## **Garage Door Safety - Fifteen Simple Steps to Protect Your Family**

## By Bruce A. Barker

Accidents involving garage doors and automatic openers in homes injure people and damage property every year. Garage doors are the largest and heaviest moving part in a home. Wood doors can weigh over 400 pounds and metal ones can exceed 100 pounds. Investing a few minutes to inspect these components at least once every year, or as recommended by the manufacturer, can help avoid tragic and costly accidents.

These procedures apply to sectional garage doors, the most common type. For doors without openers, ignore the opener related procedures. Consult the manufacturer's instructions for your door and opener. These instructions usually have diagrams that identify parts you should inspect and describe what to do if there is a problem.

1. Disconnect the opener emergency release, WITH THE DOOR CLOSED. If the spring is improperly adjusted, the door could come crashing down if you disconnect the opener with the door open.

2. Observe the door hardware including the hinges, rollers, cables, cable drums, nuts and bolts, the bottom door seal and any side seals. Nuts and bolts should be tight. Moving parts should move freely. If an opener is used, disconnect all ropes from the door to avoid injuring someone when it is operated.

3. Check the door tracks for damage and mechanical stability. The tracks should be firmly attached to the framing. The points where the tracks attach to the ceiling should have a lateral brace to keep the tracks from spreading and allowing the door to fall off the tracks.

4. Observe the torsion spring, if any, above the center of the door. It should be firmly attached to the framing. NEVER attempt to adjust or otherwise tamper with the torsion spring. Serious injury or death could result if the tension were improperly released.

5. Test the door lock. If you have an opener, disable the door lock to avoid damaging the door or opener if the opener is operated while the door is locked. If there is no opener, the lock should operate properly.

6. Operate the door manually. It should open and close freely without binding on the tracks and without requiring unusual force.

7. Open the door about 1/2 way, and then open the door completely. It should remain in each position unassisted. If it does not, have a trained technician adjust the spring(s). Improperly adjusted springs are a safety hazard and increase strain on the door opener.

8. Reconnect the opener emergency release.

9. Observe the attachment of the opener motor to the ceiling and the opener drive rail to the framing. Both should be firmly attached.

10. Observe the opener operating controls and safety systems. The controls (button and external remote control) should be at least five feet above the floor (so small children cannot reach them), and they should be within sight of the door. The reversing sensors should be no more than six inches above the floor at each side of the door. The emergency release cord should be attached to the trolley disconnect and hang no lower than 6 feet above the floor.

11. Observe the opener electrical connection, usually at the garage ceiling. The connection should either be permanently connected to the electrical connection or it should be connected to a grounded 3 wire receptacle. Extension cords, frayed wires, and spliced wires violate manufacturer's instructions and are a safety hazard.

12. Observe the opener operation. The door should fully open and close. Operation should not include unusual sounds. If the opener uses a chain drive, the chain should usually be about 1/2" above the rail when the door is open. The opener light should turn on.

13. Test the opener pressure reverse system. Place a 2x4 flat under the center of the door and allow the door to close. It should reverse on contact with the 2x4. If it does not reverse, adjust the opener according to manufacturer's instructions.

14. Test the opener reversing sensors. Interrupt the beam between the sensors while the door is closing. The door should reverse direction and open.

15. Lubricate the door and the automatic opener according to manufacturer's instructions.

These procedures take only a few minutes per door. Following them will help your garage door and opener last longer and will help prevent injury or property damage.