



GHANA STANDARD

DGS: 4502:2019

COMPULSORY SPECIFICATION FOR MOTOR VEHICLES OF CATEGORY N1.

This document is a Draft Ghana Standard. This document shall not be used or referred to as a Ghana Standard.

ICS

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DRAFT GHANA STANDARDS

Foreword

The Ghana Standards Authority is the National Statutory Body responsible for the development and promulgation of Ghana Standards.

The Ghana Standards Authority is a member of the African Organization for Standardization (ARSO), the International Organization for Standardization (ISO) and an affiliate member of the International Electrotechnical Commission (IEC).

This Ghana Standard is the compulsory specification for motor vehicles of category N1. It lays down the essential requirements to which such vehicles must conform.

The National Committee responsible for this standard (DGS 4502:2019) is the Technical Committee for Automobile Industry (GSA/TC 05).

This is the 1st edition.

Users of this standard should note that the standard undergoes revision from time to time and any references to it statutorily imply its latest edition.

DRAFT GHANA STANDARD

COMPULSORY SPECIFICATION FOR MOTOR VEHICLES OF CATEGORY N1

1 Scope

1.1 This specification covers the requirements for motor vehicle models of category N1, not previously registered or licensed in Ghana.

1.2 The requirements of this specification shall, in so far as the parts already incorporated are concerned, apply in respect of an incomplete motor vehicle model supplied for further manufacture by one manufacturer to another, and the entire specification shall apply to the vehicle after completion thereof by the last-mentioned manufacturer.

1.3 This specification does not apply to:

- a) experimental or prototype vehicles constructed or imported for the purpose of testing, assessment or development, or
- b) a motor vehicle model that was manufactured or imported during the exclusion period as per Annex A of this compulsory vehicle specification and that was not previously homologated in Ghana
- c) motor vehicles designed or adapted principally for the purposes of motor sport competition, and which are homologated under the rules of the International Federation of the Automobile (FIA) and for which such homologation documentation is lodged with the Ghana Standards Authority.

1.4 The relevant requirements of this specification shall take effect on the dates and according to the exclusions as specified both in the text of this specification and as specified in Annex A.

1.5 Where a Ghana standard, including an international standard or an ECE regulation adopted by Ghana as a national standard, is incorporated by reference into this specification, only the technical requirements/specification and category markings for the commodity and the tests to verify the compliance apply.

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.

GS 4048:2019, *Uniform provisions concerning the approval of vehicles with regard to the installation of lighting and light-signaling devices*

GS 4046:2019, *Uniform provisions concerning the approval of devices for indirect vision and of motor vehicles with regard to the installation of these devices*

GS 4043:2019, *Uniform provisions concerning the approval of safety glazing materials and their installation on vehicles*

GS 4013:2019, *Uniform provisions concerning the approval of vehicles of categories M, N and O with regard to braking*

GS 4013H:2019, *Uniform provisions concerning the approval of vehicles of passenger cars with regard to braking*

GS 4028:2019 *Uniform provisions concerning the approval of audible warning devices and of motor vehicles with regard to their audible signals*

GS 4017:2019, *Uniform provisions concerning the approval of vehicles with regard to the seats, their anchorages and any head restraints*

GS 4014:2019, *Uniform provisions concerning the approval of vehicles with regard to safety belt anchorages, ISOFIX anchorages systems and ISOFIX top tether anchorages*

GS 4016:2019, *Uniform provisions concerning the approval of: I. Safety-belts, restraint systems, child restraint systems and ISOFIX child restraint systems for occupants of power-driven vehicles, II. Vehicles equipped with safety-belts, safety-belt reminder, restraint systems, child restraint systems and ISOFIX child restraint systems.*

GS 4083:2019 *Uniform provisions concerning the approval of vehicles with regard to the emission of pollutants according to engine fuel requirements*

GS 4051:2019, *Uniform provisions concerning the approval of motor vehicles having at least four wheels with regard to their noise emissions*

GS 4039:2019, *Uniform provisions concerning the approval of vehicles with regard to the speedometer equipment including its installation*

GS 4030:2019 *Uniform provisions concerning the approval of pneumatic tyres for motor vehicles and their trailers*

GS 4054:2019 *Uniform provisions concerning the approval of pneumatic tyres for commercial vehicles and their trailers*

GS 4500:2019 Administrative Process for Homologation of Model of Motor Vehicle and its Variants.

