

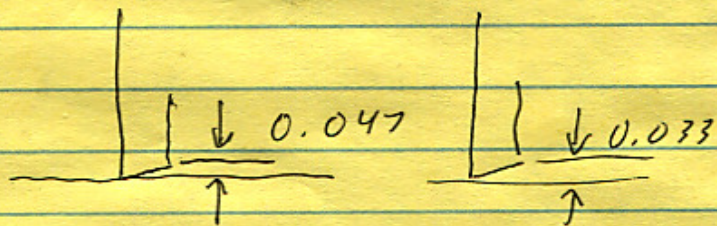
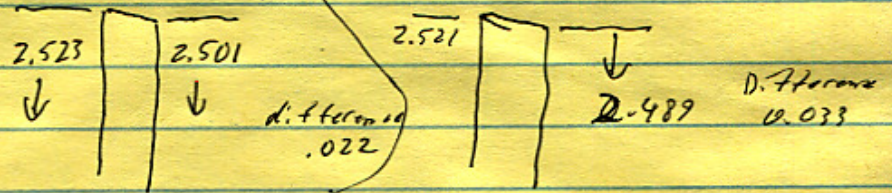
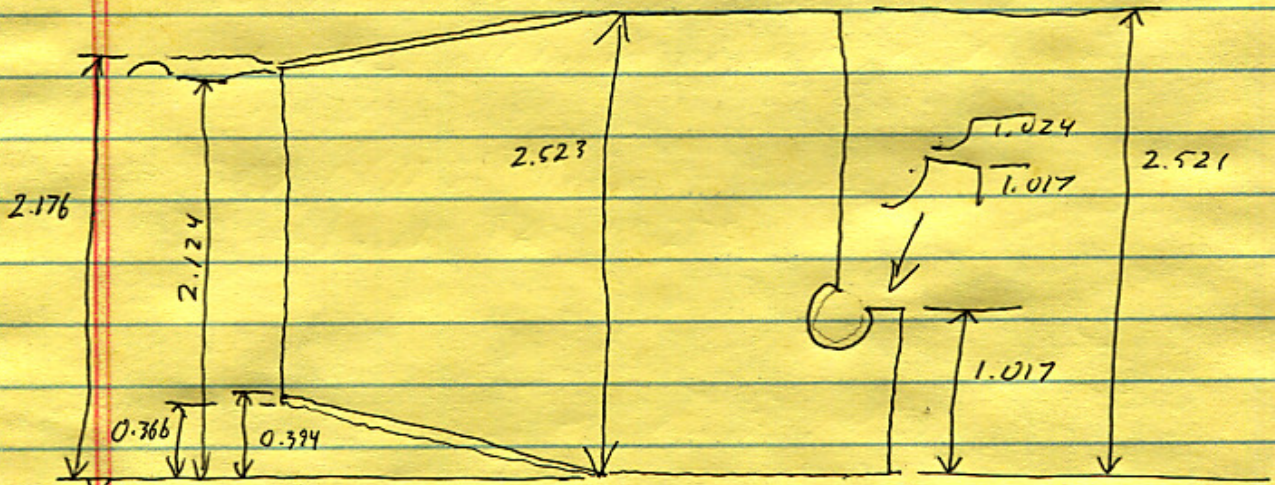
Top Parts (except wood)

25
2015-04-25

HMA - Paul Aken's Lever Hand Mold

3HMA3 Base Plate, ~~base~~ (TOP)
(WOOD SIDE)

HA

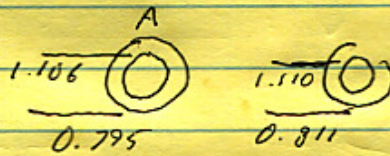
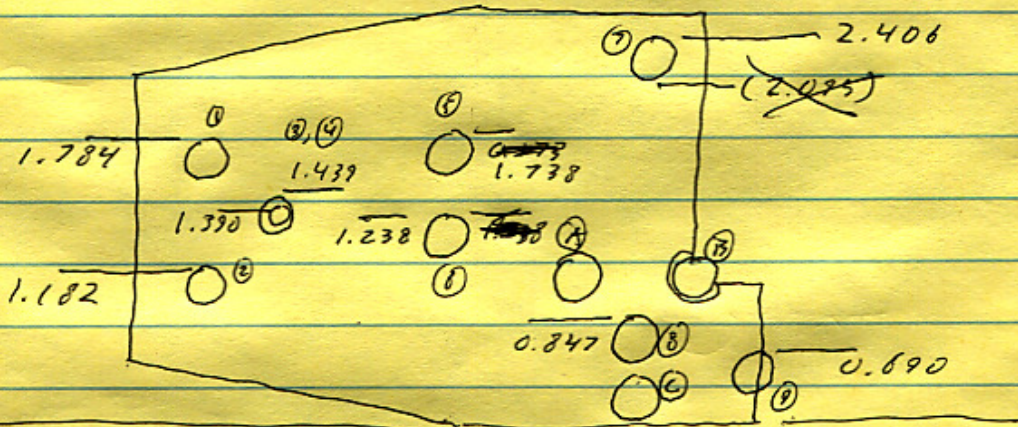


of top 1/2
All parts steel or cast iron
except wood (wood)
wood nut (brass)

3HMA3 Base Plate (TVP)

Diameters

- 1 0.279
- 2 0.279
- 3 0.186
- 4 0.253
- 5 0.286
- 6 0.276
- 7 0.323
- 8 0.322
- 9 0.274 A
- hole A 0.338 / 0.280 eccentric
- B 0.329 / 0.278
- C 0.314 / 0.303



possible
height
slight
in 540

cannot measure
due to interference
0.109

Noses

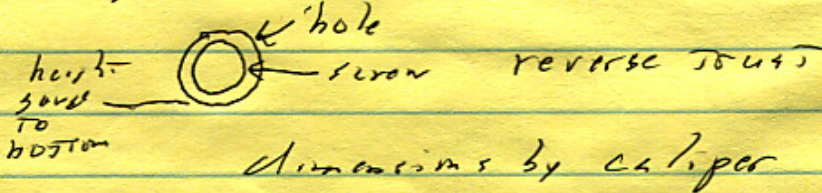
- Dimensions to tops by height gauge in
direct contact - TRUST

- Diameters by micrometer - TRUST

- ~~But dimensions to bottoms by
height gauge w/ visual estimation~~

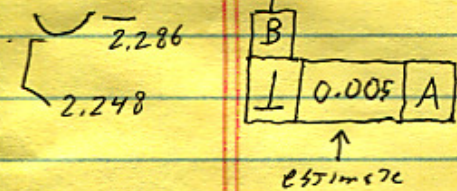
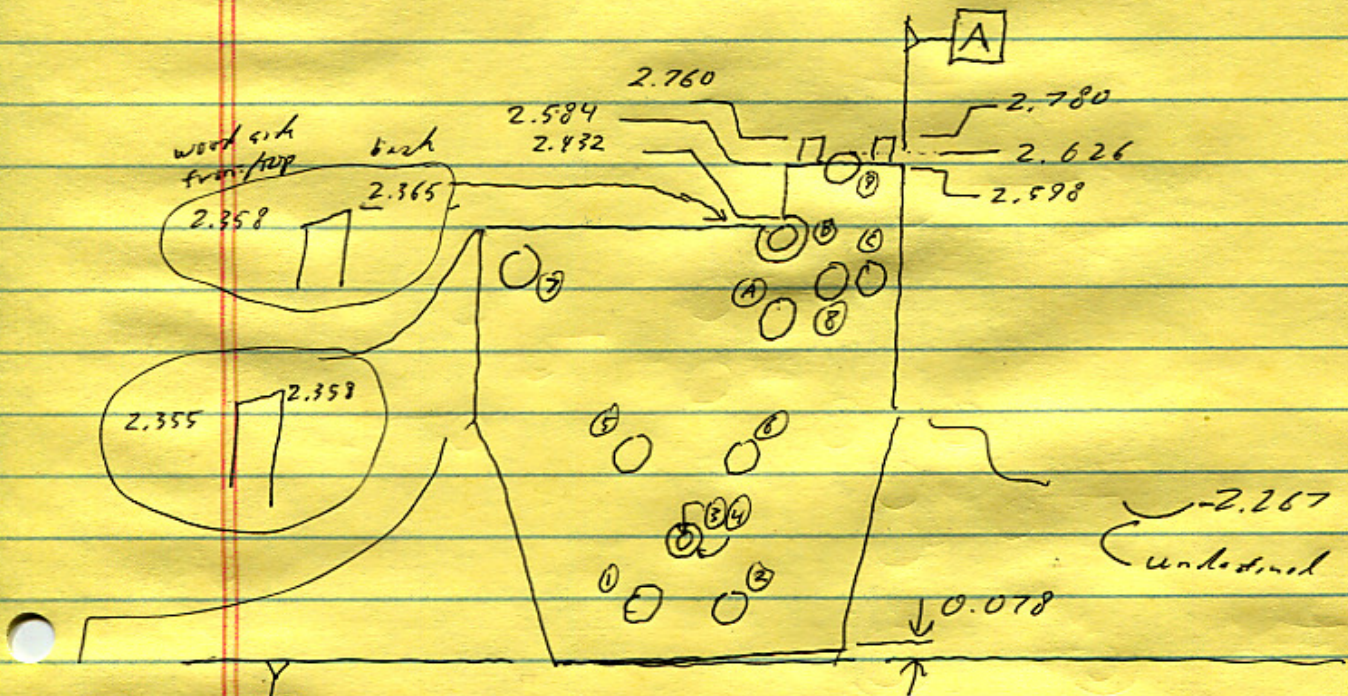
~~DO NOT TRUST - Don't take~~

