





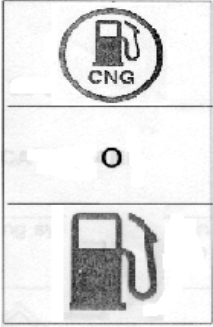
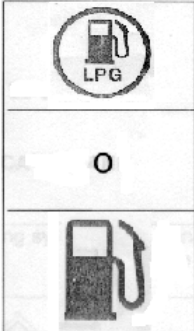
**Comments on document: GRSG-86-1 (TRANS/WP.29/2000/8/Rev.3)**  
 (Draft Global Technical Regulation – Uniform Provisions for Hand Controls, Tell-tale and Indicators Present on Category 1 and 2 Vehicles)

Transmitted by India

**1. Page No. 8 Table - 1 – Symbols for controls, Tell-tales and Indicators.**

Following symbols should be included in Table - 1.

No	Column 1 ITEM	Column 2 SYMBOL	Column 3 FUNCTION	Column 4 ILLUMINATION	Column 5 COLOUR
1.	<p><b>Fuel selector switch</b>  <b>In case of Bi-fuel<sup>L</sup></b>  <b>vehicles:</b>  <b>a) For vehicles fitted</b>  <b>with electronic</b>  <b>fuel injection</b>  <b>(Two position switch)</b></p> <p>a1) Vehicles running on CNG</p> <p>a2) Vehicles running on LPG</p>	   	Control	Yes	



	<p><b>b) For all other vehicles (Three position switch)</b></p> <p>b1) Vehicles running on CNG</p> <p>b2) Vehicles running on LPG</p>	 			
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**Justification:**

India is one of the largest operator of Automotive Vehicles running on Bi-fuel i.e on CNG / LPG or petrol.

1. In Bi-fuel vehicles fuel selector switch (control) is required for the selection of fuel to be used from the available fuels (e.g. CNG / LPG and petrol ) Identification of this switch (control) is necessary hence symbol is suggested.
  - a. In case of Bi-fuel vehicles fitted with electronic fuel injection systems, two-position switch (control) is required for selection of fuel.
  - b. In case of other Bi-fuel vehicles (e.g. carburetor fitted) three-position switch ( control) is required particularly when switching over from petrol to CNG mode to empty the petrol from the carburetor bowl.
- 1/ Bi-fuel system is defined as a system equipped to operate with either on CNG / LPG or some other fuel e.g. petrol.

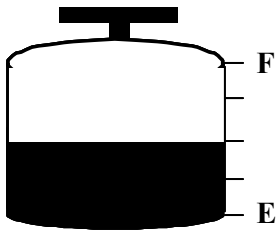
**2. Following symbols are to be added in table – 1 for Tell-tale and Indicators for CNG / LPG fuel level.**

No	Column 1 ITEM	Column 2 SYMBOL	Column 3 FUNCTION	Column 4 ILLUMINATION	Column 5 COLOUR
2	CNG Fuel level		Tell-tale	Yes	Yellow
			Indicator *(Example of indicator is given below)	Yes	
	LPG Fuel level		Tell-tale	Yes	Yellow
			Indicator *(Example of indicator is given below)	Yes	




**Justification:**

- Symbol used for fuel level tell-tale and indicator at Sr. No.7 Table – 1 ( See Reference for symbols Sr. no.1) is normally used for fuel petrol / diesel. Separate symbol as given above is available in ISO: 2575-2000 for CNG / LPG fuel and suggested to be used in case of CNG / LPG fuel level tell-tale and indicators.

- \* Example of indicator for fuel level.



### Reference for symbols:

1.		ISO:2575-2000 ( E) Road Vehicles- Symbols for controls, indicators and tell-tales Annex G- Fuel System G-01
2.		ISO:2575-2000 ( E) /Amd. 1: 2001(E) Annex Z-Special Signs Z-04
3.		ISO:2575-2000 ( E) /Amd. 1: 2001(E) Annex Z-Special Signs Z-05

### 3. Page 14 (TRANS/WP.29/2000/8/Rev.3)

Symbols for controls , tell-tales and indicators required in electric or hybrid electric road vehicles should be included in other symbols.

#### Justification :

There is need for the symbols to identify the controls , tell-tales and indicators such as state of propulsion battery, electric motor etc. to be used in electric or hybrid electric road vehicles .