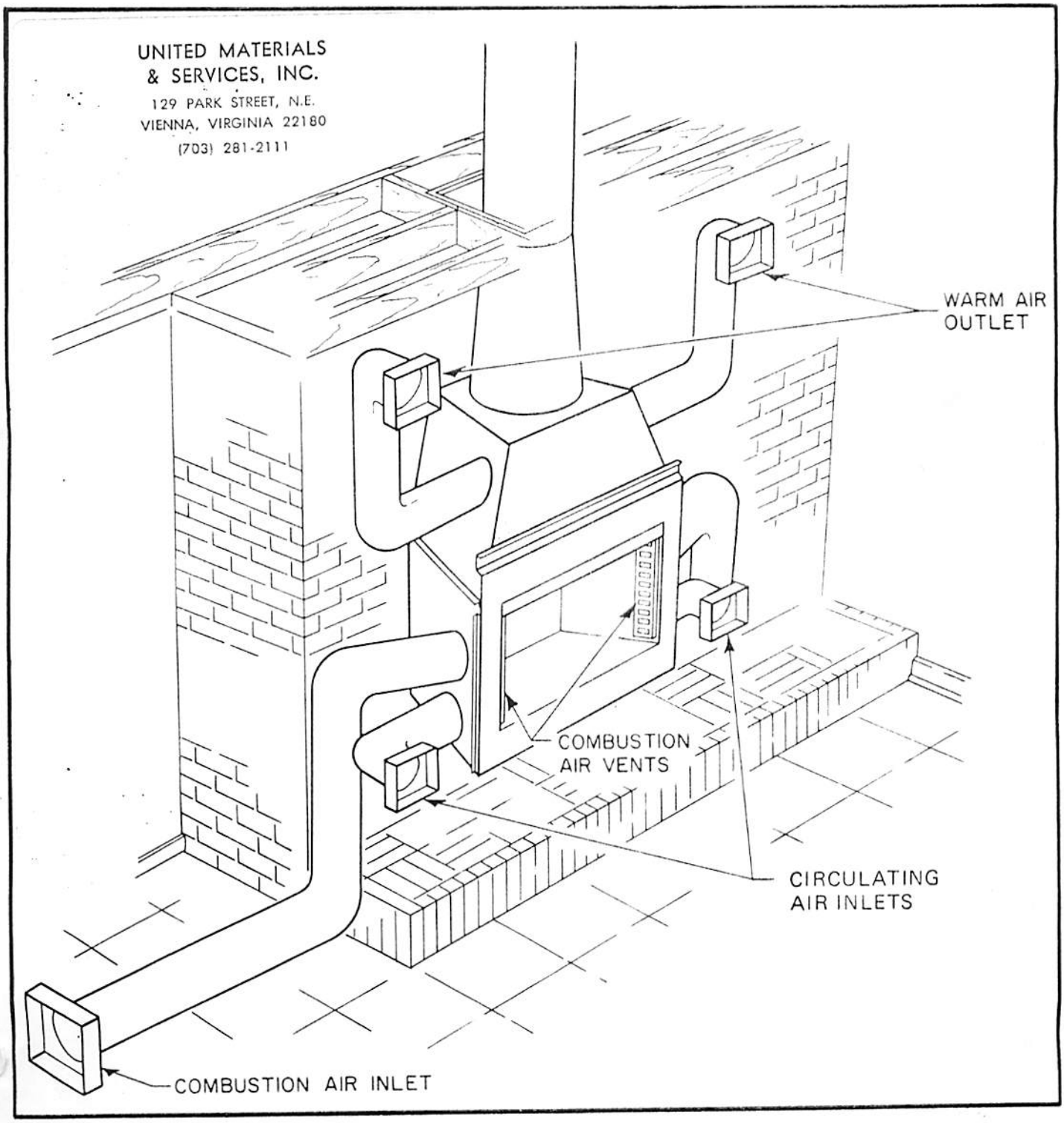
Aikens

MARTIN INDUSTRIES

OCTA-THERM

36 INCH BUILT-IN WOODBURNING FIREPLACE & CHIMNEY

Model BWH-36A - (Pat. Pending)



Look for the Underwriters' Laboratories, Inc. Listing Mark on our Fireplaces (UL File MH7603, ICBO Report No. 2767, BOCA 78-9, SBCC 7208-77).

NOTICE:

1. Read these instructions entirely before beginning any part of the installation.
2. This fireplace is not approved by Underwriters' Laboratories for mobile home installation.
3. This fireplace should **never** be attached to any other heating or air circulating system.
4. All the parts used with this fireplace system should be in accordance with these installation instructions. Failure to do so may be hazardous and will void warranty. It will also reduce your heating efficiency.
5. This fireplace and accessories should not be altered in any way except as mentioned in the installation instructions.
6. To get maximum efficiency, (only if installed on an outside wall), out of your Martin Fireplace, the enclosure that is built around the fireplace should have at least the same insulating characteristics as the exterior walls of the dwelling. If the fireplace is exposed to cold outside air, excessive heat will be lost through the jacket of the fireplace, and the pressure of wind against the fireplace can force cold air through the fireplace and into the dwelling. A chase should have a tight insulated top or firestop.
7. You should refer to your local building code for local requirements pertaining to the installation of factory built fireplaces. Martin fireplaces are intended for installation and use according to Standard NFPA No. 211 of the National Fire Protection Association.
8. Although the unique design of this fireplace makes it much more efficient than a Standard fireplace, it is not a substitute for a central heating system.
9. This fireplace is not intended to be installed with a masonry flue.

HOW DOES YOUR MARTIN FIREPLACE OPERATE?

Your Martin OCTA-THERM fireplace represents a new and unique concept in fireplace design. You must follow installation instructions carefully to insure satisfactory and safe performance.

Your Martin fireplace is designed on one of the oldest principles known to mankind ..... "heat rises."

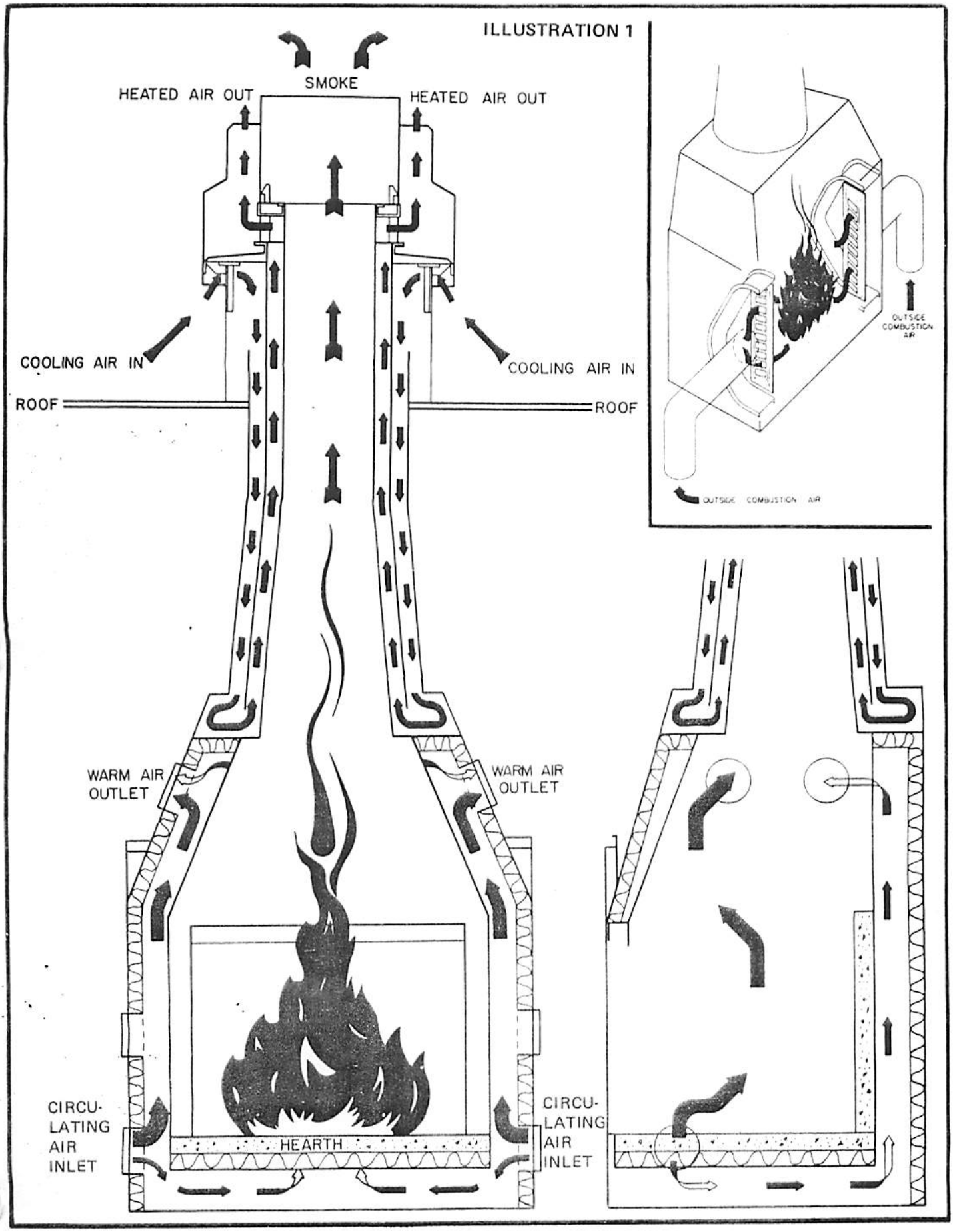
As shown in Illustration No. 1, cold air from the room is taken through circulating air inlet of the fireplace. As this air circulates around the fireplace and gets warm, it rises and comes out through the top warm air outlets.

This air is also used to cool your fireplace and failure to do so will cause the firebox to reach excessive temperatures which will result in a fire hazard. Therefore, two inlets and outlets must be installed in the same room where the fireplace is located, and should not be blocked by any means such as furniture.

The fireplace is insulated sufficiently to keep the points where combustible materials would contact the fireplace safely cool; but, this insulation is not sufficient to prevent a significant heat loss through the jacket if the unit is installed where it will be exposed to the outside. The enclosure that is built around the fireplace should be constructed and insulated so as to have the same thermal characteristics as the exterior walls of the dwelling.

Failure to properly enclose the fireplace so as to isolate it from the outside environment will result in a diminished heat output from the fireplace as well as increased heat loss when the fireplace is not in use.

