

STANDARD INFORMATION

Standard Number: UL 60745-2-15 / CSA C22.2 No 60745-2-15

Standard Name: Hand-Held Motor-Operated Electric Tools – Safety – Part 2-15: Particular Requirements for Hedge Trimmers

Standard Edition and Issue Date: 1st Edition Dated June 28, 2010

Date of Revision: March 24, 2016 and April 28, 2017

Date of Previous Revision of Standard: September 13, 2013

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **July 30, 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requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revise requirements.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: Specific details of new/revise requirements are found in table below.

March 24, 2016:

- New and revised requirements that address extended-reach hedge trimmers.

April 28, 2017:

- Incorporate Revisions to Specify Requirements for Category 4 Hedge Trimmers.

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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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
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Additions to existing requirements are underlined and deletions are shown ~~lined out~~ below.

The following changes reflect the March 24, 2016 revision.

New clause added;

8.1DV

For extended reach hedge trimmers:

- “Wear eye protection” or the safety sign M004 of ISO 7010.
- “DANGER – Keep sufficient distance away from electrical power lines” or the equivalent or alternatively the symbol C.2.30 of ISO 11684.
- “Wear head protection” or the safety sign M004 of ISO 7010.

DR Modification: Add the following to Clause 8.12.2 of this Part 2:

Safety instructions for extended-reach hedge trimmers

Extended-reach hedge trimmer safety warnings:

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

– 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.

8.12.2DV

NOTE: For the above safety warning, alternative language may be used to satisfy local requirements.

– Always use two hands when operating the extended-reach hedge trimmer. Hold the extended-reach hedge trimmer with both hands to avoid loss of control.

– Always use head protection when operating the extended-reach hedge trimmer overhead. Falling debris can result in serious personal injury.

NOTE: Alternate wording for “extended-reach” is possible, e.g. “pole” or “long reach”.

~~103A)~~ 104) Instructions for proper assembly of the handle and/or guard if the hedge trimmer is shipped without the handle or guard in place. In addition, the following warning statement shall be included in the instructions:



“WARNING – Only use with handle and guard properly assembled to hedge trimmer. The use of the hedge trimmer without the proper guard or handle provided may result in serious personal injury.”

Extended-reach hedge trimmer operating instructions:

105) Instruction for adjusting the extended reach hedge trimmer with extended reach pole to all possible working, transportation and storage configurations.

106) Advice on correct working posture, maintaining firm footing and balance during operation, and the need for rest periods and changing working position.

107) Advice of the need for eye protection.

108) Advice of the risk for bystanders, especially for children, and the need to keep them at a safe distance during the operation of the extended reach hedge trimmer.

New clause added;

19.1DV

D1 Modification: Add the following to Clause 19.1:

For extended reach hedge trimmers, Subclauses 19.101ADV, 19.102, 19.102DV and 19.105 are not applicable.

D1 Modification: Replace 19.103 and Table 101 of this Part 2 with the following:

19.103DV

To safeguard against contact with the cutter blade, hedge trimmers shall be constructed to meet the requirements of one of the categories given in Table 101DV. For extended reach hedge trimmers, any cutting device category is acceptable with respect to “Cutting length”, “Number of handles”, and “Minimum number of handles with blade control” specifications. No “lower barrier” is required. The “Maximum blade stopping time” for extended reach hedge trimmers is specified in Clause 19.104DV.

An extended-reach hedge trimmer shall be so constructed such that the shortest distance measured between the point of the blade control in the rear handle closest to the cutter blade and the nearest cutting edge of the cutter blade is at least 1 000 mm. If provided with an extendable shaft, the distance shall be measured with the shaft in its non-extended position.

Compliance is checked by inspection and by measurement.

New clause added;

19.105DV

D1 Modification: Add the following:

For extended reach hedge trimmers, Subclause 19.105 is not applicable.



