

# Replacement Instructions for Drive Gear and Worm Gear 41A2817



The garage door must be in fully closed position during installation.



To avoid serious injury or death from electrocution, disconnect power to opener before proceeding.

1. Close the garage door and unplug the opener.
2. Disengage the outer trolley by pulling the manual release rope.
3. Relax chain or belt tension by loosening outer nut of trolley assembly to the end of the threaded shaft (Figure 1). Consult your manual.
4. Remove sprocket cover or belt cap retainer (Figure 2).
5. Disengage chain or belt from sprocket and leave it loose on end of rail near sprocket until reassembly.
6. Remove the cover.
7. Remove the helical gear and retainer, Figure 3 (a).
8. Remove limit switch assembly (b):
  - Squeeze the sides just below the motor assembly bracket near the drive gear.
  - Disengage from its 3 retention slots and allow to hang by wires.
9. Unplug the wire harness (c) from the RPM sensor (d).
10. Remove motor assembly:
  - Disconnect the 3 wires leading from the motor, 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.
  - Remove entire motor/bracket assembly and set aside.
11. Replace drive gear assembly:
  - Remove the 3 screws labeled (f) from under the chassis and lift out entire assembly by sprocket
  - Remove roll pin (g) below drive gear.
  - Remove drive gear from shaft and replace with new.
  - Replace roll pin in shaft, approximately flush with gear hub.
  - Apply grease generously to drive gear.
  - Refasten assembly to opener chassis.
12. Replace worm gear:
  - A. Motor Vibration Isolator models only:** (see Figure 4 on page 2)
    - Remove 3 screws holding bracket to motor and pull off bracket.
    - Remove 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.
  - B. All other models:** (see Figure 5 on page 2)
    - Remove interrupter cup, collar, washers, and bearing from motor shaft and set aside in proper sequence for replacement. Replace only those parts used on your model.

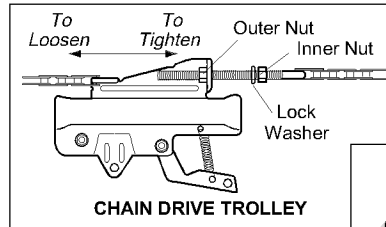


Figure 1

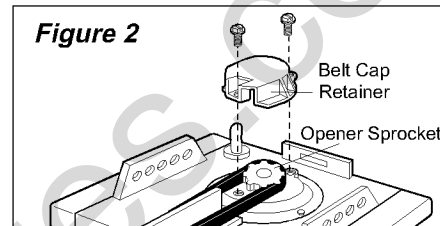
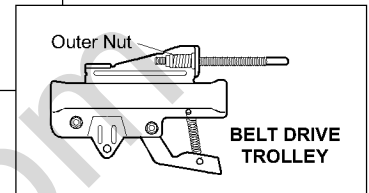


Figure 2

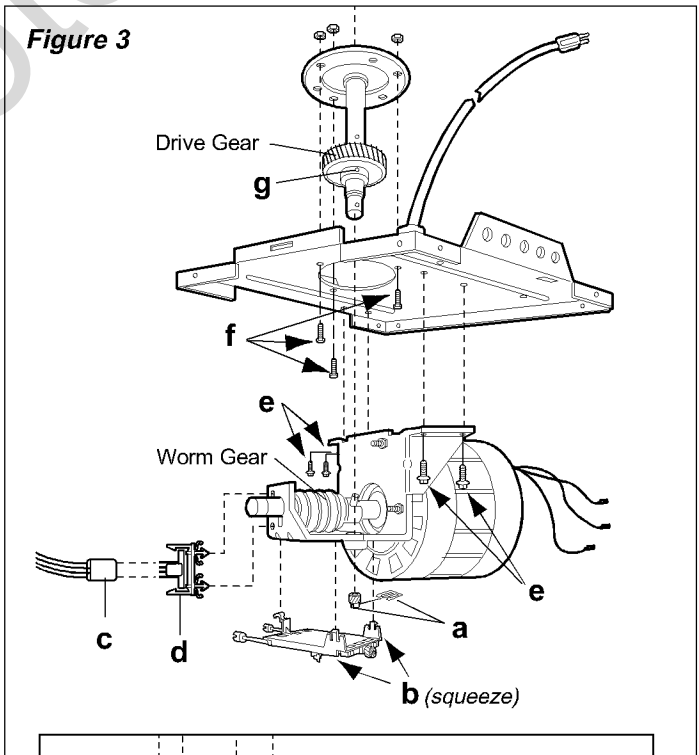
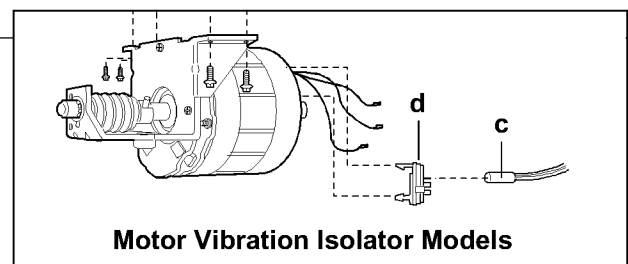


Figure 3



Motor Vibration Isolator Models

- Remove 3 nuts holding bracket to motor and pull off bracket.
- Remove worm gear from motor shaft and replace with new, fitting slots in gear over roll pin on shaft.

13. Reassemble motor and bracket assembly by reversing step 12.

**NOTE: (see Figure 5) During reassembly, push the end of the motor shaft as far forward (toward the bracket) as possible. Butt collar against the bearing until the spring washer is compressed; then tighten collar set screws securely. (Torque: 60 in. lbs.). Push interrupter cup firmly onto the motor shaft.**

14. Apply grease liberally to worm gear.

15. Reinstall motor assembly by reversing step 10.

16. Reverse steps 2-9 to reassemble the opener.

17. Restore power to the opener. Readjustment of the UP and DOWN travel limits may be necessary. Follow the instructions below or in your owner's manual.

## Test the Safety Reverse System

### Conduct the Safety Reverse Test After:

- Each adjustment of door arm length, force controls 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:

- 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.**

### Adjustment:

If the door *stops* on the obstruction, it is not traveling far enough in the down direction.

- Increase the DOWN limit by turning the DOWN limit adjustment screw counterclockwise 1/4 turn.
- Repeat the test.

**On a sectional door, make sure limit adjustments do not force the door arm beyond a straight up and down position.**

- 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 adjustment attempts, call for professional garage door service.**

