

R2-ATL Frame Assembly Guide



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Trademarks

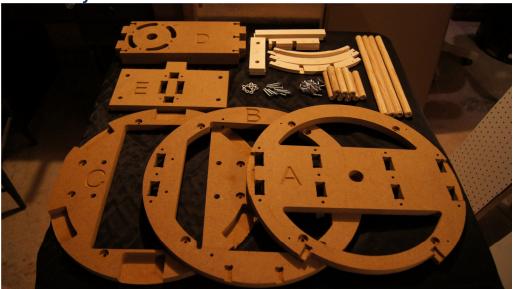
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Parts List

Included in your frame kit:



- ✓ Top Ring (A)
- ✓ Middle Ring (B)
- ✓ Lower Ring (C)
- ✓ Side Plates (2) (D)
- ✓ Middle Leg Mounting Plate (E)
- ✓ Middle Leg Height Plate (F)
- ✓ Arm Carrier Sides (G)
- ✓ Middle Arm Carrier (H)
- ✓ Upper Arm Carrier (I) (unlabeled)
- ✓ Lower Arm Carrier (J)
- ✓ Arm Carrier Lower Extensions (2)
- √ 4-1/8"Short Dowels (8)
- ✓ 13-7/8" Long Dowels (4)
- ✓ 1/2" Bolts (4)
- ✓ 1/2" Nuts(4)
- ✓ 1/2" Washers(8)
- ✓ 1/4-20 Bolts 1" long (24)
- ✓ 1/4-20 Bolts 1 1/2" long(10)
- ✓ 1/4-20 Nuts (10)

Tools & Materials Required

In addition to the materials provided above, you will need the following tools in order to successfully assemble your frame.

- ✓ Screwdriver (Phillips)
- ✓ Rubber Mallet
- ✓ Drill with ½" Countersink bit
- ✓ ½" wrench (2)
- ✓ Wood Glue

Top Ring and Side Plate Assembly

Verify the contents of your frame kit before assembly.

Remove the Top Ring, marked(A), two Side Plates (D). and the four long dowel rods.



If desired, lightly sand these pieces to remove any sharp edges left over from the CNC machining process.

Using your rubber mallet, lightly tap the dowel rods into the four locations.





The dowel rods should fit very snugly into the receiving holes.

Flip part 'A' upside down at this time. Use your $\frac{1}{2}$ " countersink bit to add countersinks to these four locations. Blow any dust out of the threads.

Take four $\frac{1}{4}$ " – 1 inch screws from your hardware burrito and screw the dowel rods into the receiver snugly. You don't need to tighten these down like Hercules.



Flip your frame over once again.

STOP!

Make sure that the letter A is facing you just like in the next picture. Take one of your side plates (D) and insert it in the left slot.



Look at the above picture!! This is wrong!! You need to make sure the 'D' letter is facing the left and not the right!!

Insert the second side plate into the other receiver holes. Make sure the 'D' is facing left.



Flip your frame over once more.

You will need 4 of the 1/4" nuts for the next step.

Take the ¼" nuts and insert them into the nut slots in the top of the side plates.



Once you've identified the four locations the nuts go, now is a good time to use your drill and countersink. Countersink all four of these holes.

Grab four $\frac{1}{4}$ " x 1- $\frac{1}{2}$ " screws from the hardware burrito. Screw these into the top plate. The screw should just reach the nut. Once again, don't be crazy, just screw these in firmly.

You frame should look similar to this now.

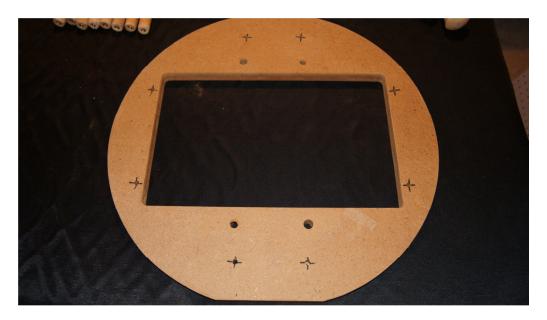


Lower Ring Pre Assembly

You will need the following for this section:

- ✓ Lower Ring (C)
- ✓ Short Dowels
- ✓ 1/4"-20 Bolts 1" long

Take Lower Ring 'C' and turn it face down on your work surface. Using the drill and countersink, countersink the holes as marked below:



You should end up with it looking like this:



Once again, flip Lower Ring 'C' over.

Just like the previous steps, lightly tap the small dowels into the receiver holes.



After much joyful tapping, Lower Ring 'C' should look like this:



Once more flip over Lower Ring 'C' and screw in the eight 1/4" -1" screws.



Flip Lower Ring (C) back over. It's very important at this point to mark the front side of the part. I used a sharpie. Make sure that the letter 'C' is on the left side and mark as below:



It's really important to not skip this step. You won't notice that this is a problem until you attempt to install the detail pieces with your skins on.

Middle Ring Assembly

You will need the following for this section:

- ✓ Middle Ring (B)
- ✓ Top Ring (A) assembly
- ✓ Drill with countersink bit

Take Middle Ring (B) and mark and countersink the following holes.



Turn the Middle Ring (B) over and mark and countersink the appropriate holes as shown. The Letter 'B' should be facedown and at the top:



Now get the Top Ring (A) assembly and the Middle Ring (B) and align them as show. The cutout on the Top Ring assembly should face you and the letter 'B' should be to the top.



