



Securing a Whole Animal to the SpitJack XB85 Spit

A user's instruction sheet for trussing hardware and equipment

This document is updated periodically. For the latest version go to web address: <http://www.spitjack.com/MANUALS.html>

Securing the animal to the spit is a critical part of the rotisserie cooking process. If not done properly and sufficiently, your entire event may be susceptible to failure. Since the rotisserie will be turning at a constant rate of 4-6 RPM and you have a relatively heavy unbalanced load, there are considerable forces that you must reckon with to ensure your success. Using the appropriate hardware and accessories are essential to this process.

Each event is different both in type and weight of animal, slaughtering methods and final preparation so it is virtually impossible to prescribe just one method, hardware set or piece of specialty equipment. Our answer is to provide you with many different tools and equipment so you can adapt to the specific needs of your event.

Basic concepts and tips:

1. **Skewering vs. Securing.** The simple idea of skewering meat with a spit is best suited to solid pieces of meat like roasts. The whole animal is a hollow object, not a solid piece of meat. Because of this a different approach is taken. The animal must somehow be firmly connected to (or engaged with) the spit. While another popular concept, large spit forks that are bolted to the spit and then stuck into the meat have some value, they are rarely sufficient to do the job especially on larger animals. **The best way to assure the animal will stay connected to the spit throughout the entire cooking process is by bringing the spit and the animal's backbone into play.** By either stitching with twine, wire, or by using other hardware, a strong adjustable connection between the spit and the backbone is the best way to avoid the meat "flopping" during the cooking.

Method 1: Trussing with a needle and butcher's twine

This method uses a special long needle and butchers twine to basically stitch the animal onto the spit (see instructions of the website or in the user manuals. This method is all that is needed for most animals under 50 lbs. The drawback to this technique is that if the stitches loosen, there is no easy way to tighten them. Also, this alone is not sufficient for larger animals (for more information and illustrations, see the related document *Spit Trussing a Whole Animal Using a Needle and Twine*).

Method 2: Banding with oversized hose clamps

These can be used in one of three ways: 1) as a way to lash the legs of the animal either together or to the spit or both, 2) as a "stitch" as in the method described above, or 3) as a way to keep the meat intact by banding it around the animal, usually at the key heavy parts (legs, shoulders). This provides an alternative to wrapping with chicken wire which may leech poisonous chemicals (if galvanized) into the meat. These clamps can be tightened as needed with a simple screwdriver throughout the cooking process.

Method 3: External spit forks

External forks are what most people associate with spit binding. They slide onto the spit and the fork tines enter the meat before the fork is tightened on the spit. This can be done at either or both ends (although not practical if the head of the animal is still on). While this method seems natural, it has its drawbacks when cooking whole animals. It is better suited for solid pieces of uniform size meat that are cooked more quickly. When used on a whole animal, it may be hard to engage the tines effectively and if you are able to, they may start to loosen (and are not able to be adjusted or tightened) as the meat softens toward the end of cooking.

Method 4: Spit pins (see photo illustrations below)

This method uses a specialized spit pin made of stainless threaded rod with oversized washers and wing nuts at each end. The pin is jammed (or power driven) through the animal usually at the heaviest concentration of meat such as the legs, hips or shoulders, through the spit, and out through the meat again. The wing nuts at each end can then be easily tightened as needed. Oversized washers prevent the wing nuts from digging too

far into the meat. By utilizing the holes in the spit this method brings the spit into play to help move the largest parts of the animal. The drawback of this technique is that the backbone is not brought into play and if the meat becomes soft enough, they could lose their effectiveness (not likely). Pins can also be used to secure the head to the spit or bind the feet together.

