## Weave Chair Seats With Paracord

by kentdvm

It's fairly easy to find old wooden chairs with broken out seat bottoms. Often the chair frame is solid, but no one is interested in reweaving the rush bottom. When I found 5 old chairs in the rafters of a barn I decided to hack them with paracord! This is a fun project which will add a pop of color to your home. Here's how.



## Step 1: Why Paracord?

Paracord is short for parachute cord which was it's original use. It's now available in a multitude of colors and has a million uses. Comprised of multiple nylon cords it's amazingly strong, very durable, and easy to clean. Cost is not prohibitive either as repairing a chair costs approximately $\$ 25$. Paracord woven chairs wear well and will look great for a long time.
https://en.wikipedia.org/wiki/Parachute cord

## Materials:

Paracord - 275 feet depending on chair measurements
I'm using 550 paracord but smaller cord will work too.
Flat bar for weaving cord
Electrical tape
Sand paper
Polyurethane, chalk paint or other wood finish


## Step 2: Preparing Your Chair

Your first step is cutting out the nasty seat bottoms which is pretty easy. Sand your chair as needed to remove old finish and any rough spots. Apply polyurethane as I did on the chair above or use paint to add more color. Chalk paint is a great option for old wood as it requires less prep and bonds well (blue chair).



## Step 3: Planning the Weave

The only tricky part of this project is spacing the weave pattern evenly although it's pretty easy. Most chairs will be similar in size, however variations will affect paracord usage. Start by measuring all four sides of your chair. The yellow \& black chair measured 10.5 " on each side, 13 " front and 11 " back and required 110 ft of yellow cord and 165 ft of black cord. This is a good estimate for similar sized chairs. You can always add more cord on the bottom side so it's not critical to be exact.

## First....

First find out how many turns you'll be making on each side. In essence of time, I suggest wrapping around and around the entire length of the back dowel, front dowel and one side to get an accurate count of turns. I tried to estimate this by wrapping a few inches and then multiplying by the length (pic 2). It didn't work very well. It's worth the time to quickly wrap each side and get a good count. Try to wrap evenly and snuggly for best results.

## Second....

Lay out the "front-to-back" pattern (yellow). Using the number of turns on the front and back dowels, you need to (a) account for width difference between front and back and (b) determine how many groups of 4 cords you will make.

Account for width difference. Since the front is wider you must add more turns on its left and right sides so the center of the pattern will run straight from back to front. Subtract the number of turns across the back dowel from those on the front dowel to find the difference between them. Divide this difference by 2 . This is the number of extra turns you need to make up on the left and right side of the front dowel so the center will be straight.

- Turns (front) - Turns (back) = Extra Turns to be made on Front
- Extra Turns / 2 = Extra Turns on Left and Right sides of front dowel

Example: On this yellow chair the front had 85 turns and the back 69 turns so I needed to account for a 16 turn difference. Dividing by 2 meant 8 extra turns on each side of the front were needed for the center to be straight.

- $85-69=16$ more turns on the front than back
- 16 / $2=8$ extra turns on left side of front and 8 on right side of front.

Look closely at the first picture and compare the front and back patterns on each side. To make up 8 turns I either added extra turns in the front or deleted turns across the back. Note along the back there are no "spacer" turns between the cords in the first 2 groups of 4 long strands. Deleting these 6 turns and adding 2 extras in the front got my long strands running perpendicular to the front \& back dowels. If the front and back of your chair are the same length, i.e. the seat is a square, then you can obviously skip this part.

Determine the number of 4 strand groups. This should be done on paper using the turn counts you've already established. See pic 3 . I typically start with 2 "spacers" turns on the front and 1 in the back and then see how it turns out. The number of spacer wraps at the beginning and end is where you'll want to place extra turns so your pattern is even. Don't forget to include the extra turns on the front.

A turn out of place here or there is not going to be noticeable but try to avoid it. On my yellow chair I didn't realize I had made a spacer turn in the wrong place until I started writing this instructable. One of the extra turns should be all the way to the right, but it's hard to tell. Don't sweat little differences. A good life rule!

