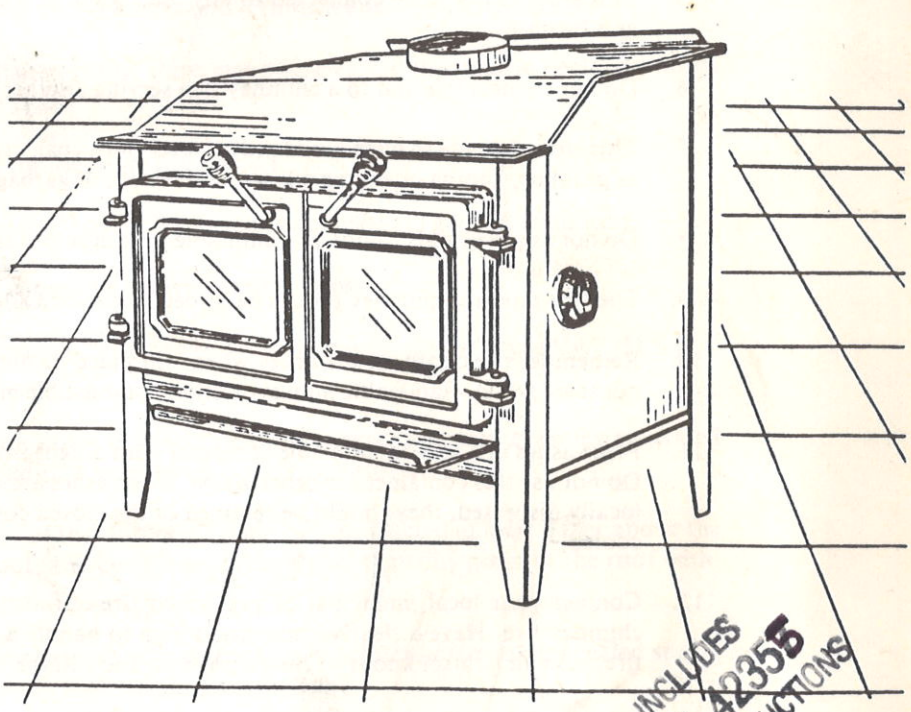
OWNERS MANUAL

Sears

HIGH EFFICIENCY AIR TIGHT WOOD STOVE

CAUTION
READ ALL INSTRUCTIONS CAREFULLY BEFORE STARTING THE INSTALLATION

- **INSTALLATION**
- **OPERATION**
- **REPAIR PARTS**



MODEL C403-42335

ALSO INCLUDES DELUXE 42355 ASSEMBLY INSTRUCTIONS

made in CANADA
fabriqué au CANADA

SAVE THIS MANUAL FOR FUTURE REFERENCE

Sears Canada Inc., Toronto, Canada M5B 2B8

SAFETY NOTICE: *If this Sears stove is not properly installed, a house fire may result. For your safety, follow the installation directions.*

GENERAL INFORMATION

1. Read these instructions carefully and complete before installing your new Sears Woodstove. Failure to follow them could result in improper operation or heater malfunction. This could result in death, serious bodily injury and/or property damage.

2. Check with the building inspector's office for compliance with local codes; a permit may be required.

3. This stove requires a masonry or type "A" (U.S.) or chimney listed to ULC S629.

4. Always connect this stove to a chimney and never vent to another room or inside a building.

5. This stove is not to be connected to any duct work to which another appliance is connected such as a furnace.

6. Do not connect this unit to a chimney flue serving another appliance.

7. This stove is made to burn wood only. Never burn coal, coke, artificial logs, flammable fluids such as gasoline, naptha or engine oil, salt driftwood, or garbage.

8. Do not use chemicals, fluids of flammable products to start the fire.

9. The flue pipe and chimney should be inspected periodically and cleaned if necessary.

10. Remember the clearance distances when you place furniture or other objects within the area. Do not store wood, flammable liquids or other combustible materials too close to the stove.

11. Place ashes in a non-combustible container with a tight fitting lid and move outdoors immediately. Do not use this container for other waste. 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.

12. Contact your local municipal or provincial fire authority for information on how to handle a chimney fire. Have a clearly understood plan to handle a chimney fire. In the event of a chimney fire, turn air control knobs to closed position and call the fire department.

