

Title (en)

Method and system for estimation of air charge of an engine

Title (de)

Verfahren und System zur Schätzung der Zylinderluftmenge einer Brennkraftmaschine

Title (fr)

Méthode et système pour estimer la charge d'air admise dans un moteur à combustion interne

Publication

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Application

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Priority

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Abstract (en)

The invention relates to a method for estimation of air charge of an engine comprising at least one cylinder (1), an air inlet (3) and an intake manifold (8), said method comprising: measuring the air flow via said air inlet (3), and measuring the pressure in said intake manifold (8). The method further comprises: determining whether the engine is operated at a steady state condition or a transient condition by measuring the pressure in the intake manifold (8), determining a measure of the air charge of said cylinder (1) by measuring the air flow via said air inlet (3) during said steady state condition and by measuring said pressure during said transient condition, correcting said measure of said air charge by means of a correction value (θ) during said transient condition, and adapting said correction value (θ) during said steady state condition. The invention also relates to a system for estimation of air charge of an engine. By means of the invention, an improved system for determining the engine load is obtained, which in particular can be used during sharp transients in the engine load. <IMAGE>

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Citation (applicant)

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