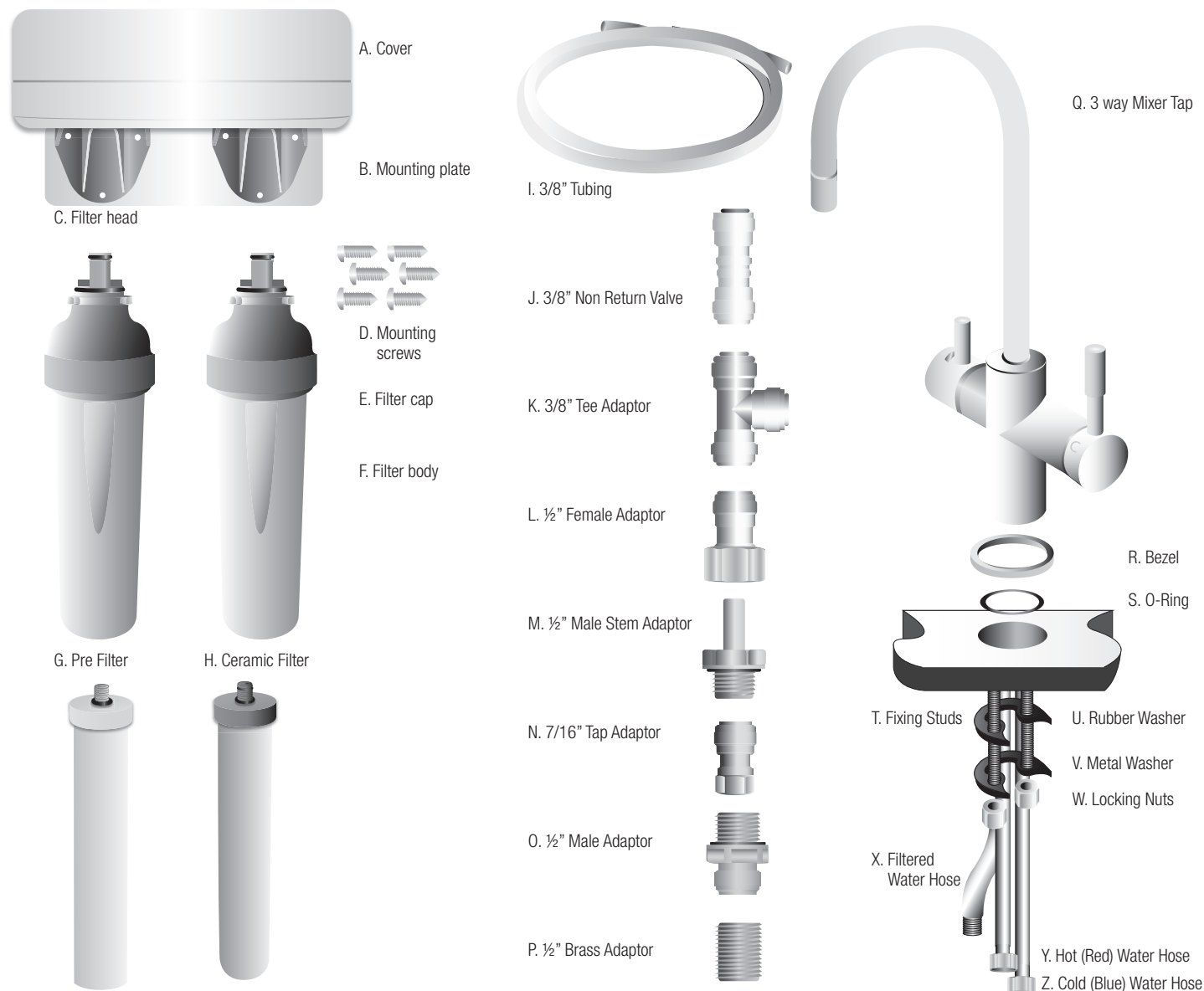


Duo Filter Mixer Tap

Filter Installation Instructions



Parts included in your Duo Filter Mixer Tap filtration system

Filter Housing Comprising:

- A. Cover
- B. Mounting Plate
- C. Filter Head x 2
- D. Mounting Screws x 6
- E. Filter Cap x 2
- F. Filter Body x 2
- G. Pre Filter
- H. Ceramic Filter

Fitting Kit:

- I. 3/8" Tubing
- J. 3/8" Non Return Valve
- K. 3/8" Tee Adaptor
- L. 1/2" Female Adaptor
- M. 1/2" Male Stem Adaptor
- N. 7/16" Tap Adaptor
- O. 1/2" Male Adaptor
- P. 1/2" Brass Adaptor

Mixer Tap Comprising:

- Q. 3 way Mixer Tap
- R. Bezel
- S. O-Ring
- T. Fixing Studs x2
- U. Rubber Washer
- V. Metal Washer
- W. Locking Nut x2
- X. Filtered Water Hose
- Y. Hot (Red) Water Hose
- Z. Cold (Blue) Water Hose

