

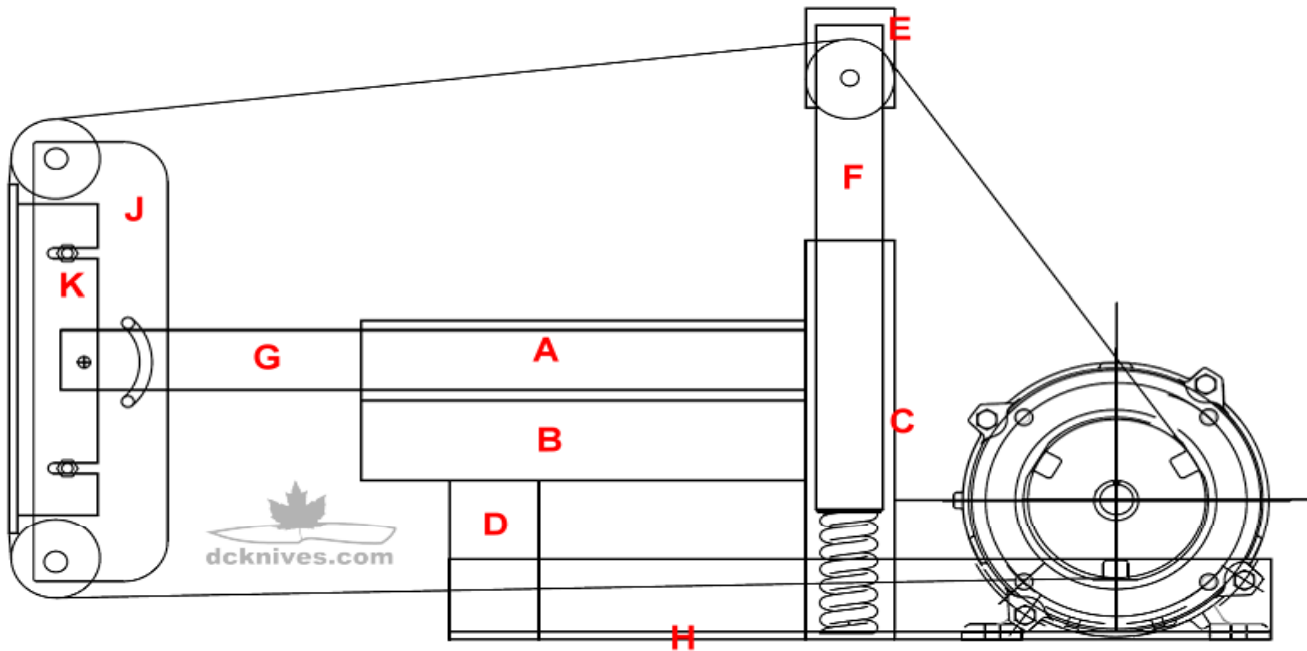
BG-272 Belt Grinder Bill of Materials

Dan Comeau

Document number: EM003

2017-03-21

<http://dcknives.blogspot.com/p/2-x-72-belt-grinder.html>



STEEL

	ITEM	DESCRIPTION		
2" HSS square 0.188" wall (40")		Cuts (inches)	37.5	total
<i>The wall thickness is very important!</i>	A	10		
<i>Do not use common 0.125" wall</i>	B	10		
	C	10		
	D	4		
	E	3.5		
1.5" HSS square 0.25" wall (32")		Cuts (inches)	30	total
<i>Use 0.25" wall only</i>	F	13		
<i>You will need to drill and tap this for a 1/4" bolt</i>	G	17		
0.25" x 12" x 20"	H	Grinder base plate		
0.188" 12" x 3"	J	Platen plate		
2" angle, 0.188" x 9"	K	Platen		
0.125" x 1.5" flat bar	4	4 inches		
<i>Welded to top and bottom of tracking pillar</i>				
30 pound compression spring	1	Screen door chain spring works		
Work Rest				
0.25" x 4" x 6" flat stock	1	Work rest		
0.375" x 0.75" x 10" bar stock	1	Work rest arm		

