

Australian Standard[®]

**POWERED ROTARY
LAWNMOWERS**

This Australian Standard was prepared by Committee CS/33, Power Lawnmowers and Edge Trimmers. It was approved on behalf of the Council of the Standards Association of Australia on 6 August 1985 and published on 4 October 1985.

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Australian Federation of Consumer Organizations
Confederation of Australian Industry
Department of Consumer Affairs, N.S.W.
Department of Employment and Labour Relations, Qld.
Department of Industrial Relations, N.S.W.
Department of Main Roads, N.S.W.
Interstate Noise Control Committee
Local Government Association of New South Wales
Metal Trades Industry Association of Australia
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PREFACE

This standard was prepared by the Association's Committee on Power Lawnmowers and Edge Trimmers. It supersedes AS 2657—1983 Powered Rotary Lawnmowers. Preparation of this edition was considered necessary to overcome some anomalies in the testing procedures. The revised procedures in this edition can be considered to achieve a higher level of safety than those which have been superseded.

The standard specifies requirements for the design and construction of the mower with the emphasis on safety for the user and the bystander, while consistent with the permitting of satisfactory performance in the intended task of cutting and catching grass. Throughout the preparation of this edition particular consideration was given to the safety of the operator while in control of the mower, and for this purpose, suitable test methods are specified in order to limit the possibility of accidental contact with the blades, and to control the dangerous ejection of objects from the mower. Tests for blades and their means of attachment are included to ensure that they are sufficiently robust to withstand all conditions which may occur in the normal use of a mower.

This standard is based on ISO 5395.

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SECTION 1. SCOPE AND GENERAL

1.1 SCOPE. This standard specifies requirements for the construction and design of powered rotary lawnmowers, together with appropriate test methods for qualitatively assessing the robustness of the cutting means and their means of attachment.

The standard does not include performance requirements for lawnmowers other than those relating to safety.

1.2 APPLICATION. This standard applies to powered rotary lawnmowers of the walk-behind type intended essentially for domestic use.

It does not apply to powered cylinder type lawnmowers or powered lawnmowers of the ride-on type.

1.3 REFERENCED DOCUMENTS. The following documents are referred to in this standard:

AS 1074 Steel Tubes and Tubulars Threaded or Suitable for Threading with Pipe Threads of Whitworth Form

AS 3156 Approval and Test Specification for Electric Lawnmowers

1.4 DEFINITIONS. For the purpose of this standard the following definitions apply:

1.4.1 Powered rotary lawnmower—a mower incorporating one or more blade assemblies in which the cutting edge or edges are in a substantially horizontal plane and driven in rotation about a vertical axis at

such a speed that will, under normal operating conditions, cut grass.

NOTE: Throughout this standard the term 'mower' is to be taken to mean 'powered rotary lawnmower'.

1.4.2 Blade—the means by which grass is cut including both metal and non-metal cutting means.

1.4.3 Blade tip circle—a circle described by the outermost point of a fully extended blade as it rotates about its vertical axis.

1.4.4 Swing-over handle—a handle which may be pivoted from one end of a mower to the other to permit reversing the direction of travel of the mower without turning the mower around.

1.4.5 Maximum speed—the maximum rotational speed of the blade assembly attained under no-load conditions using the controls provided for the operator.

1.4.6 Cutting area of the blades—the area of the blades which lies in the annulus between the blade tip circle and a concentric circle which has a diameter which is 80 percent of that of the blade tip circle (see Fig. 1).

1.5 ELECTRICAL SAFETY REQUIREMENTS.

This standard does not include the electrical safety requirements which must be observed to secure approval for connection or sale of mowers. An electrically powered rotary lawnmower shall, in addition to complying with this standard, comply with the requirements of AS 3156.

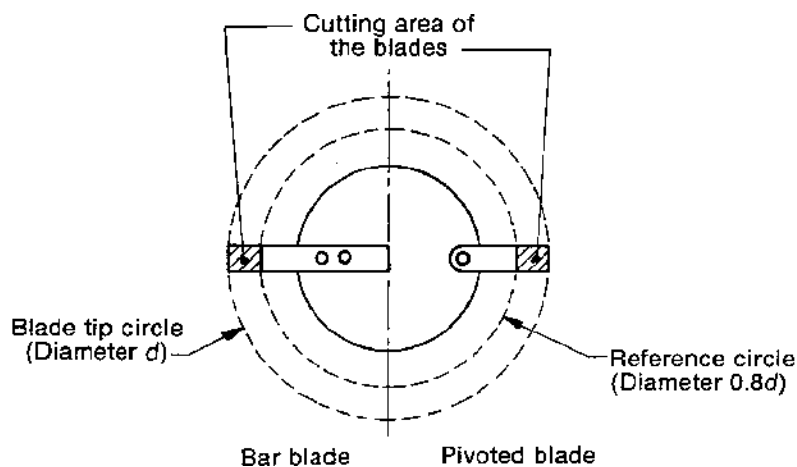


Fig. 1. CUTTING AREA OF THE BLADES