



2001 McAllister Street, San Francisco, California 94118

## PETRINI OWNER MAINTENANCE GUIDE

REVISION V1 May 5, 2025 - D. POLIFKO

Living in a Petrini condo has many advantages over owning a separate house. The bulk of the maintenance and management of our property is done by someone else, leaving you to enjoy the privacy of your unit as well as shared common spaces and amenities.

Petrini has a full-time onsite property manager, 24hr emergency response, evening security, secure entrances and parking as well as a meeting room, gym, package room and insurance. To provide all this each unit contributes with a monthly HOA fee which is based on a unit's square footage and a 1/134<sup>th</sup> share in the common property.

Although there are similarities to apartment living, the main difference is that Petrini owners are solely responsible for maintenance, repairs, and upgrades to the inside of their units. In some cases, Petrini owners may not be aware that some basic maintenance or repairs should be done as the units are relatively new.

However, when maintenance and repairs are postponed or ignored, problems compound and can also affect your neighbors and the common spaces.

To help Petrini owners, the following document contains a series of topics and recommendations for homeowners to consider.

## Questions?

Visit [petriniplace.com](http://petriniplace.com) or contact the property manager [petrinimanager@bwpm.com](mailto:petrinimanager@bwpm.com)

**(415) 445-2132** Bay West Emergency Number

Photos and Data Sheets provided at the end of the Document

# ELECTRICAL

**In-Unit Smoke Detectors / CO Detectors:** All units have either 2 (one bedroom), 3 (two bedrooms) or more (for multi-story units) smoke detectors and typically one plug in CO detector. If you've replaced your detectors then they may detect fire and CO in the same unit. All in-unit detectors are wired together with 120VAC power and each has battery backup. The lifespan of a detector is around 10 years. New detectors have sealed batteries and are disposed of after 10 years of use.

- **Test your detectors once a month (press the test button and listen for the tone) and replace batteries annually (if replaceable). If your detectors are older than 10 years, replace all of them at the same time.**

**Wall Heaters / Thermostats:** If your thermostats have yellowed or the numbers are no longer readable, identical new versions can be purchased and installed by an electrician.

- **Keep combustible objects and furniture away from heater vents. Vacuum the vent grills to remove dust.**

**Bathroom Fans:** Bathroom fans vent into a duct that goes to the roof. If your fan sounds very noisy, an electrician can replace existing components with a quieter motor and fan.

- **Dust the exterior grill of the fans and operate your fan for at least 30 minutes following a shower (Install a timer switch or a humidity sensor switch to ensure sufficient venting). Good venting reduces mold and mildew.**

**Exterior property lights (on your patio that turn on in the evening with the property timer):** If you have a light outside your unit that is not on a switch, please notify the property manager if it does not come on when other property lights come on (bulb replacement or repair is the responsibility of the HOA). If you have a switch for the light, and the light is no longer working, you will have to replace the light bulb with a similar specification (see property manager for more information). In cases where you replace the light bulb and it still doesn't work, contact the property manager to schedule repair of the socket.

- **Replacing a light bulb on your porch light is owner responsibility if it is controlled by a switch**

**Outlets:** If you see any dark scorch marks on your outlets, they should be replaced. If you have GFCI outlets (usually around water areas such as in kitchen and bathrooms) they do fail over time and usually have a lifespan of 15-25 years (test them every few months with the built-in test button – if the outlet no longer works then the outlet must be replaced). If you use an extension cord or outlet strip – do not connect portable heaters to them (portable heaters should be plugged directly into a wall outlet).

- **GFCI outlets don't last forever and should be tested regularly and replaced when no longer working**

**Property Fobs, Keys and Garage Gate Openers:** All units were originally given a set of fobs, master door keys and garage door openers. If you require replacement of any item, please see the Property Manager who will tell you the cost of each device. Garage door openers (clickers) have a battery inside that will need replacing occasionally. If you see a red light when you press the button but nothing happens, you may need to replace a worn opener. All fobs are registered to the unit. If you lose a fob, please see the Property Manager so that they can disable it. Your master door key will open all gates, stairwell doors and can open each garage gate (a key switch is located near each door on the wall).

- **Need to replace a master key, fob or a garage opener or card? See the property manager for current prices and replacements.**

# DOORS & WINDOWS

**Front Doors / Door Bells:** All front doors are painted the same color by the HOA. You may place holiday items on them (hooks over the door are preferred – not any tape or hooks on the painted surface. The original lock and door handle must remain, but you may add an electronic deadbolt of your choosing. You may also replace the original doorbell with a video doorbell. Always check with the onsite manager first if you are unsure if your choices or placement are acceptable. You may also have a door mat of your selection. However, no shoes, trash or plants can be kept outside your front door.

- **Original Lockset (deadbolt and handle) must remain – but you can add an electronic deadbolt**
- **You can change your doorbell to a video doorbell**

**Window and Sliding Door tracks and weep holes:** All vinyl tracks for the windows and sliding doors should be kept clean and if needed, lubricated with a very light coating of silicone lubricant spray. Dirt can easily accumulate so clean tracks every 3-6 months. Weep holes are usually on the bottom track, one on each side of the window or door sill. You can keep these clean and open with a pipe cleaner. If they get clogged, water can collect and get inside your unit.

- **Keep Window and Door tracks clean and lubricated and keep weep holes clear**

**Window latches and Patio Door handles:** These are the responsibility of homeowners. Keep them clean, lubricated and if they break, please repair them with a Milgard qualified repair person (see property manager).

**Window Balancers:** These counterbalances allow you to open and close your windows with ease. When the balancers fail, it is very difficult to open or close your window. See the property manager to help determine the source of your problem and how it can be resolved.

**Window IGUs (IGU = Integrated Glass Unit: the two panes of glass sandwiched together):** These require no maintenance other than annual exterior cleaning (the HOA does this) and interior cleaning (owners) with a soft cloth and window cleaner. If they fail, they can either crack (visible cracks in the glass) or the sealed sandwich fails and allows air to get in causing the window to look foggy. See the property manager to help determine who is responsible for replacement (in some cases, original owners use their Milgard warranty – in other cases, the HOA pays for replacements).

- **Window evaluation and repair cycles happen roughly 3 times per year.**

**Window Screens:** Window screens are the responsibility of the owner. You can reuse the existing frame and simply remove the old screen material and replace it with a material of your choice (plastic or aluminum mesh). Mesh replacement requires no special skills and only a few inexpensive tools and materials. Watch YouTube videos to see how to do it at minimal cost. Window screens can be removed and sprayed clean in your shower. You can purchase full replacement screens (frame and mesh) if yours are damaged or missing.

- **Window screens should always be removed before annual property window cleaning.**

# PARKING

**Parking Space:** A reminder to keep your parking space clean and only keep items that are allowed (see website for current Rules and Regulations). No items that could be food or bedding for rodents should be kept in parking spaces. Park between the lines and be courteous to your neighbors. For those with a handicap placard you may request a space swap for one of the 6 existing handicap spaces. Front Entry Parking is limited to 15 minutes. Contractors and delivery trucks must park on the street.

