



# Shenandoah

## Instruction Manual



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shenmfg.com  
Made in the U.S.A.



### 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 flambe
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.

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## **DANGER !**

**SICKNESS 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 MALADIE DE L'USAGE DE CET APPAREIL DE CHAUFFAGE DANS UN CONSTRUISANT UNVENTILATED OU DANS L'HUMAIN SECTEURS VIVANTES.**

**EL USO DE ESTA CALENTADORA EN UN UNVENTILATED CONSTRUYENDO O EN HUMANO AREAS PUEDE RESULTAR EN ENFERMEDAD Y/O MUERTE**

- |  |   |
|--|---|
| <p>⚠ 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. Adequate ventilation must be provided.</p>   | <p>⚠ Ne pas utiliser l'appareil de chauffage pour chauffer humain habiter les secteurs. L'usage voulu de l'appareil de chauffage sera obligé à fournir la chaleur pour les bâtiments de volaille et cochon. La ventilation suffisante doit être fournie.</p>  |
| <p>⚠ 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. Ventilation air and combustion air must not be obstructed.</p>   | <p>⚠ Utiliser seulement le type de gaz étant fourni à l'unité comme marqué dessus (le Propane ou le Gaz Naturel). Ne pas fonctionner avec le carburant déplacé. L'air de ventilation et l'air de combustion ne doivent pas être encombrés.</p>  |
| <p>⚠ Test all pipe and pipe joints for leaks by a suitable means (Example: soap and water solution or a pressure check). Do not operate the heater until this test has been preformed.</p>   | <p>⚠ Essayer tous joints de tuyau et tuyau pour les fuites par un moyens convenables (l'Exemple : la solution de savon et eau ou un contrôle de pression). Ne pas fonctionner l'appareil de chauffage jusqu'à ce que ce test a été préformé.</p>  |
| <p>⚠ Do not move, handle, repair, or adjust height of the heater while in operation or when still hot. Do not bypass any safety devices.</p>   | <p>⚠ Pas le mouvement, la poignée, la réparation, ou ajuster la hauteur de l'appareil de chauffage pendant que dans l'opération ou quand calme chaud. Ne pas sauter d'appareils de sûreté.</p>  |
| <p>⚠ 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.</p> | <p>⚠ 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.</p> |
| <p>⚠ The installation of these appliances is to be in accordance with CAN/CGA-B149.1 and National Fuel Gas Code, ANSI 2223.1/NFPA 54 installation codes for gas burning appliances and equipment and/or local codes.</p>   | <p>⚠ L'installation de ces appareils sera obligé à être conformément à CAN/CGA-B149.1 et Code de Gaz de Carburant National, ANSI 2223.1/NFPA 54 codes d'installation pour le gaz appareils ardents et et/ou d'équipement codes locaux.</p>  |
| <p>⚠ <b>WARNING:</b> Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.</p>   | <p>⚠ <b>L'AVERTISSEMENT :</b> 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.</p>  |

