

HERE'S THE GRINDER

Well after all of the thinking and talking about it, here is the grinder that I built. It is very similar to the one that Rob Frink has on his site, but with some modifications.

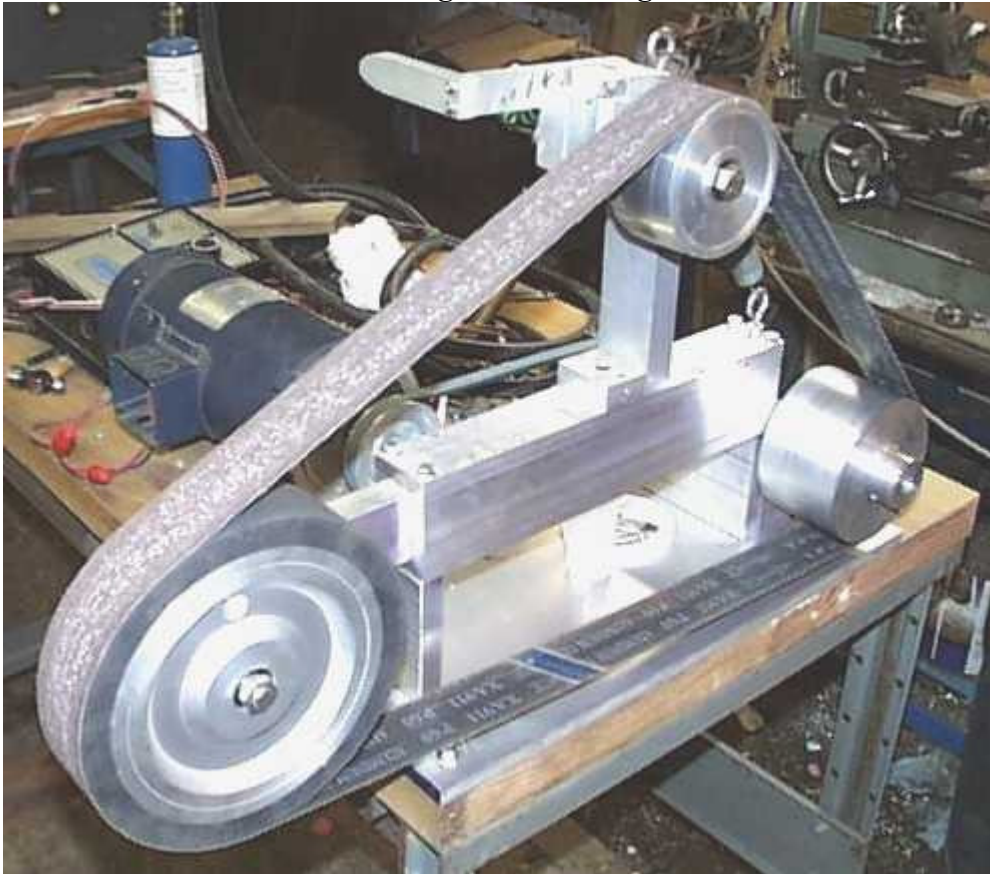
I am trying to draw up some plans for it and will share them with anyone who would like to have them once I get them done.

I traded a knife to a friend who has a small machine shop for the aluminum bar and plate. I did all of the cutting, drilling and tapping myself.

I bought the contact wheel and shaft and the idler from Rob Frink at Beaumont Metal Works. The rest I did myself.

I really haven't totaled the cost yet, but I have less than \$700 in it including the motor.

Here is the right side of the grinder



Another from the right rear



Here is a pic of the tracking adjustment



Here is the 2hp Leeson dc and matching control that I bought on an eBay auction



Here is the left side



I'll try to get some more detailed pics if anyone wants to see something specific. The batteries died in the camera as I was taking these so they are all I have for now.

Let me know what you think.

Mike

Ps: You will have to overlook the mess, I didn't take time to straighten anything up before taking the pics and still have to mount the control box for the motor and wire it up correctly.

Baltes189

Guest

Registered: Not Yet

Location:

Posts: N/A

Grinder Wheels

Did you make the wheels on your grinder? If so How did you do it, I am very curious about making some for a future grinder because I don't want to shell out 28 bucks a wheel, or what ever the price is, Although if I could find some really cheap fairly good wheels I could go that route.

Mike Conner

Guest

Registered: Not Yet

Location:

Posts: N/A

Re: Grinder Wheels

I made the drive wheel and am making the 2" wheels for the flat platen and will make the small wheel attachment. I have a small lathe. You can see part of it in the background in a couple of the pics. I am making them just because I want to, but by the time you buy the bearings and the 2" aluminum bar stock, it wouldn't be that much more to just buy the wheels from Rob Frink. He does first class work, and you will get more than you pay for when you buy from him.

