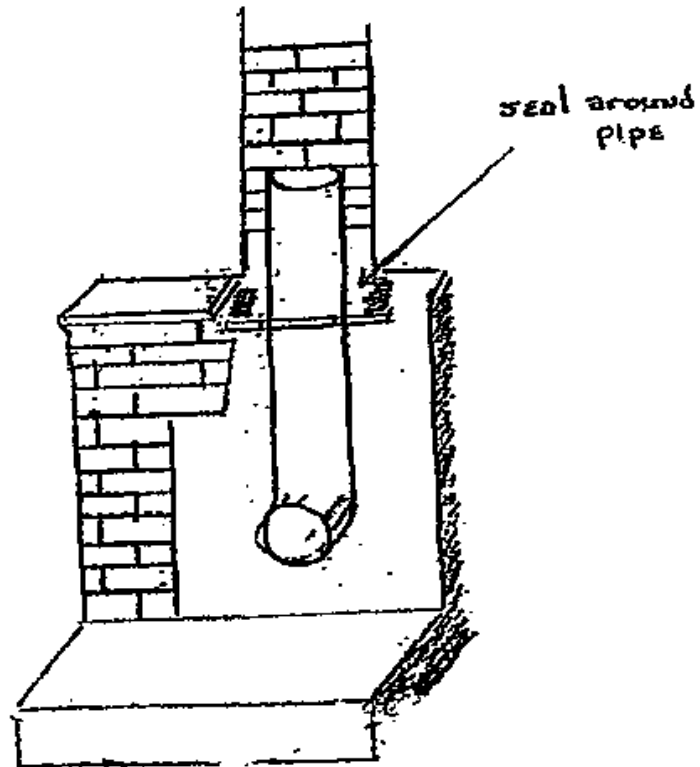


INSTRUCTIONS FOR A
HEARTH 90,000 BTU

NOTICE: - TO
INSTALLERS
INSTRUCTIONS
MUST BE
GIVEN TO
HOMEOWNERS

INSTALLATION INSTRUCTIONS KEYSTOKER HEARTH STOVE

Insert 3 lengths of 6" 24 gauge stovepipe up into chimney, with an elbow and short piece of pipe on bottom. Secure the stovepipe together with screws. Stuff fibreglass insulation all around pipe to effect a seal. Or use a flexible stainless steel pipe.

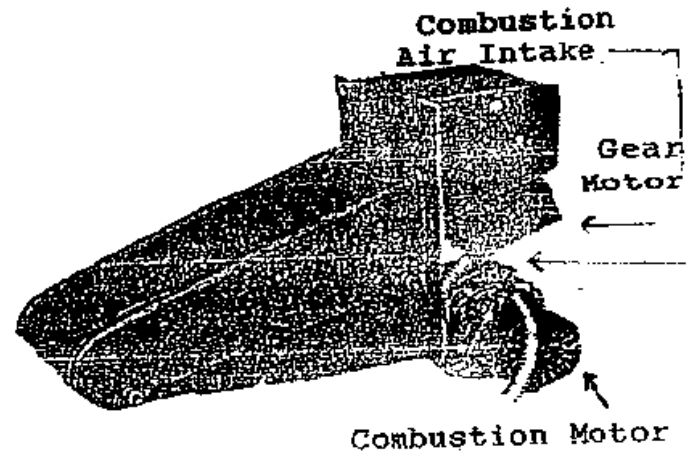
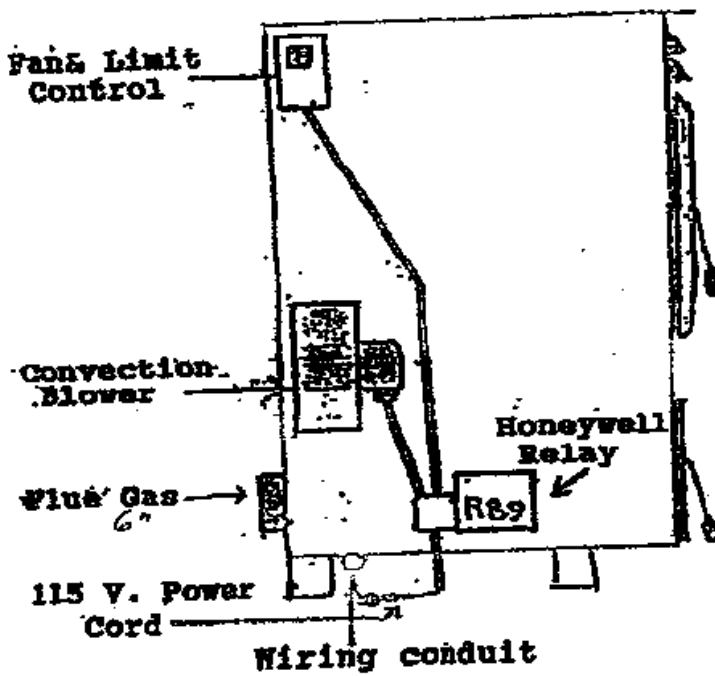


Place stove on hearth, slide stove back toward short piece of pipe. Ease pipe out to connect onto stove outlet. Secure with screws. Slide stove back against fireplace.

