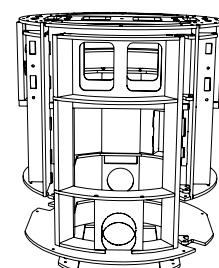
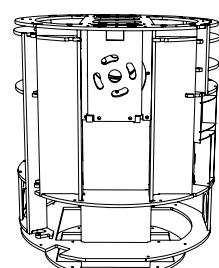
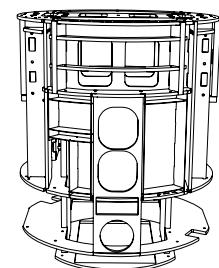
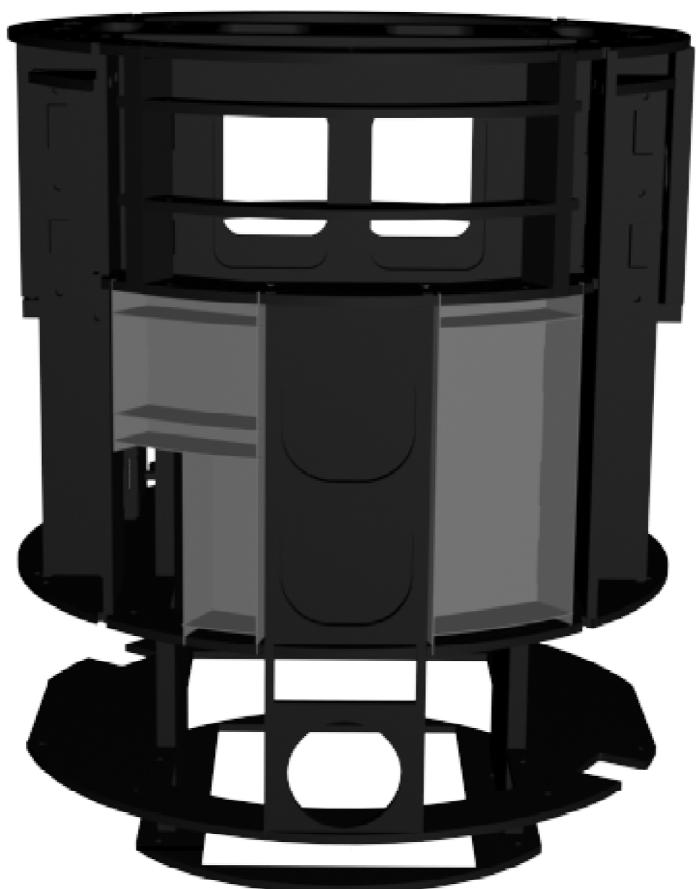


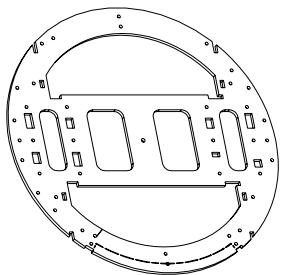
A&A Frame

Assembly Guide

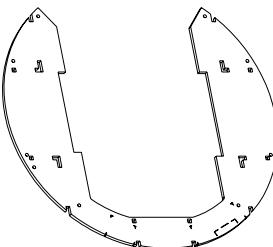


By Shane Kirk
Last Revised: 08-08-2006

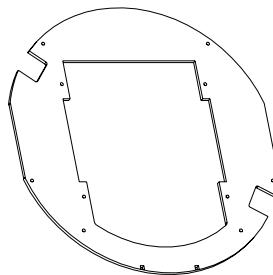
Parts Listing



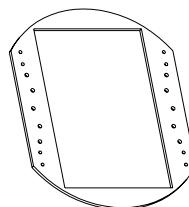
TOP RING



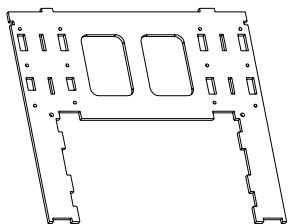
C RING



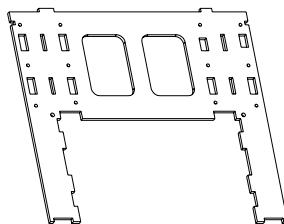
BOTTOM RING



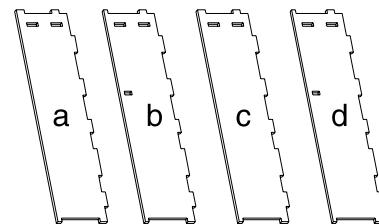
SKIRT RING



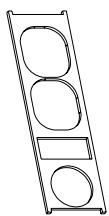
FRONT LEG SUPPORT
PLATE



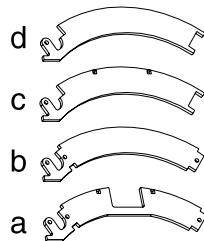
REAR LEG SUPPORT
PLATE



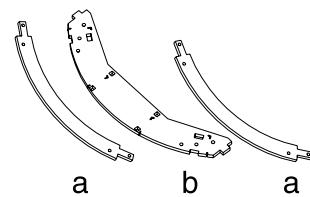
BOX SIDE WALL -
(A, C) REAR, (B, D) FRONT



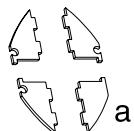
VENT BRACKET FRONT



BACK DOOR HORIZONTAL
ELEMENTS



ARM CARRIER HORIZONTAL
ELEMENTS

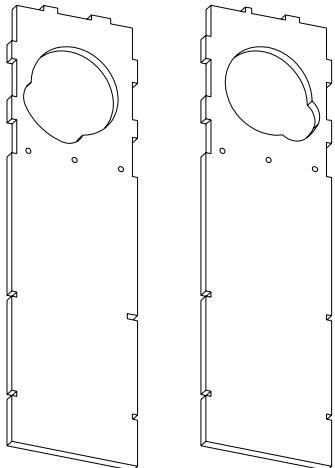


BOX SIDE WALL TOP
- A IS FRONT-RIGHT

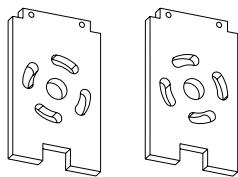


BACK POWER
COUPLING BRACKET

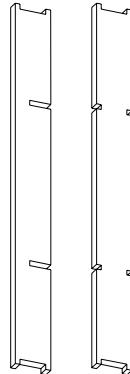
Parts Listing Continued



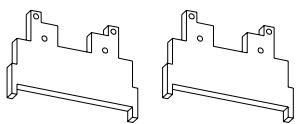
MID PLATES



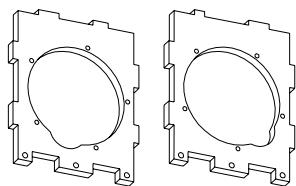
ARIA JAG STOPS



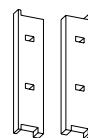
BACK DOOR
VERTICAL ELEMENTS



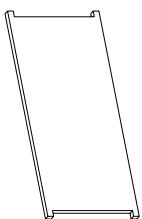
MID 2 PLATE



SHOULDER PLATES



ARM CARRIER VERTICAL
ELEMENTS

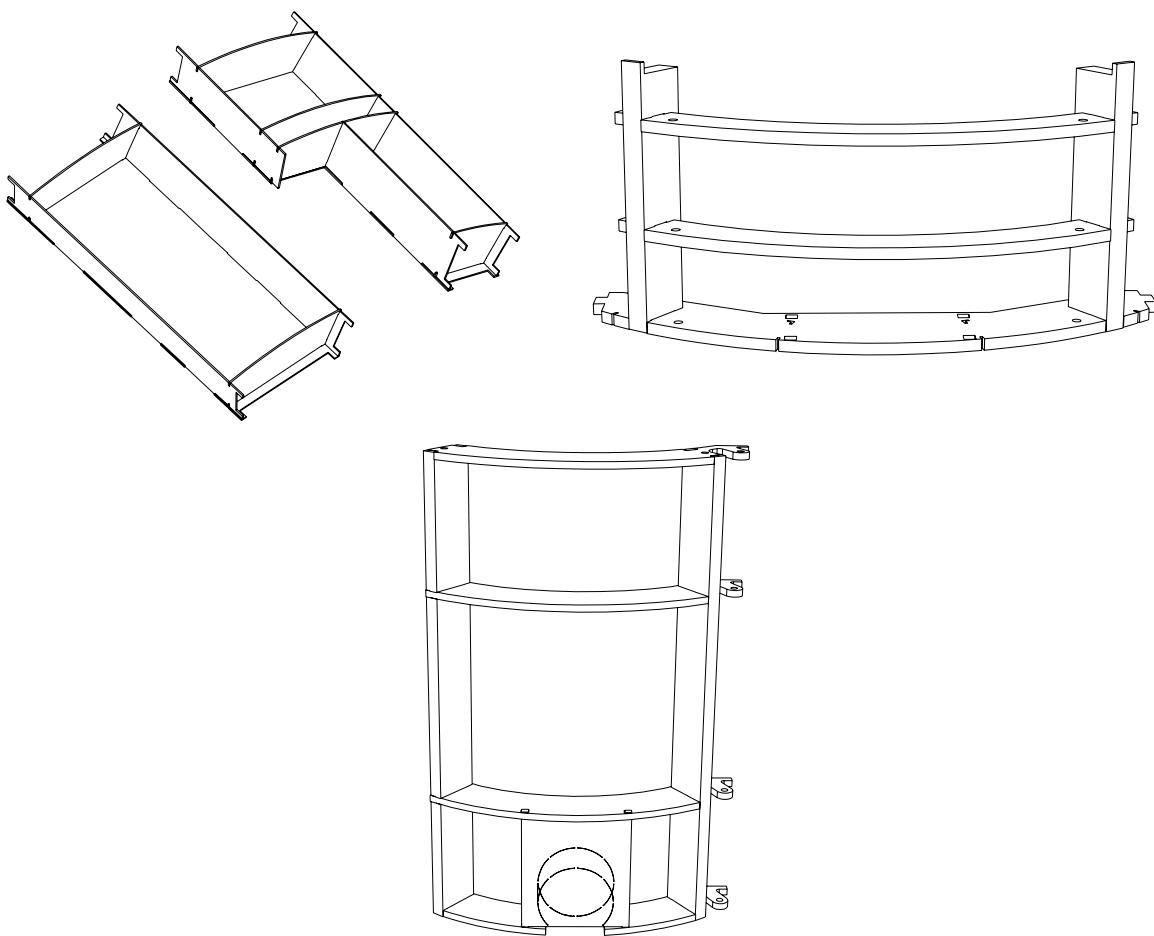


SPEAKER HOLDER

ADDITIONAL HARDWARE YOU WILL NEED:

7 OR 8 - 1/4" - 20 THREADED RODS 24" LONG
A BOX OF 1/4" NUTS
A BAG OF 1/4" LOCK WASHERS
A BOX OF #10
24 - 1/4" COUPLERS
2 - 1/4", 2 1/2" LONG MACHINE BOLTS
4 - 1/4", 2" LONG MACHINE BOLTS
20 - 1/4", 1" LONG MACHINE BOLTS
4 - #10 1 1/2" WOOD SCREWS (FRAME NEAR
SHOULDER MOTORS TO KEEP THEM FROM
BUSTING THROUGH TO THE MOTOR)
A BOX OF #10 1 1/2" WOOD SCREWS
A BOX OF #10 1" WOOD SCREWS

