

Garage Door Maintenance



A broken garage door is more than a mere inconvenience; it can literally hold you hostage. After all, if the door is closed and your car is in the garage when the breakdown happens, you're not going anywhere. So anything you can do to keep your garage door and automatic opener running smoothly is worth the time and effort.

To learn how to get the most life out of a garage door and opener, I consulted Ken Uliano, a veteran service technician. Ken says 25 percent of the calls he makes would be unnecessary if

homeowners learned how to make a few simple fixes and perform basic maintenance. Following his recommendations can help you avoid major problems and minimize repair costs.

Basic door maintenance



Start by paying attention to the parts of the door. If the door's wheels are binding as they move in the tracks, the tracks may need to be adjusted (photo below). The horizontal tracks along the garage ceiling should be parallel with the floor, but the vertical tracks should angle slightly toward the door opening and slightly inward (compared with the doorjamb) as they reach the floor. Though it's OK to attempt minor adjustments to the vertical tracks, leave horizontal-track adjustments to a professional — if you don't know what you're doing, the overhead tracks could come loose and the door could fall on you.

Adjust vertical tracks if wheels are not moving freely. Mark the points where the door is binding; then loosen the bracket bolts, adjust and retighten while the door is closed. Call a professional if you think the horizontal (ceiling) tracks need to be realigned.

Regularly lubricate the door's wheels and hinges. Use silicone spray, white lithium grease or a couple of drops of all-purpose oil (photo below). Wheels with ball bearings don't need to be lubricated.



Lubricate door hinges with silicone spray, white lithium grease or a couple of drops of all-purpose machine oil.

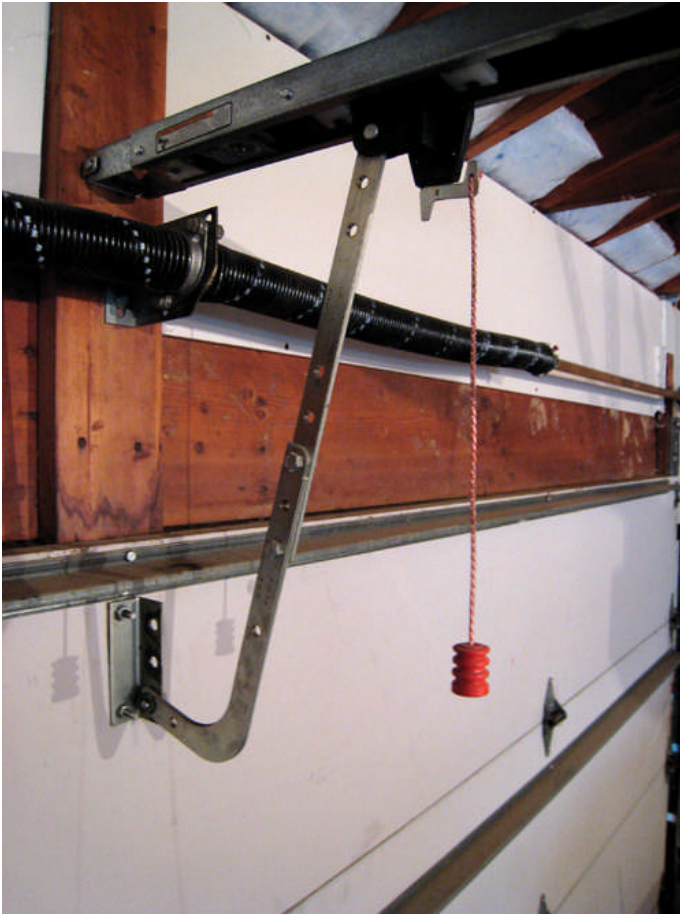
If your door has inexpensive plastic wheels without ball bearings, consider upgrading to wheels with ball bearings — it's a simple job that you can perform with the door in place (photo below). Remove one wheel-mount hinge and wheel at a time. Insert the new wheel axle in the mount and screw it back onto the door. If you find that any of the wheel-mount-hinge screws are stripped, replace them with slightly larger-diameter screws.



Replace plastic non-ball-bearing wheels to reduce friction, stress on the motor and other components, and noise. These heavy-duty, 10-ball-bearing nylon wheels cost about \$3.50 each.

