



ELECTRIC CLAMSHELL®

CSE12-208VCD, CSE12A-1, CSE12A-2

Glass Surface

CSE12A-1G thru CSE12A-6G

Contact Clam

CCSE12A-208

Installation and Operation Instructions

2M-W363 Rev. F 3/19/2015



CSE12A



These symbols are intended to alert the user to the presence of important operating and maintenance instructions in the manual accompanying the appliance.

FOR YOUR SAFTEY

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINTIY OF THIS OR ANY OTHER APPLIANCE.

POST IN PROMINENT LOCATION

INSTRUCTIONS TO BE FOLLOWED IN THE EVENT USER SMELLS GAS. THIS INFORMATION SHALL BE OBTAINED BY CONSULTING YOUR LOCAL GAS SUPPLIER. AS A MINIMUM, TURN OFF THE GAS AND CALL YOUR GAS COMPANY AND YOUR AUTHORIZED SERVICE AGENT. EVACUATE ALL PERSONNEL FROM THE AREA.

WARNING

IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE PROPERTY DAMAGE, INJURY OR DEATH. READ THE INSTALLATION, OPERATION & MAINTENANCE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS EQUIPMENT.



WARNINGRISK OF FIRE OR ELECTRIC SHOCK



WARNING, TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE CONTROL PANEL. NO USER-SERVICABLE PARTS INSIDE.
REPAIRS SHOULD BE DONE BY AUTHORIZED SERVICE PERSONNEL ONLY.

NOTICE

DO NOT OPEN

Using any part other than genuine Lang factory supplied parts relieves the manufacturer of all liability.

Lang reserves the right to change specifications and product design without notice. Such revisions do not entitle the buyer to corresponding changes, improvements, additions or replacements for previously purchased equipment.

Due to periodic changes in designs, methods, procedures, policies and regulations, the specifications contained in this sheet are subject to change without notice. While Lang exercises good faith efforts to provide information that is accurate, we are not responsible for errors or omissions in information provided or conclusions reached as a result of using the specifications. By using the information provided, the user assumes all risks in connection with such use.

MAINTENANCE AND REPAIRS

Contact your local dealer for service or required maintenance. Please record the model number, serial number, voltage and purchase & Installation Information in the area below and have it ready when you call to ensure a faster service

Model No.:	 Purchased From:
Serial No.:	 Location:
Voltage:	Purchase Date:
1-Phase or 3 Phase:	 Installed Date:



PROBLEMS, QUESTIONS or CONCERNS

Before you proceed consult you authorized Lang service agent directory or

Call the Lang Technical Service & Parts Department at 314-678-6315

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NOTICE Service on this or any other Lang appliance must be performed by qualified personnel only. Consult your Lang Authorized Service Agent Directory. You can call our service number 314-678-6315 or visit our website www.langworld.com for the service agent nearest you.

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Safety Precautions

Lang manufacturing, hereby disclaims any and all responsibility for injury, damage, loss or other claim that may occur to person or property from improper alteration, modification, addition, operation, maintenance or service, whether it be mechanical, electrical, or otherwise, which may occur from such improper alteration, modification, addition, operation, maintenance or service to this piece of equipment.

Safety Considerations

Your 12-inch Clamshell® is manufactured to rigid standards. This equipment is approved by a certifying agency to conform to safety and sanitation standards.

The presence of safety equipment control and interlocks on an appliance and attendant components of installation cannot in and of themselves, assure absolute safety of operation. Diligent, capable, well-trained operators and maintenance personnel, as well as proper programs of operation and maintenance, are essential to the safe and reliable operation of this appliance.

- A. The **responsibility of the manufacturer** is to supply suitable, comprehensive instructions and recommendations for the operation and maintenance of the appliance.
- B. Trained qualified and factory-authorized personnel must perform all operation, maintenance and repair of these appliances. It is the **responsibility of the owner/operator** to ensure that this happens.
- C. A regular periodic program of cleaning, inspection and maintenance must be established and comprehensive maintenance records maintained. It is the sole responsibility of the user to establish, schedule and enforce the frequency and scope of these programs in keeping with recommended practice and with due consideration given to actual operating conditions.
- D. Operate this appliance within the limits it was designed for, which will not exceed the working limits of any component within the appliance as a whole.



