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DEVELOPMENT, APPLICATION AND OPTIMISATION OF VISCO FAN FROM DOMESTIC MANUFACTURER ON IMR ENGINES

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The usual way of mounting a classic fan directly on a water pump or the engine crankshaft has its own shortages concerning the waste of power and fuel, and concerning the noise. Because of these reasons, more attention should be paid in solving this very important part of the engine cooling system. One of the ways of solving this problem is a possibility of applying the viscous drive fan (viscous fan) in the engine cooling system.

This work is concerned with the application of viscous fans on "IMR" vehicle engines, which are mounted on a family of 6-cylinder engines type: S46V, TS46V and TMS46V.

The laboratory and exploitation researches have showed satisfactory results in reliability, and in reduction of power waste, fuel and noise.

Key words: fan, viscous fan, engine cooling system.

RAZVOJ, PRIMENA I OPTIMIRANJE VISOKOVENTILATORA DOMAĆE PROIZVODNJE NA MOTORIMA IMR-a

Uobičajen način ugradnje klasičnog ventilatora direktno na pumpi za vodu ili na kolenastom vratilu motora ima svoje nedostatke kako u pogledu rasipanja snage motora i goriva, tako i u pogledu buke. Iz tih razloga se mora pridati veća važnost rešavanju ovog veoma važnog dela sistema za hlađenje motora. Jedan od načina rešavanja ovih problema je primena viskoznog pogona ventilatora (visokoventilatora) u sistemu za hlađenje motora.

Ovaj rad bavi se primenom visokoventilatora na motorima "IMR"-a vozilske primene, koji su ugrađeni na familiji šestocilindričnih motora.

Laboratorijska i eksploataciona ispitivanja koja su sprovedena pokazala su zadovoljavajuće rezultate kako u pouzdanosti tako i u pogledu smanjenja rasipanja snage, goriva i buke.

Ključne reči: ventilator, visokoventilator, sistem za hlađenje motora.