



#### 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: 098-003758-45 Rev.2  
Date: 10-15-04  
Drawn: TEH  
Checked: DLT 10-27-04  
Approved: MVW 11-01-04

# Installation and Maintenance Instructions



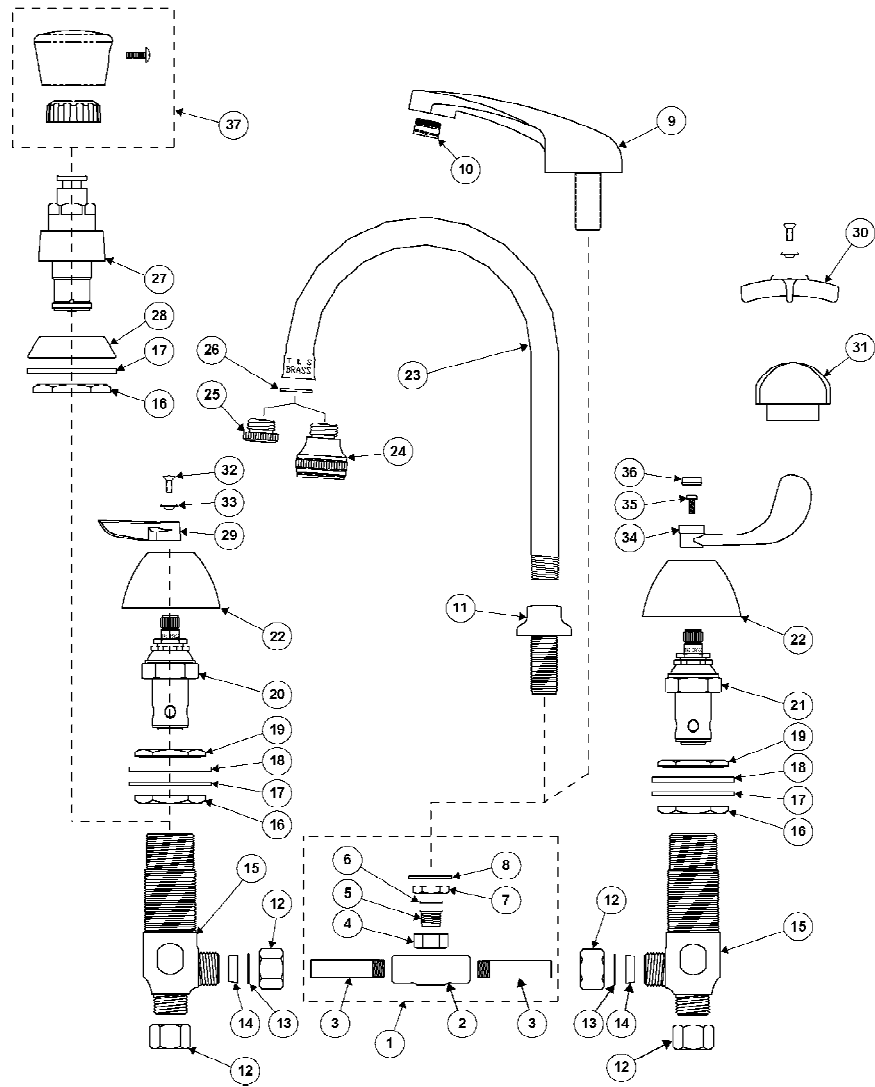
## B-2850 & B-2865 and B-2990 & B-2991 Series Concealed Body - Widespread Lavatory Faucets

**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	Asm, 8" CC Rigid Gooseneck Cross	012622-40
2	Cross, Body	*
3	Nipple	000342-20
4	Coupling	*
5	Insert	*
6	Washer, Cross Body	*
7	Locknut	002954-45
8	Washer, Shank	012596-45
9	Asm, Rigid Spout & Shank	012602-40
10	Aerator	B-0199-03
11	Center Body	*
12	Coupling Nut	000958-20
13	Washer	000981-45
14	Washer, Bevelled	001091-45
15	Faucet, Side Body	*
16	Locknut, Body Bottom	000960-20
17	Washer, Nipple	001006-45
18	Washer, Body	002290-45
19	Locknut, Body Top	000959-20
20	Asm, Eterna RH Spindle	006478-40
21	Asm, Eterna LH Spindle	006477-40
22	Escuteon	001257-45
23	Asm, Gooseneck w/ Tip	002980-40
	Gooseneck	000398-40
24	Rosespray	B-0103
25	Tip	000861-25
26	Washer	001043-45
27	Asm, Push Button Metering Cart.	238AB
28	Flange	000537-40

## ***Handle Assemblies***

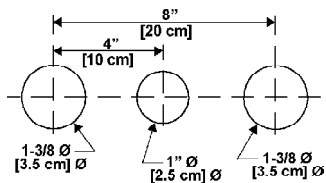
29	Lever Handle	001638-45
30	Four Arm Handle	002521-45
31	Dome Handle (Cold)	001784-40
	Dome Handle (Hot)	001783-40
32	Screw, Lever Handle	000922-45
33	Index, Blue (Cold)	001660-45
	Index, Red (Hot)	001661-45
34	Wrist Action Handle, 4"	000078-40
	Wrist Action Handle, 6"	000079-40
35	Screw, Handle	000925-45
36	Index, Snap-In, Blue (Cold)	001686-45
	Index, Snap-In, Red (Hot)	001194-45
37	Push Button Cap, Blank	014193-40
	Push Button Cap, Hot	014194-40
	Push Button Cap, Cold	014195-40

# General Instructions

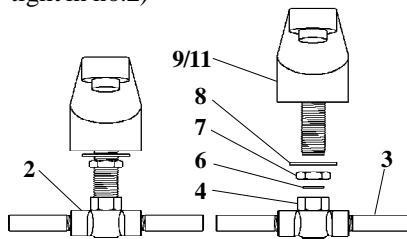
## **Installation:**

### *Center body and side bodies/faucet*

1. Turn off water supply and drain lines. Drill (3) three holes in sink or countertop where you are installing no.1. See illustration below:

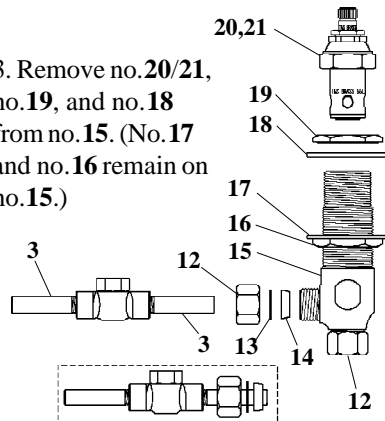


2. Remove no.9/11 from no.2 by holding no.4 with a wrench, then twist no.9/11. Remove no.7 and no.8 from no.9/11. (No.3 should already be tight in no.2)



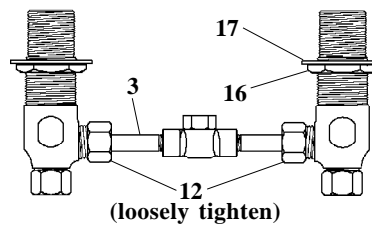
## **Hot and Cold Side Valves**

3. Remove no.20/21, no.19, and no.18 from no.15. (No.17 and no.16 remain on no.15.)

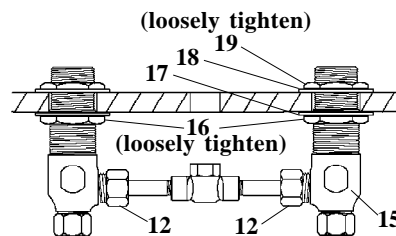


4. Remove no.12, no.13 and no.14 from no.15. Assemble previous items onto arm of no.3, as shown in illustration (below-left). **Both sides.**

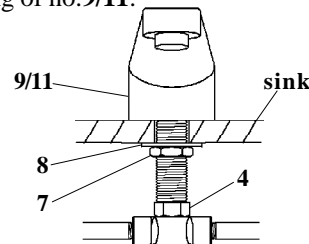
5. Insert no.3 into no.15, loosely tighten no.12 onto threads by hand.



6. Place no.15 assembly into holes from underside of sink. Loosely assemble no.16, and no.17 under sink. Replace no.18 and no.19 onto no.15 at top of sink. Loosely tighten by hand. **Do this for both sides.**

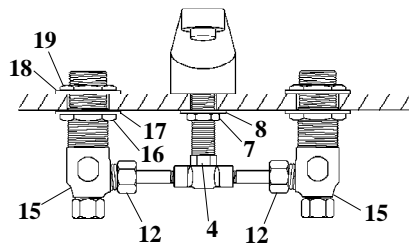


7. Place no.9/11 through hole in sink, and replace no.7 and no.8 onto no.9 from bottom of sink. Adjust no.16 and no.19 to allow proper positioning of no.9/11.



# General Instructions

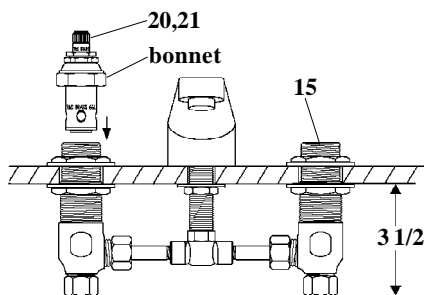
8. Reattach no.9/11 to no.4, making sure no.6 is in place.
9. Tighten no.7 with a wrench against sink bottom.
10. Tighten bottom no.16 on both side no.15 on underside of sink with a wrench. Also, tighten no.12 on no.15 assembly.



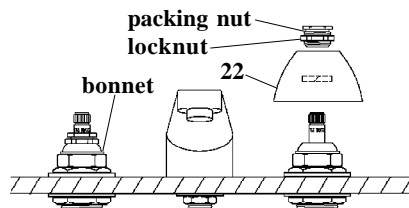
**Note:** When tightening no.7 and no.16, make sure that both no.15's are located at the same height above sink level. Tighten no.7 and no.16 before tightening no.19's

## Valve Assembly

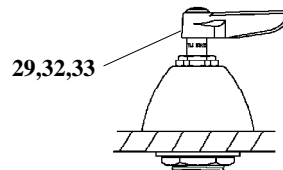
11. Replace no.20 and no.21 on both side no.15 and tighten bonnets sufficiently to seat valve.



12. Remove *packing nut/locknut assembly* from both no.20,21.
13. Slip no.22 over each no.20,21.
14. *Packing nut and locknut* should be loosely assembled before replacing into no.20,21. Hand-tighten *locknuts only* against no.22. **Do not use a wrench.**



15. Tighten *Packing nut* down against *lock nut* using two wrenches. Hold *lock nut* while rotating *packing nut*.
16. Attach no.29 to no.20,21 and place no.33 in the appropriate no.29. Place no.32 into no.33 and no.29, then tighten.



17. Connect supply lines, turn on water and check for leaks.

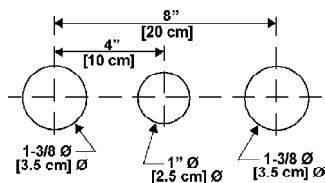
**Note:** It may become necessary to tighten bonnets and packing nuts to stop leakage from outlet or around spindle assembly.

# Instrucciones Generales

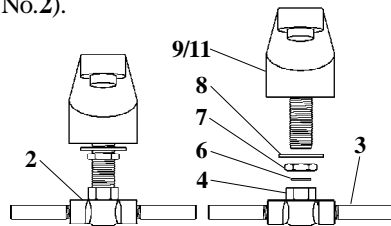
## **Instalación:**

### *Canillas/Unidad De Centro Y De Lados*

1. Cierre la fuente de agua y desagüe las tuberías. Perfore (3) tres huecos en el lavatorio o en el mostrador donde la parte No.1 será instalada. Mire la ilustración abajo.



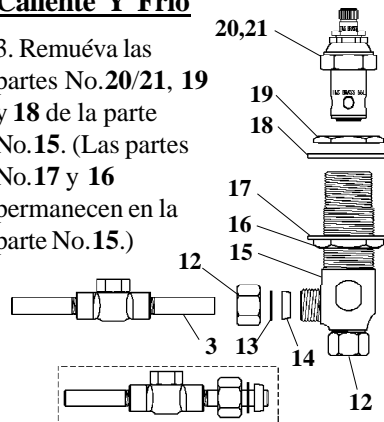
2. Sosteniendo la parte No.4 con una llave, remuévala la parte No.9/11 de la parte No.2, luego destornille la parte No.9/11. Remuévala las partes No.7 y 8 de la parte No.9/11 (La parte No.3 ya debe de estar apretada entre la parte No.2).



