PEARSON
INDUSTRIES, INC.

12” VELOCITY

OWNER’S MANUAL

OPERATING INSTRUCTIONS - MAINTENANCE - SAFETY - TROUBLESHOOTING

This manual contains very important safety warnings and information.
Read and save these instructions for future reference.

Serial No._____

Purchase Date_____

Dealer_____

Pearson Industries • 5420 Newport Drive STE 56 • Rolling Meadows, IL 60008 • Phone: (847) 963-9633
Fax: (847) 963-9733 • Toll Free 888-364-9836

INTRODUCTION

Congratulations on your purchase of a new 12" VELOCITY vane axial fan from Pearson Industries. It is our goal to provide you with the highest quality air mover. The VELOCITY is durable and will provide years of trouble free service when you follow the recommendations included in this manual.

Please read this manual before operating the unit. If you do not understand any portion of this manual, please contact Pearson or an authorized dealer for additional assistance and guidance before operating the fan.

GETTING STARTED

1) Read this owner's manual to familiarize yourself with all warnings and precautions.

2) Inspect the fan to confirm that it's in its original factory configuration. If it is not, contact Pearson or an authorized Pearson representative.

3) Always use your legs to lift the fan to help prevent back injury.

4) The fan should not be operated by a minor. Use caution when operating this fan around children.

5) Inspect the fan on a regular basis for signs of any damage and lose or worn parts. Inspect all accessories as well.

6) Understand how to turn the fan off in an emergency. Turn it off by pushing the ON/OFF switch which is located on the side of the unit or unplug it at the power source.

7) The fan uses a NEMA 5-15P plug and is designed to work ONLY from a grounded, 115 volt nominal AC~, 60Hz, single phase power source. This power source should utilize a NEMA 5-15R receptacle. Use a ground fault circuit interrupter (GFCI) to further protect against electrical shock hazards caused by ground faults.

SAFETY INFORMATION

DO NOT operate the 12" VELOCITY fan without first reading this owner's Manual and understanding the fans operation.

Pearson has endeavored to design and make the best ventilation equipment possible. However, the possibility exists that the fan can be subjected to applications for which it was not designed. This misuse can lead to serious injury or death. Refer to current OSHA job safety and health rules and regulations pertaining to the construction industry. Pay particular attention to the rules governing Permit-Required Confined Spaces for General Industry 29 CFR 1910.

This fan is designed and made for air ventilation only. It is not designed to move/transport any sort of liquid or semi-liquid material.

Do not operate the fan in any explosive or flammable atmosphere. Neither the motor nor the fan is designed to work in such environments. Serious property damage, injury or death may result if used in an explosive or flammable environment.

Keep the unit grounded with a three pronged grounding plug and a grounded electrical outlet. Do not use an ungrounded extension cord or an ungrounded adapter.

Always use caution before entering a confined space area. Test all confined space air with gas detection equipment that is appropriate for the job. Assume that a confined space is contaminated until it is proven otherwise.

GENERAL SAFETY INFORMATION

1) Do not operate any fan with a damaged cord or plug. Discard fan or return to an authorized service facility for examination and/or repair.

2) Do not run the cord under carpeting. Do not cover cord with throw rugs, runners, or similar coverings. Do not route cord under furniture or appliances. Arrange cord away from traffic area and where it will not be tripped over.

3) Do not block the air intake grill.

4) Do not put any object in the air intake grill.

5) Do not place the fan in standing water because of extreme shock hazard.

6) Do not operate the fan outside when it is raining. Only store the fan indoors.

7) Do not discharge flammable solvents or chemicals through the fan air intake grill.

8) Do not use the fan in areas where flammable or combustible liquids, gases, vapors, dust, fibers, or filings may be present.

9) This fan is not toy.

8) A properly grounded outlet should only be used with this fan.

9) Unplug the fan from the power supply before servicing and when not in use.

10) Do not handle the fan with wet hands. Do not pull or carry the fan by its cord, do not use cord as a handle, do not close a door on the cord, and do not pull cord around sharp edges or corners. Keep cord away from heated surfaces. Do not unplug the fan by pulling on the cord; grasp the plug and not the cord.

11) Do not place hair, loose clothing, fingers, and any parts of the body near the air intake grill.

12) Do not allow water inside the motor. Unplug the fan and let it dry thoroughly before using again, if the motor becomes wet.

13) Do not remove ground from the power cord. Removing it may result in electrical shock or electrocution. Removing the ground will void the warranty.

14) Inspect the fan if it has been dropped, left outdoors, or dropped into water, etc.. Thoroughly inspect it prior to use.

15) Do not install ducting when the fan is in operation.

DANGER!

DO NOT USE THE FAN IF THE INLET AND OUTLET GRILLS ARE NOT INSTALLED.

If the Fan is not working or if you have a question about its safe operation, you should not operate it.

Contact a Pearson Industries Authorized Service Center, or the factory direct at (847) 963-9633 or www.pearsonind.com.

OPERATION

1) When unpacking the fan, inspect it for any damage that may have occurred during shipping.

2) Read this manual before connecting and operating the fan.

3) Determine if your job is considered hazardous. The working environment may contain explosive gases or dust in explosive amounts.

4) The outlet to be used must be grounded.

5) Make sure that both grills on the fan are not obstructed in any way that may restrict the airflow. Do not operate the fan at anytime if the grills are not installed.

6) The fan is marked with an arrow on either side. This is the direction of airflow.

7) Never stand in front of the fan in the direction of airflow. Serious injury or death may occur from being struck with debris that are sucked into the fan and discharged at a high speed.

8) Install duct when the fan is turned off and unplugged.

9) Do not place the fan next to an obstruction such as a wall as this will decrease airflow.

10) Keep in mind that using duct will decrease the airflow rate.

11) Always test the atmosphere for explosive gases prior to turning on the fan. Be sure to continually retest the atmosphere.

MAINTENANCE

Shut off the fan and unplug it before conducting any service or inspection. Accidental electrocution or shock may occur if the fan is not disconnected from a power supply. Confirm that the fan blade has stopped rotating before removing the grills and handling the fan blade.

1) Check for any loose or broken fasteners or components. Replace, repair or tighten as needed with only factory approved parts.

2) Clean the fan blade of any debris. A build up of debris such as paint, cement dust, dirt, etc can unbalance the fan blade and damage the unit.

TROUBLESHOOTING

 **DANGER!** 

ALL THE SERVICE PROCEDURES BELOW SHOULD BE CONDUCTED WITH THE UNIT TURNED OFF AND UNPLUGGED!

PROBLEM	CAUSE	SOLUTION
Unit does not run	1. Switch is not on. 2. No power at outlet. 3. Switch is broken. 4. Loose wiring.	1. Turn on switch. 2. Check circuit breaker for power to outlet. 3. Replace Switch. 4. Check wiring, tighten as needed.
Unit runs briefly and then shuts off on overload.	1. Duct length is too long. 2. One or both grills are exhausted. 3. Motor bearings are failing or have failed. 4. Internal motor wiring is faulty.	1. Shorten duct length. 2. Clear grills. 3. Replace motor. 4. Replace motor.
Unit vibrates excessively when operating.	1. The fan blade is damaged. 2. There is dirt build up on the fan blade. 3. The motor shaft is bent because of a severe jolt.	1. Replace fan blade. 2. Clean fan blade. 3. Replace motor. If necessary, replace fan blade.
Unit makes a scraping sound while running.	1. A severe jolt has deformed the housing. 2. A sever jolt has dislodged the motor from the housing and/or the motor mount vanes.	1. Replace the housing or the entire unit if necessary. 2. Replace the motor if necessary. Replace the motor mount vanes if necessary.
Fan does not run, but motor makes noise.	1. A severe jolt has deformed the housing causing interference with the fan blade. 2. The capacitor has failed or the capacitor wire is broken.	1. Repair or replace the housing as necessary. 2. Repair or replace the capacitor as necessary.

For parts and service contact a Pearson Industries Authorized Service Center, or the factory direct at (847) 963-9633 or www.pearsonind.com.

