

READ AND SAVE THESE INSTRUCTIONS INSTALLATION and OPERATING INSTRUCTIONS

for



Whirlpool VENTED RANGE HOOD

RGH 8300-1 S
RGH 8300-2 S

TO INSTALL RANGE HOOD

This unit can be vented vertically through upper cabinets or horizontally through an outside wall. A typical vertical installation is shown in Figure 1. A typical horizontal installation is shown in Figure 2. For proper ventilation when used with an indoor electric grill, see page 2 for guidelines for proper duct sizing. Improper duct sizing or installation of restrictive roof jacks can reduce air moving capacity and provide inadequate ventilation for an indoor electric grill. For most efficient smoke removal, the top of the hood should be approximately 56 inches (137.6 cm) from the floor.

1. Make a template or transfer measurements shown in Fig. 3 to cabinets or wall.

2. Cut holes to accommodate ventilating duct allowing $\frac{1}{4}$ " (.6 cm) clearance on all 4 sides for back vent. Allow $\frac{3}{4}$ " (1.9 cm) clearance toward front for vertical vent. Allow $\frac{1}{2}$ " (.6 cm) on other 3 sides for top vent.

3. Cut appropriate hole for electrical wiring.

4. Run wire through wall or cabinets according to National Electrical Code and applicable local codes. (DO NOT turn power on until installation is complete.)

5. For an easier installation, remove the filters and the three assemblies shown in Fig. 4. This reduces the weight about 40%. The blower cover and light frame assembly are held into place with thumb screws. To remove the blower assembly, first unplug the blower power supply cord from the junction box. Remove the packing screw from the blower retaining rod, then pull the blower retaining rod to one side, freeing it from between the bumps on the blower housing.

6. Remove screw holding junction box cover.

7. Remove proper electrical knockout. See Figure 3.

8. Remove proper venting knockout. See Figure 3. NOTE: If horizontal discharge is selected an additional knockout in the blower cradle must be removed.

9. Attach the damper as shown in Figure 5 for vertical discharge or Fig. 6 for horizontal discharge.

10. Lift the hood into position. Mark location of four mounting holes.

11. Remove hood and start all four screws in center of narrow neck of keyhole slot marked on cabinet bottom.

12. Lift the hood into position simultaneously feeding the electrical wire through the knockout. Follow applicable local codes and/or latest National Electrical Code for electrical connector to be used at field wiring entrance.

13. Tighten screws to secure hood. Be sure screw head is in narrow neck of keyhole slot.

14. Install proper duct work. See page 2.

15. Complete electrical wiring in junction box according to the National Electrical Code and applicable Local Codes. NOTE: This unit must be permanently grounded in accordance with the National Electrical Code and applicable Local codes.

16. Replace junction box cover.

17. Replace blower. See page 3 for proper blower orientation.

18. Replace blower cover, light frame assembly and filters.

NOTE: It has been found that a large part of the energy loss of the average home is due to outside air infiltrating the structure. Seal around ductwork where it passes through outside walls or ceiling. Seal around electrical wiring also.

