

SAEY

**INSTALLATION AND OPERATING MANUAL
FOR THE SAEY
HANNOVER I & II
BREMEN I & II
AND
SAEY 92**

COAL BURNING HEATERS

IMPORTANT!

A carbon monoxide detector
should be installed with all
fossil fuel burning stoves!

SAFETY NOTICE - IF THE HEATER 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
REQUIREMENTS IN YOUR LOCAL AREA.

**PLEASE READ THESE INSTRUCTIONS THOROUGHLY
PRIOR TO USING THE APPLIANCE.**

TABLE OF CONTENTS

INSTALLATION & CLEARANCES	3, 4 & 5
THE CHIMNEY & THIMBLES	6
STOVE PIPE TO CHIMNEY	7
RECOMMENDED SOLID FUELS	8 & 9
CLEANING	10
LIGHTING YOUR STOVE	10
BREAKING IN YOUR STOVE	11
ADJUSTING THE HOPPER (BREMEN ONLY)	11
THERMOSTAT ADJUSTMENT	12
KEEPING THE FIRE BURNING	13
CHIMNEY & VENT CLEANING	14
CARE	14
DRAFT FACTORS	15
STOVE ASSEMBLY & COMPONENT PART LIST : BREMEN I	16 & 17
STOVE ASSEMBLY & COMPONENT PART LIST : BREMEN II	18 & 19
STOVE ASSEMBLY & COMPONENT PART LIST : HANNOVER I & II	20 & 21
STOVE ASSEMBLY & COMPONENT PART LIST : SAEY 92	20 & 21
WARRANTY	24

SAFETY NOTICE - IF THE HEATER 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 REQUIREMENTS IN YOUR LOCAL AREA.

NOTE - THIS STOVE IS NOT APPROVED FOR USE IN MOBILE HOMES.

NOTE - USE OF ALUMINIUM TYPE B GAS VENT FOR SOLID FUELS IS UNSAFE 1 PROHIBITED BY THE NATIONAL FIRE PROTECTION ASSOCIATION CODE MUST BE A CLASS "A" CHIMNEY, WHICH MEETS ALL CODES.

NOTE - KEEP ALL HOUSEHOLD FURNISHINGS AT A CONSIDERABLE DISTANCE AWAY FROM THE STOVE.

INSTALLATION

We recommend that your coal stove be installed in your home by a qualified person and that you carefully read this notice - particularly the paragraphs where the thermostat is concerned.

The floor beneath the unit must be covered with 3/4" thick asbestos millboard or equivalent. The non-combustible floor covering shall extend a minimum of 8" beyond the rear of the chimney connector ; 8" beyond the sides of the unit 16" beyond the front of the unit.

The minimum clearance to combustible materials are as follows (see next page) :

DANGER ! LOADING DOOR MUST BE CLOSED DURING OPERATION.

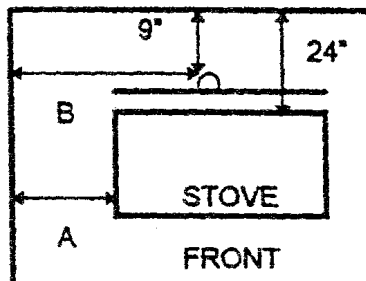
CAUTION !

- Hot while in operation
- Do not touch, keep children, clothing and furniture away.
- Contact may cause skin burns.
- Never use gasoline or any gasoline type of lantern fuel such as kerosene, charcoal lighter fluid or similar liquids to start or freshen up a fire in this stove.

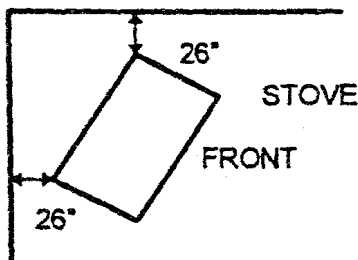
NOTE : Clearance may be reduced if walls are non-combustible. CONSULT YOUR LOCAL BUILDING CODES OR FIRE DEPARTMENT FOR AN ACCURATE DEFINITION OF A "NON-COMBUSTIBLE WALL" AND FOR CLEARANCES FROM THESE WALLS.

FREESTANDING MODE

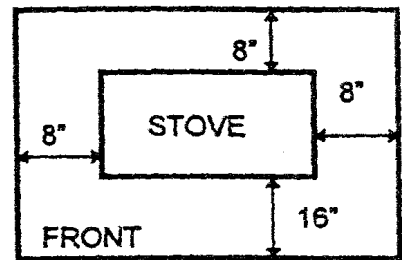
INSTALL WITH MINIMUM CLEARANCE TO WALL AS SHOWN (IN INCHES)