ILLUSTRATION 1



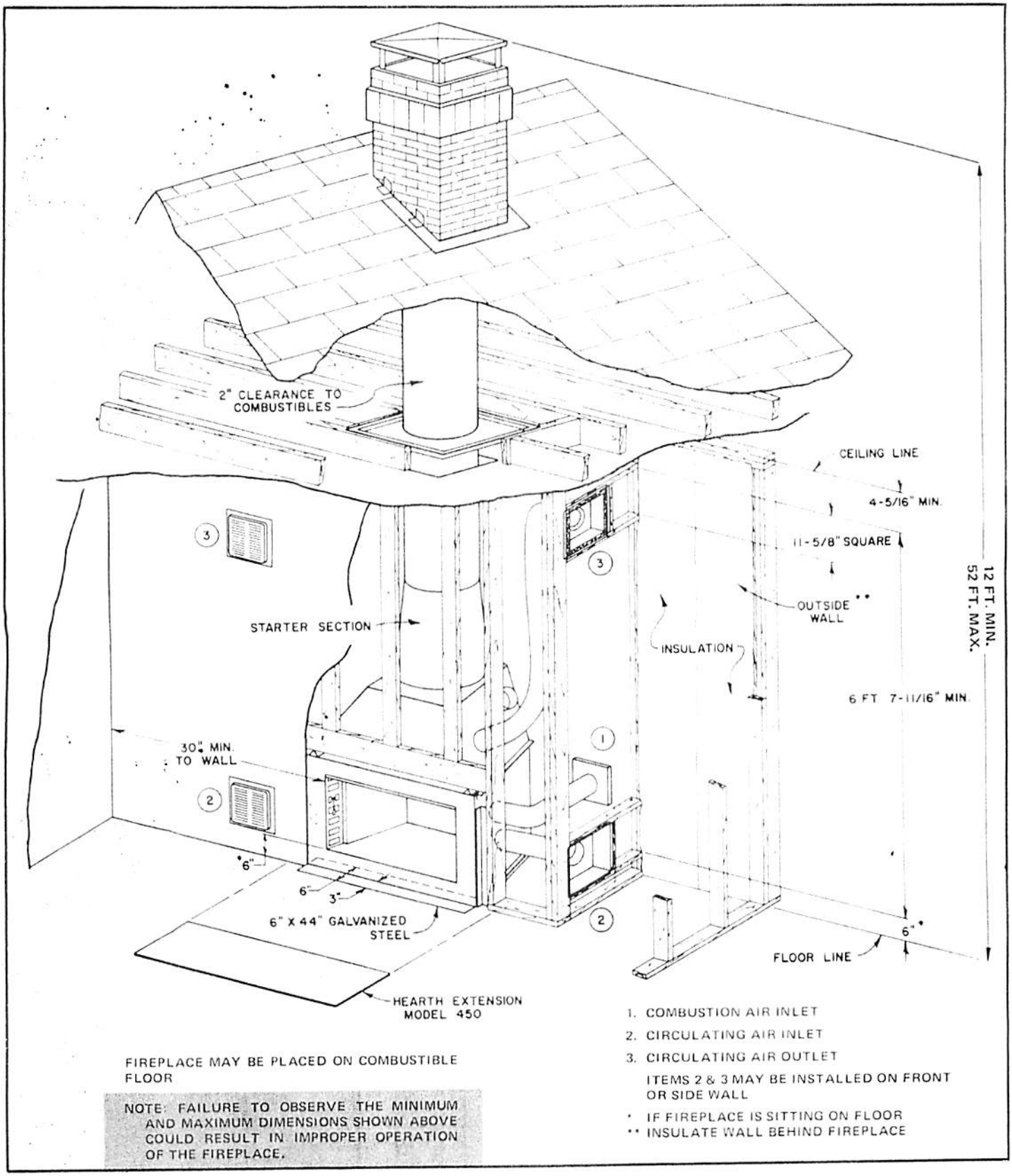


ILLUSTRATION 2

INSTALLATION

SELECTING THE LOCATION – STRUCTURAL REQUIREMENTS:

This fireplace does not require any special foundation; however, if the fireplace is to be trimmed with a large stone or brick facing, an adequate foundation is required.

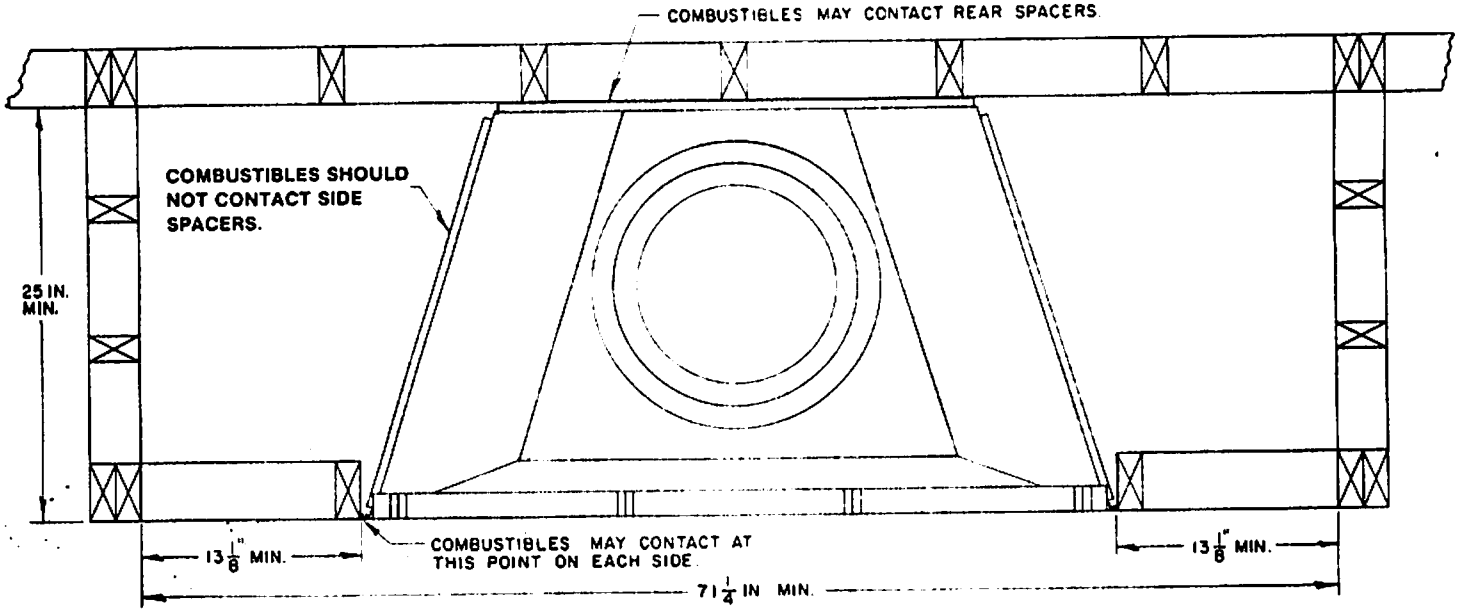
Location for your fireplace should be on the load bearing wall, and away from objects that will create drafts that could disturb the normal flow of air into the fire. Such objects are frequently opened doors and central heat air outlets and returns.

A location that requires cutting the least number of joists and rafters for the chimney installation will simplify and reduce installation cost.

Chimney outlet location is also of importance. Objects such as overhanging or nearby trees, an adjacent building or embankments, or unusual roof designs can all create air turbulance, and may cause interference with chimney performance. It also may cause a fireplace smoking problem.

FIREPLACE INSTALLATION:

1. Set the fireplace in the desired location. This location must provide necessary clearances and the minimum enclosure area as indicated by Illustration Nos. 2 and 2A.
2. Check the face of the fireplace with a carpenter's level and if it is not plumb, correct it by placing shims under the support legs beneath the fireplace.
3. Block in the fireplace to prevent any shifting of the firebox.
4. Do not build any framing around the fireplace until all the air ducts and chimney are installed.



PLAN VIEW OF MINIMUM FRAMING DIMENSIONS

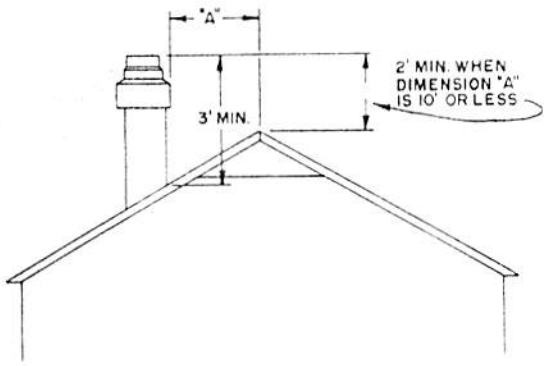
ILLUSTRATION 2-A

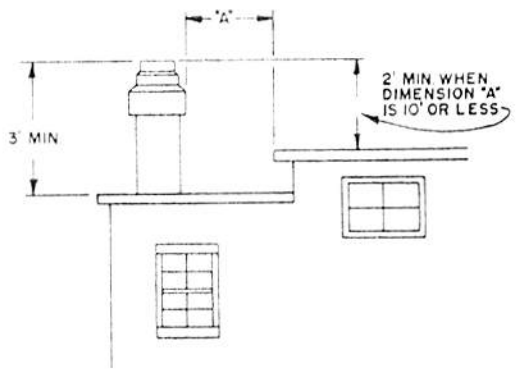
CHIMNEY INSTALLATION

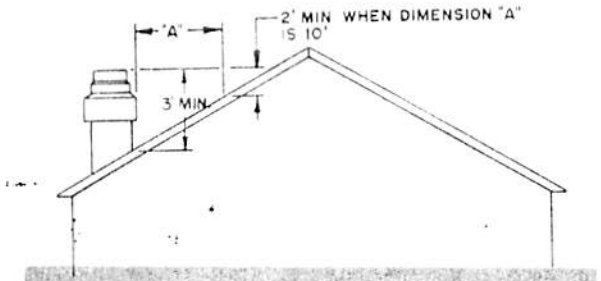
NOTE:
A. To select proper chimney height, refer to Illustration No. 2. The flue outlet must be a minimum of three (3) feet above the highest point where the chimney penetrates the roof and a minimum of two (2) feet above all portions of the building within ten (10) feet. (See Illustration No. 3). If the chimney is to include elbows to offset the chimney, refer to the next section.

B. The chimney height should be kept as minimum as possible to get maximum efficiency out of your fireplace.

1. Lay out, cut, and frame openings through all ceilings and the roof. The inside dimensions for the holes in the ceilings must be 19 inches square. Refer to Illustration No. 4 for the hole sizes to be used at the roof level.







NOTE: Flue outlet should be two feet above all portions of the building within ten feet as shown by these illustrations.

ILLUSTRATION 3

ROOF OPENINGS	
ROOF PITCH	MINIMUM OPENINGS 900 SERIES CHIMNEY
0/12	19 x 19
1/12	19 x 19-1/4
2/12	19 x 19-1/2
3/12	19 x 20
4/12	19 x 20-1/2
5/12	19 x 21
6/12	19 x 21-1/2
7/12	19 x 22-1/4
8/12	19 x 23
9/12	19 x 24
10/12	19 x 25
11/12	19 x 26-1/4
12/12	19 x 27

ILLUSTRATION 4

2. Install a firestop spacer at each ceiling level. (See Illustration No. 5 for a guide in the selection of the proper firestop spacer). Install the firestop spacer from beneath the ceiling unless the space above is attic space, in which case the firestop spacer should be installed from above the ceiling. (See Illustration Nos. 6 and 7).
3. Install the Model 912A Starter Section (see Illustration No. 8) directly on top of the fireplace by inserting the male end of the flue starter into the flue outlet of the fireplace and press down until the snap locks engage. The outlet air starter should be installed on the mating outlet of the fireplace by following the same procedure used for the flue starter. The inlet air starter should be installed with the female end down over the top of the fireplace and engage the snap locks on the top of the fireplace.

FIRESTOP SPACER FOR 900 SERIES CHIMNEY

MODEL	DIM. A	DIM. B	DIM. C	ANGLE D	DIM. E
240A	19"	19"	$9\frac{1}{2}$	90°	$9\frac{1}{2}$
241A	19"	$29\frac{5}{16}$	$12\frac{11}{32}$	30°	$12\frac{11}{32}$
242A	19"	$23\frac{5}{16}$	$10\frac{9}{32}$	15°	$10\frac{9}{32}$

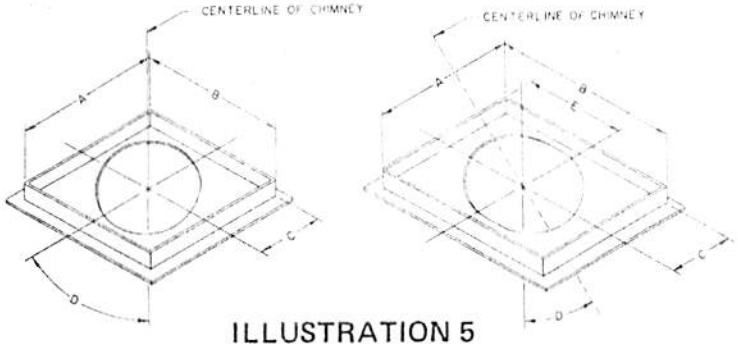
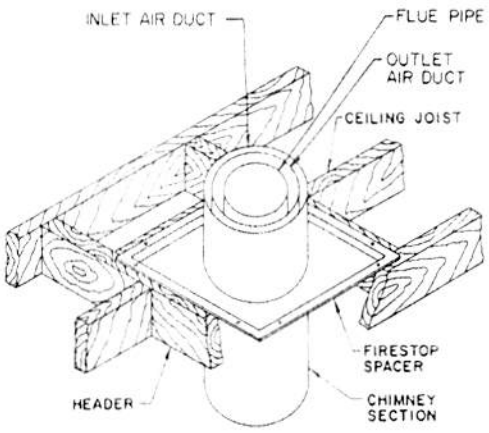


ILLUSTRATION 5

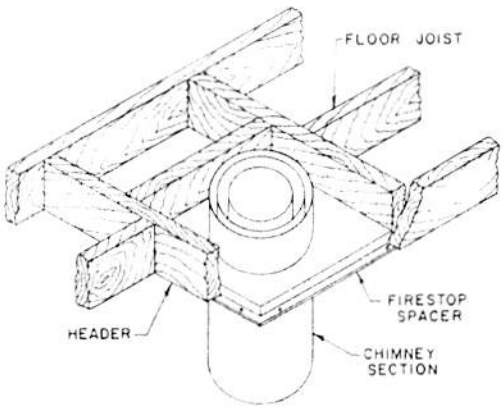


INSTALLATION OF FIRESTOP SPACER AT ATTIC

ILLUSTRATION 6

4. Install the chimney sections by inserting the male end of the flue or smallest diameter pipe on top of the flue starter and pressing down until the snap locks engage. Then place the female end of the inlet air duct or largest diameter pipe on top of the inlet air starter and press down until the snap locks engage. Continue this process adding the chimney sections on top of each other until the chimney is at least six (6) inches above the roof opening on all sides.

