NTS/NTX

Neutralising Water Treatment Systems User Guide

Puretec®
PERFECTING WATER

WATER TREATMENT

What's Inside

Puretec Customer Service

WaterMark
WMTS103
Cert. No. WM 74593
Pro-Switch Pty Ltd

Thank you for purchasing a Puretec Treatment System. Your system is a proven performer manufactured from only quality materials and components. It will give years of reliability and trouble free operation if maintained properly.

This user guide is designed for Puretec Treatment Systems. Be careful to ensure the information and illustration is applicable to your particular unit.

Caution: Do not use with water that is microbiologically unsafe or without adequate disinfection before or after the system.

The systems are designed for metropolitan supply water but can be used in other situations. For other types of water supply, please contact your local Puretec dealer.

Puretec Treatment Systems are designed to run economically for many years, dependent on the initial installation and periodic maintenance.

Flush system for 5 minutes or more, after any period of non-use, more than 2 weeks.

Installation Record

For future reference, fill in the following data:

Product Information	
Model Number:	
Serial / Batch Number:	
Purchased From:	
Date of Installation:	
Installer / Plumber Details:	

Water Analysis Information	
Hardness:	_____ ppm / mg/L
Iron:	_____ ppm / mg/L
Manganese:	_____ ppm / mg/L
pH:	_____
TDS (Total Dissolved Salts):	_____ ppm / mg/L

Installation Note: A water filter system/tap, like any product, has a limited lifespan and if not replaced, will eventually fail. Failure can happen early due to unforeseen circumstances. To avoid possible property damage, this product should be regularly examined for leakage and/or deterioration and replaced when necessary. We strongly recommend that a drain pan, plumbed to an appropriate drain or outfitted with a leak detector, be used in those applications where any leakage could cause property damage. We also strongly recommend that the water supply be turned off, upstream to the water filter system/tap, if no one is home for an extended period of time.

INSTALLATION SHOULD BE COMPLETED BY QUALIFIED TRADESPEOPLE. FAULTY OPERATION DUE TO UNQUALIFIED PERSONS WILL RESULT IN VOIDED WARRANTY COVERAGE.

How the NTS & NTX Neutraliser Works

Water with a pH level below 6.5 could be acidic, and corrosive. Acidic water leaches metal ions such as iron, manganese, copper, lead and zinc from pipework. This in turn will elevate levels of toxic metals, cause damage to plumbing and cause aesthetic problems such as a metallic taste or a blue-green stain on surfaces.

The best way to treat the problem of low pH water is with the use of a NTS or NTX Neutraliser.
The media slowly dissolves as the water passes through the bed, raising the pH level to 7 or above.

As the neutralising media is absorbed, periodic topping up is necessary. The lower the pH, the faster the media will be depleted and the longer the contact time required. The system should be sized according to the pH level and the flow rate required, contact Puretec for a recommendation.

Due to the nature of the upflow system, no electricity or backwashing is required.

NTX systems have the added benefit of a blending/mixing valve to further adjust the pH of the water.

IMPORTANT NOTE : Since the neutraliser media dissolves as it elevates pH level, it will increase the hardness of your water. Installation of a water softener may be necessary if the hardness becomes a problem.

Before Installation

Professional Installation Required

Installation requires shutting water off to home, cutting home water supply pipe and using a welding torch to add piping and fittings. Specialised tools and skills are required, this must be completed by a qualified tradesperson.

Make Sure Your Water Has Been Thoroughly Tested

An analysis of your water should be made prior to the selection of your water treatment equipment. Your dealer will generally perform this service for you, and may send a sample to a laboratory for analysis and recommendations. Enter your analysis on Page 3 for your permanent record.

pH neutralisers are designed to balance the pH of the water, however it will also increase the level of calcium in the water. This may cause scaling issues and we recommend to contact Puretec for advice.

Locate Water Treatment Equipment Correctly

Select the location of your neutraliser with care. Various conditions which contribute to proper location are as follows:

- Locate in correct relationship to other water conditioning equipment. Contact Puretec for assistance.
- Locate the neutraliser in the supply line BEFORE the water heater.
- DO NOT install the neutraliser in a location with temperatures below 0°C or above 40°C. Temperatures outside these limits may cause permanent damage and will also void the warranty.
- Protect from pressure vacuum with a suitable vacuum breaker.
- For point of entry installations an approved backflow prevention device must be installed.
- Where line pressure exceeds 500 kPa, an approved pressure limiting device must be installed to comply with Australian & New Zealand Plumbing Standards. (Ref. AS/NZS 3500.1:2021, Clause 3.3.4).
- DO NOT install where water hammer conditions may occur without installing an arrestor.
- Allow sufficient space for installation and easy servicing.

