Informal document No. 2
(85th GRSG,21-24 October 2003, agenda item 11.1)
Distr.
GENERAL

TRANS/WP.29/GRSG/2000/8/Rev.3 19 July 20024 July 2003

Original: ENGLISH

ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

World Forum for Harmonization of Vehicle Regulations (WP.29)

Working Party on General Safety Provisions (GRSG) (Eighty-third-fifth session, 15—1821 - 24 October 20022003, agenda item xx.)

<u>Justification</u>: 1) location and identification is only part of the requirements of this gtr. 2) Category 1 and 2 are already defined by draft gtr "0".

Revision 3

Transmitted by the Expert from Canada

Note: The text reproduced below was transmitted by the expert from Canada. It represents the proposed draft of the new global technical regulation. The text is based on the document TRANS/WP.29/GRSG/2000/8/Rev.2 and subsequent GRSG discussions and consultations. The text reproduced below was transmitted by the expert from Canada. It is based on a document TRANS/WP.29/GRSG/2000/8/Rev.1. The text represents the proposed draft of the new global technical regulation.

<u>Note</u>: This document is distributed to the Experts on General Safety Provisions only. GE.02-

Draft global technical regulation No. XXX

UNIFORM PROVISIONS FOR LOCATION AND IDENTIFICATION OF MOTOR VEHICLE HAND CONTROLS, TELL-TALES AND INDICATORS <u>PRESENT ON CATEGORY 1 AND 2</u> VEHICLES.

1. SCOPE AND PURPOSE

This global technical regulation specifies requirements for the location, identification, colour, and illumination of motor vehicle hand controls, tell-tales and indicators. The purpose of this global technical regulation is to ensure the accessibility, visibility, and recognition of vehicle controls, tell-tales, and indicators and to facilitate theirthe proper selection of controls under daylight and night-time conditions, in order to reduce the safety hazards that would otherwise be caused by the diversion of the driver's attention from the driving task and by mistakes in selecting controls.

2. PURPOSE

The purpose of this global technical regulation is to ensure the accessibility, visibility, and recognition of vehicle controls, tell-tales, and indicators and to facilitate their selection under daylight and night-time conditions, in order to reduce the safety hazards caused by the diversion of the driver's attention from the driving task and by mistakes in selecting controls.

<u>Justification</u>: according to the prescribed format for the gtr (TRANS/WP.29/883), the scope and purpose are under one heading.

3.2. APPLICATION

This global technical regulation applies to power-driven vehicles of categories 1 and 2 intended for use on the road, with or without bodywork and a maximum design speed exceeding 25 km/h. Contracting Parties may apply this global technical regulation to other categories of vehicles. It does not apply to motorcycles, mopeds, vehicles that run on rails and to agricultural and forestry tractors and machinery.

Justification: The addition is to allow contracting parties to apply this gtr to other categories of vehicles in their jurisdictions. The last part is deleted since specifying the application of this gtr to categories 1 and 2 (per gtr"0") would automatically exclude motorcycles, mopeds etc.

4.3. DEFINITIONS

For the purpose of this global technical regulation

- 4<u>3</u>.1. "<u>Device</u>" means an element or an assembly of elements used to perform one or more functions.
- 43.2. "Control" means that the hand-operated part of a device that enables the driver to change the state or functioning of a vehicle or vehicle's subsystem.
- 4<u>3</u>.3. "<u>Tell-tale</u>" means an optical signal that, when illuminated, indicates the actuation of a device, a correct or defective functioning or condition, or a failure to function.
- 4<u>3</u>.4. "<u>Indicator</u>" means a device that shows the magnitude of the physical characteristics that the <u>instrument device</u> is designed to sense.
- 43.5. "Adjacent", with respect to a symbol identifying a control, tell-tale or indicator, means that the symbol is in close proximity to the control, telltale or indicator and no other control, tell-tale, indicator, identifying identification symbol or source of illumination appears between an identifying identification symbol and the control, tell-tale, or indicator which that symbol identifies.

Justification: editorial changes for clarification. No new requirement.

- 4<u>3</u>.6. "<u>Common space</u>" means an area on which more than one tell-tale, indicator, identification symbol, or other message may be displayed but not simultaneously.
- 43.7. "Multi-task display" means an area on which more than one item of information may be displayed simultaneously.
- 43.8. "Multi-function control" means a control through which the driver may select, and affect the operation of, more than one vehicle function.

