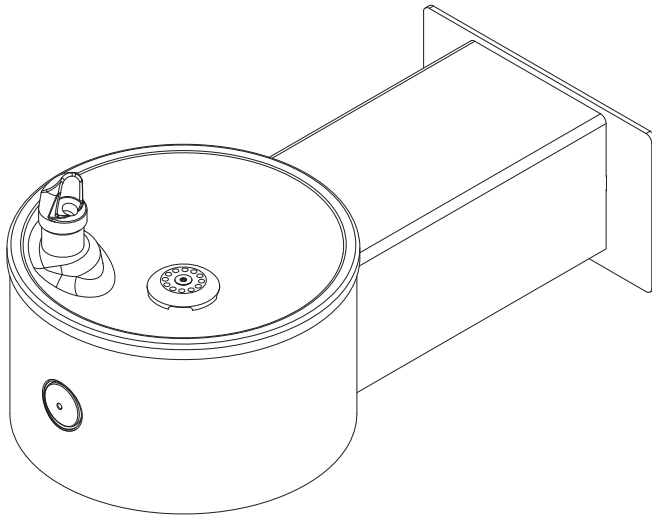
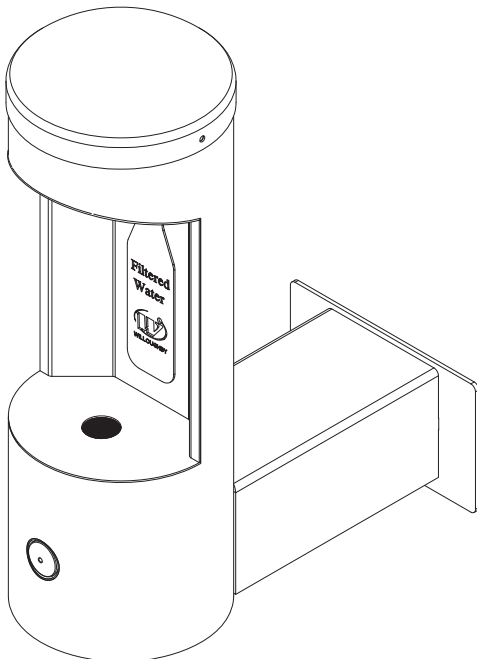


Installation & Operation Manual



WODF-1WM



CWBF-1WM

WODF-1WM Series CWBF-1WM Series

Outdoor Drinking Fountain Outdoor Bottle Filler Wall Mounted units

Table of Contents

Pre-Installation Information.....	3
Physical / Rough-in Dimensions.....	4
Required Installation Supplies.....	6
Parts List and Exploded-view Drawings.....	7
Hardware Identification	9
Installation Instructions	
Step 1: Fixture Installation	10
Step 2A: Adjusting Drinking Spout Flow	11
Step 2B: Battery Operated Infrared Sensor Startup	11
Care and Maintenance	12
Troubleshooting	
Fixture Plumbing.....	13
Infrared Sensor	14
Drawings.....	
Pushbutton Details	15
Warranty.....	16



WILLOUGHBY

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Rev. 6/2015

MADE IN THE U.S.A.



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Pre-Installation Information

Installation notice!

Check Rough-In location **PRIOR** to installation

Flush lines thoroughly **PRIOR** to hook-up

When installing the **Willoughby Industries' WODF-1WM Series** drinking fountain system or **CWBF-1WM Series** bottle filler system:

Before Step 1 of the installation instructions, ensure that rough-ins are in the correct location.

The valve assembly, including the spray head, **MUST NOT BE** connected until *after* all lines have been flushed to remove the small particles of debris that are inherent with new construction projects and all chemicals that are used in flushing are purged from the system.

Chemicals used in flushing plumbing systems can attack the internal components of the valve and spray head and severely damage them, so any flushing of the system must be followed by a full flushing with pure water to clear any harsh chemicals remaining in the system. Debris in the system if allowed to enter the valve assembly and spray head can cause poor performance or outright failure.

Again **DO NOT** attempt to connect the valve assembly and spray head until *after* all flushing is complete and pure water is the only media that will be passing through the system. Damage to the valve assembly or spray head caused by harsh chemicals or debris will not be covered by the manufacturer's warranty.

Any fittings provided by the installer should be made of plastic to electrically isolate the unit from the building or connected plumbing system.

