

### **KIT PART NUMBER 6404117**

# INSTRUCTIONS FOR REPLACING THE BREWER PUMP GEARS IN A CAFE' SYSTEM 7 (MODEL 640)

CHECK THE PARTS RECEIVED IN THE KIT WITH THE PARTS LIST IN THESE INSTRUCTIONS. IF ANY PARTS ARE MISSING, CONTACT THE NATIONAL VENDORS PARTS DEPARTMENT IMMEDIATELY.

Read these instructions carefully before installing the kit. Keep these instructions for part numbers and for future reference.

This kit includes enough gears and lubricant to replace two brewer pumps.

I NDEX	PART NUMBER	DESCRI PTI ON	QUANTI TY
1	6404118	GEAR - REPLACEMENT	4
2	6404119	LUBRI CANT - GEAR REPLACEMENT	1
3	6400203	INSTRUCTIONS - KIT - GEAR REPLACIVENT	1

## Please read all these instructions first, then proceed as follows:

- 1. Unplug the merchandiser from the wall outlet.
- 2. Remove the pump assembly from the merchandiser:
  - Remove the four screws holding the pump cover to the pump body (see figure 1).
  - b. CAREFULLY remove the pump cover. If you have to pry it off the pump body, only pry on the flat side where the tubing is located. If you pry on the curved section, you could damage it, which will in turn damage the tubing.
  - c. Spread the arms of the clip apart, and remove the roller assembly.
  - d. Spread the arms of the clip wide open and carefully lift it off the motor shaft.
  - e. Clean all of the roller assembly parts and dry with compressed air. Make sure they are free of residue.
  - f. Remove four screws holding the pump body to the pump motor and remove the pump body.
  - g. Remove the fan shroud.
- 3. Disassemble the gear housing:
  - a. Remove the four screws from the gear housing.
  - b. Carefully remove the gear housing cover while holding onto the pump drive shaft. While you are removing the cover, make sure you note the placement of all the parts (spacers, etc.) on the pump drive shaft (see figure 2).
  - c. Remove the spacers, washers, and spring washer from the pump drive shaft.
  - d. Clean the pump drive shaft, gear, and all parts.
  - e. Remove all grease and any plastic or metal gear chips from the gear housing cover.
  - f. Remove, clean, and set aside the spacers located on the tops of the three gears in the gear housing.
  - g. Remove and clean the center drive gear.
  - h. Remove and discard the two plastic idler gears.
  - i. Remove grease and any gear chips from the gear housing and the pinion gear.



## 4. Reassemble the gear housing:

- a. Apply clean grease (provided) to the pinion gear and around the three idler shafts and the gear housing. *Remember to use only half the supplied grease for each pump.*
- b. Replace the center drive (metal) gear.
- c. Install the two new idler (plastic) gears.
- d. Insert the pump drive shaft into the hole in the gear housing, taking care not to drop the spacer or washers.
- e. Grease all gears.
- f. Replace the three spacers on the center and idler shafts.
- g. Replace the gear housing cover and secure with four screws.
- 5. Replace the pump and reassemble the roller assembly:
  - a. Attach the pump body to the pump motor with four screws.
  - b. Install the spring clip to the pump drive shaft.
  - c. Reassemble the roller assembly. The roller housings are interchangeable, and it makes no difference which way the roller assembly faces on the pump drive shaft with the following exception: Make sure the flat sides of the holes in the roller housings line up. Otherwise, you will not be able to put the roller assembly back on the pump motor shaft.

#### NOTE

If the roller assembly is not installed ALL THE WAY on the motor shaft, the pump tubing will be cut. The roller housings will break if hit with a hammer, so don't use one for this procedure.

d. Slide the roller assembly back onto the pump motor shaft and secure with the clip. You may need to use a pair of pliers to CAREFULLY snap the clip back onto the roller housing.

