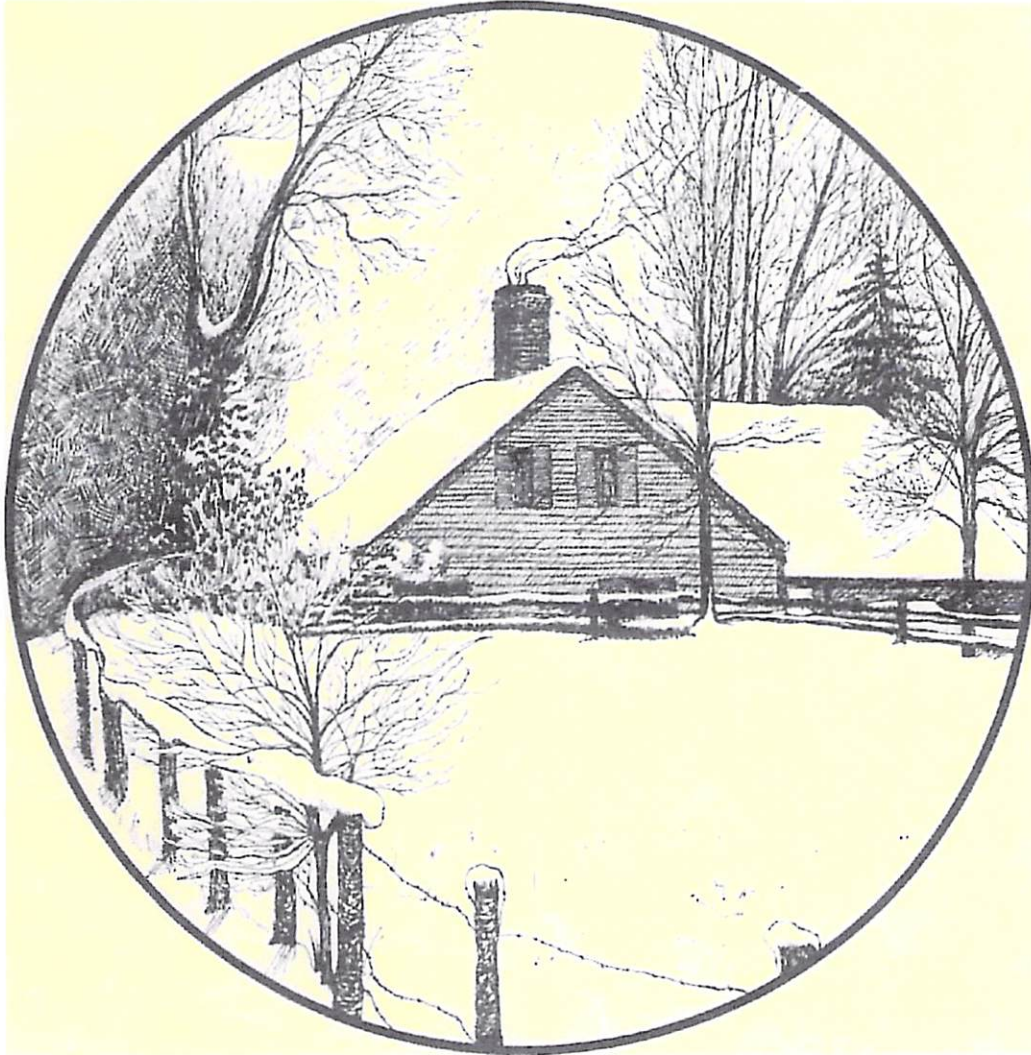


Coal Stove Chubby

Operation Manual



Chubby Stove Co.

P.O. Box 698

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781-293-7990

<http://www.ChubbyStove.com>

Updated version: 1/1/2013

Chubby Stoves have been
tested to UL Standards 1482 and 737

An introduction to anthracite and home heating with a Coal Stove Chubby.

Fifty years ago most everyone in New England heated with coal. Although the technique of coal burning has changed, the advantages that this fuel has to offer in these times of short fuel supplies speak for themselves. Our country has more anthracite coal than any other country in the world. Here in New England coal supplies are plentiful, and can greatly help cut our dependence on imported oil.

Our stove was designed to give you safe and simple coal burning efficiency, along with the appearance of stoves found here in New England around the turn of the century. Burning coal again will seem to some like a step back, but to others it signifies a rebirth of American pride, lost in recent years. It seems to us that America is changing, and

People are using alternatives that require more work and less convenience. To these people it is a step ahead, burning anthracite gives them a sense of pride.

Americans for years did without oil and we still can. Some people have stopped using oil altogether, others are using anthracite as a way to cut down current bills. Others believe a secondary source of home heating is could be a way to ride out a power interruption or worse.

With the price of gas and oil on the rise, 1984 (1.00 per gallon) 2013 (4.00) per gallon it only makes sense to start utilizing home grown resources coal and wood. Other nations are starting to buy up our resources. They are also buying the buildings in our cities and the farmlands on our countryside's. If we don't vote like-minded officials into office we will be buying back our fuel sources at twice the price. Let's stop this from happening before they buy it out from beneath us.

Thank you for purchasing a Coal Stove Chubby. Enjoy being totally warm during these very uncertain times. (2013)

Sincerely,

Larry Trainer, President
Chubby Stove Co.

