



UL 1602

STANDARD FOR SAFETY

Gasoline-Engine-Powered, Rigid-Cutting-Member Edgers and Edger-Trimmers

UL Standard for Safety for Gasoline-Engine-Powered, Rigid-Cutting-Member Edgers and Edger-Trimmers, UL 1602

Fourth Edition, Dated January 28, 2009

SUMMARY OF TOPICS

The revision of UL 1602 dated May 19, 2022 is being issued to remove the ANSI logo and approval from the title page.

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UL 1602

Standard for Gasoline-Engine-Powered, Rigid-Cutting-Member Edgers and Edger-Trimmers

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Fourth Edition

January 28, 2009

This UL Standard for Safety consists of the Fourth Edition including revisions through May 19, 2022.

Comments or proposals for revisions on any part of the Standard may be submitted to UL at any time. Proposals should be submitted via a Proposal Request in UL's On-Line Collaborative Standards Development System (CSDS) at <https://csds.ul.com>.

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INTRODUCTION

1 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 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.

2 Glossary

2.1 **BLADE-TIP CIRCLE** – The path described by the outermost point of the cutting member as it moves about its axis.

2.2 **DEAD-MAN CONTROL** – A control that automatically interrupts drive to the cutting member when the actuating force applied by the operator is removed.

2.3 **EXPECTED LOADING CONDITION** – The stress placed on the product and its components when operated in accordance with the manufacturer's operating instructions.

2.4 **GROUND SUPPORT** – The means by which the product is maintained in its intended operating position or conveyed during use.

2.5 **GROUND-SUPPORTED PRODUCT** – A product that, when used as intended by the manufacturer, has at least 50 percent of its weight directly supported by the ground.

2.6 **GUIDING HANDLE** – The handle of a hand-supported portable edger by which the operator supports the least percentage of product weight. See [2.14](#).

2.7 **HAND-SUPPORTED PORTABLE EDGER** – An edger that, when used as intended by the manufacturer, requires the operator to support more than 50 percent of the weight of the product.

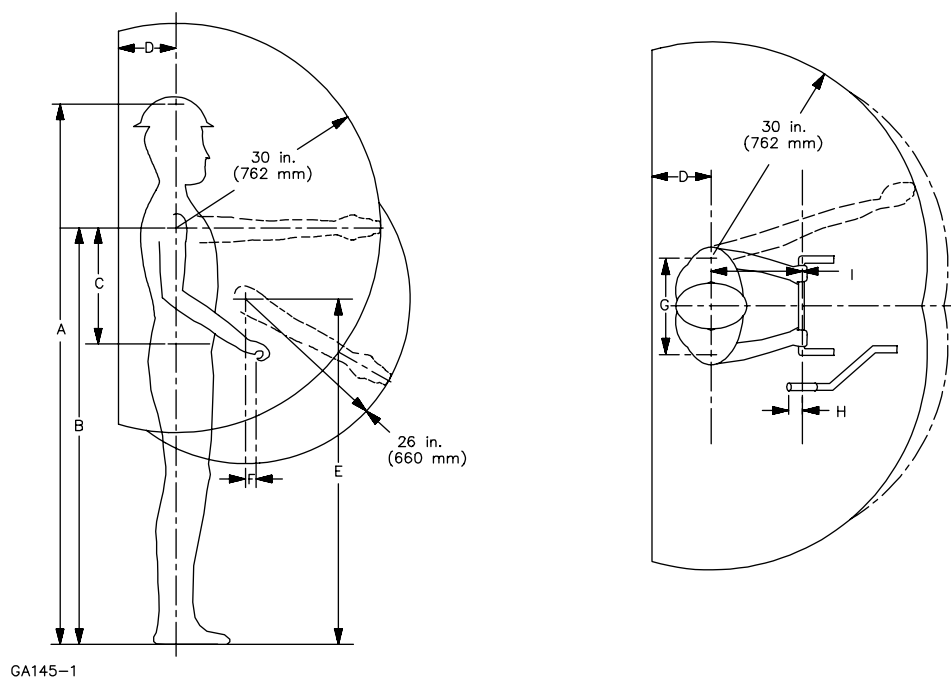
2.8 **MAXIMUM GOVERNED SPEED** – The maximum speed an engine is capable of attaining as limited by a governor or other means, and as set by the manufacturer.

2.9 **NORMAL USE AND MAINTENANCE** – Those actions performed in application of the product to its intended purposes, or for the product's continued operation, in accordance with the use and care instructions provided by the manufacturer with each product.

2.10 **OPERATING CONTROL** – Any device necessary for operating the edger or edger-trimmer, such as an engine-starting and-stopping control, a drive-engaging control, and a blade-angle adjustment.

2.11 OPERATOR CONTROL ZONE – The area within which controls are accessible by an operator standing in the operator zone. See [Figure 2.1](#).

