The internal combustion engine is a heat engine in which combustion occurs in a confined space called a combustion chamber. Combustion of a fuel creates high temperature/pressure gases, which are permitted to expand. The expanding gases are used to directly move a piston, turbine blades, rotor(s), or the engine itself thus doing useful work. Internal combustion engines can be powered by any fuel that can be combined with an "oxidizer" in the chamber. Internal Combustion Engine Fundamentals is a comprehensive book for undergraduate students of Mechanical Engineering. The book comprises chapters on engine types and their operations, thermo chemistry of fuel-air mixtures, properties of working fluids, gas exchange processes, pollutant formation and control, engine heat transfer, and engine operating characteristics. A 50 yrs Work experience mechanics, farm organic and not, some. Answered 1 year ago Â Author has 4.6K answers and 611.1K answer views. What are the best internal combustion engine books of 2019? One of the best books ever if you can find it is a copy of: Ricardo and Clydeâ€™s The Internal Combustion Engine. The High Speed Internal-Combustion Engine is an authoritative book by one of the pioneers of I.C. engine development was last published in 1941, and included work on fuels and developments in mechanical design, in addition to the well-established chapters on diesel and gasoline combustion, and components. Title: The High-Speed Internal-Combustion Engine Publisher: Blackie & Son Ltd. Publication Date: 1941 Binding: gebundene Ausgabe Book Condition: Gut. PaperBook:High Speed Internal Combustion Engine. Buy From Amazon. The High-Speed Internal-Combustion Engine Hardcover â€“ January 1, 1968. by Sir Harry R. Ricardo F.R.S. (Author), J.G.G. Hempson (Author). 4.7 out of 5 stars 6 ratings. This book, in it various revisions, is one of the most important works on the internal combustion engine written over the +100 years the engine type has been with us. It is excellently written and very accessible, and cannot be recommended enough. A suggestion: Like me you may want to own an original, however the Ricardo engineering company (set up by the author) is retailing a re-print of the 5th edition for Â£35 on line. Please look at [...] ->what we do->Information services->estore for details. The cover of the re-print looks identical to that shown on this Amazon page. Internal Combustion Engines: The Worst Form of Vehicle Propulsion -Except for All the Other Forms. Paul D. Ronney Deparment of Aerospace and Mechanical Engineering. ICE family tree. Internal Combustion Engines. Steady. Non-steady. Ramjet No compressor or turbine Use high Mach no. ram effect for compression. Rocket Carries both fuel and oxidant Jet power only, no shaft work. Solid fuel Fuel and oxidant are premixed and put inside combustion chamber. Liquid fuel Fuel and oxidant are initially separated and pumped into combustion chamber. Two-stroke One complete thermodynamic cycle. per revolution of engine. Four-stroke One complete thermodynamic cycle. per two revolutions of engine.