Opener maintenance and adjustments

When it comes to avoiding service calls on the garage-door opener, a few basic steps can save you a lot of money. Many of the service calls Ken gets are due to the J-arm's disengaging from the carriage (photo below). This can normally be fixed by yanking the manual-release cord toward the closed door and then releasing it. Sometimes you may need to push the J-arm toward the door until you hear it engage. Activating the door will also sometimes re-engage the J-arm and carriage.



The J-arm connects the door to the carriage (also called a trolley), which is powered by the opener's motor via a drive chain, worm screw or belt. By pulling on the cord, you disengage the door from the opener.

If you have a chain-drive opener, check the tension of its chain — a loose chain will not only be noisy but also can break from the excess slack. Locate the chain-adjustment mechanism (often found at the end of the track near the door's torsion springs) and slowly turn the adjustment nut until most of the slack is gone (photo below). Do not over tighten the chain, as you'll increase its likelihood of breaking.



If there is excess slack in the drive chain, turn the adjustment nut until most of the slack has been taken up and the chain operates quietly.

A garage door that fails to open or close may have misaligned, obstructed or dirty safety sensors. When these sensors are working correctly, anything that interrupts the infrared beam (such as a child or pet moving across the door opening) will reverse the door's motion. Realigning the sensors is simple: Just loosen the sensor's fastener (usually a wing nut) and

aim the sensor at the opposite eye (photo below). When the eyes are properly aligned, the LED will steadily glow on both of them. If you are unable to get both LEDs to glow, check the wiring — it may have pulled loose from the sensor, or a staple may be causing it to short out. In some cases, the sensor may need to be replaced. If so, err on the side of caution and replace both sensors rather than just the malfunctioning one.

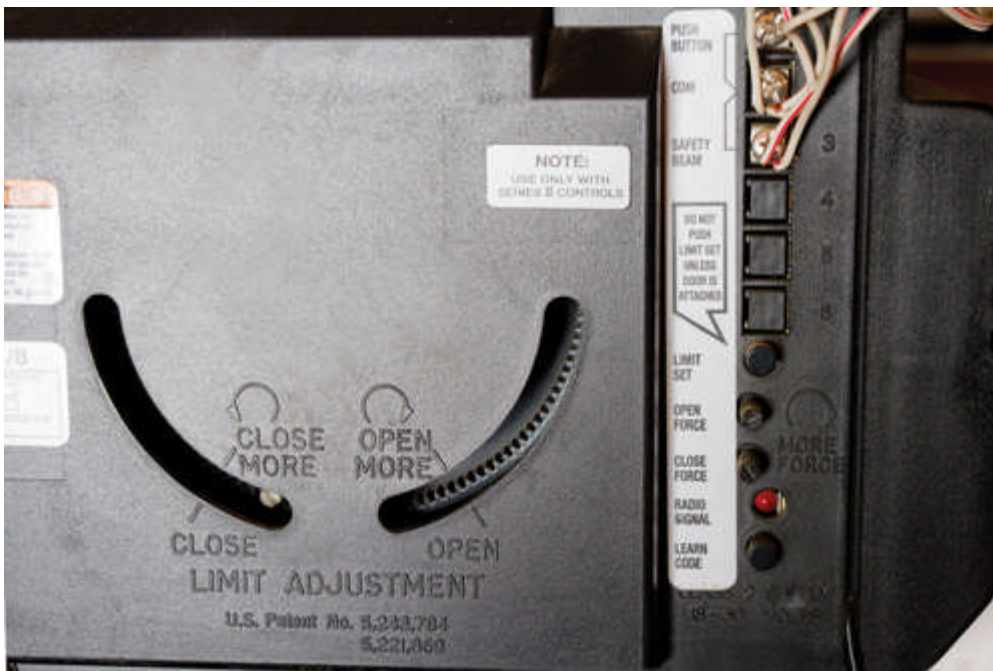


Check the safety-beam alignment — you'll know that the alignment is off if the sensor's LED indicator is not lit. To readjust, loosen the wing nut and reposition the sensor until the LED indicator activates.

How you handle more serious opener-related problems can mean life or death for the opener. For example, if the door rises a foot or so and then stops, take that as a warning and stop using the opener until the problem has been fixed. The fastest way to kill your garage-door opener is to ask it to do too much. “What many homeowners don’t understand is that it’s the springs, usually a pair of torsion springs located above the door, that do most of the lifting, not the motor,” Ken says. “If the spring is broken or has lost much of its tension over time, don’t try to operate the door or you’ll only cause more damage to the motor.”

