# Installation Instructions for the EL, ML & TL Drinking Water Filter System & Tri-Flow Tap Range

To differentiate between the products in the Tri-Flow range we will refer to the various products throughout the manual by using the last two letters of the product code. The code is clearly visible on the right hand side of the product label attached to the packaging. For example the product with the code "CULTRITL" will be referred to as simply the "TL".

Installation of the Tri-Flow tap may vary from model to model. Where variations occur, your model reference will be clearly indicated.

Listed on the following pages are item lists for the whole Tri-Flow range.

**VERY IMPORTANT:** Please check the contents of your Tri-Flow pack against the applicable component list on pages 2-5. If any components are missing, please contact BWT **BEFORE** installing any part of the system or attempting to return the goods.

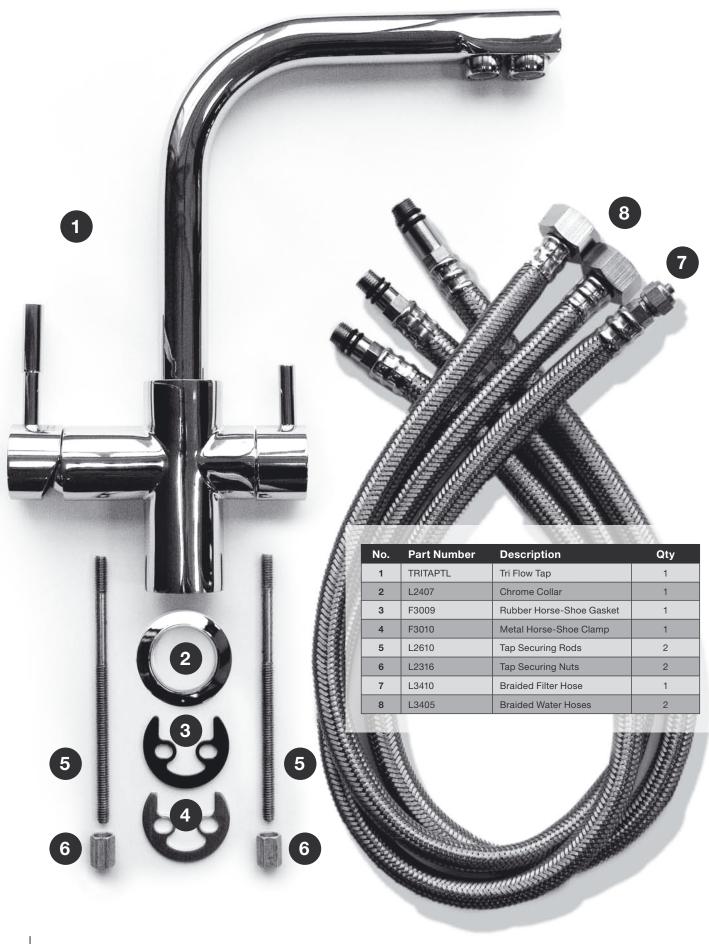


# Tri-Flow Range Component Lists – Tri-Flow Model EL

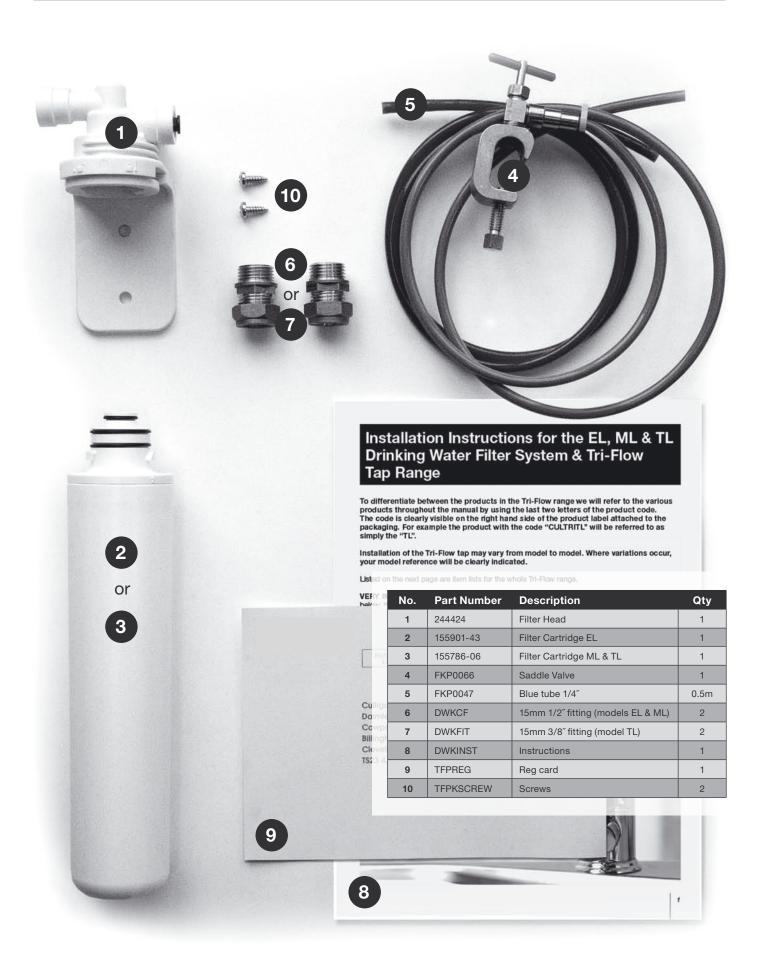


## **Tri-Flow Model ML**





## **Drinking Water Filter System (All Models)**



#### **Installation of the Tri-Flow Filtration System**

IMPORTANT: DO NOT proceed with installation until you have checked off all the components against the designated component list (please see pages 2-5).

#### Step 1: Preparation for the Tri-Flow tap installation

Unless stated otherwise the instructions cover the whole Tri-Flow range.

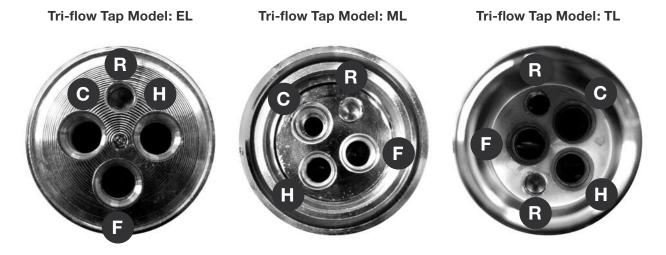
