

Instructions for the installation of Handy Well Pump Models HWP and OP-360



****Read thoroughly before you start!****

Congratulations! You have purchased a quality hand water pump that will see to your family's needs for generations. We designed it to be affordable, functional and simple to operate as well as easy to install. Please read these instructions carefully before starting your installation to make sure that you have gotten everything you need such as the correct well seal and enough pipe or stainless steel rods for your application.

Five Year Warranty

All Handy Well Pump Head Assemblies and Pump Assemblies are warranted for a period of five years from your original purchase date. If you encounter a failed part in that time period we will normally require a digital photo of that part. In rare cases we will require the part shipped back to us. Shipping returns of a defective part inside the USA will be paid by us. Shipping from outside the USA will be paid by the customer. At our discretion, we will either repair or replace the defective part. Please contact us for an RMA number when returning a part. Please keep your original packing slip with your order number as it will be needed to verify your purchase.

Product Returns

We have a 30 day return policy from date of delivery. If you receive a pump and decide that you don't want it in that time frame, you can return your unused pump at your expense. Your return will be subject to a 10% restocking fee. Shipping charges are not refundable. All components must be in new, salable condition. Please contact us at sales@beingwater.com prior to returning a system for an RMA number.

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Please Read This Before You Start!

This pump is designed to be easy to install. Nonetheless, you will need an understanding of basic plumbing principles as well as at least minimal technical ability to have a successful installation. If, after reading the instructions, you are not completely comfortable with proceeding, please contact us at info@beingwater.com with your questions. If you are still not comfortable with proceeding contact a professional installer to assist you with this project.

Your well has electrical components that, if not properly disconnected prior to working around, can shock you causing injury or death. Please use the proper caution when working around electrical circuits. If you are uncertain, please call a qualified electrician to make the appropriate modifications in your water system.



If you are installing this pump in your well it is likely that this is your main water source. Care must be taken throughout the installation process not to introduce contaminants into your well. Make sure that all of the components and parts are clean with no foreign objects attached that could jeopardize the cleanliness of your water source. Wiping the parts down that are going into the well with a solution containing 50% vinegar and 50% water will help keep things clean.

Quick Installation As A Suction Pump

The Handy Well Pump comes to you with most items included for you to set it up as a suction pump in your well. You can set it up as a suction pump as long as your static water level is no more than 28' from the bottom of the pump assembly at sea level. This distance will decrease the higher above seal level your location is. The average depth 25' for locations under 3000' in elevation.

1. Follow the instructions for determining your water depth and installing your well seal as shown on page 2 of these instructions. For the purposes of installing this pump as a suction pump, please disregard any references to Option 1 and Option 2 for extension sets.
2. Once your water level is determined, you can purchase the correct amount of ¾" PVC pipe. Get enough to reach several feet below the surface of the water.
3. Connect the included male threaded ¾" adapter to the included brass foot valve. Use Teflon tape and secure tightly to insure that there are no leaks.
4. Secure the appropriate length(s) of ¾" piping to the adapter using PVC cement.
5. Glue the ¾" female adapter to the upper end of the PVC pipe.
6. Lower the assembly into the well, making sure to keep hold of the safety rope. Once lowered into the well, secure the safety rope.
7. Thread the Stainless steel coupling nut that is located on the top of the pump assembly to the stainless steel threaded rod located inside the head assembly. If it becomes difficult to connect the two pieces, follow the head assembly disassembly procedure as written on page 4-2.
8. Thread the pump assembly onto the ¾" PVC adapter that has been lowered into the opening of the well seal.
9. Feed the pump assembly through the Universal Well Seal Adapter that is connected to the well seal as shown on page 3 and image 5.
10. Secure the head assembly to the Universal Well Seal Adapter by tightening the adapter with the hex bolt as shown page 4 image 5.
11. Tighten all of the well seal bolts until there is no side motion in the head assembly when you try to move it back and forth.
12. Install the handle assembly as shown on page 4-4.

If you are installing the Handy Well Pump in a deep well please refer to the complete attached instructions.

