Alternator vs magneto generator

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They"re simpler than alternators and thus more reliable, but a magneto the size of an alternator won"t be able to produce nearly as much current as the alternator, making it useless in passenger cars. A magneto simply can"t supply enough amps to charge a 12V battery capable of supporting your lights, stereo, engine management and electric windows.

The major point that differentiates between an alternator and generator is that in an alternator, the magnetic field rotates around a stationary armature and in generator; the armature rotates inside a stationary magnetic field.

A magneto is an electrical generator that uses permanent magnets to produce periodic pulses of alternating current. Unlike a dynamo, a magneto does not contain a commutator to produce direct current.

Defining the Alternator. An alternator is an electrical generator converts mechanical energy into alternating current (AC). Unlike generators that create a stationary magnetic field, an alternator creates a rotating magnetic field, which induces an electromotive force within stationary wire coils.

It is basically an electrical generator that has been tuned to create a periodic high-voltage pulse rather than continuous current. An electrical generator (or a magneto) is the reverse of an electromagnet. In an electromagnet there is a coil of wire around an iron bar (t

A magneto is device similar to an alternator for creating electrical energy. Many small gas engines, including several road worthy motorcycles, use them to generate electrical energy. They can be used for supplying spark or charging a battery.

I am guessing that efficiency (i.e. cost or power demand) plays the major role in deciding to use a magneto or an alternator. When is a magneto more efficient than an alternator? Is there some general rule of thumb used to decide which to use on an application?

Interesting fact: magnetos are used in some race cars in lieu of an alternator as part of a crank-fired spark plug setup. this is because this setup creates much less parasitic drag on the engine, thus freeing up more of the horses to turn the wheels.

A magneto is an electrical generator that uses permanent magnets to produce periodic pulses of alternating current. Unlike a dynamo, a magneto does not contain a commutator to produce direct current. It is categorized as a form of alternator, although it is usually considered distinct from most other alternators, which use field coils rather than permanent magnets.

Magnetos were used for specialized isolated power systems such as arc lamp systems or lighthouses, for which their simplicity was an advantage. They have never been widely applied for the purposes of bulk electricity generation, for the same purposes or to the same extent as either dynamos or alternators. Only in a few specialised cases have they been used for power generation.

Production of electric current from a moving magnetic field was demonstrated by Faraday in 1831. The first machines to produce electric current from magnetism used permanent magnets; the dynamo machine, which used an electromagnet to produce the magnetic field, was developed later. The machine built by Hippolyte Pixii in 1832 used a rotating permanent magnet to induce alternating voltage in two fixed coils.[2]

The surviving machine has an applied field from four horseshoe magnets with axial fields. The rotor has ten axial bobbins. Electroplating requires DC and so the usual AC magneto is unworkable. Woolrich"s machine, unusually, has a commutator to rectify its output to DC.