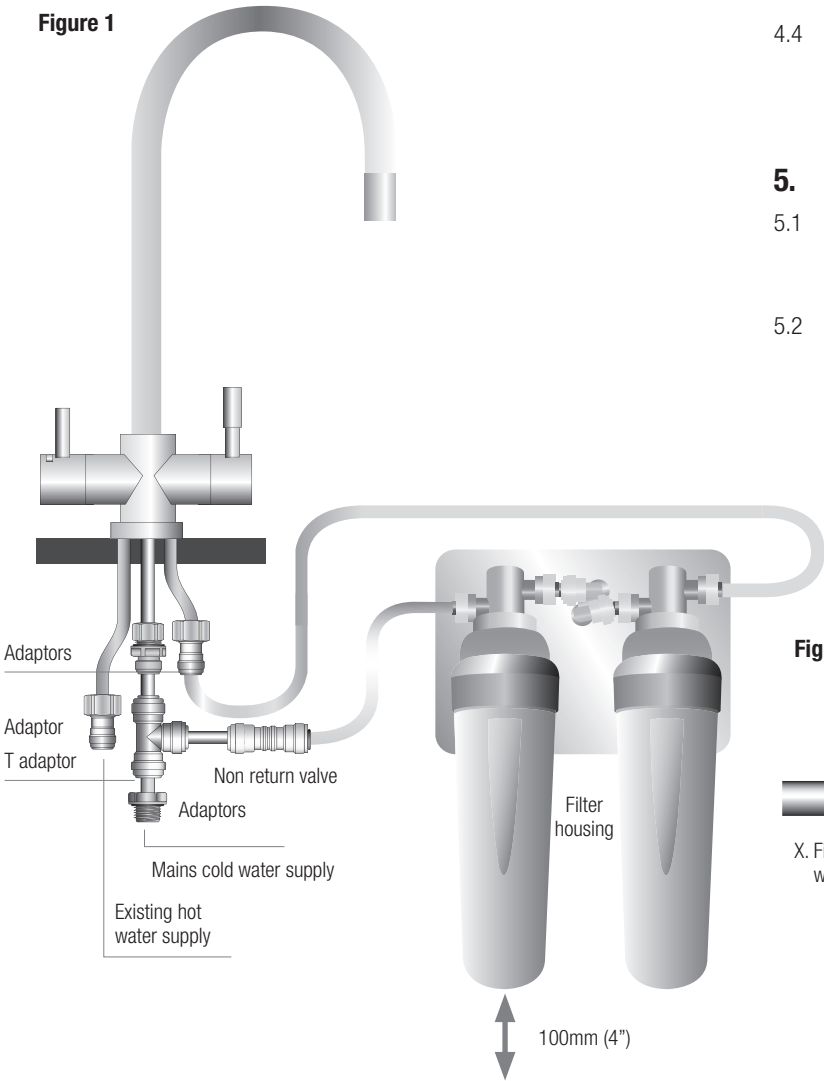
1. Operating Conditions

- 1.1 Maximum Working Pressure: 6bar (90psi) - This filter has satisfied the NSF/ANSI Stds 42 and 53 structural test criteria. However, due to the potential wide variations of pressures from one installation to another, the manufacturer advises that if there is any concern that the system would see pressures above 6 bar then an approved pressure reducing valve set at 6 bar should be installed upstream of the filter to eliminate any extreme variations of pressure.
 - 1.2 Maximum Working Temperature: 38°C (100°F)
 - 1.3 Minimum Operating Pressure: 2bar (30psi)*
 - 1.4 Minimum Operating Temperature: 5°C (41°F)
- *This will result in a 1L/min flow of filtered water. At 45psi or greater, a flow rate of 1.5L/min or more will be seen

2. Important

- 2.1 This filter is intended for installation under the sink away from direct sunlight
- 2.2 This filter is not designed for the treatment of hot water and should only be connected to the cold water supply
- 2.3 Maximum plastic housing life: 10 years
- 2.4 Water fittings for use in permanently pressurised systems have a finite life. It is important that the plastic components in the system are replaced after 10 years usage
- 2.5 **PLEASE NOTE: Allowing the unit to freeze will invalidate the product warranty**

Figure 1



3. Operating the 3 way Mixer Tap

The 3 way Mixer Tap allows selection of hot/cold and filtered water

Hot/cold water is selected by rotating the right hand mixer lever towards/away from the user, water flow is controlled by swivelling the lever outwards from the tap.

Filtered water is selected by operating the left hand filtered water tap lever. The filtered water tap has an indicator light to inform the user when the ceramic filter requires changing. The light flashes 'blue' when the filtered water tap is operated, if the light flashes 'red' the ceramic filter requires changing – see figure 2b

4. Location of the system and Preparation for Connecting Pipe work and Fittings

- 4.1 The filter is supplied with a Mixer Tap, non-return valve, 3/8" push fit connections and 3/8" polyethylene tubing to allow connection to a ½" BSP mains fitting to supply cold filtered water to the mixer tap
- Note: If you have a different thread connection you will need to obtain alternative fittings to adapt your existing pipe work to the 3/8" tube supplied with this system**
- 4.2 Ensure that there is enough space and access beneath the sink/work surface to allow installation of your new mixer tap and filter pipe work
- Note: When selecting a position for your tap, please ensure that there is at least 50mm (2") clearance behind the tap to allow the hot/cold water handle to be opened fully**
- 4.3 Position the filter in an upright position near to the incoming mains cold water supply and new mixer tap
- 4.4 Ensure that connecting pipe work will not have any sharp bends. Allow min 100mm (4") clearance below assembled filter for removal/service of the cartridge – see figure 1

