

# Screw Drive Rack Replacement

## **WARNING**

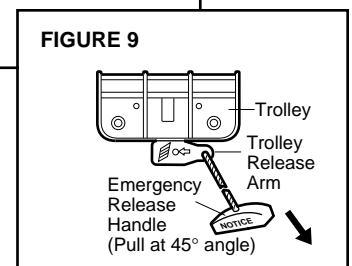
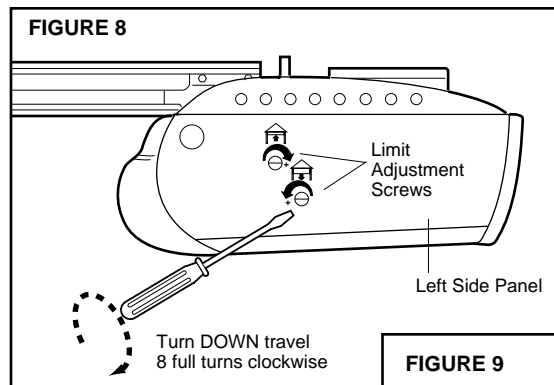
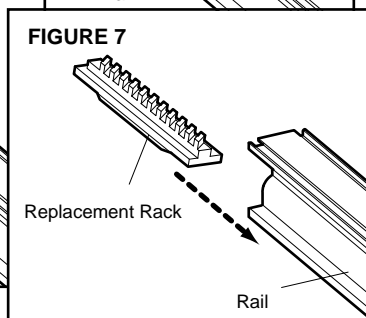
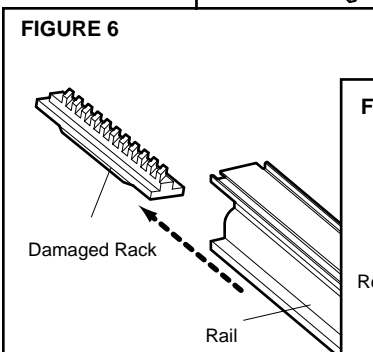
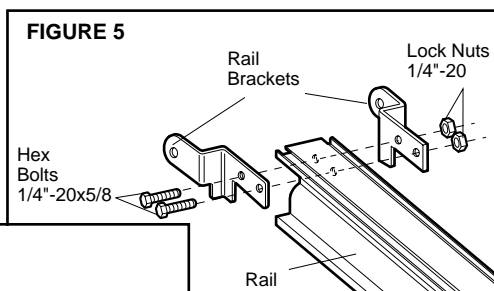
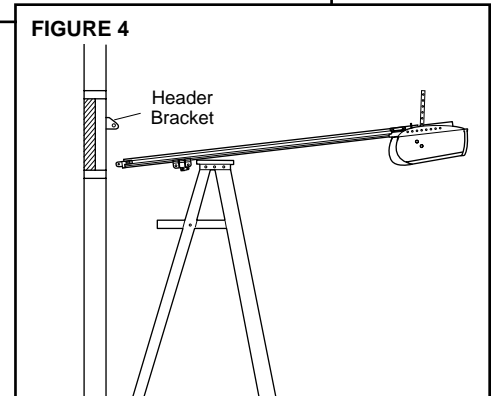
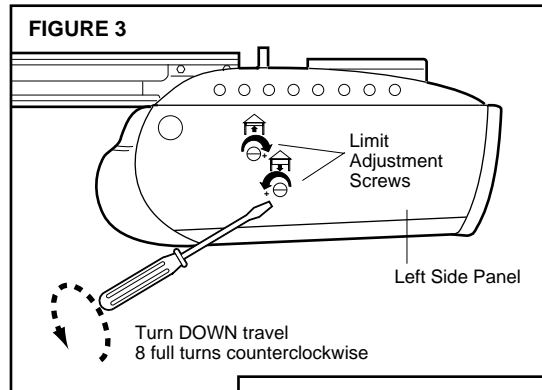
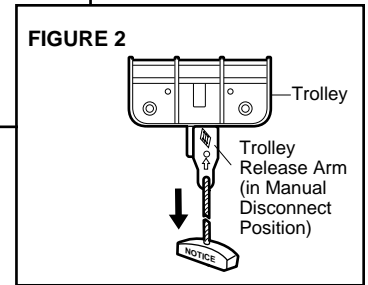
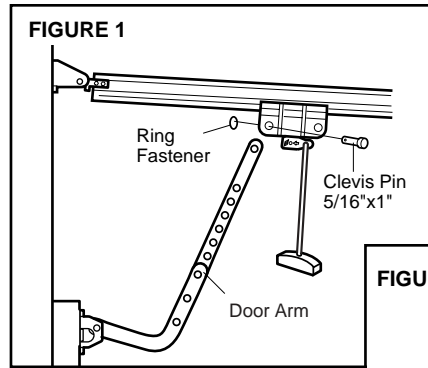
To prevent possible **SERIOUS INJURY** or **DEATH**:

- Be sure door is **CLOSED**

1. Remove pin from trolley arm to remove the door from the unit. Close door (*Figure 1*).
2. Disconnect outer trolley from inner trolley by pulling the emergency release handle (trolley release arm snaps into a vertical position) (*Figure 2*).
3. Activate to the full open position.
4. Increase the down travel by turning the down limit adjustment screw counterclockwise 8 full turns (*Figure 3*).
5. Place a ladder under rail and remove pin from header bracket. Rest rail on ladder (*Figure 4*).
6. Remove rail brackets from the end of the rail (*Figure 5*).
7. Activate unit using remote control, the damaged rack will travel through the end of the rail with assistance. Allow unit to run until the motor stops (*Figure 6*).
8. Place replacement rack into rail so it engages the teeth of the screw continue with pressure holding rack into screw (*Figure 7*).
9. Activate unit to the full open position rack will feed into screw assembly.
10. Decrease down travel by turning the down limit adjustment screw clockwise 8 full turns (*Figure 8*).
11. Re-attach rail brackets.
12. Reconnect rail to header bracket and pull emergency release handle toward the unit at a 45° angle so that the trolley release arm is horizontal.
13. Activate the unit to the down position (the outer trolley will automatically reconnect). Reconnect the door arm and trolley arm.
14. Run the opener through a complete travel cycle.
  - Does the door open and close completely?
  - Does the door stay closed and not reverse unintentionally when fully closed?

If you answered "No" to either of the above procedures read "When to Adjust the Limits" and "When to Adjust the Force".

If you answered "Yes" to both of the above questions proceed to "Testing the Safety Reverse System" on page 2.



## When to Adjust the Limits

### If the door does not open completely but opens at least five feet:

Increase UP (Open) travel. Turn the Up limit adjustment screw clockwise. One turn equals 2" of travel.

### If the door does not open at least five feet:

Adjust the UP (Open) force as explained in Adjustment Step 2 in your Owner's Manual.

### If the door does not close completely:

Increase DOWN (Close) travel. Turn the DOWN (Close) limit adjustment screw counterclockwise. One turn equals 2" of travel.

### If the opener reverses in fully closed position:

Decrease DOWN (Close) travel. Turn the DOWN (Close) limit adjustment screw clockwise. One turn equals 2" of travel.

### If the door reverses when closing:

If the opener lights are flashing, the Safety Reversing Sensor is obstructed. Remove the obstruction.

**Test the door for binding:** Pull the emergency release handle. Manually open and close the door. If the door is binding, call for garage door service. If the door is not binding or unbalanced, adjust the DOWN (Close) force.

**NOTE:** Repeated operation of the opener may cause the motor to overheat and shut off. Wait 30 minutes and continue.

## When to Adjust the Force

The maximum force adjustment range is 260 degrees, about 3/4 of a complete turn. Do not force controls beyond that point. Turn controls with a screwdriver.

### If the door doesn't open at least five feet:

Increase UP (Open) force by turning the control clockwise. Make 10 degree turn adjustments until door opens completely. Readjust the UP (Open) limit if necessary. After each adjustment, run the opener through a complete travel cycle.

### If the door reverses during the DOWN (Close) cycle and the opener lights don't flash:

Increase Down (Close) force by turning the control clockwise. Make 10 degree turn adjustments until the door completes a close cycle. After each adjustment, run the opener through a complete travel cycle.

**NOTE:** Do not increase the force beyond what is required to close door. Do not use force adjustments to compensate for a binding or sticking garage door.

### Test the DOWN (close) force:

Grasp the door handle or door bottom when the door is about halfway through DOWN (Close) travel. The door should reverse. If the door is hard to hold or doesn't reverse, decrease the DOWN (Close) force by turning the control counterclockwise.

Make 10 degree turn adjustments until the door reverses normally. After each adjustment, run the opener through a complete cycle.

### Test the UP (Open) force:

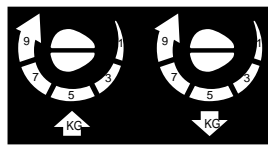
Grasp the door handle or door bottom when the door is about halfway through UP (Open) travel. The door should stop. If the door is hard to hold or doesn't stop, decrease UP (Open) force by turning the control counterclockwise.

Make 10 degree turn adjustments until the door stops easily. After each adjustment, run the opener through a complete travel cycle.



LIMIT CONTROLS  
Adjustment Label

FORCE ADJUSTMENT LABEL



Open Force      Close Force

## WARNING

Without a properly installed safety reversal system, persons (particularly small children) could be SERIOUSLY INJURED or KILLED by a closing garage door.

- Safety reversal system must be tested every month.
- If one control (force or travel limits) is adjusted, the other control may also need adjustment.
- After ANY adjustments are made, the safety reversal system must be tested. Door must reverse on contact with one-inch high object (or 2x4 laid flat) on the floor.

## Testing the Safety Reverse System

### Conduct the Safety Reverse Test After:

- Each adjustment of door arm length, force or limit controls.
- Any repair to or adjustment of the garage door (including springs and hardware).
- Any repair to or buckling of the garage floor.
- Any repair or adjustment to the opener.

### Procedure:

- With the door fully open, place a one-inch board (or a 2x4 laid flat) on the floor, centered under the garage door.
- Operate the door in the down direction. The door must reverse on striking the obstruction.

### Adjust:

- If the door stops on the obstruction, it is not traveling far enough in the down direction. Refer to "When to adjust the limits" on page 2.

**NOTE:** On a sectional door, when fully closed, the door arm must not go beyond a straight up and down position. If so, lengthen door arm.

- Repeat the test.
- When the door reverses on the one-inch board, remove the obstruction and run the opener through 3 or 4 complete travel cycles to test adjustment.

### If the door will not reverse after repeated attempts, call for a trained door systems technician.

