



FANS  
"A" Series Duct Fan  
In-Line Centrifugal Fan  
For Residential or Commercial Applications

INSTALLATION  
OPERATION  
MAINTENANCE

## READ AND SAVE THESE INSTRUCTIONS

1. The compactness and adaptability of the "A" Series fans make for easy installation. These straight-through airflow fans are shipped fully assembled. They can be mounted at any angle from horizontal to vertical.
  2. Because the unit has rotating parts, safety precautions should be exercised during all phases of installation, operation, and maintenance.
  3. **CAUTION: For General Ventilation Use Only. DO NOT USE TO EXHAUST HAZARDOUS OR EXPLOSIVE MATERIALS AND VAPORS.**
  4. Remove unit from package and inspect within fifteen (15) days after receipt. If damaged, report damage to carrier. **DO NOT operate this unit with visible damage to the blower or impeller assembly.**
  5. If the bracket provided will be used to mount fan, refer to *Illustration 1*. If suspending fan with hanger straps, refer to *Illustration 2*.
  6. To attach duct work, use duct tape at inlet and outlet to ensure good seal. If using American Aldes clamps, attach clamps and insert screws through clamp into inlet and outlet flanges.
  7. **CAUTION: Use 1/2" sheet-metal screws to secure duct work to inlet and outlet. It is critical that screws penetrate the metal of the inlet flange but not so far as to obstruct the impeller. It may be necessary to angle screws away from impeller.**
  8. **CAUTION: If not using American ALDES clamps, use 1/4" screws.**
  9. Screen guards must be installed when fan will be within reach of personnel, within seven (7) feet of the working area, or when advisable for safety.
  10. An appropriate duct termination device (roof cap, wall cap, louvered shutters, etc.) is to be used with this fan.
  3. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
  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 guidelines 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 walls and ceilings, do not damage electrical wiring and other hidden utilities.
  6. Ducted fans must always be vented to the outdoors.
  7. 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-protected (Ground Fault Circuit Interrupter) branch circuit.
  8. **NEVER** place a switch where it can be reached from a tub or shower.
- WARNING! TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:**
1. Use this unit only in the manner intended by the manufacturer. If you have any questions, contact your manufacturer's representative.
  2. Before installing, 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.

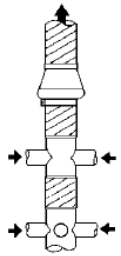
SIDE VIEW

TOP VIEW

DIMENSIONS (INCHES)

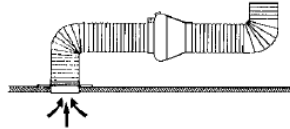
PART NUMBER	MODEL	A	C	D	E	F	WEIGHT (lbs)
99 029	A-4	4	8-1/2	6-1/2	1	1	7
99 040	A-4HP	4	9-3/4	6-15/16	1	1	8
99 010	A-5	5	8-5/8	6-1/2	1	1	7
99 042	A-5HP	5	9-3/4	6	1-1/8	1-1/8	8
99 011	A-6	6	11-3/8	6-1/4	1	7/8	10
99 041	A-6HP	6	13-1/8	7	1	1	12
99 012	A-8	8	13-1/4	6	1	1	12
99 013	A-8HP	8	13-1/4	6	1-1/8	1	13
99 014	A-10	10	13-1/4	4-3/4	1-1/8	1	12
99 039	A-10HP	10	13-1/4	4-13/16	1-1/4	1	14
99 015	A-12	12	16	6-11/16	1-1/4	1	18
99 038	A-12HP	12	16	6-11/16	1-1/2	1	21

## INSTALLATIONS

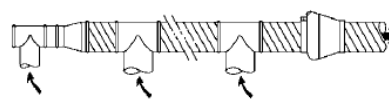


Exhaust System

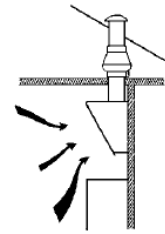
Ceiling Exhaust System



Horizontal Installation



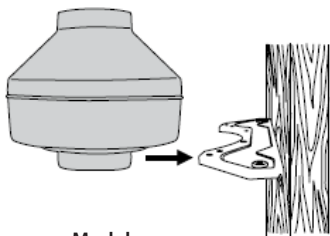
Exhaust System



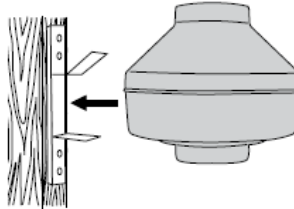
### INSTALLATION NOTES

1. When installing, keep the number of elbows and bends to a minimum. If necessary, long radius elbows or bends are recommended.
2. Duct sealant, caulk, or tape should be applied to all seams to prevent air leakage and maximize air performance.
3. Flex, spiral or snap-lock ducting may be used. If using rigid duct, American Aldes clamps are recommended to connect duct work to the fan *see Illustration 2*. Clamps make an air-tight seal at the connection points and reduce vibrations transmitted throughout the duct system.
4. To minimize static pressure losses and promote adequate airflow, minimize duct run lengths where possible. If using flex duct, keep duct runs straight and taut.
5. If installing in an unconditioned space, covering the fan with insulation is recommended to prevent condensation from forming.
6. For general ventilation applications, at least 8 ft. of insulated flexible duct shall be installed between the exhaust or supply grille(s) and the fan.

