



Limited One Year Warranty
T&S warrants to the original purchaser (other than for purposes of resale) that such product is free from defects in material and workmanship for a period of one (1) year from the date of purchase. During this one-year warranty period, if the product is found to be defective, T&S shall, at its options, repair and/or replace it. To obtain warranty service, products must be returned to...

T&S Brass and Bronze Works, Inc.
Attn: Warranty Repair Department
2 Saddleback Cove
Travelers Rest, SC 29690

Shipping, freight, insurance, and other transportation charges of the product to T&S and the return of repaired or replaced product to the purchaser are the responsibility of the purchaser. Repair and/or replacement shall be made within a reasonable time after receipt by T&S of the returned product. This warranty does not cover items which have received secondary finishing or have been altered or modified after purchase, or for defects caused by physical abuse to or misuse of the product, or shipment of the products.

Any express warranty not provided herein, and any remedy for Breach of Contract which might arise, is hereby excluded and disclaimed. Any implied warranties of merchantability or fitness for a particular purpose are limited to one year in duration. Under no circumstances shall T&S be liable for loss of use or any special consequential costs, expenses or damages.

Some states do not allow limitations on how long and implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. Specific rights under this warranty and other rights vary from state to state.

P/N: 098-005911-45 Rev.3
Date: 980507
Drawn: CW
Checked: MAB 7-23-98
Approved: MVW 7-23-98

Installation and Maintenance Instructions



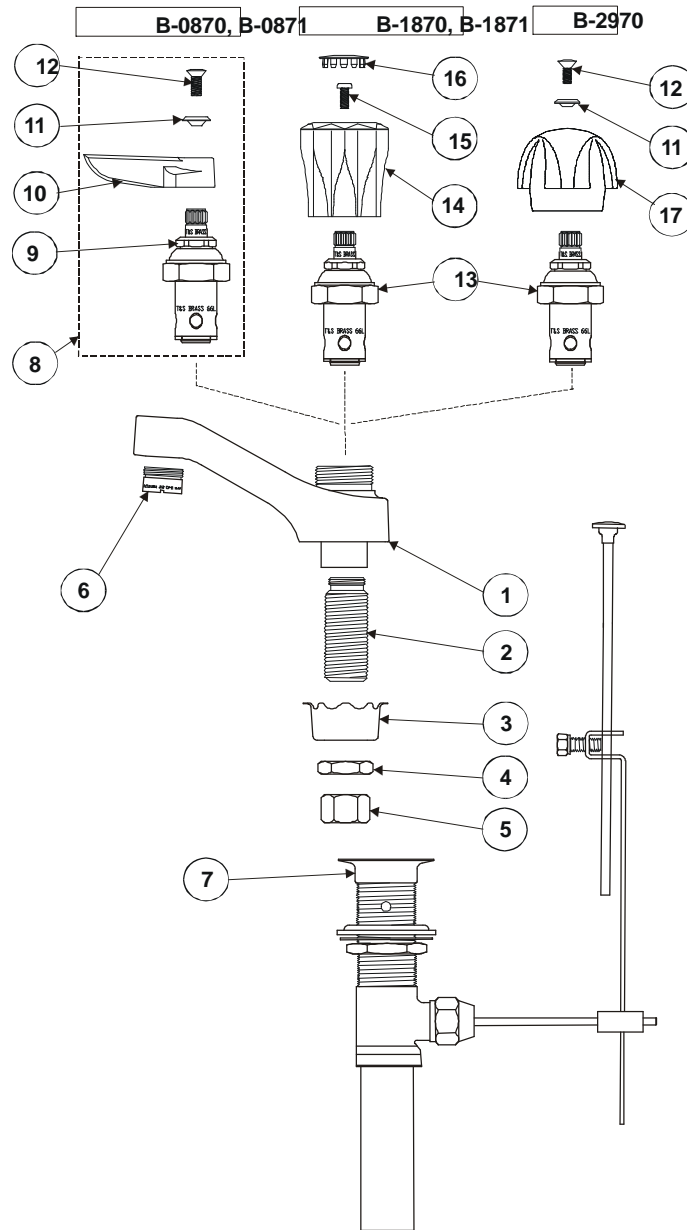
B-0870 Series Lavatory Faucets with or without Pop-Up

**Deutsch: Installations- und
Wartungsanleitungen**

**Español: la Instalación y las
Instrucciones de
Mantenimiento**

**Français: les Instructions
d'Installation et
d'Entretien**

Exploded View



* Some items are listed for instructional purposes and may not be sold as separate parts.