Turn off incoming cold water mains and isolate or drain down hot water supply.

Remove existing tap system and any residual adhesive and/or sealant to leave a dry and clean aperture.

If no pre-drilled aperture exists (i.e. a solid granite work surface) a 35mm diameter hole will be required.

#### **Installation of the Tri-Flow Tap**

#### Step 2: Attaching the braided water hoses and tap securing rods to the tap



H = Hot Water (Mains) C = Cold Water (Mains) F = Filtered Water R = Tap Securing Rod(s)

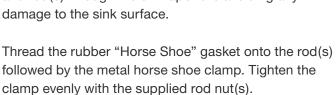
Attach the hot & cold mains hoses, rod(s) and the filtered water hose as per illustration above. Turn hoses clockwise until fully home and secure.

**NOTE** it is advisable to attach a sticky label at the end of each hose to identify which is hot, cold & filtered water as identification may be difficult once attached to the sink top.

Screw the tap rod(s) clockwise to the base of the tap.

#### Step 3: Securing tap to sink surface.

On Tri-flow model **EL** please ensure the supplied gasket is in position on the base of the tap prior to fixing on to the sink. The flat side of the gasket rests against the sink surface. The Tri-flow tap Model **ML** has a gasket preinstalled in the base of the tap. On Tri-flow model **TL** please ensure the supplied chrome collar with preinstalled gasket is in position on the base of the tap prior to fixing on to the sink. The flat side of the collar rests against the sink surface. Carefully thread hoses and rod(s) through the sink aperture avoiding any damage to the sink surface.





