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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)

**COMMENTS OF INDIA IN BLUE COLOR IN THIS FONT**

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

*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 addition 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 2010**

## A. STATEMENT OF TECHNICAL RATIONALE AND JUSTIFICATION

### I. INTRODUCTION

This proposed global technical regulation (gtr) *for* location, identification and operation of motorcycle controls, tell-tales and indicators *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~~ *controls, tell-tales and indicators* from one motorcycle to another.

One of the main purposes of this proposal is to standardize and harmonize symbols identifying controls, tell-tales and indicators. It is expected that with standardization, symbol awareness and recognition would become straightforward for the ~~travelling public~~ *drivers*. A clear advantage of symbols, or pictograms, over wording is that symbols overcome language barriers. ~~Travellers~~ *drivers* must 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 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 an efficient way of communicating information to drivers. The consistent use of a selected symbol in all new motorcycles would increase its recognition. Symbols have the potential to reduce driver confusion and simplify motorcycle design. The symbol approach is also likely to be beneficial to those whose vision is poor, as symbols are easier to read than equivalent text.

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, 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 recognisability 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: Transportation; Part 571.101: Controls and displays; and
- Canada Motor Vehicle Safety Regulation No. 123 – Location and identification of controls and displays and TSD 123 –Technical Standard Document.
- Japan Article 10
- 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 *the absence of* this proposal does not ~~specify~~ *create* any measurable threat to motorcycle safety, GRSG has agreed that there is a need to harmonize *identification 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 ~~motorists~~ *road 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~~ *locations* and identification of controls, *tell-tales* and ~~displays~~ *indicators* 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 this** 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 (*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>)*).

~~two wheeled motorcycles >50cc and >50 km/h that is driven on the public highways.~~ The application of this global technical regulation to other sub-categories in category 3 still needs to be investigated and reviewed.

*Justi. – 1) To refer to SR1 for categories. 2) Deletion of > 50cc and >50 km/h is to avoid redundancy, since category 3-3 is clearly defined in SR1. 3) Avoiding use of words such as use on public highways.*

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. "Device" means an element or an assembly of elements used to perform one or more functions.
- 3.5. "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.

- 3.6. "Tell-tale" means an optical signal which indicates the actuation of a device, correct or defective functioning or condition, or failure to function.
- 3.7. "Symbol" means a diagram from which to identify a control, a tell-tale or an indicator.

#### 4. REQUIREMENTS

##### 4.1. General

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. Location

- 4.2.1. The controls, listed in Table 1, *if fitted*, shall be located so that they are operable and within in reach of the driver when seated in the driving position

*Justi.: - To make clear that the requirements are applicable only if control is provided and to avoid a misunderstanding that all controls listed in table 1 are mandatory.*

- 4.2.2. The tell-tales and indicators listed in Table 1 *if fitted*, 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.

*Justi.: - To make clear that the requirements are applicable only if control is provided and to avoid a misunderstanding that all controls listed in table 1 are mandatory.*

- 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.

- 4.2.4. Controls for hazard warning lamps, passing and driving beam headlamps, direction indicators and for ~~engine-off~~ *supplemental engine stop* must be always accessible to the driver as primary function of the corresponding control.

*Justi: - To use the terminology of table 1.*

- 4.2.5. ~~When implementing this global technical regulation in national legislation, Contracting Parties may define~~ *also permit alternate locations*, ~~other locations than those given in this global technical regulation~~ *if so provided in table 1.*

*Justi: -*

*1) As per 1998 agreement, contracting parties have the freedom while adopting a GTR to permit requirements other than those prescribed in GTR.*

*2) Proposal from India is only for these controls and not for other control locations.*

*3) India feels that GTR may specify the alternate location so that certain amount of reduction in regional specific requirement can be achieved.*

##### 4.3. Identification

- 4.3.1. Each control, tell-tale and indicator listed in Table 1, *if fitted*, shall be identified by the relevant ~~specified~~ symbol *specified in column 3.*

