

STANDARD INFORMATION

Standard Number: UL 82
Standard Name: Standard for Electric Gardening Appliances
Standard Edition and Issue Date: 9th Edition Issued August 12, 2011
Date of Revision: March 31, 2016
Date of Previous Revision of Standard: July 7, 2015

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **August 1, 2019**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: A review of all Listing Reports is necessary to determine which products comply with new/revise 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requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revise requirements.

Overview of Changes:

- New and revised requirements for extended-reach pole pruners.
- New and revised requirements for cordless brushcutters.

Specific details of new/revise 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/revise paragraphs noted in the attached or explain why these new/revise 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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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.



STANDARD INFORMATION

CLAUSE	VERDICT	COMMENT
<i>Additions to existing requirements are <u>underlined</u> and deletions are shown lined out below.</i>		
	Info	MARKING
57	Info	General
		<i>New clause added;</i>
57.11		A pole pruner shall be marked with the direction of rotation of the saw chain on the cutting attachment.
58	Info	Cautionary
		<i>New clause added;</i>
58.8		A pole pruner shall be plainly marked with the following or the equivalent, a) “WARNING: Wear head and eye protection. Or the safety signs M014 of ISO 7010 and M004 of ISO 7010. A combination of personal protective equipment safety signs may be used. b) “DANGER – Keep sufficient distance away from electrical power lines.” or the equivalent or alternatively the safety sign C.2.30 of ISO 11684.
59	Info	Instruction Manual
59.1	Info	General
		<i>New subclause added;</i>
59.1.4 h)		For pole pruners: 1) “WARNING – Do not operate near electrical power lines. The unit has not been designed to provide protection from electric shock in the event of contact with overhead electric lines, Consult local regulations for safe distances from overhead electric power lines and ensure that the operating position is safe and secure before operating the saw chain pole pruner.” 2) Description and identification of the principal parts of the saw chain pole pruner including the safety devices and harness, and the use of the quick release mechanism. 3) Instruction for adjusting the proper tension of the saw chain, lubricating, maintenance and for transportation and storage. 4) Advice on correct working posture, maintaining firm footing and balance during operation including the safe usage of the harness, the quick release mechanism, and the need for rest periods and changing working position. 5) Advice of the need for head, and eye protection and the necessary personal protective equipment (PPE) to be used, including correct clothing.



6) Advice of the risk for bystanders, especially for children, and the need to keep them at a safe distance during operation of the saw chain pole pruner.

59.2 Info **Important safety instructions**

New subclause added;

POLE PRUNERS

1) Keep all parts of the body away from the saw chain. Do not remove cut material or hold material to be cut when blades are moving. Make sure the switch is off when clearing jammed material. Saw chain continues to move after the switch is turned off. A moment of inattention while operating the extended-reach pruner may result in serious personal injury.

2) Carry the extended-reach pruner by the handle with the saw chain stopped. When transporting or storing the extended-reach pruner, always fit the saw chain device cover. Proper handling of the extended-reach pruner will reduce possible personal injury from the saw chain.

3) Hold the extended-reach pruner by insulated gripping surfaces only, because the saw chain may contact hidden wiring or its own cord. A saw chain contacting a “live” wire may make exposed metal parts of the extended-reach pruner “live” and could give the operator an electric shock.

59.2.2 f)

Exception: “or its own cord” maybe omitted for battery-operated appliances.

4) Keep cable away from cutting area. During operation the cable may be hidden in shrubs and can be accidentally cut by the saw chain.

Exception: This warning does not apply to a battery-operated appliance.

5) Do not use the extended-reach pruner in bad weather conditions, especially when there is a risk of lightning. This decreases the risk of being struck by lightning.

6) To reduce the risk of electrocution, never use near any electrical power lines. Contact with or use near power lines may cause serious injury or electric shock resulting in death.

7) Always use two hands when operating the extended-reach pruner. Hold the extended-reach pruner with both hands to avoid loss of control.

8) Always use head protection when operating the extended-reach pruner overhead.

Falling debris can result in serious personal injury.

NOTE For all markings above, alternate wording for “extended-reach” is possible, e.g. “pole” or “long reach”.