HIGH VOLTAGES ARE PRESENT INSIDE THIS APPLIANCE WHEN THE UNIT IS PLUGGED/ WIRED INTO A LIVE RECEPTACLE. BEFORE REPLACING ANY PARTS, DISCONNECT THE WARNING UNIT FROM THE ELECTRIC POWER SUPPLY.



USE OF ANY REPLACEMENT PARTS OTHER THAN THOSE SUPPLIED BY LANG MANUFACTURING, OR THEIR AUTHORIZED DISTRIBUTORS CAN CAUSE BODILY INJURY OT THE OPERATOR AND DAMAGE TO THE EQUIPMENT EIWLL VOID ALL WARRANTIES.

GENERAL INFORMATION

Lockout Procedure

Announce lockout to other personnel.

Turn power off at main panel.

Test lockout by turning power switch on and observing if elements come on.

Check heater circuit with voltmeter.

Perform necessary repairs or tests.

Clear the unit of personnel before starting the griddle.

Turn power on at main panel.

Announce unit is "on" to other personnel.

Controls

The broiler turns on with the power switch of the griddle.

The broiler operates with full power when it is in the closed position. In the open position, the broiler will operate with partial power and be in the "idle" mode.

Controls Contact Clam

This broiler turns on using the separete control box, see Operating instructions on page 10.

GENERAL INFORMATION continued

Technical

The broiler, not including the griddle, is standard 208 or 240V, single phase. Specify voltage when ordering.

Receiving the Unit

Upon receipt, check for freight damage, both visible and concealed. Note visible damage on the freight bill at the time of delivery and have the carrier's agent sign the freight bill at that time. Concealed loss or damage means loss or damage, which does not become apparent until the merchandise has been unpacked. Make a written request for inspection upon unpacking and finding concealed damage within 15 days of delivery. Keep all packing material for inspection. Do not return damaged merchandise to Lang Manufacturing. File your claim with the carrier.



Location

Prior to un-crating, move the unit as near its intended location as practical. The crating will help protect the unit from the physical damage normally associated with moving it through hallways and doorways.

Un-crating



The unit will arrive completely assembled inside a wood frame covered by cardboard box and strapped to a skid. Remove the cardboard cover, cut the straps and remove the wood frame.

CAUTION THE UNIT IS EXTREMELY HEAVY. FOR SAFE HANDLING, INSTALLER SHOULD OBTAIN HELP AS NEEDED OR EMPLOY APPROPRIATE MATERIALS-HANDLING EQUIPMENT (SUCH AS A FORKLIFT, DOLLY OR PALLET JACK) TO REMOVE THE UNIT FROM THE SKID NOTICE AND MOVE IT TO THE PLACE OF INSTALLATION.

ANY STAND, COUNTER OR OTHER DEVICE ON WHICH THE UNIT WILL BE LOCATED MUST BE DESIGNED TO SUPPORT THE WEIGHT OF THE UNIT.

SHIPPING STRAPS ARE UNDER TENSION AND CAN SNAP BACK WHEN CUT.

Remove unit from the skid.

INSTALLATION

Electrical Connection

Verify griddle installation was performed as directed in the installation instructions.

Connect electrical service to the box at the back of the griddle.

Electrical specifications are located on the data plate.

Clearance

Use this griddle only in non-combustible locations. Maintain clearances of base appliance.





THIS APPLIANCE MUST BE GROUNDED AT THE TERMINAL PROVIDED. FAILURE TO GROUND THE APPLIANCE COULD RESULT IN ELECTROCUTION AND DEATH.



