

<sup>®</sup>  
**Dayton**



## **Axial Direct-Drive Downblast Ventilators**

**Models 39FV53 thru 39FV56,  
4YC48G thru 4YC63G, 4YC86G thru 4YC94G,  
6KWN7 thru 6KWN9, 6KWP0 thru 6KWP4**

®  
**Dayton**

**PLEASE READ AND SAVE  
THESE INSTRUCTIONS.**

**READ CAREFULLY  
BEFORE ATTEMPTING  
TO ASSEMBLE, INSTALL,  
OPERATE OR MAINTAIN THE  
PRODUCT DESCRIBED.**

**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.**

**Model #:** \_\_\_\_\_

**Serial #:** \_\_\_\_\_

**Purch. Date:** \_\_\_\_\_

*Form 5S6939 / Printed in USA  
04632 Version 1 10/2016*

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## BEFORE YOU BEGIN

**⚠ WARNING** *Installation, troubleshooting, and parts replacement are to be performed only by qualified personnel.*

**⚠ WARNING** *Do not use in any kitchen exhaust application.*



### **Electrical Requirements:**

- The motor amperage and voltage ratings must be checked for compatibility to supply voltage prior to final electrical connection. Wiring must conform to local and national codes.



### **Tools Needed:**

- Dayton® Roof Curb and Mounting Fasteners (8)
- Sealant or Caulk
- Tachometer

### **Recommended Accessories:**

- NEMA 1 Disconnect Switch (1H400, 1H401)
- Non-Ventilated Roof Curb (2RB75-2RB80, 2ZV82-2ZV84)
- Roof Curb Adapter (3AZK1-3AZK9, 3AZL1-3AZL3, 6KWP5-6KWP7)
- Speed Control (48C172, 48C173, 43Y140)
- Damper (4HX64-4HX68)

## UNPACKING

### **Contents:**

- Dayton® Axial Direct-Drive Downblast Ventilator (1)
- 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 propeller by hand to be sure it turns freely.



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

## GENERAL SAFETY INSTRUCTIONS

**⚠ DANGER** *Do not depend on any switch as the sole means of disconnecting power when installing or servicing the ventilator. 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 ventilator or motor openings while motor is connected to power source.*

**⚠ WARNING** *Do not use this equipment in explosive atmospheres.*

**⚠ CAUTION** *To reduce the risk of injury to persons, observe the following:*

**OSHA requires OSHA complying guards when fan is installed within 7 feet of floor or working level.**

**UL/cUL Standards require OSHA complying guards when fan is installed within 8 feet of floor or working level.**

1. Read and follow all instructions and cautionary markings. Make sure electrical power source conforms to requirements of equipment and local codes.
2. Ventilators should be assembled, installed and serviced by a qualified technician. Have all electrical work performed by a qualified electrician.
3. Follow all local electrical and safety codes in the United States and Canada, as well as the National Electrical Code (NEC) and the Occupational Safety and Health Act (OSHA) in the United States. Ground motor in accordance with NEC Article 250 (grounding). Follow the Canadian Electric Code (CEC) in Canada.
4. Unit must be securely and adequately grounded.
5. Do not kink power cable or allow it to come in contact with sharp objects, oil, grease, hot surfaces or chemicals. Replace damaged cords immediately.
6. Never open access door to a duct with the ventilator running.

## SPECIFICATIONS

Max. Inlet Temp.	120°F
Mounting Location	Roof, Roof or Wall on 10 and 12 inch propeller diameters
Housing Material	Spun Aluminum
Propeller Material	Aluminum
Includes	NEMA 1 Junction Box, Δ
Agency Compliance	UL/cUL 705, AMCA Sound and Air

Δ Electronically commutated ventilators 39FV53–39FV56 include motor mounted potentiometer dial to adjust speed. Optional remote mount speed control kits 43Y140, 35YV92-35YV94 can be purchased separately.

