Insert the below illustrated part in place of the upper end cap, tighten with hose clamp. The vacuum breaker lets air into the system to facilitate drainage by allowing air into the system when the pump shuts off. For proper drainage to occur, the feed line must run downhill to the 3-way valve. The 3-way valve must be open or “non-positive seal.” A positive seal may be converted by removing the seal from the diverter or drilling a 3/16” hole in the center of the diverter inside the 3-way valve. You may also leave the “positive seal” 3-way valve open slightly to achieve the same results. When needing to isolate the solar, and still run the pump, an isolation ball valve will need to be installed on the solar feed line to the solar to achieve total shutdown capabilities.