



AUTOMATIC

WOOD BURNER

WITH THERMOSTATIC CONTROL

MODEL 50

&

OPTIONAL BLOWER KIT FL-52

**INSTALLATION, OPERATION & PARTS
MANUAL**

CAUTION

- READ THIS MANUAL CAREFULLY BEFORE STARTING INSTALLATION
- DO NOT INSTALL THIS HEATER IN MOBILE-HOME

MANUFACTURED BY:

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Repair Parts Kozi Model 50 Heater

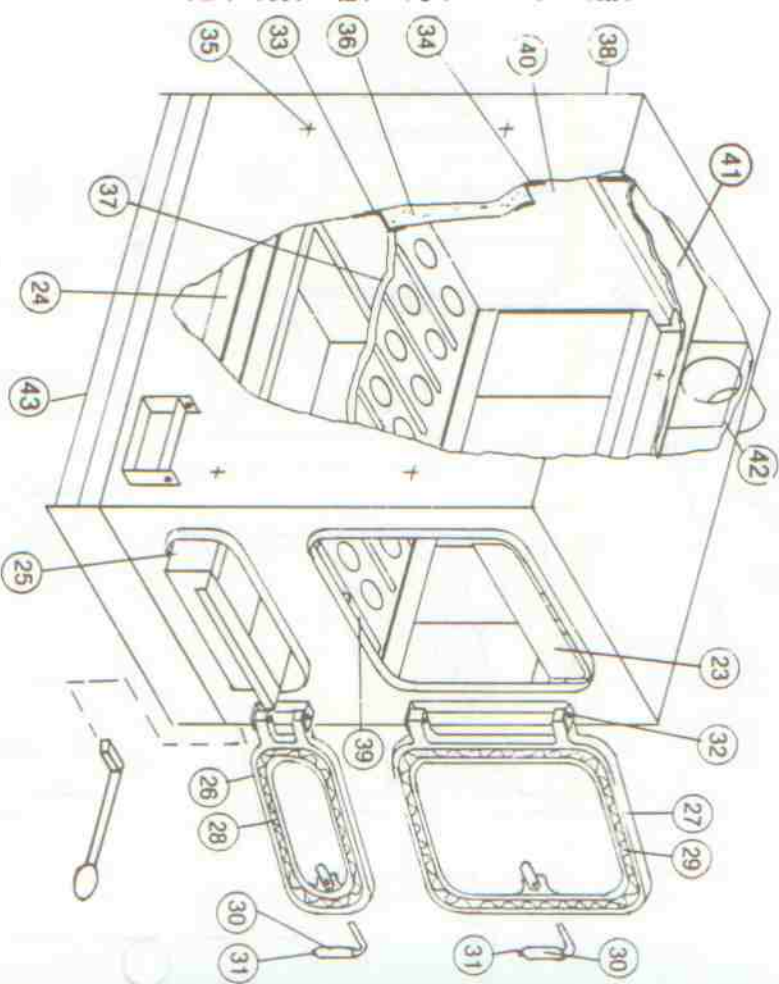


Figure 10

Rules For Safe Operation & Installation

- Inspect your heater carefully. Make yourself aware of the workings of the heater.
- Always install heater in well ventilated room. Provide access for fresh air into the room.
- Always vent heater chimney outside the building.
- Never connect a wood burning appliance to an aluminum "Type B" gas vent. This would create a fire hazard and is prohibited by the National Fire Protection Code.
- Do not reduce chimney diameter. Use chimney of the diameter equal to flue outlet (6" dia.).
- Use only class "A" masonry chimney or UL/ULC approved all-fuel prefabricated chimney.
- Make sure the chimney is high enough to create a good up-draft. A low chimney with high objects surrounding it will cause a poor draft.
- Avoid excessive long run of vent pipe. A long run will result in rapid cooling of smoke and gases, causing creosote buildup.
- Consult your local building code for installation requirements.
- Maintain clearance to combustible material as specified on page 2.
- Do not connect the heater into the chimney of any other appliance.
- Do not burn green or unseasoned wood. It may cause creosote buildup.
- Clean & maintain your heater regularly. A poorly maintained heater could be a Fire Hazard.
- Install chimney only in accordance with manufacturer's instructions and your local building code.

