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AUTOMOBILE INDUSTRY STANDARD
OF THE PEOPLE'S REPUBLIC OF CHINA

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Replacing QC/T 1-1992

General requirements for automotive product drawing

汽车产品图样的基本要求

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Table of Contents

Foreword.....	3
1 Scope.....	10
2 Normative references.....	10
3 Terms and definitions	10
4 General requirements	10
5 Drawing of the drawing	11
6 Writing of technical requirements.....	16

Annex:

References, names and dates of implementation of 42 automotive industry standards

No.	Standard reference	Standard name	Standard reference being substituted	Date of implementation
250	QC/T 776-2017	Motor caravan	QC/T 776-2007	2017-07-01
251	QC/T 1051-2017	Coach car		2017-07-01
252	QC/T 1052-2017	Communication vehicle		2017-07-01
253	QC/T 1053-2017	Concrete spraying vehicle		2017-07-01
254	QC/T 1054-2017	Tunnel cleaning vehicle		2017-07-01
255	QC/T 1055-2017	Drainage and rescue vehicle		2017-07-01
256	QC/T 218-2017	Technical specifications for steering column upper combined switch of automobile	QC/T 218-1996	2017-07-01
257	QC/T 1056-2017	Technical requirements and test methods for automotive dual clutch automatic transmission assembly		2017-07-01
258	QC/T 245-2017	Technical specifications for isolated plant of compressed-natural-gas (CNG) automobile	QC/T 245-2002	2017-07-01
259	QC/T 247-2017	Technical specifications for isolated plant of liquefied petroleum gas	QC/T 247-2002	2017-07-01
260	QC/T 1057-2017	Car snow chains		2017-07-01
261	QC/T 1058-2017	Car fingerprint identification device		2017-07-01

262	QC/T 1059-2017	Automobile cab torsion bar type flip and lock mechanism		2017-07-01
263	QC/T 32-2017	Test methods of air cleaners for automobiles	QC/T 32-2006	2017-07-01
264	QC/T 597.1-2017	Threaded fasteners - Pre - coated adhesive - Technical requirements - Part 1: Microcapsule locking layer	QC/T 597-2017	2017-07-01
265	QC/T 597.2-2017	Threaded fasteners - Pre - coated adhesive - Technical requirements - Part 2: Polyamide locking layers		2017-07-01
266	QC/T 1-2017	Basic requirements for automobile products drawing	QC/T 1-1992	2017-07-01
267	QC/T 2-2017	Drawing format of automobiles	QC/T 2-1992	2017-07-01
268	QC/T 3-2017	Completeness of drawings and design documents about automobiles	QC/T 3-1992	2017-07-01
269	QC/T 4-2017	Method for change about product drawing and design document regulations of automobile	QC/T 4-1992	2017-07-01
270	QC/T 5-2017	Standardization examination for automobile product drawings and design documents	QC/T 5-1992	2017-07-01
271	QC/T 18-2017	Automobile products drawing and design documents - Terms	QC/T 18-1992	2017-07-01
272	QC/T 340-2017	Hexagon flange bearing surface with tooth bolt	QC/T 340-1999	2017-07-01

283	QC/T 1067.1-2017	Road Vehicles - Connections for On-board Electrical Wiring Harnesses - Part 1: Definitions, Test Methods and General Performance Requirements (the Automobile Part)	QC/T 417.1-2001	2017-07-01
284	QC/T 1067.2-2017	Automotive connectors for electrical harnesses and electrical equipment - Part 2: Types and dimensions of plug terminals	QC/T 417.3-2001 QC/T 417.4-2001 QC/T 417.5-2001	2017-07-01
285	QC/T 1067.3-2017	Automotive connectors for electrical harnesses and electrical equipment - Part 3: Wire connector type, size and special requirements	QCn 29010-1991 QCn 29011-1991 QCn 29013-1991	2017-07-01
286	QC/T 1068-2017	Asynchronous drive motor system for electric vehicles		2017-07-01
287	QC/T 1069-2017	Permanent magnet synchronous drive motor system for electric vehicles		2017-07-01
288	QC/T 1070-2017	Technical specifications of automobile parts remanufactured products		2017-07-01
289	QC/T 1071-2017	Test method for steady state flow characteristics of automotive engine cylinder head airways		2017-07-01

General requirements for automotive product drawing

1 Scope

This Standard specifies general requirements for automotive product drawing.