The Handy Well Pump will work in a variety of applications. Including but not limited to shallow wells, deep wells, storage tanks both above and below ground and alongside a sink or watering trough. If you aren't sure of your application and the use of this pump, please contact us and we will gladly give assistance.

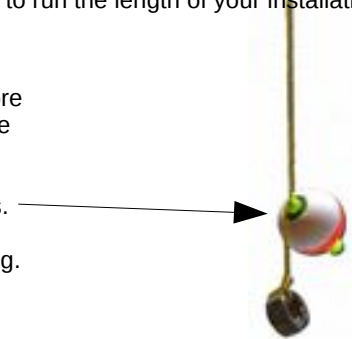
Part 1. Calculating Your Pump Depth, Preparation and Installation of a New Well Seal to Accommodate The Installation Of A Handy Well Pump. All Models.



SUPPLIES NEEDED WHEN CHANGING THE WELL SEAL. A 3/16" drill. Enough 1/8" nylon or poly rope to run the length of your installation plus a few feet. Tools to safely remove the water and electrical lines from your existing well pump.

1. Determine Your Water Level.

You have probably already determined the static water level in your well. If not, it needs to be known before you continue. To determine your water level you will first need to remove your existing well seal. Read the procedure for removing a well seal below. Then tie a threaded nut onto a long length of string such as a fishing line. Then attach something buoyant to the string about an inch above the nut such as a fishing bobber. Slowly lower the weighted string into the well taking care not to snag on any existing components. When you reach the water level the string will go slack. Mark the string at the top of the well casing and pull it out of the well in a straight line. Measure the distance between the weight and the mark on the string. This is your static water level.



2. Calculate Your Handy Well Pump Installation Depth To determine The Extensions Needed.

A good installation will have the Handy Well Pump 10' to 20' below the surface of the water. In some cases this won't be possible because the static level of the water is closer than that to the bottom of the well. The Handy Well Pump will work in as little as 6" of water.

When determining the depth of your hand pump, incorporate the length of the pump assembly into the calculation. This will keep you from bottoming the hand pump in the well. It is important to keep the hand pump off the bottom to keep it from pulling sand and other particles into the pump assembly. If you do pull sand into the pump it's possible that you will have to disassemble it and clean it, so take care not to hit the bottom of the well with it. Also, you want to keep the hand pump several feet above the level of your electric submersible pump or jet pump assembly.

A Depth Example To Calculate Needed Extensions. For example purposes your well depth is 120'. Your static water level is 65'. The Handy Well Pump would sit at around 85'. You would need 78' to 83' of extensions. 80' would work just fine in this installation. So you would need: **Placing the Handy Well Pump more than 20' below the surface of the water will not give you more water or make pumping easier. On the contrary, it will make pumping more difficult.**

Option 1, Ready Extension Made Sets. 16ea. Threaded (1/4" x 5') Extension Sets, available at handywellpump.com/extension-and-fitting-sets/

Option 2, Construct Your Own. 1ea. of our Pipe Adapter Fitting Set available at handywellpump.com/extension-and-fitting-sets/ and 80' of both 1/2" schedule 40 PVC pipe and 1- 1/4" PVC pipe.

****End of Example.****

3. Determining And Installing Your Well Seal.

Measure your well casing on the inside diameter. Common well seal sizes are 2", 3", 4", 5", 6" and 8". Casings can vary in size from 1/4" under to 1/4" over. Our standard size seals will fit these dimensions. Make sure that you have the correct well seal that will accommodate the Handy Well Pump along with your existing pump. The Handy Well Pump will fit in well casings from 2" in diameter and larger. It will fit alongside an existing electric pump in most wells that are 4" in diameter and larger and even some 3" casings.

a. Warm And Moderate Climate Installations alongside an existing pump. In warm and moderate climates, electric well pumps are installed with the water line and electrical line exiting the top of the well. In most residential installations the existing electric pump water line will be of 1" PVC or Galvanized pipe. (Note: Water lines are measured from the inside diameter and marked on the outside as to the correct dimension. This can be deceiving when calculating pipe sizes). Our 4" and larger two hole well seals are built to accommodate this setup. Occasionally the existing water line will be 1 1/4" (Inside Diameter) and the seal will need to be drilled out to accommodate the larger water line.