Justification: expression used in paras. 4.1.3. and 4.1.4.

54. REQUIREMENTS

A vehicle, if fitted with a control, a-tell-tale or an-indicator, listed in Table 1 or <u>Table 2in ISO Standard 2575:2000</u>, shall meet the prescribed requirements of this global technical regulation respecting the location, identification, illumination, and colour of <u>such-that</u> control, tell-tale or indicator.

Justification: the content of Table 1 and 2 will include all ISO 2575 symbols related to tell-tales, indicators and controls pertinent to operating the vehicle. There will be no need to refer to ISO 2575 in this document.

54.1. Location

- 54.1.1. The controls to be used by a driver while driving the vehicle shall be located so that they are operable by the driver under the conditions set out in paragraph 54.6.2.
- 54.1.2. The tell-tales and indicators listed in Table 1 and 2, and their identification symbols shall be located so that they are visible to a driver during daylight and night time driving and under the conditions set out in paragraphs 54.6.1. and 54.6.2. Tell-tales, and indicators and their identification symbols need not be visible when not activated.

<u>Justification</u>: seeing identification symbols of indicator or a tell-tale is very important. An indicator (number or scale with a pointer) or a tell-tale (brightly lit spot on the instrument panel) without visible identification is useless.

<u>Except as provided in para. 5.4.1.4.</u>, the The identification symbols of for controls, tell-tales, and indicators shall be placed on or adjacent to the <u>controls</u>, tell-tales, <u>or</u> indicators and controls that they identify. In the case of multi-function controls, the identifications need not be immediately adjacent; nonetheless, they shall be as close as practicable to the multifunction control.

Justification: editorial changes for clarification. No new requirement.

- 5.4.1.4. Paragraph 5.4.1.3. does not apply to <u>multi-function</u> controls, <u>if:</u> shown on a multi-task display and selected by manipulating controls
- 4.1.4.1. the control is depicted on an associated the multi-task display.

Justification: editorial changes for clarification. No new requirement.

- 4.1.4.2. the associated multi-task display is visible to the driver under the conditions of paras. 4.6.1. and 4.6.2., and
- 4.1.4.3. all of the vehicle systems for which control is possible from the multi-function control are identified on a multi-task display. Sub-functions of those systems need not be shown on the top-most layer of the multi-task display.

Justification: the technology of the "multi-function controls" and "multi-task display" is new and still evolving. Present proposal is based on available information from the industry.

5.4.1.5. Despite paragraphs 5.4.1.1. to 5.4.1.4., the tell-tale for "passenger air bag off", if fitted, must be located within the interior of the vehicle and forward of and above the design H-point of the driver's and the front passenger(s)" seats in their forward most seating positions. The tell-tale must be located so as to be visible to the driver and front passenger(s) under daylight and night time driving conditions and must not be located on or adjacent to a surface that may be used

for temporary or permanent storage where if use of the storage space could obscure the tell-tale from either the driver's or right front passengers' view.

5.4.2. Identification

Where fitted, each control, tell-tale and indicator, that is listed in column 1 of Table 1 or 2, shall be identified by the symbol designated specified for it in column 2 of Table 1 or 2. No identification symbol is required for any This requirement does not apply to the horn (an audible warning signal) control, when it is activated by a lanyard. Control, tell-tale or indicator not listed in Table 1 shall be identified by symbol designated for the purpose in standard ISO 2575:2000 where one exists and where that symbol is suitable for the application concerned. Each symbol provided in accordance with this paragraph must have the proportional dimensional characteristics of the symbol shown in Table 1 or 2 or in ISO 2575:2000.

Justification: The addition of the last sentence is to assure proportionality of symbols. Other changes are editorial.

5.4.2.2. To identify a control, a-tell-tale or an-indicator not included in Table 1 or 2 ISO 2575:2000, the manufacturer may use a symbol of its own conception. Such symbol may include internationally recognised alphabetic or numeric indications.

All symbols used shall follow the design principles laid down in paragraph 4. of ISO 2575:2000.

Justification: Second last sentence was redundant. Last sentence was moved to 4.2.1.

