ANSI/OPEI B175.5 Canvass Summary

| | | Interest | Included in | First C | anvass |
|--------------------|--------------------------------------|----------|---------------------|-------------|----------|
| <u>Canvassee</u> | Affiliation | Category | Canvass | Reply | Comments |
| Kevin Beaulieu | | User | Yes | Affirmative | Yes |
| Michael Braver | All Seasons Outdoor Power Equipmen | User | Yes | Affirmative | No |
| Terry Ditsch | | User | Yes | Affirmative | Yes |
| Dan Ericsson | | User | Yes | Affirmative | Yes |
| Arv Hille | | User | Yes | Affirmative | Yes |
| Jim Librande | Scotsco | User | Yes | DNV | |
| Doug Peeler | | User | Yes | Affirmative | No |
| David Anderson | TTi | Producer | Yes | Affirmative | Yes |
| Sebastian Hanussek | Stihl | Producer | Yes | Affirmative | Yes |
| Ryan Kocher | MTD | Producer | Yes | Affirmative | Yes |
| Wendy Oettinger | Husqvarna | Producer | Not included in fir | NA | NA |
| Rob Stegall | ECHO | Producer | Yes | Affirmative | Yes |
| Paul Zwolinski | Makita | Producer | Yes | DNV | |
| Mike Anthony | University Michigan | GI | Yes | Affirmative | Yes |
| Bryan Beamer | United States Publich Health Service | GI | Yes | Affirmative | Yes |
| Rex Bishop | | | | | |
| Margo Rash | | | | | |
| Andrew Bray | NALP | GI | Yes | Affirmative | Yes |
| Joe Harding | PTI | GI | Yes | Affirmative | Yes |
| Vince Morabit | Aero-Flex | User | Yes | Affirmative | Yes |
| Caroleene Paul | | | | | |
| Andrew Newens | U.S. Consumer Product Safety Comm | GI | Yes | Abstain | No |
| Ashley Rosenthal | The Rosenthal Law Firm, P.A. | GI | Yes | Affirmative | Yes |
| | | | | | |

PUBLIC COMMENTS Joe Musso

Object Yes

KEY DATES

| <u>RET DATES</u> | |
|---|-------------|
| PINS Submitted | 2/22/20213 |
| Canvass Survey Open | 5-Aug-20 |
| Canvass Survey Close Date | 11-Sep-20 |
| Committee Decision to Move Draft to Public/Canvass Review | w 9-Oct-20 |
| BSR-8 Submitted | 16-Oct-20 |
| Public Comment Period (45 Days) Open | 30-Oct-20 |
| Public Comment Period (45 Days) Close Date | 14-Dec-20 |
| First Canvass Open | 26-Oct-20 |
| First Canvass Close Date | 4-Dec-20 |
| Committee Decision to Move Draft to Public/Canvass Review | w 28-May-21 |
| Recirculation BSR-8 Submitted | 21-Jun-21 |
| Recirculation Public Comment Period (45 Days) Open | NA |
| Recirculation Public Comment Period (45 Days) Close Date | NA |
| Recirculation Ballot ("2nd Canvass) Open | 21-Jun-21 |
| Recirculation Ballot ("2nd Canvass) Closed | 23-Jul-21 |
| Committee Decision to Move Draft to Publication | NA |
| BSR-9 Submitted | NA |
| ANSI Approval | NA |
| ANSI Published | NA |
| | |

UL

Name First Canvass & Public Comment Summary w/ Committee Resolutions Date:

| Standard for Outdoor Power Equipment – Internal Combustion Engine-Powered Hand- Held Edger – Safety and Environmental Requirements | Document: ANSI/OPEI B175.5-202X 1 st Canvass Response Form 201214.xls |
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| CN ¹ | Clause No./ Subclause No./ Annex (e.g. 3.1) | Paragraph/ Figure/Table/ Note (e.g. Table 1) | Type of com- ment ² | Language as Written | Suggested Revised Language | Rationale (justification for addition, deletion, objection, or revision) |

Important note to OPEI Standards Committee for consideration of comment review and committee resolutions – All substantive changes to draft standards require circulation of the proposal(s) to the standard consensus body and public (via the BSR-8 and ANSI Standards Action notice). Substantive changes are not permitted for reaffirmations. The ANSI definition of "substantive change" is included below. When proposing draft revisions as a result of comments received, the Committee shall determine if the resolution to each comment is substantive or non-substantive in nature. This determination of each resolution as "substantive" or "non-substantive" should be included in the column (7) with the Committee's resolutions. All substantive comments shall be circulated for consensus body and public review in accordance with OPEI Standard Development Procedures and the ANSI Essential Requirements.

ANSI Essential Requirements 2021 - Definition of Substantive Change

Substantive Change

A substantive change in a proposed American National Standard is one that directly and materially affects the use of the standard. Examples of substantive changes are below:

- "shall" to "should" or "should" to "shall";
- addition, deletion or revision of requirements, regardless of the number of changes;
- addition of mandatory compliance with referenced standards.

| Joe Musso – UL- Receive d via Public Commen t | 1.1 Ge Scope and Purpose | Ge The req a) b) | uirements of this Standard apply to: Internal combustion engine–powered, hand-held edgers having at least one ground-support and a rigid cutting blade that has a blade tip circle of not more than 254 mm (10 in). Internal combustion engine–powered, hand-held, multi-purpose units when configured as an edger. | Comment:The Scope of the ANSI/UL Standard for Safety for Gasoline-Engine-Powered, Rigid- Cutting-Member Edgers and Edger Trimmers, UL 1602 covers the same equipment as indicated in the scope of the proposed new OPEI standard (B175.5-202X). See ANNEX A below for UL 1602Sa Finite the the scope of the proposed new OPEI standard the scope of the proposed new OPEI standard the scope of the proposed new OPEI standard | The ANSI/UL Standard for Safety for Gasoline-Engine- Powered, Rigid-Cutting- Member Edgers and Edger Trimmers, UL 1602 was first published in June 1981, and has remained the American National Standard for internal combustion (engine- |
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| | | edgers and edger-trim a) That is made | Indard is not applicable to gasoline-powered and edger-trimmers that employ a cutting means: That is made of nonmetallic flexible line; or That is consisting of more than one piece, e.g., | The Scope of the ANSI/UL Standard for Safety for Gasoline-Engine-Powered, Rigid-Cutting- Member Edgers and Edger Trimmers, UL 1602 is as follows, and covers the same equipment | powered) type edgers and edger trimmers over the past almost 40 years. As can be seen from the |

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| | | | | pivoting chains or flail blades. c) That is made of a solid, circular blade, e.g., circular saw blade. d) This standard is also not applicable to nonhandheld edgers. NOTE – English conversions are shown in brackets and are included for information only. The requirements of this standard do not cover cutting attachments not approved for use by the equipment manufacturer. However, this standard may be used by a component manufacturer to qualify after-market cutting attachments. Should the manufacturer of after-market cutting attachments choose to comply with this standard, the manufacturer shall conduct the tests relating to the cutting attachments on the units they recommend them for and keep records related to the test results. | as indicated in the scope of the proposed new OPEI standard (B175.5-202X). ANSI/UL 1602 Scope: 1.1 These requirements cover walk-behind gasoline-engine-powered, ground-supported edgers and edger-trimmers that employ rigid cutting members, the diameter of which is not more than 12 in (305 mm). 1.2 These requirements also cover hand-supported, portable, gasoline-engine-powered edgers having at least one ground-support and employing a rigid cutting member that has a diameter of not more than 12 in (305 mm). 1.3 These requirements do not cover gasoline-powered edgers and edger-trimmers that employ a cutting means: a) That has a maximum tip-speed of more than 12,000 surface ft/min (3660 surface) | comparison of the scopes of ANSI/UL 1602, and the proposed new OPEI standard (B175.5-202X), the scopes are almost identical. Although the documents vary to some degree with respect to the specific requirements within the body, there are many sections that cover the same areas, such as, but not limited to: cutting member/means, fuel tanks, guards, handles, hot surfaces, exhaust, and others. Based on the above, the scope of the proposed new |
| | | | | | more than 12,000 surface fi/min (3660 surface m/min); or b) That is made of nonmetallic flexible line. 1.4 These requirements do not cover accessories or attachments provided for the purpose of digging or cutting materials other than earth and grass. | scope of the proposed new OPEI standard B175.5- 202X is in direct conflict, and overlaps almost identically with the scope of ANSI/UL 1602. There is no compelling reason to have two American National Standards with the same scope. In addition, |

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| | | | | | | proceeding with development of a new standard which overlaps so closely with the ANSI standard for the same type of equipment would introduce new requirements, and cause confusion within the industry. Accordingly, it is suggested that OPEI not proceed with development of the proposed new standard. 210121 Reject The OPEI proposal is harmonized in many ways with similarly OPEI B175- series handheld product and ISO 11789 (edgers). The scope of the OPEI proposal is significantly different, in that it is focused on handheld edgers. In this regards, the Committee developed an up-to-date, much more direct and inclusive set of requirements for handheld edgers. |