HARDWARE

	QTY	DESCRIPTION
Adjustable Handle, 3/8"-16 McMstr-Carr P/N 6271K31	2	Handles to lock tool arms
3/8" NC Hex nut	2	Lock down nuts
Tracking Pillar		
5/16" x 1" NC Capscrew	1	Magic 8 Ball mount, top of tracking pillar
Magic 8 Ball Shifter Knob	1	Element of extra coolness
1/4" x 2" NC Carriage bolt	1	Tracking hinge
1/4" Flat Washer	2	Tacked and ground for fitting hinge (E)
1/4" NC Nylon locknut	1	Securing the tracking hinge
Motor Mounting		
1/4" x 3/4" NC Flat head bolts	4	Motor mounts
1/4" NC Nuts	8	Motor mounts
1/4" Fender Washer	4	Underside of motor foot
1/4" Flat Washer	4	Topside of motor foot
1/4" Nylon Lock Nut	4	Topside of motor foot
Miscellaneous		
1-1/2" Floor Glide	1	Cap for tool arm
Strips of HDPE (plastic oil jug), 1" wide x 8" long	2	Shimming tracking pillar
1/4" x 3/4" NC Hex Socket Capscrew	2	Attaching work rest arm to tool arm
1/4" x 2-1/2" NC capscrew	1	Making tracking adjustment knob
Wheel Mounting		
Bolts to match your wheel bearings inside diameter. 1/2" NC x 2-1/2" to 3" long	3	Idler wheel axles
5/16" Shim	2	Cut from schedule 40 3/8" pipe
1/2" SAE Flat washer	2	Securing wheels
1/2" NC Nylon Locknut	2	Securing wheels
OBM has a set with 1/2" bolts. See Blog		http://dcknives.blogspot.com/p/2-x-72-belt-grinder.html
Platen		
1/4" x 3/4" NC Capscrew	2	Attaching platen to plate
1/4" flatwasher	2	Attaching platen to plate
1/4" x 3/4" NC Capscrew	1	Platen plate to tool arm (arm is tapped)
1/4" flatwasher	2	Attaching platen plate to tool arm
3/8" NC nut	1	Welded inside tool arm
1/4" x 3/4" NC Capscrew	1	Tightening platen angle adjustment
1/4" flatwasher	1	Tightening platen angle adjustment

From 2014 BG-272 Belt Grinder Build inspired by Alaksabearhawk.

Your bill of materials will vary with your build and components selected.

If you find an error please let me know so I can correct it.

