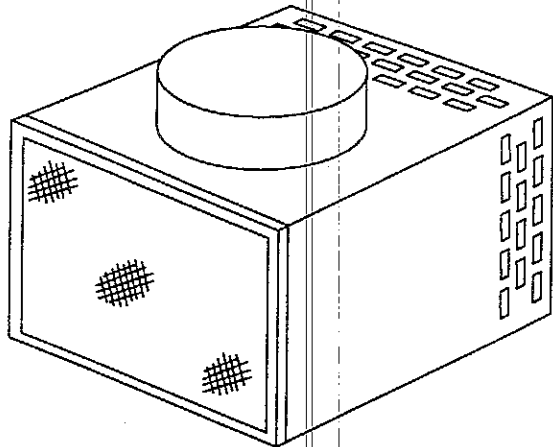


MIRACLE HEAT

OWNERS MANUAL

For Models 6101, 6105



Waste Heat Reclaimer



Read these instructions before operating or installing the unit.

Save this booklet for future reference and guidance.



UNITED STATES STOVE COMPANY
227 Industrial Park Rd., South Pittsburg, TN 37380

85627E 4/98

Congratulations on your purchase of the "Miracle Heat" Heat Reclaimer, a heat efficiency product from United States Stove Company, North America's oldest manufacturer of solid fuel appliances.

Every wood or coal stove or furnace manufactured to date is not totally efficient. This means that heat which could be utilized is going up each and every chimney. The "Miracle Heat" Heat Reclaimer is designed to utilize a part of that lost heat, and yet let enough heat pass through the chimney to maintain proper draft and temperature so that creosote and soot formation is kept to a minimum. "Miracle Heat" Heat Reclaimer has a quiet, dependable 100 CFM fan that promotes heat circulation to improve overall efficiency. The amount of heat actually recovered will depend upon the type of fuel that is burned and the type of heating appliance on which the Miracle Heat is mounted.

Chimney draft will likewise have a significant effect on the efficient operation of your Miracle Heat. The greater your draft, the more you need a Miracle Heat. But if your draft is insufficient, your Miracle Heat will not operate as efficiently, and you will possibly contribute to your draft deficiency.

Your Miracle Heat heat exchanger is designed to work well on nearly every solid fuel stove manufactured, but was specifically designed for older model stoves which are less efficient by design. It has also proved very effective when used in conjunction with a catalytic damper, as the after-burned gases from a catalytic damper are themselves quite hot, and, again, represent waste heat (though harmful wood products are being burned off).

GENERAL INSTRUCTIONS:



Your Miracle Heat should not be installed by anyone inexperienced with such work or not familiar with pre cautions required and not capable of complying with all requirements set by the various authorities having jurisdiction. If you are unfamiliar with such an installation, then do not attempt to install it yourself. Have it done by a qualified installer, one who is well versed in heating equipment venting, its use and safety.

I. DO NOT...

1. Do not use a Miracle Heat that has a smaller flue diameter than the flue outlet on your fireplace, heater, or stove.

2. Do not restrict air movement in or around or through the Miracle Heat.
3. Do not install on a stove or heater with a flue temperature of less than 350 degrees Fahrenheit.
4. Do not install the Miracle Heat closer than 18" to any combustible object or material.
5. Do not install the Miracle Heat on a heater or stove which "smokes". The Miracle Heat will aggravate this condition. Correct the smoking (see chimney and/or draft) before installing the Miracle Heat.
6. Do not plug into an electrical outlet that is not grounded or one that is operated by a wall-mounted on/off switch.
7. Do not interfere with the operation of the fan motor or blades.
8. Do not touch your Miracle Heat while it is in operation. It is hot and can burn you. Also, keep children, clothing, and combustible material away from the unit.
9. Do not use stove pipe of less than 24-gauge thickness or of aluminum or galvanized steel.

II. DO's:

1. Clean your unit periodically, at least three times during the heating season.

Step One: Remove the Miracle Heat and clean off any ash or creosote from the pipes.

Step Two: Locate the motor that drives the fan, and apply two drops of 20-weight motor oil into each hole.

