

Featherman Scalding Instructions – please read before operating!

General Info

The scald is the critical operation in feather removal and you now have a machine designed to make it simple for you. For a video recording of how to set up and use your scalding please go to www.featherman.net.

Set up

1. Locate your scalding in a draft free but well ventilated area.
2. Hook your rubber supply line hose to a propane tank. It is a brass, reverse-threaded connection. Do not over-tighten. Save the provided plastic cover on the hose end to protect your gas hose from dirt between uses.
3. Hand tighten the 1" PVC valve provided for your drain port.
4. Attach float valve to cold or hot water supply and fill tank. Cold water will take approximately 2 hours to heat to 145; hot water less than an hour. The water must at least cover the holes of the temperature sensing unit (about half way up) for the machine to operate properly.
5. Start pilot light by turning on the gas on your propane tank then turning the gas control knob to Pilot and depress the knob. This is allowing gas to flow from your tank, through the rubber hose, through the control valve, through the aluminum pipe to the pilot. That is a lot of air to push out so be patient. Experience indicates at least 2 minutes to clear this line of air.
6. After several minutes hold lighter to pilot light at the end of the aluminum tube under the scalding. If it doesn't ignite keep the button depressed and try again in 20 or 30 seconds. A mirror may help you to see the end of the pilot light.
7. 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).
8. After the pilot light is lit plug in your electric cord to 110V electricity unless you have specifically asked for 220V. Do not pass the cord under the scalding.
9. Turn the gas control knob to "ON." You will hear the burner ignite.

Operation

Your scalding is preset to 147 degrees. This means the water temperature will cycle between about 145 and 150 degrees. Use the supplied tarp to insulate the scalding water during heat up and to keep your machine clean between uses. We recommend clamping a kitchen thermometer or digital remote thermometer to the back side of your scalding where it is out of the way but readable. This will give you feedback and tell you when your water is ready to begin scalding.

Add enough dish detergent to make the water bubbly on top. This will help the scalding water penetrate.

Dunk up to 50 pounds of birds at a time in your scalding. Be sure to give them enough time out of the water to cool the skin between dunkings. As a starting point, we suggest 8 dunkings over the course of one minute. Too long in or 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 they release with no resistance the birds are ready for your plucker.

Cautions

Remember you are dealing with gas, water and electricity. Think safety first in the way you set up and during operation. Keep electric cords and gas lines out of the way. Keep any other electric appliances away from the scald water.

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.**

Do not operate your scald without water in the tank.

Clean Up

To clean up, simply drain the scald, scrub with soapy water and rinse. Don't spray the controls. Cover with the provided tarp and store under cover. Be sure to close your gas valve if you leave the tank attached. If you detach the gas tank, use the provided plastic cap to protect the exposed end of your scald's gas line from debris or insects.

