

# Installation, Operation and Maintenance Manual

# 90,000 BTU & 105,000 BTU Stoker Coal Stoves



#### **About Us**

Keystoker had its inception in 1946.

Two electrical engineers saw the need for a way to conveniently burn anthracite coal, which was plentiful, but heating with coal had a bad reputation of being dirty and requiring maintenance several times a day. Our engineers developed an automatic stoker unit equipped with a coal hopper that held enough fuel for several days. This allowed the coal to be cleanly burned and without frequent maintenance. They then saw the need to make a hot water boiler specifically designed to burn coal and built them in multiple sizes to meet our customers' needs.

As prices of energy continued to escalate, Keystoker continued its research. Over 60 years of research has developed a patented feed-in system, a patented flat grate, and a patented thermal heat exchange, which has produced the highest efficiency possible.

Keystoker --- Made in America with American Technology and utilizing American resources is now known internationally for its simplicity, quality, and dependability, all this and still an economical price.



TESTED 9/89 TO ANSI/UL 1482, CSA B366-m1979 & ETLM 78-1



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#### Safety

#### **Precautions & Definitions**

Our stoves have been designed for safe and reliable operation when properly used and maintained in accordance with instructions contained in this manual. A stoker stove is a precision system that if not properly installed or maintained can be hazardous, cause burns, electrical shock or even loss of life. Keystoker shall not be liable for physical injury, damage to property or death caused by a failure to observe the instructions in this manual.

Please note the following symbols are used to denote special attention within this manual:



**Electrical Hazard.** Particular care must be taken when electrical power source to the unit is energized.



**Warning.** Operating procedure, practice etc. which, if not correctly followed, could result in personal injury.



**Caution.** Operating procedure, practice etc. which if not followed could result in damage or destruction of unit.



**Fire**. Operating procedure, practice, etc. which if not followed could result in severe burns, bodily harm, loss of life and property damage.



**Death**. Critical situation or operation of unit that may cause death.

#### **General Safety Statements:**

- Thoroughly read and understand all instructions
- Always leave this manual with the owner of the stove.
- A carbon monoxide (CO) detector has been supplied with your stove.



- The CO Detector needs to be plugged in.
- CO is colorless, odorless & tasteless gas that can be deadly if not monitored or detected properly.
- Danger risk of fire or explosion. Do not burn garbage, gasoline, drain oil, or other flammable liquids. Do not use chemicals or fluids to start fire.
- Stove surfaces may be hot while in operation. Keep children away. Do not touch during operation
- Do not connect this unit to a chimney flue serving another appliance
- Please follow all local building and Zoning ordnances
- Use the proper fuel type as noted in this manual

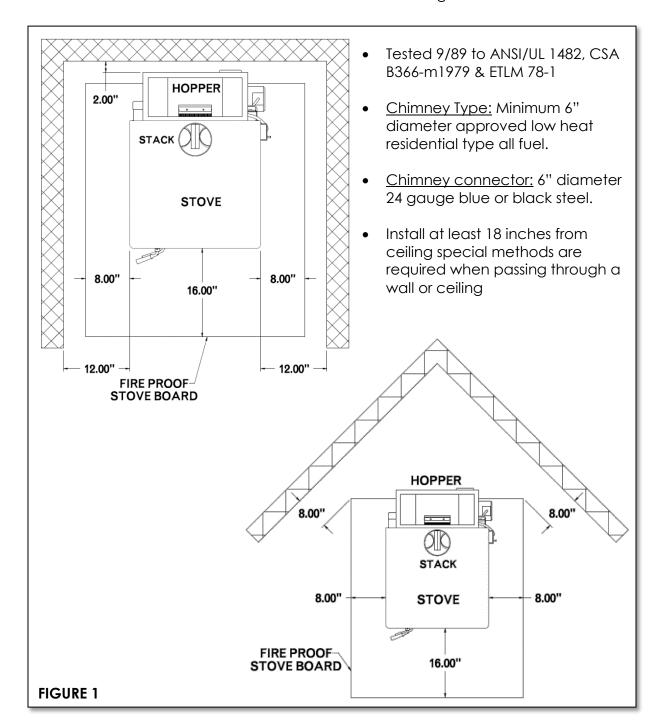
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#### Installation

#### **Stove Placement**



1. Select a position on a solid level surface with direct access to a chimney. On non-masonry floors, use an approved fire resistant & ember resistant floor protector under stove. Maintain 12" clearance on sides of stove to combustibles. A 2" clearance on rear and 16" clearance on front of stove. Clearance from corners of stove is 8". See label on stove. Refer to Figure 1.



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#### **Assembly**

- 1. Plumb hopper end of stove with level. Hopper end of stove must be vertical.
- 2. On bottom vent models, mount timer on side or rear of coal hopper.



3. Mount hopper in place and fasten securely. Carefully, reach down into bottom of inside hopper and bend flange of hopper into throat of stoker unit.



4. Ensure all power for this unit is turned off. Locate thermostat in an area where heat from stove can be freely reached. Mount plastic wall plate of thermostat. Connect thermostat wires to screws on lower portion of wall plate. According to instructions, run terminal Red & White thermostat wires to Relay on stove and connect wires to terminals marked T.T. (note: color coding of thermostat wires is unimportant.) Be sure to snap thermostat securely onto wall plate.