Step Three: Reassemble your pipes along with the Miracle heat. **CAUTION:** Under certain conditions of use, creosote may build up rapidly. When wood is burned slowly it produces tar and other organic vapors which combine with expelled moisture to form creosote. Creosote vapors condense on relatively cool parts of the chimney flue or Miracle Heat, and can accumulate to a dangerous level. If ignited, this creosote

If ignited, this creosote makes for an extremely hot fire. Reduce your possibility of a chimney fire by properly cleaning your Miracle Heat and all connecting stove pipes or elbows.

2. Burn paper or cardboard at least three times a week to burn away the products of combustion. This is especially true of thermostatically operated wood and coal burning stoves.

3. Do use three sheet-metal screws to connect your Miracle Heat to the stove pipe above and below the unit. Do not use solder.

4. Keep electrical cord plugged in at all times except during servicing to prevent overheating and possible malfunction of components. Failure of any part of the heat reclaimer may expose the living space to hot flue gasses.

5. Keep the electrical cord at least 12" from contact with the flue pipe.

III. INSTALLATION INSTRUCTIONS:

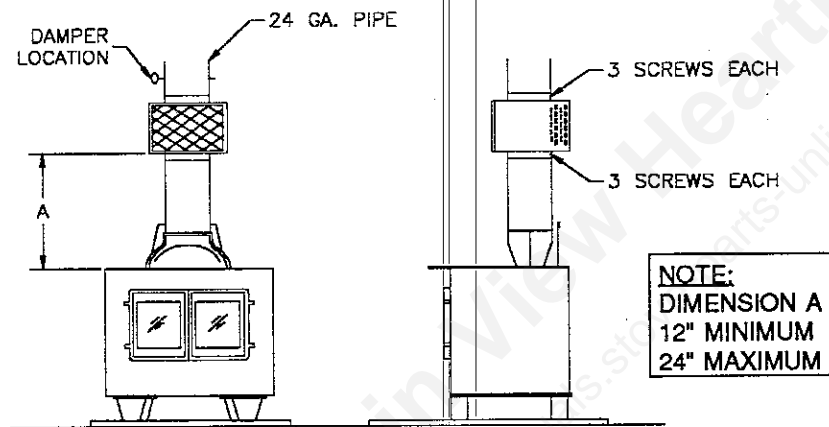
1. Do not reduce any minimum clearances which may be listed for your heater in the Owners Manual. Only chimneys of Type A all-fuel or masonry (and lined) may be used. Check your local or state building codes for proper and safe installation.

2. If you have determined your chimney to have an inadequate draft, overcome that deficiency before installing your Miracle Heat. Your chimney should be capable of developing at least .06 water column draft before installing a Miracle Heat. After installation, the chimney should develop at least .045 water column as measured below the Miracle Heat. All stove pipe above or below your Miracle Heat must be 24-Gauge or heavier to provide adequate support. Any horizontal run of pipe must pitch upward toward the chimney at least 1/4" per foot of horizontal run. All stove pipe and/or elbow joints must be secured by at least three sheet-metal screws.

3. Any elbow installed below your Miracle Heat should be of the non-adjustable type.

4. Install a hand damper (wood and coal stoves) BELOW your Miracle Heat.

5. Power cord must not contact any part of the woodburner or chimney connector. If the unit is installed horizontally, the power cord must exit the lower side of the unit.
6. Only use a heat reclaimer of equal or larger diameter as the flue outlet on the appliance.
7. The heat reclaimer should be mounted below barometric draft regulators and draft diverters.
8. All electrical supply-cord connections shall comply with the requirements of local authorities having jurisdiction.
9. Over-firing this unit is not recommended.
10. The Miracle Heat can be installed in your present flue pipe either horizontally or vertically or at any angle; and it may be installed with the crimp end either up or down, depending on your needs.
11. The Miracle Heat should be installed as close to the flue outlet as possible, but no further than 12" from the top or back, as shown below.



12. Again, do not install your Miracle Heat closer than 18" from any combustible material.

IMPORTANT: In case of a power failure (more than 15 minutes), your heater may be kept in use. However, do not overfire to the point the heat-exchange tubes become red hot, as such could damage the tubes, breaking their air seal.

OPERATION:



Before beginning operation, double check and insure that all above procedures and steps have been completed: Build a fire in your stove or heater as usual. As mentioned before, there may be smoke and odor for the first five or ten minutes at the most. If smoke still persists, shut down your heater or stove and determine the cause. If your Miracle Heat is at fault, do not attempt repairs, but return the unit to United States Stove Company or call our Customer Service Department to arrange for replacement.

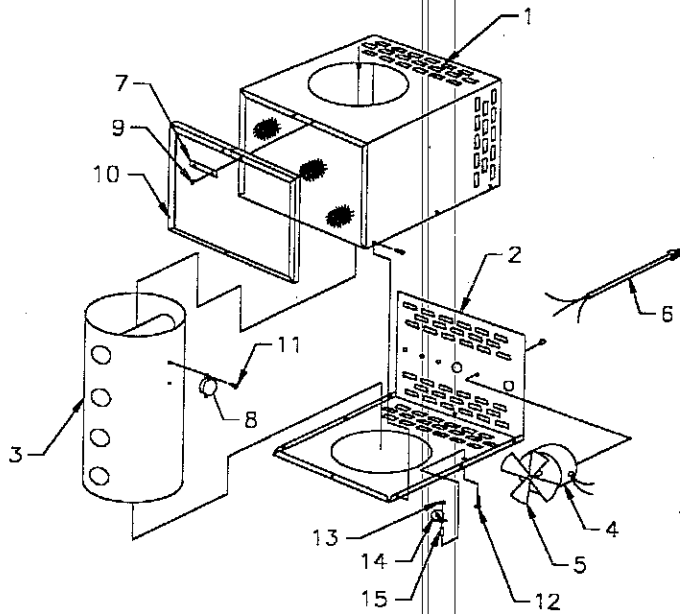
Your Miracle Heat will turn on automatically by virtue of the thermostat shortly after your fire is sated. It will turn off automatically after your fire cools down. Do not attempt to alter the thermostat in any way. This is not only a convenience feature, but an important safety device as well.

CLEANING INSTRUCTIONS:



Failure to clean your Miracle Heat regularly, as described above and below, can result in a chimney fire or in smoke spillage from your heater.

At least twice a year during the heating season, remove (or have removed by a qualified service man) your Miracle Heat from the flue and give the unit a thorough cleaning. We further recommend that at least once a day your heater be maintained at high fire for ten to twenty minutes to help burn off unstable creosote (be sure of the condition of your chimney before attempting to maintain a "hot fire.")



KEY	PART NO.	DESCRIPTION	QTY.
1	68274	Top/Side panel weld. (Model 6101)	1
	68275	Top/Side panel weld. (Model 6105)	1
2	22801	Back/Bottom panel (Model 6101)	1
	22803	Back/Bottom panel (Model 6105)	1
3	68273	6" Flue pipe/tubing Assy. (Model 6101)	1
	68275	8" Flue pipe/tubing Assy. (Model 6105)	1
4	80248	Electric Motor	1
5	89359	Fan blade	1
6	80232	Power supply cord	1
7	89524	M. heat front brass trim	1
8	80249	Thermostat	1
9	85630	Product Label	1
10	83348	#8x3/8" Pan hd. sheet metal screw	18
11	83351	#8x3/8" hex hd. sheet metal screw	10
12	83324	8-32x1-1/4" machine screw	1
13	83297	8-32 Hex Nut	1
14	80250	Power cord clamp	1
15	83350	Steel spacer	1
*	85854	M. heat UPC code label	1
*	80252	Closed end connectors	2
*	83349	#8-32 Nylon insert jam L. nut	2
*	80109	Strain relief bushing	1

* Not Shown

HOW TO ORDER REPAIR PARTS

THIS MANUAL WILL HELP YOU TO OBTAIN EFFICIENT, DEPENDABLE SERVICE FROM THE HEATER, AND ENABLE YOU TO ORDER REPAIR PARTS CORRECTLY.

