

Q: My Pneumatic Squeezer doesn't have enough power to squeeze a rivet.

A: 3 Squeezers in the last 15 years have been faulty, but we hear this situation almost weekly. It only takes 5 minutes of training to learn how to use the tool. The problem is that it usually takes a very long time for the user to overcome the 'defective tool' mindset. The reason that this takes so long is that the solution is counterintuitive. Trust the experts and follow the instructions below and you will be happily working in no time.

- First leave your compressor set at 90psi. This is true for all air tools except paint sprayers.
- Take a look at the squeezer setup table at the bottom of this sheet. This table will show you the mathematically derived gap setting for the squeezer for each different rivet size. This is only a good starting place due to internal compression and possible yoke flex.
- To adjust the gap, use any combination of: different length flat and cup sets, shim washers under the flat and/or cup sets, or by adjusting the adjustable ram if you have it. By gap I am talking about the distance between the two squeezer sets when the ram is fully extended with no material in between them.
- Try to compress a rivet. One of three things will happen.
 - The rivet will not be set enough. (decrease the gap very slightly).
 - The rivet will be overset. (increase the gap very slightly)
 - The **squeezer will come up to the rivet and stop without squeezing it**. This is when we get the call. Here you need to **increase the gap** very slightly. I know this does not make sense, but do it and it will work.

The way that the squeezer functions is by air pushing a piston which moves a 'ramp' inside the squeezer. This 'ramp' has two inclines on it. The first is steeper to quickly move the ram up to the rivet. The second is where the tool develops power. Unless the piston moves far enough to get to the second incline it will not develop the power to squeeze the rivet. This is the reason for increasing the gap rather than the natural tendency to decrease it. With more gap distance, the piston will travel just slightly further and get to the point where it will develop power, then the rivet will collapse and the squeezer can finish the stroke.

The maximum length rivet that can be set with the 214 squeezer is a -7. This takes some fine tuning to find the spot where the second incline has been reached, but the stroke length is still sufficient to completely set the rivet. Some users prefer (when using longer rivets) to partially set a row of long rivets, adjust the tool, and then finish setting the row.

Table Shows Mathematically Derived Gap Between Squeezer Sets for Various Rivet Sizes							
	-3 Rivet Length	-3.5 Rivet Length	-4 Rivet Length	-4.5 Rivet Length	-5 Rivet Length	-6 Rivet Length	-7 Rivet Length
3/32" Diameter Rivet	3/32"	1/8"	5/32"	3/16"	7/32"	9/32"	11/32"
1/8" Diameter Rivet	1/16"	3/32"	1/8"	5/32"	3/16"	1/4"	5/16"