13. Do not tamper with combustion air controls beyond their normal adjustment capacities.

14. Operate with doors closed and open doors slowly when refuelling.

INSTALLATION

1. Remove all parts to check they are all included (see Fig. D)

2. Select the proper location for the stove which complies with the required clearances and floor protection.

Stove Clearances and Floor Protection

Minimum clearances to combustible materials for a stove must be followed (See Fig. A). The stove must be set on a non-combustible surface (See Fig. A).

3. Install the refractory bricks in the proper sequence (see Fig. B).

4. The stovepipe should be fitted inside the flue collar on top of the stove between the stove and the chimney.

Stovepipe

(a) Maintain at least 18 inches clearance between the stovepipe and all combustible materials.

(b) All pipe sections should be connected with the male end (crimped end) toward the stove.

(c) Fasten the stovepipe to the flue collar by use of sheet metal screws. Do the same at each additional joint to make the entire installation rigid.

(d) Maintain the required diameter pipe for the entire installation.

(e) If you use an old masonry flue be sure to have it inspected for cracks and general condition.

Chimney: refer to chimney and chimney connector maker's instructions.

(a) This stove is to be connected to a masonry "Factory Built" or "Pre-fabricated" type "A" (U.S.) only or chimney listed to ULC S629.

Masonry chimneys can also be used, but it is advisable to have your masonry chimney inspected for cracks and check the general condition before you install your stove.

(b) To help ensure a good draft, the top of the chimney should be constructed at least 3 feet above the point of penetration through the roof, and be at least 2 feet higher than any point of the roof within 10 feet (See Fig. C)

(c) Chimney connector shall not pass through an attic or roof space, closet or similar concealed space, or a floor, ceiling, wall, or partition of combustible construction.

(d) Check with code and fire officials for installation through combustible walls or ceiling.

(e) Do not use makeshift compromise during installation.

STOVE OPERATION

NOTE: Do not use grate or elevate fire. Build wood fire directly on hearth. When the stove is used for the first time the solvents in the paint will smoke off. It may be desired to perform this fire burn outdoors.

Building a Fire

1. Place a small amount of crumpled paper in the stove.
2. Cover the paper with a small amount of kindling and a few small pieces of wood.
3. Ignite the paper and leave the door open.
4. When the kindling is burning, close the door and turn the handle.
5. Open the air control knobs about 2 turns.
6. Add wood as the fire progresses.

OPERATION

With the door closed, the rate of burning is regulated by the amount of air allowed to enter the stove through the air-controls. Once there is an established coal bed, the air can be turned down. With further experience you will be able to set the valve for heat and burning time desired.

Dry, clean wood only should be burned, not coal, soft wood, creosote soaked wood or garbage. Do not use flammable liquids to start fire.

The recommended wood load is level with top of firebricks. Overloading may eliminate sufficient air to fuel fire properly.

Place ashes in a non-combustible container with a tight fitting lid and move outdoors immediately. So do not use this container for other wastes.

Serious burns will result through contact with hot stove thus caution should be observed where children are present.

Wood should be stored beyond recommended installation clearances.

After extensive use, the sealing material which provides a door seal may need to be replaced it if fails to retain its resiliance.

This heater is designed to operate with the door closed.

Do not tamper with combustion air controls beyond their normal adjustment capacities.

CREOSOTE

When wood is burned slowly, it produces tar and other organic vapours. These combine with moisture to form creosote. Creosote vapours 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 once every 2 months during the heating season to determine if a creosote build-up has accumulated. If this is the case, the creosote should be removed to reduce the risk of a chimney fire.

