

Front suction intake (Engine 1)

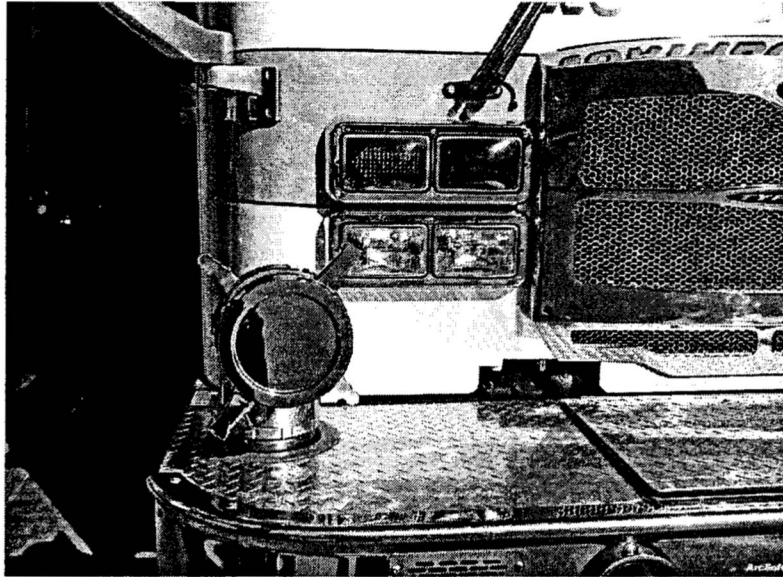


Figure 5

- Currently, Engine 1 is the only department apparatus with a front suction.
- The front suction allows water to enter the front of the pump freeing up the side pump panel in tight areas like a narrow roads or driveways, discuss where this might be advantageous.
- The front suction can also be useful in drafting from a water source such as a portable tank. The engine can nose up to the bag and drop the 6 inch suction into the bag using the front suction. This will help in tight areas.
- The front suction is useful in drafting from a pond in where the pump can nose up to the water leaving the pump panel in a dry area.
- Every pump has a 6 foot soft suction hose. Engine 1 can connect from the front suction directly into the main port of a hydrant without using the HAV. Would we ever do this? Why?
- One disadvantage to the front suction is that the piping is smaller and has many bends creating friction loss and a slight reduction in the amount of water that can enter the pump.
- Note in figure 6, the air actuated valve to open the front intake, it is extremely important to open the valve prior to water entering the intake. If the front intake is charged prior to the valve being opened, the pressure of the water against the valve will not allow the valve to open.