Chinastandards.org

ICS 43.120
CCS T 40

TCSAE

ASSOCIATION STANDARD

TCSAE 55-2017

Relaxation resistance test method of automobile spring steel

汽车弹簧钢松弛抗力试验方法

(English Translation)

Issued on: November 3, 2017 **Implemented on: November 3, 2017**

Issued by: China Society of Automotive Engineers

Preview: page 1 of 3 shown, 9 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/tcsae-55-2017

Chinastandards.org

Table of Contents

1 Scope
2 Normative references
3 Terms and definitions
4 Test principle
5 Sample
6 Test equipment
6.1 Test system
6.2 Extensometer
6.3 Sensor
6.4 Fixtures and fixtures
7 Test process
7.1 General
7.2 Cyclic loading
7.3 Forward and reverse loading
8 Data processing
8.1 Cyclic Loading Data Processing
8.1.1 Pre-strain total energy consumption EP
8.1.2 Relaxation Index ETC
8.2 Forward and reverse loading data processing
8.2.1 Total energy consumption E?P in forward loading
8.2.2 Bauschinger strain ?
8.2.3 Bauschinger Effect Energy ES
8.2.4 Mean Bauschinger strain ABS
8.2.5 BEEPINGER Effect Energy Parameter BEEP
9 Test report

1 Foreword

TCSAE 55-2017 was issued by China Society of Automotive Engineers on 3 November 2017 and took effect the same day.

The TCSAE prefix marks a association standard, adopted voluntarily.

The document runs to 9 pages in English translation.

Preview: page 2 of 3 shown, 9 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/tcsae-55-2017

2 Scope Preview

This standard specifies the definition, principle, test sample, test equipment, test procedure, data processing and test report of the automotive spring steel relaxation resistance test method. This standard is applicable to the test of the relaxation resistance of automotive spring steel under quasi-static conditions by using the Bauschinger effect.

TCSAE 55-2017 falls under ICS 43.120, in the field of road vehicle engineering.

This catalogue holds 32 other TCSAE standards in that field.

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

3 About this standard

Issued by: China Society of Automotive Engineers

English translation: about 9 pages

Chinese original: about 14,124 characters

4 Related standards

Standards on related subjects:

QC/T 1029-2016 - Polypropylene (PP) honeycomb board products for automobiles

QC/T 797-2008 - Material identification and marking of automotive plastic, rubber and thermoplastic elastomer parts

5 Classification and status

International classification (ICS): 43.120

Chinese Standard Classification (CCS): T 40

Prefix TCSAE: association standard, adopted voluntarily.

Preview: page 3 of 3 shown, 9 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/tcsae-55-2017