### Dimensions (inches)

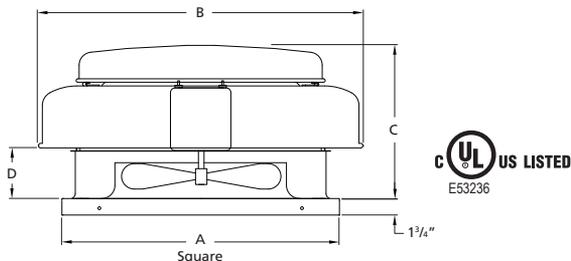


Figure 1

	39FV54		39FV56		4YC50G		39FV55		4YC58G		4YC52G		4YC54G	
	39FV54	39FV56	4YC87G	4YC89G	4YC48G	4YC51G	4YC53G	4YC55G	4YC87G	4YC89G	4YC49G	4YC59G	4YC60G	4YC62G
	4YC88G	4YC90G	4YC56G	6KWN7	4YC61G	4YC63G	39FV53	4YC91G	4YC93G	4YC57G	6KWP1	6KWN8	6KWN9	
	4YC86G	4YC92G	4YC94G	6KWP0	6KWP2	6KWP3	4YC94G	6KWP4						
A	19	22	22	26	30	34	34							
B	24-5/8	28-5/8	28-5/8	35-1/4	35-1/4	42	42							
C	15-1/4	16-1/2	16-1/2	17-1/4	17-1/4	17-1/2	17-1/2							
D	5-1/2	6-1/4	6-1/4	6-1/4	6-1/4	6-1/4	6-1/4							
Prop Dia.	10	12	14	16	18	20	24							
Shaft Dia.	1/2	1/2	1/2	1/2	5/8	5/8	5/8							
Recommended Roof Opening (Sq.)	14-1/2	17-1/2	17-1/2	21-1/2	25-1/2	29-1/2	29-1/2							
Recommended Damper Size (Sq.)	12	15	15	19	23	27	27							

## PERFORMANCE EXHAUST FANS



Model 115V, 1-Phase	Model 208-230/460V, 3-Phase	Speed Control	HP	Model ECM 115V, 1-Phase	Speed Control	RPM	Sones @ .250" SP @ 5 Ft.	CFM Air Delivery @ Static Pressure Shown .125" .250" .375" .500" .750" 1.00" 1.25"
—	—	—	—	—	—	860	—	270 — — — — —
—	—	—	—	39FV53	1/4 43Y140	1140	—	358 199 — — — — —
—	—	—	—	—	—	1725	12.5	542 475 333 246 — — — — —
4YC86G	—	1/8 48C172	—	—	—	1750	13.2	550 465 347 255 189 — — — — —
—	—	—	—	—	—	860	—	765 321 — — — — —
4YC87G	—	1/6 48C172	1/4	39FV54	43Y140	1140	5.2	1014 803 376 144 — — — — —
—	—	—	—	—	—	1725	8.6	1534 1413 1263 996 647 354 — — — — —
4YC88G	—	1/4 48C173	—	—	—	1750	8.9	1556 1437 1291 1055 672 386 231 — — — — —
—	—	—	—	—	—	860	5.5	1207 765 323 — — — — —
4YC89G	—	1/6 48C172	1/2	39FV56	43Y140	1140	8.4	1601 1311 925 626 273 — — — — —
—	—	—	—	—	—	1725	15.7	2422 2260 2050 1826 1541 1203 902 657 446 — — — — —
4YC90G	—	1/2 48C173	—	—	—	1750	16.2	2457 2298 2093 1875 1603 1244 984 716 — — — — —
—	—	—	—	—	—	860	6.0	1508 1134 598 — — — — —
4YC48G	—	1/6 48C172	1/2	39FV55	43Y140	1140	8.4	1999 1764 1418 904 682 — — — — —
—	—	—	—	—	—	1725	15.7	3024 2881 2722 2537 2280 1578 1350 1206 1062 — — — — —
4YC49G	—	1/2 48C172	—	—	—	1750	16.1	3068 2928 2771 2590 2339 1686 1398 1257 934 — — — — —
4YC50G	—	1/3 48C172	—	—	—	1140	11.4	2982 2645 2264 1669 1276 499 — — — — —
4YC51G‡	6KWN7	1	—	—	—	1750	29	4578 4349 4141 3908 3660 2935 2579 2327 1809 — — — — —
4YC52G*†	—	1/2 48C172	—	—	—	1140	11.7	3871 3531 3100 2301 1925 — — — — —
4YC53G‡	6KWN8	1-1/2	—	—	—	1750	23	5943 5745 5507 5260 5007 4246 3592 3295 — — — — —
4YC54G*†	—	1/2 48C172	—	—	—	1140	13.6	5091 4703 4277 3813 3279 2252 1891 1583 — — — — —
4YC55G†	6KWN9	1	—	—	—	1140	20	6042 5626 5137 4619 4146 3136 2682 2028 — — — — —

