



# Frost-Proof Wall Hydrant Installation, Use & Repair Guide

## 420 Anti-Siphon Series



See Pages 4-5

## 450 Standard Series



See Pages 6-7

## 460 Arrow-Breaker® Series



See Pages 8-9

## 470 Freeze-Proof® Series



See Pages 10-11

## 480 Self-Draining Series



See Pages 12-13

## 490 Hot & Cold Series



See Pages 14-15

## 455BFP APACHE SERIES



See Pages 17-18



## Frost-Proof Model # Identification:

**4 5 6 - 0 4 L F**

Frost-Proof Wall Hydrants (first digit "4")

Hydrant Series:  
See following pages for information

**LEAD FREE**  
All Frost-Proof Hydrants are ANSI/NSF 372 certified by IAPMO Laboratories

Hydrant Length:  
Wall Thickness Available in  
04", 06", 08", 10",  
12" & 14"



### Inlet Connection Types:

<b>0</b>	Plain End for Push-Fit Coupling (470 Series Only)	
<b>1</b>	3/4" Wirsbo Uponor Style Pex	
<b>2</b>	1/2" Wirsbo Uponor Style Pex	
<b>5</b>	Dual Connections: 1/2" Female Pipe Thread Inside Dia. 3/4" Male Pipe Thread Outside Dia.	
<b>6</b>	Dual Connections 1/2" Copper Sweat Inside Dia. 1/2" Male Pipe Thread Outside Dia.	
<b>7</b>	3/4" PEX (Crimp Type)	
<b>8</b>	Dual Connections: 3/4" Copper Sweat Inside Dia. 3/4" Male Pipe Thread Outside Dia.	
<b>9</b>	1/2" PEX (Crimp Type)	

## How to find your Frost-Proof Stem Length:

- 1- Identify the model of Frost-proof Hydrant installed
- 2- Measure Overall Length of the Stem Assembly



- 3- Subtract 4" & add to PK #:
  - PK2004: 8" Overall length stem for 420 series hydrant with 4" wall depth

### QuickTurn®

Easy On/Off Operation

Included on all 420, 460, 470, 490 & 410 Series hydrants & replacement stem kits.

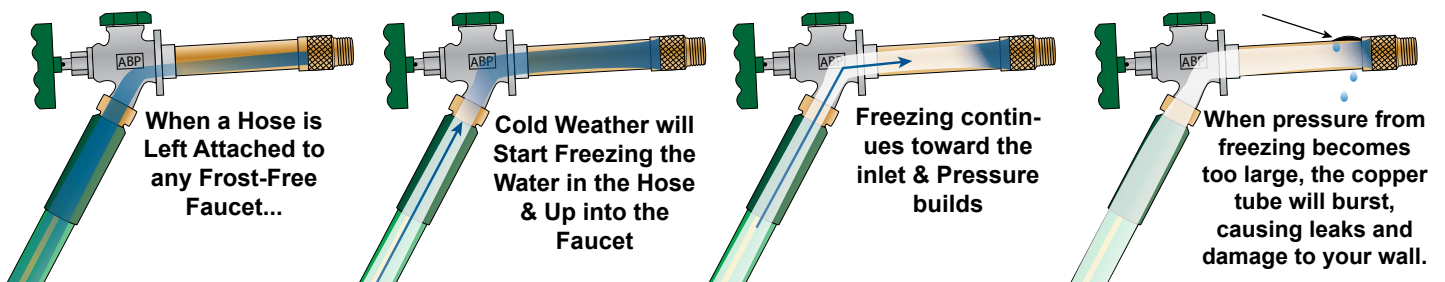
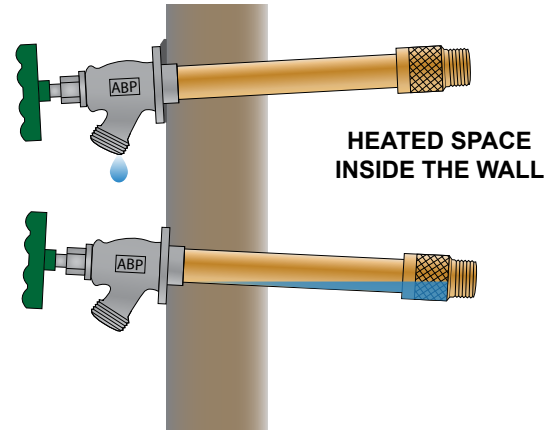


(QuickTurn® is not available on 450 & 480 series except with QT-stem replacement kits: i.e. PK8004QT)

# Frost Proof Wall Hydrant Installation & Use Guide



- Frost-free wall hydrants are designed to prevent damage from freezing water in plumbing systems. Frost-Free Wall Hydrants separate the water supply from the cold weather by shutting-off flow at the heated area inside wall.
- For a frost-free wall hydrant to work properly, it **MUST** be installed at a slight downward angle toward the spout (as shown to right) so water will drain when it is shut off. The Gap Spacer Wedge sold with every Arrowhead Frost-Free Hydrant should be used to ensure proper installation with a downward tilt.
- If the hydrant is installed level or at an upward angle, water will not drain properly and may freeze inside the faucet and cause the copper tube to burst.



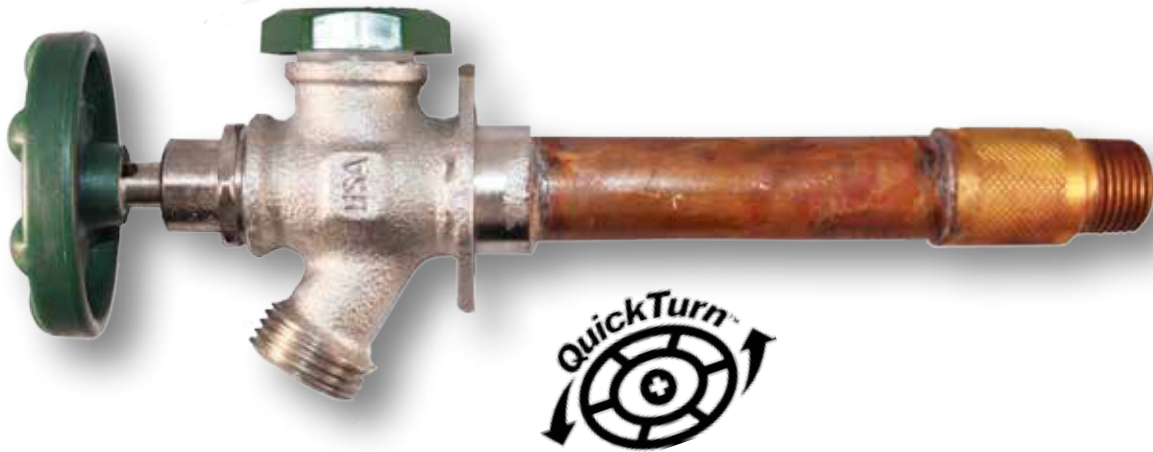
When a hose or other restriction is left attached to the faucet (such as an irrigation timer, “Y” hose splitter, or add-on back-flow preventer), water will not drain from the faucet properly. Water inside the hose will begin to freeze upward toward the back, or “SEAT”, of the faucet, and the pressure inside the copper tubing will exceed capacity and burst. This will cause leaks within the wall, usually after some time when the faucet is turned on next, and can cause considerable damage. Frost-Free wall hydrants are designed in such a way that this sort of damage can be avoided as long as the user ensures the faucets are angled downward & all hoses and devices are removed to allow proper draining.