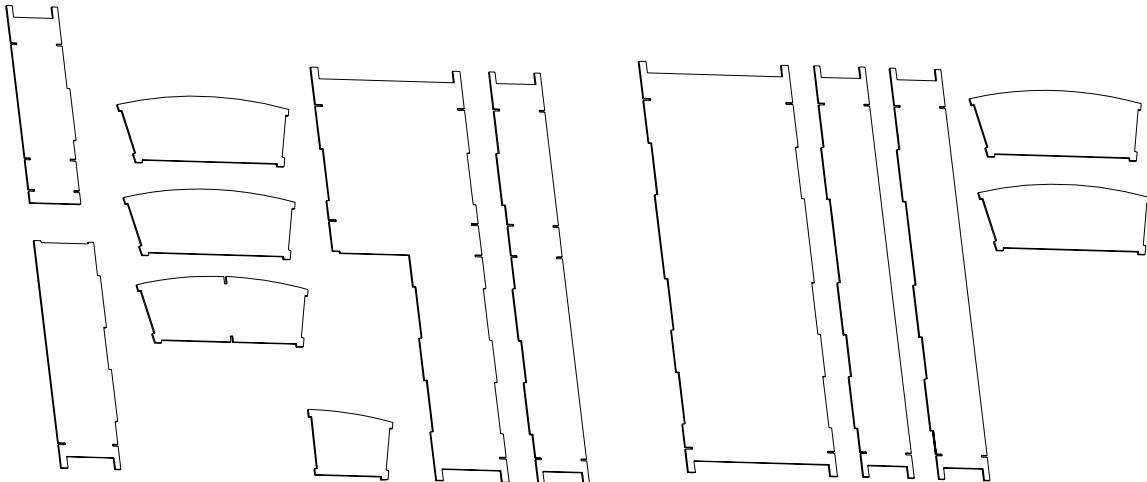
BEFORE WE START PUTTING THE MAIN PART OF THE AEIA FRAME TOGETHER, THERE ARE A FEW PARTS THAT WE SHOULD ASSEMBLE RIGHT OFF THE BAT. THESE PARTS ARE THE STYRENE BOXES, THE ARM CARRIER, AND THE BACK DOOR, AS SHOW BELOW.



ONCE WE HAVE THESE THREE COMPONENTS ASSEMBLED, WE CAN FOCUS ON ASSEMBLING THE REST OF THE FRAME.

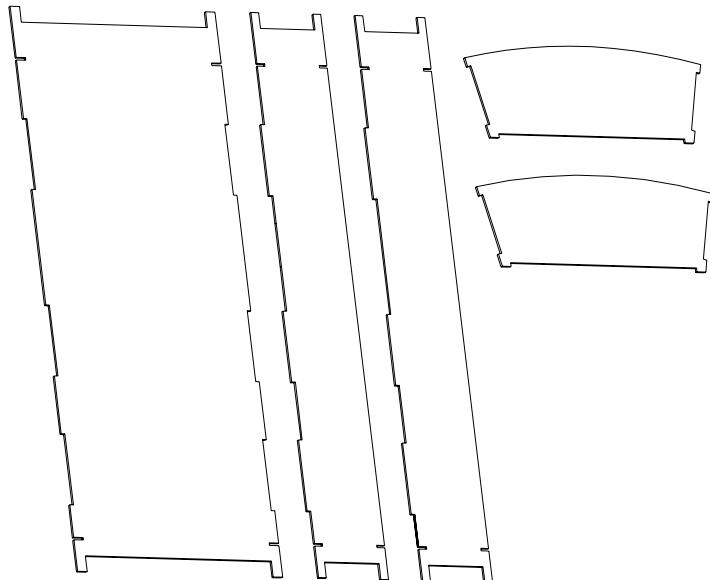
WE ARE NOW GOING TO CONSTRUCT THE STYRENE BOXES. THESE BOXES WILL BE MOUNTED ONTO THE FRONT OF THE FRAME AND SERVE AS STORAGE COMPARTMENTS.

YOU SHOULD HAVE THE FOLLOWING STYRENE PIECES:



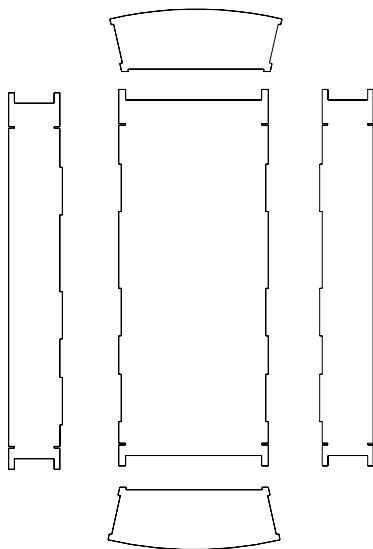
Step 1

WE'LL START WITH THE RIGHT SIDE COMPARTMENT. FOR THIS ASSEMBLY, YOU'LL NEED THE FOLLOWING PIECES.



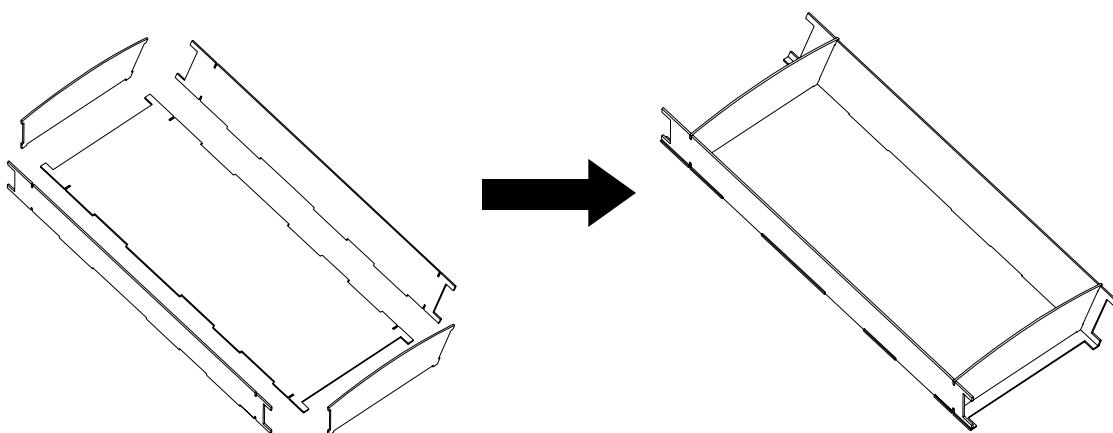
Step 2

HERE ARE THE PIECES LAID OUT READY TO BE ASSEMBLED.



Step 3

THE PIECES SHOULD BE ASSEMBLED AND GLUED LIKE SO...



SINCE THE INSIDES OF THIS COMPARTMENT WILL BE SEEN, MAKE SURE THE SURFACE IS CLEAN AND THE CORNERS AND EDGES ARE GLUED TIGHTLY AND APPEAR CLOSED.

Step 4

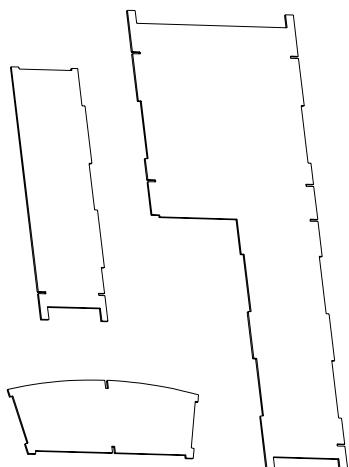
NEXT COMES THE ASSEMBLY OF THE LEFT SIDE COMPARTMENT. FOR THIS, YOU'LL NEED THE FOLLOWING PIECES...



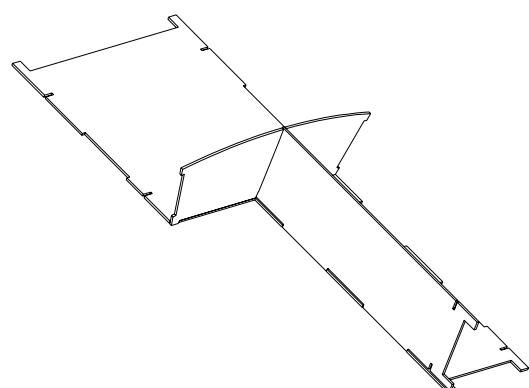
Step 5

WE'LL START WITH THE INSIDE PIECES...

YOU'LL NEED...



THE PIECES SHOULD BE GLUED LIKE SO...



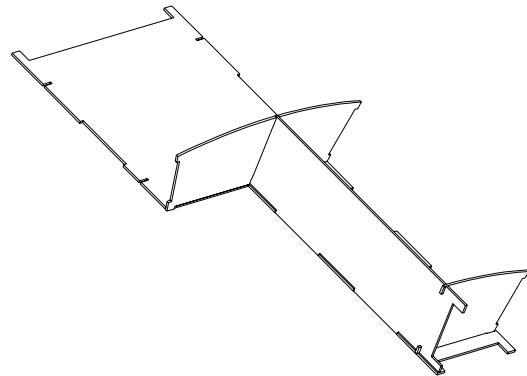
Step 6

NEXT COMES THE BOTTOM PIECE...

YOU'LL NEED...



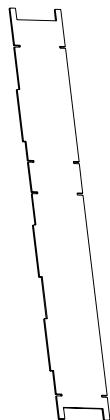
THE PIECES SHOULD BE GLUED LIKE SO...



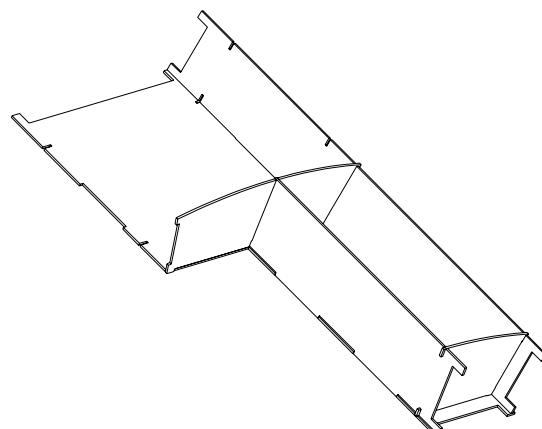
Step 7

NOW WE'LL DO THE RIGHT SIDE OF THE COMPARTMENT...

YOU'LL NEED...



THE PIECES SHOULD BE GLUED LIKE SO...

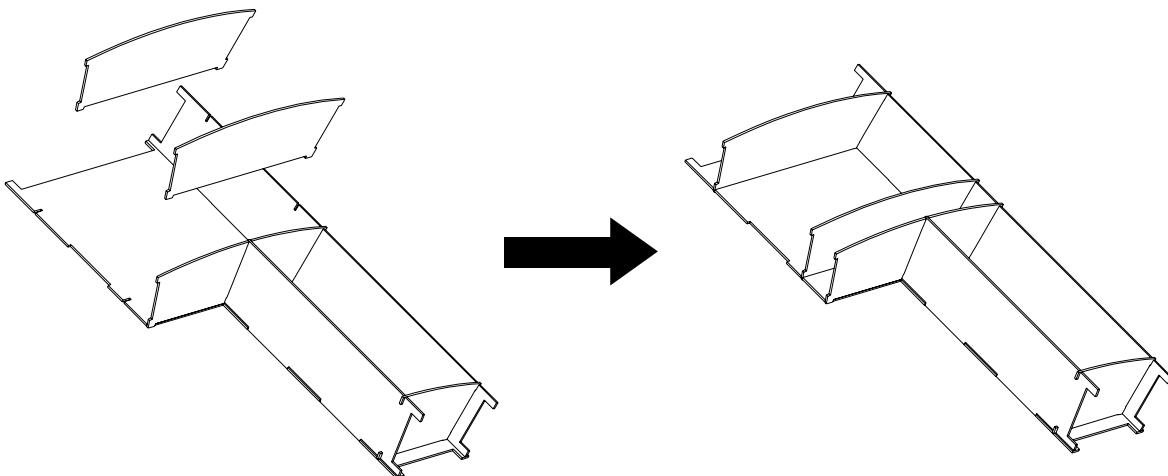
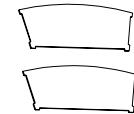


Step 8

NOW WE DO THE TOP AND MIDDLE PIECES...

