



Review Document

Basic Details

1.	Sectional Committee No. & Title:	TED 11 - Automotive Electrical Equipment and Instruments
2.	IS No :	IS 13931 : Part 2 : 1993
3.	Title :	Automotive vehicles - stoplight switches: Part 2 methods of test
4.	Date of Previous Review:	February, 2019

Review Analysis

5.1 Status of standard(s), if any from which assistance had been drawn in the formulation of this IS.

S.No.	Standard (No.)	Standard (Title)	Whether the standard has since been revised	Major changes	Action proposed
No entry made in this table					

5.2 Status of standard referred in the IS.

S.No.	Referred standards (No.)	Referred standards (Title)	Since revised IS no. of the corresponding IS	Changes in the referred Standards since last review of IS	Changes in the referred standard which are affecting the standard under review	Action proposed
No entry made in this table						

5.3 Any other standards available related to the subject & scope of the standard being reviewed (International/regional/other national/association/consortia, etc or of new or revision of existing Indian Standard).

S.No.	Standard (No.)	Standard (Title)	Provisions that could be relevant while reviewing the IS	Action proposed
1	SAE J249198806 (1988)	Mechanical Stop Lamp Switch	Nil	No action

5.4 Technical comments on the standard received, if any.

S.No.	Source	Clause of IS	Comment	Action proposed
No entry made in this table				

5.5 Information available on relevant technical developments

S.No.	Source	Development	Relevant clause of the IS under review that is likely to be impacted (Clause & IS No.)	Action proposed
1	Manufacturer (Non-licensee)	Endurance of switch: Internationally OEMS require endurance cycles as 1.0 million (10,00,000) as against 5,00,000 mentioned in Standard (for rated Voltage of 12 V ; To be decided for rated Voltage of 24 V)	Clause 4.12 of IS 13931 (Part2)	Amend the clause 4.12 Endurance Test The switch shall be tested for 5 00 000 1000000 cycles of operation (for rated Voltage of 12 V ; To be decided for rated Voltage of 24 V) at designated electrical load with at least 80 percent of rated current at normal temperature (Room temperature between 20Â°C to 40Â°C) with the stroke not exceeding 4 mm. The test voltage shall be 14 V and 28 in case of rated voltage of 12 V and 24 V respectively. The frequency of operation shall be between 25 Â± 5 cycles/min. At the end of the test, the switch shall be observed for free test. movement of plunger and play. The switch shall be tested for performance and voltage drop
2	Manufacturer (Non-licensee)	Test for voltage drop: 80mV (before endurance test) change to 200mV (before endurance test) 120mV (after endurance test) change to 300mV (after endurance test) (for rated Voltage of 12 V ; To be decided for rated Voltage of 24 V)	Clause 4.5 of IS 13931 (Part2)	Amend the clause 4.5 Test for Voltage Drop. A rated load current is applied across the switch terminals; the voltage drop measured across the terminals shall not exceed the following: a) Before the endurance test 80 mV 200mV b) After the endurance test 120 mV 300 mV The test shall be conducted at rated voltage.

5.6 Issues arising out of changes in any related IS or due to formulation of new Indian Standard.

S.No.	Related IS (revised or new)	Related IS Title	Provision in the IS under review that would be impacted & the clause no. or addition of new clause/provision	Changes that may be necessary in the Standards under review	Action proposed
1	IS 13931 : Part 1-1993	Automotive vehicles - Stoplight switches: Part 1 specification	-	-	IS 13931 (Part 1) to be updated as per changes listed in IS 13931 (Part 2)

5.7 Any consequential changes to be considered in other IS.

S.No.	Related IS to get impacted	Related IS Title	Requirements to be impacted
1	IS 4373-1967	Specification for hydraulically operated stop light switches for automobiles	NIL

Other Details

6.	Any other observation:	NIL
7.	Upload Supporting Document(s)	

7.1 ARP Report	67_5739_240416023359_ARP_Report.docx
7.2 Draft Document	No Document Uploaded

8.	Recommendations - On the basis of the analysis of the info available as mentioned above consideration of sectional committee is solicited on the following aspects of the IS under review:	Standard IS 13931 (Part 2) needs to be updated as listed above (Amendment)
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