



# Volcano Kettle Operating Procedure – Peak Instruction

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The volcano kettle, A.K.A. the Ghillie or Kelly Kettle, is an important and highly useful bit of kit. We will encounter the need to use VKs in most bushcraft activities and some walking or expedition based events. The VK is a simple and environmentally friendly way of heating water swiftly with minimal effort, it is light and encourages a oneness with nature that a standard gas stove cannot.

The VK has also got some drawbacks and accidents have happened in the industry. All Peak Instruction's VK's have been modified to lower the risk of accidents. When used in accordance with this SOP the VK session will be safe and enjoyable for all involved. VK modifications may not be present if we are providing freelance services or hiring extra kit. It is up to the instructor onsite to enforce safe use of standard or modified VKs.

## Equipment

- Volcano Kettle – 1ltr = 3 mugs, 1.5ltr = 5 mugs
- Stone slab if appropriate per kettle
- Kindling, Fuel and Firelighters
- Water
- Burns kit & 1<sup>st</sup> Aid kit
- Thick leather gloves
- Mugs and brew kit

## Operation

Set up will depend on the site being used.

Always attempt to place VKs on a non-flammable base like a stone slab or on concrete.

When no rocks are available, consider cutting turf to create a hearth.

**The VK should always sit perfectly straight** on its base.

When unpacking the VK, remove the whistle cap (marked with orange cord) and place in bag. **Never boil the VK with a cap or bung in place.** Only use the cap for storage and the transporting of water.

**Fill with water no higher than 20mm below the pouring opening.**

After preparation and at the pointy of lighting, **leather gloves must be used** for any and all contact with the VK. Each of our VK's is provided with a large and small set of leather gloves in the bag.

The use of fires in the VK should be done with reference to the risk assessment document. This must be monitored by the instructor at all times.

Lifting – When the fire is lit in the base, the VK will need lifting into position. This job should be done by the instructor in almost all circumstances. Use this as a time to demonstrate safe handling technique if preparing a group to do it themselves.



Once lit, stand the kettle on the fire base so that the spout points approximately 180° away from the opening in the base. This is so that anyone blowing into the hole or feeding fuel will not be at risk from water spilling from the pouring spout.

Ensure that the handle and chain are not in a position where they may burn.

Identify to clients the hazards of a lit VK. Namely; the central chimney aperture, the fire base hole and the pouring spout.

Show the client how to fuel the VK safely.

Either push small amounts of fuel into the fire base opening, taking care to not push the kettle over,

or, drop fuel down the central chimney. Fuel should not be dropped down in enough volume so that it jams in the chimney or fills the fire base beyond its own rim. **Always use gloves for fuelling.**

Never place an empty or near empty VK back on the fire base. Boiling them dry will ruin them.

Once boiling the VK should be removed from the fire base as soon as is practical and safe.

In most cases the instructor should remove the kettle from the fire base. If allowing clients to remove it then a 1:1 supervision and a prior demonstration and practice must have occurred. This is one of the main danger points in the use of VKs.

Remove the VK by holding the metal handle at 90° to the body and lifting. **Never lift a VK off the fire base with the handle fully up, over the chimney.**

Place the VK on the ground before changing grip to allow for pouring.

In most cases the instructor should pour water from the VK. If allowing clients to do this, 1:1 supervision and a practice/demonstration should occur. This is also one of the most dangerous times for VK use.

From the ground, hold the metal handle above the VK and use the other hand to hold the wooden handle on the pouring chain.

**Pour at an angle to your body** so water does not run down the VK onto your legs.

**Pour water into mugs that are on the ground wherever possible.**

If mugs will not stand correctly and need to be held, a person may hold the mug with a gloved hand at a 90° angle from the VK. This is done so that any over-splash will not end up on their arm.

With younger children, consider pouring the water from the VK into a plastic jug before decanting into mugs. This also allows you to check water levels easily and the mug pouring can be delegated to a parent or teacher.

Allow the VK and fire base to cool completely before packing away. Empty the VK and ensure the pouring spout cap is replaced for transport and storage.

15/2/2014 – Pete Knight