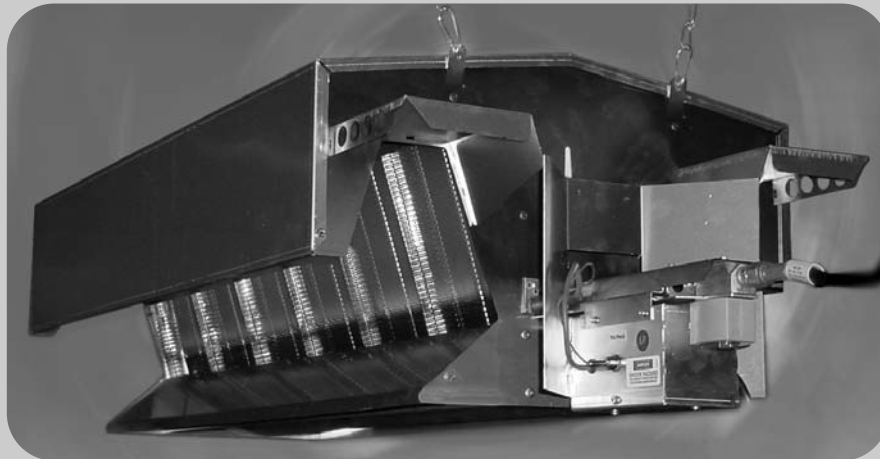


CHORE-TIME®



GENERATION 2 QUADRATHERM® Heater

FOR YOUR SAFETY

If you smell gas:

1. Open Windows
2. Don't touch electrical switches
3. Extinguish any open flame
4. Immediately call your gas supplier

POUR VOTRE SURETE

Si vous sentez une odeur de gaz:

1. Ouvrez les fenêtres
2. Ne touchez pas aux de commutateurs électriques
3. Eteindre n'importe quelle ouverture flamme
4. Immédiatement appeler votre fournisseur de gaz

FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

POUR VOTRE SURETE

Pas l'essence de magasin ou usage ou les autres vapeurs et les liquides inflammables à proximité de cet ou l'autre appareil.

Note: The original, authoritative version of this manual is the English version produced by CTB, Inc. or any of its subsidiaries or divisions, (hereafter collectively referred to as "CTB"). Subsequent changes to any manual made by any third party have not been reviewed nor authenticated by CTB. Such changes may include, but are not limited to, translation into languages other than English, and additions to or deletions from the original content. CTB disclaims responsibility for any and all damages, injuries, warranty claims and/or any other claims associated with such changes, inasmuch as such changes result in content that is different from the authoritative CTB-published English version of the manual. For current product installation and operation information, please contact the customer service and/or technical service departments of the appropriate CTB subsidiary or division. Should you observe any questionable content in any manual, please notify CTB immediately in writing to: CTB Legal Department, P.O. Box 2000, Milford, IN 46542-2000 USA.

WARRANTY

CTB, Inc. warrants each new product manufactured by it to be free from defects in material or workmanship for one (1) year from and after the date of initial installation by or for the original purchaser. If such a defect is found by Manufacturer to exist within the one-year period, the Manufacturer will, at its option, (a) repair or replace such product free of charge, F.O.B. the factory of manufacture, or (b) refund to the original purchaser the original purchase price, in lieu of such repair or replacement. Labor costs associated with the replacement or repair of the product are not covered by the Manufacturer.

Conditions and Limitations

1. The product must be installed by and operated in accordance with the instructions published by the **Manufacturer or Warranty will be void.**
2. Warranty is void if **all components** of the system are not original equipment supplied by the Manufacturer.
3. This product must be purchased from and installed by an authorized distributor or installer or a certified representative thereof **or the Warranty will be void.**
4. Malfunctions or failure resulting from misuse, abuse, mismanagement, negligence, alteration, accident, or lack of proper maintenance, or from lightning strikes, electrical power surges or interruption of electricity shall not be considered defects under the Warranty. Corrosion, material deterioration and/or equipment malfunction caused by or consistent with excessive additions of chemicals, minerals, sediments or other foreign elements with the product shall not be considered defects under the Warranty.
5. This Warranty applies only to systems for the care of poultry and livestock. Other applications in industry, commerce, or residential applications are not covered by this Warranty and are **strictly prohibited.** Any such use **will void the Warranty.**

Manufacturer shall not be liable for any **Consequential or Special Damage** which any purchaser may suffer or claim to suffer as a result of any defect in the product. **"Consequential" or "Special Damages" as used herein include, but are not limited to, lost or damaged products or goods, costs of transportation, lost sales, lost orders, lost income, increased overhead, labor and incidental costs and operational inefficiencies.**

THIS WARRANTY CONSTITUTES THE MANUFACTURER'S ENTIRE AND SOLE WARRANTY AND THIS MANUFACTURER EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, INCLUDING, BUT NOT LIMITED TO, EXPRESS AND IMPLIED WARRANTIES AS TO MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSES SOLD AND DESCRIPTION OR QUALITY OF THE PRODUCT FURNISHED HEREUNDER.

Distributors are not authorized to modify or extend the terms and conditions of this Warranty in any manner or to offer or grant any other warranties for the products in addition to those terms expressly stated above. An officer of the Manufacturer must authorize any exceptions to this Warranty in writing. Manufacturer reserves the right to change models and specifications at any time without notice or obligation to improve previous models.

Effective 08/08

Chore-Time Equipment
A Division of CTB, Inc.
P.O. Box 2000 Milford, Indiana 46542-2000 USA
Ph.: 574-658-4101 Fax: 877-730-8825

Email: ctb@ctbinc.com Internet: <http://www.ctbinc.com>



WARNING !

SERIOUS PERSONAL INJURY AND/OR DEATH MAY RESULT FROM USE OF THIS HEATER IN AN UNVENTILATED BUILDING OR IN HUMAN LIVING AREAS.

LE RESULTAT DE MAI DE MORT DE ET/OU DE BLESSURE PERSONNEL SERIEUX DE L'USAGE DE CET APPAREIL DE CHAUFFAGE DANS UN CONSTRUISANT UNVENTILATED OU DANS L'HUMAIN SECTEURS VIVANTS

EL USO DE ESTA CALENTADORA EN UN EDIFICIO SIN VENTILACIÓN O EN UNA AREA HUMANA PUEDE RESULTAR EN ENFERMEDAD Y/O MUERTE



Do not use the heater to heat human living areas. The intended use of the heater is to provide warmth for poultry and hog buildings.



Ne pas utiliser l'appareil de chauffage pour chauffer humain habiter les secteurs. L'usage voulu de l'appareil de chauffage sera obligé à



Use only the type of gas being supplied to the unit as marked on it (Propane or Natural Gas). Do not operate with improper fuel.



Utiliser seulement le type de gaz étant fourni à l'unité comme marqué dessus (le Propane ou le Gaz Naturel). Ne pas fonctionner



Before each use, a visual inspection of the heater is essential to insure safe and satisfactory heating. Replace or repair defective components before operating heater. Failure to do so will void warranty and could result in injury or property damage.



Avant que chaque usage, une inspection visuelle de l'appareil de chauffage est essentielle pour assurer le chauffage sûr et satisfaisant. Remplacer ou réparer des composants le défectueux avant de fonctionner appareil de chauffage. L'échec pour ainsi faire annulera la garantie et pourrait avoir pour résultat les dommages de blessure ou propriété.



WARNING: Improper installation, adjustment, alteration, service or maintenance could cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.



L'AVERTISSEMENT : l'installation Déplacée, l'ajustement, le changement, le service ou l'entretien peuvent causer les dommages de propriété, la blessure ou la mort. Lire l'installation, fonctionnant et les instructions d'entretien à fond avant d'installer ou entretenir cet équipement.



WARNING Failure to follow the WARNINGS in this manual could result in serious personal injury or significant property damage.

THESE INSTRUCTIONS SHOULD BE LEFT WITH THE APPLIANCE AND THE USER TO RETAIN FOR FUTURE REFERENCE.

READ THESE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING, USING OR SERVICING THIS EQUIPMENT.

⚠ Before lighting, sniff all around the appliance area for a gas odor. Be sure to sniff next to the floor because propane gas is heavier than air and may temporarily exist at floor level.

Avant d'allumer, renifle tout autour le secteur d'appareil pour une odeur de gaz. Etre sûr de renifler à côté du plancher parce que le gaz de propane est plus lourd que l'air et peut exister temporairement au niveau de plancher.

Antes encender, huele por todas partes el área de aparato para un olor de gas. Esté seguro oler junto al gas de piso porque propano está más pesado que aéreo y puede existir temporalmente en el nivel de piso.

⚠ DO NOT ALLOW POWER CORDS AND/OR GAS SUPPLY HOSES TO REST ON THE CANOPY, HANGING BRACKETS OR OTHER HOT SURFACES OF THE UNIT OR TO COME WITHIN 12" OF THE HEATER.

Ne pas permettre tuyaux à la provision de gaz de et/ou de cordes de pouvoir pour se reposer sur le baldaquin, pendant des crochets ou les autres surfaces chaudes de l'unité Ou venir dans 12" de l'appareil de chauffage.

No permita cuerdas de poder y/o mangas de suministro de gas para descansar en el dosel, colgando paréntesis u otras superficies calientes de la unidad O para venir dentro de 12" de la calentadora..

⚠ DSI UNITS MUST BE PROPERLY GROUNDED. DO NOT ALTER ELECTRICAL CORD.

LES UNITES DE DSI DOIVENT ETRE CONVENABLEMENT FONDE. Ne PAS CHANGER LA CORDE ELECTRIQUE.

Las UNIDADES de DSI se DEBEN PONER EN TIERRA APROPIADAMENTE. No ALTERE CUERDA ELECTRICA.

⚠ Plug in the three-prong power cord to a correctly grounded three-prong electrical outlet.

Brancher sur le cordon d'alimentation de trois-broche à un a fondé correctement la trois-broche sortie électrique.

Conecte la cuerda de tres polos del poder a un molió correctamente salida eléctrica de tres polos.

⚠ The installation of this appliance must in all cases conform with local and national building codes or in the absence of local codes with the current National Fuel Gas Code ANSI Z223.1/NFPA 54, or the Natural Gas and Propane Installation Codes, CSA B149.1 and B149.2.

L'installation de cet appareil doit dans tous cas conforme avec les codes de bâtiment locaux et nationaux ou en l'absence de codes locaux avec le Carburant le Gaz le Code ANSI Z223.1/NFPA National actuel 54, ou le Gaz Naturels et le Codes d'Installation de Propane, CSA B149.1, B149.2

La instalación de este aparato debe en todos casos se conforma con códigos locales y nacionales de edificio o en ausencia de códigos locales con el Código Nacional actual de Gas de Combustible ANSI Z223.1/NFPA 54, o el Gas natural y Códigos de Instalación de Propano, CSA B149.1, B149.2

⚠ Heaters must be electrically grounded in accordance with the National Electrical Code, ANSI/NFPA 70 or the current Canadian Electrical Code, CSA C22.1. Polarity of Line voltage and neutral wires must be maintained. The total load of all heaters in a circuit must be considered for overload control of that circuit. Power supply must have earth ground.

