

# Fire Suppression MAX Induction Cooking Stations

## Owner's Manual





**⚠ WARNING**

Warning is used to indicate the presence of a hazard that can cause severe personal injury, death, or substantial property damage if the warning is ignored.

**⚠ CAUTION**

Caution is used to indicate the presence of a hazard that will or can cause minor personal injury or property damage if the caution is ignored.

**NOTICE**

Notice is used to note information that is important but not hazard-related.

### Introduction

Thank you for purchasing Spring USA's Fire Suppression MAX Induction Cooking Station. The Fire Suppression MAX Induction Cooking Stations are equipped with an integrated pre-engineered Buckeye BFR-5 UL-300 fire suppression system, recirculating downdraft filtration system and a drop-in MAX Induction System. Please follow the recommended safety, installation, operation and maintenance instructions in this manual to ensure the best performance and safe operation of the appliance.

### Safety Instructions & Warnings

- Cooking surface and surrounding area are hot when the unit is in use; avoid touching the surface when using the appliance.
- Before operating the unit make sure all filters, panels, and grease collectors are in place.
- Do not let grease accumulate around the appliances while in use.
- Do not use a hose or a wash down method to clean the induction appliances or the surrounding area, avoid letting water or food escape the cooking surface.
- Persons with a cardiac pacemaker should consult their doctor whether they are safe near an induction unit.
- Do not obstruct the air intake and exhaust of the induction appliances to avoid unit shutdown from overheating.
- If the power cord is damaged, have it replaced immediately by an approved service technician.
- Clean the Air Inlet Filter weekly or as often as necessary to keep dirty air filter from blocking fresh air inlet. Make sure it is dry before installing it.



- Induction can heat up metallic objects very quickly. Do not place any cans, aluminum foil, cutlery, jewelry or watches on the cooking surface.
- Do not place any objects made of aluminum or plastics on the cooking surface.
- The appliance is equipped with locking casters. Make sure the feet are locked in place prior to use.
- Do not open the electrical box or attempt to service any electrical components while power is present. Disconnect power prior to performing any service work.
- Do not cook with any flammable liquids such as alcohol as the flame may trigger the fire suppression system.
- Do not attempt to service while power is present.
- Do not attempt to bypass or modify any fire suppression components.
- Do not lean over hot surfaces, serious burns may occur.
- Do not place any objects inside the duct work that could get lodged in the blower intake or wheel.
- Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.
- Do not move the mobile cooking unit while it's plugged into an electric outlet. When moving the appliance, ensure the power cable is pulled up and laying within the appliance so it doesn't get damaged by the wheels.
- Refer to cooking appliance user manual for safety, operation and troubleshooting instructions.

**Griddle Unit Only:**

- Do not place any object other than food on griddle surface. The griddle surface must only be used for cooking.
- Do not use the griddle to heat cookware as this could damage the griddle plate.
- Do not leave any foreign objects on the griddle plate such as paper, cardboard or cloth to avoid starting a fire.
- Do not place any objects on the griddle plate that are sensitive to magnetic waves such as credit cards and tapes.

### Operating Conditions

<b>Nominal Supply Voltage Maximum Tolerance</b>	+6/-10 %
<b>Supply Frequency</b>	50/60 Hz
<b>Maximum Ambient Temperature</b>	+41° F to +99° F (+5° C to +40° C)
<b>Maximum Relative Air Humidity</b>	1500 (2 seconds)
<b>Recommended Make Up Air</b>	120 V, 60 Hz



## Limited Warranty

Unless otherwise specified, all fire suppression mobile cooking stations are warranted against defects in materials and workmanship for a period of 1 year from the date of purchase and applies to the original purchaser only.

Each induction unit can be removed from the cart for hassle-free replacement. Spring USA offers a 1 year, overnight exchange warranty on all induction ranges for customers in the U.S. View the “Induction Range Limited Warranty” to learn more about our induction warranty and exchange program.

This warranty is void if it is determined that, upon inspection by an authorized service agency, the equipment has been modified, misused, misapplied, improperly installed, improperly maintained or damaged in transit or by fire, flood or act of God. Damage to the glass cooktop or the range housing is not covered. Any alteration of the cord or plug voids the warranty. Cooking Station Warranty is void if the serial nameplate has been removed, or if service is performed by unauthorized personnel.

## Additional Warranty Exclusions

- Resetting of safety interlocks, circuit breakers, over load protectors, and/or fuse replacement is not covered by this warranty unless warranted conditions are the cause. The discharge of the fire suppression system may damage the Fire Suppression MCS Mobile Cooking Station. Warranty is no longer valid after the fire suppression system is discharged.
- All problems due to operation at voltages or phase other than specified on equipment nameplates are not covered by this warranty. Conversion to correct voltage and/or phase is the customer’s responsibility.
- All problems due to electrical connections not made in accordance with electrical code requirements and wiring diagrams supplied with the equipment are not covered by this warranty.
- Replacement of items subject to normal wear such items as filters and normal maintenance functions including adjustment of micro switches and replacement of fuses are not covered by this warranty.
- Damage to electrical cords and/or plug due to exposure to excessive heat are not covered by this warranty.



- Customer is responsible to perform and maintain a log of preventive maintenance, servicing and cleaning items as described in this service manual. Failure to follow proper cleaning and servicing schedules will void this warranty.
- Any use of non-genuine Spring USA parts completely voids any warranty.
- Installation and labor are not considered warranty and are not covered by this warranty.
- Spring USA cannot assume liability for damage or loss incurred in transit. Equipment is carefully inspected and packaged before leaving our factory. Upon acceptance of this shipment, the transportation company assumes full responsibility for the appliance during transit.
- This warranty is only valid in the United States and void elsewhere.