- 5. Install stove pipe from stove to chimney and secure with screws. On top vent models, place the non crimped end of pipe of barometric damper down onto the 6" exhaust outlet on stove. Swinging door on barometric damper may face any direction; however, the hinges must be horizontal.
  - a. High chimneys or high winds could cause stove to operate inefficiently and could possibly damage stove mechanism. It is therefore necessary that you install the barometric damper that is supplied with your stove. All top vent stoves are required to use an automatic damper.



6. Ensure all terminals are properly connected. Plug power cord into 115 volt grounded wall outlet. Combustion blower should be running. Turn the thermostat up to make the feed motor operate and you are now ready to start a fire.

#### **Fuel Type**



1. Burn rice Anthracite coal only.

Danger risk of fire or explosion. Do not burn garbage, gasoline, drain oil, or other flammable liquids. Do not use chemicals or fluids to start fire.

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#### **Operation**

#### Startup



1. To start a fire, fill hopper with coal, reach in through fire door and pull coal down to cover entire grate area. Place kindling (charcoal supplied) into a full sheet of newspaper, crumble paper, and dig kindling deep into coal in the center of grate. Light newspaper with match and plug power cord into outlet. NEVER USE GASOLINE OR LIGHTER FLUID TO START FIRE. When kindling is burning well, place a few small shovel full of coal onto the fire.



**NOTE:** The coal feeder adjustment nut is PRESET and may not need to be changed. If it becomes necessary to adjust coal feed, the white nut on stoker unit may be turned **CLOCKWISE** for **MORE** coal feed and **COUNTER-CLOCK WISE** for **LESS** coal feed. NEVER USE A WRENCH ON COAL FEED ADJUSTMENT NUT (USE FINGERS ONLY).

#### **Check Draft**

After starting a fire and a consistent fire is established, the chimney will be warm enough to check draft.

1. Remove Allen screw located in ash door and insert draft gauge into hole in ash door. The draft range should not go lower than -.02, nor above -.03. The air shutter on combustion motor and/or the barometric damper on stove pipe may be used to obtain proper draft readings.



- a. If draft goes above -.03 adjust barometric damper to open a little wider.
- b. If draft goes below -.02 close air shutter on combustion motor.
- c. Check for debris in exhaust chamber & stack.

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## Diagram 1 – Continuous Heating

Depicts what fire should look like when thermostat calls for heat for extended period:

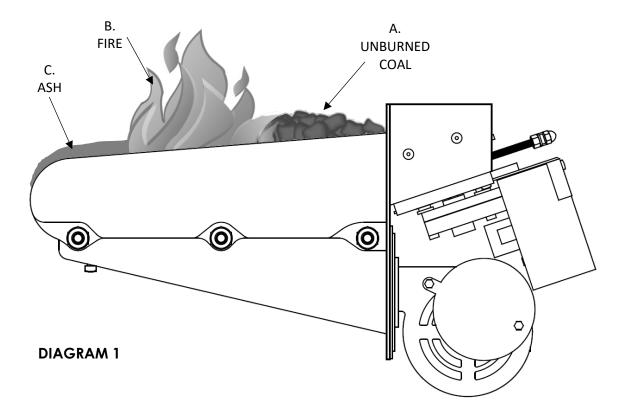
- A. Unburned fresh coal supply from coal hopper
- B. Burning Coals
- C. Ash on end of grate (around 1" to 2")

The actual length of burning coals will vary as heat demand increases or decreases. If burning coals fall off grate, reduce coal feed by turning white adjustment nut in a counter clock-wise direction 1 or 2 full turns. Wait at least 1 hour before making any more adjustments.

When thermostat is calling for heat, the gear motor will be in continuous run, but if the fire bed remains small, increase the coal feed by turning white adjustment nut clockwise.

Under normal draft conditions, when fire bed has reached its maximum length (with 2" of ash) flames should be touching top of interior stove plate. If flame is not reaching top of stove:

- 1. Fire bed may be too thick.
- O
- 2. Reduce coal feed.
- 3. Hopper end of stove is not plumb.
- 4. Burrs may be stuck on grate, scrape grate until it is smooth.
- 5. Not enough air flow, adjust air intake shutter on combustion motor (see Check Draft section).



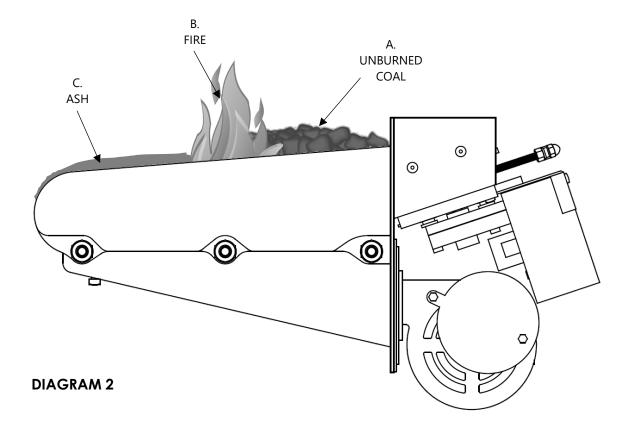
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## Diagram 2 – Intermittent Heating

Depicts what fire size should look like when thermostat has not called for heat for extended periods:

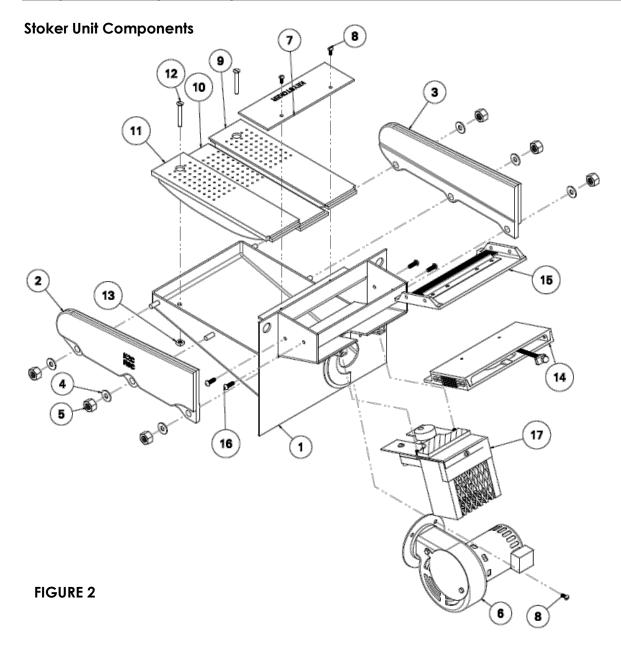


- A. Unburned fresh coal supply from hopper.
- B. Burning coal (about 1-1 ½" to 2") (low flames).
- C. Ash on end of grate



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## **Component Descriptions & Operation**

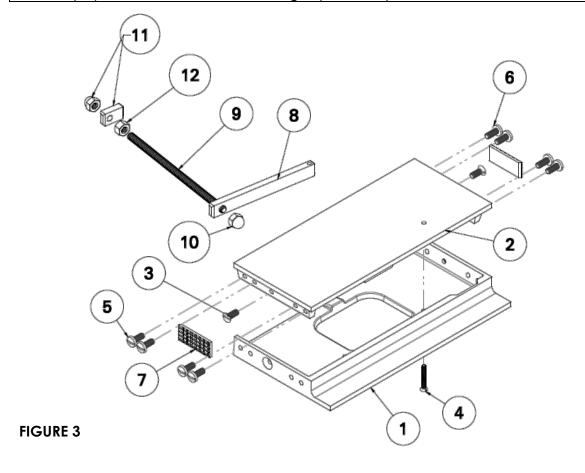


Item #	Component	Item #	Component
1	Stoker Subframe	10	Stoker Grate # 2
2	Side Rail, Left	11	Stoker Grate # 4
3	Side Rail, Right	12	Screw, 1/4-20UNC x 2.00" Long
4	Washer, 5/16"	13	Square Nut, ¼"
5	Nut, 5/16"	14	Pusher Bar Subassembly
6	Combustion Blower	15	Top Plate Subassembly
7	Coal Level Plate	16	Drive Screw ½" x ¾" Long
8	Screw, #10-24UNC x ½" Long	17	Stoker Motor Subassembly
9	Stoker Grate # 1		

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<u>PUSHER BAR SUBASSEMBLY</u>: Moves in a reciprocating motion. Activated by cam on gear motor to force coal from hopper onto grate and pushes ashes off grate into ash pan. Length of stroke is adjustable by turning white coal feed adjustment nut. Replaceable parts include Nylon Screws (#5 & #6) & Insulation Strip (#7). All other parts are non-serviceable.

Item #	Component	Item #	Component
1	Movable Plate 2	7	Insulation Strip
2	Movable Plate 1	8	Stoker Bar
3	Screw, #10-24 x ½" Long	9	Threaded Rod, 1/4"
4	Screw, #6-32 x 1.00" Long	10	Cap Nut, ¼"
5	Nylon Screw, #10-24 x ½" Long	11	WHITE Coal Feed Adjustment
6	Nylon Screw, #10-24 x 3/4" Long	12	Nut, 1/4"



<u>WHITE COAL FEED ADJUSTMENT (ITEM # 11)</u>: Turn clockwise for more coal feed, turn counterclockwise for less coal feed.

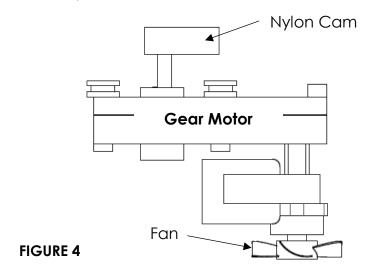


NYLON ADJUSTING SCREWS (ITEM #'s 5 &6): To eliminate metal on metal contact. There are 8 nylon screws on the pusher bar, 4 on each side. The 4 nylon screws pictured on diagram are used to adjust the amount of sideward movement of pusher bar. When

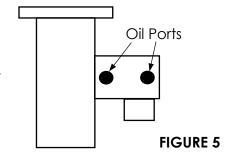
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nylon screws are properly aligned, the pusher bar will slide in and out freely and have only a slight sideward movement.

NYLON CAM: located on gear motor. To give reciprocating motion to pusher bar shown below.

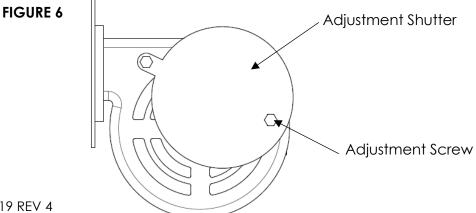


**GEAR MOTOR:** The drive shaft turns approximately 1RPM. The nylon cam on drive shaft will, when moving inward, force coal from hopper onto grate. When withdrawing, will allow coal to fall in front of pusher bar for preparation of next inward stroke. The gear motor will only run when activated by a call for heat from thermostat or when timer turns it on.