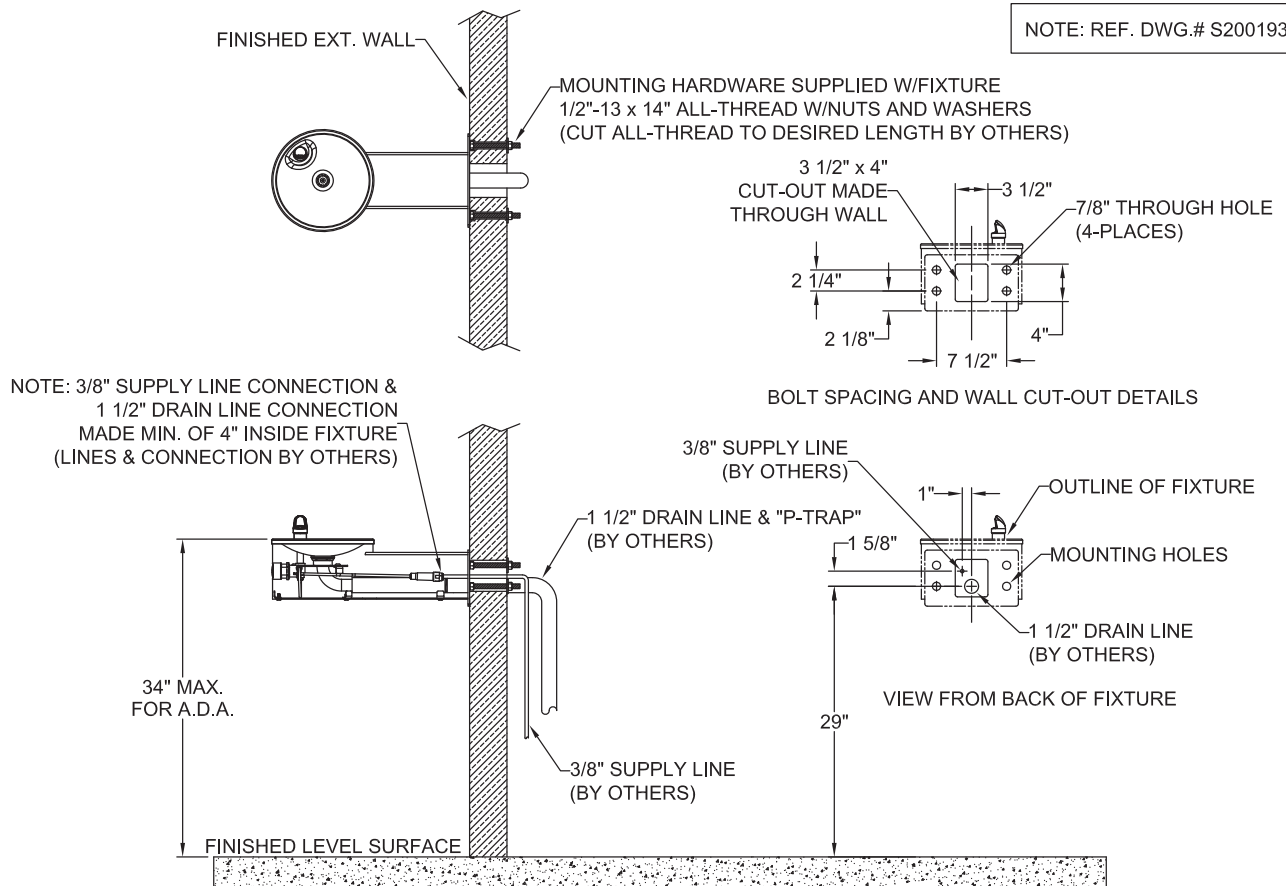
The grounding of electric equipment such as telephones, computers, etc, to water lines is a common procedure. This grounding can cause electrical feedback into a water fountain or similar fixture, causing electrolysis, which results in a metallic taste or an increase in the metal content of the water. This can easily be avoided by using the proper materials as indicated.

Installation notice!

