



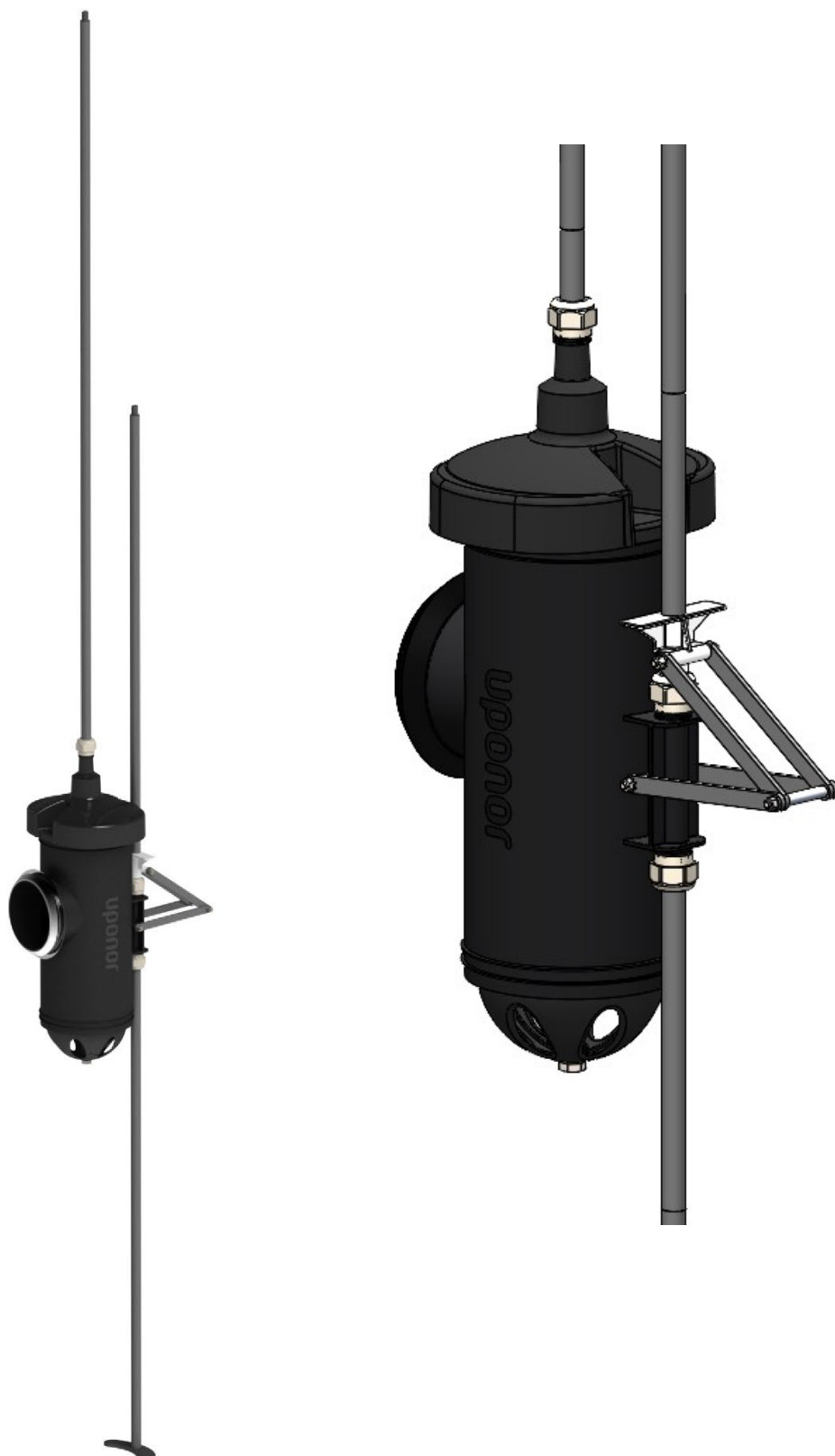
Uponor Stormix

Installation Manual

uponor



Uponor Stormix rainwater filter



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1. Introduction

Any work related to transport, assembly, operation and maintenance of devices may be performed by persons familiar with this Manual. To ensure the full use of the filter and extend its service life, the operating conditions specified in the documentation must be followed.