CORNER INSTALLATION

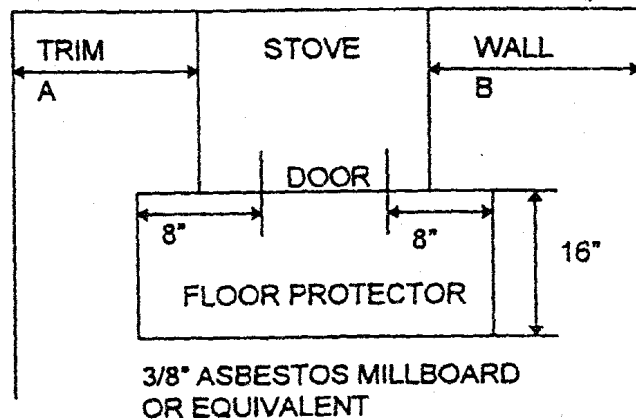
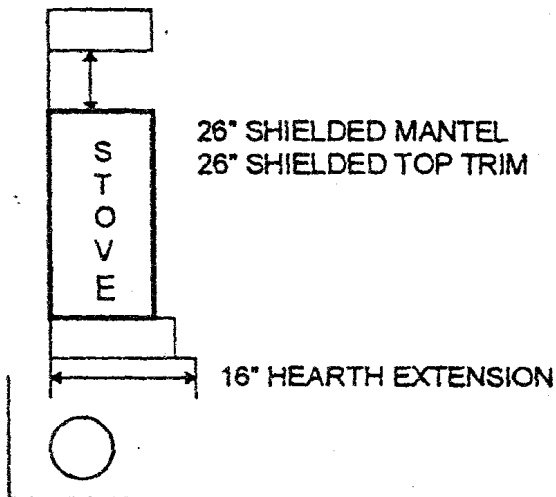


FLOOR PROTECTOR MINIMUM SIZE



3/8" ASBESTOS MILLBOARD OR EQUIVALENT

	A	B
BREMEN I	12"	24"
BREMEN II	12"	21"
HANNOVER I	26"	36"
HANNOVER II	26"	34"
SAEY 92	26"	36"



HEARTH MODE

FOR USE IN A MASONRY FIREPLACE BUILT IN ACCORDANCE WITH THE UNIFORM BUILDING CODE

	A	B
BREMEN I & II	10"	12"
HANNOVER I & II	20"	26"
SAEY 92	20"	26"

THE CHIMNEY (con't)

A barometric draft damper must be installed to insure a stable draft and a consistent rate of combustion.

Stoves will operate properly at draft levels of $-.015''\text{WC}$ to $-.05''\text{WC}$. With readings of less than $-.015''\text{WC}$ increasing chimney height, installing a draft inducer or any other applicable measure may be used to increase the draft to an appropriate level.

When readings are in excess of $-.05''\text{WC}$, a barometric damper must be installed and the necessary adjustments made to reduce draft intensity. The ideal operating draft range is $-.03''$ to $-.04''\text{WC}$. Have your authorized retailer check your specific draft level and adjust it if necessary.

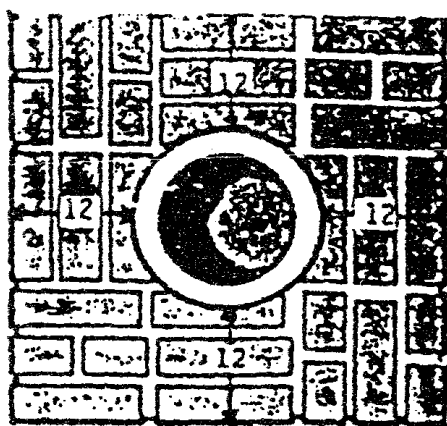
MANUAL CAST IRON DAMPERS

Although cast iron dampers have resolved many operational problems on stoves, they are not recommended for use on our coal stoves. They do not compensate for variations in wind activity.

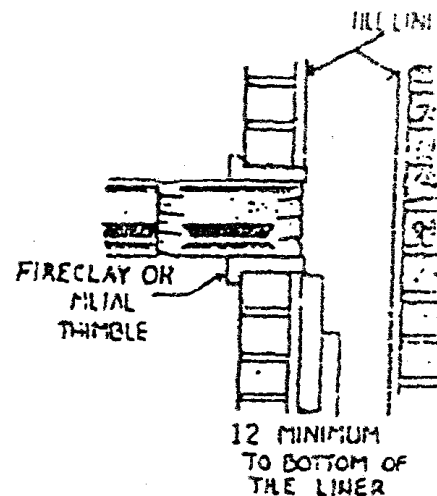
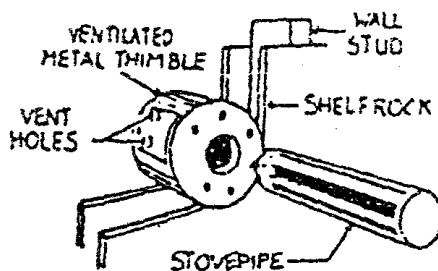
THIMBLES

A metal or fireclay thimble is used when passing a stovepipe through non-combustible walls or into a chimney. The thimble should be permanently cemented (with refractory cement) into the masonry and should extend through the chimney wall to the inner face of the liner, but not beyond. If possible, the stovepipe should extend into the thimble so the end of the stovepipe is flush with the inner end of the thimble. In many cases the inner diameter of the thimble will be too small to allow full penetration of the stovepipe into the thimble. In this case, the stovepipe should be inserted as far as possible and then securely fastened to the thimble. If it is necessary to pass a flue connection through a combustible interior or exterior wall, a horizontal section of prefabricated chimney installed according to the chimneys manufacturer's specifications can be used. A combustible wall may also be penetrated by a fireclay surrounded by solid masonry at least 12 inches on all sides, by removing all combustible material within 18 inches of the stovepipe.