## Last....

Planning out the pattern for the side-to-side weaving (black) is simpler since the side dowels are the same length. I typically don't put spacer turns on the sides so there are no gaps in the weave. Up to you. Use the turn count for the side dowel you've already established and divide it by 4 . If you have extra turns then use them as spacers either at the front or
back.
Grab some cord and let's get going!




## Step 4: Let's Get to Weaving!

Grab 110 feet or more of paracord and bind it up so it's easy to handle. I have tried several ways of bundling the cord and find a rubber band works about as well as anything. I haven't tried rolling it into a ball like yarn but that might work too. It just needs to be gathered up so it's easy to pass while you keep the cord snug on the chair frame.

Tie your cord on the front dowel to get started. A clove hitch (pic 1) works well although the type of knot is not important. After cinching the clove hitch knot rotate it 180 to hide the crossing strand. The clove hitch starts you off with 2 turns in the front which is convenient when you are trying to add extra turns along the front. Leave a 12 " pigtail so you can tie the other cord (black) to it when you start weaving side to side.
https://www.instructables.com/id/How-To-Tie-A-Clove...



## Step 5: The First Color Wrap

If you haven't noticed this is a 2-layer weave where you will be weaving an identical top and bottom layer. Normally you would only have one layer made by weaving the strands on the top and bottom together for your seat. I didn't attempt this because paracord doesn't stretch much and I was afraid it would be too tight to weave it at the end. As you'll find, it gets hard to pass the paracord in this 2-layer pattern as the weave gets tighter at the end. Weaving 2 layers requires more cord, but it's easier and faster to weave.

After tying your knot, the first pass (moving front to back) is on the bottom side. Passes on the bottom are made moving front to back. Passes on the top are made when moving back to front. Now simply wrap the pattern you've already worked out on paper. Do not wrap the cord super tight! Taunt is good enough. When you finish your passes tie it off and leave a 12 " pigtail to use later.






## Step 6: Weaving the Second Color

It is much faster to weave this seat if you use a bar, stick, wire or other long instrument to pass the cord. I found an 18 " $x$ 3/4" aluminum bar which worked great. Instead of drilling an "eye" for my needle I used electrical tape as a simple solution for attaching the cord to the bar (pic 4). This avoids passing a knot or double strands of cord as you weave.
Unless you enjoy pulling 165 feet of cord back and forth through your weave start with around 60 feet of paracord (or roughly $1 / 3$ of what you estimate needing). When you run short of paracord tie on a new 60 foot strand so the knot will be on the bottom side of the seat. Here are a couple knot options.
https://www.instructables.com/id/Part-2-of-my-knot-...
https://www.instructables.com/id/Fisherman-Knot/
To begin make a clove hitch or other knot on the side dowel at the same corner where you started the first layer. Tie a second knot to the pigtail you left from the first layer to secure both layers. Alternatively you can tape or nail the paracord to the inside of the dowel and wrap over it. Either seems to work well. On this chair I forgot to leave a pigtail so I just taped it to the side dowel where it would be hidden.



## Step 7: Weave Away

Now that you're tied on start weaving back and forth. Weave across the top and then weave back across the bottom layer. As you can see in pic 4 the bottom looks just like top. When you get to the end tie off your second layer to the pigtail from the first layer. And that's it!







## Step 8: Enjoy Your New Chair(s)

I hope you found this instructable useful and that you will give this a try. Once you do a chair you won't need this guide any more as it's simple to learn the technique. A fun furniture hack with a big "Wow" factor. Your friends and family will be amazed at how those old busted chairs look now!

If you find this furniture hack worthy, please give me a vote in the contest. My son is interested in woodworking and l'd feel better if he was using a SawStop;) Looking forward to your comments and questions.





Thanks for posting this. BTW, you have a typo on your page. There's a paragraph break at "but no one i" that looks like a mistake.

