**Amendment 7 (04/2019)**

**To**

**AIS-007 (Rev.5): Information on Technical Specifications to be submitted by the Vehicle Manufacturer.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **1.** | **Table 1C** | | | |
|  | Insert New Sr. Nos. 0.7.2,0.7.3 and 0.7.4 after Sr. No. 0.7.1: | | | |
|  | 0.7.2 | Specify : For Mass emission and for Evaporative emission test Deterioration factor to be used from notification or actual durability/aging test to be performed | **:** |  |
|  | 0.7.3 | Description for type II test ‘service mode’ | **:** |  |
|  | 0.7.4 | Description for Components for adjusting the idling speed | **:** |  |
|  |  | | | |
| **2.** | **Table 1C, Sr. No. 1.1** | | | |
|  | Substitute following text for existing text: | | | |
|  | 1.1. | Photographs and/or drawings of a representative / vehicle | **:** |  |
|  |  | | | |
| **3.** | **Table 1C, Sr. Nos. 1.4.3 and 1.4.4** | | | |
|  | Substitute following text for existing text: | | | |
|  | 1.4.3. | Maximum net power combustion engine  (kW/min-1 at A/F ratio)(10) | **:** |  |
|  | 1.4.4. | Maximum net torque combustion engine  (Nm/min-1 at A/F ratio) (10) | **:** |  |
|  |  | | | |
| **4.** | **Table 1C, Sr. Nos. 1.4.7, 14.8, 1.4.9 and 1.4.10** | | | |
|  | Substitute following text for existing text: | | | |
|  | 1.4.7. | Maximum continuous total power for propulsion(s)  (kW/min-1 at A/F ratio)(10) | **:** |  |
|  | 1.4.8. | Maximum continuous total torque for propulsion(s)  (Nm/min-1 at A/F ratio)(10) | **:** |  |
|  | 1.4.9. | Maximum peak power for propulsion(s)  (kW/min-1 at A/F ratio) (10) | **:** |  |
|  | 1.4.9.1 | Maximum fuel delivery (1), (2). ........... (kg/hr) or (mm3 /stroke) or cycle at max net power speed......... (min-1) or characteristic diagram:  If boost control is supplied, state the characteristics fuel delivery and boost pressure versus engine speed | **:** |  |
|  | 1.4.9.2 | Maximum permitted depression of air intake at characteristic place kPa (Specify location of measurement) | **:** |  |
|  | 1.4.9.3 | Exhaust back pressure at maximum net power and location of measurement (kPa) | **:** |  |
|  | 1.4.9.4 | Effective volume of exhaust (specify the tolerance and range) | **:** |  |
|  | 1.4.9.5 | Moment of inertia of combined flywheel and transmission at condition when no gear is engaged | **:** |  |
|  | 1.4.9.6 | Power absorbed by fan kW (specify the tolerance) | **:** |  |
|  | 1.4.9.7 | Maximum Net torque on bench Nm at rpm | **:** |  |
|  | 1.4.10. | Engine Power Table (Engine Performance Declared speed and powers of the engine submitted for type approval) (Speeds to be agreed with the testing agency) (10) | **:** |  |
|  |  | | | |
| **5.** | **Table 1C, Sr. No. 3.1.2.3** | | | |
|  | Insert New Sr. No 3.1.2.3 after Sr. No. 3.1.2.2: | | | |
|  | 3.1.2.3 | Part No./ Identification No. | **:** |  |
|  |  | |  |  |
| **6.** | **Table 1C, Sr. No. 3.2.1.2** | |  |  |
|  | Substitute following text for existing text: | |  |  |
|  | 3.2.1.2 | Working principle: internal combustion engine (ICE) / positive ignition / compression ignition / external combustion engine (ECE) / turbine / compressed air / GDI / IDI | **:** |  |
|  |  | | | |
| **7.** | **Table 1C** | | | |
|  | Insert New Sr. Nos. 3.2.1.7.1, 3.2.1.7.2, 3.2.1.7.3 and 3.2.1.7.4 after Sr. No. 3.2.1.7: | | | |
|  | 3.2.1.7.1 | Number and minimum cross-sectional areas of inlet and outlet ports | **:** |  |
|  | 3.2.1.7.2 | Valve timing or equivalent data | **:** |  |
|  | 3.2.1.7.3 | Maximum lift of valves, angles of opening and closing, or timing details of alternative distribution systems, in relation to dead centres. For variable timing system, minimum and maximum timing | **:** |  |
|  | 3.2.1.7.4 | Reference and/or setting ranges | **:** |  |
|  |  | | | |
| **8.** | **Table 1C, Sr. Nos. 3.2.1.9 and 3.2.1.9.1** | | | |
|  | Substitute following text for existing text: | | | |
|  | 3.2.1.9. | Nominal engine idling speed (min-1)(Including tolerance): | **:** |  |
|  | 3.2.1.9.1 | High idle engine speed (min-1) (Including tolerance):  Lambda /O2 Sensor make | **:** |  |
|  | 3.2.1.10. | Stop-start system: yes / no | **:** |  |

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| **9.** | **Table 1C** | | | |
|  | Insert New Sr. Nos 3.2.1.10.3 and 3.2.1.10.4 after Sr. No. 3.2.1.10.2.5.5.2.1: | | | |
|  | 3.2.1.10.3 | Powertrain / propulsion / drive-train management system | **:** |  |
|  | 3.2.1.10.4 | PCUs / ECUs | | |
|  | 3.2.1.10.4.1 | Make | **:** |  |
|  | 3.2.1.10.4.2 | Number (s) of ECU | **:** |  |
|  | 3.2.1.10.4.2 | Identification / Part No. | **:** |  |
|  | 3.2.1.10.4.3 | Calibration identification number (16 digits) | **:** |  |
|  | 3.2.1.10.4.4 | calibration verification number, | **:** |  |
|  |  | | | |
| **10.** | **Table 1C** | | | |
|  | Insert New Sr. Nos. 3.2.3.2.1.1 after Sr. No. 3.2.3.2.1: | | | |
|  | 3.2.3.2.1.1 | Fuel Pump Type, Make, Identification/ Part Number | **:** |  |
|  |  | | | |
| **11.** | **Table 1C, Sr. Nos. 3.2.4.1.1** | | | |
|  | Substitute following text for existing text: | | | |
|  | 3.2.4.1.1 | Make(s), type and Identification No/Part No. | **:** |  |
|  | 3.2.4.1.1.1 | Jets (indicate venture diameter, main jet, pilot  jet) | **:** |  |
|  | 3.2.4.1.1.2 | Maximum Level in float chamber | **:** |  |
|  | 3.2.4.1.1.3 | Mass of float | **:** |  |
|  | 3.2.4.1.1.4 | Fuel curve as a function of the air flow and setting required in order to maintain that curve | **:** |  |
|  |  | | | |
| **12.** | **Table 1C, Sr. Nos. 3.2.4.3.2** | | | |
|  | Substitute following text for existing text: | | | |
|  | 3.2.4.3.2. | Fuel injector(s) opening pressure (kPa) : single / multi-point / direct injection / other (specify) | **:** |  |

