

**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

LY/T 1934-2010

Replacing LY/T 1934-2010

**Garden machinery Mounted lawn trimmer powered by gasoline
(diesel) engine
(English Translation)**

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Table of Contents

Foreword
1 Scope
2 Normative references
3 Terms and definitions
4 Model preparation method
5 Basic parameters
6 Technical requirements and test methods

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1: Structure and Drafting Rules of Standardization Documents" Drafting.

This document replaces LY/T 1934-2010 "Garden Machinery Mounted Lawn Mower". Compared with LY/T 1934-2010, except for editing the main technical differences outside of the sexual modification are as follows.

- The name of the document is changed from "Garden Machinery Mounted Lawn Mower" to "Garden Machinery is powered by gasoline (diesel) engines Mounted lawn trimmer", and revise its English name;
- Modified the content of the "Normative Reference Documents" (see Chapter 2, Chapter 2 of the 2010 Edition);
- Modified the method of product model compilation (see Chapter 4, Chapter 4 of the 2010 edition);
- Added the requirements and inspection content of "mowing height" (see 6.3.1);
- Amend the "Radio Disturbance Characteristics Limit" to "Electromagnetic Compatibility" and modify its content (see 6.4.1, 2010 edition 6.4.2);
- Added the requirements and inspection contents of "gasoline engine emission performance" (see 6.4.2);
- Modified the content of "safety requirements" (see 6.4.4, 6.9 in 2010 edition);
- Added "reliability" requirements and inspection methods (see 6.5);
- The content of "Anti-aging test of warning labels and nameplates" has been newly added

(see 7.1.1.3).

1 Scope

This document specifies the model of a mounted rotary blade lawn trimmer powered by a gasoline (diesel) engine (hereinafter referred to as "mounted lawn mower") Preparation, technical requirements and test methods, signs, instructions for use, packaging, transportation and storage.

This document applies to mount-type rotary knife lawn trimmers and mount-type hob lawn trimmers powered by gasoline (diesel) engines.

2 Normative references

The contents of the following documents constitute the indispensable clauses of this document through normative references in the text. Among them, dated reference documents, Only the version corresponding to that date is applicable to this document; for undated references, the latest version (including all amendments) is applicable to this document file.

GB/T 191 Packaging, storage and transportation pictorial signs GB/T 1147.1 Medium and small power internal combustion engines Part 1: General technical conditions GB/T 1147.2 Medium and small power internal combustion engines Part 2: Test methods GB/T 6388 Transport packaging receiving and dispatching signs GB/T 9480 Rules for the compilation of manuals for agricultural and forestry tractors and machinery, lawn and garden power machinery GB 10396 General rules for safety signs and hazard graphics for agricultural and forestry tractors and machinery, lawn and garden power machinery GB/T 13384 General technical conditions for packaging of mechanical and electrical products GB/T 15706 General Principles of Mechanical Safety Design Risk Assessment and Risk Reduction GB 20891 Limits and measurement methods of exhaust pollutants from diesel engines for non-road mobile machinery GB/T 21398 Electromagnetic compatibility test methods and acceptance rules for agricultural and forestry machinery GB 26133 Limits and measurement methods for exhaust pollutants from small ignition engines for non-road mobile machinery GB/T 38364.1 Garden machinery. Safety requirements for lawn trimmers powered by internal combustion engines. Part 1: Terminology and general tests GB/T 38364.3 Garden machinery. Safety requirements for lawn trimmers powered by internal combustion engines. Part 3: Mounted lawn trimmers JB/T 5135.1 General Small Gasoline Engine Part 1: Technical Conditions JB/T 5135.2 General Small Gasoline Engine Part 2: Bench Performance Test Method JB/T 5135.3 General small gasoline engine Part 3: Reliability and durability test and evaluation method LY/T 1621 Garden Machinery Product Model Compilation Method QC/T 518 Specification for tightening torque of threaded fasteners for automobiles

3 Terms and definitions

The following terms and definitions defined in GB/T 15706 and GB/T 38364.1 apply to this document.

4 Model preparation method

The preparation method of the product model of the mounted lawn mower is carried out in accordance with the regulations of LY/T 1621.

Mounted lawn mowers use cutting width (in millimeters) as the main performance parameter, rounded up to the nearest decimal point; based on engine displacement (single the position is cubic centimeters) as the main power parameter, which is rounded to the nearest whole number. The specific method of model preparation is shown in Figure 1.

5 Basic parameters

The main performance parameters and structural parameters of the mounted lawn mower, as well as the main technical parameters of the supporting power, should be included in the manual or provided for the user.

Given in other technical documents of the user. Mass-produced mounted lawn mowers should conform to the technical parameters given by them, and the main technical parameters should be at least include.

- a) Engine displacement, cm³;
- b) Maximum engine power, kW;
- c) Fuel tank volume, L;
- d) Cutting width, mm;
- e) Adjusting range of mowing height, mm;
- f) The number of mowing height gears;
- g) The maximum no-load speed of the tool, r/min;
- h) Maximum driving speed, km/h;
- i) Front and rear wheel specifications;
- j) Overall dimensions (lengthxwidthxheight), mm;
- k) Net weight of the whole machine, kg;
- l) The volume of the grass collector (if applicable), m³;
- m) The minimum turning circle diameter, m.

6 Technical requirements and test methods

General requirements

6.1.1

The mounted lawn mower should be able to operate normally under the following environmental conditions.

- a) The height of grass on the lawn does not exceed 300 mm;
- b) The slope of the site is not more than 15°;
- c) The altitude does not exceed 1,000 m;
- d) Ambient temperature -5 °C~40 °C;
- e) Humidity ≤90%, no rain;
- f) Lawn without stones, wires, sticks, metal objects and other foreign objects.

6.1.2

During the inspection, relative to the specified value or actual value, the accuracy of all control values or measured values should be within the following tolerance range.

- a) Size. ± 0.5 mm;
- b) Speed. ± 10 r/min;
- c) Displacement. $\pm 1\%$;
- d) Volume. $\pm 1\%$;
- e) Time. ± 0.1 s;
- f) Quality. $\pm 1\%$.

Performance of matching gasoline (diesel) engine

6.2.1 Requirements

The performance of the diesel engine for the mounted lawn mower should meet the requirements of GB/T 1147.1.

The performance of the gasoline engine matched with the mounted lawn mower should meet the requirements of JB/T 5135.1.

6.2.2 Inspection

The performance test of the diesel engine is carried out in accordance with the provisions of GB/T 1147.2.