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# Home Maintenance Guide

*Preserving Your Home Inside and Out*



# HOMEOWNER MAINTENANCE CHECKLIST

APPLIANCE/SYSTEM	MODEL	SERIAL NUMBER	LAST CHECKUP
Heating System			
Air Conditioning System			
Garage Door Opener			
Electrical System			
Plumbing System			
Water Heater			
Garbage Disposal			
Dishwasher			
Refrigerator			
Range / Oven			
Main Sewer Line			
Microwave			
Trash Compactor			
Washer			
Dryer			
Hot Tub			
Spa			
Pool			
Septic			
Well			

# Avoid Those Nagging Problems!

As a valued client you may call us at any time, day or night, **(800) 775-4736** if something goes wrong with any of your home's major systems or appliances that are eligible for coverage. After we receive your call a qualified contractor will contact you to schedule an appointment.

The following **Tips** may help you avoid any system or appliance "downtime" as a result of a common problem in your home, and may help you **SAVE** the cost of a potential Service Call!

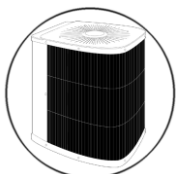
- Heating System
- Air Conditioning System
- Electrical System
- Plumbing System
- Faucets
- Water Heater
- Garbage Disposal
- Dishwasher
- Refrigerator
- Oven/Range/Stovetop
- Microwave Oven
- Trash Compactor
- Washer/Dryer
- Pool and Spa
- Septic System
- Well

## HEATING SYSTEM



- Check filters every month.
- Have your mechanical system annually serviced and your ductwork cleaned before each heating season.
- Blower units making excessive noise should be brought to the attention of a licensed technician.
- Clean and dust the radiators and heating vents and inspect the radiators for any signs of leakage.
- Bleed air from your radiators on an annual basis.
- Check the exhaust pipe on your gas furnace for any loose connections.
- Call the gas company immediately if you detect a gas smell.
- Check filters every month and replace as necessary.
- Keep your outdoor condensing unit clean and free of debris.
- Have your system annually serviced before each air conditioning season.

## AIR CONDITIONING SYSTEM



- Check filters every month and replace as necessary.
- Keep your outdoor condensing unit clean and free of debris.
- Have your system annually serviced before each air conditioning season.

## ELECTRICAL SYSTEM



- To prevent loss of power, do not overload any one circuit in your home.

## PLUMBING SYSTEM



- Do not flush any paper products down a toilet other than toilet paper.
- A simple plunger may solve many of your clogging problems.
- Check any of your exposed plumbing lines for corrosion or leaks.
- In the event you are experiencing extremely cold weather, allowing a faucet to drip slowly will help avoid a freezing water line.
- Check the water heater for signs of leaking or corrosion.
- Inspect the bottom of your water heater, drain pan or floor for signs of rust or water staining.
- Drain and flush your water heater every year by attaching a common garden hose to the drain valve at the bottom of the heater.
- Remove the heating elements from your electric water heater and soak in vinegar to remove any corrosion or sediment build up.

## FAUCETS



- A dripping faucet may be repaired by simply replacing an o-ring or vinyl gasket.
- Clean and remove any hard water or mineral deposits with vinegar to avoid a slow water flow.

## GARBAGE DISPOSAL



- Remember to always run the water while you are using the disposal.
- To avoid stoppages, continue to run the water for at least two minutes after you turn the disposal off.
- Using the disposal with a tray of ice cubes, pieces of lemon or lime, and baking soda will help keep your disposal clean and smelling fresh.
- If you drop a piece of silverware in your disposal, turn the power off immediately before you attempt to remove it.
- If the disposal should become jammed, use a disposal wrench which should attach at the bottom of the disposal. Turn the wrench counter clockwise until it turns easily. Press the red reset button on your disposal and the disposal should operate properly.

