

IRON &
MANGANESE
REMOVAL
SYSTEMS



O&M MANUAL

CLACK WS1-WS1.25

QUICK INSTALLATION CHECKLIST

- The installation site should be a flat level surface in a frost-free environment.
- Water pressure required is a minimum of 2.0 bar maximum of 8.0 bar
- Access to a drain that is open, level and accessible.



1. Vessel 2. Clack valve 3. Riser tube 4. Clack basket 5. Gravel. 6. Media

1.0 VESSEL ASSEMBLY

- Place the vessel (1) on a level flat surface, in its final placement if possible or as close to.
- Insert the riser tube (3) into the vessel (1) 'basket-end' first.
- You will feel the basket nestle in the dip in the centre of the base of the vessel.
- The riser tube will sit level with the top of the tank
- If the tube is sitting proud, the tube is not seated correctly.



2.0 ADDING THE MEDIA

Firstly fill the vessel around 20% - 30% with water.

This is to help protect the riser basket and the tank from scoring

Cap off the top opening of the riser tube, taping over the opening should be sufficient and is important so that NO media enters the tube.



Please read the Media Safety Datasheet before installing any of our water treatment systems.

Scan the QR Code or visit: https://pumpexpress.co.uk/media-safety-datasheets/



Media Safety Datasheets

Now pour the gravel into the gap between the riser tube and lip of the tank followed by the media. Please refer to the table on page 5 for exact quantities as this will vary depending on the size of the filter.

STOP pouring when the media reaches around two thirds of the tank.

DO NOT FILL THE VESSEL FULLY WITH MEDIA – this will drastically reduce the efficiency

3.0 INSTALLING THE CLACK VALVE

(The valves are preset for backwashing to begin at 2am)
Assemble the inlet & outlet connectors as per diagram/picture





When connectors are assembled, align each squarely, with the ring end first into the inlet or outlet ports on the valve, securely hand tighten.

(DO NOT over tighten, and take care NOT to cross thread)





Take the Clack Distributor (cone shaped basket) and attach by inserting the wider end first into the underside of the Clack Valve.

This will connect via a bayonet connection, so will need a partial twist to secure.



WARNING

FAILURE TO ATTACH THIS BASKET MAY RESULT IN THE MEDIA CONTAMINATING THE FULL SYSTEM.

4.0 CONNECTING THE CLACK VALVE TO THE VESSEL

Carefully position the Clack Valve over the vessel aligning the Distributor Basket opening with the riser tube. Ensuring alignment, gently push the valve down so the tube enters the valve basket.

Steadily rotate the completed Clack valve ensuring not to cross thread until it is hand tight (DO NOT over tighten).









Connecting the drain line

The drain line should be plumbed in to the nearest drain. We suggest using the following items. These are not included.

1 x 3/4" stainless steel socket

1 x 3/4 to 1/2" stainless steel reducing bush

½" pipe to drain

BUILD COMPLETE! Your unit is now ready to be connected to your water supply and powered up!

SPECIFICATION

Model	Service flow rate		Backwash Flow Rate		Vessel Size	Pyrolox Media		Gravel	
	m3/hr	Lpm	m3/hr	Lpm	Inches	Bags	KG	Bags	KG
1044	0.9	15	1.8	30	10x44	2.0	50	0.25	6.25
1248	1.35	22.5	2.6	43.3	12x48	3.0	75	0.5	12.5
1354	1.8	30	3.0	50	13x54	4.0	100	0.75	18.75
1465	2.3	38.3	3.5	58.3	14x65	5.0	125	1.5	37.5
1665	3.65	60.8	4.6	76.6	16x65	8.0	200	1.5	37.5
1865	4.5	75	5.7	95	18x65	10	250	2.0	50

m3/hr - Cubic Metres Per Hour

Lpm - litres per minute

If the filtration system that you are installing also has any of the following filters, the order of installation is:

Contact assembly



Turbidex



pH Correction



Pyrolox

Programming inputs for Clack filters using a 3 button Clack valve

Set days between Regen

Press SET and UP simultaneously for 3 seconds

Set regen time to 2:00

Set number of days between regens to 1

Press set complete and return to front screen

Programming inputs for Clack filters using a 5 button CI valve

User settings (NEXT & UP together for 3 seconds)

Set day override to 2 (backwash every 1 days)

Set regeneration time (2am is factory, if there is more than 1 filter in system stagger them by 30 mins)

OEM programming level 2 (NEXT & DOWN for 3 seconds then repeat)

Set valve size eg 1.0 for WS1

Set to "OFF" the option to use NHBP valve

Set to "DP OFF" (not using differential pressure switch)

Set stage 1 to BACKWASH

Set stage 2 to RINSE

Set stage 3 to END

OEM programming level 1 (NEXT & DOWN for 3 seconds)

Set to FILTERING

Set backwash time to 10 mins

Set rinse time to 8 mins

Set relay 1 to OFF

Set relay 2 to OFF

Set to filtering first in OEM1 & scroll through to front screen.

Go into OEM 2 and set all parameters.

Go back into OEM 1 to set backwash and rinse times.

Enter user settings to set day override and backwash time.



MORE RESOURCES

Please scan QR codes for further helpful resources, and trouble shooting.

Please read the safety datasheet before installing any of our water treatment systems.







Pump Express Website

WARRANTY

This product is guaranteed for the period of one year from the date of purchase against mechanical and/or electrical defects. This guarantee is only valid if the unit has been installed and used in accordance with these instructions.

