

# Limited Lifetime Faucet Warranty

Fluid™ warrants its faucets to be free from defects in material and workmanship for as long as the original consumer/purchaser/owner owns his or her home.\* Plastic and rubber components are warranted for a period of two years. This warranty applies only to original installation locations. If a defect is found in normal residential use, Fluid™ will, at its election, repair, provide a replacement part or product, or make the appropriate adjustment.

Fluid™ reserves the right to examine the product in question and its installation prior to replacement. This warranty is limited to replacement of defective parts only. Damage to a product caused by accident, improper installation, misuse or abuse, improper care of finishes, hard water or mineral deposits, potassium or salt based water softener systems or exposure to corrosive materials is not covered by this warranty. Improper care and cleaning will void the warranty.\*\* Replacement parts can be obtained from your local dealer or directly from the Fluid™ warehouse, (shipping charges may apply). Dated proof of purchase must accompany all warranty claims. This warranty applies only to Fluid™ faucets installed in the United States of America, Canada or Mexico (North America).

Fluid™ recommends using a certified plumber for faucet installation and repair. Incidental and consequential damages, labor charges, repair or replacement costs are expressly excluded. In no event shall the liability of Fluid™ exceed the purchase price of the faucet. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights which vary from state/province to state/province. If you find any such problem with your product, please immediately contact your nearest Fluid™ dealer or sales representative.

# fluid |

## Sustainable Solutions

## Need Help?

For additional assistance  
Toll Free: 1 800 460 7019  
Fax: 1 604 430 5050  
[help@sustainablesolutions.com](mailto:help@sustainablesolutions.com)  
[www.sustainablesolutions.com](http://www.sustainablesolutions.com)

\* Two year warranty on commercial applications.

\*\* Never use cleaners containing abrasive cleansers, ammonia, bleach, acids, waxes, alcohol, solvents or other products not recommended for surface finishes. This will void the warranty.

This product meets or exceeds the following standards:

ASME A112.18.1 / CSA B125.1

This product has been tested and certified by IAPMO.



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Pressure Balancing Valve Set w/ 2-Way Diverter / VO / 2019

## Installation Instructions for Pressure Balancing Valve Set w/ 2-Way Diverter F1012B

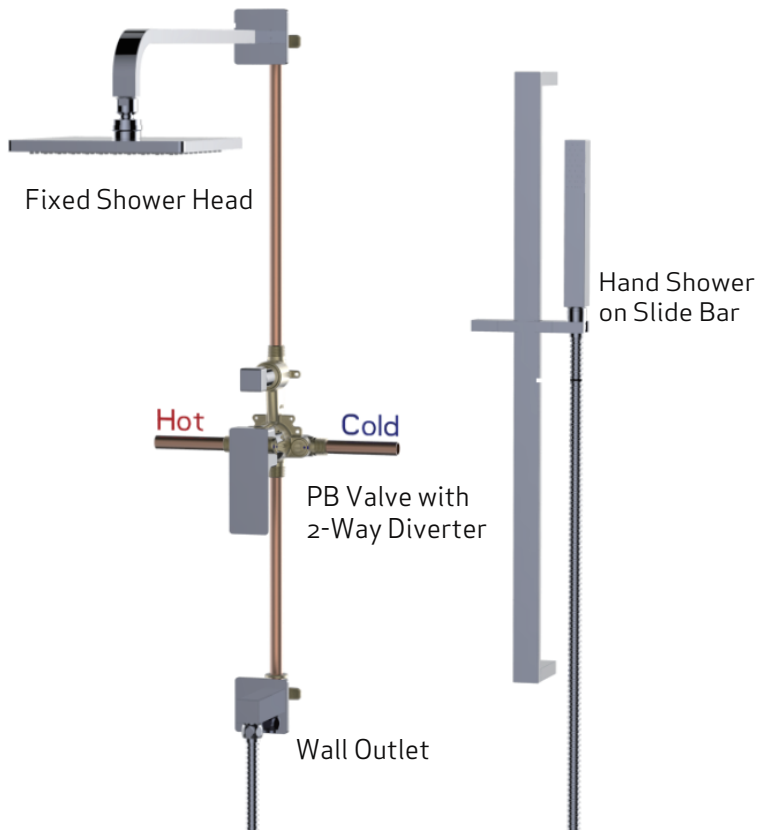


Do not complete and cover over rough in installation until valve and diverter (if any) have been fully water tested for any leaks.