**THE ONLY CAUSE OF A BURST FROST-FREE HYDRANT IS WATER EXPANSION FROM FREEZING INSIDE THE COPPER TUBE THAT WAS NOT DRAINED PROPERLY. PROPERLY INSTALLED VALVES (WITH DOWNWARD TILT) WILL ALWAYS DRAIN UNLESS A HOSE OR OTHER DEVICE WAS LEFT ATTACHED.**



**Forgot to remove your hose? Tired of burst pipes? Check out Arrowhead’s 470 Freeze-Proof wall hydrant with worry-free burst & back-flow protection.**

# 420 Series Anti-Siphon Wall Hydrants



## 420 Series Hydrant Information

- Frost-Free Hydrants with built-in anti-siphon technology.
- Protects drinking water from harmful contaminants (pesticides, herbicides, etc).
- Protects pipes from freezing & damage.
- Includes QuickTurn® Technology: easy on/off operation without letting go of the handle.
- ASSE 1019 Certified by IAPMO.
- 3-Year Limited Warranty
- **Faucet should not be pressurized for more than 12 consecutive hours**
- **Not designed for constant pressure applications (i.e. sprinkler & drip timers, "Y" Shut offs...)**
- When using self-closing nozzle, always relieve pressure after shut-off
- Faucet must be installed at a downward angle to ensure drainage & prevent freezing

## Repair

### Leaking out of the Weep Hole during use:

- Cause: worn out o-ring on the check assembly. This happens over time or if the faucet is left "ON" for long periods of time (over 12 hrs)
- If the faucet was installed after 1999 OR the stem's check assembly is SPRING-LESS, replace with new check assembly [PK2016] OR full stem

### Leaking out of the Green Cap Air-Vent:

- Cause: worn, broken or missing parts
- Repair by removing old parts & replacing with new parts from kit [PK1430]
- Follow assembly diagram on next page

### Any Leaking on Faucet Installed Before 1999 or Check Assembly with SPRING

- Cause: worn out parts & seals
- If the stem has a SPRING in the Check Assembly, the full stem should be replaced with a Special Order Stem Length that is 1/4" longer [PK2004SP - PK2014SP]- OR replace the hydrant

### Leaking out of the Hose Thread when "OFF"- Will Not Shut Off:

- Cause: worn out washer or broken faucet seat
- Replace the check-assembly or entire stem
- If replacement parts do not work, contact Arrowhead Brass

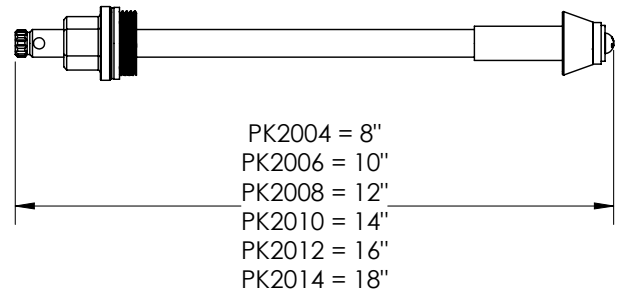
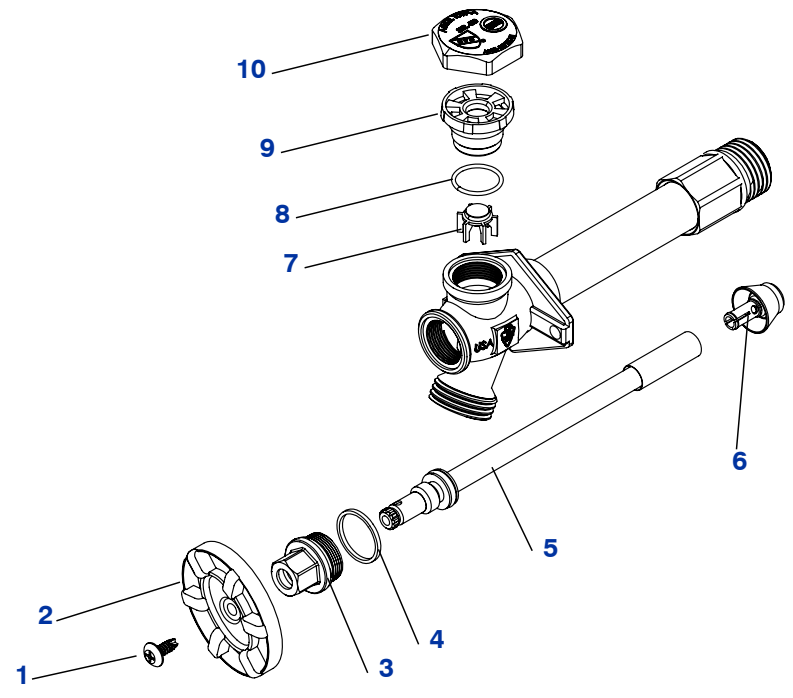
# 420 Series Anti-Siphon Wall Hydrants



## Repair & Replacement Parts

<b>AIR-VENT ASSEMBLY</b>	<b>RUBBER-COATED HANDLE &amp; SCREW</b>	<b>SPRING-LESS CHECK ASSEMBLY</b>	<b>GAP-SPACER WEDGE</b>	<b>420 SERIES 4" STEM ASSEMBLY</b>	<b>420 SERIES 6" STEM ASSEMBLY</b>	<b>420 SERIES 8" STEM ASSEMBLY</b>
<b># PK1430</b> Includes green cap, housing, plunger, & O-ring (#'s 7-10)	<b># PK1295</b> Rubber-coated green oval handle (# 2) & stainless screw (# 1)	<b># PK2016</b> Replacement spring-less check assembly (# 6)	<b># PK1450</b> Replacement gap spacer, used to tilt faucet downward	<b># PK2004</b> 4-inch hydrant stem assembly (# 3-6) (8" total length)	<b># PK2006</b> 6-inch hydrant stem assembly (# 3-6) (10" total length)	<b># PK2008</b> 8-inch hydrant stem assembly (# 3-6) (12" total length)

<b>420 SERIES 10" STEM ASSEMBLY</b>	<b>420 SERIES 12" STEM ASSEMBLY</b>	<b>420 SERIES 14" STEM ASSEMBLY</b>
<b># PK2010</b> 10-inch hydrant stem assembly (# 3-6) (14" total length)	<b># PK2012</b> 12-inch hydrant stem assembly (# 3-6) (16" total length)	<b># PK2014</b> 14-inch hydrant stem assembly (# 3-6) (18" total length)



\*For 420 series hydrants installed prior to 1999, use PK20\_ SP stem assembly to replace old style stems that have a spring check assembly. Contact Arrowhead Brass for more details

