

CONGRATULATIONS!!!

AND WELCOME TO

THE GROWING FAMILY OF WOODBURNING STOVE OWNERS

The availability of energy in our world is of growing concern to the serious minded. Nearly 60% of all energy used in the home goes into heating it. Another 20% is consumed by domestic water heating, cooking, air conditioning, and other processes which require heat. With the dependency for that heat on fossil fuels, and ever increasing costs, coupled with serious shortages, many people like yourself, who have purchased a wood stove are discovering that simple joy which comes to those who are getting back to basics. Remember, wood is our only renewable source of energy.

The Timberline Stove is one of the finest wood burning stoves manufactured. It's unique design coupled with sound engineering makes the Timberline a "HIGH EFFICIENCY STOVE", providing more heat from less fuel with fewer ashes.

The features of a Timberline Stove include simplicity of line combined with functional design, heavy cast iron doors that are thick and sealed properly, firebrick lining to eliminate burning out the firebox area, and a cooking surface that has different temperatures. The front draft controls are cool to the touch and regulate the intensity of the fire within by metering the amount of air intake. Quality craftsmanship goes into the fitting and welding of all parts that make up our product. The result HEATING EFFICIENCY AND DURABILITY!!

Let us take this opportunity to thank you for your selection of a TIMBERLINE.

HAPPY HEATING



The Timberline Room heaters and Fireplace Stoves have been developed to provide for the maximum heating comfort. They have been developed, tested, and constructed in accordance with the requirements of Underwriters Laboratories, Incorporated and U. L. 1482. These units are designed as safe and efficient, solid fuel burning heaters but they must be properly installed and operated. Carefully read and follow all of the requirements and instructions included.

CONDENSED SAFETY REQUIREMENTS PLEASE READ CAREFULLY

1. Never install a solid-fuel burning stove in a bedroom or sleeping area.
2. A hearth extension for floor protection must be installed with the heater which meets the minimum measurements and clearances as shown in the attached drawings.
3. The room heaters and fireplace stoves are designed primarily for burning wood.
4. NEVER USE FLAMMABLE LIQUIDS TO START A FIRE. NEVER STORE FLAMMABLE LIQUIDS NEAR THE STOVE.
5. The heaters will be hot when burning properly and will set objects such as clothing and curtains on fire if they touch it. Keep anything flammable away from the heater.
6. Do not allow children to play around the heater without supervision. Do not touch the heater while it is in operation as it will sometimes be hot enough to burn skin seriously.
7. Do not allow anyone to operate the heater who is not familiar with the operating instructions.
8. Recommended minimum clearances from the surface of the heater to combustible materials are shown in Figures 1 and



2. It is important to observe the recommended clearances closely. Do not store fuel, paper, flammable liquids, matches, or combustible materials of any kind around the heater.

WARNING: BE ABSOLUTELY SURE THAT THE DISTANCE BETWEEN THE HEATER AND ANY COMBUSTIBLE MATERIAL IS NOT LESS THAN THAT SHOWN ON THE DRAWINGS.

9. For further information on using your heater safely, obtain a copy of the National Fire Protection Association publication "Using Coal and Wood Stoves Safely", NFPA Number HS-8-1974. The address of the NFPA is 470 Atlantic Avenue, Boston, Massachusetts, 02210.

GENERAL INFORMATION

Your Timberline Stove will provide you with years of dependable, efficient service if you follow all of the installation, operating and maintenance instructions in this booklet. Read this manual thoroughly before starting the installation and operation of your stove. You will find it filled with worthwhile information and suggestions. Keep it handy as a ready reference should the need arise.

We strongly recommend that you hire a licensed installer to properly install your Timberline Stove.

Contact your local building inspector before your installation begins to assure that you comply with all local building and fire codes. Have your installation safety inspected before you put your stove into operation.

SIZING YOUR STOVE

It is important that you select the correct size stove for the amount of space you intend to heat. Your stove should be big enough to do the job, but it shouldn't be too large either. An oversized unit will require that you operate the stove in a "choked down" condition, which accelerates the buildup of creosote in the chimney.



specific height from the floor, and utilizes firebrick in the bottom of the firebox, heat will still radiate to the floor. A non-combustible floor protection must be installed with the heater that will insulate the heat from the existing combustible floor. As a minimum, this protection must be the equivalent of 3/8 inch of asbestos mill board or 2 inches of common brick and must extend beyond the width and length of the heater as shown in Figures 1 and 2.

