Modifying the New Braunfels Hondo and Black Diamond smoker grill

I bought my Hondo about four years ago and really struggled to get good 'cue. I researched and researched and bought book after book but still struggled. I was ready to spend big bucks to purchase a fancy rig - or even get one custom made - I was that frustrated. But before I did, I used my research to make the following modifications and my problems disappeared. Then I tried a cooking technique in addition to the modifications and was finally able to maintain an absolutely steady 220 degrees for four hours with ease. I was thrilled!

The Hondo (and Black Diamond) are both well made cookers but poorly designed. The modifications that follow rectify the design flaws. Now I see no reason to buy another cooker of any kind -- even a real expensive one. In fact, at this point I would be loathe to get rid of it.

These modifications are inexpensive (under $25) and easy (they took me about an hour and I am sooooo not mechanically inclined - changing a tire is pushing my envelope, believe me) yet they work wonders. Try them and see if they don't work for you too.

First the modifications

Stuff to get

Go to your local home or building supply store and get the following:

- One roll of aluminum flashing for the chimney.
- One piece of unpainted, non galvanized 22 or 16 gauge light steel for the baffle. It should be bendable with either a hammer, vice, or break.
- Pipe plug or metal cap to fill the thermometer hole.

Lower the thermometer so that it reads at the same level as the meat

This is critical. You want to measure temperature at the grill level, not a foot above. I put mine to the immediate right of the handle.

1. Remove the existing thermometer. The hole has a 3/4 inch outside diameter. Fill the hole with the pipe plug or cap.
2. With an electric drill and a 3/4 inch bit, drill a new hole to the right of the handle and insert the thermometer there.

   Note. Another option is to purchase a Weber thermometer (I found one at Home Depot) that uses about a 1/4 inch hole. One caution: I have never used the Weber thermometer so I don't know how accurate it is - it is fairly inexpensive (under $10) so I would proceed with caution.

Improve the chimney by lowering it toward the grill

1. Cut a foot to a foot and a half of the aluminum flashing.
2. Roll the cut piece into a cylinder.
3. Stick the cylinder up inside the chimney leaving enough exposed at the bottom of the chimney so that it is the same level as the grill.

   When you let the aluminum unroll, it will unroll to the diameter of the chimney. This effectively lowers the chimney inside the smoker so that it draws from below grill level and dramatically evens out the temperature inside the cooking chamber.

Insert a steel baffle between the firebox and cooking chamber

This modification serves two purposes. First, it directs heat downward below the grill for much improved heat circulation, which together with the chimney modification, dramatically evens out the temperature in the cooking chamber. Second, it acts as a heat shield between the firebox and the meat so that you get only indirect heat. This prevents the meat from burning before it is done.

1. Cut the piece of the steel wide enough to cover the upper half of the opening between the fire box and the cooking chamber and approximately one foot long (better to be slightly long than slightly short).
2. Line the piece of steel up with the upper bolts that hold the fire box to the cooking chamber, mark the spots, and drill holes to line up with the bolt.
3. At a height just below grill level, bend the piece of steel into an L-shape, but not quite 90 degrees, with the end pointing slightly downward toward the bottom of the smoke chamber. Make sure you have at least six inches (more is better than less) of surface extending into the chamber.

   Note: The steel I used was heavy enough that I had to use a hammer to bend it into shape - I don't own a vise.)

4. Mount the piece of steel to the bolts, making sure the bottom of the L extends into the cooking chamber. This creates the baffle between the fire box and the cooking chamber.

Now the technique

Building the fire

The following steps are necessary because the Hondo and its clones are not very airtight. These steps only work with charcoal briquettes and not with wood or chunk charcoal. I have tried it with both and the results have been very disappointing. Because pure hardwood charcoal is hard to get in my area, all temperatures and cooking times are based on the use of Kingsford briquettes.

Note: Always keep the chimney outlet wide open during the entire lighting and cooking process, otherwise your food will get sooty and gross tasting.

1. For four hours of perfectly steady 220 cooking, fill the firebox with 10 pounds of unlit charcoal briquettes.
1. Spread the charcoal evenly over 80 percent of the firebox, keeping the briquettes approximately 3 inches away from the air vent to allow good circulation.
2. Put five pounds of charcoal into a Weber charcoal starter chimney and light it. Five pounds of briquettes are even with the top of the chimney.
3. When the lit charcoal is covered with grey ash (takes about 20 minutes), dump the coals directly on top of the charcoal in the firebox. Spread the lit coals evenly and close both the firebox and cooking chamber lids. Leave the intake air vent on the firebox door completely open.
4. When the temperature reaches 240 degrees, close the intake air door all the way and within 20 minutes, the temperature should back down to 220 degrees.
5. Open the air vent about a quarter of the way. In about 10 minutes the temperature should settle at a perfect 220 degrees.

Let's cook

Now you're ready to cook. Pop that brisket, leg of lamb, pork shoulder, slab of ribs, or what have you onto the grill in the smoke chamber and let the good times roll. Ten pounds of charcoal gives you four hours of steady fire. After four hours, almost all of the charcoal will have burned down and the temperature started to drop. If you're cooking something that requires more cooking time, see the tip that follows for adding coals without losing cooking time.

Charcoal, wood, or both?

If you like a stronger smoke flavor, add one good sized piece of smoking wood (you may have to soak it first to keep it from igniting) after about an hour or so of cooking. The wood will smoulder and add all the smoke flavor you should need. I personally don't like a heavy smoke flavor so I don't use the smoking wood. Plain Kingsford charcoal is enough smoke for me.

Cooking times and fire maintenance

Consider wind and outside temperature

You will probably have to make adjustments to these times for the wind. Because the Hondo and Black Diamond are not very airtight, they are quite susceptible to wind. On a breezy day it might be a good idea to find a spot out of the wind, if possible. You will also need to adjust for the outside temperature (and perhaps the brand of charcoal) on the day you cook, but this technique is so easy I can't imagine you having any problem.

How much charcoal and wood?

On the day I cooked a leg of lamb, I got two hours of steady cooking time for every five pounds of unburned charcoal used. This did NOT include the five pounds of lit charcoal spread out on top. When the original fire burns down to where it won't sustain 220 degrees, you can start up another five pounds of charcoal in your Weber chimney about twenty minutes before you figure you will need it. When it's ready, clean out the old charcoal in the firebox and dump in another five or ten pounds of unlit briquettes. Spread the lit charcoal on top and you're ready for another four hours.

With a little ingenuity, you can save much of the still burning charcoal from the ashes of the original fire and put it on top of the fresh charcoal. I use a small fireplace shovel and scoop all the coals out and dump them onto another grill (the one I use for grilling). The ash falls through the grate leaving any still burning coals behind. Using the little shovel, I can clean the Hondo firebox quickly, add 10 more pounds of fresh charcoal, transfer the still burning coals back to the Hondo, dump on the additional coals from the chimney and old fire, and start anew, all with less than10 minutes of downtime. With good timing, you should lose no more than a few minutes cooking time during this transition.

Drop us a line

If you try this modification/technique, please drop me a line and let me know how it works for you. I have begun hearing from people who have made the modifications and tried the technique and every one of them reports excellent results - some even better than mine!

Good cooking!

Dan