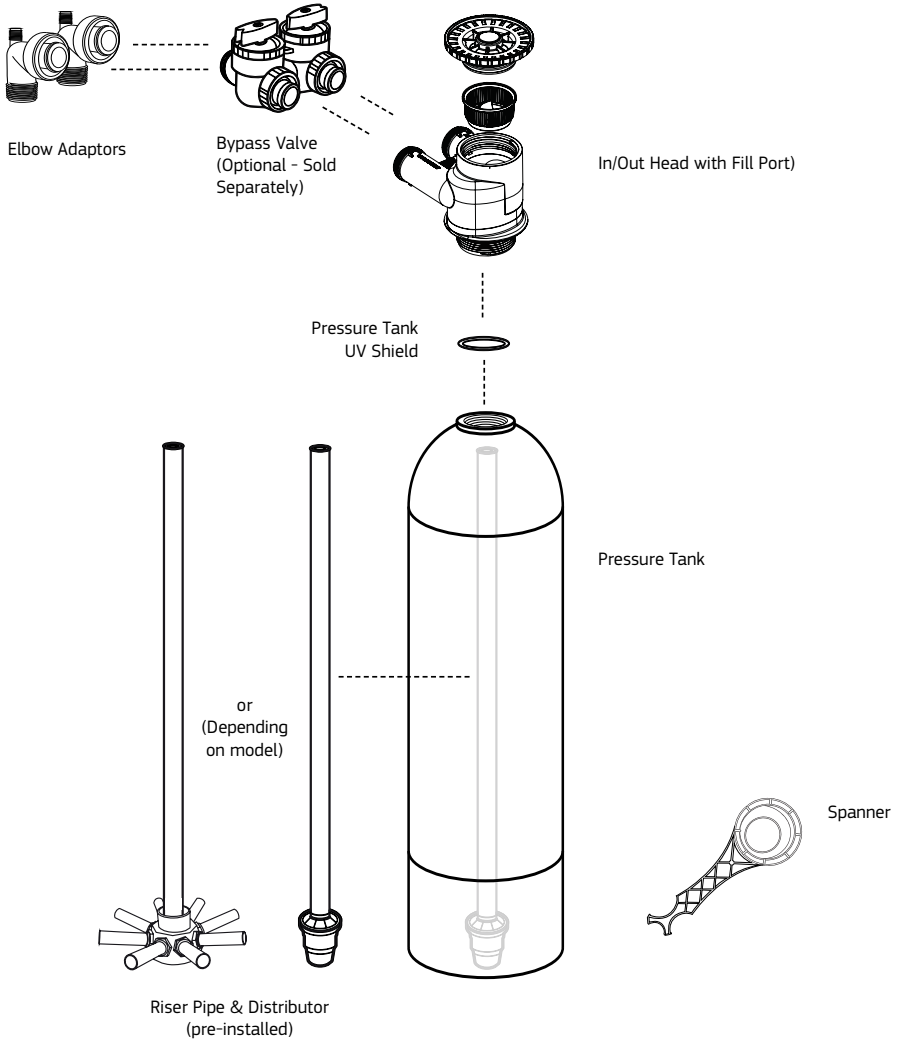
Facts to Remember While Planning Your Installation:

- All installation procedures MUST conform to local plumbing codes.
- If lawn sprinklers, a swimming pool, or geothermal heating/cooling or water for other devices/activities are to be treated by the neutraliser, a larger model MUST be selected to accommodate the higher flow/volume. Contact Puretec for assistance.

WARNINGS

- The control valve, fittings and/or bypass are designed to accommodate minor plumbing misalignment but are not designed to support the weight of a system or the plumbing.
- Do not use petroleum jelly, oils, other hydrocarbon lubricants or spray silicone anywhere. A silicon lubricant may be used on the black o-rings but it is not necessary.
- Do not use pipe dope or other sealants on threads. Thread seal tape is the preferred sealant but is not necessary on the nut connection or caps because of o-ring seals.
- All plumbing should be done in accordance with local plumbing codes.
  Avoid getting primer and solvent cement on filter system.
- Install grounding strap on metal pipes if required.
- Ensure the system is protected against high pressure and extreme temperatures.

Fig. 1 – NTS Exploded Diagram



NTS1000 Model Information

Specifications

Operating Pressure Min/Max:	138 - 862* kPa
Operating Temperature Min/Max:	0 - 40 °C (protect from freezing)
Inlet/outlet Connection:	1"
Dimensions:	178 mm (W) x 889 mm (H)
Service Flow Rate:	15 Lpm
Max Flow Rate:	40 Lpm

System Inclusions - Kits & Components

Kit Type	Part no.	Description	Qty
Tank Kit (WTP2090-K)	WTP2090	Pressure Tank with Base (7x35)	1
	WTV3030	Pressure Tank UV Collar Shield	1
	WTD2030	Riser Pipe & Distributor (pre-installed)	0.89m
Head Kit (WTV1010-K)	WTV1010	In/Out Head with Fill Port	1
	WTV5070	1" Elbow Adaptors (pack of 2)	1
	WTV5180	Spanner	1
Instruction Kit (WTI-NTS1000)	WTV1500	Media Funnel	1
	LBL-METALLIC	Metallic Silver Model Label (60x100)	1
	UG-NTS/X	NTS/NTX User Guide	1
	LBL-LOGO-WTS	Puretec Logo Decal	1
Media Kit	WTM2000-15L	Neutrasafe Neutralising Media 15L	1

Vessel Media Filling Order

1st
1 x WTM2000-15L

* Where line pressure exceeds 500 kPa, an approved pressure limiting device must be installed to comply with Australian & New Zealand Plumbing Standards. (Ref. AS/NZS 3500.1:2021, Clause 3.3.4).