THE PIECES SHOULD BE GLUED LIKE SO...

YOU'LL NEED...

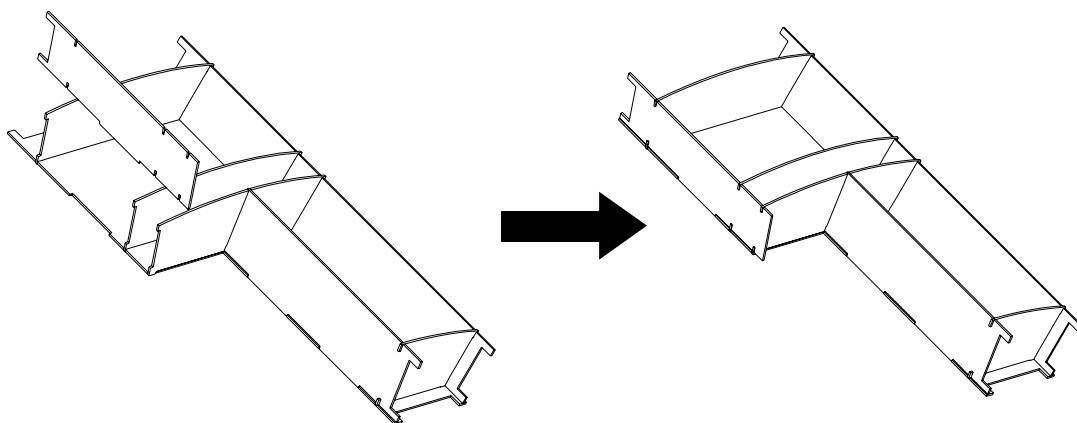


Step 9

AND FINALLY THE LEFT SIDE PIECE...

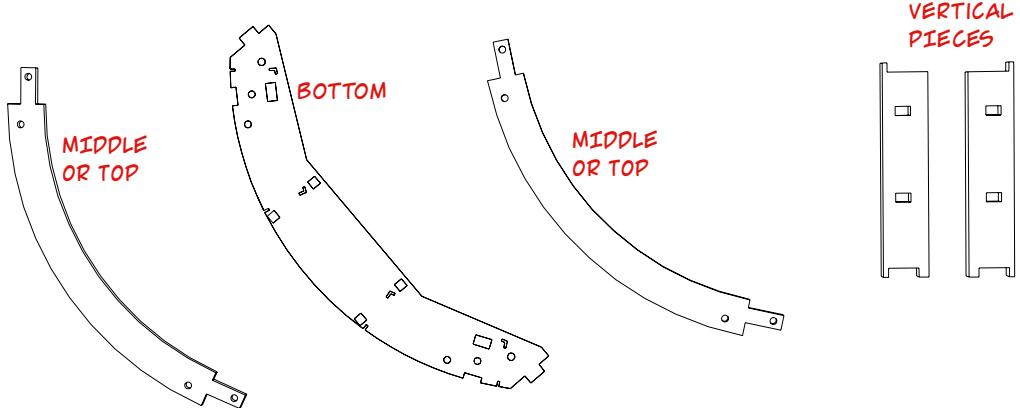
THE PIECES SHOULD BE GLUED LIKE SO...

YOU'LL NEED...



NEXT UP IS THE ARM CARRIER. THIS COMPONENT IS RESPONSIBLE FOR SUPPORTING THE UTILITY ARMS.

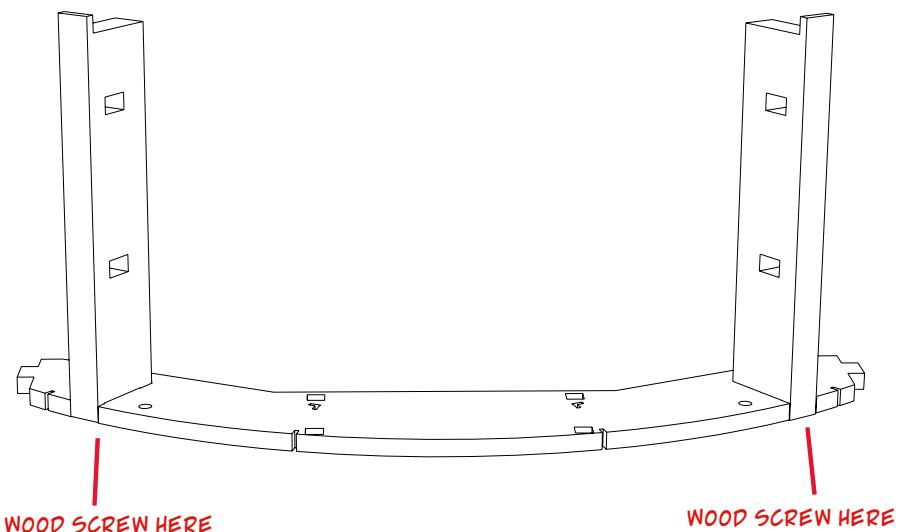
YOU SHOULD HAVE THE FOLLOWING PVC PIECES:



THE TWO SHORT STRAIGHT PIECES ARE THE ARM CARRIER'S VERTICAL SUPPORTS. THE THREE CURVED PIECES ARE THE HORIZONTAL SUPPORTS.

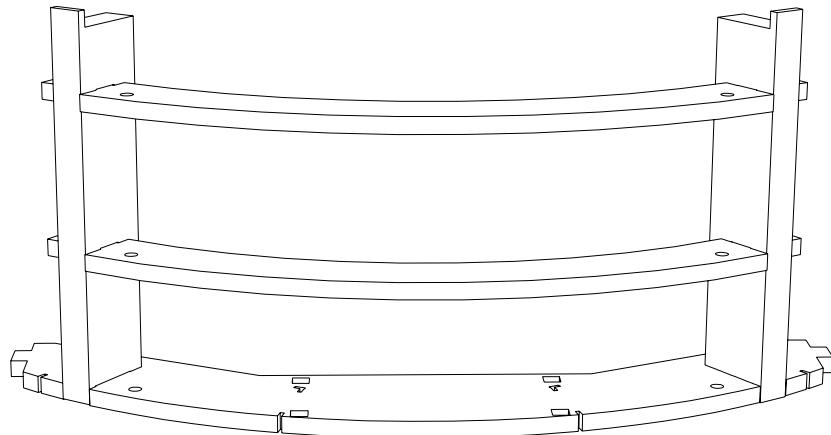
Step 1

WE'LL START WITH THE BOTTOM HORIZONTAL PIECE AND WORK OUR WAY UP. THE PIECES SHOULD BE ORIENTED AS SHOW BELOW. IT'S ADVISED THAT YOU GLUE THESE PIECES TOGETHER.



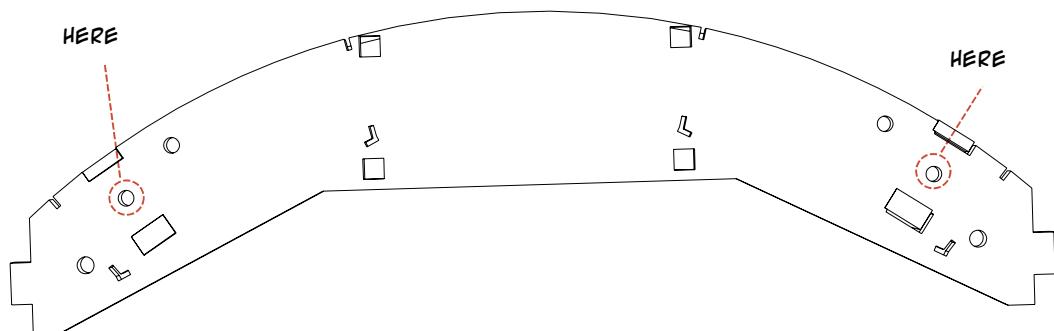
Step 2

NEXT ARE THE MIDDLE AND TOP PIECES. THESE SHOULD ALSO BE GLUED.



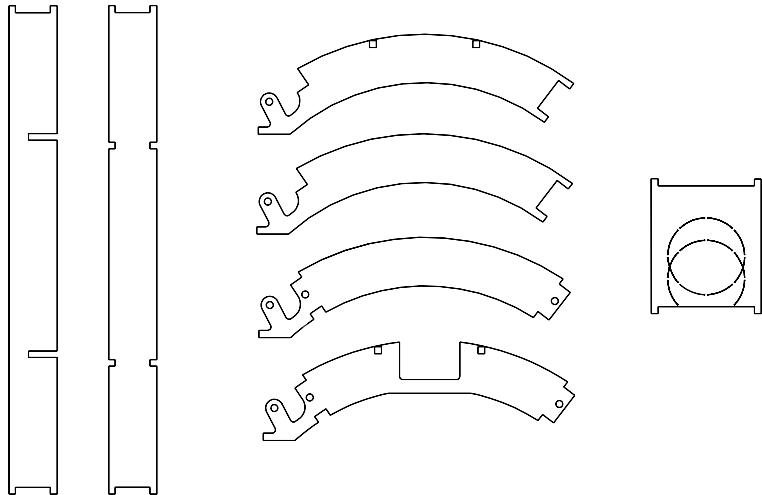
Step 3

WOOD SCREWS SHOULD BE USED ON THE BOTTOM OF THE CARRIER TO SCREW THE VERTICAL SUPPORTS TO THE BOTTOM HORIZONTAL SUPPORT.



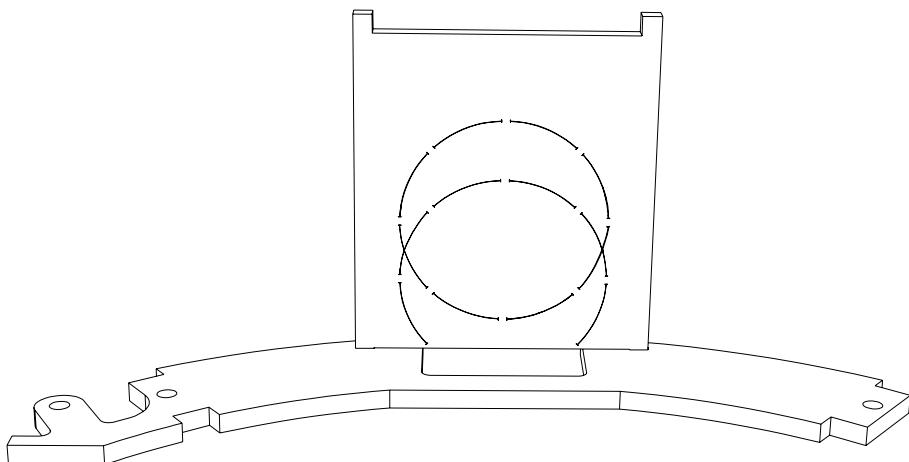
THE BACK DOOR IS NEXT ON OUR LIST TO ASSEMBLE. THE BACK DOOR IS AN OPTIONAL COMPONENT. IF YOU DON'T PLAN ON CUTTING THE SKINS IN SUCH A WAY TO PERMIT INTERNAL ACCESS FROM THE BACK SKIN, DON'T WORRY ABOUT IT. IF, HOWEVER, YOU DO DECIDE TO GO DOWN THAT ROAD, CONTINUE ON...

