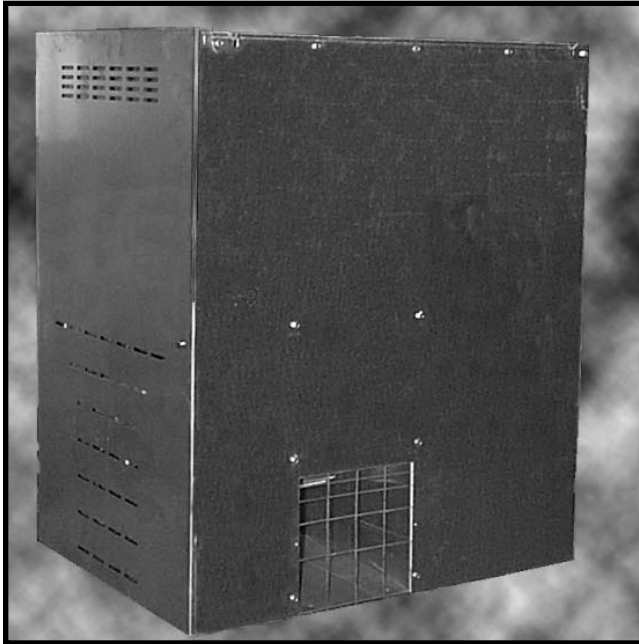


CHORE-TIME®

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

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.



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.
- ⚠ 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.
- ⚠ 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 performed.
- ⚠ Do not move, handle, repair, or adjust height of the heater while in operation or when still hot.
- ⚠ Do not bypass any safety devices.
- ⚠ 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.

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 foregoing 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.

SPACE HEATER MANUAL

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.

If you smell gas:

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

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

⚠ 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.



DANGER: Sickness and/or death due to asphyxiation if this space heater is used in an unventilated building or living area, such as a home, shop for human habitation, or recreational vehicle.

Installation of this heater in a home, shop or recreational vehicle may result in fire or explosion, property damage or loss of life.



DANGER: Sickness and/or death may result from use of this space heater in an unventilated building.

⚠ WARNING:

Proper gas supply pressure must be provided to the inlet of the appliance. Refer to the rating plate for proper gas supply pressure. Gas pressure in excess of the maximum inlet pressure specified at the appliance inlet can cause fires or explosions, leading to serious injury, death, building damage, or loss of livestock.

⚠ WARNING: Use only the type of gas being supplied to the unit as marked on unit (Natural or LP). Do not operate with improper fuel.

⚠ WARNING: Do not expose unit to rain, or electrical shock hazard may result. This space heater is designed for indoor use only.

⚠ WARNING: This heater must not be washed. Use of a pressure washer, water or liquid cleaning solution on this heater can cause severe personal injury or property damage due to waster and/or cleaning solution:

A. In electrical components, connections and wires causing shock or component failure.

B. On gas control components causing corrosion which can result in gas leaks and fire or explosion from the leak. Heater must be cleaned without being subjected to liquid spray or excessive wetting.

⚠ WARNING:

Adequate ventilation must be provided. Ventilation air and combustion air must not be obstructed. Do not place this space heater in close proximity of intake and/or discharge ductwork. This could cause equipment to produce an excessive amount of combustion, by-products and/or cause overheating conditions or malfunction.

⚠ WARNING:

This space heater is equipped with a three-prong grounded plug. For your safety against shock, this should only be used in a properly grounded three-prong receptacle outlet. The use of the extension cords to supply power to the Space Heater is not recommended.

⚠ WARNING: Test all pipe and pipe joints for leaks by a suitable means (Example: soap and water solution or a pressure check). Do not attempt to operate this space heater until this test has been performed.

⚠ WARNING:

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

⚠ WARNING: Do not bypass any safety devices. Replace or repair defective component before operating the space heater. Failure to do so will void warranty and could result in injury or property damage.

SPECIFICATIONS

	<u>LP</u>	<u>NAT</u>
Input BTU/hr	225,000	200,000
Inlet Pressure	11" w.c.	7" w.c.
Burner Manifold Pressure	9" w.c.	3" w.c.
Electrical v/hz/a	110 V 60 HZ 230/50/5.5 230/60/5.5	
Motor	Thermal protected 1/3 H.P.	
Heated air output	850 C.F.M.	
Unit Switch	On-Off Toggle	
High temp safety	Manual reset limit switch	
Air flow safety	Wind vane sail switch	
Gas flow safety	Automatic gas shut off control with flame sensing rod	
Power cord	6' wire power cord with molded plug	
Thermostat Control	Remote thermostat or computer control system*	
Dimensions (L x W x H)	24 3/4" x 19 1/4" x 29 1/4"	
Net weight	116 lbs. w/kit 52.73 KG 108 lbs. w/o kit 49.09 KG	
Shipping weight	123 lbs. w/kit 55.35 KG 115 lbs. w/o kit 51.75 KG	
Clearances	20" from sides, back, top, bottom, to any roof, floor, or side walls of building. Allow a minimum of 10 feet to discharge air outlet.	

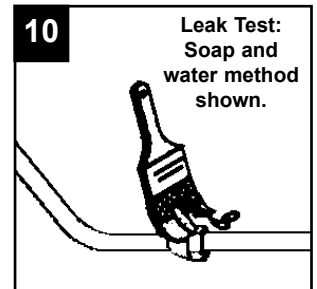
* Not included in Standard Unit

Note - Refer to price sheet for standard features, accessories, and options.