Mike

KandSKNIVES

Guest

Registered: Not Yet

Location:

Posts: N/A

Re: Grinder Wheels

Mike, considering the cost of the motor and control, you really saved yourself some big bucks. In fact, you could say you are way ahead. Can your strut be shortened up enough to use 2/48 belts?

Mike Conner

Guest

Registered: Not Yet

Location:
Posts: N/A
Re: Grinder Wheels

Ken,
I really don't know, but I can check and see. If not a person could change the layout some to accommodate the shorter belts, but there is such a better selection of 2X72 belts on the market. I built this one out of my head and by looking at pictures of other machines, I wanted the idler to be higher and set back a little farther from the contact wheel than most that I looked at. I do a lot of slack belt work on the handles as well as use the slack belt to sharpen the knives so I set this one up with that in mind. I do have some 1x72 belts that I have tried on this machine and they work fine as well.
I am making up some rough plans and will be happy to send them to anyone who is interested when I finish them.
Mike

KandSKNIVES
Guest

Registered: Not Yet
Location:
Posts: N/A
Re: Grinder Wheels

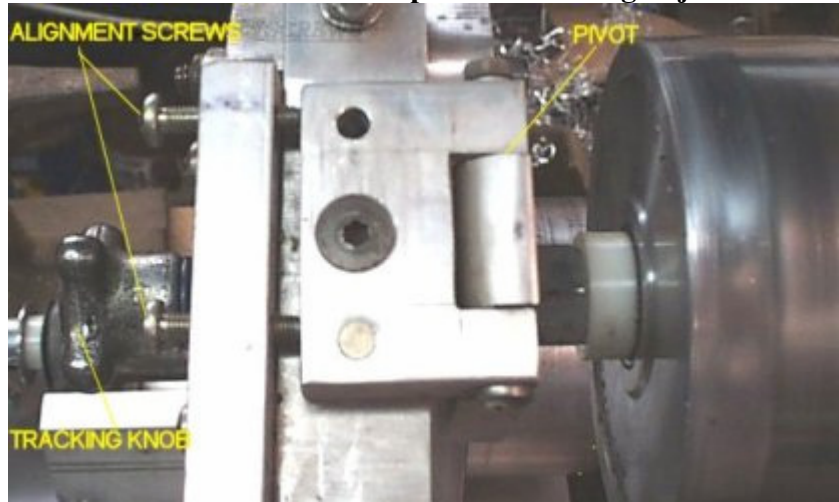
Thanks Mike for the info, and yes I would definitely like some plans. You have built the almost same machine I had in my mind to start to build. I already have a big supply of 2/48 belts, got cheap, that is why I asked. Also, could you post more pics of your alignment control setup? Thanks for your time and effort.

Mike Conner
Guest

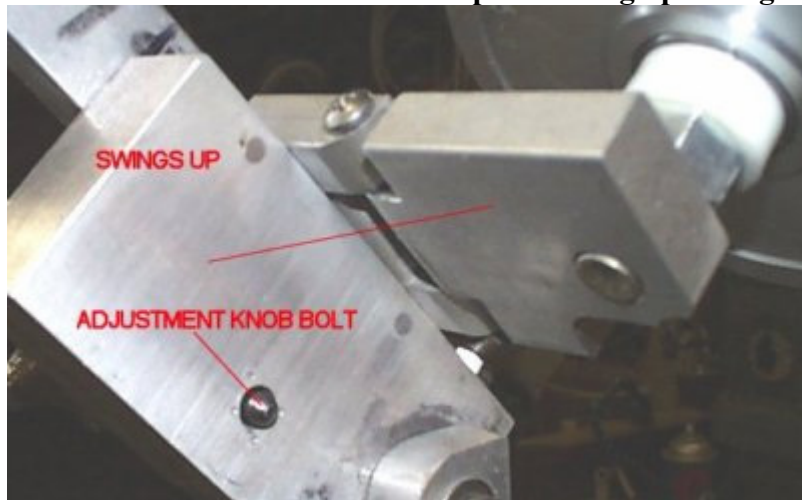
Registered: Not Yet
Location:
Posts: N/A
Re: Very Nice

I have had several emails asking me to post some more pictures of the tracking mechanism so here they are. Hope this helps.

Here is a view from the top of the tracking adjustment



Here is a view with the Idler wheel plate swung up 90 degrees



Here is a view from the bottom up



These next two are from the back; I think everyone should get a good idea of how the tracker works. If not just drop me a line and I'll try to do a better job of describing the tracking assembly.



