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### **ECONOMIC COMMISSION FOR EUROPE**

INLAND TRANSPORT COMMITTEE

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

Working Party on General Safety Provisions (GRSG)

PROPOSAL FOR A NEW DRAFT GLOBAL TECHNICAL REGULATION CONCERNING LOCATION AND IDENTIFICATION OF MOTORCYCLE CONTROLS, TELL-TALES AND INDICATORS

**Comments from Canada are highlighted** 

This document (MCSYM-02-01) is issued as the next revision of document MCSYM-01-03 (03-MCSYM-10, proposal for the GTR) and incorporates and reflects the comments raised at the first informal group meeting (document MCSYM-01-05).

Please note that a second document (MCSYM-02-02), issued separately, includes the list of symbols suggested by Members in additional to those included in this document. The intention of the informal group is that MCSYM-02-02 will supplement this document.

COMMENTS TO INFORMAL GROUP SECRETARY BY 17 SEPTEMBER
DECEMBER 2010

#### A. STATEMENT OF TECHNICAL RATIONALE AND JUSTIFICATION

#### I. INTRODUCTION

This proposed global technical regulation (gtr) establishes the criteria on location, identification and operation of motorcycle controls, tell-tales and indicators which is determined to be critical for safety by GRSG Working Party. The objective of the proposal is to reduce the safety hazards caused by rider distraction. Specifically, the proposal is intended to reduce distractions resulting from an error in control selection or inconsistency in graphical representations of commands-tell-tales and indicators from one motorcycle to another.

One of the main purposes of this proposal is to standardize and harmonize symbols markings identifying controls, tell-tales and indicators. It is expected that with standardization, symbol awareness and recognition would become straightforward for the travelling public. One way of doing this is through the use of symbols. A clear advantage of symbols, or pictograms, over wording is that symbols, once they have been taught to and have been recognised by the target group, to overcome language barriers. Travellers Drivers mustshall be able to operate motorcycles safely, even if they cannot understand the language of the country they are visiting. Recognition that is independent of language is necessary an advantage in a global motorcycle market.

Furthermore, some Contracting Parties have more than one official language and require that motorcycle safety information be presented in all official languages. This could result in a requirement to provide a language selection function to drivers or a means to display wording in all official languages, which would be difficult on space-limited dash panels.

Symbols are anone of the efficient ways of communicating information to drivers. The consistent use of a selected symbol in all new motorcycles would will increase its recognition. Symbols have the potential to reduce driver confusion and simplify motorcycle design and, once taught and recognised, to reduce driver confusion. The symbol approach is also likely to be beneficial to those whose vision is poor, as symbols are easier to read than equivalent text.

When implementing this global technical regulation into national legislation, Contracting Parties may define other operational requirements than those given in this global technical regulation.

The symbols in this global technical regulation are based on the ISO 6727 standard of the International Organization for Standardization (ISO). This set of symbols was selected because it is currently used internationally and is accepted by most manufacturers and Contracting Parties. It is the intention that for any new symbols added to the GTR, should have undergone ISO recognition studies to ensure a full and global comprehension of the symbol.

### II. PROCEDURAL BACKGROUND

During the XXX session of GRSG in 2002, IMMA proposed the development of ECE Regulations regarding controls, tell-tales and indicators.

It had been agreed that there was a need to harmonize the way in which motorcycle controls, tell-tales and indicators are installed and identified, and establish a commonality in the world-wide use of the symbols, which would justify the development of a global technical regulation.

### III. DISCUSSION OF ISSUES ADRESSED BY THE GTR (SYMBOLS)

It has been argued that the meaning of some symbols is not immediately clear and that riders would have to consult the owner's manual to discover their meaning. It is agreed that Safety symbol recognition should be part of learning process to ride a motorcycle. By standardizing symbols around the world, the GRSG Working Party will provide riding schools and evaluation organizations with a standard from which it will be possible to educate and test new riders. The riding population would be informed of the meaning of new symbols as they are added. In fact, it is expected that the global technical regulation itself could improve the communication of safety symbols to the riding public. Contracting Parties have a responsibility to inform their populations of the set of requirements.

GRSG Working Party has successfully obtained agreement on most of the criteria for the location, operation, illumination and position of the controls and display. One issue regarding the use of certain symbols remains. (To address this issue, the global technical regulation proposal calls for inclusion of a table that will identify 32 functions determined to be essential for safety. Each of these functions will be associated with a symbol. The current global technical regulation defines some mandatory symbols based on the ISO standard. This was determined appropriate as all these symbols are already accepted by most Contracting Parties. The remaining safety symbols will need to be selected by the Contracting Parties on the basis of their applicability to motorcycles and their global recognisibility to allow for harmonization of the symbols, tell-tales and indicators.)

