

## Lathe Bench Plans for Jet 1221 VS Lathe

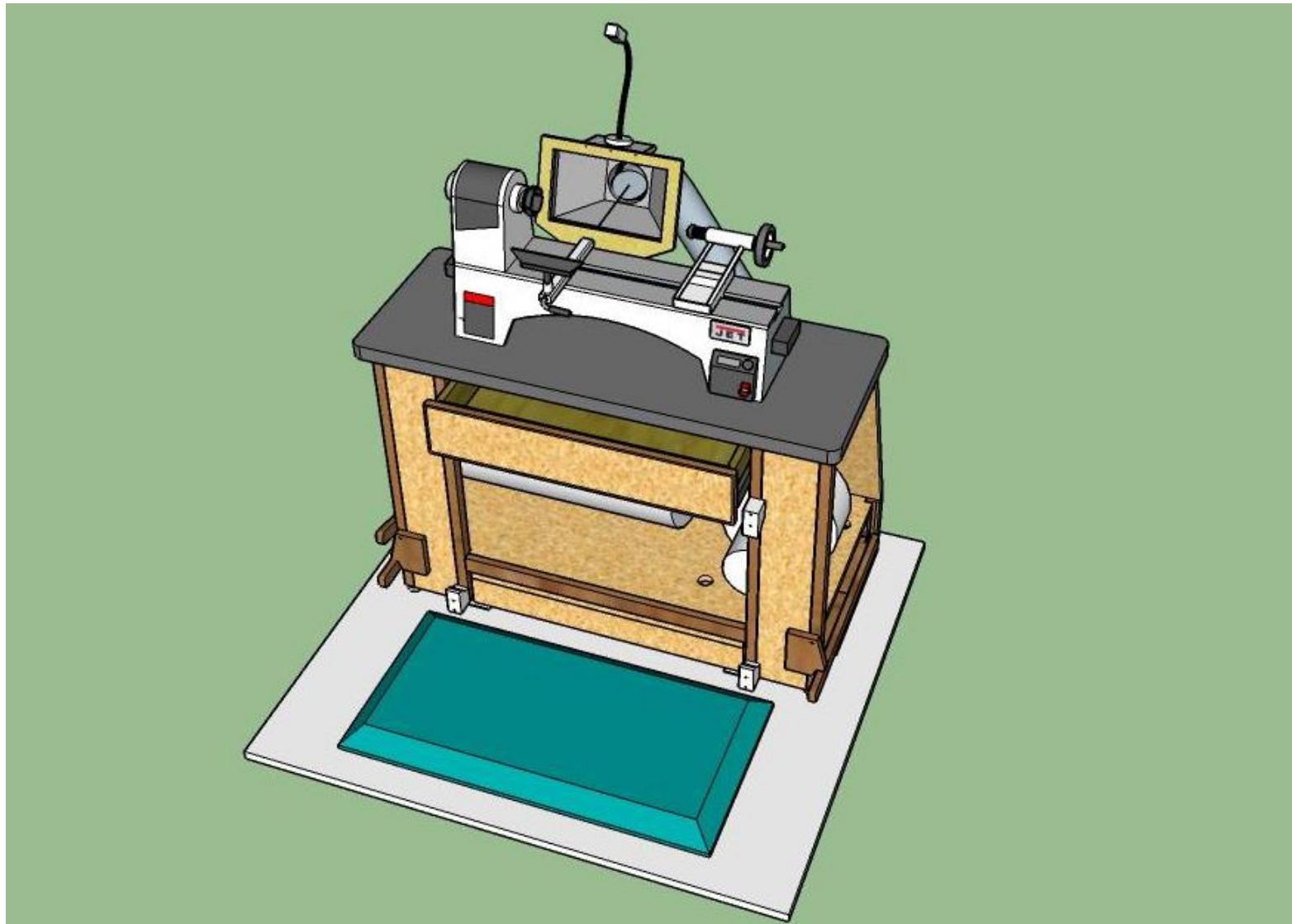
This bench is designed specifically for the Jet 1221VS lathe but could easily be used for other mid-sized lathes. The main features include construction from readily available materials, easy joinery, substantial weight for stability, retractable casters, adjustable foot pads, built in dust collection, extra electrical outlets, single pigtail for power connection, a sturdy drawer with double extension slides for storage of basic lathe accessories, built in riser for vertically challenged turners and fatigue pad storage when not in use.

The main materials used in the construction are hardwood such as Maple or Oak, good quality ¾" & ½" plywood, good quality MDF (Medium Density Fiberboard) and a few pieces of construction 2 x 4. Most of the joinery is secured with carpenter's glue and the Kregg Pocket Screw system. Otherwise appropriate length Dri-Wall screws are used. After assembly all exposed edges are eased with 1/8" rondover bit. Then all surfaces are lightly sanded before sealing and finishing with two coats of Shellac. After sealing any appropriate paint will add color if desired.

There are a number of ways to secure and position the dust hood. I am not completely satisfied with the design shown here. It works OK but I wish it had more range of motion. If I come up with a better design it can be easily refined and change later. The hood needs to be moveable to very close proximity to the work in order to collect the most amount of dust during sanding. The dust collector does not have the power and it is not designed to collect chips while turning. Grizzley, Rockler and General all make very similar dust collectors that will fit under the bench. Even though the published specs are different I'm not sure there is much difference in the performance between them. I used the Grizzley unit in my bench. I believe the Rockler unit is a bit quieter.

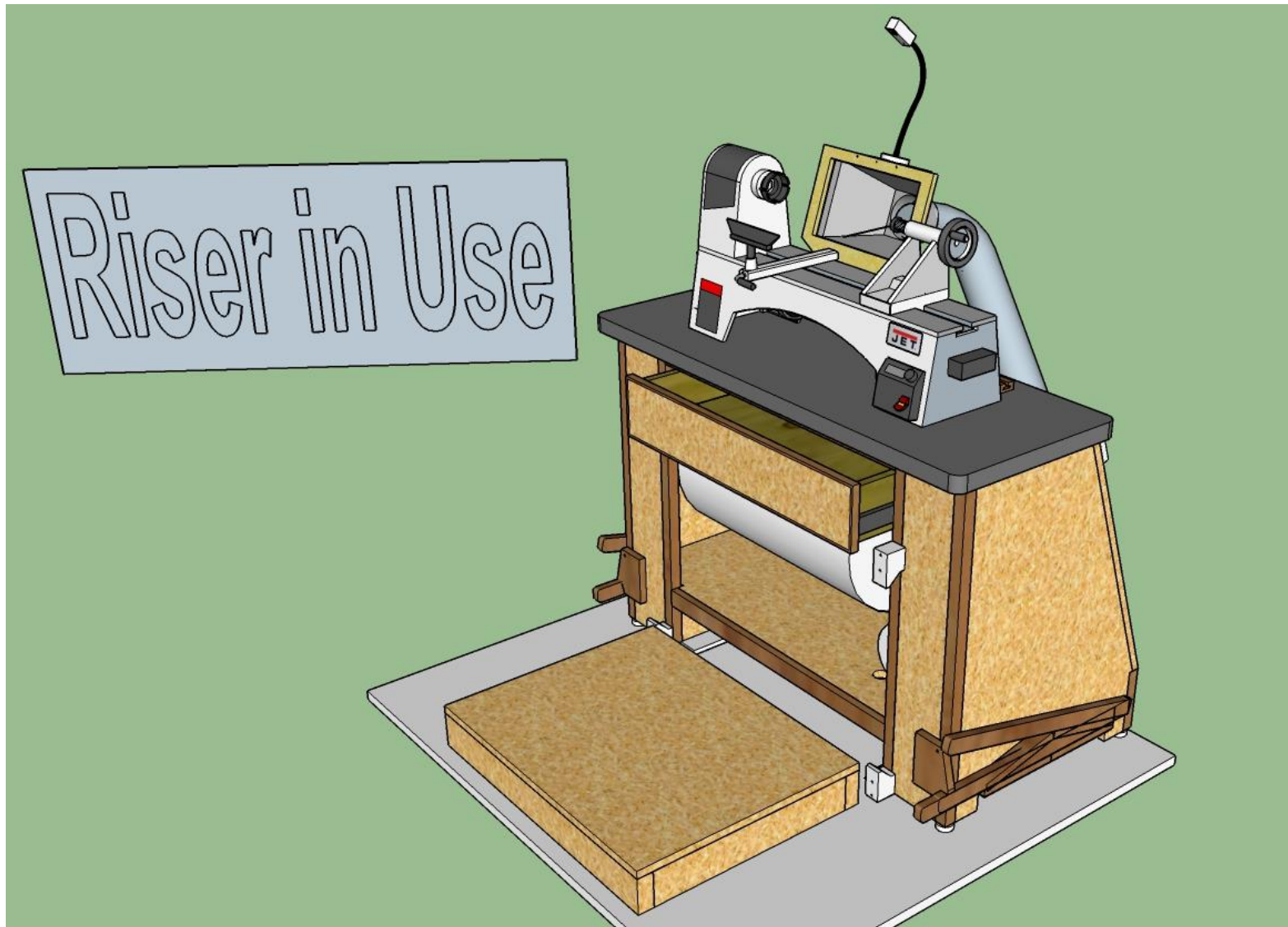
This design was created by Dave Kratzer for the Ohio Valley Woodturners Guild [www.ovwg.org](http://www.ovwg.org) for their Learning Center. The design was inspired by dust collection seen at Marc Adams School and retractable wheel systems seen on You Tube. OVWG needed 8 benches so there are cut diagrams for the sheet goods for 8 benches. The Google free version of Sketch Up was used in the design process and to create the following images. After a few more refinements I may upload this design to the Sketch Up Warehouse for anyone to use. If you want a copy of the Sketch Up file please contact me. [dave@kratzerkraft.com](mailto:dave@kratzerkraft.com)

## Lathe Bench Plans for Jet 1221 VS Lathe



The completed bench with storage drawer, 2" thick industrial fatigue mat and dust collection system.

## Lathe Bench Plans for Jet 1221 VS Lathe



Here we see the built in Riser in use. When not in use it stores and transports under the bench.

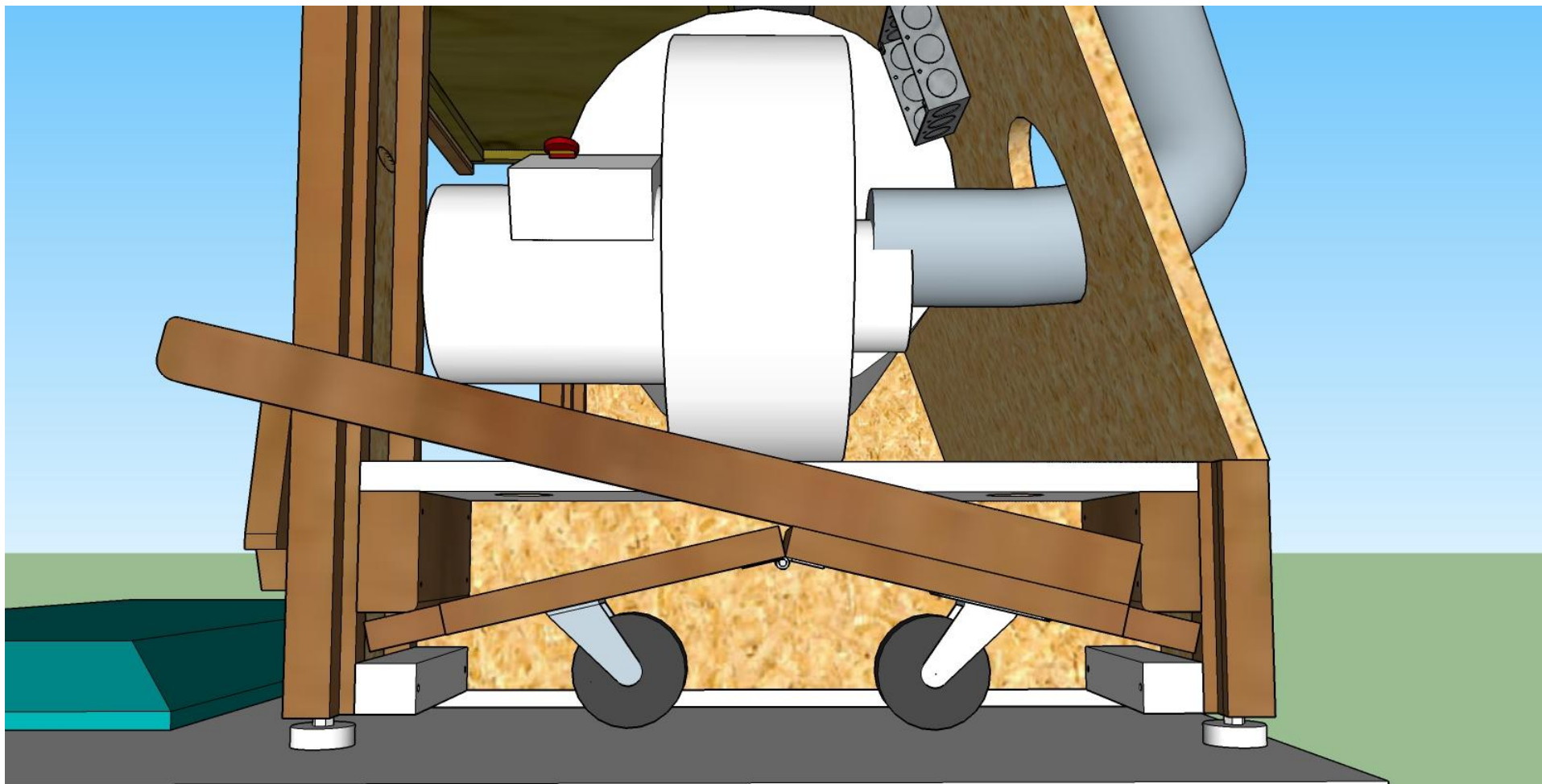
Extra lift can be gained by placing fatigue pad on top of riser.