AIR INTAKE ADJUSTMENT SHUTTER: Adjusts amount of air flow through fire.

COMBUSTION MOTOR: Combustion motor will run all the time to force air through holes in grate to burn coal. The constant running of motor will assure the maximum amount of heat is gained and will aid in a more complete burning of coal. The motor has an adjustable air shutter for regulating air flow through fire.



© June 2019 REV 4 - 12 - <u>TIMER</u>: Unless your stove had been a special order, it will be equipped with our patented flat grate stoker unit and a timer. The purpose of a timer is to maintain a minimum fire when the thermostat is not calling for heat.

## **Timer Switch Examples**

Times can be adjusted by moving the switch next to the number.

	ON TIME	SWITCHES TURNED ON	OFF TIME	SWITCHES TUNED ON
Average Boiler and	34 seconds on	#6, #2	10 minutes off	#4, #2
Warm Air furnace	40 seconds on	#6, #4	10 minutes off	#4, #2
Idle Time Examples	45 seconds on	#6, #4, #3, #1	10 minutes off	#4, #2
Older boiler and Warm Air Furnace	1 min on	#6, #5, #4, #3	10 minutes off	#4, #2
idle time without	1 min 15 sec on	#7, #4, #2, #1	10 minutes off	#4, #2
secondary blower Examples	1 min 30 sec on	#7, #5, #4, #2	15 Minutes Off	#4, #3, #2, #1

	ON TIME	SWITCHES TURNED ON	OFF TIME	SWITCHES TUNED ON
Average Stove with combustion fan	1 min 15 sec on	#7, #4, #2, #1	10 minutes off	#4, #2
running constantly	1 min 30 sec on	#7, #5, #4, #2	15 minutes Off	#4, #3, #2, #1
Average older stove without combustion	1 min 15 sec on	#7, #4, #2, #1	10 minutes off	#4, #2
fan running constantly	1 min 30 sec on	#7, #5, #4, #2	10 minutes Off	#4, #2

Refer to pages 21 - 24 for wiring diagrams.

Light will be red when N.O. is powered. Sending power to feeder motor.

Light will be green when N.C. is powered. Not sending power to feeder motor.



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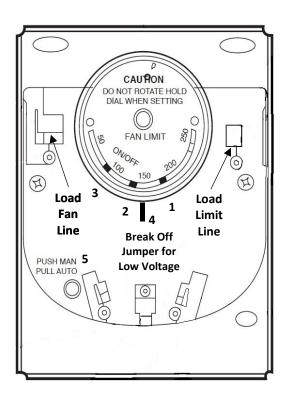
THERMOSTAT: Top pointer is to be set at warmth desired in home. Bottom pointer is the present temperature in room. When room temperature (bottom pointer) falls below desired room temperature, (top pointer), this will send a signal to the Relay control to activate gear motor to push fresh coal onto grate



#### FAN LIMIT SWITCH:

- 1. HIGH LIMIT POINTER-is a safety switch that stops gear motor from pushing coal onto grate at 200 degrees (If stove gets too hot, this switch will turn off gear motor).
- 2. CENTER POINTER-turns convection blower on when internal air temperature reaches this setting (normally set around 160 degrees, but is adjustable).
- 3. LOW POINTER-turns convection blower off when internal air temperature falls to this setting (normally set around 120 degrees, but is adjustable).
- 4. Whatever number on silver dial is directly above this point is temperature of internal air.
- 5. WHITE BUTTON-pull out for automatic operation of convection blower. Push in for constant running of convection blower.
- 6. On this application, the JUMPER PIN is left intact

FIGURE 9



RELAY: Receives signal from 24V thermostat to turn on or turn off gear motor.

<u>CONVECTION BLOWER</u>: When running, it will take cool air from room, and force it through heated air chamber inside stove, and return heated air into room. Blower can only be activated by Fan Limit Switch.

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#### Maintenance

#### Cleaning & Lubrication of Stove



Stove pipe and exhaust tubes must be cleaned once during the heating season. On top exhaust stoves, brush exhaust tubes out with a flexible brush. Keep base and interior openings below interior exhaust tubes clear of ash. Clean under grates annually by removing combustion motor and vacuuming under grates or you may remove the bolt holding the grates and then remove the grate and proceed to vacuum. Grates must then be re-cemented back into their place. Upper portion of grates must be sealed (air tight) with furnace cement, from the upper portion of the grate (close to hopper) down to where the 1/8" holes are drilled in grates.



Lubricate combustion motor and convection fan motor with a light grade of regular motor oil.

Oil fire door and ash door hinges. Oil threads on fire door and ash door handles to prevent freeze up over summer.



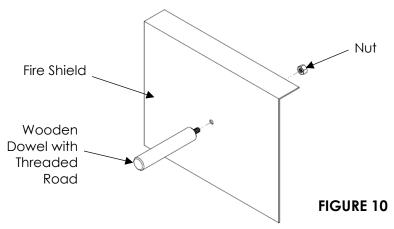
To minimize corrosion of stove accessories, it is important to clean stove thoroughly at the end of heating season. Completely remove all coal from hopper. Remove and clean stove pipe. Check chimney and base of chimney for obstructions or blockage. Clean under grate.

