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Item 5.5. and B.2.8. of the provisional agenda

PROPOSAL TO DEVELOP A GLOBAL TECHNICAL REGULATION CONCERNING UNIFORM PROVISIONS FOR LOCATION AND IDENTIFICATION OF MOTORCYCLE CONTROLS, TELL-TALES AND INDICATORS

Submitted by the representative of Italy

Note: This document contains a proposal to develop a global technical regulation (gtr) concerning the uniform provisions for location and identification of motorcycle controls, tell-tales and indicators under the 1998 Agreement Concerning the Establishing of Global Technical Regulations for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles. It is based on the text of informal document No. WP.29-138-11 distributed during the one-hundred-and-thirty-eighth session (TRANS/WP.29/1050, para. 102).

Objective of the proposal
Many vehicle collisions result from driver distraction. One identifiable source of such distraction is diversion of drivers' attention from the driving task by confusing information displayed in the drivers' field of vision and unclear identification of the controls necessary for vehicle's operation.

People purchasing new vehicles in countries allowing motorcycles certified in different jurisdictions are faced with different tell-tales and means of identifying controls. Drivers need time to learn their dashboard messages and to identify their vehicle controls. During this time these vehicle operators have to divide their attention between the increasingly difficult task of driving, the identification of controls and the comprehension of tell-tales provided to "ease" the driving task.

There is, therefore, a need to harmonize the way in which the motorcycle controls, tell-tales and indicators are installed and identified.

The proposed global technical regulation would apply to all on-road motorcycles. It would specify requirements for the location, identification, colour, and illumination of motorcycle tell-tales, indicators and controls. It would be designed to ensure the visibility of tell-tales and indicators and to ensure the accessibility of vehicle controls to facilitate their selection under daylight and night-time conditions.

Description of the proposed regulation
The document attached as Annex 1 is a table which compares the content of the texts listed below and includes a draft proposal for the technical content of the global technical regulation.

Existing regulations and directives
Though there are no regulations currently contained in the Compendium of Candidates, the following regulations were taken into account during development of the new global technical regulation regarding controls, tell-tales and indicators:

- Canada Motor Vehicle Safety ~~Regulation~~ Standard No. ~~101~~ 123 – ~~Location and identification of~~Motorcycle C~~c~~ontrols and D~~d~~isplays.
- EC Directive 93/29/EEC – Identification of controls, tell-tales and indicators
- Japan: Article 10/Article 46.
- UNECE Regulation No. 60: Controls, tell-tales and indicators
- U.S.A Federal Motor Vehicle Standard 123: Controls and displays.

International Voluntary Standards
- ISO 6727-1981 "Motorcycles: Symbols for control indicators and tell-tales
- 9021-1988 "Motorcycles - Controls - Types, positions and functions

Item	Source	~~FMVSS~~CMVSS	ISO	ISO	JAPAN	EU	ECE	IMMA Proposal	
No.	Contents	123	6727-1981	9021-1988	Article 10 / Article 46	93/29/EEC	R. 60	GTR	Comments
Subject	Contents	Motorcycle Controls and Displays	Rode Vehicles - Motorcycles - Symbols for controls, indicators and tell-tales	Motorcycles - Controls - Types, positions and functions	Control Systems (Article 10) Speedometer (Article 46)	Requirements concerning the component type-approval of two or three-wheel vehicles in respect of the identification of their controls, tell-tales and indicators.	Uniform Provisions concerning the approval of two-wheeled motor-cycles and mopeds with regards to driver operated controls including the identification of controls, tell-tale and indicators.	Motorcycle Controls, Displays and Symbols	
Vehicle Application	Source	(1)	2	1			1		
	Contents	Every motorcycle, except those designed and sold exclusively for use by law enforcement agencies, shall conform to the requirements of Technical Standards Document No. 123, Motorcycle Controls and Displays (TSD 123), as amended from time to time.~~Motorcycle equipped with handlebars, except law enforcement motorcycles.~~	Motorcycles as defined in ISO 3833. Controls that are fitted to the instrument panel or are in the immediate vicinity of the motorcycle driver.	Two-wheeled motorcycles as defined in ISO 3833.	Motor vehicles	Two or three wheeled motor vehicles.	Two wheeled motorcycles and two wheeled mopeds	~~Motorcycles used on Public Roads~~ Category 3 vehicle	This is to be addressed at a later date, once the category definitions are further agreed upon
General Requirements	Source	S3.		4.2.	Article 10-1		5.1.		
	Contents	Any identification provided shall be placed on or adjacent to the control or display position, and shall appear upright to the operator.		Controls shall be within the driver's reach while in normal driving position. Controls on the handlebars shall be placed so that the driver's hand does not leave the respective handgrip. All controls shall be reachable without any other controls or parts of the structure being in the way.	Control devices that are necessary for operating a motor vehicle shall be located 500 mm or less to the left and right of the center of the steering wheel and be constructed so that the driver, in normal driving position, may easily operate them:		Controls shall be within the driver's reach while in normal driving position. Controls on the handlebars shall be placed so that the driver's hand does not leave the respective handgrip. All controls shall be reachable without any other controls or parts of the structure being in the way.	Controls used during normal operations shall be within the operator's reach while in the normal operating position. Controls on the handlebars shall be placed so that when used, the operator's hand does not leave the respective handgrip. Symbols or displays for controls viewed by the operator while in the normal operating position shall stand out clearly against the background, either bright against dark or dark against bright. Symbols must be placed on or adjacent to the control or display to be identified. Where this is not possible, the symbol and the control or display must be joined by a continuous line as short as possible.	
	Source	S.5.2.2	4.1.		Article 10-2	2.1.			
	Contents	If an item of equipment listed in Table 2, Column 1, is provided, the display for such item shall be visible to a seated operator under daylight conditions, shall illuminate as specified in Column 2, and shall operate as specified in Column 3	Symbols must be such that, when viewed by the driver, from his normal seat position, they are recognizable.		Identification shall be placed on or nearby so as to be easily recognized by the driver in his seat.	The controls, tell-tales and indicators referred to in section 2.1.5. shall be identified in accordance with the following requirements when they are fitted to a vehicle.			
	Source		4.2.			2.1.1.			
	Contents		Symbols on controls and tell-tales shall have a good contrast with their background.			These symbols shall stand out clearly against the background, either bright against dark or dark against bright.			
	Source		4.3.			2.1.2.			
	Contents		Symbols must be placed on, or adjacent to, the control or tell-tale to be identified.			The symbols shall be placed on the control or control tell-tale to be identified or in			

