

A free-piston two-stroke engine has two circular cylinders, the working cavities of those are separated in six working volumes by two-action pistons with pressing-out units and with ability of free and straight counter-motion. The system of gas exchange with inlet windows has electronic drive nozzles and spark-plugs. The transformer is equipped with cylindrical tooth gear with direct shaft of the engine, at each one turn of this one in the twelve working volumes thirty six cycles of compression and expansion are performed.