INSTALLATION OF THE UNIT MUST BE DONE BY PERSONNEL QUALIFIED TO WORK WITH ELECTRICITY AND PLUMBING. IMPROPER INSTALLATION CAN CAUSE INJURY TO PERSONNEL AND/OR DAMAGE TO EQUIPMENT. UNIT MUST BE INSTALLED IN WARNING ACCORDANCE WIHT ALL APPLICABLE CODES.



BROILER ELEMENTS CAN IGNITE GREASE FIRES ON THE GRIDDLE SURFACE, WHICH MAY RESULT IN PROPERTY DAMAGE, SERIOUS INJURY OR DEATH. ENSURE GRIDDLE SURFACE IS SLOPPED DOWN FROM BACK TO FRONT BY AT LEAST 1/4" BEFORE COOKING.

NOTICE

The data plate is located behind the Clamshell® between the two pivot arms. The Clamshell® voltages, wattage, serial number, wire size and clearance specifications are on the data plate. Carefully read and understand this information before proceeding with the installation.

NOTICE

The installation of any components such as a vent hood, grease extractors or fire extinguisher systems must be conform to the applicable National, State and locally recognized installation standards.

INITIAL START UP

Each unit is preheated, tested and calibrated at the factory prior to shipment. However, due to temperature and climate changes during shipment the unit can absorb moisture. Check griddle for moisture and allow the unit to dry before placing the unit into full operation.

Prior to putting any unit into full time operation at normal cooking temperatures, it must be thoroughly "seasoned" or dried out. Moisture absorption in the closed spaces, in the insulation and even inside the heating elements can cause future trouble if not properly treated.

Allow the element in the unit to dry thoroughly prior to the initial use. To dry the unit, cycle the unit on and place the hood into the down position. Allow the unit to saturate until all vapor and condensation have been removed. For best operating results allow the unit to thoroughly dry out for 8 to 12 hours.

Pre-heat the griddle for one hour, if the unit has been out of service for three days, especially when exposed to high humidity and/or cool temperatures.

NOTICE

During the first few hours of operation, you may notice a small amount of smoke and a faint odor from the smoke. This is normal for a new unit and will disappear after the first few hours of use.



ALWAYS KEEP THE AREA NEAR THE APPLIANCE FREE FROM COMBUSTIBLE MATERIALS.

KEEP FLOOR IN FRONT OF EQUIPMENT CLEAN AND DRY. IF SPILLS OCCUR, CLEAN IMMEDIATELY TO AVOID THE DANGER OF SLIPS OR FALLS.

Once the griddle has been loaded properly, lower the hood over the product.

Elements must not touch product when clamshell is in the closed position.

CLEANING

Daily Cleaning

Clean the exterior of the appliance with cleaner and water.

Wipe drip shield between hood and griddle to remove any grease.

Weekly Cleaning

Allow the hood to burn off any carbon build up after high use periods.

With a cold griddle, lower the hood and allow the hood to cook for 30 minutes. Additional time may be necessary for more baked-on grease.

Glass Cleaning



Never use abrasives or a dull scraper on the glass surface. Scratches and nick in the glass will form weak spots and can cause the glass to break if an impact occurs.

Daily: mist the surface with warm water and wipe with a soft towel; doing this daily will reduce the build-up that could occur over a period of time. This can be done while the surface is warm, but the unit MUST BE TURNED OFF.

For a more extensive cleaning, use a product such as WEIMAN® Glass Cooktop Cleaner, directions for cleaner must be followed.

CHROME SURFACES (certain models)

It takes very little time and effort to keep this Industrial Chrome griddle surface sparkling clean and performing at top efficiency. DO NOT allow grease to accumulate as it will carbonize and become difficult to remove.

To prevent this condition, the following cleaning suggestions should be followed:

- Remove excess oil and food regularly with a 4" (100mm) wide razor sharp type scraper and wipe surface with a damp cloth if desired.
- 2. Following the scraping, for end of the day cleaning, a damp cloth and a non-silicate, non-abrasive, non-chlorinated cleaner such as Bon-Ami may be used to wipe surface clean, followed by wiping with clean wet cloth.
- 3. Follow daily cleaning steps for Non-Chrome Surfaces.