Procedure For Removing and Installing a Well Seal For Pump Installation Alongside An Existing Pump. ****Please have this part done by a qualified service person**.** For an installation without another pump use a single hole well seal.

1. Turn of the electrical circuit to the pump.
2. Ready the existing seal to be removed by removing the water line and disconnecting the electrical. The process will vary depending on your setup.
3. Carefully remove the old well seal and prepare the new well seal for installation as follows:

- * Drill a 3/16" hole in the threaded cap on the top of the well seal between two of the bolts for the safety rope. **(Alternatively you can drill a hole in the side of your well casing a few inches from the top if your casing sticks far enough above the surface.)**
- * Remove two of the bolts on the well seal and install the ones supplied with the Universal Well Seal Adapter so that they are coming up through the bottom.
- * Loosely attach the provided Universal Well Seal Adapter to the bolts that align it over the opening in the well seal that is for the



Universal Well Seal Adapter

hand pump.

4. Feed the rope through the 3/16" hole from the top down and then bring the rope end up through the hole for the hand pump with a few feet extra rope coming out the top of the well seal.
5. Feed the existing water line through the smaller hole in the seal and the electrical line through the threaded hole with a cap while lowering the new well seal into position snugly within the well casing. Do Not tighten the bolts on the well seal at this time.



IMPORTANT NOTE Install the well seal onto the casing only if you are using **Option 1, Our ready made Threaded (1/4" x 5') Extension Rods.** If you are using **Option 2, Pipe Adapter Fitting Set** then the well seal will need to be installed over the head assembly of the hand pump after the hand fitting has been installed in the well casing.

Part 1 Continued



b. Cold Climate Installation

Wells in colder climates are set up with a pitless adapter on the inside of the casing several feet below the surface where the water line exits the well casing. The existing well seal does not have any pipes coming out the top. There will be an electrical line coming up the outside of the well casing and entering the inside of the casing under a protrusion on the well cap. Once the well cap is removed from the casing you can determine how to proceed



Before

Some models of pitless adapters have a support bracket that sits on the top of the casing. In this situation you will need to completely remove the existing well cap framework and install pipe a coupling that is the same size as your well casing in order to get some distance between the pitless adapter support rod and the top of the well. Also, you need to be sure that you have a minimum of 1.68" between the casing wall and the body of the pitless adapter that is located several feet down the well. (Using Option 1) The widest point on the pump assembly is 1.68". The easiest way to determine if the pump will fit is to lower a length of 1- ¼" PVC pipe down between the casing and the pitless adapter. If the pipe fits past the pitless adapter then the pump will fit without having to remove the pitless adapter. If there is less than 1.68" (1 ¼ " pipe diameter) but more than 1.32" (1" pipe diameter) of room then you can install the pump using Option 1, but the pitless adapter will have to be lifted up while the hand pump is installed, and then reinstall the pitless adapter.

Pitless Adapters that don't have a support bracket that sits on the top of the well casing are easier to deal with in most cases. Remove the well cap and replace it with one of our two hole well seals . Use the image to the right as a guide. Make sure that the hand pump opening is over an open area without obstructions.

IMPORTANT NOTE Install the well seal onto the casing only if you are using **Option 1**, Ready Made Threaded (¼" x 5') Extension Sets. If you are using **Option 2** and building your own extension sets then the well seal will need to be installed over the head assembly of the hand pump after the hand pump has been installed in the well casing.



After

Part 2. Installing The Pump Assembly, Extensions and Head Assembly. All Models.

Tools and Supplies Needed. **Using Option 1.** 2 pair of locking pliers, drill motor with a 1/16" drill bit, adjustable open end wrench, 3/16" Allen wrench, Teflon tape (Use on all threaded fittings) and a 1/8" diameter safety rope the length of your installation plus a few feet. **For Option 2** add PVC cement, ½" schedule 40 PVC pipe and 1 ¼ " schedule 40 PVC pipe equivalent to the depth of your installation

These instructions contain two options for installation of the Handy Well Pump. Please read both before continuing.

Option 1. Ready Made Extension Set using The Stainless Steel Threaded Extension Set.