# SPRINKLER HEADS

**Sprinkler Heads:** Each room, hallway and closet in your unit has one or more sprinkler heads. Petrini regularly inspects each sprinkler head inside units and throughout the property. Please cooperate and be available during inspections.

- **NEVER hang anything from a sprinkler head and NEVER paint them. Be very careful when moving objects around them so you don't hit and damage them (causing water to spray and flood your unit).**

# FIRE SOUNDERS

**RED Fire Sounder (Alarm horn):** Each unit has a red sounder / horn that will make a tremendous noise when triggered by our Fire System. When you hear this, it means that a smoke/fire detector or pull station has been triggered. This triggering of an alarm will cause the entire property to go into alarm (each unit's sounder as well as sounders around the property will make noise). This alerts you to leave your unit and exit to the street and await further instructions. Leaving your unit and exiting to the street will keep everyone safe.

- **NEVER obstruct the sounder or cover it. By law it has to be exposed and meet a minimum sound level in order for the property to pass regular inspection. If you cover it or block it, you will be responsible for restoring it to the original condition.**

# PATIO & BALCONY

**Patio / Balcony Surfaces and Drains:** Patios and Balconies are considered exclusive common use areas. Owners are responsible for keeping the area clean and free of debris to avoid drains clogging. However, if your drain does clog (you will notice during rainy weather that water will not drain and will create a puddle), please notify the Property Manager to have it cleaned immediately. Clogged drains can cause water to get into the unit if not quickly remedied. Do not cover patio drains with furniture or small throw rugs as they must remain clear.

**Patio / Balcony Furniture & Storage:** Please see the current Rules and Regulations or speak with the Property Manager for more information. Note, only small storage items are allowed on the patio / balcony. Ensure that nothing inside them can be used as a food or bedding source for rodents and insects.

**Patio Fences:** All inner courtyard units with a ground level patio must keep all objects off the fences and fence caps (top rail). Do not use nails, screws or staples to attach anything to the wooden fences including decorations, lights, artificial plants, or mesh. Patio fences are common area property and are maintained by the HOA. Anything you attach can cause holes and damage in the wood reducing the effective life of them.

**Patio / Balcony Railings:** Nothing can be attached or leaned against the painted metal railings as scratches in the paint will allow water to rust the metal. Keep objects an inch or more away from railings. Please do not place anything on the top of the stucco balcony walls including plants.

**Bird Abatement:** On several patio walls there are metal spike strips that are attached. Nothing should be placed near or on them and any damage should be reported to property management.

**Pets:** Patios and balconies cannot be used for pets to relieve themselves. Nor should pets be left on patios and balconies unattended. No food or water for birds shall be placed outside on them as well as it is counter to the bird abatement techniques we've employed.

# APPLIANCES

**Laundry – Dryer:** Clean out lint filter after each use. Occasionally wash it with soapy water to remove dryer sheet build up which can clog the mesh. You can also vacuum inside the slot where the lint trap rests. During our annual dryer vent cleaning, you can pay to have your flex duct (the duct that connects to the back of the dryer and to the wall if you have a venting dryer) cleaned professionally. The HOA cleans the duct from the wall to the roof annually.

**Laundry – Washer:** Some washing machines have a lint trap that should be cleaned regularly. You should also clean the detergent tray (many can be removed, cleaned and reinstalled easily). Washing machine hoses (especially old, inexpensive ones) can burst and should be replaced with new ones typically every 5 years as they can degrade with use. However, you need to have a working water valve (the one attached to the wall) to remove and replace the hoses or even the whole washing machine. If you have an original water valve you should consider having it refurbished (the HOA has the parts you can purchase at cost and plumbers can do the work during a water shutdown) as most no longer work.

**Refrigerators:** Most refrigerators are connected to a water valve on the wall behind the refrigerator. Occasionally that water valve won't fully shut off and will need to be replaced (you will encounter this usually when trying to replace your refrigerator and your installer refuses to do it because the water cannot be disconnected from your old refrigerator). Always monitor your icemaker and water filter as those two components can fail (and cause considerable water damage if not noticed quickly).

**Kitchen Sink Disposal:** Use of a disposal is highly discouraged as the particles generated by grinding food waste can settle in and clog drain pipes. We have green recycling bins for disposal of fruit and vegetable waste.

## TOILETS

**Toilet Leaks, Angle Stops and Supply Line:** Your toilet should be maintained regularly to ensure that there is no waste of water. A leaky flapper valve can waste 50-250 gallons per day. You can use a couple drops of food coloring in the tank (or use commercial toilet leak dye tablets) and see if the bowl changes color after a few minutes without flushing. Likewise, a broken fill valve can leak water. Both should be immediately repaired. \*\*\* However, in order to repair your toilet (without a property wide water shutdown) or even stop the flow of water into the toilet when it clogs and overflows, you need to have a working angle stop (angle stop - the small valve under your toilet on the wall). This valve can stop working properly over the years so if you haven't yet replaced it – consider replacing your toilet angle stops. During the replacement, you should also replace the supply line (supply line is the hose that connects the valve to the bottom of the toilet fill valve).

## DRAINS

**Sink, Tub and Shower Drains:** Use of drain strainer is highly recommended especially for your kitchen sink. No grease should be poured down the drain as it will quickly cool, congeal inside the pipe and block the flow. For your sink and shower drains, it is better to have them snaked or professionally cleaned rather than relying on chemical drain cleaners which can damage or weaken drain pipes. If you do find a sink or shower that is not properly draining and hire professional help, ensure the distance that they snake the pipe to clear a blockage, is indicated on their invoice. If the blockage is within your unit, it is the owner's responsibility. If the blockage is found to be in the common waste lines, then the HOA will be responsible. Property management will determine the appropriate distance and responsibility for your specific unit once you submit the invoice. If no distance is indicated on the invoice, then the owner is responsible.

# SHOWER & TUB

**Shower and Tub Water Temperature:** The original Powers Shower temperature controls do not last forever. You may notice cooler water temperatures and occasionally leaky shower heads even when the water is off. You can have the mixing cartridge replaced during a water shutdown (see the Property Manager for more information – we stock the parts).

**Shower and Tub Caulk and Grout:** The most important thing regarding our original showers and tubs is to keep the caulk (caulk is flexible and is usually between tub and tile or spigots and controls and tile) and grout (hard filler between tiles) clean and in good condition. Old caulk or missing caulk allows water to get behind the wall and causes considerable damage. Mold and mildew also build up on caulk and grout especially when there is poor or no ventilation which causes water leaks. Keep your bathroom fan running at least 30 minutes after each shower.