Install wall thermostat according to the instructions packed with it and wire with #18-2 thermostat wire to terminals marked T.T. in Honeywell relay.

Plug power supply cord into any 115V outlet.

Hopper end of stove should be plumbed with level.



CONTROLS AND THEIR FUNCTIONS

Thermostat. Top pointer is desired room temperature. Bottom pointer is thermometer. When room temperature drops below setting of thermostat, combustion blower and Gear motor will start. When room temperature rises, combustion blower and gear Motor will stop.

Relay. Converts 115 volts to 24 volts for thermostat, and sends signal to combustion Blower and gear motors to start or stop

Convection Blower. Located behind enclosure on left of stove. Blows heated air into Room. It is controlled only by fan and limit switch.

Fan & Limit Switch. Limit control (Pointer on right, set at 200 degrees) will shut off stoker unit to prevent overheating. If Internal stove temperature reaches 200 degrees, control will shut off stoker. When temperature in stove drops, stoker unit will Be reactivated.

When stove temperature reaches middle pointer (set approximately at 160) the Convection blower will be activated to blow heated air into room.

Convection blower will run until internal air temperature drops down to lower Pointer setting (set approximately at 130)

Gear Motor. Drives coal feed mechanism (pusher bar) to slide coal from hopper onto Grate, to move the fire forward and the ash into ash receptacle.

Combustion Blower. To force air through stoker unit to burn coal

Fan & Limit Control Serves dual purpose. 1. As a high limit, will shut off the stoker unit to prevent overheating. If internal stove temperature reaches 200 degrees, control will shut off stoker unit, until temperature drops, which will then allow stoker unit to be reactivated. 2. As a convection blower control, it starts the convection blower when internal stove temperature reaches center pointer setting. The convection blower will run as long as stove remains hot. When stove begins to cool down to low setting on control, the convection blower will shut off. Normal starting settings for control are: High limit (pointer on right) 200 degrees. Center pointer (Fan on) 160 degrees. Left pointer (fan off) 130 degrees. White button in control must be pulled out for normal automatic operation. If continuous operation of convection fan is desired, push white button in.

Gear motor Function is to drive feed mechanism (pusher bar) to slide coal from hopper onto the grate, to move the fire forward and the ash into the receptacle.

Combustion blower To force air through stoker unit to burn coal.

Operating Instructions

Starting fire Plug cord in. Turn room thermostat higher than temperature in home. Stoker unit should be running now. Find coal feed adjuster (painted white) on stoker unit, and while it is withdrawing, (moving toward you) turn nut counter-clockwise as far as it will go. Use fingers only. Do not use a wrench on the feed adjuster. Turn switch. Pull power cord from outlet. Fill hopper, slide coal down onto grate covering entire grate. Place kindling about in center of grate. Light kindling, and plug cord in. When kindling is burning well, throw a few hands full of coal onto fire. After fire is established, turn coal feed adjuster in about 8 full turns, (clockwise). Remember make coal feed adjustment with fingers only, while pusher is moving toward you. Further coal feed adjustment should be made, so that when stoker unit is running to satisfy thermostat, you have a full grate of fire, except for the last two inches of grate. The lower part of grate should have ash covering it. To fine tune the coal feed, turn the white feed adjuster nut clock-wise for more coal feed, or counter-clockwise for less coal feed. Turn adjuster nut one or two full turns per day, until best results are obtained. It is usually not necessary to readjust coal feed to start another fire.

WARRANTY

10 years on stove
2 years on grate and side rails
1 year on all electrical controls and motors.

There is no warranty on glass, paint or labor.
Warranty parts do not include costs.

Cleaning and Lubrication

Stove and stove pipe should be cleaned once during heating season, and at the end of heating season. Open ash door, remove ash pan, reach straight back to stove pipe elbow with flexible brush and pull flyash into ash pan area. Vacuum area thoroughly.

Remove flyash from under grate annually by either A. or B. below.

- A. Remove nut and bolt from bottom of grate, tap grates in upward direction. Lift grate out, vacuum chamber. Clear unit of old furnace cement. Re-cement grates to create an air tight fit from start of holes, to top of grate.
- B. Remove screw holding stoker or combustion motor, slide motor to side. Vacuum flyash from grate chamber. Reverse procedure to reassemble.

Oil convection motor with light grade S.A.E. motor oil. Combustion motor requires no oil.