## **Valvulas De Los Lados**

### **Caliente Y Frío**

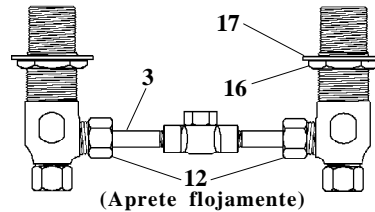
3. Remuévala las partes No.20/21, 19 y 18 de la parte No.15. (Las partes No.17 y 16 permanecen en la parte No.15.)



4. Remuévala las partes No.12, 13 y No.14 de la parte No.15. Ensamble los articulos anteriores en el brazo de la parte No.3 como esta demostrado en la ilustración (abajo -izquierda).

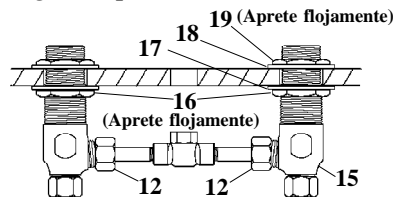
***Ambos lados.***

5. Inserte la parte No.3 entre la parte No.15, aprete a mano flojamente la parte No.12 en las roscas.

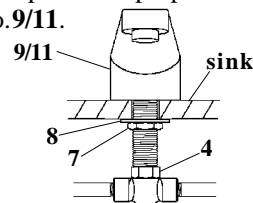


6. Coloque la parte No.15 ensamblada entre los huecos por debajo del lavatorio. Flojamente ensamble las partes No.16 y No.17 debajo del lavatorio. Coloque de nuevo las partes No.18 y No.19 en la parte No.15 sobre el lavatorio. Aprete a mano flojamente.

***Haga esto para ambos lados.***



7. Coloque la parte No.9/11 a través del hueco en el lavatorio y coloque de nuevo las partes No.7 y No.8 en la parte No.9/11 por debajo del lavatorio. Ajusta las partes No.16 y No.19 para permitir la posición apropiada de la parte No.9/11.

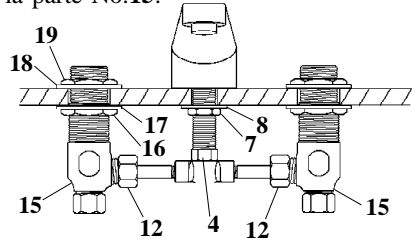


# Instrucciones Generales

8. Junte de nuevo la parte No.9/11 a la parte No.4, asegurándose que la parte No.6 este situada.

9. Con una llave aprete la parte No.7 contra el fondo del lavatorio.

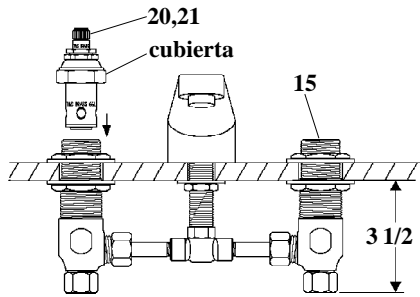
10. Apreté la parte No.16 en ambos lados de la parte No.15 con una llave por debajo del lavatorio. También aprete la parte No.12 al ensamble de la parte No.15.



*Nota: Cuando este apretando las partes No.7 y No.16, asegúrese que ambas partes No.15 estén localizadas a la misma altura a nivel sobre el lavatorio. Antes de apretar las partes No.19 aprete las partes No.7 y No.16.*

## Ensamble De Válvula

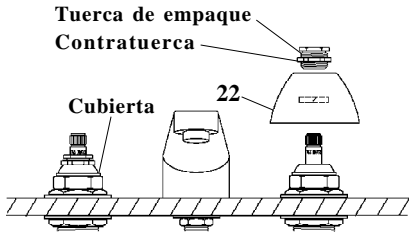
11. Coloque de nuevo las partes No.20 y No.21 en ambos lados en la parte No.15 y aprete las cubiertas suficientemente para acentar las válvulas.



12. Remueva la tuerca de empaque y la contratuerca de ambos lados de las partes No.20 y No.21.

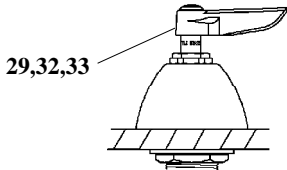
13. Deslice la parte No.22 sobre cada parte No.20 y No.21.

14. La tuerca de empaque y la contratuerca deben ser flojamente ensambladas antes de estar colocadas de nuevo en las partes No.20 y No.21. Apreté a mano solamente la contratuerca contra la parte No.22. **No use llave.**



15. Apreté la tuerca de empaque contra la contratuerca usando llaves. Sostenga la contratuerca mientras que gira la tuerca de empaque.

16. Junte la parte No.29 a las partes No.20 y No.21 y coloque la parte No.33 en la apropiada No.29. Coloque la parte No.32 entre la parte No.33 y No.29 luego aprete.



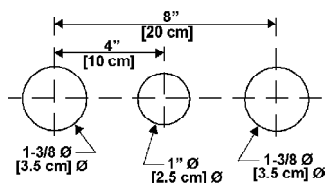
17. Conecte las líneas de surtido, abra la fuente de agua e inspeccione por filtraciones.

*Nota: Puede llegar a ser necesario apretar las cubiertas y las tuercas de empaque para parar filtración de la boquilla o alrededor del ensamble del eje.*

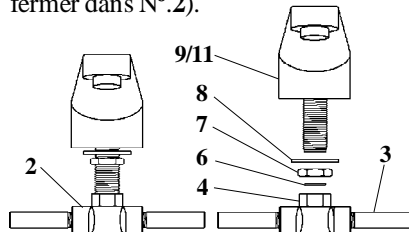
# Instructions Générales

## L'Installation: Le centre et le côté: Le robinet

1. Fermer la réserve de l'eau et égoutter la tuyauterie. Percer (3) trous dans l'évier ou le comptoir où vous aller installer N°.1. Voir le diagramme ci-dessous.

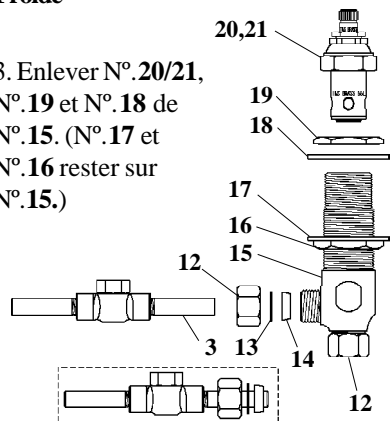


2. Enlever N°.9/11 de N°.2 en tenant N°.4 avec une clef anglaise, puis tourner N°.9/11. Enlever N°.7 et N°.8 de N°.9/11. (N°.3 devoir être bien fermer dans N°.2).



