



INSTALLATION INSTRUCTIONS FOR IN-LINE DUCT FANS™

READ AND SAVE THESE INSTRUCTIONS GENERAL SAFETY INSTRUCTIONS

WARNING – RISK OF ELECTRIC SHOCK. CAN CAUSE INJURY OR DEATH: DISCONNECT AND/OR LOCKOUT ALL REMOTE ELECTRIC POWER SUPPLIES BEFORE SERVICING OR INSTALLING. WHEN THE SERVICE DISCONNECTING MEANS CANNOT BE LOCKED, SECURELY FASTEN A PROMINENT WARNING DEVICE, SUCH AS A TAG TO THE SERVICE PANEL.

WARNING – USE COPPER SUPPLY WIRES ONLY.

WARNING – FOR GENERAL VENTILATING USE ONLY. DO NOT USE TO EXHAUST HAZARDOUS OR EXPLOSIVE MATERIALS AND VAPORS. DO NOT USE TO EXHAUST AIR LADEN WITH LINT, GREASE, OR OIL.

WARNING – PRODUCT INTENDED INSTALLATION IS AN INLINE DUCT FAN WITH BOTH ENDS CONNECTED TO DUCTWORK (SEE INSTALLATION INSTRUCTIONS SECTION). FOR ANY OTHER INSTALLATION, GUARDS MUST BE INSTALLED TO PREVENT UNINTENTIONAL CONTACT WITH MOVING FAN BLADE UNLESS THE UNIT IS MOUNTED WITH THE LOWEST MOVING PARTS AT LEAST 2.4M (8FT) ABOVE FLOOR OR GRADE LEVEL.

WARNING – FAN IS SUITABLE FOR ONLY CONNECTION TO A DUCT SUPPLYING SINGLE-ROOM DISCHARGE (MODELS: DB100C, DB200C, DB204C, DB205C, DB206C, DB208C, DB306E, DB308E)

Use this unit only in the manner intended by the manufacturer. If you have any questions, contact the manufacturer. You may phone the manufacturer during normal business hours at 1-800-999-3267 or submit your questions from our website: www.suncourt.com.

In-Line Duct Fans™ are designed to boost dry conditioned (heated or cooled) indoor airflow in ducts of forced air systems with temperatures between 40°F (4°C) and 140°F (60°C). Suncourt® accepts no responsibility for use of this product in other applications.

EXPOSURE TO AIRFLOW TEMPERATURES EXCEEDING 140°F (60°C) WILL PERMANENTLY DAMAGE THE FAN AND VOID THE WARRANTY.

ELECTRICAL SAFETY INSTRUCTIONS

WARNING – To Reduce the Risk Of Fire, Electrical Shock, or Injury to Persons, Observe the Following:

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 and accessibility.

Your In-Line Duct Fan™ must be connected to a 110/120 Volt AC, 60Hz fuse or circuit breaker protected power source only in a manner approved by all applicable codes. Never connect your In-Line Duct Fan™ to a 240 Volt AC blower motor or other 240 Volt AC system. Never connect your In-Line Duct Fan™ to a variable-speed (ECM) furnace blower. For a two-speed In-Line Duct Fan™, never connect directly to multiple taps on the furnace blower; always use isolation relays.

The power source must be protected by a fuse or circuit breaker rated at a minimum of 15 amperes.

You may also supply power to your In-Line Duct Fan™ using the Suncourt® DuctStat® Temperature Sensitive Switch™ or a standard on/off switch (Purchased Separately).

For In-Line Duct Fans™ without power cord attached, all connections to the power supply must be made inside the electrical box provided with the unit. Use power supply conductors and wire nuts of appropriate size and type. Attach a wire nut to any unused lead in a 2-speed In-Line Duct Fan™. The power supply wiring must always include a ground wire properly terminated at the fan (green wire).

For In-Line Duct Fans™ with power cord attached, the cord can be plugged in to any standard (NEMA 5-15) 3-prong outlet. The outlet supplying power to the cord must include a ground terminal properly connected to a ground source. The power cord should be secured to a location where it is not subject to damage, abrasion, or temperatures exceeding 140°F (60°C).

GENERAL INSTALLATION NOTES

For maximum performance and minimum noise, the best location to install your In-Line Duct Fan™ is 6–10 feet from the register that needs the boosted air.

