Automatic Pressure Control Devices
Types of Devices

- Pressure relief valves
- Pressure governor
Purpose

- Control excessive pressure
  - Protects fire fighters and equipment from water hammer
- Works on the principle of pressure differential
Discharge Pressure Relief Valve

**OPERATION**

- Pressure side of the pump to the inlet
- Adjustable
- Components
  - Pilot valve/controller
  - Four-way valve
  - Relief valve
Driver/Operator 1B
September 2003     Slide 2-1-5

- Four-way valve
- Pilot valve
- RELIEF VALVE
  - OPEN
  - CLOSED
- WARNING
  - DO NOT OPEN THROTTLE UNLESS LIGHT IS ON
- THROTTLE
  - ON
  - OFF
- SUCTION TANK TO PUMP
  - FULL TO CLOSE
Discharge Pressure Relief Valve

- Diaphragm
- Pilot Valve
- Pressure Chamber
- Relief Valve
- Pump Discharge Pressure Lower than Pilot Valve Setting
- From Discharge
- To Pump Intake
- Pump Discharge Pressure Higher than Pilot Valve Setting
Intake Pressure Relief Valve

OPERATION

- Excess pressure from the supply line
- Some not easily adjustable
- External to pump panel or internal on pump
External Relief Valve
Internal Relief Valve Control
Pressure Governor

PURPOSE

- Controls excessive pressure
- Protects fire fighters and equipment

OPERATION

- Opening and closing the throttle to the engine
  - Electronic
  - Manual