ON CROME SURFACES:

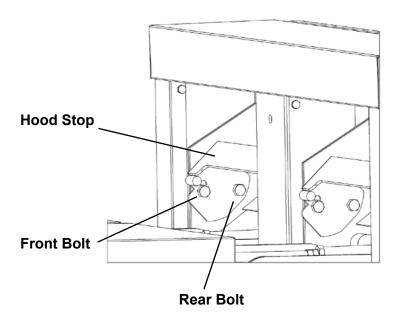
- 1. Never use pumice, griddle stones, or abrasives on the surface.
- 2. Never strike the surface with a sharp instrument or spatula edge.
- 3. Never use steel wool.
- 4. Never use commercial liquid grill cleaner on the griddle surface.

Abusing the surface voids the warranty.

HOOD STOP ADJUSTMENT

Units with an Adjustable Hood Stop Installed have the capablity to adjust between a 40° to 45° degree settings. These simple steps will assist you in accomplishing this. If you have difficulty accomplishing this, please call a qualified service agent or Star Manufacturing Technical Service Department.

- 1. Remove the front bolts from the hood stop, and loosen the back bolts up, do not completely remove the back bolts.
- 2. Adjust the hood stop to the desired position, the top hole is to stop the hood at 40° degrees the bottom hole is to stop the hood at 45° degrees.
- 3. Re-install the front bolts and tighten up the back bolts.



OPERATING INSTRUCTIONS CONTACT CLAM ONLY

- 1. Turn unit on by placing switch in "ON" position. The "Heat On" indicator, program number and display will flash indicating unit is heating. When the preset temperature is reached, the heating light, display and program light indicator will stop flashing followed by 3 beeps. (Initial startup heating time is approximately 30 minutes).
- 2. Place product on the bottom cooking surface of the unit and close the lids.
- 3. Press program button and let displayed time count down to "0" at which time unit will beep. To turn off the beeper, press program button again.
- 4. Raise lids until it engages into first indent and remove food. Using spatula, scrape residue into grease catcher tray.
- 5. Turn the unit off when not in use.

TEMPERATURE/TIMER CONTROLLER OPERATION SPECIFICATIONS

- Startup:
 - 1. The preset time will flash until preset temperature is reached.
 - 2. When the control reaches preset temperature, time display, "Heat On" indicator and program indicator will stop flashing and the alarm will beep three times.

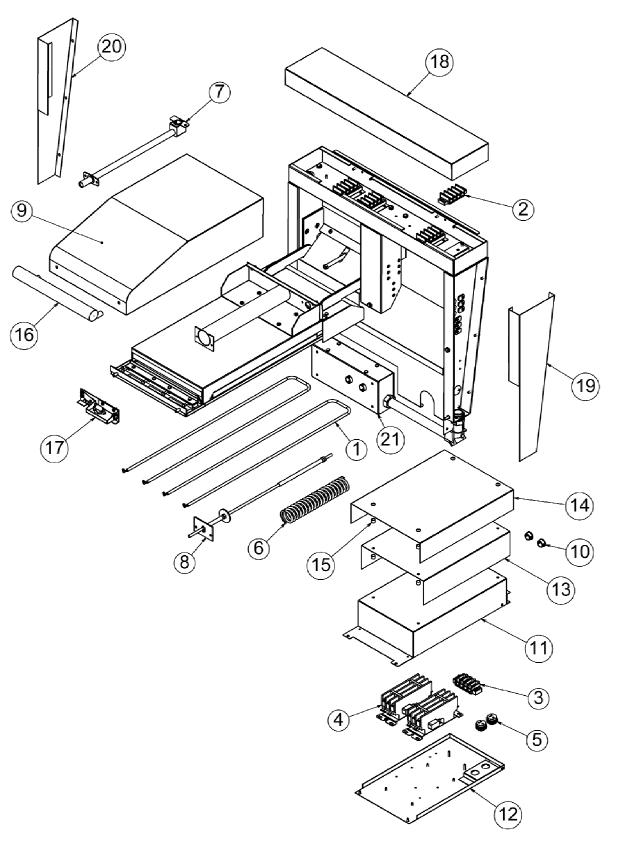
Temperature:

1. To view the actual temperature, press and hold "Temp Button." Display will read "Lo F" if temperature is below 273°F (134°C) and "Hi F" if temperature is above 573°F (301°C).

To Program Time and Temperature:

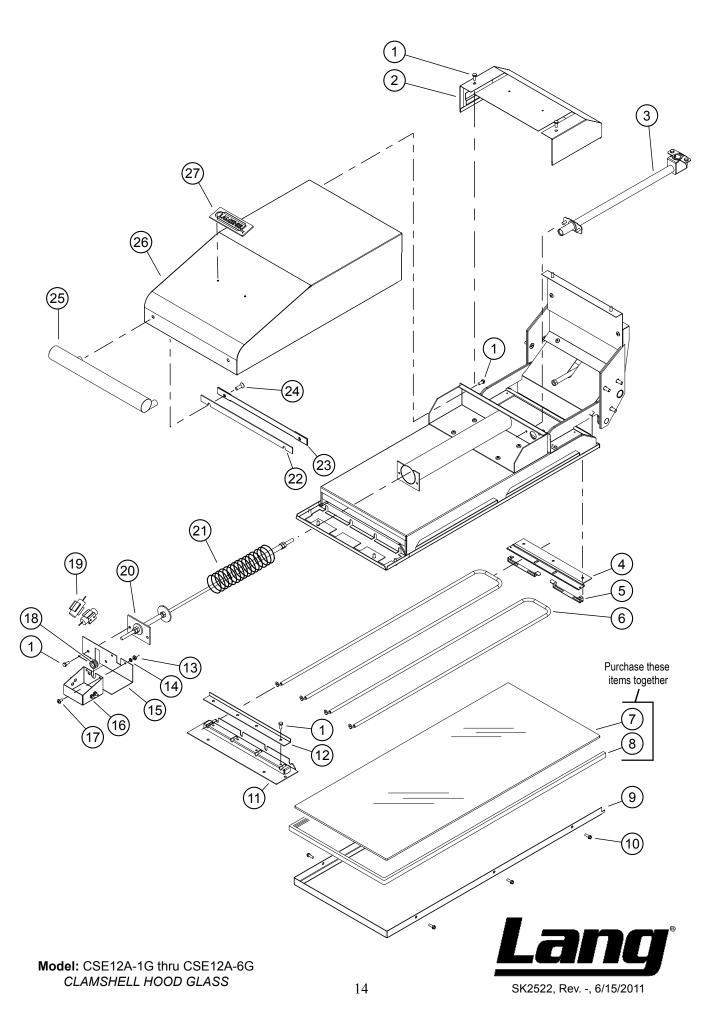
- 1. Press and hold "TEMP" (actual temperature displays).
- 2. While holding "TEMP," press and hold any program button on the Left one second, the LED above the program number light and the display reads "____." Enter the four-digit security code sequence, 4, 3, 2, 1. The security code will not show on the display. Once the correct sequence has been entered, the preset time will be displayed and the LED for that program will begin to flash.
- 3. Set the time with the "+ or -" buttons.
- 4. Press the "TEMP" button to save the time.
- 5. The preset temperature will now be displayed.
- 6. Set the desired temperature for this program using the "+ or -" buttons.
- 7. Press the "TEMP" button to save temperature and to exit programming mode for this program. The LED will stop flashing but will remain lit.
- 8. Press any other program button within 15 seconds to continue programming without re-entering the security code.
- 9. While programming a program (LED is flashing), if no input is received for 15 seconds, the unit will revert to normal operation and the security code must be re-entered.

