

# How to Assemble and Install Your Rain Barrel



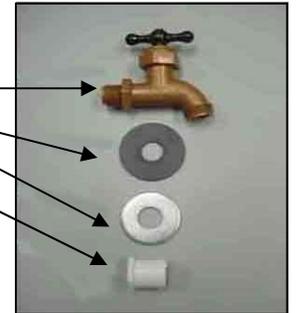
The barrel shown on the right is a typical food-grade plastic drum that you can use to build your own rain barrel. Most of these barrels are between 40 and 60 gallons and can be obtained from vendors other than the manufacturer who initially used the barrel. (See Insert 1: Local Vendors for these barrels or search the web for others.) Because of this, you will need to ask if the vendor knows the following traits for a "good" rain barrel:

- > Was it ever used to contain chemicals or other harmful substances? This can leach into the ground when you water your garden, harm the soil, pollute the ground water, and possibly affect you and your family. Always smell a barrel before buying it to test for lingering smells. Pickle smells are OK.
- > Does it have a tight fitting lid to prevent curious little critters from getting in?
- > Is it made from UV tolerant plastic so it will not decay with sun exposure?
- > What color does it come in? The practical aspect of this is to keep the water relatively cool. If the barrel is clear, it will get too warm. The aesthetic aspect is simple. If you do not like how it looks against your house, you are less likely to use it.

## Assembly A: Faucet

- Drill a 3/4" hole roughly 3 or 4 inches from the bottom.
- Screw the spigot into the hole.
- From inside the barrel, slide the rubber washer over the spigot threads.
- Slide the metal washer over the threads behind the rubber washer.
- Screw on the bushing and tighten.

Cost:	Materials Needed
\$4.49	1/2" Hose spigot
\$1.50	3/4" Inside diameter rubber washer
\$0.50	3/4" Inside diameter steel washer
\$0.75	PVC Bushing with inside diameter to fit on non-hose end of the spigot
\$1.96	1-1/2" Wing nut plug (rubber)*



## Assembly B: Overflow

- Drill a 1-1/2" hole ~6" from the top.
- From inside the barrel, push the smaller end of the female insert adapter through the drilled hole.
- Attach overflow hose onto the insert adapter. Cut hose to a length that will reach a vegetated area or at least 4 ft from the house foundation.
- Tighten the hose clamp where the hose covers the adapter to secure it.
- From the inside of the barrel, caulk the seam where the adapter meets the barrel walls.

Cost:	Materials Needed
\$7.99 Available at large hardware stores	1-1/2" Sump pump drain kit, including: <ul style="list-style-type: none"> <li>&gt; 1-1/2" Inside diameter male adapter</li> <li>&gt; Hose clamp with range including 1-1/2"</li> <li>&gt; 1-1/2" Overflow hose (weather resistant)</li> </ul>
\$2.99	Marine or other weather resistant caulk



\*Note: The rubber wing nut plug should be used to seal "Plug" in the Figure 2 drawing below if multiple barrels are being connected. To connect another barrel, remove the spigot from the first barrel, and screw in a hose adapter. Optional: installing another rubber wing nut plug on the side of the barrel as close to the bottom of the barrel as fits helps with yearly cleaning (See "Plug" in Figure 1). If barrels are not winterized, leaving this valve open (rubber wing nut plug out) will prevent the barrel from freezing in the winter. Rubber plugs should be kept inside in the winter to prevent cracking.

