



### **DRAIN TECH SINKS AND FLOOR TROUGHS**

Thank you for choosing products from BSI. We appreciate your business and are available to assist you with all of your needs.

This manual has been designed to help you better understand your product and its proper usage.

If you have questions that go beyond this detailed manual please contact our Customer Service Department at 1.800.662.9595.

Thank you, The BSI Team

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The BSI, LLC manual is an important part of your equipment. This document should be stored in a safe location, as it will be useful for the life of your product. It contains important safety information concerning the maintenance, operation and servicing of these products.

Failure to properly use this manual may result in serious injury. Do not operate this equipment unless you have read and understood the contents of this manual.

#### IMPORTANT OWNER INFORMATION

Record the model number(s) of your Drain Tech and serial number(s), of your warming units to use as a reference when contacting your local representative or the BSI headquarters in Colorado.

Model No.:	BSI, LLC		
Serial No.:	Business Hours:	8:00 a.m. to 4:30 p.m.	
Model No.:		Mountain Time	
Serial No.:	Telephone:	(800) 662-9595; (303) 331-8777	
Date of	Fax:	(303) 331-8444	
Purchase:	Web Address:	www.BSIdesigns.com	
Other:	Web / (ddie35.	www.bordesigns.com	

Revision 2

# **CLEARVIEW INSTALLATION OPTIONS**

# SAFETY PRECAUTIONS

BSI

The Drain Tech Sink or Trough must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and the hazards involved.

#### **RECEIVING AND INSPECTING THE EQUIPMENT**

Even though most equipment is shipped crated, care should be taken during unloading so the equipment is not damaged while being moved into your facility.

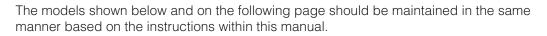
- Visually inspect the exterior of the package and 1. skid or container. Any damage should be noted and reported to the delivering carrier immediately.
- If damaged, open and inspect the contents with the 2. carrier.
- In the event that the exterior is not damaged, yet, 3. upon opening, there is concealed damage to the equipment, notify the carrier. Notification should be made verbally as well as in written form.
- 4. Request an inspection by the shipping company of the damaged equipment. This should be done within 10 days from receipt of the equipment.
- Be sure to check that there is no broken glass. 5.
- Be sure to check that all materials are received. 6.
- 7. Freight carriers can supply the necessary damage forms upon request.
- Retain all crating materials until an inspection has 8. been made or waived.
- 9. All Drain Tech packages contain drawings for your installer.
- 10. All Drain Tech packages contain this Owner's Manual and Warranty.

All Drain Tech models are certified by NSF.





HSD-ST



If you have questions regarding Drain Tech or are interested in custom configurations please contact BSI, LLC at 1.800.662.8777.

#### SINK MODELS





**HSHW** 



HSHW-ST



HSTC-ST



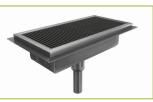
HSD



TROUGH MODELS



FWT







FTAS



**FTSEC** 



FTS



FTDP



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#### Stainless Steel

Stainless steel is known for its ability to be a clean surface that resists corrosion and rust. Dirt, dust and grime, however, put stainless steel at risk for corrosion and rust. Luckily, stainless steel responds well to cleaning, never wearing out from excessive cleaning, as long as certain rules are followed.

Water and a cloth.

 Routine cleaning can be accomplished by using warm water and a cloth. This is the least risky option for cleaning stainless steel. Dry with a towel or cloth to prevent water spots. Wipe in the directions of the polish lines.

Mild detergent, (dish washing liquid) and cloth.

 For cleaning that needs more power, mild detergent and warm water can do a great job without damaging the stainless steel. Make sure you rinse the surface thoroughly to prevent staining and spotting. Towel dry to prevent water spots which can be caused by minerals in water.

Glass cleaner for fingerprints.