NTS2000 Model Information

Specifications

Operating Pressure Min/Max*:	138 - 862* kPa
Operating Temperature Min/Max:	0 - 40 °C (protect from freezing)
Inlet/outlet Connection:	1"
Dimensions:	229 mm (W) x 1350 mm (H)
Service Flow Rate:	20 Lpm
Max Flow Rate:	70 Lpm

System Inclusions - Kits & Components

Kit Type	Part no.	Description	Qty
Tank Kit (WTP2210-K)	WTP2210	Pressure Tank with Base (9x48)	1
	WTV3030	Pressure Tank UV Collar Shield	1
	WTD2130	Riser Pipe & Distributor (pre-installed)	1.8m
Head Kit (WTV1010-K)	WTV1010	In/Out Head with Fill Port	1
	WTV5070	1" Elbow Adaptors (pack of 2)	1
	WTV5180	Spanner	1
Instruction Kit (WTI-NTS2000)	WTV1500	Media Funnel	1
	LBL-METALLIC	Metallic Silver Model Label (60x100)	1
	UG-NTS/X	NTS/NTX User Guide	1
	LBL-LOGO-WTS	Puretec Logo Decal	1
Media Kit	WTM2000-15L	Neutrasafe Neutralising Media 15L	2

Vessel Media Filling Order

1st
2 x WTM2000-15L

*Where line pressure exceeds 500 kPa, an approved pressure limiting device must be installed to comply with Australian & New Zealand Plumbing Standards. (Ref. AS/NZS 3500.1:2021, Clause 3.3.4).

NTS3000 Model Information

Specifications

Operating Pressure Min/Max:	138 - 862* kPa
Operating Temperature Min/Max:	0 - 40 °C (protect from freezing)
Inlet/outlet Connection:	1"
Dimensions:	254 mm (W) x 1500 mm (H)
Service Flow Rate:	30 Lpm
Max Flow Rate:	80 Lpm

System Inclusions - Kits & Components

Kit Type	Part no.	Description	Qty
Tank Kit (WTP2280-K)	WTP2280	Pressure Tank with Base (10x54)	1
	WTV3030	Pressure Tank UV Collar Shield	1
	WTD2130	Riser Pipe & Distributor (pre-installed)	1.8m
Head Kit (WTV1010-K)	WTV1010	In/Out Head with Fill Port	1
	WTV5070	1" Elbow Adaptors (pack of 2)	1
	WTV5180	Spanner	1
Instruction Kit (WTI-NTS3000)	WTV1500	Media Funnel	1
	LBL-METALLIC	Metallic Silver Model Label (60x100)	1
	UG-NTS/X	NTS/NTX User Guide	1
	LBL-LOGO-WTS	Puretec Logo Decal	1
Media Kit	WTM2000-15L	Neutrasafe Neutralising Media 15L	3

Vessel Media Filling Order

1st
3 x WTM2000-15L

* Where line pressure exceeds 500 kPa, an approved pressure limiting device must be installed to comply with Australian & New Zealand Plumbing Standards. (Ref. AS/NZS 3500.1:2021, Clause 3.3.4).

NTS4000 Model Information

Specifications

Operating Pressure Min/Max:	138 - 862* kPa
Operating Temperature Min/Max:	0 - 40 °C (protect from freezing)
Inlet/outlet Connection:	1"
Dimensions:	305 mm (W) x 1470 mm (H)
Service Flow Rate:	40 Lpm
Max Flow Rate:	90 Lpm

System Inclusions - Kits & Components

Kit Type	Part no.	Description	Qty
Tank Kit (WTP2360-K)	WTP2360	Pressure Tank with Base (12x52)	1
	WTV3030	Pressure Tank UV Collar Shield	1
	WTD2130	Riser Pipe & Distributor (pre-installed)	1.8m
Head Kit (WTV1010-K)	WTV1010	In/Out Head with Fill Port	1
	WTV5070	1" Elbow Adaptors (pack of 2)	1
	WTV5180	Spanner	1
Instruction Kit (WTI-NTS4000)	WTV1500	Media Funnel	1
	LBL-METALLIC	Metallic Silver Model Label (60x100)	1
	UG-NTS/X	NTS/NTX User Guide	1
	LBL-LOGO-WTS	Puretec Logo Decal	1
Media Kit	WTM2000-15L	Neutrasafe Neutralising Media 15L	4

Vessel Media Filling Order

1st
4 x WTM2000-15L

*Where line pressure exceeds 500 kPa, an approved pressure limiting device must be installed to comply with Australian & New Zealand Plumbing Standards. (Ref. AS/NZS 3500.1:2021, Clause 3.3.4).

NTS70-C Model Information

Specifications

Operating Pressure Min/Max:	138 - 862* kPa
Operating Temperature Min/Max:	0 - 40 °C (protect from freezing)
Inlet/outlet Connection:	1"
Dimensions:	406 mm (W) x 1790 mm (H)
Service Flow Rate:	70 Lpm
Max Flow Rate:	120 Lpm

System Inclusions - Kits & Components

Kit Type	Part no.	Description	Qty
Tank Kit (WTP2460-KN)	WTP2460	Pressure Tank with Base (16x65)	1
	WTP4000	Tank Adaptor 4" x 2½"	1
	WTV3040	Pressure Tank UV Collar Shield	1
	WTD3305	Riser Pipe (pre-installed)	1.8m
	WT-HUB25	Distributor Hub (pre-installed)	1
	WT-LAT90	Lateral 90mm (pre-installed)	8
Head Kit (WTV1010-K)	WTV1010	In/Out Head with Fill Port	1
	WTV5070	1" Elbow Adaptors (pack of 2)	1
	WTV5180	Spanner	1
Instruction Kit (WTI-NTS70)	WTV1500	Media Funnel	1
	UG-NTS/X	NTS/NTX User Guide	1
	LBL-LOGO-WTS	Puretec Logo Decal	1
Media Kit	WTM2000-15L	Neutrasafe Neutralising Media 15L	8

Vessel Media Filling Order

1st
8 x WTM2000-15L

* Where line pressure exceeds 500 kPa, an approved pressure limiting device must be installed to comply with Australian & New Zealand Plumbing Standards. (Ref. AS/NZS 3500.1:2021, Clause 3.3.4).