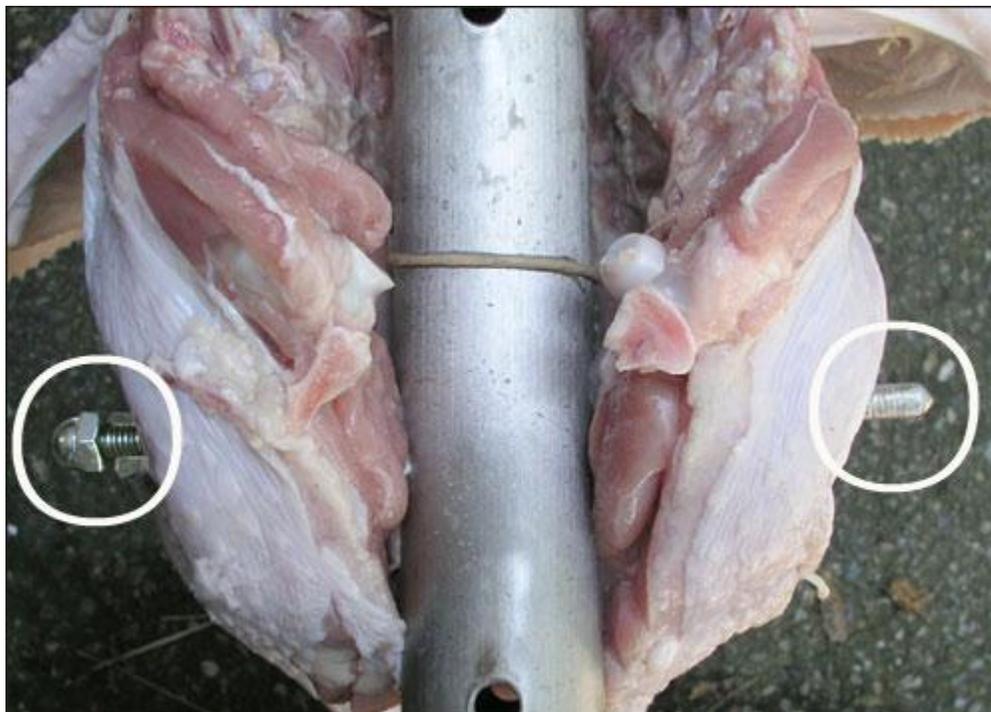
Method 5: U-bolts

U-bolts are very effective in binding the meat to the spit and preventing “flopping” of the heavier sections of the animal during cooking. They use the best design concepts of some other methods and provide the most reliable way of securing larger (100 lbs. or more) animals. The U-bolt placed around the spit from the bottom and then driven up through the meat and protrude on either side of the backbone. It is then secured with a common plate and tightened with wing nuts. The plate can then be easily tightened down as needed throughout the cooking (not illustrated).

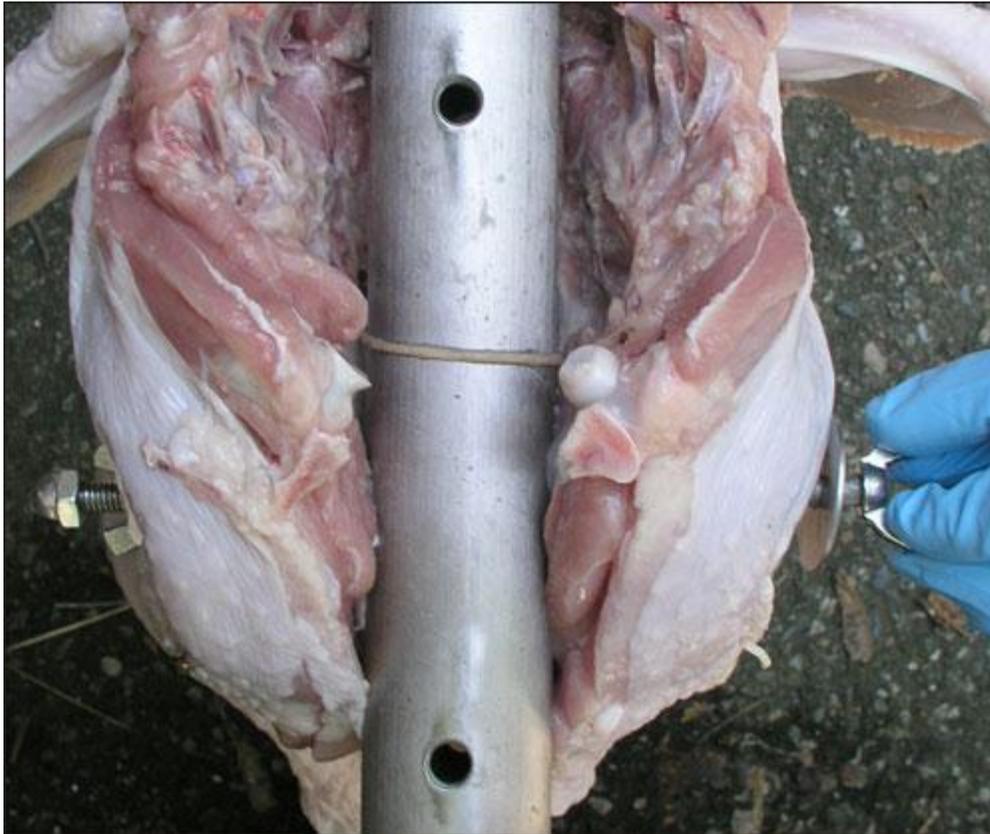
Spit Pin User Guide:



Set up the spit pin as illustrated above.



1. Make sure you have the spit oriented so that the hole is facing the proper direction to receive the pin. Push pin through one side of the meat, *through the hole in the spit*, and then out the other side of the meat. You can use a 9/16” socket wrench (hand or power) to help if you need to. The pin should now look like it does in the photo above.



2. Place the second washer and wing nut on the open end and tighten down as needed.