

Parts & Accessories



CHECK OUT OUR WEBSITE: www.metcraftindustries.com EMAIL US AT: sales@metcraftindustries.com METCRAFT INDUSTRIES, INC. 2901 NE Hagan Road LEE'S SUMMIT, MO 64064 816.554.0300 FAX: 816.554.0307 Introduction

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If you're viewing the digital version of our parts catalog we've added some enhancements for you!

Quick Links

Whenever you see the button below, you can click or tap it. These buttons are direct links to our website and will lead you to a page with relevant information to the part you are looking at in the catalog. Our website features abundant information on our products from videos and additional pictures to related products and repair parts.



If you're not viewing the digital version but have a Smartphone or Tablet we've added some enhancements for you too!

QR Codes

Whenever you see an image similar to the one below, you can use a QR Code reader to access additional information or quickly get a link. There are numerous different QR Code readers for Android, iPhones, iPads and Windows Mobile Devices. Similar to the digital button, QR Codes that link to our website allow you to tap into the abundant information on our products from videos and additional pictures to related products and repair parts.

Link Example:



Additional Information Example:





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What's New?



The next time you are faced with the repair or potential replacement of an expensive plumbing fixture, consider this cost-savings alternative first! Metcraft, the innovator in stainless steel plumbing fixtures, is once again breaking new ground with the Metcraft Refurbish Program - the only guaranteed refurbish program on the market today.

Plus, it doesn't matter who manufactured your original fixture. Whether your fixture was made by Acorn, Bradley, Willoughby, Metcraft or any other stainless steel fixture manufacturer. Metcraft can fix it.





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These General Terms and Conditions of Sale (these "Terms and Conditions") govern the relationship between Buyer and Metcraft Industries, Inc. ("Metcraft" and together with Buyer, the "Parties"), and all orders and agreements entered into by and between the Parties. These Terms and Conditions may be amended from time to time by Metcraft at Metcraft's sole discretion. Buyer covenants to review these Terms and Conditions immediately prior to submission of any order and agrees to be bound by the Terms and Conditions in effect as of the date of such submission.

PRICING, QUOTATIONS AND ORDERS

Price lists are subject to change without notice; consult the factory for current pricing. Quoted prices are guaranteed for 30 days from quote date. A written purchase order (a "Purchase Order") is required by the factory on all orders. An order verification (a "Verification") will be issued and delivered to Buyer upon acceptance of the Purchase Order, and no Purchase Order shall be effective until issuance of a corresponding Verification. The Verification may contain terms that modify or conflict with these Terms and Conditions; to the extent of any such inconsistency, the Verification will supersede such inconsistent terms. Orders that modify previously accepted Purchase Orders ("Change Orders") must be formally accepted with the issuance of a new Verification and may be subject to additional pricing. Once a Verification has been issued, the Purchase Order is considered binding and cannot be cancelled without Metcraft's written approval. Cancelled orders will be subject to a cancellation charge. [Orders with indefinite ship dates (i.e., hold for approval, will advise, etc.) have no status.?

SPECIFICATION REQUIREMENTS

Check your local plumbing codes and USA Trade Agreements for Fixture Compliance and Requirements. It is the Buyer's Responsibility to determine if Metcraft's products meet all of Buyer's requirements before purchasing this product. All designs are subject to change without notice. Unless otherwise stated in the Purchase Order and expressly agreed to by Metcraft, goods furnished will be of the design in effect at the time the order is filled. Every effort will be made to quote on goods which are equal, or superior, to those specified by Buyer. Metcraft will provide submittals sheets but does not guarantee approval by architect/ engineer/owner. When goods are approved as submitted, the Metcraft's sole responsibility shall be to provide the goods as approved. Field dimensions are the responsibility of the Buyer and must be provided to Metcraft in writing, accompanied by Buyer's signature. Current rough-in dimensions are provided with the submittal drawings. Dimension are subject to $(+ \text{ or } -) \frac{1}{4}$ " manufacturer's tolerance and may change without notice. Metcraft Industries will not be responsible for use of superseded or obsolete drawings.

PAYMENT AND TAXES

If the Verification includes payment terms, such terms are subject to credit approval prior to shipment. Checks from Buyer must be dated and postmarked no later than the date specified for payment in the Verification. All periods for payment shall commence as of the invoice date, as set forth on the face of the invoice. Payment terms proposed by Buyer and appearing on any Purchase Order shall be deemed severed from such Purchase Order and shall be without force or effect. If Buyer defers delivery of goods, goods will be considered shipped on the date scheduled, and payment in full shall be due according to terms of the applicable Verification. Any additional costs that Metcraft incurs as a result of such deferred delivery will be the sole responsibility of Buyer, and Buyer agrees to, at Metcraft sole option, (1) pay any such additional costs in advance (including to any third parties as may be designated by Metcraft) and provide Metcraft with evidence of such payment, or (2) reimburse Metcraft for any expenses actually incurred and paid. Minimum invoice charges will be enforced. If exemption from sales taxation is claimed, a sales tax exemption certificate must accompany the Purchase Order. Buyer agrees to provide Metcraft all information needed to file and perfect a mechanic's lien, if deemed necessary or advisable by Metcraft.

FREIGHT AND DELIVERY TERMS

All shipments are F.O.B. origin at Buyer's risk. Freight terms shall be stated on the Verification. Metcraft reserves the right to designate the freight carrier. All shipping weights and shipping dates are estimates only and are not guaranteed. Metcraft shall not be liable for any loss or damage arising out of delay in delivery of any goods due to causes beyond its control. When an order is scheduled and in production, changes in shipping date can only be made by written notice and on the condition that (1) any charges incurred on account of such change will be Buyer's sole responsibility and (2) such change does not impose an undue burden upon Metcraft, which Metcraft shall determine in its reasonable discretion. Items must be shipped within 6 months from date of Purchase Order unless this period has been extended in writing by Metcraft.



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CLAIMS AND SHORTAGES

The Buyer must file all claims for losses and damages in shipment [with the delivering carrier]; however, Metcraft will, if requested in writing, file such claim if Buyer has complied with all of the following requirements within 5 working days after receipt of shipment:

- (1) Buyer inspects the shipment immediately upon receipt;
- (2) Buyer causes the shipment to be inspected by the delivering carrier for losses and damage; and
- (3) Buyer files an inspection report with carrier and sends copy of such report to Metcraft.
- All claims for shortages must be reported in writing to Metcraft within 14 days of shipment.

All claims for failure to receive shipment must be reported in writing to Metcraft within 30 days of invoice date.

WARRANTIES AND RETURNS

All items are manufactured per specification. Goods manufactured by Metcraft are warranted to be free from defects in workmanship and materials for a period of one year from the date of shipment.

With respect to allegedly defective goods, Buyer must (1) provide written notice to Metcraft of any such defects promptly after discovery and within a one year period from the date of shipment and (2) return the allegedly defective good to Metcraft for inspection. Within a reasonable time after such notification and the return of the product, Metcraft, at its sole option, shall repair or replace defective good and deliver the replacement good to Buyer without cost to Buyer.

With respect to nonconforming goods, Buyer must advise Metcraft in writing within 30 days of shipment of any noncompliance with the signed submittal sheets. The return of any goods shall be based upon Metcraft's reasonable discretion. No goods will be accepted for return without a written return materials authorization ("RMA") from Metcraft. A request for an RMA must include the invoice number and invoice date. Within a reasonable time after such notification and the return of the nonconforming product, Metcraft shall deliver the replacement good to Buyer without cost to Buyer. Terms of the return shall be listed on RMA.

Repair or replacement is the Buyer's exclusive remedy for any breach of warranty. In no circumstance shall Metcraft's liability under this Section be greater than the amount paid by Buyer for the good that forms the basis for the Buyer's claim. Furthermore, Metcraft will under no circumstances be responsible for consequential, incidental or special damages based upon breach of warranty, breach of contract, negligence, strict tort liability or any other legal theory. Notwithstanding any applicable statute of limitation, Buyer agrees that no claims arising under these Terms and Conditions or any Purchase Order may be brought more than one year from the date of shipment.

THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY, TITLE AND FITNESS FOR A PARTICULAR PURPOSE.

The failure of Metcraft to insist upon the strict performance of these Terms and Conditions shall not constitute or be construed as a waiver or relinquishment of Metcraft's rights thereafter to enforce any such term or condition or any other term or condition. These Terms and Conditions, and any and all Purchase Orders, Verifications or other agreements entered into by and between the Parties (each an "Agreement") shall be governed by, and construed in accordance with, the laws of the State of Missouri, not-withstanding principles of conflicts of laws. The Parties agree that any action arising out of any Agreement shall be brought solely in the state and federal courts located in Jackson County, Missouri, and each Party hereby consents to the personal jurisdiction of such courts with respect to all actions arising out of any such Agreement.

NO AGENT OR REPRESENTATIVE OF METCRAFT IS AUTHORIZED TO MAKE ANY EXCEPTIONS TO THESE TERMS AND CONDITIONS OF SALE. IF LEGAL ACTION IS NECESSARY TO ENFORCE ANY OF THESE TERMS AND CONDITIONS OF SALE, THE CUSTOMER WILL BE RESPONSIBLE FOR ANY COURT COSTS AND REASONABLE ATTORNEY'S FEES.



Here's an Idea...

Before you scrap your old stainless steel fixtures, consider Metcraft's fixture refurbishment program!

