

PROPOSAL FOR BOV EXEMPTION CATEGORY

BoV Exemption Category – CMVR Provisions

- Battery Operated Vehicles (BoV) are defined in CMV Rule 2(u)
- In the same Rule, exemption criteria for exemption category BoV 2W are specified
 - ✓ 30 minute power of electric motor < 250 W
 - ✓ max speed of vehicle < 25 km/hr
 - ✓ vehicle fitted with suitable brakes and retro-reflective devices in the front and rear
 - ✓ unladen weight (excluding battery weight) not more than 60 kg

BoV Exemption Category – Process of Approval

- Test Agencies verify/test prototype vehicle and give exemption report. No approval certificate is issued.
- These vehicles, being exempted from classification as motor vehicle, are not registered. Similarly no requirements for driving licence for driver, insurance, traffic violations etc. as per MV Act

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BoV Exemption Category – Malpractices in the Field

- Manufacturers / dealers of exemption category BoVs, while supplying vehicles in the field, tamper with motor controller setting to increase motor power and/or to increase max speed above limits specified in the exemption definition
- This is clear violation of exemption classification under CMVR for which approval is granted by Test Agencies
- This is rampant practice in the field as reported by various sources

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BoV Exemption Category – Malpractices in the Field

- Test Agencies receive complaints from field, RTI queries and also legal notices for granting exemption approval and subsequent violations in the field
- FAME-1 included this category initially for availing demand incentive. But due to such malpractices, this category has been removed in FAME-2.

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BoV Exemption Category – Proposal

- Exemption may be granted as per CMV Rule 2(u) to only electrically assisted cycles
- Separate low speed 2W BoV category may be introduced (motor power < 500 W, max speed < 35 km/hr)
- Limited type approval requirements may be defined for this category on similar lines of E-rickshaw / E-cart
- These vehicles need to be registered, insured, driving licence for 16 years of age and above, traffic rules applicable
- For extending this category to 3W BoV, possible overlap with E-rickshaw/E-cart category may be taken into consideration

Co-driver airbag for M1 category

- ❑ AIS-098 (Offset crash) has been implemented vide SO 2412(E) dtd 3rd Sept 2015. All models manufactured on or after 1st Oct 2019 need to be compliant.
- ❑ AIS-098 standard is aligned to UNECE R94 regulation wherein the occupant injury is the judgement criteria.
- ❑ OEMs use combination of high strength BIW design and restraint system (airbag, seatbelts and seats) for meeting occupant injury criteria (i.e. both driver and co-driver) and complying to regulatory requirements.
- ❑ Global regulations don't mandate Airbags specifically and rather mandate the occupant injury criteria through regulations. Airbag is most common restraint system for complying to these injury criteria.
- ❑ Most of the M1 category vehicles are able to meet the injury criteria of crash regulation with restraint system having Driver airbag only configuration.
- ❑ **The clearance on co-driver side is more than driver side and vehicle structure design is adequate enough to meet the co-driver occupant injury criteria even without airbag.**
- ❑ On similar lines, although co-driver airbag was proposed in draft notification GSR 1014(E) dtd 26th Oct'16, SIAM submitted its technical justification for keeping it optional.
- ❑ **After detailed deliberation in Crash panel and also with MoRTH, it was finalized and notified to have only Driver airbag as mandatory safety item under AIS-145 regulation.**

Table 2: Amendments to AIS Standards

The following amendments were approved in 63rd and 64th meeting of AISC. The nature of amendment is as given in the table. Committee may adopt the proposed amendments.

Sr. No.	Amd. Nos.	Title of AIS standard	Nature of amendment
1.	Amd 8 to AIS 007 (Rev. 5)	Technical Information to be submitted by vehicle manufacturer	In view of the implementation of the following new standards, Amendment 8 to AIS 007 (Rev. 5) is proposed: AIS-063 (School Buses), AIS-134 (3 W Safety), AIS-126 (2 W Tell Tale), AIS-146 (2 W stand), AIS-147 (2 W External projection), AIS-148 (Foot rest for 2 W), AIS-119 (Sleeper Coaches), AIS-139 (Double Decked Buses), AIS-153 (Additional requirement for buses), AIS-140 (ITS), AIS-150 (Improved braking for M & N), AIS-151 (Improved braking for M1 & N1)
2.	Amd 2 to AIS 009	Automotive Vehicles - Installation Requirements of Lighting and Light-Signalling Devices for 2 and 3 Wheelers, their Trailers and Semi-Trailers	To add installation requirements of retro reflective tapes in AIS-009 and AIS-009 (Rev. 1).
3.	Amd 3 to AIS 009 (Rev. 1)	Automotive Vehicles - Installation Requirements of Lighting and Light-Signalling Devices for 2 and 3 Wheelers, their Trailers and Semi-Trailers	To add installation requirements of retro reflective tapes in AIS-009 and AIS-009 (Rev. 1).
4.	Amd 2 to AIS 048	Battery Operated Vehicles - Safety Requirements of Traction Batteries	To add More clarity with respect to the following: <ul style="list-style-type: none"> • Vibration and shock test procedure. • SOC condition and nail size requirement for nail penetration test
5.	Amd 1 to AIS 057 (Rev. 1)	Provisions concerning the Approval of Retro-Reflecting Devices for Power Driven Vehicles and their Trailers	To expand the scope of AIS-057 (Rev.1) to cover CEV as well.
6.	Amd 3 to AIS 072	Approval of Restraining Devices for Child Occupants of Power-Driven Vehicles	To introduce deemed compliance to AIS-072 for UN R 129 approved CRS as an additional option along with UN R 44 CRS approval.
7.	Amd 4 to AIS 093 (Rev. 1)	Code of Practice for Construction and Approval of Truck Cabs, Truck Bodies and Trailers	For Exemption till April 2020 of Drive-Away Chassis from Truck Code, To add option of CAE Method, to measure CG in laden condition for stability

			measurement test using tilt table method for vehicles carrying Hazardous Goods.
8.	Amd 1 to AIS 103	Automotive Vehicles – Spray Suppression Systems for Two Wheeled Motor Vehicles	To bring clarity on applicability of standard for BOV (2 W) and exempting vehicles having motor output above 11 kW.
9.	Amd 5 to AIS 113	Code of Practice for Type Approval of Trailers / Semi-trailers of categories T2, T3 and T4 being towed by Motor Vehicles of categories N2 and N3	To extend the scope of AIS-113 to vehicle carriers trailers.
10.	Amd 3 to AIS 125 (Part 1)	Constructional and Functional Requirements for Road Ambulances.	To Correct pictorial representation of Type B Ambulance.
11.	Amd 4 to AIS 145	Additional Safety features for Category M & N Vehicles	Optionally allowing tippers and other vehicles such as ready mix concrete mixer which are primarily used in construction work to provide reverse audible warning system in place of RPAS.
12.	Amd 5 to AIS 153	Additional Requirements for Bus Construction	To add clarity with respect to Power to Weight ratio requirements for Electric Buses. To address interior vibration and harshness measurements procedure for Sleeper buses. To add Reference of appropriate revision of ISO 7637.

