ENTERPRISE FAWCETT

"Compact" Wood Burning Furnace

Model WF90

INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS:

Read these instructions carefully. Consult your local authorities concerning local fire safety regulations. Installation must be made in accordance with the Local, Provincial or State codes in your area which may differ from this manual. Always comply with the most severe application. Proper installation and use will ensure safe and satisfactory performance. Improper installation or use could result in voiding your warranty.

ENTERPRISE FAWCETT
Making Wood Stoves Since 1852

73 Lorne Street
Sackville, NB
E4L 4A2

Phone: 506-536-1160
Fax: 506-536-1820
Email: enterpri@nbnet.nb.ca

INSTALLATION:

Your Fawcett Wood Furnace can be set up with the blower compartment on the left or right-hand side, (See attached drawing), this may simplify the duct installation. Select and place near the chimney to eliminate flue pipe and elbows as much as possible.

Set the furnace on a full sized non-combustible level foundation (recommend a cement slab of about 2" thick with about 18" extra in front of feed door).

Place warm air section on foundation in selected area.

Attach blower section to selected side:

- Gravity panel fits opening on left and right-hand sides.
- Remove blower and motor unit.
- Place blower & motor in opening (may need to block it up to set beside the proper location on side of furnace)

Connect blower wire and BX cable to motor and blower section using the cable straps and the pre-punched holes.

If blower section is mounted on the right-hand side, it will be necessary to shorten the BX cable to the blower section and use the long BX cable and wire packed in blower section, between the junction box and the next location of the fan limit control. All holes are pre-punched (See attached drawing).

Install the thermostat in selected area.

Connect the furnace to an approved chimney for solid fuel. Recommended chimney size 8" x 8" inside. Smoke pipe should have a minimum of 1¼″ rise per foot of run. Install draft control at this time, draft control setting must not exceed 0.05" W.C. All smoke pipe joints must be secured with metal screws or its equal. Smoke pipe should be constructed of 24 gauge metal.

The installation must conform with local ordinances having jurisdiction.

Install and maintain sand or ashes in the bottom of the firebox to within ½″ below feed door sill.

Fuel storage must conform with local ordinances having local jurisdiction.

Plastic ductwork is not recommended. Use metal ducts.

Do not use joist space as ducts on this furnace.

The unit may be used as a gravity system in a power failure and we recommend the following:

- Locate the furnace as near central as practical for better distribution of warm air.
- Oversize the extended plenum (rectangular duct) one or two sizes according to recommended sizes in National Warm Air Standards.
- Use 6" diameter minimum pipe size.
- Where possible grade (slope) ducts and pipes upward to assist in gravity flow of warm air.

Do not use smoke pipe damper with this furnace.

The furnace should be installed by a qualified installer.

OPERATING:

When the installation is complete, close the power supply switch and set the thermostat above room temperature. Damper motor should open draft door. If not, check the following:

  - Freedom of draft door
  - Power supply and fuses
  - Output of transformer to damper motor, if output is ok damper motor is defective
  - Oil blower motor twice a year, 2 - 3 drops SAE 20-30 motor Oil on each bearing

- Fill and maintain pit sand or ashes to about ½ below fire door sill.
- Do not fill the firebox above bottom of smoke curtain in fire door.
- Do not use fluids, gasoline, chemicals, etc. to start a fire.
- Do not burn garbage, tar products, oils, plastics, rubber, driftwood containing salt and chemicals, etc.
- Do not set flue draft above .05" W.C.
- Maximum damper opening ½″.
- Clean as required, or at least once a year, the Heat Exchanger, Flue Pipes and Chimney.
- With a couple of sheets of newspaper and a few kindlings start a fire, then add a small amount of wood after this has burned down, add larger wood. At no time load the fuel above the bottom edge of the smoke curtain in the feed door.

- Do not store combustible materials within the following minimum clearances:

  - Top of warm air plenum and 6' of duct - 6"
  - Duct: ½″
  - Floor: Non combustible
  - Front: 48"
  - Side 1 (Blower): 30"

  - Side 2 (Gravity Panel): 18"
  - Flue Pipe: 18"

- When using uncured wood inspect furnace, flue pipes and chimney once a month for soot and creosote.

- At no time connect an automatic stoker to this unit.