> The next time you are faced with the repair or potential replacement of an expensive plumbing fixture, consider this cost-savings alternative first! Metcraft, the innovator in stainless steel plumbing fixtures, is once again breaking new ground with the Metcraft Refurbish Program - the only guaranteed refurbish program on the market today!

With nearly five decades of experience, Metcraft has qualified employees who can quickly evaluate your situation. If the fixture can be refurbished, Metcraft will completely refurbish the fixture to function with "like new" performance for a fraction of the cost of a new fixture.

Plus, it doesn't matter who manufactured your original fixture. Whether your fixture was made by Acorn, Bradley, Willoughby, Metcraft or any other stainless steel fixture manufacturer, Metcraft can

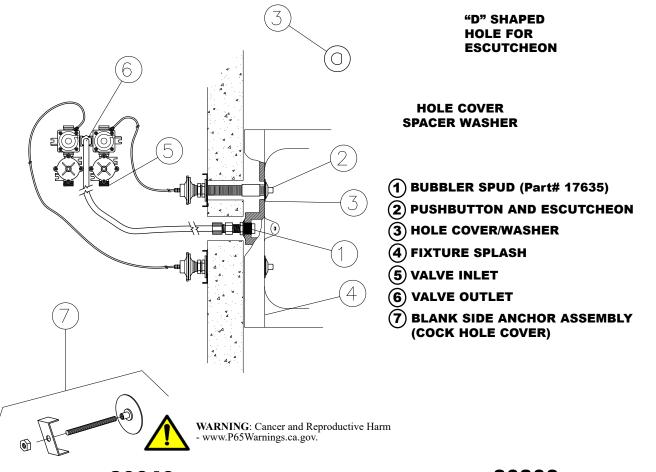
fix it!



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Call us for additional information!

Backsplash Mounted Retro-Fit Valve



39849 A341 Single Temperature

The Metcraft retrofit pneumatic valve assemblies are designed to replace existing valves on vitreous china and aluminum prison fixtures or to compliment the installation of new vitreous china prison fixtures. These valves are furnished with push button assemblies, actuators and steel anchoring nipples. The steel anchoring nipples are designed to provide support for securing the fixture to the wall. 2-3/8" (60mm) OD push button escutcheon plates are furnished to adequately cover the larger push button holes found in these fixtures. A bubbler spud with an expanding rubber seal is provided to make the connection between the bubbler supply tubing and the integral bubbler.

38382

A342 Dual Temperature

Valves can be operated either as quick closing, metering or a combination of both operating modes.

When a single temperature valve is required, a stainless steel cover plate with an anchor is provided to secure the side of fixture opposite the single push button.

Replacement valves should be located within ten feet of the fixture(s). Where circumstances permit, valves can be manifolded to serve two fixtures from a single manifold.

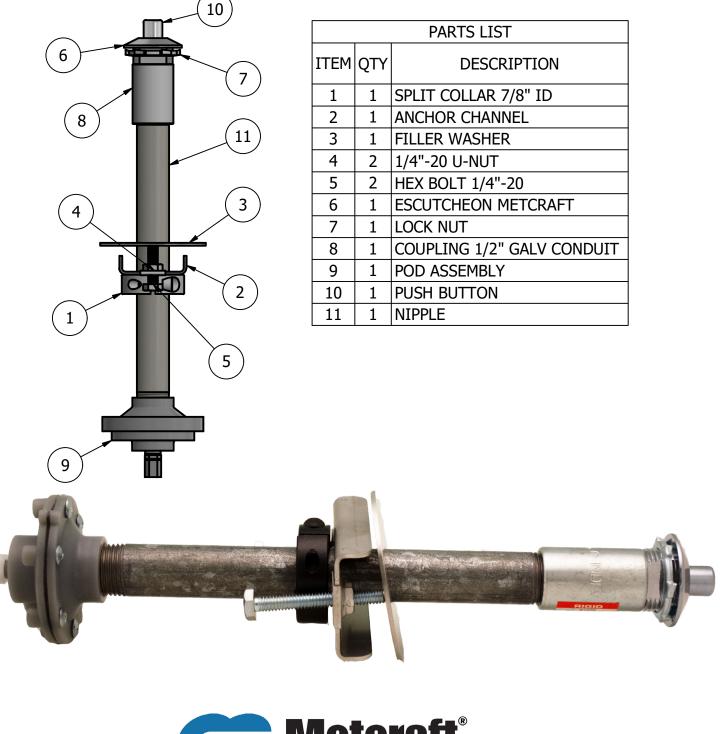


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Anchor Assemblies

39321 - 10"

39352 - 8"





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Anchor Assemblies

26580

24856

8

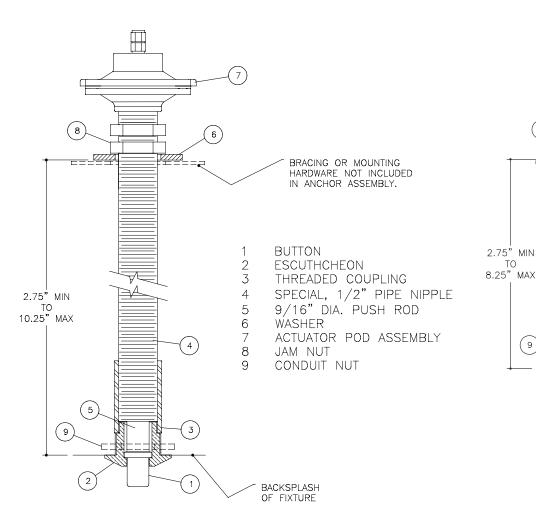
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"A" DIMENSION = TOTAL THICKNESS OF WALL, SPLASH, AND ANY OTHER MOUNTING HARDWARE.



Anchor Assemblies

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Pushbutton adapters are used to convert the current existing hole punching of the existing fixture to the Metcraft Pushbutton design.



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Deck Mounted Retro-Fit Valve

Models

Single Temperature

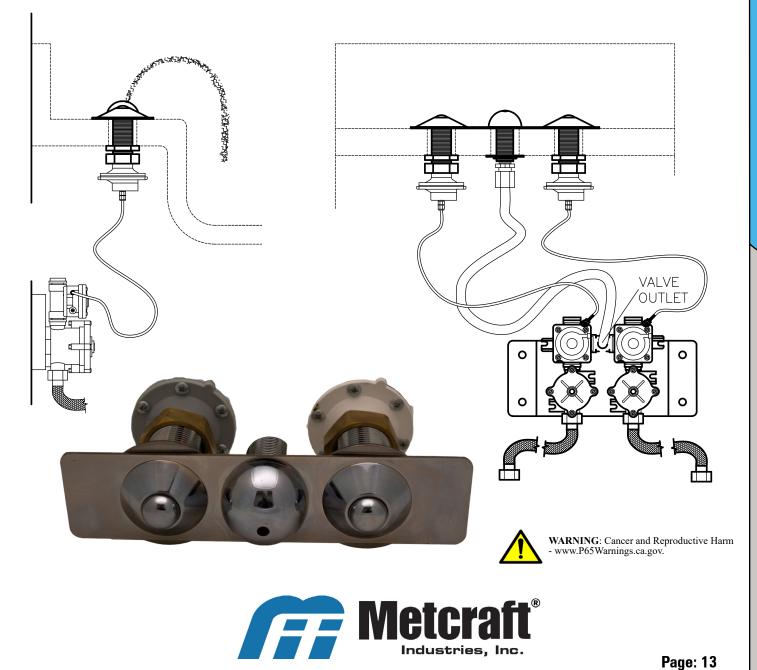
- **38280** *A341-DM-LR-4* with 4" C-C Deck Plate
- □ **38281** *A341-DM-LR-8* with 8" C-C Deck Plate

Dual Temperature

- □ **38278** *A342-DM-LR-4* with 4" Deck Plate
- □ **38279** *A342-DM-LR-8* with 8" Deck Plate

Standard Features

- Hemispherical Push Button
- Hemispherical Bubbler
- Deck Plate
- Mounting Washers



Tempus II Retro-Fit Valve Information

The following section deals with the retrofit of existing fixture valves. The Metcraft TEMPUS II valve was discontinued in 1993. This valve was manufactured for Metcraft and the manufacturer is no longer a viable source for repair parts or valve components. Metcraft offers two retrofit cartridges for this valve.

PART NO. #19811 NON-METERING CARTRIDGE KIT

This cartridge has been adapted to provide a relatively inexpensive non-metering cartridge for the Tempus II valves. When this cartridge is used, it is necessary to utilize the looped operating lever assembly and cap nut from the old brass Tempus cartridge being replaced, along with the existing push rods and push rod ends. New operating levers, push rods and push rod ends are no longer available.

The old Tempus II valve received a minor change in its casting during its last few years of production. This change made the opening at the top of the cartridge bore slightly larger than the previous casting. As a result, the older castings will not accept the #19811 retro-fit cartridge until the upper "O" ring is moved against the small rim at the top of the cartridge. Once this is done, the retro-fit cartridge can be pushed down into the body. The rim at the top of the cartridge compresses the upper "O" ring of the cartridge against the valve body forming the upper seal. It is important that when the cap nut is screwed onto the valve body, it is not tightened to the point where it shears this "O" ring. Only very moderate tightening is required to seal the cartridge.