Don't be afraid to tackle something like this, it takes some time but really it is easier than making a knife.

Good luck with your grinders,
Mike

Mike Conner
Guest

Registered: Not Yet

Location:

Posts: N/A

Re: Very Nice

Ken, I'll check and make sure I sent you the right files. The plans are really just some .gif files that are simple drawings of the piece parts. If you print them out and then just look at the grinder pics you can tell where they all would go.

Mike

Mike Conner

Guest

Registered: Not Yet

Location:

Posts: N/A

Re: Grinder Wheels

Ken,

I checked the grinder with the wheel strut in as far as it would go and it is around 60 inches in the current configuration. You could shorten the main horizontal structure some and move the front support back to accommodate the 2X48 belts though. You would have to do the math to figure out how much, but I would think that 3 to 4 inches would do the job.

Mike

KandSKNIVES

Guest

Re: Grinder Wheels

Thanks Mike, you have been a great help. I believe by shortening up the base, in the front, by 4 1/2 inches, you would be able to run 48 and 72" belts. We'll find out soon, I'm just about ready to start my grinder. I have been hunting a treadmill motor for the power. If I cannot find one, I can always go to step pulleys for different speeds. I will try and keep you updated, along with 13 knives to repair, finish grinding 12, and oh yea I'm in the process of packing, were moving to the country.

Mike Conner

Guest

Anybody else built them a grinder yet? If so post some pictures.

I have been using this one for 2 months now and it is still as smooth as day one. I don't know how I ever managed without a variable speed unit up until now.

Mike

Bob Warner

Guest

Mike,

You really did a clean job. I seem to get so caught up in how it looks, I miss something in the operational end of things and have to go back and fix something. Then it looks bad anyway.

I also would be interested in plans. I really like your tracking setup.

As for the wheels, I'll call Rob if I can get a number for him (I'm sure it is in the forum somewhere). I assume he made your contact wheel, it looks like rubber but not serrated. How do you like it?

I have a 2 HP variable speed motor and controller out of a tread mill. It is pretty small and I thought it would not have the power I would want but I could not stop the treadmill when it was running and I am not a small person. I bought the treadmill from a yard sale for \$20 because the roller on the back side had a crack in it. The people that sold it thought I was a nut for getting it. I am a nut, but not for that reason.

Geno

Guest

Mike, I haven't built a grinder in a lot of years now. I bought a burr king over a decade ago and that's that. I do have other belt grinders but seldom ever use anything else. My Blade Master grinder is now a surface grinder.

If I made one today, I doubt it would look as good as yours. But if I do, you can bet it will be like NO other, and work hard.

I really admire the craftsmanship you have put into this tool. If it works 1/2 as good as it looks, you are in grinder Heaven!

.....BE BLESSED!!!.....

