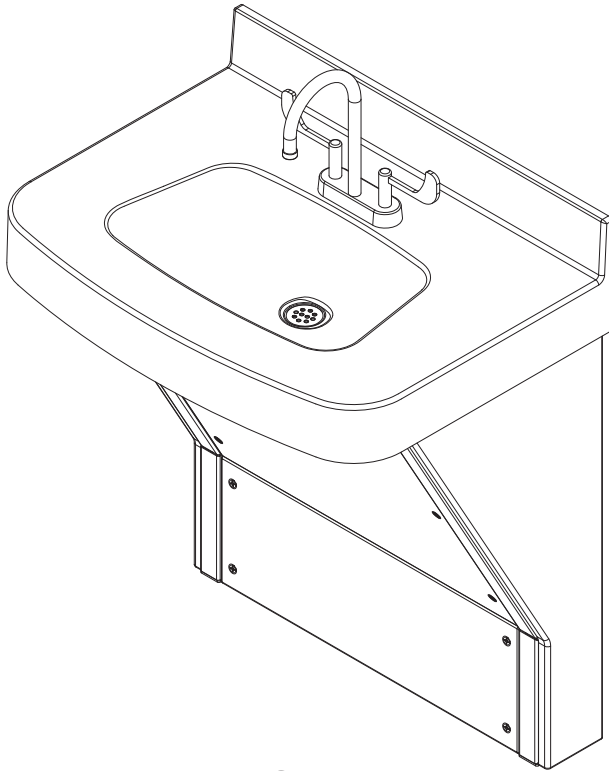


# Installation & Operation Manual

## BHS-3123 Series

### Bariatric Lavatory



**BHS-3123**

#### Table of Contents

Pre-Installation Information.....	3
Physical Dimensions .....	4
Rough-In Dimensions .....	5
Mounting Dimensions .....	6
Checking Contents .....	7
Required Installation Supplies .....	8
Parts List/Hardware Identification .....	9
Installation Instructions .....	
Step 1: Pedestal Mounting.....	10
Step 2: Drain Assembly #320014 .....	10
Step 3: Basin and Pedestal Assembly .....	11
Step 4: Final Assembly .....	12
Adjustable Mixing Valve Installation .....	13
Care and Maintenance .....	14
Drawing .....	
Exploded-view Detail and BOM.....	15
Warranty.....	16



**Willoughby Industries, Inc.**

5105 West 78th Street  
Indianapolis, IN 46268

Toll Free: (800) 428-4065

Local: (317) 875-0830

Fax: (317) 875-0837

[www.willoughby-ind.com](http://www.willoughby-ind.com)

**WILLOUGHBY**

Rev. 3/2015

MADE IN THE U.S.A.



***(Page left intentionally blank)***

## **Pre-Installation Information**

# **Installation notice!**

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

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

When installing the **Willoughby Industries' BHS-3123 Series** Bariatric Lavatory deck systems:

Before Step 1 of the installation instructions, ensure that the 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 can 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 or spray head, can cause poor performance or outright failure.

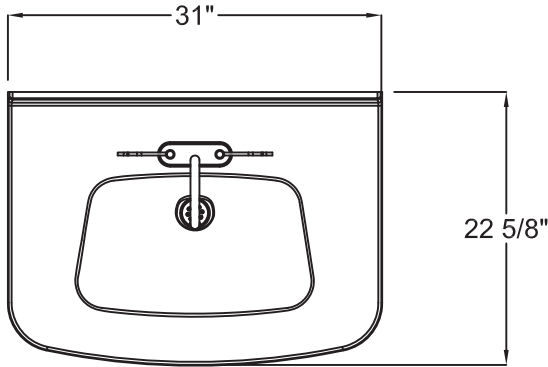
Again, **DO NOT** attempt to connect the valve assembly and spray head until after all the flushing is complete and pure water is the only media that will be passing through the system. Damage to the valve assembly or spray head caused by harsh chemicals or debris will not be covered by the manufacturer's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