IMPORTANT

Please read this Manual entirely before lighting your stove. Then re-read it there is a lot of information in this Manual — more than you could remember in one sitting. So please, for safety sake, install your stove safely and check your chimney on a regular basis • at least once a month. If you need more information on clearances, etc. do not guess — please call us if, in any part of this Manual, we were not clear. 781-293-7990 Tech support is always free even if you purchase your Chubby stove from a private party (safety first) logistics last

STOVE SAFETY

Be sure your stove is always 36" from combustibles (walls, paneling, clothing, curtains, etc.) unless a heat shield is used to protect combustibles side & rear, in which case 18" from combustibles will be o.k. Make it a practice before retiring each night to check for clothing, shoes, furniture, etc. to make sure they are a safe distance from your heater.

* **ALWAYS** open the rear damper before opening the doors or top lid. Open the doors and lid slowly.

* **Never Open the door while leaning forward as if to look into the stove. It is possible under certain conditions such as a chimney down draft for flames to exit the stove door causing serious injury. Always open the door slowly ½" pause for a few moments and while leaning away from the stove open the door slowly.**

* **NEVER** operate your stove with the lower ash cleanout door open. This could cause your stove to overheat. This will void your warranty and is also very dangerous.

* **WE** recommend that you have your local building inspector check your installation for safety. The fee (if any) is very small and well worth his expertise for your peace of mind.

* **BURN** the stove slowly for the first 24 hours as this will allow castings to season properly. If stove has not been burnt off outside first sealants and paint may cause blue smoke during the first few hours of burning (especially around the under the top of stove).

* **DURING** constant use, ashes should be removed once a day. Sometimes you may have to empty two ash pans full. Ashes must be disposed of carefully. Read disposal of ashes!

* **OPENING** the door too quickly can cause an excess amount of oxygen to enter the stove resulting in flames exiting the door. This will cause a blue flame to ignite out of the top door. And could cause serious injuries.

* **A 1" layer of ashes or sand should always be kept beneath the ash pan.**

* **PERIODICALLY** check your stove pipe for fatigue. This can be done when the stove is out by simply tapping on the pipe.

* **ALWAYS** check your stove settings (air intake and rear exit damper) before leaving your stove unattended.

* **BE SURE** that persons unfamiliar with the stove do not try operating the heater under any conditions. A common mistake is usually made by someone

CHIMNEY SYSTEMS

* opening the door to look at the fire and forgetting to open the rear or pipe damper. This can result in flames igniting out the loading door. The reason this occurs is because with the rear damper closed, the flames cannot go up to the chimney and are forced out the loading doors.

* **REMEMBER** stoves do not start fires. Faulty installations and operating negligence do. Be sure Be sure adequate floor and wall protection is used. No chimney with a diameter of less than 6" is permissible.

* **NOTE:** Use of aluminum Type B gas vent for solid fuel is unsafe and prohibited by the National Fire Protection Association Code. **Only Class A masonry chimneys or all-fuel factory-built chimneys can be used.** Factory built chimneys must be listed as approved by Underwriters Laboratories (UL).

The longer the pipe length and/or the larger the number of elbows, the greater chance of dangerous creosote and ash buildup. In the past, installers strove for long runs to ensure maximum heat dispersal. This, however, should now be unnecessary and is a hazardous situation. Modern stoves should achieve maximum heat dispersal without lengthy pipes.

Heavy gauge stovepipe, at least 24 gauge, should be used. Lighter gauge stovepipe is more susceptible to rusting and corrosion from smoke condensates. Each stovepipe joint should be secured with three (3) sheet metal screws to avoid possible separation during use.

The top of the chimney should be at least (3) feet higher than the roof at the point of exit. With pitched roofs, the top of the chimney must be at least two (2) feet higher than any point on the roof within ten (10) feet of the chimney. Check with your local Building Inspector for local building code compliances.

Any horizontal pipe should be pitched upward toward the chimney at least ¼" for each foot of horizontal run. Be sure that the chimney connection pipe extends at least 2" into the chimney, but does not extend so far into the chimney flue that it blocks air flow. Particular attention should be paid to the point where the flue passes through a wall or ceiling.

This penetration should always be made with insulated pipe and the proper accessories. Once you change to insulated pipe you cannot change back to black pipe. Never use black stove pipe outdoors. It will not work properly!!

The chimney is one of the most important, yet most neglected and misunderstood portions of any Solid Fuel Burning installation. We do not recommend that the stove be connected to the chimney with other heating devices.

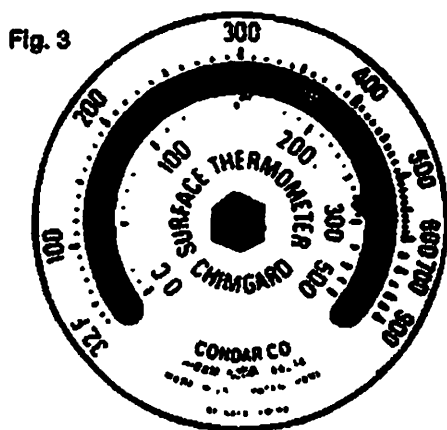
Safety Tip:

Do not use a chimney that was used for a pre-fab fireplace of any kind without first having it inspected by a chimney sweep. The same holds true for a direct vent chimney. Wood and coal stoves need an approved class "A" solid fuel chimney for safety reasons. Call an insnector if you're not sure.

Surface Thermometer (optional)

The use of a magnetic surface thermometer is highly recommended. The surface thermometer is to the stove as a speedometer is to an automobile; it monitors the surface temperature of the stove at all times. Knowing the surface temperature of your stove will aid you in knowing when it is time to refuel the stove.

You will know it is time to open the air intake and turn damper, so you can shake out the ash and fill up with fresh coal. When the surface temperature declines without making an adjustment with the air intake, you have an hour or so to service the heater. This thermometer will also help you to know if you are burning the stove too hot. We have found that burning your stove at a surface temperature of 400-650° is a comfortable setting among Chubby owners. The thermometer should be attached to the side of your Chubby on top of the secondary air tear drop, that will keep it from sliding down the stove. These magnetic thermometers are available at any stove shop or hardware store.



