

# Identify this alternator component

Identify this alternator component

## Components of an Alternator

The purpose of an alternator is to change the spinning motion of the alternator pulley (mechanical energy) into electrical energy. See Figure 2. The components of a typical alternator are shown in Figure 3. They include:

Rotor assembly--field windings, claw poles, rotor shaft, and slip rings.

Stator assembly--three stator windings, stator core, and output wires.

Brush assembly--brush housing, brushes, brush springs, and brush wires.

Rectifier assembly--diodes, heat sink or diode plate, and electric terminals.

Fan and pulley assembly--fan, spacer, pulley, lock washer, and pulley nut.

Housing--drive end frame, slip ring end frame, and end bolts.

Figure 2. The alternator produces AC electricity, which is then converted to DC for use by various automotive systems.

Figure 4. In an alternator, the rotor spins inside the stator.

A--The spinning magnetic field induces current into the stationary windings of the stator.

The stator is a stationary set of windings that surrounds the rotor. See Figure 6. The stator serves as the output winding of the alternator. A typical rotor and stator are shown in Figure 7. When the rotor spins, its strong magnetic field cuts across the stator windings, inducing a current in them. If the stator windings are connected to a load, the load will operate.

Contact us for free full report

Web: <https://www.kary.com.pl/contact-us/>

Email: [energystorage2000@gmail.com](mailto:energystorage2000@gmail.com)

WhatsApp: 8613816583346

