# Cleveland

# **Supplemental Operation Manual**

# **STEAMCUB**



**MODEL: 1SCEMCS** 

# **Supplemental Operator's Manual**

for Mechanical Timer SteamCub Steam Cooker and Rethermalization Unit

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# **IMPORTANT**

This manual is only a supplement to the main Operator's Manual. In order to fully understand the safe operation of this steamer. It will be necessary to be familiar with both of these manuals.

RETAIN THIS MANUAL FOR YOUR REFERENCE

### **SECTION 1 – INTRODUCTION**

This is a supplement to the main Operator's Manual supplied with the SteamCub steamer. It explains the differences in operation for the Model No. 1SCEMCS SteamCub Steamer with mechanical timer controls.

To use a SteamCub steamer safely and effectively, each operator must read and understand this Supplemental Manual as well as the main Operator's Manual completely before starting operation. The owners and operators of the steamer should retain these instructions in an easily accessible location for future reference and training.

# **SECTION 2 – OPERATION**

## A. General Operation

Most of the general operating procedures are found in the main Operator's Manual. Only those systems, which are different for the Model No. 1SCEMCS mechanical timer SteamCub, are listed below.

### 1. Power On

Press the ON (top) end of the ON/OFF switch to the ON position to energize the SteamCub control panel and all the safety circuits. This procedure is used at the beginning of a shift to prepare the steamer for operation without starting steam generation, after the steamer has been filled with water (see "Inspecting the Cooking Compartment – Manual Water Fill" in the main Operator's Manual). If the unit is not filled with water, when the power switch is turned ON the Low Water Alarm circuit will be energized. (see Section 2 Part A3)

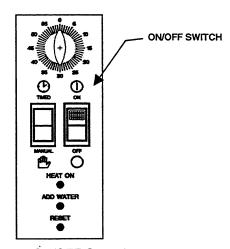


Figure 2-1 ON/OFF Controls

### 2. Preheating the Steamer

Preheating the steamer can help insure that the best productivity and consistent cooking is obtained. To preheat the SteamCub, simply run a cooking cycle of approximately 15 minutes with no food in the cooking compartments.

 BEFORE PREHEATING, inspect and clean the compartment. After preheating, the compartment will be too hot to inspect and clean safely.

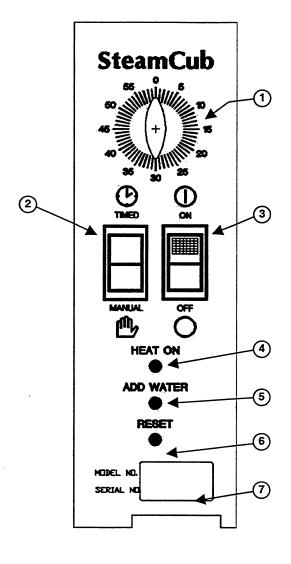
### 3. Low Water Alarm

If an attempt is made to run the steamer without water, or if the water level drops below the sensor level, an alarm buzzer will sound, the Add Water Indicator lamp will light and the heating elements will be turned OFF. To turn off the alarm and continue cooking additional water will have to be added before the steamer will again operate normally.

### B. Mechanical Timer Control Panel Operation

### 1. Cooking Operations - Dial Timer Control Panel

For safe, efficient operation of the steamer, the operator must, at a minimum, comply with all the cautions, warnings and instructions in the detailed operating procedures found in the main Operator's Manual and be familiar with the control panel shown in Figure 2-2. The operator must be familiar with all the operating features explained in this manual and Chapters 1 and 2 of the main Operator's Manual before attempting to operate the steamer.