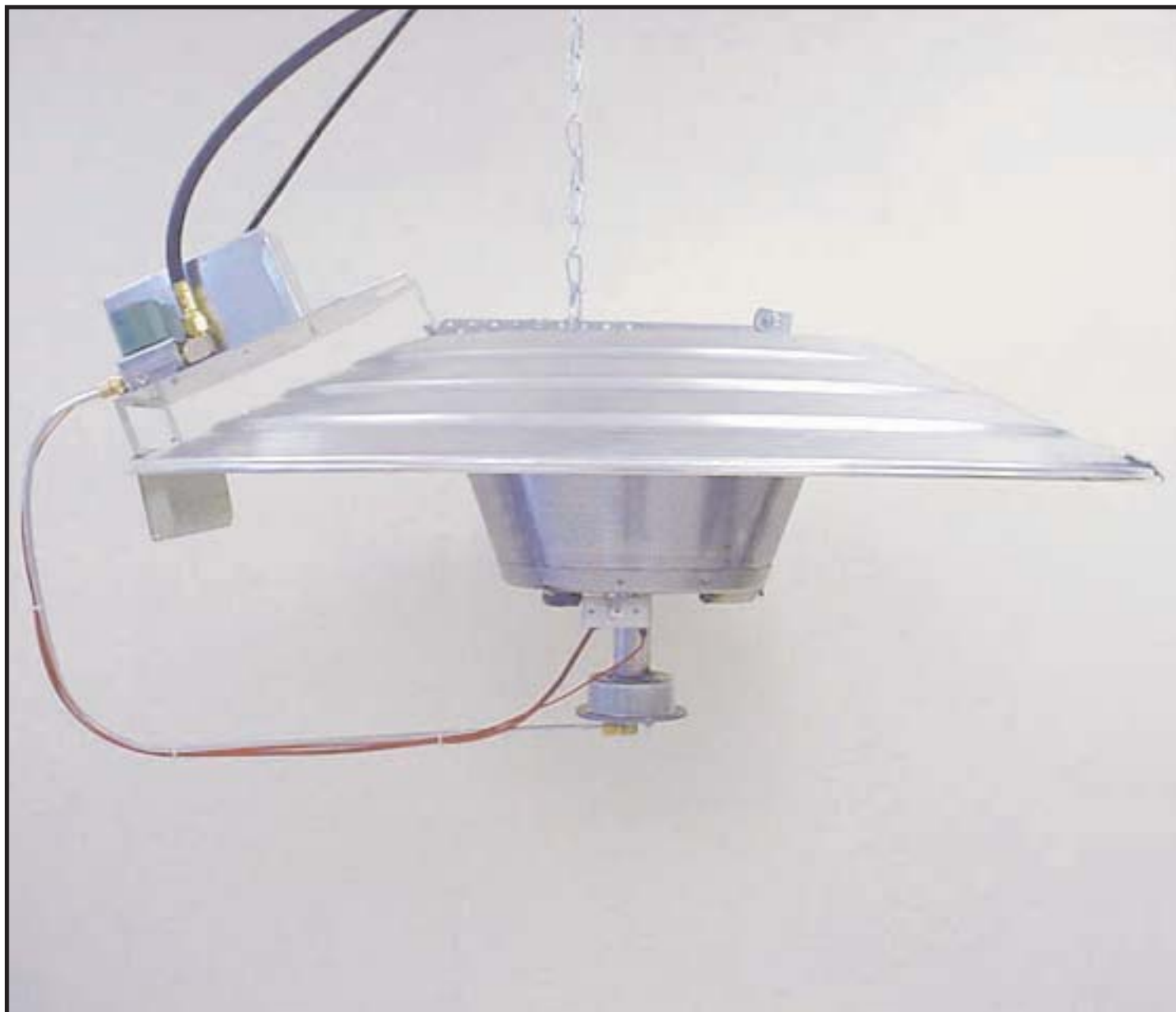
**DSI UNITS MUST BE PROPERLY GROUNDED. DO NOT ALTER ELECTRICAL CORD.**

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

**Las UNIDADES de DSI se DEBEN MOLER APROPIADAMENTE. No ALTERE CUERDA ELECTRI-CA.**

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

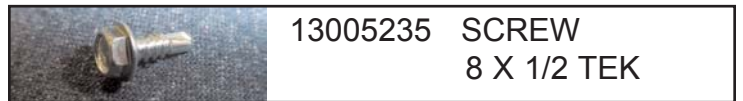