• Fingerprints are one of the biggest complaints about stainless steel, but can be taken care by using glass cleaner or household ammonia. Rinse thoroughly and towel dry. There are some newer types of finishes for stainless steel that resist fingerprints, a must if your pint-sized helpers leave their mark on your stainless steel appliances.

Stainless Steel Cleaner.

 If you've had staining or scratching, or need to polish your stainless steel, a stainless steel cleaner may be a good option. Some of these cleaners and polishes can help minimize scratching and remove stains. They also can polish stainless steel surfaces nicely. Read the directions on the stainless steel cleaner and test in an inconspicuous spot. Be sure to rinse thoroughly and towel dry.

#### ➢ FIVE STAINLESS STEEL MISTAKES NOT TO MAKE

- 1. Do not use abrasive cleaners that will scratch the surface.
  - Depending on the surface finish of your stainless steel, abrasive cleaners can cause scratching. Duller finishes probably won't show scratching as much as mirror or highly polished finishes. When in doubt, test in a hidden spot, and also work from the least risky type of cleaning, (ie water) to the heavy duty stuff.
- 2. Do not forget to rinse.
  - Gritty or dirty water, or residue from cleaning solutions left on a stainless steel surface can stain or damage the finish.
- 3. Do not use cleaners containing chlorine.
  - While it may be second nature to bleach everything, stainless steel and chlorine don't mix. Stay away from the bleach when you clean stainless steel.
- 4. Do not use steel wool or steel brushes.
  - These products leave little particles in the surface of the steel and inevitably these particles begin rusting and staining the surface of the steel. They also can excessively scratch the surface of your stainless steel.
- 5. Do not assume it's the cleaner.
  - If you do have some spotting or staining, and you've followed all of the rules, it may not be the cleaner. Water, especially hard water, can leave spotting and staining on stainless steel surfaces. Towel dry after rinsing can end the problem.



#### Straing FLOOR TROUGHS

While some floor grates are smooth, others can be textured for better grip. Grates are likely removable however some can be permanently secured to an installed floor trough.

- 1. Remove excess dirt from floor and gratings, and place into designated container.
- 2. Remove grating (if not secured)
- 3. Rinse all surfaces with clean water.
- 4. Using a commercial drain brush with polypropylene bristles, scrub into all corners of the grate.
- 5. Re-rinse with clean water.
- 6. Visually check surface cleanliness repeat cleaning process if neccessary.
- 7. Place grating back into its original position on the floor.

#### 🤌 PLUMBING

All sink units can be plumbed in the field to a floor drain if available or to a 1-1/2" drain pipe. 1/2" MPT for cold water connection only with less than 45 psi.

#### 

Sink Model	Faucet Option	Faucet Model
HSIUS	Single Wall Faucet	3710
	Pot Filler w/Swivel Hose	2740
	Single Deck Dual Control	3110
	Wall Mount Infared	EC-3101
HSHW	Wall Mount Infared	EC-3101
	Wall Mount Standard	3710
	Single Deck Dual Control	3110
HSHW-ST	Wall Mount Infared	EC-3101
	Wall Mount Standard	3710
	Single Deck Dual Control	3110
HSTC-ST	Wall Mount Infared	EC-3101
	Wall Mount Standard	3710
	Single Deck Dual Control	3110
HSD	Single Deck Dual Control	KN41-4006
	Deck Mount Infared	5E-F-2D-DS
HSD-ST	Single Deck Dual Control	KN41-4006
	Deck Mount Infared	5E-F-2D-DS

See pages 6-11 for Faucet Manufacturer Spec Sheets.

If you encounter a problem with a faucet part please contact BSI Customer Service at 1.800.662.9595.