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| **13.** | **Table 1C, Sr. Nos. 3.2.4.7** | | | |
|  | Substitute following text for existing text: | | | |
|  | 3.2.4.7. | CI / PI injection specific: yes / no | **:** |  |
|  |  | | | |

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| **14.** | **Table 1C, Sr. Nos. 3.2.5.4.10.2.** | | | |
|  | Substitute following text for existing text: | | | |
|  | 3.2.5.4.10.2. | Calibration identification number(s) (16 digit) | **:** |  |
|  |  | | | |
| **15.** | **Table 1C, Sr. Nos.** 3.2.6.6 and 3.2.6.7 | | | |
|  | Substitute following text for existing text: | | | |
|  | 3.2.6.6. | Air filter (drawings or photographs) | **:** |  |
|  | 3.2.6.6.1 | Casing Type, Make, and Identification No/Part No. | **:** |  |
|  | 3.2.6.6.2 | Element Type, Make, and Identification No/Part No. | **:** |  |
|  | 3.2.6.7. | Intake air-silencer description Type , Make, and Identification No/Part No.(drawings or photographs) | **:** |  |
|  |  | |  |  |
| **16.** | **Table 1C, Sr. Nos. 3.2.8.3** | |  |  |
|  | Substitute following text for existing text: | |  |  |
|  | 3.2.8.3. | Spark plugs   * Number of spark plug in each cylinder * Make and Type * Identification No. / Part No. * Nominal resistance (kilo ohm) (if resistive type) | **:** |  |
|  |  | | | |
|  | **Table 1C** | | | |
|  | Insert new Sr. No. 3.2.8.8 after Sr. No 3.2.8.7.1. | | | |
|  | 3.2.8.8 | CDI/ TCI/ IDI | | |
|  | 3.2.8.8.1 | Make | | |
|  | 3.2.8.8.2 | Identification/ Part No. | | |
|  |  | | | |
|  | **Table 1C, Sr. Nos. 3.2.10.8** | | | |
|  | Substitute following text for existing text: | | | |
|  | 3.2.10.8. | Lubricant mixed with the fuel: yes / no | **:** |  |
|  | 3.2.10.8.1. | Percentage range of lubricant mixed with the fuel | **:** |  |
|  | 3.2.10.9 | Lubricant Temperature in Deg C  (Location of measurement be specified ) | **:** |  |
|  | 3.2.10.9.1 | Minimum | **:** |  |
|  | 3.2.10.9.2 | Maximum | **:** |  |
|  |  | | | |
|  | **Table 1C, Sr. Nos.** 3.2.11.1 | | | |
|  | Substitute following text for existing text: | | | |

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|  | 3.2.11.1. | Brief description and schematic drawing of exhaust devices for noise and tailpipe emission control with volume | **:** |  |
|  |  | | | |
|  | **Table 1C,** | | | |
|  | Insert new Sr. No 3.2.11.8 after Sr. No 3.2.11.7 | | | |
|  | 3.2.11.8 | Maximum Exhaust temperature | **:** |  |
|  |  | | | |
|  | **Table 1C,** | | | |
|  | Add new Sr. No. 3.4.3.1 and renumber subsequent Sr. Nos | | | |
|  | 3.4.3.1 | Battery pack and/or Battery Cell  Identification /TAC No/BIS license No. | **:** |  |
|  |  | | | |
|  | **Table 1C** | | | |
|  | Insert New Sr. Nos. 3.3.6.5 after Sr. No. 3.3.6.4 | | | |
|  | 3.3.6.5 | Kind of electrochemical couple | **:** |  |
|  |  | | | |
|  | **Table 1C** | | | |
|  | Insert New Sr. Nos. 3.4.2.1.1 after Sr. No. 3.4.2.1 | | | |
|  | 3.4.2.1.1 | Drawing(s) of lubrication system | **:** |  |
|  |  | | | |
|  | **Table 1C, Sr. Nos.** 3.5.7 | | | |
|  | Substitute following text for existing text: | | | |
|  | 3.5.7 | Maximum designed speed of vehicle and gear in which it is reached (in km/h)(9) (10) | **:** |  |
|  |  | | | |
|  | **Table 1C** | | | |
|  | Insert New Sr. Nos. 4.1.1 and 4.1.2 after Sr. No. 4.1 | | | |
|  | 4.1.1 | Fuel equivalent, Fuel Consumption (Actual fuel) | **:** |  |
|  | 4.1.2 | Fuel Consumption (Petrol Equivalent) | **:** |  |
|  |  | | | |
|  | **Table 1C, Sr. No. 4.2** | | | |
|  | Substitute following text for existing text: | | | |
|  | 4.2 | Declared CO2 emissions(9) (g/km) (Rounded to 3 decimal places) | **:** |  |
|  | 4.2.1 | CO2 reduction technologies available (Yes / No) | **:** |  |
|  |  | | | |
|  | **Table 1C, Sr. Nos. 4.5.2.2** | | | |
|  | Substitute following text for existing text: | | | |

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|  | 4.5.2.2. | Number of catalytic converters | **:** |  |
|  | 4.5.2.2.1 | Make, | **:** |  |
|  | 4.5.2.2.2 | Identification No/ Part No | **:** |  |
|  | 4.5.2.2.3 | Unique Identification Number (Sr. No./Month and year of manufacturing/Batch No) | **:** |  |
|  |  | | | |
|  | **Table 1C, Sr. Nos. 4.5.2.4** | | | |
|  | Substitute following text for existing text: | | | |
|  | 4.5.2.4. | Cell Density (CPSI) | **:** |  |
|  |  | | | |
|  | **Table 1C, Sr. No. 4.5.2.5** | | | |
|  | Substitute following text for existing text: | | | |
|  | 4.5.2.5. | Total charge of precious metals. (gram / vehicle) Data shall be given in sequence Pt:Rh:Pd | **:** |  |
|  |  | | | |
|  | **Table 1C, 4.5.2.18** | | | |
|  | Substitute following text for existing text: | | | |
|  | 4.5.2.18 | **DPF** | | |
|  | 4.5.2.18.1 | Make | | |
|  | 4.5.2.18.2 | Identification number/ Part No. | | |
|  | 4.5.2.18.3 | Unique Identification Number (Sr. No./Month and year of manufacturing/Batch No) | | |
|  | 4.5.2.18.4 | Drawing with dimension, shape and other details. | | |
|  |  | | | |
|  | **Table 1C, Sr. Nos. 4.5.3, 4.5.3.1 and 4.5.3.2** | | | |
|  | Substitute following text for existing text: | | | |
|  | **4.5.3.** | **Lambda / Oxygen sensor(s)** | | |
|  | 4.5.3.1. | **Lambda /** Oxygen sensor component(s) drawing(s) | **:** |  |
|  | 4.5.3.2. | Drawing of exhaust device with **Lambda /** oxygen sensor location(s) (dimensions relative to exhaust valves) | **:** |  |
|  |  | | | |
|  | **Table 1C, Sr. No. 4.5.7.2.1** | | | |
|  | Substitute following text for existing text: | | | |
|  | 4.5.7.2.1 | Type, Make Identification number, Working principle | **:** |  |
|  |  | | | |
|  | **Table 1C, Sr. No. 4.7.1** | | | |
|  | Substitute following text for existing text: | | | |