## IV. EXISTING REGULATIONS, DIRECTIVES AND INTERNATIONAL VOLUNTARY STANDARDS

GRSG followed the recommendations of paragraph 4. of TRANS/WP29/2002/882. In the absence of a UNECE Regulation under the 1958 Agreement or a global technical regulation in the compendium of candidate global technical regulations, GRSG has considered the documents listed below:

- EC Directive 2009/80/EC Identification of controls, tell-tales and indicators as amended by Commission Directive 93/91/EEC;
- FMVSS 123: Motorcycle controls and displaysTransportation; Part 571.101: Controls and displays; and
- Canada Motor Vehicle Safety Regulation Motor No. 123 Motorcycle controls and displays Location and identification of controls and displays and TSD 123 Technical Standard Document.
- Japan Article 10

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- Japan Article 46
- ECE Regulation 60

GRSG has also considered the UNECE Regulation 60, developed in the framework of the 1958 Agreement as well as the known voluntary standards on the subject listed in the proposal, specifically:

- ISO 6727-1981 Road vehicles, Motorcycles, Symbols for controls, indicators and telltales
- ISO 9021-1988 Motorcycles, Controls, Types, positions and functions

All known regulations and voluntary standards on the subject of the installation and identification of controls, tell-tales and indicators were considered during development of the draft UNECE Regulation. GRSG has decided to use the documents and standards listed above as the basis for development of the new global technical regulation.

### V. REGULATORY IMPACT AND ECONOMIC EFFECTIVENESS

Although this proposal does not specify or create any measurable threat to motorcycle safety, GRSG has agreed that there is a need to harmonize identification, operation and location of motor vehicle controls, tell-tales and indicators.

Additionally, driver distraction is a significant contributor to incidents involving motorcycles. Standardizing controls, tell-tales and indicators could reduce driver distraction, resulting in improved safety for all motoristsroad-users.

Since all the symbols prescribed in the global technical regulation are currently accepted by most of the Contracting Parties, the cost is minimal. The global technical regulation would ensure better understanding of safety symbols by riders around the world.

Defining the installation, **operation** and identification of controls and displays is of sufficient importance to warrant this global technical regulation. This proposed global technical regulation is a first step. As other controls, tell-tales and indicators get used and get recognition these would be added to the current list through revisions and addendums to the global technical regulation. Table 1 will be updated from time to time to prescribe more symbols and to further increase global harmonization.

### B. TEXT OF THE REGULATION

#### 1. SCOPE AND PURPOSE

This global technical regulation specifies requirements for the location, identification and operation of motorcycle controls, tell-tales and indicators. The purpose of this global technical regulation is to ensure the accessibility, visibility, and recognition of motorcycle controls, tell-tales, and indicators and to facilitate the proper selection of controls under daylight and night-time conditions. The **intention of the** global technical regulation intention—is also to reduce the safety hazards that would otherwise be caused by the diversion of the rider's attention from the driving task by mistakes in selecting controls.

### 2. APPLICATION

This global technical regulation applies to power-driven vehicles of category 3-3 two wheeled motorcycles >50cc and >50 km/h as defined in SR1¹ that areis driven on the public highwaysroads. The application of this global technical regulation to other sub-categories in category 3 still needs to be investigated and reviewed.

#### 3. DEFINITIONS

For the purposes of this global technical regulation, the following definitions apply.

- 3.1. "Adjacent", with respect to a symbol identifying a control, tell-tale or indicator, means that the symbol is in close proximity to the control, tell-tale or indicator and no other control, tell-tale, indicator, identification symbol or source of illumination appears between an identification symbol and the control, tell-tale, or indicator which that symbol identifies.
- 3.2. "Common space" means an area on which more than one tell-tale, indicator, identification symbol, or other message may be displayed but not simultaneously.
- 3.3. "Control" means any part of the vehicle or a device directly actuated by the driver which changes the state or functioning of the vehicle or any part thereof.
- 3.4. "<u>Device</u>" means an element or an assembly of elements used to perform one or more functions.
- 3.5. "Handlebars" means any part of the bar or bars connected to the head of the forks (steering head) by means of which the vehicle is steered.