Les appareils de chauffage doivent être électriquement fondé conformément au Code Electrique National, ANSI/NFPA 70 ou le Code Electrique, canadien et actuel, CSA C22.1. La polarité de tension de Ligne et de fils neutres doit être maintenue. Le chargement total de tous appareils de chauffage dans un circuit doit être considéré pour le contrôle de surcharge de ce circuit.

Las calentadoras basado en eléctricamente la conformidad con el Código Eléctrico Nacional, ANSI/NFPA 70 o el Código Eléctrico, canadiense y actual, CSA C22.1. La polaridad del voltaje de la Línea y alambres neutrales se debe mantener. La carga total de todas calentadoras en un circuito se debe considerar para el control de sobrecarga de ese circuito.

QUADRADIANT

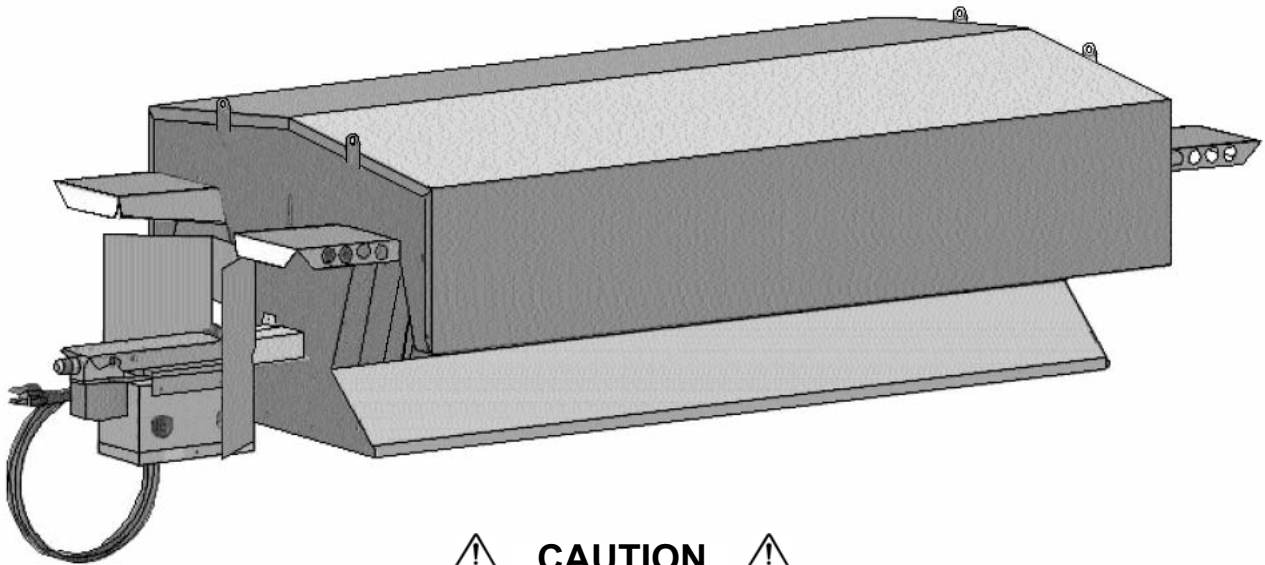
80,000 BTU High Pressure Heater
120 v
Maximum 5 PSI GAS



WARNING:

During normal operation, the surfaces of the unit become very hot. It is VERY IMPORTANT that the power cords and gas supply hoses DO NOT TOUCH or REST ON ANY surface of the unit or to come within 12" of the heater.

The area directly above the unit becomes hot during normal operation of the heater. DO NOT install electrical wiring, water lines or conduit above the heater.
DO NOT run gas supply hoses above the heater.



CAUTION



DO NOT ALLOW ANYONE WHO HAS NOT READ THESE INSTRUCTIONS TO INSTALL, ASSEMBLE, LIGHT, ADJUST OR OPERATE THIS HEATER.

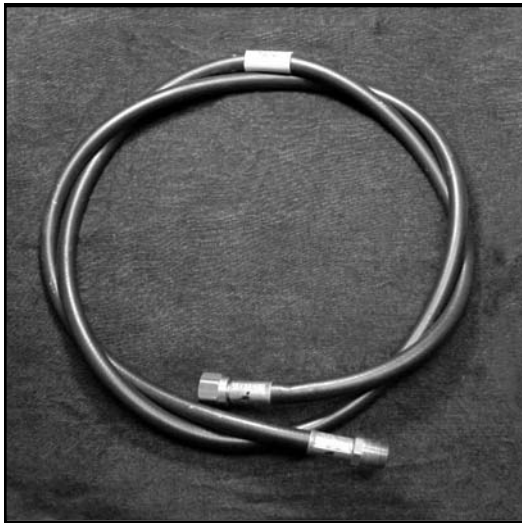
THIS HEATER IS TO BE INSTALLED BY CERTIFIED INSTALLERS ONLY.

ONLY PERSONS WHO CAN UNDERSTAND AND FOLLOW THESE INSTRUCTIONS SHOULD USE OR SERVICE THIS HEATER.

**HEATER IS SHIPPED PRE-ASSEMBLED
TOOLS REQUIRED FOR INSTALLING HEATER:**

3/4" wrench for tightening gas connections.
11/16" wrench
2 Pipe wrenches





WARNING



**5 PSI MAXIMUM OUTLET PRESSURE.
GAS PRESSURE EXCEEDING 5 PSI MAY VOID
WARRANTY.**

**USE THREADED GAS CONNECTIONS ONLY.
HEATER MUST BE CONNECTED TO GAS SUPPLY
USING THE DRIP LEG, HOSE AND CONNECTORS
PROVIDED WITH THE UNIT BY THE
MANUFACTURER.**

CAUTION



Hot Surface

**Allow To Cool
Before Servicing**

ALLOW HEATING UNIT TO
COOL BEFORE WINCHING,
CLEANING OR SERVICING.

DO NOT ALLOW GAS HOSES
OR POWER CORDS TO TOUCH
HOT SURFACES.

DO NOT TOUCH HOT EMITTER
PANELS.

CAUTION



**CHECK ALL FITTINGS
AND CONNECTIONS
FOR LEAKS BEFORE
USE**

BEFORE USING HEATER
CHECK ALL FITTINGS AND
CONNECTIONS FOR LEAKS.

DO NOT USE OPEN FLAME TO
CHECK FOR LEAKS!

USE SOAP AND WATER TO
CHECK FOR LEAKS.

CAUTION



**Electrical Shock Hazard.
Disconnect Power
Supply Before
Servicing.**

TO AVOID INJURY, ALWAYS
DISCONNECT ALL POWER
SUPPLY TO THE UNIT BEFORE
CLEANING OR SERVICING.

ROUTINE MAINTENANCE IS
REQUIRED FOR OPTIMAL
HEATER PERFORMANCE AND
SAFETY.

⚠ THE STATE OF CALIFORNIA REQUIRES THE FOLLOWING WARNING:
WARNING

Combustion by-products produced when using this product contain carbon monoxide, a chemical known to the State of California to cause cancer and birth defects (or other reproductive harm).

⚠ CAUTION

THIS APPLIANCE IS HOT DURING NORMAL OPERATION. AVOID PHYSICAL CONTACT.
CET APPAREIL A CHAUD PENDANT L'OPERATION NORMALE. EVITER LE CONTACT PHYSIQUE.
ESTE APARATO TIENE CALOR DURANTE la OPERACION NORMAL. EVITE el CONTACTO FISICO.

⚠ DANGER

DO NOT ATTEMPT TO CLEAN THE HEATER WHILE IT IS OPERATING OR WHILE IT IS STILL HOT.
Ne PAS TENTER DE NETTOYER L'APPAREIL DE CHAUFFAGE PENDANT QU'IL FONCTIONNE OU PENDANT QUE C'EST TOUJOURS CHAUD.
No PROCURE LIMPIAR LA CALENTADORA MIENTRAS OPERA O MIENTRAS ESTA TODAVIA CALIENTE.

QuadRadiant® Heater Installation Checklist

Installation Topics	Checkmark below when complete
1. Gas Pressure at Heater Q. Have you verified that your gas pressure at the heater is 5 psi maximum? A. See <u>page 10</u> in the installation and operation manual.	
2. Gas Hoses and Power Cords Q. Are your gas hoses and power cords positioned properly away from heater? A. See <u>pages 15-16</u> in the installation and operation manual.	
3. Purging the Gas Lines Q. Before attaching the hose, have you purged all gas lines? A. See <u>page 10</u> in the installation and operation manual.	
4. Drip Leg Q. Have you installed a drip leg or sediment trap for each heater? A. See <u>page 9</u> in the installation and operation manual.	
5. Floor and Ceiling Clearance Q. Are your heaters the correct distance from the floor and ceiling? A. See <u>pages 11-12</u> in the installation and operation manual.	
6. Heat Shields Q. Have you installed all the heat shields on all of the heaters, and verified that no heat shields are missing? A. See <u>pages 17-18</u> in the installation and operation manual.	
7. Sensor Location Q. Have you positioned your temperature sensors correctly? A. See <u>page 13</u> in the installation and operation manual.	
8. Hanging Q. Are your heaters' hanging points positioned properly, and are all heaters hanging level? A. See <u>page 14</u> in the installation and operation manual.	
9. Air Movement Q. Have you ensured that there will be no direct air blowing on the heaters? A. See <u>page 15</u> in the installation and operation manual.	
10. Cleaning Q. Have you established a cleaning schedule for the heaters and orifices? A. See <u>page 19</u> in the installation and operation manual.	

This checklist provides only limited set up and operational information. Reference the complete installation & operation manual for the QuadRadiant heater to familiarize yourself with all operational risks and requirements in their entirety. Failure to follow complete installation & operation instructions contained in the product manual(s) shall be considered misuse of the product and could result in personal injury and/or property damage.

Lista de verificación de instalación de criadoras QuadRadiant®

Temas de instalación	Ponga una marca debajo una vez completado
1. Presión de gas en el calentador Q. ¿Ha verificado usted que su presión de gas al calentador es de 5 psi al máximo? A. Vea la <u>página 10</u>.	
2. Mangueras de gas y cables eléctricos Q. ¿Ha posicionado sus mangueras de gas y cables eléctricos apropiadamente y lejos de la criadora? A. Vea las <u>páginas 15-16</u>.	
3. Purgando las líneas de gas Q. ¿Ha purgado usted todas las líneas de gas antes de poner la manguera? A. Vea la <u>página 10</u>.	
4. Trampa de sólidos Q. ¿Ha instalado usted la trampa de sólidos o sedimentos en cada calentador? A. Vea la <u>página 9</u>.	
5. Espacio libre al piso y al techo Q. ¿Están sus calentadores a la distancia correcta del piso y del techo? A. Vea la <u>páginas 11-12</u>.	
6. Protectores de calor Q. ¿Ha instalado todos los protectores de calor en todos los calentadores, y verificado que ninguno falta? A. Vea las <u>páginas 17-18</u>.	
7. Ubicación de sensor Q. ¿Ha colocado usted sus sensores de temperatura correctamente? A. Vea la <u>página 13</u>.	
8. Colgamiento Q. ¿Están los puntos de suspensión para sus calentadores colocados apropiadamente, y están todos los calentadores nivelados? A. Vea la <u>página 14</u>.	
9. Circulación de aire Q. ¿Se ha asegurado usted que no habrá corrientes de aire directamente a los calentadores? A. Vea la <u>página 15</u>.	
10. Limpieza Q. ¿Ha establecido usted un calendario de limpieza para los calentadores y los orificios? A. Vea la <u>página 19</u>.	

