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

GB 24929-2010

**Limit and measurement method of noise emitted by
accelerating all-terrain vehicles**

全地形车加速行驶噪声限值及测量方法

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Foreword

The standard Chapter 4, Chapter 5 and Chapter 6 are mandatory, the rest are recommended. Appendix A of this standard is an informative annex. The standard four all-terrain vehicle by the National Standardization Technical Committee (SAC/TC344) and focal points. This standard is drafted by: Shanghai Motor Vehicle Inspection Center. Participated in the drafting of this standard. Chongqing Jianshe Motorcycle Co., Ltd., the National Motorcycle Quality Supervision and Inspection Center (Chongqing), Zhejiang Xingyue Group Co., Ltd., Hangzhou Chunfeng Holdings Group Motorcycle Manufacturing Co., China Quality Certification Center, Chongqing Astronautic Bashan Motorcycle Manufacturing Co., step Yang Group Limited. The main drafters of this standard. Miao Wenquan, Jiang Yong, Zhou plot, Lian, Bo Jun, ZHAO Yong Zhou, Zhang, Zhu Zhu, Chen Xiangyang, Zhang Ping. The standard implementation of the transition period. the first stage of implementation of the standard after six month; the second phase of the implementation of the standard 30 months after the date onwards. ATVs with acceleration noise Limits and methods of measurement

1 Scope

GB 24929-2010 is the Chinese national standard on limit and measurement method of

noise emitted by accelerating all-terrain vehicles, in the field of environment and health protection, safety. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 9 August 2010 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 January 2011. Classification: ICS 13.140, CCS Z32. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the all-terrain vehicle acceleration with noise limits and measurement methods. This standard does not apply to non-road all-terrain vehicles and special all-terrain vehicle. This standard applies to all-terrain vehicle type approval and production consistency check.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Can you use the latest versions of these files. For undated reference documents, the latest versions apply to this standard.

GB/T 3785 sound level meter electric, acoustic performance and test methods

GB/T 5378 motorcycles and road test method

GB/T 15173 electric acoustic sound calibrators (GB/T 15173-2010, IEC 60942.2003, IDT)

GB 16169-2005 motorcycles and accelerated with noise limits and measurement methods

GB/T 24936 ATVs term

3 Terms and Definitions

In GB/T 24936 and established the following terms and definitions apply to this standard.

3.1 Type approval test testfortype-approval Production enterprises manufacturing all-terrain vehicle type approval tests of new models by the provisions of.

3.2 Conformity of Production tests testforconsistencyoftheproductinspection The test type approval test approved ATVs mass production vehicle models produced by the provisions of the consistency check.

3.3 Background noise ambientnoise Background noise refers to the ambient noise (including wind noise) test vehicle noise does not exist.

4 Acceleration with noise limits

4.1 Noise limit the type approval test The internal combustion engine as a power source using all-terrain vehicle type approval test accelerated with noise limits in Table 1, the pure electric drive as a power source The all-terrain vehicle type approval test acceleration noise limits in Table 2, the use of hybrid ATVs its power source, respectively assessment.

4.2 Production consistency check test noise limits ATVs various stages of production consistency check test implementation date and the same type approval testing, production consistency check test acceleration With noise limits than the type approval test acceleration with high noise limits 1dB (A), and the production consistency check test noise measured value It should not exceed the type approval test measured noise value plus 3dB (A).

4.3 Other Requirements Equipped with sound-absorbing material fiber exhaust muffler system of all-terrain vehicles should be consistent with GB 16169-2005 Appendix A requirements. All-terrain vehicle type approval test in Table 1 with an internal combustion engine powered acceleration noise limits Engine Displacement/mL Noise Limit/dB (A) The second stage of the first phase ≤ 50 78 76 > 50 and < 17 580 ≥ 175

82 Table 2 electric all-terrain vehicle type approval test accelerated with noise limits ATVs Type Noise Limit/dB (A) Motor maximum continuous power ≤ 4 kW

76 Motor maximum continuous power > 4 kW 80

5.1 Acoustic measuring instruments

5.1.1 for measuring the sound level of the sound level meter or equivalent measurement system should be consistent with GB/T 3785 type 1 precision sound level meter requirements.

Note. Whenever possible, use the extension rods and extension cables.

5.1.2 At the beginning and end of each series of measurements, use a suitable sound source (such as a piston sound meter) according to GB/T 15173 requirements Checked and calibrated sound level meter. Use Sound Level Meters "fast (F)" profile Time weighting characteristics and "A" frequency weighting characteristics measurement measurements.

5.1.3 measurement process, should be required to use the sound level meter windshield instructions correctly, it should be noted windshield on the microphone sensitivity And directional influence.

5.2 vehicle speed and engine speed measuring instruments You should use a dedicated vehicle speed and engine tachometer measuring instruments, which should be consistent with the requirements of GB/T 5378 regulations.

5.3 Meteorological measuring instruments Anemometer, air pressure gauge and a thermometer should be consistent with GB/T 5378 regulations.

6 accelerated running noise test method

6.1.1 Measurement site (FIG. 1) Center

6.1.1.1 to survey the site should be a solid flat area surrounding the detection of the acceleration parts, this central acceleration section should be flat; Its surface should be dry, there should be no snow, dirt or similar sound absorbing material covered. Detecting road surface coating should be consistent with GB 16169-2005 Appendix B requirements.

6.1.1.2 on the measuring site, accelerated change free-field sound source and the microphone part of the center should not exceed 1dB (A). If the center portion 50m in the acceleration range, no large sound reflecting objects, such as buildings, fences, rocks, bridges, trees and parked Vehicle, can be considered for this condition is satisfied.

6.1.1.3 should not in any way that could affect the sound field microphone barrier, no one should stand between the microphone and the sound source, the measurement Own work stations observers should not affect the readings measuring device.

6.1.2 Meteorology Measurement should be no rain, no snow and the wind speed of not more than 3m/s climatic conditions. Excluding the impact should be measured gusts of sound level meter readings.

6.1.3 Background noise The measurement process, the A-weighted sound level of sound sources influence the detection of the vehicle other than the wind formed (background noise) ratio should be at least test the whole earth Noise generated by the car-shaped low 10dB (A) above. If the difference between the ambient noise and the measured noise is between 10dB (A) ~ 16dB (A) of the Room noise measured value of the test vehicle shall be reduced by the correction value shown in Figure 2. In meters 1 with noise measurement site, measurement region and microphone arrangement Figure 2 correction value of the background noise

6.2 Vehicle Condition

6.2.1 During the measurement, the test vehicle in addition to a pilot, shall not load and without people, vehicles should be in working order (including cooling Fluid, lubricants, fuel, tools, spare wheel). The total mass of the driver and their equipment should be between 75kg ~ 80kg, if necessary, increase Additional weights of 75kg to meet the minimum requirements.

6.2.2 If the test subject is equipped with automatic fans, in the measurement process, this system should be undisturbed.

6.2.3 before measuring, speed warm-up test shall be subject to the normal operation, and