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| | | | | | | Despite the commentors rationale, the referenced UL standard is void of many requirements the OPEI's standards development committee considers necessary for handheld edgers and similar handheld products. The Committee reviewed the UL standard and found that the standard and requirements noted by the commentor are not harmonized with the widely accepted OPEI B175 handheld series requirements for product hazards which are similar across many handheld products. The Committee found that most of the requirements are outdated, and/or ground-supported centric, and do not reflect the needs of experts for handheld edgers. For example, the UL standard only requires only that engine temperatures not |

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| | | | | | | exceed 65C. However, the OPEI B175 handheld series standards, including the proposed subject B175.5, address power source surface temperatures depending on the conductive temperatures of common handheld guarding materials, including both metal (80C) and plastic (94C), as well as temperature limits for common continuous touch points including handles (43C) and controls (55C). The OPEI proposed standard requirements much more closely reflect the temperature technical performance and needs of handheld edgers. Finally, regarding the scope, the UL standard is limited to less than 12,000 surface/ft/min, which handheld edger may exceed. In conclusion, while the |
| | | | | | | Committee, which |

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| | | | | | | represents the majority manufacturers of the product, recognizes conflict between the referenced UL and proposed OPEI standards, the Committee believes the current B175.5 proposal, focused solely on handheld edgers, based largely on the successful ANSI/OPEI B175 handheld product standards series, with consideration of ISO 11789, closely reflects up- to-date technologies and market needs; while the current UL standard does not. The Committee believes confusion related to conflicts between the OPEI proposed standard and UL standard will be minimal, as most manufacturers of the product are members of OPEI and this OPEI standard development committee. As a result, the Committee believes there <u>is</u> indeed a compelling need for the proposed handheld edger standard and OPEI |

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| Requirements | Standard for Outdoor Power Equipment – Internal Combustion Engine-Powered Hand- Held Edger – Safety and Environmental Requirements | Document: ANSI/OPEI B175.5-202X 1 st Canvass Response Form 201214.xIs |
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| RK | 1.1 Scope | 1/1.1 b) | te | b) Internal combustion engine–powered, hand- held, multi-purpose units when configured as an edger. | "multi-purpose" is not defined in this document. Multi-purpose unit – a unit which is configurable as two or more types of outdoor power equipment. For example, a hand-held string trimmer with a changeable portion of the equipment that transforms the unit into a hand-held edger. | intends to move forward with the proposal. Recommend basic definition identifying intended types of multi- purpose equipment to clarify full scope. 210121 Accept Substantive |
| TD | 1.1 Scope | | te | This standard is not applicable to gasoline-powered edgers and edger-trimmers that employ a cutting means: e) That is made of nonmetallic flexible line; or f) That is consisting of more than one piece, e.g., pivoting chains or flail blades. g) That is made of a solid, circular blade, e.g., circular saw blade. h) This standard is also not applicable to nonhandheld edgers. | Does this standard apply to bed redefiners? Not clear from a, b, c or d. | State inclusion or exclusion of bed redefiners more clearly. 210121 Inquiry Only The standard is not intended to include bed redefiners. The definition of edger defines a unit as having a blade which operates in a plane approximately perpendicular to the ground. The Committee believes this definition would exclude redefiners. However, exclusion of redefiners in the scope does not prohibit manufacturers from using |

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| | | | | | | the standard for redefiners if they feel it is appropriate. |
| AAH | 1.1 Scope | Third para, first sentence | ge | The requirements of this standard do not cover cutting attachments not approved for | The requirements of this standard do not cover cutting attachments of a type not approved for | Clearer wording 210121 Reject. The proposal may add confusion. For example a specific brand rectangular blade tested by a manufacturer does not assure all rectangular blades from all manufacturers will comply. |
| RS | 2 Normative References | ISO 13867 | ge | ISO 13857:2008 (reaffirmed 2011): Safety of machinery – Safety distances to prevent hazard zones being reached by upper and lower limbs | Delete | Not used anywhere in standard other than in references 210121 Accept Substantive Reference to be removed (replaced by 22867) |
| RS | 2 Normative References | ISO 20643 | ge | ISO 20643:2005, Mechanical vibration – Hand-held and hand-guided machinery – Principles for evaluation of vibration emission | Delete | Not used anywhere in standard other than in references 210121 Accept Substantive Reference to be removed (replaced by 22867) |
| RS | 2 Normative | ISO 8041 | ge | ISO 8041-1:2017, Human response vibration – Measuring instrumentation – Part 1: General purpose vibration | Delete | Not used anywhere in standard other than in |

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| | References | | | meters | | 210121 Accept |
| | | | | | | Substantive |
| | | | | | | Reference to be removed (replaced by 22867) |
| RS | 2 Normative References | ISO 5349 | ge | ISO 5349-2:2001, Mechanical vibration – Measurement and evaluation of human exposure to hand-transmitted vibration – Part 1: General requirements | Delete | Not used anywhere in standard other than in references |
| | | | | | | 210121 Accept |
| | | | | | | Substantive |
| | | | | | | Reference to be removed (replaced by 22867) |
| Bryan Beamer | 2. Normative References | | Ed | | ISO 5349-2:2001, Mechanical vibration – Measurement and evaluation of human exposure to hand-transmitted vibration – Part 1: General requirements | ISO 5349-1:2001, Mechanical vibration — Measurement and evaluation of human exposure to hand- transmitted vibration — Part 1: General requirements ISO 5349-2:2001/AMD |
| | | | | | | 1:2015, Mechanical vibration — Measurement and evaluation of human exposure to hand- |

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| Power Equipment – Canvass Response Form 201214.xls Internal Combustion Engine-Powered Hand- Held Edger – Safety and Environmental Requirements Requirements |
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| | | | | | | transmitted vibration — Part 2: Practical guidance for measurement at the workplace — Amendment 1 |
| | | | | | | GTK 210108 – The comment is unclear. In the e-mail accompanying the e- mail the commentor notes "We at NIOSH are happy that noise seems to be adequately addressed. The comment we provided is, we believe, a more accurate reference to one of the referenced ISO standards." |
| | | | | | | 210121 Accept Substantive See above. Reference to be removed (replaced by 22867) |
| RS | 2 Normative References | ISO 16063 | ge | ISO 16063-21:2003, Methods for the calibration of vibration and shock transducers – Part 21: Vibration calibration by comparison with a reference transducer | Delete | Not used anywhere in standard other than in references 210121 Accept |

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| | | | | | | Substantive |
| | | | | | | Reference to be removed (replaced by 22867) |
| RS | 2 Normative References | ISO 6531 | ge | ISO 6531, Machinery for forestry – Portable chain saws – Vocabulary | Delete | Not used anywhere in standard other than in references 210121 Accept Substantive There are no additional definitions in 6531 needed here. |
| AAH | 2 Normative References | ISO 6531 | ge | ISO 6531, Machinery - Portable chain saws - Vocabulary | Remove this item | I doubt this reference is applicable, given the ISO 7112 document 210121 Accept Substantive |
| | | | | | | There are no additional definitions in 6531 needed here. |
| RS | 2 Normative References | ISO 7112 | ge | ISO 7112, Machinery for forestry – Portable brush-cutters and grass-trimmers – Vocabulary | Delete | Not used anywhere in standard other than in references 210121 Accept |
| | | | | | | Substantive There are no additional |

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| | | | | | | definitions in 7112 needed here. |
| RS | 3 Definitions | 3.1 | ge | Blade: A rotating cutting device made of rigid material with cutting edges. | Blade: A rotating cutting device made of rigid material with cutting edges. Circular blades are not included in this definition | Need to align definition with Scope 210121 Reject Already addressed in Scope. |
| VM | 3 Definitions | 3.1 | ge | Blade: A rotating cutting device made of rigid material with cutting edges. | Blade: A rotating cutting device Non-circular; 'Stick Edger Blade', triangular, made of rigid material with cutting edges. | Is there a specification for direction of blade rotation so as to create a pull force at the operator position? 210121 Reject Types of blades excluded are already addressed in Scope. Defining different shapes otherwise may be design restrictive. |
| VM | 3 Definitions | 3.10 Edger | | Edger (unit): Grass/soil trimming machine where the blade operates in a plane approximately perpendicular to the ground. | Edger (unit): Grass/soil trimming machine where the blade operates in a plane approximately perpendicular to the ground. Or at an angle relative to the vertical | 210121 Reject The comment is unclear. Note comment above uses the perpendicular definition to exclude bed redefiners. |
| VM | 3 Definitions | 3.11 Fuel tank | | | | |
| DE | 3 Definitions | 3.11 Fuel tank | | constructed of any material | constructed of any material | To save a few words - does not add anything really 210121 Accept |

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| Standard for Outdoor Power Equipment – Internal Combustion Engine-Powered Hand- Held Edger – Safety and Environmental Requirements | Document: ANSI/OPEI B175.5-202X 1 st Canvass Response Form 201214.xIs |
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| | | | | | | Non-Substantive / Editorial |
| VM | 3 Definitions | 3.12 | ge | Guard: Part of the unit of component incorporated to provide protection for the operator. | Guard: Part of the unit of component incorporated to provide protection for the operator Other than a blade shield. | 210121 Reject A blade shield is a guard, but a guard may not necessarily be the blade shield. |
| RS | 3 Definitions | 3.13 | te | Hand-held: A unit with a dry weight under 16.0 kg (25.37 lbs), having no more than two wheels, for which the operator needs to provide support and/or attitudinal control for the edger throughout the performance of its intended function. | Hand-held: A unit with a dry weight under 8.16 kg (18.0 lbs), having no more than two wheels, for which the operator needs to provide support and/or attitudinal control for the edger throughout the performance of its intended function. | Current weight limits seem to be very high and not state of art? 210121 Accept in part Substantive "A unit that during operation is supported and controlled by the user, and having no more than two wheels" |
| DE | 3. Definitions | 3.13 Handheld | Ed | Hand-held: A unit with a dry weight under 16.0 kg (25.37 lbs), having no more than two wheels, for which the operator needs to provide support and/or attitudinal control for the edger throughout the performance of its intended function . | Hand-held: A unit with a dry weight under 16.0 kg (25.37 lbs), having no more than two wheels, for which the operator needs to provide support and/or attitudinal control for the edger throughout the performance of its intended function . | 'for which' refers to "A unit", so the words proposed to be deleted should be superfluous 210121 Accept in part Non-Substantive / Editorial |
| DA | 3 Definitions | 3.14.1. Adjustable handle | Ed | Adjustable handle: Handle whose position can be modified either by movement or by rotation. | Adjustable handle : Handle whose position can be modified either by linear movement or by rotation. | More specific, clarify type of movement 210121 Reject |
| DE | 3. Definitions | 3.17 Maximum power | Ed | Maximum power speed: Engine speed at which maximum corrected brake power is obtained. Maximum power speed is obtained in accordance with ISO 8893. | Maximum power speed: Engine speed at which maximum corrected brake power is obtained. Mmaximum power speed is obtained in | Simplification 210121 Accept |

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| | | speed | | | accordance with ISO 8893. | Non-Substantive / Editorial |
| DA | 3 Definitions | 3.18. Muffler | Ed | Muffler: Device for reducing engine exhaust noise and directing the flow of the exhaust gasses | Muffler: Device for reducing engine exhaust noise and directing the flow of the exhaust gasses gases. | Misspell 210121 Accept Non-Substantive / Editorial |
| AAH | 3. Definitions | 3.19 Normal operation: | ed | Normal operation: Use of the unitstarting, stopping, fueling, or connecting to (or disconnecting from) a power source. | Normal operation: Use of the unitstarting, stopping, fueling, or connecting to (or disconnecting from) a power source. | Seems this may be a carryover from electrical tools 210121 Accept in part Substantive Delete definition. Add "in accordance with the manufacturer's recommendation" to use in 6.1 and 17.3. |
| DE | 3. Definitions | 3.19 Normal operation | Ed | or connecting to (or disconnecting from) a power source. | or changing of blade | Easier to understand 210121 Accept in part Substantive Delete definition. See above. |

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| RS | Figure 1 | Key | ed | Key 1 Engine (motor) 2 8 1 Engine (motor) 2 8 9 7 9 9 9 9 1 1 1 2 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 2 2 3 4 3 4 3 4 5 4 5 4 5 5 5 6 5 6 7 5 7 5 | Item numbers 4 and 8 use different terminology than used in definitions. Item 7 not defined in definitions | Need to correct Figure 1 210121 Accept in part Substantive 1 = Power Head (engine/motor) 4 = Blade Shield 7 - No definition needed. The term is self-explanatory and the Figure helps if needed. 8 = Blade |
| TD | 4.2 Handles | | te | The gripping surface of handles shall be at least 100 mm (3.94 in) long. On closed or U-shaped handles this dimension is related to the inner <i>width</i> of the gripping surface. | On closed or U-shaped handles this dimension is related to the inner <u>radius</u> width of the gripping surface. | Clarity 210121 Reject The dimension ("width") may be straight (not a curved shape). |
| DE | 4.2 Handles Dimensional requirements | | Те | If a part containing the engine complies with | If a <u>any other</u> part <u>of the unit</u> containing the engine complies with | More general 210126 Accept Substantive |
| JH | 5 | 2 nd para | Те | The location and accessibility of power-driven | The location and accessibility of power-driven | Incorrect standard |

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| | | | | components shall be verified by inspection, using a probe in accordance with IEC 62031, Probe B. The probe shall be applied to any opening protecting a power-driven component using a force of $10 \text{ N} \pm 2 \text{ N}$ (2.25 lbf ± 0.45 lbf). | components shall be verified by inspection, using a probe in accordance with IEC 62031 61032, Probe B. The probe shall be applied to any opening protecting a power-driven component using a force of 10 N \pm 2 N (2.25 lbf \pm 0.45 lbf).OrThe location and accessibility of power-driven components shall be verified by inspection, using a probe in accordance with IEC 62031 $61032:1997$, Probe B. The probe shall be applied to any opening protecting a power-driven component using a force of 10 N \pm 2 N (2.25 lbf \pm 0.45 lbf).Note: IEC 61032 (or IEC 61032:1997) needs to be added to the normative references. | reference. 210126 Accept Non-Substantive / Editorial Update reference standard w/o year. Add normative reference w/ date (1997) |
| RS | 5 Power Driven Components | 2 nd paragraph | ed | The location and accessibility of power-driven components shall be verified by inspection, using a probe in accordance with IEC 62031, Probe B. | Keep as is | Need to call out IEC 62031 in Reference Section 210126 Accept See above. |
| DE | 5. Power-driven components | 2 nd and 3 rd subclause | Ed | The location and accessibility of power-driven components shall be verified by inspection, using a probe in accordance with IEC 62031, Probe B. The probe shall be applied to any opening protecting a power-driven component using a force of $10 \text{ N} \pm 2 \text{ N}$ (2.25 lbf ± 0.45 lbf). Contact with any power-driven component is not allowed | The location and accessibility of <u>above described</u> power-driven components shall be verified by inspection, using a probe in accordance with IEC 62031, Probe B. The probe shall be applied to any opening protecting a <u>above described</u> power- driven components using a force of 10 N \pm 2 N (2.25 lbf \pm 0.45 lbf). Contact with any <u>above described</u> power-driven component is not allowed | Clarifying that the part in contact with the soil is excluded from the probing and requirement. 210126 Accept in part Non-Substantive / Editorial / Clarification "The location and accessibility of these |

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| | | | | | | power-driven components" |
| AAH | 6. Hot Surfaces 6.1 Requirements | First para | ge | The temperature of handles and continuously held controls | When tested according to paragraph 6.2, the temperature of handles and continuously held controls | More precise wording 210126 Accept in part. Non-Substantive / Editorial / Clarification. Add intro sentence / paragraph: "When tested in accordance with Section 6.2, the temperature requirements of this section apply." Also, delete ambient temperature reference as it is included in 6.2 Test |
| RS | 6.1 Hot Surfaces | | ge | The temperature of handles and continuously held controls shall not exceed 43° C (109° F) when measured at an ambient temperature | The temperature of handles and continuously held controls shall not exceed 43° C (109° F <u>) when the unit is operated</u> , measured at an | Procedures.We define an ambient but do not define if unit is run or not. Paragraph confusing.210126 - Commenter withdraws comment. |
| TD | 6.1 Hot Surfaces | | te | Such a hot surface shall be guarded from unintentional contact if the tip or the conical surface of the test cone shown in Figure 4 can contact more than $10 \text{ cm}^2 (1.55 \text{ in}^2)$ | Such a hot surface shall be guarded from unintentional contact if the tip or the conical surface of the test cone shown in Figure 4 can | Clarity 210126 Accept |