Part Number Guide

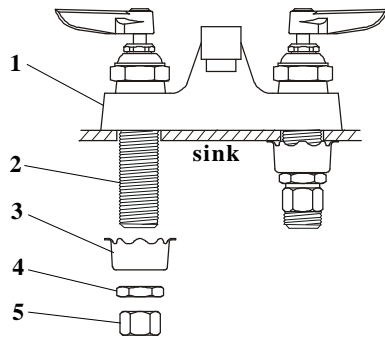
Faucet Assemblies

1	Base Faucet	*
2	Shank, Faucet	*
3	Washer, Rosette	001000-45
4	Locknut	002954-45
5	Nut, Coupling	000958-20
6	Aerator, 13/16" MA	B-0199-03
7	Asm, Drain w/Pop-Up	B-0898
8	Asm, Spindle - Eterna LH	002713-40
	Asm, Spindle - Eterna RH	002714-40
9	Spindle - Cold	005959-40
	Spindle - Hot	005960-40
10	Handle - Cold	001636-45
	Handle - Hot	001635-45
11	Index, Button - Blue (Cold)	001660-45
	Index, Button - Blue (Hot)	001661-45
12	Screw, Handle	000922-45
13	Asm, Eterna Spindle - Hot	005960-40
14	Handle, Alpine - Lexan	001144-45
15	Screw, Lab Handle	000925-45
16	Index Button, Handle (Cold)	001327-40
	Index Button, Handle (Hot)	001328-40
17	Handle, Lavatory, 3 Wing (Cold)	001784-40
	Handle, Lavatory, 3 Wing (Hot)	001783-40

General Instructions

Installation: (Faucet)

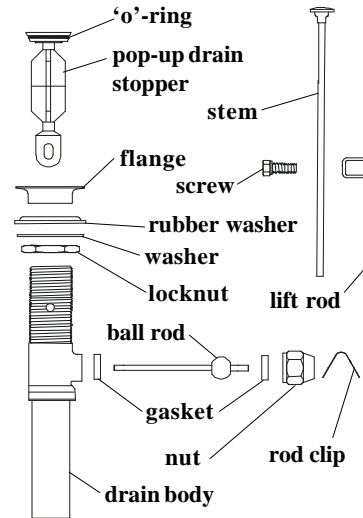
1. Turn off water supply and drain lines. Drill (2) two 1" diameter holes, 4" center-to-center in sink top where you will be installing no.1.
2. After unpacking, remove no.5, no.4 and no.3 from each no.2.



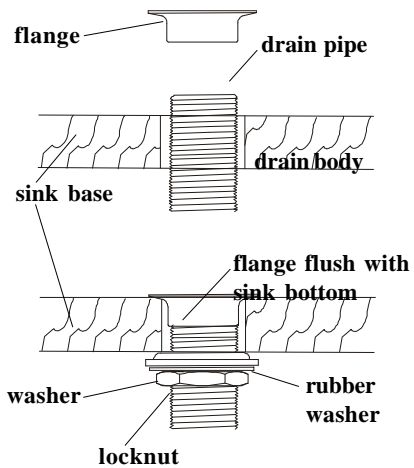
3. Place no.1 into holes in sink top and replace no.3, no.4 and no.5 onto no.2. Tighten no.5 with a wrench.
4. Connect water supply lines and check for leaks.

Installation: (Pop-Up Valve)

1. Remove **pop-up drain stopper**, with **'o'-ring** and **flange** from **pop-up assembly**.
2. Remove **rod clip**, **lift rod**, **rod guide nut**, **rubber washer** and **rod ball assembly** from **drain body**.



3. Insert **drain body** from bottom of sink drain hole, reassemble **flange to drain body**, tightening as far as possible.



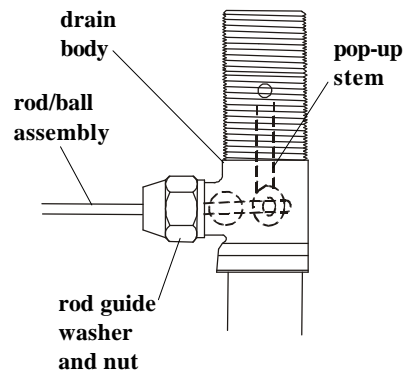
4. Slide **rubber washer** on **drain pipe** up against bottom of sink. Tighten **washer** and **locknut** firmly against base for a tight seal.

General Instructions

5. Replace **pop-up drain stopper** in **drain body**, with 'o'-ring in place, and align stopper hole with guide and opening.

