

Halloween Prop Replica Electric Chair

Step by step illustrated guide to
Reproducing a replica Electric Chair.



Please note: This is a prop, it is not
Intended for use as an actual restraint for any reason.
The Designer holds no liability for the misuse
of the prop this manual instructs to create.

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please send us an email and we will try to assist you
as best we can.

(halloween@dwightfleming.com)

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are made to the origin of the design.

Thank You. Have a fun and safe Halloween

Material & Equipment List

Lumber

- 5 each - 2x4's - 8Ft. Length (96 inches) - (Actual Measure 1 1/2" x 3 1/2")
- 1 each - 1x6 - 8 Ft. Length (96 Inches) - (Actual Measure 3/4" x 5 1/2")
- 1 each - 1x8 - 2 Ft. Length (24 Inches) - (Actual Measure 3/4" X 7 1/5")
- 1 Each - 1x10 - 6 Ft. Length (72 Inches) - (Actual Measure 3/4" x 9 1/4")
- 1 Each - 2x12 - 4 Ft. Length (48 Inches) - (Actual Measure 1 1/2" x 10 3/4")

Tools

Mitre Saw capable of cutting 90, 45, and 5 degree angles
Jigsaw capable of 90 and 45 degrees angles
Drill
Drill Bits (Various sizes up to 1 1/16" for proper countersinking)
Screwdriver (of your preference)
Electric Sander (optional)
Clamps
Square
Pencil

Hardware

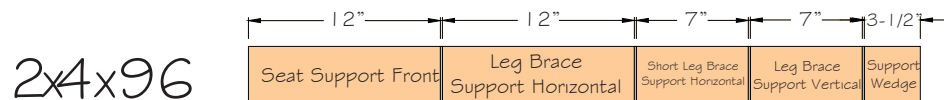
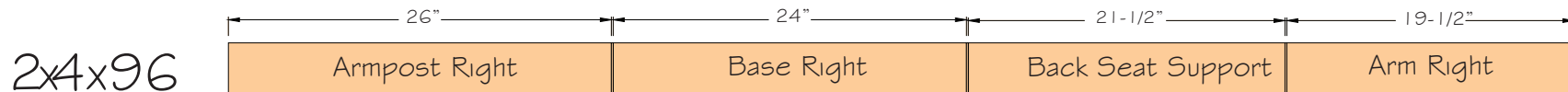
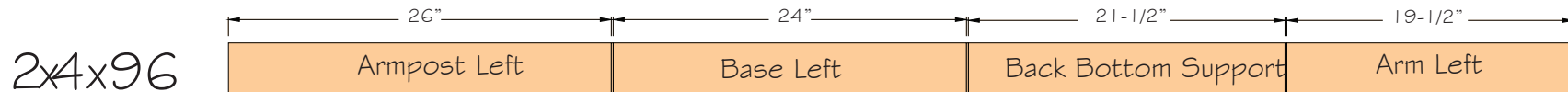
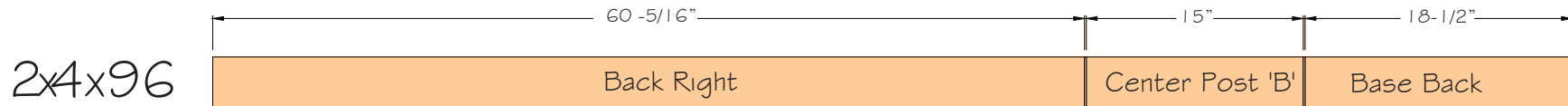
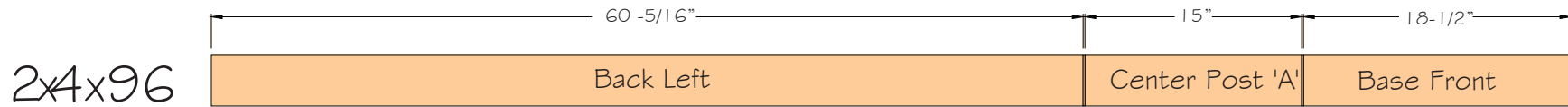
4 each 2 inch 'L' brackets

1 box - 2" or 2 1/2" exterior grade deck screws
8 each 1" exterior grade deck screws
6 each 2" hex bolts
12 each washers to fit
6 each nuts to fit 2" hex bolts

Sandpaper
Stain or Finish of choice

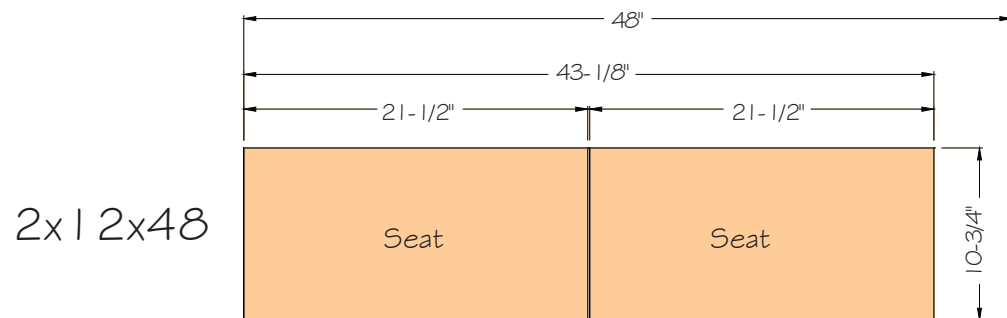
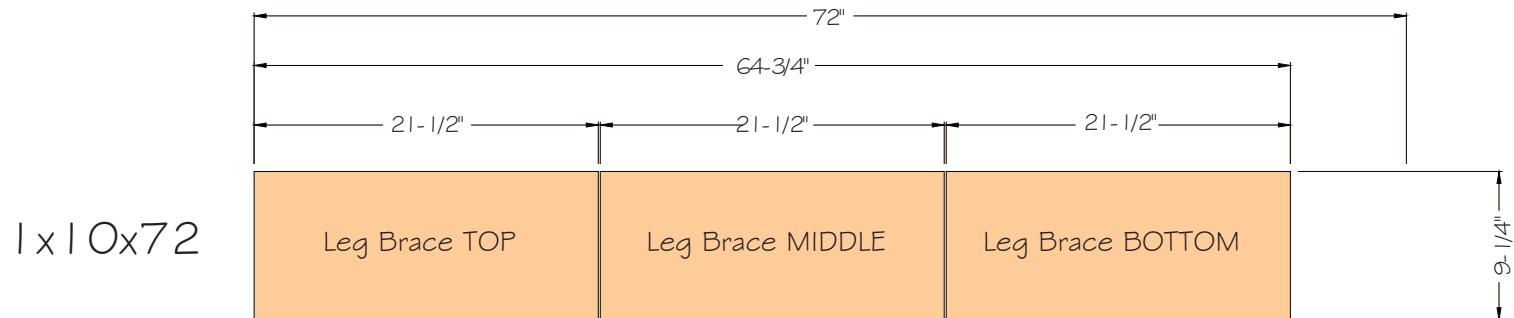
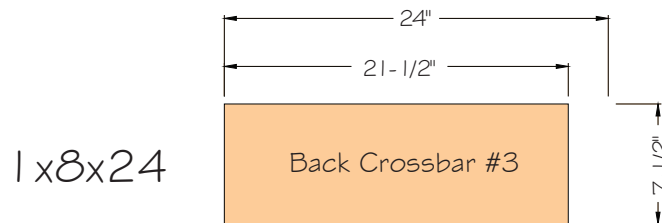
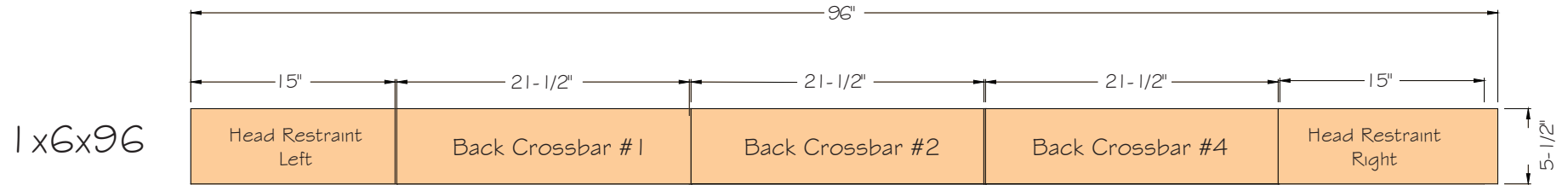
Cut List - 2x4's

Set Saw for 90 degrees



<p>2x4 Tags Print this page and cut tags apart. Adhere to your cut pieces for easy identification and quick reference.</p>	<p>2x4x60 -5/16" Back Left</p>	<p>2x4x15" Center Post 'A'</p>	<p>2x4x18-1/2" Base Front</p>
<p>2x4x60 -5/16" Back Right</p>	<p>2x4x15" Center Post 'B'</p>	<p>2x4x18-1/2" Base Back</p>	<p>2x4x26" Armpost Left</p>
<p>2x4x24" Base Left</p>	<p>2x4x21-1/2" Back Bottom Support</p>	<p>2x4x19-1/2" Arm Left</p>	<p>2x4x26" Armpost Right</p>
<p>2x4x24" Base Right</p>	<p>2x4x21-1/2" Back Seat Support</p>	<p>2x4x19-1/2" Arm Right</p>	<p>2x4x12" Seat Support Front</p>
<p>2x4x12" Leg Brace Support Horizontal</p>	<p>2x4x7" Short Leg Brace Support Horizontal</p>	<p>2x4x7" Leg Brace Support Vertical</p>	<p>2x4x3-1/2" Support Wedge</p>

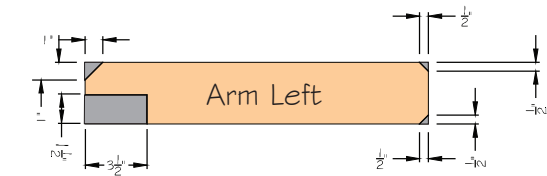
Cut List for Dimensional Lumber Set Saw for 90 degrees



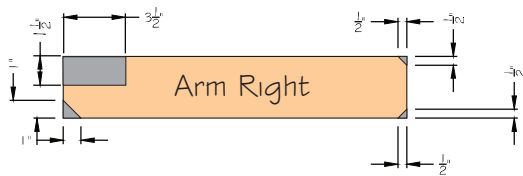
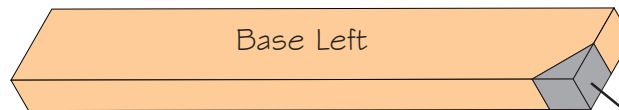
<p>Dimensional Lumber Tags Print this page and cut tags apart. Adhere to your cut pieces for easy identification and quick reference.</p>	<p>1x6x15" Head Restraint Left</p>	<p>1x6x21-1/2" Back Crossbar #1</p>
<p>1x6x21-1/2" Back Crossbar #2</p>	<p>1x6x21-1/2" Back Crossbar #4</p>	<p>1x6x15" Head Restraint Right</p>
<p>1x8x21-1/2" Back Crossbar #3</p>	<p>1x10x21-1/2" Leg Brace TOP</p>	<p>1x10x21-1/2" Leg Brace MIDDLE</p>
<p>1x10x21-1/2" Leg Brace BOTTOM</p>	<p>21-1/2" Seat</p>	<p>21-1/2" Seat</p>

Cut List for additional Set saw for 45 degree cuts

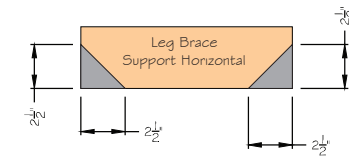
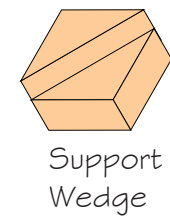
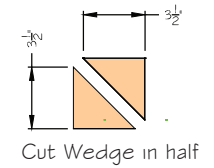
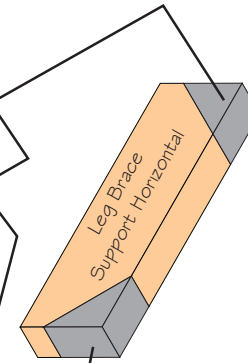
Mark the appropriate pieces with the given dimensions.
Set your mitre saw to 45 degrees for all but the arm notches, return saw to 90 degrees for these cuts.