**Justi.: - To make clear that the requirements are applicable only if control, tell-tale and indicator is provided and to avoid a misunderstanding that all listed in table 1 are mandatory.**

NOTE. ISO 6727 : 1981 or **ISO 2575-2000** or similar standards should be used to designate symbols to identify controls, tell-tales and indicators not given in Table 1. **Each additional symbol or supplementary symbol used by the manufacturer must not cause confusion with any symbol specified in this global technical regulation.**

**Justi: -**

- 1) **ISO 6727 does not specify any additional symbol than covered in the text of this gtr. If a contracting party proposes to use other symbols, he can select from ISO 2575 – Road vehicles – Symbols for controls, indicators and tell-tales.**
- 2) **The text appearing in 4.3.3 is in relation to the requirement given in this note. Therefore it is suggested that this may be incorporated in the note itself.**

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

**Justi: -**

- 1) **As per 1998 agreement, contracting parties have the freedom while adopting a GTR to permit requirements other than those prescribed in GTR.**
- 2) **India understands that the decision in MCSYM 01 was that supplementary words can be permitted in conjunction or in lieu of the symbol by a contracting party.**

4.3.3. ~~Each additional or supplementary symbol used by the manufacturer must not cause confusion with any symbol specified in this global technical regulation.~~

**Justi: - This text has been incorporated in the note under 4.3.1**

4.3.3. If the control, indicator or tell-tale for the same function are combined, one symbol may be used to identify that combination.

4.3.4. All identification symbols for the tell-tales, indicators and controls **provided on handle bar or instrument cluster** must 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.

**Justi: - The requirement of perpetually upright position need to be applied to symbols for controls, tell-tales and indicators located on handle bars or instrument cluster and not for other items like manual fuel shut off control, which is not located on handle bars or instrument cluster.**

4.3.5. Identification symbols shall be provided for the control of each function of the automatic vehicle speed system (cruise control).

4.3.6. 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. 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.

4.4.2. A tell-tale shall emit light when the malfunction or vehicle condition it is designed to indicate occurs. It shall not emit light at any other time, except during a bulb check.

**4.4.3** *At the manufacturers' option, the identification symbols provided on controls may be illuminated.*

*Justi: - To specify clearly that illumination of controls is not a mandatory requirement.*

4.5. Colour

4.5.1. The light of each tell-tale shall be of the colour as specified in Table 1.

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 4.4.3 **4.5.3** and 4.4.4 **4.5.4**. The colour selected must not mask or interfere with the identification of any tell-tale, control or indicator specified in Table 1.

*Justi: - Editorial*

4.5.3. Subject to paragraph ~~4.2.10~~ **4.5.2.**, colours must be selected in accordance with the following colour code:

*Justi: - Editorial.*

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 yellow is required by Table 1.).

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

**4.6.1 Method of operation of all driver operated controls specified in table 1 if fitted, shall be as specified in table 1.**

**Justi:** - An operative clause for operation has been included.

4.6.2 ~~When implementing this global technical regulation into national legislation, Contracting Parties may **permit alternate operation requirements if so provided in table 1.** define other operational requirements than those given in this global technical regulation for foot selector manual gear shift control.~~





**Justi:** - **The proposal from India was only for the operation requirements of the foot selector gear shift control.**








4.7 Common space for displaying multiple messages

Except as provided in paragraph 4.5.1.3., a common space may be used to show information from any source, subject to the following requirements:



1. The tell-tales and indicators displayed in the common space shall illuminate at the initiation of the condition they are designed to identify.
2. The tell-tale and indicators that are listed in Table 1 and are shown in the common space must illuminate at the initiation of any underlying condition.
3. Except as provided in paragraph 4.5.1.4., when the 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 4.6.2.
4. The tell-tales for the, headlamp driving beam and direction indicator shall not be shown in the same common space.
5. If condition of activation exists for the following tell-tales: headlamp driving beam and direction indicator are displayed on a common space with other tell-tale, they must have priority over anything else in the common space.
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**