# **Installation notice!**

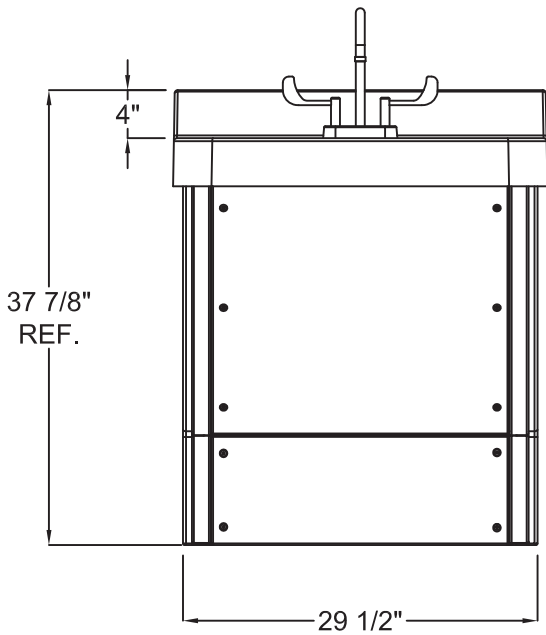
Check Rough-In location **PRIOR** to installation

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

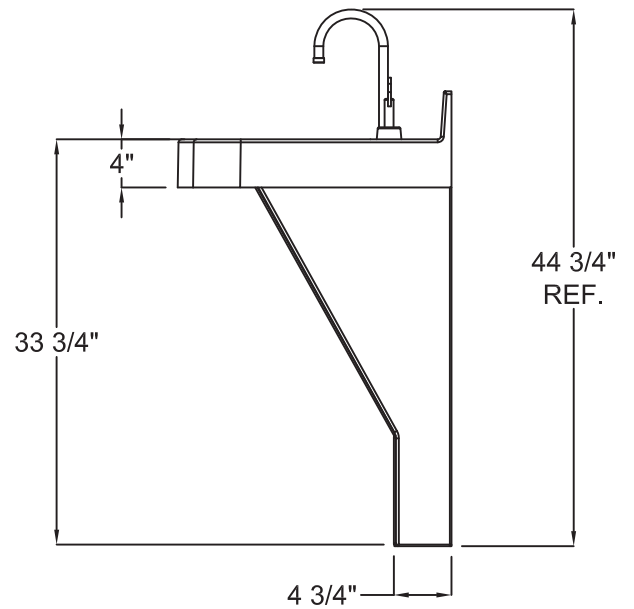
