

DRAFT KENYA STANDARD

DKS 2295-1:2023

ICS 43.040.30

Maximum road speed limiters for motor vehicles

Part 1:

Performance and installation requirements

PUBLIC REVIEW DRAFT, APRIL 2023

DKS 2295-1:2023

TECHNICAL COMMITTEE REPRESENTATION

The following organizations were represented on the Technical Committee:

Chief Engineer (Mechanical), Mechanical and Transport Division
Embu County Government
Isuzu East Africa
Kenya Accreditation Service (KENAS)
National Police Services (NPS)
National Transport and Safety Authority (NTSA)
Road Safety Association of Kenya (RSA)
Speed Governors and Road Safety Association (SGRSA)
Technical University of Mombasa (TUM)
Strathmore University
Kenya Bureau of Standards — Secretariat

REVISION OF KENYA STANDARDS

In order to keep abreast of progress in industry, Kenya Standards shall be regularly reviewed. Suggestions for improvements to published standards, addressed to the Managing Director, Kenya Bureau of Standards, are welcome.

© Kenya Bureau of Standards, 2023

Copyright. Users are reminded that by virtue of Section 25 of the Copyright Act, Cap. 130 of 2001 of the Laws of Kenya, copyright subsists in all Kenya Standards and except as provided under Section 25 of this Act, no Kenya Standard produced by Kenya Bureau of Standards may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from the Managing Director.

KENYA STANDARD

DKS 2295-1:2023

ICS 43.040.30

Maximum road speed limiters for motor vehicles

Part 1:

Performance and installation requirements

KENYA BUREAU OF STANDARDS (KEBS)

Head Office: P.O. Box 54974, Nairobi-00200, Tel.: (+254 020) 605490, 602350, Fax: (+254 020) 604031
E-Mail: info@kebs.org, Web: <http://www.kebs.org>

Coast Region

P.O. Box 99376, Mombasa-80100
Tel.: (+254 041) 229563, 230939/40
Fax: (+254 041) 229448

Lake Region

P.O. Box 2949, Kisumu-40100
Tel.: (+254 057) 23549, 22396
Fax: (+254 057) 21814

Rift Valley Region

P.O. Box 2138, Nakuru-20100
Tel.: (+254 051) 210553, 210555

DKS 2295-1:2023

Foreword

This Kenya Standard was developed by the Technical Committee on Extra-low Voltage Equipment under the guidance of the Standards Projects Committee (SPC), and is in accordance with the procedures of the Kenya Bureau of Standards.

The first edition of this standard in 2011 was published as a way of minimizing accidents attributed to speeding of PSVs and vehicles with a tare weight exceeding 3048 Kg (as per the Traffic Act (Cap 403 Laws of Kenya)). Subsequent to the publication and enforcement of the standard, several emerging technological changes/challenges have necessitated revision of some of the provisions of the standard. Tampering with the speed recorder required further measures to be prescribed in the second edition which resulted in among other requirements, requiring the speed to be tapped from the electromechanical speed sensor installed onto the speedometer cable take off at the gearbox or by use of the vehicle inbuilt speed sensor. This effectively barred the use of speed signals derived from either GPS or GPRS signals due to their unreliability and vulnerability to manipulation. Another critical addition to the second edition was the requirement for the mandatory online reporting system for all the speed data and any malfunction within the speed limiting function.

A driver whose speed is no more than 80 Km/h is obviously far less likely to have an accident than the same driver under the same road conditions going 90, 100, or even 120 Km/h. The differential between his speed and that of other vehicles on the road, the distance needed to stop the car, etc. are all much less. Moreover, even if an accident does occur, it will almost always be less severe. An accident at 120 Km/h is about 225% as severe as one occurring at 80 Km/h, even though the first vehicle is traveling only 50% faster. This is because the severity of the accident is directly related to the kinetic energy of the vehicle, which in turn is proportional not to the speed but to the square of the speed.

This Kenya Standard specifies requirements for the performance and installation of devices designed to limit the maximum road speed of motor vehicles by control of engine power.