These wall penetrations should only be used when it is necessary to penetrate a chimney which is immediately in back of a combustible wall. Stovepipe should never be used to penetrate a ceiling. A stovepipe may never pass through a ceiling, closet, or concealed area; for these areas a listed factory-made chimney is required. Once the stovepipe connects to a chimney, it must remain a chimney from that point on. No further use of the stovepipe is allowed.



MASONRY THIMBLE



STOVE PIPE TO CHIMNEY

1. Stove pipe must be properly sealed to the stove. Flue sizes 5" OD. Material must be 24 GA blue steel or equivalent.
2. It should be straight and as short as possible.
3. The pipe must have 1" per foot rise properly secured by 3 equally spaced sheet metal screws at each joint.
4. Stove cement or some other material that will not disintegrate should be used to seal joints.
5. The smoke pipe may be attached to flue by filling the void with refractory cement and should not be inserted more than 1".
6. Use as few elbows as possible. Maximum amount of 90 turns, including chimney, is 4.
7. Maximum horizontal run of stovepipe or chimney is 4'. All horizontal pipe must be installed with a 1/4" rise per foot.

RECOMMENDED SOLID FUEL

Caution : Proper operation requires the use of only pea or chestnut size anthracite coal - other fuels can cause excessive temperatures.

Pea or chestnut sized premium grade anthracite coal is the recommended fuel for our coal heaters.

Premium grade anthracite is usually referred to as the type having approximately 8% to 10% ash content, a fixed carbon content of approximately 86% to 88%, and a volatile combustible matter percentage of approximately 4%. The best type of anthracite would be one with a higher volatile combustible matter percentage coupled with a reduction of ash content although maintaining at least an 86% fixed carbon content.

The ash fusion point (the temperature at which "clinkers" are formed because of coal ash being fused) of a high grade of anthracite will be in the area of 2,800° to 3,000°F, and the BTU output should be approximately 13,500 to 14,500 BTU's per pound.

It is normal misconception that larger size coal produces more heat as compared to an equal volume of a smaller caliber coal. A load of egg/stone size coal will burn hotter only because there is more fuel being consumed at a faster than normal rate. This is primarily due to the increased air spaces or pockets that are created by the larger chunks of coal as they stack up the hopper of your stove and thus encouraging faster than normal airflow and combustion.

Using smaller buckwheat size coal will result in longer than normal burn times, a decrease in normal heat output, and it will also increase raw coal waste because of the smaller pieces of coal falling through the openings of the grates.

Our coal stoves are designed for efficient anthracite coal combustion.

NEVER USE, 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.

RECOMMENDED SOLID FUEL (cont.)

RATING AND HEATING CAPACITY

BREMEN I	55,000 BTU/H to 16,000 cu. ft.*
BREMEN II	30,000 BTU/H to 8,800 cu. ft.*
HANNOVER I	60,000 BTU/H to 17,600 cu. ft.*
HANNOVER II	44,000 BTU/H to 13,200 cu. ft.*
SAEY 92	60,000 BTU/H to 17,600 cu. ft.*

* Note : The heating capacity of any stove is affected by such factors as

1. FUEL : Quality of coal burned in
 - Ash content
 - Volatile content
 - Ash fusion point
 - Size of individual pieces of coal
2. AREA HEATED :
 - A. Air infiltration of home
 - B. Individual heat demand of house or heat loss factors
 - C. Stove location and installation
3. OPERATION OF THE STOVE :
 - A. Proper stove maintenance and daily care
 - B. Properly set and consistent chimney draft.

LIGHTING YOUR STOVE

Open the front glass door and place several pieces of crumpled newspaper along the cradle area on top of the firegrates. Place some dry kindling wood (approximately 4" long) over the newspaper. Add a small amount of coal by lightly distributing it on top of the wood kindling. Then set the thermostatic control dial on the righthand side of the stove on Position # 8. Start the fire by lighting the newspaper. When the newspaper begins to ignite, close the glass door. After the kindling is burning well, add some additional wood kindling with a shovel of coal into the hopper; then make sure the hopper door is tightly shut. When the coal is burning, add additional coal a little at a time. Also, it is very important that there are no pieces of coal or coal particles in the closure area so that the hopper door is airtight.

After 20-30 minutes, reset the thermostatic control to the heating comfort desired. Now with the coal on the grate burning brightly, fill the hopper with coal, leaving at least one inch of space between the coal and the top load door.