# FAUCETS

**Faucet Aerators:** Practically all bathroom and kitchen faucets have an aerator (a mesh screen which adds air to the water stream – to save water. However, over time, especially after a water shutdown which dislodges particles in the water pipes, the aerator can become clogged with particles and you will have less water flow. You can simply unscrew the tip of the faucet where the aerator is, remove it, rinse it and you can even soak in distilled vinegar to clean it. Reinstall. Doing this 2-3 times per year will keep the water flowing strong out of each faucet. Note that some kitchen faucets with spray nozzles have the aerators in-line in the hose couplings. See your manual for how to disassemble and clean.

**Faucet Leaking:** If your faucet is starting to leak and drip (into the sink) then the faucet's internal parts are most likely worn (O-rings, washers, valve seats). Many faucets can be refurbished with replacement parts instead of replacing the whole faucet. However, in some cases, especially kitchen faucets, the replacement parts are either too expensive or no longer available, necessitating a whole new faucet. Replacing a faucet requires working angle stops.

**Faucet Supply Lines:** All faucets have a supply line that connects the faucet to the wall's angle stop. In some cases, the supply line is permanently attached to the faucet and is not replaceable. However, the connection end that attaches to the angle stop usually contains a rubber washer that can be replaced since it degrades over time (from chloramine and hot temperatures). A new washer is perhaps all the maintenance you can do on a faucet supply line.

# PESTS

**Silverfish / Bugs:** Silverfish are harmless and can usually be discouraged from taking up residence in your home by 1. Keeping all paper products in sealed containers (toilet paper etc.) and 2. Keeping the area under your sinks and around the toilets dry. These two actions should reduce and will usually eliminate them. If you find any other infestation of bugs or rodents, immediately contact the Property Manager for a pest control visit.

**Rodents:** We have regular visits from pest control professionals to mitigate rodents. Bait boxes are placed throughout the property and checked regularly (the black angled boxes which should typically be up against a wall). Pest spray is also applied regularly. However, if you should find indications of (droppings or chewed items) or an actual rodent (dead, alive), immediately tell property management. Eliminating sources of food and bedding from your parking area and patio/balcony is the easiest step in prevention.

# CONTRACTOR, HANDY PERSON or HOMEOWNER?

## Who should do what work? Licensed Contractor, Professionals, Handy Person, Homeowner:

ALWAYS – submit an Architectural Modification form or check with the Property Manager if unsure about non-cosmetic work. The HOA wants all work inside a unit to be professionally done for the protection of you, your neighbors and our property.

Who should be doing what work?

**LICENSED CONTRACTOR:** Anything that requires a permit, anything that modifies or adds electrical wiring behind the wall, anything that adds a new fixture or hardwired electrical appliance, and all projects exceeding \$1000, require you hire a licensed contractor (see website for more information). Always check the CLSB.CA.GOV site to see if the license is active and that they are bonded and insured. All contractors have to sign a Petrini Job Site Rules document available on our website.

**PROFESSIONALS** (Licensed / Bonded for one specific specialty): For items like appliance installation, carpet installation etc., you can rely on professionals that do specific work based on your purchase. Most of these professionals should supply you (and the HOA) with proof of insurance before they are allowed on the property or in your unit.

**HANDY PERSON:** Anything that is cosmetic (painting, hanging a shelf or blinds) or that does not require a permit can be done by a Handy Person. Note, many do not carry insurance or have any professional qualifications. CA Law dictates that a Handy Person cannot do work inside your home, that totals more than \$1000. They cannot hire other workers (as they do not have workman's compensation insurance). And they cannot ask for more than 10% downpayment. For anything requiring hiring of workers, permits or if the project exceeds \$1000, you must hire a licensed contractor.

**HOMEOWNER:** You should only attempt projects that do not require a licensed contractor. Note that you may void your homeowner's insurance if you do work which results in a fire or flood. Cleaning, minor repairs and maintenance, and testing of sensors and components should be done regularly.

## LEAK PREVENTION & DETECTION

**Water Sensors:** Adding relatively inexpensive sensors which are wirelessly connected to your internet (to deliver alerts to your cell phone) can help detect water leaks 24 hours a day. They are especially recommended for those who travel, but everyone benefits from an early alert. Sensors are placed on the floor next to toilets, washing machines, under sinks and next to dishwashers and refrigerators. Regularly replace their batteries and test them.

**Proper Maintenance:** Proper maintenance of valves, supply lines, toilets and drains is part of being a homeowner. Not all components last forever. Angle stops fail over 10-15 years. Supply lines can rupture after 5-10 years. And toilets need fill valves and flappers replaced every 5-10 years.

### Common Sense:

- Have appliances delivered while the front office is open (in case you have a leak and water needs to be shut off quickly – if on the weekend it may take hours to stop the water) and let the property manager know.
- Either replace or properly test water valves / angle stops **before** you have an appliance delivered. Delivery and installation will not happen if they cannot disconnect the old device if you can't stop the water flow.
- Don't let drips and leaks worsen. A leak indicates a problem that should be immediately fixed.

**Consequences:** A small water leak in your unit can quickly travel from room to room as well as into hallways and to units or the store below. Your water leak can affect multiple units, inconveniencing many and costing you significant money to remediate and restore.

# EMERGENCY

**Share Your Emergency Contact Information to Property Manager:** To ensure that we can contact you in an emergency situation regarding your unit, an adjacent unit or on the property in general, **PLEASE ENSURE THAT THE PROPERTY MANAGER HAS ALL OF YOUR CURRENT INFORMATION:** **Name, Unit, Phone numbers and email addresses for the OWNER and if you have tenants, each of them and a copy of the lease.**

**Emergency Food & Water & Batteries:** It is prudent in California to have emergency supplies in the event of an earthquake or other emergencies. Please have a small stock of shelf-stable food, several gallons of bottled water, flash lights and batteries available in each unit. When power goes out garage doors will be inoperable and you should use the master key to open doors.

# INSURANCE

**Insurance Policy – HO6:** Most all homeowners with a mortgage are required to have CONDO / HOMEOWNERS insurance (also known as an HO6 Policy). This primarily covers the owner for repairs, rebuilding and restoration in various events. It can also cover you if you need to be relocated to a hotel temporarily. If you are renting your unit, you should insist that your renters have renter's insurance.