# Physical Dimensions- BHS-3123



TOP VIEW



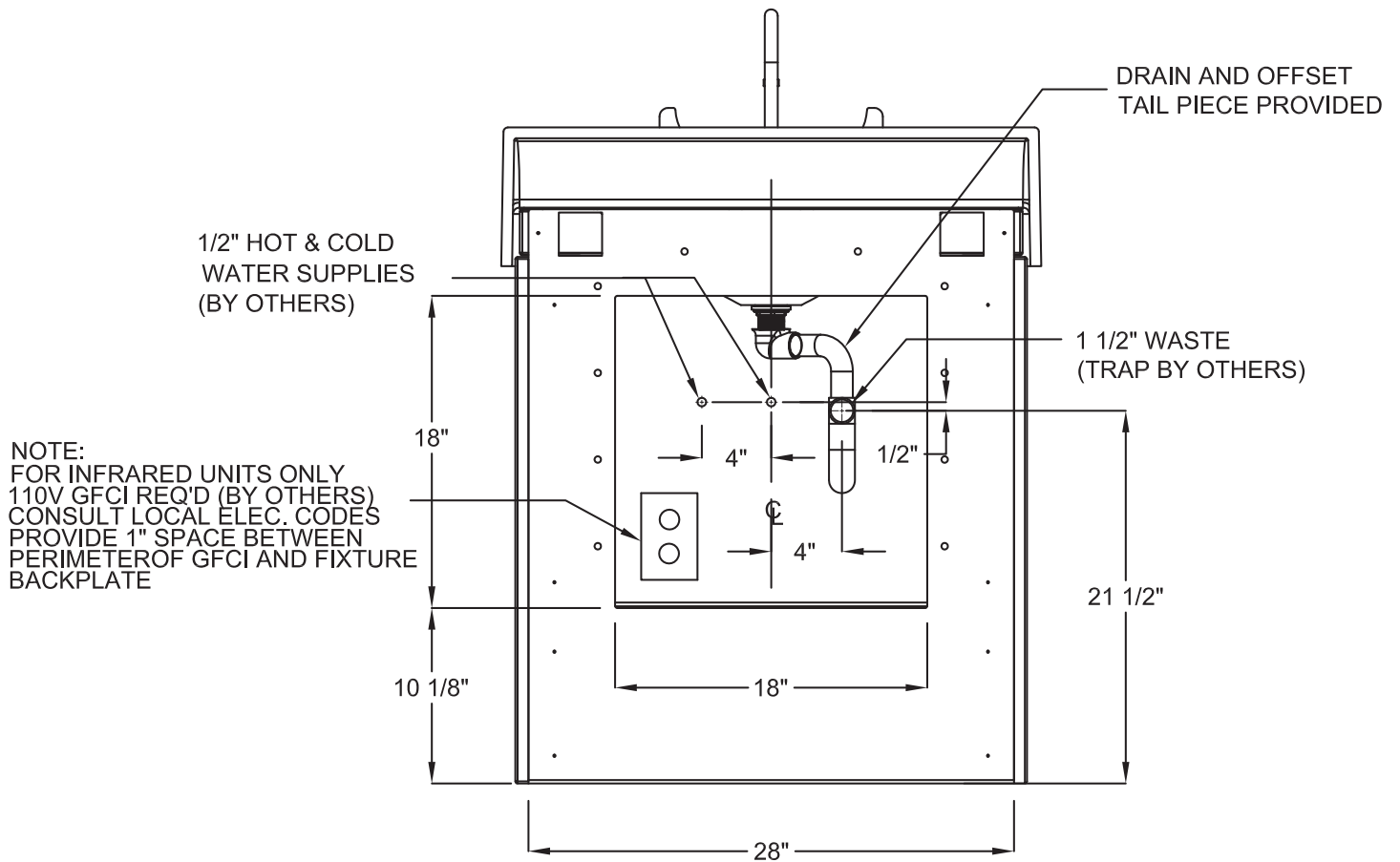
FRONT VIEW



SIDE VIEW

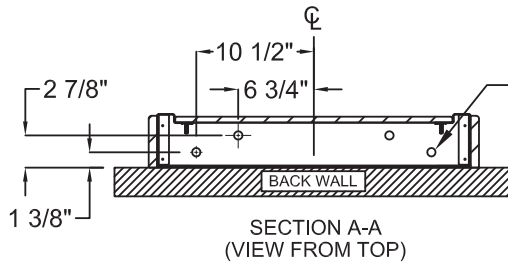
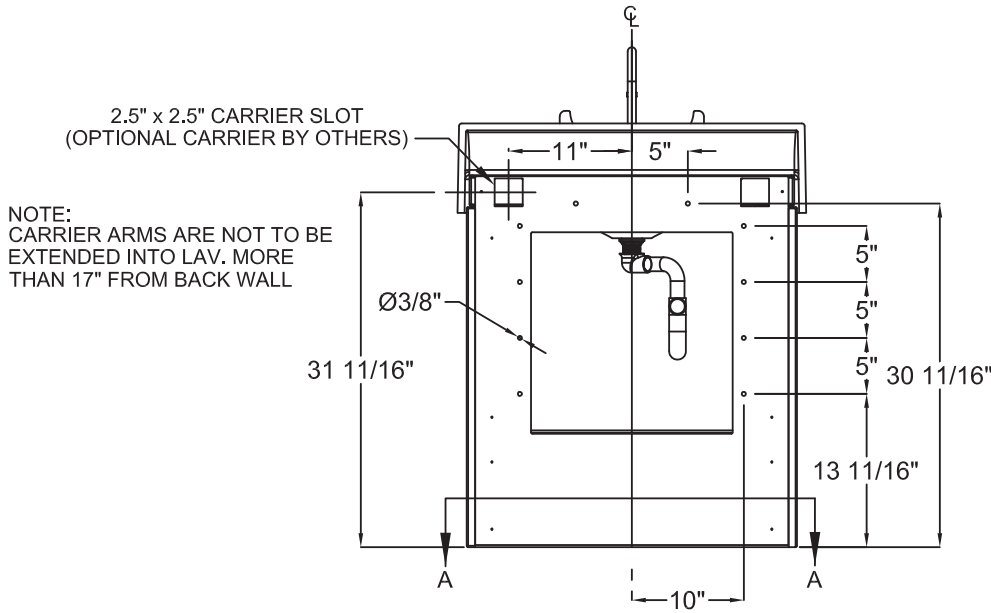
# **Rough-In Dimensions- BHS-3123**

