



System on 01/09/03 Shows Duct shroud around woodstove with new door outfitted with the retro-bab and a window to view the flame.

Solenoid valve on the floor is operated by yellow plug dangling from the burner and is

controlled by the controller on the blower.

Also on that circuit is the pre-heater for

This controller has



the eye input and a set of contacts for the thermostat. In the plenum I have a temp probe from a water heater that interrupts the burn cycle if the air temp goes over 200 F. Notice the pre-heater block for the oil with a waterheater-

thermostat.
Has 200 watt 120 V slug heater in the center (2"x .370")



Thru this side is a small adjustment for the ball position and a cool place to put the air in. Note that the oil is not forced thru the regular fitting but is in the gage hole. Also note the long hose on the oil line. This serves as a way to keep the air out of the pump like a check valve. End air



valve. This all
on 4 and less.
Side none.

Here the view is not clear of the bracket in the center, But it induces some spin.

The tube is 6" ID pipe and is cut and bent up to allow for the mounting of the igniters which are bent just behind the insulators to meet with the angle of

the elevated transformer. There is a little extra air over the top of the frame and that

This project Smoked fierce at first, I had two problems. First was the length of the tube. It has to be long enough to narrow the burn zone. Second was the need for a target that was ceramic or something easily heated by the flame. The reason the burn was so bad I think was because the

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NTC II Burner

incoming air is not preheated at all and rather than consume myself with air temp I tried the easier alternative of reusing the heat of the flame on itself. I used this burner first on an outdoor blast furnace, no smoke ever in that setup. The bricks glow brilliant yellow in the blast. I think they act as a catalytic. Even the exhaust gasses on the blast were over 1000 deg F.

rank and that
helps draw the arc
down and keep the
points clean.