This third edition cancels and replaces the second edition, KS 2295-1:2018, Maximum road speed limiters for motor vehicles Part 1: Performance and installation requirements which has been technically and editorially revised with the following as the most notable revisions:

- Revision and addition of some definitions
- Revision of text for clarity
- Reference to compliance requirements where they were missing
- Requirement for compliance to the Data Protection Act, 2019 (DPA)

During the preparation of the Standard, reference was made to the following documents:

BS AU 217-1a 1987, Maximum road speed limiters for motor vehicles — Specification for installed requirements.

ZS 675:2006, Road vehicles — Road speed limiters — Guidelines.

Acknowledgement is hereby made for the assistance derived from these sources.

Maximum road speed limiters for motor vehicles

Part 1:

Performance and installation requirements

1 Scope and field of application

This Part 1 of this Kenya Standard specifies requirements for the performance and installation of devices designed to limit the maximum road speed of motor vehicles by control of engine power.

This standard also specifies performance requirements of speed recording and reporting devices. This may be a separate unit to be installed on the vehicle as an add-on or on-board system built in the vehicle.

This standard does not cover methods of test and procedure for type approval which are covered under KS 2295-2. The two parts of this standard cannot therefore be read in isolation.

NOTE 1 unless otherwise referred to in clause 3, the device is referred to hereafter as the limiter.

NOTE 2 Permitted tolerances of the system may allow the vehicle to exceed the set speed.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

Data Protection Act, 2019 (DPA)

KNWA 2460: 2013 *Motor vehicle garages for repair and services — Code of practice*

KS 2295-2: *Maximum road speed limiters for motor vehicles — Part 2: Specification for system and component requirements*

Traffic Act, Cap. 403 of the Laws of Kenya and any legal notices.

3 Terms and definitions

For the purposes of this document, the following terms shall apply.

3.1

authority

the National Transport and Safety Authority at the time of approval of this standard or any of its successor(s) post approval of this standard

3.2

authorized officer

© KEBS 2023 — All rights reserved

DKS 2295-1:2023

authorized motor vehicle inspector, traffic police officer, employee of the Kenya Bureau of Standards and employee of the Chief Engineer (Mechanical), Mechanical and Transport Division,

3.3

calibration

comparison between an instrument and a measuring standard of higher accuracy to detect, correlate, adjust, and document the accuracy of the item being compared

3.4

driving hours

period during which the vehicle is in motion

3.5

engine

source (or sources) of the vehicle's motive power

3.6

juddering

action of shaking rapidly during the retardation process

3.7

limiter supplier

in the case of maximum road speed limiters fitted in the course of construction of the vehicle, the vehicle constructor. In all other cases, the limiter manufacturer or any individual or company authorized to import speed limiters, open up fitting centers and or appoint agents as retailers or fitting centers

3.8

malfunction

the state of a speed limiter not functioning in the intended manner either through deliberate human intervention (tampering) or unintended system failure

3.9

maximum speed (V_{max})

maximum speed declared by the limiter supplier at which the limiter may be set and meet the requirements of this standard

3.10

real time

transmission intervals of not more than fifteen (15) seconds

3.11

set speed (V_{set})

intended mean vehicle speed when operating in a stabilized condition as defined in this standard. It shall be marked on the vehicle and used for calibration purposes

3.12

speed limiter (governor)

device that shall temporarily cause the engine to lose power when the set speed is reached

NOTE: The purpose of the limiter is to limit the maximum road speed for vehicles to a specified value without affecting the other performance parameters of the vehicle in any manner

3.13

speed limitation function (SLF)

function to control the fuel feed of the vehicle or engine management in order to limit the vehicle speed to a fixed maximum value

3.14

speed recorder (recorder)

device designed to record, store and transmit vehicle speed to the Authority's server

3.15

violation

malfunction (see 3.8) or any speed in the excess of 5 Km/h of the set speed (see 3.11)

4 Requirements

4.1 General requirements

4.1.1 A complete speed limiting system shall consist of the limiter and a speed recorder.

4.1.2 The speed limitation shall be such that the vehicle in normal use complies with the provisions of this standard. It shall be so designed and constructed, that its performance is not affected by the vibrations to which the vehicle may be subjected and as tested in accordance with KS 2295-2.

4.1.3 The speed limiter shall be so designed, constructed, assembled and fitted to the vehicle to make it maximum tamper proof and "failsafe".