5. Install the Mixer Tap.

- 5.1 Turn off the water supply and unscrew the fittings which connect your hot and cold water supply to your existing kitchen tap, remove your existing kitchen tap
- 5.2 A Ø 36mm hole is required to mount the new mixer tap into the sink/work surface
- Note: When selecting a position for your tap, please ensure that there is at least 50mm (2") clearance behind the tap to allow the hot/cold water handle to be opened fully**

Figure 2a

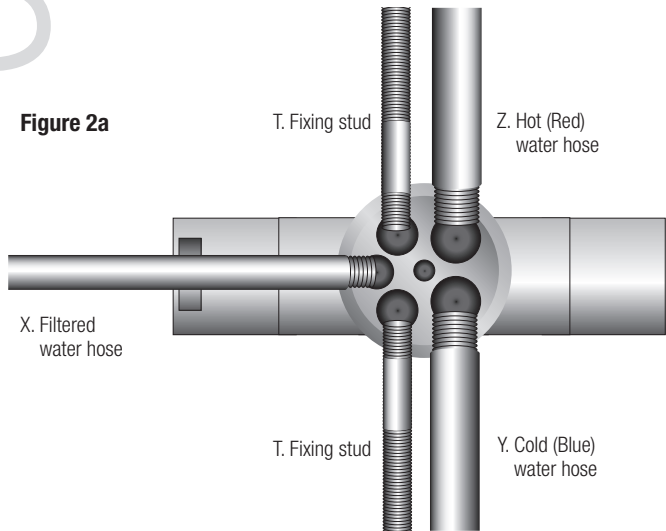


Figure 2a

- 5.3 Fit the flexible supply pipes (X, Y & Z) by screwing the threaded part with O-ring seals into the underside of the tap body. Ensure that each pipe is fully inserted and hand tight only – do not over tighten
- 5.4 Screw the short thread of the threaded fixing studs (T) into the underside of the tap body. Ensure that each stud is fully inserted and hand tight only – do not over tighten

Figure 2b

- 5.5 Place the bezel (R) with o-ring seal (S) over the mounting hole with the o-ring seal facing downwards. Insert the flexible supply pipes (X, Y & Z) through the bezel and mounting hole and seat the tap body onto the bezel
- 5.6 Position the tap so that the filtered water tap lever is on the left hand side of the tap body and the lever is turned towards the user to operate the tap
- 5.7 From beneath the sink/work surface place the rubber washer (U) and metal washer (V) over the threaded fixing studs (T) and secure the tap into position using the locking nuts (W). Note that the locking nuts are fitted with the cylindrical portion towards the underside of the sink/work surface
- 5.8 Screw the 7/16" tap adaptor (N) to filtered water flexible supply pipe on the mixer tap - do not over tighten

6. Install the adaptor to your cold water mains supply

If your cold water supply pipe fitting has a ½" BSP Female connection – see figure 3

- 6.1 Connect the ½" Male Stem Adaptor (M) to the fitting on the mains cold water supply - do not over tighten
- 6.2 Connect the ½" Male Adaptor (O) to the flexible cold water hose (Z) on your new mixer tap (Q) - do not over tighten
- 6.3 Connect the Tee Adaptor (K) to the Stem Adaptor (M) on the mains cold water supply
- 6.4 Measure the length and cut the tubing (I) required and use to connect the Tee Adaptor (K) to the Male Adaptor (O) on the flexible cold water hose (Z) on your new mixer tap (Q)

If your cold water supply pipe fitting has a ½" BSP Male connection – see figure 4

- 6.5 Connect the ½" Female Adaptor (L) to the fitting on the mains cold water supply - do not over tighten
- 6.6 Connect the ½" Male Stem Adaptor (M) to the flexible cold water hose (Z) on your new mixer tap (Q) - do not over tighten
- 6.7 Connect the Tee Adaptor (K) to the Stem Adaptor (M) on the flexible cold water hose (Z) on your new mixer tap (Q)
- 6.8 Measure the length and cut the tubing (I) required and use to connect the Tee Adaptor (K) to the Female Adaptor (L) on the mains cold water supply

Note: It is important that the tube ends are always cut square and that the tubes are pushed into the fittings and housing to a minimum of 18mm (0.75") to ensure a good seal

- 6.9 Connect the flexible hot water hose (Y) to the fitting on the mains hot water supply. If necessary use the ½" Brass Adaptor (P) from the fitting kit to convert to the required thread type