<sup>&</sup>lt;sup>1</sup> (Special Resolution No. 1, Concerning the Common Definitions of Vehicle Categories, Masses and Dimensions (S.R. 1) (ECE/TRANS/WP.29/1045 and Amend.1) (http://www.unece.org/trans/doc/2005/wp29/TRANS-WP29-1045e.doc))

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- 3.5.1. "Handlebars: right side" means any part of the handlebars which, when facing the direction of forward movement, lies on the right side of the longitudinal median plane of the vehicle.
- 3.5.2. "Handlebars: left side" means any part of the handlebars which, when facing the direction of forward movement, lies on the left side of the longitudinal median plane of the vehicle.
- 3.5.3. "Handlebars: forward" means any part of the handlebars lying on the side furthest from the driver when seated in a driving position.
- 3.6 "Handgrip" means that part of the handlebars, furthest from the centre, by which the handlebars are held by the driver of the vehicle.
- 3.6.1. "Rotating handgrip" means a handgrip, operating some functional mechanism of the vehicle, which is free to rotate around the handlebar when so turned by the driver of the vehicle.
- 3.7. "Frame" means any part of the frame, chassis or cradle of the vehicle, to which is attached the engine and/or transmission unit, and/or the engine and transmission unit itself.
- 3.7.1. "Frame: left side" means any part of the frame which, when facing the direction of forward movement, lies on the left side of the longitudinal median plane of the vehicle
- 3.7.2. "Frame: right side": means any part of the frame which, when facing the direction of forward movement, lies on the right side of the longitudinal median plane of the vehicle
- 3.8. "Lever" means any device consisting of an arm turning on a fulcrum, by means of which some functional mechanism of the vehicle is operated.
- 3.8.1. "Hand lever" means a lever operated by the hand of the driver;

  Note: Unless otherwise stated, a hand lever is operated by compression, (that is, movement of the apex of the lever towards the supporting structure), e.g. to engage a brake mechanism or to disengage the clutch mechanism.
- 3.8.2. "Foot lever" means a lever operated by contact between the foot of the driver and a spur projecting from the arm of the lever.
- 3.8.3. "Pedal" means a lever operated by contact between the foot of the driver and a pad on the lever, so placed as to allow pressure to be applied to the arm of the lever:

Note: Unless otherwise stated, a pedal is operated by depression, for example to engage a brake mechanism.

- 3.8.4. "Rocker arm" means a lever, pivoted at or near its centre and having a pad or spur at each end, operated by contact between the foot of the driver and the said pads or spurs.
- 3.9. "Footrest" means the projections on either side of the vehicle on which the driver places his/her feet when seated in the driving position.
- 3.10. "Clockwise" means the direction of rotation around the axis of the part considered, following the motion of the hands of a clock when viewed from the upper or the outer side of the part considered.
- 3.10.1 "Anticlockwise" has the inverse meaning;
- 3.11. "Combined brake" means a system of operation (by hydraulic action or mechanical linkage, or both) whereby both the front and the rear brakes of the vehicle are brought into operation at least partially by the use of only one control.
- 3.125. "Indicator" means a device which presents information on the functioning or situation of a system or a part of a system, for example a fluid level.
- 3.136. "Tell-tale" means an optical signal which indicates the actuation of a device, correct or defective functioning or condition, or failure to function.
- 3.147 "Symbol" means a diagram from which to identify a control, a tell-tale or an indicator.

### 4. REQUIREMENTS

4.1 <u>General</u>

A motorcycle, if fitted with a control, tell-tale or indicator identified in Table 1, shall comply with the requirements of this global technical regulation with respect to the location, identification, operation, illumination, and colour of that control, tell-tale or indicator.

- 4.2. <u>Location</u>
- 4.2.1. The controls, listed in Table 1, shall be located so that they are operable and within in reach of the driver when seated in the driving position
- 4.2.2. The tell-tales and indicators listed in Table 1, and their identification symbols shall be located so that they are visible to a driver when seated in the driving position, during daylight and night-time driving. Tell-tales, indicators and their identification symbols need not be visible when not activated.

