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# **Steps**

## Step 1

- 1. Lay leg A flat on the ground
- 2. Lay leg B flat on the ground
- 3. Align J holes with the holes of A and B
- 4. Secure J between A and B using bolts 4
- 5. Tighten using Allen Kye
- 6. Align Hholes with the holes of A and B
- 7. Secure H between A and B using bolts 4
- Tighten using Allen Kye
- 9. Align Iholes with the holes of A and B
- 10. Secure I between A and B using bolts 4
- 11. Tighten using Allen Kye
- 12. Align G holes with the holes of A, B, and J
- 13. Attach part G using bolts 2
- 14. Tighten using Allen Kye

#### Step 2

- 1. Lay leg C flat on the ground
- 2. Lay leg D flat on the ground
- 3. Align J holes with the holes of C and D
- 4. Secure J between A and B using bolts 4
- 5. Tighten using Allen Kye
- 6. Align G holes with the holes of C,D, and J
- 7. Attach part G using bolts 2
- 8. Tighten using Allen Kye

## Step 3

- 1. Lay part P horizontally on the ground.
- 2. Lay part Q horizontally on the ground about 3 inches above part P.
- 3. Lay part R horizontally on the ground about 3 inches above part Q.
- 4. Lay part N vertically on top of parts PQR.
- 5. Align the holes on part N with the holes on the left side of Parts PQR.

- 6. Lay part N vertically on top of parts PQR.
- 7. Align the holes on part N with the holes in the middle of Parts PQR.
- 8. Lay part N vertically on top of parts PQR.
- 9. Align the holes on part N with the holes on the right side of Parts PQR.
- 10. Connect Part N and Parts PQR by using tool 9 to screw in a bolt 2 to each of the holes.
- 11. Lay part K horizontally on the ground.
- 12. Lay part L horizontally on the ground about 3 inches above part K.
- 13. Lay part M horizontally on the ground about 3 inches above part L.
- 14. Lay part N vertically on top of parts KLM.
- 15. Align the holes on part N with the holes on the left side of Parts KLM.
- 16. Lay part N vertically on top of parts KLM.
- 17. Align the holes on part N with the holes in the middle of Parts KLM.
- 18. Lay part N vertically on top of parts KLM.
- 19. Align the holes on part N with the holes on the right side of Parts KLM.
- 20. Connect Part N and Parts KLM by using tool 9 to place a bolt 2 to each of the holes.

#### Step 4

- 1. Place washer 5 on top of the hole on the bottom left of part T.
- 2. Place washer 6 above washer 5.
- 3. Place bolt 4 through washers 5 and 6 into the hole using tool 9.
- 4. Repeat 1-3 on the bottom left corner of part T.
- 5. Repeat 1-4 on the other two part Ts and Part U.

# Step 5

- 1. Place PF1 in the front-left corner of the rightHeadboard.
- Orient PF1 that the flat edge is facing inward at the top of the rightHeadboard.
- 3. Line up PF1's holes with the corner pieces.
- 4. Take one flat washer, washer, and B4, as well as allen Wrench.
- 5. Place flat washer on the hole.
- 6. Place washer on the hole on top of flat\_washer.
- 7. Place B4 inside the hole, through flat washer and washer.
- 8. Use allen\_Wrench to tighten B4.
- 9. Repeat steps 4-8 on the remaining 3 holes.
- 10. Place PE1 in the front-right corner of the rightHeadboard.
- 11. Orient PE1 that the flat edge is facing inward at the top of the rightHeadboard.
- 12. Line up PE1's holes with the corner pieces.
- 13. Repeat steps 4-8 on the 4 holes lined up with PE1.

