KENT
Automatic
Iron Filter
HOUSE of PURITY

Marketed by:
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Manufactured by:
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Made in India

High Capacity 100L

KENT
Automatic
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HOUSE of PURITY

KENT Automatic Iron Removal Filter

Instruction Handbook

Welcome to KENT

Dear Customer

Welcome to the world of KENT, leaders of water purification industry in India. With a KENT's product you have all reasons to smile, since at KENT, we take pride in the quality and laboratory-tested performance of our products.

We are confident that your decision to own KENT Automatic Iron Removal Filter. Will go a long way in serving you with sediment free water. We assure you that you will be satisfied with its performance and quality which comes without any compromise.

This manual will familiarize you with the operation of KENT Automatic Iron Removal Filter. Before operating the unit, please read it thoroughly and retain it for future reference.

Should you need further assistance, do not hesitate to contact your nearest KENT dealer or branch.

Best Wishes

KENT RO SYSTEMS LTD.

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Introduction

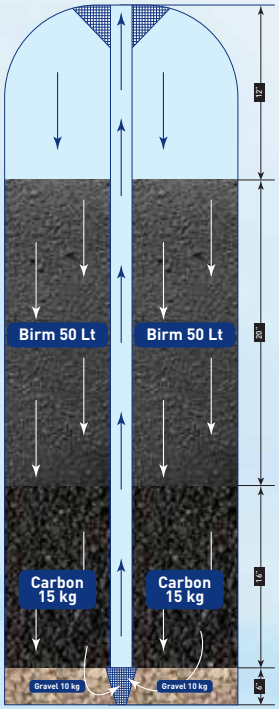
Presenting the all-new KENT Automatic Iron Removal Filter, to liberate you from the problems of water full of iron particles and provide your family with clean water. The Automatic Iron Removal Filter removes Iron from water. KENT Automatic Iron Removal Filter would provide you and your family with advantages outlined below

- High Capacity 100L (4000 Lph)
- Elegant Design
- High-quality Media for Longer Life
- Automatic Hassle-free operation
- Low Maintenance Cost
- Easy to Install and Use

Items in the box

1. KENT Automatic Iron Removal Filter:	(1N)	5. Gravel filter 10 kg	: (1N)
2. FRP Tank Assly	: (1N)	6. Activated Carbon 15 kg	: (1N)
3. Control Valve Assly	: (1N)	7. Warranty Card	: (1N)
4. Birm 25L	: (2N)	8. AC/AC Adaptor	: 1 N

Stage of filtration

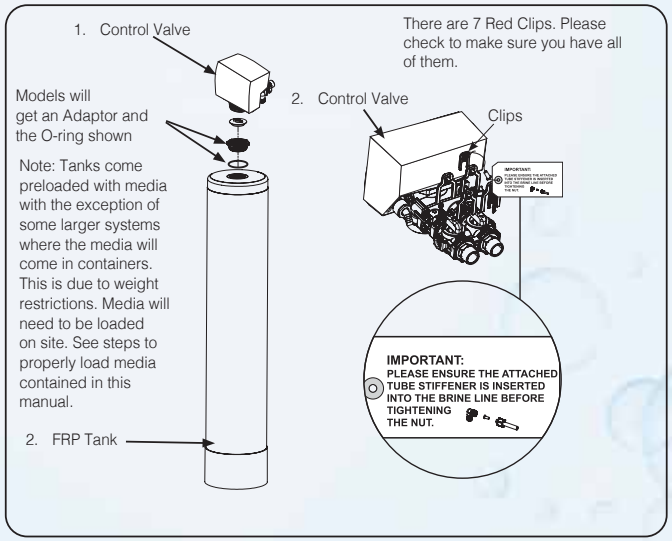


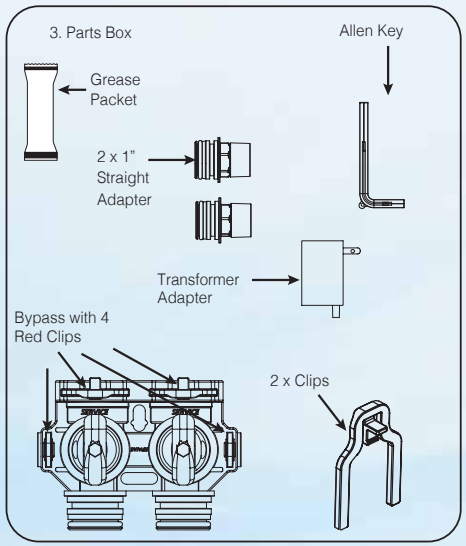
Unpacking

To install the softener many parts are provided in the packaging.