Item	Part No.	Description
13	5013	Thermostat knob
14	5014	Pin for thermostat control
15	5015	Retainer
16	5016	Friction plate
17	5017	Thermostat spring
18	5018	Thermostat coil
19	5019	Intake damper pin
20	5020	Intake damper
21	5021	Thermostat linkage chain
22	5022	Thermostat bolt kit
23	5023	Smoke flap
24	5024	Ash tray guide
25	5025	Ash tray
26	5026	Ash pit door
27	5027	Loading door
28	5028	Gasket, ashpit door
29	5029	Gasket, loading door
30	5030	Door handle casing
31	5031	Casing retainer
32	5032	Door Pins
33	5033	Lower Brick holder
34	5034	Upper Brick holder
35	5035	Brick holder hardware
36	5036	Firebricks
37	5037	Grate
38	5038	Fire Box
39	5039	Front Kickplate
40	5040	Back Kickplate
41	5041	Heat Guard

To order Parts please provide the following information:

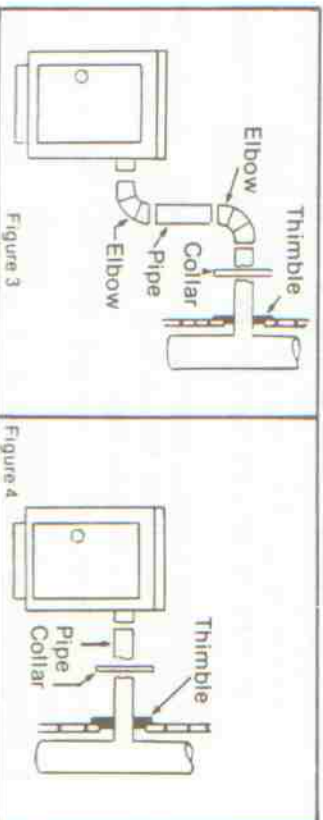
1. Model Number
2. Serial Number
3. Part Number
4. Description

Installation

1. Before proceeding with installation check the following:
 - a. Heater location is free from hazardous, combustible material.
 - b. Enough clearance has been allowed from combustible surfaces.
 - c. Non combustible, non heat-conducting base has been installed.
 - d. All the leveling shims are made of non-combustible material.
 - e. Have enough stove pipe (6" dia), fittings, collars, thimbles, sheet metal screws, stove pipe cement and proper tool to install the stove pipes and heater.

**DO NOT USE MAKE SHIFT INSTALLATION
IT IS A FIRE HAZARD.**

2. Install heater on non combustible or protected floor, level it, and make sure it is sitting firmly on the floor.
3. Connect the heater to the chimney by using stove pipe as shown in fig. 3, 4 & 5.



Caring For Enameled Parts

This heater has an enameled outside jacket. Enamel baked onto the steel or iron is very serviceable, but will not stand rough handling or abuse. When setting up your heater use care in handling. Clean with soap and warm water when heater is not hot. DO NOT use any acids or scouring soap, as these wear and dull the finish.

Things That Could Cause Your Stove To Smoke

It is of utmost importance that installations are made airtight! This is best accomplished by using stove cement at each pipe joint and where the elbow or first joint of pipe enters the heater and where the pipe enters the chimney flue.

Any air leaks existing between the top of the chimney vent and the heater may cause "back-puffing". Here is the reason: heaters are designed to operate on an airtight principle. The draft door is controlled by the bi-metal thermostat and will close intermittently; the heater has to breathe for combustion through this draft door or holes in the door. Therefore, any air leaks will cause the draft to draw at points where least resistance is offered such as: at pipe joints, where pipe enters chimney flue, around loose flue thimble, around flue opening into chimney and around clean out doors. When this takes place, the gases and smoke are not drawn off the heater in proper quantity, causing them to build up in volume within the heater which results in "Back-puffing". All such leaks must be sealed off airtight. In other words, the entire chimney "pull" or "draft" must be on the damper entrance only!

