



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: 098-014733-45
Date: 03-01-04
Drawn: TEH
Checked: MVW 03-11-04
Approved: MVW 03-11-04

Installation and Maintenance Instructions



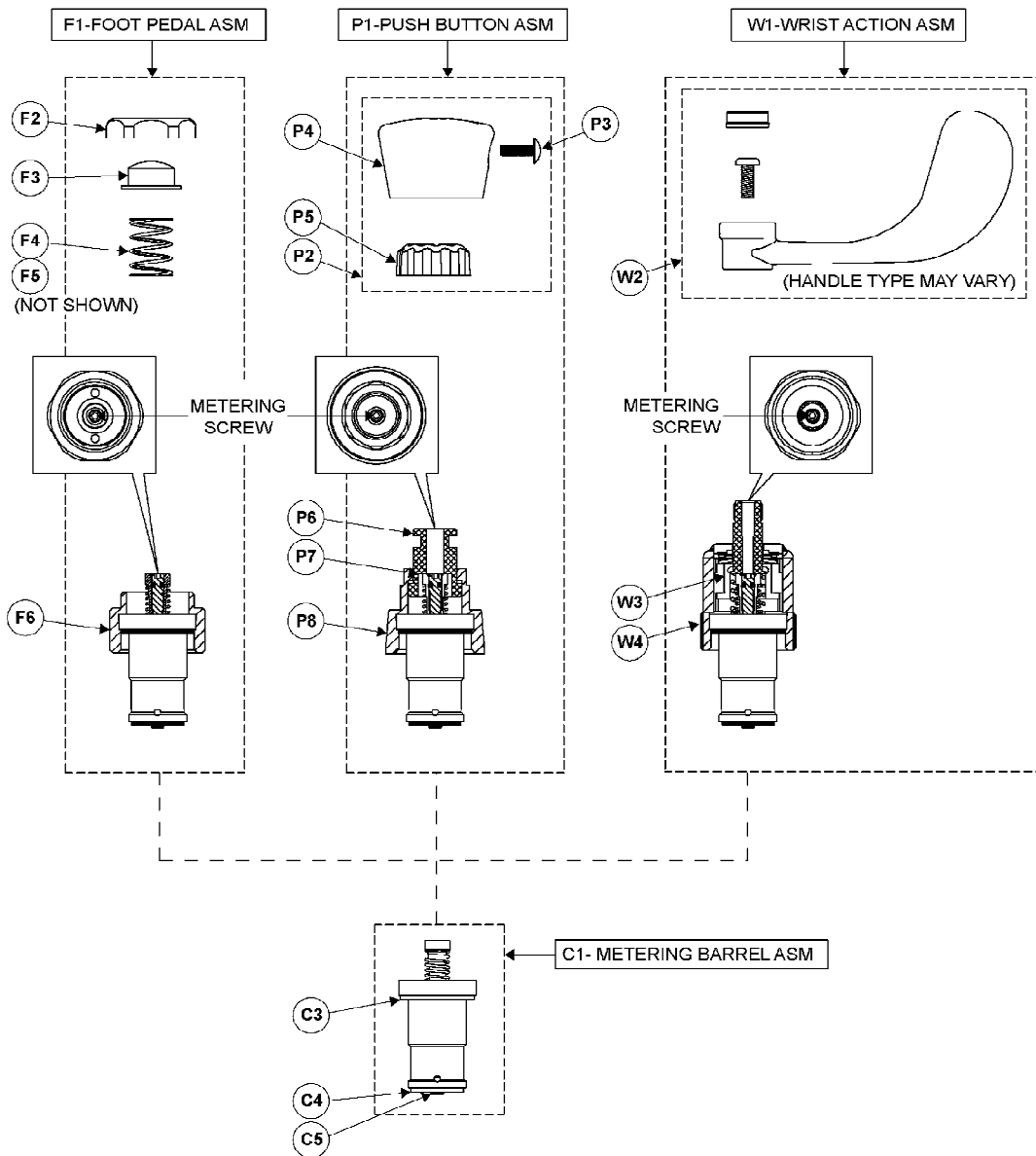
METERING BARREL ASSEMBLY

**Deutsch: Installations- und
Wartungsanleitungen**

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

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

Exploded View



Part Number Guide

Metering Cartridge Assembly

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
	Push Button Asm, Hot Valve	238AH
	Push Button Asm, Cold Valve	238AC
P2	Blank Cap Asm, Push Button	014193-40
	Hot Cap Asm, Push Button	014194-40
	Cold Cap Asm, Push Button	014195-40
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	*
W4	Bonnet	*

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 instructional 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 with 40psi inlet water pressure. They may be reset at installation. If water pressure varies, the cycle time will also vary.

Adjustment

1. Handle/Cap Removal

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

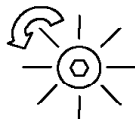
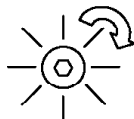
Push Button: Unscrew P3 from cap. Remove P4 and P5.

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 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 W3 (wrist action) from faucet body.
4. Unscrew C1 from F6, P8, or W3. 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 W3).
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

T&S BRASS AND BRONZE WORKS, INC.

A firm commitment to application-engineered plumbing products

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