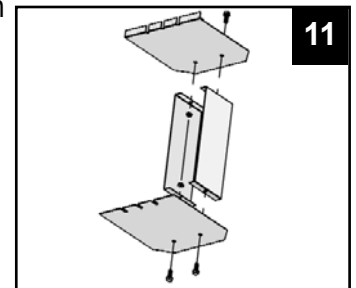
1. Read all safety precautions in this owner's manual.
2. Do not allow the Space Heater to come closer than 20 inches from sides, back, top, bottom, to any roof, floor, or side walls of building. Allow a minimum of 10 feet to discharge air outlet.
3. If the Space Heater is suspended by chains in a fixed position, be sure the chains are rated for the weight of the Space Heater.
4. If height adjustment is desired, the Space Heater can be mounted on a cable suspension system operated by a winch. Attach the properly weight-rated cable to the four S Hooks at the top of the Space Heater. Be sure to install a safety device to keep the Space Heater from being accidentally lowered too close to the floor. Also, be sure to add a stop in the winching system to protect the unit from being winched up too high; therefore, being too close to the ceiling of the building.
5. The Space Heater should be level and not to exceed a 5 degree incline.
6. Install a gas pipe trap to the gas pipe inlet on the Space Heater.
7. We recommend that high-pressure lines and regulators be outside of house.
- 8a. For: LP Gas pressure requirements, if the supply pressure to the Space Heater is greater than 11" w.c., a secondary regulator will need to be installed.
Caution: Do not exceed maximum rated pressure to the secondary regulator. Note: the pressure on the outlet of the gas valve should be 9" w.c.
- 8b. For: Natural Gas pressure requirements, if the supply pressure to the Space Heater is greater than 7" w.c., a secondary regulator will need to be installed.
Caution: Do not exceed maximum rated pressure to the secondary regulator. Note: the pressure on the outlet of the gas valve should be 3" w.c.

9. Make the last connection of the flexible hose to the supply pipe and turn on the gas supply. Use a good grade of pipe dope compound on all gas pipe connections.

10. Check for gas leaks (use a 50/50 soap and water solution or a pressure check). This is very important. **DO NOT** operate the Space Heater if there are any gas leaks.

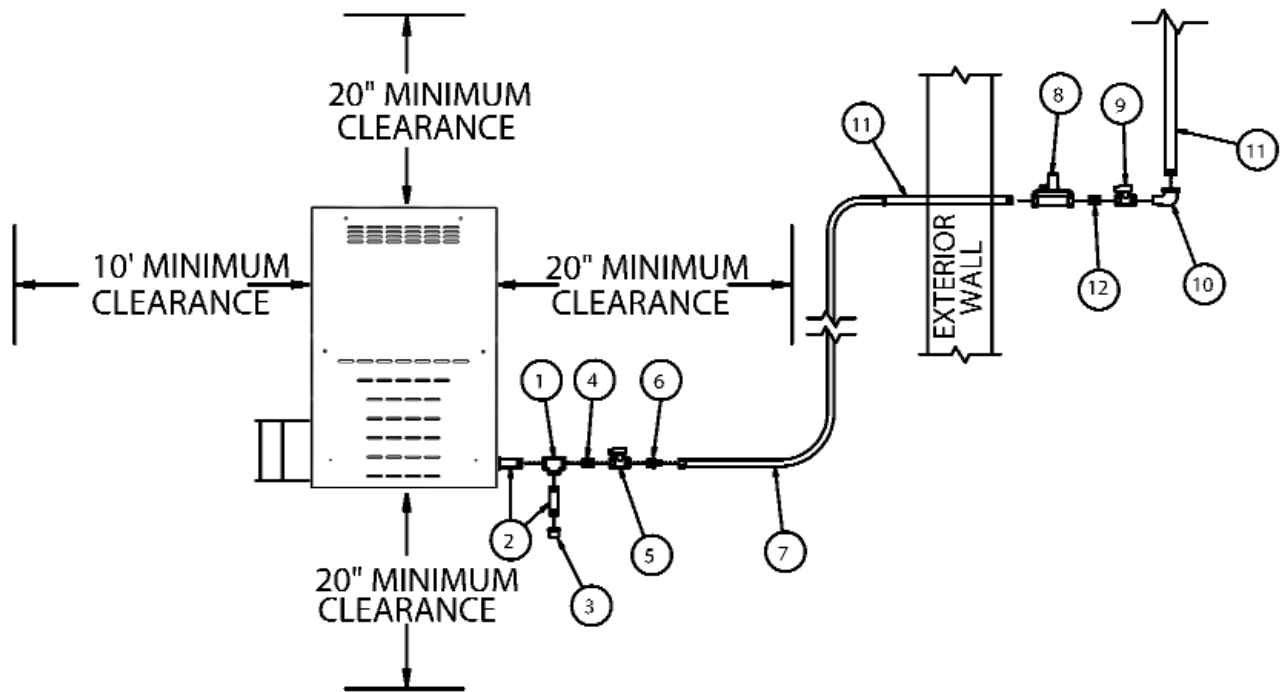


11. Assemble air deflector with the flaps pointing vertically and place it on the air discharge opening with screw supplied.



12. When connecting the Space Heater directly to thermostat or a whole house system, check the wiring diagram of that type of controller for proper wiring to insure safe operation of the Space Heater, if any difficulty arises, call your dealer. Turn the thermostat dial to a temperature lower than the temperature of the building.
13. Plug in the three-prong power cord to a correctly grounded three-prong electrical outlet. **DO NOT** use any electrical extension cords to supply power.