## DISHWASHER



- Use vinegar to remove mineral deposits from the heating element.
- Keep the spray arm clean and free of any soap build up.
- When loading, be sure the dishes do not interfere with the movement of the spray arm.
- Periodically use a rinse agent to minimize soap film.
- Using a granular soap rather than a liquid soap will help reduce the suds in the dishwasher. Too many suds may cause water to drip from the door.
- Check for any signs of leaks or water stains on the floor.

## REFRIGERATOR



- Use a vacuum cleaner to clean behind and underneath the refrigerator at least once a year.
- Clean and dust the sides and top of your refrigerator also.
- Check and clean the interior shelves, lining and door gasket every three months.
- Help keep the inside of the refrigerator smelling clean by keeping a cup of baking soda in the refrigerator at all times. A slice of lemon or lime will also work.

## OVEN/RANGE/STOVETOP



- Avoid using heavy or extra-large cooking pots or pans.
- Keep the inside of your oven clean by **only** using the self-cleaning function if available.
- Use a vacuum cleaner to clean behind and underneath the stove at least once a year.
- Keep the stovetop clean and free of spilled food or grease build-up around the burners.

## MICROWAVE OVEN



- Do not use any container or dishes that are metal or have any kind of metal trim or edging.
- Clean the interior with a diluted soap solution or baking soda. An abrasive cleaner may damage the lining and expose metal causing the unit to fail.

## TRASH COMPACTOR



- Help prevent odors by replacing the deodorant supply regularly based on the amount of usage.
- Before running, make sure the bag is properly positioned and secured.

## WASHER/DRYER



- Assure that the washing machine “legs” are adjusted for a level installation by turning the “legs” counterclockwise to raise and clockwise to lower.
- Make sure the water level of each wash load is appropriate for the volume of clothes. Do not overload the machine.
- Remove and clean the lint screen after each drying cycle has been completed.
- Use a vacuum cleaner to clean behind and underneath both the washer and dryer at least once every three months.

## POOL AND SPA



- Maintain a proper water level as recommended by the manufacturer.
- Keep the water chemically balanced by regular testing throughout the season.
- Have your pool and spa regularly maintained and serviced by a local pool and spa company.

## SEPTIC SYSTEM



- Inspect and pump the septic tank every three to five years to help prevent costly repairs to the leach field.
- Do not dispose of non-decomposable materials through your home's sewer system. Examples of items that should not be put down the drain are: cooking fats and oils, disposable diapers, facial tissue, coffee grounds or cigarette butts.
- Make sure you do not overload your washing machine with detergent. Too many soap suds may cause problems with your septic system by killing the valuable bacterial essential for a properly functioning system.

## WELL



- Determine the age of the well and what state agency is responsible for issuing well permits. If a permit was issued when your well was originally drilled you will be able to verify any restrictions that may exist for use of your well. Some wells are only approved for water use inside the home, others allow for outdoor watering of gardens or for supplying water to livestock.
- Determine the flow rate of the well, that is, how many gallons per minute will the well produce and for how long will the well produce this amount of water. A residential well should produce at least seven gallons of water per minute for more than one hour. A licensed well pump installer can provide you with this information if necessary. If the well does not produce enough water, a holding tank must be used to compensate for the low flow rate of the well.
- What is the water quality from the well? Check with your state or county health department to determine where a water sample can be tested for quality.
- Ask neighboring property owners if they've had any well problems and find out how deep the neighbor's wells are drilled compared to the depth of the well on the property you are considering purchasing.

# Troubleshooting Guide

## HEATING SYSTEM

<b>The Problem</b>	<b>Possible Cause</b>	<b>Possible Solution</b>
No heat.	No power to the heater. The blower belt is broken.	Check and reset breaker. Replace the belt.
Not enough heat to the rooms.	The filter is dirty. The registers are dirty. A register is closed. Blocked ductwork. Separated ductwork. Duct damper position problem. Blower belt is loose.	Replace the filter. Clean the registers. Check and open all registers. Check and clear ductwork. Repair with duct tape. Adjust room dampers. Tighten blower belt.
Soot in the house.	The filter is dirty. The ducts are dirty. Heat exchanger may be cracked or damaged.	Replace the filter. Have the ducts professionally cleaned. Call a qualified contractor.
Heating unit is making an unusual noise.	A pulley may be loose. Blower motor belt may be worn out. Blower motor bearings are dry.	Check and tighten all pulley screws. Replace the belt and adjust the belt tension. Oil the bearings.