New clause added;

Modification: Add the following to Clause 19 of this Part 2:

19.107DV

“For hedge trimmers incorporating extended reach pole:

If the cutting device can be adjusted or altered for length, distance from handles, or angle with respect to the handles, then the measurement “x”, taken in the position in which any part of the cutting blade is nearest to the front handle as shown in Figure 105BDV, shall not be less than 120 mm. Positions where the cutting device will not operate are not included.

New clause added;

20DV

D1 Modification: Replace first sentence of Clause 20 of this Part 2 with the following:

This clause of Part 1 is applicable except as follows:

New clause added;

DR Modification: Replace entire Clause 20.3 of the Part 1 with the following:

A hedge trimmer, other than an extended reach hedge trimmer, shall comply with the requirements of Part 1.

An extended reach hedge trimmer is dropped once from each of the four orientations shown in Figure 117DV a) – d), with any adjustable device or adjustable handle in the zero degree cutting position, on a concrete surface from a height of 1 m. The lowest point of the machine shall be 1 m above the concrete surface. For the test, separable accessories are not mounted.

20.3DV

If attachments are provided as specified and mounted in accordance with 8.12.2, the test is repeated, with each attachment or combination of attachments mounted to a separate machine sample.

Additionally, an extended-reach hedge trimmer shall be dropped once in each of the three most unfavorable positions and configurations, on a concrete surface at its maximum extension. For each additional drop, the machine is pivotally supported at the rear handle 1 metre above the concrete surface. The nearest cutting edge of the cutter blade to the rear handle is raised to a height of 2 meters above the concrete surface and allowed to drop onto the concrete surface.

Each drop shall be conducted on a separate unit. At the manufacturer’s request, each drop may be conducted on the same unit.

NOTE: For an extended-reach hedge trimmer, a total of seven drops are conducted.



New clause added;

Figure 105BDV DR Addition of Figure 105BDV to this Part 2:

Figure
105BDV

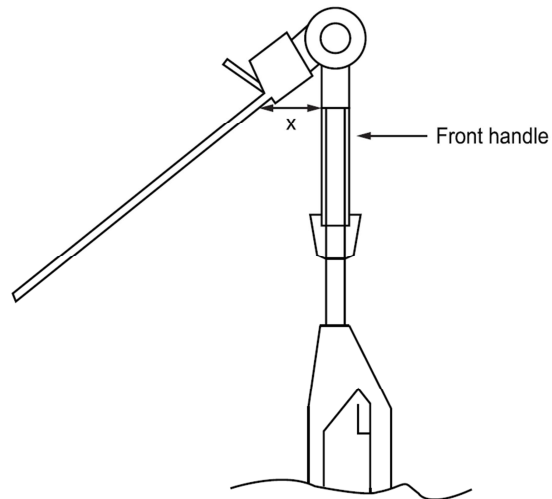
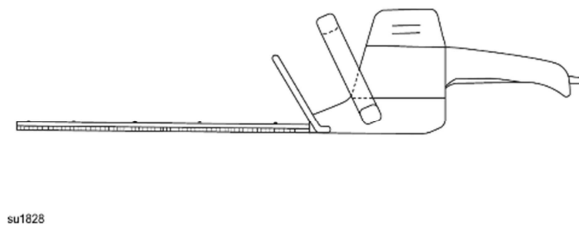
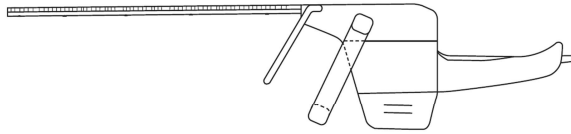


Figure 117DV D1 Modification: Addition of Figures 117DV a) – d) to this Part 2:

Figure
107DV

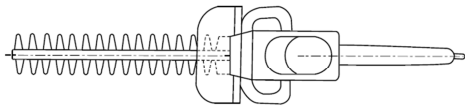


a) Cutting device pointing horizontal and cutting plane parallel to ground, machine upright



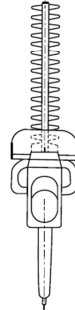
su1829

b) Cutting device pointing horizontal and cutting plane parallel to ground, machine inverted



su1830

c) Cutting device pointing horizontal and cutting plane perpendicular to the ground, as for cutting the side of a hedge (left or right hand)



su1826

d) Cutting device pointing vertical, as for cutting the side of a hedge with the blade pointing uppermost

Figure 117DV – Hedge trimmer positions for drop test of 20.3DV

The following changes reflect the April 28, 2017 revision.