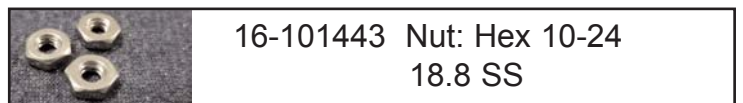
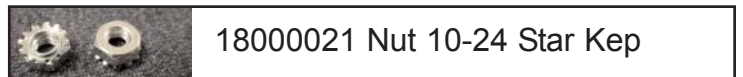
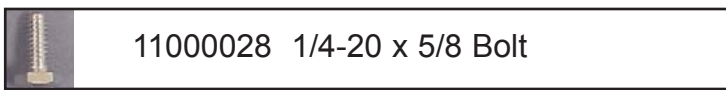
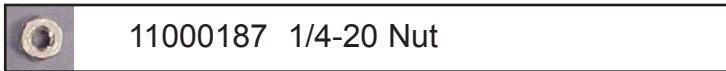
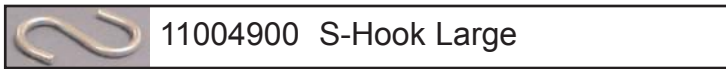
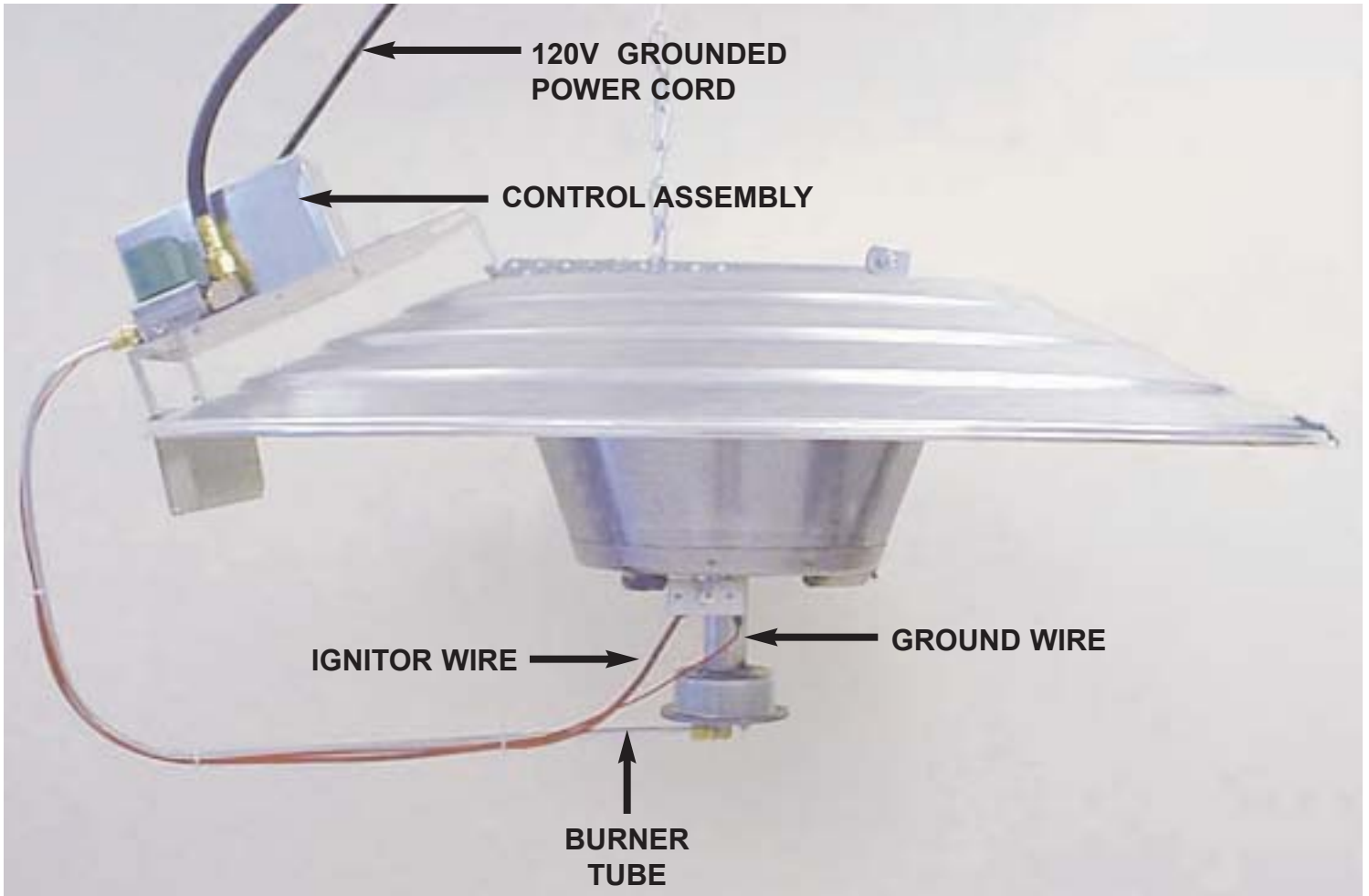
**HIGH PRESSURE LARGE INFRARED BROODER  
LP 40,000 BTU 120V 5PSI**

