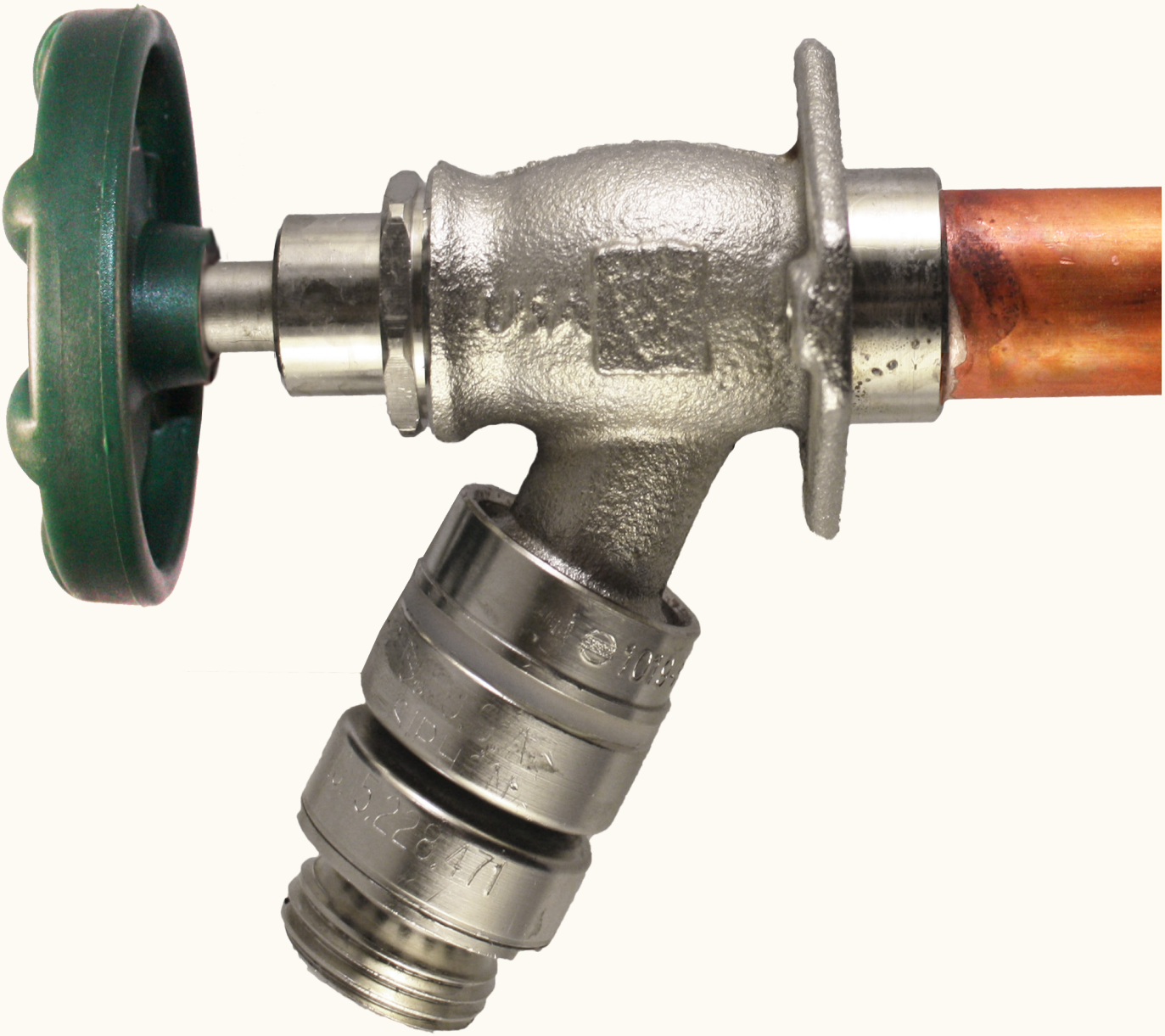
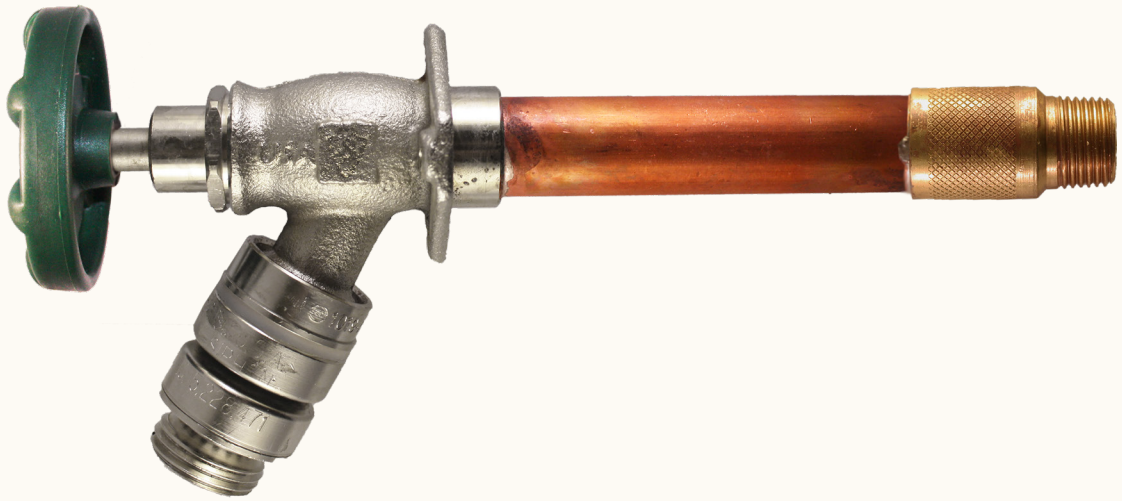
480 Series Self-Draining Wall Hydrant Installation, Use & Repair Guide



