Part #107852-003

Product Manual:

Model #1375D & #1385D Axial "AIRPAC" Ventilator







T.A. Pelsue Company

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Since our inception in 1963 – the T.A. Pelsue Company has designed and manufactured high quality equipment to improve the personnel efficiency and working conditions in various underground, confined, and outdoor areas.

Founded by T. Allen Pelsue, the company has established a continuing reputation for excellence in the production of fine products for a broad spectrum of industry throughout the world.

Now, in our second generation of family direction, continued commitment to innovation and quality makes Pelsue a leading source of equipment for many types of confined spaces. We specialize in safety, retrieval, fall arrest, ventilation, cable placing, splicing, and maintenance nationally and abroad. With more than 70,000 square feet of facilities available, Pelsue continues the dedication that has made us pre-eminent in this field.

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1.1 - Quality Policy

T.A. Pelsue Company Quality Policy

OUR GOAL IS THE PURSUIT OF NEVER-ENDING IMPROVEMENT IN PRODUCT QUALITY AND BUSINESS SYSTEMS.

METHODS TO BE EMPLOYED IN ATTAINING THIS GOAL WILL INCLUDE NEW PRODUCT QUALITY PLANNING, EMPLOYEE TRAINING, AND UTILIZATION OF EMPLOYEE INVOLVEMENT GROUPS TO SOLVE PROBLEMS.

IN AN INCREASINGLY COMPETITIVE MARKETPLACE, ENSURING CUSTOMER SATISFACTION IS ONE OF THE DIFFERENTIATORS THAT SETS YOU APART FROM THE PACK AND YIELDS A COMPETITIVE ADVANTAGE.

THEREFORE, WE WILL SUPPORT TOTAL CUSTOMER SATISFACTION BY IMPLEMENTING THE **ISO 9001 QUALITY SYSTEM** AND PROVIDING THE NECESSARY ATMOSPHERE AND TRAINING TO NURTURE THIS CONCEPT THROUGHOUT OUR ORGANIZATION.

WE WILL MAKE EVERY BUSINESS DECISION AS THOUGH THE QUALITY OF THE PART OR SERVICE PROVIDED WAS DESTINED FOR OUR OWN OR OUR FAMILY'S USE. WE WILL ALWAYS THINK **QUALITY FIRST.**

EVERY T.A. PELSUE COMPANY EMPLOYEE IS EXPECTED TO COMMIT TO THIS PHILOSOPHY IN THE PERFORMANCE OF HIS OR HER DAILY TASKS.

QUALITY FIRST!

T.A. PELSUE COMPANY SENIOR MANAGEMENT TEAM

PELSUE PORTABLE PRODUCT WARRANTY

- Pelsue products are designed and engineered to perform as stated in published specifications. Quality materials and workmanship are used in the manufacture of this product. With regular maintenance and proper care, Pelsue equipment provides many trouble free hours of operation.
- The T.A. Pelsue Company warrants to the buyer that material furnished will conform to specifications and will be free from defects in material and workmanship from the date of shipment to the original buyer, for the period listed by product description on the reverse side of this warranty statement.
- In the event of failure of any components of a Pelsue product within the warranty period, service must be preapproved by the T.A. Pelsue Company and service must be performed by the T.A. Pelsue Company Parts and Service Department in Englewood Colorado, or at the option of T.A. Pelsue Company, service may be performed at any designated service center, which may include any authorized service center for the component manufacture.
- Damage or failure due to misuse, mishandling, or unauthorized modifications will not be covered by this warranty. Unless otherwise agreed, the T.A. Pelsue Company shall repair or replace the defective components within (30) calendar days of notice of failure. T.A. Pelsue Company's obligation hereunder, shall be limited to the repair or replacement of the product or component as set forth above, and shall not include any liability whatsoever for damages caused by such failure, including but not limited to consequential or incidental damages flowing from use or lack of use of product.
- Any replacement, repair, modification, installation or other service performed by the T.A. Pelsue Company shall be warranted by the remainder of the unexpired period of the warranty, or for a period of (90) calendar days, whichever is longer.
- All materials or parts returned for credit or warranty shall be returned only with prior approval, and will be subject to factory inspection before credit is allowed. Parts claimed defective will be replaced upon request and will be invoiced as purchased, subject to credit when the parts claimed to be defective have been received and examined by the factory.
- This warranty is expressly in lieu of all other warranties expressed or implied, including any warranties of merchantability or warranties of fitness for any particular use and all other obligations or liabilities in connection with the sale of this equipment.

