



Hot Food Holding Drop-In Wells Electric



Models:

100-HW/D4/D6/D443/D643
100-HWLF/D4/D6
100-HWRS/D6
200-HW/D4/D6/D443/D643
200-HWLF/D4/D6
200-HWI/D4/D6/D443/D643
200-HWIS/D6
200-HWILF/D4/D6
300-HW/D4/D6/D443/D643
300-HWLF/D4/D6
300-HWI/D4/D6/D443/D643
300-HWIS/D6
300-HWILF/D4/D6
400-HW/D4/D6
400-HWLF/D4/D6
400-HWI/D4/D6
400-HWILF/D4/D6
500-HW/D4/D6
500-HWLF/D4/D6
500-HWI/D4/D6
500-HWILF/D4/D6



500-HWI/D4



100-HW/D6



300-HWI/D6



400-HW/D4



200-HWIS/D6

- **Installation**
- **Operation**
- **Maintenance**

W164 N9221 Water Street • P.O. Box 450
Menomonee Falls, Wisconsin 53052-0450 U.S.A.

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FAX: 262.251.7067 • 800.329.8744 U.S.A. ONLY
www.alto-shaam.com



Consult instructions
for operation and use.



Manufacturer's Information

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Manufacturer

Alto-Shaam, Inc.

P.O. Box 450

W164 N9221 Water Street

Menomonee Falls, WI 53052

Original Instructions

The content in this manual is written in American English.

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Warranty and Service Information



Enjoy your Alto-Shaam Hot Well!

Halo Heat® Technology Better food quality. Individual well control. Inside Alto-Shaam drop-in food wells, gentle Halo Heat® surrounds each well with precisely controlled, even heat. Water-less design offers safety and less maintenance. Drop-in wells easily fit into any buffet service counter, prep station, or chef's table.

Register your Appliance

Register Registering your appliance ensures prompt service in the event of a warranty claim. You will also receive direct notifications of software updates and additional product information.

Your personal information will not be shared with any other company.

www.alto-shaam.com/warranty

Alto-Shaam 24/7 Emergency Repair Service

Call Call 800-558-8744 to reach our 24-hour emergency service call center for immediate access to local authorized service agencies outside standard business hours. The emergency service access is provided exclusively for Alto-Shaam equipment and is available throughout the United States through Alto-Shaam's toll free number.

Availability Emergency service access is available seven days a week, including holidays.

This Alto-Shaam appliance has been thoroughly tested and inspected to ensure only the highest quality appliance is provided. Upon receipt, check for any possible shipping damage and report it at once to the delivering carrier.

This appliance, including unattached items and accessories, may be delivered in one or more packages. Ensure all standard items and options have been received with each appliance as ordered. Save all the information packed with the appliance. Register the appliance online at www.alto-shaam.com/en/support/warranty-registration to ensure prompt service in the event of a warranty parts and labor claim.

This manual must be read and understood by all people using or installing the appliance. Contact the Alto-Shaam Tech Team Service Department if you have any questions concerning installation, operation, or maintenance.

1-800-558-8744; servicedept@alto-shaam.com

The serial number is required for all inquiries.

Always include both model and serial number(s) in any correspondence regarding the appliance.

Model: _____

Serial number: _____

Purchased from: _____

Date installed: _____ **Voltage:** _____

Environmental Conditions**Operational Environmental Conditions**

- Before use, appliance must acclimate to room temperature in the environment it is placed — 24 hours is recommended.
- Ambient temperature range of 60°F to 110°F (16°C to 43°C).
- Relative humidity of less than 95% non-condensation.
- Atmospheric pressure range of 50kPa to 106kPa.

- Carefully remove the appliance from the carton or crate.

NOTE: Do not discard the carton and other packaging material until you have inspected the appliance for hidden damage and tested it for proper operation.

Do not discard this manual. This manual is considered to be part of the appliance and is to be provided to the owner or manager of the business or to the person responsible for training operators. Additional manuals are available from the manufacturer.

- Read all instructions in this manual carefully before installing this appliance, using the appliance or performing routine maintenance. Following procedures other than those indicated in this guide to use and clean the appliance is considered inappropriate and may cause damage, injury or fatal accidents, in addition to voiding the warranty and relieving Alto-Shaam of all liability.
- Remove all protective plastic film, packaging materials, and accessories from the appliance before connecting electrical power. Store any accessories in a convenient place for future use.

- The appliance is intended to hold hot food for the purpose of human consumption. No other use for this appliance is authorized and is therefore considered dangerous. The appliance must not be used to hold food containing flammable materials (such as food with alcohol). Substances with a low flash point can ignite spontaneously and cause a fire.
- The appliance is intended for use in commercial establishments where all operators are familiar with the purpose, limitations, and associated hazards of this appliance. Operating instructions and warnings must be read and understood by all operators and users.
- This appliance is intended to be used for commercial applications, for example in kitchens of restaurants, canteens, hospitals and in commercial enterprises such as bakeries, butcheries, etc., but not for continuous mass production of food.
- This appliance is not intended to be used by laymen in household and similar applications such as: staff kitchen areas in shops, offices, and other working environments; farmhouses, hotels, motels and other residential type environments; bed and breakfast type environments.
- Any troubleshooting guides, component views, and parts lists included in this manual are for general reference only and are intended for use by qualified and trained technicians.
- This manual should be considered a permanent part of this appliance. This manual and all supplied instructions, diagrams, schematics, parts lists, notices, and labels must remain with the appliance if the appliance is sold or moved to another location.

The following signal words and symbols may be used throughout this manual.

DANGER

Indicates a hazardous situation that, if not avoided, will result in death or serious injury.

WARNING

Indicates a hazardous situation that, if not avoided, could result in death or serious injury.

CAUTION

Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

NOTICE: Indicates information considered important, but not hazard-related (e.g., messages relating to property damage).

NOTICE: For equipment delivered for use in any location regulated by the following directive: 2012/19/EC WEEE

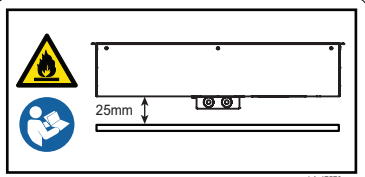


Do not dispose of electrical or electronic equipment with other municipal waste.