3 Definitions

For the purposes of this specification, the following definitions apply:

3.1

airbag assembly

device that is installed to supplement safety belts and restraint systems in power-driven vehicles which, in the event of a severe impact affecting the vehicle, automatically deploys a flexible structure intended to limit, by compression of the gas contained within it, the gravity of the contact of one or more parts of the body of an occupant of the vehicle with the interior of the passenger compartment

3.2

Builder

person who builds a category N1 motor vehicle, and "build" has a corresponding meaning

3.3

category N1 motor vehicle,

hereinafter referred to as a motor vehicle that has a maximum mass not exceeding 3.5t, that has at least four wheels (or, provided that the maximum mass exceeds 1 t, at least 3 wheels), and that is used for the carriage of goods

3.4

child restraint

arrangement of components which may comprise a combination of straps or flexible components with a securing buckle, adjusting devices, attachments, and, in some cases, a supplementary chair or an impact shield or both, capable of being anchored to a power-driven vehicle. It is so designed as to diminish the risk of injury to the wearer, in the event of a collision or of an abrupt deceleration of the vehicle, by limiting the mobility of the wearer's body

3.5

homologation

is a process of establishing the compliance of a model of motor vehicle and approval being granted by the Ghana Standards authority, prior to it being introduced for sale in Ghana

3.6

importer

person who imports a category N1 motor vehicle, and "import" has a corresponding meaning

3.7

manufacturer

person who manufactures, produces, assembles, alters, modifies or converts a category N1 motor vehicle, and "manufacture" has a corresponding meaning

3.8

model

manufacturer's description for a series of vehicle designs that do not differ in respect of body shell, cab structure, profile, or the number of axles, by which they are introduced to Ghana

The Authority reserves the right to decide which variations or combinations of variations constitute a new model, and might also take cognisance of the classification system applied in the country of origin of the design

The following variations do not necessarily constitute a new model:

- a) a variant of the model in relation to trim or optional features for which compliance has been fully demonstrated;
- b) different engine and transmission combinations, including petrol and diesel engines, and manual and automatic transmissions;
- c) minor variations in profile, such as front air dams or rear spoilers;
- d) air management systems;
- e) a different number of doors;
- f) sleeper cabs on trucks;

- g) wheelbase variations;
- h) a cargo body or equipment fitted to a truck and that has no effect on compliance; and
- i) the number of driven axles.

If a vehicle is manufactured in several configurations, such as a sedan, a hatchback, or a station wagon, and a single or double cab, each of these may be regarded as a variant to the base model.

3.9

passenger airbag

airbag assembly intended to protect the occupants of seats other than the driver's in the event of a collision

3.10

proof of compliance

the authentic evidence of compliance with any of the requirements of this compulsory specification and in the case of homologation from a source defined in "Source of Evidence" in Clause 10.

3.11

rearward facing

facing in the direction opposite to the normal direction of travel of the vehicle

3.12

registered manufacturer, importer or builder

any manufacturer, importer or builder of vehicles is required to be registered with the Ghana Standards Authority

3.13

Ghana Standards authority

an organization appointed by the Minister of Trade and Industry to administer the compulsory vehicle specifications on behalf of the Government of Ghana

4 General requirements

4.1 Requirements for lights and lighting equipment

4.1.1 Lights

Lights, if fitted to a vehicle as per clause 4.1.2, shall comply with the installation requirements of clause 4.1.1.1 as determined by the homologation date:

4.1.1.1 For vehicles homologated on or after **1 JANUARY 2020**, the lights as fitted in terms of clause 4.1.2.1 and indicated in the Table 1 - Lighting Installation Requirements shall comply with the relevant requirements given in GS 4048:2019, *Uniform provisions concerning the approval of vehicles with regard to the installation of lighting and light-signaling devices*, as published by Ghana Standards Authority.

4.1.2 Lighting

Lighting shall be fitted to a vehicle as per clause 4.1.2.1 as determined by the homologation date:

4.1.2.1 Vehicles homologated on or after **1 JANUARY 2020** shall have lighting installed as per Table 1 that comply with the relevant requirements given in GS 4048:2019, *Uniform provisions concerning the approval of vehicles with regard to the installation of lighting and light-signaling devices*, as published by Ghana Standards Authority.

Provided that the specific requirements of the said GS 4048 for

- 1) dipped beam adjustment devices are not required for vehicles with self leveling suspension; and
- 2) for vehicles fitted with filament headlamps, the requirements of the following clauses:
 - 6.2.6.1 (Vertical orientation for dipped beam);
 - 6.2.6.2 (Headlamp levelling) and
 - 6.2.6.3 (Measuring procedure).
 in GS 4048 are not applicable;
- 3) lights indicated as **OPTIONAL** in Table 1 shall apply for the purposes of this compulsory specification if any motor vehicle is fitted with such devices or lamps.

Table 1 — Lighting Installation Requirements

GS 4048 Clause Ref.	Light description	Fitment condition
6.1.	Main-Beam Headlamps	Compulsory
6.2.	Dipped-Beam Headlamps	Compulsory
6.3.	Front Fog Lamps	Optional
6.4.	Reversing Lamp	Compulsory
6.5.	Direction Indicator Lamp	Compulsory
6.7.	Stop Lamp – excl. S3 on M1 & N1	Compulsory
6.8.	Rear Registration Plate Lamp	Compulsory
6.9.	Front Position Lamp	Compulsory
6.10.	Rear Position Lamp	Compulsory
6.11.	Rear Fog Lamp	Optional
6.12.	Parking Lamp	Not Required
6.13.	End-Outline Marker Lamp	Not Required
6.14.	Rear Retro-reflector, non-triangular	Compulsory
6.15.	Rear Retro-reflector, triangular	Optional
6.16.	Front Retro-reflector, non-triangular	Optional
6.17.	Side Retro-reflector, non-triangular	Optional
6.18.	Side Marker Lamp	Optional
6.19.	Daytime Running Lamp	Optional
6.20.	Cornering Lamp	Optional
6.21.	Conspicuity Markings	Optional
6.22.	Adaptive Front lighting Systems	Optional

4.2 Requirements for rear-view mirrors and vision

4.2.1 Rear-view mirrors

Rear-view mirrors shall be fitted to a vehicle as per clause 4.2.1.1 as determined by the homologation date.

4.2.1.1 Vehicles homologated on or after **1 JANUARY 2020** shall comply with the relevant requirements given in GS 4046:2019, *Uniform provisions concerning the approval of devices for indirect vision and of motor vehicles with regard to the installation of these devices*, as published by Ghana Standards Authority, excluding the Markings as required in clauses 4 & 5 of GS 4046.

4.2.2 Windscreens, windows and partitions

4.2.2.1 Windscreens

Windscreens shall be fitted to a vehicle as per clauses 4.2.2.1.1 as determined by the homologation date.

4.2.2.1.1 Vehicles homologated on or after **1 JANUARY 2020** shall comply with the relevant requirements given in GS 4043:2019 *Uniform provisions concerning the approval of safety glazing materials and their installation on vehicles*, as published by Ghana Standards Authority.

4.2.2.1.2 For the purposes of this specification, the marking requirements shall be as follows:

- a) the windscreen shall bear the glass manufacturer's registered trademark; and
- b) the glass fitted shall comply with an approved national standard, recognized by the Ghana Standards Authority, that will provide a method of identifying the glass type.

4.2.2.2 Windows and partitions

Windows and partitions shall be fitted to a vehicle as per clauses 4.2.2.2.1 as determined by the homologation date.

4.2.2.2.1 Vehicles homologated on or after **1 JANUARY 2020** shall comply with the relevant requirements given in GS 4043:2019, *Uniform provisions concerning the approval of safety glazing materials and their installation on vehicles*, as published by Ghana Standards Authority.

4.2.2.2.2 For the purposes of this specification, the marking requirements shall be as follows:

- a) the glass shall bear the glass manufacturer's registered trademark; and
- b) the glass fitted shall comply with an approved national standard, recognized by the Ghana Standards Authority, that will provide a method of identifying the glass type.

4.2.3 Windscreen wipers

A vehicle shall be fitted with at least one windscreen wiper that is capable of operation by means other than manual, and the windscreen wiper blade, when in operation, shall wipe the outside of the windscreen directly in front of the driver, evenly and efficiently.

