



CD/K/013:2008
ICS 43.020; 53.060

EAST AFRICAN STANDARD

Code of practice — Roadside roadworthiness assessment of motor vehicles

EAST AFRICAN COMMUNITY

Foreword

Development of the East African Standards has been necessitated by the need for harmonizing requirements governing quality of products and services in East Africa. It is envisaged that through harmonized standardization, trade barriers which are encountered when goods and services are exchanged within the Community will be removed.

In order to meet the above objectives, the EAC Partner States have enacted an East African Standardization, Quality Assurance, Metrology and Test Act, 2006 (EAC SQMT Act, 2006) to make provisions for ensuring standardization, quality assurance, metrology and testing of products produced or originating in a third country and traded in the Community in order to facilitate industrial development and trade as well as helping to protect the health and safety of society and the environment in the Community.

East African Standards are formulated in accordance with the procedures established by the East African Standards Committee. The East African Standards Committee is established under the provisions of Article 4 of the EAC SQMT Act, 2006. The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the private sectors and consumer organizations. Draft East African Standards are circulated to stakeholders through the National Standards Bodies in the Partner States. The comments received are discussed and incorporated before finalization of standards, in accordance with the procedures of the Community.

Article 15(1) of the EAC SQMT Act, 2006 provides that "Within six months of the declaration of an East African Standard, the Partner States shall adopt, without deviation from the approved text of the standard, the East African Standard as a national standard and withdraw any existing national standard with similar scope and purpose".

East African Standards are subject to review, to keep pace with technological advances. Users of the East African Standards are therefore expected to ensure that they always have the latest versions of the standards they are implementing.

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Code of practice — Roadside roadworthiness assessment of motor vehicles

1 Scope

This standard establishes the methods to be used in, and the extent of, the examination of motor vehicles that are subjected to a roadside assessment for roadworthiness by traffic authorities.

This standard has to be read in conjunction with the Traffic Act and its Regulations, as amended.

2 Normative reference

The following referenced documents are indispensable for the application of this East African Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

CD/K/040:2008, *Measurement of noise emitted by road vehicles when stationary — Code of practice*

CD/K/014:2008, *Code of practice — Vehicle test station evaluation*

3 Definitions

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

3.1

acceptable

acceptable to the traffic officer

3.2

heavy vehicle

a motor vehicle the mass of which is in excess of 3 500 kg

3.3

notification

a written or verbal warning given by a traffic officer when a component is not in good working order but does not as yet constitute a danger

NOTE "Notify" has a similar meaning.

3.4

rejection

a written notice to appear in court, or a written notice to discontinue the use of a vehicle which is issued when a component is found to be worn, broken or damaged to such an extent that, in the opinion of the traffic officer, it constitutes a danger

NOTE "Reject" has a similar meaning.

3.5

truck tractor

a motor vehicle used for towing a semi-trailer

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4 Duties of the traffic officer

4.1 The traffic officer shall use the procedure detailed in Clause 5 and shall detail the findings of the examination on a prescribed form that is acceptable to the inspection agency.

4.2 A vehicle that has a defect that is, in the opinion of the traffic officer, in an area deemed to affect safety in terms of the Traffic Regulations (i.e. braking, suspension, steering and lights) shall either:

- a) be prohibited from continuing unless the relevant repairs are carried out immediately, or
- b) proceed directly to a repair facility, or
- c) proceed to the nearest authorized test station where a more detailed examination shall be undertaken, or
- d) be towed away by a breakdown vehicle with the wheels lifted.

NOTE The findings of a roadside roadworthiness assessment do not overrule the findings of a test station that complies with CD/K/014:2008.

5 Procedure

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5.1 General

The site for a roadside roadworthiness assessment shall be so chosen as not to affect the safety of other road users, or interfere with the normal flow of traffic.

5.2 Test site

It is recommended that the site be established in accordance with CD/K/014:2008.

5.3 Sensitive loads

A vehicle that is carrying hazardous cargo, livestock or other sensitive loads, should not be unduly delayed at the test site.

5.4 Brake system

5.4.1 General

Examine the accessible components of the brake system and note the general condition of the system. **Notify if** a vehicle has an alarm system connected with the brake system.

5.4.2 Brake pedal (hydraulic actuation)

With the engine running, examine and test the movement of the brake pedal.

Reject if the brake pedal continues to move down when a constant foot pressure is maintained for 1 min. **Notify** if the brake pedal does not have a non-slip surface.

5.4.3 Brake pedal (full air brake)

Examine and test the brake pedal operation.

Reject if any rod, clevis or split-pin is damaged, worn or missing.

Notify if the brake pedal does not move smoothly over its arc of movement.

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5.4.4 Brake servo mechanism (vacuum operation)

With the engine stopped, deplete the vacuum reservoir. Fully depress the brake pedal and start the engine.

Notify if no movement of the brake pedal is noticed.

5.4.5 Handbrake

Examine and test the handbrake control.

Reject if

- a) the control is not in working order, or
- b) in the case of a single-pull type handbrake, the hand lever moves over the complete handbrake ratchet quadrant, or
- c) in the case of a multiple-pull type handbrake, the hand lever requires more than four pulls.

