



The HEALTHY HOUSE Ltd

The Old Co-Op, Lower St, Ruscombe, Stroud, Glos, GL6 6BU
Tel: 0845 450 5950, Fax: 01453 753533,
info@healthy-house.co.uk www.healthy-house.co.uk

DOUBLE PLASTIC UNDERSINK DRINKING WATER SYSTEM THH2P

INSTALLATION INSTRUCTIONS

IMPORTANT

We suggest getting quotes from 3 different plumbers and showing them the fitting instructions. Water filters must be fitted according to the manufacturer's instructions. Damage caused by plumbers inexperienced in fitting water filters cannot be covered by our guarantee. If the unit has to be returned to our supplier and damage has been caused a charge will be applied. All components are checked before dispatch. Please check them carefully when they arrive. If any components have been damaged in transit we must be notified immediately.

The **THH2P** plastic drinking water filter with push fit connections is a complete undersink water filtration system. It consists of two plastic housings which contain one of each of the following:-
Pre Filter - installed in the first housing - removes larger particles and increases flow rate or a
Fluoride Filter – installed in the first housing – reduces fluoride
Imperial Ultracarb™ filter - installed in the second housing, removes chlorine, chemicals, bacteria, particles and heavy metals. The Ultracarb™ candle uses a silver impregnated ceramic micro filter that has a closely controlled pore size. This removes a wide range of waterborne contaminants for the life of the filter. The silver is locked into the ceramic inhibiting the growth of bacteria and giving self-sterilising properties. The filter incorporates an ion exchange resin, which reduces lead and other harmful heavy metals. It should be replaced approx every 6 months for 4 people and 9 months for 1 to 2 people. The pre-filter and fluoride filters should be replaced every 6 months.

Ultracarb removal chart

Pathogenic Organisms	Trace Organics
<u>Bacteria</u>	Oestrogen and synthetic oestrogen
E. Coli - >99.99%	<u>Insecticides</u>
Vibrio Cholerae (Cholera) - >99.99%	Lindane - >85%
Shigella - >99.999%	<u>Herbicides</u>
Salmonella Typhi (Typhoid) - >99.999%	Atrazine - >85%
Klebsiella Terrigen - >99.999%	<u>Phenols</u>
<u>Cysts</u>	TCP - >50%
Cryptosporidium - >99.999%	<u>Polyaromatic Hydrocarbons</u> - >95%
Giardia - >99.999%	<u>Trihalomethanes</u>
	Chloroform - >50%

Inorganics Removal - Free Chlorine - >97% Lead - >98.3%

The Ultracarb™ will remove other heavy metals such as copper and mercury but the amounts have not been quantified.

The Ultracarb has been tested and certified by NSF - a non-profit organisation that certifies the quality and safety of products.

This system will not remove the beneficial trace elements or the calcium that are natural elements in the water and beneficial for strong bones and teeth.

THH2P is supplied with the following components:-

2 x Plastic filter housings - Double size wall fixing bracket with screws

Chrome tap - Hose

DIY fitting kit:- line piercing valve, necessary fittings for hose connections (1x 3/8" push fit with 7/16" female thread to tap, 1x 3/8" push fit with 1/2" female thread to line piercing valve)

