

**DESIGN, INSTALLATION,
MAINTENANCE & RECHARGE
MANUAL**

NO. 20150

**AMEREX
RESTAURANT
FIRE SUPPRESSION SYSTEM**

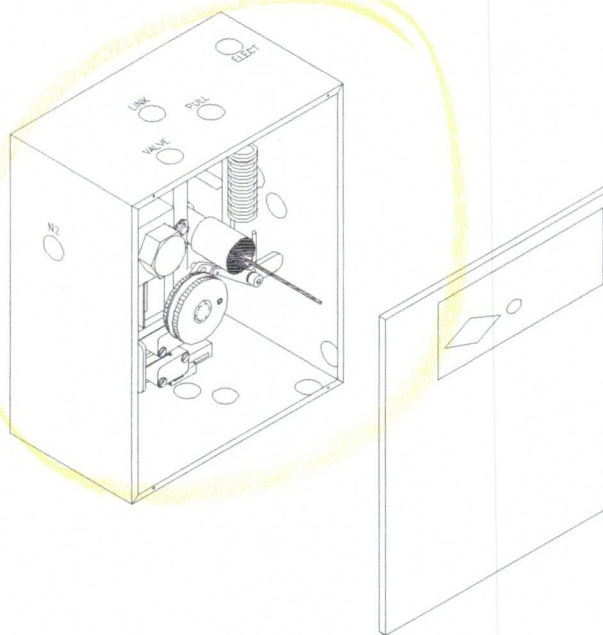
TESTED AND LISTED BY
UNDERWRITERS LABORATORIES
TO UL STANDARD 300
and
UNDERWRITERS LABORATORIES OF
CANADA ULC/ORD 1254.6-1995*

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A Factory Trained and Authorized Distributor must perform the installation and service of any Amerex Restaurant Fire Suppression System in strict accordance with this manual.

* ULC Certification does not apply to the STRIKE™ or SRM.



Wide x 5" Deep x 11 3/4" High.

MECHANICAL RELEASE MODULE II - (P/N 11977) WITHOUT AN ENCLOSURE

NOTE: This version of the MRM II is a direct replacement for the old style MRM. It carries the same part number as the original MRM.

The Mechanical Release Module II is used to actuate the agent cylinder discharge valve either automatically or manually by puncturing a nitrogen cylinder.

Automatic release of agent is accomplished when a fusible link detector separates during a fire condition. This causes a spring-loaded plunger to perforate the rupture disc and releases nitrogen through the actuation hose/piping network to the agent cylinder discharge valve(s).

Manual release of agent is accomplished by pulling on a manual pull station which is connected to the Mechanical Release Module II by a cable.

The Mechanical Release Module II is equipped with two **snap action switches**, one (P/N 12524) for electrical signaling, power shutdown and other auxiliary functions and a second (P/N 18312) alarm initiating snap action switch for connection to a fire alarm panel. An additional two snap action switches may be added.

Operation of one or two mechanical gas valves may be accomplished by adding a **Gas Trip Assembly (P/N 12740)**.

The cable for the gas valves, manual pull stations and detection network may be attached to the MRM II from either of two sides (top or bottom).

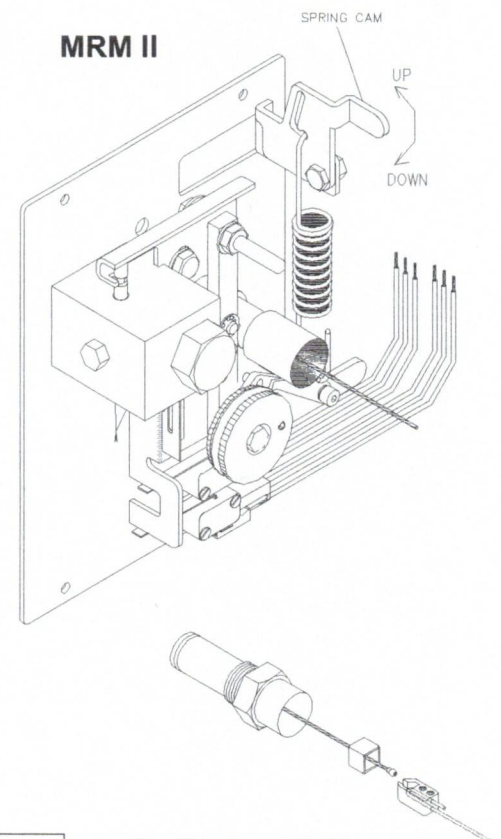
MECHANICAL RELEASE MODULE II (MRM II)

P/N 18000: MRM II with Red-painted Steel Enclosure

P/N 18001: MRM II with Stainless Steel Enclosure

The new MRM II combines the same features and functionality as the original MRM along with increased detection capabilities and a far simpler means of setting the detection cable tension. The MRM II is available in the above configurations, now pre-installed in its own enclosure.

The method of setting the detection cable tension on the **MRM II** does not require the use of any tools (once the cable is locked down into the large, knurled wind-up spool). A large lever to the right of the spool is used to increase the cable tension. Alignment of the bottom edge of the lever with markings on a label on the mounting plate indicates when the proper tension has been achieved. In addition to being easier to set up, lowering cable tension to change out detection links is now also much simpler. The enclosure is 10"



Gas Trip Asy - 12740

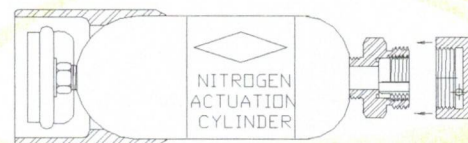
NITROGEN ACTUATION CYLINDER:**10 in³ N₂ Actuation Cylinder (P/N 12856)****15 in³ N₂ Actuation Cylinder (P/N 09956)**

The N₂ Actuation Cylinder supplies nitrogen gas pressure to the Agent Cylinder Discharge Valve through the actuation network for the purpose of opening the Agent Cylinder.

The 10 in³ N₂ Actuation Cylinder, P/N 12856, is charged to 1800 psig (12410 KPa) at 70°F (21°C) and contains enough nitrogen to actuate up to **ten total of Models 275 / 375 / 475** Agent Cylinders Assemblies in any combination **OR** a total of **six** Model **600** Agent Cylinders Assemblies **OR** a **total of six** Agent Cylinders when the **mix contains at least one Model 600** Agent Cylinder Assemblies.

The 15 in³ N₂ Actuation Cylinder, P/N 09956, is charged to 1800 psig (12410 KPa) at 70°F (21°C) and contains enough nitrogen to actuate up to **ten total of Models 275 / 375 / 475 & 600** Agent Cylinders Assemblies in any combination.

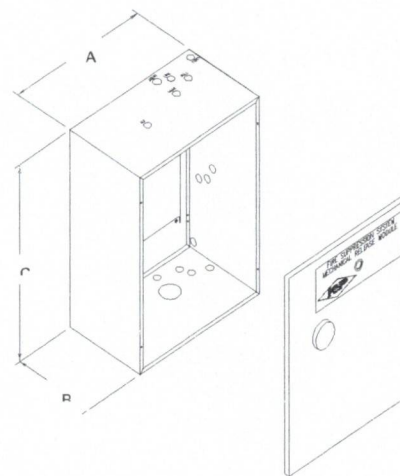
A maximum distance of 100 feet (21.3 meters) to the last control head is possible when using the specified copper tubing. Pressure is retained in the N₂ Actuation Cylinder by a gold plated rupture disc. Replacement rupture discs are available, P/N 09958. Only genuine Amerex rupture discs may be used when recharging Nitrogen Actuation Cylinders. Proper charge pressure is indicated by a pressure gauge located on the cylinder's bottom and protected by an impact resistant plastic gauge guard. The N₂ Actuation Cylinder is shipped fully charged from the Amerex factory with a protective shipping cap installed on the outlet threads. The cap must be removed at installation but must remain in place at all other times. (Retain the shipping cap to reuse when recharging the N₂ Actuation Cylinders.) Construction of the N₂ Actuation Cylinder is per DOT 3E. The cylinder is rechargeable by certified Amerex installers and does not require periodic hydro-testing. The 10 in³ Nitrogen Actuation Cylinder may be used in the MRM, MRM II or PRM. The 15 in³ Nitrogen Actuation Cylinder may be used only with the ECH.



