Instructions for Setting up the SpeedFire™ Cone System

NOTICE: PLEASE DO NOT ATTEMPT OPERATION UNTIL YOU HAVE READ ALL THE DIRECTIONS THOROUGHLY!

CONTENTS

The carton you receive contains a SpeedFire™ Cone (1), round stainless steel mesh firing grid (2), pyrometer with probe (3), two nuts for attaching pyrometer to vertical pyrometer mounting bracket (4), vertical pyrometer bracket, (5), two Phillips head screws with two wing nuts (6), carton containing stove with horizontal pyrometer bracket attached (7), fuel tank stabilizer base (8) PHOTO 1

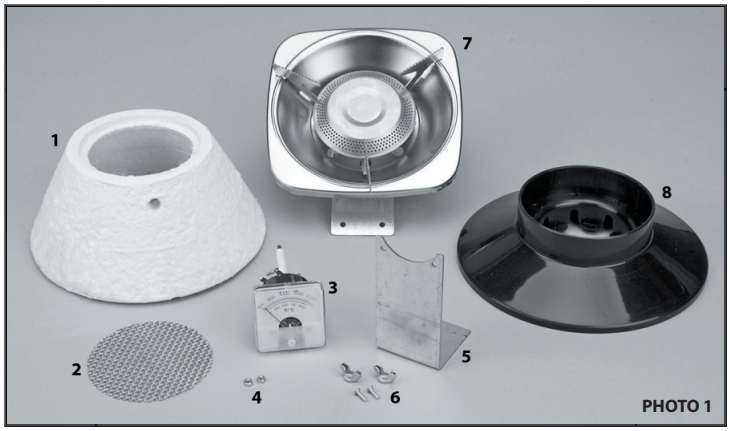

PHOTO 1

You will need a Phillips head screwdriver and a pair of small pliers such as a needle nose type.

BRACKET ASSEMBLY

Using the two Phillips head screws and wing nuts (6) mount the vertical metal pyrometer bracket to the horizontal part of the bracket connected to the stove as shown in PHOTO 2. The heads of the screws come in from the top of the horizontal bracket.

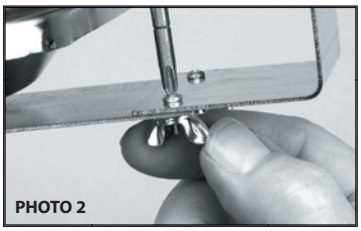
PHOTO 2

PYROMETER/STOVE ASSEMBLY

Using the lower set of screws on the back of the pyrometer meter face, Insert them into the vertical bracket on the end of the bracket with the curved cutout. PHOTO 3. Use the two nuts (4) to attach the pyrometer to the bracket. PHOTO 4. DO NOT OVER TIGHTEN.

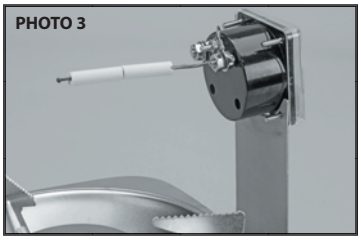
PHOTO 3

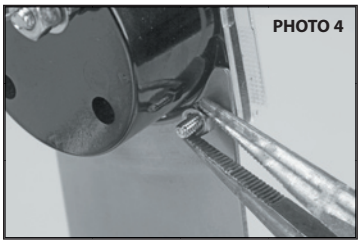
PHOTO 4

Screw the stove and pyrometer assembly to the top of your propane bottle. Be sure that the stove is screwed tightly to the bottle. Be sure that the plastic base that comes as a part of the propane fuel cylinder is firmly attached to the cylinder. Place the bottle with stove and pyrometer assembly attached into the black plastic fuel tank stabilizer base. Make sure that the fuel cylinder is pressed firmly into the fuel tank stabilizer base (8) and is perpendicular to the stabilizer base before operation. PHOTO 5


PHOTO 5

The propane cylinder we recommend is the small one pound capacity style with integrated plastic base. It should be readily available at any hardware or camping store.

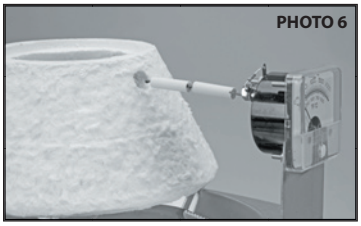
PHOTO 6

INSTALLING THE SPEEDFIRE™ CONE

Holding the SpeedFire™ cone level with the three burner supports, move the cone sideways so that the pyrometer sensor goes into the hole in the side of the cone near the top PHOTO 6. Looking down through the top of the cone, move it onto the stove top PHOTO 7 until the burner is placed as shown. PHOTO 8 (next page)

Lastly, place the round stainless steel mesh grid into the recess at the top of the SpeedFire™ cone. PHOTO 9 (next page)

SAFETY FIRST !