Thanks! Got it fixed.
This was my first attempt at weaving a seat. I had purchased fibre rush to refinish this stool seat that had originally been done in what I believe was grass (thinner and softer than cane). The corners of this frame prevented my attempts at using fibre rush so as I was browsing the Internet to learn about using ropes or yarn, I came upon this idea and decided "why not". This was great! I love the results I love my stool! Looks great in my kitchen! Thanks.


Thanks for the instructions! I am not crafty and have never woven anything.
Dragging the cord through the second layer was a pain (it kept getting so tangled). I started with a little stool. I have three chairs to do still. Would a weaving shuttle help?

I am very happy with how the stool turned out!
IMG_0840.JPG

Weavers usually wrap the cord in a "butterfly" while weaving so the extra doesn't get tangled.
Basically you just wrap the cord in a figure 8 pattern between your thumb and pointer finger and then wrap the last foot or so around the middle where the figure 8 intersects itself. The shape it makes looks like a butterfly and will keep your slack from getting tangled.

Awesome idea and set of instructions! Put on some good music or show in the background and enjoy it! Take the time on the test wraps to gauge how many wraps per side and just take your time with it!

I got this old rocking chair from a friend. It was grey and weathered and without seat. Some sanding, stain, spar urethane, and this handy dandy paracord seat and it's back in business!


I did a basic figure 8 "weave" for the back. I found the paracord very tricky/twisty to work with, but we eventually came to an agreement.


How cool! Looks great. Really like the back.
These instructions are great and I can't wait to give this a go. Literally just stumbled across this website (never heard of it before) but I can tell it's going to be a favorite of mine. I'll add some photos of my outdoor round/bucket like seats (before and after pics of course) when they are complete. Very exciting. Now...how do I upload a profile photo??

I used 2 mm "Bonnie" craft cord, used in macremé. About 1/4th of the cost of Paracord at Hobby Lobby. It's a very small rocker for toddlers, so I think the much lower tensile strength will not be a problem. Came out great. Chair was mine as a child, then used by my kids as toddlers. Now redone to give to my granddaughter.


Looks fantastic. I'll have to check out Bonnie cord. Certainly doesn't need to be as strong as Paracord. Great heritage in that little rocker!

Thanks for the comment. And especially thanks for the excellent instructions to do it.
My first chair bottom! A small one for a grandchild. I had so much fun doing this, Thanks!


Nice job! Looks fantastic!
Hi
I have finished my first chair! Really pleased with it. I wrapped the back, front and side as you
said but I still managed to get more wraps once I actually did the weaving but I think it worked out fine. I will use the count from the finished chair when I do the second one. I think it looks better than it did originally. Thanks for the instructions $:$ :)


I agree you improved that chair immensely! I am working on similar but mine has a few more curves. Did you use any adhesive to keep the paracord fastened to the chair frame? With the curves I have, it might be an issue with paracord sliding a bit. Did you have issues with cord sliding? It looks like you did not need to sand or repaint the chair frame. I need to repaint mine. I really admire your work on this project.

Hi, thanks for your comments. I didn't use any adhesive, the weave itself, once there was a few lines of it on the chair, held it in place. I had to push it into place once a " 4 " section was completed. It was tricky threading all of the cord through the gaps but I tied it (with elastic bands) in three smaller bundles rather than one large one. I also used a small metal bar as my guider that I could bend slightly which made the weaving much easier towards the end. It was a flat fixing plate about 2 mm thick - it got well bent as you can see from the photo. My chairs were metal as they are outdoor chairs and they both were repainted before I did the weave. I am about to do an indoor on and that needs sanding and repainting first.
I'd love to see your chair once you've done! Enjoy!


Thank you for sharing your tips. I have 4 chairs so my first one will be where I learn the most!
Beautiful work! I agree. I like the colors \& weave better than original. Second chair will be a breeze. Thanks for sharing pics.

beautiful work! Thanks for sharing, now with the policy "stay at home" because of COVID-19, plenty of time to try new things and fix chairs at home.
The most well written set of instructions I've ever read. I look forward to trying this project. Please don't allow your son to use the tablesaw without a stop. I speak from experience as a Safety first consciousness. I am on a poster and have been out of work for year from a hand injury on

I'm pretty thrilled with how my trash-picked footstool turned out. The bad news: working with just one color can be a little tricky and hard to see. The good news: it hides mistakes well.