Place a few drops of oil on door hinges; and allow fire door and ash door to remain slightly open during periods of non-use.

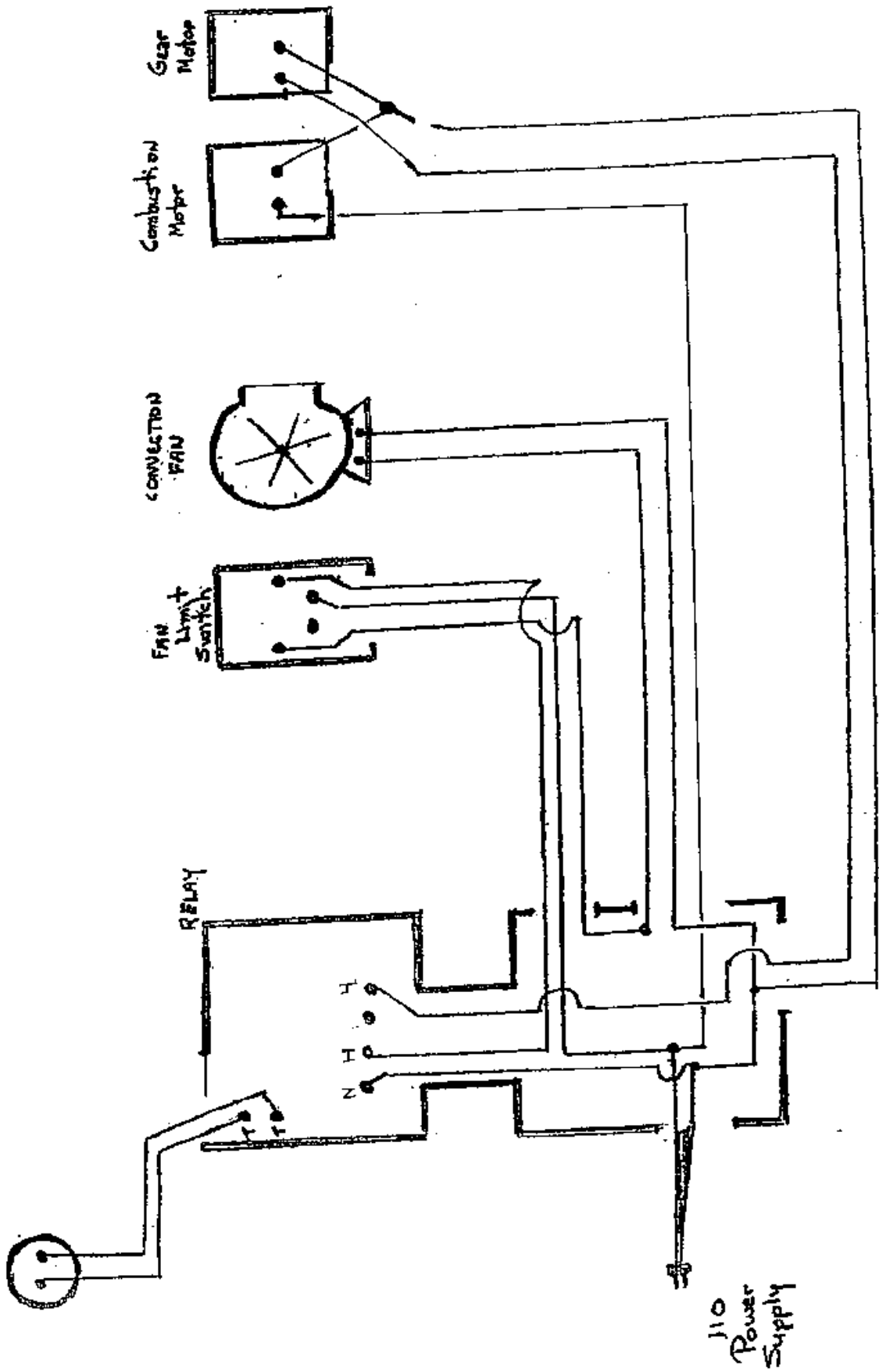
Clean glass regularly with a non-abrasive cleaner. Turn thermostat down, open fire door. Place shield over door opening, apply cleaner. Wipe off cleaner with paper towel. Moisten a clean paper towel with water, wipe glass and dry with paper towel.

Draft check After starting fire, when stove pipe and chimney get warm enough to check draft. Open ash door slightly and check with a lit match.