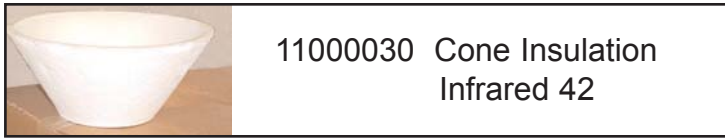


**BROODER IS SHIPPED PRE-ASSEMBLED**

**TOOLS REQUIRED FOR INSTALLING BROODER:**

3/4" wrench for tightening gas connections.





11000030 Cone Insulation Infrared 42



31000015 Large Infrared Emitter Asm.



16500092 BURNER ASM HP LP LARGE



16500091 DISC: AIR PORT LP HP



16-1111 DISC: AIR PORT HYBRID



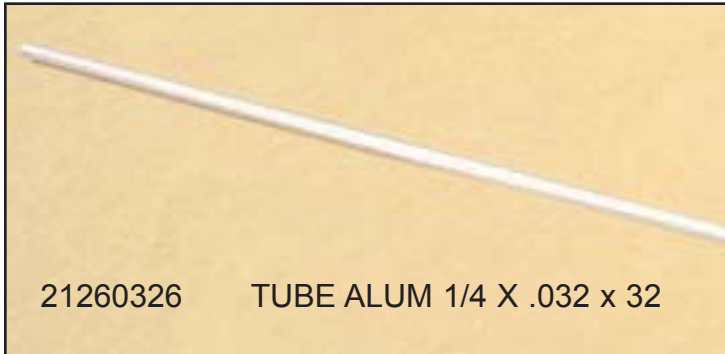
13005190 NUT 10-24 WING



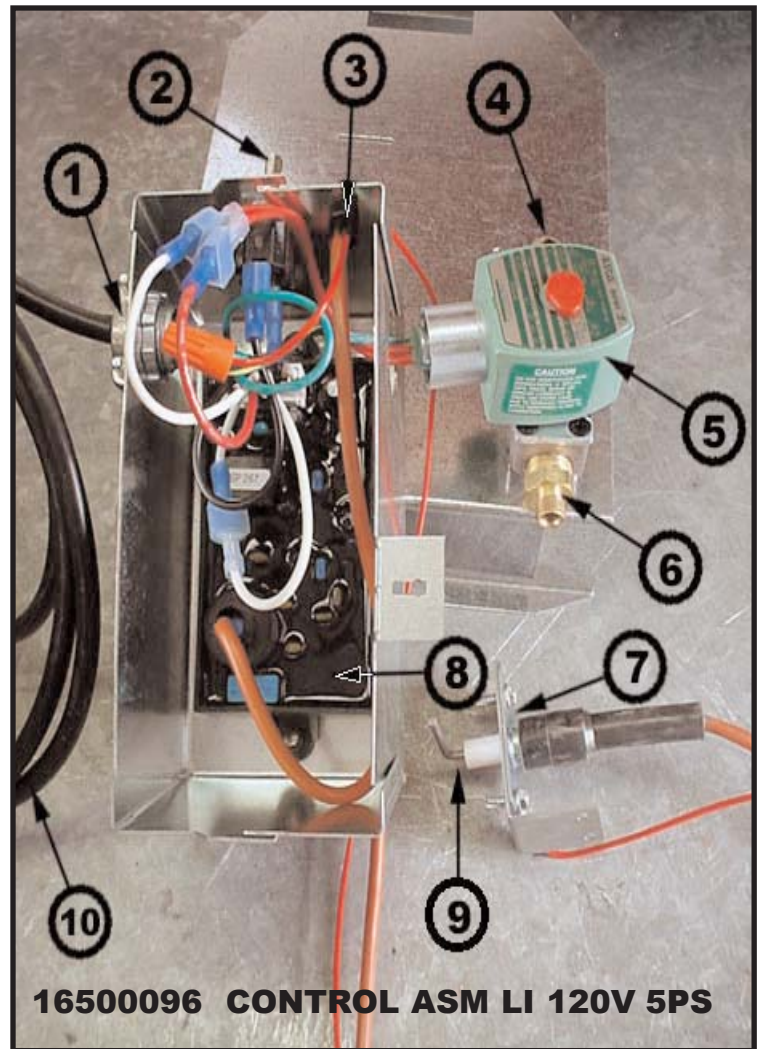
21000624 ELBOW BRASS 1/4MCT X 1/8MPT



16000053 ORIFICE #61



21260326 TUBE ALUM 1/4 X .032 x 32



**16500096 CONTROL ASM LI 120V 5PS**

- |    |           |                        |
|----|-----------|------------------------|
| 1  | 13005072  | CONN BOX 3/8 STRAIN RE |
| 2  | 13005282  | SWITCH TOGGLE SINGLE P |
| 3  | 13008108  | WIRE STRAIN RELIEF     |
| 4  | 16000054  | ELBOW BRASS 3/8MFT X 3 |
| 5  | 16000058  | VALVE ASCO 120V 5PSI   |
| 6  | 18000037  | CONN 3/8MPT X 1/4MCT   |
