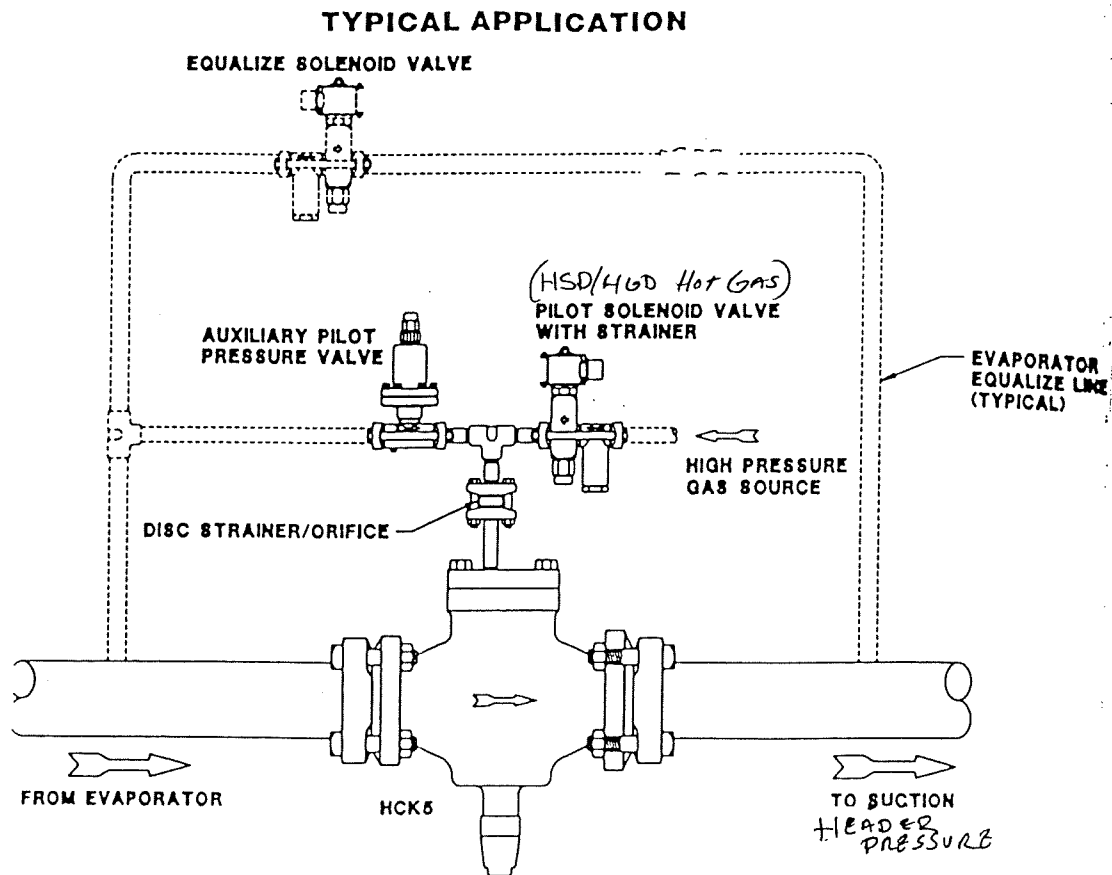


# Tech Note



This is an example of a HCK5 suction stop valve. It is a normally open valve similar to the typical gas powered check valve (HCK2) we normally use. It differs in that the piston has a seal ring and there is a small bleed hole in the piston, the HCK2 has no piston seal ring so the pressure is bled out thru the area between the piston and the cylinder wall.

The purpose of this type of suction valve arrangement is for protection from the suction valve instantly opening in the event of a controls or power failure, this can cause a violent rush of gas and liquid in the suction header which may damage piping and components. If the hot gas valve were to be de-energized the auxiliary pilot pressure valve (regulator) would continue to feed an adequate amount of pressure to maintain the suction valve closed. Once the pressure is close to equalized the pilot will close and the suction valve will open. The pressure valve should be set for 10 psi. above the header pressure.

While setting the auxiliary pressure valve you will need to be monitoring the defrost relief gauge with the unit in defrost. Once the coil is up to pressure and the hot gas pilot pressure valved off, set the regulator to close (the suction valve will open) at 10 psi. above the header pressure. Set the regulator slowly (lower the pressure) to allow adequate time for the pressure to bleed down thru the piston. I recommend setting this only if the coil is completely pumped out, damage may result from liquid hammer if it is not.

Also note that the parts required to rebuild the HCK2, HCK5 and HS9B are different even though they look the same.