

TROUBLESHOOTING GUIDE

No soft water

POSSIBLE CAUSES	SOLUTIONS	REPAIR KIT(S) NEEDED
No salt in the storage tank.	Refill with Morton System Saver Pellets.	None
No salt in the storage tank.	Use "Recharge Now" feature.	None

No soft water timer display blank.

POSSIBLE CAUSES	SOLUTIONS	REPAIR KIT(S) NEEDED
Transformer unplugged at wall outlet, or power cable disconnected, transformer OR power cord defective.	Check for loss of power and correct. Reset timer and use the "Recharge Now" feature.	Transformer Power Cord
Fuse blown circuit breaker popped, or circuit switched off.	Replace fuse, reset circuit breaker, or switch circuit on and use the "Recharge Now" feature.	None
Timer control board defective.	Use the "Vacation" feature to return the softener to soft water position. Use the "Recharge Now" feature.	Timer Control Board

"VAC" flashing in display

POSSIBLE CAUSES	SOLUTIONS	REPAIR KIT(S) NEEDED
Time in Vacation ("VAC") position.	Use the "Vacation" feature to return the softener to soft water position. Use the "Recharge Now" feature.	None

No soft water, salt level not dropping

POSSIBLE CAUSES	SOLUTIONS	REPAIR KIT(S) NEEDED
Salt in storage tank bridged.	Break salt bridge	None
Manual bypass valve(s) in bypass position.	Pull out stem in single bypass to service.	None
No regeneration set on timer.	Select and program a regeneration schedule. Use the "Recharge Now" feature.	None

No soft water

- **Salt storage tank full of water**
- **Water running to drain while unit in soft water cycle.**

POSSIBLE CAUSES	SOLUTIONS	REPAIR KIT(S) NEEDED
<i>Dirty, plugged or damaged nozzle and venturi.</i>	<i>Take apart, clean and inspect nozzle and venturi</i>	<i>Nozzle Kit</i>
<i>Inner valve defect causing leak.</i>	<i>Replace Seals and rotor.</i>	<i>Rotor Seal Kit</i>
<i>Valve drain hose plugged.</i>	<i>Hose must not have any kinks, sharp bends or any water flow blockage.</i>	<i>None</i>
<i>Low or high system water pressure (low pressure may disrupt brine draw during recharge, high pressure may cause inner parts failure).</i>	<i>If pressure is low, increase well pump output to a minimum 20 psi. If daytime pressure is over 100 psi, add a pressure reducing valve in the supply pipe to the softener.</i>	<i>None</i>
<i>Brine valve float kit dirty or defective.</i>	<i>Clean brine or replace valve float kit assembly.</i>	<i>Float Kit</i>
<i>Leak between valve and resin tank assembly.</i>	<i>Replace tank valve O-rings.</i>	<i>Tank/Valve O-Ring Kit</i>

Water is hard sometimes

POSSIBLE CAUSES	SOLUTIONS	REPAIR KIT(S) NEEDED
<i>Time setting wrong.</i>	<i>Check and change time setting.</i>	<i>None</i>
<i>Regeneration too few.</i>	<i>See regeneration chart for correct settings.</i>	<i>None</i>
<i>More water being used.</i>	<i>See regeneration chart for correct settings.</i>	<i>None</i>
<i>Hot water being used when softener is regenerating.</i>	<i>Avoid using hot water while the softener is regenerating as the water heater will fill with hard water. Check timer for correct settings.</i>	<i>None</i>
<i>Possible increase in water hardness.</i>	<i>Test the raw water for hardness and iron, and program the timer accordingly.</i>	<i>None</i>
<i>Leaking faucet or toilet valve. Excessive water usage.</i>	<i>A small leak will waste hundreds of gallons of water in a few days. Fix all leaks and always fully close faucets.</i>	<i>None</i>

Resin in household plumbing, resin tank leaking.