Part No.		12856
Diameter	1.998 in	5.07 cm
Length	6 3/8 in	16.19 cm
Pressure @ 70°F	1800 PSI	12411 kPa
Part No.		09956
Diameter	1.998 in	5.07 cm
Length	9.44 in	24 cm
Pressure @ 70°F	1800 PSI	12411 kPa

CABINET (P/N 11978)

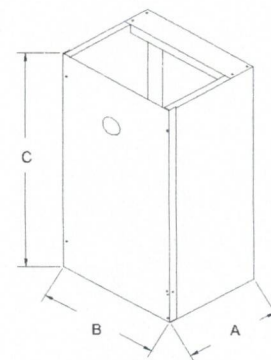
Stainless steel cabinets are available for single cylinder systems. The cabinet will house one model 275 or 375 Agent Cylinder Assembly, the agent cylinder mounting bracket and a Mechanical Release Module which are purchased separately.



P/N 11978	U.S.	Metric
(A) Width	20 1/2"	52.07 cm
(B) Depth	10 3/4"	27.3 cm
(C) Height	26 1/4"	66.68 cm

275 / 375 / 475 CYLINDER ENCLOSURE (P/N 16814)

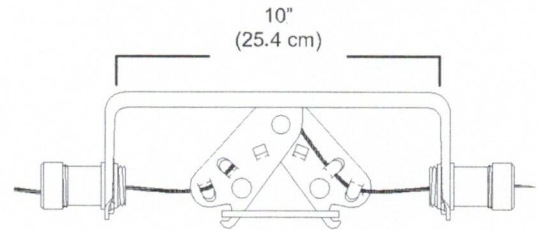
Stainless steel enclosure is available for a single model 275 / 375 / 475 Agent Cylinder Assembly. The enclosure will house a 275 / 375 / 475 Agent Cylinder Assembly and **does not require** the use of a cylinder mounting bracket nor a distributor. The enclosure includes a swivel adapter for connection of the cylinder to the discharge piping.



P/N 16814	U.S.	Metric
(A) Width	14"	35.6 cm
(B) Depth	11"	27.9 cm
(C) Height	26 1/4"	66.68 cm

DETECTOR BRACKET ASSEMBLY (P/N 12508)

Each detector bracket in the Amerex Kitchen Fire Suppression System is comprised of three parts: the detector bracket, detector linkage and two EMT fittings. The fusible link is ordered separately. The bracket serves as support for the linkage and is attached to a rigid surface. The linkage supports the fusible link and a continuous cable run under tension. At a predetermined temperature the fusible link will separate, relieving tension on the cable and actuating the system.



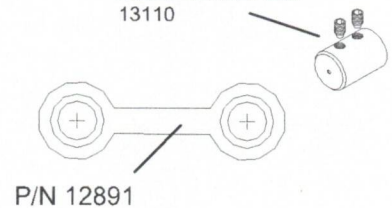
Fusible link not included with detector

This manual will refer to series and terminal detectors. There is no difference in part numbers or dimensions between series and terminal detectors. A terminal detector is the last or only detector in the network and the cable must be "terminated" there. A series detector is any detector located between the terminal detector and the mechanical release module in the detection network.

TEST LINKS (P/N 12891)

Test links are available for conducting functional tests of the detection system. This device fits the detector linkage in the same manner as the fusible link, is normally placed on the terminal detector and can be cut, simulating a fusible link separating under fire conditions.

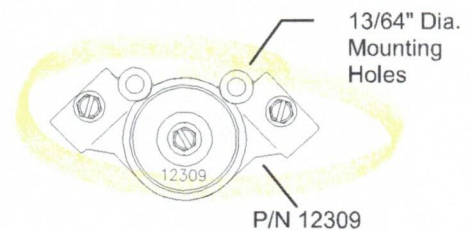
Cable Terminal End
13110



P/N 12891

CORNER PULLEY (P/N 12309)

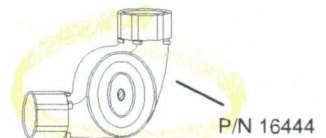
The Amerex Kitchen Fire Suppression System uses a "high temperature" corner pulley to change direction of the cable by 90°. This corner pulley may be used in environments with temperatures up to 700°F (371°C). Mounting holes are provided for anchoring the corner pulley **where allowed by local codes**.



P/N 12309

CORNER PULLEY (P/N 16444)

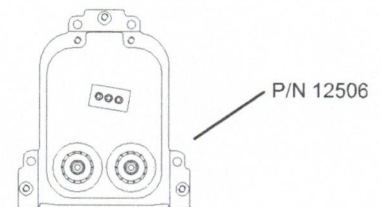
The Amerex Kitchen Fire Suppression System also use a "high temperature" compression corner pulley to change direction of the cable by 90°. (This compression corner pulley [Brooks Model CP5] allows complete assembly of conduit and corner pulleys prior to installing the cable).



P/N 16444

PULLEY TEE (P/N 12506)

A pulley tee is used to change the direction of two cables by 90°. This device can be used with mechanical gas valves and manual pull stations but **not fusible link detectors**. It cannot be used where temperatures exceed the range of 32° - 120°F (0° - 49°C).



P/N 12506

CABLE (P/N 12553)

Cable is used to run from the MRM, MRM II or PRM, through conduit and corner pulleys to detectors, mechanical gas valves or manual pull stations. It is 1/16 inch diameter, stainless steel (7 x 7 – 480# tensile strength) – available in 500 foot (152 m) spools (P/N 12553).

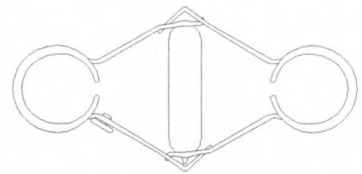
EYEBOLT SUPPORT (P/N 17520)

Eyebolt supplied with one Hex. Nut used to lock the eyebolt into final position. Eyebolt is used to support bare cable run in plenum of the hood in a **Linear Fusible Link Detection System**.



JOB LINKS

Four temperature ratings of the Job Links are available. They are constructed of two metal struts held intension by a small, glass bulb that ruptures at the appropriate temperature rating. The detector bracket (P/N 12508) will support either the Globe Type 'K' fusible links or the Job links, and the same detector limitations apply for both types of detector.



Job Quick Response Link
Load Limit: 1 to 55 lb.

Part No.	Response Type	Link Rating		Max. Ambient Temperature	
16225	Quick	200°F	93°C	150°F	66°C
16226	Quick	286°F	141°C	225°F	107°C
16227	Quick	360°F	182°C	300°F	149°C
16445	Quick	450°F	232°C	375°F	191°C
16446	Quick	500°F	260°C	425°F	218°C

FUSIBLE LINKS

Four temperature ratings of fusible links are available. They are of the electric solder type link which will melt at a predetermined temperature allowing the two halves of the link to separate.