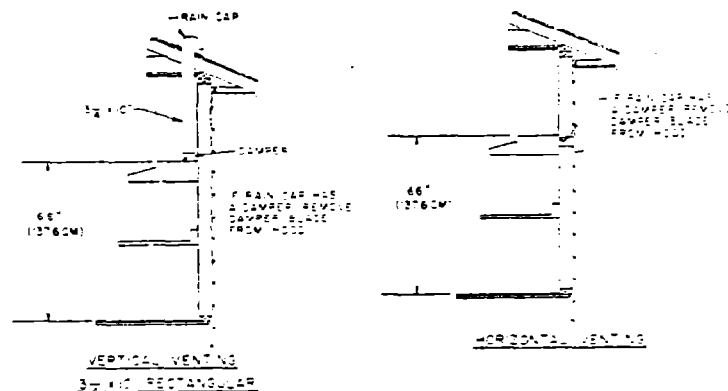


FIGURE 1

FIGURE 2

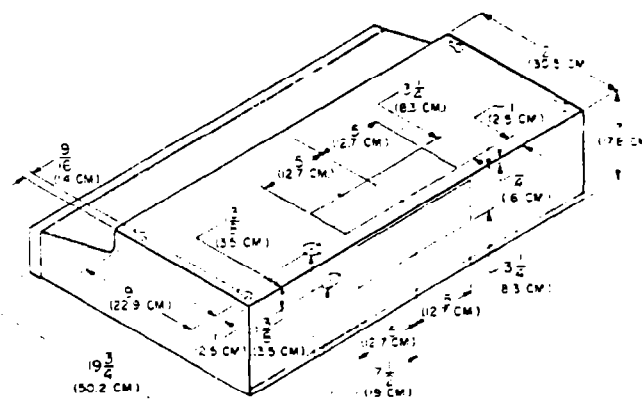


FIGURE 3

L WIRING KNOCKOUT

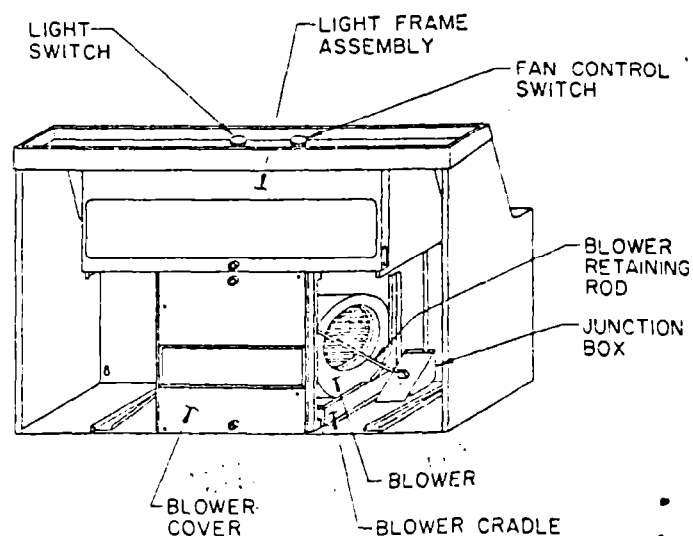


FIGURE 4

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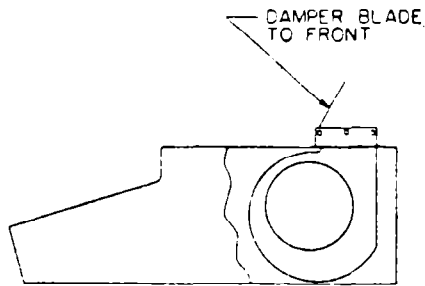


FIGURE 5

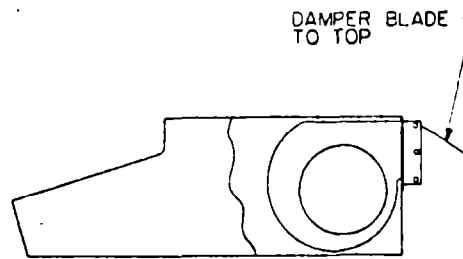


FIGURE 6

Guideline to Proper Duct Sizing for Ventilating An Indoor Electric Grill

These Guidelines are to insure adequate ventilation for an indoor Electric Grill. Indoor electric grills produce more smoke than normal cooking and requires at least 410 CFM to provide adequate ventilation. Less stringent ventilating requirements can deviate from these recommendations.

HORIZONTAL VENTING:

Figure 2 on page 1 shows a direct discharge to the outside through a wall rain cap. Due to the lower CFM rating in this venting position, duct must be limited to a maximum of 2 feet of 3 1/4 x 10 inch duct capped with a wall rain cap with a free discharge area of at least 66 inches square. There should be no bends in the connecting duct between the hood and the wall rain cap.

VERTICAL VENTING:

Figure 1 on page 1 shows an installation using 3 feet of 3 1/4 x 10 inch duct terminating in a roof rain cap. In table 1 we see that 3 feet of 3 1/4 x 10 inch duct is the maximum length of 3 1/4 x 10 inch duct recommended.

Figure 7 shows an installation requiring more duct length. A transition to round is used as close to the hood as possible to eliminate the restriction caused by the 3 1/4 x 10 duct. 45° bends should be used instead of 90° bends wherever possible.

For example, if the straight lengths of duct in Fig. 7 total 9 ft. the elbow is 45° and the roof rain cap has 113 in² free area, choose the duct size required. The 45° elbow can be approximated by dividing the equivalent duct lengths in Table 2 by two.

Since we already have 9 ft. of straight duct, Table 1 tells us that 7" dia. is too small. So we try 8" dia.

$$\frac{9 \text{ ft. Straight Duct}}{6 \text{ ft. Equivalent straight length of } 45^\circ \text{ elbow (8" Dia.)}} = 15 \text{ ft.}$$

Fifteen feet is over the maximum of 13 ft. for 8" dia. duct, so 8" duct is too small.

Move to 9" dia. duct and run through the calculations again.

$$\frac{9 \text{ ft. Straight Duct.}}{7 \text{ ft. Equivalent straight length of } 9^\circ \text{ dia. duct for } 45^\circ \text{ elbow.}} = 16 \text{ ft.}$$

Sixteen feet is under the maximum of 25 ft. for 9" dia. duct, so 9" duct is a good choice.