PHOTO 7

Use common sense when setting up and operating the SpeedFire™ Cone System. Since there is heat and flame involved be sure that you don't operate the SpeedFire™ Cone System in an area that would be conducive to fires being ignited in the case of an accident. Be sure to place the SpeedFire™ Cone System in a **well ventilated area** (especially when burning out organic materials) that allows for a minimum of 18" clearance on all sides, the top, and with no combustible

or flammable material especially above or in the surrounding area. As with any metal clay firing method, a significant amount of heat is radiating from the cone opening.

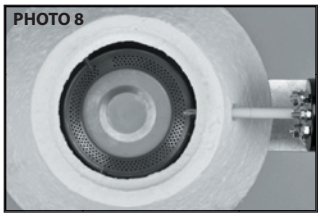
PHOTO 8

During firing, especially prolonged firings, metal surfaces can heat up so do not touch them until after the unit has cooled down completely. The gas regulator knob can also heat up somewhat so don't be surprised if it feels warm, however, adjustment during firing and turning the unit off should cause no discomfort.

OPERATION

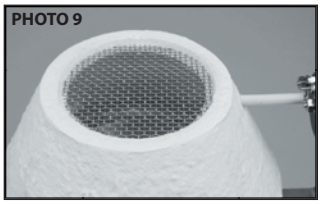
PHOTO 9

Before firing for the first time be sure that the pyrometer is reading room temperature (appx.75 F.). If it needs adjusting use the plastic screw on the face of the pyrometer to adjust to room temperature.

Place the PMC objects to be fired on top of the stainless steel mesh grid. Insert an unlit butane match lighter between the cone and the top of the stove, ignite the butane lighter then open the valve slightly and light the burner. PHOTO 10

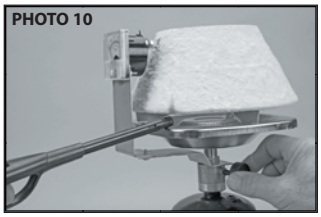
PHOTO 10

Open the stove valve a little at a time to adjust the temperature. The meter indicates the temperature. Keep in mind that you need to give the meter time to "catch up" if you make adjustments with the stove valve. To minimize fluctuations in firing temperatures, avoid firing your SpeedFireTM Cone in an area susceptible to drafts or strong movements of air.

Once the temperature is set, let the PMC fire for the recommended time. Remember that the time at the proper temperature (or a higher temperature) is very important in sintering silver. We recommend that you not exceed 1650F. to insure that you do not approach the melting point of the PMC. Keep an eye on the meter and make adjustments as necessary. The burning capacity of the stove is somewhat affected by the amount of fuel remaining in the bottle but the stove has a built in regulator that is designed to keep this fluctuation to a minimum. When you are unable to reach proper temperatures it is time to replace the fuel bottle or fire at a longer time at a lower temperature.

In a well lit area any flames resulting from opening the valve too much may not be visible above the screen. Use caution and open the valve only enough to maintain the proper temperature.

FIRING RECOMMENDATIONS

The recommended temperature options using the SpeedFire™ Cone System for Precious Metal Clay are:

PMC+	1470 F. for 30 minutes	**PMC3**	1110 F. for 45 minutes
	1560 F. for 20 minutes		1200 F. for 20 minutes
	1650 F. for 10 minutes		1290 F. for 10 minutes

PMC Standard - The firing time for PMC Standard is 1650 F. for 2 Hours. If you choose to fire PMC Standard with the SpeedFire™ Cone system we recommend that you begin with a full bottle of fuel. Depending on the ambient temperature and your altitude you may have to utilize a 2nd bottle to fully fire the PMC Standard at the recommended time and temperature.

The recommended temperature options using the SpeedFire™ Cone System for Art Clay Silver are:

Art Clay Standard &	1600 F. for 10 minutes	**Art Clay**	1472 F. for 5 minutes
Art Clay Slow Dry	1560 F. for 20 minutes	**650/1200**	1200 F. for 30 minutes
	1472 F. for 30 minutes		

We recommend that you use the longer times at the lower temperatures. Our research indicates that the amount of fuel used is essentially the same.

Your altitude above sea level may affect your ability to reach the higher temperatures indicated above, if this is the case in your location, fire for a longer time at one of the lower temperatures.