

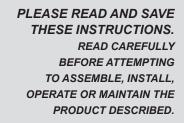




# Silent Low-Profile Ceiling Fans

Models 3DPE2A, 3DPE3A, 1UBH6B, 1UBH7B, 1UBH8A, 5AE68B, 5AE69A





PROTECT YOURSELF AND
OTHERS BY OBSERVING ALL
SAFETY INFORMATION. FAILURE
TO COMPLY WITH INSTRUCTIONS
COULD RESULT IN PERSONAL
INJURY AND/OR PROPERTY
DAMAGE! RETAIN INSTRUCTIONS
FOR FUTURE REFERENCE.

PLEASE REFER TO BACK COVER FOR INFORMATION REGARDING DAYTON'S WARRANTY AND OTHER IMPORTANT INFORMATION.

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#### **BEFORE YOU BEGIN**

AWARNING Installation, troubleshooting and parts replacement are to be performed only by qualified personnel in accordance with all applicable codes and standards, including fire-rated construction.



#### **Electrical Requirements:**

WARNING

Install all wiring, protection and grounding in accordance with the U.S. National Electrical Code (NEC) and all local requirements. Follow all local electrical and safety codes, as well as the U.S. National Electrical Code (NEC) and the Occupational Safety and Health Act (OSHA).



#### **Tools Needed:**

- Lock-Out Tag-Out
- · Phillips Screwdriver
- Drill
- Sheet Metal Screws

#### **Recommended Accessories:**

- Speed Control (48C172)
- · Fluorescent (3AZG1) Lighted Grille Kit
- Non-Lighted (3DPF8) / Lighted (3DPG1) Ceiling Radiation Damper

#### UNPACKING



#### **Contents:**

- Dayton<sup>o</sup> Silent Low-Profile Ceiling Fan (1)
- Mounting Brackets with Hardware (2)
- Operating Instructions and Parts Manual (1)



#### **Inspect:**

- After unpacking unit, inspect carefully for any damage that may have occurred during transit. Check for loose, missing, or damaged parts.
   Shipping damage claim must be filed with carrier.
- Check all bolts, screws, set-screws, etc. for looseness that may have occurred during transit. Retighten as required. Rotate wheel by hand to be sure it turns freely.



 See General Safety Instructions on page 2, and Cautions and Warnings as shown.



#### GENERAL SAFETY INSTRUCTIONS

Do not depend on any switch as the sole means of **▲ DANGER** disconnecting power when installing or servicing the fan. Always disconnect, lock and tag power source before installing or servicing. Failure to disconnect power source can result in fire, shock or serious injury. Motor will restart without warning

after thermal protector trips. Do not touch operating motor, it may be hot enough to cause injury.

DANGER

Do not place any body parts or objects in fan, motor openings or drives while motor is connected

to power source.

**A** CAUTION vapors.

For general ventilating use only. Do not use to exhaust hazardous or explosive materials and

**A WARNING** 

To reduce the risk of fire, electric shock, or injury to persons, observe the following:

- Read and follow all instructions and cautionary markings. Make sure electrical power source conforms to requirements of equipment and local codes.
- 2. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
- 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.
- Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent back drafting. Follow the heating equipment manufacture'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. These fans are not recommended for cooking exhaust applications. They are designed primarily for low temperature, clean air applications only. Figure 3, page 5 shows the minimum distance these fans should be placed in relation to cooking equipment.
- 6. When cutting or drilling into wall or ceiling, do not damage electrical wiring or other hidden utilities.
- 7. Ducted fans must always be vented to the outdoors.
- 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 Circuit Interrupter) - protected branch circuit.
- Suitable for use with solid-state speed controls. 9.
- 10. Never place a switch where it can be reached from a tub or shower.
- 11. Fan/Light combination not to be installed in a ceiling thermally insulated to a value greater than R-40.

Dayton

12. Before servicing or cleaning unit, switch power off at service panel and lock 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.

#### **SPECIFICATIONS**

Max. Inlet Temp.	104°F
Mounting Location	Ceiling, Horizontal Discharge
Housing Material	Galvanized Steel
Includes	Mounting Brackets with Hardware, Backdraft Damper
Recommended Ceiling Opening (inches)	13-1/2 x 10-7/8
Recommended Speed Control	48C172
Agency Compliance	UL/cUL 507, AMCA Sound and Air

NOTE: Models are acceptable for use over a bathtub or shower when installed in a GFCI protected branch circuit.