HSIUS





HSTC-ST



HSD



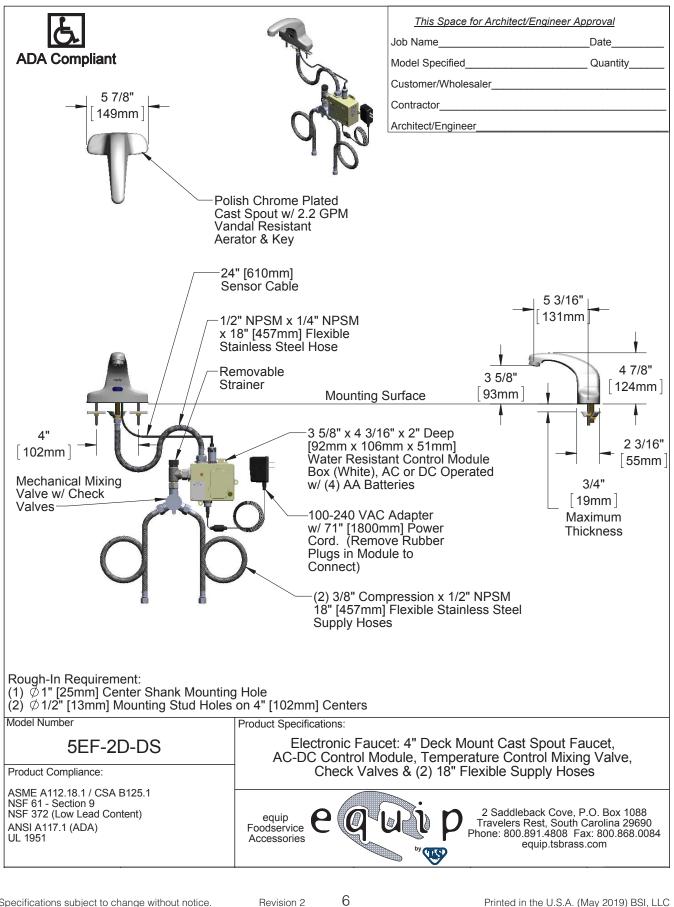
#### HSD-ST

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APPLICATION:	PRODUCT NAME:
	SINGLE DECK DUAL CONTROL FAUCET
JOB NAME:	
JOB NAME: QUANTITY: ITEM NO.	SINGLE DECK DUAL CONTROL FAUCET   SPECIAL CONFIGURATION CHECK BASE MODEL AND OPTIONS   MODEL:   3110 W/ 6" SWING SPOUT   3111 W/ 6" SWING SPOUT   3111 W/ 8" SWING SPOUT   3111 W/ 10" SWING SPOUT   3113 W/ 12" SWING SPOUT   3114 W/ 14" SWING SPOUT   3118 W/ 16" SWING SPOUT   3118 W/ 16" SWING SPOUT   J118 W/ 16" SWING SPOUT   J111 U/ 4" SWING SPOUT   J111 W/ 16" SWING SPOUT   J111 DJ SUB-ASSY (7-1/4" OR 13") CIRCLE LENGTH   DJ SUB-ASSY (7-1/4" OR 13") CIRCLE ENGTH   DJ SUB-ASSY (7-1/4" OR 13") CIRCLE ENGTH   VANDAL RESISTANT KIT   HANDLES (CROSS OR WRIST) CIRCLE STYLE   OTHER   FEATURES:   * STAINLESS STEEL SEAT SCREWS
Ø1-1/4" [31.8mm]	FISHER MANUFACTURING COMPANY TOLL FREE: 800-421-6162 - FAX: 800-832-8238 information@fisher-mfg.com - www.fisher-mfg.com

Revision 2



in Deck Mount Faucets

#### Product Information for Part: #KN41-4006-TE1



### · Solid heavy-duty cast body

- · High commercial quality for hand sinks
- · Color coded indexes meet international standards
- · Built-in check valves to prevent back and cross flow and positive seal
- 1/2 NPSM male inlets, furnished with mounting hardware

#### Specifications

Aerator Type	2.2 GPM Aerated Stream
Base Faucet Style	Deck
Base Faucet Material	Chrome Plated Brass
Inlet Center	102 mm, 4 in
Supply Inlet Size	13 mm, 1/2 in
Valve Type	Compression
Handle Style	Standard Lever
Spout Style	Swivel Cast
Spout Length	6 in, 152 mm