Note 1. Any tampering shall be easy to detect.

4.1.4 The Limiter Supplier shall demonstrate to the Authority and testing agencies defined in the Traffic Act (Cap. 403 of the laws of Kenya) this inviolability with documentation analyzing the failure mode in which the system will be globally examined. The analysis shall show, taking into account the different states taken by the system, the consequences of a modification of the input or output states on the functioning, the possibilities of obtaining these modifications by failures or by tampering and possibility of their occurrence.

The speed limiter, as a minimum, shall be tested against the disconnection/failure of power supply, speed sensor, mechanical actuator system and linkages or any unauthorized modification and adjustment to the system. The analysis level will always be to the first failure

4.1.5 If the plug/s to the electronic controller is/are removed, power is disconnected or if the speed signal and/or wire is disconnected the vehicle shall automatically default to a limp mode. While in limp mode, the vehicle speed shall not exceed fifty kilometers per hour (50 km/h).

4.1.6 In the event of any form of malfunction an alert signal shall be generated and transmitted to the Authority describing the kind of malfunction.

4.1.7 The speed limiter shall monitor the road speed of the vehicle by the installation of an electro-mechanical speed sensor installed onto the speedometer cable take off at the gearbox or by use of the vehicle inbuilt speed sensor, where provided.

DKS 2295-1:2023

4.1.8 All cable or harness connectors in the speedometer circuit shall be wired and sealed for certification purposes. All connections shall be soldered and insulated with a flame proof insulation tape of adequate length of such a colour as to blend well with the rest of the vehicle wiring.

4.1.9 The speed limiter shall pre-warn the driver, by way of a high frequency buzzer, that the set speed is being reached. This warning shall occur at not less than 5 % prior to the set speed and shall continue buzzing at any speed above the set speed.

4.1.10 When the set speed is reached, the speed limiter shall temporarily cause the engine to lose power. Engine power shall be reinstated at a speed not less than the pre-warning switch point, which is not less than 5 % below the set speed.

4.1.11 The speed limiter system shall be checked for accuracy and functionality, at least once per year.

4.1.12 A duly signed original certificate in indelible ink containing the information as detailed in Annex A shall be clearly displayed in an easily accessible position within the vehicle.

4.1.13 Compliance with the provisions of the Traffic Act (Cap 403 Laws of Kenya) and all regulations relating to speed limiters is mandatory.

4.2 Requirements for speed limiters

The speed limiter shall meet the requirements of this standard as tested in accordance with KS 2295-2.

4.2.1 Workmanship

The limiter shall be visually examined for workmanship, finish, marking and compliance with all the general requirements specified in 4.1.

4.2.2 No effect on the normal operation of vehicle

4.2.2.1 The speed limiter shall allow normal acceleration and full engine power up to the set maximum speed limit when the limitation function comes to play.

4.2.2.2 The speed limiter shall not interfere with the brake system of the vehicle.

4.2.2.3 The speed limitation function shall be performed progressively in such a manner that no juddering is not caused.

4.2.2.4 The speed limitation function shall not cause engine back firing.

4.2.2.5 The speed limiter shall not cause uncontrolled engine power

4.2.2.6 No malfunction or tempering with the speed limiter shall result in increase in engine power above that demanded by the position of the driver's accelerator.

4.2.2.7 The speed limitation function shall be obtained once the vehicle speed reaches the set speed (V_{set}) regardless of the acceleration a driver may apply.

DKS 2295-1:2023

4.2.2.8 The speed limitation function shall be independent of the condition or soundness of the speedometer.

4.2.2.9 Compliance with the requirements of 4.2.2.1 to 4.2.2.9 shall be tested in accordance with KS 2295-2.

4.2.3 Compatibility with environmental conditions

4.2.3.1 The speed limiter shall be so designed, constructed and assembled so as to resist vibrations, corrosion, dust, humidity, petrochemicals and aging phenomena to which it may be exposed. Compliance shall be tested in accordance with KS 2295-2.

4.2.3.2 The speed limiter shall not be subject to any electromagnetic disturbance from other devices in its environment. Compliance shall be tested in accordance with KS 2295-2.