Item	Source	~~FMVSS~~CMVSS	ISO	ISO	JAPAN	EU	ECE	IMMA Proposal	
No.	Contents	123	6727-1981	9021-1988	Article 10 / Article 46	93/29/EEC	R. 60	GTR	Comments
			Where this is not possible, the symbol and the control or tell-tale must be joined by a continuous line as short as possible.			immediate proximity thereof. Where this is not possible the symbol and the control, or tell-tale, shall be joined by a continuous dash that is as short as possible.			
	Source		4.4.						
	Contents		If, in a symbol, a motorcycle or parts of a motorcycle are shown in a side view, a motorcycle driving from right to left shall be assumed.						
	Source	(8) and (9)							
	Contents	The words and abbreviations that must be displayed under this section shall be displayed in both official languages. However, if there is insufficient space to display the words or abbreviations identifying the ignition, tachometer or fuel tank shutoff valve in both official languages in a readily visible manner, they may be displayed in one official language only. The symbols and abbreviations used to identify the controls and displays of a motorcycle shall be provided in writing in the English and French versions of the owner's manual, accompanied by a full explanation.						The symbols and abbreviations used to identify the controls and displays of a motorcycle shall be provided in writing in the owner's manual, accompanied by a full explanation.	
Colour of Tell-Tale Lights	Source	----------	4.6.	----------	----------	2.1.4.	Annex 4 8.		
	Contents	----------	Red: Danger Yellow: Caution Green: Safe Blue: Upper beam	----------	----------	Red: Danger Amber: Caution Green: Safety Blue: Driving beam only	Red: Danger Yellow (Amber): Caution Green: Safe Blue: Driving beam	Red: Danger ~~Amber~~Yellow: Caution Green: Safe or In Use Blue: ~~Driving or upper headlight~~Headlamp upper beam only	

Item	Source	~~FMVSS~~CMVSS	ISO	ISO	JAPAN	EU	ECE	IMMA Proposal	
No.	Contents	123	6727-1981	9021-1988	Article 10 / Article 46	93/29/EEC	R. 60	GTR	Comments
Symbols	**Source**	(5) and (6)							
	Contents	Any control or display that is not listed in Table 3 to TSD 123 and for which no other identification requirements are specified in these Regulations shall, if identified, be identified by the corresponding symbol set out in International Standard ISO 6727, Road vehicles — Motorcycles — Symbols for controls, indicators and telltales, as amended from time to time. Any control or display for which a symbol is not specified in Table 3 to TSD 123 or in International Standard ISO 6727, Road vehicles — Motorcycles — Symbols for controls, indicators and telltales, as amended from time to time, may be identified by a symbol designed by the manufacturer in compliance with the principles specified in that Standard.~~Harmonized~~	Harmonized	N/A	Harmonized	Harmonized	Harmonized	If a symbol is used, ~~it's~~ it shall be harmonized with ISO 6727 Any control or display that is not listed in this regulation, if identified, be identified by the corresponding symbol set out in International Standard ISO 6727, *Road vehicles — Motorcycles — Symbols for controls, indicators and telltales*, as amended from time to time. Any control or display for which a symbol is not specified in this regulation or in International Standard ISO 6727, *Road vehicles — Motorcycles — Symbols for controls, indicators and telltales*, as amended from time to time, may be identified by a symbol designed by the manufacturer in compliance with the principles specified in ISO 6727. Allow words to be added to symbols.	
Supplemental Engine Stop Control	**Source**	S5.1. & Table 3 No. 2	----------	5.1.3.1. & 5.1.3.2.	----------	2.1.5., Fig. 13, Fig. 14	6.1.3.1.		
	Contents	Each motorcycle shall be equipped with it located on the right handlebar, represented by given symbols and the wording" off, run" and "marche", "arrêt".	----------	May be equipped with an electrical power cut-out. Position: on handlebars, right side. Manual decompression control Position: on handlebars. Type: lever, or rotating handgrip, provided that it is combined with the speed control.	----------	Diesel engine ignition or cut-off control in 'out of use' position Diesel engine ignition or cut-off control in the 'operating' position	May be equipped. Alternative to the main switch or decompression valve control, located on the right side of the handlebars. Represented by given symbols for "off" and "run".	Located on the right handlebar, represented by given ~~words and/or~~ symbols for "off " and "on" or "run" positions.	
	Source	Table 3 No. 2	5.13.	----------	----------	Fig. 13 & Fig. 14	Fig. 15A, B		
	Symbol	Off and Arrêt Run and marche or Engin stop and Arrêt du moteur	Off Run	----------	----------	out of use Operating	off run	~~Off~~ ~~On or Run~~	
	Colour of tell-tale	----------	----------	----------	----------	----------	----------		
Ignition Switch	**Source**	Table 1 No. 6, Table 3 No. 1 and (2), (3)	----------	5.1.1.1.	----------	----------	6.1.1.1.		

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Item	Source	~~FMVSS~~CMVSS	ISO	ISO	JAPAN	EU	ECE	IMMA Proposal	
No.	Contents	123	6727-1981	9021-1988	Article 10 / Article 46	93/29/EEC	R. 60	GTR	Comments
	Contents	Off or Arrêt - will appear when at appropriate position, counter clockwise from other positions (a mandatory control)	----------	For a rotary switch, motion shall be clockwise from the ignition "off" position to the "on" position.	----------	----------	For a rotary switch, motion shall be clockwise from the ignition "off" position to the "on" position.	Definition: Ignition Switch - The device that enables the engine to run, and may also allow operation of other electrical systems on a vehicle. For a rotary control, the "on" position shall be clockwise from the "off" position.	
	Symbol	Ignition or contact	----------	----------	----------	----------	----------		
	Colour of tell-tale	----------	----------	----------	----------	----------	----------		
Electric Starter	**Source**	Table 3 No. 4	----------	5.1.1.2. & 5.1.1.3.	Article 10-1	2.1.5.	6.1.1.2. & 6.1.1.3.		
	Contents	Represented by a given symbol. The words ~~s~~ "Start and Démarreur" must appear when at appropriate position if separate from ignition switch.	----------	No special requirement. In the case of a rotary switch, motion shall be clockwise, passing from ignition "off" to ignition "on" and then to the starter energizing position.	Control devices that are necessary for operating a motor vehicle shall be located 500 mm or less to the left and right of the center of the steering wheel and be constructed so that the driver, in normal driving position, may easily operate them:	Represented by a given symbol.	No special requirement. In the case of a rotary switch, the direction of motion shall be clockwise, passing from the "off" position to the ignition "on" position to the starter energizing position.	Represented by a given symbol.	
	Source	Table 3 No. 4	5.16.	----------	----------	Fig. 19	Fig. 18		
	Symbol	 Start and Démarreur		----------	----------				
	Colour of tell-tale	----------	----------	----------	----------	----------	----------		
Manual Choke	**Source**	Table 3 No. 3	----------	5.5.1.	----------	2.1.5.	6.5.1. & 9.		
	Contents	Represented by a given symbol and the wording "Choke and Étrangleur [or enricheneur and Enrichissement] or the required symbol".	----------	Needs to be placed as to be reasonable and conveniently accessible to the driver.	----------	Represented by a given symbol.	The control shall be so placed as to be reasonably and conveniently accessible to the rider.	Represented either by the symbol on the control or an optional amber tell-tale with the symbol.	
	Source	Table 3 No. 3	5.4.	----------	----------	Fig. 5	Fig. 5		
	Symbol	 Choke and Étrangleur or Enricheneur and Enrichissement		----------	----------				
	Colour of tell-tale	----------	----------	----------	----------	Amber	Amber	~~Amber~~Yellow	
Neutral Indicator	**Source**	Table 3 No. 9 Table 2 No. 2	----------	----------	----------	2.1.5.	9.		
	Contents	Represented by a given symbol and the wording "Neutral and Mort" by a green display lamp that illuminates when the gear selector is in the neutral position.	----------	----------	----------	Represented by a given symbol.	Represented by a given symbol.	Represented by a given symbol, green tell-tale light.	
	Source	Table 3 No. 9	5.15.	----------	----------	Fig. 18	Fig. 17		

