



# REPAIR GUIDE

## 480 Series

### Frost-Free Anti-Siphon Hydrant



#### ANTI-SIPHON FROST-FREE HYDRANT INFORMATION

- Frost-Free Hydrants with Self-Draining Anti-Siphon Vacuum Breaker
- Protects drinking water from harmful contaminants (pesticides, herbicides, etc)
- Drains water from valve upon shut off to protect faucet & pipes from freezing & damage;
- Heavy Duty Red Brass Construction (82% Copper content)
- ASSE 1019 Listed; IAPMO Certified
- Made in the USA; 3-Year Limited Warranty
- **Do not leave faucet open for more than 12 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
-  Not intended for potable water use (contains lead)

#### 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 [5 & 6]
- 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 the bonnet has the old 2-piece style with graphite packing, replacing the entire stem is suggested [PK8004-PK8014]; but graphite packing is available [part # 3]
- 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

**SEE PAGE 2 FOR INFORMATION ON REPLACING THE  
SELF-DRAINING VACUUM BREAKER**

5147 Alhambra Ave. ▼ Los Angeles ▼ CA ▼ 90032  
P. 323.221.9137 ▼ F. 323.221.2579 ▼ [www.arrowheadbrass.com](http://www.arrowheadbrass.com)



# REPAIR GUIDE

## Self-Draining Vacuum Breaker

### 59BFPCHR or PK1390

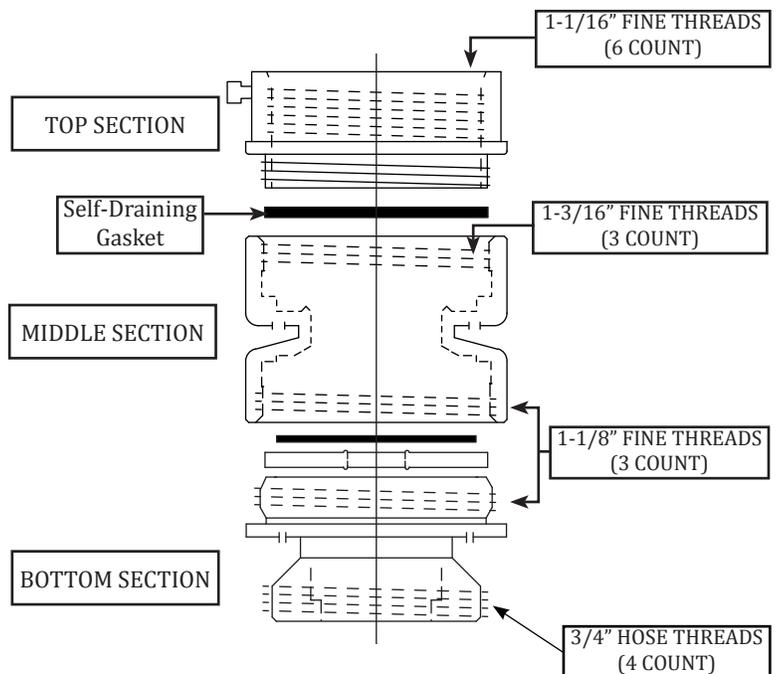


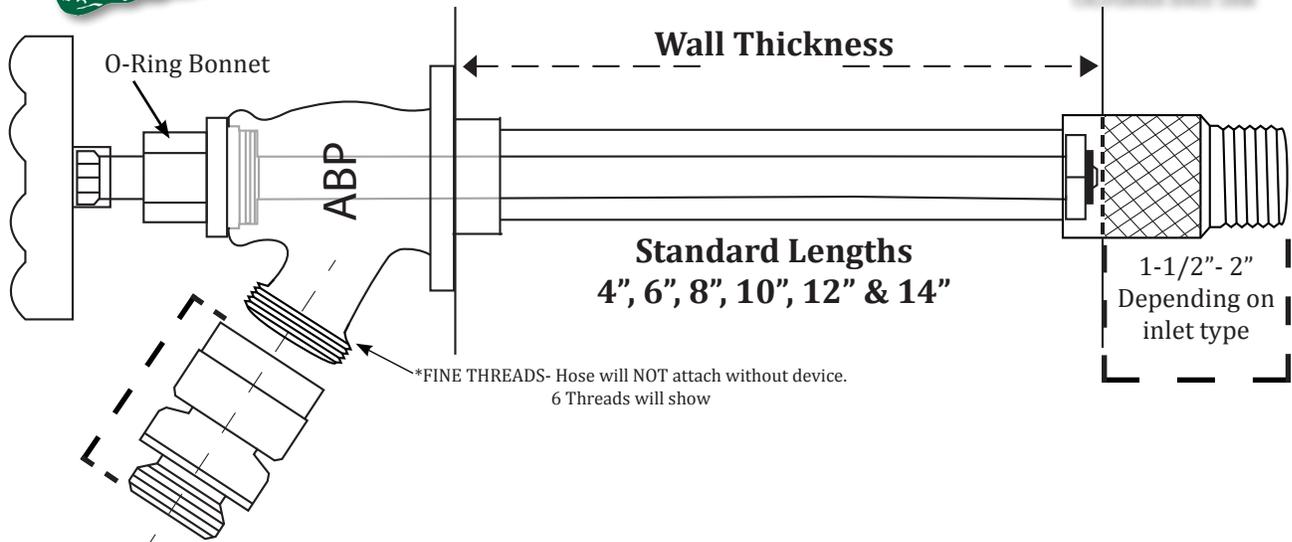
#### ANTI-SIPHON FROST-FREE HYDRANT INFORMATION

- Self-Draining Anti-Siphon Vacuum Breaker
- Protects drinking water from harmful contaminants (pesticides, herbicides, etc)
- Allows water to drain from valve upon shut off to protect faucet & pipes from freezing & damage;
- **Do not leave faucet open for more than 12 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 (not fully horizontal or vertical)