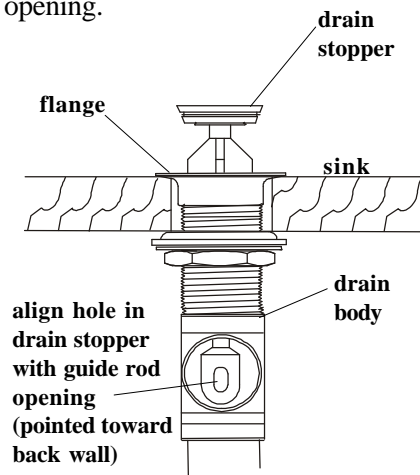
6. Reinsert **rod ball assembly** back into **drain body** and through hole in **drain stopper**.

7. Insert **pop-up stem** through hole in faucet body. Attach **lift rod** to **pop-up stem** by inserting **stem** through hole in **lift rod**. Reassemble **rod guide, washer and nut**, and tighten firmly.

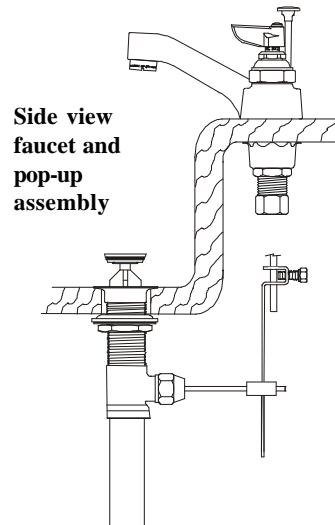


9. Make connection to supply lines.

10. Turn on water supply and check for leaks.



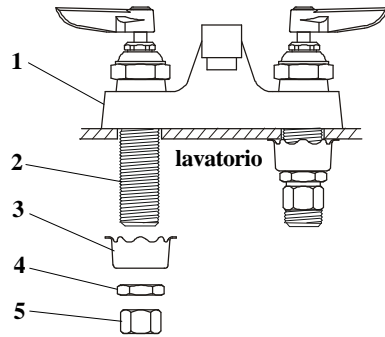
8. Adjust **pop-up stem** to correct height by opening drain, and sliding **lift rod** and **rod clip** at the same time onto **rod/ball assembly**. Readjust **lift rod screw** if necessary, hand-tighten.



Instrucciones Generales

Instalación: (Canilla)

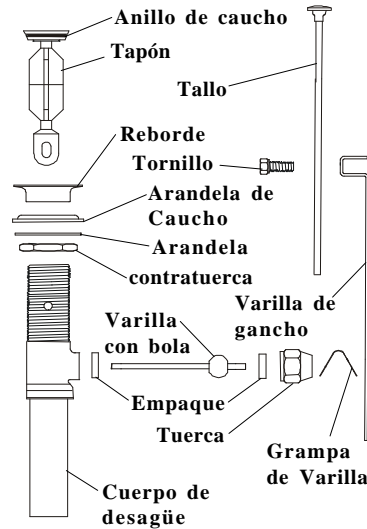
1. Cierre la fuente de agua y desagüe las tuberías. Perfore (2) dos huecos de 2.5cm de diámetro, con 10cm de centro en la parte de encima del lavatorio donde será instalada la parte No. 1.
2. Después de desempacar, remueva las partes No.5,4 y 3 de ambas partes No.2.



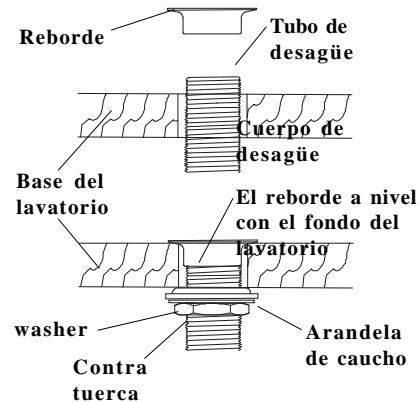
3. Coloque la parte No.1 entre los huecos de la parte de encima del lavatorio y coloque de nuevo las partes No.3, 4 y 5 en la parte No.2. Aprete la parte No.5 con una llave.
4. Conecte las líneas de surtido de agua e inspeccione por filtraciones.

Instalación: (Valvula De Tapón)

1. Remueva el tapón con el anillo de caucho y el reborde del ensamble del tapón.
2. Remueva la grampa de varilla, la varilla de gancho, el guía para la tuerca de varilla, la arandela de caucho y el ensamble de la bola con varilla del cuerpo de desagüe.



3. Por la parte de abajo en el hueco de desagüe del lavatorio inserte el cuerpo de desagüe, ensamble de nuevo el reborde a el tubo del desagüe, y aprete hasta el máximo trayecto.