4.2.3.3 The speed limiter shall be so designed that reverse polarity connections of the battery shall not result in any damage of the limiter.

Compliance shall be tested in accordance with KS 2295-2.

4.2.4 Susceptibility to tampering

4.2.4.1 The limitation threshold shall not, in any case be capable of being increased or removed temporarily on vehicles where the speed limitation device has been fitted.

Compliance shall be checked by subjecting the limiter to an acceleration beyond the set speed while the vehicle is stationary or by use of a test bench.

4.2.4.2 The speed limitation function, the road speed limiter and the connections necessary for its operation shall be protected from any unauthorized adjustments or the interruptions of its energy supply by the attachment of sealing devices and/or the need to use special tools. All components necessary for the full function of the limiter shall be energized whenever the vehicle is being driven.

Compliance shall be checked by visual examination and as prescribed in KS 2295-2.

4.2.5 Manuals

Limiters shall be supplied with two manuals, namely a vehicle owner's manual and a Technician's manual, written in English and/or Kiswahili. Use of additional languages such as braille is encouraged but not mandatory.

This requirement does not apply to speed limiters fitted as original equipment during the vehicle manufacturing (3.12). However, it shall apply in all other situations including where the vehicle manufacturer outsources a speed limiter supplier.

4.2.5.1 Vehicle owner's manual

The following information shall be included in the vehicle owner's manual;

- a) The expected behaviour of a vehicle where a road speed limiter has been fitted;
- b) Driving tips for a vehicle where road speed limiter has been installed;

DKS 2295-1:2023

- c) What should not be done to the installed road speed limiters;
- d) What should be done in case of malfunction; and
- e) The liability of the owner or driver of vehicle for tampering with the road speed limiters.

4.2.5.2 Technician's manual

The following information shall be included in the technician's manual;

- a) Principles of operation covering details of how the road speed limiter works;
- b) Fitting Instructions;
- c) Calibration or programming instructions;
- d) Inspection and functionality checks;
- e) Maintenance and troubleshooting instructions;
- f) Parts list;
- g) Manufacturer's name and authorized trade mark; and
- h) model.

4.3 Requirements for the speed recording, storing and transmitting device (recorder)

4.3.1 General

4.3.1.1 The recorder shall incorporate a combination of an onboard and off-board mechanism for recording and storing the speed of the vehicle.

4.3.1.2 The speed shall be recorded in Km/h at not more than five (5) seconds interval.

4.3.1.3 The Authority shall provide one communication protocol for limiter to server communication.

4.3.1.4 The Authority and limiter suppliers shall, at all times, ensure full compliance with the requirements of the Data Protection Act, 2019 (DPA).

4.3.1.5 The retrieved data shall clearly and in an unambiguous manner

- a) indicate the date (yyyy/mm/dd) of recording.
- b) be time related (either 24 hour or 12 hour format).
- c) capture global position coordinates.

4.3.1.6 The format and minimum information of the data to be recorded and transmitted shall be as prescribed in Annex B and as amended from time to time by the Authority.

4.3.1.7 The recorded data shall be in the same format for both the onboard and off board storage systems.

4.3.2 Onboard data storage

4.3.2.1 The data shall be stored onboard in a non-erasable memory meeting the following criteria

- a) If the power supply is disconnected, data stored in the recorder for a period not less than 72 (seventy two) driving hours prior to the power loss, shall remain retrievable.
- b) An authorized officer shall be able to print all the data for the last one hour and/or all the violations recorded in the same period direct from the onboard recording device on site using a portable printer by use of a panel mounted type A USB Port.

Note 1. The panel mounted USB port shall be placed in an easily accessible point on the dashboard.

Note 2. where only speed violations are printed, the output shall be in the format prescribed in Annex B

- c) An authorized officer shall be able to view the data using a computer by use of a panel mounted Type B USB port.

The computer shall communicate to the recording device by use of USB CDC protocol (communication device class) or its equivalent using commands for accessing data as prescribed in appendix B.

4.3.2.2 The printer shall conform to serial communication protocols, and shall communicate by use of the traditional serial communication protocol (RS232 protocol). The portable printer shall comply with thermal printer ESC/POS protocol standard commands or its equivalent

4.3.2.3 The retrieved data shall conform to the format prescribed in Annex B and as amended from time to time by the Authority.