# OWNER RESOURCES

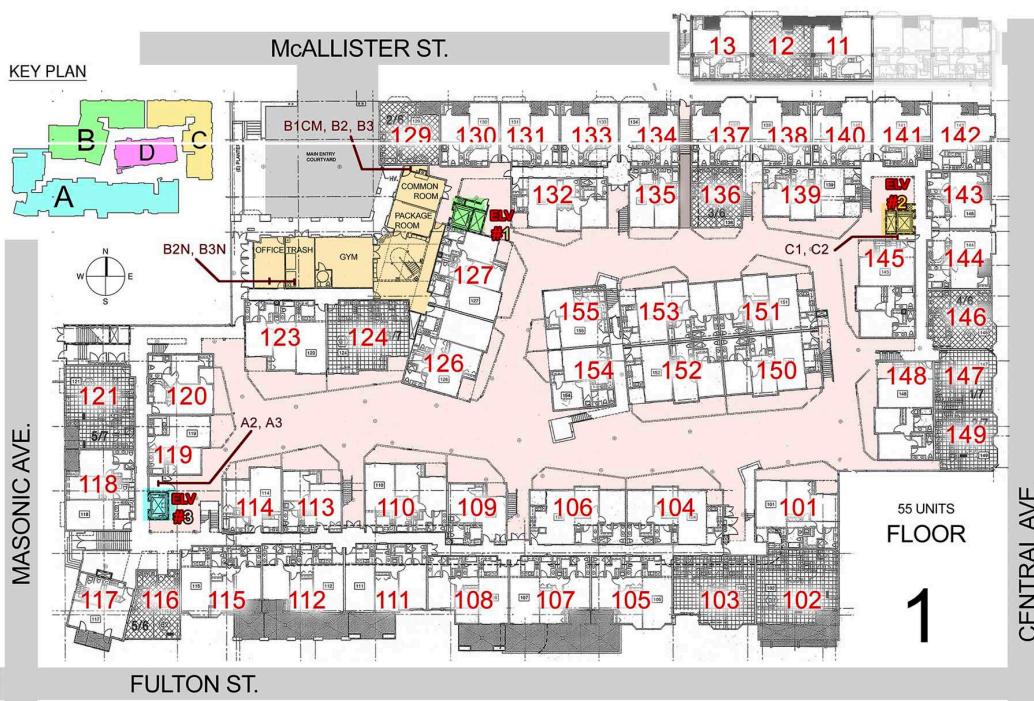
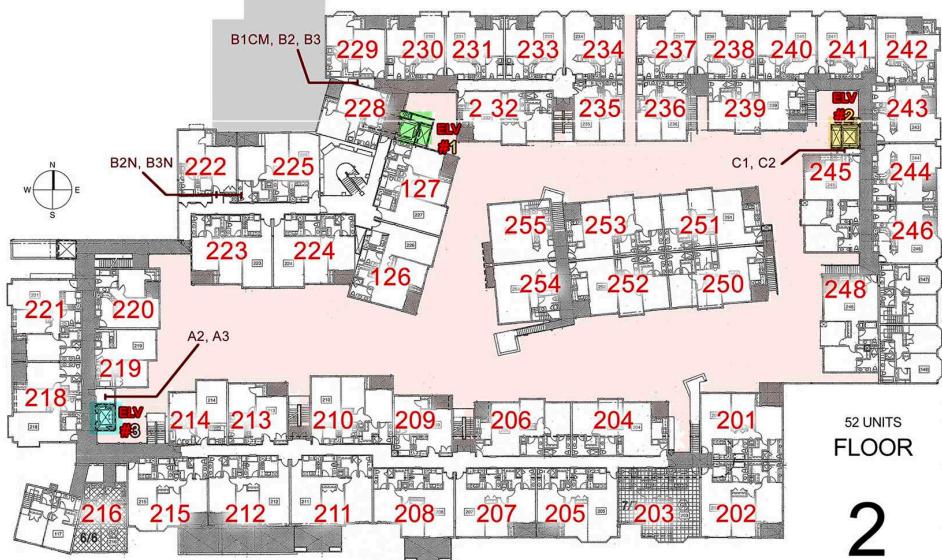
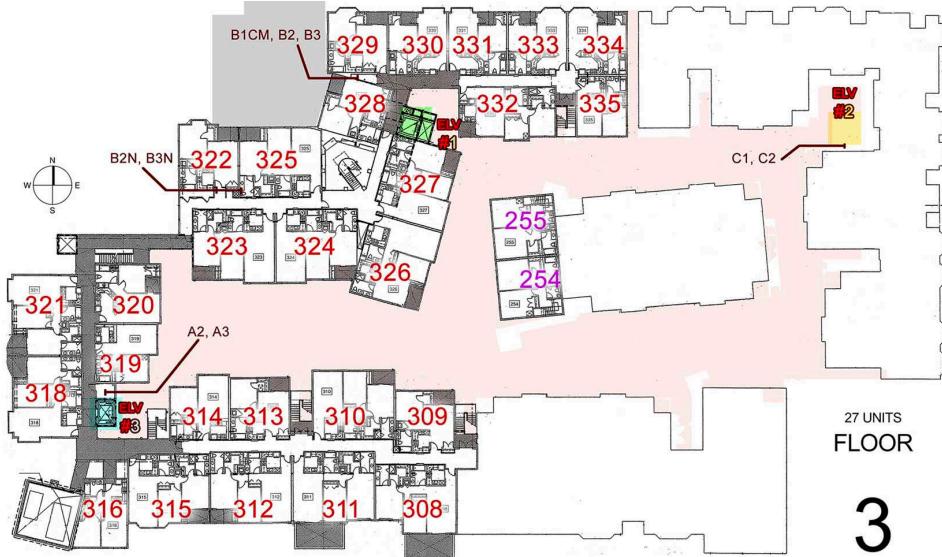
You have access to three valuable sources of information:

1. The HOA BOARD and BOARD PRESIDENT [boardpresident@thevillageatpetriniplace.com](mailto:boardpresident@thevillageatpetriniplace.com)
2. The Property Management company and Onsite Property Manager (Bay West) [petrinimanager@bwpm.com](mailto:petrinimanager@bwpm.com)
3. The Petrini Website, which has documents, contacts and other useful information as well as suggested vendors: <https://thevillageatpetriniplace.com/local-info/>

*If unsure – always ask Property Management for advice.  
It's better to ask first, as even the simplest mistake can be very costly and result in fire or water damage.*



## FLOOR PLANS



# (ORIGINAL) WATER VALVES / ANGLE STOPS

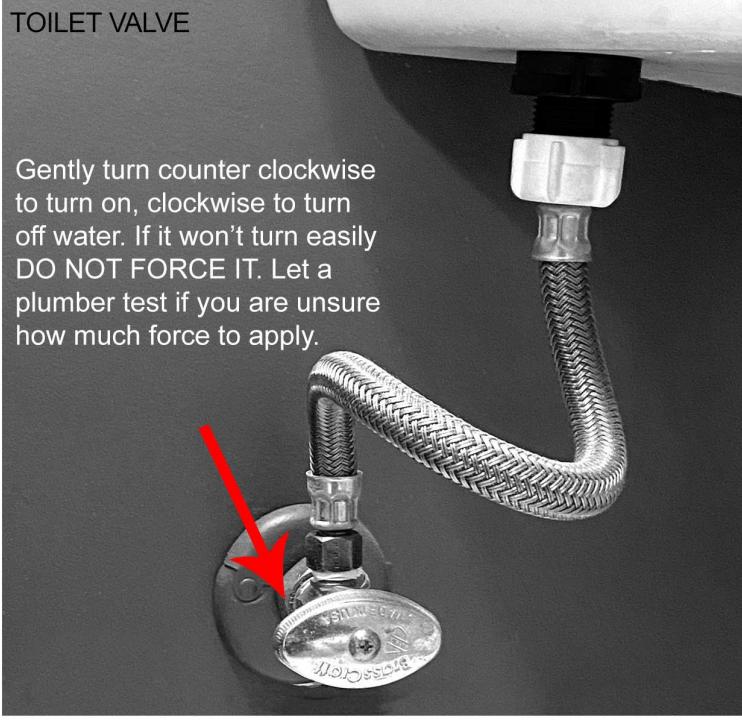
ORIGINAL SHOWER VALVE



WASHING MACHINE VALVE



TOILET VALVE



SINK or DISH WASHER VALVE



# DOORS & WINDOWS FRAMES & WEEP HOLES

Owners are responsible for keeping vinyl window and slider tracks clean and clear of debris. Weep holes at the bottom of each window or slider must also be kept clear and operational. Weep holes allow water that accumulates in the track to drain to the outside.