Comments, complaints and defects during the warranty period should be reported to the supplier's address:

Uponor Infra Oy, Kouvolantie 365, 15550 Lahti, Finland

asiakaspalvelu@uponor.com

2. Purpose

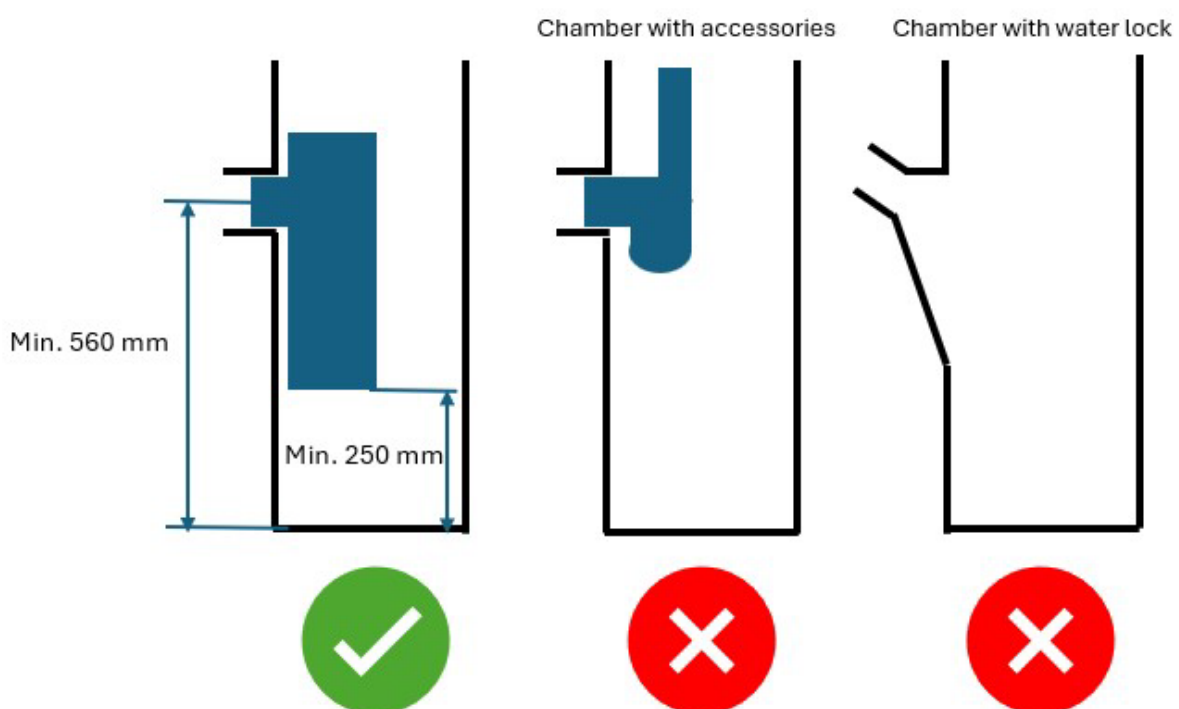
The Uponor Stormix rainwater filter is installed in rainwater chambers, where it filters microplastics and larger impurities from the water and prevents them from entering the environment. This filter solution is available in two versions that differ only in the size of the chamber water outlet pipe: **DN110** (Uponor item 1143761) or **DN160** (Uponor item 11437612) outlet pipe.

Uponor Stormix rainwater filter can be installed in a new chamber in connection with the rainwater collection system or as a retrofit in an already installed chamber. It can be installed in the chambers of most chamber manufacturers, with some exceptions.

Image below illustrates the acceptable chamber structure for a retrofit installation (✓).

Images on center and right illustrate not acceptable retrofit chamber structures (✗).

IMPORTANT TO NOTE: If you are not sure that this product is suitable for your chambers, contact Uponor before purchase.



