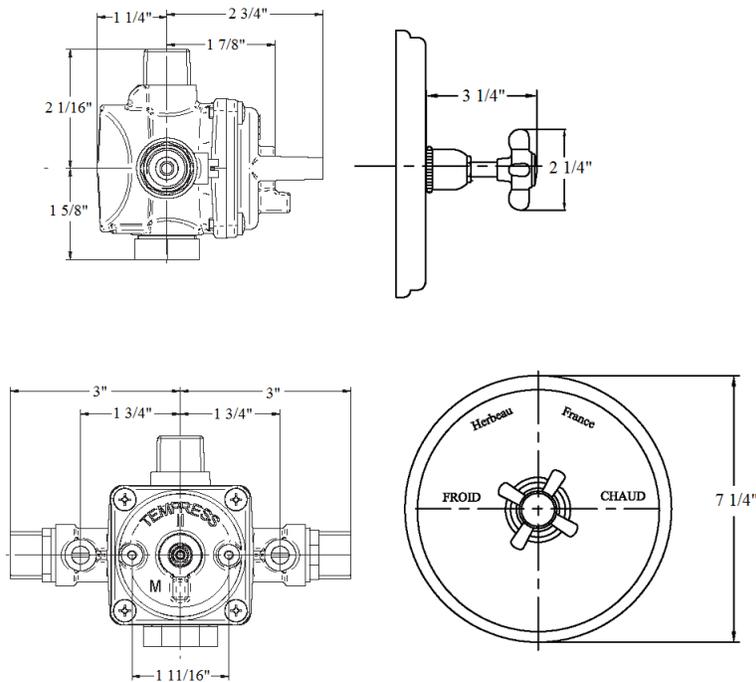


# 3077 – ‘Royale’ Pressure Balance Valve



## Technical Information

- Controls temperature.
- For 1/2" rough pressure balance valve.
- Available finishes are French Weathered Brass (47), Polished Chrome (48), SoliBrass (49), Lacquered Matte Black Nickel (50), Old Gold (52), Old Silver (53), Polished Brass (55), Polished Nickel (56), Brushed Nickel (57), Satin Nickel (60), Antique Lacquered Copper (67), Antique Lacquered Brass (68), Weathered Brass (70), Lacquered Polished Black Nickel (71) and Lacquered Polished Copper (80).
- Please See Cleaning Instructions: <http://herbeau.com/CleaningAll.pdf> For Finish Care and Maintenance Information.

Please follow example when ordering parts for Royale Pres. Bal. Valve

- To order part#10 – Royale Cross Handle

○ 950064xx

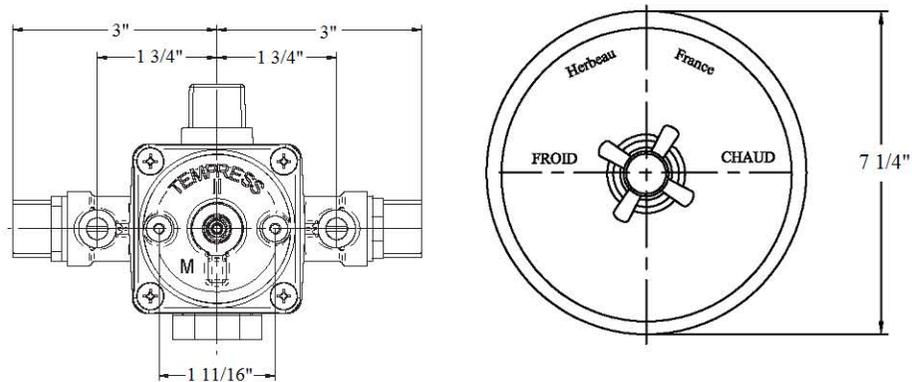
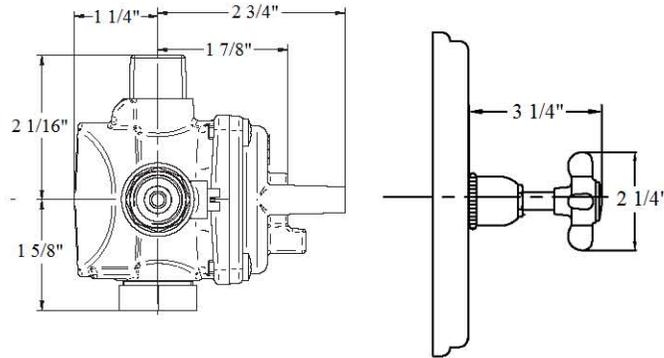
- Please substitute finish number needed in place of **XX**