AIS 004-Part 3 Rev 1: Electromagnetic Compatibility (EMI/EMC)

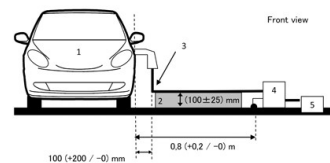
Present Standard**AIS 004: Part 3:**

- Covers ICE vehicles and Electric Vehicles EMC Testing
- Also covers Electronic Sub Assembly (ESA) testing for all above vehicles.
- Inline with UN R 10.3

New Proposed Revision**AIS 004: Part 3: Rev 1**

Proposed revision covers in addition to conventional EMC testing of (IEC +EV) vehicles,

- ++Vehicle which has REESS (**Battery**) charging mode coupled to the power grid
- ++Electronic Sub Assembly (ESA) with REESS (**Battery**) charging mode coupled to the power grid
- Inline with **UN R 10.5**



- The standard was approved in 64th meeting of AISC.
- It is proposed to review the implementation date for the revised standard after October 2020. In the interim the standard may be used for development work and testing.
- **Committee may adopt the proposed standard.**

AIS 024 and AIS 028 (Rev. 1) (Part A): Safety and Procedural Requirements for Type Approval of Gaseous Fuel Vehicles and Code of Practice for Use of Gaseous Fuels in Internal Combustion Engine Vehicles (Revision-I) (Part A) (Automotive Application)

AIS 024 and AIS 028 (Rev. 1) (Part B): Safety and Procedural Requirements for Type Approval of Gaseous Fuel Vehicles and Code of Practice for Use of Gaseous Fuels in Internal Combustion Engine Vehicles (Revision-I) (Part B) (Tractor Application)

- AIS 024 and 028 is revised to incorporate safety requirements for tractor as well as off-highway vehicles as notified in GSR 1151 (E) dated 29th November 2018. Also, the revised standard covers requirements for Bio-CNG and LNG.
- The standard AIS-024 and AIS-028 has been divided in the following three parts with common annexures.
 - Part – A (Automotive Requirements)
 - Part – B (Tractor Requirements)
 - Part – C (Off Highway)
- The Parts A and B of the revised standard were approved in 63rd meeting of AISC.
- **Committee is requested to adopt the Part A and B of the proposed standard.**

AIS 038 Rev 2: Specific Requirements for Electric Power Train of Vehicles

India Present Scenario



- **Presently AIS 038 Rev 1:** covers vehicle electrical safety for L, M & N category of vehicles. (Inline with UN R 100 Rev 2-Part 1)



- **AIS 048:** Covers Traction Battery safety requirements for L, M & N category vehicles (Including E-Rickshaw/E-Cart)
 - Test on cells or Module or Pack
 - No System level safety approach

New Proposed Standard



- **Proposed AIS 038 Rev 2:** for M & N Category vehicles only



- Inline with GTR 20 Phase 1 and UN R 100 Rev 3 Transposition Document.



- High Voltage Electrical Vehicle Safety and REESS safety together.
 - System level approach
 - Covers functional safety, DFMEA , ASIL level etc.

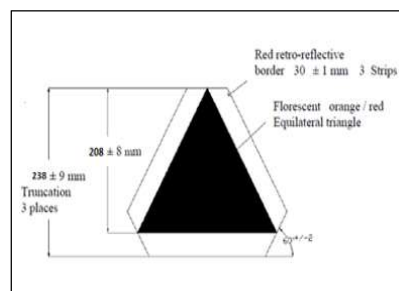
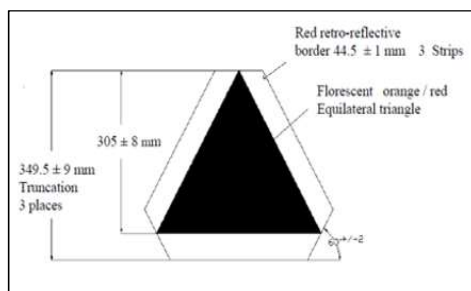
- The standard was approved in 64th meeting of AISC.
- It is proposed to implement the revised standard after 3 years from date of notification.
- **Committee may adopt the proposed standard and implementation schedule.**

AIS 088 (Rev.1): Performance Requirements of Rear Marking Plates (Rear Warning Triangles) for Automotive Vehicles, Agricultural Tractors their Trailers and Semi-Trailers

Clause No	Existing	Proposed Comments
Scope	Can not travel faster than 30 km/h , agricultural tractors	The word 30 km/h replaced by 40 km/h
ANNEX 1 Figure 1	THE CIE CO-ORDINATE SYSTEM	Existing figure and labels replaced by figure & label given in R69 Revision 1 supp 4 to 1 series amendment for more clarity.
Annex 1 Figure 2	GONIOMETER MECHANISM EMBODYING THE CIE ANGULAR SYSTEM	Existing figure and labels replaced by figure & label given in R69 Revision 1 supp 4 to 1 series amendment for more clarity
ANNEX 3 (see 8) Clause 2	SPECIFICATIONS OF SHAPE AND DIMENSIONS The plates shall have an orange fluorescent centre	As per R69 the wording " orange" replaced by ' Red '
Annex 3 Clause 3	The dimension of rear marking plate shall be as per Figure 1 in Annex 9.	No change in existing provision. For better clarification added both the figures with dimensions.

