

#90-99000 Dwyer Air Meter Instructions

460-1 Air Meter	460-7 Supply Grille Probe
460-2 White Plastic Ball	460-8 14"x3/16"x5/16" Rubber Tube
460-3 Bottom Plug	460-9 Angle Connector
460-4 Pipe Stem Cleaners	460-10 Return Grille Probe
460-5 Nylon Bristles to clean calibration orifice.	460-11 Air Velocity Calculator
460-6 Case	460-12 Dwyer Instructions



The Dwyer 460 Air Meter is capable of measuring draft and air velocity. The following instructions will only explain the procedures for measuring draft. For further information on measuring air velocity see the instruction card enclosed with the unit. *The only way to effectively separate the functionality of the stove from the functionality of the chimney is to measure draft in the chimney system.*

- 1: Drill a 1/4" hole on the back side of the stove pipe (so it is not visible from the front of the stove) about 12-18" past the flue collar. Do not drill at the bottom of an elbow or horizontal run. (It may secrete condensate or creosote later.)
- 2: Connect the Angle Connector to the Rubber Tubing (#460-8) and the Rubber Tubing to the **center** connector on the meter. Make sure the Rubber Tubing does not come in contact with the stovepipe once it is hot. Use only the 14" length of Rubber Tubing supplied with the meter. Changing the length or size of the tubing may affect the reading.
- 3: Build a fire in the stove.
- 4: Hold the meter vertically and insert the Angle Connector into the hole in the stovepipe. Read the meter by observing the height of the white ball. The meter has two different scales. The Red scale is used to measure air velocity. The **black** scale is used to measure draft. The Low scale measures draft from -0.005" W.C. to -0.09" W.C. To read the High scale, cover the outside connector on the meter with your finger. **Make sure you do not cover the calibration orifice on the side of the connector opening.** The high scale measures draft from -0.05" W.C. to -1.0" W.C..
- 5: Compare the results with the draft requirements for that stove model by referring to the owner's manual or Technical Bulletin # 21 "Soapstone Woodstove Temperature and Draft Readings."

Note: There are many factors that effect draft. Serious draft problems will be apparent during testing. The sealed joints in the pipe and/or thimble, ash clean out doors in the flue, intensity of the fire, air pressure in the room or home, atmospheric conditions, placement of the hole in the stovepipe are just a few.

- 6: Remove the Angle Connector from the stovepipe. Be careful, it will be hot!
- 7: Plug the drilled hole in the stovepipe with 1/4" finishing plug (part #4700-0600) or a 1/4" sheet metal screw.

Maintenance: See the Dwyer Instruction Card also included for maintenance instructions.

For replacement parts :Call Dwyer at (219) 879-2000

or visit their web site at www.dwyer-inst.com.