Part #	Description
	<b><u>TRIM</u></b>
01	Mounting Plate
02	Finished Screw
03	Lille Wall Plate
04	Bell Escutcheon & Stem
06	Handle Screw
07	Washer
08	Rubber O-Ring
09	Handle Stem
10	Cross Handle
11	Finished Insert Holder
12	Black Logo Ceramic Insert
13	Hex Nut
91	Royale Insert Black Logo Assembly
	<b><u>ROUGH</u></b>
01	Screw
02	Stem
03	Collar
04	Screw
05	Face Plate
06	O-Ring
07	Modular Cartridge
09	Collar
11	Hex Collar
12	Hex Nut
13	1/2" Handle Ext. Kit
14	3/4" Handle Ext. Kit



**Herbeau**<sup>®</sup>  
L'Art du Sanitaire depuis 1857

# 3077 - 'Royale' Pressure Balance Valve

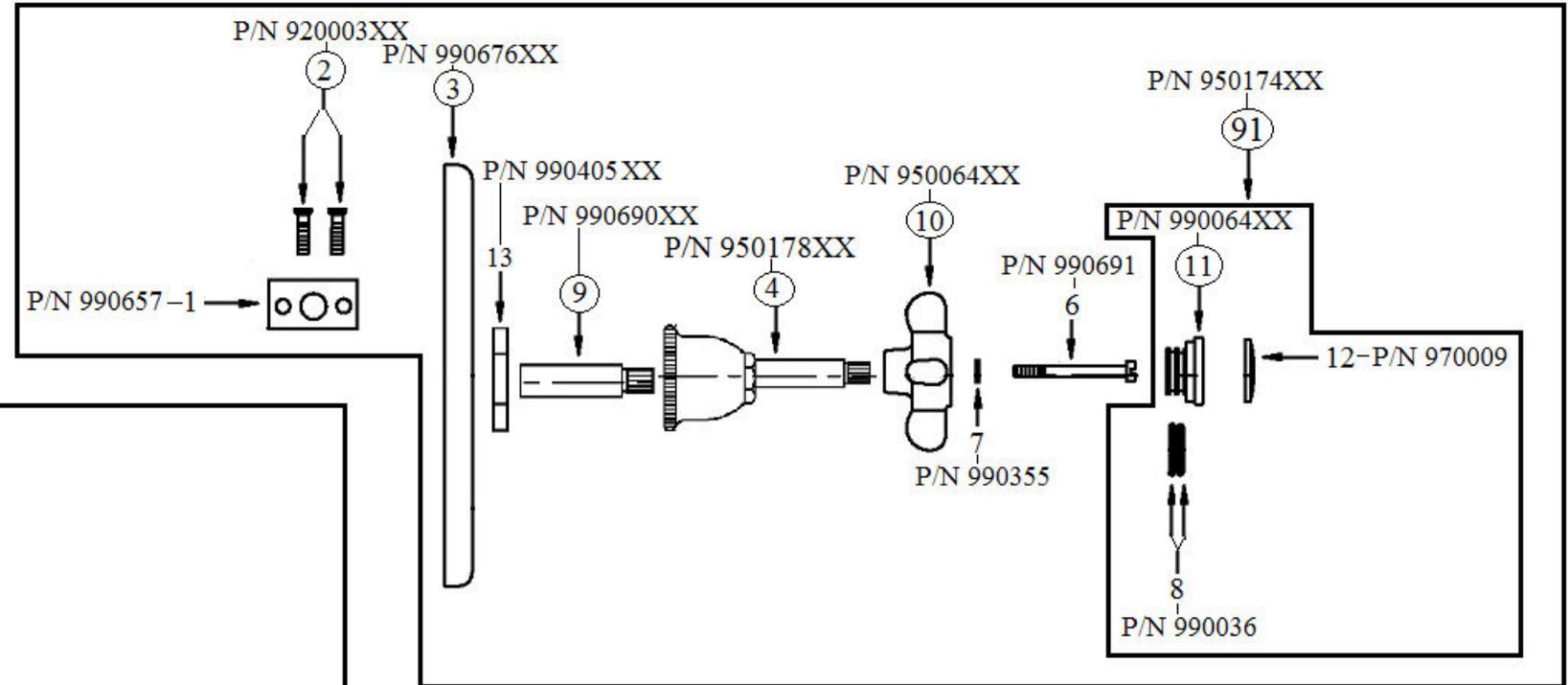
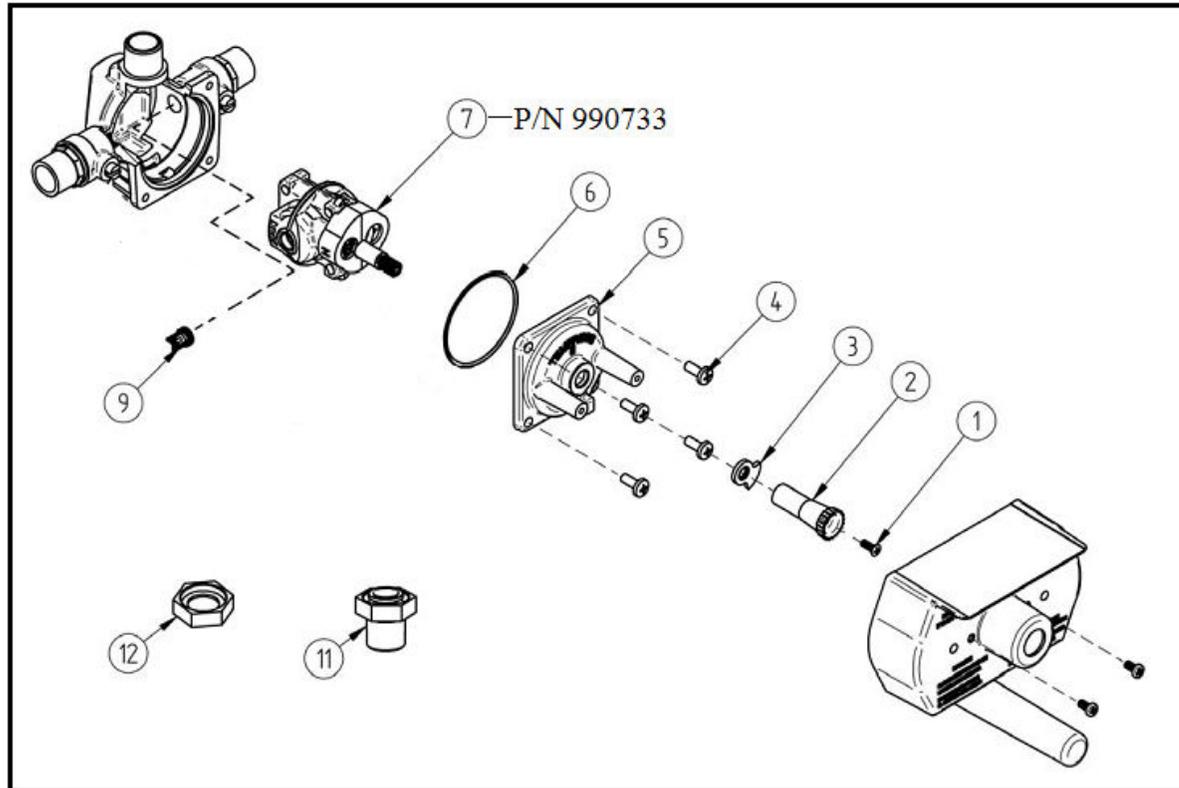