Info **POLE PRUNERS**

New section added;

69A Info

Construction



69A.1	A cutting attachment capable of being operated as a standalone chain saw or reassembled into a chain saw as specified in the manufacturer's instruction manual, shall comply with the requirements in UL 60745-2-13.
69A.2	To prevent the operator from contacting the saw chain while operating the pole pruner, the minimum distance between the activating switch and the saw chain shall be 39.37 in. (1,000 mm). The distance shall be measured with the pole adjusted to the minimum distance between the cutting attachment and the activating switch. If the pole consists of sections that can be removed, the minimum number of pole sections required to operate the device shall be used to measure the distance.
69A.3	Pole pruners shall be equipped with a momentary contact on-off switch that shall not be capable of being locked in the "on" position.
69A.4	The power supply cord shall exit the enclosure at a point farthest from the cutting edges and in a direction away from the cutting edges.
69A.5	The activating switch shall be equipped with a device that automatically locks it in the "off" position when the actuator is released.
69A.6	To provide safe control, the pole pruner shall be fitted with at least two handles. The handles shall be designed such that each handle can be grasped with one hand. If the handle nearest the cutting device is an integral part of the shaft, it shall be suitably shaped to be grasped securely with a perimeter between 2.56 inch (65 mm) and 6.30 inch (160 mm). The gripping surface of the front handle shall be at least 3.94 inch (100 mm) long. For bail or closed handles (U-shaped handles) this dimension is related to the inner width of the gripping surface. On straight handles it is the complete length between the housing and the end of the handle. There shall be a minimum radial clearance of 0.98 inch (25 mm) around the gripping length.
69A.7	If the shaft is used as a handle, the entire shaft length can be considered as the handle as long as it is electrically isolated from the cutting device.
69A.8	Pole pruners having a mass of more than 13.2 lb (6 Kg) shall be provided with a harness to be worn by the operator for support and balance during cutting operations. Any harness, whether required or not, shall be adjustable to the size of the operator and equipped with a quick-release mechanism to enable a rapid emergency release of the machine from the harness or the harness from the operator.
69A.9	A protective cover shall be provided with the machine to cover the saw chain in order to prevent injuries during transportation and storage. The cover shall not become detached with the saw chain of the appliance in a vertical downwards position.
69A.10	The saw chain cutting attachment shall be constructed so that it can be adjusted to obtain the tension recommended by the manufacturer.
69A.11	The pole pruner shall be provided with a means for lubricating the saw chain. If the pole pruner is equipped with a manual saw chain oiler control, it shall be located so that it can be operated while both handgrips are held by the hands of the operator.



		<i>New section added;</i>
69B		Performance
69B.1		Pole pruners shall comply with the tests indicated in Sections 26 – 52, modified as indicated in 69B.2.
69B.2		The input test is to consist of cross-cutting a soft pine beam, the thickness of which is not less than 150 percent of the width of the saw blade and the width of which is 75 percent of the length of the saw blade (the length of the saw blade is considered to be the effective length of the blade on which the chain rides, and the width of the saw blade is considered to be the width of the blade plus twice the thickness of the chain).
Supplement SB	Info	BATTERY POWERED GARDENING APPLIANCES

New clause added;

In addition to the requirements in this standard, a cordless brushcutter shall also comply with the following from the requirements of ANSI B175.3, the Standard for Internal Combustion Engine-Powered Hand-Held Grass Trimmers and Brushcutters – Safety and Environmental Requirements:

	Section/Paragraph	Related Comments
SB1.1.1	3.1, 3.3, 3.4, 3.5, 3.8, 3.9, 3.10	Cutting path related to blade diameter only.
	3.11	Replace “engine” with “appliance”
	3.12	
	3.16, 3.17, 3.18, 3.21, 3.23	Replace “engine” with “appliance”
	3.24	
	3.25, 3.26, 3.27, 3.28	Replace “engine” with “appliance”
	3.29	
	3.30, 3.34	Delete “grass trimmer”
	3.40	
	3.41	
	4	
	4.1.1 – 4.1.4	
	4.2	
	6.1, 6.2	
	7	For 7.2.1.3, the maximum speed is considered to be the speed obtained with the unit turned on with a fully charged battery
	8	
13.1, 13.1.1, 13.1.2, 13.2, 13.2.1, 13.2.2,		
13, 13.3.1	For 13.3.1, the appliance shall be fitted with the	



	heaviest detachable battery pack
13.3.3, 13.3.4, 13.3.5	
13.4, 13.4.1	For 13.4.1 the appliance shall be fitted with the smallest and largest battery packs specified in the instructional manual
13.4.2	The phrase, “and grass trimmers” in the first sentence and the last sentence, is not applicable; Compliance shall be checked with the most severe combination of the lightest and heaviest cutting attachments and smallest and largest battery packs specified in instruction manual.
13.4.3	The phrase “and grass trimmers” is not applicable; Compliance shall be checked with the most severe combination of the lightest and heaviest cutting attachments and smallest and largest battery packs specified in instruction manual.
16	Adhesion shall comply with section 52 of UL 82
16.1, 16.3, 16.4, 16.5, 16.8, and 16.9	
17, 17.1.1, 17.1.2	
17.2, 17.2.1, 17.2.2, 17.2.3	
17.2.4	For 17.2.4, the statements “Check for fuel leaks.” and “Use only flexible, nonmetallic line recommended by the manufacturer. Never use, for example, wire or wire-rope, which can break off and become a dangerous projectile.” Are not applicable;
7.2.5	For 17.2.5, the statement “and hot surfaces” is not applicable
17.2.8	
17.2.9	Replace with: “When the unit is turned off, make sure the cutting attachment has stopped before servicing, cleaning or removing material from the gardening appliance and before the unit is set down .
17.3, 17.3.1, 17.3.2, 17.3.3	
17.3.4	Change “engine” to “appliance”.

