



# -NP FREEZE RESISTANT VALVE SYSTEM

INSTALLATION/MAINTENANCE INSTRUCTIONS

## INSTALLATION INSTRUCTIONS FOR OPTION -NP "NON-POLLUTABLE"

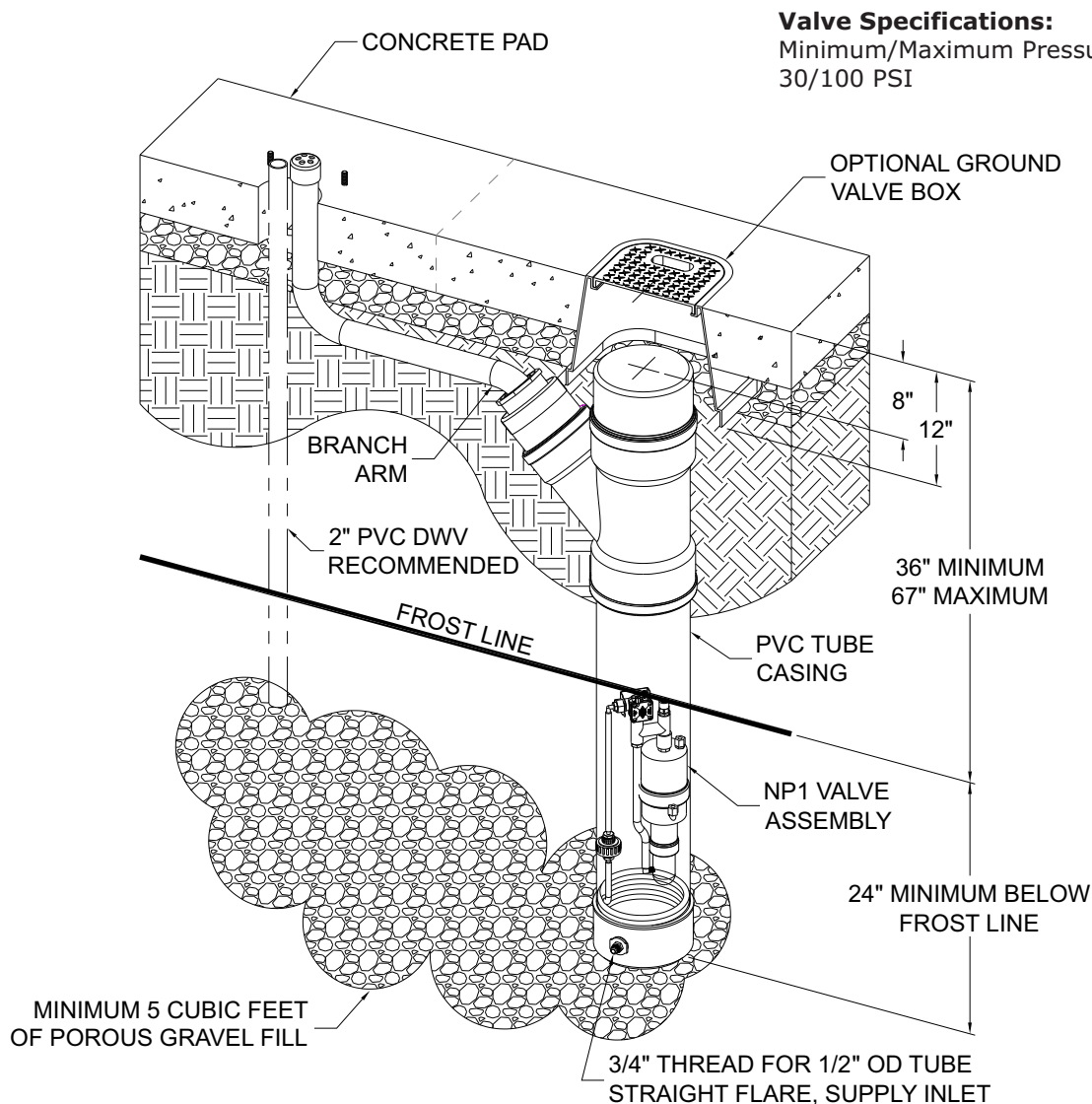
**Important: Read all instructions and refer to local codes prior to installation. Flush supply lines thoroughly before making up connections to NP Valve.**

When preparing the site for your fixture, consideration should be given as to the addition of a separate surface drain and/or accessible catch basin depending on location and use, such as on a playground where use of bowl could create drain blockage with mud, sand, mulch, etc.