## **BHS-3123 Plumbing Rough-In Detail**



# Mounting Dimensions- BHS-3123

## BHS-3123 Mounting Details



FLOOR ANCHORS REQ'D  
TO MOUNT FIXTURE TO CONCRETE FLOOR.  
(CONCRETE FLOOR ANCHORS BY OTHERS)

NOTE:

- MINIMUM REQUIREMENT FOR FLOOR ANCHORS
- MATERIAL: TYPE 316 STAINLESS STEEL
- DIAMETER: 1/2"
- LENGTH: 4 1/2"
- MIN. INSTALL DEPTH: 2 1/4"
- ULTIMATE PULL OUT STRENGTH: 4,700 lbs.
- WASHER OD: 1 1/16" TO 1 7/16"

## **Check Contents**

- Separate all parts from packaging and make sure all parts are accounted for before discarding any packaging material. If any parts are missing, do not attempt to install BHS-3123 Bariatric Lavatory until you obtain the missing parts.

**NOTE: Before beginning installation, all supply, drain and waste piping for the BHS-3123 must be completed according to specified rough-ins. If you have not received rough-in details, please contact Willoughby Industries, Inc. (800) 428-4065**

**IMPORTANT: These installation instructions cover all of the Willoughby Industries Inc. BHS-3123 Bariatric Lavatory series. Simply omit the steps which do not apply to the model you are installing.**

**IMPORTANT: Flush all the water supply lines before making connections.**

## **Required Installation Supplies**

- Proper mounting hardware
- Hardware for waste outlet connections
- Gasket for waste outlet connection
- Shims (for toilet or cabinet 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 BHS-3123 Bariatric Lavatory.**

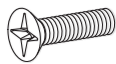


# Parts List / Hardware Identification

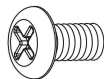
ITEM	DESCRIPTION	PART NUMBER
1	FAUCET	900215
2	LAVATORY BASIN	BHS3123-XX*
3	DRAIN ASSEMBLY	320014
4	PEDESTAL ASSEMBLY	S300833
5	FLAT WASHER, 1/4-20 X 1" O.D.	600650
6	1/4-20 X 1/2" PHILLIPS TRUSS HEAD SCREW	800144
7	STARBOARD PANEL KIT	SB903123
8	1/4-20 X 1" PHILLIPS, FLAT HEAD	800155
9	TINNERMAN CLIP, 1/4-20	800113

\*XX REPRESENTS THE LAVATORY COLOR

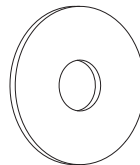
WHITE GRANITE=WG1  
 SAND STONE=SS1  
 GRAY GRANITE=GG1  
 BLACK GRANITE=BG1  
 SEA GREEN=SG1  
 NOCTURNAL BLUE=NB1  
 RED CORAL=RC1  
 GLACIER WHITE=GW1  
 BONE=BN1



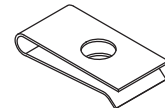
1/4-20 x 1"  
 PHILLIPS  
 FLAT HEAD SCREW  
 800155



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



1/4-20 x 1" O.D.  
 FLAT WASHER  
 600650



1/4-20  
 TINNERMAN NUT  
 800113

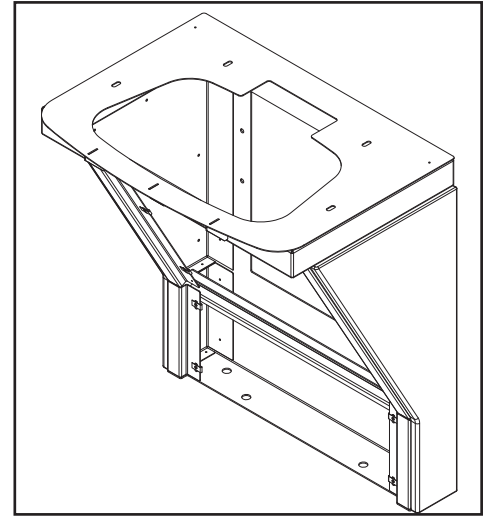
# **Installation Instructions**

## **Step 1: Pedestal Mounting**

### Parts Supplied:

- Pedestal (pre-assembled)