Safety Procedures

- To prevent serious injury, death or property damage, the appliance should be inspected and serviced at least every twelve (12) months by an authorized service partner or trained technician.
- **Only** allow an authorized service partner or trained technician to service or to repair the appliance. Installation or repairs that are not performed by an authorized service partner or trained technician, or the use of non-factory authorized parts will void the warranty and relieve Alto-Shaam of all liability.
- When working on this appliance, observe precautions in the literature, on tags, on labels attached to or shipped with the appliance and other safety precautions that may apply.

 WARNING	
	This appliance must not be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision concerning use of the appliance by person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance. Children shall neither clean nor maintain the appliance.

 LA-47571	Do not add water.
	WARNING Hot surface
 ⚠ WARNING/ADVERTENCIA/AVERTISSEMENT Electric Shock Hazard To reduce the risk of electric shock, do not remove or open cover. No user-serviceable parts inside. Refer servicing to qualified personnel. Qualified personnel: Disconnect power before servicing. Peligro de descarga eléctrica Para reducir el riesgo de descarga eléctrica, no retire ni abra la cubierta. No hay piezas en el interior a la que se les pueda realizar mantenimiento. Derive el mantenimiento a personal calificado. Danger de décharge électrique Pour réduire le risque de décharge électrique, ne par ouvrir ni retirer le capot. Ne confiez pas de pièces réparables par l'utilisateur. Confier les réparations à du personnel qualifié. Personnel qualifié : Sectionnez l'alimentation avant toute intervention. LA-38950 	WARNING Electric shock hazard To reduce the risk of electric shock, do not remove or open cover. No user-serviceable parts inside. Refer servicing to qualified personnel. Qualified personnel: Disconnect power before servicing.
 Every Alto-Shaam product is precision calibrated prior to release from the factory to ensure accurate temperature control. CALIBRATION TECHNICIAN _____ LA-26378	Every Alto-Shaam product is precision calibrated prior to release from the factory to ensure accurate temperature control.
CLEARANCE REQUIREMENT: Mount unit to allow a minimum of 1" (25mm) clearance between unit bottom surface and combustible materials. DÉGAGEMENT : Monter l'appareil de façon à avoir un dégagement de 25 mm au minimum entre la surface inférieure de l'appareil et des matériaux combustibles. ANFORDERUNGEN AN DEN FREIRAUM: Das Gerät so montieren, dass zwischen der Bodenplatte des Geräts und brennbaren Materialien mindestens 25 mm Freiraum besteht. REQUISITO DE ESPACIO: Monte la unidad de modo que quede un espacio mínimo de 25 mm entre la superficie del fondo de la unidad y los materiales combustibles. 間隙要求: 安装时要在装置底部表面和可燃物之间至少留出25mm的间隙。 LA-36923	Mount unit to allow a minimum of 1" (25mm) clearance between unit bottom surface and combustible materials.
 LA-47570	Installation clearances.

Specifications

See Specification Sheet for dimensions and electrical connections.

100-HW	
100-HWRS	
200-HW	
200-HWIS	
300-HW	
300-HWIS	
400-HW	
500-HW	

! WARNING

Improper installation, alteration, adjustment, service, cleaning, or maintenance could result in property damage, severe injury, or death.

Read and understand the installation, operating and maintenance instructions thoroughly before installing, servicing, or operating this equipment.

! CAUTION

To prevent **personal injury** or **property damage**:

Always use hand protection when operating this appliance to avoid burns. Metal parts of this equipment become hot when in operation.

! WARNING

To prevent personal injury, death or property damage:

Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

Site Installation

The Alto-Shaam hot well must be installed in a location that will permit it to function for its intended purpose and to allow adequate clearance for ventilation, proper cleaning, and maintenance access.

1. The hot well must be installed on a stable and level surface free of vibration and suitably strong enough to support the combined weights of the appliance plus the maximum product load weight.
2. **DO NOT** install this hot well in any area where it may be affected by any adverse conditions such as steam, grease, dripping water, high temperatures, or any other severely adverse conditions.
3. This hot well must be kept free and clear of any combustible materials.
4. Countertop material must withstand temperature up to 200°F (93°C). Verify countertop material temperature rating with manufacturer before installing to ensure counter can withstand heat.
5. A stainless steel heat shield is recommended if the area under the hot well is used for storage.
6. Some foods may require additional overhead heating. Always monitor the food temperature and add overhead heating when needed.

Clearance Requirements

1" (25mm) from combustible surfaces

Accessories

Pan Divider Bars	
Full Size	16019
Half Size / Third-Size	11318
Extra Long (200 and 300-HW/D443 or D643)	1012405
Locking Kit	5020849
Undermount Kit (100-HW only)	5020793