NOTE: The last section of the chimney installed should be either a 2' or 3' section so that the telescope section included with the chimney termination will telescope properly. Be sure the snap locks are engaged on each flue pipe section.

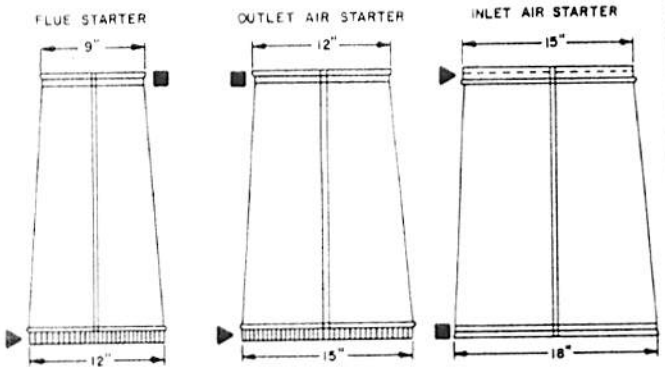


INSTALLATION OF FIRESTOP SPACER AT FLOOR LEVELS

ILLUSTRATION 7

5. The chimney may be terminated with either a simulated brick chimney housing or a contemporary round termination cap. For specific installation instructions, refer to the section of these instructions applicable to the chimney termination which you have chosen.

NOTE: Exposed part of the chimney in living quarters or storage area should be enclosed to avoid personal contact with and possible damage to the chimney.



MODEL 912 A STARTER SECTION

▶ MALE END
■ FEMALE END

ILLUSTRATION 8

OFFSET INSTALLATION SEQUENCE:

1. Determine the location and amount of offset required, then select the combinations of chimney sections and elbows required from the offset charts given in Illustration 9.
2. Install the 1230 flue elbow for a 30° offset or a 1215 flue elbow for a 15° offset directly on top of the fireplace by inserting the male end of the flue elbow into flue. Push down until snap locks are engaged. The outlet air elbow should be installed on the mating outlet of the fireplace by following the same procedure used for the flue elbow. The inlet air elbow should be installed with the female end down over the top of the fireplace and engage the snap locks on the top of the fireplace.
3. If the first elbow is installed on top of a chimney section rather than directly on top of the fireplace, nail the elbow support straps tightly to a building frame member.
4. Install the sections of pipe that are required to be between the elbows until the proper number of chimney sections have been installed or, if the offset will pass through a ceiling, until the point where the offset will penetrate the ceiling can be determined.
5. If the inclined portion of the chimney penetrates a ceiling or floor, lay out the location of the holes in the joist areas. The dimensions shown on Illustration No. 5 may be used to frame the hole.
6. Install the firestop spacer by inserting it into the framed hole and nailing it into place through the flange around the perimeter of the hole.
7. Install the second elbow to return the run of the chimney to vertical.
8. Nail the support straps of the second elbow to a building frame member.
9. Continue installing the vertical portion of the chimney.

NOTE: Maximum 4 elbows can be used for fireplace. Do not incline the chimney more than 30° from vertical.

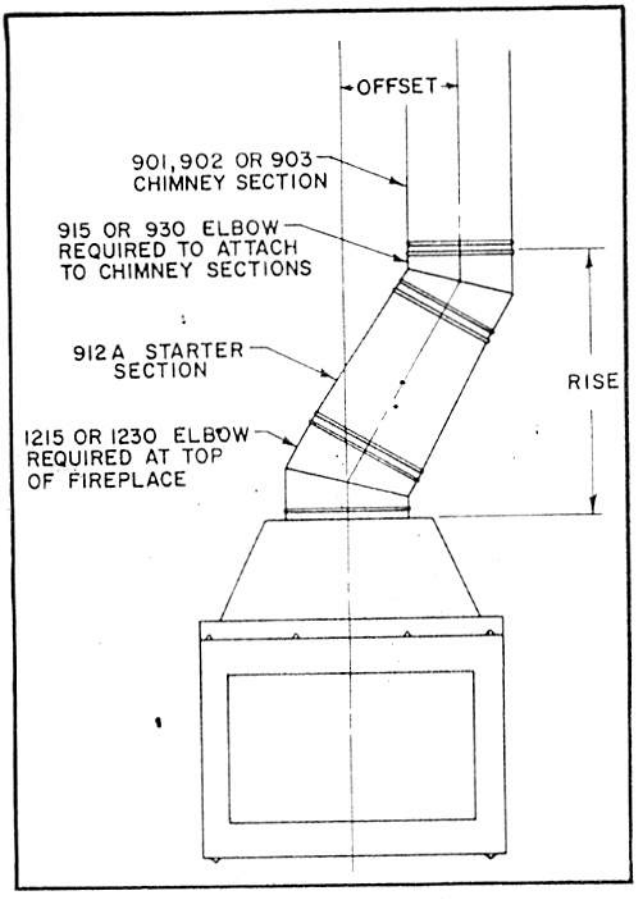


ILLUSTRATION 9

OFFSET CHARTS

SELECT DESIRED OFFSET AND READ ACROSS TABLE TO OBTAIN RISE, QUANTITY OF CHIMNEY SECTIONS & ELBOWS

30° ELBOW

B Offset * In.	R Rise ** In.	No. 901 Chimney Sections	No. 902 Chimney Sections	No. 903 Chimney Sections	No. Elbows Req'd.
4	16	0	0	0	1 PR.
10	25	1	0	0	1 PR.
16	36	0	1	0	1 PR.
22	46	0	0	1	1 PR.
28	57	0	2	0	1 PR.
34	67	0	1	1	1 PR.
40	78	0	0	2	1 PR.
46	88	0	2	1	1 PR.
52	99	0	1	2	1 PR.
58	109	0	0	3	1 PR.
64	120	0	2	2	1 PR.
70	130	0	1	3	1 PR.

15° ELBOW

2	18	0	0	0	1 PR.
5	28	1	0	0	1 PR.
8	40	0	1	0	1 PR.
11	52	0	0	1	1 PR.
14	62	0	2	0	1 PR.
17	74	0	1	1	1 PR.
20	85	0	0	2	1 PR.
23	96	0	2	1	1 PR.
26	107	0	1	2	1 PR.
29	119	0	0	3	1 PR.
32	129	0	2	2	1 PR.
35	141	0	1	3	1 PR.

* RISE is the number of inches in vertical height reached by the combinations shown.

** OFFSET is the number of inches which the centerline of the chimney is moved horizontally by the combinations shown.

* The 912A Starter Section is equivalent to a 902 Chimney Section.

INSTALLATION OF THE 420, 620, 440, OR 640 CHIMNEY HOUSING:

SPECIAL NOTE: The Models 420, 620, 440, or 640 chimney housings are designed to be installed on several fireplace models. Make sure the housing you have is equipped with the proper size telescope to fit the chimney of your fireplace.

1. Unpack the chimney housing and identify all parts and fasteners.
2. Place the flashing halves around the top sections of the chimney with the flashing halves overlapped so that rainwater will run off the lap joint. (See Illustration No. 10.) If you are using the 440 or 640 chimney housing, the flashing extension should be used as shown on Illustration No. 11. If the chimney housing is being installed on a roof where the shingles have already been applied, the nails holding the shingles above the hole in the roof should be removed and the flashing pushed back under the shingles. When the installation of the chimney housing is complete, the shingles should be nailed back in place.
3. Lay out and cut the chimney housing to match the slope of the roof using the method described in Illustration No. 12.

NOTE: If the chimney housing is cut to the miminim allowable height, the chimney sections should not protrude beyond the highest point of the roof opening more than 13 inches.

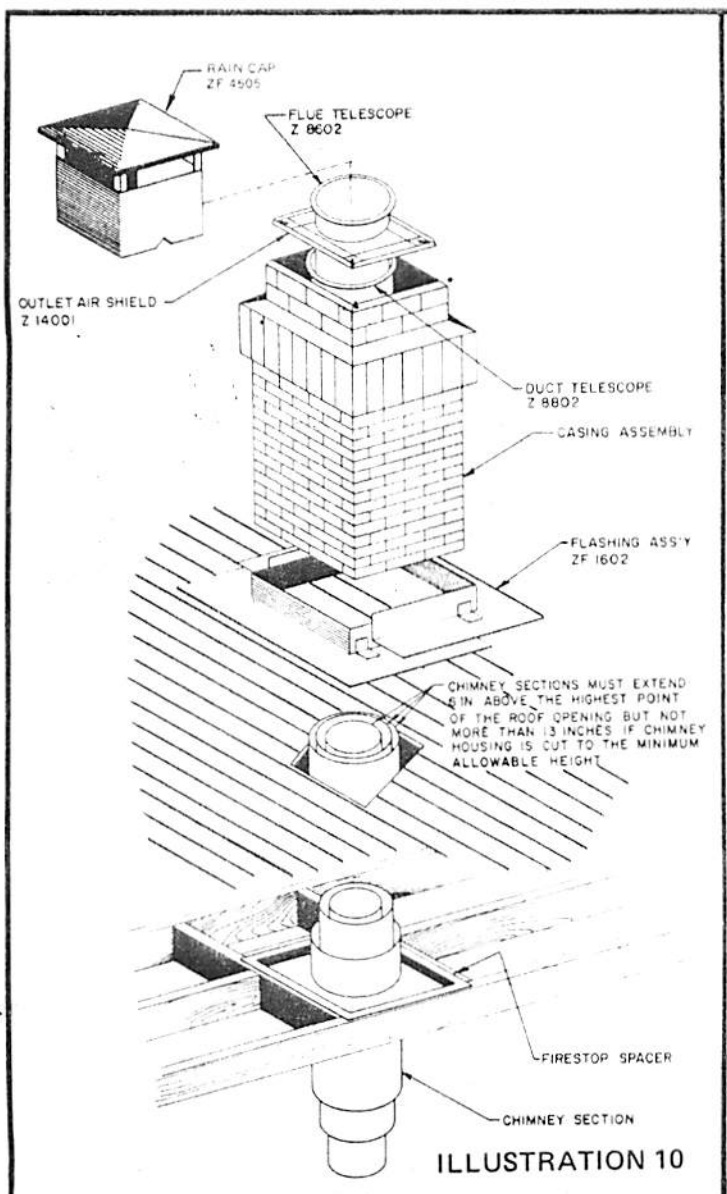


ILLUSTRATION 10

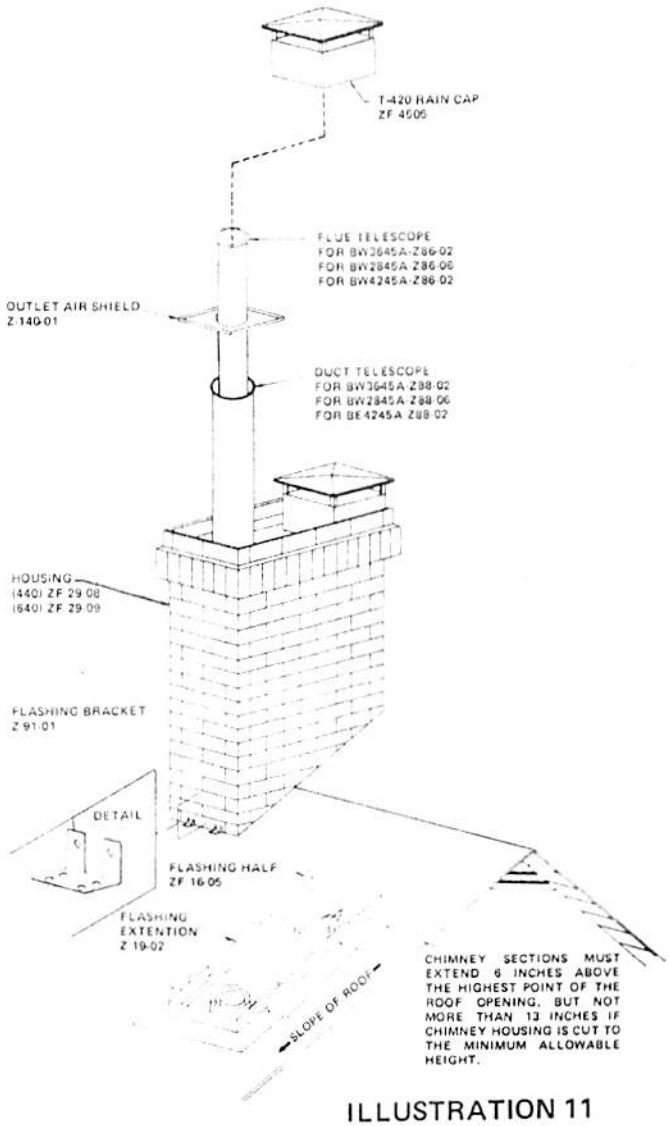


ILLUSTRATION 11

1. Set the chimney housing on the roof.
2. Place a level alongside of the chimney so that the lower corner of the level is even with the upper edge of the chimney housing (Point B).
3. Scribe a line along the lower side of the level. This line will match the roof pitch.
4. The chimney should be cut along this line to use the full height of the chimney. If less than the full height of the chimney housing is to be used, cut parallel to this line.

