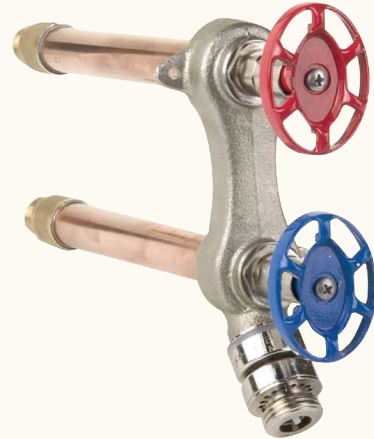


490 Series Hot & Cold
Anti-Siphon Wall Hydrant
Installation, Use & Repair Guide



490 Series Hot & Cold Anti-Siphon Wall Hydrants



490 Series Hydrant Information

- Heavy pattern Lead-Free brass: 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.
- **Faucet should not be pressurized (left open) for more than 12 consecutive hours.**
- **Not designed for constant pressure applications (i.e. sprinkler & drip timers, "Y" Shut-offs).**
- Includes QuickTurn® style operation: Easy on/off without letting go of the handle.
- 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.

490 Series Hot & Cold Anti-Siphon Wall Hydrants

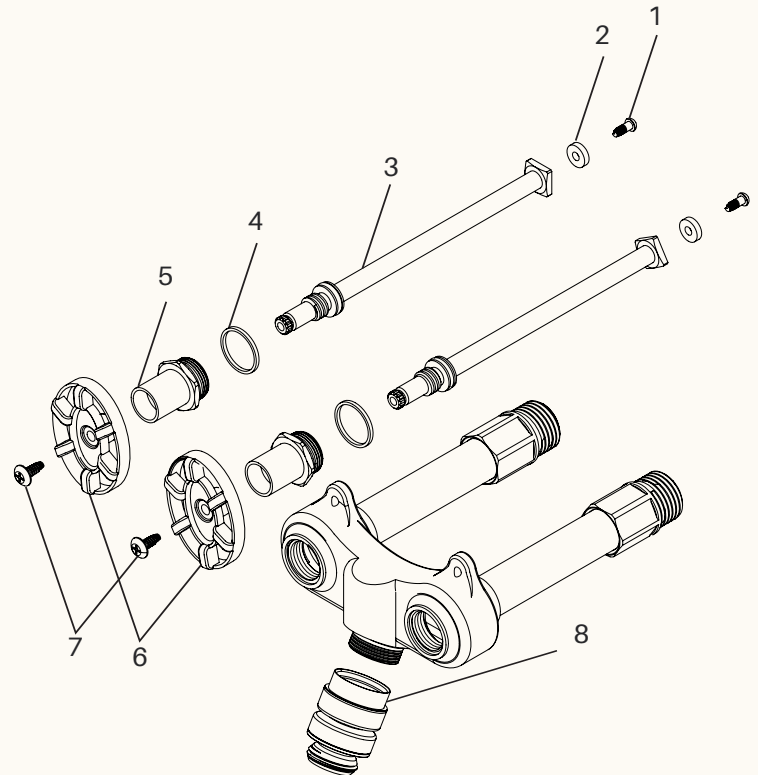
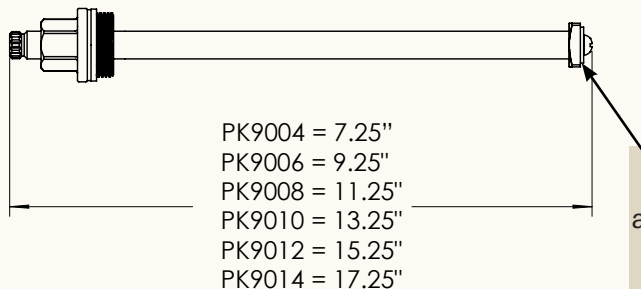


Repair & Replacement Parts

Stem Rebuild Kit 	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 
# PK1000 Seat washer (# 1) & screw (# 2), nylon washer (# 4) & handle screw (# 7)	# PK1299 Red & blue oval handles (# 6) & stainless screws (# 7)	# PK1390 Self-draining vacuum breaker- fine threads; PK- retail package (# 8)	# PK9004 4-inch hydrant stem assembly (#'s 1-5) (7-1/4" total length)	# PK9006 6-inch hydrant stem assembly (#'s 1-5) (9-1/4" total length)	# PK9008 8-inch hydrant stem assembly (#'s 1-5) (11-1/4" total length)	# PK9010 10-inch hydrant stem assembly (#'s 1-5) (13-1/4" total length)
490 Series 12" Stem Assembly 	490 Series 14" Stem Assembly 					
# PK9012 12-inch hydrant stem assembly (#'s 1-5) (15-1/4" total length)	# PK9014 14-inch hydrant stem assembly (#'s 1-5) (17-1/4" total length)					