WARNING: *Things to remember in case of chimney fire:*

1. CLOSE ALL DRAFT AND DAMPER CONTROLS.

2. CALL THE FIRE DEPARTMENT.

WAYS TO PREVENT AND KEEP UNIT FREE OF CREOSOTE

1. Burn stove with draft and damper controls wide open for about 45 minutes every morning during the burning season. This will burn out creosote deposits within the heating system.
2. Burn the stove with draft and damper controls wide open for about 10 - 15 minutes every time you apply fresh wood. This allows wood to achieve the charcoal stage faster and burns wood vapours which might otherwise be deposited within the system.
3. BURN ONLY SEASONED WOOD; Avoid burning wet or green wood. Seasoned wood has been dried at least one year.
4. A small fire is preferable to a large smoldering one that can deposit creosote within the system.
5. Never completely close draft controls while the unit is in operation. Closing the draft while burning will allow unburned gas vapours to escape and be deposited within the chimney.
6. Establish a routine for the fuel, wood burner and firing technique. Check daily for creosote build-up until experience shows how often you need to clean to be safe. Be aware that the hotter the fire, the less creosote is deposited and weekly cleanings may be necessary in mild weather even though monthly cleanings may be enough in the coldest months. Contact your local municipal authority for information on how to handle a chimney fire. Have a clearly understood plan to handle a chimney fire.

CORNING/PYROCERAM TM. GLASS IN WOODBURNING STOVES

The following use and safety tips should be observed:

1. Inspect the glass regularly for cracks and breaks. If you detect a crack or break, extinguish the fire immediately, and contact your stove dealer.

2. Do not slam stove door or otherwise impact the glass. When closing doors, make sure that logs or other objects do not protrude to impact the glass.

3. Do not clean the glass with materials which may scratch (or otherwise damage the glass). Scratches on the glass can develop into cracks or breaks.

4. Never attempt to clean the glass while a fire is in the unit. If the deposit is not very heavy, normal glass cleaners are adequate with a plain, non-abrasive, scouring pad.

5. Never put substances which can ignite exposively in the stove since even small explosions on confined areas can blow out the glass.

CHIMNEY CLEANING

If you want to do the job yourself follow these tips

* Use a brush.
* Use masking tape and newspaper to cover any openings, and nearby furniture.
* Use a dust mask for eyes and mouth.

To clean the chimney attach the brush to a rope the same length as the chimney. Attach weights to the end of the brush and pass the brush down to the bottom of the chimney and pull it up again. This operation should be repeated until the brush no longer brings up large amounts of creosote.

For long horizontal runs of pipe, fiberglass rods can be used rather than rope. This method should be used if your roof is too steep that you must clean the chimney from below.

A heavy-duty vacuum can be used to clean out the stove. To clean the stovepipe, remove and take out doors. Brush the inside until it is clean.

ASH DISPOSAL

Sears stoves feature a convenient ash lip for easy removal of ash. During constant use, ashes should be removed every few days, or when they have built up to the loading door. Only remove ash when the fire has died down, as in the morning. Even then, expect to find a few hot embers.

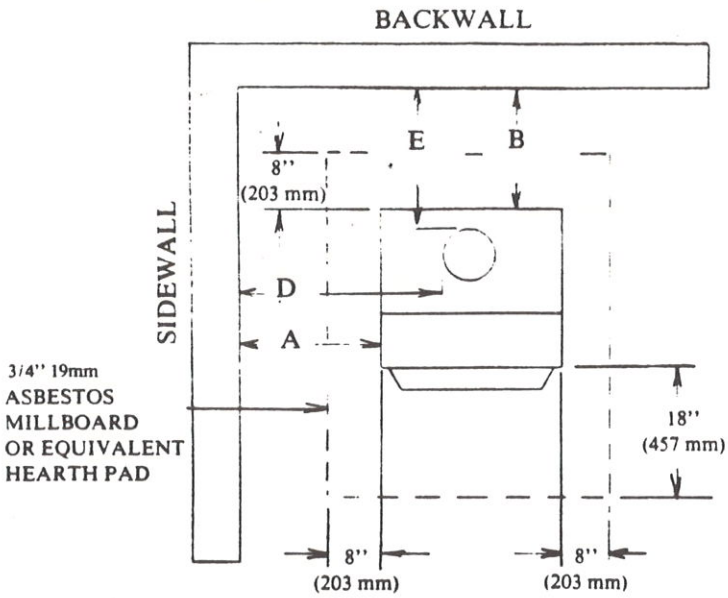
Ashes should be placed in a metal container with a tight-fitting lid. The closed container of ashes should be placed on a non-combustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispensed, they would be retained in the closed container until all cinders have thoroughly cooled. Other waste should not be placed in the ash container.