Net Weights

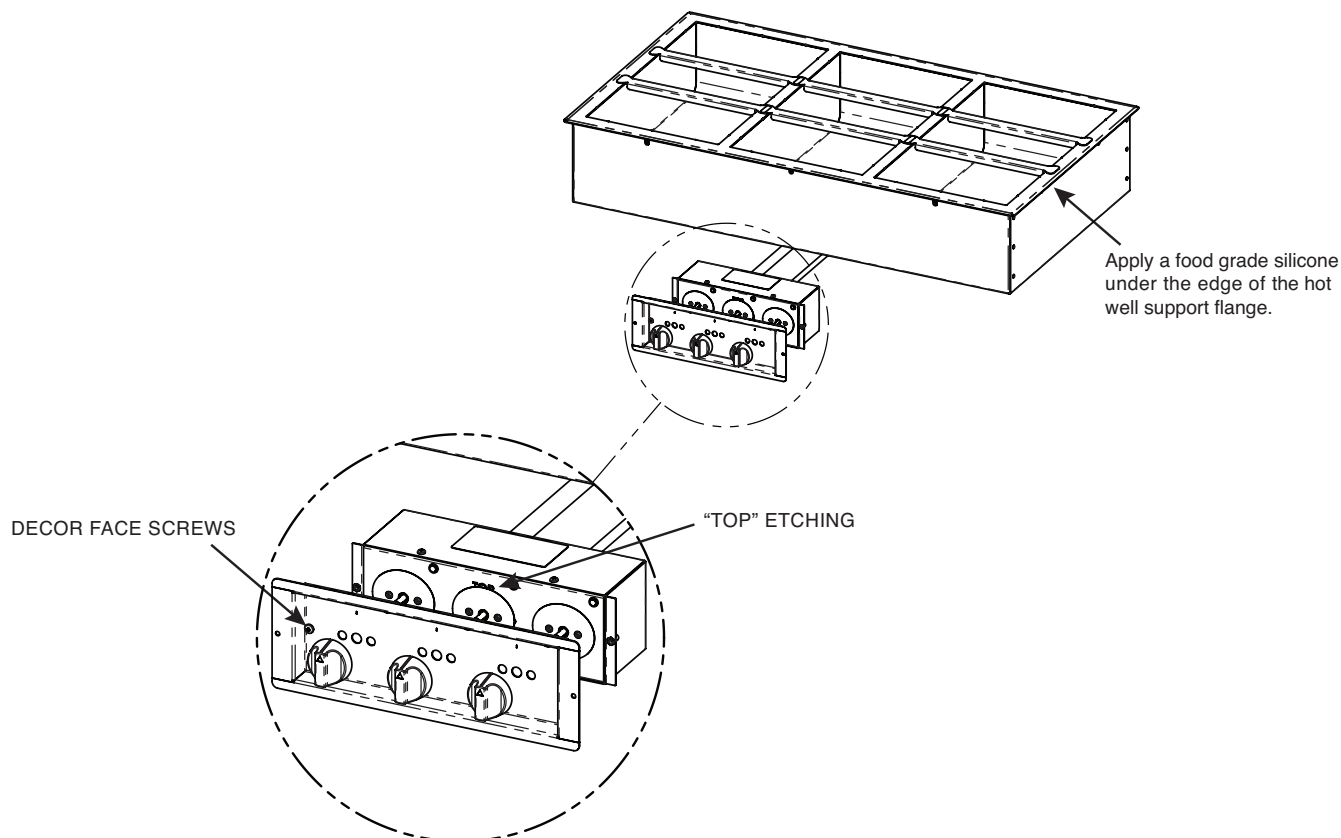
Model	D4	D6	D443	D643
100-HW	25 lb (11 kg)	29 lb (13 kg)	31 lb (14 kg)	35 lb (16 kg)
100-HWLF	27 lb (12 kg)	31 lb (14 kg)	—	—
100-HWRS	—	29 lb (13 kg)	—	—
200-HW	40 lb (18 kg)	45.5 lb (21 kg)	50 lb (23 kg)	56 lb (25 kg)
200-HWLF	43 lb (20 kg)	48 lb (22 kg)	—	—
200-HWI	50 lb (23 kg)	56.25 lb (26 kg)	62 lb (28 kg)	69.5 lb (32 kg)
200-HWILF	54.25 lb (25 kg)	60.5 lb (27 kg)	—	—
200-HWIS	—	56.25 lb (26 kg)	—	—
300-HW	54.5 lb (25 kg)	61 lb (28 kg)	68 lb (31 kg)	75 lb (34 kg)
300-HWLF	58 lb (26 kg)	64.5 lb (29 kg)	—	—
300-HWI	69 lb (31 kg)	77.5 lb (35 kg)	85 lb (39 kg)	99 lb (45 kg)
300-HWILF	74 lb (34 kg)	83 lb (38 kg)	—	—
300-HWIS	—	77.5 lb (35 kg)	—	—
400-HW	71 lb (32 kg)	79 lb (36 kg)	—	—
400-HWLF	75 lb (34 kg)	83 lb (38 kg)	—	—
400-HWI	90 lb (41 kg)	101.5 lb (46 kg)	—	—
400-HWILF	96.5 lb (44 kg)	108 lb (49 kg)	—	—
500-HW	85 lb (39 kg)	94.5 lb (43 kg)	—	—
500-HWLF	89.5 lb (41 kg)	100 lb (45 kg)	—	—
500-HWI	107 lb (49 kg)	121 lb (55 kg)	—	—
500-HWILF	115 lb (52 kg)	128.5 lb (58 kg)	—	—

Product\Pan Capacity

Model	Max. Capacity			Max. Volume			Full-Size Pans* 12" x 20" x 4" GN 1/1 (530 x 325 x 100mm)	Half-Size Pans* 12" x 10" x 4" GN 1/2 (265 x 325 x 100mm)	Third-Size Pans* 12" x 6" x 4" GN 1/3 (176 x 325 x 100mm)	
	D4	D443	D6	D4	D443	D6			D4, D6	D443
100 Series	24 lb (11 kg)	32 lb (15 kg)	36 lb (16 kg)	14.5 qt (14 L)	19.2 qt (18 L)	22 qt (21 L)	1	2	3	4
200 Series	48 lb (22 kg)	64 lb (29 kg)	72 lb (33 kg)	29 qt (28 L)	37.8 qt (36 L)	44 qt (42 L)	2	4	6	8
300 Series	72 lb (33 kg)	96 lb (44 kg)	108 lb (49 kg)	43.5 qt (42 L)	56.6 qt (53 L)	66 qt (63 L)	3	6	9	12
400 Series	96 lb (44 kg)	—	144 lb (65 kg)	58 qt (56 L)	—	88 qt (84 L)	4	8	12	—
500 Series	120 lb (54 kg)	—	180 lb (82 kg)	72.5 qt (70 L)	—	110 qt (105 L)	5	10	15	—