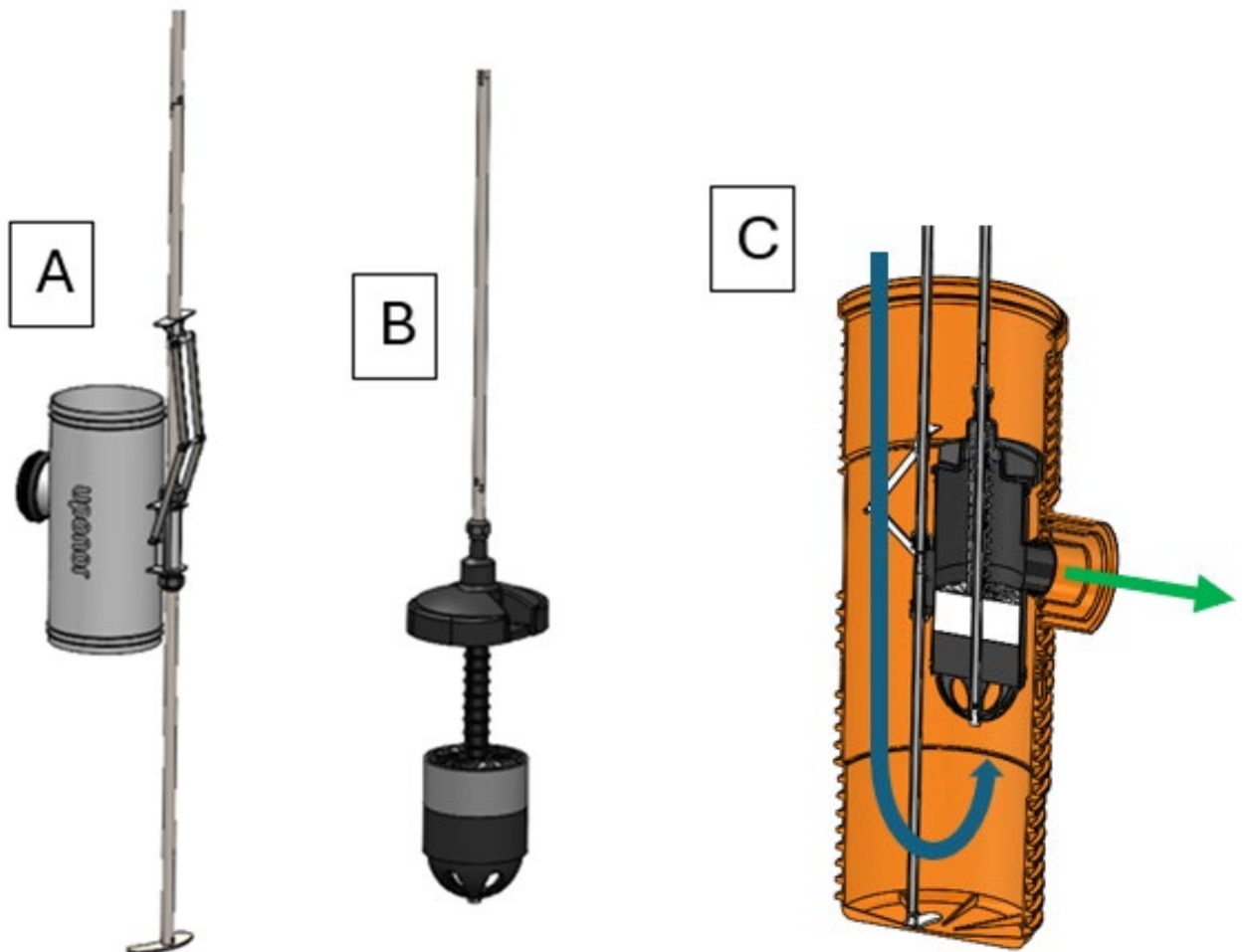
3. Principle of operations

The Uponor Stormix rainwater filter solution is made of two units: The housing unit (A in image below), permanently installed in the chamber, and the filter unit (B), which is lifted from the housing unit to change the filters.

With the filter installed in the chamber, the rainwater settles to the bottom of the chamber, and the water rises up and passes through two separate filters, before leaving the chamber (C).