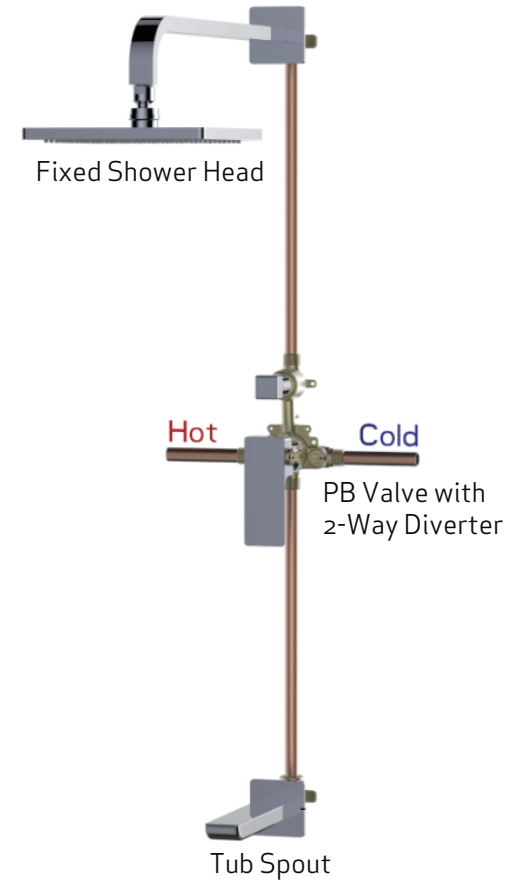
Please Keep This Manual For Future Reference

# Recommended Installation Layout for F1012B Pressure Balancing Valve with 2-Way Diverter

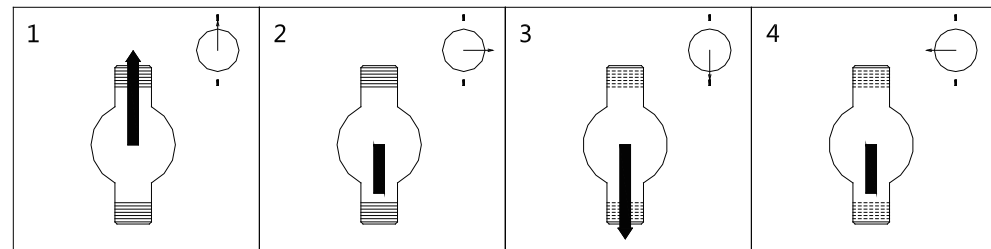
## 1. Fixed Shower and Handheld Shower on Slide Bar