- (1) TIMER This dial timer sets the operating time from 0 to 60 minutes. Turn the dial clockwise until it points to the required number of minutes. When it reaches 0, a buzzer sounds for 3 seconds.
- (2) TIMED/MANUAL Switch The TIMED/MANUAL switch selects the manual or timed operating mode.
  - Pressing the MANUAL (bottom) end of the switch selects the manual mode.
  - Pressing the TIMED (top) end of the switch selects the timed mode.
- (3) ON/OFF Switch The ON/OFF switch controls electric power to the control panel.
  - Pressing the ON (top) end of the switch energizes the steamer control panel. A red indicator on the switch lights, and all the safety controls become active.
  - Pressing the OFF (bottom) end of the ON/OFF switch turns the steamer control panel OFF. The red indicator goes out, all control circuits are deactivated and the high limit circuit is reset if it had been activated.
- (4) Heaters on Indicator Light When the amber indicator light is on the heating elements are ON.
- (5) Add Water Indicator Light When the water level drops below the water level sensor the green indicator light comes ON, an alarm sounds continuously and the heating elements are turned OFF.
- (6) Hi Limit Reset Light Should the high limit temperature be reached, this red indicator light comes ON, an alrm sounds continuously, the heating elements will be turned OFF and the control panel will lose power. To reset system, the ON/OFF switch must be turned off for 5 minutes and then back ON.
- (7) Serial Number/Model Number Display

Figure 2-2 Mechanical Timer Control panel

#### 2. Manual and Timed Modes

The steamer has two operating modes: manual and timed. The TIMED/MANUAL rocker switch selects the operating mode. Pressing the MANUAL end of the switch selects the manual-operating mode. Pressing the TIMED end of the switch selects the timed operating mode. Cooking procedures are slightly different for each mode.

#### a. Manual Mode

The manual mode provides continuous steaming. The operator starts and stops steaming operations manually. See the Operating and Cooking Procedure – Manual mode in Section 2, Part C2 for more information.

#### b. Timed Mode

- The timer provides timed control of steaming operations. The timer starts and stops steaming operations.
- To use the timer, simply set the timer to the desired time. The steamer will begin
  cooking as soon as the timer is set. When the timer reaches zero the steaming
  functions will automatically end and a buzzer will sound for 3 seconds to alert the
  operator that cooking is complete.

## C. Cooking With The Mechanical Timer Steamcub

## 1. Operating and Cooking Procedure - Timed Cook Mode

In timed mode, the timer starts and stops the steaming operation.

- (1) Refer to INSPECT THE COOKING COMPARTMENT in the main Operator's Manual. Inspect and clean the drain and cooking compartment as required.
- (2) If necessary, refer to Preheating the Steamer, in Section 2, Part A2, and preheat the cooking compartment.
- (3) Slide the pans of food into the slide racks inside the steamer. Do not place pans or anything else on the bottom of the compartment.

# **A** CAUTION

Some foods drip juices. Use a solid catch pan under perforated pans when steaming food that will drip juices. Failure to use a catch pan can cause a clogged drain.

- For best cooking results, use shallow, 2-1/2 inch deep, perforated pans without covers. These give the best heat transfer and shortest cooking time.
- (4) Close the steamer door.
- (5) Check the control panel settings. At this point the settings should be:
  - The ON/OFF switch is in the ON (top) position and the light is lit.
  - The TIMED/MANUAL switch is in the TIMED (top) position.
- (6) Set the required cooking time. The timer will start counting down and the heating circuit will be turned ON. Shortly, steam fills the cooking compartment.
- (7) When the timer reaches zero, a buzzer will sound for three seconds; the heating elements are turned OFF and steam generation stops. The cooking cycle is complete.

# **A** WARNING

SEVERE BURNS may result from exposure to steam.

Do not open the steamer door before steam generation stops. Stand back when opening the compartment door. Open the door slightly to allow steam to vent before looking or reaching into cooking compartment. Do not reach into cooking compartment until the steam has cleared.

Do not reach into steamer or handle hot items without wearing heatproof gloves. Wet or damp gloves conduct heat, and may cause burns when touching hot items.

- (8) Carefully open the cooking compartment door, and remove the pans from the slide racks.
  - If the steamer will be used again shut the door to maintain the cooking compartment temperature.
  - If the steamer is not being used again during this shift, perform the Shut Down and Cleaning Procedures, found in the main Operator's manual.