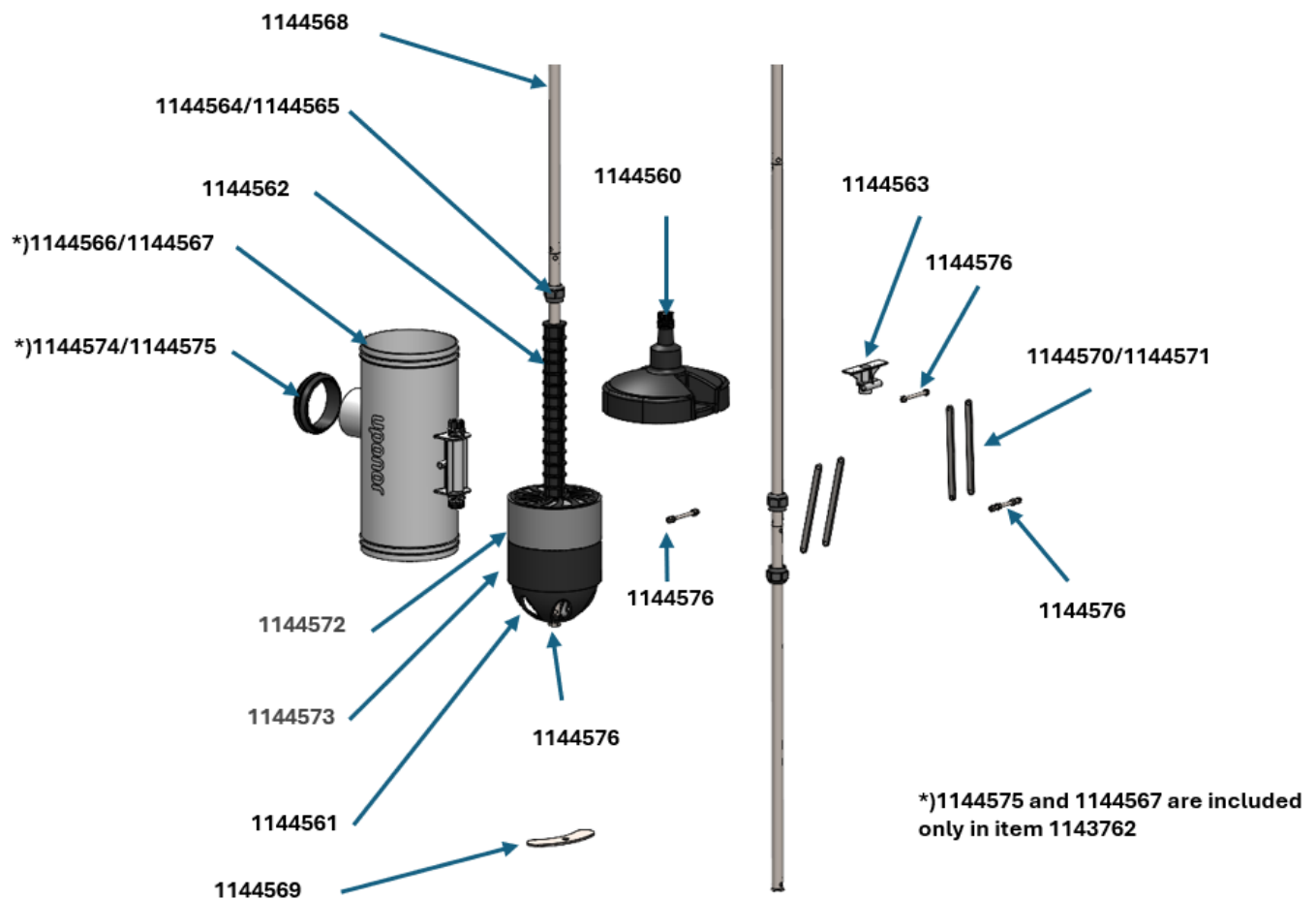
The coarse filter is on the bottom, receiving the water first and stopping larger particles.

The fine filter is on top, stopping the smallest particles that have passed through the bottom filter. Only particle-free water should flow out.



4. Assembly




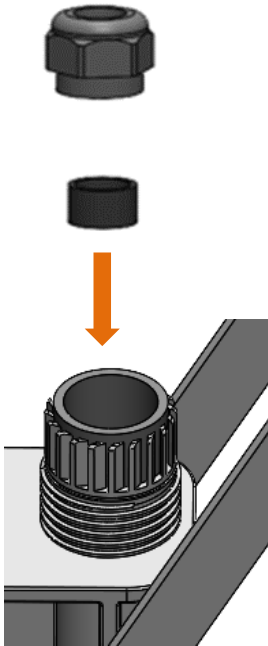
Assembly is the same for both chamber filter versions. See parts illustrated and listed next.



