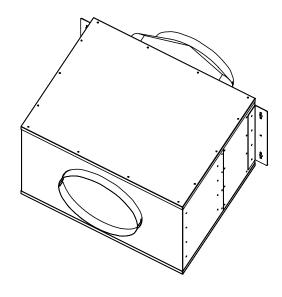
# **ZEPH'R**

# Jse, Care, and Installation Guide

# **In-Line Blower**

**PBN-1000A** 



Model number:	
Serial Number:	

JUL08.0101 © Zephyr Corporation

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# FOR DOMESTIC COOKING ONLY



# WARNING





### TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR IN-JURY TO PERSONS, OBSERVE THE FOLLOWING:

- 1. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer at the address or telephone number listed in the warranty.
- 2. Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.
- 3. Installation work and electrical wiring must be done by a qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction codes and standards.
- 4. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent backdrafting. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.
- 5. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- 6. Ducted fans must always be vented to the outdoors.
- 7. To reduce the risk of fire, use only metal ductwork.
- 8. If this unit is to be installed over a tub or shower, it must be marked as appropriate for the application and be connected to a GFCI (Ground Fault Interrupter) - protected branch circuit.
- 9. Never place a switch where it can be reached from a tub or shower.
- 10. This unit must be grounded.

### TO REDUCE THE RISK OF A RANGE TOP GREASE FIRE:

- A. Never leave surface units unattended at high settings. Boilovers cause smoking and greasy spillovers that may ignite. Heat oils slowly on low or medium settings.
- B. Always turn hood ON when cooking at high heat or when flambeing food (i.e. Crepes Suzette, Cherries Jubilee, Peppercorn Beef Flambe').
- C. Clean ventilating fans frequently. Grease should not be allowed to accumulate on fan or filter.
- D. Use proper pan size. Always use cookware appropriate for the size of the surface element.

# TO REDUCE THE RISK OF INJURY TO PERSONS IN THE EVENT OF A RANGE TOP GREASE FIRE, OBSERVE THE FOLLOW-

- 1. SMOTHER FLAMES with a close-fitting lid, cookie sheet, or metal tray, then turn off the burner. BE CAREFUL TO PREVENT BURNS. If the flames do not go out immediately, EVACUATE AND CALL THE FIRE DEPARTMENT.
- 2. NEVER PICK UP A FLAMING PAN You may be burned.
- 3. DO NOT USE WATER, including wet dishcloths or towels violent steam explosion will result.

# WARNING





- 4. Use an extinguisher ONLY if:
- A. You know you have a Class ABC extinguisher and you already know how to operate it.
- B. The fire is small and contained in the area where it started.
- C. The fire department is being called.
- D. You can fight the fire with your back to an exit.
- \* Based on "Kitchen Fire Safety Tips" published by NFPA.

# CAUTION



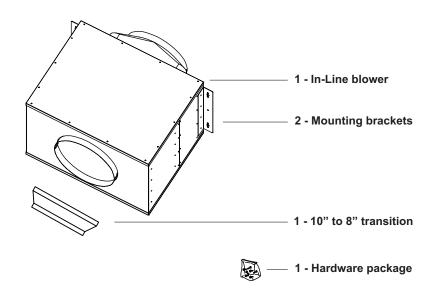
- 1. For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
- 2. To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc. off power
- 3. If ventilator is installed in an unconditioned space (such as an attic): Surround the ventilator with thermal insulation - to minimize possible condensation.
- 4. Please read specification label on product for further information and requirements.

PBN-1000A Max. Watts - 640, Max. Amps - 5.45

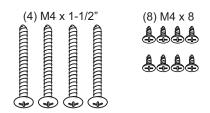
# Installer: Leave this manual with the homeowner.

# MODEL: PBN-1000A

# **PARTS SUPPLIED**



### HARDWARE PACKAGE CONTENTS



# **PARTS NOT SUPPLIED**

- Ducting, conduit, wiring and all installation tools
- Cable connector (if required by local codes)
- Range hood

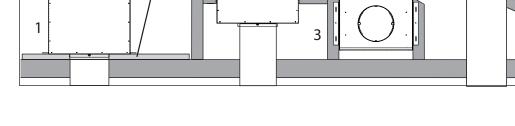
Duct pieces Equivalent number							
Duct pieces		length x used		=	Total		
	3-1/4" x 10" Rect., straight	1 Ft.	x (	) =	Ft.		
	6" Round, straight	1 Ft.	x (	) =	Ft.		
	7"-10" Round, straight	1 Ft.	x (	) =	Ft.		
	3-1/4" x 10" Rect.90° elbow	15 Ft.	x (	) =	Ft.		
	3-1/4" x 10" Rect.45° elbow	9 Ft.	x (	) =	Ft.		
	3-1/4" x 10" Rect.90° flat elbow	24 Ft.	x (	) =	Ft.		
	3-1/4" x 10" Rect. wall cap with damper	30 Ft.	x (	) =	Ft.		
	3-1/4" x 10" Rect.to 6" round transition	5 Ft.	x (	) =	Ft.		
	3-1/4" x 10" Rect.to 6" round transition 90° elbow	20 Ft.	x (	) =	Ft.		
	6" Round, 90° elbow	15 Ft.	х (	) =	Ft.		
	6" Round, 45° elbow	9 Ft.	х (	) =	Ft.		
	Ft.						