- 5.4.2.3. Supplementary symbols (for example words) may be used in conjunction with any symbol specified in Table 1 or Table 2ISO 2575:2000.
- 5.2.4. 4.2.4. Each additional or supplementary symbol used by the manufacturer must not cause confusion with any symbol specified in this global technical regulation.
- 5.4.2.5. Where a If the control, an indicator or a tell-tale for the same function are combined, one symbol may be used to identify such that combination.
- 5.4.2.6. Except as provided in paragraph 5.4.2.97., all identification symbols for the of tell-tales, indicators and controls listed in Table 1 or 2ISO 2575:2000 must be positioned so as to appear to the driver to be perceptually upright. In case of rotating control, this paragraph applies to it when such control is in its "off" position. For rotating controls that have an "off" position, this requirement applies to the control in the "off" position.

Justification: editorial changes. No new requirement.

5.4.2.7. The identification symbols for of the following need not be positioned so as to appear to the driver to be perceptually upright:

- 5.4.2.7.1. a horn control,
- 5.4.2.7.2. any control, tell-tale or indicator located on the steering wheel, when the steering wheel is positioned for the motor vehicle to travel in other than a straight forward direction, and
- 5.4.2.7.3. any rotating control that does not have an "off" position.
- 5.4.2.8. Identification symbols shall be provided for the control of each function of the automatic vehicle speed system (cruise control) and the heating and air conditioning systems. Each control for the automatic vehicle speed system (cruise control) and each control for heating and air conditioning system(s) shall have identification provided for each function of each such system.

Justification: clarification. No new requirement.

5.4.2.9. When fitted each control that regulates a system function over a continuous range shall have identification provided for the limits of the adjustment range of any such function.

If colour coding is used to identify the limits of the adjustment range of a temperature function, the hot limit shall be identified by the colour red and the cold limit by the colour blue.

If the status or limit of a function is shown by an indicator that is separated from and not adjacent to the control for that the function, both the control and the indicator must be independently identified in compliance with paragraph this global technical regulation.

Justification: clarification

- 5.4.3. Illumination
- 5.4.3.1. Timing of illumination
- 4.3.1.1. Except as provided in paragraph 4.3.1.3. the identifications of controls for which wherever the word "Yes" is indicated in column 4 of Table 1, the corresponding identification symbol for a control listed in column 1 in Table 1 shall be capable of being illuminated whenever the headlamps are activated. This does not apply to controls located on the floor, floor console, steering wheel, or steering column, or in the area of the windscreen header, or to those controls for a heating and or air-conditioning system if the systemthat does not direct air directly upon the windscreen.

Justification: editorial clarifications. No new requirement.

- 5.4.3.1.2. Except as provided in paragraph 4.3.1.3. the indicators and their identifications for which wherever the word "Yes" is indicated in column 4 of Table 1, the corresponding indicator and its identification symbol shall be illuminated whenever the vehicle's propulsion system and the headlamps are activated.
- 5.4.3.1.3. The indicators, their identifications and the identifications of controls need not be illuminated when the headlamps are being flashed or operated as daytime running lamps.
- 5.4.3.1.4. At the manufacturer's discretion a Any control, indicator or and their respective identification symbols may be capable of being illuminated at any time.
- **Justification**: not necessary to say "at the manufacturer's discretion" because "may" means it is at their discretion. No new requirement
- 5.4.3.1.5. A tell-tale shall not emit light except when identifying the malfunction or vehicle condition for whose indication it is designed to indicate occurs. It shall not emit light at any other time, except or during a bulb check-upon propulsion system activation.
- <u>Justification</u>: Need the requirement to illuminate. Expanded to allow bulb check to occur at any time.
- 5.4.3.62. Brightness of illumination of regarding controls and indicators
- 5.4.3.62.1. Means shall be provided for illuminating the indicators, and identification symbols for of indicators and identifications of controls; listed in Table 1; to make them visible to the driver under daylight and nighttime driving conditions.
- 5.4.3.62.2. The means for providing the of illumination required by paragraph 5.4.3.2.1.: visibility
- 5.4.3.62.2.1. shall be adjustable to provide at least two levels of brightness, at the lower of which the <u>indicators and</u> identification <u>symbols for of controls</u>, <u>and indicators and the identification of indicators</u> are barely discernible to the driver who has adapted to dark ambient roadway condition; and
- 5.4.3.62.2.2. may be operable manually or automatically.

Justification: editorial changes for clarity of the text. No new requirement.