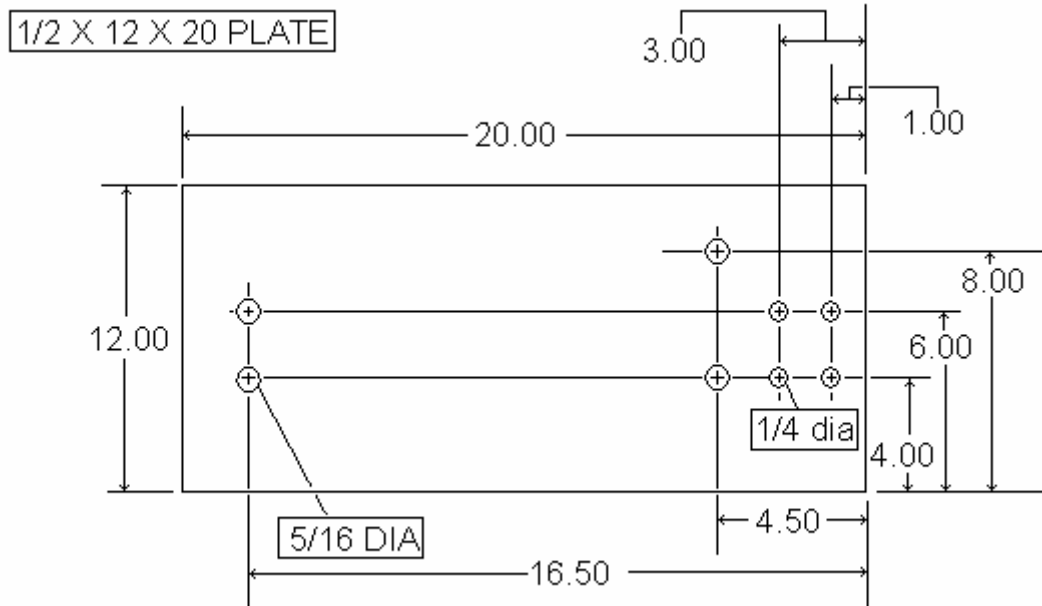
Mike Conner

Guest

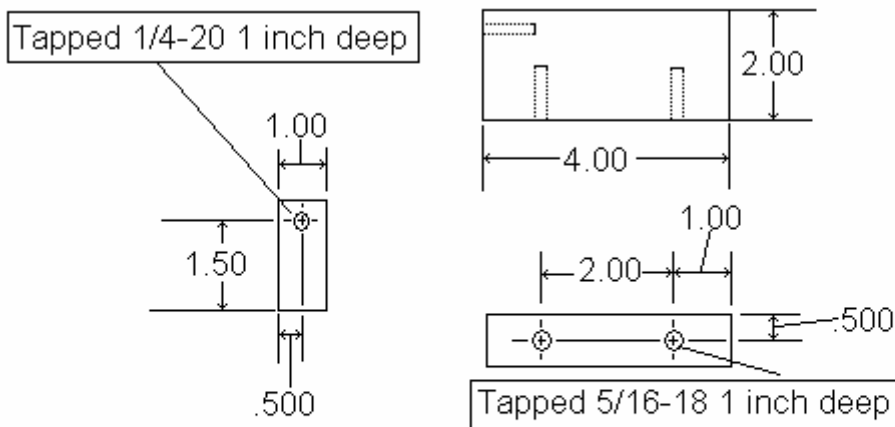
Re: Mike, you're a legend

Well at the risk of eating up a lot of bandwidth here goes.
Let me know if there is anything that is unclear and we will work it out.

