AIS-137 (Part 6)

AUTOMOTIVE INDUSTRY STANDARD

Administrative Procedure for Type Approval and Conformity of Production for M and N Category Vehicles, Two and Three Wheelers and Agricultural Tractors / Construction Equipment Vehicles (CEVs) / Power Tillers / Combine Harvesters Engines as per CMV Rules 115, 116 and 126

PRINTED BY
THE AUTOMOTIVE RESEARCH ASSOCIATION OF INDIA
P.B. NO. 832, PUNE 411 004

ON BEHALF OF
AUTOMOTIVE INDUSTRY STANDARDS COMMITTEE

UNDER
CENTRAL MOTOR VEHICLE RULES – TECHNICAL STANDING COMMITTEE

SET-UP BY
MINISTRY OF ROAD TRANSPORT & HIGHWAYS
(DEPARTMENT OF ROAD TRANSPORT & HIGHWAYS)
GOVERNMENT OF INDIA

April 2019

Status chart of the Standard to be used by the purchaser for updating the record

Sr. No.	Corrigenda	Amendment	Revision	Date	Remark	Misc.

General Remarks:

INTRODUCTION

In India, the mass emission norms based on Indian Driving Cycle (IDC) were notified under CMVR in 1989. The first mass emission norms for vehicles were enforced from 1st April 1991 for Gasoline vehicles and from 1st April 1992 for Diesel vehicles. Since then, progressively emission norms have been tightened.

Government of India has notified migration to Bharat Stage VI (BS VI) emissions norms for 2, 3 and 4 wheeled vehicles from 1st April 2020. For Agricultural Tractors, Construction Equipment Vehicles and Combine Harvesters (vehicles having power exceeding 37 kW) next stage emission norms Bharat Stage (CEV/TREM) – IV) are notified from 1st October 2020 and Bharat Stage (CEV/TREM) – V) from 1st April 2024. Test procedure for Type Approval and COP for above emission norms shall be as per various parts of AIS-137, as applicable.

This Part 6 of AIS-137 prescribes Administrative Procedure for Type Approval and Conformity of Production for M and N Category Vehicles, Two and Three Wheelers and Agricultural Tractors/Construction Equipment Vehicles (CEV) / Power Tillers/ Combine Harvesters Engines as per CMV Rules 115, 116 and 126

While preparing this standard, considerable assistance has been taken from following regulations/documents:

Doc. No.: MoRTH/CMVR/ TAP-115/116: Issue No.: 4: Document on test method, testing equipment and related procedures for testing type approval and conformity of production (COP) of vehicles for emission as per CMV Rules 115, 116 and 126: (Part VI) and its Amendments.

The Committee Composition for formulation of this standard is given in Annexure 5.

After approval of the standard by SCOE, 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.

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Administrative Procedure for Type Approval and Conformity of Production for M and N Category Vehicles, Two and Three Wheelers and Agricultural Tractors /Construction Equipment Vehicles (CEV) / / Power Tillers / Combine Harvesters Engines as per CMV Rules 115, 116 and 126

1. GENERAL

1.1 The Ministry of Road Transport and Highways is the Nodal Agency for implementation of emission legislation in both its aspects of Type Approval and Conformity of Production (COP).

1.2 This procedure contains administrative guidelines for carrying out Conformity of Production tests in implementation of Emission Legislation. This has to be read in conjunction with Part 1, Part 2, Part 3, Part 4, Part 5 and Part 7 of AIS-137, which contain the technical procedures and guidelines for the implementation.

1.3 The Standing Committee on implementation of Emission Legislation has been constituted by the MoRTH under the Chairmanship of Joint Secretary - MoRTH, to advise the Nodal Agency in such implementation.

1.4 The functions of Standing Committee are to advise the Nodal Agency on all matters pertaining to the implementation of Emission Legislation in general, and particularly

1.4.1 To formulate, monitor and control the policies and actions for Type Approval and Conformity of Production Testing System and Procedures.

1.4.2 To co-ordinate all such activities relating to implementation of the Emission Legislation.

1.4.3 To deal with certification, withdrawal and restoration of Type Approval.

1.4.4 To deal with all technical, administrative or legal matters in this regard.

1.4.5 A list of members of the Standing Committee is circulated by Ministry of Road Transport & Highways from time to time.

1.5 Manufacturer is responsible for completion of COP before end of COP period for each model and each fuel type produced at different production plant, to enable the same:

a) Manufacturer to submit the initial plan within 8 weeks from Start of Production or at the start of Financial Year (April – March), as applicable.

b) For imported vehicles/engines: Manufacturer to submit the initial plan within 8 weeks from landing/invoice date at port in India.

c) Test Agency to select vehicles at least one quarter before the end of COP period, for four wheelers / engines or latest two months before the end of COP period, for the two and three wheelers.

d) The completion of COP should not extend beyond one quarter of the next financial year.

If a manufacturer fails to complete COP in due time, Test Agency will inform the suitably the Nodal Agency and / or display the non-compliance suitably at respective Test Agency's website, if the reasons for non-completion of COP is solely due to the manufacturer.