5.4.3.73. Brightness of tell-tale illumination regarding tell-tales

Means shall be provided for illuminating tell-tales and their identification symbols to make them visible to the driver under daylight and nighttime driving conditions.

<u>5.4.</u>4. <u>Colour</u>

5.4.4.1. Except as provided in 4.5.1.6, tThe light of each tell-tale listed in column 1 of Table 1 shall be of the colour shown-specified for that tell-tale in column 5 of this that table.

Justification: editorial changes for clarity of the text. No new requirement.

5.4.4.2. Indicators and tell tales and identifications of indicators and controls not listed in Table 1 may be of any colour chosen by the manufacturer, however, such colour must not interfere with or mask the identification of any tell tale, control, or indicator specified in Table 1. The colour to be selected shall follow the guidelines specified in paragraph 5 of ISO standard 2575:2000.

The colour of indicators, tell-tales and the identification symbols for indicators and controls not listed in Table 1 shall be selected by the manufacturer in accordance with paragraphs 4.4.3 and 4.4.4. The colour selected must not interfere with or mask the identification of any tell-tale, control or indicator specified in Table 1.

Justification: editorial change for clarity of text. The reference to paragraph 5 of the ISO 2575 is replaced by the actual text in 4.4.3 (below).

- 4.4.3. Colours must be selected in accordance with the following colour code:
- 4.4.3.1. red: danger to persons or very serious damage to equipment is immediate or imminent;
- 4.4.3.2. yellow or amber: caution, outside normal operating limits, vehicle system malfunction, damage to vehicle likely, or other condition which may produce hazard in the longer term;
- 4.4.3.3. green: safe, normal operating condition (where blue or vellow is not required).
- 5.4.4.34. Each symbol used for <u>the</u> identification of <u>a tell-tale</u>, control or indicator shall <u>be</u> in a colour that stands out clearly against the background.

Justification: editorial change for clarity of the text.

5.4.4.4<u>5</u>. The dark filled-in part of any symbol may be replaced by its outline and the outline of any symbol may be filled in.

Justification: editorial change for clarity of the text.

- <u>5.4.</u>5. <u>Common space for displaying multiple information</u>
- <u>Except as provided in 4.5.1.3.</u>, <u>aA</u> common space may be used to show information from any source, subject to the following requirements:

Justification: editorial change for clarity of the text.

5.4.5.1.1. The tell-tales and indicators <u>displayed</u> in the common space shall <u>provide</u> relevant information illuminate at the initiation of <u>any underlyingthe</u> condition they are designed to identify.

<u>Justification</u>: provision of relevant information does not necessarily mean that the driver will see it. <u>Illumination involves light stimuli which will be observed if the location/orientation/etc</u> of the tell-tale or indicator conforms to this gtr.

- <u>5.4.</u>5.1.2. <u>Except as provided in 4.5.1.4.</u> <u>Ww</u>hen the <u>underlying</u> condition exists for actuation of two or more tell-tales, the information shall be either
 - (i) repeated automatically in sequence, or
 - (ii)——indicated by visible means and capable of being selected for viewing by the driver under the conditions of paragraph <u>5.4.</u>6.2.

Justification: editorial change for clarity of the text.

5.4.5.1.3. The tell-tales for the any brake system malfunction, air bag malfunction, side air bag malfunction, passenger air bag off, headlamp driving beam, low tire pressure, direction indicator and seat belt shall not be shown in the same common space.

<u>Justification</u> it is important to warn the vehicle operator of any air bag problem. Malfunction of an airbag (unintended inflation) may cause grave consequences. Low tire pressure indication is required by the United States and considered essential information.

5.4.5.1.4. If tell-tale for the brake system malfunction, headlamp driving beam, direction indicator or seat belt is displayed in a common space it must displace any other symbol, message or other information in such common space if the underlying condition exists for its activation. In the case of the telltale for a brake system malfunction, air bag malfunction, side air bag malfunction, passenger air bag off, low tire pressure, high beam, direction indicator, or seat belt that is designed to be displayed in a common space, that telltale must displace any other information in that common space while the condition for the telltale's activation exists.

<u>Justification</u>: editorial change for clarity of the text. In addition, the air bag malfunction and low tire pressure tell-tales were added.

5.4.5.1.5. Information displayed in the common space may be cancellable automatically or by the driver, except that. T tell-tales for headlamp driving beam, passenger air bag off, low tire pressure, a direction indicator and those for which the colour red is required in by Table 1 shall not be cancellable if the underlying condition exists for their activation.