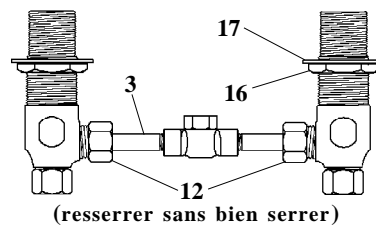
## La Soupape Côté Chaude et Froide

3. Enlever N°.20/21, N°.19 et N°.18 de N°.15. (N°.17 et N°.16 rester sur N°.15.)

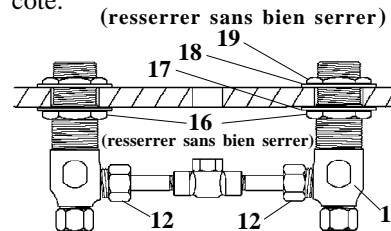


4. Enlever N°.12, N°.13 et N°.14 de N°.15. Assembler les choses précédentes sur le bras de N°.3, comme indiqué (ci-dessous à gauche) chaque côté.

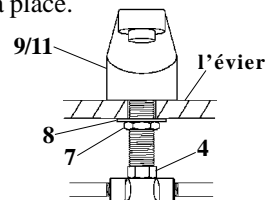
5. Insérer N°.3 sur N°.15, resserrer sans bien serrer N°.12 sur les filets par le main.



6. Mettre l'assemblage N°.15 dans les trous du fond de l'évier. Assembler, approximativement N°.16 et N°.17 au-dessous-de l'évier. Remplacer N°.18 et N°.19 sur N°.15 en haut de l'évier. Resserrer par le main - sans bien serrer. Faire la même chose pour chaque côté.



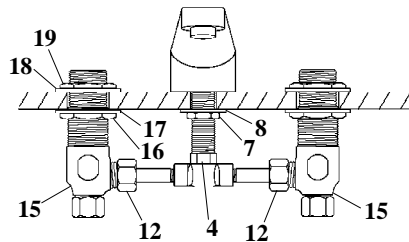
7. Mettre N°.9/11 à travers le trou dans l'évier et remplacer N°.7 et N°.8 sur N°.9/11 du fond de l'évier. Régler N°.16 et N°.19 pour permettre N°.9/11 d'être à sa place.





# Instructions Générales

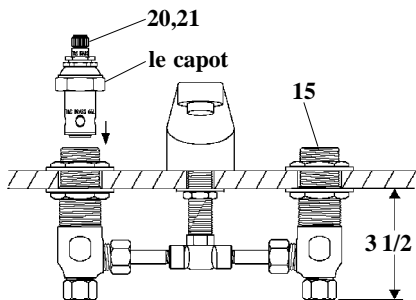
8. Réattacher N°.9/11 à N°.4. Soyez certain que N°.6 être à sa place.
9. Resserer N°.7 avec une clef contre le fond de l'évier.
10. Resserer le N°.16 du bas sur chaque côté de N°.15 sur le fond de l'évier avec une clef anglaise. Aussi resserer N°.12 sur l'assemblage de N°.15.



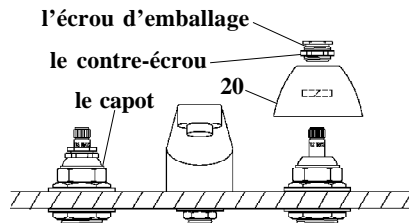
**Noter: En resserant N°.7 et N°.16, soyez certain que les N°.15's, tous les deux se situer au même niveau au-dessus-de l'évier. Resserer N°.7 et N°.16 avant vous resserer les N°.19's.**

## L'Assemblage de la Soupape

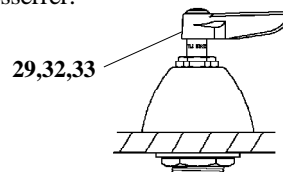
11. Remplacer N°.20 et N°.21 sur chaque côté de N°.15 et resserer les capots pour vous permettre placer la soupape.



12. Enlever l'assemblage de l'écrou d'emballage/ le contre-écrou de N°.20,21 tous les deux.
13. Mettre N°.22 sur chaque N°.20,21.
14. L'écrou d'emballage et le contre-écrou doivent être assemblés approximativement avant de remplacer dans N°.20,21. Resserer par le main les contre-écrous seulement contre N°.22. N'utiliser pas une clef.



15. Resserer l'écrou d'emballage contre le contre-écrou en utilisant deux clefs anglaises. Tenir le contre-écrou en tournant l'écrou d'emballage.
16. Attacher N°.29 à N°.20,21 et mettre N°.33 dans le N°.29 approprié. Mettre N°.32 dans N°.33 et N°.29 puis resserer.



17. Brancher les tuyaux qui fournir l'eau, recommencer l'eau et vérifier s'il y a des fuites.

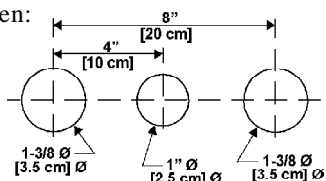
**Noter: Peut-être il falloir resserer les capots et les écrous d'emballage pour arrêter la fuite de la sortie ou l'assemblage de la broche.**

# Allgemeine Anleitungen

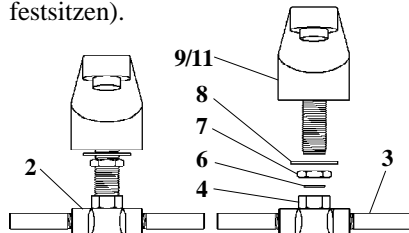
## Installation:

### *Armaturrumpf und Seitenarmaturen/ Wasserhähne zentrieren.*

1. Wasserzufuhr absperren und Wasserleitungen entleeren. 3 (drei) Löcher in den Spültisch oder die Abdeckplatte bohren, in die Nr. 1 installiert wird. Siehe Abbildung unten:

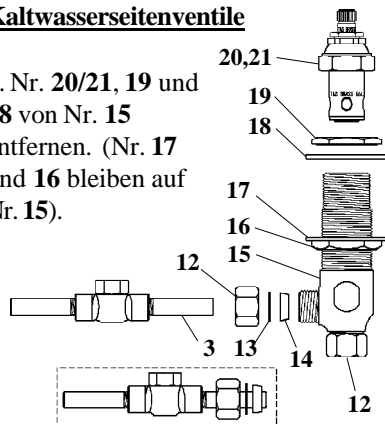


2. Nr. 9/11 von Nr. 2 entfernen, indem Nr. 4 mit einem Schraubenschlüssel festgehalten wird, dann Nr. 9/11 drehen. Nr. 7 und Nr. 8 von Nr. 9/11 entfernen. (Nr. 3 sollte bereits in Nr. 2 festsitzen).