1.6 In-Service Compliance for M & N vehicles with GVW <3500 kg shall be done as per procedure laid down in AIS-137(Part 3) and with GVW >3500 kg shall be done as per procedure laid down in AIS-137(Part 4)

1.6.1 During COP for vehicles GVW < 3500kg, real world driving cycle emission using PEMS shall be carried out for data collection.

1.6..2 During COP for vehicles GVW > 3500kg, emission measurement on vehicle using PEMS shall be carried out for data collection.

1.7 For M and N category vehicles manufactured after 1st April 2023 in-use performance of OBD compliance statement shall be submitted as per procedure laid down in AIS-137 (Part 3) and (Part 4)

2. COP TEST AGENCY

2.1 The Test Agencies specified in Rule 126(A) of CMVR 1989 will be responsible for carrying out the COP tests in addition to the Type Approval tests.

2.2 Initially the vehicle/engines manufacturer has the option of choosing the Test Agency for Type Approval of its specific model from among those listed in Rule 126(A) of CMVR 1989. On completion of first COP by the same Test Agency, the manufacturer can change the Test Agency if so desired. In case the vehicle manufacturer desires to change the COP Test Agency, a formal request should be made to the new Test Agency under intimation to the previous Test Agency and Nodal Agency. This request should be made at least one month before the beginning of the next COP period along with all relevant documents concerning type approval/previous COP and also the latest information as per clause 3.10 of this part.

On receipt of intimation of requests for a change, the previous COP Test Agency will authenticate all the relevant documents of that model and forward to the new Test Agency. The new Test Agency will carry out the process of selection & testing of the vehicle/engine for the COP as per the procedure and will consult the previous Test Agency if required about the test findings and results before issuing the final COP Certificate.

2.3 No change of Test Agency will be allowed in the cases covered by clause 5.7 to 8.4 until the procedure required under that Rule are finally completed.

3. COP PERIOD AND SELECTION OF RANDOM SAMPLE

3.1 a) For two and three wheelers COP frequency and samples:

Sr. No.	Type of Vehicle	Annual Production / Import		COP Frequency
		Exceeding	Upto	
(1)	(2)	(3)	(4)	(5)
1.	Two-wheeler and three wheeler	250 per 6 months	10000 per year	Once every year
2.	Two-wheeler	10000 per year	150000 per 6 months	Once every 6 months
3.	Two-wheeler	150000 per 6 months	---	Once every 3 months
4.	Three wheeler	10000 per year	75000 per 6 months	Once every 6 months
5.	Three wheeler	75000 per 6 months	----	Once every 3 months

b) For M & N category vehicles COP frequency is once in a year (April to March).

c) The period between commencement of production/Import of a new model and beginning of next rationalized COP period is less than 2 months; the same would be merged with the rationalized COP period.

d) COP period for agricultural tractor, power tiller, construction equipment vehicle (CEV) and combine harvester engines with annual production/ Import upto 200 nos., it shall be once in two years per family/model. For agricultural tractor, power tiller, construction equipment vehicle and combine harvester with annual production / Import exceeding 200 nos., it shall be once in every year per family/model.

3.1.1 For the vehicles other than those mentioned in clause 3.1 (d) if the number of a specific vehicle model and its variants produced/ Imported are less than 250 in any consecutive period of six months in a year, COP should be carried out as per AIS-137 (Part 1) for 2 wheeler vehicles, AIS-137(Part 2) for 3 wheeler vehicles, AIS-137 (Part 3) for M and N vehicle having GVW $\leq$ 3,500 kg., AIS-137 (Part 4) for M and N vehicle having GVW > 3,500 kg.

Provided that in case the number of vehicles sold in India for a given base model and its variants (manufactured in India or imported to India) are less than 250 in any consecutive period of six months in a

year, then such base model and its variants need not be subjected to the above test, if at least one model or its variants manufactured or imported by that manufacturer or importer, as the case may be, is subjected to such tests at least once in a year;

Provided further that, in case the number of base models and its variants manufactured / imported is more than one and if the individual base model and its variants are less than 250 in any consecutive period of six months in a year, then the testing agencies can pick up one of the vehicles out of such models and their variants for respective fuel type once in a year for carrying out such test".

3.2 The vehicle manufacturer may conduct the internal COP emission tests in addition to those conducted by Test Agency, the data may be referred by the Test Agencies in case on COP non-compliance.

3.3 The vehicle manufacturer should have a valid certificate of compliance to ISO 9001-2015 or equivalent for the plant manufacturing that model.

3.4 For COP testing at manufacturer test facility following requirements shall be met :-

3.4.1 Test Agency may use manufacturer's facilities which is accredited for NABL (ISO-IEC 17025) covering AIS-137.

3.4.2 Manufacturer test facility should be used for COP testing of vehicles/engines preferably for same plant location.

3.4.3 The manufacturer will submit one model per plant every year for COP evaluation at the premises of the Test Agencies. The selection of the model will be at the discretion of the Test Agency.

3.5 A vehicle/engine is considered to be produced when the vehicle/engine has passed the final inspection stage as declared by the manufacturer.