Performance certified is for installation type A: Free inlet, Free outlet. Performance ratings include the effects of a birdscreen in the airstream. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

## PERFORMANCE SUPPLY FANS

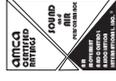
Model 115V, 1-Phase	Speed Control	HP	Model 208-230/460V, 3-Phase	Speed Control	HP	RPM	Sones @ .250" SP @ 5 Ft.	CFM Air Delivery @ Static Pressure Shown							
								.000"	.125"	.250"	.375"	.500"	.750"	1.00"	1.25"
4YC91G	1/4	48C173	—	—	—	1750	14.3	.000"	929	813	595	415	—	—	—
4YC92G	1/4	48C173	—	—	—	1750	12.2	.000"	1444	1400	1203	953	641	—	—
4YC93G	1/4	48C173	—	—	—	1750	15.9	.000"	2041	1912	1742	1567	1380	1018	—
4YC94G	1/2	48C173	—	—	—	1750	19.9	.000"	2586	2395	2395	1971	1799	1380	—
4YC56G	1/2	48C173	—	—	—	1750	19.6	.000"	2353	2195	2008	1819	1597	1121	903
4YC57G	3/4	48C172	6KWP0	—	3/4	1750	20	.000"	2920	2802	2602	2376	2188	1693	1475
4YC58G	3/4	48C172	6KWP1	—	3/4	1750	27	.000"	3906	3690	3454	3228	2990	2454	2097
4YC59G†	1	—	6KWP2	—	1	1750	30	.000"	4247	4076	3846	3526	3259	2724	2392
4YC60G†	1/2	48C172	—	—	—	1140	18.4	.000"	3488	3125	2715	2315	1847	—	—
4YC61G‡	1-1/2	—	6KWP3	—	1-1/2	1750	34	.000"	5355	5137	4886	4886	4408	3830	3575
4YC62G†	1/2	48C172	—	—	—	1140	23	.000"	4569	4215	3841	3392	2958	2422	—
4YC63G†	1	—	6KWP4	—	1	1140	24	.000"	5742	5315	4929	4556	4131	3066	—

Performance certified is for installation type A: Free inlet; Free outlet; Performance ratings include the effects of a birdscreen in the airstream. The sound ratings shown are loudness values in fan sonas at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical some levels.

\* Speed control usable at 115V only

† 115/230V, 1-Phase

‡ 115/208-230V, 1-Phase



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.

## INSTALLATION INSTRUCTIONS

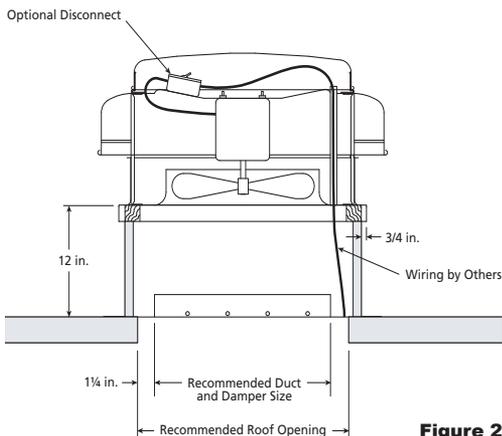
**▲ WARNING** *Installation, troubleshooting and parts replacement are to be performed only by qualified personnel.*

**▲ WARNING** *Comply with all local and national safety codes including the National Electrical Code (NEC) and National Fire Protection Act (NFPA).*

**▲ CAUTION** *Do not raise ventilator by its windband; use a sling or platform.*

**NOTE:** Rotate the propeller by hand to ensure that it does not rub and rotates freely. Position is preset and the unit is test run at the factory. Movement may occur during shipment and realignment may be necessary.

### Roof-Mount Installation



**Figure 2**

**NOTE:** Mount unit with a Dayton® roof curb (purchased separately).

1. Cut an appropriate sized hole in the roof surface, refer to Dimensions. Follow curb manufacturer's installation instructions. Caulk and flash curb to ensure a water tight seal.
2. Install optional backdraft damper. Secure damper flange to curb damper tray.
3. Remove motor cover by removing fasteners. Place cover on a flat surface in an area protected from strong winds.
4. Lift and place the unit on top of roof curb.
5. Secure ventilator to roof curb using a minimum of eight suitable fasteners.
6. Check ventilator propeller for free rotation.
7. Verify power line wiring is de-energized before connecting ventilator motor to power source.
8. Check the power source for compatibility with the requirements of your equipment.
9. Motor and ventilator must be securely grounded (bare metal) to a

suitable electric ground, such as a grounded water pipe or ground wire system.