YOU SHOULD HAVE THE FOLLOWING STYRENE PIECES:



Step 1

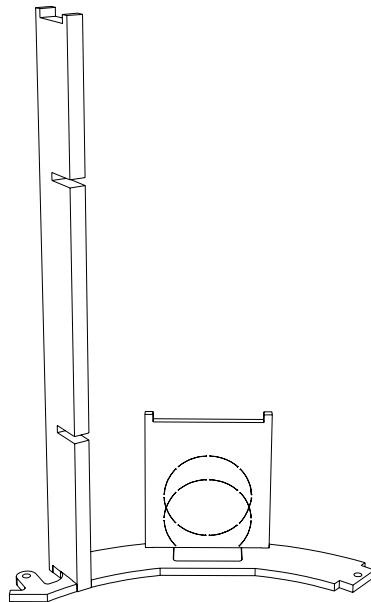
WE'LL START WITH THE BOTTOM OF THE DOOR. THE BOTTOM PIECE SHOULD BE ORIENTED SO THAT THE DOOR HINGES IN THE DIRECTION OF YOUR CHOOSING. IT'S A PERSONAL PREFERENCE. THE POWER COUPLING HOLDER SHOULD THEN BE INSERTED AND GLUED LIKE SO...



NOTE THAT THIS VIEW IS FROM THE INSIDE OF THE DOOR LOOKING OUT.
THE LOWER POWER COUPLING CUTOUT IS FOR AN R2 UNIT. THE UPPER CUTOUT
IS FOR AN R7.

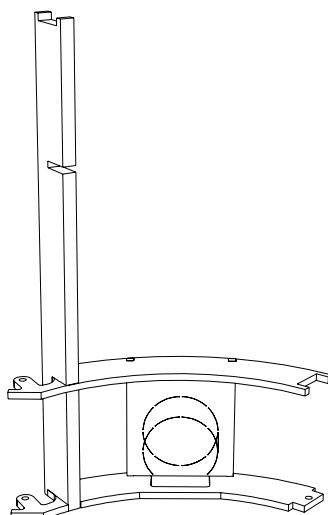
Step 2

NEXT COMES ONE OF THE SIDE PIECES. NOTE THE ORIENTATION OF THE SIDE PIECE RELATIVE TO THE BOTTOM PIECE.



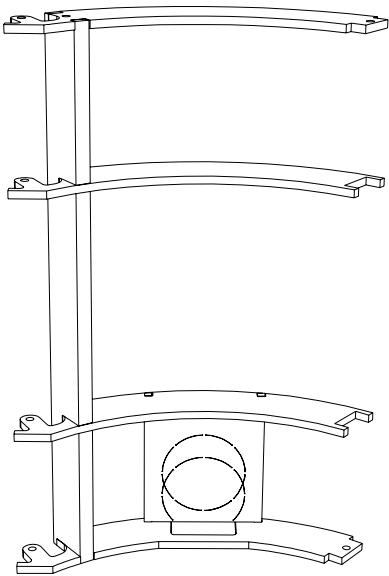
Step 3

WE NOW ADD ANOTHER HORIZONTAL PIECE. THE PIECE HAS SLOTS CUT OUT FOR THE POWER COUPLER HOLDER. IF THE HORIZONTAL PIECE DOESN'T LINE UP WITH THE HOLDER AFTER INSERTING IT INTO THE VERTICAL SUPPORT, YOUR VERTICAL SUPPORT IS UPSIDE DOWN.



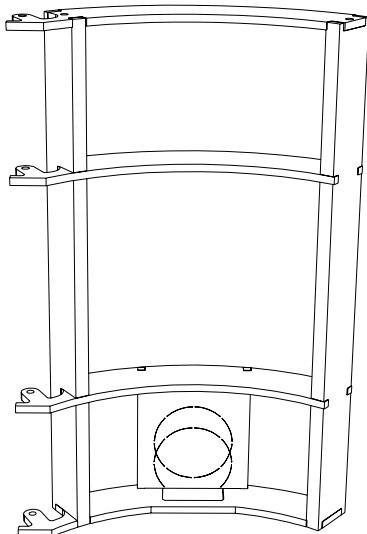
Step 4

WE NOW ADD THE LAST TWO HORIZONTAL PIECES. NOTE THE ENDS OF THE PIECES TO DETERMINE WHICH PIECE GOES ON TOP.



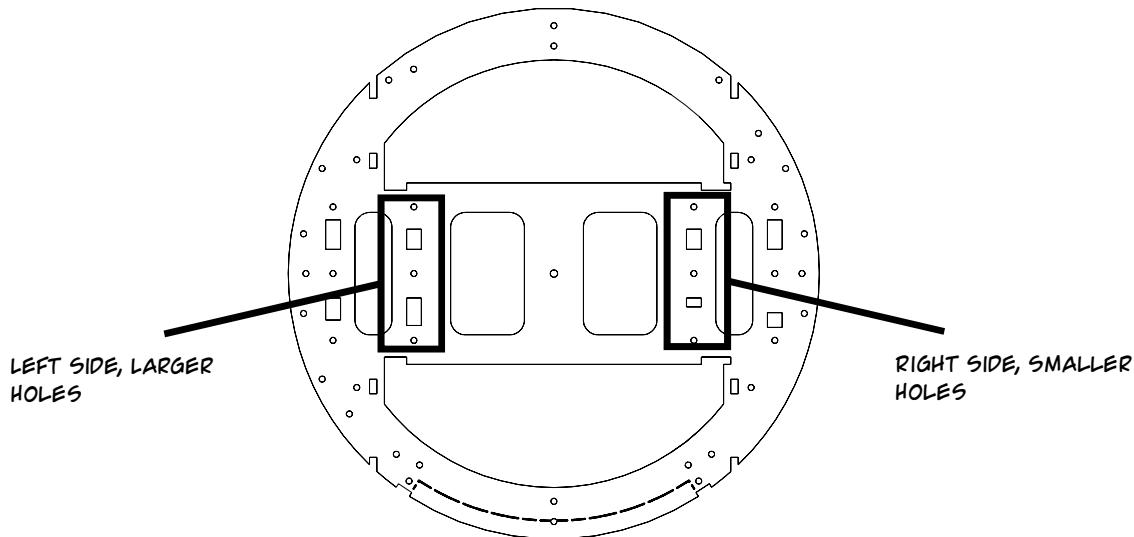
Step 5

AND NOW THE FINAL SIDE PIECE. NOW IT'S TIME TO GLUE AND SCREW. USE 4 WOOD SCREWS (TWO IN THE TOP, TWO ON BOTTOM) TO SCREW THE VERTICAL SUPPORTS TO THE TOP AND BOTTOM HORIZONTAL SUPPORTS.

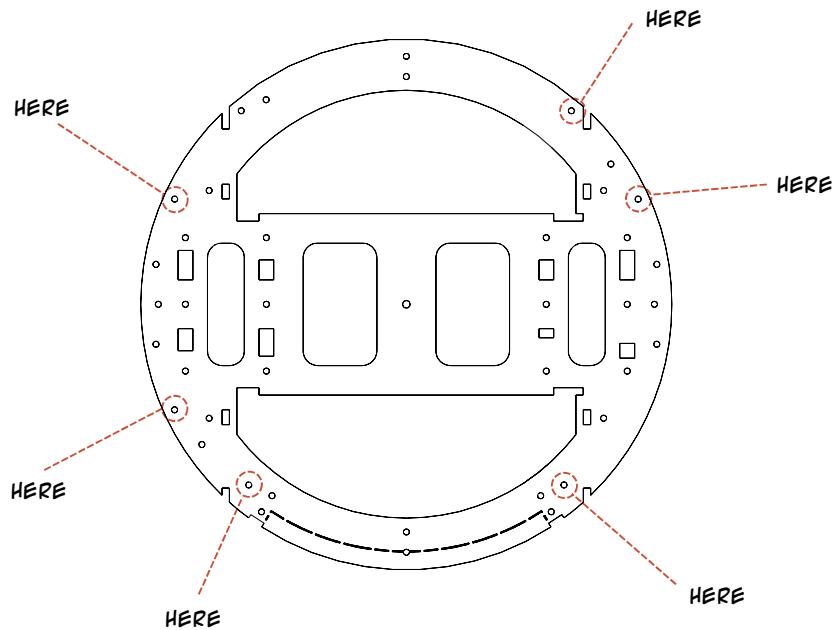


Step 1

THE FIRST STEP IN CONSTRUCTING THE AEIA FRAME IS COUNTERSINKING THE HOLES IN THE TOP RING TO MATCH THE MACHINE SCREWS. COUNTERSINKING IS NEEDED IF YOU PLAN TO USE A ROCKLER(LEE VALLEY) TYPE BEARING FOR DOME ROTATION. NOTE THE ORIENTATION OF THE RING IN THIS PICTURE. YOU CAN IDENTIFY WHICH SIDE SHOULD BE UP FROM THE ORIENTATION OF THE HOLES IN THIS PICTURE.

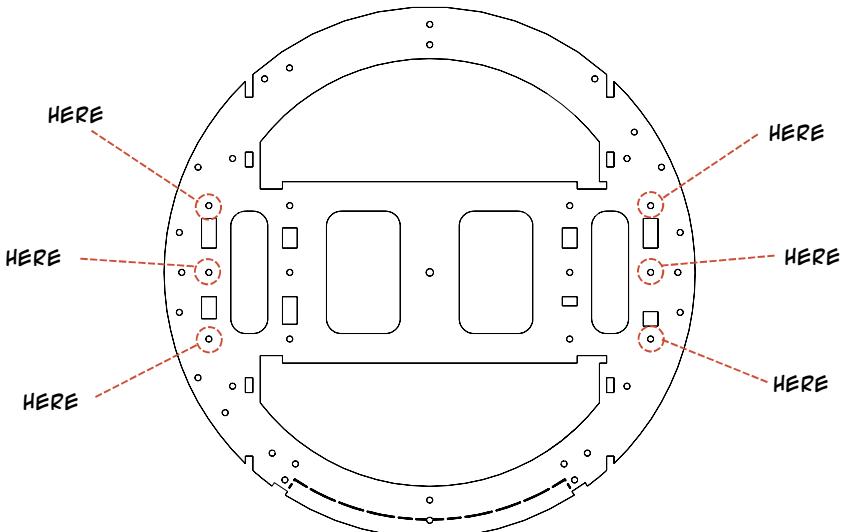


THE HOLES MARKED BELOW WILL BE WHERE THE MACHINES SCREWS WILL BE INSERTED FOR THE 1/4" THREADED RODS. THESE HOLES SHOULD BE COUNTERSUNK TO MATCH THE MACHINE SCREWS.