Esta lista de verificación proporciona sólo información limitada. Vea el manual completo de instalación y operación para el calentador QuadRadiant para familiarizarlo con todos los riesgos y requisitos operacionales en su totalidad. No seguir la instalación completa & las instrucciones de la operación en el manual del producto será considerado el maltrato del producto y podría tener como resultado herida personal y/o dañado a la propiedad.

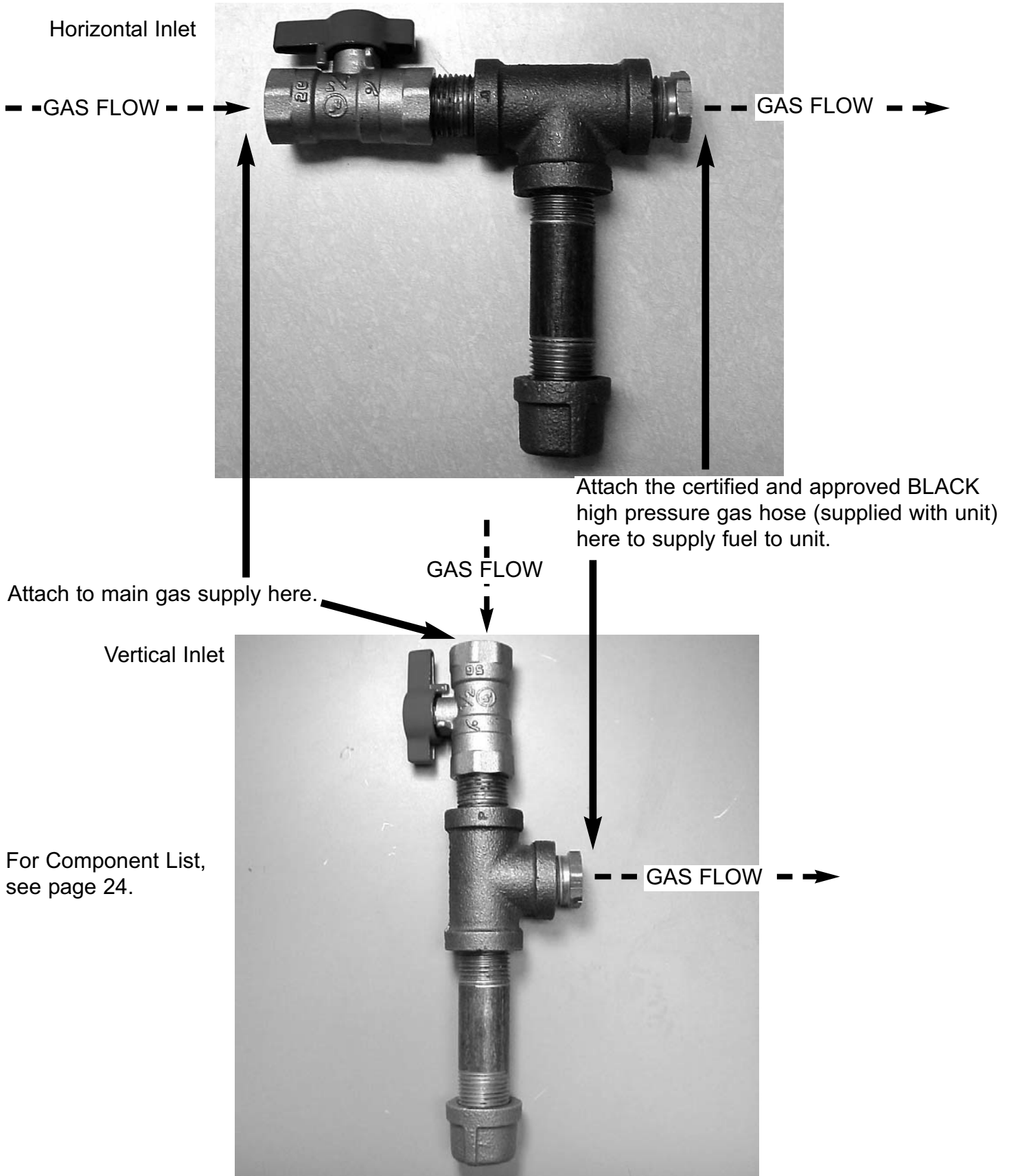
Install drip leg on gas line.

The manufacturer requires the installation of the drip leg in order to help keep the gas orifice free from debris commonly found in gas lines. Use approved and certified sealant on all connections.



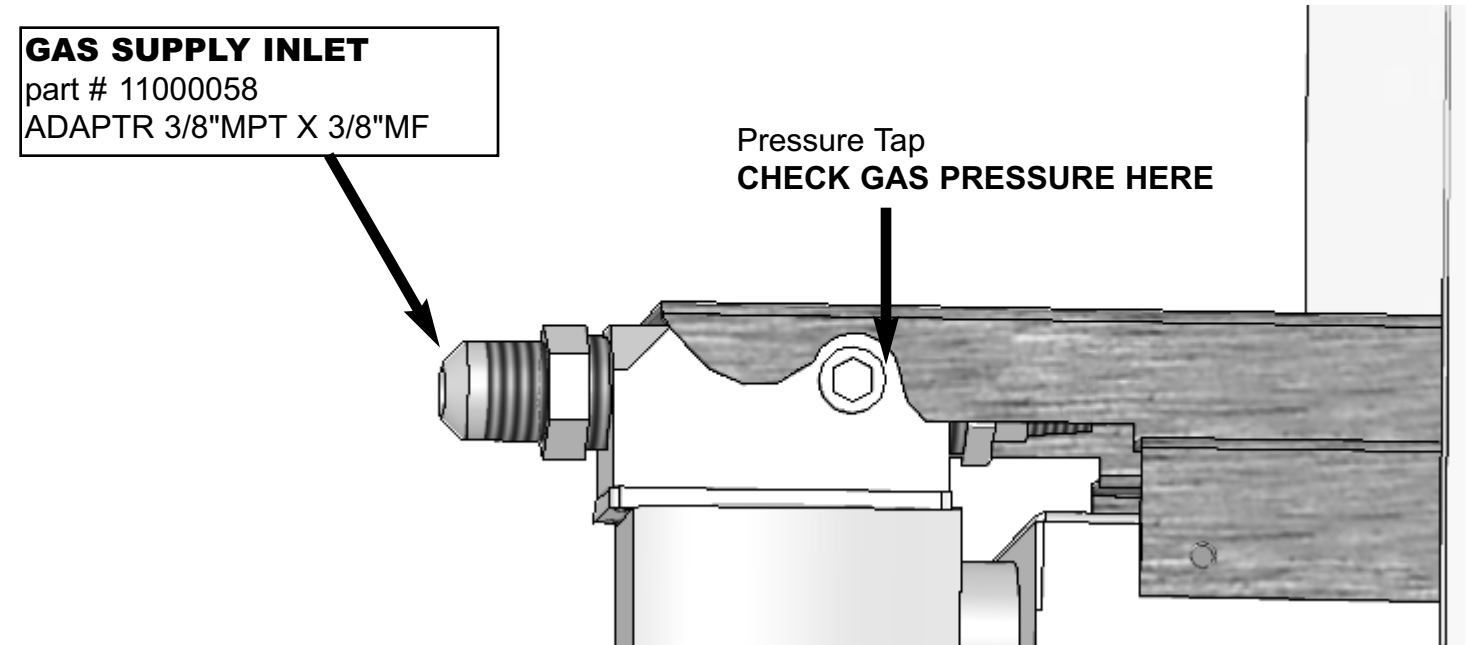
WARNING!

Failure to follow the instructions in this manual could result in serious personal injury or property damage.



Remove adapter from drip leg parts bag. Apply certified and approved gas sealant to threads and insert into gas valve as shown. Take care to not get sealant inside of adapter. Piping joint compound must be resistant to the action of liquefied petroleum gases. In order to avoid loosening other connections when installing the adapter, tighten using a wrench on the adapter and one on the valve. Use only the connections and/or fittings supplied with the unit.

**Attach swivel end of certified and approved BLACK high pressure gas hose assembly (supplied with unit) to valve.
Tighten using 3/4" and 11/16" wrenches.**



CAUTION: Before attaching heater to gas supply line, purge gas supply line to free the supply of any contaminants.

CONNECT THE GAS HOSE TO THE CONTROL VALVE.

Turn on gas supply to the unit and **CHECK ALL FITTINGS AND CONNECTIONS FOR LEAKS** with a Gas Sensing Meter and /or soap solution. Do Not Use an open flame to check for gas leaks.

Note: the burner connections can only be checked with the burner burning.

GAS PRESSURE - should be CHECKED AND ADJUSTED to recommended settings. **Pressure exceeding 5 P.S.I. could void warranty.**

GAS Pressure:

FIRST - go to the furthest stove from the regulator and connect the pressure gauge to the Pressure Tap on the gas valve. Light only the stove you are testing or if you have a zone system light all the stoves in the zone. Set the pressure at a maximum of 5 P.S.I..

SECOND - light all stoves in the house on the same regulator and check the pressure again. The pressure should not drop below 4.5 P.S.I.. **If the pressure does fall below 4.5 P.S.I., then the gas distribution system is inadequately designed. The problem may be a regulator, (size or quantity) pipe sizing or other restrictions in the system.**

SUSPENDING THE HEATER

NOTE: We recommend that the heater be installed level. Keep gas hose away from hot surfaces. The heater is attached to a winch cable used for raising and lowering.

In addition, a safety cable or chain (not supplied) is required to be attached to the suspension hooks to prevent the heater from falling to the litter if the cable should happen to break.

HEATER SAFETY CLEARANCE

The heater must be located so there is a minimum clearance to combustible material of 24" (minimum of 12" if heat deflectors are used) above the heater and 48" from the side.