Prepare trench for water supply line and waste line (if required) a minimum of 24" below frost line. At fountain location, prepare a hole to trench depth large enough for a person to work.

Site or Concrete pad dimensions should include provision for 36" minimum centerline of PVC Pipe Outlet Casing & -NP valve to fixture location.

Depending on code and design requirements, drain may be open, French or sanitary connection. Consideration with regards to the addition of a surface drain and/or accessible catch basin. Under drain and PVC Tube Casing opening, place a minimum of three to five cubic feet of porous gravel fill (no pea gravel or small stone). Local soil conditions may require more gravel for drainage.





# -NP1 FREEZE RESISTANT VALVE SYSTEM

INSTALLATION/MAINTENANCE INSTRUCTIONS

## INSTALLATION INSTRUCTIONS FOR OPTION -NP "NON-POLLUTABLE"

Position assembled PVC Tube Casing as indicated with Branch Arm oriented toward fixture. Install optional Ground Valve box as required. Refill trench and hole, compacting back fill as required. Leave sufficient depth in hole to accommodate concrete pad (by others).

Prepare the slab area surrounding fountain spreading and compacting gravel as necessary. Prepare forms (refer to fixture installation) to protect Branch Arm and waste stub outs. If required, fix 1/2" UNC L-bolt anchors by others in position arranging L-bolts according to pattern indicated and pour concrete to grade. Leave enough thread for mounting base. Ensure concrete top surface is flat and level. If concrete has cured, use appropriate 1/2" concrete anchoring hardware by others following the manufacturer's installation recommendations.

- It is recommended to include a supply stop appropriately located on the supply line.
- When inlet pressure exceeds 85 PSI, an in-line PRV installed on the supply line is recommended to ensure a working water pressure of 30-60 PSI.
- A water filter should be installed on the supply line if sediment or mineral content is a problem or concern.
- 3-5 cubic feet of coarsely crushed rock (without slurry) should be provided for drainage medium -no pea gravel or small stone.
- Drainage medium should be located directly under the bottom of the connection and out to the side.
- Allow concrete to cure before completing installation.
- Flush supply line thoroughly prior to making up connections to valve.

Position fixture near installation site and thread 3/8" OD expulsion tube, 1/8" OD pushbutton tube and 1/4" OD riser tubing from NP valve through Casing Branch Arm, Branch Arm Cap and fixture pedestal and make up connections to fixture pushbutton and bubbler.

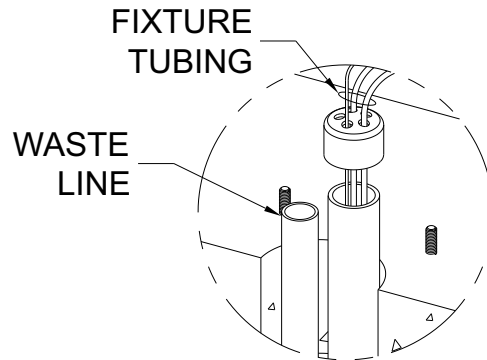
Assemble PVC Tube Casing following manufacturer's instructions for primer and glue by others. Do not glue caps. Trim bottom excess of PVC Tube Casing making allowance for lowering NP valve assembly.

Make up 1/2" Flared supply inlet connection to NP casing inlet and test for leaks.

Position assembled PVC Tube Casing, as indicated with Branch Arm oriented toward fixture. Install optional Ground Valve box as required.

Refill trench and hole, compacting back fill as required. Leave sufficient depth in hole to accommodate concrete pad (by others).

Prepare the slab area surrounding fountain spreading and compacting gravel as necessary.