## Agency Listing Information

ETL Listed in compliance with ANSI/UL710B and ANSI/NSF standards



## Receiving and Inspection

Use caution when removing the packaging around the mobile cooking unit as components may have shifted in transit. Avoid using sharp objects to cut through the packaging material as this may damage the unit. Remove all packaging, shipping restraints and inspect the appliance for any damage. Contact Spring USA if any damage is present.

Use caution when moving the mobile cooking unit off the pallet as it is heavy and can cause crush injuries. Use caution on uneven surfaces, never leave the appliance free to move or push it uncontrolled. Read, understand, and follow all instructions in this manual before installing or using this appliance. Keep all documentation with the appliance for future reference.



### Included Components

PART NUMBER	ITEM DESCRIPTION	QUANTITY
MCS59-400	Baffle Filters	2
MCS59-401	Pre-Filter	1
MCS59-402	HEPA Filter	1
MCS59-403	Carbon Odor Filter	1
MCS59-333	Grease Tray	1
INQUIRE	Fire Damper	1
MCS59-259	Cutting Board	1

### Installation

Installation, use, and maintenance of this product are to be in accordance with the Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, NFPA 96.

1. Contact your building contractor to arrange fire suppression setup
2. Position the mobile cooking unit on a level floor and lock the casters in place
3. Confirm HEPA, PRE-FILTER, BAFFLE and CARBON ODOR filters are properly installed
4. Confirm grease tray and grease collector pan/baffle filters are installed
5. Confirm all closure panels are properly installed
6. Plug in the mobile cooking unit using the supplied NEMA 6-50P plug
7. Check the status display screen to make sure no fault codes are present

### Fire Suppression

#### WARNING

Do Not Operate the unit without first contacting your building contractor to arrange setup of the fire suppression system by an authorized Buckeye Fire Suppression Dealer.

Always make sure protective bands are installed on the fire suppression nozzles.

Check the pressure gauge on the fire suppression tank on a daily basis. Refer to the Buckeye Fire Suppression Manual for additional safety, operating and maintenance instructions.

This Appliance is equipped with a MANUAL PULL STATION that allows for a manual activation of the fire suppression system.

#### Manual Activation Instructions (ONLY DO IN A FIRE EMERGENCY)

Pull the ring on the pull station to its full extent to activate the fire suppression.

### Electrical Specifications and Symbols





1. Only use the designated power outlets that are marked for that specific appliance
2. Do Not attempt to modify any electrical or air flow components
3. Do Not access the electrical enclosure while power is present
4. This mobile cooking unit is equipped with a NEMA 6-50P plug before connecting, always make sure the voltage and frequency are correct and match the nameplate
5. Circuit breakers contain international labels for “On” and “Off “ as shown below

I = ON    O = Off

### Features

- Exhibition Style Mobile Cooking
- Heavy Duty Stainless Steel Construction
- MAX Induction System
- Recirculating 4 Stage Downdraft Filtration System (Grease Baffle Filters, Pre-filter, HEPA, Carbon)
- FLEX - Filter Life Extension Technology
- Safety Interlocks and Filter Detection System
- Integrated Fire Suppression System
- Touchscreen Status Display
- Cutting Board
- Easy to Clean and Maintain
- Energy Efficient
- Low Cost to Operate
- Cooking temperatures up to 450°F and 20 power levels on “Cook” mode

### Included Components

MODEL	VOLTAGE	POWER	PLUG CONFIGURATION
MCS-59-FPS-SP251G	208-240	5000W 10.4 X 2 AMPS	 Nema 6-50
MCS-59-FPS-SP261-2	208-240	5200W 11 AMPS	 Nema 6-50
MCS-59-FPS-SP350-2	208-240	7000W 17 AMPS	 Nema 6-50
MCS-59-FPS-SP351WCR-2	208-240	7000W 15 AMPS	 Nema 6-50

### Power On Procedure

1. Press the power button on the left column to turn on the filtration system
2. Check the screen to make sure no error codes or messages are present
3. Turn the control knob to the desired temperature to power on the induction appliance; unit is now ready for operation. Temperature can be adjusted from 90-400°F (32-204°C) for models MCS-59-FPS-SP251G, MCS-59-FPS-SP261-1, and MCS-59-FPS-SP351WCR-2 and 90-450°F (32-230°C) for model MCS-59-FPS-SP350-2

4. As you turn the control knob the digital display will show the temperature, stop turning the knob when the desired temperature is displayed

### Power Off Procedure

1. Turn the Control knobs on the appliance to the OFF-Position.  
NOTE: The filtration system will continue to operate for a period of 30 Minutes before turning off . DO NOT press the power button on the column to initiate an abrupt shutdown of the unit. Repeated abrupt shutdowns may damage the appliances and void warranty.

Once the surface is cool the induction units will go into the stand-by mode. When in the stand-by mode, the point on the display blinks once every second.

#### **CAUTION**

Avoid touching the glass surface as it may get hot from the heat of the pan.

### Operating Instructions

#### **CAUTION**

The griddle plate is hot when the unit is in use. To avoid burn injuries, do not touch the surface.

The induction ranges have a very short pre-heat time and can reach 450°F in 4 Minutes. DO NOT leave unattended during operation.

Do not remove or open air closure panels while system is operating.

Do not remove any filters while system is operating, this can cause the system to shutdown.

**NOTICE**

Before operating the unit ensure all objects are removed from the induction surface and the grease collector pan, grease tray, and filters are installed properly.