#### **Cleaning Stove Glass**

The following instructions are meant to serve as guidelines for proper cleaning and care of **ROBAX** glass ceramic windows.



To clean glass, first turn down the thermostat to allow the stove to cool. Assemble fire door shield, using metal plate (approximately 16" x 14") and wooden dowel with threaded rod. Remove nut from threaded rod, push threaded rod through hole in metal shield and tighten nut to hold wooden dowel onto metal shield. Refer to Figure 10 below.



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ALL cleaning procedures should be done at room temperature **CLEANING OF HOT CLASS SHOULD BE AVOIDED.** Cleaning solutions applied to hot glass may dry before cleaning agent is removed, which may result in creating a film or deposit that can react with combustion by products. Dried on cleaning solution may react with surface causing discoloration or a permanent film.



If white deposits are found to be on the surface of glass, these should be scraped off using a sharp bladed scrapper and wiped away with a dry cloth prior to any wet cleaning. Scrapping should be done at a low angle below 30 degrees.



Although glass is extremely hard and very scratch resistant, it is not scratch proof. The use of abrasive cleaners (i.e., any cleaners containing grit) and scouring pads (i.e., steel wool, plastic with embedded grit) should be strictly avoided.

Soft cloths should be used for all cleaning steps. The cloths should be free of any abrasive agents from any previous use.

Dried on cleaning solutions may react with glass surface causing discoloration or a permanent film.

While **ROBAX** glass is the best glass for use on anthracite burning coal stove, the manufacturer does not warranty the glass.

#### **Ash Pan Emptying**

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



1. Ash pan must be emptied on a regular basis to prevent ashes from overflowing into ash pit area. Excessive ash accumulation may impede air flow to chimney, preventing gases to be drawn up chimney.



- 2. Fire door and ash door must be kept closed at all times during normal operation.
- 3. It is necessary to keep coal in hopper while stove is in operation.
- 4. In most applications it is sufficient to clean stove and stove pipe twice during heating season. However, under extreme weather conditions, or high demand on stove running periods, the stove and stove pipe may need more frequent cleaning. Clean as often as necessary.



#### CAUTION: ASH PAN IS HOT-Always Use Gloves to Remove Ash Pan



- 1. Before removing ash pan, turn switch off, or pull power cord plug from 110V outlet.
- 2. Open ash door.
- 3. Use a good pair of gloves, to remove ash pan.
- 4. Place filled ash pan on a non-combustible surface.
- 5. Slide an empty ash pan into stove.
- 6. Close ash door.
- 7. Turn switch on or plug power cord back into 110V outlet.

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

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

If 4" exhaust pipe is not going straight out through outside wall and 4" pipe is in a vertical position to access an area above outside grade, the 4" elbow is a common location for dust to accumulate and restrict exhaust air flow to outside of home. A 4" tee may also be used in place of a 4" elbow. This will allow the bottom of tee to be used as a collection point (out of the flow of exhaust gases) providing an easier access for cleaning and less chance for restriction or blockage.



It is ESSENTIAL...that every 4" pipe joint or connection be sealed with a high temperature silicone or equivalent. All adjustable joints on elbow must also be sealed with silicone. **FAILURE TO SEAL ALL JOINTS** could allow carbon monoxide to leak into home.

#### **Gear Motor Removal & Installation**

Refer to the following Figures 11 & 12

#### TO REMOVE GEAR MOTOR:



- 1. Pull power cord pug from 115V outlet.
- 2. Remove #10-24 machine screw and then remove protective cage.
- 3. Disconnect both blue wire nuts marked.
- 4. Remove both #10-24 machine screws from mounting bracket.
- 5. Slide gear motor out of its track toward you, pusher bar will also come out with gear motor.
- 6. While pusher bar is out of its chute, clean chute area and remove any obstructions. Check nylon screws on pusher bar (4 on each side) for wear or breakage. (Replace if necessary)



- 7. Slide pusher bar in and out of chute (should move freely) check for sideward movement.
- 8. Adjust nylon screws on right side to allow only a slight sideward movement.

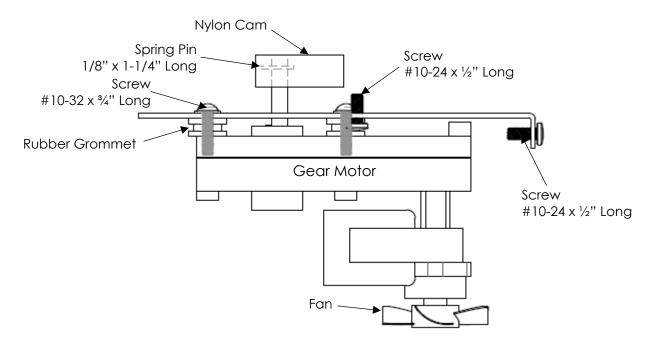
#### TO REPLACE GEAR MOTOR:



- 1. Remove (4) 10-32 machine screws that hold gear motor onto mounting bracket.
  - a. Before removing gear motor from bracket, look at position of gear motor; install new motor in exact same position before reinstalling screws.
- 2. Reverse removal procedure and reinstall.
- 3. When replacing gear motor with a new one, both gear motor wires are black; either wire may go to red or white wire from power supply.