POSSIBLE CAUSES	SOLUTIONS	REPAIR KIT(S) NEEDED
<i>Crack in distributor or riser tube.</i>	<i>Replace resin tank assembly.</i>	<i>Resin Tank Assembly Kit</i>

Salt storage tank leaking

POSSIBLE CAUSES	SOLUTIONS	REPAIR KIT(S) NEEDED
<i>Crack in brine tank.</i>	<i>Replace salt storage tank assembly.</i>	<i>Salt Storage Tank Assembly Kit</i>

Motor stalled or clicking.

POSSIBLE CAUSES	SOLUTIONS	REPAIR KIT(S) NEEDED
<i>Motor defective or inner valve defect causing high torque on motor.</i>	<i>Replace rotor/seal.</i>	<i>Rotor-Seal Kit</i>
	<i>Replace motor and switch.</i>	<i>Motor/Switch</i>

Error code E1, E2, E3 or E4 appears.

POSSIBLE CAUSES	SOLUTIONS	REPAIR KIT(S) NEEDED
<i>Wiring harness or connection to position switch.</i>	<i>Replace wiring harness or connection to position switch.</i>	<i>Motor/Switch</i>
<i>Switch.</i>	<i>Replace switch.</i>	<i>Motor/Switch</i>
<i>Valve defect causing high torque.</i>	<i>Replace rotor seal.</i>	<i>Rotor/Seal Kit</i>
<i>Motor inoperative.</i>	<i>Replace motor.</i>	<i>Rotor/Seal Kit</i>

Procedure for removing error code from faceplate:

- *Unplug transformer*
- *Correct defect*
- *Plug in transformer.*
- *Wait for 6 minutes.*

The error code will return if the defect was not corrected. Press and hold the VAC/RCHG button for 3 seconds as an alternative way to clear an error code.

Error code E5 appears

POSSIBLE CAUSES	SOLUTIONS	REPAIR KIT(S) NEEDED
<i>Faceplate.</i>	<i>Replace electronic control board.</i>	<i>Electronic Control Board Kit</i>

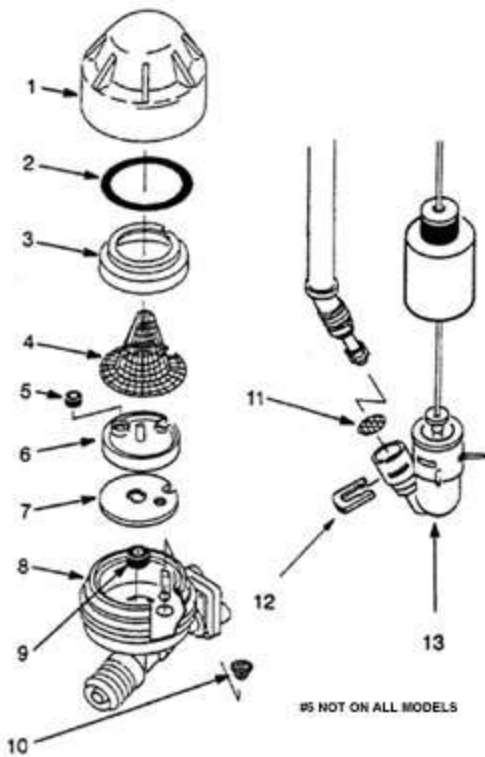
Procedure for removing error code from faceplate:

- *Unplug transformer*
- *Correct defect*
- *Plug in transformer.*
- *Wait for 6 minutes.*

The error code will return if the defect was not corrected. Press and hold the VAC/RCHG button for 3 seconds as an alternative way to clear an error code.

Brine tank full of water, No soft water or Not using salt.

Solution: Disassemble and clean the nozzle and venturi:



Clean all parts using a soft tooth brush, mild soap and warm water. Use resin bed cleaner if parts are iron coated. Rinse with clean fresh water. Do not use any sharp or hard objects to clean bottom of item #6. Remove parts 1-7, 9 and 10. Set parts aside and clean. Reinstall cap (#1) and o-ring (#2).