## AIR CONDITIONING SYSTEM

<b>The Problem</b>	<b>Possible Cause</b>	<b>Possible Solution</b>
The unit has stopped operating.	There is no power to the unit.	Check and reset breaker.
The air doesn't get cool enough.	The condenser coil is dirty.  The insulation has fallen off the feed lines. There is direct sun on the evaporator unit.	Clean the condenser unit so air can freely circulate around the coil fins. Replace the insulation.  Create shade for the unit.
The unit cycles on and off.	The filter is clogged or dirty.	Clean or replace the filter.
Water is leaking into the walls or ceiling.	The drain hose from the condenser pan is clogged.	Clear the hose so the water is able to flow freely.

## ELECTRICAL SYSTEM

<b>The Problem</b>	<b>Possible Cause</b>	<b>Possible Solution</b>
The lights do not work properly.	There is no power to the lights.	Check the circuit breakers to be sure they are set properly.
The outlets do not work properly.	There is no power to the outlets.  Too many appliances are plugged in and using electricity at the same time.	Check the circuit breakers to be sure they are set properly. Reset the GFI outlet if applicable. Unplug all appliances and reset the breaker.

## PLUMBING PIPES, FAUCETS and FIXTURES

<b>The Problem</b>	<b>Possible Cause</b>	<b>Possible Solution</b>
A faucet outlet has a deteriorated finish or is broken.	Chemical or mineral deposits have caused damage.	Remove and replace the outlet aerator.
The sink drains slowly.	A blockage of hair, soap scum or grease exists.	Use a drain maintenance product available at your hardware or larger grocery store.
Water does not run freely from a showerhead or faucet.	Chemical or mineral deposits have caused a restriction.	Clean the showerhead or faucet with vinegar.

## WATER HEATER (ELECTRIC)

<b>The Problem</b>	<b>Possible Cause</b>	<b>Possible Solution</b>
There is no hot water.	No power to the heater.  Defective or failed thermostats. Defective or failed heating elements. Sediment build up in the tank.	Be sure the unit is plugged in and then check and reset the circuit breaker. Test and replace thermostats. Test and replace heating elements. Drain and flush the tank.
There is not enough hot water.	The tank is too small. Defective heating element. Thermostats are defective or require adjustment. Insufficient insulation around thermostats. Hot water faucets are leaking.	Install a larger capacity tank. Test and replace heating element. Test and replace or adjust thermostats. Pack insulation around thermostats. Repair leaking faucets.
The water is too hot.	The thermostat is set too high. The heating elements are defective. Thermostats are defective.	Turn down the thermostat. Test and replace heating elements. Test and replace the thermostats.
The water heater is leaking.	The seal on the heating element is defective. The safety valve is defective. The tank has a cracked liner or has rusted through. A plumbing line or connection has failed.	Check and replace the seal.  Check and replace the safety valve. Replace the water heater.  Call a qualified plumber.
The heater is noisy.	Rust, scale or sediment have developed in the tank or heating elements.	Drain and flush the tank to remove the sediment. Remove and clean the heating elements with vinegar.



## WATER HEATER (GAS)

<b>The Problem</b>	<b>Possible Cause</b>	<b>Possible Solution</b>
There is no hot water.	The pilot light is out.  The pilot light will not stay on.  The burner assembly is clogged. Defective thermocouple. No gas is reaching the burner.	Follow instructions to relight the pilot light. Make sure the gas valves are on and the thermocouple is near the pilot flame and connected to the gas control Call a qualified contractor. Replace the thermocouple. Call a qualified contractor.
There is not enough hot water.	Thermostats are defective or require adjustment. The tank is too small. The burner is clogged. Hot water faucets are leaking. Un-insulated hot water lines.	Test and replace or adjust thermostats.  Install a larger capacity tank. Call a qualified contractor. Repair leaking faucets. Insulate the hot water pipes.
The water is too hot.	The thermostat is set too high. Thermostats are defective. The exhaust may be blocked.	Turn down the thermostat. Test and replace the thermostats. Check the exhaust vent and clear it of any obstruction.

