AUTOMOTIVE INDUSTRY STANDARD

Specific Exemptions for Armoured Vehicles from the notified provisions under the Central Motors Vehicles Rules, 1989

INTRODUCTION

The Government of India felt the need for a permanent agency to expedite the publication of standards and development of test facilities in parallel when the work on the preparation of the standards is going on, as the development of improved safety critical parts can be undertaken only after the publication of the standard and commissioning of test facilities. To this end, the erstwhile Ministry of Surface Transport (MOST) has constituted a permanent Automotive Industry Standards Committee (AISC) vide order No. RT-11028/11/97-MVL dated September 15, 1997. The standards prepared by AISC will be approved by the permanent CMVR Technical Standing Committee (CTSC). After approval, the Automotive Research Association of India, (ARAI), Pune, being the Secretariat of the AIS Committee, has published this standard. For better dissemination of this information ARAI may publish this standard on their web site.

As per directions of MoRTH, it is proposed to deliberate on the exemptions needed for armoured vehicles from certain CMVR requirements, due to their nature of use and construction. Ministry has been receiving request for granting exemptions on case to case basis and it is felt that the subject may be discussed in detail and a simpler process could be formulated to facilitate such exemptions comprehensively without having the need to review each case separately.

The AISC panel and the Automotive Industry Standards Committee responsible for preparation of this standard is given in Annexure-1 and Annexure-2 respectively.

Specific Exemptions for Armoured Vehicles from the notified provisions under the Central Motors Vehicles Rules, 1989

1.0	SCOPE: Requirement of this standard shall be applicable to Armoured Vehicles of Category M and N, as defined in IS 14272:2011, as amended from time to time.
2.0	REFERENCE:
2.1	Regulation (EU) 2018/858: approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles, amending Regulations (EC) No 715/2007 and (EC) No 595/2009 and repealing Directive 2007/46/EC.
2.2	Central Motor Vehicle Rules (CMVR) 1989.
3.0	DEFINITIONS:
3.1	Armoured Vehicles means a special purpose vehicle of category M and N which is intended for the protection of conveyed persons or goods with antibullet armour plating.
4.0	CMVR REQUIREMENTS FOR ARMOURED VEHICLES:
	Armoured vehicles shall comply with the requirements of CMVR, as amended from time to time, for the purpose of type approval after taking into consideration the exemptions in Table 1.

Table 1

Provisions for consideration for CMVR requirements exemption of Armoured Vehicles.

Item	Subject	M1	M2	M3	N1	N2	N3
1	Installation of tyres as per AIS-051.	A	A	A	A	A	A
2	Pneumatic tyres for motor vehicles and their trailers (Class C1) as per IS 15633:2005.	A	-	-	-	-	-
3	Pneumatic tyres for commercial vehicles and their trailers (Classes C2 and C3) as per IS 15636:2005.	-	A	A	A	A	A
4	Tyre rolling sound	A	A	A	A	A	A