- 4.2.3. The identification symbols for controls, tell-tales, and indicators shall be placed on or adjacent to the controls, tell-tales or indicators that they identify except as provided in paragraph 4.2.4.4.2.5.
- 4.2.4. Controls for hazard warning lamps, passing and driving beam headlamps, direction indicators, and for supplemental engine off-stop, audible warning device, brakes and clutch mustshall be always accessible to the driver as primary function of the corresponding control without the removal of the driver's hands from the respective handgrips.
- 4.2.5. Paragraph 4.2.3. does not apply to multi-function controls, if:
- 4.2.5.1. the control is associated with a multi-task display, and
- 4.2.5.2. the associated multi-task display is visible to the driver, and
- 4.2.5.3. identifies the control with which it is associated, either graphically or in words, and
- 4.2.5.4. all of the vehicle systems for which control is possible from the multifunction 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, and
- 4.2.5.5. does not display tell-tales listed in Table 1
- 4.2.4. When implementing this global technical regulation in national legislation, Contracting Parties may define other locations than those given in this global technical regulation.
- 4.3. Identification
- 4.3.1. Each control, tell-tale and indicator listed in Table 1, shall be identified by the relevant specified symbol. Small deviations in the design of the symbols listed in column 3 of table 1 are allowed.

NOTE. ISO 6727: 1981 or similar standards should be used to designate symbols to identify controls, tell-tales and indicators not given in Table 1.

4.3.2. When implementing this global technical regulation into national legislation, Contracting Parties may allow the use of supplementary words as specified in column 2 of table 1 in conjunction with or instead in lieu or with of any symbol.

[justification: this provision is covered by the 1998 Agreement – no need for a "political/policy" statement in the text of the gtr. Similar decision was made regarding deleted paragraph following 4.2.5.5. above.]

- 4.3.3. Each additional or supplementary symbol used by the manufacturer mustshall not cause confusion with any symbol specified in this global technical regulation.
- 4.3.4. If the control, indicator or tell-tale for the same function are combined, one symbol may be used to identify that combination.
- 4.3.5. All identification symbols for the tell-tales, indicators and controls **provided on handle bar or instrument cluster mustshall** be positioned so as to appear to the driver to be perceptually upright except for an audible warning device. For rotating controls that have an "off" position, this requirement applies to the control in the "off" position.
- 4.3.6. Identification symbols shall be provided for the control of each function of the automatic vehicle speed system (cruise control).
- 4.3.7. When fitted, each control that regulates a system function over a continuous range shall have identification provided for the limits of the adjustment range.
- 4.4. Illumination
- 4.4.1. At the manufacturer's option, any control, indicator and their respective identification symbols may be capable of being illuminated. If so illuminated:
- **4.4.1.1.** The indicators, their identifications and the identifications of controls need shall not be illuminated when the headlamps are being flashed or operated as daytime running lamps.
- 4.4.2 [Means may be provided for illuminating tell-tales and their identification symbols to make them visible to the driver under daylight and night time driving conditions.]
- 4.4.-23. A tell-tale shall emit light when the malfunction or vehicle condition it is designed meant to indicate occurs. It shall not emit light at any other time, except during a bulb check.
- 4..4.4 At the manufacturers' option, the identification symbols provided on controls may be illuminated.
- 4.5. <u>Colour</u>

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4.5.1. Subject to paragraph 4.7, point 66.6., The light of each tell-tale shall be of the colour as specified in Table 1. [justification: nothing in paragraph 4.7. etc applies to colour.]

- 4.5.2. 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 4.54.3 and 4.54.4. The colour selected mustshall not mask or interfere with the identification of any tell-tale, control or indicator specified in Table 1.
- 4.5.3. Subject to paragraph 4.2.10., Ceolours mustshall be selected in accordance with the following colour code:
- 4.5.3.1. red: danger to persons or very serious damage to equipment is immediate or imminent;
- 4.5.3.2. amber: caution, outside normal operating limits, vehicle system malfunction, damage to vehicle likely, or other condition which may produce hazard in the longer term;
- 4.5.3.3. green: safe, normal operating condition (except if blue or <a href="yellow-amber">yellow-amber</a> is required by Table 1.). [justification: consistency through-out of the document.]
- 4.5.4. Each symbol used for the identification of a tell-tale, control or indicator shall be in a colour that stands out clearly against the background.
- 4.5.5. The filled-in part of any symbol may be replaced by its outline and the outline of any symbol may be filled in.

### 4.6. Operation

When implementing this global technical regulation into national legislation, Contracting Parties may define other operational requirements than those given in this global technical regulation.

4.<del>7-6</del> Common space for displaying multiple messages

Except as provided in paragraph 4.5.1.3 point 3 below 4.6.3., a common space may be used to show information from any source, subject to the following requirements: [justification: wrong place to express "exception". It is done in 4.6.3.]

**4.6.1** The tell-tales and indicators displayed in the common space shall illuminate at the initiation of the condition they are designed to identify.