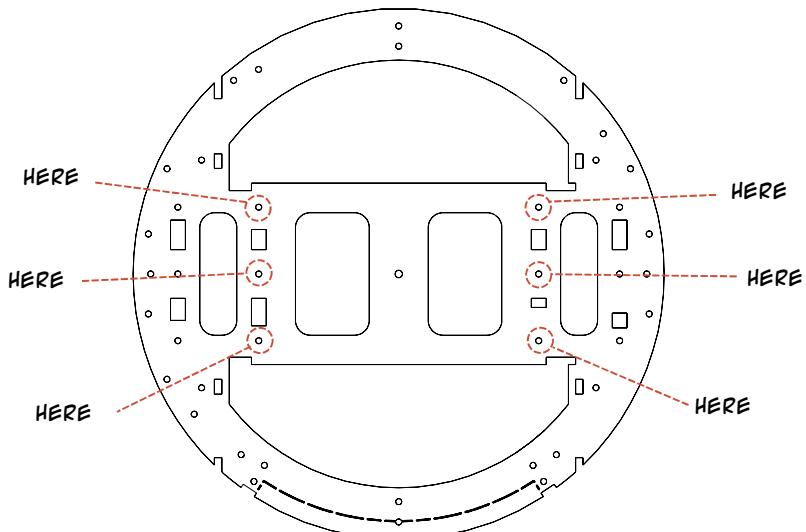
Step 2

THE NEXT STEP IS TO COUNTERSINK THE HOLES FOR THE SATELLITE MOTOR BRACKETS. YOU WILL BE USING WOOD SCREWS FOR THESE HOLES TO COUNTERSINK ACCORDINGLY. THE HOLES MARKED BELOW ARE THE ONES FOR THE SATELLITE MOTOR BRACKETS.



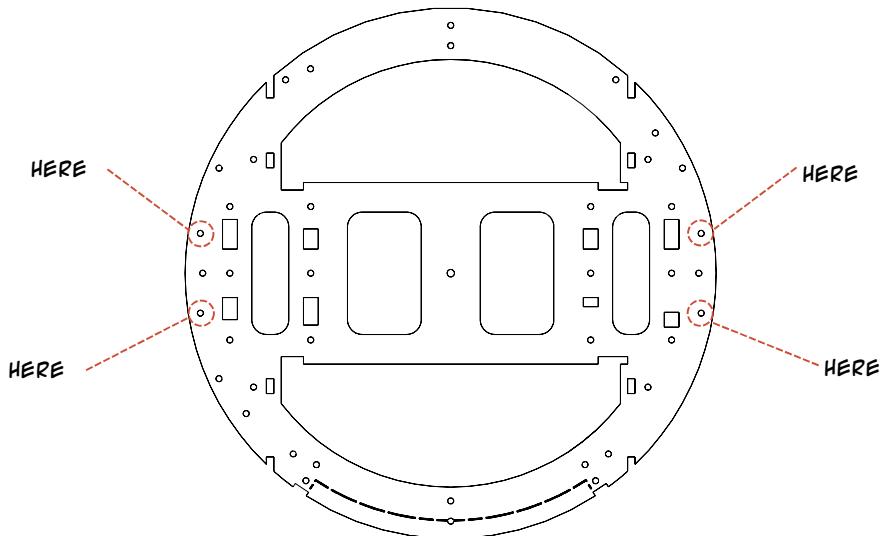
Step 3

NEXT COME THE HOLES FOR THE VERTICAL SUPPORTS.



Step 4

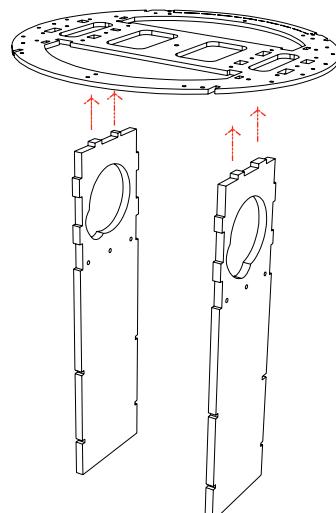
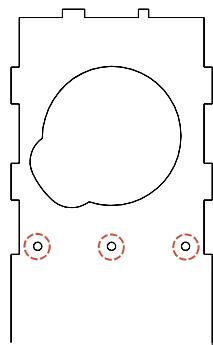
NEXT COME THE HOLES FOR THE JAG STOPS. THESE PIECES ARE A SAFETY FEATURE TO PREVENT THE SHOULDER ROTATION FROM GOING BEYOND WHAT IT SHOULD IN CASE OF A CONTROL FAILURE. THIS SHOULD NOT BE USED TO STOP THE ROTATION AS IT IS UNSURE HOW THE MATERIAL WILL STAND UP OVER TIME.



Step 5

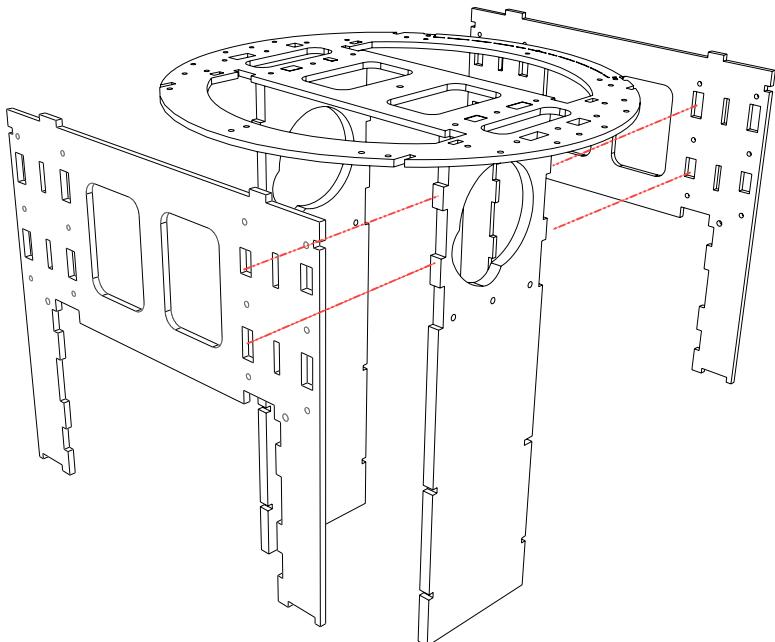
NEXT YOU NEED TO FIGURE OUT THE ORIENTATION OF THE FRONT AND REAR PLATES. SINCE THE PLATES ARE DESIGNED TO ONLY GO ON A CERTAIN WAY, YOU NEED TO ASSEMBLE A FEW PARTS TO DETERMINE THE ORIENTATION. START OUT WITH THE VERTICAL SUPPORTS.

NOTE THAT THE VERTICAL SUPPORTS HAVE HOLES ON THE INSIDE THAT NEED TO BE COUNTERSUNK. THE HOLES ARE MARKED BELOW. MAKE SURE YOU COUNTERSINK THE INSIDES OF THE SUPPORTS AND NOT THE OUTSIDE.



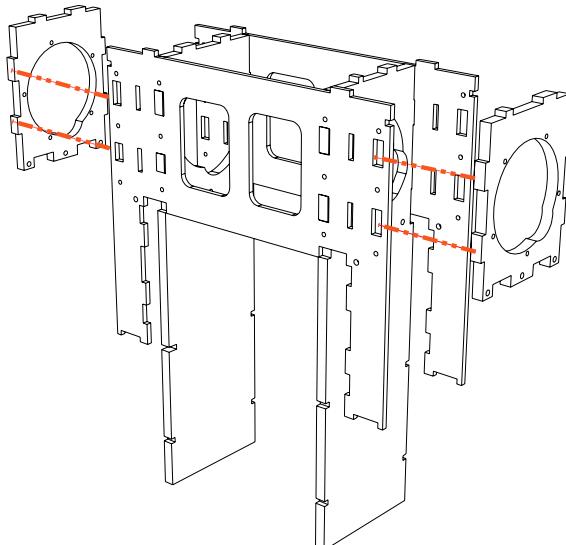
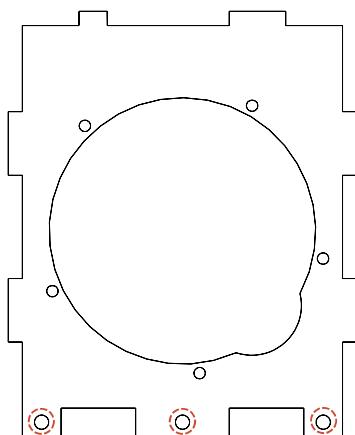
Step 6

NOW ATTACH THE PLATES. THEY'LL ONLY GO ON ONE WAY. ALL OF THE PIECES SHOULD FIT TOGETHER.



Step 7

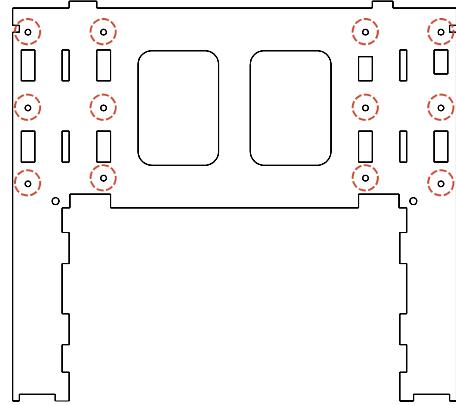
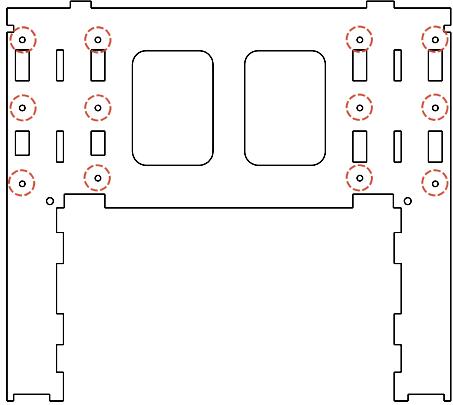
BEFORE ATTACHING THE MOTOR MOUNTS, YOU'LL WANT TO COUNTERSINK THE APPROPRIATE HOLES. THE HOLES ARE ON THE OUTSIDE OF EACH MOTOR MOUNT AND ARE MARKED BELOW. TEST FIT TO MAKE SURE THE SATELLITE MOTOR CAN BE INSTALLED TO MAKE SURE YOU GET THE CORRECT ORIENTATION BEFORE COUNTERSINKING.



WITH THE PLATES ATTACHED, REMOVE THE TOP RING AND INSTALL THE MOTOR MOUNTS. YOU'LL PROBABLY HAVE TO REMOVE EITHER THE FRONT OR BACK PLATE TO GET THE MOTOR MOUNTS INSTALLED.

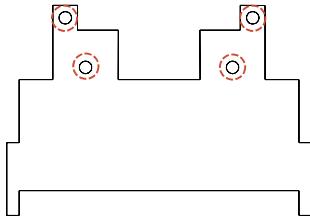
Step 8

THE NEXT STEP IS TO COUNTERSINK THE HOLES ON THE FRONT AND REAR PLATES. THE HOLES TO COUNTERSINK ARE MARKED BELOW. THE COUNTERSINKING SHOULD BE ON THE OUTSIDE OF THE PLATES.