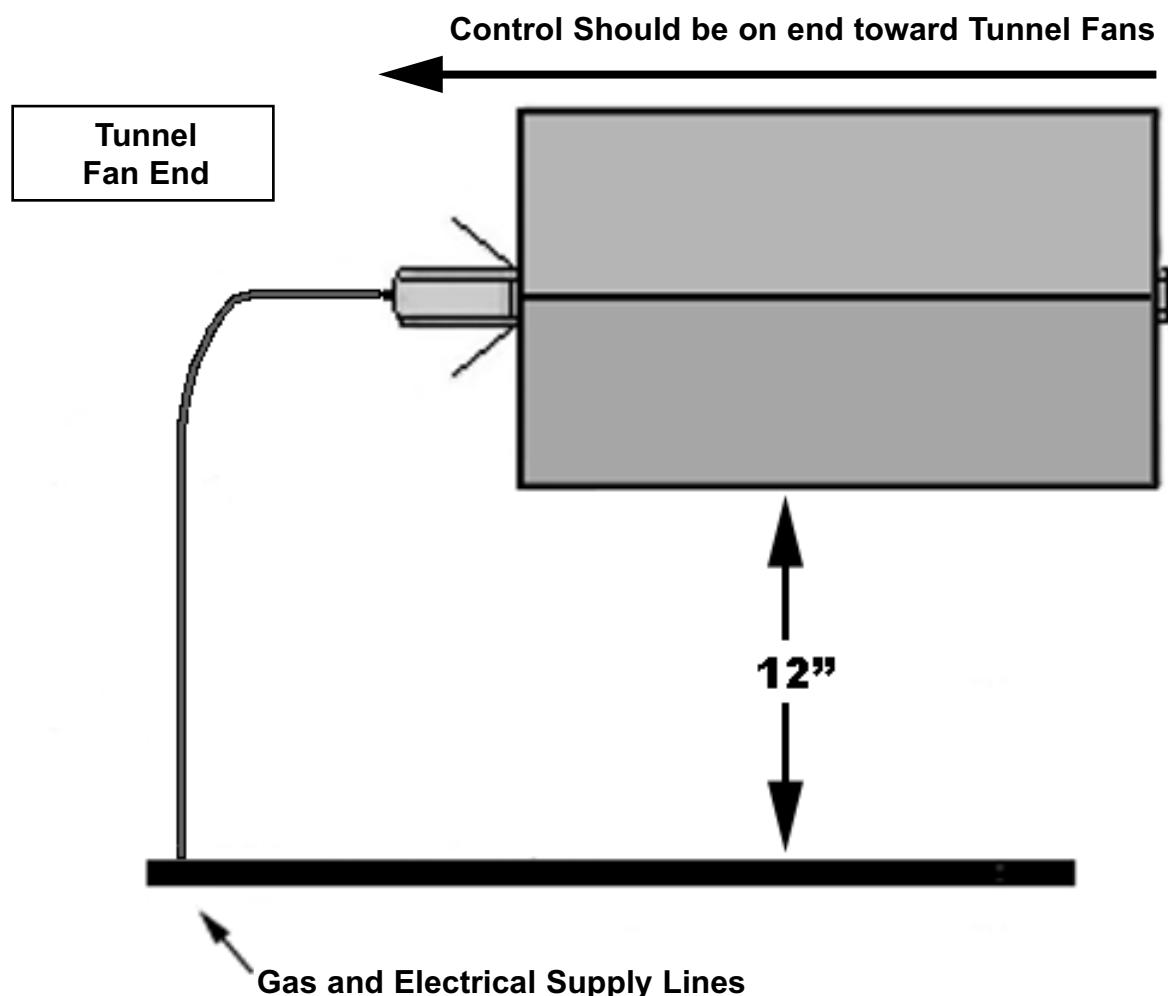
The heater should be hung with a min. of 72" from the bottom of the heater to the floor.

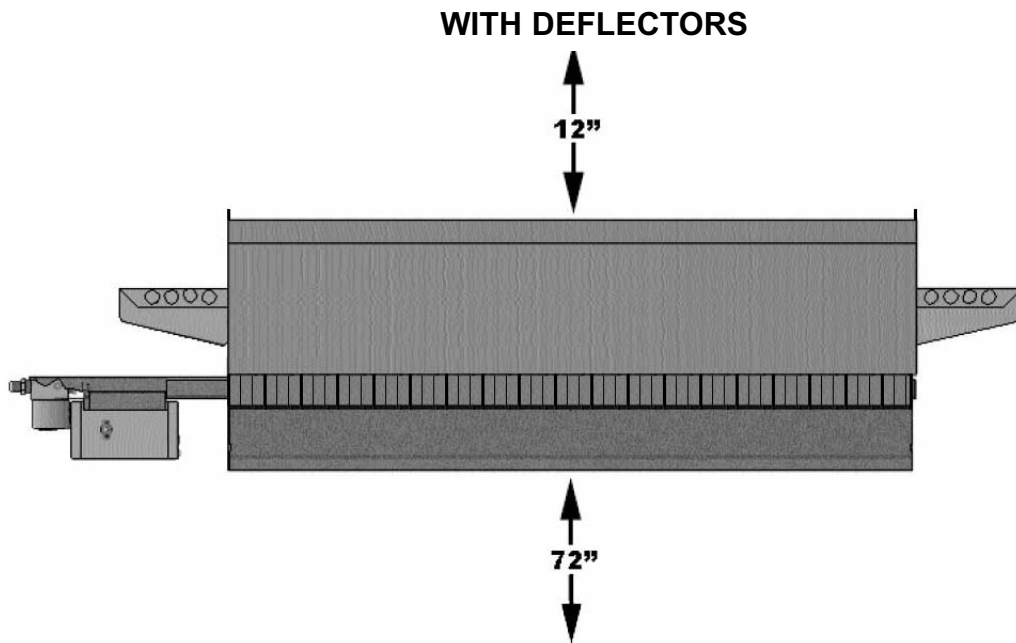
We require a minimum clearance of 12" from the heater to the fuel and electric supply lines.

The installer **MUST** comply with all applicable local, state, and federal gas codes and regulations for your area.

CAUTION

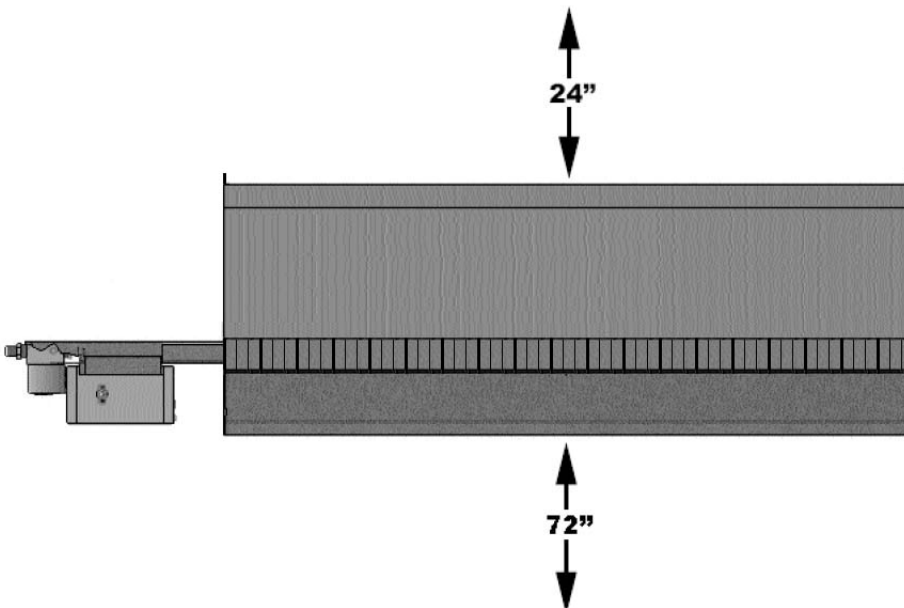
Always allow heater to cool off before winching unit up to ceiling!
Materials that come in close proximity to hot surfaces may ignite.





MISSING DEFLECTORS

This is only a temporary adjustment. Heaters REQUIRE the installation of HEAT DEFLECTORS.



CONNECTING HEATER TO THERMOSTATICALLY CONTROLLED POWER SUPPLY

Insert grounded plug into 120 volt controlled electrical outlet.



WARNING!

Do not allow power cords and/or gas supply hoses to rest on the canopy, hanging brackets or any other hot surfaces of the unit or within 12" of the heater. Failure to follow these instructions could result in serious personal injury or significant property damage.



WARNING!

Failure to follow the instructions in this manual could result in serious personal injury or property damage.



WARNING!

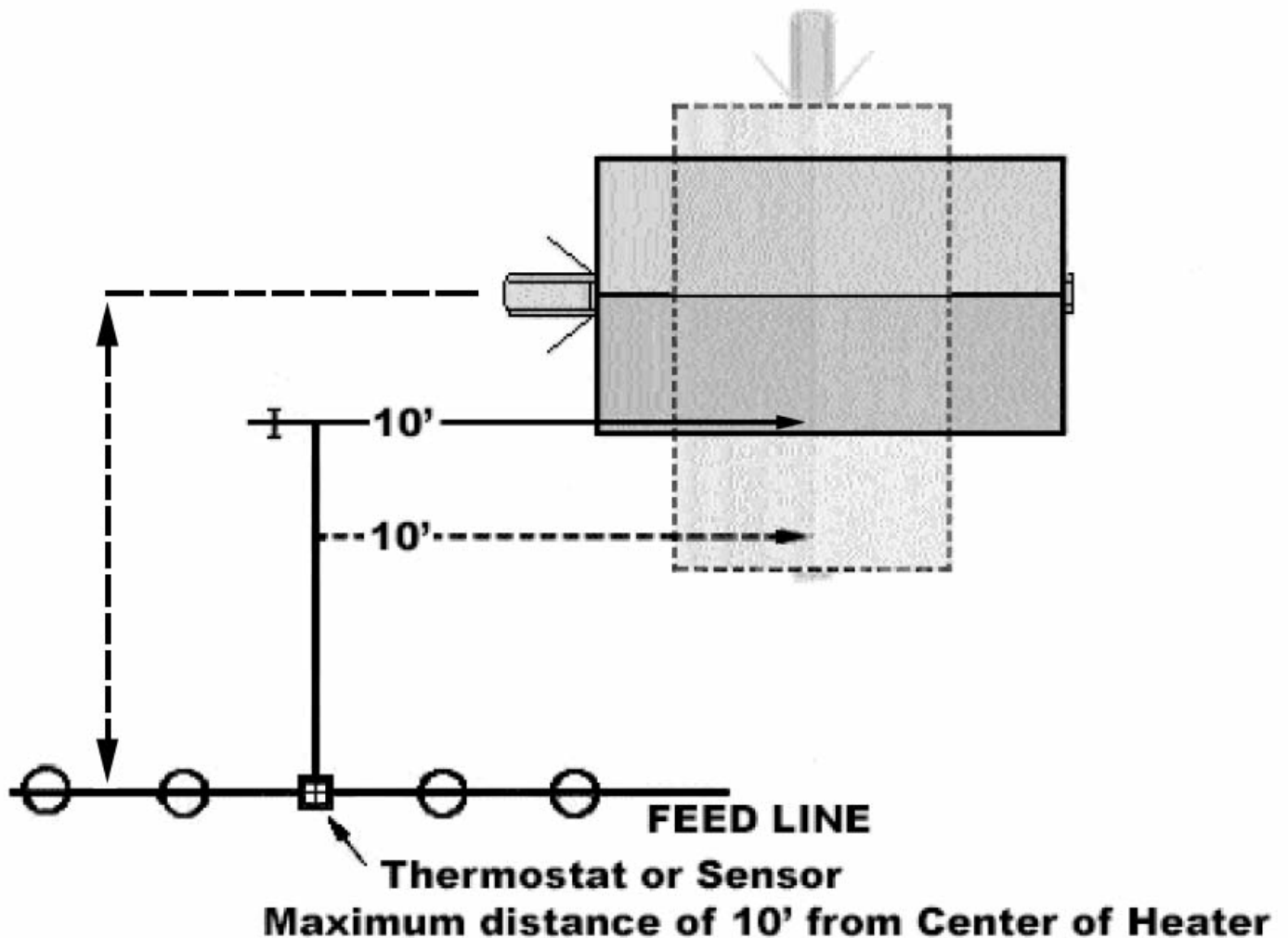
Failure to comply with all applicable local, state, and federal gas codes could result in serious personal injury and/or serious property damage.