Tri-Flow tap model TL shown

The Tri-flow tap should now be securely fixed to your sink unit.

#### Securing the hot & cold braided flexible hoses to the mains water supply

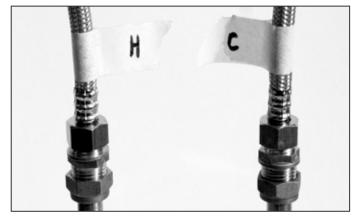
IMPORTANT: In line with good plumbing practice, it is recommended that Isolation valves\* are fitted into the hot & cold mains pipe work prior to fitting supplied tap couplings.

# Step 4: Ensure the ends of the mains hot & cold water pipes are clean, dry and free from dirt or debris.

Place and tighten the couplings onto the mains hot & cold pipe work.



Screw and tighten hot & cold braided flexible hoses onto secured couplings, ensure correct hose is fastened to the appropriate mains pipe work.



<sup>\*</sup> Not supplied, available from your local DIY store or plumbing merchants.

#### **Step 5: Installing the Filtration System**

Mounting the Cartridge Head, ensure positioning of the bracket/filter head is in a location to allow connection of the Tri-flow braided filter water hose.

**NOTE:** Allow 50mm clearance below housing or 280mm below filter head to enable filter cartridge changes.

**CAUTION:** Filter head should be mounted on stud or firm surface. The mounting bracket will support the weight of the filter and help prevent strain on the cold water line.

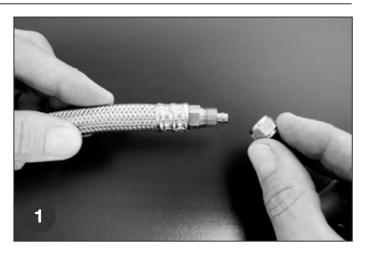
Filter head should be mounted in vertical position, use mounting bracket as a template to mark screw locations. Mount filter head in marked location using screws.

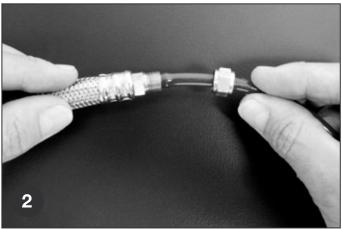
Remove Brass nut from the Filtered braided flexible hose, (see photo No.1).

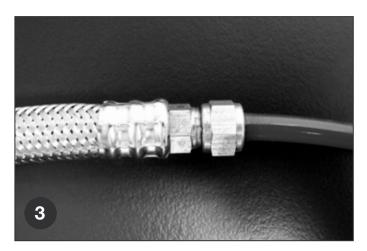
Thread nut onto Blue plastic tubing, and push Blue tubing onto brass nipple until firmly home (see photo No.2).

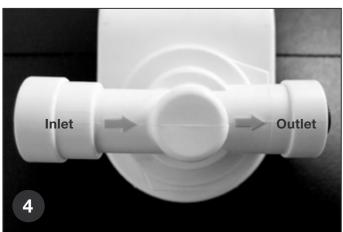
Tighten nut until secure, do not over tighten (see photo No.3).

Take the other end of the blue tubing and insert fully home into the outlet side of the filter head. Check arrows for flow direction (see photo No.4)









#### Step 6: Installing the Cartridge

Remove the cellophane shrink-wrap from cartridge. Hold cartridge from the bottom when installing or changing the cartridge. Use caution not to scrape knuckles on bracket when locking the cartridge into place. Line up the arrow on the cartridge with unlocked padlock on head. Insert cartridge and turn arrow to locked padlock.



#### **Step 7: Installing the Saddle Valve**

Place the saddle clamp on the cold mains supply pipe to kitchen sink. Make sure that the SADDLE A is in place as shown in the photo. Tighten the locking screw C to clamp the pipe securely.

Take the tube end and insert fully home into the inlet side of the filter head, (check arrows for flow direction).