3.6 Three random sample of the vehicle model type approved will be selected using random number generating software under the control and supervision of the Head Office of Test Agency for the COP test before the completion of the COP period defined in clause 3.1. In the case of vehicle with GVW > 3500 kg, three engines shall be tested for AIS-137 (Part 4) and (Part 5).

In case of vehicle model and its variants produced less than 250 in any consecutive period of six months in a year, as mentioned in clause 3.1.1 one vehicle shall be tested.

For agricultural tractor, power tiller, construction equipment vehicle (CEV) and combine harvester engines, two random sample of the vehicle model/engine type approved will be selected using random number generating software under the control and supervision of the Head Office of Test Agency for the COP test before the completion of the COP period defined in clause 3.1. One sample shall be tested for AIS-137 (Part 7).

3.6.1 During Random number generation for vehicles base model and variant shall be considered, for engines parent and child engines to be considered for particular family.

3.7 The vehicle / engine manufacturer shall inform the Nodal and concerned Test Agency

3.7.1 Production/ Import plan for each model including its variants (with respect to the Type Approval Certificates and the previous COP Certificate) in format given at Annexure 1 for vehicle GVW less than 3500 kg and Annexure 2 for vehicle GVW more than 3500 kg, Agricultural Tractor, CEVs, and Power Tiller and Combine Harvester within 8 weeks from the start of production/Import of type approved vehicle model or resumption of production of a vehicle or start of the COP period for that model.

3.7.1.1 Manufacturer declared actual Production/ Import plan for each model including its variants (with respect to the Type Approval Certificates and the previous COP Certificate) in format given at Annexure 1 and Annexure 2 before two months of completion of COP period. (Required authorization letter from company management (i.e. MD/CEO/COO or equivalent, as applicable) for the "authorized signatory" for the organization)

3.7.2 Any subsequent change in such Production/ Import Plan, which would affect time schedule for random selection referred to in clause 3.11.

3.7.3 Likely and approximate last date before which COP will have to be completed, at least one to two months before such a date is likely to arrive.

3.7.4 Stoppage of production/ Import of a specific model, in case this has not been anticipated at the start of the COP period. This should be intimated at least 3 months in advance so that COP selection of vehicle/engine can be completed by the test Agency before stoppage of production/ Import.

3.8 Manufacturer shall request the Test Agency when they would like to make random selection of vehicles/engines and to seek their time table for completing the COP test.

3.9 Manufacturer shall provide all the assistance required by the Test Agency for completing the COP.

3.10 The latest updated technical specifications, procedure of Pre-Delivery Inspection (PDI), running-in and servicing of the vehicle/engine, shall also be submitted before the vehicle/engine selection, if there has been revisions after the previous COP/Type Approval.

3.10.1 Make, Identification/Part number, of emission related part like FIP, Fuel Pump, Catalytic Converter, DPF, EGR, Muffler, ECU, Canister shall be shown to Test Agency. Dedicated instruments may be used for visibility, where direct line of sight for observation is not feasible.
Unique identification (Serial number or Month and Year of Manufacturing or Batch number or any other means of identification) for Catalytic converter, DPF and canister to be provided.

3.10.2 All emission related components (as per AIS-007) will be verified at time COP selection or during COP test.

However before test, vehicle shall not be disassembled in case parts are covered and manufacturer can get the parts checked after completion of COP test.

These parts can be verified by physical verification / appropriate documentary evidence from manufacturer's documentation system.

3.11 The Test Agency will inform the vehicle/engine Manufacturer not more than two days in advance, its time schedule for the selection of random sample from manufacturing plant or dealer's location or warehouse. If the vehicle/engine manufacturer has a problem for this time table for reason such as, that particular model is not likely to be scheduled for production at that time, or enough number of vehicles/engines may not be available etc., the time schedule should be modified by Test Agency based on production data provided by manufacturer.

Vehicle models (two and three wheelers and < 3,500 kg GVW vehicles) will be selected from dealer's location or warehouse through manufacturer 2 model out of 4 models produced from particular plant as per COP frequency defined in CMVR 115

For imported vehicles/engines shall be selected from arrival port / warehouse in India.

Vehicles with GVW more than 3500 kg and industrial vehicle will be selected from production plant.

Selected vehicles/engines should be sealed and dispatched immediately in presence of Test Agency representative. Wherever immediate dispatch not possible selected vehicle/engines shall be sealed in closed room/container in front of Test Agency representative. However, selected samples should reach Test Agency maximum within two weeks.

4. EXEMPTIONS FROM COP

4.1 In the following cases, vehicle/engine models are exempted from COP tests :-

4.1.1 A batch of new/modified vehicles/engines produced for field trials up to a maximum of 500 vehicles/engines. (Not sold to customer)

5. COP TESTING

5.1 The sampling size shall be one days average production subject to a minimum of 10 and maximum of 100.

For vehicle model and its variants produced less than 250 in the half yearly period as mentioned in clause 3.1.1 sample size can be less than 10 or batch size whichever is higher.

For agricultural tractor, power tiller, construction equipment vehicle and combine harvester engine with annual production/ Import upto 200 no's sample size can be less than 10 or batch size whichever is higher.

For selection at dealer's location above sample size is not applicable.