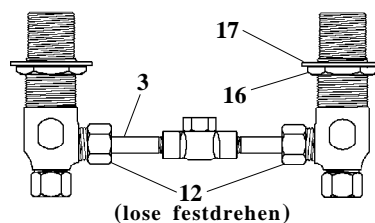
### Warm- und Kaltwasserseitenventile

3. Nr. 20/21, 19 und 18 von Nr. 15 entfernen. (Nr. 17 und 16 bleiben auf Nr. 15).

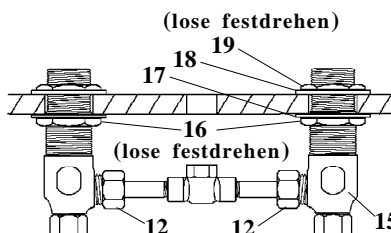


4. Nr. 12, 13 und 14 von Nr. 15 entfernen. Auf beiden Seiten die vorhergehenden Teile auf dem Arm von Nr. 3 aufreihen, wie in der Abbildung (unten links) gezeigt wird.

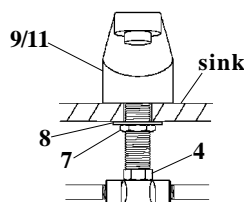
5. Nr. 3 lose in Nr. 15 einfügen, Nr. 12 lose mit der Hand auf dem Gewinde festdrehen.



6. Die Garnitur Nr. 15 von der Unterseite des Spültisches in die Löcher einführen. Nr. 16 und 17 lose unter dem Spültisch zusammensetzen.



7. Nr. 9/11 durch das Loch in dem Spültisch führen und Nr. 7 und 8 wieder von der Unterseite des Spültisches auf Nr. 9/11 aufsetzen. Nr. 16 und 19 justieren, um die ordnungsgemäße Positionierung von Nr. 9/11 zu ermöglichen.

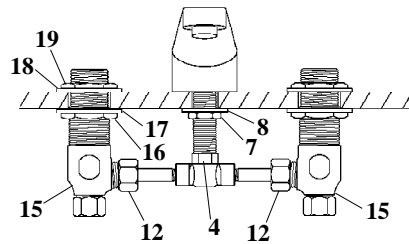


# Allgemeine Anleitungen

8. Nr. 9/11 wieder mit Nr. 4 verbinden. Sicherstellen, daß sich Nr. 6 am richtigen Platz befindet.

9. Nr. 7 mit einem Schraubenschlüssel gegen die Unterseite des Spültisches festziehen.

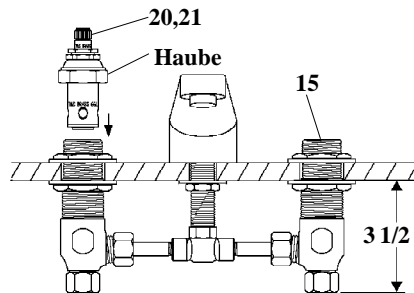
10. Unterseite von Nr. 16 auf beiden Seiten von Nr. 15 auf der Unterseite des Spültisches mit einem Schraubenschlüssel festziehen. Nr.12 auf der Garnitur Nr.15 festziehen.



**Anmerkung:** Beim Festziehen von Nr. 7 und Nr. 16 sicherstellen, daß beide Nr. 15 sich auf der Oberseite des Spültisches in gleicher Höhe befinden. Nr. 7 und 16 festziehen, bevor Nr. 19 festgezogen wird.

## Ventilmontage

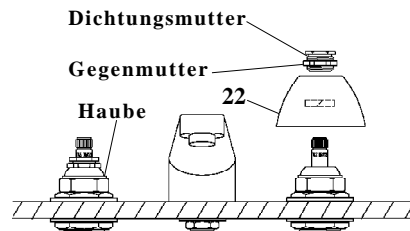
11. Nr. 20 und Nr. 21 auf beide Seiten von Nr. 15 aufsetzen und die Hauben genügend anziehen, um das Ventil einzusetzen.



12. Dichtungsmutter/Gegenmutter-Garnitur von beiden Nr. 20/21 entfernen.

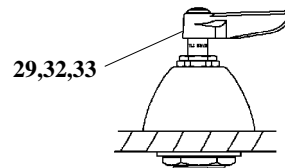
13. Nr. 22 über beide Nr. 20/21 schieben.

14. Dichtungsmutter und Gegenmutter sollten lose zusammengesetzt werden, bevor sie wieder in Nr. 20/21 eingesetzt werden. Dichtungsmuttern mit der Hand nur gegen Nr. 22 anziehen. *Keinen Schraubenschlüssel benutzen.*



15. Dichtungsmutter gegen die Gegenmutter unter Verwendung von zwei Schraubenschlüsseln festziehen. Gegenmutter festhalten, während die Dichtungsmutter gedreht wird.

16. Nr. 29 mit Nr. 20, 21 verbinden und Nr. 33 in die zutreffende Nr. 29 einsetzen. Nr. 32 in Nr. 33 und 29 einsetzen, dann festdrehen.



17. Wasserzufuhr herstellen, Wasserventil öffnen und auf Dichtigkeit prüfen.

**Anmerkung:** Es kann notwendig sein, daß die Hauben und Dichtungsmuttern festgezogen werden müssen, um Leckstellen vom Auslauf oder um die Spindelgarnitur zu unterbinden

## RELATED T&S BRASS PRODUCT LINE



**B-0868-04**  
**Medical Lavatory Faucet**  
**with Pop-Up Waste**

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### T&S BRASS AND BRONZE WORKS, INC.