**Operating Instructions**

- Do not place empty cookware on the cooking zone, empty pans and pots can heat up very quickly. Instead, place grease or liquid into the pan prior to placing the pan on the cooking surface.
- If using oil or grease during the cooking process, constantly check the pan to make sure the contents don't overheat and burn.
- Keep the pan in the center of the heating area.
- Do not place any flammable objects such as cardboard between the pan and the heating area as this may cause a fire.
- Do not leave pans unattended.
- Do not place any metallic objects such as jewelry, closed cans, aluminum foil, cutlery, watches etc. on the heating surface of the induction appliance. Metallic objects heat up very quickly when placed on the induction cooktop.
- Avoid placing any objects sensitive to magnetism on the glass cooking surface.
- Do not let any liquid overflow the pan onto the cooker surface.
- If the heating surface is damaged (cracked or broken) discontinue use and contact Spring USA. Do not touch any parts inside the appliance.
- Do not operate in ambient temperature of more than 100°F, doing so can cause overheating and shutdown of the appliance.
- Always make sure the unit is OFF when not actively cooking on the appliance.

**Griddle Instructions:**

- Always season the griddle surface before placing any protein on it.
- If cooking frozen food avoid using the same positions on the griddle. Otherwise the surface could deform locally overtime.

**Filter Installation & Replacement Schedule**

PART NUMBER	ITEM DESCRIPTION	REPLACEMENT SCHEDULE
MCS59-400	Baffle Filters	Dishwasher Safe, Wash Daily
MCS59-401	Pre-Filter	Recommended 30 Days
MCS59-402	HEPA Filter	Recommended 90 Days
MCS59-403	Carbon Order Filter	Recommended 180 Days

**Filter Installation Procedure**

**Baffle Filters**

Baffle Filters are re-usable, dishwasher safe, and should be cleaned daily. Remove the Baffle Filters by pulling up on the filter and sliding the bottom out as shown below. Only use genuine Spring USA replacement filters to maintain safe and optimal operation. Use of non-genuine Spring USA filters will void the warranty. To avoid service disruptions it is recommended to keep a spare set of filters on hand. Spring USA assumes no liability for loss of business due to filter related shutdown.



**Figure 1**

## Pre-Filter Replacement Procedure

### Pre-Filter

The Pre-Filter (Part No. MCS59-401) is a low cost disposable hi-temp filter. Do not operate the appliance without the pre-filter, doing so will shorten the life of the HEPA filter. Do not attempt to clean the Pre-Filter, replace in 30 days or sooner.

1. Remove the Baffle Filters as shown **(Figure 1)**
2. Remove the Filter Access Panel as shown below by removing the panel knobs
3. Slide the bottom of the access panel towards you and then lift up to remove the panel
4. Install the Pre-Filter in the correct orientation (air-flow arrow pointing down)
5. Install the filter access panel
6. Install the access panel knobs and tighten. To avoid stripping the thread, do not over-tighten
7. Replace the baffle filters



Figure 2

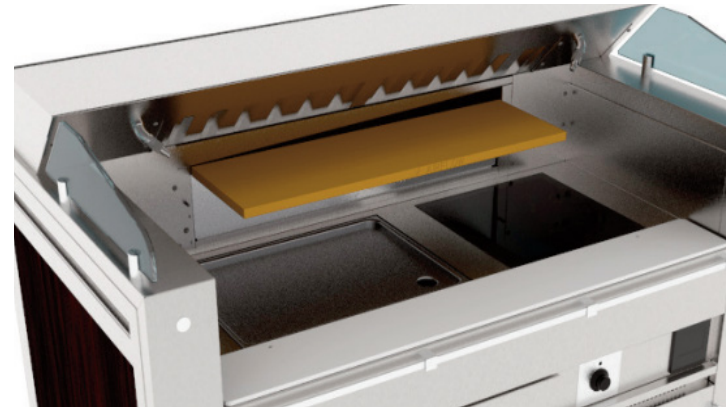


Figure 3

## HEPA Filter Replacement Procedure

### HEPA Filter

HEPA Filter (Part No. MCS59-402) is a disposable filter that should be replaced every 6 months or sooner.

1. Remove the Baffle Filters **(Figure 1)**
2. Remove the Filter Access Panel
3. Remove the Pre-Filter **(Figure 3)**
4. Remove the HEPA filter by lifting it up and sliding it out of the duct work **(Figure 4)**
5. Replace the HEPA Filter in the correct orientation (Gasket side down and air-flow arrow pointing down)
6. Place the Pre-Filter on top of the HEPA
7. Install front access panel and tighten the knobs
8. Reinstall the Baffle Filters

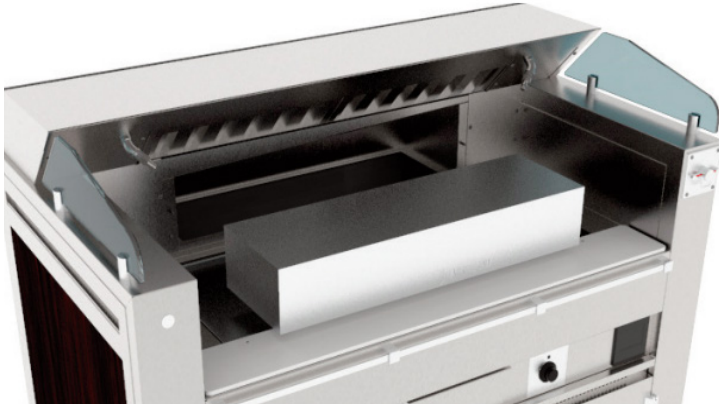


Figure 4

### Carbon Odor Filter

Carbon Odor Filter (Part No. MCS59-403) is a disposable odor filter that should be replaced every 6 months or sooner.