To prevent air leaks, use a good quality aluminum foil duct tape to seal the seams in the ductwork after installing the In-Line Duct Fan™.

By utilizing tapered reducers, you may install larger diameter duct fans in smaller diameter ducts to achieve greater boosted airflow.

Always leave your In-Line Duct Fan™ accessible for maintenance, cleaning, or repair.

ACCESSORY INFO

Ductstat® Temperature Sensitive Switch™, model DS100

The In-Line Duct Fan™ can be controlled by our Ductstat® to operate the fan. This is the easiest way to interlock your In-Line Duct Fan™ to your furnace. Simply plug your fan into the Ductstat® and set the controls to operate the fan only when conditioned air is sensed inside the boosted duct. Please visit www.suncourt.com for more info on the Ductstat® Temperature Sensitive Switch™.

Standard Variable Speed Control, model VS100

The speed of your non-corded In-Line Duct Fan™ (models DB412E, DB414E, DB416E) can be controlled with our model VS100 Variable Speed Control. This speed control utilizes solid-state circuitry to safely adjust the fan speed without damaging the motor. The speed control mounts inside a standard 2x4 electrical box and includes a cover plate and mounting hardware.

WARNING – NEVER USE A RHEOSTAT OR LIGHT DIMMER SWITCH TO CONTROL YOUR FAN SPEED. A SOLID-STATE SPEED CONTROLLER MUST BE USED TO AVOID DAMAGE TO THE MOTOR.

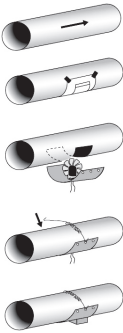
Please visit www.suncourt.com for more info on these or other accessories.

INSTALLATION INSTRUCTIONS

In-Line Duct Fans™ with power cord attached have the model number extension DBxxxC
In-Line Duct Fans™ with electrical box attached have the model number extension DBxxxE

MODEL: DB100C

- 1. Locate the place in the duct where you wish to install the In-Line Duct Fan™.
- 2. Tape the enclosed template to the duct with the arrow pointing in the direction of the airflow. Cut out the required opening by first drilling a pilot hole and cutting along the dashed line using a jig saw or tin snips.
- 3. Place the Inductor® In-Line Duct Fan™ in the opening, making sure that the fan blade can turn freely. Align the arrow on the unit in the direction of airflow.
- 4a. For a 6" round duct (shown), connect the spring through the middle hole provided in the base plate, stretch the spring over the duct and through the middle hole on the other side of the plate. Bend the ends of the spring over to secure, providing a snug installation.
- 4b. For 8" round or square duct, secure the In-Line Duct Fan™ in position with the supplied #6 sheetmetal screws using the provided holes in the base plate of the unit.
- 5. Finish the installation by covering the seams in the duct with a good quality aluminum foil duct tape.



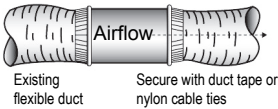
MODELS: DB200C, DB204C

- 1. Locate the place in the duct where you wish to install the In-Line Duct Fan™. Align arrow label on unit in direction of airflow.

FLEXIBLE DUCT

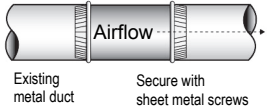
- 2a. Simply cut the flexible duct and slide the In-Line Duct Fan™ in place by slipping the cut flexible duct ends over the crimped ends on the In-Line Duct Fan™, making sure the unit is well supported.

Complete the installation by securing the In-Line Duct Fan™ to the flexible duct with a good quality aluminum foil duct tape or nylon cable ties.



METAL DUCT

- 2b. Remove a section of the existing ductwork and slide the In-Line Duct Fan™ in place by slipping the duct ends over the crimped ends of the unit. Complete the installation by securing the In-Line Duct Fan™ to the metal duct with the supplied #6 sheet metal screws spaced evenly around the circumference on each end of the unit.



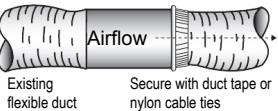
- 3. Finish the installation by covering the seams in the duct with a good quality aluminum foil duct tape.

MODELS: DB205C, 206C, 208C, 210C, 212C, 306E, 308E, 310E, 412E, 414E, 416E, 6GTC

- 1. Locate the place in the duct where you wish to install the In-Line Duct Fan™. Align arrow label on unit in the direction of the airflow.