First COP should be completed within three months from start of production.

5.2 Gasoline vehicles and diesel vehicles with Gross Vehicle Weight less than 3500 kg, vehicles type approved on the basis of Chassis Dynamometer tests as per AIS-137 (Part 1, 2 and 3, as applicable) produced in plants of the same manufacturer of different locations are to be considered as an independent unit for COP purposes and offered for COP. The results of the COP will affect only that unit. However, this criteria is exempted for a specific vehicle model and its variants produced less than 250 in the half yearly period as mentioned in clause 3.1.1.

5.2.1 Unladen weight of vehicles selected for COP will be verified with Approved specification, major deviation (i.e. which results in change in Emission / Inertia Class) will be reported to Nodal Agency.

5.3 In the case of vehicles/engines type approved based on the engine tests as per the requirements of AIS-137 (Part 4), (Part 5) and (Part 7), the plants manufacturing engines of the same manufacturer will be considered as independent units for COP purposes and the engines would be offered for COP. These will be tested with the worst case configurations of the exhaust system of the models of the vehicles/engines type approved, based on this engine.

5.4 The COP will be determined on the basis of conformity of the make and specifications of the components used in the randomly selected vehicles/engines to those type approved under Rule 126 of CMVR and tests on vehicles/engines as described below.

5.5 Pre-delivery inspection will be carried out by the manufacturer as per the procedure declared at the time of type approval, and as amended and intimated to the concerned Test Agency from time to time, on the selected vehicles/engines, under the control of the Test Agency.

5.6 The running in of the vehicle/engine shall be carried out as per the manufacturer's recommendation submitted during type approval. This should be carried out as amended and intimated to the concerned Test Agency from time to time, under the control of Test Agency. After this, the manufacturer will be permitted by the Test Agency to carry out all the adjustments recommended in his user's/service manual and as amended and intimated to the concerned Test Agency from time to time, under the control of Test Agency.

5.7 In the case of failure of any major component during the running-in or testing, the Test agencies may permit to replace the components, only once, which have failed and which do not affect the performance and emission of engine/vehicle. In the case of

components affecting the performance and emissions of the engine/vehicle, random selection should be done once again and the testing will be done. If the randomly selected vehicle/engine also fails, it would be reported to the Nodal Agency by the concerned Test Agency and the Agency will await instructions from the Nodal Agency for further action.

6. COP CERTIFICATE

6.1 If the vehicle/engine meets the requirements of COP, the Test Agency will issue a COP certificate to the manufacturer. The certificate for COP will cover the vehicle/engine model and its variants produced/planned to be produced during the COP interval. The Test Agency will also send the copies of the COP certificate to other Test and Nodal Agencies. The format for COP certificate is given at Annexure 3 for vehicle GVW upto 3,500 kg and Annexure 4 for vehicle GVW more than 3,500 kg, Agricultural Tractor, CEVs, Power Tiller and Combine Harvester.

7. EXTENDED COP TESTS

7.1 If the test for COP on the vehicle/engine model has to be continued as per AIS-137 (Part 3) for 4 wheeler vehicles and AIS-137 (Part 1) and (Part 2) for 2 and 3 wheeler vehicles, AIS-137 (Part 7) for Agricultural Tractor/ Construction Equipment Vehicle engines, Power Tiller / Combine Harvester, AIS-137 (Part 4) diesel engine, the Test Agency will immediately inform the manufacturers with copies to the Nodal Agency and other Test Agencies about this. All the subsequent tests to this model for COP will be carried out by the same Test Agency for that COP. If the testing is not completed till the end of the next COP period, then, a sample of the vehicle/engine produced in the next COP period will be selected and taken up for testing after the earlier test has been completed.

7.2 In the case when action as per clause 7.1 has to be taken, the manufacture should offer adequate number (at least two times of sample size referred in clause 3.6) of vehicles/engines for random selection of the above 'N'/10 vehicles/engines, or N/32 vehicles/engines as the case may be, immediately within 2 weeks unless its production/ Import is not then scheduled. In that event, the samples should be offered for random selection from the first lot of production/ Import within 2 weeks of start of production/ Import without implementing any design/production modifications which would affect emission performance.

7.3 The Test Agency should endeavor to complete further testing of the samples of the vehicles/engines selected according clause 7.1 within 6 weeks from the date of selection of the samples. If the vehicle/engine selected as per clause 7.1 meet the requirements of COP, the Test Agency will issue a COP certificate to the manufacturer.

8. CONSEQUENCES OF FAILURE

8.1 If the vehicle/engine fails to meet the requirements of COP, the Test Agency shall send the copies of the test report to the Nodal Agency and the manufacturer. The Nodal Agency will make a decision and convey the same to the manufacturer and test agencies within 4 weeks of the receipt of the failure report of the COP, after calling for a Standing Committee meeting to discuss and advise the Nodal Agency. The vehicle/engine manufacturer will be given an opportunity to present his case to the committee before advising the Nodal Agency. Based on the recommendations of the committee, the Nodal Agency may issue the order for withdrawal of type approval certificate and stop dispatch of the vehicles/engines by the manufactures from his works.