Clean weep holes and confirm they are not blocked by inserting a pipe cleaner or toothpick, wiggling / turning to remove dirt. A BLOCKED weep hole allows water to accumulate in the bottom track. Filled tracks can allow water to enter your unit during heavy rain.

**SLIDING GLASS DOOR TRACK**  
- WEEP HOLE ON OUTSIDE



**SLIDING GLASS DOOR TRACK**  
- WEEP HOLE LOCATION



**WINDOW**  
- WEEP HOLE ON OUTSIDE

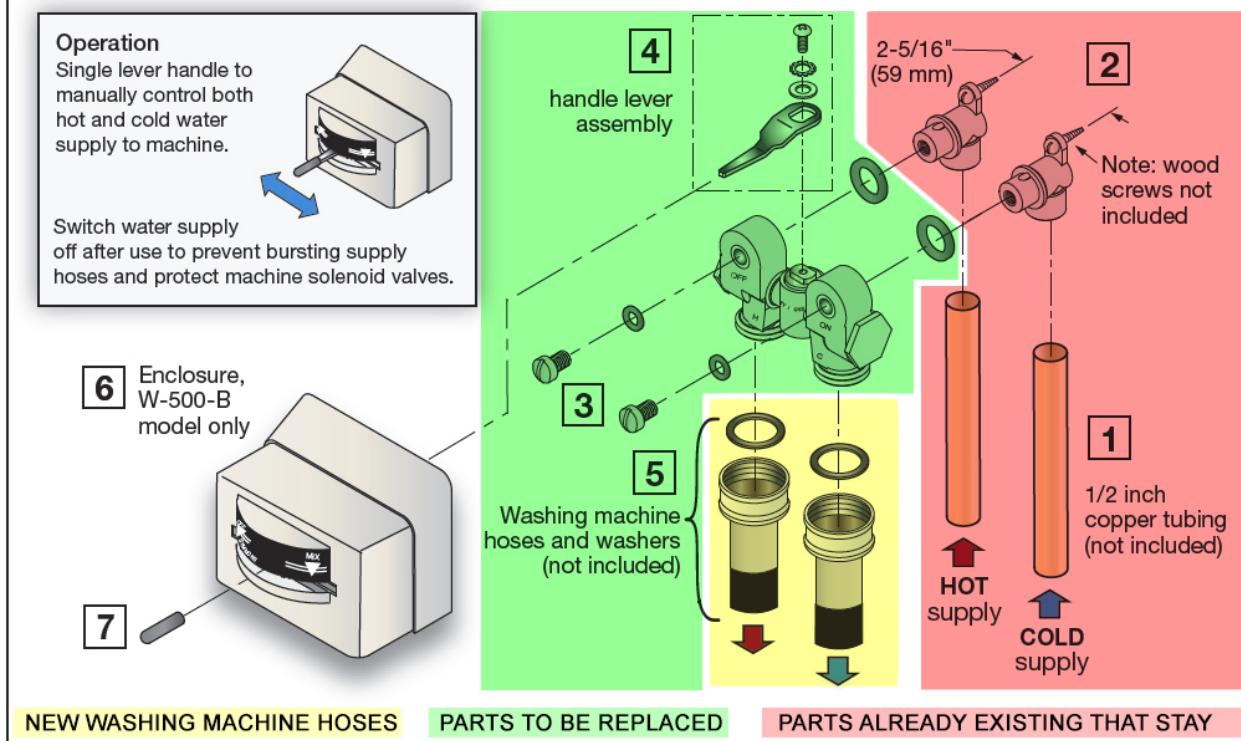


**WINDOW TRACK DRAIN HOLES**  
- THE WATER EXITS TO WEEP HOLES



# (ORIGINAL) WASHING MACHINE VALVE REPAIR

## Installation Laundry-Mate Automatic Washing Machine Valve, W-500-B



- Step 1 Sweat union ells to 1/2 inch copper tubing
- Step 2 Screw union ells to wall
- Step 3 Mount valve to wall
- Step 4 Attach handle lever to valve

- Step 5 Attach water supply hoses from washing machine to valve
- Step 6 Snap enclosure onto valve (model W-500-B only)
- Step 7 Slide handle sleeve over end of lever

## FIRE SOUNDER IN UNIT – DON’T PAINT, COVER or BLOCK

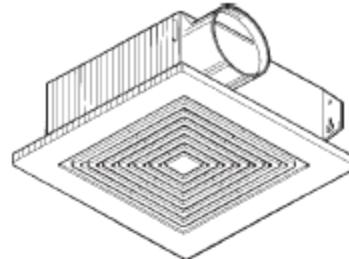


# (ORIGINAL) BATHROOM FANS



## SPECIFICATION SHEET

### MODELS 688 & 689 CEILING/WALL FANS



Versatile, high quality ventilators at economy prices.

#### FEATURES

##### GRILLE:

- White polymeric - blends well with any decor
- Torsion spring grille mounting - no tools required
- Metal grille kit available - purchase separately

##### MOTOR:

- Plug-in, permanently lubricated
- Broan-designed polymeric blower wheel
- Snap in/out motor assembly for easy cleaning - no screws to drive or drop

##### HOUSING:

- Compact, 25 gage galvanized steel - attaches easily to wall or ceiling joists
- Double strength mounting flanges with keyhole slots
- Removable wiring cover - make connections away from tight corners
- No electrical knockout to remove
- Polymeric duct fitting with tapered sleeve for easy, positive duct connection
- Quiet polymeric damper prevents cold backdrafts-no metallic clatter
- U.L. Listed for use over bathtubs and showers when connected to a GFCI protected branch circuit.

#### CONTROLS DESIGNED FOR USE WITH THESE PRODUCTS (purchase separately):

- Model 59V (Ivory)/59W (White) 60-Minute Time Control
- Model 57V (Ivory)/57W (White) Electronic Variable Speed Control - 3 amp
- Model 69V (Ivory)/69W (White) Single-Function Control

MODEL 1667H: Rough-in housing for Models 1688F and 1689F finish assemblies (packed 6 per carton).

