

Since the reciprocating movement of the piston is but a straight movement, it can only be used to drive the tractor if it is converted into a rotary movement. This is done by means of the connecting-rod and the crankshaft.

The temperatures involved in the combustion of the fuel-air mixture in the cylinder come up to 2,000 °C. As compared to this, iron will melt at about 1,200 °C and light alloy at about 650 °C. Hence it follows that the cylinder block, piston rings and pistons cannot stand the temperatures of combustion if

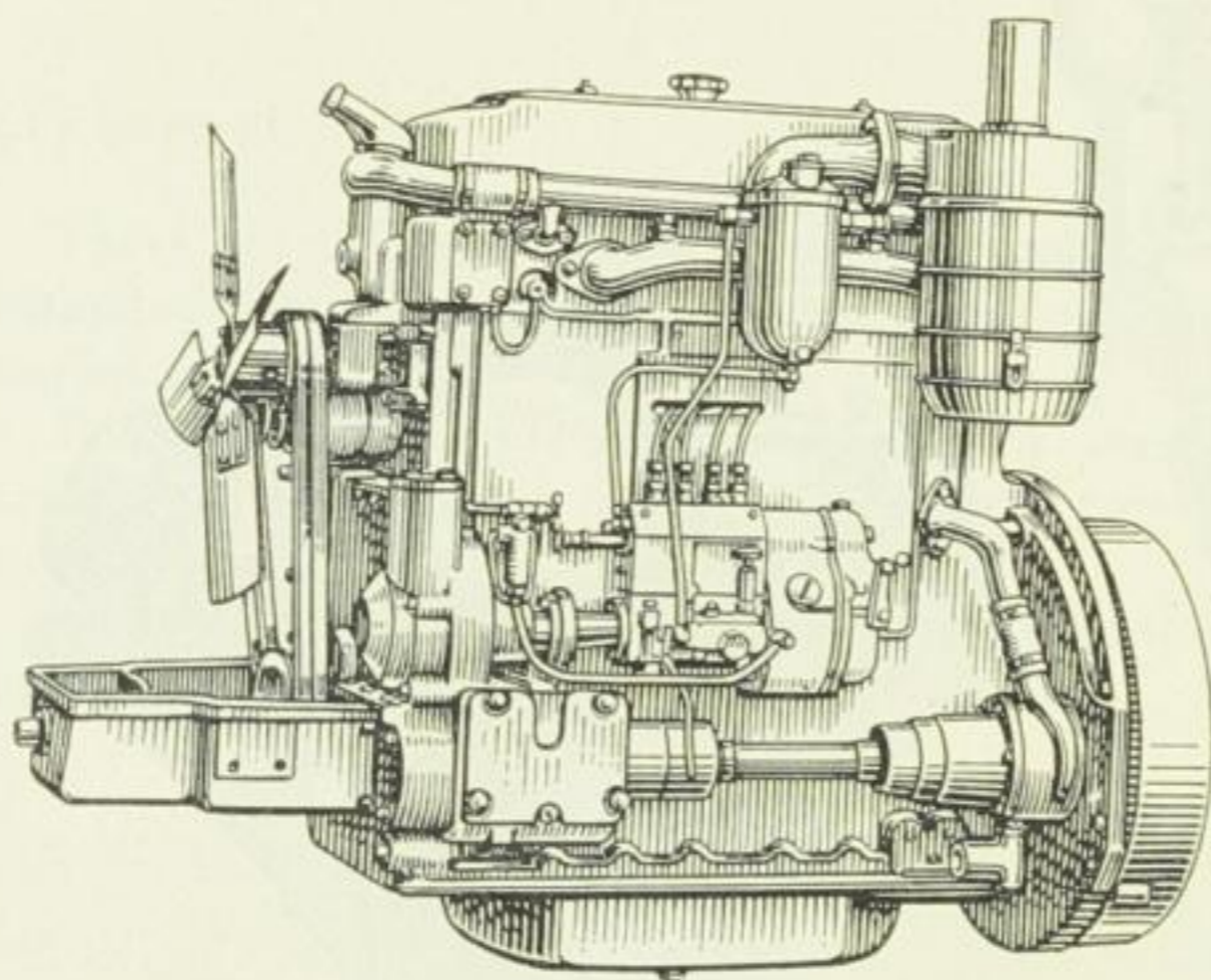


Fig. 41. Four-stroke in-line engine (Diesel engine)  
(Type: D 57 / 55 h.p. / swept volume 5,702 cm<sup>3</sup> - Manufacturer: Hanomag)

