



Single-Speed Whirlpool System

Single-Speed whirlpool systems are offered on numerous MAAAX models of various sizes, shapes and surface materials. Depending on the model selected, the unit is equipped with a complete multi-jet factory installed and tested system designed for personal usage in a permanent installation. (Refer to specific model for exact features.)

These guidelines are recommended by Aker Plastics Company Inc. (hereafter "MAAX") for the proper assembly and operation of the whirlpool system. A careful review of these procedures (and any referenced publications) before starting is important in avoiding unnecessary problems resulting in an improper assembly or operation.

NOTE: All drawings in this publication are typical and may appear different than the actual items.

WARNING!
NEVER LIFT OR HANDLE WHIRLPOOL
BY SYSTEM PIPING AT ANY TIME.
LIFTING THE UNIT BY THE PIPING CAN
CAUSE SYSTEM DAMAGE.

Special Notes to Installer

- *It is the sole responsibility of the installer to determine, prior to installation, the requirements necessary for compliance with all codes involving the unit and the installation!
- *All paperwork packaged with the unit and any associated options or accessories should be saved and presented to the homeowner upon completion of the installation!
- *All published unit dimensions are for reference only. **Any critical dimensions required for installation should be taken directly from the unit being installed!**
- *Any independent changes made to the whirlpool system (or unit) beyond those required for normal installation can void all warranties! (Refer to warranties for further information.)

IMPORTANT SAFETY INSTRUCTIONS

WARNING! Basic precautions should always be observed regarding the installation and the operation of a whirlpool system, including the following:

1. READ AND FOLLOW ALL INSTRUCTIONS.

2. DANGER: To reduce the risk of injury, **DO NOT** allow children to use or operate the whirlpool unless closely supervised by an adult at all times.

3. Use this unit only for its intended purpose as described in this publication. **DO NOT** use attachments not recommended by the manufacturer.

4. NEVER drop or insert any object into any opening.

5. DO NOT operate the whirlpool without the guard(s) (suction covers) installed over the suction fitting(s).

6. The whirlpool system can only be connected to an electric supply that is protected by a ground-fault-circuit-interrupter (GFCI). The GFCI should be provided by the installer and tested on a routine basis.

To test the GFCI, push the test button. The GFCI should interrupt power.

Push the reset button. Power should be restored.

If the GFCI fails to operate in this manner, there is a ground current flowing, indicating the possibility of an electric shock. **DO NOT USE THE WHIRLPOOL.** DISCONNECT THE WHIRLPOOL SYSTEM, and have the problem corrected by a qualified service representative before continuing usage.

7. A green colored terminal (or a wire connector marked «G», «GR», «Ground», or «Grounding») is provided inside the terminal compartment of the pump. To reduce the risk of electrical shock, connect this terminal to the grounding terminal in the electrical service supply panel using a continuous green insulated copper wire equivalent in size to the service conductors supplying this equipment, but no smaller than No.12 AWG (3.3 mm).

8. A pressure wire connector on the pump, near the terminal compartment, is provided to permit connection of a No. 8 AWG (8.4 mm²) solid copper bonding conductor between the system and all other electrical equipment and exposed metal in the vicinity, as needed to comply with local requirements.

9. SAVE THESE INSTRUCTIONS

TO BE REMOVED FOR USE BY THE OCCUPANT - RETIRER DE L'UNITÉ AVANT L'UTILISATION - RETIRE DE LA UNIDAD ANTES DE USAR

Inspection Guidelines

A careful check of the whirlpool system should be conducted upon receipt of the unit. The basic whirlpool configuration is shown in Figure 1. A system with an in-line heater is shown in Figure 2.

If the unit has a factory-fitted:

Alternate pump location,

refer to the *Supplemental Assembly* information packaged with the accessory items for additional item checks before continuing. Notify your supplier immediately if any questions or problems are encountered during this process.

**DO NOT INSTALL UNIT WITHOUT
FIRST ADDRESSING QUESTIONS
WHICH ARISE DURING THE
INSPECTION!**

Basic Whirlpool System Check

- ✓ Check clear plastic tubing for attachment on pneumatic switch button body and on control box.
- ✓ Check system to ensure all trim is in place and for finish ordered.

Whirlpool System with Mounted In-Line Heater Check

- ✓ Check for factory installed in-line heater option mounted on pump.

Basic Module Check

An individual check list is included in the installation guidelines packaged with the module. Refer to the listed publication for further information before continuing.