Sensor Location

Sensor should be placed over the feeder or drinker line.

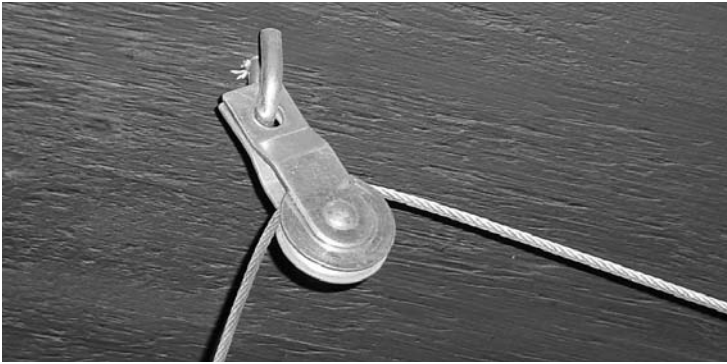
Suspend sensor 12" to 16" off the floor.

Sensor should be no more than 10-12 feet to the side from the center or 10 feet lengthwise from the center of the heater.

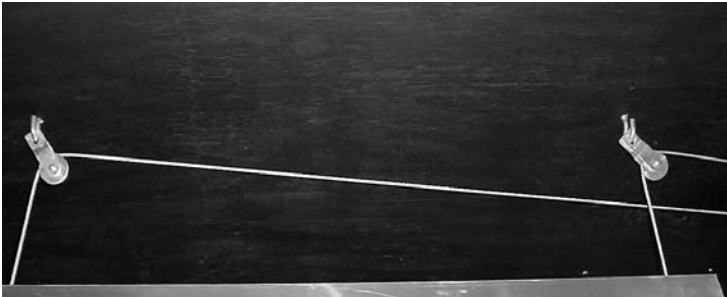


Pulleys should be mounted in the ceiling and positioned 6" wider than the suspension points on the heater.

Cable Suspension



Chain AND Carabiner Suspension



Cable Suspension



Chain AND Carabiner Suspension



NOTE: Do not mount this heater directly below electrical wiring that is exposed or in conduit.

NOTE: During and after winching, make certain that ALL hoses and power supply cords are NOT resting on the heater nor are within 12" of the heater.

AIR MOVEMENT

Position heaters so there is no direct air movement on the heater.

Stir fans, inlets and tunnel doors should not blow directly on the units (During minimum ventilation, lock off inlets that affect heater operation.)

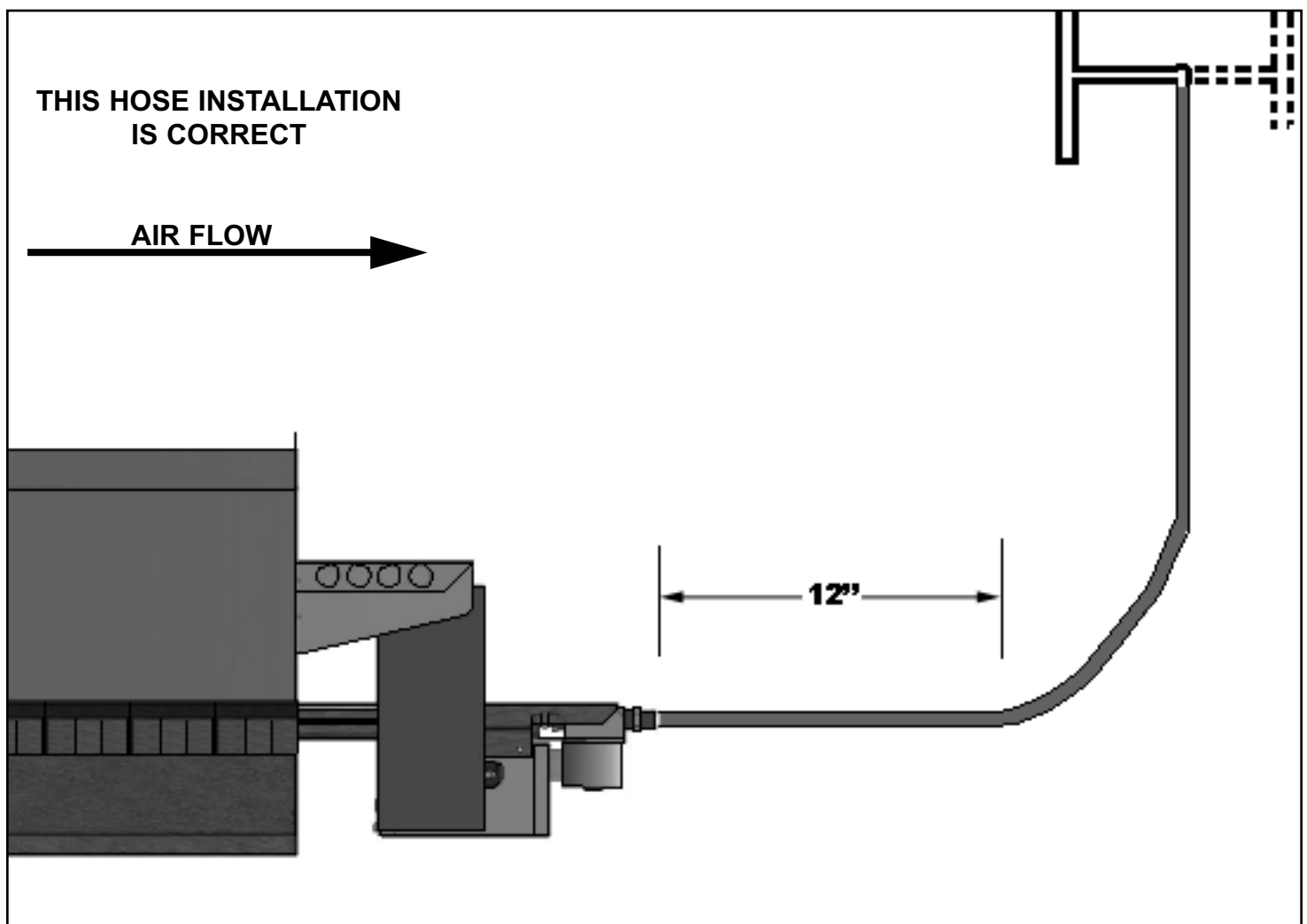
Check all heaters to be sure flame is not blowing outside the emitter.

Do not run heaters during tunnel ventilation.

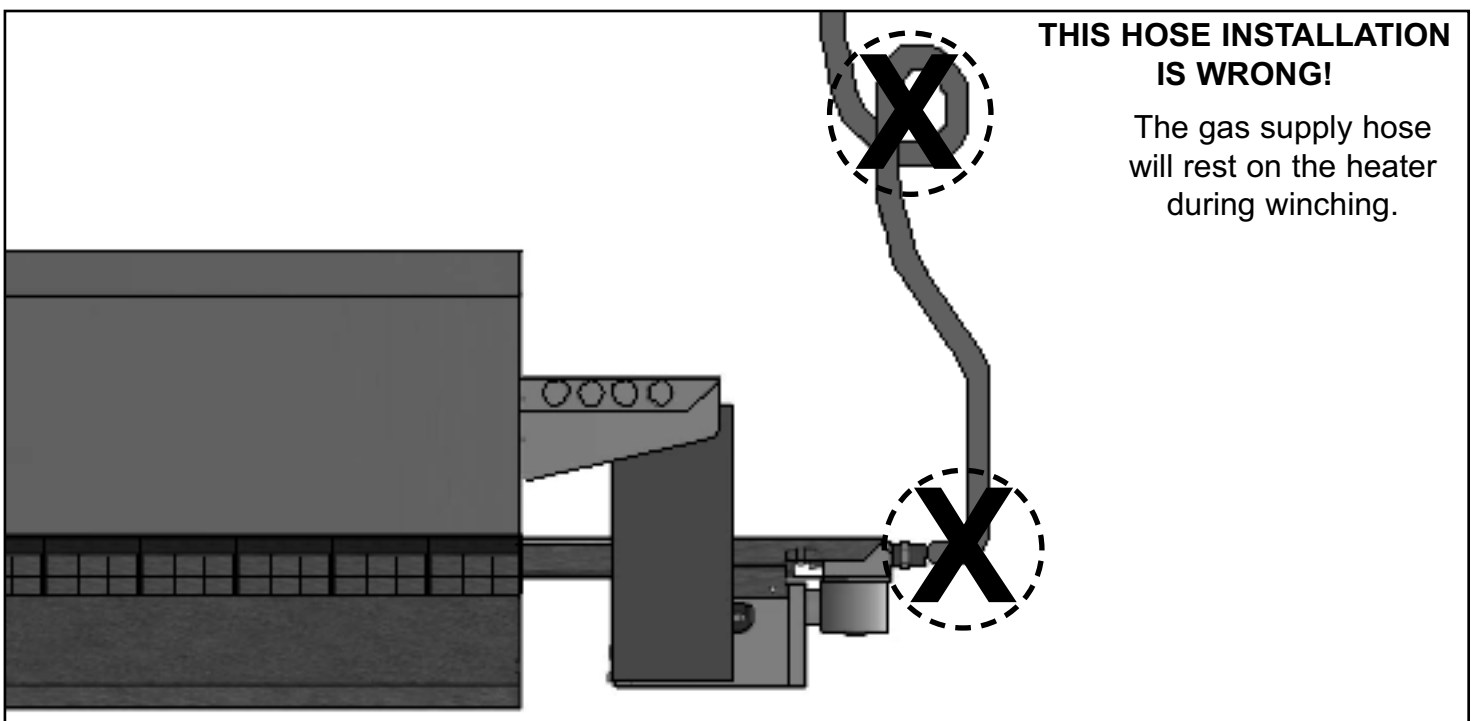
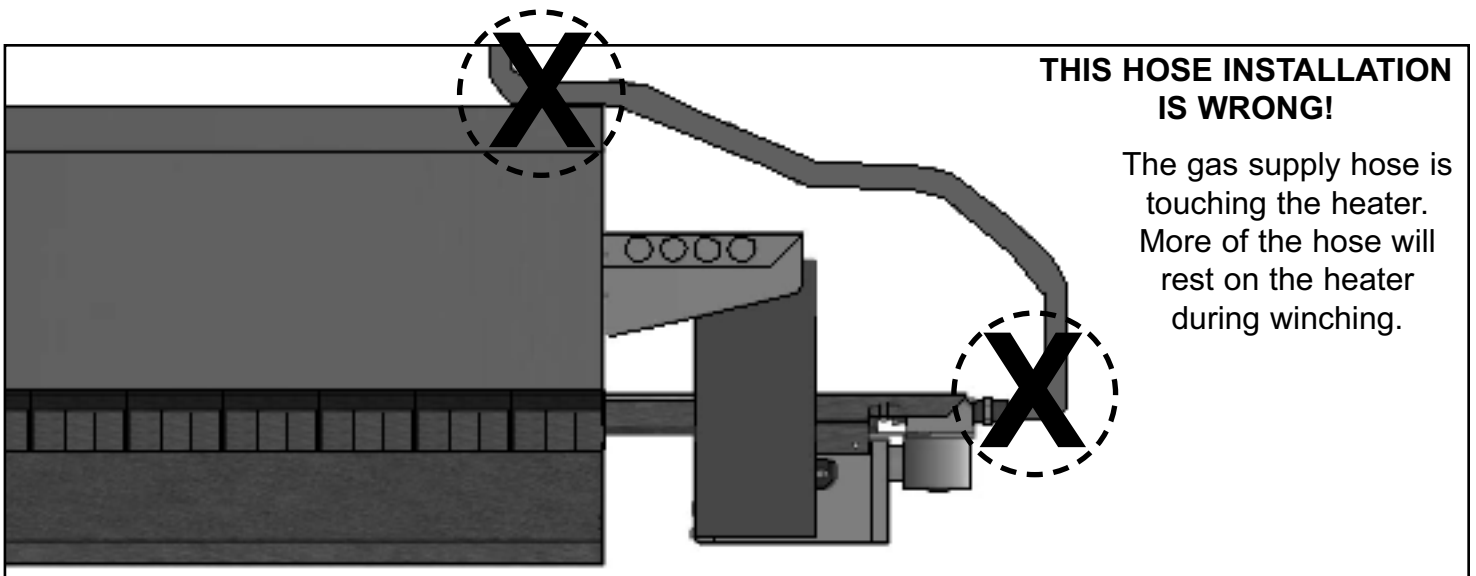
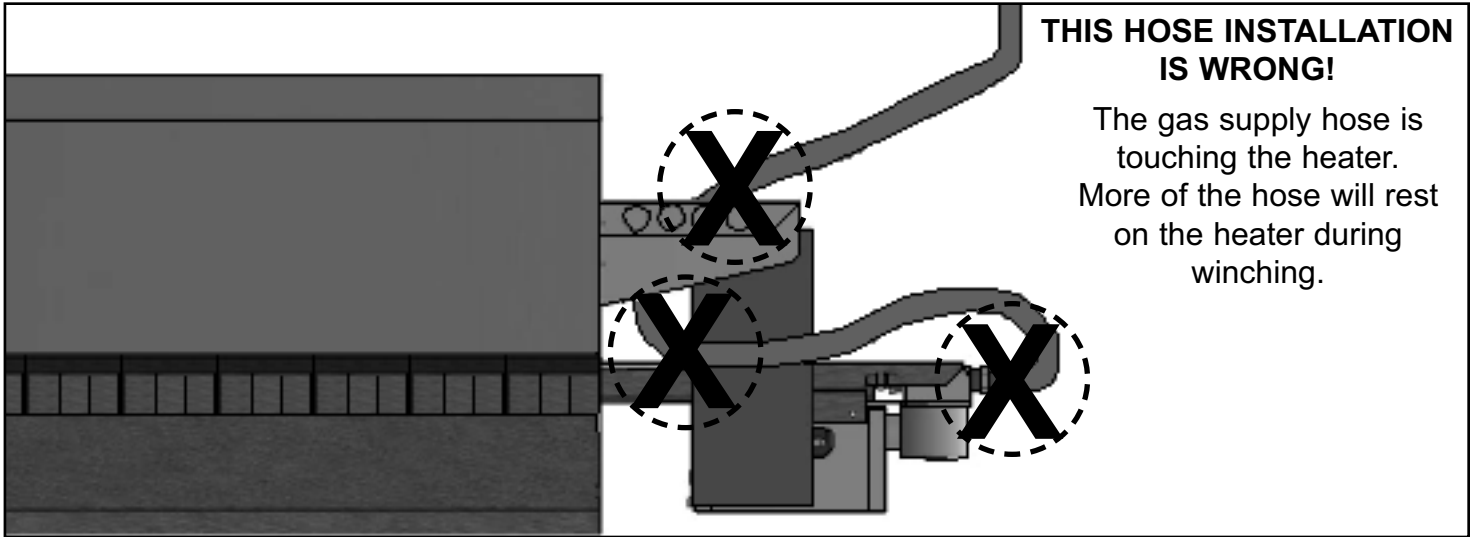
Control end of heater should be toward tunnel fan end.