Suggestion

The use of a humidifier is helpful in maintaining proper levels of moisture in your home. A kettle of water on top of your stove will help, but may not be enough.

If you burn wood, you should purchase a 6" plug that you can install in the place where your barometric control face is. If burning wood, instead of coal the barometric control will not help. See: "Lighting Your Stove."

LIGHTING YOUR STOVE

Lighting your new Chubby Stove is easy! You will need the following:

- A. Newspapers
- B. Kindling
- C. Hot mitts (a must)
- D. Matches

Safety First:

The first thing to do is check your stove for safety. Look for stove pipe fatigue, 3 sheet metal screws in each pipe joint, all combustibles are away from heater, clothes, wood, toys, etc. Also remove any dry flowers, herbs, wreaths. Keep any item that will burn 36" away from your stove while it is in operation.) If you are going to burn wood for more than 8 hours, you should install a 6" plug your barometric tee.

Children and Stove safety

We recommend keeping young children out of the room during the initial lighting of the stove. Once you have the stove going and you are comfortable with the operation of the stove is the best time for stove safety education. While you are learning how to light the stove a curious child may accidentally touch the hot stove surface. Customers have shared their ways of accomplishing this for us to pass on to you. Once the stove is running hot, guide young children holding both of their hands above their heads, closer and closer to the stove. At some point they will automatically stop moving toward the stove because of the heat! – This method seems to help the curiosity factor a great deal, and they remember this exercise. This can be done with visiting children as well. Because they see you opening the stove door, they may want to try it when you are not in the room. It is important to explain this is not acceptable and is dangerous.

Another good idea is to take a fireplace screen and put it in front of the stove if you have company, or when children need to be near the working heater. Even a curious adult can't resist patting your cute Chubby Stove, just be sure it is not hot.

Starting the stove:

- A. Open air intake
- B. Open turn damper
- C. Load 6 or 8 sheets of newspapers crumbled up into the top door. Next: add lots of kindling. Small twigs, wood shingles, small cut up hard wood. Wet wood usually won't work. 2 x 4 cut offs work well also.
- D. Be sure the turn damper is open, or the smoke will enter the house. For turn damper location see dia. In this manual. Open turn damper, open air on bottom door all the way, light newspaper with a match.

After your kindling fire is going (remember) always open the turn damper first! Then Add more wood to the fire. WHAT DOES THE TURN DAMPER DO? It holds the fire down into the stove and forces the flames to heat the stoves body radiating the heat into the house. What if it is too hot in the house? Open the turn damper and close the air on the bottom door to 1/8th open and the heat will go up the chimney.

Add Coal:

When the kindling burns down to red coals open the turn damper and add 2 scoops of nut coal. When it turns bright red 3-5 minutes close the air on the bottom door to 1/8" open and fill the coal fire pot to the top with fresh coal. Do not add the coal in layers add it all at once to the top of the pot. It will not go out once the initial 2 inches are burning red hot. Wait 5 – 10 minutes and close the turn damper 98% of the way. Wait 30 minutes and set the bottom air intake to your desired heat setting. Open a bit more heat – less for less heat. It will take 20 minutes for the new setting to take place.

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 material - surface, pending final disposal. If the ashes are disposed of by burial in the soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.

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. When burned, 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.

CAUTION:

"NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID, OR SIMILAR LIQUIDS TO START OR FRESHEN UP A FIRE IN THIS HEATER. **Do not use easy light products or products with waxes or paraffin. Use kindling wood and newspaper only.** KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE HEATER WHILE IT IS IN USE.

WARNING! FIRE HAZARD

DO NOT EXCEED RECOMMENDED FLUE DRAFT. DO NOT STORE FUEL, PAINTS, THINNERS, OR OTHER FLAMMABLE LIQUIDS IN THE ROOM WITH YOUR STOVE. DO NOT STORE WOOD CLOSER THAN MARKED INSTALLATION CLEARANCES. THE FIRE AND ASH DOORS MUST BE CLOSED DURING OPERATION. DO NOT OPERATE WITH FIRE OR ASH DOORS IN THE OPEN POSITION OR EXCESSIVE TEMPERATURES MAY OCCUR. CLEAN FLUE PIPE AND CHIMNEY REGULARLY.

In the event you accidentally over fire this stove by leaving the door open and you're not sure what to do.

1. First if you have created a dangerous situation call 911 or your local fire safety number for help.
2. If you feel your situation can be reversed, with insulated stove gloves use your supplied poker and tap the air intake closed completely. Using the poker turn pipe damper to the closed position. The stove will slow in 5 – 15 minutes. **See dia. On right.**

SAFETY NOTICE: If this coal/wood stove is not properly installed, a house fire may result. For your safety, follow the installation directions. Contact local building or fire officials about restrictions and installation inspection in your area.

INSTRUCTIONS FOR THE INSTALLATION, DRAFT MEASUREMENT, AND ADJUSTMENT OF THE BAROMETRIC DRAFT REGULATOR. INSTALLATION:

CAUTION!

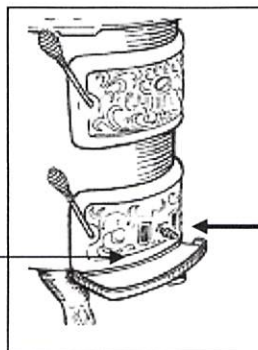
Follow Manufacturer's Instructions on how to install the Barometric Regulator.