Included in the box:

1. FRP Tank
2. Control Valve
3. Filter Media
4. Small Parts

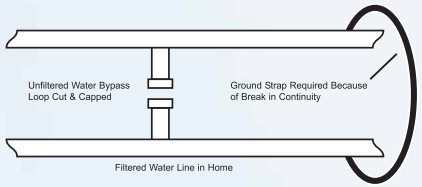




Before Installation

In all cases where metal pipe was originally used and is later interrupted by poly pipe, or the Noryl bypass valve, an approved ground clamp with physical separation and no less than #6 copper conductor must be used for continuity, to maintain proper metallic pipe bonding.

Fig. 1.



WARNING

If the ground from the electrical panel or breaker box to the water meter or underground copper pipe is tied to the copper water lines and these lines are cut during installation of the bypass valve and/or poly pipe, an approved grounding strap must be used between the two lines that have been cut in order to maintain continuity. The length of the grounding strap will depend upon the number of units being installed and/or the amount of copper pipe being replaced with plastic pipe.

See figure 1.

Mechanical

Do not use petroleum-based lubricants such as petroleum jelly, oils or hydrocarbon-based lubricants. Use only 100% silicone lubricants provided in parts kit. All plastic connections should be hand tightened only. Thread tape may be used on connections that do not use an O-ring seal.

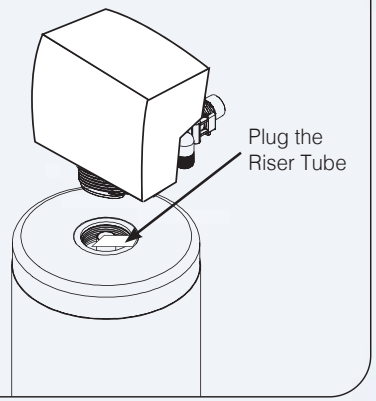
Do not use pliers or pipe wrenches except when indicated by nut shape, e.g., pipe adapters. Soldering connections should be done before connecting any plastic pieces to the pipe as excessive heat can damage them.

Preparations

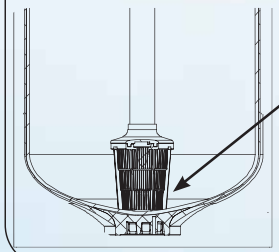
Media Installation (When Necessary)

Follow the steps below for proper media loading.

1. Temporarily plug the open end at the top of the riser (distribution tube with tape).



2. Ensure the bottom of the riser tube remains seated in the depression at the bottom of the tank. Fill tank one-quarter full with water to protect the distribution tube during gravel installation.

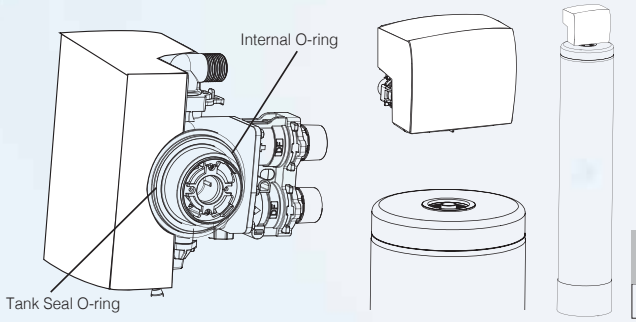


NOTE

If severe loss in water pressure is observed when the softener unit is initially placed in service, the filter tank may have been laid on its side during transit. If this occurs, backwash the filter to 'reclassify' the media.