Lift the brine valve assembly (#13) from the brinewell. Remove the plastic clip (#12) and pull the assembly apart.

Use the SELECT or TOUCH HOLD button to enter the unit into a manual regeneration and advance the valve to the fill position.

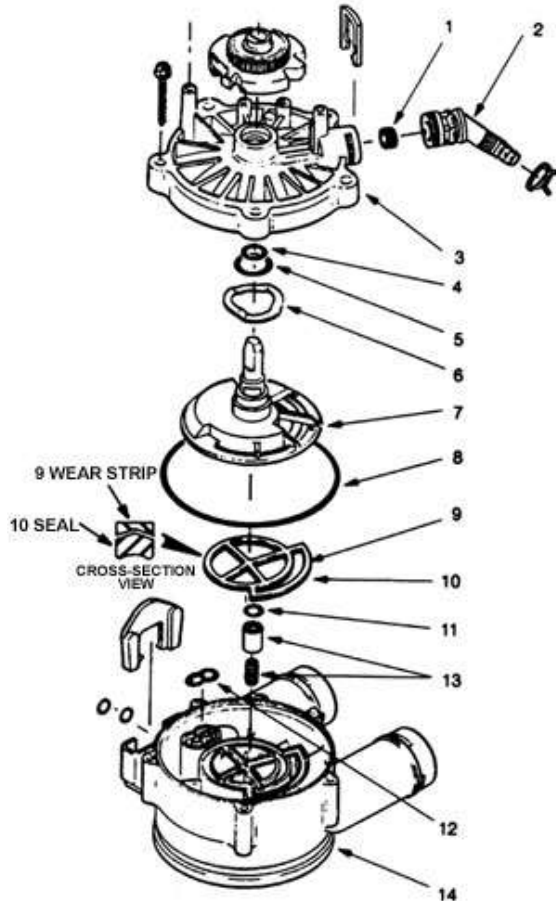
As the valve advances into FILL, there will be a flow of water from the tubing. Use this to wash down the brine valve assembly of any excess salt. Also wash down the brine well of excess salt. Move the bypass valve into BYPASS to shut off the flow of water to the valve. Use the toothbrush to thoroughly clean the nozzle and venturi (#6), flow plugs (#5 and #9) and screens (#4, #10 and #11). Carefully clean the flow plug center hole with a small wire.

Reassemble all parts in the nozzle venturi. BE SURE #8 is installed correctly, numbers up on the flow plugs (#5 and #9). Advance the valve into the BRINE position. Place the bypass valve into service and check for suction on the tubing that connects to the brine valve assembly. If not, recheck the assembly of the nozzle venturi. If suction is now working, reinstall the brine valve assembly and finish the regeneration.

VALVE NOT WORKING

- Water running to drain
- Brine tank overflowing
- Motor stalled
- Water leaking from valve

Solution: Before you start to service a valve, make sure it is in the service position. Place bypass valve in bypass to shut off water. Loosen 3 of 5 hex screws at top back of valve. This will relieve pressure in the softener.



If water is running to drain in service, if brine tank is overflowing, or the motor is not turning the valve (valve stuck):

1. Remove the 5 hex screws from the top of the valve and carefully remove the cover. Replace the seal kit parts #9 through #12. Be sure wear strip (#9) is placed on top of rubber seal (#10). Inspect the rotor for wear, scratches or cracks, and replace if needed. Check all o-rings for wear, cuts, flat spots, proper positioning, etc., and replace as needed. Install the valve cover and 5 screws. Turn the water on and check to see if failure is corrected.

If water is leaking from the top of the valve, or between #3 and #14, replace o-rings 4, 5 and 8. Turn water on and check again for leaks.

If the brine tank is overflowing, with little or no water flow from the valve drain hose during regeneration, check flow plug #1, drain elbow #2, and the valve drain hose for obstruction.

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