Note: Each programming change must be saved by pressing the "TEMP" button!



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	Model: CSE12-208VCD, CSE12A-1-208V, CSE12A-2-208V Clamshell Hood				
Fig No.	Part	Description	Qty	Application	
1	2N-11160-32-2	STLHTR208VXLH1600W42.5WSI	2	CSE12-208VCD, A-1-208, A-2-208, A-3-208, A-4-208, A-5-208, A-6-208	
1A	2N-11160-32-4	STLHTR240VXLH1600W42.5WSI	2	CSE12A-1-240, A-2-240, A-3-240, A-4-240, A-5-240, A-6-240	
2	2E-30500-02	TRM STRP 4 POLE 30A 600V	1	ALL	
3	2E-30501-03	TERM STRP 4 POLE W/PUSH	1	ALL	
4	2E-30705-01	CONTC 2-SPD MTR 25A 24VAC	1	ALL	
5	2J-40302-02	CANCTR/RECEPTACLE GGB	1	ALL	
6	2P-51002-15	HOOD SPRING XLH12 NEW	1	ALL	
7	K9-60102-13582	BRIDGE TO HOOD WIRE	1	ALL	
8	K9-60102-13588	ROD ASY HOOD SPRNG XLH12	1	ALL	
9	K9-60102-XLH609	FRONT HOOD WRAP	1	ALL	
10	2K-70801-04	SNAP BUSH 3/4 SB750-10	1	ALL	
11	K9-EZG-418-1	OUTER BOX SPOTWELD CSE12	1	ALL	
12	K9-EZG-429	SPOT CONNECTOR MOUNT	1	ALL	
13	K9-EZG-430	BOX HEAT SHIELD COMBO	1	ALL	
14	K9-EZG-433	BOX HEAT SHIELD #2 COMBO	1	ALL	
15	K9-EZG-436-1	BOX HEAT SHIELD SPACER	1	ALL	
16	K9-XLH-709-1	HANDLE ASSY. CSE12	1	ALL	
17	K9-XLH-740-1	Hood switch svc kit	1	ALL	
17	2E-30307-04	SWT MERCURY TILT HI-TEMP	2	ALL	
18	K9-XLH-636-21	BRIDGE COVER 2' CSE12 NO	1	ALL	
19	K9-XLH-659	RIGHT STANCHION COVER	1	ALL	
19	K9-XLH-659-1	RIGHT STANCHION CVR	1	ALL	
20	K9-XLH-660-1	LEFT STANCHION CVR	1	ALL	
21	K9-XLH-735-221	CON. BOX/FLUE 2'GAS-12 NO	1	ALL	
NI	K9-XLH-704-01	ELEMENT ASSY 208	1	CSE12-208VCD, A-1-208, A-2-208, A-3-208, A-4-208, A-5-208, A-6-208	
NI	K9-XLH-704-02	ELEMENT ASSY 240	1	CSE12A-1-240, A-2-240, A-3-240, A-4-240, A-5-240, A-6-240	
NI	K9-XLH-781	HOOD STOP BRACKET	1	CSE12-208VCD	
NI	2A-XLH-782	HOOD STOP	2	CSE12-208VCD	
NI	2E-30900-30	FUSE, 60 AMP	2	ALL	