Figure 2b

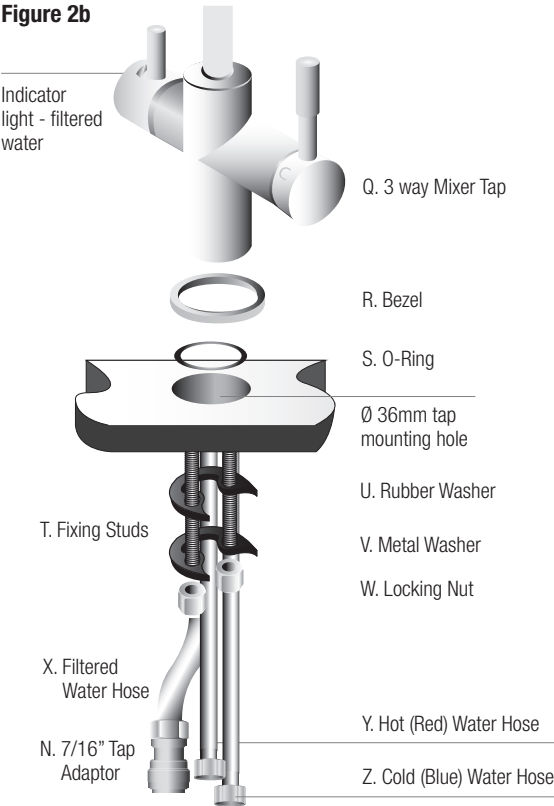


Figure 3

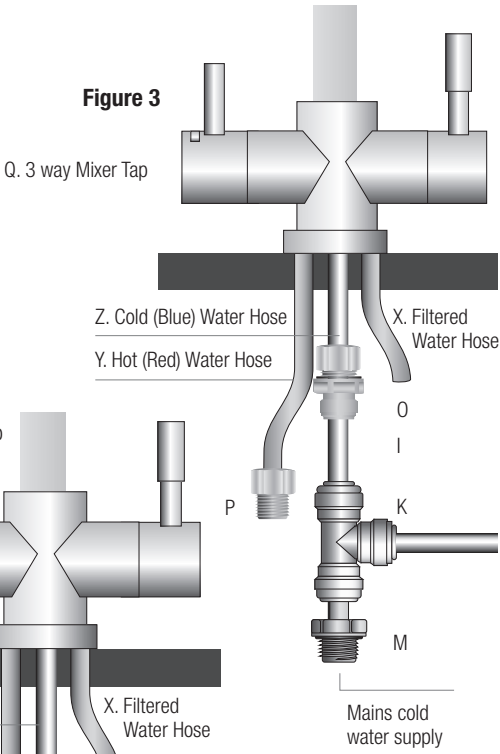
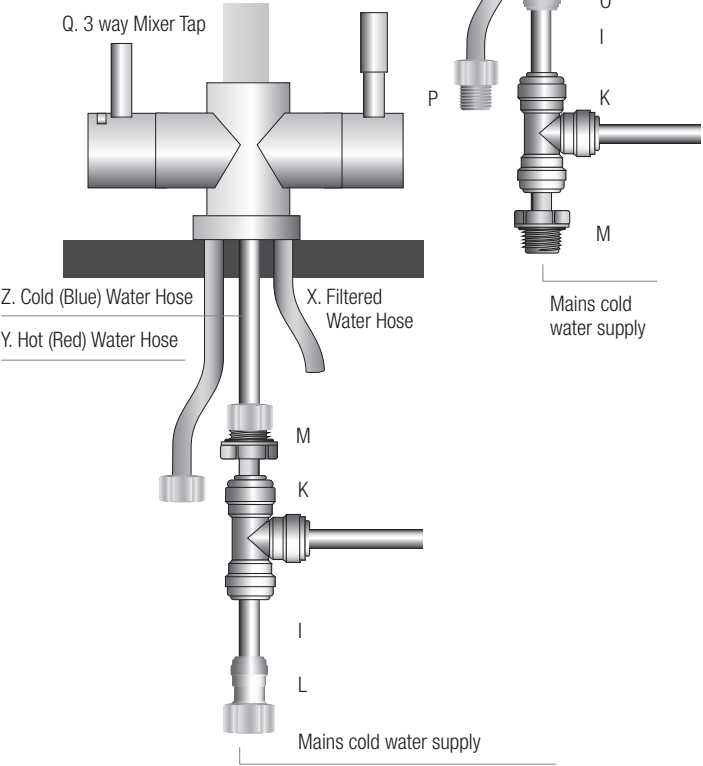


Figure 4



7. Position the Filter and Assemble the Filter for each Housing – see figure 5a to 5d

7.1 Mark the required head position for fixing using the paper template supplied

Figure 5a

- 7.2 Grip the grey filter caps (E) and twist to the 'unlock' position
- 7.3 Pull down to disengage the filter caps (E) from the heads (C) and put the filter caps (E) and filter bodies (F) to one side
- 7.4 Remove all packaging and fix the mounting plate (B) and filter heads (C) to the unit or wall with the 6 screws (D) provided

Figure 5b

- 7.5 Unscrew the filter bodies (F) from the filter caps (E), open the filters and discard the protective bags from the pre filter (G) of the left hand housing and the ceramic filter (H) of the right hand housing

