

Title (en)  
METHOD FOR MONITORING TWO-STAGE SUPERCHARGING BY FIXED GEOMETRY TURBOCHARGERS HAVING A DYNAMIC ESTIMATOR AND PRE-TURBINE PRESSURE LIMITATION

Title (de)  
VERFAHREN ZUR ÜBERWACHUNG EINER ZWEIPHASIGEN TURBOLADUNG DURCH TURBOLADER MIT FIXER GEOMETRIE UND EINEM DYNAMISCHEN KALKUKATOR SOWIE VORTURBINENDRUCKBEGRENZUNG

Title (fr)  
PROCEDE DE CONTROLE D'UNE SURALIMENTATION A DEUX ETAGES DE TURBOCOMPRESSEURS A GEOMETRIE FIXE AVEC ESTIMATEUR DYNAMIQUE ET LIMITATION DE LA PRESSION AVANT TURBINE

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Application  
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Abstract (en)  
[origin: WO2011067491A1] The invention relates to a method for monitoring the air supercharging of a motor vehicle internal combustion engine (1) fitted with a supercharging stage twin turbocharger (6, 7) including: two turbines (10, 12) that are rotated by the exhaust gases of the engine (1); two supercharging compressors (11, 13) that are driven by each of the turbines (10, 12); and two high- and low-pressure valve actuators (17, 18). Said method includes controlling the compression rate (PRc) of the compressor to around a compression ratio set value (PRc, cons) and moreover controlling the decompression rate (PR1) of the turbine (12) so as to limit the value of the pressure (Pavt, t) upstream from the turbine (12), said control being implemented when the pressure (Pavt, t) upstream from the high-pressure turbine (12) exceeds a threshold value (CONSpavt).

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