CMVR-TSC – Agenda 4 (a) (5)
AIS 088 (Rev.1): Performance Requirements of Rear Marking Plates (Rear Warning Triangles) for Automotive Vehicles, Agricultural Tractors their Trailers and Semi-Trailers

Clause No	Existing	Proposed Comments
ANNEX 9 (See 8 and Annex 3, cl. 3)	SHAPE AND DIMENSION OF SMV REAR MARKING PLATES (REAR WARNING TRIANGLE)	Refer attached file for replacing the existing Annex 9


CMVR-TSC – Agenda 4 (a) (5)
AIS 088 (Rev.1): Performance Requirements of Rear Marking Plates (Rear Warning Triangles) for Automotive Vehicles, Agricultural Tractors their Trailers and Semi-Trailers

Clause No	Existing	Proposed Comments
Annex 4 Clause 2.1 Table 1	Luminance Factor ≥ 0.03	Existing Luminance factor 0.03 need to change to ≥ 0.3
Annex 6 Clause 2	Resistance to Corrosion	The standard reference added: " Resistance to Corrosion (ISO standard 3768)"
Annex 6 Clause 4.1	The adhesion of laminated or coated retro-reflective and fluorescent materials shall be determined.	The clause 4.1 need to revise as below " The Adhesion of laminated or coated retro-reflective and fluorescent material shall be determined. The adhesion of retro-reflective materials shall be determined after 24 hours curing time by utilizing a 90-degree peel on a tensile strength testing machine."

AIS 088 (Rev.1): Performance Requirements of Rear Marking Plates (Rear Warning Triangles) for Automotive Vehicles, Agricultural Tractors their Trailers and Semi-Trailers

Clause No	Existing	Proposed Comments
Annex 6 Clause 7	Cleaning	<p>Clause 7 need to revise as below</p> <p>7.1 A test sample smeared with a mixture of detergent lubricating oil and graphite shall be easily cleaned without damage to the retro-reflective or fluorescent surfaces when wiped with a mild aliphatic solvent such as n-heptane, followed by washing with a neutral detergent.</p> <p>7.2 Power washing</p> <p>7.2.1 When subjected to a continuous spraying action for 60 seconds on the test component in its normal mounting conditions, a test sample shall show no damage to the retro-reflective surface or delamination from the substrate or separation from the sample mounting surface under the following set-up parameters:</p> <p>(a) Water/wash solution pressure 8 ± 0.2 MPa; (b) Water/wash solution temperature $60^\circ - 5^\circ$ C; (c) Water/wash solution flow rate 7 ± 1 l/min; (d) The tip of the cleaning wand to be positioned at distance of 600 ± 20 mm away from the retro-reflective surface; (e) Cleaning wand to be held at no greater angle than 45 degrees from perpendicular to the retro-reflective surface; (f) 40 degree nozzle creating wide fan pattern.</p>

- Committee is requested to adopt the proposed standard with a lead time of one year.

AIS 156: Specific Requirements for L Category Electric Power Train Vehicles

India Present Scenario



Presently AIS 038 Rev 1: covers vehicle electrical safety for L, M & N category of vehicles. (Inline with UN R 100 Rev 2-Part 1)



AIS 048: Covers Traction Battery safety requirements for L, M & N category vehicles (Including E-Rickshaw/E-Cart)



- Test on cells or Module or Pack
- No System level safety approach

New Proposed Standard



- Proposed AIS 156 standard is complete Inline with UN R 136. (Vehicle +REESS)



- High Voltage Electrical Vehicle Safety and REESS safety together.



- System level approach
- Part 1 : Vehicle Safety
- Part 2: REESS Safety



- The standard was approved in 64th meeting of AISC.
- It is proposed to implement the revised standard after 3 years from date of notification.
- Committee may adopt the proposed standard and implementation schedule.

AIS 158: Code of Practice for Type Approval of Modular Hydraulic Trailers towed by Puller Tractor of Category N3

- As decided In the 52nd and 55th meetings of CMVR-TSC, an initial Draft AIS :158 for Type Approval of Modular Hydraulic Trailers was prepared considering the following **ADDITIONAL** requirements:
 - ❖ Maneuverability requirements
 - ❖ Draw bar Coupling
 - ❖ Draw Bar Eye
 - ❖ EMC/EMI – For Electronic components, wherever fitted
 - ❖ Technical specifications to be submitted for Type Approval
 - ❖ Clarity on Trailer Registration Procedure
- The standard was approved in 63rd meeting of AISC held on 18th September 2019.
- **Committee is requested to adopt the proposed AIS-158.**
- It is proposed to implement the standard with lead time of one year

Thank You !

AIS 160 : Safety requirements for Construction Equipment Vehicles

- Based on the discussions in the 56th meeting of CMVR-TSC and direction from the Ministry the earlier proposed Safety road map (notification) for CEVs has now been converted into AIS 160.
- Earlier Proposed road map for implementation of various safety standards for Construction Equipment's Vehicles (CEV), cross refers to multiple AIS/IS/ISO, which may call for frequent changes in notification, in case of revision in any of the standard.
- To address this situation, a complied Draft AIS has been prepared, where in all these standards are cross referred which can now be directly notified under CMVR.
- This standard covers following two pars:
 - **Part 1 (Phase 1):** This part covers requirements for External rear view mirror, Internal Mirror (if fitted), Common / Specific Symbols for operator controls and other displays, Machine Safety Labels, Visual Display Requirements, Operator Station and Maintenance Areas, Non-metallic Fuel Tanks, Minimum Access Dimensions, Access Systems for steps, primary access, alternate exit path and opening, maintenance opening, handrail and handholds, Guards - Barrier Guards, Fenders, Fan Guards, Thermal Guards, and Hose Guards, Visual Display Requirements, Machine mounted audible travel alarms and forward horn, Operator Controls, Performance requirements for Articulated Frame Lock, Lift Arm Support Device, Dimensions and requirements for Operator's Seat.