**Globe Type "K"**

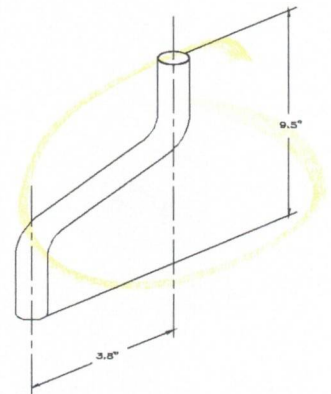
Load Limit: Maximum Load – 50 lbs. (22.68 Kg)
Minimum Load - 3 lbs. (1.37 Kg)

EXPOSURE LIMIT				
Part No.	Link Rating		Max. Ambient Temperature	
12326	212°F	100°C	150°F	66°C
12327	280°F	138°C	225°F	107°C
12328	360°F	182°C	300°F	149°C
12329	450°F	232°C	375°F	191°C

Temperature and year of manufacture are stamped on each link.

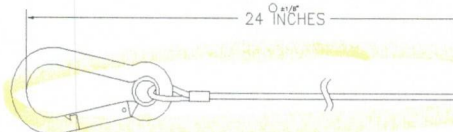
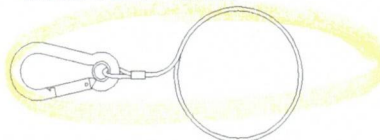
CONDUIT OFFSET (P/N 12507)

The conduit offset is used to allow a smooth transition for cable runs into or out of the MRM, MRM II & PRM without using pulley elbows. It may be used with the detection network, manual pull stations or mechanical gas valve actuation network. The use of this device does not reduce the maximum number of corner pulleys allowed in the system. **THE CONDUIT OFFSET MAY ONLY BE ATTACHED TO THE ENCLOSURE OF EITHER THE MRM, MRM II OR THE PRM.**

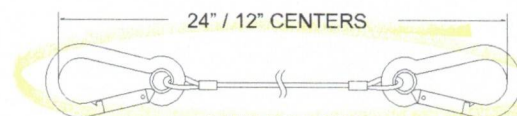
**FUSIBLE LINK TERMINATION KIT (PN 17515)**

The kit consists of four major components, their part numbers and quantities per kit are provided in the table. The kit contains the necessary cable segments and hardware for the beginning and end termination of the Linear Fusible Link Detection network.

QTY.	DESCRIPTION
1	EMT CONDUIT CONNECTOR 1/2"
1	CABLE SEG. – MRM TO 1 ST LINK – 30 FEET
1	CABLE SEG. – LINK TO TERMINATION
1	HANDY BOX – ½ CONDUIT BOX

MRM TO 1ST LINK**LINK TO TERMINATION**
CABLE SEGMENT – LINK TO LINK
PN17354 – 24" CENTERS
PN19155 – 12" CENTERS

The Link to Link cable segment PN17354 insures that the links in the linear fusible link detection system are spaced at the maximum 24" centers to center distance. The Link to Link cable segment PN19155 places links 12" apart center to center. It will assist in locating links in the hood duct opening when the two ducts are an odd distance apart.

**LINK TO LINK**

MANUAL PULL STATION (P/N 11993)

Every Amerex Kitchen Fire Suppression System must use at least one Manual Pull Station. This device provides a means of discharging the system manually. Manual Pull Stations should be located in a **PATH OF EGRESS** and mounted at a height conforming to the local code requirements. The Manual Pull Station may be recessed or surface mounted, see "Installation", Section 4, Page 11 for details.

MANUAL PULL STATION ADAPTER KIT (P/N 14193) (for use with manual pull station P/N 11993)

When recessing the manual pull station the adapter kit compensates for the additional wall thickness and provides an oversized cover for the wall opening.

MANUAL PULL STATIONS (OVERSIZED - P/N 14320)

This Manual Pull Station is to be recess mounted. The oversized cover is large enough to cover sheetrock access hole for the standard 4" octagonal box and remain attractive and functional. Manual Pull Stations should be located in the **path of egress** and mounted at a height conforming to the local Authority Having Jurisdiction.

MANUAL PULL STATION (COMBO PACK)

(ENG. – P/N 21481)

(ENG. / FRENCH – P/N 22117)

(ENG. / SPANISH – P/N 22116)

This Manual Pull Station may be either surface or recess mounted. The oversized cover is large enough to cover the sheetrock access hole for the standard 4" octagonal box and remain attractive and functional. Manual Pull Stations should be located in the **path of egress** and mounted at a height conforming to the local code requirements.

"QUICK-SEAL" ADAPTER

(3/8" pipe – P/N 12276 – HOLE SIZE 1 1/8" DIA.)

(1/2" pipe – P/N 14204 – HOLE SIZE 1 1/8" DIA.)

(1" pipe – P/N 18252 – HOLE SIZE 1 5/8" DIA.)

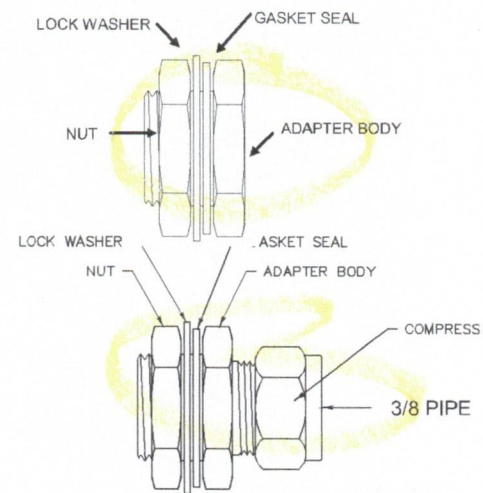
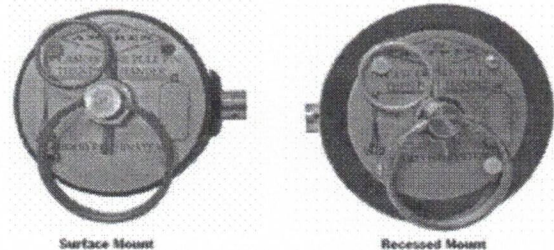
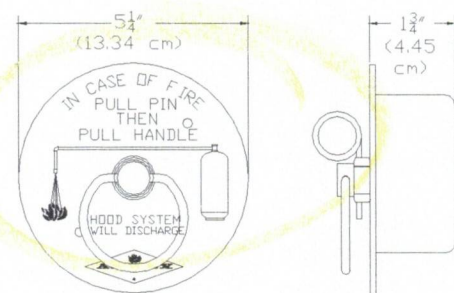
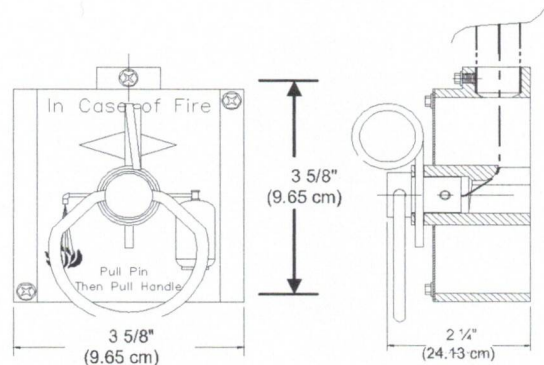
This listed mechanical bulkhead fitting produces a liquid tight seal around distribution piping where the piping penetrates hoods or ducts. The "quick-seal" adapter is available in 3/8" and 1/2" NPT.

"COMPRESSION SEAL" ADAPTER

(3/8" pipe – P/N 12510 – HOLE SIZE 1 1/8" DIA.)

(1/2" EMT – P/N 12512 – HOLE SIZE 1 1/8" DIA.)

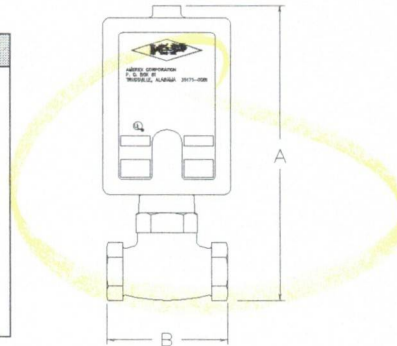
The compression seal adapter is a "listed mechanical bulkhead" fitting that produces a liquid tight seal around pipe or conduit when making penetrations in a hood or duct. Unlike the quick-seal adapter, the compression seal adapter is not threaded to accept pipe and does not require conduit or pipe to be cut or threaded. It is available in 3/8" and 1/2" sizes.



AMEREX MECHANICAL GAS SHUT-OFF VALVE

All Amerex Kitchen Fire Suppression Systems protecting gas-fired cooking appliances must use a gas shut-off valve listed for use with the system. The Amerex Mechanical Gas Valves are held open with a latching device. Upon system discharge a piston in the MRM, MRM II or PRM will pull on a cable connected to the latch in the gas valve actuation box, releasing the latch and allowing the gas valve spring to close the valve. These valves are considered to be "Normally Closed – Held Open". The valve bodies are made of brass and threaded with female NPT threads on both ends and are UL listed for natural gas and propane in ¾", 1", 1¼", 1½", and 2" sizes. The Gas Trip Assembly PN12740 is included with all Amerex Gas Valves.

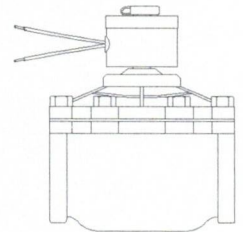
Part No.	Size	A	B	Pressure
12790	¾ in.	10 5/16 in. (26.194 cm)	3 ¾ in. (9.525 cm)	10 PSIG (69 kPa) Max.
12791	1 in.			
12792	1¼ in.	11 9/16 in. (29.369 cm)	4 7/8 in. (12.383 cm)	
12793	1 ½ in.			
12794	2 in.	12 ½ in. (31.75 cm)	6 in. (15.24 cm)	



ELECTRIC GAS SHUT-OFF VALVES

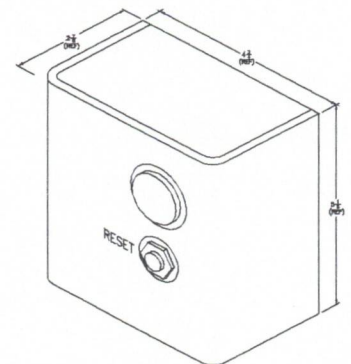
Electric gas shut-off valves operate on 110 VAC current which powers a solenoid holding the valve open against a spring. Upon system discharge current to the solenoid is interrupted by a micro switch in the MRM, MRM II or PRM causing the valve to shut. A loss of electrical power will also cause an electrical gas valve to close. A Manual Reset Relay must be used with each electric gas valves. UL listed sizes are ¾", 1", 1¼", 1½", 2", 2½", 3".

Part No.	Size	Manufacturer
12870	¾ in.	ASCO
12871	1 in.	
12872	1 ¼ in.	
12873	1 ½ in.	
12874	2 in.	
12875	2 ½ in.	
12876	3 in.	



MANUAL RESET RELAY (P/N 12526)

Anytime an electrical gas valve is connected to an Amerex Kitchen Fire Suppression System, a Manual Reset Relay must be used. After an electrical gas valve has closed (either because of system discharge or because of power failure), the gas valve cannot be opened without manually pressing the reset button on the Manual Reset Relay. This operation is to guard against a momentary loss of power closing the valve, extinguishing the pilot lights and allowing gas to escape when power is restored. The Manual Reset Relay is UL listed and has a pilot lamp to indicate its status.



DESCRIPTION: MANUAL RESET RELAY

CONTACT CONFIGURATION: DOUBLE POLE, SINGLE THROW

MINIMUM CONTACT RATING: MTR LOAD = 8 AFL, 48 ALR, 120 VAC

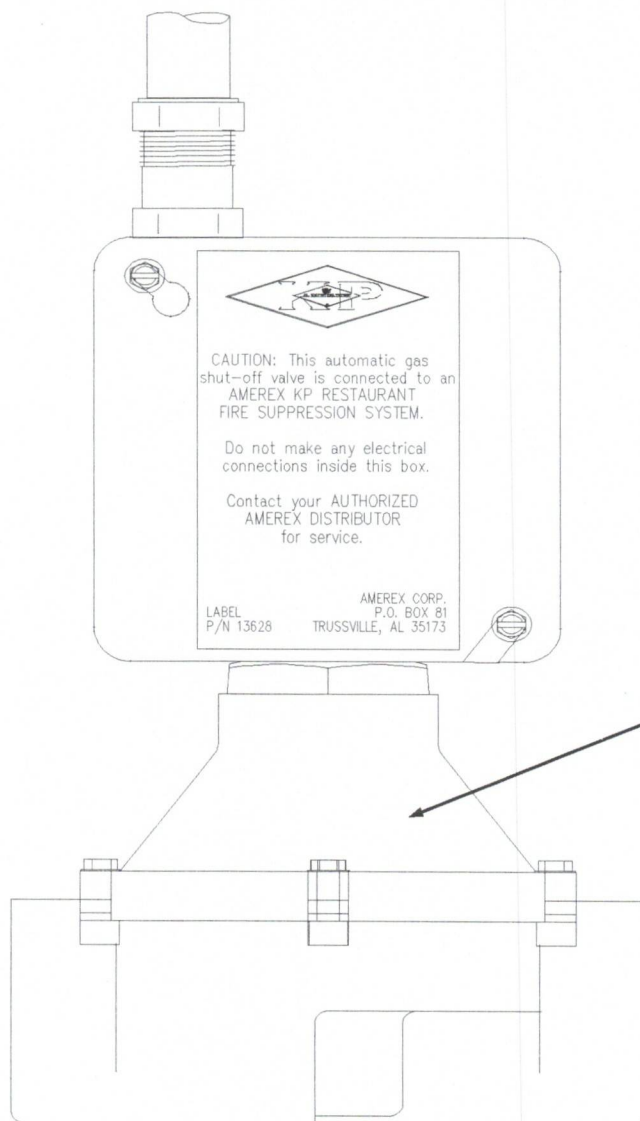
RES LOAD = 8A, 120 VAC

PILOT DUTY 120 VA, 120 VAC

MECHANICAL GAS VALVE KIT (P/N 13622)

The Amerex Gas Valve Kit provides a means of converting a standard "release to close" ASCO gas shut-off valve to a "pull to close" type gas shut-off valve that has been listed with the system. The gas valve is held open by a latching device. Upon system discharge a piston in the Mechanical Release Module will pull on a cable connected to the latch on the gas valve, release the latch and allow the spring in the gas valve to close the valve. The kit must be used with the ASCO valves listed here to complete the UL listing of the Amerex Kitchen Fire Suppression system, ASCO valves are purchased separately. See Section 4, Page 17 & 18 for installation instructions.

NOTE: P/N 13622 ASCO Mechanical Gas Valve Kit is sold separately from the Gas Valve. A gas trip assembly, P/N 12740, is also required when using any of these valves.