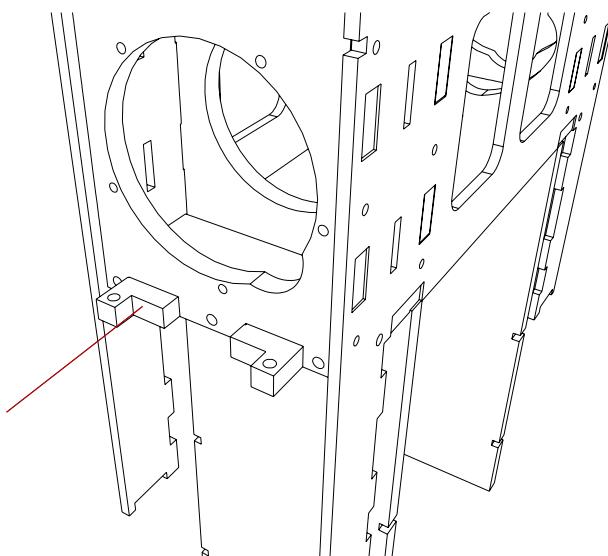


Step 9

NEXT YOU'LL NEED TO COUNTERSINK AND MOUNT THE MID PLATES. THE HOLES FOR COUNTERSINKING ARE MARKED BELOW. THE COUNTERSINKING SHOULD BE DONE ON THE UNDERSIDE OF THE MID PLATE. YOU CAN ALSO SEE HOW THE STOPS ARE MOUNTED ONTO THE FRAME.

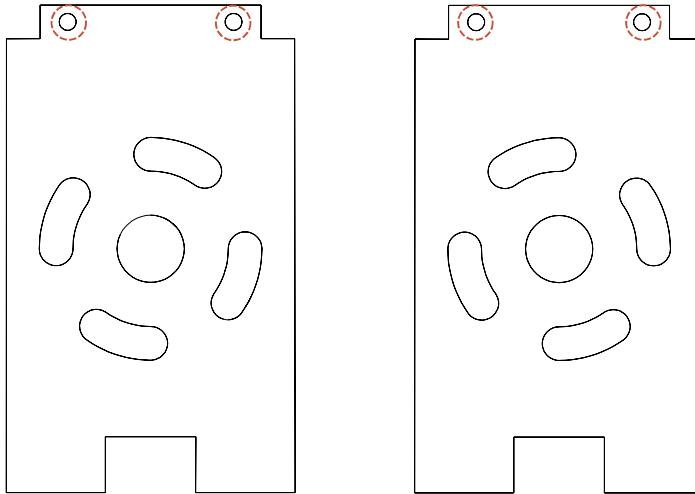


THE MID PLATES MOUNT HERE.
ONE ON EACH SIDE



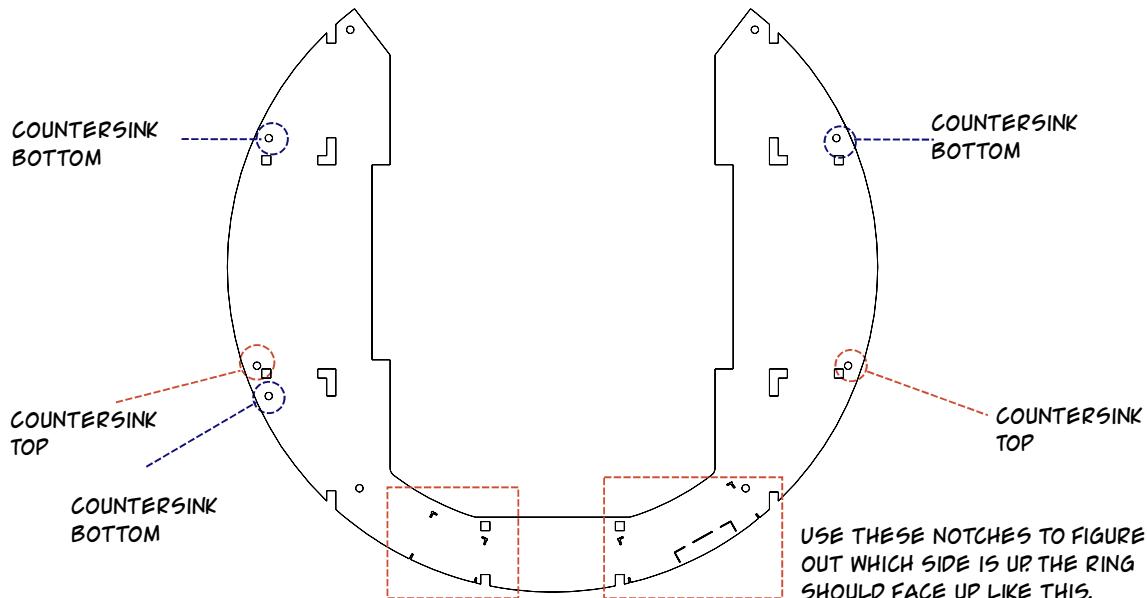
Step 10

NEXT COMES THE COUNTERSINKING OF THE JAG STOPS. THE HOLES FOR COUNTERSINKING ARE MARKED BELOW. THE COUNTERSINKING SHOULD BE DONE ON THE OUTSIDE OF THE JAG STOP. WE'LL WAIT TO MOUNT THEM.



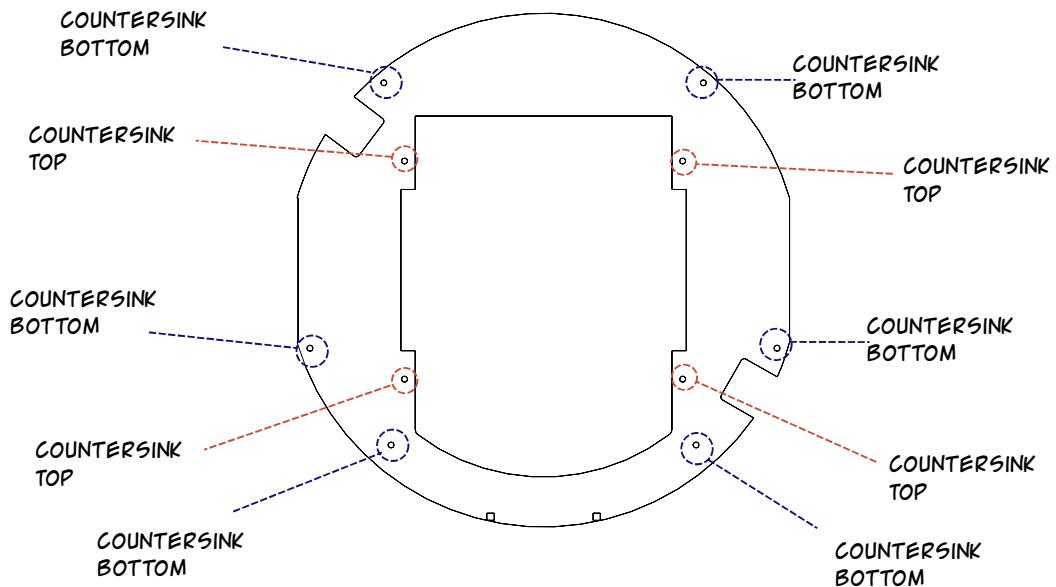
Step 11

THE NEXT STEP IS TO COUNTERSINK THE HOLES ON THE MIDDLE RING. YOU CAN IDENTIFY WHICH SIDE IS UP BY REFERRING TO THE NOTCHES FOR THE STYRENE BOXES BELOW.



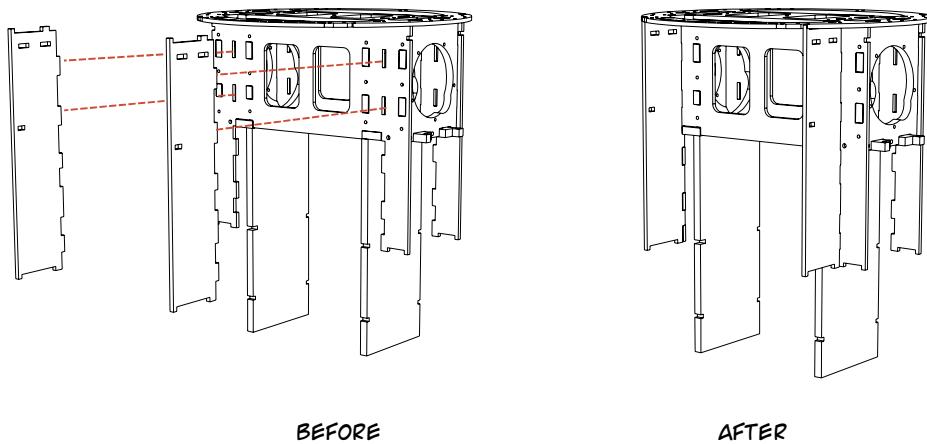
Step 12

NEXT COMES THE COUNTERSINKING OF THE BOTTOM RING. THE HOLES ARE MARKED BELOW. PAY SPECIAL ATTENTION TO THE ORIENTATION OF THE RING. IT'S SHOWN BELOW AS IF IT WERE FACING UP.



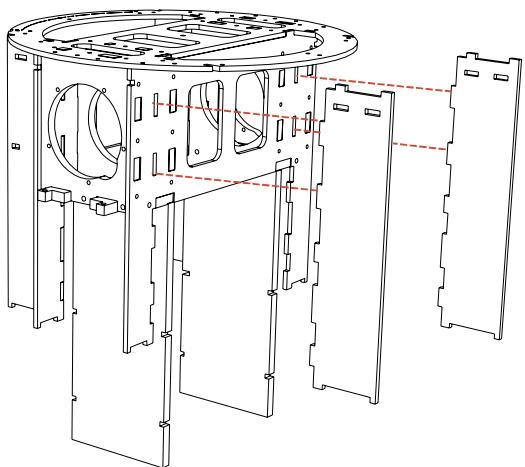
Step 13

NOW IT'S TIME TO ADD THE BOX SIDES. WE'LL START WITH THE FRONT PIECES. NOTICE THE SLOTS PART WAY DOWN ON THE FRONT PIECES. THESE ARE FOR THE ARM CARRIER.

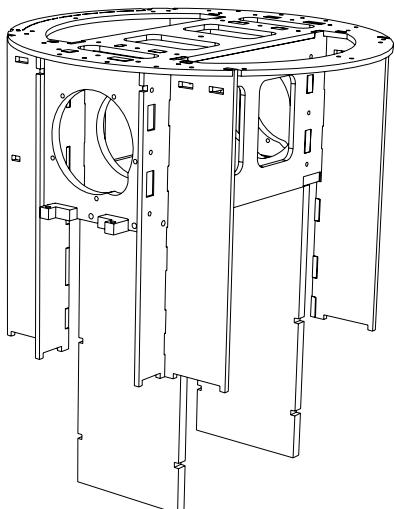


Step 14

NEXT COME THE REAR BOX SIDES.



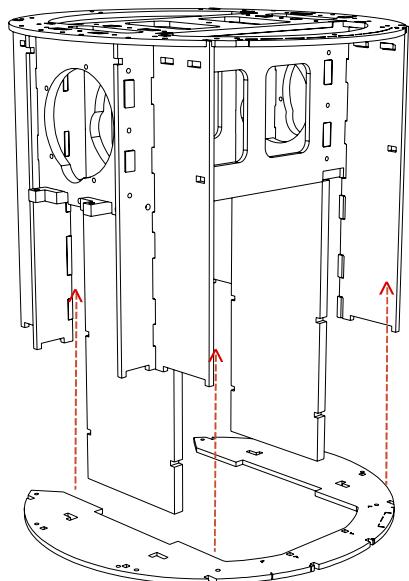
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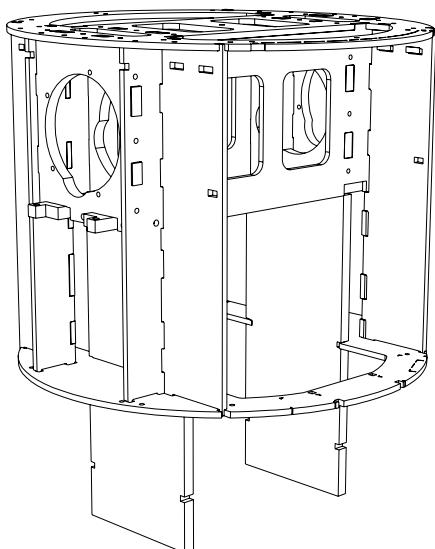
AFTER

Step 15

LET'S NOW INSTALL THE C RING.