NTS120-C Model Information

Specifications

Operating Pressure Min/Max:	138 - 862* kPa
Operating Temperature Min/Max:	0 - 40 °C (protect from freezing)
Inlet/outlet Connection:	1"
Dimensions:	533 mm (W) x 1850 mm (H)
Service Flow Rate:	100 Lpm
Max Flow Rate:	150 Lpm

System Inclusions - Kits & Components

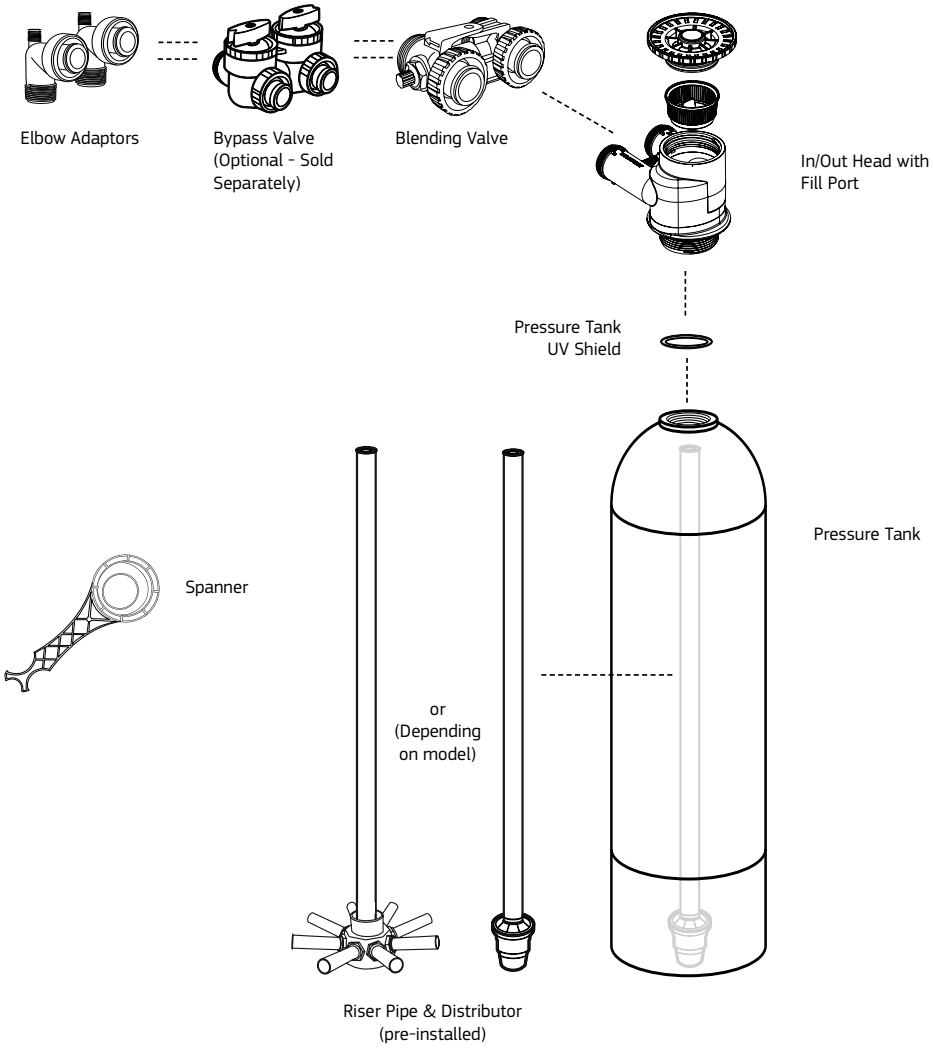
Kit Type	Part no.	Description	Qty
Tank Kit (WTP2600-KN)	WTP2600	Pressure Tank with Base (21x62)	1
	WTP4000	Tank Adaptor 4" x 2½"	1
	WTV3040	Pressure Tank UV Collar Shield	1
	WTD3305	Riser Pipe (pre-installed)	1.8m
	WT-HUB25	Distributor Hub (pre-installed)	1
	WT-LAT90	Lateral 90mm (pre-installed)	8
Head Kit (WTV1010-K)	WTV1010	In/Out Head with Fill Port	1
	WTV5070	1" Elbow Adaptors (pack of 2)	1
	WTV5180	Spanner	1
Instruction Kit (WTI-NTS120)	WTV1500	Media Funnel	1
	UG-NTS/X	NTS/NTX User Guide	1
	LBL-LOGO-WTS	Puretec Logo Decal	1
Media Kit	WTM2000-15L	Neutrasafe Neutralising Media 15L	15

Vessel Media Filling Order

1st
15 x WTM2000-15L

*Where line pressure exceeds 500 kPa, an approved pressure limiting device must be installed to comply with Australian & New Zealand Plumbing Standards. (Ref. AS/NZS 3500.1:2021, Clause 3.3.4).