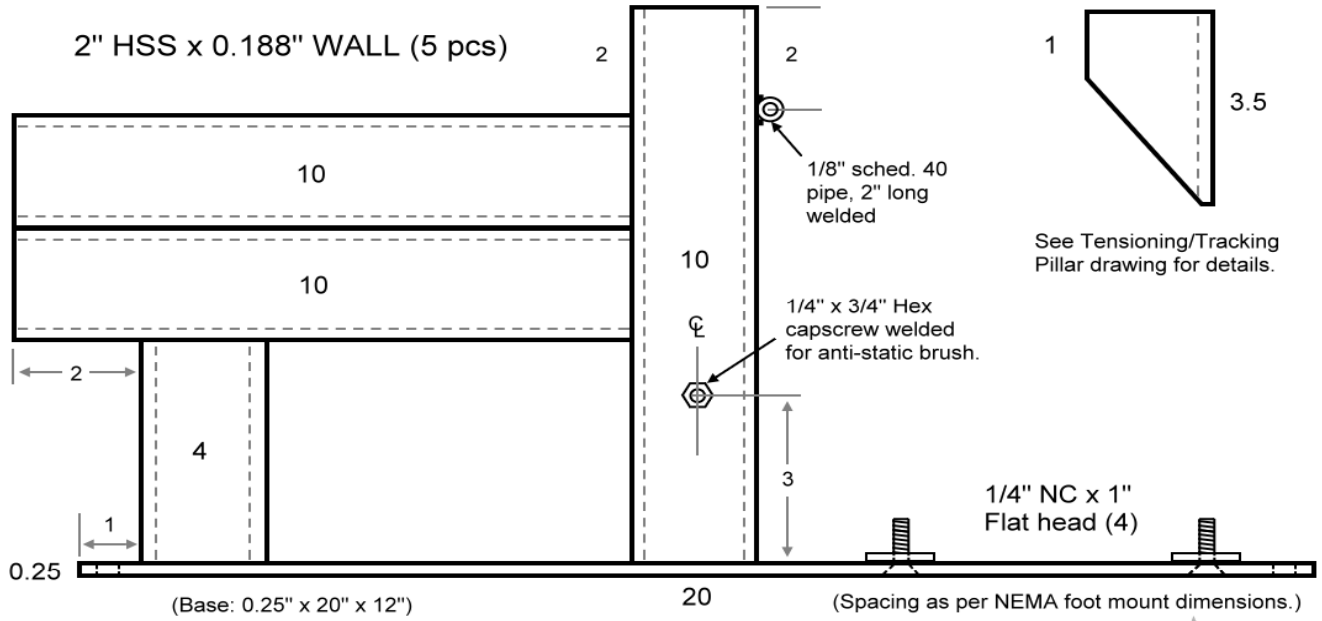
Thanks,

Dan



<http://dcknives.com>

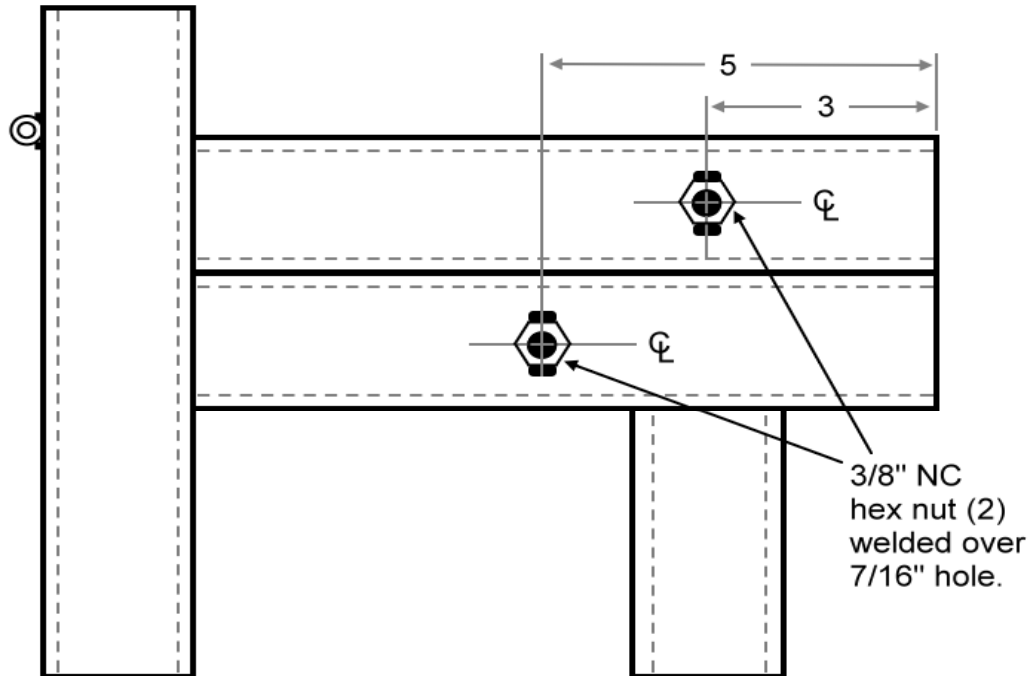
BG-272 BELT GRINDER FRAME



RIGHT SIDE VIEW

2017
dcknives.com
All measurements in inches.