- **4.6.2** The tell-tale and indicators that are listed in Table 1 and are shown in the common space mustshall illuminate at the initiation of any underlying condition.
- **4.6.3** Except as provided in paragraph 4.5.1.4point 4 below 4.6.4, 4.6.5 and 4.6.5, when the condition exists for actuation of two or more tell-tales, the information shall be either [justification: all paragraphs refer to appearance of two or more tell-tales all should be mentioned.]
  - 1. repeated automatically in sequence, or
  - 2. indicated by visible means and capable of being selected for viewing by the driver under the conditions of paragraph 4.6.2when seated in the driving position.
- **4.6.4** The tell-tales for the **brake system malfunction**, headlamp driving beam and direction indicator shall not be shown in the same common space.
- **4.6.5** If condition of activation exists for the following tell-tales: **brake system malfunction**, headlamp driving beam and direction indicator are displayed on a common space with other tell-tale, they **mustshall** have priority over anything else in the common space. **[justification:** if there is brake malfunction such critical condition must be communicated to the driver with the same priority as driving beam tell-tale]
- **4.6.6** Information displayed in the common space may be cancellable automatically or by the driver, except for the tell-tales of headlamp driving beam and a direction indicator and those for which the colour red is required by Table 1 shall not be cancellable if the condition exists for their activation.

## Table 1. Symbols identifying controls, tell-tales and indicators

No.	Column 1	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	ITEM	SYMBOL	FUNCTION	LOCATION	COLOUR	DEFINITION	OPERATION
1	Supplemental engine stop control-OFF	X	Control Control	Located on the right handlebar, represented by given words and/or symbols for "off" and "on" or "run" positions	-	-	As a means of stopping the engine, alternative to the main switch or a decompression valve control, the vehicle may be equipped with an engine electrical power supply cutout (Supplemental engine stop).  Position of control: on handlebars: right side.  Manual decompression control: Position of control: on handlebars.
2	Supplemental engine stop control-RUN	$\bigcirc$					Type of control: Lever, or rotating handgrip, provided that it is combined with the speed control (right side).
23	Ignition Switch	C	Control	For a rotary control, the "on" position shall be clockwise from the "off" position.	-	The device that enables the engine to run, and may also allows operation of other electrical systems on a vehicle	In the case of a rotary switch, the direction of motion shall be clockwise from the ignition "off" position to the ignition "on" position.
34	Electric Starter	<b>(F)</b>	Control		-		
45	Manual Choke	I. I	Control		-		
		~	Tell-Tale (Optional)		Amber		
56	Neutral Indicator	Ν	Indicator		-		
		- <b>-</b>	Tell-tale		Green		

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No.	Column 1	Column 32	Column 43	Column 54	Column 65	Column 76	Column 87
	ITEM	SYMBOL	FUNCTION	LOCATION	COLOUR	DEFINITION	OPERATION
8	Fuel Tank Shutoff Valve Manual Manual -off Fuel Tank Shutoff Valve Manual - on-	•	Control - -			If so equipped, the switch may be represented by the words "On" "Off" and "Reserve" (or "Res" or "Res."), or by the given symbols"	The control shall have separate positive positions for "OFF", "ON" and "RESERVE" (where a reserve supply is provided).  The control shall be in the ON position when it is in the direction downstream of the flow of fuel from the tank to the engine: in the OFF position when it is in a direction perpendicular to the flow of fuel, and in the RESERVE
9	Fuel Tank Shutoff Valve Manual – Rreserve-or Res or Res	Ţ					position (where applicable) when it is in the direction upstream of the flow of fuel.  In case of a system in which the fuel flow is stopped when the engine is switched off, and if equipped with a control, the symbols and control positions shall be the same as identified for Manual Fuel Shut-Off Control No "Off" position is required.
7	Fuel Tank Shutoff Valve Automatic	•	Control	-	-	Fuel shut-off control optional for systems in which the fuel flow is stopped when the engine is switched off. If	-
-	-		-	-	-	equipped with a control, the symbols and control positions shall be the same as identified for Manual Fuel Shut-Off	-
-	-	T T	-	-	-	Control. No "Off" position is required.	-
810	Speedometer		Indicator	Must be within the direct field of view of the driver and shall be legible day or night.			Shall be legible day or night.
911	Audible warning device (Horn)	Þ	Control	on the left handlebar for vehicles with foot operated gear selection operated independently of the clutch and on the right handlebar for vehicles with gear selection operated in conjunction with the clutch. on the left handlebar for vehicles with a gear			Button or switch

