CHORE-TIME_®

Instruction Manual



Made to Work. Built to Last. SM
P.O. Box 2000 State Road 15 North
Milford, IN. 46542-2000 U.S.A.
219-658-4101 Fax 877-730-8825
www.ctbinc.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

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

Si vous sentez une odeur de gaz:

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

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.

May 2004 10900000

DANGER!

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

⚠ 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.

The installation of the heater must comply with all applicable state, local, and/or national codes in accordance with CAN/CGA - B149.1 or .2 installation codes.

① 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.

!\text{Ventilation air and combustion air must not be obstructed.}

Do not operate the heater in the presence of combustible vapors, liquids, or gases. Failure to heed this warning could result in an explosion and/or fire.

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.

riangle Do not move, handle, repair, or adjust height of the heater while in operation or when still hot.

⚠ Do not bypass any safety devices.

A 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.

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.

⚠ WARNING: 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.

NOTES

LIMITED WARRANTY:

CHORE-TIME INDUSTRIES, INC. WARRANTS THAT ITS PRODUCTS SHALL BE FREE FROM DEFECTS IN MATERIAL AND IN WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR, WHEN PROPERLY USED FOR THEIR ORDINARY AND INTENDED PURPOSES AND WHEN PROPERLY MAINTAINED AND REPAIRED.

It is expressly agreed and understood that the Buyer's sole and exclusive remedy for any breach of this Limited Warranty shall consist of the repair or replacement of any defective part or product when returned to the Seller or to the Seller's authorized representative. It is further expressly agreed and understood that this sole and exclusive remedy shall be in lieu of and shall preclude any other liability of the Seller to the Buyer for any consequential or incidental damages sustained by the Buyer as a result of any defect in the products including any loss of profits, loss of business opportunity, inconvenience, increased costs of operation, loss of goodwill, property damage or any other economic or business loss. The forgoing provisions of this Limited Warranty constitute the final and complete expression of the agreement between the Buyer and Seller concerning express warranties of the product. Any other statements, representations, or promises made by salesmen, dealers, brokers, distributors or others which purport to expand or extend the coverage or term of this Limited Warranty in any particular whatsoever, are unauthorized and shall not be binding on the Seller and shall not operate as warranties of the product. It is further understood that no salesman, dealer, distributor, broker or other person is authorized to change, modify, alter, amend, delete, or supplement the printed terms of this Limited Warranty in any manner or in any particular. No handwritten or typewritten interlineation, modification, amendment, addendum, deletion, supplement change or alteration of the printed terms of this Limited Warranty shall be effective or shall be binding upon the Seller. All prior discussions, negotiations, statements, promises, agreements, understanding and representations concerning the character and quality of the products are merged with and superseded by the terms of this Limited Warranty. The printed term of the Limited Warranty contain the final and exclusive statement of the Buyer's and Seller's intentions, understanding and agreement concerning the subject matter hereof.

DISCLAIMER AND EXCLUSION OF WARRANTIES - The foregoing LIMITED WARRANTY is given in lieu of and in substitution for any and all other warranties of any kind or description whatsoever, specifically including the implied warranty of the character or condition of the products. The SELLER disclaims and excludes any implied warranty or merchantability or fitness for a particular purpose in connection with the products subject to this transaction. The SELLER further disclaims any express warranties concerning the products other than the foregoing "LIMITED WARRANTY". There are no warranties of any nature whatsoever which extend beyond the express "LIMITED WARRANTY" set forth in the preceding paragraph.

Any exceptions to this warranty must be authorized in writing by an officer of the company. Chore-Time Industries reserves the right to change models and specifications at any time without notice or obligation to improve previous models.

HIGH PRESSURE ASSEMBLY INSTRUCTIONS

NOTE: The installation of these appliances is to be in accordance with CAN/CGA - B49.1 and B149.2 Installation Codes for gas burning appliances and equipment and/or local code.

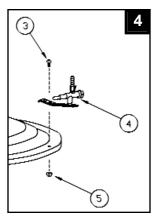
1. Remove all parts from the box - save empty box for use in assembly.

(11)

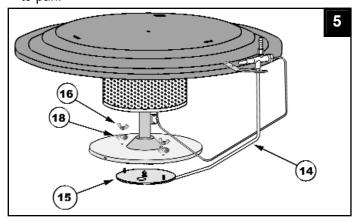
- Turn the **BURNER** ASSEMBLY(10) and the **EMITTER ASSEMBLY (9) UPSIDE DOWN. Insert** the stud on top of the BURNER (10) through the **BURNER SPACER (11)** and the small end of the emitter cone. Place the large WASHER (7) onto the stud inside the emitter cone and finger tighten SS NUT (6). Align one of the emitter legs with the two holes in the burner pan. Firmly tighten SS nut inside Emitter.
- B. Set the CANOPY (1)
 UPSIDE DOWN on the box. Place the CONE
 INSULATION (8) with the large end down in the center of the canopy. Set the EMITTER over the CONE INSULATION, inserting the leg that is aligned with the holes in the burner pan through

the slot aligned with the hole in the outer edge of the canopy.