Except A-B-C



25
2015-04-24
3

3 HMA 3 Base Plate (top)



	Height of screw top	Height of hole bottom
1	0.530	
2	0.532	
3	0.887	
4	0.929	
5	2.407	
6	2.402	
7	2.159	
8	2.166	
9	2.626	
A	1.894	1.608
B	2.391	2.082
C	2.153	1.848

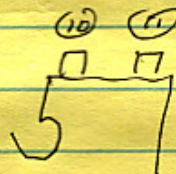
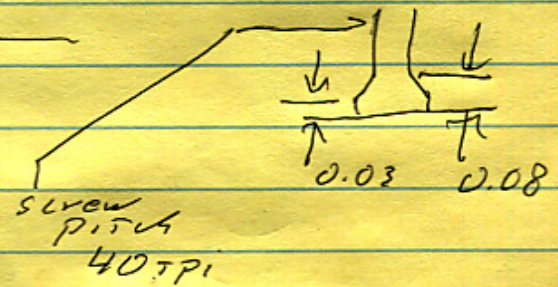
3HMA3 Base Plate (top)

Screw head heights

- 1 0.166
- 2 0.178
- 3 $\xrightarrow{\hspace{10em}}$ 7 0.498
- 4 $\xrightarrow{\hspace{15em}}$
- 5 0.163
- 6 0.165
- 7 0.180
- 8 0.177
- 9 ~~0.177~~ 0.178
- 10 0.165
- 11 0.171

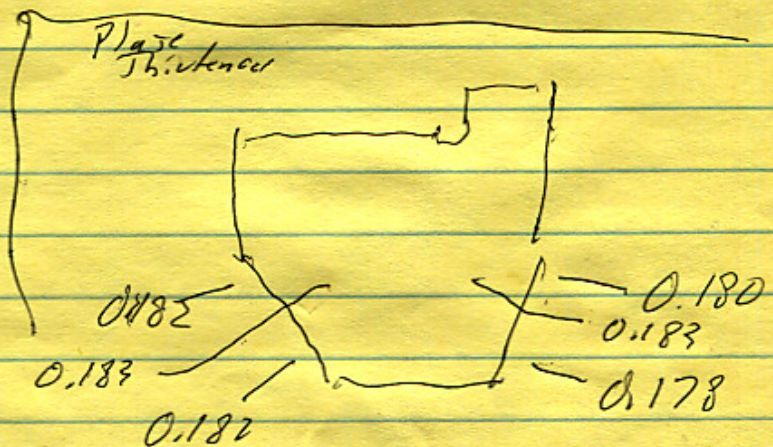
height
of stud

height
of boss



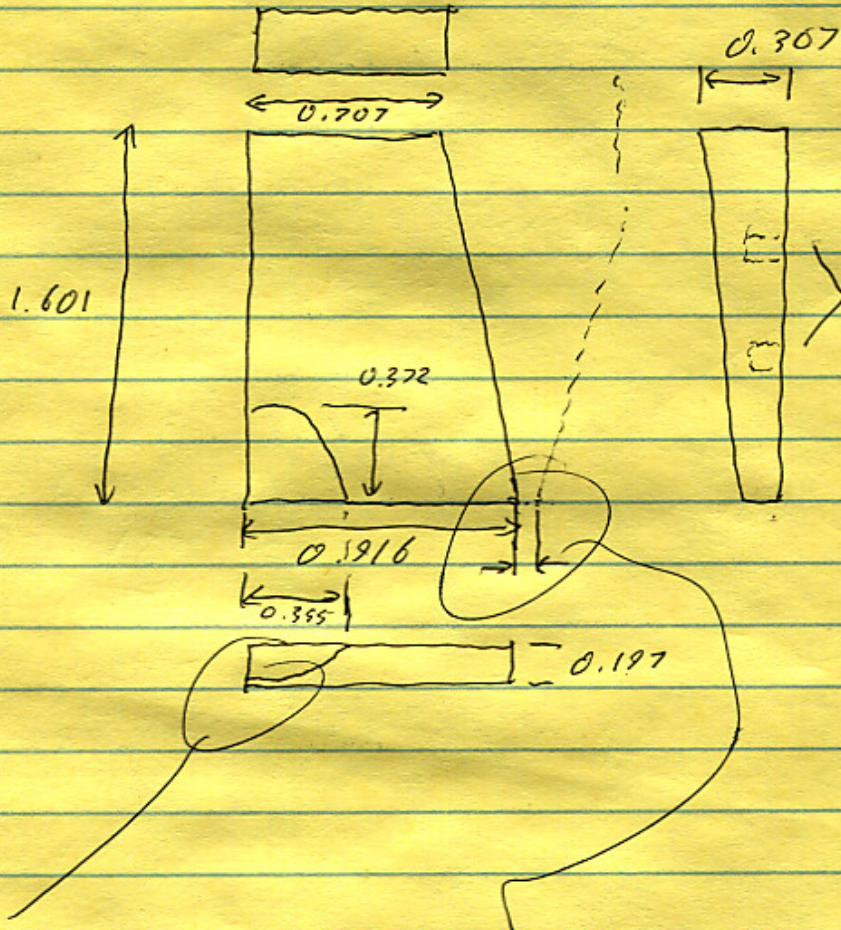
W.A.R of Slot

- 1 0.032
 - 2 0.032
 - ~~3 0.032~~
 - ~~4 0.029~~
 - 5 0.035
 - 6 0.029
 - 7 0.036
 - 8 0.030
 - 9 munged
 - 10 0.039
 - 11 0.033
- A 0.031
 - B 0.037
 - C 0.033

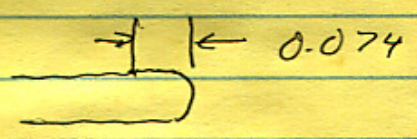
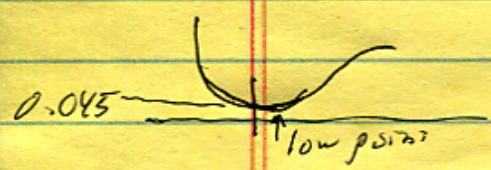


25
2015-04-21 (5)

3HMA7 Mon. Piece (top), Plate

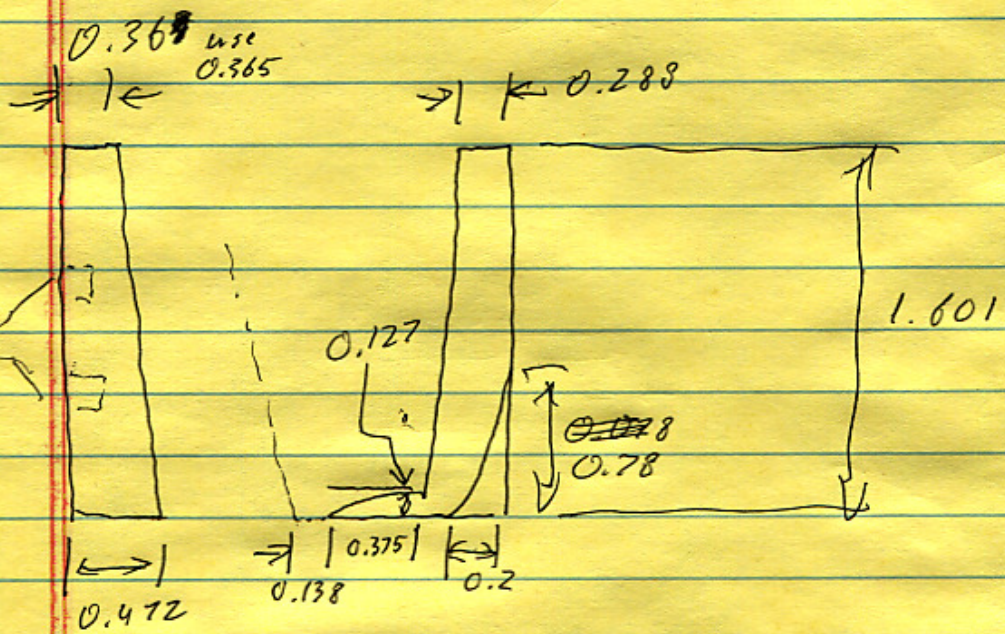
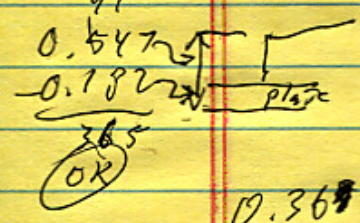


