

1) ASSEMBLY INSTRUCTIONS

List of Materials:

2 – Five gallon buckets with sealable lids

1 – ¼ inch white nylon hex nipple (threaded)

1 – 10 inch string wound 1-micron sediment filter

1 – 10 inch PVC carbon filter

1 – Wood dowel

1 – 2 inch receiver cup for the top sediment filter

2 – 3/8 inch black rubber washers

1 – ¾ inch plastic red plug with ¼" hole

1 – 1oz. medicine cup

1 - Spout

1. By following the instructions on the spout packaging, insert the threaded end of the spout through the ¾" hole on the side of the bottom bucket. Be sure to have a one of the provided rubber gaskets placed on either side of the bucket so there is a proper seal. Finally, Screw the Jam Nut tight in order to secure the spout to the bucket.
2. Through the pre-drilled hole in the bottom of the top bucket, insert the ¼ inch nylon nipple carefully threading the nipple clockwise.
3. Taking the lid of the bottom bucket, place it over the remaining exposed end of the nylon nipple on the bottom of the top bucket pushing the center of the lid onto the bottom of the top bucket.
4. On each exposed end of the nylon nipple, place a rubber washer. One on the end of the nylon nipple in the bottom of the top bucket, and one on the end of the nylon nipple in the lid of the bottom bucket.
5. With nipple and washers in place, thread the 2-inch receiver cup onto the end of the nipple that is extended into the bottom of the top bucket.
6. Thread the 10-inch carbon filter onto the other end of the nipple that extends through the lid of the bottom bucket.
7. Hand-tighten the cup and filter until the two black washers are squeezed between the cup and the bucket, and the filter and the lid so that no water can leak through the hole.
8. Take the ¾ inch plastic red plug and place it in one end of the core of the 1 micron string wound cartridge.
9. Insert the 1-micron string wound cartridge into the receiver cup in the bottom of the top bucket making sure that the end with the plastic red plug is at the top and the open end is in the receiver cup. *See Operating Instructions for instructions on using the wood dowel.*
10. Take the now assembled filters, top bucket, and bottom lid and place on top of the bottom bucket so as to form a sealed unit.
11. Insert the wood dowel into the red plug in the top of the 1 micron string wound cartridge and push it down into the nylon fitting between the buckets to seal off water flow.

The system is now ready for the Pre-Filtration Chlorine Demand Test.

2) PRE-FILTRATION CHLORINE DEMAND FIELD TEST

Prior to the use of the Mission Filter system, it is imperative to determine the amount of chlorine that will be needed to sanitize the water. This will ensure complete bacteria kill, as well as optimize the performance of the Mission Filter. It is important to note that all water supplies have a different chlorine demand. If the water contains sand, leaves, dirt, rocks or other visible forms of sediment, it is recommended that a cloth or towel be utilized as a pre-filter and placed over the opening of the top bucket and the source water be poured through the towel

PROCEDURE:

1. Take a five-gallon bucket and fill it to within **3 inches (76 cm) from the top** with raw water.
2. Using the provided cup, add **5 cc's** of household bleach (**5.5% chlorine**). Mix the solution with a long spoon or other mixing device for approximately 1 minute. **1 ounce = 30 ml = 30 cc (5cc's is equivalent to 1 teaspoon)**
3. Cover the mixed solution, and let stand for a **MINIMUM of 60 minutes**.
4. Following the instructions on the Free Chlorine Test, check the chlorine level of the water. If the chlorine level is **1.2 PPM (part per million) or GREATER**, you can proceed with the Operating Instructions. If the chlorine level is **less than 1.2 PPM**, then add an additional **5 cc's** of household bleach, let stand for another 60 minutes and retest. This procedure should be repeated until the target residual (1 ppm) is reached.
5. The first 2.3 gallons through the system should be discarded due to the harmless carbon fines that will be flushed from the filter system.

NOTE: Failure to perform the above procedure could result in incomplete microbiological destruction, and thus render the system ineffective, and leave the water with possible remaining contamination.

3) OPERATING INSTRUCTIONS

Important Notes:

1. See PRE FILTRATION CHLORINE DEMAND TEST TO TEST CHLORINE LEVEL PRIOR TO USE OF UNIT
2. Your system will function better and last longer if you filter any large visible sediment and trash that may be present in the water by pouring the water through a clean cloth placed over the opening of the top bucket.
3. Standard household bleach (5.5% solution) is the normal sanitizing agent used for this system. However, chlorine powder or other liquid chlorine can be used as long as the correct percentage is computed, the chlorine contains no other chemical agents that might be harmful, and the chlorine agent used, if in solid form, dissolves in a timely fashion. Call 1-800-881-7620 for questions concerning the use of other chemicals.
4. Care should also be taken to wipe out the bottom bucket and spout with a clean cloth, wet with chlorine after each use in order to maintain the sanitized state of this part of the system and to keep the lids sealed on both buckets while not in use.
5. **1 teaspoon = 5cc (ml) = 25 drops**

OPERATION:

1. Insert the wood dowel into the red plug in the top of the 1 micron string wound cartridge and push it down into the nylon fitting between the buckets to seal off water flow. It may be necessary to remove the red plug, insert the dowel, push the dowel into the hole and then push the red plug back in.
2. Pour the water to be treated into the top bucket to within 3 inches of the top of the bucket. **NOTE: IF THE DOWEL IS IN PLACE, NO WATER SHOULD BE HEARD TRICKLING INTO THE BOTTOM BUCKET.** Add the amount of household bleach (5.5% chlorine solution) as determined by the Pre-Filtration Chlorine Demand Field Test.
3. Place the top lid on the top bucket being careful not to push and seal it to the bottom bucket. This will keep the water from flowing into the bottom bucket. Allow chlorinated water to set for a minimum of 60 minutes. Care should be taken to keep this water away from any other type of contamination, animals, etc.
4. Gently pull the wood dowel out of the fitting about 1 inch and allow the gravity filtration process to take place. This is normally a 30 to 60 minute process. Be careful to twist slightly on the dowel as you pull upward so as not to pull out the red plug in the top of the string wound cartridge.
5. Potable water can be dispensed from the spout in the bottom bucket.