1. Remove the back panel by lifting up on it
2. Open the rear access panel shown below
3. Remove the carbon Odor Filter
4. Replace the Carbon Odor Filter in the correct orientation (air-flow arrow pointing down)
5. Close and latch the rear filter access panel and install the back access panel

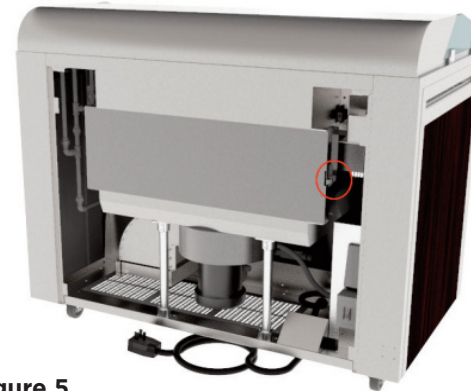


Figure 5

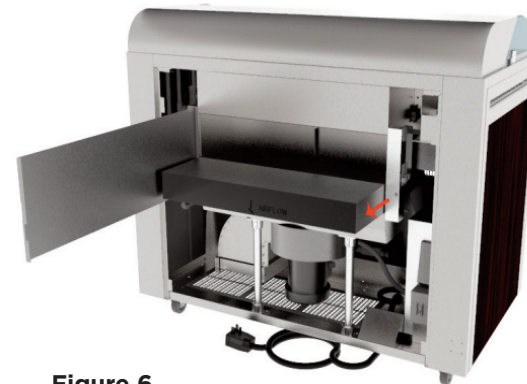


Figure 6



## Cleaning Instructions

### ⚠ CAUTION

Allow Unit to cool and shutoff before cleaning.

### ⚠ CAUTION

Ensure no liquid can enter into the induction unit. Do not let water or food overflow the cooking area. Do not use hoses to clean or power wash the induction unit or its vicinity. Clean the mobile cooking station by wiping only.

### ⚠ CAUTION

Cleaning the griddle plate can produce hot steam. DANGER OF BURN INJURIES.

### ⚠ CAUTION

Do not use strong detergents or dissolvers such as Ketone, Ester, and alkaline detergents to clean the griddle surface as they may damage the surface

## DAILY OR AS NEEDED CLEANING INSTRUCTIONS

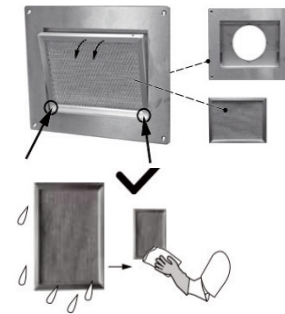
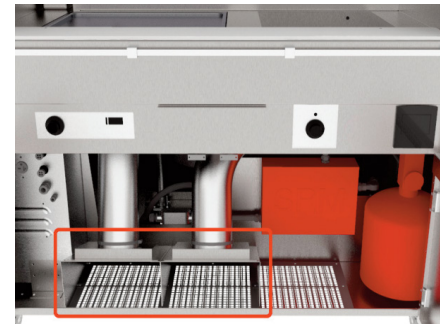
Turn off the appliances by placing the controls in the OFF position. Make sure the 30min timer expired and the filtration system is shutdown. Allow the appliances to cool before proceeding.

### Cleaning the Countertop and Surrounding Areas:

1. Remove the BAFFLE FILTERS, GREASE TRAY, CUTTING BOARD, and GREASE COLLECTION PAN.
2. Clean the BAFFLE FILTERS, GREASE TRAY, CUTTING BOARD, and GREASE COLLECTION PAN in a sink or dishwasher using mild detergent and warm water.
3. Remove the Filter access panel and using a clean moistened cloth with warm water and mild detergent wipe the inside of the grease drain channel.
4. Wipe the countertop, filter access panel and surrounding areas with a clean moistened cloth with warm water and mild detergent. Rinse by wiping with a clean cloth moistened with warm water.
5. Dry the removed components with a clean non-abrasive cloth.
6. Reinstall the removed components.

## WEEKLY CLEANING INSTRUCTIONS

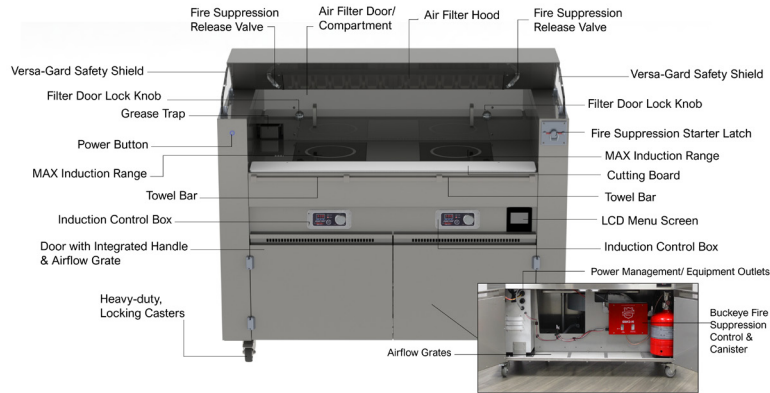
1. Open the front doors and remove the appliance AIR INTAKE FILTERS shown below by pressing up on its corners.
2. Clean the AIR INTAKE FILTERS in a dishwasher. Wipe the Filters DRY before inserting them back into the filter holders.



