

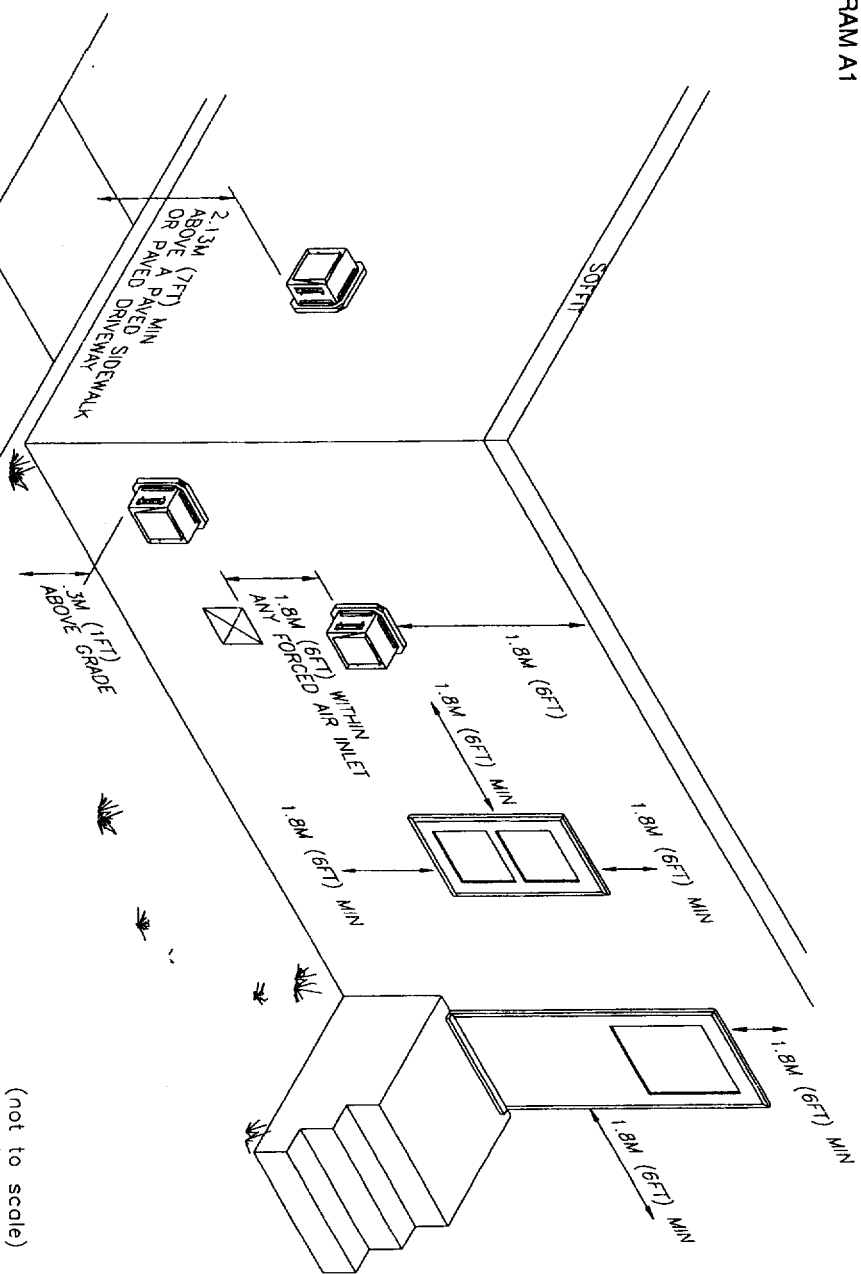
A venting system shall not terminate within 3m (1ft) of the following:

- Above grade level or any surface that may support snow, ice, or debris.

CAUTION: The owner of the SS2 must keep the area around the vent terminal free of snow, ice and debris.

If possible, do not terminate the SS2 on a wall that faces the direction of the prevailing winds. Backdrafts by severe winds can cause oil odors to remain in the structure and/or interrupt equipment operation.

