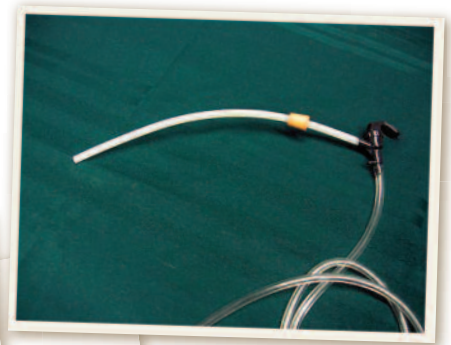
Homemade Homebrewing Gadgets

by Tony Profera

Editor's Note: Tony Profera of Charlotte, N.C. won the Great Gator Tail Brewing Gadget Extravaganza at the AHA's National Homebrewers Conference in Orlando in June. Here he shares some of his simple home-made gadgets—sure to make you say "Why didn't I think of that?" —to help make the brew day a little easier.



one.

No-Nonsense Bottle Filler

Use to fill bottles from Cornelius style kegs for competition entry, homebrew club meetings, brew sessions, parties, etc. No reason not to enter your kegged homebrews into competition anymore.

How-to: Chill bottles first. Set Cornelius style keg of homebrew to 3-5 PSI. This gadget is very simple and inexpensive to make, easy to use, and cleanup is a snap. Simply insert a length of rigid 3/8" white nylon tube into a cobra tap and fill your bottles. Remove tube while filling, then cap on top of foam, just like the breweries do! Bottles filled with this method after six months show no signs of oxidation. Note: Do not force nylon tube too far into the cobra tap head, or it will hold the tap open even after you let go (beer shower to ensue!). Fit should be firm inside the cobra tap head.

Parts list:

- 16"x3/8" rigid nylon tube (Note: This is the cloudy white semi-rigid tubing you can get at the big box home improvement store, or perhaps your local homebrew shop. Take your cobra tap with you when you go to buy your tubing to ensure that this tubing fits snugly in the end of the tap.)
- Cornelius keg with your homebrew on CO_2 (pressure released to approximately 3-5 PSI).
- Cobra (aka "picnic") tap connected to keg
- Sanitized 12- or 22-ounce brown glass flip-top bottles (chilled to brew temperature is best)
- Sanitized bottle caps
- Bottle capper
- Stopper (optional, to differentiate tubing)

two.

PET 2- or 3-Liter Travel Kegging System

For when you want to take your brew but not the keg! Truly separates CO_2 injection from brew dispensing. Allows you to take multiple bottles of your homebrew for when 2 or 3 liters is not enough. This system is expandable to however much you want to bring with you. Your beer will not go flat nor oxidized using this system.

How-to: Simply fill your 2-or 3-liter soda bottles with your homebrew and put the cap on the bottle loosely, squeezing all the air out. You will know all the air is out when the foam begins to squeeze out under the loose cap. Tighten the cap fully and charge with CO_2 (using a carbonator or your normal tank and regulator setup). You are then ready to dispense. The valve between the carbonator and the bottle permits the system to be closed so that additional 2-liter bottles can be installed without losing CO_2.

Parts list:

- 2-liter (or 3-liter) cleaned and sanitized soda bottle
- 1/2" FPT brass or stainless steel (SS) tee
- Several O-rings—fit to size
- Nylon garden hose washer
- 14.5" SS tube (scavenged from a Corny keg dip tube—use the curved end)
- 1/2" MPT black liquid water-tight strain relief fitting
- Cobra ("picnic") tap with 38" of 3/8" OD clear beer line hose
- 1/2"x3/8" brass adapter
- Carbonator and CO_2 cartridges to fit (typically available from your local homebrew shop)
- 3/8" male flare x 3/8" MPT brass needle valve (this valve allows you to use normal CO_2 bottles and regulators as well as the carbonator, and also can close the system off to allow CO_2 cartridge changes without letting air into your homebrew).
- Small cooler to keep your homebrew at the right serving temperature. Note: the cooler I used has a 1 1/2" hole cut into the lid to allow the soda bottle to protrude. A taller cooler would allow the entire system to be contained inside.
- 3" length of clear 3/8" OD (put on beer end of SS tube to allow 2- or 3-liter bottle use)
- 3/8" hose clamps (Oetiker type SS clamps recommended)
- Teflon tape

three.