Ultracarb™ filter candle

Pre-filter or Fluoride filter

Fitting instructions. 1 year parts warranty

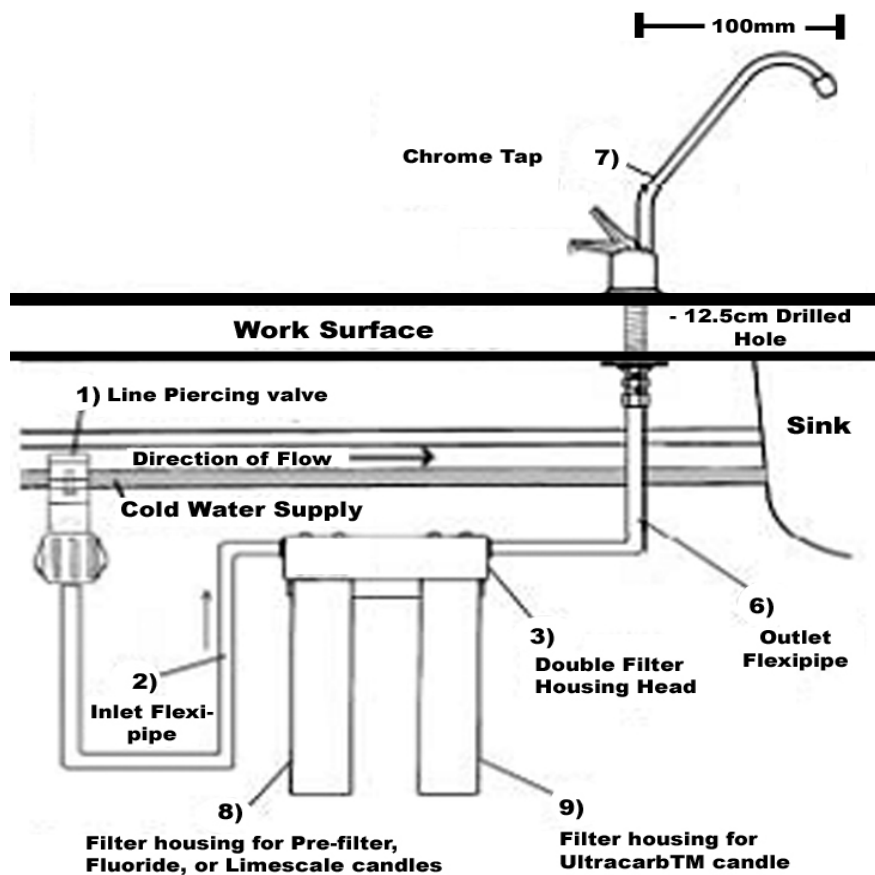
System location:

Your drinking water system should be installed under a sink. Do not install unit where temperatures fall below freezing.

Tap: The tap should be placed near the sink. A 5cm (2") flat surface is required to mount the tap, and the thickness of the mounting surface should not exceed 32mm (1 1/4"). The size of the hole required is 12.5mm (1/2").

Water feed connection:

The line piercing valve is a simple way of diverting your cold water supply. Locate this assembly as close to the system as possible. Connect to the cold water supply line only.



Principal components:

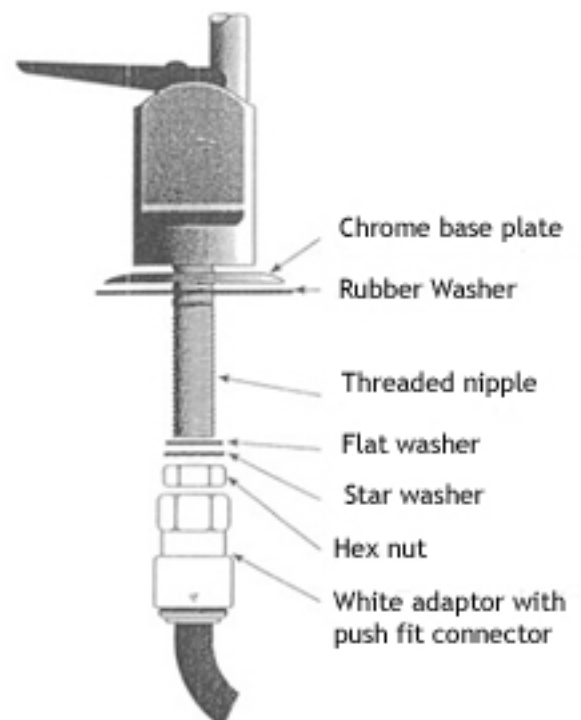
The first component in the system is the line-piercing valve (1), which is easily connected to the cold water supply line. (This is usually the supply leading to the cold water tap in the kitchen.) The line-piercing valve is connected by flexi pipe (food grade). (2) to the inlet of the filter housing(s) with individual bracket (3), which contains the candle(s) (4). The flexi pipe (6) is connected from the outlet of the filter housing(s) to the chrome tap (7).

