



Duct Boost Pressure Sensing Kit (SDB110P)

for Installation Instructions

P/N 28131

Typical Duct Boost Application

Duct Boost Pressure Sensing Kit includes:

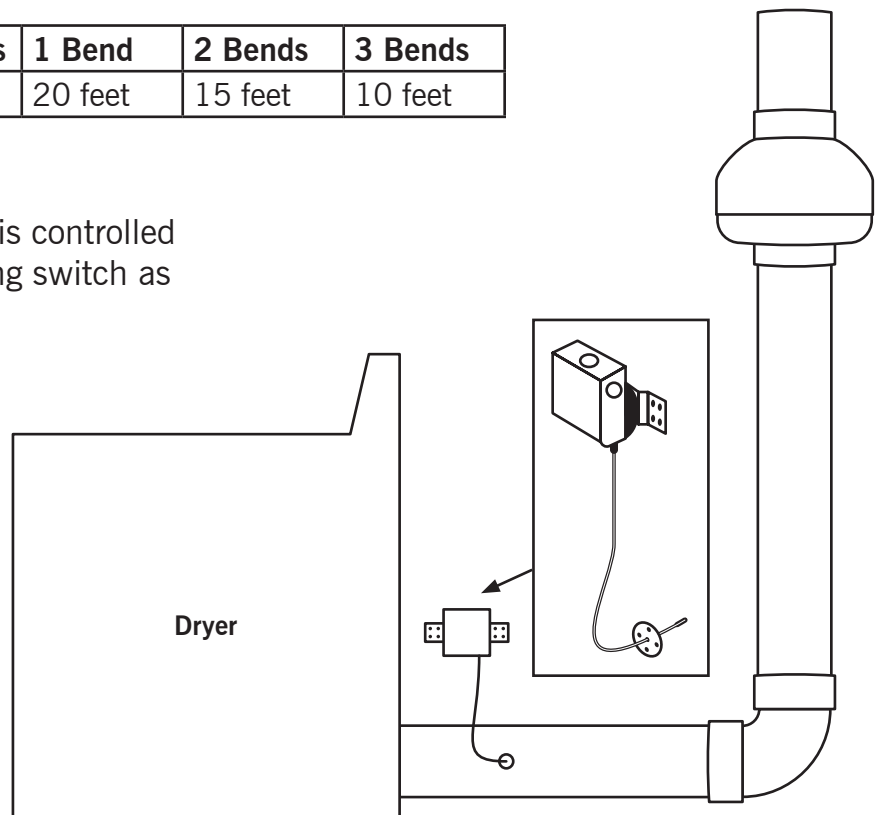
- Air Pressure-Sensing Switch
- Probe
- Vinyl tubing



Duct boosting involves adding an auxiliary fan (RB110) inline to a duct system to increase airflow and efficiency of the system in installations having duct runs longer than specified by the manufacturers of the primary heating, cooling or circulating device. Long duct runs result in long drying times and excessive wear and tear on the dryer. Boosting is usually required when the total duct length exceeds the following:

No Bends	1 Bend	2 Bends	3 Bends
25 feet	20 feet	15 feet	10 feet

Using this Kit, the auxiliary fan is controlled by an automatic pressure sensing switch as shown in the drawing inset.



Kit used with SDB110P
P/N 28131



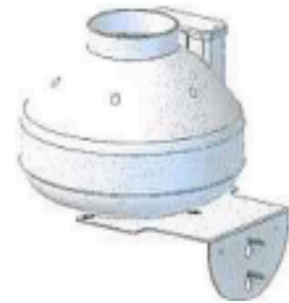
Duct Boost Kit (SDB110P) Installation Instructions

1.0 Auxiliary Fan Location

The auxiliary fan should be mounted with a minimum of 15 feet of ductwork from the outlet of the primary device to the inlet of the fan.

2.0 Auxiliary Fan Mounting

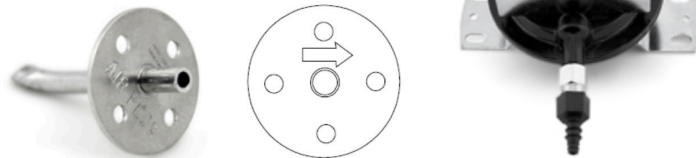
2.1) Attach the bracket to mounting structure with the 1-inch screws (2) provided. Insert the grommets (3) supplied into the slotted holes in the mounting bracket and attach the fan to the mounting bracket with self-tapping screws (3), provided, avoid over-tightening the screws.



2.2) Connect the ductwork between the outlet of the device and the inlet of the fan. Connect the outlet of the fan to the termination ductwork. Seal the connections with duct tape or similar means.

