

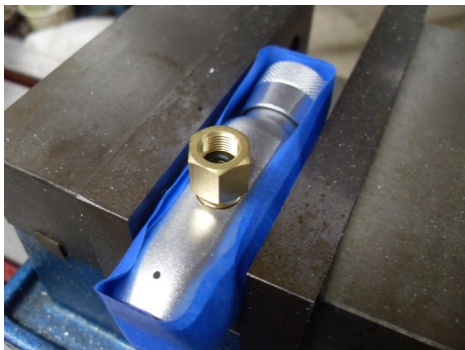
## Adapting the new model 150psi Beverage Industry Regulator with 1/8" BSP Plugs



Wrap with painters tape to prevent scratching/slipping. Insert in a large strong vise just snug enough to hold the regulator. Do not over-tighten. Use a well-fitting 11mm wrench.



It will take significant force but don't rush it. It will begin to move slowly. It was sealed with a clear adhesive like Gorilla Glue. If you are successful, you will have a good 150psi gauge that will come in handy later. Set it aside.

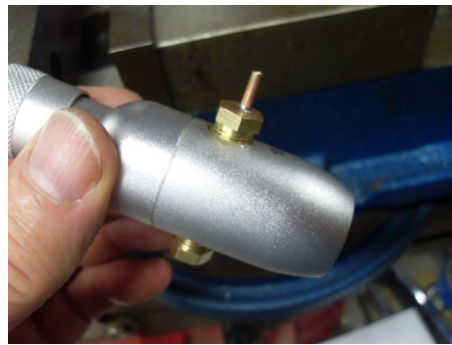
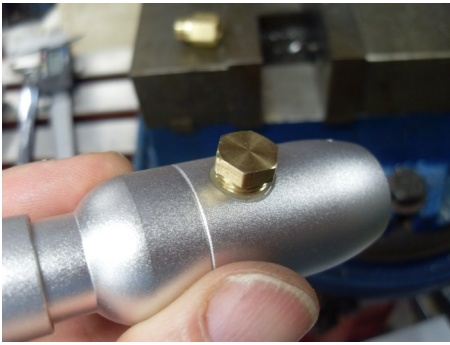


Repeat on the other side using a 12mm box end wrench.

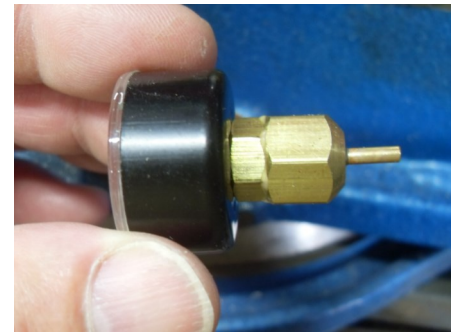


You can see the port on the side of the threaded hole. Clean out any bits of glue or metal. Using a wire or toothpick, spread a very small amount of filled epoxy into only the outer two threads. Any more and you risk excess epoxy blocking the port. Running the toothpick or wire around the plug, spread filled epoxy over the end three threads.





Screw in the plug and snug with a wrench. No need to over-tighten. The epoxy will seal it when cured. Repeat for the plug that has the 3/32" brass tube soldered to it. This size tube fits into 1/16" Clippard pneumatic hose. The work is complete. Do not pressure test the fittings for leaks until the epoxy is fully cured. To save weight in the destroyer, the cap could be removed, but this smaller cap weighs very little so I would keep it on the regulator.



The regulator has a metal housing and the brass stem looks like a 1/8BSP British Standard Pipe thread. At 28TPI (Threads Per Inch), it is similar to the US 1/8 NPT 27TPI thread. You may be able to make an adapter, from hardware store plumbing parts with a 3/32" K&S #5126 brass tube (Fits 1/16" pneumatic hose.) soldered to it making it useful to attach to your system to check the regulated CO2 pressure up to 150psi.



The gauge will help you set your system pressure and to identify leaks in your system. Pressurize the system between your regulator and your solenoid or poppet valve by screwing in the regulator adjustment cap. Unscrew the cap to turn off any pressure. If the pressure drops after unscrewing the regulator adjustment cap, they you have gas escaping and you need to find the leak.

**ALWAYS RELEASE ALL PRESSURE BEFORE REMOVING THE USED CO2 CARTRIDGE OR DISCONNECTING ANY PART OF THE PRESSURIZED SYSTEM. ALWAYS DISCONNECT ANY BATTERIES AND INSTALL SAFETY CLIPS IN ANY CANNONS BEFORE SERVICING THE SYSTEM. MAKE SURE YOUR CANNONS ARE UNLOADED BEFORE STORING THEM. ALWAYS WEAR SAFETY GOGGLES, THE KIND THAT WRAP AROUND THE SIDES OF YOUR TEMPLES TO FULLY PROTECT YOUR EYES.**

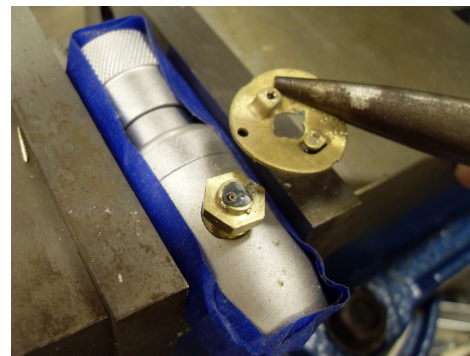
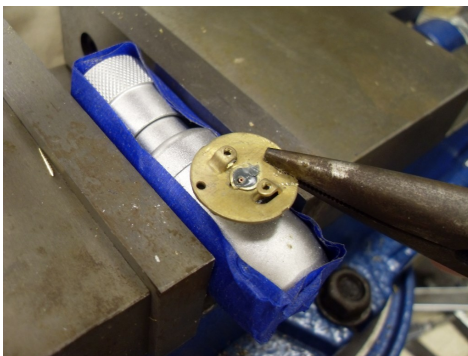
## Adapting the older model 150psi Beverage Industry Regulator.

The older model regulator works fine. The newer one has a cartridge purge port, larger internal passages more standard internal materials. The older model has smaller internal passages that deliver regulated CO2 to the outlets. This can limit how rapid you can fire consecutively due to the system taking a second to re-pressurize after a shot. The 1/2 cubic inch in-line accumulator tank helps the process for both regulators. This older one can be drilled out but that is advanced work and I don't recommend you mess with the internals of a factory built regulator without being qualified to do so.

You must destroy the pressure gauge to insert a plug. The hex flats on the stem of the gauge are too shallow for the wrench to reach them. They are so thin that the torque of removing the gauge will always strip away the flats because the gauge and the opposite adapter plug are epoxied in place by the factory. The threads are G1/8", a straight (not tapered) British pipe thread. Pipe dope or Teflon Tape will not work to seal straight threads. They are used for tapered pipe thread that compresses the dope or Teflon tape when the joint is tightened. G1/8" threads never compress the material.



If this is your regulator, tape and lightly clamp in a strong secure vise. Break off the plastic gauge housing and the display. Remove the two small Philips screws. Twist away the gears and copper ring.



Twist the backing plate back & forth to break it away to expose the stem. Using an 11mm socket wrench, slowly remove the stem. It will be difficult but the socket wrench is your best bet to remove it without crushing it.

After that, clean the threads and epoxy in the new plug and outlet plug as with the newer model.