DIAGRAM A1



INSTALLATION TOOLS REQUIRED

- Nut Runner Set
- Screwdriver Set
- Smoke Tester

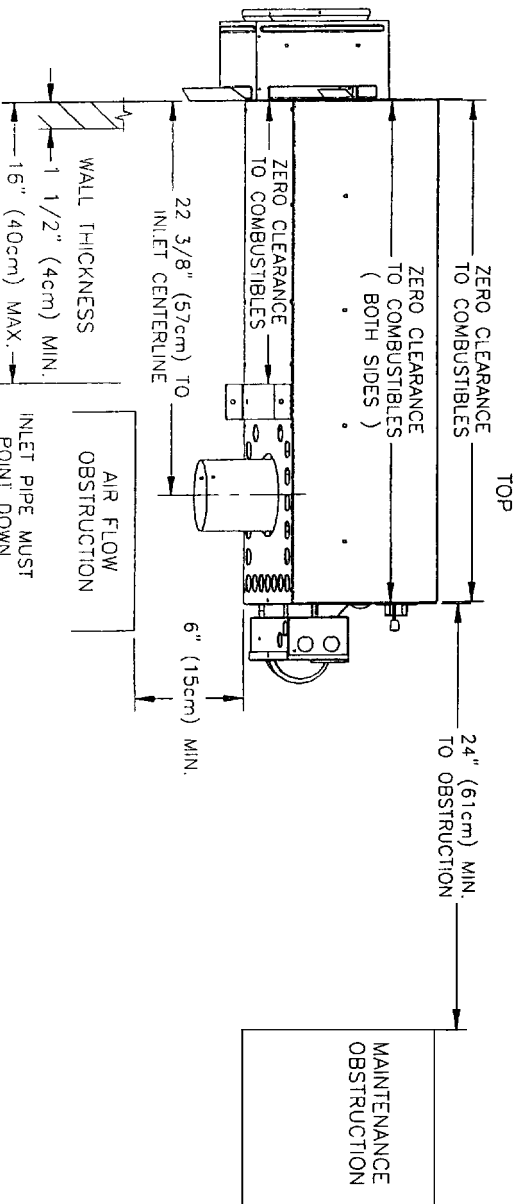
- Drill w/Bits
- Wire Cutter/Stripper
- CO2 Analyzer

- Combination Wrench Set
- Draft Gauge
- Reciprocating Saw

SS2 VENT SYSTEM CLEARANCES FROM COMBUSTIBLES & OBSTRUCTIONS

With an inlet flue gas temperature of 650°F (343°C) or below, the SS2 has been Listed for Zero Clearance from combustibles.

NOTE: You must allow a minimum 2 foot distance of unobstructed clearance behind the SS2 Vent System for doing maintenance. Allow 6" minimum clearance from bottom of vent cabinet to any obstruction for air flow.



INSTALLING SS2 VENT CABINET

1. a) Fold SS2 Vent Cabinet template (inserted) along dashed line and attach between the floor joists ensuring that it is snug against the sill plate and centered between the floor joists. Follow same procedure if floor trusses are used. (See Diagram B).
 b) If the SS2 is not being installed between floor joists, attach the template to the wall it will be exiting ensuring it is level.
2. Verify that wall penetration will not come in contact with concealed wiring or plumbing. Using 1/2" bit, drill pilot holes noted on each side of the template from inside through rim-joint, wall board, siding, etc., keeping drill bit perpendicular to the wall. 1/2" bit must penetrate through exterior.
3. Remove template from rim-joint and attach to building exterior, aligning pilot hole markings on template with holes previously created in Step #2.
4. Drill remaining (4) corner holes noted on the template through the building exterior. Remove the template and mark lines from the outside edge of the holes drilled, forming a rectangle.
5. Using reciprocating saw and appropriate blade, cut a rectangular opening through the rim joint, wall board, siding, etc., on the lines marked in Step 4. The rectangular opening should be no larger than 10-1/2" in width by 8-1/2" in height. (See Diagram C).
6. Knock out block material exposing rectangular opening through the wall.