- Clean ½ of the unit through the fire door, clean ¼ through the vent pipe and ¼ through the cleanout.

- Set wood thermostat above room temperature. This will open combustion draft door. With paper and kindlings, build a small fire, after four or five minutes add a few sticks of larger wood. In mild weather use your driest wood and maintain a small brisk fire instead of a large smouldering one. This will reduce creosote accumulation. Set the thermostat to desired temperature.

- Keep furnace, vent pipe and chimney clean, as it increases efficiency and reduces the chance of a soot or creosote fire.

- Solid fuel requires a sufficient supply of air for Combustion and Combustion Air is required above the fuel bed.

- Furnace when installed in a central location and a reasonable distance from a chimney with large warm air ducts will give reasonable satisfaction in a power failure situation. See power failure operation.

- MAXIMUM LIMIT SETTING IS 180° F.

RUN AWAY FIRE:

Caused by excessive fuelling, soot build-up or too much draft.

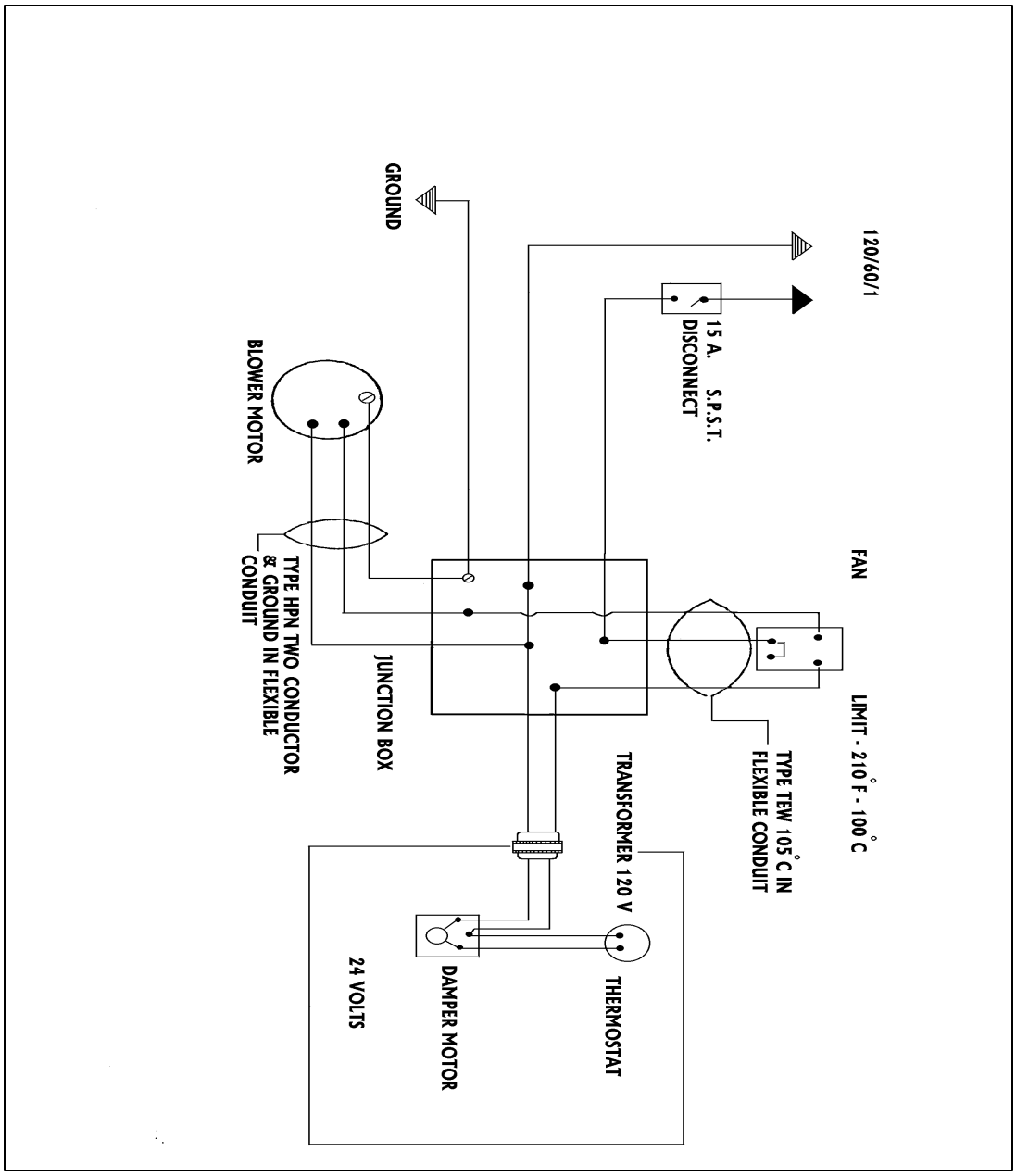
- Close all supply of combustion air to the fire by lowering the thermostat setting or unhooking the damper chain.
- Reduce draft - by fully opening flue pipe draft regulator.
- Since excess heat may damage the safety controls, they should be checked before restoring the furnace to service.