## Lathe Bench Plans for Jet 1221 VS Lathe



We needed the ability to move all the lathes aside to create an open meeting space so it was useful to be able to store the fatigue mat right on the bench. The upper right retainer pivots and works as a simple latch to hold the pad and make it easy to remove. The sloped back of the bench keeps the dust hose from being crushed when pushed against the wall or other lathes during storage. The whole unit occupies approximately 2' x 4' of floor space. With a compartmented drawer for chuck and lathe tools and accessories this makes for a compact unit that is easy to verify that all of the tools are there at the end of the day.

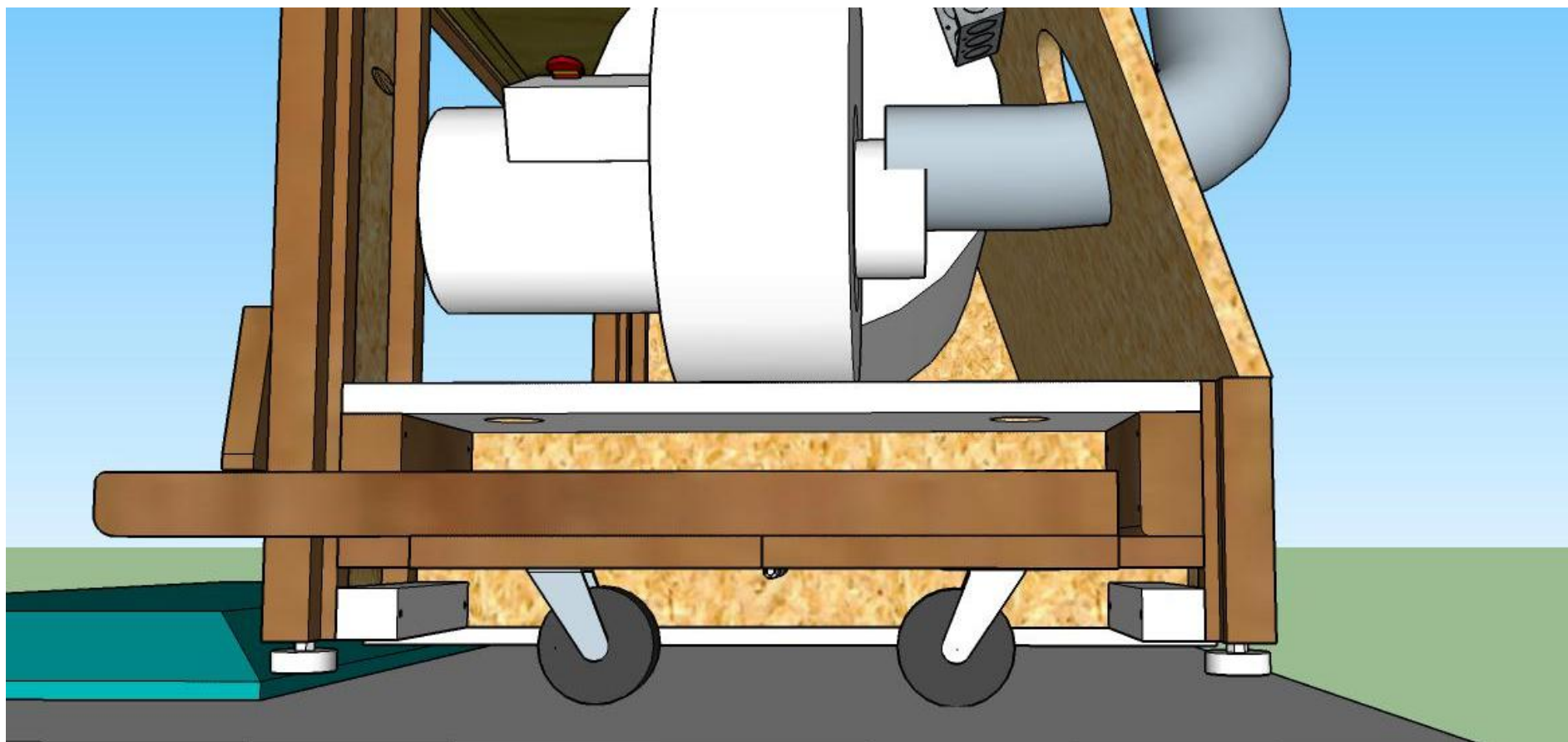
## Lathe Bench Plans for Jet 1221 VS Lathe



This is the wheel system in the retracted position. The wheel system is a clever design that I stole from the internet. The combination of a long lever and lots of mechanical advantage make this system easy to use even with very heavy loads. This design is easily adaptable to different caster sizes and bench configurations. I like the ability to operate from the front and that it uses inexpensive non locking casters. It works equally well with fix wheels on one end of the bench although we chose to use casters on both ends for more maneuverability.

In this view the end panel has been omitted for a clear view of caster system.

## Lathe Bench Plans for Jet 1221 VS Lathe

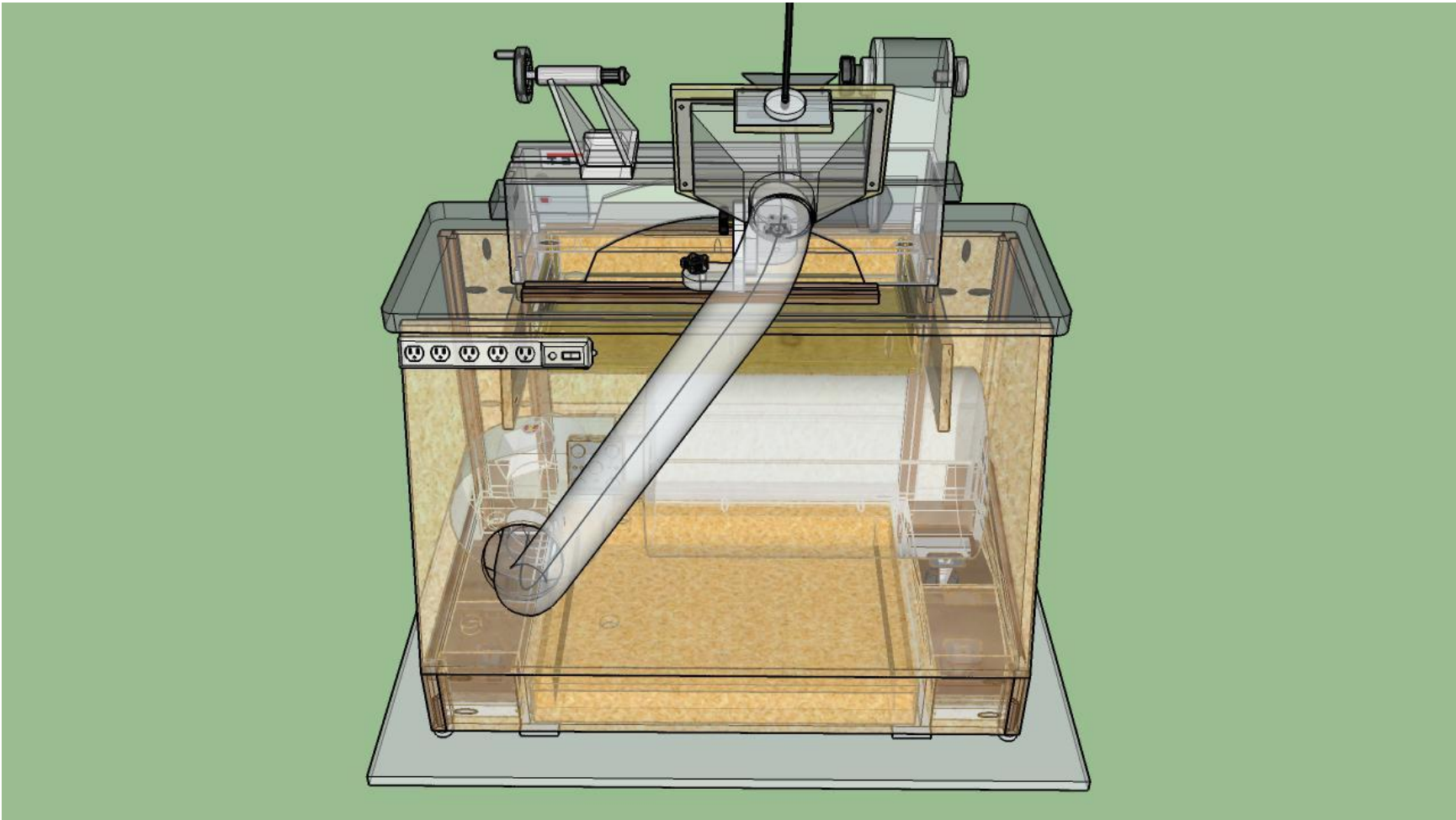


The wheel system in the extended position.

The free swinging latch on front of bench makes for easy operation of the wheels with one hand or a foot. The amount of lift can be adjusted some by varying the placement distance of the casters from the hinge. More lift closer to the center. More stability farther from the center. This design produces an inch or more of lift and adequate stability. You could also increase the travel distance of the caster plates but that would take more space under the shelf. The placement I used seems to work well with 2-1/2" to 3" Casters. Different size casters can be accommodated by changing the size of the pivot blocks thus raising and lowering the caster plates.

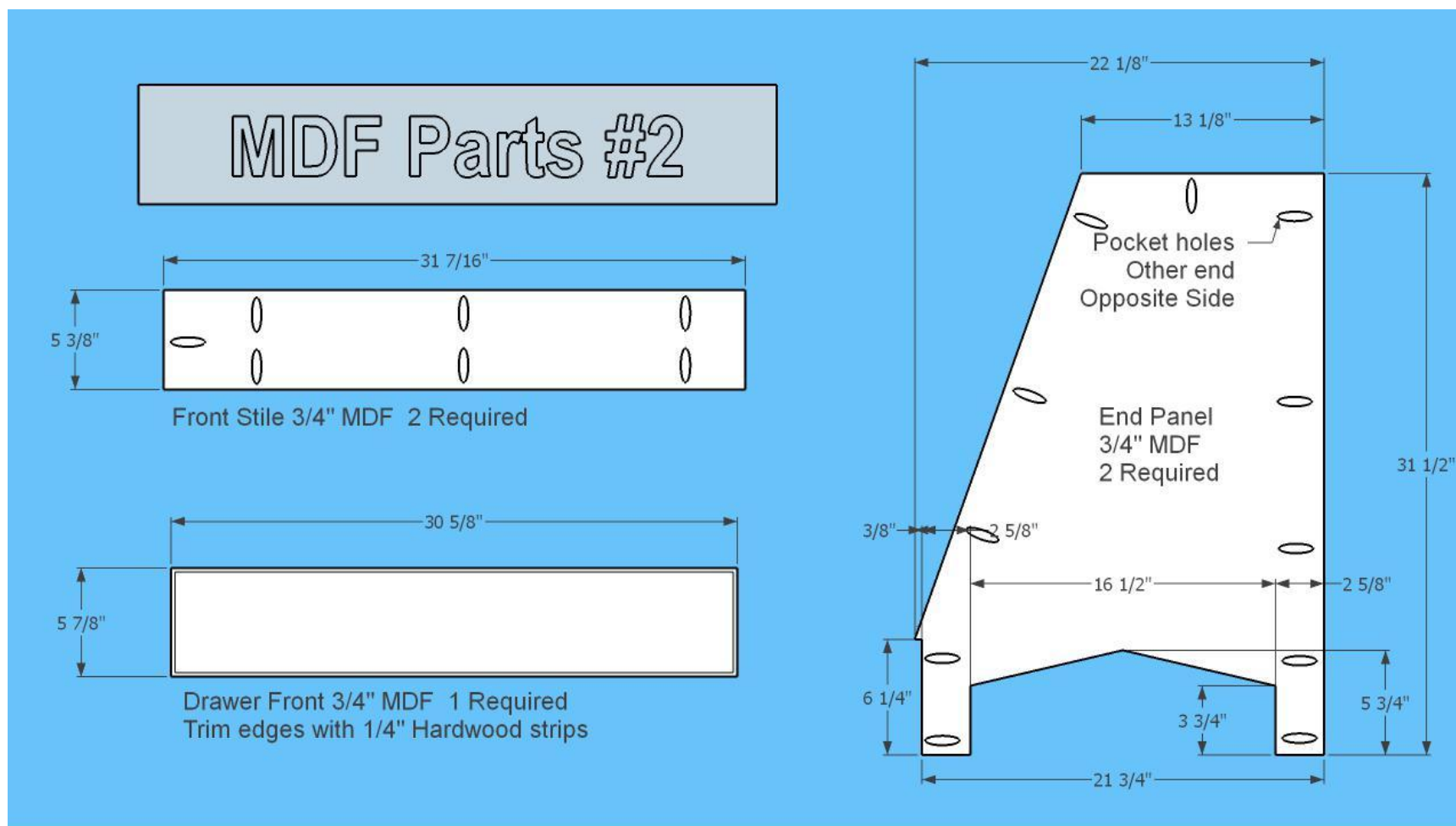
In this view the end panel has been omitted for a clear view of caster system.

## Lathe Bench Plans for Jet 1221 VS Lathe



A quad electrical box is included under the bench in an out-of-the-way location to plug in the lathe, task light and the additional plug strip attached to the back of the bench. The quad box has one long pigtail that goes to the main power source. The plug strip can be used for drills, sanders and other accessories around the lathe.

## Lathe Bench Plans for Jet 1221 VS Lathe

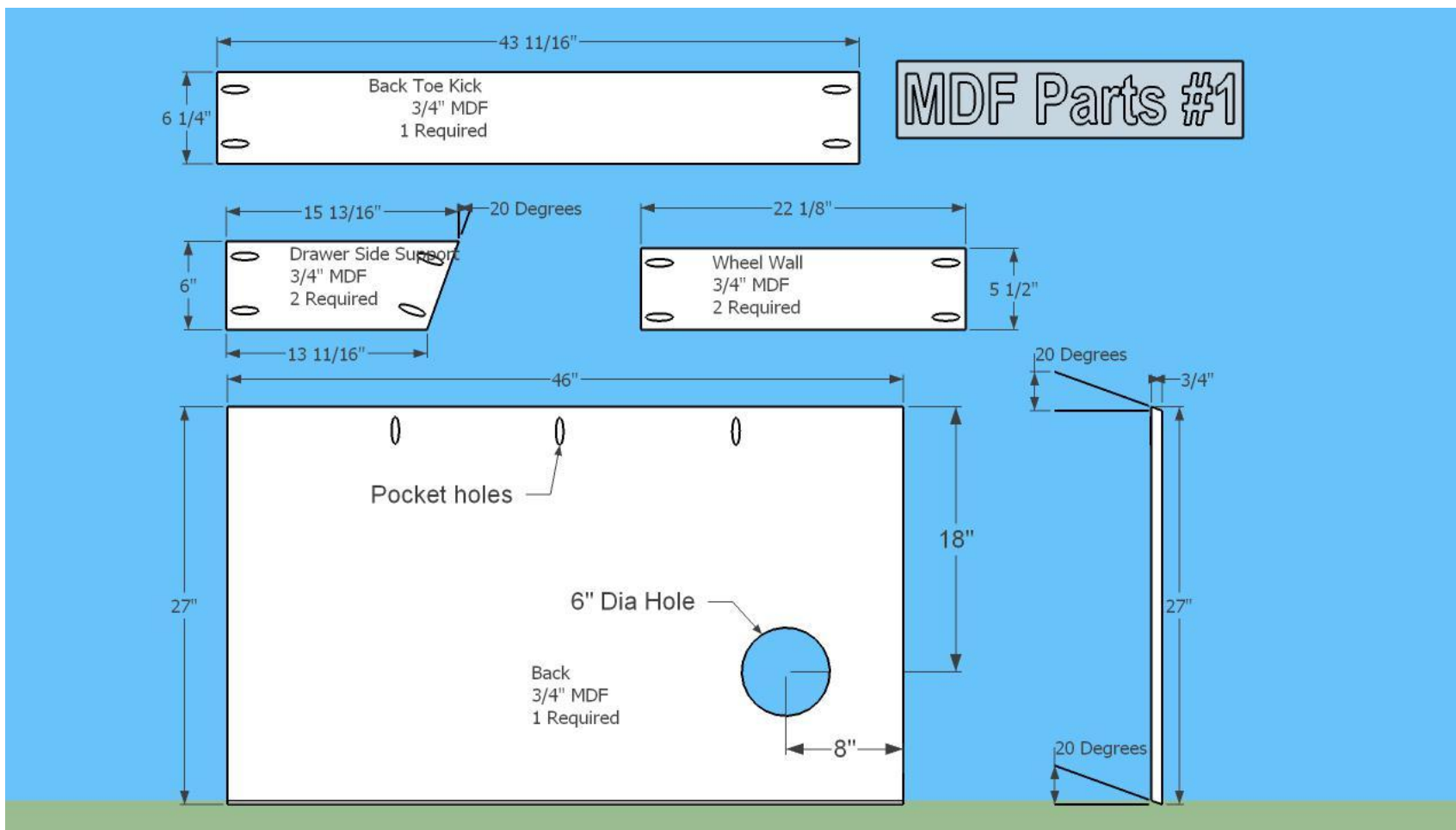


All of the MDF parts could be made from plywood but I chose MDF for the added weight and reduced cost. I have incorporated hardwood legs and edging on the MDF to give strength where needed and protect vulnerable corners from abuse. The oval markings for Kregg Pocket Hole screws are approximate locations and can be eyeballed rather than measured. A minimum of Pocket Screws are needed as they serve mainly as clamps till the glue dries. The Pocket Holes along the top edge are used to attach the Bench Top.

For the End Panels be sure to make Right and Left versions. I.E. put the Pocket Holes on opposite sides of panel.

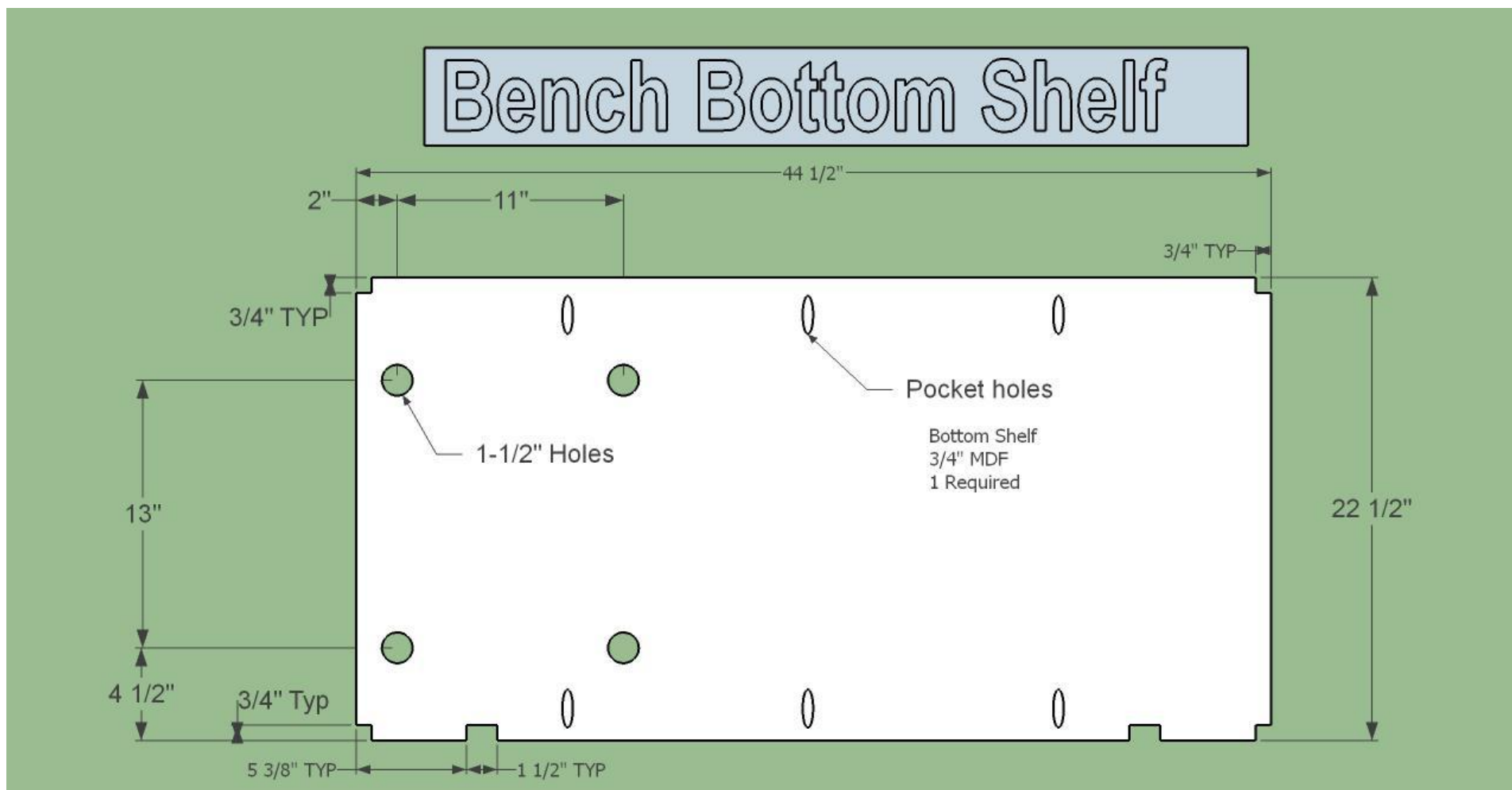


# Lathe Bench Plans for Jet 1221 VS Lathe



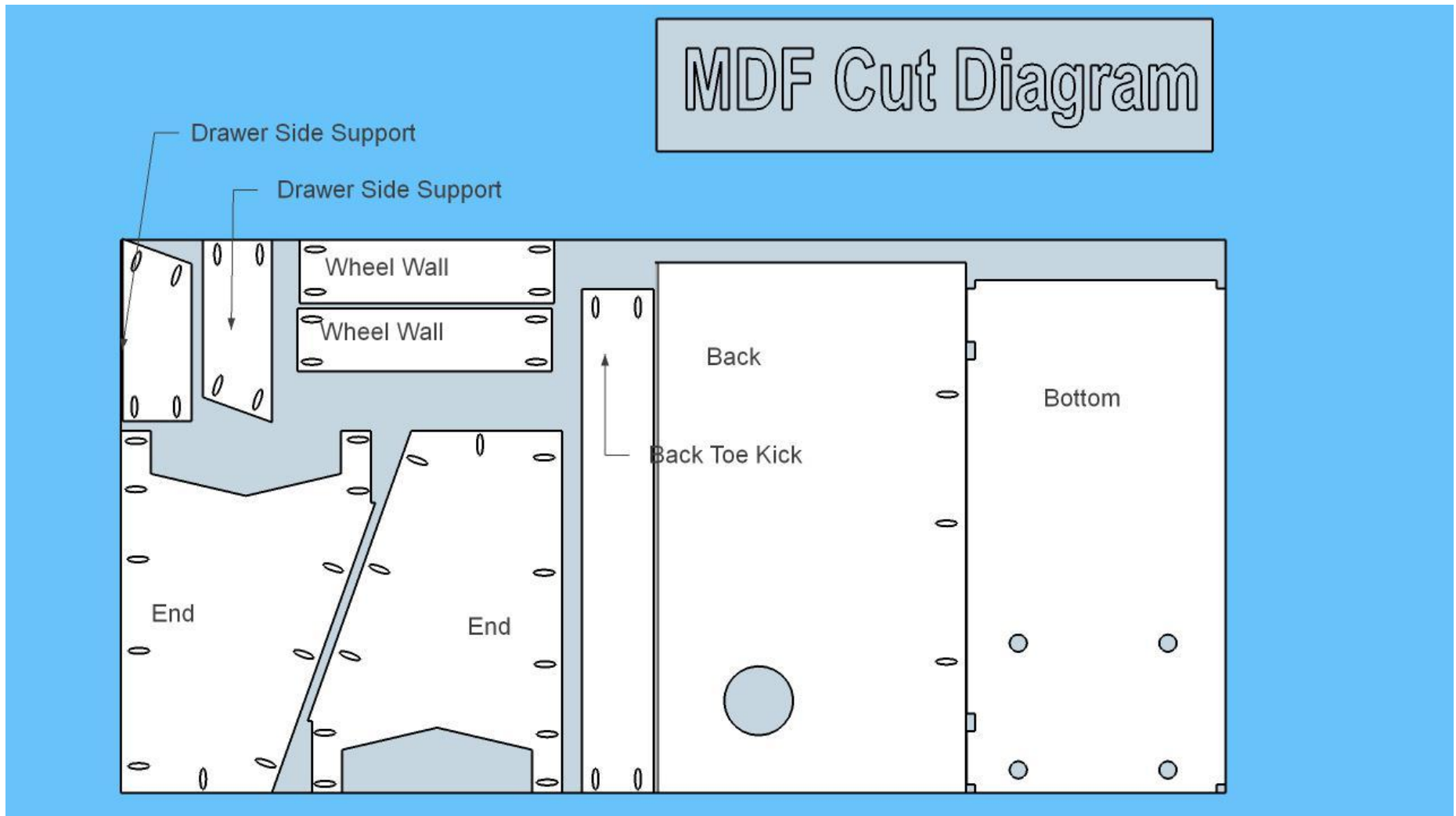
For these parts you could make RH and LH versions of the Drawer Side Support but it is not entirely necessary it just makes the Pocket Screws easier to access on one side. You may want to wait till final assembly to locate the 6 inch hole in the Back panel as there may be some difference in the location based on which Dust Collector is used. Due to the 20 degree angle it may take some trimming and fitting of the Back panel during and after assembly to get the best fit and look. I fitted and installed the panel then planed any protrusions with a block plane. 1/8" roundover the 6" hole on both sides to protect the dust hose from abrasion. After the bench is assembled 1/8" roundover all exposed edges of MDF and hardwood.