Figure 2.1
Operator control zone^a



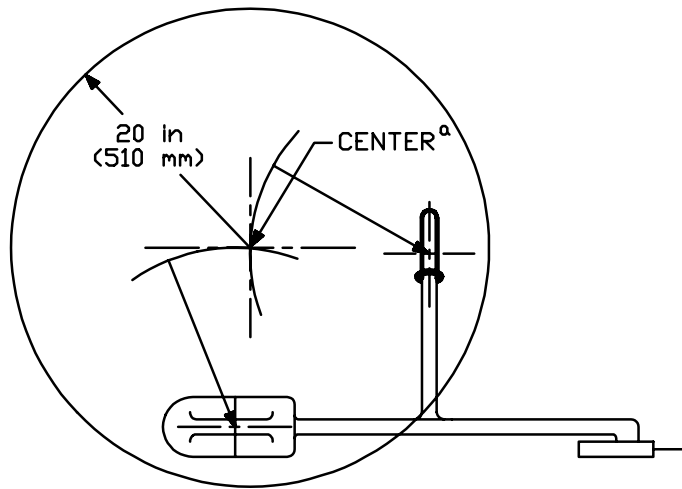
^a SI values for the dimensions in this figure are:

Dimension	Inches	Millimeters
A	74.0	1880
B	59.0	1500
C	18.7	475
D	10.0	254
E	50.0	1270
F	4.0	102
G	14.0	356
H	2.5	64
I	12.0	305

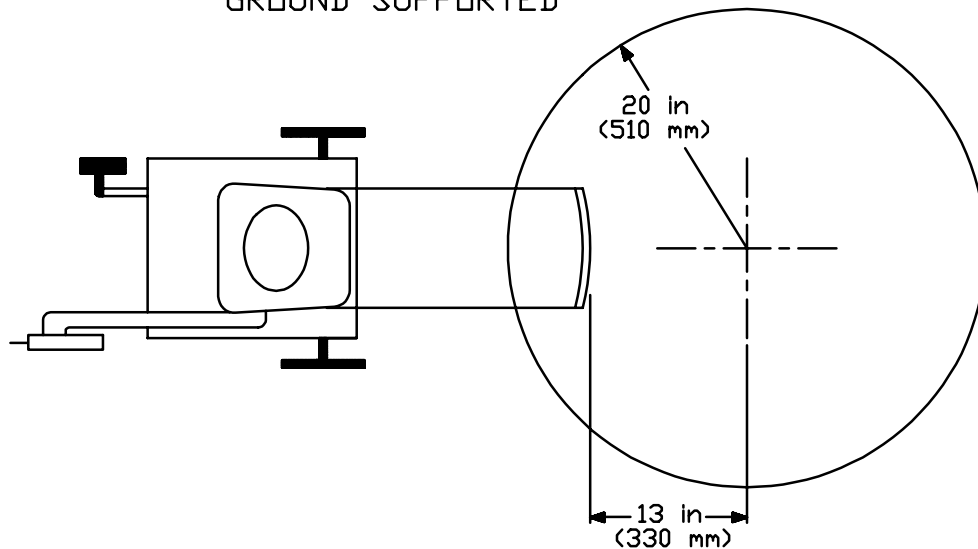
2.12 OPERATOR ZONE – When the product is performing its intended function, the operator zone is the space occupied by an operator having his hands on the handle or handles and his feet on the ground. See [Figure 2.2](#).

Figure 2.2
Operator zone

HAND SUPPORTED



GROUND SUPPORTED



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^a The center of the operator zone of a hand-supported portable edger is the point of intersection of two 13 in (330 mm) radius arcs that are drawn, one from each handle, in a plane parallel to the supporting surface. For the purposes of this measurement, the top center of the support handle is to be positioned 33.3 in (846 mm) above the supporting surface.

2.13 RIGHT, RIGHT HAND – LEFT, LEFT HAND – The designation that refers to the orientation of the edger or edger-trimmer when the operator is in the operator zone, facing the intended direction of travel of the product.

2.14 SUPPORT HANDLE – The handle of a hand-supported portable edger by which the operator supports the greatest percentage of product weight. See [2.6](#).

3 Units of Measurement

3.1 Values stated without parentheses are the requirement. Values in parentheses are explanatory or approximate information.

4 Components

4.1 Except as indicated in [4.2](#), a component of a product covered by this standard shall comply with the requirements for that component. See Appendix [A](#) for a list of standards covering components generally used in the products covered by this standard.

4.2 A component is not required to comply with a specific requirement that:

- a) Involves a feature or characteristic not required in the application of the component in the product covered by this standard, or
- b) Is superseded by a requirement in this standard.

4.3 A component shall be used in accordance with its rating established for the intended conditions of use.

4.4 Specific components are incomplete in construction features or restricted in performance capabilities. Such components are intended for use only under limited conditions, such as certain temperatures not exceeding specified limits, and shall be used only under those specific conditions.

5 Undated References

5.1 Any undated reference to a code or standard appearing in the requirements of this standard shall be interpreted as referring to the latest edition of that code or standard.

CONSTRUCTION

6 General

6.1 Accessories provided or specifically recommended for use by the manufacturer shall be individually evaluated with a product to determine that the product, when used with the accessory as directed by the manufacturer, complies with the requirements in this standard.

7 Cutting Member

7.1 An edger-trimmer shall not employ a cutting member in which the operational plane is adjustable to more than 110 degrees from the horizontal trimming position.

7.2 An edger shall not employ a cutting member in which the operational plane is adjustable to more than 20 degrees from either side of the vertical edging position.