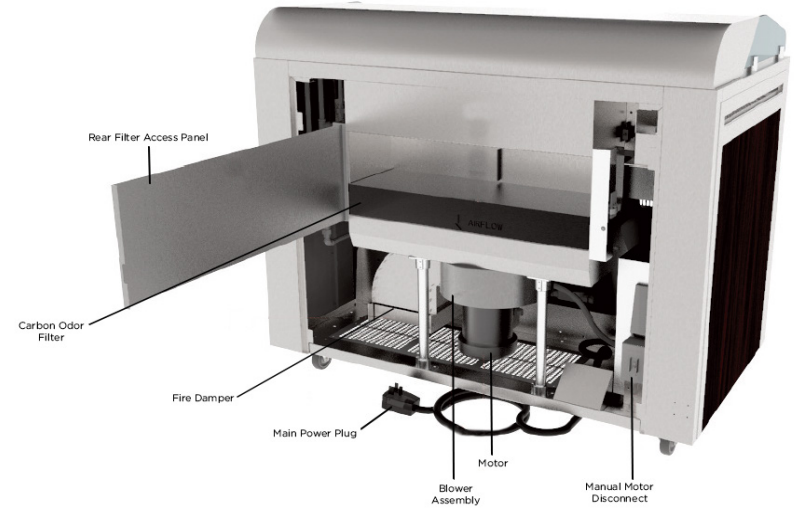
## MONTHLY CLEANING INSTRUCTIONS

1. Clean the mobile cooking unit and appliances by following the Daily Cleaning Instructions.
2. Remove the BAFFLE FILTERS AND THE FRONT FILTER ACCESS PANEL in this order.
3. Remove the PRE-FILTER and the HEPA FILTER.
4. Wipe the inside of the of the duct work surrounding areas with a clean moistened cloth with warm water and mild detergent. **DO NOT** spray water or any other liquid inside the duct work. **Do not grab onto the fusible links or the cable supporting them.**
5. Reinstall the HEPA, PRE-FILTER, FRONT FILTER ACCESS PANEL and BAFFLE FILTERS in this order.
6. Remove the back panel.
7. Open the rear Filter access panel. Remove the CARBON ODOR FILTER.
8. Wipe the inside of the of the duct work surrounding areas with a clean moistened cloth with warm water and mild detergent. **DO NOT** spray water or any other liquid inside the duct work. Rinse by wiping with a clean cloth moistened with warm water.
9. Reinstall the Carbon Odor Filter, close the rear filter access panel and replace the back panel.

### Appliance Front View



### Appliance Rear View



DESCRIPTION	DETAILS
Heavy-duty, Locking Casters	5" casters are more durable & easier to push than industry-standard 4" casters
Door with Integrated Handle & Airflow Grate	Vents that release air after it has run through the 4-stage filtration system
Induction Control Box	Use to turn on/off induction range and set cooking temperature
Towel Bar	Can be used as a towel bar, utensil holder, or a handle to help operator pull the cart out to access the back panel
MAX Induction Range	More even heat distribution and precise temperature control for a more efficient solution over traditional gas or electric
Power Button	Use to turn cart on/off
Grease Tray	Part No: MCS59-333 Dishwasher Safe, remove and wash daily
Filter Door Lock Knob	Part No: MCS59-304
Versa-Gard Food Shield	NSF-compliant food shields
Fire Suppression Release Valve	Always make sure protective bands are installed on the nozzles
Air Filter Door / Compartment	Remove to access HEPA and Pre-Filter. Must be in place for unit to operate
Air Filter Hood	Part No: MCS59-400 Baffle Filters, Dishwasher safe, remove and wash daily
Cutting Board	Part No: MCS59-259
LCD Screen	Displays appliance status and error codes
Power Management / Equipment Outlets	Power source for induction ranges
Buckeye Fire Suppression Control & Canister	Do Not Open. Service to be performed by qualified personnel
Airflow Grates	Grates that release air that has been filtered through the 4-stage air filtration system

DESCRIPTION	DETAILS
Rear Filter Access Panel	Must be closed for unit to operate
Carbon Odor Filter	Part No. MCS59-403. Recommended replacment interval 6 months or sooner
Fire Damper	Part No. INQUIRE. Replace annually
Main Power Plug	NEMA 6-50P power plug. Disconnect before performing service
Blower Assembly	Do not place any foreign objects in the duct work that may obstruct the blower
Motor	1 HP TEFC 56C Frame 3Phase Motor
Manual Motor Disconnect	Use only in emergency to disconnect power to motor



### Troubleshooting Guide - Status Display Codes

FAULT CODE	POSSIBLE CAUSES	SUGGESTED ACTION
Baffle Filter Missing	Missing filters or duct air pressure ports blocked	Install missing filters. Check air pressure ports inside of the duct for any obstruction. If necessary, disconnect the air line via push-to-fitting to clear blockage. Reinstall the air line making sure it's fully seated within the fitting.
HEPA or Pre-Filter Missing	Missing filters or duct air pressure ports blocked	Install missing filters. Check air pressure ports inside the hood for obstruction. If necessary, disconnect the air line via push-to-fitting to clear blockage. Reinstall the air line making sure it's fully seated within the fitting.
Carbon Filter Missing	Missing filters or duct air pressure ports blocked.	Install missing filters. Check air pressure ports inside the hood for obstruction. If necessary, disconnect the air line via push-to-fitting to clear blockage. Reinstall the air line making sure it's fully seated within the fitting.
Front Filter Access Panel Open	Panel missing or not installed properly	Check front filter access panel to make sure it's installed properly.
Rear Filter Access Panel Open	Rear filter access panel not closed	Confirm rear filter access panel is closed and latched properly.
Motor Overload	Blower intake blockage	Inspect and replace dirt filters.
CPU Battery Low	Bad Battery	Contact Spring USA for replacement.
Fire Suppression Not Ready	Fire suppression not set up	Contact Spring USA or Buckeye Authorized Dealer to inspect and charge system. DO NOT tamper with the fire suppression system.