## Lathe Bench Plans for Jet 1221 VS Lathe



The location of the 1-1/2" holes that locate the casters of the Dust Collector and prevent it from rolling around should be verified before drilling as the location may differ depending on which Dust Collector is used. The locations here work for the Grizzly Dust Collector.

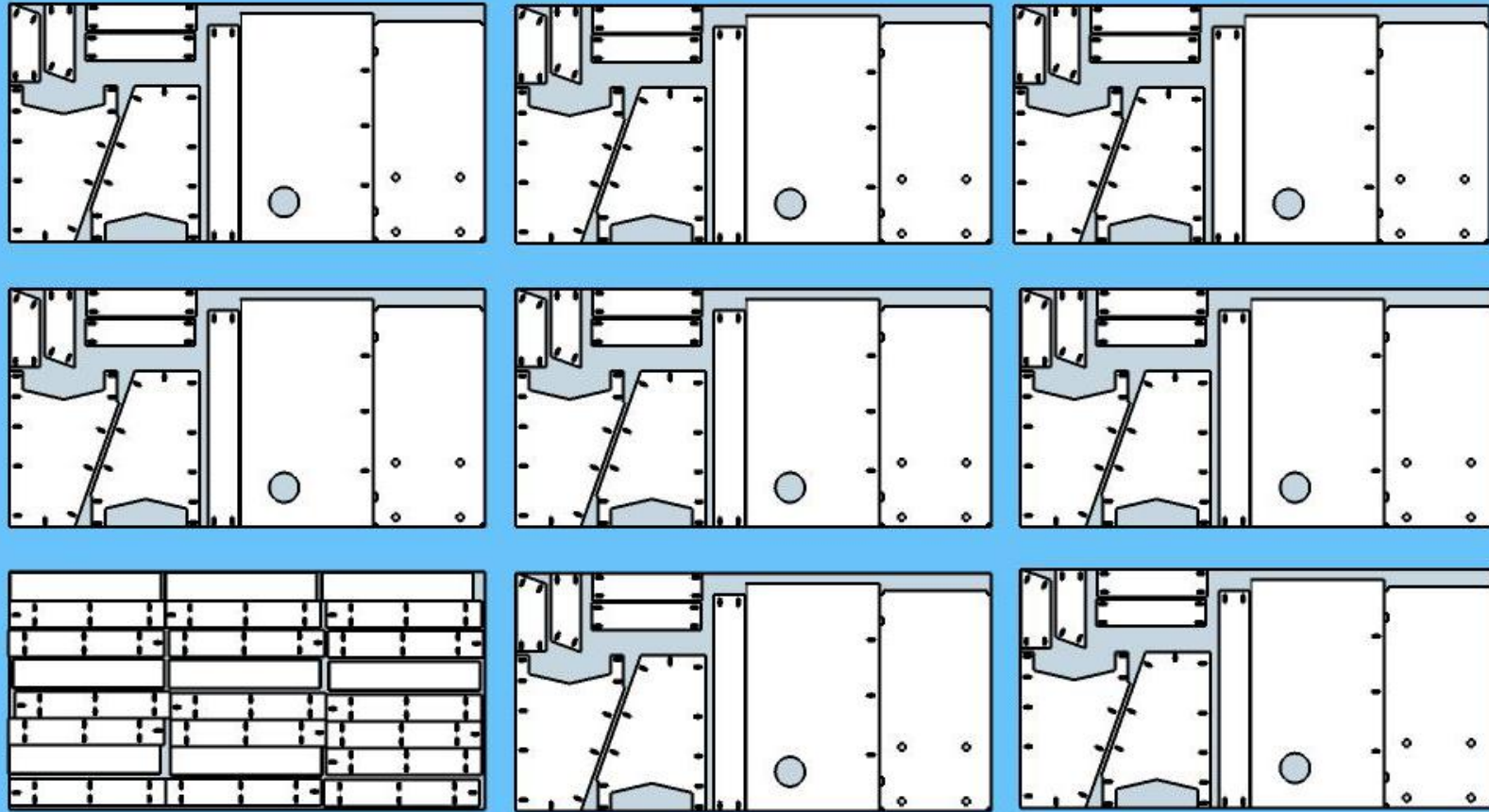
## Lathe Bench Plans for Jet 1221 VS Lathe



This diagram shows how most of the MDF parts can be cut from one sheet of MDF. All that is missing is the Front Stiles and the Drawer Front. For one bench they can be made from less than a ¼ sheet or scraps of MDF. For 8 benches a whole sheet is used. See below.

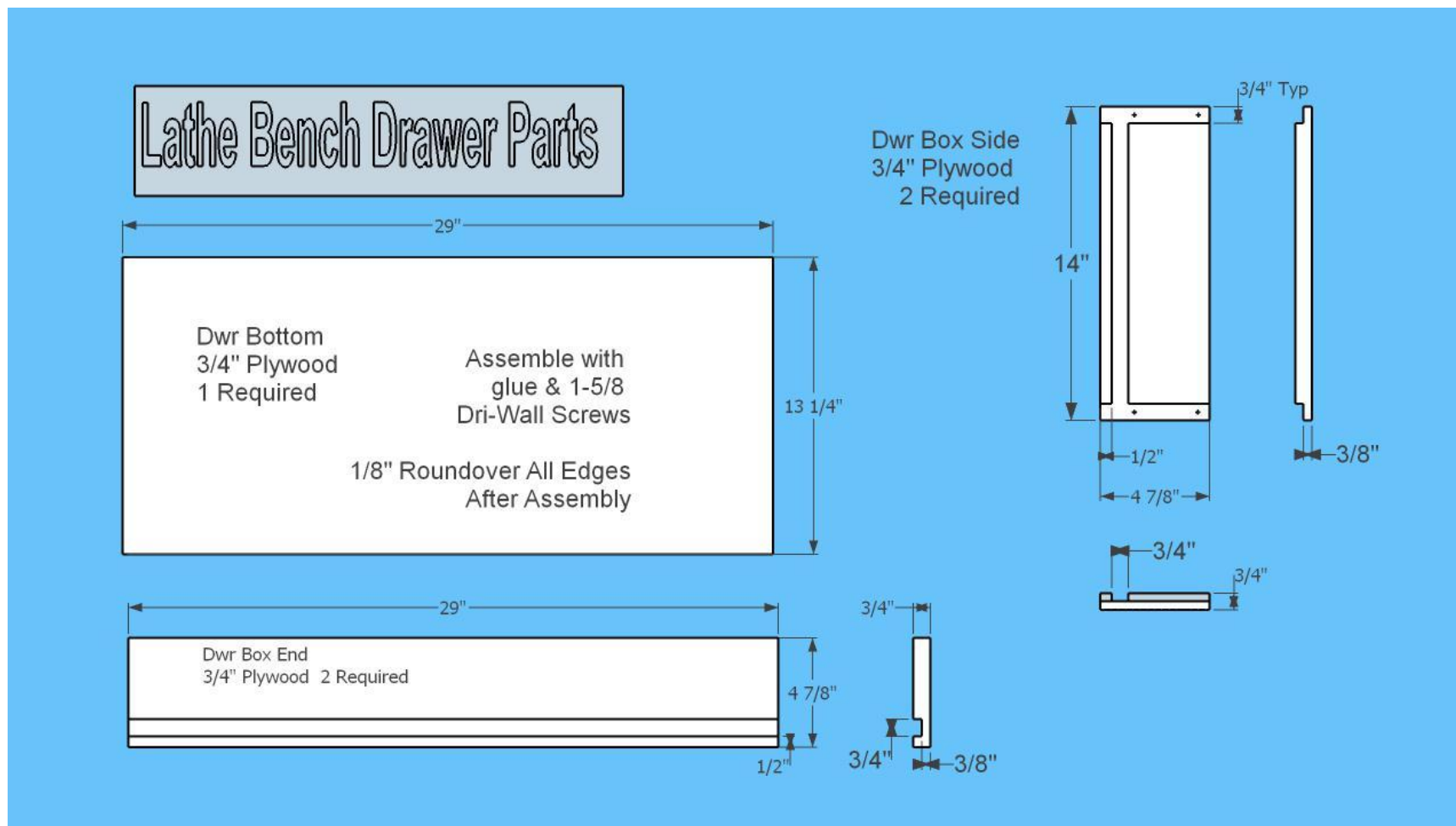
# Lathe Bench Plans for Jet 1221 VS Lathe

## MDF Sheets



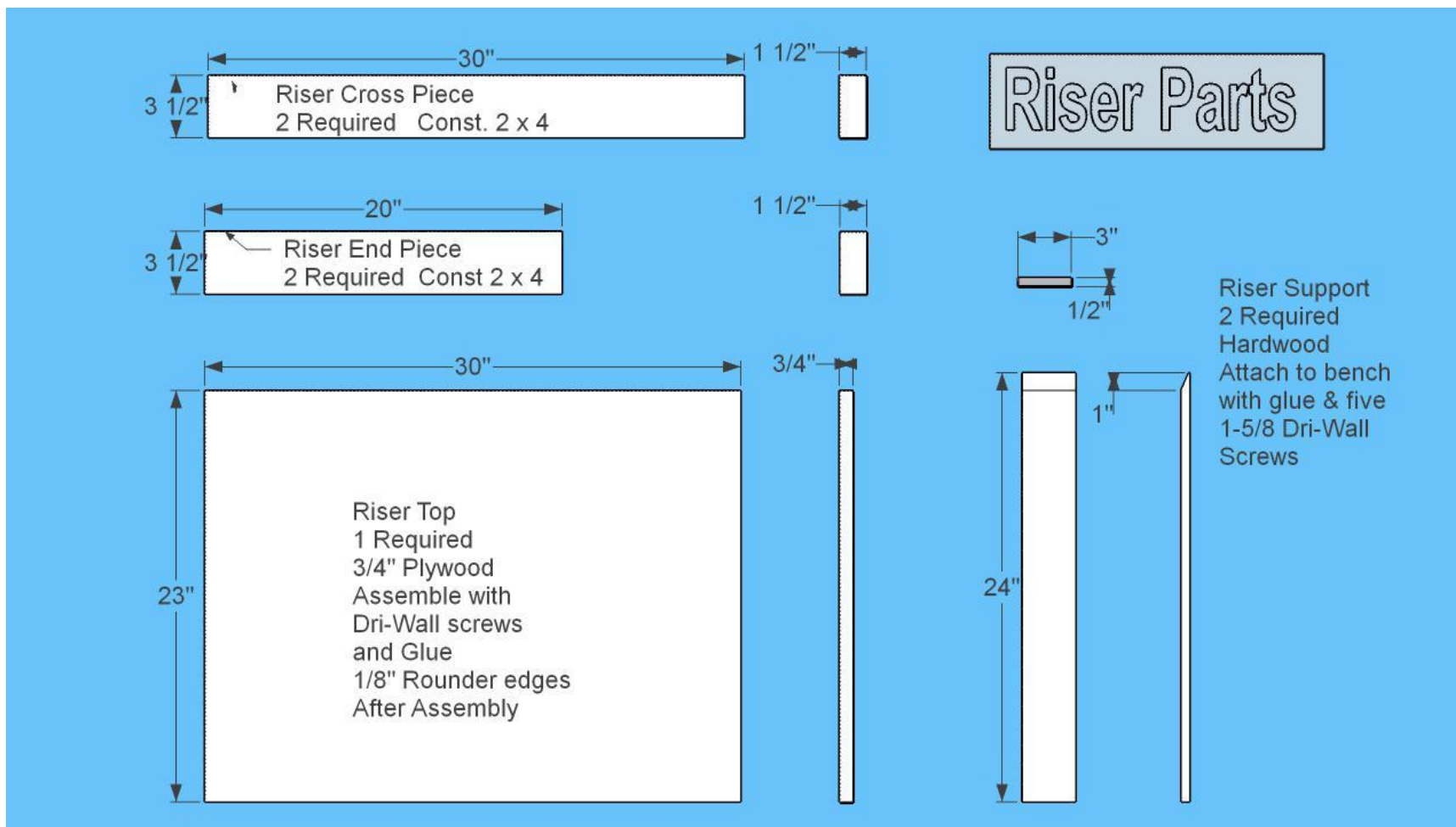
Here is the cut diagram for 8 benches from 9 sheets of MDF. The Front Stiles and Drawer Fronts come from the 9<sup>th</sup> sheet.