## 2. Tub and Fixed Shower

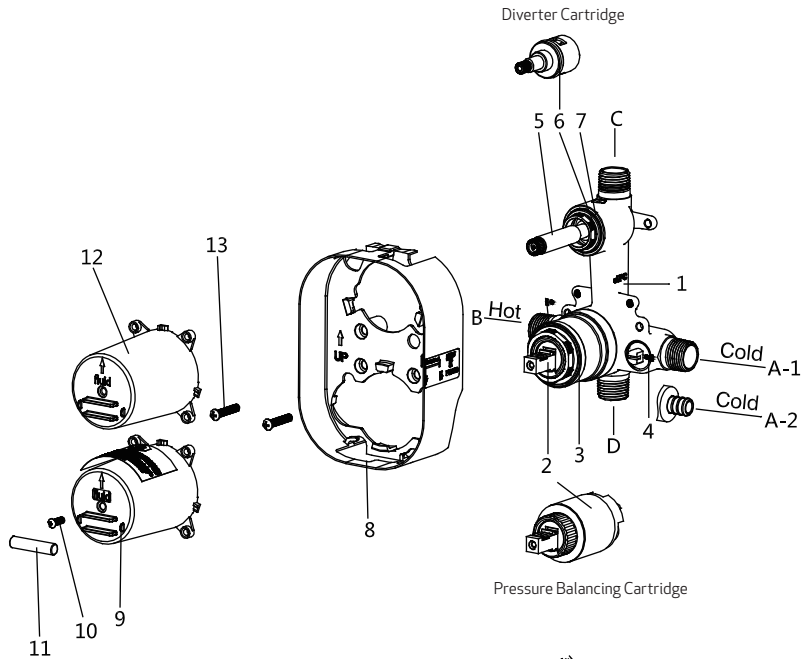


### Water Flow For 2Way Diverter Valve - Open

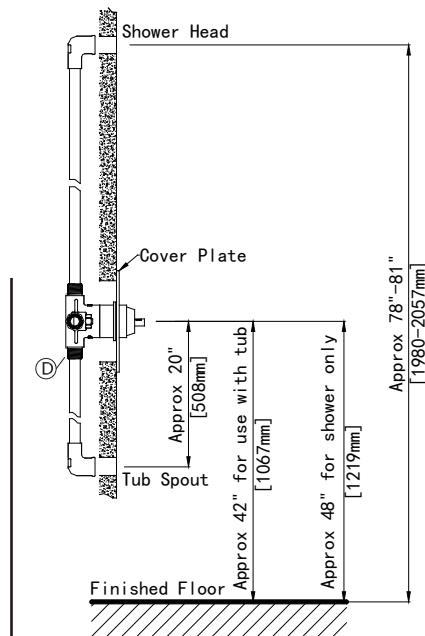


# Tools Required for Installation

-  Teflon Tape (not supplied)
-  Adjustable Wrench (not supplied)
-  Screwdriver (not supplied)
-  Soldering Equipment (not supplied)



The drawing shows typical measurements from the floor. In order to assure proper function, piping from the bottom port D of valve to tub spout outlet MUST be 1/2" nominal copper pipe. Do not use PEX FOR THIS CONNECTION.



# Valve Installation Instructions

1. Shut off cold and hot water supplies.
2. Use the recommended measurements on the left page to choose a proper location for the valve body (#1) and use the enclosed cutout template (#8) to cut the wall properly.
3. This pressure balancing valve must be installed with the cold inlet port (A, marked in blue color) on the right and the hot inlet port (B, marked in red color) on the left. Also ensure that the arrow, the word "UP" and "fluid" on the cutout template (#8) point upwards. Use the bubble level (#11) for leveling reference.
4. Install the valve body (#1) so that the surface of FINISHED wall is between the MIN and the MAX mark on the side of cutout template (#8).
5. Connect the valve body (#1) to water supplies using proper fittings (copper tubing or PEX). (A) is the cold inlet port and (B) is the hot inlet port.
  - 5.1 For 1/2" Copper Tube Soldering Connections: Solder water supply tube to body (#1). NOTE: Prior to soldering remove plastic cut out template (#8) and round mud guards (#9 and #12) all together by unscrewing and removing two screws (#13). Avoid soldering excessively at high temperature.
  - 5.2 For 1/2" IPS Connections: Apply Teflon tape or other thread sealant onto male threads and connect water.

6. Remove two round mud guards (#9 and #12) by turning counter-clockwise, then turn on cold and hot water supplies and flush clean the piping system.

NOTE: It's critical to flush clean the piping system well to clean and remove debris and dirt in order to prevent them from plugging the anti back flow devices in the integral stop valves (#4).