Fig. 2 - NTX Exploded Diagram



NTX2000 Model Information

Specifications

Operating Pressure Min/Max:	138 - 862* kPa
Operating Temperature Min/Max:	0 - 40 °C (protect from freezing)
Inlet/outlet Connection:	1"
Dimensions:	229 mm (W) x 1350 mm (H)
Service Flow Rate:	20 Lpm
Max Flow Rate:	70 Lpm

System Inclusions - Kits & Components

Kit Type	Part no.	Description	Qty
Tank Kit (WTP2210-K)	WTP2210	Pressure Tank with Base (9x48)	1
	WTV3030	Pressure Tank UV Collar Shield	1
	WTD2130	Riser Pipe & Distributor (pre-installed)	1.8m
Head Kit (WTV1010-K)	WTV1010	In/Out Head with Fill Port	1
	WTV5070	1" Elbow Adaptors (pack of 2)	1
	WTV5180	Spanner	1
Instruction Kit (WTI-NTX2000)	WTV1500	Media Funnel	1
	LBL-METALLIC	Metallic Silver Model Label (60x100)	1
	UG-NTS/X	NTS/NTX User Guide	1
	LBL-LOGO-WTS	Puretec Logo Decal	1
Media Kit	WTM2500-5L	Neutramax Neutralising Media 5L	1
	WTM2000-15L	Neutrasafe Neutralising Media 15L	2
Blending Valve Kit	WTV5050	Blending Valve & User Guide	1

Vessel Media Filling Order

1st	2nd	3rd
1 x WTM2000-15L (half of the media supplied)	1 x WTM2500-5L	1 x WTM2000-15L (remaining half of the media supplied)

*Where line pressure exceeds 500 kPa, an approved pressure limiting device must be installed to comply with Australian & New Zealand Plumbing Standards. (Ref. AS/NZS 3500.1:2021, Clause 3.3.4).

NTX3000 Model Information

Specifications

Operating Pressure Min/Max:	138 - 862* kPa
Operating Temperature Min/Max:	0 - 40 °C (protect from freezing)
Inlet/outlet Connection:	1"
Dimensions:	254 mm (W) x 1500 mm (H)
Service Flow Rate:	30 Lpm
Max Flow Rate:	80 Lpm

System Inclusions - Kits & Components

Kit Type	Part no.	Description	Qty
Tank Kit (WTP2280-K)	WTP2280	Pressure Tank with Base (10x54)	1
	WTV3030	Pressure Tank UV Collar Shield	1
	WTD2130	Riser Pipe & Distributor (pre-installed)	1.8m
Head Kit (WTV1010-K)	WTV1010	In/Out Head with Fill Port	1
	WTV5070	1" Elbow Adaptors (pack of 2)	1
	WTV5180	Spanner	1
Instruction Kit (WTI-NTX3000)	WTV1500	Media Funnel	1
	LBL-METALLIC	Metallic Silver Model Label (60x100)	1
	UG-NTS/X	NTS/NTX User Guide	1
	LBL-LOGO-WTS	Puretec Logo Decal	1
Media Kit	WTM2500-5L	Neutramax Neutralising Media 5L	2
	WTM2000-15L	Neutrasafe Neutralising Media 15L	2
Blending Valve Kit	WTV5050	Blending Valve & User Guide	1

Vessel Media Filling Order

1st	2nd	3rd
1 x WTM2000-15L (half of the media supplied)	2 x WTM2500-5L	1 x WTM2000-15L (remaining half of the media supplied)

*Where line pressure exceeds 500 kPa, an approved pressure limiting device must be installed to comply with Australian & New Zealand Plumbing Standards. (Ref. AS/NZS 3500.1:2021, Clause 3.3.4).

NTX4000 Model Information

Specifications

Operating Pressure Min/Max:	138 - 862* kPa
Operating Temperature Min/Max:	0 - 40 °C (protect from freezing)
Inlet/outlet Connection:	1"
Dimensions:	305 mm (W) x 1470 mm (H)
Service Flow Rate:	40 Lpm
Max Flow Rate:	90 Lpm

System Inclusions - Kits & Components

Kit Type	Part no.	Description	Qty
Tank Kit (WTP2360-K)	WTP2360	Pressure Tank with Base (12x52)	1
	WTV3030	Pressure Tank UV Collar Shield	1
	WTD2130	Riser Pipe & Distributor (pre-installed)	1.8m
Head Kit (WTV1010-K)	WTV1010	In/Out Head with Fill Port	1
	WTV5070	1" Elbow Adaptors (pack of 2)	1
	WTV5180	Spanner	1
Instruction Kit (WTI-NTX4000)	WTV1500	Media Funnel	1
	LBL-METALLIC	Metallic Silver Model Label (60x100)	1
	UG-NTS/X	NTS/NTX User Guide	1
	LBL-LOGO-WTS	Puretec Logo Decal	1
Media Kit	WTM2500-15L	Neutramax Neutralising Media 15L	1
	WTM2000-15L	Neutrasafe Neutralising Media 15L	3
Blending Valve Kit	WTV5050	Blending Valve & User Guide	1

Vessel Media Filling Order

1st	2nd	3rd
1½ x WTM2000-15L (half of the media supplied)	1 x WTM2500-15L	1½ x WTM2000-15L (remaining half of the media supplied)

*Where line pressure exceeds 500 kPa, an approved pressure limiting device must be installed to comply with Australian & New Zealand Plumbing Standards. (Ref. AS/NZS 3500.1:2021, Clause 3.3.4).