Grinder base



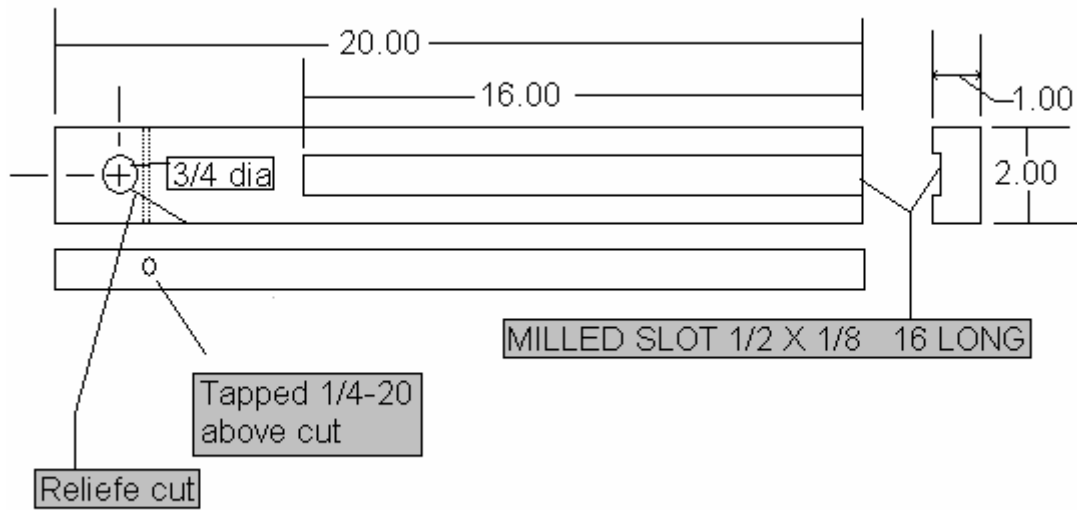
Rear bearing riser



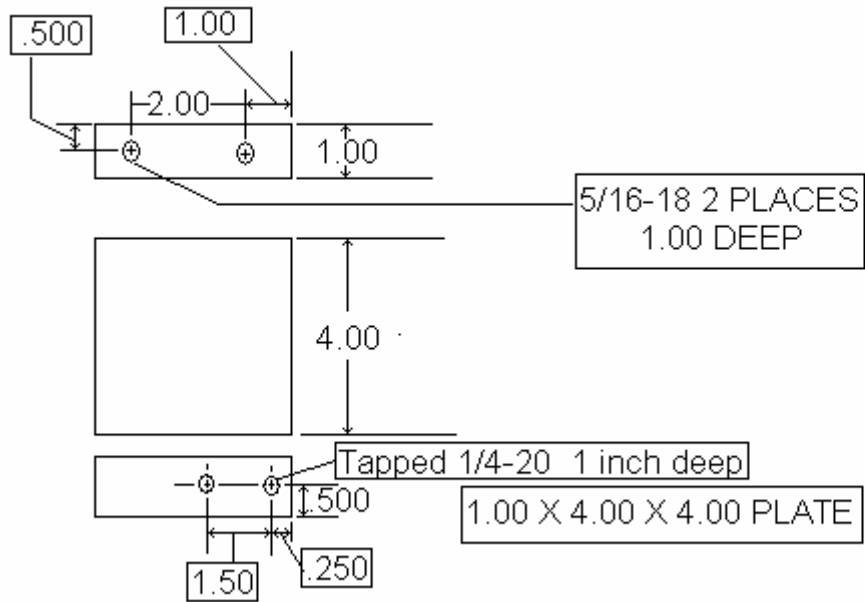
1 X 2 X 4 BLOCK/PLATE

2 PIECES

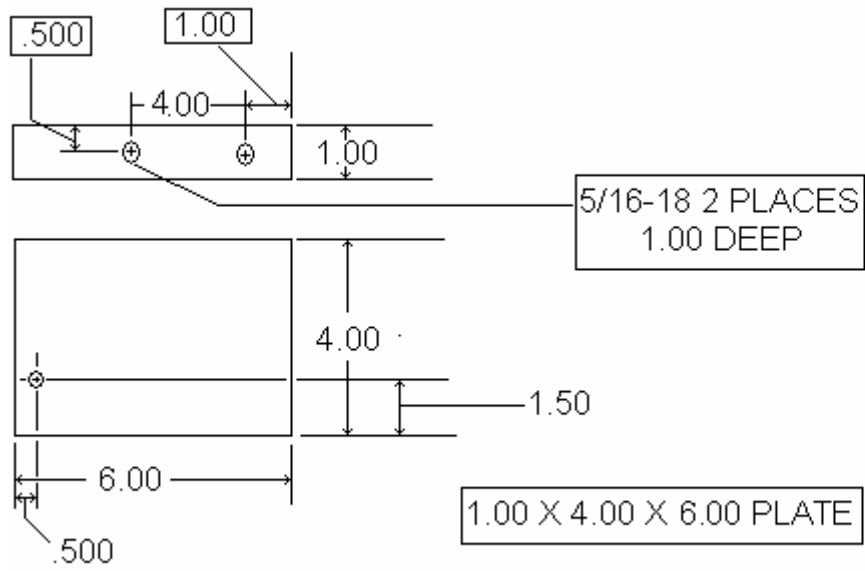
Contact wheel shaft



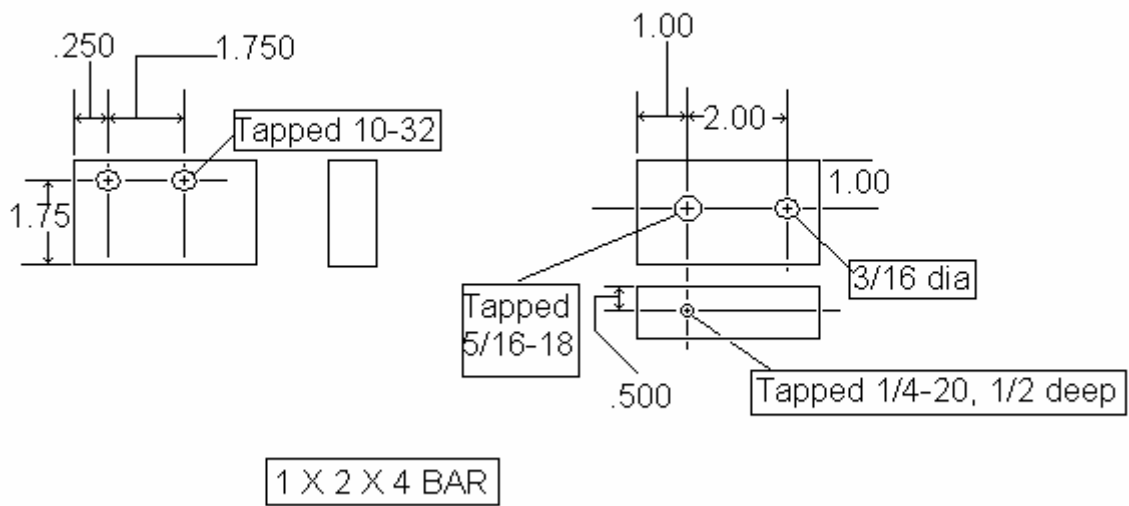
Front support



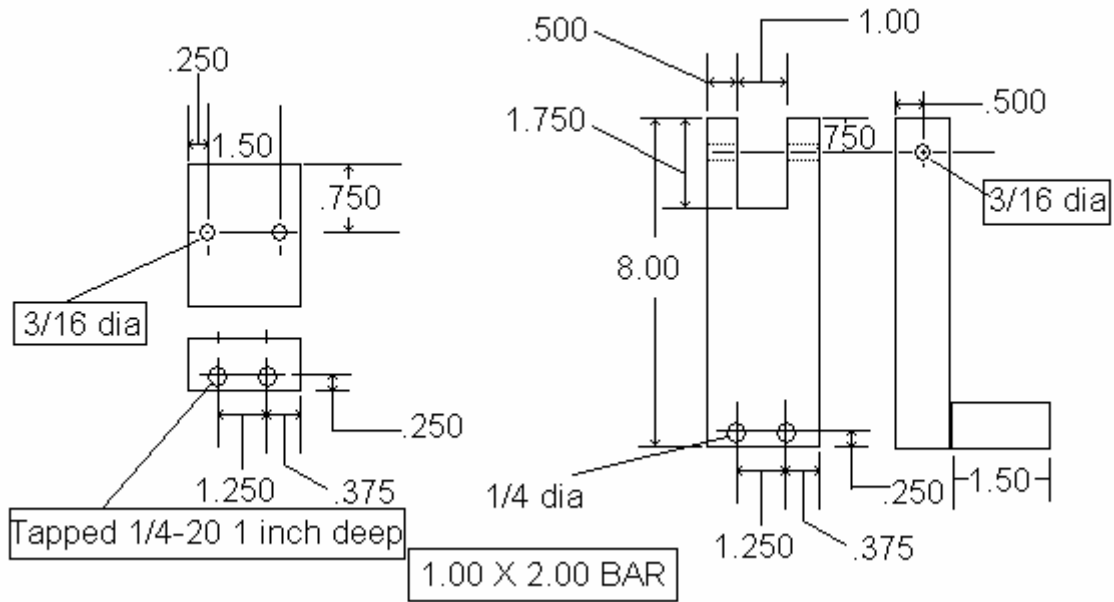
Rear support



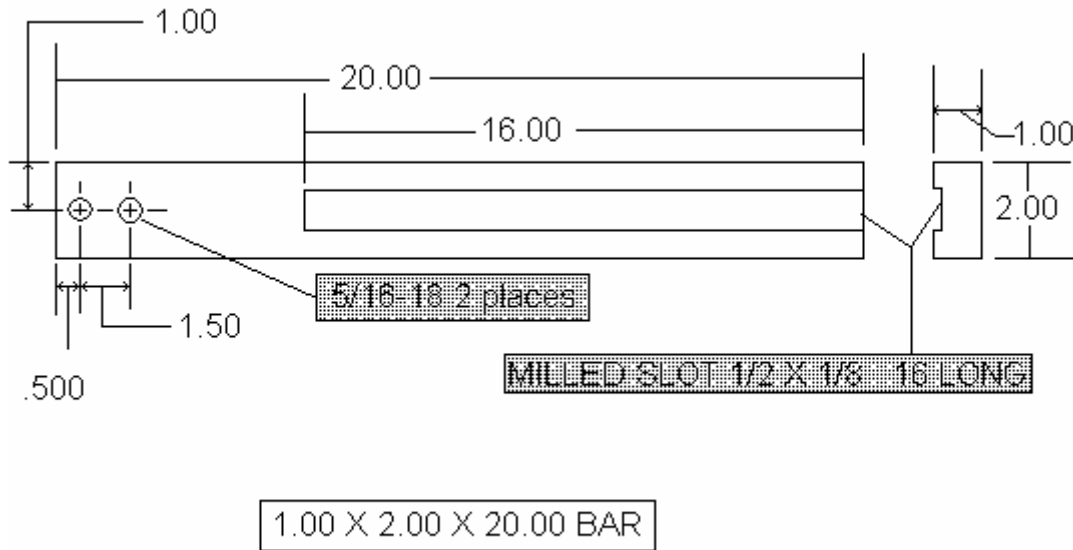
