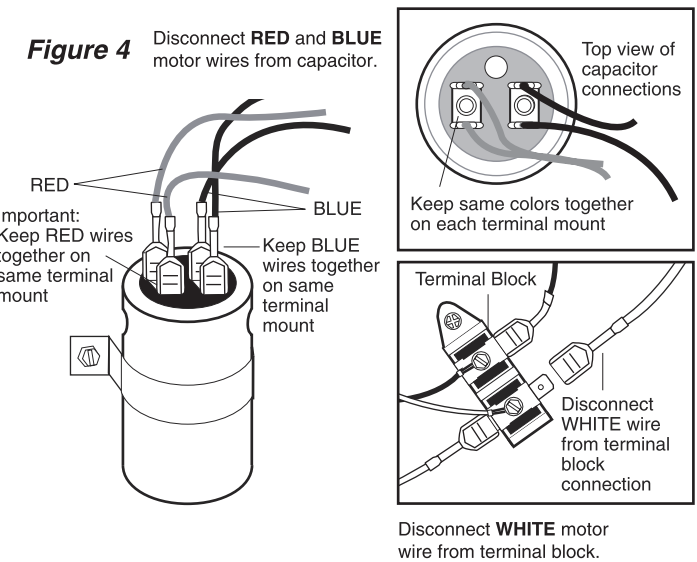
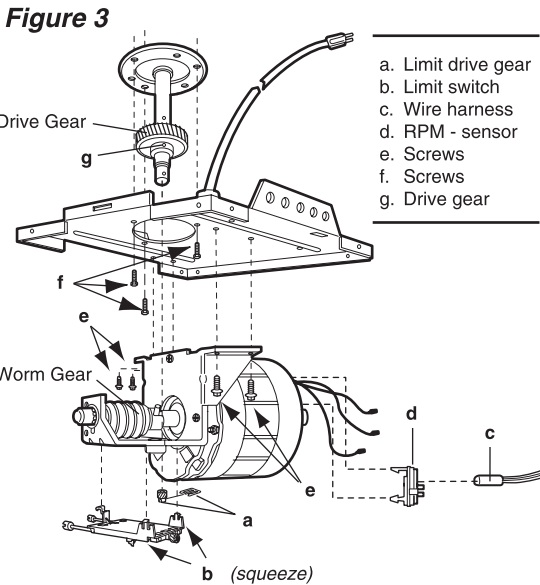
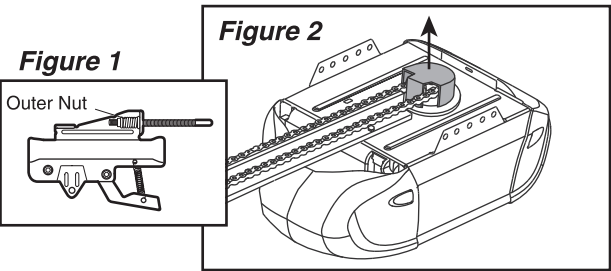


Replacement Instructions for Belt Drive Gear and Sprocket Kit

Tools needed:

- 1/8" Allen wrench
- Flat head screw driver
- 1/4" Nut driver
- 5/32" Punch
- 3/8" Nut driver or socket
- 5/16" Nut driver or socket w/extension
- Hammer



WARNING

To prevent possible SERIOUS INJURY or DEATH from electrocution, disconnect power to opener BEFORE proceeding.

CAUTION

The garage door MUST be in the fully closed position during installation.

CHECK OFF STEPS AS THEY ARE COMPLETED

1. Preparing the opener for disassembly:

- Disconnect the power to the garage door opener by unplugging the power cord from the outlet.
- Disengage the outer trolley by pulling the emergency release rope.
- Manually pull the garage door to a closed position.
- Relax the chain tension by loosening the outer nut on the trolley assembly to the end of the threaded shaft (Figure 1).
- Remove the chain cap retainer (Figure 2).
- Remove chain from sprocket. **Manually slide the inner trolley to a closed position until it engages the outer trolley.**
- Place loose chain on the end of the rail nearest sprocket. Tape the chain to the rail to prevent the chain from falling to the floor.
- Remove cover and both side panels.

2. Limit drive gear, limit switch assembly and RPM sensor (Figure 3):

- Remove the limit drive gear and retainer clip labeled (a).
- Remove the limit switch assembly (b), by squeezing the sides just below the motor assembly bracket near the drive gear.
- Allow the limit switch assembly to hang by the wires.
- Unplug the wire harness (c) from the RPM sensor (d).

3. Remove motor assembly (Figure 4):

- Disconnect the 3 wires leading from the motor (RED, WHITE, BLUE), noting their position for reassembly.
- Remove the 4 screws (e) fastening the motor bracket to the chassis, using a 5/16" long-shafted magnetic driver. Hand support motor before removing final screw. Place motor/bracket assembly aside.