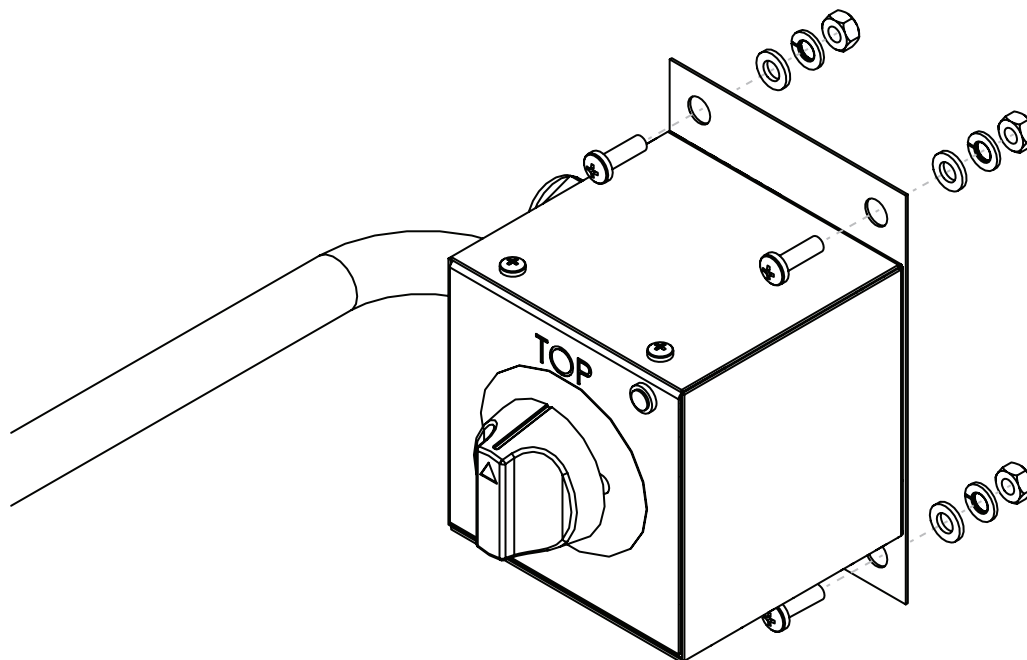
* Based on 4" deep pans. Well will also accept 2-1/2" (65mm) deep pans; D6 Hot Wells will accept 6" (150mm) deep pans

Control Installation Instructions

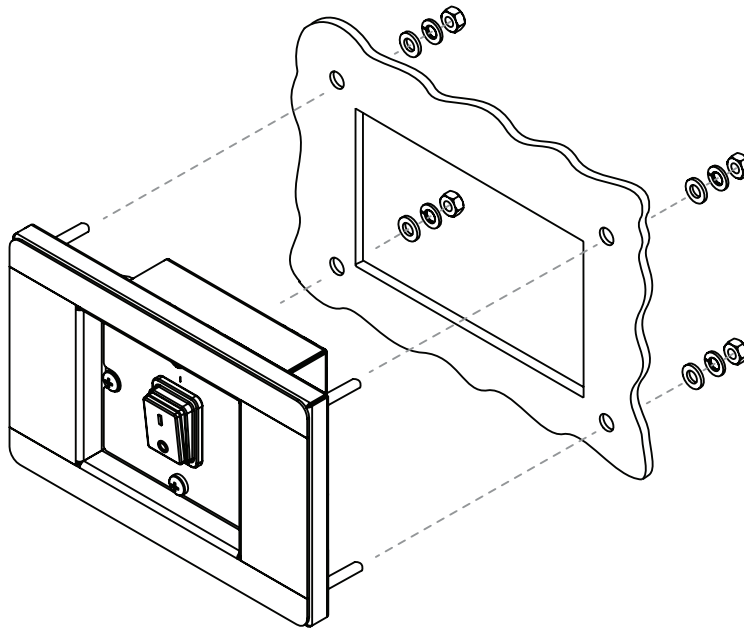


1. Cut an appropriate sized opening in the location where the control is to be positioned. **See Specification Sheet for Rough Cut Openings for cutout size.**
2. Thoroughly clean and dry the mounting surface around the control cut-out opening on which the décor face will be applied.
NOTICE: The control face will not properly adhere to an unclean surface.
3. Remove the knob(s) from the thermostat(s) by pulling knob away from control. Remove the décor face from the appliance by removing the two (2) screws located to the right and left of the thermostat.
4. Making sure "TOP" etching is at the top, route control housing through opening cut in step 1. Secure the décor face housing to the control housing using the screws removed in step 3.
5. Remove the protective film from the mounting tape on the inside flanges of the décor face and apply the décor face to the mounting surface. Two holes are provided in décor face for additional mounting screws (not provided) if desired.
6. Reattach the knob(s) to the thermostat(s).

100-HWRS/D6 Control Housing Installation Instructions (5022756)



1. Drill four (4) 3/8" (9.5mm) holes in mounting surface.
2. Align housing with holes and attach housing to mounting surface with 5/16" (M9) bolt, flat washer, lock washer and locknut (not supplied).

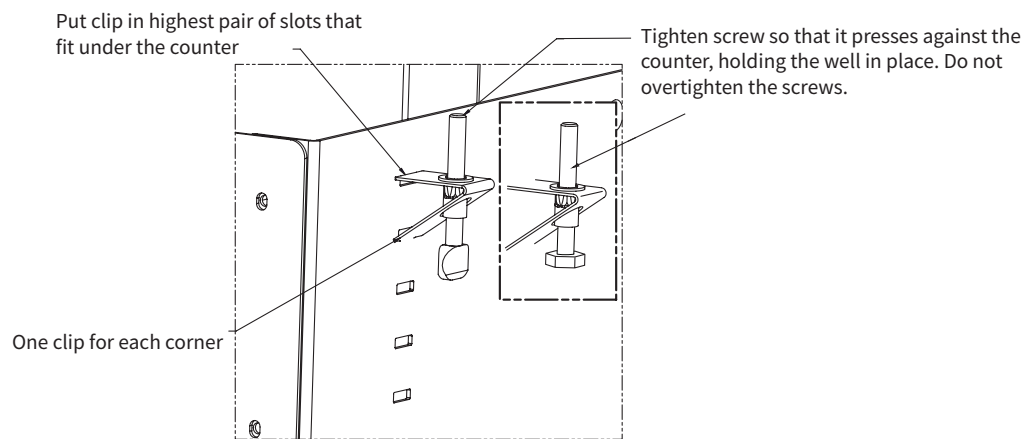
100-HWRS/D6 Switch Housing Installation**New Installation:**

1. Cut switch cut-out in cabinet to $0.865" \times 1.200" \pm 0.020"$.
2. Install switch body in cutout.
3. Crimp two (2) Molex spade connectors (190020024 or equivalent) and one (1) #10 ring terminal to 16/3 SJT, 120V wire and run to 120V power source. Ground per local and NEC codes.