NOTE: For easy one person installations, remove (3) screws from rear and bottom of vent cabinet. Slide venter assembly out of SS2 cabinet and set aside being careful not to damage housing. After SS2 cabinet is secured to the outside wall, and the vibration isolation mount is installed to the inside wall, replace venter assembly and all (9) screws. (See Diagram D).

7. Apply two beads of exterior rated caulk approximately 3/8" in width at the seam of the outside casing of the SS2 Vent Cabinet and on the inner flange of the Vent Hood Termination. (See Diagram E).

DIAGRAM B

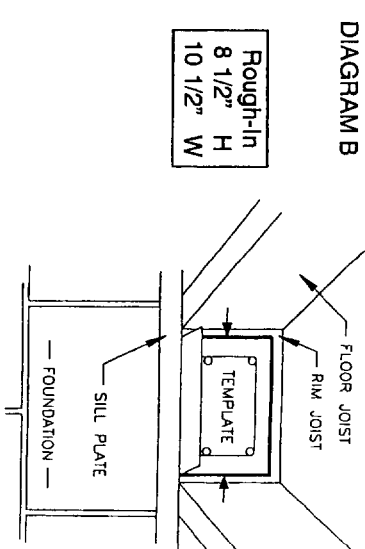


DIAGRAM C

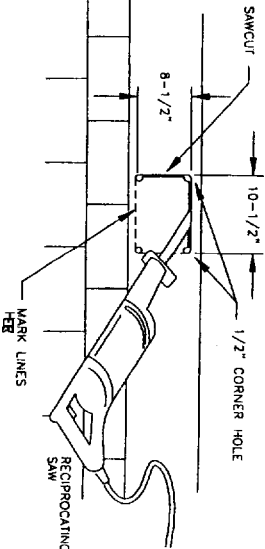


DIAGRAM D

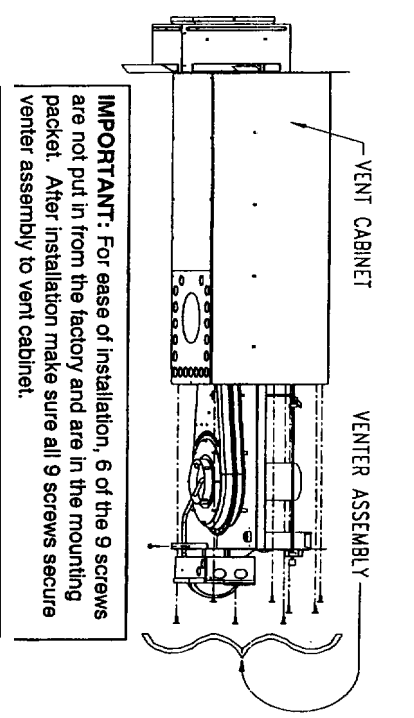
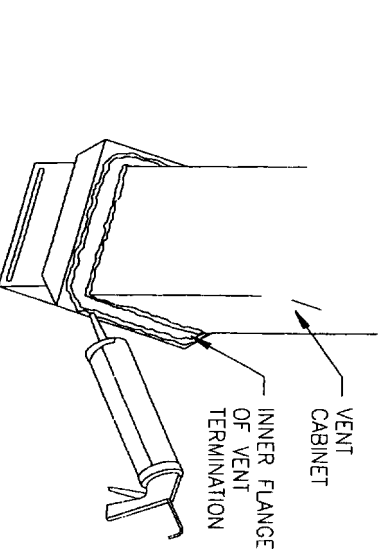


DIAGRAM E



8. Slide the SS2 vent cabinet through the wall with drip flange facing down towards ground. (See Diagram F). Mount Vent Hood to exterior using (6) #10 x 1 1/4" wood screws provided. (See Diagram F). If installing in masonry wall drill 1/4" holes and use wall anchors provided.