**If your faucet stem has a SPRING or does NOT measure to an even length, you may need an "SP" Stem**

- SP Stems are 4-1/4" longer than the hydrant length (i.e. PK2004SP = 8-1/4")
- SP Stems should work as replacements for valve older than 1999 but often times may not work. SP or "special" stems are non-returnable & not covered under warranty
- Arrowhead Brass suggests replacing your faucet if it was installed before 2001. We can not guarantee that SP parts will work

# 450 Series Standard Frost-Proof Wall Hydrants



## 450 Series Hydrant Information

- Standard Frost-Free Wall Hydrant
- Protect faucet & pipes from freezing & damage by separating cold weather from water supply
- Made in the USA; 3-Year Limited Warranty
- IMPORTANT: Always shut off faucet after use AND remove hose in order to drain the faucet and prevent freezing
- Faucet should not be pressurized for more than 12 consecutive hours
- Does not provide anti-siphon back-flow protection; add-on devices available (may be required by code)
- Faucet must be installed at a downward angle to ensure drainage & prevent freezing
- When using self-closing nozzle, always relieve pressure after shut-off

## Repair

### Leaking out of the hose thread when “OFF”

- Faucet will not shut off:
- Cause: worn out washer or broken faucet seat
- Replace entire stem [PK8004-PK8014]- suggested
- Replace seat washer & screw at end of the stem [PK1000]
- If new stem does not stop leak, replace the faucet
- If original stem is not a standard length (even lengths 4”-18” total length), special order stems are available

### Leaking out of the packing nut or bonnet:

- Cause: loose bonnet or worn out seals in the bonnet.
- If the bonnet has the old 2-piece style with graphite packing, replacing the entire stem is suggested [PK8004-PK8014]
- If the bonnet is the new o-ring style, replacing the stem is suggested [PK8004-PK8014]
- If original stem is not a standard length (even lengths 4-18” total length), special order stems are available

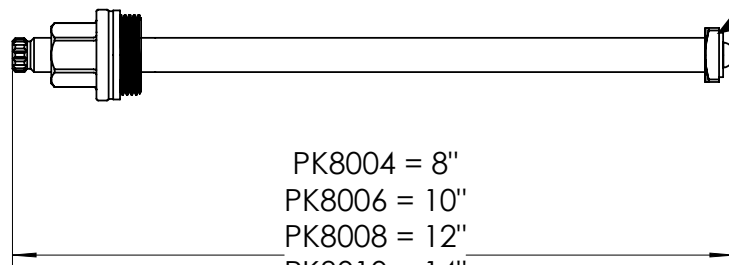
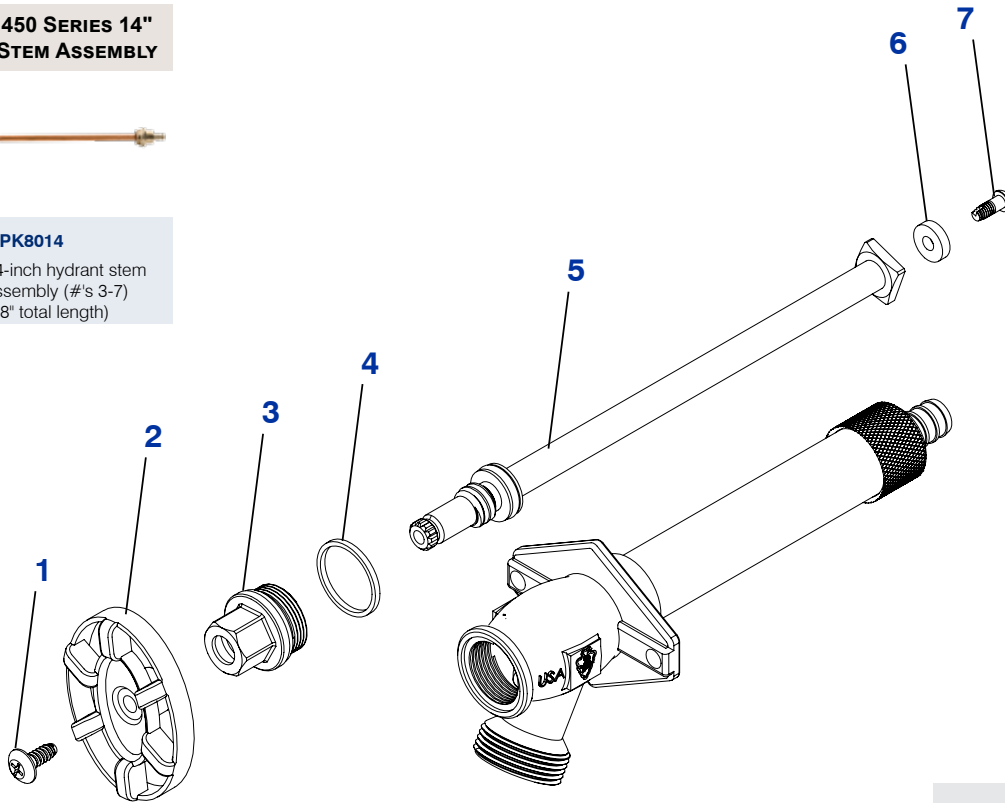
# 450 Series Standard Frost-Proof Wall Hydrants



## Repair & Replacement Parts

STEM REBUILD KIT	GREEN OVAL HANDLE & SCREW	GAP-SPACER WEDGE	450 SERIES 4" STEM ASSEMBLY	450 SERIES 6" STEM ASSEMBLY	450 SERIES 8" STEM ASSEMBLY	450 SERIES 10" STEM ASSEMBLY
<b># PK1000</b> Seat washer (# 6) & screw (7), nylon washer (4) & handle screw (1)	<b># PK1295</b> Green oval handle (# 2) & stainless screw (# 1)	<b># PK1450</b> Replacement gap spacer, used to tilt faucet downward	<b># PK8004</b> 4-inch hydrant stem assembly (#'s 3-7) (8" total length)	<b># PK8006</b> 6-inch hydrant stem assembly (#'s 3-7) (10" total length)	<b># PK8008</b> 8-inch hydrant stem assembly (#'s 3-7) (12" total length)	<b># PK8010</b> 10-inch hydrant stem assembly (#'s 3-7) (14" total length)

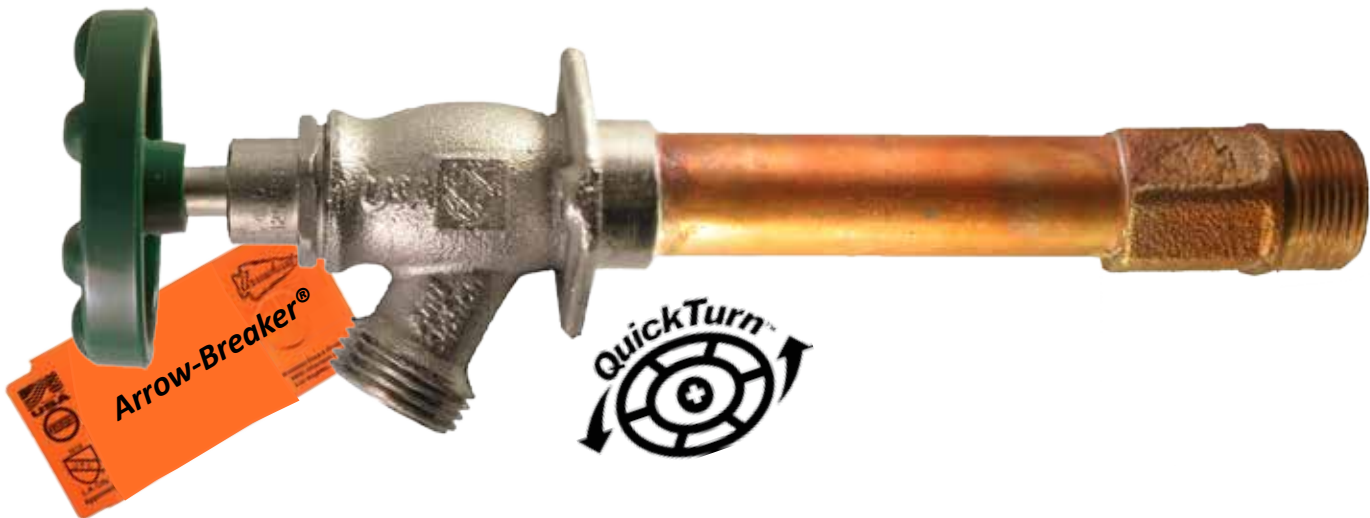
450 SERIES 12" STEM ASSEMBLY	450 SERIES 14" STEM ASSEMBLY
<b># PK8012</b> 12-inch hydrant stem assembly (#'s 3-7) (16" total length)	<b># PK8014</b> 14-inch hydrant stem assembly (#'s 3-7) (18" total length)



- PK8004 = 8"
- PK8006 = 10"
- PK8008 = 12"
- PK8010 = 14"
- PK8012 = 16"
- PK8014 = 18"

On faucets older than 1999: replacement stems may require a trim to the brass square washer retainer. Trim 1/16" off each corner to fit it into faucet. Contact Arrowhead for more information.

# 460 Series Arrow-Breaker® Frost-Proof Wall Hydrants



## 460 Series Hydrant Information

- Arrow-Breaker® Frost-Free Hydrants with built-in anti-siphon technology
- Protects drinking water from harmful contaminants (pesticides, herbicides, etc)
- Includes QuickTurn® Technology: easy on/off operation without letting go of the handle
- Protects pipes from freezing & damage
- ASSE 1019 Listed; IAPMO Certified
- Made in the USA; 3-Year Limited Warranty
- **Faucet should not be pressurized for more than 12 consecutive hours**
- **Not designed for constant pressure applications (i.e. sprinkler & drip timers, "Y" Shut offs...)**
- When using self-closing nozzle, always relieve pressure after shut-off
- Faucet must be installed at a downward angle to ensure drainage & prevent freezing

## Repair

### Leaking out of the Hose Thread when "OFF":

- Cause: worn out washer or broken faucet seat
- Repair by replacing the Spring-Less Check Assembly (PK6026) or replacing the entire stem assembly (PK6004-PK6014)
- If faucet continues to leak when OFF, the faucet seat might be broken and the faucet will need to be replaced

### Leaking out of the Packing Nut or Bonnet:

- Cause: loose bonnet or worn out seals in the bonnet.
- If tightening the bonnet does not stop leaking from the threads, replace nylon washer ( or the Stem Assembly (PK6004-PK6014)

### Leaking out of the Weep Hole during use:

- Cause: worn out o-ring on the check assembly. This happens over time or if the faucet is left "ON" for long periods of time (over 12 hrs).
- Repair by replacing the Spring-Less Check Assembly (PK6026)
- If the leak still occurs, replace the entire stem assembly (PK6004-PK6014)



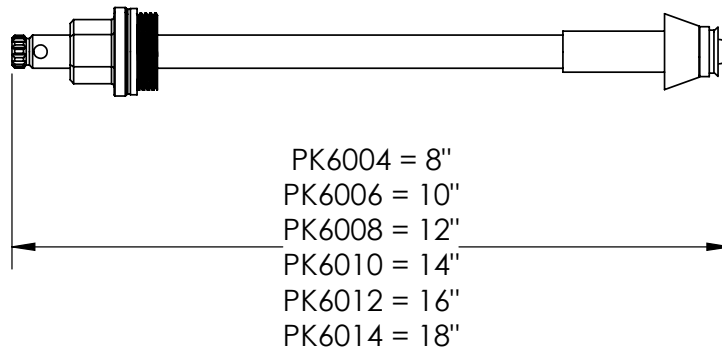
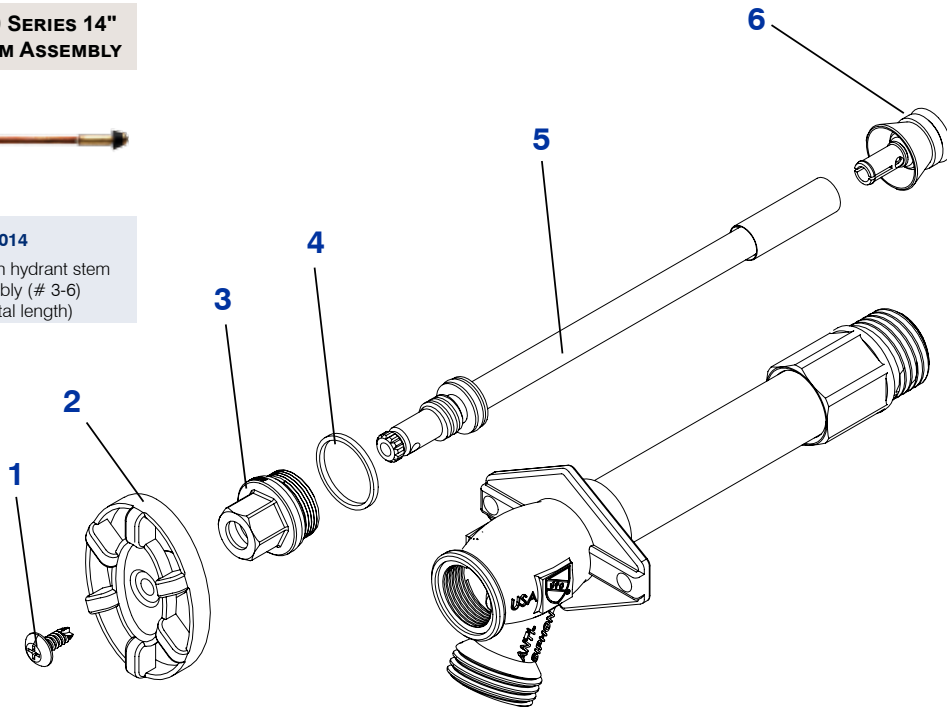
# 460 Series Arrow-Breaker® Frost-Proof Wall Hydrants