## GARBAGE DISPOSAL

<b>The Problem</b>	<b>Possible Cause</b>	<b>Possible Solution</b>
The motor will not turn on.	No power to unit.  Defective on/off switch.  The overload switch has tripped.	Make sure the unit is plugged in. Check and reset the circuit breaker. Check the wall switch, repair or replace. Make sure the unit is not jammed and then push the red reset button.
The motor hums but does not grind.	The blades are jammed.	Turn off the power and clear any items that are jamming the blades. Turn the blades manually to be sure they are no longer jammed. Push the reset button.
The disposal is not grinding properly.	There is not enough water.  Improper waste in the disposal.	Run the cold water when using the disposal. Consult the disposal manual for a list of improper waste material.
The disposal leaks.	The sink or drain connection is loose.	Tighten the flanges or replace the gaskets.
The disposal trips a circuit breaker.	Too many appliances are on the same circuit.	The disposal should be on it's own 15amp circuit.
The disposal is making more noise than it should.	A hard object is in the unit.  Disposal mounting screws have become loose.	Inspect and remove any hard objects with pliers or tongs. Tighten the mounting screws where it attaches to the bottom of the sink flange.

# DISHWASHER

The Problem	Possible Cause	Possible Solution
The dishwasher will not turn on.	<p>The door is not closed properly.</p> <p>The unit is not receiving power.</p> <p>The door latch is defective.</p> <p>The control selector is in the wrong position.</p>	<p>Be sure the door is properly closed and latched.</p> <p>Be sure the unit is plugged in properly and reset the breaker.</p> <p>Inspect the door latch, repair or replace as necessary.</p> <p>Adjust the control to the correct “start” positions.</p>
The dishwasher will not fill with water.	<p>The water filter is clogged.</p> <p>The overflow switch is defective.</p> <p>The water valve is not on.</p> <p>The timer has failed.</p>	<p>If equipped, clean the intake water filter.</p> <p>If the switch sticks in the “fill” position the unit will not fill with water. Replace the switch.</p> <p>Make sure the valve in the feed line is on. Track the feed line until you find the valve.</p> <p>Replace the timer.</p>
The dishwasher makes a funny noise.	<p>The spray arm is hitting the dishes.</p> <p>A knocking sound occurs from a defective water intake valve.</p>	<p>Make sure the dishes do not obstruct the dishes.</p> <p>Replace the water intake valve.</p>
The soap dispenser does not open.	<p>Soap build up is interfering with proper operation.</p> <p>The lid may be blocked.</p>	<p>Remove soap build up and clean with vinegar.</p> <p>Make sure the lid is not obstructed.</p>
The dishes are wet.	<p>There may be a problem with the heating element.</p> <p>The timer is defective.</p>	<p>Make sure all the electrical connections around the element are secure and clean the element with vinegar.</p> <p>Replace the timer.</p>
The dishwasher is leaking.	<p>The door seal has failed.</p> <p>The hose clamps are loose.</p> <p>The door hinges have failed.</p> <p>Liquid soap.</p>	<p>Make sure the seal is clean and free of any soap build up or waste. Clean or replace as necessary.</p> <p>Check and tighten clamps.</p> <p>Replace the door hinges to regain a tight fit of the door.</p> <p>Switch to a powder soap.</p>
The dishes are still dirty.	<p>The water is not hot enough.</p> <p>The dishes are not loaded properly.</p> <p>The soap is not effective.</p> <p>Too much food was on the dishes prior to loading.</p>	<p>Run hot water from the faucet and then turn the dishwasher on. If the problem remains, call a qualified contractor.</p> <p>Redistribute the dishes so they face the water spray and not too close together.</p> <p>Replace with new powder soap.</p> <p>Rinse the dishes before loading.</p>
If the water continually runs.	<p>The timer may be defective, the water intake valve has failed or the overflow switch is not functioning properly.</p>	<p>Call a qualified contractor.</p>