SPACE HEATER GAS PIPING AND MINIMUM CLEARANCES



NO.	DESCRIPTION	PART NO.
1	PIPE TEE 1/2" X 1/2" X 1/2"	13005255
2	PIPE NPL 1/2" X 3"	13005193
3	PIPE CAP 1/2"	13005229
4	PIPE NPL 1/2" CLOSE	13005228
5	VALVE BALL COCK 1/2"	13004937
6	HOSE NPL	13005180
7	HOSE 8'	13008098
8	REGULATOR LV4403 B4 LP	13005203
	REGULATOR 325-3 NAT	13005074
9	VALVE BALL COCK 1/2"	SUPPLIED BY INSTALLER
10	PIPE STREET ELBOW 1/2"	
11	HARD PIPING	
12	PIPE NPL 1/2" CLOSE	

PARTS #1-8 ARE INCLUDED IN OPTIONAL ACCESSORY KIT

The instructions and information on pages 7 thru 11 are for the Pilot controlled Space Heater. If your Space Heater has the Direct Spark Ignitor or Hot Surface Igniter continue on to page 12.

OPERATING INSTRUCTIONS

1. Read all instructions in this owner's manual before operating the Space Heater.
2. Recheck the type of gas being supplied to the unit. Make sure it is the same gas for which the Space Heater and orifice is adjusted.
3. Double check for any gas leaks (see Safety Precautions). This is very important. Do not operate this heater until there are no gas leaks.
4. Turn on all gas valves to the Space Heater.
5. Open the end door and turn the knob labeled PILOT VALVE clockwise until it stops. Push the red button down and hold. Light the pilot through the hole in the pilot shield. Continue holding the button down for approximately 30 seconds after the pilot lights. Release the knob and make sure the pilot remains lit. Note: The pilot may be hard to light on initial start up or after service because of air in the lines.
6. Turn the system switch to the ON position. This is located on the outside of the heater near where the power cord enters the case.
7. After flame is established, allow unit to run for a couple of minutes. Then make the Space Heater go through several "start-ups and shut downs" to check the operation of the unit.
8. Set the thermostat or system control to desired house temperature.

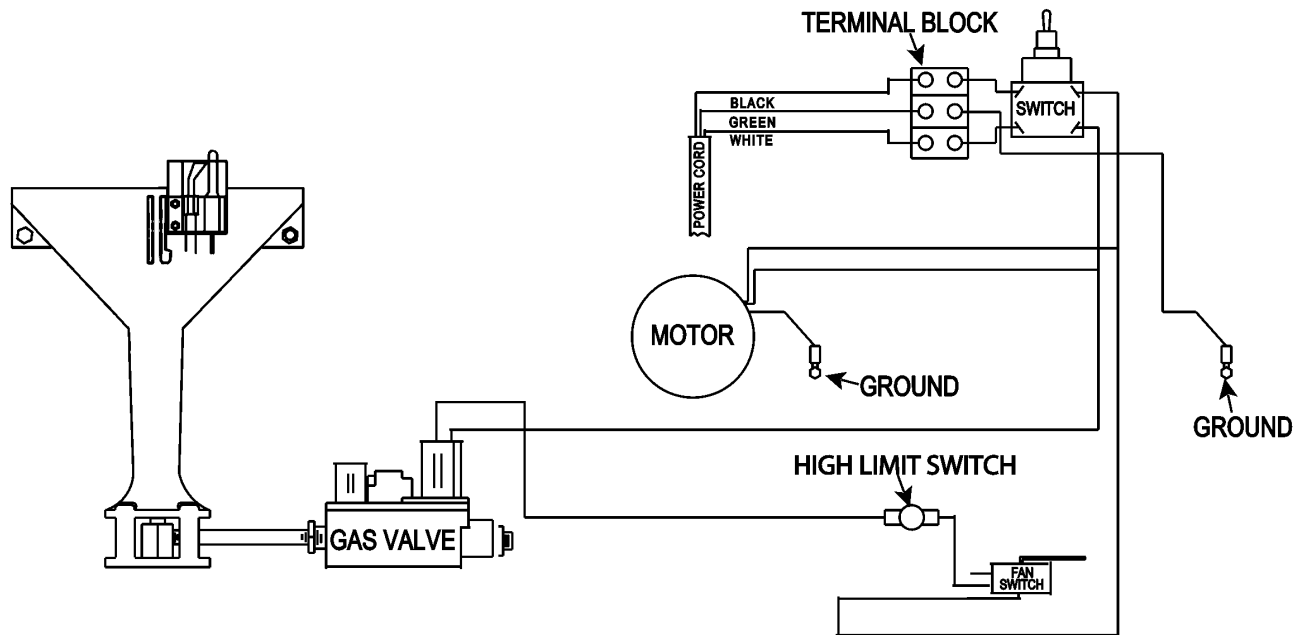
Note: When the Space Heater has not been used for an extended length of time due to off season or between flocks, follow the maintenance instructions before restarting the heater. Then follow regular operation instructions.