NOTE : The glass in the front door may be cleaned with a non-abrasive household cleaner such as ammonia. The cleaner should only be applied when the glass is cool. Placing a moist cloth on the glass surface when it is hot could cause permanent etching and clouding.

NOTE : Before lighting your fire, cover the inside of the glass door with aluminium foil. This will keep the glass free of smoke build-up while starting the fire. After the coal fire is well established, remove the foil for clear visibility of the fire.

After using your stove for several weeks, the glass may develop a slight white haze. In the morning when the fire has subsided and before shaking down the ashes, open the glass door and cover the front stove opening with aluminium foil allowing the glass door to cool for 20-30 minutes. When the glass is cool, you may then clean it while the stove is still in operation.

NOTE : You should never operate a stove with broken glass; replace it immediately. For replacement glass contact your nearest authorized SAEY dealer, or Stanley C. Bierly directly.

CLEANING

Before putting your stove into use, wipe it off with a clean, soft, dry cloth. As moisture and fingerprints will stain your appliance permanently, be very meticulous while doing this. If any drops of moisture are on the stove when you light it, be sure to wipe them off immediately.

BREAKING IN YOUR STOVE

Just like any other fine appliance constructed of high quality cast iron alloys the SAEY stoves need to be gradually "broken in" prior to loading the hopper fully and using the stove normally.

It is mandatory that five (5) consecutive small coal fires be built in the stove prior to using it continuously 24 hours/day with the hopper fully loaded. The five "firings" referred to are successive small coal fires being built with a complete cooling off of the stove after the fire dies down. It is not acceptable to build a small fire and keep it going for 2-3 days on a low stove setting. The stove must be cooled off completely after a firing in order to properly heat treat or break in all the metal parts on the stove.

NOTE : You should never bring the stove from very cold temperatures into your home and build a fire in it immediately. The stove should be allowed to properly warm up to room temperature (50-60°) before firing it up for the first time.

ADJUSTING THE HOPPER

COAL HOPPER ADJUSTMENT FOR THE BREMEN I & II

The contents of fuel hopper may be altered by moving the position of the front wall of the hopper (Part # 215). During assembly at the factory the hopper wall is placed in position 3. This is for large chestnut coal. The two other positions may be used to reduce the contents of the hopper and are thus intended for smaller pea sized coal.

NOTE : No hopper adjustment is featured on HANNOVER stoves.

THERMOSTAT ADJUSTMENT, GENERAL

0-2 Mild temperature or for night time use.

3-5 Normal usage

6-8 Cold weather usage

IMPORTANT

The thermostat has been regulated in the factory and is not to be adjusted except by a qualified mechanic. A prolonged overheating of the stove can damage both the stove and the thermostat. Treat your stove carefully as with any other fine appliance. Do not force the thermostat dial. Turn it only as far as it will naturally go. When the stove is hot the dial will not go back to a setting of zero.

The output is controlled by means of a control knob with an adjustment scale corresponding to permanently cast markings on the upper rear right-hand surface of the stove.

In the manual position, the size of aperture for the intake of combustion air remains unchanged after the adjustment.

In the automatic position, the air intake is increased or reduced according to the stove temperature.

The maximum output of the stove is obtained with the thermostat in position 5. This is equivalent to position III in manual operation.

In the "HAND" (manual) position, the control knob automatic device is switched off and the valve is opened and closed mechanically.

KEEPING THE FIRE BURNING

Be sure that all the doors on the appliance are tightly shut, including the ash pan door and the coal hopper door to insure that the stove is complete airtight.

Never leave any of these doors open while operating your appliance. This could cause overheating and damage your appliance.

The chamber which holds the ash pan should be shaken down into the ash pan using the external shaker lever located at the back of the stove. Ashes can be shaken down once every 6 hours on high settings; on warmer days or when the stove is set on the lower settings, shaking is necessary only every 12 hours.

By opening the ash cover door, you can also use a manual poker to slice down ashes as needed. This poker is introduced just above the grate, in the gap provided.

NOTE : Continuous frequent shakedown such as every 1, 2 or 3 hours will cause damage to the stove - this must be avoided.

NOTE : It is important that all ash is removed from the grate area with particular attention to the back side of the hopper area. If the ashes are not thoroughly removed, less space will be available for coal combustion resulting in less heat.

To remove the ashes, use the cast iron tool provided to open the ash pan door. The closure is located to the left of the ash door. Remove the ash pan with the same tool provided with the appliance.

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 outdoors well away from all combustible materials. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be thoroughly cooled.

DO NOT LET ASHES ACCUMULATE IN THE ASH PAN.

A good rule of thumb is to empty the ash pan every time the ashes are shaken down. If ashes accumulate in the ash pan, this will clog the hopper grates and impede the air flow to the firebed. This will cause premature deterioration of cast iron grates.

On the coldest day of winter if the thermostat is on a higher setting, the ash pan may need to be emptied one extra time in the middle of the day. Everytime ashes are shaken down and the ash pan is emptied, new fresh coal must be added into the hopper reservoir to assure and maintain normal stove operation.