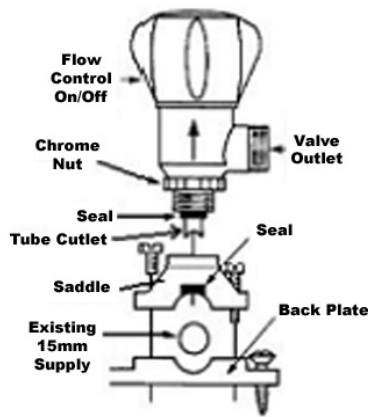
Tap installation:

Select the desired tap position on a flat part of the draining board. To allow the tap to pour into the sink, it should be located no more than 100mm (4") from the corner of the sink bowl. Examine the underside of the sink at that point to ensure that you can get to it in order to connect the tubing to the underside of the tap assembly.

Drill a 12.5mm ($\frac{1}{2}$ ") hole either using a carpenter's drill or a high speed bit.

Place the threaded portion of the tap stem through the drilled hole so that the lever is in a convenient position for easy access when you want to turn the tap on. Secure in place with the flat washer, star washer and hex nut provided. You may wish to use a spanner on the flats of the tap to hold it in the desired position. If this is the case, be sure to place a piece of cardboard between the tap and the jaws of the spanner to avoid marking the polished finish. The tap assembly includes a white adaptor with push fit connection which screws directly onto the thread of the tap stem make sure you screw this on tightly to prevent any leaks. The water outlet spout should swivel freely to any required position.





Line piercing valve and tubing installation:

The self-tapping line piercing valve is designed for use with 15mm ($\frac{9}{16}$ " OD) soft copper supply tubing (plain or chromed) and rigid metal pipe.

Do not use with flexible ribbed supply tubing, which is too thin and requires special hardware.

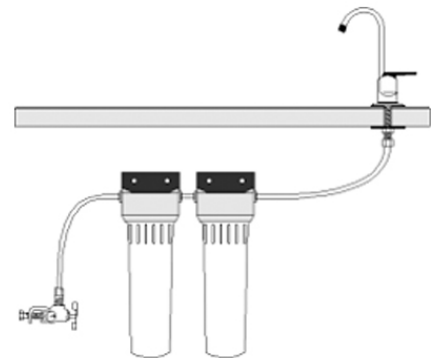
Turn off cold water valve from under sink or main water line valve for whole house.

Before installing line piercing valve, make sure piercing lance does not protrude beyond the rubber gasket.

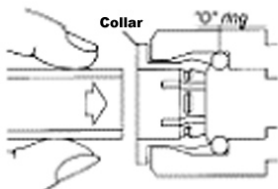
Assemble line piercing valve on cold water supply.

Do not fit to hot water line

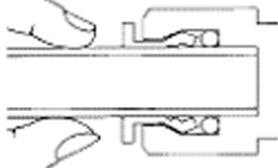
The back plate must be firmly fixed to the wall in order to avoid distortion of the copper pipe and possible leakage when screwing valve into saddle. Turn handle clockwise to pierce soft copper tube until valve is firmly seated. (Valve is closed in this position). Turn on water supply to pressurize the cold water line. Connect grey adaptor with push fit connector to valve outlet on the line piercing valve.



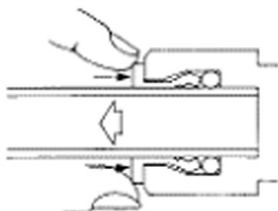
Push Fit Connections



To fit tube, push into filter housing head connector



The tube is automatically secured



If you need to release the tube push the collar

Initial tubing connections:

For convenience, it may be advisable to complete under counter hose connections at this time.

