- Look at the "D" side of the HAV. Note the one way valve on a spring inside port D. When the handle is turned to position D, water will continue to flow through the valve. Only when the pressure supplied by the engine overcomes the hydrant pressure will this valve open and allow the pressure to be increased into the supply line.

Operation

- Place the HAV on a hydrant
- Stand behind the hydrant and open the hydrant fully and flush (handle should be pointing to the "B" side of the valve
- Turn handle on the valve to the right to "C" to stop the flow of water
- Attach 1 -2 lengths of LDH to the "B" side of the valve
- Attach a master stream appliance with pressure gauge, to the LDH and secure properly
- Supply water to the appliance by turning the valve back to "B" side
- Note the pressure on the pressure gauge on the appliance or use the pitiot gauge to get a pressure reading
- Engage the pump on the engine
- Place the blue 4 inch snake from the "C" side of the valve into the master intake valve.
- Place the green 4 inch snake from the large diameter discharge on the officer side pump panel into the HAV on the "D" side of the valve
- Turn the valve handle to the left side "D"
- Once the handle has been turned to the left the blue snake will be charged. There will little to no interruption of water flow to the appliance.
- Open the master intake valve on the engine
- Open the large diameter discharge on the officer side pump panel
- Once this has been accomplished, the green snake will be charged
- With the engine still at idle, note if there is a pressure change on the appliance
- Determine the desired flow to the appliance and increase to pump pressure to reach the flow remembering to calculate the appliance loss and the friction loss.
- Remember; a straight tip master stream appliance should not exceed 80 PSI at the tip
- Example – A 2 inch tip on a master stream device should flow 1000 gallons of water. Calculating the Appliance loss, (10 PSI), the friction loss of 20 PSI per hundred feet of LDH at 100 GPM (40 PSI) and the desired pressure of 80 PSI at the Appliance will require an engine pressure of 150 PSI.
- Please note that LDH should never be pumped in excess of 185 PSI.