

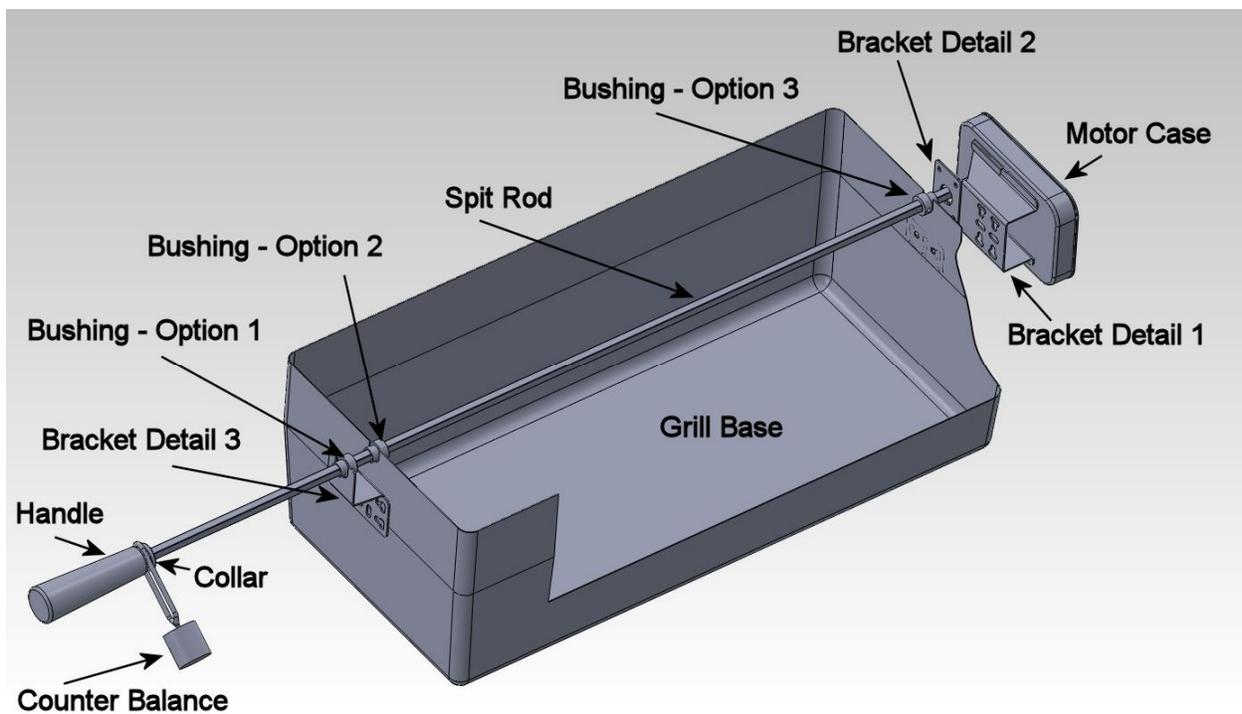


Determining Rotisserie Size

There are literally thousands of grill models that have been manufactured over the years. How do you determine which rod or set is right for you? It's not that complicated if you gather a few important dimensions and an overall picture of how your grill is made. We will explain that all in detail below.

If you are hungry, just take the width of your lid and add 5 - 7". If you want to make sure it will even work, read below.

First let's look at a picture of a typical installation.

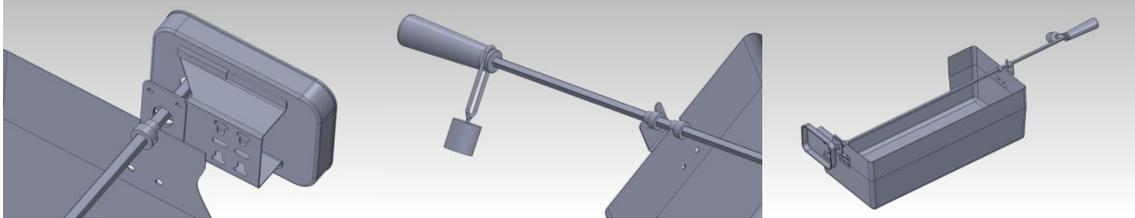


Here you can see the names of the items and their locations.

BUSHINGS: The bushing is most confusing to a lot of people. It's job is to make a spit rod that is not round have a round area to spin without bouncing off of the flats on the rod. If you do not use bracket detail 3 then you don't need option 1. Most installs never use option 3 as the motor supports the weigh on that end. However option 3 is better for heavy loads and improves

motor life. Option 2 or any bushing position also serves as a stop to keep the rod from coming out of the motor. You will notice that the larger diameter is inside the grill base.