SHUT DOWN INSTRUCTIONS

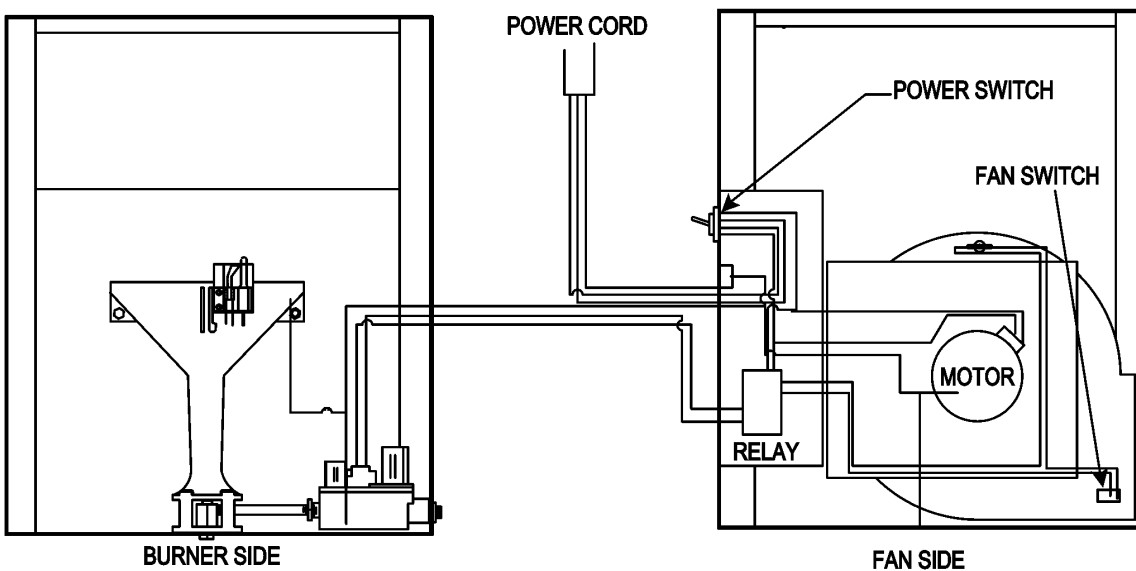
1. Turn systems switch to the off position.
2. Turn the knob on the gas valve inside the unit to the "off" position.
3. Turn off the gas valve between gas hose and supply pipe.
4. Turn off the gas supply valve at supply source.
5. Unplug the power cord.

TROUBLE SHOOTING GUIDE

	Possible Cause	Corrective Action
Problem 1) Blower Will Not Run	<ul style="list-style-type: none"> a. No power to heater b. System switch to "off" c. Defective motor d. Bad capacitor 	<ul style="list-style-type: none"> a. Check electric supply b. Turn switch to "on" c. Replace the motor d. Replace capacitor
Problem 2) Wind Switch Does Not Close	<ul style="list-style-type: none"> a. Bad wind switch b. Low air flow c. Obstruction or bent sail arm d. Loose or broken wire 	<ul style="list-style-type: none"> a. Replace switch b. Clean blower and refer to problem #1 c. Remove obstruction or straighten arm d. Repair or replace wire
Problem 3) High Limit Switch Open	<ul style="list-style-type: none"> a. Manifold pressure too high b. Blower wheel loose or damaged c. Blower wheel dirty d. Motor turns too slow e. Wrong burner orifice f. Wrong type of gas g. Blockage on inlet or outlet h. Defective limit switch 	<ul style="list-style-type: none"> a. Check pressure and adjust as required b. Tighten or replace wheel c. Clean blower wheel d. Replace motor or refer to Problem #1 or 2 e. Replace orifice with correct one f. Check the gas type g. Clean and remove blockage h. Replace switch
Problem 4) Pilot will not light	<ul style="list-style-type: none"> a. Air in gas lines b. No gas to the unit 	<ul style="list-style-type: none"> a. Purge the gas lines b. Check the gas supply
Problem 5) Pilot lights but goes out when knob is released	<ul style="list-style-type: none"> a. Defective thermocouple 	<ul style="list-style-type: none"> a. Replace thermocouple
Problem 6) Burner lights will not stay lit	<ul style="list-style-type: none"> a. Leak in the pilot assembly. b. Blockage around base of burner c. Incorrect manifold pressure d. Shield damaged or removed 	<ul style="list-style-type: none"> a. Tighten or replace pilot assembly b. Clean out carbon or debris from burner c. Check pressure and adjust as required d. Replace pilot shield
Problem 7) Burner does not light	<ul style="list-style-type: none"> a. Air in gas line b. No gas c. Thermostat not calling for heat d. Tripped limit switch e. Defective gas valve f. Wind switch is defective or improperly functioning 	<ul style="list-style-type: none"> a. Purge gas line b. Refill LP tank or check natural gas supply c. Replace or Adjust thermostat d. Reset or replace limit switch e. Replace gas valve f. See problem #2
Problem 8) Unit won't heat	<ul style="list-style-type: none"> a. Gas supply pipe too small b. Blockage in gas pipe c. Burner does not light d. Wind switch open e. High limit open f. Defective gas valve 	<ul style="list-style-type: none"> a. Replace with larger pipe b. Clean out trap and check gas lines c. Refer to problem #5 d. Refer to problem #2 e. Refer to problem #3 f. Replace the valve
Problem 9) Main Burner does not shut off	<ul style="list-style-type: none"> a. Defective gas valve b. Gas pressure too high c. Defective thermostat 	<ul style="list-style-type: none"> a. Replace the valve b. Check gas manifold pressure c. Replace the thermostat