MODEL 1667HMTL: Rough-in housing with metal duct connector for Models 1688F and 1689F finish assemblies (packed 6 per carton).

#### SPECIFICATIONS

MODEL	VOLTS	AMPS	SONES	CFM	DUCT
688	120	0.9	4.0	50	3" Round
689	120	1.5	5.5	60	3" Round

Broan-NuTone LLC, 926 West State Street, Hartford, WI 53027 (1-800-637-1453)



HVI-2100 CERTIFIED RATINGS comply with new testing technologies and procedures prescribed by the Home Ventilating Institute, for off-the-shelf products, as they are available to consumers. Product performance is rated at 0.1 in. static pressure, based on tests conducted in AMCA's state-of-the-art test laboratory. Sones are a measure of humanly-perceived loudness, based on laboratory measurements.



REFERENCE	QTY.	REMARKS	Project
			Location
			Architect
			Engineer
			Contractor
			Submitted by _____ Date _____

50H

99041072S

## (ORIGINAL) WALL THERMOSTAT



[www.king-electric.com](http://www.king-electric.com)

# GOOD · LINE VOLTAGE

## **EURO STYLE SINGLE OR DOUBLE POLE LINE VOLTAGE**



K601 T



K602

These good thermostats have a larger, more sensitive, bi-metal sensor that improves temperature accuracy to  $\pm 3^{\circ}\text{F}$ . This feature achieves a better comfort level with a reduced temperature swing as compared to economy models. The rounded corners give a modern appearance while the large knob allows for easy adjustment. The standard color is white. Add (-T) for models that include a room thermometer.

MODEL	UPC #093319 PART #	TYPE	PACKAGE	COLOR	AMPS 120-240	AMPS 277	TEMP. RANGE
K601	19157	Single Pole Euro Style	Box (25 pieces)	White	22	18	45°F - 75°F
K601T	19158	Single Pole Euro Style w/ Thermometer	Box (25 pieces)	White	22	18	45°F - 75°F
K601TR	19162	Single Pole Euro Style w/ Thermometer	Clamshell* (10 pieces)	White	22	18	45°F - 75°F
K602	19159	Double Pole Euro Style	Box (25 pieces)	White	22	18	45°F - 75°F
K602T	19160	Double Pole Euro Style w/ Thermometer	Box (25 pieces)	White	22	18	45°F - 75°F
K602TR	19163	Double Pole Euro Style w/ Thermometer	Clamshell* (10 pieces)	White	22	18	45°F - 75°F

\* a master pack of 4 - 10 packs is available (40 units total)

## SPECIFICATIONS

**Temperature Range:** 45°F to 75°F (7°C to 24°C)

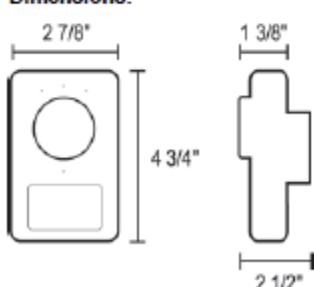
Temperature Default: 55°F  
or 68°F (13°C or 20°C)

Display: 5° increments

Rate: 2 cycles per

**Accuracy:**  $\pm 3^\circ F$   
**Power Source:** 120 VAC,  
208VAC - 240VAC,  
277 VAC  
50 - 60Hz

### Dimensions:



## FEATURES

- Even temperature settings.
- Internal heater simulates room heater warming up space.
- Rounded face gives modern appearance.
- Single or double pole (positive off) available.
- Optional thermometer on cover shows temperature.
- White color with gray print.
- Fully vented cover allows air sensing in all directions.
- Large knob allows easy adjustment to all temperatures.
- 75°F (24C) maximum setting provides compliance with some state energy codes, like California's Title 24.

## TECHNICAL

- 22 Amps at 240V, 5,280 Watts.
- Three wire installation.
- Snap action switch.
- Flexible wire leads.
- 45° to 75°F (7°C to 24°C).
- Large bi-metal sensor.
- 120/208/240/277 Volts.
- New rounded styling.
- (T) - designates thermometer.
- For use on all types of electric heaters, fan-forced, baseboard, radiant etc.

# (ORIGINAL) WALL HEATER



www. king-electric.com

## wall heater

PZ  
SERIES

FAN-FORCED / GOOD



### FEATURES:

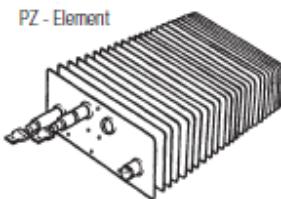
- Smart Limit Protection®
- Steel Fin Element
- C-Frame Motor
- Squirrel Cage Blower
- 20 gauge powder-coated grille with contemporary die-formed round corners
- Standard color: bright white
- Bi-metallic limit on manual reset limit

### OPTIONS:

- 1-Pole or 2-Pole unit-mount thermostat 45°-80°F
- Surface wall box
- Color: almond (-A)

**Used in apartment applications** where a high quality, dependable heater is desired. The wattage is specified on the plans.

This heater has all the qualities of the famous Pic-A-Watt® without the ability to select the wattage upon installation.



**NOTE: Heaters cannot be installed vertically**

### ENGINEERING SPECIFICATIONS:

Contractor shall supply and install PZ Series wall-mounted forced-air electric heaters manufactured by King Electrical Mfg. Company of the wattage and voltage as indicated on the plans.

**Ratings:** Heaters shall be available in wattages of 250 to 2,000, at 120, 208, 240, or 277 Volts.

**Blower and Motor:** A tangential cylindrical blower, delivering 65 CFM, shall be driven by a shaded pole, permanently lubricated, C-frame type motor with impedance protection and sealed bearings. Motors shall be the same voltage as the heater.

**Elements:** Element assemblies shall be non-glowing design. Element assemblies shall consist of steel sheathed heating tubes in a furnace-brazed, plate-finned, block design. Each sheathed tube shall contain a coiled Ni-Chrome wire embedded in an insulator of Magnesium Oxide. The element assembly shall provide the specific wattage indicated on the plans.

**Thermal Overload:** Heaters shall be equipped with thermal overload Smart Limit Protection®, which disconnects elements and motor in the event

normal operating temperatures are exceeded. If thermal overload trips due to abnormal operating temperatures, thermal overload shall remain open until manually reset by turning the heater off for fifteen minutes. Automatic reset of thermal overloads, which allow the element to continue to cycle under abnormal conditions, will not be accepted.

**Wall Can:** The wall can shall be 20 gauge electrogalvanized steel and shall contain a minimum of three (3) knockouts through which power leads are brought. The wall can shall have a depth gauge indicator, and a factory installed, insulated and stranded copper groundwire. Minimum 4" clearance to floors and 6" sidewalls. Zero clearance to combustible material in the wall.

**Grille:** The grille shall be a louvered, one-piece design with rounded edges on all four sides, with rounded corners to prevent snags from contact with other materials. The grille shall be epoxy powder-coated in the color specified on the plans.