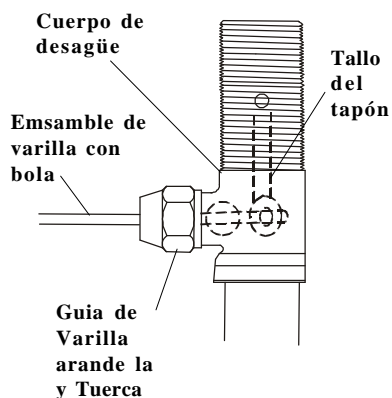
4. Deslice la arandela de caucho en el tubo de desagüe contra la parte de abajo del lavatorio. Apriete la arandela y contratuerca firmemente contra la base para formar un sello apretado.

Instrucciones Generales

5. Coloque de nuevo el tapón en el cuerpo de desagüe, con el anillo de caucho en su sitio y alinee el hueco del tapón con el guía y la abertura.

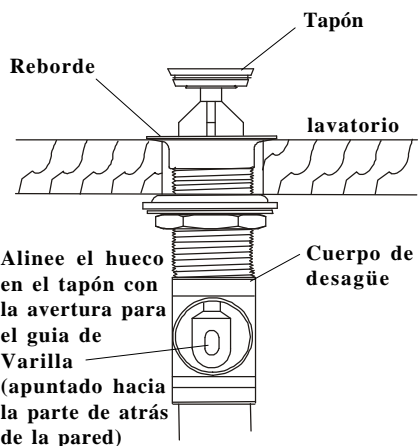
6. Inserte de nuevo el ensamble de la varilla con bola en el cuerpo de desagüe y a través del hueco del tapón.

7. Inserte el tallo del tapón a través del hueco en el cuerpo de la canilla. Una la varilla de gancho a el tallo para el tapón, insertando el tallo a través del hueco en la varilla del gancho; Arme de nuevo el guía de la varilla, la arandela y tuerca y aprete firmemente.

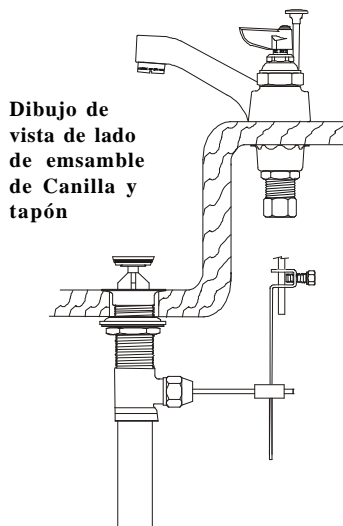


9. Haga las conexiones a la línea de surtido.

10. Abra el surtido de agua e inspeccione por filtraciones.



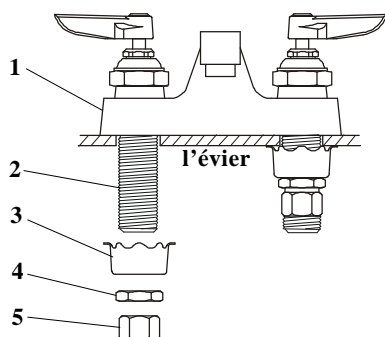
8. Ajuste el tallo del tapón a la altura correcta, abriendo el desagüe y deslizando la bola. Si es necesario ajuste de nuevo el tornillo de la varilla de gancho, aprete a mano.



Instructions Générales

L'Installation: (Le Robinet)

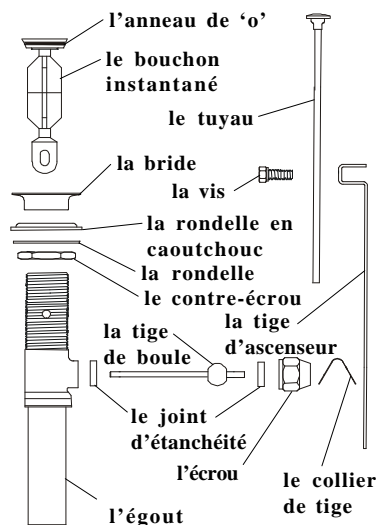
1. Fermer la réserve de l'eau et égoutter la tuyauterie. Percer (2) deux trous, avec un diamètre de 1''[2.5cm], 4''[10cm] de centre à centre où vous installer N°.1.
2. Après on vider l'élément de la boîte, enlever N°.5, N°.4 et N°.3 de chaque N°.2.