Idler horizontal



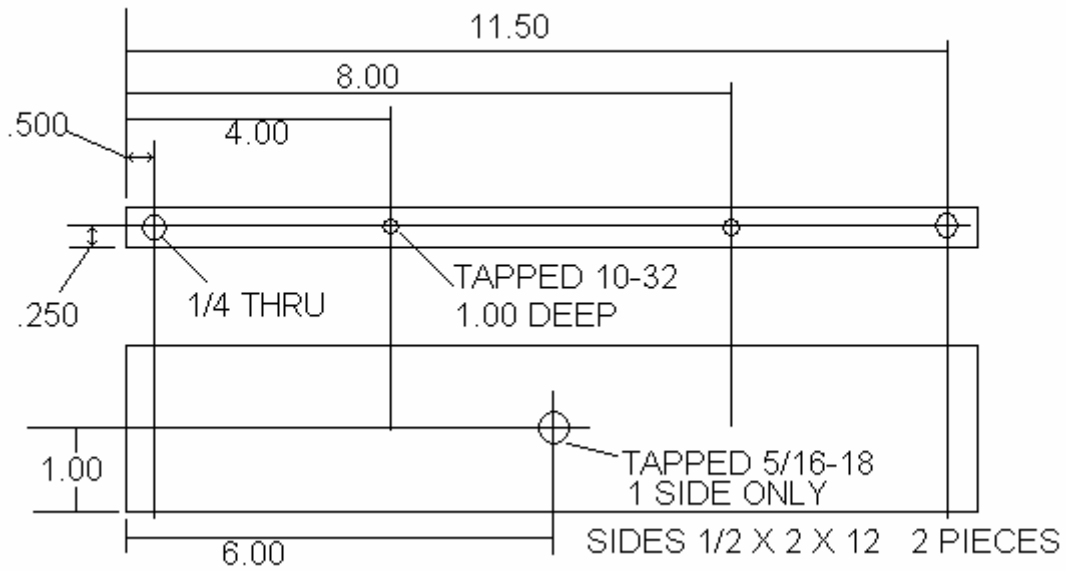
Idler upright



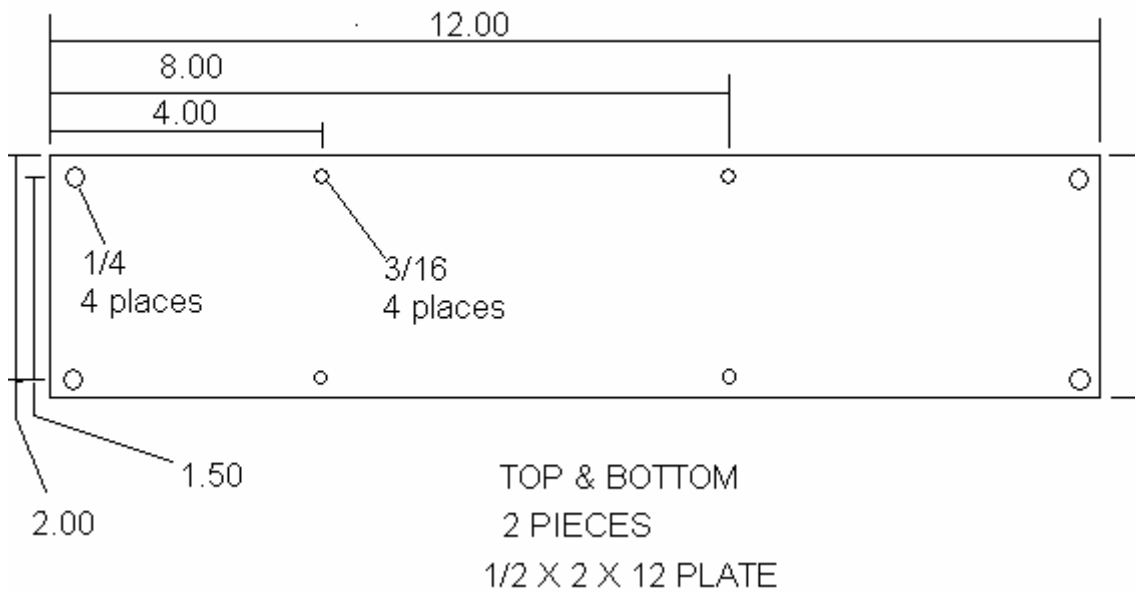
Platen shaft



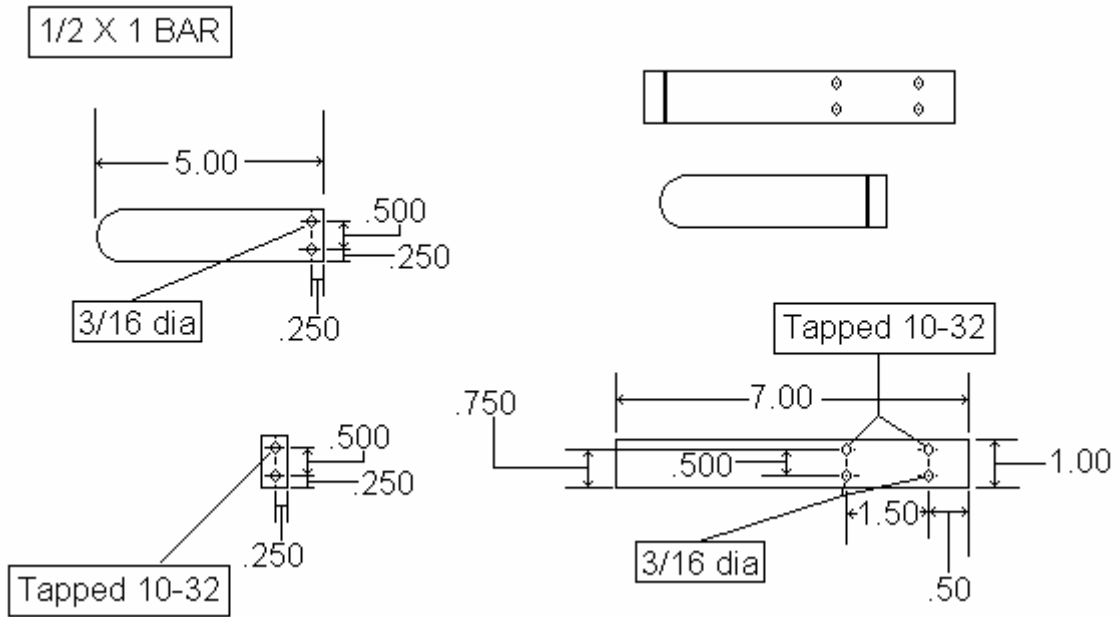
Sides of shaft housing



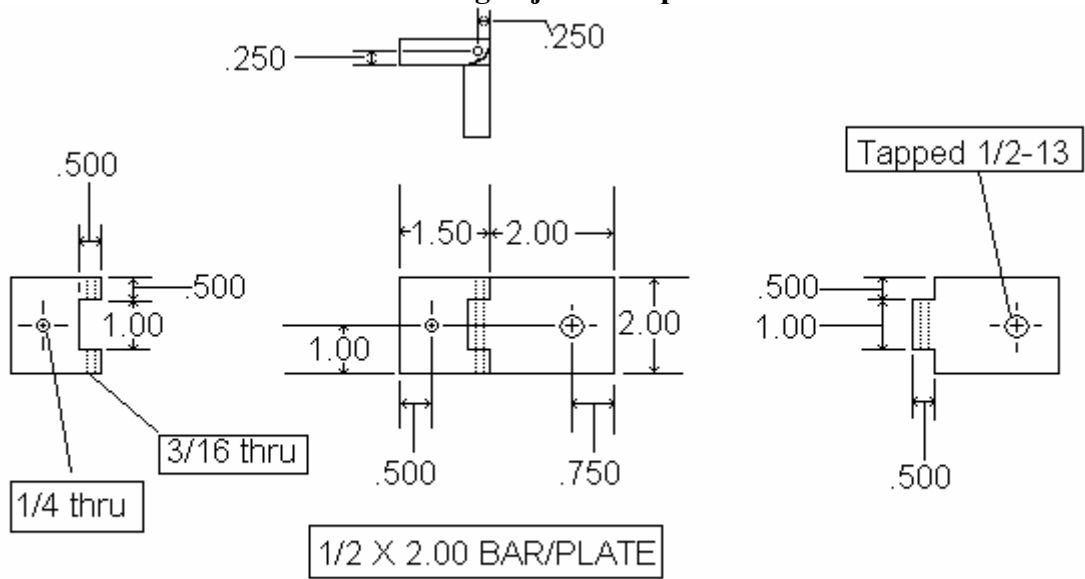
Top & Bottom of shaft housing



Tensioning handle



Tracking adjustment parts



Geno
Guest

Re: Mike, you're a legend

Awesome Mike,
Did you draw them up or just post them?

Mike Conner
Guest

Re: Mike, you're a legend

They are just simple drawings I did on Microsoft Paint program as bitmaps and then converted them to .GIF to save file space. Nothing special really, just took a little time as I always seem to be busy doing something else.
Mike

Mike Conner
Guest

Re: Mike, you're a legend

OK guys and gals, it's been a while and I'm anxious to hear how your grinders are going. Be sure and post some pics when you get them done.
Mike

acs1943
Guest

Hi Folks

This is just a thought but with a few more words and picture this grinder would make a great tutorial for us newbees and all the other folk out there

What about it Mike?