Dayton Electric Mfg. Co. certifies that the ventilators shown herein are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and



comply with the requirements of the AMCA Certified Ratings Program.

**OPERATION** 

TROUBLESHOOTING

SAFETY / SPECIFICATIONS

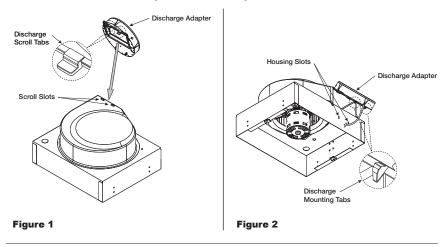
## PERFORMANCE

Model		Full Load		Sones @	Sones @ 5 Ft. @			CFM Ai	CFM Air Delivery @ Static Pressure Shown	@ Static	Pressure	Shown		
115V	Watts	Amps	RPM	.100"SP	100"SP ,250"SP	.000	.100	.125"	.250"	.375"	.200	.625"	.750"	1.00"
3DPE2A	38	0.50	625	1.4	2.0	29	53	51	40	59	I	I	I	1
1UBH6B	17.1	0.16	675	0.8	4.1	88	75	71	54	35	I	I	I	I
1UBH7B	18.6	0.16	006	6.0	1.3	94	81	77	62	46	I	I	I	I
5AE68B	21.1	0.18	200	1.0	1.5	104	92	88	72	22	I	I	I	I
1UBH8A	80	1.14	950	1.5	2.0	133	114	110	26	92	94	91	85	20
5AE69A	128	1.70	1050	2.5	3.0	160	156	155	154	152	149	147	138	92
3DPE3A	172	2.20	1100	4.0	4.5	197	195	194	191	187	184	181	166	128

Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 Performance certified is for installation type B: Free inlet, Ducted outlet. Performance ratings include the effects of an inlet grille and backdraft damper. m) in a spherical free field calculated per AMCA Standard 301. Values shown are for installation type B: Free inlet spherical sone levels.

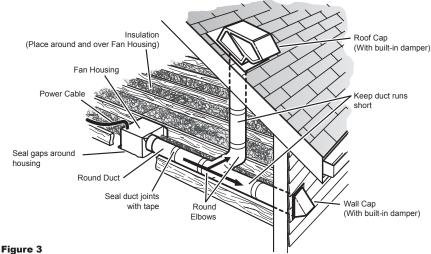
#### **ASSEMBLY INSTRUCTIONS**

- Insert discharge adapter tabs into the scroll slots, shown in Figure 1.
- Rotate discharge adapter until the two mounting tabs fully engage into the housing slots, shown in Figure 2.



#### **INSTALLATION INSTRUCTIONS**

Installation, troubleshooting and parts **A WARNING** replacement are to be performed only by qualified personnel in accordance with all applicable codes and standards, including fire-rated construction.



For best performance, choose a location with the shortest possible duct run and minimum number of elbows. Do not mount near cooking equipment, shown in Figure 4.



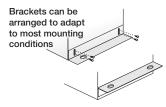


Figure 4

Figure 5

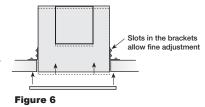
NOTE: If using optional Dayton ceiling radiation damper, refer to instructions provided prior to fan installation.

- Attach adjustable mounting brackets to fan, but leave the screws loose until proper height is determined, shown in Figure 5.
- Cut a 14-1/8 x 11-3/4" hole in the ceiling.

**A WARNING** utilities.

When cutting or drilling into a wall or ceiling, do not damage electrical wiring and other hidden

Position unit between joists. 4 Position brackets such that bottom edge of housing will be flush with finished ceiling, and tighten the adjustable mounting brackets, refer to Figure 6.



- 5 Installation of ductwork is critical to the performance of the fan. Straight ductwork or ductwork that turns in the same direction as the wheel is recommended. Ductwork turning opposite the wheel direction will cause turbulence and back pressure resulting in poor performance.
- 6. Slide ductwork over the fan's discharge collar and securely attach it with sheet metal screws. Make sure the screws do not interfere with damper operation.
- Check damper to make sure it opens freely.