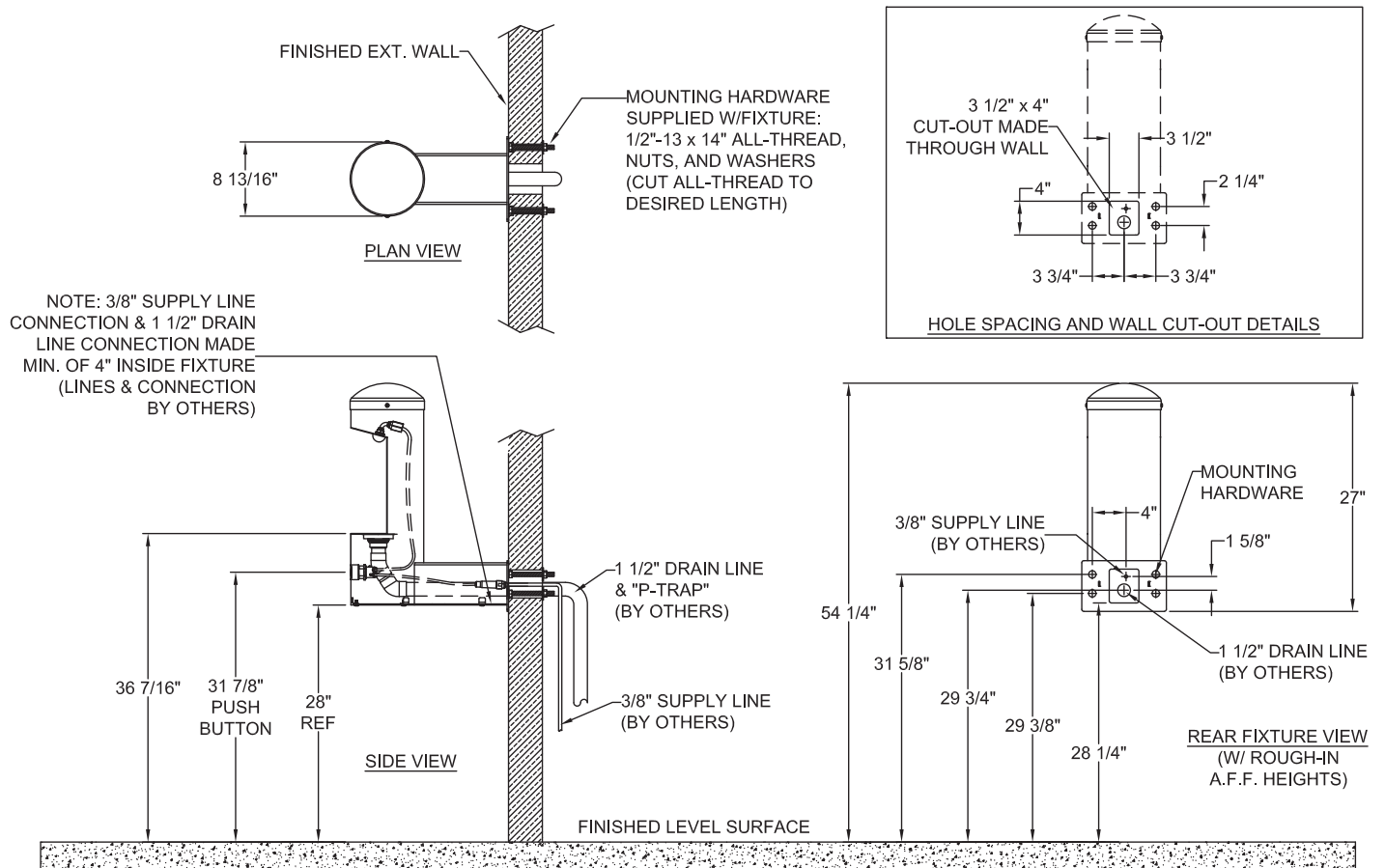
Check Rough-In location **PRIOR** to installation

Flush lines thoroughly **PRIOR** to hook-up

Physical / Rough-in Dimensions- WODF-1WM



Physical / Rough-in Dimensions- CWBF-1WM



Required Installation Supplies

- Proper mounting hardware
- Proper plastic fittings as indicated
- Hardware for waste outlet connections
- Gasket for waste outlet connection
- Shims (for installation if necessary)
- Supply piping
- Silicone caulk
- Plumbers putty

WARNING: Willoughby Industries does not assume any responsibility for personal injury or damage to equipment due to an improperly installed WODF-1WM Series drinking fountain system or CWBF-1WM Series bottle filler system:

Parts List and Exploded-view Drawing- WODF-1

ITEM #	PART #	DESCRIPTION	QTY.
1	600601HE	DECK MOUNTED DRINKING FOUNTAIN BUBBLER	1
2	600116	O-RING, #023, BUNA N-70	1
3	600612N	HEX NUT, 3/4"-14 NPSM	1
4	320469	NIPPLE, 3/8" NPT X 2.5" LONG	1
5	320091	COUPLING, 3/8" FPT STAINLESS STEEL	1
6	320437	ADAPTER, 3/8" NPT MALE X 1/4" TUBE PUSH-TO-CONNECT	1
7	4509SSN	1/4"-20 x 2" FH SECURITY SCREW	1
8	380284	DRAIN, 1-1/2"	1
9	S200033	ADA BOWL - 1-3/4" DEPTH	1
10	380274	GASKET FOR 1-1/2" DRAINS	1
11	380273	DRAIN WASHER, 1-5/8"	1
12	600043	NUT, 1 5/8"-12 THD FOR 1-1/2" DRAIN	1
13	800144	1/4-20 X 1/2" PHILLIPS TRUSS HEAD SCREW	3
14	S200034	RECEPTOR SUPPORT ASSEMBLY w/DRAIN ELBOW	1
15	320288-14	NYLABRAID REINFORCED VINYL TUBING, 1-1/4" X 14" LONG	1
16	S200194	ARM ASSEMBLY - WALL MOUNTED WODF	1
17	980632	STRAINER, IN-LINE, 1/4 TO 3/8 PRESS LOCK	1
18	600471	TUBING, 1/4" OD X 0.17" ID X (20" LONG)	1
19	600315	PUSHBUTTON VALVE ASSEMBLY, ADJUSTABLE	1
20	600471	TUBING, 1/4" OD X 0.17" ID X 18" LONG	1
21	S200197	OUTER BOTTOM COVER - WALL MOUNTED WODF	1
22	4500NSS	1/4-20 X 1/2" BUTTON HEAD SECURITY SCREW	5
23	MK4PC-14	MOUNTING KIT, 4PC 1/2-13 X 14" ALL-THREAD	1

Willoughby Industries Inc.
 Indianapolis, Indiana

TOLERANCES EXCEPT AS NOTED

3 PLCS: 10/32 FRACTIONS 1/16" SCALE

ANGLE 1:1

DATE: 4/7/14

REV: A

REF: P143013A

NOTED ON PAGE 2

WALL: 1/8"

SCALE: 1:8

TITLE: WODF-1WM OUTDOOR DRINKING FOUNTAIN - WALL MOUNTED

PART # S200193

STANDARD SHEET: 2 OF 2

**NOTE: ITEM# 23 NOT SHOWN

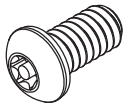
Parts List and Exploded-view Drawing- WODF-2-PET

ITEM #	PART #	DESCRIPTION	QTY.
1	S200129	BODY CAP, Ø8.625"	1
2	4500NSS	1/4-20 X 1/2" BUTTON HEAD SECURITY SCREW	7
3	320575	ELBOW, 3/8" NPTF MALE X 1/4" TUBE PUSH-TO-CONNECT	1
4	600471-24A	TUBING, 1/4" OD X 0.17" ID X 24" LONG	1
5	600612N	HEXNUT, 3/4"-14 NPSM	1
6	S200239	WELD ASSEMBLY, WALL MOUNTED BOTTLE FILLER	1
7	380063	HEMISPHERIC BOTTLE FILLER BUBBLER	1
8	S200035	PLACARD FOR CWBF SERIES	1
9	S200142	DRAIN SCREEN FOR CWBF-1	1
10	600315	VALVE ASSEMBLY, ADJUSTABLE	1
11	S200135	DRAIN BOX ASSY FOR CWBF-1	1
12	320283	PVC THREADED ADAPTER, 1 1/4"	1
13	320279-3	PVC PIPE, 1 1/4" SCHED 40 X 3' LONG	2
14	320285	ELBOW, 1-1/4", FEMALE, PVC	1
15	320281	ELBOW, 22.5°, 1-1/4" FEMALE UNTHREADED SOCKET ENDS	1
16	320279-8	PVC PIPE, 1 1/4" SCHED 40 X 18" LONG	1
17	600471-24C	TUBING, 1/4" OD X 0.17" ID X 18" LONG	1
18	980632	STRAINER, IN-LINE, 1/4 TO 3/8 PRESS LOCK	1
19	320573	REDUCER, 3/8" STEM X 1/4" TUBE	1
20	980440	CHARCOAL FILTER, 3/8" TUBING CONNECTIONS	1
21	S200243	BOTTOM COVER, WALL MOUNTED, CWBF-1WM	1