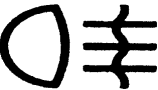

No.	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	ITEM	WORDS	SYMBOL	FUNCTION	LOCATION	COLOUR	DEFINITION	OPERATION
1	Supplemental engine stop control	Off		Control	Located on the right handlebar, represented by given words and/or symbols for "off" and "on" or "run" positions <b>Justi: - To avoid redundancy</b>	-		As a means of stopping the engine, alternative or in addition to the main switch or a decompression valve control, the vehicle may be equipped with an engine electrical power supply cut-out (Supplemental engine stop). <b>Justi: - To provide flexibility of using both main switch and supplemental engine stop.</b> <del>Position of control: on handlebars: right side.</del> <b>Justi: -May be deleted since covered in Column 5</b> Manual decompression control: Position of control: on handlebars. Type of control: Lever, or rotating handgrip, provided that it is combined with the speed control (right side).
		On or Run		Control		-		
2	Ignition Switch			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 allow 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.
3	Electric Starter			Control		-		
4	Manual Choke			Control		-		
		Tell-Tale (Optional)			Amber		<b>Justi: - Tell-tale for manual Choke need to be optional EEC / ECE</b>	
5	Neutral Indicator		N	Indicator		-		
		Tell-tale			Green			

No.	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	ITEM	WORDS	SYMBOL	FUNCTION	LOCATION	COLOUR	DEFINITION	OPERATION
6	Fuel Tank Shutoff Valve Manual	Off		Control			<p>If so equipped, the switch the control may be represented by the words "On" "Off" and "Reserve" (or "Res" or "Res."); or by the given symbols"</p> <p><b>Justi: -To avoid redundancy</b></p>	
		On						
		Reserve or Res. or Res						
7	Fuel Tank Shutoff Valve Automatic	Off	- 	Control	-	-	<p>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 Control. No "Off" position is required.</p> <p><b>Justi: - Not required since the control is automatic.</b></p>	
		On						
		Reserve or Res. or Res						
8	Speedometer			Indicator	Must be within the direct field of view of the driver and shall be legible day or night.			
9	Audible warning device			Control	<p>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.</p> <p><b>Alternatively (see 4.5.2) left or right handle bar</b></p>			<b>Justi: - To invite attention to relevant para.</b>

					<i>irrespective of clutch or gear selection operation.</i>			
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No.	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	ITEM	WORDS	SYMBOL	FUNCTION	LOCATION	COLOUR	DEFINITION	OPERATION
10	Headlamps Driving beam (Main beam)			Control	on the left handlebar for vehicles with gear selection operated independently of a hand operated clutch, on right handlebar for vehicles with gear selection is operated in conjunction with the hand operated clutch <b>Alternatively (see 4.5.2) left or right handle bar irrespective of clutch or gear selection operation.</b>			<b>Justi: - To invite attention to relevant para.</b>
				Tell-Tales		Blue		
11	Headlamps Passing Beam (Dipped Beam)			Control	on the left handlebar for vehicles with gear selection operated independently of a hand operated clutch, on right handlebar for vehicles with gear selection is operated in conjunction with the hand operated clutch <b>Alternatively (see 4.5.2) left or right handle bar irrespective of clutch or gear</b>			<b>Justi: - To invite attention to relevant para.</b>


					<b>selection operation.</b>			
				Tell tales <b>(Optional)</b>		Green		<b>Justi: - Tell-tale for dipped beam need to be optional which is not clarified in the text of gtr. Hence, this proposal.ece/eec</b>
12	Optical warning device			Control	If so equipped, the control for this device shall be located on the same handlebar as the vehicle Driving Beam/Passing Beam Switch <b>control</b>			<b>Justi: - serial No 10 and 11 do not specify switch. Hence it may be specified as control</b>