CHIMNEY CLEANING

IMPORTANT :

A clean chimney is paramount to the safe operation of your stove. Your chimney should be inspected and cleaned at least once a year for safe operation. To keep your appliance in good working order, it is necessary to keep soot accumulation to a minimum.

Your appliance must be installed in such a way that the movement of the draft control on the right side of the stove must not be impeded or obstructed in any way. It must be able to open and close easily with a turn of the dial.

CARE

Do not clean the appliance until it has completely cooled down. Avoid harsh chemical cleaners or abrasives.

The glass on the front door of the stove can be cleaned only when the stove is completely cold. The manufacturer suggests a water-vinegar solution.

WHEN THE STOVE IS NOT IN USE : Remove carefully all coal ashes and soot. Place a cloth bag inside of stove containing a dehydrating substance such as silica-gel, which absorbs moisture while the stove is not in use. Silica-gel may be purchased in most drugstores.

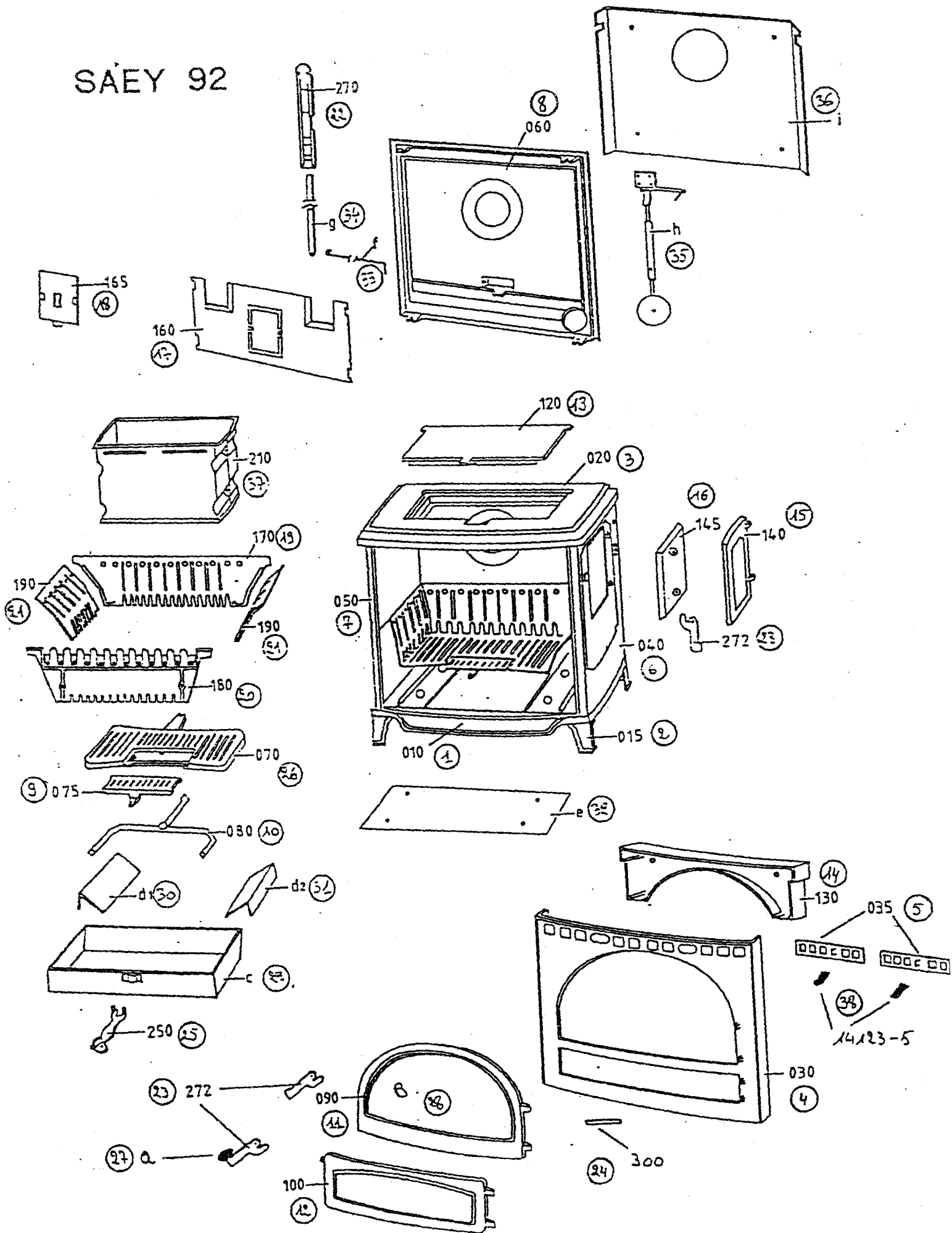
CAUTION : DO NOT CLEAN WHILE HOT.

NOTE : Periodically you should inspect the gasketing materials on all three doors : The Top Loading Door, The Ash Pan Door and the Front Glass Door. With extended time and usage the gasketing can wear and should be replaced to insure safe, controlled burning in your stove.