CMVR-TSC – Agenda 4 (a) (8)

- **Part 2 (Phase 2):** This part covers requirements for Electro Magnetic Compatibility (EMC), Seat Belt and Seat belt anchorages, Roll over Protective Structure (ROPS), Roll Over Protective Structure (ROPS), Tip over protection structure (TOPS) for compact excavators, Performance and Tests of Rubber Tracked / Padded Crawler Machines for Braking Systems, Seat Index Point, Physical Dimension of Operator and Minimum Operator Space, Falling Object Protective Structure (FOPS), Operator Field on View, Installation requirement of rear view mirrors, Zones of Comfort and Reach for Controls, Evaluation of Operator Seat Vibrations for suspended seats
- Standard was approved in 63rd meeting of AISC.
- **Implementation Plan:** It is proposed to notify AIS-160, along with provisions for Braking system, Turning Circle Radius and Turning Circle Diameter, Steering Effort and Noise (in two phases) as per the following schedule:

Part 1 of AIS 160 along with Braking system, Turning Circle Radius and Turning Circle Diameter, Steering Effort and Noise (Phase 1)	1 st April 2021
Part 2 of AIS 160 along with Noise (Phase 2)	1 st April 2024

- **Committee may adopt the standard and proposed implementation schedule.**

Thank You


CMVR-TSC – Agenda 4 (b) (i)

Motor Vehicle Part Compliance Requirements

Status report for CMVR-TSC

13th February 2020: NATRAX, Indore

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Status Report

CMVR-TSC – Agenda 4 (b) (i)

Panel Meeting held on 19th November 2019

- During the earlier CMVR-TSC meeting, members of the committee suggested to call for a Panel Meeting to discuss and understand the workings of Portal
- Panel Meeting held on 19th November 2019 and members consented for Portal
- Panel Members proposed to have the Homologation Portal, be implemented in 3 phases:
 1. **Pilot phase to begin with a few components from AIS-037 (any 5 components) to analyse the functioning of Portal**
For the pilot run, Notification be issued for these 5 components.
 2. Phase-I to cover all components under AIS-037
 3. Phase-II be extended to cover more components

AISC meeting held on 17th January 2020

- AISC Members advised to have discussion with MoRTH and Plan Surveillance for effective enforcement. In absence of ground enforcement, there is no use of creating Portal
- In light of Motor Vehicle Amendment Act 2019 – Sec.182 (sub rule – 3), JS may advise further course of action.


CMVR-TSC – Agenda 4 (b) (i)
Snapshot of Sec.182A of Motor Vehicle Amendment Act 2019

65. For section 182A of the principal Act, the following sections shall be substituted, namely:—

Substitution of
new section
for section
182A.

(3) Whoever, sells or offers to sell, or permits the sale of any component of a motor vehicle which has been notified as a critical safety component by the Central Government and which does not comply with Chapter VII or the rules and regulations made thereunder shall be punishable with imprisonment for a term which may extend to one year or with fine of one lakh rupees per such component or with both.

The above Section talks about penalties, which requires enforcement of AIS-037 Standard to Aftermarket


CMVR-TSC – Agenda 4 (b) (i)
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
NOTIFICATION

New Delhi, the 13th September, 2018

G.S.R. 870(E).— Whereas, the draft rules further to amend the Central Motor Vehicles Rules, 1989 were published, as required under sub-section (1) of section 212 of the Motor Vehicles Act, 1988 (59 of 1988), *vide* notification of the Government of India in the Ministry of Road Transport and Highways *vide* number G.S.R. 528 (E), dated the 6th June, 2018, in the Gazette of India, Extraordinary,

2. In the Central Motor Vehicles Rules, 1989 (herein after referred as the said rules), in rule 92, for sub-rule (3), the following sub-rule shall be substituted, namely, –

"(3) Whenever a part, component, or assembly is compliant with the international standard namely, EEC or ECE or Japanese, in lieu of the standard notified in the rules, the compliance of such part, component or assembly shall be deemed to be established for the purpose of rules 124 and 126, by a certificate of compliance for the relevant standard issued by an authorised agency or accredited certifying agency."

The above Notification could help in introducing checks at Imports based on EEC, ECE & JIS Certifications and paves way for all other Imports of Safety Critical Items to follow Homologation route

Status of Portal

CMVR-TSC – Agenda 4 (b) (i)



- *ARAI and ACMA has discussed and finalized the flow chart of the portal*
- *Proposal detailing cost and time for creating portal has been shared by ARAI*
- *ACMA is seeking funding support from DHI. Proposal under discussion*
- *After receipt of clearance from ACMA, ARAI will start portal formulation of Portal. Estimated Time - 6 months*
- *ARAI will interact with all testing agencies during formulation of portal*

CMVR-TSC – Agenda 4 (b) (i)



Request to Chairman of CMVR-Technical Standing Committee
to advise way forward



Thank You

Updates on formulation of AIS: Hydrogen Fuel Cell Vehicles

59th AISC (19th Apr'2018)

Constitution of AISC panel
on Hydrogen Fuel Cell
Vehicle under convenorship
of M/s TATA Motors Ltd.

AISC Panel Meetings

1st : 13th July'2018
2nd : 21st Feb'2019
3rd : 10th Jan'2019
4th : 13th Sep'2019
5th : 9th Jan'2020

64th AISC (17th Jan'2020)

In principle approval of
draft standard by AISC
DRAFT AIS 157/D1/2020

TATA MOTORS
Connecting Aspirations

NATIONAL AND INTERNATIONAL STANDARDS CONSIDERED IN AIS-157

H2 Receptacles & Nozzles	H2 Storage System	H2 Fuel System Components	Fuel Cell System	Electric Propulsion
<ul style="list-style-type: none"> ISO 17268 Refueling Connection Devices ISO 15916 Hydrogen Safety WP2 HyApproval Refueling Station Approval 	<ul style="list-style-type: none"> ISO 19881 H2 Cylinders ISO 12619 Cylinder valves & Fittings EC 79/2009 Installation Safety 	<ul style="list-style-type: none"> ISO 12619 H2 Fuel Components EC 79/2009 Installation Safety 	<ul style="list-style-type: none"> GTR 13 H2 Fuel Cell Vehicles UN ECE R134 Hydrogen Fueled Vehicles ISO 27273 Functional Safety 	<ul style="list-style-type: none"> AIS-038 Construction/Functional Safety AIS-039 Energy Consumption AIS-041 Power Measurement AIS-048 Traction Battery AIS-049 Type Approval Process

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TATA MOTORS
Connecting Aspirations