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		selection control		
		operated		
		independently of a		
		hand operated		
		clutch, on right		
		handlebar for		
		vehicles with gear		
		selection located on		
		the left handlebar		
		and operated in		
		conjunction with		
		the hand operated		
		clutch		

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No.	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
No.	Column 1	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	ITEM	SYMBOL	FUNCTION	LOCATION	COLOUR	DEFINITION	OPERATION
1012	Headlamps Driving beam (Main or upper beam)		Control  Tell-Tales	on the left handlebar for vehicles with a gear selection control operated independently of a hand operated clutch, on right handlebar for vehicles with gear selection located on the left handlebar and is operated in conjunction with the hand operated clutch	Blue		
++13	Headlamps Passing Beam (Dipped or dipped lower Beam) -Lo		Control  Tell-T-tales	on the left handlebar for vehicles with gear selection control operated independently of a hand operated clutch, on right handlebar for vehicles with gear selection located on the left handlebar and is operated in conjunction with the hand operated clutch	Green		
1214	Optical warning device		Control	If so equipped, the control for this device shall be located on the same handlebar as the vehiclead jacent to the Driving Beam/Passing Beam Switch			May be an additional function of the Driving Beam/Passing Beam Switch  When release, shall go back to passing beam off position

	No.	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
	No.	Column 1	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
		ITEM	SYMBOL	FUNCTION	LOCATION	COLOUR	DEFINITION	OPERATION
	4315	Fog lamps - front	老〇	Control	If one control is used for both, front fog lamp symbol is used.			If one control is used for both front and rear fog lamps, frontrear fog lamp symbol is used
İ			70	Tell-Ttales		Green		
	1416	Fog lamps - rear	<b>Ω</b> ±	Control	If one control is used for both, front fog lamp symbol is used.			If one control is used for both front and rear fog lamps, front rear fog lamp symbol is used.
l			ノナ	Tell-Tŧales		Amber		

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Direction indicators  Control  Switch is to be located on the handlebar in clear view from the operator's seat and shall be marked clearly-Switch is to be located on the handlebar in clear view from the operator's seat and shall be marked clearly. The	ft hand portion or actuates the left side
handlebar in clear view from the operator's seat and shall be marked clearlySwitch is to be located on the handlebar in clear view from the operator's seat and shall be marked	actuates the left side
view from the operator's seat and shall be marked clearly Switch is to be located on the handlebar in clear view from the operator's seat and shall be marked	
operator's seat and shall be marked clearly Switch is to be located on the handlebar in clear view from the operator's seat and shall be marked	ght side indicators.
shall be marked clearlySwitch is to be located on the handlebar in clear view from the operator's seat and shall be marked	
clearlySwitch is to be located on the handlebar in clear view from the operator's seat and shall be marked	
be located on the handlebar in clear view from the operator's seat and shall be marked	
handlebar in clear view from the operator's seat and shall be marked	
view from the operator's seat and shall be marked	
operator's seat and shall be marked	
shall be marked	
clearly. The	
indicator lamp must	
be located within the	
elear view of the	
operator when the	
vehicle is in	
operation and may	
either flash to show	
that a turn signal is	
engaged or separate	
lamps may flash to	
show which side of	
the vehicle is being	
worked. If there are	
separate tell-tales, or	
controls, for the left	
and right direction	
indicators, the two	
may be used	
separately.	
The control shall be	
elearly marked in	
such a manner as to	
indicate the side of	
the vehicle on	
which the control	
actuates the	
indicators.	
Tell-Tales Green	

No.	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
No.	Column 1	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	ITEM	SYMBOL	FUNCTION	LOCATION	COLOUR	DEFINITION	OPERATION
1618	Hazard warning <del>lights</del> ignal	<b>\$</b>	Controls			Represented by either the direction indicator tell-tale(s) flashing simultaneously, or by a given triangle symbol.	
			Tell-Tales		Green		
			Controls				
			Tell-Tales		Red		
1719	Position Lamp	`^ ^	Controls			Can be combined with ignition control. Represented by the given symbols for position lamps, master lamp	In the case of a rotary switch, operation of the switch in a clockwise direction shall engage, progressively, the vehicle's position lights and then the vehicle's main lights. This shall not prevent the inclusion of additional switch
		<del>=</del> 00=	Tell-Tale		Green	control and parking lamp but if all lamps are automatically lit when vehicle is in operation, no position or	positions provided that they are clearly indicated. The light control switch may be combined with the ignition switch if so desired.
1820	Master Lamp	<b>'A'</b>	Controls			master lamp control symbol need appear. Clockwise operation if rotary control, position lights then	
		-,\-	Tell-Tale		Green	headlights	
<del>19</del> 21	Parking Lamp	-/	Controls				
<del>20</del> 22	Fuel Indicator	P=	Tell-Tale 8		Green		
<del>20</del> 22	ruei indicator		Indicator				