Installation Guidelines

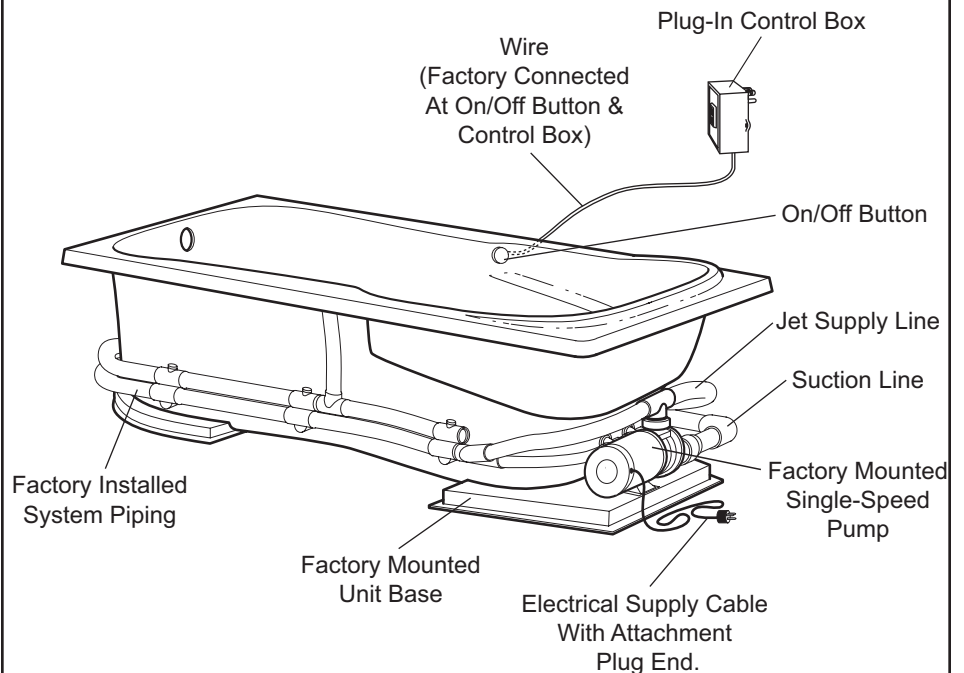
Framing and Installation Requirements

Framing and dimensional requirements for the module are included in the installation guidelines packaged with the basic unit. Refer to the unit installation guidelines for further information before continuing.

WARNING!
ADEQUATE ACCESS MUST BE
PROVIDED AT THE PUMP LOCATION.

The basic single-speed whirlpool system is produced with the pump secured to the unit base and with the complete system assembled at the factory.

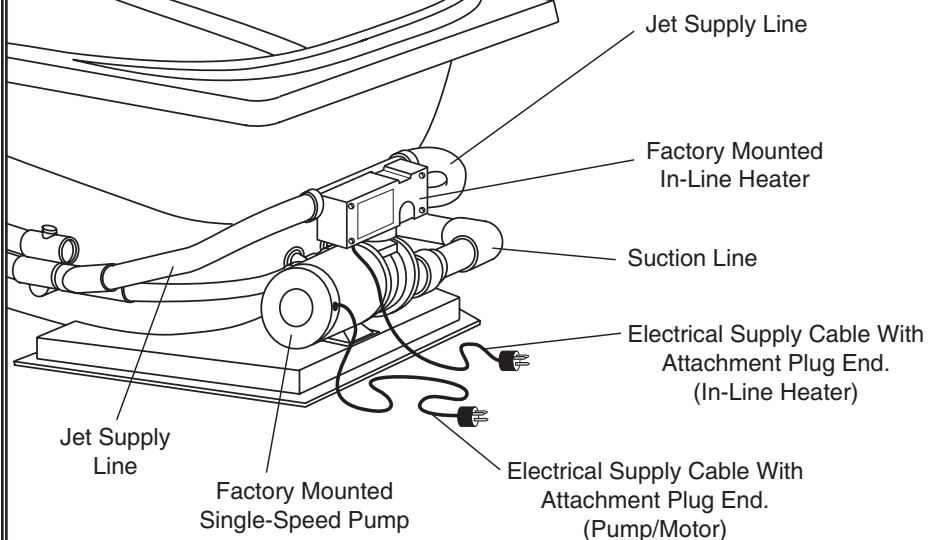
Figure 1 - Basic Whirlpool System
(Typical Tub Illustrated)



If the unit has a factory-fitted:

Alternate pump location,

Figure 2 - Whirlpool System With In-Line Heater (Factory Installed Option)



additional on-site assembly will be required. Refer to the *Supplemental Assembly* information packaged with accessory item(s) before continuing.