7. After flushing the piping system, install cartridges (#2 and #6) and integral stop valves (#4).

7.1 Install pressure balancing cartridge (#2). Align two position pins at the bottom surface of cartridge (#2) with two position holes in the cavity and firmly push the cartridge (#2) in without any left or right movement. Screw in brass retaining nut (#3) and tighten with a 1-11/32" socket wrench or an adjustable wrench. Do not over-tighten.

7.2 Install diverter cartridge (#6). Align two position pins at the bottom surface of cartridge (#6) with two position holes in the cavity and firmly push the cartridge (#6) in without any left or right movement. Screw in brass retaining nut (#7) and tighten with a 29/32" socket wrench or an adjustable wrench. Do not over-tighten.



7.3 Install integral check stop (#4). Integral check stop marked with blue color should be installed at the cold port (A) on the right. Integral check stop marked with red color should be installed at the hot port (B) on the left. Push integral check stop (#4) into the cavity and screw in a clockwise direction with a flat head screwdriver until it stops. Then turn integral check stops (#4) in a counter-clockwise direction less than one turn to align blue or red indicator on the integral check stop (#4) with the blue or red indicator on the valve body (#1). When the integral check stop (#4) color is aligned with the color on the valve body (#1), it is in the fully OPEN position. The integral check stop (#4) is in the fully CLOSED position with the color indicator on the integral stop is at a 90 degree angle to the color indicator on the valve body. Illustration of integral check stops in OPEN and Closed position is shown on page 7.



8. With both integral stops (#4) in the fully OPEN position, turn on cold and hot water supplies and conduct a system water pressure leak test.

NOTE: To protect the valve, keep mud guards and cut out template (#8, #9 and #12) on during installation. Remove only when you are ready to install trims.

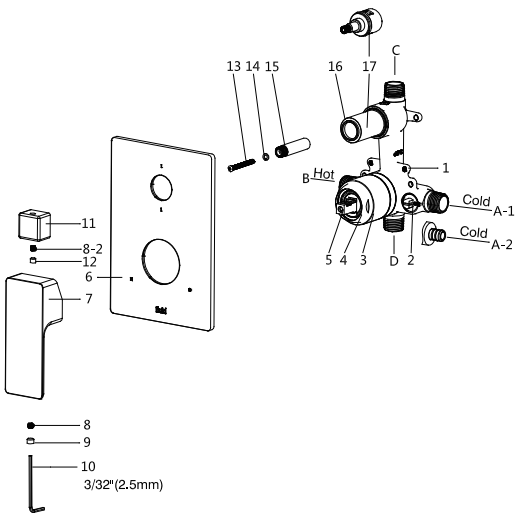
**IMPORTANT NOTE:** In keeping with standard plumbing practices it is essential that all tub/shower systems be tested extensively for leaks before the finishing wall, (tile, etc.) is completed. Also ensure that the integral stops (#4) are exposed, (not covered by tile, boarding etc.) under the removable trim plate. The trim plate should completely cover the rough-in opening when attached. (Having access to these stops allows you to stop the water flow to your shower system without turning off the water to the rest of the bathroom or home.)

# Tools Required for Installation

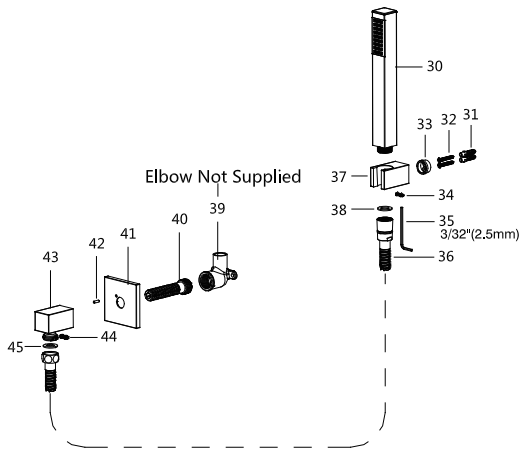
-  Teflon Tape (not supplied)
-  Adjustable Wrench (not supplied)

-  Screw Driver (not supplied)
-  5/16"(8mm) Allen Wrench (not supplied)