Item	Source	~~FMVSS~~CMVSS	ISO	ISO	JAPAN	EU	ECE	IMMA Proposal	
No.	Contents	123	6727-1981	9021-1988	Article 10 / Article 46	93/29/EEC	R. 60	GTR	Comments
	Symbol	N Neutral and Mort	N	----------	----------	N	N	N	
	Colour of tell-tale	Green	Green	----------	----------	Green	Green	Green	
Fuel Tank Shutoff Valve	**Source**	Table 3 No. 12 and (2), (4)	5.12.	5.5.2.1.	----------	----------	6.5.2. & 9.		
Manual	**Contents**	Represented by the wording "Fuel or Carburant" and given symbols for three positions, "on or Ouvert, off or Fermé, reserve or Aux.", which are separated by 90 degrees of rotation. The framed areas may be solid. (On and Reserve) (a mandatory control for manual fuel tank shutoff valves only)	The framed areas may be solid. (On and Reserve)	The control shall have separate positions for "off", "on" and "reserve" (where a reserve supply is provided). The control shall be "on" when the fuel-flow points downstream from the fuel-tank to the engine: it shall be "off" when it is perpendicular to fuel-flow: it shall be on "reserve" (when applicable) when it points upstream of the fuel-flow.	----------	----------	The control shall have separate 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 position (where applicable) when it is in the direction upstream of the flow of fuel.	~~If so equipped, the~~ The "on" position shall be separated from the "off" position by 90 degrees of rotation. If equipped with a "reserve" position, it shall be separated from the "on" position by 180 degrees of rotation and the operator shall be able to switch to the "reserve" position while in the normal driving position. ~~Optional: the switch may be represented by the words "On" "Off" and "Reserve" (or "Res" or "Res."), or by the given symbols.~~	
	Source	----------	----------	5.5.2.2.	----------	----------	6.5.2.1.		
	Contents	----------	----------	Where a reserve supply is provided, the driver shall be able to switch to it while seated in the driving position.	----------	----------	Where a machine is so equipped the rider must be able to switch to the reserve fuel supply when in the seated position.		
	Source	Table 3 No. 12	5.12.	----------	----------	----------	Fig. 13 & Fig. 14		
	Symbol	Off or Fermé On or Ouvert Res. or Aux. 	Off On Reserve 	----------	----------	----------	**Off** Res. 	Off On Reserve or Res. or Res 	
	Colour of tell-tale	----------	----------	----------	----------	----------	----------		
Automatic	**Contents**							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. The control may include a "Prime" position which shall not conflict with any other defined position and shall be marked with the "PRI":	**There is currently no symbol for the "Prime" function. A new appropriate symbol could be discussed as a future work item, eg in ISO, etc.**

Item	Source	~~FMVSS~~CMVSS	ISO	ISO	JAPAN	EU	ECE	IMMA Proposal	
No.	Contents	123	6727-1981	9021-1988	Article 10 / Article 46	93/29/EEC	R. 60	GTR	Comments
Speedometer	Source	Table 3 No. 8 and (10), (11)	----------	----------	Article 46 & Instruction	----------	----------		
	Contents	Illuminated whenever the headlamp is activated. Despite the requirements of item 8 of Table 3 to TSD 123, a speedometer fitted on a motorcycle shall be calibrated in kilometres per hour or in kilometres per hour and miles per hour. Digital speedometers that switch between kilometres per hour and miles per hour are permitted if the unit of measure is identified. In the case of analogue speedometer displays, the kilometre-per-hour scale on the speedometer shall increase in a clockwise direction. Major graduations and numerals shall appear at 10- or 20-kilometre-per-hour intervals and minor graduations at 5- or 10-kilometre-per-hour intervals. ~~M.P.H. increases clockwise with 10 mph intervals for numerals and major graduations, 5 mph intervals for minor graduations.~~	----------	----------	Shall be constructed so that the driver may easily confirm the speed while the motor vehicle is moving. Shall have a lighting device or be luminous or shall have luminous dial plate or pointer. Shall be glare proof. Shall be shown in km/h. Motor driven two wheeled vehicles with speed over 30 km/h must have speed warning indicator lamp.	----------	N/A ECE R.39 200 km/h >= Interval 20 km/h >= >200 km/h Interval 30 km/h >=	The speedometer display must be located within the direct field of view of the driver and shall be legible day or night. Digital speedometers that switch between kilometres per hour and miles per hour are permitted if the unit of measure is identified. In the case of analogue speedometer displays, the scale on the speedometer shall increase in a clockwise direction. Major graduations and numerals shall appear at 10- or 20-kilometre-per-hour intervals and minor graduations at 5- or 10-kilometre-per-hour intervals. (Add similar requirements for country using miles)	-
Odometer	**Source**	(12)	----------	----------		----------	----------		
	Contents	An odometer or trip odometer installed on a motorcycle adjacent to the speedometer shall display distances in the same unit of measure as that of the predominant speedometer scale. If the odometer or trip odometer is not adjacent to the speedometer or switches between kilometres and miles independently of the speedometer, the odometer or trip odometer shall display distances in kilometres or miles and shall identify the unit of measure used.	----------	----------		----------		An odometer or trip odometer installed on a motorcycle adjacent to the speedometer shall display distances in the same unit of measure as that of the predominant speedometer scale. If the odometer or trip odometer is not adjacent to the speedometer or switches between kilometres and miles independently of the speedometer, the odometer or trip odometer shall display distances in kilometres or miles and shall identify the unit of measure used.	-
	Symbol	----------	----------	----------	----------	----------	----------		
	Colour of tell-tale	----------	----------	----------	----------	----------	----------		
Horn	Source	Table 3 No. 6 and (2) Table 1 No. 4	----------	5.4.1.	Article 10-1	2.1.5.	6.4.1. & 9.		