D1 Modification: Replace 19.103 and Table 101 of this Part 2 with the following:

To safeguard against contact with the cutter blade, hedge trimmers shall be constructed to meet the requirements of one of the categories given in Table 101DV. For extended reach hedge trimmers, any cutting device category is acceptable with respect to “Cutting length”, “Number of handles”, and “Minimum number of handles with blade control” specifications. ~~No “lower barrier” is required.~~ For extended reach hedge trimmers, blunt extensions and a “lower barrier” are not required. The “Maximum blade stopping time” for extended reach hedge trimmers is 3 s specified in Clause 19.104DV.

19.103DV

An extended-reach hedge trimmer shall be so constructed such that the shortest distance measured between the point of the blade control in the rear handle closest to the cutter blade and the nearest cutting edge of the cutter blade is at least 1 000 mm. If provided with an extendable shaft, the distance shall be measured with the shaft in its non-extended position.

Compliance is checked by inspection and by measurement.

Table 101DV – Hedge trimmer categories



Items with requirements	Category number and requirements				
	1	2	3		4
Cutting length	≤ 200 mm	> 200 mm	> 200 mm	> 200 mm	<u>> 200 mm</u>
Number of handles	1	2	2	2	<u>2</u>
Minimum number of handles with blade control	1 (rear handle)	1 (rear handle)	1 (rear handle)	2	<u>2</u>
Maximum blade stopping time (sub-clause 19.105)	No	No	3 s	3 s	<u>1 s</u>
Blade configuration figure	106	106	107	107	<u>108</u>
Lower barrier required (sub-clause 19.105)	No	No	Yes	No	<u>No</u>
Adjustable cutting device permitted (sub-clause 19.103DV)	No	No	Yes	No	<u>No</u>

Hedge trimmer category 3 (see Figure 107)

Blunt extensions shall extend over the full length of the cutting device for the blade configurations according to Figures 106 and 107.

Hedge trimmer category 4 (see Figure 108DV (a) and 108DV (b))

The minimum depth of the blunt extensions shall be no less than 8 mm as shown in Figure 108DV (a).

In addition, the distance between the blade teeth and the side of the (120 +1/-0 mm) test probe cylinder shall not be less than 4 mm when the test cylinder is positioned perpendicular to the plane of the cutting device and between two blunt extensions as shown in Figure 108DV (a).

For machines with blunt extensions that are not an integral part of the cutting device, the following additional requirement shall be met:

The distance between the end of the cutting plane between the cutter blades and the side of the test probe cylinder shall not be less than 4 mm when the test probe cylinder is positioned as shown in Figure 108(a) and then tilted around the ends of the blunt extensions up to an angle of 40° as shown in Figure 108 (b).

Compliance is checked by inspection and by measurement.

To provide blade visibility during use, at least 50 percent of the area of the top surface of the cutting device of category 3 tools, excluding areas occupied by a warning label and the surfaces wiped by blade motion, shall be coloured with a highly visible, durable bright-red, bright-yellow or bright-orange colour which sharply contrasts with green. The coloured portion shall extend for at least 90 percent of the length of the cutting device measured from the outboard end. **The**