### Troubleshooting Guide

ISSUE	SUGGESTED ACTION
Cooking appliances do not power on	<ul style="list-style-type: none"> <li>• Confirm all filters are installed</li> <li>• Confirm all closure panels are installed properly</li> <li>• Confirm ventilation is on</li> <li>• Check for fault codes on the status display screen</li> <li>• Confirm cooking appliances are plugged in at the provided receptacles only</li> <li>• Disconnect main power and confirm circuit breakers are not tripped</li> </ul>
Ventilation does not turn on	<ul style="list-style-type: none"> <li>• Confirm fire suppression is charged and in ready state</li> <li>• Confirm all closure panels are closed</li> <li>• Check blower for any obstruction inside the duct work</li> <li>• Disconnect main power and confirm circuit breakers are not tripped</li> </ul>
Ventilation does not turn off	Confirm cooking appliances are in the off position.
Ventilation noise has increased significantly	Replace filters
Cooking appliance power is reduced	<ul style="list-style-type: none"> <li>• Confirm that cooking appliance air intake filters are clean</li> <li>• Confirm that ambient temperature is below 100°F</li> </ul>

### Required Maintenance

#### Maintenance Schedule

##### Daily Or After Each Use:

1. Part # MCS59-400 Baffle Filters/ Grease Collector Pans Dishwasher Safe Wash Daily

##### Monthly:

1. Replace part # MCS59-401 Disposable 1 Pre-Filter
2. Clean induction cook-top intake filters (if supplied - model specific)
3. Inspect all filters for damage - replace if damaged
4. Confirm Fire damper is installed properly
5. Inspect duct work for any grease build-up within the duct work - Clean by wiping with a damp cloth and gleaning agent. Do Not Wash Down With Pressure
6. Inspect cook-top joints for silicon adhesive integrity - re-apply food grade silicon if necessary. Always confirm that no liquid is penetrating below cooktops
7. Inspect casters are not damaged and when locked successfully prevent appliance movement. Replace if necessary



8. Verify that the extinguishing system is in its proper location
9. Verify that the manual actuators are unobstructed
10. Verify that the tamper indicators and seals are intact
11. Verify that the maintenance tag or certificate is up to date and in place
12. Verify that no obvious physical damage or condition exists that might prevent operation
13. Verify that the extinguishing system pressure gauge is in the operable range
14. Verify that the nozzle blow off caps are intact and undamaged
15. Verify that the hood, duct, electrical controls, safety interlocks and cooking appliances have not been replaced, modified, or relocated

Quarterly:

1. Replace HEPA filter part # MCS59-402
2. Re-place carbon filter Part # MCS59-403

Semi-annually:

1. Inspect pneumatic tubing for damage and grease buildup - replace or clean if needed
2. Clean pitot tube, pneumatic fittings and ports

**Semi-annual maintenance of the Kitchen Mister System  
Is required by NFPA-17A and Buckeye Fire Equipment  
And must be performed by a factory trained, Authorized  
Buckeye Fire Equipment Dealer. Semi-annual  
Maintenance shall include the following:**

1. Check that the hazard area 1 has not changed.
2. Check the cylinder pressure gauge, making sure it is in the operable range.
3. Check all nozzle orifices to assure that they are unobstructed and that all nozzle caps are in place
4. If any BFR-UBC stainless steel metal caps are used, they must be removed, cleaned and checked to assure that they slide easily on and off the nozzle body. If the cap does not slide easily off the nozzle tip, the o-ring and cap must be replaced.
5. Remove the face plate from the control head
6. Remove the actuation nitrogen cartridge from the systems releasing module. If the use of the Keeper pin is desired to prevent the operation of the gas valve and miniature electric
7. Check entire system for mechanical damage
8. Inspect fusible link detection line for grease build-up or mechanical damage. Replace corner pulleys or conduit, if necessary.



9. Activate the Systems Releasing Module by releasing tension from the end of the fusible link line by cutting or melting the last link. Make certain that the Systems Releasing Module fires, the gas valve closes, and all auxiliary devices connected to the micro-switch operate or stop
10. Replace all fusible link detectors
11. Reset the Systems Releasing Module and then activate the system by using the remote pull station. Make certain that the Systems Releasing Module fires, the gas valve closes, and all auxiliary devices connected to the micro-switch operate or stop
12. After the SRM has been tested and is functioning properly, the system can be put back into service
13. If a Keeper Pin was used, remove it from the Systems Releasing Module
14. Before installing the Nitrogen Cartridge, it is necessary to make sure that the Actuating Pin is moving freely. Insert the Actuation Pin Resetting Tool into the threaded hole of the Manifold Mounting Block where the Nitrogen Cartridge is installed and then remove the BFR-PRT
15. Install the Nitrogen Actuation Cartridge by completely screwing the cartridge into the manifold block
16. Re-install the Systems Releasing Module cover
17. Verify that the date on the cartridge is visible in the viewing window

Annually:

1. Replace Fire Damper

**Annual maintenance of the Kitchen Mister System  
Is required by NFPA-17A and Buckeye Fire Equipment  
And must be performed by a factory trained, Authorized  
Buckeye Fire Equipment Dealer. Annual  
Maintenance shall include the following:**

1. Check and inspect the system in accordance with steps 1 - 7 of semi-annual maintenance instructions
2. Disconnect the Systems Releasing Module from the cylinder valve by removing the four screws securing the SRM to the top of the valve and separate. DO NOT lose or damage the Interface Gasket because it will be required to reconnect the SRM. If the SRM is mounted remotely, remove all Model BFR-CAP(s), Valve Cap Assembly from each of the cylinder valve(s) by unscrewing the four mounting screws and remove them from the cylinder valve(s).