No.	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	ITEM	WORDS	SYMBOL	FUNCTION	LOCATION	COLOUR	DEFINITION	OPERATION
13	Fog lamps - front			Control	If one control is used for both, front fog lamp symbol is used.			
				Tell-tales		Green		
14	Fog lamps - rear			Control	If one control is used for both, front fog lamp symbol is used.			
				Tell-tales		Amber		
15	Direction indicators			Control	Switch is to be located on the handlebar in clear view from the operator's seat and shall be marked clearly. The indicator lamp must be located within the clear 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 left and right arrows on switches or tell-tales may be separated.	<i>Justi: - The strikethrough portion relates to location of tell-tales and its' operation. Hence, it is proposed to shift to appropriate rows against tell-tale.</i>
				Tell-Tales	<i>The indicator lamp must be located within the clear view of the operator.</i>	Green		<i>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</i>

								<i>direction indicators, the two may be used separately</i>
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No.	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	ITEM	WORDS	SYMBOL	FUNCTION	LOCATION	COLOUR	DEFINITION	OPERATION
16	Hazard warning light			Controls			Represented by either the direction indicator tell-tale(s) flashing simultaneously, or by a given triangle symbol.	<b>Justi: - Identification symbol for Hazard warning need to be the two triangles and indication of two arrows is not correct.</b>
				Tell-Tales		Green		
				Controls				<b>Justi: - This symbols for tell-tale of Hazard warning is an alternate to two arrows. Hence, the proposal is to bring more clarity.</b>
				Tell-Tales <i>(Alternative to two arrows specified above)</i>		Red		
17	Position Lamp			Controls			Can be combined with ignition control. Represented by the given symbols for position lamps, master lamp control and parking lamp but if all lamps are automatically lit when vehicle is in operation, no position or master lamp control symbol need appear. Clockwise operation if rotary control, position lights then headlights	<b>Justi: - Tell-tale for position lamps need to be optional which is not clarified in the text of gtr. Hence, this proposal.</b>
				Tell-Tales <i>(Optional)</i>		Green		
18	Master Lamp			Controls				<b>Justi: - Tell-tale for master lamp need to be optional which is not clarified in the text of gtr. Hence, this proposal.</b>
				Tell-Tales <i>(Optional)</i>		Green		
19	Parking Lamp			Controls				<b>Justi: - Tell-tale for parking lamp need to be optional which is not clarified in the text of gtr. Hence, this proposal.</b>
				Tell-Tales <i>(Optional)</i>		Green		
20	Fuel Indicator			Indicator				

				Tell-Tales		If so equipped , the Tell-tales shall be Amber in colour		
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No.	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	ITEM	WORDS	SYMBOL	FUNCTION	LOCATION	COLOUR	DEFINITION	OPERATION
21	Engine cooling temp			Indicator				
				Tell-Tales		If so equipped , Red		
22	Battery charging			Indicator	(optional)			
				Tell-tale		If so equipped , Red		
23	Engine Oil			Indicator				
				Tell-Tales		Red		
24	Engine Speed Control			Control	Rotating handgrip on 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		<p>The speed of the engine shall be controlled by a hand-operated control.</p> <p><del>Position of control: on handlebars: right side.</del></p> <p><del>Type of control: rotating handgrip on handlebars.</del></p> <p><del>Direction of rotation: anticlockwise to increase speed.</del></p> <p><b>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</b></p> <p><b>Justi: - Deletion of above text is proposed to avoid duplication.</b></p> <p><b>Portion related to operation is proposed to be shifted from column 5 to this column.</b></p>	