NTX70-C Model Information

Specifications

Operating Pressure Min/Max:	138 - 862* kPa
Operating Temperature Min/Max:	0 - 40 °C (protect from freezing)
Inlet/outlet Connection:	1"
Dimensions:	406 mm (W) x 1790 mm (H)
Service Flow Rate:	70 Lpm
Max Flow Rate:	120 Lpm

System Inclusions - Kits & Components

Kit Type	Part no.	Description	Qty
Tank Kit (WTP2460-KN)	WTP2460	Pressure Tank with Base (16x65)	1
	WTP4000	Tank Adaptor 4" x 2½"	1
	WTV3040	Pressure Tank UV Collar Shield	1
	WTD3305	Riser Pipe (pre-installed)	1.8m
	WT-HUB25	Distributor Hub (pre-installed)	1
	WT-LAT90	Lateral 90mm (pre-installed)	8
Head Kit (WTV1010-K)	WTV1010	In/Out Head with Fill Port	1
	WTV5070	1" Elbow Adaptors (pack of 2)	1
	WTV5180	Spanner	1
Instruction Kit (WTI-NTX70)	WTV1500	Media Funnel	1
	UG-NTS/X	NTS/NTX User Guide	1
	LBL-LOGO-WTS	Puretec Logo Decal	1
Media Kit	WTM2500-15L	Neutramax Neutralising Media 15L	2
	WTM2000-15L	Neutrasafe Neutralising Media 15L	6
Blending Valve Kit	WTV5050	Blending Valve & User Guide	1

Vessel Media Filling Order

1st	2nd	3rd
3 x WTM2000-15L (half of the media supplied)	2 x WTM2500-15L	3 x WTM2000-15L (remaining half of the media supplied)

* Where line pressure exceeds 500 kPa, an approved pressure limiting device must be installed to comply with Australian & New Zealand Plumbing Standards. (Ref. AS/NZS 3500.1:2021, Clause 3.3.4).

NTX120-C Model Information

Specifications

Operating Pressure Min/Max:	138 - 862* kPa
Operating Temperature Min/Max:	0 - 40 °C (protect from freezing)
Inlet/outlet Connection:	1"
Dimensions:	533 mm (W) x 1850 mm (H)
Service Flow Rate:	100 Lpm
Max Flow Rate:	150 Lpm

System Inclusions - Kits & Components

Kit Type	Part no.	Description	Qty
Tank Kit (WTP2600-KN)	WTP2600	Pressure Tank with Base (21x62)	1
	WTP4000	Tank Adaptor 4" x 2½"	1
	WTV3040	Pressure Tank UV Collar Shield	1
	WTD3305	Riser Pipe (pre-installed)	1.8m
	WT-HUB25	Distributor Hub (pre-installed)	1
	WT-LAT90	Lateral 90mm (pre-installed)	8
Head Kit (WTV1010-K)	WTV1010	In/Out Head with Fill Port	1
	WTV5070	1" Elbow Adaptors (pack of 2)	1
	WTV5180	Spanner	1
Instruction Kit (WTI-NTX120)	WTV1500	Media Funnel	1
	UG-NTS/X	NTS/NTX User Guide	1
	LBL-LOGO-WTS	Puretec Logo Decal	1
Media Kit	WTM2500-15L	Neutramax Neutralising Media 15L	4
	WTM2000-15L	Neutrasafe Neutralising Media 15L	11
Blending Valve Kit	WTV5050	Blending Valve & User Guide	1

Vessel Media Filling Order

1st	2nd	3rd
5½ x WTM2000-15L (half of the media supplied)	4 x WTM2500-5L	5½ x WTM2000-15L (remaining half of the media supplied)

*Where line pressure exceeds 500 kPa, an approved pressure limiting device must be installed to comply with Australian & New Zealand Plumbing Standards. (Ref. AS/NZS 3500.1:2021, Clause 3.3.4).

Installation Procedure

1 Unpack the Equipment

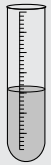
Ensure all parts are present and have not been damaged in transport.
You should have:

- Tank Kit
- Valve Kit
- Media Kit
- Instruction Kit
- Blending Valve Kit (NTX systems only)

See individual model information page for detailed kit inclusions.

2 Ensure Water Has Been Tested

Input values into Installation Record on page 3 and the analysis has been inspected by Puretec.



Water Analysis Information	
Hardness	130 ppm / mg/L
Iron	0.3 ppm / mg/L
Manganese	0.1 ppm / mg/L
pH	7
TDS (Total Dissolved Salts)	275 ppm / mg/L
Conductivity	404 EC / uS/cm
Chloride	121 ppm / mg/L
Sodium	46 ppm / mg/L

Puretec PERFECTING WATER

Customer Service Helpline
1300 140 140 (AU) 0800 130 140 (NZ)

3 Position the Water Treatment System on a Level Surface

WARNING - THESE STEPS ARE CRITICAL FOR THE CORRECT INSTALLATION OF YOUR WATER TREATMENT SYSTEM.

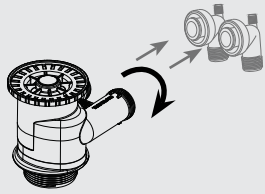
1. Select the location of your water treatment system with care. Various conditions which contribute to proper location are as follows:
2. Install as close as possible to a drain.
3. The unit must be installed on a surface that is firm, level, horizontal in both directions and fully supports the entire base of the softener. The softener can weigh a considerable amount when full and the base must be suitable to support this weight.
4. Install in correct relationship to other water treatment equipment. Contact Puretec for assistance.
5. Install the water treatment system in the supply line BEFORE the water heater. Temperatures above 110°F (43.3°C) will damage the system and void the warranty.
6. DO NOT install the treatment system in a location where freezing temperatures occur. Freezing may cause permanent damage and will also void the warranty.
7. DO NOT install where water hammer conditions may occur without installing an arrestor.
8. Allow sufficient space around the installation for easy servicing. Provide a non-switched 240V power source for the control valve.