The gas supply inlet must be installed so that the gas supply hose is away from the surface of the heater. Electrical supply must be installed so that the electrical power cord is away from the surface of the unit.

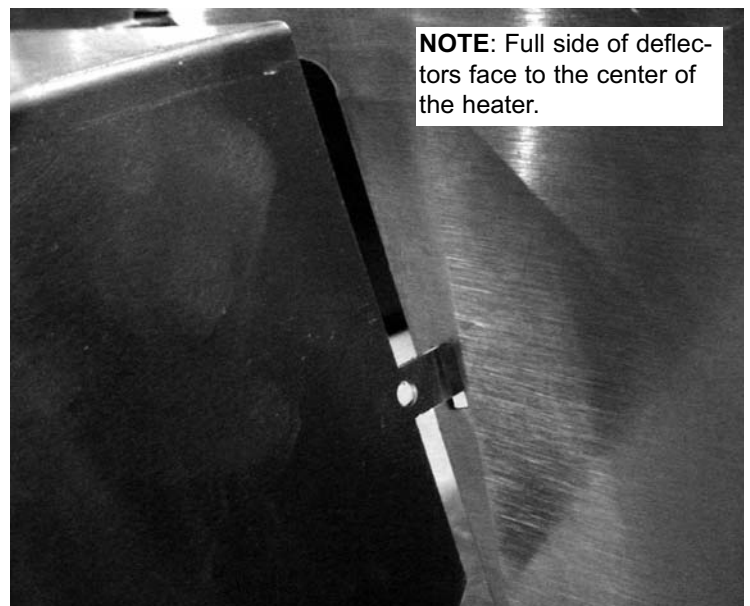
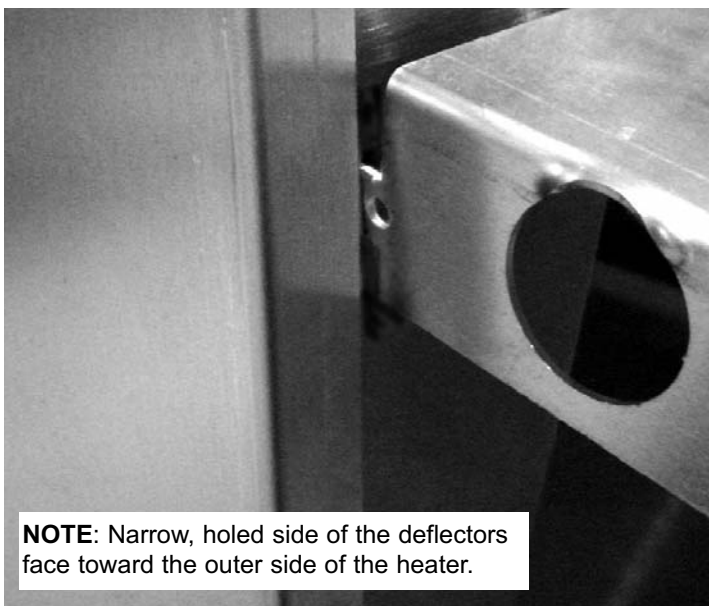
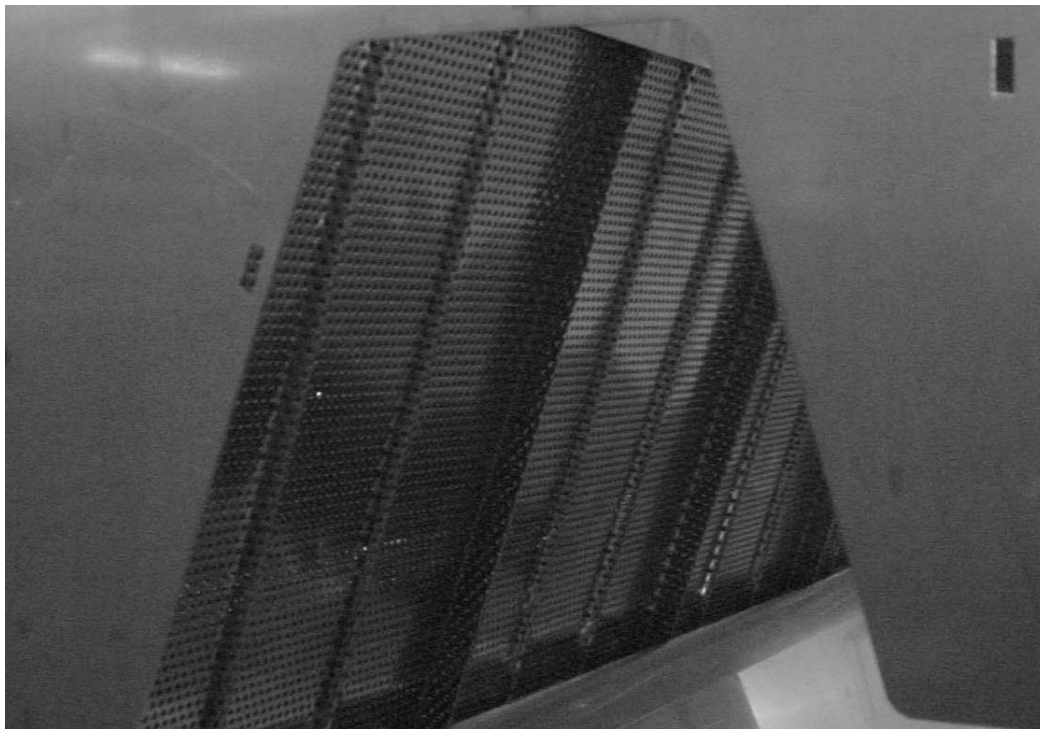
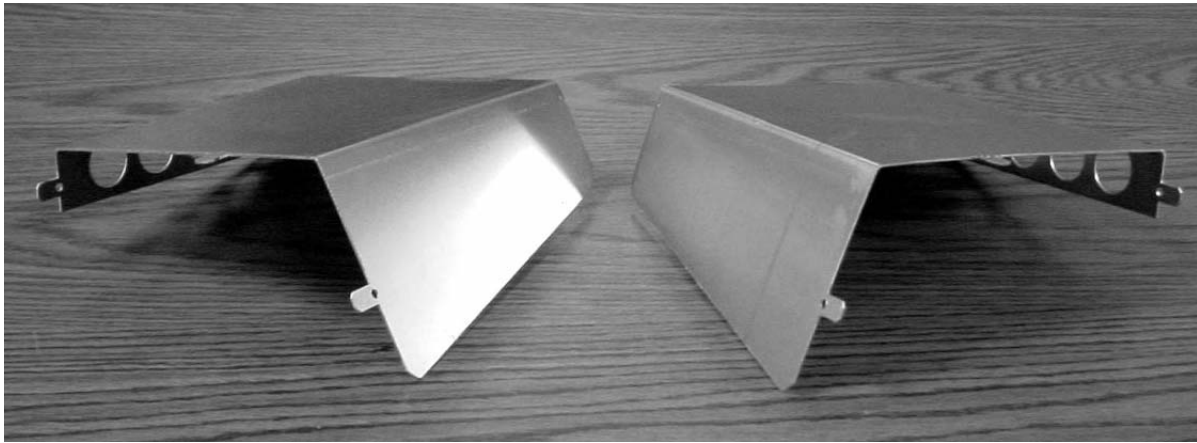
The gas supply hose and the electrical power cord must not touch or rest on any surface of the heater during operation of the unit or rest on the unit while the heater is being winched up or down.