KEEP THIS MANUAL IN A SAFE PLACE FOR FUTURE REFERENCE.

WHEN WRITING, ALWAYS GIVE THE FULL MODEL NUMBER WHICH IS ON THE NAMEPLATE ATTACHED TO THE INSIDE OF THE CABINET DOOR OF THE HEATER.

WHEN ORDERING REPAIR PARTS OR OPTIONS, ALWAYS GIVE THE FOLLOWING INFORMATION AS SHOWN IN THIS LIST:

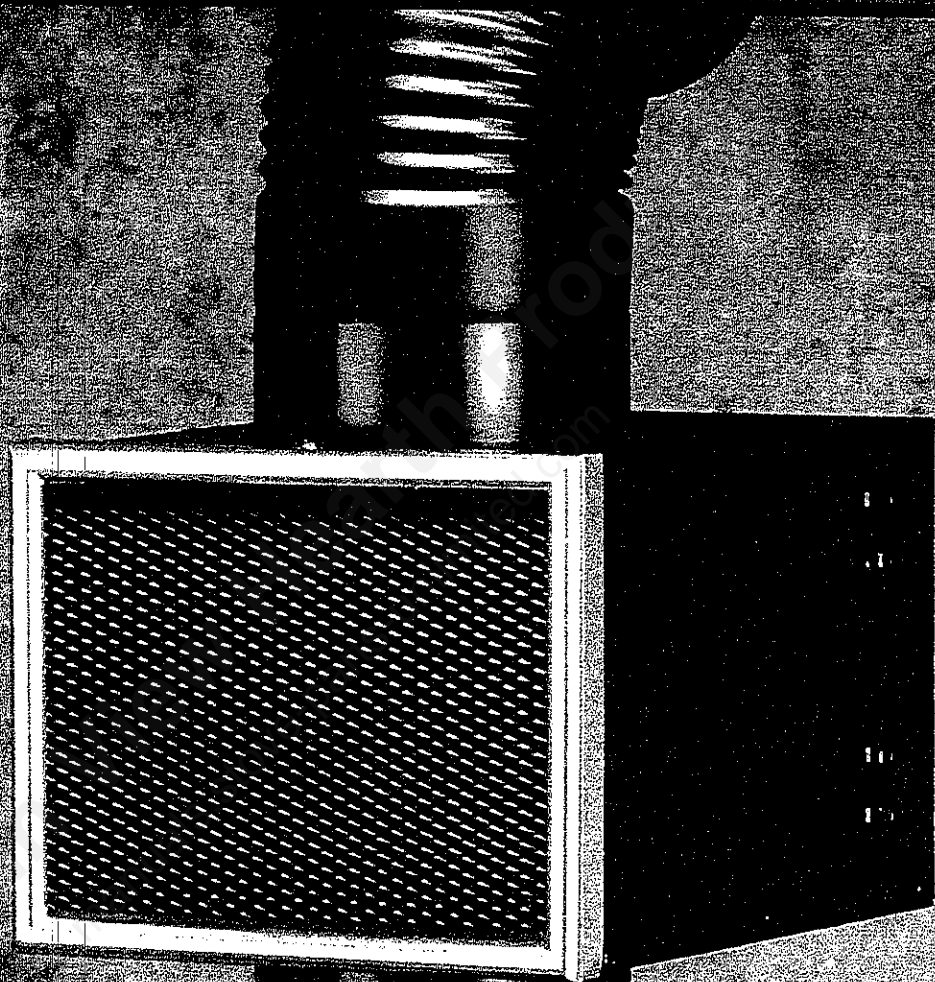
1. The PART NUMBER
2. The PART DESCRIPTION
3. The MODEL NUMBER: 6101(6") 6105(8")
4. The SERIAL NUMBER: _____

BEFORE INSTALLING YOUR HEATER, FILL IN THE SERIAL NUMBER OF YOUR HEATER IN THE SPACE PROVIDED ABOVE.