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|  | 4.7.1. | Evaporative emissions control system: yes / no | **:** |  |
|  | 4.7.1.1 | **Canister** | | |
|  | 4.7.1.1.1 | Working capacity | **:** |  |
|  | 4.7.1.1.2 | Make | **:** |  |
|  | 4.7.1.1.3 | Identification number/ Part No. | **:** |  |
|  | 4.7.1.1.4 | Unique Identification Number (Sr. No./Month and year of manufacturing/Batch No) | **:** |  |
|  | 4.7.1.1.5 | Drawing with dimension, shape and other details. | **:** |  |
|  | 4.7.1.1.6 | Canister bed volume (1) | **:** |  |
|  | 4.7.1.1.7 | Evap Hoses length and material | **:** |  |
|  |  | | | |
|  | **Table 1C,** | | | |
|  | Insert New Sr. No. 4.7.3.1 after Sr. No. 4.7.3 | | | |
|  | 4.7.3.1 | Drawing of fuel tank with 2different nominal capacities marking (30%,50%,70%.) for sensor and heating pad fitment | **:** |  |
|  |  | | | |
|  | **Table 1C,Sr No. 7.6.1.3** | | | |
|  | **Substitute following text for existing text:** | | | |
|  | 7.6.1.3 | Electronic control unit (ECU): yes/no | | |
|  |  | | | |
|  | **Table 1C, Sr. No. 7.6.1.4** | | | |
|  | Substitute following text for existing text: | | | |
|  | 7.6.1.4 | Calibration identification number(s) (16 digit) | **:** |  |
|  |  | | | |
|  | **Table 1C, Sr. No. 7.6.2.6** | | | |
|  | Substitute following text for existing text: | | | |
|  | 7.6.2.6. | Physical location of diagnostic-connector (drawings and photographs) with description of pin configuration) | **:** |  |
|  |  | | | |
|  | **Table 1C,** | | | |
|  | Insert New Sr. No. 7.6.2.9.1.4.1 and 7.6.2.9.1.4.2 after Sr. No.7.6.2.9.1.4 | | | |
|  | 7.6.2.9.1.4.1 | In the case of vehicles equipped with positive-ignition engines, a declaration by the manufacturer of the minimum percentage of misfires out of a total number of firing events that would either result in emissions exceeding the limits given in applicable Gazette Notification, if that percentage of misfire had been present from the start of a Type I test as described in Chapter 2 of AIS 137 Part 1, or that could lead to an exhaust catalyst, or catalysts, overheating prior to causing irreversible damage; | **:** |  |
|  | 7.6.2.9.1.4.2 | A declaration by the manufacturer that the OBD system complies with the provisions of Chapter 6 of AIS 137 Part 1 relating to in-use performance under all reasonably foreseeable driving conditions. | **:** |  |
|  |  | | | |
|  | **Table 1C, Sr. No.7.6.3.4** | | | |
|  | Substitute following text for existing text: | | | |
|  | 7.6.3.4 | Description of default modes and strategies in case of ETC Failure. | **:** |  |
|  |  | | | |
|  | **Table 1C,** | | | |
|  | Insert New Sr. No. 7.6.4.5.1 after Sr. No.7.6.4.5 | | | |
|  | 7.6.4.5.1 | Resetting adaptive learning parameters, variant coding and replacement component setup, and customer preferences. | **:** |  |
|  |  | | | |
|  | **Table 1C, 7.6.5.1** | | | |
|  | Substitute following text for existing text: | | | |
|  | 7.6.5.1. | A description of tests to confirm its functionality, at the component or in the harness | **:** |  |
|  | 7.6.5.1.1 | Test procedure including test parameters and component information | **:** |  |
|  | 7.6.5.1.2 | Connection details including minimum and maximum input and output and driving and loading values; | **:** |  |
|  | 7.6.5.1.3 | Electrical values for the component in its static and dynamic states; | **:** |  |
|  | 7.6.5.1.4 | Failure mode values for each of the above scenarios; | **:** |  |
|  | 7.6.5.1.5 | Failure mode diagnostic sequences including fault trees and guided diagnostics elimination. | **:** |  |
|  |  | | | |
|  | **Table 1C,** | | | |
|  | Insert New Sr. No. 7.6.5.2.3.1 after Sr. No.7.6.5.2.3 | | | |
|  | 7.6.5.2.3.1 | For strategies requiring more than two preconditioning cycles for MI activation, the manufacturer shall provide data or an engineering evaluation which adequately demonstrate that the monitoring system is equally effective and timely in detecting component deterioration. Strategies requiring on average more than ten driving cycles for MI activation are not accepted. | **:** |  |
|  |  | | | |
|  | **Table 1C,** | | | |
|  | Add following new footnote (10) after footnote (9) | | | |
|  | (10)In case of vehicles with more than one driving mode, to be specified for each mode separately | | | |
|  |  | | | |
| **44** | **Table 1 D** | | | |
|  | Substitute following title for existing title | | | |
|  | TECHNICAL SPECIFICATIONS OF L5 CATEGORY VEHICLES FOR BS VI NORMS TO BE FILLED IN ADDITION TO INFORMATION GIVEN IN TABLE 1. | | | |

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|  | **Table 1 D, Sr. Nos. 1.1.2 and 1.1.3** | | | | | |
|  | Substitute following text for existing text: | | | | | |
|  | 1.1.2 | Manufacturer's engine model code (as marked on the engine, or other means of identification): | | | | |
|  | 1.1.3 | Location of engine model code and engine serial number on block / crankcase (drawing to be attached) | | | | |
|  |  | | | | | |
|  | **Table 1 D** | | | | | |
|  | Inert new Sr. No 1.2.1.6.1 and 1.2.1.6.2 after Sr. No. 1.2.1.6 | | | | | |
|  | 1.2.1.6.1 | | Engine Power Table (Engine Performance Declared speed and powers  of the engine submitted for type approval) (Speeds to be agreed with the testing agency) | | | |
|  | 1.2.1.6.2 | | Power for propulsion(s): ......... kW at .......... min-1 (min 6 points) | | | |
|  |  | | | | | |
|  | **Table 1 D, Sr. No. 1.2.1.10.1** | | | | | |
|  | Substitute following text for existing text: | | | | | |
|  | 1.2.1.10 | | | High idle engine speed (min -1) (including tolerance): | **:** |  |
|  | 1.2.1.10.1. | | | High Idle Lambda value (1± 0.03) or as specified by the vehicle manufacturer) | **:** |  |
|  | 1.2.1.10.1.1 | | | Fuel equivalent, Fuel Consumption (Actual fuel) | **:** |  |
|  | 1.2.1.10.1.2 | | | Fuel Consumption (Petrol Equivalent) | **:** |  |