emissions, adhesion on wet surfaces and rolling resistance (Classes C1, C2 and C3) as per AIS-142. 5 Temporary-use spare unit, run-flat tyres/system as per AIS-110 and tyre pressure monitoring system as per AIS-110 and tyre pressure monitoring system as per AIS-154 6 Protection of occupants in the event of a frontal collision as per AIS-096. 7 Requirement for the protection of occupants in the event of an offset frontal collision as per AIS-098. 8 Protection of occupants in the event of lateral collision as per AIS-099. 9 Pedestrian protection as per AIS-099. 9 Pedestrian protection as per AIS-099. 10 Safety glazing materials as per IS 2553 (Part 2):1992 and their installation on vehicles. 11 Windscreen wiper and washer systems as per IS 15804:2008 or IS 15804:2008 as applicable. 12 Audible warning devices and signals as per IS 1884 or A+H A+H A+H A+H A+H A+H IS 15796:2008 13 External Projection as per AIS-100 A A A A A A A A A A A A A A A A A A				ı	ı	ı	ı	
run-flat tyres/system as per AIS-110 and tyre pressure monitoring system as per AIS-154 6 Protection of occupants in the event of a frontal collision as per AIS-096. 7 Requirement for the protection of occupants in the event of an offset frontal collision as per AIS-098. 8 Protection of occupants in the event of lateral collision as per AIS-099. 9 Pedestrian protection as per AIS-099. 9 Pedestrian protection as per AIS-100. 10 Safety glazing materials as per IS 2553 (Part 2):1992 and their installation on vehicles. 11 Windscreen wiper and washer systems as per IS 15804:2008 as applicable. 12 Audible warning devices and signals as per IS 1884 or IS 15796:2008 13 External Projection as per AIS-120 or IS 13942:1994 as applicable. 14 Installation of lighting and light-signaling devices on vehicles as per AIS-008 (Rev.1). 15 Forward field of vision as		surfaces and rolling resistance (Classes C1, C2						
the event of a frontal collision as per AIS-096. 7 Requirement for the protection of occupants in the event of an offset frontal collision as per AIS-098. 8 Protection of occupants in the event of lateral collision as per AIS-099. 9 Pedestrian protection as per AIS-100. 10 Safety glazing materials as per IS 2553 (Part 2):1992 and their installation on vehicles. 11 Windscreen wiper and washer systems as per IS 15802:2008 or IS 15802:2008 or IS 15804:2008 as applicable. 12 Audible warning devices and signals as per IS 1884 or IS 15796:2008 13 External Projection as per AIS-120 or IS 13942:1994 as applicable. 14 Installation of lighting and light-signaling devices on vehicles as per AIS-008 (Rev.1).	5	run-flat tyres/system as per AIS-110 and tyre pressure monitoring system as per	A+C	-	-	A+C	-	-
protection of occupants in the event of an offset frontal collision as per AIS-098. 8 Protection of occupants in the event of lateral collision as per AIS-099. 9 Pedestrian protection as per AIS-100. 10 Safety glazing materials as per IS 2553 (Part 2):1992 and their installation on vehicles. 11 Windscreen wiper and washer systems as per IS 15802:2008 or IS 15804:2008 as applicable. 12 Audible warning devices and signals as per IS 1884 or IS 15796:2008 13 External Projection as per AIS-120 or IS 13942:1994 as applicable. 14 Installation of lighting and light-signaling devices on vehicles as per AIS-008 (Rev.1). 15 Forward field of vision as	6	the event of a frontal	A	-	-	-	-	-
the event of lateral collision as per AIS-099. 9 Pedestrian protection as per AIS-100. 10 Safety glazing materials as per IS 2553 (Part 2):1992 and their installation on vehicles. 11 Windscreen wiper and washer systems as per IS 15802:2008 or IS 15802:2008 as applicable. 12 Audible warning devices and signals as per IS 1884 or IS 15796:2008 13 External Projection as per AIS-120 or IS 13942:1994 as applicable. 14 Installation of lighting and light-signaling devices on vehicles as per AIS-008 (Rev.1). 15 Forward field of vision as	7	protection of occupants in the event of an offset frontal	В	-	-	-	-	-
AIS-100. AIS-100. A A A A A A A A A A A A A A A A A A A	8	the event of lateral collision	A	-	-	A	-	-
per IS 2553 (Part 2):1992 and their installation on vehicles. A A A A A A A A A A A A A A A A A A A	9		A	-	-	A	-	-
washer systems as per IS 15802:2008 or IS 15804:2008 as applicable. A D D D D AHH AHH AHH AHH AHH AHH IS 15796:2008 External Projection as per AIS-120 or IS 13942:1994 as applicable. A A A A A A A A A A A A Installation of lighting and light-signaling devices on vehicles as per AIS-008 (Rev.1). Forward field of vision as I D D D D D D D D D D D D D D D	10	per IS 2553 (Part 2):1992 and their installation on	A	A	A	A	A	A
and signals as per IS 1884 or IS 15796:2008 13 External Projection as per AIS-120 or IS 13942:1994 as applicable. 14 Installation of lighting and light-signaling devices on vehicles as per AIS-008 (Rev.1). 15 Forward field of vision as	11	washer systems as per IS 15802:2008 or IS	A	D	D	D	D	D
AIS-120 or IS 13942:1994 A A A A A A A A A A A A A A A A A A	12	and signals as per IS 1884 or	A+H	А+Н	A+H	A+H	А+Н	А+Н
light-signaling devices on vehicles as per AIS-008 (Rev.1). A+I	13	AIS-120 or IS 13942:1994	A	A	A	A	A	A
	14	light-signaling devices on vehicles as per AIS-008	A+I	A+I	A+I	A+I	A+I	A+I
	15	Forward field of vision as AIS-021.	J					