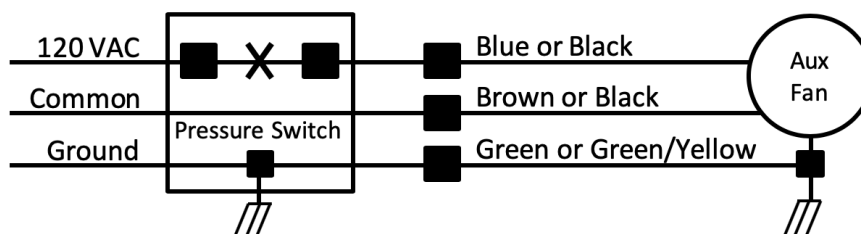
3.0 Automatic Pressure Switch Installation

The pressure switch must be mounted vertically on a wall surface as near the outlet of the primary device as possible. Mount the duct probe through the duct and connect with tubing provided to the pressure switch.



4.0 Electrical Wiring

All wiring must be performed in accordance with the National Fire Protection Association's (NFPA)'National Electrical Code, Standard #70"-current edition for all commercial and industrial work, and state and local building codes. All wiring must be performed by a qualified and licensed electrician. Make electrical connections to the pressure switch and auxiliary fan as shown in the following schematic:



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5.0 Installation Troubleshooting

If the auxillary fan fails to start when the device begins, check the following:

Verify the AC voltage at the pressure switch. The pressure switch-point is approximately 0.1" WC. The device must generate this positive pressure to close the switch and start the auxillary fan. If not, check the probe and connecting tubing for blockage. You may blow gently into the tubing to check the switch operation.

If the auxillary fan cycles on and off after the device cycle begins, check the following:

The auxillary fan may be generating sufficient negative pressure to overcome the positive pressure generated by the device. This can be verified with a sensitive pressure measuring device or with an AC voltmeter at the pressure switch. Relocate the auxillary fan further from the device and recheck.

6.0 Maintenance

Periodic inspection, cleaning and/or inspection of the system filters is required to be performed every six (6) months or sooner (depending on device) usage to ensure duct and fan are free of debris.

DISCONNECT ELECTRICAL POWER TO THE UNIT PRIOR TO INSPECTION OR CLEANING.

NOTE: Excessive noise or vibration from the auxillary device may be an indication of dirt and/or lint buildup inside the fan impeller.



IMPORTANT INSTRUCTIONS TO INSTALLER

Inspect the Spruce SDB110P Duct Boost Pressure Sensing Kit for shipping damage within 15 days of receipt. Notify Spruce of any damages immediately. Spruce is not responsible for damages incurred during shipping. However, for your benefit, Spruce does insure shipments. Install the Spruce SDB110P Duct Boost Pressure Sensing Kit in accordance with all state and local building codes and state regulations.

Warranty

Subject to any applicable consumer protection legislation, Spruce Environmental Technologies, Inc. ("Spruce") warrants that the Duct Boost Pressure Sensing Kit (the "Kit") will be free from defects in materials and workmanship for a period of one (1) year from the date of manufacture (the "Warranty Term").

Warranty claims made during the first thirty (30) days after installation:

Spruce will replace any Kit which fails due to defects in materials or workmanship. The Kit may be returned (at owner's cost) to either the point of purchase or the Spruce factory. The point of purchase may require proof of purchase or a bill of sale for replacement.

Warranty claims made after the first thirty (30) days after installation through the end of the Warranty Term:

Spruce will (at its option) either recondition or replace any Kit which fails due to defects in materials or workmanship. The Kit must be returned (at owner's cost) to the Spruce factory.

This Warranty is contingent on installation of the Kit in accordance with the instructions provided. This warranty does not apply where any repairs or alterations have been made or attempted by others, or if the unit has been abused or misused. Warranty does not include damage in shipment unless the damage is due to the negligence of Spruce.

Spruce is not responsible for installation, removal or delivery costs associated with this Warranty.

LIMITATION OF WARRANTY

EXCEPT AS STATED ABOVE, THE KITS ARE PROVIDED WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

IN NO EVENT SHALL SPRUCE BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF, OR RELATING TO, THE KIT OR THE PERFORMANCE THEREOF. SPRUCE'S AGGREGATE LIABILITY HEREUNDER SHALL NOT IN ANY EVENT EXCEED THE AMOUNT OF THE PURCHASE PRICE OF SAID PRODUCT. THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY SHALL BE THE REPAIR OR REPLACEMENT OF THE PRODUCT, TO THE EXTENT THE SAME DOES NOT MEET WITH SPRUCE'S WARRANTY AS PROVIDED ABOVE.

For service under this Warranty, contact Spruce for a Return Material Authorization (RMA) number and shipping information. No returns can be accepted without an RMA. If factory return is required, the customer assumes all shipping costs, including insurance, to and from factory.

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3 Saber Way, Ward Hill, MA 01835 USA
TEL (978) 521-3703
FAX (978) 521-3964
Email to: [Returns@Spruce.com](mailto>Returns@Spruce.com)

Record the following information for your records:

Serial Number:

Purchase Date:

