

DISCLOSURE CERTIFICATE

This information is provided by the National Council For Whirlpool Bath Health & Safety, Washington, D.C., (202) 362-1534. It should be read carefully before using a whirlpool bath.



STANDARD PRECAUTIONS:

- ◆ Do not allow small children to be unattended while in a whirlpool bath.
- ◆ Never operate electrical appliances in or near a bath (within 6 feet).
- ◆ Do not operate a whirlpool bath's pump unless the suction guard is in place.
- ◆ Avoid prolonged immersion in hot water. Hyperthermia can result from prolonged exposure to excessive heat and may be hazardous to your health. Symptoms may include cramping, exhaustion, or faintness.
- ◆ Children, aged persons, anyone under a doctor's care, and pregnant women should consult their physicians before using a whirlpool bath.
- ◆ Whirlpool baths should not be used by persons having a communicable disease, persons under the influence of alcohol, or by persons taking medications which induce drowsiness.
- ◆ Whirlpool baths should be properly cleaned and maintained to reduce the risk of bacterial infections.
- ◆ The use of oily bath products (e.g. bath oils) enhances the build-up of bath residue within a whirlpool bath's circulation system. These products should not be used in a whirlpool bath regardless of whether or not the whirlpool bath's pump is in operation because the circulation system piping will be coated with the oily residue.

CONSUMER WARNINGS:

◆ DANGER OF DROWNING:

DO NOT IMMERSE HAIR IN A WHIRLPOOL BATH. DO NOT PUT HAIR NEAR ANY SUCTION FITTING. HAIR IMMERSION CAN CAUSE HAIR ENTRAPMENT WHICH CAN RESULT IN DROWNING.

◆ SYSTEM CONTAMINATION:

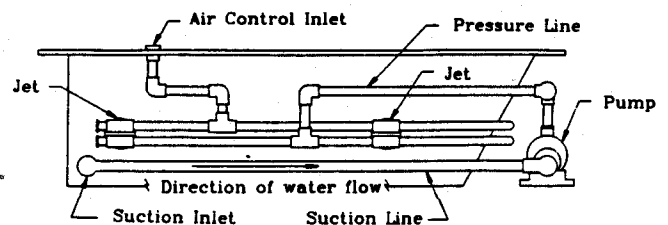
FAILURE TO FOLLOW PROPER MAINTENANCE AND CLEANING PROCEDURES FOR A WHIRLPOOL BATH'S CIRCULATION SYSTEM CAN RESULT IN THE GROWTH AND TRANSMISSION OF INFECTIOUS BACTERIA.

NOTICE: Bath residue contains soapscum, dirt, body secretions, skin cells, and bath oils. With each use of a whirlpool bath, these organic materials combine with mineral deposits from water and contribute to the build-up of scale deposits. The warm, dark, and humid environment of a whirlpool bath circulation system provides an ideal location for the growth of microorganisms that can cause many different types of ailments (e.g. vaginal, kidney, bladder, skin, eye, and lung infections, just to name a few). Scientific reports show that household products such as bleach, vinegar, baking soda, and automatic dishwasher detergent are ineffective for the purpose of cleaning bath residue and scale deposits from whirlpool bath circulation systems.

◆ WATER RETENTION:

CLAIMS OF "FULLY DRAINING" WHIRLPOOL BATH CIRCULATION SYSTEMS ARE MISLEADING.

NOTICE: Because water has an adherent quality to it, it cannot "fully drain" from a piped circulation system. The American National Standards Institute ("ANSI") that governs the construction of whirlpool baths recognizes the fact that a whirlpool bath circulation system, piped with either rigid or flex piping, cannot completely drain. According to their own standard, (ASME/ANSI A112.19.7M-1987), ANSI permits the design of whirlpool baths that retain up to "1½ fluid ounces of water for each jet and suction fitting." For a whirlpool bath with only 4 jets and 1 suction fitting, this manufacturing guideline permits up to 7½ fluid ounces of water (nearly a full cup) to remain inside the circulation system after the tub is allowed to drain. However, many whirlpool baths do not even conform to this manufacturing guideline and actually hold over a gallon of water within the circulation system when "fully drained." Water retention in any whirlpool bath circulation system can be increased with the addition of bath residue and scale deposits unless the circulation system is properly cleaned and maintained.



