Magnum 6500 Draft Issues fix!

Posted by pelletman - 26 Jan 2013 01:07

Hey all, Im Joseph from Hutchinson, MN I work for an HVAC company in town and my Dad has always had good luck with AE stoves (Ever since they first came out) so when I found a used one on craigslist, I jumped on it. I ended up purchasing it for $1150 along with 7 bags of wood pellets, 4 - 7 gallon pails of corn, a corn scrubber and misc. pipes and fittings. Pretty good deal I thought!

My setup is the 6500 with the biomass fire pot, 2 - 3in cleanout tees, 4ft of 3in pipe, 1 - 4in cleanout tee, 22ft vertical 4in pipe ran inside my exsisting chimney and all original parts.

At first when I was burning the pellets the glass would soot up almost all the way, and very little heat, couldnt figure it out for the life of me! After that I found out that the previous owner had let the unit and pellets sit for four years UNUSED, he also neglected to clean the heat exchanger at ALL! So naturally I Cleaned the heat exchanger, draft blower, passages and purchased the higher output draft blower from AES. Good thing they are right in town for me, as I made about 5-6 trips over to their facility buying parts and asking questions! The new remedy seemed to help a bit but still wasn't drafting enough for a proper burn and level fire pot of red coals.

So with my HVAC background, I had a thought of introducing more draft to the equation by an inline 4in duct fan, It worked out alright but didnt have the cfm I was looking to achieve. So I continued to think about it and I found a universal small draft inducer assembly laying around our shop. I attached the draft assembly to the stove by using an ABS 2in floor drain assembly. Worked out very well and slipped right into the air intake pipe without interfering with the air shutter, then I screwed the draft assembly right to the floor drain assembly and ducted my fresh air to the draft inducer. NOW the stove has draft and burns GREAT! Had to shut the air shutter down about halfway and the firepot is staying an even level while burning. Here are some pictures of the unit firing on the number 2 setting putting out 120 degrees.

Also attached are the pellets I found around here in central MN to be the BEST, they are made in Spearfish, SD great softwood pine with no trash, very low .26 ash and tons of heat output. Both bags are made by the same company, owner told me its whatever bag they feel like using that day, lol.

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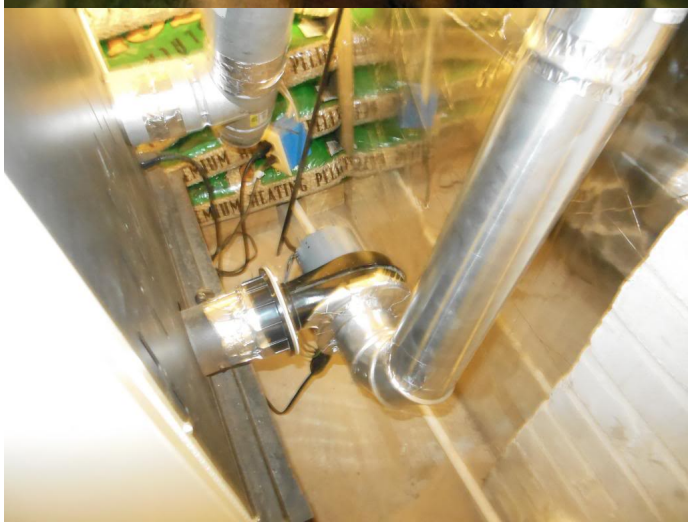

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Re: Magnum 6500 Draft Issues fix!

Posted by pelletman - 26 Jan 2013 03:22

Video of the setup

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Re: Magnum 6500 Draft Issues fix!

Posted by naturesheat - 26 Jan 2013 18:30

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I don't have the hvac schooling that it sounds like you have, but to me it sounds as though you have turned that negative pressure furnace into a positive pressure unit, and by burning pellets in it, you are looking to have a hopper fire.

I would suggest taking that draft inducing fan off and figuring out where there is still some blockage in your exhaust path.

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Re: Magnum 6500 Draft Issues fix!

Posted by pelletman - 14 Feb 2013 01:00

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Still working great two weeks later, cleaned every crevice of the stove and no improvement without the draft induction. I'm not too worried about the hopper fire as it has yet to back to the auger like it was before. Ill run it the rest of the season and see how it goes!

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