**Note: Hardware for floor & wall anchoring by others**



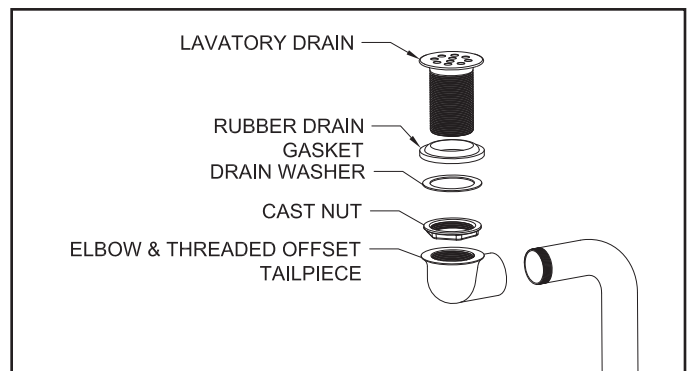
- 1.) Place pedestal in position using pre-installed concrete floor anchors to locate.
- 2.) Assemble washers and nuts onto concrete floor anchors. *Do not tighten yet.*
- 3.) Ensure pedestal is level and that back of pedestal is flush with back wall.
- 4.) Tighten concrete floor anchor nuts.
- 5.) Secure pedestal to back wall using all thru holes (adequate mounting hardware and backing by others).
- 6.) Inspect installation ensuring fixture is secured and level.

**Note: Pedestal must be level for fixture to drain properly.**

## **Step 2: Drain Assembly #320014**

### Parts/Materials supplied:

- Solid Surface basin
- Drain assembly



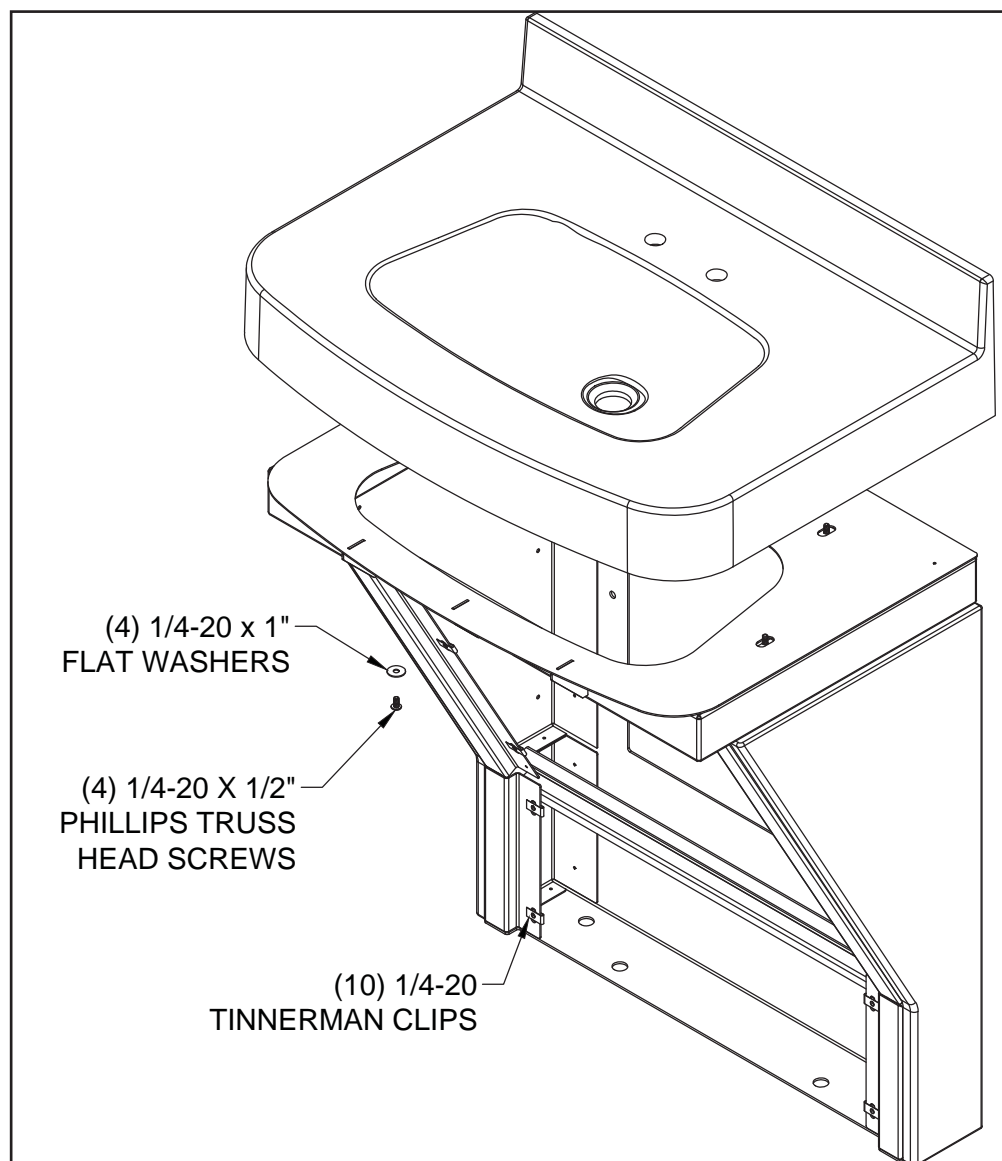
- 1.) Insert drain spud into wash basin using plumbers putty (supplied by others).
- 2.) From beneath basin, thread the washers & locknut onto the drain spud and secure locknut against wash basin.

