

The invention relates to the mechanical engineering, in particular to the automobile transport, and may be used in the systems for air magnetic activation and oxygen enrichment thereof.

The device for air magnetic activation of the internal combustion engine includes a body 1 in the form of a body of revolution of non-magnetic material, onto the lateral part of which there is fixed an air inlet pipe 3, a cover 2 and placed into the body an air filter 6 and air magnetic activators, made in the form of permanent magnets 14, uniformly placed round the circumference. In the lower base of the body 1 there is made a central discharge 4 for the treated air, the filter 6 is made cylindrical and placed coaxially to the body 1 between its base and the cover 2. Onto the lower base of the body 1, inside the filter 6, there is placed a heat exchanger 7 in the form of a plane spiral, which is provided with pipes 8 for inlet of the circulating heat-transfer agent from the motor 10 and for outlet 11 thereof into a radiator 13, above the heat exchanger 7 with clearance about it there are placed at the same level permanent magnets 14, above which with clearance about them there is placed a separating plane ring 15. The device additionally contains a mechanism for outlet of the treated air, which includes coaxially placed into the body 1 a conic shell 16 and a conic valve 17, provided with a lead screw 18, forming a screwed pair with a central threaded hole, made into the cover 2, wherein there are fixed at least two check valves 19.

The permanent magnets 14 may be made of niobium (samarium) ferrites or of other rare-earth elements, magnetized to saturation, with increased value of the coercive force. The size of the clearance between the permanent magnets 14, the separating plane ring 15 and the heat exchanger 7, correspondingly, constitutes 15...20 mm.

Claims: 3

Fig.: 1