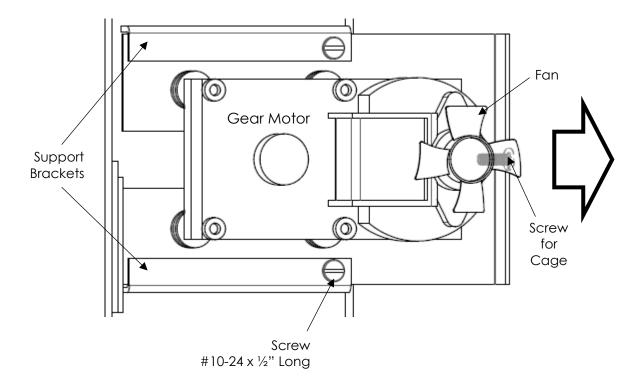
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#### FIGURE 11



#### FIGURE 12

#### **Bottom of Stoker Unit**



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# Troubleshooting Guide

Problem	Fix
FIRE GOES OUT	See page 13 (Timer) and Page 9 Diagram 2
COAL KLINKERING OR FUSING TOGETHER	See page 9 Diagram 1 & 2
SULFUR SMELL	See page 15 (Cleaning & Lubrication and Check Draft section, Page 7)
STOKER UNIT DOESN'T FEED COAL	See page 11 (Pusher Bar)
PUSHER BAR IS NOT MOVING STRAIGHT	See page 11 (Pusher Bar)
CONVECTION BLOWER RUNS TOO OFTEN	See page 14
CONVECTION BLOWER RUNS CONSTANTLY	Pull white button on Fan Limit Switch out for automatic operation. Clean screen and fan blades on blower. See page 14
THERMOSTAT CALLS FOR HEAT, but CONVECTION BLOWER OFF TOO LONG	See Page 10 Diagram 1
FIRE IS LIT, BUT NOT ENOUGH HEAT	If gear motor only runs short cycles, timer is working. When thermostat calls for heat, gear motor should run steady. If gear motor is running steady, but fire is small, increase coal feed. See pages 8, 9 & 11 If gear motor is not running steady, check for loose wire in Thermostat or in Relay. Check for broken thermostat wire between thermostat and Relay.
GEAR MOTOR RUNS CONSTANTLY MAKING TOO MUCH HEAT	<ol> <li>Gear motor can only be activated by thermostat or timer.</li> <li>Remove thermostat wires from T.T. terminals in Relay, if gear motor shuts off, replace thermostat wire or Thermostat.</li> <li>OLDER MODELS: Check timer to see if yellow wheel is turning, if not replace timer motor.</li> <li>Check timer switch. See page 13 and Fig. 7 Timer</li> </ol>
CONVECTION BLOWER NOT BLOWING MUCH AIR	Clean screen and fan blades on blower.
GEAR MOTOR SHUTS OFF ON HI-LIMIT	High Limit pointer in Fan Limit Switch is designated to shut gear motor off when internal air temperature reaches 200 degrees. If internal air temperature stays on 200 degrees, Convection Blower is not cooling stove off quickly enough. Clean screen and fan blades on blower or replace convection blower or See Page 14, Fan Limit Switch.

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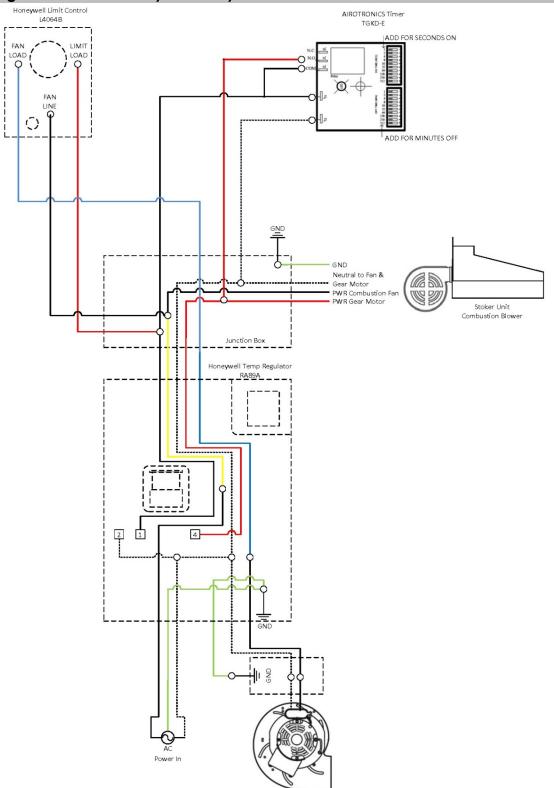
# Troubleshooting Guide – cont'd

Fix
Fan blades on combustion motor dirty. Brush off.
Accumulated fly ash under grate. Remove
combustion motor and clean under grate.
Holes blocked in grate. Open holes with 1/8" center
punch. See Page 10 Figure 2
TO CLEAN UNDER OR REPLACE GRATE See Page 15
(Cleaning & Lubrication) & Page 10 Figure 2
Under normal operating conditions, nylon cam will
not melt. Melting of nylon cam can only be caused
by a draft problem.
A blookers in abiranov abiranov connector stave
A blockage in chimney, chimney connector, stove
pipe, or stove. Inspect and clean. Or excessive draft, caused by high chimney, large
flue, or high winds. Clean and adjust barometric
damper. (Set barometric damper with a draft gauge
to obtain a draft reading of02 to03, See Page 7
Check Draft)