4. Attach the CONTROL VALVE ASSEMBLY (4) on the edge of the CANOPY (canopy top), the gas outlet on the valve should be in the "up" position (gas valve down), and secure with two SCREWS (3) and STAR NUTS (5).

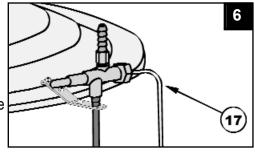


5. Attach the 1/4" TUBING (14) to the GAS CONTROL VALVE. Tighten firmly, making sure that the studs on the air intake/ orifice bracket align with the holes in the burner pan- USE TWO WRENCHES TO PREVENT TWISTING OR DAMAGING THE TUBING. Insert the two studs on the AIR INTAKE/ORIFICE BRACKET through the holes in the BURNER PAN. Use two WASHERS (18) and WING NUTS (16) to secure bracket to pan.



6. Attach the THERMOCOUPLE (17) to the GAS

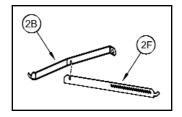
CONTROL VALVE (Caution: Finger tighten plus quarter turn!) Form the thermocouple along the tubing.

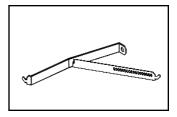


<u>NOTE:</u> Check all Screws & Fittings to make sure they are tight per instructions.

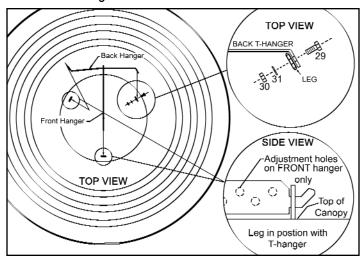
05000000

- 7. "T-Hanger" assembly instructions:
- A. Insert slot in the middle of BACK T-HANGER (2B) into the slot in the end of the FRONT T-HANGER (2F) (Note: adjustment holes at top)

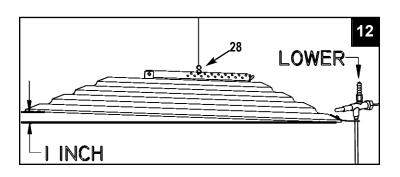




- B. Insert hook on front T-hanger through top leg of EMITTER which is aligned with the four holes the CANOPY. Insert the hook on the right end of the back T-HANGER through right top leg of the EMITTER.
- C. Assemble and tighten BOLT (31), NUT (32), and WASHER (33) as shown with back T-hanger on outside of Emitter legs.



12. Suspend the brooder: To level the heater, simply support the heater underneath and then move the S-HOOK (28) forward or backward. After it is level clamp both ends of the s-hook shut. The brooder should hang with the control assembly tilted slightly downward. Normally the brooder 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 brooder to prevent the brooder from falling to the litter if the winching cable should happen to break.