United States Stove Company

227 Industrial Park Rd.
P.O.Box 151
South Pittsburg, TN 37380
(423) 837-2100

Miracle Heat[®]



Models #6101, 6105

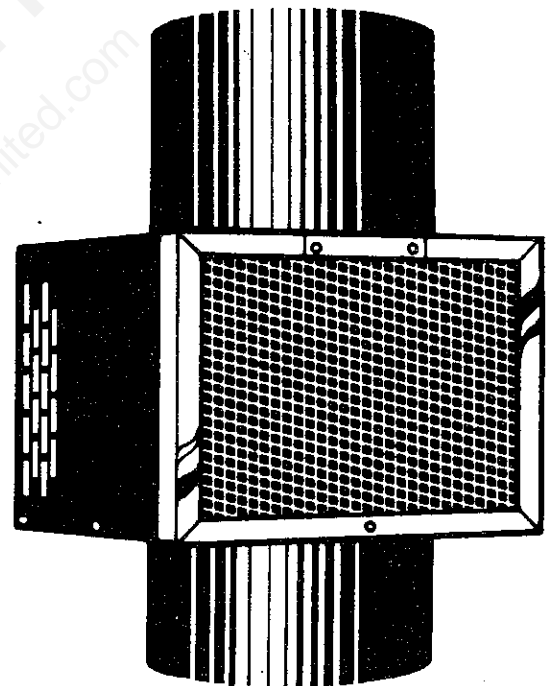


Miracle Heat®

Models 6101, 6105

Every wood or coal stove or furnace manufactured to date is not totally efficient. This means that heat which could be utilized is going up each and every chimney. The MIRACLE HEAT Heat Reclaimer is designed to utilize a part of that lost heat and yet lets enough heat pass through the chimney so creosote and soot formation is avoided. The MIRACLE HEAT Heat Reclaimer has a quiet, dependable 100-CFM fan that promotes heat circulation to improve overall efficiency.

- Increases heat output and stove efficiency, allowing more heat to remain in living area by utilizing heat normally vented out the chimney
- Six-inch and eight-inch models allow units to conform to most common stove-pipe diameters
- Seven-inch 100-CFM fan extracts and distributes proper amount of heat without cooling flue too rapidly
- Eight-foot, grounded power cord provides ample length to reach nearest electrical outlet
- Heavy-gauge outer box and heat tubes provide durability and long-lasting performance



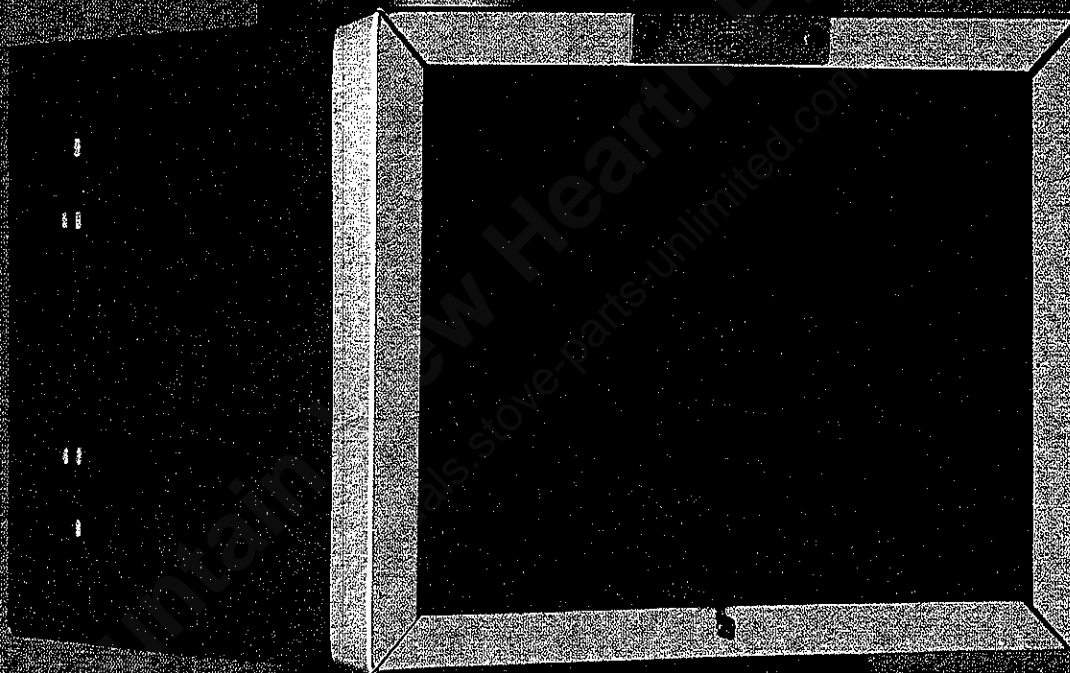
UNITED STATES STOVE COMPANY
P.O. BOX 151 • SOUTH PITTSBURG, TN 37380 • (423) 837-2100
Keeping America Warm Since 1869