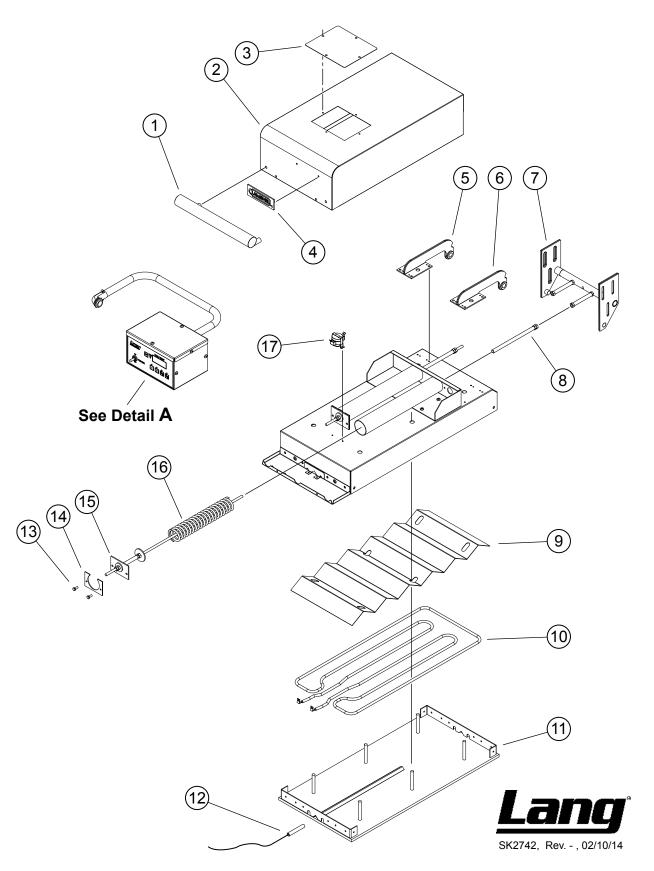
Model: CSE12A-1G thru 6G, Clamshell Hood Glass				
Fig No.	Part Number	Description	Qty	Application
1	2C-20111-09	SCRW HXHD CAP 10-32X1/2	24	
2	K9-XLH-706-W1	REAR COVER ASSEMBLY-XLH12	1	
3	K9-XLH-734	BRIDGE TO HOOD WIRE	1	
4	K9-XLH-788	BASE - ELEMENT BRACKET 2		
5	K9-XLH-789	BRACKET - ELEMENT 4		
6	2N-11160-32-2	STLHTR208VXLH1600W42.5WSI	2	208V
0	2N-11160-32-4	STLHTR240VXLH1600W42.5WSI		240V
7	2Q-71300-20	GLASS - HIGH TEMP CERAMIC	1	
8	1P-72602-38	TAPE-FIBERGLASS 1"x1/16TK	5.21 FT	
9	K9-XLH-268	FRAME - GLASS CLAMSHELL	1	
10	2C-Z6925	SCREW #8X1/2 HEXW B SS	6	
11	K9-XLH-705-01	ELEMENT HOLDER ASSY	1	
12	K9-XLH-628-01	ELEMENT CLAMP	1	
13	2C-20301-11	NUT HEX 8-32 PLTD	2	
14	2C-20202-12	WSHR LOCK #8 INT STAR 2		
15	K9-XLH-742-1	MERCURY SWITCH BRACKET 1		
16	K9-XLH-741-1	MERCURY SWITCH BASE 1		
17	2C-20101-28	SCRW THD MS 8-32X3/8 PLTD	2	
18	21-70803-04	CERMC INSLTR 9/32ID11/16	1	
19	2E-30307-04	SWITCH MERCURY TILT	2	
20	K9-60102-13588	ROD ASSY HOOD SPRNG	1	
21	2P-51002-15	HOOD SPRING XLH12 NEW	1	
22	K9-XLH-611	HANDLE BRACE TOP	1	
23	K9-XLH-612	HANDLE BRACE BOTTOM	1	
24	2C-20104-61	SCRW 1/4-28X3/4 FLT HD SO	2	
25	K9-XLH-709-1	HANDLE ASSY. CSE12	1	
26	K9-XLH-707	FOREWARD HOODWRAP ASSY	1	
27	2M-60301-W2	LANG CLAMSHELL LOGO	1	