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|  | **Table 1 D, Sr.No. 1.2.2.2** | | | |
|  | Substitute following text for existing text: | | | |
|  | 1.2.2.2. | Fuel type: Diesel / Gasoline / LPG / CNG / Biomethane / Bio-H2 methane / HCNG / Biogas / LNG / Ethanol ((E85) / (E100)) / (ED 95)/Flex fuel Methanol M15 / M100 / MD95 / Biodiesel up to 100% / Hydrogen. | **:** |  |
|  |  | | | |
| **49.** | **Table 1 D, Sr.No. 1.2.2.3** | | | |
|  | Insert Sr. No 1.2.2.3 | | | |
|  | 1.2.2.3 | Maximum amount of biofuel acceptable in fuel (manufacturer's declared value): percent by volume | **:** |  |
|  |  | | | |
| **50.** | **Table 1 D** | | | |
|  | Insert New Sr. No. 1.2.3.5 after Sr. No 1.2.3.4 | | | |
|  | 1.2.3.5 | Manufacturer and Trade Mark | **:** |  |
|  |  | | | |
| **51.** | **Table 1 D, Sr.No. 1.2.4.2.3.3** | | | |
|  | Substitute following text for existing text : | | | |
|  | 1.2.4.2.3.3 | Maximum fuel delivery in (mm3 /Stroke) or (kg/hr) with tolerance at max net power engine speed (min-1) or characteristic diagram:  If boost control is supplied, state the characteristics fuel delivery and boost pressure versus engine speed | **:** |  |

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| **52.** | **Table 1 D, Sr.No. 1.2.4.2.6.1,** | | | |
|  | Substitute following text for existing text : | | | |
|  | 1.2.4.2.6.1 | Make (trade name of manufacturer) | **:** |  |
|  |  | | | |
| **53.** | **Table 1 D** | | | |
|  | Insert Sr. No. 1.2.4.2.6.3 after Sr. No 1.2.4.2.6.2 : | | | |
|  | 1.2.4.2.6.3 | Identification/ Part number: | **:** |  |
|  |  | | | |
| **54.** | **Table 1 D** | | | |
|  | Insert following new Sr. Nos. after Sr. No. 1.2.4.2.6.3 | | | |
|  | 1.2.4.2.6.4 | **Cold start system** | **:** |  |
|  | 1.2.4.2.6.4.1 | Make(s): | **:** |  |
|  | 1.2.4.2.6.4.2 | Type(s) & Identification Number:: | **:** |  |
|  | 1.2.4.2.6.4.3 | Description: | **:** |  |
|  | 1.2.4.2.6.4.4 | Auxiliary starting aid | **:** |  |
|  | 1.2.4.2.6.4.5 | Make(s): | **:** |  |
|  | 1.2.4.2.6.4.6 | Type(s): | **:** |  |
|  | 1.2.4.2.6.4.7 | System description: | **:** |  |
|  | 1.2.4.2.6.5 | **Electronic controlled injection: (Yes/No)** | **:** |  |
|  | 1.2.4.2.6.5.1 | Make(s): | **:** |  |
|  | 1.2.4.2.6.5.2 | Type(s): | **:** |  |
|  | 1.2.4.2.6.5.3 | Description of the system (in the case of systems other than continuous injection, give equivalent details): | **:** |  |
|  | 1.2.4.2.6.5.4 | Make and type of the control unit: | **:** |  |
|  | 1.2.4.2.6.5.5 | Make and type of the fuel regulator: | **:** |  |
|  | 1.2.4.2.6.5.6 | Make and type of air-flow sensor: | **:** |  |
|  | 1.2.4.2.6.5.7 | Make and type of fuel distributor: | **:** |  |
|  | 1.2.4.2.6.5.8 | Make and type of throttle housing: | **:** |  |
|  | 1.2.4.2.6.5.9 | Make and type of water temperature sensor: | **:** |  |
|  | 1.2.4.2.6.5.10 | Make and type of air temperature sensor: | **:** |  |
|  | 1.2.4.2.6.5.11 | Make and type of air pressure sensor: | **:** |  |
|  |  | | | |
| **55.** | **Table 1 D** | | | |
|  | Insert after Sr. No. 1.2.4.3 | | | |
|  | 1.2.4.3.1 | Working principle: intake manifold (single/multi-point)/direct injection/other (specify) | **:** |  |
|  | 1.2.4.3.2 | Make(s) of Injection Pump : | **:** |  |
|  | 1.2.4.3.3 | Type(s) & Identification Number of Injection Pump: | **:** |  |
|  | 1.2.4.3.4 | System description (in the case of systems other than continuous injection give equivalent details): | **:** |  |
|  | 1.2.4.3.4.1 | Make and type of the control unit: | **:** |  |
|  | 1.2.4.3.4.2 | Make and type of the fuel regulator: | **:** |  |
|  | 1.2.4.3.4.3 | Make and type of the air-flow sensor: | **:** |  |
|  | 1.2.4.3.4.4 | Make and type of the micro-switch: | **:** |  |
|  | 1.2.4.3.4.5 | Make and type of the throttle housing: | **:** |  |
|  | 1.2.4.3.4.6 | Make and type of the water temperature sensor: | **:** |  |
|  | 1.2.4.3.4.7 | Make and type of the air temperature sensor: | **:** |  |
|  | 1.2.4.3.4.8 | Injectors: Opening pressure (Specify the tolerances):,................... (kPa) or characteristic diagram: | **:** |  |
|  | 1.2.4.3.4.9 | Make(s): | **:** |  |
|  | 1.2.4.3.4.10 | Type(s): | **:** |  |
|  | 1.2.4.3.4.11 | Identification Number | **:** |  |
|  | 1.2.4.3.4.12 | Maximum fuel delivery in (kg/hr) with tolerance at max net power engine speed (min-1) or characteristic diagram:  If boost control is supplied, state the characteristics fuel delivery and boost pressure versus engine speed | **:** |  |
|  |  | | | |
| **56.** | **Table 1D, Sr. No. 1.2.4.3.2.2** | | | |
|  | Substitute following text for existing text | | | |
|  | 1.2.4.3.2.2 | Type(s) & Identification Number of the injection pump | **:** |  |
|  |  | | | |
| **57.** | **Table 1D, Sr. No. 1.2.6.13.1** | | | |
|  | Insert after Sr. No. 1.2.6.13.1 | | | |
|  | 1.2.6.14 | **Radiator** | **:** |  |
|  | 1.2.6.14.1 | Radiator drawing(s) | **:** |  |
|  | 1.2.6.14.2 | Make | **:** |  |
|  | 1.2.6.14.3 | Type (s) | **:** |  |
|  | 1.2.6.14.4 | Relief valve pressure setting | **:** |  |
|  | 1.2.6.14.5 | Fan characteristics (Fan power, kW) Enclose the fan power curve corresponding to full load (v/s engine speed) | **:** |  |
|  | 1.2.6.14.6 | Make (s) | **:** |  |
|  | 1.2.6.14.7 | Number of blades and Identification/Part No | **:** |  |
|  | 1.2.6.14.8 | Material of blades ( metal / plastic ) | **:** |  |
|  | 1.2.6.14.9 | Type(s) [Fixed / Viscous / Electrical driven] | **:** |  |
|  | 1.2.6.14.10 | Drive ratio | **:** |  |
|  | 1.2.6.14.11 | Fan diameter (mm) |  |  |
|  | 1.2.6.14.12 | Max. Speed of fan (in rev/min) |  |  |
|  | 1.2.6.14.13 | Radiator core open area (cm²) |  |  |