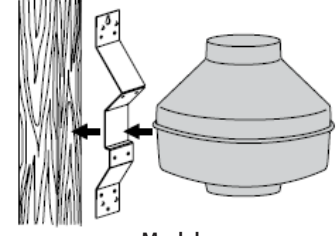
### ILLUSTRATION 1



Models  
A-4, A4-HP, A-5, A-5HP, A-6



Models  
A-6HP, A-8, A-8HP, A-10, A-10HP

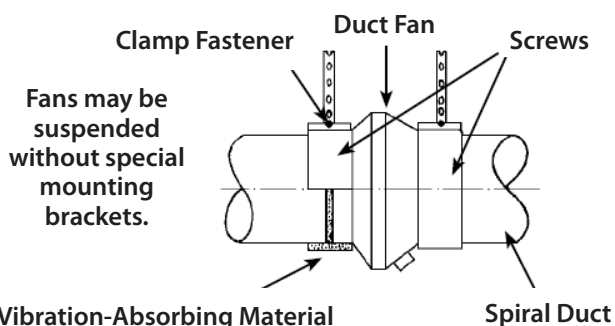


Models  
A-12, A-12HP

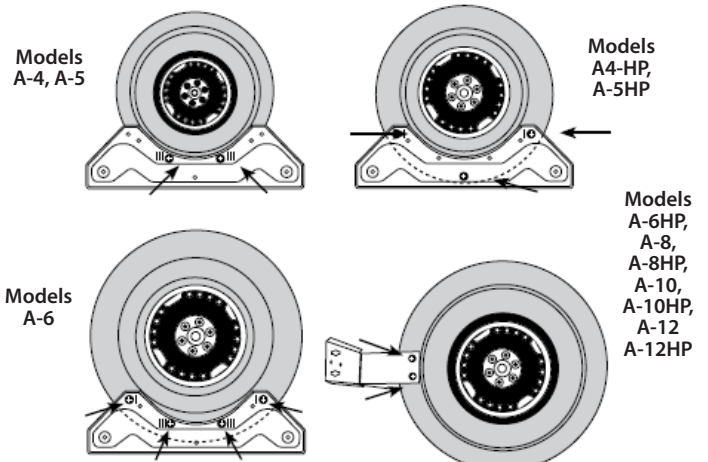
Fan bracket should be installed, then the fan should be mounted directly to bracket using sheet-metal screws.

**CAUTION: Install fan to bracket using screws provided, and ONLY at the locations indicated for each Model/Size. The use of unspecified mounting holes may result in damage to the fan.**

### ILLUSTRATION 2



### MOUNTING BRACKET & SCREW LOCATIONS

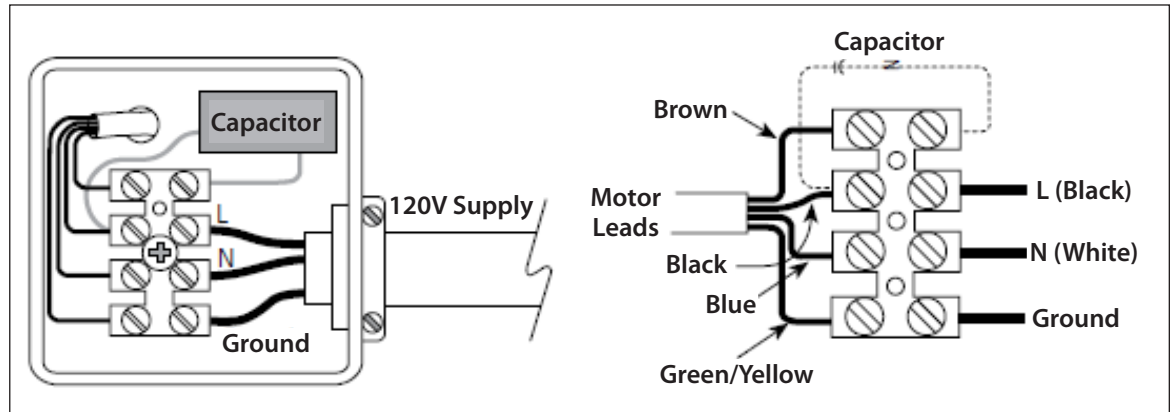
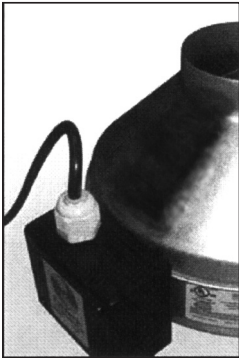


### SPECIAL WIRING PRECAUTIONS

All installation should be wired according to the following diagrams.