The flame of the match must be drawn into stove when combustion or stoker motor is running.. If not:

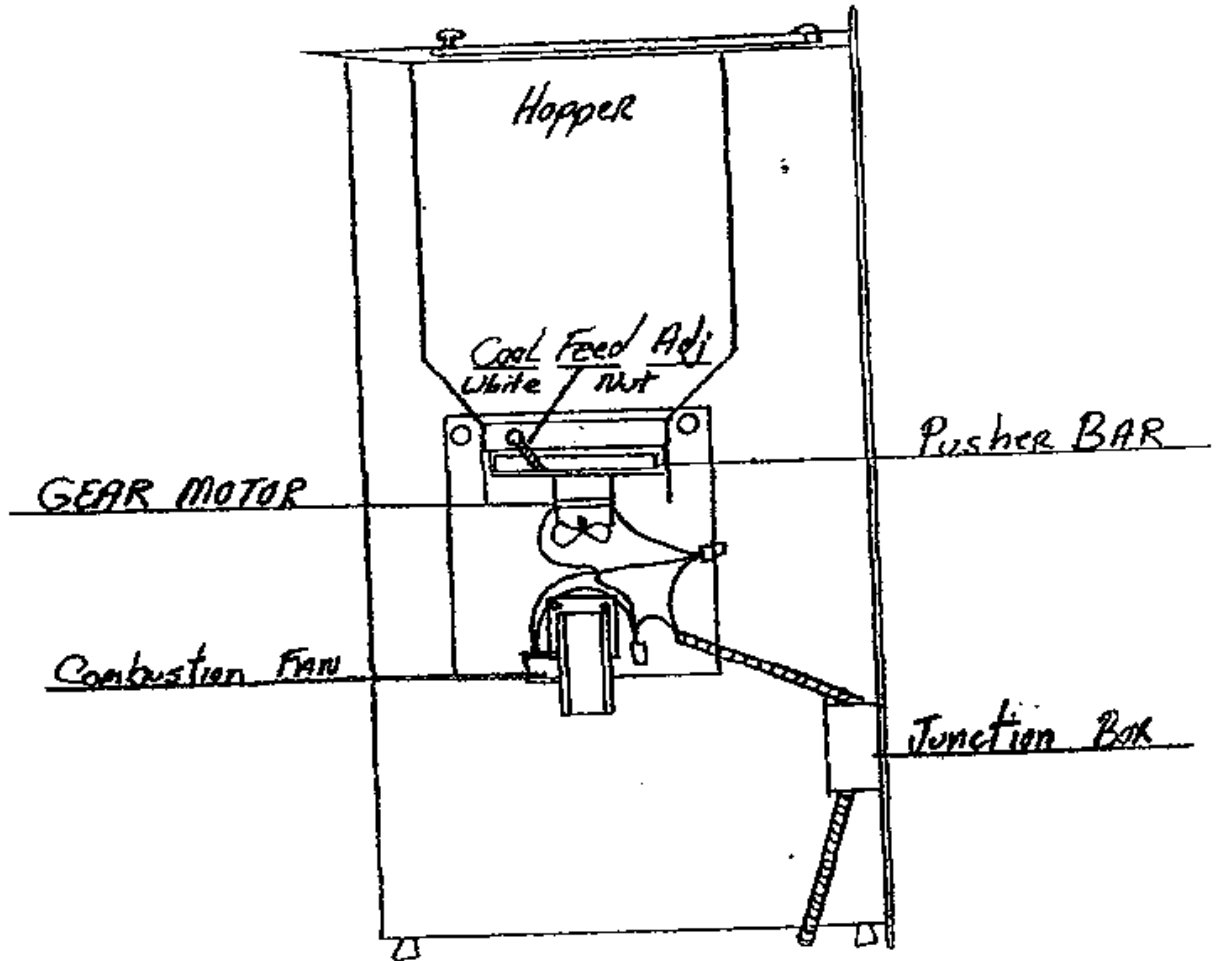
1. Be sure chimney is clean.