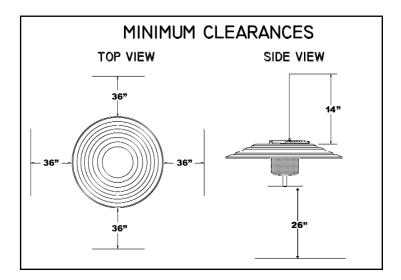


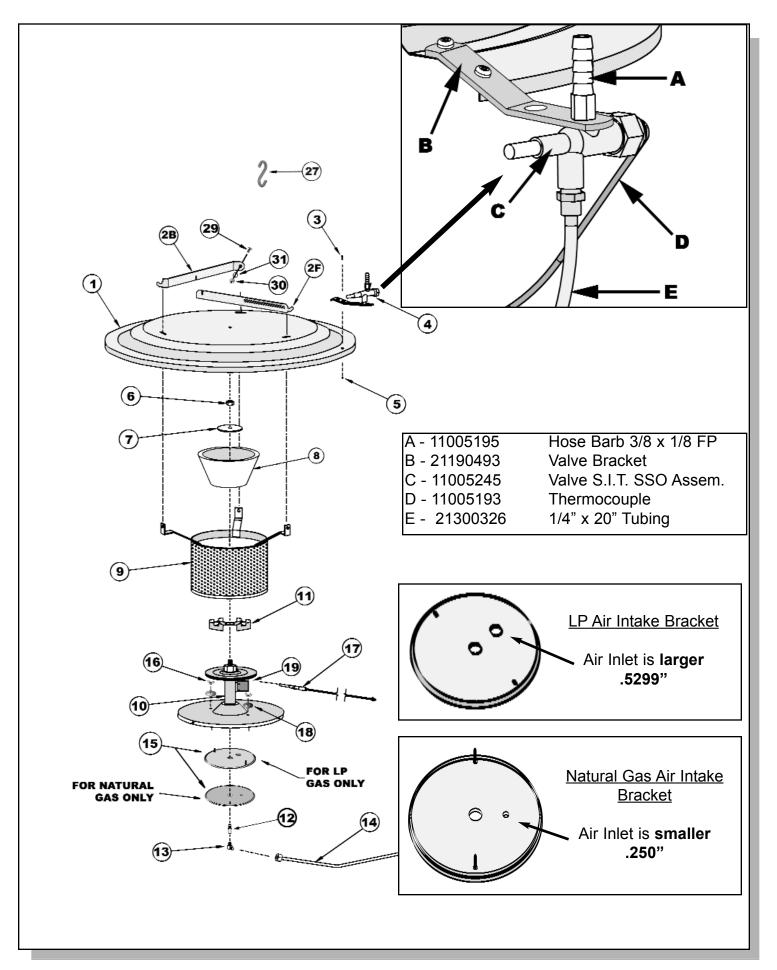
GENERAL INFORMATION

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 26" from bottom of the heater to the floor.

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





HIGH PRESSURE BROODER PARTS LIST

1	21002008	Canopy 24 Hp17 Galv Compl	1
2B	21004002	HANGER-T BACK LEG	1
2F	21014002	HANGER-T FRONT LEG	1
3	18003945	Screw 10-24 X 3/8	2
4	31005245	VALVE ASM HP17 SSO	1
5	18000021	Nut 10-24 Star Kep	2
6	11000064	Nut 3/8-16 Stainless	1
7	11000151	Washer Flat 2"	2
8	11000075	Sierra Infrd 21,22 Cone Insul	1
9	31001028	Sierra Infrd 21,22 Emitter Asm	1
10	31001123	Infra Red Welded Burner H21	1
11	21077088	Burner Spacer H-21	1
12	11000203	Orifice No 73 (Clean)	1
13	21000624	Elbow Brass 1/4Mct X 1/8Mpt	1
14	21300326	Tubing Hp17 1/4 x 20"	1
15	31004904	Air/Intk Brkt LP Hp17	1
	31004905	Air Intake Brkt NAT	1
16	13005190	Nut 10-24 Wing	2
17	11005193	Thermocouple 600MM (24")	1
18	13005189	Washer (Fender) 3/16"X1"	2
19	21004507	Bracket HP17 TCOUPLE & SHLD	1
27	11004900	Hook S Large	1
29	11000028	1/4-20 BOLT	1
30	11000187	1/4-20 NUT	1
31	11000338	1/4-20 WASHER	1

MANIFOLD OPERATION

- A. Install the manifold by connecting the gas supply from the LP tank to the ½" pipe tee located next to the Red regulator.
- B. Connect the piping to the heaters to the ½" pipe tee closest to the gauge. Check all connections for leaks.

TO ADJUST THE MANIFOLD

The supply pressure to the manifold should be between 5 psi and 10 psi

- a. Light all the heaters. Turn on the bottom solenoid, this is the Maximum rate solenoid. Set the pressure on the manifold gauge so that the pressure is 5 psi. Turn off the bottom solenoid.
- b. Turn off the Maximum rate solenoid and turn on the 2nd solenoid up from the bottom of the manifold, this is the Med-Hi solenoid. The pressure should be set so that it is 3.5 psi.
- c. Turn off the Med-HI rate solenoid and turn on the 3rd solenoid up from the bottom of the manifold, this is the Med-Lo solenoid. The pressure should be set so that it is 2 psi.
- d. Turn off the Med-Lo solenoid. Gas will be going through the top section of the manifold. This is the minimum rate burn. Adjust the manifolds gauge pressure so that it is .5 psi (13" water column)

TO SET UP THERMOSTAT/CONTROLLER

Set the set point on each thermostat progressively lower from Med-Lo to Hi. There should be about .5 to 1 degree difference in the set point of each solenoid.

Example:

Med-Lo Set Point	85
Med-Hi Set Point	84
Hi set point	83

LIGHTING INSTRUCTIONS

- 1. Turn on main gas supply to supply pipe.
- 2. Turn on High Solenoid Valve.
- 3. Depress and hold blue button and light the Burner. Allow to burn "45" seconds before releasing.
- 4. Adjust thermostat to proper setting.

SHUT DOWN INSTRUCTIONS

- 1. Turn off gas supply.
- 2. Turn off power to manifold.

MAINTENANCE

Proper care and maintenance of your HIGH PRESSURE Radiant 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

MAINTENANCE PROGRAM:

- Daily: Check flames, they should be burning clear and blue; if not, clean as required or and/or check gas pressure.
- Clean 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 by removing the wing nuts and washer from the top of the burner pan and lowering the air intake assembly. If an air compressor is not available, turn the heater to a vertical position and tap on the side of the burner brackets with a screwdriver handle, 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. After wash downs 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 be cleaned by inserting a long brass bristle brush between the emitter screen and inner cone.
- Clean air intakes with a small brush.
- Extreme care must be taken not to enlarge or distort the burner orifice. Special burner orifice cleaning kits, which includes the correct size orifice cleaning gauges and brushes, are available for purchase at your dealer.
- 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.

NOTES