Prepare forms (refer to fixture installation) to protect Branch Arm and waste stub outs. If required, affix 1/2" UNC L-bolt anchors by others in position arranging L-bolts according to pattern indicated and pour concrete to grade. Leave enough thread for mounting base.

Ensure concrete top surface is flat and level. If concrete has cured, use appropriate 1/2" concrete anchoring hardware by others following the manufacturer's installation recommendations. Set fixture into position, aligning anchoring studs to pedestal mounting holes. Secure pedestal to slab. After securing fixture in place, make up connections to fixture waste outlet. Refer to NP detail for additional information.

To ensure plumb installation, lay a bubble level on fountain bowl and adjust using shims or washers until unit is level.

Lower NP valve assembly into PVC Pipe Casing, coiling flexible hose within casing without kinking and seal with cap provided. Conceal and cover with ground valve box lid.

Turn on water supply and test for proper operation and checking for leaks. Ensure water drains out of risers at NP Valve and into gravel fill when flow stops.

**FYI:** Protect exposed valve assembly, tubing and tube openings to prevent damage to equipment or to prevent tubes from becoming filled with soil or debris.

Excess tubing should be trimmed to fit. When tubing is properly trimmed, NP valve may be raised to grade level to allow maintenance or servicing and returned to bottom of casing when completed. Riser tubing should include no low spots where water may collect and freeze.