## Lathe Bench Plans for Jet 1221 VS Lathe



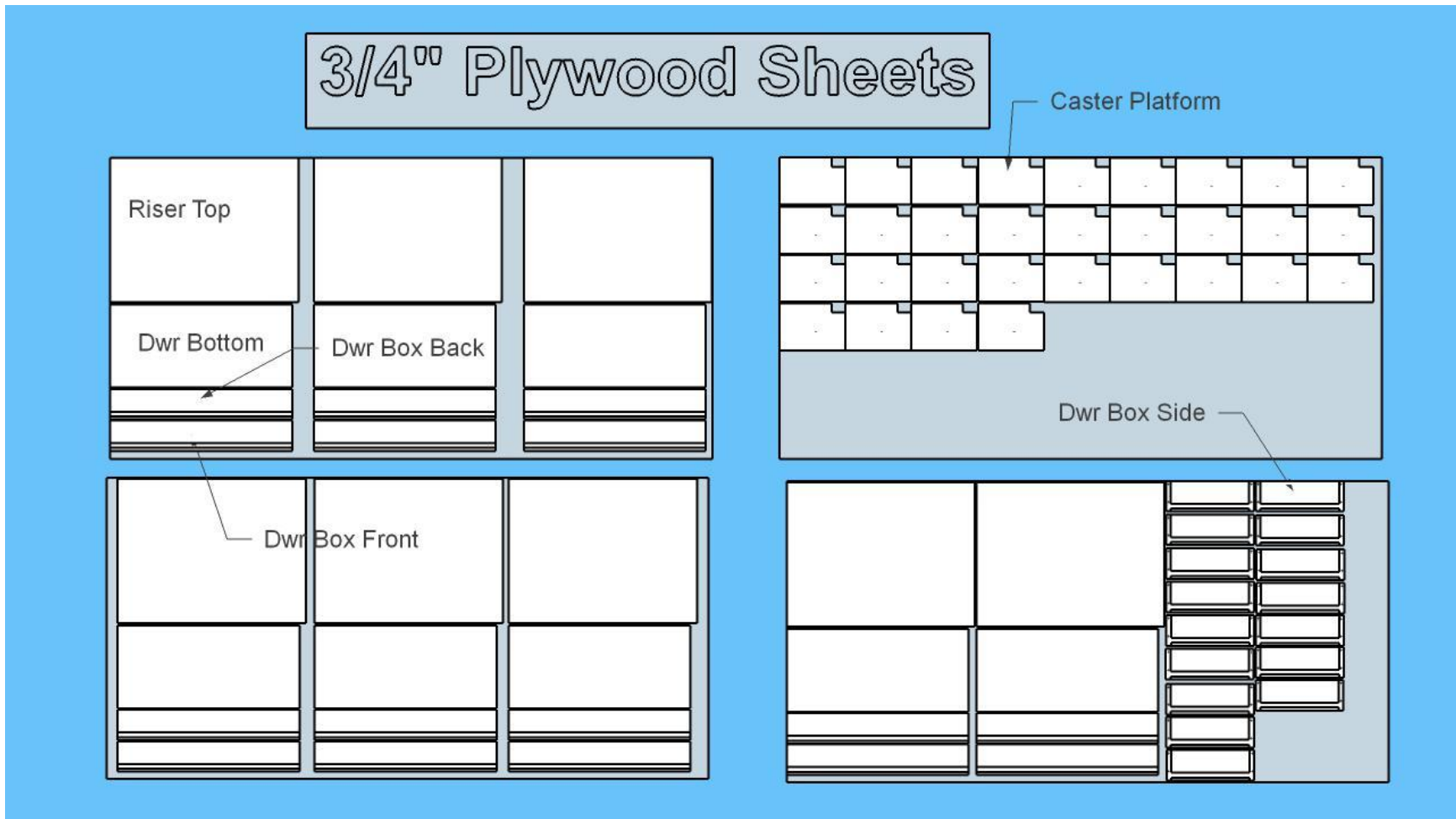
The Drawer is made from 3/4" plywood for strength and durability as it will hold a number of tools and heavy chucks. When it is determined what tools will be kept in the drawer a compartmented insert can be made to hold each tool so it can be easily determined at a glance that all the tools are accounted for at the end of a turning session. After assembly all edges should be eased with 1/8" roundover. Attach Drawer Front with 4 Dri-Wall screws after drawer is mounted in finished bench.

## Lathe Bench Plans for Jet 1221 VS Lathe



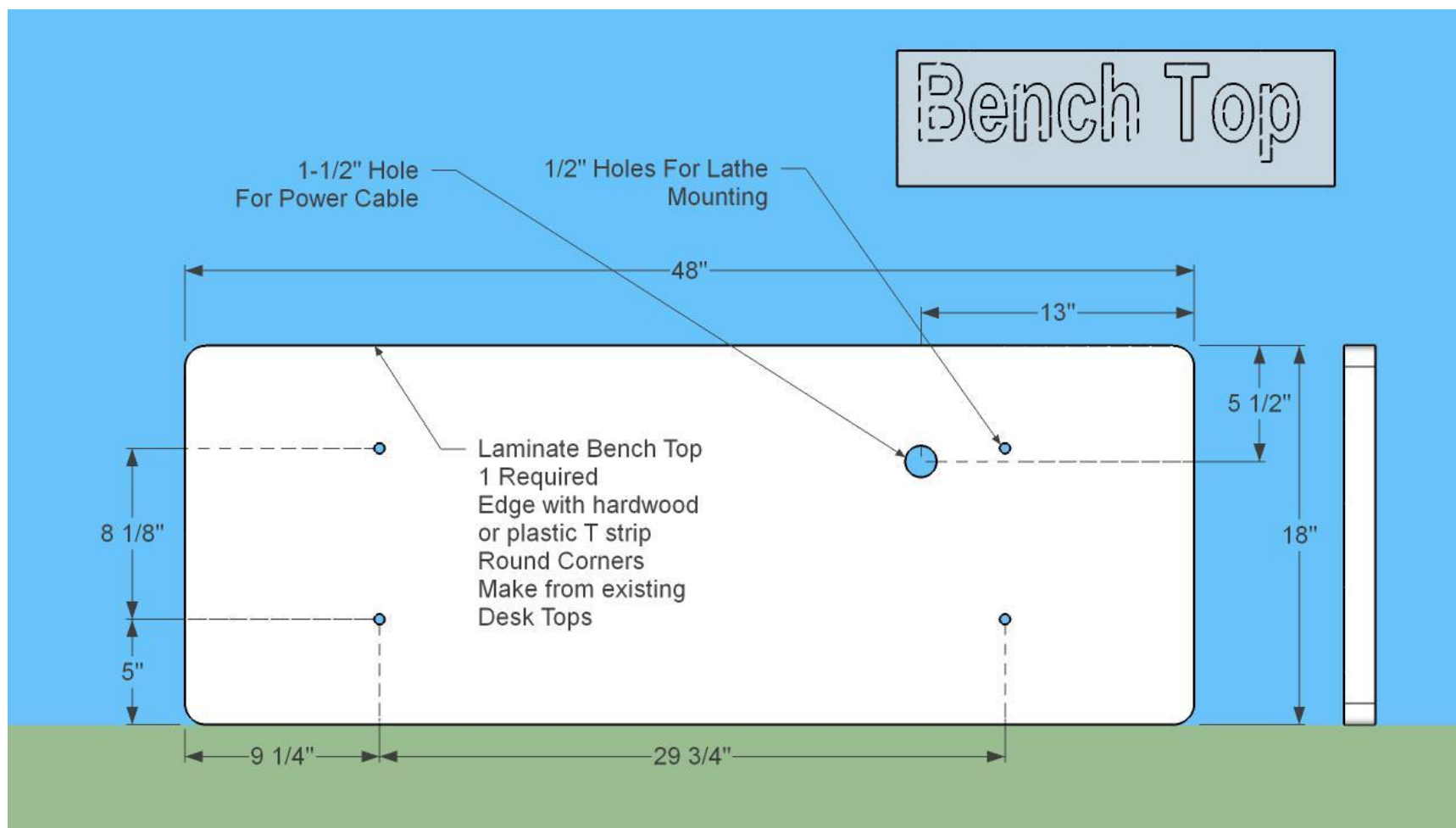
The Riser will take a lot of abuse and the frame can be made from construction grade 2 x 4. The support runners should be made from strong 1/2" hardwood. Assemble Riser with glue and Dri-Wall screws. Attach Riser Support to under side Wheel Wall with Glue and Dri-Wall screws. 1/8" roundover all edges after assembly.

# Lathe Bench Plans for Jet 1221 VS Lathe



This is the cutting diagram for all of the 3/4" plywood parts for 8 benches. The Caster Platforms must be made from plywood as they have a lot of strain on them. MDF will break when lowering wheels. Don't ask me how I know that.

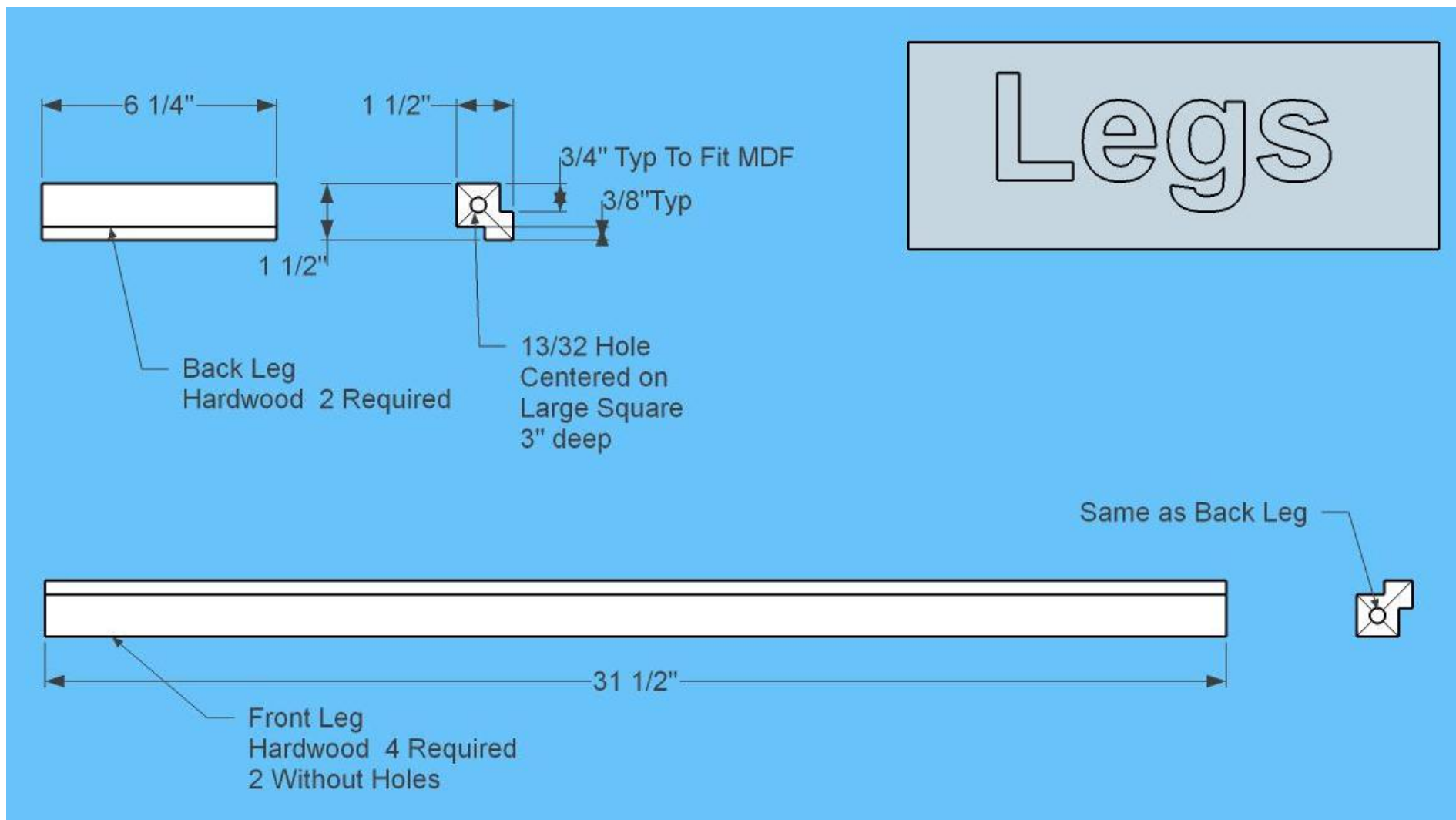
## Lathe Bench Plans for Jet 1221 VS Lathe



I made my Bench Top from an old solid core door and trimmed it with hardwood. OVGW Bench Tops are to be made from a supply of laminated table tops that the club already owns. They will then be edged in hardwood or plastic 'T' edging. The hole locations here are for the Jet 1221VS lathe. The Bench Top is held to the bench with Pocket Screws around the top of the bench panels.



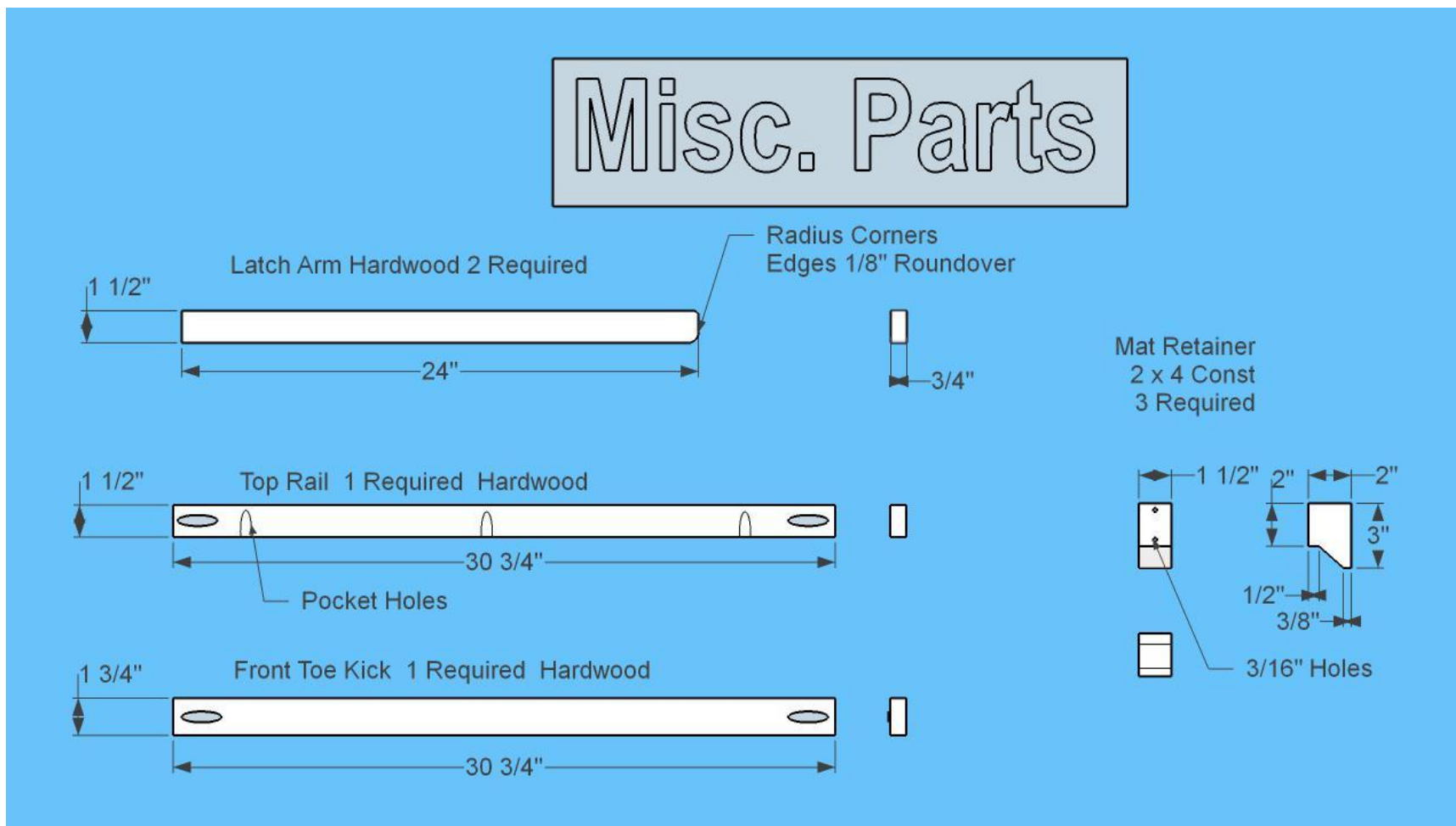
## Lathe Bench Plans for Jet 1221 VS Lathe



Two of the long legs for each bench do not need to have the hole in the end. The 3/4" rabbet needs to be sized to the thickness on the MDF used. All 3/4" MDF is not really 3/4".

T-Nut to be inserted in leg holes to accommodate leveler Glides.

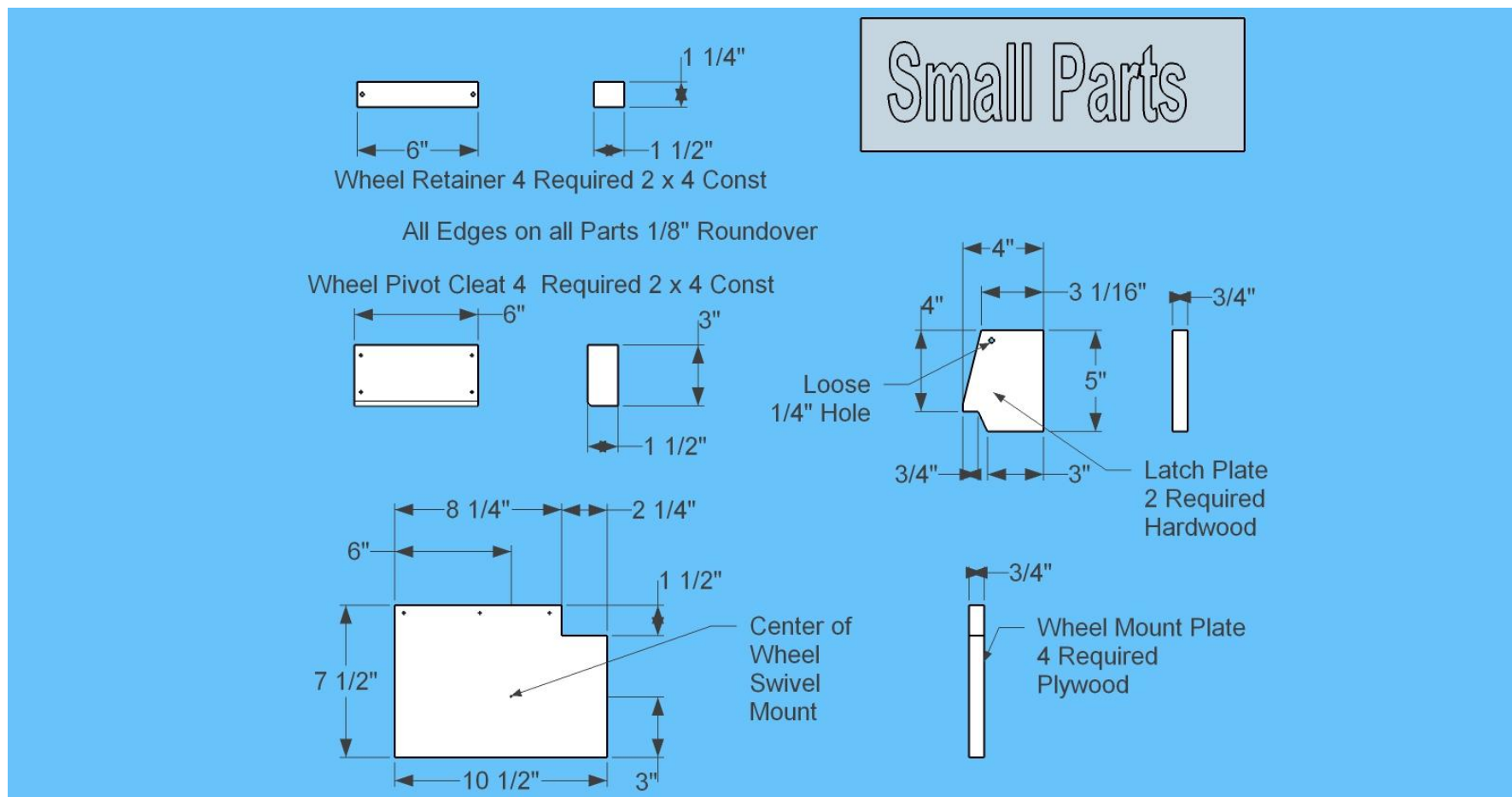
# Lathe Bench Plans for Jet 1221 VS Lathe



Make Latch Arm from defect free hardwood as it gets a lot of strain during wheel extension. The Latch Arm should have all edges eased with 1/8" roundover. Do not roundover the Rail or Toe Kick until after assembly of bench. Three Pocket holes along length of Rail are for attaching Bench Top.

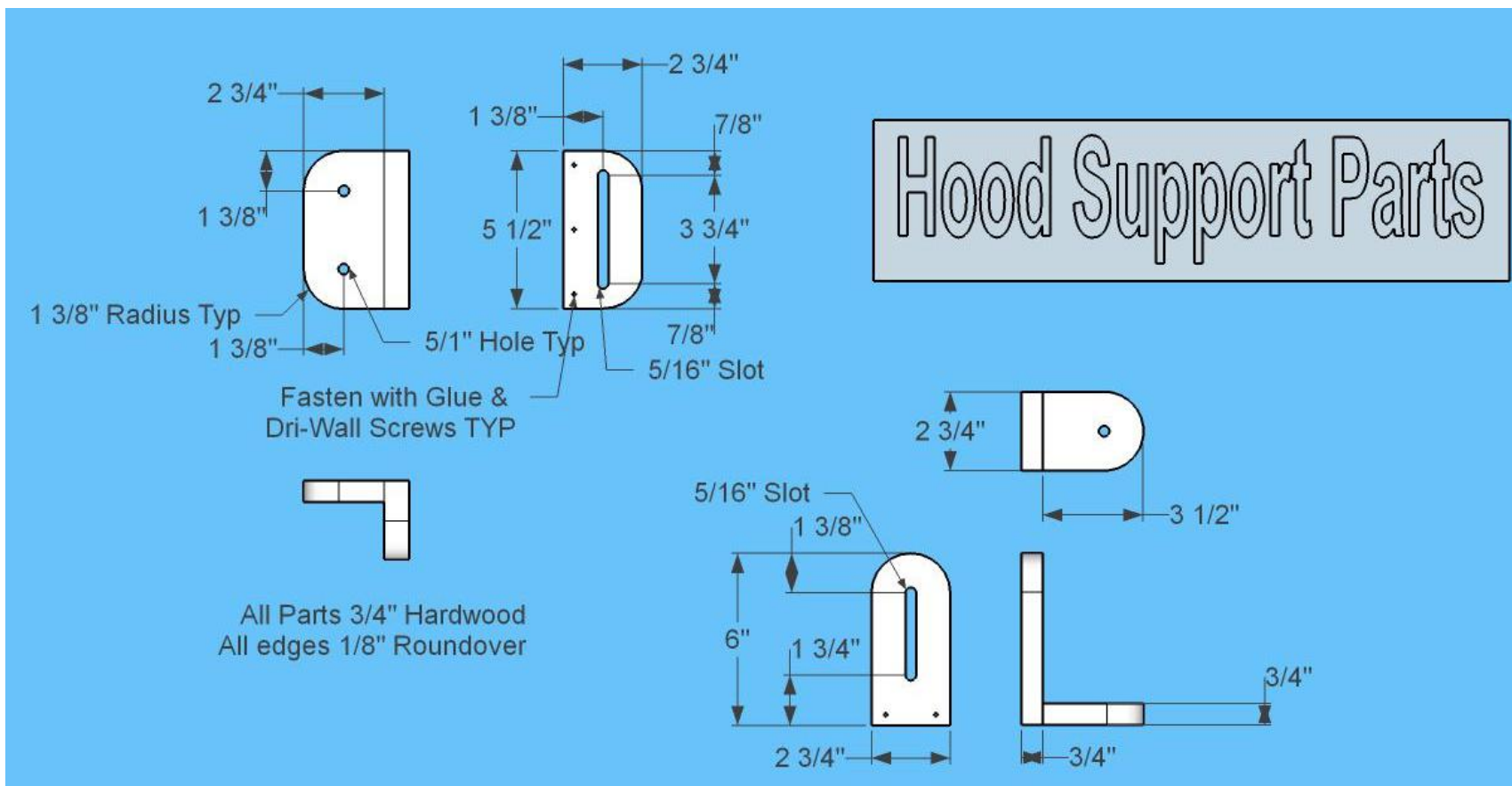
One of every three Mat Retainers needs only one hole nearest the edge as it pivots to retain mat.

## Lathe Bench Plans for Jet 1221 VS Lathe



Roundover all edges of Latch Plate and Wheel Mounts. On final assembly attach Latch Plate to corner leg with 1/4" x 2" lag screw so it freely swings without slop in a vertical position that allows easy operation and holds the Latch Arm in the down position. Center caster swivel on the indicated mark and attach to Wheel Mount with #7 x 5/8" screws. Attach Wheel Mounts together with a 3" Butt Hinge using same screws. Attach Latch Arm to rear Mount plate on each side flush with side and end of Mount plate notch using three 2" Dri-Wall screws. Pivot Blocks mount against bottom of Shelf with large radius inboard. Their 3" dimension can be varied to accommodate different size wheels. 3 inches works for 2-1/2" to 3" wheels. Wheel Retainers are attached flush with bottom of legs to prevent wheel assembly from falling out if bench is lifted for any reason.

