

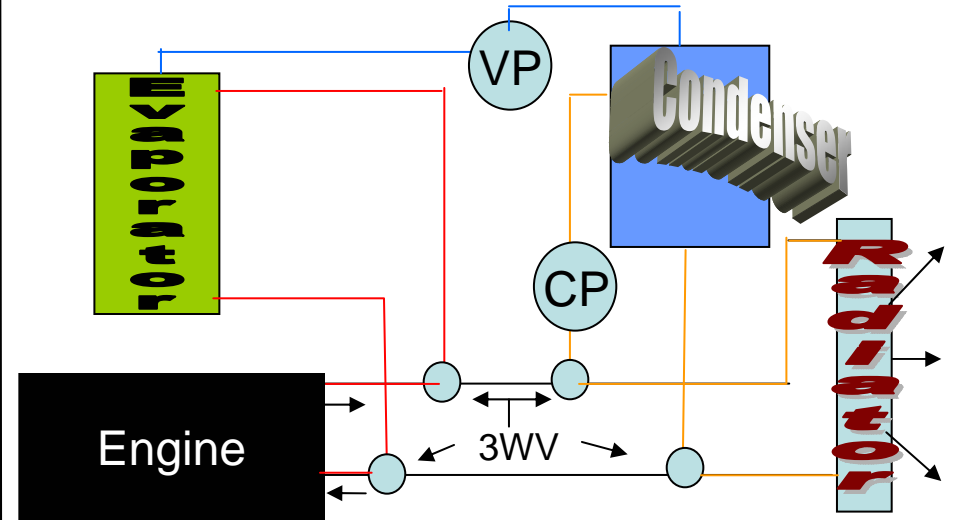


EVCO

Challenge 2 Water Purification Corey Fucetola, James labuz, Kevin Mears

Engine Heat Driven Water Purifier

- Excess heat from car engine cooling cycle is used to distill dirty water
- Process occurs at reduced pressure, so low grade heat becomes useful
- Provides 100% distilled water, with optional water cooling



DESIGN HIGHLIGHTS

- Waste engine heat is used to distill water, and render potable
- System relies on heat rejection components already in vehicle use
- Additional power load and component installation do not require re-design of vehicle.
- Off the shelf components

SOLDIER BENEFITS

- 100% pure water produced while vehicle is being used in field, and remote from base
- Water production rates nominally between 12 and 15 gallons of pure water per day
- Potable water at comfortable temperatures