**Approvals:** cULus (E41422)



King Electrical Manufacturing Company / 9131 10th Avenue South, Seattle, WA 98108 / phone 206.762.0400 / fax 206.763.7738

# (ORIGINAL) BATHROOM CEILING HEATER TIMER



## FD Series Auto-Off Timers

### FD Series Decorator Series

The FD Series Decorator Auto-Off Timers are designed to replace any standard wall switch - single or multi-gang. This series of energy-efficient mechanical timers do not require electricity to operate. In addition, they automatically limit the ON times for fans, lighting, motors, heaters, and other energy consuming loads.

#### Features

- Hold feature enables user to override the automatic shut-off function
- Supplied time dial plates are designed to fit either toggle (FF) or decorator style (FD) switch plates
- Single or multi-gang with no field modifications required
- Time saving up front terminal connection with teeter-type terminals
- Press-on knob design ensures quick and easy installation
- CFL Compatible

*Not for use with sunlamps, saunas, or loads that could cause personal injury if timed incorrectly.*

#### Ratings

Resistive:	20 Amp, 125 VAC, 50/60 Hz 10 Amp, 250 VAC, 50/60 Hz 10 Amp, 277 VAC, 50/60 Hz
Tungsten:	7 Amp, 125 VAC
Motor:	1 HP, 120 VAC, 50/60 Hz 2 HP, 240 VAC, 50/60 Hz
Operating Temperature:	-40°F to 104°F (-40°C to 40°C)
Style:	Can be used with decorator and toggle type switch plates
Dimensions:	2.79" H x 1.6" W x 1.19" D

Project: \_\_\_\_\_

Location: \_\_\_\_\_

Product Type: \_\_\_\_\_

Contact/Phone: \_\_\_\_\_

Model #: \_\_\_\_\_



Energy Controls

# (ORIGINAL) BATHROOM CEILING HEATER



www.king-electric.com

## ceiling heater

WHFC  
SERIES

FAN-FORCED / 500 or 1500 WATTS



### FEATURES:

- Smart Limit Protection®
- Dual Open-Coil Element
- C-Frame Motor
- Squirrel Cage Blower
- Quieter
- Ceiling mount
- New dual limit
- Dual wattage
- 20 gauge powder-coated grille with contemporary die-formed round corners
- 20 gauge electrogalvanized steel recess can with QuickSet™ stop on side
- Factory installed groundwire approved for direct contact with building insulation
- Standard color: bright white

### OPTIONS:

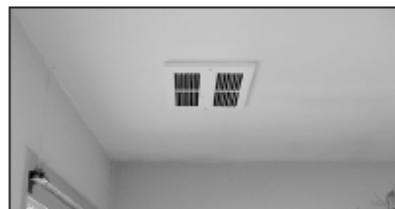
- Surface wall box
- Color: almond (-A)

Grille Dimensions: 13 1/8" L x 1 1/8" W x 10" H  
Rough-In Cut: 12" L x 9" W x 4" H

### MODEL CODE:

WHFC1210  
|  
WHFC      Series  
|  
120      Volts  
|  
1000      Watts

Standard Color: Bright White



### SELECTION:

#### REMOTE THERMOSTAT REQUIRED

WATTAGE	MODEL	UPC #093319 PART #	MODEL	UPC #093319 PART #	WT. (lbs.)
1000 or 500	WHFC1210	12208	WHFC2410	12202	8
1200 or 600	WHFC1212	12532			
1500 or 750	WHFC1215	12210	WHFC2415	12200	

#### OPTIONS

ADD. SUFFIX:	DESCRIPTION	WT. (lbs.)
-A	Almond color	8
-I	Interior and Grille Only (no wall can)	6
-H	Interior Only (no can or grille)	6

### ACCESSORIES:

MODEL	DESCRIPTION	UPC #093319 PART #	WT. (lbs.)
WHIC-C	Universal Recess Can	12650	3.5
WHSC-C	Surface Can - White	12230	4
WHFG	Grille - White	12520	2

### ENGINEERING SPECIFICATIONS:

Contractor shall supply and install WHFC Series ceiling-mounted forced-air electric heaters manufactured by King Electrical Mfg. Company. Heaters shall be of the wattage and voltage as indicated on the plans.

**Ratings:** Heaters shall be available in wattages of 500 to 1,500 at 120, 208, or 240 Volts.

**Blower and Motor:** A tangential cylindrical blower, delivering 65 CFM, shall be driven by a shaded pole, permanently lubricated, C-frame type motor with impedance protection and sealed bearings. Motors shall be the same voltage as the heater. The motor and all wiring shall be totally isolated from the heating chamber for protection from heated air.

**Elements:** Element assemblies shall be constructed of coiled Nickel Chromium alloy, corrosion resistant wire strung through a minimum of four rows of mica insulator. Element assemblies shall have factory provided connection to allow field modification to 50% wattage at time of installation.

**Thermal Overload:** Heaters shall be equipped with thermal overload Smart Limit Protection®, which disconnects elements and motor in the

event normal operating temperatures are exceeded. If thermal overload trips due to abnormal operating temperatures, thermal overload shall remain open until manually reset by turning the heater off for fifteen minutes.

Automatic reset of thermal overloads, which allow the element to continue to cycle under abnormal conditions, will not be accepted.

**Wall Can:** The wall can shall be 22 gauge electrogalvanized steel and shall contain knockouts through which power leads are brought. The wall can shall be provided with a depth gauge, extending the full length of the wall can. The wall can shall be supplied with a factory installed groundwire.

**Grille:** The grille shall be a louvered, one-piece design with rounded edges on all four sides, with rounded corners to prevent snags from contact with other materials. The grille shall be epoxy powder-coated in the color specified by manufacturer.

**Approvals:** cULus (E41422)



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# (ORIGINAL) SHOWER MIXING VALVE

TI900

**POWERS™**

## TECHNICAL INSTRUCTIONS

BILTMORE Series 900

Pressure-Balancing Valves

Model 3

### DESCRIPTION

The BILTMORE is a pressure-balancing mixer which delivers a predetermined mix of hot and cold water by compensating for pressure fluctuations in the hot and cold water supplies.

The BILTMORE features a poppet design valve as part of a replaceable balancing cartridge. The poppet-type construction offers two distinct advantages: It will not stick due to lime build-up or foreign particles in the supply water, and it has a quick reaction time. The adjustable maximum temperature stop prevents overadjustment of the handle.

**Safety feature:** Should either supply fail, the BILTMORE reduces the flow of water to prevent a continued spray of all hot or all cold water.