Backdraft

There are two main causes of chimney downdraft. One readily recognized is air currents being deflected down the chimney by nearby higher objects, such as a tree, building or hill.

Operation

A. Read the following carefully before starting the heater.

1. The heater is designed for WOOD ONLY. Burn only wood or wood-like material. Store fuel away from heater in a dry place.
2. Do not overload heater. A few logs (maximum 20 inches long and 3 to 6 inches in diameter) will give the best result.
3. The heater is equipped with a thermostatically controlled damper. Set thermostat to maintain desired room temperature.
4. Always operate heater with doors CLOSED. This is an airtight heater which will not operate properly unless the doors are shut tightly.
5. Remove ashes carefully. Place them in a metal container with a tightly fitting lid and place the container on a non combustible floor away from combustible material until they have cooled.
6. Inspect the chimney flue weekly until a safe frequency is established. The burning of wood, particularly if it is not seasoned, may cause a build up of creosote, resulting in chimney fire.

B. The following precautions should be taken in using this

Heater:

1. Do not burn coal or charcoal. It may damage heater.
2. Do not burn any highly flammable material, such as gasoline, lighter fluid, grease and oil, aerosol cans, etc. It may cause an explosion resulting in loss of property and life.
3. Avoid overfiring of heater. It will reduce heater life and may cause burn out.
4. Do not operate heater with door open. It will cause overheating and distort the fire box.
5. Do not store combustible material within clearance range of heater. All it takes is one mistake to cause a house fire.
6. Heater and stove pipe surfaces are HOT while in use. Contact with these surfaces will cause skin burns.

C. Building A Fire:

1. Set thermostat knob to HIGH to provide maximum draft.
2. Open both top & bottom doors.
3. Use ample kindling to start a good fire.
4. Light the kindling. When it is burning well, load the heater with wood and close the feed door tightly.
5. Once the fire is burning briskly, close the ash door tightly.

D. Caution About The Chimney Fire: Build up of tar and creosote can ignite and cause a chimney fire, resulting in distortion of the inner lining of chimney. If such a fire occurs, your chimney should be inspected immediately and damaged parts should be replaced before further use.

E. Use of Heater for Emergency Cooking: In case of emergency, this heater can be used for cooking. Remove two screws from the front to lift heater top. Cooking can be done on the top of firebox.

Note: — Automatic thermostat will not operate properly while top is open.

F. Minimum Fire: When wood is burning slowly for a long time, tar and distillates are formed. They are deposited on the inside of the stove pipe and chimney. This tar may ignite and burn. Formation of tar can be reduced by opening the fire air shutter (A) on the draft control. Draft control is located at the front right hand bottom corner of the fire box. Open the heater top by removing the two screws in the front that hold the heater top. Turn air shutter (A) to expose more opening.

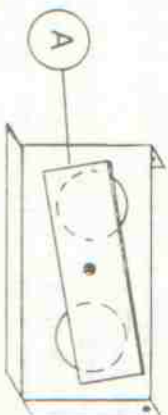


Figure 7

G. Thermostat: The thermostat (bi-metal) is set at the factory and generally does not require any adjustment. If adjustment is necessary, follow these directions:

- A. To increase the heat at fixed dial setting
— Reduce Chain Length
- B. To decrease the heat at fixed dial setting
— Increase Chain Length.

