

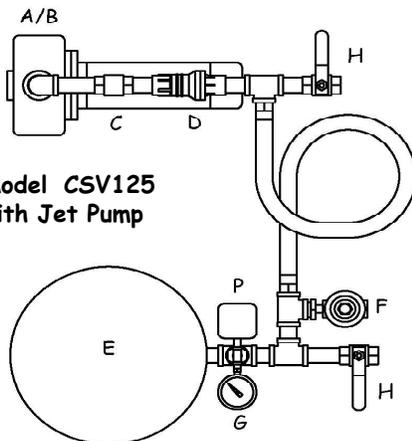
__Model__ CSV125 or CSVS125 Pump Control Valve



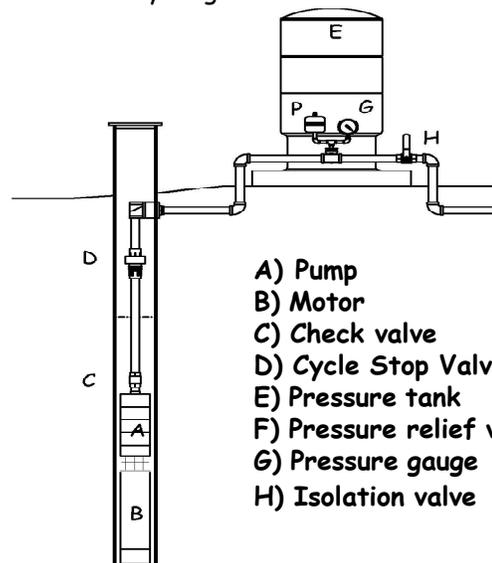
Installation Instructions

Please read all instructions before beginning installation.

- 1) Be sure that the well has been pumped clean before any valve installations. It is also important that all lines including the pump be flushed clean of debris. Pipe dope or trash pumped into the valve can make the CSV fail. Turn off power to pump and drain system. This model will vent water over time. We do not recommend indoor installations for this reason.
- 2) The CSV (Cycle Stop Valve) should be installed downstream of the pump on the pump side of the pressure tank/pressure switch. Everything pumped needs to go through the CSV before it goes anywhere else. Any and all water outlets have to be downstream of the CSV valve. Flow direction is indicated by an arrow → on the side of the valve. (Note: This model is designed to hold weight. It can be installed/hung inside the well and can be submerged as well. It should be installed as close to the well surface as possible. PSI loss begins where the valve is installed, so for example, if installed 15' below surface, translates to a 7 PSI loss of pressure before reaching the surface. So, choose a higher pressure valve if this is the case. If using a pitless adapter, install 2 to 3 feet below the pitless to allow the valve to center. This allows for tee offs between the well head and the pressure tank such as a frost free hydrant at the well.)
- 3) **Model CSV** should be **hand tightened** using Teflon tape on threaded ends. Four to seven wraps of Teflon tape is usually sufficient. **DO NOT USE PIPE DOPE** as it can run into the valve works. **WARRANTY WILL BE VOIDED IF PIPE DOPE IS USED.** All connections should be watertight.
- 4) The pressure tank should be installed on a tee or tank cross. It should be installed downstream of the CSV. Pressure switch and other controls must be installed as close to the tank as possible. Pre-charge pressure in the tank should be 3-5 PSI lower than pressure switch start point. Pressure switch shut off pressure must be higher than the Cycle Stop Valve pressure. How much higher depends on your pressure tank size. The smaller the tank, the closer the cut in pressure setting and CSV set pressure should be. Conversely, the larger the tank, the closer the cut out pressure setting and CSV set pressure should be. Regardless of pressure tank size, pressure switch shut off pressure must be higher than the CSV set pressure.
- 5) The CSV-1 model will have a 1 gpm pressure tank refill rate (Recommended for 2HP and smaller). The CSV-3 will have a 3 gpm pressure tank refill rate (Recommended for 3 HP to 5 HP). When using the CSV-1 model, the minimum pressure tank drawdown should be at least 1 gallon. When using the CSV-3 model, the minimum pressure tank drawdown should be at least 3 gallons. You can always use a larger pressure tank if needed, as every situation is different. However, your pump will be protected from excessive cycling with the minimum size tanks recommended.



Model CSV125
with Jet Pump



- A) Pump
- B) Motor
- C) Check valve
- D) Cycle Stop Valve
- E) Pressure tank
- F) Pressure relief valve
- G) Pressure gauge
- H) Isolation valve



CSV125 and CSVS125 Troubleshooting

Symptom

Cause

Remedy

Pump is Cycling off and on

Pressure switch not set correctly

Cut off pressure must be higher than valve pressure. Reset pressure switch cut off to at least 10 psi higher than valve pressure.

Waterlogged pressure tank

Replace Tank

Bad or torn diaphragm

This is usually due to back pressure being higher than 150 PSI. You will have to change models to a CSV1A or CSV2W if this is the case. Replace valve

Low pressure

Demand is more than pump can provide at desired pressure

Reduce demand so it is within pump capabilities to maintain desired pressure.

Check psi marking on valve

Switch to correct model valve

Chattering valve

Too much air pressure in tank

Reduce air pressure in tank to 5-10 PSI below cut in pressure.

Pump rapid cycles at start up and then begins to function correctly

Pressure switch is located on the main line or closer to the main line than the pressure tank.

Move pressure switch to small line at the base of the tank on a line no larger than 1 1/4" in diameter

CSV setting is too close to cut off pressure

Set pressure switch cut off pressure at least 10 PSI higher than CSV setting

Air pressure in tank too high

Reduce air pressure in tank to 5-10 PSI below cut in pressure

Multiple check valves in system working against each other

Remove all but the check valve or foot valve on the pump itself