#### 2. OPERATING AND COOKING PROCEDURE - MANUAL MODE

Manual mode allows the operator to personally control the cooking functions. The operator starts and stops the steaming operations, and sets the cooking time including time for cooking compartment and food heat-up time. Use the manual-cooking mode for:

- A continuous supply of steam.
- Cooking times longer than the timer can measure.
- Maintaining the compartment temperature between cooking batches.

### (1) Using the Timer in Manual Mode

The timer may be used when the steamer is operating in the manual mode, but it will not start or stop the steaming cycle.

### (2) Manual Cooking Procedure

Follow this procedure when cooking with the steamer in manual mode.

- 1. Refer to INSPECT THE COOKING COMPARTMENT in the main Operator's Manual. Inspect and clean the drain and cooking compartment as required.
- 2. In manual mode, the operator can bring the compartment to cooking temperature by either preheating or increasing the cooking time. If the operator chooses to preheat the cooking compartment manually, refer to Section 2, Part A2, Preheating the Steamer.
- 3. Slide the pans of food into the slide racks inside the steamer. Do not place pans or anything else on the bottom of the compartment.

# **A** CAUTION

Some foods drip juices. Use a solid catch pan under perforated pans when steaming food that will drip juices. Failure to use a catch pan can cause a clogged drain.

- For best cooking results, use shallow, 2-1/2 inch deep, perforated pans without covers. These give the best heat transfer and shortest cooking time.
- Close the steamer door. Select the manual mode by pressing the MANUAL (bottom)
  end of the TIMED/MANUAL rocker switch. The steaming cycle starts as soon as the
  switch is pressed. Shortly, steam fills the cooking compartment.
- 5. If the timer is used to monitor cooking.
  - a) Set the timer.
  - b) When the timer reaches zero, the buzzer will sound, and cooking is done. Remember, in manual mode, the timer does not stop the steaming functions.
- To stop manual mode steaming, press the TIMED (top) end of the TIMED/MANUAL rocker switch. The heating elements are turned OFF, and steam production gradually stops.

# **A** WARNING

SEVERE BURNS may result from exposure to steam.

Do not open the steamer door before steam flow stops. Stand back when opening the compartment door. Open the door slightly to allow steam to vent before looking or reaching into cooking compartment. Do not reach into cooking compartment until the steam has cleared.

Do not reach into steamer or handle hot items without wearing heatproof gloves. Wet or damp gloves conduct heat, and may cause burns when touching hot items.

- 7. Carefully open the cooking compartment door, and remove the pans from the slide racks.
  - If the steamer will be used again in a few minutes shut the door to maintain the cooking compartment temperature.
  - If the steamer is not being used again during this shift, perform the "Shut Down and Cleaning Procedures", found in the main Operator's Manual.

# SECTION 3 – OPERATORS TROUBLESHOOTING GUIDE MECHANICAL TIMER EQUIPPED STEAMCUB

The Troubleshooting guide includes a list of symptoms that may be encountered during routine operation and maintenance. The first column on the left (PROBLEM) describes these symptoms. The second column lists the possible causes for the problem in column one. The third column lists possible remedies for the problems and causes in columns one and two. The causes and remedies are listed in the order they should be checked, with the least costly and easiest to repair listed first. The third column also refers to notes that are grouped at the end of the troubleshooting guide. Refer to these notes when instructed to do so.