Product Description	Warranty Coverage
Ventilators	1 year
Heaters	1 year
Ventilator Hoses/Ducts	3 months
Pel-Cans and Caddys	1 year
Hose Adapters	1 year
Manhole Shields & Manhole Guards	1 year
Pel-Brite Work Lights	6 months
Planks and Plank Supports	6 months
Duct Rodders and Accessories	6 months
Submersible Pumps	6 months
Discharge and Suction Hoses for Pumps	
Wheel Chocks	1 year

^{*}From date of shipment to original buyer.

T.A. Pelsue Company, 2500 South Tejon Street, Englewood, Colorado 80110, 800-525-8460

2.0 - Introduction & Product Information

Congratulations on your choice of a Pelsue Model #1375D & #1385D Axial "AIRPAC" Ventilator to compliment your confined space ventilation operation. This equipment has been designed and manufactured to exceed confined space requirements and regulations in order to meet the needs of the discriminating operator for the efficient and safe operations of personnel in a confined space.

Safe, efficient and trouble-free operation and maintenance of the system requires that anyone who will be operating, maintaining, or inspecting the equipment, read, understand and follow all the operation, safety, maintenance, and inspection instructions contained within this manual. This manual covers the Pelsue Model #1375D & #1385D Axial "AIRPAC" Ventilator. Use the Table of Contents as a guide to find specific information.

Keep this manual handy for frequent reference and to pass on to new operators.



This product is a part of a system for confined space ventilation operations. The user must read, understand and follow the instructions contained in this manual before using this equipment. Failure to follow these instructions could result in serious injury or death.

2.1 - Serial Number

Product Serial Number

Always give your dealer the serial number of your Pelsue confined space ventilator product when ordering parts or requesting service or other information.

The serial number plate is permanently embossed with a serial number. The serial number will be located on the plate location on the side of the Axial "AIRPAC" Ventilator as shown in Fig. 2a. The serial number plate will appear as shown to the right in Fig. 2b. A space has been provided below for the recording of the serial numbers for future reference.

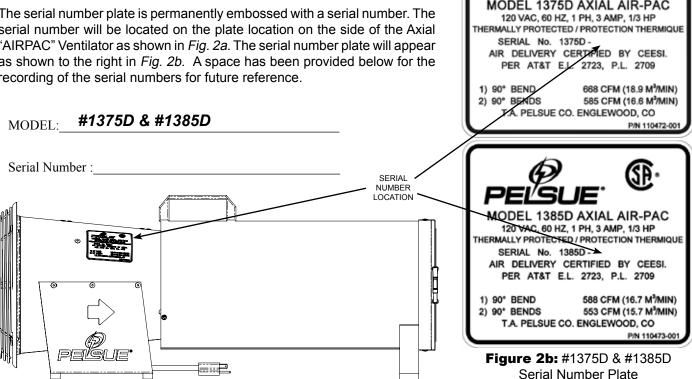


Figure 2a: Serial Number Location

3.0 - Configuration & Assembly

Upon initial receipt of the #1375D & #1385D Axial "AIRPAC" Ventilator, inspect the packaging for any evidence that the product may have been damaged in shipment. While unpacking the product, inspect all of the components for damage. If damage to any of the components is discovered, Alert the shipping carrier immediately of the damage to the shipment.

3.1 - Parts Diagram & List

Refer to the following parts breakdown diagram (Figure #3.1a) and the accompanying parts list (Table #3.1a & #3.1b) for identification of parts of Model #1375D & #1385D Axial "AIRPAC" Ventilator in the event replacements become necessary. The parts list table displays applicable part numbers, descriptions, and quantity per assembly.

**Refer to parts list if replacement parts are required. Replacement parts can be ordered from the T.A. Pelsue Company at 800-525-8460.