# Step 6

1. Stand up the leftHeadboard and rightHeadboard.

- Orient the leftHeadboard and rightHeadboard to face each other with the metal parts facing inward.
- Take PV1 and place at the bottom right edge of the parts, lining up with holes
- 4. Take B4 and place it inside one of the holes lining up with PV1.
- 5. Repeat step 4 on the other side of PV1.
- 6. Take PS1 and orient the smaller flat edge parallel to PV1.
- 7. Take PS1 up to the holes midway on both sides
- 8. Repeat steps 4 and 5 using PS1 instead of PV1.
- 9. Take the frontSide and backSide.
- 10. Take the backSide, and stand on the same side as PS1 and PV1.
- 11. Orient this part so that PN3, PN4, and PN5 face away from the build.
- 12. Make sure the backSide is resting on PF1.
- 13. Take the frontSide, and head to the opposite side of PS1 and PV1.
- 14. Orient the part like the other part in step 11 & 12, and allow it to rest on PE1.

#### Step 7

- 1. Use allen\_Wrench to tighten the B4s placed during steps 5-9 in step 6 (Gavin)
- 2. On one of the metal pieces near the top, take B1 and place it inside one of the holes.
- 3. Use allen Wrench to tighten the B1 that was just placed.
- 4. Repeat steps 2-3 on the other hole on the same piece.
- 5. Repeat steps 2-4 on the other 3 metal pieces.

#### Step 8

- 1. Place m and d together so that they are aligned where you could see through both the leg and the hole.
- 2. Place the .8in screw through the hole
- 3. screw in the screw until you can't screw in the screw anymore
- 4. Repeat the first 2 steps for each of the next 3 corners of the bed.
- 5. Align the front and back legs so that you can see through the holes.
- 6. place the m6x1' in screws in and screw them in using an allen key

# Step 9

- 1. On the lower part of the desk align the ladder horizontally that you can through the holes on each side of the ladder.
- 2. Place the flat washer under the washer
- 3. push the mx1' screw threw both of the washers
- 4. Then place the screw in the hole on one side of the ladder
- 5. screw in the screw using a allen key
- 6. Repeat steps 2-3 for the other side of the desk.

#### Step 10

- 1. Locate the Yx1 piece
- 2. Pick up the Yx1 piece
- 3. Search for the center mounts on the two J pieces
- 4. Line the ends of the Yx1 piece above the center mounts of the two J pieces
- 5. Push the Yx1 piece down making sure it is fastened to the center mounts on the two J pieces

#### Step 11

- 1. Locate the Wx1 piece
- 2. Center the Wx1 piece on top of the Yx1 piece
- 3. Make sure the holes on the Wx1 piece are aligned with the holes on the bed frame
- 4. Locate 6 of the 4x3 screws
- 5. Use a drill or screwdriver or drill to fasten the Wx1 to the bedframe using the 4x3 screws
- 6. Finished

# **Variables**

- PA1- First A part
- PB1- First B part
- PC1- First C part
- PD1- First D part
- PE1- First E part
- PF1- First F part
- PG1- First G part
- PG2- Second G part
- PH1- First H part
- PI1- First I part
- PJ1- First J part
- PJ2- Second J part
- PK1- First K part
- PL1- First L part
- PM1- First M part
- PN1- First N part
- PN2- Second N part
- PN3- Third N part
- PN4- Fourth N part
- PN5- Fifth N part
- PP1- First P part
- PQ1- First Q part
- PR1- First R part
- PS1- First S part

- PT1- First T part
- PU1- First U part
- PV1- First V part
- PW1- First W part
- PY1- First Y part
- S1 = -4x30 screw
- S2 = 4x20 screw
- B1 = M6x12 Bolt
- B2 = M6x25 Bolt
- B3 = M6x30 Bolt
- B4 = M6x70 Bolt
- flat\_washer = washer used in steps 4,5, and 9
- washer = the small washer used in steps 4,5, and 9
- allen\_Wrench = Part 9, the Allen Wrench
- leftHeadboard = Part assembled at the end of Step 1
- rightHeadboard = Part assembled at the end of Step 2
- frontSide = Part assembled during Step 3 with parts PK1, PL1, PM1, PN1, and PN2
- backSide = Part assembled during Step 3 with parts PN3, PN4, PN5, PP1, PQ1, and PR1