16	Strength of the superstructure of large passenger vehicles as per AIS-031.	-	A	A	-	-	-
17	Spray Suppression System as per AIS-013 (Rev.1).	-	-	-	A	A	A
18	Interior fittings AIS-047 or IS 15223:2002	A	A	A	A	A	A
19	Interior Noise as per IS 12832:2010	A	A	A	A	A	A
20	Bumpers as per IS 15901:2010	A	-	-	-	-	-
21	Windscreen defrosting and demisting systems as per AIS-084 (Part 1) and (Part 2).	A	F	F	F	F	F
22	Front Under Run Protection Devices as per AIS-069.	-	-	-	-	A	A
23	Rear Under Run Protection Device as per IS:14812:2005	-	A	A	-	A	A
24	Vehicle Lateral Protection Side SUPD as per IS:14682:2004	-	A	A	-	A	A
25	Devices for indirect vision and their installation as per AIS-001 (Rev.1) and AIS- 002 (Rev.1).	A+G	A+G	A+G	A+G	A+G	A+G
26	Safety belt anchorages as per IS 15140:2003, Isofix anchorages systems and Isofix top tether anchorages.	A	A	A	A	A	A
27	Seats, their anchorages and any head restraints AIS-023 or IS 15546:2005 as applicable.	E	-	-	E	Е	Е

28	Seats of large passenger	_	Е	Е	_	_	_
	vehicles as per AIS-023.						
29	Child restraint system as per AIS-072.	N/A	N/A	N/A	N/A	N/A	N/A
30	Additional Safety Features for M1 Category of vehicles as per AIS-145.	N/A	-	-	-	-	-
31	Speed Governor-Speed Limiting Function as per AIS-018	-	A	A	A	A	A
32	Towing device	A	A	A	A	A	A
33	M2 and M3 vehicles as per AIS-052 (Rev. 1) and AIS- 153 as applicable.	-	A	A	-	-	-
34	Truck Body Code as per AIS-093 (Rev.1)	-	-	-	-	A	A
35	Recyclability as per AIS-129.	A	A	A	A	A	A
36	Hydrogen system as per AIS-157.	A	A	A	A	A	A
37	Vehicle Alarm system and immobilizer for M1 & N1 cat. having GVW less than 2 ton (Other category if fitted) as per AIS-076	K	K	K	K	K	K
38	Provision of vehicle location tracking device and emergency button as per AIS-140	N/A	N/A	N/A	N/A	N/A	N/A
39	ESC requirement as per AIS-150	K	K	K	K	K	K
40	Approval of Retro- Reflecting Devices as per AIS-057 (Rev.1)	A	A	A	A	A	A
41	Window retention & release system for Buses as per IS 13944:1994	A	A	A	A	A	A

42	Constant Speed Fuel consumption test as per IS 11921:1993	M	M	M	M	М	М
43	Vehicle reverse parking alert system as per AIS-145	A	A	A	A	A	A
44	Emission	L	L	L	L	L	L
45	Door latches and hinges	A	A	A	A	A	A
46	Protection of driver against the steering mechanism in the event of impact	N/A	-	ı	N/A	-	-