NOTE: For mounting on vinyl or lap siding a wood frame with 1" x 2" on the sides and top and 1" x 3" material on bottom can be utilized on exterior wall. This will provide a flush mounting surface for the hood and a nicely finished look with "J" channel when siding. Inside of frame opening should be 10 1/2" wide by 8 1/2" high.

DIAGRAM F

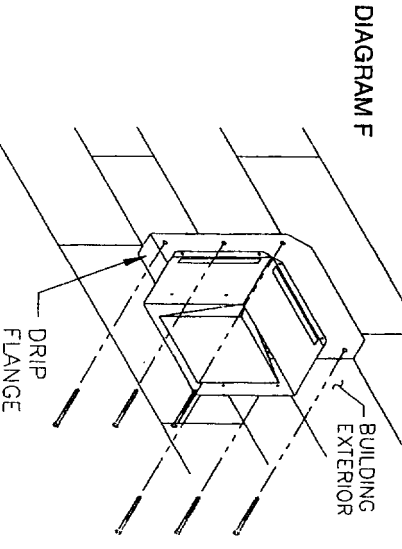
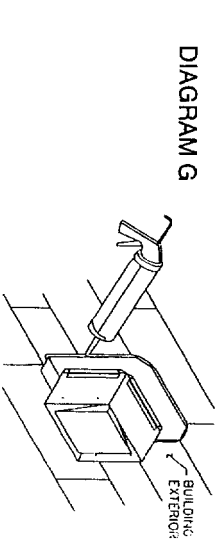
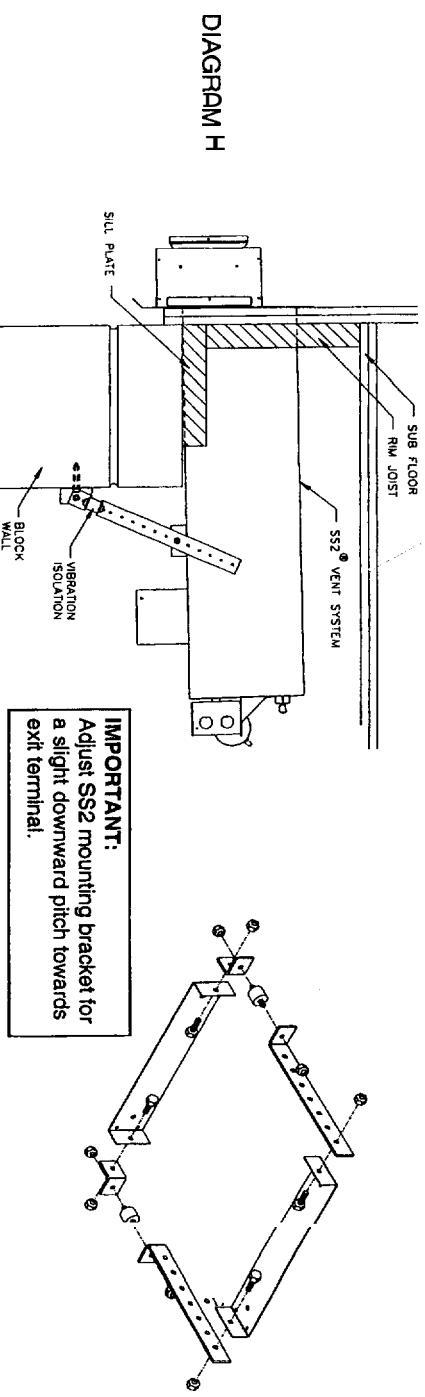