Ken says many homeowners will turn up the “open force” sensitivity setting (photo below) to compensate for a weak spring, a temporary “fix” that actually hastens the motor’s demise. “The motor should only have to lift

15 to 20 pounds, not 75,” he says.



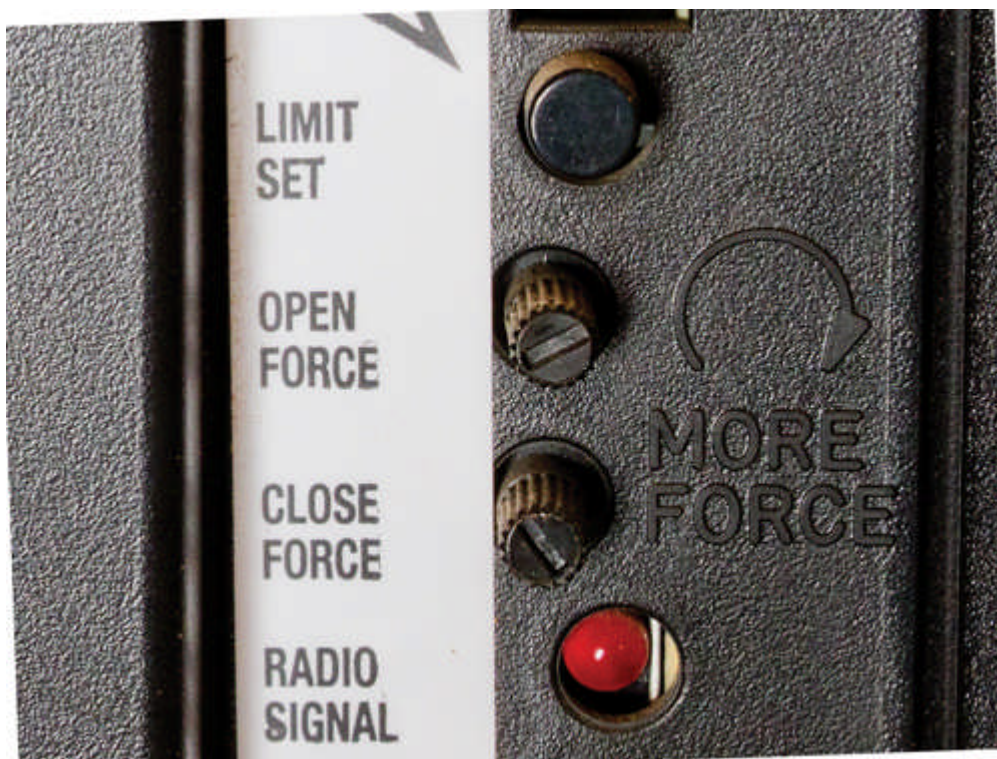
Make sure sensitivity settings (often labeled “close force” and “open force”) are set at their midrange levels. This will prevent the motor from attempting to lift more weight than it should, damaging itself or tearing the J-arm off of the door.

To test whether the springs are doing their job, pull the opener’s release cord and raise the door manually about halfway. If it remains

stationary or very slowly closes, the springs are in decent shape and at the proper tension. If it doesn’t, have a service professional inspect the springs. In some cases, the springs can be tightened to increase tension, but in others, they will need to be replaced. Ken recommends asking for oil-tempered springs that are rated for at least 30,000 cycles and to opt for at least a five-year — preferably a lifetime — warranty. (Steer clear of installers that offer only a one-month warranty.) Warning: Do not, under any circumstances, attempt to

adjust or replace the springs yourself, as they can cause very serious injury if they break or suddenly lose tension.

Finally, if your door bangs — either against the floor when it closes or at the end of its opening cycle — adjust its travel limits. Set screws determine how far the door will open, and ideally you want the door's motion to stop just shy of the end of its range of travel. Travel-limit screws (photo below) are found in different places on different models (sometimes on the side of the motor and sometimes at the back), so consult your opener's manual.



Sometimes a door will begin to stop short of the floor or hit the floor too hard. Other times it may not open all the way. You can easily fix the problem by adjusting the open and close travel settings (with a little trial and error).

These simple maintenance and repair steps can help you avoid unnecessary service calls. Granted, there will sometimes be repairs that require professional help, but by saving money when you can, you'll be better prepared financially to

handle the big fixes when they're needed.