# 3077 - 'Royale' Pressure Balance Valve

\*P/N = PART NUMBER

- 13 - PART# 990731 - 1/2" HANDLE EXTENSION KIT
- 14 - PART# 990732 - 3/4" HANDLE EXTENSION KIT

## 3077-R Rough Only



## 3077(Finish)-Trim Only

○ = FINISHED PARTS

XX = TWO DIGIT FINISH CODE

# Modular pressure balance valve – 3 ports

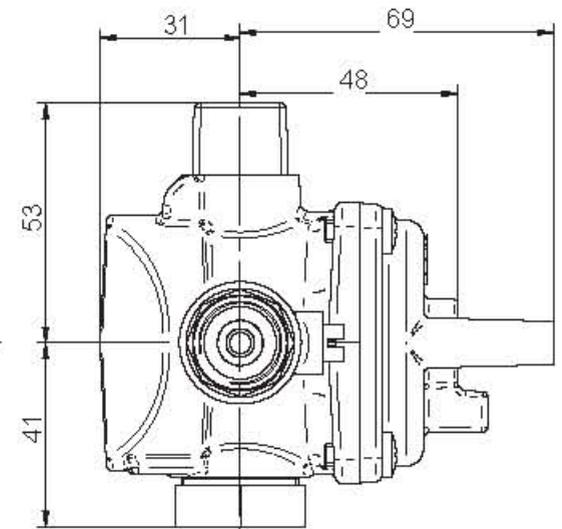
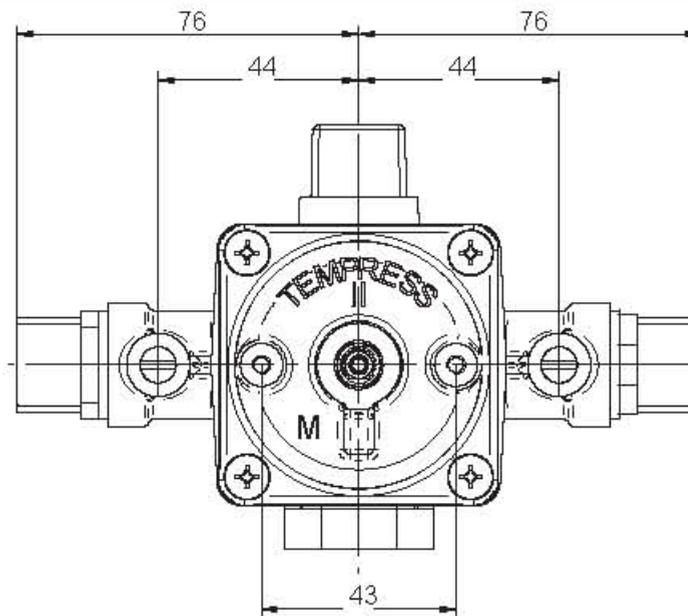
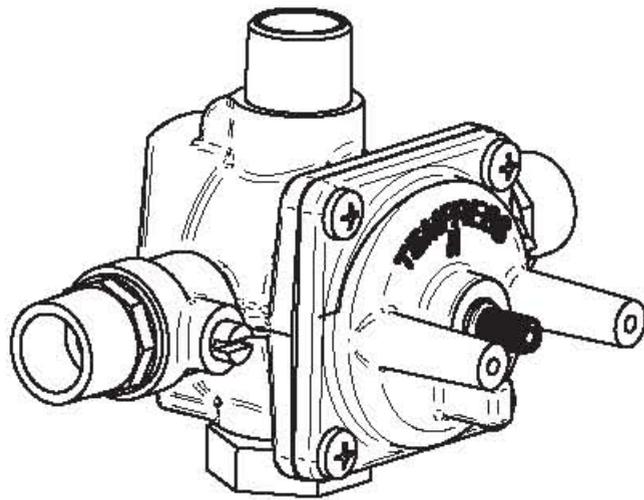
3077-R

## Description

The new modular pressure balance rough-in valve replaces the existing valve and offers the convenience of a second outlet that can be used with a diverter<sup>1</sup>, a dual outlet<sup>2</sup> or can be capped off. Tempress pressure balance valves offer protection from scalding and cold shocks. The rotating handle control provides the user with precise temperature control and a wide comfort zone.