DRAFT FACTORS

1. Poorly assembled pipe connections running from the stove itself to flue connection
2. Chimney is not insulated properly - needed to maintain correct stack temperature (cooling off and losing negative pressure)
3. Leaks in the chimney system.
4. Improper chimney dimension, stack easily cooled.
5. Chimney flue not straight - starts at one point then angles off.
6. Chimney not tile lined, may result in cooling and leaks.
7. Poor masonry work on lining of chimney - excessive mortar and leaks.
8. Fireplace connection where the pipe running from the stove to the fireplace flue improperly installed.
9. Pipe connection forced against smoke shelf.
10. Pipe connection into regular chimney flue not properly installed.
 - a. Forced in too far
 - b. Not sealed properly
11. More than one appliance connected to a single chimney will cause draft problems and is in violation of fire safety codes.
12. Chimney clean-out door opened - causing draft interference.
13. Insufficient chimney height.
14. Trees around chimney or location of home - making it susceptible to down drafts.
15. Materials and construction of a makeshift chimney.
16. Chimney obstructions.
17. Outside temperatures too warm, creating poor draft.
18. Too many elbows in pipe.
19. Too long of a horizontal run of stove pipe or chimney.

SAEY 92



SAEY 92

Stove assembly and component parts list

010	bottom casting	165	cleaning slider
015	cast iron legs	170	firebox rear
028	top plate	180	firebox front
030	front wall	190	firebox side
035	draft slider	270	extending riddling connector
040	right body casting	272	closing hook door
050	left body casting	a)	door grip
060	rear body casting	b)	glass
070	bottom firebox grate	c)	ash pan
075	ash dump grate	d)	ash tin plate
080	grate base	e)	tin plate under the stove
090	fire door	f)	riddling connection
100	ash door	g)	riddling system
130	cover plate air control	h)	thermostate
140	side door	i)	tin plate bach side
145	side door, inner baffle		
160	baffle plate		

At your spare part order, please give the spare part number and the stove number.

Example for a spare part order : 3385-090

stove number spare part number for the fire door

detailed - drawing see next side

1 YEAR LIMITED WARRANTY

Stanley C. Bierly warrants this product to be free from defects in material and workmanship for a period of one year after the original date of consumer purchase. Should it be necessary to use this Warranty, all defective parts which show beyond question defects in material or construction will be replaced F.O.B. Stanley C. Bierly, Millheim, free of charge upon return of the damaged part to Stanley C. Bierly, Millheim, in accordance with the Warranty Card to be completed and returned to Stanley C. Bierly. To take advantage of this Warranty you must return the warranty card to Stanley C. Bierly at the time of purchase. SPECIFICALLY EXCLUDED FROM THIS WARRANTY ARE PARTS MADE OF GLASS, GASKETING MATERIAL, GRATES AND HOPPER OR HOPPER PLATE.

Our sole liability under this warranty shall be to repair or replace those defective materials or parts which we receive directly or through our dealer or distributor within the one year warranty period. We will not be responsible for damage caused by accident, misuse, abuse, affixing any unauthorized accessory or attachment to the product, or failure to follow the operating instructions. In addition, this Warranty does not cover installation, which shall be the sole responsibility of the installer.

THE WARRANTY SET FORTH HEREIN IS IN LIEU OF ANY AND ALL OTHER WARRANTIES EXPRESS OR IMPLIED INCLUDING THE WARRANTY OF MERCHANTABILITY AND FITTING. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS VARY FROM STATE TO STATE.

In the event any provision of this Warranty conflicts with the appliance law it shall not affect other provisions of this Warranty.