Thermostat

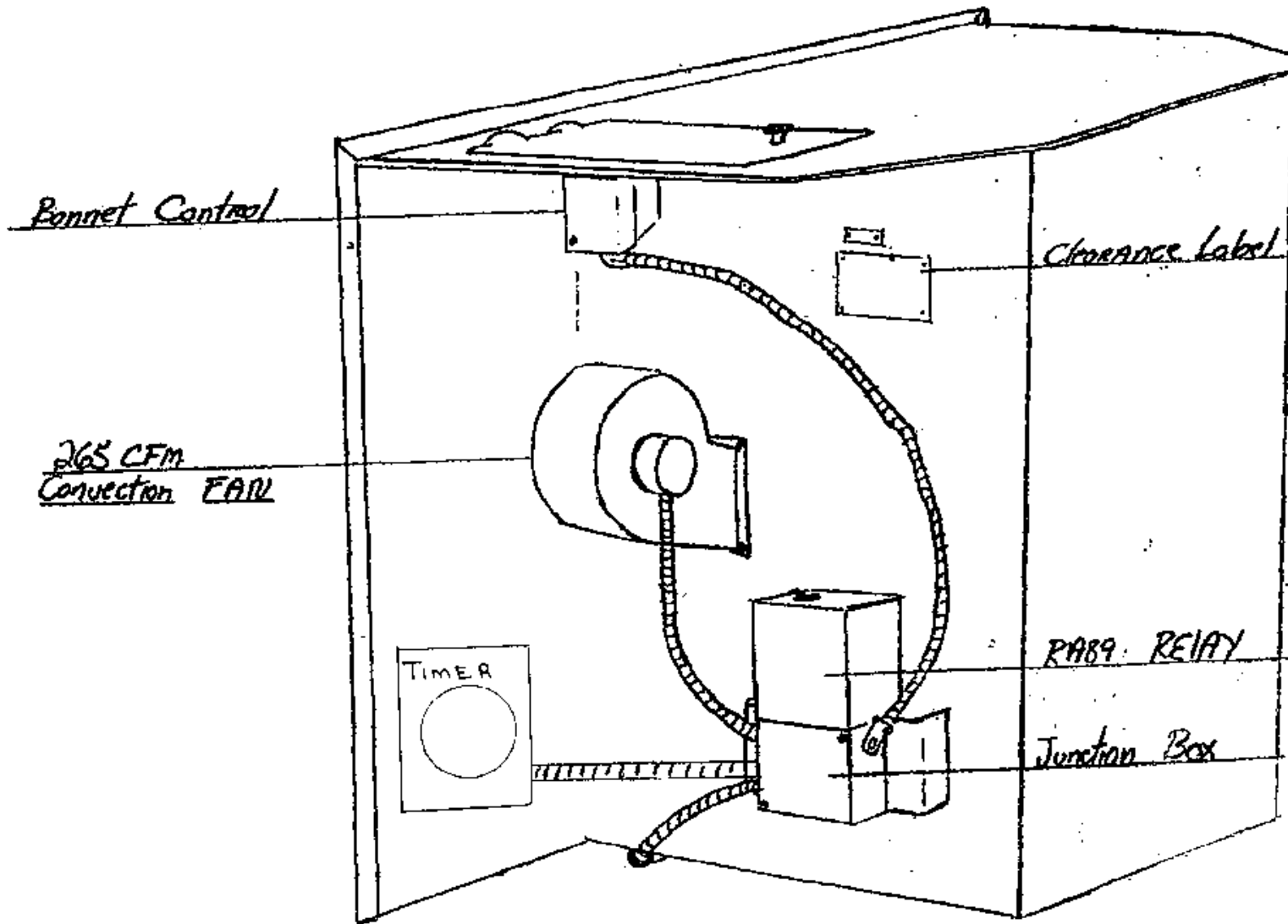


Keystoker Hearth Models
Wiring Diagram

Go Hearth Stove
Right Side

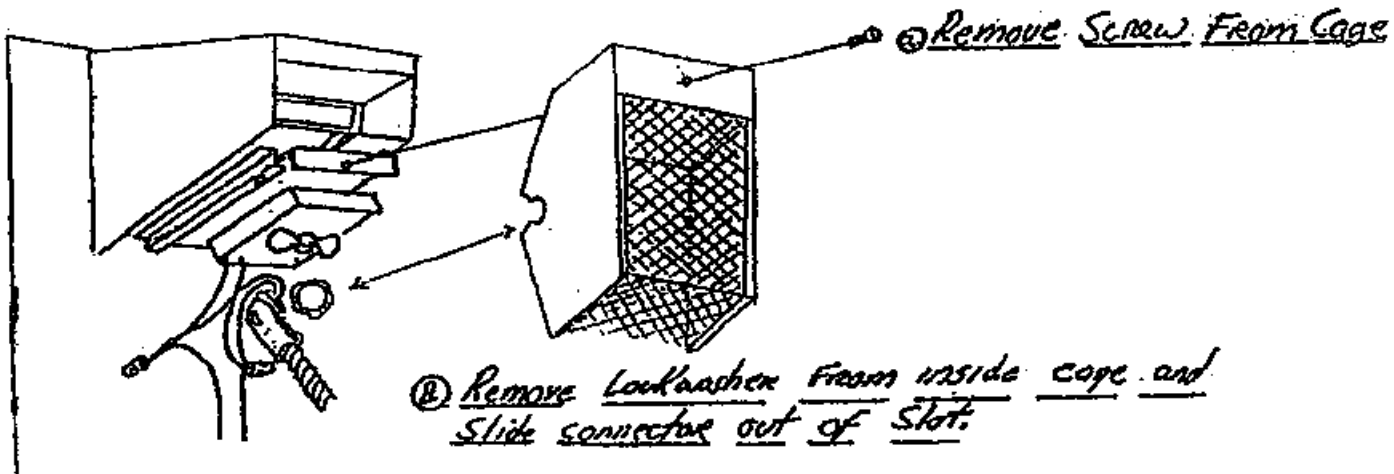


60 HEARTH LEFT SIDE



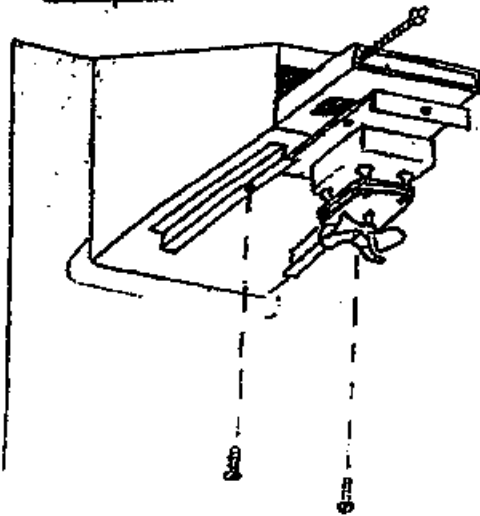
How to change a Gear Motor.

Step 1

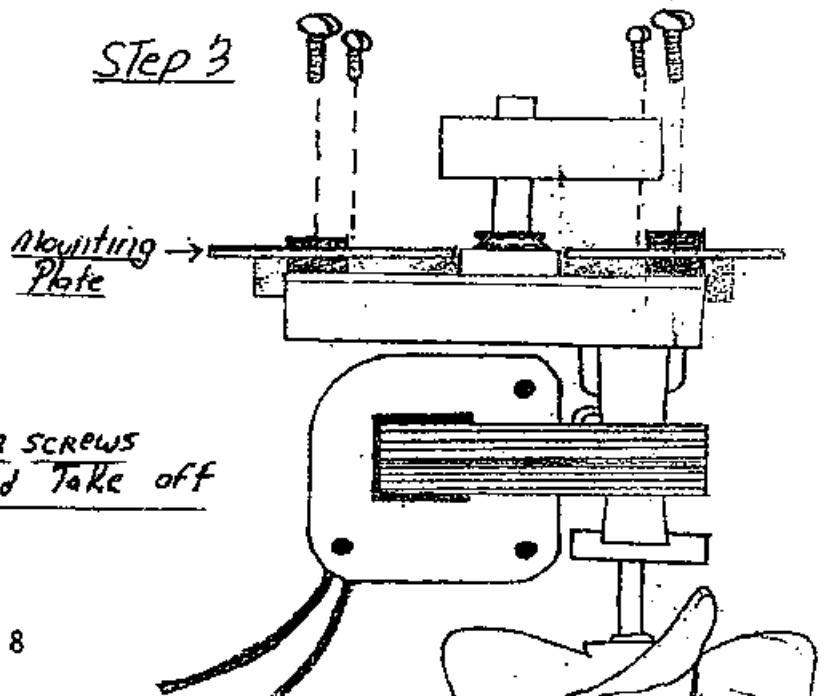


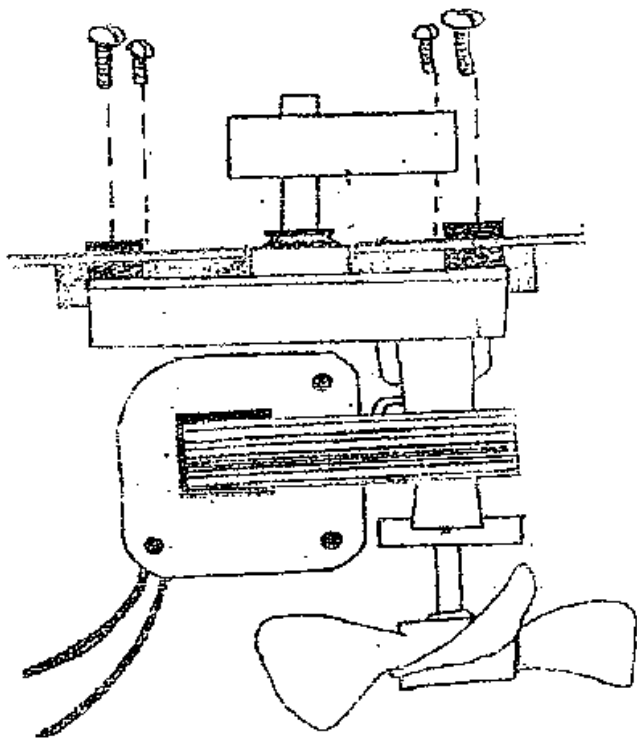
③ Remove wire nuts and disconnect Gear Motor wires.

Step 2



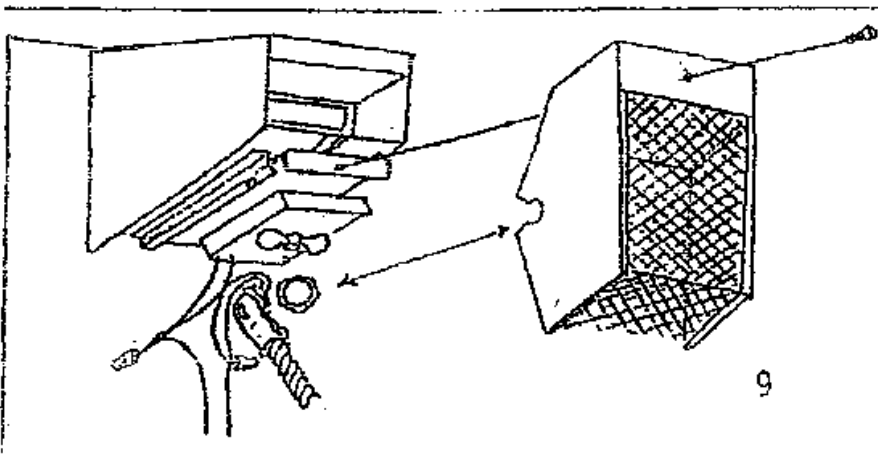
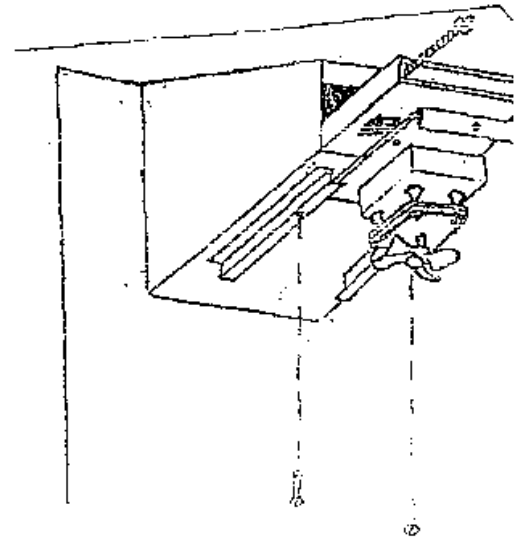
Step 3





- ① Slide new motor onto plate
Tighten Four screws snug.

- ② Fit cam into pusher bar and slide
Both motor and pusher bar into place.
 ③ Tighten two screws snug.



- ④ Make proper wire connections.
 ⑤ Slide cage back onto motor plate
and tighten screw.
 ⑥ Slide connector back onto cage
and tighten lockwasher

TROUBLE SHOOTING GUIDE

1. Fire goes out

- A. Increase coal feed by turning white nut clockwise, until approximately 3 inches of red burning coals are maintained on grate during timing cycles.
- B. Increase timing cycle by adding additional clips to increase running cycle of Stoker unit.

2. Coal over side rails

- A. Reduce coal feed.
- B. Increase opening of combustion air shutter.
- C. Check, with level, to be certain that hopper end of stove is plumb.
- D. Sand grate and inner part of side rails with sand paper.
- E. Mixing buckwheat coal with rice coal may help.

3. Coal Gas Smell

- A. Open ash door, remove ash pan, vacuum or brush out elbow at bottom rear of Stove. If problem persists, shut stove off, call your local dealer for assistance.

4. Stoker unit doesn't feed coal

- A. Pusher bar may be jammed. Remove all coal from hopper and stoker unit. Move Pusher bar inward and outward, not side ways, pusher bar is free when it has a slight inward and outward movement.
- B. Gear motor may be defective. Replace. See instructions for replacing motor.

5. Convection blower runs too often

Convection blower will only run when internal air temperature reaches center Pointer in fan limit switch. If blower runs too often, during periods of no demand by thermostat, internal air temperature is too high. To cool stove off, remove one clip from one of groups in timer.

6. Convection blower runs constantly

Pull white button on fan limit switch out for automatic operation.

7. Convection blower off too long

- A. Convection blower will only run when internal air temperature reaches center Pointer in fan limit switch.

- 1A. Fire bed is too small – increase coal feed until only two inches of ash remain on bottom of grate, when stoker unit is running steady.
- 2A. Fire bed not burning hot – Increase opening of combustion air shutter, or clean holes in grate, clean fan blades on combustion motor, clean under grate.
- 3A. Fire bed is too thick. – Refer to #2

TROUBLE SHOOTING GUIDE

8. Fire lit but no heat

If stoker unit only runs short cycles

- A. Loose or broken wires from thermostat to Honeywell Relay.**
- B. Check connection on thermostat backplate to thermostat. If bottom Two screws are loose, thermostat will not operate stoker.**
- C. If stoker unit runs constantly, refer to #7 1A - 2A & 3A**

9. Stoker unit runs constantly

Stoker unit can only run by demand of thermostat, or timer.

