

# Instructions for Making a Rain Barrel



Provided by





# Step 1

## Clean Barrel

### Tools and Materials

1. 55 Gallon Food Grade Plastic Barrel
2. Water
3. Soap
4. Vinegar or lemon juice
5. Rag

- **READ THROUGH ALL THE INSTRUCTIONS BEFORE YOU BEGIN.**
- Use Food Grade 55 gallon plastic barrel (only previously food stored in the barrel)
- Empty barrel of contents.
- Give one quick rinse
- Cleaning solution: 2 teaspoons of soap and 2 teaspoons of vinegar or lemon juice to every gallon of water used.
- Clean barrel by rolling barrel vigorously
- (Barrels containing oily foods such as sauces with oil will need to be wiped down with a cloth.)
- Rinse and slosh until soap suds are gone.
- Empty remaining water.
- Let dry.
- Proceed to Step 2



## Step 2

# Cutting Top Hole

(use step 2 instructions when using a fixed lid barrel,  
if you have a barrel with a removable lid skip this step and move on to step 3)

### Tools and Materials

1. Jigsaw with plastic grade blade
2. Drill with 15/16 spade bit
3. Marker
4. Safety goggles
5. Metal File

- Draw a line across the top of the barrel to mark where to cut a semicircle.
- **PUT ON SAFETY GOGGLES!**
- Drill a starter hole along the line marked for cutting using the 15/16 spade drill bit. (This serves two functions to practice using the spade drill bit to create a starter hole. Drill another practice hole in the part of the lid you will cut off. You will use this hole to practice using the pipe tap later.)
- Use the starter hole to begin cutting hole with a jigsaw. Be sure to keep jigsaw level, especially along the edges of the barrel where the plastic is thickest. Keep one foot petal on the rim of the barrel when cutting along the edge of the barrel. Cut about an inch from the rim of the barrel to keep out of thick plastic and to cut between the rim and any existing pour hole.
- Hold the jigsaw firmly, but do not push through cutting too hard. (It helps to have someone hold the barrel steady for you.)
- Take a file or steel wool to the edge of the cut to smooth it out.
- Check if your barrel needs additional cleaning now that you have a large hole to look into. You will need to empty the bits of plastic that came off while using the jigsaw. If additional cleaning is necessary see step 1 again.
- Proceed to Step 3



## Step 3

# Making Faucet Hole

### Tools & Materials

1. Drill with 15/16 drill bit
2. Safety Goggles
3. Marker
4.  $\frac{3}{4}$  in Pipe Tap
5. Crescent wrench

- The rain barrel is meant to be installed under a downspout. Determine where you want the faucet (and overflow hole-step 4) to be placed. This depends on where you will locate the barrel. Think about the landscaping where you will set up your barrel. Are there any steps, walls or plants nearby that you need to work around when using the rain barrel?
- Usually placing the faucet hole perpendicular ( $90^\circ$ ) to the large overflow hole you will make near the top of the barrel, works best.
- The Faucet hole should be two to three inches from the bottom of the barrel.
- Before you drill, with chalk mark the faucet and overflow hole locations. Do not locate the hole on the seam of the barrel.
- **PUT ON SAFETY GOGGLES.**
- Drill the faucet hole using the 15/16 spade drill bit. Make sure that you take your hand off the power trigger before you pull the spade drill bit out of the hole so
- Take  $\frac{3}{4}$  inch pipe tap and place a crescent wrench on top to act as a handle. Turn clockwise into hole to thread the hole. Keep turning until the pipe tap is about  $\frac{3}{4}$  of the way through the hole. Turn counterclockwise to remove the pipe tap from the whole.
- Proceed to Step 4



## Step 4

# Making Overflow Hole

### Tools and Materials

1. Drill with 1 1/4 inch hole saw drill bit
  2. Safety Goggles
- This is the top hole where you will attach an overflow hose to move excess water away from the house.
  - Mark where you want to locate the overflow hole in relation to where the faucet hole (Step 3) is at the bottom of the barrel keeping in mind any landscaping that may restrict your access to the rain barrel.
  - Locate the overflow hole about 3 inches from the top of the barrel rim. Mark this with chalk. A good placement is often at a 90 degree angle from the faucet hole (Step 3). Do not place the hole on the seam of the barrel.
  - **PUT ON SAFETY GOGGLES.**
  - Center 1 1/4 in. holesaw drill bit on the chalk mark and cut the hole. Use enough pressure on the drill to cut but not too much that it stops the movement of the drill bit. It is a good idea to toggle the drill so that the plastic will not adhere to the drill bit.
  - Proceed to Step 5.