TABLE 1
Vertical Venting

Duct Size	3 1/4 x 10"	7" dia.	8" dia.	9" dia.	10" dia.
Max. Duct Length (Feet)	3	7	13	25	40

Table 1 shows the maximum length of duct to be used in conjunction with a roof rain cap having a free area of 113 in².

TABLE 2

	Duct Size	Equivalent length of straight duct of same dia.
90° Elbow	7" dia.	11 ft.
	8" dia.	12 ft.
	9" dia.	14 ft.
	10" dia.	16 ft.

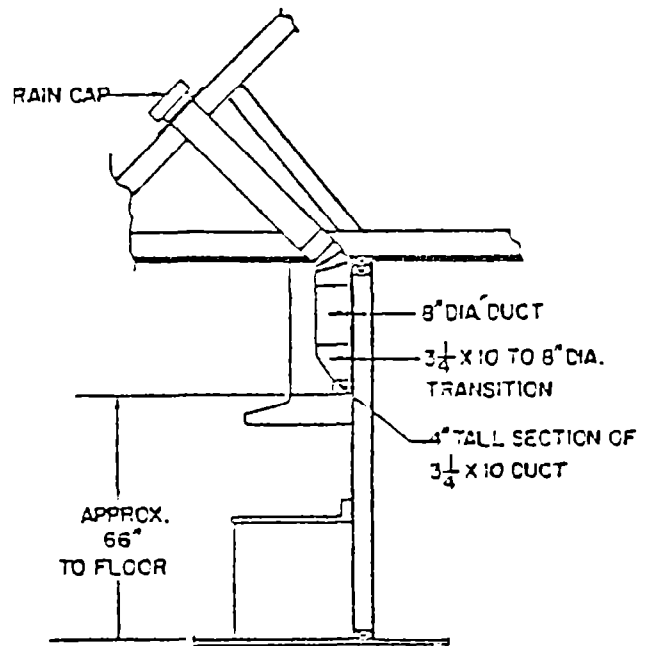


FIGURE 7

CFM vs. DUCT LENGTH FOR RGH SERIES HOOD
Equivalent Duct Length (ft.)

Static Pressure	CFM	3-1/4 x 10 Rect.	7" dia.	8" dia.	9" dia.
.06	460	4	8.5	17	30
.10	440	7	16.0	31	55.5
.15	417	12	25.0	50	88
.20	390	18	40	77	142
.25	355	26	61	104	
.275	330	34	73	145	
.30	250	65	136		
.35	180	140			

NOTE: The above table is based on vertical disc. 17.9 a. The values in this table are for duct length only and do not account for static pressure loss through roof mounted rain caps.

RANGE HOOD BLOWER ORIENTATION

NOTE: Before reinstalling the Blower Assembly, check the damper for free operation. Open the damper blade and check for any restrictions in the duct system. Check installation instructions for proper duct sizing.

Correct Blower orientation is imperative. Incorrect installation will drastically cut air flow and cause Blower to run at maximum RPM regardless of motor speed control setting.

VERTICAL DISCHARGE:

1. Figure 1 shows the proper Blower Assembly orientation for vertical discharge.
2. From the Blower position shown in Figure 1, lift the Blower Assembly vertically into mounting position.
3. The 3" Blower discharge surface should now be flush against top of hood. This will allow proper air flow from the Blower through the top vent. (The wider 5" surface will be to the rear).

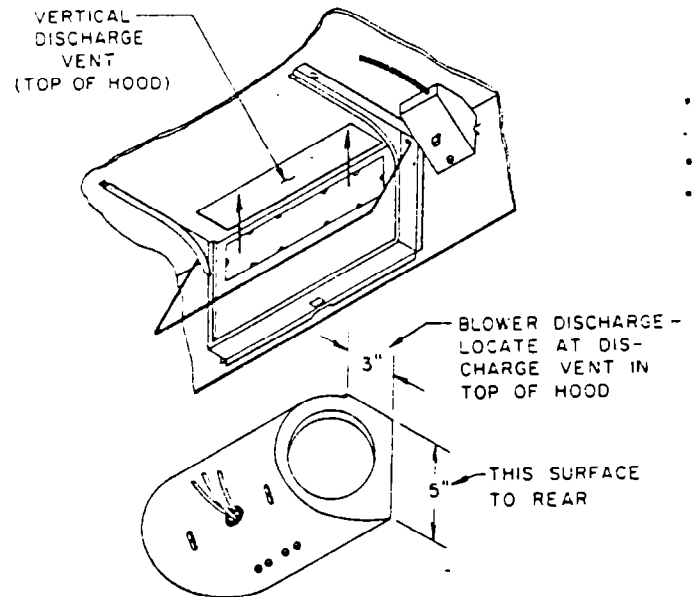


FIGURE 1
VERTICAL DISCHARGE

HORIZONTAL DISCHARGE:

1. Figure 2 shows the proper Blower Assembly orientation for horizontal discharge.
2. From the Blower position shown in Figure 2, lift the Blower Assembly vertically into position.
3. The 3" Blower discharge surface should now be flush against rear of hood. This will allow proper air flow from the Blower through the rear vent. (The wider 5" surface will be to the top).

