Sterling engine

Abstract:

Sterling engine is a heat engine that operates by compression of air or other gases by compression at different temperatures. So that heat energy is converted into mechanical energy.

Sterling engine was used in olden days in 1816 for using low domestic applications.

When steam enters, piston reciprocates up and down, Due to pressure of steam. While by movement of piston, connecting rods which can revolve the fly wheel at speed. Which convert kinetic energy of steam pressure into mechanical energy.

The Sterling engine is efficiency quiet operation, and its ability to use almost any heat source. The heat energy source is generated external to the Sterling engine rather than by internal combustion as with the Otto cycle or diesel cycle engines.

It is very efficient engine; it gives greater power than intake. No toxic gases are released and it is less efficient.

The main objective of this project is to design a sterling engine components and assembly it to together as working model. The whole design and analysis is completed in solid works premium 2014.