissions annually.

Maintenance Tips

- Regularly inspect the brackets that secure the tracks in place. Brackets should always be securely attached to the wood frame with lag screws or bolts. Re-fasten any brackets that might have worked loose, or may not have been properly secured during installation.
- All modern garage door openers include a safety reversing system, with photoelectric eyes mounted about six inches above the ground, using a light beam spanning the door opening. Keep these photoelectric eyes aligned and clear from dirt, leaves and other obstructions at all times.
- If you use the garage door opener with the remote control regularly, change the battery in the remote every few years to avoid battery failure and unexpected lock out.

Loss Prevention Tips

- The power unit contains circuit boards that are susceptible to lightning storms and power surges. Install surge protectors to minimize potential for this type of failure.
- The metal rollers and hinges should be lubricated every few years or when opening noise becomes noticeable. This will reduce excess stress on the motor and drive mechanism, and extend the life of your rollers and your garage door opener.