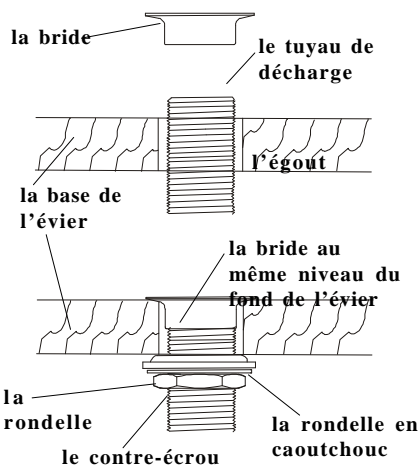
3. Mettre N°.1 dans les trous dans le comptoir et remplacer N°.3, N°.4 et N°.5 sur N°.2. Resserrer N°.5 avec une clef.
4. Brancher les tuyaux qui fournir l'eau et vérifier s'il y a des fuites.

L'Installation: (la soupape instantanée)

1. Enlever le bouchon instantané, avec l'anneau de "o" et la bride de l'assemblage instantané.
2. Enlever le collier de tige, la tige d'ascenseur, l'écrou qui dirige la tige, la rondelle en caoutchouc et l'assemblage de la tige de boule de l'égout.



3. Insérer l'égout du fond du trou de décharge de l'évier, réassembler la bride à l'égout, resserrer fermement.



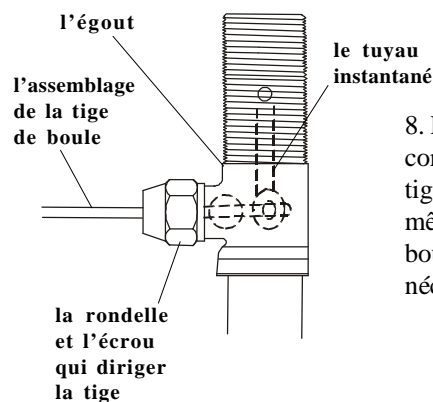
4. Faire glisser la rondelle en caoutchouc sur le tuyau de décharge contre le fond de l'évier. Resserrer la rondelle et le contre-écrou fermement contre la base.

Instructions Générales

5. Remplacer le bouchon instantané dans l'égout avec l'anneau de "o" à sa place, et aligner le trou du bouchon avec la guide et la percée.

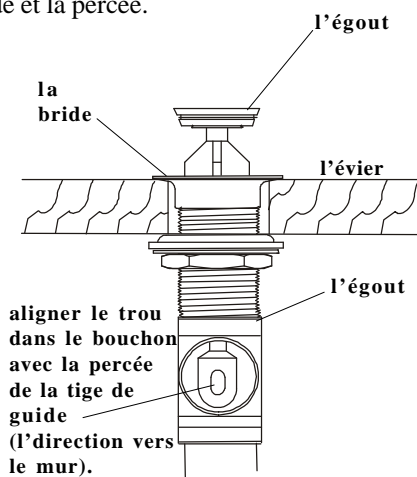
6. Réinsérer l'assemblage de la tige de boule dans l'égout et à travers le trou dans le bouchon.

7. Insérer le tuyau instantané à travers le trou dans l'égout. Attacher la tige d'ascenseur au tuyau instantané en insérant le tuyau à travers le trou dans la tige d'ascenseur. Réassembler la rondelle et l'écrou qui dirigent la tige et resserrer fermement.

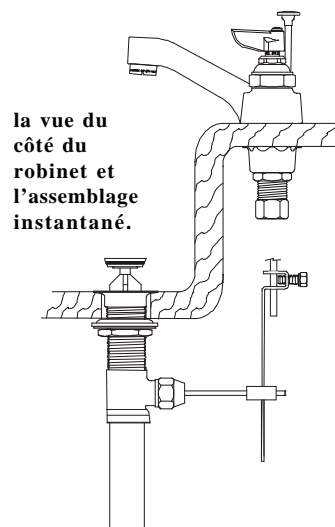


9. Brancher les tuyaux qui fournissent l'eau.

10. Recommencer l'eau et vérifier s'il y a des fuites.



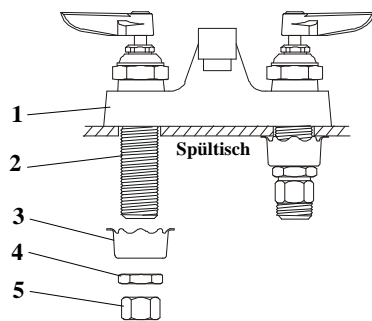
8. Régler le tuyau instantané à la hauteur correcte en ouvrant l'égout, et en mettant la tige d'ascenseur et le collier de la tige, au même temps sur l'assemblage de la tige de boule. Régler la vis de la tige d'ascenseur si nécessaire, resserrer par le main.