Figure 5c

- 7.6 Screw the threaded pre filter (G) into the grey filter cap (E) of the left hand housing until washer resistance is felt, repeat for the ceramic filter (H) for the right hand housing - do not over tighten
- 7.7 Screw the white filter bodies (F) into the grey filter caps (E) until a positive stop is felt

Figure 5d

- 7.8 Align the arrow on the grey filter cap (E) of the assembled pre filter to the unlock position on the left hand filter head (C) and push the assembled filter firmly into the head until the clicks into position. Repeat this for the assembled ceramic filter into the right hand filter head.
- 7.9 Twist the grey filter cap (E) of the assembled pre filter until the arrow is aligned with the locked position on the left hand filter head (C). Check that the arrows align to ensure that the filter is fully locked. Repeat this for the assembled ceramic filter into the right hand filter head

Note: it is important that pre filter and ceramic filter are fitted in the correct locations - See figure 6

8. Install the pipe work and non return valve – see figure 6

- 8.1 Measure and cut the tubing (I) to the length required to connect the inlet port of left hand filter head (C) to the Tee adaptor (K). The length of the tubing must be a minimum of 200 mm (8"). Take the cut length of tubing and cut it in half
- 8.2 Fit one end of each tube into the non return valve (J)

Figure 6

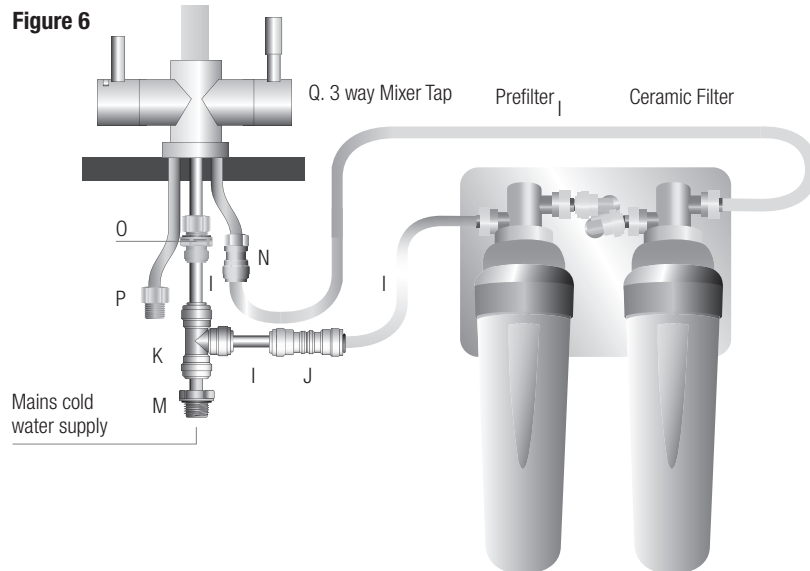


Figure 5a

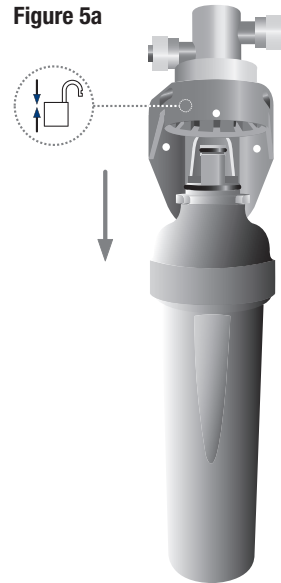


Figure 5b

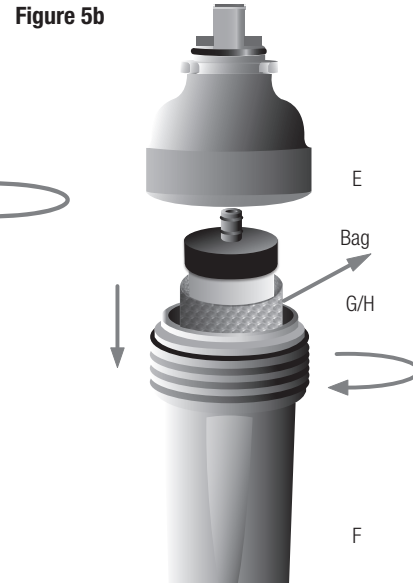


Figure 5c

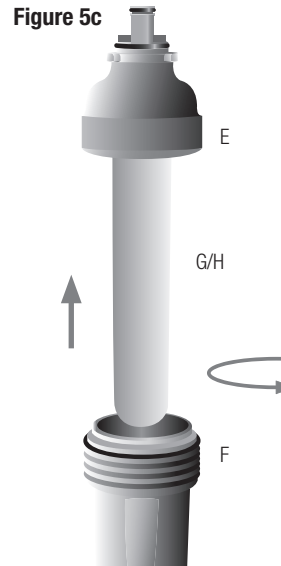


Figure 5d

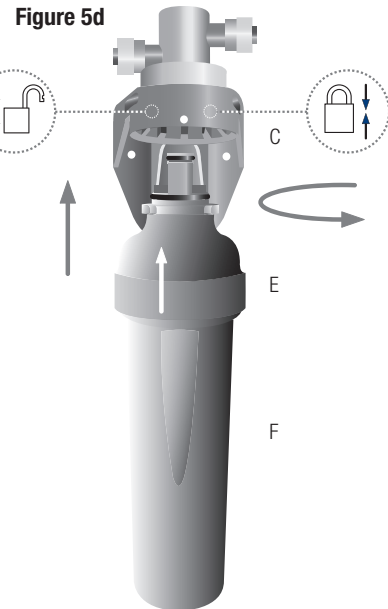
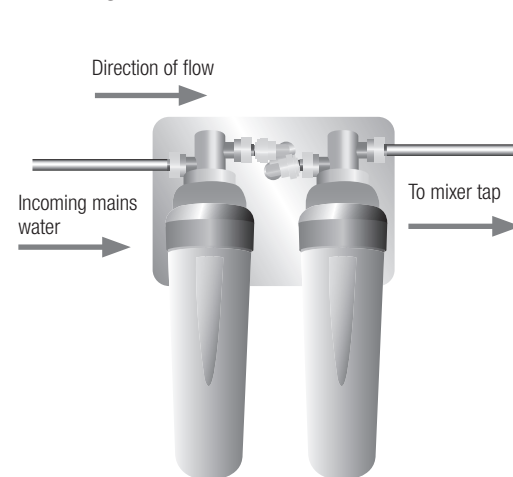


Figure 7



- 8.3 Connect the non return valve (J) to the inlet port of the left hand filter head (C) and the tee adaptor (K) with the tubing (I). Ensure that the flow arrow on the non return valve (J) is pointing in the direction of the filter head (C)
- 8.4 Measure and cut the tubing (I) to the length required to connect the outlet port of the right hand filter head (C) to the 7/16" adaptor (N) on the filtered water hose on the mixer tap. Connect the tubing to the filter head outlet port and mixer tap
- 8.5 Check that the arrows on non return valve (J) and the ports of the left and right hand filter heads (C) are pointing in the correct direction of flow towards the mixer tap – see page 1 and figure 7

9. Check the system for leaks

For guidance on identification of system components see page 1 and figure 1

- 9.1 With the mixer tap filtered and hot/cold water taps open, slowly turn on the mains water to allow the system to fill gradually until all of the trapped air has been expelled from the system