Electrical Service and Connections

When providing electrical service, basic precautions should be observed, including the following:

- *All wiring should be done by a licensed electrician in accordance with all applicable local and national codes.
- *The system must be connected to a dedicated circuit(s) protected by a ground-fault-circuit-interrupter(s), (GFCI). (Installer supplied)
- *Properly ground the system.

WARNING!
RISK OF ELECTRICAL SHOCK!
MAKE SURE POWER IS OFF WHEN
WIRING THE WHIRLPOOL SYSTEM.

Single-Speed Pump Wiring

Each whirlpool is supplied with a special system control box. The control box includes an air hose that is secured to the pneumatic button and attached to the control box by the box manufacturer.

A single electrical supply cable with an attachment plug, extending from the wiring compartment on the pump/motor, fitted through a strain relief fitting, is supplied as a standard component of the system. All internal pump/motor wiring connections have been completed by the pump/motor manufacturer. The field electrical connection is a single dedicated service line, protected by a ground-fault-circuit-interrupter (GFCI), running from the main panel to an independently mounted junction box with an appropriate electrical receptacle. Breaker size, junction box mounting, receptacle selection and all field electrical connections must be in compliance with applicable codes for the installation site.

The control box is plugged into the GFCI circuit receptacle and the pump supply cable plugged into the pigtail on the bottom of the control box as shown in Figure 3.

In-Line Heater Wiring

A single electrical supply cable with an attachment plug, extending from the wiring compartment on the in-line heater, is supplied as a standard component of the in-line heater. All internal wiring connections have been completed by the heater manufacturer. The field electrical connection is a single dedicated service line, (independent of the pump/motor circuit), protected by a ground-fault-circuit-interrupter (GFCI), running from the main panel to an independently mounted junction box with an appropriate electrical receptacle for the in-line heater attachment plug. Breaker size, junction box mounting, receptacle selection and all field electrical connections must be in compliance with applicable codes for the installation site. No control box is necessary for the in-line heater system. All controls are housed internally in the heater.

Whirlpool System Field Testing

ATTENTION INSTALLER!
WHIRLPOOL SYSTEM MUST BE
FIELD TESTED FOR LEAKS BEFORE
FRAMING IS COVERED OR THE UNIT
ENCLOSED.

After completing all water supply, drain and electrical connections, use the following procedure to test the system and all fittings for leaks.

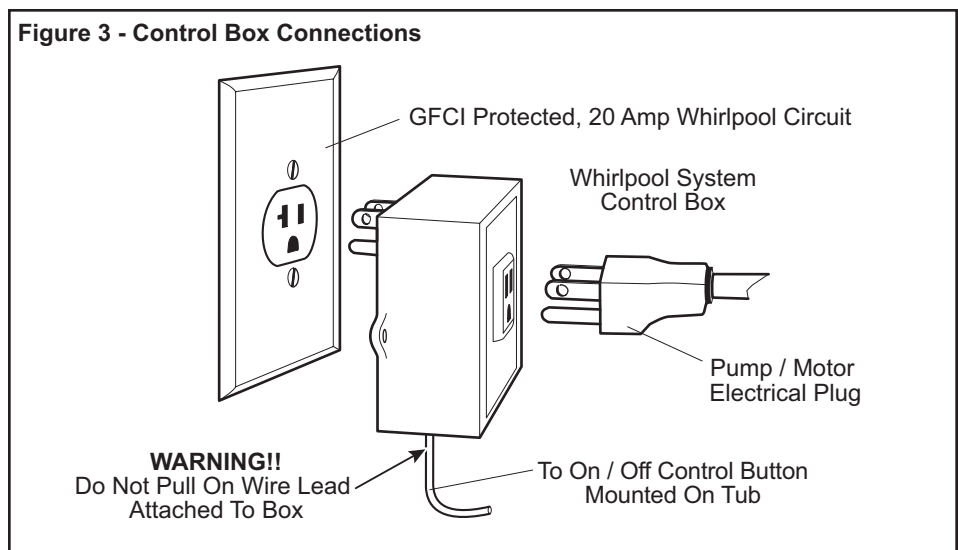
Step 1: Thoroughly clean tub of all debris which could damage the system, including small particles which could lodge in the jets or the pump.