Justification: editorial change for clarity of the text. The air bag malfunction and low tire pressure were also added.

5.4.5.1.6. Unless prescribed in a specific Regulation, the colour requirements regarding tell-tales do not apply when tell-tales appear in a common space. The colour requirements regarding telltales for engine oil pressure and parking brake do not apply when those telltales appear in a common space.

<u>Justification</u>: This change aligns the text of the gtr with EEC directive 93/91/EEC and makes the gtr independent of other regulations.

- 5.4.6. Conditions
- 5.4.6.1. The driver has adapted to the ambient light roadway conditions.
- 5.4.6.2. The driver is restrained by the installed crash protection system, adjusted in accordance with the manufacturer's instructions, and is free to move within constraints of that system.

Table 1. Symbols for Controls, Tell-tales and Indicators

| ıNo. | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|--------------|---|------------------------------------|-------------------------|--------------|----------|
| INO. | ITEM | SYMBOL 2/ | FUNCTION | ILLUMINATION | COLOUR |
| 1. | Master lighting switch | | Control | No | |
| | Tell-tale may not act as the tell-tale for the position (side) lamps. | -¤- ₁ / | Tell-tale <u>11/42/</u> | Yes | Green |
| <u>2a.</u> | <u>Headlights</u> | | Control 6/ | | |
| | (Justification: alignment with 78/316/EEC) | 1/, 2/ | <u>Tell-tale</u> | Yes | Green |
| 2 <u>b</u> . | Headlamp <u>driving</u> high beams | | Control | No | |
| | | ■ D <u>1</u> / <u>152</u> / | Tell-tale | Yes | Blue |
| 3. | Direction indicator | ♦ | Control | No | |
| | | | Tell-tale | Yes | Green |
| 4. | Hazard warning signal | | Control | Yes | |
| | | <u> </u> | Tell-tale <u>4</u> / | Yes | Red |
| 5. | Front fog lamps | | Control | No | |
| | | 彰 0 <u>1</u> / | Tell-tale | Yes | Green |
| 6. | Rear fog lamp | | Control | No | |
| | | [() ‡] _{1/} | Tell-tale | Yes | Yellow |
| 7. | Fuel level | | Tell-tale | Yes | Yellow |
| | | or 🔊 | Indicator | Yes | |
| 8. | Engine oil pressure | <u>5/</u> | Tell-tale | Yes | Red |
| | | | Indicator | Yes | |
| 9. | Engine coolant temperature | ₹ <u>5</u> / | Tell-tale | Yes | Red |
| | | | Indicator | Yes | |
| 10. | Electrical charging | - + | Tell-tale | Yes | Red |
| | Condition | | Indicator | Yes | |
| 11. | Windscreen wiping system (continuous) | P | Control | Yes | |

| No. | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|---------------|--|-------------------|-------------------------------------|-------------------------------------|--------------|
| | ITEM | SYMBOL | FUNCTION | ILLUMINATION | COLOUR |
| 12. | Power window lock | or | Control | No | |
| 13. | Windscreen washing system | | Control | Yes | |
| 14 <u>a</u> . | Windscreen washing and wiping system | \$ | Control | Yes | |
| <u>14b.</u> | Headlamp cleaning device (with separate operating control) (Justification: alignment with 78/316/EEC) | <u>2/</u> | Control | <u>No</u> | |
| 15. | Windscreen defrosting and defogging system | ₩ | Control | Yes | |
| | | | Tell-tale | Yes | Yellow |
| 16. | Rear window defrosting and defogging system | G | Control | Yes | |
| | | | Tell-tale | Yes | Yellow |
| 17 <u>a</u> . | Position, side marker, and/or end-outline marker lamps | =00= <u>1/,6/</u> | Control | No | |
| | | | Tell-tale <u>11/ 12/</u> | Yes <u>6</u> / <u>7</u>/ | Green |
| <u>17b.</u> | Parking lamps (Justification: alignment with 78/316/EEC) | P≒ | Control | <u>No</u> | |
| | | | <u>Tell-tale</u> | <u>Yes</u> | <u>Green</u> |
| 18. | Seat belt | A or A | Tell-tale | Yes | Red |
| 19. | Airbag malfunction | 1/8/ | Tell-tale | Yes | Red |
| 20. | Side airbag malfunction | 1/7/8/ | Tell-tale | Yes | Red |