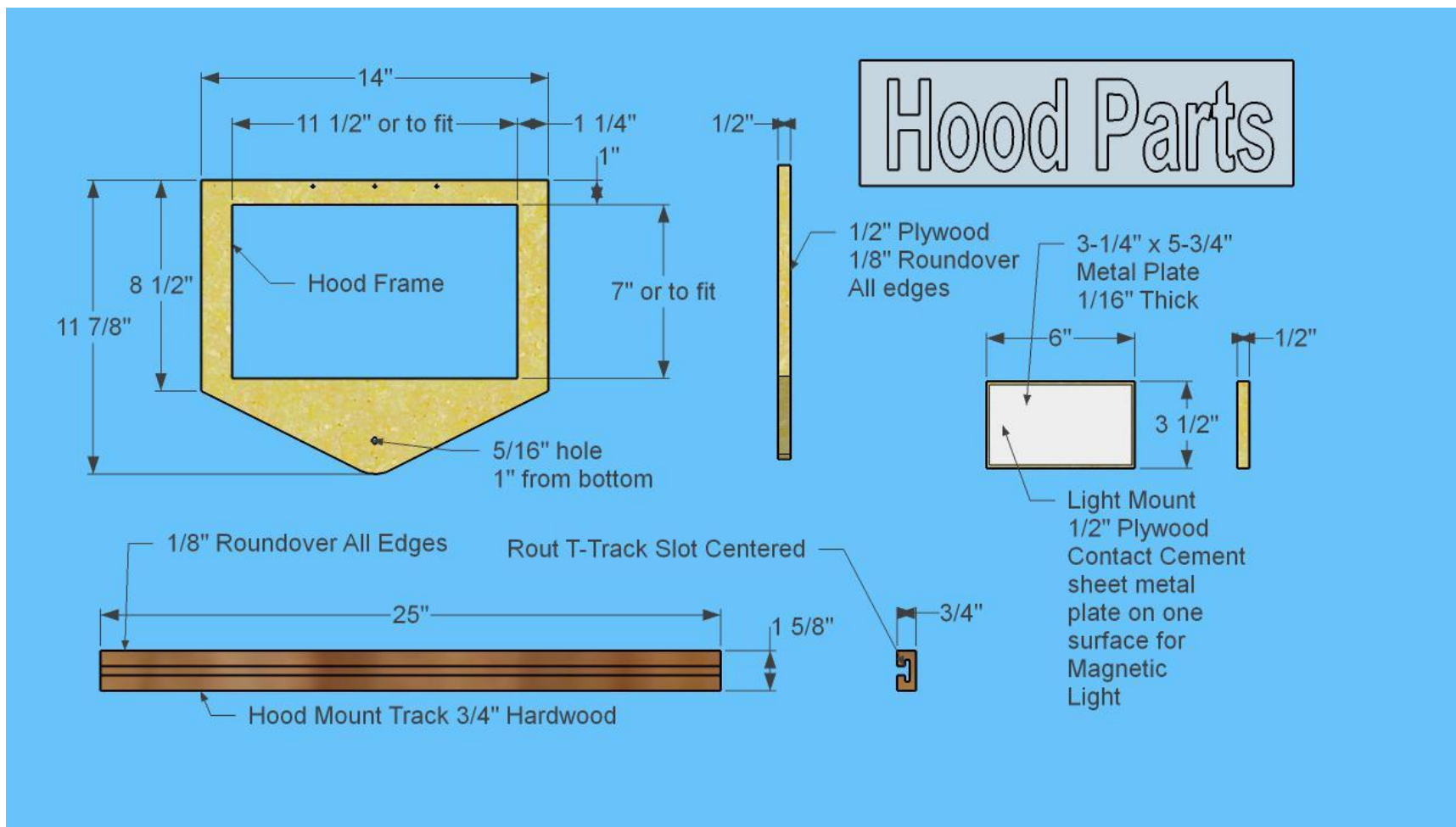
## Lathe Bench Plans for Jet 1221 VS Lathe



These parts are all hardwood and assembled with Dri-Wall screws and glue. 1/8" roundover all edges after assembly.

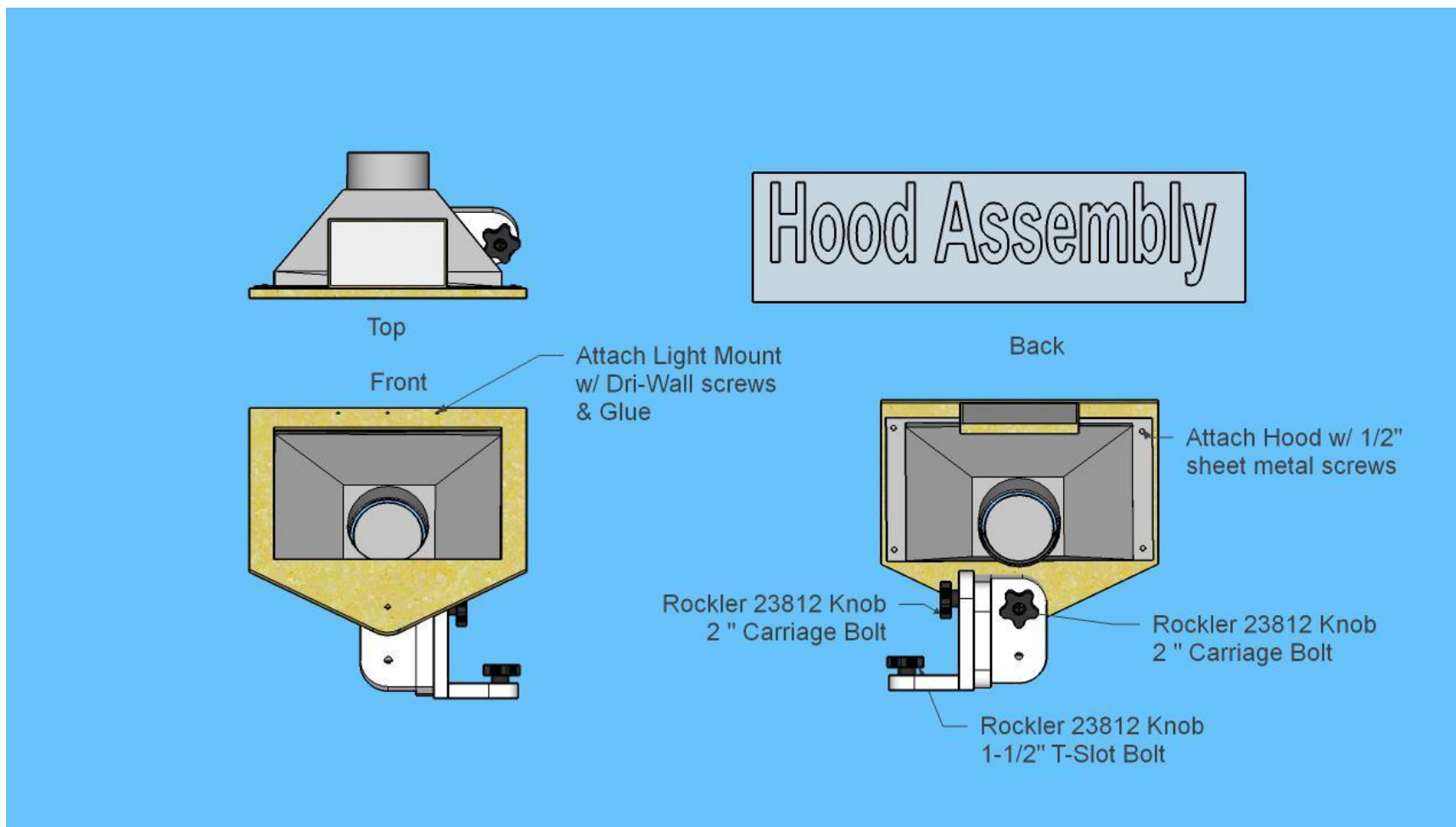
Assemble hood as indicated below.

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This Hood Frame fits hood from Grizzly. Check and change dimensions as necessary to fit the hood you use. The Hood Mount Track could be the commercial aluminum variety if you want to spend the money for it. I bought the T-Track router bit instead. Use contact cement to attach metal plate to the Light Mount. 1/8" roundover all edges of all parts before assembly and attaching metal plate.

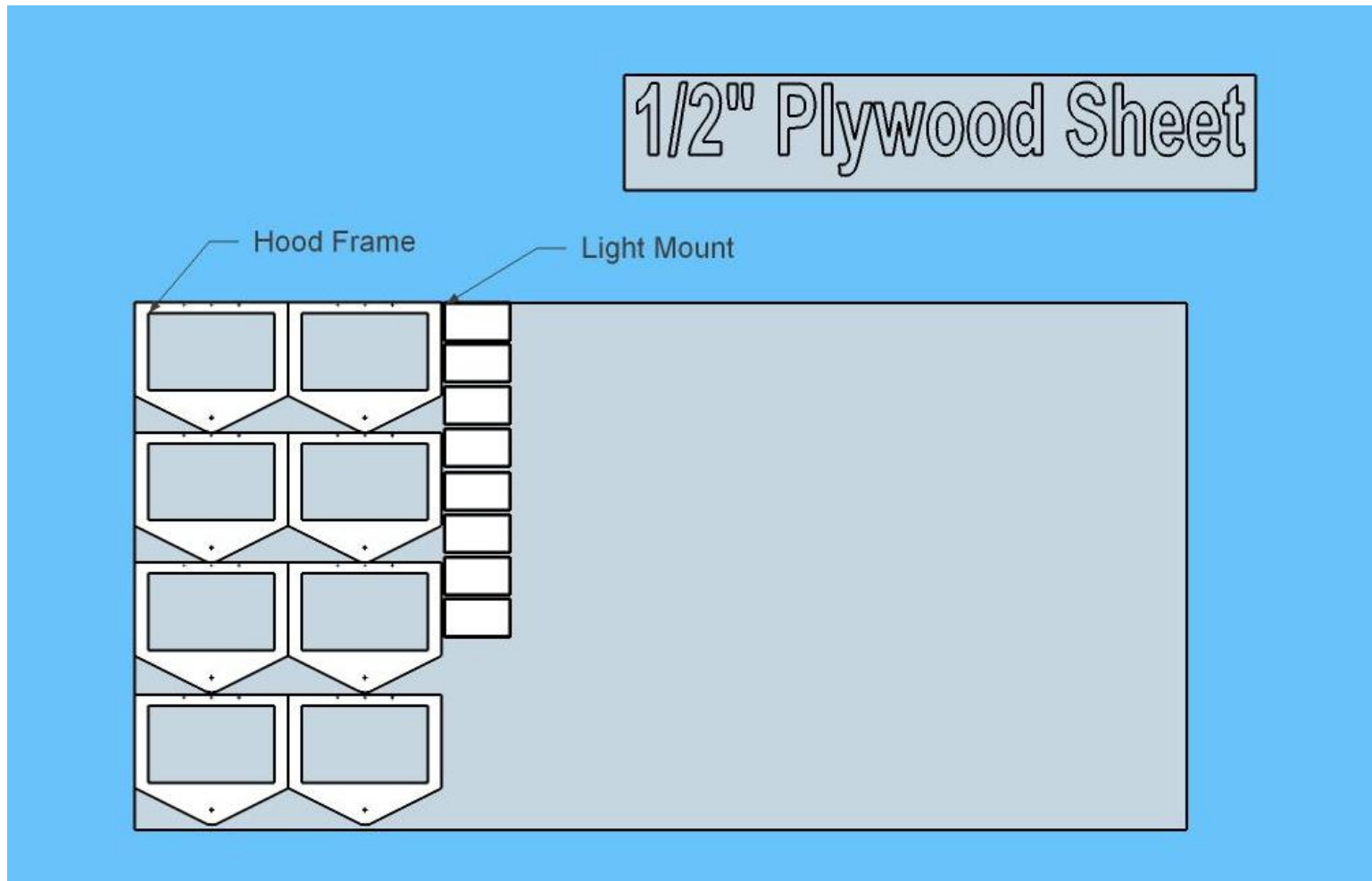
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This is the way it all goes together.

For better air flow the plastic grill in the 4" hose connection to the hood can be removed and a 1/2" mesh hardware cloth screen added between front of hood and the hood frame to prevent large objects going through the dust collector. Do not omit the hardware cloth if the grill is removed otherwise there will be constant fishing in the dust bag for your sand paper.

## Lathe Bench Plans for Jet 1221 VS Lathe



This is the cut diagram for 8 sets of hood parts. These obviously could be cut from a half sheet of plywood to save money.

# Lathe Bench Plans for Jet 1221 VS Lathe

## Possible Sources and Parts Identification and Requirements.

### Retractable Casters

<https://www.youtube.com/watch?v=7TTnb3TyH5Y>

<http://www.harborfreight.com/3-inch-x-7-8-eighth-inch-rubber-swivel-caster-66360.html>

Caster \$3.29      32 Casters    \$105.00

### Butt Hinges

<http://www.globalindustrial.com/p/building-materials/door-hardware/hinges-kick-plates/ultra-hardware-narrow-hinge-nrp-sq-corner-3l-x-2w-brassus3>

3"x2" \$1.34 each pkg of 12 \$16.08      2 Pkg \$32.00

<http://www.lowes.com/ProductDisplay?langId=-1&storeId=10151&catalogId=10051&productId=50201667&cld=compare>

3 1/2" x 3 1/2" Lowes \$1.08 each    16 Hinges    \$18.00      I prefer these if they are available.