Item	Source	~~FMVSS~~CMVSS	ISO	ISO	JAPAN	EU	ECE	IMMA Proposal	
No.	Contents	123	6727-1981	9021-1988	Article 10 / Article 46	93/29/EEC	R. 60	GTR	Comments
	Contents	Represented by a given symbol or the wording "Horn "located on the left handlebar, push to activate. (a mandatory control)	----------	Button or switch located on the left handlebar. For vehicles with gear selection operated in conjunction with a hand - operated clutch, button or switch located on the right handlebar.	Control devices that are necessary for operating a motor vehicle shall be located 500 mm or less to the left and right of the center of the steering wheel and be constructed so that the driver, in normal driving position, may easily operate them:	Represented by a given symbol.	For gear selection independent of the clutch: button on the left handlebar. For gear selection in conjunction with the clutch: button on the right handlebar. Represented by a given symbol.	Represented by a given symbol, located on the left handlebar Could be added as an option [~~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.~~]	
	Source	Table 3 No. 6	5.5.	----------	Article 10-2	Fig. 6	Fig. 6		
	Symbol	or  Horn and Avertisseur		----------	Identification shall be placed on or nearby so as to be easily recognized by the driver in his seat. (JIS D0032 or ISO2575 as sample)				
	Colour of tell-tale	----------	----------	----------	----------	----------	----------		
Headlamps	**Source**	Table 3 No. 5 Table 3 No. 10 Table 1 No. 3	5.1.	5.4.2.2.		2.1.3. 2.1.5.	6.4.2.2.1. 9.		
	Contents	Represented by a given symbols and the wording" Hi and Phares, Lo~~w~~ and Code" located on the left handlebar, up for high beam and down for low beam. The framed areas may be solid.	The framed areas may be solid.	For vehicles with gear selection operated by a foot lever and/or independent of the clutch: located on the left handlebar. Located on the right handlebar for vehicle with gear selection operated in conjunction with the clutch.	Must be located within 500 mm to the center of the steering wheel and can be operated by the driver easily while driving.	Main beam headlights shall be represented by parallel horizontal rays of light and dipped beam headlamps by parallel rays of light angled downwards.	Vehicle with gear selection operated independently of the clutch: located on the left handlebar.	Located on the left handlebar Could be added as an option [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. Represented by given symbols for driving beam headlamp and passing beam headlamp. An indicator lamp shall show when the driving beam is in use.]	
	Source	----------	----------	----------	----------	----------	6.4.2.2.2.		
	Contents	----------	----------	----------	----------	----------	Located on the right handlebar for the vehicle with gear selection operated in conjunction with the clutch.		
	Source	Table 3 No. 5, No. 10	5.1.	----------	----------	Fig. 1 & Fig. 2.	Fig. 1 & Fig. 2		
	Symbol	Lights and Phares  or ~~High Beam~~Hi and Route, Lo and Code	Main Beam  Dipped beam 	----------	----------	Main Beam  Dipped beam 	Driving beam  Passing Beam 	~~Driving~~upper beam  ~~Passing~~Lower Beam 	

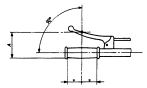
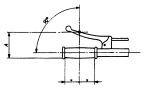
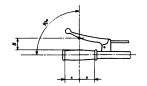
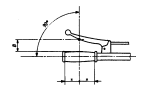
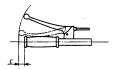
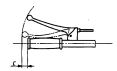
Item	Source	~~FMVSS~~CMVSS	ISO	ISO	JAPAN	EU	ECE	IMMA Proposal	
No.	Contents	123	6727-1981	9021-1988	Article 10 / Article 46	93/29/EEC	R. 60	GTR	Comments
	Colour of tell-tale	----------	Blue (Main beam)	----------	----------	Blue (Main beam) Green (Dipped beam)	Blue (Main beam) ----------	~~Driving or High~~Upper Beam: Blue. Optional: ~~Passing or~~ Lower Beam: Green.	
Optical Warning Device	**Source**	----------	----------	5.4.2.3.	----------	----------	6.4.2.3.		
	Contents	----------	----------	The control for this device, for which there is no special requirement as to type, shall be adjacent to the main-beam/dipped-beam switch or an additional function of it.	----------	----------	The control for this device shall be adjacent to the Driving Beam/Passing Beam Switch or shall be an additional function of the latter.	If so equipped, the control for this device shall be located on the same handlebar as the vehicle ~~Driving~~ headlamp upper Beam/~~Passing~~ Lower Beam ~~Switch~~control.	
	Colour of tell-tale	----------	----------	----------	----------	----------	----------		
Fog Lamps	**Source**	----------		----------	----------	2.1.5.	9.		
	Contents	----------	If one control is used for both, front fog lamp symbol is used. The framed areas may be solid. (Front)	----------	----------	Represented by a given symbols for front and rear fog lamps. If one control is used for both, front fog lamp symbol is used.	Represented by a given symbol for front and rear fog lamps. If one control is used for both, front fog lamp symbol is used.	Represented by given symbols for front and rear fog lamps. If one control is used for both, front fog lamp symbol is used.	
	Source	----------	5.10. & 5.11.	----------	----------	Fig. 10 & Fig. 11	Fig. 10 & Fig. 11		
	Symbol	----------	Front Rear	----------	----------	Front Rear	Front Rear	~~Front~~ ~~Rear~~	
	Colour of tell-tale	----------	Front: Green Rear: Amber	----------	----------	Front: Green Rear: Amber	Front: Green Rear: Amber	Front: Green. Rear: ~~Amber~~Yellow. If one lamp is used for both: Green.	
Turn Signal	**Source**	Table 3 No. 7 and (15)	5.2.	5.4.3.	Article 10-1	2.1.5.	6.4.3. & 9.		
	Contents	Represented by a given symbols or the wording "Turn and Clignotant, L and G, R and D". Control located on the handlebars. The framed areas may be solid.	The framed areas may be solid.	Position: on handlebars The control shall be so designed that, when viewed from the driver's seat, operation, of the left-hand portion, or movement to the left actuates the left side direction indicators and the inverse for the right side direction indicators. The control shall be clearly marked to show the side of the vehicle on which the indicators are working.	Control devices that are necessary for operating a motor vehicle shall be located 500 mm or less to the left and right of the center of the steering wheel and be constructed so that the driver, in normal driving position, may easily operate them:	Represented by given symbols.	The control shall be so designed that, when viewed from the rider's seat operation of the left hand position, or movement to the left of the control actuates the left side indicators and vice versa for the right side indicators. The control shall clearly be marked in such a manner as to indicate the side of the vehicle on which the control actuates the indicators.	Represented by given symbols. The left and right arrows on ~~switches~~ control, which is located on the handlebar, or tell-tales may be separated. ~~Switch is to be located on the handlebar in clear view from the operator's seat and shall be marked clearly.~~ The ~~indicator lamp~~tell-tale 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~~direction indicator is engaged or separate ~~lamps~~ tell-tales 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 arrows may also be used separately.	