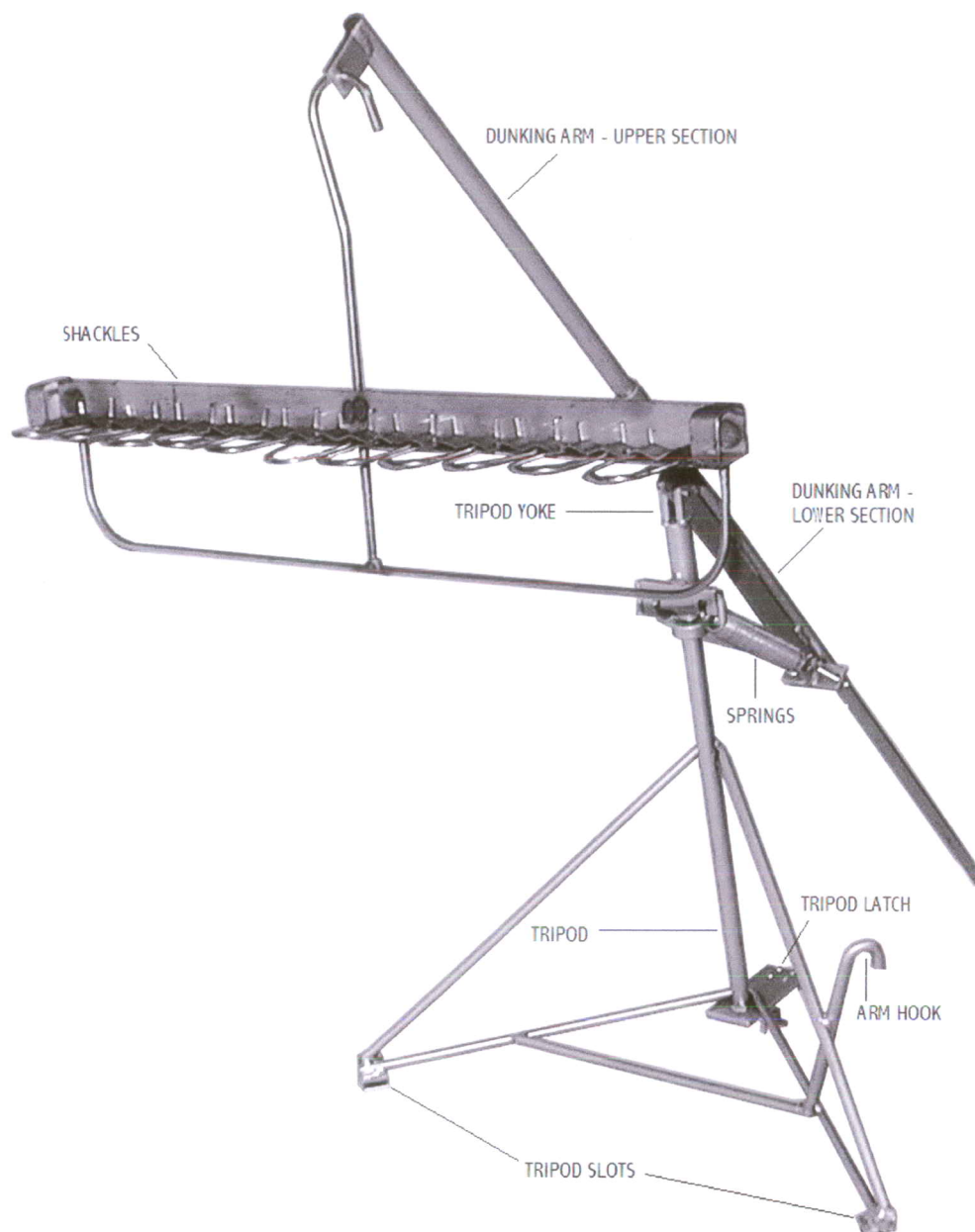
Warranty

Your Featherman Scald is designed to give you many years of reliable service. Should you encounter problems please consult our Trouble-shooting section on our website first. If your problem persists please call us. All Featherman equipment is fully guaranteed for one year and our phone number is on the nameplate.

Good luck and happy scalding!

Featherman Equipment

www.featherman.net



1. Assemble dunking arm lower section to upper section using cotter pin. Make sure the shackle holder is pointed down (same side as long rib on lower section).
2. Bolt lower section to tripod yoke using 1" stainless bolt and nut.
3. Attach springs to holes on upper yoke and to eyebolts through lower handle section. Leave nuts loose as you will adjust these later.
4. Slide tripod slots into scalding lip and lock in place with the tripod latch.
5. Place bled-out poultry on shackles and adjust eyebolt tension to balance load.
6. Use arm hook when necessary to keep dunker arm stable and out of the way

Plucker Instructions

Featherman

Automatic Feather Picker

Owner's Manual

Date _____ Model # _____

Featherman Equipment
760 SW 55th Ave.
Jamesport, MO 64648
660/684-6035
www.schaferfarmsnaturalmeats.com

Congratulations on your purchase of a new Featherman Plucker! You are now on your way to an exciting and possibly life-changing experience. The pastured poultry business was the foundation stone in our natural meat business that allowed us to exchange a 540- acre farm (family owned) and work that was never done for a 64-acre farm of our own and a feeling of freedom like we had never imagined. Your chickens will sell themselves and your customers will be asking you for more products. Or, like some, with your new equipment you can start a processing sideline or even go into it full time. You can make a handsome profit easily doing work that would take others many hours. Plus you can have the satisfaction of helping others reap the rewards of pastured poultry.