3. Reinstall the Nitrogen Activation Cartridge. To check the satisfactory operation of the fusible link system, cut the terminal link or the "S" Hook attached to the terminal link. This will release tension on the fusible link line causing the following to occur:
  1. The Systems Releasing Module will operate, causing the detection arm assembly to move back to the left, disengaging the trigger, and allowing the actuation lever to operate. The actuation pin will puncture the nitrogen cartridge and allow the nitrogen gas to discharge through the bottom of the SRM or BFR-CAP(s)
  2. The pressurization indicator of each Test Valve Assembly (when used) will be fully extended and there are no leaks in the copper tubing
  3. The gas valve will close, stopping gas flow to any gas fueled appliances
  4. All auxiliary devices connected to the miniature electrical switch(s) provided in the Systems Releasing Module will have operated
4. Remove the used nitrogen cartridge and discard immediately
5. Replace all fusible link detectors
6. After testing the fusible link line, repair the terminal link and re-set the control head
7. Once the Systems Releasing Module is reset, the mechanical pull station must be checked. To do so, pull the handle on the remote pull station and make sure that the following occurs:
  1. The Systems Releasing Module will operate, causing the detection arm assembly to move back to the left, disengaging the trigger, and allowing the actuation lever to operate
  2. All auxiliary devices connected to the miniature electrical switch(es) provided in the Systems Releasing Module will have operated
8. Disconnect the discharge piping from the cylinder valve. Using air or nitrogen, blow out the discharge piping and make sure all the nozzle caps have blown off. If any nozzle cap(s) fails to blow off during test, carefully examine piping system and nozzle(s) to determine cause and take appropriate corrective action. Repeat test to assure both piping system and nozzles are unobstructed.
9. Reconnect the discharge piping to the cylinder valve and check that all nozzle caps are installed properly



10. Reconnect the Systems Releasing Module or Valve Cap Assembly(s) to the appropriate cylinder valve(s) and secure each with the four provided screws.
11. Before installing the Nitrogen Cartridge it is necessary to make sure that the Actuating Pin is moving freely. Insert the Actuation Pin Resetting Tool into the threaded hole of the Manifold Mounting Block where the Nitrogen Cartridge is installed.
12. Install a new Nitrogen Actuation Cartridge by completely screwing the cartridge into the manifold block.
13. Write the current date on the gray band of a new Nitrogen Actuation Cartridge so that it can be seen in the viewing window of the SRM.
14. Re-install the Systems Releasing Module cover. Verify that the date on the cartridge is visible in the viewing window.

#### 12 Year Maintenance:

1. In addition to the required annual maintenance, all agent cylinders must be removed from the system, discharged, and hydrostatically tested as per the requirements of NFPA-17A. The cylinder should then be recharged in accordance with Buckeye Kitchen Mister manual and returned to service. Note: New extinguishing agent must be used when performing this procedure.
2. Replace motor input shaft seal.

#### **Contact an Authorized Spring USA Distributor immediately if any deficiencies are found.**

**Note: A record of monthly inspections is to be kept by the owner of the system that includes the date of inspection, the person performing the inspection, and any corrective action required.**



### Required Maintenance

DESCRIPTION	FREQUENCY	PERFORMED BY
Fire Suppression System Inspection per manufacturer's recommendations	Monthly	Owner/User
Change Filter	As Needed	Owner/User
Clean Mobile Cooking Unit following Daily/Weekly and Monthly Instructions	As Needed	Owner/User
Perform semi-annual maintenance of the fire suppression system as described in the Buckeye Kitchen Mister System Manual Chapter 5 (System Inspection and Maintenance)	Semi-Annual	Authorized Buckeye Dealer
Perform inspection and testing of safety interlocks and fire damper	Semi-Annual	Authorized Buckeye Dealer
Replace fusible links	Semi-Annual	Authorized Buckeye Dealer
Perform annual maintenance of suppression system as described in the Buckeye Kitchen Mister System Manual Chapter 5 (System Inspection and Maintenance)	Annual	Authorized Buckeye Dealer
Replace the fire damper Part No. 32000024	Annual	Authorized Buckeye Dealer



### OWNER'S MONTHLY INSPECTION LOG

It's the Owner's responsibility to conduct a monthly inspection of the fire suppression system in accordance to manufacturer's operation manual including the items listed in the inspection log.

ITEMS TO VERIFY	NAME/ DATE	NAME/ DATE	NAME/ DATE	NAME/ DATE	NAME/ DATE	NAME/ DATE	NAME/ DATE	NAME/ DATE	NAME/ DATE	NAME/ DATE	NAME/ DATE	NAME/ DATE
Verify the extinguishing system is in its proper location.												
The manual actuators are unobstructed.												
The tamper indicators and seals are intact.												
The maintenance tag or certificate is up to date and in place												
No obvious physical damage or condition exists that might prevent operation.												
The pressure gauge is in the operable range.												
The nozzle blow off caps are intact and undamaged												
The hood, duct, and cooking appliances have not been replaced, modified, or relocated.												
The maintenance log is in place and up to date.												



## MAX Induction Before You Begin:

Read the following instructions in their entirety. Use proper serving vessels. All serving vessels must be induction-ready.

Your MAX Induction® Range must have proper ventilation in order to operate correctly. There must be at least 7" of space available under a mounted induction range. Cabinets housing the induction range (s) should have intake & exhaust vents. Active ventilation may be needed. For optimal performance, the inside temperature of the cabinet should not exceed 90°F / 32° C.

Ensure that you have dedicated power to the installed location. Refer to the grid on Page 6 for Electrical Specifications.

### Suitable Serving Ware:

Your MAX Induction® Range works with induction-ready serving vessels. Visit the Spring USA Website for a full line of induction-ready, professional serve ware.

