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ICS 43.040.01
CCS T 47

TCSAE

ASSOCIATION STANDARD

TCSAE 42-2015

Electric vehicles - unified diagnostic services specification over CAN bus

电动汽车CAN总线故障诊断规范

(English Translation)

Issued on: November 5, 2015 **Implemented on: November 5, 2015**

Issued by: China Society of Automotive Engineers

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1 Foreword

TCSAE 42-2015 was issued by China Society of Automotive Engineers on 5 November 2015 and took effect the same day.

The TCSAE prefix marks a association standard, adopted voluntarily.

The document runs to 35 pages in English translation.

2 Scope Preview

This standard specifies the communication protocol between the network layer and the application layer. It is mainly used for data monitoring, calibration, input/output control of electric vehicles, and reading of internal information of controllers. This standard elaborates on the network layer and application layer of the CAN bus fault diagnosis service for electric vehicles. For the network layer, data transmission rules, message types, addressing modes, diagnostic sessions, and the like are mainly specified. Diagnostic service applications are primarily specified for the application layer. The diagnostic service application includes a diagnostic management function unit, a data transmission function unit, a transmission and storage data function unit, an input/output control function unit, a remote function activation function unit, and an upload and download function unit. The diagnostic management function unit includes activating a diagnostic session service, a controller reset service, a secure access service, and a test online.

TCSAE 42-2015 falls under ICS 43.040.01, in the field of road vehicle engineering.

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This catalogue holds 32 other TCSAE standards in that field.

In this catalogue, TCSAE standards carry edition years from 2015 to 2020.

3 Normative references

ISO 14229

ISO 15765

4 About this standard

Issued by: China Society of Automotive Engineers

English translation: about 35 pages

Chinese original: about 53,527 characters

5 Related standards

Standards on related subjects:

QC/T 247-2017 - Technical specifications for fuel gas systems of LPG vehicles

QC/T 245-2017 - Technical specifications for fuel gas systems of CNG vehicles

QC/T 674-2007 - Compressed natural gas solenoid valves for automobiles

6 Classification and status

International classification (ICS): 43.040.01

Chinese Standard Classification (CCS): T 47

Prefix TCSAE: association standard, adopted voluntarily.

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