Option 2. Build Your Own Extensions Using The Pipe Adapter Fitting Set.

OPTION 1. Using Our Ready Made Stainless Steel Threaded Extension Set. Using this system will allow you to install your pump quickly and easily without having to mess around with cutting PVC pipe or glue any fittings together. The sets come in a convenient 5' lengths that are easy to ship and easy to store in case you don't want to install your system right away. This system is designed for one person to easily be able to do an installation.

1. Screw the brass foot valve onto the bottom of the pump assembly, using teflon tape, then tie the safety rope that is coming out of the opening in the well seal around the pump assembly in the narrow area between the foot valve and the bottom of the pump. Use a secure knot such as a double square not. **As shown in image 1.** Test the knot.

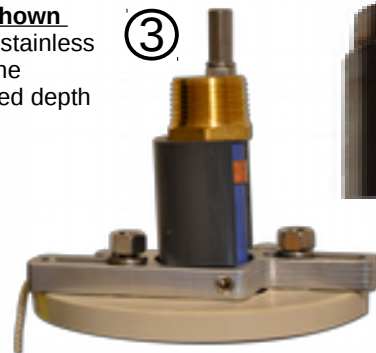
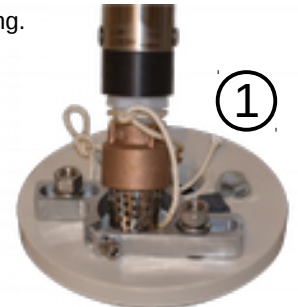
2. Remove the 3/8" x 3/8" coupling nut from the top of the pump assembly. Replace it with one of the 3/8" x 1/4" coupling nuts that came with your extension set. Screw the first stainless steel rod into the stainless steel pump rod making sure to use the provided backing nut and lock washer to secure the rods together. Tighten securely with wrenches. **As shown in image 2.** Next, screw the female end of a brass outer extension piece onto the pump assembly. **As shown in image 2-A.** Be sure to use Teflon tape on the threads. A leaky connection will cause the water to drain out of the system which would make you have to prime the pump before each use.

3. Now it is time to start lowering the assembly into the well casing. In step one, the pump assembly was secured to the safety rope and the safety rope was fed through a small hole drilled into the well seal as **shown in image 1.** With one hand, feed the pump assembly through the well seal into the well casing. With the other hand, start feeding the rope through the drilled hole in the well seal. The weight of the pump should pull the rope through the hole. When the upper brass male end of the extension is about 6 inches from the top of the well seal tie a loop knot on the rope to support the pump assembly and extension.

4. At this point clip the Installation Support Bracket onto the outer PEX extension pipe **As shown in image 3** . Repeat the assembly and lowering of each extension section that includes the stainless steel rod and the PEX outer extension section while adjusting the safety rope and clipping the installation support bracket onto the top of each section. Once you have reached your desired depth secure the safety rope and prepare to install the head assembly.

5. **Weep hole.** In colder climates it is advisable to drill a small 1/16" weep hole in the upper outer PEX extension pipe at your frost level so that water will drain back down to that point and not cause damage to the exposed pump parts.

You are now finished with the Option 1 Pump and Extension installation and are ready to install the head assembly.



Installing The Head Assembly Option 1

1. Prepare To Install The Head Assembly.

At this point you should have the top of the final extension set resting above the top of your well seal held in place by the Installation Safety Bracket. **As shown in image 1.** Remove the coupling nut from the top of the stainless steel rod and replace it with the 3/8" x 1/4" coupling nut supplied with the extension set. Before attaching the head assembly, mix a cup full of vinegar in a couple of gallons of water and pour it down the extension pipe. This will serve to both clean and prime the pump when you start operating it. Alternately you can use 1/4 cup of liquid bleach in the same amount of water. If you use bleach be sure to let it gas off for 24 hours.

