

VERTICAL COIL vs. HORIZONTAL COIL

**So why would you purchase one over the other.
The answer is really quite easy!**

***Lower Cost to build = lower selling Price
and that is the MAJOR reason!***



So, now that we have covered all of the advantages that the vertical coil has over horizontal coil let's talk about it's disadvantages.

Up-right coils tend to be about 15% to 20% less efficient than horizontal coils. We all know that heat rises and with a vertical coil heat has a very easy escape route - *straight up*. On the other hand - heat in a horizontal coil will linger around longer before it finds it's way out of the exhaust stack. Here is a good '*rule of thumb*' - an 8 GPM machine that will get to 200° in a horizontal coil will only get to around 160°-170° in a vertical coil. Remember, the more water that has to be heated - the more heat loss you will experience with a vertical coil.

As we know that '*heat rises*' we also know that '*water falls*' because of gravity. So, if you spring a leak in a vertical coil all of the water will fall into the burner housing. With a horizontal coil the water will accumulate in the bottom of the coil wrapper and leak out around the holes that were drilled into the wrapper to accomodate the inlet/outlet coil pipes. If a coil erupts in a vertical coil and the water drops straight down into the burner housing not only will you have the expense of repairing or replacing the coil but you could be facing \$400-\$500 in bruner damages as well. *Even if you never spring a leak* the condensation alone that forms on the coil everytime you use it and shut it down continues to 'drip' into the burner housing.

We see many vertical coil pressure washers on open trailers and quite often the contractor will be on the job-site and it starts to rain. Unless they have a 'rain-cap' or something to cover the heating coil - water easily finds it's way to the burner housing and there goes the electricals. If you already have a vertical coil pressure washer you should always be prepared by having a '*rain-cap*' that fits over the exhaust stack or some other way to keep water from entering the coil.

Also, accessability on the vertical coil is a nightmare. If you ever have to change a fuel pump, igniter, electrodes, etc. you can expect to be on the job for quite some time.

And having to replace an entire coil on a vertical unit is horrible. - John Allison