Discard pieces
from these cuts

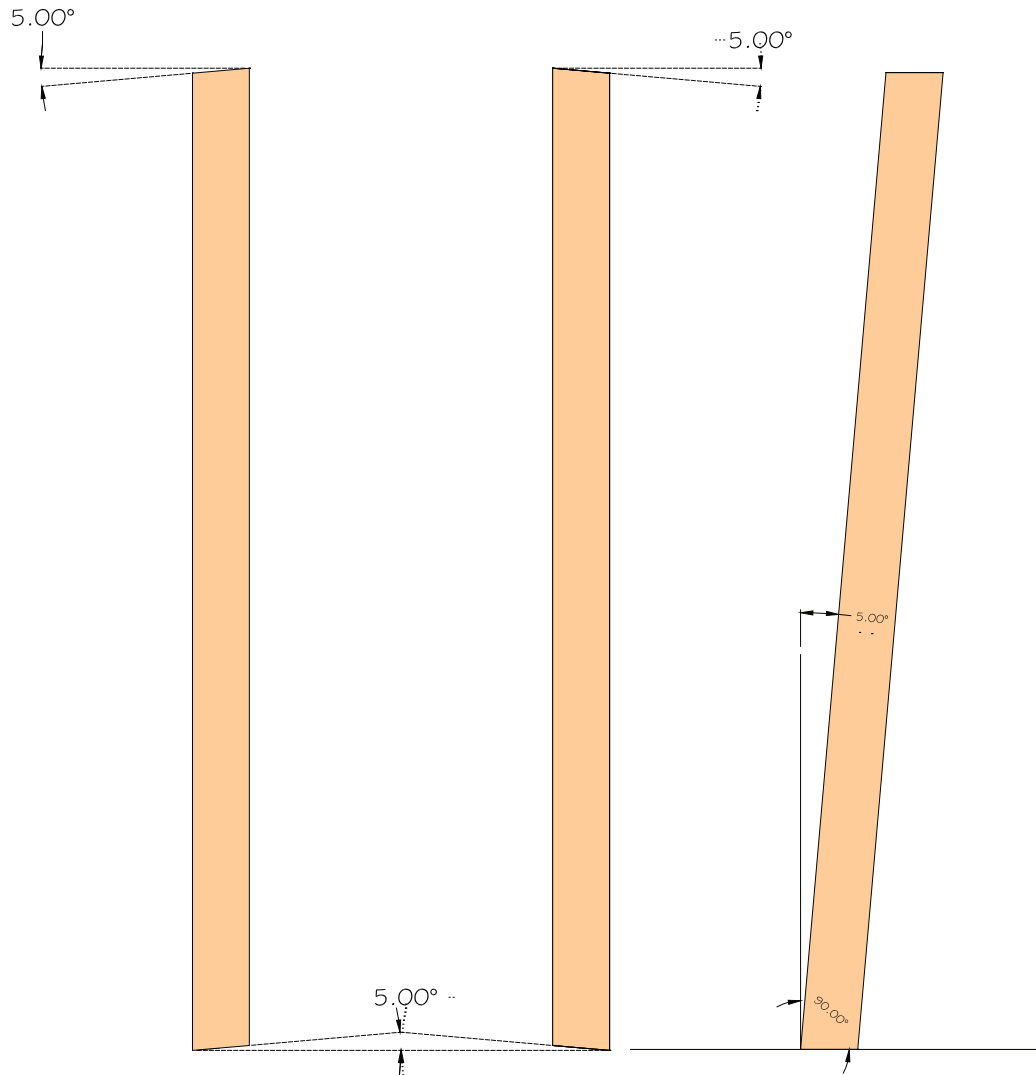


Retain pieces
from these cuts
Hold for supports
for head restraints

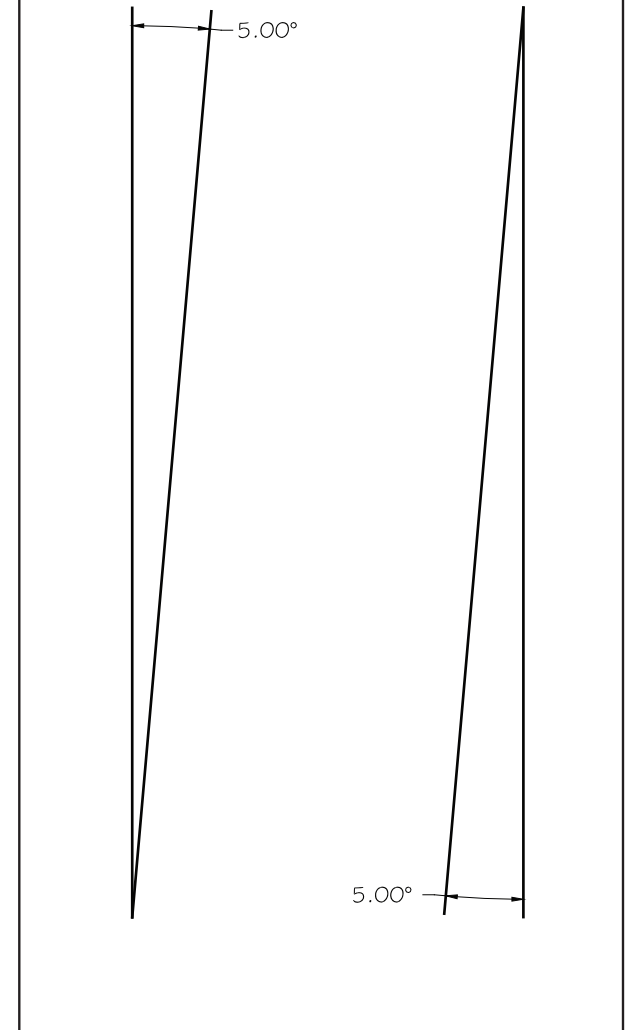


Chair Back

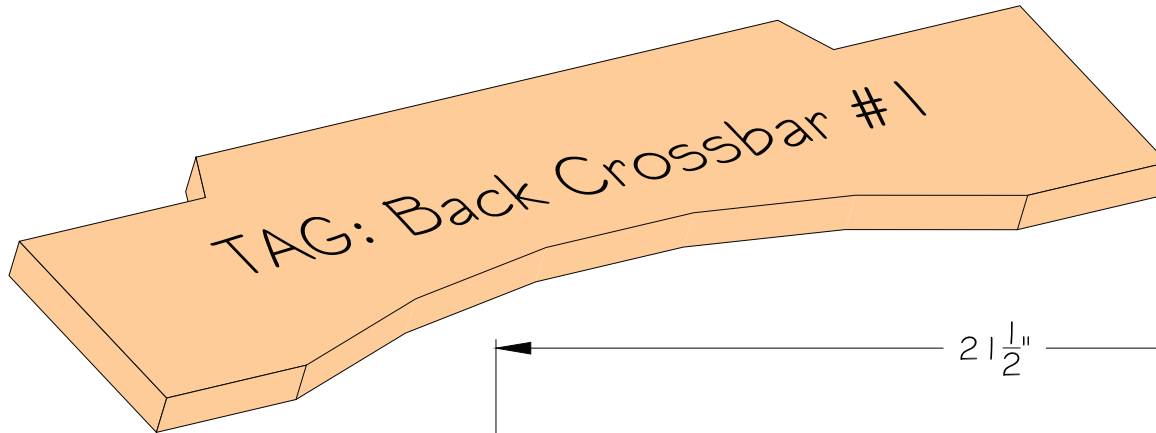
Set your saw to 5 degrees and cut a thin portion equally off the Back Left and Back Right pieces, both top and bottom as shown. This gives the back a subtle recline that is more comfortable and the top of the chair back is level with the ground at this incline. If your saw does not have a 5 degree setting you can print and cut out the templates to the right to hand mark your pieces with the desired angle and manually cut them.
(This step is optional if you wish the chair to be straight backed.)



5 Degree Template

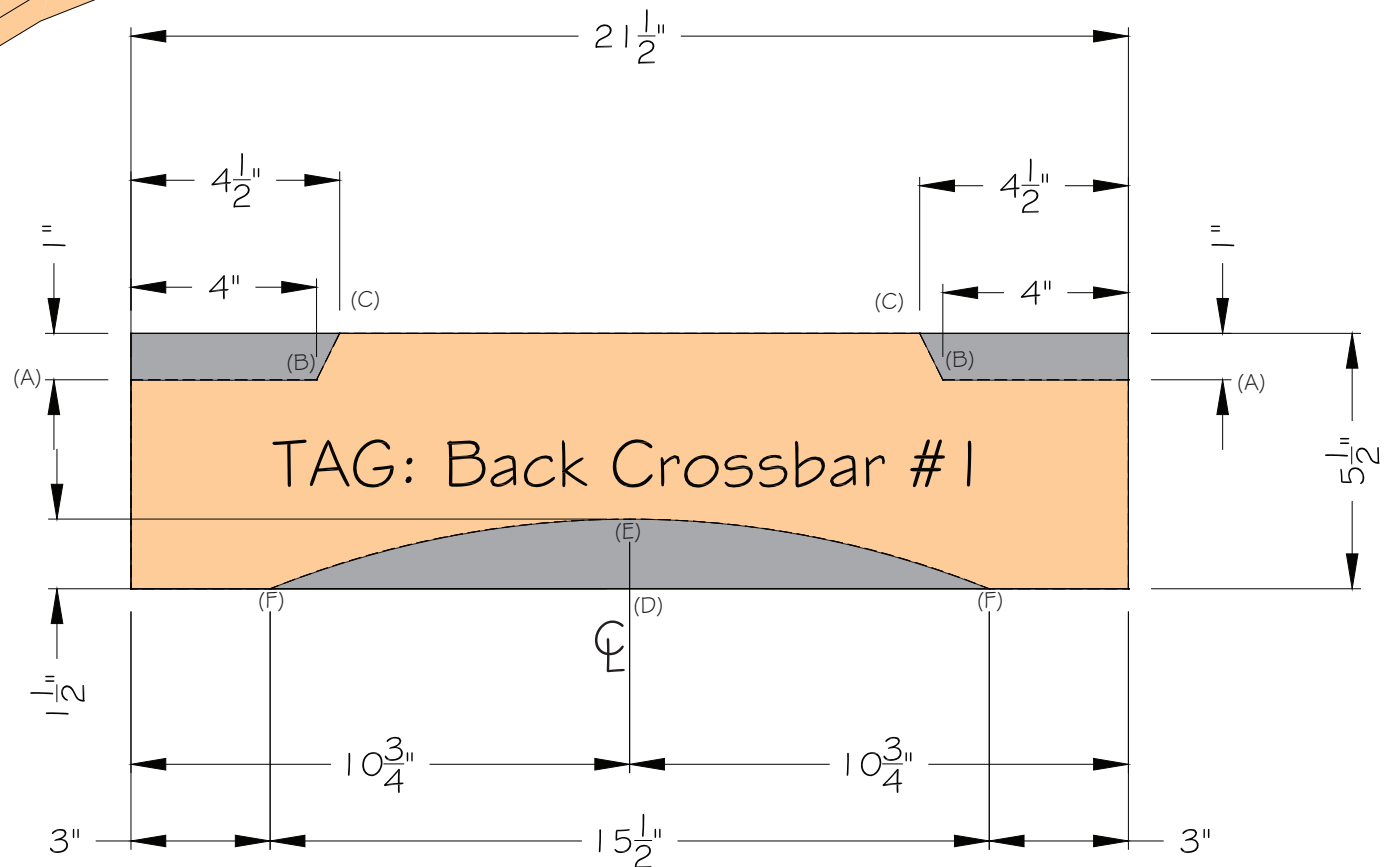



Back Crossbar #1



Top Cuts - Measure down 1 inch on each edge (A) and lightly draw a line across the entire width. On this line mark over 4 inches from each edge (B). On the top mark over 4 and one half inch from the edge (C). Draw a line between the two (B#C). Cut these two sections out per the diagram.