| No. | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------------------|--|---|----------------------|--------------|-------------------------|
| | ITEM | SYMBOL | FUNCTION | ILLUMINATION | COLOUR |
| 21. | Passenger Airbag off Justification: alignment with US | \(\begin{align*} \begin{align*} \be | Tell-tale | Yes | Yellow |
| 2 <mark>2.</mark> 21. | Brake system malfunction | (!) <u>7/ 8/</u> | Tell-tale | Yes | see brake Regulation |
| 2 3. 22. | Antilock brake system malfunction | ABS) | Tell-tale | Yes | Yellow |
| <u>23.</u> | Regenerative brake system malfunction Justification: alignment with US | (RBS) | <u>Tell-tale</u> | Yes | Yellow |
| 24. | Antilock brake system malfunction in tow vehicle Justification: alignment with US | | <u>Tell-tale</u> | Yes | Yellow |
| <u>25.</u> | Antilock brake system trailer fault Justification: alignment with US | (ABS) | <u>Tell-tale</u> | Yes | Yellow |
| <u>26.</u> | Low brake air/fluid pressure Justification: alignment with US | (***) 7/ | <u>Tell-tale</u> | Yes | Red |
| <u>27.</u> | Low brake fluid condition Justification: alignment with US | 7/ | Tell-tale | Yes | Red |
| 24. <u>28.</u> | Speedometer | km/h and MPH (upper or lower case) 12/ 13/ 13/ 14/ | Indicator | Yes | |
| 2 5. 29. | Parking brake applied | (P) <u>8/9</u> / | Tell-tale | Yes | Red |
| 2 6. 30. | Horn | 9 | Control | No | |

| No. | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|---------------------------|--|-------------------------------|------------------|--------------|----------|
| | ITEM | SYMBOL | FUNCTION | ILLUMINATION | COLOUR |
| !7<u>31a</u>. | Engine on-board diagnostics or engine malfunction | | Tell-tale | Yes | Yellow |
| <u>31b.</u> | Diesel pre-heat (Justification: alignment with 78/316/EEC) | 90 | <u>Tell-tale</u> | Yes | Yellow |
| <u>31c.</u> | Choke (cold starting device) | 181 | Control | <u>No</u> | |
| | (Justification: alignment with 78/316/EEC) | | <u>Tell-tale</u> | Yes | Yellow |
| 28. <u>32.</u> | Air Conditioning System | or A/C | Control | Yes | |
| 29 <u>33</u> . | Automatic (park) transmission (reverse) control (neutral) position (drive) | P R N D <u>9/10/</u> | Indicator | Yes | |
| 30 <u>34</u> . | Engine Stop | [S] <u>10/41/</u> | Control | Yes | |
| 31 <u>35</u> . | Brake lining wear-out condition | [O] <u>7/8/9</u> / | Tell-tale | Yes | Yellow |
| 32 <u>36</u> . | Heating system | <u> </u> | Control | Yes | |
| 33 <u>37</u> . | Heating and/or air conditioning fan | \$ <u>1</u> / | Control | Yes | |
| 34 <u>38</u> . | Headlamp levelling | or and "x" and "x" 152/ | Control | No | |

| No. | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|---------------------------|---|--|-----------|---------------|----------|
| | ITEM | SYMBOL | FUNCTION | ILLUMINATION | COLOUR |
| 35 <u>39</u> . | Odometer | km, if kilometres are shown or miles, if miles are shown (upper or lower case) | Indicator | Yes | |
| 36 | Instrument panel illumination (Justification: moved to table 2) | () | Control | No | |
| 3 <u>740.</u> | Tyre malfunction (e.g. low tyre pressure) | or or | Tell-tale | Yes | Yellow |

2/ The symbols included in this global technical regulation are substantially identical to symbols described in ISO 2575:2000. Proportional dimensional characteristics specified in ISO 2575:2000 shall be maintained.

Justification: requirements were added to the body of the text.

2/ The number of parallel lines in the symbol may be 4 or 5.

Justification: moved from 15/.