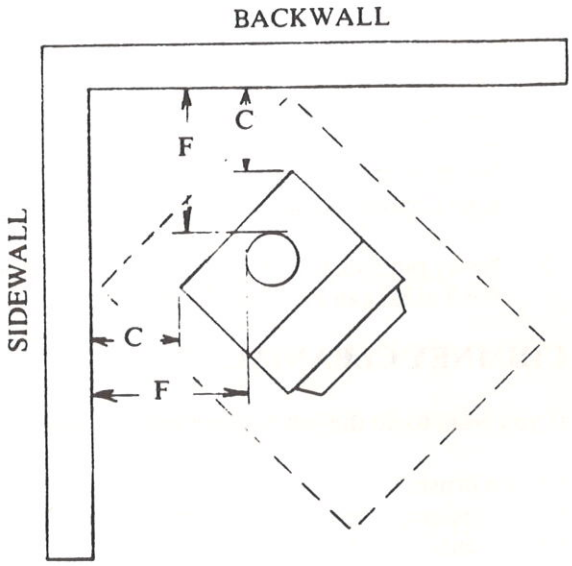
WOOD

Only use dry seasoned wood. Green wood, besides burning at only 60% of the fuel value of dry wood, deposits creosote on the inside of your stove and along the chimney. This can cause an extreme danger of chimney fire. To be called "seasoned", wood must be dried for a year. Regardless of whether the wood is green or seasoned, it should be stored in a well-sheltered, ventilated area to allow proper drying during the year to come.

FIG. A. CLEARANCE FROM COMBUSTIBLE CONSTRUCTIONS

FROM HEATER		42335	FROM CHIMNEY CONNECTOR		42335
A	SIDEWALL	30"	D	SIDEWALL	41"
B	BACKWALL	17 1/2"	E	BACKWALL	20 1/2"
C	CORNER	21 1/4"	F	CORNER	32"
	FRONT	48"		CEILING	18"