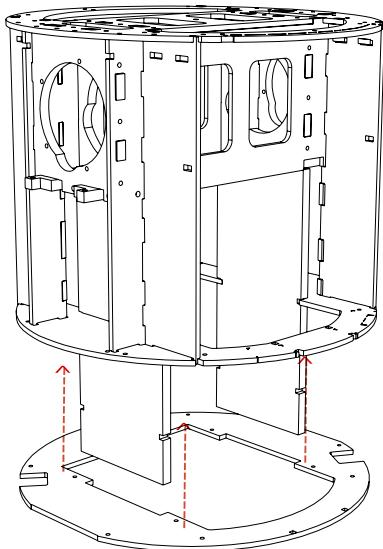
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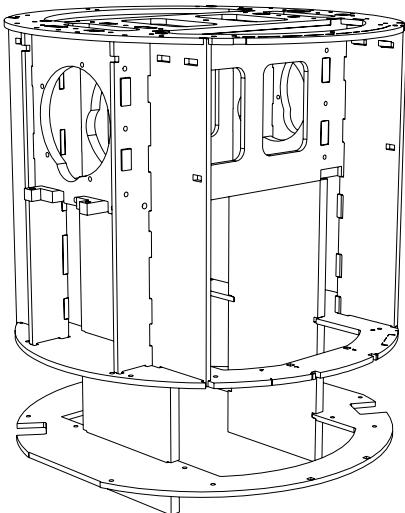
AFTER

Step 16

NOW WE ATTACH THE BOTTOM RING.



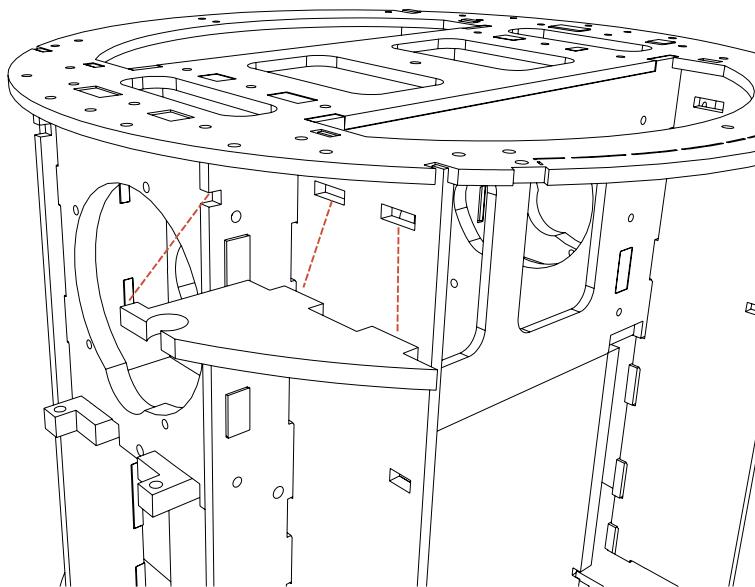
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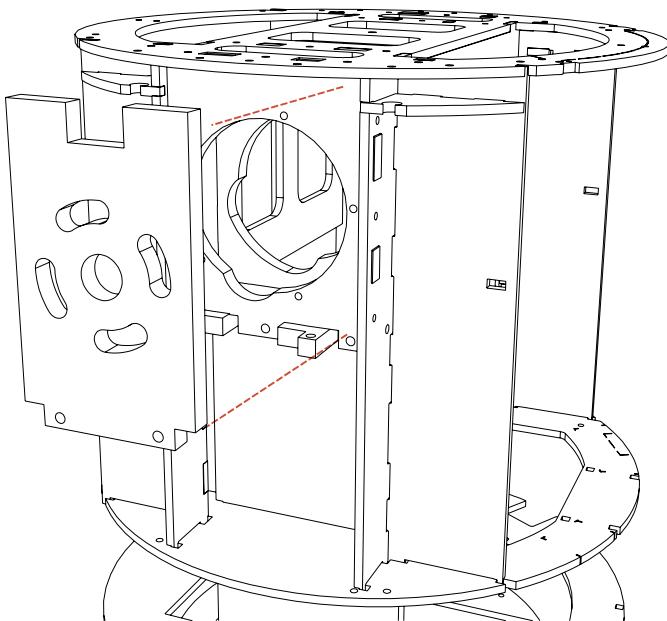
Step 17

NEXT WE INSTALL THE TOPS OF THE BOX SIDE WALLS. THERE ARE FOUR OF THESE, ONE FOR EACH SIDE. THREE OF THESE PIECES HAVE NOTCHES TO ALLOW THE THREADED ROD COUPLING TO PASS THROUGH.



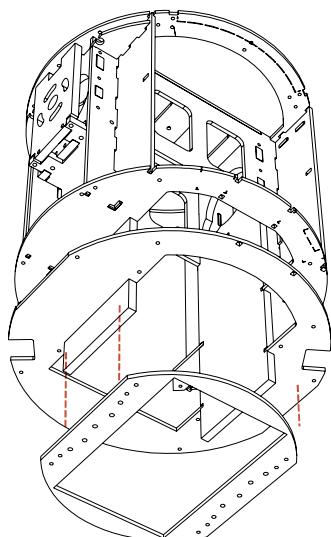
Step 18

NOW WE INSTALL THE JAG STOPS.

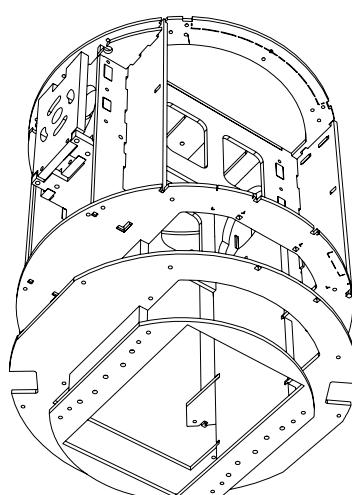


Step 19

NOW COMES THE SKIRT RING.



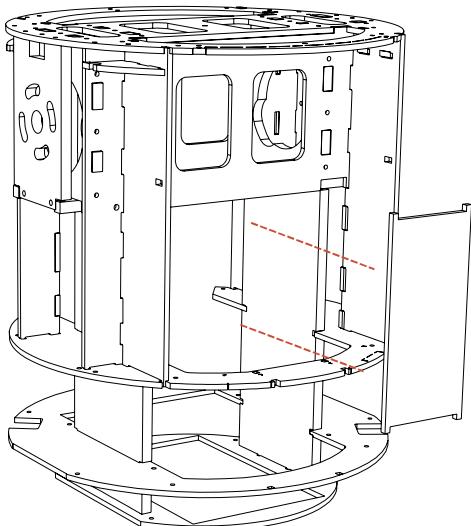
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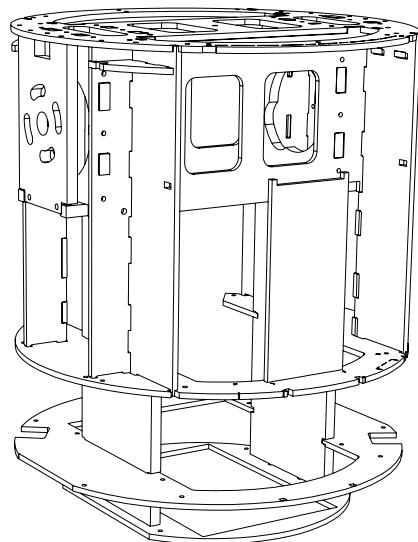
AFTER

Step 20

NOW WE GLUE IN THE SPEAKER HOLDER



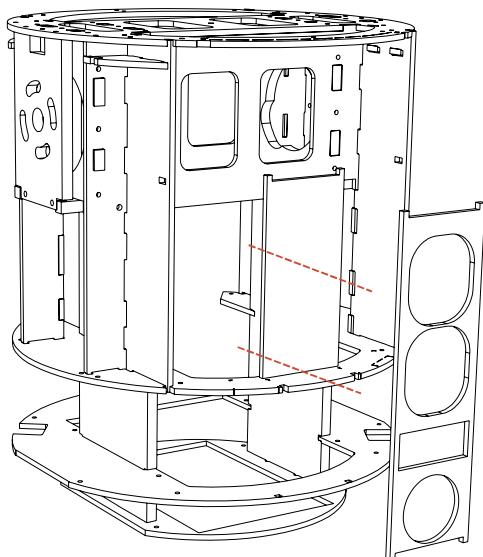
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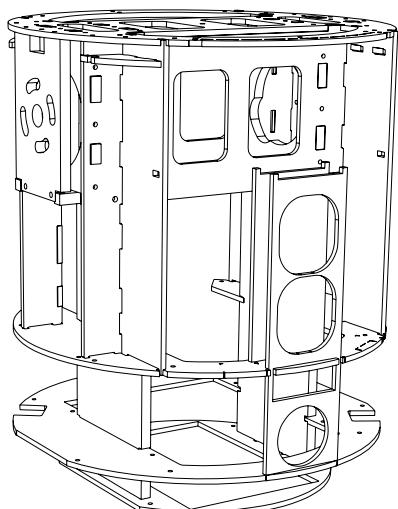
AFTER

Step 21

AND NOW GLUE IN THE VENT BRACKET



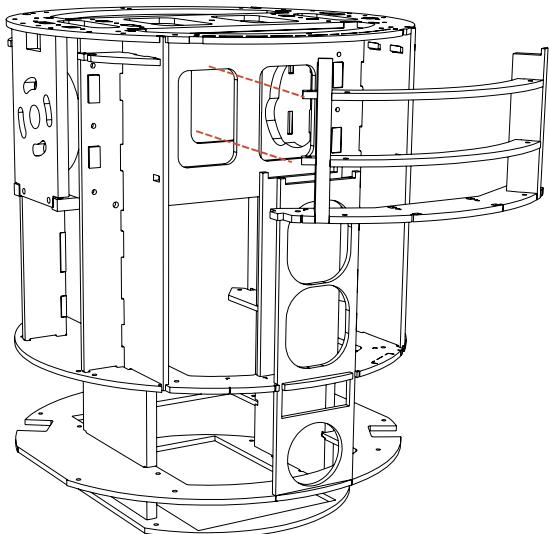
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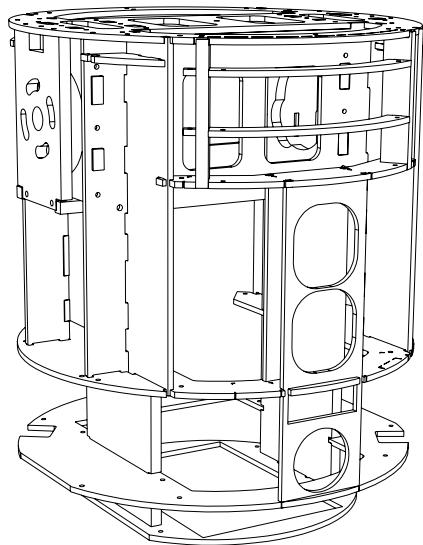
AFTER

Step 22

NOW WE ATTACH THE UTILITY ARM CARRIER USING TWO WOOD SCREWS THAT ARE INSERTED THROUGH THE TOP RING.



