

Installing/Adjusting the Clack PVC Air Injection Valve

The Clack PVC air injection valve must be installed before the well pressure tank, on the main water supply coming from the well. (The well must have a **submersible pump** for the valve to operate properly.)

The Schrader valve located on one side of the air injector is where the air enters the injection valve and water flow. When the submersible pump is running, water is forced through the injection valve under very high pressure. Inside the injection valve are two openings, one is a small venturi opening and the other is a larger 3/8" opening.

The high-pressure water being forced through the small venturi opening creates a low-pressure area inside the injector valve, which in turn draws extremely small micro-bubbles of air into the flow of water as it passes through the venturi opening.

The Adjustable part of the injection valve, is a flat head brass screw located on the opposite side of the Schrader valve. When this screw is rotated clockwise, it slowly pushes a brass plunger down which will begin to partially block the other larger opening inside the injection valve.

By blocking this larger opening, more water is forced through the smaller venturi opening causing a greater low-pressure area inside the injector valve, which in turn draws more micro-bubbles of air into the flow of water as it passes through the venturi opening.

During initial installation, we recommend backing the adjustment screw out, until the head of the screw is flush with the top of the plastic knob that holds the screw. With the screw backed out in this position, the brass plunger will not be blocking the larger opening located inside the injection valve.

Some water will still be forced through the venturi opening and will many times draw a small amount of air into the water flow, which is normally all that is required.

If you find the scraper valve is not drawing any air when the screw is in this position, simply rotate the screw clockwise one turn at a time while the pump is running until you can hear or can feel air being drawn into the Schrader valve. Once air is being drawn into the valve, stop adjusting the screw and leave it at this setting.