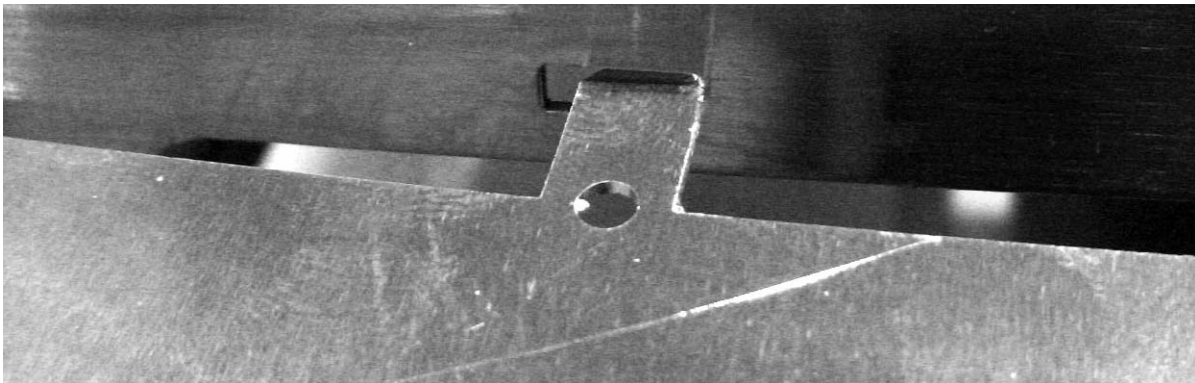
The gas supply installation shown in the illustration above allows the gas supply hose to hang AWAY from the surfaces of the heater even during winching of the unit. This is the CORRECT method for installing the gas supply hose.



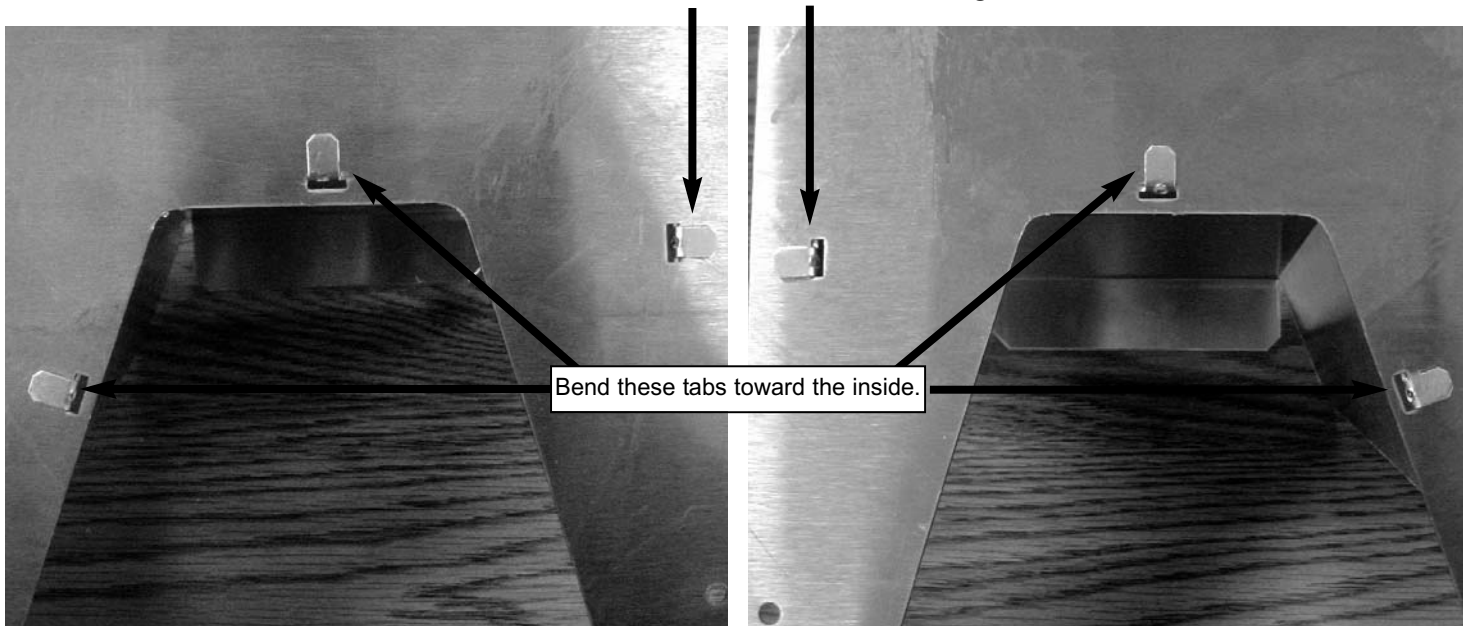
Each unit requires two Left Deflectors and two Right Deflectors



Align tabs of deflectors with slots on heater and insert tab into slots completely so that deflectors are flush against the unit.



Using pliers, bend the tabs to secure deflectors to the heater.
Bend these tabs toward the outer edge.



MAINTENANCE

Proper care and maintenance of your heater cannot be over emphasized!!

A POORLY MAINTAINED HEATER WILL:

- Raise Operating Costs- due to poor combustion.
- Lower Air Quality
- Cause Inconsistent Temperatures
- Decrease the Life of the Heater

CAUTION



**BEFORE PERFORMING ANY MAINTENANCE ON THE HEATER,
MAKE CERTAIN THAT ALL POWER AND FUEL HAS BEEN SHUT
OFF TO THE UNIT.**



MAINTENANCE PROGRAM

- ◆ Daily: Check burner, flames should be burning clear and blue; if not, clean as required or check gas pressure.
- ◆ Clean heater after each flock.
- ◆ Clean orifice using the CORRECT size orifice drill - 54 for LP and 51 for Natural Gas. Extreme care must be taken not to enlarge or distort the orifice openings.
- ◆ Clean dust and dirt from canopy, reflector pan, emitters and burner ports with compressed air. Blow out the inside of the burner assembly using compressed air.
- ◆ If houses are washed down, care should be taken to prevent moisture from accumulating on control valve and burner assemblies. Cover valve assembly with plastic before washing. After wash downs remove plastic from heater. We recommend that you light the heaters to dry up any excess moisture.
- ◆ For proper combustion it is important that the small holes in the emitter be clean and unobstructed. The emitter can also be cleaned by inserting a long brass bristle brush between the screens and inner cone.
- ◆ Check ignitor and burner ports for debris, wipe clean with steel wool and clear burner ports with wire.
- ◆ If heater is disconnected from the gas line, use tape to seal the open connections. This will keep moisture, dust, and insects out and prevent future problems.



WARNING! Never spray penetrating oil (WD-40) on the control valve. This will cause the loss of high temperature valve grease and cause the valve to leak.

Failure to follow these instructions could result in serious personal injury or significant property damage.



16550123 CONTROL ASM QDR
120V 5P **NAT**

16550105 CONTROL ASM QDR
120V 5P **LP**

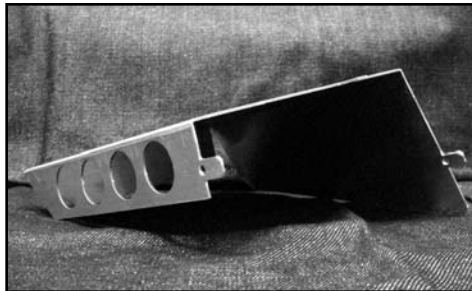
(See pages 22, 23 for components) — 1 each



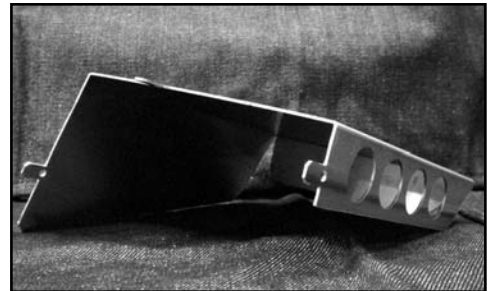
16550135 IGNITOR w/BURNER MOUNT & WIRE
1 each



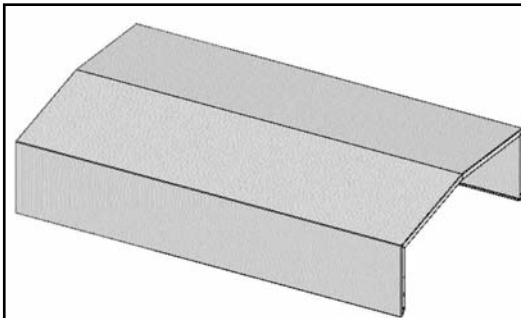
16550086
SPACER, BURNER/INNER CONE-SHORT
2 each



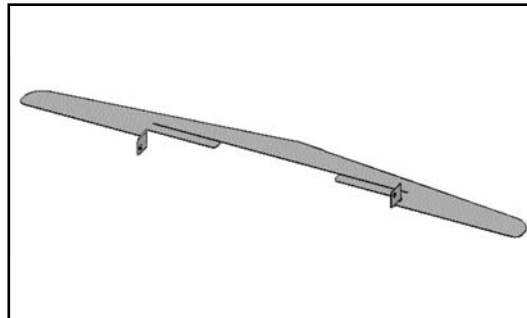
16550038 HEAT DEFLECTOR LEFT
2 each



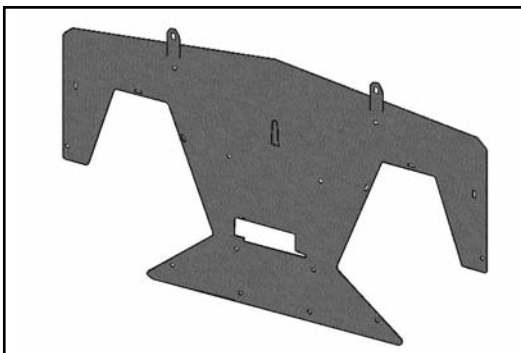
16550037 HEAT DEFLECTOR RIGHT
2 each



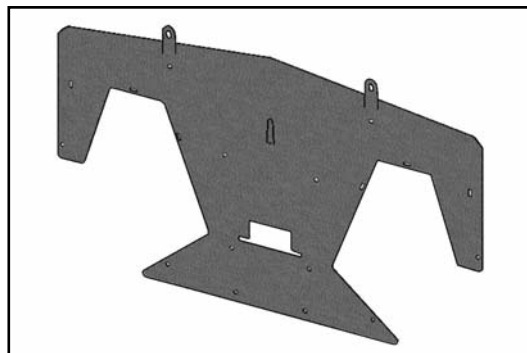
16550015 CANOPY
1 each



16550081 CENTER SUPPORT CANOPY
1 each



16550080 END PLATE
CONTROL END — 1 each



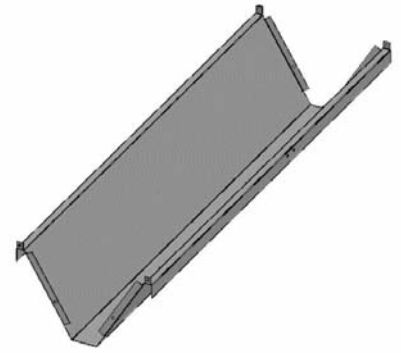
16550079 END PLATE
OPPOSITE CONTROL END — 1 each