Arrowhead Brass 5147 Alhambra Ave., Los Angeles, CA 90032
Tel: (323) 221-9137 | Fax: (323) 221-2579 | Email: customer.service@arrowheadbrass.com | Website: www.arrowheadbrass.com

480 Series Self Draining Wall Hydrants



480 Series Hydrant Information

- Frost-Free Hydrants with Self-Draining Anti-Siphon Vacuum Breaker.
- Protects drinking water from harmful contaminates (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 (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.

Repair

Leaking out of the hose thread when "OFF"

- Faucet will not shut off, has constant leak.
- Cause: worn out washer or broken faucet seat.
- Replace seat washer & screw at end of the stem [PK1000] or replace entire stem assembly [PK8004 - PK8014].
- If new stem does not stop leak, the seat is damaged and the faucet will need to be replaced.
- If original stem is not a standard length [1/4" longer than even inch lengths], replace with PK80__SP.

Leaking out of the packing nut or bonnet:

- Cause: loose bonnet or worn out seals in the bonnet.
- Replace stem assembly with PK80__, measure tip to tip of the existing hydrant stem and subtract 4".
- If original stem is not a standard length [1/4" longer than even inch lengths], replace with PK80__SP.

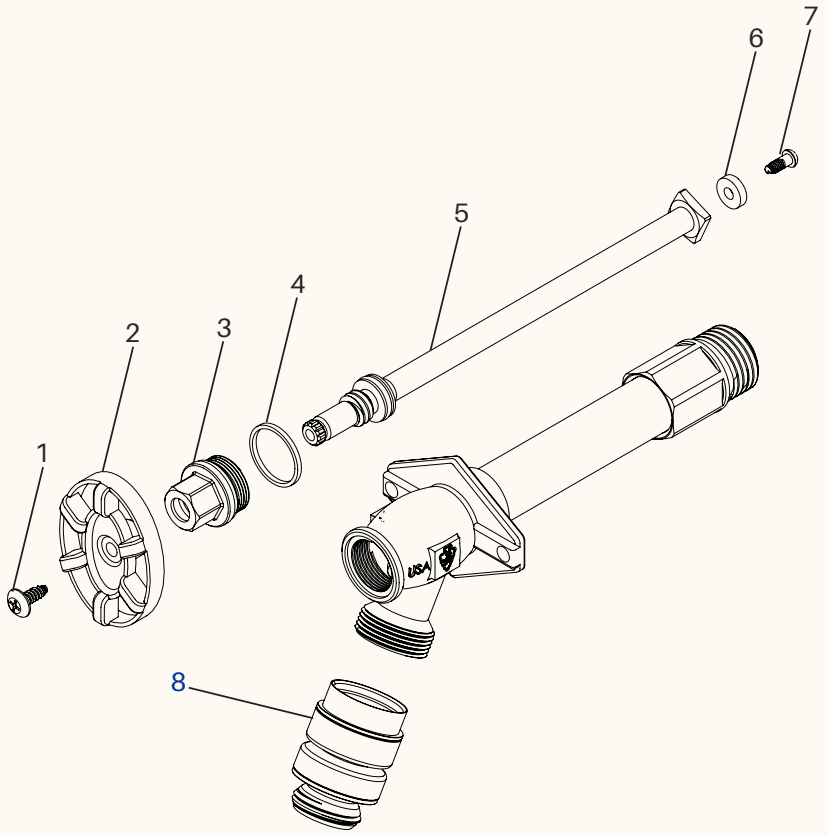