CHIMNEYS

Your chimney must be at least the same dimensions (inside diameter) as the flue of your stove. If you plan to use an existing masonry chimney, be sure it is free of cracks and loose joints. Gases traveling through a chimney reach extremely high temperatures. Cracks or loose mortar can allow hot gases to reach the wood portion of the structure surrounding the chimney. These toxic gases may also reenter the house through cracks and small holes in the chimney, or cause back-puffing which will result in excessive smoking. Be on the safe side and have your chimney inspected by a mason or chimney sweep.

A chimney must reach at least three feet above the highest point where it passes through the roof and at least two feet higher than any portion of the building within ten feet of the chimney. A smooth chimney liner works best. Since smoke travels upward through the chimney in a circular spiraling motion, a round liner is most efficient. A rough masonry chimney without a good smooth liner will cause creosote to build up rapidly.

An uninsulated chimney will cool quickly, also allowing rapid build-up of creosote. Creosote build-up limits your chimney's ability to draw, thus causing smoking problems in your stove. You may also find slow burning fires being extinguished as a result. In some cases "Thermal siphon" chimneys which utilize triple-wall pipe that circulates air between pipe layers cool too rapidly



and cause similar creosote deposits.

We recommend a U. L. Listed Class A all fuel, factory built chimney for use in conjunction with your Timberline Stove.

Follow the manufacturer's instructions for the installation of the chimney.

Your chimney should have a chimney cap to help prevent downdraft. Some local codes and regulations may require a static arrestor in the chimney cap. This component should be inspected frequently and cleaned to remove 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 connector and chimney 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.

STOVES PIPES

A straight up stovepipe installation is most desirable. Use single wall stove pipe only in the room that the stove is in. It is to be used only to connect the stove to the chimney, or ceiling connector. **DO NOT ATTEMPT TO RUN SINGLE WALL STOVE PIPE THROUGH A COMBUSTIBLE WALL OR CEILING.**



Use only specially painted or aluminized, low carbon steel, or stainless steel stove pipe. It should be a minimum of six inches in diameter and at least 24 ga. metal. Galvanized pipe emits toxic zinc fumes and the galvanizing agents will liquidify and drip when they become extremely hot.

Never connect more than one stove or heater to a chimney.

DAMPERS

We recommend installation of a damper on all stoves. It is an additional regulatory device for burning. Dampers are usually placed in the first section of pipe going upward from the stove. See "Starting the Fire".

GRATES OR ANDIRONS

Timberline Room Heaters and Fireplace Stoves are designed for the burning of wood directly on the firebrick. Best efficiency is received when a one inch bed of ashes is maintained in the firebox.

The Room Heater and Fireplace Stove models T-PF, T-SF, and T-LF: Do not use grates or elevate the fire as over firing of the heater may result. Do not use coal.

The Room Heater models T-18, T-24, and T-33: A grate may be used to elevate a wood fire but is not recommended. A grate must be used when burning coal to elevate the fire at least two inches above the firebrick and the ashes should be removed before they accumulate enough to reach the bottom of the grate.

SAFETY PRECAUTIONS

MOST HOME FIRES CAUSED BY WOOD BURNING STOVES ARE THE RESULT OF IMPROPER INSTALLATION AND OPERATION.

READ ALL INSTRUCTIONS THOROUGHLY BEFORE INSTALLING AND OPERATING YOUR TIMBERLINE STOVE.

1. Consult your local building inspector to assure compliance with building and fire codes.
2. Design your installation with safety as the primary consideration.
3. Finish the installation completely before putting your stove into operation.
4. Observe proper distances from combustibles for stove, stove pipe, and associated components.
5. Use only prescribed material for your installation.
6. Create a safety zone around the stove where children may not enter. Carefully supervise youngsters when they are in the same room with the stove.
7. Be sure everyone is aware of high surface temperatures and avoid contact with skin or clothing and combustible items to avoid ignition.
8. Do not dry clothing on or near the stove or stove pipe.
9. Do not let anyone operate the stove who is not familiar with it's operation.
10. Never use gasoline, gasoline type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or "freshen up" a fire in this heater. Keep all such liquids, well away from the heater while it is in use.



11. Keep explosives, aerosol cans etc. stored away from your stove.

12. Provide for fresh air inlet into the room while the stove is in operation.

13. Do not leave the house unattended for long periods of time when stove is in operation.

14. Make sure stove pipe connections cannot accidentally come apart. Use sheet metal screws to secure pipe connection. Avoid flexible elbows and snap together pipe which can come apart under extreme heat. Seal connections on stove pipe with sealer.