MOTOR: For this article all we want to mention is that the farther away the motor is from the heat the better. Heat is the number one reason a motor will fail. That is why we use a two bracket system. It also helps you mount the motor in more than one position.



Step 1 - First of all you want to look over your grill in detail and see if it is even capable of adding a rotisserie. Not all of them are made for one to be added.



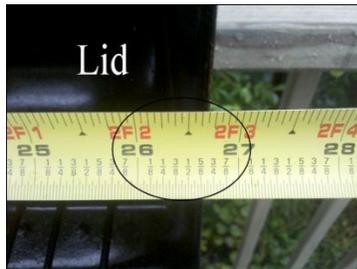
This picture shows the side of a grill. If you notice inside the circled area there are no holes for a bracket. There is also no notch to clear a spit rod. You could drill and notch, but you will lose the protection of the powder coat and it will rust and degrade rapidly.

Step 2 – You will want to measure the width of the grill base. Notice above in the circled area that there is an offset or difference in width between the 2 pieces. On some grills like Brinkman for example, this offset is significant and must be planned for.



We will round this up to 26 1/2". This is the total width of the part of the grill that houses the burner assembly. It should be taken where the notch for the spit rod is.

Step 3 – We will now measure the lid. Again we will take the full width dimension in the center where the notches are.



We will round this up to 26 $\frac{3}{4}$ ". On this grill the difference is only $\frac{1}{4}$ " in width total. The number we are looking to use for our calculation is $\frac{1}{2}$ this amount or $\frac{1}{16}$ ". On this particular grill, the $\frac{1}{16}$ " amount is insignificant but we will use it later anyway so you can follow the logic. If your offset amount is $\frac{3}{4}$ " or more you will need to take additional considerations discussed below.

Step 4 – Now we will look at the shelf configuration. The reason for this is that on some grills the shelf is only a few inches below the notch and there is no room for the motor. Consideration also has to be given for the counterbalance weight if you have one. In most cases your OneGrill universal 3 piece bracket set (4PB06) will help you make the install work.



Here we are looking at 5" clearance. Almost all grills have the same distance on both sides.

Step 5 – The bracket set you are using will be the last piece of information we need to account for. On some grills you may need to mount the motor bracket directly to the side. On most grills you will want to mount a grill base bracket and then the motor mounting bracket. The reason for this is twofold. First it allows you to keep the motor farther from the heat thus increasing the life of the unit. Secondly it allows in some cases the ability to mount the motor horizontally so that it clears some shelves.

Step 6 - Now we can put our numbers together and see what spit rod or spit set will work with our grill. Longer is almost always better. If you have to, you can get the next size up in length if you are in between sizes. A longer rod allows for you to grab it and remove from outside the hot areas.

We determined in this case that the offset is not a problem. If the lid was say $\frac{3}{4}$ " or 1 inch wider on each side, then we would have to look for a special bracket set that would clear that distance. OneGrill does offer an extended offset bracket kit for these grills (4PB09).

- We will use the standard bracket set with 2 brackets on the motor side to keep the heat down. We will also mount the outboard support bracket on the other end. That total width of the 3 brackets is approximately 3.5"
- We will add 2" to clear a counter balance weight that we want on our set.
- We will plan on a standard 1 $\frac{1}{2}$ " minimum insertion depth of the spit in the motor.
- We will subtract 1" from the total length of the spit rod for the threads that go into the handle.

So now we add:

Lid	26 $\frac{1}{2}$ "
Bracket Set	3 $\frac{1}{2}$ "
Counterbalance	2"
Insertion in Motor	1 $\frac{1}{2}$ "
Total	33 $\frac{1}{2}$ " + 1" for threads = 34 $\frac{1}{2}$ " long spit rod.

The closest common size is 37" total length. We need to subtract 1" for the threads in the handle and so the effective length we are looking at is 36" of rod. This gives us 2 $\frac{1}{2}$ " of extra rod which is a nice margin.

What would happen if you came up with 38"? Well you can reduce the insertion depth in the motor to $\frac{1}{2}$ " which is the minimum. You may be able to use the notch in the grill base and eliminate the outboard bracket saving about an 1". These 2 adjustments could amount to 2" in length. You could also take away some of the 2" for the counterbalance.

Additional consideration.

There are many choices of rod size. 5/16" square or 3/8" square and 1/2" Hex. The bigger the diameter the more weight it can hold. The longer the rod the more important this becomes.

Materials are also a choice with chrome and stainless. It really depends on how much care you want to take. The chrome can rust if left outside and not properly cleaned. The stainless will last a lifetime with no special attention.