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**Federal Communications Commission  
Office of Engineering and Technology  
Laboratory Division Public Draft Review**

**Draft Laboratory Division Publications Report**

**Reason:** The proposed change to this publication is to add **Clarification that Power Tools, Cordless Multi-Tools and Battery Operated Tools are non exempt under section 15.103 as appliances.**

**Publication:** 772105

**Keyword/Subject:** 15.103, Exempt Appliances, Household Appliances

**First Category:** Radio Service Rules

**Second Category:** Part 15 Unintentional Radiators

**Third Category:**

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**Question:** What household appliances, identified as Part 15 unintentional radiators, are considered exempt from the equipment authorization procedures?

**Answer:** A household appliance using digital logic (an unintentional device or system that generates and uses timing signals or pulses at a rate in excess of 9,000 pulses or cycles per second, and uses digital techniques as defined in Section 15.3 (k)) is classified under Part 15 Subpart B as a Class B digital device (as defined in Section 15.101) requiring an equipment authorization under the Verification procedure (Section 2.902). However, some appliances may be exempt from an equipment authorization procedure under Section 15.103.

Exempt household appliances are electrical machines intended for household tasks that assist persons in washing and drying clothes, household cleaning, cooking, or food preparation; or is equipment that is directly involved in conditioning the supply of household water and air (heating, cooling and humidifying) in a residence. This includes appliances such as a vacuum cleaner, washing machine, dishwasher, clothes dryer, air conditioner (central or window), etc. This exemption is limited to basic housekeeping appliances and is not intended to apply to all home-use products that may contain digital logic.

To be exempt under Section 15.103, only the digital circuitry directly responsible for operation of the basic functions associated with the appliance is exempt, and must be contained within the major appliance and not remotely connected via wire, cable or other communication system. For example, this includes the digital controller board for a washing machine responsible for different cycles and washing modes

Appliances that (1) contain other ancillary functions (not directly responsible for the basic functions), or (2) contain other non-housekeeping appliance or other functions, are not exempt from equipment authorization procedures and regulations. These other functions require testing and compliance to the appropriate equipment authorization procedures and regulations.

For example, a stove that contains an in-house communication function over power lines to communicate with a home automation system or an integrated television receiver does not exempt the home automation system and television receiver functions from their applicable Part 15 B equipment authorization requirements. Many other appliances, such as consumer inductive cooking stoves and microwave ovens, are subject to the technical standards and equipment authorization procedures under Part 18 of the FCC rules.

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An exempt appliance is only exempt from equipment authorization procedures for the functions associated with the digital device circuitry. The appliance remains subject to the requirements in Section 15.5 requiring the device not cause harmful interference, and Section 15.29 regarding inspection by the Commission. It is strongly recommended that manufacturers or importers make every effort to meet the specific technical standards, follow appropriate FCC equipment authorization procedures, and comply with quality practices to ensure all units sold and marketed are, and will remain, compliant.

Questions about specific appliances may be submitted to the FCC at <http://www.fcc.gov/labhelp> . The link "Submit an Inquiry" should be used to access the inquiry form and submit a question.

**Exempted Devices**

<b>Exempt Cooking or Food Preparation Devices</b>	
Refrigerators	Freezers
Stoves	Juice extractors
Bread makers	Coffee Makers
Food warming pads	Deep-fat fryers

<b>Exempt Appliances for Washing and Drying Clothes</b>	
Washing machines	Clothes dryers

<b>Exempt Household Cleaning Devices</b>	
Trash compactors	Rug cleaners
Vacuum cleaners	Dishwashers
Irons	Trash compactors
In-sink garbage disposals	

<b>Exempt Household Water and Air Conditioning Equipment</b>	
Humidifiers Dehumidifiers	Water Heaters
Room Fan Heater	Room air-conditioners (window, floor, standing)
HVAC systems (*not including external thermostats)	Central Air-conditioners (Split-System)

<b>Non Exempt Devices</b>		
External Thermostats*	Exercise Equipment	Hair Dryers
Heat Guns	Hair straighteners	Electric Blankets
Paper Shredders	Bed Warmers	Portable Personal Fan Heaters
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\* Thermostat is connected via wire and not contained within the appliance.

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