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| | | | | of the contiguous hot surface area. | contact <u>a contiguous hot surface area</u> more than 10 cm ² (1.55 in ²) of the contiguous hot surface area | Non-Substantive / Editorial / Clarification Add " <u>of</u> more than…" |
| TD | 6.1 Hot Surfaces | | te | The exhaust pipe (outlet) is not considered a surface that may be intentionally or inadvertently contacted during normal operation. | The exhaust pipe (outlet) is not considered a surface that may be intentionally or inadvertently contacted during normal operation <i>provided that it is properly guarder per</i> | Ensure proper exhaust guarding. 210126 Reject The current language is harmonized with other similar products/powerheads. |
| RS | 7.2 Exhaust System | n | te | If an edger is equipped with or has provisions for a spark arresting muffler, it shall meet the specifications and performance requirements in USDA FS5100-1 when tested in accordance with SAE J335. | | Why is spark arresting muffler not required? 210126 Reject The current language is harmonized with other similar products/powerheads. |
| TD | 8.1 Guard and Blad Shield | le | te | All guards and the blade shield shall be permanently attached to the unit and shall not be detachable without the use of tools, or the construction of the unit shall be such that it cannot be used without the guard or shield in its intended position. | Add "an OM warning that the guard or shield is not to be removed." | Safety GTK 2100108 – OM 19.2.3 includes statement: "Make sure the cutting attachment is properly installed and securely fastened. Be sure the cutting attachment shield is |

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| | | | | | | properly attached and in the position recommended by the manufacturer." |
| VM | 8.1 Guard and Blade Shield | 3 | te | All guards and the blade shield shall be permanently attached to the unit and shall not be detachable without the use of tools, or the construction of the unit shall be such that it cannot be used without the guard or shield in its intended position. | All guards and the blade shields | 210126 Reject Additionally, how is this accomplished? Prohibition of use, or by interlock design? 210126 Accept in part. Non-Substantive / Editorial / Clarification Use "(s)" for (4x) uses of |
| TD | 8.2 Blade Shield Dimension Requirement | | te | When the unit is in the operating position for edging, the blade shall be shielded (as a minimum) to the extent shown in Figure 5 and the requirements of the thrown objects protection test shall be fulfilled as described in Section 9 | Add callout for shield in Figure 5. | "blade shield(s)" Clarity 210126 Accept Non-Substantive (Shield is already called out in Figure 1) Request original artwork from ANSI (ISO) |
| DE | 8.2 | Figure 5 | Ed | The requirement text | Should be moved to 8.2 Blade shield dimensional requirements 210126 – Committee resolution: OPTION 1: When the unit is in the operating position for | Requirements should be in the text, not in a figure. 210126 Accept |

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| | | | | | edging, the blade shall be shielded (as a minimum) to the extent shown in Figure 5. For units with a forward rotating blade, dimension (A) shall be such to comply with the requirements of Section 9. (A) may be supplemented by support wheel, debris deflector or other components. Dimension (B) shall be greater than 0° For units with a reverse rotating blade, dimension (A) shall be greater than or equal to 0°, and dimension (B) shall be greater than or equal to 110°, as required to meet Section 9. OPTION 2 When the unit is in the operating position for edging, the blade shall be shielded (as a minimum) to the extent shown in Figure 5. Dimensions (A) and (B) shall be such to comply with the requirements of Section 9. For units with a forward rotating blade, dimension (A) may be supplemented by support wheel, debris deflector or other components. Dimension (A) may be supplemented by support wheel, debris deflector or other components. Dimension (B) shall be greater than 0° | TABLED. COMMITTEE TO DECDIE HOW TO REWRITE. 2 OPTIONS PROPOSED TO THE LEFT.210202- Replace as follows:When the unit is in the operating position for edging, the blade shall be shielded (as a minimum) to the extent shown in Figure 5.Dimensions (A) and (B) shall be such to comply with the requirements of Section 9. Dimension (C) shall be a minimum 10 mm (0.39 in).For units with a forward rotating blade, dimension (B) shall be greater than 0° For units with a reverse rotating blade, dimension (A) shall be greater than or equal to 0°, and dimension (B) shall be greater than or equal to 110° |

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| | | | | | | KEEP current 2 nd paragraph. Separate 2 sentences to separate paragraphs / requirements. Brusadin to remove and replace 10mm with "C" |
| DE | Figure 5 | Key and figure | Ed | | Add 5. Shield | To avoid any misunderstanding what shielding means 210126 Accept Non-Substantive See above. Request original artwork from ANSI (ISO) |
| VM | 8.2 | Figure 5 | | Minimum <u>guard</u> dimension | | Is this a guard or shield? 210126 Accept in part Non-Substantive / Editorial / Clarification Retitle – "Minimum blade shield dimensions" |
| AAH | 8.3.1 | | ed | The blade shield that is described in section 8.2 for the | The blade shield that is described in section 8.2 | Reads better |

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| | Guards and Blade Shield Requirements | | | blade, and any | for the blade, and any | 210126 Accept Non-Substantive / Editorial |
| VM | 8.3.1 Guards and Blade Shield Requirements | | | The blade shield that is described in section 8.2 for the blade, and any mounting means provided for such guarding, shall withstand the ball-impact test in Section 8.3.2 without cracking or deformation such that the function of the blade shield is affected. | for the blade, and any mounting means provided for such guarding shielding, shall withstand the | 210126 Accept Non-Substantive / Editorial |
| RK | 8.3.2 Blade Shield Strength – Test Procedure | 1 | Те | The ball-impact test shall be conducted using a 50 +1 -0 mm (2.0 \pm 0.05 in) diameter smooth steel sphere with a mass of approximately 0.45 kg (1.12 lbs). If the component being tested can be struck from above, and is at an angle of less than 45° to the horizontal, the sphere shall be allowed to fall vertically from rest to strike the component. Otherwise, the sphere shall be suspended by a cord and allowed to fall from rest as a pendulum to strike the component. In either case, the vertical travel of the sphere shall be 1300 +0 -5 mm (51 \pm 0.2 in). | +1 -0 mm (2.0 ± 0.05 in) diameter smooth steel sphere with a mass of approximately 0.45 kg (1.12 lbs). If the component being tested can be struck from above, and is at an angle of less than 45° to | Pre-conditioning from UL 1602 creates a worst-case condition for the guard material. Neither this standard nor UL 1602 provide guidance on where to strike the guard, allowing for favorable testing conditions. 210126 – Accept in Part – Substantive / Technical RETURN HERE NEXT MEETING – ADD TEMPERATURE |

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| | | | | | | REQUIREMETNS FOR METALLIC AND NONMETLLIC PER B175.3 EXCEPT LOW TEMP -5C. ONE IMPACT AT EACH TEMP. SAME SHIELD SHALL BE USED FOR BOTH NON-METALLIC TEMP TESTS. 210202 Agree as described above. Add requirements harmonized with B175.3 4.2.1c (1) and (3), except change (3) from -25c to -5C to harmonize with edger operating range and fuel tank impact temp |
| RK | 8.4.2 Debris Deflector Retention Strength – Test Procedure | 1 | Ge | A force equal to the weight of the edger (with empty tanks) shall be applied for 10 s over the width of the deflector in a direction that produces the maximum stress on the deflector. | A force equal to the weight of the edger (with empty tanks) the dry weight of the unit shall be applied for 10 s over the width of the deflector in a direction that produces the maximum stress on the deflector. | This weight (dry weight) is already defined and does not require re-stating for this test. 210202 – Accept |
| VM | 8.4.2 Debris | 1 | Ge | A force equal to the weight of the edger (with empty | | Non-Substantive / Clarification |
| VIVI | Deflector Retention | | Ge | tanks) shall be applied for 10 s over the width of the deflector in a direction that produces the maximum stress | | "a direction that produces the maximum stress" is vague. |

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| | Strength – Test Procedure | | | on the deflector. | | 210202 – No suggestion provided. Due to a variety of deflector designs it may be design restrictive or not reflect the worst case if a specific direction is prescribed. |
| DE | 9.2 | 3 rd subclause | Ed/T e | A panel with an operator zone cutout as defined in figure 6 shall be positioned perpendicular to the test surface and blade tip circle at a distance of 850 mm (33.5 in) | "from the rear edge of the cutting means" is not shown in figure 6. Maybe amend text to "from the center of the cutting means". Or | Text and figure should correlate |
| | | | | rearwards from the rear edge of the cutting means. | amend fig. 6 | 210202 - Accept in part |
| | | | | | | Substantive |
| | | | | | | Brusadin to propose updated Figure 6. Consider updating diagonal "ground" hatches to lower plane (the "ground" plane in the test set-up) in Figure 7. |
| | | | | | | Update 9.1 "When the edger is positioned in accordance with Figures 6 and 7," |
| TD | 10.1.1 | | te | Any breakage or cracking of the blade or blade retainer | Define difference between break, crack and chip | Specifics |
| | Blade & Blade Retainer Integrity | / | | shall be considered as failure of the test. Chipping of the blade cutting edge is not considered a test failure. | (by size etc). | 210202 – Accept in part |
| | Requirements | | | | | Substantive |