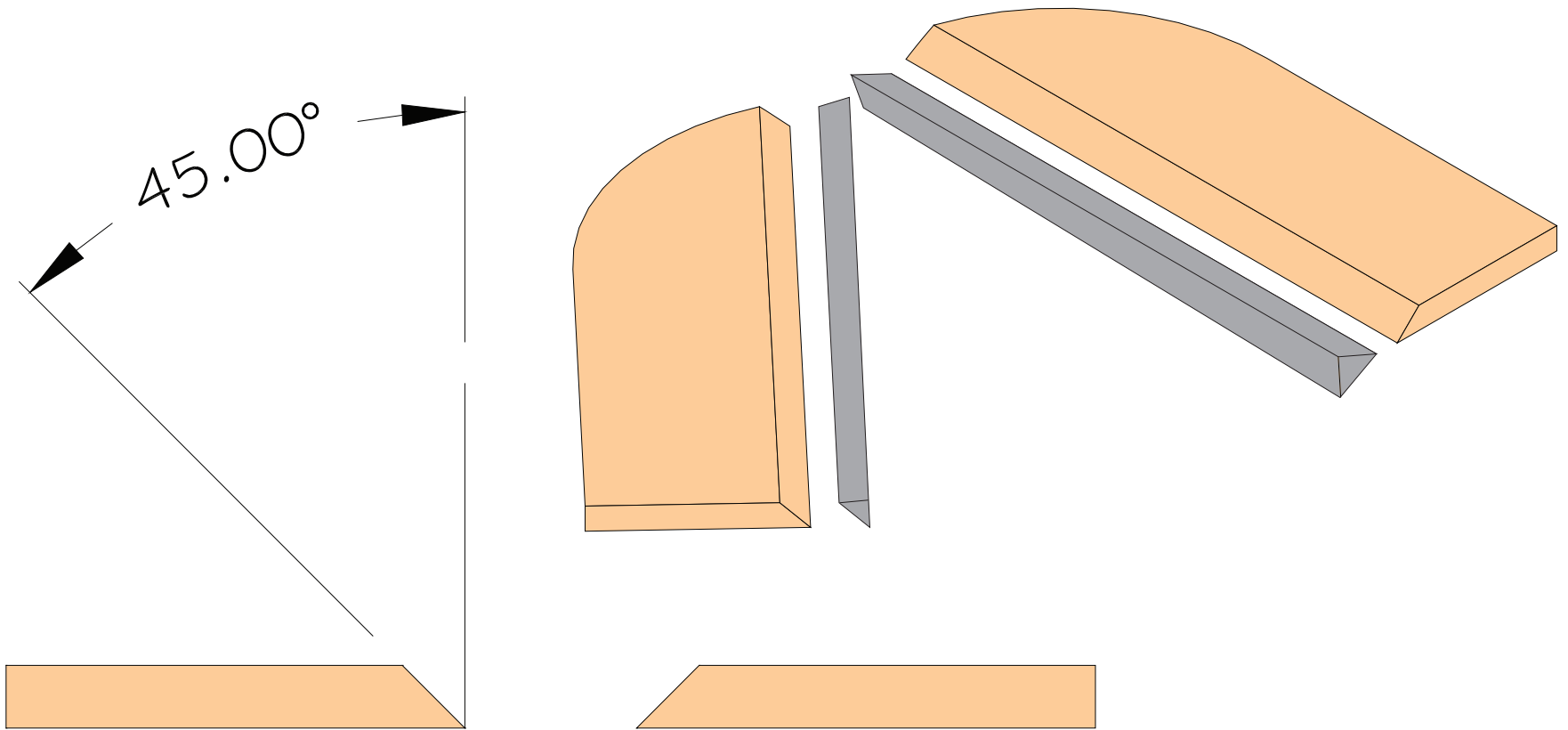
Bottom Cuts - Measure over to the Center Line 10 and three quarter inches, and mark (D). Measure up one and one half inch, and mark (E). Measure over 3 inches from each end and mark (F). Draw an arc from the bottom edge at 3 inches to the centerline top of the one and one half inch mark and back down to the other bottom 3 inch mark. cut and discard. Sand thoroughly for smooth edges.



Discard pieces from these cuts 

Head Restraint Cuts

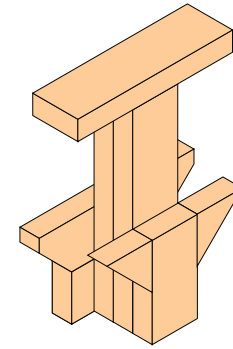
Set your jigsaw to 45 degrees and shave off the edge of each head restraint piece. Sand before assembly.



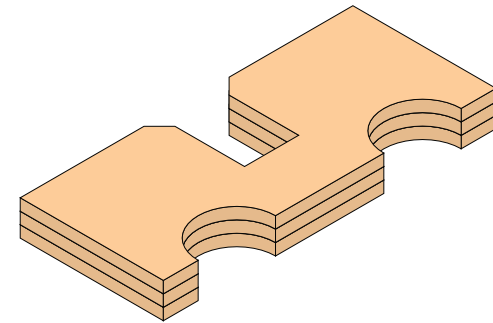
Modular Component Assembly

Assembly can take two or more days depending on time available and tools at hand.

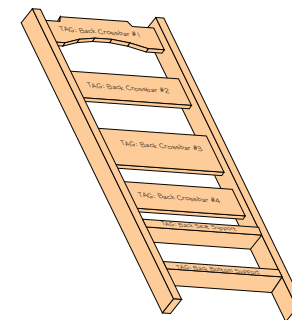
- 1) Start with the leg brace assembly (beginning next page)
This unit requires clamping and gluing that must be fully dry before final assembly of the chair can be completed



- 2) Second, assemble the leg brace/restraint.
It requires laminating 3 sheets of precut pieces and also must fully dry before finishing.

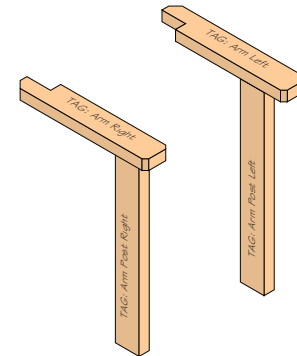


- 3) Third is the chair back, it is largely glued for support and is screwed together for additional strength.
It also should be allowed to dry but will be relatively sturdy until then.

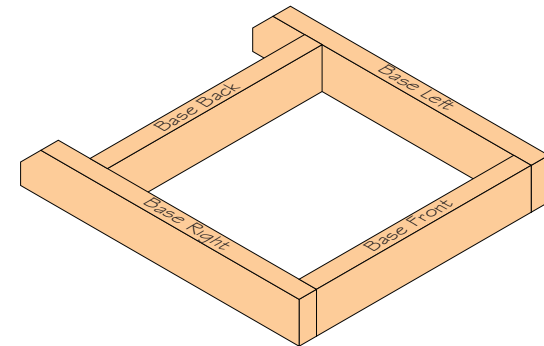


Modular Component Assembly

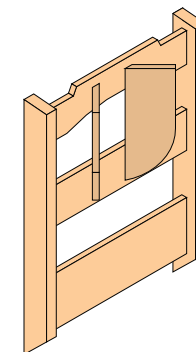
4) Fourth are the arms, these are straightforward in construction, glued but supported by “L” brackets.



5) Fifth, the chair base, make sure this is well glued and assembled as it plays an important role with the structural integrity of the chair and helps it stay put as you leap out of it at the halloweenies.



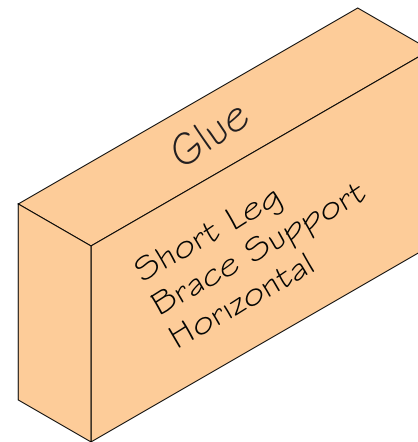
6) The last step is the head restraint, it is directly attached to the seat back, which should be dry enough by now to assemble these pieces to it.



Front Support Construction

TAG: Short Leg
Brace Support
Horizontal

Start with this piece and
add glue to the top.



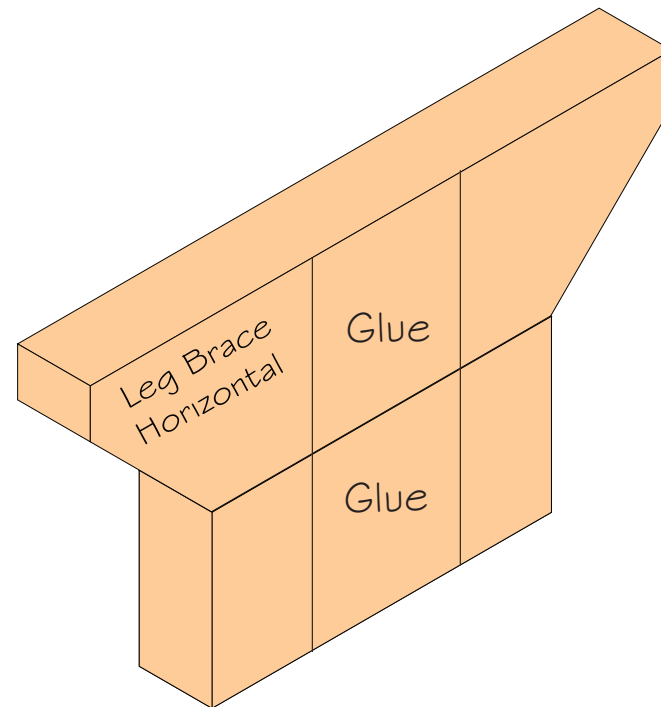
Front Support Construction

TAG: Short Leg
Brace Support
Horizontal

Start with this piece and
add glue to the top.

TAG:
Leg Brace
Horizontal

Set Horizontal leg brace in
place on top. Apply wood
glue to the front center.



Front Support Construction

TAG: Short Leg
Brace Support
Horizontal

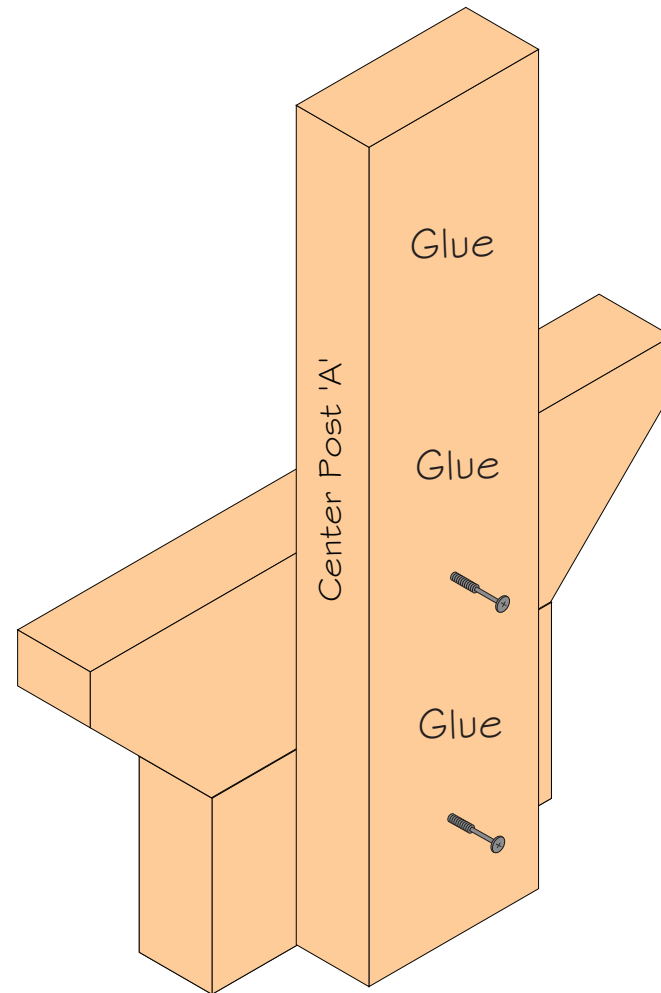
Start with this piece and
add glue to the top.

TAG:
Leg Brace
Horizontal

Set Horizontal leg brace in
place on top. Apply wood
glue to the front center.

TAG: Center Post 'A'

Set two screws to hold it
together.



Front Support Construction

TAG: Short Leg
Brace Support
Horizontal

Start with this piece and
add glue to the top.