## Features and Benefits

- Built-in service ball stops for convenience
- Check valves to prevent cross flow, reduce water hammer and direct water to cartridge
- ½" NPT male-C x C universal connections
- Protection against scalding and cold water shock provided by the diaphragm which compensates for water pressure fluctuations
- Temperature control within 3.6°F (2°C) of set point even with a 50% water pressure drop
- Reversible cartridge allows back to back installation, eliminating additional piping
- Shallow valve body suitable for thin wall installations
- Reduced stop to stop dimension allows for smaller escutcheons (trims)
- Elimination of inserts inside the valve cavity reduces replacement parts and trouble shooting
- Reduced overall dimensions thanks to a redesign of the valve and addition of a captive inlet O-ring to divert water
- Visual cartridge alignment and seating facilitates cartridge replacement



## Optional Fittings

- 1 31150010 Automatic diverter assembly w/plastic link
- 1 31150015 Automatic diverter assembly w/brass link
- 1 31150005 Manual Diverter assembly
- 2 44150330 Dual outlet fitting



31150010



31150015



31150005



44150330

## Technical Data

Min. operating pressure: 20 psi (140KPa)  
Max. operating pressure: 125 psi (860 KPa)  
Max. burst pressure: 500 psi (3450 KPa)  
Max. hot water temperature : 180°F (80°C)  
Flow rate – Shower 5.3 USGPM (20 l/min) @ 50 psi (345 KPa)

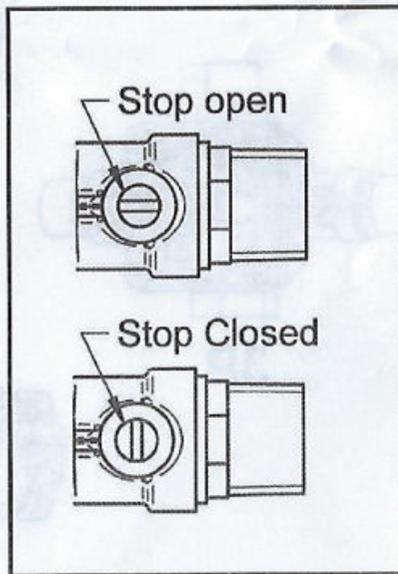
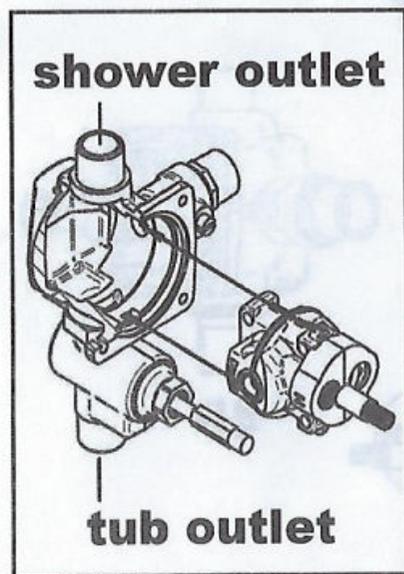
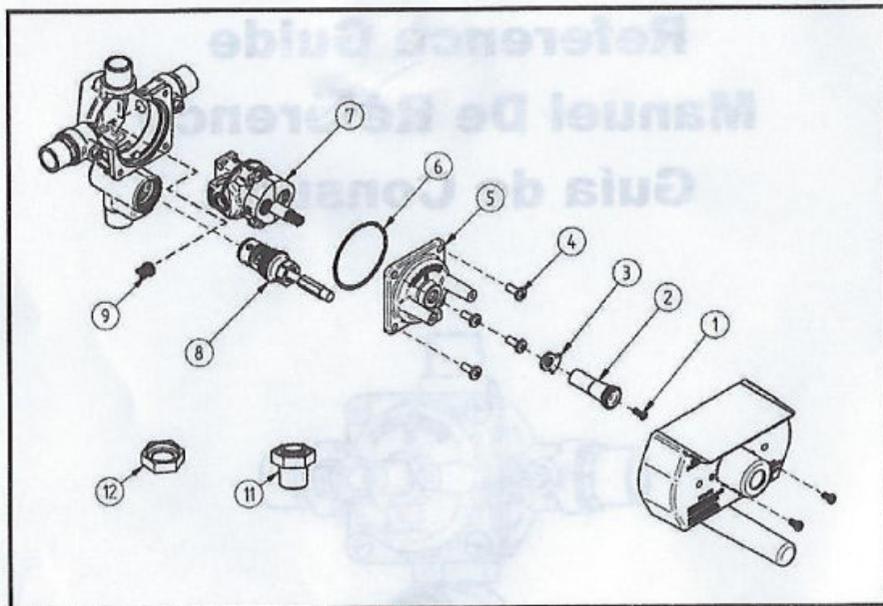
## Approvals