8.2 In case the type approval certificate has been withdrawn as per clause 8.1 above, the manufacturer can subsequently identify the reason for not meeting the COP and necessary corrective measures. Then they should inform the same to the Nodal and concerned test Agency and offer the rectified vehicle/engine for testing. The Test Agency will carry out a complete test as per the relevant type approval procedure on this rectified vehicle/engine. If the modifications are only in the production process without involving any model change, it should meet the COP norms. If the modifications call for changes resulting in a model change, it should meet the type approval norms. If the modified vehicle/engine passes the relevant norms, the manufacturer will write to the Nodal and concerned Test Agency which has carried out the test, the modifications which are to be finally carried out on the vehicles/engines to be produced/ Imported in future and the vehicles/engines which require retrofitting/rectifications. Type approval will be restored by the Nodal Agency subject to clause 8.5. Further, a special COP will be carried out within a month,. Regular COP as per schedule will be carried out.

8.3 In case of stoppage of vehicles/engines, the manufacturer can offer the rectified vehicle/engine from serially produced vehicles / engines, for random selection if the changes do not constitute a model change.

8.4 If a manufacturer identifies the reason for not meeting the COP and the necessary corrective actions (if the corrective measures do not constitute a model change), when actions under clause 7.0 to 8.3 are on-going, the manufacturer should inform the same to the Nodal and concerned Test Agency and request to abort the actions on-going under clause 7.0 to 8.3 and offer the vehicle/engine for carrying out the tests as per clause 8.2 and 8.3. Then the Test Agency will carry out the test as per clause 8.2 and 8.3 and report the results to the Nodal Agency. If the vehicle/engine meets the requirements, then the Nodal Agency will instruct the Test Agency to issue the COP certificate along with instructions to the manufacturer to carry out corrective actions, if any, within a stipulated period as per clause 8.5. The COP certificate will be issued by the Test Agency after the special COP vehicle / engine meets the requirements, if the case calls for it. If the vehicle/engine does not meet the requirements, action under clause 8.1 will follow.

8.5 It is the responsibility of the manufacturer to ensure at his cost that the modifications/modified components are carried out / retrofitted, within a period specified by the Nodal Agency, on all the vehicles / engines produced / dispatched in the period between the dates of which the COP became due as per clause 3. and restoration of the type approval by the Nodal Agency as per clause 8.2 or when the Nodal Agency has informed the Test Agency and the manufacturer as per clause 8.4.

8.6 When COP was carried out as per clause 3.1.1 and if the vehicles/engines fail to meet the requirements of COP, all other models considered for exemption will be individually subjected to COP for that period.

9. CONSEQUENSES OF NON - COMPLETION OF COP

9.1 If the manufacturer fails to complete COP before end of COP period, the Test Agency shall send list of such vehicles/engines to the Nodal Agency to include in VAHAN system to block registration and further inventory for those vehicles and engines.

Annexure 1

Production Plan Format for COP test of Two, Three, Four Wheeler vehicle

Plant Manufacturing Address		Start of Production (SoP) or Date of Ist CoP	
		Engine cc	
Engine model		Rated Poweer kw @ rpm	
Engine Manufacturer & Plant		Running-in to be covered for vehicle in km	
Maximum Torque Nm@ RPM			

Emission related Component Description

Sr. No	COMPONENT	MAKE	PART ID & *Sr NO.	Sr. No	COMPONENT	MAKE	PART ID
1	ECU			8	Muffler (s)		
2	calID			9	*Cat Con(s)		
3	Spark plug (s)			10	EGR		
4	Air filter			11	Turbocharger		
5	*Fuel Pump			12	*Cansiter		
6	Fuel Injector			13	*SCR		
7	*DPF			14	*LNT		

Production Plan Format for COP test of Two, Three, Four Wheeler vehicle (Page 1)

Sr.No.	Is Base/ Parent?	Vehicle Models / Variants produced as per CMVR certificate	Latest CMVR Cert. No.	Latest Emission Type approval test report no.	Planned/Actual Production for COP(1st Half) 1/4/20xx - 30/9/20xx								Planned/Actual Production for COP(2nd Half) 1/10/20xx-31/3/20xx							Actual Production for Previous COP 1/4/20xx-31/3/20xx	Tentative Date of COP Selection	Latest COP certificate No. (if any)
					Category	Apr	May	Jun	Jul	Aug	Sep	Total	Oct	Nov	Dec	Jan	Feb	Mar	Total			
1		Base			Actual production Days																	
					Quantity																	
					Average																	
2		Varient 1			Actual production Days																	
					Quantity																	
					Average																	
3		Varient 2			Actual production Days																	
					Quantity																	
					Average																	
4		Varient 3			Actual production Days																	
					Quantity																	
					Average																	
					TOTAL																	

Note: Later on, if there is any change in the production plan, please inform the test agency accordingly.