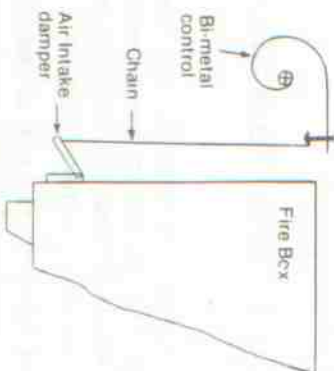
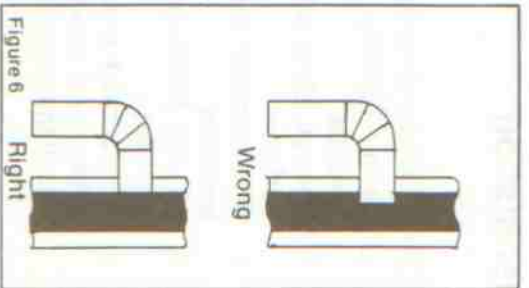
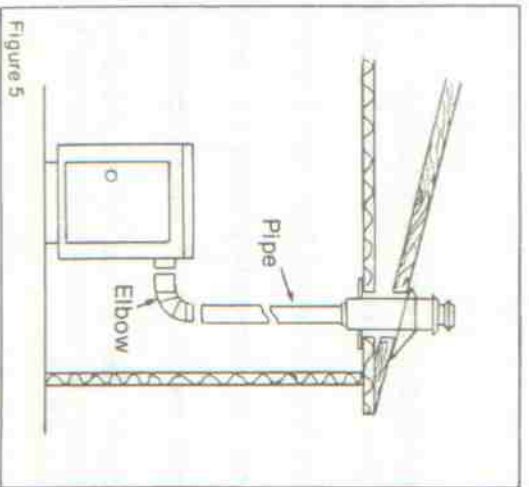


Figure 8

Service Hints

1. Do not expect a heater to draw. It is the chimney that creates the draft.
2. The vent pipe may be pushed into the chimney too far, stopping the draft.
3. Do not connect two heaters into the chimney flue. If it cannot be avoided, be sure that one pipe is higher than the other so that the two openings will not be opposite each other.
4. The chimney used for a heater must not be used to ventilate the cellar or basement. If there is a cleanout opening at the base of the chimney, it must be closed tightly.
5. If the fire burns well but sometimes back draft occurs, it may be caused by the chimney top being lower than another part of the house or nearby trees. The wind blowing over a house or a tree, falls on top of the chimney like water over a dam, beating down the smoke. The top of the chimney should be at least 3 feet above the roof and be at least 2 feet higher than any point of the roof within 10 feet.



4. Follow these rules to install stove pipe:
- Single wall stove pipe must not penetrate combustible walls or ceilings.
 - Use as short a run of stove pipe and as few elbows as possible. A long run will cause excessive cooling of flue gases, resulting in creosote deposit and poor draft.
 - Horizontal pipe should slope upwards towards chimney at least 1/4 inch (6mm) per horizontal foot (30cm) run of stove pipe.
 - Install crimped edge of stove pipe towards the heater. This will allow condensation & creosote to run towards the heater and eventually burn off.
 - Maintain at least 18 inches (45cm) clearance between horizontal run of stove pipe and ceiling.
 - Be sure that stove pipe does not extend into the chimney. Fig. 6.
 - Install all the joints of stove pipes with ample stove pipe cement, to seal them. Use at least three metal screws on each joint to make joint rigid.
 - Stove pipe should be vented only into an approved chimney.
 - Height of the chimney should extend at least 3 feet (92 cm) above the point at which comes into contact with roof and 2 feet (61 cm) above the roof surface within 10 feet (3 meter) horizontal distance from chimney.

The other cause, equally or more common, but seldom understood or recognized, is that in many chimneys the flue gases are chilled too quickly as they pass up the chimney. The temperature of the flue gases drops and they become heavy; then other gases from the wood fire have to push a column of heavy air ahead of them in order to escape up the chimney. This often results in back-puffing or back pressure, odors in the house, or poor combustion which can be annoying.

Concerning Fuel

Wood that has been saturated with salt water will cause deep corrosion pits in all parts of the firebox and cause early and frequent burn outs. Wood with a high pitch content or partially decayed and water soaked will help cause a creosote condition. Coal should never be used in a heater designed as a Wood-burning heater.

Creosote Buildup

High fire heater frequently, few minutes at a time, to keep creosote condition to minimum.

