## Clean Water Made Easy

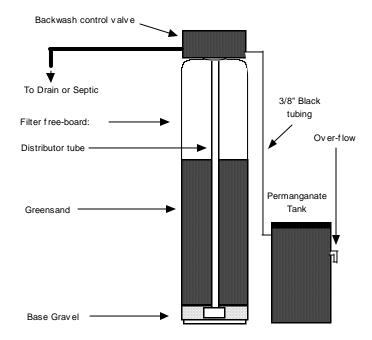
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## Adding Media & Starting Up Greensand + 2750 Filter with Potassium Permanganate Regeneration

- 1. Remove control valve and place distributor tube into tank if not already present in tank.
- 2. Make sure there is a plug or cap on top of distributor tube inside tank or wrap end of distributor tube with a electrical or duct tape to prevent greensand media from entering distribitor when pouring in media.
- 3. Add base gravel using funnel provided, then add greensand media. Tank should be about 2/3rd full.
- 4. Remove cap or tape from distributor. Do not pull up distributor tube. Screw on control valve until tight, be careful not to cross thread tank. Do not over-tighten and do not use any teflon tape or pipe-joint compound on the threads. Plug in filter backwash control valve into electrical outlet.
- 5. Install piping inlet and outlet, being careful to follow in and out arrows on the control valve.

  See Fleck 2750 control valve manual (page 26) for piping information. Install the control valve with gate or ball valves so a bypass valve is created. Attach tubing to the drain and connect to a suitable drain, sewer or septic tank. Plug control valve in to a 115v outlet.
- 6. Attach potassium permanganate solution tank tubing (3/8" black poly tubing) from the permanganate solution tank. You do not have to disassemble the white fitting in order to insert the tube. Loosen the white nut sufficiently in order to slide in the black 3/8" tube until it seats into the fitting, and then hand tighen the white compression nut until tight.
- 7. Add 3 gallons of water to permanganate solution tank. Water will cover the white felt pad. Add 5 lbs (2 kgs) of potasium permanganate granules to the potassium perm tank by pouring it directly on top of the white felt pad. Do not pour permanganate down the white plastic brine well where the black line is attached.
- The over-flow on the side of the potassium permanganate tank can be attached to a drain or a bucket if desired. The permanganate tank will not normally or may not ever over-flow, however, if the tank is located in an area where a stain or over-flowing permananate solution would cause a problem, then a bucket or a tube can be run to a drain or floor pan.



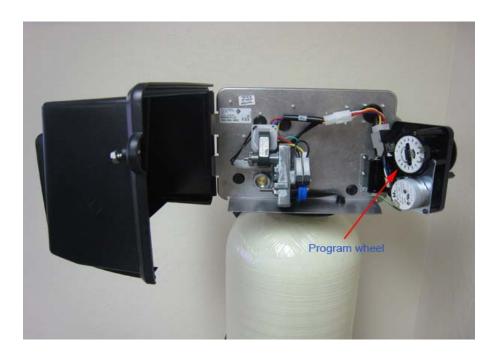




- 9. Open timer cover. Swing open timer assembly to view the program wheel. 1 pin or space equates to 2 minutes. The program wheel has come preset and does not need to be changed.
- 10. Before putting the filter into general use, the greensand-plus filter media needs to be backwashed and regenerated with potassium permanganate.

Turn manual regeneration control knob on front of timer assembly in center of timer, clockwise a few degrees until you hear and see the control valve go into first position, or backwash position. By having the timer assembly open you can see when you turn the knob on the front, that it turns the program wheel on the back. Turn the manual regeneration knob until it clicks on the first set of pins, which is the backwash cycle.





- 11. Slowly turn on the water to the filter tank, and allow filter tank to slowly fill with water, removing all air. After filter has backwashed and moved from the first set of pins on the program wheel to the next set of spaces, the control valve will suck in the potassium permanganate solution from the solution tank automatically. Wait 10 15 minutes until it has sucked in all the solution, the permanganate tank is empty and several minutes have passed (to make sure the chlorine bleach has thoroughly contacted the greensand-plus filter media, and then unplug the control valve, and put the iron filter on bypass. Allow to soak for 4 hours.
- 12. Plug back in control valve but leave on bypass. Turn the timer program wheel knob so the program wheel advances all the around until it clicks on the first set of pins again, which are the backwash pins. Allow to go through a complete cycle (90 minutes).
- 13. Open up a hose bib or a faucet in the house without an aerator, and run water for 5 to 10 minutes until you get clear water, and flush piping and fixtures.
- 14. Frequency of backwash is controlled by 12 day skipper wheel on front of timer assembly. Typical frequency is once every 4 days for high levels of iron. If the pin is sticking out,on the skipper wheel, then the filter will backwash on that night.
- 15. Set time of day to real time of day; if set to real-time-of-day, then filter will automatically backwash at 2am.
- 16. Add potassium permanganate powder as needed, typically every four to six months. When the mound of powder disappears into the purple solution in the tank, you can add another 5 lb container with a month.