- 9.2 Check for leaks around the mains supply pipes and adaptors, non return valve, filter head inlet and outlet ports and filtered water adaptor. Also check for leaks between the filter head, cap and filter body

9.3 If there are leaks from the adaptors, non return valve or filter head ports:

- Turn off the mains water supply
- Open the mixer tap filtered and hot/cold water taps to release pressure from the system
- Press in on the collar around the tubing where it enters the adaptor, see figure 8
- Pull the tubing to release it from the adaptor
- Check to make sure that the tubing is cut square and that that it is not scratched or crimped
- If the tubing is unevenly cut or scratched, cut off the damaged section squarely and re install the tubing
- With the mixer tap filtered and hot/cold water taps open, slowly turn on the mains water to allow the system to fill gradually
- Check the system for leaks

Figure 8

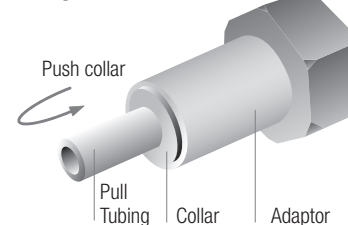


Figure 9



9.4 If there are leaks from the filter head:

- Turn off the mains water supply
- Open the mixer tap filtered and hot/cold water taps to release pressure from the system
- Remove the filter assembly, as described in section 7.2 – 7.3/figure 5a
- Check the O-rings around the top of the grey filter cap (E), ensure that they are in place and free from dirt and particles, see figure 9
- Re-fit the filter assembly, as described in section 7.8 – 7.9/figure 5d
- With the mixer tap filtered and hot/cold water taps open, slowly turn on the mains water to allow the system to fill gradually
- Check the system for leaks

9.5 If there are leaks from the filter cap and filter body:

- Turn off the mains water supply
- Open the mixer tap filtered and hot/cold water taps to release pressure from the system
- Remove the filter assembly, as described in section 7.2 – 7.3/figure 5a
- Unscrew the filter body (F) from the filter cap (E)
- Check the O-ring around the top of the filter body, ensure it is in place and free from dirt and particles
- Remove the filter element by unscrewing from the filter cap and place to one side ensuring that the open ended plastic mount is kept clean to avoid contamination
- Check the inside of the filter cap on the surface where the body O-ring seals, ensure it is free from dirt and particles, see figure 9
- Re fit the threaded filter element and reassemble the filter as described in section 7.6 – 7.9/ figures 5c & 5d
- With the mixer tap filtered and hot/cold water taps open, slowly turn on the mains water to allow the system to fill gradually
- Check the system for leaks