TAG:
Leg Brace
Horizontal

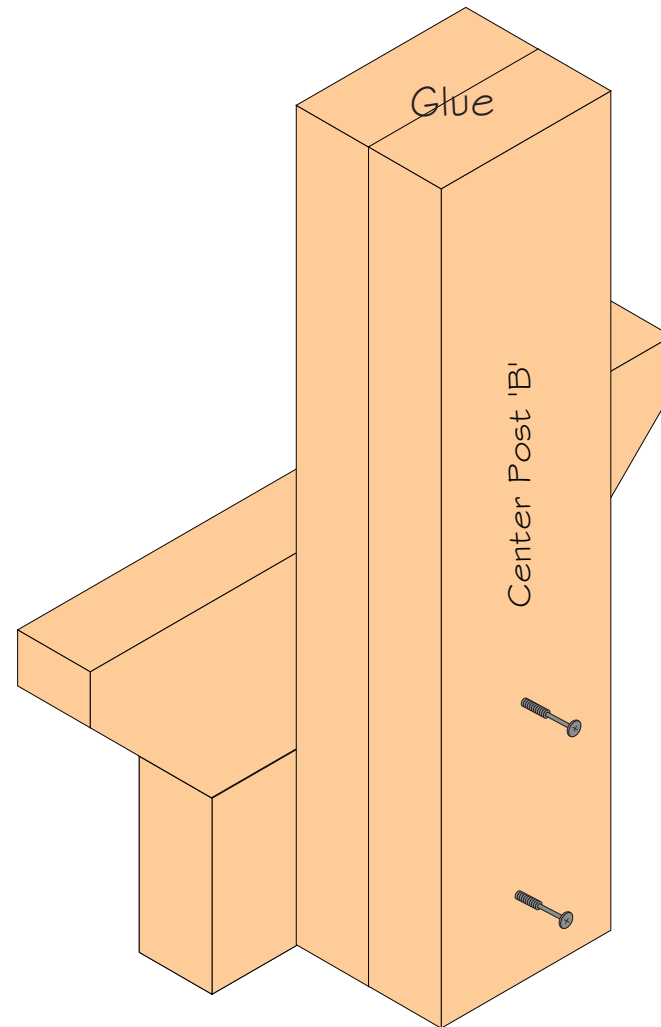
Set Horizontal leg brace in
place on top. Apply wood
glue to the front center.

TAG: Center Post 'A'

Set two screws to hold it
together.

TAG: Center Post 'B'

Screw Center Post 'B' to
'A' and secure with
screws. Apply Glue to the
Top



Front Support Construction

TAG: Short Leg
Brace Support
Horizontal

Start with this piece and
add glue to the top.

TAG:
Leg Brace
Horizontal

Set Horizontal leg brace in
place on top. Apply wood
glue to the front center.

TAG: Center Post 'A'

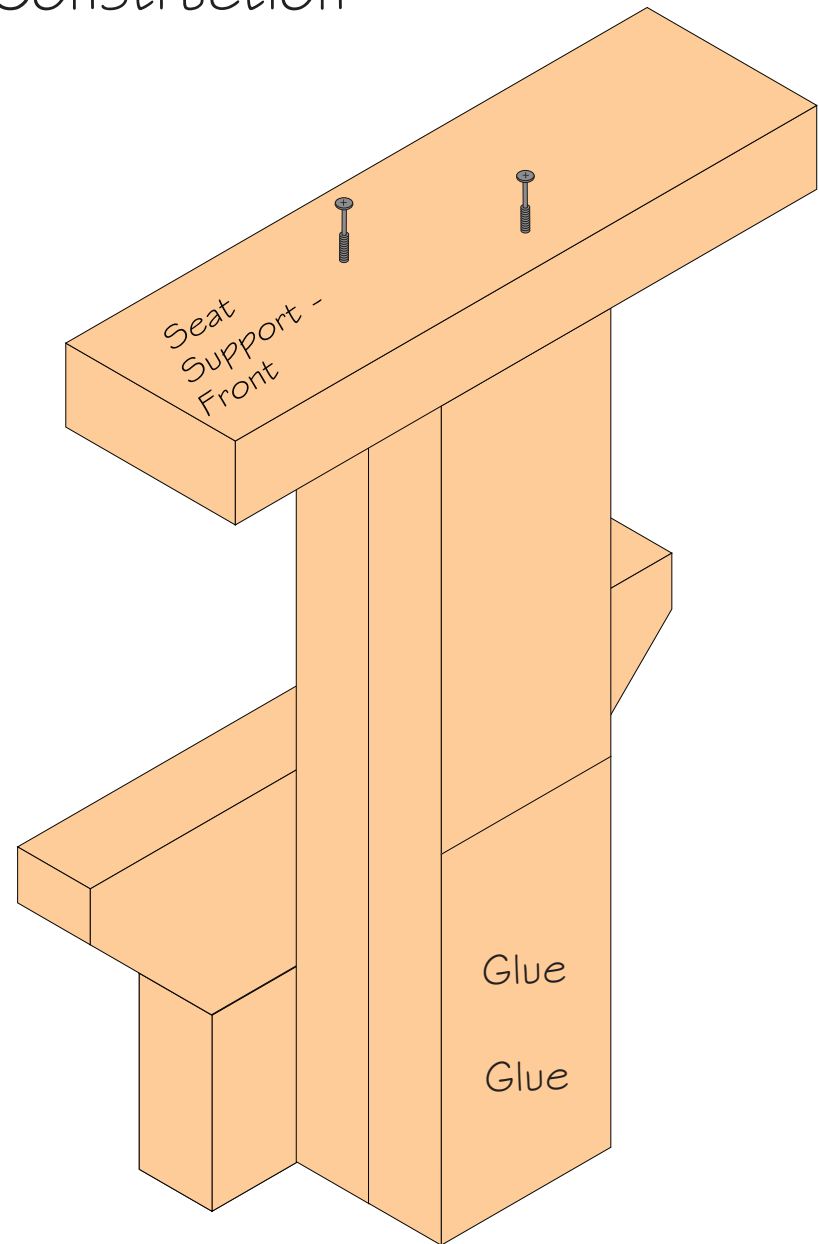
Set two screws to hold it
together.

TAG: Center Post 'B'

Screw Center Post 'B' to
'A' and secure with
screws. Apply Glue to the
Top

TAG: Seat
Support -
Front

Center Front Seat Sup-
port and screw in place.
Apply Glue to facing side.



Front Support Construction

TAG: Short Leg
Brace Support
Horizontal

Start with this piece and
add glue to the top.

TAG:
Leg Brace
Horizontal

Set Horizontal leg brace in
place on top. Apply wood
glue to the front center.

TAG: Center Post 'A'

Set two screws to hold it
together.

TAG: Center Post 'B'

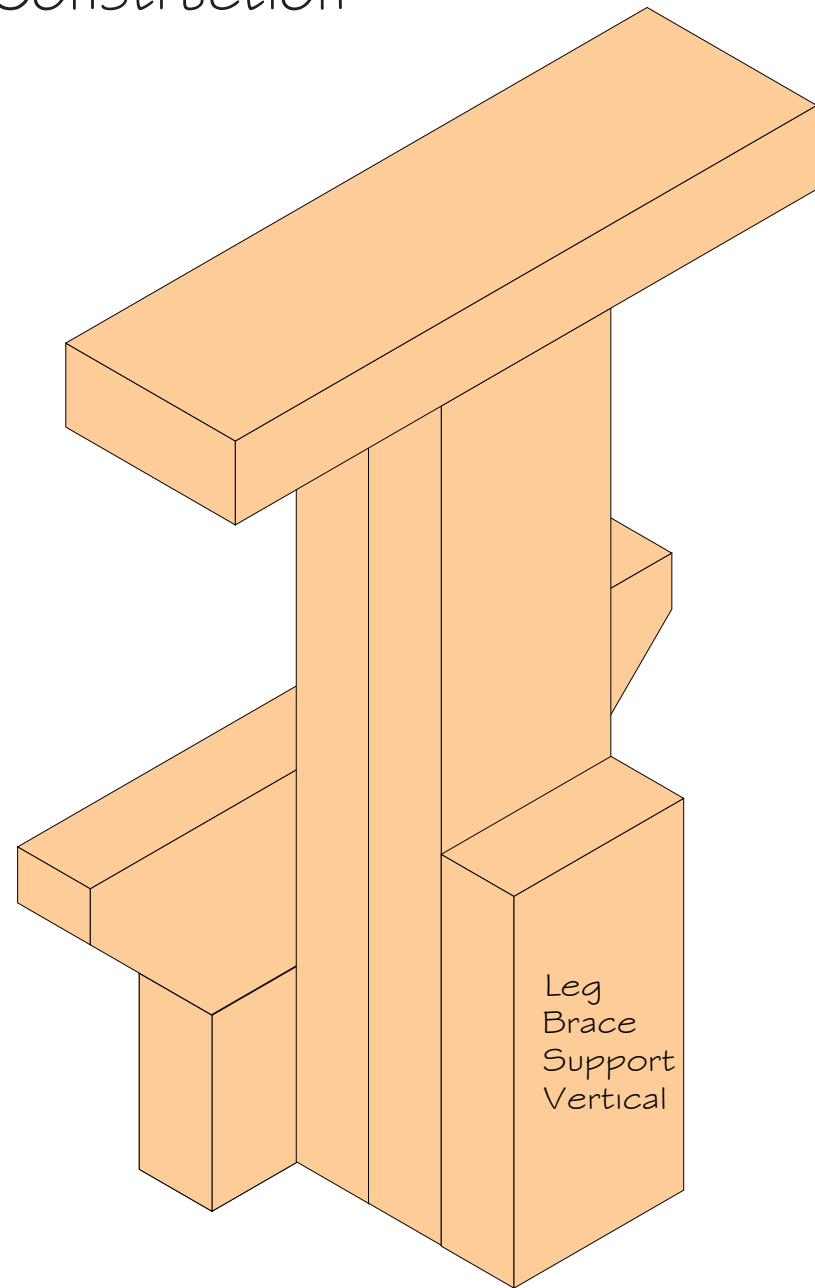
Screw Center Post 'B' to
'A' and secure with
screws. Apply Glue to the
Top

TAG: Seat
Support -
Front

Center Front Seat Sup-
port and screw in place.
Apply Glue to facing side.

TAG: Leg
Brace
Support
Vertical

Clamp in place and allow
to dry. Do Not Screw in
place as this will be a
viewable face.



Front Support Construction

TAG: Short Leg
Brace Support
Horizontal

Start with this piece and
add glue to the top.

TAG:
Leg Brace
Horizontal

Set Horizontal leg brace in
place on top. Apply wood
glue to the front center.

TAG: Center Post 'A'

Set two screws to hold it
together.

TAG: Center Post 'B'

Screw Center Post 'B' to
'A' and secure with
screws. Apply Glue to the
Top

TAG: Seat
Support -
Front

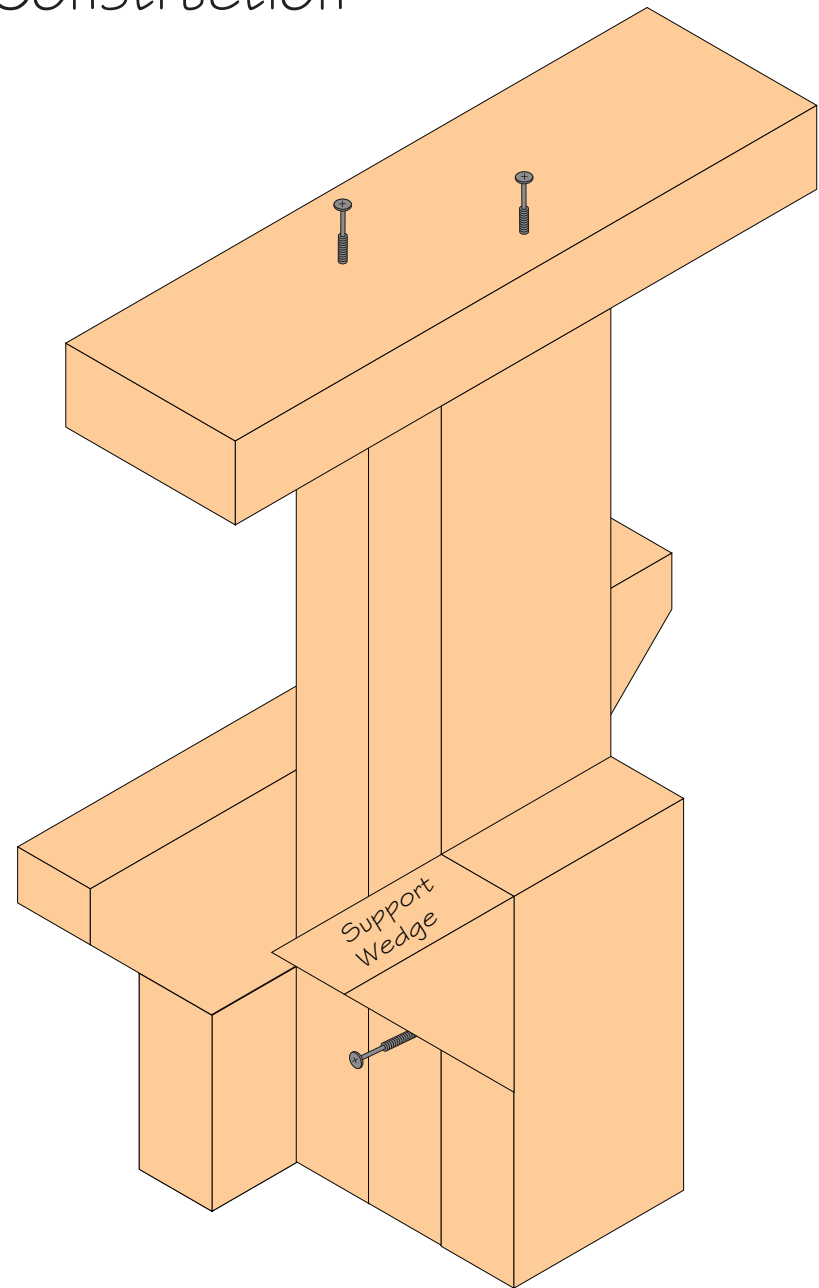
Center Front Seat Sup-
port and screw in place.
Apply Glue to facing side.

