

India comments on EPPR-08-08e

Global technical regulation No. XX

SUPPLEMENT 1

MEASUREMENT PROCEDURE FOR TWO- OR THREE-WHEELED LIGHT MOTOR VEHICLES
EQUIPPED WITH A COMBUSTION ENGINE WITH REGARD TO THE CRANKCASE AND
EVAPORATIVE EMISSIONS

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No	Reference Para	India comments	Ref doc	Justification
1	Title	MEASUREMENT PROCEDURE FOR TWO- OR THREE-WHEELED LIGHT MOTOR VEHICLES EQUIPPED WITH A COMBUSTION ENGINE WITH REGARD TO THE CRANKCASE AND EVAPORATIVE EMISSIONS	New suggestion from India	The expression "light vehicle" is used in CARB and sometimes in REPPR. In SR1, there is no term called "light vehicle". Also use of the term "two and three wheeled light vehicles" would indicate there is a category which are "two and three wheeled heavy vehicles", where as not such category exists
	B.2.	<u>TEXT OF THE REGULATION, TEST TYPE III, EMISSIONS OF CRANKCASE GASSES</u>		
2	1.1	<p><i>Test type III shall be conducted in order to demonstrate that no gases from the crankcase ventilation system shall escape directly into atmosphere.</i> Test type III shall be conducted in order to demonstrate that zero emissions from the crankcase and/or if applicable the crankcase ventilation system can escape directly into the atmosphere. Alternatively some Contracting Parties may be satisfied with a written statement only from the vehicle manufacturer and may consequently waive the type III test.</p> <p><i>Type III test is not applicable for vehicles equipped with a two-stroke engine containing a scavenging port between the crank case and the cylinder(s).</i></p>	New suggestion from India	<ol style="list-style-type: none"> 1. Wording suggested for better clarity 2. As technically there is no crank case emission for two stroke engines there is no need to go through the administrative process. 3. The requirement of clause 2.1.2.4 is combined with clause 1.1 for better clarity.
3	2.1.2.4	vehicles equipped with a two-stroke engine containing a scavenging port between the crank case and the cylinder(s) may be exempted from the type III test requirements at the request of the manufacturer.	New suggestion from India	Deletion suggested in view of the shifting this clause in 1.1. above

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4	4.1.2	Measurements shall be taken in the following sets of conditions of engine operation:	New suggestion from India	1) Speed unit to be mentioned for better clarity 2) Text modified for better understanding and follow the procedure. It is necessary to appropriate to specify gear to be used in case of b).	
		Condition number			Vehicle speed (km/h)
		1			Idling
		2			Highest of: (a) 50 ±2 km/h (in 3rd gear or -driveø) or (b) if (a) not achievable, 50 % of max. design vehicle speed. (at the gear at which max designed vehicle speed is achieved)
	3				
5	4.1.4.2.	The pressure in the crankcase shall be measured at an appropriate location. It may be measured at the dip-stick hole with an inclined-tube manometer with an accuracy of 1mm of H2O, sampling frequency is not necessary. If this is an inappropriate location i.e. for vehicles with a dry sump lubrication system, then alternative locations as per the bag test described in point 4.2.1. may be selected.	New suggestion from India	It is essential to specify accuracy of an inclined tube manometer during measurement. Sampling frequency is not appropriate for water manometer as it is fundamental measurement without any electronics involved.	
6	4.1.5.	For the test by the method described in points 4.1.4.1. to 4.1.4.3., the pressure in the intake manifold shall be measured to within ±1 kPa for electronic transducers.	New suggestion from India	This requirements is specifically applicable for electronic transducers.	
7	4.1.7.	The pressures measured in the crankcase and the ambient pressure shall be measured to within ± 0.1 kPa and shall be sampled with a frequency × 1 Hz within a time period of × 60 s when the conditions in point 4.1.2. are continuously operated and stabilised for electronic transducers.	New suggestion from India		

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	<u>Annex B.2.1.</u>	<u>propulsion family definition with regard to test type III requirements</u>		
7	1.1	Category <i>Engine capacity (+/- 2 %) of the combustion engine;</i>	New suggestion from India	Instead of Vehicle category, engine capacity is more relevant in case of crankcase emissions.
8	1.1	Sub category	New suggestion from India	There is no sub category in the context of crank case emission.
9	2.1.	Propulsion (not) equipped with crankcase ventilation system (max. design vehicle speed.) <i>1) If the test speed as per cl. 4.1.2. increases by > 10%</i> <i>2) If Power absorbed by the brake for Type-I test for the test vehicle increases by more than 10% of type approved vehicle</i>	New suggestion from India	These are new clauses for propulsion family criteria for Type III test which are relevant in the context of test procedure to be followed.
10	2.1.1.	Crankcase ventilation system type	New suggestion from India	India suggest that crankcase ventilation system type definition is required to understand this criteria.

India ó General comments

- “ A Separate GTR is suggested for all definitions related to EPPR to avoid conflict among GTRs and this may be further referred to GRPE- VPSD group.
- “ India would like to suggest that Type óIII & Type óIV (Crankcase and Evapo) GTRs can be formulated for all 2W & 3W vehicle categories instead of repeating the same work later on as most of the criteria's and test procedure will be common for these vehicle categories.
- “ All these India comments are on Type óIII and Type óIV tests are same and shall be appropriately considered for corresponding UN Regulations referred under the scope of EPPR.

Thank you