Guarantee

Your entire machine is guaranteed for one year from your purchase date. Should any problems occur due to faulty parts or manufacture we will replace the parts or replace the machine.

Maintenance

Since the plucker always waits on the scald, it is resting at least half the time. Our motor manufacturer tells us our motors will last forever in that kind of use. (To add life to your motor, start it unloaded, then add birds as recommended in **Procedure**).

The only maintenance we recommend is a thorough wash-down after use. It is normal for feathers to catch under the fingers. The only way to remove them is by hand.

Operation

After removal of all packaging materials including the protective plywood on the base, your Featherman is ready to plug in and go. Use 110 volt

current (unless you specifically ordered a 220V model) and be sure to keep the cord in good shape and out of standing water. Hook up a garden hose (cold water) to the spray ring. Simply open the valve to spray.

Features

- Solid and durable, high density plastic tub and motor housing are attractive, easy cleaning and USDA food grade approved.
- Rubber padded, no-slip feet.
- 1 HP motor and 10:1 speed reducer
- Light weight for easy transport and low cost shipping.
- Fingers are softest fingers made in America giving the gentlest pick possible.
- Unique feather chute keeps work space clean, speeds clean up.
- Spray ring washes feathers down automatically.
- Knee-high, water-proof on-off toggle switch handy to operate with foot or knee yet concealed to prevent accidental starting.

Basic Processing Procedure for Chickens

Handling

Always handle birds as gently as possible. Distraught birds will be harder to pick and bad handling will cause bruising. Hold by a leg or around the body, not by a wing.

Restraining

We recommend the use of kill cones and manufacture a perfectly round, stainless steel, cone. Unlike flat-sided cones, birds cannot back out of the round cones during bleed out.

Killing

Slit the carotid artery with a very sharp knife. This takes practice to avoid cutting the trachea (windpipe) or severing the spine – either of which causes trauma to the bird and will result in an inferior bleed out. A proper cut will not be felt by the bird (and is an appropriate time to give thanks to the bird).

Bleeding

Bleeding will take about two minutes. Contraction of muscles as they are oxygen starved is normal but care must be taken to avoid dislocated or broken wings or legs in this process. Watch for this and adjust the restraining technique if necessary. Collect the blood and compost it.

Scalding

Scalding is the critical step in processing and requires either a lot of experience or sophisticated equipment. The Featherman Plucker will give you squeaky clean birds with no pin feathers when you master the scald. We manufacture the Featherman Scalding to take the guesswork out of this operation but it is possible to have a perfect scald with very little investment. Find the largest, heaviest scald container you can and heat it with propane or other fuel (cheaper, quicker and less expensive than electricity). We recommend scalding at 145 degrees F. for a minute. Batches of birds will vary slightly so be prepared to adjust accordingly with temperature and/or time changes on the scald. Change water when it is dirty. If your scald is too long or too hot, skin will tear; if it is too short or too cold, feathers will stick. Our plucker's soft fingers give the industry's widest margin in scald temperatures, giving you more undamaged birds. Still, be careful not to over-scald. You can actually cook the breast meat. (Outdoor-raised birds are less likely to have this happen.)

Dunking

You may rig up a dunking apparatus, stir with a paddle, or simply dip the birds by hand. Be sure to add some soap (like a dish detergent) to the water. This will help water penetration to loosen the feathers. We manufacture a dunking apparatus to ease this job.

Plucking

Drain the birds of excess moisture, turn the Featherman on and drop the birds in. Open one of the valves on the "Y" to let the water spray. Check in 20 seconds. Give more time if necessary. Turn machine off, turn water spray off and remove birds. Because of its gentleness you will not damage the birds by leaving them in the plucker too long.

Poor scald

Should you get a bad pick (always due to a scald error) don't be afraid to scald and pluck again. You still probably won't get all the feathers out, but you will save time over picking by hand.

