Standards Update Notice (SUN)

Issued: January 9, 2017

Standard Information

This SUN contains new/revised requirements from updates dated September 2, 2016 and October 7, 2016

Standard Number: UL 1795
Standard Name: Hydromassage Bathtubs
Standard Edition and Issue Date: 5th Edition Dated September 2, 2016
Date of Revision: October 7, 2016
Date of Previous Revision of Standard: 4th Edition Revised January 7, 2015

Effective Date of New/Revised Requirements

Effective Date (see Schedule below): **October 6, 2017**

Impact, Overview, Fees and Action Required

Impact Statement: A review of all Listing Reports is necessary to determine which products comply with new/revised requirements and which products will require re-evaluation. **NOTE:** Effective immediately, this revised standard will be exclusively used for evaluation of new products unless the Applicant requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revised requirements.

This new edition to UL 1795, the Standard for Hyrdromassage Bathtubs, includes the following changes:

- Revise requirements for electronic circuits
- Allow the use of UL 840 to evaluate clearance and creepage distances
- Update requirements for switches
- Update requirements for button or coin cell batteries of lithium technologies

Specific details of new/revised requirements are found in table below.

If the applicable requirements noted in the table are not described in your report(s), these requirements will need to be confirmed as met and added to your report(s) such as markings, instructions, test results, etc. (as required).

Client Action Required:

Information – To assist our Engineer with review of your Listing Reports, please submit technical information in response to the new/revised paragraphs noted in the attached or explain why these new/revised requirements do not apply to your product (s).

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.

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Description of New/Revised Technical Requirements

Clause	Verdict	Comment
--	--	**New/Revised requirements from Update dated September 2, 2016**
19	Info	**Circuits**
19.1	Info	**General**
19.1.1		*Additions to existing requirements are underlined and deletions are shown ~~lined out~~ below.* ~~A reliability investigation is required for limited energy circuits, safety circuits, or where single mode component faults result in a risk of fire, electric shock, or injury to persons.~~ Circuits and controls shall comply with the requirements of this standard and those in either Supplement SA, SB or SC.
19.1.2		*Additions to existing requirements are underlined and deletions are shown ~~lined out~~ below.* ~~When safety circuits are investigated, consideration shall be given to the need for additional testing, depending on the circuit construction and the intended function.~~ All circuits shall be evaluated to determine that single-mode component faults will not result in a risk of fire, electric shock, casualty hazards or loss of a Safety Critical Function.
19.4		**Circuits that perform Safety Critical Functions**
19.4.1		*Additions to existing requirements are underlined and deletions are shown ~~lined out~~ below.* ~~A temperature-regulating control, a temperature-limiting control, and a dry fire control are considered to be safety circuits.~~ Any function involved in the control, protection, and monitoring of safety-related attributes of a hydromassage bathtub whereby a loss/malfunction of its functionality would represent an unacceptable risk of fire, electric shock, or casualty hazards would be considered a Safety Critical Function. See Table 19.1 for the most common Safety Critical Functions anticipated by this standard.

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<table>
<tr><th>Clause</th><th>Verdict</th><th>Comment</th></tr>
<tr><td>Table 19.1</td><td></td><td>New table added;

Safety Critical Functions

<table>
<tr><th>Function [a]</th><th>Hazard</th><th>Location of parameters and tests</th></tr>
<tr><td>Motor running overload protection</td><td>Risk of fire or electric shock</td><td>Section 30</td></tr>
<tr><td>Motor locked rotor protection</td><td>Risk of fire or electric shock</td><td>Section 30</td></tr>
<tr><td>Motor short circuit protection</td><td>Risk of fire or electric shock</td><td>Section 30</td></tr>
<tr><td>Temperature regulating control</td><td>Hyperthermia</td><td>Section 40</td></tr>
<tr><td>Temperature limiting control</td><td>Scalding</td><td>Section 41.2</td></tr>
<tr><td>Water-Flow Controls (dry-fire protection)</td><td>Risk of fire, electric shock, or scalding</td><td>Section 41.3</td></tr>
<tr><td colspan="3">[a] Functions specified in the table represent the common safety critical circuit functions of hydromassage bathtubs. It is not intended to represent all possible safety critical functions. Any function involved in the control, protection, and monitoring of safety-related attributes of a hydromassage bathtub whereby a loss/malfunction of its functionality would represent an unacceptable risk of fire, electric shock, or casualty hazards would be considered a Safety Critical Function.</td></tr>
</table></td></tr>
<tr><td>19.4.2</td><td></td><td>New clause added;