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| | | | | | | Reword (per B175.3 7.2) "the blade, or its retainer shall not break, crack or separate when tested in accordance with section 10.1.2. Note – Damage to the blade at the point of contact may be expected and is not a cause of test failure" STRIKE "Chipping of the blade cutting edge is not considered" |
| DE | 10.1.1 Blade and blade retainer integrity Requirement | | Ed | The blade, or its retainer shall not become detached. | The blade, or its retainer shall not become detached, when tested according to 10.1.2. | Clarification 210202 – Accept See above. |
| DE | 10.1.2 Blade and blade retainer integrity Test Procedures | / | Те | A horizontally positioned rigidly supported mild cold rolled steel rod with a diameter of 25mm (9.8 in) shall be vertically impacted by the cutting attachment at a minimum approach speed of 1.0 m/s (40 in/s). | | Minimum would allow a test house to well exceed 1 m/s. Instead add a suitable tolerance, maybe +/- 5%. 210209 – Accept in Part Substantive A horizontally positioned rigidly supported mild cold |

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| | | | | | | rolled steel rod with a diameter of 25mm (9.8 in) shall be vertically impacted by the cutting attachment at a minimum approach speed of 1.0 m/s \pm /- 0.1 m/s (40 in/s \pm /- 3.94 in/s), which may be measured or optionally achieved by letting the unit swing from a drop height calculated according to Formula 1. The approach speed may be measured or determined by using the calculated drop height. The calculations shall be made such that the unit center of gravity shall be at its lowest point at blade contact with the bar. |
| RK | 10.1.2 Impact Test – Test Procedures | 3 | Те | A horizontally positioned rigidly supported mild cold rolled steel rod with a diameter of 25mm (9.8 in) shall be vertically impacted by the cutting attachment at a minimum approach speed of 1.0 m/s (40 in/s). | A horizontally positioned rigidly supported mild cold rolled steel rod with a diameter of 25mm (9.8 in) shall be vertically impacted by the cutting attachment at a minimum approach speed of 1.0 m/s (40 39.4 in/s). | Incorrect number of significant digits used in the conversion from m/s to in/s. 210209 – Accept in part. Substantive Harmonize more closely with B175.3, but with |

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| CN ¹ | Annex | Paragraph/ Figure/Table/ Note (e.g. Table 1) | Type of com- ment ² | Language as Written | Suggested Revised Language | Rationale (justification for addition, deletion, objection, or revision) |
| | | | | | | tolerance instead of range. "(for example SAE 1010- 1040)25.4 mm +/- 1.3 mm (1.0 in +/- 0.05 in)1.0 m/s +/- 0.1 m/s (39.37 in/s +/- 3.94 in/s)." |
| DE | 10.1.2 Blade and blade retainer integrity Test Procedures | | Te | The approach speed may be measured or determined by using the calculated drop height. The calculations shall be made such that the unit center of gravity shall be at its lowest point at blade contact with the bar. The engine shall be switched off 1 s after impact. Determine the drop height from: $h = \frac{\left(\frac{r1}{r2}\right)^2}{19.6}$ | | I have not attempted to derive the formula, but notice that h will increase with longer ropes, i.e. higher top fastening point for the ropes. Verification against measured speed with a couple of sets of r1/r2 would be of interest. You have probably already done so 210209 – The formula was derived for ISO 11789. The Committee assumes it to be correct. |
| AAH | 10.1.2 Test Procedures | Fifth para | ed | where h is drop height, in meters; r1 and r2 are as shown in Figure 8, in meters, | where h is drop height, in meters; r ₁ and r ₂ are as shown in Figure 8, in meters , | 210209 – Accept in Part Non-Substantive Correct R1 and R2 to subscripts. Keep meters as it clarifies specifically the R1 and R2 units. |

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| AAH | 10.2.2 | Definition of "V" | te | V is the engine displacement in cm ³ (in ³) | V is the engine displacement in cm ³ (in³) | To remain consistent with units in the expression for "M" 210208 – Accept in part |
| | | | | | | Non-Substantive |
| | | | | | | The equation for M includes both metric and English. Separate better. No change to (in3). |
| DE18 | 10.2.2 Blade retention | c) | Те | $M = 0.4 \times \vee \times k (4.84 \times \vee \times k)$ | $M = 0.4 \text{ x V x } k (4.84 \underline{6.55} \text{ x V x } k)$ | 2.54^3*0.4=6.55 |
| | Test Procedure | | | | | 210208 – Accept in part. |
| | | | | | | Non-Substantive |
| | | | | | | Clarify the English formula is lbf.ft. Harmonize with B175.7, except correct factor as follows: |
| | | | | | | "or, with <i>M</i> , lbf · ft: $M = 4.84 \times V \times k$ |
| | | | | | | where <i>V</i> is the engine displacement, in ₃ ." |
| TD | 10.2.1 Blade Retention Requirements | | te | The fastening system shall be designed to protect against the blade becoming detached from the unit by: a) A fastening system that is tightened by the | In the case of a lock nut or other secondary fastening system, a note should be required in the OM indicating such with instructions on frequency of replacement. | Users may not be aware of lock nut usage or other secondary safety device. |
| | | | | driving torque of the units; or | | GTK 210108 – OM 19.2.3 |

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| | | | | A fastening system secured by a method not acted upon by rotational forces. | | includes statement to inspect unit before every use, including that fasteners are in place and secure: "Inspect unit before each use. Replace damaged parts. Check for fuel leaks. Make sure all fasteners are in place and secure." 210209 – Accept in Part. No Change. This is adequately addressed in 19.2.3 as described above. |
| VM | 11. ON/Off or Stop Control | | | The edger shall be equipped with an engine stop control that brings the engine to a complete stop without sustained manual effort for its operation. | The edger shall be equipped with an engine stop control without sustained manual effort for its operation that brings the engine to a complete stop without sustained manual effort for its operation. | 210209 – Accept in Part. Substantive. Harmonize closely with B175.3 (note gloves are mentioned in several other places). "All units shall be equipped with an engine stopping device that brings the engine to a complete stop. The control for this device shall be so positioned that it can be operated while the |

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| MA | 12 Electrical | | Ge | | "All <u>electrically energized high voltage</u> parts of the circuit" | unit is being held with both hands, and its operation shall not depend on sustained manual effort." 210209 – Accept in part. To be harmonized with |
| | Protection | | | | | other B175 standards. See below. |
| RK | 12 Electrical Protection | 1 | te | All high-voltage parts of the circuit, including spark-plug terminals, shall be electrically protected in such a manner that the operator cannot make accidental contact with them. | 12.1 All high-voltage parts of the unit's circuit, including spark-plug terminals, shall be electrically protected in such a manner that the operator cannot make accidental contact with them be located, insulated or guarded so that the operator cannot come into accidental contact with them. Ignition interruption or short-circuiting shall be provided and shall be fitted on the low-voltage side. 12.2. The location and insulation of the parts under high voltage shall be verified by inspection, using a standard test finger, in accordance with UL 60745-1, first edition (IEC 60745-1:2006), Figure XX. The ignition interruption or short-circuiting shall be verified by inspection. | Align with B175.3-2019 and B175.7-2019, since many 'multi-purpose' hand-held edgers share the same power head as string trimmers/brushcutters/pole saws anyways. 210209 – Accept Substantive |
| RK | 13 Clutches | 1 | te | The edger shall have a clutch so designed that the cutting attachment does not move when the engine rotates at any speed less than 1.25 times the idling speed. Correct operation of the clutch shall be verified by inspection when increasing the engine speed from idling speed to 1.25 times the highest idling speed as specified by the | The edger shall have a clutch so designed that the cutting attachment does not move when the engine rotates at any speed less than 1.25 times the idling speed. Correct operation of the clutch shall be verified by inspection when increasing the engine speed from idling speed to 1.25 times the | Align with B175.3-2019, since many 'multi-purpose' hand-held edgers share the same power head as string trimmers/brushcutters |

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| | | | | manufacturer. | highest idling speed as specified by the manufacturer. 13.1 Power Disengagement All edger units shall have a clutch that disengages power to the cutting attachment when the engine speed is reduced to the manufacturer's recommended idling speed. | anyways. 210209 – Accept Substantive. May include "Verification" as proposed below, pending on the rest of the document format. Knott/Acuna/Myers to determine best with consideration of format. |
| RK | 13 Clutches | 1 | te | The edger shall have a clutch so designed that the cutting attachment does not move when the engine rotates at any speed less than 1.25 times the idling speed. Correct operation of the clutch shall be verified by inspection when increasing the engine speed from idling speed to 1.25 times the highest idling speed as specified by the manufacturer. | cutting attachment does not move when the engine rotates at any speed less than 1.25 times the idling speed. Correct operation of the clutch shall be verified by inspection when increasing the | Align with B175.7-2019, since many 'multi-purpose' hand-held edgers share the same power head as pole saws anyways. 210209 – Accept Substantive |
| | | | | | 13.1 Requirements The unit shall have a clutch so designed that the cutting attachment does not move at any speed less than or equal to the manufacturer's recommended highest idling speed. 13.2. Verification Correct operation of the clutch shall be verified by inspection when the engine speed is increased to the highest idling speed, in accordance with the | See above. |