- A. Disconnect wires from thermostat, - if stoker shuts off, replace thermostat or Thermostat wire.**
- B. Check on and off switch in timer.**

10. Convection blower not blowing much air

Clean screen and fan blades on convection blower.

11. Stoker unit shuts off on Hi-Limit

High limit pointer in fan limit switch is designed to shut stoker unit off when Internal air temperature reaches safety setting of 200 degrees. If internal air Temperature stays on high reading, (200 degrees), convection blower is not Cooling stove off quickly enough. SEE # 10

12. Not enough air through fire

- A. Fan blades on combustion motor dirty. Brush off.**
- B. Accumalated flyash under grate. Remove combustion motor and clean.**
- C. Holes blocked in grate. Open holes with 1/8" center punch.**
- D. Combustion motor not running. Replace. To replace combustion motor, pull power cord from outlet. Disconnect wires. Remove screw holding motor, and slide motor to side. Install new motor and reverse procedure.**

To clean under or replace grate.

Remove coal from hopper and stoker unit. Remove nut and bolt from bottom of grate. Tap grate in upward direction with hammer. Remove grate, clean off old furnace Cement from grate and unit. Clean flyash from under grate. Smear furnace cement Around top of grate and sides of grate down to where holes start. Place grate back into unit and secure with nut and bolt.

TROUBLE SHOOTING GUIDE

Nylon cam melts

Under normal operating conditions, nylon cam will not melt. Melting of nylon cam can only be caused by a draft problem.

- A. A blockage in chimney, chimney connector, stove pipe, or stove. Inspect & clean.
- B. Excessive draft, caused by high chimney, large flue, or high winds.

Clean and adjust barometric damper. (Set barometric damper with draft gauge)

To set barometric damper with gauge - Start fire, allow stove and chimney to

Warm up. Drill a 1/4" hole in stove near ash door. Turn stoker unit off, insert

Draft gauge into hole, and adjust barometric damper to obtain a draft reading

Of -.02 (Negative .02)

To order parts

Should it become necessary to order a control, identify the number and brand name marked on control before ordering. Controls are warranted for 1 year. Save your Sales receipt for PROOF OF PURCHASE.

If you need to order a part on stoker unit, find the 1" X 3" Keystoker label fastened To stoker unit body. The four or five digit number will be required to get proper Replacement parts from your dealer.

SAFETY

THE BURNING OF ALL FOSSIL FUELS GENERATES CARBON MONOXIDE GASES. CARBON MONOXIDE GASES ARE TOXIC, CAN CAUSE SICKNESS OR BE FATAL.

To prevent toxic carbon monoxide gases from entering the home, certain precautions must be taken.

Ash tub must be emptied on a regular basis to prevent ashes from overflowing into ash pit area. Ash accumulation in ash pit area may impede air flow to chimney.

Fire door and ash door must be kept closed at all times during normal operation.

It is necessary to keep coal in hopper while stove is in operation.

In most applications it is sufficient to clean stove and stove pipe twice during heating season. Under extreme operation conditions, it may become necessary to clean more often.

CAUTION – Ash Pan is Hot – Always Use Gloves To Remove Ash Pan

When removing ash pan, place filled ash pan on a non-combustible surface. Slide an empty ash pan into stove.

ON DIRECT VENT MODELS

It is important on occasion to use long brush supplied with stove, to reach into exhaust pipe and with a circular motion, brush inside 6" exhaust pipe. This may be necessary once or twice a month.

Fan blade and fan blade chamber may have to be cleaned several times during heating season. (see instructions)

The 4" exhaust pipe going through outside wall of home should also be cleaned when fan chamber is being cleaned.

It is **ESSENTIAL**.. That every 4" pipe joint or connection be sealed with a high temperature silicone or equivalent. All adjustable joints on elbows must also be sealed with silicone. Failure to seal all joints could allow carbon monoxide to leak into home.

STOVE CONTENTS

TT MODELS

Manual _____
Carbon Monoxide Tester _____
Glass Cleaner _____
Charcoal _____
Thermostat _____
2-Handles & Bolts _____
Brass Handle/Koker _____
Brass Trim-90/105 _____
Clamp & Screw BV & Koker _____
Damper TV Only _____
Top Plate Stoves with Cut _____

SSAC MODELS

Manual _____
SSAC page _____
Carbon Monoxide Tester _____
Glass Cleaner _____
Charcoal _____
2-Handles & Bolts _____
Brass Handle/Koker _____
Brass Trim 90/105 _____
Clamp & Screw BV & Koker _____
Damper TV Only _____
Top Plate Stoves with Cut _____

PACKED BY: _____