

Subject Syphon Pump Conversion

What happens when a Metter's, Southern Cross, or IBC Syphon pump gets too old? Sometimes these are buried in concrete and almost impossible to get out. It's also near impossible to get parts for these – if you can get parts it costs almost as much as a new pump to have them made up.

A great frustration with old Syphon Pumps is getting them to pump properly. The main reason for this frustration is almost certainly to do with the fact that there are two seals to contend with. The top seal is between the main (cast iron) body of the pump and the Top Cap. The bottom seal is below the Cast Iron Cylinder Collar. This one is often not looked at, and it is a critical seal – if this seal leaks the pump will circulate water back into its own inlet.

The answer to all these problems is a Syphon Pump Conversion.



Instead of trying to resurrect the old pump, it can be converted into a modern Syphon Pump.

This involves changing the Top Cap, replacing the internal components with an off-the-shelf Flush Cap Pump, fitting a new Differential Compensator, and plugging the old outlet.

The first advantage of the Syphon Pump Conversion is that the parts used are all standard windmill components. These are available off-the-shelf throughout Australia – so when next the pump requires an overhaul, all the parts are readily available.

The next advantage is the elimination of one of the leather seals – especially the bottom seal (below the Cast Iron Cylinder Collar).

The Syphon Pump Conversion has a single seal; below the (new) Top Cap.

There are two Syphon Pump Conversions – the first for those pumps having 111mm centre to centre bolt holes, and then those having centre to centre holes of 142mm. The first size (111mm) will suit all Metters (No. 8) 2", 2¼", 2½", Southern Cross (JS) 2", 2¼", 2½", and 3" and IBC 2", 2¼", 2½" Syphon Pumps.

One problem with the old style Syphon Pump (shown at right) was the seal below the Cast Iron Collar. This seal is often forgotten. If this seal doesn't work then the water will be circulated from the delivery side of the Plunger back to the suction side. The Seal will fail when the leather is too old or the casting is badly corroded.