2. Installing the Head Assembly All Models.

The Handy Well Pump models HWP and OP-360 have similar components on the inside of the Head Assembly. The Head Assembly must be partially dismantled before installing onto the extension set coming out of the top of the well seal. **Refer to image 2.** Remove the retainer nut, bushing, U-ring and Outer Seal/Rod Guide. The Outer Seal/Rod Guide can be removed by rotating the lift rod so that the power portion slides by the inside of the outflow and then firmly pulling the Lift Rod and Outer Seal/Rod Guide out of the Head Piece. Next, thread the lift rod onto the extension rod **as shown in image 3.** Then, thread the Head Tube onto the outer extension pipe **as shown in image 4.** Use Teflon tape to seal the threads and prevent leaks. Next, reinstall all of the components back into the head tube. Make sure the U-seal is installed the same way it came out with the lip facing down and tucked into the recess in the rod guide exactly as shown in **Image 2.**

3. Securing the Head Assembly To The Well

Lower the Head Assembly into the well seal through the Universal well seal adapter. Adjust it to a comfortable position. **As shown in image 5.** Using a 3/16" Allen wrench, tighten the set screws on the Universal Well Seal Adapter. Do not over tighten. Tighten the bolts on the well seal. Tighten in a rotation. As one bolt gets tight the next one will be able to be tightened a little more. Go around the well seal several times. Tie a permanent knot in the safety rope.

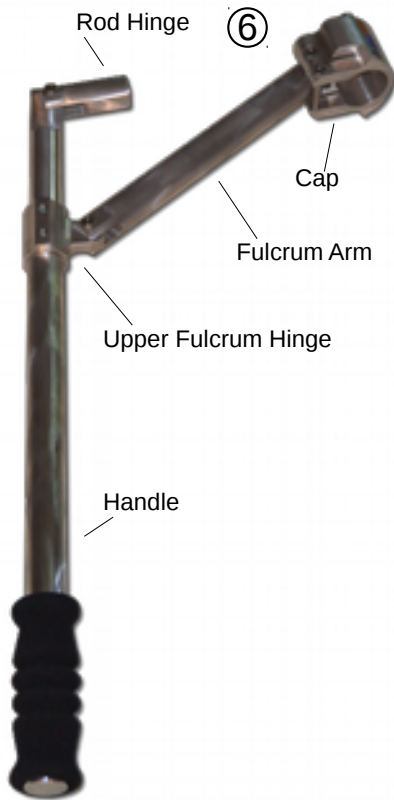
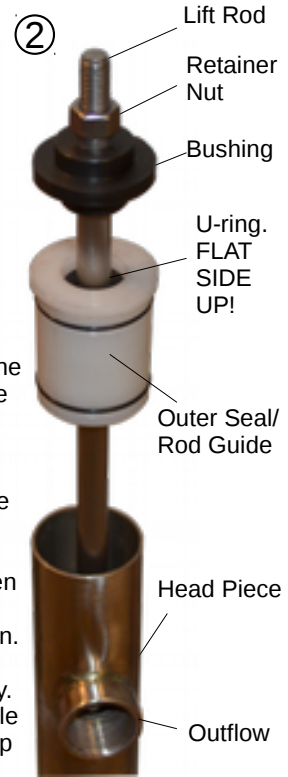
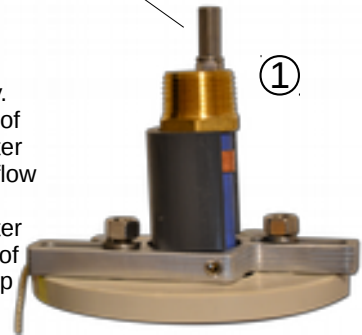
4. Installing The Handle and Adjusting the Pump. Option 1 and 2.

On model HWP Tee handle pump thread the aluminum handle onto the lift rod extending out of the cap on the head assembly. Once it is threaded as far down as it will go, tighten the retainer nut securely against the handle with a wrench. Operate the pump by moving the handle up and down. **Image 8**

On model OP-360 lever handle pumps The Cap is incorporated into the hinge assembly.