**Table 3-1 Trouble Shooting Guide** 

PROBLEM	POSSIBLE CAUSE	REMEDY/REFERENCE	
Power indicator light does not turn on when ON/OFF switch is	Power turned off at main power switch.	Turn on power at main power switch.	
in the ON position.	Inoperative controls.	See note #1	
Steam flow does not stop when timer stops.	Operating in manual mode.	Switch to timed mode for timer to be effective.	
	Inoperative controls inside cabinet.	Turn OFF electricity at the main power switch. See note #1.	
Control panel POWER indicator light on, heater ON	Door interlock switch not engaged. Close door completely.		
indicator is OFF and steamer is not up to cooking temperature	Unit is in timed mode and timer is change to manual mode or set the times not set.		
or producing steam.	Inoperative controls.	See note #1.	
Steam and/or water draining	Water level filled too high	Drain off excess water in steamer	
around the compartment door.	Vent clogged or covered.	Clear vent	
	Door gasket or door parts worn.	See note #1.	
	Steamer not level.	See note #2.	
Alarm is sounding and low	Water level to low.	Add water to steamer.	
vater indicator light is ON.	Sensor is dirty.	Clean water sensor. See note # 5.	
	Distilled water used to fill steamer.	Water sensor may not work with distilled water. Use non-distilled water or add ¼ teaspoon of salt or an aspirin to the water.	
	Inoperative controls.	See note #1.	
Compartment bottom dirty with food drippings.	Juices and/or food leaking from pans.	Put a solid pan under perforated pans to catch drippings, or put less food in pan.	
Control panel Power indicator is ON, alarm is sounding continuously, and reset	Hi limit has been tripped.	Turn OFF power for 5 minutes and back ON. If problem repeats itself, see Note #1.	
indicator is ON.	Inoperative controls.	See Note #1.	

(Continued on next page)

**Table 3-1 Trouble Shooting Guide (Continued)** 

PROBLEM	POSSIBLE CAUSE	REMEDY/REFERENCE	
Food takes too long to cook.	Pans too close to the bottom of cabinet.	Put pans in racks near top of cabinet.	
	Compartment overloaded with too much food.	Put less food into pan. Use fewer pans.	
	Suggested cooking times are usually listed for cooking at sea level.	Extend cooking times for altitudes above 2500 feet.	
	Voltage too low for unit.	See note #3.	
	Inoperative controls.	See note #1.	
Steam coming out of the exhaust.	A small amount of steam may issue from the exhaust, every time the elements are cycled in the cooking mode.	1 · · · · · · · · · · · · · · · · · · ·	
	If steam continuously issues from the vent during operation, without any interruptions, the thermostatic control is not operating properly.	See Note #1.	

#### TROUBLESHOOTING NOTES

- 1. A qualified service technician must repair problem or do the appropriate maintenance
- 2. Proper installation of the steamer is the responsibility of the owner or installer. A qualified installer or technician should be contacted to correct the installation
- 3. Repairs to external wiring should be done by a Licensed Electrician.
- 4. For more information on products and services, contact your nearest Authorized Sales Representative.
- 5. See main Operator's Manual for additional information on maintenance and cleaning.

### SECTION 4 – START UP AND CHECKOUT PROCEDURE

# **A** WARNING

This procedure should be performed only by a service technician or installer.

The Startup and Checkout procedure prepares a recently installed or repaired steamer for operation. The procedures check proper installation and electrical connection of the steamer, and verify basic steamer operation.

#### 1. Installation Checkout

See the main Operator's Manual.

### 2. Operating Test and Final Checkout Procedure

Cleveland Range SteamCub Model No. 1SCEMCS has a manual dial timer control panel, which controls the various modes the steamer can be used for. See Figure 2-2, for a detail of the control appearance.

This procedure will evaluate the function of all the major operating controls of the SteamCub. Read through all steps of this procedure before starting. Complete the Startup Procedure before starting the actual operating tests. This procedure should be performed only by a qualified service technician or installer.

Complete the startup procedure, before starting the actual operating tests. Once this entire procedure has been completed the unit will be ready for normal operation.

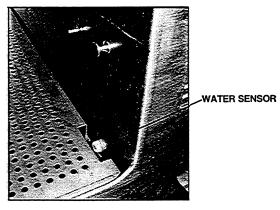
### a. Startup Procedure

- (1) Check that the drain valve is closed. There should be <u>no</u> water in the steamer.
- (2) Open the steamer door. Check for proper installation of the slide racks, and door gasket assembly. Be sure the drain is not blocked. Shut the steamer door.
- (3) Refer to electrical layout, Figure 4-4, and Table 4-1, in the main Operator's Manual. Be sure the main power switch is in the OFF position. Verify installation of the proper size fuses or breakers.
- (4) Set the ON/OFF switch to the OFF position and open the steamer door.
- (5) Remove the right side access cover.

# **MARNING**

Death, severe electrical shock or equipment damage can result from touching any component inside unit when main power switch is in the on position. Use extreme caution during testing with the access cover removed.