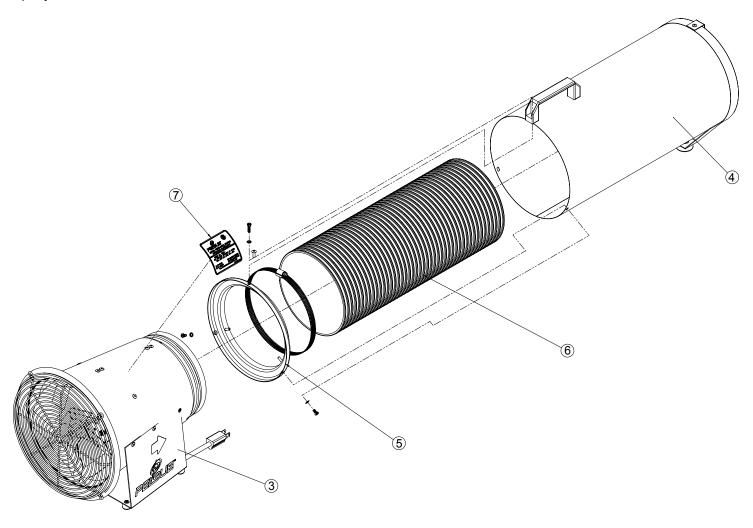


Figure 3.1a: #1375D & #1385D Parts Diagram

ITEM			
NUMBER	PART NUMBER	DESCRIPTION	QUANTITY
3	109997-003	VENTILATOR ASSEMBLY - MODEL #1325D FOR USAGE WITH AIR PAC MODELS	1
4	102095-999	CANISTER SUB-ASSEMBLY - AIR PAC, FIXED MOUNT TO VENTILATOR, 21 1/4" CAN LG.	1
5	102095-998	CONNECTION SUB-ASSEMBLY - CANISTER & HOSE TO VENTILATOR	1
6	100743-001	HOSE - VENTILATOR, HIGH RETRACTION, 8" DIA	1
7	110472-001	DECAL - I.D. & SERIAL NO. RATING 1375D AIR PAC	1

Table 3.1a: #1375D Parts List

ITEM			
NUMBER	PART NUMBER	DESCRIPTION	QUANTITY
3	109997-003	VENTILATOR ASSEMBLY - MODEL #1325D FOR USAGE WITH AIR PAC MODELS	1
4	102095-999	CANISTER SUB-ASSEMBLY - AIR PAC, FIXED MOUNT TO VENTILATOR, 21 1/4" CAN LG.	1
5	102095-998	CONNECTION SUB-ASSEMBLY - CANISTER & HOSE TO VENTILATOR	1
6	100743-002	HOSE - VENTILATOR, HIGH RETRACTION, 8" DIA	1
7	110473-001	DECAL - IDENTI., RATING & SERIAL #, BLK ON SILVER, 1385D	1

Table 3.1b: #1385D Parts List

3.2 - Parts Diagram & List

Refer to the following parts breakdown diagram (Figure #3.2a & #3.2b) and the accompanying parts list (Table #3.2a & #3.2b) for identification of parts of Model #1325D Axial "AIRPAC" Ventilator for use in the event replacements become necessary. The parts list table displays applicable part numbers, descriptions, and quantity per assembly.

**Refer to parts list above if replacement parts are required. Replacement parts can be ordered from the T.A. Pelsue Company at 800-525-8460.

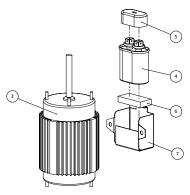


Figure 3.2a: #110002-010 Parts Diagram

Item			
Number	Part Number	Description	Quantity
3	110002-001	MOTOR - ELECTRIC, AXIAL, 3/8" SHAFT, 120VAC	1
4	110007-001	CAPACITOR - 7.5 MFD, 370 VAC, 60 HZ	1
5	110288-001	COVER - RUBBER, CAPACITOR CONNECTION	1
6	119023-001	GASKET, FOAM STRIP, 3/8" X 1" X 11" LG. NEOPRENE W/PSA CLOSED CELL	0.091
7	114628-001	CAPACITOR BRACKET - 7.5 MFD, 370 VAC, 60HZ	1