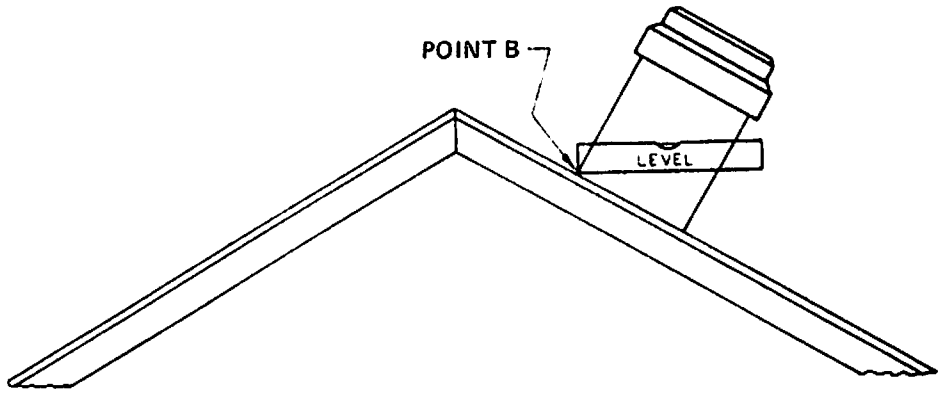


ILLUSTRATION 12

4. Lower the chimney housing over the flashing so that the cut edges of the chimney housing are inserted into the flashing brackets that are attached to the flashing (see Illustration No. 11). The additional flashing brackets included with the 440 and 640 chimney housing should be placed so that there are two brackets at each end and four along each side of the housing.
5. Insert the duct telescope down through the hole in the chimney housing and into the corresponding duct of the chimney section. Push down on the duct telescope until the flanged end of the telescope rests around the hole in the chimney housing. It may be necessary to move the chimney housing some in order to correctly align the ducts.
6. Place the outlet air shield (with outside flanges up) over the four vertical brackets, making sure the brackets fit tight to the outside edges of the slots in the outlet air shield.
7. Insert the flue telescope into the hole in the outlet air shield and into the last section of the flue pipe. Push down on the flue telescope until it enters the last section of the flue pipe 3" or more and so that the flanged end of the telescope rests on the flange of the outlet air shield.
8. Place the rain cap (all four vertical support brackets must be inside cap) on the brackets, then push downward until each bracket snaps into the slot in each corner of the rain cap. Be sure all brackets are in the slots.
9. Pull the two halves of the flashing apart until they fit firmly inside the chimney housing. Make the necessary adjustments to make sure the proper clearance exists on all sides of the chimney section where it passes through the roof opening.
10. Secure the flashing to the roof by driving two of the special nails provided into the holes provided in the horizontal leg of each of the flashing brackets. The nails should be driven through the flashing and into the roof structure. These nails should penetrate the blocking or rafters to hold the chimney housing securely.
11. Caulk around the perimeter of the flashing and along the edge of the shingles that overlap the flashing to avoid any possible leaks at this point.
12. Make sure the chimney housing is vertical and drill or punch eight 1/8" diameter holes in the chimney housing to align with the holes in the flashing brackets.
13. Fasten the chimney housing to the flashing with the No. 10 x 1/2" screws provided.
14. Caulk around the base of the chimney to prevent leaks.

SPECIAL CONSIDERATIONS:

If the 440 or 640 chimney housing is installed so that the wide side of the housing is parallel to the ridge of the roof, an extension should be made out of galvanized metal and applied to the upper side of the flashing to prevent water from backing up and running under the flashing. On low pitched roofs, it is advisable to construct a cricket above the chimney housing.

INSTALLATION OF THE MODEL 985A ROUND TERMINATION CAP:

SPECIAL NOTE: The proper chimney height as previously explained is important to assure proper draft and safety. The round termination extends the flue outlet 9 inches above the top of the last section of chimney. This should be kept in mind when determining the proper height for the chimney. In addition, the chimney should not be extended more than 90 inches above the supporting roof structure without additional support. In the case of "A" frame type construction or other steep pitch roofs that require more than 90 inches above the roof, a support should be attached to the chimney at the 90 inch level that is strong enough to support a wind load of 3-1/8 pounds for each inch the chimney extends above 90 inches.

1. Extend the regular chimney sections until the top of the chimney is 9 inches below the total flue height desired. Do not snap the last section of inlet air duct or largest diameter pipe in place until Step 3 is completed.

2. Remove the shingles from around the chimney so that the flashing may be installed as shown in Illustration No. 13 with the upper part of the flashing under the shingles.

3. Set the flashing on the roof and scribe a line around the flashing as described on Illustration No. 13, then cut the top off the flashing by cutting one-fourth inch below the scribed line. This should increase the diameter of the flashing outlet sufficiently to allow the flashing to be placed over the chimney.

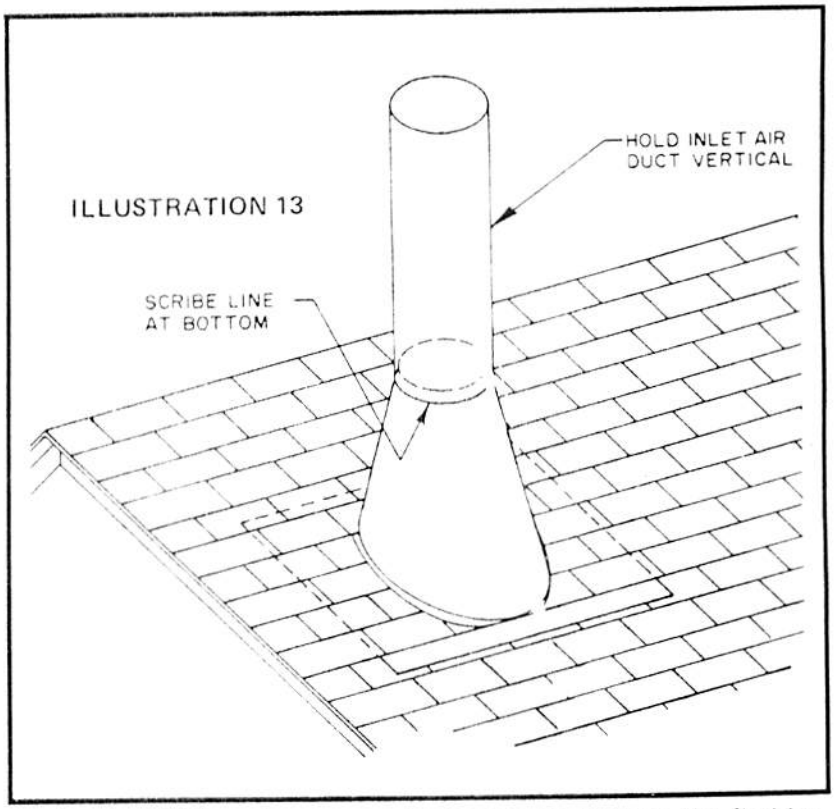


ILLUSTRATION 13

4. Snap the last section of inlet air duct in place and slide the flashing over the chimney. Adjust the chimney to assure that the proper minimum clearances between the chimney and all combustible materials at the roof level are maintained. When the proper clearances are assured, the flashing should be nailed securely in place with the eight lead head nails provided. (See Illustration No. 15 for identification of all round termination parts.)

5. Seal the crack between the top of the flashing and the chimney with mastic. Leave some excess mastic at this area to be used in Step 6.

6. Place the storm collar around the chimney. Then put the collar together like a belt in belt-loops. Slide the end of the collar under the two "loops" on the other end, with the loops facing up. Overlap the ends of the collar until it is tight against the chimney. Bend the end back over the loops to hold the storm collar securely together. The excess of the storm collar may be trimmed off.

NOTE: It is advisable to use pliers and wear gloves when performing Step 6 to minimize the danger of cutting your hands on the edge of the storm collar.

*7. Slide the storm collar down snugly against the flashing until the excess mastic left in Step 5 is forced up into the crack between the storm collar and the chimney. This should make the joint between the flashing and the chimney watertight.

8. Lower the base assembly of the round termination over the last section of chimney; then punch or drill 3/16" diameter holes in the inlet air duct opposite the brackets at the bottom of the base assembly. Fasten the base assembly in place by putting one of the 10-24 x 1/2 bolts provided through the base brackets and into the inlet air duct and tighten these in place with the nuts provided.

9. Slide the duct telescope down into the base assembly and telescope it into the outlet air duct. The duct telescope should be pushed down until the flanged end of the duct telescope rests on the vertical flange around the hole in the chimney base.

10. Slide the flue telescope down into the duct telescope and telescope it into the flue. The flue telescope should be pushed down until the flanged end of the flue telescope and the deflector rests on top of the brackets welded in the end of the duct telescope.

11. Place the rain cap over the chimney base assembly and fasten it in place by inserting screws through the holes in the rain cap and into the matching holes in the legs of the chimney base.

FINAL CHECK

Inspect all parts of the fireplace, chimney, and chimney termination to assure that no parts have been damaged or bent during installation, all parts have been installed properly, and all parts of the chimney fit.