Carboy Drier

Do you let your carboy sanitizer drip dry like the no-rinse sanitizer manufacturers suggest? This 6" piece of scrap PVC pipe makes it easier, and even works with carboys that have handles installed. I use this simple DIY tool every time I brew.

How-to: Cut a 5- or 6-inch length of scrap 6" sewer pipe. Round the inside edge with a router using a round-over bit, or hand file until smooth (that's what I did). Make several small cuts on the bottom to allow drainage. Note: Do not use the carboy handles to support the weight of a carboy at any time. I was able to find a scrap piece of unused sewer pipe so this gadget cost me nothing to make.

Parts list:

- 6" diameter x 6" long x 1/2" thick PVC pipe

four.

Wallpaper Tray Sanitizer and Storage Box

It's easy to sanitize long items such as spoons, auto siphons and racking canes using a store bought wallpaper tray, but these trays can be flimsy and prone to spillage and cracking. Fortifying the tray with a wooden homebuilt pine box solves these problems and makes the trays far easier to use and more durable.

How-to: A simple 1"x4" pine scrap enclosure with feet added props the box above any water that gets on the brew table and supports the center of the tray. Cutout handles on the ends make it easy to pick up, move and empty the tray. Cut plexiglass can be added as a cover to keep dust and nasties out between brew sessions. Attach some bungee cord on each end to keep the plexiglass lid in place during storage. Be sure that all equipment is dry prior to storage. Note: I still use a bucket to sanitize hoses.

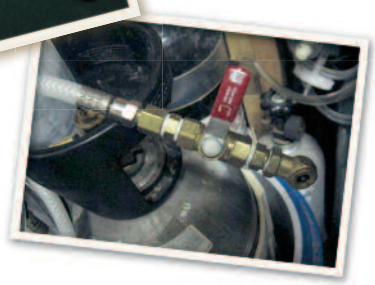
Parts list:

- 2 1"x 4"x33" fir or pine boards (note: a 1 x 4 board is actually 3 1/2" wide)
- 4 1"x 2"x 6 5/16" wood cross braces (align with indentures on the bottom of the wallpaper tray)
- 33"x7 1/4" plastic wallpaper tray
- 33"x 8"x3/16" plexiglass (as a cover)
- 2 small eyebolts to attach the bungee cord
- 2 lengths 3/8"x18" bungee cord (to hold the plexiglass in place during storage)
- Wood glue
- 1 1/2" nails or wood screws (pre-drill holes to avoid wood splitting)

five.

PET Carbonation Cap

These caps are great to fill 1-, 2- or 3-liter PET bottles for taking your homebrew on the road, or to give beer to friends. There are commercial versions but you can save big when you make them yourself. These are more durable than the commercial versions and at only 20 percent of the cost are an easy DIY project. If you give a friend a bottle of your homebrew with one of these caps and don't get it back, you are only out about $2!



Parts list:

- 2- or 3-liter PET soda bottle cap
- Universal tubeless tire clamp in tire valve (NAPA #90-432)
- CO_2 bottles with attached regulator and hose
- 1/4" FPT x 1/4" FPT brass or stainless steel ball valve (this allows the system to reliably shut off ensuring your CO_2 tank doesn't slowly drain)
- 1/4" x 1/4" nipples
- 1/4" MPT tire fill chuck

How-to: Carefully drill a hole into a 1-, 2- or 3-liter plastic bottle cap. Unscrew the tire valve parts and install the tire valve with the seal on the inside of the cap. Tighten until a seal is made with the cap. Fill your sanitized PET soda bottle 3/4 full from your keg. Put one of these caps loosely on the bottle. Squeeze the bottle until all the air is out and the foam starts to come out the cap (this is good). Tighten the cap and pressurize with CO_2 expanding the bottle. Use about 14 psi to carbonate. You may need to pressurize the bottle several times as CO_2 is absorbed into the beer. If the beer is already carbonated set the pressure to about 7 PSI dependent on the style of beer. Note: The ball valve installed on the standard air chuck hose insures there will be no loss of CO_2 through leakage.

Tony Profera is a member of the Carolina Brewmasters in Charlotte, N.C.