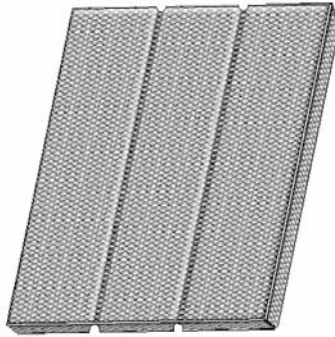
16550085 PAN/CHANNEL REFLECTOR
2 each



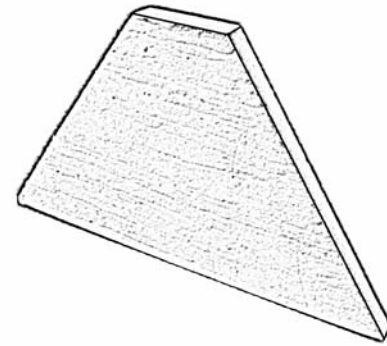
16550082 BOTTOM FLAME SHIELD
1 each



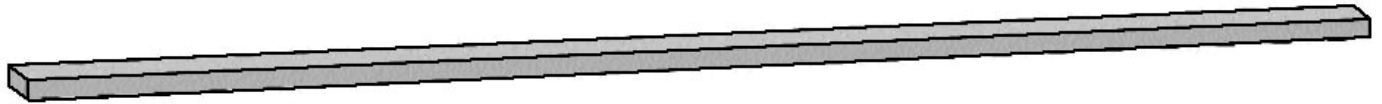
16550089
INNER CONE, CORRUGATED QDR
1 each



16550084 EMITTER, PANEL QDR II
12 each



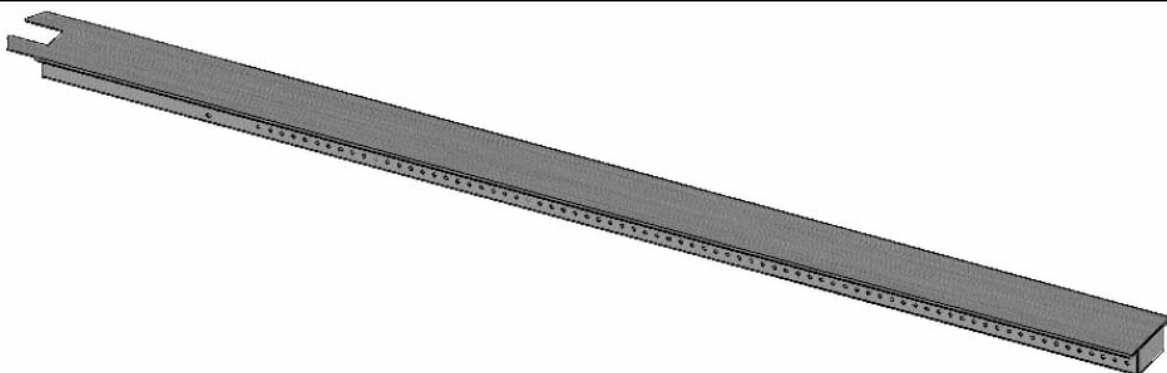
16050048 INSULATION,
END PANEL
2 each



16050046 INSULATION, BOTTOM PANEL
1 each



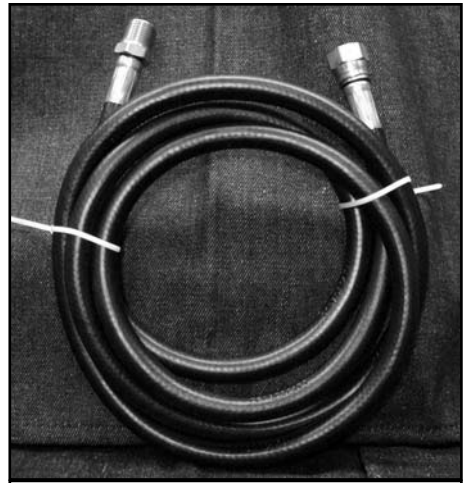
16050047 INSULATION, SIDE PANEL
2 each



16550093 BURNER ASM
1 each



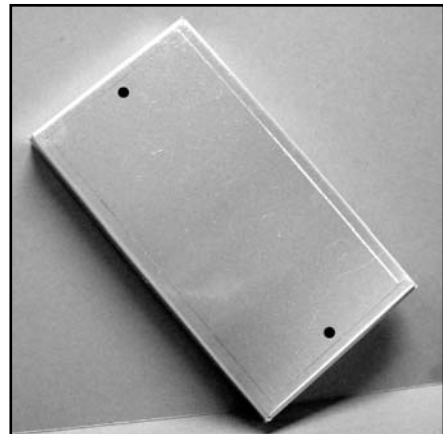
16550136 POWER CORD W/TERMINALS
8ft — 1 each



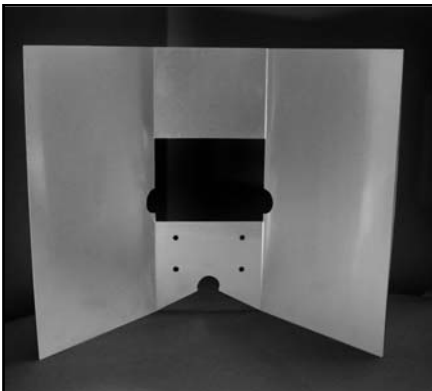
16050055 HOSE GAS 1/4ID 3/8 X 3/8
8ft — 1 each



16550083 BOX, IGNITION
CONTROL QDR II — 1 each



16550055 CONTROL BOX LID QDR
1 each



16550091 HEAT SHIELD,
IGNITION CONTROL — 1 each



10106615 HEYCO
STRAIN RELIEF
SR 7K-2 — 1 each



16550090 BRACKET, CONTROL BOX SHORT
1 each

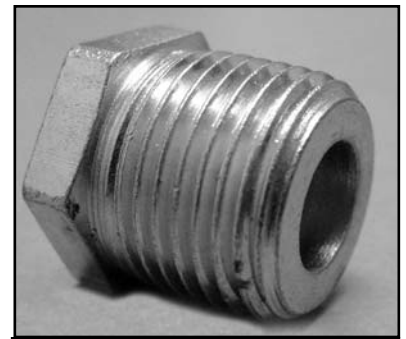


13005282 SWITCH TOGGLE
SINGLE POLE — 1 each

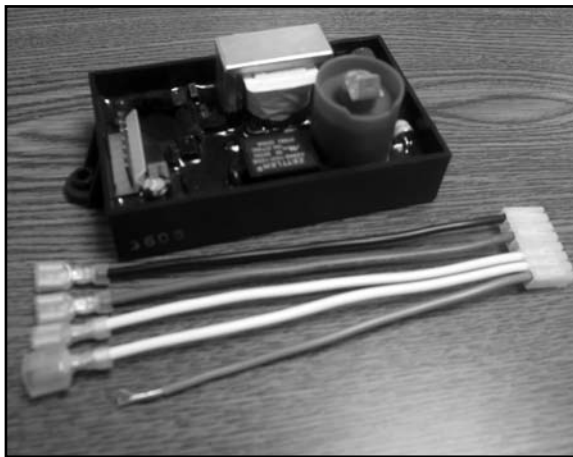


16550087 AIR INTAKE
NAT QDR

16550088 AIR INTAKE
LP QDR



16-11194 BUSHING:
GALV STD HEX 3/8 x 1/8
1 each



IGNITION MODULE AND
IGNITION WIRE HARNESS KIT
16550124



16550137 VALVE ASCO 120V
W/TERMINALS
5PSI — 1 each



16550057 ORIFICE #54
(.053-.056) QDR **LP**

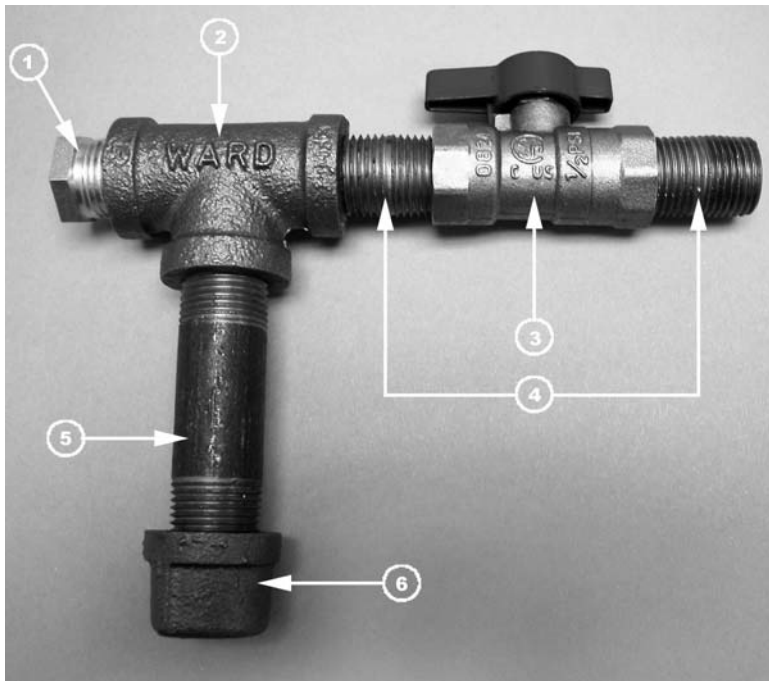
16550058 ORIFICE #51
(.050-.053) QDR **NAT**



21000615 CONN
1/8" MP X 1/8 MP HEX
BRASS TAPPED — 1 each

PARTS NOT SHOWN IN ILLUSTRATIONS

16000115	SCREW 8-32 X 5/8 PHM	2
13005207	NUT 8-32 STAR ZNC	2
16050021	RIVET: POP 3/16" SS SSD	26
16550114	GROUND WIRE ASS'Y QDR	1



16550121

DRIP LEG

1	11000683	BSHG 3/8 FPT X 1/2 MPT	1
2	13005255	PIPE TEE 1/2 X 1/2 X 1/	1
3	13004937	VALVE 1/2 BRASS BALL	1
4	13005228	PIPE NPL 1/2 CLOSE BLK	2
5	13005193	PIPE NPL 1/2 X 3 BLK	1
6	13005229	PIPE CAP 1/2 BLK	1

Also included in the drip leg parts bag:



16050061 Carabiner
3/16" ZINC 4 each



11000058 ADAPTR
3/8"MPT X 3/8"MF

1 each

120 VOLT WIRING DIAGRAM

