

FINALIZED DRAFT

AUTOMOTIVE INDUSTRY STANDARD

Document on Administrative Procedure for Type Approval and Conformity of Production for M and N Category Vehicles, Two and Three Wheelers and CEV/Tractors/Power tiller engines As per CMV Rules 115, 116 and 126

PART-6 Applicable from Apr-2020

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Sr. No.	Corrigenda	Amendment	Revision	Date	Remark	Misc.

General Remarks:

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Document on Administrative Procedure for Type Approval and Conformity of Production for M and N Category Vehicles, Two and Three Wheelers and CEV/Tractors/Power tiller engines	
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.
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 5 & 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 policy 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 other technical, administrative or legal matters in this regard.
1.4.5	A list of members of the Standing committee are 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 produced at different production plant, to enable the same:
	<ul style="list-style-type: none"> a. Manufacturer to submit the initial plan within 8 weeks from Start of Production or at the start of Financial Year, 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 & three wheelers. d. The completion of COP should not extend beyond one quarter of

	<p>the next financial year.</p> <p>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.</p>
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 & 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 & 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 & 4.
2.0	COP TEST AGENCY
2.1	The test agencies specified in Rule 126(A) of CMVR 1993 will be responsible for carrying out the COP tests in addition to the Type Approval tests.
2.2	<p>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 1993. 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 para 17 of the procedure.</p> <p>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.</p>
2.3	No change of Test Agency will be allowed in the cases covered by Para 29 to 37 until the procedure required under that Rule are finally completed.

3.0	COP PERIOD AND SELECTION OF RANDOM SAMPLE				
3.1	a. For 2 & 3 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 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 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 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 11(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 Part 1 of AIS 137 for 2 Wheeler vehicles, Part 2 of AIS 137 for 3 Wheeler vehicles, Part 3 of AIS 137 for M&N vehicle having GVW<3.5 Ton, Part 4 of AIS 137 for M&N vehicle having GVW>3.5 Ton & Part 7 of AIS 137 for Off Highway Engines “Provided that in case the number of vehicles sold in India for a				

	<p>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;</p> <p>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”.</p>
3.2	The vehicle manufacturer may conduct the internal COP emission tests in addition to those conducted by Testing 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 9001-2008 or equivalent for the plant manufacturing that model.
3.4	For COP testing at manufacturer test facility following requirements shall <u>meet</u> :-
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 location.
3.4.3	The manufacturer will submit one model per plant every year for COP evaluation at the premises of the testing agencies. The selection of the model will be at the discretion of the test agency.
3.5	A vehicle is considered to be produced when the vehicle has passed the final inspection stage as declared by the manufacturer.
3.6	<p>Three random sample of the vehicle model type approved will be selected using random number generating software under the control & supervision of the Head office of test agency for the COP test before the completion of the COP period defined in Para 11.0. In the case of vehicle with GVW>3500 kg, three engine shall be tested for AIS 137 Part 5 & Part 7.</p> <p>Further, 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 11.1 one vehicle shall be tested.</p>
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 should 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 I for vehicle GVW less than 3500 kg and Annexure II for vehicle GVW more than 3500 kg, Tractor, CEVs, and Power Tiller 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 I and Annexure II before two months of completion of COP period. (Required Authorization letter from company management (i.e. MD/CEO/COO 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 Para 18.
3.7.3	14.3 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 should 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 should 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 (Serial number or Month & year of Manufacturing or Batch number or any other means of

	identification) for Catalytic converter, DPF & canister to be provided.
3.10.2	<p>All emission related part (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.</p> <p>These parts can be verified by physical verification / appropriate documentary evidence from manufacturer's documentation system.</p>
3.11	<p>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.</p> <p>Vehicle models (2&3 wheelers and < 3.5 tons 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.</p> <p>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.</p>
4.0	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)
5.0	COP TESTING
5.1	<p>The sampling size shall be one days average production subject to a minimum of 10 and maximum of 100.</p> <p>For vehicle model and its variants produced less than 250 in the half yearly period as mentioned in clause 11.1 sample size can be less</p>