How to measure a frost-proof stem:

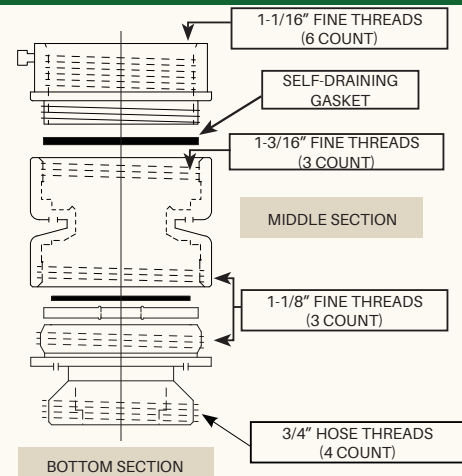
- 1- Measure overall (tip to tip) length of the stem assembly.
- 2- Subtract 3.25".



Some hot and cold hydrants may have a "springless check assembly" at the end [similar to the 420 hydrants on pages 6-7]. The PK90__ stems will work as a replacement.

On vertical hydrants, if your stem length does not match the dimensions stated left, contact Arrowhead Brass customer service for assistance.

Self-Draining Vacuum Breakers (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 (left open) 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

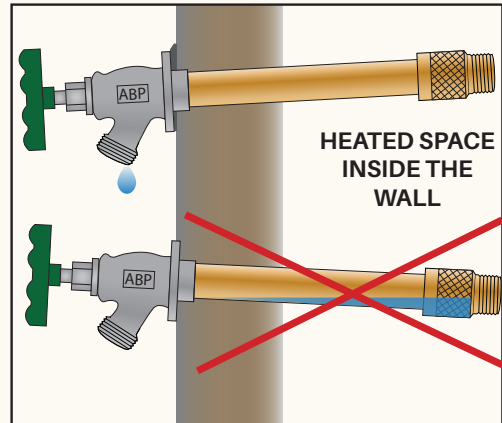
- Cause: worn out gasket and seals; happens with age & use, or when left on/open for long periods of time.
- Result: Leaks non-stop when on out of holes in "middle Section.
- Fix by replacing fine thread vacuum breaker.
- **TOP SECTION MUST BE REMOVED FROM FAUCET:** Ensure the fine thread top section 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 may leak at threads when faucet is in use.
- 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.

Frost-Proof Wall Hydrant Installation and Use



- Frost-proof wall hydrants are designed to prevent damage from freezing water in plumbing systems. Frost-proof wall hydrants protect the water supply from the cold weather by shutting-off flow at the heated space inside the wall.
- For a frost-proof wall hydrant to work properly, it must be installed at a slight downward angle toward the spout (as pictured right). This allows water to drain when it is shut-off. A gap spacer wedge can 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 lead to freeze damage.

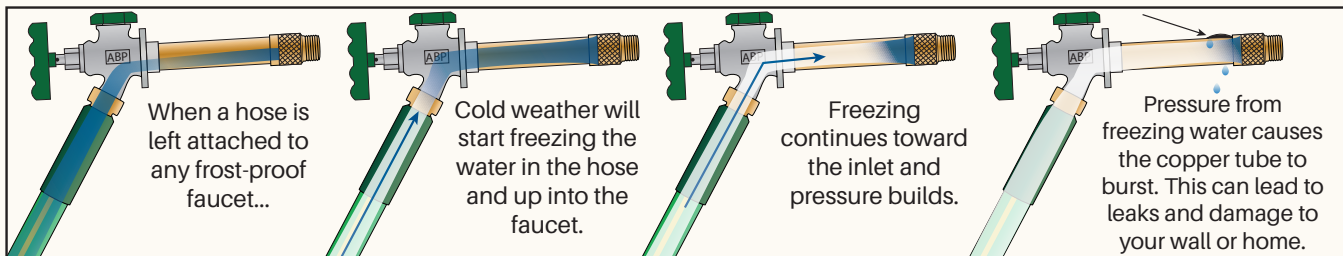


The only cause of a burst frost-proof hydrant is water expansion from freezing water inside an un-drained wall hydrant. Properly installed valves (with downward tilt) will always drain unless a hose or other device was left attached.



Grey gap spacer wedge can be used to ensure downward tilt.

"REMOVE HOSE IN FREEZING WEATHER".



When a hose or other device is left attached to the faucet (such as an irrigation timer, "y" hose splitter, or add-on back-flow preventer), water will remain trapped inside the wall hydrant. If cold weather hits, 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 and can cause considerable damage. Frost-proof wall hydrants are designed to prevent this damage as long as the user ensures the faucets are angled downward and all hoses/devices are removed during freezing weather.