#### **Compliance Marks**



#### EASY PRODUCT SEARCH

#### **ENCORE PRODUCT** SELECTOR

#### **Breakroom/Office Pantry**

· Deck & Wall Mount Faucets · Widespread Faucets

#### PowerPulse<sup>™</sup> Spray Valves and Assemblies

- PowerPulse<sup>™</sup> Spray Valves
- PowerPuse<sup>™</sup> Spray Valve **Pre-Rinse Assemblies**

#### TOP-LINE

- Drains
- · Foodservice Faucets
- · Lavatory & Restroom
- Pre-Rinse Assemblies
- · Replacement & Accessory Parts

#### Drains

- · Box Pattern Drains
- Encore® Lever Drains / Wastes
- Encore® Twist Drains / Wastes
- · Lever / Twist / Rotary Drain Parts
- · Overflow Drains & Components
- Overflow Tubes, Nipples & Couplings
- · Rotary Drains / Wastes
- · Sink Drains & Components
- Special Purpose Drains
- TOP-LINE® Lever & Twist Drains

#### Electronic Faucets, Adapters & Soap Dispensers

- · Electronic Faucet Adapter

- · Deck Mount Faucets
- TOP-LINE® Economy Wall Mount Faucets
- Wall Mount Faucets
- TOP-LINE® Deck Mount
- · Foot & Knee Valves

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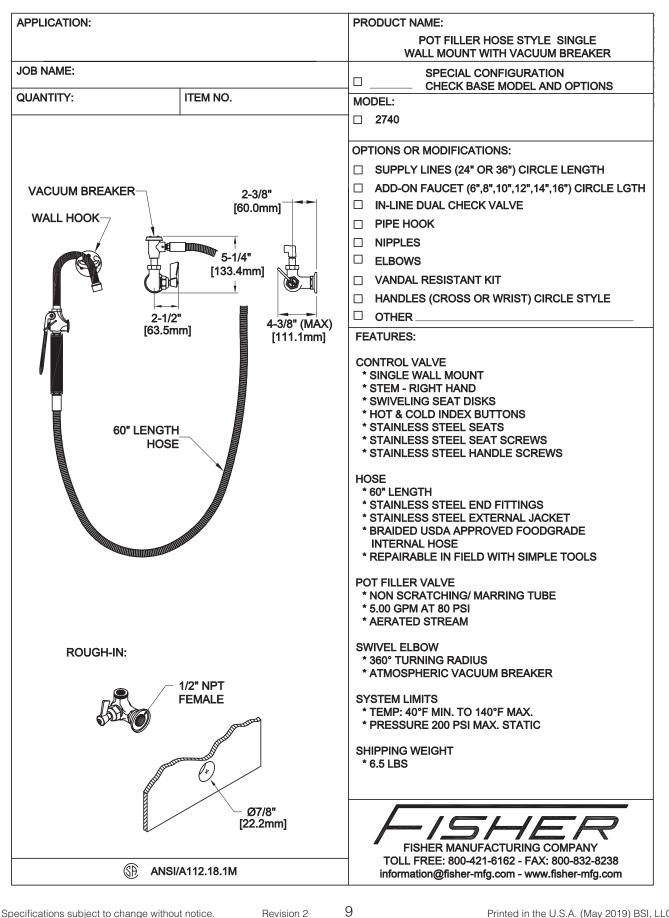
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- - Electronic Soap Dispensers
  - · Restroom Faucets
  - Electronic Faucet
  - Replacement Parts
  - · Wall & Deck Mount Faucets