Retrofit:

1. Drill four (4) $1/4"$ (6.35 mm) holes in mounting surface for studs (if necessary).
2. Route switch housing through cutout from the inside of the cabinet.
3. Align studs with holes and push switch housing flush with mounting surface.
4. Put a M6 flat washer, lock washer, and locknut on each stud, and tighten to 28 in-lbs. maximum torque.
NOTICE: Do not overtighten.

Locking Kit 5020849 Installation (Option)



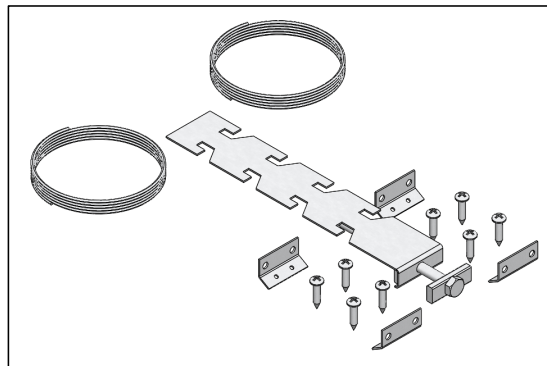
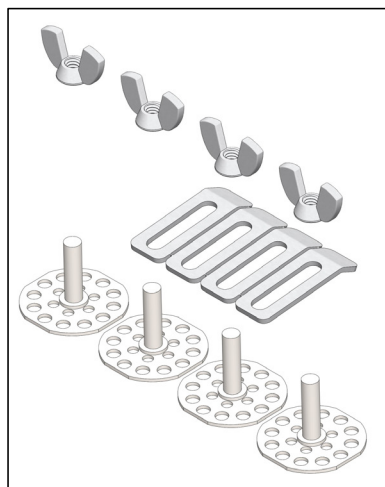
Undermount Kit 5020793 Installation (Option)

AFFECTED MODELS TO INCLUDE: 100-HW

PURPOSE: INSTRUCTIONS FOR MOUNTING A 100-HW HOTWELL UNDER A COUNTERTOP

NOTE: KIT ASSEMBLY # 5020793

TOOLS NEEDED: PLATE TO MIX EPOXY ON, STICK TO MIX WITH, TAPE, MARKER, SCISSORS, 7/16" WRENCH, PLIERS



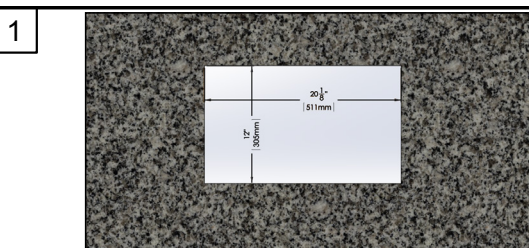
REV.	ECO	DESCRIPTION	DATE	APP
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1	7530	ADDED UNDERMOUNT HARNESS	3/17/2014	JJH

KIT 5020793

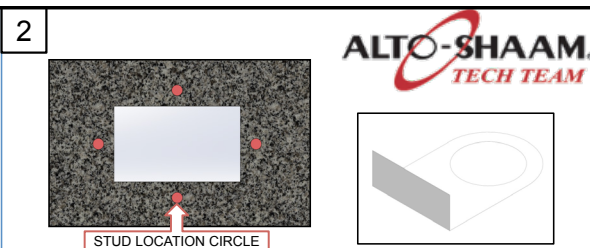
SRV-20035 REV. 1

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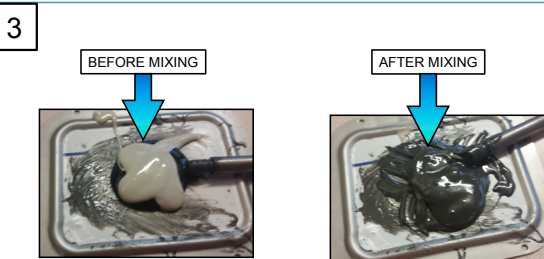
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- CLEAN THE BOTTOM SURFACE OF THE COUNTER THAT THE HOT WELL WILL MOUNT TO (INSIDE CUTOUT SURFACE OF COUNTER MUST BE FINISHED/SEALED FOR SANITATION PURPOSES. A SOLID SURFACE OR METAL COUNTER IS SUGGESTED). **NOTE:** CUTOUT DIMENSIONS ARE SHOWN IN THE IMAGE BUT ARE NOT INCLUDED IN THESE INSTRUCTIONS. 6" [153mm] MINIMUM CLEARANCE FROM EACH SIDE OF THE CUTOUT IS REQUIRED FOR UNDERMOUNT INSTALLATION.



- USE A PAPER GAUGE (KIT INCLUDES PAPER TEMPLATES - USE SCISSORS TO CUT THE IMAGES OUT AND FOLD ON DASHED LINES). MARK STUD LOCATION CIRCLES AT THE CENTER OF EACH OF THE FOUR SIDES OF THE CUTOUT ON THE BOTTOM SIDE OF THE COUNTER. **NOTE:** IF POSSIBLE, ROTATE COUNTER TO BOTTOM SIDE UP FOR EASIER INSTALLATION, BUT INSTRUCTIONS ARE INCLUDED IF YOU ARE NOT ABLE TO DO SO.



- MIX J-B WELD STEEL AND HARDENER AT 1:1 RATIO (2 OZ WILL BE ENOUGH FOR FOUR STUDS).