ITEM NO.	ITEM NAME
1144560	HAT PP D244X190
1144561	BOTTOM PP D160X80
1144562	FILTER HOLDER PP D165x336
1144563	PUSH GLIDE PP 106X27X50
1144564	CABLE CLAND BUSHING TOP D20
1144565	BUSHING SEALING D20
1144566	HOUSING 180/90
1144567	HOUSING 180/140
1144568	MOUNTING ROD A4 700XD20/1,5+20XM8
1144569	FOOT PLATE A4 150X51X4
1144570	315-400 PUSH PLATE A4 177/CC165X12X5
1144571	560-600 PUSH PLATE A4 347/CC335X12X5
1144572	FILTER FOAM UPPER FIBERSPRING 402 D175X80
1144573	FILTER FOAM LOWER BULPREN PPI30 D175X80
1144574	SEALING MANCHETTE OUTLET 90
1144575	SEALING MANCHETTE OUTLET 140
1144576	FASTENER BAG

How to assemble the Housing unit

Mechanism arms are pre-assembled into the housing. You must assemble the mounting rod that becomes the pusher glide to hold the housing in place inside the chamber.

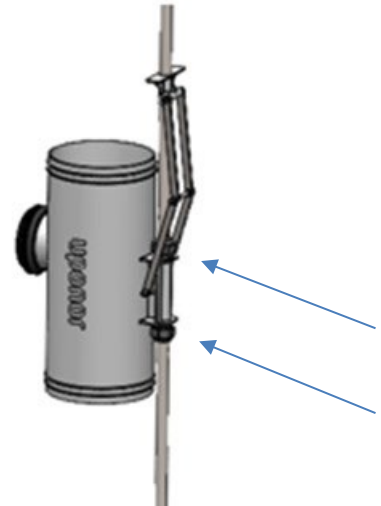
<p>1. Fasten three (3) installation bars (1144568) together to assemble the mounting rod.</p> <p>NOTE: Lubricate the threads.</p>	
<p>2. Pair up a bushing cap and a rubber sleeve.</p>	 <p>Bushing cap + rubber sleeve into bracket 1144564 & 1144565</p> 
<p>3. Slide the bushing caps inside the rubber sleeves.</p>	

4. Slide the mounting rod in its place, female thread down.

Lock it by tightening the bushing caps with rubber sleeves. The locking is on top and below the brackets on the housing's outer wall.

NOTE: Tighten ONLY by hand!

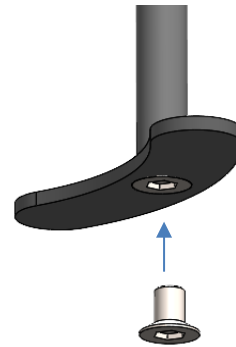
NOTE: If you use a 37 mm wrench, do not overtighten the bushing caps.



5. Attach the bottom plate (1144569) in the bottom end of the mounting rod.



Use Allen-Key to tighten the screw to the mounting rod end.

No lubrication is needed.



How to assemble the Filter unit

Next assemble the filter unit that is put inside the chamber filter housing.

<p>1. Assemble the mounting rod to needed length to suit the chamber depth.</p> <p>There are three rod parts available in the delivery.</p>	
<p>2. Slide the mounting rod through the parts in the following order:</p> <ul style="list-style-type: none">a) Hat 1144560b) Filter holder 1144562c) Filter 1144573 (fine)d) Filter 1144572 (coarse)e) Bottom 1144561	
<p>3. Lubricate the threads at mounting rod end. Mount filter bottom with a M12 Hex head screw and a locking washer into mounting rod.</p> <p>NOTE: Tighten ONLY by hand!</p> <p>NOTE: If you use a 37 mm wrench, do not overtighten the screw.</p>	

- 4.** Attach Cable Gland 1144564 with a rubber sealing 1144565 to the hat.

NOTE: Tighten ONLY by hand!

NOTE: If you use a 37 mm wrench, do not overtighten the bushing cap.



5. Before installation

1. Read these instructions and the information on the package cover.
2. Check that the contents of the delivered package match the parts list.
3. Make sure you have the necessary hand-tools available:

- 37mm wrench
- 19 mm wrench
- 10 mm wrench (2 pcs)
- 8 mm Allen-Key



4. It is recommended to assemble the Uponor Stormix rainwater filter parts indoors before taking them to the installation site outdoors.

5. **IMPORTANT:** Before installation work with chambers already installed in the ground and connected to the drainage network you must ensure that the chamber bottom is sucked empty of all debris.