(2) blind Tapped holes below, depth unknown. Get locations from Plate

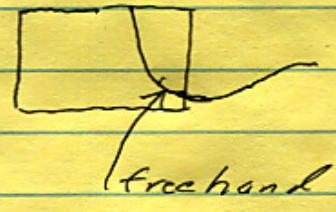


3 HMA10 Montypico (Top), Sidewalk

check



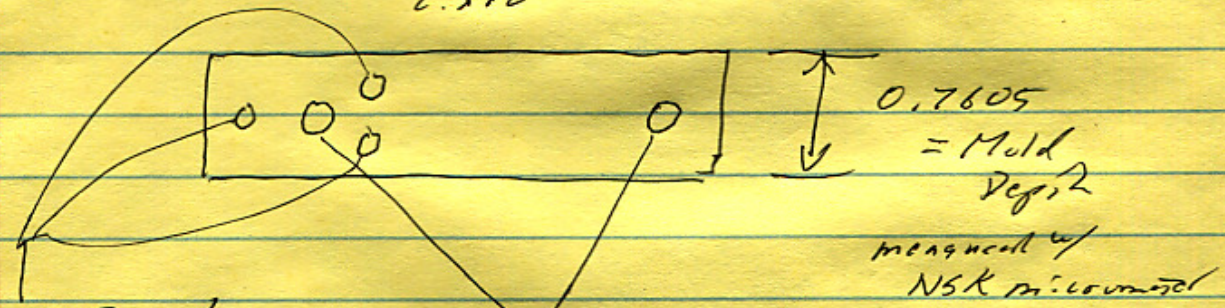
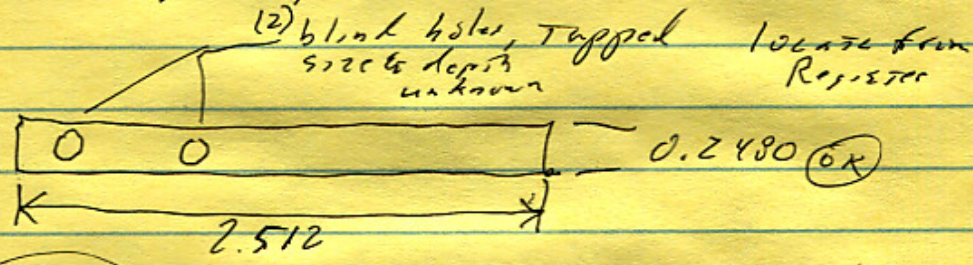
(2) Blind
Tapped
holes
below.
Depth
unknown
Get locations
from
Plate



2015-04-25
7

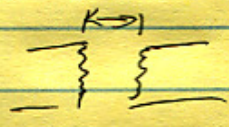
5HMA4 Carriage (TOP)