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| | | | | | instructions. | |
| RS | 13 Clutch | 1 st paragraph | ge | Correct operation of the clutch shall be verified by inspection when increasing the engine speed from idling speed to 1.25 times the highest idling speed as specified | Correct operation of the clutch shall be verified by inspection when increasing the engine speed from idling speed to 1.25 times the highest idling speed | Need to define where the info should come from. |
| | | | | by the manufacturer. | as specified by the manufacturer in the operator's | 210209 – Accept |
| | | | | | manual. | Substantive |
| | | | | | | If we use B175.3 language (no Verification), need to add. |
| RS | 16 Vibration | 1 st paragraph | te | The vibration total value $a_{hyv,eq}$ from three orthogonal axes for each handle shall not exceed 12 m/s ² (39.4 ft/s ²) when tested in accordance with ISO 22867. Units intended for | The vibration total value a _{hyv,eq} from three orthogonal axes for each handle shall not exceed | Should discuss why 12 was selected. B175.3 is 10. |
| | | | | occasional use shall be excluded from this requirement. | 12 m/s ² (39.4 ft/s ²) when tested in accordance with ISO 22867. Units intended for occasional use shall be excluded from this requirement. | GTK 2100108 – Committee discussion note, ISO 11789 does not have a limit, only a measurement process if a vibration measurement is desired. |
| | | | | | | Contrary to the comment, Knott has confirmed B175.3-2013 and -2019 Section 10.2 establishes a requirement of 12 m/s^2, not 10 m/s^2. |
| | | | | | | 210208 – See above. |
| VM | 17.1 Tank Filler Location and Identification | | | The fuel tank filler opening and the oil tank filler opening if provided, shall be located | | Units must have a fuel tank, and is an oil tank applicable? |

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| | | | | | | 210208 – Four strokes may have an oil tank. |
| DA | 17.4 Fuel Tank Integrity | | Ed | Fuel Tank Integrity | Fuel Tank Material Integrity | More specific as this section no longer addresses structural integrity. 210208 – Reject. Harmonized with other B175 standards. |
| AAH | 17.4 Fuel Tank Integrity | First para, last sentence | te | Tanks shall be evaluated according to Annex C.2. | Tanks shall be evaluated according to Annex C.2. for fuel resistance and UV resistance and Paragraph 17.7 for structural integrity. Another way to accomplish the above would be to add a paragraph C.2.3. Structural Integrity to Annex C, wherein the test procedure now outlined at paragraph 17.7.2 would be specified | Completes identification of requirements 210208 – Accept in part. Substantive Annex C.2 includes only the fuel resistance and UV resistance and requirements. Paragraph 17.7 should have separate unique requirements. The Committee found that the requirement for "30 second inspection" is not harmonized with other B175 Standards and should be removed from 17.4, as the requirements are in Annex C.2. |

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| DA RK | 17.4 Fuel Tank Integrity | | Ed | described in Annex C. | described in Annex C.2. | For clarity 210208 – Reject. See above. |
| AAH | 17.4 Fuel Tank Integrity | Second para | te | No visibleto the test described in Annex C. | No visibleto the test described in Annex C.and after the test described in Paragraph 17.7. | Completes identification of requirements 210208 – Reject. See above. |
| AAH | 17.7 .1 Structural Integrity of Fuel Tanks Requirements | | ge | 17.7.1 Requirements | Remove this paragraph, renumber Test Procedure accordingly, or as mentioned above, move the Test Procedure to Annex C | Requirements are already specified at para 17.4 210208 – Reject. See above. The requirements will be clarified / different for 17.4 v. 17.7. Additionally, the Annex is intended to be tests that are common across B175 standards, however 17.7 is different from standard to standard due to suspension requirements, so this section is being moved to the body for all B175 standards. |
| RK | 17.7.2 Structura Integrity of Fuel | | ed | c) Suspend the unit at the suspension height as described in below. | c) Suspend the unit at the suspension height as described in below Section 17.7.3. | Missing reference |

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| CN ¹ | Annex | Paragraph/ Figure/Table/ Note (e.g. Table 1) | Type of com- ment ² | Language as Written | Suggested Revised Language | Rationale (justification for addition, deletion, objection, or revision) |
| | Tanks – Test Procedure | | | | | 210209 – Accept Non-Substantive (may rename 17.7.3 to be harmonized with the rest of the document formatting. Knott/Acuna/Myers to review). |
| SH | 17.7.3 Fuel Tanks, Fuel Lines and Oil Tanks Suspension Height | | Ge | Suspend the edger complete with cutting blade by means of a string attached to the mid-point of the rear handle. | As far as I understand even if the edger is suspended the cutting blade or support wheel touches the ground. That's the way it is shown in Figure 3. If that is correct, perhaps it may be helpful to clarify that it is allowed/ possible that the cutting blade or the supporting wheel contacts the ground when the drop test is carried out. | 210209 – Accept in Part. Substantive. Remove "If the tank is exposed, the unit shall be suspended in such a manner so as to most likely cause the exposed tank surface to contact the ground at impact." Add: "The support wheel and / or blade may contact the ground in the suspended normal operating position" |
| AAH | 18. Labeling Requirements | First para., first sentence | ed | The edger shallSections 18.1 through 18.6 below. | The edger shallSections 18.1 through 18.6. below. | Reads better 210218 – Accept Non-Substantive |
| AAH | 18. Labeling Requirements | Last para., second sentence | ed | Embossed features shall be at leastin height. | Embossed features shall be at leastin height depth. | Use of the word embossed suggests depth might be a more precise term 210218 – Reject. |

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| | | | | | | Recessed feature (depth) is debossed. Additionally, "height" is harmonized with other B175 standards for the same provision. |
| AAH | 18. Labeling Requirements | | ed, ge | | In order to remain consistent with practice throughout the document, it might be better to create a "Test Procedure" sub paragraph that would include the last two paragraphs of this section | Possibility of improving readability 210218 – Reject. Harmonized with other B175. Standards. |
| TD | 19.2.1 OM Physical Condition of Operator | | te | Do not operate this unit when tired, ill or under the influence of alcohol, drugs, or medication. | Add "Do not operate at night or under poor visibility conditions." | Safety 210218 – Accept in Part. Substantive Add new requirement to "Operating Area" at start. "Operate the unit only in daylight or good artificial light." |
| TD | 19.2.2 OM Clothing Recommendation | 5 | te | Always wear long pants, boots, gloves and a long-sleeve shirt. Do not wear loose clothing, jewelry, short pants, sandals, or go barefoot. Secure hair so it is above shoulder level. | Add "gloves, eye & hearing protection." | PPE safety. GTK 2100108 – Section 19.1 requires that the OM include information requirements in Section 18 (labelling). Section 18.4-18.6 requiring |

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| CN ¹ | Annex | Paragraph/ Figure/Table/ Note (e.g. Table 1) | Type of com- ment ² | Language as Written | Suggested Revised Language | Rationale (justification for addition, deletion, objection, or revision) |
| | | | | | | labeling for ear, hearing, foot and hand protection. 210218 – Reject. See above. Also harmonized with B175.3. |
| AAH | 19.2.2. OM Clothing Recommendatio n | last sentence | ge | Secure hair so it is above shoulder level. | Remove the sentence - Secure hair so it is above shoulder level. | Not really applicable in this situation 210218 – Reject Harmonized with B175.3. |
| TD | 19.2.6 OM Fueling | | te | Mix and pour fuel outdoors where there are no sparks and flames. <i>Slowly remove the fuel cap only after stopping the</i> <i>engine.</i> Do not smoke while fueling or mixing fuel. Wipe spilled fuel from the unit. Move at least 3 m (10 ft) away from the fueling source and site before starting engine. | Slowly remove the fuel cap only after stopping the engine and allowing the engine to cool sufficiently. | Safety GTK 2100108 – For reference and consideration, the current B175.1 proposal was revised in this area. B175.1 (proposed) Annex C.2 (Safety precautions for chain saw users) includes the following update: "Use caution when handling fuel. Mix and pour fuel outdoors where there are no sparks and flames. Slowly remove the fuel cap only after stopping the engine and allowing the |