<http://www.lowes.com/ProductDisplay?langId=-1&storeId=10151&catalogId=10051&productId=3111551&cld=compare>

3" x 2" w/screws Lowes \$1.63 each or \$3.27 pair.    8 Pair \$26.16

### MDF

[http://www.lowes.com/pd\\_37461-99899-](http://www.lowes.com/pd_37461-99899-)

[M31LW1249097\\_0\\_?productId=3604212&Ntt=mdf&pl=1&currentURL=%3FNtt%3Dmdf&facetInfo](http://www.lowes.com/pd_37461-99899-M31LW1249097_0_?productId=3604212&Ntt=mdf&pl=1&currentURL=%3FNtt%3Dmdf&facetInfo)

Sheet \$25.00      9 Sheets      \$225.00

### Leg Glides

<http://furniturelevelor.com/product/tempest-glide-popular-450t-copy/>

3/8 x 2" Glides \$0.74 each 32 glides \$24.00

### 3/8-16 T-Nuts

[http://furniturelevelor.com/product/100-t-nuts-climbing-holds/?attribute\\_pa\\_thread-diameter=38-16-diameter](http://furniturelevelor.com/product/100-t-nuts-climbing-holds/?attribute_pa_thread-diameter=38-16-diameter)

100 T-Nuts    \$21.00

### 3/4 Plywood

[http://www.lowes.com/pd\\_520360-53547-520360\\_0+1z140lf](http://www.lowes.com/pd_520360-53547-520360_0+1z140lf)

3/4 Plywood \$50.00 per sheet    4 Sheets    \$200.00

### 1/2" Plywood



## Lathe Bench Plans for Jet 1221 VS Lathe

[http://www.lowes.com/pd\\_520359-53547-](http://www.lowes.com/pd_520359-53547-520359_0_?productId=50121137&Ntt=1%2F2+plywood&pl=1&currentURL=%3FNtt%3D1%252F2%2Bplywood&facetInfo)

[520359\\_0\\_?productId=50121137&Ntt=1%2F2+plywood&pl=1&currentURL=%3FNtt%3D1%252F2%2Bplywood&facetInfo](http://www.lowes.com/pd_520359_0_?productId=50121137&Ntt=1%2F2+plywood&pl=1&currentURL=%3FNtt%3D1%252F2%2Bplywood&facetInfo)

1/2" Plywood \$35.00 per sheet      1 Sheet      \$35.00

### 14" Double Extension Drawer Slide

[http://www.lowes.com/pd\\_636761-93052-](http://www.lowes.com/pd_636761-93052-TU99072G14_0_?productId=50284305&Ntt=drawer+slide&pl=1&currentURL=%3FNtt%3Ddrawer%2Bslide&facetInfo=)

[TU99072G14\\_0\\_?productId=50284305&Ntt=drawer+slide&pl=1&currentURL=%3FNtt%3Ddrawer%2Bslide&facetInfo=](http://www.lowes.com/pd_636761-93052-TU99072G14_0_?productId=50284305&Ntt=drawer+slide&pl=1&currentURL=%3FNtt%3Ddrawer%2Bslide&facetInfo=)

Pair of Slides \$13.00      8 Pair \$104.00

### Rockler Dust Collector

<http://www.rockler.com/portable-dust-collector>

\$179 each      8 Collectors \$1432.00

### Rockler 5 Micron Dust bag

<http://www.rockler.com/5-micron-replacement-bag-for-rockler-wall-mount-dust-collector>

Bag \$33.00      8 Bags      \$264.00

### Rockler Dust Hood

<http://www.rockler.com/mini-gulp-dust-hood>

Hood \$9.00      8 Hoods      \$72.00

### Rockler 4 Inch Hose Clamps

<http://www.rockler.com/4-keyed-bridge-hose-clamps>

5 Pack Clamps      \$11.00      4 Packs      \$44.00

### Rockler 4" Dust Hose

<http://www.rockler.com/clear-flexible-dust-collection-hose-optional-sizes>

Hose 10'      \$31.00      40' Hose      \$124.00

### Rockler 23812 Star Knob for hood mount

<http://www.rockler.com/5-star-jig-knobs-through-hole-insert>

Knob \$2.00      24 Knobs      \$48.00

### Rockler 1-1/2" T-Slot Bolt for hood mount

<http://www.rockler.com/t-slot-bolts-5-16-18-thread-t-slot-bolts>

Bolt \$1.50      8 T-Bolts      \$12.00

### 5/16" x 2" Carriage Bolts for hood mount

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[http://www.lowes.com/pd\\_63339-37672-](http://www.lowes.com/pd_63339-37672-240090_0)

[240090\\_0 ?productId=3058623&Ntt=5%2F16+x+2+carriage+bolt&pl=1&currentURL=%3FNtt%3D5%252F16%2Bx%2B2%2Bcarriage%2Bbolt&facetInfo=](http://www.lowes.com/pd_63339-37672-240090_0?productId=3058623&Ntt=5%2F16+x+2+carriage+bolt&pl=1&currentURL=%3FNtt%3D5%252F16%2Bx%2B2%2Bcarriage%2Bbolt&facetInfo=)

Bolt \$0.25                      16 Bolts              \$4.00

### **5/16 Washers for hood mount**

[http://www.lowes.com/pd\\_41574-37672-](http://www.lowes.com/pd_41574-37672-492024_0)

[492024\\_0 ?productId=3033292&Ntt=5%2F16+washer&pl=1&currentURL=%3FNtt%3D5%252F16%2Bwasher&facetInfo](http://www.lowes.com/pd_41574-37672-492024_0?productId=3033292&Ntt=5%2F16+washer&pl=1&currentURL=%3FNtt%3D5%252F16%2Bwasher&facetInfo)

25 5/16" Washers \$5.00

### **#7 x 5/8" Wood Screws for Casters & Hinges**

[http://www.amazon.com/Hard---Find-Fastener-014973292263-100-](http://www.amazon.com/Hard---Find-Fastener-014973292263-100-Piece/dp/B003R33GJY/ref=sr_1_52?ie=UTF8&qid=1430142242&sr=8-52&keywords=5%2F8+inch+wood+screw)

[Piece/dp/B003R33GJY/ref=sr\\_1\\_52?ie=UTF8&qid=1430142242&sr=8-52&keywords=5%2F8+inch+wood+screw](http://www.amazon.com/Hard---Find-Fastener-014973292263-100-Piece/dp/B003R33GJY/ref=sr_1_52?ie=UTF8&qid=1430142242&sr=8-52&keywords=5%2F8+inch+wood+screw)

100 Screws \$10.00              4 Pkgs              \$40.00

### **F-125 Maxi Loc Kregg Screws**

<http://www.rockler.com/kregreg-coarse-fine-maxi-loc-square-drive-washer-head-pocket-hole-screws-7-screws>

500 Screws \$18.00

### **1-5/8 Dri-Wall Screws**

[http://www.lowes.com/pd\\_112599-1278-](http://www.lowes.com/pd_112599-1278-158CDWS1_0)

[158CDWS1\\_0 ?productId=4744171&Ntt=sheet+rock+wall+screw&pl=1&currentURL=%3FNtt%3Dsheet%2Brock%2Bwall%2Bscrew&facetInfo=](http://www.lowes.com/pd_112599-1278-158CDWS1_0?productId=4744171&Ntt=sheet+rock+wall+screw&pl=1&currentURL=%3FNtt%3Dsheet%2Brock%2Bwall%2Bscrew&facetInfo=)

1# \$6.50

### **2" Dri-Wall Screws**

[http://www.lowes.com/pd\\_112594-1278-](http://www.lowes.com/pd_112594-1278-2CDWS1_0)

[2CDWS1\\_0 ?productId=4744167&Ntt=sheet+rock+wall+screw&pl=1&currentURL=%3FNtt%3Dsheet%2Brock%2Bwall%2Bscrew&facetInfo=](http://www.lowes.com/pd_112594-1278-2CDWS1_0?productId=4744167&Ntt=sheet+rock+wall+screw&pl=1&currentURL=%3FNtt%3Dsheet%2Brock%2Bwall%2Bscrew&facetInfo=)

1# \$6.50

### **1/4" x 2" Lag Screws**

\$0.40 each              16 Screws              \$6.50

### **IKEA LED Task Light**

<http://www.ikea.com/us/en/catalog/products/20169658/>

Task Light \$10.00              8 Lights              \$80.00

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## Harbor Freight Magnets for Task Lights

<http://www.harborfreight.com/set-of-2-magnetic-decor-hooks-65528.html>

Magnets 2 per      \$4.00      4 Sets      \$16.00

### Summary cost:

### One Bench

### 8 Benches

Hardwood

Ask Doc Bryant

3-1/4" x 5-3/4" x 1/16" Metal Plate

8 Required

Ask Dale Miner

Quad Electrical Box & Plug Strip

8 each Required

Ask Mike Ball

1/2 sheet 3/4 inch plywood

\$25.00

4 sheets

\$200.00

1/2" Plywood

1 Sheet

\$35.00

1-1/2 sheet 3/4 MDF

\$37.50

9 Sheets

\$225.00

4 3" Casters

\$15.00

32 Casters

\$105.00

3/8 x 2" Leg Glides

\$3.00

32 glides

\$24.00

3/8" T-Nuts

\$3.00

100 T-Nuts

\$21.00

14" Pair of Drawer Slides

\$13.00

8 Pair

\$104.00

3 1/2" x 3 1/2" Hinges

\$1.08 each

16 Hinges

\$18.00

5/8 Wood Screws

\$5.00

400 Screws

\$40.00

100 Pocket hole screws

\$5.00

500 screws

\$ 20.00

1-5/8" Dri-wall Screws

5#

\$6.50

2" Dri-wall Screws

5#

\$6.50

1/2 gal Shellac

\$23.00

4 Gal

\$100.00

1/2 gal Alcohol

\$8.00

4 Gal

\$ 32.00

Rockler Dust Collector

\$179.00

8 Collectors

\$1432.00

Rockler 5 Micron Bag

\$33.00

8 Bags

\$264.00

Rockler Dust Hood

\$9.00

8 Hoods

\$72.00

Rockler 4" Clamps

\$4.00

4 5 count Packs

\$44.00

Rockler 4" Hose 10'

\$31.00

40' Hose

\$124.00

Rockler 23812 Star Knob

\$6.00

24 Knobs

\$48.00

Rockler 1-1/2" T-Slot Bolt

\$1.50

8 Bolts

\$12.00

## Lathe Bench Plans for Jet 1221 VS Lathe

5/16" x 2" Carriage Bolts	\$0.25	16 Bolts	\$4.00
5/16 Washers	\$0.75	24 Washers	\$5.00
Task Light	\$10.00	8 Lights	\$80.00
Magnets 2 per for lights	\$2.00	4 Sets	\$16.00

**\$2942.00 total materials w/DC = \$368.00 for each bench**

**\$2032.00 for dust collection only = \$254.00 each for Dust Collection only**

**\$896.00 Bench Materials only = \$112.00 each for bench only**

**For comparison Jet 12-21 Metal Stand \$348.00 each**

**I have not included any extra discount we may get from Rockler on Dust Collectors and other items.**

**Web links are for part identification and approximate costing. Identical or similar items may be purchased from a number of sources at varying prices.**

### Jet 1221 Lathe Bench Design Specifications

The OVWG Clubhouse needs lathe benches constructed for a number of Jet 1221VS lathes that have been purchased without the Jet stand. These lathes and constructed benches will be used in the new clubhouse and for off-site demos. Below are the desired specifications of these benches.

When the design is finalized we will ask for volunteers to build these benches in their own shops and/or individual parts may be assigned to different people and then all the parts assembled as a group project at an appropriate location. We want to involve as many people as possible to reduce the burden on any individual or group.

Materials will be furnished by and/or purchased by the Guild. DO NOT purchase any parts or materials expecting reimbursement without prior Board approval.

**Here are the desired properties:**

# Lathe Bench Plans for Jet 1221 VS Lathe

- 1) Bench must be sturdy with no flexing or racking in normal use.
  - a) Bench shall be built from reasonably priced readily available materials like good quality  $\frac{3}{4}$  inch plywood, MDF and/or solid wood.
  - b) All joints shall be glued.
  - c) All surfaces shall be sanded and sealed with at least two coats of shellac.
  - d) Assuming multiple benches will be built the parts should be sized to make maximum use of standard size materials with minimum waste.
- 2) Bench footprint shall be no larger than 24" D x 48" W
- 3) Lathe mounting surface shall be 35" above floor with wheels retracted.
- 4) Bench shall have 4 easily retractable wheels – 3" diameter or larger.

Here is an example of wheel type desired:  
<http://www.rockler.com/3-in-casters-2-fixed-2-swiveling>

  - a) Retraction system can be commercially bought or a readily constructed alternative.
  - b) Two fixed wheels at head stock end, two swivel wheels at tail stock end or 4 swivel wheels.
  - c) When wheels are retracted there shall be 4 sturdy, easily adjustable feet to accommodate uneven floors.
- 5) There shall be space under the bench top for a General 10-050M1 dust collector or equivalent.
  - a) The dust hose will exit the bench and have an easily adjustable mounting for dust hood behind lathe to accommodate dust collection from the head stock to the tail stock
  - b) Dust collector specs are here:
    - i) <http://www.coastaltool.com/generalinternational/10-050m1.htm>
    - ii) [http://www.general.ca/products/1\\_general/10\\_dust/10-050.html](http://www.general.ca/products/1_general/10_dust/10-050.html)
  - b) See photos below for example. This pictured hood is not adjustable. Ours should be moveable the length of the work area of the lathe.

## Lathe Bench Plans for Jet 1221 VS Lathe



- 6) There shall be storage above and/or below the bench top in the form of compartments, drawers, racks or other means to securely accommodate all standard lathe specific tools including but not limited to:
  - a) Chuck and key, Live center, 60 degree center attachment, center fixing pin, Spur center, Face plate, Knock out bar, Spindle wrench, Tool rests, Misc. tools and supplies
  - b) Any drawers shall have sturdy drawer slides & any doors shall have 32mm self closing hinges.
  
- 8) There shall be a quad 110 Volt outlet box to accommodate lathe, dust collector, and two task lights.
  - a) Outlet box will have a 10 foot, 12 gauge pigtail with plug to connect to power outlet.
  
  - a) There may be adjustable magnetic mounting surface/s for task lights (IKEA led lights with Harbor Freight magnet installed).
  - b) <http://www.ikea.com/us/en/catalog/products/20169658/>
  - c) <http://www.harborfreight.com/set-of-2-magnetic-decor-hooks-65528.html>

## Lathe Bench Plans for Jet 1221 VS Lathe



Fully dimensioned drawings to be provided in 3D rendition done using the free Google SketchUp Make program available for download here: <http://www.sketchup.com/download>

When downloading choose usage "Personal Projects" for the free version called SketchUp Make. The more detail and dimensions the better.