Failure to comply will cause the motor to "hum" or not work.

Maximum torque that can be applied to the terminal block screws is 0.79 Nm (7 lb-in).



#### NOTE:

Liquid-tight wiring must be used for outside applications.

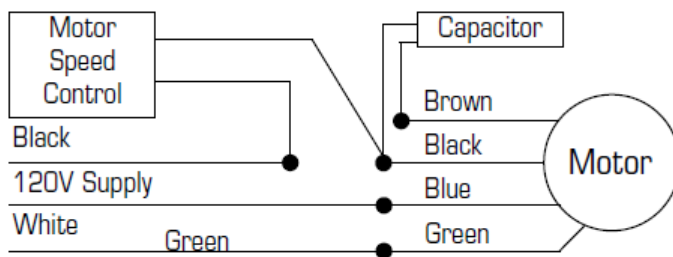


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DUCT FANS  
(E77545)

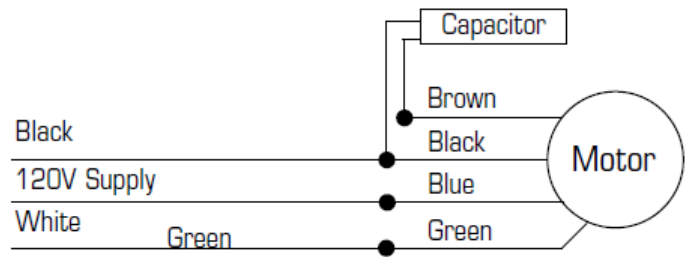


### WIRING INSTRUCTIONS FOR ALL "A" SERIES FANS

#### With Motor Speed Controller



#### Without Motor Speed Controller



### TROUBLESHOOTING

If fan fails to operate, please check the following:

- Consult wiring diagrams included to ensure proper connections.
- To ensure proper contact, check motor lead wiring, incoming supply wiring, and capacitor connections.
- If possible, use a meter to test for continuity between fan loads. Please note that capacitor will show no reading if tested with meter.

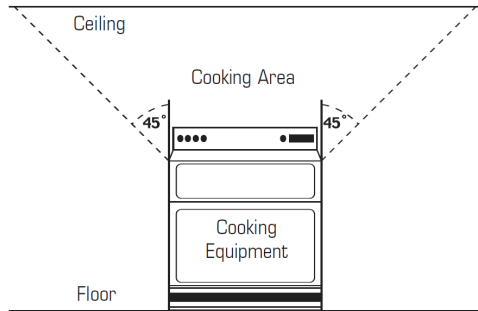
If fan still fails to operate, consult your American ALDES representative for return/replacement instructions.

### MAINTENANCE

- Since fan bearings are sealed and have been provided with an internal lubricating material, no lubrication is necessary.
- At least once a year, remove any airborne particles in the impeller. No other maintenance is required.

## USE OVER RESIDENTIAL COOKING SURFACES\*

For installations in which the fan is connected to a range hood, or if an exhaust grille connected to the fan is located near the cooking surface (as shown below), be sure to observe the following safety warnings:



### WARNING

**TO REDUCE THE RISK OF FIRE, USE ONLY METAL DUCT.**

Use only galvanized steel ductwork, in accordance with all applicable codes.

NOTE: If the fan is not connected to a range hood or a grille in the vicinity of the cooking surface, other approved ducting may be used.

### WARNING

**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 range hood ON when cooking at high heat or flambeing food.
- 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.

\*Based on "Kitchen Fire Safety Tips" published by NFPA.

### WARNING

**TO REDUCE THE RISK OF INJURY TO PERSONS IN THE EVENT OF A RANGE-TOP GREASE FIRE, OBSERVE THE FOLLOWING:**

- A. 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.
- B. NEVER PICK UP A FLAMING PAN - You may be burned.
- C. DO NOT USE WATER, including wet dishcloths or towels, because a violent steam explosion could result.
- D. Use an extinguisher ONLY if:
  1. You know you have a Class ABC extinguisher, and you already know how to operate it.
  2. The fire is small and contained in the area where it started.
  3. The fire department is being called.
  4. You can fight the fire with your back to an exit.