4.3 Requirements for brakes and braking equipment

Brakes and braking equipment shall be fitted to a vehicle as per clauses 4.3.1 or 4.3.2 as determined by the homologation date.

4.3.1 Vehicles homologated on or after **1 JANUARY 2020** shall be fitted with braking equipment and shall comply with the relevant requirements given in GS 4013:2019, *Uniform provisions concerning the approval of vehicles of categories M, N and O with regard to braking*, as published by Ghana Standards Authority or;

4.3.2 Vehicles homologated on or after **1 JANUARY 2020** shall be fitted with braking equipment including an antilock braking system and electronic stability control system and shall comply with the relevant requirements given in GS 4013H:2019, *Uniform provisions concerning the approval of vehicles of passenger cars with regard to braking*, as published by Ghana Standards Authority.

4.4 Requirements for controls, steering mechanism and audible warning devices

4.4.1 Controls

4.4.1.1 General

All controls that are fitted to a vehicle, and that are required for the operation of the vehicle, shall be so located that the driver can reach and operate them when he is seated in the normal driving position, with the seat belt fastened.

4.4.1.2 Left-hand drive

A vehicle shall be of a left-hand drive configuration, except as allowed in terms of 4.4.1.3.

4.4.1.3 Central steering

A vehicle may have a central steering configuration.

4.4.2 Audible warning devices

Audible warning devices shall be fitted to a vehicle as per clauses 4.4.2.1 as determined by the homologation date.

4.4.2.1 Vehicles homologated on or after **1 JANUARY 2020** shall be fitted with one or more audible warning devices such that, when they are operated, a continuous sound is emitted at a level of at least 87 dB, and shall comply with the relevant requirements given in GS 4028:2019 *Uniform provisions concerning the approval of audible warning devices and of motor vehicles with regard to their audible signals*, as published by Ghana Standards Authority.

4.6 Requirements for seats, seat anchorages, head restraints, restraining device anchorages, restraining devices (safety belts) and airbags

4.6.1 Seats, seat anchorages and head restraints

Seats and seat anchorages shall be fitted to a vehicle as per clause 4.6.1.1 as determined by the homologation date.

4.6.1.1 Vehicles homologated on or after **1 JANUARY 2020** shall be fitted with seats, seat anchorages and head restraints that shall comply with the relevant requirements given in GS

4017:2019, *Uniform provisions concerning the approval of vehicles with regard to the seats, their anchorages and any head restraints*, as published by Ghana Standards Authority.

4.6.2 Restraining device anchorages

Restraining device anchorages shall be fitted to a vehicle as per clause 4.6.2.1 as determined by the homologation date.

The fitment of anchorages for a 2-point belt on the centre seat of a N1 light commercial vehicle is allowed as an alternative to a 3-point seat belt anchorage as required in GS 4014.

4.6.2.1 Vehicles homologated on or after **1 JANUARY 2020** shall be fitted with restraining device anchorages that shall comply with the relevant requirements given in GS 4014:2019, *Uniform provisions concerning the approval of vehicles with regard to safety belt anchorages, ISOFIX anchorages systems and ISOFIX top tether anchorages*, as published by Ghana Standards Authority.

4.6.3 Restraining devices (safety belts)

Restraining devices (Safety Belts) shall be fitted to a vehicle as per clause 4.7.3.1 as determined by the homologation date.

The fitment of a 2-point belt on the centre seat of a N1 light commercial vehicle is allowed as an alternative to a 3-point seat belt as required in GS 4016.

4.6.3.1 Vehicles homologated on or after **1 JANUARY 2020** shall be fitted with restraining devices that shall comply with the relevant requirements given in GS 4016:2019, *Uniform provisions concerning the approval of: I. Safety-belts, restraint systems, child restraint systems and ISOFIX child restraint systems for occupants of power-driven vehicles, II. Vehicles equipped with safety-belts, safety-belt reminder, restraint systems, child restraint systems and ISOFIX child restraint systems*, as published by Ghana Standards Authority.

4.6.4 Airbag warnings

4.6.4.1 If a motor vehicle is fitted with an airbag assembly, it shall carry information to the effect that it is equipped with such an assembly.

