



CANSOLAIR INC.

INSTALLATION MANUAL

MODEL RA 240 SOLAR MAX

Installation Manual



Customer determines position of panel on South, South-East, or South-West facing wall.



After locating where to place your blower duct (between studs), draw a 6" square on wall 1" above the baseboard and draw diagonal lines corner to corner to mark center of hole. Use 1/8" X 16" pilot drill bit, drill straight and level through to the outside wall. Draw 4" square inside the 6" square and cut it out. Inspect for pipes, wires, etc. and



Test fit the 6" blower boot through hole in inside wall. It should be a snug fit, but not bind. Adjust by removing excess material. Put end of duct flush and square to outside wall. Drill 4 starter holes in each of the four corners or mark with pencil on the inside of the outside wall. Remove boot and drill squarely through outside wall. Cut through outside wall using the 4 holes as the guides.



Test fit boot again and adjust as necessary until it is level and not binding.



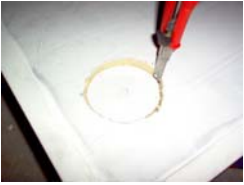
Temporarily position gasket and mark a line all around boot, 1" from gasket with ruler and marker.



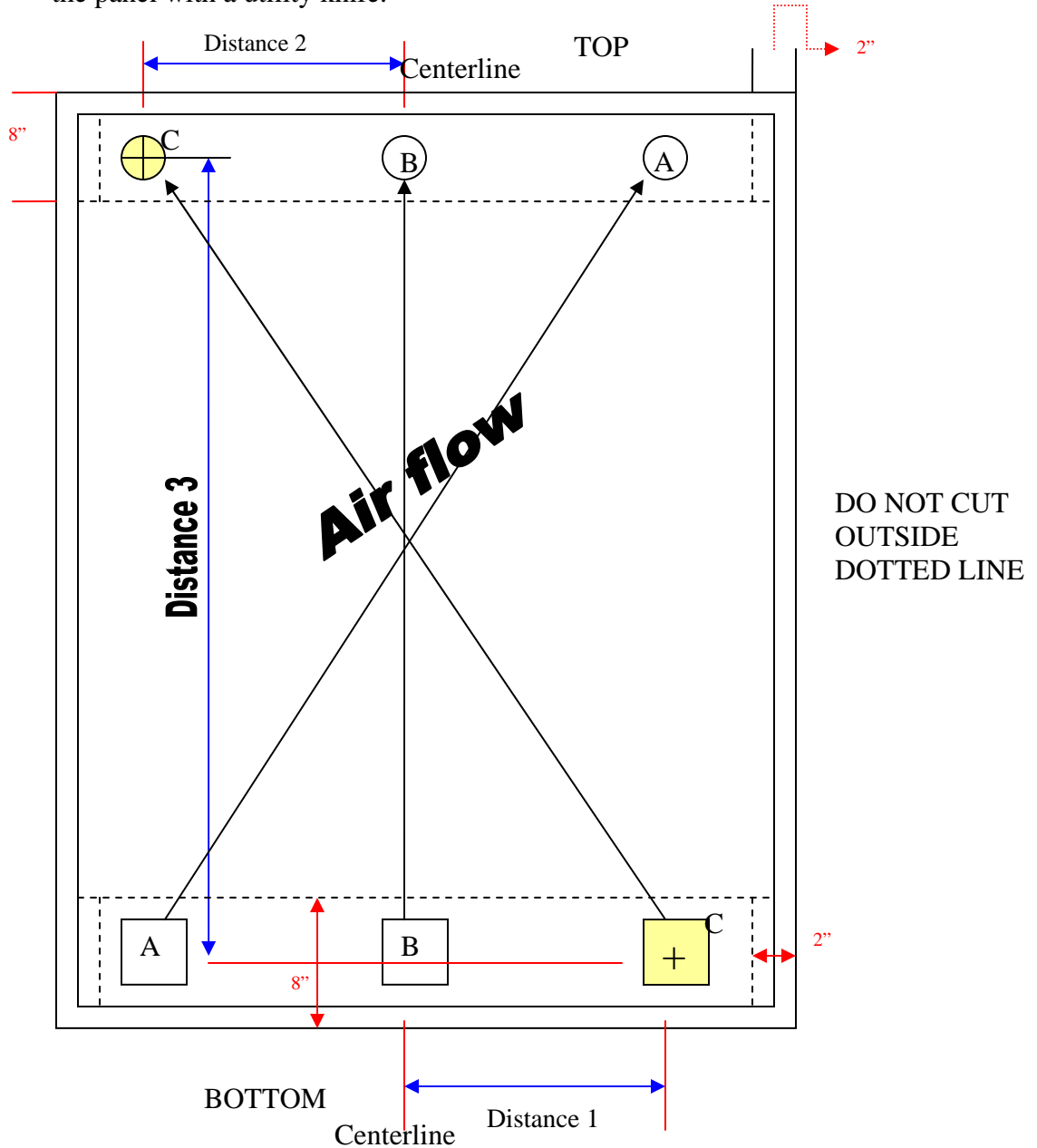
Cut off excess duct boot at the 1" mark and round off sharp edges with file or grinder. This 1" ledge is what the panel sits on.