Table 3.2a: #110002-010 Parts List

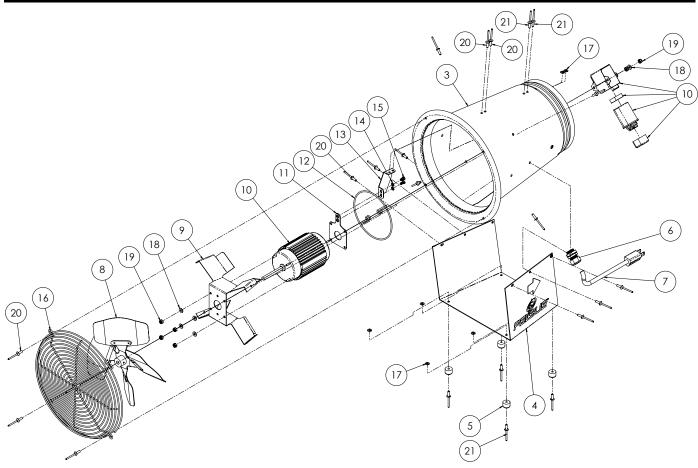


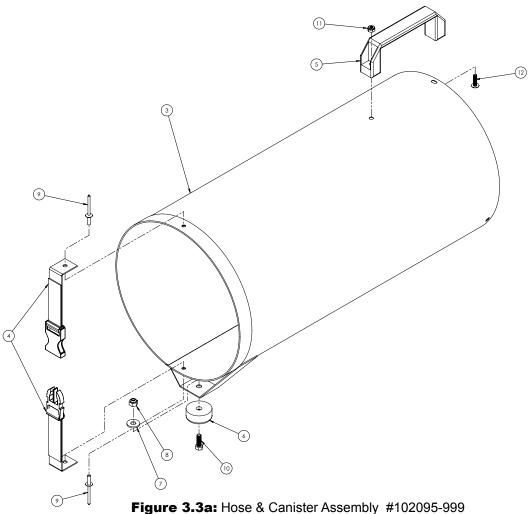
Figure 3.2b: #Ventilator Assembly Parts Diagram

Item			
Number	Part Number	Description	Quantity
3	110006-001	WELDMENT - AXIAL HOUSING, 1300D / 1400D	1
4	110021-001	BASE - AXIAL BLOWER, PAINTED & SILKSCREENED	1
5	100188-001	FOOT - RUBBER, 3/4" OD, W/ WASHER	4
6	100405-004	STRAIN RELIEF - WATERTIGHT, 1/2" HUB, 0.250"- 0.375" DIAM.	1
7	26E-005700	CORDSET - W/MOLDED PLUG 16/3 SJTOW RATED	1
8	119268-001	FAN BLADE - 10" DIA., 3/8" SHAFT, 3450 RPM, ALUM, CW	1
9	118809-001	MOTOR MOUNT - AXIAL BLOWERS, HDPE / STEEL BLOWER HOUSINGS	1
10	110002-010	ASSEMBLY - AXIAL MOTOR 120V/60Hz/1Ph, 1/3Hp. W/CAPACITOR, 3/8"SHAFT	1
11	126038-001	END PLATE - AXIAL MOTOR, AFT (OUTLET) END, MOTOR SUPPORT	1
12	110000-001	GRILLE - OUTLET, 1300D/1400D, AS POWDER COATED IN BLACK	1
13	126038-002	VERTICAL RIB - AXIAL MOTOR, STEEL HOUSING, HANDLE LOCATION ATTACHMENT	1
14	68N-004300	WASHER - LOCK, INTERNAL TOOTH, #10, PLATED	2
15	68N-035000	SCREW - MACHINE, HEX HD, SLOT, 10-24 UNC X 3/8", PLATED	2
16	104977-001	GRILLE - INTAKE, 1300D/1400D, AS POWDERCOATED BLK	1
17	104151-001	WASHER - RIVET BACK UP, 7/32" ID X 7/16" OD, SS	6
18	100050-006	WASHER - FLAT, #10, TYPE A, W, PLATED	6
19	110733-001	LOCKNUT - HEX WITH NYLON INSERT, 10-32, BLACK	6
20	118518-001	RIVET - STAVEX, BLIND FLANGE DOME, BLACK, .188" DIA	16
21	118519-001	RIVET - STAVEX, BLIND FLANGE DOME, BLACK, 0.188" DIA	6
22	26E-014100	TERMINAL - BUTT SPLICE, 16GA - 14 GA, NYLON INSUL (NOT SHOWN)	3
23	26E-040210	TERMINAL - QUICK DIS, FEMALE, 18-22, 1/4 TAB, NYL INS (NOT SHOWN)	2
24	105343-001	TUBING - HEAT SHRINK, BLK, 3/8" (NOT SHOWN)	6

Table 3.2b: #Ventilator Assembly Parts List

Refer to the following parts breakdown diagram (Figure #3.3a) and the accompanying parts list (Table #3.3a) for identification of parts of AIRPAC Canister in the event replacements become necessary. The parts list table displays applicable part numbers, descriptions, and quantity per assembly.