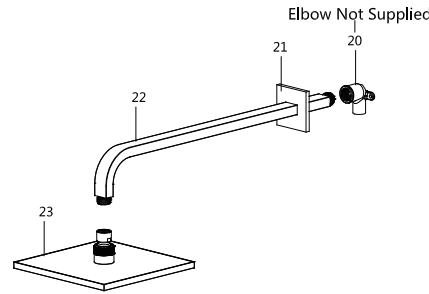
## 1. Cover and Handle



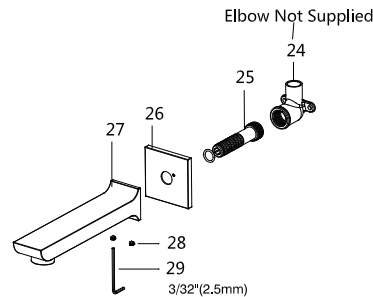
## 4. Hand Shower



## 2. Shower Head



## 3. Tub Spout



# Trim Installation Instructions

Use the Recommended Installation Layout to plan trim installation.

### 1. For Cover and Handle Installation

- 1.1 Remove two round mud guards by turning counter-clockwise.
- 1.2 Remove cutout template or use a knife to remove the edge outside the finished wall.
- 1.3 Screw small decorative tube (#16) over the diverter valve and slide large decorative tube (#3) onto the pressure balancing valve.

- 1.4 Peel the white tape off the seal gasket on the backside of the round or the soft square cover plate (#6).
- 1.5 Use water to wet the round rubber gaskets on the cover plate (#6) and slide cover plate (#6) over two decorative tubes (#3 and #16). Gently press cover plate (#6) against the finished wall.

- 1.6 Install handle (#7) onto the pressure balancing cartridge stem (#5). Secure handle (#7) by tightening set screw (#8) by using the supplied 3/32" (2.5mm) Allen Wrench (#10). Cover the hole with the supplied Silicon plug (#9).

- 1.7 To position diverter handle (#11) at the desired upward position, loosen screw (#13), rotate spindle adapter (#15) and at the same time rotate diverter handle (#11) until the desired position is achieved.

- 1.8 Secure the spindle adapter (#15) with screw (#13) and spring washer (#14) and diverter handle (#11) with set screw (#8-2) by using 3/32" (2.5mm) Allen wrench (#10). Push in silicon plug (#12).

### 2. For Shower Head Installation

- 2.1 Make sure that 1/2" threaded elbow (#20) is installed securely inside the wall.
- 2.2 Slide flange (#21) over shower arm (#22).
- 2.3 Screw shower head (#23) onto shower arm (#22) and tighten with an adjustable wrench.

### 3. For Tub Spout Installation

- 3.1 Make sure 1/2" threaded elbow is installed securely inside the wall.
- 3.2 Apply Teflon tape onto male threads and screw Speed Connector (#25) into threaded elbow (#24). NOTE: For Speed Connector (#25) installation details, refer to the enclosed General Instructions for Speed Connector.
- 3.3 Slide escutcheon (#26) and tub spout

- (#27) over Speed Connector (#25) all the way against the finished wall.

- 3.4 Secure tub spout (#27) with two set screws (#28) by using 3/32" (2.5mm) Allen wrench (#29).

### 4. For Handheld Shower Wand Installation

- 4.1 Make sure 1/2" threaded elbow (#39) is installed in place securely inside the wall.
- 4.2 Apply Teflon tape onto male threads and screw Speed Connector (#40) into threaded elbow (#32).
- 4.3 Slide escutcheon (#41) over Speed Connector (#40).
- 4.4 Install water outlet (#43) into Speed Connector (#40). Depending on choice of round and square model, pin (#42) is inserted into square outlet.
- 4.5 Secure water outlet (#43) by tightening set screws (#44) with 3/32" (2.5mm) Allen wrench (#35).
- 4.6 Determine location of handheld shower holder (#37).

- 4.7 Mark position of mounting bracket (#33) on the finished wall.