Remove coupling nut and replace with included 3/8" x 1/4" coupling nut

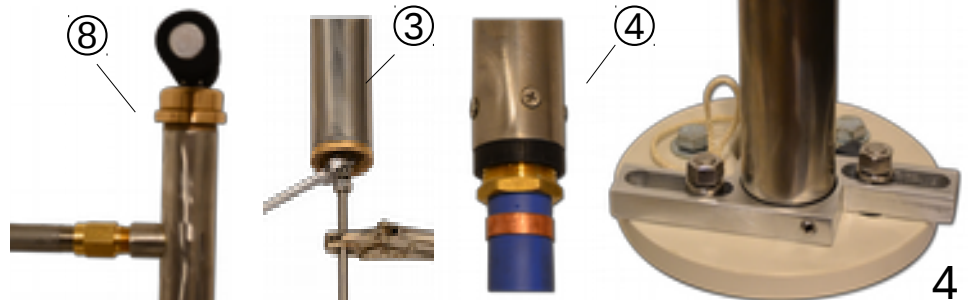
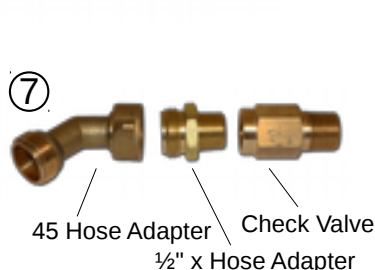


- Slide the Cap **Image 6** completely onto the Head Piece. **Image 2** Tighten the set screw with a 5/32" Allen wrench to secure it in place. Note: You can rotate the cap to whatever position is comfortable for your application.
- Lift the Rod Hinge **Image 6** up into position over the Lift Rod **Image 2** and thread the Lift Rod into the Rod Cap by turning the Lift Rod counter clockwise until the Rod Cap and the Retainer Nut touch. You may have to use pliers. Take care not to mar the surface of the Lift Rod. Then use an open end wrench to tighten the Retainer Nut securely to the Rod Hinge.
- Move the Handle up and down. It should move freely. If not, Use a 5/32" Allen wrench and loosen the set screws on the Upper Fulcrum Hinge **Image 6** and move it towards the Rod Hinge by 1/4" and tighten the Fulcrum Hinge. Test again. Repeat until a smooth operation is achieved.
- Operate the pump by moving the handle up and down. It should move freely. Take care to lift the handle in an up and down motion. Trying to move the handle side to side will only cause a bind and could bend the lift rod. Operate the pump until you are comfortable with how it works.

5. The Convertible Outflow Adapter Set

Your new pump comes with a three piece Convertible Adapter Set. **Image 7** It can be installed by using just the 1/2" x Hose Adapter, add the 45 Hose Adapter or add the in line Check Valve if you are pressurizing a water system. Since the Check Valve is spring loaded the pump will be a bit more difficult to operate when using it. It is recommended to not use it unless you need it. Alternatively you can hard plumb your pump by connecting rigid pipe to where you need water as shown in **Image 8.**

Congratulations! Your pump should be operational. We'd love to hear how things went and get some pictures. Let us know. info@beingwater.com



Part 2. Continued- Option 2

OPTION 2. Installing the Pump Assembly, Extensions and Head Assembly using our optional Pipe Adapter Fitting Set. This option can be a preferable method of installing your Handy Well Pump. When you purchase the Pipe Adapter Fitting Set **As shown in image 1** it enables you to use locally available ½" PVC pipe as the inner lift rod and 1 ¼" PVC pipe as the outer extension pipe. This can decrease the cost of your installation considerably in a deep well. While fairly simple to install, the installation process is a bit different than Option 1. Please read carefully before you continue to make sure you have a good understanding of the process and the materials you will need.

Tools and Supplies Needed. 2 pair of locking pliers, drill motor with a 1/16" drill bit, several adjustable open end wrench's, 3/16" Allen wrench, Teflon tape (Use on all threaded fittings) and a 1/8" diameter safety rope the length of your installation plus a few feet. PVC cement, ½" schedule 40 PVC pipe and 1 ¼ " schedule 40 PVC pipe equal to the depth of your installation.

Make an Installation Support Platform. It is helpful to have a secure method of supporting the pump assembly and extensions while you are working on the next section. A simple piece of plywood around 8" square with a 1-¾" wide slot cut in it to the center will work just fine. **As Shown in image 2**

1. Screw the brass foot valve onto the bottom of the pump assembly then tie the safety rope around the pump assembly in the narrow area between the foot valve and the bottom of the pump. Use a secure knot such as a square knot. **As shown in image 3.** Test the knot. Find a secure temporary location to secure the safety rope that will allow you to feed it as you lower the pump into the well casing. Don't lower the pump into the casing yet.