Stanley C. Bierly
108 West Main Street
Box 428
Millheim, PA 16854

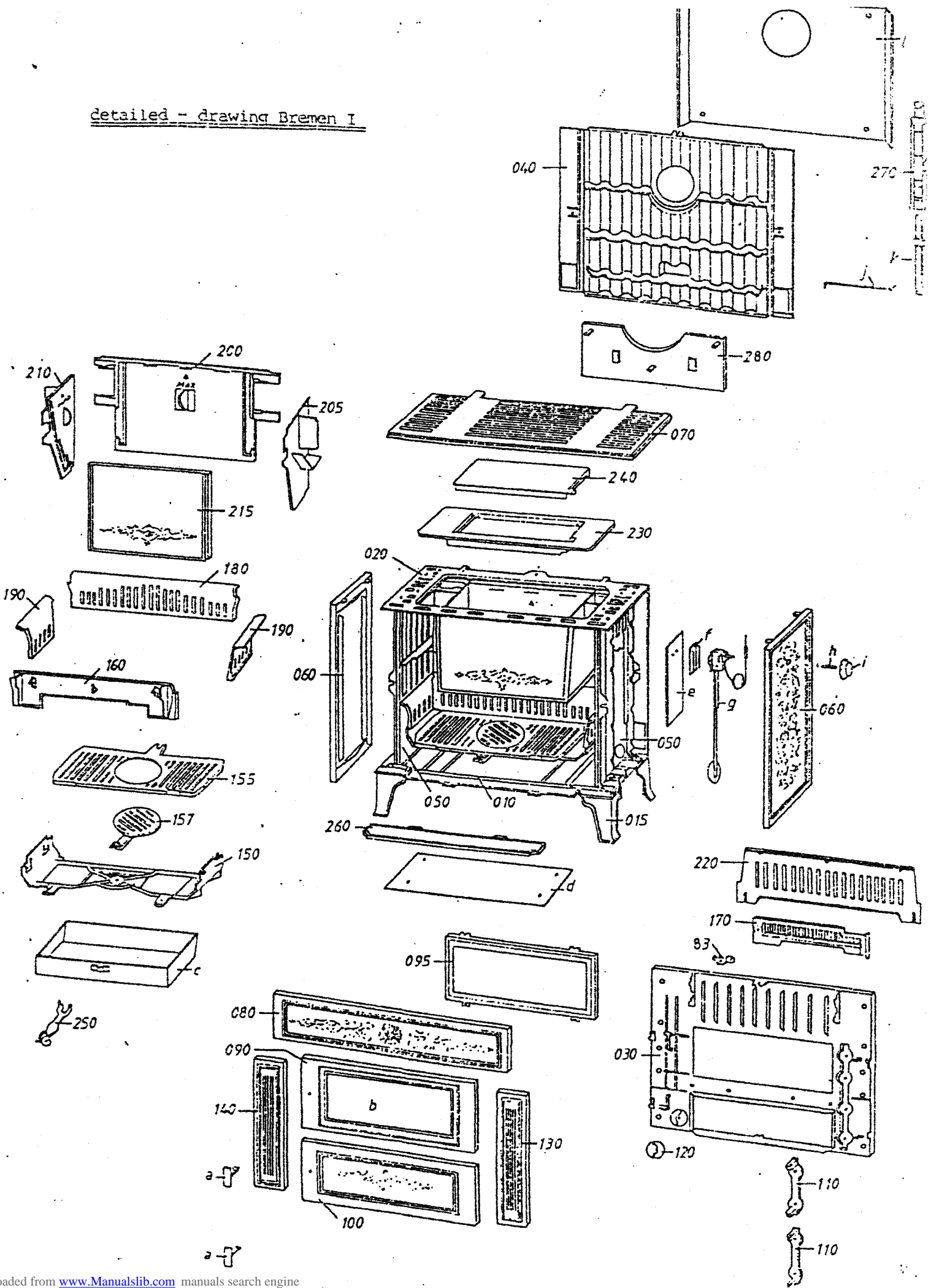
Date of Purchase :

Name of dealer :

Address :

Fill in above for your own records and to provide proof of purchase, promptly fill in warranty card and mail.

detailed - drawing Bremen I



BREMEN I (No. 2385) stove assembly and component parts list

010	base parts	200	fuel hopper rear wall
015	legs	205	fuel hopper side wall right
020	top plate	210	fuel hopper side wall left
030	front wall	215	fuel hopper front wall
040	rear wall	220	front grate
050	side wall	230	locating frame
060	jacket plates	240	fuel hopper cover
070	top cover	250	all purpose tool
080	front plate	260	ash lip
83	grate position lock	270	riddling extender
090	fire door	280	cover plate
095	fire door frame	a)	door grip
100	ash pan door	b)	glass
110	door knobs	c)	ash pan
120	control knob	d)	tin plate under the stove
130	corner quart right	e)	tin plate for thermostate
140	corner quart left	f)	thermostate holder
150	grate bearing	g)	thermostate
155	shaking grate	h)	distance bolt
157	grate	i)	thermostate knob
160	frame for upright grill	j)	riddling connection
170	upright grill	k)	riddling system
180	firebox rear	l)	tin plate back side
190	firebox left and right		

At your spare part order, please give the spare part number and the stove number.

Example for a spare part order : 2385-090

stove number spare part number for the fire door

detailed - drawing see next side

BREMEN II (No. 2347) stove assembly and component parts list

010	base parts	190	firebox right
015	legs	200	fuel hopper rear wall
020	top plate	205	fuel hopper side wall right
030	front wall	210	fuel hopper side wall left
040	rear wall	215	fuel hopper front wall
050	side wall	220	front grate
060	jacket plates	230	locating frame
070	top cover	240	fuel hopper cover
080	front plate	250	all purpose tool
83	grate position lock	260	ash lip
090	fire door	a)	door grip
095	fire door frame	b)	glass
100	ash pan door	c)	ash pan
110	door knobs	d)	tin plate under the stove
120	control knob	e)	tin plate for thermostate
130	corner guard right	f)	thermostate holder
140	corner guard left	g)	thermostate
150	grate bearing	h)	distance bolt
155	shaking grate	i)	thermostate knob
160	frame for upright grill	j)	riddling connection
170	upright grill	k)	riddling system
180	firebox rear	l)	tin plate bach side
190	firebox left and right		