This Standard is applicable to the drawing of automobile product drawing (hereinafter referred to as the drawing).

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

QC/T 2, *Automotive product pattern format*

QC/T 18, *Automobile products drawing and design documents - Terms*

QC/T 265, *Coding rules of automobile part and component*

QC/T 490, *Drawings for motor vehicle body*

3 Terms and definitions

For the purposes of this document, the terms and definitions defined in QC/T 18 apply.

4 General requirements

4.1 The drawing shall be drawn in accordance with the national standards, industry standards and other standards or regulations related to mapping, to be correct, complete, unified, clear.

4.2 The terms, codes, words, graphics, structural elements and units of measurement on the drawing shall comply with relevant standards or regulations. The coordinate system complies with the provisions of QC/T 490.

4.3 The views and technical requirements on the drawing shall indicate the structure and contour of the products and components, and serve as the

5.1.11 Unspecified dimensional tolerances, geometric tolerances and surface structures shall be specified in the corresponding standards or specified in the technical requirements.

5.2 Assembly drawing.

5.2.1 Each assembly shall generally draw a separate assembly drawing.

5.2.2 The assembly drawing shall clearly express the followings:

- a) relationship between parts, structure and assembly that make up the assembly;
- b) main assembly dimensions and tolerances;
- c) dimensions, limit deviations, surface structures, etc. that need to be machined during assembly;
- d) technical requirements for the assembly.

5.2.3 The parts and sub-assemblies that make up the assembly are generally marked with a leader line in the drawing. Fill in the item numbers in the parts list. Or directly mark the part number on the guide line in the drawing. If there is embedded software, the software number is filled in the parts list. However, the number of the sub-assembly and its subordinate parts shall not appear on the assembly pattern at the same time.

5.2.4 If an assembly consists of a complex part and another part that is simple in structure and size, it allows the shape of the simple part to be drawn on the complex part pattern with fine double-dotted lines. The assembly drawing composed of these parts are no longer drawn, but the structure, contour, dimensions, technical requirements and assembly relationship with the simple parts shall be clearly expressed. The information of the complicated parts is filled in the title bar, and the information of the assembly is filled in the extended title bar.

5.2.5 The assembly of the left and right, front and rear, and up and down symmetrical assemblies is the same as the requirements of 5.1.3.

5.2.6 When the parts of the assembly are combined and connected by changing the shape or bonding, the deformation or bonding position in the view shall be marked with the lead line (such as flange, pipe expansion, shop equal) or in the technical requirements.

5.2.7 The electrical diagram assembly diagram generally includes the mark symbol status table, connector model, pin definition, performance parameter table, and schematic. Graphical symbolic description is allowed.

deviations, materials, overlays, technical requirements, etc. Variables in the table can be marked with letters or text.

5.6.3 The product or part that the structure is basically the same, only the individual elements (such as the number of holes, the number of slots, the position of the holes or slots) are different, when drawing the table drawing, shall separately draw the partial graphics of the differences. And in the table column that indicates the graphic, mark the corresponding mark codes to the partial graphics.

5.6.4 The view of the table drawing shall select a more appropriate specification in the table. Draw in scale or sketch.

5.7 Alternative drawing.

5.7.1 Parts that can clearly express the composition with the text or the text and partial view can use alternative drawing.

5.7.2 When it is necessary to reassemble the assembly of different group numbers or group numbers specified in QC/T 265 into a large assembly, an alternative drawing is allowed. The drawing number is compiled according to the group number of the larger component or the assembly within the group number.

5.8 Schematic.

5.8.1 The connection between input and output shall be marked and it shall clearly indicate the functions of the product and the working procedures.

5.8.2 Graphic symbols (codes) shall comply with relevant standards and regulations.

5.8.3 The movable part of the component shall be drawn in the normal position.

5.8.4 A description of the function of each link shall be noted, and the complex product can be divided into schematics.

5.9 Wiring drawing.

5.9.1 The drawing of the wiring drawing shall comply with relevant standards and regulations.

5.9.2 The circuit number and azimuth number of each component connected to each other in the system shall be indicated. If necessary, note the wiring line specification and color.

5.9.3 Automotive product can use several sub-wiring drawings to form a total wiring drawing. If necessary, indicate the location and requirements.