#### **Electrical Connection**

115 Volt Black wire is "Hot" White wire is "Neutral" Green wire is "Ground"



Install all wiring, protection and grounding in accordance with the U.S. National Electrical Code



**▲** WARNING

Follow all local electrical and safety codes, as well as the U.S. National Electrical Code (NEC) and the Occupational Safety and Health Act (OSHA).

- 1. Remove wiring cover.
- 2. Using proper wire connectors, wire the fan as shown in Figure 7.
- 3. Push all wiring into the unit's cover and replace wiring cover.

Figure 7

#### **Attach The Grille**

NOTE: If using optional Dayton lighted grille kit, refer to instructions provided.

- Turn Power Off. 1.
- 2. Attach grille with two screws provided. Do not over tighten, over tightening will damage grille.
- 3. Slide attachment screw covers over the attachment screws, shown in Figure 8.
- 4. Turn on power and check fan.

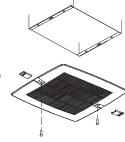


Figure 8

#### TROUBLESHOOTING GUIDE

Symptom	Possible Cause(s)	Corrective Action
Ventilator	Blown fuse or breaker	Replace or repair
inoperative	2. Defective motor	<ol><li>Replace or repair</li></ol>
	3. Incorrectly wired	<ol><li>Shut power OFF and check wiring for proper connections</li></ol>
Excessive noise or vibration	Accumulation of material on wheel	1. Clean
	2. Fan wheel out of balance	Replace wheel
Insufficient airflow	1. Blocked duct or clogged filters	Clean or replace
	2. Collapsed or perforated duct	2. Repair or replace duct section
Motor overloads	Shorted motor winding	Replace motor
or overheats	2. Incorrect voltage input	2. Correct to 115V
	Buildup of dust, dirt or other contaminants on motor	3. Clean motor

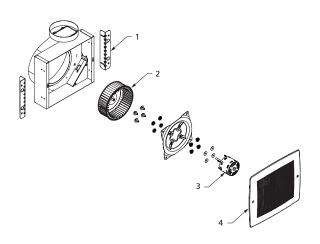
#### **MAINTENANCE**

Disconnect the power source before working on A WARNING the unit. Maintenance should be done yearly or as conditions warrant.

- The ventilator motor, wheel, housing and grille should be checked for dust and dirt accumulations. Dirt buildup can lead to loss of performance and motor overheating.
  - Remove grille. Using a vacuum cleaner with appropriate attachments, vacuum dust from grille. Wash grille with warm, soapy solution of water. Allow grille to dry thoroughly before re-installing.
  - To clean wheel and housing, unplug motor from the integral terminal box. Vacuum the wheel. If necessary, the wheel can be washed. Wipe the wheel dry with an absorbent cloth. Wipe out the interior of the housing. Plug blower motor into terminal box. 7



## REPAIR PARTS ILLUSTRATION FOR SILENT LOW-PROFILE CEILING FANS



## REPAIR PARTS LIST FOR SILENT LOW-PROFILE CEILING FANS

<b>U</b>	IIIO I AIIO					
Ref. No.	Description	Part Numb	er for Mode 1UBH7B	els: 1UBH8A	3DPE2A	Quantity
1	Mounting Bracket Kit	21EA90	21EA90	21EA90	21EA90	2
2	Wheel	21EC03	21EC03	21EC03	21EC03	1
3	Motor	21DX69	21DX70	21DX71	21DY24	1
4	Grille	34G192	34G192	34G192	34G192	1
Ref.		Part Numb	er for Mode	els:		
No.	Description	3DPE3A	5AE68B	5AE69A		Quantity
1	Mounting Bracket Kit	21EA90	21EA90	21EA90		2
2	Wheel	21EC03	21EC03	21EC03		1
3	Motor	21DY25	21EC08	34G194		1
4	Grille	34G192	34G192	34G192		1

## For Repair Parts, call 1-800-Grainger 24 hours a day – 365 days a year

Please provide following information:

- -Model number
- -Serial number (if any)
- -Part description and number as shown in parts list

SAFETY /
SPECIFICATIONS

ASSEMBLY / INSTALLATION

NOTES	
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#### DAYTON ONE-YEAR LIMITED WARRANTY