- (6) Check the internal wiring and make sure there are no loose or disconnected wires. Verify that the supply wiring is of adequate size and that the unit is properly grounded. Correct any deficiencies.
- (7) Turn on the main power switch.
- (8) Turn the ON/OFF switch to the ON position.
  - The control panel will power up, the Add Water indicator light will come ON, and an alarm will sound continuously.
  - The heater ON indicator will not be lit.
  - Add 1½ gallons of fresh water to the steamer. The Add Water indicator light and alarm will turn OFF.
  - NOTE: The elements will be deenergized and the Add Water alarm system and indicator will come ON whenever the water level drops below the water sensor located at the lower right front of the steamers interior. (See Figure 4-1).



NOTE: RACK SUPPORTS ARE NOT SHOWN FOR CLARITY PURPOSES

Figure 4-1 Sensor Location

### b. Operating Test

- 1. At the start of this test the controls should be set as follows:
  - The main power switch is ON.
  - The ON/OFF switch is ON (The red indicator on the switch is lit).
  - The TIMED/MANUAL switch is in the TIMED (top) position.
  - The timer should be zeroed. If the Timer is not zeroed, turn the dial counter clockwise until it points to the 0 mark.
  - The door should be open.
- Set the TIMED/MANUAL switch to MANUAL. Nothing will happen as long as the door remains open. Close the steamer door, the steaming cycle starts. Check the following functions.

- The door interlock switch will make contact.
- The heating elements will be energized and the heater ON indicator light will come ON.
- In a few minutes the water in the base will reach the boiling temperature and the unit will begin to steam. Steam will be visible intermittently coming from the steam vent (the small pipe extension at the right rear of the steamers top).
- Once the unit comes to temperature, the heating elements and the heat On indicator light will begin to cycle ON and OFF as the thermostat controls temperature.
- With the unit in manual cooking mode the unit should cook continuously until turned off, or set to the timed cooking mode. After several minutes of steaming, check for steam leaks around the door gasket.
- 3. When the TIMED/MANUAL switch is set to TIMED (and the timer is set to zero), the steam generating cycle stops. Press the TIMED end of the TIMED/MANUAL switch.
  - The heating elements and the heat ON indicator turn OFF and the buzzer will sound for 3 seconds.
- 4. Open the cooking compartment door to vent the steam and allow the compartment to cool slightly. After 2 or 3 minutes, close the door and continue testing.
- 5. With the TIMED/MANUAL switches set to TIMED, set the timer for 10 minutes.
- 6. As soon as the dial is set, the steam generating cycle starts. This is the same sequence observed in step 2 and 3, except:
  - The timer controls the cycle.
  - The elapsed time to produce steam is shorter because the water in the steamcooking compartment was preheated during steps 2.
  - The timer automatically starts the step 3 functions after counting down to zero.
- After the timed operation has been started, observe the following steam generating functions.
  - a) The timer immediately begins counting down to zero.
  - b) Check for steam leaks around the door.
  - c) When the timer counts down to zero, the heating elements and the indicator turn off and the buzzer sounds for 3 seconds.
- 8. Turn the steamer off by turning the ON/OFF switch to the OFF (bottom) position. The red indicator light turns off immediately. Turn the steamer off at the main power switch.
- Install the side panel and secure it in place with two screws. After completing the Initial Startup Procedure, and the Operating Test procedure; the steamer is ready for service. Refer to SECTION 2 – OPERATION of this manual and the main Operator's Manual for complete operating instructions.

### LIMITED WARRANTY

CLEVELAND RANGE products are warranted to the original purchaser to be free from defects in materials and workmanship under normal use and service for the standard warranty period of one year from date of installation or 18 months from date of shipment, which ever comes first.

CLEVELAND RANGE agrees to repair or replace, at its option, f.o.b. factory, any part which proves to be defective due to defects in material or workmanship during the warranty period, providing the equipment has been unaltered, and has been PROPERLY INSTALLED, MAINTAINED, AND OPERATED IN ACCORDANCE WITH THE CLEVELAND RANGE OWNER'S MANUAL.