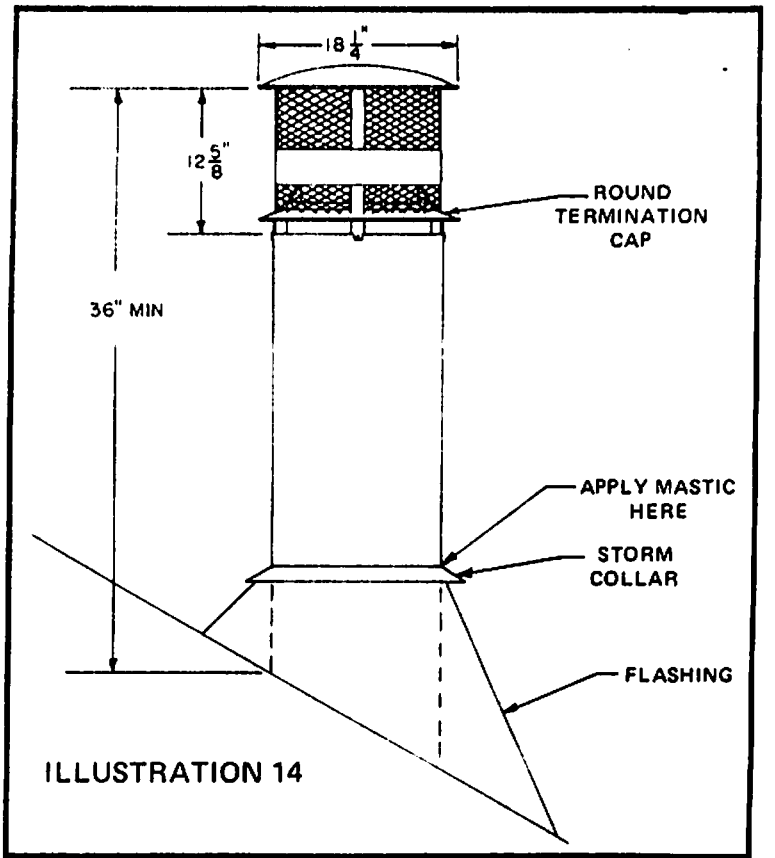


ILLUSTRATION 14

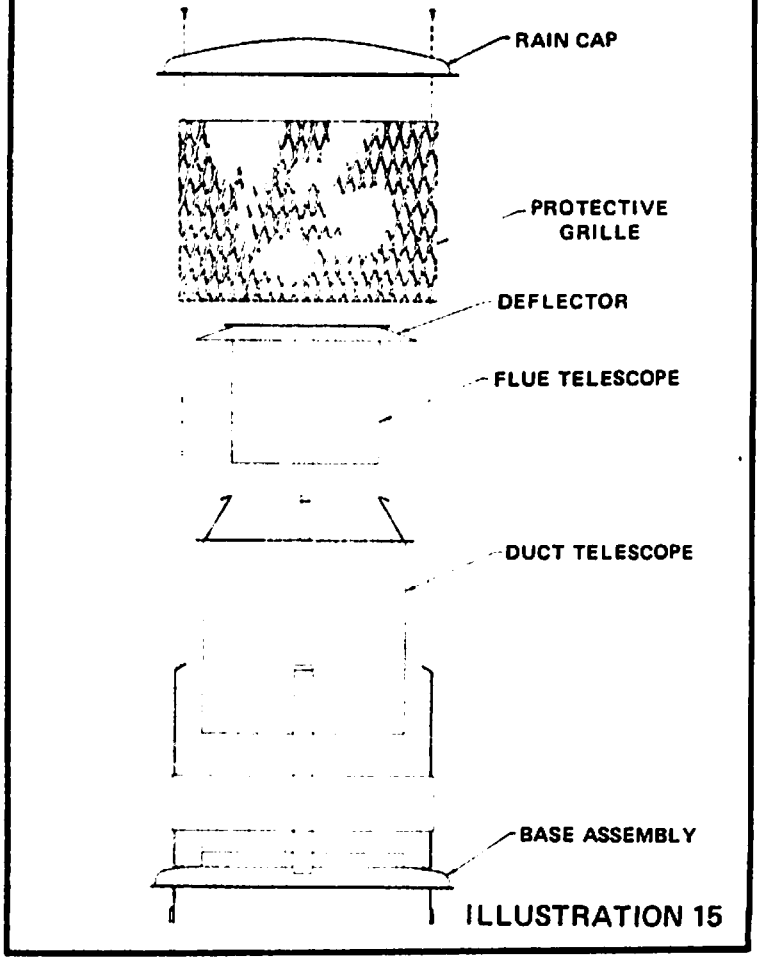


ILLUSTRATION 15

LOCATION OF THE INLETS AND OUTLET REGISTERS FOR THE HEAT CIRCULATION SYSTEM:

A minimum of two inlet and two outlet registers must be located in the same room with the fireplace opening. Connectors are provided on the fireplace for two outlets. If two inlets and two outlets are installed in the room as noted above, then additional outlets may be installed in rooms adjacent to the fireplace. It should be noted that additional outlets will not increase the heat output of the fireplace, but will only circulate the heat to a larger area.

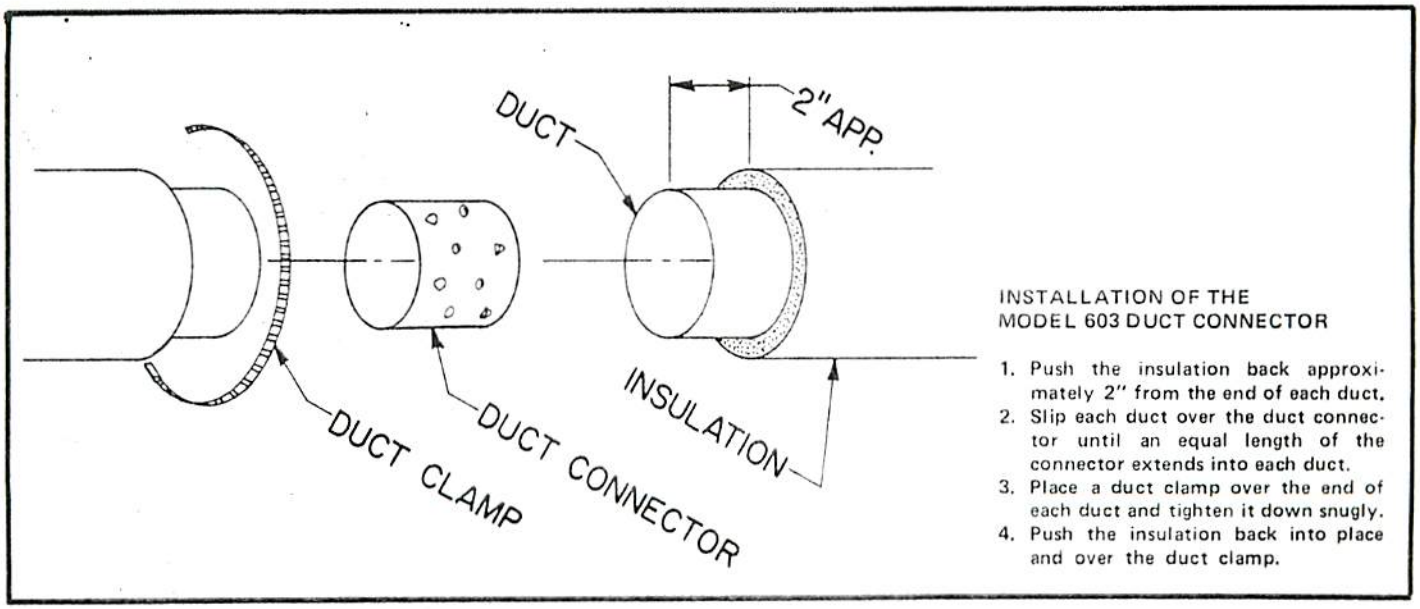
The boxes intended for the inlet are not insulated. Be sure only insulated outlet boxes are used for the circulating air outlets.

The following are a list of guidelines for register location:

1. The register location should be such that the length of the connecting ducts do not exceed 14 feet. If ducts are installed that exceed 14 feet, the safety of the fireplace may be affected. Long runs of ducts have a higher resistance to air flow, thus lowering the efficiency of the fireplace.
2. The inlet registers should be located as near the floor as possible.
3. The outlet registers should be located as high as possible, but within the limits as indicated on Illustration No. 2.
4. The higher the outlet is located above the fireplace, the larger the volume of air that will be emitted from the outlet. Therefore, if most of the circulated heat of the fireplace is desired in an adjacent room, the ducts in the adjacent rooms should be installed at a level above the outlets located in the room with the fireplace.
5. The installation of circulating air outlet register in areas not normally heated such as a garage can result in cold air being brought into the living area from the unheated area when the fireplace is not in use. This condition will also reduce the outlet air temperature when the fireplace is in use.
6. You may use optional blower packages, Model BL-36, in place of air inlet boxes, Model 601. Refer to installation instructions for BL-36.

DUCT INSTALLATION:

Only Martin Type FP, insulated, six-inch diameter, flexible duct should be used. Failure to do so may cause a safety hazard. This duct can be cut with a regular pocketknife. To splice duct, use Model 603 Duct Connector as shown in Illustration No. 16. The fireplace and all inlet/outlet air boxes are equipped with special tubes for the attachment of duct.



INSTALLATION OF THE
MODEL 603 DUCT CONNECTOR

1. Push the insulation back approximately 2" from the end of each duct.
2. Slip each duct over the duct connector until an equal length of the connector extends into each duct.
3. Place a duct clamp over the end of each duct and tighten it down snugly.
4. Push the insulation back into place and over the duct clamp.

ILLUSTRATION 16

1. Remove the covers from the tubes on the fireplace that are to be used for duct connections. Do not remove the covers from any of the tubes that will not be used for duct connections.

NOTE: The covers attached to the tubes on the fireplace are marked to identify the purpose of each tube. The tubes marked as "Circulation Air Outlets" are intended for connection to the Model 602 (this is the only box with insulation inside it). "Circulating Air Inlets" are to be connected to Model 601. "Combustion Air Inlets" are to be connected to Model 604. If any of the accessories are attached improperly, hazardous operation of the fireplace will occur.

2. Select, cut, or splice together a piece of duct of sufficient length to attach to the fireplace and protrude at least three (3) inches beyond the face of the wall to which each inlet or outlet box is to be attached. If the duct must be cut, this can be done with a standard pocketknife. If two or more pieces of duct must be spliced together, refer to Illustration No. 16 for splicing instructions.

3. Push the insulation back from one end of the ducts approximately two (2) inches (see Illustration No. 16).

4. Slip the exposed end of ducts over the flanged tubes of the fireplace.

5. Place the duct clamp around the exposed end of the duct.

6. Slip band through housing, then pull band tight around the duct.

7. Snap screw down and tighten with screwdriver. (See Illustration No. 17).

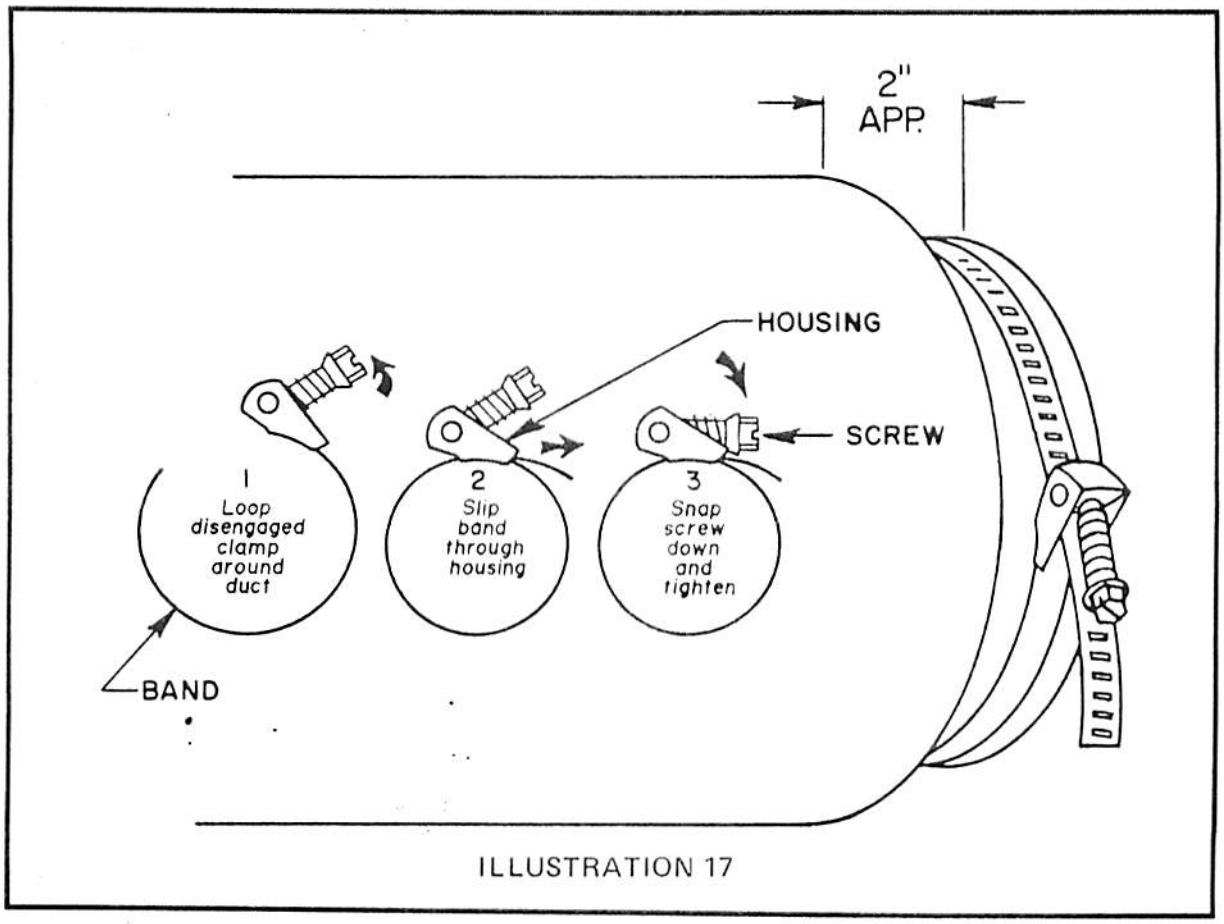


ILLUSTRATION 17

INSTALLATION OF THE HEAT CIRCULATION SYSTEM INLET AND OUTLET BOXES (MODELS 601 AND 602).