Note: All photographs are for illustrative purposes only and are not meant to be a guide for actual installation. All safety regulations with respect to combustible materials and surfaces must be followed. See installation manual for specifics. Dimensions and specifications are subject to change without notice. Contact local building or fire official about restrictions and installation inspection requirements.

Miracle Heat® Efficiency Products

Model 6101, 6105, 6109



Model #6101
Heat Exchanger



#6109



Miracle Heat Efficiency Products

**Model 6101
6105
6109**

Every wood or coal stove or furnace manufactured to date is not totally efficient. This means that heat which could be utilized is going up each and every chimney. The MIRACLE HEAT Heat Reclaimer is designed to utilize a part of that lost heat and yet lets enough heat pass through the chimney so creosote and soot formation is avoided. The MIRACLE HEAT Heat Reclaimer has a quiet, dependable 100-CFM fan that promotes heat circulation to improve overall efficiency.

- Increases heat output and stove efficiency, allowing more heat to remain in living area by utilizing heat normally vented out chimney
- Six-inch and 8" models allow units to conform to most common stove-pipe diameters
- Seven-inch 100-CFM fan extracts and distributes proper amount of heat without cooling flue too rapidly
- Thermostatically controlled fan automatically activates at 160 degrees F and shuts off at 130 degrees F
- Eight-foot grounded power cord provides ample length to reach nearest electrical outlet
- Heavy-gauge outer box and heat tubes provide durability and long-lasting performance

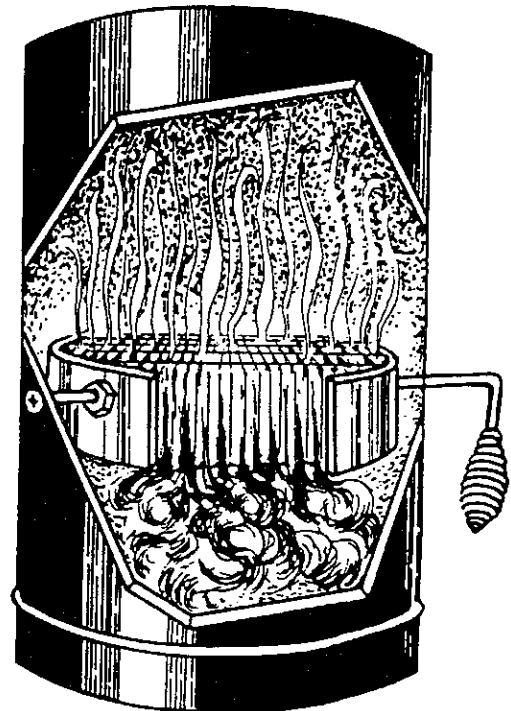
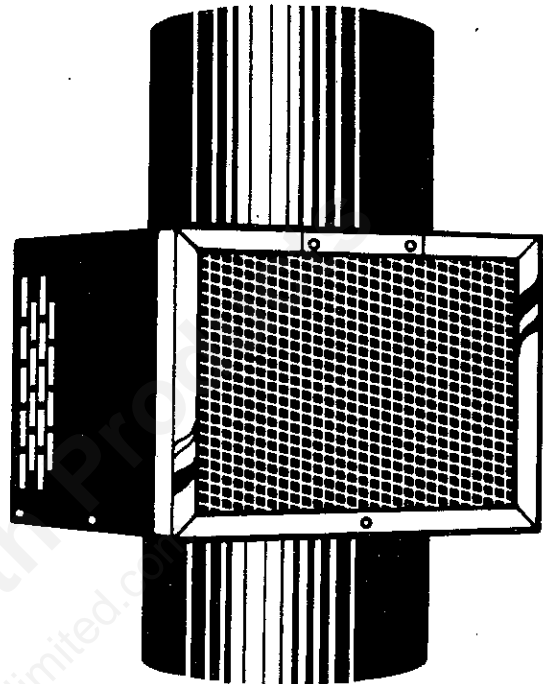
Catalytic Damper 6109 (Wood Appliances)