## Repair & Replacement Parts

RUBBER-COATED HANDLE & SCREW	SPRING-LESS CHECK ASSEMBLY	GAP-SPACER WEDGE	460 SERIES 4" STEM ASSEMBLY	460 SERIES 6" STEM ASSEMBLY	460 SERIES 8" STEM ASSEMBLY	460 SERIES 10" STEM ASSEMBLY
<b># PK1295</b> Rubber-coated green oval handle (# 2) & stainless screw (# 1)	<b># PK6026</b> Replacement spring-less check assembly (# 6)	<b># PK1450</b> Replacement gap spacer, used to tilt faucet downward	<b># PK6004</b> 4-inch hydrant stem assembly (# 3-6) (8" total length)	<b># PK6006</b> 6-inch hydrant stem assembly (# 3-6) (10" total length)	<b># PK6008</b> 8-inch hydrant stem assembly (# 3-6) (12" total length)	<b># PK6010</b> 10-inch hydrant stem assembly (# 3-6) (14" total length)

460 SERIES 12" STEM ASSEMBLY	460 SERIES 14" STEM ASSEMBLY
<b># PK6012</b> 12-inch hydrant stem assembly (# 3-6) (16" total length)	<b># PK6014</b> 14-inch hydrant stem assembly (# 3-6) (18" total length)



# 470 Series Freeze-Proof® Wall Hydrants



## 470 Series Hydrant Information

- Revolutionary Freeze-Proof® technology prevents damage from freezing water by reducing pressure build-up
- New innovative o-ring shut off design that prevents damage & wear to hydrant seat
- Maintains constant separation between household and irrigation water sources
- Prevents back-flow by utilizing patented Arrow-Breaker® integrated anti-siphon technology
- QuickTurn® easy on/off operation without letting go of the handle
- ASSE 1019-A Certified
- Max. 140°F – 125 PSI
- 3 Year limited warranty; Made in the USA from domestic and foreign components
- **Faucet should not be pressurized for more than 12 consecutive hours**
- Not designed for constant pressure applications (i.e. sprinkler timers, “Y” Shut offs... )
- Remove hose after use to drain faucet
- When using self-closing nozzle, always relieve pressure after shut-off
- Faucet must be installed at a downward angle to ensure drainage & prevent freezing

## Repair

### Leaking or malfunction:

- Shut-off water to the hydrant & open it all the way.
- Loosen the bonnet with a wrench and remove stem assembly.
- With the stem removed, briefly turn water supply back on to flush the hydrant, then shut-off again.
- Inspect the stem for cracks or damage to the O-rings or other parts. The recommended repair is to replace the Freeze-Proof® check assembly (PK7026) or replace the entire stem (see instructions below to identify the stem kit needed PK7004 through PK7014).
- Reinstall stem with bonnet in the open position, close the hydrant and turn water back on to the valve.

# 470 Series Freeze-Proof® Wall Hydrants



## Repair & Replacement Parts

<b>RUBBER-COATED HANDLE &amp; SCREW</b>	<b>FREEZE-PROOF® CHECK ASSEMBLY</b>	<b>GAP-SPACER WEDGE</b>	<b>470 SERIES 4" STEM ASSEMBLY</b>	<b>470 SERIES 6" STEM ASSEMBLY</b>	<b>470 SERIES 8" STEM ASSEMBLY</b>	<b>470 SERIES 10" STEM ASSEMBLY</b>
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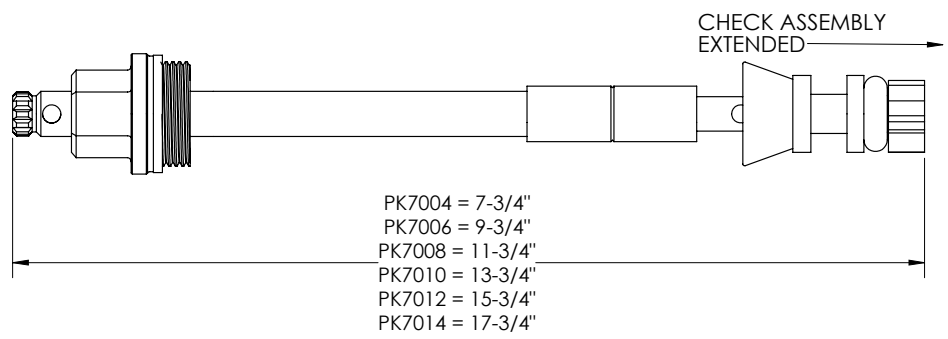
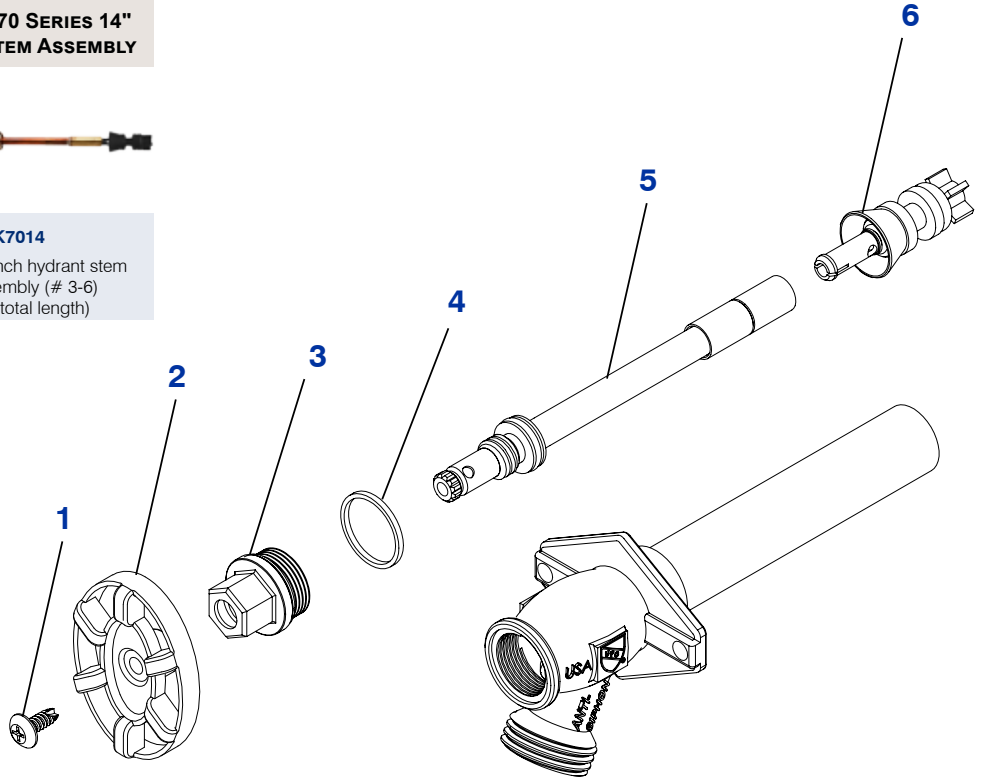


