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

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Tri-wheel vehicle self-unloading system -- Safety requirements

三轮汽车自卸系统 安全技术要求

(English Translation)

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Table of Contents

Foreword
1 Scope
2 Normative references
3 Security requirements and measures
3.1 General requirements
3.2 Security guards
3.3 Lifting and fall
3.4 Hydraulic System
3.5 Operating mechanism
4.1 General Requirements
4.2 Security guards
4.3 Lifting and fall
4.4 Hydraulic System
4.5 Operating mechanism
5 Use Information

Foreword

All the technical contents of this standard is mandatory.

The standard proposed by China Machinery Industry Federation.

The low standard by the National Automotive Standardization Technical Committee (SAC/TC234) centralized.

1 Scope

This standard specifies the technical requirements for the safety of three-wheel hydraulic dump system.

This standard applies to three-wheeled automobile hydraulic dump system.

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 Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB 10396 agricultural and forestry tractors and machinery, lawn and garden equipment - Safety signs and hazard pictorials - General principles (GB 10396-2006, ISO 11684:1995, MOD) Symbol GB/T 19122 farm vehicles, controls, indicators and telltales

3.1 General requirements

3.1.1

Design of three car dumper system, manufacturing should ensure safe operation. In accordance with the manufacturer product instructions normal operation and maintenance There should be no unreasonable risk when maintenance.

3.1.2

three car dumper system used by the component shall comply with the national standards, industry standards, granted in accordance with prescribed procedures Quasi products manufacturing drawings and technical documents.

3.2 Security guards

3.2.1

dump system should be set after lifting the state of repair of mechanical locking devices, rollover Tipper dump transport system should be set up state Locking means. Locking device should be able to secure locking.

3.2.2

Dump system should ensure that the car does not appear automatically lifting phenomenon in the process of moving.

3.3 Lifting and fall

3.3.1

Dump system should enable the car steady rise, fall or stop at any position, there should be no collision and wiring.

3.3.2

at 10% overload condition, give rise to 20 °, the residence 5min, from the lower compartment of not more than 1.5 °.

3.3.3

Dump system should enable accurate return after lifting the car.

3.4 Hydraulic System

3.4.1

Hydraulic dump system pressure safety devices (pressure limiting device) should be installed.

3.4.2

hydraulic dump system 1.5 times (the rated working pressure $\leq 15\text{MPa}$) or 1.25 times (the rated working pressure $> 15\text{MPa}$) rated operating Under pressure to make, is not allowed within 3min oil leakage, cracking, swelling and partial disengagement joints and so on.

3.4.3

Dump hydraulic system piping should be reasonable layout, stable fixation, away from hot surfaces, moving parts, exhaust and electrical equipment, there should be no infiltration Drain, loose, loss and interference phenomena.

3.4.4

When necessary, should be high-pressure tubing hydraulic dump system piping protection, to ensure that when the pipeline rupture, without splashing into the body.

3.5 Operating mechanism

Operating mechanism and other components should not have interference, measures should be taken to prevent accidental start-control mechanism. The control mechanism should be flexible, accurate Accurate, reliable, and should not be displaced due to vibration.

Determining safety requirements and measures 4

4.1 General Requirements

Dump system carrying dangerous does not occur during the test according to the manufacturer product instructions normal operation and maintenance, it is determined the project qualified.

4.2 Security guards

4.2.1

Visually inspect the locking device is qualified.

4.2.2

dump truck driving at full load, in the three and three of the following roads at least 1h, observe whether the carriage to automatically lift L phenomenon.

4.3 Lifting and fall

4.3.1

to 3.3.1, dump truck without a load, stopping on a flat, hard surface of the ground, steering system dump, visually check for eligibility.

4.3.2

dump truck at 10% overload state, stopping on a flat, hard ground surface, uniform load, mounted on the side of the car dump direction fence Inclinator, then the coaches give rise to 20 °, the residence 5min, read and record the starting and ending point of view angle instrument, calculate the difference. Press dumping direction, each repeated three times, and three times the difference between the average value of the compartment from the lower amount.

4.3.3

Dump visual system enables car lifting the return after the accuracy of eligibility.

4.4 Hydraulic System

4.4.1

to 3.4.1, a visual inspection pressure safety devices (pressure limiting device) is set.

4.4.2

hydraulic dump system pressure rises to 1.5 times (the rated working pressure $\leq 15\text{MPa}$) or 1.25 times (the rated working pressure After $> 15\text{MPa}$) rated working pressure, keeping 3min, to observe whether there is oil leakage, cracking, swelling and partial disengagement joints and so on.

4.4.3

to 3.4.3, a visual inspection is qualified.

4.4.4

to 3.4.4, a visual inspection is qualified.

4.5 Operating mechanism

Dump system operated steering mechanism, visually check for eligibility.

5 Use Information

5.1

Dump system controls, graphic indicators and telltales signs shall comply with GB/T 19122 of.