## **Installation Instructions (cont.)**

### **Step 3: Basin and Pedestal Assembly**

**Caution: Do not leave basin on the pedestal unsupported, as it may fall and cause damage or personal injury.**

- 1.) Line up the brass threaded inserts on the bottom of the basin with the 4 holes on the top of the pedestal, secure with (4) 1/4-20 x 1/2" truss head screws.
- 2.) Install (10) tinnerman clips in preparation for final assembly.



## **Installation Instructions (cont.)**

### **Step 4: Final Assembly**

- 1.) Install faucet (use instructions supplied with faucet).
- 2.) Make all final plumbing connections to the drain and valve inlets.
- 3.) Test the system for leaks (both supply and waste).
- 4.) Place tinnerman nuts on the pedestal tabs.
- 5.) Set desired temperature with the adjustable mixing valve (see Page 13).
- 6.) Secure upper & lower panel with (10) 1" Phillips flat head screws.

# Installation Instructions (cont.)

**POWERS™**

IS-P-e480

**HydroGuard® T/P Series e480**  
**Lavatory Combination Valve**

## Installation Instructions

### To Install ■

**NOTE:** Installation should be in accordance with accepted plumbing practices. Flush all piping thoroughly before installation.

1. Locate a suitable place for the tempering valve. Valve should be accessible for service and adjustment and as close to the point-of-use as possible.
2. Connect hot and cold water to the supply valve using 1/2" NPT or 3/8" compression connections.
3. Connect outlet of tempering valve to fixture(s) using 1/2" NPT or 3/8" compression connections.
4. Turn on hot and cold water supplies. If any leaks are observed, tighten connections as necessary to stop leaks before proceeding.
5. Turn on fixture and allow water to flow for 2 minutes. Measure water temperature at outlet. If water is not at desired temperature, adjust as necessary.