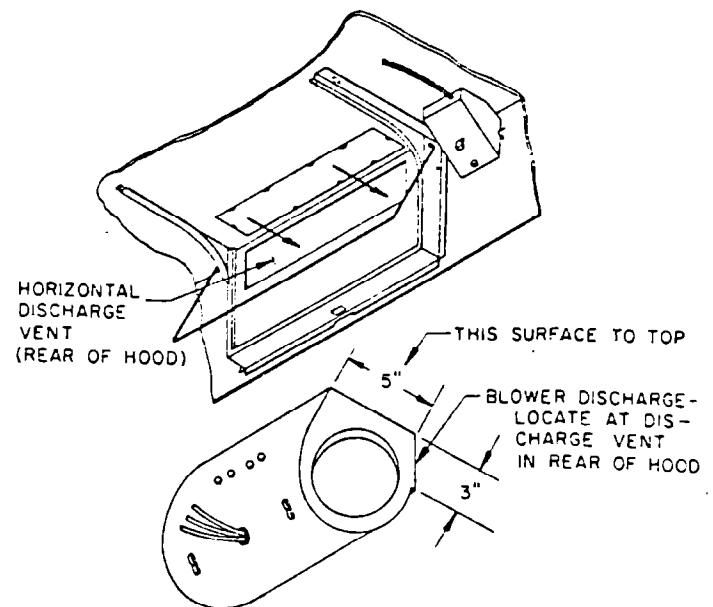


FIGURE 2
HORIZONTAL DISCHARGE

OPERATION AND CARE OF UNIT

BLOWER CONTROL

This range hood has a solid state motor speed control. This allows an infinite control of blower air moving capacity from 440 CFM down. After setting the control to a desired speed, it will take approx. 15 seconds for the blower to respond to that setting.

CARE OF BLOWER

Under normal operating conditions, this blower requires no oiling for the first year. After the first year oil every 6 months with SAE 20 oil.

LIGHT SWITCH

Select two light bulbs up to 75 watts each to achieve desired lighting level.

CARE OF FILTER

For greatest efficiency, the permanent aluminum filter should be removed and cleaned periodically. The filter can be washed in a dishwasher.

CARE OF EXTERIOR SURFACES

Your range hood is a beautifully finished addition to your kitchen. To preserve its lasting beauty, clean with a mild detergent. **DO NOT** use abrasive cleaners.

Replacement filters and repair parts may be obtained from Whirlpool Corporation Parts Distribution Center, La Porte, Indiana 46350. For most effective removal of smoke & odors; turn on fan at beginning of cooking operation & allow to run until smoke & odors are removed from room.

Whirlpool franchised TECH-CARE® service

If your WHIRLPOOL appliance ever needs service anywhere in the United States, help is just a phone call away... to your nearest TECH-CARE service representative.

Whirlpool maintains a nationwide network of franchised TECH-CARE service companies to fulfill your warranty and provide after-warranty service and maintenance to keep your WHIRLPOOL appliance in peak condition.

You'll find your nearest TECH-CARE service company listed in your local telephone book Yellow Pages under Washers-Dryers—Repairing or Servicing. Should you not find a listing, dial free, the Whirlpool COOL-LINE® service assistance telephone number (800)253-1301. When calling from

Michigan..... Dial (800)632-2243
Alaska & Hawaii..... Dial (800)253-1121

If you move...

Call the TECH-CARE service representative in your local area. He'll see to the installation of WHIRLPOOL appliances in your new home, promptly, expertly and fairly priced to you.

Helpful hints...

You can help your TECH-CARE service representative give you faster service if you include the model and serial number of your appliance when requesting service. Also, retain your sales slip and warranty to verify your warranty status.

Remember...

Your TECH-CARE service representative is specially trained in the expert repairing and servicing of your WHIRLPOOL appliances. He can help you maintain the quality of originally built Whirlpool appliances. So why not take the time now to look up his telephone number and jot it down in the space provided below.

My TECH-CARE service representative's telephone number is:

Range hood model number:

Range hood serial number:

Purchase and/or installation date:



Benion Harbor, Michigan, Automatic Washers, Clothes Dryers, Freezers, Refrigerator-Freezers, Ice Makers, Dishwashers, Built-in Ovens and Surface Units, Ranges, Microwave Ovens, Food Waste Disposers, Compactors, Room Air Conditioners, Dehumidifiers, Central Heating and Air Conditioning Systems.

Part No.
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