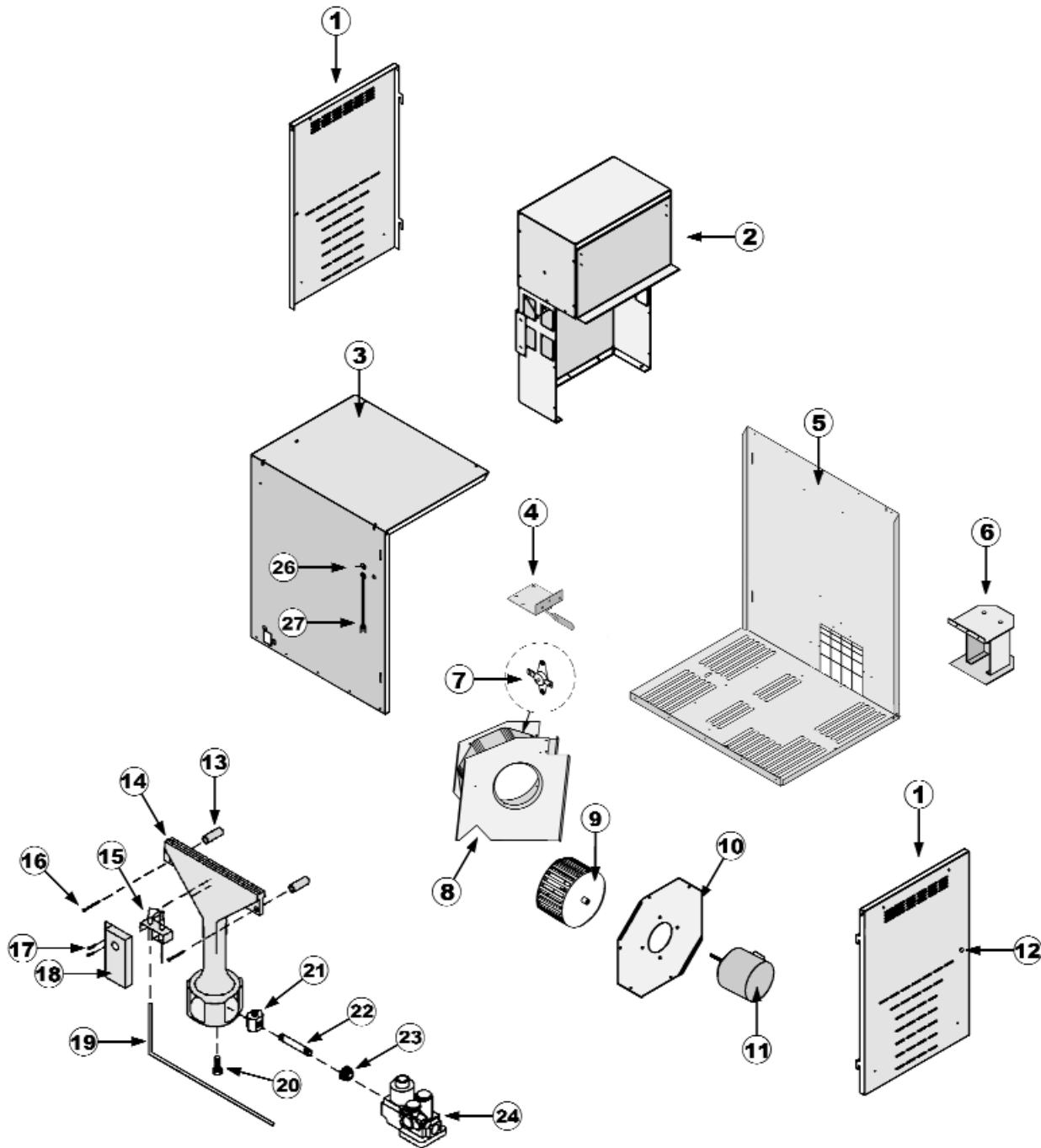


PILOT SPACE HEATER WIRING DIAGRAM 240 VOLTS / 50 HRZ



PILOT SPACE HEATER

Exploded Parts



PILOT SPACE HEATER

ILLUSTRATION NUMBER	PART NUMBER	DESCRIPTION	REQUIRED NUMBER
1	23006000	DOOR RIGHT/LEFT F/SPACE	2
2	33024958	TURBO COMBUSTION CHAMBE	1
3	23005000	CABINET TOP/BACK F/SPAC	1
4	33014925	TURBO 2 FAN SWITCH/BRKT	1
5	23105010	CABINET BTM/FRONT F/ SP	1
6	33002900	EXHAUST AIR KIT	1
7	13004938	SWITCH 2450 THERMO	1
8	33007088	TURBO 2000 FAN HOUSING	1
9	13005233	FAN SQUIRREL CAGE	1
10	23305030	MNT PLATE F/SPACE HTR	1
11	11000067	MOTOR 1/3 HP 110-230V/	1
-	13000067	MOTOR TURBO FAN 230V/5	-
12	13008075	LATCH DOOR 93-225	2
13	22000005	SPACER 1/8 X 1 1/4	2
14	13005210	BURNER CAST IRON	1
15	11006188	PILOT ASM 2 CHL-10 LP	1
-	21006170	PILOT ASM 2CHL PILO NAT	-
16	16000064	SCREW #12 X 2 1/2 HEX T	2
17	13005235	SCREW 8 X 1/2 TEK	2
18	23127088	PILOT SHIELD CE	1
19	21200326	TUBE ALUM 1/4 X 15	1
20	13005270	BOLT 3/8 - 16 X 3/4	1
21	13005224	ORIFICE .188" LP	1
	13006224	ORIFICE .330" NAT	1
22	13007072	PIPE NPL 1/4 X 4 3/4 B	1
23	13002747	BSHG 1/2 X 1/4 HEX BLK	1
24	13008095	VALVE GAS TURBO-2 SP	1
25	11004900	HOOK S LARGE	4
26	13005283	SWITCH TOGGLE DOUBLE	1
27	16-61225	CORD: SJT W/PLUG-FG 18	1
28	33007002	TURBO CONTROL BOX	1

The instructions and information on pages 12 thru 17 are for the Direct Spark Ignitor and Hot Surface Igniter Space Heaters.
If your Space Heater has the Pilot Igniter return to page 7.

