TROUBLESHOOTING

WARNING

Do not perform maintenance operations or open filter ports before the pressure in the system is fully released. For draining purposes, open any valve downstream from the filtration system until the pressure is fully released. Check the pressure gauge to be sure it is at 0 before proceeding. Alternatively, you can open the valve installed on the outlet manifold end-cap - if installed.

If the pressure difference across the filtration system is over 0.7 bar (10.15 PSI) and the flushing cycle does not reduce it:

1. Check the system flow rate to see if the flow rate corresponds with the benchmark data, to make sure that the system flow rate is not too high.

2. If the pressure differential is not caused by a high flow rate, perform the following steps.

3. Adjust the flow-control valve if necessary.

4. Make sure that the water from the backwash manifold is running free.

5. Check the duration of backwash and make sure the water that drains in the last 10 seconds of flushing is clean.
If the water is dirty at the end of the flushing – increase the duration of flushing – if required, increase the backwash duration and perform 3 consecutive flushing cycles.

If the flushing cycle does not start but the controller is initiating the flushing signal and the solenoids are reacting ("clicking"):

1. Check the command filter in the control head. Clean it if necessary and perform manual flushing.

2. Check for clogging inside the solenoid valves - clean if possible or replace with a new solenoid.

3. Check for clogging of the hydraulic control tubes - open the clogs and clean if necessary.

4. Check for a ruptured or defective hydraulic control tube - replace if necessary.

If the media is running out through the backwash manifold during backwash:

1. Adjust the backwash flow-control valve on the backwash manifold.
- If a manual backwash flow-control valve is installed, throttle the valve to reduce the flow until the media stops running out.
- If a hydraulic backwash flow-control valve is installed, the valve is factory pre-set to the required flow rate.

In the rare case that the backwash flow-control valve requires fine-tuning:

a. Release the pilot lock-nut.
b. Gently rotate the pilot calibration bolt counterclockwise with a wrench to reduce the flow until the media stops running out.
c. Retighten the pilot lock-nut.

2. Check the level of media inside the filters.
- If the level is lower than the media level marker on the filter tank - add media.
- If the level is higher than the media level marker on the filter tank - remove media.

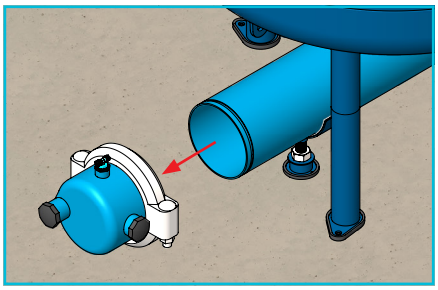
TROUBLESHOOTING

If media is running out through the outlet manifold during filtration:

Replacing a damaged under-drain diffuser part ("flute" or "mushroom"):

1. Release the pressure and drain the filtration system. Open any valve downstream from the filtration system or the manual valve (if installed) on the outlet manifold end-cap, until the pressure is fully released. Check the pressure gauge to make sure it is at 0 before proceeding.

2. Empty the water from the filtration system.



TIP
To speed up emptying the water from the filtration system, you can temporarily dismantle the outlet manifold end-cap.

3. Open the top service ports of all the tanks.

4. Gently remove the media from all the tanks.

WARNING
Do not use tools (such as a shovel) to remove the media, as this could damage the tank under-drain diffusers ("flutes" or "mushrooms").

5. Clean any media remaining on the under-drain diffuser with pressurized water (with a hose, through the top service ports).

6. Visually identify the damaged under-drain diffuser part/s ("flute/s" or "mushroom/s") with the aid of a flashlight.

ATTENTION
There may be more than one tank losing gravel.

ATTENTION
Screw, unscrew and fasten the under-drain diffuser parts by hand only. Do not use tools, as this could damage the under-drain diffusers ("flutes" or "mushrooms").

7. Manually unscrew the damaged under-drain diffuser part.

8. Check the integrity of the following parts and replace them it if necessary:
- Single-chamber tank - the plastic washer (yellow).
- Double-chamber tank - the rubber gasket.

WARNING
A damaged rubber gasket may be difficult to pull out. Do not use a screwdriver (or any metal tool) to remove it, as this could damage the tank protective coating.

9. Replace the damaged under-drain diffuser part ("flute" or "mushroom") with a new one.

ATTENTION
Do not forget to put the following parts back in place:
- Single-chamber tank - the plastic washer (yellow).
- Double-chamber tank - the rubber gasket.

TROUBLESHOOTING

ATTENTION

Single-chamber only

Before filling the tanks with media, fill each tank with water up to a third of its height with a hose through the filling port before media filling.

10. Fill the tanks with media through the filling port. Fill each tank up to the media level marker on the filter tank.

Single-chamber

Tank diameter (inch)	Sand quantity*	
	kg	lbs
30	270	595
36	350	770
48	675	1490

*Crushed basalt.

Double-chamber

Tank diameter (inch)	Sand quantity*	
	kg	lbs
12	60	132
16	90	198
20	120	265
24	180	397
30	240	529
36	360	794
48	575	1768

11. Flatten the surface of the media.

12. Make sure that the filling port and its gasket are clear of any remaining gravel particles and close the filling port.

13. Turn on the water and start irrigation.

(See tank replacement parts: single-chamber - page 20, double-chamber - page 24).

For further assistance, contact your local Netafim™ representative.