4.6.4.2 In the case of a motor vehicle fitted with an airbag assembly intended to protect the driver, the information shall consist of the inscription "AIRBAG" located in the interior of the circumference of the steering wheel; this inscription shall be durably affixed and easily visible.

4.6.4.3 In the case of a motor vehicle fitted with a passenger airbag intended to protect the front seat occupants other than the driver, this information shall consist of a warning label.

4.6.4.4 A motor vehicle fitted with one or more passenger airbags shall carry information about the extreme hazard associated with the use of rearward-facing child restraints on seats equipped with airbag assemblies.

5 Requirements for the control of environmental interference

5.1 Suppression of atmospheric pollution

Suppression of atmospheric pollution equipment shall be fitted to a vehicle as per clause 5.1.1 as determined by the homologation date.

5.1.1. Vehicles homologated on or after **1 JANUARY 2020** shall comply with the gaseous and particulate emissions requirements of GS 4083:2019 *Uniform provisions concerning the approval of vehicles with regard to the emission of pollutants according to engine fuel requirements*, as published by Ghana Standards Authority.

The minimum vehicle emission requirements are specified at the Euro I level.

5.2 Suppression of noise emission - Vehicles in motion

Suppression of noise emission for Vehicles in motion shall comply as per clause 5.2.1 as determined by the homologation date.

5.2.1. Vehicles homologated on or after **1 JANUARY 2020** shall, with the exception of noise emission originating from audible warning devices, have any noise emitted by a vehicle determined in accordance with GS 4051:2019, *Uniform provisions concerning the approval of motor vehicles having at least four wheels with regard to their noise emissions*, as published by Ghana Standards Authority.

6 Requirements concerning metrological data and vehicle identification

6.1 Vehicle dimensions

The dimensions of a vehicle shall comply with the applicable requirements of the relevant provisions of the Ghana Road Traffic Regulations, 2012 (L.I. 2180)

6.2 Vehicle Identification

6.2.1 Data plates

6.2.1.1 A vehicle shall have a metal data plate or plates affixed by rivets, or by welding, or by any other method that will achieve permanency of attachment during the life of the vehicle, in a conspicuous and readily accessible position on a part not subject to replacement.

6.2.1.2 As an alternative to the above, a data plate may be a self-adhesive tamperproof metal or plastics label that is not transferable from one vehicle to another, is clearly legible, and undergoes permanent and obvious damage on removal. The self-adhesive tamperproof label shall be resistant to engine oils, to engine coolants, to normal engine temperatures and to humidity. In addition, it shall have permanency characteristics similar to those of the plate(s) described in 6.2.1.1.

6.2.1.3 The data plate(s) shall be legibly and indelibly printed or stamped with the following details of the model type or of the vehicle, as applicable:

- a) the gross vehicle mass, in kilograms, for the model type, denoted and prefixed by the letters GVM/BVM;
- b) the gross combination mass, in kilograms, for the model type, denoted and prefixed by the letters GCM/BKM; and
- c) the gross axle mass-load of each axle, or the gross axle unit mass-load of each axle unit, in kilograms, for the model type, denoted and prefixed by the letter's GA/BA or GAU/BAE, as applicable.

6.2.2 Optional data plate

The abbreviations given in 6.2.1.3(a), 6.2.1.3(b) and 6.2.1.3(c) are not required if the information is supplied in the following order:

- a) gross vehicle mass;
- b) gross combination mass; and
- c) gross axle masses in the order front to rear.

6.2.3 Vehicle identification number (VIN)

The vehicle identification number shall comply with the relevant requirements given in ISO 3779:1983, *Road vehicles - Vehicle identification number (VIN) - Content and structure*, and ISO 4030: 1983, *Road vehicles - Vehicle identification number (VIN) - Location and attachment*, as published by Ghana Standards Authority.

6.2.4 Visible identification

An identification code made up of all of the VIN shall be applied to the motor vehicle, such that it is readily visible to a person standing outside the vehicle, without the use of aids.

6.3 Measuring units

All gauges, indicators or instruments that are fitted to a motor vehicle and are calibrated in physical units shall be calibrated in units as prescribed by the current applicable regulations promulgated under the Weights and Measures decree NRCD 362.

