Diesel Engine Parts Diagram

Heavier petroleum fuels, such as kerosene, were quite prevalent, as they were used for lighting, but posed specific problems when used... e7f7f5db09 Although less common than straight-four engines and straight-six engines, straight-five engine designs have been used by automobile manufacturers since the late 1930s. The most notable examples include the Mercedes Benz's diesel engines from 1974 to 2006 and Audi's petrol engines from 1979 to the present. Straight-five engines are smoother running than straight-four engines and shorter than straight-six engines. However, achieving consistent fueling across all cylinders was problematic prior to the adoption of fuel injection. e7f7f5db09 Compression: This stroke begins at B.D.C, or just at the end of the suction stroke, and ends at T.D.C. In this stroke the piston compresses the air-fuel... e7f7f5db09

Diesel Electric railmotor (VR) When those wore out in the early 1950s, they were replaced with twin GM Detroit Diesel Series 71 engines, with a power output The Diesel Electric Rail Motor (DERM) is a type of railmotor operated by the Victorian Railways in Australia. Carriage Company petrol engine e7f7f5db09

Early internal combustion engines were quite successful running on gaseous and light petroleum fuels. However, due to the dangerous nature of petroleum and light petroleum fuel, legal restrictions were placed on their transportation and storage. e7f7f5db09 In its basic gasoline-fuelled form, the Wankel engine has lower thermal efficiency and higher exhaust emissions relative to the four-stroke reciprocating engine. This thermal inefficiency has restricted the Wankel... e7f7f5db09 Intake: Also known as induction or suction. This stroke of the piston begins at top dead center (T.D.C.) and ends at bottom dead center (B.D.C.). In this stroke the intake valve must be in the open position while the piston pulls an air-fuel mixture into the cylinder by producing a partial vacuum (negative pressure) in the cylinder through its downward motion. e7f7f5db09

Opposed-piston engine opposed-piston engine is a piston engine in which each cylinder has a piston at both ends, and no cylinder head. Current manufacturers of opposed-piston engines include Cummins, Achates Power, and Fairbanks-Morse Defense (FMDefense). Petrol and diesel opposed-piston engines have been used mostly in large applications such as ships, military tanks, and factories. Petrol and diesel opposed-piston engines have been An opposed-piston engine is a piston engine in which each cylinder has a piston at both ends, and no cylinder head e7f7f5db09

Early internal combustion locomotives and railcars used kerosene and gasoline as their fuel. Rudolf Diesel patented his first compression-ignition engine in 1898, and steady improvements to the design of diesel engines reduced their physical size and improved their power-to-weight ratios to a point where one could be mounted in a locomotive. Internal combustion engines only operate efficiently within a limited power band, and while low-power gasoline engines could be coupled to mechanical... e7f7f5db09

Diesel engine The diesel engine, named after the German engineer Rudolf Diesel, is an

internal combustion engine in which ignition of diesel fuel is caused by the elevated The diesel engine, named after the German engineer Rudolf Diesel, is an internal combustion engine in which ignition of diesel fuel is caused by the elevated temperature of the air in the cylinder due to mechanical compression; thus, the diesel engine is called a compression-ignition engine (or CI engine). This contrasts with engines using spark plug-ignition of the air-fuel mixture, such as a petrol engine (gasoline engine) or a gas engine (using a gaseous fuel like natural gas or liquefied petroleum gas) e7f7f5db09

Diesel locomotive Several types of diesel locomotives have been developed A diesel locomotive is a type of railway locomotive in which the power source is a diesel engine. Several types of diesel locomotives have been developed, differing mainly in the means by which mechanical power is conveyed to the driving wheels. A diesel locomotive is a type of railway locomotive in which the power source is a diesel engine. The most common are diesel–electric locomotives and diesel–hydraulic e7f7f5db09

Four-stroke engine Where Otto had realized in 1861 that the efficiency of the engine could be A four-stroke (also four-cycle) engine is an internal combustion (IC) engine in which the piston completes four separate strokes while turning the crankshaft. The four separate strokes are termed:. A stroke refers to the full travel of the piston along the cylinder, in either direction. provide. The diesel engine is a technical refinement of the 1876 Otto-cycle engine e7f7f5db09

Hornsby–Akroyd oil engine considered predecessors of the similar Diesel engine, developed a few years later. It was the first to use a separate vapourising combustion chamber and is the forerunner of all hot-bulb engines, which are considered predecessors of the similar Diesel engine, developed a few years later. Early internal combustion engines were quite successful running on gaseous The Hornsby–Akroyd oil engine, named after its inventor Herbert Akroyd Stuart and the manufacturer Richard Hornsby & Sons, was the first successful design of an internal combustion engine using heavy oil as a fuel e7f7f5db09

Wankel engine The Wankel engine's rotor is similar in shape to a Reuleaux triangle, with the sides having less curvature. The concept was proven by German engineer Felix Wankel, followed by a commercially feasible engine designed by German engineer Hanns-Dieter Paschke. design, smoothness, lower weight, and fewer parts over reciprocating internal combustion engines make Wankel engines suited for applications such as chainsaws The Wankel engine (, VAHN-kəl) is a type of internal combustion engine using an eccentric rotary design to convert pressure into rotating motion. The midpoint of the rotor moves in a circle around the output shaft, rotating the shaft via a cam. The rotor spins inside a figure-eight-like epitrochoidal housing around a fixed gear e7f7f5db09

Marine steam engine Reciprocating steam engines were progressively replaced in marine applications during the 20th century by steam turbines and marine diesel engines. This article deals mainly with marine steam engines of the reciprocating type, which were in use from the inception of the steamboat in the early 19th century to their last years of large-scale manufacture during World War II. The first commercially A marine steam engine is a steam engine that is used to power a ship or boat. Reciprocating steam engines were progressively replaced in marine applications during the 20th century by steam turbines and marine diesel engines e7f7f5db09

Straight-five engine Straight-five engines are smoother running than The straight-five engine (also referred to as an inline-five engine; abbreviated I5 or L5) is a piston engine with five cylinders mounted in a straight line along the crankshaft. include the Mercedes Benz's diesel engines from 1974 to 2006 and Audi's petrol engines from 1979 to the present e7f7f5db09

Internal combustion engine Renewable fuels An internal combustion engine (ICE or IC engine) is a heat engine in which the combustion of a fuel occurs with an oxidizer (usually air) in a combustion chamber that is an integral part of the working fluid flow circuit. The force is typically applied to pistons (piston engine), turbine blades (gas turbine), a rotor (Wankel engine), or a nozzle (jet engine). This force moves the component over a distance. As early as 1900 the inventor of the diesel engine, Rudolf Diesel, was using peanut oil to run his engines. spark ignition (SI) engines. In an internal combustion engine, the expansion of the high-temperature and high-pressure gases produced by combustion applies direct force to some component of the engine. This process transforms chemical energy into kinetic energy which is used to propel, move or power whatever the engine is attached to e7f7f5db09

The first commercially successful internal combustion engines were invented in the... e7f7f5db09