### Specifications ■

e480-00 .....	1/2" NPT (Rough Bronze)
e480-01 .....	1/2" NPT (Rough Chrome)
e480-10 .....	3/8" Compression (Rough Bronze)
e480-11 .....	3/8" Compression (Rough Chrome)
Capacity: .....	4.0 gpm (15.0 l/m)
Approach Temperature: .....	5°F (2.8°C) above set pt.
Max. Operating Pressure: .....	125psi (862 kpa)
Max. Static Pressure: .....	125psi (862 kpa)
Max. Hot Water Temperature: .....	180°F (82°C)
Temp. Adjustment Range:	
..... ASSE Type T/P: 95 – 110°F (43-48°C)	
..... ASSE Type T: 80 – 120°F (27-49°C)	
Minimum Flow: .....	0.5 gpm (2.2 l/m)
Checks: .....	Integral
Construction: .....	Cast Brass Body
Certified: .....	CSA B125
Listing .....	ASSE 1016-1996 (Type T/P)
.....	ASSE 1070

**CALIFORNIA PROPOSITION 65 WARNING**

**WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. (California law requires this warning to be given to customers in the State of California.)  
For more information: [www.watts.com/prop65](http://www.watts.com/prop65)

Figure 1

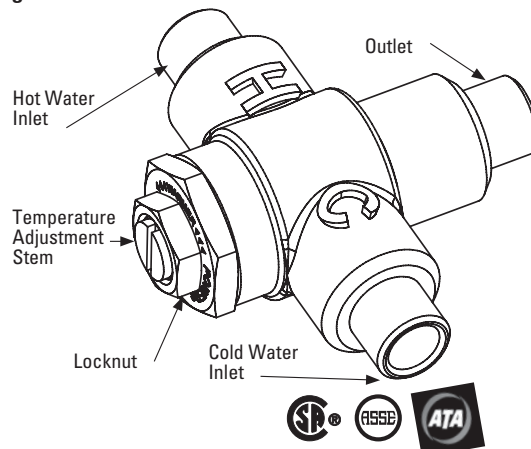
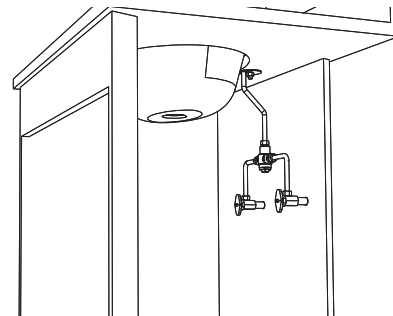


Figure 2: Typical Installation



### To Adjust Temperature ■

1. Loosen locknut.
2. Turn on fixture and run water for at least two (2) minutes to allow supply temperature to stabilize.
3. Turn temperature stem counter-clockwise for hotter or clockwise for colder outlet temperature.
4. Tighten locknut to prevent accidental or unauthorized temperature adjustment.
5. Re-check outlet temperature.

### Repair Kit ■

Motor Repair Kit..... 480-270

# **Care and Maintenance**

## **Solid Surface Care**

Surfaces may be easily cleaned using conventional cleaning agents such as an ammonia based liquid cleaner, (glass cleaner).

Dry stains on a matte finish can be removed with a 3M Scotch-Brite gray scouring pad or a mild abrasive cleaner.

Burns or scorches can be removed by sanding with coarse grit sandpaper followed by finer grit (220) sandpaper. Follow sanding with a 3M Scotch-Brite gray pad (or equivalent) to match finish of sanding area to surrounding area. A final buffing may be required on polished surfaces. Accidental nicks or chips can be repaired with special patch kits available in all colors.

Avoid exposing surfaces to strong chemicals such as acetone's; paint removers and sulfuric acid or hydrochloric chemical cleaners. Exposure to strong chemicals may result in permanent damage to surfaces.