| 7  | 23004502  | IGN BRKT HYBRID LARGE  |
| 8  | 16000059  | BOARD: CTRL DSI BRDR   |
| 9  | 16-101197 | IGNITOR: DSI GB/SB SNG |
| 10 | 16-61225  | CORD: SJT W/PLUG-FG 1  |
|    | 16000110  | WIRE HARNESS DSI 120V  |

## SUSPENDING THE HEATER

**NOTE:** To level the heater, simply support the heater underneath and then move the S-hook forward or backward. We recommend that the valve side of the canopy be slightly lower (1 to 2 inches when in the operating position with hose and wiring connected) to insure that the gas valve assembly does not over heat. Keep gas hose away from hot surfaces. After it is level, clamp both ends of the s-hook shut. Normally the heater is attached to a winch cable used for raising and lowering.

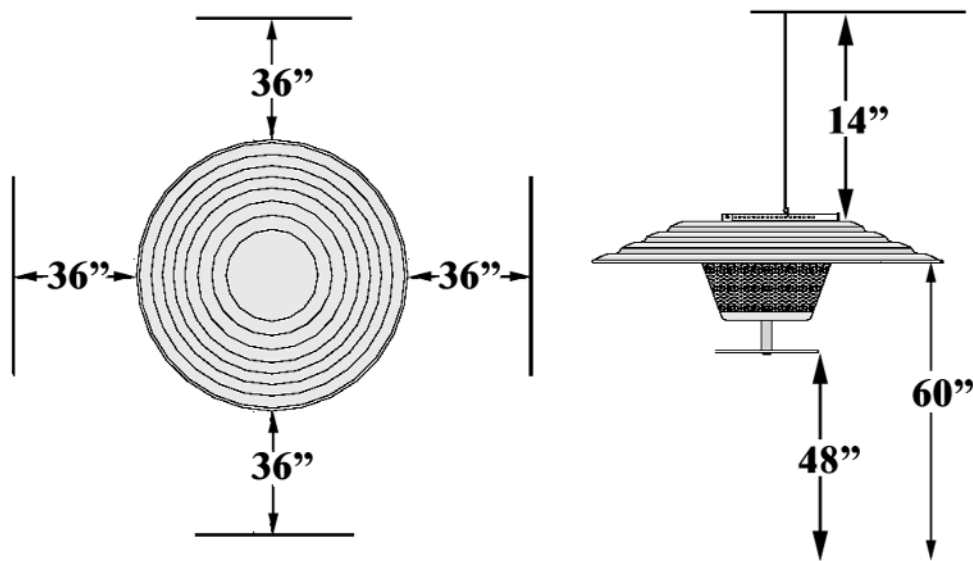
**In addition, we strongly recommend that a safety cable or chain be attached to the heater to prevent the heater from falling to the litter if the cable should happen to break.**

## **BROODER CLEARANCE**

The heater must be located so there is a minimum clearance of 14" above the heater and 36" from the side. Any combustible material must not be adjacent to the heater.

The heater should be hung with a min. of 60" from the edge of the canopy to the floor.

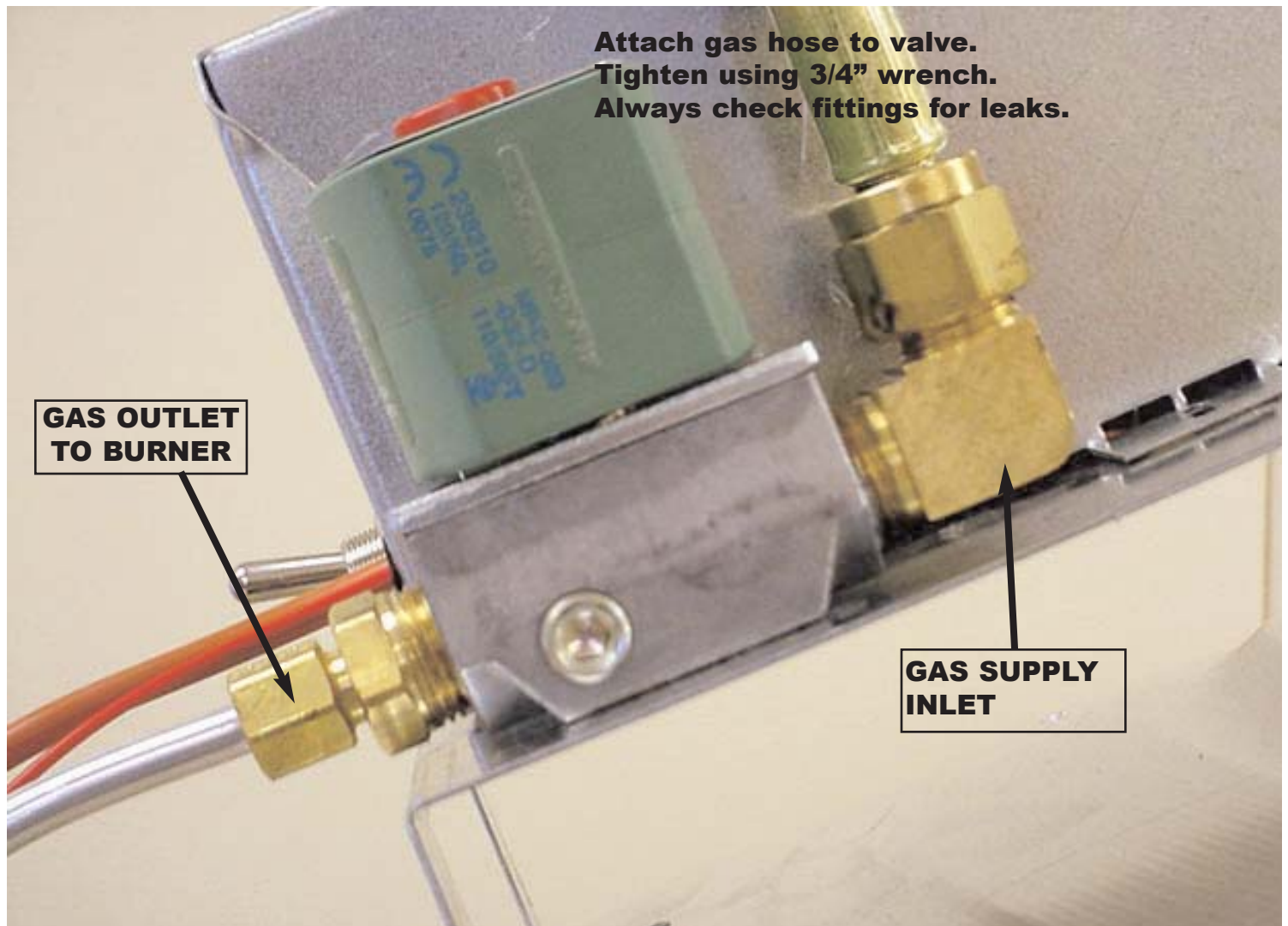
Be sure to comply with all local, state, and federal gas codes for your area.