- SPREAD MIXED EPOXY ON TOP OF BASE PLATE OF STUD. THE EPOXY SHOULD BE APPROXIMATELY SAME THICKNESS AS THE BASE PLATE. **NOTE:** SCREWING THE WING NUT ALL THE WAY ON AND THEN BACK OFF IS A GOOD WAY TO CLEAR ANY EPOXY ON THREADS BEFORE IT DRIES.

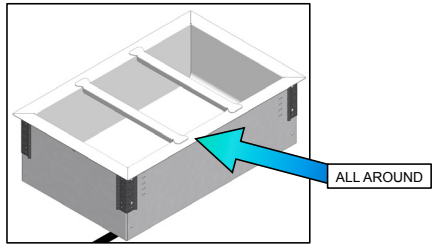
SRV-20035 REV. 1

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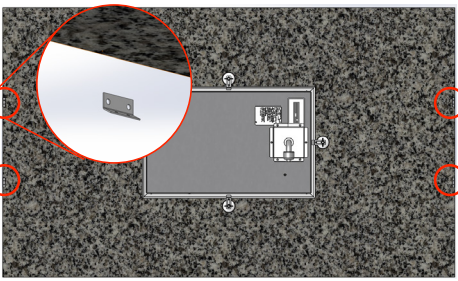
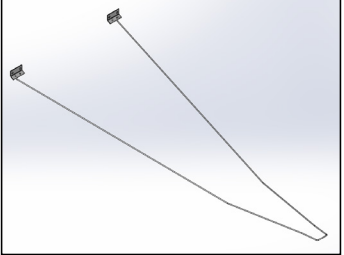
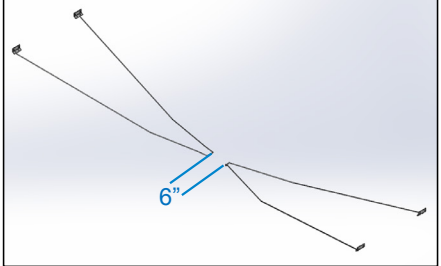
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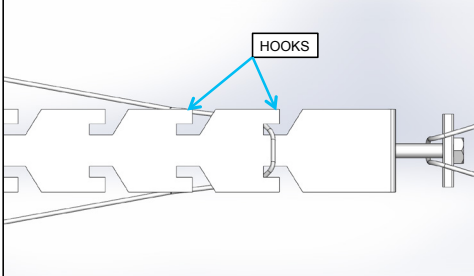
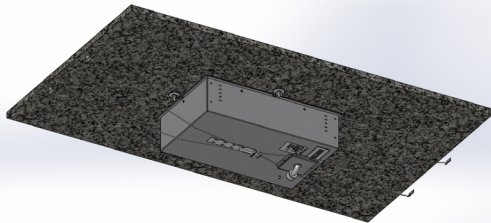
Undermount Kit 5020793 Installation (option) - continued

5  □ PRESS STUD ONTO BOTTOM OF COUNTER UNTIL THE EPOXY SEEPS THROUGH THE HOLES ON THE STUD BASE PLATE.	6  ALTO-SHAAM[®] TECH TEAM □ SPREAD EPOXY EVENLY OVER BASE PLATE TO COMPLETELY COVER IT. KEEP THE EPOXY WITHIN THE DRAWN CIRCLES IN THE COUNTER REFERENCED IN STEP 2.
7  □ APPLY TAPE TO HOLD THE STUD IN PLACE IF COUNTER IS BOTTOM SIDE DOWN. ALSO WRAP TAPE AROUND THE THREADS OF THE STUDS TO PREVENT DRIPS ONTO THE THREADS. NOTE: A DROP CLOTH BELOW ALL THE STUDS IS RECOMMENDED TO CATCH ANY EPOXY DRIPS.	8  □ ALLOW EPOXY TO DRY OVERNIGHT (APPROXIMATELY 15 HOURS).
SRV-20035 REV. 1 Alto-Shaam Technical Service 800-558-8744 x6702 servicedept@alto-shaam.com 3 of 7	

9  □ APPLY A LINE OF FOOD GRADE SILICONE ALONG THE TOP FACE OF THE HOT WELL FLANGE AND PLACE THE HOT WELL CENTERED ON THE CUTOUT. NOTE: IF COUNTER IS BOTTOM SIDE DOWN AND YOU HAVE NOTHING TO HOLD IT UP WITH, WAIT TO LOCATE THE HOTWELL UNTIL THE BRACKETS ARE ON.	10  ALTO-SHAAM[®] TECH TEAM □ PLACE A BRACKET AND NUT ON EACH STUD AND TIGHTEN EACH UNTIL IT BEGINS TO GRAB THE BOTTOM OF THE HOT WELL FLANGE. IF THE COUNTER IS BOTTOM SIDE DOWN, TIGHTEN OPPOSITE SIDES FIRST TO HOLD THE WELL IN PLACE WHILE YOU TIGHTEN THE REMAINING TWO STUDS.
11  □ HAND TIGHTEN THE WING NUT ENSURING THAT THE HOT WELL STAYS CENTERED ON THE COUNTER CUTOUT.	12  □ REMOVE ANY SILICONE THAT SEEPED INTO THE WELL AFTER TIGHTENING THE BRACKETS AND NUTS.
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Undermount Kit 5020793 Installation (option) - continued