Figure 1

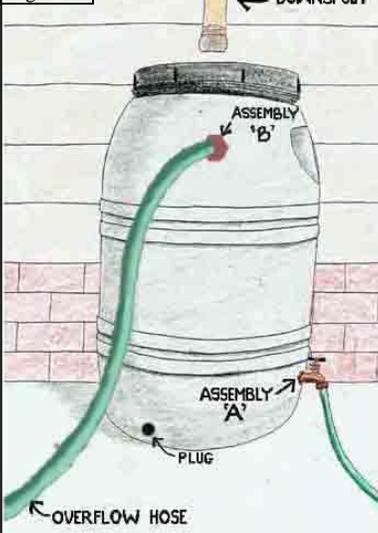
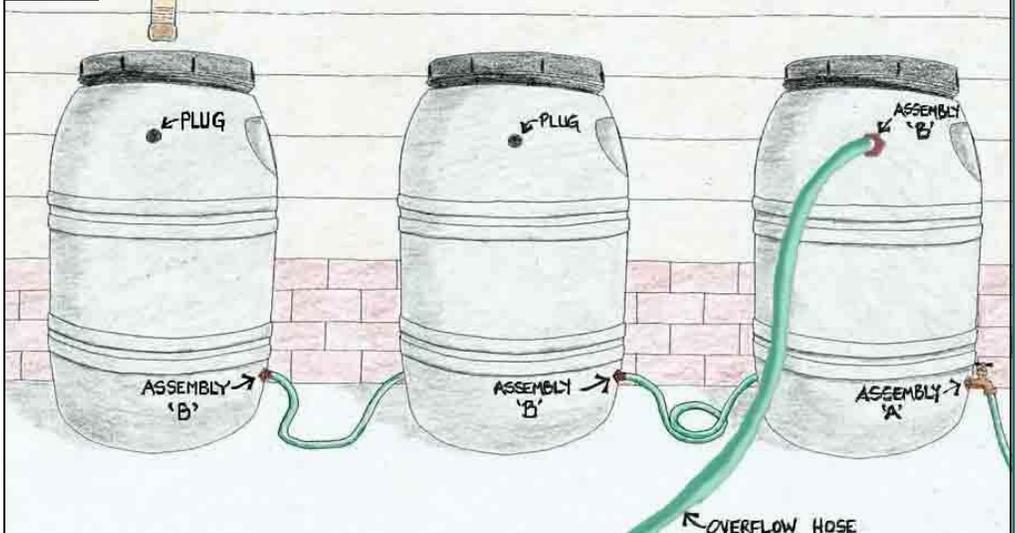


Figure 2



**Lid: Be Creative. Used barrels vary greatly, so you may have to improvise.**

**Example A: Barrel with lid.**

- Use a jigsaw to cut a hole in the lid the size of the inside of the atrium grate rim. Cutting it the same size as the outside of the rim will make it fall into the barrel.
- Put filter sock in the atrium grate and secure. This will assure that mosquitoes won't use your barrel to create more mosquitoes. Clean as necessary.

Cost	Materials
	Jigsaw or sharp utility knife
\$6.99	6" atrium grates
\$7.99 for 3	Inlet filter sock



**Example B: Barrel with no lid - bottom of barrel becomes top of rain barrel**

- Use jigsaw or knife to cut 8-1/2" - 9" hole in drain tray.
- Trace the size of this hole on the base of the barrel.
- Cut out three holes as shown in photo of the blue barrel. The remaining plastic "Y" is for support and to make sure small critters don't fall through the screen.
- Cut screen and hardware cloth in 10" circles. Stack and center both layers over holes.
- Place drain tray over screens. Screens should not stick out of edge.
- Screw drain tray through screen and to barrel. Pre-drill holes one at a time if you want. Drilling all holes before adding any screws often results in misaligned holes.

Cost	Materials
	Jigsaw or sharp utility knife
\$3.00	14" drain tray from plastic plant pot
\$1.25	1 sq. ft. hardware cloth - 1/4" grid
Recycle or <\$6/roll	1 sq. ft. window screen - smallest possible grid for mosquito control
\$0.72	(6) stainless steel screws, 3/4" in



**Example C: Barrel with threaded or snap-on lid that has tall edges**

- Cut out circle in lid to desired size. Note: it should be big enough to handle large amounts of water, but small enough to keep kids and animals out.
- Take lid off, and place window screen over the top of the barrel.
- Pop or twist the lid back on.
- Trim edges of screen, but leave excess so it will be easy to re-assemble after cleaning.

Cost	Materials
	Jigsaw or sharp utility knife
Recycle or usually <\$6/roll	3 - 4 sq. ft. window screen - smallest possible grid for mosquito control (Measure the diameter of your lid, and overestimate by ~4" on each of four sides to allow for overhang).



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