2. Using a couple of open end wrenches, remove the coupling nut from the top of the stainless steel rod on the Pump Assembly. Take care not to lose the lock washer that is between the two nuts. Then install one of the Stainless Steel Pipe Adapters in its place. Be certain to tighten it securely. **See item A of image 4.** Next, thread the PVC reducer bushing that is connected to the 1 ¼" female threaded adapter onto the top of the pump assembly. **See item B of image 4.** Be sure to use Teflon tape on all connections. Next thread the ½" stainless clad PVC adapter onto the Stainless steel pipe adapter. **See item C of image 4.** You are now ready to start gluing ½" and 1- ¼ " PVC pipe to the fittings

3. **Important**In this configuration it is necessary to use a stainless steel rod for 24" down into the extension pipe closest to the surface. Before you begin to install your extensions, take one of the ½" pipe lengths and cut 24" off of it and glue the other stainless clad PVC female threaded adapter onto the end. Then thread the other Stainless Steel Pipe Adapters from the kit into the PVC fitting and thread the 3/8" x 22" stainless rod that is included in your Pipe Adapter Fitting Set.

4. Once the pipe adapters are secured to the pump assembly, gluing the ½" and 1-¼" PVC pipe to the fittings can begin. Use 10' or 20' lengths. 10' lengths are easier to handle. Leaning them against a step ladder helps. 10' lengths will require couplers at the joints. 20' lengths have bell fittings at one end. Glue a length of ½" PVC pipe into the end of the rod adapter. Then slide a length of 1 ¼" PVC pipe over the top of the ½" pipe and glue the 1 ¼" pipe into the 1-¼" PVC female adapter. Let it set for about 10 minutes. With one end of your safety rope secured to something solid, lower the pump assembly and first extensions into the well casing and support it using the installation support platform. **Image 2.** Repeat until you get to your desired pump depth. Let the glue on each section dry before proceeding to the next. When you get to the last set of extensions you will have the ½" special pipe ready that you made based on step 3. Glue it in place just like the previous ones and slide the 1 ¼" pipe over the top and glue it in place. Lower the assembly down into the plywood support bracket. **(IMPORTANT NOTE: You may need to adjust the length of the 1 ¼" pipe to achieve 1-½" distance between the top of the fittings on both the inner and the outer assemblies!)** Glue the upper 1 ¼" adapter piece that has the gray male threaded nipple on it onto the upper end of the 1 ¼" PVC pipe. Tighten all of the fittings. Be sure to use Teflon tape.

5. Weep hole. In colder climates it is advisable to drill a small 1/16" weep hole in the outer PVC extension pipe at your frost level so that water will drain back down to that point.

6. Prepare To Install The Head Assembly.

At this point you should have the top of the final extension set resting above the top of your well seal held in place by the Installation Safety Bracket. Before attaching the head assembly, mix a cup full of vinegar in a couple of gallons of water and pour it down the extension pipe. This will serve to both clean and prime the pump when you start operating it. Alternately you can use ¼ cup of liquid bleach in the same amount of water. If you use bleach be sure to let it gas off for 24 hours as it can be toxic to breathe.

7. Installing The Head Assembly.

Disassemble the Head Assembly as shown on item 2 of page 4. Thread the stainless steel Lift Rod from the Head Assembly onto the stainless rod in the extension. Thread the Head Tube from the Head Assembly onto the gray threaded nipple on the extension as shown in **Image 6.** Slide the well seal over the Head Tube and feed the safety rope through the hole in the well seal. With the well seal resting on the Installation Support Platform, tighten the set screw on the Universal Well Seal Adapter. Remove the Installation Support Platform and rest the well seal inside the well casing. Tighten all of the bolts on the well seal equally in a rotating fashion, tightening a little more as you go around the seal. Reassemble the head assembly and complete the installation using the instructions on item's 2 and 4 of page 4.

handy
well pump