<b># PK1297</b> Rubber-coated green oval handle (# 2) & stainless screw (# 1)	<b># PK7026</b> Replacement Freeze-Proof® check assembly (# 6)	<b># PK1450</b> Replacement gap spacer, used to tilt faucet downward	<b># PK7004</b> 4-inch hydrant stem assembly (# 3-6) (8" total length)	<b># PK7006</b> 6-inch hydrant stem assembly (# 3-6) (10" total length)	<b># PK7008</b> 8-inch hydrant stem assembly (# 3-6) (12" total length)	<b># PK7010</b> 10-inch hydrant stem assembly (# 3-6) (14" total length)
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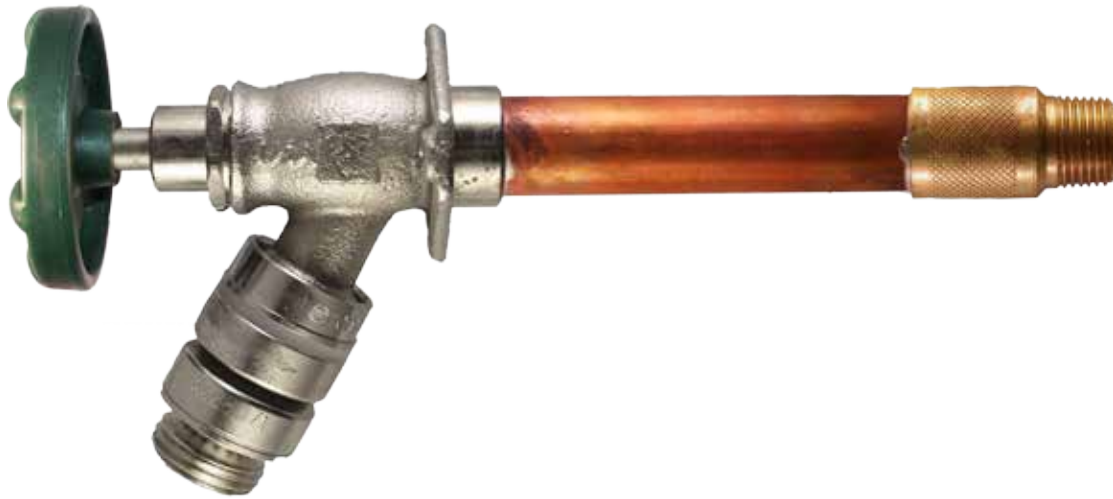
<b>470 SERIES 12" STEM ASSEMBLY</b>	<b>470 SERIES 14" STEM ASSEMBLY</b>
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<b># PK7012</b> 12-inch hydrant stem assembly (# 3-6) (16" total length)	<b># PK7014</b> 14-inch hydrant stem assembly (# 3-6) (18" total length)
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# 480 Series Self-Draining Frost-Proof Wall Hydrants



## 480 Series Hydrant Information

- Frost-Free Hydrants with Self-Draining Anti-Siphon Vacuum Breaker
- Protects drinking water from harmful contaminants (pesticides, herbicides, etc)
- Drains water from hydrant upon shut off to protect faucet & pipes from freezing & damage;
- ASSE 1019 Listed; IAPMO Certified
- Made in the USA; 3-Year Limited Warranty
- **Faucet should not be pressurized for more than 12 consecutive hours**
- **Not designed for constant pressure applications (i.e. sprinkler & drip timers, "Y" Shut offs...)**
- When using self-closing nozzle, always relieve pressure after shut-off
- Faucet must be installed at a downward angle to ensure drainage & prevent freezing

## Repair

### Leaking out of the Hose Thread when "OFF"- Will Not Shut Off:

- Cause: worn out washer or broken faucet seat
- Replace entire stem [PK8004-PK8014]- suggested
- Replace seat washer & screw at end of the stem
- If new stem does not stop leak, replace the faucet
- If original stem is not a standard length (even lengths 4"-18" total length), special order stems are available

### Leaking out of the Packing Nut or Bonnet:

- Cause: loose bonnet or worn out seals in the bonnet.
- If the bonnet has the old 2-piece style with graphite packing, replacing the entire stem is suggested [PK8004-PK8014]
- If the bonnet is the new o-ring style, replacing the stem is suggested [PK8004-PK8014]
- If original stem is not a standard length (even lengths 4-18" total length), special order stems are available








***Problem with the Self-Draining Vacuum Breaker? See Page 16***






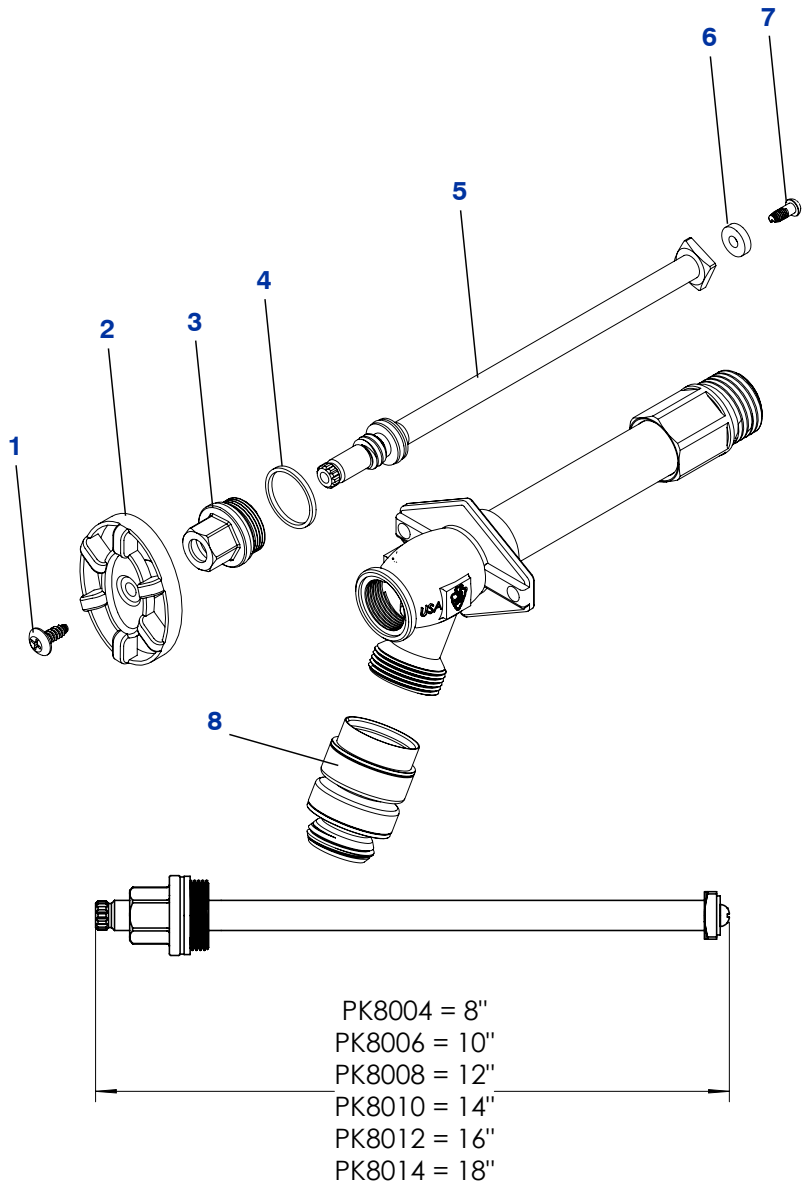
# 480 Series Self-Draining Frost-Proof Wall Hydrants