Production Plan Format for COP test of Two, Three, Four Wheeler vehicle (Page 2)																			
Sr.No.	Vehicle Models / Variants produced as per CMVR certificate	Latest CMVR Cert. No.	Latest Emission Type approval test report no.	Category	Actual Production for Previous COP period(1st Half) 1/4/20XX-30/9/20XX							Actual Production for Previous COP period(2nd Half) 1/10/20XX-31/3/20XX								Latest COP certificate No. (if any)
					Apr	May	Jun	Jul	Aug	Sep	Total1	Oct	Nov	Dev	Jan	Feb	Mar	Total2	Total	
1				Actual production Days																
				Quantity																
				Average																
2				Actual production Days																
				Quantity																
				Average																
3				Actual production Days																
				Quantity																
				Average																
4				Actual production Days																
				Quantity																
				Average																
				TOTAL																

ANNEXURE 2

Production Plan Format for COP Test on Automotive Engines

Engine Model		**Running-in to be coverd for engine in hrs :**	
Manufacturer at			
Rated Power			
Maximum Torque			
Exhaust Back Pressure at rated Speed			
Exhaust Volume			
Air In-take Depression at rated speed			

Sr. No.	*Vehicles Models / Variants produced as per CMVR certificate*	*Plant*	*CMVR Certi. No. for BS VI Norms*	*Emission Type Approval Test Report No.*	*Planned / Actual Production for COP Period First Half (01/04/20XX to 30/09/20XX)*								*Planned / Actual Production for COP Period Second Half (01/10/20XX to 31/03/20XX)*							*Latest COP Certificate No. (If any)*	*Tentative COP Selection Date*	*Applicable critical component details such as (Fuel pump/Turbocharger /Cat.Con/Spark plugs/Injectors etc)*
						Apr	May	Jun	Jul	Aug	Sep	Total	Oct	Nov	Dec	Jan	Feb	Mar	Total			
1					Actual Production Days																	
					Quantity																	
					Avg per production day																	
2					Actual Production Days																	
					Quantity																	
					Avg per production day																	
3					Actual Production Days																	
					Quantity																	
					Avg per production day																	
	*	**Later on, if there is any change in the production plan, please inform the test agency accordingly.**																				

Production Plan Format for COP Test on Automotive Engines (Page 2)

Sr. No.	*Vehicles Models / Variants produced as per CMVR certificate*	*Plant*	*CMVR Certi. No. for BS VI Norms*	*Emission Type Approval Test Report No.*	*Actual Production for previous COP Period First Half (01/04/20xx to 30/09/20xx)*								*Actual Production for previous COP Period Second Half (01/10/20xx to 31/03/20xx)*							*Latest COP Certificate No. (If any)*	*Tentative COP Selection Date*	*Applicable critical component details such as (Fuel pump/Turbocharger /Cat.Con/Spark plugs/Injectors etc)*
						Apr	May	Jun	Jul	Aug	Sep	Total	Oct	Nov	Dec	Jan	Feb	Mar	Total			
1					Actual Production Days																	
					Quantity																	
2					Actual Production Days																	
					Quantity																	
3					Actual Production Days																	
					Quantity																	

Production Plan Format for COP Test on Power Tiller Engine Models

Power Tiller Vehicle Manufacturer		**Plant**	
Power Tiller Engine Manufacturer		**Plant**	
Power Tiller Engine Model		**Rated Power ----------at----------RPM**	
Emission TA Report No. for Bharat (Trem) Stage III Norms			
Running-in to be covered (Hrs)			
Maximum Torque ----------at ----------RPM		**Exhaust Back Pressure at rated speed**	
Air In-take Depression at rated speed		**Exhaust Volume**	

TABLE-II

Sr. No.	*Power Tillers Models / Variants produced as per CMVR certificate*	*CFMT&TI, Budni CMVR Certificate No.*	*ARAI Engine CMVR Certificate No. (Trem III)*		*Planned / Actual Production for COP Period First Half (01/04/20xx to 30/09/20xx)*							*Planned / Actual Production for COP Period Second Half (01/10/20xx to 31/03/20xx)*							*Latest COP Certificate No. (If any)*	*Tentative COP Selection Date*	*Applicable critical component details such as (Fuel pump/Turbocharger /Cat.Con/Spark plugs/injectors etc)*
					Apr	May	Jun	Jul	Aug	Sep	Total	Oct	Nov	Dec	Jan	Feb	Mar	Total			
1				Actual Production Days																	
				Quantity																	
				Avg per Prodn day																	
2				Actual Production Days																	
				Quantity																	
				Avg per Prodn day																	
3				Actual Production Days																	
				Quantity																	
				Avg per Prodn day																	

* **Later on, if there is any change in the production plan, please inform the test agency accordingly.**

* **Please enclose, a copy of CFMT&TI, Budni CMVR Certificate in case of imported engines.**

Production Plan Format for COP Test on Power Tiller Engine Models (Page 2)

TABLE-III

Sr. No.	*Power Tillers Models / Variants produced as per CMVR certificate*	*CFMT&TI, Budni CMVR Certificate No.*	*ARAI Engine CMVR Certificate No. (Trem III)*	*Actual Production for previous COP Period First Half (01/04/20xx to 30/09/20xx)*								*Actual Production for previous COP Period Second Half (01/10/20xx to 31/03/20xx)*							*Latest COP Certificate No. (If any)*	*Tentative COP Selection Date*	*Applicable critical component details such as (Fuel pump/Turbocharger /Cat.Con/Spark plugs/Injectors etc)*
					Apr	May	Jun	Jul	Aug	Sep	Total	Oct	Nov	Dec	Jan	Feb	Mar	Total			
1				Actual Production Days																	
				Quantity																	
2				Actual Production Days																	
				Quantity																	
3				Actual Production Days																	
				Quantity																	