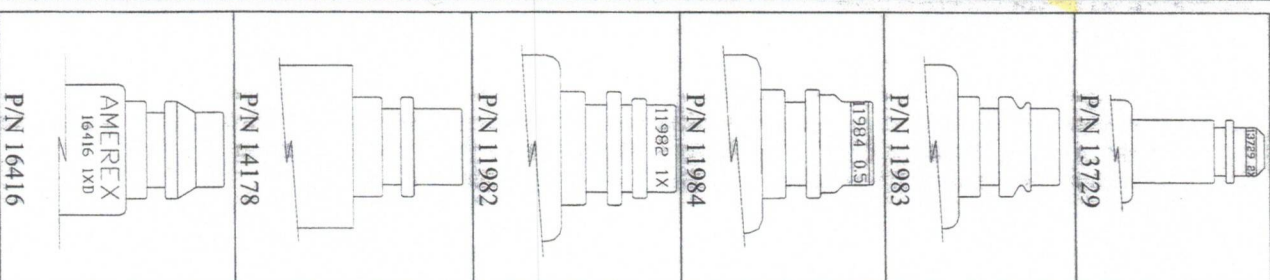
APPLICATIONS		
Amerex Part No.	ASCO Part No.	Size
13772	HV216-585-1	¾"
13773	HV216-585-2	1"
13774	HV216-585-3	1¼"
13775	HV216-585-4	1½"
13776	HV216-585-5	2"

ASCO Gas Shut-Off Valves must be purchased separately

AMEREX KP RESTAURANT SYSTEM NOZZLE APPLICATION CHART

Appliance	Nozzle P/N	Flow Points	Width	Length	Min. Height	Max. Height
Deep Fat Fryer - without Drip Board	13729	2	19 1/2 in.	19 in.	36 in.	48 in.
Deep Fat Fryer - with Drip Board	13729	2	19 1/2 in.	25 3/8 in.	36 in.	48 in.
Deep Fat Fryer - without Drip Board	13729	2	26	24	36 in.	48 in.
Deep Fat Fryer - with 1" Drip Board	13729	2	26	25	36 in.	48 in.
Deep Fat Fryer - with Drip Pan Low Proximity	2-11982	2	19 1/2 in.	25 3/8 in.	17 1/2 in.	36 in.
Range - Single Burner	11984	1 1/2	18 in.	18 in.	20 in.	42 in.
Range - Two Burner (14" Burner)	11982	1	14 in.	28 in.	44 in.	48 in.
Range - Two Burner (12" Burner)	11982	1	12 in.	24 in.	36 in.	50 in.
Range - Two Burners w/Back Shelf (12" Burner)	11982	1	12 in.	24 in.	40 in.	47 in.
Low Back Shelf/Salamander - BS Manifold	17461	1	14 in.	42 in.	14 in.	19 in.
Range - Three Burners (Special Aiming)	2-11984	1	12 in.	36 in.	20 in.	30 in.
Range - Four Burners (12" Burner)	14178	2	24 in.	24 in.	18 in.	50 in.
Wok	11982	1	14-24 dia.	4-7 depth	40 in.	50 in.
Griddle	11982	1	30 in.	36 in.	30 in.	48 in.
Griddle - Overhead Protection	13729	2	30 in.	42 in.	38 in.	50 in.
Griddle	14178	2	30 in.	48 in.	15 in.	50 in.
Upright Broiler	2-11984	1	30 1/2 in.	28 1/2 in.	-	-
Charbroiler (Lava Rock)	11983	1 1/2	24 in.	24 in.	18 in.	44 in.
Charbroiler (Gas Radiant & Electric Radiant)	11982	1	24 in.	24 in.	18 in.	48 in.
Chain Broiler - Closed Top	11982	1	24 1/2 in.	31 in.	-	-
Chain Broiler - Open Top	13729	2	24 1/2 in.	31 in.	12 in.	36 in.
Chain Broiler - Nisco Model 9025 /Catalyst (2)	4-11982	4	18 in.	24 in.	13 in.	36 in.
Chain Broiler - Duke (with / without Catalyst or Damper)	2-13729	4	-	-	15 in.	30 in.
Natural & Mesquite Charcoal Charbroiler	11983	1 1/2	24 in.	28 1/2 in.	16 in.	42 in.
Mesquite Chips & Chunks Charbroiler	11983	1 1/2	24 in.	28 1/2 in.	16 in.	48 in.
Mesquite Log Charbroiler	11983	1 1/2	24 in.	28 1/2 in.	19 in.	44 in.
Plenum	Nozzle P/N	Flow Points	Width	Length		
Single Bank/V-Bank	11982	1	4 ft.	10 ft.		
Duct	Nozzle P/N	Flow Points	Max. Perimeter	Diameter	Length	Max. Diagonal
Rectangular	16416	1	50 in.	-	Unlimited	18.8 in.
Circular	16416	1	-	16 in.	Unlimited	-
Rectangular	2-16416	2	51 to 82	-	Unlimited	18.8 in.
Circular	2-16416	2	-	26 in.	Unlimited	-
Rectangular	2-11983	3	100 in.	-	Unlimited	37.2 in.
Circular	2-11983	3	-	32 in.	Unlimited	-
Rectangular	3-11983	4 1/2	150 in.	-	Unlimited	55.9 in.
Circular	3-11983	4 1/2	-	48 in.	Unlimited	-

Protection is not limited to the items listed on this chart. Modulating larger appliances are an acceptable practice. See your Amerex KP Manual for additional information.



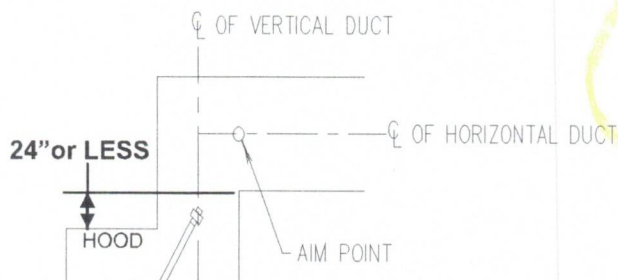
DUCT PROTECTION

NOTE: An Amerex KP & ZD Kitchen Fire Suppression System have the same listed criteria for the protection of the Duct and Plenum.

DUCT PROTECTION LIMITATIONS SINGLE NOZZLE (P/N 16416)

The Amerex Duct Nozzle (P/N 16416) is listed to protect restaurant cooking ducts of unlimited length up to 50 perimeter inches (127 cm) or 16 diameter inches (40.6 cm) using one nozzle. The nozzle has one flow point and must be centered within the duct, placed 2 – 8 inches (5.08 – 20.32 cm) into the duct opening and aimed at the center of the cross section of the duct.

NOTE: In no case shall the diagonal dimension of the duct exceed 18.8 inches without additional duct nozzles.