Preparations (Continued)

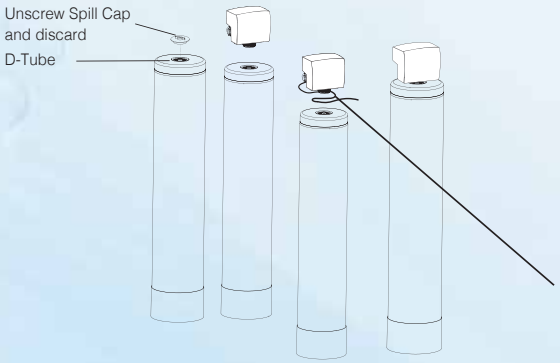
3. Apply the supplied lubricant to the internal O-ring at the bottom of the control valve. Apply lubricant to the larger O-ring on the bottom of the valve that seals with the tank threads.



NOTICE

Do NOT use petroleum-based lubricants as they will cause swelling of the O-ring seals.

4. Remove the tape from the top of the riser tube. Carefully position the valve over the riser tube, inserting riser into the internal O-ring. Turn the valve clockwise into the threads of the tank until secure.



NOTICE

Make sure the quick connect power cord is not yet connected to prevent the cord getting caught between the threads of the tank and the valve.

Installation Location

- To condition the complete water supply at home, install the KENT Automatic Iron Removal Filter close to main water supply outlet
- A nearby drain is required to carry away regeneration discharge (drain) water. Use a floor drain, laundry tub, sump, standpipe or any other option
- The location chosen for the installation must have enough space for the system, its accessories, and connections and to carry out a proper maintenance
- The system should not be installed next to a heat source or where it receives a direct flow of hot air
- Avoid external dips from pipes, drains etc. on to the system

Installation Procedure

KENT Automatic Iron Filter installation must be done according to the following schemes and in accordance with the local laws. Follow assembly and installation indications given in the manual. Contact KENT technical service for any support.

- Close main water supply
- Move the KENT Automatic Iron Filter to the installation position

Installation Steps

To Begin Your Installation:

1. Make sure the bypass is attached securely to the control valve.
2. Apply thread tape to threaded connections straight or elbow plumbing adaptors
3. Apply the supplied lubricant to the O-rings of the fittings.
4. Connect the supplied straight or elbow plumbing adaptors to the bypass with red clips.
5. Connect the inlet and outlet of the Iron filter to the plumbing of the house.

NOTICE

Any solder joints near the valve must be done before connecting any piping to the valve. Failure to do this could cause damage to the valve.

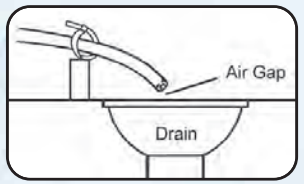
NOTICE

Do NOT use pipe thread compound as it may attack the material in the valve body.

NOTICE

Failure to leave enough distance could cause damage to the valve. Always leave at least 6" [152 mm] between the valve and joints when soldering pipes that are connected to the valve.

6. For the drain line connection; attach a 1/2" [12.7 mm] Inside Diameter (ID), 5/8" [15.875 mm] Outside Diameter (OD) drain hose to the drain line fitting.
   a. Complete any necessary plumbing to maintain a proper air gap.

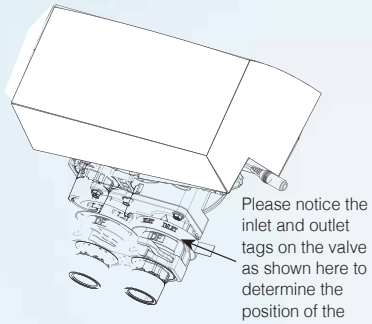


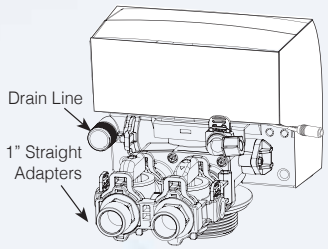
NOTICE

The waste connections or drain outlet shall be designed and constructed to provide for connection to the sanitary waste system through an air-gap of 2 pipe diameters or 1" [25.4 mml whichever is larger.

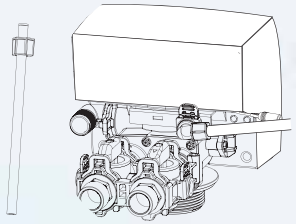
CAUTION

Never insert drain line directly into a drain, sewer line, or trap. Always allow an air-gap between the drain line and the wastewater to prevent the possibility of sewage being back-siphoned into the softener.