15. Clean your stove, chimney, stove pipe and associated components regularly. Do not allow excessive build-up of ashes in the stove, or allow ashes to spill from the stove when door is opened.

16. Check masonry chimneys for cracks which may allow back-puffing and fumes to reenter the house. Inspect for excessive creosote build-up and clean chimney at least annually.

17. Have your stove installation safety inspected before you build a fire in it the first time.

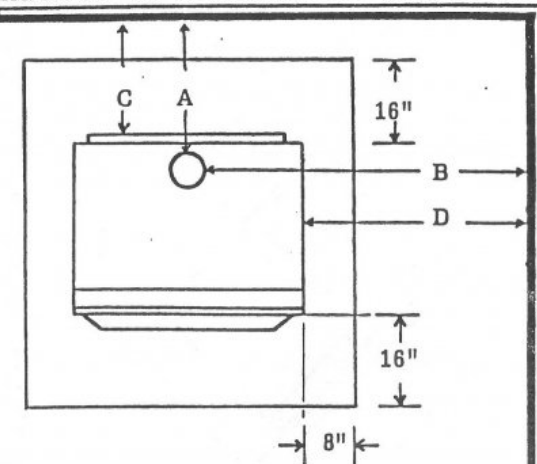
18. If you cook on your stove top, have a box of baking soda close at hand to extinguish grease fires. Never use water to control a grease fire. Also be careful to keep handles on pots and pans from extending beyond the stove where they may be accidentally knocked over.

19. Install a smoke detection alarm system.

20. Every home should have a fire extinguisher. Consult local fire officials or authorized fire extinguisher company for proper equipment.



Figure:
Side-Wall
Back Wall Installation
CLEARANCE TO COMBUSTIBLE CONSTRUCTION

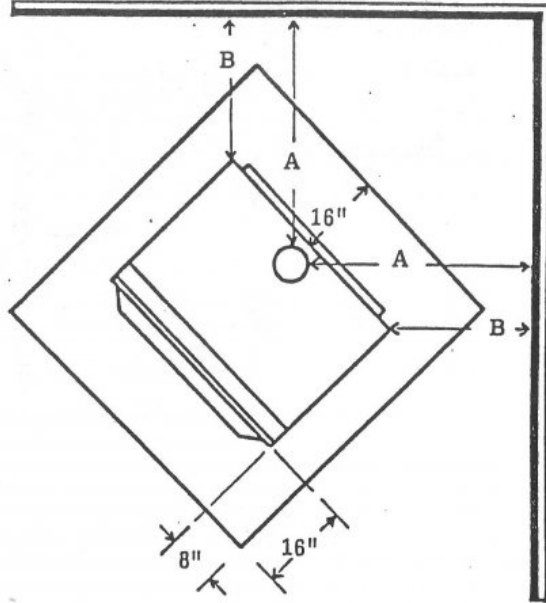


	A	B	C	D
T-18	18"	30"	14"	25½"
T-24	24"	40"	20"	34"
T-33	24"	40"	20"	35"
T-PF	24"	36"	20½"	27½"
T-SF	26"	40"	22½"	31"
T-LF	26"	45"	22½"	34"

NOTE: For Rear Flue models, the distances A and B apply to the vertical wall of the stovepipe.



Figure 2
Corner Installations
CLEARANCE TO COMBUSTIBLE CONSTRUCTION



	A	B
T-18	31½"	25½"
T-24	41"	34"
T-33	42"	35"
T-PF	35½"	27½"
T-SF	40"	31"
T-LF	44½"	34"

NOTE: For Rear Flue models, the distance A applies to the vertical wall of the stovepipe.



ASSEMBLY AND INSTALLATION

AFTER YOU HAVE READ AND FULLY UNDERSTAND THE MATERIAL IN THIS MANUAL, YOU ARE READY TO PROCEED WITH THE INSTALLATION OF YOUR TIMBERLINE STOVE. CONTACT YOUR LOCAL BUILDING INSPECTOR TO ASSURE THAT YOU ADHERE TO LOCAL BUILDING CODES.

1. Select the exact place where you want to permanently install your Timberline Stove. Set the unit in place. Check for clearances from combustible walls and material for your particular model. (Refer to Figures 1 and 2.) Plan ahead so that other moveable combustibles such as furniture and drapes will have ample clearance from your stove.

Before cutting through walls and ceilings, check to be sure there are no ducts, conduit, electrical wires, or vital structural support beams and rafters in the way of your stove pipe and chimney.