The Cat-6109 burns the smoke that would normally escape out the chimney in the form of uncombusted wood smoke. By burning these gases, the heat output is increased by as much as 30% with the same amount of wood. The Cat-6109 also reduces creosote and pollutants considerably.

- 6 & 8 inch models
- Specifically designed for wood stoves and furnaces
- Utilizes 1.5 inch catalytic combustor
- 24 gauge flue pipe
- 8 inches high with welded seam
- Brass ring handle for pivotal adjustment of catalyst

Note: All photographs are for illustrative purposes only and are not meant to be a guide for actual installation. All safety regulations with respect to combustible materials and surfaces must be followed. See installation manuals for specifics. Dimensions and specifications subject to change without notice.

Contact local building or fire officials about restrictions and installation inspection requirements.



UNITED STATES STOVE COMPANY
P.O. BOX 151 • SOUTH PITTSBURG, TN 37380 • (615) 837-2100

Building Quality Products for America Since 1869.



Corporate Office:
111 Industrial Dr.
P.O. Box 151
South Pittsburg, TN 37380
615-837-2100
FAX 615-837-2109



Plants Located in
Chattanooga and
South Pittsburg,
Tennessee and in
Bridgeport, Alabama

UNITED STATES STOVE COMPANY

THANK YOU for purchasing a MIRACLE HEAT.

We feel that you have purchased the finest heat recovery unit on the market. It is an extremely quiet running, efficient unit designed as an addition to wood fired stoves and furnaces with a minimum of creosote buildup and it also works well on oil and gas fired furnaces.

PLEASE read the installation and maintenance instructions carefully and MIRACLE HEAT will give you many years of carefree service.

INSTALLATION

MIRACLE HEAT can be inserted into your present flue pipe both horizontally or vertically or at any angle, it may be installed with crimped end either up or down depending on your needs. The lack of obstruction in the pipe make this all possible.

Install MIRACLE HEAT according to all local and state codes.

IMPORTANT

For wood stoves with a top or back mounted outlets the MIRACLE HEAT should be installed as close to the outlet as possible but no farther than 12 inches from the top or back of the stove as shown in figure A and B. Do not install MIRACLE HEAT closer than 18 inches from any combustible material. Three sheet metal screws should be inserted into the top and bottom of the MIRACLE HEAT where it connects to the regular stove pipe.

After installation per the above instructions, plug the unit into a wall socket, start fire and MIRACLE HEAT will function automatically.

Figure A

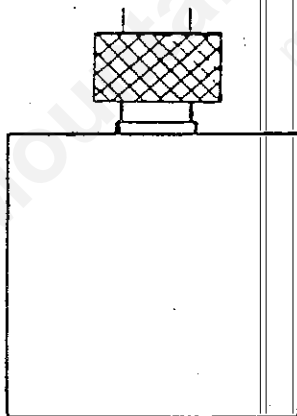
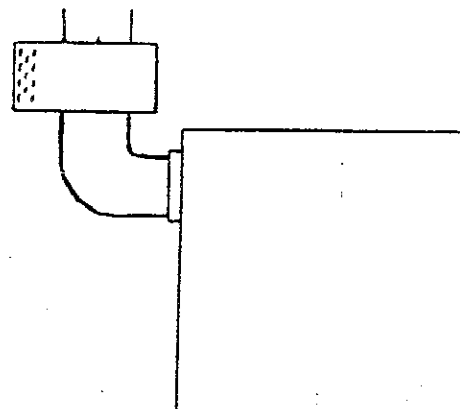