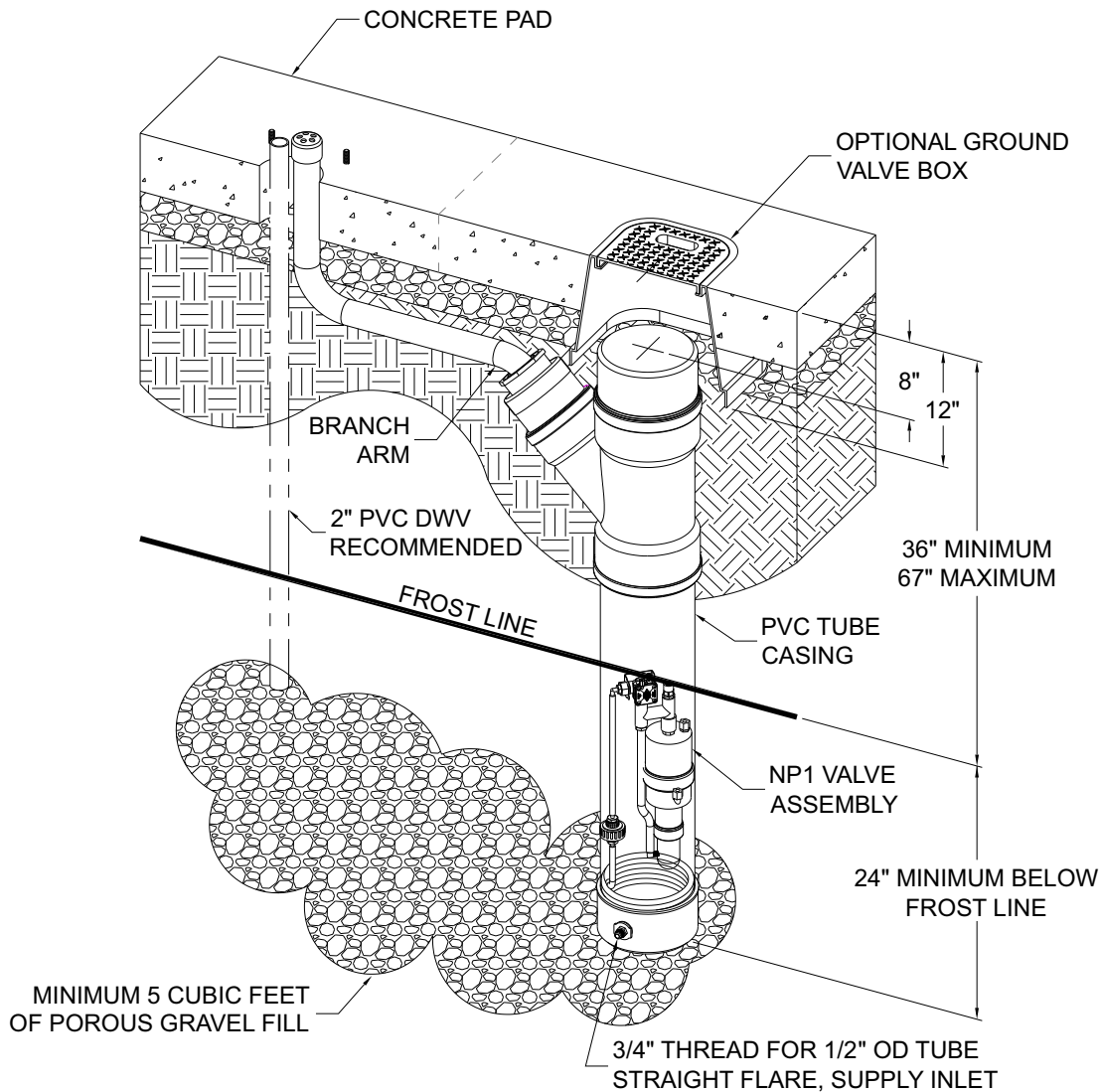


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## PREPARATION CHECKLIST

- Do you have the proper depth of bury?
- Does the fixture meet state and local codes?
- Did you thoroughly flush the supply line?
- Do you have any special requirements (e.g. 3/4" NPT verses 1" NPT)?
- Do you have adequate drainage medium (3-5 cubic feet minimum recommended) for freeze resistant fixtures?
  - a. Is it coarsely crushed rock without slurry?
  - b. Is it directly under the bottom of the drain connection and out to the side?
- Do you need a surface drain with your fixture?
- You may want to consider a catch basin depending on location and use, such as on a playground where use of bowl may create blockage with mulch, sand, etc.
- Check anchor pattern.
- FYI Ideal water pressure for Murdock-Super Secur Drinking Fountains and Bottle Fillers is 30-60 PSI.