Figure 5

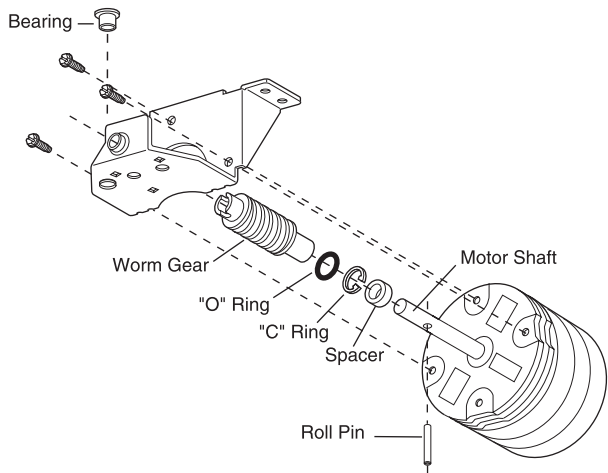


Figure 6

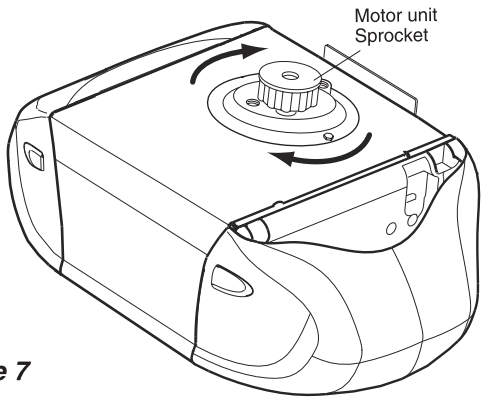


Figure 7

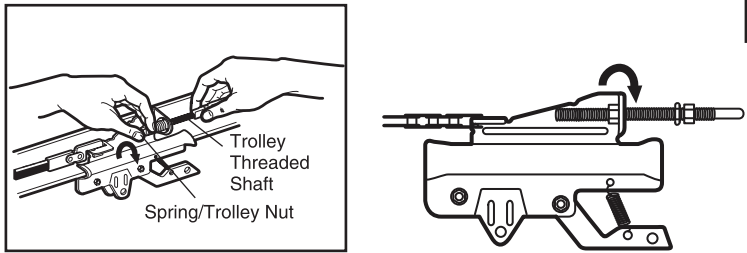
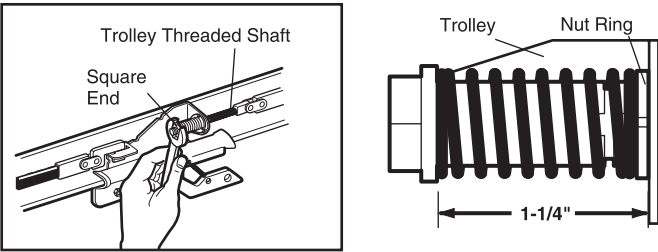


Figure 8



CHECK OFF STEPS AS THEY ARE COMPLETED

4. Removal and replacement of the WORM gear (Figure 5):

- Remove the 3 nuts holding the bracket to the motor and separate bracket from motor.
- Use punch and hammer to drive roll pin from motor shaft and slide worm gear off. Remove "O" ring, "C" ring and spacer.
- Replace with new parts in proper sequence, per illustration (Figure 5).
- Reassemble the motor and bracket assembly.

5. Removal and replacement of the sprocket assembly:

- Remove the 3 screws labeled (f in figure 3, page 1) from under the chassis and lift out entire assembly by sprocket.
- Apply grease generously to each tooth on replacement drive gear.
- Refasten the sprocket assembly to opener.
- Reinstall motor assembly by reversing step 3.
- Reinstall motor cover and end panels.

6. Setting Limits:

- Restore power to the opener.
- Run the motor until the sprocket has completed a clockwise cycle (Figure 6).

7. Reinstalling belt and setting belt tension:

- Remove tape from belt and rail.
- Reinstall chain on drive sprocket and replace chain cap retainer.
- To tighten the chain, hold the chain at the trolley shaft to avoid twisting as you thread the spring/trolley nut by hand on the shaft until finger tight against the trolley (Figure 7).
- Place a 7/16" open-end wrench on the square end. Tighten spring to a 1-1/4" tension (Figure 8).

8. Run opener and Test:

- 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 questions, read "When to Adjust the Limits" and "When to Adjust the Forces".

If your door passes both of these tests, no limit/force adjustments are necessary please proceed to "Testing the safety reverse system" (on page 4).

⚠ WARNING

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

- Incorrect adjustment of garage door travel limits will interfere with proper operation of safety reversal system.
- 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 2 x 4 laid flat) on floor.

When to Adjust the Limits



LIMIT CONTROLS
Adjustment Label

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.

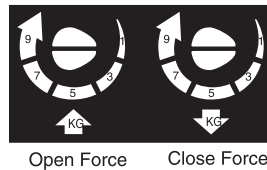
Test the DOWN (Close) force:

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:

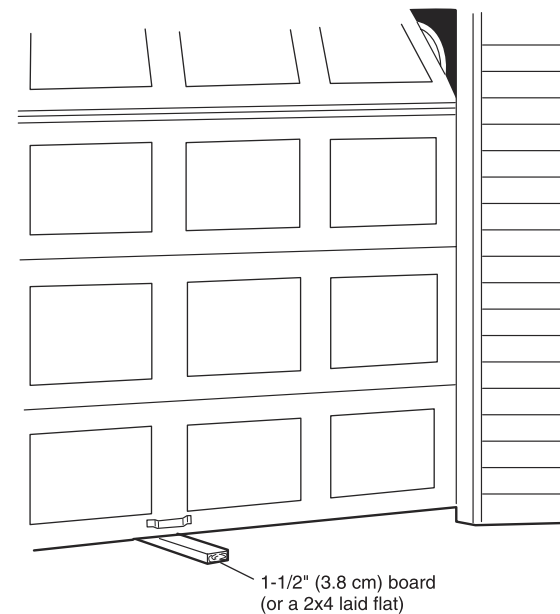
Grasp the door handle or door bottom when the door is about halfway through UP (Open) travel. The door should stop. If the door is hard to hold or doesn't stop, decrease UP (Open) force by turning the control counterclockwise. Make 10 degree turn adjustments until the door stops easily. After each adjustment, run the opener through a complete travel cycle.



⚠ 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.