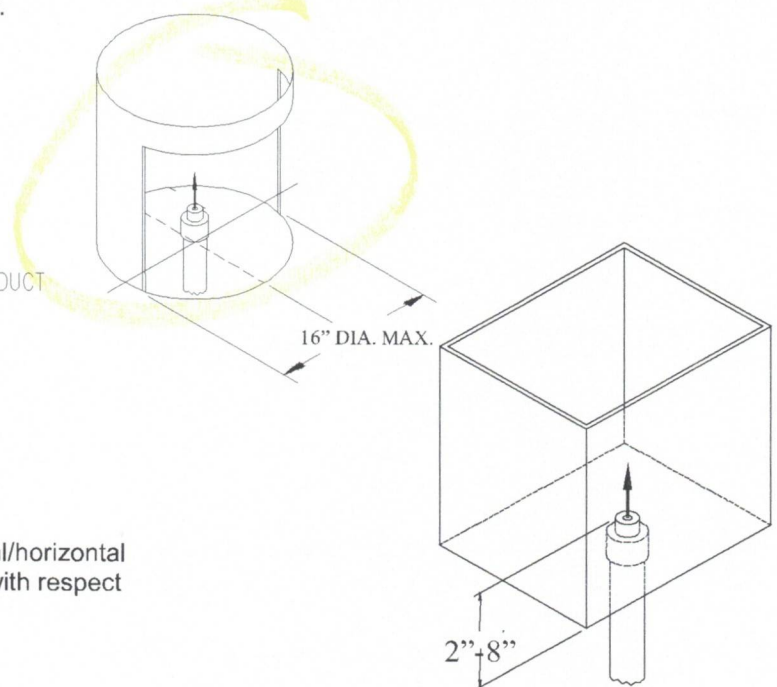
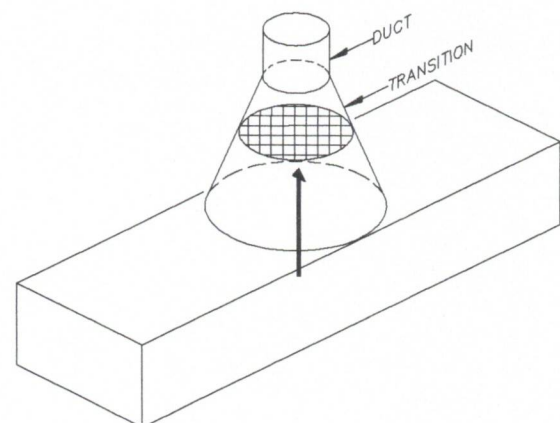
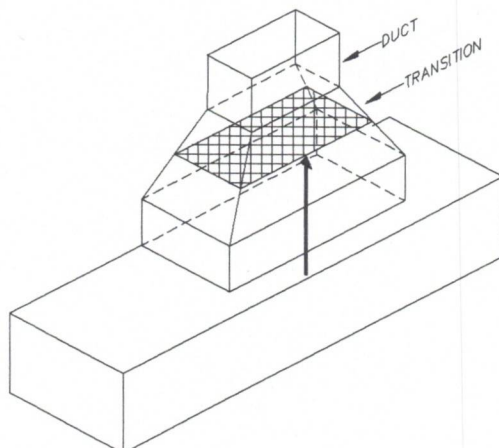


**Vertical / Horizontal Transition
with a rise of 24" or less.**

Special Note: For ducts with short vertical/horizontal transitions reference the diagram above with respect to nozzle aim.

TRANSITION LIMITATIONS – SINGLE NOZZLE (P/N 16416)

A transition is a section found on some exhaust systems between the hood and the duct. One Amerex duct nozzle (P/N 16416) will protect a transition at the point where the transition is 50 perimeter inches (127 cm) or less or a diameter of 16 inches (40.6 cm) or less. The nozzle has one flow point and must be placed in the center of the opening at the point where the perimeter inches are 50 (127 cm) or less or where the diameter inches are 16 (40.6 cm) or less and aimed at the center of the cross section on the duct. Additional duct protection is not required when using this method.

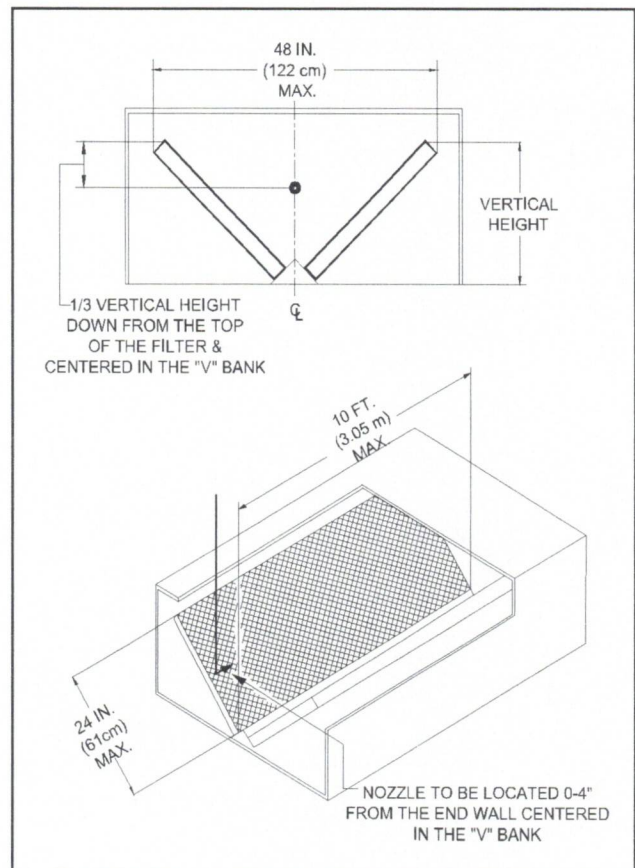
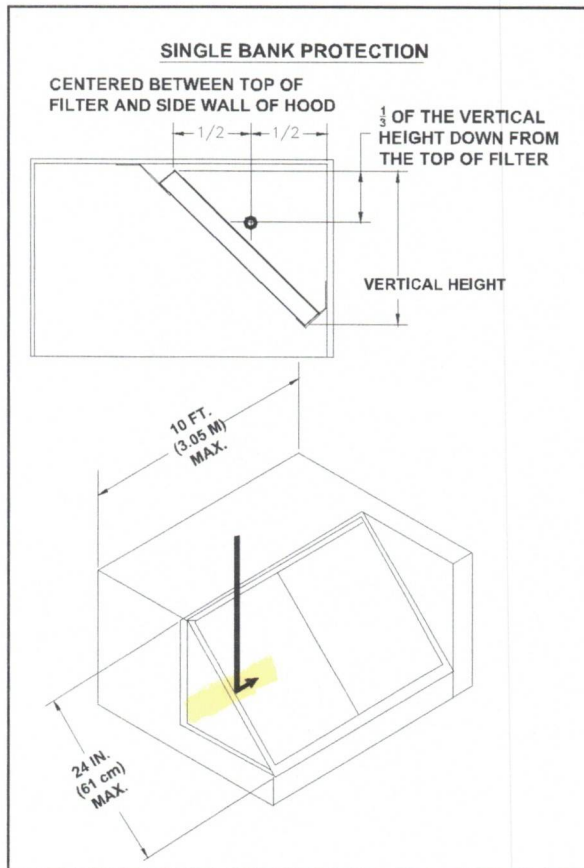


PLENUM PROTECTION

NOTE: An Amerex KP & ZD Kitchen Fire Suppression System have the same listed criteria for the protection of the Duct and Plenum.

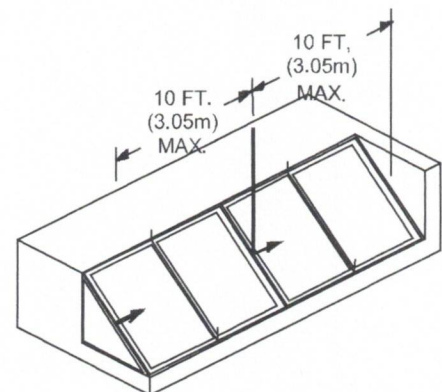
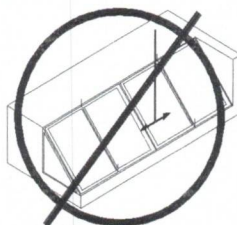
PLENUM PROTECTION LIMITATIONS – SINGLE FLOW POINT NOZZLE (P/N 11982)

The Amerex Appliance, Plenum Nozzle (P/N 11982) is capable of protecting plenums up to 10 feet (3.048m) long with either a single inclined filter bank or a "V" bank filter arrangement. The filter height cannot exceed 24 inches (60.96 cm). Each plenum nozzle uses one flow point. The nozzle must be positioned 4 inches (10.16) maximum from the end wall of the hood, aimed horizontally and positioned down 1/3 the vertical filter height from the top of the filter. The width of a "V" bank filter arrangement is limited to a maximum of 48" (122 cm).



PLENUM PROTECTION – MULTIPLE NOZZLES

Plenums exceeding 10 feet (3.048 m) in length may be protected by using multiple plenum nozzles. Each nozzle must be protecting an area of no more than 10 feet in length. Nozzles may be positioned facing each other or facing the same direction as long as the entire plenum area is being covered. Nozzles may not face in opposite directions from a common tee.