Contents of AIS 157

DRAFT AIS-157/D1/2020

SAFETY AND PROCEDURAL REQUIREMENTS FOR TYPE APPROVAL OF COMPRESSED GASEOUS HYDROGEN FUEL CELL VEHICLES

GENERAL	REQUIREMENTS	OTHERS
<ul style="list-style-type: none"> Scope (M&N Category) Reference Standards Definitions 	<ul style="list-style-type: none"> Performance & Safety Requirements <ul style="list-style-type: none"> Fuelling Receptacle H2 Storage System H2 Fuel Lines Fuel Cell Stacks Electric Propulsion 	<ul style="list-style-type: none"> Safety Checklist & TA Requirements Vehicle Identification Label CMVR Specs for H2 Fuel Cell Vehicles

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Hydrogen Fueled Fuel Cell Vehicle

- Apart from formulation of standard and its notification under CMVR additional steps would need to be taken such as:
 - Notification of hydrogen fuel with purity index greater 99.97% in line with ISO 14687 and SAE J2719 for better fuel cell stack operations and life
 - Issuance of safety guidelines for hydrogen re-fueling stations in line with global practices.
- Draft standard AIS-157 is approved in principle during 64th AISC meeting.
- **Committee is requested to consider the above standard for adoption.**
- **Secretariat will submit details with respect to the additional steps (as indicated above) for perusal of the Ministry.**

AIS-162 Advanced Emergency Braking Systems (AEBS)

- A technical panel is working on formulating a standard on AEBS for M2, M3, N2 and N3 category vehicles.
- Demonstration trials of the AEBS technology for commercial vehicle and passenger car were arranged, during the third panel meeting, to understand the functioning of the system in detail.
- A need for initiating a project to review the performance of the technology in Indian traffic conditions has been envisaged.
- ESC is prerequisite for AEBS. EVSC for buses manufactured by OEM is mandated from 1st April 2023. Considering the same there is significant time for AEBS implementation.
- In view of the above it is felt that requirements with respect to forward vehicle collision warning systems (FCWS) can be worked out first. Also, this is independent of the implementation of EVSC.
- Basic requirements of in-lane collision warning are covered in draft AIS 162 whereas ISO 15623 covers the same in detail including design calculation and guidelines. The requirements for FCWS will be finalized in either a different standard or as part of AEBS standard.
- Committee may deliberate and approve the proposed action plan.

AIS 166 - New AIS on protective devices for two wheelers

- Draft D3 of the proposed standard is hosted on ARAI website and circulated to all panel members for seeking comments till 15th February 2020.
- AISC approved the draft in principle, in case of no comments.

Extending scope of AIS-145 to other than M1

- An important step in enhancing safety for driver and co drivers, in vehicles categories such as Quadricycles, M2, M3 and N, is proposed to be taken up by implementing revised IS 15140.
- The seat belt requirements are proposed to be mandated for all front facing seats of N1 and M2 category of vehicles which are less than 3.5 ton.
- This step is a logical prerequisite before implementing airbags.
- Transport categories vehicles are to be mandatorily fitted with speed limiting devices and thus the need for speed beep becomes redundant.
- Requirement of manual override is not needed for bus and trucks considering their nature of door and body construction.
- Crash standards with injury criteria are not mandated for such category of vehicles under UN Regulations.
- Requirement for reverse park alert system has been extended to M2, M3 and N Category vehicles.
- The panel after detailed deliberations on the subject concluded that requirements such as airbags, speed beep, seat belt reminder and manual override need not be mandated for L7, M2, M3 and N categories of vehicles.
- The subject may be reviewed, if needed, after implementation of safety belt requirements for such categories.
- **Committee is requested to review and endorse the proposed action plan.**

AIS for Battery Operated Agricultural Tractors

- In absence of any UN Regulation on the subject reference is drawn from EU Directives 167/2013, 2015/208 and 3/2014, While formulating draft AIS,
- The electric safety requirements are based on two and three wheeler directive 03/2014.
- Relevant AIS standards have been referred for requirements with respect to REESS safety, motor power, and EMC.
- Draft AIS has been formulated and circulated to the panel members for comments.
- Comments are received from stakeholders. The same will be reviewed in a panel meeting.
- **Committee may note.**

Super Single Tyre

- Two panel meetings were held on the subject.
- In the first meeting CRRRI reported that the super single tyre is considered for urban use.
- The performance analysis has been done at 30 km/h and CRRRI has been requested to conduct further studies to evaluate performance upto 80 km/h.
- Panel will review the proposed changes in CMVR 94 / 95 and the axle load notification which have been proposed by ARAI and M/s Tata Motors Limited respectively.
- Notification would be applicable to the rigid trucks or tractors having three or more axles considering overall safety and handling and that all possible tyre and axle load configurations were considered while formulating the draft manuscript
- Tyre industry has been requested to propose wide base tyre sizes for incorporation in IS 15636 before the next panel meeting
- Suitable tyre sizes can be picked from ITTAC manual in absence of data submission by tyre industry.
- **Committee may note.**

[TO BE PUBLISHED IN THE GAZETTE OF INDIA, EXTRAORDINARY, PART II, SECTION 3, SUB-SECTION (i)]

Government of India

Ministry of Road Transport and Highways

NOTIFICATION

New Delhi, the 2020.

G.S.R.....(E) The following draft of certain rules further to amend the Central Motor Vehicles Rules, 1989, which the Central Government proposes to make in exercise of the powers conferred by sections 109, 110 of Motor Vehicles Act, 1988 (59 of 1988) is hereby published as required by sub-section (1) of section 212 of the said Act for information of all persons likely to be affected thereby and notice is hereby given that the said draft rules shall be taken into consideration after expiry of thirty days from the date on which the copies of this notification as published in the Gazette of India are made available to the Public.

The objections or suggestions which may be received from any person with respect to the said draft rules before the expiry of the period aforesaid will be considered by the Central Government.

Objections or suggestions, to these draft rules, if any, may be sent to the Joint Secretary (Transport), email : js.tpt@gov.in, Ministry of Road Transport and Highways, Transport Bhawan, Parliament Street, New Delhi 110 001.

Draft rules

1. Short title and commencement.- (1) These rules may be called as the Central Motor Vehicles (..... Amendment) Rules, 2020.

(2) Save as otherwise provided in these rules, they shall come into force on the date of their final publication in the Official Gazette.