5.4.6 Brake piping system

Examine the accessible components of the brake piping.

Reject if

- a) there is evidence of hydraulic brake fluid leakage, or
- b) there is evidence of air leakage (for example, loose connectors, broken pipes, leaking diaphragms), or
- c) there is evidence of broken or missing brake pipes, or
- d) any pipe or flexible hose not specifically designed for brake pipe application (such as a garden hose) is fitted, or
- e) brazed, welded or blanked brake pipes are found, or
- f) where fitted, the load sensing valve and its operating linkage are damaged or disconnected; or
- g) flexible hoses are not secured by hose clamps or other acceptable means, or
- h) the low air pressure visual or audible warning device is inoperative, or not fitted.

Notify if evidence of deteriorated brake pipes or hose is apparent.

5.4.7 Air reservoirs

Examine the air tank reservoirs. **Reject if**

- a) a reservoir is so damaged that its performance might be affected, or
- b) a reservoir is not securely mounted, or
- c) where fitted, a manual drain valve is not in working order. **Notify if** a reservoir contains excessive water, or oil (or both).

5.4.8 Foundation brake components (heavy vehicles)

Examine and, where possible, test the brake components.

Reject if

- a) an essential brake component is damaged, broken or missing, or

NOTE Brake dust plates are not considered essential components.

- b) free play is found on any brake component where it could reduce the efficiency of the brake assembly, or

- c) when the brakes are applied, more than 55 mm of travel of the actuating rods of diaphragm brake chambers is measured, or

NOTE Where piston type brake chambers are used, the actuating rod travel should not exceed 70 mm.

- d) more than one size or type of brake chamber is fitted on an axle.

5.4.9 Trailer connections

Examine the flexible connections between the vehicle and the trailer.

Reject if

- a) the trailer susi-hoses and connections are interchangeable or are not clearly and correctly identified (red for emergency and yellow for service), or

- b) the hoses are damaged, or

- c) the hoses are not connected, or

- d) the hoses are incorrectly connected, or

- e) the connections are damaged, or

- f) the connectors are worn.

5.5 Suspension

Examine the suspension.

Reject if

- a) one or more spring blade (including the main locating blade, or "U" bolt) is loose, broken or missing, or

- b) a cracked or broken suspension spring mounting bracket is found, or

- c) an axle location arm is loose, broken (or otherwise damaged) or missing, or

- d) the axles are noticeably misaligned.

Notify if a shock absorber mounting is loose, broken or missing.

5.6 Wheels

Examine all wheels (excluding the spare wheel).

Reject if

- a) a wheel or part of a wheel is bent to such an extent that the tyre seating is impaired, or

- b) a component of the wheel is missing, or

- c) a wheel has any visible damage (for example, cracks or elongation of mounting holes), or
- d) more than one wheel, nut or stud per wheel is missing or loose.

5.7 Tyres

Examine all tyres (excluding the tyre on the spare wheel).

Reject if

- a) the tyre is so worn or damaged that the fabric or cord used in its construction is exposed, or
- b) the tyre is otherwise found to be defective in terms of the Traffic Regulations.

Notify if

- a) there is any sign of separation of the tread from the carcass, or
- b) tyres on an axle are mismatched (in other words, of different construction or bearing different size markings), or
- c) where dual tyres are fitted, there is any contact between them.

In such a case, instruct the driver to have the tyres inflated as soon as possible.

5.8 Exhaust system

Examine and test the exhaust system.

Reject if, when measured in accordance with CD/K/040:2008, the exhaust system emits noise at a level that exceeds the limits given in Annex B to the code.

Notify if

- a) the exhaust system mounting is damaged, or
- b) any temporary repair made to the exhaust system is inefficient.

5.9 Chassis

5.9.1 General

Examine all accessible parts of the chassis.

Reject if any part of the chassis is broken.

Notify if any part of the chassis is cracked or any cross-member is deformed or has visible cracks.

5.9.2 Fifth wheel and subframe mounting (truck tractor)

When a vehicle is fitted with a fifth wheel coupling, examine and test the coupling and subframe mounting.

Reject if

- a) more than 20 % of the subframe or fifth wheel mounting bolts are missing, or
- b) the locking device and safety catches are inoperative.

5.9.3 Cab-tilt locking device

When a vehicle is fitted with a cab-tilt lever, examine the locking devices. Reject if the locking devices and safety catches are inoperative.

5.10 Steering

Examine and test the steering mechanism.

If the vehicle has power-steering, carry out the test with the engine running.

Reject if

- a) any component is loose, worn or damaged, or
- b) the free play in the steering gear, when the wheels are in the straight-ahead position, is such that the free movement of the steering wheel exceeds one eighth of a revolution, that is 45°.

5.11 Forward and rearward vision

5.11.1 Windscreen

Examine the windscreen.

Reject if

- a) the windscreen is cracked, clouded or otherwise defective, unless the defect does not weaken it and, when measured from the kerb side, does not extend over an area of more than 50 % of the entire area of the windscreen, or
- b) the defect, in the opinion of the traffic officer, materially affects the use of the kerb-side rearview mirror, or
- c) the windscreen is in such a bad state that the vision of the driver is affected. **Notify** if the windscreen is not marked with a recognized certification mark.