Allgemeine Anleitungen

Installation: (Armatur)

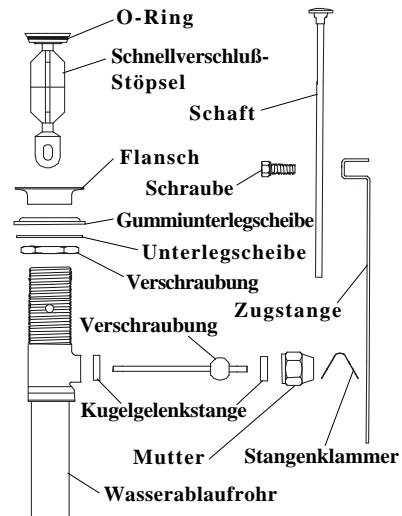
1. Wasserzufuhr absperrn und Wasserleitungen entleeren. Zwei 2,5 cm große Löcher in die Spültischoberfläche mit einem Abstand von 10 cm von Mitte zu Mitte bohren, in die Nr. 1 installiert wird.
2. Nach dem Auspacken Nr. 5, 4 und 3 von jeder Nr. 2 entfernen.



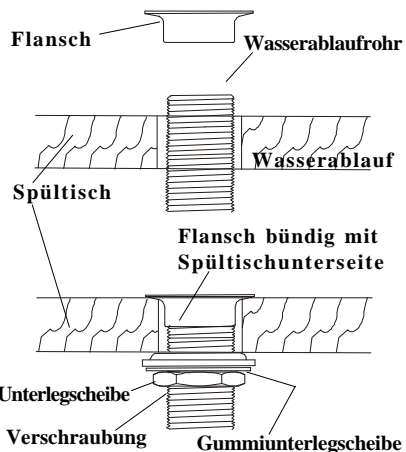
3. Nr. 1 in die Löcher in der Spültischoberfläche einsetzen und Nr. 3, 4 und 5 wieder auf Nr. 2 aufsetzen. Nr. 5 mit Schraubenschlüssel festziehen.
4. Die Wasserzufuhrleitungen aufdrehen und auf Lecks prüfen.

Installation: (Schnellverschlußventil)

1. Schnellverschluß-Stöpsel mit O-Ring und Flansch von der Schnellverschluß-Garnitur entfernen.
2. Die Stangenklammer, die Zugstange, die Stangenführungsmutter, die Gummiunterlegscheibe und die Kugelgelenkstangen-garnitur vom Wasserablauf entfernen.



3. Wasserablaufrohr von unten in das Spültischloch einführen, Flansch mit dem Wasserablaufrohr verbinden, so weit wie möglich festdrehen.



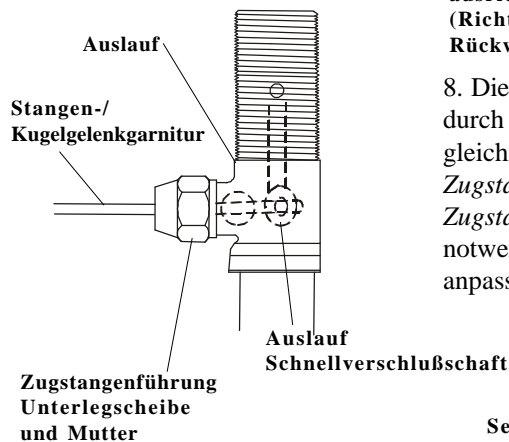
4. Die Gummiunterlegscheibe auf das Wasserablaufrohr gegen die Spültischunterseite schieben. Zur Abdichtung Unterlegscheibe und Verschraubung fest gegen Grundplatte anziehen.

Allgemeine Anleitungen

5. Den *Schnellverschluß-Stöpsel* mit dem korrekt eingesetzten *O-Ring* wieder in den *Auslauf* einsetzen und das Stöpselloch nach der *Zugstangenführung* und der *Öffnung* ausrichten.

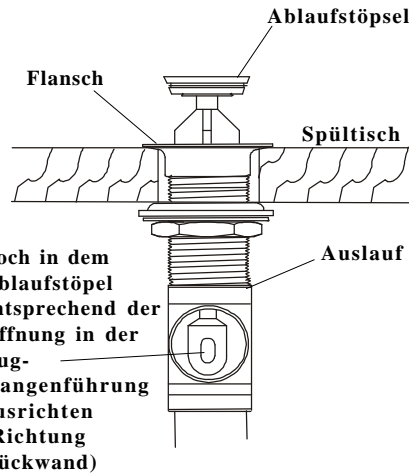
6. Die *Kugelgelenkstangengarnitur* wieder in den *Auslauf* und in das Loch im *Auslaufstöpsel* einsetzen.

