

**Generator Engine**

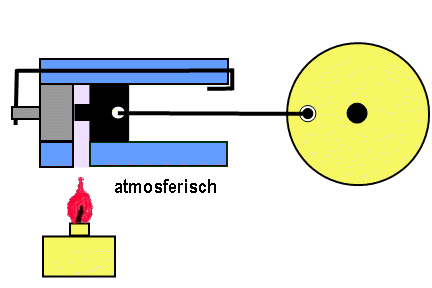
**9-12**

# **Duration:** 30 minutes (15-minute review, 15-minute demo)

# **Objective**

You will be learning how Stirling Engines are designed and built to create movement from a difference in temperature.

# **Types of Engines**

* Heat Engine
  + A device that converts heat energy into work
  + Transforms thermal energy into mechanical energy but is not done perfectly. Some of the input heat energy is not converted to work, but instead dissipated as waste.
* Atmospheric (Vacuum)
  + Flame is ported into chamber and then valved off.
  + The cooling gas drops cylinder pressure below the atmospheric pressure
  + As a result, the atmospheric pressure pushes the piston inward.
  + The pressure then balances and cycles the cylinder to repeat the process