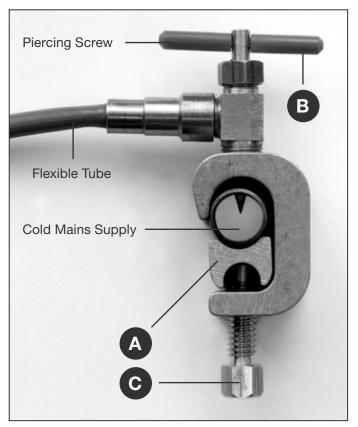
Turn on your water supply and check for leaks. At this point only you're hot & cold water supply will be operational.

Turn the piercing screw B clockwise and fully home to puncture the Pipe with the TAPPING PIN. Open the Tri-Flow tap filter lever fully to allow for continuous flow, then slowly turn the piercing screw B anti-clockwise allowing water to enter the Filter slowly and displace trapped air and loose particles. When the water runs clear, turn the piercing screw B anti-clockwise until fully open and the water flows at maximum rate, (Ave 2.35 Ltrs/Min @ 4.1 Bar)

Allow water to flow through the system for around 15 minutes when first installed or when left unused for a prolonged period of time.

Always flush drinking water filter system for 10 seconds prior to use.

The image opposite represents a typical under sink installation. You may have to vary the arrangement depending on your individual plumbing layout.





#### Filter Cartridge Replacement

**NOTE:** It is recommended that the filter be replaced every six months, or when you notice a change in taste, odour, or flow of the water being filtered

- (1) Turn off water supply to the filter and dispense water from drinking water tap until water flow stops to relieve pressure.
- (2) Place towel under the system to catch any water drips.
- (3) Turn arrow from locked to unlocked position. Remove cartridge.
- (4) Line up arrow with unlocked position on head and insert cartridge. Turn to locked position.
- (5) Turn on water and check for leaks. If it leaks, see Troubleshooting.
- (6) Flush water through drinking water tap for 5 minutes to remove carbon fines. Check for leaks before leaving installation.

#### **Troubleshooting**

IMPORTANT: If any leaks are experienced, please check water pressure (see performance data on page 12).

#### Leaks: Between head and cartridge

- (1) Turn off the water supply to the filter and dispense water from drinking water tap until water and airflow stops.
- (2) Remove cartridge and inspect o-rings to make sure they are in place and clean.
- (3) Install cartridge and turn on water supply. If it still leaks, contact Technical Support.

#### **Leaks: From fittings**

Turn off saddle valve and turn on drinking water tap. For plastic tubing, depress collar on Push-Fit and remove the tubing from the housing. Inspect to see if the tubing is damaged. If damaged, remove problem area by cutting squarely across the tubing. Then reconnect tubing following procedure on page 8 (connecting to filter housing). Open the water supply valve, then close tap and check for leaks. If the leaks persist, or if there are other leaks on the unit, turn off the water supply then call Technical Support.

#### Leaks: On saddle valve connection

Call Technical Support.

#### Leaks: On tap/tubing connection

#### Call Technical Support.

**NOTE:** If leaks persist, or if there are other leaks on system, turn off water supply. Call our technical support department.

## **Filter Cartridge Information**

#### **RELATES TO EL MODEL ONLY**

Model	Cartridge Colour	Claims	Filter Life	Flow Rate	Micron Rating	1/4-inch Threaded	1/4-inch JG Push fit	3/8-inch JG Push fit
155901-43	Blue	chlorine taste & odour	500 gallons (1890 L)	0.75 gpm (2.8 L/min)	ı	<b>✓</b>	1	<b>✓</b>

#### **RELATES TO ML & TL**

Model	Cartridge Colour	Claims	Filter Life	Flow Rate	Micron Rating	1/4-inch Threaded	1/4-inch JG Push fit	3/8-inch JG Push fit
155786-06	White	chlorine taste & odor, sediment, lead, atrazine, lindane, cyst and turbidity	500 gallons (1890 L)	0.5 gpm (1.9 L/min)	0.5	<b>&gt;</b>	✓	<b>√</b>

