

Detailed Deep Well (60'+) Pex Extension Installation Instructions



Our new Pex extension system is an easy and convenient way to install The Handy Well Pump at fairly deep levels. There are a few things to keep in mind so that you have a successful installation no matter how deep you are setting the pump in the well. The piston rod extends from the pump assembly about 1/2" above the male 1" threaded end of the pump. **Image 1.** This is the bottom resting position of the piston and rod. You will want to maintain this position, +/- 1/4" to the other end of your installation.

It's important to start out correctly in order to maintain the proper 1/2" distance between the outer extension piece and the stainless steel extension rod.

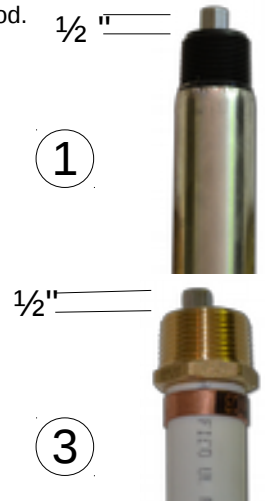
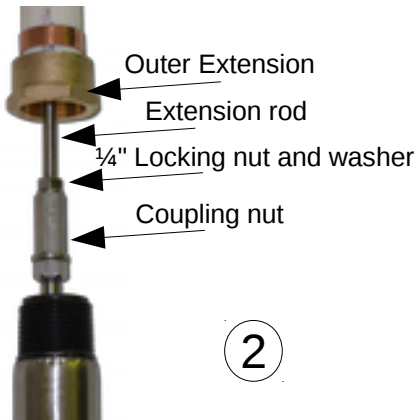
Installing The First Extension Correctly!

The stainless rods come with a coupling nut, washer and retaining nut pre-installed on one end. This end will always face up.

The down facing end has a loose 1/4" nut on the end with a washer behind it on the rod. Remove the nut and washer. Thread the nut back on to the rod to the end of the threads. Insert the washer over the threads. Thread the rod into the coupling nut on the pump assembly. Using a pair of vice grip pliers on the rod, tighten the coupling nut onto the rod taking care to not cross thread while making sure that the rod is threaded all the way into the coupling nut. You should be able to compress the lock washer without having to tighten the 1/4" nut back against the coupling nut.

Image 2

Next, wrap Teflon tape around the top threads on the pump assembly. Slide the outer extension over the stainless rod and thread the female brass fitting onto the pump assembly. **Image 2.** Tighten securely, taking care not to cross thread the pump assembly.



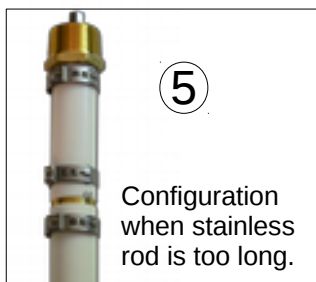
When done, the top of the extension should look like **Image 3** with around 1/2" of the coupling nut sticking out above the male brass thread. If you find that you are running a little less than 1/2" you can make up an 1/8" or so by adjusting the coupling nut and backing nut at the top of the rod. It isn't recommended to extend it more than 1/8" because this can cause a weak joint. If you are running more than 1/2" difference you will have to compensate for it when all of the extensions are installed with our included Make Up Kit. Repeat this process with the remainder of the extensions while lowering the pump assembly into the well per the installation manual. After installing the last extension it should look like **Image 3**.

Extension Make Up Kit

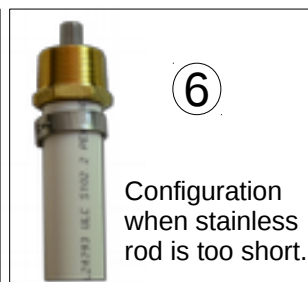
With every set of extensions we sell that is 60' and longer, we provide an Extension Make Up Kit. This is because as extensions are added there can be variations in length from the desired 1/2" difference between the top of the coupling nut on the inner rod and the top of the male fitting on the outer extension. These variations can happen for a number of reasons but usually it's because of how things are threaded together. So rather than have the customer take everything apart we provide a relatively simple solution to the possible problem. On installations under 60' it is rarely a problem because if there is a discrepancy it isn't great enough to affect the pump stroke and water volume output.



Extension Make Up Kit
Includes:
1- Brass coupling
3- stainless cinch rings
(1 installed)
1- piece of 1" Pex pipe



Configuration when stainless rod is too long.



Configuration when stainless rod is too short.



Cinch Ring Pliers

The Extension Make Up Kit comes as shown in **Image 4**. To use it you will have to remove the copper crimp ring from the top installed outer extension using a Dremel tool with a cut off wheel or similar tool taking care not to cut the Pex tubing. This will allow you to remove the male threaded brass fitting from the outer extension.

If the stainless rod is too long, Slide a cinch ring onto the Pex tubing in the make up kit. **Image 5.** Then insert the male brass fitting taken from the outer extension tube. Using a pair of cinch ring pliers **Image 7,** (alternatively you can use a pair of tile nibblers or carpenters end dykes) cinch the ring so that it matches the ring cinched around the coupling. **Image 4.** Match the distance of the ring away from the fitting as well. It will take considerable force to cinch the ring. If your pliers have short handles you may need to close them in a vise or portable clamp in order to get enough leverage to cinch the ring. **Next,** hold the make up piece alongside the extension outer pipe so that the top of the threaded brass fitting is 1/2" below the top of the stainless coupling nut. Use a felt pen and mark the outer extension pipe where the end of the brass coupling would rest on the pipe. Cut the pipe at this point using a pipe cutter or hack saw. Slide the cinch ring onto the extension pipe and insert the make up piece into the extension pipe. Make sure you have a 1/2" difference and cinch the ring. It will look like **Image 5.**

If the stainless rod is too short, insert a pencil or similar object into the outer extension pipe until it hits the stainless coupling nut. Mark the pencil where it sticks above the extension pipe. Measure this distance and add the thickness of the male threaded brass fitting. Include the thickness of the hex portion but not the portion that fits inside the pipe. Cut the measured distance off of the extension pipe. Slide the cinch ring onto the pipe and insert the male threaded fitting into the pipe. Check for the correct measurement and cinch the ring. **Image 6.**

At this point remove the coupling nut from the top stainless rod. This is necessary in order for it to thread to the Head Assembly rod. Continue with the installation of the head assembly per the instruction manual.