TAG: Leg
Brace
Support
Vertical

Clamp in place and allow
to dry. Do Not Screw in
place as this will be a
viewable face.

TAG:
Support
Wedge

Glue and Screw support
wedge in place.



Front Support Construction

TAG: Short Leg
Brace Support
Horizontal

Start with this piece and
add glue to the top.

TAG:
Leg Brace
Horizontal

Set Horizontal leg brace in
place on top. apply wood
glue to the front center.

TAG: Center Post 'A'

Set two crews to hold it
together.

TAG: Center Post 'B'

Screw Center Post 'B'. to
'A' and secure with
screws. Apply Glue to the
Top

TAG: Seat
Support -
Front

Center Front Seat Sup-
port and screw in place.
Apply Glue to facing side.

TAG: Leg
Brace
Support
Vertical

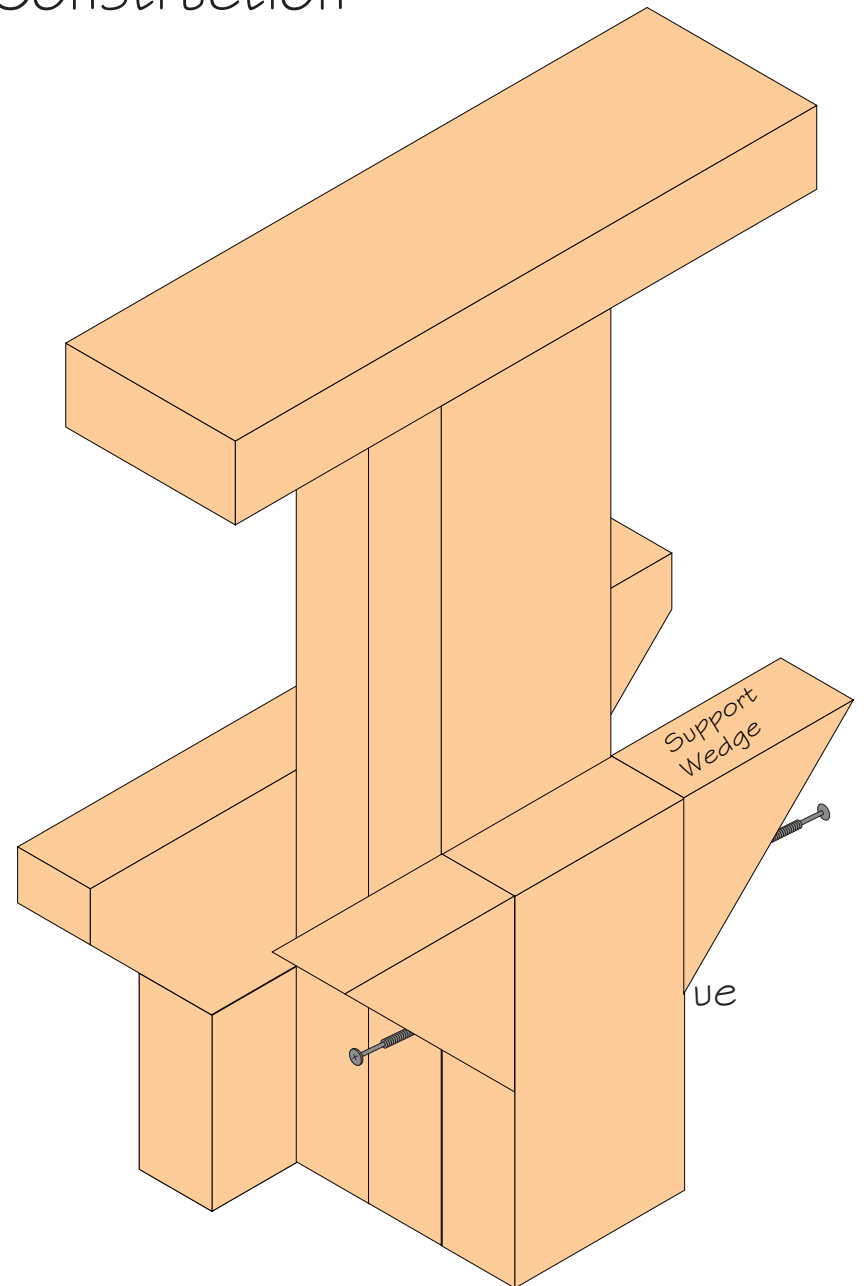
Clamp in place and allow
to dry. Do Not Screw in
place as this will be a
viewable face.

TAG:
Support
Wedge

Glue and Screw support
wedge in place.

TAG:
Support
Wedge

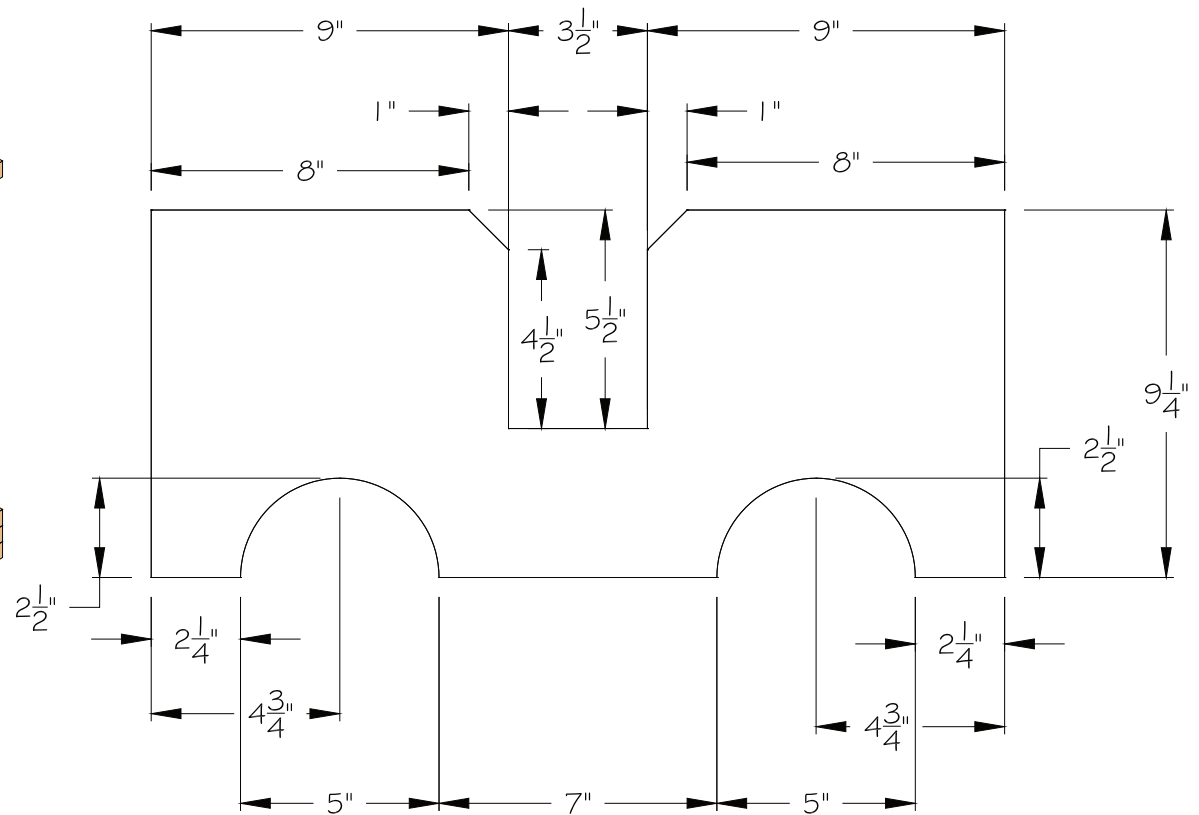
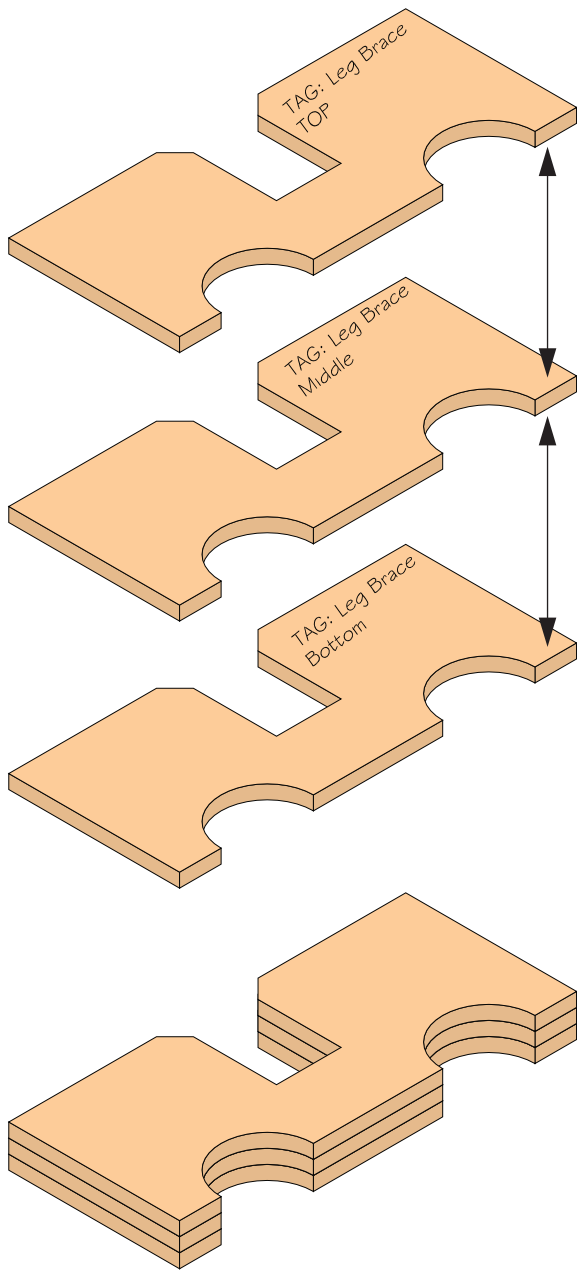
Glue and Screw support
wedge in place. Leave in
an upright position and
allow the glue to fully dry.