Approved to CSA B125,  
ASME A112.18.1, and  
ASSE 1016 standards.



Product and specifications subject to change without notice.

# 3077-R



## BEFORE YOU BEGIN

READ ALL DIRECTIONS PRIOR TO INSTALLATION. ANY ALTERATIONS MADE TO THE VALVE OR CARTRIDGE OR FAILURE TO FOLLOW THESE INSTRUCTIONS MAY CAUSE DAMAGE OR IMPROPER INSTALLATION AND WILL NULLIFY THE WARRANTY AS WELL AS INCREASE THE RISK OF SCALDING.

- Observe and adhere to all local plumbing codes.
- Pressure-balancing valves are designed for use with hot water supplied from pressurized storage heaters and **cannot** be used in conjunction with low-pressure storage heaters (displacement water heaters).
- Refer to the protective cover (mud guard) markings for proper installation depth. This cover **must** remain in place for plastering and/or tiling etc.
- If PEX (plastic) pipes are to be used, do not use PEX with a diameter of less than 3/4" between the valve and the tub spout (4-Port valves only). Smaller diameter pipes and fittings will cause stacking in the shower outlet.
- It is not necessary to remove the pressure-balancing cartridge from the valve during normal soldering of connections using propane-butane gas. **DO NOT USE OXYGEN-ACETYLENE.** When soldering connections, do not use excessive heat. Open the stop valves when soldering inlets.
- It is recommended that the pipes be flushed clean prior to installation, in order to avoid any problems later.
- Ensure that the stop ring is correctly installed per the instructions below, otherwise a user could potentially disengage the cartridge with minimal force to the external handle. This would cause the valve to fail and the user would be unable to turn the water on/off or control the temperature.

## SPECIFICATIONS

Min. Operating pressure:	20 psi [140 KPa]
Max. Operating pressure:	125 psi [860 KPa]
Max. Burst pressure:	500 psi [3450 KPa]
Max. Hot water temp.:	180°F [60°C]

Flow rate in USGPM [l/min] @ 50 psi [345 KPa]:

	Tub		Shower	
3P 3-Port:	-	-	5.3	[20]
4P 4-Port:	6.8	[26]	5.3	[20]
ID Diverter (Automatic):	6.5	[25]	5.3	[20]
ID Diverter (Manual):	-5.3	[20]	4.7	[18]

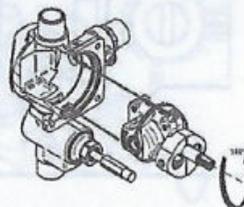
## ROUGH-IN NOTES

When installing 4-Port (4P) and Diverter (ID) valves, please ensure that the fixed outlet is up, and the configurable outlet is down.

Open the valve counterclockwise to verify the changes in outlet water temperature. The cartridge driver can be used to turn the cartridge stem.

To test pipe joints, and to inspect for any other possible leaks, pressurize both the hot and cold inlets **before** attaching the outer trim components.

For installations where the hot and cold water supplies are reversed, turn off the hot and cold water supplies and then simply take out the cartridge, rotate it 180° and re-insert as shown below.