**Refer to parts list above if replacement parts are required. Replacement parts can be ordered from the T.A. Pelsue Company at 800-525-8460.



Parts Diagram

ITEM			
NUMBER	PART NUMBER	DESCRIPTION	QUANTITY
3	100768-002	WELDMENT - HOSE CANISTER, 1300D/1400D AIR PACS	1
4	118972-001	RETAINER - HOSE CARRIER, NYLON WEBBING TYPE	1
5	106942-001	HANDLE - PULL TYPE, BLK PLASTIC, FOR 1590 & 1690 SERIES	1
6	100188-002	FOOT - RUBBER, 1-1/2" OD W/REC WASHER	1
7	100050-009	WASHER - FLAT, 1/4 IN, TYPE A, W, PLATED	1
8	100048-114	LOCK NUT - HEX, 1/4-20, NYLON INSERT	1
9	118519-001	RIVET - STAVEX, BLIND FLANGE DOME, BLACK, .188" DIA	2
10	100604-008	SCREW - CAP, HEX HEAD, 1/4-20 UNC X 3/4" LONG	1
11	112178-001	LOCKNUT - NYLON INSERT, #10-24 UNC, BLK	1
12	111841-001	SCREW - MACHINE TRUSS HEAD, 10-24 UNC X 3/4" LG, BLK	1

Table 3.3a: Hose & Canister Assembly #102095-999 Parts List

3.4 - Parts Diagram & List

Refer to the following parts breakdown diagram (Figure #3.4a) and the accompanying parts list (Table #3.4a) for identification of parts of AIRPAC Canister to Ventilator Adapter Sub Assembly in the event replacements become necessary. The parts list table displays applicable part numbers, descriptions, and quantity per assembly.

**Refer to parts list below if replacement parts are required. Replacement parts can be ordered from the T.A. Pelsue Company at 800-525-8460

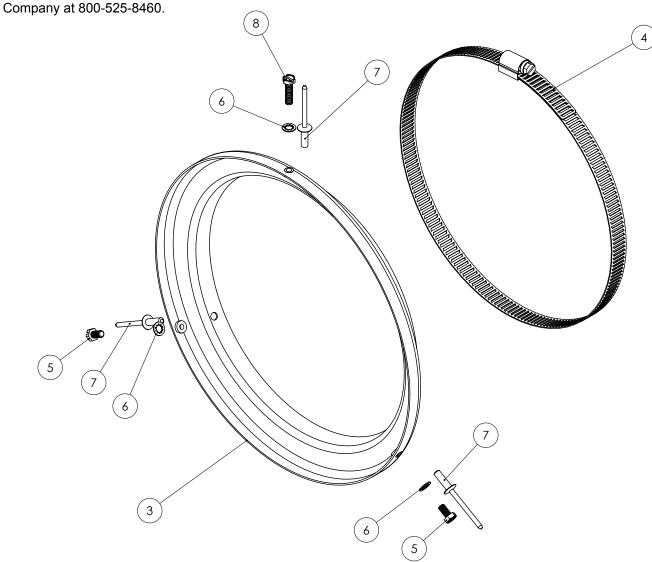
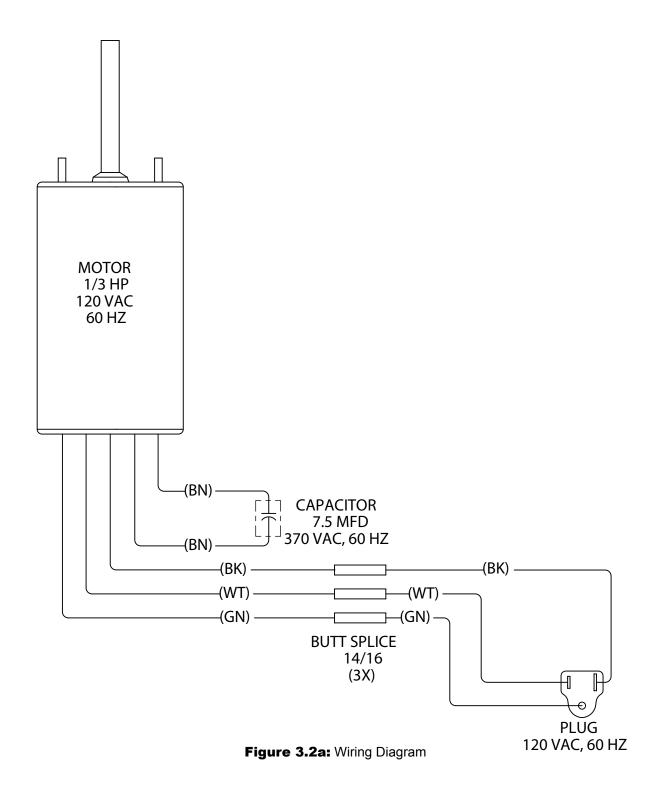


Figure 3.4a: Adapter Sub Assembly #102095-998 Parts Diagram

ITEM NUMBER	PART NUMBER	DESCRIPTION	QUANTITY
3	100775-001	ADAPTER - VENTILATOR TO HOSE CANISTER	1
4	441-007000	CLAMP - HOSE, WORM DRIVE, #128, 24", 9/16" BAND, SS	1
5	68N-035000	SCREW - MACHINE, HEX HD, SLOT, 10-24 UNC X 3/8"	2
6	68N-004300	WASHER - LOCK, INTERNAL TOOTH, #10, PLATED	3
7	118518-001	RIVET - STAVEX, BLIND FLANGE DOME, BLACK, .188" DIA	3
8	101043-002	SCREW - MACHINE, HEX HD, 10-24 UNC X 1/2", PLATED	1

Table 3.4a: Adapter Sub Assembly #102095-998
Parts List

Shown below in Figure 3.5a, is a wiring diagram of the motor and the cordset.



4.0 - Safety

The following section will address the safety precautions which must be adhered to when working with Pelsue confined Space Ventilation equipment such as the #1375D & #1385D Axial "AIRPAC" Ventilator. Any user must familiarize themselves with the information in this section before utilizing the equipment.

SIGNAL WORDS:

Note the use of the signal words **DANGER**, **WARNING** and **CAUTION** with the safety messages. The appropriate signal word for each message has been selected using the following guidelines:

- **DANGER-** Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations or for hidden or unseen hazards.
- **WARNING-** Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury and includes obvious and hidden hazards. It may also be used to alert against unsafe practices.
- **CAUTION-** Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

You are responsible for the safe operation of your Pelsue #1375D & #1385D Axial "AIRPAC" Ventilator. You must ensure that anyone who will operate or work around the equipment be familiar with confined space ventilation procedures. This manual will take you step-by-step through the workings and capabilities of the #1375D & #1385D Axial "AIRPAC" Ventilator and alert you to all good safety and operating practices while using the system.

Remember, you are the key to safety. Good safety practices not only protect you but also the people around you. Make these practices a working part of your safety program. Be certain that everyone operating in or around a confined space is familiar with the procedures recommended and follows safety precautions. Remember, most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

- The most important safety device on this equipment is a safe operator. It is the operator's responsibility to read and understand all safety and operating instructions in the manual and to follow these. Most accidents can be avoided.
- A person must understand the operation of this equipment and be trained in it's usage before operating the equipment. An untrained operator exposes himself and others to possible serious injury or death.
- Do not modify the equipment in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the equipment.
- Think SAFETY! Work SAFELY!

4.1 - Safety Alert Symbol

SAFETY ALERT SYMBOL

This Safety Alert symbol means **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**

The Safety Alert symbol identifies important safety messages on your Pelsue Confined Space Product and in the manual. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instruction in the safety message.

Why is this symbol important to you?

3 BIG Reasons: Accidents Disable and Kill.

Accidents Cost You Money.

Accidents Can Be Avoided.



Safety Precautions:

It is necessary to follow these safety precautions, each time, prior to using the product.