10. Connect power supply wiring to the motor as indicating on the motor nameplate.
11. Mount and wire safety disconnect switch under ventilator cover. Wire control switches at ground level, refer to switch manufacturer for installation and wiring procedures.
12. Check all fasteners for tightness.
13. Replace motor cover.

### **Wall-Mount Installation**

**▲ WARNING** *Only 10" and 12" models are designed for wall roof mounting. Do not attempt to wall mount any larger models.*

1. Cut an appropriate sized hole in the wall.

**NOTE:** The actual size of the wall opening is determined by the duct size.

2. **Masonry Wall.** Around the wall opening, install an angle iron frame at least 2" x 2" x 1/4" to match the inside base dimensions of the ventilator. Secure with lead cinch type anchors with non-ferrous bolts (by others — three per side). The ventilator should then be mounted to the mounting angle with eight self tapping sheet metal screws (by others).

**Wood Siding.** Around the wall opening install a wooden frame at least 2" x 4" to match the inside base dimension of the ventilator. Secure with counter-sunk expansion type lag bolts (by others — three per side).

The ventilator should then be mounted to the mounting frame with eight square head wood screws (by others).

3. Any mounting flange connection between the wall, mounting flange and the ventilator should be coated with a suitable caulking compound or approved waterproof mastic sealer to prevent water leakage into the ventilator.
4. Remove motor cover by removing fasteners.
5. Check ventilator propeller for free rotation.
6. Verify power line wiring is de-energized before connecting ventilator motor to power source.
7. Check the power source for compatibility with the requirements of your equipment.
8. Motor and ventilator must be securely grounded (bare metal) to a suitable electric ground, such as a grounded water pipe or ground wire system.
9. Connect power supply wiring to the motor as indicating on the motor nameplate.
10. Mount and wire safety disconnect switch under ventilator cover. Wire control switches at ground level, refer to switch manufacturer for installation and wiring procedures.

11. Check all fasteners for tightness.
11. Replace motor cover.

## OPERATION

1. Before starting up or operating the unit, check all fasteners for tightness. In particular, check set screws in propeller hub. While in the OFF position, or before connecting the ventilator to power, turn the ventilator propeller by hand to be sure it is not striking the orifice or any obstacle.
2. Start the ventilator up and shut it off immediately to check rotation of the propeller with directional arrow in the motor compartment. Ventilator propeller should rotate clockwise for models 4YC86G, 39FV53, 39FV54, 39FV55, 39FV56 only and counterclockwise on all other models when viewed from the top.
3. When the ventilator is started, observe the operation and check for any unusual noises.
4. With the system in full operation and all ductwork attached, measure current (amps) input to the motor and compare with the nameplate rating (full-load amps) to determine if the motor is operating under safe load conditions.
5. Keep inlets and approaches to ventilator clean and free from obstruction.
6. Electronically commutated motors can be controlled two ways:



**Figure 3**

- a. A motor mounted potentiometer is mounted on the case of the motor to adjust the speed manually. See Figure 3. Turn the potentiometer using a screwdriver to adjust the speed.
- b. The motor includes a capped motor lead that can be connected to a Dayton variable-speed control kit. The motor lead cap can be removed and connected to the nine-pin motor/transformer harness lead. Follow installation instructions provided with optional speed control kit.



**Remote Touch  
35YV94**



**Remote Dial  
43Y140**



**2-Speed  
35YV92**



**Temp/Humidity  
35YV93**

7. Inspection of the ventilator should be conducted at the first 30 minutes and 24 hour intervals of satisfactory operation.
  - a. 30 Minute Interval – Inspect bolts, set screws and motor mounting bolts. Adjust and tighten as necessary.
  - b. 24 Hour Interval – Check all internal components.

## TROUBLESHOOTING GUIDE

Symptom	Possible Cause(s)	Corrective Action
Ventilator inoperative	<ol style="list-style-type: none"> <li>1. Blown fuse or breaker</li> <li>2. Defective motor</li> <li>3. Incorrectly wired</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace or repair</li> <li>2. Replace or repair</li> <li>3. Shut power OFF and check wiring for proper connections</li> </ol>
Excessive noise or vibration	<ol style="list-style-type: none"> <li>1. Loose propeller</li> <li>2. Accumulation of material on propeller</li> <li>3. Ventilator base not securely anchored</li> <li>4. Motor cover loose and rattling</li> <li>5. Fan propeller out of balance</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten set screws</li> <li>2. Clean</li> <li>3. Secure properly</li> <li>4. Tighten acorn screws securing motor cover</li> <li>5. Replace propeller</li> </ol>
Insufficient airflow	<ol style="list-style-type: none"> <li>1. Blocked duct or clogged filters</li> <li>2. Damper closed</li> <li>3. Incorrect propeller rotation</li> <li>4. Loose fitting duct sections permitting air loss</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean or replace</li> <li>2. Inspect/repair</li> <li>3. Check motor wiring</li> <li>4. Check for secure connection where duct sections are joined (suggest duct tape at seams for sealed closure)</li> </ol>
Motor overloads or overheats	<ol style="list-style-type: none"> <li>1. Shorted motor winding</li> <li>2. Incorrect wheel rotation</li> <li>3. Over/Under line voltage</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace motor</li> <li>2. Check motor wiring</li> <li>3. Contact Power Company</li> </ol>

## MAINTENANCE

### **⚠ WARNING**

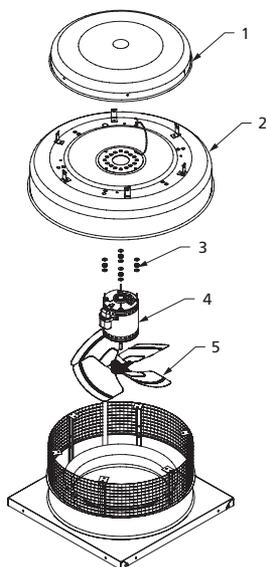
**Disconnect and lockout power source before servicing.**

### **⚠ CAUTION**

**Uneven cleaning of the propeller will produce an out of balance condition that will cause vibration in the ventilator.**

1. Depending on the usage, a regularly scheduled inspection for cleaning the ventilator propeller, housing and surrounding areas should be established.
2. Keep inlets and approaches to ventilator clean and free from obstruction.
3. Check for unusual noises when ventilator is running.
4. Periodically inspect and tighten set screws.
5. Follow motor manufacturer's instructions for motor lubrication.
6. For critical applications, a spare motor should be available.

## REPAIR PARTS ILLUSTRATION FOR AXIAL DIRECT-DRIVE DOWNBLAST VENTILATORS



## REPAIR PARTS LIST FOR AXIAL DIRECT-DRIVE DOWNBLAST VENTILATORS

Ref. No.	Description	Part Number for Models:					Qty.
		39FV53	39FV54	39FV55	39FV56	4YC48G	
1	Motor Cover	21EA52	21EA53	21EA54	21EA53	21EA54	1
2	Shroud	21EA56	21EA57	21EA58	21EA57	21EA58	1
3	Isolator Kit	21DZ10	21DZ10	21DZ10	21DZ10	21DZ10	1
4	Motor	43Y136	43Y136	43Y137	43Y137	5BE62	1
5	Propeller	21EA33	58YU07	58YU08	58YU09	21EA40	1

Ref. No.	Description	Part Number for Models:					Qty.
		4YC49G	4YC50G	4YC51G	4YC52G	4YC53G	
1	Motor Cover	21EA54	21EA54	21EA54	21EA55	21EA55	1
2	Shroud	21EA58	21EA58	21EA58	21EA59	21EA59	1
3	Isolator Kit	21DZ10	21DZ10	21DZ10	21DZ10	21DZ10	1
4	Motor	5BE54	5BE64	5BE58	5BE66	5BE60	1
5	Propeller	21EA40	21EA43	21EA43	21EA46	21EA46	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

Ref. No.	Description	Part Number for Models:					Qty.
		4YC54G	4YC55G	4YC56G	4YC57G	4YC58G	
1	Motor Cover	21EA55	21EA55	21EA54	21EA55	21EA54	1
2	Shroud	21EA59	21EA59	21EA58	21EA59	21EA58	1
3	Isolator Kit	21DZ10	21DZ10	21DZ10	21DZ10	21DZ10	1
4	Motor	5BE66	5BE68	5BE54	5BE68	5BE56	1
5	Propeller	21EA48	21EA50	21EA41	21EA50	21EA44	1