Finishing the birds

There is no substitute for sharp knives and experience. You will be amazed at how many birds per hour an old hand can do compared to a greenhorn. Quality standards should be your first priority before speed however. As you gain experience you will be able to keep up the quality and do over 20 birds per person per hour. (The very experienced can do 30 to 40 birds per person per hour).

Clean Up

The Featherman is made to be washed down. A pressurized spray down is all that is required. Take care to avoid wetting the motor assembly unnecessarily. A few feathers will catch between the fingers and the plastic. This happens with all pluckers and is not a concern. You may remove them if you like but it is not necessary. The Featherman is made of USDA-approved materials and has been passed for use in USDA-approved facilities.

More Information

Don't hesitate to contact us or the dealer you purchased from if you have questions, glowing testimonies, or if you find an area that needs improvement. We continue to fine tune and know that there is always another creative idea out there.

Schafer Farms
760 SW 55th Ave.
Jamesport, MO 64648
660/684-6035

www.schaferfarmsnaturalmeats.com
dna76@grm.net

The Featherman History

We began raising chickens reluctantly in 1994 after our beef and lamb customers had been asking us for chickens for several years. We were well aware of the pastured poultry model but couldn't encourage any of our neighbors to raise chickens for us. Finally, we bit the bullet and ordered 100 chicks, built a little pen and scrounged for used equipment. We were lucky (we thought) to attend the close-out sale of the last poultry processing shop in the area. From them we purchased crates, a big drum roller-style table-top plucker, and two large aluminum scald pots. We used a fiberglass scalding tank with electric heat elements and started our education. Selling the birds was by far the easiest part of the whole affair.

The next year we found a hatchery that gave a great discount on 1000 birds so we called up half a dozen friends from our Green Hills Farm Project grazier's group as well as a few neighbors and instantly we formed a cooperative effort. We built pens together, found a large stainless steel plucker five hours away and bought it for \$750, made our own dunking apparatus, got a grant for a mobile processing unit and spent many hours putting the processing pieces of the puzzle together.

We raised some beautiful birds with friendly competition and we all shared in the processing, though we kept the unwieldy "mobile" unit at our place. It required 220V electricity hook-up and just didn't travel too well on the road. We found that our fancy plucker, designed for 12 – 15 birds, didn't do a very good job on just four. They didn't tumble. We tried everything before we decided we needed to pluck 8 at a time. We re-built our dunking shackles but our home-made scalding tank barely kept up with the demand. Worse, the temperature would go up and down like a yo-yo, so we had to be very patient. The strain of lifting 8 birds was also too much for our dunking motor and we had to help it a little manually, like lifting sixty pound barbells ten times every 2 or 3 minutes! The romance wore off quickly and all but two of the families dropped out despite great sales and happy customers. Our farm was committed and pressed on, doing 160 birds a day by ourselves. It took from daybreak till 1 pm and we were exhausted. Aching backs from all the lifting forced our brains to find a better way; we drove our birds 10 miles to an Amish family that was butchering chickens.

Later, after inspecting some expensive processing equipment, our Amish butcher, Ernie Kauffman, built the first homemade tub-style plucker to

replace his drum-roller model. It worked so well, we drafted and mailed out plans. Many of those homemade machines are still in use. An inventive grazier friend saw the plucker on a visit and started the Jako line of tub pluckers and scalders based on it. Another plucker made from Ernie's plans inspired Herrick Kimball's fine Build-it-Yourself manual and many happy "Whizbang" plucker builders.

In 1999, while on a trip overseas, we visited the huge Hong Kong farmer's market where each day thousands of chickens come to the market alive, are killed and scalded collectively in one big room, then carted to tiny stalls, each of which had a little two bird plucker, miniature replicas of ours. Through contacts and with a lot of hair-raising experience, we imported a container of them, the Featherman, Jr., and sold them all within a year. Importation was such a hassle we redesigned and manufactured a better machine ourselves, the Featherman you now have.

We've combined a lot of thought and experience into this machine to make it work efficiently, economically and for a long time. We hope you enjoy your journey with poultry as much as we have ours.