0.4308 overall
 $- 0.182$ plate thick
 0.248
OK



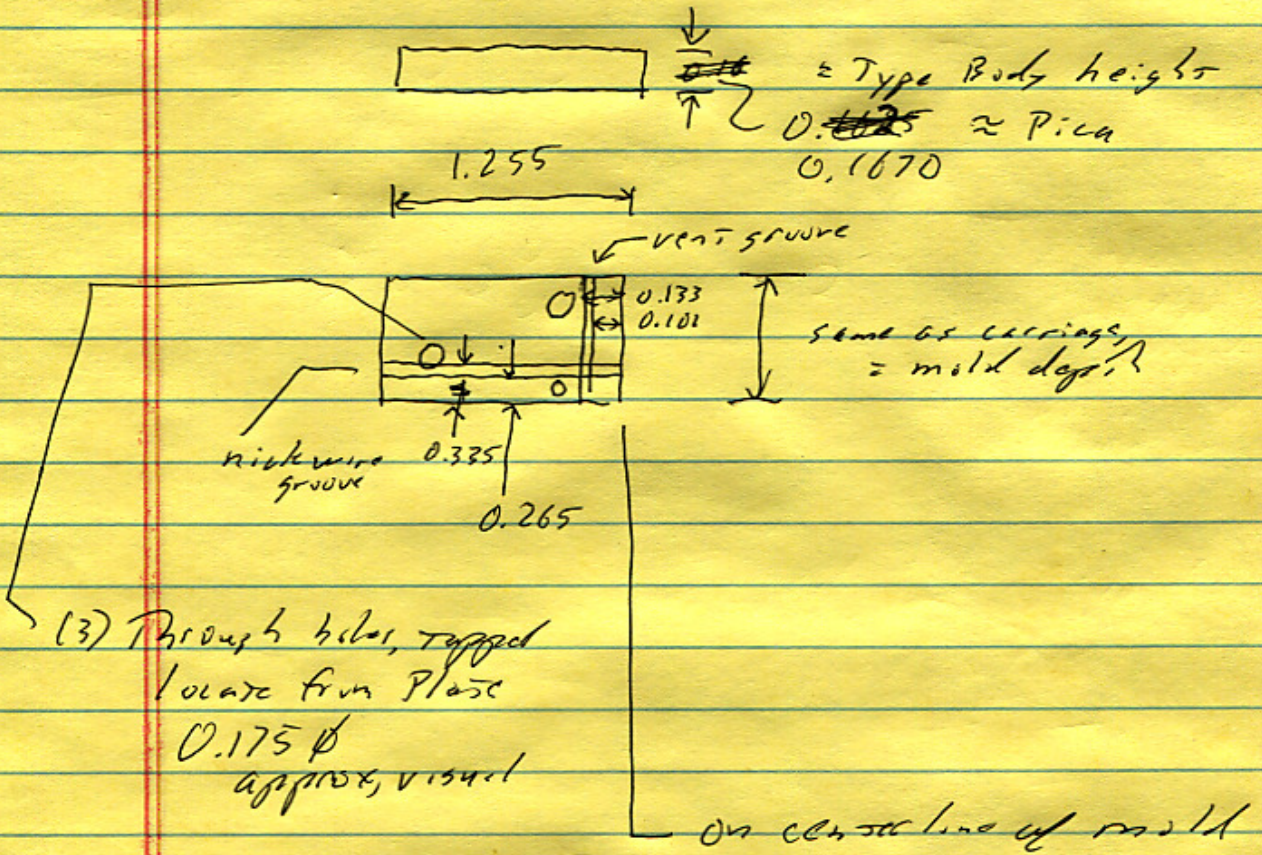
(3) Through holes
locate from plate

(2) Through holes, Tapped
locate from plate
Approx ϕ 0.1865



(1) blind hole, Tapped
locate from Wing
size & depth unknown

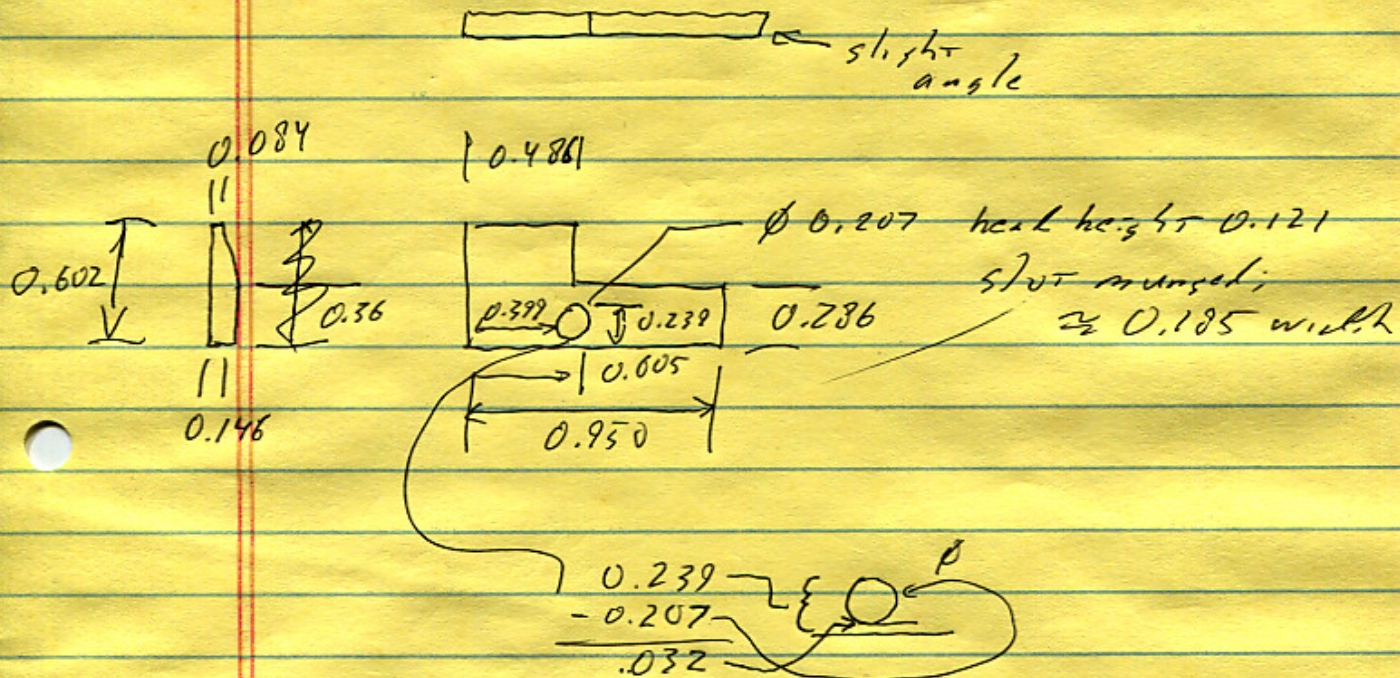
6HMAS Body (Top)



Note: Plate, Carriage, Body,
 Wing, & Register
 all finish with each other
 on left/outside
 so can locate holes from
 Plate, Register, & Wing

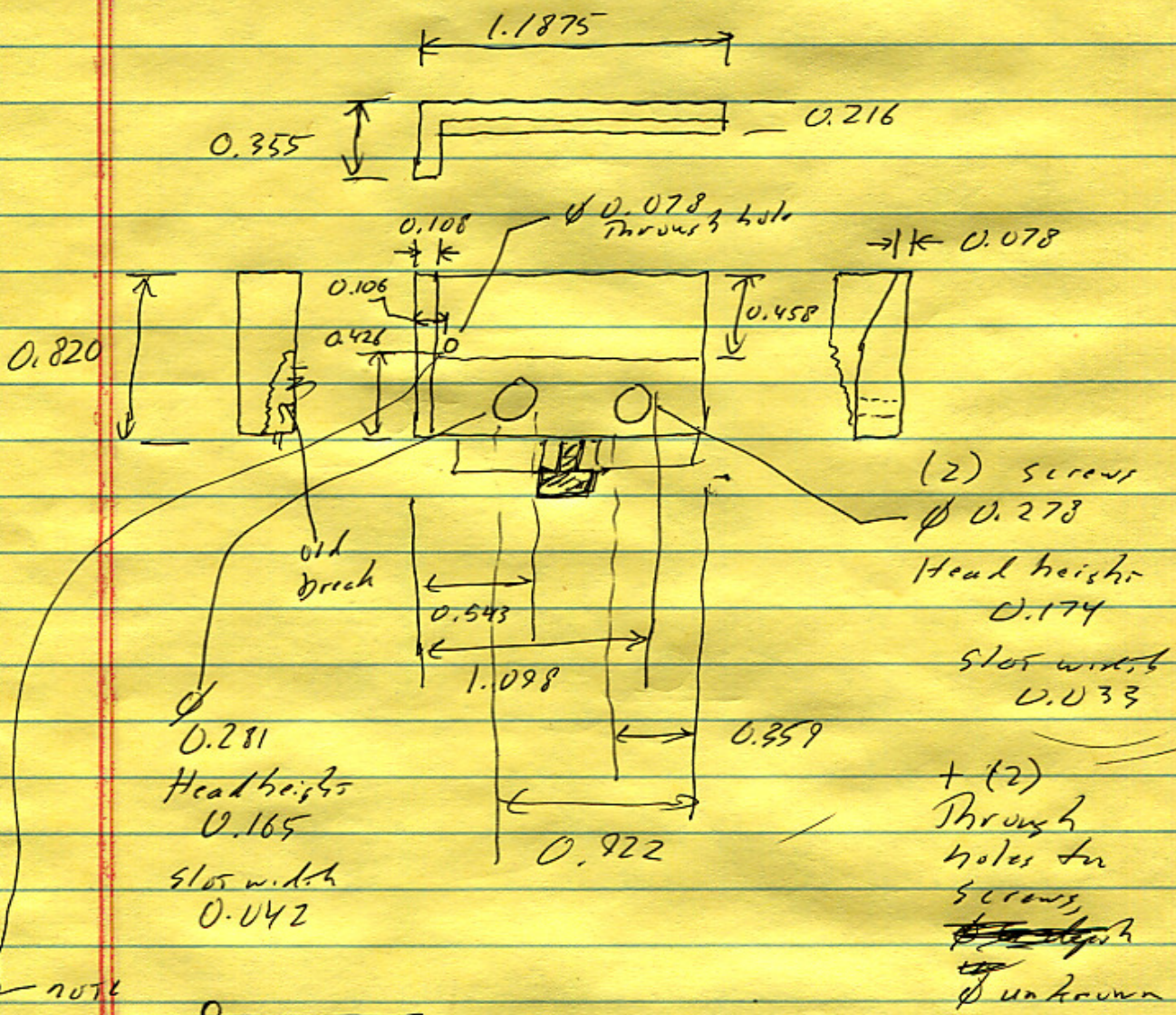
2015-04-24²⁵ (8)

8HMA4 Wing (Top)



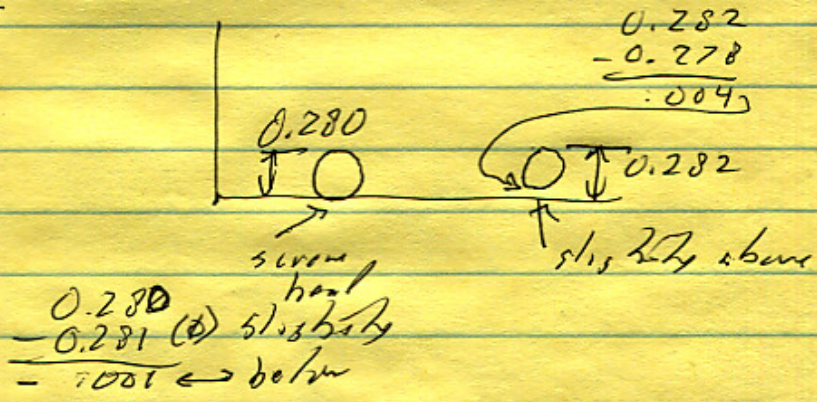
2015-04-25
 (10)

9HMA5 Register (top)



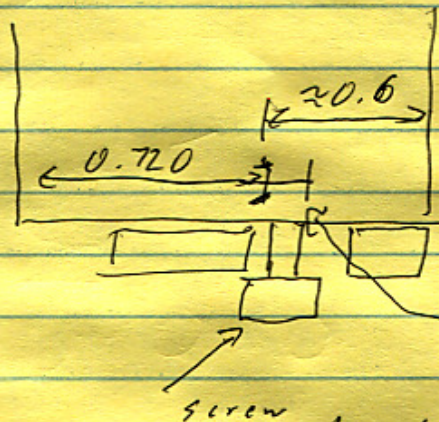
NOTE

Bottom of Through hole is slightly below top of Body



25
2015-04-~~24~~
(11)