155786-06 Cartridge	U.S. EPA MCL*	Avg. Influent Concentration	Avg.(Max) Effluent Concentration	Avg.(Min) Reduction
Standard 42				
Chlorine-Class I	_**	2.10 ppm	0.02 ppm	99.00%
Particulates (0.5 to<5 µm) –Class I	_**	7,108,826.00 #/ml	15,896.00 #/ml	99.80%
Standard 53				
Cysts <sup>†</sup>	99.95 %	130,750.00 #/ml	0.00 #/ml	99.99%
	Reduction		(0.00 #/ml)	(99.99%)
Turbidity	0.5 NTU*	37.40 NTU	0.08 NTU	99.96%
			(0.08 NTU)	(99.95%)
Lead	0.010 ppb‡	0.15 mg/L	0.001 mg/L	99.30%
(6.5 pH)			(0.001 mg/L)	(99.30%)
Lead	0.010 ppb‡	0.15 mg/L	0.002 mg/L	98.60%
(8.5 pH)			(0.003 mg/L)	(98.00%)
Atrazine	0.003 mg/L	0.0088 mg/L	0.0002 mg/L	97.70%
			(0.0002 mg/L)	(97.70%)
Lindane	0.0002 mg/L	0.002 mg/L	0.00005 mg/L	(97.50%)
			(0.00005 mg/L)	(97.50%)

Flow Rate = 1.89 Lpm Capacity = 1892L or 6 Months

- \* US EPA Maximum Contaminant Level
- \*\* No maximum contaminant level
- † NSF test requirement of at least 50,000 3–4 micron particles per millilitre. The 3–4 micron size particle is a surrogate particle for Cryptosporidium and Giardia cysts.
- ‡ US EPA Action Level for lead

**NOTE:** Substances reduced are not necessarily in your water. Filter must be maintained according to manufacturer's instructions, including replacement of filter cartridges.

#### **Performance Data**

Important Notice: Read this performance data and compare the capabilities of this system with your actual water treatment needs.

The cartridge 155786-06 is tested and certified by NSF/ANSI to Standard 42 for the reduction of Chlorine Taste & Odour and Particulate Class I. Standard 53 Atrazine, Cyst, Lead, Lindane and Turbidity. Cartridge 155901-43 is Tested and Certified by NSF/ANSI to Standard 42 for the reduction of Chlorine Taste & Odour.

#### **Test Conditions: All Cartridge Models**

Flow Rate = 0.5 gpm Inlet Pressure = 60 psi (4.1 bar)

pH =  $7.5 \pm 1$  Temperature =  $68^{\circ} \text{ F} \pm 5^{\circ} \text{ F} (20^{\circ} \text{ C} \pm 2.5^{\circ} \text{ C})$ 

#### **Operating Requirements**

Pressure = 30-125 psi (2.1-8.62 bar) Temperature =  $40^{\circ}-100^{\circ} \text{ F } (4.4^{\circ}-37.7^{\circ} \text{ C})$ 

Turbidity = 5 NTU Max

Do not use with water that is microbiologically unsafe or unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.

#### Guarantee

This product is guaranteed for the period of one year from the date of purchase against any manufacturing fault. The guarantee is only valid if the product has been installed and used in accordance with the manufacturers instructions and has not been dismantled or interfered with in any way. Damage caused to the product or by the product as a result of failure to use the product in accordance with the manufacturers instructions is not covered by this guarantee. Under this guarantee we undertake at our discretion to repair or replace free of charge the product or any part thereof that is found to be faulty. Costs associated with the fitting of a replacement product or part or the removal of the product are not covered by this guarantee. Loss or damage caused by the product (including consequential loss) is not covered by this guarantee. This guarantee does not affect your statutory rights.

#### **Customer Help Line:**

# **01494 838 100** Monday to Friday 08.30 – 17.30 UK Only.

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