POWER FAILURE:

- Remove gravity panel.
- Open all warm air registers and dampers.
- Open furnace room door for air circulation.
- Maintain ½ fire, do not expect maximum comfort.
- Using non-combustible material, brace draft door open ¼ maximum if required.
- Do not allow an inexperienced operator to service fire.

Note: The flue products can contain carbon monoxide, particularly where the wood fire is being starved for air (made to burn at a slow rate). Vent pipes should have a relatively gas-tight engagement.

CSA FILE NO –
FBL 11187-93



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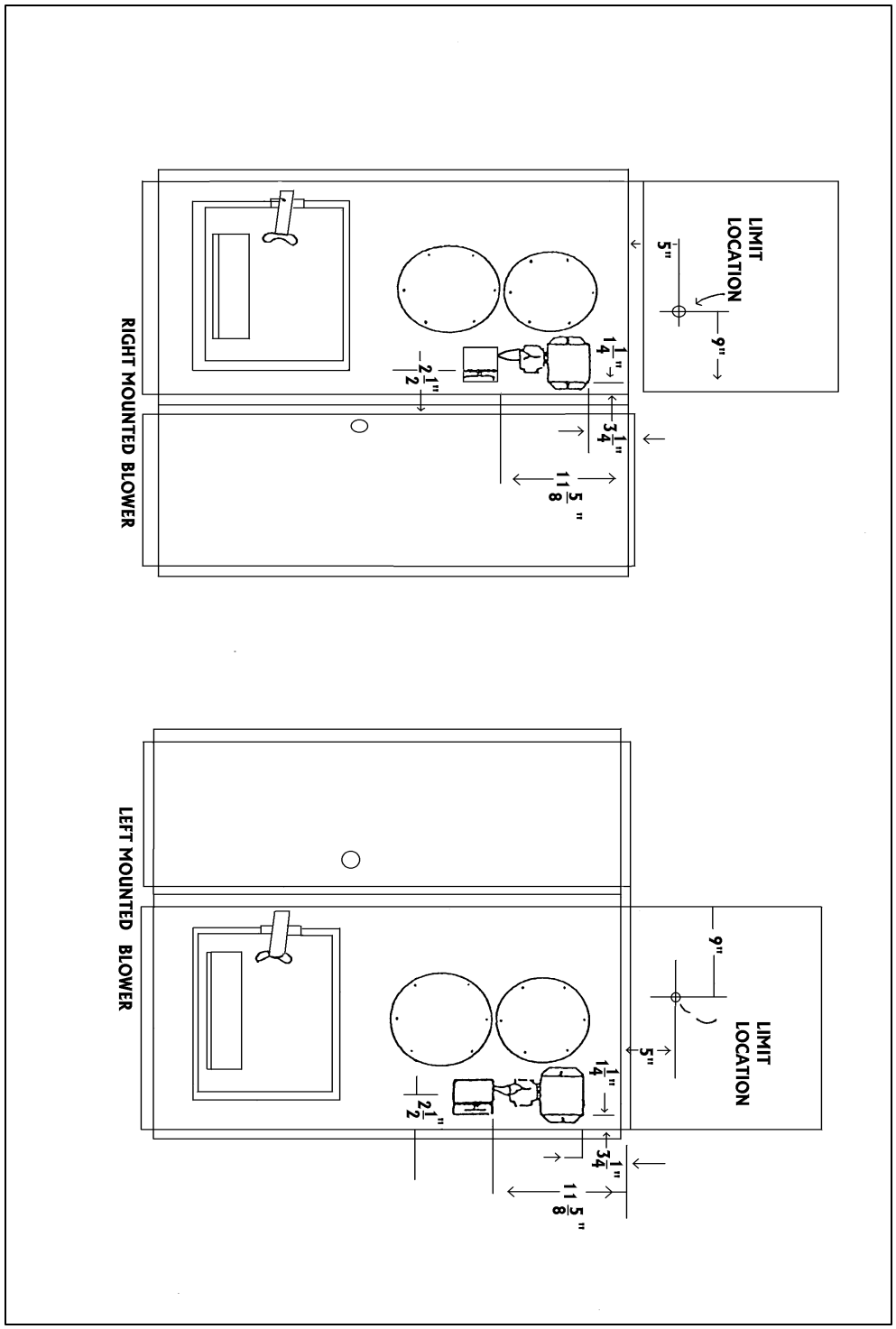