PHMAS Register (top) cont'd



(17) blind hole for this screw. depth unknown

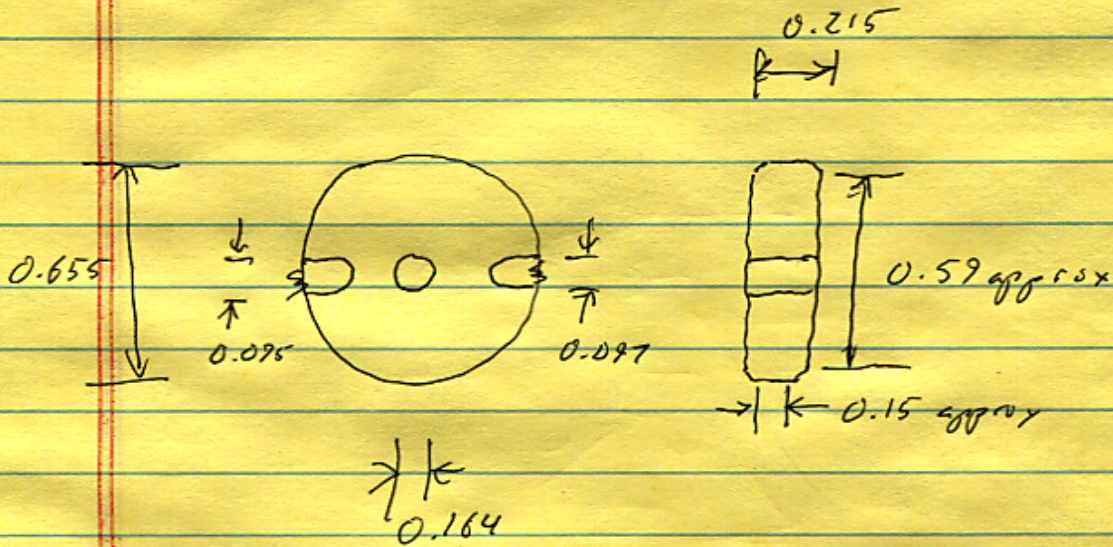
~~head~~
head ϕ 0.275
" height 0.193
slot munged

2015-04-26

(1)

HMA - Paul Aken's Lever Hand Mold

1 HMA4 Wood (top), Nut



(1) Trough hole,
Threaded
0.164 ϕ to threads

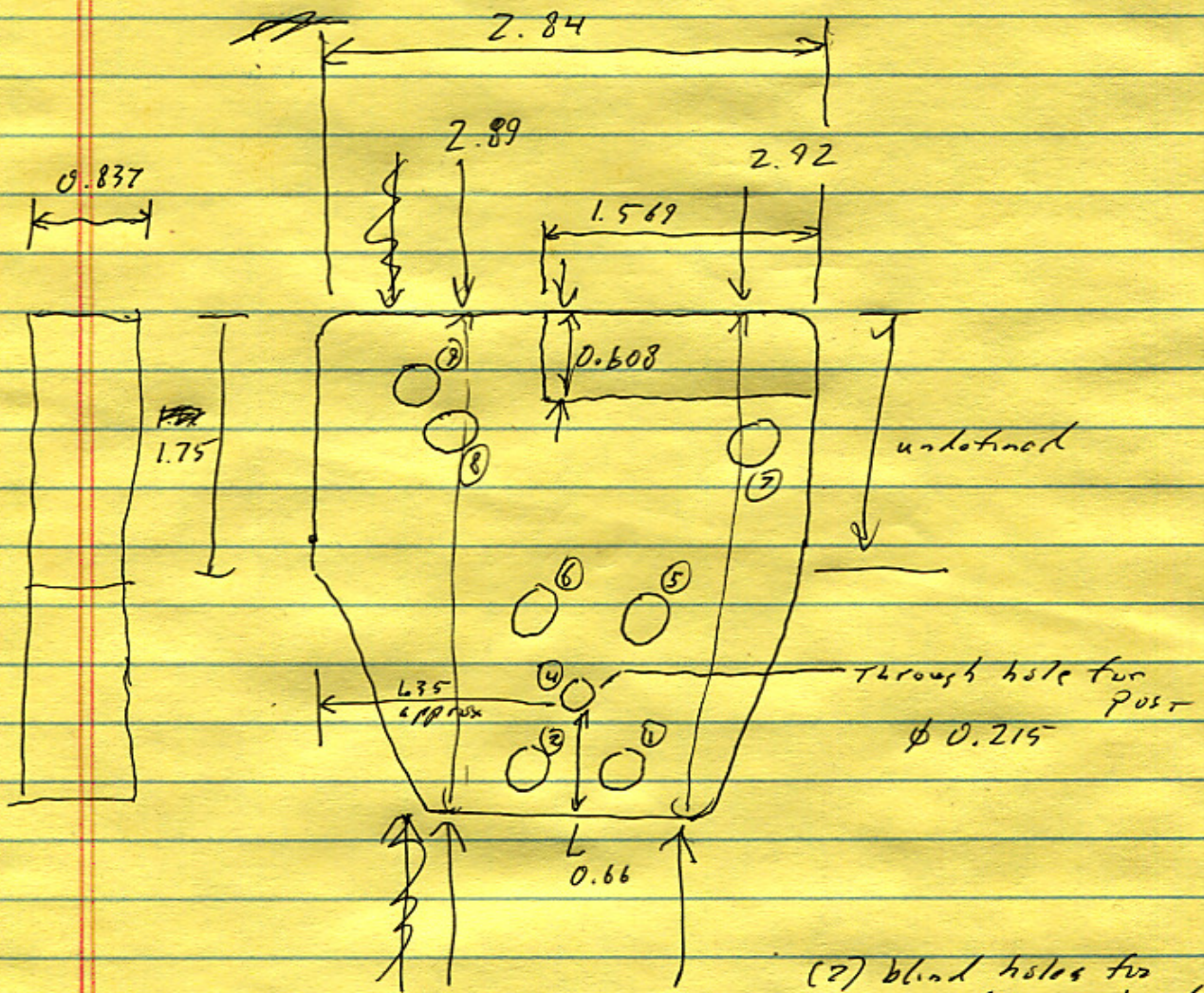
Material: brass

2015-04-28

(2)

1HMA3 Wood (Top)

Plate Side

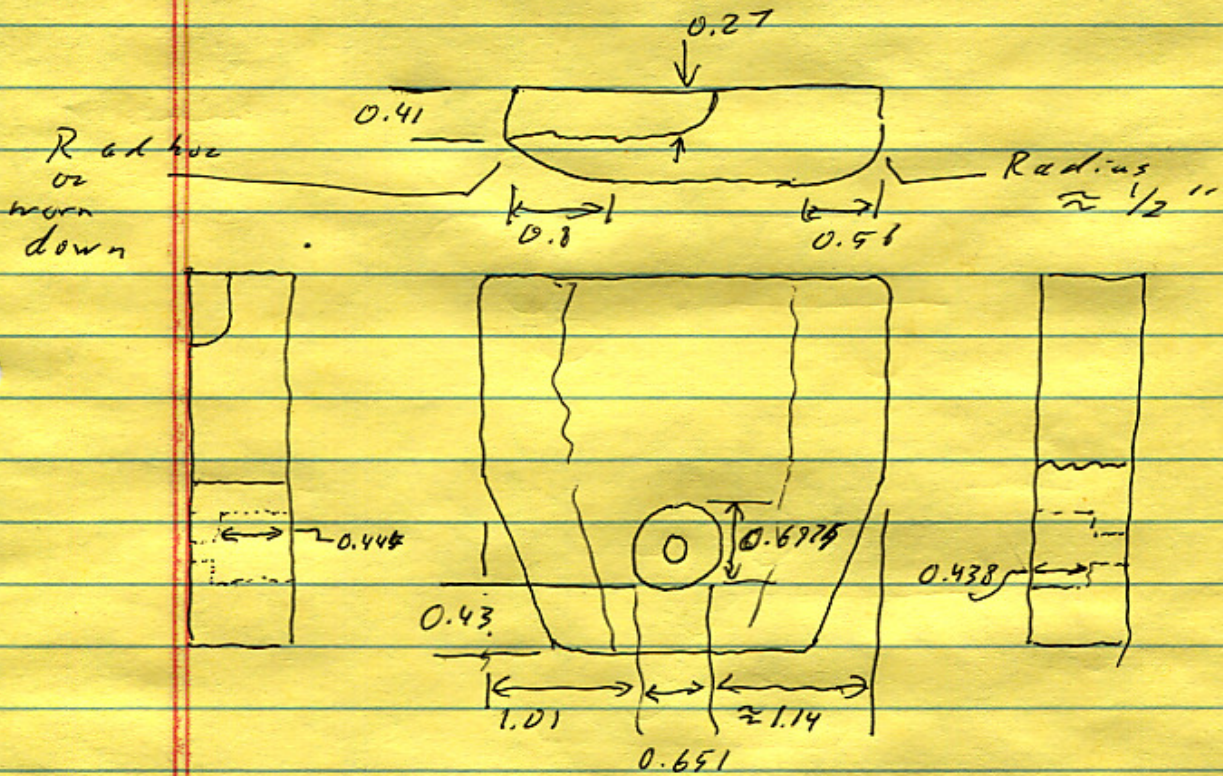


Hole	Dia	Depth	Hole	Dia	Depth
1	0.347	0.216	7	0.353	0.199
2	0.367	0.178	8	0.351	0.231
5	0.369	0.181	9	0.368	0.214
6	0.370	0.190			