The on-off function of the overall hydromassage bathtub would be considered a Safety Critical Function only if a mandatory off period is necessary for the unit to comply with the Temperature Test.</td></tr>
<tr><td>19.4.3</td><td></td><td>New clause added;

Electronic circuits that manage a Safety Critical Function shall be:

a) Reliable as defined as being able to maintain the Safety Critical Function in the event of single defined component faults; and

b) Not susceptible to electromagnetic environmental stresses encountered in the anticipated environments of the appliance.</td></tr>
<tr><td>23</td><td>Info</td><td>New Section added;

Clearance and Creepage Distances

As an alternative approach to the spacing requirements specified in Spacings, Section 22, and other than as noted in 23.2, clearances and creepage distances may be evaluated in accordance with the requirements in the Standard for Insulation Coordination Including Clearances and Creepage Distances for Electrical Equipment, UL 840, as described in 23.3.</td></tr>
<tr><td>38</td><td>Info</td><td>Switches, Receptacles, and Controls</td></tr>
<tr><td>38.1</td><td>Info</td><td>General</td></tr>
<tr><td>38.1.12</td><td></td><td>New clause added;

Switches that comply with the Standard for Switches for Appliances – Part 1: General Requirements, UL 61058-1, shall be rated as specified in 38.1.13 – 38.1.15.</td></tr>
</table>

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Clause	Verdict	Comment
38.1.13		*New clause added;* Power switches shall be rated as follows: a) For a voltage not less than the rated voltage of the appliance; b) For a current not less than the rated current of the appliance; c) For Continuous Duty; d) With respect to load: 1) Switches for motor-operated appliances: for resistance and motor load in accordance with the Standard for Switches for Appliances – Part 1: General Requirements, UL 61058-1, or the Outline for Particular Requirements for Switches for Tools, UL 6059, if the switch would encounter this load in normal use; or 2) Switches may be regarded as switches for a declared specific load in accordance with the UL 61058-1, or UL 6059 and may be classified based upon the load conditions encountered in the appliance under normal load. e) For ac if the appliance is rated for ac; f) For dc if the appliance is rated for dc.
38.1.14		*New clause added;* Ratings and load classifications for switches other than power switches shall be based on the conditions encountered in the appliance under normal load.
38.1.15		*New clause added;* Switches shall also be rated with respect to endurance as follows: a) Power switches: 6000 cycles; b) Power switches provided with series electronics shall be subject to an additional 1000 cycles of operation with the electronics bypassed; c) Switches other than power switches, such as speed selector switches, that may be switched under electrical load: 1000 cycles; d) The following non-power switches are not required to be rated for endurance: 1) Switches not intended for operation without electrical load, and which can be operated only with the aid of a tool or are interlocked so that they cannot be operated under electrical load; or 2) Switches for 20 mA load as classified in the Standard for Switches for Appliances – Part 1: General Requirements, UL 61058-1.

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Clause	Verdict	Comment
SUPPLEMENT SA	Info	*New section added;* **UL 60335-1 BASED REQUIREMENTS FOR THE EVALUATION OF ELECTRONIC CIRCUITS** These requirements provide **alternate** requirements for the investigation of electronic controls and other circuits used in appliances covered by this standard (see standard for section details).
SUPPLEMENT SB		*New section added;* **CONTROLS EVALUATED TO UL 60730-1 AND ITS PART 2'S** This new section includes new construction requirements for Temperature-Regulating Controls, Temperature-Limiting Controls, and Pressure-Sensitive Controls (see standard for section details).
--	--	**New/Revised requirements from Update dated October 7, 2016**
7.5		*New section added;* **Button or coin cell batteries of lithium technologies**
7.5.1		The battery compartment of an appliance or any accessory, such as a wireless control, incorporating one or more coin cell batteries of lithium technologies shall comply with the Standard for Products Incorporating Button or Coin Cell Batteries of Lithium Technologies, UL 4200A, if the appliance or any accessory: a) Is intended for use with one or more single cell batteries having a diameter of 32 mm (1.25 in) maximum with a diameter greater than its height; and b) The appliance is intended for household use. Exception: UL 4200A is not applicable to appliances and accessories intended for use where the battery is not intended to be replaced and is not referenced in instructions and markings.
		CUSTOMERS PLEASE NOTE: This Table and column "Verdict" can be used in determining how your current or future production is or will be in compliance with new/revised requirements.