Leg Restraint Construction

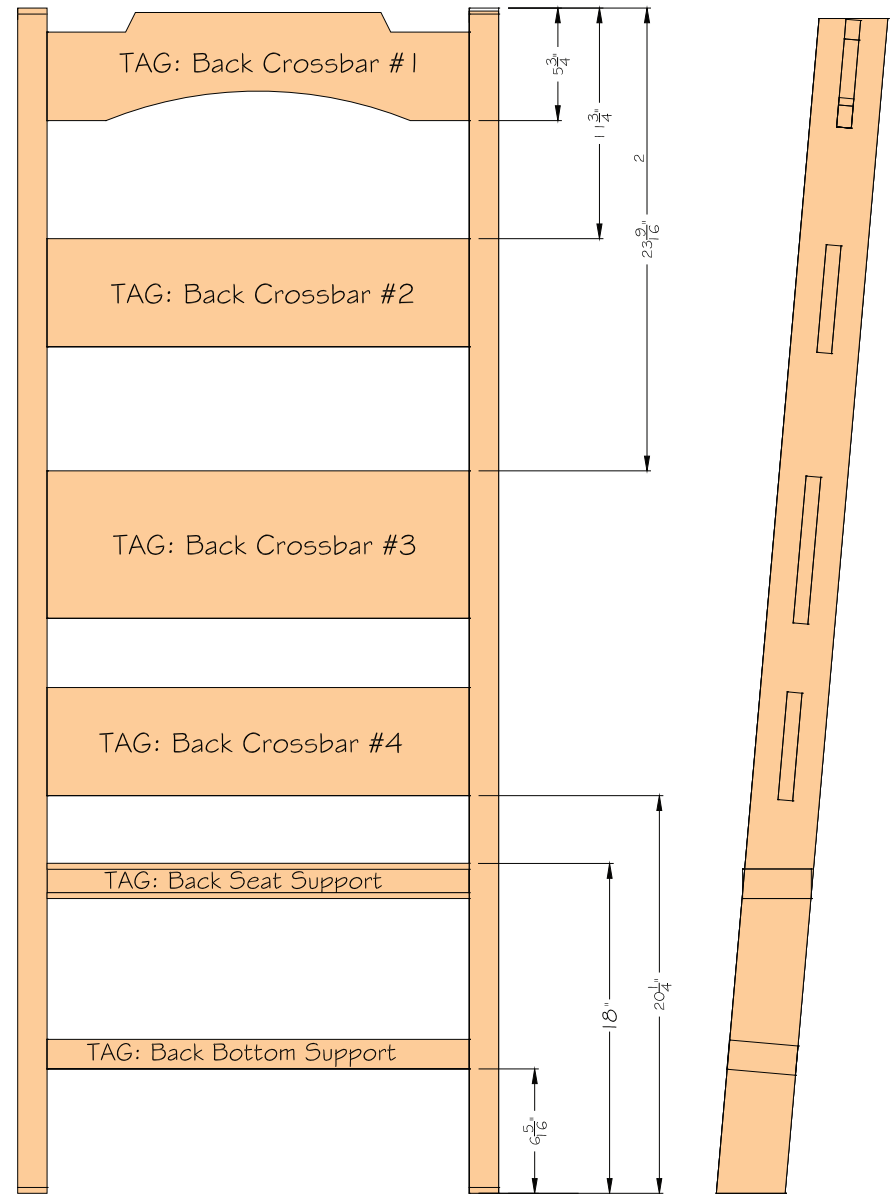
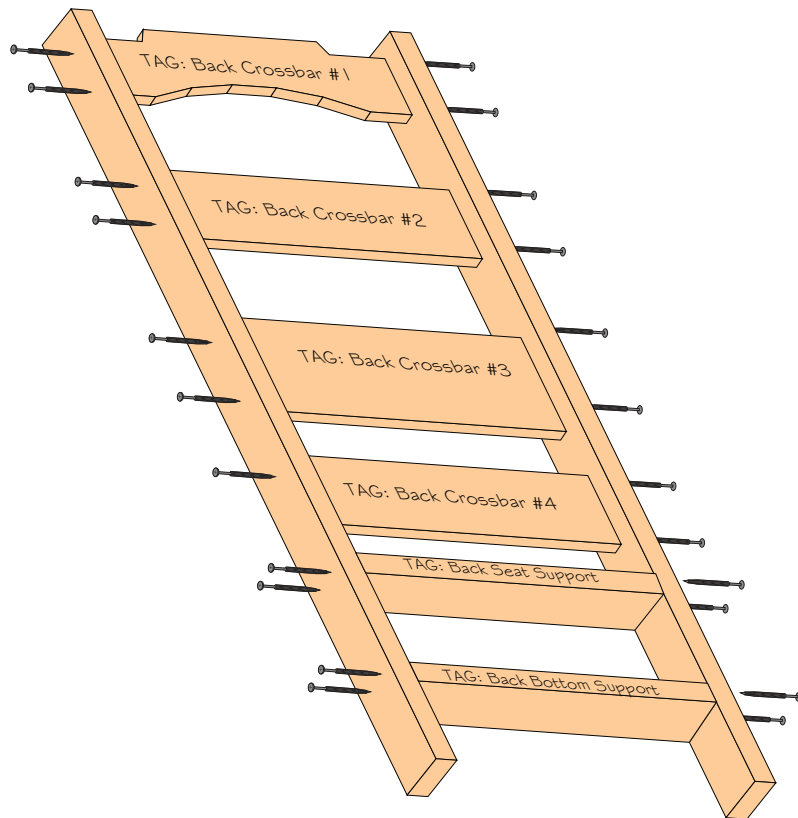
Carefully mark the 'leg brace bottom' with the given dimensions. Using a jigsaw, cut the bottom piece. 2) use this 'template' to mark the remaining two pieces and cut them.

Glue and clamp these three pieces together and allow to fully dry. Sand all the edges flush if any miss alignment occurs.



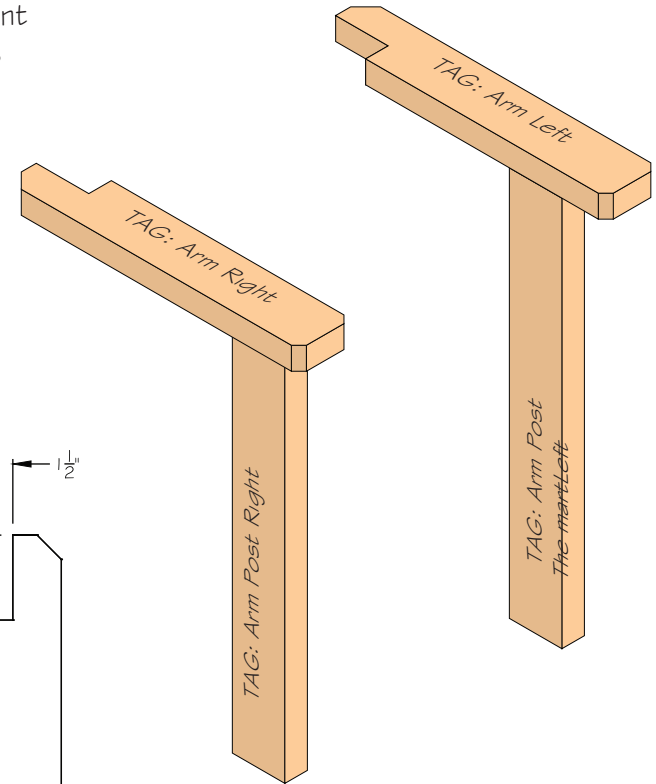
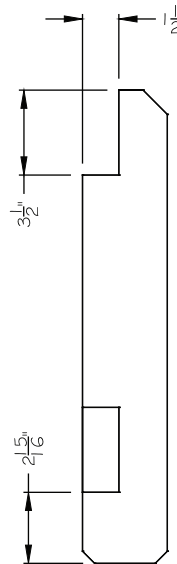
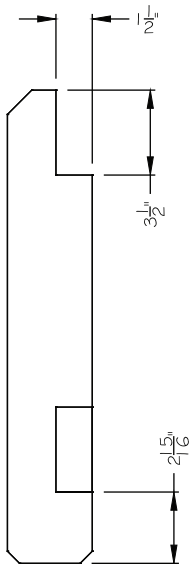
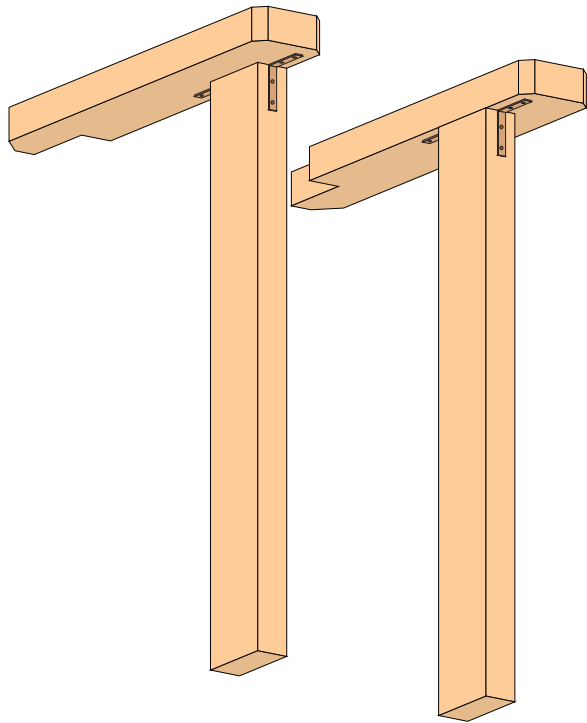
Back Construction

Mark the interior Left and Right back pieces at the given dimensions. Mark the center of the board to assist with the proper alignment of the crossbars. Proper placement of the 'Back Seat Support' is critical as it supports the seat. The top of this support must be 18 inches above the floor, and level with the floor. If the 5 degree cut was used, this crossbar must be installed at the same 5 degree angle to be level. Glue and Screw all pieces into place as this is a permanent unit of the modular design.



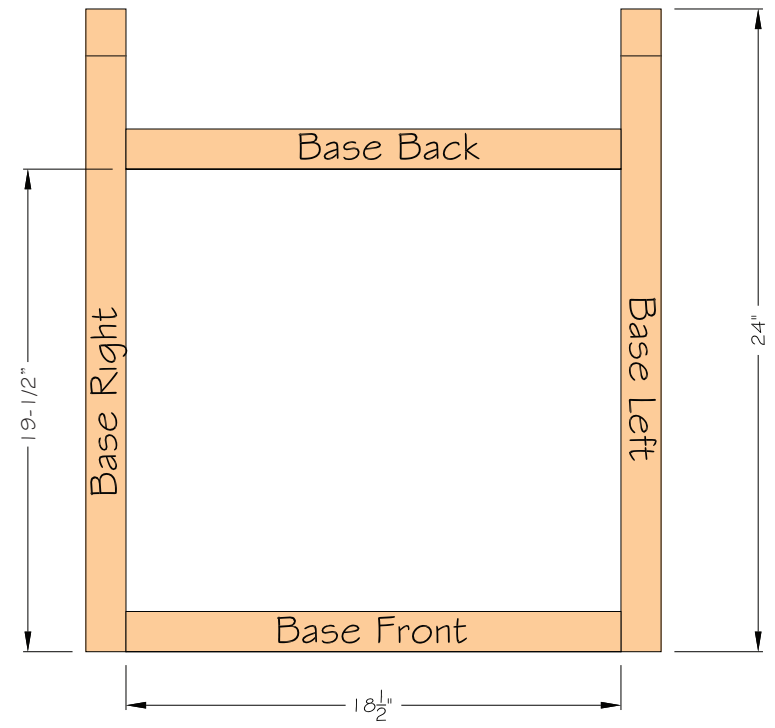
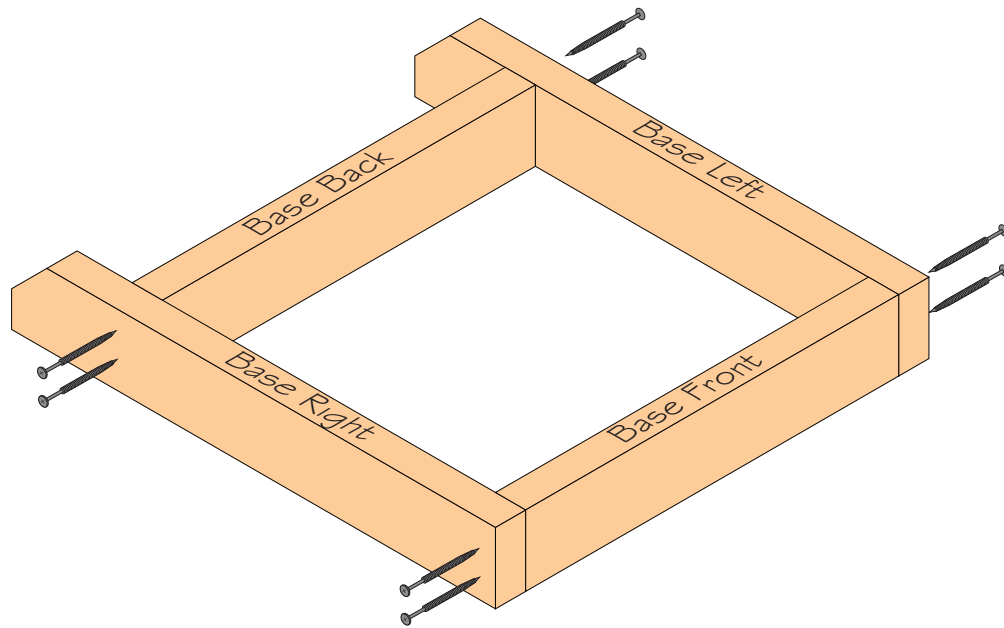
Arm Construction

Install 'L' brackets flush with the top of the arm posts, centered on the edge of the post. Glue and screw them to the arm pieces as shown, flush with the inside edges of the arms., 2-15/16" back from the front of the arm. Lay them on their sides and allow to fully dry.