CLEVELAND RANGE agrees to pay any FACTORY AUTHORIZED EQUIPMENT SERVICE AGENCY (within the continental United States, and Hawaii) for reasonable labor required to repair or replace, at our option, f.o.b. factory, any part which proves to be defective due to defects in material or workmanship, during the labor warranty period. This warranty includes travel time not to exceed two hours and mileage not to exceed 50 miles (100 miles round-trip), BUT DOES NOT INCLUED POST START-UP, TIGHTENING LOOSE FITTINGS, MINOR ADJUSTMENTS, MAINTENANCE, CLEANING OR DESCALING.

The standard labor warranty allows factory payments of reasonable labor required to repair or replace such defective parts. Cleveland Range will not reimburse the expense of labor required to repair or replacement of parts after the standard warranty period, unless and Extended Labor Warranty Contract has been purchased to cover the equipment for the balance of the warranty period from the date of equipment installation, start-up, or demonstration.

PROPER INSTALLATION IS THE RESPONSIBILITY OF THE DEALER, THE OWNER-USER, OR INSTALLING CONTRACTOR, AND IS NOT COVERED BY THIS WARRANTY. Many local codes exist, and it is the responsibility of the owner and installer to comply with these codes. Cleveland Range equipment is built to comply with applicable standards for manufactures, including UL, A.G.A., NSF, ASME/Ntl. Bd., CSA, CGA, ETL, and others.

Boiler (Steam Generator) MAINTENANCE IS THE RESPONSIBILITY OF THE OWNER-USER AND IS NOT COVERED BE THIS WARRANTY. The use of good quality feed water is the responsibility of the Owner-User (see Water Quality Recommendations below). THE USE OF POOR QUALITY FEED WATER WILL VOID EQUIPMENT WARRANTIES. Boiler maintenance supplies, including boiler hand gaskets, are not warranted beyond the first 90 days after the date the equipment is placed into service. Preventive maintenance records must be available showing descaling per the applicable Cleveland Operators Manual for Boiler Proration Program considerations.

#### WATER QUALITY RECOMMENDATIONS

TOTAL DISSOLVED SOLIDS

TOTAL ALKALINITY

SILICA

CHLORIDE

pH factor

Less than 60 parts per million

Less than 20 parts per million

Less than 13 parts per million

Less than 30 parts per million

Greater than 7.5

The foregoing shall constitute the sole and exclusive remedy of original purchaser and the full liability of Cleveland Range for any breach of warranty. THE FOREGOING IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER WRITTEN, ORAL, OR IMPLIED, INCLUDING ANY WARRANTY OF PERFORMANCE, MERCHANTABILITY, OR FITNESS FOR PURPOSE, AND SUPERSEDES AND EXCLUDES ANY ORAL WARRANTIES OR REPRESENTATIONS, OR WRITTEN WARRANTIES OR REPRESENTATIONS, NOT EXPRESSLY DESIGNATED IN WRITING AS A "WARRANTY" OR "GUARANTEE" OF CLEVELAND RANGE MADE OR IMPLIED IN ANY MANUAL, LITERATURE, ADVERTISING BROCHURE OR OTHER MATERIALS.

CLEVLAND RANGE'S liability on any claim of any kind, including negligence, with respect to the goods or services covered hereunder, shall in no case exceed the price of the goods or services, or part thereof, which gives rise to the claim. IN NO EVENT SHALL CLEVELAND RANGE BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMGES, OR ANY DAMAGES IN THE NATURE OF PENALTIES.

#### LIMITED EXTENDED WARRANTY COVERAGE

The purchase of a Limited Extended Warranty Contract extends the standard warranty coverage to the purchased period of time (one to two years) from the date of installation, start-up, or demonstration, whichever is sooner.

An additional two years Parts and Labor Warranty can be purchased with each piece of Cleveland equipment for an additional 2% of the List Price per year. The 2% of list price charge will be the net invoice amount for each year of extended warranty purchased.

- Extended warranty must be purchased at the same time the equipment is purchased.
- a. Extended Warranty has the same exclusions as stated in our standard warranty.