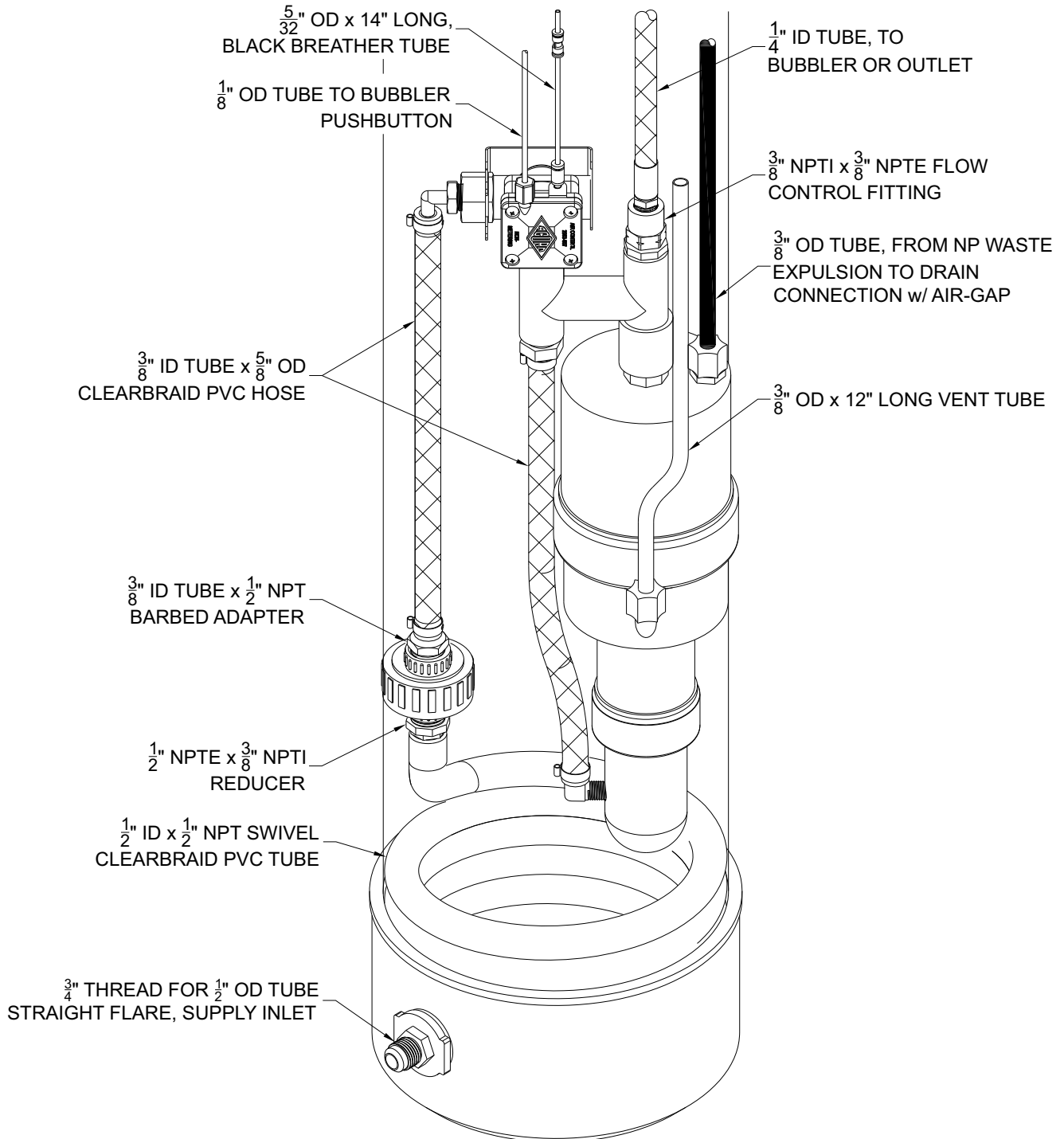




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OPTION -NP1 SHOWN FOR REFERENCE