Duct pieces	Equivalent number length x used =				Total		
	6" Round wall cap with damper	30 Ft.	x (	)	=	iotai	Ft.
	6" Round, roof cap	30 Ft.	x (	)	=		Ft.
	6" round to 3-1/4" x 10" rect. transition	1 Ft.	х (	)	=		Ft.
	6" round to 3-1/4" x 10" rect. transition 90° elbow	16 Ft.	x (	)	=		Ft.
	7" - 10" Round, 90° elbow	15 Ft.	х (	)	=		Ft.
	7" - 10" Round, 45° elbow	9 Ft.	x (	)	=		Ft.
	7" - 10" Round wall cap with damper	30 Ft.	х (	)	=		Ft.
	7" - 10" Round, roof cap	30 Ft.	x (	)	=		Ft.
	7" round to 3 1/4" x 10" rect. transition	8 Ft.	x (	)	=		Ft.
	7" round to 3-1/4" x 10" rect. transition 90° elbow	23 Ft.	х (	)	=		Ft.
Subtotal column 2 =							Ft.
Subtotal column 1 =							Ft.
Total ductwork =							Ft.

**Maximum Duct Length:** For satisfactory air movement, the total duct length should not exceed 100 equivalent feet.

5

outlet



outlet

# **WARNING:**

outlet

Check installation position so that the blower outlet is exhausting air away from the hood and out of the home.

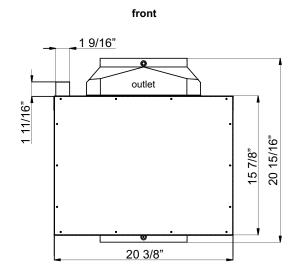
1. Mount on top of ceiling joists with plywood

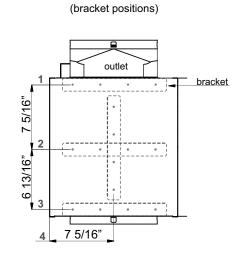
Plywood

- 2. Vertical mount to cross-members tied to trusses
- 3. Horizontal mount to cross-members tied to trusses
- 4. Mount on underside of rafters with wood blocking
- 5. Mount to cross-members tied to trusses with 90 degree elbow

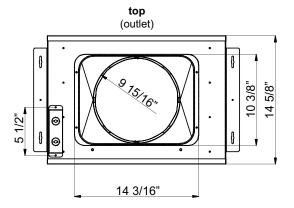
Note1: When applicable, additional plywood may be used to simplify installation.

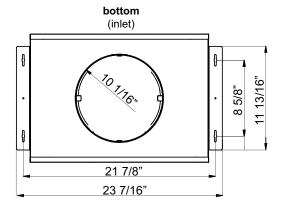
Note2: For some models, such as Cheng and Arc Collection, it is necessary to convert from 10" round to 8" round ducting. A 10" to 8" transition is included with the blower. Conversion must be done before ducting passes through ceiling.





side





- Determine blower position (examples on page 5). Install each of the (2) mounting brackets to the sides of the in-line blower housing using (4) M4x8 screws per bracket. There are possible (4) mounting positions for the brackets. FIG. A Note: Brackets must be secured to studs using (2) M4 x 1-1/2" screws per bracket.
- 2. Run 10" round ducting to inlet and outlet of in-line blower housing. Secure with aluminum duct tape. Note: Cheng and Arc Collection hoods require a 10" to 8" round transition to be installed prior to the duct passing through the ceiling. 8" round ducting is then connected to the hood. A 10" to 8" transition is included with the blower. FIG. B
- Run electrical conduit per local codes from junction box on top of in-line blower to blower wiring harness on top of the range hood. See instructions included with range hood for more information.
- 4. Run (5) wires through conduit (black, white, blue, red and green ground). Check local code compliance for style and gauge of wires. The ground wire shall have a suitable gauge according to the Electrical Code and Regulations. Connect wires to in-line blower and blower wiring harness on hood per the diagram in FIG. C. A cable lock (not supplied) might be required by local codes. Check with local code requirements, purchase and install appropriate connector if necessary. FIG. D
- 5. Turn circuit breaker on, power on hood and test all functions. Check for leaks around duct connections.

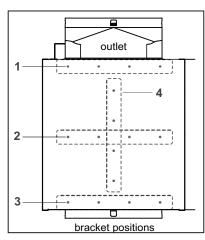


FIG. A

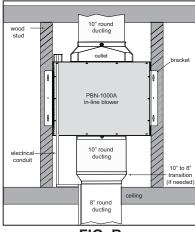
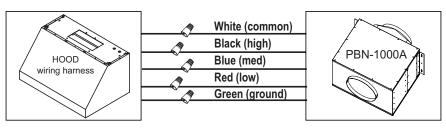


FIG. B

CAUTION: At least two installers are required due to the weight and size of the blower.

WARNING: Electrical wiring must be done by a qualified person(s) in accordance with all applicable codes and standards. This blower must be properly grounded. Turn off electrical power at service entrance before wiring.



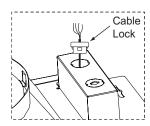


FIG. C FIG. D