## DISHWASHER (Cont'd)

The Problem	Possible Cause	Possible Solution
When the dishwashing cycles are complete there is standing water in the tub.	<p>(One or two cups of water is normal) The drain hose may be kinked or obstructed. The pump is blocked or has failed.</p> <p>The kitchen sink drain may be clogged.</p>	<p>Clear the drain hose and make sure it is not kinked.</p> <p>Make sure the pump drain are is not blocked. Call a qualified contractor as necessary.</p> <p>Both the dishwasher and garbage disposal may use common drain lines with the kitchen sink. Run the cold water and disposal to clear any drain line blockage.</p>

## REFRIGERATOR

The Problem	Possible Cause	Possible Solution
No power to the unit.	The unit is not plugged in or the breaker has tripped.	Make sure the unit is plugged in, use a portable appliance to verify the outlet is working properly. Check and reset the breaker.
The unit has power but it is not cooling properly.	<p>The condenser coils are dirty. The condenser fan is malfunctioning.</p> <p>The thermostat is not set properly. The door gasket is defective.</p> <p>The room temperature is very hot.</p> <p>Heavy frost accumulation.</p>	<p>Clean the coils with a vacuum. Check the fan and repair or replace as necessary.</p> <p>Adjust the thermostat as necessary. Replace the door gasket to eliminate cold air from escaping.</p> <p>The unit may be operating properly, try to cool the room. Defrost the unit more frequently.</p>
The unit makes funny noises.	<p>The unit may not be level. The drain pan is rattling.</p> <p>The fan blades are hitting something.</p>	<p>Level the unit. Make sure the pan is not touching the sides or the compressor.</p> <p>Make sure the fan blades are not bent or obstructed.</p>
The unit ices up and will not defrost.	<p>The drains are clogged. Food is uncovered. The door gasket leaks or is damaged. The drain hose is damaged or cracked.</p>	<p>Clear the drains. Cover and seal food in a container. Replace the door gasket. Replace the drain hose.</p>
The refrigerator leaks water.	The drain line is clogged or the drain pan is full.	Clear the drain line and empty the drain pan.
The refrigerator has a bad odor.	<p>The drain pan is dirty. There is spoiled food in the unit.</p>	<p>Clean and sanitize the drain pan. Remove any spoiled food, keep an open container of baking soda in the unit until the odor is gone.</p>

## OVEN/RANGE/COOKTOP (ELECTRIC)

<b>The Problem</b>	<b>Possible Cause</b>	<b>Possible Solution</b>
The range will not turn on.	The unit has no power.	Make sure the unit is plugged in, check and reset the breaker.
One of the burners does not turn on.	The element is not properly “plugged in”.  The burner is defective.  The burner wiring, terminal block or switch is defective.	Remove the burner and replace to a fully secured position, ensuring it is properly “plugged in”. Remove the burner and plug it in to another burner position. If it still does not work replace the burner. Test each part and replace as necessary.
The oven timer is not working properly.	The timer fuse is blown. There is a loose connection.  The timer is bad.	Replace the fuse. Turn off the power and tighten all connections. Replace the timer.
The oven overheats.	An oven vent is clogged.	Clear the clog and replace the filter as necessary.
The oven does not maintain the set temperature.	The door gasket is damaged and leaks. The calibration of the thermostat is not correct.	Replace the door gasket. Contact the manufacturer for re-calibration instructions.
The oven light does not work.	The bulb is burnt out. The light switch or socket wiring are defective .	Replace the bulb. Test the switch and wiring and replace as necessary.
A feature on the control panel does not work.	A fuse has blown.	Check accessory circuit fuse.
The self-cleaning function of the oven is not working.	The oven door is not locked.	Shut and lock the oven door and re-start the self-clean cycle.