No.	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	ITEM	WORDS	SYMBOL	FUNCTION	LOCATION	COLOUR	DEFINITION	OPERATION
25	Front wheel brake			Control	Hand lever located on the right handlebar. However, in the case of vehicles equipped with a combined brake system, the front wheel brake may operate simultaneously with the rear wheel brake when the combined brake system is activated			
26	Foot rear wheel brakes control			Control	On the right side of the frame.		Not allowed for <del>L1</del> category vehicles with pedals usable for motive power.	<b>For vehicles with pedals</b> - Position of control: on handlebars: right side forward Type of control: hand lever <b>Justi: - L1 Category is not relevant to SR1 and in any case this gtr is not applicable to equivalent 3-1 category. The text in column 7 still is applicable to category 3-3 two wheeled vehicles having pedals. The text in column 8 is applicable to vehicles with pedal.</b>
27	Hand rear wheel brake control			Control	On left handlebar.		Not allowed for vehicles with hand operated clutch	Vehicles equipped with manually-hand operated clutch: Position of control: on frame: right side Type of control: pedal <b>Justi: - In line with description given in column 7.</b>
28	Parking brake			Control	Hand or foot control with no special requirements.			Type of control: hand lever or pedal
29	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: hand lever

No.	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	ITEM	WORDS	SYMBOL	FUNCTION	LOCATION	COLOUR	DEFINITION	OPERATION
30	Foot selector Manual Gear Control Justi: - For better clarity			Control	If the vehicle is equipped with a manual clutch, and gear selection is performed independently from the clutch, the gear selector is on the left side of the frame		<p>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 200cc] vehicles, transmissions with the following shift patterns may be fitted:</p> <p>- Rotary pattern (i.e: N-1-2-3-4-5-N-1.)</p> <p>- Reverse pattern, where moving the forward part of the foot lever or rocker arm shall progressively select the gears:</p> <p>- upward movement of the forward part for shifting to a lower gear position, and</p> <p>- downward movement for shifting to a higher gear position.</p> <p><b>Justi-These entries may be shifted to Column 8 since these are operation requirements.</b></p>	<p>Vehicles having no manual clutch control</p> <p>- Vehicles equipped with riding pedals must, and vehicles equipped with a platform or with footrests integrated into a platform may, conform to the requirement.</p> <p>- Position of control: on handlebars: left side forward.</p> <p>- Type of control: hand lever.</p> <p>All other vehicles</p> <p>- Position of control: on frame: right side</p> <p>- Type of control: pedal</p> <p><b>Justi: - These appear to be for brake control in case of vehicles which do not have manual clutch control. Hence, it is proposed to be deleted.</b></p> <p><b>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 200cc] vehicles, transmissions with the following shift patterns may be fitted:</b></p> <p><b>- Rotary pattern (i.e: N-1-2-3-4-5-N-1.)</b></p> <p><b>Alternatively (See 4.6)-Reverse pattern, where moving the forward part of the foot lever or rocker arm shall progressively select the gears:</b></p> <p><b>- upward movement of the forward part for shifting to a lower gear position, and</b></p> <p><b>- downward movement for shifting to a higher gear position. (See 4.6)</b></p> <p><b>Justi: - The reverse pattern may not be applied only to vehicles below 200cc, but for all vehicles. If necessary, India proposes that this may be covered in level of stringency.</b></p>

31	Hand Selector Manual Gear Control			Control	<p>If the vehicle is equipped with a manual clutch, and gear selection is operated independently from</p> <p><b>or in conjunction with</b> the clutch, the gear selector shall be a control located on the left handlebar</p> <p><b>Justi: - In these type of vehicles, normally the clutch is operated in conjunction with gear control.</b></p>		<p>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... or N-1-2-3-4...).</p>	
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No.	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	ITEM	WORDS	SYMBOL	FUNCTION	LOCATION	COLOUR	DEFINITION	OPERATION
32	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 on the left side of the frame or on the left handlebar			<p>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</p> <p>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.</p> <p>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.</p>

No.	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	ITEM	WORDS	SYMBOL	FUNCTION	LOCATION	COLOUR	DEFINITION	OPERATION
32	Automatic or Semi-automatic Gear Selector Control (continued)							<p>In case of engine displacement less than 200 cm<sup>3</sup>:</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>
33	Anti-lock Brake System Malfunction			Tell-Tales		Amber	<p><del>ABS system: Required.</del></p> <p><b>Applicable for vehicles fitted with ABS system.</b></p> <p><b>Justi: - The proposed wording clarifies the requirements is meant for vehicles fitted with ABS.</b></p>	