Step 2: Close the drain and fill tub to the top of trim ring on the highest jet.

Step 3: Start whirlpool and operate continuously for 20 minutes. During this cycle, check each jet for proper operation. After careful inspection, fully close all the jets (See Figure 7) and continue running.

Step 4: Upon completion of this cycle, inspect all fittings and connections for leaks before draining.

WARNING!
AVOID OPERATING THE WHIRLPOOL
SYSTEM WITHOUT ADEQUATE WATER
IN THE TUB.



Whirlpool System Care and Cleaning

Through routine use, the whirlpool system can collect residues from soap, bath additives and natural body oils. Additional deposits can also collect from minerals or particles found in the water.

WARNING!
NEVER USE ABRASIVE MATERIALS,
NOR ABRASIVE CLEANERS ON
THE WHIRLPOOL TRIM. (JETS, AIR
CONTROLS AND SUCTION COVERS)

EXTREME CAUTION is urged regarding the use of any cleaner, acid or solvent on the whirlpool system trim.

**Only use MILD liquid detergent on trim!
Incorrect cleaning materials can
damage finish on trim, drain/overflow
and supply valves.**

**READ AND FOLLOW ALL PACKAGE
LABELS AND INSTRUCTIONS!**

The following procedure is recommended to remove most deposits and avoid major accumulations inside the system piping. The actual schedule for cleaning will depend on system usage and water quality, but should not exceed 90 days.

Step 1: Fill tub to the top of the trim ring on the highest jet with lukewarm water. (Figure 4)

Step 2: Add 1 cup low-sudsing, automatic dishwasher detergent and run the whirlpool system for 20 minutes. (1 complete timer cycle)

Step 3: Drain tub, refill with clean water and operate the system for 20-minutes (1 complete timer cycle) to rinse. (Rinse thoroughly)

Occasionally sanitize the system by following the cleaning procedure above, but substitute 1 cup of household bleach for the dishwasher detergent. (Rinse very thoroughly)

Refer to the unit installation for guidelines on unit surface care and cleaning.

Whirlpool System Trouble Shooting

Whirlpool did not start?

- ✓ Check GFCI circuit breaker.
- ✓ Push the pneumatic button to ensure system is turned «ON».
- ✓ Confirm control box and pump/motor are plugged in.
- ✓ Check pneumatic connector line (plastic tube) to ensure it is attached on switch body and pump.
- ✓ Have wiring connections checked. (Call installer or electrician)
- ✓ Thermal Limiter (in pump) may have engaged. (Call installer or supplier)

Pump «Hums», but no water action?

- ✓ Make sure water is to the top of the trim ring on the highest jet.
- ✓ Check highest side jet for blockage.
- ✓ Check suction line connection at pump intake port. (HAND TIGHTEN UNIONS ONLY!)
- ✓ Have pump checked for impeller obstruction or other malfunction. (Call installer or supplier)

Restricted flow from one or more jets?

- ✓ Confirm jet is open to full flow. (See Figure 7)
- ✓ Suction inlet may be restricted. Clean and remove obstructions from suction safety cover.
- ✓ Check each jet for blockage.
- ✓ Have pump-to-jet supply line checked for blockage. (Call installer or supplier)

Water has excessive foaming?

- ✓ Clean and sanitize whirlpool system. (See *Whirlpool System Care and Cleaning* section)

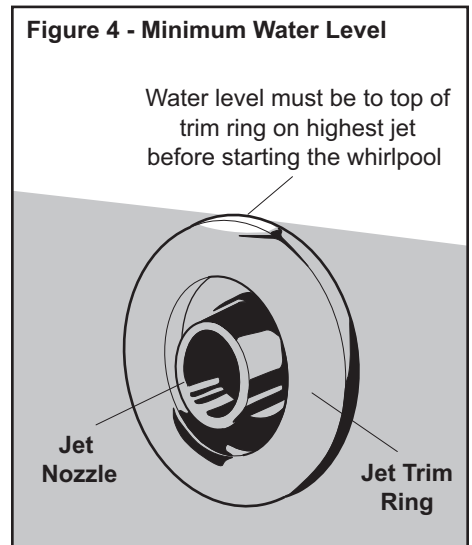
WARNING!
ANY SERVICING NOT MENTIONED
ABOVE SHOULD BE PERFORMED
BY A QUALIFIED SERVICE
REPRESENTATIVE.