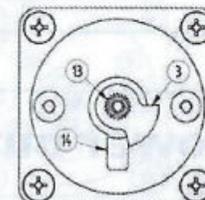


## STOP RING INSTALLATION

Ensure that the stop ring (3) is correctly installed as follows:

- Rotate the cartridge stem (13) fully **clockwise**.
- Position the stop ring on the stem such that it rests against the stop post (14).

The stop ring must be correctly installed **before** the outer trim is installed.



See the trim installation instructions included with the trim components to properly install the hot limit stop.

## INSTALLATION PROBLEMS

**If water continuously drips from the spout or showerhead and/or there is reduced water flow:**

- Turn off the water supplies.
- Remove the cartridge.
- Check for debris in the valve body
- Inspect o-rings for damage.
- Re-grease with silicone-based grease only.
- Re-install cartridge.

For additional troubleshooting help, please go to [www.lempress.ca](http://www.lempress.ca) or contact Point of Purchase.

We reserve the right to change specifications without notice. Some valves may not appear exactly as shown. Valves are warranted to be free from manufacturing defects for a period of 18 months from the date of manufacture. Modular PBV Cartridges are warranted to be free from manufacturing defects for a period of 10 years from the date of manufacture. Additional warranties may apply. All warranty concerns must be directed through the original point of purchase.

## 3077 TRIM INSTALLATION

### TOOLS NEEDED:

Slotted Screwdriver      Plumber's Grease

Phillips Screwdriver

Small Adjustable Wrench

1. Remove black plastic wall guide and set aside:



2. Remove #2 white plastic stem from rough with Phillips screwdriver and set aside:



3. Take #1 mounting plate and place over center of rough with counter-sink holes facing up. Thread two #2 slotted screws into plate and leave them slightly loose:



4. Take #4 bell and ensure #9 stem is inserted into the back of #4 bell as shown below left. Insert the assembly through the center of #1 mounting plate and fit it onto the rough nipple. Now finish screwing #2 slotted screws down tight to secure mounting plate to rough. (This aligns bell & stem.) Remove #4 bell & #9 stem and set aside for next step:



5. Position #3 wall plate over #2 mounting plate center post. Make sure you align it with the "Herbeau France" lettering at the top and Froid (cold) and Chaud (hot) are aligned with the cold and hot rough inlets. Thread #13 locking nut over center post and tighten with adjustable wrench so wall plate is secure:





6. Install #4 bell & #9 stem into center of #3 wall plate and turn the stem fully clockwise. (Note that #4 bell & #9 stem will sit slightly above the wall plate so it can turn freely without scratching the wall plate.):



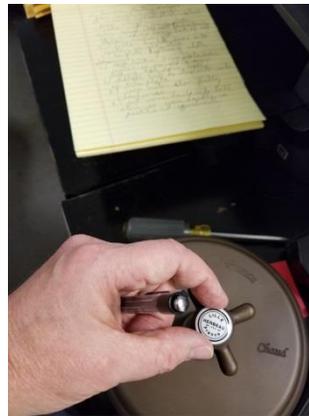
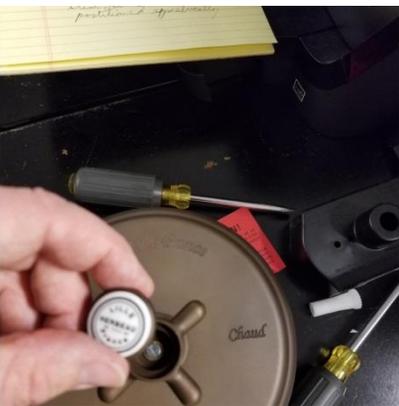
7. Install #10 cross handle onto #4 bell stem ensuring that cross handle is placed symmetrically:



8. Set #7 washer into center of #10 cross handle and thread #6 slotted handle screw into cross handle tightly with slotted screwdriver.



9. Take #91 logo insert and apply a small amount of plumber's grease to the rubber o-rings on the plug. Align correctly and insert the logo plug into the center of the cross handle:



10. Trim is now installed.