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| --- | --- | --- | --- | --- |
| **58.** | **Table 1 D, Sr.No. 1.2.7.4.4,** | | | |
|  | Substitute following text for existing text: | | | |
|  | 1.2.7.4.4 | Maximum Exhaust temperature | **:** |  |
|  |  | | | |
| **59.** | **Table 1 D** | | | |
|  | Insert Sr. No. 1.2.8.3.1 after Sr. No 1.2.8.3 and renumber subsequent Sr. Nos. | | | |
|  | 1.2.8.3.1 | Maximum permitted depression of air intake at characteristic place in kPa (Specify location of measurement) | **:** |  |
|  |  | | | |
| **60.** | **Table 1 D, Sr. No. 1.2.8.3.3.** | | | |
|  | Substitute following text for existing text: | | | |
|  | 1.2.8.3.3 | Inlet silencer, Dimensional drawings | **:** |  |
|  |  | | | |
| **61.** | **Table 1 D, Sr. No. 1.2.9.1** | | | |
|  | Substitute following text for existing text: | | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 1.2.9.1 | | Dimensional (Drawing of complete exhaust system with identification (if proprietary) or part no (if non-proprietary) | **:** |  |
|  |  | | | | |
| **62.** | **Table 1 D** | | | | |
|  | Insert Sr. No. 1.2.10.1 after Sr. No 1.2.10 | | | | |
|  | 1.2.10.1 | Exhaust back pressure at maximum net power and location of measurement (kPa) | | **:** |  |
|  |  | | | | |
| **63.** | **Table 1 D, Sr. No. 1.2.12.2.1.** | | | | |
|  | Substitute following text for existing text: | | | | |
|  | 1.2.12.2.1 | Unique Identification (Serial No. or Month and Year of Manufacturing or Batch No. or any other means of identification) | | **:** |  |

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| **64.** | **Table 1 D, Sr. No. 1.2.12.2.1.3** | | | |
|  | Substitute following text for existing text: | | | |
|  | 1.2.12.2.1.3 | Dimensions (mm), shape and volume of the catalytic converter(s) | **:** |  |
|  |  | | | |
| **65.** | **Table 1 D, Sr.No. 1.2.1.4,** | | | |
|  | Substitute following text for existing text | | | |
|  | 1.2.14 | Fuel temperature 0C: (at the injection pump inlet) | : |  |
|  |  | | | |
| **66.** | **Table 1 D,** | | | |
|  | Insert Sr. No. 1.5.4.1 after Sr. No 1.5.4 | | | |
|  | 1.5.4.1 | Calibration Verification number: | **:** |  |
|  | 1.5.4.2 | Selectable modes for vehicle operation in ECU with brief description | **:** |  |
|  |  | | | |
|  | **Table 1 D,** | | | |
|  | Insert Sr. No. 1.7.4 after Sr. No 1.7.3 | | | |
|  | 1.7.4 | Evap Hoses length and material | **:** |  |

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| --- | --- | --- | --- | --- | --- |
|  | **Table 1 D, Sr. No. 1.8,** | | | | |
|  | Substitute following text for existing text | | | | |
|  | 1.8 | Lambda /O2 Sensor make | | **:** |  |
|  |  | | | | |
|  | **Table 1 D,** | | | | |
|  | Insert Sr. Nos. 1.9.3.1 and 1.9.3.2 after Sr. No. 1.9.3. and renumber subsequent Sr. No. | | | | |
|  | 1.9.3.1 | Information on the operation of all AES or defeat device (if any) | | **:** |  |
|  | 1.9.3.2 | A description of the provisions taken to prevent tampering with and modification of the emission control computer. | | **:** |  |
|  |  | | | | |
|  | **Table 1 D,** | | | | |
|  | Insert Sr. Nos. 1.9.3.2.6.5.2 and 1.9.3.2.6.5.3 after Sr. No. 1.9.3.2.6.5.1 | | | | |
|  | 1.9.3.2.6.5.2 | Vehicle run in and driven at least 1000 km before the test : yes / no | | **:** |  |
|  | 1.9.3.2.6.5.3 | Coast down / Table to be used for Mass Emission Test | | **:** |  |
|  |  | | | | |
|  | **Table 2** | | | | |
|  | Insert following Sr. Nos. A 2.3 and A 2.3.1 after Sr. No. A 2.2. | | | | |
|  | A2.3 | | Vehicle available modes | | |
|  | A2.3.1 | | Vehicle Default mode Yes / No – If Yes then define | | |
|  |  | | | | |
|  | **Table 4 E , Sr. No 1.1.1 and 1.1.2** | | | | |
|  | Substitute following text for existing text: | | | | |
|  | 1.1.1. | | Manufacturer's engine model code (as marked on the engine, or other means of identification): | | |
|  | 1.1.2. | | Location of engine model code and engine serial number on block / crankcase (drawing to be attached) | | |
|  |  | | | | |
|  | **Table 4 E, Sr. No 1.2.1.1** | | | | |
|  | Substitute following text for existing text: | | | | |
|  | 1.2.1.1. | | Working principle: positive ignition / compression-ignition, four-stroke / two-stroke / rotary cycle (DI/IDI) (NA/TC/TCIC/Any other) | | |
|  |  | | | | |
|  | **Table 4 E ,** | | | | |
|  | Insert following new Sr. Nos 1.2.1.5.1 and 1.2.1.5.2 after Sr. No. 1.2.1.5 : | | | | |
|  | 1.2.1.5.1 | | Vehicle with Defeat Device Yes / No | | |
|  | 1.2.1.5.2 | | If yes – Details of the Defeat device | | |
|  |  | | | | |
|  | Table 4 E, Sr. No 1.2.1.7.1 | | | | |
|  | Substitute following text for existing text : | | | | |
|  | 1.2.1.7.1 | | High Idle Lambda value (1± 0.03) or as specified by the vehicle manufacturer) | | |
|  |  | | | | |
|  | Table 4 E ,Sr. No 1.2.2.2 | | | | |
|  | Substitute following text for existing text : | | | | |

