



Featherman Stainless Scalders

Owner's Manual

Featherman Equipment, LLC

Plant: 20251 State Hwy 190

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General Information

The scald is the critical operation in feather removal and you now have a machine designed to make it simple for you. To watch our YouTube video of how to setup and use your scald please visit us at <https://www.feathermanequipment.com/how-to-videos/> .

Set up

1. Locate your scald in a draft free but well ventilated area. If it is cold outside move your processing operation into a warm room so you won't be fighting the elements.

2. Hook your rubber supply line hose to a propane tank. It is a brass, reverse-threaded connection. Do not over-tighten. Protect your gas hose from dirt between uses.

YOUR SCALDER WILL NOT WORK PROPERLY IF YOUR PROPANE TANK IS EMPTY OR NEAR EMPTY!

3. Put plumbers tape or putty on threads and hand tighten the PVC valve provided for your drain port. Make sure your scald is level and sitting on a surface that can get extremely hot.

4. Attach a garden hose to cold or hot water supply and fill tank to within 3" of the overflow port. Cold water will take approximately 2 hours to heat to 155; hot water less than an hour. Cover your scald during warm up using our [Featherman Scald Cover](#) to speed the process. For cold incoming water consider our [Featherman Scald Booster](#).

5. PLUG IN ELECTRIC CORD! *Do not pass the cord under the scald.*

6. Start pilot light by turning on the gas on your propane tank then turning the gas control knob on the scald to Pilot and depressing the knob.

7. Insert the included long lighter through the 3" peephole in your scald base to ignite the pilot flame. The pilot assembly can be found by tracing the aluminum tube to its end. Ignite the pilot. If it doesn't ignite keep the gas control Pilot button depressed and try again.

8. When lit, keep the knob depressed for another 30 seconds. The thermocouple takes this long to warm up and send a signal for the pilot gas flow to remain open. (The thermocouple is brass colored and has a tube to the gas control valve marked with 3 indentations).

9. Turn the gas control knob to "ON." You will hear and see the burner ignite. DO NOT HAVE YOUR FACE CLOSE TO THE 3" PEEPHOLE WHEN YOU TURN THE BURNER ON!

Operation

Your scald's aquastat is preset to 148 degrees. This means the water temperature will cycle between about 145 and 150 degrees. We recommend having two reliable thermometers on hand to tell you when the water is ready to begin scalding. (Not before 145!)

Add enough dish soap (we recommend [Dr. Bronner's Unscented Pure-Castile Soap](#)) to make the water bubbly on top (about 1/4 cup). This will help the scald water penetrate to loosen the feathers.

For higher volumes of birds we recommend a steady, small stream of water entering the scald (preferably hot water) to keep the water level constant and the scald consistent. Attach a garden hose to the overflow port to direct any overflow water away from work area.

Scald up to 50 pounds of birds at a time in your scald. If manually dunking be sure to allow enough time out of the water to cool the skin between dunks. As a starting point, we suggest 8 to 10 dunks over the course of one minute. You may do this by hand or with a homemade lever and shackle or with the [Featherman Dunker/Shackles Combo](#). If using the [Featherman Roto-dunker](#) the cycle is pre-set.

Too much time scalding with any method, or with water that is too hot, will result in torn skin. Learning to pull wing feathers will soon make you an expert on when the chickens are ready to be plucked. When feathers release with no resistance the birds are ready.

Cautions

Remember you are dealing with gas, water and electricity. **Think safety first** in the way you set up your equipment and during operation.

1. Keep electric cords and gas lines out of the way.
2. Keep any other electric appliances away from the scald water.
3. The built-in chimney improves airflow and retains more heat. Position your scald so that the chimney cannot be touched accidentally.
THE CHIMNEY WILL GET VERY HOT AND CAN CAUSE SERIOUS BURNS.
4. Do not operate your scald without water in the tank. If scalding in a small room, be sure to ventilate the room well.

Clean Up

To clean up, turn off gas, unplug electric cord and open the PVC drain valve and empty tank. Disconnect the propane tank and cover the hose end. Wash out and disinfect the tank. Don't spray the controls. Cover and store under shelter. Be sure to close the gas valve if you leave the tank attached.

Troubleshooting

Pilot will not light.

1. Check to be sure propane valve is open.
 2. Check to be sure "Pilot" on gas control valve is aligned with slot.
 3. Depress Pilot valve for up to 5 minutes to purge air out of lines.
 4. Make sure lighter is reaching pilot light (at end of aluminum tube).
5. Clean pilot assembly:
- a. Tools needed - ½' open end wrench, needle nose pliers, and a toothbrush.
 - b. Move the thermocouple out of the way, then use the wrench to remove brass nut:



- c. Carefully remove the aluminum tubing:



- d. Use needle nose pliers to remove pilot orifice.



- e. After removing the pilot orifice, clean thoroughly with soapy water and a soft bristled brush (toothbrush).



- f. When clean and dried, a tiny hole will be seen through the orifice.



The Pilot lights, but burner will not.

1. Plug in electric cord and check extension cords and breakers.
2. Clean orifice at end of copper line.
3. Replace thermocouple.

Pilot flame is too small and/or not a clean blue flame.

1. Check to see if there is a small obstruction in the brass orifice.
2. To clean or check the orifice, see above.
3. Blow air through the orifice to loosen any particles. **Warning: Do not insert anything into the opening, only use air or soft bristled brush or you may damage the orifice.**
4. Once the orifice is cleaned, reassemble.
5. Experiencing more problems...call 660-684-6035. Do not alter scalders in any way to keep warranty intact.

Scalder too HOT

1. Check setting on Aquastat – it should be at 147.5.
2. Check thermometer (there will be a few degrees difference between water temperature in the middle and at the top of the scalders).
3. Replace thermostat

Air Intake Adjustment

Your scalders has been tested and set to have a perfect flame. This flame is about 1 inch high and **blue**. If, for some reason, your flame has become yellow and less hot, you may need to adjust the airflow into the burner. If operated for a length of time with too much airflow (yellow flame) and the burner is sooted, remove burner and clean with soapy water and a stiff bristled brush.

A single 1/4" machine-head screw holds the air intake plate in place (see arrow). Loosen the screw with a 1/4" socket or crescent wrench or pliers and turn the plate so that more or less air is allowed into the burner. When the flame is blue it is most efficient. Tighten the screw.



Warranty

Your [Featherman Stainless Scalders](#) is designed to give you many years of reliable service. Should you encounter problems please consult our [Troubleshooting Section](#) above and also on our website **first** before you call. If your problem persists please call us. All Featherman equipment is fully guaranteed for one year as long as you do not alter the equipment in any way.

Good luck and happy scalding!

David Schafer, Owner & Founder, Featherman Equipment LLC