2. If a hole is to be cut through the ceiling, use a plumb bob to locate the hole in the ceiling by aligning the plumb bob with the exact center of the flue on your stove.

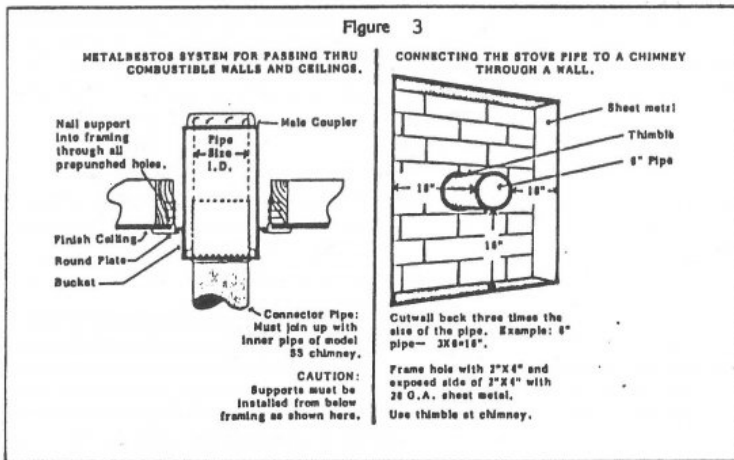
3. If you are installing a new chimney, follow the manufacturer's installation instructions very carefully. Be sure to comply with all safety recommendations. Use only insulated pipe and connectors to pass through combustible walls and ceilings. (See number 8 below for installation using an existing masonry chimney.)

4. Make a mark on the floor around each of the legs (or corners of the stove in the case of pedestal models). Move the stove and install the stove board or proper hearth. Be sure to extend the stoveboard beyond the stove as outlined in Figures 1 and 2.

5. Place stove on properly sized stoveboard or hearth



in exact location and install chimney connector. If the connector is to pass through a combustible wall or ceiling it must be insulated or other proper clearance precautions must be observed. (See Figure 3.)



6. After properly installing chimney connector, run the stove pipe from the connector to the flue on the stove. Use three sheet metal screws evenly spaced around the pipe on each joint including the flue collar. Seal joints with stove cement.

7. Make certain proper distances have been maintained between combustible surfaces and both the stove and stove pipe.

8. If you plan to use an existing masonry chimney here are some notes to remember:

a. Make sure the chimney has an inside minimum measurement 6" X 6".

b. Inspect chimney for cracks or deteriorating

mortar. Have a mason or contractor evaluate any problems of this nature. This will prevent back-puffing and gases returning to the building interior.

c. Be sure the pipe does not run down hill from the stove to the chimney.

d. Cut hole in chimney wall where pipe is to enter. Use a thimble or collar to connect the stove pipe to the chimney. Seal around the collar with furnace cement.

e. According to mechanical codes, the collar or connector should extend through the chimney wall to the inner face of the chimney liner, but not beyond. The chimney connector has to be at least 6" from the bottom of the chimney. The chimney should have a clean-out. If there is not a 6" space available, you must install a clean-out tee on the connector next to the chimney.

A stove cannot be connected to a fireplace chimney unless the fireplace opening or the flue that vents the fireplace is permanently sealed.

f. Masonry repairs and construction should have 48 hours to set up before lighting the stove. Your first few fires should be small to allow for masonry to cure.

9. Inspect the heater to insure the sheet metal heat shields are in place and undamaged as follows:

1. The back heat shield is securely mounted and allows a minimum 3" space between the shield and back of the heater.

2. The bottom heat shield is securely mounted

and allows a minimum 2" space between the shield and bottom of the heater.

OPERATION INSTRUCTIONS

STARTING A FIRE

1. Wad up several sheets of newspaper into individual balls. Place them on the floor of the stove a few inches from the door.
2. Place 8 to 10 small (approx. 1" diameter) pieces of dry kindling on top of the paper along with 3 or 4 slightly larger pieces of dry wood.
3. Open draft caps and damper.
4. Light the paper and close the door to the stove.
5. In about 5 minutes check the fire. If the fire is blazing rapidly, add several pieces of split wood (approximately 4" X 6" diameter). If the fire is out, repeat number 1 through number 4 above.
6. In order for your stove and associated parts to cure, your first few fires should not be too hot.