IT IS RECOMMENDED THAT THE DRAFT CONTROL BE LOCATED WITH OPENING POINTED AWAY FROM YOUR WALL

(Twelve to twenty inches on a top vent is advised.) The barometric draft control is not included with your stove and must be purchased separately. It comes with a collar that is attached to one short section of smoke pipe. One end is "beaded and crimped" to fit into the next section of standard smoke pipe. (The beaded and crimped end is facing toward the chimney.) If you burn WOOD ONLY It is recommended that the stovepipes be installed with the crimp down so that any creosote formed, as a natural by-product of wood combustion, will run back towards the stove and not through the joint to the outside of the smoke pipe. The section of pipe holding the Draft Control can be installed in either direction as a part of the vertical or horizontal section. The Draft Control will revolve, within its collar, to an upright and level position. After installation, make certain the Draft Control is upright and level. Tighten the screw to hold it firmly in place. Be sure that your installer installs a 6" cast iron turn damper below your barometric damper and above your stove. Rear Exit models come with damper in stove flue already.

Draft can be measured with a draft meter.

If you think your stove is not performing as it should you can do a draft test. Your coal stove has an **AIR-CONTROLLED FIRE CHAMBER**; and with a fire burning and a draft gauge inserted into the 6" smoke pipe halfway up from the flue outlet in the heater between the damper and the stove. YOU should RECEIVE .03" to .05" WATER COLUMN UPDRAFT READING TO PERFORM SATISFACTORILY! More or less draft may result in unsatisfactory operation. Any oil burner serviceman can run this test. Too much draft can be controlled by your barometric damper setting.



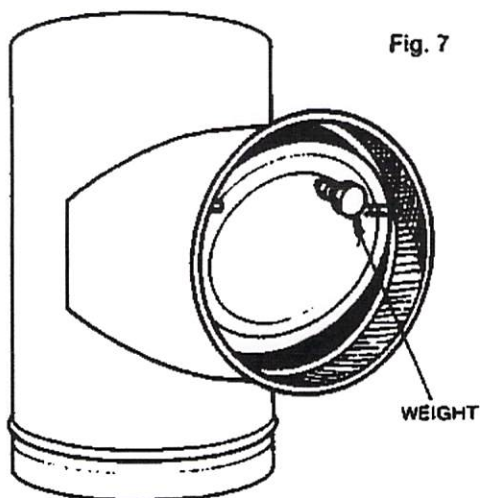
Close air intake

If your coal stove is used to burn coal, a barometric damper is required. **If your stove is used only to burn wood, a barometric damper is not required.**

A barometric damper is recommended on every Chubby installation, except where it is impossible to use one. The recommended setting is .04 to .06 inches when using a draft meter. If not using a draft meter for the proper setting, set the counter weights to the high position. This will usually suffice.

If you find you have marginal draft remove the barometric damper it will not make a bad draft better. **Do not use a barometric damper if you are burning wood only.**

Recommendation: Your barometric damper should either be removed or capped when burning wood. This will prevent the barometric damper from adding air to the flue in the event of a chimney fire.



Barometric REGULATOR IS NOT USED WHILE BURNING wood.

DRAFT TEST

Follow the manufacturer's instructions for setting the draft. This can be done without a draft meter.

The Field 6" Model R-C, manufactured by Field Controls, Kinston, North Carolina 28501, is a preferred version because it is easy to install and does not require a draft gauge and fire for set up.

Also the: Vogelzang BD- 06 is good.

Google: Vogelzang BD-06 Barometric 6" Damper Black Stove Pipe Draft Control they can be purchased on EBay



Read the manufacturers instructions for setting up your barometric damper. All Chubby Stoves require a turn damper in the pipe system (BEFORE) the barometric damper not (Above) it. This will keep your stove burning the same everyday and will stop overdrafting and excess coal consumption.

Stove pipe direction:

With a coal stove the crimped edge of pipes go toward the chimney, with a wood stove the crimped edge heads toward the wood stove.

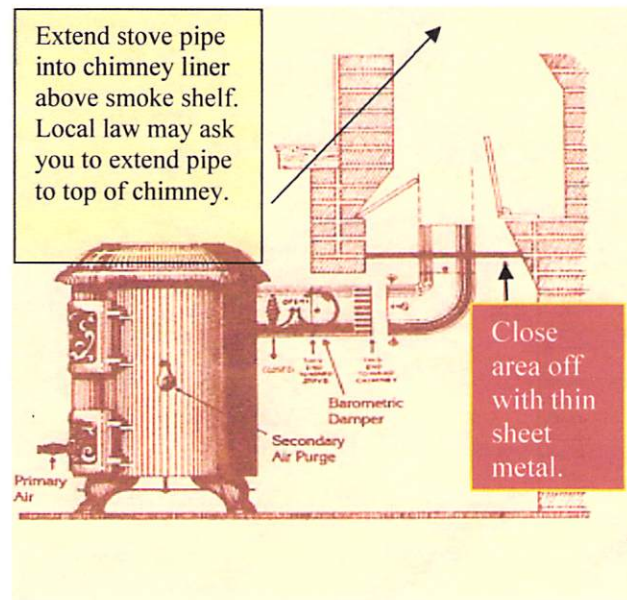
"TYPICAL INSTALLATION"