A firm commitment to application-engineered plumbing products

2 Saddleback Cove, P.O. Box 1088,  
Travelers Rest, SC 29690

Phone: (864) 834-4102

Fax: (864) 834-3518

E-mail: [tsbrass@tsbrass.com](mailto:tsbrass@tsbrass.com)

T & S Brass-Europe

'De Veenhoeve'

Oude Nieuwveenseweg 84

2441 CW Nieuwveen

The Netherlands



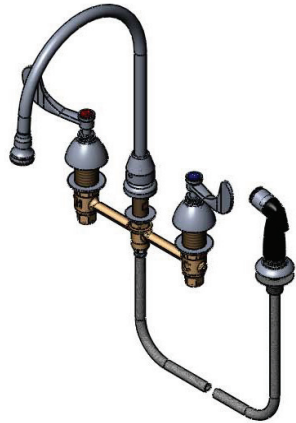
RELIABILITY BUILT IN™



**Easy Install™**

**8" FIXED CENTER  
CONCEALED  
WIDESPREAD  
B-2300, B-2800,  
B-2900 SERIES**  
Patent # 7,472,434

**Installation and  
Maintenance  
Instructions**



**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 option, repair and/or replace it. To obtain warranty service, products must be returned to.....

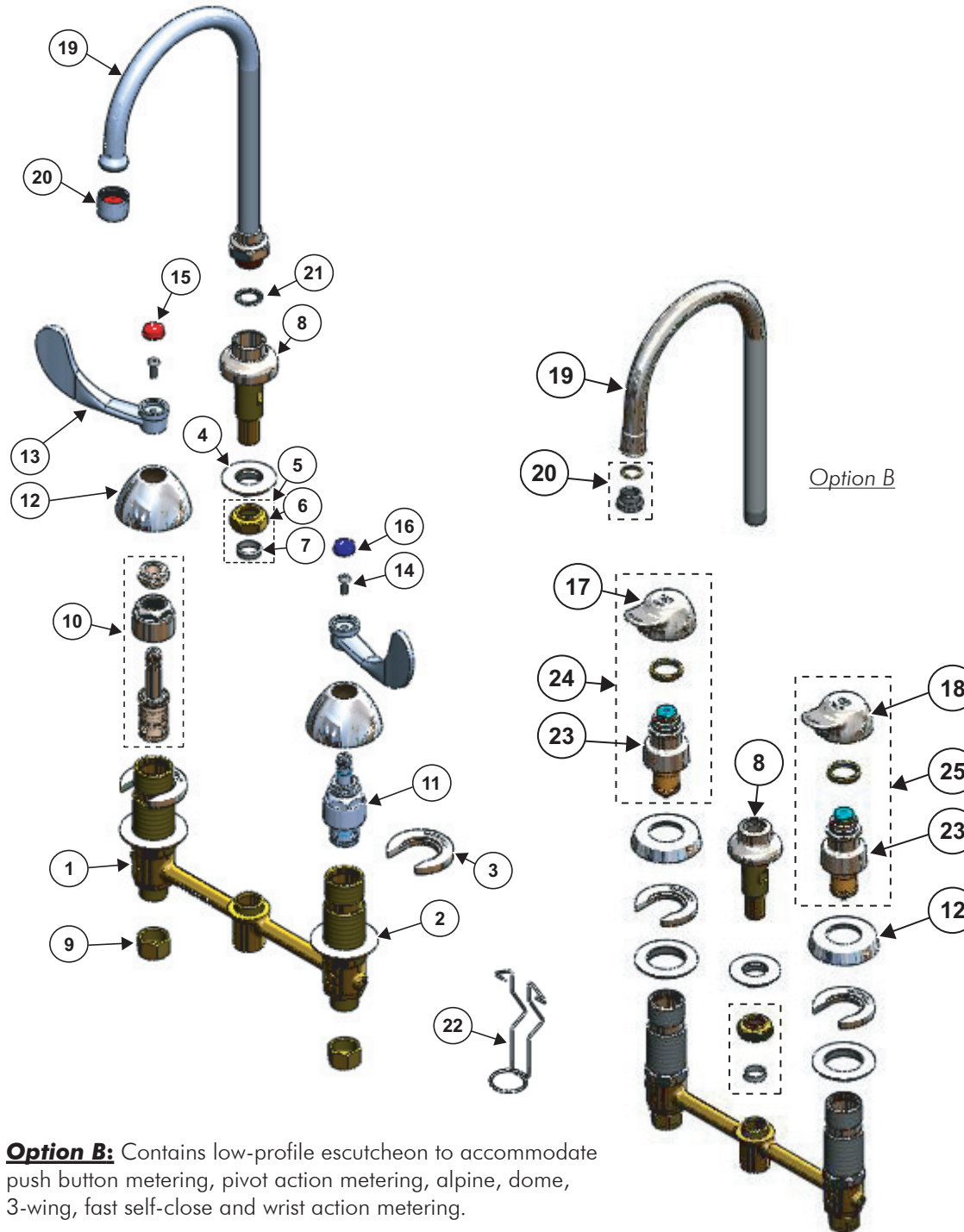
T&S Brass and Bronze Works, Inc.  
Attn: Warranty Repair Department  
2 Saddleback Cove  
Travelers Rest, SC 29690

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 circumstance 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 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: 098-016898-45 Rev. 2  
DATE: 11-08-10  
DRAWN: TEH  
CHECKED: JRM 11-12-10  
APPROVED: JHB 11-12-10



**Option B:** Contains low-profile escutcheon to accommodate push button metering, pivot action metering, alpine, dome, 3-wing, fast self-close and wrist action metering.