OPERATING INSTRUCTIONS

1. Read all instructions in this owner's manual before operating the Space Heater.
2. Recheck the gas being supplied to the unit. Make sure it is the same for which the Space Heater is adjusted.
3. Double check for any gas leaks (see Safety Precautions). This is very important. Do not operate this heater until there are no gas leaks.
4. Turn on all gas valves to the Space Heater.
5. Turn the system switch to the ON position. This is located on the outside of the cabinet near where the power cord enters the case.
6. Adjust the remote thermostat or the system controls to a temperature higher than in the house.
7. On initial start up or when the Space Heater has not been in use for awhile, the unit may cycle several times to purge the lines of air.
8. After flame is established, allow unit to run for a couple of minutes. Then make the Space Heater go through several "start-ups and shut downs" to check the flame sensors and hot surface igniters for proper setting.
9. Set the thermostat or system control to desired house temperature.

NOTE: When the Space Heater has not been used for an extended length of time due to off season or between flocks, follow the maintenance instructions before restarting the heater. Then follow regular operation instructions.

SHUT DOWN INSTRUCTIONS

1. Turn thermostat or system control to the lowest temperature setting.
2. Turn systems switch to the "off" position.
3. Turn off the gas supply valve at supply source.
4. Turn off the gas valve between gas hose and supply pipe.
5. Unplug the power cord.

TROUBLE SHOOTING GUIDE

The LED light located in the module cover can help isolate where a problem might be located.

THE LED LIGHT WILL FLASH FROM 1 TO 4 TIMES AFTER THE MODULE LOCKS OUT DUE TO FAULTY OPERATION.

1. LED blinks, fan runs, heater lights ----- Normal operation

IF THERE IS A PROBLEM THE:

2. LED does not blink when the unit ----- No voltage to heater from thermostat
 is turned on, fan does not run, ----- 24 volts not supplied from transformer to thermostat
 heater does not light

3. LED flashing:

1 time ----- Sail switch is stuck, closed, or shorted out
 2 times ----- Sail switch flapper stuck to base of blower housing with debris
 ----- Sail switch doesn't close or is defective
 ----- Fan wheel binding or dirty
 ----- Bad motor, capacitor or wiring

----- High limit switch tripped or defective

3 times ----- No fuel

----- Broken or disconnected igniter

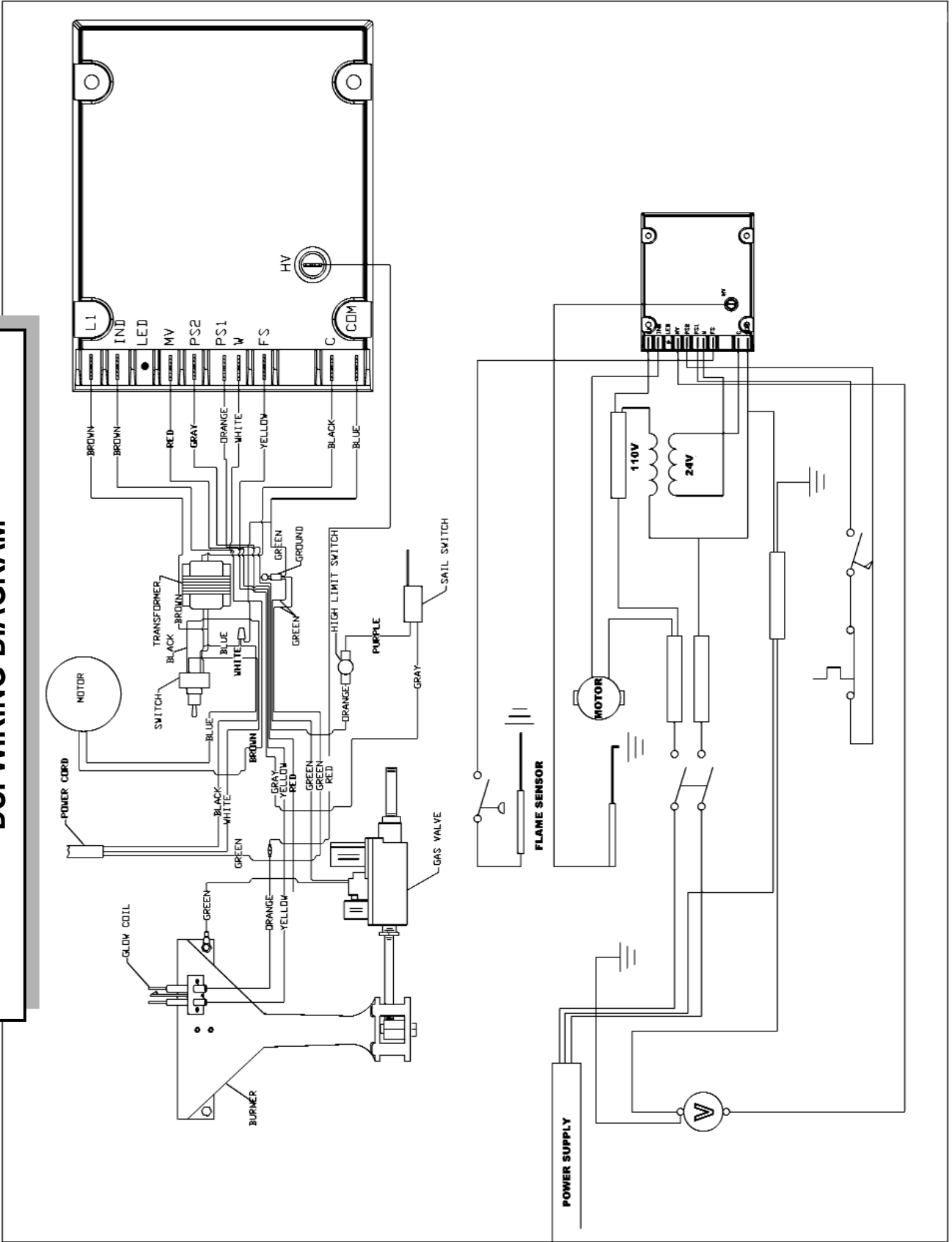
----- Defective improperly positioned, dirty, or disconnected flame sensor