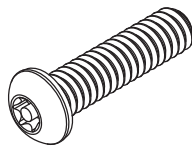
		PART # P2408-0016
TITLE/DESC: CWBF-1WM BOTTLE FILLER, WALL MOUNTED, SINGLE STATION, ADA		REGION DRG: TRB 12/1/14 REV: TRB 12/1/14
TOLERANCES UNLESS NOTED DIMENSIONS IN PARENTHESES ARE AS NOTED		STANDARD SHEET: 1 OF 2
SCALE: 1:12 ANGLE: 21		REF:

Hardware Identification

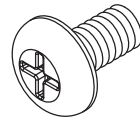
WODF Series / CWBF Series Hardware



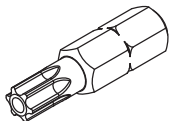
1/4-20 x 1/2"
SECURITY SCREW
4500NSS



1/4-20 x 1"
SECURITY SCREW
800114



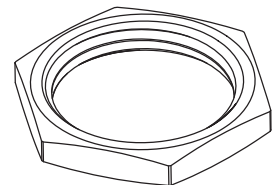
1/4"-20 x 1/2"
PHILLIPS SCREW
800144



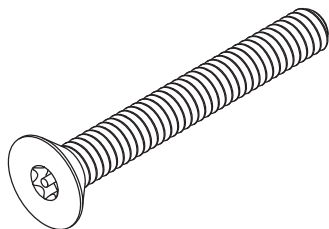
T27
1/4" PINNED TORX BIT
800115



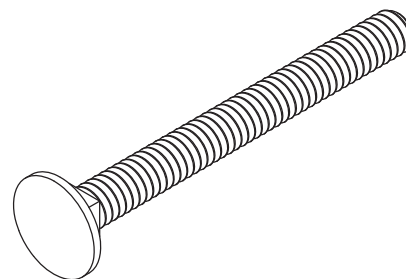
1/4"-20 HEX NUT
600613N



3/4" NPT
BRASS LOCKNUT
600612N



1/4"-20 x 2"
FLAT HEAD SECURITY SCREW
4509SSN



1/4"-20 x 2-1/2"
CARRIAGE BOLT
600635N

Installation Instructions

Step 1: Fixture Installation

Note: The WODF outdoor drinking fountain / CWBF outdoor bottle filler is to be mounted on a flat, suitably level surface (wall, concrete or otherwise) with an adequate support structure.

Note: Refer to the Physical / Rough-In Dimensions for locating fixture mounting points and plumbing connections.

- 1.) Install service shut-off valve in water supply line (valve not furnished).
- 2.) Locate and complete the rough-in mounting holes and plumbing access hole as specified.
- 3.) Install the drinking fountain or bottle filler using the supplied hardware kit. Cut the included all-thread rods to lengths adequate for proper fixture installation through the wall and thread the rods into the tapings on the rear of the fixture.
- 4.) Once the rods have been attached, mount the fixture by inserting the rods through the mounting holes in the wall. Tighten the included washers and nuts to the all-thread through the chase side (inside) of the wall just enough to hold the fixture in position.
- 5.) Make sure that the positioned fixture is level, both front to back and side to side, to ensure proper draining. Adjust as necessary, then fully tighten the nuts to secure the fixture.
- 6.) As noted previously, flush the water supply line with clean drinking water before making final connections to the drinking fountain.
- 7.) Connect water supply line to inline strainer inside the drinking fountain or bottle filler using 3/8" plastic tubing (extra tubing not furnished). Push tube straight into fitting on filter about 3/4" until it reaches a positive stop. Water supply connection must comply with local codes.
- 8.) Connect the drain line to drainage system. Drain is to be 1-1/2" IPS minimum to a porous gravel fill or main sewer line located below frost line. Installer to provide waste trap downstream of drain connection. Drain and waste trap must comply with local codes.
- 9.) Turn on water supply and check both the water supply lines and drain lines for leaks.*