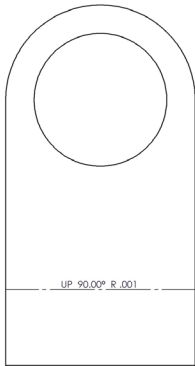
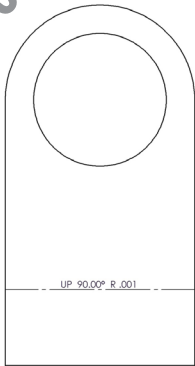
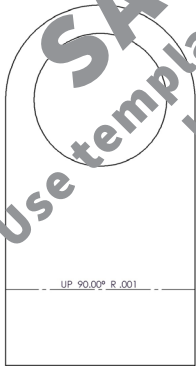
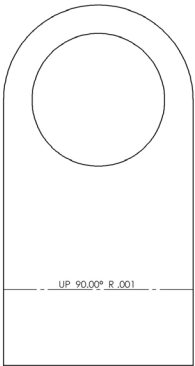
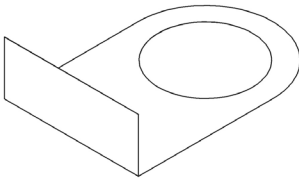
13  ❑ INSTALL MOUNTING CLIPS INTO THE SIDE WALLS OF THE CABINET ABOUT 1" (25mm) FROM THE BOTTOM OF THE COUNTERTOP. THE DISTANCE BETWEEN THE CLIPS SHOULD BE ABOUT THE WIDTH OF THE HOT WELL.	14  ❑ FEED ONE END OF THE WIRE UP THROUGH THE OUTSIDE HOLE ON THE CLIP. LEAVE ABOUT 2" (51mm) OF EXCESS WIRE. BEND THE WIRE DOWN AND WRAP IT AROUND ITSELF TO SECURE IT IN PLACE.
15  ❑ BEND THE WIRE INTO A "V" 2-3" (51-76mm) AWAY FROM THE CENTER OF THE HOT WELL. FEED THE FREE END UP THROUGH THE OTHER CLIP, BEND, AND WRAP AS BEFORE.	16  ❑ REPEAT STEPS 14 & 15 FOR THE WIRE ON THE OPPOSITE SIDE. WHEN MAKING THE BEND, LEAVE ABOUT 6" (152mm) BETWEEN THE BENDS.
SRV-20035 REV. 1 Alto-Shaam Technical Service 800-558-8744 x6702 servicedept@alto-shaam.com 5 of 7	

17  ❑ LOOP ONE "V" AROUND THE T-NUT SO THAT THE LOOP GOES BELOW THE BOLT. HOOK THE OTHER "V" AT THE TIGHTEST HOOK POSSIBLE.	18  ❑ TIGHTEN THE BOLT TO DRAW THE WIRES TIGHT.
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Undermount Kit 5020793 Installation (option) - continued



DRAWING MEANT TO BE PRINTED ON 11" x 17" PAPER TO BE CORRECTLY SCALED.
CHECK THAT LINE ABOVE IS 1" TO CONFIRM DRAWING IS TO SCALE



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- A rating tag is permanently mounted on the appliance. Make sure the source voltage matches the voltage listed on the rating tag.
- This appliance is equipped with a three-prong grounding plug. For your protection against shock hazard this appliance should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug. Plug the appliance into a properly grounded receptacle **ONLY**, positioning the appliance so that the plug is easily accessible in case of an emergency. Arcing will occur when connecting or disconnecting the appliance unless all controls are in the off position.
- Proper receptacle or outlet configuration or permanent wiring for this appliance must be installed by a licensed electrician in accordance with applicable local electrical codes.
- Ground fault or residual current Type B protection device must accommodate leakage current of 20mA.

NOTICE: Where local codes and CE regulatory requirements apply, appliances must be connected to an electrical circuit that is protected by an external GFCI outlet.

Electrical Connections

WARNING



To prevent **SERIOUS INJURY, DEATH** or **PROPERTY DAMAGE**:

All electrical connections must be made by a qualified and trained service technician in accordance with applicable electrical codes.

CAUTION



Power source must match voltage identified on appliance rating tag. The rating tag provides essential technical information required for any appliance installation, maintenance or repairs. Do not remove, damage or modify the rating tag.

WARNING

Improper installation, alteration, adjustment, service, cleaning, or maintenance could result in property damage, severe injury, or death.

Read and understand the installation, operating and maintenance instructions thoroughly before installing, servicing, or operating this equipment.

WARNING



To prevent serious injury, death, or property damage:

All electrical connections must be made by a qualified and trained service technician in accordance with applicable electrical codes.



This appliance must be adequately grounded in accordance with local electrical codes or, in the absence of local codes, with the current edition of the National Electrical Code ANSI/NFPA No. 70. In Canada, all electrical connections are to be made in accordance with CSA C22.1, Canadian Electrical Code Part 1 or local codes.



CE-approved appliances include an equipotential-bonding terminal marked with the symbol shown on the left. Provisions for earthing are to be made in accordance with IEC:2010 60335-1 section 27 or local codes.



CAUTION



To prevent **personal injury** or **property damage**:

Always use hand protection when operating this appliance to avoid burns. Metal parts of this equipment become hot when in operation.

1. Do not add water to hot well

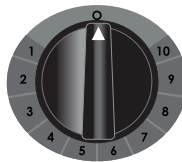
Adding water to the hot well will void the warranty.

2. Place pan dividers and empty pans in the wells

NOTICE: No matter what type of pan configuration chosen, pan divider bars must be used to close all gaps between pans, and all gaps between the pans and the edges of the wells. If these gaps are not closed, heat will escape, heat distribution will be uneven, and uniform temperature will be difficult to maintain.

3. Preheat

A preheat step is built into the control. When knob is turned to desired setting the appliance will automatically preheat for a predetermined time and then begins to cycle on and off based on the setting selected. The pilot light (green) is "ON" whenever the dial is turned to a number.



4. Load hot foods into the appliance

After preheating, place hot foods into the preheated pans located in the appliance or exchange the pans with pre-filled product pans. This appliance is designed for the purpose of hot food holding. Only hot foods should be placed into the appliance. Potentially hazardous foods should be held in the appliance at setting 10. If lower settings are used, ensure the food has maintained safe food temperatures. Lower settings should be tested by user to ensure food has maintained safe food temperatures.

All pan divider bars required must be utilized at all times with the pan configuration chosen.

5. Reset thermostat(s) as needed

After all products are loaded into the appliance, it may be necessary to reset the thermostat(s). Since proper temperature range depends on the type of products and the quantities being held, periodically check each item to make certain the correct temperatures are being maintained.

NOTICE: Some foods may require additional overhead heating. Always monitor the food temperature and add overhead heating when needed.

For models with ON/OFF Switch

1. Place an empty pan in the hot well.
2. Press the ON/OFF switch to the ON (I) position.
3. Turn the thermostat knob to the desired temperature.
4. Preheat the hot well for 30 minutes before loading hot food.
5. Place hot food in the pan in the hot well.