5.11.2 Windscreen wipers

Examine and test the windscreen wiper mechanism.

Reject if the windscreen wipers are not capable of adequately cleaning the windscreen immediately in front of the driver.

5.11.3 Mirrors

Examine the mirrors and the rearward vision that they provide.

Notify if

- a) the mirrors are so mounted as to permit severe mirror-head vibration, or
- b) the mirrors are so mounted that the rearward vision is not acceptable.

5.12 Audible warning device (hooter)

Examine and test the device.

Reject if

- a) the device is not in working order, or

- b) when operated, the device is not capable of emitting a sound that, under normal conditions, is clearly audible at a distance of 90 m from the front of the vehicle by a person with normal hearing.

5.13 Atmospheric pollution

Examine the exhaust emission.

Reject if the vehicle engine emits smoke and fumes that would not normally be emitted if the engine were in a good working condition and running efficiently.

5.14 Lights and lighting equipment

Minor, on-the-spot repairs may be undertaken in respect of replacing globes, fuses and reflectors, and tightening of screws in respect of head lamps, tail lamps and registration plate lamps.

5.14.1 Headlamps

Examine and test the headlamps.

Reject if

- a) any headlamp fails to operate, or
- b) any headlamp glass is broken and foreign matter has contaminated the lamp reflector, or
- c) the headlamps do not operate in conjunction with a beam dipping device, unless they are permanently adjusted to dipped beam operation, or
- d) any lamp that is mandatory in terms of the Traffic Regulations does not comply with these Regulations.

Notify if

- a) the size of a headlamp is different from that of its counterpart, or
- b) any headlamp is loose in its housing.

5.14.2 Tail lamps

Examine and test the tail lamps.

Reject if

- a) any of the tail lamps fail to operate, or
- b) at least two tail lamps (one on each side) do not emit a red light directly towards the rear, or
- c) a lens is broken, or
- d) a piece is missing.

Notify if

- a) the light intensity of a tail lamp exceeds that of the corresponding stop lamp, or
- b) the light intensity of one tail lamp differs substantially from that of any other tail lamp, or
- c) a lens is markedly discoloured, or
- d) the lenses are covered in mud.

5.14.3 Registration plate lamp

Examine and test the registration plate lamp.

Reject if

- a) the registration plate lamp fails to operate, or
- b) the registration plate is not illuminated by a white light, or
- c) the light source is visible (except by reflection) from the rear of the vehicle, or
- d) in the case of a drawing vehicle to which a trailer is attached, the registration plate lamp on the rear of the drawing vehicle fails to operate.

5.14.4 Stop lamps

Examine and test the stop lamps.

Reject if

- a) the stop lamps do not emit a red light of intensity greater than that of the other tail lamps, or
- b) the lamps are not visible at a distance of at least 30 m from the vehicle to a person with normal eyesight, or
- c) the lamps fail to operate when the brake pedal is applied, or
- d) a lens is broken or missing.

5.14.5 Direction indicators

Examine and test the indicators.

Reject if

- a) the indicator lamps are not in working order, or
- b) the flashing of the indicators is not visible at a distance of at least 30 m from the vehicle to a person with normal eyesight, or
- c) where an indicator lamp is combined with or mounted within 150 mm of any other lamp, the light intensity emitted by the indicator lamp is not greater than that emitted by the other lamp, or
- d) the front indicator lens is neither white, nor yellow, nor amber, or
- e) the rear indicator lens is neither amber, nor yellow, nor red, or
- f) a lens is broken or missing, or
- g) the indicator shows a steady light.

Notify if the indicator flashing sequence is slow or irregular.

5.15 Retro-reflectors, chevrons and warning signs

Examine each retro-reflector.

Reject if

- a) red retro-reflectors are not fitted to the rear of the vehicle, or

- b) a vehicle (other than a bus) of overall length exceeding 7 m, is not fitted with yellow retro-reflectors on its side, or
- c) a chevron has been fitted but, in the opinion of the traffic officer, is not in a good condition, or
- d) no chevron has been fitted, or
- e) the emergency warning signs do not comply with the relevant Road Traffic Regulations.

Notify if

- a) in the case of a trailer, white retro-reflectors are not fitted to the front of the vehicle, or
- b) a lens is cracked, broken or missing, or
- c) a retro-reflector (other than that provided for in (d) below) does not bear a certification mark, or
- d) where a rear retro-reflector is combined with other tail lamps, it does not bear a recognized mark of approval, or
- e) if covered with mud and grit.

5.16 Oil leaks

Examine the vehicle for oil leaks.

Reject if more than three drops of oil are observed over a period of 10 s.

5.17 Dimensions (heavy vehicles)

Measure the vehicle.

Reject if the following dimensions are in excess of the maximum legal values:

- a) overall width; or
- b) overall length; or
- c) wheelbase; or
- d) rear overhang; or
- e) front overhang; or
- f) overall height.

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