UDC 521.4-2

Kaukarov A.K. Investigation the dry compaction of internal combustion engine / A.K. Kaukarov, T.M. Mendebaev.,

V.G. Nekrasov, M.K, Kuanyshev // Internal combustion

engines. – 2010. – № 2. – P. 123-127.

It was investigate of the piston’s compaction in the cylinder

without use of lubricant oil. The design compression

rings consisting of two rings placed in one groove of the

piston was developed. Each rings is executed with two half

rings and step contact of half in a vertical plane and springs

for their pressing to a mirror of the cylinder. Joints of rings

are shifted be relative each other on 90 degree. The cylindrical

surface of rings has turn in which the antifriction layer

from hardening paste is incorporated on the basis of graphite.

The structure of paste containing 75 % of a graphite powder

and 25 % of binding liquid glass was picked up. Paste is

checked up on durability in a separate kind, and also in rings.

Thermal stability of paste is tested by temper. The effort to

shift the rings in the cylinder and compression in the engine

is determined. Wear of rings was studied at their work in the

experimental engine. Positive parameters of dry condensation

are received. Table. 5. Il. 5. Bibliogr. 7 names.