PART NO. 30033S PNEUMATIC METERING CARTRIDGE

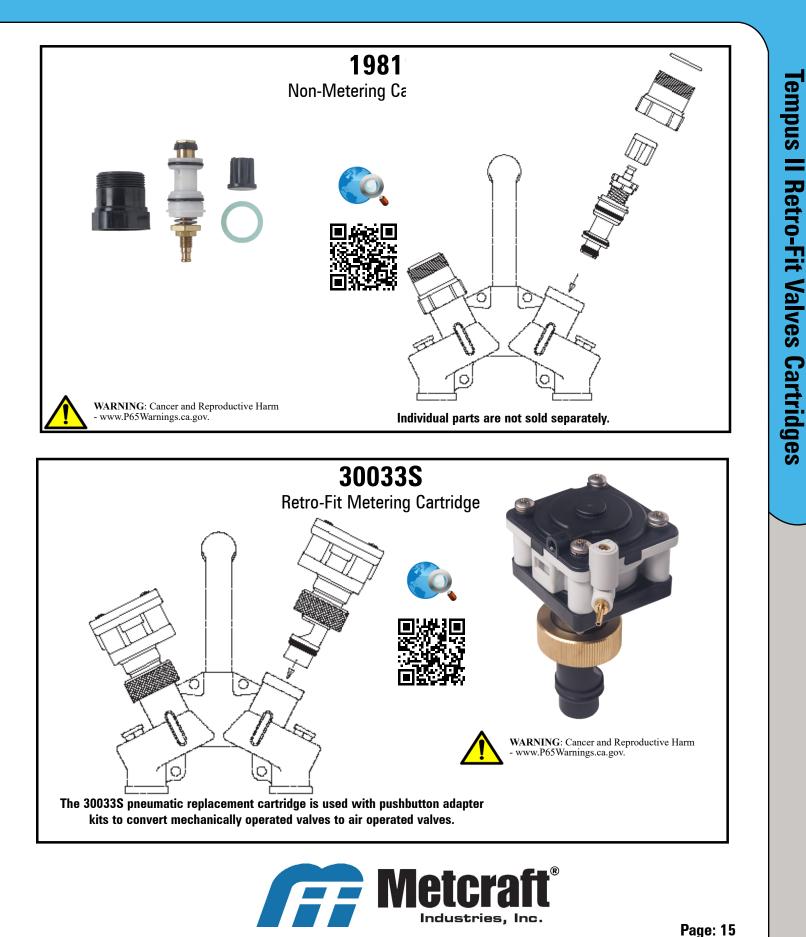
This cartridge was developed to provide a replacement for the old brass metering cartridges originally used for the TEMPUS II valve. When this cartridge is chosen, it is necessary to convert the pushbuttons for pneumatic operation of the cartridge. The existing mechanical push rods and push rod ends are removed and replaced with a push button adapter kit.

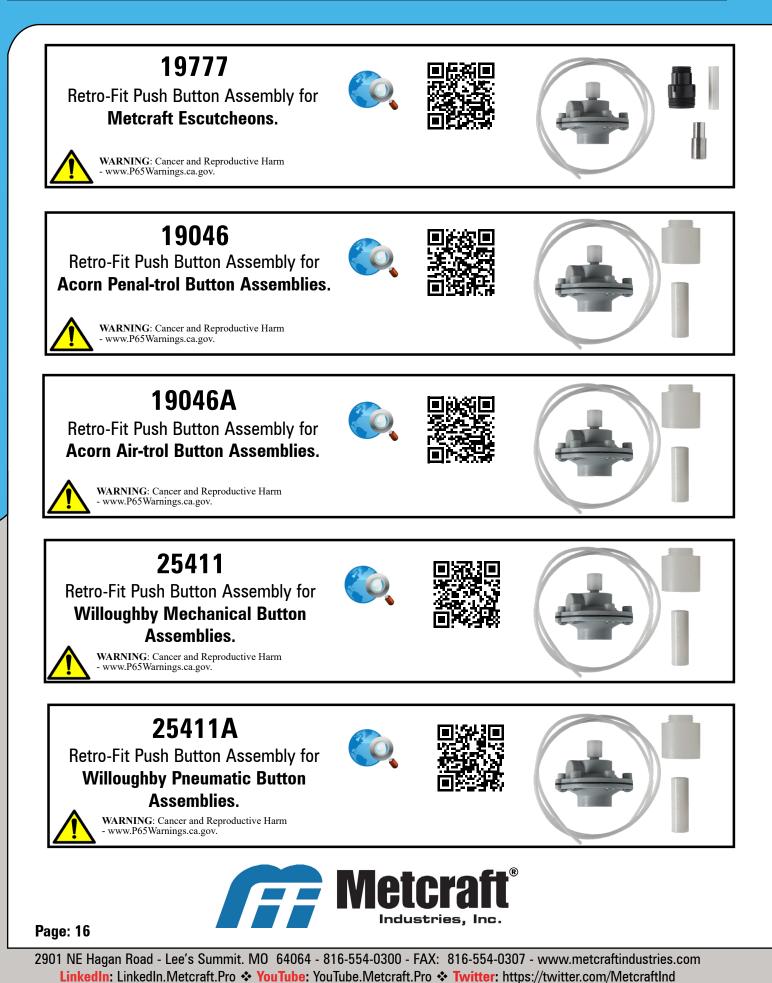
The EXTENDED push button adapter kit (Part No. #20348) is primarily used for lavatory valves. It adapts the existing push button assembly to operate a diaphragm pod which, in turn, operates the #30033S pneumatic cartridge. The kit contains all parts needed to convert either of the two push button types used on the Tempus II valve. The parts list illustrates the two push button types. Parts not required can be discarded.

The CLOSE COUPLED push button adapter kit (Part No. #19777) is primarily used for shower applications where there is adequate access to the back of the panel where the push button is mounted. As with the extended push button adapter kit, parts are included for either of the two push button types used on the Tempus II valve. Unused parts can be discarded after the conversion is made.



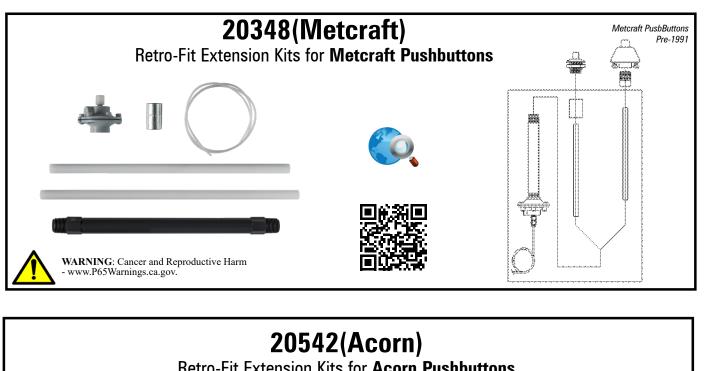
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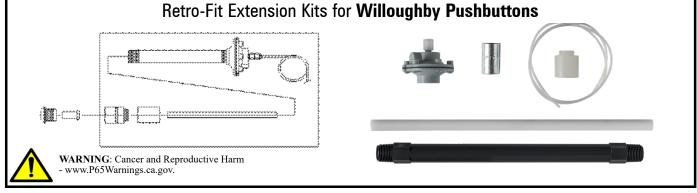
Retro-Fit Push Button Assemblies

Retro-Fit Extension Kits





30347(Willoughby)





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A311 Single Temperature Pneumatic Valves

Part#	Description
24376S	A311 Valve W/Pushbutton .5 GPM
23890S	A311 Valve W/O Pushbutton .5 GPM





Part#	Description
24305S	A312 Valve W/ Pushbutton .5 GPM
23891S	A312 Valve W/O Pushbutton .5 GPM



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A313 Single Temperature Manifolded Pneumatic Valves

Part#	Description
24395S	(2) Manifold Valve W/ Pushbutton .5 GPM
24428S	(2) Manifold Valve W/O Pushbutton .5 GPM
24394S	(3) Manifold Valve W/ Pushbutton .5 GPM
24399S	(3) Manifold Valve W/O Pushbutton .5 GPM
24270S	(4) Manifold Valve W/ Pushbutton .5 GPM
24429S	(4) Manifold Valve W/O Pushbutton .5 GPM

2 Manifold Valve



3 Manifold Valve



4 Manifold Valve







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Lavatory Pneumatic Valves

A314 Dual Temperature **Manifolded Pneumatic Valves**

Part#	Description
24398S	(2) Manifold Valve W/ Pushbutton .5 GPM
24215S	(2) Manifold Valve W/O Pushbutton .5 GPM
24397S	(3) Manifold Valve W/ Pushbutton .5 GPM
24216S	(3) Manifold Valve W/O Pushbutton .5 GPM
24396S	(4) Manifold Valve W/ Pushbutton .5 GPM
24113S	(4) Manifold Valve W/O Pushbutton .5 GPM

2 Manifold Valve

3 Manifold Valve

4 Manifold Valve









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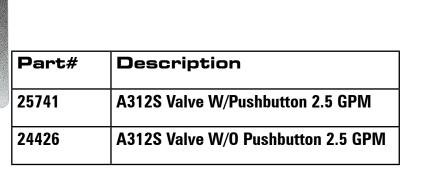
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WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

A311 Single Temperature Pneumatic Valves

Part#	Description
24356	A311S Valve W/Pushbutton 2.5 GPM
24157	A311S Valve W/O Pushbutton 2.5 GPM