DIAGRAM G

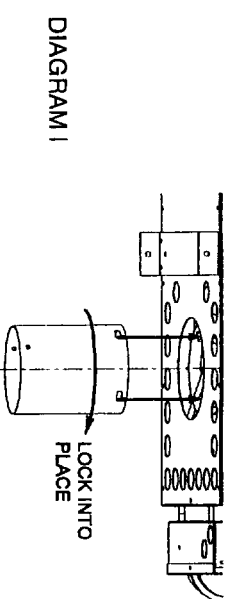


INSTALLATION OF WALL SUPPORT BRACKET

- To prevent damage to the SS2, temporarily support the bottom of the SS2 cabinet (prop on ladder top) while assembling the wall support bracket. Assemble the wall support bracket as shown, (See Diagram H).
- Connect mounting bracket to SS2 using (4) #8 x 3/8" sheet metal screws. Line up holes on bottom of SS2 with mounting bracket to ensure proper placement, (See Diagram H).
- Adjust the wall support bracket so that a slight pitch is maintained for moisture drainage and vibration isolation. Use the prepunched holes on the wall bracket as a template to mark holes to be drilled into the side wall for mounting screws, (See Diagram H).
- a) If installing the bracket into a wood wall, drill 2 pilot holes at each point established in step 3 with a 1/8" drill bit approximately 1" deep and install the screws provided to secure the bracket to the wall.
b) If installing the bracket into a masonry wall, drill 2 holes at each point established in step 3 with a 1/4" masonry drill bit. Tap the masonry anchors into the 2 holes drilled and screw the wall bracket onto the wall.



INLET PIPE INSTALLATION



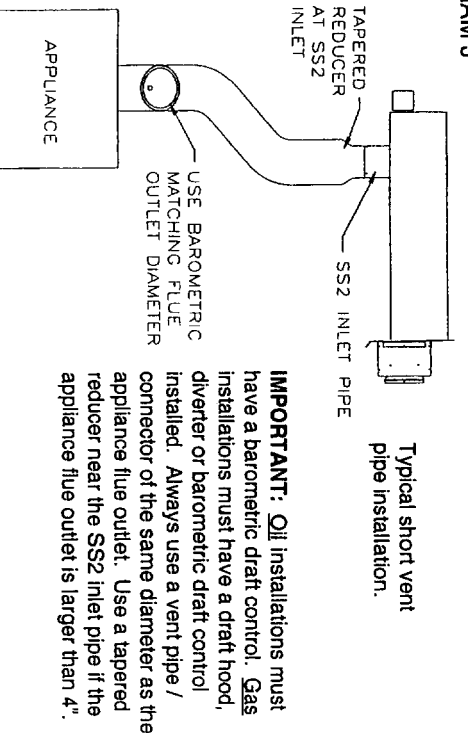
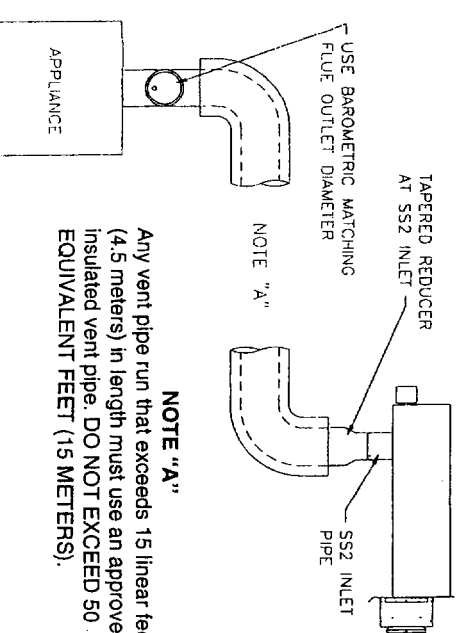
- Remove 4" round inlet pipe from box.
- Align the 4 slots of the inlet pipe to the 3 pins and proving switch sensing tube, push pipe up until it bottoms out in the SS2 inlet.
- Turn the inlet collar clockwise to lock in place, (See Diagram I). **IMPORTANT:** After vent pipe is installed verify inlet pipe is locked tightly in place.