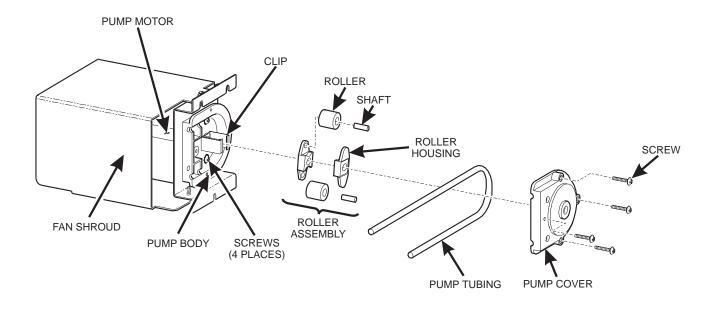


Figure 1



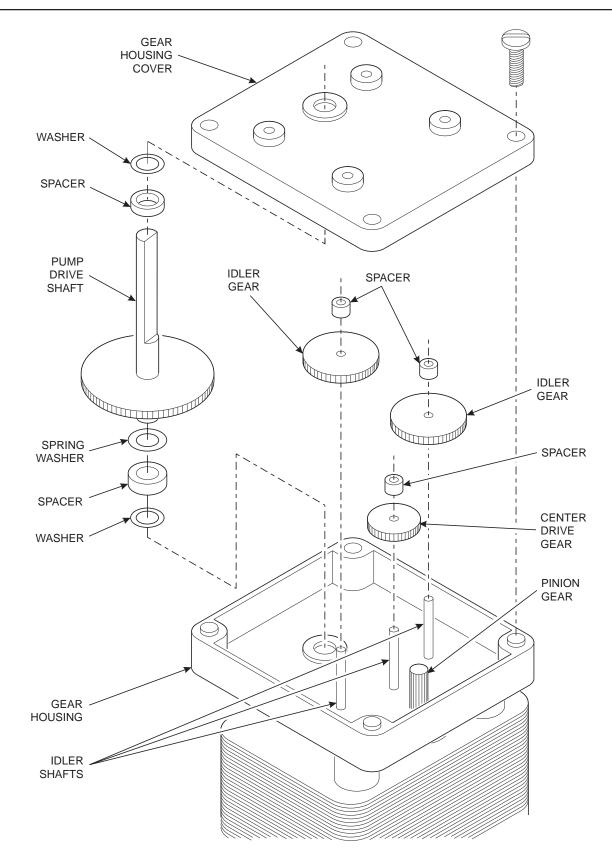


Figure 2



- 6. Install the pump tubing into the pump body (see figure 3):
  - a. Measure 9½" from one end of the tubing. Mark it with a pencil.
  - b. Line the pencil mark up with the outside of the pump body as shown.
  - c. Work the tubing into the pump body while turning the roller assembly counterclockwise, as shown. DO NOT FORCE the tubing. Make sure the top of the tubing is even with the tops of the rollers. If it is lower or higher, it can get pinched, which can lead to premature failure or leaks. Before installing the pump cover, turn the roller assembly as shown in figure 2, view A.
  - d. Note that the pump cover and pump body have locator pins and holes molded into the curved face, as shown. Use a flat object about ½" wide x 1/16"-1/8" thick (such as a feeler gauge) without sharp edges to hold the tube in toward the roller assembly as you install the pump cover. This will allow you to assemble the cover without pinching the tubing between the top and bottom housings. Be sure the locator pins fit into their holes.
  - e. Hold the pump cover in place while inserting the four screws. Tighten the screws until they just snug up. DO NOT OVERTIGHTEN.
- 7. Replace the fan shroud.
- 8. Install the pump into the merchandiser and connect the tubing. Connect the pump to the machine wiring harness.
- 9. Check for proper operation.

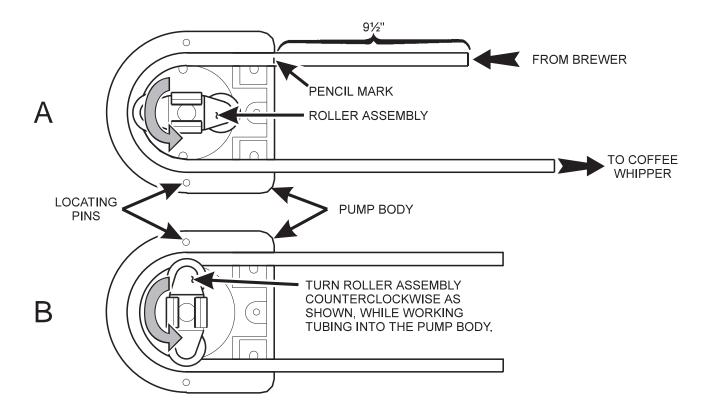


Figure 3