The mounting brackets for the inlet and outlet boxes are designed to provide easy installation of the boxes on either finished or unfinished walls. If the walls are finished, the mounting brackets should be installed with Point "A" as indicated on Illustration No. 18 even with the face of the wall. If the brackets are to be installed before the wall covering is applied, Points B, C, or D should be even with the face of the wall studs. Point B should be used if the wall covering will be 1/4 inch thick; Point C for 3/8 inch wall covering, and Point D for 1/2 inch wall covering.

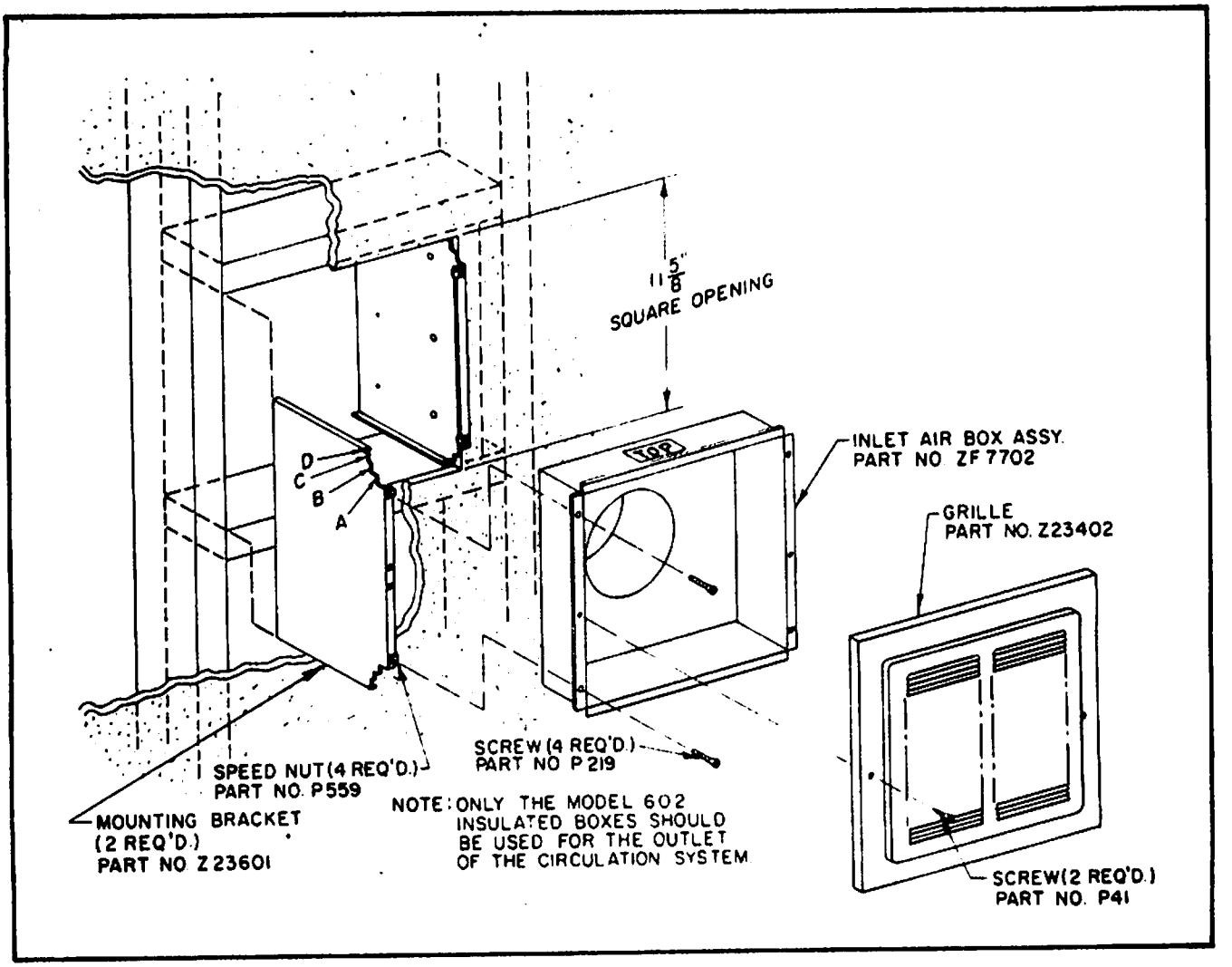


ILLUSTRATION 18

Installation Procedure.

1. Frame an 11-5/8 inch square opening in the stud wall at each intended location for an inlet or outlet box.
2. Nail the mounting brackets in place as shown by Illustration No. 18 at the proper position to allow for the wall covering material as indicated above.
3. Attach the inlet or outlet box to the duct so that in Step 4 the side of the box labeled "Top" will be up.
4. Push the inlet or outlet box into position over the mounting brackets and attach it to the mounting bracket with the flat head machine screws provided.
5. Attach the grille to the inlet or outlet box with the oval head screws provided.

INSTALLATION AND USE OF THE MODEL 604 COMBUSTION AIR ASSEMBLY:

The location of the register for the combustion air assembly is a matter of extreme importance. The following requirement and suggestions should be carefully read and understood:

1. The center line of the combustion air duct at the point where it connects to the combustion air inlet box should be level with or below the center line of the duct where it attaches to the fireplace. **Under no conditions should the center line of the duct at the combustion air inlet box be above the center line of the duct at the fireplace. Failure to observe this requirement could result in hazardous operation of the fireplace.**

2. The combustion air inlet box should be located on an exterior wall in a location where register is not likely to be accidentally blocked in any manner. Should the register become blocked, heated room air will be substituted for the outside combustion air that would be drawn through the ducts, thus lowering drastically the efficiency of the fireplace.

3. Extremely long runs and numerous turns in the duct leading from the fireplace to the combustion air inlet box should be avoided. These conditions will increase the resistance to the free flow of air through the duct, thus lowering the efficiency of the fireplace.

4. The louver openings behind the screen in each side of your fireplace should be open when a fire is in progress to allow combustion air to flow from the outside into the firebox of the fireplace. When a fire is not in progress, the damper behind these openings should be closed to prevent cold air from flowing into the dwelling.

5. To close the dampers behind the combustion air inlets inside the fireplace, pull the control chain and lock it in the keyhole. To open the damper, release the chain from the keyhole slot in the face of the combustion air inlets.

6. Combustion air boxes on the outside wall should not be recessed in the wall, but mounted so that the full thickness of the combustion air box extends beyond the wall surface.

7. Combustion air inlet assemblies should never be mounted in the garage or storage area where combustible fumes such as gasoline fumes might accumulate and be drawn into the firebox.

8. Combustion air can be drawn from the crawl space under the house only when an adequate supply of air is provided by open ventilation.

INSTALLATION PROCEDURE:

1. Construct or cut a nine-inch diameter hole in the outside wall covering at each place where an outside register is to be located. (See Illustration No. 19).

2. Attach the duct to the combustion air inlet box by the same method used to attach the duct to the fireplace.

3. Nail the combustion air inlet box to the surface of the wall.

NOTE: If the wall covering is brick or stone, appropriate masonry fasteners will have to be used.

4. Push the speed nuts provided over the uppermost set of holes in the flange of the inlet box and install the grille with the openings in the grille angled down so as to prevent rain from falling into the grille openings.

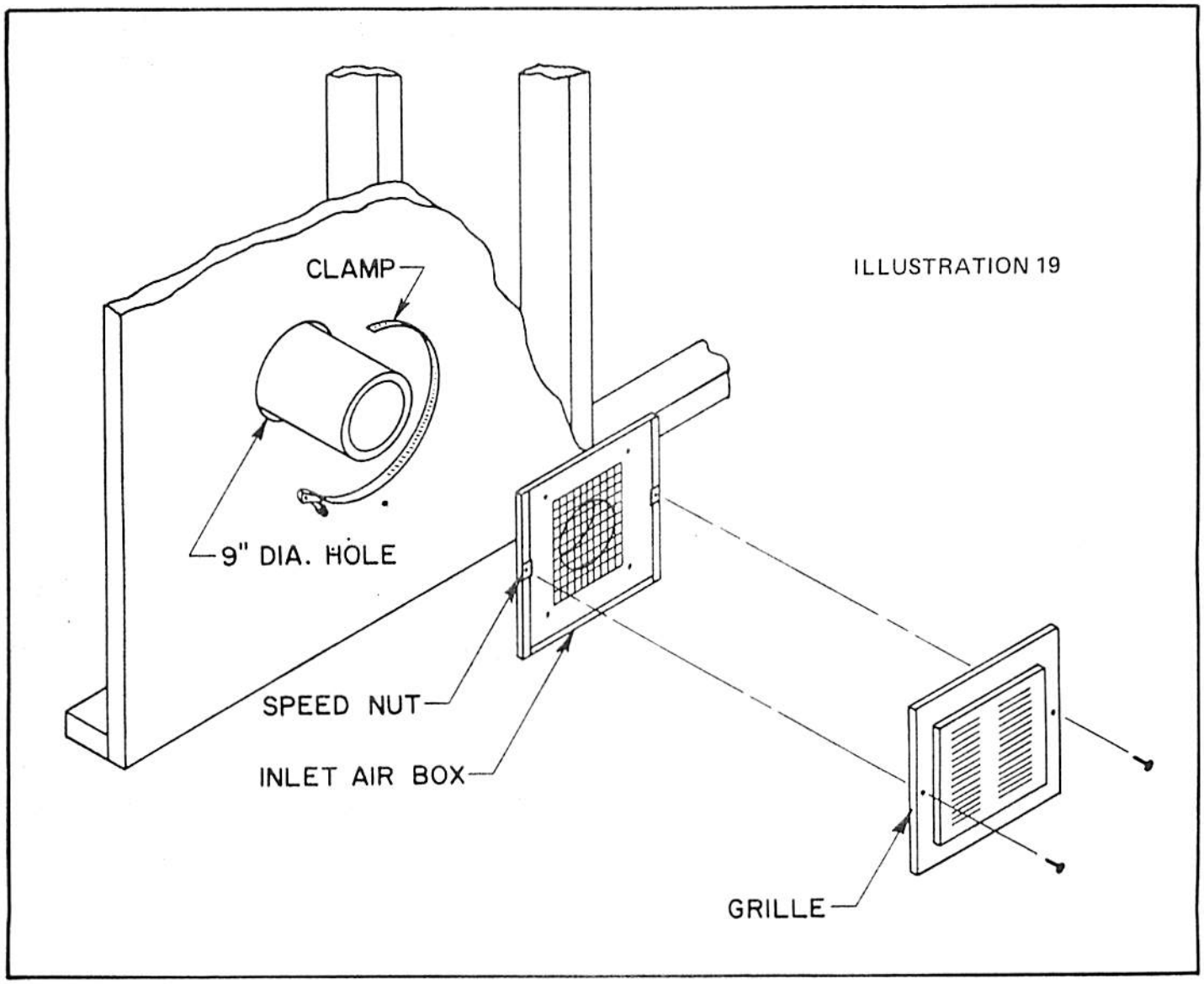


ILLUSTRATION 19

INSTALLATION OF OPTIONAL BLOWER PACKAGE -- MODEL BL-36:

NOTE: Use of this blower on the fireplace will increase the volume of air flow through the fireplace and reduce the outlet air temperature.

This blower should be connected to a properly fused circuit with wiring that complies with the requirements of National Electrical Code and applicable local codes.

1. Frame an 11-5/8 inch square opening in the stud wall at each intended location for a blower box. Minimum required vertical spacing between the blower box and outlet box is shown by Illustration No. 2.

2. Nail the mounting brackets in place as shown by Illustration No. 20 at the proper position to allow for the wall covering material. The mounting brackets for the blower boxes are designed to provide easy installation of the boxes on either finished or unfinished walls. If the walls are finished, the mounting brackets should be installed with Point "A" as indicated on Illustration No. 20 even with the face of the wall. If the brackets are to be installed before the wall covering is applied, Points B, C, or D should be even with the face of the wall studs. Point B should be used if the wall covering will be 1/4 inch thick; Point C for 3/8 inch wall covering, and Point D for 1/2 inch wall covering.