**Parts List**

1	Base Faucet Assembly	N/A	
2	Side Flange Nut	N/A	
3	C-Washer	016749-45	
4	Center Flange Nut	016742-45	
5	Compression & Nut Fitting	016745-45	
6	Compression Nut	N/A	
7	Compression Fitting	N/A	
8	Center Shank:		
	Center Shank, Swivel	016754-40	
	Center Shank, Rigid	016847-40	
9	Coupling Nut	000958-20	
12	Escutcheons:		
	Escutcheon, Bell	001257-40	
	Escutcheon, Metering	017292-45	Opt.B
22	Hanger	016777-45	
19	Rigid & Swivel Goosenecks	Inquire w/ T&S	
20	Aerators:		
	55/64"-27 Female Threads	B-0199-01	
	3/8" NPSM Male Threads	B-0199-02	
	13/16"-27 Male Threads	B-0199-03	
	Stream Regulator, Plain	B-LT	
	Stream Regulator w/ Screen	B-PT	
	Sidespray & Hose Assembly	001495-45	
21	Star Washer, Anti-Rotation	014200-45	

**Cartridge Assemblies**

10	Cartridge, Hot Eterna Teflon	016753-40	
	Cartridge, Hot Cerama	016767-25	
11	Cartridge, Cold Eterna Teflon	016752-40	
	Cartridge, Cold Cerama	016768-25	
	Wrist Action Metering	012449-40	Opt.B
	Hot Eterna Teflon - Short	017327-40	Opt.B
23	Push Button Metering	238A	Opt.B
24	Pivot Action Metering - Hot (shown)	238AH-PA	Opt.B
25	Pivot Action Metering - Cold (shown)	238AC-PA	Opt.B

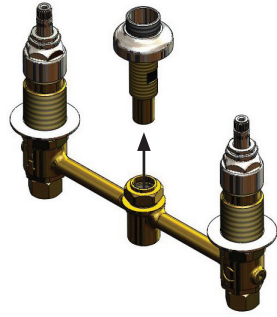
**Handle Assemblies**

13	Handle, 4" Wrist Action (shown)	B-WH4	
	Handle, Lever	001638-45	
	Handle, 4-Arm	002521-45	
14	Screw, 4" Wrist Action (shown)	000925-45	
	Screw, Lever Handle	000922-45	
15	Index, Snap-In Red (Hot) (shown)	001194-45	
	Index, Lever Handle (Hot)	001661-45	
16	Index, Snap-In Blue (Cold) (shown)	001686-45	
	Index, Lever Handle (Cold)	001660-45	
17	Pivot Action Handle - Hot	PA-H	Opt.B
18	Pivot Action Handle - Cold	PA-C	Opt.B
	Cold Cap Assembly	014195-40	Opt.B
	Hot Cap Assembly	014194-40	Opt.B
	Lavatory Handle, 3-Wing - Cold	001784-40	Opt.B
	Lavatory Handle, 3-Wing - Hot	001783-40	Opt.B
	Fast Self-Closing Asm - Cold	002875-40	Opt.B
	Fast Self-Closing Asm - Hot	002876-40	Opt.B
	Cold Alpine Handle Assembly	076F-C	Opt.B
	Hot Alpine Handle Assembly	076F-H	Opt.B

Before starting the installation, be sure to flush supply lines and shut off water supply.

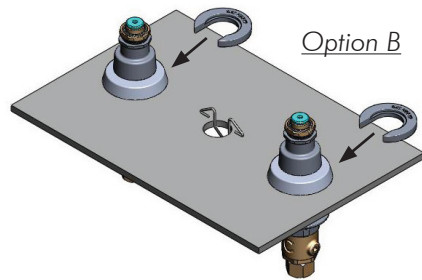
**Step 1:**

Take center shank out of body.



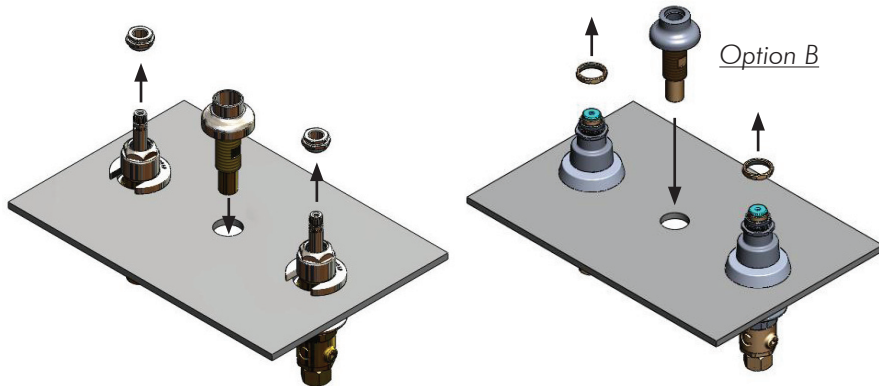
**Step 4:**

*Option B:* Screw metering escutcheons over c-washers. Tighten cartridges.



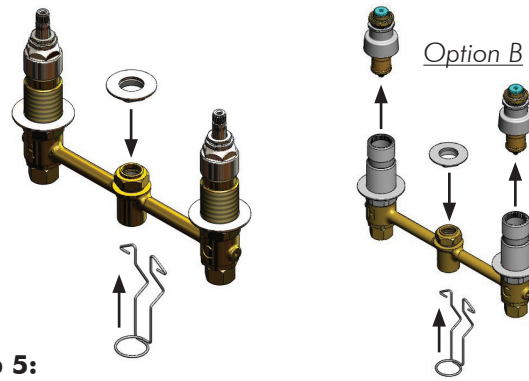
**Step 6:**

Remove nuts as shown. *Option B:* Remove retaining rings from cartridges. Place center body through center hole into main body. Tighten 3 flange nuts. Tighten compression nut to seal center body.



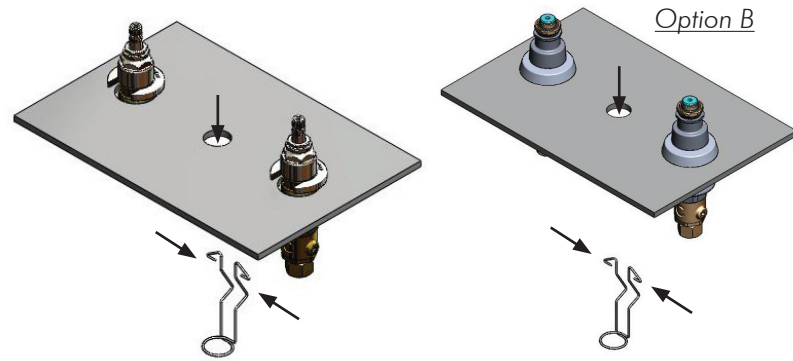
**Step 2:**

Place hanger on body. Add center flange nut to top of compression nut. *Option B:* Remove cartridges.