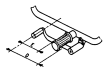
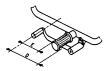
Item	Source	~~FMVSS~~CMVSS	ISO	ISO	JAPAN	EU	ECE	IMMA Proposal	
No.	Contents	123	6727-1981	9021-1988	Article 10 / Article 46	93/29/EEC	R. 60	GTR	Comments
	Source	Table 3 No. 7	5.2.	----------	Article 10-4	Fig. 3	Fig. 3		
	Symbol	 Turn and Clignotant, ~~—~~ L and G, R and D		----------	Each direction of a direction indicator lamp control device shall have identification thereon or nearby so it can be easily recognized by the driver in his seat.				
	Colour of tell-tale	~~----------~~Green or Yellow	Amber or Green	----------	----------	Green	Green	Green	
Hazard Warning Light	**Source**	----------	5.3.	----------	----------	2.1.5.	9.		
	Contents	----------	The framed areas may be solid.	----------	----------	Two possibilities: - identifying signal placed alongside or - simultaneous operation of direction indicators (both arrows in Fig. 3)	Represented by either arrows flashing simultaneously, or a triangle symbol.	Represented by either the ~~turn signal~~direction indicator ~~indicator lamp(s)~~tell-tale(s) flashing simultaneously, or by a given triangle symbol.	
	Source	----------	5.3.	----------	----------	Fig. 4	Fig. 4		
	Symbol	----------	1. Simultaneous operation of both arrows of Turn signal or 2. 	----------	----------	1. Simultaneous operation of both arrows of Turn signal or 2. 	1. Simultaneous operation of both arrows of Turn signal or 2. 	~~1.~~ This should be in a footnote like in ECE 121 (If the tell-tale for a turn signal is the separate, individual arrow (not both arrows), the hazard warning tell-tale may be the simultaneous operation of both turn signal tell-tales) ~~or~~ ~~2.~~ 	
	Colour of tell-tale	----------	1. Amber or Green 2. Red	----------	----------	1 Green 2. Red	1. Green 2. Red	~~1. Green~~ ~~2~~1. Red	
Lighting Control Switch	**Source**	----------	5.14.	5.4.2.1.	Article 10-1	2.1.5.	6.4.2.1. & 9.		
	Contents	----------	Can be combined with ignition control.	Clockwise operation if rotary switch, position (side) lights then headlights. May be combined with ignition switch.	Control devices that are necessary for operating a motor vehicle shall be located 500 mm or less to the left and right of the center of the steering wheel and be constructed so that the driver, in normal driving position, may easily operate them:	Can be combined with ignition control. Represented by given symbols.	Can be combined with ignition control. Represented by given symbols. Clockwise operation if rotary switch, position (side) lights then headlights.	Can be combined with ignition control. Represented by the given symbols for position lamps, master lamp ~~switch~~ control and parking lamp but if all lamps are automatically lit when vehicle is in operation, no position or master lamp ~~switch~~ control symbol need appear. Clockwise operation if rotary ~~switch~~control, position lights then headlights.	
	Source	----------	5.14.	----------	Article 10-2	Fig. 15 & 16 & 17	Fig. 16A, B, C		
	symbol	----------	Position lamp  Master Lamp switch  Parking Lamp 	----------	Identification shall be placed on or nearby so as to be easily recognized by the driver in his seat. (JIS D0032 or ISO2575 as sample)	Lighting SW  General Lighting SW  Parking Lamp 	Position light  Master Lamp switch  Parking Light 	~~Position lamp~~  ~~Master Lamp switch~~  ~~Parking Lamp~~ 	

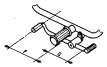
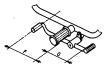
Item	Source	~~FMVSS~~CMVSS	ISO	ISO	JAPAN	EU	ECE	IMMA Proposal	
No.	Contents	123	6727-1981	9021-1988	Article 10 / Article 46	93/29/EEC	R. 60	GTR	Comments
	Colour of tell-tale	----------	----------	----------	----------	Position: Green Master Lamp: Green Parking Lamp: Green	Position: Green Master Lamp: Green Parking Lamp: -------	~~Tell Tale Optional:~~ Green	
Fuel Indicator	**Source**	----------	----------	----------	----------	2.1.5.	9.		
	Contents	----------	----------	----------	----------	Represented by a given symbol.	Represented by a given symbol.	~~(Indicator optional)~~ Represented by a given symbol.	
	Source	----------	5.6.	----------	----------	Fig. 7	Fig. 7		
	Symbol	----------		----------	----------				
	Colour of tell-tale	----------	Amber	----------	----------	Amber	Amber	~~If so equipped: Amber~~Yellow	
Engine Cooling Temperature	**Source**	----------	----------	----------	----------	2.1.5.	9.		
	Contents	----------	----------	----------	----------	Represented by a given symbol.	Represented by a given symbol.	~~(Indicator Optional)~~ Represented by a given symbol.	
	Source	----------	5.7.	----------	----------	Fig. 8	Fig. 8		
	Symbol	----------		----------	----------				
	Colour of tell-tale	----------	Red	----------	----------	Red	Red	~~If so equipped:~~ Red	
Battery Charging	**Source**	----------	----------	----------	----------	2.1.5.	9.		
	Contents	----------	----------	----------	----------	Represented by a given symbol.	Represented by a given symbol.	~~(Indicator Optional)~~ Represented by a given symbol.	
	Source	----------	5.8.	----------	----------	Fig. 9	Fig. 9		
	Symbol	----------		----------	----------				
	Colour of tell-tale	----------	Red	----------	----------	Red	Red	~~If so equipped:~~ Red	
Engine Oil	**Source**	----------	5.9.	----------	----------	2.1.5.	9.		
	Contents	----------	The framed areas may be solid.	----------	----------	Represented by a given symbol.	Represented by a given symbol.	Represented by a given symbol.	
	Source	----------	5.9.	----------	----------	Fig. 10	Fig. 10		
	Symbol	----------		----------	----------				
	Colour of tell-tale	----------	Red	----------	----------	Red	Red	Red	
Speed Control	**Source**	Table 1 No. 8 and (2)	----------	5.1.2.1.	Article 10-1	----------	6.1.2.1.		