<u>PAYTON ONE-YEAR LIMITED WARRANTY.</u> All Dayton\* product models covered in this manual are warranted by Dayton Electric Mfg. Co. ("Dayton") to the original user against defects in workmanship or materials under normal use for one year after date of purchase. If the Dayton product is part of a set, only the portion that is defective is subject to this warranty. Any product or part which is determined to be defective in material or workmanship and returned to an authorized service location, as Dayton or Dayton's designee designates, shipping costs prepaid, will be, as the exclusive remedy, repaired or replaced with a new or reconditioned product or part of equal utility or a full refund given, at Dayton's or Dayton's designee's option, at no charge. For limited warranty claim procedures, see "Warranty Service" below. This warranty is void if there is evidence of misuse, mis-repair, mis-installation, abuse or alteration. This warranty does not cover normal wear and tear of Dayton products or portions of them, or products or portions of them which are consumable in normal use. This limited warranty gives purchasers specific legal rights, and you may also have other rights which vary from jurisdiction to jurisdiction.

#### WARRANTY DISCLAIMERS AND LIMITATIONS OF LIABILITY RELATING TO ALL CUSTOMERS FOR ALL PRODUCTS

LIMITATION OF LIABILITY. TO THE EXTENT ALLOWABLE UNDER APPLICABLE LAW, DAYTON'S LIABILITY FOR CONSEQUENTIAL AND INCIDENTAL DAMAGES IS EXPRESSLY DISCLAIMED. DAYTON'S LIABILITY IN ALL EVENTS IS LIMITED TO AND SHALL NOT EXCEED THE PURCHASE PRICE PAID.

WARRANTY DISCLAIMER. A DILIGENT EFFORT HAS BEEN MADE TO PROVIDE PRODUCT INFORMATION AND ILLUSTRATE THE PRODUCTS IN THIS LITERATURE ACCURATELY; HOWEVER, SUCH INFORMATION AND ILLUSTRATIONS ARE FOR THE SOLE PURPOSE OF IDENTIFICATION, AND DO NOT EXPRESS OR IMPLY A WARRANTY THAT THE PRODUCTS ARE MERCHANTABLE, OR FIT FOR A PARTICULAR PURPOSE, OR THAT THE PRODUCTS WILL NECESSARILY CONFORM TO THE ILLUSTRATIONS OR DESCRIPTIONS. EXCEPT AS PROVIDED BELOW, NO WARRANTY OR AFFIRMATION OF FACT, EXPRESSED OR IMPLIED, OTHER THAN AS STATED IN THE "LIMITED WARRANTY" ABOVE IS MADE OR AUTHORIZED BY DAYTON.

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THIS LIMITED WARRANTY ONLY APPLIES TO UNITED STATES PURCHASERS FOR DELIVERY IN THE UNITED STATES.

#### **WARRANTY SERVICE**

To obtain warranty service if you purchased the covered product directly from W.W. Grainger, Inc. ("Grainger"), (i) write or call or visit the local Grainger branch from which the product was purchased or another Grainger branch near you (see www.grainger.com for a listing of Grainger branches); or (ii) contact Grainger by going to www.grainger.com and clicking on the "Contact Us" link at the top of the page, then clicking on the "Email us" link; or (iii) call Customer Care (toll free) at 1-888-361-8649. To obtain warranty service if you purchased the covered product from another distributor or retailer, (i) go to www.grainger.com for Warranty Service; (ii) write or call or visit a Grainger branch near you; or (iii) call Customer Care (toll free) at 1-888-361-8649. In any case, you will need to provide, to the extent available, the purchase date, the original invoice number, the stock number, a description of the defect, and anything else specified in this Dayton One-Year Limited Warranty. You may be required to send the product in for inspection at your cost. You can follow up on the progress of inspections and corrections in the same ways. Title and risk of loss pass to buyer on delivery to common carrier, so if product was damaged in transit to you, file claim with carrier, not retailer, Grainger or Dayton. For warranty information for purchasers and/or delivery outside the United States, please use the following applicable contact information:

Dayton Electric Mfg. Co., 100 Grainger Parkway, Lake Forest, IL 60045 U.S.A. or call +1-888-361-8649