	<p>than 10 or batch size whichever is higher.</p> <p>For agricultural tractor, power tiller & construction equipment engine with annual production/ Import upto 200 no's sample size can be less than 10 or batch size whichever is higher</p> <p>For selection at dealer's location above sample size is not applicable.</p> <p>First COP should be completed within three months from start of production.</p>
5.2	<p>Petrol 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 3 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 11.1 of this part.</p>
5.2.1	<p>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.</p>
5.3	<p>In the case of vehicles/engines type approved based on the engine tests as per the requirements of AIS-137 Part 4,5 & 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.</p>
5.4	<p>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.</p>
5.5	<p>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.</p>
5.6	<p>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.</p>

5.7	In the case of failure of any major component during the running-in or testing, the testing 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.
6.0	COP TEST REPORT AND CERTIFICATE
6.1	If the vehicle/engine meets the requirements of COP, the test agency will issue a COP test report & 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 testing and Nodal Agencies. The typical formats of the test report are given at Annexure III for vehicle GVW not exceeding 3500 kg and Annexure IV for vehicle GVW more than 3500 kg, Tractor, CEVs, and Power Tiller. The format for COP certificate is given at Annexure V for vehicle GVW less than 3500 kg and Annexure VI for vehicle GVW more than 3500 kg, Tractor, CEVs, and Power Tiller.
7.0	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 & 2 for 2/3 wheeler vehicles AIS 137 Part 7 for agricultural tractor/construction equipment engines, AIS 137 Part 4 diesel engine, the test agency will immediately inform the manufacturers with copies to the Nodal 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 para 28 has to be taken, the manufacture should offer adequate number (at least two times of sample size referred in para 21) 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 to para 28 within 6 weeks from the date of selection of the samples. If the vehicle/engine selected as per para 28 meet the requirements of COP, the test agency will issue a COP certificate to the manufacturer.
8.0	CONSEQUENCES OF FAILURE
8.1	If the vehicle/engine fails to meet the requirements of COP, the testing 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 Para 31 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 Para 35. 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 Para 28 to 33 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 Para 28 to 33 and offer the vehicle/engine for carrying out the tests as per Para 32 and 33. Then the testing agency will carry out the test as per Para 32 and 33 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 Para 35. 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 Para 31 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 Para 11.0 and restoration of the type approval by the nodal agency as per Para 32 or when the nodal agency has informed the test agency and the manufacturer as per Para 3
8.6	When COP was carried out as per clause 11.1, 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.
9.0	CONSEQUENCES OF NON- COMPLETION OF COP
9.1	If the manufacturer fails to complete COP before end of COP period, the testing agency shall send list of such vehicles/engines to the nodal agency to include in VAHAN system to block registration.

	FOLLOWING ANNEXURES WILL BE UPLOADED SHORTLY
	<p style="text-align: center;">ANNEXURE I:</p> <p>Production Plan Format for COP Test of Two, Three, Four Wheeler Vehicles</p>
	<p style="text-align: center;">ANNEXURE II:</p> <p>Production Plan Format for COP Test on Automotive Engines</p> <p>Production Plan Format for COP Test on Power Tiller Engine Models</p> <p>Production Plan Format for COP Test on Construction Equipment Engine (CEV)</p> <p>Production Plan Format for COP Test on Agricultural Tractor Engine and power tiller</p>
	<p style="text-align: center;">ANNEXURE III:</p> <p>Test Report Format for Vehicle with GVW not exceeding 3500 Kg</p>
	<p style="text-align: center;">ANNEXURE IV:</p> <p>Test Report Format for Vehicle with GVW more than 3500 Kg, Tractor, CEVs, and Power Tiller</p>
	<p style="text-align: center;">ANNEXURE V:</p> <p>COP Certificate Format for Vehicle with GVW not exceeding 3500 Kg</p>
	<p style="text-align: center;">ANNEXURE VI:</p> <p>COP Certificate Format for Vehicle with GVW more than 3500 Kg, Tractor, CEVs, and Power Tiller</p>

ANNEX 1
(See Introduction)
COMPOSITION OF COMMITTEE FOR PART 6*
(To be included)

ANNEX 2
(See Introduction)

COMMITTEE COMPOSITION *

Automotive Industry Standards Committee

(To be included)