PRODUCTION PLAN FORMAT FOR COP TEST ON CONSTRUCTION EQUIPMENT ENGINE (CEV)/Combine Harvester

TABLE-I

Engine Manufacturer Name		Plant address	

Running-in to be covered for engine in hrs :

Engine family name

Sr.no.	Engine model	Rated power	Max. torque @ speed	Exhaust back pressure at rated speed	Air intake depression at rated speed	Exhaust system volume
1	Parent					
2	Variant 1					
3	Variant 2					
4	Variant 3					
5	Variant 4					
6	Variant 5					
7	so on					

TABLE-II

Sr.no.	CEV manufacturer & Plant Address	CEV/Combine Harvester model & variants	Engine family	Engine model fitted on CEV/Combine Harvester	Engine TA report no.	CMVR Certificate no.	Planned / Actual Production for COP Period First Half 01.04.20xx to 30.09.20xx								Planned / Actual Production for COP Period Second Half 1.10.20xx to 31.03.20xx							Latest COP certificate no.	Tentative Date of COP Selection	Applicable critical component details such as (Fuel pump/ Turbocharger/ Cat.Con./Spark plugs / injectors etc)
								Apr	May	Jun	Jul	Aug	Sep	Total	Oct	Nov	Dec	Jan	Feb	Mar	Total			
1							Actual Production days																	
							Quantity																	
							Avg per Production day																	
2							Actual Production days																	
							Quantity																	
							Avg per Production day																	
3							Actual Production days																	
							Quantity																	
							Avg per Production day																	

Notes : (1) Later on, if there is any change in the production plan, please inform the test agency accordingly. (2) Please submit separate production plan for each engine family.

PRODUCTION PLAN FORMAT FOR COP TEST ON CONSTRUCTION EQUIPMENT ENGINE (CEV)/Combine Harvester (Page 2)

TABLE-III

Sr.no.	CEV manufacturer & Plant Address	CEV model/Combine Harvester & variants	Engine family	Engine model fitted on CEV/Combine Harvester	Engine TA report no.	CMVR Certificate no.	Actual Production for Previous COP Period First Half 01.04.20xx to 30.09.20xx								Actual Production for Previous COP Period Second Half 01.10.20xx to 31.03.20xx								Latest COP certificate no.	Tentative Date of COP Selection	Applicable critical component details such as (Fuel pump/ Turbocharger/ Cat.Con./Spark plugs / injectors etc)
								Apr	May	Jun	Jul	Aug	Sep	Total	Oct	Nov	Dec	Jan	Feb	Mar	Total			
1							Actual Production days																	
							Quantity																	
2							Actual Production days																	
							Quantity																	
3							Actual Production days																	
							Quantity																	

Sheets may be added as required to cover all the engine families.

Page 2 of 2

PRODUCTION PLAN FORMAT FOR COP TEST ON AGRICULTURAL TRACTOR ENGINE

TABLE-I

Engine Manufacturer Name		Plant address	

Running-in to be covered for engine in hrs :

Engine family name

Sr.no.	Engine model	Rated power	Max. torque @ speed	Exhaust back pressure at rated speed	Air intake depression at rated speed	Exhaust system volume
1	Parent					
2	Variant 1					
3	Variant 2					
4	Variant 3					
5	Variant 4					
6	Variant 5					
7	so on					

TABLE-II

Sr.no.	Agri. Tractor manufacturer & Plant Address	Agri. Tractor model & variants	Engine family	Engine model fitted on Agri. Tractor	CFMT&TI Budni CMVR Certificate No.	ARAI ATA Engine CMVR Certificate No.	Engine TA Report Nos.	Planned / Actual Production for COP Period First Half 1.4.20xx to 30.09.20xx							Planned / Actual Production for COP Period Second Half 1.10.20xx to 31.03.20xx							Latest COP certificate no.	Tentative Date of COP Selection	Applicable critical component details such as (Fuel pump/ Turbocharger/ Cat.Con./Spark plugs / injectors etc)
									Apr	May	Jun	Jul	Aug	Sep	Total	Oct	Nov	Dec	Jan	Feb	Mar	Total			
1								Actual Production days																	
								Quantity																	
								Avg per production day																	
2								Actual Production days																	
								Quantity																	
								Actual Production days																	
3								Actual Production days																	
								Quantity																	
								Actual Production days																	

Notes : (1) Later on, if there is any change in the production plan, please inform the test agency accordingly. (2) Please submit separate production plan for each engine family.
(3) Please enclose, a copy of CFMT&TI, Budni CMVR Certificate in case of Imported Engines.