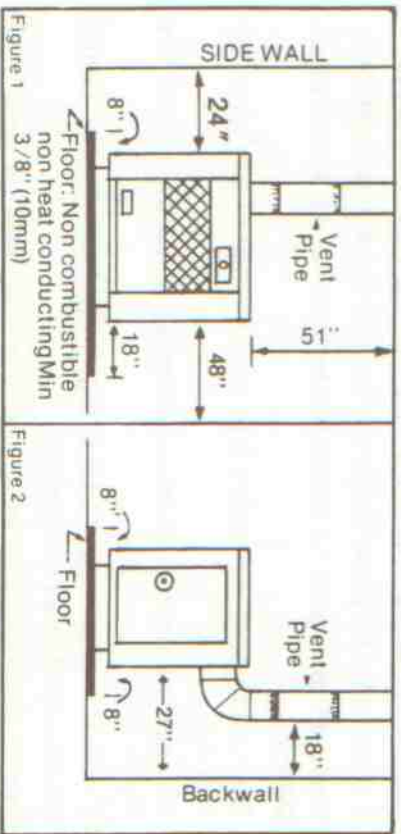
Repair Parts Kozi 50 Wood Burning Heater

Item	Part No.	Description
1	5001	Cabinet
2	5002	Lid
3	5003	Lid Chain
4	5004	Hinge
5	5005	Cabinet door
6	5006	Cabinet door knob
7	5007	Door latch
8	5008	Top front plate
9	5009	Screen
10	5010	Bottom front plate
11	5011	Temp setting plate
12	5012	Logo plate

Locating Your Heater:

- Place heater on a non combustible, non heat-conducting base, at least 3/8 inch (10 mm) thick, that extends at least 18 inches (45 cm) beyond the door side of heater and at least 8 inches (20 cm) on the other three sides.
 - Provide following minimum clearance between heater and combustible walls.

Side and rear walls	— 24 in.	Fire door end	— 48 in.
	— 61 cm		— 122 cm
Front of heater	— 48 in.	Above the heater	— 51 in.
	— 122 cm	Behind heater	— 27 in.
Flue Pipe	— 18 in.		— 69 cm
	— 45 cm		
- Minimum size of non combustible, non heat-conducting floor board — (millboard or stove board)
 3/8" in. (10mm) thick x 56 in. (143cm) x 35 in. (89cm)
- Connect heater to approved chimney only.



For reducing clearance refer to your local building code or follow instructions listed in Table 2.5D, Canadian Heating, Ventilating and Air Conditioning Code, 1977 (NRCC No. 15560), issued by Associate Committee on National Building Code, National Research Council of Canada, Ottawa.