**Capacity**..... 4.6 gpm @ 45 psi

### SPECIFICATIONS

[15 L/min @ 310 kPa Differential]

**Maximum Static Pressure**..... 125 psig [862 kPa]

**Maximum Inlet Temperature**..... 180°F [82°C]

**Inlet and Outlet Sizes**..... 1/2" sweat or NPT thread

**Rough-in Guide**..... All Models

**Handle Rotation Stop**..... All Models

**Listing**..... ASSE 1016 Type P

**Certified**..... CSA B125

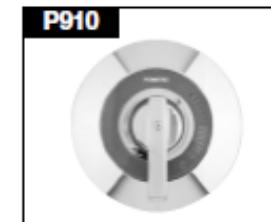
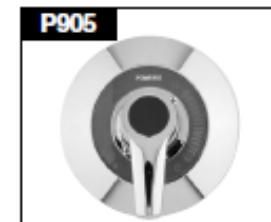
### APPLICATION

The BILTMORE is particularly recommended for shower and shower/tub installations in hotels, motels, high-rise apartments, condominiums, and single-family housing.

### OPERATION (See Figure 1)

Pressure balancing valve (Type P) senses incoming water pressures and compensates for fluctuations in either to stabilize outlet temperature. The entire balancing poppet assembly is contained in a chamber. This chamber is replaceable as a complete cartridge. The hot and cold are mixed by the action of the mixing plate. As the temperature adjustment stem is rotated from shutoff to maximum hot water discharge temperature, the mixing plate passes the required proportion of hot and cold water to produce the desired water temperature. With the adjustment stem in its full clockwise position, shutoff is obtained by closing off both supplies.

The maximum temperature limit stop (located on the bonnet) allows the user to set the desired maximum discharge temperature. This mixer does not compensate for supply water temperature changes, so any variation in the water temperature will affect the control point and the maximum discharge temperature setting.



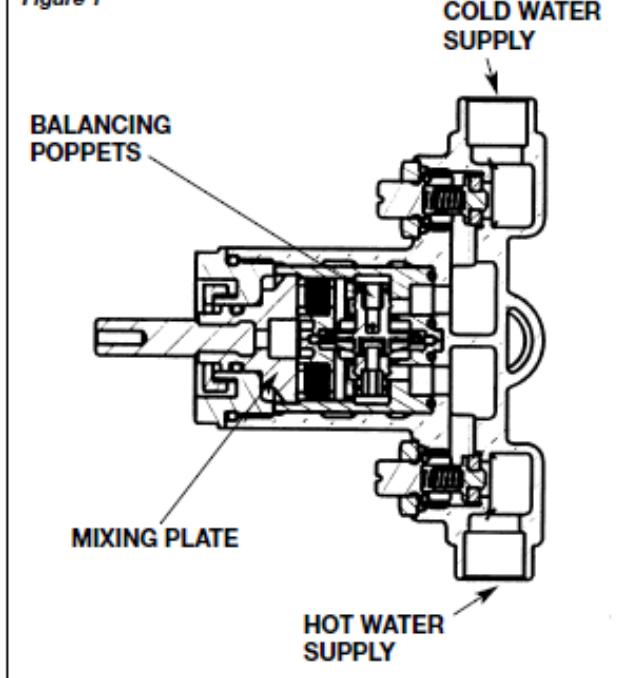
ASSE

CS



**CAUTION:** Maintenance of the unit requires resetting of the maximum temperature adjustment stop. As inlet temperatures vary from site to site and season to season, failure to properly adjust the maximum temperature adjustment stop can result in excessive hot water delivery.

Figure 1



## MAINTENANCE/TROUBLESHOOTING

### What to look for If:

1. The flow of water is less than desired.
  - a. Valves upstream from supply not full open
  - b. Low inlet water supply pressure(s)
  - c. Accumulation of lime deposits in hot water pipes, restricting flow of hot water
  - d. Showerhead clogged
  - e. Checkstops obstructed or jammed
2. The flow of water is completely shut off.
  - a. Valves upstream from supply completely closed
  - b. Failure of hot or cold water supply pressure, the mixer is designed such as to restrict the flow of water on hot or cold water supply failure
  - c. Checkstops are closed
3. The flow is untempered hot or cold water.
  - a. Hot water supply temperature is too low
  - b. Diaphragm is ruptured; replace with new balance chamber
4. The flow of water continues after mixer is shut off.
  - a. Worn shutoff discs; replace shutoff discs
  - b. Foreign particles on mixing plate causing scratches; replace stem and plate
  - c. Bad O-rings on the inlet ports of cartridge; replace.
5. The maximum temperature is low.
  - a. Accumulation of lime deposits in hot water pipes restricting flow of hot water
  - b. Concealed maximum temperature stop is not at desired adjustment point
  - c. Hot water supply temperature is too low
6. The valve opens with hot water flow rather than cold water flow.
  - a. Inlet water supplies are connected to the wrong ports; see instructions below on reversed inlets.

### Cold into hot, hot into cold

If *reversed inlets* are required due to back-to-back instal-

## REVERSED INLETS

lation, close check stops. Remove High Temperature Limit Stop. Unscrew bonnet. Rotate stem 180. The word "TOP" stamped on stem must face down toward tub outlet. Reinstall bonnet. Place High Temperature Limit Stop on bonnet.

**NOTE:** Hot and cold inlets should be re-identified for reversed inlets to avoid confusion during future maintenance.

## SERVICING

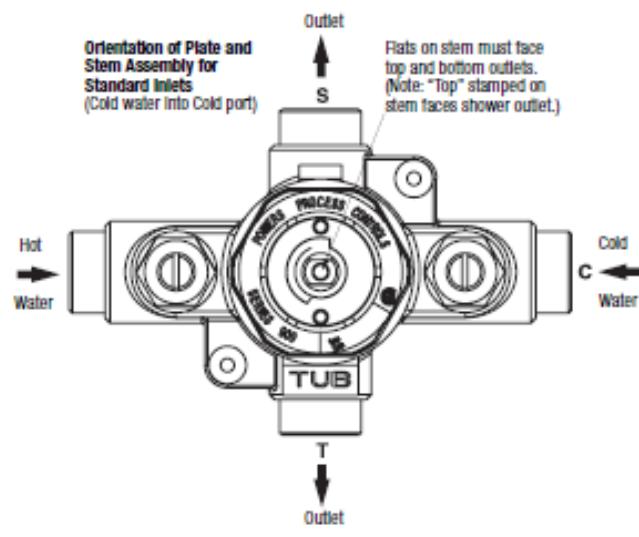
To service mixer, remove handle and dial assembly. Shut off water supply at checkstops. Remove sleeve and O-ring, unscrew bonnet, and remove stem.

To remove balance chamber, use needle-nose pliers. Pull straight out.

Reassemble; Apply silicone grease to stem assembly (15) at O-ring (14) and mixing plate face. Also apply silicone grease to outlet seal (16). Be certain "TOP" stamped on stem is facing up. Screw bonnet onto body; tighten to 75 in.-lbs. Place O-Ring on bonnet. Slide sleeve over O-Ring. Turn on water at checkstops. Replace dial assembly and handle.

To service checkstops, turn off water supplies upstream of mixer. Unscrew checkstop bonnet nut and remove plunger. Replace items as required.

Figure 2



## OWNER NOTES:

Keep track of any work done in your unit – description, contractor, date, cost and note the next maintenance date