Into a Fireplace Flue

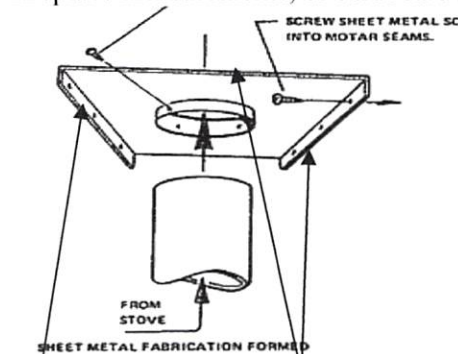
If you already have a fireplace, you may choose to connect the stove to it this can be the least expensive and fastest installation. The fireplace should be cleaned out and inspected for an approved liner. Consult your local codes to assure compliance. First remove the fireplace damper, actuating mechanism, or pull the cotter pin out and lay it back disconnected so you don't lose it. It may be necessary to remove the actuating rod to make room for the stove pipe to pass through. Center the stove in the fireplace opening and install 6" stove pipe through the damper frame work and up into your chimney as far as possible. You must go up into the clay tile chimney liner at least 3'. Make a cardboard template to make a pattern around the 6" stove pipe. This cardboard close-off should fit snugly around the stove pipe and extend beyond the edge of the cast iron damper framework opening. Next, Convert the template to either 24-gauge or heavier sheet metal. Discard the template; install the sheet metal, securing it to existing mortar joints or damper frame. Without a proper close off your stove will not draft properly.

In cases where you are required to add pipe to the top of your chimney you can have a thicker piece of sheet metal made to sit on top of your chimney tile with a collar like the one shown to the right. Then attach stove pipe to the collar and drop it down the chimney to connect to the stove pipe at the damper area.

*If you have a clay lined chimney than there should be no need to line the already lined chimney unless your liner is defective.



Example of a sheet metal damper close off. This can be made for you at any place that does heating and air conditioning or a sheet metal shop. Just bring your fireplace measurements, or cardboard template.



Bring these measurements they will add a lip to it if you ask to fasten it into the mortar joints.

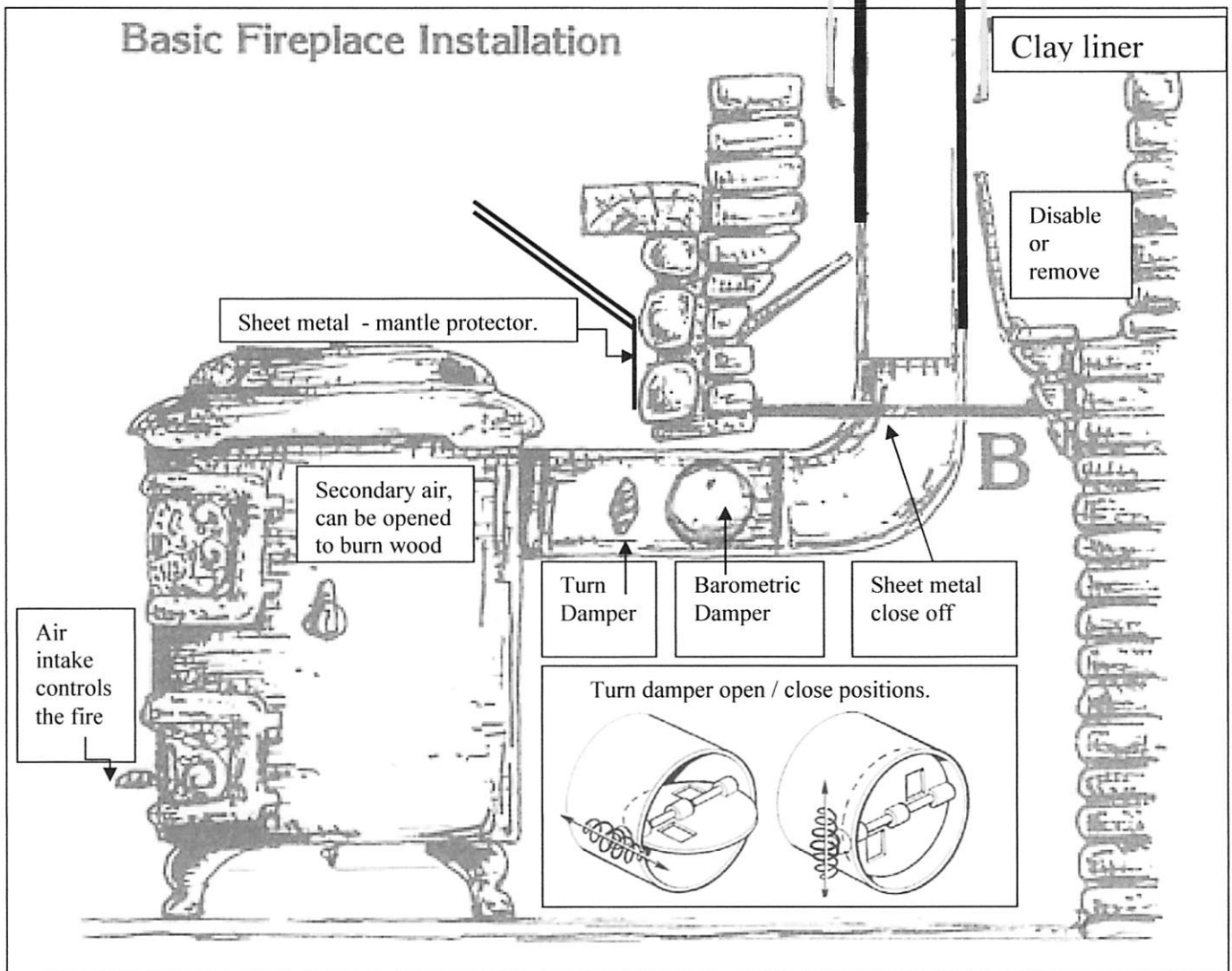
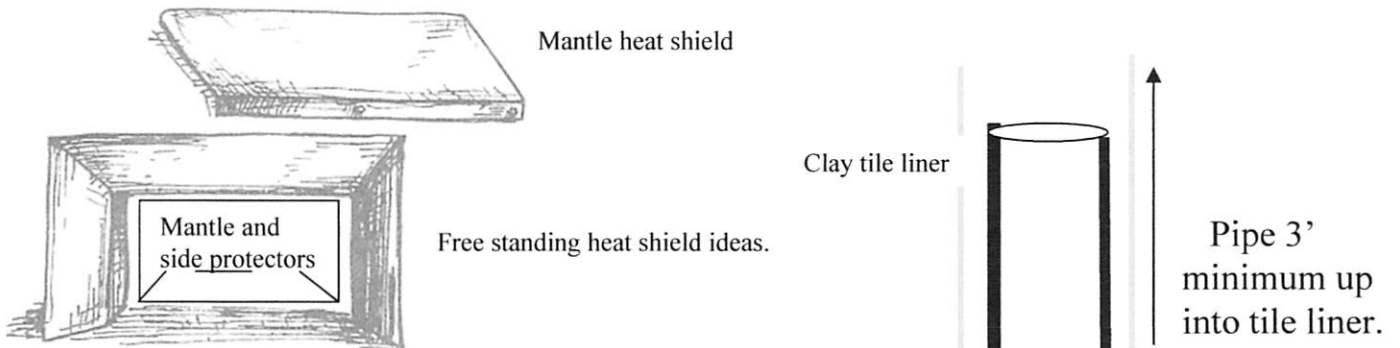
Front of Fireplace L. to R. =
Back of fireplace L to R.
Depth of FP front to back

