



**C A R A 1176**

**Date : 07<sup>th</sup> December 2022**

**ANNEXURE - I**

Rule No.	Sub Rule(s)	Description	Standard
114	(1)	Exhaust gases	GSR 240(E) dt. 31.03.2021
	(2)	Location of exhaust pipes	
115-B	BB (II) & (D)	Mass Emission Standards for LNG vehicles (For in-use Diesel Vehicle converted to LNG)	GSR 84 (E) dt. 09.02.2009 & GSR 1151(E) dt. 29.11.2018 & Part XV of MoRTH/CMVR/TAP-115/116
	BB (II)	Electromagnetic compatibility (EMC)	AIS-004 (Part 3)-2009
115-B	(E)	LNG Safety Checks for LNG Kit Components and Installation on the vehicle	As per AIS 024 Rev1 & 028 Rev1 and respective standards referred in the Notification No.GSR 643(E) dt. 27.06.17, GSR 490(E)dt.24.05.18 & Gas Cylinder Rules, 2016
124	(4) Sl. No. 5	The procedure for Type Approval and establishing Conformity of production for components – LNG Regulator Model No. PCMB1010P55F1500-A16/A Report No. CT0GR 9240 dt. 13.09.2022	GSR 784(E) dt. 12.11.2008
Mass Emission Test, Engine Performance, Gradeability, Range Test, Cooling Performance, and Fuel Consumption Test. (Ref: GSR 589(E) dt. 16-09-2005 , GSR No. 853(E) dt. 19-11-2001& GSR 84 (E) dt. 09.02.2009)			Meets the requirement of sub clauses (i),(ii),(iii),(v), (vi) & (vii)

**ANNEXURE - II**

Standards	Notification	Date	Effective From	Applicable CMVR
Safety Checks for use of LNG Fuels in internal combustion engines (as per AIS 024 & 028(Rev.1) (Part A)) and Gas Cylinder Rules, 2016	GSR 643(E)	27.06.2017	27.06.2017	115-B (E)
	GSR 490(E)	24.05.2018	01.10.2018	

**Compliance of Mass Emission Standards & Validity**

LNG converted "In-use " diesel vehicle "LPT 1613 TC/52" (October 2012 make) with B 5.9 130 31 engine, fitted with catalytic converter as a part of LNG kit, meets the **Bharat Stage – IV** norms, Same kit can be fitted on the vehicle model/variants fitted with the same capacity engine manufactured/registered from **1<sup>st</sup> January 2012 to 31<sup>st</sup> March 2020**, subject to specific approval, for layout plan by ICAT, for retrofitment of LNG kit.

<b>ICAT Ref No.</b>	2022-0778.; IOCS No. 159572
<b>Emission Report No.</b>	CTOER 0477 dt. 29.11.2022 (Spark Plug-BOSCH (FR6DC4), Catcon-TTWW Catalytic Converter Co., Ltd. China (5263133), ECU-M/s.Omnitek Engineering Corp. USA (ECM66AATA), Gas Injector- M/s.Omnitek Engineering Corp. (IG-6)

<b>AUTHORISED SIGNATORY</b>			
<b>VIJAYANTA AHUJA</b> DEPUTY GENERAL MANAGER	<b>SAURABH DALELA</b> DIRECTOR		