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| | | | | | | machine cool. Do not smoke while fueling or mixing fuel. Move the chain saw at least 10 feet (3 m) from the fueling point before starting the engine." 210218 – Accept in part. Harmonize with B175.1 proposal above. |
| AR | 19.2.7 OM Operating Area | | Ed | Clear the are of children, bystanders and pets. At a minimum, keep all children, bystanders, and pets outside a 15 m (50 ft) radius; | Clear the are <u>a</u> of children, bystanders, and pets. At a minimum, keep all children, bystanders, and pets outside a 15 m (50 ft) radius in all directions, creating a 360 degree circular safety zone around the operation zone. Means should be implemented as necessary in known pedestrian areas, near schools, and on public sidewalks to prevent children, bystanders, and pets from entering this safety zone radius while in use. Suggested measures include, but are not limited to, warning flags, signs, or cones, temporary sidewalk closure signs, safety cones, ropes, or utilization of a spotter Such measures should be implemented as necessary to warn and prevent bystanders, children, and pets, who may be approaching the operator from behind, from entering the 15 m (50 ft) safety zone. | Revised language (1) corrects typo, and (2) addresses the safety issue of maintaining the entire safety zone radius, even the area behind the operator of the edger on public sidewalks, since an operator cannot hear or see a bystander or child approach from behind on a public sidewalk. 210218 (1) Accept Non-Substantive (2) Accept in Part Substantive. Add "Be aware that children, bystanders and pets may approach from behind. If you are approached, stop |

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| | | | | | | the engine" Also, revise "At a minimum, keep and pets 15 m (50 ft) away." |
| TD AHH | 19.2.8 OM Idle Speed Adjustment | | te | The cutting attachment may be spinning during carburetor adjustments. Wear your protective equipment and observe all safety instructions. <i>For units equipped with a</i> <i>clutch</i> , be sure the cutting attachment stops turning when the engine idles. When the unit is turned off make sure the cutting attachment has stopped before the unit is set down. | Delete "For units equipped with a clutch" | Clutch is a requirement (Section 13) 210218 – Accept |
| VM | 19.2. General Instructions | 19.2.10. Blade Thrust | Ge | | Add "blade thrust" into clause 3. Terms and Definitions. In my understanding blade thrust is a typical reactive force that can occur. Possible definition (modified from ANSI/OPEI B175.3): Blade Thrust: The sudden forward or backward motion of the unit, which may occur when the blade jams or catches on an object such as a rock. | 210218 – Accept |
| AR | 19 – Operator's Manual(s) Instructions | 19.2.13 | Ed | A coasting blade can cause injury while it continues to spin after the engine is stopped or throttle trigger is released. Maintain proper control until the blade has completely stopped rotating. | A coasting blade can cause injury while it continues to spin after the engine is stopped or throttle trigger is released. Maintain proper control and stance, and do not move the edger outside of the proper operation zone until the blade has completely stopped rotating. | I have personally and frequently observed commercial operators of edgers change direction on public sidewalks and swing the shaft of the edger across public sidewalks |

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| | | | | | | while the blade is still moving which could injure a bystander or child. In the event that edgers are not going to have a blade brake (like a chain brake for chain saws providing for immediate stopping of the blade), then the operator must maintain proper position in the operation zone until the blade actually stops spinning. 210218 – Accept in part Substantive "Maintain proper control and stance, and do not move the edger outside of the operating area until the blade has completely stopped rotating. |
| RK | Annex B B.4.3 Microphone | 1 | Ed | Suitable measuring devices are sound level meters meeting or exceeding the requirements of a Class 1 instrument in accordance with IEC 61672-1. It is recommended that a microphone with a diameter not greater than 13 mm (0.5 in) be used for the measurements. A wind screening attachment to the microphone may be used, if this is allowed for, if necessary, in the calibration and does not alter the measured sound level by more than 0.5 dB(A) as a consequence of its effect on the omni directional | Suitable measuring devices are sound level meters meeting or exceeding the requirements of a Class 1 instrument in accordance with IEC 61672-1. It is recommended that a microphone with a diameter not greater than 13 mm (0.5 in) be used for the measurements. A wind screening attachment to the microphone may be used, if this is allowed for, if necessary, in the calibration and does not alter the measured sound level by more | Re-phrase second part of the paragraph for clarity. Also, omnidirectional is one word. 210218 – Accept. Non-Substantive Editorial Note, omnidirectional is one word. |

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| EDITORIA AAH | L ITEMS 1.1. Scope | Second para | ge | characteristics of the microphone. This standard is not applicablecutting means: a) That is made b) That is consisting of c) That is made of a This standard is also not applicable | than 0.5 dB(A) as a consequence of its effect on the omni directional characteristics of the microphone. A wind screening attachment to the microphone may be used if necessary and allowed per relevant standards. Such an attachment may be used during calibration of the microphone provided it does not alter the sound level by more than 0.5 dB(A) as a consequence of its effect on the omnidirectional characteristics of the microphone. This standard is not applicablecutting means: a) That is made b) That is made of a c) That is made of a This standard is also not applicable to non- | Clearer wording |
| RK DE | 1.1 Scope | 2/1.1d | ge | This standard is not applicable to gasoline-powered edgers and edger-trimmers that employ a cutting means:a)That is made of nonmetallic flexible line; orb)That is consisting of more than one piece, e.g., | handheld edgers This standard is not applicable to gasoline- powered edgers and edger-trimmers that employ a cutting means: a) That is made of nonmetallic flexible line; or | Handheld should be hand- held (per document definition). This exemption (d) should |

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| | | | | pivoting chains or flail blades. c) That is made of a solid, circular blade, e.g., circular saw blade. d) This standard is also not applicable to nonhandheld edgers. | b) That is consisting of more than one piece, e.g., pivoting chains or flail blades. c) That is made of a solid, circular blade, e.g., circular saw blade. d) This standard is also not applicable to non-handhold edgers. This standard is also not applicable to non-hand- | be on its own line since it does not share context with a-c. GTK 210120 Agree |
| RS JH AAH DE RK | 3 Definitions | 3.9 | ed | Dry weight: Weight of the unit with empty fuel and oil tank(s) and with blade an blade guard(s) installed. | held edgers. Dry weight: Weight of the unit with empty fuel and oil tank(s) and with blade and blade guard(s) | Typo GTK 210120 Agree |
| AAH DA | 3 Definitions | 3.12 Guard | ed | Guard: Part of the unit of component | Guard: Part of the unit of or component | Typo GTK 210120 Agree |
| RS | 3 Definitions | 3.12 | ge | Guard: Part of the unit of component incorporated to provide protection for the operator. | ? | Sentence does not make sense GTK 210120 See Above |
| JH AAH DE DA RK | 3 Definitions | 3.20 | Ed | Occasional use: Infrequent of moderate, non-income use. | Occasional use: Infrequent of <u>or</u> moderate, non- income use. | Editorial revision. GTK 210120 Agree |
| DA | 4.2 Dimensional | Figure 2a | Ed | Figure 2a: Example of handle dimensions on close or U- shaped handles | Figure 2a: Example of handle dimensions on close closed or U-shaped handles | Misspell GTK 210120 Agree |

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| | Requirements | | | | | |
| DA | 4.2 Dimensional Requirements | Figure 2 | Ed | Figure 2: Example of handle dimensions | Figure 2: Example Examples of handle dimensions | Plural as there are two figures. |
| TD JH AH DH DA RK | 5 Power Driven Components | | ed | All power-driven components, except any part of a component functioning in contact with the soil, shall be guarded so that the operator will not inadvertently contact them when starting or during normal operation of the <u>unis</u> as described in the operator's manual | unit | Editorial / Spelling GTK 210120 Agree |
| RK | 6.1 Hot Surfaces – Requirements | 5 | Ed | Maintenance and adjustment procedures as described in the manufacturer's instruction manual are considered intentional acts and excluded from the provisions of this section. | Maintenance and adjustment procedures as described in the manufacturer's instruction manual are considered intentional acts and are excluded from the provisions of this section. | Sentence needs 'are' added for completeness |
| RK | 7.2 Spark-Arresting Mufflers | 1 | Ed | If an edger is equipped with or has provisions for a spark arresting muffler, it shall meet the specifications and performance requirements in USDA FS5100-1 when tested in accordance with SAE J335. | If an edger is equipped with or has provisions for a spark arresting muffler, it shall meet the specifications and performance requirements in USDA FS 5100-1 when tested in accordance with SAE J335. | Add space between USDA FS and 5100-1 for proper/consistent reference. GTK 210120 – Need to confirm what use is correct. |
| AAH | 8 Guards and Blade Shield | Figure 5 | ed | Figure 1: Minimum | Figure 5: Minimum | |
| RS JH SH DE | 8.2 Blade Shield | Figure 5 | ed | A, As required to meet Section 9. May be supplemented by support wheel, debis deflector or other components. | A, As required to meet Section 9. May be supplemented by support wheel, debris deflector or other components. | Typo GTK 210120 Agree |

