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Terminology of power-driven vehicle inspection

机动车检验术语

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1 Scope

China's national terminology for motor vehicle inspection. Periodic vehicle inspection is a mass activity - every vehicle in the country passes through it on a schedule - carried out by thousands of stations under regulatory supervision, and the terms have to mean the same thing in all of them. The vocabulary covers the inspection items and their categories, the equipment and its readings, the defect classifications, and the outcomes: what constitutes a pass, a repairable defect and a failure. The classification of defects is the part that carries the weight, because it determines what a station can require a motorist to fix and what a regulator can enforce, and an ambiguous term in that classification is the space in which inconsistent and contestable decisions are made. Fixing it nationally is what makes an inspection certificate mean the same thing wherever it was issued.

This Document defines the terminology of basic types, inspection types and items, inspection personnel, inspection site facilities, inspection instruments and equipment, management systems, and inspection control and communication of motor vehicle inspection. This Document applies to motor vehicle registration inspection, in-use motor vehicle inspection and vehicle off-line inspection.

2 Normative References

For the purposes of this Document, there are no terminologies apply.

3.1 Basic terms

3.1.1 Power-driven vehicle testing Measurements and tests that are carried out with the aid

of equipment and instruments in order to determine the technical condition or working capabilities of motor vehicles.

3.1.2 Power-driven vehicle checking Use methods such as visual inspection, tool assistance, and instrument equipment assistance to conduct qualitative analysis of the vehicle's technical condition.

3.1.3 Power-driven vehicle inspection The work of testing and inspection to determine the technical condition of power-driven vehicles and determine whether they comply with relevant specific technical standards.

3.1.4 Testing parameter Direct and indirect indicators that adequately express the technical status of the test object.

3.1.5 Working parameter Parameters that can represent comprehensive information about power-driven vehicle detection objects. NOTE: Such as vehicle braking rate, headlight high beam luminous intensity, etc.

3.1.6 Procedure parameter Local information parameters that represent the local information parameters of the power-driven vehicle detection object. NOTE: Such as the amount of free rotation of the steering wheel, tire tread depth, etc.

3.1.7 Inspection standard The standards and criteria followed by the inspection object in terms of entities and procedures.

3.1.8 Power-driven vehicle experiment Test that is used to determine the technical characteristics of the vehicle and conduct tests on the power-driven vehicle or its parts and materials according to predetermined procedures. NOTE: Such as reliability test, durability test, electromagnetic compatibility test, etc.

3.1.9 Principle of similarity A research method that uses a model similar to the prototype to replace the prototype working machine.

3.1.10 Similarity criterion The dimensionless combination number used to judge the similarity between the model and the prototype.

3.1.11 Prototype experiment The experiment with object as the actual structure of the vehicle.

3.1.12 Model experiment The experiment, to obtain relevant data and check design defects, that is carried out on scaled-down or full-scale models of vehicles or components.

3.1.13 Orthogonal experiment The experiment that is conducted by selecting some representative points from the comprehensive experiment based on orthogonality.

3.1.14 Variance analysis The experiment that is used for the significance of the difference between the mean values of two or more vehicle parameter samples.

3.2 Inspection types and items

3.2.1 Road experiment Test instruments are installed on power-driven vehicles and experiments are conducted on roads that comply with regulations according to test conditions. NOTE: Such as vehicle braking distance, maximum stable vehicle speed, handling stability test, etc.

3.2.2 Bench experiment The experiment that simulates vehicle operating conditions on a specially designed test bench based on similar principles to obtain data similar to actual use.

3.2.3 Field experiment The controllable and repeatable vehicle experiment is conducted that uses simulated targets and scene elements.

3.2.4 Simulation experiment The experiment that simulates the effects of reality on a computer and uses virtual scenes to observe dynamic changes in vehicles.

3.2.5 Inspection for vehicle at end of production line The final inspection of the whole vehicle performance and quality after the completion of production of a new vehicle. NOTE: It is a necessary condition for delivery.

3.2.6 Inspection for unregistered vehicle Safety technical inspection and pollutant emission inspection that are conducted by inspection agencies on power-driven vehicles applying for registration. Inspection of harmful gases such as CO, HC, and NOX produced after combustion in power-driven vehicle engines.

3.2.11.4 Particle pollutants inspection Testing of harmful particulate matter such as soot and trace metal particles produced after the combustion of power-driven vehicle engines.

3.2.12 Online query The query that is conducted by a dedicated network for the information on driven-power vehicle accidents, violations, recalls due to safety defects and other information.

3.2.13 Inspection of parameters of vehicle characteristics Inspect the main characteristics and technical parameters of the power-driven vehicle such as the outer dimensions, curb weight/empty weight, and the approved number of passengers; and confirm that they are consistent with the national safety technical standards for power-driven vehicles, power-driven vehicle product announcements, power-driven vehicle exit-factory certificates, and power-driven driving license, and other technical certificate materials. [SOURCE: GB 38900-2020, 3.1.4]

3.2.14 Vehicle appearance inspection The inspection of power-driven vehicle body appearance, external lighting and signaling devices, tires, number plate (frames) and other items.

3.2.15 Safety device inspection The inspection of vehicle active and passive safety devices such as power-driven vehicle seat belts, emergency parking safety accessories, fire

extinguishers, anti-lock braking devices, etc.

3.2.16 Chassis component inspection The inspection of steering, transmission, driving and braking system components and other chassis components of power-driven vehicles.

3.2.17 Steering wheel lateral sideslip inspection The inspection that uses side slip inspection platform to inspect the lateral slippage of the steering wheel.

3.2.18 Service brake performance inspection The inspection that uses road test or bench test inspect the driving braking performance of the power-driven vehicles.

3.3 Inspector

3.3.1 Driver of the vehicle under inspection In a power-driven vehicle inspection agency, a person who drives a power-driven vehicle for inspection and holds a valid power-driven vehicle driving license corresponding to the vehicle model under inspection.

3.3.2 Appearance inspector In the power-driven vehicle inspection agency, a person who cooperates with the driver of the vehicle under inspection to complete the online query of the inspected vehicle, vehicle uniqueness inspection, vehicle characteristic parameter inspection, vehicle appearance inspection, safety device inspection and pollutant emission appearance inspection in the external inspection shed (or external inspection workshop).

3.3.3 Chassis dynamic inspector In the power-driven vehicle inspection agency, a person who completes a chassis dynamic inspection by driving an inspected vehicle consistent with the approved model in the chassis dynamic inspection area. NOTE: It is allowed that the chassis dynamic inspector and the driver of the vehicle under inspection are the same person.

3.3.4 Chassis component inspector In a power-driven vehicle inspection agency, a person who cooperates with the driver of the vehicle under inspection to complete the inspection of chassis components of the vehicle under inspection in the inspection trench (or by using a vehicle lifting device).

3.3.5 Authorized signatory A person who is nominated by the power-driven vehicle inspection agency, and after passing the assessment by the qualification accreditation department, issue safety technology and pollutant emission inspection reports within the scope of their capabilities authorized by the qualification accreditation.

3.4.2 Traffic markings Traffic safety facilities that are composed of various lines, arrows, words, facade markings, raised road signs and outline signs drawn on the road surface.

3.4.3 Safety sign A sign that is used to convey specific safety information. NOTE: Safety signs consist of graphic symbols, safety colors, geometric shapes (borders) or text.

3.4.4 Pedestrian passageway In the power-driven vehicle inspection agency, isolation fences and inspection area are used to isolate and are dedicated to personnel passage.