Question about negative draft kits

Posted by drysun - 25 Nov 2012 02:17

Hi all,

Couple of questions regarding the kits. Corn has gotten to crazy prices, so looking to convert to pellets sometime during the winter. I have tried reading about the Sparta and Nesco kits. A local company really didn't recommend the Nesco one. It tends to be windy around here and I think the issue was it was not able to keep up with the high wind gusts (gusts sometimes as high as 40+ mph, fortunately not sustained at that speed). I was wondering:

1) Is the Sparta one a higher power exhaust blower?

2) I notice the Nesco one has a different auger that is a complete corkscrew. What difference does that make? (If I went with the Sparta one, basically, is the full corkscrew auger something that should be purchased as well?)

3) I know there's no wiring for this, but I do know some stoves have an intake AND exhaust blower. What would happen if one could somehow wire up both to run at the same time? Would that be bad or help efficiency? Obviously splitting the intake blower lines would be bad since it would split the electricity to both and the motors I suspect would run at slower speeds.

4) As they are connected and pull air from the exhaust, I'm sure some soot must build up, how often do you have to clean out the blowers/motors themselves?

I couldn't find any answers in this or the old forums, but I thought I read a couple of years ago someone did swap out to a full corkscrew auger but I can't find the old thread to see what difference it made.

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Re: Question about negative draft kits

Posted by tfgrower - 25 Nov 2012 02:38

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drysun wrote:

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Hi drysun, Just a couple of thoughts. Which fan you use will matter not concerning 40 MPH wind. You will limit the air to burn correctly so the same amount of air will be coming out the exhaust at the same pressure with both. A wind break for the fan/exhaust would be my best advice there. With this in mind a dual fan setup would not be an advantage. I have a Nesco setup on 4th winter and no complaints (knock knock).

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Re: Question about negative draft kits

Posted by command_z - 25 Nov 2012 07:20

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The folks at Sparta Coop do not have a kit for horizontal venting so if yours runs directly thru the wall, go with the Nesco. If yours runs up thru the ceiling, or up then out, Sparta's will work just fine. As for the auger, I think that they recommend that the auger be changed on the 4100 & 7100 no matter who's multifuel kit you purchase. It needs changed because of pellet flow, not exhaust type. I agree with tfgrower regarding wind.

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Re: Question about negative draft kits

Posted by drysun - 25 Nov 2012 17:02

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Thanks for the input so far.

Regarding the wind, it only occasionally gusts that high during really windy days and my real concern is that currently as a positive draft system, sometimes the flame will go up the feed tube and I can usually stop that by putting a box fan on top of the hopper and have it blow air down into the hopper and push back into the burning area. I'm thinking with the negative draft, even though there might be high wind, since there is a fan pulling air out, it shouldn't have flame going up the feed tube.

I'm not expecting miracles, since I've been outside in the high wind gusts and it feels like it's going to knock me down.

My setup does go up a few feet and then out the side. Looking at the install pdf for the Sparta kit, I believe I just make the 3 feet rise it is recommending.

From the forums I seem to get the feeling more folks chose the Sparta one over the Nesco one, so I'll probably grab that and the replacement auger. Worst case I'm out a few hundred in this experiment.

Any thoughts on the question of cleaning out the blower? As I stated before, since it's sucking out exhaust, I'm sure it must build up some soot and need cleaning, so I'm curious as to the difficulty and frequency of that extra maintenance.

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Re: Question about negative draft kits

Posted by command_z - 25 Nov 2012 19:53

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drysun wrote:

Thanks for the input so far.

Any thoughts on the question of cleaning out the blower? As I stated before, since it's sucking out exhaust, I'm sure it must build up some soot and need cleaning, so I'm curious as to the difficulty and frequency of that extra maintenance.

Here is what I do. It is not without risk of blowing ash into the living quarters, but if careful it will not. I found a piece of plastic pipe that is duct taped to the nozzle of my leaf blower. It is just small enough to fit into the exhaust cleanout of the stove. I put the nozzle into the clean out, stuff an old towel around the opening to catch any blow back, turn the blower on in short bursts. This blows LOTS of crud out of the exhaust. I do this every 6-8 weeks.

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Re: Question about negative draft kits
Posted by tfgrower - 25 Nov 2012 22:35

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Hi Fella's, internet out all day. Sounds like things are under control here. I use leaf blower with fan blowing every cleaning, only cleaning flex pipe has had going on 4 years. I would like any feedback on Sparta unit if you go that way drysun.

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Re: Question about negative draft kits
Posted by drysun - 26 Nov 2012 20:09

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I have a shopvac that has some sort of cone attachment that just fits right for the exhaust blowout port and that's how I clean it now. As there will be a motor in the path of the exhaust, I was thinking it may need to be removed occasionally to clean out soot from the motor and oil it on a yearly basis. Is that not true?

Anyway, I just placed an order for the Sparta kit and the auger as well as an infrared thermometer off Amazon so I can see if it makes a difference.

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Re: Question about negative draft kits
Posted by tfgrower - 26 Nov 2012 20:30

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The motor will be shielded from exhaust in any cofiguration me thinks.

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Re: Question about negative draft kits
Posted by willie91k - 27 Nov 2012 01:22

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I used a leaf blower in the clean out worked ok for a while. then cleaned the stove went to fire it up and ext. fan would not run. Looked in side and that

1 1/4 plug had blew out and landed on the fins of the fan.

Talk about a job to get the plug put back in...

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Re: Question about negative draft kits

Posted by tfgrower - 27 Nov 2012 01:59

That would be a bugger. Did you use high temp silicone cement on it? That will help hold it in place.

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