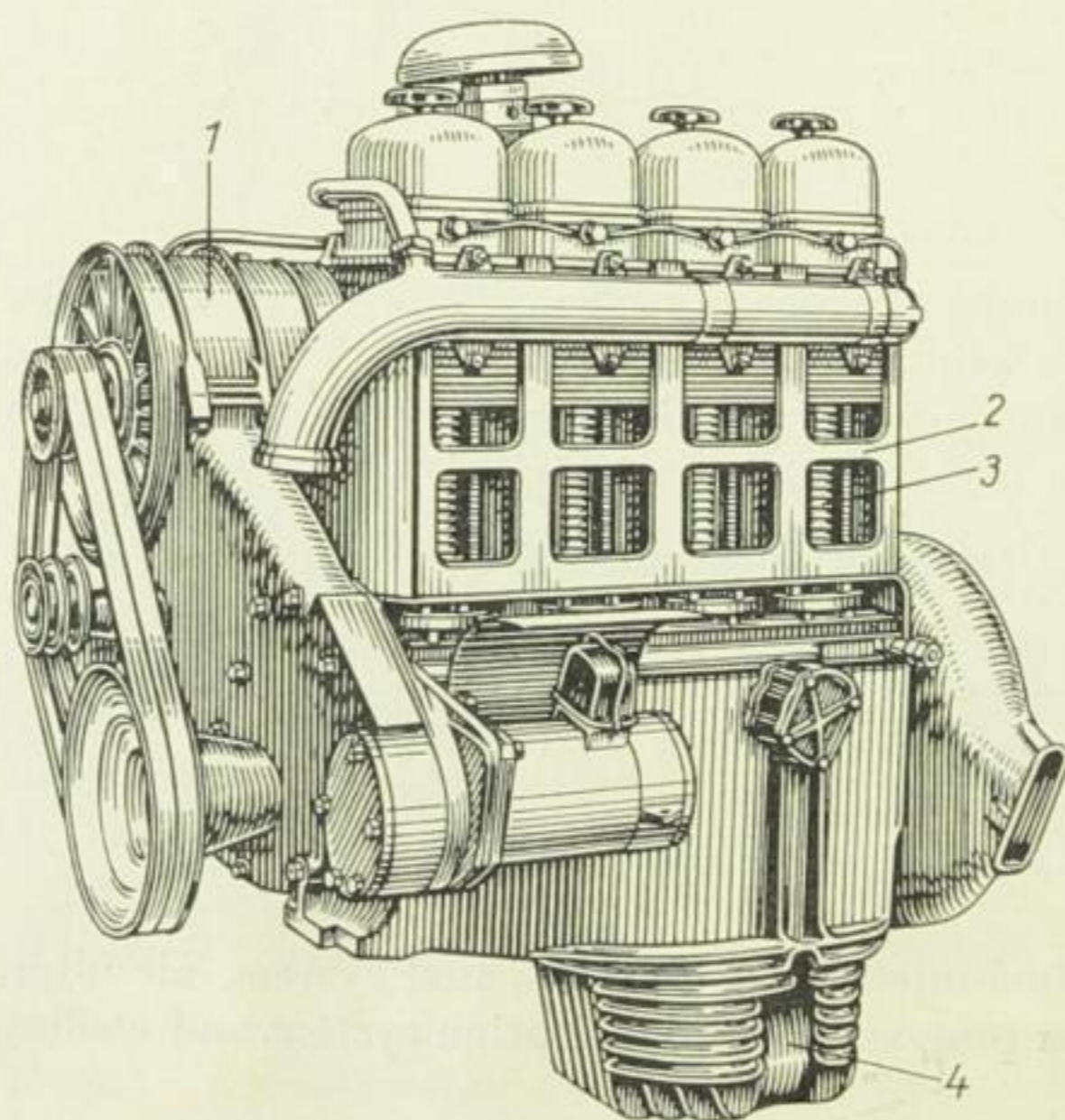


Fig. 42. Air-cooled in-line engine (Type: Garant 30 K / four-stroke petrol engine / four cylinders / 55 h.p. / swept volume 3,000 cm<sup>3</sup> - Manufacturer: VEB Kraftfahrzeugwerk Zittau)

- 1 Fan
- 2 Air baffle plate
- 3 Cooling fins at cylinder block
- 4 Oil pan with cooling fins