Taking note of the holes position relative to vertical center line on house and panel, you can now mark position of 6" square hole in bottom header of the panel and determine its center by drawing diagonal lines corner to corner. The bottom of the panel will be determined by the Cansolair logo on either side of the panel or by the A B C air flow diagram drawn on the back. Measure distance from center line on panel back to center of 6" square hole. Put hand inside 6" hole and feel for the outer most loop or open end of control wire. It will be held in place with green masking tape. Using Aluminum duct tape, seal the edges of the hole and provide a



Draw 4" circle at opposite corner in top header within the cutting parameters indicated on panel back or in the following diagram. Using your 4" hole saw as a centering guide, mark the center of the circle. Measure the distance from center of circle to centerline on panel back (Distance 2) and measure the vertical distance from the center of the circle to the center of the 6" square hole (Distance 3). Transfer hole center positions from panel to house using center lines on house. Proceed by cutting the 4" round hole in the back of the panel with a utility knife.



Seal edge of hole with duct tape



Provide mating surface for gasket.



Finished mating surface for gasket.



Drill exhaust hole from outside using 1/8" X 1/4" pilot drill and 4" round hole saw.



Clear debris from hole saw, making sure to unplug the drill first.



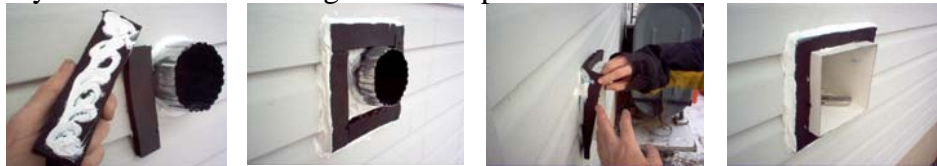
Proceed inside and drill out through using 1/4" pilot hole as guide. Remove debris and insulation.



Using a rotary file, enlarge hole for snug fitting duct placement and taper outer edge with hand crimping tool.



Carefully seal around both 6" square and 4" round duct with silicone and apply gasket material. Thoroughly seal edge grain of gasket material, but do not get any silicone on the mating surface to panel.



Determine mounting bracket position relative to clapboard and duct position. Placement should be near ends and edge of bracket should be touching high point of clapboard, but not hanging out over. Pre-drill bracket holes with 1/8" drill bit. Be careful not to penetrate too far into panel. Put a dab of silicone into pre-drilled holes prior to installing brackets with stainless steel screws.



The top of the bracket should be touching the lens retainer strip.



Pass low voltage control wire through 6" square duct and install the panel over the exhaust and inlet ducts.



Secure panel with four 3" stainless steel screws supplied with installation kit. Do not over tighten mounting screws.



When inserting blower assembly into 6" duct, it is important that the impeller inlet plate be adjusted and positioned **no further than 1/8"** from end of duct in panel. (If it is inserted further, it may be difficult to retrieve).



Test run the blower assembly by plugging in the power cord and turning the thermostat clockwise (all the way). If the fan does not turn or if there are any scuffing noises, adjust as necessary and retest through several cycles. Disconnect the marrett and separate the two wires to test relay. Now feed the control wire from the panel through all the grommets leading to the low voltage side of the control box. Using two marretts, connect the control wires.



When room temperature is achieved on the next sunny day, instruct customer to slowly turn the thermostat counter-clockwise until a click is heard and the impeller fan stops. At this point the **Model RA 240 SOLAR MAX** will cut out automatically in the future.

***** Note that all thumbnail pictures above can be seen in larger scale below *****