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				P. 25 -
	Tell-Tales	<del>If so</del>		
	h(	<del>equipped ,</del>		
	U	the Tell-tales		
	-	<del>shall be</del>		
		Amber in		
		colour		

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No.	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
No.	Column 1	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	ITEM	SYMBOL	FUNCTION	LOCATION	COLOUR	DEFINITION	OPERATION
2123	Engine coolanting temperature	Ė	Indicator				
		<b>≈E</b> ≈	Tell-TTales		If so equipped, Red		
2224	Battery Electrical charging	[ <del>- +</del> ]	Indicator	<del>(optional)</del>			
			Tell-Ttale		If so equipped , Red		
2325	Engine Oil Pressure	97	Indicator				
			Tell-Tales		Red		
2426	Engine Speed Control Automatic Vehicle Speed System (cruise control)		Control	Rotating handgrip Oen the right handlebar. Anticlockwise manipulation increases speed. The control shall be self- closing to idle in a clockwise direction after release of the hand unless a vehicle speed control device is activated			The speed of the engine shall be controlled by a hand- operated control.  Position of control: on handlebars: right side.  Type of control: rotating handgrip on handlebars.  Direction of rotation: anticlockwise to increase speed.Hand operated control.  Anticlockwise rotation increases speed.  The control shall be self-closing to idle in a clockwise direction after release of the hand unless a vehicle speed control device is activated

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No.	Column 1	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
No.	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
	ITEM	SYMBOL	FUNCTION	LOCATION	COLOUR	DEFINITION	OPERATION
2527	Front wheel brake		Control	Hand lever located Oen the right handlebar.  However, in the case of vehicles equipped with a combined brake system, the front wheel brake may shall be operated simultaneously with the rear wheel brake control when the eombined brake system is activated			Hand lever
2628	Foot rear wheel brakes control		Control	On the right side of the frame.		Not allowed for L1 category vehicles with pedals usable for motive power.	Position of control: on handlebars: right side forward Type of control: hand lever Pedal
<del>27</del> <b>29</b>	Hand rear wheel brake control	-	Control (optional)	On the left handlebar.	-	Not allowed for vehicles with hand operated clutch	Vehicles equipped with manually operated clutch: Position of control: on frame: right side Type of control: pedalHand lever Not allowed for vehicles with hand operated clutch
2830	Parking brake		Control	Hand or foot control with no special requirements.			Type of control: Hhand lever or pedal
2931	Clutch		Control	If so equipped, a control on the left handlebar, forward.		Shall not prohibit the use of devices on the left side of the vehicle that combine operations of a clutch and gear selector	Type of control: Hhand lever Shall not prohibit the use of devices on the left side of the vehicle that combine operations of a clutch and gear selector

No.	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
No.	Column 1	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	ITEM	SYMBOL	FUNCTION	LOCATION	COLOUR	DEFINITION	OPERATION
3032	Foot selector Manual gear shift Control		Control	If the vehicle is equipped with a manual clutch, and gear selection is performed independently from the clutch, the gear selector is eOn the left side of the frame		Moving the forward part of the foot lever or rocker arm shall progressively select the gears: upward movement of the forward part for shifting to a higher gear position and downward movement for shifting to a lower gear position. A separate, positive "neutral" position shall be provided in either the first or second position in the gear selection order (i.e: 1-N-2-3-4 or N-1-2-3-4.). For [PTW's less than 200ce] vehicles, transmissions with the following shift patterns may be fitted:  Rotary pattern (i.e: N-1-2-3-4-5-N-1.)  Reverse pattern, where moving the forward part of the foot lever or rocker arm shall progressively select the gears:  upward movement of the forward part for shifting to a lower gear position, and downward movement for shifting to a higher gear	Vehicles having no manual clutch control  Vehicles equipped with riding pedals must, and vehicles equipped with a platform or with footrests integrated into a platform may, conform to the requirement.  Position of control: on handlebars: left side forward.  Type of control: hand lever.  All other vehicles  Position of control: on frame: right side  Type of control: pedal  Foot lever or rocker arm  Moving the forward part of the foot lever or rocker arm shall progressively select the gears: upward movement of the forward part for shifting to a higher gear position and downward movement for shifting to a lower gear position.  A separate, positive "neutral" position shall be provided in either the first or second position in the gear selection order (i.e: 1-N-2-3-4,or N-1-2-3-4,).  For vehicles with an engine capacity of less than 200cc, transmissions with the following shift patterns may be fitted:  Rotary pattern (i.e: N-1-2-3-4-5-N-1.)  Reverse pattern, where moving the forward part of the foot lever or rocker arm shall progressively select the gears:  - upward movement of the forward part for shifting to a lower gear position, and  - downward movement for shifting to a higher gear position
3133	Hand Selector Manual gear shift Control		Control	If the vehicle is equipped with a manual clutch, and gear selection is operated independently from the clutch, the gear selector shall be a control located oOn the left handlebar		If the operation of the control is through rotation of the handgrip, the anticlockwise rotation shall progressively select gears giving an increased forward speed and conversely for a reduced forward speed. A separate, positive "neutral" position shall be provided in either the first or second position in the gear selection order (i.e: 1-N-2-3-4).	If the operation of the control is through rotation of the handgrip, the anticlockwise rotation shall progressively select gears giving an increased forward speed and conversely for a reduced forward speed. A separate, positive "neutral" position shall be provided in either the first or second position in the gear selection order (i.e: 1-N-2-3-4). For vehicles with an engine capacity of less than 200cc, transmissions with the following shift patterns may be fitted:  Rotary pattern (i.e: N-1-2-3-4-5-N-1.)  Reverse rotary pattern, The rotating handgrip, after gear selection, may return to neutral position.

