

Family of
Space
Heaters...



It's one of those freezing winter nights when the sky's swept crystal clear and the air feels like needles pricking your skin. But you don't mind. You're snug inside your tent with an arctic space heater or an H-45 space heater up and running on liquid fuel.

You've settled into a cozy sleeping bag and are drifting off to sleep when suddenly the heater starts running rough. Smoke starts coming out of the heater and the top of the stack.



You've just come face to face with a problem known as **overfiring**. That's when the heater gets more fuel than it can burn. At the same time, it may not be getting enough air. Not only will it throw off black smoke and run rough (also known as pulsing), but the top and sides may glow red. The flame will have an orange color as seen through the sight glass on the heater lid. Eventually, overfiring leads to metal flaking of heaters and stacks, destroying them before their time.

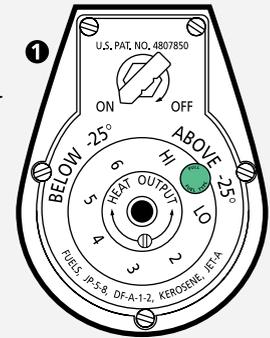


Adjust Fuel Flow



PUT A **STOP** TO OVERFIRING BY MAKING THESE ADJUSTMENTS TO THE FUEL FLOW CONTROL VALVE...

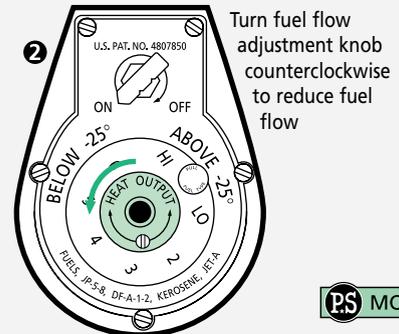
Set fuel selector control to proper setting



1. Set the **fuel selector control** to the proper setting for outside temperature and the type of fuel being used. This adjusts the valve to match the viscosity of the fuel so that the correct amount flows to the burner.

Never turn the fuel selector control to a temperature setting that's lower than the outside temperature. You'll cause more fuel to flow to the heater than it can burn. The result is overfiring.

2. Adjust the **fuel flow adjustment knob** to further regulate the amount of fuel to the burner. Turn the knob counterclockwise to a lower setting. That will reduce the flow until the flame is light yellow or white (the desired color) and the heater stops smoking and pulsing.

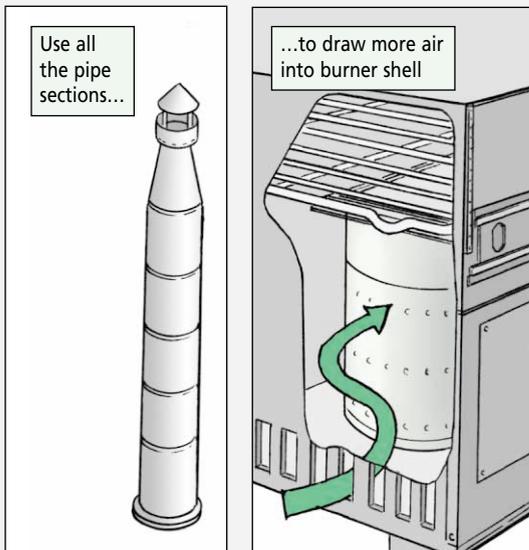


Turn fuel flow adjustment knob counterclockwise to reduce fuel flow

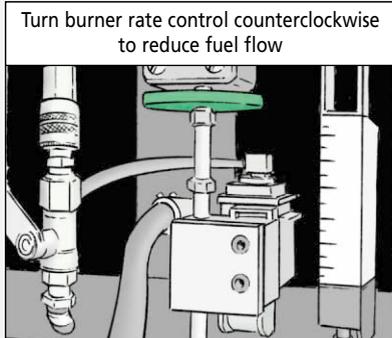
Keep Air Flowing

To prevent overfiring, you also need to make sure the heater has enough air. The best way to do that is to use **all** the pipe sections when you put together the heater's exhaust stack.

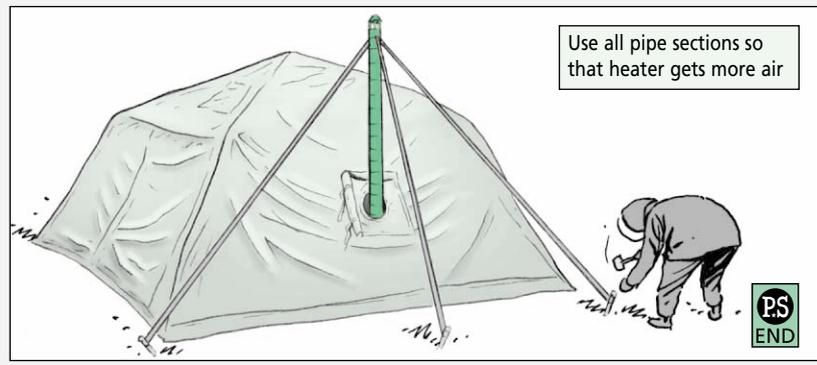
You see, overfiring isn't just a problem of the heater getting too much fuel. It's also a matter of getting too little air. Fuel can't burn completely without adequate air. By using all the pipe sections, you create more suction in the stack, which draws surrounding air into the heater's burner shell.



Unlike the arctic heater or the H-45 heater, the small heater doesn't have a fuel selector control or a fuel flow adjustment knob. But it does have a single burner rate control that regulates the amount of fuel flowing to the burner. If your heater overfires, turn the burner rate control counterclockwise. That will lower the height of the float bowl and reduce the fuel flow until the flame is light yellow or white and the heater stops smoking and pulsing.



Like the arctic or H-45 heater, the small heater also needs plenty of air to keep from overfiring. So use **all** the pipe sections when you put together the heater's stack.



BRIEFLY NOTED... Carabiner NSNs

If your unit does rock climbing or rappelling, you use carabiners. You'll find a variety of them listed in the FED LOG—that is, if you know where to look. Three separate searches will net all the carabiner NSNs you'll need. Search by item name using the following terms:

- carabiner
- snap link, mountain piton
- snap link, rappeller

Remember to read the characteristics data before you order. That way you'll make sure the item meets your requirements.

Threaded Ends for Water Hoses

The Army doesn't stock replacement threaded ends for water hoses. But you can order them at the GSA Advantage website at <https://www.gsaadvantage.gov>

Just do a search on "garden hose parts" for a run-down of what's available. The threaded ends are described as brass hose repair couplers and mender. You'll find male and female couplers in 1/2-in, 5/8-in and 3/4-in sizes.

Flashlight Focus

If your two-cell, fixed-focus flashlight is too puny for maintenance in the dark corners, order a foot-long, water-resistant, adjustable-beam, three-cell, krypton-bulb flashlight with NSN 6230-01-247-7549. Use NSN 6240-01-441-8368 to get a replacement bulb.