

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

LY/T 1810-2020

Replacing LY/T 1810-2008

**Garden machinery Portable pole-type hedge trimmer powered
by gasoline engine
(English Translation)**

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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 1810-2008 "Garden Machinery Pole Power Hedge Trimmer", compared with LY/T 1810-2008, the main technical the technical content changes are as follows.

- Modify the file name "Garden Machinery Pole Power Hedge Trimmer" to "Garden Machinery Powered by Gasoline Engine Portable Pole Hedge trimmer";
- Modified the scope (see Chapter 1, Chapter 1 of the 2008 edition);
- Revised the normative references (see Chapter 2, Chapter 2 of the 2008 edition);
- Modified terms and definitions (see Chapter 3, Chapter 3 of the 2008 edition);
- Modified the use environment (see 5.1.1, 2008 version 5.2.1);
- Modified the test instrument parameters (see 5.1.2, 2008 edition 6.1.2);
- Modified the requirements for test hedges (see 5.1.3, 2008 edition 6.1.3);
- Modified the requirements for "supporting gasoline engines" and added corresponding inspection methods (see 5.2, 2008 edition 5.1.1);
- Modified the requirements and inspection methods of "starting performance" (see 5.3.1, 2008 edition 5.2.2 and 6.2);
- Modified the requirements and inspection methods of "idling performance" (see 5.3.2, 2008 edition 5.2.3 and 6.3);
- Added the requirements and inspection methods of "acceleration and deceleration performance" (see 5.3.3);

- Modified the inspection method of "Idle Speed Reversal Performance" (see 5.3.4.2, 2008 edition 6.4);
- Deleted the "operating rate" requirements and inspection methods (2008 version 5.2.7 and 6.6);
- Modified the requirements and inspection methods of "Maximum No-load Speed Stability" (see 5.3.5.2, 2008 edition 5.2.5 and 6.5);
- Added the requirement and inspection method of "No-load reciprocating frequency of cutting device" (see 5.3.6);
- Modified the requirements and inspection methods of "tearing rate" (see 5.3.7.2, 2008 editions 5.2.8 and 6.7);
- Added the requirement and inspection method of "maximum pruning diameter" (see 5.3.8);
- Added the "cutting width" requirements and inspection methods (see 5.3.9);
- Modified the requirements and inspection methods of "complete machine tightness" (see 5.3.11, 2008 edition 5.4.1 and 6.9);
- Added the requirements and inspection methods for "starters" (see 5.4.1);
- Modified the "clutch" inspection method (see 5.4.2.2, 2008 edition 6.8);
- Added the requirements and inspection methods of "cutting device protective cover" (see 5.4.3);
- Increase the inspection method of "cutter angle adjustment mechanism" (see 5.4.4.2);
- Modified the requirements of "strap" and added corresponding inspection methods (see 5.4.5, 2008 edition 5.3.6);
- Modified the requirements of "handle" and added corresponding inspection methods (see 5.4.6, 2008 edition 5.3.2);
- Added requirements and inspection methods for "hydraulic and pneumatic pipes and hoses" (see 5.4.7);
- Modified the requirements and inspection methods of "handle vibration" (see 5.5.1, 2008 edition 6.10);
- Modified the inspection method of "the noise near the operator's ear" (see 5.5.2.2, 2008 edition 6.11);
- Modified the requirements of "electromagnetic compatibility" and added corresponding inspection methods (see 5.5.3, 2008 edition 5.1.2);
- Added the requirements and inspection methods for "exhaust pollutants" (see 5.5.4);

- Added "other safety" requirements and inspection methods (see 5.5.5);
- Deleted "control device", "throttle trigger", "engine stop mechanism", "protection of moving parts", "thermal protection", "Engine exhaust direction", "protection of high-voltage live parts" and "fuel tank" requirements (2008 5.3.3, 5.3.4, 5.3.5, 5.4.2, 5.4.3, 5.4.4, 5.4.5 and 5.4.9);
- Modified the requirements and inspection methods of "reliability and durability" (see 5.6, 2008 edition 5.5, 6.12);
- Modified the requirements of "appearance quality" and added corresponding inspection methods (see 5.7, 2008 edition 5.6);
- Deleted the content of "Inspection Rules" (Chapter 7 of the 2008 edition);
- Modified the requirements for "marking" and added corresponding inspection methods (see 6.1, 2008 edition 8.1.1);
- Modified the requirements of the "Instruction Manual" and added the corresponding inspection methods (see 6.2, 2008 edition 8.4);
- Modified the requirements for "packaging" and added corresponding inspection methods (see 6.3, 2008 edition 8.2);
- Modified the content of "Appendix A (Normative Appendix) Main Technical Parameters of Pole Hedge Trimmers" (see Appendix A, Appendix A of the 2008 edition);
- Deleted "Appendix B (informative appendix) Hand-feel vibration frequency weighting characteristics" (Appendix B of 2008 edition);
- Deleted "Appendix C (Normative Appendix) Hand Feeling Vibration Measurement Data of Pole Hedge Trimmer" (Appendix C of the 2008 edition).

1 Scope

This document specifies the terms and definitions of portable pole-type hedge trimmers powered by gasoline engines (hereinafter referred to as "pole-type hedge trimmers"), Product model and basic parameters, technical requirements and test methods, signs, instructions for use, packaging, transportation and storage.

This document applies to side-mounted and knapsack-type hedge trimmers powered by gasoline 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 3766 General rules and safety requirements for hydraulic transmission systems and their components GB/T 4269.5 Operator control symbols and other markings for portable forestry machinery GB/T 5390 Forestry and Gardening Machinery Engineering Method for the Determination of Noise from Portable Hand-held Operation Machinery Powered by Internal Combustion Engines (Level 2 Accuracy) GB/T 5395 Forestry and Garden Machinery Vibration Measurement Specification for Portable Hand-held Operation Machinery Powered by Internal Combustion Engines, Handle Vibration GB/T 7932 General rules and safety requirements for pneumatic systems and their components GB/T 9480 Rules for the compilation of manuals 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 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 (China's first and second-order segment) 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 JB/T 11652 General specification of rebound rope starter for small gasoline engine LY/T 1619 Garden machinery hand-held hedge trimmer powered by gasoline engine LY/T 1621 Garden Machinery Product Model Compilation Method LY/T 2569 Safety requirements and tests for hand-held hedge trimmers powered by gasoline engines for garden machinery

3 Terms and definitions

The following terms and definitions defined in LY/T 1619 apply to this document.

Pole-mounted hedge-trimmers A cutting component is installed on one end of a working rod, and the other end of the working rod is connected to a power device through a clutch, a transmission shaft and a transmission box A portable hedge trimmer that drives the cutting part to reciprocate and realizes the hedge cutting function.

4 Product model and basic parameters

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

Product technical parameters should be given in the instruction manual and related technical documents, see Appendix A.