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China Compulsory Certification Implementation Detailed-Rules

Brake Hose of Motor Vehicle

机动车制动软管

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China Quality Certification Center

Table of Contents

0. Introduction

"*China Compulsory Certification Implementation Detailed-Rules - Brake Hose of Motor Vehicle*" (hereinafter referred to as Implementation Detailed-Rules) is compiled based on the requirements of "*Implementation Rules for China Compulsory Certification - Brake Hose of Motor Vehicle*" (CNCA-C11-04:2014) (hereinafter referred to as Implementation Rules). This Implementation Detailed-Rules is used together with the Implementation Rules as supportive document.

The product scope, certification basis and all other contents of this Implementation Detailed-Rules shall comply with relevant provisions of Implementation Rules. It shall also be adjusted according to the Notices such as defined directory and directory adjustment that are issued by Certification and Accreditation Administration of the People's Republic of China (hereafter referred to as CNCA).

In accordance with the provisions of Implementation Rules, following the principles of maintaining the effectiveness of product certification, improving quality of product, serving certification companies, and controlling risk of certification, CQC formulates and issues this Certification Implementation Detailed-Rules. Through establishing the classification management requirements of manufacturing enterprises, and combining the classification of manufacturing enterprises, this Detailed-Rules determines the implementation requirements for China compulsory certification of brake hose of motor vehicles.

0.1 Terms and Definitions

0.1.1 Brake hose: flexible hoses used to transmit or store hydraulic pressure, pneumatic pressure or vacuum to provide braking force to the braking system. The following also referred to as hose.

Brake hose assembly: composed by brake hose and brake hose end fitting, and brake hose and brake hose end fitting are permanently connected.

0.1.2 Testing at Manufacturer's Premises (abbreviated as TMP mode)

It means that the engineers of designated laboratory use the testing equipment in the factory laboratory to conduct testing. The factory shall dispatch test personnel to provide assistance. The designated laboratory will examine, approve and issue the test report.

0.1.3 Witnessed Manufacturer's Testing (abbreviated as WMT mode)

It means that the engineer of designated laboratory witnesses the factory laboratory's test conditions and all tests completed by using the laboratory's equipment or according to the test plan submitted; or witnesses part of the test conditions and the test items. Test personnel of the factory laboratory shall provide the original records

In case there is any change, the documents publicized by CQC shall prevail. In principle, the classification result of manufacturing enterprises shall be upgraded according to the sequence of D-C-B-A; and downgraded according to the sequence of A-B-C-D or it may be directly downgraded to the corresponding category according to the risk evaluation.

0.3 Requirements on Utilizing Testing Resources of Manufacturing Enterprises

0.3.1 Scope

Applicable to after-certification supervision sampling test and supplementary difference-test when the certificate is changed.

0.3.2 Implementation

If the manufacturing enterprise has the testing equipment and testing capacity that are required by “Implementation Rules for China Compulsory Certification: Utilization Requirements of Testing Resources and Other Certification Results of the Manufacturing Enterprise” and the certification standards, then the CLIENT, manufacturer, or manufacturing enterprise can apply for testing to utilize the testing resources of the manufacturing enterprise (hereinafter referred to as the factory laboratory) and perform the self-inspection. The self-inspection result and relevant materials shall be submitted to CQC for review. The factory laboratories of which the materials pass the review are allowed to perform TMP or WMT (hereinafter also referred to as on-site test) with factory laboratory resources.

In principle, CQC shall not organize inspection only for factory laboratory. Generally, factory laboratory inspection application of the CLIENT shall be proposed together with on-site test application. CQC shall organize the technical specialists from designated laboratories to perform both inspections. Inspection group shall inspect the laboratory capability first; and keep the relevant inspection and assessment record; after conformance, then perform production on-site inspection.

0.3.3 Qualification maintenance

CQC shall perform regular (such as once a year, or adjusted according to frequency) supervision to the certified factory laboratory. In principle, laboratory supervision shall be made together with after-certification supervision. Factory laboratory shall take part in contrast test to ensure the test accuracy and maintain the qualification.

When it is needed by the manufacturing enterprise, it can perform single test in response to the on-site test raised by CLIENT; the test result is only applicable to this on-site test. The factory laboratory may be exempted from supervision to maintain the qualification. When there is same-item requiring for on-site test, application for approval shall be made again.