## OVEN/RANGE/COOKTOP (GAS)

<b>The Problem</b>	<b>Possible Cause</b>	<b>Possible Solution</b>
No ignition to the oven or burners.	The pilot light is out. Gas is not turned on.  The burner cap may not be set properly.	Relight the pilot. Make sure the gas valve is turned on, consult the gas company if necessary. Make sure the cap matches the burner size and is seated properly.
The burner will not stay on.	The pilot port is clogged. The pilot is getting blown out.	Turn off the gas and clear the port. Avoid drafts near the range.
The burner flame is not steady.	The burner may be clogged. The gas mixture is incorrect.	Clean the burner surface and port. Call the local gas company.
The oven does not bake evenly.	Circulation in the oven is not proper.  The exhaust vent may be clogged.  The oven was not pre-heated. The door seal leaks.	If you cover a shelf with aluminum foil make sure you have at least 2 inches of clearance on the sides and back. Clear the vent and replace the filter as necessary. Pre-heat the oven before baking. Replace the door seal.
There is a gas odor coming from the unit.	The pilot light has gone out.  The gas line is leaking.	Open any windows and doors to create good ventilation and relight the pilot. Call the gas company immediately.

## MICROWAVE OVEN

<b>The Problem</b>	<b>Possible Cause</b>	<b>Possible Solution</b>
The unit will not turn on.	No power to the unit.	Make sure the unit is plugged in, check and reset the breaker.
The touch pad is not working.	The clock is not set. A programming sequence was entered improperly.	Reset the clock. Press "Clear" on the touchpad and re-program.
There is a popping noise coming from inside the unit.	There is metal or metallic trim on an item in the unit. The unit was turned on with nothing in the unit.	Remove metal or metal trimmed items from inside the unit. Make sure you always have an item in the unit when you turn it on.

## TRASH COMPACTOR

<b>The Problem</b>	<b>Possible Cause</b>	<b>Possible Solution</b>
The unit will not turn on.	No power to the unit.  The safety lock is not on. The drawer is open.	Make sure the unit is plugged in, check and reset the breaker. Turn on the safety lock. Make sure the drawer is securely shut.
The trash is not fully compacted.	The pulley or gears or chain drive are loose or broken. The ram has jammed.	Check and tighten or replace as necessary. Oil the ram and replace the screws if stripped out.
A breaker trips during the compactor's cycle.	There are too many appliances on one circuit.  There may be a short in the power cord.	Unplug other appliances, check and reset the breaker. The unit may need its own circuit. Make sure the cord, plug and switch are operating properly.
The unit makes loud noises.	The unit needs to be lubricated. Some parts may have come loose. The drive chain is loose.	Oil the unit. Check and tighten all screws and bolts Tighten the drive chain.
The unit has a bad odor.	The deodorant is empty. The deodorant dispenser is clogged.	Replace deodorant. Clear the nozzle with a thin piece of wire or remove and run the nozzle under warm water.

## CLOTHES WASHER

The Problem	Possible Cause	Possible Solution
The unit will not turn on.	<p>The unit is not getting power.</p> <p>Water may not be available to the unit.</p>	<p>Make sure the unit is plugged in, check and reset the breaker.</p> <p>Make sure the hot and cold water valves are open.</p>
The unit will not fill with water.	<p>The water valves are turned off.</p> <p>Water line filters are clogged.</p> <p>There is a kink in a water hose.</p> <p>The button to control water is not activated properly.</p>	<p>Make sure the water valves are turned on.</p> <p>Make sure the hose filters are clear.</p> <p>Check and straighten both water hoses.</p> <p>Push the button to make sure it is activated properly.</p>
The unit fill's with water but it will not run.	<p>The tub may be filled with too much laundry.</p> <p>The timer is defective.</p> <p>The lid is not closed properly.</p> <p>The drive belt may be loose or broken.</p>	<p>Remove some laundry and re-distribute the remaining laundry in the tub. Wait 15 minutes to allow the machine to reset.</p> <p>Replace the timer.</p> <p>Make sure the lid is closed and the safety switch is working.</p> <p>Tighten or replace the drive belt as necessary.</p>
The unit is leaking water.	<p>The hose connections are loose.</p> <p>Possible failed parts: gasket, mixing valve, hoses, overflow switch or sensor.</p>	<p>Check and tighten the hose connections.</p> <p>Check and replace the defective parts as necessary.</p>
The unit vibrates more than it should.	<p>The laundry load is unbalanced.</p> <p>The machine may not be level.</p>	<p>Distribute the clothes evenly.</p> <p>Level the machine by adjusting the legs.</p>
The unit will not drain.	<p>The lid is not closed properly.</p> <p>The drain hose may be kinked.</p> <p>The position of the drain hose may be too high.</p>	<p>Close the lid because the unit spins and drains at the same time.</p> <p>Check and straighten the drain hose.</p> <p>If the drain hose is more than 4 feet above floor level and it cannot be lowered easily, call a qualified contractor.</p>