H.P. BLOWER MOTOR
Schematic Wiring Diagram

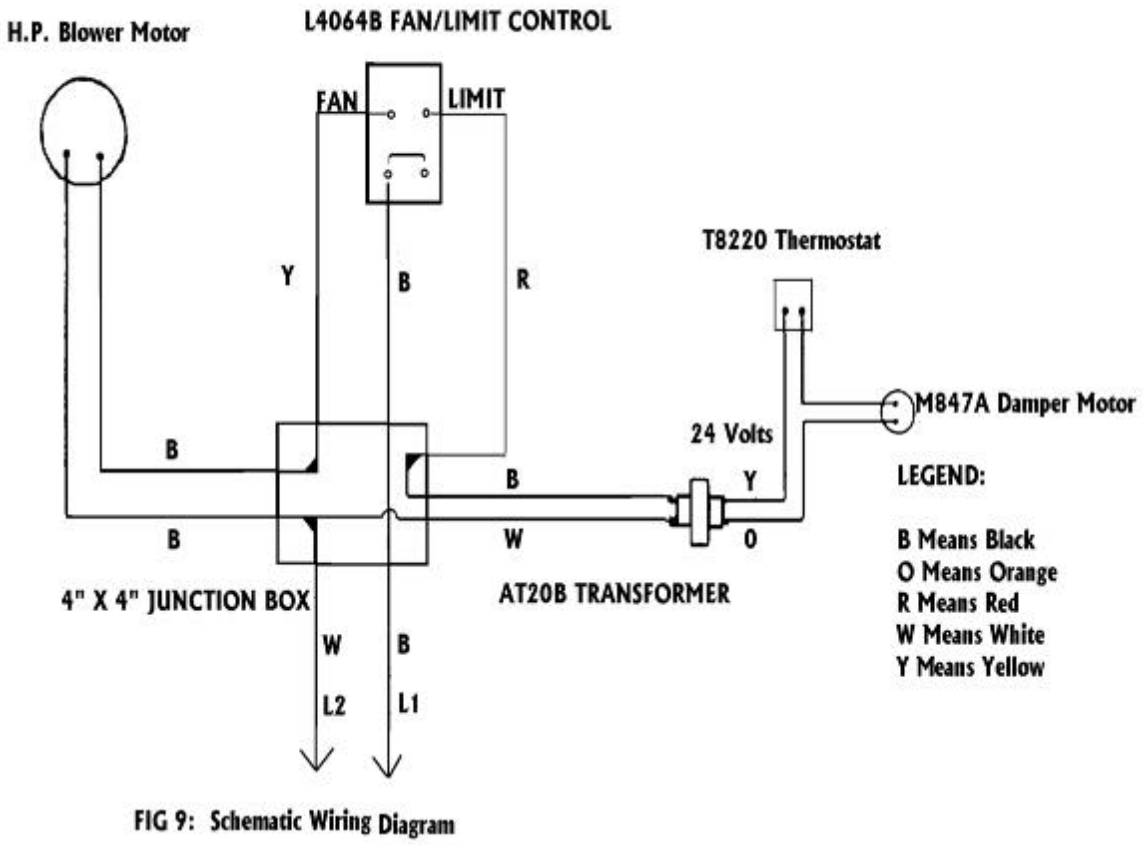

FIG 9: Schematic Wiring Diagram