4.3.2.4 The officer shall not require the services of a speed limiter specialist to interpret the retrieved data.

4.3.2.5 The speed recorder shall only be activated once the details of the vehicle, vehicle owner, installation location coordinates and the details of the speed limiter are captured for certification purposes.

4.3.2.6 The system shall function normally when connected to a power supply in the range (12/24V) d.c.

4.3.3 Off board data storage

A speed limiter system shall be designed with data transmission mechanism complying to the following requirements:

4.3.3.1 The system shall, in real time, transmit speed data to the Authority's data servers.

4.3.3.2 All detected violations shall, in real time, cause an alarm signal to be triggered at the Authority's server.

4.4 Conditions for limiter suppliers of speed limiters

For the purpose of licensing of Limiter Suppliers, the following conditions shall apply.

DKS 2295-1:2023

4.4.1 Manufacturers authorization

4.4.1.1 A limiter suppliers shall have a letter(s) of authorization from the manufacturer(s).

4.4.1.2 A manufacturer shall not issue a letter(s) of authorization to more than one limiter supplier for dealing in a particular type of road speed limiter in Kenya.

Compliance shall be by proof of a certified copy of the manufacturer's authorization certificate.

4.4.2 Manufacturers' warranty

Limiter Suppliers shall provide a manufacturer's warranty covering a period of not less than 12 months from the date of installation.

Compliance shall be a properly documented warranty card that at the minimum meets the requirements of 4.4.12.

4.4.3 Establishment of fitting centers and appointing of agents

Note 1. This requirement shall not apply to limiter suppliers who are the original vehicle manufacturers (3.12) or designated dealers of vehicles so designed with integrated speed limiters or inbuilt vehicle management systems, which includes speed limiting function.

Note 2. Where the original vehicle manufacturer outsources a limiter supplier for the purposes of installation of speed limiters at the vehicle manufacturers premises, such premises shall automatically be designated as a fitting centre owned by the original vehicle manufacturer and shall require no further licensing/inspection unless as required by any other applicable laws.

4.4.3.1 The authorized limiter supplier shall open fitting centers and appoint agents in accordance with the existing legal requirements.

4.4.3.2 Where a fitting centre is also used as a garage, the facility shall meet all the requirements specified in KNWA 2460:2013 and all the additional requirements specified in Annex C.

4.4.3.3 Where a facility is used purely as a fitting centre, the facility shall meet the requirements specified in KNWA 2460:2013 as modified in Annex C.

4.4.4 Change in design or construction of the approved type of speed limiter

A Limiter supplier shall seek fresh approval when a speed limiter for which approval was given changes in design, operation or construction.

Note. This requirement shall not apply to limiter suppliers who are the original vehicle manufacturers (3.12) or designated dealers of vehicles so designed with integrated speed limiters or inbuilt vehicle management systems, which includes speed limiting function.

4.4.5 Training of government technical personnel

The limiter supplier who introduces a type of speed limiter for approval shall train officers from the relevant regulatory/testing agencies in the fitting and inspection of the presented speed limiter once approved.

DKS 2295-1:2023

Note. This requirement shall not apply to limiter suppliers who are the original vehicle manufacturers (3.12) or designated dealers of vehicles so designed with integrated speed limiters or inbuilt vehicle management systems, which includes speed limiting function.

4.4.6 Records

4.4.6.1 The limiter supplier shall keep records of all vehicles fitted with the speed limiters. A master register, kept in a central place, shall have all the information for fittings at all branches and appointed agents/fitting centers.

4.4.6.2 The limiter supplier shall forward the compiled data to the Authority in such a manner as shall be prescribed by the Authority. The same data shall be made available to any other agency(ies) on demand.

4.4.6.3 The limiter supplier shall keep the records for inspection by the Authority/agency(ies) for a period governed by the relevant legislation/regulation or as shall be prescribed by the Authority.

4.4.7 Fitting certificates

Every vehicle fitted with a speed limiter shall be issued with a certificate of compliance (see Annex D) signed by a person approved by the limiter supplier. The sample compliance certificate with the specimen signature of the supplier shall be forwarded to the Authority as required by the relevant legislation/regulation.