Serving pieces must have a flat bottom, in order to make full contact with the countertop.

Serving pieces that are footed, or that have a raised ridge, are not for use on this system, as they cannot make full contact with the counter surface.

Vessels must have a bottom diameter greater than 4".

Glass Cookware is not suited for use on your induction warming system.

Serving vessels must be centered on the induction warmer for optimal heating and performance.



ERROR	CAUSES	SOLUTION
E0	Range does not detect a pan on the range.	Place an induction ready pan on the range.
E1	Range has overheated due to blocked ventilation and has shut down the range.	Clear vents, let range cool down, then restart. If error message continues, your range needs to be serviced.
E2	Overheating protection has been activated & the range has been shut down.	Remove the cookware from the range. Let the unit cool down, then restart. Make sure the cookware you are using is induction ready.
E3	Range is experiencing temporary voltage overload.	Let the induction range cool down completely, before restarting. Review dedicated power requirements.

### Safety Precautions & Key Points:

Cabinet Ventilation must be provided. The inside temperature of the cabinet must not exceed 90°F / 32° C. Regularly inspect air intake grill on underside of ranges. Clean by vacuuming, as needed. Ventilation areas into and out of the cabinet should be provided. Active ventilation may be necessary dependent on cabinet design. Attach Control Panel to range prior to connecting to power source.

Actual range temperatures may vary due to a number of variables such as ambient temperature in the immediate surrounding area, content and volume of food being heated or cooked, and whether or not you are utilizing a cover on the vessel you are using.

Never attempt to service any part of your MAX Induction® Range on your own. Contact our Service Department by calling (1) 630-527-8600. Attempting to service your Induction Range on your own, or through an unauthorized repair facility automatically voids your warranty. For service forms, visit the Spring USA Website. Always disconnect from power source prior to removing range from cabinet.

For Limited Warranty Information, visit [www.springusa.com/warranty](http://www.springusa.com/warranty)

#### NOTICE

This equipment uses, generates and can radiate radio frequency energy. If not installed correctly and used in accordance with the instructions, may cause harmful interference to radio communications.



## Mounting Control Panel

To mount the Control Panel (B), use the template provided. Place the template on a plane or panel, perpendicular to the MAX Induction® Range, centering it to the range whenever possible.

The Control Panel cutout should measure 5<sup>3/4</sup>" x 2<sup>3/4</sup>". Place the Control Panel (B) into cutout hole. Using the four (C) wood screws provided, secure the Control Panel into place.

Using Your MAX Induction® Range:

Attach Control Panel to range prior to connecting to power source. Turn the induction range on (remember, the induction unit, by default, will start out in cook mode). An 'EO' message will appear in the panel. Place an induction-ready pan or server on the induction range. The display will begin to read the set temperature.

Set a stainless steel pan or server filled with water on top of the granite directly over the induction range mounted underneath. The blinking LED light should go solid. This means the induction range is reading the pan.

MODEL #	VOLTAGE/AMPS	PEAK POWER	PLUG TYPE
SM-351WCR	208-220 Volts 14.6 Amps	3500 Watts 50-60 Hz	NEMA 6-20 6" Cord
SM-261R	208-220 Volts 11.8 Amps	2600 Watts 50-60 Hz	NEMA 6-20 6" Cord
SM-350R	208-220 Volts 14.6 Amps	3500 Watts 50-60 Hz	NEMA 6-20 6" Cord
SM-251-2CR	208-220 Volts 10.4 x 2 Amps	2500 X 2 Watts 50-60 Hz	NEMA 6-30P

## How To Operate

Your MAX Induction® Range is designed to operate in two modes: "Cook" or "Temp".

"Cook" Mode offers you high-speed heating, used for sautéing, omelet stations, pasta bars or demonstration cooking.

"Temp" Mode offers you thermostatically controlled holding temperatures for use with soups, sauces, buffets or pastry work. The LED display allows for more accurate temperature selection.

### In "Cook" Mode:

- An 'EO' code will flash until suitable cookware is placed on the glass surface of the range
- The LED panel will display a two-digit number indicating the power level. Power levels run from 1 thru 20
- As a safety precaution, if no cookware is placed on the induction range plate after 2-1/2 minutes, the unit will shut off
- Once suitable cookware has been placed on the glass induction plate, the unit will continue to cook until the range is manually shut down, or the mode is changed over to "Temp" mode

**Note:** There must be at least 7" of space available under a mounted induction range. Cabinets housing the induction ranges should have both vents & circulation fans installed. The inside temperature of the cabinet must not exceed 90°F / 32° C.

### In "Temp" Mode:

- An 'EO' code will flash until suitable cookware is placed on the glass surface of the range
- The LED panel will display a three-digit number indicating the temperature setting. To increase the temperature setting, turn the dial clockwise To decrease the setting, turn the dial to the counter-clockwise.
- The induction range will continue to warm the food until the set temperature has been reached. Once the temperature has been reached, the range will maintain that pre-selected temperature setting.
- Temperature settings in "Temp" mode, in fahrenheit are: 110°, 120°, 130°, 140°, 150°, 160°, 170°, 180°, 190°, 200°, 220°, 240°, 260°, 280°, 300°, 320°, 340°, 380° & 400°  
Celsius: 43°, 49°, 54°, 60°, 66°, 71°, 77°, 82°, 88°, 93°, 104°, 116°, 127°, 138°, 149°, 160°, 171°, 182°, 193° & 204°.





**127 Ambassador Drive, Suite 147**  
**Naperville, IL 60540-4079**  
**P: 630-527-8600**  
**F: 630-527-8677**  
**springusa@springusa.com**  
**www.springusa.com**