HEAT OUT PUT

Timberline Stoves depend upon:

1. Amount of wood
2. Type and dryness of wood
3. Size of smoke path leading from the stove
4. Amount of air entering the stove

The fire can be reduced by closing down the draft cap openings so as to limit the amount of oxygen entering the stove. By closing down the damper you limit the



amount of air the stove can take in and the rate of combustion will be reduced. More usable heat will be given off by closing down the damper slightly so that heat from burning gases remain inside the stove for a longer period and transmits more heat into the room. By opening the damper, heated gases from the coals in the stove go out the chimney and heat is lost. With a little experience, adjustments of your Timberline Stove will become second nature.

THE FIRE SCREEN

The Room Heater and Fireplace Stove models T-PF, T-SF, and T-LF are designed to burn with the doors open or closed. Each unit comes with a fire screen which should always be used when doors are open during burning.

CHECK EXISTING FIRE

When you need to check an existing fire in your Room Heater, first open the draft caps fully, hesitate, and then open the doors slowly.

DO NOT OVERFIRE YOUR HEATER

Although your stove has been designed to heat efficiently and operate at high temperatures, it is meant to supplement other heating means in your home and it should never be fired to a red hot condition. Once the stove is in use, it should be checked frequently to be sure that it is operating at the temperature range you have selected.

OPERATING HINTS

NEW PAINT ODOR

For a short time during break-in, you may notice an odor from the high temperature paint on the stove components. This is a temporary condition. It is a



good idea to provide extra ventilation by opening a door or window until the paint has had time to cure fully and the odor subsides. Note number 6 (Starting a Fire).

ASHES

Your Timberline Heater works best when you consistently maintain a good bed of coals. Although ash build-up does need to be cleaned out periodically. Remember that a wood fire does burn best with a bed of about one inch of ashes.

Disposal of ashes: Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a non-combustible floor or on the ground well away from all combustible material pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.

WET OR GREEN FUEL

Wet or green fuel should not be used. (Green wood is wood cut from live trees and newly dead trees with sap still in it; it should be cut into pieces and allowed to air dry for several months before attempting to burn it.)

However, if you do add wet or green fuel to a existing fire, open the draft caps to intensify the fire and burn off moisture. When this is done return the draft caps to desired operating position.

REMEMBER WET OR GREEN WOOD CREATES CREOSOTE!

BURING COAL

When utilizing coal as a primary fuel source in models



T-18, T-24, and T-33 only, you will need a grate or coal basket with legs to keep the fire bed well above the ashes that collect on the bottom of the firebox, and above the draft controls so that intake air can pass up and through the coal for proper combustion. As coal can be obtained in varying degrees of hardness and the various flashpoints, it is necessary to find a source of stove or chunk coal of the type specifically recommended by coal distributors for stove (not furnace) use. Your local coal suppliers can provide you with assistance in obtaining the proper coal for your use. When utilizing coal as a fuel, remember to remove ashes from the stove before they reach the bottom of the grate.

Carbon monoxide may form from burning coal. It will be removed through the chimney with proper maintenance and ash removal. Carbon monoxide is colorless and odorless. Other gases which are produced at the same time, known as aldehydes, do however, give some warning of carbon monoxide emissions by giving off a sour odor. Physical symptoms of carbon monoxide poisoning include headaches, dizziness, and nausea. If you suspect carbon monoxide entering the area, OPEN DOORS AND WINDOWS IMMEDIATELY. Shut down the heater by closing the draft caps. Inspect all connections for leakage and repair all leaks. Have the heater installation inspected before re-lighting.

CREOSOTE

Creosote build-up may be minimized by using dry-seasoned wood, especially hardwoods. Avoid burning green wood at anytime but especially during periods of slow burning such as over night.

Recommended burning practices also reduce creosote build-up. It has been found that opening the draft caps to allow the fire to burn freely in your Timberline Heater each week, **will cut down on creosote build-up**. Open the draft caps each time fuel is added



and allow the fire to flame a few minutes before closing the draft caps again. After an overnight burn, open the draft caps and allow the fire to flame hot for five or ten minutes with dry kindling.

Remember these practices are to reduce creosote build-up. If creosote has built-up already, have the chimney and stove pipe system cleaned immediately. If a creosote fire should develop, the fire department should be called immediately and then attempts should be made to control the fire until assistance arrives. The fire can often be controlled and even extinguished by dumping large quantities of coarse salt, dirt, or sand on it. A wet blanket thrown over the heater will also help to smolder the fire. After a severe chimney fire, the complete chimney system and connecting pipes should be checked before further use.

SO ENJOY YOUR TIMBERLINE STOVE, IT DOES MAKE THE DIFFERENCE. YOU WILL BURN LESS WOOD AND RECEIVE TOTAL HEATING COMFORT.