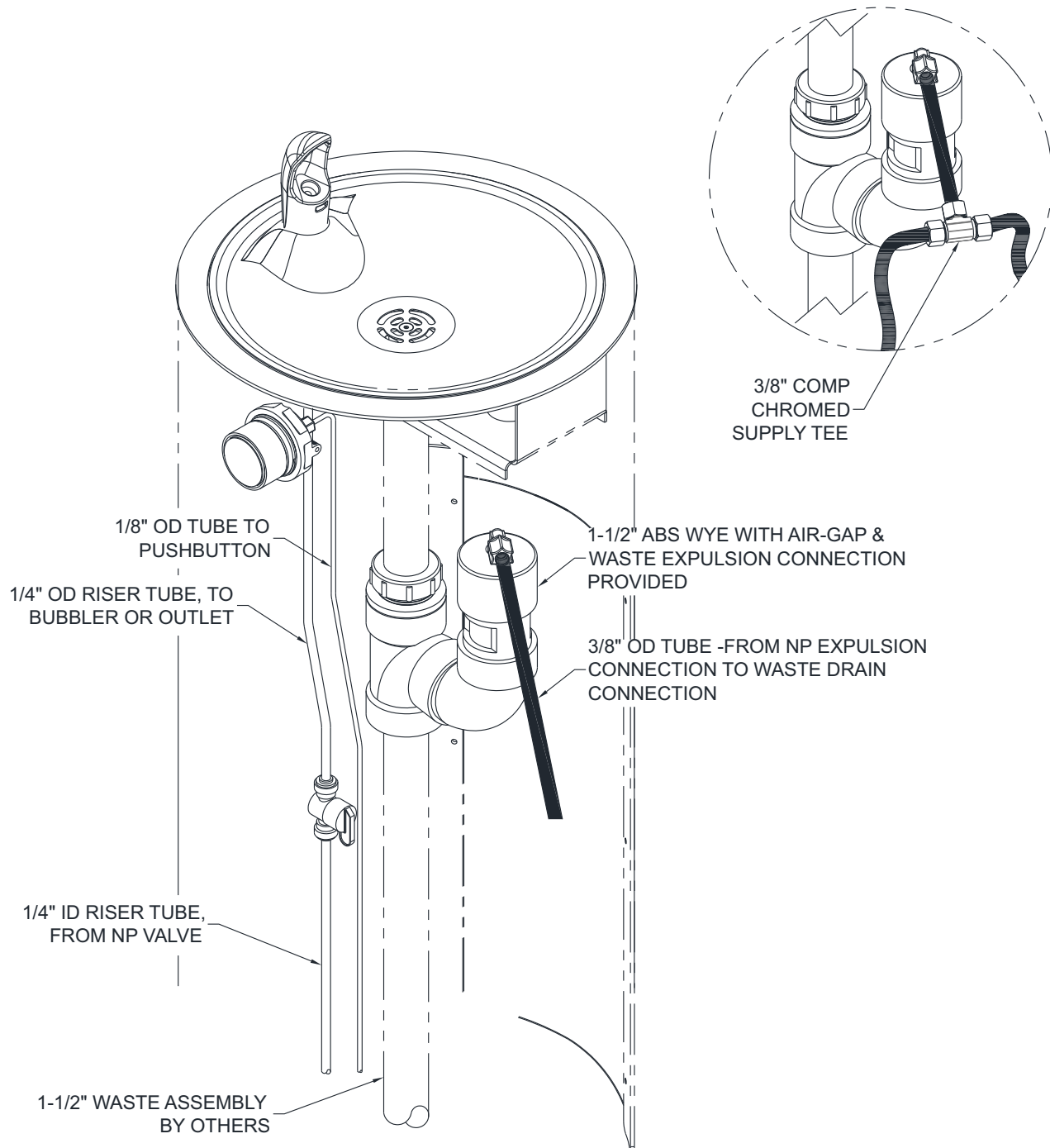


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NOTE: FOR NP3 & NP4, 3/8" DIVIDER IS REQUIRED

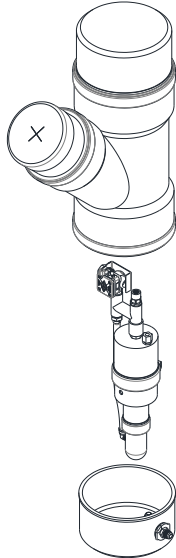




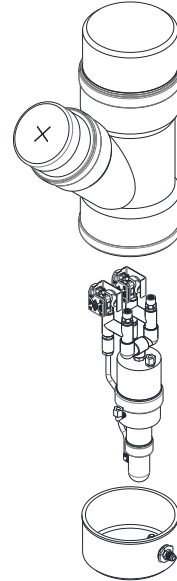
# -NP FREEZE RESISTANT VALVE SYSTEM

INSTALLATION/MAINTENANCE INSTRUCTIONS

## -NP OPTION CONFIGURATIONS

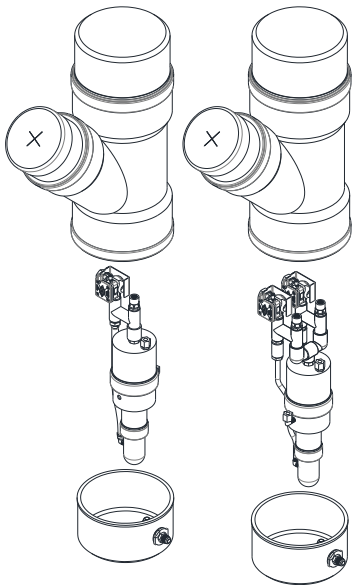


NP1

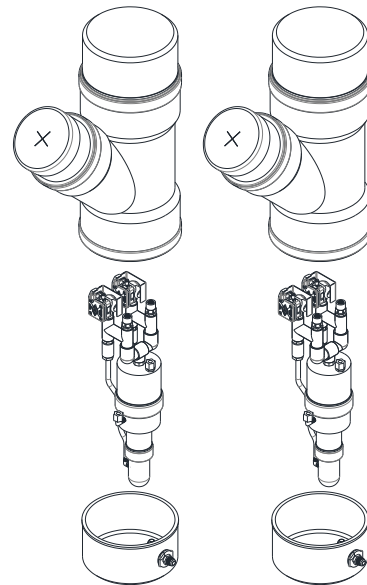


NP2

NOTE:  
FOR OPTIONS NP3 AND NP4, TWO SEPARATE  
CANISTERS WILL BE SHIPPED.