6.1.2.1 Type test samples shall be regular products of manufacturing enterprise of CLIENT. CLIENT shall promise that all samples are consistent with actual produced products, and are not allowed to borrow, rent or purchase samples for test. CQC and/or designated laboratory shall check the authenticity of samples provided by the CLIENT. When laboratory is not sure about the authenticity of samples, it shall report to CQC and handle it accordingly.

6.1.2.2 Sample submission/sampling mode

CLIENT shall prepare samples in accordance with type test plan, and send the samples to designated laboratory. When required by CLIENT, CQC may arrange inspectors to sample when performing production conformity inspection of 6.2.3. In this case, Sampling shall be made on the premise that factory inspection is concluded as qualified; or there is conformity item, it needs the written-mode to verify the effectiveness of corrective measures.

In principle, manufacturing enterprises shall send the samples to designated laboratory within 20 days for type test. In the case that CLIENT fails to send the samples to designated laboratory on time, reasonable explanations shall be made to CQC.

6.1.2.3 Sample specification and quantity for type test

(1) Hose assembly or hose of main inspected model:

a. Hydraulic brake hose assembly: 31 (due to the structure of hose end fitting, the assembly need to be cut into 39 sections for the inner hole throughput after constriction test), and for hose assemblies used at parts with relative motion such as frame and axle, the quantity need to increase 4;

b. Pneumatic brake hose or assembly: 16;

c. Vacuum brake hose or assembly: 10 for rubber, 8 for plastic.

If there is difference between different models of products within the same unit in the following aspects, CQC will select the hose or hose assembly of corresponding model to carry out the difference test required in 6.1.3:

(2) Nominal inner diameter (rubber hose) or nominal outer diameter (plastic hose): Hoses or hose assemblies of different nominal inner diameter (or outer diameter) in the same unit shall be subjected to difference test. For products of each diameter, quantity of samples of the same model shall be increased:

a. Hydraulic brake hose assembly: 12 (due to the structure of hose end fitting, the assembly need to be cut into 20 sections for the inner hole throughput after constriction test), and for hose assemblies used at parts with relative motion such as frame and axle, the quantity need to increase 4;

and test result are traceable. If there is abnormality in the test, the laboratory shall contact CQC and handle it accordingly.

6.1.4.2 If there are unqualified test items, the CLIENT has the right to make corrections after analyzing the failure for further retest. In this case, the laboratory shall inform the certification body; and the certification body shall confirm the test plan again.

Generally, the CLIENT shall complete the correction within 90 days, and provide the valid corrected materials/samples to the designated laboratory/CQC. If it exceeds 90 days, it is deemed that the CLIENT gives up and terminates the certification entrusting. The CLIENT may terminate the certification by itself. CQC shall arrange personnel for sampling from corrected samples. If the factory inspection has been completed, necessity of extra factory inspection shall be determined based on failure reasons and failed items.

6.1.4.3 Type test shall not exceed 25 working days (counted from the day when samples arrive the laboratory); time for correction and retest due to sample failure or test items failure is not counted in it. Time-limit of new test after correction is the same as type test.

6.1.5 Type Test Report

CQC shall formulate the unified format of type test report.

The laboratory shall issue type test reports in the unified format. The laboratory and its related personnel shall be responsible for correctness of the content and test conclusions of the type test reports made by them. The laboratory shall issue type test report to CQC and to CLIENT timely when test is completed. Test report shall include descriptions of related information of other products in the unit (when required by CQC) and of certification.

CLIENT shall ensure that it be able to provide certification body and law enforcement departments with complete and valid type test report during after-certification supervision.

6.2 Initial Factory Inspection

6.2.1 Basic Requirements of Factory Inspection

6.2.1.1 Manufacturers or manufacturing enterprises shall abide by the requirements in Attachment II of the Implementation Rules to establish, implement and sustainably maintain the production conformity control system; make sure that the certified products sustainably satisfy the requirements of compulsory product certification.

Factory inspection refers to the evaluation, made by the certification body, if the production conformity control system of manufacturers or manufacturing enterprises can comply with certification requirements. Initial factory inspection shall be carried out

needs, type test and factory site inspection may also be made at the same time.

CQC delegates the compulsory product certification inspectors with national registered qualification to form an inspection team to make the site inspection of production conformity in accordance with Attachment II of the Implementation Rules. Entrusted certification products shall be in production during the factory site inspection. When necessary, site inspection can be extended to sites of the CLIENT and manufacturer.