2015-04-26

3

1 HMA3 Wood (Top)

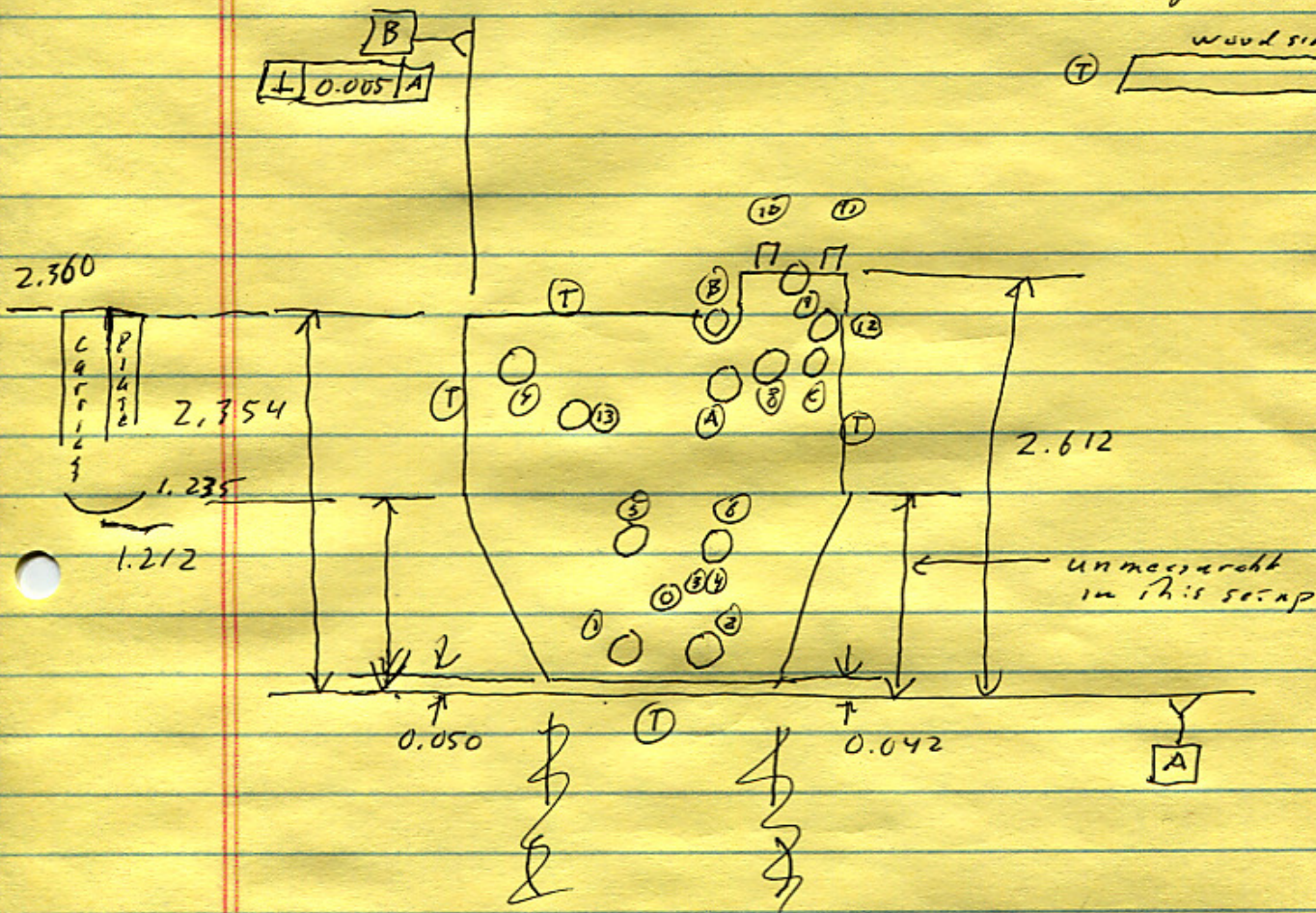
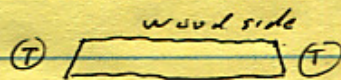


2015-04-26
(4)

2 HMA 1 Base Plate (bottom)

Wood side

Note: All sides marked
(T) Taper x 0.001

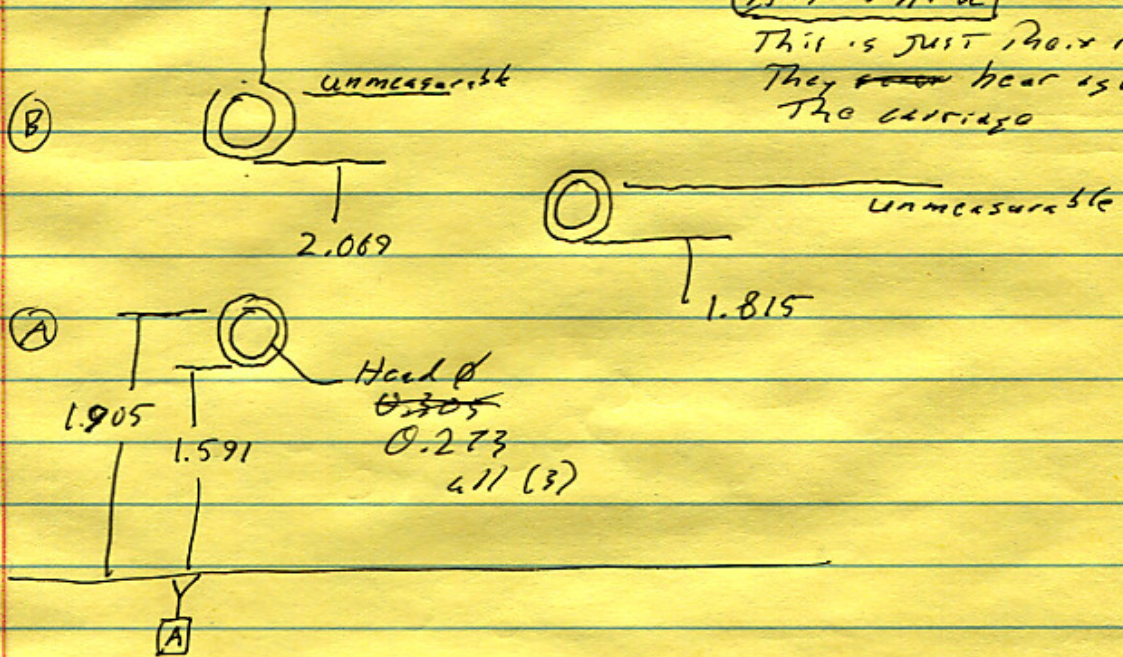


#	Height To [A]	Head Dia	Head Height	Slot width	#	Height To [A]	Head Dia	Head Height	Slot width
1	0.516	0.279	0.185	0.032	9	2.829	0.273	0.182	0.032
2	0.516	0.278	0.1965	0.031	10	2.728	0.275	0.133	0.036
3	0.956				11	2.732	0.277	0.126	0.047
4	0.962				12	2.496	0.276	0.168	0.040
5	1.393	0.277	0.184	0.033					
6	1.375	0.276	0.159 (starburst)	0.034					
7	2.140	0.319	0.185	0.047	13	1.573	0.168		
8	2.181	0.323	0.179	0.041	<p>13 Hole bottom Hole L.D. Thru X</p>				

2015-04-26

2 HMA1 Base Plate (bottom)
Screws for Body

(5)