## **CONNECTING HEATER TO POWER SUPPLY**

Insert grounded plug into 120 volt electrical outlet. Do not allow power cords and/or gas supply hoses to rest on the canopy, hanging brackets or other hot surfaces of the unit.

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.

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

**GAS PRESSURE** - should be CHECKED AND ADJUSTED to recommended settings.

**GAS Pressure:**

**FIRST** - go to the furthest stove from the regulator and connect the pressure gauge to the Press 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 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, pipe sizing, etc.




## MAINTENANCE

Proper care and maintenance of your brooder 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

### MAINTENANCE PROGRAM

- ◆ Daily: Check burner, it should be burning clear and blue; if not, clean as required or check gas pressure. Note:  $\frac{3}{4}$ " yellow tip is a common characteristic of the flame on this brooder.
- ◆ Clean brooder/heater after each flock
- ◆ Inspect for any orifice blockage caused by spider webs in the burner assemblies.
- ◆  **DANGER!** 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.
- ◆ Clean dust and dirt from burner ports with compressed air. If an air compressor is not available turn the brooder/heater to a vertical position and tap on the side of the burner with a screwdriver, pliers, or any other suitable object, to knock the dust from the unit.
- ◆ If houses are washed down, care should be taken to prevent moisture from accumulating on control valve and burner assemblies. Cover valve and burner assemblies with plastic before washing. After wash downs remove plastic from brooder/heater. Do not allow radiant to become wet. We recommend that you light the brooders/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 be cleaned by inserting a long brass bristle brush between the outer and inner cones.
- ◆ Clean air intakes with a small brush.
- ◆ Extreme care must be taken not to enlarge or distort the burner orifices.
- ◆ If brooder/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.
- ◆ Dust that accumulates on the canopy should be cleaned off before igniting brooder. If dust is left to burn off of galvanized canopies it will result in loss of galvanizing material and corrosion of the canopy.





## WARRANTY

**Agile Mfg., Inc.**, ("Agile"), warrants each new SHENANDOAH® 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 the 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. The Manufacturer shall not be responsible for the costs of removal or reinstallation of products and shall not be responsible for transportation costs. The purchaser must first contact the seller to resolve product issues covered under this Warranty. If the purchaser is unable to resolve warranty claims directly with the seller, the purchaser should contact the manufacturer as the address listed below.

### Conditions and Limitations

1. The product must be installed and operated in accordance with the instruction published by the Manufacturer **or Warranty will be void.**
2. The product must be installed according to all applicable federal, State and local codes or regulations **or Warranty will be void.**
3. Warranty is **void if all components** of the product or system are not original equipment supplied by the Manufacturer.
4. This product must be purchased from and installed by an authorized distributor or certified representative thereof **or the Warranty will be void.**
5. Malfunctions or failure resulting from misuse, abuse, negligence, alteration, accident, of lack of proper maintenance, or from lightning strikes, electrical power surges or interruption of electricity, shall not be considered defects under the Warranty.
6. This Warranty applies only to systems for the care of poultry and livestock. Other applications in industry or commerce are not covered by this Warranty.

The 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 THE 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.

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