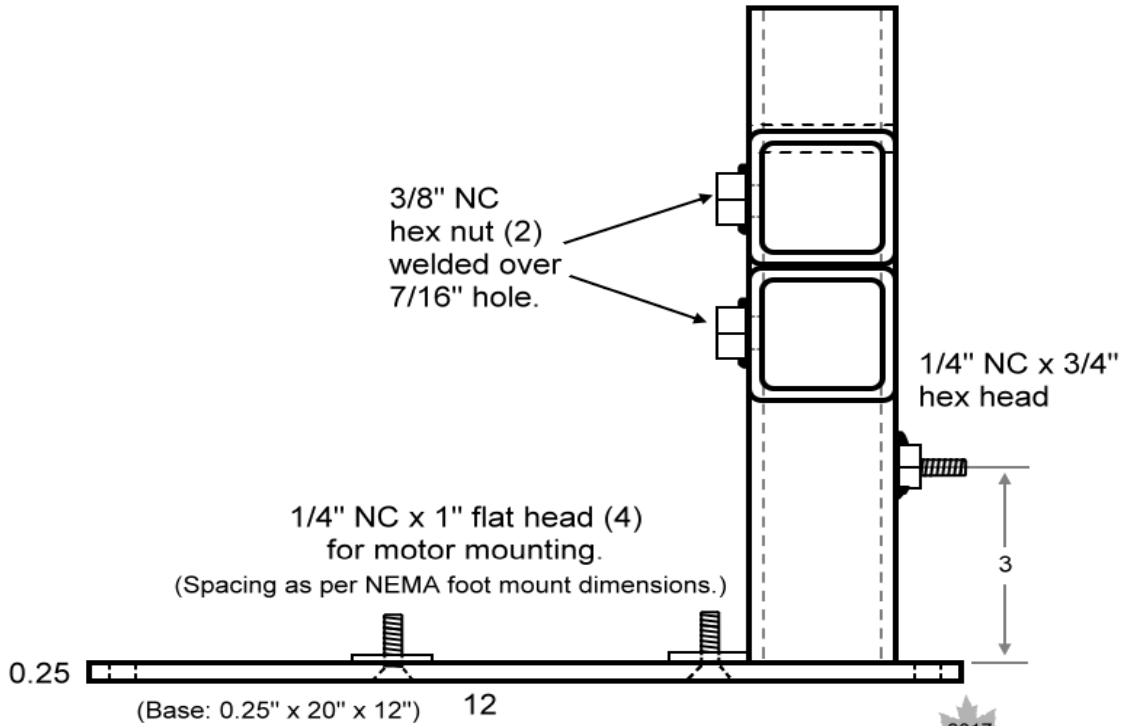
BG-272 BELT GRINDER FRAME



LEFT SIDE VIEW

2017
dcknives.com
All measurements in inches.