----- Bad valve or wires connected to valve

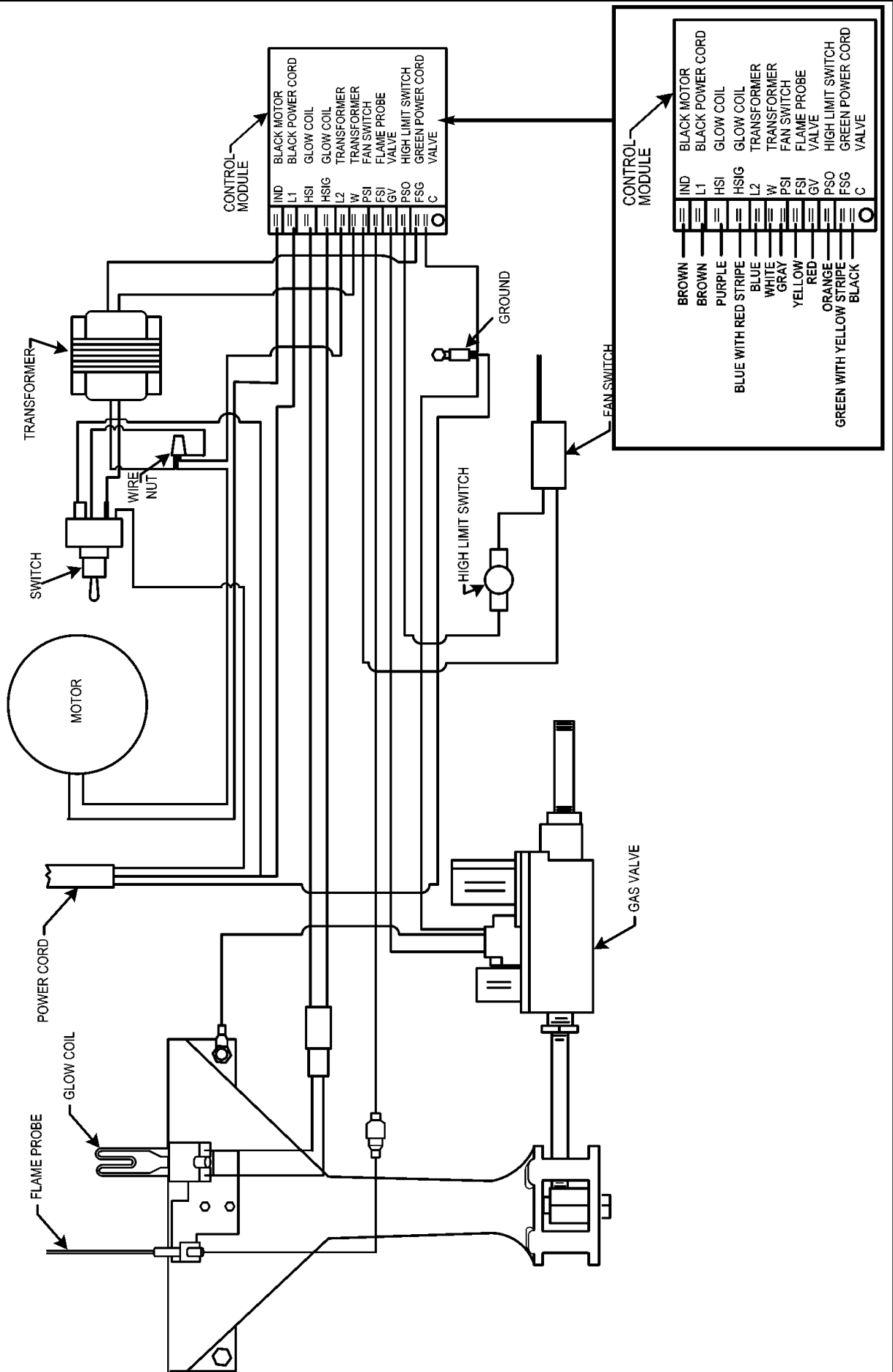
4 times ----- Bad HSI board

	Possible Cause	Corrective Action
Problem 1) ----- Blower Will Not Run	a. No power to heater ----- b. System switch to "off" c. Defective motor d. Bad capacitor	a. Check electric supply b. Turn switch to "on" c. Replace the motor d. Replace capacitor
Problem 2)----- Sail Switch Does Not Close	a. Bad sail switch----- b. Low air flow c. Obstruction or bent sail arm d. Loose or broken wire	a. Replace sail switch b. Clean blower and refer to problem #1 c. Remove obstruction or straighten arm d. Repair or replace wire
Problem 3) ----- High Limit Switch Open (Reset limit switch after Problem corrected)	a. Manifold pressure to high----- b. Blower wheel loose or damaged c. Blower wheel dirty d. Motor turns too slow e. Wrong burner orifice f. Wrong type of gas g. Blockage on inlet or outlet h. Defective limit switch	a. Check pressure and adjust as required b. Tighten or replace blower wheel c. Clean blower wheel d. Replace motor or refer to Problem #1 or 2 e. Replace orifice with correct one f. Check the gas g. Clean and remove blockage h. Replace limit switch
Problem 4) ----- Burner lights will not stay lit	a. Flame sensor not completely in----- flame b. Defective flame sensor c. Flame sensor circuit not complete d. Blockage around base of burner e. Manifold pressure to low or to high	a. Adjust flame sensor into flame b. Replace c. Check for loose connection and repair d. Clean out carbon or debris e. Check pressure and adjust as required
Problem 5) ----- Burner does not light	a. Igniter broken----- b. Igniter not in adjustment c. Igniter not making complete circuit d. Air in gas line e. No gas	a. Replace igniter b. Re-adjust the igniter c. Check wiring and connections d. Purge gas line e. Refill LP tank or check natural gas supply
Problem 6)----- Unit won't heat	a. Gas supply pipe to small ----- b. Blockage in gas pipe	a. Replace with larger pipe b. Clean out trap and check gas lines
Problem 7)----- Main Burner does not shut off	a. Defective gas valve----- b. Gas pressure too high c. Defective thermostat	a. Replace the valve b. Check gas manifold pressure c. Replace the thermostat

SPACE HEATER DSI WIRING DIAGRAM



SPACE HEATER HSI WIRING DIAGRAM



HSI / DSI SPACE HEATER

ILLUSTRATION NUMBER	PART NUMBER	DESCRIPTION	REQUIRED NUMBER
1	23006000	DOOR RIGHT/LEFT F/SPACE	2
2	33024958	TURBO COMBUSTION CHAMBE	1
3	23005000	CABINET TOP/BACK F/SPAC	1
4	33014925	TURBO 2 FAN SWITCH/BRKT	1
5	23105010	CABINET BTM/FRONT F/ SP	1
6	33002900	EXHAUST AIR KIT	1
7	13004938	SWITCH 2450 THERMO	1
8	33007088	TURBO 2000 FAN HOUSING	1
9	13005233	FAN SQUIRREL CAGE	1
10	23305030	MNT PLATE F/SPACE HTR	1
11	11000067	MOTOR 1/3 HP 110-230V/	1
	13000067	MOTOR TURBO FAN 230V/5	-
12	13008075	LATCH DOOR 93-225	2
13	22000005	SPACER 1/8 X 1 1/4	1