9.6 If there are leaks from the mixer tap adaptor:

- Turn off the mains water supply
- Open the mixer tap filtered and hot/cold water taps to release pressure from the system
- Press in on the collar around the tubing where it enters the 7/16" tap adaptor (N). See figure 8
- Pull the tubing to release it from the adaptor and unscrew the adaptor from the filtered water flexible supply pipe on the mixer tap
- Check that the black sealing washer is correctly seated in the threaded hole of the tap adaptor
- Make sure the black sealing washer is undamaged and free from dirt and particles
- Screw the tap adaptor (N) to the filtered water flexible supply pipe on the mixer tap - do not over tighten
- Ensure sure that the tubing is cut square and it is not scratched or crimped
- If the tubing is unevenly cut or scratched, cut off the damaged section squarely and re install the tubing
- With the mixer tap filtered and hot/cold water taps open, slowly turn on the mains water to allow the system to fill gradually
- Check the system for leaks

10. Prepare the filter for use

- 10.1 The 3 way mixer tap (Q) has an indicator light to inform the user when the ceramic filter requires changing. The light flashes 'blue' when the filtered water tap is operated, if the light flashes 'red' the ceramic filter requires changing. Remove the plastic battery protection strip from the underside of the mixer tap filtered water tap lever to enable the filter replacement indicator function, see figure 2b
- 10.2 Open the mixer tap filtered water tap and run the water to waste for 10 minutes (or 15 litres)
- 10.3 Leave to stand for 24 hours to condition the ceramic filter element, then run water to waste for a further 10 minutes. The filter is now ready for use

11. Care and Cleaning

- 11.1 Use only soapy water and a soft sponge or cloth to clean the filter housing and mixer tap, avoid the use of:
- **Strong oxidising agents such as bleach or Milton solution**
 - **All strongly acidic materials including descalants**
 - **Strongly alkaline materials**
- 11.2 Always ensure that the filter housing and mixer tap are thoroughly rinsed and dried after cleaning
- 11.3 If used with hard water or water with very high mineral content it is necessary to clean and dry the mixer tap after use, build up of calcium and other minerals could seriously damage the surface of the tap

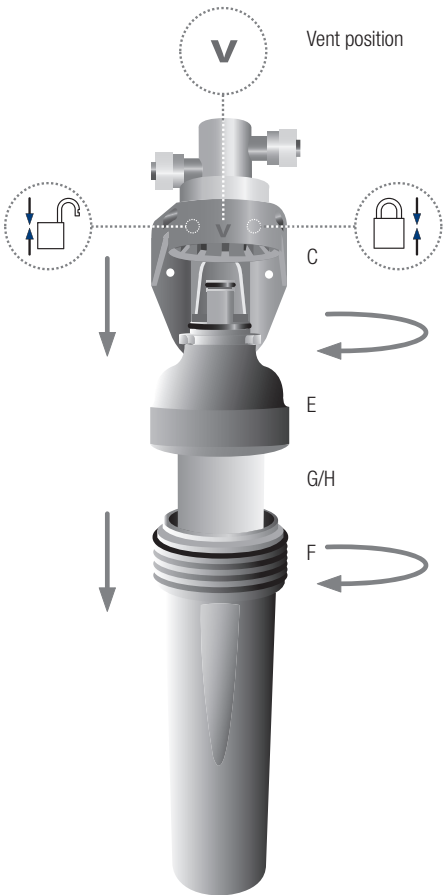
12. Servicing/Replacing the ceramic filter (H) in the right hand filter housing – see figure 10

- 12.1 Grip the textured rim of the grey filter cap (E), twist to the 'unlock' position, taking care not to trap fingers and pull down to disengage.
- Note: If the filter has had little use prior to servicing, twist the grey filter cap (E) to the 'V' vent position and open the mixer tap filtered water tap (to relieve pressure in the filter), twist the grey cap to the 'unlock' position and pull down to disengage the filter whilst the tap remains open**
- 12.2 The water supply is automatically turned off when the filter is dismantled.
- Note: If the filter is to be left unattended whilst dismantled for an extended period of time (i.e. over 1 hour) then the upstream mains water supply should be turned off**
- 12.3 Take the filter cartridge to the sink – remembering that it is still full of water
- 12.4 Unscrew the grey filter cap (E) to remove the filter body and empty the water into the sink, **taking care not to contaminate the open ended neck of the filter cap with unfiltered water**
- 12.5 Unscrew the ceramic filter (H) from the grey filter cap (E).
- Note: Care must be taken to prevent contamination of the neck of the filter cap and filter element mount stem**
- 12.6 Replace the ceramic filter or clean as described in section 14 and then wash your hands. Note: If replacing with a new ceramic filter, prepare the filter for use as described in section 10 or as per the Operating and Exchange Instructions supplied with the ceramic filter
- 12.7 The used ceramic filter can be wrapped in a plastic bag or newspaper for disposal with your household waste

13. Replacing the pre filter (G) in the left hand filter housing – see figure 10

- 13.1 Refer to section 12.1 to 12.4 to open the left hand housing for removal and replacement of the pre filter
- 13.2 Replace the Pre Filter with a new unit, replacement is recommended every 3 - 6 months dependant on the quality of your water