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| --- | --- | --- | --- |
|  | 1.2.2.2 | Fuel type: Diesel / Gasoline / LPG / CNG / Biomethane / Bio-H2 methane / HCNG / Biogas / LNG / Ethanol ((E85) / (E100)) /ED (95) Flex fuel Methanol M15 / M100 / MD95 / Biodiesel up to 100% / Hydrogen. | |
|  |  | | |
|  | Table 4 E ,Sr. No 1.2.3.1.3.3 | | |
|  | Substitute following text for existing text | | |
|  | 1.2.3.1.3.3 | Maximum fuel delivery in (mm3 /Stroke) or (kg/hr) with tolerance at max net power engine speed (min-1) or characteristic diagram:  If boost control is supplied, state the characteristics fuel delivery and boost pressure versus engine speed | |
|  |  | | |
|  | **Table 4 E, Sr. No. 1.2.3.2.2 and 1.2.3.2.3** | | |
|  | Substitute following text for existing text : | | |
|  | 1.2.3.2.2 | Make(s) of Injection Pump : | |
|  | 1.2.3.2.3 | Type(s) & Identification Number of Injection Pump: | |
|  |  | | |
|  | **Table 4 E,** | | |
|  | Insert following Sr. Nos. 1.2.3.2.5.3 and 1.2.3.2.5.4 after Sr. No. 1.2.3.2.5.2 : | | |
|  | 1.2.3.2.5.3 | Identification Number | |
|  | 1.2.3.2.5.4 | Maximum fuel delivery in (kg/hr) with tolerance at max net power engine speed (min-1) or characteristic diagram:  If boost control is supplied, state the characteristics fuel delivery and boost pressure versus engine speed | |
|  |  | | |
|  | Table 4 E, Sr. Nos. 1.2.5.12 and 1.2.5.12.1.1 | | |
|  | Substitute following text for existing text: | | |
|  | 1.2.5.12 | | Fan characteristics (Fan power, kW) Enclose the fan power curve corresponding to full load (v/s engine speed). |
|  | 1.2.5.12.1.1 | | Number of blades and Identification/Part No |
|  |  | | |
|  | Table 4 E, Sr. No. 1.2.7.1 | | |
|  | Substitute following text for existing text: | | |
|  | 1.2.7.1 | | Pressure charger: (Yes/No) Turbocharger / Supercharger |
|  |  | | |
|  | Table 4 E, | | |
|  | Insert following Sr. No 1.2.7.2.1.1 after Sr. No. 1.2.7.2.1: | | |
|  | 1.2.7.2.1.1 | | Make : |

|  |  |  |
| --- | --- | --- |
|  | Table 4 E, | |
|  | Insert following Sr. No 1.2.7.2.2.1 after Sr. No. 1.2.7.2.2: | |
|  | 1.2.7.2.2.1 | Air pressure drop across the intercooler |
|  |  | |
|  | Table 4 E, Sr. Nos. 1.2.7.4.1 and 1.2.7.4.2 | |
|  | Substitute following text for existing text: | |
|  | 1.2.7.4.1 | Intake manifold description including dimensional drawings and/or photographs): |
|  | 1.2.7.4.2 | Air filter, Dimensional drawings |
|  |  | |
|  | Table 4 E, Sr. No. 1.2.7.4.3 | |
|  | Substitute following text for existing text: | |
|  | 1.2.7.4.3 | Intake silencer, Dimensional drawing |
|  |  | |
|  | Table 4 E ,Sr. No. 1.2.8.1 | |
|  | Substitute following text for existing text : | |
|  | 1.2.8.1 | Description and Dimensional drawing of the exhaust manifold: |
|  |  | |
|  | Table 4 E, | |
|  | Insert following Sr. No 1.2.8.2.2.1.1 after Sr. No. 1.2.8.2.2.1: | |
|  | 1.2.8.2.2.1.1 | Make |
|  |  | |
|  | Table 4 E, Sr. No. 1.2.11.2.1.1 | |
|  | Substitute following text for existing text : | |
|  | 1.2.11.2.1.1 | Catalytic converter Make Canner / Loader : |
|  |  | |
|  | Table 4 E, | |
|  | Insert following Sr. No 1.2.11.2.1.2.1 after Sr. No. 1.2.11.2.1.2: | |
|  | 1.2.11.2.1.2.1 | Unique Identification (Serial No. or Month and Year of Manufacturing or Batch No. or any other means of identification) |
|  |  | |
|  | Table 4 E, Sr. No. 1.2.11.2.1.4 | |
|  | Substitute following text for existing text : | |
|  | 1.2.11.2.1.4 | Dimensions (mm) and shape of the catalytic converter(s) (volume, etc.): |
|  |  | |
|  | Table 4 E, Sr. No. 1.2.11.2.1.6 | |
|  | Substitute following text for existing text : | |
|  | 1.2.11.2.1.6 | Total charge of precious metal: (g/vehicle) |
|  |  | |

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| --- | --- | --- |
|  | Table 4 E, Sr. No. 1.2.11.2.1.11 | |
|  | Substitute following text for existing text : | |
|  | 1.2.11.2.1.11 | Diagram indicating the arrangement and Positioning of the catalytic converter(s) (place and reference distances in the exhaust system): |

|  |  |  |
| --- | --- | --- |
|  | Table 4 E, | |
|  | Insert following Sr. No. 1.2.11.2.1.13.3.5 after Sr. No. 1.2.11.2.1.13.3.4: | |
|  | 1.2.11.2.1.13.3.5 | Unique Identification (Serial No or Month and year of Manufacturing or Batch No. or any other means of identification) |
|  |  | |
|  | **Table 4 E** | |
|  | Insert Sr. Nos. 1.2.11.2.1.13.4.5.1.3 and 1.2.11.2.1.13.4.5.1.4 after Sr. No. 1.2.11.2.1.13.4.5.1.2 | |
|  | 1.2.11.2.1.13.4.5.1.3 | Interruption in dosing activity (Yes/No) |
|  | 1.2.11.2.1.13.4.5.1.4 | If yes, specify operating conditions with justification |
|  |  | |
|  | Table 4 E, Sr. No. 1.2.11.2.2.5 | |
|  | Substitute following text for existing text : | |
|  | 1.2.11.2.2.5 | Identification / Part number |
|  |  | |
|  | Table 4 E, Sr. No. 1.2.11.4.1 | |
|  | Substitute following text for existing text : | |
|  | 1.2.11.2.4.1 | Make and number of EGR’s : |
|  |  | |
|  | Table 4 E, Sr. No. 1.2.11.2.5 | |
|  | Substitute following text for existing text : | |
|  | 1.2.11.2.5 | Evaporative emission control system: (Yes / No)  Type:  Make and Identification/Part number: |
|  |  | |
|  | Table 4 E, | |
|  | Insert following Sr. No. 1.2.11.2.5.3.1, 1.2.11.2.5.3.2, and 1.2.11.2.5.3.3 after Sr. No. 1.2.11.2.5.3: | |
|  |  | Canister Make : |
|  | 1.2.11.2.5.3.2 | Canister Identification/ Part number : |
|  | 1.2.11.2.5.3.3 | Unique Identification (Serial No. or Month and Year of Manufacturing or Batch No. or any other means of identification) |
|  |  | |
|  | Table 4 E, Sr. No. 1.2.11.2.6.2 | |
|  | Substitute following text for existing text : | |

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| --- | --- | --- |
|  | 1.2.11.2.6.2 | Make and Identification Number  Canner & Loader |
|  | 1.2.11.2.6.2.1 | Unique Identification (Serial No. or Month and Year of Manufacturing or Batch No. or any other means of identification) |
|  |  | |
|  | Table 4 E, Sr. No. 1.2.11.2.6.4 | |
|  | Substitute following text for existing text : | |
|  | 1.2.11.2.6.4 | Type and design of particulate trap: Volume in litres |