7 Requirements for vehicle equipment, components and systems

7.1 Speedometers

Speedometers shall be fitted to a vehicle as per clause 7.1.1 as determined by the homologation date.

7.1.1 Vehicles homologated on or after **1 JANUARY 2020** and that is capable of exceeding a speed of 25 km/h on a level road shall be equipped with speedometer equipment that complies with the relevant requirements given in GS 4039:2019, *Uniform provisions concerning the approval of vehicles with regard to the speedometer equipment including its installation*, as published by Ghana Standards Authority.

7.2 Engine and transmission

7.2.1 Engine

The engine of a vehicle shall be so fitted with a cover that any part of the engine that constitutes a source of danger is out of normal reach of a person.

7.2.2 Transmission

A vehicle, the tare of which exceeds 570 kg, shall be equipped with a transmission that enables it to be controlled and driven in both a forward and a reverse direction.

7.3 Fuel system

7.3.1 Fuel filler cap

The orifice for filling a fuel tank on a vehicle shall be fitted with an effective cap that prevents incidental ingress of water or other foreign matter.

7.4 Tyres

Tyres shall be fitted to a vehicle as per clause 7.4.1 or 7.4.2 as determined by the homologation date.

7.4.1 Vehicles homologated on or after **1 JANUARY 2020** shall be fitted with tyres that complies with the relevant requirements given in GS 4030:2019 *Uniform provisions concerning the approval of pneumatic tyres for motor vehicles and their trailers* as published by Ghana Standards Authority, or

The fitment of Snow Tyres as defined in Clause 2.2 of GS 4030:2019 shall not be allowed.

7.4.2 Vehicles homologated on or after **1 JANUARY 2020** shall be fitted with tyres that complies with the relevant requirements given in GS 4054:2019 *Uniform provisions concerning the approval of pneumatic tyres for commercial vehicles and their trailers* as published by Ghana Standards Authority.

The fitment of Snow Tyres as defined in Clause 2.2.3 of GS 4054:2019 shall not be allowed.

8 Homologation requirements

8.1 Homologation

Registered manufacturers, importers or builders shall have each model of motor vehicle, covered by the scope of this compulsory specification, successfully homologated by the Ghana Standards authority in accordance with the requirements of GS 4500:2019 Administrative Process for Homologation of Model of Motor Vehicle and its Variants.

8.2 Rights of homologation approval

The rights of homologation approval, so granted for a vehicle model in 8.1, shall lie with the registered manufacturers, importers or builders that obtained such approval. This may only be transferable, to another registered manufacturers, importers or builders on request of the manufacturers, importers or builders that currently owns the rights to the homologation approval, and be authorised by, the Ghana Standards authority.

9 Equivalent requirements

The requirements of any of the standards or requirements stated in column 3 in the appropriate parts given in Table 2 shall be deemed to have been met if compliance with the equivalent standards given in columns 5, 6 or 7 of the same table, or to any of their later amendment levels is achieved.

10 Source of evidence for homologation

The evidence of compliance to any of the requirements of any referred-to standard in this compulsory specification, which requires testing to establish compliance, and a test report, will only be recognized to the Ghana Standards Authority from the following sources:

- 1) ECE Type Approval Documentation, or
- 2) A laboratory that is part of an international or regional mutual acceptance scheme, or
- 3) A laboratory that is accredited to ISO/IEC 17025 by an accreditation body operating in accordance with ISO/IEC 17011, or
- 4) The laboratory has been successfully assessed against the requirements of ISO/IEC 17025 to the satisfaction of the Ghana Standards Authority.