Arrowhead Brass 5147 Alhambra Ave., Los Angeles, CA 90032
Tel: (323) 221-9137 | Fax: (323) 221-2579 | Email: customer.service@arrowheadbrass.com | Website: www.arrowheadbrass.com

480 Series Self-Draining 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
						
# PK1000 Seat washer (# 6) & screw (# 7), nylon washer (# 4) & handle screw (# 1)	**# PK1295** Rubber-coated green oval handle (# 2) & stainless screw (# 1)	**# PK1390** Self-draining vacuum breaker- fine threads (# 8)	**# PK1450** Replacement gap spacer, used to tilt faucet downward	**# PK8004** 4-inch hydrant stem assembly (# 3-7) (8" total length)	**# PK8006** 6-inch hydrant stem assembly (# 3-7) (10" total length)	**# PK8008** 8-inch hydrant stem assembly (# 3-7) (12" total length)

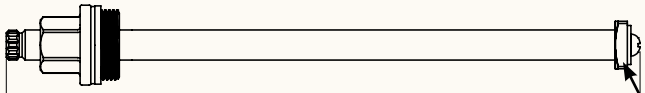
480 Series 10" Stem Assembly	480 Series 12" Stem Assembly	480 Series 14" Stem Assembly
		
# PK8010 10-inch hydrant stem assembly (# 3-7) (14" total length)	**# PK8012** 12-inch hydrant stem assembly (# 3-7) (16" total length)	**# PK8014** 14-inch hydrant stem assembly (# 3-7) (18" total length)



How to measure a frost-proof stem:

1- Measure overall (tip to tip) length of the stem assembly.

2- Subtract 4".



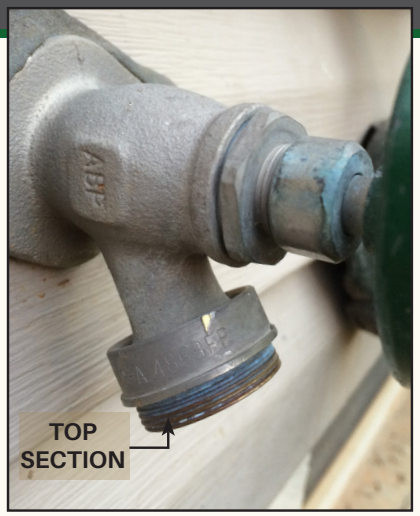
PK8004 = 8"
PK8006 = 10"
PK8008 = 12"
PK8010 = 14"
PK8012 = 16"
PK8014 = 18"