Commented [ZM1]: The Authority has so far transitioned to digital verification of documents. If possible this clause to be deleted and combined with other digital data as required by the Authority.

4.4.8 Record of technicians

This requirement shall not apply to limiter suppliers who are the original vehicle manufacturers (3.12) or designated dealers of vehicles so designed with integrated speed limiters or inbuilt vehicle management systems, which includes speed limiting function.

4.4.8.1 The limiter supplier shall approve and keep a record of all the technicians who fit the speed limiter.

4.4.8.2 The training of personnel approved to fit speed limiters shall be, as a minimum, as prescribed in KNWA 2460 together with any approved modifications for speed limiter fitters.

4.4.9 Calibration equipment

4.4.9.1 All unique calibration and sealing devices shall remain the property of the limiter supplier.

4.4.9.2 The limiter supplier shall retrieve all sealing and calibration equipment once a branch is closed or fitting agency is withdrawn.

4.4.9.3 The limiter supplier shall limit the possession of calibration equipment or devices to authorized personnel.

4.4.10 The suitability of the limiter for a particular type of vehicle.

The responsible Authority shall approve and gazette the types of limiters to be used in Kenya. However, the responsibility to determine the suitability of speed limiter for a particular type of vehicle shall be vested on the speed limiter supplier and or his approved agent.

DKS 2295-1:2023

This requirement shall not apply to limiter suppliers who are the original vehicle manufacturers (3.12) or designated dealers of vehicles so designed with integrated speed limiters or inbuilt vehicle management systems, which includes speed limiting function.

4.4.11 Warranty obligations

The limiter supplier shall take responsibility for the warranty obligations for the speed limiter supplied.

4.4.12 Start of operations

This requirement shall not apply to limiter suppliers who are the original vehicle manufacturers (3.12) or designated dealers of vehicles so designed with integrated speed limiters or inbuilt vehicle management systems, which includes speed limiting function.

4.4.12.1 A limiter supplier shall train relevant officers from the Authority and testing agencies in the fitting and detecting of tampering before being allowed to start operation. Records of such training shall be made available at the time of applying for approval.

4.4.12.2 A limiter supplier shall provide the following to the Authority before being allowed to start operation:

- a) Submit one sample of the speed limiter for light and heavy commercial each (in case where the Limiter Supplier intends to fit both light and heavy commercial vehicles).
- b) two samples of certificate of fitting.
- c) list of physical addresses for all speed limiter-fitting centers under limiter supplier's control including their GPS coordinates
- d) copies of the technical manuals.
- e) sample warranty certificates.
- f) copies of the user manuals.
- g) physical address of the central office where all records of the fittings at various centers shall be kept, including the GPS coordinates

4.4.12.3 The limiter supplier shall update the Authority on any new fitting centers under their control and the responsible signatories to the fitting certificates at those centers.

4.4.12.4 Before starting operations, the limiter supplier shall sign a commitment binding them to the terms and conditions for Limiter Suppliers of speed limiters as shall be prescribed by the Authority from time to time.

4.4.13 Licensing and Approval

- a) Compliance to the Traffic Act (Cap 403 Laws of Kenya) related to speed limiters for public service and commercial vehicles shall form the minimum requirements for the licensing and approval of speed limiters and limiter suppliers for the installation of speed limiters in road vehicles.
- b) Reference to this Kenya Standard in any law, regulation or Legal Notice shall be deemed to mean reference to the most current edition of the standard even where such a law, regulation or legal notice

DKS 2295-1:2023

refers to a particular edition during its drafting unless there are clear reasons as to why the most current edition should not be applied.

- c) Failure to comply with the technical requirements of this standards may lead to the recommendation for the withdrawal of the license of a particular type of limiter and/or a limiter supplier based on recommendation(s) by the Kenya Bureau of Standards (KEBS) and the Chief Engineer (Mechanical), Mechanical and Transport Division to the Authority. Such recommendation(s) shall be based on the market surveillance report(s) by the Authority and may lead to the withdrawal of the KEBS permit.
- d) All other issues not related with compliance to the technical requirements of this standard shall be the responsibility of the Authority and may lead to the withdrawal of the license.
- e) Where the Authority withdraws a license based on non compliance arising from 4.4.13(c) and/or (d), the Authority may recommending to the Cabinet Secretary (designated by the Traffic Act (Cap 403 Laws of Kenya)) to withdraw the approval of such a speed limiter or speed limiter supplier.
- f) Withdrawal of a license of a particular type of limiter may lead to the cancellation of the KEBS permit as it shall be deemed to be a violation of the permit's terms and conditions of use.