Typical Whirlpool Bath Circulation System

◆ AIR INDUCTION SYSTEM:

DUE TO THE DESIGN OF MANY WHIRLPOOL BATH CIRCULATION SYSTEMS, A COMPLETE FLUSHING OF THE AIR INDUCTION SYSTEM CANNOT BE PERFORMED. IT IS RECOMMENDED THAT ANY AIR INDUCTION SYSTEM BE TERMINATED AT EACH JET FITTING IF THE AIR PIPING CAN BACKFILL WITH BATH WATER AND CANNOT BE FLUSHED BY THE CONSUMER. (Note: See the manufacturer's recommendation for proper termination procedure.)

STANDARD MAINTENANCE PROCEDURES:

NOTICE: Due to the many different whirlpool bath system designs, types of usage (i.e. residential, commercial, and health care), frequency of usage, assorted bathing product usage, and the chemical composition of various water supplies, no single standard of cleaning and maintenance can be all-encompassing for every whirlpool bath. The maintenance procedure included herein is recommended due to its maximum effectiveness.

◆ **REGULAR FLUSHING:** To remove bath residue and guard against system contamination, a whirlpool bath's circulation system should be flushed after every use with a cleaning solution specifically formulated for this purpose.

NOTICE: To properly flush a whirlpool bath circulation system, fill the whirlpool bath with water to its minimum operating capacity, add the recommended amount of cleaning solution specifically formulated to remove bath residue, and activate the whirlpool bath's pump to allow the cleaning solution to circulate throughout the entire circulation system according to the product's directions. This recommended flushing of a whirlpool bath's circulation system will remove the majority of bath residue and prevent a significant accumulation of scale deposits for up to one year; however, scale is able to adhere to pipes and can thus persist even when there is constant flushing of a piped-water system.

◆ **PROFESSIONAL CLEANING:** To remove the accumulation of scale deposits, a whirlpool bath circulation system should be professionally cleaned on a regular basis. A professional cleaning should consist of flushing, descaling, and disinfecting the entire circulation system.

Note: Scale deposits attach firmly to whirlpool bath system fittings and piping. Piping material that scale cannot adhere to is yet to be discovered. Specialized equipment is required to heat a descaling solution to the appropriate temperature to effectively remove accumulations of scale from a whirlpool bath circulation system. Descaling cannot be achieved by adding a descaling product to a tub full of water and activating the whirlpool bath's pump because of the inability to maintain the appropriate descaler concentration at the required temperature. An effective descaler solution could damage the surface and components of a whirlpool bath unless the appropriate cleaning equipment is utilized.



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Residential Use: A whirlpool bath used privately in a residence should be flushed after every use with a cleaning solution specifically formulated to remove bath residue, and professionally cleaned at least annually.

A new whirlpool bath should have a clean and scale-free circulation system. It should be initially maintained with a regular flushing.

A used whirlpool bath should be professionally cleaned to remove bath residue and scale deposits before being used because no inspection method is available to assure that proper maintenance procedures were previously followed.

Commercial Use: A whirlpool bath used commercially (e.g. lodging industry use) should be flushed after every use with a cleaning solution specifically formulated to remove bath residue, and professionally cleaned at least twice a year. Two professional cleanings are recommended because various occupants of a particular whirlpool bath may use products such as sun tan lotions and bath oils which increase the build-up of scale deposits and the risk of cross infections.

Health Care Use: A whirlpool bath used in a health care setting (e.g. hospital, rehabilitation center, nursing home) should be flushed after every use with cleaning solutions specifically formulated to remove bath residue and disinfect, and it should be professionally cleaned at least twice a year. This maximum maintenance procedure is recommended because occupants of a whirlpool bath in a health care setting typically have immune systems that are weakened due to illness, age, injury, or medical operation and they are more subject to cross infection than other whirlpool bath users.

The National Council For Whirlpool Bath Health & Safety ("Council") was formed to provide the public with information concerning the proper use and care of a whirlpool bathtub appliance. It is the Council's mission to provide educational materials (medical, legal, technological, and mechanical) to consumers, users, manufacturers, distributors, and suppliers of whirlpool baths. Council services and publications make substantial contributions to the development of standards and to the collection of statistics. The Council serves as a central contact point for national media requests and inquiries about the whirlpool bath industry.

While the Council does not promote individual products, policy permits identification of key sources or sole suppliers of services or products which may be of benefit to consumers, users, manufacturers, distributors, and suppliers of whirlpool baths.

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