A312 Dual Temperature

Pneumatic Valves



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Shower Valves

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A313 Single Temperature Manifolded Pneumatic Valves

Part#	Description
24425	(2) Manifold Valve W/Pushbutton 2.5 GPM
24220	(2) Manifold Valve W/O Pushbutton 2.5 GPM

A314 Dual Temperature Manifolded Pneumatic Valves

Part#	Description
24424	(2) Manifold Valve W/Pushbutton 2.5 GPM
24423	(2) Manifold Valve W/O Pushbutton 2.5 GPM

36048

Ligature Resistant Pressure Balancing Valve



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Repair Parts

Parts Catalog



30001S Flow Through Valve Module





Valve Modules





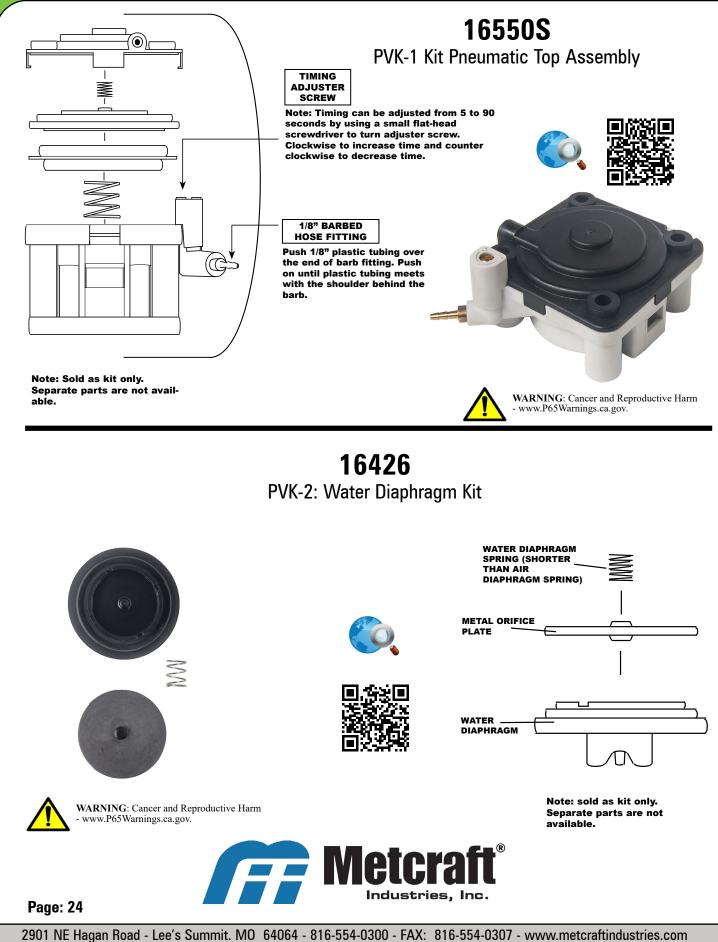




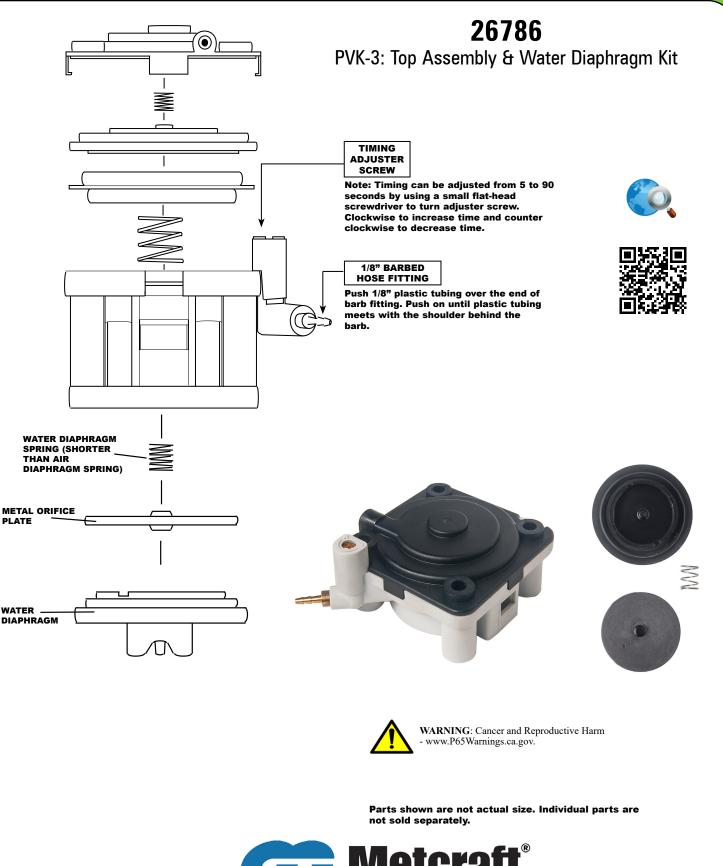
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18977 S/S Seat with O-Ring for Pneumatic Valve





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Valve Components

	Elbow Flow For Metcraft Pneu		
	Part Number	Flow Rate	
	27090	.5 GPM	
I T THE TWO IN THE REAL PROPERTY.	30911	1.2 GPM	
	32045	1.4 GPM	
	29241	2.0 GPM	
WARNING: Cancer and Reproductive Ha	am 27088	2.5 GPM	



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For Metcraft Pneumatic Valves

Part Number	Flow Rate
27089	.5 GPM
31554	1.2 GPM
32028	1.4 GPM
31555	2.0 GPM
27087	2.5 GPM



Brass Flow Controls

For Metcraft Shower Heads

Part Number	Flow Rate
32007	1.2 GPM
32044	1.4 GPM
20409	2.0 GPM
20408	2.5 GPM



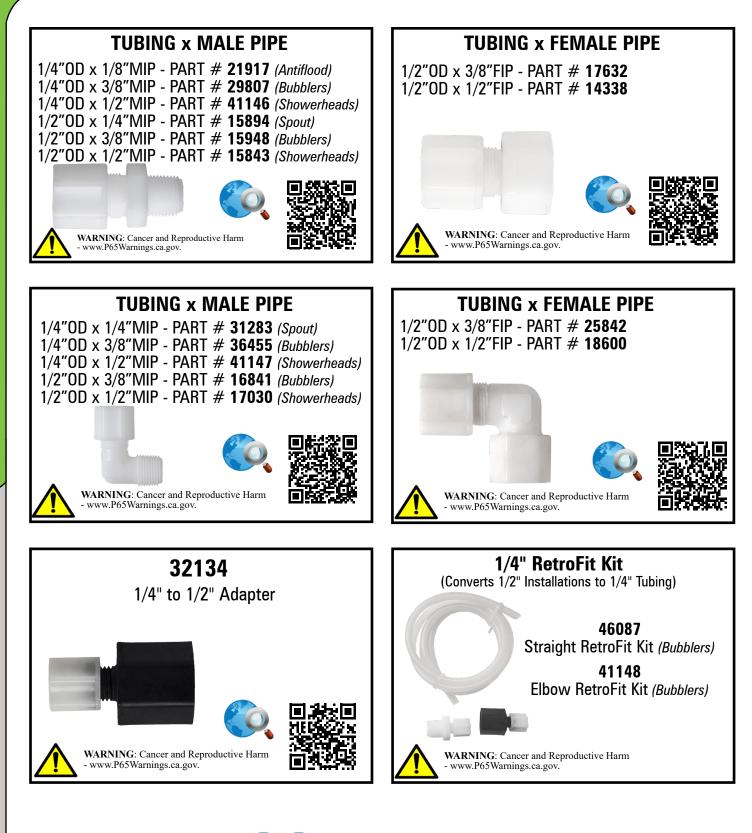


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Valve Components



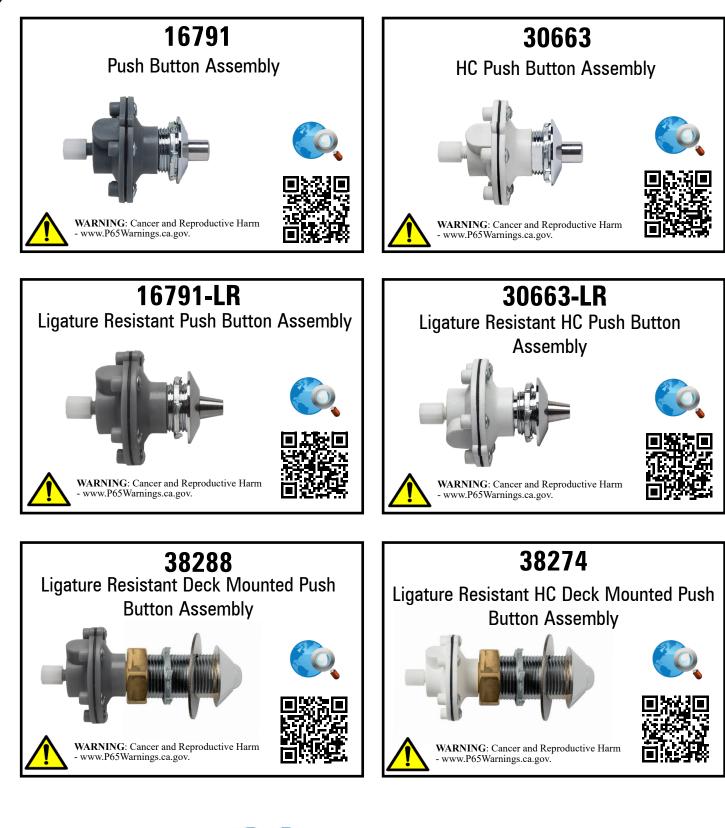
Plastic Adapters





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38672

Ligature Resistant HC Backsplash Mounted **Push Button Assembly**



35697A



Retrofit Ligature Resistant Ring for Push Buttons

35697A	Ring for Metcraft Push Buttons
35698A	Ring for Acorn Push Buttons
35699A	Ring for Willoughby Push Buttons