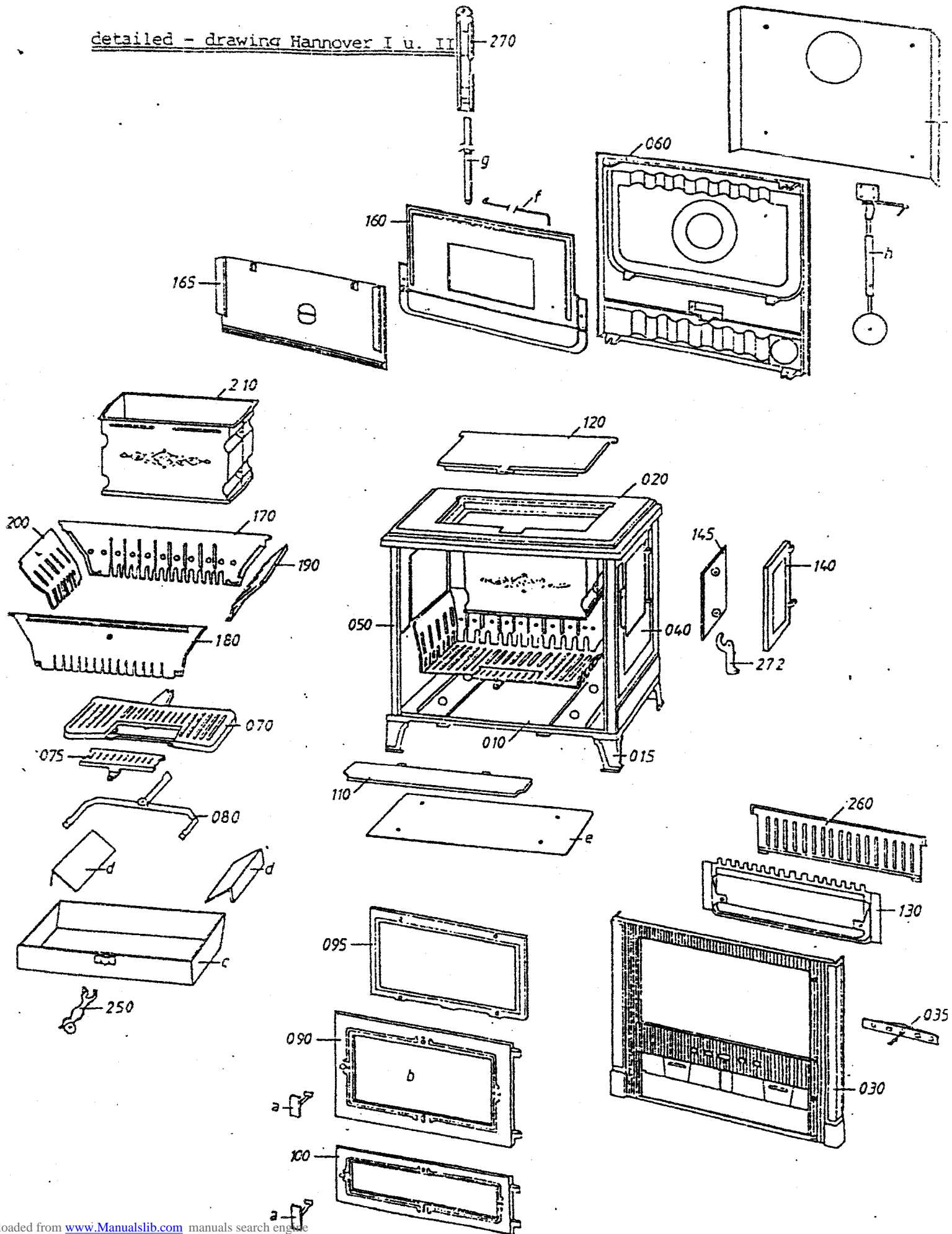
At your spare part order, please give the spare part number and the stove number.

Example for a spare part order : 2347-090

stove number spare part number for the fire door

detailed - drawing see next side

detailed - drawing Hannover I u. II



**HANNOVER I (No. 3385)
HANNOVER II (No. 3384)
Stove assembly
and component parts list**

010	bottom casting	165	rear inner wall
015	cast iron legs	170	firebox rear
020	top casting	180	firebox front
030	secondary air slide and control	190	firebox right
040	right body casting	200	firebox left
050	left body casting	210	hopper halves
060	rear body casting	250	all purpose tool
070	bottom firebox grate	260	front grate
075	ash dump grate	270	iron riddling extender
080	grate base	272	cast iron tool
090	fire door	a)	door grip
095	fire door frame	b)	glass
100	ash door	c)	ash pan
110	ash lip	d)	ash tin plate
120	top feed door	e)	tin plate under the stove
130	inner rear wall	f)	riddling connection
140	side door	g)	riddling system
145	side door, inner baffle	h)	thermostate
160	baffle plate	i)	tin plate bach side

At your spare part order, please give the spare part number and the stove number.

Example for a spare part order : 3385-090

stove number spare part number for the fire door

detailed - drawing see next side