4 **Installing the Mixing Valve** (NTX systems)

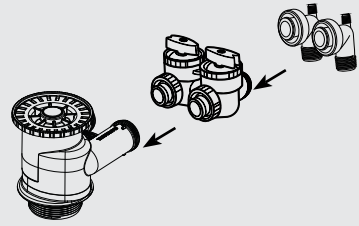
Install the mixing valve as per the WTV5050 User Guide included with the mixing valve before proceeding to step 6.

5 **Installing the Bypass** (purchased separately)

Optional: Install MP100B + PL05MP1 on the outlet to prevent an excess media from coming through the line.



Uninstall the plastic fittings by turning the knob counterclockwise.



Connect the bypass assembly followed by the plastic fittings. Hand tighten the knobs, do not overtighten.

Refer to Page 13 for bypass operation.

6 Connecting The System

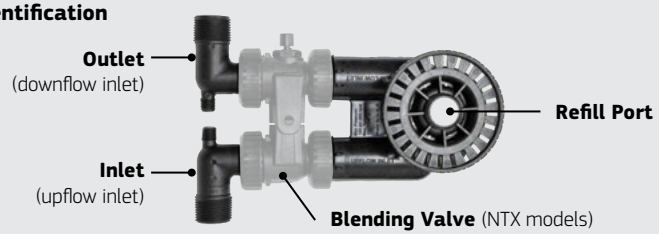
1. Refer to diagram (below) for correct plumbing of head. Cut the inlet line as required to accommodate the inlet/outlet of the neutraliser. ONLY use thread tape, as liquid sealants will cause deterioration of the plastic. DO NOT OVERTIGHTEN.
2. After the valve has been connected, remove the fill-port cap using the spanner provided. Add the neutralising media using a funnel (see individual model specifications for filling order), ensuring that it is no more than 2/3 full. Replace the fill-port cap.

Note: Overfilling the tank can result in excess undissolved media entering the line. You may have been supplied with more media than required, retain this for future replenishing.

3. Adjust the bypass to allow water flow (refer to Page 13) and turn the water supply back on.
4. The water will initially be 'milky white' in appearance. Flush the water through the system until all the air in the lines is expelled, or when the water runs clear.
5. Installation is now complete, and your system is ready for use.

Note: The pH level can be adjusted using the mixing valve on NTX models to achieve the desired level. If the pH is initially over corrected this can be adjusted with a bypass valve by mixing untreated water with treated water to achieve the desired level (if installed). Testing can be done with a hand-held meter, Puretec PTE20 or similar (not included).

Valve Identification



Maintenance

1. Isolate water supply by closing the inlet valve.
2. Relieve pressure by opening a tap down stream. Remove fill-port cap with the spanner provided. Some water will weep out of the head, however this is normal.
3. Top-up the media as required, ensuring that you do not exceed the maximum level on the tank (more than 2/3 full).
4. Replace fill-port cap onto the head and tighten with the spanner provided. Open the inlet valve, the system is now ready for use.

Media Replacement

The NTS neutraliser sytems use a pure calcium carbonate media. The NTX neutraliser sytems use a pure calcium carbonate & magnesium oxide media. During water usage a specific amount of media is consumed, thus requiring periodic top-ups for a continuous supply of treated water. The frequency is dependent on the pH level and water usage. Always replenish the media before the supply is exhausted. No extra water is required when topping up the media level.

An easy way to determine if the neutraliser requires media replenishment is to place a mark on the outside of the unit at the maximum level of the media when first installed. Every 2-3 months check the level by shining a light through the tank and compare the current level to the maximum. If you are unable to see through the tank and a dip-test is necessary to gauge media level, first remove the fill-port cap. Then, using a clean, food-grade rod (with a diameter no more than 5 mm) insert the rod into the crescent-shaped opening in the fill port and measure down to the top of the media. Add more media if the media is more than 2 inches below the mark. See individual Model Information pages for details.

The media storage capacity is as per the following, and should be no more than 2/3 full.

Model	Capacity – x Litres	Maximum Flow – x Litres *
NTS1000	15	40
NTS2000 / NTX2000	30	70
NTS3000 / NTX3000	45	90
NTS4000 / NTX4000	60	100
NTS70-C / NTX70-C	70	120
NTS120-C / NTX120-C	100	150

* The lower the pH (acidity) of the water being treated, the greater the attrition rate of the media and the slower the water should pass through the bed. The unit should be sized according to the level of pH and existing flow rate.

Personal Protective Equipment

Eye / Face Wear dust-proof goggles.
Hands Wear PVC or rubber gloves.
Body When using large quantities or where heavy contamination is likely, wear coveralls.
Respiratory Where an inhalation risk exists, wear a Class P1 (Particulate) respirator.

Tank Clean-Out (Yearly) - If Required

To help prevent service problems the tank should be emptied and flushed out with a garden hose when dirt and other insolubles accumulate on a regular basis. Shut off water inlet supply and depressurise the system before service.

Steps to follow:

1. Disconnect inlet/outlet connections and remove the fill-port head
2. Turn tank upside down and discard old media.
3. Rinse out with a garden hose.
4. Reconnect the fill-port head and inlet/outlet connections.