2. In the Central Motor Vehicles Rules, 1989 (hereafter referred as the principal rules), in rule 125, after sub-rules (1) and (1-A), the following provisos shall be inserted, namely: –

Provided that all front facing seats of every motor vehicle of M2 Category with GVW less than 3.5 tonnes and N1 Category manufactured on and after 1st April 2022 shall be equipped with a safety belt.

Provided further that Safety Belt Assemblies fitted on vehicles of categories M, N and L7 manufactured on and after 1st April 2022 shall conform to IS 15140:2018 as amended from time to time:

Provided also that the installation of Safety Belts and Restraint Systems on vehicles of categories M1 manufactured on and after 1st April 2022 shall conform to IS 16694:2018 as amended from time to time:

Provided also that the driver and co-driver seating positions of M1 category vehicles manufactured on and after 1st April 2022 shall be equipped with Safety Belt Reminders conforming to IS 16694:2018 as amended from time to time.

Provided also that safety belt reminders approved as per AIS 145-2017 shall be deemed to comply with the relevant requirements in IS 16694-2018.

TO BE PUBLISHED IN THE GAZETTE OF INDIA, EXTRAORDINARY
PART II, SECTION 3, SUB-SECTION (i)]
GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
New Delhi,

....., 2020

NOTIFICATION

G.S.R.----(E).—The following draft of certain rules further to amend the Central Motor Vehicles Rules, 1989, which the Central Government proposes to make in exercise of the powers conferred by section 109, 110 and 120 of the Motor Vehicles Act, 1988 (59 of 1988), is hereby published as required by sub-section (1) of section 212 of the said Act for information of all persons likely to be affected thereby; and notice is hereby given that the said draft rules shall be taken into consideration after the expiry of thirty days from the date on which the copies of this notification as published in the Official Gazette, are made available to the public;

Objections or suggestions, if any, may be sent to the Joint Secretary (Transport), Ministry of Road Transport and Highways, Transport Bhawan, Parliament Street, New Delhi-110001;

The objections or suggestions which may be received from any person in respect of the said draft rules before the expiry of the aforesaid period will be considered by the Central Government

Draft Rules

1. (1) These rules may be called the Central Motor Vehicles (.....Amendment) Rules, 2020
(2) Save as otherwise provided in these rules, they shall come into force on the date of their final publication in the Official Gazette.
2. After 6 Months from the date of publication of final notification, in Central Motor Vehicle Rules, 1989, in rule 125 H, in sub-rule (2), for the words and figures “AIS-140:2016, as amended from time to time, till such time the corresponding BIS specifications are notified under the Bureau of India Standards Act, 1986 (63 of 1986)” the words and figures “Annex A of IS:16833-2018, as amended from time to time” shall be substituted.
3. After 6 Months from the date of publication of final notification, in Central Motor Vehicle Rules, 1989, in rule 125 H, in sub-rule (3), for the words and figures “AIS-140:2016, as amended from time to time, till such time the corresponding BIS specifications are notified under the Bureau of India Standards Act, 1986 (63 of 1986)” the words and figures “ Annex A of IS:16833-2018, as amended from time to time” shall be substituted.

”

Manuscript of notification for amending MoEF Rules

MINISTRY OF ENVIRONMENT AND FORESTS

DRAFT

New Delhi, XX XX, 2020

G.S.R ###(E) - In exercise of the powers conferred by sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely –

(1) These rules may be called the Environment (Protection) XXXX Amendment Rules, 2020.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. In the Environment (Protection) Rules, 1986, in Schedule VI, in Part E relating to noise standards, in paragraph with the heading “AA- Noise limits for vehicles at manufacturing stage,” after the table in Serial No.2, the following shall be inserted, namely:-

“3) **Noise limits for vehicles applicable at manufacturing stage for vehicle manufactured on and after one year from the date of final notification for L2 Category vehicles as defined in clause (ib) of sub-rule (i) of rule 2, of Central Motor Vehicle Rules 1989:**

The noise limits shall be as specified below, when tested as per the Indian Standard 3028(Part 1):2018 standard, as amended from time to time.”

Power-to-mass Ratio Index (PMR) ⁽¹⁾	Noise limits dB(A)	
	L_{urban} ⁽¹⁾	L_{wot} ⁽¹⁾
PMR ≤ 25	Not Applicable	73
25 < PMR ≤ 50	74	Not Applicable
PMR > 50	77²⁾	Not Applicable

1) These terms are as defined in IS 3028 Part 1
2) For L2 category vehicles, tested in second gear only, the limit value is increased by 1 dB(A).

4) **Noise limits for vehicles applicable at manufacturing stage for vehicle manufactured on and after one year from the date of final notification for L5 Category vehicles as defined in clauses (ic), (id) and (j) of sub-rule (i) of rule 2, of Central Motor Vehicle Rules 1989:**

The noise limits shall be as specified below, when tested as per the Indian Standard 3028(Part 3):2018 standard, as amended from time to time.”

Serial Number	Type of vehicles	Noise limits dB(A)
1.	Three wheelers	
1.1	Displacement upto 175 cc	77
1.2	Displacement more than 175 cc	80”

MINISTRY OF ROAD TRANSPORT AND HIGHWAYS

NOTIFICATION

New Delhi, ## ####, 2020

G.S.R. ###(E).—The following draft of certain rules further to amend the Central Motor Vehicles Rules, 1989, which the Central Government proposes to make in exercise the powers conferred by section 110 the Motor Vehicles Act, 1988 (59 of 1988), is hereby published as required by sub-section (1) of section 212 of the said Act, for information of all persons likely to be affected thereby; and notice is hereby given that the said draft rules will be taken into consideration after the expiry of thirty days from the date on which the copies of this notification as published in the Gazette of India, are made available to the public;

The objections or suggestions which may be received from any person with respect to the said draft rules before the expiry of the period aforesaid will be considered by the Central Government;

Objections and suggestions to these draft rules, if any, may be sent to the Joint Secretary (Transport), Ministry of Road Transport and Highways, Transport Bhawan, Parliament Street, New Delhi-110 001.