14	13005210	BURNER CAST IRON	1
15	13008086	IGNITOR GLO COIL 220 V	1
16	16000064	SCREW #12 X 2 1/2 HEX T	2
17	13005235	SCREW 8 X 1/2 TEK	2
18	23004043	COVER HOT SURFACE IGNI	1
19	23014958	BRKT IGNITER TURBO-2	1
20	13005270	BOLT 3/8 - 16 X 3/4	1
21	13005224	ORIFICE .188" LP	1
-	13006224	ORIFICE .330" NAT	-
22	13007072	PIPE NPL 1/4 X 4 3/4 B	1
23	13002747	BSHG 1/2 X 1/4 HEX BLK	1
24	13006223	VALVE WR 36E LP 9"	1
25	11004900	HOOK S LARGE	4
26	13005283	SWITCH TOGGLE DOUBLE	1
27	16-61225	CORD: SJT W/PLUG-FG 18	1
28	23007000	CONTROL BOX F/ SPACE H	1
29	13008094	MODULE IGNITION HSI 240 VOLT	1
	13008074	MODULE IGNITION HSI 120 VOLT	1
-	16-101141	BOARD: CTRL IGN DSI SH	-
30	13004931	TRANSFORMER 40VA 240/2 HSI	1
-	13004932	TRANSFORMER 40VA 120/2 DSI	-
31	16-101293	IGNITOR: DSI	1
32	13014929	FLAME SENSOR / .187 MA	1
	33007003	TURBO CTRL BOX COMP HSI	1
	33007001	TURBO CONTROL BOX COMP DSI	1

MAINTENANCE INSTRUCTIONS

1. Turn off gas supply and disconnect electrical supply from unit before any type of work or cleaning is done.
2. Do not use any cleaning solvents and/or liquids of any type to clean the Space Heater. Use only compressed air to clean the Space Heater.
3. Pay close attention to the dirt and dust build up on the concave side of blades on the blower wheel. This is very important. A dirty wheel will reduce the air flow output and could cause the wheel to become out of balance thus causing premature failure.
4. Clean out control box with compressed air between flock and annually. Dust-build up could cause electrical shorts, reduce wiring life, and require higher maintenance.
5. Check all electrical wiring and cords for loose connections or frayed wires. Tighten, repair, or replace any damaged parts.
6. Check all gas hoses and piping frequently. Be sure the hose is not cut, weathered, cracked or worn. Inspect all gas piping and check for leaks (see Safety Precautions). This is very important as gas leaks should be watched for and corrected. Also, clean out the pipe trap of water, line scale, and/or rust.
7. Keep the main burner orifice clean and free from carbon build-up, dust, and debris. Also, inspect around the air inlet of the burner and keep clean. This will help the Space Heater run more efficiently
8. Check the wind sail switch for proper operation. Pay close attention to the travel of the sail switch arm and make sure it is not restricted. Occasionally, clean dust build up off of sail part of wind switch. This is necessary.
9. Check the chains or cable holding the unit for safety.
10. If the remote thermostat is used, be sure to keep the coil clean.
11. Turn on the Space Heater and allow it to cycle several times at the beginning of each heating season or between flocks of birds to insure the Space Heater is running properly.
12. An annual inspection by a qualified service person is recommended.