Single-Speed System Operation

WARNING!
AVOID OPERATING THE WHIRLPOOL
SYSTEM WITHOUT ADEQUATE WATER
IN THE TUB

Before using the whirlpool for the first time, the system should be cleaned as described in the *Whirlpool System Care and Cleaning* section of this guide.

Step 1: Close the drain and fill tub to desired water level. Water level must be at least to the top of trim ring on highest jet before whirlpool system is started. (Figure 4)



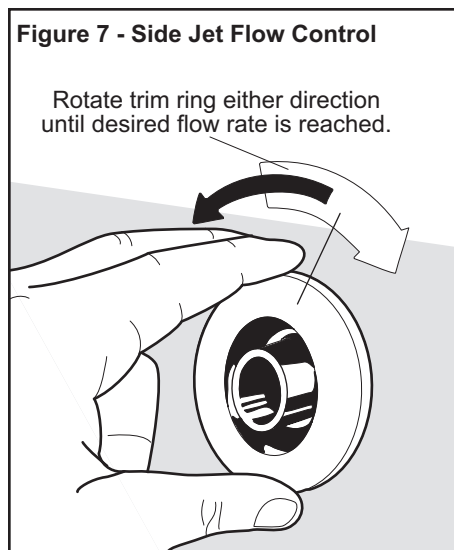
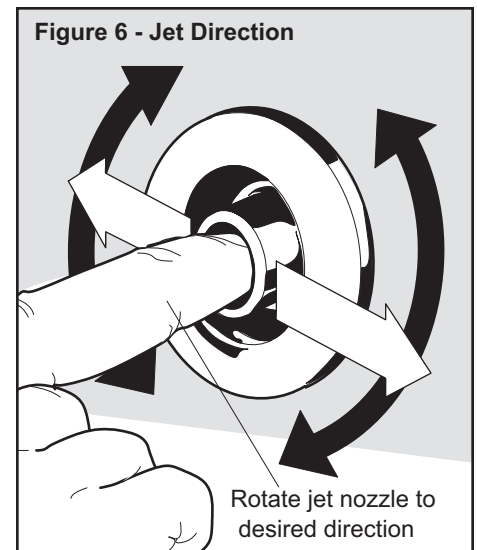
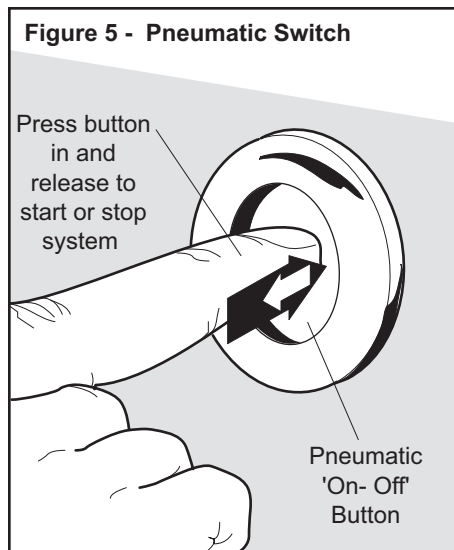
Step 2: To start a whirlpool equipped with a single-speed pump, depress the pneumatic switch button and release as shown in Figure 5. To stop the whirlpool or to restart the system, depress the pneumatic switch button and release.

On systems equipped with an optional in-line heater, the heater is automatically operated through the internal heater controls.

Step 3: To adjust directional flow of any jet, rotate the jet nozzle to the desired position as shown in Figure 6. On systems equipped with an in-line heater, the heater is automatically operated through the internal heater controls.

Step 4: To change (*increase or decrease*) the flow of the jet(s), rotate the outer trim ring clockwise or counter-clockwise until desired flow is reached. (See Figure 7).

Step 5: Drain and thoroughly rinse the tub and flush the whirlpool system after each use to help reduce the build-up of soap scum or body oils in the system supply lines. Follow the care and cleaning recommendations listed in this guide.





LIMITED WARRANTY

AKER Plastics Company Inc. (hereafter "MAAX") offers the following express limited warranty on each of its products. This warranty extends only to the original owner/end-user for personal household use. For commercial uses, additional limitations apply.

MAAX warrants **whirlpool motor/pumps** to be free from defects in workmanship and materials under normal use and service for a period of five (5) years from the initial date of purchase by the owner/end-user, contractor or builder from an authorized dealer.