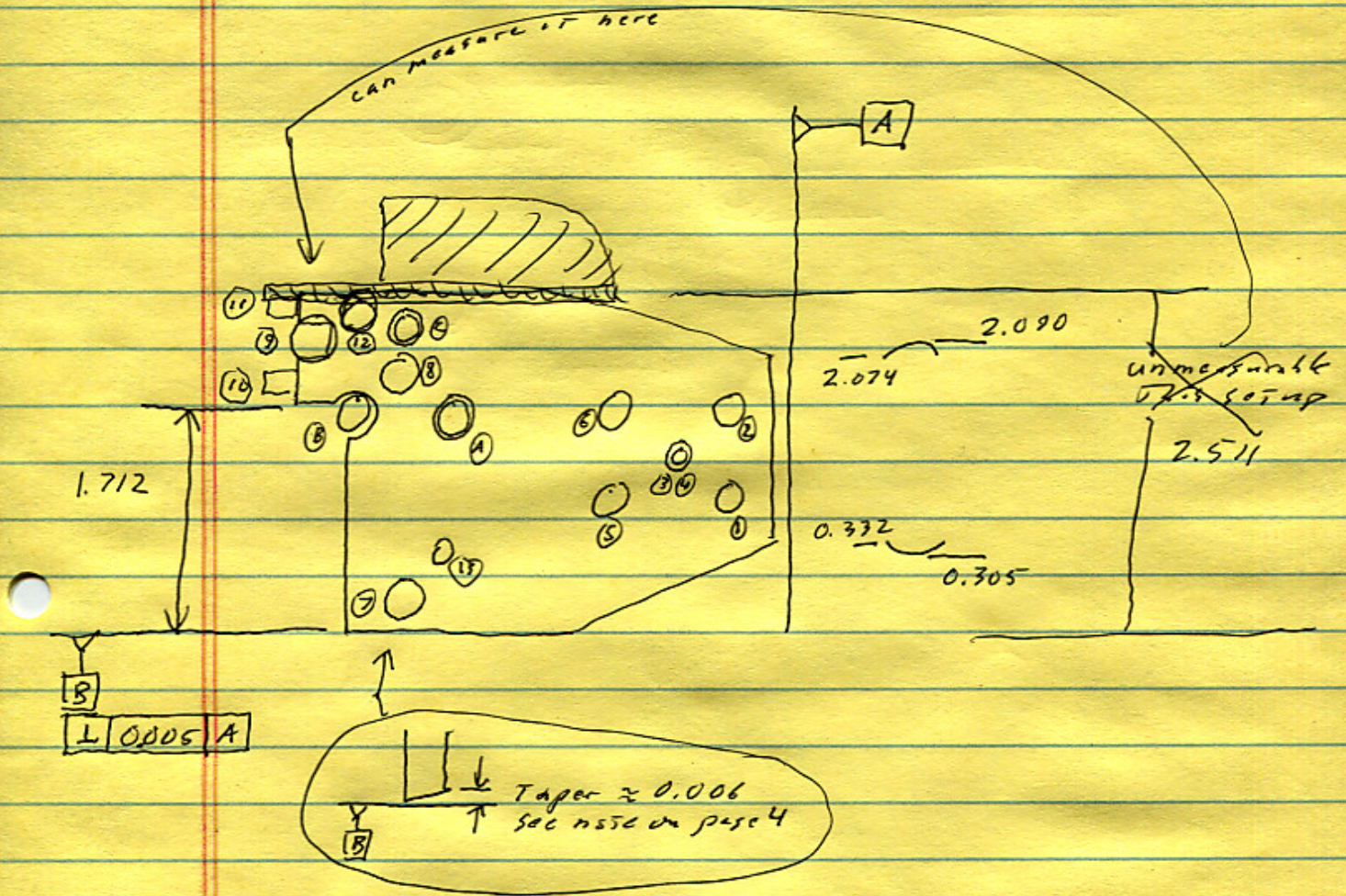
All Thru

This is just for relief
They ~~can~~ bear against
The carriage

2015-04-26

(6)

2 HMA1 Base Plate (bottom)



#	Height to [B]
1	1.104
2	1.051
3	1.700 screen
4	1.346 base
5	1.112
6	1.597
7	0.480
8	2.098

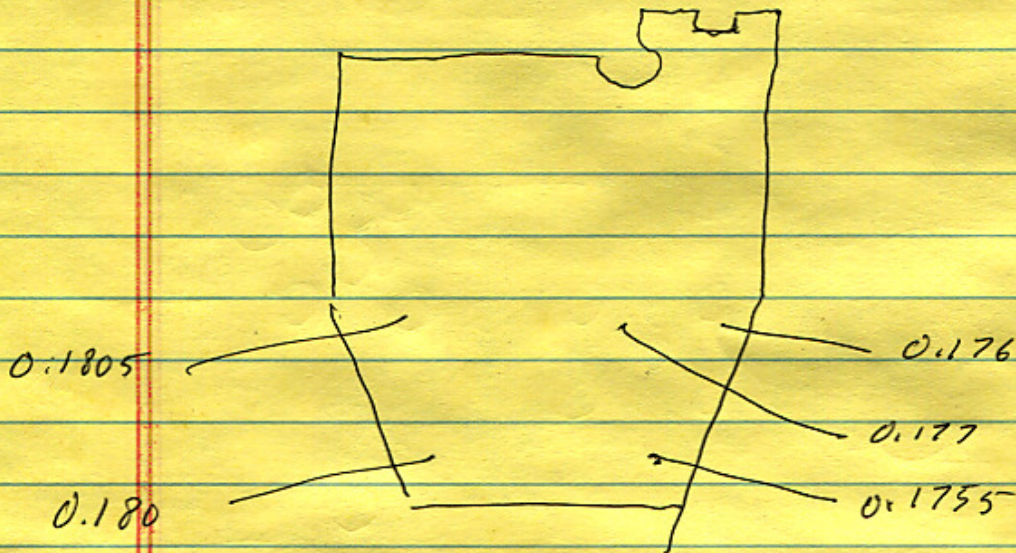
#	Height to [B]	
9	2.200	
10	1.952	
11	unmeasurable this setup	
12	2.451 (hole bottom)	
13	0.505 to bottom of	
A	1.403 hole	1.698
B	1.432	1.707
C	covered by [B]	unmeasurable this setup

2015-04-26

(7)

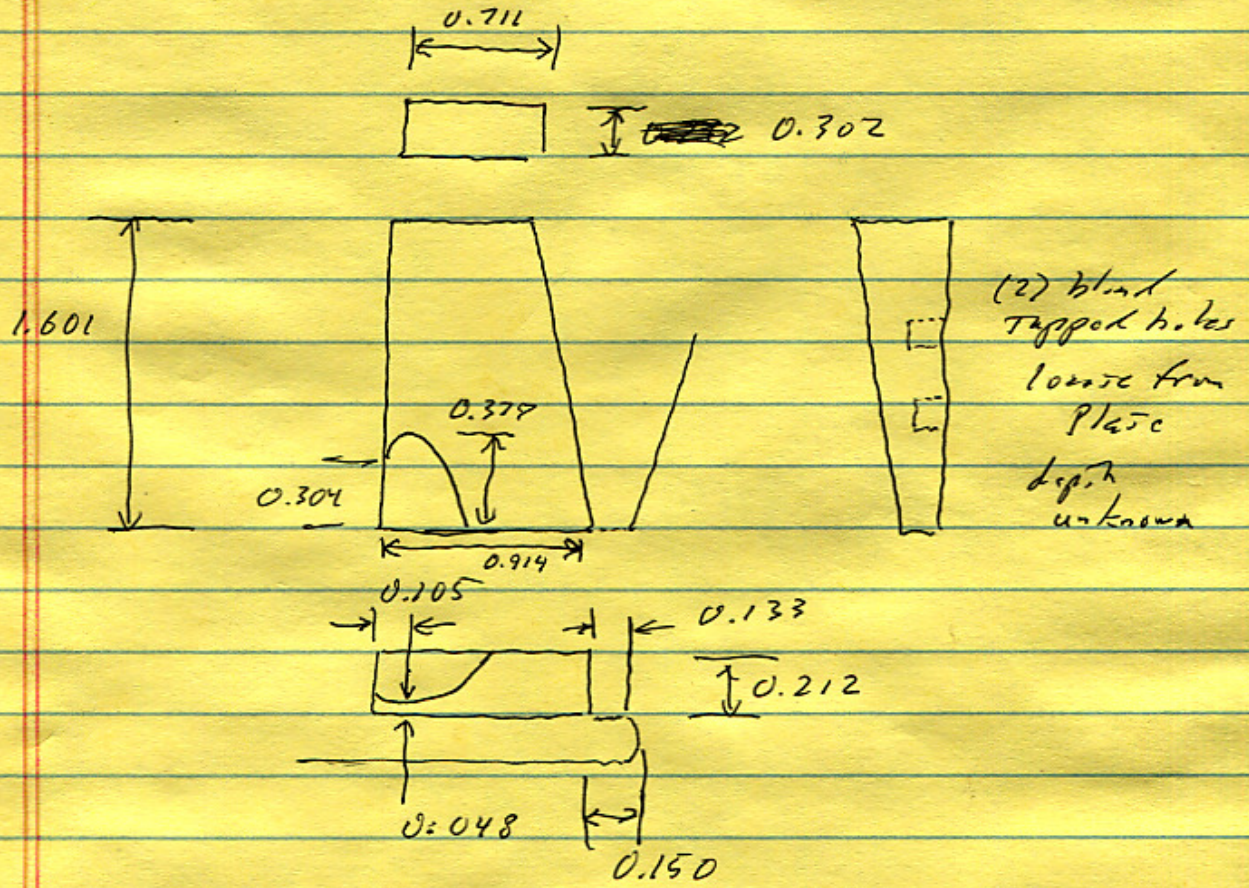
2 HMA1 Base Plate (bottom)