DRAFT RULES

- (1) These rules may be called the Central Motor Vehicles (__ Amendment) Rules, 2020
(2) They shall come into force on the date of their final publication in the Official Gazette.
- In the Central Motor Vehicles Rules, 1989, the following shall be substituted in sub-rule (2) of rule 120,-
“Noise Standards- Every motor vehicle shall be constructed and maintained so as to conform to noise standards specified in Part E of the schedule VI to the Environment (Protection) Rules,1986, when tested as per the Indian standards ~~IS: 3028-1998~~ **specified in the above schedule, as amended from time to time:]”**

---XXX---

**MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
NOTIFICATION**

New Delhi, the ...th, 2020

S.O.(E).—In exercise of the powers conferred by sub-section (3) of section 109 and clause (k) of subsection (1) of section 110 of the Motor Vehicles Act, 1988 (59 of 1988), read with sub-rule (1) of rule 124 of the Central Motor Vehicles Rules, 1989, the Central Government hereby makes the following further amendments in the notification of Government of India in the erstwhile Ministry of Shipping, Road Transport and Highways (Department of Road Transport and Highways) number S.O. 1365(E) dated 13th December, 2004, published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-Section (ii), namely:-

(2) In the said notification, in the Table, for serial number 48 the following shall be substituted, namely: -

“

(1)	(2)	(3)	(4)
48	a) Spray Suppression Systems for two wheeled motor vehicles	AIS:103:2009 for vehicles specified therein	13 th December 2004 and valid upto date of implementation of 48 (b)
	b) Spray Suppression Systems for two wheeled motor vehicles	IS 16712: 2018, as amended from time to time.	Six months from the date of publication of this notification

”

(Note: Timeline of six months after publishing of notification is agreed in 63rd meeting of AISC)

Draft
Transitory Provisions for Implementing IS 2553 (Part 2):2019
(As per clause 6 of AIS 000)

Back ground:

The IS 2553 (Part 2):2019 is aligned with GTR 6 and UN R 43 and is published by BIS. These transitional provisions are approved by AISC in its 63rd meeting held on 18th September 2019.

Following transitional provisions are to be followed

“1. TRANSITIONAL PROVISIONS

- 1.1 At the request of the applicant, type approvals for compliance to IS 2553 (Part 2):2019, shall be granted by test agencies. Such type approvals shall be deemed to be compliance to CMV Rule 100 (1), (2), (3).
- 1.2 Type approvals issued for compliance to CMV Rule 100 (1), (2), (3), shall be extended to approval of IS 2553 (Part 2):2019, subject to satisfactory compliance of all the requirements specified in IS 2553 (Part 2):2019.
- 1.3 Extension of Approvals for engineering and administrative changes:
 - 1.3.1 In the case of 1.1, extensions shall be granted subject to the conditions of IS 2553 (Part 2):2019, Such extensions shall be deemed to be compliance to CMV Rule 100 (1), (2), (3).
 - 1.3.2 Extensions to approvals as per CMV Rule 100 (1), (2), (3) shall be granted till the date of implementation of IS 2553 (Part 2):2019 specified in CMVR notification.”

Request CMVR TSC to adopt the above transition provisions.

INDIAN CONSTRUCTION EQUIPMENT MANUFACTURERS' ASSOCIATION

57th CMVR-TSC meeting

13th Feb, 2020
NATRAX

Sl. No.	Concern	iCEMA Request
1	Few RTOs were insisting for registration of Off-highway CEMM eqpt. like Cold Recyclers / Soil Stabilizers, Cold milling machines, Large size Wheel Loaders, Dumpers etc.	Issue of Notification to all Transport departments not to consider these eqpt as CEVs and not to insist for registration.
2	Max. allowable height for CEVs, when they are loaded on a truck (for transportation) to be changed from 3.8 m to 4.75 m	Amendment to be issued to Rule 93 to increase the max allowable height while transportation
3	Post implementation of the e-vahan, there are many concerns faced while registration of CEVs. Proposed to amend the e-vahan software as follows: <ul style="list-style-type: none"> •GVW Field to be disabled for CEVs. •CEVs to be added in Vehicle category •Dual Fuel (Diesel +CNG) to be added in fuel category 	To convene a meeting with NIC to resolve these concerns.

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INDIAN CONSTRUCTION EQUIPMENT MANUFACTURERS' ASSOCIATION

Sl. No.	Concern	iCEMA Request
4	ICEMA's proposal of using 200*100 size HSRP was not specified in the MoRTH notification dated 18 th July 2019.	Request to add 200*100 size HSRP for CEVs in the notification.
5	As per CMV Rule-95 – 2A, “The maximum Safe Load for single axle with two or more tyres shall not exceed 10.2 t” for CEVs.	<i>Ref.: Notification no S.O. 3467(E) dt. 16th July, 2018 & S.O. 3881(E) dt. 6th Aug, 2018 for Transport vehicles</i> Request to issue a notification increasing the maximum Safe Axle Load for CEVs (with single axle & four tyres) from 10.2t to 12.5t fitted with pneumatic suspension (Ref: iCEMA letter dated 9 th August 2018)

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INDIAN CONSTRUCTION EQUIPMENT MANUFACTURERS' ASSOCIATION

6. Re-christening the nomenclature of Emission norms for CEVs
(Ref: iCEMA's letter dt. 30th Sep. 2019)

Sl. No	Engine Power band (kW)	Notified Emission Nomenclature	Proposed Emission Nomenclature	Implementation Date	Related MoRTH Notification no.
1	37 ~ 560	Bharat Stage (CEV/TREM) – IV	CEV Stage - IV	1 st Oct. 2020	GSR 201(E) dt 5 th March 2018
2	All Power	Bharat Stage (CEV/TREM) – V	CEV Stage - V	1 st Apr. 2024	
3	< 37	Bharat Stage III (CEV)	CEV Stage - IV	1 st Oct. 2020	GSR 276(E) dt 10 th April 2007
4	< 37	Bharat Stage III (CEV)	CEV Stage- III	Three Months from the date of confirmation of revised nomenclature*	

* Three months to be used to obtain CMVR compliance certificate with the new nomenclature.