#### **Foodservice Faucets**

- Faucets
- Healthcare





Revision 2

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APPLICATION:		PRODUCT NAME:
		SINGLE WALL FAUCET
JOB NAME:		SPECIAL CONFIGURATION
QUANTITY:	ITEM NO.	MODEL:   3710 W/ 6" SWING SPOUT   3711 W/ 8" SWING SPOUT   3712 W/ 10" SWING SPOUT   3713 W/ 12" SWING SPOUT   3714 W/ 14" SWING SPOUT   3715 W/ 16" SWING SPOUT   W/ 16" SWING SPOUT 3714   DISUB-XSY (7-1/4" OR 36") CIRCLE LENGTH   DJ SUB-ASSY (7-1/4" OR 13") CIRCLE LENGTH   NIPPLES   ELBOWS   HANDLES (CROSS OR WRIST) CIRCLE STYLE   VANDAL RESISTANT KIT   OTHER
MODEL   DIM     3710   2-1/.     10   [57.2r]     3711   2-1/.     11   [63.5r]     3712   3-1/.     179.4.1   3713     3714   [95.3r]     1805   5-1/.     130.2   130.2	4"   5-7/8"   6"     nm]   [149.2mm]   [152.4mm]     2"   6-3/8"   8"     nm]   [161.9mm]   [203.2mm]     8"   6-7/8"   10"     mm]   [174.6mm]   [254.0mm]     4"   7-3/8"   12"     nm]   [187.3mm]   [304.8mm]     8"   8-1/4"   14"     mm]   [209.6mm]   [355.6mm]     8"   8-7/8"   16"	FEATURES: * SINGLE WALL * SWIVELLING SEAT DISKS * STEM - RIGHT HAND * STAINLESS STEEL SEATS * STAINLESS STEEL SEAT SCREWS * STAINLESS STEEL HANDLE SCREWS * HOT AND COLD INDEX BUTTONS SYSTEM LIMITS * TEMP: 40°F MIN. TO 140°F MAX. * PRESSURE 200 PSI MAX. STATIC * 2.20 AT 80 PSI SHIPPING WEIGHT * 2.25 LBS
ROUGH-IN: 1/2" NPT FEMALE Ø7/8" [22.2mm]		
B	ANSI/A112.18.1M	FISHER MANUFACTURING COMPANY TOLL FREE: 800-421-6162 - FAX: 800-832-8238 information@fisher-mfg.com - www.fisher-mfg.com

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2 Saddleback Cove / P.O. Box 1088 Travelers Rest, SC 29690		Model No. EC-3101 Item No.	
Travelers Rest, SC: 800-476-4103 • Simi Valley, CA: 800-423-0150 • Fax: 8	64-834-3518 • www.tsbrass.con	1	
ChekPoint	This Space for Architect/En	gineer Approval	
	Job Name	Date	
ADA Compliant	Model Specified		
2 1/4"	Customer/Wholesaler		
[57mm]	Contractor		
3 3/4"	Architect/Engineer		
	13/16"		
1 13/16"	[21mm] 🗕 🗲		
[47mm] 4 1/8			
Rigid Gooseneck	-      19	5/16"	
w/ 2.2 GPM [8.3 L/min] Vandal Resistant Aerator		4mm] aximum	
		hickness	
11"		lounting	
[280mm	[280mm] Surface		
1/2" NPSM x 3/8" NPSM / 24" [610mm] Sensor Cable	<u> </u>	15/16" 49mm	
30" [762mm] Flexible Stainless Steel Hose -		-Short Elbow	
		For Restricted Space Installations	
Removable Strainer 35/8" x 4 3/16" x			
[92mm x 106mm	x 51mm] Control Module Box (Blue)	Unscrew Set Screw in Body	
w/ Internal Flow (	Control Setting Switches	to Desired Height for Anti-rotation	
Mixing Valve 🛛 🚰 🚛 🦳 🗖 Hardwire Capabl	ed w/ (4) AA Batteries. e using Terminals on Back	Feature. (See	
w/ Check Valves		Mounting Hole Detail)	
— 100-240 VAC Ada w/ 71" [1800mm]	apter _	Mounting Hole	
Cord. (Řemove Ř	ubber	Detail	
Plugs on Module and Cable to Connect)		∅1" ∇ [25mm]	
(2) 3/8" Compression x 1/2" NPSM 18" [457mm] Flexible Stainless Steel			
Supply Hose	1	1 9/32"	
		Ø9/32"	
		[7mm]	
Product Specifications:	Product Compliance	ce:	
Chrome Plated Brass Electronic Faucet: Wall Mount Rigid Goosene 2.2 GPM VR Aerator, AC/DC Control Module w/ Internal Flow Cont	rol Setting   NSF 61 - Section 9	)	
Switches, Temperature Control Mixing Valve w/ Check Valve, 18" H Supply Stop Flexible Connector Hoses	lot & Cold NSF 372 (Low Lea ANSI A117.1 (ADA	d Content)	
	UL 1951		
Specifications subject to change without notice. Revision 2 11	Printed in the	9 U.S.A. (May 2019) BSI, LLC	