- 4.8 Drill holes per marks and insert plastic anchors (#31) into the finished wall.

- 4.9 Secure mounting bracket (#33) against the finished wall by fastening screws (#32).

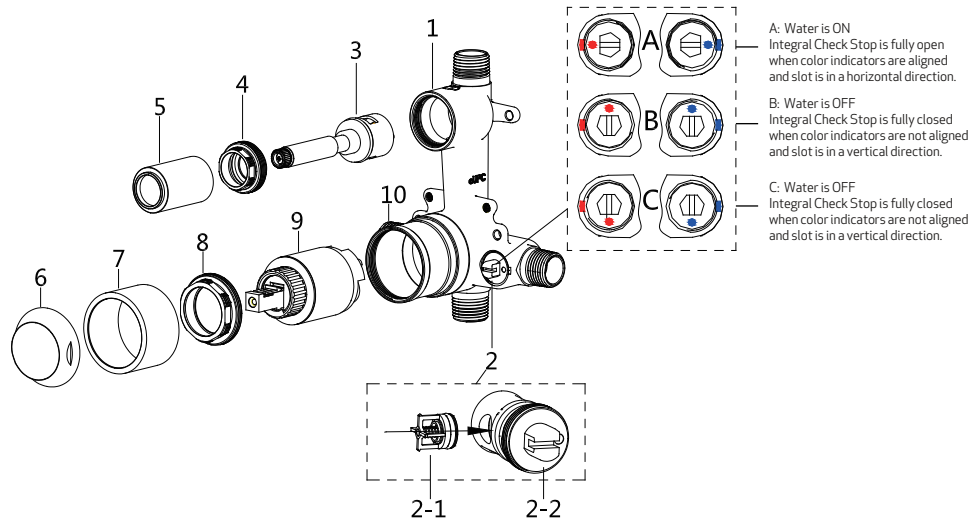
- 4.10 Secure holder (#37) with set screws (#34) using 3/32" (2.5mm) Allen wrench (#35).

- 4.11 Insert rubber washers (#38) into the thread fittings of flex shower hose (#36).

- 4.12 Thread flex shower hose (#36) onto water outlet elbow (#43) and handheld shower wand (#30) at the end of flex shower hose (#36).

5. To seal and prevent water from leaking behind trim pieces, apply a small bead of silicon between the finished wall and the top and side edges of cover plate (#6) and all escutcheons (#21, #26 and #41). For round plate, apply to the top arc.

# Cleaning and Maintenance Instructions



## For Pressure Balancing Cartridge:

1. Close two integral check stops (#2) with a flat head screwdriver by turning less than one turn. When two matching color indicators are 90 degrees apart and the slot on integral check stop body (#2-2) is in vertical position, the integral check stop (#2) is at a fully closed position.
2. Remove decorative ring (#6), decorative sleeve tube (#7) and retaining nut (#8) using an adjustable wrench or a 1-11/32" socket wrench.
3. Use two fingers to grasp the stem of cartridge (#9) and wiggle, then pull out.
4. Shake cartridge (#9) and ensure that a clicking sound is heard, which means the pressure balancing spool moves freely and works properly.
5. You may soak the cartridge (#9) in 50-50 vinegar/water mix to remove any calcium and mineral build-up. Replace the cartridge (#9) if it is damaged.
6. Follow instruction 7.1 on page 4 for proper pressure balancing cartridge (#9) installation.

## For Two-Way Diverter Cartridge:

1. Turn off pressure balancing cartridge (#9) by closing handle to stop water flowing into diverter cartridge (#3).
2. Unscrew and remove decorative tube (#5) by hand.
3. Remove retaining nut (#4) with an adjustable wrench or a 29/32" sock wrench.

4. Use two fingers to pull diverter cartridge (#3) out. You may soak cartridge (#3) in 50-50 vinegar /water mix to remove any calcium and mineral build-up. Replace the diverter cartridge (#3) if it is damaged.