7. Den *Schnellverschlußschaft* durch das Loch im *Armaturrumpf* einführen. Die *Zugstange* mit dem *Schnellverschlußschaft* verbinden, indem der *Schaft* durch das Loch in der *Zugstange* eingeführt wird. Die *Zugstangenführung*, *Unterlegscheibe* und *Mutter* zusammensetzen und fest anziehen.

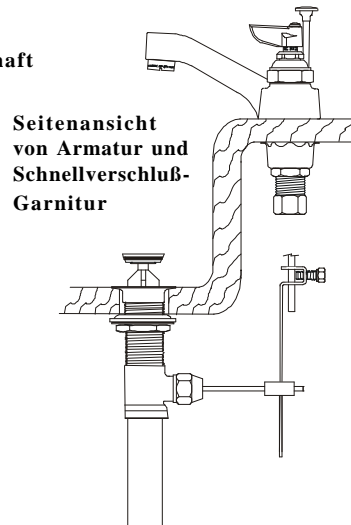


9. Mit den Wasserleitungen verbinden.

10. Wasserleitung aufdrehen und auf Lecks prüfen.



8. Die Höhe des *Schnellverschlußschafts* durch Öffnen des *Auslaufs* justieren und gleichzeitig die *Zugstange* und *Zugstangenklammer* auf die *Zugstangengarnitur* schieben. Falls notwendig, die *Zugstangenschraube* anpassen, mit der Hand festdrehen.



RELATED T&S BRASS PRODUCT LINE



B-0830
Slow Self-Closing Centerset
Lavatory Faucet with Pop-Up



B-0833
Slow Self-Closing Centerset
Lavatory Faucet with Pop-Up

T&S BRASS AND BRONZE WORKS, INC.

A firm commitment to application-engineered plumbing products

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Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. Specific rights under this warranty and other rights vary from state to state.

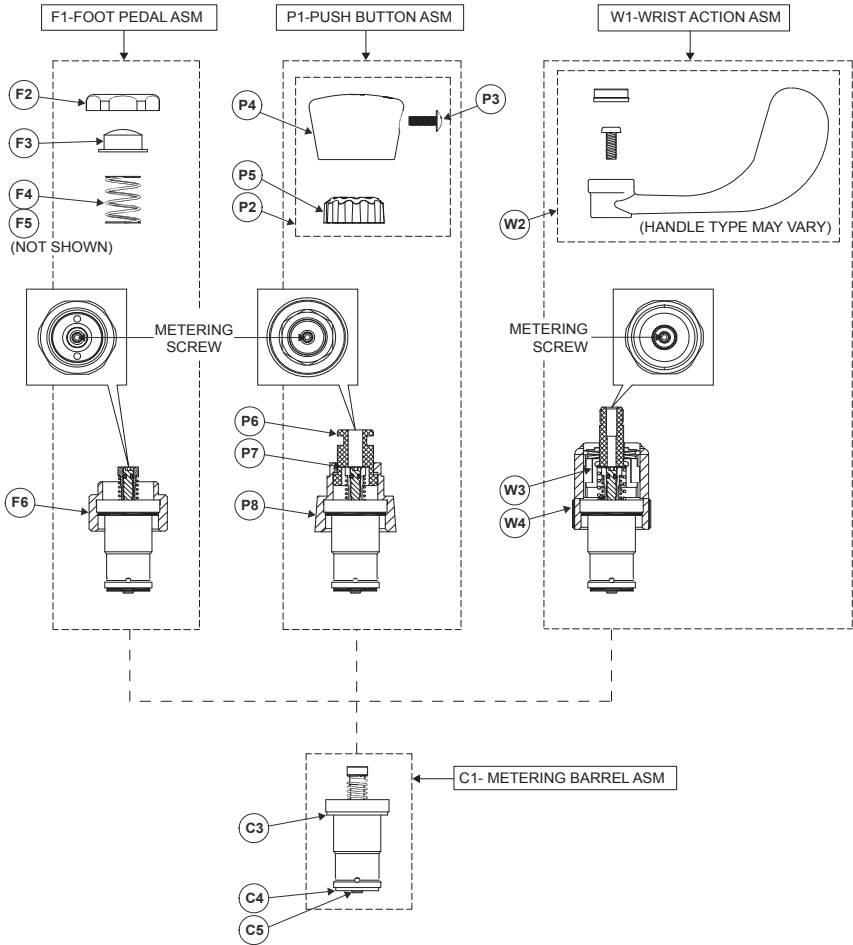
P/N: 098-014733-45 Rev.1
Date: 05-18-10
Drawn: TEH
Checked: GEF 09-13-10
Approved: JHB 09-13-10