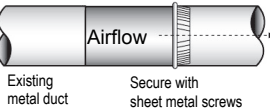
FLEXIBLE DUCT

- 2a. Install connectors onto any uncrimped ends of the unit. Then simply cut the flexible duct and slide the In-Line Duct Fan™ in place by slipping the cut flexible duct ends over the connectors or crimped ends on the In-Line Duct Fan™, making sure the unit is well supported. Complete the installation by securing the In-Line Duct Fan™ to the flexible duct with a good quality aluminum foil duct tape or nylon cable ties.



METAL DUCT

- 2b. Install connectors onto any uncrimped ends of the unit, or crimp your existing ductwork. Then simply place the existing duct over the crimped ends of the unit, or the existing crimped ductwork into the unit. Secure the In-Line Duct Fan™ to the metal duct with the supplied #6 sheet metal screws spaced evenly around the circumference on each end of the unit.



- 3. Finish the installation by covering the seams in the duct with a good quality aluminum foil duct tape.

IMPORTANT NOTICE - In-Line Duct Fans™ without power cord attached.

Single Speed - DB4xxE

The motor of your In-Line Duct Fan™ may have 1 White and 1 Black wire or 2 Black wires. If you have a motor with a White and Black wire, connect the White motor wire to the White supply wire and the Black motor wire to the Black supply wire. If you have a motor with 2 black wires, connect either of the Black wires to the White supply wire and the other Black wire to the Black supply wire.

Two Speed - DB3xxE

Make sure you connect the colored wire as shown in the table below. Failure to connect correctly will destroy the motor. Make sure to attach a wire nut to any unused wire lead. No warranty claim for an incorrectly wired motor will be accepted by Suncourt®.

WIRING INSTRUCTIONS FOR IN-LINE DUCT FANS™ WITHOUT POWER CORDS ATTACHED:

DB306E, DB308E and DB310E:

Never connect red and black wires together!

DB306E, DB308E, and DB310E: Never connect LOW and HIGH wires together. For single speed operation, select the LOW or HIGH speed wire for your application and attach a wire nut to the unused wire lead. When either the LOW or HIGH speed wire is energized there will be voltage present in the other wire.

MODELS	White (neutral or common) wire from power source	Black (hot or line) from power source	Green (ground) wire from power source
DB412E DB414E DB416E	Black wire or White wire (see note above) from Suncourt® motor.	Black wire from Suncourt® motor.	Green wire from Suncourt® motor.
DB306E, DB308E, DB310E	White wire from Suncourt® motor.	LOW fan speed: Red wire from Suncourt® motor. HIGH fan speed: Black wire from Suncourt® motor.	Green wire from Suncourt® motor.

For two-speed operation you must never supply power to both LOW and HIGH speed leads simultaneously. You must isolate the power to LOW and HIGH speeds using a relay or switch. If connecting to a HVAC blower please consult with the system manufacturer or qualified HVAC contractor. Never connect to a DC blower system.

CLEANING AND MAINTENANCE

Suncourt® Inc. recommends that you clean your In-Line Duct Fan™ at regular intervals, similar to what is recommended for the fan of your furnace, no less than twice a year. Keep your In-Line Duct Fan™ free of lint, dust, and debris. The In-Line Duct Fan™ must never be exposed to temperatures over 140°F (60°C).

ONE YEAR LIMITED WARRANTY

Subject to the following limitations, Suncourt® Inc. (manufacturer) warrants that the In-Line Duct Fan™ will, for 1 (one) year from date of original retail purchase, but not exceeding 2 (two) years from date of manufacture, remain free from appearance of defects in workmanship or materials. This warranty is subject to the following limitations: (a) manufacturer's liability is limited to the replacement or repair of the unit, as decided by the manufacturer; (b) a defective unit must be returned, prepaid, with proof of purchase, well packaged to avoid damage in transit; and (c) this warranty does not apply to defects resulting from the alteration, abuse, accidental damage, unauthorized repair, or misuse of the unit. This warranty is given in lieu of all other warranties, guarantees, and conditions on manufacturer's part, and the manufacturer shall have no tortious or other liability in respect to this In-Line Duct Fan™. Ship unit to Suncourt® Inc. only after obtaining a Return Goods Authorization (RGA) number. Returns without this RGA number will not be accepted.

Actual product appearance may differ from illustrations.

Suncourt® reserves the right to modify any or all of its products' features, designs, components and specifications without notice.