## Sparta Coop Amaizablaze Stove Conversion For Direct Through the Wall Venting - Exhaust Motor & Fan Outside House **Please read this entire document before proceeding!**

Just a quick note on the material used in the mounting plate and the outside cover. These are made from galvannealed steel. These can easily be painted if desired. Check the following website for more info on the galvannealed process, corrosion resistance and painting preparation.

## Alert!

Some Low VOC Paints Adhere Poorly to Galvanneal (Paint Grip) Today, many applications call for low VOC paint products. Schools, hospitals, LEED projects, and green developments require paint low in volatile organic compounds. Unfortunately, some of these low VOC paints have been problematic in working with Galvanneal (paint grip) ductwork. Though counterintuitive, low VOC paints often work better on traditional galvanized steel products.

http://www.baronmetal.com/en/site/baronmetal/Products/Galvanneal-steel/

We have posted other documents showing the conversion of the stove itself at:

http://www.spartacoop.com/content/main-office/stove-information

Look for the information specific to your model stove for removal of the internal combustion fan and the plugging of the air balancing tube.



This is the fan and motor assembly attached to the mounting plate and fastened over the stainless steel thimble face on the outside wall of the house. This is the same fan and motor assembly we have been using on our other conversion kits for the last 4 years.



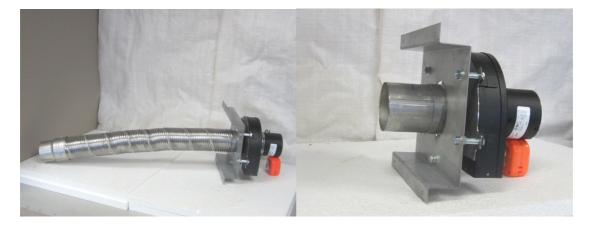
This is the mounting plate without the fan and motor, slid off to the side. The mounting plate fits over the angle pieces of stainless steel. The plate will have to be centered left to right on the face of the thimble to insure the exhaust tube is centered inside the fresh air intake tube.



Mounting plate in left picture, thimble on outside wall in the right picture. As you look at the thimble from the outside of the house, the electrical cord for the motor goes on the right side of the thimble. Prepare the thimble and the mounting plate for the electrical cord by drilling a 1/2" hole in the mounting plate on the right centered top to bottom and center of the hole in 1" from the side. Note the hole pattern to make sure your hole is on the proper side. On the thimble face drill a 1/2" hole centered top to bottom and right of the tube 1 1/2". Rubber gromets are supplied to protect the electrical cord from being damaged by the sharp edges. Both of these holes are best drilled using a small drill bit to get a pilot hole and then a larger bit to get to the 1/2" final size.



Put the connector end of the stainless steel exhaust pipe on the stove and slide the stove into position with the exhaust pipe out through the thimble. The exhaust pipe should protrude beyond the wall of the house about 3/4 of an inch, about half the depth of the SS angle pieces on the front of the thimble. If your pipe is longer than that, you will need to cut it to these specs. If the exhaust pipe doesn't come out that far you need to either move the stove back toward the inside wall (minimum 2 inches clearance) or get a new pipe and cut it to fit correctly.



This is what your assembled mounting plate and fan & motor should look like. The 3" X 4" extender pipe is inserted into the fan & motor assembly. A little silicone on the pipe end that is inserted into the fan & motor assembly will hold them together. The extender pipe will fit inside the stainless steel exhaust pipe to a depth of about 2". The fit is close enough silicone should not be needed. That will help get it apart when you need to clean the ash out of the stainless steel pipe (at least annually). It is recommended that when you are done burning the stove in the spring that you take the fan & motor assembly off the side of the house and put it inside until ready to burn the stove again in the fall. Plug the openings inside and around the exhaust pipe with steel wool to prevent insects and birds from entering the house. If you reattach the outside cover, you should be good for the summer



The fan and motor assembly can now be mounted to the mounting bracket. Again, the bracket will fit over the stainless steel brackets and must be centered side to side. After the bracket is centered, mark the mounting bracket holes on the stainless steel thimble face and use a small pilot drill bit to make your mounting holes. Included are #10 X 1" screws. You may need longer ones depending on the material on the side of the house.



This is the view of the electrical cord coming out the house wall, through the grommet in the thimble face, through the grommet in the adapter plate and hooked up to the motor connections. Fish the wires through before putting the connectors on the end of the wires. You might want to put a small dab of silicone to secure the electrical wire to the rubber grommet to keep the wire from sliding out of the grommet.



Center the outside cover on the stainless steel thimble face, mark the holes and drill pilot holes with a small drill bit. Secure the cover using the provided 10 X 1" screws. You may have to use longer screws depending on the material on the outside of the house. Make sure you get into solid materials with the screws so your fan and cover are well supported.



This is the view with the cover installed looking up from underneath. Note the gaps on the right and left sides of the adapter plate. This gap is where the intake fresh air gets into the stove between the exhaust pipe and the outer pipe. The exhaust is blown straight down toward the ground. Early in the fall or late in the spring, when there is dry, dead grass or leaves under the exhaust, it is necessary to protect the grass from possibly starting on fire especially if the exhaust fan is closer that 3 feet to the ground.