**\*These fans are not acceptable for use over commercial cooking equipment.**

## THREE (3) YEAR WARRANTY

### THIS WARRANTY SUPERSEDES ALL PRIOR WARRANTIES

#### DURING THE FIRST THIRTY (30) DAYS:

American ALDES will repair or replace any product that has a factory defect in workmanship or material. Product(s) may be returned to point of purchase or the American ALDES factory, with Bill of Sale, for an immediate replacement.

#### DURING THE FIRST THREE (3) YEARS:

(Excluding the 30-day period above)  
American ALDES will repair or replace any product that has a factory defect in workmanship or material. Product(s) must be returned to the American ALDES factory, with Bill of Sale and identified with a RMA number, within three (3) years of purchase. The warrantee assumes all costs to and from the factory.

#### WARRANTY DOES NOT APPLY TO THE FOLLOWING:

1. Damages from shipping, either concealed or visible. Claim must be filed with the carrier.
2. Damages resulting from improper wiring or installation.
3. Damages or failure caused by Acts of God, or resulting from improper consumer procedures, such as:
  - Improper maintenance
  - Misuse, abuse, abnormal use, or accident
  - Incorrect electrical voltage or current
  - Removal or alterations made on the American ALDES label, control number, or date of manufacture.
4. Any other warranty, expressed, written, or implied, and to any consequential or incidental damages, loss of property, revenues, or profit, or costs of removal, installation, or reinstallation, for any breach of warranty.

#### WARRANTY VALIDATION

The end user must keep a copy of the Bill of Sale to verify purchase date. Valid proof of the date of installation may also serve as a verification of commencement of warranty period.

#### AMERICAN ALDES RETURN POLICY

Claims for damages or order shortages must be reported within ten (10) days of receipt of product(s). For any product(s) received damaged by the forwarding agent, the following instructions MUST BE followed:

1. For product(s) delivered by UPS:
  - Concealed Damages: Keep all cartons; call UPS for an inspection and notify American ALDES immediately.
  - Visible Damages: Save all cartons and file a complaint directly with UPS.
2. For product(s) delivered by Common Carrier: File damaged goods claim directly with the freight company.
3. Shortages: Only sign for the total number of pieces received and contact American ALDES immediately.

#### FOR FACTORY RETURN

AMERICAN ALDES WILL NOT ACCEPT THE RETURN OF ANY SPECIAL, NON-STOCK, OBSOLETE, OR UNSALABLE PRODUCT(S). AMERICAN ALDES MAY, AT ITS DISCRETION, ACCEPT RETURN OF SALABLE PRODUCT(S) SUBJECT TO A 25% RESTOCKING CHARGE.

1. No product(s) will be accepted without a Return Materials Authorization (RMA) number. This number can be obtained by calling American ALDES at 1-800-255-7749. Please have the Bill of Sale or proof of date of installation available.
2. RMA must be clearly marked on outside of carton or delivery will be refused. All product(s) must be returned freight prepaid.
3. Product(s) will be repaired/replaced and shipped back to buyer; no credits will be issued.
4. Any out-of-warranty product will be evaluated and buyer will be notified of cost. Repair cost will be charged to customer. Buyer will be responsible for return freight, or product may be returned to the buyer, freight collect, without action. No credit will be issued.

#### LIMITATIONS OF WARRANTY AND LIABILITY

This warranty does not apply to any American ALDES product or part which has failed as a result of faulty installation or abuse, incorrect electrical connections or alterations made by others, use under abnormal operating conditions, or misapplication of the product or parts. American ALDES will not approve for payment any repair not made by us or our authorized agent without prior written consent. The foregoing shall constitute our sole and exclusive warranty and our sole exclusive liability, and is in lieu of any other warranties, whether written, oral, implied, or statutory. There are no warranties that extend beyond the description herein. In no event, whether as a result of breach of contract or warranty, or alleged negligence, defect, incorrect advice or other causes, shall American ALDES be liable for special or consequential damages, including but not limited to, loss of profits or revenue, loss of use of equipment or any other associated equipment, cost of capital, cost of substitute equipment, facilities or services, downtime costs, or claims of customers of purchases for such damages. American ALDES neither assumes nor authorizes any person to assume for it any other liability in connection with the sale of product(s) or part(s). Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

#### WARNING

American ALDES products are designed and manufactured to provide reliable performance, but they are not guaranteed to be 100% free of defects. Even reliable products will experience occasional failures and this possibility should be recognized by the user. If these products are used in a life-support ventilation system where failure could result in loss or injury, the user should provide adequate back-up ventilation, supplementary natural ventilation, a failure alarm system, or willingly acknowledge the risk of such loss or injury.