Protecting Stainless Steel Surfaces



It is important to guard against corrosion in the care of stainless steel surfaces. Harsh, corrosive, or inappropriate chemicals can completely destroy the protective surface layer of stainless steel. Abrasive pads, steel wool, or metal implements will abrade surfaces causing damage to this protective coating and will eventually result in areas of corrosion. Even water, particularly hard water that contains high to moderate concentrations of chloride, will cause oxidation and pitting that result in rust and corrosion. In addition, many acidic foods spilled and left to remain on metal surfaces are contributing factors that will corrode surfaces.

Proper cleaning agents, materials, and methods are vital to maintaining the appearance and life of this appliance. Spilled foods should be removed and the area wiped as soon as possible but at the very least, a minimum of once per day. Always thoroughly rinse surfaces after using a cleaning agent and wipe standing water as quickly as possible after rinsing.

Cleaning Materials

Cleaning can usually be accomplished with the proper cleaning agent and a soft, clean cloth. When more aggressive methods are needed, use a non-abrasive scouring pad on difficult areas and make certain to scrub with the visible grain of surface metal to avoid surface scratches.

NOTICE



To protect stainless steel surfaces, completely avoid the use of abrasive cleaning compounds, chloride based cleaners, or cleaners containing quaternary salts. **Never** use hydrochloric acid (muriatic acid) on stainless steel. **Never** use wire brushes, metal scouring pads or scrapers.



WARNING



To prevent **SERIOUS PERSONAL INJURY, DEATH, or PROPERTY DAMAGE:**

If the appliance is not cleaned or is not cleaned well enough, deposits of grease and or food residues inside the appliance may catch fire. If fat deposits and/or food waste inside the appliance ignite disconnect the appliance from the main power and use a fire extinguisher (do not use water to extinguish a grease fire!). Failure to clean the appliance properly may cause fire, personal injury, death, invalidates the warranty and relieves Alto-Shaam of all liability.

WARNING



To prevent serious personal injury, death, or property damage:

Do not steam clean, hose down or flood the interior or exterior with water or liquid solution of any kind. **Do not** use water jet to clean. Failure to observe this precaution will void the warranty.

WARNING



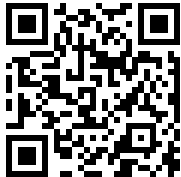
To prevent serious injury, death, or property damage, **always** disconnect the appliance from the power source before cleaning or servicing.

Clean the Food Well daily

1. Disconnect hot well from the power source. Let appliance cool.
2. After the hot well has cooled, remove pan insert and clean separately.
3. Remove any food scraps.
4. Wipe the interior metal surfaces with a paper towel to remove any remaining food debris.
5. Clean interior with a damp cloth or sponge and any good commercial detergent at the recommended strength.
6. For baked-on food deposits, use a non-caustic and non-toxic commercial oven cleaner appropriate for the interior surface. Follow the product manufacturer's instructions. Any commercial oven cleaner must be approved for use on food contact areas. Remove soil with the use of a plastic scouring pad.
7. Rinse surfaces by wiping with a sponge and clean warm water.
8. Remove excess water with a sponge and wipe dry with a clean cloth, or air dry. Leave area open until interior is completely dry. Replace pan insert.

Always follow appropriate state or local health (hygiene) regulations regarding all applicable cleaning and sanitation requirements for food service equipment.

For the most current schematics, use the QR code or click link.

	
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Warranty

Introduction

Alto-Shaam, Inc. warrants to the original purchaser only, that any original part found to be defective in material or workmanship will be replaced with a new or rebuilt part at Alto-Shaam's option, subject to provisions hereinafter stated.

Warranty Period

The original parts warranty period is as follows:

- For all other original parts, one (1) year from the date of installation of appliance or fifteen (15) months from the shipping date, whichever occurs first.
- The labor warranty period is one (1) year from the date of installation or fifteen (15) months from the shipping date, whichever occurs first.
- Alto-Shaam will bear normal labor charges performed during standard business hours, excluding overtime, holiday rates or any additional fees.
- For the refrigeration compressor, if installed, the warranty period is five (5) years from the date of original installation of the appliance.
- For heating elements on Halo Heat® Cook and Hold ovens, the warranty period is for as long as the original owner owns the oven. This warranty period applies to units sold after 2/1/2009 and excludes holding-only ovens.
- To be valid, a warranty claim must be asserted during the applicable warranty period. This warranty is not transferable.

Exclusions

This warranty does not apply to:

- Calibration.
- Replacement of light bulbs, rubber gaskets, grease filters, air filters, racks, jet plates, and/or the replacement of glass due to damage of any kind.
- Equipment damage caused by accident, shipping, improper installation or alteration.
- Equipment used under conditions of abuse, misuse, carelessness or abnormal conditions, including but not limited to, equipment subjected to harsh or inappropriate chemicals, including but not limited to, compounds containing chloride or quaternary salts, poor water quality, or equipment with missing or altered serial numbers.
- Equipment damage caused by use of any cleaning agents other than those recommended by Alto-Shaam, including but not limited to damage due to chlorine or other harmful chemicals.
- Any losses or damage resulting from malfunction, including loss of food product, revenue, or consequential or incidental damages of any kind.
- Equipment modified in any manner from original model, substitution of parts other than factory authorized parts, unauthorized removal of any parts including legs, or unauthorized addition of any parts.
- Equipment damage incurred as a direct result of poor water quality*, inadequate maintenance of steam generators and/or surfaces affected by water. Water quality and required maintenance of steam generating equipment is the responsibility of the owner/operator.
- Equipment damage incurred as a result of not following the required maintenance schedule published in the manuals for the equipment.

Conclusion

This warranty is exclusive and is in lieu of all other warranties, express or implied, including the implied warranties of merchantability and fitness for a particular purpose. No person except an officer of Alto-Shaam, Inc. is authorized to modify this warranty or to incur on behalf of Alto-Shaam any other obligation or liability in connection with Alto-Shaam equipment.

**Refer to the product spec sheet for water quality standards.*



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