Ref. No.	Description	Part Number for Models:					Qty.
		4YC59G	4YC60G	4YC61G	4YC62G	4YC63G	
1	Motor Cover	21EA54	21EA55	21EA55	21EA55	21EA55	1
2	Shroud	21EA58	21EA59	21EA59	21EA59	21EA59	1
3	Isolator Kit	21DZ10	21DZ10	21DZ10	21DZ10	21DZ10	1
4	Motor	5BE58	5BE66	5BE60	5BE66	5BE68	1
5	Propeller	21EA45	21EA47	21EA47	21EA49	21EA51	1

Ref. No.	Description	Part Number for Models:					Qty.
		4YC86G	4YC87G	4YC88G	4YC89G	4YC90G	
1	Motor Cover	21EA52	21EA53	21EA53	21EA53	21EA53	1
2	Shroud	21EA56	21EA57	21EA57	21EA57	21EA57	1
3	Isolator Kit	21DZ10	21DZ10	21DZ10	21DZ10	21DZ10	1
4	Motor	4YY56	5BE62	5BE52	5BE62	5BE54	1
5	Propeller	21EA33	21EA34	21EA34	21EA37	21EA37	1

Ref. No.	Description	Part Number for Models:					Qty.
		4YC91G	4YC92G	4YC93G	4YC94G	6KWN7	
1	Motor Cover	21EA53	21EA53	21EA53	21EA53	21EA54	1
2	Shroud	21EA57	21EA57	21EA57	21EA57	21EA58	1
3	Isolator Kit	21DZ10	21DZ10	21DZ10	21DZ10	21DZ10	1
4	Motor	5BE52	5BE52	5BE52	5BE54	21DU56	1
5	Propeller	21EA35	21EA36	21EA38	21EA39	21EA43	1

Ref. No.	Description	Part Number for Models:					Qty.
		6KWN8	6KWN9	6KWPO	6KWP1	6KWP2	
1	Motor Cover	21EA55	21EA55	21EA55	21EA54	21EA54	1
2	Shroud	21EA59	21EA59	21EA59	21EA58	21EA58	1
3	Isolator Kit	21DZ10	21DZ10	21DZ10	21DZ10	21DZ10	1
4	Motor	21DU57	21DU58	21DU59	21DU59	21DU56	1
5	Propeller	21EA46	21EA50	21EA50	21EA44	21EA45	1

Ref. No.	Description	Part Number for Models:		Qty.
		6KWP3	6KWP4	
1	Motor Cover	21EA55	21EA55	1
2	Shroud	21EA59	21EA59	1
3	Isolator Kit	21DZ10	21DZ10	1
4	Motor	21DU57	21DU58	1
5	Propeller	21EA47	21EA51	1





## **DAYTON ONE-YEAR LIMITED WARRANTY**

**DAYTON ONE-YEAR LIMITED WARRANTY.** 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.

**PRODUCT SUITABILITY.** MANY JURISDICTIONS HAVE CODES AND REGULATIONS GOVERNING SALES, CONSTRUCTION, INSTALLATION, AND/OR USE OF PRODUCTS FOR CERTAIN PURPOSES, WHICH MAY VARY FROM THOSE IN NEIGHBORING AREAS. WHILE ATTEMPTS ARE MADE TO ASSURE THAT DAYTON PRODUCTS COMPLY WITH SUCH CODES, DAYTON CANNOT GUARANTEE COMPLIANCE, AND CANNOT BE RESPONSIBLE FOR HOW THE PRODUCT IS INSTALLED OR USED. BEFORE PURCHASE AND USE OF A PRODUCT, REVIEW THE SAFETY/SPECIFICATIONS, AND ALL APPLICABLE NATIONAL AND LOCAL CODES AND REGULATIONS, AND BE SURE THAT THE PRODUCT, INSTALLATION, AND USE WILL COMPLY WITH THEM.

**CONSUMERS ONLY.** CERTAIN ASPECTS OF DISCLAIMERS ARE NOT APPLICABLE TO CONSUMER PRODUCTS SOLD TO CONSUMERS; (A) SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU; (B) ALSO, SOME JURISDICTIONS DO NOT ALLOW A LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU; AND (C) BY LAW, DURING THE PERIOD OF THIS LIMITED WARRANTY, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE APPLICABLE TO CONSUMER PRODUCTS PURCHASED BY CONSUMERS, MAY NOT BE EXCLUDED OR OTHERWISE DISCLAIMED.

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](http://www.grainger.com) for a listing of Grainger branches); or (ii) contact Grainger by going to [www.grainger.com](http://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](http://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**