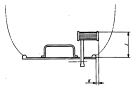
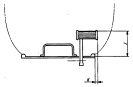
Item	Source	~~FMVSS~~CMVSS	ISO	ISO	JAPAN	EU	ECE	IMMA Proposal	
No.	Contents	123	6727-1981	9021-1988	Article 10 / Article 46	93/29/EEC	R. 60	GTR	Comments
	Contents	Twist-grip throttle located on the right handlebar. Self-closing to idle in a clockwise direction after release of hand. (a mandatory control)	----------	The speed of the engine shall be adjusted by a hand-operated control. Position: on the handlebar, right side. Type: rotating handgrip. Direction of rotation: anticlockwise to increase speed.	Control devices that are necessary for operating a motor vehicle shall be located 500 mm or less to the left and right of the center of the steering wheel and be constructed so that the driver, in normal driving position, may easily operate them:	----------	The speed of the engine shall be controlled by a hand-operated control. Position: on the handlebar, right side. Type: rotating handgrip. Direction of rotation: anticlockwise to increase speed.	~~Rotating handgrip o~~On the right handlebar. If equipped with a rotating handgrip, Aanticlockwise manipulation increases speed. The control shall be self-closing to idle in a clockwise direction after release of the hand unless a speed control device is activated.	
Front Wheel Brake	**Source**	Table 1 No. 10 and (2)	----------	5.2.1.	Article 10-1	----------	6.2.1.		
	Contents	Squeeze to engage on the right handlebar. (a mandatory control)	----------	Hand lever located on the right handlebar, forward.	Control devices that are necessary for operating a motor vehicle shall be located 500 mm or less to the left and right of the center of the steering wheel and be constructed so that the driver, in normal driving position, may easily operate them:	----------	Hand lever located on the right handlebar, forward.	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.	
Rear Wheel Brake	**Source**	Table 1 No. 11 and (2)	----------	5.2.2.1.	Article 10-1	----------	6.2.2.1.		
Foot Rear Wheel Brake Control	**Contents**	Right foot control. (applies also to single control for front and rear brakes) (a mandatory control)	----------	Hand-operated clutch: pedal, frame, right side.	Control devices that are necessary for operating a motor vehicle shall be located 500 mm or less to the left and right of the center of the steering wheel and be constructed so that the driver, in normal driving position, may easily operate them:	----------	For vehicle with manually operated clutch: pedal on right side of the frame.	For ~~L1 - L5~~ 3 category vehicles EXCEPT 3-1~~L1~~ category vehicles with pedals usable for motive power [mopeds with bicycle type pedals]. A foot control located on the right side of the frame. Not allowed for ~~L1~~ 3-1 category vehicles with pedals usable for motive power.	
Hand Rear Wheel Brake Control	**Source**	Table 1 No. 11 ~~---------~~	----------	5.2.2.2.	----------	----------	6.2.2.2.1.		
	Contents	~~———~~Left handle bar for a limited-speed motorcycle and for a scooter with an automatic clutch	----------	Without hand-operated clutch: either hand lever left handlebar, forward or pedal on the frame right side.	----------	----------	No manual clutch: Hand lever located on the forward left handlebar is a must for vehicles equipped with riding pedal, optional for vehicles that contain platform or footrest integrated into a platform with a max design speed of 100km/h.	For ~~L1 - L5~~3 category vehicles WITHOUT hand operated clutch devices: A hand control on the left handlebar. Not allowed for vehicles with hand operated clutch.	
	Source	----------	----------		----------	----------	6.2.2.2.2.		
	Contents	----------	----------		----------	----------	No manual clutch: All other vehicles: pedal frame right side.		

Item	Source	~~FMVSS~~CMVSS	ISO	ISO	JAPAN	EU	ECE	IMMA Proposal	
No.	Contents	123	6727-1981	9021-1988	Article 10 / Article 46	93/29/EEC	R. 60	GTR	Comments
	Source	----------	----------	5.2.3.	----------	----------	6.2.3.		
	Contents	----------	----------	CBS: Position and type of control: as specified in 5.2.1. or 5.2.2.	----------	----------	CBS: Position and type of control: as specified in paragraphs 6.2.1. and 6.2.2.	For ~~L1 - L53~~ category vehicles equipped with combined braking systems: The rear wheel brake may operate simultaneously with the front wheel brake when the combined brake system is activated.	
Parking Brake	**Source**	----------	----------	5.2.4.	Article 10-1	----------	6.2.4.		
	Contents	----------	----------	No special requirement for location or type of control.	Control devices that are necessary for operating a motor vehicle shall be located 500 mm or less to the left and right of the center of the steering wheel and be constructed so that the driver, in normal driving position, may easily operate them:	----------	Hand lever or pedal with no special requirement.	(Optional for three wheeled motorcycles or sidecar equipped motorcycles) Hand or foot control with no special requirements.	
Clutch	**Source**	Table 1 No. 1	----------	5.3.1.	Article 10-1	----------	6.3.1.		
	Contents	Located on the left handlebar, squeeze to disengage clutch.	----------	Manual operating clutch shall be a hand lever on the left handlebar, forward. Shall not prohibit the use of a combined foot lever for the clutch and gear selection.	Control devices that are necessary for operating a motor vehicle shall be located 500 mm or less to the left and right of the center of the steering wheel and be constructed so that the driver, in normal driving position, may easily operate them:	----------	Hand lever on the left handlebar, forward. Shall not prohibit the use of a combined foot lever for the clutch and gear selection.	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.	The IMMA proposal reflects the current and forward looking developments in this area. With the various new technologies being developed the IMMA proposal is intended to be less design restrictive while still meeting the intent of each of the current applicable regulations.
Hand Levers	**Source**	----------	----------	A.1.1.	Article 10-1	----------	1.1.		
	Contents	----------	----------	At maximum compression the outer end of the hand lever shall not exceed 30mm pass the edge of the handgrip. The distance between the forward face of the hand lever and the rearward face of the handgrip shall not exceed 135 mm or be less than 45 mm. The dimension may decrease inside the mid-point of the hand lever towards the fulcrum, but shall no case be less than 25 mm.	Control devices that are necessary for operating a motor vehicle shall be located 500 mm or less to the left and right of the center of the steering wheel and be constructed so that the driver, in normal driving position, may easily operate them:	----------	The maximum dimension between the forward face of the hand lever and the rearward face of the handgrip shall not exceed 120 mm measured perpendicularly to the axis of the handgrip at any point between the mid-point and the end thereof nearest the fulcrum of the hand lever. In the case of vehicles equipped with a gear selection control operated in conjunction with the clutch operating control, the maximum dimension shall not exceed 135 mm.	To be left out of this document and addressed as necessary with the appropriate systems. [These items can be identified by the shading in the Item and Source columns of this document]	ECE 60 items covering ergonomic issues (Hand Levers, Foot Rests, Foot Levers, Rocker Arms and Pedals) are not included in this document. It is the belief of IMMA that as these items are fairly design restrictive, they should be removed. As technology evolves, their designs should be governed by market forces and enable targeting specific market segments based on ergonomic efficiencies, or be included in specific system regulations as appropriate. [These items can be identified by the shading in the Item and Source columns of this document]
	Source	----------	----------	A.1.1.2.	----------	----------	1.2.		