*If you have a Push Button model fountain or bottle filler, go to **Step 2A**

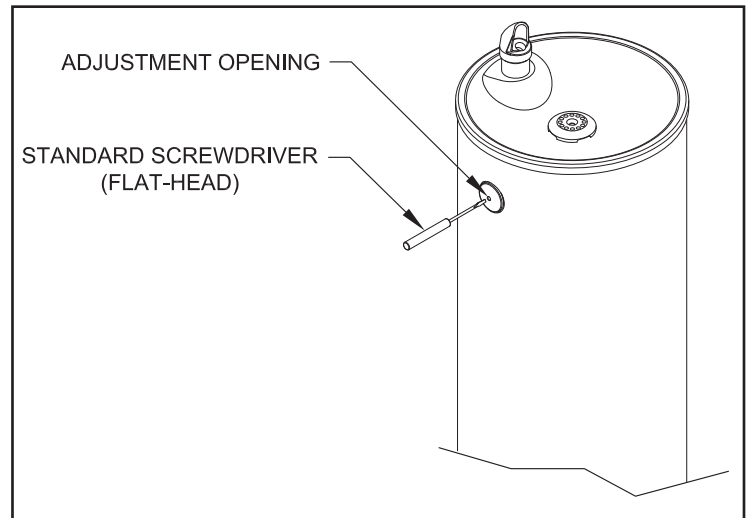
If you have a Battery Operated Infrared Sensor model bottle filler, go to **Step 2B**

Installation Instructions (cont.)

Step 2A: Adjusting Drinking Fountain Flow (Push Button)

- 1.) Insert a standard flat-head screwdriver into adjustment opening on face of pushbutton, as shown.
- 2.) Rotate screwdriver to adjust until desired flow is achieved:

Rotate clockwise to increase flow.
Rotate counterclockwise to decrease flow.



(WODF-1 shown)

Step 2B: Battery Operated Infrared Sensor Startup

- 1.) Remove the bottle filler body cap on the top of the fixture.
- 2.) Open the top of the battery box and insert 4X batteries. Replace the battery box, and check that all sensor, battery box, and valve connections are secure.
- 3.) Replace the body cap once the IR sensor has completed the start-up mode.

Care and Maintenance

Unit Care

Willoughby Industries' WODF Outdoor Drinking Fountains are not freeze resistant without the FRV Freeze Resistant Valve option. The unit should be disconnected or shut off from the water supply and drained during the colder months. For more information, refer to the rough-in detail.

In order to ensure adequate flow and cleanliness of water, the inline strainer in the supply line should be cleaned or replaced regularly. New inline strainers can be ordered using Willoughby Part No. 980632.

Unit Care

Willoughby Industries' CWBF Outdoor Bottle Fillers are not freeze resistant without the FRV Freeze Resistant Valve option. The unit should be disconnected or shut off from the water supply and drained during the colder months. For more information, refer to the rough-in detail.

The charcoal water filter should be replaced every 6-12 months, depending on water quality. New charcoal filters can be ordered using Willoughby Part No. 980440.

Stainless Steel Care

Stainless Steels are basically alloys of iron and chromium and are corrosion resistant. Stainless steel has a bright surface that is easy to clean and is free from oxides. Therefore, cleaning of stainless steel is relatively simple and easy if done on a regular basis.

Frequency of cleaning should depend on the rate at which the fixture becomes dirty. Remember that fresh (soft) deposits of all kinds are relatively easy to remove, while removing older (hard) deposits are much more difficult. Establish a cleaning SCHEDULE.

Routine cleaning should involve ordinary soap or detergent and water, applied with a sponge, brush or cloth. Baking soda, borax or any of several non-abrasive commercial cleansing agents can help hasten the cleaning action. After scrubbing, rinse THOROUGHLY and wipe dry.

DO NOT use common steel wool, scouring pads, scrapers, wire brushes, files or other steel tools to clean stainless steel. Such items will scratch the surface or leave small particles of iron imbedded in the surface, which will eventually rust and stain the surface - even appearing as if the stainless itself was rusting.

Certain chemical compounds, if used on stainless steel, can give the appearance of rust and if allowed to stand for long periods of time, can pit the surface of even stainless. Products containing hydrochloric acid, muriatic acid or potassium hydrochloride can ruin the surface.

