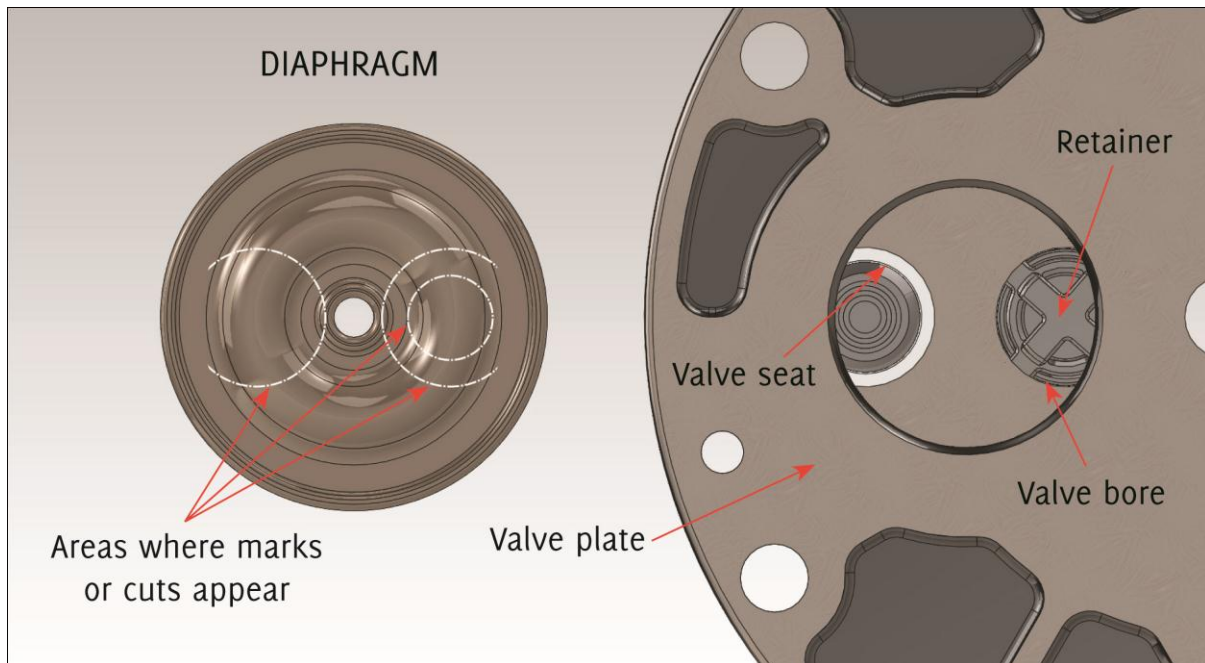


Non Kel-Cell pumps Diaphragm failure due to Cavitation / Starvation



If a non Kel-Cell Hydra-Cell pump has been allowed to cavitate, or the fluid supply has been restricted or blocked, the diaphragm will move forwards until it is pushed against the of the bores in which the valve assemblies are fitted.

This will result in marks on the face of the diaphragm in the corresponding position to the edges of the bores in the valve plate, or even the centres of the valve seats of the discharge valves. If the effect is strong enough, the diaphragm may also be cut in the same positions.

This effect may appear on only one or two diaphragms and the marks or cuts may only correspond to one the valve bores of the affected pumping chamber.

Sometimes, the marks will appear only as a slightly roughened surface texture and maybe difficult to spot in normal light.

If there are any marks or changes to the surface of the diaphragm material in these positions then cavitation is almost certainly the cause. Investigation of the inlet condition should be the first course of action to prevent recurrence.