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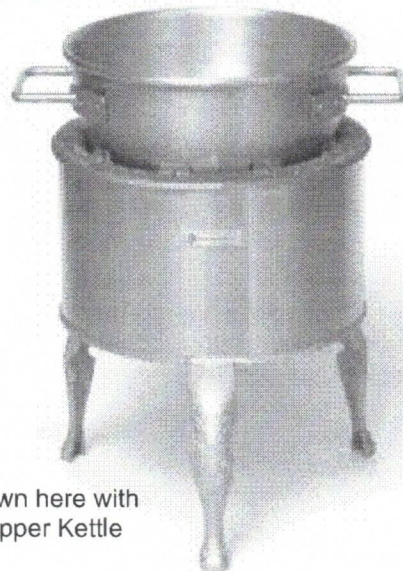
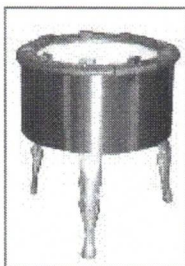
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Gas Candy Stove

A tradition to the candy industry for over five generations

Our gas candy stoves use our even heat jet system. Natural or propane gas compatible, made with a stainless steel outer shell, cast aluminum legs, safety gas pilot, and built to last for many years. It's no wonder that **SAVAGE BROS.** has been the candy industry leader for over 150 years.

Even heat jet
burner system



Shown here with
Copper Kettle

Choose the gas stove that best suits your *business*:

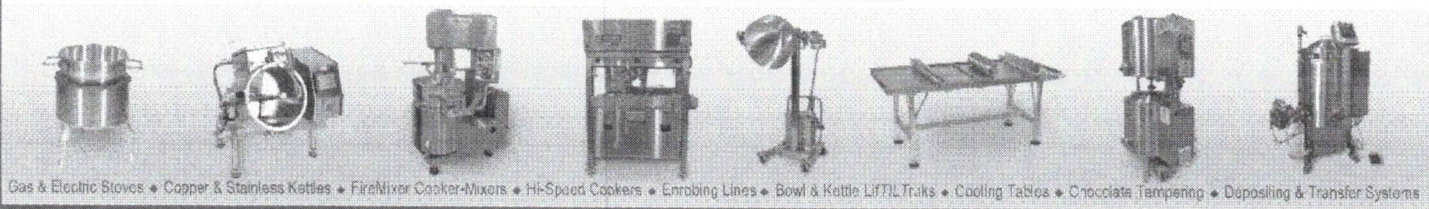
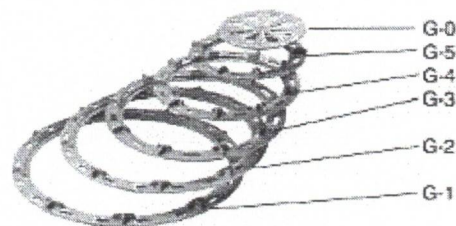
STOVE TYPE	#20 Gas Stove	#33 Gas Stove
Certification	CSA* Gas & Sanitation Certified	
BTU Rating	80,000 BTU	140,000 BTU
Gas Line	1/2 NPT input pipe	3/4 NPT input pipe
Burners and Jets **	Cast iron – 32 jets	Cast iron – 44 jets
Construction	Insulated double wall steel	Double wall steel with ceramic lining
Dimensions	31.2" dia. X 27.2"H / 793mm X 691mm	33.9" dia. X 26.6"H / 861mm X 676mm
Kettle Size – Best	20 x 11 in (11 gal) 500 x 290 mm (41.8 L)	24 x 14 in (20 gal) 560 x 350 mm (57 L)
Kettle Size – maximum	20 x 16 in (15 gal) 500 x 400 mm (57.0 L)	24 x 16.75 in (27 gal) 610 x 425 mm (102 L)

** Specify high altitude jets, if required

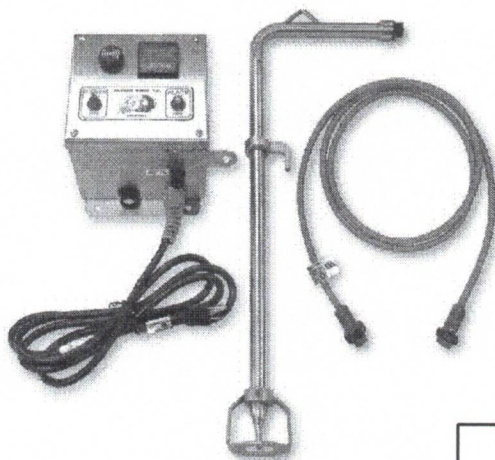
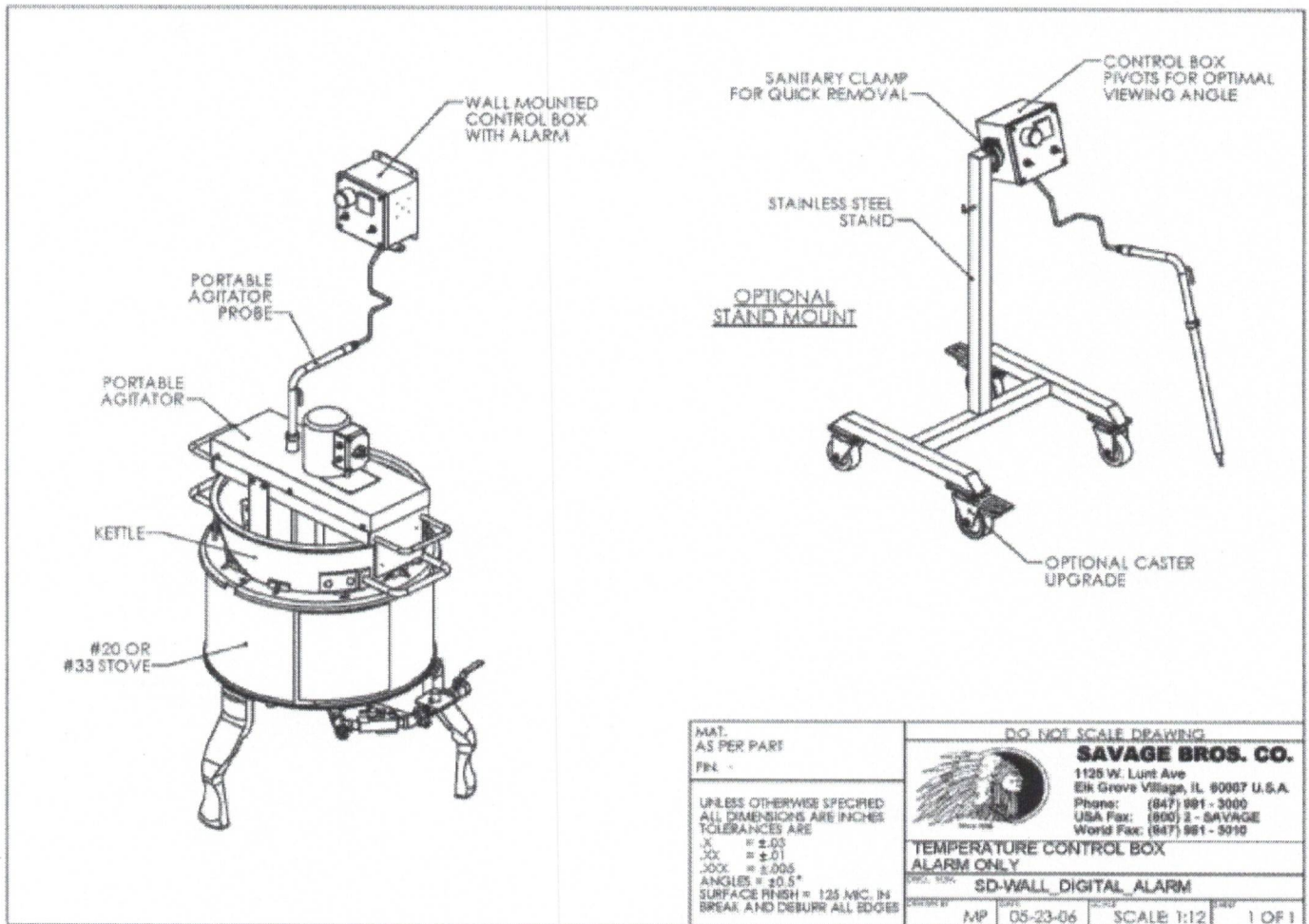
* USA & Canada mark for gas appliance certification

