

One aspect of a new construction or renovation project is updating the garage door; nowadays homeowners often opt for the convenience of a garage door opener, as well.

While a manual garage door torsion spring system is adequate for basic un-insulated steel garage door types, an insulated garage door, wood garage door, or elaborate custom garage door may require an overhead garage door opener to handle the added weight.

Prices Vary Drastically

Depending on which type and size door is selected for the project, garage door prices can vary drastically. A basic style utilizing steel garage door panel construction is commonly priced under \$400; a basic wood panel garage door for a 2-car garage can be purchased under \$600; elaborate custom wood or steel garage doors can range from \$1200 to \$10,000.

For the basic steel and wood panel styles, expect to add about \$100 to the price for installation.

Choose the Right Garage Door Opener System

With countless manufacturers and styles available on the market, it may be a good idea to consult a garage door consumer report before making a selection and purchasing one. If including a garage door opener, research garage door opener comparison information. This will help insure you are getting a quality mechanism that will give years of trouble-free service.

For an 8-foot garage door, consider at least a minimum lift motor size of 1/3 hp; for a 10 to 12-foot door, at least 1/2 hp. For larger, heavier custom doors, follow manufacturer's recommendations.

DIY Garage Door Installation; Difficult, but not Impossible

Garage door installation may be a moderately difficult task, but a determined homeowner with some salty mechanical skills will be able to pull it off as a DIY project.

However, dealing with garage door springs can be very dangerous. If opting not to enlist professional help, never attempt the task alone. ALWAYS follow manufacturer instructions and cautions.

All installation kits available today include complete manufacturer's instructions on how to install a garage door safely, and correctly. The most common garage door problem is binding or twisting. Apparent when rollers and tracks show signs of wear, through time; and the door shudders and binds when opening and closing. This is a direct result of improper or incomplete installation. More about that later.

The basic procedure to install a garage door begins with attaching the seal to the bottom of the first panel. And then set the first panel levelly in the opening. Once in place, partially drive a couple of nails in each side of the jamb to keep the panel wedged in place.

Always Use Lag Screws - not Nails!

Using lag bolts into the framing members, bolt the track hangars into place. Do not completely tighten so that any necessary adjustments can be made later. Never use nails; always use lag screws. Make sure screws go into a solid frame member. This is because garage doors generate a considerable amount of force when opening and closing, and the weight of the door itself requires adequate support.

Set the next panel on top of the first, and fasten them together with the hinges and hardware provided. Attach the next section of track and hanger brackets. When adding panels, make sure any tongue and groove edges are properly lined up according to instructions; this will help prevent leakage - or binding and subsequent damage to panel edges.

When the door is in place and assembled, you are ready for the lift motor system assembly. There are two common types of lift motor systems; chain driven, and screw-driven actuators.

The chain driven system might be a better choice for several reasons; chain drive systems are reliable and easy to repair. And, they are much easier to shorten for adjustment when installing. All you need to do is cut the slider bar to fit the assembly, and shorten the chain.

Common Mistakes

Plan ahead when constructing the garage; make sure there are no obstructions such as outlets, light fixtures, or any other items present on the garage ceiling where the center of the door and lift motor and assembly will be.

When undertaking the garage door opener installation, it is critical that the lift motor and assembly be installed so that it is attached to the perfect center of the door. It is a common installation mistake to place the lift motor and assembly off-center to allow for obstructions. This will cause the door to twist and bind, causing it to shudder when opening or closing. Over time, this garage door problem will damage components, necessitating premature repairs.

Another common installation error is omitting the steel stiffener on the top edge of the top panel. The stiffener is usually 1.5 inch X 1.5 inch steel, or larger; necessary to re-enforce the top panel. This stiffener component might not come with some doors. That is because not all garage doors have an electric garage door opener.

Note: stiffeners are commonly omitted by sloppy installers who cut corners to save time. When there is no stiffener, repeated jerks created by the motor will slowly bend the panel until the system jams and no longer work. This type garage door problem can occur very slowly. By the time the problem becomes noticeable garage door repair is necessary, but door warranty has expired.

When installing the opener, position and adjust the lift motor so that when the gasket seal on the bottom of the first panel first contacts the floor, the door continues to close, with about $\frac{1}{4}$ to $\frac{1}{2}$ inch overrun. This will make a good seal on the floor. Be careful, however; while too little overrun makes a poor seal, too much will stress the door.

Once installation is complete, test the safety reverse feature on the lift system. If a 1X4 is placed anywhere along the gasket when closing, the door should stop and reverse when it encounters it.