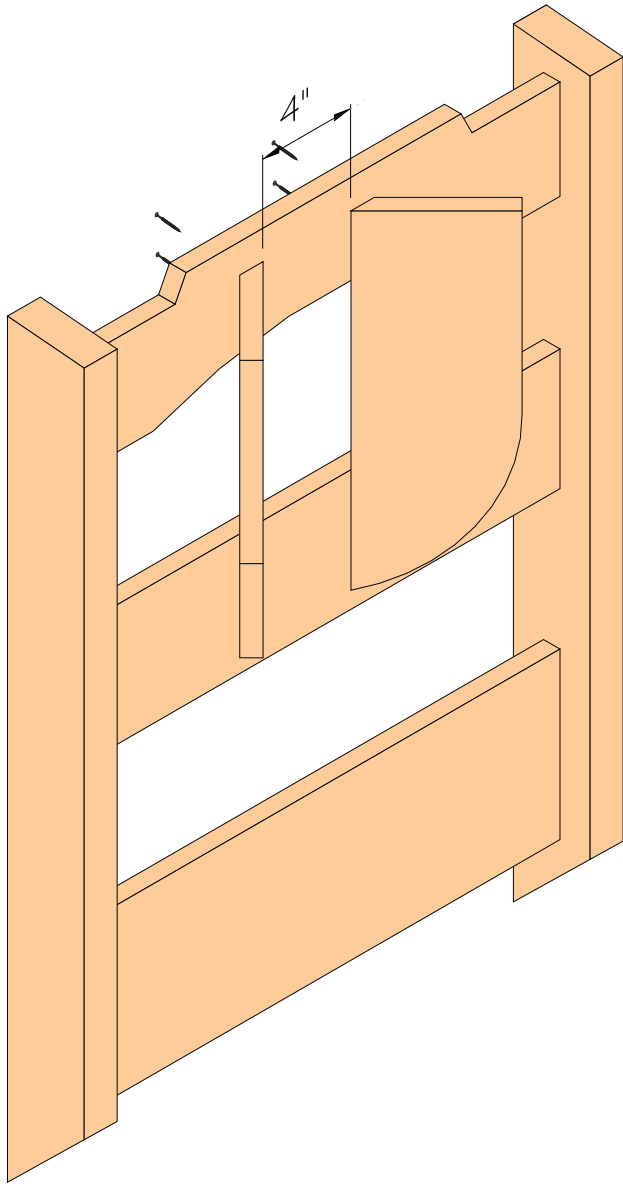


Base Construction

Lay the base left and right out and mark the 19 1/2" dimension. Glue and screw these pieces together on a level surface. Allow to fully dry before final assembly.

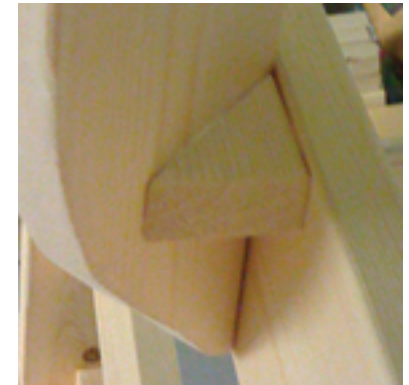


Back Construction



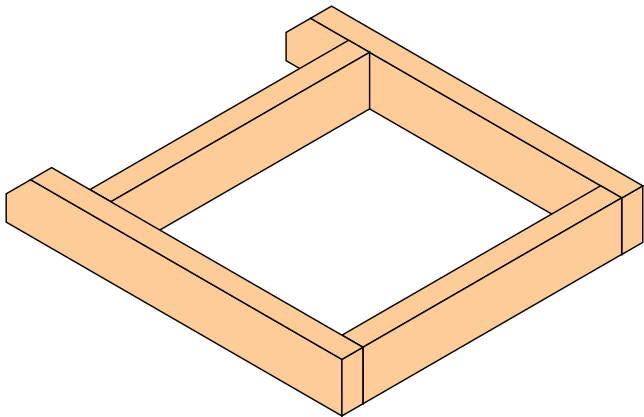
Chair Back should be dry enough for assembly of the final two pieces at this point. Glue and screw onto the chair back centered left and right about 4 inches apart. Vertical placement is centered between the top two chair braces. (Be careful that you do not drive your screws all the way through the face. Brace the head restraints with the leftover wood from, page 7.

NOTE: in my final construction I made new braces from wood used for the head restraints. Structurally not as sound but more aesthetically pleasing.



Final Construction

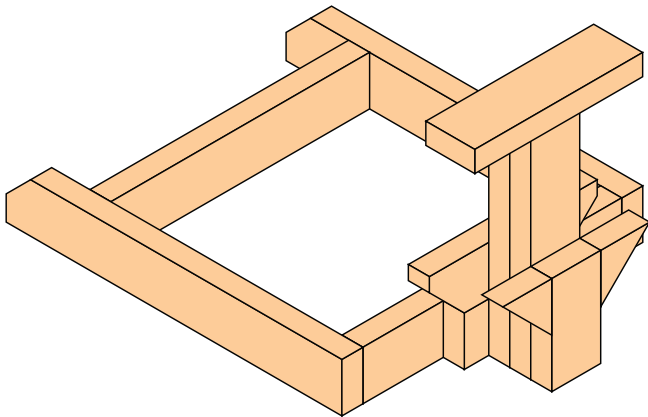
1) Begin with the base



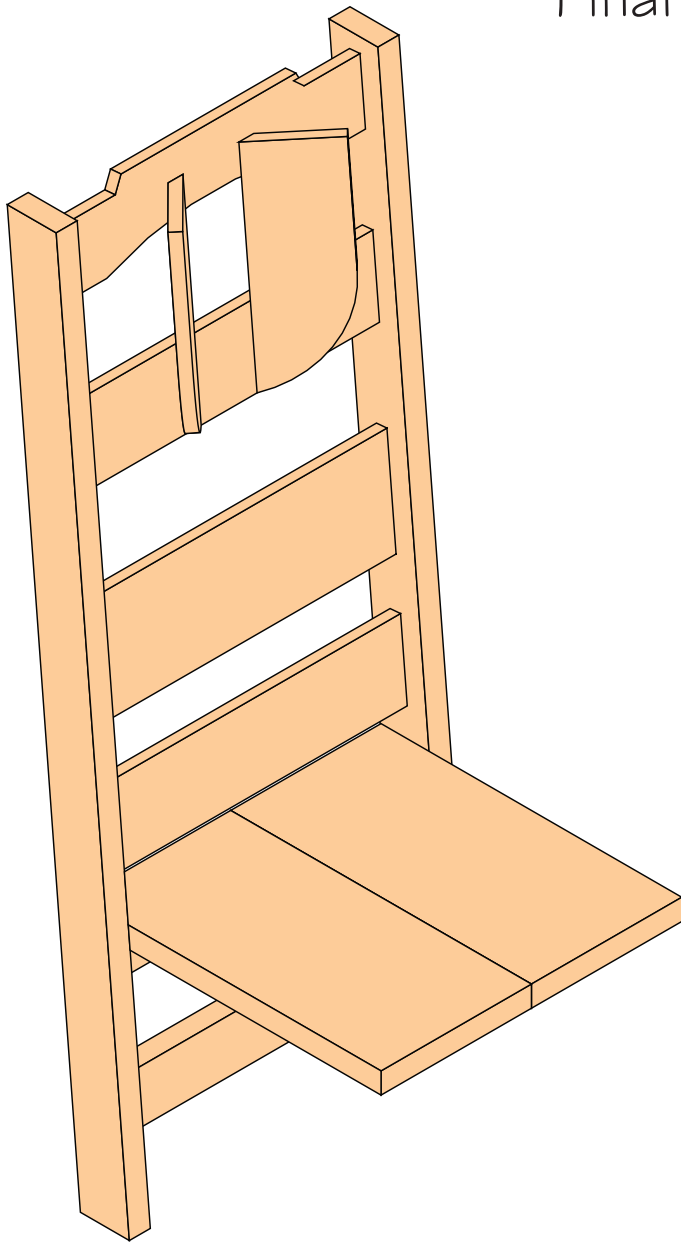
Final Construction

1) Begin with the base

2) Center and screw in the leg brace support. It is important that this is centered or the leg restraint will not fit within the arms when installed. Temporarily tack or clamp in place if you feel adjustments may be necessary



Final Construction

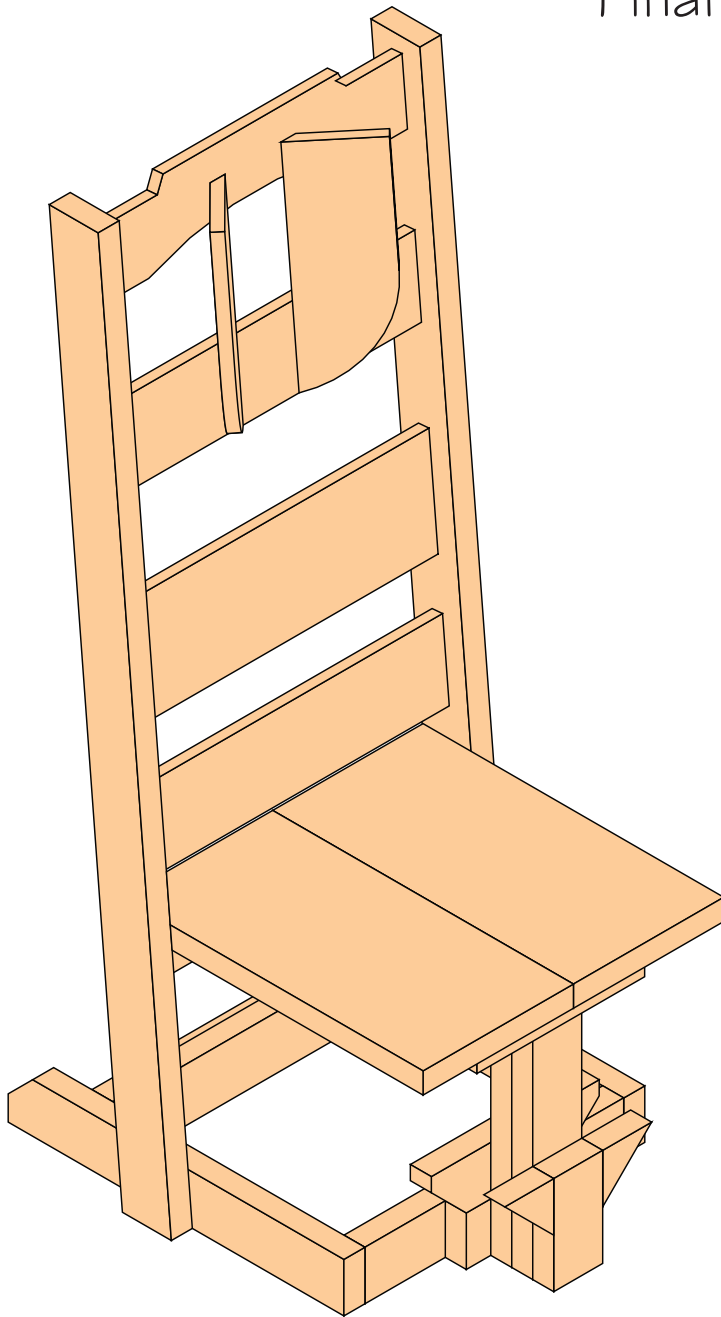


1) Begin with the base

2) Center and screw in the leg brace support. It is important that this is centered or the leg restraint will not fit within the arms when installed. Temporarily tack or clamp in place if you feel adjustments may be necessary