6. **IMPORTANT:** This product is used in rainwater chambers that do NOT have accessories installed, such as a ball valve in the outlet and/or a cleaning pipe on chamber top. Any accessories prevent the installation of the product. The product can only be installed in an unobstructed and free space in the chamber outlet pipe.

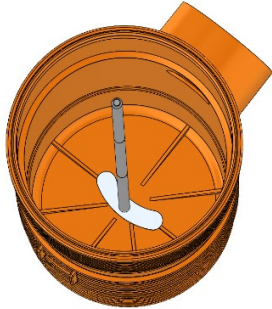
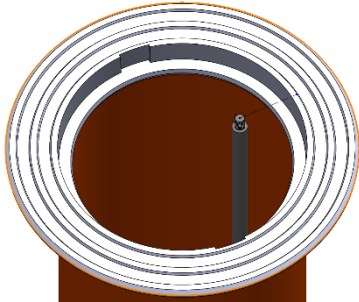
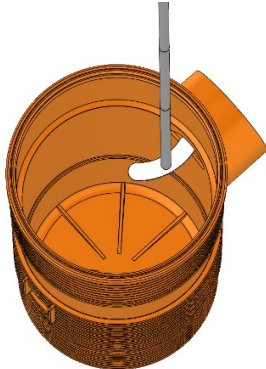
If you are unsure that Uponor Stormix rainwater filter is suitable for rainwater chambers in your system, contact Uponor before purchase.

6. Installation

The following are guidelines for installing Uponor Stormix rainwater filters 1143761 and 1143762. Main steps are:

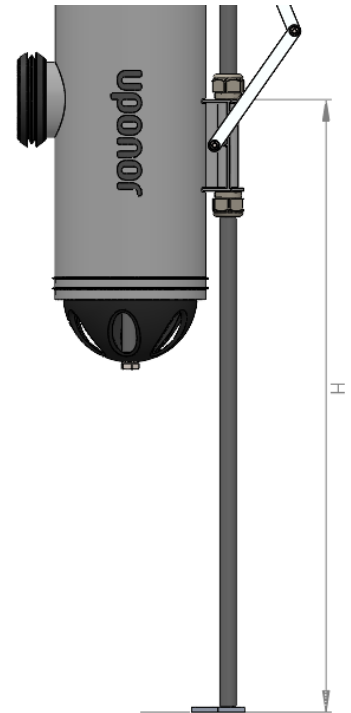
- A. Measure distance from chamber bottom to outlet centerline. If the chamber is shallow, the measurement can be performed with a tape measure directly from the bottom to the outlet pipe. If the chamber is deep, you need to do multiple measurements.
- B. Adjust mounting rod to correct depth.
- C. Install the filter housing unit inside the chamber.
- D. Install the filter unit inside the housing unit.

See step details below.

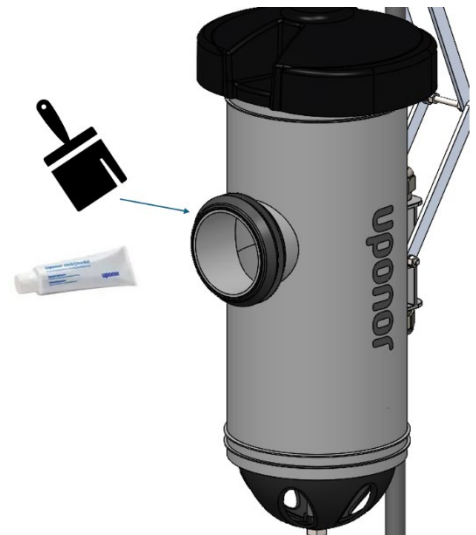
<p>1. Measure the total chamber depth from chamber bottom to the top ground level.</p>	
<p>2. Measure the outlet connection height from the lower edge of the outlet opening to the top ground level.</p>	
<p>3. Calculate the difference between the outlet lower edge from the total chamber depth.</p> <p>Now you have the distance from chamber bottom to the outlet connection level.</p>	
<p>4. Add outlet pipe radius to the distance measure (110 or 160).</p> <p>Now you have the distance from chamber bottom to the outlet centerline (H).</p>	

5. Loosen the bushings in the housing bracket to adjust the mounting rod in correct depth (H).

Correct dimension (H) is from the housing bracket top line to the bottom of the bottom plate.