6.2.3.2 When performing factory site inspection, the inspection team shall randomly sample qualified products at the processing site to carry out following inspections, including but not limit to:

(1) Structure and parameters of certified products, including model, specification, and critical components;

(2) On-site designated test of certified products (selected from production conformity control plan).

6.2.3.3 Result of factory inspection

(1) Inspection result shall be qualified if there is no unqualified item;

(2) Unqualified items in factory inspection are allowed to be corrected, and the certification body shall adopt reasonable manner to confirm the correction result. Correcting time shall not exceed 3 months. If the correction is not finished within 3 months, or correction result is not qualified, the inspection result shall be unqualified.

(3) If it is found that production conformity control plan significantly deviates from the implementation, or produced products have significant difference in structure and parameters with type test samples, then the inspection result is unqualified.

If inspection result is unqualified, then the certification is terminated.

6.2.3.4 Inspection time

Factory on-site inspection time depends on unit-quantity of entrusted certification products, and shall take production scale of the factory into consideration. Generally, inspection time for each factory is 2 ~ 4 man-days.

6.2.3.5 When performing compulsory product certification, CQC may, according to the actual conditions, decide not to test some of the items as specified in Appendix I of the Attachment 2 of the Implementation Rules, provided the factory has secured service and management system certificate issued by the CNCA-authorized organizations and the certificate is valid. Other test items in initial factory inspection shall not be exempted.

Attachment I Requirements of Conformity of Production Control Plan

The object of conformity of production control is to make sure mass-produced certified products are consistent with approved certified products. The factory shall establish production conformity control plan for certified products according to Attachment II of the Implementation Rules. Conformity of production (COP) control plan shall at least contain the following contents:

1. Conformity of production test (inspection, test or check) control plan

The factory shall establish necessary inspection, test and check plan according to certification standards. If certification standards specify the items for COP, the test provisions of the factory shall not be lower than the requirements of standards.

For brake hose of each energy transmission mode (hydraulic, pneumatic and vacuum), the conformity of production test items are all the applicable clauses in accordance with the standards in Article 2 of this Detailed-Rules at the frequency of at least once a year.

After-certification supervision sampling test can also be treated as COF test result.

COF control plan shall at least include the following items:

(1) Test scope and responsibilities, and specification of test capacity and requirements of test laboratory;

(2) Test items, including off-production test items and items in certification standards;

(3) Test procedures;

(4) Test frequency;

(5) Requirements of sampling and samples;

(6) Test result evaluation conditions (qualified or unqualified shall be determined respectively);

(7) Analysis, record and preserving requirements of test result;

(8) Correction, prevention and non-conformity control measures when test result is unqualified.

Relevant documents or articles can be directly referenced into production conformity control plan, provided the factory has already established independent quality control

Attachment II Certification Implementation of Service Parts for After-sales Maintenance for Discontinued Vehicle Model

1. CLIENT submits application (www.cqc.com.cn) to CQC. Append “After-sales service part for discontinued vehicle model xxx” in product name in the application materials (only for xxx service parts).

2. CLIENT submits certification application materials

(1) Applicable application materials as specified in 5.2 of this Detailed-Rules;

(2) Proof on discontinued models that are provided by the assembly plant; sealed with primary seal, instead of sealed by competent departments such as purchasing department or product department;

(3) Test report of product type approval;

(4) Note of annual consumption (product volume) of certified products.

3. CQC establishes certification plan according to enterprise classification management and certification risk;

4. Type test

Type test can be exempted if there is compulsory items’ test report of type approval. If not, CQC shall establish type test plan. If certification standards have been upgraded, test standards can be based on the old edition.

5. Initial factory inspection

5.1 For factories that have obtained mass-produced product (not service parts for discontinued vehicle model) CCC certificate by following the Implementation Rules and this Detailed-Rules, it can be exempted from initial factory inspection. However, production conformity control plan of manufacturer or the factory shall have independent requirements to service parts of discontinued vehicle models.

5.2 For factories without mass-produced product certificate, it shall be subject to initial factory inspection. However, the “italics-words part” in Attachment II of the Implementation Rules is optional. And test standards of factory inspection can be based on the standards when the product was type approved.

5.3 For the case that mass-produced product certificate is directly changed into certificate of service parts for discontinued vehicle models, it can be exempted from initial factory inspection. However, production conformity control plan of manufacturer or the factory shall have independent requirements on service parts of discontinued

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