The Safety Precautions is not limited to, but must include the following items;

- **1.** Do not use the Ventilator for anything other than its intended use.
- **2.** Do not wear loose clothing that can become entangled in operating machinery. Do not operate the Ventilator without inlet or outlet screen guards in place.
- **3.** Do not place fingers or any other object through inlet or outlet screens.
- **4.** Always operate the Ventilator from a properly grounded receptacle.
- **5.** Never handle energized power cords with wet hands.
- **6.** Never let extension cords or plug connection lay in water. Locate the Ventilator so that it cannot fall into water inadvertently.
- **7.** Never use cords with frayed, cut, or brittle insulation. Check the cord for sound connections to the ground fault interrupter receptacle.
- **8.** Never use this Ventilator in an explosive environment.
- **9.** Ensure that toxic fumes are not blown into a confined space.
- **10.** Unattended use of equipment is not recommended.



! CAUTION! - Be sure the Ventilator is disconnected from the power source before doing any maintenance or repair work on the Ventilator.

! CAUTION! - Check all power cords for cuts, frayed ends, or brittle insulation. See parts list for replacement cord part number.

! CAUTION! - The user must ensure that the Ventilator is located where it cannot fall into water inadvertently and the extension cords or plug connections do not lay in water.

5.0 - Product Operation

The following section will address the capabilities and the general operation of the Pelsue #1375D & #1385D Axial "AIRPAC" Ventilator. The instructions contained within this section should be adhered to each and every time the product is used. Any person tasked with installing or operating the piece of equipment should be familiar with these procedures.

5.1 - Product Description & Capabilities

The Pelsue #1375D & #1385D Axial "AIRPAC" Ventilator is an all-in-one, high volume ventilator and 8" x 15' hose. Model #1385D includes a 25' hose. Both models are manufactured with tough, long-life steel housing. The base provides convient cord storage. All specifications, instructions, and procedures provided within this manual or upon Pelsue Specification Documents are based upon and only valid for usage with Pelsue accessories. The T.A. Pelsue Company can not verify equipment safety and/or compliance when utilized with anything other than Pelsue approved confined space accessories.

Axial "AIRPAC" Ventilator - #1375D & #1385D

General Specifications

• Weight - 40 LBS. (Model 1375D), 43LBS. (Model 1385D)

Height - 14.5"
 Width - 13"
 Length - 37"

Model Specifications & Performance

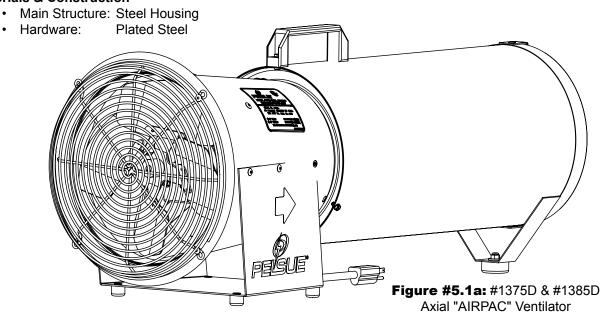
		<u>1375D</u>	<u>1385D</u>
•	Voltage	120VAC	120VAC
•	Amperage	3.3	3.3
•	H.P.	1/3 (0.249kW)	1/3 (0.249kW)
•	One 90° Bend	668 CFM (18.9 m ³ /min)	588 CFM (16.7 m ³ /min)
•	Two 90° Bends	585 CFM (16.6 m ³ /min)	553 CFM (15.7 m ³ /min)

Two 90° Bends 585 CFM (16.6 m³/min) 553 CFM (15.7 m³/min)
 Hose Length: 15' 25'

Features

- · Low Maintenance
- Specifically designed to provide a completely portable source of fresh air

Materials & Construction



Prior to Operation, the #1375D & #1385D Axial "AIRPAC" Ventilator should be configured and prepared according to the following guidelines.

1. Pre-Operation Inspection:

It is necessary to perform a visual inspection, each time, prior to using the product. If deficiencies are found, remove the product from service and contact the T.A. Pelsue regarding repair. The following checklist coupled with *Figure #5.2a* should be used as a guide to determine whether the equipment is in good operating condition prior to usage. Equipment that is not in good condition can endanger the safety of the entrant and attendant during use.