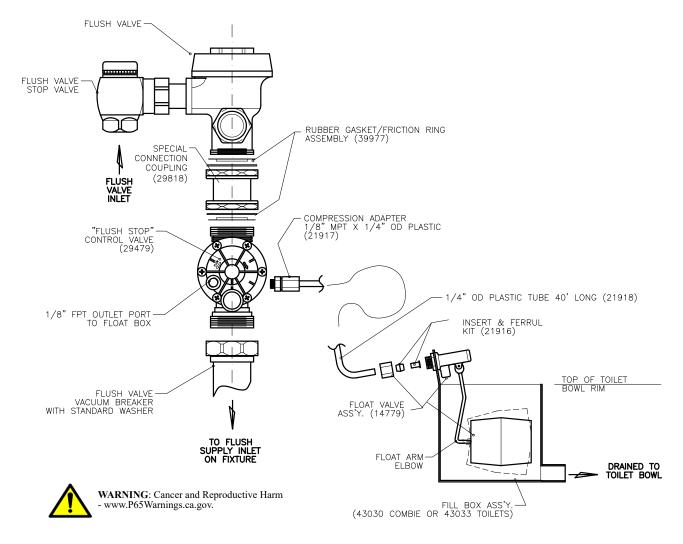


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Anti-Flood Installation Diagram

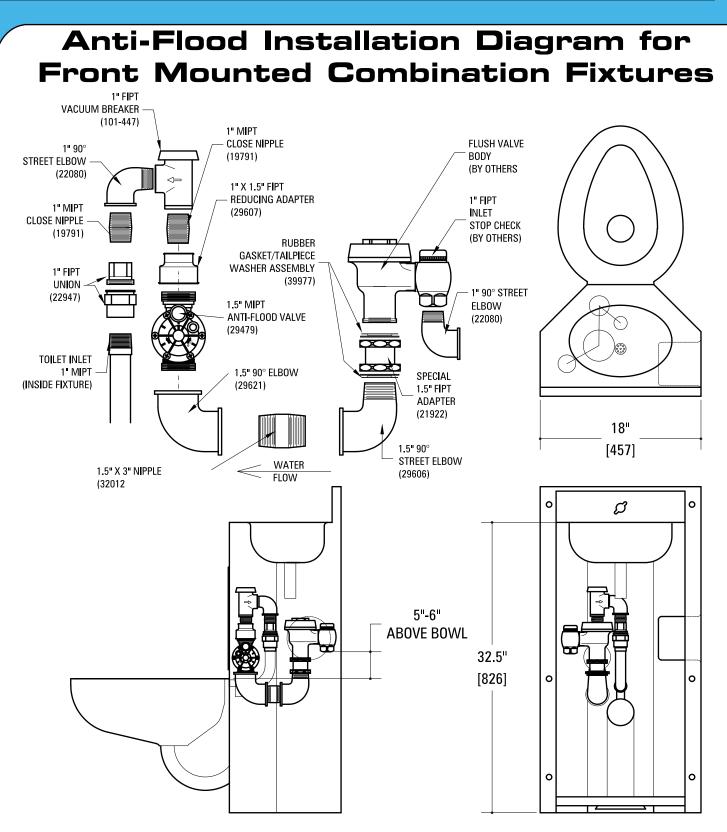


Connect hydraulic "Flush Stop" valve to flush valve using special connection coupling with cloth inserted washers. Install vacuum breaker on downstream side of "Flush Stop" valve. Install assembly on unit as usual.

Slip compression nuts on tube. Install tube on float valve. Run interconnect tube to "Flush Stop" valve. Interconnect tube should be as short as possible, it should have a continuous rise from float valve to compression fitting. All bends should be as "gentle" as possible, be careful not to kink tube when bending. Install compression adapter on "Flush Stop" valve. Install interconnect tube to compression adapter.

The float value is positioned to prevent water from overflowing the bowl. To adjust the water level, loosen the nuts on the mounting bracket for fill box assembly. This bracket has slots that will allow you to adjust the location of the fill box. Adjust the fill box so that it fully drains into the toilet bowl, then tighten the nuts to secure the fill box.







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Anti-Flood Repair Parts



Parts Catalog





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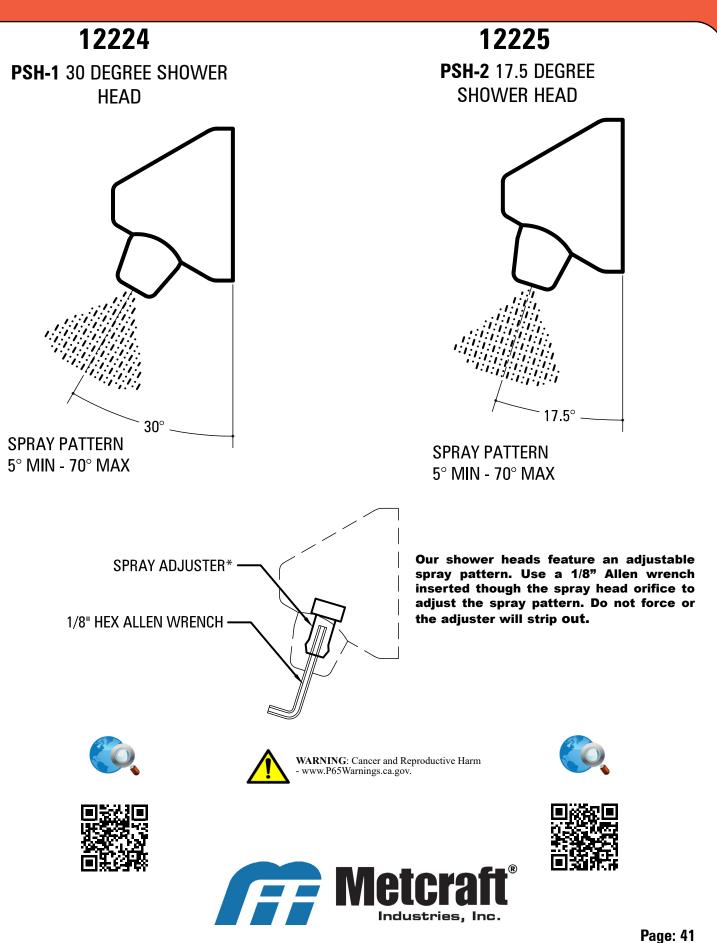
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Bubblers & Fillers

Parts Catalog

Shower Heads





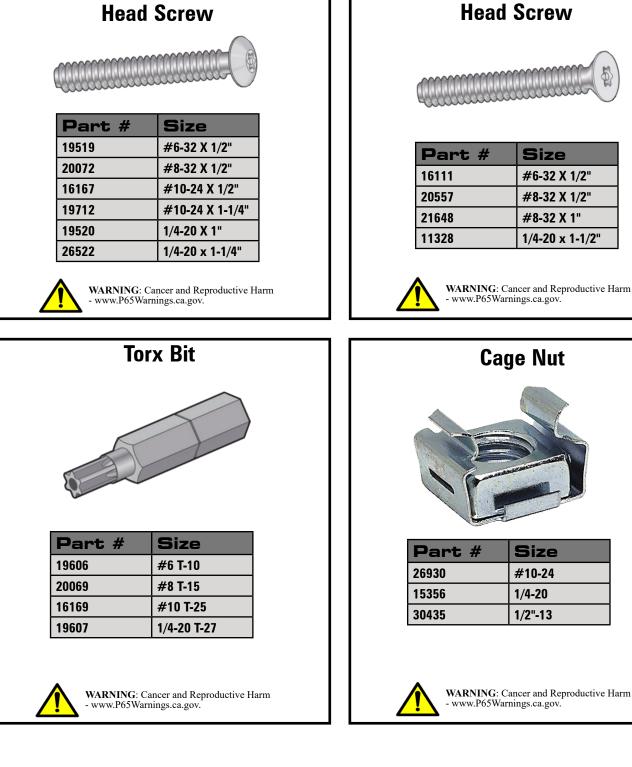
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Tamper Resistant S/S Torx Button

Tamper Resistant S/S Torx Flat





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-asteners

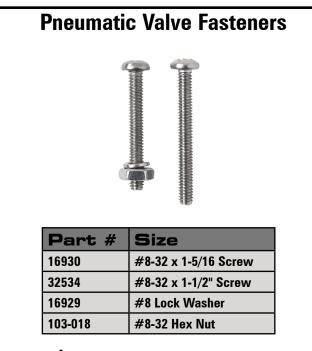
Vandal Resistant Cap Nuts & Spanner Bit



Part #	Size
SF3-003	1/4 - 3/8 - 5/8 Spanner
SF3-138	1/4-20 Cap Nut
39678	5/16-18 Cap Nut
SF3-178	3/8-16 Cap Nut
SF3-179	5/8-11 Cap Nut