Troubleshooting- Fixture Plumbing

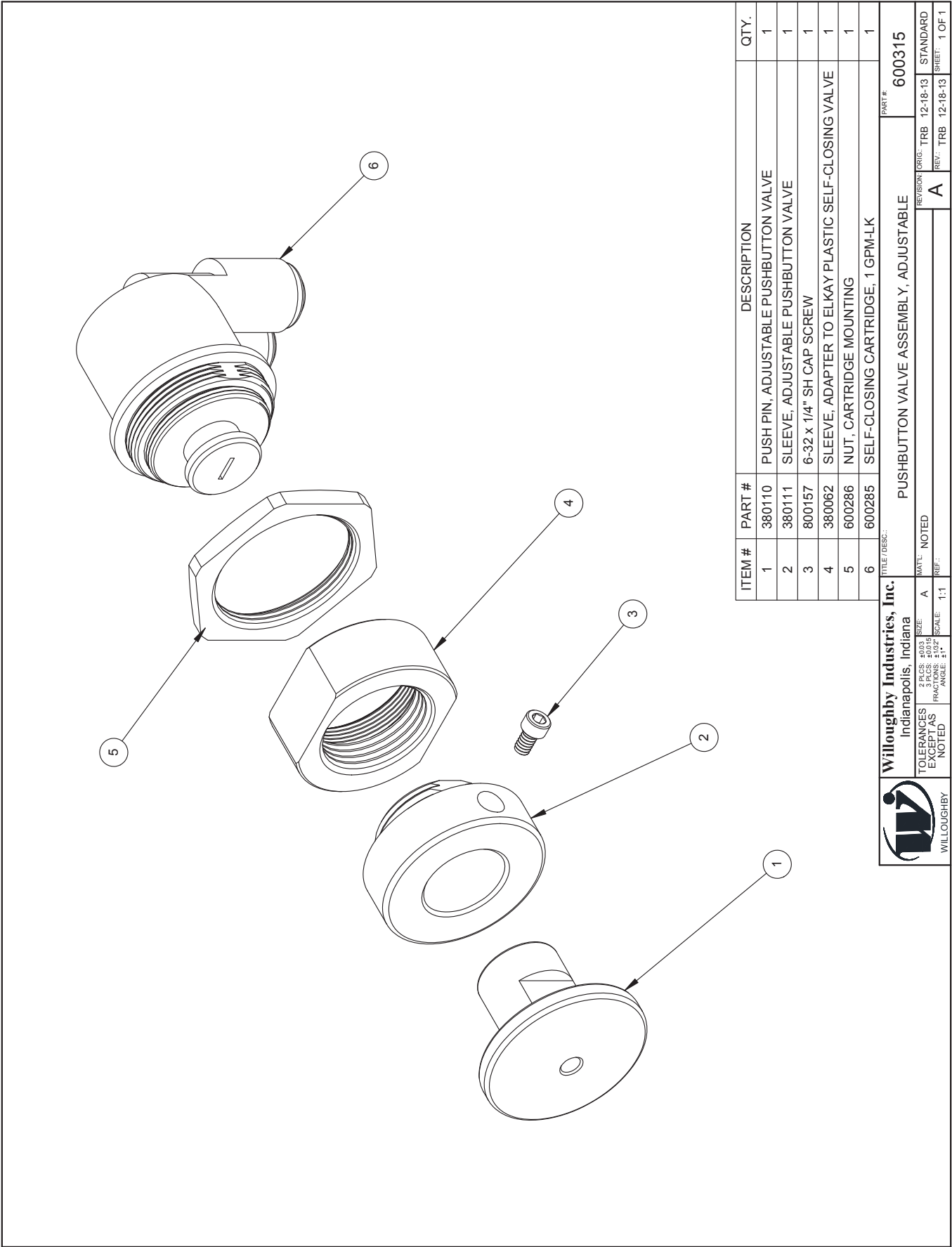
- I. Insufficient Flow
 - A. Ensure the service shut-off valve is fully open (provided by installer).
 - B. Ensure water supply is within the normal operating range of 40-60 psi.
 - 1. If pressure is too low, flow can be drastically reduced.
 - 2. If pressure is too high, the strainer and/or valve may have been damaged.
 - 3. The unit is rated for a maximum range of 30-105 psi.
 - C. Inspect the unit's valve for damage, and replace if necessary.
 - D. Inspect the inline strainer for damage and/or clogging, and clean or replace as necessary.
 - E. Check all fittings and tubing for damage and leaks. Replace components as necessary.