IMPORTANT: WHEN ORDERING, SPECIFY VOLTAGE OR TYPE GAS DESIRED INCLUDE MODEL AND SERIAL NUMBER

PAGE 1

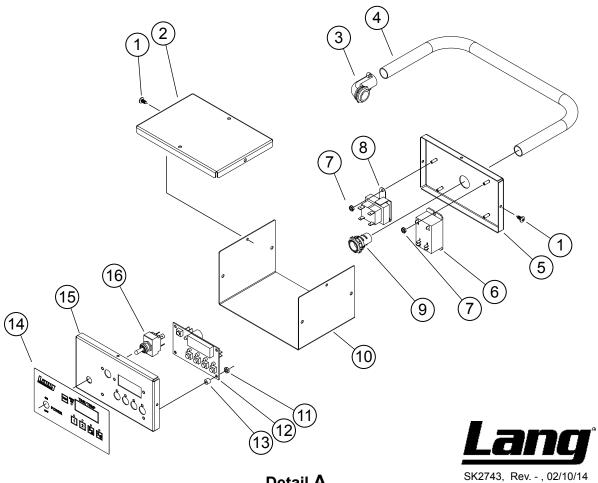
Some items are included for illustrative purposes only and in certain instances may not be available.





Model: CCSE12A1 Contact Clam

Model: CCSE12A1 Contact Clam				
Fig No.	Part Number	Qty	Description	
1	K9-XLH-709-1	1	HANDLE ASSY. CSE12	
2	K9-XLH-821	1	TOP COVER	
3	K9-XLH-822	1	COVER CLOSE OFF PLATE	
4	2M-60301-W2	1	LANG CLAMSHELL LOGO	
5	K9-XLH-761-1	1	LEFT HINGE ARM PIVOT ASSY	
6	K9-XLH-762-1	1	RIGHT HINGE ARM PIVOT ASY	
7	K9-XLH-721-4	1	PIVOT ASSY CCSE12	
8	K9-XLH-644	2	PISTON ROD TUBE SLEEVE	
9	K9-XLH-813	1	SPRING BAFFLE	
10	2N-11060-30	1	ELEMENT 208V 3600W	
11	K9-XLH-820	1	CC WELDED ASSY	
12	2E-Z3278-1	1	RTD PROBE - 48" LONG WIRE	
13	2C-20111-09	4	SCRW HXHD CAP 10-32X1/2	
14	K9-XLH-763-1	2	SPRING TUBE END-CCSE12	
15	K9-XLH-703-4	2	SPRING ROD ASY XLH12-NEW	
16	2P-51002-15	2	HOOD SPRING XLH12 NEW	
17	2T-30401-34	1	STAT FIXED TEMP 375F	



Detail AK9-XLH-580 Control Box Assembly

		Model: CCS	E12A1 Control Box
Fig No.	Part Number	Qty	Description
1	2C-20103-02	8	SCRW SM PLT 10 X .5 PHLSL
2	K9-XLH-580-1	1	CONTROL BOX TOP-CCSE12A
3	2E-70505-17	1	CONDUIT CNNCTR 1/2 90o
4	1M-70502-03	60 inches	CONDUIT TUBNG 1/2FLEX, (sold by the inch)
5	K9-XLH-580-4	1	CONTROL BOX BACK ASSY
6	2E-Z3335	1	RELAY DBL POLE-SNGL THROW
7	2C-20301-10	4	NUT HEX 6-32 PLTD
8	2E-05-07-0350	1	TRANSFORMER 230V/10V 6VA
9	2E-70505-02	1	CONDUIT CNNCTR 1/2 FLEX
10	K9-XLH-580-2	1	CONTROL BOX C-WRAP
11	2C-20301-11	4	NUT HEX 8-32 PLTD
12	2J-Z17605	1	CONTROL BOARD-CONTACT
13	2A-20504-12	4	SPACER - NYLON .3120DX.25
14	2M-60301-186	1	OVERLAY, CONTROL BOX ASSY
15	K9-XLH-580-3	1	CONTROL BOX FRONT ASSY
16	2E-Z12020	1	SWITCH-TOGGLE 2P ST
NI	2M-61113-W38	AR	WIRING DIAGRAM, CCSE12A

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