Item	Source	~~FMVSS~~CMVSS	ISO	ISO	JAPAN	EU	ECE	IMMA Proposal	
No.	Contents	123	6727-1981	9021-1988	Article 10 / Article 46	93/29/EEC	R. 60	GTR	Comments
	Contents	----------	----------	This dimension may increase beyond the mid-point of the handgrip towards the hand lever open end.	----------	----------	This dimension may increase beyond the mid-point of the handgrip and towards the open end of the hand lever.		
	Source	----------	----------	Fig. 1 a)	----------	----------	Fig. 1 (a)		
	Fig.	----------	----------		----------	----------			
	Source	----------	----------	A.1.2.1.	----------	----------	1.3.		
	Contents	----------	----------	The minimum dimension (clearance) between the hand lever rearward face and the handgrip forward face shall not be less than 45 mm at any point between the outer end and the mid-point of the handgrip.	----------	----------	The minimum distance (clearance) between the forward face of the hand lever and the forward face of the handgrip shall not be less than 45 mm at any point between the outer end and the mid-point of the handgrip.		
	Source	----------	----------	A.1.2.2.	----------	----------	1.4.		
	Contents	----------	----------	This dimension may decrease inside the mid-point of the handlever towards the fulcrum, but shall in no case be less than 25 mm.	----------	----------	This dimension may decrease beyond the mid-point of the handgrip and towards the fulcrum but must in no case be less than 25 mm.		
	Source	----------	----------	Fig. 1 b)	----------	----------	Fig. 1 (b)		
	Fig.	----------	----------		----------	----------			
	Source	----------	----------	A.1.3.	----------	----------	1.5.		
	Contents	----------	----------	The outer end of the hand lever shall not project beyond the outer end of the handgrip by more than 30 mm when the hand lever is at maximum compression.	----------	----------	The outer end of the hand lever shall not project beyond the outer end of the handgrip by more than 30 mm when the hand lever is in its position of maximum compression.		
	Source	----------	----------	Fig. 1 c)	----------	----------	Fig. 1 (c)		
	Fig.	----------	----------		----------	----------			
Footrest	Source	~~10994~~S5.2.5 and (14)	----------	----------	----------	----------	----------		

Item	Source	~~FMVSS~~CMVSS	ISO	ISO	JAPAN	EU	ECE	IMMA Proposal	
No.	Contents	123	6727-1981	9021-1988	Article 10 / Article 46	93/29/EEC	R. 60	GTR	Comments
	Contents	Shall be provided for each designated seating position. ~~Passenger footrest shall fold rearward and upward when not in use.~~	----------	----------	----------	----------	----------		
Foot Lever	**Source**	----------	----------	A.2.1.1.	Article 10-1	----------	2.1.1.		
	Contents	----------	----------	The maximum distance between the rearward face of the foot lever spur and the rearward face of the footrest shall not exceed 200 mm at any point on the spur.	Control devices that are necessary for operating a motor vehicle shall be located 500 mm or less to the left and right of the center of the steering wheel and be constructed so that the driver, in normal driving position, may easily operate them:	----------	The maximum dimension between the rearward face of the spur of the foot lever and the rearward face of the corresponding footrest shall not exceed 200 mm at any point on the spur.		
	Source	----------	----------	A.2.1.2.		----------	2.1.2.		
	Contents	----------	----------	The minimum distance between the rearward face of the foot lever spur and the forward face of the footrest shall not be less than 105 mm at any point on the spur.		----------	The minimum distance between the rearward face of the spur of the foot lever and the forward face of the corresponding footrest shall not be less than 105 mm at any point on the spur of the foot lever.		
	Source	----------	----------	A.2.4.		----------	2.1.3.		
	Contents	----------	----------	When the footrest are adjustable, the dimensions shall be measured at the normal footrest adjustment points (or as stated in the "Owner's Manual") and with the foot lever, rocker arm or pedal in the position specified by the manufacturer.		----------	In case footrest are adjustable such dimensions shall be measured at the normal points of adjustment provided for the footrest, as stated in the instructions given by the manufacturer to the owner/user of the vehicle and with the foot lever in the position prescribed by the manufacturer.		
	Source	----------	----------	Fig. A2		----------	Fig. 2		
	Fig.	----------	----------			----------			
Rocker Arms	**Source**	----------	----------	A.2.2.1.	Article 10-1	----------	2.2.1.		
	Contents	----------	----------	For the front end of the rocker arm, the dimension between the pad rearward end, or the spur rearward face, and the footrest rearward face shall not be more than 200 mm nor less than 60 mm.	Control devices that are necessary for operating a motor vehicle shall be located 500 mm or less to the left and right of the center of the steering wheel and be constructed so that the driver, in	----------	The dimension (K) between the rearward part of the pad, or the rearward face of the spur, situated at the front of the rocker arm and the rearward face of the footrest shall not be more than 200 mm nor less than 60 mm.		
	Source	----------	----------	A.2.2.2.		----------	2.2.2.		

Item	Source	~~FMVSS~~CMVSS	ISO	ISO	JAPAN	EU	ECE	IMMA Proposal	
No.	Contents	123	6727-1981	9021-1988	Article 10 / Article 46	93/29/EEC	R. 60	GTR	Comments
	Contents	----------	----------	For the rearward end of the rocker arm, the dimension between the pad forward end, or the spur forward face, and the footrest rearward face shall not be more than 100 mm nor less than 50 mm.	normal driving position, may easily operate them:	----------	The dimension (L) between the forward part of the pad, or the forward face of the spur, situated at the rear of the rocker arm and the rearward face of the footrest shall not be more than 100 mm nor less than 50 mm.		
	Source	----------	----------	A.2.4.		----------	2.2.3.		
	Contents	----------	----------	When the footrest are adjustable, the dimensions shall be measured at the normal footrest adjustment points (or as stated in the "Owner's Manual") and with the foot lever, rocker arm or pedal in the position specified by the manufacturer.		----------	In case footrest are adjustable such dimensions shall be measured at the normal points of adjustment provided for the footrest, as stated in the Owner's Manual, and with the foot lever in the position prescribed by the manufacturer.		
	Source	----------	----------	Fig. A3		----------	Fig. 3		
	Fig.	----------	----------			----------			
Pedals	Source	----------	----------	A.2.3.1.1.	Article 10-1	----------	2.3.1.1.		
	Contents	----------	----------	The maximum dimension between the rearward end of the pedal pad and the footrest rearward face shall not exceed 170 mm at any point.	Control devices that are necessary for operating a motor vehicle shall be located 500 mm or less to the left and right of the center of the steering wheel and be constructed so that the driver, in normal driving position, may easily operate them:	----------	The maximum dimension between the rearward part of the pedal and the rearward face of the corresponding footrest shall not exceed 170 mm at any point.		
	Source	----------	----------	A.2.3.1.2.		----------	2.3.1.2.		
	Contents	----------	----------	The minimum dimension (clearance) between the rearward part of the pedal pad and the footrest forward face shall not be less than 50 mm at any point.		----------	The minimum dimension (clearance) between the rearward part of the pad of the pedal and the forward face of the corresponding footrest shall not be less than 50 mm at any point.		
	Source	----------	----------	A.2.4.		----------	2.3.1.3.		
	Contents	----------	----------	When the footrest are adjustable, the dimensions shall be measured at the normal footrest adjustment points (or as stated in the "Owner's Manual") and with the foot lever, rocker arm or pedal in the position specified by the manufacturer.		----------	In case footrest are adjustable such dimensions shall be measured at the normal points of adjustment provided for the footrest, as stated in the Owner's Manual, and with the pedal in the position prescribed by the manufacturer.		