Optional reducing rings: Circles of cast iron which allow you to use smaller kettle sizes on any **SAVAGE BROS.** gas stove. The rings nest in position on the cast iron stove top and create a strong solid support surface for smaller kettles or if a complete set is used, a flat bottomed pot.

Item Description	Inside Diameter	Best Kettle Size	Stove model # & ring part #	
			Model #20	Model #33
Full Set			#0222 (5 Rings)	#0232 (6 Rings)
Ring G-1	17 1/2 in	Any 20 in	N/A	#0201
Ring G-2	15 1/4 in	18 x 10 in	#0202	#0202
Ring G-3	12 5/8 in	16 x 9 in	#0203	#0203
Ring G-4	10 in	14 x 8 in	#0204	#0204
Ring G-5	7 1/4 in	10 & 12 in	#0205	#0205
Ring G-0	Vented disc	Flat pot	#0206	#0206



Gas & Electric Stoves • Copper & Stainless Kettles • FireMixer Cooker-Mixers • Hi-Speed Cookers • Enrobing Lines • Bowl & Kettle Lift/L TruLs • Cooling Tables • Chocolate Tempering • Depositing & Transfer Systems

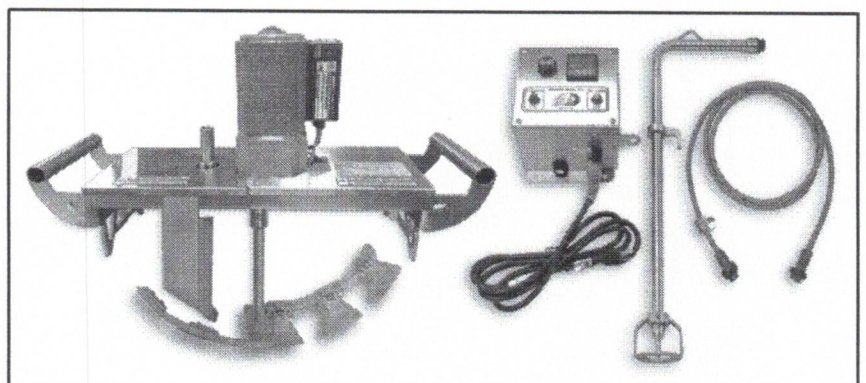
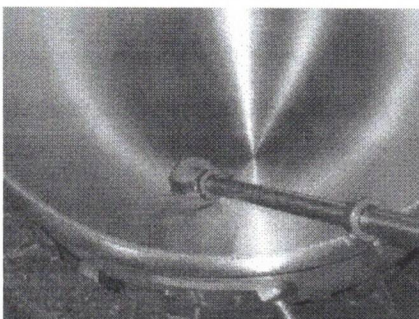


Savage Bros Wall-mount Digital Temperature Unit

- * Audible Alarm in advance of temperature set-point
- * Stainless steel probe monitors batch temperature
- * Probe fits into top of Portable Agitator or use hook to hang directly in kettle if no Portable Agitator
- * Tip Guard on end of probe to keep tip elevated off kettle bottom and protect probe tip from damage.

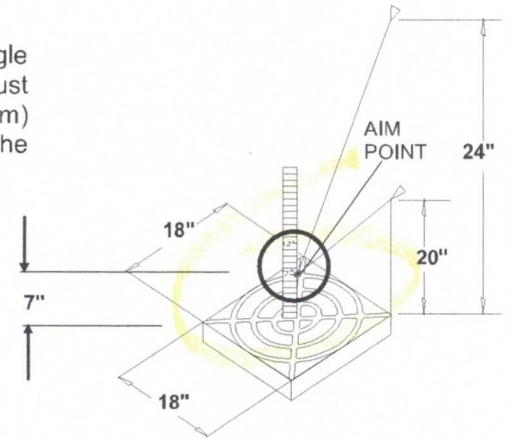
Standard is Wall-mount version / Stand-mount version available

Also available digital temperature unit to **control** gas stove burner. **ASK!**

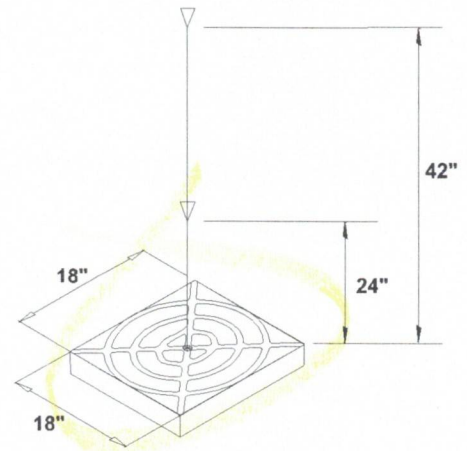


SINGLE BURNER RANGE PROTECTION**ONE – ½ FLOW POINT NOZZLE (P/N 11984)**

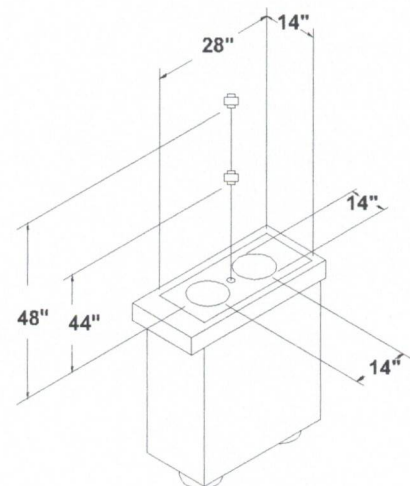
The Amerex half (½) flow point nozzle (P/N 11984) will protect a single burner with a surface area of 18" x 18" (46 x 46 cm). The nozzles must be located on the perimeter of the burner and 20 to 24" (51 – 61 cm) above the burners surface. The nozzle is aimed at a point 7" above the center of the burner.

**SINGLE BURNER RANGE PROTECTION – OVERHEAD****ONE – ½ FLOW POINT NOZZLE (P/N 11984)**

The Amerex half (½) flow point nozzle (P/N 11984) will protect a single burner with a surface area of 18" x 18" (46 x 46 cm). The nozzles must be located directly above the center of the burner and 24 to 42" (61 - 107 cm) above the burners surface. The nozzle is aimed at the center of the burner.

**TWO BURNER RANGE PROTECTION –
SINGLE FLOW POINT NOZZLE (P/N 11982)**

The Amerex appliance, plenum nozzle (P/N 11982) has one flow point and will protect a range surface area of 14" x 28" (36 x 71 cm). The center to center distance between burners must not exceed 14" (36 cm). The nozzle must be located 44 - 48" (112 - 122 cm) above the range surface and centered between the two burners. The range surface area is measured from the outside of the burner to the outside of the burner.



NOTE: Maximum and minimum heights must be measured from the tip of nozzle to the surface of the appliance.