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Marchenko A.P. Adjustment the turbocharger with vaneless turbine volute: efficiency, reliability, low cost/ V.A. Petrosjants, D.E. Samojlenko, A.A. Prohorenko, E.I.

Zinchenko, A.G. Kosulin, D.V. Meshkov // Internal combustion engines. – 2010. – № 1. – P. 72-77.

Actions for maintenance of effective and reliable regulation in turbocharger with vaneless turbine volute are developed. This actions have been taken into account in design of the adjustable turbine. It is established, that for maintenance of high efficiency of the turbine in all adjustment range it is necessary to profile the adjustment element (AE) under special way. His movement algorithm should provide maximum depth of regulation under minimal angular motion. To maintenance the reliable operation of the adjustable turbine which was developed on base TKR -7 the three holes in adjusting disk was drilled. The holes was performed evenly on the circle and unload the disc from the axial thrust. Il. 4. Bibliog. 8 names.