Item	Source	~~FMVSS~~CMVSS	ISO	ISO	JAPAN	EU	ECE	IMMA Proposal	
No.	Contents	123	6727-1981	9021-1988	Article 10 / Article 46	93/29/EEC	R. 60	GTR	Comments
	Source	----------	----------	Fig. A.4		----------	Fig. 4		
	Contents	----------	----------						
	Source	----------	----------	A.2.3.2.		----------	2.3.2.1.		
	Contents	----------	----------	The maximum dimension between the platform surface and the highest point of the pedal pad, measured perpendicular to the surface of the platform adjacent to the pedal, shall not exceed 105 mm.		----------	The maximum dimension between the surface of the platform and the highest point of the surface of the platform adjacent to the pedal, shall not exceed 105 mm.		
	Source	----------	----------	A.2.3.2.2.		----------	2.3.2.2.		
	Contents	----------	----------	The extreme outer edge of the pedal pad shall not project more than 25 mm beyond the platform outer edge.		----------	The extreme outer edge of the pad of the pedal shall not project more than 25 mm beyond the outer edge of the platform.		
	Source	----------	----------	Fig. A.5		----------	Fig. 5		
	Fig.	----------	----------			----------			
Gear Selection	**Source**	Table 1 No. 2	----------	5.3.2.1.1.	Article 10-1	----------	6.3.2.1.		
Foot Selector Manual Control	**Contents**	An upward motion of the operator's toe shifts transmission toward lower numerical gear ratios (commonly referred to as "higher gears"), and a downward motion toward higher numerical gear ratios (commonly referred to as "lower gears"). If three or more gears are provided, it shall not be possible to shift from the highest gear directly to the lowest gear, or vice versa. ~~Left foot control, upward or downward motion of operator's toe shift transmission. Up for higher gears= lower numerical gears, Down for lower gears= higher numerical gears.~~	----------	In the case of vehicle equipped with a gear selection control operated by a foot lever either in conjunction with or independently of the clutch control, Position: on frame, left side. Type: foot lever or rocker arm. Method of operating control: movement of the foot lever or the forward part of the rocker arm upward shall, progressively, select gears giving an increased forward speed and conversely for the selection of gears giving a reduced forward speed. Within the range of movement between the lowest and the highest gear, a separate detent position shall be provided for neutral.	Control devices that are necessary for operating a motor vehicle shall be located 500 mm or less to the left and right of the center of the steering wheel and be constructed so that the driver, in normal driving position, may easily operate them:	----------	Vehicles with gear selection operated independently from the clutch: manual, Foot lever or Rocker arm on the left side of the frame.	If the vehicle is equipped with a manual clutch, and gear selection is performed independently from the clutch, the gear selector is a foot lever or rocker arm on 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.). If three or more gears are provided, it shall not be possible to shift from the highest gear directly to the lowest gear, or vice versa. Could be added as in option [For [PTW's less than 200cc] 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 position.]	

Item	Source	~~FMVSS~~CMVSS	ISO	ISO	JAPAN	EU	ECE	IMMA Proposal	
No.	Contents	123	6727-1981	9021-1988	Article 10 / Article 46	93/29/EEC	R. 60	GTR	Comments
	Source	----------	----------		----------	----------	6.3.2.1.1.		
	Contents	----------	----------		----------	----------	Movement of the foot lever or the forwarding 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.		
	Source	----------	----------		----------	----------	6.3.2.1.2.		
	Contents	----------	----------		----------	----------	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.		
	Source	----------	----------	5.3.2.1.2.	----------	----------	6.3.2.2.		
Hand Selector Manual Control	Contents	----------	----------	In the case of vehicle equipped with a gear selection control operated in conjunction with a hand operated clutch, Position: on handlebars, left side. Type: rotating handgrip. Method of operating control: rotating of the handgrip anticlockwise shall, progressively, select gears giving an increased forward speed and conversely for a reduced forward speed. Within the range of movement between the lowest and the highest gear, a separate detent position shall be provided for neutral.	----------	----------	In the case of vehicle equipped with a gear selection control operated in conjunction with the clutch operating control: manual rotating handgrip on the left handlebar	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 on 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... or N-1-2-3-4...).	
	Source	----------	----------		----------	----------	6.3.2.2.1.		
	Contents	----------	----------		----------	----------	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.		

Item	Source	~~FMVSS~~CMVSS	ISO	ISO	JAPAN	EU	ECE	IMMA Proposal	
No.	Contents	123	6727-1981	9021-1988	Article 10 / Article 46	93/29/EEC	R. 60	GTR	Comments
	Source	----------	----------	5.3.2.2.		----------			
Automatic or Semi-automatic Gear Selector Control	Contents	----------	----------	In the case of vehicle equipped with automatic or semi-automatic transmission and/or gear-boxes, there shall be no specific requirements for the position, or the type of control (if any) used to engage the transmission or select the gears.		----------		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.	
~~Brake~~ABS	Source				Article 12-1. (14)				
	Contents				ABS: shall be provided with a warning device to give warning to the driver in his seat when the device becomes liable to fail to operate normally.			~~Non ABS system, optional.~~ ABS system: Required.	gtr #3 "Motorcycle Brake Systems"
	Symbol				----------			 In a footnote "If a single tell-tale is used to indicate more than one brake system condition, the brake system malfunction symbol shall be used."	
	Colour of tell-tale				----------			~~amber~~Yellow	
Brake	Source	CMVSS 122 (3)			Article 12-1. (14)				
	Contents	Each indicator lamp shall have a the symbol for brake with the legend "Brake Failure" in option on or adjacent to it in letters not less than 2.38 mm high that shall be legible to the driver in daylight when lighted							gtr #3 "Motorcycle Brake Systems"
	Symbol	 the words "Brake Failure" are optional			----------				
	Colour of tell-tale	Red			----------			Red	
Stands	Source	S5.2.4 and (13)			Article 12-1. (14)				
	Contents	A stand shall fold rearward and upward if it contacts the ground when the motorcycle is moving forward. This requirement does not apply to motor tricycles.							

Item	Source	~~FMVSS~~CMVSS	ISO	ISO	JAPAN	EU	ECE	IMMA Proposal	
No.	Contents	123	6727-1981	9021-1988	Article 10 / Article 46	93/29/EEC	R. 60	GTR	Comments
DRL	Source								
	Contents								See regulation 53 paragraph 6.13.8 If equipped with a tell-tale, the tell-tale shall be this one
	Symbol								-
	Colour of tell-tale							Blue or Green	

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