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| --- | --- | --- | --- |
|  | Table 4 E, | | |
|  | Insert following Sr. No 1.2.11.2.6.8.1 after Sr. No. 1.2.11.2.6.8: | | |
|  | 1.2.11.2.6.8.1 | | Cell density (CPSI) |
|  |  | | |
|  | Table 4 E, Sr. No. 1.2.11.2.7.1 | | |
|  | Substitute following text for existing text : | | |
|  | 1.2.11.2.7.1 | Make & number of ECU’s related to Engine Management System. | |
|  |  | | |
|  | Table 4E | | |
|  | Add following Sr. Nos. 4.0, 4.1 and 4.2 after Sr. No. 3.3.3 | | |
|  | 4.0 | Vehicle Family | |
|  | 4.1 | OBD IUPR Family if any | |
|  | 4.2 | In-Service family if any | |
|  |  | | |
|  | **Table 4 F, Sr. No 0** | | |
|  | Substitute following text for existing text: | | |
|  | **0** | (General) Name of Engine Family | |
|  |  | | |
|  | **Table 4 F,** | | |
|  | Delete text under Sr. No. 0.6 and reserve Sr.No. | | |
|  |  | | |
|  | **Table 4F,** | | |
|  | Add following title below Sr. No. 0.8 | | |
|  | Part 1: Essential characteristics of the (Parent) engine and the engine types within an engine family. | | |
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|  | **Table 4 F, Sr. No 1.1.1** | |
|  | Substitute following text for existing text: | |
|  | 1.1.1. | Working principle: positive ignition /compression ignition (1), (DI/IDI) (NA/TC/TCIC/Any other) |
|  |  | Cycle four stroke / two stroke/ rotary(1): |
|  |  | |
|  | **Table 4 F, Sr. No. 1.1.2.1 and 1.1.2.2** | |
|  | Replace footnote (1) with (3) | |
|  |  | |
|  | **Table 4 F, Sr. No 1.1.3** | |
|  | Substitute following text for existing text: | |
|  | Engine capacity (4) cm³ | |
|  | **Table 4 F, Sr. No. 1.1.4, 1.1.6, 1.1.6.1 and 1.1.7** | |
|  | Replace footnote (2) with (5) | |
|  |  | |
|  | **Table 4 F, Sr. No 1.1.8** | |
|  | Substitute following text for existing text: | |
|  | 1.1.8 | Maximum net power (6)………….. kW at…….min-1 (manufacturer's declared value) |
|  |  | |
|  | **Table 4 F, Sr. No 1.1.11** | |
|  | **Substitute following text for existing text** | |
|  | 1.1.11 | Manufacturer references of the Documentation package required by paragraphs 3.1, 3.2 and 3.3 of AIS-137 (Part 4) enabling the Test Agency to evaluate the emission control strategies and the systems on-board the engine to ensure the correct operation of NOx control measures |
|  |  | |
|  | **Table 4 F, Sr. No 1.2.1** | |
|  | Replace footnotes (1) (6) with (1) (15) | |
|  |  | |
|  | **Table 4 F, Sr. No 1.2.1** | |
|  | Substitute following text for existing text: | |

|  |  |  |
| --- | --- | --- |
|  | 1.2 .1 | Fuel type: Diesel / Gasoline / LPG / CNG / Biomethane / Bio-H2 methane / HCNG / Biogas / LNG / Ethanol ((E85) / (E100)) / ED (95)/Flex fuel Methanol M15 / M100 / MD95 / Biodiesel up to 100% / Hydrogen. (1) (15) |

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| --- | --- | --- |
|  | **Table 4 F, Sr. No 1.2.2** | |
|  | Substitute following text for existing text: | |
|  | 1.2.2 | Fuels compatible with use by the engine declared by the manufacturer in accordance with paragraph 4.6.2. of AIS 137 Part 4 |
|  |  | |
|  | **Table 4 F, Sr. No. 1.3.1.3.3, 1.3.1.3.4, 1.3.1.3.5, 1.3.1.6.3, 1.3.1.11, 1.3.1.11.6, 1.3.1.12.1, 1.3.1.15.4 and 1.3.1.15.5** | |
|  | Replace footnote (2) with (5) | |
|  |  | |
|  | **Table 4 F, Sr. No 1.3.1.6.2** | |
|  | Substitute following text for existing text: | |
|  | 1.3.1.6.2 | Type(s) / Identification number |
|  |  | |
|  | **Table 4 F, Sr. No 1.3.1.9.3.9** | |
|  | Substitute following text for existing text: | |
|  | 1.3.1.9.3.9. | Calibration identification number(s):  Calibration Verification Number (CVN) : |
|  |  | |
|  | **Page 96/227, Table 4 F,** | |
|  | Insert new Sr. No. 1.3.1.11.7 after Sr. No. 1.3.1.11.6 | |
|  | 1.3.1.11.7 | Fuel flow at rated speed (kg/hr) |
|  |  | |
|  | **Table 4 F,** | |
|  | Insert Sr. No 1.3.1.16.4 after Sr. No 1.3.1.16.3 | |
|  | 1.3.1.16.4 | Identification/Part No |
|  |  | |
|  | **Table 4 F,** | |
|  | Insert Sr. No. 1.3.1.17.3 after Sr. No. 1.3.1.17.2 | |
|  | 1.3.1.17.3 | Identification / Part No |
|  |  | |