3) Lay the chair back flat on its back and screw the seat in place flush with the back of the Back Seat Support

Final Construction



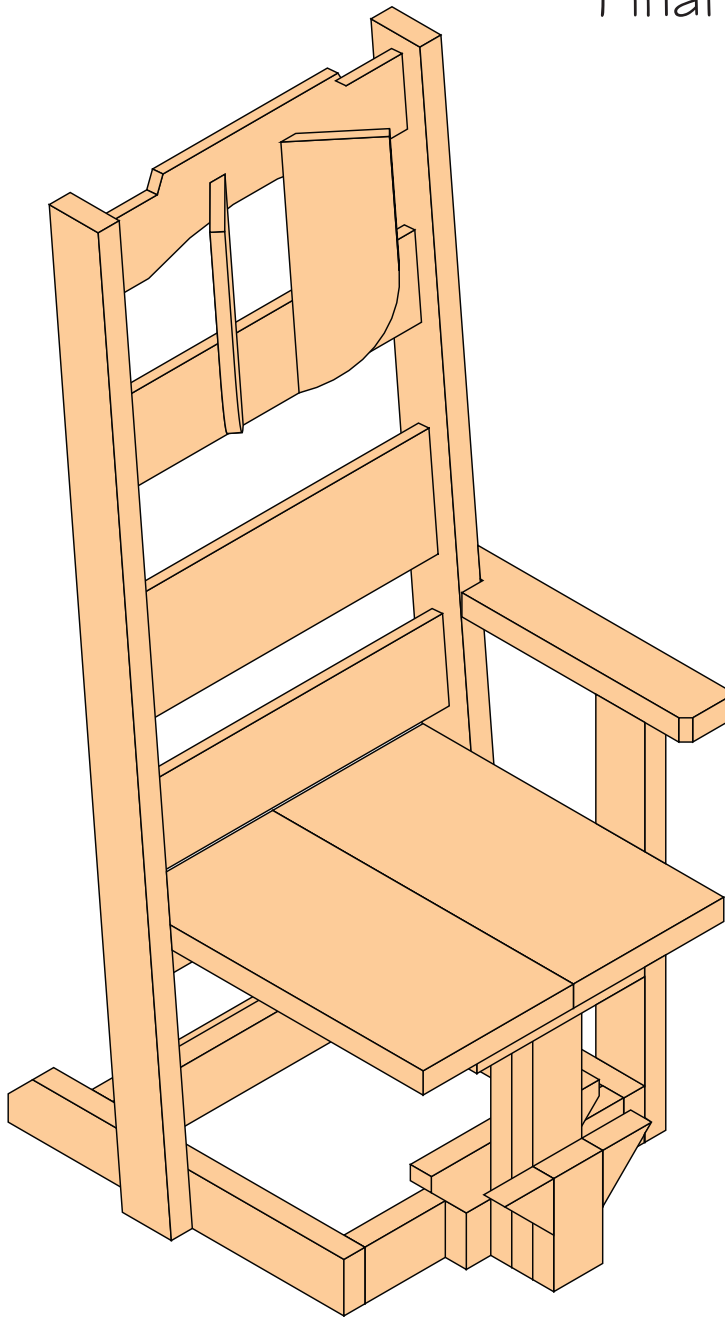
1) Begin with the base

2) Center and screw in the leg brace support. It is important that this is centered or the leg restraint will not fit within the arms when installed. Temporarily tack or clamp in place if you feel adjustments may be necessary

3) Lay the chair back flat on its back and screw the seat in place flush with the back of the Back Seat Support

4) Stand this unit up and place it over the base about 11 inches from the back, allowing about an inch of overhang on the front support. Test fit the arms to make sure the posts do not extend beyond the front of the base. Screw the front support to the bottom of the seat, or tack or clamp in place if center post adjustments may be needed.

Final Construction



1) Begin with the base

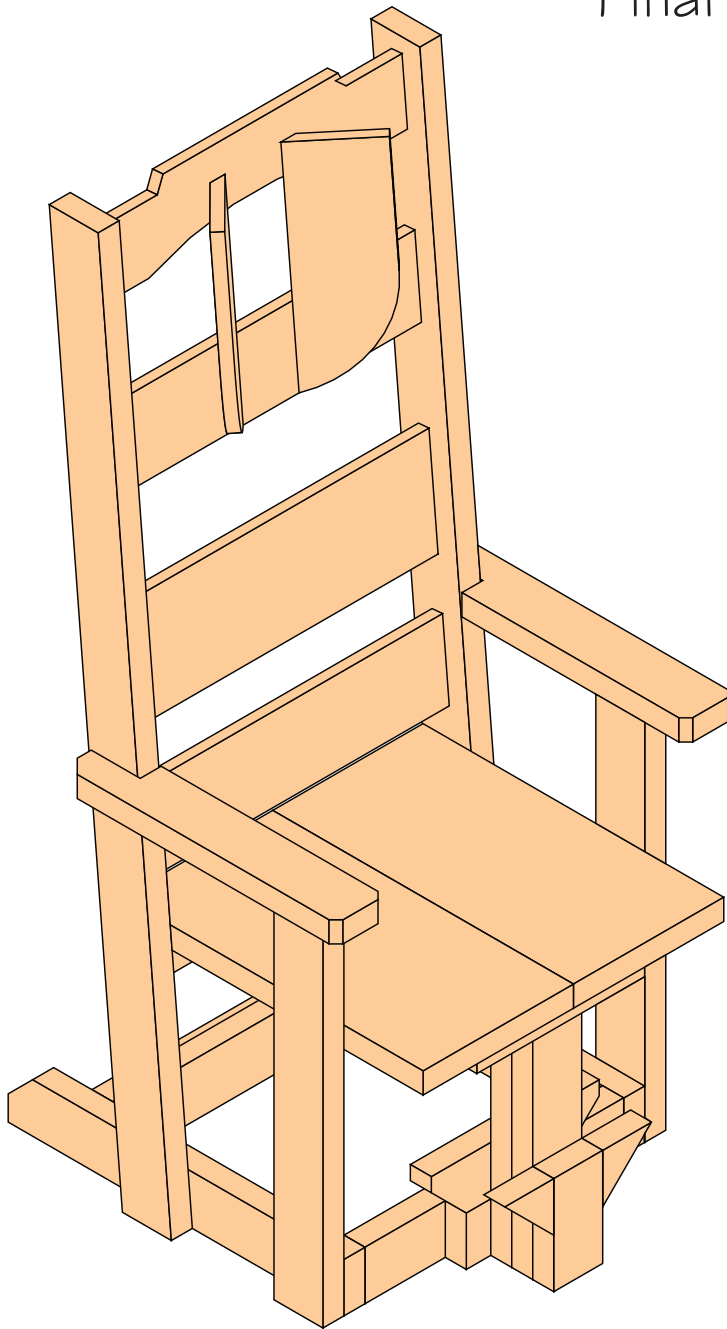
2) Center and screw in the leg brace support. It is important that this is centered or the leg restraint will not fit within the arms when installed. Temporarily tack or clamp in place if you feel adjustments may be necessary

3) Lay the chair back flat on its back and screw the seat in place flush with the back of the Back Seat Support

4) Stand this unit up and place it over the base about 11 inches from the back, allowing about an inch of overhang on the front support. Test fit the arms to make sure the posts do not extend beyond the front of the base. Screw the front support to the bottom of the seat, or tack or clamp in place if center post adjustments may be needed.

5) Install the left arm, screw it to the chair back, seat and base.

Final Construction



1) Begin with the base

2) Center and screw in the leg brace support. It is important that this is centered or the leg restraint will not fit within the arms when installed. Temporarily tack or clamp in place if you feel adjustments may be necessary

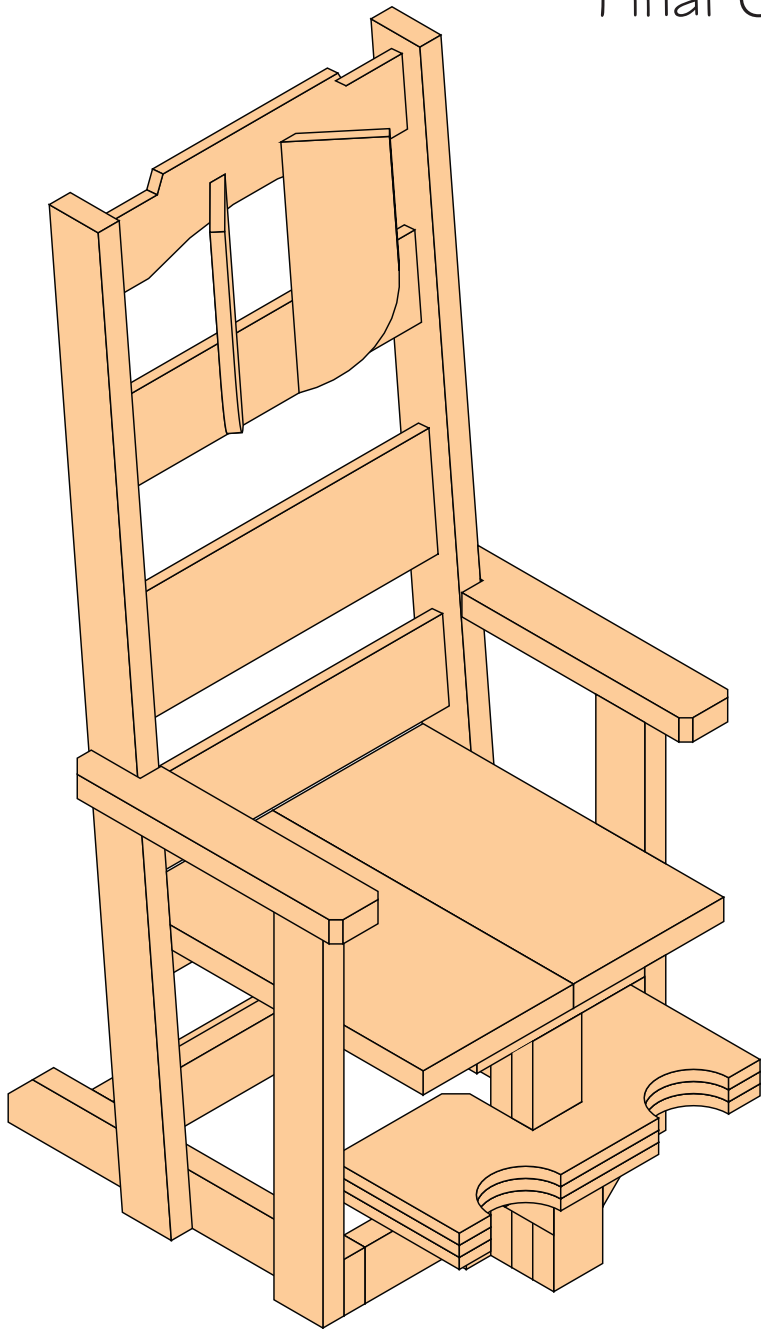
3) Lay the chair back flat on its back and screw the seat in place flush with the back of the Back Seat Support

4) Stand this unit up and place it over the base about 11 inches from the back, allowing about an inch of overhang on the front support. Test fit the arms to make sure the posts do not extend beyond the front of the base. Screw the front support to the bottom of the seat, or tack or clamp in place if center post adjustments may be needed.

5) Install the left arm, screw it to the chair back, seat and base.

6) Install the right arm, screw it to the chair back, seat and base.

Final Construction



1) Begin with the base

2) Center and screw in the leg brace support. It is important that this is centered or the leg restraint will not fit within the arms when installed. Temporarily tack or clamp in place if you feel adjustments may be necessary

3) Lay the chair back flat on its back and screw the seat in place flush with the back of the Back Seat Support

4) Stand this unit up and place it over the base about 11 inches from the back, allowing about an inch of overhang on the front support. Test fit the arms to make sure the posts do not extend beyond the front of the base. Screw the front support to the bottom of the seat, or tack or clamp in place if center post adjustments may be needed.

5) Install the left arm, screw it to the chair back, seat and base.

6) Install the right arm, screw it to the chair back, seat and base.

7) Install the leg restraint and screw it in from the bottom through the center supports