NP3

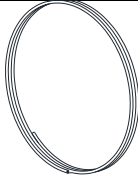
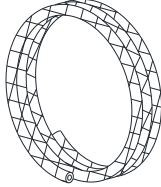
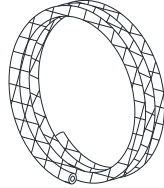
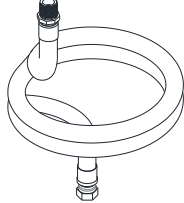
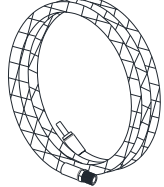
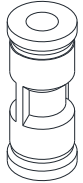
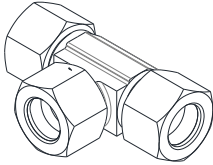


NP4



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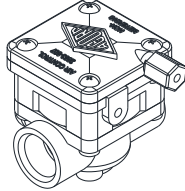
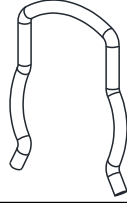
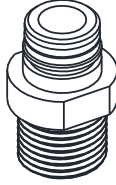
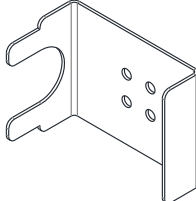
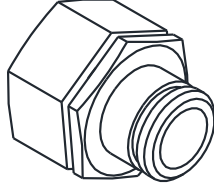

INSTALLATION/MAINTENANCE INSTRUCTIONS

Description	Part No.	Diagram
<b>VALVE COMPONENTS</b>		
5/32" OD x 14 Feet Long, Polyurethane, Black	4100-394-199	
1/4" ID x 1 Foot Long, Clearbraided PVC Hose	4103-019-199	
1/4" ID x 10 Feet Long, Polybraided Hose	4100-469-100	
1/2" ID x 1/2" NPT Swivel Clear Braid PVC Tube	4103-020-001	
1/4" ID Tube, to Bubbler or Outlet	Varies Upon Bury Depth	
1/8" OD Plastic Connector	1895-128-000	
<b>(FOR NP3 &amp; NP4 ONLY)</b> 3/8" COMP CHROMED SUPPLY TEE	1843-116-001	



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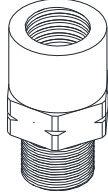
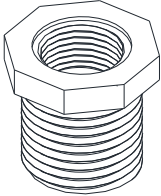
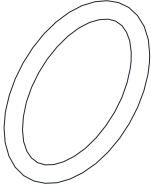
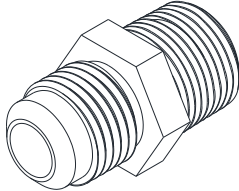
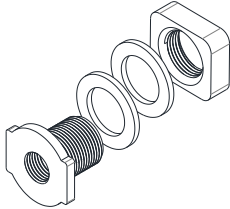
Description	Part No.	Diagram
<b>VALVE COMPONENTS</b>		
Direct Acting Valve Assembly -Open End	2570-102-001	
Retaining Clip, Air-Control Valves	0326-100-000	
1/2" NPT Outlet Adapter	2570-055-001	
Valve Bracket	4107-025-199	
3/8" NPT Female, Air-Trol Inlet Adapter	2570-063-199	
3/32" x #10-32 Push-In Connector	1895-127-000	





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Description	Part No.	Diagram
<b>VALVE COMPONENTS</b>		
3/8" NPTE x 3/8" NPTI, Flow Control	4100-853-000	
1/2" to 3/8" Reducer, PVC, NPTM x NPTI	0326-100-000	
3/8" NPT Female, Air-Trol Inlet Adapter O-Ring	0404-016-000	
1/2" NPTM x 1/2" Flare Brass Adapter	4100-625-000	
Bulkhead Fitting, 1/2" NPTF, PVC, Modified	4100-302-199	
1/2" NPT x 1/2" Flare Elbow, Brass	1895-127-000	