- II. Unit has problems draining
 - A. Remove and clean the drain screen.
 - B. Remove any debris from the drain.
 - C. Remove any debris from the PVC pipe and fittings.
 - D. Check and clear the waste trap (provided by installer).

Troubleshooting - Infrared Sensor

- I. Bottle filler does not function (red light does not appear when user steps in front of sensor)
 - A. No power to sensor. Make certain that power is on. Check battery power levels, contacts and connections. Repair or replace as necessary.
 - B. Willoughby IR Sensor not operating. Replace Willoughby IR Sensor (Part# 380188-1)
- II. Bottle filler does not function (red light appears when user steps in front of sensor and solenoid does not click)
 - A. Debris in solenoid; disassemble, clean, and flush.
 - B. Solenoid not wired correctly; check solenoid connections.
 - C. Solenoid problem; replace solenoid.
- III. No water when activated (valve clicks)
 - A. Make certain that water is turned on.
 - B. Valve clogged. Clean or replace filter.
- IV. Very low flow or slow dribble
 - A. Check supply stop(s); open if closed.
 - B. Debris in filter; remove, clean, and reinstall.
 - C. Debris in aerator or spray head; remove, clean and reinstall.
 - D. Disassemble solenoid; clean and flush.
- V. Continues to run (with power on and red light flashing)
 - A. Non-permanent target in range after user leaves. Remove non-permanent target. If this target is a new permanent target (i.e., a new wall or partition), remove batteries for fifteen (15) seconds. Turn power back on and let the sensor complete start-up mode.
 - B. Sensor failure; replace sensor.
- VI. Continues to run (even with power disconnected)
 - A. Solenoid valve installed backwards.
 - B. Debris in solenoid, won't close properly; remove operator and clean. Reassemble in the same manner.

DRAWING: Pushbutton Detail



ITEM #	PART #	DESCRIPTION	QTY.
1	380110	PUSH PIN, ADJUSTABLE PUSHBUTTON VALVE	1
2	380111	SLEEVE, ADJUSTABLE PUSHBUTTON VALVE	1
3	800157	6-32 x 1/4" SH CAP SCREW	1
4	380062	SLEEVE, ADAPTER TO ELKAY PLASTIC SELF-CLOSING VALVE	1
5	600286	NUT, CARTRIDGE MOUNTING	1
6	600285	SELF-CLOSING CARTRIDGE, 1 GPM-LK	1

Willoughby Industries, Inc.
 Indianapolis, Indiana

TOLERANCES EXCEPT AS NOTED
 2 PLCS: 4003 SIZE: A
 FACS: 50016
 FRACT: 1/16 OF SCALE
 ANGLE: 31°
 SCALE: 1:1

MATL: NOTED
 REF:

TITLE/DESC: PUSHBUTTON VALVE ASSEMBLY, ADJUSTABLE
 PART #: 600315
 REVISION: TRB 12-18-13 STANDARD
 REV.: TRB 12-18-13 SHEET: 1 OF 1



WILLOUGHBY

Warranty

Willoughby Industries, Inc. warrants to commercial and institutional purchasers only that each unit will be free from defects in workmanship and materials under normal use and service upon the following terms and conditions for a period of one (1) year from date of shipment.

This warranty does not cover installation or any other labor charges and does not apply to any components damaged by accident, abuse, improper installation or improper maintenance. This warranty does not cover any installation that did not comply with national, state and local building, plumbing or electrical codes. The warranty is limited to replacing or repairing at manufacturer's option, transportation charges prepaid by the purchaser, any component or part which upon our inspection shall be deemed as defective within the limitations of this warranty. The replacement or repair of defective units as stated in this warranty shall constitute the sole remedy of the purchaser and the sole liability of Willoughby Industries, Inc. Willoughby Industries, Inc. shall not otherwise be liable under any indirect damages caused by defects in the repair or replacement thereof.

This warranty only extends to commercial and industrial purchasers and does not extend to any others, including consumer customers of commercial institutional purchasers. This warranty is in lieu of all other warranties, expressed or implied, including implied warranty of merchantability or fitness for a particular purpose or otherwise.