- $\underline{3}$ / The pair of arrows is a single symbol. When the controls or tell-tales for left and right turn operate independently, however, the two arrows may be considered separate symbols and be spaced accordingly.
- 4/ Not required when arrows of turn signal tell-tales that otherwise operate independently flash simultaneously as hazard warning tell-tale.
- <u>5</u>/ Combination of the engine oil pressure symbol and the engine coolant temperature symbol in a single tell-tale is permitted.
- 6/ Separate identification not required if function is combined with master lighting switch.
- 7/ If a single tell-tale is used to indicate any airbag malfunction, the "airbag malfunction" symbol must be used.

Justification: alignment with US

<u>\$7/</u> Contracting Parties which, at the date of coming into force of this global technical regulation, allowed or required the use of text for this function may, until [sixty months] after the date of

¹/ Framed areas of the symbol may be solid.

coming into force of this global technical regulation, continue to allow or require the text in addition to the prescribed symbols for vehicles to be registered in their country.

- 98/ If a single tell-tale is used to indicate more than one brake system condition, the brake system malfunction symbol must be used.
- 109/ Letter "D" may be replaced or supplemented by other alphanumeric character(s) or symbol(s) chosen by the manufacturer to indicate additional selection modes. The indicators may shall be displayed top to bottom or left to right.
- <u>4410</u>/ Use when engine control is separate from the key locking system.
- <u>1211</u>/ Not required if instrument panel lights are lit automatically on activation of the master lighting switch.
- <u>1312</u>/ Digital speedometers that switch between kilometres per hour and miles per hour are allowed if the unit of measure is identified.
- <u>1413</u>/ The analogue speedometer scale intervals shall increase in <u>a</u> clockwise direction. Major graduations and numerals shall appear at 10 kilometres per hour intervals and corresponding minor graduations at 5 kilometres per hour intervals. In vehicles manufactured for countries where imperial units are used, the speedometer shall also be marked in mph (miles per hour). Major graduations and numerals shall appear at 10 miles per hour intervals and corresponding minor graduations at 5 miles per hour intervals.
- 15/ The number of parallel lines in the symbol may be 4 or 5. Justification: (moved to 2/)

Other Symbols

| Column 1 | Column 2 | Column 1 | Column 4 |
|------------------------|--------------|--|-------------|
| ITEM | SYMBOL | <u>ITEM</u> | SYMBOL |
| Reserved | Reserved | Interior compartment illumination | ☆ |
| Reserved | Reserved | Long range light | ≡D |
| Exterior bulb failure | -\\div | Working light | 1,2 |
| Reading/map light | | Beacon | <u>-</u> D- |
| <u>Γaxi sign light</u> | TAXI | Medical assistance sign light | + |
| Loading light | ₽ 0 0 | Elevated headlights Loading platform and rear axle may be omitted if appropriate | |
| Roof sign illumination | % - | Instrument panel illumination | CX |

Table 2 Other Symbols

| Column 1 | Column 2 | Column 1 | Column 4 |
|---|----------------|---|----------|
| <u>ITEM</u> | SYMBOL | <u>ITEM</u> | SYMBOL |
| Low windshield washer fluid | | Electrically heated windshield | ₩ |
| Windshield wiping system (intermittent) | \overline{Q} | Low rear window washer fluid | |
| Rear window wiping system (continuous) | \Box | Rear window wiping system (intermittent) | \Box |
| Rear window washing and wiping system | \$ | Rear window washing system | |
| Exterior mirror heating | | Exterior mirror adjustment Symbol allows for mirror image and 90 degree rotation. Arrows can be omitted if the function does not exist. | or ∰. |
| Power folding exterior mirror | or D | Reserved | Reserved |
| Hand throttle |)>(| Engine malfunction | (|
| Engine heating | | Electronic diesel control | (EDCY) |
| Engine start | | Central lubrication | R |

Table 2

Other Symbols

| Column 1 | Column 2 | Column 1 | Column 4 |
|-----------------------------|---------------|---------------------------|--------------|
| ITEM | SYMBOL | ITEM | SYMBOL |
| Engine oil temperature | مل ا | Engine oil level | 1 |
| Engine oil filter | 1::::I | Engine coolant heating | <u> </u> |
| Engine coolant level | <u></u> | Engine coolant fan | * |
| Engine inlet air filter | ≱ | Engine inlet air pre-heat | 余 |
| Emission system malfunction | :j:3> | Engine exhaust gas filter | -≣ 3> |
| <u>Turbo</u> | ₩ | Battery malfunction | ⊞! |
| Battery shut off | ₩ | Battery fluid level | Ē |
| Fuel economy | | Fuel filter | |
| Fuel system malfunction | ս ₽ ∂i | Fuel shut off | Ű |
| Reserved | Reserved | <u>Tachometer</u> | RPM or r/min |