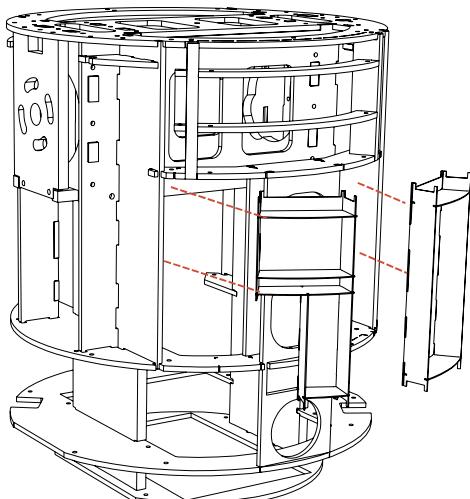
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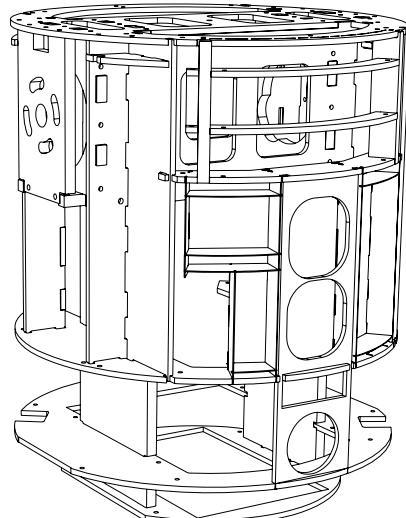
AFTER

Step 23

THE STYRENE BOXES CAN BE ADDED NOW.



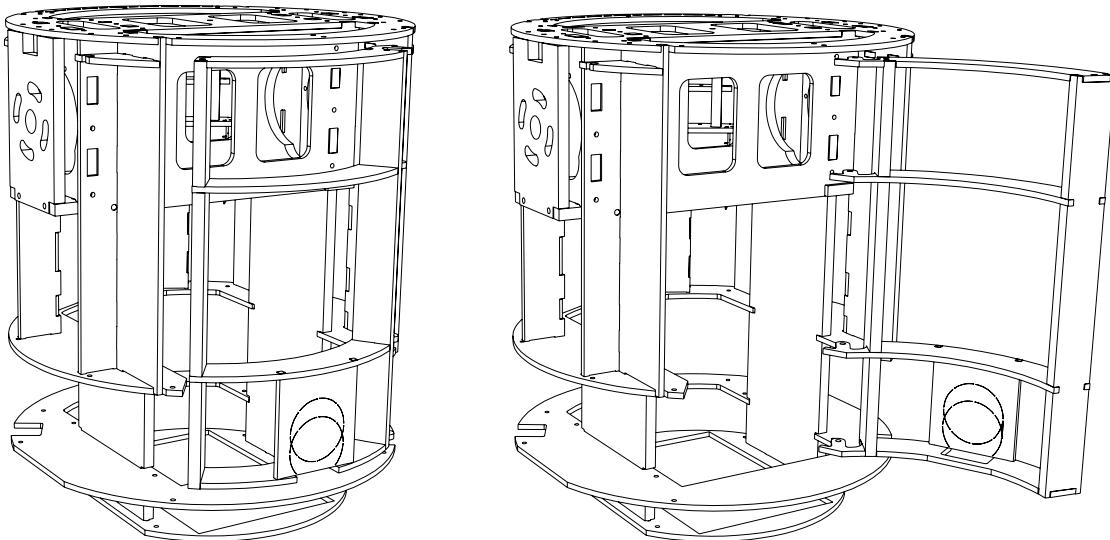
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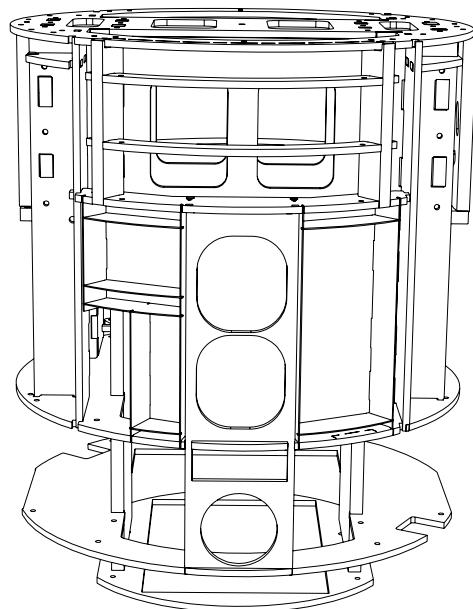
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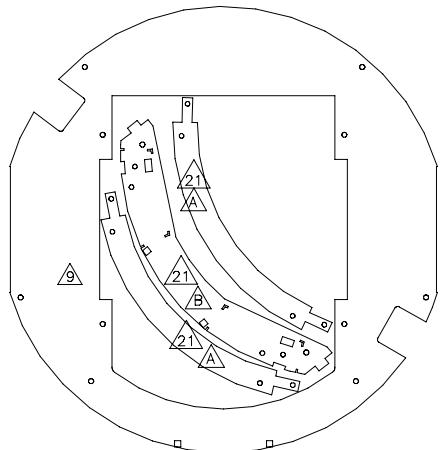
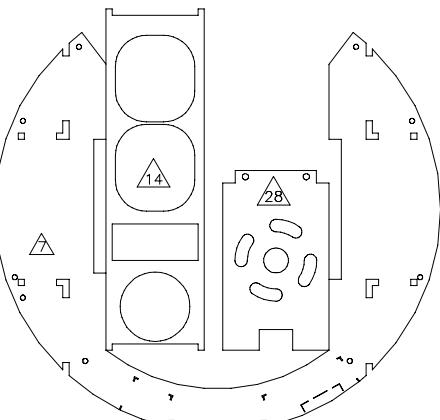
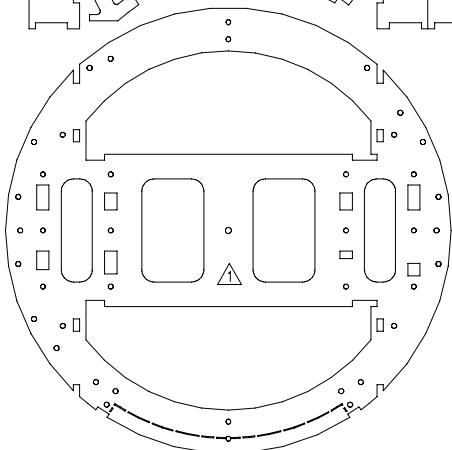
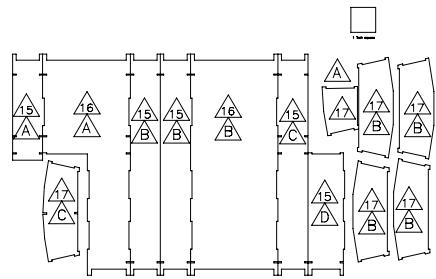
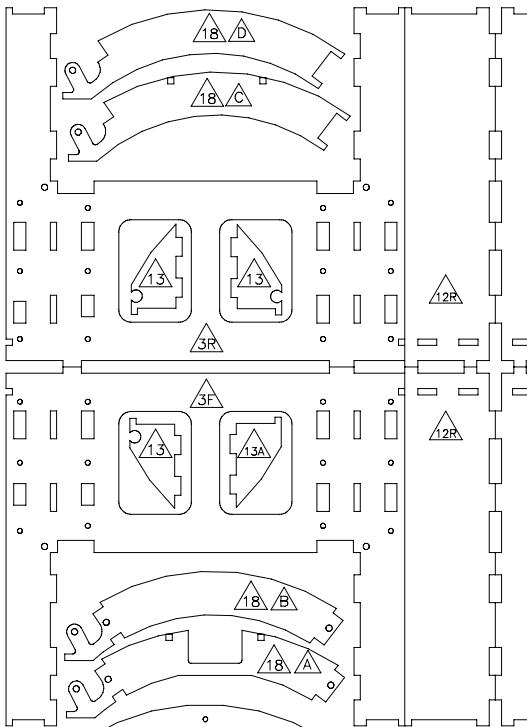
Step 24

THE VERY LAST PIECE OF THE PUZZLE IS THE BACK DOOR. THE BACK DOOR IS ATTACHED USING THREADED RODS. THREADED RODS SHOULD BE ADDED TO THE FRAME FOR EXTRA SUPPORT.



CONGRATULATIONS! YOU'VE JUST COMPLETED ASSEMBLY OF THE AEIA FRAME

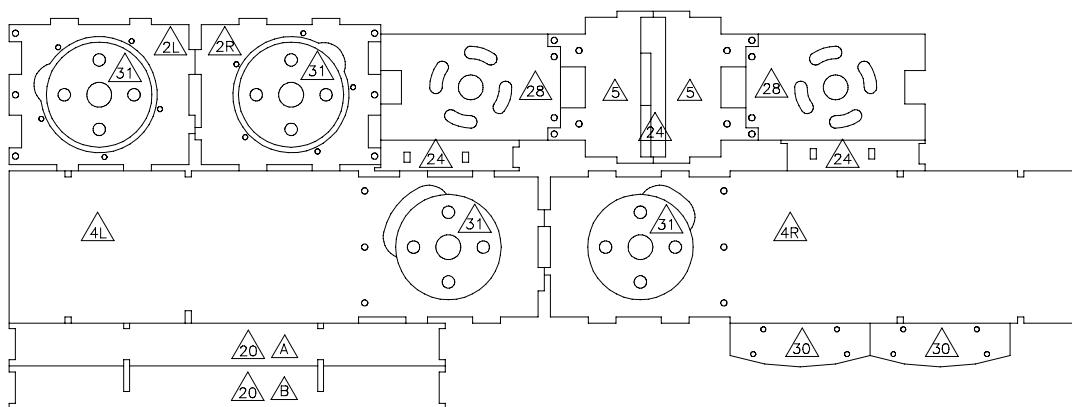




LEGEND

- LEGEND**

 - 1. Top Ring
 - 2R. Right shoulder plate
 - 2L. Left shoulder plate
 - 3F. Front leg support plate
 - 3R. Rear leg support plate
 - 4R. Right Mid 1 Plate
 - 4L. Left Mid 1 Plate
 - 5. Mid 2 Plate
 - 7. C Ring
 - 8. Skirt Ring
 - 9. Bottom Ring
 - 11. Skirt Plate
 - 12F. Box side wall front
 - 12R. Box side wall rear
 - 13. Box side wall top
 - 13A. Box Side wall top Front-right
 - 14. Vent Bracket front
 - 15. Box Sides
 - 16. Box Backs
 - 17. Box Horizontal
 - 18. Back Door Horizontal elements
 - 20. Back Door Vertical elements
 - 21. Arm Carrier Horizontal elements
 - 24. Arm Carrier Vertical elements
 - 27. Back Power Coupling Bracket
 - 28. A&A JAG stop
 - 30. Skin Mounting Plates
 - 31. Shoulder Hubs



PROVIDED COURTESY OF ANDY SCHWARTZ AND ALEX KUNG