TYPES OF WOOD

SPECIES OF TREE	RELATIVE HEAT POTENTIAL	GENERAL RATING	OUTSTANDING CHARACTERISTICS
Pinon	High	Excellent	
Douglas Fir	High-medium	Good	Good kindling
Ponderosa	Medium	Good	May smoke Good kindling
Juniper (Cedar)	Medium	Good	May smoke Distinct odor Bark may smoke
Lodge Pole Pine	Medium	Good	
True Fir	Low	Fair	Considerable smoke
Spruces	Low	Poor	Pops, sparks, crackles
Sub Alpine Fir	Low	Fair	Burns to very fine ash
Oak	High	Excellent	Burns to slowly-glowing coals
Curl Leaf Mahogany	High	Excellent	Burns steady hot flame
Big Tooth Maple	High	Excellent	Burns slowly-hot
Box Elder	Medium	Good	Burns slowly Difficult to split
Aspen	Low	Fair	Excess smoke
Cottonwoods	Low	Fair	Smokes-difficult to split
Willows	Low	Fair	Smokes-difficult to split
Ash	High	Excellent	No smoke-split easily
Hard Maple	High	Excellent	"
Beech	High	Excellent	"
Pecan	High	Excellent	"
Birch	High	Excellent	"
Dogwood	High	Excellent	"
Hickory	High	Excellent	"
Soft Maple	Medium	"	"
Cherry	Medium	Good	"
Walnut	Medium	Good	"
Elm	Medium	Fair	Difficult to split
Sycamore	Medium	Fair	Some smoking
Qum	Medium	Fair	Difficult to split
Bass Wood	Low	Fair	Not-good kindling
Poplar	Low	Fair	Good kindling
Cypress	Medium	Fair	Some smoking
Redwood	Medium	Fair	Some smoking
Tamarack	Medium	Fair	Sparks-pops
Larch	Medium	Poor	Splits easily





**YOUR
TIMBERLINE
OWNERS
MANUAL**

ROOM HEATER MODELS
T-18, T-24, T-33

ROOM HEATER AND FIREPLACE STOVE MODELS
T-PF, T-SF, T-LF

TIMBERLINE INTERNATIONAL, INC.
P. O. Box 4307
3775 CASSIA
BOISE, IDAHO 83704



TIMBERLINE

LIMITED WARRANTY

The manufacturer warrants to the original purchaser of the Timberline Fireplace to be free from defects in material and workmanship under normal home use and service. The obligation under this warranty shall be limited to the repair and exchange of any part or parts which may best prove defective under normal home use and service within five (5) years from the date of sale to the original purchaser and which examination by the manufacturer shall disclose to be thus defective. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE AND OF ALL OTHER OBLIGATIONS OR LIABILITIES OF THE MANUFACTURER. NO OTHER LIABILITY IN CONNECTION WITH THE SALE OF THIS TIMBERLINE STOVE OR FIREPLACE IS ASSUMED NOR AUTHORIZED TO BE ASSUMED BY ANY PERSON. THIS WARRANTY SHALL NOT APPLY TO THIS TIMBERLINE STOVE OR FIREPLACE OR ANY PART THEREOF WHICH HAS BEEN SUBJECT TO ACCIDENT, NEGLIGENCE, ALTERATION, ABUSE OR MISUSE. WE MAKE NO WARRANTY WHATSOEVER IN RESPECT TO ACCESSORIES OR PARTS NOT MANUFACTURED OR SUPPLIED BY MANUFACTURER. THE TERM "ORIGINAL PURCHASER," AS USED IN THIS WARRANTY, SHALL BE DEEMED TO MEAN THAT PERSON TO WHOM THE TIMBERLINE STOVE OR FIREPLACE IS ORIGINALLY SOLD. THIS WARRANTY DOES NOT INCLUDE THE PAINT, FIREBRICK OR HOT WATER COIL.

This warranty shall be effective ONLY if the purchase of the Timberline Stove or Fireplace is registered with TIMBERLINE INTERNATIONAL, INC. within thirty (30) days of purchase. Such registration shall not be deemed to create any obligation or liability of TIMBERLINE INTERNATIONAL, INC. under this warranty and this warranty shall be the sole obligation and responsibility of the manufacturer herein named.

INDEPENDENT ENERGIES, INC.
ROUTE 131, BOX 281 - SCHOOLCRAFT, MICHIGAN 49087

No 50951