Unit installation:

To mount the drinking water unit, elevate it at least 5cm (2") off the floor and mark the location of mounting holes needed. Drill holes for mounting screws and install screws, allowing the mounting bracket slots to slip over them.

Final tubing connections:

Connect the flexi pipe tubing to the INLET side of the filter housing head and into the push fit connector on the line-piercing valve. Push the tubing well into the push fit connector. When it is fully in place it will not leak and can only be released by pressing in the collar at the same time as withdrawing the tubing. Next push the flexi pipe into the OUTLET side of the filter housing head. **Caution: The wrong direction of water flow will damage the candle.**

Tubing should follow contour of the cabinets

Cut tubing to desired length using **square** cuts.

Do not make sharp bends.

Keep tubing from the unit to the tap as short as practical for good flow.

Testing for leaks:

Make sure that all the push fit joints are securely positioned by pushing the flexi pipe firmly. Ensure that the candle housing is screwed tightly onto the head. Ensure that the whole system is connected correctly and all joints are tight and firmly attached.

With the line piercing valve still in the closed (clockwise) position, turn on the mains water supply and check that the line piercing valve is tightly connected and not leaking. Now slowly open the line piercing valve tap and check the entire installation for leaks. **Check very carefully.**

Once you are happy that there are no leaks, WITH NO CANDLES INSTALLED set the chrome tap to continuous flow mode and flush out the line for a few minutes. Again, check for leaks whilst the water is on continuous flow.

Conditioning the filter cartridge:

In order to remove any loose particles resulting from the manufacture of the candle, allow the new filters to stand in water overnight and then once the filters are inserted in the unit run the first 3 litres of water to waste.

Installation/Replacement of filter cartridge:

With the water supply off, vent any pressure by opening the tap. Unscrew the filter housing. Care should be taken as it will be full of water. Install/Replace the cartridge(s), ensure they are positioned correctly and seals are made. To seal the candles into the head, the upper spigot/thread of the candle threads into the head using the candle-sealing washer. **THIS SEAL IS ESSENTIAL TO THE CORRECT WORKING OF THE FILTER.** Develop the habit of checking that it is in place before you screw on the candle when cleaning or replacing. The body can now be screwed into the head. **DO NOT OVER TIGHTEN.**

The water first passes through the Pre-filter, which removes larger particles and increases flow rate, or through the fluoride reducer and then the Ultracarb™ which is a multi-stage water treatment unit. The water enters the housing and percolates from the outside into the candle through the porous ceramic. The first stage of treatment of the Ultracarb™ is micro filtration through the ceramic membrane. This cleanses the water of suspended particles. Because of its superfine filtration characteristics - the porous ceramic is too small for bacteria to penetrate - it also performs a further essential function. It actually disinfects the water by filtering out at least 99.99% of any bacteria that might have entered the water supply from the mains. The water then passes through a number of special water treatment media, which serve to improve the taste and act against a whole range of chemical contaminants.

Cleaning the filter:

Due to filtration of particulate contaminants from the water during use, the flow of water from the Ultracarb™ candle may reduce over a period of time. To return the water flow to its normal level, simply remove the candle, taking care not to contaminate the inside of the filter housing with unfiltered water or dirty hands. Take the candle to the sink and hold under running water, scrub gently with a stiff kitchen/nail brush. The Ultracarb™ is ceramic so try not to rub too hard as it could break. The candle is now ready to replace in the filter housing and screw clockwise to seal. It is always advised to use a little vaseline around the rubber washer to ensure ease in removing housing next time. Hand tighten only

Limited warranty:

Drinking water units are warranted for materials and workmanship for one year.

Reminder Service:

The Healthy House will send a cartridge replacement reminder and will continue to remind unless advised otherwise.