

# Settings

Before the unit can be recharged and put into service, several settings must be made.

## BACKWASH

Backwash, the first step in the recharge cycle, expands and loosens the resin bed, and flushes away accumulated turbidity. The backwash interval is preset at the factory for 10 minutes which is adequate for most water supplies. It is adjustable, however, for 5 to 30 minutes. It is recommended that backwash last just long enough so that the effluent from the drain line is clear. Backwash too long and water is wasted, not long enough and the tank becomes fouled with sediment.

If backwash time adjustment is needed, see Fig. 17. **THE TIMER MUST BE DISCONNECTED FROM THE POWER SUPPLY WHEN MAKING INTERNAL ADJUSTMENTS.**

1. Remove the timer from the case and turn it over to view the fiber electrical barrier.
2. Loosen both the screw holding the barrier in place and rotate the barrier to expose the cams and switches.
3. Refer to Fig. 7. Loosen screw (A) and rotate the black cam segment (B) until its pointer indicates the desired backwash time on the grey cam segment (C). Retighten screw (A).
4. Replace the fiber barrier and tighten the screws.

All normal adjustments from this point on may be made with the timer mechanism securely fastened within its case. The unit may be plugged in at this time.

## TIME OF RECHARGE

The timer is factory-set to recharge at 2:00 a.m. (plus or minus 20 minutes), a timer when water usage is at a minimum for most families. If water is used during recharge, hard water will be automatically bypassed to service. If it would be more convenient to have the water conditioner recharge at a different time of day the setting may be changed as follows, referring to Fig. 8.

1. The position of the time-of-day dial (E) in relation to the peg (D) on the black tab determines when the conditioner will begin to recharge.
2. Remove the set screw (M).
3. Lift the white time-of-day dial and rotate it until the desired time of recharge is opposite the peg (D). Please note that whenever the time of recharge is changed, the time-of-day setting must be changed also.
4. Replace set screen.

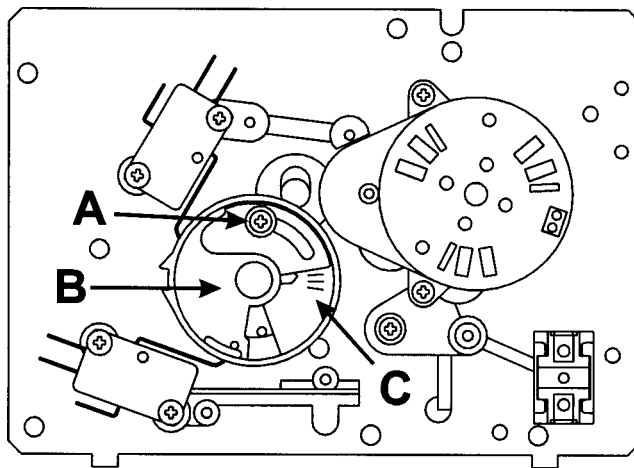


FIG. 7

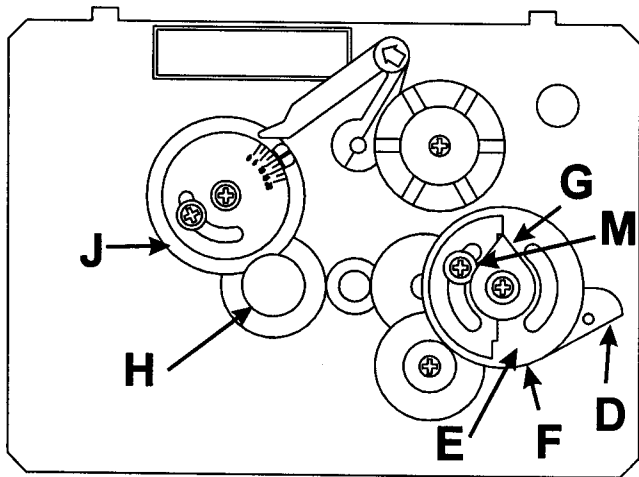


FIG. 8

### TIME OF DAY

Upon completing the installation, the timer must be set to the correct time of day. Time of day must also be reset after any kind of power interruption, such as that caused by an electrical storm. See Fig. 8.

1. Determine the correct time of day.
2. Grasp the gear (F) and lift straight up (the white time-of-day dial will lift with it). Rotate the dial until the correct time of day lines up with the pointer (G). The dial is spring-loaded and will return to its position when released. Make sure the teeth mesh.

Note that the silver half of the time-of-day dial designates the daytime hours, while the black half designates the nighttime hours.

### SERVICE POSITION

The timer assembly is in the service position when the toothless notch in the cam gear (J) is over the teeth on the idler gear (H). The timer will return to this position after each recharge (Fig. 8).

### SALT DOSAGE/RECHARGE FREQUENCY (Time Clock Models Only)

The salt dosage is the number of pounds of salt the softener will use with each recharge. The frequency is the number of recharges per six day period (or seven day period, with optional 7-day frequency wheel).

To determine the salt dosage and frequency, two things must be known:

1. Daily water usage as determined by the number of persons in the household or by actual gallonage measurements.

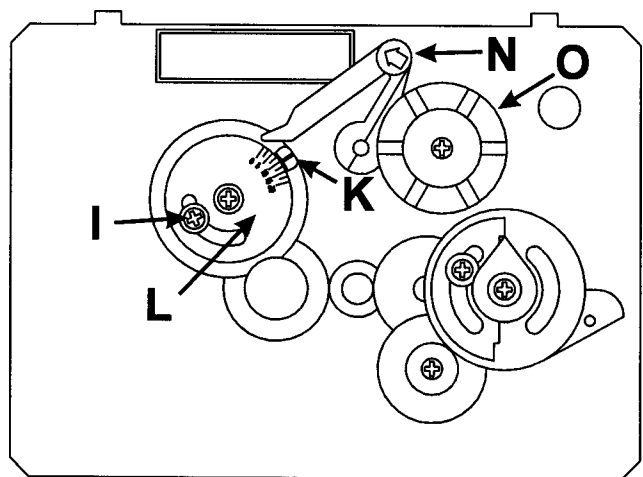


FIG. 9

2. The total hardness of the water as shown on the Culligan Water Analysis Report.

With these factors known, refer to Salt Dosage/Frequency Charts, Table 2A/2B. Find the box in the right or left column with the number of individuals in the household, or the approximate daily average water usage. Move across until the box under the correct hardness range is reached. The number in the shaded portion of the box indicates the amount of salt, in pounds (kilograms), to be used for each recharge, and the number in the non-shaded portion indicates the number or recharges required per six-day period.

*NOTICE: The optional 7-day frequency wheel may be used when recharge is desired only on specific days of the week.*

As an example, if four individuals live in the household, and the water has a total hardness of 18 grains per gallon, the salt dosage per recharge for the water conditioner will be 5 pounds (2.5 kg) and the recharge frequency will be 3 (or every 2 days). Monthly salt usage can be estimated, using these figures, at about 75 pounds (37.5 kg).

### SALT DOSAGE SETTING

Set the salt dosage as follows, referring to Fig. 9.

1. Loosen screw (I).
2. Grasp the gear (L) and rotate the salt dosage dial until the desired dosage is indicated by the point (K).
3. Retighten screw (I).

### FREQUENCY (Time Clock Models Only)

Starting with all pins in the up position, set the correct frequency on the frequency wheel by pushing down the appropriate number of pins. Refer to Tables 5A and 5B.