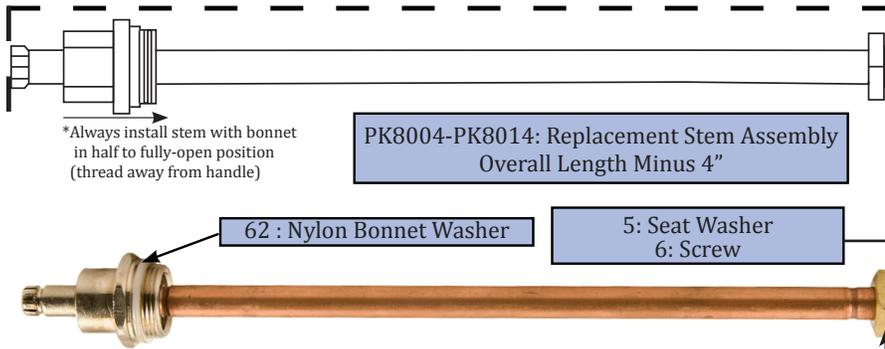
#### Repair: Vacuum Breaker Leaking

- 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





### HOW TO MEASURE YOUR FAUCET STEM:



**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.

### REPAIR KITS & PARTS

| Part Kit (PK) #             | Description  | Parts (Sold Separately) |
|-----------------------------|--|-------------------------|
| PK1295                      | Green Rubberized Coated Handle<br>Stainless-Steel Self-Tapping Screw                                     | 11RCH<br>8              |
| PK1390                      | Replacement Self-Draining Vacuum Breaker with Fine Thread Inlet, 3/4" male Hose Thread Outlet- Chrome    | 59BFPCHR                |
| PK8004<br>Through<br>PK8014 | Frost-Free Stem Assembly; Last two digits specify valve length 02"-14"<br>(Stem overall length minus 4") |                         |
|                             | Replacement Seat Washer  | 5                       |
|                             | Stainless-Steel Seat Washer Screw  | 6                       |
|                             | White Nylon Bonnet Washer  | 62                      |
| PK1450                      | Gap Spacer (Grey)  | 79                      |



### CONNECTION TYPES

| Model | Connection Type        |  |
|-------|------------------------|--|
| 481   | 3/4" Wirsbo® WPX       |  |
| 482   | 1/2" Wirsbo® WPX       |  |
| 483   | 3/4" Push-Fit          |  |
| 484   | 1/2" Push-Fit          |  |
| 485   | 1/2" FIP or 3/4" MIP   |  |
| 486   | 1/2" Sweat or 1/2" MIP |  |
| 488   | 3/4" Sweat or 3/4" MIP |  |
| 487   | 3/4" PEX Connection    |  |
| 489   | 1/2" PEX Connection    |  |