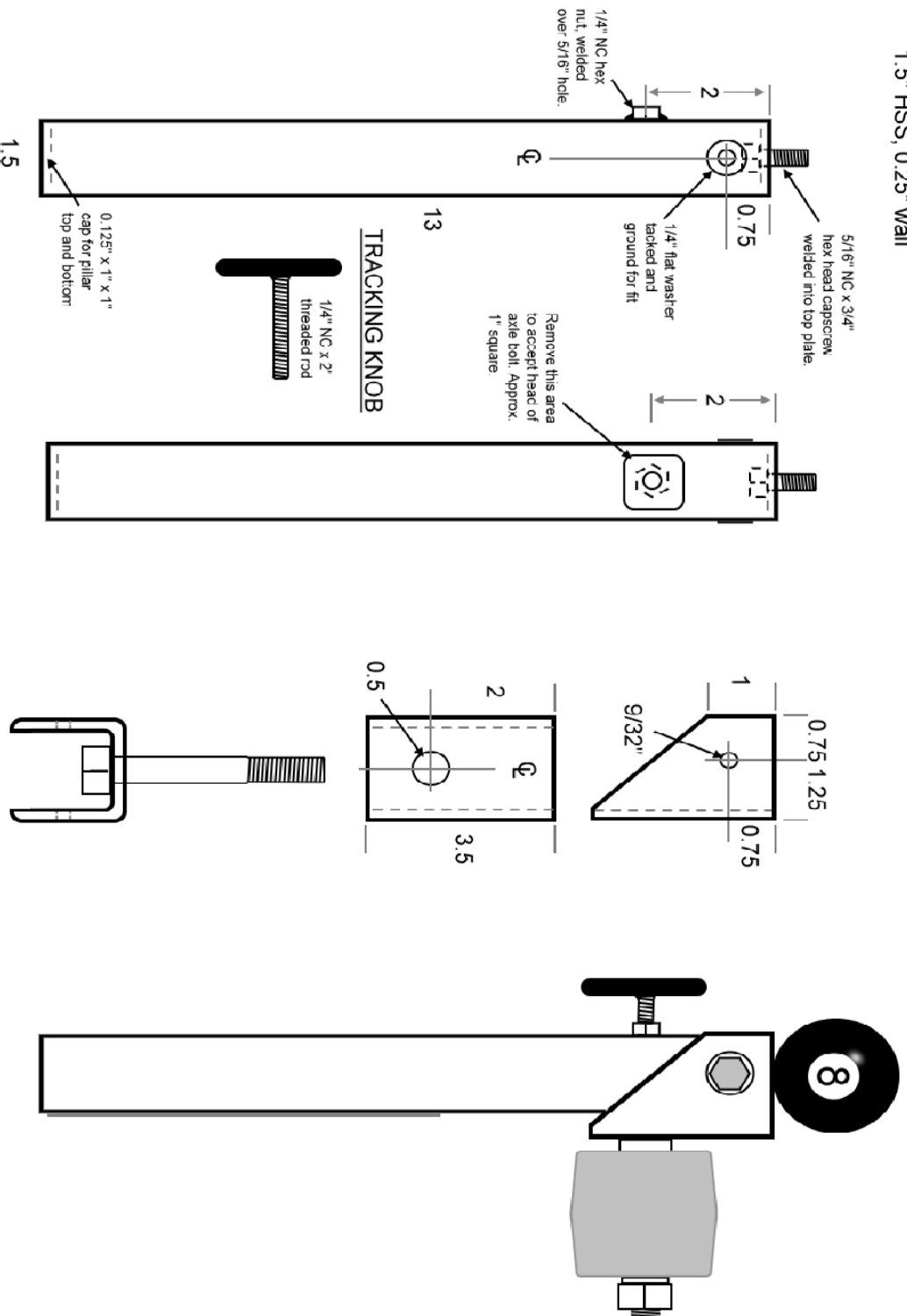
BG-272 BELT GRINDER FRAME



FRONT VIEW

BG-272 TENSIONING PILLAR

1.5" HSS, 0.25" wall



FRONT

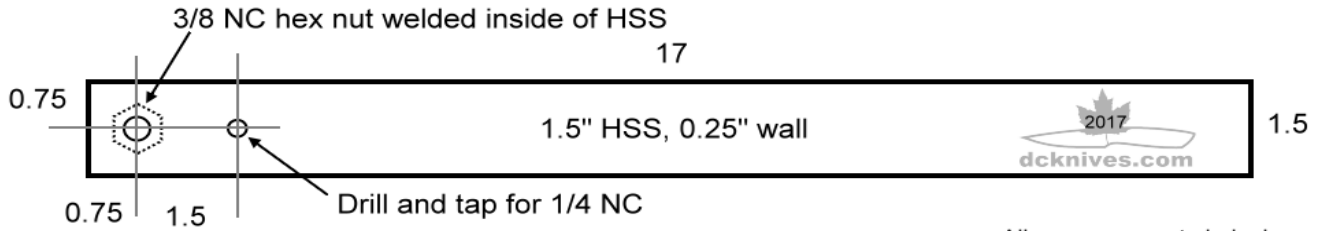
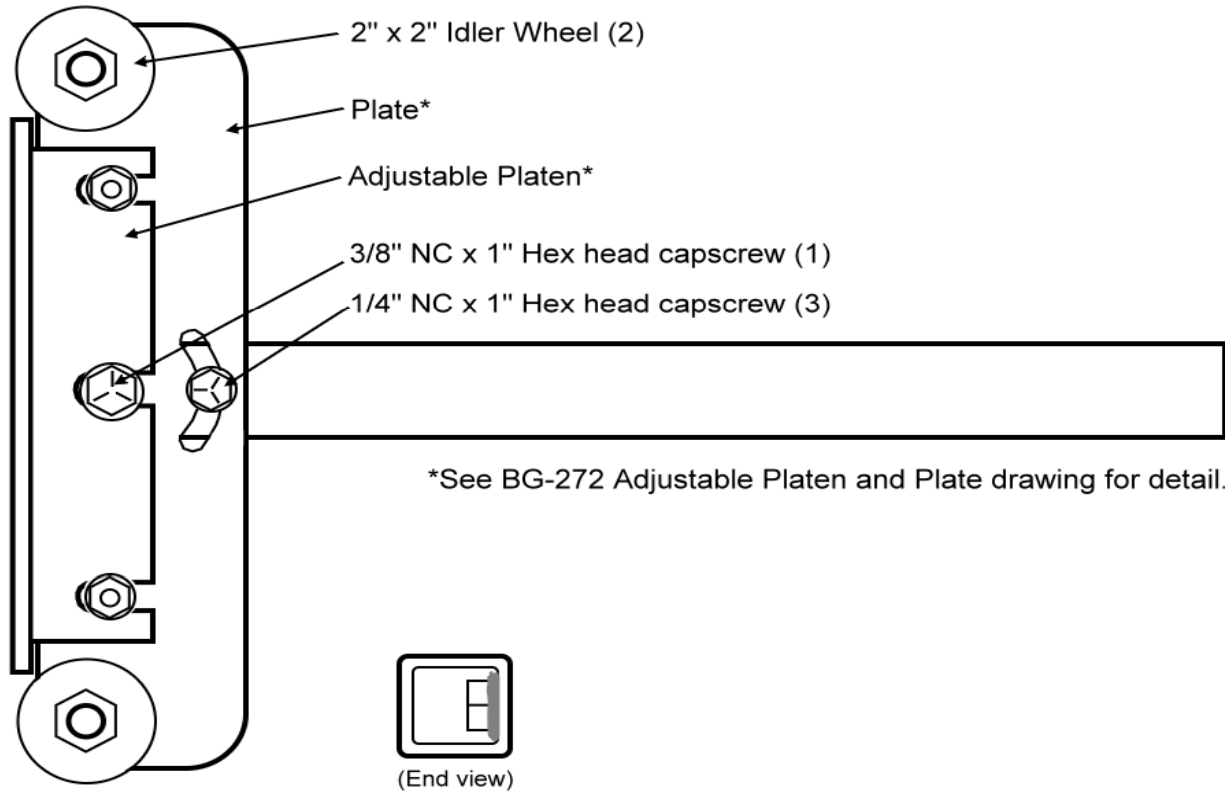
RIGHT