Figure B



NOTE

Due to protective oils and paint this unit will cause an odor and will smoke for the first few minutes of the first operation. There is no cause for alarm as this is normal. Ventilate the area well and the odor and smoke will disappear shortly. From time to time with shipping and sometimes the assembly process the fan blade will get bent and will cause the unit to vibrate. If this occurs in your unit it can be fixed very easily. The thing to do is to get a longer screw driver or something long and slim. Unplug the MIRACLE HEAT. Turn the fan blade with the screw driver slowly looking through the side of the unit at the bottom. As the blades come around you will notice that they line up with the holes on the bottom. Continue to turn the blades and you will find one that is out of line. Bend that blade in line with the rest of the blades and that should stop the vibration.

MAINTENANCE

Maintenance of the MIRACLE HEAT is very simple.

Step 1 - Remove MIRACLE HEAT two or three times a burning season just as you remove the pipes to clean them. Clean any ash build up from MIRACLE HEAT just as you clean the pipes.

Step 2 - Locate the motor that drives the fan. Depending on your pipe system; either on top or on the bottom of the motor. The holes are located in front and toward the back of the motor, or you may have a motor that the oil hole is on the back of the motor between the motor and the back of the unit. In this case you will need to loosen the nuts on the motor to locate the oil holes. Drop two drops of #20 oil into each hole, retighten nuts.

Step 3 - Reassemble your pipes along with the MIRACLE HEAT, Plug the unit back into a wall socket and the MIRACLE HEAT will continue to function automatically for you.

REPLACEMENT PARTS

Every component of the MIRACLE HEAT can be easily replaced. At such a time a component should need to be replaced after the warranty has expired, check with your local dealer or contact United States Stove Company for parts and current price list.

INSTALLATION INSTRUCTION REQUIREMENTS

1. Power cord must not contact any part of the woodburner or chimney connector. If the unit is installed horizontally, the power cord must exit the lower side of the unit.
2. Heat reclaimer must be plugged in at all times to prevent overheating and possible malfunction of components. Failure of any part of the heat reclaimer may expose the living space to hot flue gasses.
3. Only use a heat reclaimer of equal or larger diameter as the flue outlet on the appliance.
4. A. The heat reclaimer should be mounted below barometric draft regulators and draft diverters.
B. Installation of the heat reclaimer should be made only by a person(s) who is familiar with the work and necessary precautions required for venting of the appliances.
C. All electrical supply cord connections shall comply with the requirements of local authorities having jurisdiction.
D. Over-firing this unit is not recommended.

CAUTION

Under certain conditions of use creosote build up may occur rapidly. We would also point out that under certain conditions even a regular stove pipe may have a rapid creosote build up. Creosote - formation and need for removal. When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote makes an extremely hot fire. The chimney, chimney connector, and heat exchanger should be inspected at least twice monthly during the heating season to determine if a creosote build up has occurred. If creosote has accumulated it should be removed to reduce the risk of a chimney fire.

LIMITED WARRANTY

The United States Stove Company warrants its Miracle Heat against failure of electrical components of the blower and against defective material and workmanship.

The warranty period extends 12 months from date of purchase by original owner for one year from date of purchase.

Any defects relating to above should be reported to United States Stove Company, giving description and pertinent data. Include proof of purchase, which will be returned on request.

Providing the Miracle Heat has been installed and used in accordance with the owners manual supplied with the unit. The United States Stove Company will either: (1) Replace the defective part free of charge, including payment of any labor charges, or (2) Replace the Miracle Heat free of charge, including payment of any labor charges.

Smoking problems are not covered under this warranty. Inadequate draft is generally due to the design or installation of the flue system.

United States Stove Company, P.O. Box 151, 111 Industrial Dr., So. Pittsburg, TN 37380.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.