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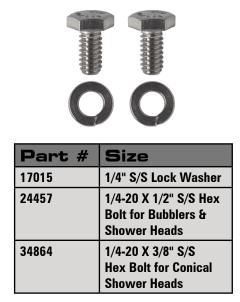


Part #	Size
33095	1/4-20 Nut
33119	5/16-18 Nut
33120	3/8-16 Nut
33096	Bit



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Hex Bolts and Lock Washers





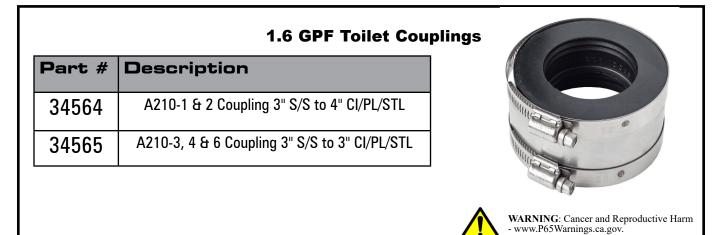
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Lavatory Couplings
Description
A205-1 & 2 Coupling 1-1/4" S/S to 1-1/2" CI/PL/STL
A205-4 Coupling 1-1/2" S/S to 1-1/2" CI/PL/STL
A205-6 Coupling 1-1/2 S/S to 2" CI/PL/STL
A205-3 Coupling 1-1/4 S/S to 2" CI/PL/STL
1-1/4 S/S to 1-1/4 S/S Coupling





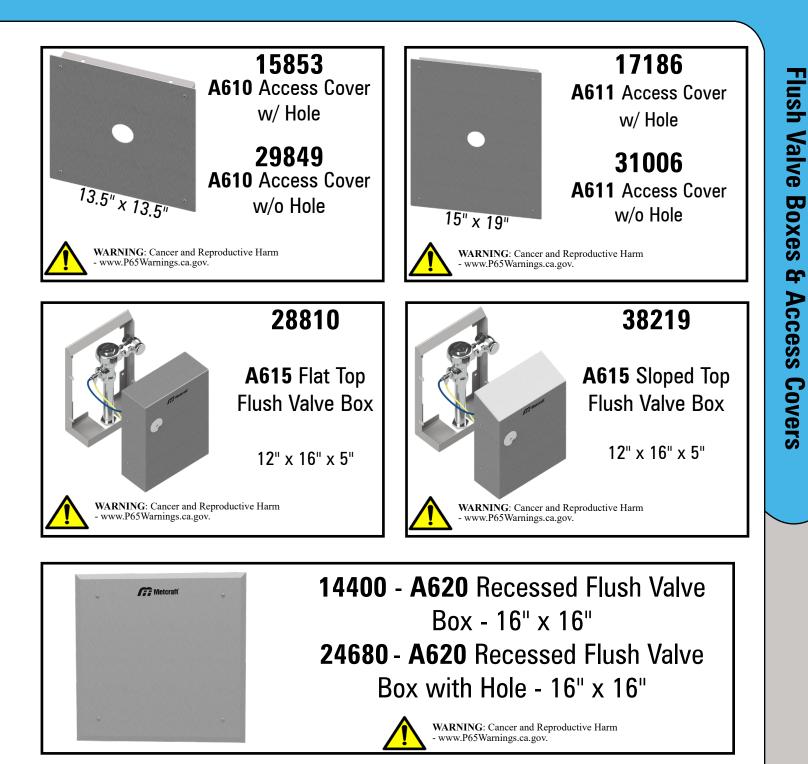
1.28 GPF Toilet Couplings			
Part #	Description		
30075	A210-5 Coupling 2-3/8" S/S to 2-3/8" CI/PL/STL	MILLING CONTRACTOR	
17881	A210-8 Coupling 2-3/8" S/S to 4" CI/PI/STL	And	
17882	A210-9 Coupling 2-3/8" S/S to 3" CI/PL/STL	0	



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Custom sizes are available. Please call with your request.



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20176

A216-3 S/S Pinned Brass Cleanout Plug 3" for placement behind the toilet.

16556

A216-4 S/S Pinned Brass Cleanout Plug 4" for placement behind the toilet.





A216H-3 S/S Pinned Brass Cleanout Hook 3" for placement in the Vertical Stack.

28293

A216H-4 S/S Pinned Brass Cleanout Hook 4" for placement in the Vertical Stack.



Test Tees

23169

A215-3 3" No-Hub Tee with Plug

23170

A215-4 4" No-Hub Tee with Plug





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A550 SERIES SINGLE WALL GRAB BARS

37088	A554	18" Long Straight Grab Bar	
37240	A554LR	Ligature Resistant 18" Long Straight Grab Bar	
35287	A550	24" Long Straight Grab Bar	
35286	A550LR	Ligature Resistant 24" Long Straight Grab Bar	
35291	A551	36" Long Straight Grab Bar	
35290	A551LR	Ligature Resistant 36" Long Straight Grab Bar	
34782	A552	42″ Long Straight Grab Bar	
32925	A552LR	Ligature Resistant 42" Long Straight Grab Bar	
33880	A553	48" Long Straight Grab Bar	
37692	A553LR	Ligature Resistant 48" Long Straight Grab Bar	

Standard Model Pictured Directly Below Ligature Resistant Model Pictured at Bottom

A540 SERIES TWO WALL GRAB BARS

32035 A540 2-Wall Grab Bar
29381 A540LR-LH Left Hand Ligature Resistant 2-Wall Grab Bar
29355 A540LR-RH Right Hand Ligature Resistant 2-Wall Grab Bar

Standard Model Pictured Directly Below Ligature Resistant Model Pictured at Bottom





STANDARD FEATURES

- 1-1/2" OD Grab Bar.
- 16 Gauge Type 304 Stainless Steel.
- 12 Gauge Flange
- Slip Resistant Gripping





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Metcraft does not recommend the use of a hand held shower in security or behavioral health applications. A second fixed head, mounted per HC guidelines is recommended instead.



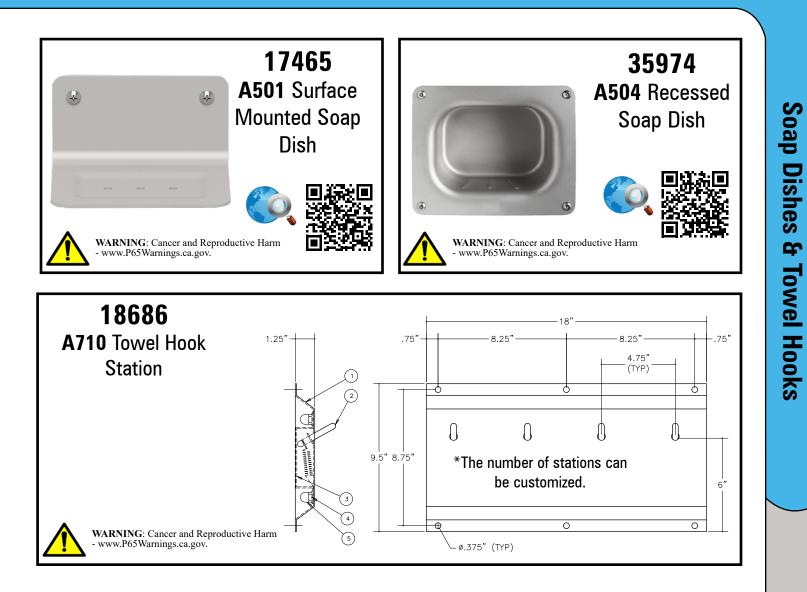
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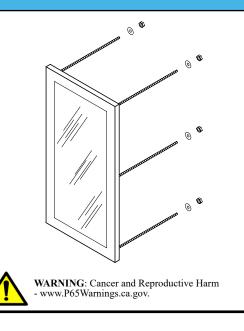
Accessories







Parts Catalog

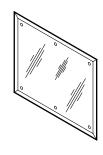


Rear Mounted Mirrors:

19210 A750 Mirror - 12.25" x 16"

26436 A751 Mirror - 12.25" x 24" HC

A758 Mirror - Custom Sizes (Built to Size) ____ x ____



Front Mounted Mirrors:

29270 A752 Mirror - 12.5" x 16" HC

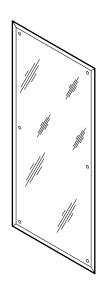
29272 A753 Mirror - 12.5" x 24" HC

33003 A754 Mirror - 9.5" x 11.25"

31546 A755 Mirror - 11.25" x 17.25"

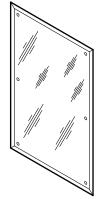
35448 A756 Mirror - 11.25" x 23.5" HC

A757 Mirror - Custom Sizes (Built to Size) _____ x ____





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Metcraft[®]

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Mirrors





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For Optimal Care of Your Stainless Steel Fixtures Check Out Our Stainless Care & Cleaning Kit!

38151 Stainless Steel Repair & Cleaning Kit



Clean and maintain your stainless with our affordable care & cleaning kit.

Easily clean grime and stains even on vertical surfaces with our choice cleanser.

Remove scuffs and minor scratches with our choice hand and wheel abrassives. These will allow you to blend and buff minor scratches and scuffs out of your fixtures to return them to a like-new condition.

Our choice protectant will help you maintain the great aesthetics of stainless steel.