Table 2 Other Symbols

| Column 1 | Column 2 | Column 1 | Column 4 |
|----------------------------------|--------------|------------------------------|--|
| <u>ITEM</u> | SYMBOL | <u>ITEM</u> | SYMBOL |
| Hood opener | 2 | <u>Door lock</u> | |
| | 1 | | |
| Trunk opener | ~ | Child lock | R |
| Immobilizer/theft protection | | Door ajar | |
| | | | |
| Sun shade | _ ± _ | Power window | 4 |
| | | | |
| Reserved | Reserved | Reserved | Reserved |
| Power on/off switch | 0 | Owner's manual | |
| Upper air outlet | ننر | Lower air outlet | فهرد |
| Upper and lower air outlets | ننز | Defrost and lower air outlet | **** |
| Passenger compartment air filter | * | Vent open | *** |
| Vent closed | X | Fresh air | ************************************** |

Table 2 Other Symbols

| No. | Column 1 | Column 2 | Column 1 | Column 4 |
|------|-------------------------------------|------------|--------------------------------------|---|
| 110. | <u>ITEM</u> | SYMBOL | <u>ITEM</u> | SYMBOL |
| | Recirculated air | (E) | Temperature | °F if degrees Fahrenheit is shown, or °C if degrees Celsius is shown. |
| | <u>Lighter</u> | | Reserved | Reserved |
| | Longitudinal seat adjustment | | Seat back recline | |
| | Seat height adjustment | # | Seat cushion front height adjustment | |
| | Seat cushion rear height adjustment | 4 | Head restraint adjustment | j |
| | Seat lumbar adjustment | <u></u> | Seat heater | ₩ |
| | Steering circuit 1 | ⊕ 1 | Steering circuit 2 | ⊘ 2 |
| | Steering malfunction | ⊕! | Steering fluid level | <u>@</u> |
| | Four wheel steer | | Traction control | <u>(TC)</u> |

Table 2
Other Symbols

| Column 1 | Column 2 | Column 1 | Column 4 |
|-------------------------------|--------------------|--|-------------|
| <u>ITEM</u> | SYMBOL | <u>ITEM</u> | SYMBOL |
| Parking aid | P | Reserved | Reserved |
| Brake temperature | | Retarder | ((3) |
| Exhaust gas brake | | Spring brake release | +(())+ |
| Fresh air — Truck | ₹ <mark> </mark> 0 | Recirculated air — Truck | <u>6</u> 00 |
| Roof ventilation — Truck | <u> </u> | Reserved | Reserved |
| Load tipping | ₽ | Load tipping — trailer | -00 |
| Diverging flap release | 2 | Diverging flap release — trailer | -0 0 |
| Truck height control | 6 10 | Truck front height control | 100 |
| Truck rear height control | 6 0↓ | Trailer lock up | |
| Fifth wheel height adjustment | ₽ | Snowplow Platform and rear axle may be omitted from the symbol if appropriate. | ⊅ 60 |

Table 2 **Other Symbols**

| | | 1 | |
|--|-------------|---|------------|
| Column 1 | Column 2 | Column 1 | Column 4 |
| <u>ITEM</u> | SYMBOL | <u>ITEM</u> | SYMBOL |
| <u>Fuel temperature</u> | | Fuel heating | |
| <u>Transmission malfunction</u> | Ф | Transmission fluid level | |
| <u>Transmission temperature</u> | (1) | <u>Transmission converter</u> <u>temperature</u> | ₹ ₽ |
| <u>Fransmission converter fluid</u> <u>level</u> | 35 | Transmission converter malfunction | 용! |
| Axle malfunction | Ыİ | Axle lifting | 0 |
| Axle fluid level | H | Reserved | Reserved |
| Cab lock Platform and rear axle may be omitted if appropriate. | <u>80 0</u> | Winch | ¥///JA |
| <u>Γire temperature</u> | €! | Reserved | Reserved |

- 1. Symbols employing four lines instead of five may also be used.
 2. Framed areas of the symbol may be solid; solid areas may be framed.
 3. Reserved
- 4. Use when engine control is separate from the key locking system.