IMPORTANT SERVICING NOTE:

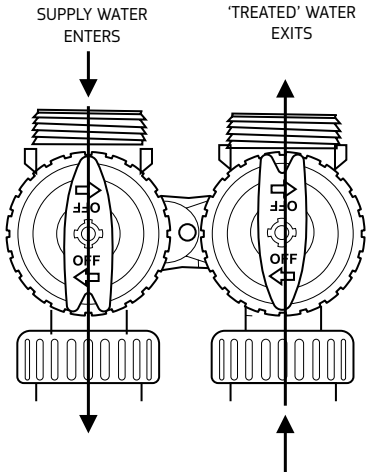
Under normal circumstances removal of the fill-port head assembly should not be required. However, if it must be removed, disconnect the plumbing attached to the bypass valve first. Then, rotate the fill-port head assembly to the left or counter clockwise. Before attempting any disassembly, pressure should be relieved by shutting off water to the system and opening a faucet. Upon reassembly, all o-rings should be lubricated with silicone grease. Reattach fill-port head assembly by rotating to the right or clockwise until fill-port head assembly is seated to the tank hand tight. Reconnect the plumbing to the bypass valve.

Blending Valve Operation (NTX systems)

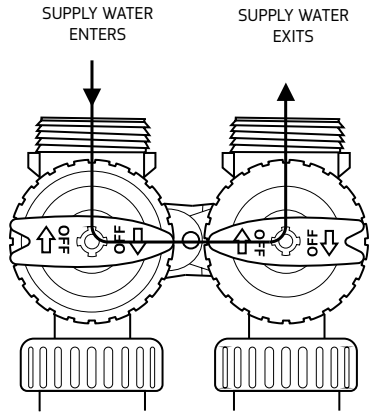
For blending vale operation information see the Puretec WTV5050 User Guide included with the NTX models. The Puretec WTV5050 Blending Valve can also be purchased seprately.

Bypass Valve Operation - *Optional Accessory*

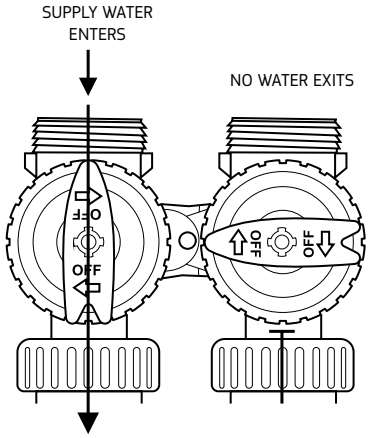
Normal Operation



Bypass Operation



Shut Off Mode



Troubleshooting Guide

Possible Problem	Solution
A. Neutraliser overcorrects upon installation or after replenishment.	1. The inlet bypass can be partially closed to allow untreated and treated water. Periodically test treated water pH and open bypass valve when pH begins to drop.
B. Neutraliser fails to increase pH upon installation.	1. Make sure bypass valve is closed. 2. Test water or have it tested via third party. If high hardness or total dissolved solids (TDS), seek alternate means of treatment such as feeding a solution of soda ash or caustic soda.
C. Neutraliser fails to increase pH after being in service.	1. Check filter bed for cementing or channelling. Break channelling or cementing with stiff rod or tubing.
D. Excessive pressure drop.	1. Check untreated water for sediment, silt or sand. Install sand trap or multiple cartridge filter prior to neutraliser. 2. Check the inlet is connected to the port labelled "upflow".

Warranty

Any claim under this warranty must be made within 1 year of the date of purchase of the product. This product is warranted to be free of defect of material and workmanship for 1 year from date of purchase.

Puretec is renowned for its quality and after-sales support so if you have any issues please call 1300 140 140 (AU) or 0800 130 140 (NZ). To make a warranty claim, contact us directly or the place of original purchase. All costs relating to a warranty claim must be approved by Puretec prior to any work being carried out.

1 year warranty is 1 year parts and labour. Excludes consumables. Puretec will pay your reasonable, direct expenses of claiming under this warranty. You may submit details and proof of your expense claim to place of purchase for consideration.

The warranty only applies if the product was used and/or installed in accordance with the user guide and/or installation instructions. This warranty is given in lieu of all other express or implied warranties and manufacturer shall in no circumstance be held liable for damages consequential or otherwise or delays caused or faulty manufacturing except as excluded by law.

Applicable to all above, is that the warranties need to be approved by Puretec to ensure product was not incorrectly used, installed or claimed. False and incorrect claims will be pursued at Puretec's discretion, including chargeable inspection and labour costs incurred.

Warranty/Australia

This warranty is given by Puretec Pty Ltd, ABN 44 164 806 688, 37-43 Brodie Road, Lonsdale SA 5160, telephone no. 1300 140 140 and email at sales@puretec.com.au.

This warranty is provided in addition to other rights and remedies you have under law: Our goods come with guarantees which cannot be excluded under the Australian Consumer Law. You are entitled to replacement or refund for a major failure and to compensation for other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Warranty/New Zealand

This warranty is given by Puretec NZ LP, Reg. No 50081773, PO Box 875 Cambridge 3450 NZ, telephone no. 0800 130 140 and email at sales@puretec.co.nz.

This warranty is provided in addition to other rights and remedies you have under law: Our goods come with guarantees which cannot be excluded under the Consumer Guarantees Act. You are entitled to replacement or refund for a major failure and to compensation for other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

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