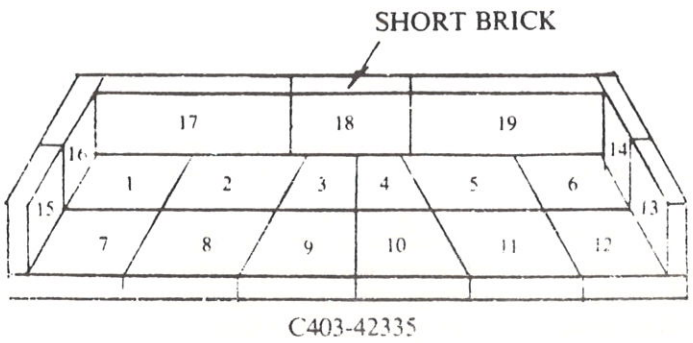


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FIG. B

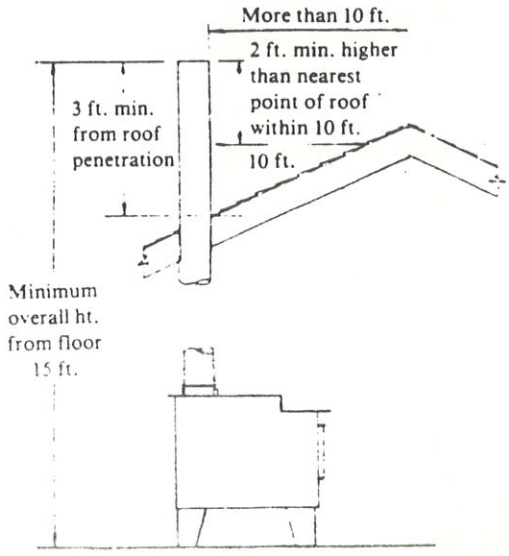

Fig. C.
Minimum chimney heights above roof and clearances

PARTS DIAGRAM
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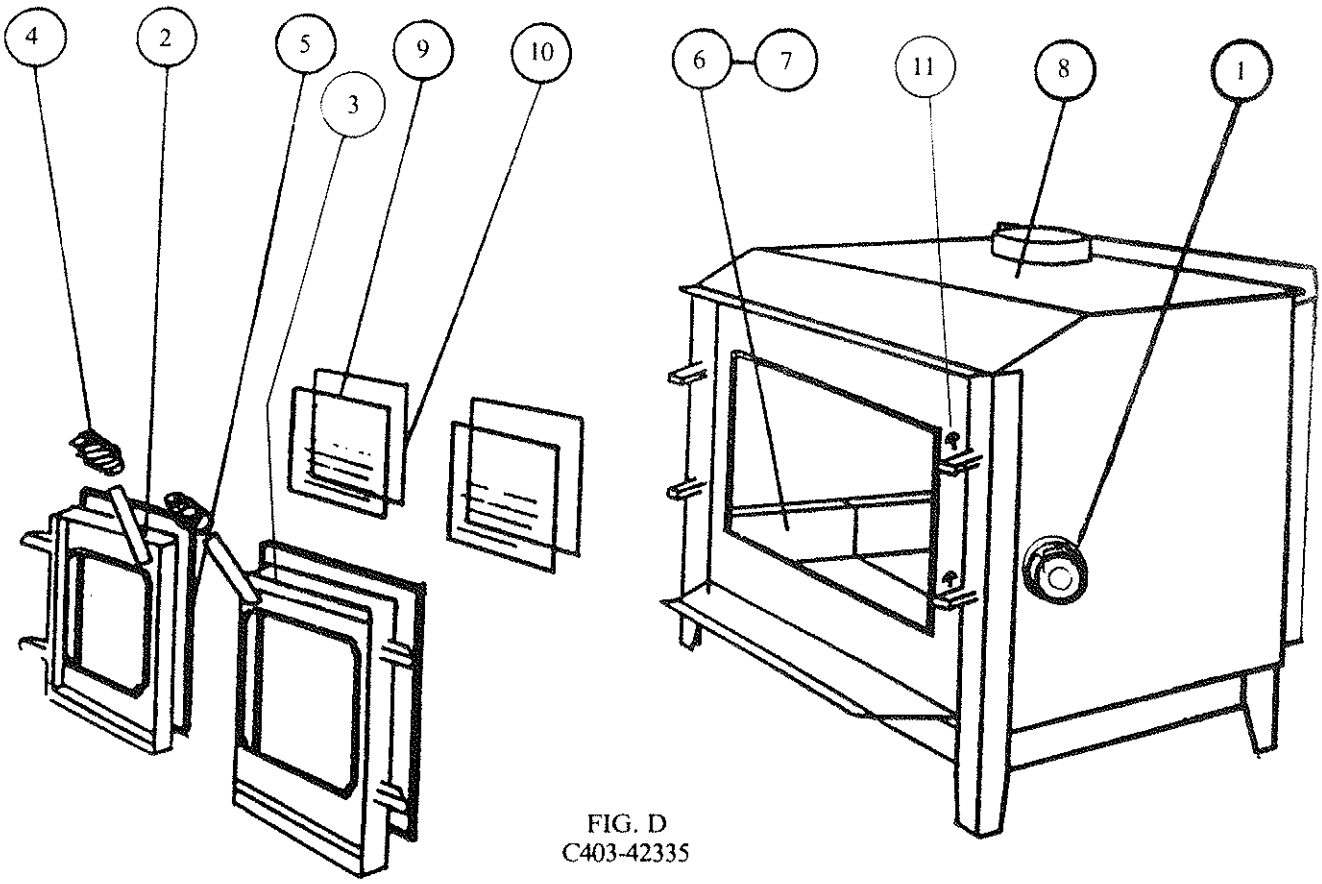

FIG. D
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NO.	QTY.	DESCRIPTION	PART NO.
1	2	AIR VALVE	S12018
2	1	LH DOOR ASSEMBLY	S31039
3	1	RH DOOR ASSEMBLY	S31038
4	2	DOOR KNOB	S11007
5	2	3/4'' DOOR SEAL	S15009
6	18	BRICKS 9'' x 4-1/2''	S16001
7	1	BRICKS 6-1/4'' x 4-1/2''	S16004
8	1	STOVE BODY	3357
9	2	GLASS	S10004
10	2	1/8 GLASS SEAL	S15008
11	4	HINGE PINS	S11005

NOTE: PARTS ARE AVAILABLE FROM YOUR LOCAL SEARS PARTS DEPARTMENT.