Repair Parts Kozi Model 50 Heater

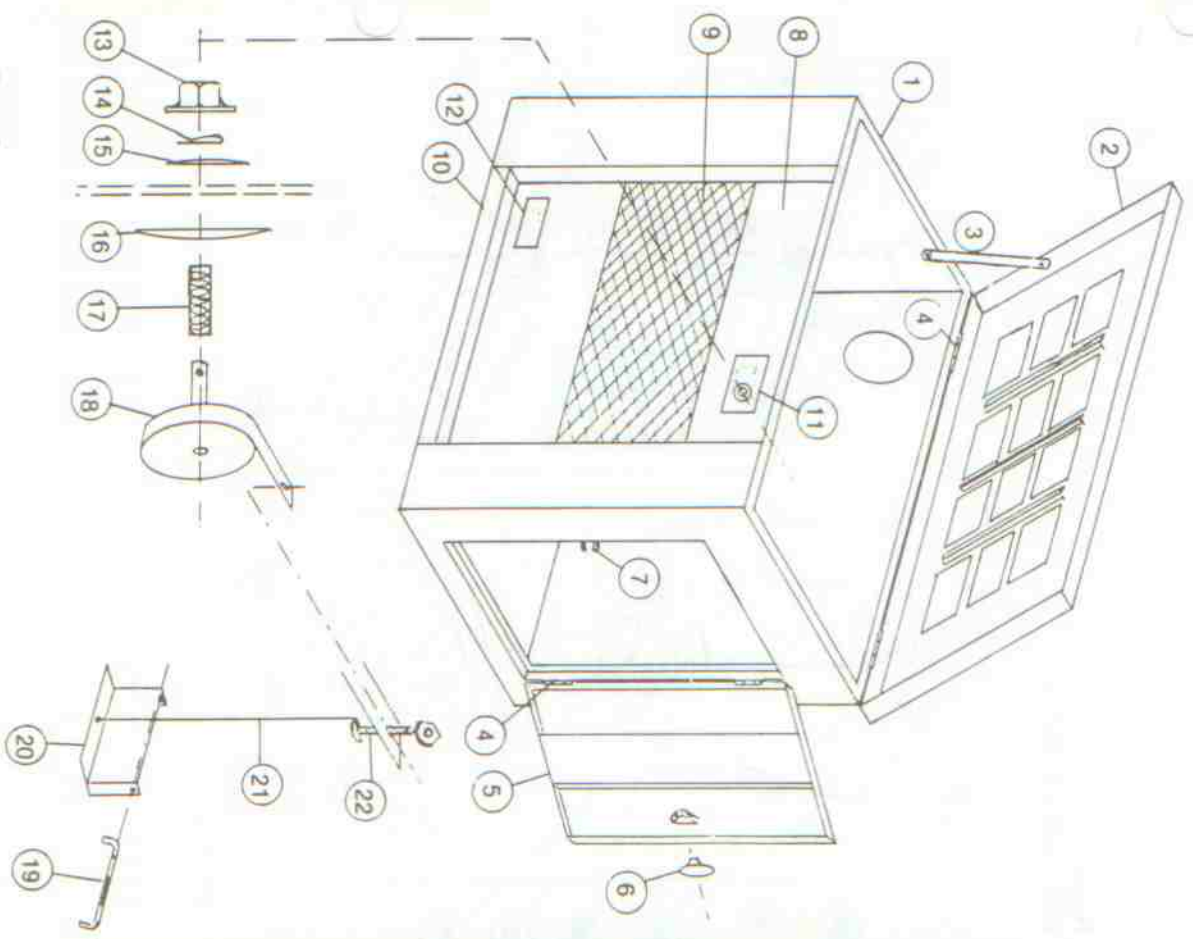


Figure 9

AIR BLOWER KIT MODEL FL-52 FOR THERMOSTATIC CONTROLLED KOZI BURNERS

INSTALLATION & Operation

- A. Install Blower 5201 on outlet duct 5202 by four sheet metal screws.
- B. Slide outlet duct under the heater and fasten it with screw as shown in figure 12.
- C. To operate, plug in the blower in any 115 V. A.C. outlet.

Maintenance

Oil blower twice a year with SAE 20 oil.

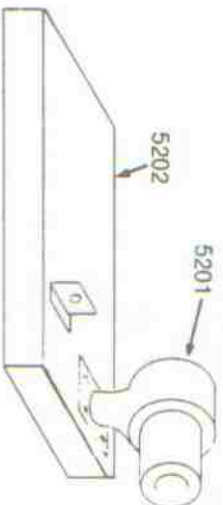


Figure 11

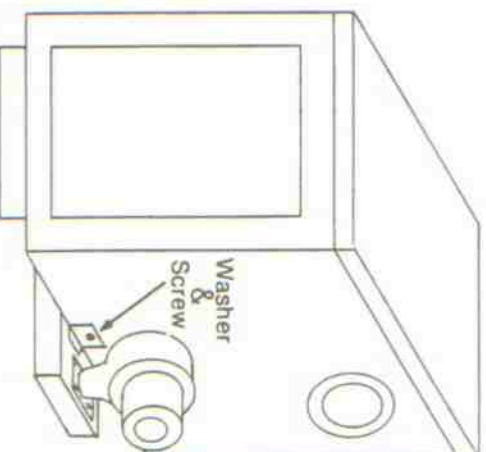


Figure 12