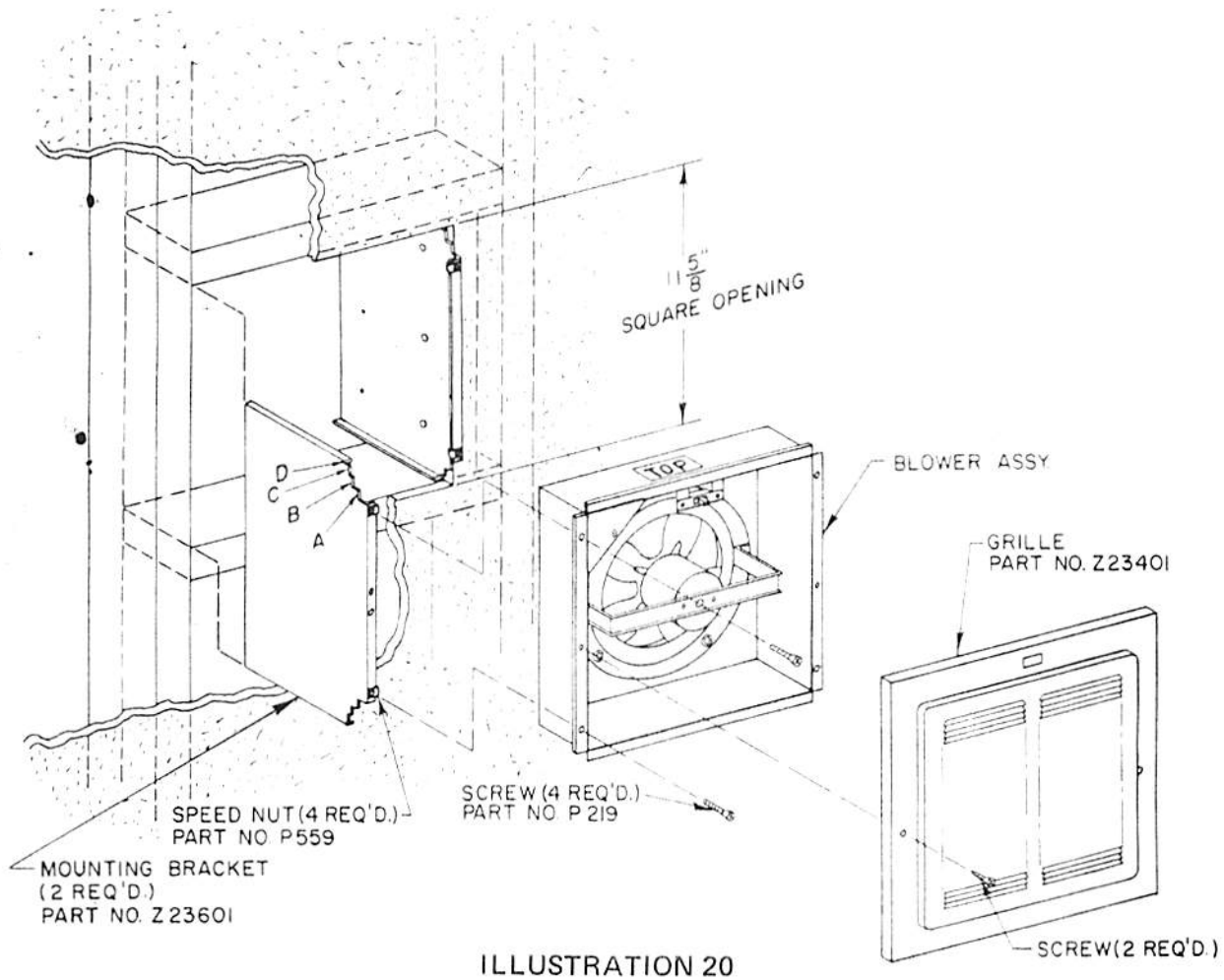


ILLUSTRATION 20

3. Remove the junction box front (see Illustration No. 21).

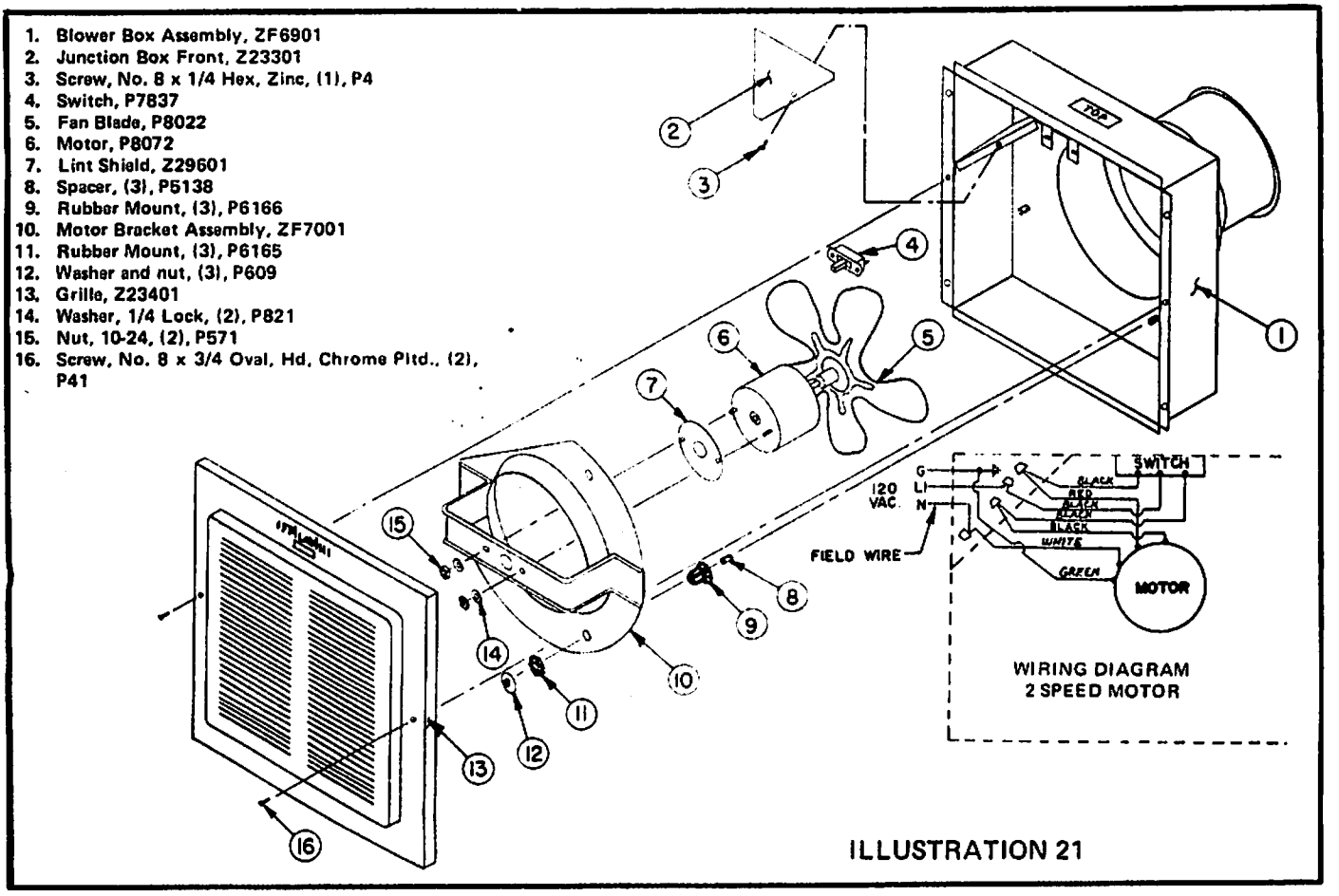


ILLUSTRATION 21

4. Attach the blower box to the duct so that the side of the box labeled "TOP" will be up when the box is eventually installed in the wall.

5. Install a conduit connector or cable clamp in the hole provided in the back of the wiring box. Feed the field wires through the box and connect the conductors as shown in the wiring diagram on Illustration No. 21.

6. Push the blower box into position over the mounting brackets and attach it with the flat head machine screws provided.

7. Re-install the junction box front.

8. Place the grille on the blower with the switch button protruding through the slot provided and attach the grille to the box with the oval and head screws.

NOTE: Failure to properly install the blower can cause cold air from the wall cavity to be mixed with the room air and reduce the heat output of the fireplace.

PREPARATION OF BWH-36A FOR ACCEPTANCE OF A GAS APPLIANCE:

1. Remove the two screws holding the firebox right side, and remove the firebox right side. (Refer to Illustration No. 22)

2. Push out the plug in the bottom of the firebox right side.

3. Remove the three screws that hold the cover plates on the firebox wrap.

4. Discard the cover plate that does not have the 15/16" hole in the center.

5. With a screwdriver or other suitable tool, push the loose fiberglass insulation out of the tube that is attached between the firebox wrap side and the jacket side.

6. Slide the 1/2" pipe for the gas appliance through the tube between the firebox wrap side and the jacket side.

7. Slip the cover plate over the end of the pipe.

8. Fasten the gas appliance to the pipe and move the appliance to its desired location.

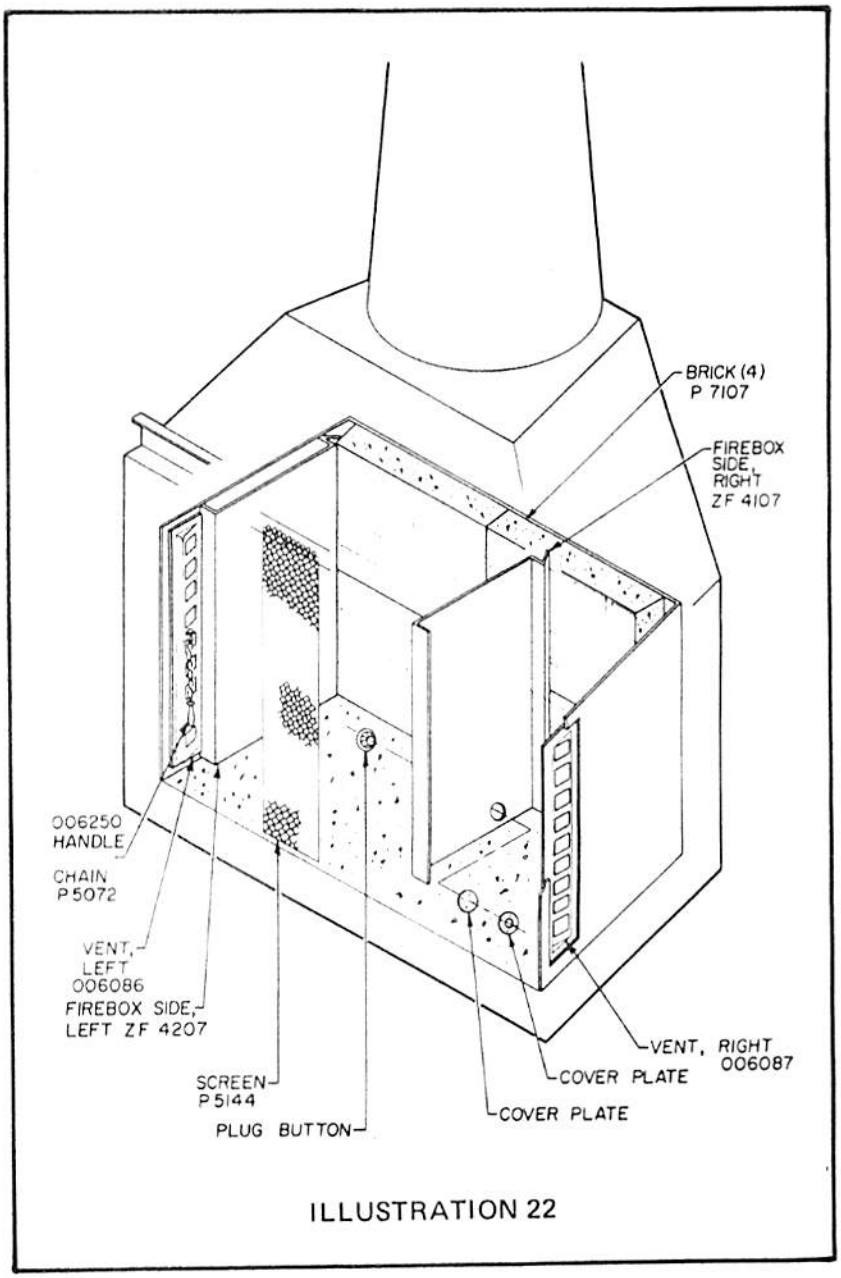


ILLUSTRATION 22

9. Pack the insulation removed in Step 5 around the pipe.

10. Push the cover plate back into position on the firebox wrap and jacket wrap and re-attach them with screws.

NOTE: It may not be possible to place the screws back into the existing holes in the firebox wrap. If this occurs, new 1/8" holes may be drilled for screws.