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Protect Your Fixture

The corrosion appearing in this image is the result of contaminants that fell into the toilet during the construction phase of the project. Particles of mild steel that are introduced into the water in the toilet bowl will rust and cause the stainless steel to corrode. The longer the particles remain in the toilet bowl, the more severe the corrosion.

The fixtures must be protected during the construction phase and cleaned immediately upon contact with any contaminants. Cleaning the interior of the bowl with a fiber pad (like 3M Scotchbrite) is recommended. DO NOT use mild steel (wool) scouring pads. Some areas which may be deeply pitted can not be restored using this method. It is important to regularly clean the fixtures using a mild detergent and water.

DO NOT, under any circumstances, use cleaners that contain chlorides, bleach or muriatic acids as these compounds will attack and destroy stainless steel.





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Presenting Metcraft's Utility Room

Did you know we have a wide range of products for your utility room? From Mop Sinks to Utility Sinks, we have you covered! We also have the perfect accessories to finish out your utility room including valve boxes, grab bars and mop holders. That's just a sample of what we offer, to learn more about our full line of products head over to our website:

www.metcraftindustries.com



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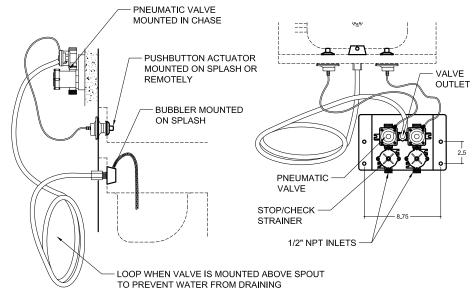
A300 PNEUMATIC VALVE GENERAL GUIDELINES

For specific valve applications, Metcraft provides supplemental information with each shipment. Please refer to these sheets for answers to specific questions on individual valves. In general, Metcraft's pneumatic valves are designed to operate under these general guidelines:

- 1. All valves require water pressure of at least 35 PSI flowing. Recommended maximum pressure 70 PSI.
- 2. Flow controls of lavatories/drinking fountains are preset to .5 gallons per minute.
- 3. Flow controls of showers are preset to 2.5 gallons per minute

4. Flush all standing water from lines prior to attachment of valve to water supply. Do not leave highly chlorinated water in valves or severe damage will occur. Long periods of dormancy can adversely affect valves. The water should be removed from valves during such dormant periods.

For the best results from Metcraft's A300 Pneumatic Valves, reasonable water quality standards must be maintained. High levels of minerals and sediments in water supply will have detrimental effects on function of these valves.



A300 SERIES PNEUMATIC VALVE INSTALLATION INSTRUCTIONS

- 1. Flush all supply lines thoroughly before hooking valves to supply lines.
- 2. Make sure polyethylene tubing is clear of any debris or water. DO NOT use kinked tubing.

3. Install inlet fitting to the bubbler/shower head. Assemble push buttons and bubbler/shower head to the fixture's backsplash/panel before securing to the wall.

4. Mount the valve and bracket assembly to the wall. Choose a location where future access for maintenance and adjustment of the valve will be convenient. The valve must be located within 7 feet of the push button operators and bubbler outlet.

5. DO NOT use pipe thread compounds or sealants on any threads connecting to the valves, valve operators and tubing nuts. Thread sealants are not intended for these connections and may contribute to valve damage or malfunctions and thereby void warranty.

6. Connect 1/2" polyethylene tubing to the bubbler/shower head and the valve outlet. Loop tubing below spout to prevent water draining from spout. Compression connections should be tightened. Over-tightening with a wrench may cause damage. Make sure tubing is fully inserted into socket before tightening.

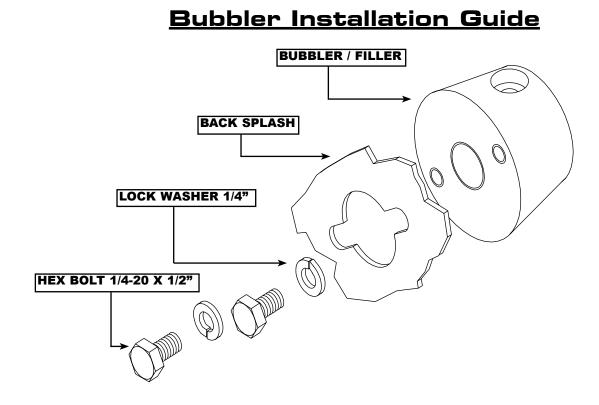
7. Connect 1/8" tubing to push button assemblies and to brass barb connection on the side of the valve operator. Make sure tubing is fully inserted in socket on push button assemblies before tightening small plastic nut. Small nut should be finger tightened only. Do not use a wrench on these nuts.

- 8. Open supply stop(s) and check the valve connections for leaks.
- 9. Actuate push buttons several times to clear air from the valves and tubing. Check water tubing at valve and bubbler for possible leaks again.
- 10. Adjust timed cycle of valves as needed, following the instructions given below.

The timing cycle can be adjusted using the timing adjustment located next to the 1/8" air tube connection on the side of the valve operator. These valves have a small screwdriver slot on the end of the adjuster. Timing clockwise lengthens the cycle; counter-clockwise shortens the cycle. Adjustments should be made in small increments to achieve best results. As the cycle is lengthened, adjustments become increasingly sensitive. Timed cycles in excess of 1 minute require infinitely small adjustments.



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BUBBLER / FILLER INSTALLATION INSTRUCTIONS

1. Assemble bolt & lock washer finger tight through body slots in back splash and threaded holes in bubbler.

- 2. Align lock washer so split is not in slots on back splash as shown.
- **3. Tighten bolts to 10FT/LB.**



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Flush Valve Pipe Stabilizer

1. Install Flush valve per flush valve manufacturers recommendations or if previously installed verify it is installed per flush valve manufacturers recommendations.

2. Familiarize yourself with the Flush Valve Pipe Stabilizer installation drawing and how parts are assembled before proceeding with installation.

3. Using a 3/16" Allen wrench remove cap screws from collars and brace.

4. Put two halves of a collar on either the horizontal or the vertical flush pipe tube and insert a cap screw through the hole opposite from where the brace would go and loosely thread the cap screw in.

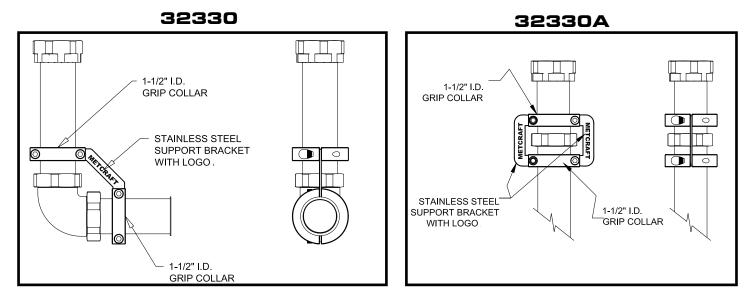
5. In the opposite hole insert one end of the brace and loosely thread the other cap screw in place.

6. Using the previous method connect the remaining collar to the other pipe, leaving cap screws loose.

7. Adjust collars and brace were they resemble the illustration drawing. Make sure brace doesn't interfere with compression nut on flush valve elbow in case it must be tightened in the future.

8. Using the 3/16'' Allen wrench tighten the cap screws to 80 in-lbs. at the brace first then the outer screws.

9. After a short period of use check cap screws for tightness.





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<u> Parts Catalog</u>

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Trouble-Shooting Pneumatic Valves

<u>SYMPTOM:</u> VALVE WILL NOT SHUT OFF.

- 1. Remove 1/8" air tube from fitting beside timer. If the valve shuts off after a short time, turn the timer adjustment counter-clockwise several turns. Re-connect the tubing making sure the connection is sealed properly (tubing will not slip or come off if tugged gently). Re-adjust timer for desired cycle time.
- 2. Turn off water to valve. Remove the valve top by removing the (4) screws securing it. Note the position of the tube connector and timer so the valve top can be properly re-assembled in the same position. Remove valve operator exposing the water chamber of the valve. Check the rubber diaphragm assembly for possible debris. Check the diaphragm to be sure the rubber is properly seated into the plastic post. The plastic post has a groove that the rubber diaphragm fits into and there should not be any bulges in the rubber when it is properly seated. Check the hole through the plastic post to be sure it's free of debris. Turn the diaphragm assembly over and find the small circle near the edge of the rubber. There is a small hole in the middle of the circle that should be free of debris. Rinse the assembly with clean water to remove any debris. Also, rinse the orifice plate and the separator cup in the valve top, making sure the small spring in the separator cup (above the orifice plate) is not dropped or lost. If any part of the diaphragm is damaged, replace the entire diaphragm assembly using part # 16426 (pvk-2 diaphragm kit). Clean any debris from the valve base and the valve seat before re-assembling. Re-assemble the valve and adjust the timing to desired cycle length.

<u>SYMPTOM:</u> VALVE WILL NOT OPEN OR DELIVER WATER.