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| --- | --- | --- | --- |
|  | **Table 4 F,** 1.3.1.19 | | |
|  | Substitute following text for existing text: | | |
|  | 1.3.1.19 | Fan (Yes / No)(1) | |
|  | 1.3.1.19.1 | Fan characteristics ( Fan power, kW) Enclose the fan power curve, corresponding to full load ( v/s engine speed) | |
|  | 1.3.1.19.2 | Make | |
|  | 1.3.1.19.3 | No. of blades | |
|  | 1.3.1.19.4 | Material of blade (metal /plastic) | |
|  | 1.3.1.19.5 | Type (Fixed / Viscous / Electrical driven) | |
|  | 1.3.1.19.6 | Fan drive system | |
|  | 1.3.1.19.7 | Drive ratio | |
|  | 1.3.1.19.8 | Fan cowl | |
|  | 1.3.1.19.9 | Radiator drawing | |
|  | 1.3.1.19.9.1 | Make | |
|  | 1.3.1.19.9.2 | Type | |
|  | 1.3.1.19.9.3 | Relief valve pressure setting | |
|  |  | | |
|  | **Table 4 F,** | | |
|  | Insert new Sr. No. 2.3.3 after Sr. No. 2.3.2 | | |
|  | 2.3.3 | Drop across intercooler at rated engine speed and at 100 % load | |
|  |  | | |
|  | **Table 4F, Sr. Nos. 2.4.1, 3.1, 3.2, 3.2.1** | | |
|  | Substitute word “and” for words “and/or” | | |
|  |  | | |
|  | **Table 4 F, Sr. No. 3.2.9** | | |
|  | Replace footnotes (3) with (7) | | |
|  |  | | |
|  | **Table 4 F, Sr. No 3.2.11** | | |
|  | Substitute following text for existing text: | | |
|  | 3.2.11 | | Device for recycling crankcase gases: yes / no (1) |
|  | If yes, description and drawings: |
|  | If no, compliance with Chapter 3 of AIS 137 (Part 4) required |
|  |  | | |
|  | **Table 4 F, Sr. No 3.2.11.2.6.4** | | |
|  | Substitute following text for existing text: | | |
|  | 3.2.11.2.6.4 | | Manufacturer references of the OBD-Documentation required by paragraph 3.1.4. (c) and paragraph 3.3.4. of AIS 137 (Part 4) and specified in chapter 8 of AIS 137 (Part 4) for the purpose of approving the OBD system |
|  |  | | |
|  | **Table 4 F, Sr. No. 3.2.12.2.6.7** | | |
|  | **Substitute following text for existing text:** | | |
|  | 3.2.12.2.6.7. | | Manufacturer references of the OBD-Documentation required by paragraph 3.1.4. (c) and paragraph 3.3.4. of this Regulation and specified in Chapter 8 of AIS 137 (Part- 4) for the purpose of approving the OBD system |
|  |  | | |
|  | **Table 4 F, Sr. No 3.2.12.2.6.2, 3.2.12.2.6.3.1, 3.2.12.2.6.3.1.1, 3.2.12.2.6.3.1.2, 3.2.12.2.6.3.1.3, 3.2.12.2.6.3.2, 3.2.12.2.6.3.2.1, 3.2.12.2.6.3.2.2, 3.2.12.2.6.3.2.3, 3.2.12.2.6.3.2.4, 3.2.12.2.6.3.2.5, 3.2.12.2.6.4, 3.2.12.2.6.5, 3.2.12.2.6.6** | | |
|  | Replace footnote (4) with (8) | | |
|  |  | | |
|  | **Table 4 F , Sr. No 3.2.12.2.7.2.1** | | |
|  | Substitute following text for existing text: | | |
|  | 3.2.12.2.7.2.1 | | Engine with permanent deactivation of the driver inducement, for use by the rescue services or in vehicles designed and constructed for use by the armed services, Civil Defense, Fire services and forces responsible for maintaining public order: Yes / No (1) |
|  |  | | |
|  | **Table 4 F, Sr. No 3.2.12.2.7.2.2** | | |
|  | Substitute following text for existing text: | | |
|  | 3.2.12.2.7.2.2 | | Activation of the creep mode disable after restart / disable after fueling / disable after parking (1) (7) |
|  |  | | |
|  | **Table 4 F, Sr. No 3.2.13.7.4** | | |
|  | Substitute following text for existing text: | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 3.2.13.7.4 | | | Calibration Identification Number(s):  Calibration Verification Number. |
|  |  | | | |
|  | **Table 4 F, Sr. No. 3.3.1.2** | | | |
|  | Substitute following text for existing text: | | | |
|  | 3.3.1.2 | CO2 mass emissions WHTC test in Diesel /CNG mode (17) …………………g/kWh. | | |
|  |  | | | |
|  | **Table 4 F, Sr. No. 3.3.1.5** | | | |
|  | Substitute following text for existing text: | | | |
|  | 3.3.1.5 | Fuel consumption WHTC test in Diesel / CNG mode (17) …………………g/kWh. | | |
|  |  | | | |
|  | **Table 4F** | | | |
|  | Insert Sr. No. 3.5.1.3 after 3.5.1.2 | | | |
|  | 3.5.1.2 | Lubricating oil grade | | |
|  |  | | | |
|  | **Table 4 F,** | | | |
|  | Insert new Sr. No. 3.5.5 after Sr. No. 3.5.4.1.2 | | | |
|  | 3.5.5 | Requirements for engine test | | |
|  | 3.5.5.1 | Moment of inertia of combined flywheel and transmission at condition when no gear is engaged | | |
|  | 3.5.5.2 | Maximum rated speed (specify the tolerance) | | |
|  | 3.5.5.3 | Minimum rated speed (specify the tolerance) | | |
|  | 3.5.6 | Engine performance Declared speed and powers of engine submitted for type approval (Speed to be agreed with the testing agency) | | |
|  | 3.5.6.1 | Low speed (nlo) | | |
|  | 3.5.6.2 | High speed (nhi) | | |
|  | 3.5.6.3 | Idle speed | | |
|  | 3.5.6.4 | Preferred speed | | |
|  | 3.5.6.5 | n95h | | |
|  | 3.5.6.6 | Engine power Table | | |
|  |  | |  |  |  | | --- | --- | --- | | Measurement point | Engine speed rpm | Net Power kW | | 1 |  |  | | 2 |  |  | | 3 |  |  | | 4 |  |  | | 5 |  |  | | 6 |  |  | | 7 |  |  | | 8 |  |  |   Net Power according to AIS 137 Part 5 | | |
|  |  | | | |
|  | **Table 4F,** | | | |
|  | Insert following title after 3.5.6.6 | | | |
|  | Part 2: Essential characteristics of vehicle components and systems with regards to exhaust emission | | | |
|  |  | | | |
|  | **Table 4F, Sr. No. 3.11,** | | | |
|  | Substitute following text for existing text: | | | |
|  | 3.11 | | **On-board-diagnostic (OBD) system**  Alternative approval as defined in point 2.4 of chapter 8A of AIS-137 (Part 4) used. (Yes/No) (1) | |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Table 4F, Sr. No. 3.11.6 | | |
|  | Substitute following text for existing text: | | |
|  | 3.11.6 | Alternative approval as defined in paragraph 2.4 of chapter 8A of AIS-137 (Part 4). | |
|  |  | | |
|  | **Table 4 F, Sr. No 3.12.2 and 3.12.3** | | |
|  | Substitute following text for existing text: | | |
|  | 3.12.2 | | engine with permanent deactivation of the driver inducement for use by the rescue services or in vehicles designed and constructed for use by the armed services, civil defence, fire protection services and forces responsible for maintaining public order :Yes/No (1) |
|  | 3.12.3 | | Activation of the creep mode:  “disable after restart” / “disable after fuelling” / “disable after parking” (1) (7)  Components on board the vehicle of the systems ensuring the correct operation of Nox control measures |
|  |  | | |
|  | **Table 4 F , Sr. No 3.12.6** | | |
|  | Replace footnotes (6) with (10) | | |
|  |  | | |
|  | Table 4F, Notes | | |
|  | Substitute figure “ 3.2.12.2.6.4” for figure “3.2.12.2.7.0.4” in note no 8 | | |
|  |  | | |
|  | Table 4F, Notes | | |
|  | Substitute figure “ 3.11.6.2” for figure “3.2.12.2.7.2” in note no 10 | | |

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UNDER

CENTRAL MOTOR VEHICLE RULES - TECHNICAL STANDING COMMITTEE

SET-UP BY

MINISTRY OF ROAD TRANSPORT & HIGHWAYS

(DEPARTMENT OF ROAD TRANSPORT & HIGHWAYS)

GOVERNMENT OF INDIA

11th April 2019