Annex A
(normative)

Sample display certificate

Certificate No:
Name of Limiter Supplier:
Address:
Telephone contact:
Speed Limiter Compliance
Date of Inspection
Vehicle registration No:
Chassis no:
Type of Governor:
Expiry Date:

Sign:
Stamp:

Annex B
(normative)

Minimum recorded/transmitted data and data format

B.1 Data header

B.1.1 Each device header shall have data containing information specific to the particular device which shall be none-erasable once programmed into the device. This information shall be programmed first before the device can allow any other features of the speed recording device to be initialized.

B.1.2 Below the mandatory information to be captured in the device header:

- a) VEHICLE OWNERS NAME.....
- b) VEHICLE OWNER ID
- c) OWNER PHONE NO.....
- d) VEHICLE REG. NUMBER.....
- e) CHASIS NO.....
- f) VEHICLE MAKE & TYPE.....
- g) CERTIFICATE NUMBER.....
- h) LIMITER TYPE.....
- i) LIMITER SERIAL.....
- j) DATE OF FITTING.....
- k) FITTING AGENTS NAME.....
- l) FITTING AGENT ID.....
- m) NAME & LOCATION OF STATION.....
- n) EMAIL ADDRESS.....
- o) AGENT PHONE NUMBER.....
- p) BUSINESS REG. NO.....

B.2 Reports to be recorded/transmitted

B.2.1 Speed records

DKS 2295-1:2023

The speed records specified in 4.3.2 and 4.3.3 shall be continuously updated as required by this standard or as prescribed by the Authority

B.2.2 Data presentation format

Both onboard and off board data records shall at a minimum have the following information presented in the format below in addition to the mandatory header described in B.1.2.

<u>DATE</u>	<u>TIME</u>	<u>SPD</u>	<u>LONG</u>	<u>LATT</u>
2023/04/06	20:19:25	000.0	3.0674° S	37.3556° E

B.2.3 Speed violations print out

Where it is required to print out speed related violations, the printout shall have the following minimum information in addition to the mandatory header (see B.1.2)

<u>DATE</u>	<u>TIME</u>	<u>SPD</u>
2023/04/06	20:19:25	86.0

B.3 Commands

B.3.1 These are ASCII characters sent from a host to a device and may have a length of one byte or more.

B.3.2 All speed recording devices approved for use in Kenya shall have common protocols and commands sent shall be in human readable non encrypted text.

B.3.3 The following commands shall apply

Function	Command	Expected output
Header files	Head	Header files as in B.1.2 shall be displayed on to the screen
Reset device	RST	The recording device is reset
Read trip data	TRP	All speeds stored in the device for the last 72 HOURS shall be displayed on to the screen
Highest speed attained	TP	Top speed recorded in the device for the last 6hrs shall be displayed on to the screen.
Read trip data for one hour	1TP	All speeds stored in the device for the last ONE HOUR shall be displayed on to the screen
Read trip data for six hours	6TP	All speeds stored in the device for the last SIX HOURS shall be displayed on to the screen
Violations	VIOL	Violations recorded in the device shall be displayed on the screen.

Annex C (normative)

Modifications to KNWA 2460:2013

NOTE This Annex is to be read together with KNWA 2460:2013

The requirements of KNWA 2460:2013 shall apply except as modified by this annex where a facility doubles up as both a fitting centre and a garage or where the facility is used as a pure fitting centre.

C.1 Requirements for garages used as fitting centres

Where fitting is done in a garage, the garage shall fully comply with KNWA 2460:2013 in addition to any additional requirements given in C.2.

C.2 Requirements for exclusive fitting centres

Where fitting is done in an exclusive fitting centre the term "fitting centre" shall replace "garage" and the following modifications shall apply.

