

KITCHEN FIRE SUPPRESSION SYSTEM

UL EX4658

BULLETIN NO.

SL-203

Date: April 2023

To: Authorized Amerex Distributors and OEMs

From: Sales and Product Management—Kitchen Systems

Re: KP protection for Mary Brown's Cooker—Model: 550 & 550-EB

Note: This technical bulletin serves as an addition to the KP/ZD Design, Installation, Maintenance, & Recharge Manual P/N 20150 Amerex Restaurant Fire Suppression System dated February 14th, 2019. This technical bulletin is not meant to replace any requirements and/or limitations within, and the information in the bulletin will be added at the next revision. This bulletin defines a UL LISTED COVERAGE for the protection of the listed appliance(s).

Amerex is announcing the addition of an appliance-specific KP fire protection coverage for Mary Brown's 550 and 550-EB vegetable oil pressure fryer cookers. This coverage must be installed in accordance with all requirements of NFPA (National Fire Protection Association) 17A and NFPA 96.

This protection provides coverage for the gas-powered cooker (550) and electric powered cooker (550-EB). **Only a dedicated KP375 cylinder may be used for protection of these appliances. This KP375 cylinder is limited to a maximum of 4 nozzles (4 flow points), and all nozzles must be used for protection of these appliances only.** Additional appliances, plenums and ducts must be covered with an additional tank.

The coverage utilizes QTY (1) 11982 (1 flow) nozzle per fryer. The aiming point for the nozzle is on the top surface of the appliance, $\frac{5}{8}$ " from the inner pot edge, along the point of intersection of a straight line from the nozzle location to the center of the pot.

Nozzle Type: 11982 (1 flow)

Nozzle Quantity: 1

Nozzle Height: 4 in to 6 in (102 mm to 152 mm) above cooking surface.

Nozzle Location: 3 in to 5 in (76 mm to 127 mm) from inner pot edge.

Nozzle Aim Point: Top surface of the appliance (See Detail A on page 2), $\frac{5}{8}$ in (16 mm) from inner pot edge.

Cylinder: KP375 only (2 flow points minimum; 4 flow points maximum, See page 3 for piping limitations).

Cooker Specifications:

Fryer Pot Size: 16 in diameter (406 mm)

Input Ratings: 72,000 BTU/HR – Gas Version (550)
13.5 kW – Electric Version (550-EB)



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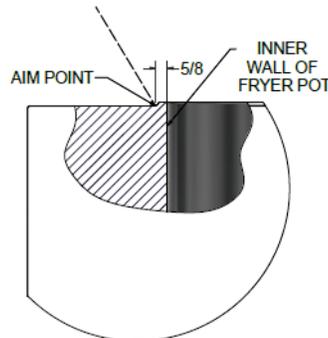
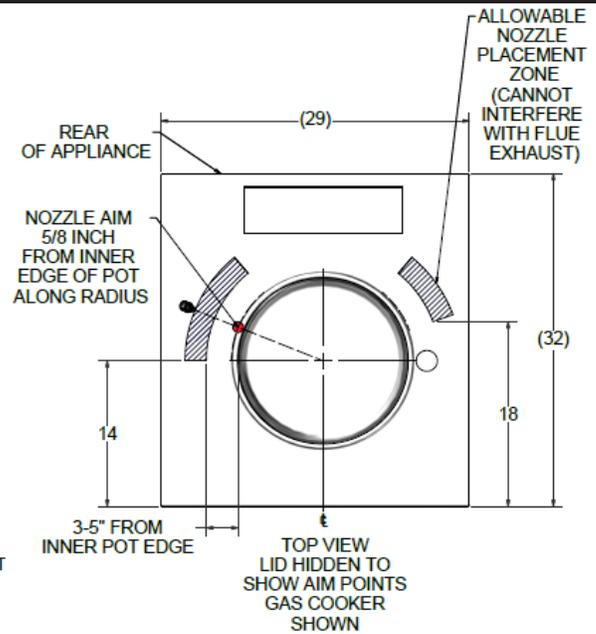
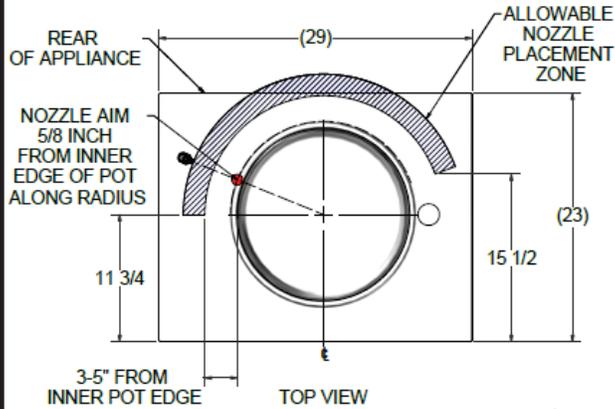
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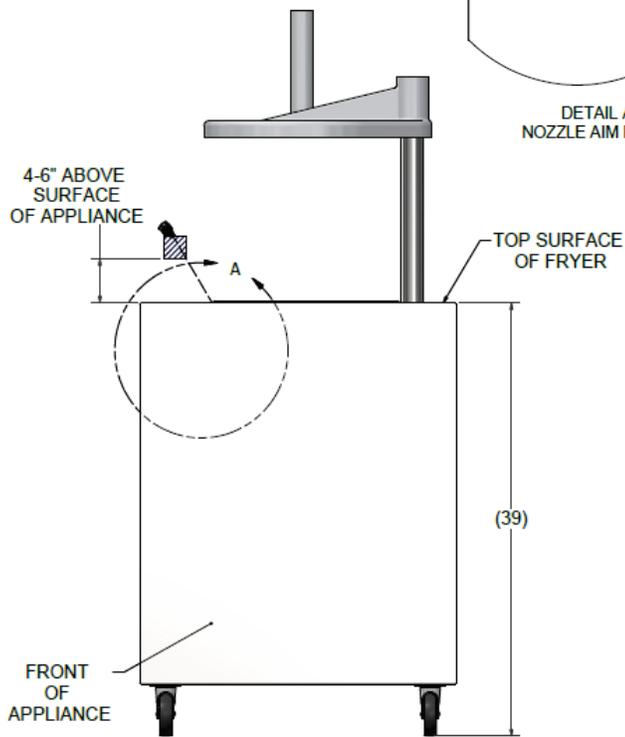
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NOTES:

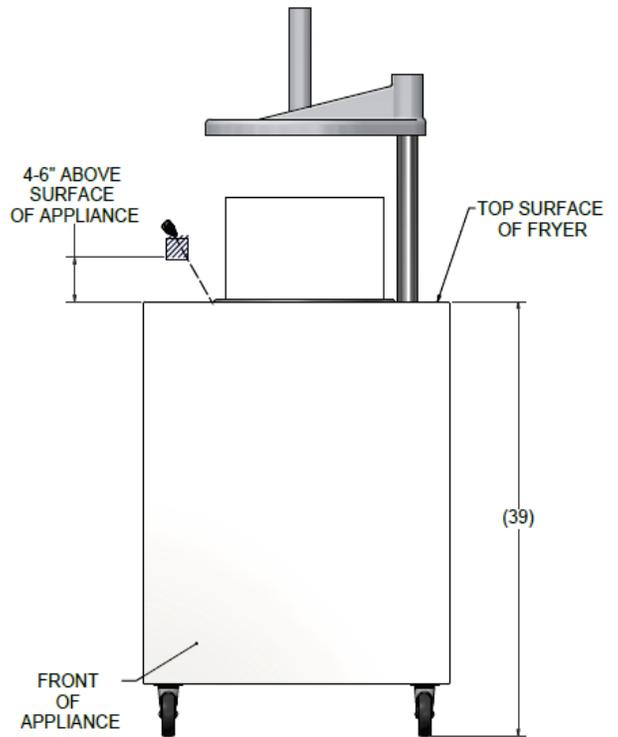
1) CENTERLINES SHOWN FOR THE FRYER POT.



DETAIL A
NOZZLE AIM POINT



FRONT VIEW
ELECTRIC
COOKER
SHOWN



FRONT VIEW
GAS COOKER
SHOWN

Figure 1: Nozzle Placement and Aim



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DISTRIBUTION PIPING LIMITS for PROTECTION of the MARY BROWN'S COOKERS

When designing a KP System to protect the Mary Brown's Cooker the following MINIMUM TOTAL SYSTEM PIPING must be used in accordance with the chart below:

MINIMUM PIPING REQUIREMENTS		
MINIMUM LINEAR FEET	MINIMUM TOTAL EQUIVALENT FEET	MINIMUM FLOW POINTS PER SYSTEM
6.5	10	2

SUPPLY LINE LIMITATIONS:

CYLINDER FLOW POINTS	PIPE SIZE	MAXIMUM LINEAR FEET OF PIPE	MAX. QTY. TEES	MAX. QTY. ELBOWS	MAX. QTY. BUSHINGS
375-4	3/8	20	1	5	1

SUPPLY BRANCH LINE (including last nozzle branch) LIMITATIONS:

All pipe and fittings leaving the first splitting tee in the system and ending with the last nozzle in the last branch line. While the last nozzle branch is included in the piping limitations for the supply branch line, the limitation (pipe size and maximum length) for nozzle branch lines apply to this portion of the supply branch line.

CYLINDER FLOW POINTS	PIPE SIZE	MAXIMUM LINEAR FEET OF PIPE	MAX. QTY. TEES	MAX. QTY. ELBOWS	MAX. QTY. BUSHINGS
375-4	3/8	20	3	9	0

NOZZLE BRANCH LINE LIMITATIONS:

All pipe and fittings leading from the supply branch tee to a system nozzle.

CYLINDER FLOW POINTS	PIPE SIZE	MAXIMUM LINEAR FEET OF PIPE	MAX. QTY. TEES	MAX. QTY. ELBOWS	MAX. QTY. BUSHINGS
375-4	3/8	20	2	9	0
MAX. PER NOZZLE BRANCH		7	1	6	0

NOTES:

1. Only 3/8" pipe to be used in system.
2. Only KP375 cylinder to be used for system.
3. Maximum of (4) flow points for system.
4. The supply line has a maximum vertical rise above the distributor of 10 feet.
5. Maximum of (2) flow points per nozzle branch.
6. Only P/N 11982 nozzles to be used in system.
7. Only a straight piping system may be used. Split piping is not allowed.