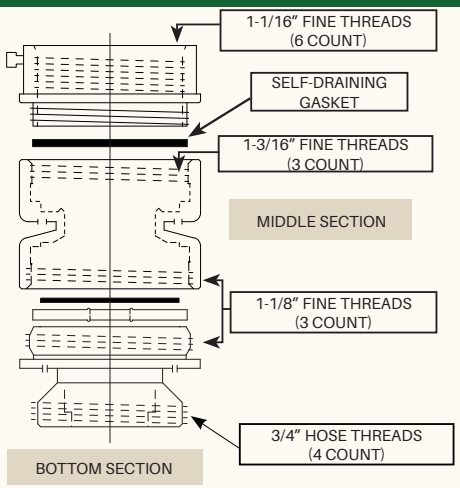
On faucets older than 1999: replacement stems may require a trim to the brass square washer retainer. Use a file or grinder to trim 1/16" off each corner to fit the stem into faucet. Contact Arrowhead Brass for more information.

If the original stem is not an even length from tip to tip (8", 10", 12", 14", 16" or 18"), and is 1/4" longer, you likely will need an "SP" stem: PK80__SP.

Arrowhead Brass 5147 Alhambra Ave., Los Angeles, CA 90032
Tel: (323) 221-9137 | Fax: (323) 221-2579 | Email: customer.service@arrowheadbrass.com | Website: www.arrowheadbrass.com

Self-Draining Vacuum Breakers (PK1390)





Self-Draining Vacuum Breaker Information

- ASSE 1019 back flow preventer.
- Protects drinking water from harmful contaminates (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

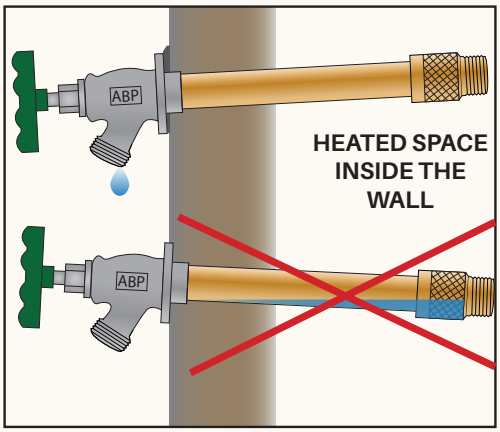
- Cause: worn out gasket and seals; happens with age & use, or when left on/open for long periods of time.
- Result: Leaks non-stop when on out of holes in "middle Section.
- Fix by replacing fine thread vacuum breaker.
- **TOP SECTION MUST BE REMOVED FROM FAUCET**: Ensure the fine thread top section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

Arrowhead Brass 5147 Alhambra Ave., Los Angeles, CA 90032
Tel: (323) 221-9137 | Fax: (323) 221-2579 | Email: customer.service@arrowheadbrass.com | Website: www.arrowheadbrass.com

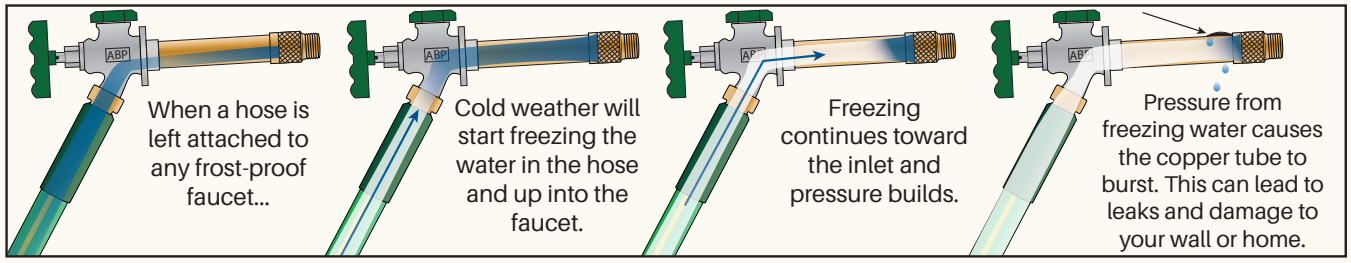
Frost-Proof Wall Hydrant Installation and Use

- 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.

Arrowhead Brass 5147 Alhambra Ave., Los Angeles, CA 90032
Tel: (323) 221-9137 | Fax: (323) 221-2579 | Email: customer.service@arrowheadbrass.com | Website: www.arrowheadbrass.com