Installation and Maintenance Instructions



METERING BARREL ASSEMBLY

Exploded View



Part Number Guide

Foot Pedal

F1	Asm, Floor Mounted Foot Pedal	011399-40
F2	Screw Cap, Foot Pedal	*
F3	Button, Foot Pedal	*
F4	Spring	*
F6	Bonnet, Foot Pedal	*
F1	Asm, Wall Mounted Foot Pedal	011406-40
F2	Screw Cap, Foot Pedal	*
F3	Button, Foot Pedal	*
F4	Spring	*
F5	Spring (011406-40 Asm Not Shown)	*
F6	Bonnet, Foot Pedal	*

Push Button

P1	Push Button Asm, Blank Valve	238AB
	Screw Cap, Foot Pedal	238AH
	Button, Foot Pedal	238AC
P2	Blank Cap Asm, Push Button	014193-40
	Hot Cap Asm, Push Button	014194-40
	Cold Cap Asm, Push Button	014195-45
P3	Screw Cap, Push Button	014145-45
P4	Blank Cap, Push Button	*
	Hot Cap, Push Button	*
	Cold Cap, Push Button	*
P5	Insulator, Push Button	*
P6	Guide Bushing, Push Button	*
P7	Kapton Washer (Not Shown)	*
P8	Bonnet, Push Button	*

Wrist Action

W1	Wrist Action Asm	012449-40
W2	Handle Asm (Various Options Available)	*
W3	Repair Kit, Wrist Action	012555-40
	Return Spring	*
	Kapton Washer	*
	Asm, Stem Cam	*
	Linear Cam	*
	Bellville Springs	*
	Stem Bushing	*
W2	Bonnett	*

Metering Barrel Assembly

C1	Metering Barrel Assembly	014152-40
C2	Seal Repair Kit	014152-40K
C3	Top Seal	*
C4	Bottom Seal	*
C5	Stem Seal	*

* Items not sold as separate parts; listed for instruction purposes only.

General Instructions

Tools Required:

Foot Pedal

- 1 Allen Wrench (3/32")
- 1 1-1/4 Wrench
- 1 1-3/8 Wrench

Push Button

- 1 Allen Wrench (3/32")
- 1 15/16 Wrench
- 1 #8 Spanner Bit/Wrench

Wrist Action

- 1 Allen Wrench (3/32")
- 1 1-3/8 Wrench

Metering Cartridge:

Note: Each metering cartridge is preset for approximately 10 seconds at the factory. They may be reset at installation. If water pressure varies, the cycle time will also vary. T&S advises to flush the supply lines prior to new faucet or replacement part installation.

Adjustment

1. Handle/Cap Removal

Foot Pedal: Unscrew screw cap (F2) from assembly. Remove F3 and F4 (and F5 if installed).

Push Button: Unscrew P3 from cap. Remove P4.

Wrist Action: Remove W2. Various handle assemblies are available. Majority of handle assemblies contain handle, screw, and index tab.

2. Timing Adjustment

1/8 turn increments
clockwise for longer
flow time



1/8 turn increments
counter-clockwise for
shorter flow time



Refer to exploded view for metering screw location.

Depress stem (with P5 insulator installed) fully to verify timing and make adjustments if necessary after valve has closed.

3. Reinstall handle assembly

Cartridge Replacement:

1. Turn off water supply.
2. Perform step 1 in adjustment section.
3. Unscrew F6 (foot pedal), P8 (push button), or W4 (wrist action) from faucet body.

4. Unscrew C1 from F6, P8, or W4.

Note: Cartridge may have unscrewed from bonnet during bonnet removal.

5. Discard old C1 and its attached seals.

6. Screw new C1 into bonnet (F6, P8, or W4).

7. Verify that external seals are intact (C3, C4, C5). It is helpful to push C3 into bonnet until it bottoms out. This will insure proper sealing with the faucet body.

8. Screw assembly securely (30 lbs minimum) into faucet body.

9. Turn on water supply and check for leaks.

10. Reinstall handle assembly.

Caution: If faucet has separate hot and cold controls, make certain that hot water shuts off before cold to avoid scalding.

Wrist Action Note: Install wrist action handles in an orientation that allows 1/4 turn (full activation of metering cartridge). Whenever possible, install handles to prevent valves from being intentionally stuck in open position when handle is rotated beyond intended 90° (1/4 turn) activation.

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RELIABILITY BUILT IN™