Very nice! I haven't tried a single color but plan to if I can keep the pattern straight;) Congrats on a great job!

I made this for my great grand daughter out of PVC. She loves it. As you can see I haven't come up with a suitable way to tie my ends but until I do she loves it. Any suggestions?


Love it! PVC is such a good idea. What little girl wouldn't love a pink and purple chair made by her granddad. I either knot the ends on the bottom side where the knots can't be seen or fuse pieces together after using a lighter to melt the ends. Here's a video on how to join ends before beginning a project but you can do the same on your chair. Good work!

Can this be done on cane seats? There are many small holes around the seats. I could cane them, but I LOVE what you did with the paracord.

Thanks! I think it can be done depending on the frame. My guess is you could either wrap the paracord around the frame or thread it through holes drilled in wood. I've never tried it but I think it would work some trial and error. Hopefully someone else has some thoughts on this.

Anyone have a video link where i can watch this being done the exact same way?
Looks really good, thanks for getting into the math. I'm a weaver (4 harness Schacht) and weaving is Full of Math, where if you skip it you do NOT Get Results. I'm now looking for tips on materials that are really weatherproof for outdoor use. If you know anything...I might use seatbelt webbing but I really like the color options of paracord.
and for the bottom, do you think i can just do it back to front without doing the horizontals? Will it hold a person sitting on it well enough if I don't do both horizontal and vertical weave?
I don't think that would work very well. I think it would hold a person, but over time would sag and probably not be that comfortable. I would drill holes in the sides or router slots. You could drill holes in alternating in two rows for example.

Cool, so glad I saw this post. You think I can weave only in one direction? I saw this chair in a shop window, and the raw chair is my project chair.


For the back of the chair, absolutely. I like the way they did the figure 8 pattern.
Made sort of a smaller version of this - I did a canoe seat. it wound up looking really good (I see the mistakes I made, no one else does which is okay) and is more comfortable to sit on than the original wicker/rattan seat that was in there originally. Thanks for the great Instructable to help me get through it!

Excellent! Glad it was helpful. That's a perfect place for paracord.
Finally got around to getting a picture. It's not perfect, but at least now I know what to do when the other seat goes! Thanks again.

very nice job. looks great.
Wow that looks great. Nicely done!

Hitting roadblocks. I realized you can't do this with any old chair. If it has a back that connects with the back horizontal piece, you can't skip that whole space. Duh, I feel stupid. I'm trying to think of a way to salvage the project. Maybe add a bar to the back and weave off that? Suggestions welcome.

make a straight line on front back and sides of chair drill hole's that line up on all 4 sides feed cord through the holes you will get the same effect as wrapping around the dowel on the other chair.

I'm finishing two old rockers. Chose paracord for the backs and seats. Just started and it is working fairly well.

Any suggestions for joins. I've been knotting without much grace.


Hard to hide knots on the back. You could simply heat both ends and join them. I always feel like I need knots but I've never had one come apart that I remember. Melted paracord holds well.

I am finishing 4 old mismatched chairs and will paint them all one color. Contemplating using this for the seats.
I wanted to let folks know that, just like old paint, old stain often has lead in it. I just sanded up a storm without realizing this. No mask either :(
Thank you for sharing that. Fortunately old stain contains much less lead than paint and it is less common that it contains lead, but you don't know?
Nice idea! yet another use for paracord.
This is so cool! I love paracord but I still want to stay away from it for a while after my last paracord project. Thank you so much for sharing this!

Thanks! I think I speak for everyone in asking for a few more details about your last projects;)
https://www.instructables.com/id/Paracord-Hammock-3...This was my last project. I completed it over 6 months ago and I still have nightmares about weaving it. But it honestly turned out great!
Well done! It's in my favorites. Completely understand.
I would like to do a chair that is somewhat like a sling chair, no separate back. Would I do it side to side first, then top to front dowel? It has sun damaged wide plastic strips. The chair is light, wood and was oh so comfy.