DRAFT GHANA STANDARD

COMPULSORY SPECIFICATION FOR MOTOR VEHICLES OF CATEGORY N₁

Annex A — Operative dates

1	2	3	4	5
Sub-clause	Item	Operative date	Exclusions	Exclusions expiry date (Manufactured/Imported)
4.1.1.1	Lights to GS 4048:2019	1 JANUARY 2020	Vehicle models not previously homologated in Ghana	+12 Months 1 January 2021
4.1.2.1	Installation of lights to GS 4048:2019	1 JANUARY 2020	Vehicle models not previously homologated in Ghana	+12 Months
4.2.1.1	Rear-view mirrors to GS 4046:2019	1 JANUARY 2020	Vehicle models not previously homologated in Ghana	+12 Months
4.2.2.1.1	Windscreen to GS 4043:2019	1 JANUARY 2020	Vehicle models not previously homologated in Ghana	+12 Months
4.2.2.2.1	Windows & partitions to GS 4043:2019	1 JANUARY 2020	Vehicle models not previously homologated in Ghana	+12 Months
4.3.1	Braking to GS 4013:2019	1 JANUARY 2020	Vehicle models not previously homologated in Ghana	+12 Months
4.3.2	Braking to GS 4013H:2019	1 JANUARY 2020	Vehicle models not previously homologated in Ghana	+12 Months
4.4.2.1	Audible warning devices to GS 4028:2019	1 JANUARY 2020	Vehicle models not previously homologated in Ghana	+12 Months
4.6.1.1	Seats, seat anchorages and head restraints to GS 4017:2019	1 JANUARY 2020	Vehicle models not previously homologated in Ghana	+12 Months
4.6.2.1	Restraining device anchorages to GS 4014:2019	1 JANUARY 2020	Vehicle models not previously homologated in Ghana	+12 Months
4.6.3.1	Restraining devices to GS 4016:2019	1 JANUARY 2020	Vehicle models not previously homologated in Ghana	+12 Months
5.1.1	Vehicle emissions to GS 4083:2019 to the level of ECE R83.02	1 JANUARY 2020	Vehicle models not previously homologated in Ghana	+12 Months
5.2.1	Vehicle Noise in motion to GS 4051:2019	1 JANUARY 2020	Vehicle models not previously homologated in Ghana	+12 Months
6.2.3	Vehicle Identification number	1 JANUARY 2020	No Exclusion	N/A
6.2.4	Visible Vehicle Identification number	1 JANUARY 2020	Vehicle models not previously homologated in Ghana	+12 Months
7.1.1	Speedometer to GS 4039:2019	1 JANUARY 2020	Vehicle models not previously homologated in Ghana	+12 Months
7.4.1	Passenger Tyres to GS 4030:2019	1 JANUARY 2020	Vehicle models not previously homologated in Ghana	+12 Months
7.4.2	Passenger Tyres to GS 4054:2019	1 JANUARY 2020	Vehicle models not previously homologated in Ghana	+12 Months

Compulsory specification for motor vehicles of category N1

**Table 2 — Equivalent standards that shall be
deemed to comply with GS standards**

1	2	3	4	5	6	8	9
Sub clause	Item	GS No.	Dated	EEC	ECE level	Others	Remarks
4.1.1.1	Lights	GS 4048 GS 4003 GS 4004 GS 4006 GS 4007 GS 4023 GS 4112	2019 2019 2019 2019 2019 2019 2019		R48.04 R3.02 R4. R6.01 R7.02 R23.00 R112.00	FMVSS 108	
4.1.2.1	Installation of lights	GS 4048	2019		R48.04		
4.2.1.1	Rear-view mirrors	GS 4046	2019		R46.02		
4.2.2.1.1	Windscreen	GS 4043	2019		R43.00	FMVSS 205	
4.2.2.2.1	Windows & partitions	GS 4043	2019		R43.00	FMVSS 205	
4.3.1	Braking	GS 4013	2019		R13.08		
4.3.2	Braking	GS 4013H	2019		R13H.00		
4.4.2.1	Audible warning devices	GS 4028	2019		R28.00		
4.6.1.1	Seats, seat anchorages and head restraints	GS 4017	2019		R17.04		
4.6.2.1	Restraining device anchorages	GS 4014	2019		R14.05		
4.6.3.1	Restraining devices	GS 4016	2019		R16.04		
5.1.1	Vehicle emissions	GS 4083	2019		R83.02		
5.2.1	Vehicle Noise in motion	GS 4051	2019		R51.00		
6.2.3	VIN Content	?????				ISO 3779:1983	
6.2.3	VIN Location	?????				ISO 3779:1983	
7.1.1	Speedometer	GS 4039	2019		R39.00		
7.4.1	Passenger Tyres	GS 4030	2019		R30.02		
7.4.2	Commercial Tyres	GS 4054	2019		R54.00		