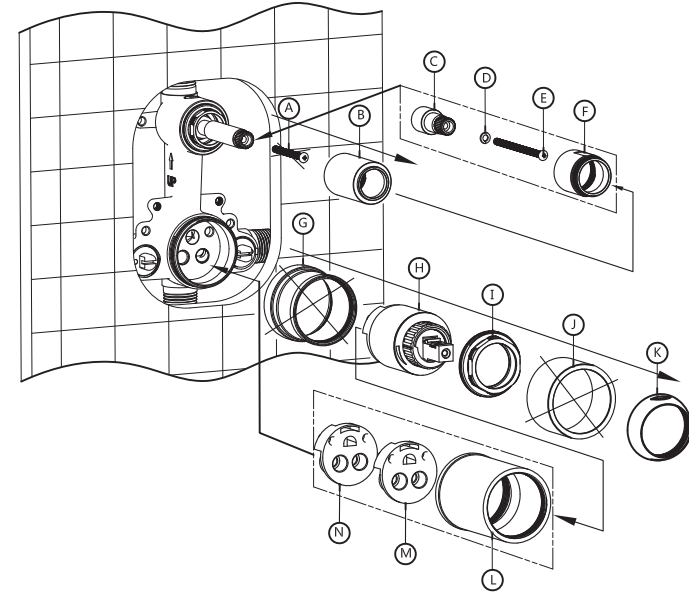
5. Follow instruction 7.2 on page 4 for a proper two way diverter cartridge (#3) installation.

## For Integral Check Stops:

1. Remove integral check stop (#2) by unscrewing with a flat head screwdriver in counter-clockwise direction and then pulling out with two fingers or pliers.
2. You may soak integral integral check stop (#2) in 50-50 vinegar/water mix to remove any calcium and mineral build-up. Use a small needle to remove dirt and debris inside the check valve (#2-1).
3. If check valve (#2-1) is damaged or fully plugged, use a flat head screwdriver to push on the round end with some force to remove. Check valve (#2-1) that come with 4 snap fit wings can NOT be re-used and should be replaced once it is removed from the integral check stop body (#2-2).
4. With the round end of check valve (#2-1) facing the larger hole located on the opposite side of the color indicator painted on the integral check stop body (#2-2), push check valve (#2-1) into the integral check stop body (#2-2). If the check valve is installed in the wrong direction, it will not allow water to flow through the integral check stop (#2) and the valve body (#1).
5. Follow instruction 7.3 on page 4 for proper integral check stop installation.

# Deep Wall Installations:

If the valve body is installed too deeply behind the finished wall making installation of the cover plate and handle impossible, Extension Kit F-EXT1012 is available for purchase from fluid.



1. Remove decorative tube (#B) and screw (#A) for diverter cartridge.
2. Attach brass extension (#C) onto spindle adapter and secure with the supplied long screw (#E) and spring washer (#D).
3. Screw sleeve tube extension (#F) by hand onto the valve body, then screw decorative sleeve tube (#B) onto sleeve tube extension (#F).
4. After removing decorative ring (#K), decorative tube (#1) and retaining nut (#4), pull pressure balancing cartridge (#H) out.
5. Remove brass sleeve (#G) by hand or a pipe wrench. Replace it with long decorative sleeve tube (#L) in proper finish color.
6. Insert two raised blocks (#N and M) together into long decorative sleeve tube (#L) by aligning two pins on the bottom of raised block (#N) with two holes in the valve cavity.
7. Insert pressure balancing cartridge (#H) by aligning two pins on the bottom of cartridge with two holes on the raised block (#M). Ensure there is no movement when the cartridge is turned to left or right by hand.
8. Screw retaining nut (#I) onto long decorative sleeve tube (#L) by hand and tighten with an adjustable wrench or a 1-11/32" socket wrench. Do not over-tighten.
9. Screw decorative ring (#K) onto retaining nut (#I) by hand and tighten with an adjustable wrench. Do not over-tighten.