As one gets closer to the BS - VI deadline for Motor Vehicles, we request MoRTH to issue an advisory to all concerned

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Agenda points submitted by TMA

Sl. No.	Concern	Decision of CMVR-TSC
1	<p>Earlier in CMVR 124A,- (5) The tow hook wherever used in agricultural tractor shall be in accordance with IS:12362 (Part 2), as amended from time to time was specified.</p> <p>Subsequently the above rule was substituted for replacing IS 12362 Part (2) by AIS 091 (Part2).</p> <p>However, the word, "Wherever used" is missing due to Typographical Error.</p>	It was agreed to amend sub-rule 5A of CMV Rule 124A accordingly.
2	<p>The Tractors are procured based on the HP of the Engine.</p> <p>In the "Vahan" portal, the Power of the engines in "KW" But, in Form -23, generated by "Vahan portal", the unit of measure used for the Engine power is converted in to "British HP" (1 British HP =0.7457 KW)</p> <p>It is essential to use the correct unit of measure for Engine HP, namely Metric system. "Metric HP" (1 Metric HP=0.7355KW).</p>	It was agreed to request NIC to do the appropriate changes as proposed.

Agricultural Tractor Trailer brake

Background:

- **As per GSR 492(E) - From 1st Jan 2016, all tractors were to be fitted with hydraulic pump and valve with suitable pipe connection for actuating brakes of agricultural trailers having hydraulic brake. Accordingly tractor OEM has started providing the same through dealer installed kit. The same had been approved for all the models through CMVR and is continuing.**
- **The S.O.1473(E) date 22th April 2016 exempts agricultural trailer from this requirement.**
- **However till date all the tractor OEMs needs to test their tractor with trailer brake kit provision during CMVR certification.**

Proposal:

- **Since the Trailer brake requirement got exempted for trailer manufacturer, requesting to exempt the requirement of trailer brake provision on Tractors in CMVR.**

Indian Agriculture Mechanization

1. (1) These rules may be called the **Central Motor Vehicles (...Amendment) Rules, 2015**.
- (2) They shall come into force on the date of their final publication in the Official Gazette.
2. In the Central Motor Vehicle Rules, 1989 (hereinafter referred to as the principal rules), in rule 96C, for the existing proviso, the following proviso shall be substituted, namely:-

"Provided that every agricultural tractor manufactured on or after 1st January, 2016 and coupled with agricultural trailer shall meet the following requirements to facilitate agricultural trailer having hydraulic brake system as per AIS:043-2005 specification referred to in sub-rule (3) of rule 97, namely:-

 - (a) a hydraulic pump and valve with suitable pipe connections on the tractor;
 - (b) a hydraulic piping and pressure lines on the tractor supplied by the OEM as accessories, to be fitted on the tractor by their dealers which shall be terminated at the rear end of the tractor, to facilitate tapping of hydraulic line for trailer;
 - (c) the hydraulic line pressure available at the rear end of the tractor shall be clearly specified by the manufacturer for each type and model of the tractor in the owner's manual;
 - (d) the tractor shall have the minimum provision for connecting the trailer brake actuation cable or linkage."
3. In the principal rules, in rule 97, in sub-rule (3), the following proviso shall be inserted, namely:-

"Provided that every agricultural trailer manufactured on or after 1st January, 2016 shall meet the following requirements for compliance to agricultural trailer brake system as per AIS:043-2005 specification, as amended from time to time, namely:-

 - (a) fitment of the hydraulic braking system or inertia over-run braking system such as foundation brake (drum or disc, etc.) actuation systems on the trailer including the proportional or control valve;
 - (b) type approval of agricultural trailer braking system requirements as per AIS-043-2005, as amended from time to time."

Sd/-
(Sanjay Bandopadhyaya)

MINISTRY OF ROAD TRANSPORT AND HIGHWAYS

NOTIFICATION

New Delhi, the 22nd April, 2016

S.O. 147N(E)—In exercise of the powers conferred by sub-section (3) of section 110 of the Motor Vehicle Act, 1988 (59 of 1988), the Central Government hereby exempts agricultural trailers from the purview of rule 96C and sub-rule (3) of rule 97 of the Central Motor Vehicles Rules, 1989 till 1st January, 2017 or until further orders, whichever is earlier.

[F. No. RT-11036/31/2010-MVL]

ABHAY DAMLE, Jr. Secy.



7-Pin Connector – For Trailers

Background:

- GSR 111(E) dated 10th Feb 2004, mandated for lighting and light signaling devices for agricultural tractor shall be in accordance with AIS:030 which also mandates tractor shall be fitted with the permanently connected socket outlet (7 pole connector)
- The intention of this 7 pole connector provision is to illuminate the light & light signaling device provided on the agricultural trailer.
- Till date agricultural trailer in India do not have the lighting devices on the trailer.
- AIS 112 has been formulated for Code of Practice for Construction & Approval of Agricultural Trailers, however this standard is not yet enforced.
- As on date all the tractor OEMs are providing the 7 pin connector socket on the tractor to get the CMVR certificate which is not used for any purpose as Agri Trailers do not have a lighting provision as per AIS 112.

Proposal:

- Since agricultural trailer is not covered under regulatory regime and there is no end user for this 7 pole connector socket.
- We propose to exempt this requirement for Agricultural tractor in CMVR.



7-Pin Connector – For Trailers

- (2) The lighting and light signalling devices for agricultural tractor shall be in accordance with AIS:030, as amended from time to time, till such time the corresponding BIS standard is notified.

Provided that the performance requirements of the lighting, light signalling and indicating systems of agricultural tractor manufactured on and from 1st April, 2005 shall be in accordance with safety standard AIS: 062, as amended from time to time, till such time corresponding BIS standards are notified.

- (3) The hydraulic brake hoses wherever used in agricultural tractor and its trailer shall be in accordance with IS:7079-1995, as amended from time to time.

AIS-030 (Rev.1):2012

4.0 RESERVED PARAGRAPH

5.0 GENERAL REQUIREMENTS

- 5.1 The lighting and light-signalling devices shall be so fitted that under normal conditions of use, and notwithstanding any vibration to which they may be subjected, they retain the characteristics laid down in this Standard and enable the tractor to comply with the requirements of this Standard. In particular, it shall not be possible for the adjustment of the lamps to be inadvertently disturbed

- 5.1.1 Tractors shall be equipped with electrical connection to enable a detachable light-signalling system to be used. In particular, tractor shall be fitted with the permanently connected socket outlet specified in IS: 13460-1992, IS: 13461-1992 and IS: 14683 –1999.

ग II—खण्ड 3(1)]

भारत का राष्ट्रीय : अक्षर

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