TRACKING HINGE

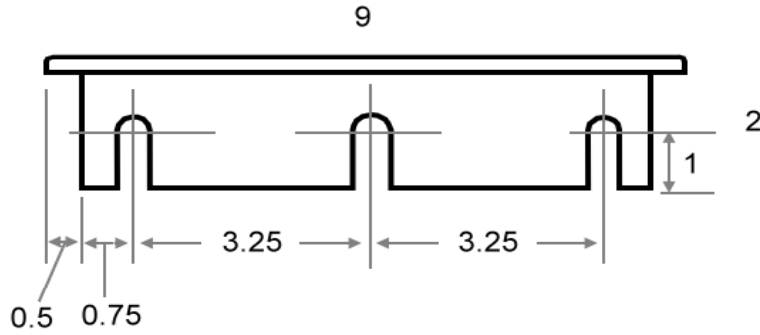
NOTES:

1. The height of the pillar will be dependant on the size of the compression spring you use. Aim for having the top of the tracking wheel 15" from the base of the frame.

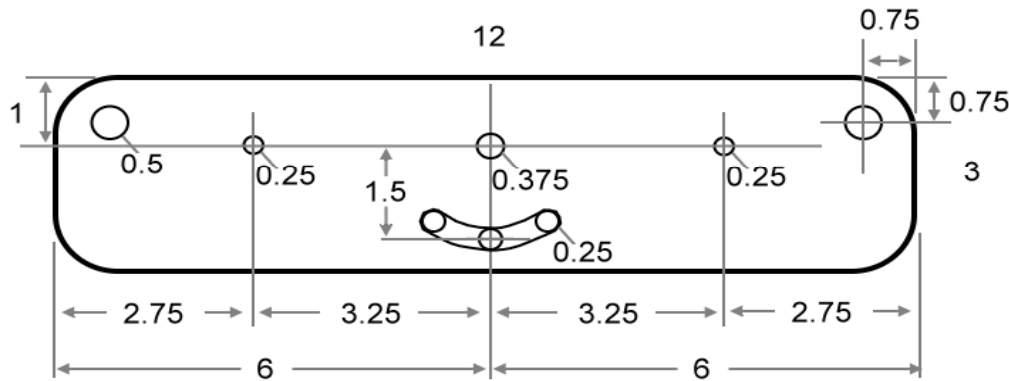
BG-272 FLAT PLATEN TOOL ARM



BG-272 ADJUSTABLE PLATEN AND PLATE



2" ANGLE
@ 9" long



3" x 12"
0.188" stock



Copyright 2017 D.Comeau
<http://dcknives.com>