EUROMOT POSITION

20 April 2015

Potential amendment to Council Document 6576/15 on inter-institutional file 2014/0268 (COD) revising definition of “internal combustion engine”

EUROMOT fundamentally rejects the initiative of the Council to amend the definition of an engine to include ‘…at least, an engine block with an installed crankshaft and head assembly’, which is an incomplete assembly of components often known as a ‘long block’.

EUROMOT is concerned to ensure that the regulation facilitates effective market surveillance and prevents deliberate circumvention of the regulation by the removal of selected components from a fully functional engine, but does not consider that defining incomplete assemblies of components as an engine is an appropriate approach.

EUROMOT proposes that the Council return to the original principle that this regulation addresses the type approval of complete engines, and proposes to use an alternative approach to prevent circumvention.

1. Rationale

As stated in the title of the regulation under discussion in 2014/0268 (COD), it is ‘…on requirements relating to emission limits and type-approval for internal combustion engines for non-road mobile machinery, …’. Furthermore, the subject matter (Article 1) clearly states that ‘This Regulation establishes emission limits for gaseous pollutants and particulate matter and the administrative and technical requirements relating to EU type-approval for all engines referred to in Article 2(1).’ This is entirely appropriate, so long as it applies to complete engines.
However, Council has proposed in document 6576/15 that the definition of an engine should apply equally to an assembly of engine components that, on their own, cannot operate. As a consequence those components can neither perform the defined function of ‘transforming chemical energy (input) into mechanical energy (output)...’, nor can they emit gaseous pollutants or particulate matter. Consequently it is not technically possible to conduct the necessary type approval tests on such assemblies of components.

From a commercial perspective such incomplete assemblies of core engine components are used as both a low-cost engine repair option for engines already installed in machines and also shipped from component suppliers to engine manufacturers as sub-assemblies for producing new engines in conformity with the regulation. One long block configuration may be used for multiple engine families, including families at different emission levels and for different markets, including export from EU, preventing identification of final configuration at point of placing on market. It is consequently highly burdensome to regulate such long-block sub-assemblies and they are out of scope of all EU vehicle engine regulations.

2. Alternative approach

The alternative approach proposed by EUROMOT would be to retain a definition of the complete functional engine, which is the configuration to be subjected to type approval testing, conformity of production testing and in-service monitoring, then to add to the to the articles setting out the general obligations of the economic operators a sub-clause that would prohibit circumvention of the regulation by omission or removal of the emission control system.

(Amendment proposal in detail provided on the next page)
Amendment Proposal [1]

CHAPTER I, SUBJECT MATTER, SCOPE AND DEFINITIONS, Article 3, definitions

Text proposed in Council Document 6576/15

(6) “internal combustion engine” ("engine") means an energy converter transforming chemical energy (input) into mechanical energy (output) with an internal combustion process. It comprises, at least, an engine block with an installed crankshaft and head assembly. Where installed, it includes the emission control system and the communication interface (hardware and messages) between the engine system electronic control unit(s) (ECU) and any other powertrain or vehicle control unit necessary to comply with Chapters II and III;

Justification

It is inappropriate to include ‘...at least, an engine block with an installed crankshaft and head assembly’, which is an incomplete assembly of components often known as a 'long block'. This assembly of core engine components cannot operate nor can it be type approved under this regulation. The definition should include only a complete engine as this is the configuration subject to the emission limits and type approval procedure of this regulation.

All engines subject to this regulation will have an emission control system in order to comply with the regulation but not all engines will be fitted with a communication interface or ECU as some may comply without these features.
Amendment Proposal [2]

CHAPTER II, GENERAL OBLIGATIONS

Article 8, General obligations of manufacturers

*Text proposed in Council Document 6576/15
Amendment*

(1) Manufacturers shall ensure that when their engines are placed on the market, they are manufactured and approved in accordance with this Chapter and Chapter III.

…

(1) Manufacturers shall ensure that when their engines are placed on the market, they are manufactured and approved in accordance with this Chapter and Chapter III. The absence of an emission control system installed on the engine shall not remove the obligation to comply with this Regulation except as permitted by Chapter VIII and Article 57.

…

Article 11, General obligations of importers

*Text proposed in Council Document 6576/15
Amendment*

(1) Importers shall place on the market only compliant engines which have received EU type approval.

…

(1) Importers shall place on the market only compliant engines which have received EU type approval. The absence of an emission control system installed on the engine shall not remove the obligation to comply with this Regulation except as permitted by Chapter VIII and Article 57.

…
Article 13, General obligations of distributors

Text proposed in Council Document

Amendment

6576/15

(1) When making an engine available on the market, distributors shall act with due care in relation to the requirements of this Regulation.

…

Justification

Economic operators are obliged to comply with this regulation. It should be prohibited from circumventing the regulation by omitting or removing the emission control system in order to claim that the unit is no longer an engine.
**EUROMOT** is the European Association of Internal Combustion Engine Manufacturers. It is committed to promoting the central role of the IC engine in modern society, reflects the importance of advanced technologies to sustain economic growth without endangering the global environment and communicates the assets of IC engine power to regulators worldwide. For more than 20 years we have been supporting our members - the leading manufacturers of internal combustion engines in Europe, USA and Japan - by providing expertise and up-to-date information and by campaigning on their behalf for internationally aligned legislation. The EUROMOT member companies employ all over the world about 200,000 highly skilled and motivated men and women. The European market turnover for the business represented exceeds 25 bn euros.

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