Some people make a cardboard template to bring to the sheet metal shop you can show where you want the 6" hole and if you want a collar on one side or both sides to tie your stove pipe to. Not necessary to have a collar though.

The higher up your chimney the pipe goes the better the stove will work.

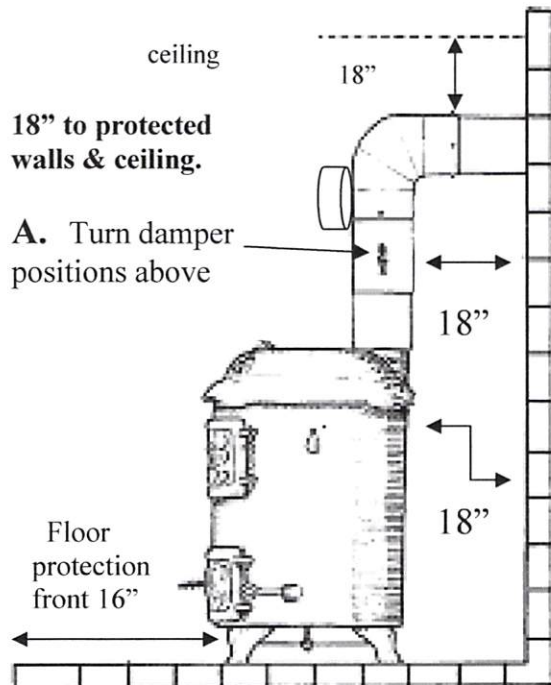
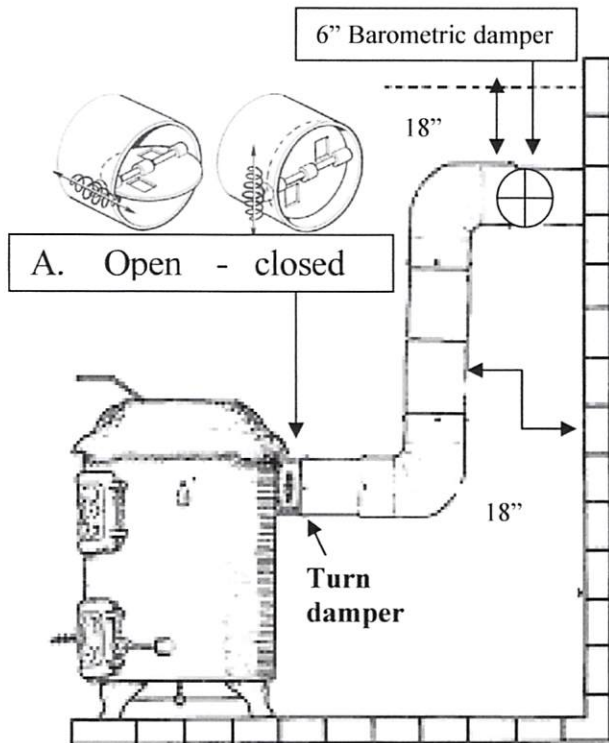
Informational pictures

Mantle & Side heat shield protection – Made at your local sheet metal shop. 24 ga. Or heavier is fine. By protecting your wooden mantle and side surround with sheet metal you can cut the distance to your combustible surface by 50%



Free standing installation information & illustrations.

A TOP VENT Chubby Stove has an oval flue exit located at the rear of the stove top. The top vent Chubby is specifically designed for free-standing installations. The top vent allows you to install the stove closer to the wall, eliminating the need for extra clearance for the elbow on a back vent stove. The illustrations below will give you a clear explanation of the benefits of the top vent Chubby in free-standing installations.

