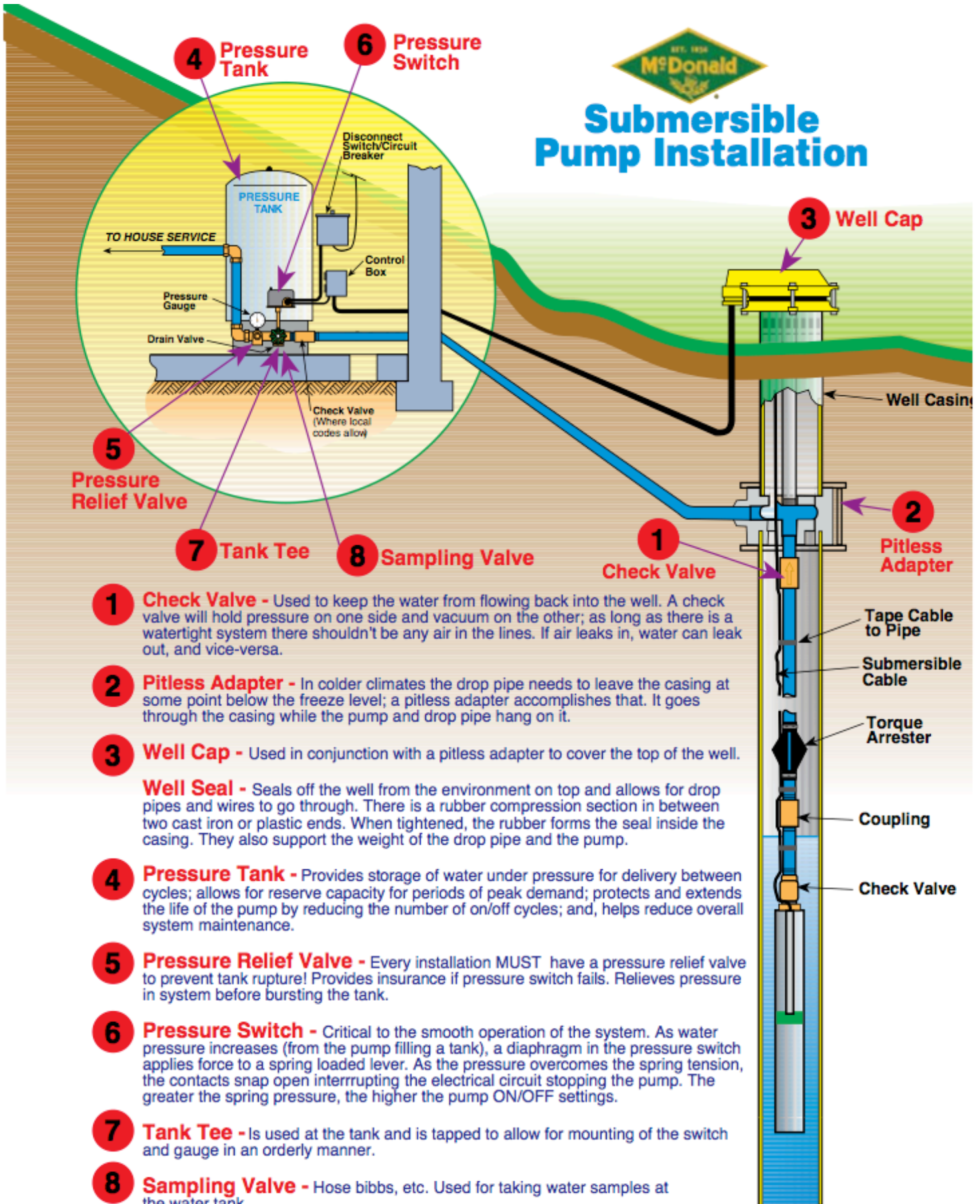




Submersible Pump Installation



- 1 Check Valve** - Used to keep the water from flowing back into the well. A check valve will hold pressure on one side and vacuum on the other; as long as there is a watertight system there shouldn't be any air in the lines. If air leaks in, water can leak out, and vice-versa.
- 2 Pitless Adapter** - In colder climates the drop pipe needs to leave the casing at some point below the freeze level; a pitless adapter accomplishes that. It goes through the casing while the pump and drop pipe hang on it.
- 3 Well Cap** - Used in conjunction with a pitless adapter to cover the top of the well.
Well Seal - Seals off the well from the environment on top and allows for drop pipes and wires to go through. There is a rubber compression section in between two cast iron or plastic ends. When tightened, the rubber forms the seal inside the casing. They also support the weight of the drop pipe and the pump.
- 4 Pressure Tank** - Provides storage of water under pressure for delivery between cycles; allows for reserve capacity for periods of peak demand; protects and extends the life of the pump by reducing the number of on/off cycles; and, helps reduce overall system maintenance.
- 5 Pressure Relief Valve** - Every installation **MUST** have a pressure relief valve to prevent tank rupture! Provides insurance if pressure switch fails. Relieves pressure in system before bursting the tank.
- 6 Pressure Switch** - Critical to the smooth operation of the system. As water pressure increases (from the pump filling a tank), a diaphragm in the pressure switch applies force to a spring loaded lever. As the pressure overcomes the spring tension, the contacts snap open interrupting the electrical circuit stopping the pump. The greater the spring pressure, the higher the pump ON/OFF settings.
- 7 Tank Tee** - Is used at the tank and is tapped to allow for mounting of the switch and gauge in an orderly manner.
- 8 Sampling Valve** - Hose bibbs, etc. Used for taking water samples at the water tank.