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| DA RK VM | | | | | | |
| DE | 9.1 Thrown objects protection test | | Ed | operator zone cut out. | operator zone cutout. | cut out →cutout |
| SH | 9.2 Test Procedure | Figure 7 | Ed | Figure b) is shown before figure a) | Change order to a), b) | |
| AAH | 10.2.1 | para a) | ed | a) A fastening systemtorque of the units; or | a) A fastening systemtorque of the units; or | |
| RK | 10.2.1 Blade Retention – Requirements | 1 | Ed | The blade fastening system shall provide tension to the blade to prevent movement during normal use. The blade attachment shall withstand the test torque, M described in Section 10.2.2. | The blade fastening system shall provide tension to the blade to prevent movement during normal use. The blade attachment shall withstand the test torque, M, described in Section 10.2.2. | Comma missing for correct variable declaration. |
| RK | 10.2.2 Blade Retention – Test Procedure | 10.2.2 (c) | ed | c) Apply a rotational torque, M (N.m) to the cutting attachment. | Apply a rotational torque, M (N.m), to the cutting attachment. | Comma missing for correct variable declaration. |
| AAH | 11. ON/Off or Stop Control | First para, last sentence | ed | This deviceoperator with and without gloves. | This deviceoperator with and or without gloves. | Reads better |
| SH DE | 14.3.1 Throttle control lockout Requirements | | Ed | The cutting blade shall not engage or move when a force s Section 14.3.2 is applied to the throttle control without releasing the throttle lock-out. | Proposed change; need to be checked by a native speaker The cutting blade shall not engage or move when a force according to Section 14.3.2 is applied to the throttle control without releasing the throttle lock-out. | |
| DA RK | 14.3 Throttle Control Lockout | 14.3.1 Requireme nts | Ed | The cutting blade shall not engage or move when a force is Section 14.3.2 is applied | The cutting blade shall not engage or move when a force is in Section 14.3.2 is applied | Misspell GTK 210120 Agree |

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| RS JH DA | 15 Sound Levels | 1 st paragraph | ed | (written of pictorial) | (written or pictorial) | Typo GTK 210120 Agree |
| RS TD JH SH DE DA RK | 17.3 Fuel Tanks | | ed | If the fuel system is equipped with a ventilation-system, it shall not lead under normal operation. | If the fuel system is equipped with a ventilation- system, it shall not leak under normal operation. | Туро GTK 210120 Agree |
| DA | 17.4 Fuel Tank Integrity | | Ed | The material used for the tank shall be resistant to fuels, oils and environments expected for use in the unit | The material used for the tank shall be resistant to fuels, oils and environments expected for use in of the unit | Change to "of" for clarity. "in" applies to fuels and oils but does not apply to environment (outside factor). |
| DA | 17.4 Fuel Tank Integrity | | Ed | No visible tank leakage shall occur while holding the product for 30 s in each of the 6 orthogonal directions after subjecting test samples to the test described | No visible tank leakage shall occur while holding the product for 30 s in each of the 6 orthogonal directions after subjecting test samples to the test tests described | Plural as there are two tests. |
| DA | 17.5 Fuel Feed Line Integrity | | Ed | The fuel feed lines used in the unit shall be resistant to fuels, oils and environments expected for use by the manufacturer in the operator's manual. | The fuel feed lines used in the unit shall be resistant to fuels, oils and environments expected for use by the manufacturer as described in the operator's manual. | For clarity |
| RS | 18.4 Labeling | 18.4 | ed | Inform the operator to wear eye protection that complies with ANSI Z87.1. | Inform the operator to wear eye protection that complies with ANSI Z87.1. | Need to add this standard to list of references GTK 210120 Agree |
| TD AHH DA RK | 18 Labelling Requirements | | ed | In addition, the unit shall be marked with the rotational cutting direction for the cutting attachment on a component near the cutting <i>the</i> attachment. | Omit " <i>the</i> " | Grammar GTK 210120 Agree |

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| RK | 18. Labeling Requirements | 4 | ed | To comply with the durability requirements the labels on the unit shall be tested according to ISO 11806:2011, or ANSI/UL 969:2012 supplemented by a gasoline exposure test. | To comply with the durability requirements, the labels on the unit shall be tested according to ISO 11806:2011, or ANSI/UL 969:2012 supplemented by a gasoline exposure test. | Grammar - remove extra 'the', add a comma after requirements, and remove unnecessary comma after 11806:2011. |
| TD RS DA RK | 19.2.7 Manual | | ed | Clean the area to be cut before each use. Remove all objects, such as rocks, broken glass, nails, wire or sting , which can be thrown or become entangled in the cutting attachment. Clear the are of children, bystanders and pets. At a minimum, keep all children, bystanders, and pets outside a 15 m (50 ft) radius; Outside the 15 m (50 ft) zone, there is still risk of injury. Bystanders should be encouraged to wear eye protection. If you are approached, stop the engine. | String Area | Spelling GTK 210120 Agree |
| DA | A.2 Determination of temperature of hot surfaces | : | Ed | Determine temperatures using temperature measuring equipment with an accuracy of \pm 2 °C (3.6 °F). | Determine temperatures using temperature measuring equipment with an accuracy of ± 2 °C (± 3.6 °F). | Tolerance marks missing GTK 210120 Agree |
| RK | Annex B B.2.1 | B.2.1 (d) | ed | d) The ambient air temperature shall be 5 °C (41 °F), or greater at the time of test. | d) The ambient air temperature shall be 5 °C (41 °F), or greater <mark>,</mark> at the time of test. | Grammar – add comma for proper phrasing. |
| RK | Annex B B.4.1 Calibration | B.4.1 (a) | Ed | a) Before and after each series of measurements an acoustical calibrator with an accuracy of at least +0.5 dB(A) shall be applied to the microphone to check the calibration of the entire measuring system at one or more frequencies in the range from 200 to 1000 Hz. | a) Before and after each series of measurements, an acoustical calibrator with an accuracy of at least +0.5 dB(A) shall be applied to the microphone to check the calibration of the entire measuring system at one or more frequencies in the range from 200 to 1000 Hz. | Grammar – add comma for proper phrasing |
| RK | Annex B B.4.2 | | Ed | An engine speed indicator shall be used to check the | An engine speed indicator shall be used to check | Grammar – add 'the' for |

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| | Engine Speed Indicator | | | speed of the engine. It shall have an accuracy of $\pm 3\%$ of measured value. | the speed of the engine. It shall have an accuracy of $\pm 3\%$ of the measured value. | proper sentence structure GTK 210120 Agree |
| RK | Annex B B.7 Test Procedure | B.7 (a) | Ed | a) Measurements shall be taken at every 45 degrees (a total of 8 different positions). Five readings shall be taken at each position for at least 5 seconds apart. Each reading shall be an average of at least 2 seconds duration. The arithmetic average of the five readings is to be used in the calculation of the reported sound level. If the test data at each position vary more than 2 dB (A), the test shall be repeated until five sequential readings are within 2 dB (A) at each measuring position. If an analog sound level meter is used, the average of the highest and the lowest indicated readings shall be used. | a) Measurements shall be taken at every 45 degrees (a total of 8 different positions). Five readings shall be taken at each position for at least with at least 5 seconds apart between each reading. Each reading shall be an average of at least 2 seconds duration. The arithmetic average of the five readings is to be used in the calculation of the reported sound level. If the test data at each position vary more than 2 dB (A), the test shall be repeated until five sequential readings are within 2 dB (A) at each measuring position. If an analog sound level meter is used, the average of the highest and the lowest indicated readings shall be used. | Sentence structure clean- up |
| RK | Annex C.1.1 Fuel Resistance | 9 | Ed | The fuel line shall be filled with a 10% ethanol fuel for 168 hours. For example, gasoline (E0) splash blended with ethanol. The ambient temperature for the soak period shall be 40 °C \pm /- 5 °C (104 °F \pm 9 °F). The line shall be removed from the fuel and allowed to air dry at 80 °C (176 °F) for four hours. The fuel line shall develop no visible cracks when bent (without stretching or elongating) around a 25.4 mm (1 in) diameter rod and being examined with the naked eye. | The fuel line shall be filled with a 10% ethanol fuel for 168 hours. For example, gasoline (E0) splash blended with ethanol. The ambient temperature for the soak period shall be 40 °C $\frac{4}{2} \pm 5$ °C (104 °F ± 9 °F). The line shall be removed from the fuel and allowed to air dry at 80 °C (176 °F) for four hours. The fuel line shall develop no visible cracks when bent (without stretching or elongating) around a 25.4 mm (1 in) diameter rod and being examined with the naked eye. | ± symbol incorrectly shown GTK 210120 Agree |
| RK | Annex C.2.1 Fuel Resistance | 2 | Ed | For tanks utilizing the same, material, color, manufacturing process and thickness, the manufacturer may select a single tank to represent all tanks when conducting this test. The tank test shall have the largest internal surface | For tanks utilizing the same, material, color, manufacturing process and thickness, the manufacturer may select a single tank to represent all tanks when conducting this test. The | Eliminate extra comma GTK 210120 Agree |

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| | | | | area per volume ratio of the family. | tank test shall have the largest internal surface area per volume ratio of the family. | |
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