11. Unscrew the appliance and replace the firebox right side and fasten it with the two screws previously removed.

ATTACHMENT OF THE FIRESCREEN FOR PROPER OPERATION:

To finish installation of screen, follow these special instructions:

1. Remove the polyethelene sheets from the screen halves.
2. Locate the four spring clips (2 on each side) on the sides of the fireplace opening.
3. Let the screen hang down alongside these clips. Remove the clips and insert them into a strand of the screen.
4. Re-insert the clips into the fireplace side. (A pair of needle-noise pliers are ideal for this job; however, regular wire pliers can be used). When closing the screen, these clips will keep the screen from pulling away from the sides.

ADDING DECORATIVE TRIM TO YOUR FIREPLACE:

The face of your fireplace may be left exposed or trimmed with any noncombustible material such as brick, stone, marble, or factory-built metal trims. If a facing trim is installed, be sure it is fastened snugly to the face of the fireplace. A crack between the trim material and the face of the fireplace could pose a fire hazard and impair the proper operation of the fireplace. If the fireplace is blocked in by framing so as to prevent any movement of the firebox, this will further reduce the possibility of such a crack developing.

If a masonry trim is added to the fireplace, wall ties should be fastened to the face of the fireplace with sheet metal screws and placed in the mortar joints of the masonry trim.

A metal strip should be placed under the front edge of the fireplace as shown in Illustration No. 2. This is an extra precaution should a crack ever develop between the face of the fireplace and the hearth extension portion of the fireplace trim.

Combustible materials should not be placed in contact with the black painted portion of the fireplace face.

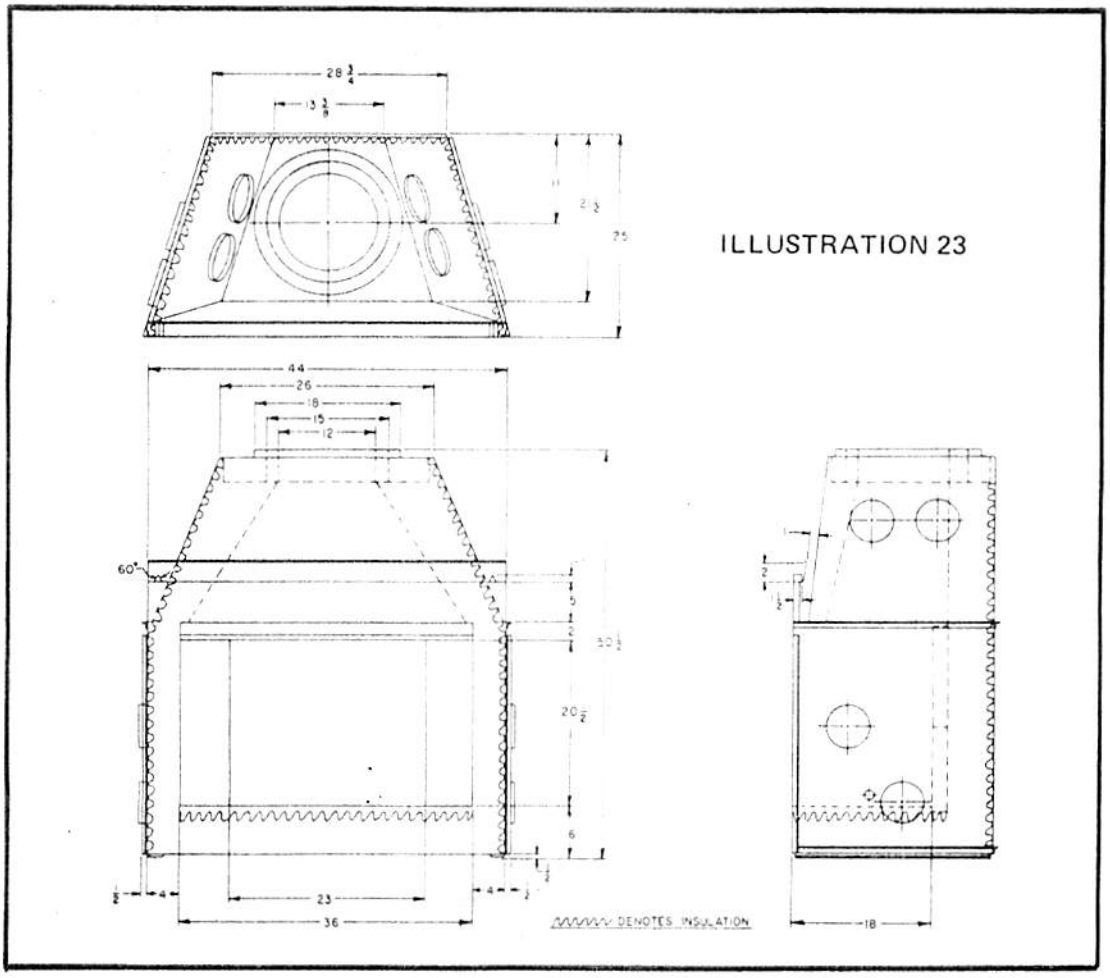


ILLUSTRATION 23

HOW TO GET MAXIMUM PLEASURE FROM YOUR NEW MARTIN FIREPLACE . . .

YOUR MARTIN FIREPLACE . . . PRACTICAL, ECONOMICAL, REASSURING.

As a supplement to your heating system, your new Martin Fireplace not only adds comfort to your home; it provides you with a practical means of coping with the fuel energy shortage.

Quite likely, you'll find a small fire sufficient to dispel the early morning and evening chill in spring and fall. And a small fire does the job with less fuel than a large, whole-house heating system.

In times of emergency, when power lines are down or deliveries of fossil fuels disrupted, your fireplace can be used not only for heating, but for cooking as well!

ADVANTAGES OF A WOODBURNING FIREPLACE

A point to consider, especially in these times, is that wood is a renewable fuel resource. Coal, oil, and gas, once used, cannot be replaced. But new trees can always be planted to maintain a consistent supply.

A further advantage of wood is that it has a low ash content. And the little ash that remains after burning is useful in home gardening as a fertilizer and soil conditioner.

These are the practical, ecological advantages of wood as a fuel. Also to be considered is the aesthetic appeal. Most of us consider a wood fire with nostalgia. We enjoy the aroma, and find the flickering light of a cozy hearth conducive to a happy remembrance of things past.

WHICH WOODS ARE BEST?

Each wood species offers something different in aroma or heat value, and you should consider your needs and desires before building your fire.

Softwoods, like pine, spruce, and fir are easy to ignite because they are resinous. However, a fire built entirely of softwoods burns out quickly and requires frequent replenishment. While a softwood fire is not too desirable for a long evening, it's fine in the morning when you want quick warmth, or for late evening when you want a fire that will burn out before you go to bed.

On occasions when a longer fire is desired, it's best to combine softwoods with the heavier hardwoods such as ash, beech, birch, maple, oak, and hickory. These hardwood species burn less rapidly, with shorter flames, and produce steady, glowing coals.

For the most pleasing aroma, you'll want to burn the woods of fruit trees such as apple and cherry, or nut trees such as beech, hickory, and pecan. Such wood is generally more expensive, but a little combined with other woods, goes a long way. Start your fire with a mixture of softwood and hardwood; then add some fruit or nut woods for nostalgic wood aroma.

Since most woods will not burn well when freshly cut, the wood you purchase should be reasonably dry. The sizes you buy are dictated by the size of your fireplace. Purchase logs that will fit when laid across your grate, and ask that the larger, heavier logs be split. Kindling should be short, easily-split lengths of softwood, lumberyard or mill scraps, or twigs and branches gathered from your yard.

HOW TO BUILD A BETTER FIRE

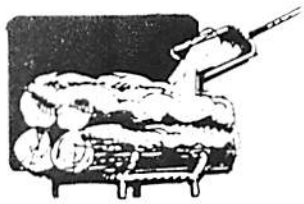
First, make sure your room is well ventilated, your damper open, and the flue unplugged. Then make sure your wood is dry and seasoned. Unseasoned wood, coupled with poor ventilation or an obstructed chimney, leads to all sorts of irritation, affecting your eyes, nose, and temper.

Open your outside combustion air inlets.

Begin laying your fire by placing two logs on the iron grate or firebasket, and laying the tinder between them. Tinder may be dry scrap paper, twigs, or dry bark. Next, place above this a small handful of twigs or split softwood kindling. Then place more dry logs over this base. Keep logs close together, since narrow air spaces between them promote better drafts, and heat reflected between adjacent surfaces aids in raising and maintaining combustion temperatures.

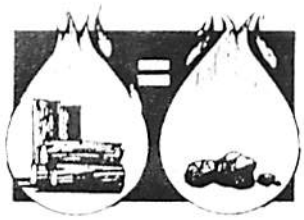
You'll need a minimum of three logs, and preferably four, to make a good fire. Add kindling and new logs as needed to rekindle a dying glow. New logs should be added at the rear grate after raking the coals toward the front.

Ashes, important because they form a bed for glowing coals, should only be left to accumulate within an inch or two of the bottom of the grate. Excess ashes can be used to check a flaming fire; or to "bank" your fire, cover the logs with ashes. A "banked" fire will hold glowing coals for 8-10 hours, thereby saving a morning fire for evening use, or vice versa.



WOOD VS. FOSSIL FUELS

Compared to fossil fuels, a full cord of dry hickory weighs about two tons and is approximately equal in heating value to a ton of hard coal. On a pound for pound basis, heavy hardwoods have about half the heating value of coal.



The following tabulation shows the relative densities and heat values of a variety of dry woods. Those toward the top of the list burn longer. Those toward the bottom ignite and burn quicker; therefore, the best fire is a combination of both light and heavy woods.

SPECIES	DENSITY	HEAT VALUE	SPECIES	DENSITY	HEAT VALUE
Dogwood	.70-.79	100-107	Ash	.57-.61	81-82
Hickory	.70-.74	100	Southern Pine	.51-.60	73-81
Oak	.60-.73	86-99	Elm	.50-.59	71-80
Black Locust	.69-.70	95-98	Cherry	.50-.52	70
Beech	.64-.66	89-91	Douglas Fir	.45-.51	64-69
Hard Maple	.58-.65	83-88	Spruce	.41-.44	59
Birch	.55-.64	79-86	Redwood	.33-.40	47-54
Apple	.58-.62	83-84	White Pine	.35-.37	50

A FEW WORDS OF CAUTION

Beware of burning certain materials in your fireplace. Among these are plastics, poison ivy twigs and stems, and chemically treated woods such as discarded poles and railroad ties. These not only create air pollution, but can induce extreme irritation for some individuals.

Use hemlock, spruce, juniper, and other resinous woods with caution. They contain moisture pockets which, upon heating, "pop" with considerable vigor.

Always use a firescreen. And always "bank" a fire, or, at least, push all unburned fuel to the rear of the grate before leaving a fire unattended. Do not use this fireplace as an incinerator.

ENJOY . . . ENJOY!

Used properly, your new Martin Fireplace will serve you well. It will be a source of pleasure and comfort through many years to come.

CHIMNEY CLEANING

The chimney needs cleaning to prevent chimney fires and to improve the draft. How often the chimney is cleaned depends on how frequently the fireplace is used. The chimney should be cleaned after every third cord of wood is burned or once every year. Any time an inspection shows approximately 1/8 inch layer of soot and creosote, the chimney should be cleaned.

Chimneys are cleaned by mechanical means to scrape off any loose creosote build up. Rain caps must be removed and front of the fireplace closed with plastic or plywood before doing any cleaning work on the chimney. To clean the chimney pull a bag containing wire, or ball of wire mesh, weighted with chains or rocks up and down the chimney. Stiff wire chimney cleaning brushes are used by professional chimney sweeps and are available at reasonable cost. Take extra care climbing steep roof and ladder on the roof.

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