New table added;

Brushcutters – Required performance levels

Table SB2.7.2

Type and purpose of SCF	Minimum Performance Level (PL)
Prevent unwanted turn on where unexpected operation exposes users or bystanders to a substantial risk of	c



injury due to unenclosed moving parts such as blade	
Provide desired switch-off of the appliance if continued operation exposes the user to a substantial risk of injury due to unenclosed moving parts such as blade	b
Prevent exceeding thermal limits as specified in Heating, Section 9, of UL 2595	a
Prevent reverse direction of rotation	Not an SCF
Prevent exceeding the maximum run down time in SA3	a
Operator presence sensor as in SA2.12	a
Lock-off function as required by SA2.11	a
Visual indicator as referenced in SA2.11	Not an SCF
Prevent self-resetting as required in 9.12	a

Appliance types – Switching arrangement requirements

Appliance type	Requires compliance with switching arrangement specified in 18.5 of UL 2595
Brushcutter	<u>Yes, and comply with SA2.11 through SA2.13</u>
Cultivator	Yes
Edger-trimmer	No
Edger	Yes
Grass shears	Yes
Lawn trimmer that complies with 57.2.4	No
Pruner	Yes
Shredder / Shredder-bagger	Yes
Other appliance employing exposed cutting device whose inadvertent operation may result in a risk of serious injury or death.	Yes
Other appliance: a) Without exposed cutting device, or b) Whose inadvertent operation does not result in a risk of serious injury or death	No

Table SB2.8

Table SB2.9

New table added;



Pole Pruners- Required performance levels

Type and purpose of SCF	Minimum Performance Level (PL)
Prevent unwanted turn on where unexpected operation exposes users or bystanders to a substantial risk of injury due to unenclosed moving parts such as saw chain	c
Provide desired switch-off of the appliance if continued operation exposes the user to a substantial risk of injury due to unenclosed moving parts such as saw chain	b
Prevent exceeding thermal limits as defined in Heating, Section 9 of UL 2595	a
Provide desired direction of rotation of saw chain	b
Prevent self-resetting as required in 9.12	b
Provide automatic lubrication of the saw chain as in 65.11	Not an SCF

New clause added;

For a brushcutter, these two actions shall not be possible with a single grasping motion or a straight line motion. The switch shall be positioned such that that it can be operated while the appliance is being held with both hands. The switch operation shall be marked if not obvious.

SB2.10.1

Exception: A single grasping motion or a straight line motion is acceptable provided:

- a) The unit is provided with an activation mode start switch, and*
- b) The on-off switch or the lock-off device is activated within 45 s of the actuation of the activation mode start switch, otherwise the unit shall return to its off state, and*
- c) There is a visual indication that the brushcutter is in an active state when the activation start mode switch is activated and shall continue until the activation mode start switch is off.*



New clause added;

SB2.10.2 The on-off switch for brushcutters shall immediately return to the locked state when it is released, unless:

- a) An operator presence sensor is incorporated in the handle or grasping surface associated with the on-off switch, and
- b) The hand is not released from the operator presence sensor. The operator presence sensor can be attained by any combination of mechanical, electrical or electronic means.

New clause added;

SB2.10.3 A brushcutter shall be equipped with a momentary contact on-off switch that shall not be capable of being locked in the “on” position.

New section added;

SB3

Brushcutter Blade Stopping Time after Long Term Cycling

SB3.1 After 6,000 cycles of operation, rotation of the blade shall cease within 10 seconds after the power is shut off. Mechanical means for braking the rotation shall show no evidence of malfunction.

SB3.2 To determine whether a brushcutter complies with the requirements in SA3.1, one sample is to be tested. Each cycle is to consist of 45 seconds on at maximum operating speed and 15 seconds off. The means for operating the unit during the test was such that the blade control was released abruptly from the full “on” position and returned to the “off” position by itself.

New section added;

SB4

Brushcutter Marking

SB4.1 A brushcutter shall be permanently marked in a visible location on a fixed part of the unit in the vicinity of the saw blade with an arrow raised or recessed or by any other means no less visible and indelible indicating the direction of rotation of the arbor.

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.