- (A) The Testing Agency may only grant exemption(s) if the manufacturer demonstrates that the vehicle cannot meet the requirements due to its special purpose. The exemptions granted are to be described on the vehicle type- approval certificate and the certificate of conformity.
- (B) If GVW of vehicle is more than 2.5 T then vehicle is exempted for this test.
- (C) Applies only where such vehicles are fitted with equipment covered by AIS-154.
- (D) Vehicles of categories other than M1 do not need to fully comply with CMVR but shall be fitted with a windscreen washing and wiping devices.
- (E) Application limited to seats designated for normal use where the vehicle is used on a public road. Seats that are not designated for use where the vehicle is used on the public road are to be clearly identified to users either by means of a pictogram or a sign with an appropriate text. The luggage retention requirements of UN Regulation No 17 do not apply.
- (F) Vehicles of categories other than M1 do not need to fully comply with CMVR but shall be fitted with a windscreen defrosting and demisting device.
- (G) When the vehicle is fitted with rigid body structure instead of safety glazing at the rear end, fitment of interior mirror is not mandatory. In such case rear vision of vehicle shall be displayed with the help of rear-view camera. Then fitment of rear-view mirror is optional for M1 category vehicle as per clause No 15.2.2.10 of AIS 002 (Part-1) (Rev -1).
- (H) Additional panic alarm devices are permitted.
- (I) Provided that all mandatory lighting devices are installed and that the geometric visibility is not affected.
- (J) The light transmission factor is at least 60 % and the 'A' pillar obstruction angle is not more than 10 degrees.

- (K) Applies only where vehicles are fitted with such equipment.
- (L) In CMV Rule 115, vehicle used for Government purposes relating to the defence of the country which is registered under Section 60 of the Act and to the special purpose vehicles (armoured and other specialised vehicles used for operational purposes for the maintenance of law and order and internal security) are exempted from BSIV & BSVI norms.
- (M) Test is mandatory & limit requirements are exempted

ANNEXURE 1					
(See Introduction)					
	OSITION OF AISC PANEL *				
Convener					
Mr. A. A. Badusha	ARAI				
Members	Representing				
Mr. K. C. Sharma	MORTH				
Mr. K. S. Deswal	CRRF				
Dr. A. V. Marathe	ARAI				
Mr. Kamalesh Patil	ARAI				
Mr. Pratik Nayak	ARAI				
Mr. S. N. Dhole	CIRT				
Ms. Shubhangi Dalvi	CIRT				
Ms. Vijayanta Ahuja	ICAT				
Mr. Mayak Sharma	ICAT				
Mr. Muthukumar N.	Ashok Leyland Ltd.				
Mr. Faustino V.	Ashok Leyland Ltd.				
Mr. P. S. Gowrishankar	Tata Motors Ltd.				
Mr. Sharad Bhole	Tata Motors Ltd.				
Mr. Uday Salunkhe	Tata Motors Ltd.				
Col. (Retd) Gurmeet Singh	Mahindra – Defense Services				
Mr. Santosh Khollam	Mahindra – Defense Services				
Mr. V. G. Kulkarni	Mahindra Truck & Bus Div.				
Mr. Kulkarni Shailesh	Mahindra & Mahindra				
Mr. Ram Mohan	DCM Shriram				
Mr. Santosh Jadhav					
Mr. Shrikant Joshi					
Mr. Sujeetkumar Patel					

^{*} At the time of approval of this Automotive Industry Standard (AIS)

ANNEXURE E

(See Introduction)

COMMITTEE COMPOSITION * Automotive Industry Standards Committee

Chairperson	
Dr. Reji Mathai	Director, The Automotive Research Association of India, Pune
Members	Representing
Representative from	Ministry of Road Transport and Highways (Dept. of Road Transport and Highways), New Delhi
Representative from	Ministry of Heavy Industries (Department of Heavy Industry), New Delhi
Shri S. M. Ahuja	Office of the Development Commissioner, MSME, Ministry of Micro, Small and Medium Enterprises, New Delhi
Shri Shrikant R. Marathe	Former Chairman, AISC
Shri R.R. Singh	Bureau of Indian Standards, New Delhi
Director	Central Institute of Road Transport, Pune
Director	Global Automotive Research Centre
Director	International Centre for Automotive Technology, Manesar
Director	Indian Institute of Petroleum, Dehra Dun
Director	Vehicles Research and Development Establishment, Ahmednagar
Director	Indian Rubber Manufacturers Research Association
Representatives from	Society of Indian Automobile Manufacturers
Shri R. P. Vasudevan	Tractor Manufacturers Association, New Delhi
Shri Uday Harite	Automotive Components Manufacturers Association of India, New Delhi
Shri K. V. Krishnamurthy	Indian Construction Equipment Manufactures' Association (ICEMA), New Delhi
Member Secretary	
Shri Vikram Tandon	The Automotive Research Association of India, Pune

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