

RV Lamp Post



Materials Needed:

- 20' of 2" schedule 40 PVC (standard thick wall PVC)
- 10' of 1" schedule 40 PVC
- 4' of 3/4" wooden dowel
- 1 PVC 4 way 2" x 1 1/2" reducer (this looks like a + and its 2" on top and bottom & 1 1/2" on left and right sides)
- 3 PVC T's 2"
- 4 PVC 90's 2"
- 1 PVC 2" x 3" Shower drain with the removable cap.
- 2 1 1/2" x 1" PVC reducers
- 2 1" PVC caps
- 1 Post Light (your favorite style, I prefer the nautical, because it's all plastic)
- 1 25' outdoor extension cord
- 1 10' outdoor extension cord (you will cut this cord, so if you can find a shorter one, it may save you a couple of bucks)
- 1 can of PVC glue
- 4 #12 eye hooks
- 3 Yellow twist locks
- 1 25W light bulb (I use a blue bulb for a soft glowing effect)
- 1 Roll of tape
- 1 Piece of foam rubber (a scrap piece from an old cushion works good)
- 1 Hacksaw
- 1 Tape ruler
- 1 Dremel Tool (not necessary, but really saves time)

Directions:

First let me explain, you will have some PVC left over but it is cheaper to purchase it in 10' lengths rather than pre-cut lengths.

Start by cutting the 2" PVC into the proper lengths. You will need;


- 1 4' length (this is from the base to the crossbar)
- 1 1' length (this is from the crossbar to the light)
- 2 2' lengths (this is part of the base)
- 4 1' lengths (this is part of the base)
- 2 11" lengths (this is part of the base)


Now let's cut the 1" PVC into its correct lengths. You will need;

- 2 18" lengths (this is for the crossbar)

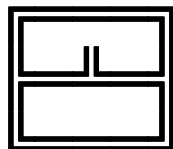
Now that we have all of the pieces cut, let's start building the base.

Take the four 90's and install them on each end of the 2' PVC pieces making sure that the 90's lineup with each other. I **did not** glue these at this time, that way if I needed to take it apart I could.

Next, take the four 1' PVC (2") and install them into the 90's above. You should have 2 pieces that look like this  Again, I **did not** glue these.

Now, let's build the center section of the base. When you are doing this make sure that you keep everything square and in line with one another. You will be gluing this section. However, I **did not** glue it to the sections that you put together above. You may want to make a dry fit first so you can see how it goes together. 

Looking at the picture, the center T is actually facing straight up. This is where the lamp post will be fitted. Now, if you don't quite understand just yet, don't glue anything until you have it all together. Then take it back apart and glue it at then.



The base should look something like this, but the center section facing upward.

Now that the base is built, let's build the post and crossbar!

Take the 4' piece of PVC and stick it in the base. Then take the 4 way fitting and stick it on top of the 4' piece. Glue the 1" x 1 1/2" reducers into the 4 way and then stick the 18" sticks of 1" PVC into the reducers (you can put both sides on at this time, but I didn't glue mine). Now take the wooden dowel and fish it through the crossbar. This will give it strength so it won't bend when you hang a sign on it. After you have the dowel all the way through the crossbar, cut off any extra that you have sticking out of the PVC. Now glue the caps on the ends of the 1" PVC.

At this time you should have the base, the bottom post, and the crossbar together. Now we are ready for the top section and the light. This section can be a little time consuming because it will involve in some modifications to the shower drain.

Okay, first take the shower drain and remove the cap by taking out the 2 screws. After you have removed the cap, look inside the drain and notice that there is a stop ring (this is the lip inside of the shower drain that keeps the PVC from going all the way through). You will have to remove this stop ring. I used a Dremel tool with a sanding stone on it for the job. Once you have removed the lip, check to make sure that the PVC will pass all the way through it.

Now take the 1' PVC section and glue it to the shower drain. Stick the PVC into the 2" side of the shower drain about an inch (this is the end that you just removed the cap from). If you're not sure then don't glue it at this point.

Temporary install your lamp post on top of the shower drain (this will be the 3" side) and place the top section onto the crossbar of the lamp post. Your lamp post should look like the one at the top of this article in the picture.

Now all you have to do is install the electrical.

Remove the top section of the lamp post, and remove the light from the top. Take your small extension cord and cut off the female end (this is the end without the prongs) of the cord. Fish the cut end of the extension cord up from the bottom of the 4 way at the crossbar out the top at the light. Make sure you have enough wire sticking out both ends to make your wiring connections. The bottom part of the top section will have the male plug, this will allow you plug it into the bottom section of the lamp post (I know this may sound a little complicated, but it's really not. By making it this way, you can remove the top section and unplug it from the bottom section when you are transporting it). Once you have enough wire installed it's time to wire it up. At the lamp, wire the Black to the Black, the White to the White, and the Green to the Green

(sometimes this wire will be a bare wire instead of a green wire). Secure the connections by using the 3 yellow twist locks. Install and secure the light back on top of the post.

At this point, your top section should be 100% complete.

Next let's install the extension cord to the bottom section. Before you take the 4' post out of the base, make a mark on the post at the top of the "T" connector (this will let you know how far the post sits down into the base connector). After you have your mark, pull the post out of the base. Now you will need to make a cut into the PVC so you can run the extension cord. The way I did mine was, I took my Dremel tool and made a slit from the bottom of the PVC (wide enough to slide the cord in) to just above the mark. Then I took the female end of the 25' extension cord and figured out how much of the extension cord was going to be inside of the 2" PVC. I tied a knot in the cord to prevent it from coming out of the post in case someone pulled on it. Then I ran the extension cord through the PVC. At the end that will be connecting to the top section, I took a piece of foam rubber and taped it around the cord (make sure you make it larger than 2" in diameter), then I pushed it into the 2" PVC. This will prevent the cord from falling back into the PVC once you unplug the lamp to travel.

Install the post back into the base and plug it in to make sure it works. If the post is too loose while sitting in the base because of the slit you cut, wrap a piece of tape around the bottom of the post. This will make it tight again and it prevents the wobbles. At first mine was okay, but after 30-40 times of using it I had to tighten it up.

Finally, install the #12 eye hooks to the bottom side of the crossbar (you will have to figure the measurements out for yourself, as all signs are different). I had a scrap piece of ¼" pencil iron that I bent the ends around and then installed 2 "S" hooks to hold our small flag.

The PVC will have red writing on it from the manufacture. This can be removed by using acetone. It makes it look better!

When you have it all together and then you want to take it apart to travel, you will find that sometimes the PVC can be hard to take apart. I took some sand paper and sanded mine at the connections where it comes apart. This makes it a little easier.

Due to the storage area that we have in our 5th wheel, I made mine come apart in the following sections; the top, the post, the base center section, The 2 base's outside supports, and the base's one foot pieces (4). When storing, I roll the extension cord tight around the post.

Enjoy!

Cost to build mine \$85 (the nautical light from Home Depot was \$32)