MAAX warrants **whirlpool and other bathtub systems** to be free from defects in workmanship and materials under normal use and service for a period of two (2) years from the initial date of purchase by the owner/end-user, contractor or builder from an authorized dealer.

Any product reported to the authorized dealer or to MAAX as being defective within the warranty period will be repaired or replaced (with a product of equal value) at the option of MAAX. This warranty extends to the original owner/end-user and is not transferable to a subsequent owner.

Neither the distributor, authorized MAAX dealer nor any other person has been authorized to make any affirmation, representation or warranty other than those contained in this warranty; any affirmation, representation or warranty other than those contained in this warranty shall not be enforceable against MAAX or any other person.

MAAX reserves the right to modify this warranty at any time, it being understood that such modification will not alter the warranty conditions applicable at the time of the sale of the products in question.

Limitations

This warranty shall not apply following incorrect operating procedures, breakage or damages caused by fault, carelessness, abuse, misuse, misapplication, improper maintenance, alteration or modification of the unit, as well as chemical or natural corrosion, accident, fire, flood, act of God or any other casualty. This warranty shall not apply to stains caused by ferrous water or hard water.

The owner/end-user of the product covered by the present warranty is entirely responsible for its proper installation and electrical wiring. MAAX neither installs nor supervises the installation, nor hires a contractor for this purpose, and consequently cannot be held responsible for any default, breakage or damages caused thereby or resulting thereof, either directly or indirectly. The owner/end-user must provide access to the components of the product as described in the installation guide, so that MAAX can execute the warranty specified herein. If such access is not available, all expenses to provide said access will be the responsibility of the owner/end-user.

This warranty does not apply to products or equipment not installed or operated in accordance with instructions supplied by MAAX and all applicable rules, regulations and legislation pertaining to such installations.

MAAX strongly recommends that its products - for example, but without limitation, shower doors and other items - be installed by professionals with experience in bathroom products. Installation of shower doors by an inexperienced person may result in glass breakage and, consequently, cause personal injury or death.

MAAX is not liable for any costs, damages or claims resulting from the purchase of products that do not fit through openings or existing structures. MAAX is not liable for any costs, damages or claims resulting from defects that could have been discovered, repaired or avoided by inspection and testing prior to installation.

MAAX is not liable for personal injuries or death to any person or for any direct, special, incidental or consequential damage, loss of time, loss of profits, inconvenience, incidental expenses, labor or material charges, or any other costs resulting from the use of the product or equipment or pertaining to the application of the present warranty, or resulting from the removal or replacement of any product or element or part covered by this warranty.

EXCEPT AS OTHERWISE PROVIDED ABOVE, MAAX MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE OR COMPLIANCE WITH ANY CODE.

In any case, MAAX cannot be liable for any amount over and above the purchase price paid for the product by the owner/end-user, contractor or builder.

Commercial Limitations

In addition to the above conditions and limitations, the warranty period for products installed for commercial applications or used in commercial ventures is of one (1) year from the initial date of purchase by the owner/end-user, contractor or builder from an authorized dealer. MAAX is not responsible for loss of use or profit under any circumstances. If the product is used as a display, the warranty period begins when the product is placed on display.

This warranty gives the owner/end-user specific legal rights. The owner/end-user may also have other rights which vary from one state and/or province to another.

Warranty service

In order to obtain service provided under this warranty during regular business hours, contact the dealer or distributor who sold the unit, or MAAX directly.

MAAX will provide the warranty service described above when the following conditions have been met: (1) the failure is of the nature or type covered by the warranty; (2) the user has informed an authorized MAAX Agent or Warranty Service Department representative of the nature of the problem during the warranty period; (3) conclusive evidence (e.g., proof of purchase or installation) is provided to the foregoing by the user proving that the failure occurred or was discovered within the warranty period and (4) an authorized independent service person or company representative has been permitted to inspect the product during regular business hours within a reasonable time after the problem was reported by the user.

MAAX's warranty obligation shall be discharged upon tender of replacement or repair. The customer's refusal to accept the tender terminates MAAX's warranty obligation.

MAAX products are certified by one or more of the following certification agencies: CSA, UL, IAPMO, ULI, INTERTEK (ETL), WARNOCK HERSEY, US TESTING, NAHB.

Certain models are pending approval.

Certification may be ended by MAAX or certification agencies without notice.

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