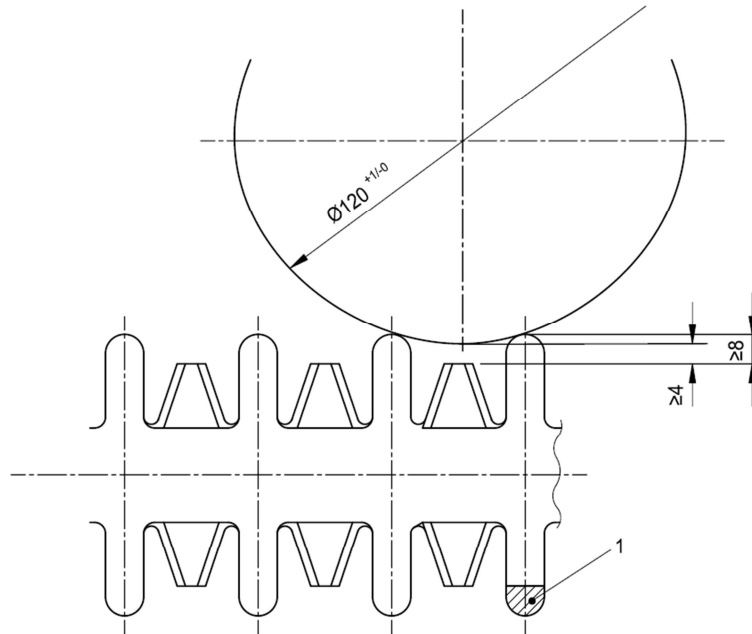


blade visibility requirements do not apply to extended reach hedge trimmers.

Compliance is checked by inspection and measurement.

D1 Modification: Replace Figure 108 of the Part 2 with Figure 108DV (a) and Figure 108DV (b):

Figure 108DV



Dimensions in millimetres

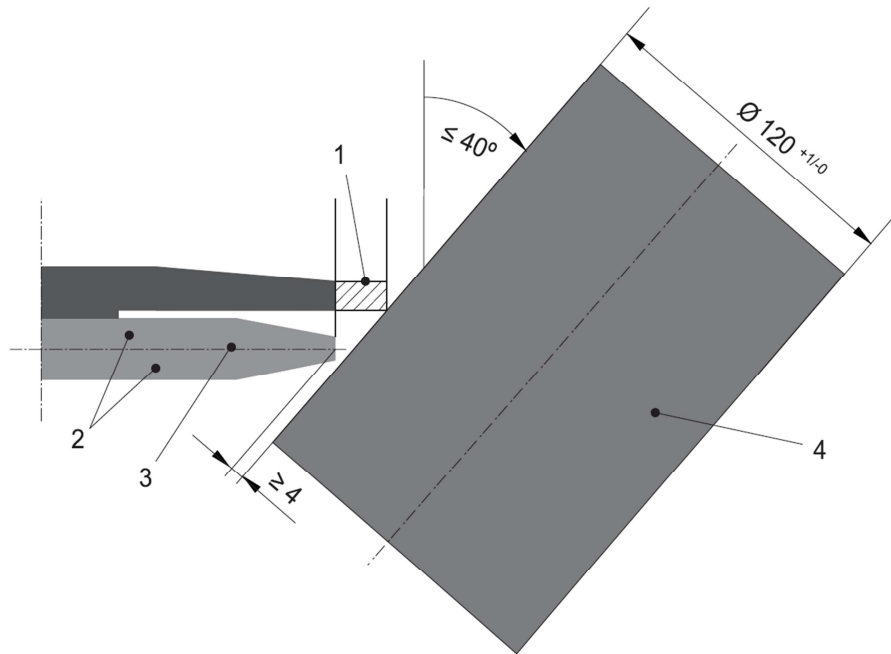
This cutting device may be single- or double-sided.

Key

1 Blunt extension

Figure 108DV (a) – Cutting device configuration option for Category 4

**Top view
(See Table 101DV)**



Key

1 Blunt extension

2 Cutter blade

3 Cutting plane

4 Test cylinder

Figure 108DV (b) – Cutting device configuration option for Category 4

Side view

(See Table 101DV)

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.