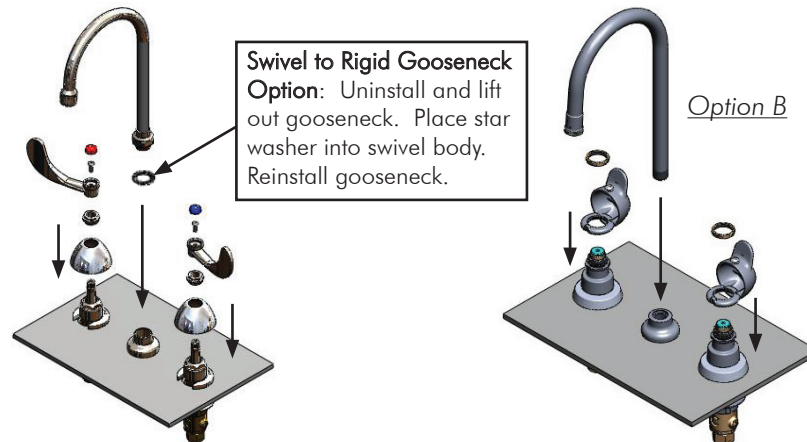
**Step 5:**

Squeeze hanger loops and allow hanger to drop through center hole.



**Step 7:**

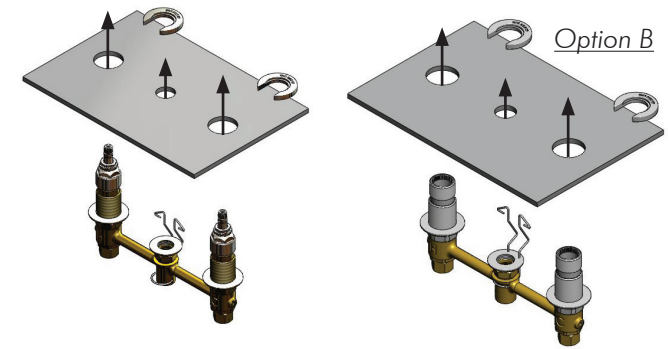
Add escutcheons, packing nuts, handles, spout and tighten. *Option B:* Add handles, retaining rings, spout and tighten. Turn on water supply and check for leaks.



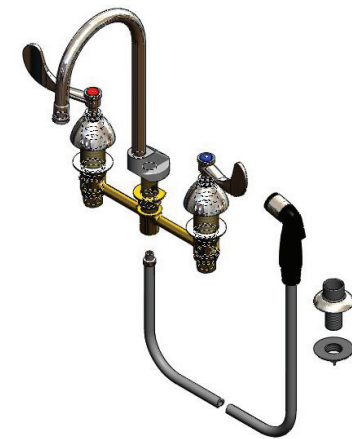
**Swivel to Rigid Gooseneck Option:** Uninstall and lift out gooseneck. Place star washer into swivel body. Reinstall gooseneck.

**Step 3:**

Insert body into deck holes until hanger snaps to top of deck. Place c-washers under bonnet nuts on side bodies.



For models with sidespray:



1. Tighten diverter to center body using flat head screwdriver.
2. Remove locknuts from hose guide, place it through existing hole in sink. Reinstall locknut on the hose guide. Tighten by hand.
3. Apply Teflon tape to threaded end of sidespray, insert through hose guide and attach threaded end of side spray to base of center body. Tighten with wrench.
4. Turn on water and check for leaks.



# Installation and Maintenance Instructions

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*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.

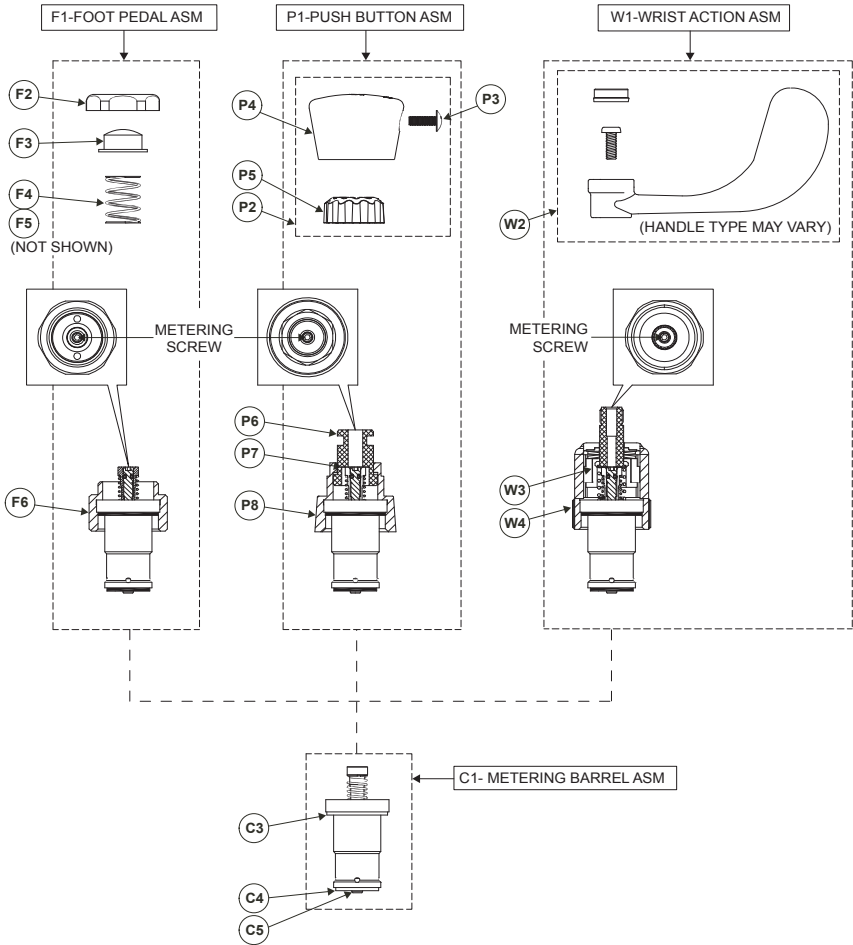
Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. Specific rights under this warranty and other rights vary from state to state.



## METERING BARREL ASSEMBLY

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

# Exploded View





# Part Number Guide

## ***Foot Pedal***

F1	Asm, <b>Floor</b> Mounted Foot Pedal	011399-40
F2	Screw Cap, Foot Pedal	*
F3	Button, Foot Pedal	*
F4	Spring	*
F6	Bonnet, Foot Pedal	*
F1	Asm, <b>Wall</b> 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.*

## RELATED T&S BRASS PRODUCT LINE

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