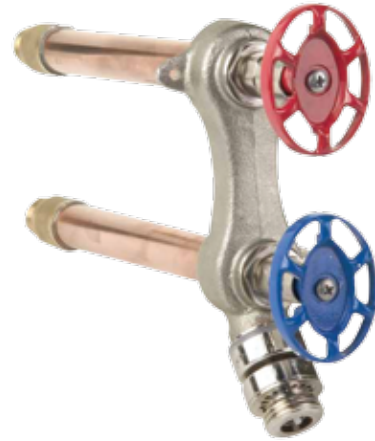
## Repair & Replacement Parts

STEM REBUILD KIT	RUBBER-COATED HANDLE & SCREW	SELF-DRAINING VACUUM BREAKER	GAP-SPACER WEDGE	480 SERIES 4" STEM ASSEMBLY	480 SERIES 6" STEM ASSEMBLY	480 SERIES 8" STEM ASSEMBLY
						
<b># PK1000</b> Seat washer (6) & screw (7), nylon washer (4) & handle screw (1)	<b># PK1295</b> Rubber-coated green oval handle (# 2) & stainless screw (# 1)	<b># PK1390</b> <b># 59BFPCR</b> Self-draining vacuum breaker- fine threads; PK- retail package (# 8)	<b># PK1450</b> Replacement gap spacer, used to tilt faucet downward	<b># PK8004</b> 4-inch hydrant stem assembly (# 3-7) (8" total length)	<b># PK8006</b> 6-inch hydrant stem assembly (# 3-7) (10" total length)	<b># PK8008</b> 8-inch hydrant stem assembly (# 3-7) (12" total length)

480 SERIES 10" STEM ASSEMBLY	480 SERIES 12" STEM ASSEMBLY	480 SERIES 14" STEM ASSEMBLY
		
<b># PK8010</b> 10-inch hydrant stem assembly (# 3-7) (14" total length)	<b># PK8012</b> 12-inch hydrant stem assembly (# 3-7) (16" total length)	<b># PK8014</b> 14-inch hydrant stem assembly (# 3-7) (18" total length)



# 490 Series Hot & Cold Frost-Proof Wall Hydrants



## 490 Series Hydrant Information

- Heavy Pattern Lead-Free Bronze: NSF/ANSI 372 Certified Lead Free, IAPMO Listed
- Hot & Cold Mixing, with Color Coded Red & Blue Handles
- External Self-Draining Vacuum Breaker: drains hydrant upon shutoff to prevent freezing.
- ASSE 1019-A Approved, IAPMO Certified
- Exclusive O-Ring Bonnet & Stem design
- Includes QuickTurn® style operation: Easy on/off without letting go of the handle
- Rubber coated oval handle
- Dual back-flow protection with internal anti-siphon check valves to prevent mixed temperature back-flow
- Available in 4, 6, 8, 10, 12 & 14 Inch lengths (other lengths available by special order)

## Repair

### Leaking out of the Hose Thread when "OFF":

- Cause: worn out washer or broken faucet seat
- Repair by replacing the stem assembly
- If faucet continues to leak when OFF, the faucet seat might be broken and the faucet will need to be replaced

### Leaking out of the Vacuum Breaker:

- Cause: worn out gasket and seals; happens with age & use, or when left on/open for long periods of time.
- Fix by replacing fine thread vacuum breaker: 59BFPCHR or PK1390
- Ensure all 3 brass sections of vacuum breaker are removed
- Use liquid thread sealant

***Problem with the Self-Draining Vacuum Breaker? See Page 16***



# 490 Series Hot & Cold Frost-Proof Wall Hydrants



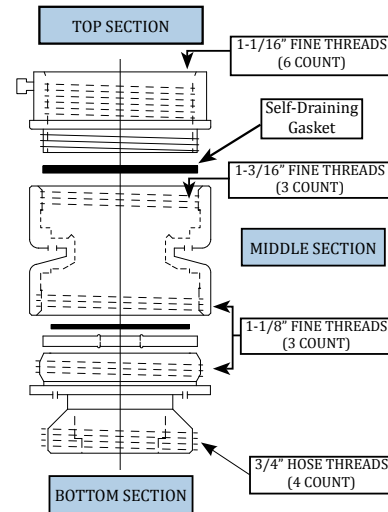
## Repair & Replacement Parts

SPRING-LESS CHECK ASSEMBLY	RED & BLUE HANDLES & SCREWS	SELF-DRAINING VACUUM BREAKER	490 SERIES 4" STEM ASSEMBLY	490 SERIES 6" STEM ASSEMBLY	490 SERIES 8" STEM ASSEMBLY	490 SERIES 10" STEM ASSEMBLY
<b># PK6026</b> Replacement spring-less check assembly (# 1)	<b># PK1299</b> Red & blue oval handles (# 5) & stainless screws (# 6)	<b># PK1390</b> <b># 59BFPCHR</b> Self-draining vacuum breaker- fine threads; PK- retail package (# 8)	<b># PK9004</b> 4-inch hydrant stem assembly (# 3-7) (8" total length)	<b># PK9006</b> 6-inch hydrant stem assembly (# 3-7) (10" total length)	<b># PK9008</b> 8-inch hydrant stem assembly (# 3-7) (12" total length)	<b># PK9010</b> 10-inch hydrant stem assembly (# 3-7) (14" total length)
490 SERIES 12" STEM ASSEMBLY	490 SERIES 14" STEM ASSEMBLY					
<b># PK9012</b> 12-inch hydrant stem assembly (# 3-7) (16" total length)	<b># PK9014</b> 14-inch hydrant stem assembly (# 3-7) (18" total length)					
<p>PK9004 = 7.25" PK9006 = 9.25" PK9008 = 11.25" PK9010 = 13.25" PK9012 = 15.25" PK9014 = 17.25"</p>						

## Part Kits for Old Models

STEM REBUILD KIT	OLD-STYLE VERTICAL VACUUM BREAKER	490V SERIE STEM ASSEMBLY	
<b># PK1000</b> Seat washer (9) & screw (10), nylon washer (3) & handle screw (6)	<b># PK1390V</b> Self-draining vacuum breaker- fine threads; PK- retail package (#12)	<b># PK90_V</b> Add "V" for vertical hydrants installed before 2015 (3, 4, 9-11)	
<p>Pre-2015 Vertical Hot &amp; Cold Hydrants</p> <p>PK9004V = 7.5" PK9006V = 9.5" PK9008V = 11.5" PK9010V = 13.5" PK9012V = 15.5" PK9014V = 17.5"</p>			