INSTALLATION OF VENT PIPE

When installing the SS2 Vent System on an oil appliance, a full size barometric draft control must be used. Install the barometric draft control as shown, (See Diagram J). The SS2 may only be installed on gas appliances equipped with a draft hood, draft diverter or barometric draft control. The SS2 inlet pipe is designed to accept 4" vent pipe. Choose type of vent pipe based upon fuel and heater manufacturer's recommendations. The vent pipe used must be in compliance with local codes and the listing of the vent pipe manufacturer. When necessary, install tapered reducers and increasers as shown below.

Determine vent pipe layout which will allow for the least amount of elbows to the appliance. Calculate the equivalent vent pipe length from the appliance to the SS2 Vent System by adding the straight vent pipe length and the equivalent elbow lengths together. Each 90 degree elbow is equal to 10 feet (3 meters) of straight vent pipe, each 45 degree elbow is equal to 5 feet (1.5 meters) of straight pipe. The equivalent vent pipe length must not exceed 50 feet (15 meters) from the appliance to the SS2 Vent System. Vent runs of over 15 linear feet (4.5 meters) require the use of an approved, insulated vent connector to prevent problems related to condensation. It is not necessary to maintain a 1/4" rise per foot of horizontal when Side Wall Venting.

NOTE: Installing a vent pipe "log" on vertical vent pipe layouts allows for easier dismantling if servicing is necessary, (See Diagram J).



ELECTRICAL WIRING

▲ WARNING

All wiring from the SS2 to the appliance must be appropriate Class 1 wiring as follows: installed in rigid metal conduit, intermediate metal conduit, rigid non-metallic conduit, electrical metallic tubing, Type MI Cable, Type MC Cable, or be otherwise suitably protected from physical damage.

IMPORTANT: MORE THAN ONE INTERLOCK METHOD MAY BE APPLICABLE

In many cases it is easier to interlock with the thermostat/aquastat portion of the heater control circuit vs. the primary control portion of the heater control circuit. Review all of the wiring diagram options prior to choosing the best method.

SS2 SEQUENCE OF OPERATION WITH INTEGRAL UC1 UNIVERSAL CONTROL AND 24 VAC OR 115 VAC HEATER CONTROL CIRCUIT:

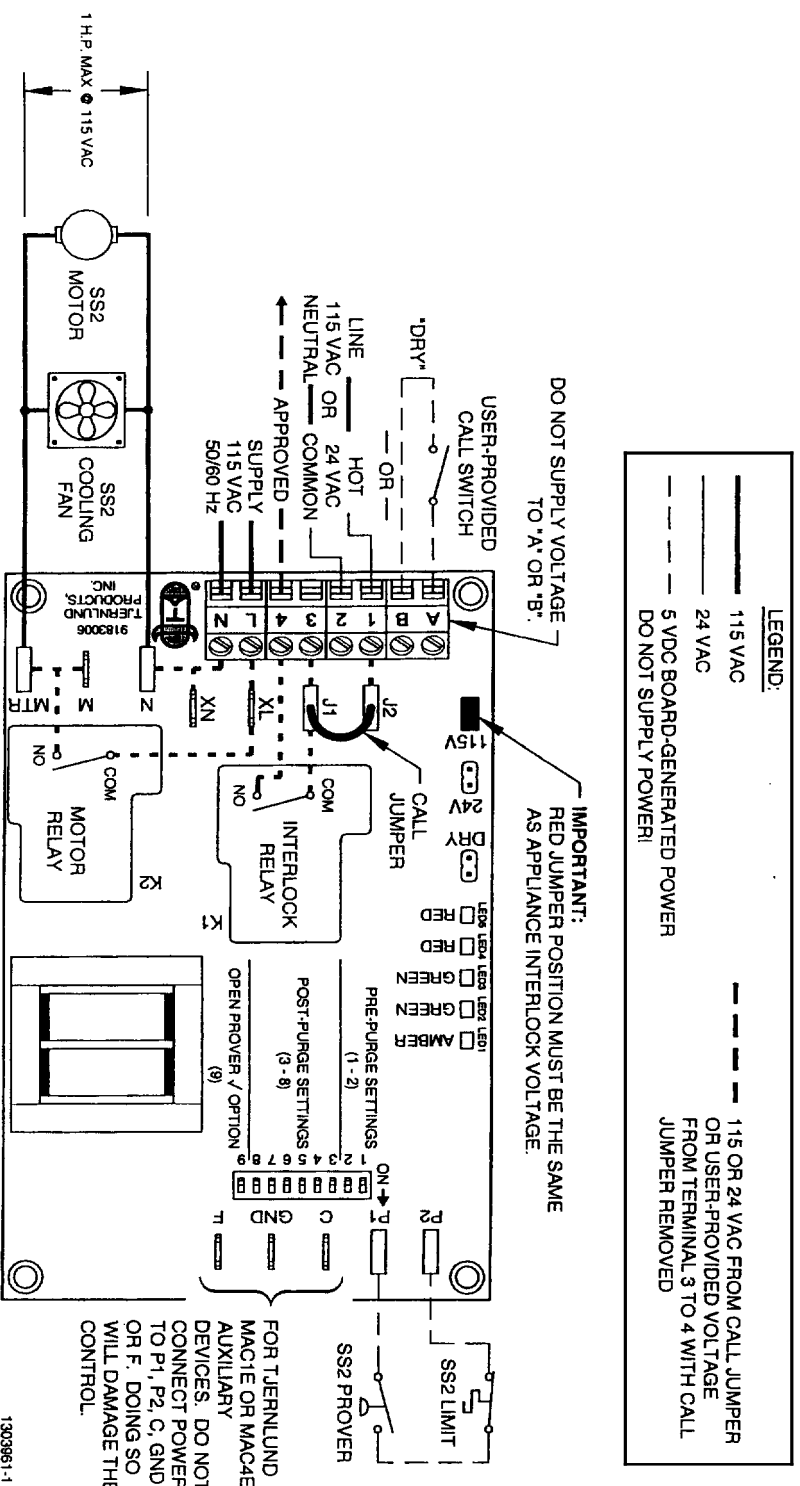
Control signal from thermostat, aquastat or primary control is intercepted and routed to terminal "1" on UC1 terminal strip. When terminal "1" is energized with either 24 VAC or 115 VAC, the Ventur motor is energized. After draft is established, the Fan Proving Switch closes within 5 to 10 seconds energizing terminal "4", which completes the circuit allowing burner to fire. **NOTE:** If a Ventur pre-purge is selected, the burner will not fire until the pre-purge time is finished. The Ventur will continue to run after the burner has finished firing for the set post-purge time cycle. The UC1 is set for a 2 minute post-purge time period from the factory. See "Pre / Post-Purge Settings" on page 5 for details.

The "1" input terminal on the Sideshot can accept either a 24 VAC or 115 VAC control signal. **IMPORTANT:** The RED voltage jumper must be positioned based on appliance interlock voltage 24V or 115V. If using the "DRY" contact activation method, use terminals A & B on UC1 control and position the RED voltage jumper tab in the "DRY" position. **IMPORTANT:** Only one interlock method (i.e. 24V, 115V or "Dry") can be used with the UC1. Multiple appliance interlocks require the use of our MAC-Series multiple appliance controls.

The steps listed under each diagram are intended as a supplement to the diagram. Wiring colors or designations may vary by manufacturer. If you are unable to wire the SS2 as outlined in these instructions, call Tierlund's Customer Service Department toll free at 1-800-255-4208 for assistance.

IMPORTANT: If the call for heat interlock signal or 115 VAC power is removed, the UC1 board will reset and any fault, if present, will be stored in memory instead of displayed. See page 5, "Checking Memory for Last Fault Code".

SS2 WITH INTEGRAL UC1 UNIVERSAL CONTROL (THE SS2 MOTOR, COOLING FAN, LIMIT & PROVER ARE ALL FACTORY PREWIRED)



WARNING: Disconnect power supply from the SS2 and heating equipment when making wiring connections and servicing the SS2. Failure to do so may result in personal injury and/or equipment damage. LED #5 (RED) should be off with power removed.

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