The Pre-Operation Visual Inspection is not limited to, but must include the following items;

- **a.** Check the Ventilator inlet and outlet guard screens for obstructions.
- **b.** Remove any objects around the immediate area that could be sucked into the Ventilator.
- **c.** The cordset is properly attached to the Ventilator.
- **d.** The rubber feet are attached.

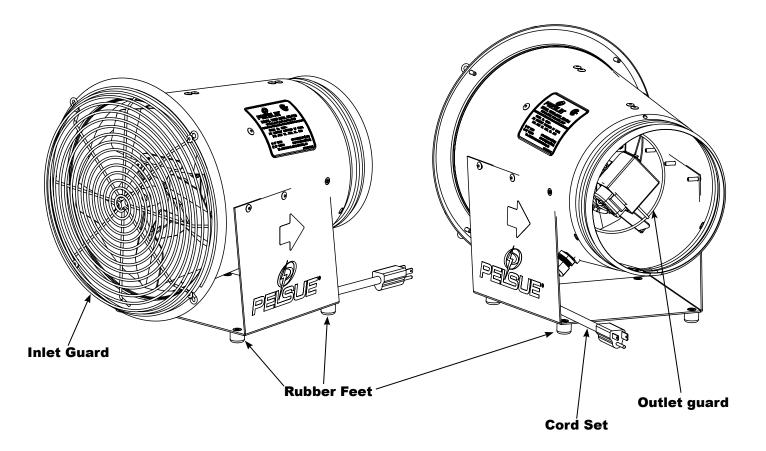


Figure #5.2a: #1375D & #1385D Axial "AIRPAC" Ventilator Pre-Operation Inspection Points

5.2 - Start-Up & Operating Procedures (continued)

2. Setup of #1375D & #1385D Axial "AIRPAC" Ventilator:

Choose a location where installation will provide suitable proximity to the work area yet minimize obstructions during use and in the event a rescue is necessary. Once a location is chosen;

- **a.** Ventilator should be placed 1.5 meters upwind where possible, from the confined space, and have its inlet pointed into the wind. This will reduce the chance of contamination being blown into the confined space. (Refer to Fig. #5.2b)
- **b.** Plug the Ventilator power cord to a properly grounded receptacle.
- **c.** Extend and place the Ventilator hose as required.
- **d.** When Ventilator operation is no longer required, unplug the power cord. Coil and store the power cord in the opening of the molded handle, or wrap the cord around the molded legs.

Important Notes:

- During confined space entry operations, it should not be assumed that the ventilator will maintain the air inside the confined space at a safe condition. When the ventilator is in use, the air inside the confined space should be monitored continuously for the presence of poisonous gases and/or toxic fumes.
- Ensure that the Ventilator provides positive airflow the entire time during usage. The Axial "AIRPAC" Ventilator can be used with an accessory Pelsue Air Flow Alarm (#FLO-CHEK) in order to alert the entrants that positive ventilation is lost.
- The Axial "AIRPAC" Ventilator can also be used in conjunction with a Pelsue Airpac that connects to the Ventilator and has storage built-in for the hose.

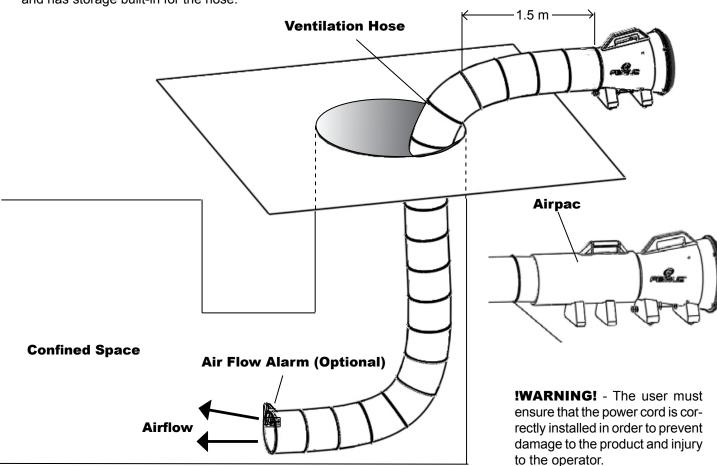


Figure #5.2b: Axial "AIRPAC" Ventilator Setup in Confined Space