12” VELOCITY EXPLODED VIEW

PEARSON
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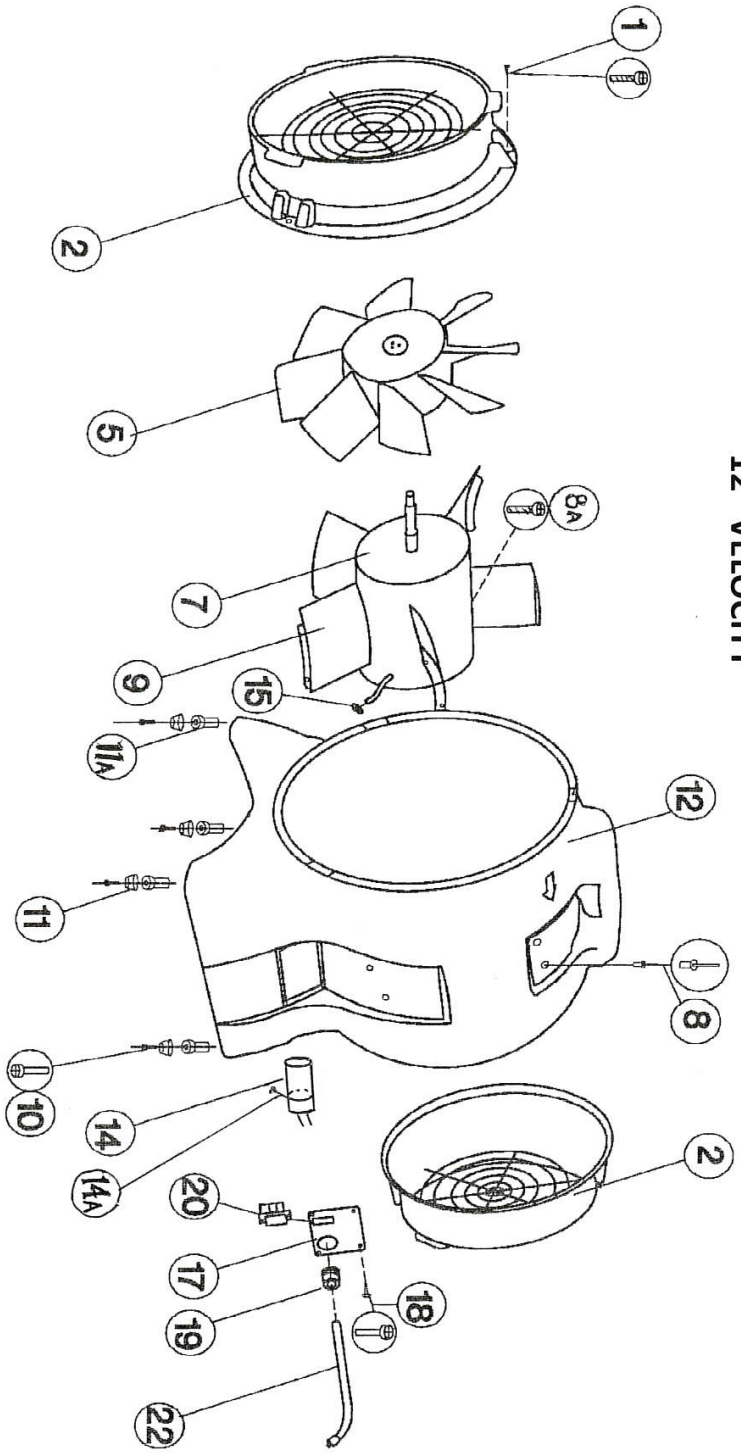
12” VELOCITY



ITEM	PART #		DESCRIPTION
1	PII-V0139082		Duct Ring Screw
2	PII-V3002		Duct Ring/Grill
5	PII-V3004		Fan Blade Assy.
7	PII-V3010		Motor (110v 50/60HZ)
8	PII-V00010		Rivet (for motor mount vane)
8A	PII-V32404		Bolt (for motor vane)
9	PII-V3001		Motor mount vane (w/shim)
10	PII-VM82510		Bolt (for rubber foot)
11	PII-V00137		Rubber Foot
11A	PII-V00011		Well Nut (for rubber foot)
12	PII-V3005-USI		Shell
14	PII-V3003		Capacitor
14A	PII-66886K26		Cable Tie (capacitor mount)
15	PII-V00136		Rubber Grommet
	PII-SWVKIT-115V		Switch Kit (Includes #17, 18, 19, 20, 22)
17	PII-15008-NS		Switch Plate w/Gasket
18	PII-V71787		Switch Plate Bolt
19	PII-00163		Cord Strain Relief
20	PII-020097A		Rocker Switch w/cover
22	PII-08-315		Cord (20' length, 110v)
	230 Volt parts		
7A	PII-V3010CE		Motor (230V 50 HZ)
14A	PII-AJ00396		220V Capacitor
18A	PII-1172914		Switch Plate Bolts (tamper proof)
22	PII-V02-2451		Cord (20' length, 220v)

MOTOR SPECIFICATIONS

VELOCITY		
Voltage	115V AC~	230V AC~
Phase	Single	Single
Frequency	50/60 Hz	50 Hz
Electric Motor	1 H.P. (.75 Kw)	1 H.P. (.75 Kw)
Watts	615W(110v)	670W(230v)
Current (amps)	8.0/5.7	4.2
R.P.M.	2800/3300	2850
Max. S.P.	3"	2.5" (68 mm/Aq)

AIR FLOW RATES	CFM	m^3/Min.	CFM	m^3/Min.
Free Air	2518	72	2443	70

DIMENSIONS

Size	12" diameter (305 mm)
Weight	32.2 lbs. (14.6 Kg)
Height	20" (508 mm)
Length	18.5" (470 mm)
Width	15" (381 mm)

UNITED KINGDOM CORDS ONLY
DANGER!!
THIS FAN MUST BE EARTHED!!
IMPORTANT!!

The main lead wires are colored as follows:

BLUE	—	NEUTRAL
BROWN	—	LIVE
YELLOW/GREEN	—	EARTH

Because the colors of the main lead wires may not correspond with the colored markings on the terminals of your plug, connect as follows:

• The brown wire is connected to the terminal marked with the letter —L— or colored red.
• The blue wire is connected to the terminal marked with the letter —N— or colored black.
• The yellow/green wire is connected to the terminal marked with the letter E or ⏚

If you are unsure how to connect the fan correctly, consult a qualified electrician. This fan must be protected by a 13A fuse if a 13A (B.S. 1363) plug is used. If any other type of plug is used, the fan must be protected by a 5A fuse either in the plug, the adapter or at the distribution board.

PEARSON INDUSTRIES LIMITED WARRANTY

The original purchaser of a new Pearson Industries fan is entitled to a limited warranty subject to the terms and conditions set forth herein. Pearson's limited warranty is for the replacement or repair of any part that proves to be defective in workmanship or materials for a period of two (2) years from the date of purchase by the original purchaser. During these two years, Pearson will provide all parts necessary to correct any defects free of charge. This limited warranty is not transferable and is only available for the original purchaser.

The limited warranty is only for the repair or replacement of parts found to be defective upon Pearson's examination. This limited warranty will be null and void unless the assembled unit is returned, freight pre-paid, together with a letter describing the problem to Pearson or an authorized Pearson dealer,

This warranty is limited to ninety (90) days for labor from the date of the purchase. Thereafter, any labor costs incurred will be charged to the customer at the current hourly rate.

This limited warranty is null and void if the product has been used in an improper manner, disassembled, altered or not maintained properly. Furthermore, this limited warranty is null and void if fan has been subjected to unauthorized repairs, corrosive chemicals, improper voltage, fire, flood, abnormal wear or any causes beyond Pearson's control.

This limited warranty is null and void if the serial number has been removed, obliterated, or defaced. Pearson Industries reserves the right to make changes to the fan design, materials or specifications as necessary and without prior notice. Pearson shall not be obliged to make any changes or modifications to any product previously manufactured.

Please provide the serial number of the fan and call Pearson to receive a return authorization number. Replacements parts cannot be provided unless Pearson has the proper information from the customer. To obtain replacement parts pursuant to this limited warranty, you must write to Pearson or call (888) 364-9836 to receive an authorization number.

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