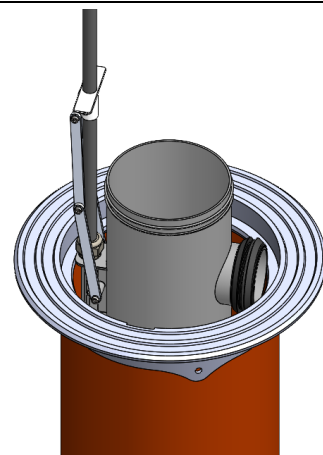


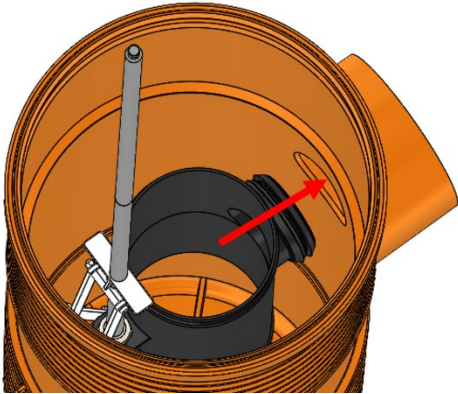
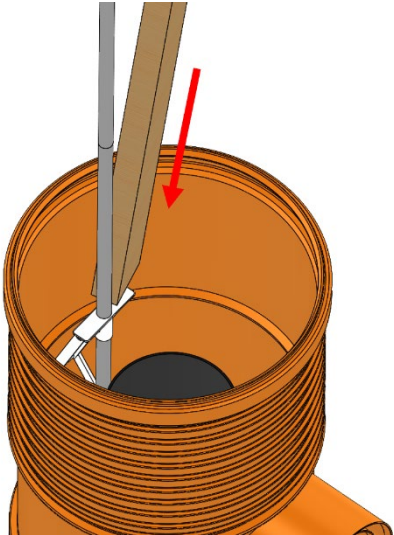

6. Lubricate the rubber seal completely with mounting grease. The more grease, the better.



7. Check that mounting rod is set at correct level (see step 5). Then carefully lower the filter housing unit into the chamber through the manhole.

NOTE: You may need to remove the manhole frame to fit the housing unit through.



<p>8. Push the housing outlet pipe into the chamber outlet pipe.</p> <p>The entry can be tight.</p>	
<p>9. Use a wooden board or similar, to press the housing mechanism down and at the same time push and fit the sealing ring tight into the chamber outlet pipe.</p> <p>NOTE: Do not use too much force!</p>	
<p>10. The sealing ring is completely in place when the backend profile meets the chamber inner wall.</p>	
<p>11. Lower the filter unit inside the housing unit.</p>	


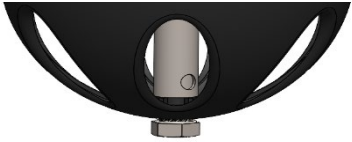
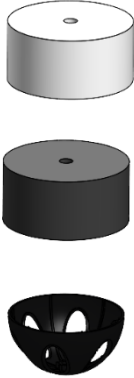
7. Maintenance

Clean the product surfaces by spraying water with a pressure washer. Do not use chemicals for cleaning. Do not remove the housing unit from the chamber for cleaning. Remove only the filter unit if necessary.

How to change the filters of Uponor Stormix rainwater filter

The yearly interval how often the filters need changing depends on the location of the chamber, the amount of water and the number of particles contained in the treated water.

Both filters are changed at least once a year.

<p>1. Lift the filter unit out from the housing unit.</p>	
<p>2. Unscrew the filter unit bottom locking bolt and washer.</p> <p>Remove the filter unit bottom.</p>	
<p>3. Remove both filters.</p> <p>4. Put in new filters in the same order: finer filter on top, coarse filter below.</p> <p>5. Insert and tighten the locking bolt and washer in filter unit bottom.</p> <p>6. Lower the filter unit back in the housing unit.</p>	
<p>7. Dispose of the dirty filters as general waste.</p>	

8. Technical data

For technical data, see Uponor Stormix rainwater filter –specific datasheets.

9. References

The following documentation is available at www.uponor.com for your reference.

Uponor Infrastructure Solutions – Technical Handbook

10. Operation journal for Uponor Stormix rainwater filter

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