7. Using the included Allen key, place the unit in the bypass position.
   a. Slowly turn the main water supply ON.
   b. At the nearest cold treated water tap, remove the tap screen, OPEN the tap and let water run a few minutes or until the system is free of any air or foreign material resulting from the plumbing work.



Manual Water Bypass

In case of an emergency, or to perform filter maintenance, you can isolate your automatic Iron filter from the water supply using the bypass valve located at the back of the control.

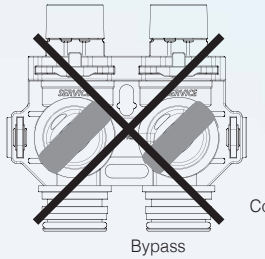
NOTICE

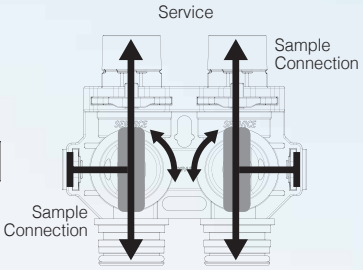
If the tap has a screen, it should be removed to allow debris to flush out of the plumbing.

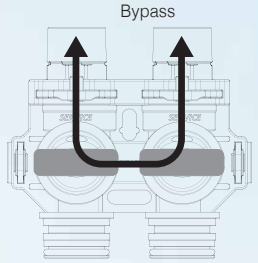
In normal operation the bypass is OPEN with the ON/OFF knobs in line with the INLET and OUTLET pipes, i.e., the black marks in the vertical position. See SERVICE below.

To isolate the sand filter, simply rotate the knobs as indicated to the CLOSE position until they lock. You can continue to use your water related fixtures as the water supply is bypassing the filter. However, the water you use will be untreated.

To resume treated service, OPEN the bypass valve by rotating the knobs back to the SERVICE position.







NOTE

Please make sure bypass knobs are completely open otherwise the untreated water may enter through the valve.

8. Make sure there are no leaks in the plumbing system before proceeding. Shut the water tap OFF when the water runs clean.

Troubleshooting

Problem	Possible Causes	Possible Solution
1. Concentration of Iron particles in water are high	Regeneration not done.	Carry out the Regeneration
	Regeneration not done properly for the prescribed time	Carry out the Regeneration for the stipulated time as mentioned in manual
2. (Error Code) (Error E1) - Electrical Trouble Shooting:		
Issue 1: When the controller is plugged, the buzzer beeps and the screen displays" System Error E1" **Cause:** The wire of micro switch is not plugged or loose.		Check the micro switch and connect the wire well.
3. (Error Code) (Error E1) - Electrical Trouble Shooting:		
Issue2: The buzzer beeps and the screen displays"System Maintaining El" **Cause:** The wire of micro switch is not plugged or loose.		Check the micro switch and connect the wire.
4. (Error Code) (Error E2) - Electrical Trouble Shooting:		
Issue: The buzzer beeps and the screen displays "System Error E2" **Cause:** The motor can not find its right position, micro switch or motor malfunction, automatic circuit protection action.		Check the current of micro switch and motor.
5. (Error Code) (Error E2) - Electrical Trouble Shooting:		
Issue 2: The buzzer beeps and the screen displayed " System Maintaining E2" **Cause:** The motor can not find its right position.		Replace Motor or PCB.

Technical Specifications

Product	:	KENT Automatic Iron Removal Filter
Product Code	:	111063
Product Colour	:	Black
Product Generic Name	:	Iron Removal
Application	:	Suitable for removal of iron from raw water
Mounting	:	Floor Standing Product
Dimensions (mm)	:	322 (L) x 332 (W) x 1384 (H)
Maximum Flow Rate	:	3000 L/hr.
Net Weight	:	11.20 kg
Inlet water Pressure/Temp. (Min.)	:	1.0 kg/cm2/1°C
Inlet water Pressure/Temp. (Max.)	:	10.7 kg/cm2/50°C
Gravel Media Weight	:	10 kg
Activated Carbon Weight	:	15 kg
Brim Media Volume	:	50 L