

Translated English of Chinese Standard: JT/T1344-2020

www.ChineseStandard.net → Buy True-PDF → Auto-delivery.

Sales@ChineseStandard.net

JT

TRANSPORTATION INDUSTRY STANDARD
OF THE PEOPLE'S REPUBLIC OF CHINA

ICS 43.180

R 16

JT/T 1344-2020

**Specification for the inspection and maintenance of battery
electric vehicle**

纯电动汽车维护、检测、诊断技术规范

Issued on: October 30, 2020

Implemented on: February 01, 2021

Issued by: Ministry of Transport of the People's Republic of China

Table of Contents

Foreword	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Maintenance work safety	5
5 Maintenance work requirements	6
Annex A (informative) Recording sheet for insulation resistance testing	16
Annex B (informative) Recording sheet for completion inspection of secondary maintenance of special equipment for electric system	17

Specification for the inspection and maintenance of battery electric vehicle

1 Scope

This Standard specifies the operation safety and operation requirements for the maintenance of battery electric vehicles.

This Standard applies to battery electric vehicles in use.

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.

GB/T 5624, *Motor vehicle maintenance and repair terms*

GB/T 18344, *Specification for the inspection and maintenance of motor vehicle*

GB 18384, *Electric vehicles safety requirements*

GB/T 19596, *Terminology of electric vehicles*

3 Terms and definitions

For the purposes of this document, the terms and definitions defined in GB/T 5624, GB/T 19596 as well as the followings apply.

3.1 battery electric vehicle; BEV

A vehicle driven by an electric motor whose driving energy is provided entirely by electric energy. The driving electric energy of the motor comes from the on-board rechargeable energy storage system or other energy storage devices.

[GB 19596-2017, definition 3.1.1.1]

3.2 routine maintenance

Operations performed to maintain the sound technical condition or working capacity of mechanical systems (components) such as brake systems, steering systems, driving systems, and transmission systems and low-voltage electrical systems on battery

electric vehicles.

3.3 maintenance of special equipment for electric system

Operations performed to maintain the sound technical condition or working capacity of the high-voltage system and its related accessories on battery electric vehicles.

4 Maintenance work safety

4.1 The maintenance work site shall be dry. Set up warning isolation areas and warning signs.

4.2 The maintenance work area shall be equipped with fire-fighting and high-pressure protection emergency equipment, including but not limited to fire shears, fire sand, fire shovels, fire extinguishers, gas masks and insulating rods, etc.

4.3 The maintenance operators for the high-voltage system of battery electric vehicle (hereinafter referred to as "high-voltage system") shall obtain an electrician special operation certificate and take up their posts after passing professional training.

4.4 When maintaining the high-voltage system, no less than 2 people shall cooperate to operate it. Maintenance operators shall abide by electrical safety operating regulations.

4.5 High-voltage system maintenance operators shall wear safety protective equipment and use working tools with insulation protection. It is forbidden to wear metal jewelry for work. Safety protection equipment shall include, but not limited to, insulating gloves (with a withstand voltage rating above 1000 V), insulating shoes, eye protectors, safety helmets, etc. Protective equipment and work tools shall be undamaged and insulated effectively.

4.6 Before maintenance work on the high-voltage system, the vehicle shall be powered off in the order of turning off the main control switch of the vehicle power supply, disconnecting the positive and negative poles of the auxiliary battery or closing the switch handle of the auxiliary battery, and turning off the high-voltage maintenance switch (or in accordance with the order specified in the vehicle maintenance manual). After confirming that the positive and negative pole voltages of the high-voltage output line system of the traction battery are lower than 36 V, and the insulation resistance meets the requirements of the vehicle maintenance manual, the maintenance work can be carried out. After the maintenance work is completed, the vehicle shall be powered on and reset according to the reverse sequence of vehicle power off (or the sequence specified in the vehicle maintenance manual).

4.7 If there are other special requirements for operation safety and failure protection stipulated in the vehicle maintenance manual, the relevant regulations shall also be followed.

5 Maintenance work requirements

5.1 General requirements

5.1.1 The maintenance of battery electric vehicles is divided into daily maintenance, primary maintenance and secondary maintenance. Daily maintenance is performed by the driver before leaving the vehicle, during driving and after receiving the vehicle. Primary maintenance and secondary maintenance are performed by professionals.

5.1.2 The primary maintenance and secondary maintenance intervals shall be determined in accordance with the vehicle maintenance manual, instruction manual and GB/T 18344, combined with the vehicle category, vehicle operating status, mileage, road conditions and service life.

5.1.3 The maintenance of battery electric vehicles is divided into routine maintenance and maintenance of special equipment for electric systems. Routine maintenance shall be carried out in accordance with the provisions of GB/T 18344.

5.1.4 The operation process of the secondary maintenance shall be carried out according to the provisions of GB/T 18344.

5.1.5 For battery electric vehicles, the power battery shall be balanced according to the frequency and method required by the vehicle maintenance manual or instruction manual.

5.2 Daily maintenance

5.2.1 See Table 1 for the items and requirements for daily maintenance of special equipment for electric system.

5.2.2 The driver shall report for repair in time if any abnormality is found in the daily maintenance process.

This is an excerpt of the PDF (Some pages are marked off intentionally)

Full-copy PDF can be purchased from 1 of 2 websites:

1. <https://www.ChineseStandard.us>

- SEARCH the standard ID, such as GB 4943.1-2022.
- Select your country (currency), for example: USA (USD); Germany (Euro).
- Full-copy of PDF (text-editable, true-PDF) can be downloaded in 9 seconds.
- Tax invoice can be downloaded in 9 seconds.
- Receiving emails in 9 seconds (with download links).

2. <https://www.ChineseStandard.net>

- SEARCH the standard ID, such as GB 4943.1-2022.
- Add to cart. Only accept USD (other currencies - <https://www.ChineseStandard.us>).
- Full-copy of PDF (text-editable, true-PDF) can be downloaded in 9 seconds.
- Receiving emails in 9 seconds (with PDFs attached, invoice and download links).

Translated by: Field Test Asia Pte. Ltd. (Incorporated & taxed in Singapore. Tax ID: 201302277C)

About Us (Goodwill, Policies, Fair Trading...): <https://www.chinesestandard.net/AboutUs.aspx>

Contact: Wayne Zheng, Sales@ChineseStandard.net

Linkin: <https://www.linkedin.com/in/waynezhengwenrui/>

----- The End -----