---

## **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.

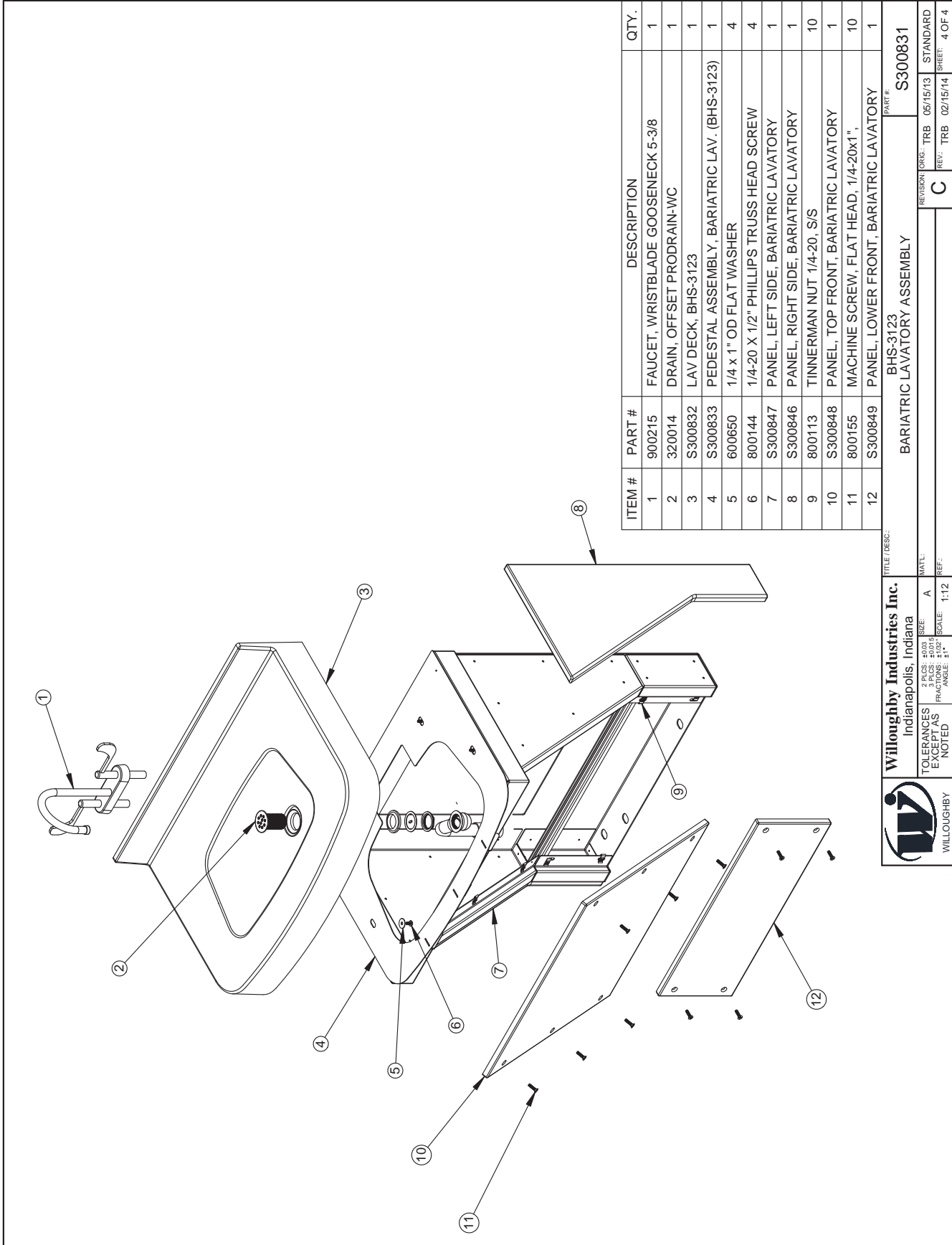
Frequency of cleaning should depend on the rate at which the fixture becomes dirty. Remember that fresh (soft) deposits of all kinds are relatively easy to remove, while removing older (hard) deposits are much more difficult. Establish a cleaning SCHEDULE.

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.

**DRAWING: Exploded-view Detail and BOM**



**Willoughby Industries Inc.**  
Indianapolis, Indiana

TOLERANCES EXCEPT AS NOTED

3 PAGES  
FRACTIONS: 1/16"  
ANGLE: 1:12

SCALE: 1:12

REF:

MATL:

ISSUE: A

REVISION ORG: TRB 05/15/13

REV: TRB 02/15/14

C

STANDARD SHEET: 4 OF 4

TITLE / DESC: BHS-3123 BARIATRIC LAVATORY ASSEMBLY

PART # S300831

## **Warranty**

Solid surface products are a homogenous blend of resins, mineral filler and colorant manufactured for panels, molded and/or shaped products and components. Solid surface products provide a luxurious appearance with the durability of stain proof, impact resistant, burnresistant material with the ease of maintenance and cleaning.

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. The period during which components are warranted as follows:

1. Solid surface components are warranted for 2 years from date of shipment.
2. All other components warranted for 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.