Carefully align the side plates and long dowels into the receiving holes. Take your time on this step.

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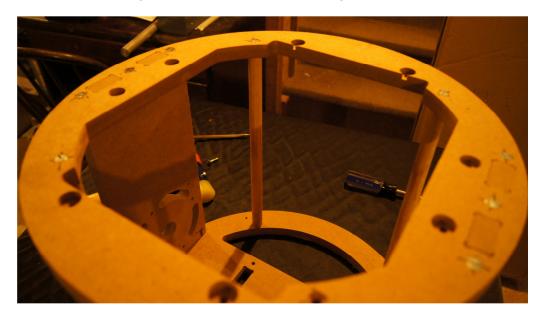


The side plates should fit in first then the dowels. Once you have everything aligned and the dowels slightly inset into the receiver holes, flip the entire assembly over and tap everything into place using the rubber mallet.



Continue to lightly tap the Middle Ring (B) until it is fully seated. Use light taps and work your way around the circumference several times.

Use four ¼"X 1-½"screws and four ¼" nuts and secure the side plates. Now use four ¼" X 1" screws and secure the long dowel rods to the Middle Ring (B).



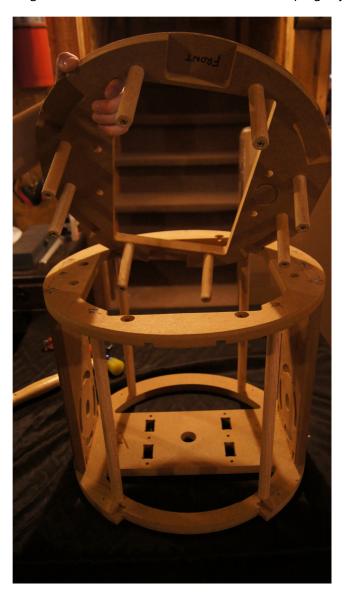
Upper and Lower Assembly

You will need the following for this section:

- ✓ Lower Ring Assembly
- ✓ Upper Ring Assembly

Take the Upper Ring Assembly and place it face down with the LDP cutout facing you. Now take the Lower Ring Assembly and find the are you marked as front. Make sure the front is closest to you as well.

Align the short dowel rods into the holes tap lightly to seat.



Turn the entire assembly over and tap the assembly to seat it fully. Use the ¼" X 1" screws and secure the ring assembly together. Double check your alignment of everything at this point.



The LDP cutout, the arm carrier notches, and the slot you marked as front should all be aligned.

Congratulations! You're almost there. You're frame should look like this now:



Arm Carrier Assembly

You will need the following parts for this section:

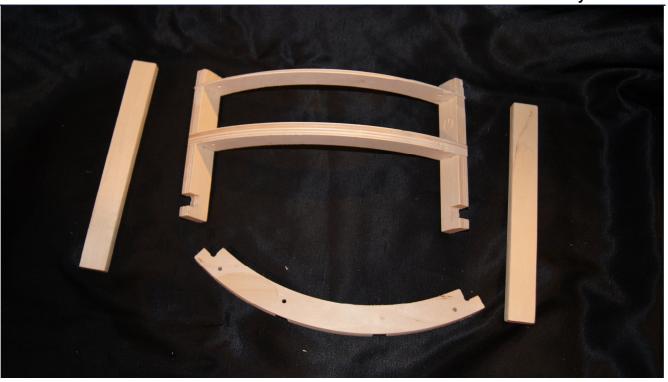
- ✓ Arm Carrier Sides (G)
- ✓ Middle Arm Carrier (H)
- ✓ Upper Arm Carrier (I) (unlabeled)
- ✓ Lower Arm Carrier (J)
- ✓ Arm Carrier Lower Extensions (2)

I recommend doing a dry fit of these parts first prior to gluing these together.

Take Upper Arm Carrier (I) which is unlabeled but has the low cut pocket along the face and insert carefully into the top slot cuts of the Arm Carrier Sides (G).



Insert Middle Arm Carrier (H) into the middle notches of the Arm Carrier Sides (G).



Now insert the Lower Arm Carrier (J) into the lower notches of the Arm Carrier Sides (G).



Now insert the Lower Arm Carrier Extensions into the two notches of Lower Arm Carrier (J). You want to pay particular attention and make sure that the fronts of the extensions do not extend past the curvature of the lower arm carrier. You need to do this so your skins will sit flush with the frame.

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Once you're comfortable with how everything fits together. Carefully take this apart and apply suitable wood glue to each piece and reassemble. The lower arm carrier also has pilot holes drilled if you want to use a small wood screw as well. (I recommend it).

To do so, pre-drill an additional pilot hole in the Lower Arm Carrier Extensions to ensure you don't crack the wood. In the next picture you can see how I just used wood screws to attach the assembly together.

Once you're glue has dried, insert the Arm Carrier Assembly into the Frame assembly. On the top ring, there are two holes aligned with the edge of the Arm Carrier Assembly, drill two pilot holes here. Then make a small countersink and attach the Arm Carrier Assembly to the frame with two wood screws. I recommend doing the same with the two Lower Arm Carrier Extensions to the Middle Ring Assembly.

Congratulations! You've finished you're frame!



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