6220 just installed

Posted by cds11 - 20 Oct 2012 18:16

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well about 7 monthes ago i started a topic that i just bought a used 6220 furnace. well i just installed the furnace last week and i just started it up today to make sure everything was ok. everything on the furnace seems to function correctly but im not getting very much air flow out of the floor registers. i took the rear panel off the furnace to make sure both blowers were running and they both are. anybody else have this problem with these furnaces? i do have the cold air return hooked up to the furnace. i also have a backdraft damper installed so it doesnt blow air into my electric furnace. my electric furnace has a 1400 cfm blower and it just blasts the air out of the registers, you can actually stand beside the register on the floor and feel the air hitting your face. when the 6220 is running you can barely feel the air on your hand right against the register. the 6220 has twin 500 cfm blowers so im not sure whats going on. i was just getting ready to go buy 3 tons of pellets today but i dont want to waste any more money if i cant get this to work any better. any help would be greatly appreciated. thanks

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Re: 6220 just installed

Posted by cds11 - 21 Oct 2012 18:28

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Re: 6220 just installed

Posted by lukecornstalker - 23 Oct 2012 15:58

I also have a 6220, I know that on the lower settings when only one fan is being called on to circulate air, that the other one still spins. It looks like it's running but it's not. After you light it, as it's coming up to temp on it's way to hr-5, you should be able to hear the second fan come on. Depending on you're settings, it's when it transitions from 2 to 3. You can press a display button on the side panel and you will get rf-1 or rf-2. (room fan) Soooooo, I guess what I would do, is fire it up, pull up a chair with your favorite beverage, listen for it to kick on the second fan, (remember the little dash will blink during transition) if it

gets up to temp and you never heard the second fan kick on, press the display to make sure it called for it, if it did, pop the back panel and probe the fan terminals with a multi-meter, if both fans are showing 120ac but one of them isn't running under it's own power, you need a new fan. If you have verified that both fans are under power and operating normally, then it's time to look at restrictions in duct work or filter or something along those lines. I know on my furnace, it is no where near the air that is circulated when my lp furnace is running, but that has alot stronger fan than these twin 550's.

PS, do you have an isolation panel inside your fan compartment or are your fans exposed to the rest of the interior of the furnace? Do a search on here, if you don't have this, you will get soot throughout your house. Stupid design.

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Re: 6220 just installed
Posted by johnlb - 23 Oct 2012 18:35

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Just an observation from your pictures,You have a 12" hot air duct going out of the corn burner. max free flow air in a 12" duct would be 700cfm. with the elbows your only going to get about 500cfm.

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Re: 6220 just installed
Posted by tfgrower - 23 Oct 2012 19:20

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Wouldn't his 12" duct be forced air unless he has no fans

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Re: 6220 just installed
Posted by cds11 - 24 Oct 2012 00:13

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lukecornstalker wrote:

I also have a 6220, I know that on the lower settings when only one fan is being called on to circulate air, that the other one still spins. It looks like it's running but it's not. After you light it, as it's coming up to temp on it's way to hr-5, you should be able to hear the second fan come on. Depending on you're settings, it's when it transitions from 2 to 3. You can press a display button on the side panel and you will get rf-1 or rf-2. (room fan) Soooooo, I guess what I would do, is fire it up, pull up a chair with your favorite beverage, listen for it to kick on the second fan, (remember the little dash will blink during transition) if it gets up to temp and you never heard the second fan kick on, press the display to make sure it called for it, if it did, pop the back panel and probe the fan terminals with a multi-meter, if both fans are showing 120ac but one of them isn't running under it's own power, you need a new fan. If you have verified that both fans are under power and operating normally, then it's time to look at restrictions in duct work or

filter or something along those lines. I know on my furnace, it is no where near the air that is circulated when my lp furnace is running, but that has alot stronger fan than these twin 550's.

PS, do you have an isolation panel inside your fan compartment or are your fans exposed to the rest of the interior of the furnace? Do a search on here, if you don't have this, you will get soot throughout your house. Stupid design.

hi luke, thanks for the reply. i was hoping that someone that owns a 6220 would help out. when i had the unit running on high pr-5 it was calling for both fans and they were both running. does the control board just send full power to the fans or can the control board determine how much power is sent to them? when i took the panel off the back i was wandering why the fans could draw air from the upper part of the 6220. did you make your own isolation panel or can it be bought? thanks for the help.

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Re: 6220 just installed
Posted by johnlb - 24 Oct 2012 11:10

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tfgrower wrote:

Wouldn't his 12" duct be forced air unless he has no fans

What I'm saying a straight piece of 12" duct will only flow 700cfm no matter how big of a fan is pushing air through it. John

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Re: 6220 just installed
Posted by tfgrower - 24 Oct 2012 13:07

Really, I wouldn't have guessed that, good information John. I just thought the more fan the more preasure the more air.

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Re: 6220 just installed
Posted by cds11 - 24 Oct 2012 15:25

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johnlb wrote:

Just an observation from your pictures,You have a 12" hot air duct going out of the corn burner. max free flow air in a 12" duct would be 700cfm. with the elbows your only going to get about 500cfm.

hi john, the duct coming off the corn burner is 10 inch but i doubt that changes much. i was thinking that all the elbows would hurt the air flow a little. i have to have the elbows to clear the lid to the corn burner when it opens. do you think putting a duct booster fan in the 10" duct line would help?

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Re: 6220 just installed

Posted by johnlb - 24 Oct 2012 16:24

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I don't think you will gain by putting in a booster fan. the only way to increase the flow is to increase the plenum size.

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Re: 6220 just installed

Posted by Tinman - 25 Oct 2012 01:59

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cd just curious where exactly is your back draft damper located?

I don't think there is any adjustment on those fans, if there on there running full blast.

If you have a amp probe you could check the amp draw on the unit when its running, I don't know what the actual amp draw is but you could run the furnace on lowest setting and check it and then on the highest setting and see if there is any difference, there should be if the 2nd fan is coming on.

what kind of discharge temps are you getting?

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