

## Pump Shaft issues- Direct Drive shaft key

On of the service department "night-mares",

..is telling someone "it should only take a few minutes to change the pump,  
..then finding the chewed-up shaft-key has the two shafts locked together.

Cavitation causes the pulsation which directly "chatters" the shafts.

This problem is WAY more pronounced on tank-fed systems.

Pushing water into its face is the only way to minimize this cavitation.

That's why the Direct drive pumps seem to be fine with Pressure-Feeding with garden hose pressure, but they ALL eventually eat the key-shaft they ride on.

To Minimize issues, and maximize reliability..

We always tack-weld shaft-keys in place,

we use as long a piece as will fit,

we replace the original "set-screw" with a hardened stainless-steel versions.

and we lube the shafts with hi-temp anti-seize compound.

Otherwise.. Belt drive is the way to go !!

gear reduction is next-best.. with WAY fewer shaft problems.

..and remember..

the pump adapter housing is replaceable,

the side-case of the motor is more expensive.

So be careful using tire-irons to pry a pump away from a motor !

..and if you have to heat the shafts..

know were the lawnmower shop is located, for quick access to a new motor-shaft Oil-seal.