Figure 10



14. Cleaning the ceramic filter (H) – see figure 11

- Due to filtration of particulate contaminants from the water during use, the flow of water from the filter may reduce over a period of time. To restore flow to its normal level simply clean the ceramic filter as follows:
- 14.1 Hold the ceramic filter in a bowl of water or under running water. Ensure that the open ended plastic mount is clear of the water to avoid contamination
- 14.2 Take a clean kitchen scouring pad in one hand and cup it around the circumference of the ceramic filter at the top next to the mount. Press gently onto the filter surface with the scouring pad, whilst quickly turning the filter with the other hand
- 14.3 Apply a gentle even pressure with the pad and slowly work down the length of the filter once. Ensure that the cleaning is uniform over the whole filter

15. Re-setting the Mixer Tap filtered water indicator light or changing the battery – see figure 12

- When the ceramic filter has been changed the Mixer Tap filtered water indicator light will need to be re-set. To re-set the indicator light or change the battery, follow the steps below. It is recommended that a new mixer tap battery is fitted every 12 months
- 15.1 Remove the battery holder by pulling out from the underside of the filtered water tap operating lever
- 15.2 Remove the battery
- 15.3 Re fit the new battery or if you are just re-setting the indicator light put the old battery back in. The led light on the circuit board will flash red then blue
- 15.4 Push the battery holder into the underside of the filtered water tap operating lever, ensure the light on the circuit board aligns with the light lens. The indicator light is now re-set for use with the new ceramic filter, when the filtered water tap is operated the indicator light flashes 'blue'

Figure 11

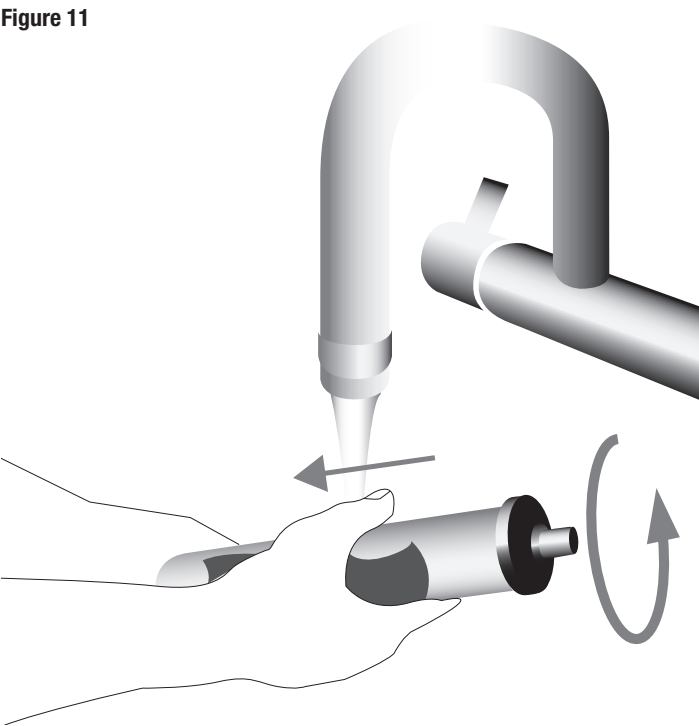
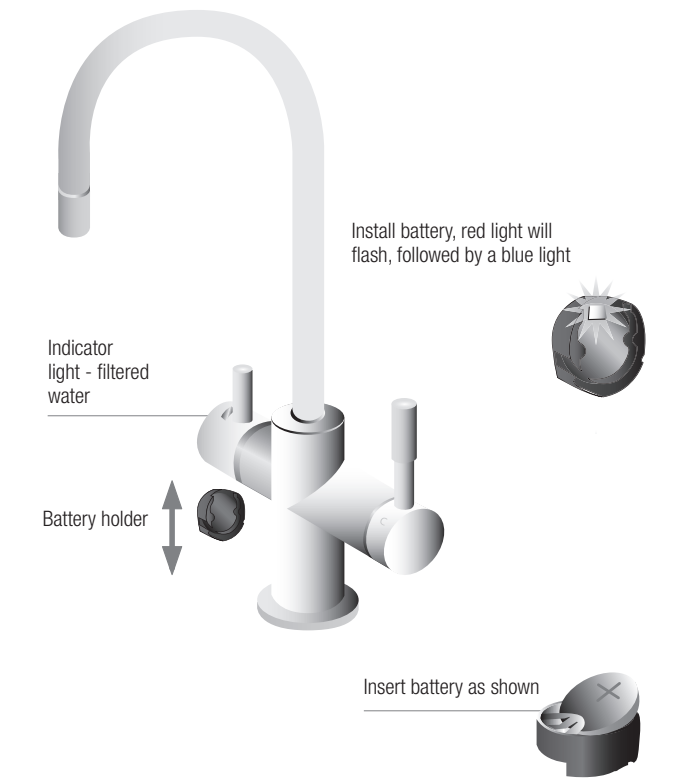


Figure 12



Parts and Service Availability - Buy online at **www.doulton.com**

Product Warranty - Your filter housing is covered under warranty for 12 months from the purchase date of the product against any failure due to defect of materials, workmanship or design of the filter housing. Please retain your receipt as proof of purchase. To register your product warranty please visit www.doulton.com/product-registration/ and complete the Product Registration Form.



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