## CLOTHES DRYER

<b>The Problem</b>	<b>Possible Cause</b>	<b>Possible Solution</b>
The unit will not turn on.	The unit is not getting power.  The door is open. There is a bad switch or timer.	Make sure the unit is plugged in, check and reset the breaker. Close the door. Check and replace as necessary.
The motor runs but the drum does not turn.	The belt drive is loose or broken. The drum is stuck.  The drum support mechanism is broken.	Tighten or replace the belt. Check the drum and remove any obstructions. Check and replace as necessary.
The clothes don't dry.	The lint trap or exhaust vent is clogged. There are too many clothes in the dryer. The door gasket leaks. The heating element may not be operating properly.	Clear the trap or vent.  Remove some clothes.  Check and replace the door gasket. Check the heating element, thermostat and timer and replace as necessary.
The unit will not shut off.	The unit has a bad timer.	Check and replace the timer.

## POOL AND SPA

<b>The Problem</b>	<b>Possible Cause</b>	<b>Possible Solution</b>
The circulating pump will not turn on or is not operating properly.	There is no power to the circulating pump. The water level in the pool or spa may be too low and the pump has lost a prime.	Check and reset the circuit breaker to be sure the pump is receiving power. Raise the water level in the pool or spa and prime the pump by adding a few gallons of water to the pump basket and following instructions in your pump manual.
The heater is not working.	The unit is not receiving gas or power.  The filter is dirty.	Be sure the gas valve is in the correct position, check and reset the circuit breaker. Clean the filter with a backwash process or remove and clean the filter cartridge.
The filter is not operating properly.	The filter is dirty.	Like the heater, the filter will not clean the water properly if it is dirty. A dirty filter causes an increase in pressure and a reduction in the efficiency of the filtration system. Keep the filter clean!

## SEPTIC SYSTEM

The Problem	Possible Cause	Possible Solution
The waste lines in the home are draining slowly or are backing up.	The septic tank is full.	Inspect the septic tank to confirm the tank is full and there are no other blockages in the waste lines. Have the tank pumped. To reduce the number of times the tank will require pumping, maintain the system properly to insure the natural bacterial breakdown of the tank contents. Be aware that most of today's soaps and bleaches will adversely affect the healthy growth of bacteria in the tank.

## WATER WELL SYSTEM

The Problem	Possible Cause	Possible Solution
The well is not producing enough water.	There has been a reduction in the aquifer. Compare the current static water level with the static water level records at the time the well was drilled. A lower level will confirm a depletion in the aquifer. Neighboring well interference.	Reduce water use or drill another well that taps into a different aquifer.  Identify neighboring wells located in the same aquifer. Reduce pumping rates as required.
An unnatural buildup of residue or mineral scale on household plumbing fixtures.	There is a biofilm or mineral buildup in the well casing, well screen or pump intake.	Shock chlorinate the well and water system for the biofilm buildup, usually once or twice a year. Have a drilling contractor clean, scour, and acid treat the well in order to remove the mineral buildup.
Sediment in the water.	Sediment is getting through the perforated casing or screen.	Contact a qualified drilling contractor.