# Self-Draining Vacuum Breakers 59 Series / PK1390



## Self-Draining Vacuum Breaker Information

- ASSE 1019 back flow preventer
- Protects drinking water from harmful contaminants (pesticides, herbicides, etc)
- Designed to drain the faucet upon shut off to prevent damage from freezing
- **Vacuum Breaker should not be pressurized for more than 12 consecutive hours: Not designed for constant pressure applications (i.e. sprinkler & drip timers, "Y" Shut offs... )**
- **When using self-closing nozzle, always relieve pressure after shut-off**
- **Faucet must be installed at a downward angle to ensure drainage & prevent freezing**
- Water from wall hydrant will drain in a steady gentle stream for approximately 15-20 seconds after hydrant is turned off.
- For optimum freeze protection, vacuum breaker should be installed at an angle towards the ground, **device will not work if it is installed completely vertical or horizontal**

## Vacuum Breaker Replacements

- Cause: worn out gasket and seals; happens with age & use, or when left on/open for long periods of time.
  - Result: Leaks non-stop when on out of holes in "middle Section."
  - Fix by replacing fine thread vacuum breaker
  - **TOP SECTION MUST BE REMOVED FROM FAUCET:** Ensure the fine thread top section of the original vacuum breaker is removed from the faucet before trying to install replacement. 6 fine threads should be visible. Hold the faucet body in place with channel locks while removing vacuum breaker (with pipe wrench or vise grips) to prevent damage to faucet.
  - Use Liquid Thread Sealant (Pipe Dope) on Fine Threads when installing replacement. Without positive thread seal, vacuum breaker
  - Set Screw on replacement/new vacuum breakers only. Tighten when installed to prevent removal
- IMPORTANT: After installation, vacuum breaker may need to be pressurized to work correctly:** hook up a hose with a closed nozzle attached, turn the faucet on FULL BLAST and allow hose to fill. Once filled, the vacuum breaker will seal & stop leaking



# 455BFP Series "Apache" Frost-Proof Wall Hydrants



## Discontinued 455BFP Series Hydrant Information

- Anti-Siphon Frost-Free Wall Hydrant
- **455BFP Apache Series- DISCONTINUED IN 2009**; hydrant no longer available
- **IMPORTANT:** Always shut off faucet after use AND remove hose in order to drain the faucet and prevent freezing
- Faucet should not be pressurized for more than 12 consecutive hours
- Not designed for constant pressure applications (i.e. sprinkler & drip timers, "Y" Shut off... )
- When using self-closing nozzle, always relieve pressure after shut-off

## Repair

### Leaking out of the hose thread when "OFF"- OR-

#### Leaking out of the Packing Nut or Bonnet

- Cause: worn out washer, seals or broken faucet seat
- Replace seat washer & screw at end of the stem [PK1000]
- If repair parts do not stop leak, replace the faucet
- **Replacement stems (PK5004-PK5014) are no longer available from Arrowhead Brass**

### Leaking out of the Green Cap Air-Vent:

- Cause: worn, broken or missing parts
- Repair by removing old parts & replacing with new parts from kit [PK1430]
- Follow assembly drawing on next page.
- If leak persists, ensure positive seal and cleaned threads; Do not use thread tape

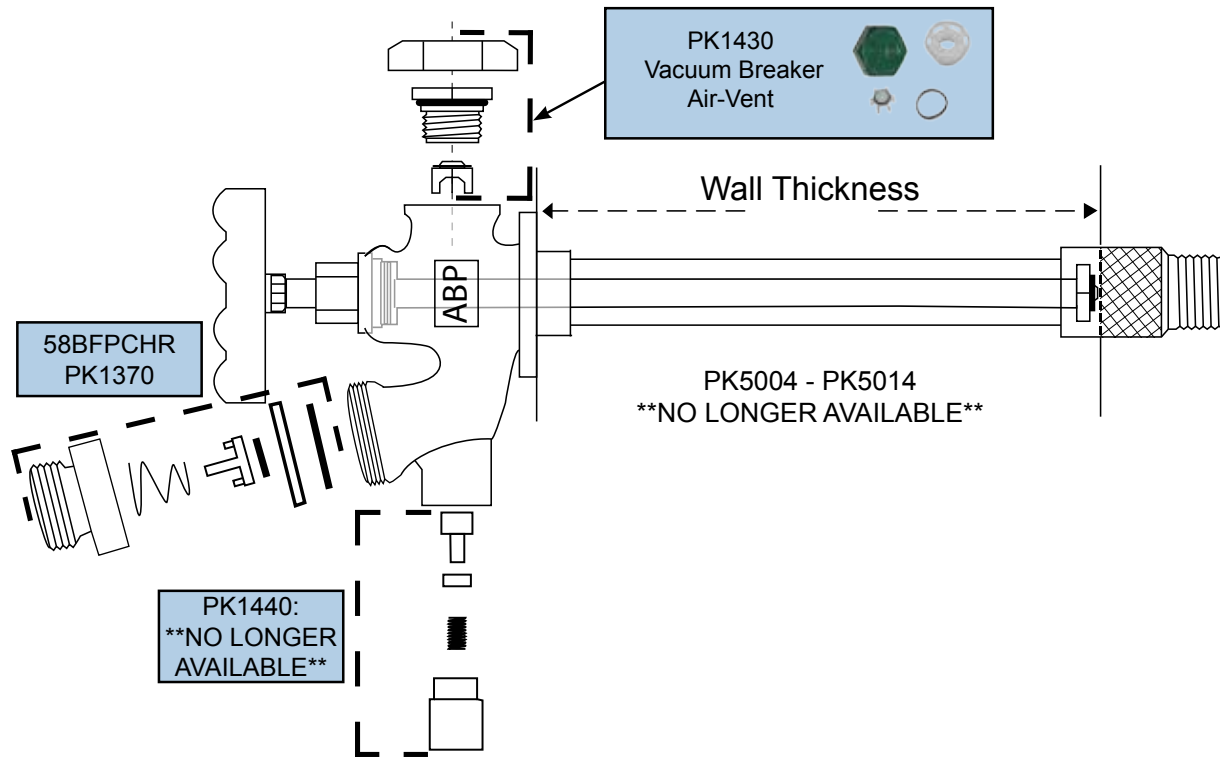
### Leaking out of the Drain (below hose connection):

- Cause: worn, broken or missing parts
- Part Kit **PK1440 is no longer available.**
- Replacement hydrant suggested.

### Leaking out of the Hose-Thread Vacuum Breaker:

- Cause: worn, broken or missing parts
- Repair by removing old parts & replacing with new parts [58BFPCHR or PK1370]
- Use thread sealant when installing new part

# 455BFP Series "Apache" Frost-Proof Wall Hydrants



The 455BFP Apache Series has been discontinued since 2008. Many replacement parts are no longer available. If these parts are required, it is suggested that the Apache series hydrants be replaced with a new hydrant model. Available part kits are below.

STEM REBUILD KIT	GREEN OVAL HANDLE & SCREW	AIR-VENT ASSEMBLY	VACUUM BREAKER
<p># PK1000</p> <p>Seat washer &amp; screw, nylon washer &amp; handle screw</p>	<p># PK1290</p> <p>Green oval handle &amp; stainless screw</p>	<p># PK1430</p> <p>Includes green cap, housing, plunger, &amp; O-ring</p>	<p># PK1370</p> <p># 58BFPCHR</p> <p>Fine thread nickel plated vacuum breaker- PK- retail package</p>