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## Diagrams

## Wiring – Thermostat: Honeywell Relay & Airotronics Timer

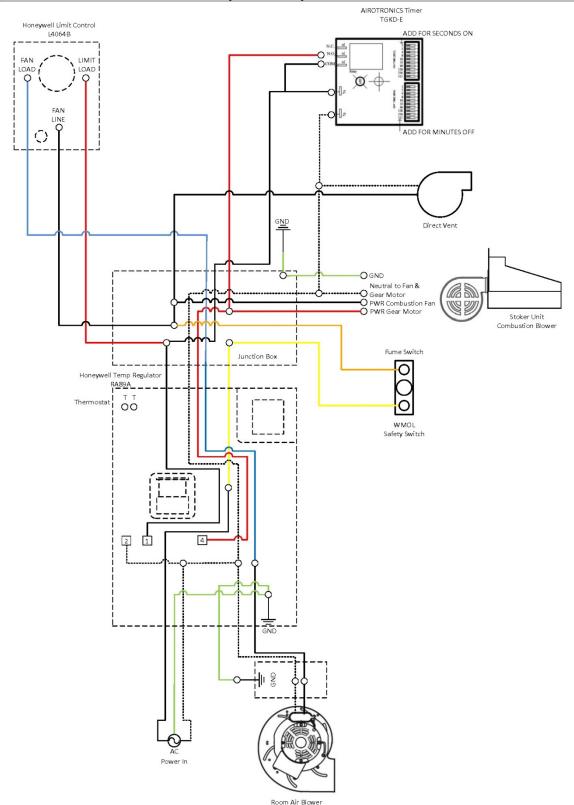


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Room Air Blower

## Diagrams – cont'd

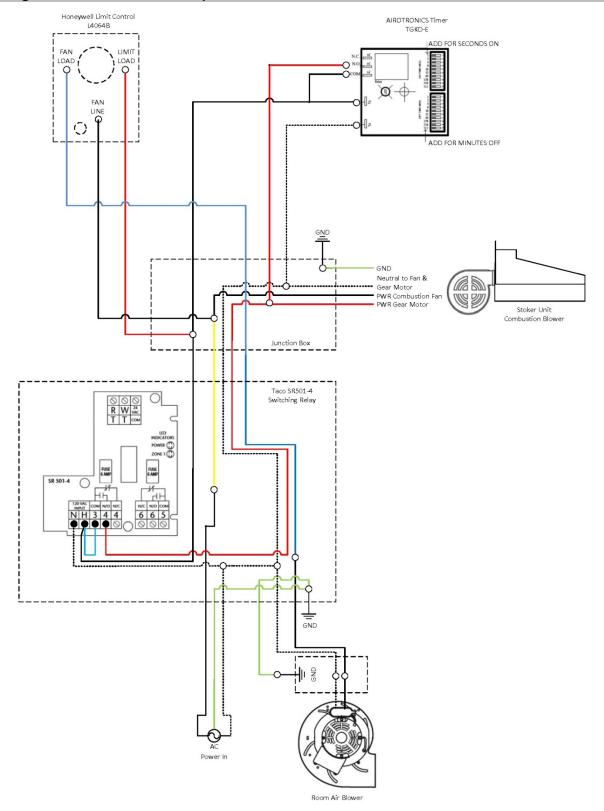
## Wiring – Thermostat, Direct Vent: Honeywell Relay & Airotronics Timer



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# Diagrams – cont'd

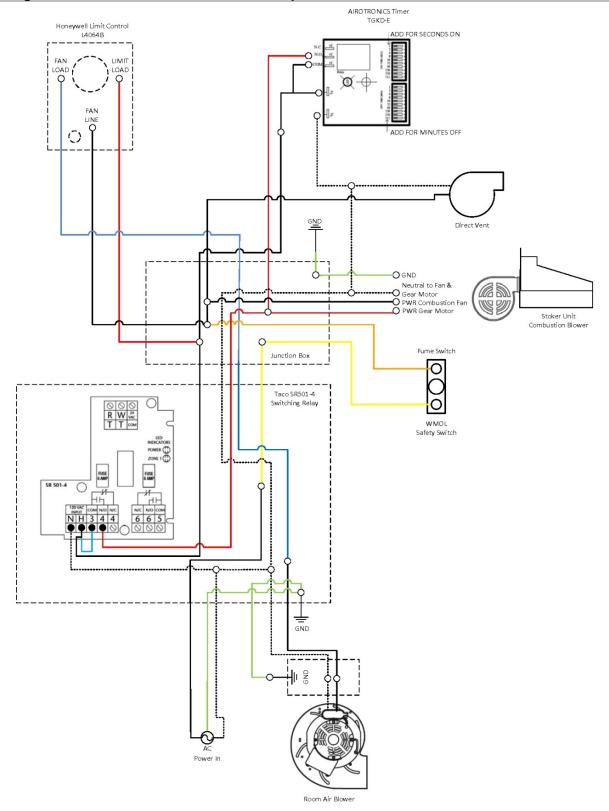
## Wiring – Thermostat: Taco Relay & Airotronics Timer