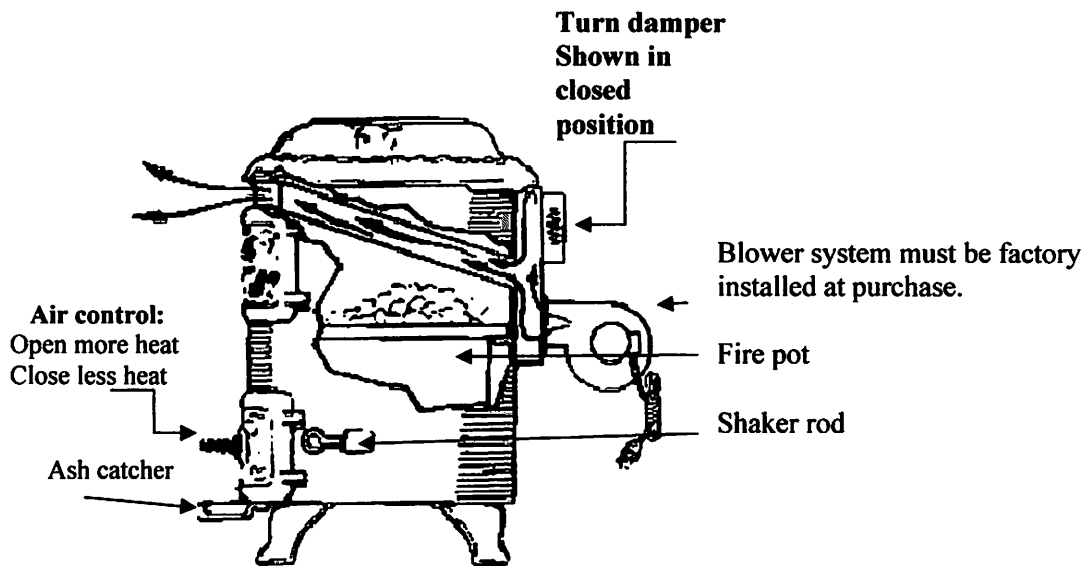


Floor protection sides = 8"

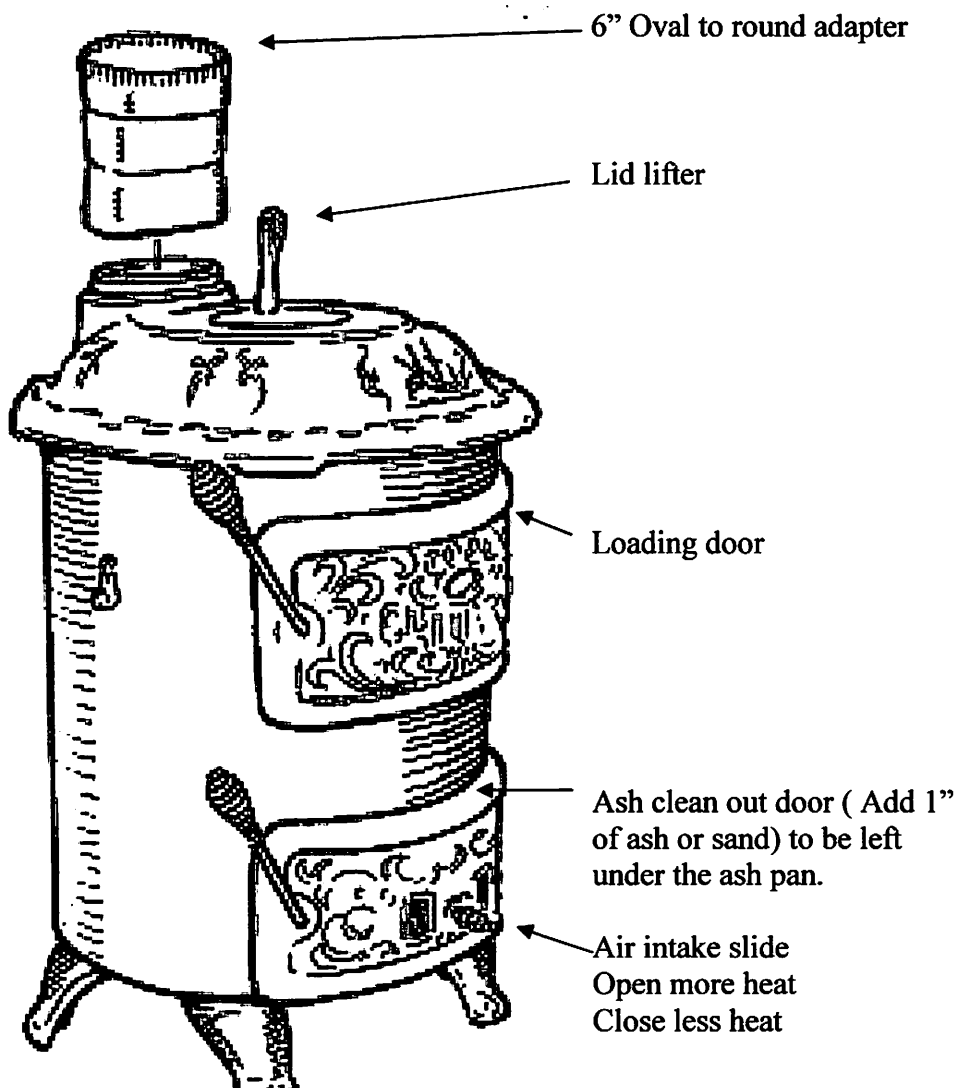
* Be sure adequate floor and wall protection is used. Your stove can be installed with either a factory built, stainless steel insulated chimney, a masonry chimney, or in front of your fireplace, connected to your fireplace flue. No chimney with a diameter of less than 6" is permissible. **NOTE:** Use of aluminum Type B gas vent for solid fuel is unsafe and prohibited by the National Fire Protection Association Code. **Only Class A - masonry chimneys or all-fuel factory-built chimneys can be used.** Factory built chimneys must be listed as approved by Underwriters Laboratories (UL). The longer the pipe length and/or the larger the number of elbows, the greater chance of dangerous creosote and ash buildup. In the past, installers strove for long runs to ensure maximum heat dispersal. This, however, should now be unnecessary and is a hazardous situation. Modern stoves should achieve maximum heat dispersal without lengthy pipes. Heavy gauge stovepipe, at least 24 gage, should be used. Lighter gauge stovepipe is more susceptible to rusting and corrosion from smoke condensates. Each stovepipe joint should be secured with three (3) sheet metal screws to avoid possible separation during use. The top of the chimney should be at least (3) feet higher than the roof at the point of exit. With pitched roofs, the top of the chimney must be at least two (2) feet higher than any point on the roof within ten (10) feet of the chimney. Check with your local Building Inspector for local building code compliances. Any horizontal pipe should be pitched upward toward the chimney at least $\frac{1}{4}$ " for each foot of horizontal run. Be sure that the chimney connection pipe extends at least 2" into the chimney, but does not extend so far into the chimney flue that it blocks air flow. Particular attention should be paid to the point where the flue passes through a wall or ceiling. This penetration should always be made with insulated pipe and the proper accessories. The chimney is one of the most important, yet most neglected and misunderstood portions of any Solid Fuel Burning installation. Do not connected to a chimney with other heating devices. **Do not use a chimney that was previously used for a gas fireplace insert. That is not likely for solid fuels – wood / coal etc.** Links to a few companies that sell insulated solid fuel chimney for more safety tips:

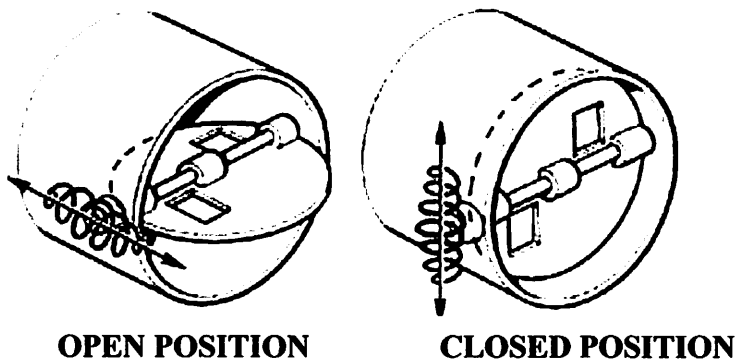
1. http://www.duravent.com/docs/product/L923_DuraTech_install_guide2011_web.pdf
2. <http://www.selkirkcorp.com/Flash-Installation-Guide/english/supervent/supervent.swf>
3. You will need a **6" chimney** for a Chubby Stove and a **5" system** for a Jr. Chubby. However a six inch is recommended for a Jr. as well.

Rear vent Chubby



Top vent Chubby below



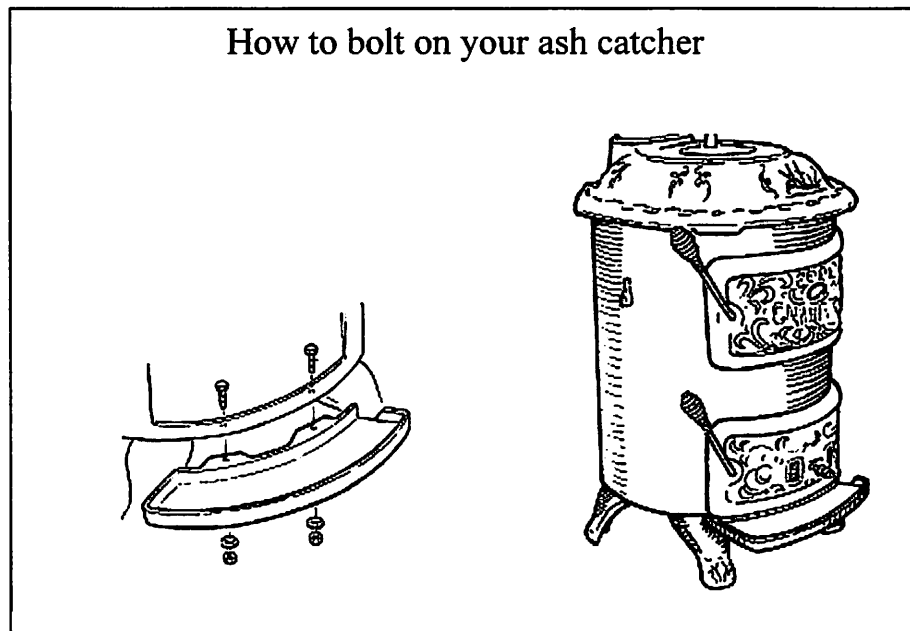


SMOKE PIPE DAMPER POSITIONS LETS THE SMOKE
GO UP THE CHIMNEY WHEN OPENED!

Every Chubby stove needs to have a **smoke pipe damper**. Also, known as a **turn damper**. In a rear vent stove it is found in the back of the stove where the pipe comes out of the stove. In all cases the turn damper is located before the barometric damper in the pipe line.

A top vent stove needs to have a turn damper below the barometric damper in the pipe.
ALWAYS OPEN THE TURN DAMPER BEFORE OPENING THE STOVE DOORS OR
THE SMOKE AND FLAMES WILL EXIT THE STOVE DOOU INTO THE ROOM.

The flap inside the pipe is always heading in the direction of the spring you can see.



An ash catcher is shipped inside the stove and bolts onto the front stove bottom as shown in this diagram.