C.2.1 Where a requirement for garages as specified in KNWA 2460:2013 is not modified in this annex, the requirement shall apply as specified and users of this standard shall comply with the same.

C.2.2 The requirements of 11.2 apply except f) and h) which are optional.

C.2.3 Requirements of 11.3 are optional.

C.2.4 The fitting centre shall have all the hand tools prescribed in 13.1, except those prescribed in c, d, g, h, i, k, o, p, q which are optional. In addition, all fitting centres shall have the following hand tools: soldering gun, soldering wire, insulating tape

C.2.4.1 It is not a requirement for fitting centres to have the equipment listed under 13.2 but all fitting centres shall have: a laptop, computer, printer and an approved inspection device.

C.2.4.2 In addition to the information prescribed in Annex B, the customer complaint login form shall capture the following information:

- a) Vehicle make/type,
- b) speed limiter type,
- c) serial number of limiter,
- d) date fitted.

C.2.4.3 Replace Annex C with the following:

DKS 2295-1:2023

1. Company Name:			
1.1	Reception	Details	Remarks
	Reception desk or counter clearly designated as reception		
	KS 2460:2013, KS 2295:2011 certified copies of KEBS and CM&TE certificates, NTSA fitting centre compliance certificate		
	Name of the legal entity comprising the business and the working hours		
	Well maintained house keeping with reception areas being clean and tidy		
	Offices for administrative duties to be separate from reception		
1.2	Customer waiting facility		
	Seating for at least two clients and include reading material		
	Customer refreshments		
	Ablution for customers/staff and proper signage		
1.3	Premises		
	Well maintained, clean and tidy		
	Demarcated customer parking and signage		
	Secure overnight parking		
	The premises shall be insured		
2. Safety requirements:			
	Adequate fire extinguishers (valid for six months)		
	Demarcation of fire extinguishers.		

DKS 2295-1:2023

1. Company Name:			
1.1	Reception	Details	Remarks
	Clear demarcation for emergency exits		
	Secure overnight parking		
	The premises shall be insured		
3. Workshop GDH			
	Floors – Shall be in good condition, clean and oil free		
	Signage – Sufficient signage to indicate facilities and customer / commercial restrictions		
	Signage – Workstation identification and clear no smoking sign		
	Lighting – Adequate lighting with all tubes and bulbs in working condition		
	Ventilation – The working area shall be well ventilated		
	Covered working bays – General business to be conducted in a workshop which is roofed and walled (considering climatic conditions)		
	Designated part storage area (parts not to be stored in cars)		
	First aid kit (easy access)		
	Security provided		
	Staff ablution: Clean and adequate		
4. Other requirements			
	Administration (mandatory)		
	Pin certificate		
	VAT		

DKS 2295-1:2023

1. Company Name:			
1.1	Reception	Details	Remarks
	NHIF, NSSF		
	Quoting		
	Printed quotes/handwritten (optional)		
	Management system (electronic)		
	Guarantees – Guarantees on workmanship and paint		
	Indemnity signage to be clearly displayed (recommended)		
	Customer follow up – Mandatory for customer satisfaction		
	Complaint resolution to be clearly documented		
	Vehicle check-in list		
	Uniforms/overall		
	Must be clean and presentable		
	Safety boots		
5. Minimum personnel requirements — Registered production staff only			
	Qualified Technicians (minimum certificate level and computer literate)		
	Quality Inspector		

Annex D
(normative)

Sample certificate of compliance

Name of Limiter Supplier

Address and physical location

CERT No......

SPEED GOVERNOR
COMPLIANCE CERTIFICATE

THIS IS TO CERTIFY THAT:

Vehicle Reg; No.....Chassis No.....

Make..... Type.....

Has been fitted with approved speed governor of type.....

Serial No.....Dated.....

This certificate is valid for 12 months from the date of issuing. It is an offence to tamper with the speed governor and it will nullify all warranty.

Signed with stamp by Supplier/Dealer/Agent

DKS 2295-1:2023

FITTING CENTER DETAILS

Business Reg. No..... Pin no..... VAT no.....

Company Address.....

Date of installation/ inspectionCertified by

Sign.....

Expiry Date.....

This Certificate is issued without any alteration whatsoever.