#### INSTALLING HAND SINK DRAWERS

BSI'S HSD and HSD-ST hand sinks are designed to be placed under a counter. Each unit has pre-drilled holes on top of the units edges to secure to the counter's undercarriage.

Wood Subsurface

• Screw provided screws up into the wood subsurface.

Stainless Steel Work Table

- Weld hand sink to bottom of stainless steel table.
- If stainless counter top is too thin then a shelf or channel to rest the sink on is required.

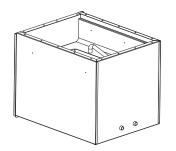
Solid Surface or Stone Counter

- If counter has a wood subsurface then use the provided screws to secure the sink to the wood.
- If counter does not have a wood subsurface then a shelf or channel to rest the sink on is required.

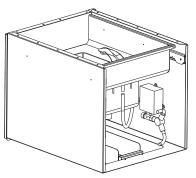


#### PLUMBING

All sink units can be plumbed in the field to a floor drain if available or to a 1-1/2" drain pipe. 1/2" MPT for cold water connection only with less than 45 psi.



Standard Rear Drawer Sink Hot and Cold Faucet Inputs



Standard Rear Drawer Sink Infared Hot and Cold Faucet Inputs



### BSI, LLC WARRANTY

BSI, LLC warrants its products to be free from defects in material and workmanship from the date of their original purchase for normal use and for the applicable warranty periods set forth below. BSI, LLC's warranty extends only to original purchasers acquiring new products purchased in the United States directly from BSI, LLC, its authorized dealers or other companies specifically authorized by BSI, LLC to act as resellers of its products.

#### DRAIN TECH SINKS AND TROUGHS

BSI, LLC warrants sinks and floor troughs against defects in material and workmanship for a period of two years from invoice date.

THERE ARE NO WARRANTIES EXCEPT AS EXPRESSLY STATED ABOVE, WHETHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. These warranties do not apply to any products which have been altered in any way or to products which have been subject to misuse, abuse, neglect, accident, or which have been damaged in transit. Warranty is void if products are used, held or stored in an unsupervised environment. BSI, LLC's liability for its products shall be limited to the repair or replacement of products or, at BSI, LLC's option, to refunding the purchase price. BSI, LLC will not be liable, under any circumstances, for incidental or consequential damages (including, without limitation, lost profits) arising in connection with the sale, use, inability to use, repair or replacement of BSI, LLC's products. The liability of BSI, LLC arising from any cause shall not exceed the price paid for the products.

Any claim for breach of the foregoing warranties shall be deemed waived unless submitted to BSI, LLC in writing within 30 days of the date the alleged defect was discovered, or by reasonable inspection should have been discovered. The merchandise must be returned to the BSI, LLC factory from which it was purchased, freight prepaid, and will not be accepted unless prior written authorization to return the merchandise has been issued by BSI, LLC. A copy of the original invoice must accompany the returned merchandise to prove the date of original purchase and warranty entitlement. Any cause of action for breach of the foregoing warranties shall be deemed waived unless brought within one year of the date of the claim submission.