Page 1 of 2

PRODUCTION PLAN FORMAT FOR COP TEST ON AGRICULTURAL TRACTOR ENGINE (Page 2)

TABLE-III

Sr.no.	Agri. Tractor manufacturer & Plant Address	Agri. Tractor model & variants	Engine family	Engine model fitted on Agri. Tractor	CFMT&TI Budni CMVR Certificate No.	ARAI ATA Engine CMVR Certificate No.	Engine TA Report Nos.	Actual Production for Previous COP Period First Half (01.04.20xx to 30.09.20xx)								Actual Production for Previous COP Period Second Half (01.10.20xx to 31.03.20xx)							Latest COP certificate no.	Tentative Date of COP Selection	Applicable critical component details such as (Fuel pump/ Turbocharger/ Cat.Con./Spark plugs / injectors etc)
									Apr	May	Jun	Jul	Aug	Sep	Total	Oct	Nov	Dec	Jan	Feb	Mar	Total			
1								Actual Production days																	
								Quantity																	
2								Actual Production days																	
								Quantity																	
3								Actual Production days																	
								Quantity																	

Sheets may be added as required to cover all the engine families.

Page 2 of 2

ANNEXURE 3

COP Certificate Format for L, M and N Category of Vehicles with GVW not exceeding 3,500 kg

COP Certificate No.: Date : dd/mm/yyyy

CERTIFICATE

FOR

CONFORMITY OF PRODUCTION

Cert	Report	Spec	Drg	Total
0	00	--	--	00 pgs

1. Based on the verification of documents and trials conducted on the vehicle models **"……. "** manufactured by **M/s. ……..**and randomly selected from their plant at **……..,** it is certified that the following vehicle models, comply with the following provisions of the Central Motor Vehicles Rules, 1989, as amended up-to-date.

Mass Emission Standards	CMV Rule	Effective From	MoRTH Noti. No.	Date
Bharat Stage – .			GSR ..(E)	

2. This certificate covers the following vehicle models, declared by the manufacturer to have been produced / planned to be produced with the following engine, during the stipulated period.

Engine	Plant :	Manufacturer	Engine Power	Cubic Capacity
		M/s.	kW @ rpm	…

Vehicle Models		Plant :	CMVR Certificate No.	Manufacturing Period	COP Year
Type : Passenger Car – M1/…/..				SOP To dd/mm/yyyy	20….to 20….
1					
2					
3					
4					

Note : Please refer overleaf for **"Disclaimer Clause"**

AUTHORISED SIGNATORY 1 **AUTHORISED SIGNATORY 2**

Ref. COP Test Report No. : …… Dt. ……

Place of Issue: ……..

Disclaimer by Test Agency

1. **.....**

2. .....

ANNEXURE 4

COP Certificate Format for Vehicle with GVW more than 3,500 kg, Agricultural Tractor, CEVs, Power Tiller and Combine Harvester

COP Certificate No.: **Date: dd/mm/yyyy**

Cert	Report	Spec	Drg	Total
Pgs	..pgs	---	---	… pgs

CERTIFICATE

FOR

CONFORMITY OF PRODUCTION

M/s.

1. Based on the verification of documents and trials conducted on the engine model **" ----------"** manufactured by **M/s. ----------** randomly selected from their plant at **,** it is certified that the vehicle models given in Annexure-I, manufactured by ***M/s.*** **----------**with engine model mentioned in paragraph 2, comply with the following provisions of the Central Motor Vehicles Rules, 1989, as amended up-to-date.

Mass Emission Standards	CMV Rule	Effective From	MoRTH Noti. No.	Date
			GSR …(E)	

2. This certificate covers the vehicle models listed in Annexure-I, declared by the manufacturer to have been produced / planned to be produced with the following engine, during the stipulated period.

Engine	Plant :	Manufacturer	Engine Power	Cubic Capacity

3. **Note :** Please refer overleaf for **"Disclaimer Clause".**

AUTHORIZED SIGNATORY 1 **AUTHORIZED SIGNATORY2**

Place of Issue : .....

Disclaimer by Test Agency

1. .....

2. …….

ANNEXURE 5
(See Introduction)

COMPOSITION OF A COMMITTEE FOR FORMULATION OF THIS STANDARD AS PER MORTH OFFICE MEMORANDUM NO. RT-11035/28/2015-MVL DATED 3rd SEPTEMBER, 2015

Chairperson	
Mrs. Rashmi Urdhwareshe	Director, The Automotive Research Association of India (ARAI), Pune
Co-ordinator and Member Secretary	
Mr. K. Srinivas	The Automotive Research Association of India (ARAI), Pune
Members	**Representing**
Representative from	International Centre for Automotive Technology (iCAT), Manesar, Gurgaon
Representative from	Society of Indian Automobile Manufacturers (SIAM), New Delhi
Representative from	Ministry of Petroleum & Natural Gas (MoPNG), New Delhi
Representative from	Emission Control Manufacturers Association (ECMA), New Delhi
Representative from	Automotive Component Manufacturers Association of India (ACMA), New Delhi
Representative from	Vehicles Research and Development Establishment (VRDE), Ahmednagar
Representative from	Central Institute of Road Transport (CIRT), Pune
Representative from	Indian Institute of Petroleum (IIP), Dehra Dun
Representative from	Ministry of Road Transport and Highways (MoRTH), New Delhi

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