**Intro: DIY - Dual/Triple or Quad Carburetor Sync Tool**

A vacuum gauge can be costly especially if you need it only once and a while to sync your motorcycle carburetors. But where we are stationed they don't even have gauges. So I had to resort to making my own Carburetor sync tool from scratch.

**Parts**
2 - 24oz (16-24oz will do) Glass Welch's Grape Juice bottles (gaterade, starbuck's coffee bottles will do as long as they are glass) Empty do not use the juice or drink for the gauge wrong viscosity. - do not use plastic
2 - Rubber chair leg guards (size them up for a tight fit) you may also use rubber beaker stoppers from your local science craft store.
2 - 6’ lengths of 3/8” clear rubber hose. Must be resistant to automatic transmission fluid.
1 - 28” length of 1/4 clear rubber hose.
3 - 20” Zip Ties
½ quart of ATF / power steering fluid
1 - Small tube of silicon sealant

**Tools**
- Scissors
- Drill with 3/8th inch drill bit and a 1/4th inch drill bit. or a hot iron for wood burning to make holes
- ball pen
- T-pin or Ice Pick

**Instructions**
1) Drink all your juice it is good for you. Then wash and dry the bottles completely
2) Take and Mark your 2 Rubber chair leg guards (caps) where you will put the holes.
3) Pierce the marked spots with your T-pin or ice pick.
4) Drill or burn holes to size
5) Place your rubber caps on your bottles.
6) Put the 28” of 1/4th inch hose through one hole in each bottle, align them next to each other. Make sure this hose goes all the way down to the bottom of each bottle
7) Put the 6 foot pieces of rubber hose one per bottle. These will hook to your vacuum nipple where you vacuum hoses go one your carburetor intakes. Make sure you only put in about 2 inches of hose into each bottle. This will keep you from sucking fluid into your manifold.
8) Remove caps and fill each bottle 1/4th the way up with ATF and replace caps
9) Put some silicon sealant around each hose on your rubber caps let 24 hours.
10) Zip tie your two bottles together

Add one bottle for each additional Carburetor. Use T connection nipples to join bottles together.

You are ready to sync your carburetors.

Attach one line to each carburetor vacuum intake. Start engine and idle adjust center screw between carburetors. If to much to one side it will suck fluid into that sides bottle adjust the screw the other way to equalize the suction. When they are the same the fluid levels will be equal.

While this tool works for Motorcycles It may also work on dual Holly carburetors on your old 350 Chevy.
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