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## Diagrams - cont'd

#### Wiring – Thermostat, Direct Vent: Taco Relay & Airotronics Timer

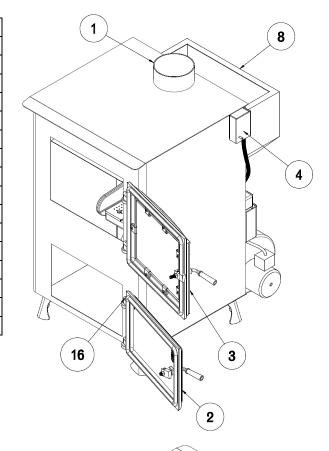


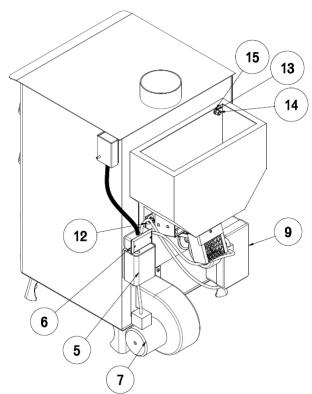
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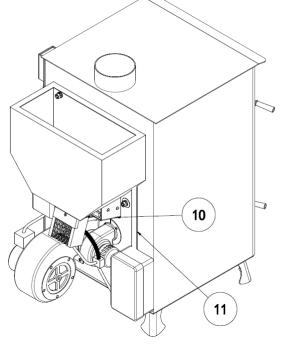
# Diagrams – cont'd

## Stove Parts List – 105K, Top Vent Shown

Item #	Component
1	Stove Pipe, 6"
2	Ash Door Subassembly
3	Fire Door Subassembly
4	Limit Control
5	Thermostat Relay
6	Junction Box
7	Room Blower
8	Hopper
9	Timer
10	Stoker Subassembly
11	Gasket
12	Washer, 5/16"
13	Lock washer, 5/16"
14	Hex Nut, 5/16"
15	Large Washer, 5/16"
16	Hinge Pin





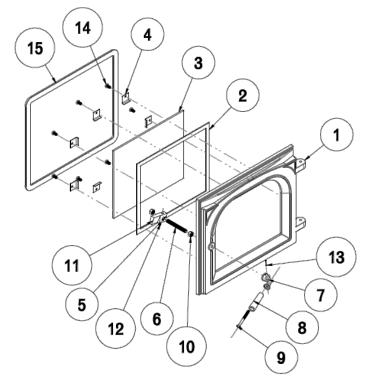


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## Diagrams – cont'd

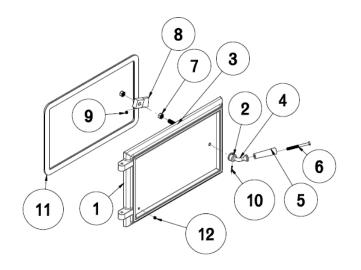
## Fire Door Parts List – 105K, Top Vent Shown

Item #	Component
1	Ash Door
2	Gasket
3	Glass
4	Glass Clip
5	Lever Handle
J	Subassembly
6	Threaded Rod
7	Lever Base
8	Handle
9	Machine Screw
10	Hex Nut
11	Door Latch
12	Set Screw
13	Roll Pin
14	Machine Screw
15	Insulation



## Ash Door Parts List – 105K, Top Vent Shown

Item #	Component
1	Ash Door
2	Lever Handle
Z	Subassembly
3	Threaded Rod
4	Lever Base
5	Handle
6	Machine Screw
7	Hex Nut
8	Door Latch
9	Set Screw
10	Roll Pin
11	Insulation
12	Set Screw



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SERIAL #

#### Warranty

Keystone Manufacturing company extends the following warranties to the original owner from the date of purchase.

- Ten Years Workmanship on stove body
- Two years on grates and side rails
- One year all electric controls and motors.
- Warranty does not apply if damage occurs because of improper handling, operation, abuse, rust, corrosion, misuse or use beyond rated capacity.
- This warranty does not apply if the product has been altered in any way after leaving the factory.
- All warranty claims should be made through dealer where the appliance was originally purchased. Model, **Stoker Unit** Number 1 ½ x 3 tag (found below hopper) and original copy of the sales receipt need be presented to dealer.
- If a consumer chooses to make a warranty claim directly through Keystone
  Manufacturing Company model, stoker unit number, and copy of the original
  sales receipt are required. Customer must provide a credit card which will be
  charged for the full retail price for the product plus shipping and handling. When
  defective part is returned to the company and found to be a defect within
  warranty period the consumer's credit card will be credited back the cost of part.
- Keystone Manufacturing Company assumes no responsibility for any labor expanses, for service, product removal, reinstallation or any freight charges for parts returned to the company.
- If defective in material or workmanship and if removed by the owner with in warranty period Keystone manufacturing will at their opinion repair or replace the product.
- This warranty is limited to defective parts, repair, or replacement at our opinion and excludes any incidental and consequential damages connected there with.
- Warranty exclusions, labor, glass, door gasket, ash tub, hopper and paint

Stove Information	
Dealer / Phone #:	
Date of purchase:	
Stoker unit number:	
Stove Model:	

#### **Parts Ordering**

If not listed above, locate the metal  $1 \frac{1}{2}$ " x 3" Keystoker label fastened to stoker unit body, near gear motor. The four or five-digit number will be required to get proper replacement parts from your dealer.

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## **Stove Contents Checklist**

Manual
Carbon Monoxide Detector
Shield & Handle
Charcoal
Draft Regulator
Spring Handle
Ash Tub (2 pcs)
Clamp and Screw

Packed By	v:	
	<b>,</b> •	



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