- 1. Make sure the water supply is turned on.
- 2. Remove the 1/8" plastic tubing from the back of the pushbutton diaphragm and suck on the end. If water flows, the valve is operating properly but there is an air leak in the tubing connections, the tubing or the pushbutton diaphragm. Also, it is possible that the timer has been opened (turned counter-clockwise) so far the the vacuum can not be held. Close the timer (turn clockwise) to see if the valve will operate. If yes, adjust timing for desired cycle.
- 3. Check the flow control orifice located in the valve outlet fitting to be sure it is not blocked by debris. If blocked, clear debris by blowing air through it from the tubing end of the fitting. Do not force any tools through the orifice as this may damage or distort it and cause improper operation.
- 4. Check the pushbutton actuator diaphragm for leakage by removing the diaphragm from the back of the pushbutton and from the air tubing. While holding your finger over the end of the tubing connection to seal it, push the rubber diaphragm toward the back using your finger in place of the pushbutton. If the tubing fitting is sealed properly with your finger, the rubber diaphragm should be held back away from the front of the diaphragm housing. If it returns to the front of the housing, it is not holding a vacuum and must be replaced. This test should be repeated several times before deciding the diaphragm must be replaced as it is difficult to hold your finger over the hole in the tube fitting to properly seal it.



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Trouble-Shooting Pneumatic Valves

<u>SYMPTOM:</u> VALVE WILL ONLY RUN A SHORT TIME AND DOES NOT RESPOND TO TIMER ADJUSTMENT.

This is one of the most common complaints. In most cases, this is a result of an air leak in the air tubing connections either at the pushbutton end or the valve end of the tubing. If the tubing is connected using a white plastic nut, gently give the tubing a quick tug. If it comes out of the fitting, re-insert it, making certain it "bottoms out" in the fitting. Using gentle force, tighten the plastic nut one-quarter turn. Repeat as necessary until tubing is held tightly in place.

If the tubing is connected using a small brass nut (especially on showers) on the pushbutton end, it is common to find the nut has been over-tightened. This causes the seal between the tube fitting and the diaphragm or valve body to leak air. Often, loosening the nut is only possible by removing the fitting. When re-installing the fitting, it is important to just tighten the fitting firmly. Excessive force should not be applied. The brass nut should be slipped over the tubing end and then the tubing is pushed onto the barbed end fitting. The tubing nut should then be tightened only by using the fingers. The seal on this type of connection is effected on the inside of the tubing and the barb on the fitting. The brass nut serves only to prevent the tubing from inadvertently being pulled off the barb. The brass nut is not designed to seal The connection.

It should be noted that the ends of the 1/8" tubing should be closely checked for splitting or cuts. Also, inspect the tubing to be sure there are no kinks or bends to prohibit air flow within the tubing. If the tubing is damaged or kinked, it must be replaced. The ends of the tubing should be cut square for best results.



Trouble-Shooting Bubblers

<u>SYMPTOM:</u> BUBBLER SPURTS WATER WHEN PUSHBUTTON IS RELEASED.

Water spurting from the spout when the pushbutton is released is caused by air in the supply tubing to the spout. This is a common problem on project start-ups and there is no good or easy way to avoid it. When a new piping system is filled with water, pockets of air are trapped in the piping. Also, new water heating systems add more air molecules into the piping system as the water is heated. Consequently, the spurting problem is more pronounced on the warm water side of a dual temperature valve. Often, the "Milky" color seen in water coming from the warm water side is due to saturation with tiny air bubbles. Thorough purging of the piping system at each tap will relieve some of these symptoms. With the passage of time, the water system will stabilize and less and less air will be found in the system. As this happens, the spurting problem decreases and eventually ceases. However, based on water conditions and usage of a given water system, the process can take several weeks to several months for conditions to stabilize.

Some suggestions to lessen this phenomena are:

- 1. Systematically purge each tap starting with the most remotely located from the source of flow.
- Locate pneumatic valves as close as practical to the fixtures they serve. Never install a valve above a fixture with more than ten feet of tubing between the valve and the valve outlet as this produces a "Head" pressure and accentuates the spurting problem.

<u>SYMPTOM:</u> BUBBLER STREAM OVERSHOOTS THE LAVATORY BASIN (STEADY STREAM).

- Check the flow control fitting to be sure the flow restrictor is in place. The flow restrictor is normally located inside the fitting where the outlet supply tubing is connected to the valve. Penal spouts are designed for a rate of 0.5 gpm flow rate provided by the flow restrictor. Flow rate can not be adjusted adequately using the inlet stops on the valve.
- 2. Check the hole in the spout or bubbler for debris or blockage. The outlet hole of the bubbler must be clear of any obstruction or partial obstruction to form proper height of arc. Clear any debris inside the bubbler head by disconnecting the supply tube from the fitting and blowing air back through the bubbler. Do not use tools or probes through the hole on the bubbler as they may damage the finish or distort the hole, causing an erratic stream. Re-assemble the valve and adjust timing to desired cycle length.

<u>SYMPTOM:</u> BUBBLER STREAM DOES NOT FORM A HIGH ENOUGH ARC.

- 1. Check the flow control fitting for blockage. Clear any debris with air pressure or flushing with clean water. Do not use probes to clear blockage as this may cause damage to the flow restrictor.
- 2. Check plastic supply tubing for possible kinks that would restrict water flow.
- 3. Make sure inlet stops are open.
- 4. Turn off inlet stops and inspect strainer screens for blockage or mineral build-up. Use clean water to rinse away debris. If mineral build-up is severe on the screen, use a commercial mineral solvent, (like Calcisolve or Limerase) to clean it. Thoroughly rinse the screen before re-installing it.



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Tired of Replacing Broken Units?



Replace typical vitreous china with water conserving stainless steel fixtures from Metcraft Industries! Our stainless steel plumbing fixtures are designed to provide the most reliable, durable and sanitary features demanded in the "High Abuse Washroom" market. Our new powder coated fixtures look like porcelain but wear like stainless steel!

Replacement Lavatory Fixtures

Metcraft lavatory fixtures are designed for "High Abuse Washrooms". These fixtures are fabricated using heavy gauge stainless steel, seamlessly welded to form a one piece vandal resistant unit. Lavatory fixtures are offered in a wide variety of models, styles and options. See web site for details.



American Standard Models	Metcraft Replacement Models
Prison 0421-069	R5115-3.25-11.75
Crane Models	Metcraft Replacement Models
Parvus 1-604	R5115-4-11
Kohler Models	Metcraft Replacement Models
Chardon K-2475	R5115-3.375-11.625
Eljer Models	Metcraft Replacement Models
St. Louis 051-3436 / 051-3437	R5115-5.625-9.375

Now Available in Powder Coat!

Our new powder coated lavatory option looks like porcelain china but is constructed of heavy gauge type 304 stainless steel. This retains the look of your exsiting fixtures while providing the durability and sanitary features of our stainless steel fixtures.



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Lavatory Fixtures

Metcraft urinal fixtures are designed for "High Abuse Washrooms". These fixtures are fabricated using heavy gauge stainless steel, seamlessly welded to form a one piece vandal resistant unit. Urinal fixtures are offered in a wide variety of models, styles and options. See web site for details.

Let us know what you have and we'll manufacture a direct replacement fixture!



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Parts Catalog

Now Available in Powder Coat!

Floor Mount

Our new powder coated toilet option looks like porcelain china but is constructed of heavy gauge type 304 stainless steel. This retains the look of your exsiting fixtures while providing the durability and sanitary features of our stainless steel fixtures.

Wall Hung



American Standard Models	Metcraft Replacement Models
2511.012 Instanto (BS)	R4610-FV5
2512.010 Instanto (TS)	R4615
2516.037 Corbo (BS)	R4620-10.25-16.25
2257.103 Afwall (TS)	R4665-5.25
2258.125 Afwall (BS)	R4660-5.25-11
2531.016 Neolo (BS)	R4670-4.25-13.125
Crane Models	Metcraft Replacement Models
3-440 Placidus (BS)	R4660-5.5-9
3-460 Rapidway (TS)	R4615-3.125
3-462 Rapidway (BS)	R4610-FV4.75
3-481 Sanwalton (BS)	R4670-4.5-13
3-489 Angleton (BS)	R4620-11-16.5
Kohler Models	Metcraft Replacement Models
K-4432 Kingston (BS)	R4660-5-10
K-4460C Sifton (BS)	R4610-FV5.5
K-4475 Suffield (BS)	R4610-FV5.5
K-4398 Anglesey (BS)	R4670-4.5-13
K-4498C Anglesey (BS)	R4670-4.5-13.25
K-4498ER Anglesey (BS)	R4670-4.5-13
Eljer Models	Metcraft Replacement Models
111-0377 Tacoma (BS)	R4610-FV5
111-0527 Newark (BS)	R4670-4.5-13
111-0580 Missouri (BS)	R4620-10-16
111-1425 Auburn (BS)	R4660-5.25-7.75
Super Secur	Metcraft Replacement Models
A-100 Smithson	R4620-10.25-16.5
A-300 Walbol or SS-300	R4610-FV5.25



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Flush Valve Pipe Stabilizer



Flush valve pipe separation and major flooding is possible, if not inevitable, with most penal toilet fixtures. This separation is due to the increased back pressure necessary to flush institutional toilets. This separation can cost many thousands of dollars in damages and cleanup. But, Metcraft's new FVP Stabilizer can help eliminate this problem.

Two clamps attach to the vertical and horizontal discharge pipes with a solid connector joining them. This system reduces the vertical and horizontal movement of the flush pipes and helps prevent separation from the slip joint elbow. What's more, FVP Stabilizers are inexpensive and quick to install without any disturbance to existing piping.



Stabilize your valve piping in five minutes.

- Affordable
- Easy to Install
- Reliable
- Helps Prevent Water Damage