## Step 5

# Start Overflow Assembly

### Tools and Materials

1. Metal curved File
  2. Shop Vac
  3. 1 1/4 inch Barb fitting
- File the hole using a curved metal file until just large enough to screw the threaded part of the barb fitting into the hole. As you are filing, regularly check to see if the hole is ready. If you make the hole too big, you can use some caulk to seal it up.
  - Screw the threaded end of the barb fitting through the hole until you can no longer see threads on the outside of the barrel.
  - Shop vac the inside of the barrel to clean out plastic shavings.
  - (If you want to paint your barrel this is a good time to do it. Use 2-3 cans of spray paint meant for plastic. Follow the directions on the paint can.)
  - Proceed to step 6 (Before securing the barb fitting on with the adapter.)



## Step 6

# Faucet Assembly

### Tools and Materials

1.  $\frac{3}{4}$  in Male Faucet assembly (boiler drain style)
  2. Gasket Material
  3. 1 inch washer
  4.  $\frac{3}{4}$  in female adaptor
  5. Silicone caulk and caulk gun
- At the tapped hole at the bottom of the barrel, screw the faucet into the hole. Turn the faucet counterclockwise to drop the faucet into the threads then turn clockwise to screw the faucet all the way into the hole. You may need a wrench to give you the leverage to turn the faucet until you do not see any threads on the outside of the barrel. Make sure that the faucet is going in straight. It should be perpendicular to the barrel, not at an angle.
  - Use the inner hole of a 1 inch washer to trace a circle onto the gasket material.
  - Cut out the hole in the gasket material.
  - Reach inside the barrel to place the gasket around the faucet threads so it is snug up against the inside of the barrel.
  - Screw on the female adaptor onto the threads of the faucet (inside the barrel) to secure the faucet in place. Have someone hold the faucet on the outside so that it stays in place and does not turn as you tighten the adaptor.
  - Seal the outside of the faucet with silicone, where the faucet meets the barrel.
  - Proceed to Step.



## Step 7

# Finish Overflow Assembly

### Tools and Materials

1. 1 1/4 inch adapter
  2. 1 1/4 inch sump pump hose.
  3. Clamp that opens to 2 inches
  4. Flat head screwdriver
- Screw adapter on tightly to the threaded part of the barb fitting located on the inside of the barrel.
  - Attach drain hose to barb fitting on the outside of the barrel.
  - Place a clamp around the drain hose to secure it to the barb fitting and tighten.
  - Proceed to Step 7.





## Step 7

# Screening the Barrel

### Tools and Materials

1. 28 x 28 inch fiberglass screen
  2. Barrel lid
  3. Bungee cord (if the barrel does not have a lid)
- You want to measure the screen so that it is a hands width wider than the barrel rim.
  - Place the screen over the barrel top.
  - Screw lid rim over screening. (If your barrel does not have a lid, use a bungee cord to keep the screen in place.)
  - Trim screen evenly around the lid. (I suggest you leave enough screen around the lid so that it is easy to put the lid back on over the screening after you clean your barrel.)

**Congratulations!**

**Your barrel is complete.**



## Step 8

# Installing your Barrel

### Tools and Materials

1. Hack Saw
  2. Gutter Elbow (I found that flexible elbows allow for easier installation)
  3. Pencil or marker
- Place barrel at downspout.
  - Stack cinder blocks under the barrel to lift the barrel high enough to make room for a bucket or watering can to fit under the faucet at the bottom of the barrel.
  - Determine the height at which you need to cut the downspout to allow room for the elbow to fit above the barrel. (Between six and eight inches above the barrel height depending on the elbow you use.)
  - Mark with a pencil or marker.
  - Cut down spout.
  - Attach gutter elbow to downspout.
  - Place the barrel under downspout and adjust the flex elbow.
  - Direct overflow hose away from the foundation or into existing underground drains.

Do a rain dance!

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## General Maintenance

### Cleaning

- The barrel will need cleaning of residue buildup 1-2 times per year.
- Algae may build up, especially in the hot weather. Look at your local pet or home improvement store for bio-friendly products to clean out Algae. Alternatively, a cup of bleach will help keep the algae in check and will be deluded enough by the 55 gallons of water so that it will not harm your plants.

### Prevent breeding of mosquitoes

- Keep your barrel covered with the screening. Periodically inspect for holes.
- You can put one tablespoon of olive or vegetable oil to make a slick surface that the mosquitoes will stay away from.
- Use a mosquito dunk (bio friendly) and place in the barrel, replace when dissolved. You can find these at your local home improvement store.