No.	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
No.	Column 1	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	ITEM	SYMBOL	FUNCTION	LOCATION	COLOUR	DEFINITION	OPERATION
3234	Automatic or Semi-automatic Gear Selector Control		Control	If the vehicle is equipped with an automatic or semi-automatic transmission and/or gearbox, the control (if any) used to engage the transmission or select the gears shall be oOn the left side of the frame or on the left handlebar			In the case of vehicles equipped with a gear selection control operated independently of the clutch operating control Position of control: on frame: left side.  Type of control: foot lever or rocker arm  Movement of the foot lever or the forward part of the rocker arm in an upward direction shall progressively, select gears giving an increased forward speed and conversely for the selection of gears giving a reduced speed. A separate, positive "neutral" position shall be provided.  Movement of the foot operated gear selection control in a forward or a rearward direction is also permitted. In this case, movement of the foot lever in a rearward direction shall progressively select gears giving an increased speed and conversely for the selection of gears giving a reduced speed. A separate, positive "neutral" position shall be provided.  Movement of the foot lever in a rearward direction shall progressively select gears giving an increased speed and conversely for the selection of gears giving a reduced speed. A separate, positive "neutral" position shall be provided (i.e: N-1-2-3-4).  Operation of the control through buttons: Activation by the thumb shall progressively select gears giving an increased forward speed and activation by the index select gears giving a reduced speed. A separate, positive "neutral" position shall be provided in the first position in the gear selection order (i.e: N-1-2-3-4).

	Column 1	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	ITEM	SYMBOL	FUNCTION	LOCATION	COLOUR	DEFINITION	OPERATION
35	Automatic or Semi-automatic Gear-Selector Control (continued)						In case of engine displacement less than 200 cm3:  1) movement of the foot lever or the forward part of the rocker arm in an upward direction may progressively, select gears giving a decreased forward speed and conversely for the selection of gears giving a increased speed. A separate, positive "neutral" position shall be provided.  2) movement of the foot-operated gear selection control in a forward or a rearward direction is also permitted. In this case, movement of the foot lever in a rearward direction shall progressively select gears giving an decreased speed and conversely for the selection of gears giving a increased speed. A separate, positive "neutral" position shall be provided.  3) vehicles equipped with a left hand gear selection control operated in conjunction with the left hand clutch operating control: Position of control: on handlebars: left Type of control: rotating handgrip on handlebars.  Rotation of the handgrip anticlockwise shall, progressively, select gears giving an increased forward speed and conversely for the selection of gears giving a reduced speed. A separate, positive "neutral" position shall be provided.
<del>36</del> 35	Anti-lock Brake System Malfunction	(ABS)	Tell-Tale		Amber	ABS system: Required.	
3736	Emissions related Malfunction Indicator Lamp		Tell-Tale		Amber	This (or any similar) symbol shall not be used to convey non-emissions related failures or operation states	
378	Brake System Malfunction		Tell-Tale		Red		

Anti-lock	-	Tell-Tales	-	Amber	ABS system: Required.	-
Brake System						
Malfunction						