Thickness



2015-04-26 (8)

3 HMA1 Monopires (bottom), Plate

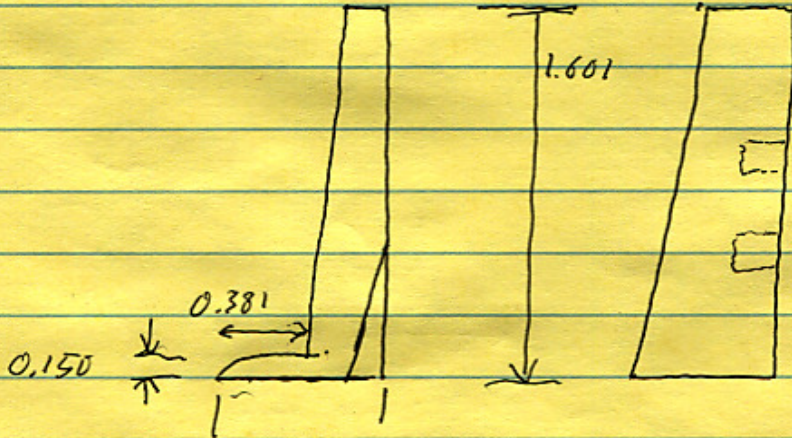
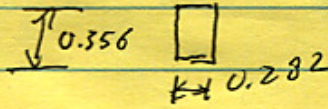


2015-04-26

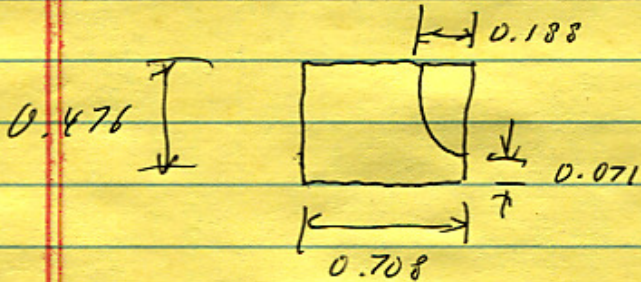
9

3HMA4 Men. Piece (Boston), Sidwell

$$\begin{array}{r} 4, \\ 0.436 \\ 0.180 \\ \hline 356 \end{array}$$



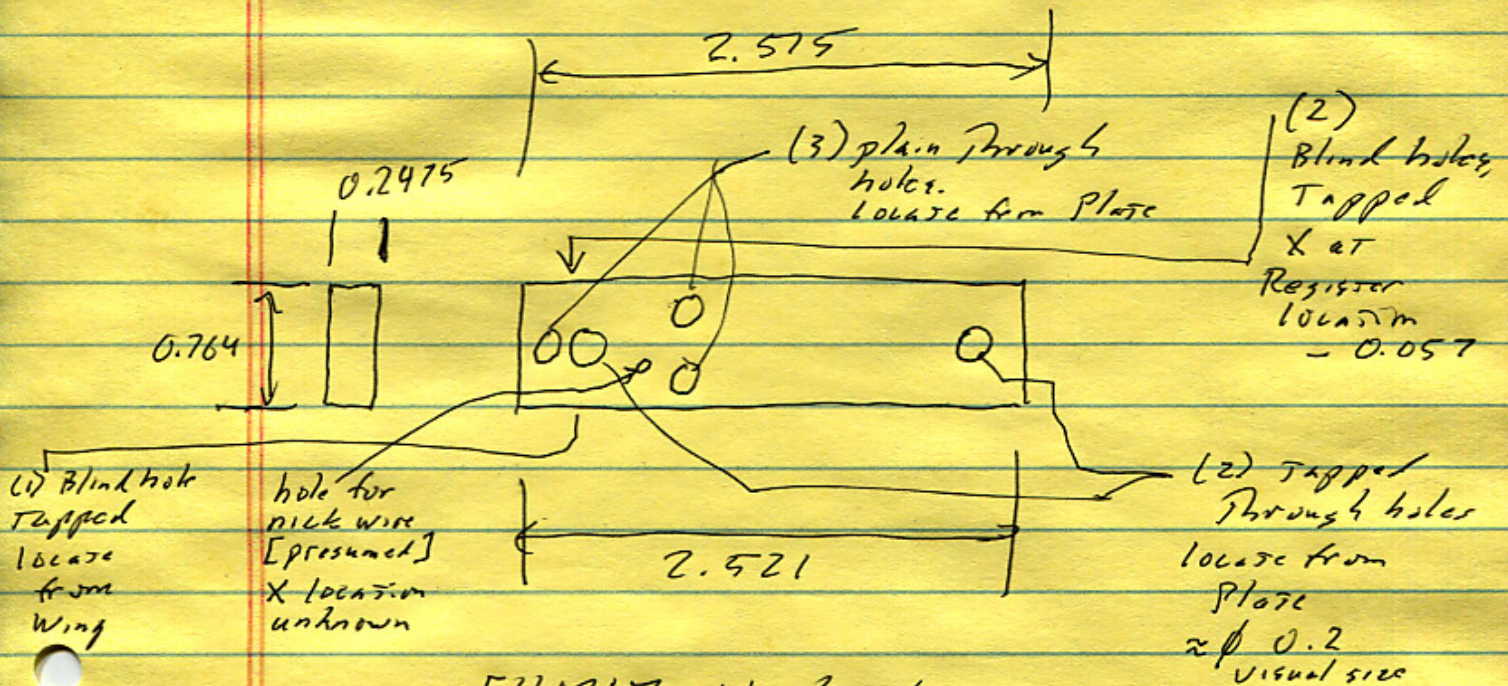
(2) blind
Tapped holes
depth unknown
locate from
plate



2015-04-26

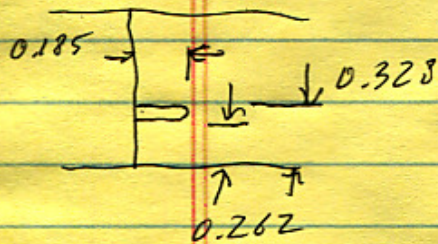
(10)

5HMA1 Carriage (bottom)

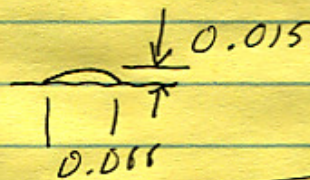


nick wire

5HMA7 Nick Wire

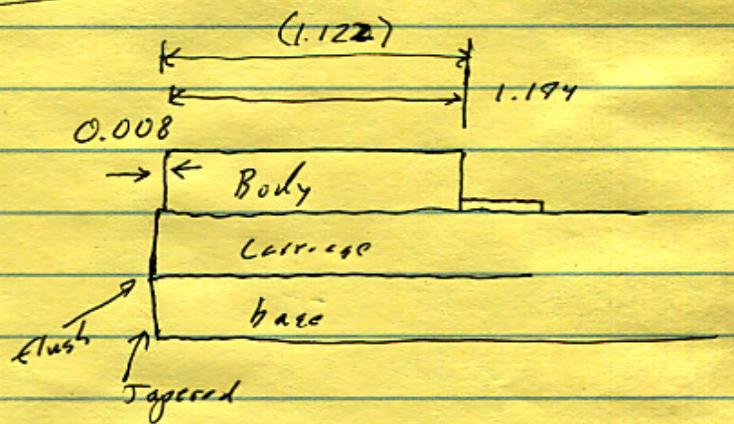


Nick Wire



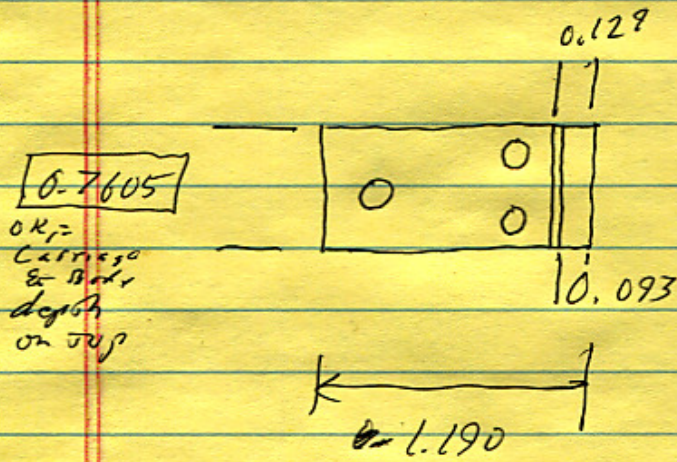
$$\begin{array}{r} .828 \\ -.262 \\ \hline .066 \end{array}$$

OK for nick wire width



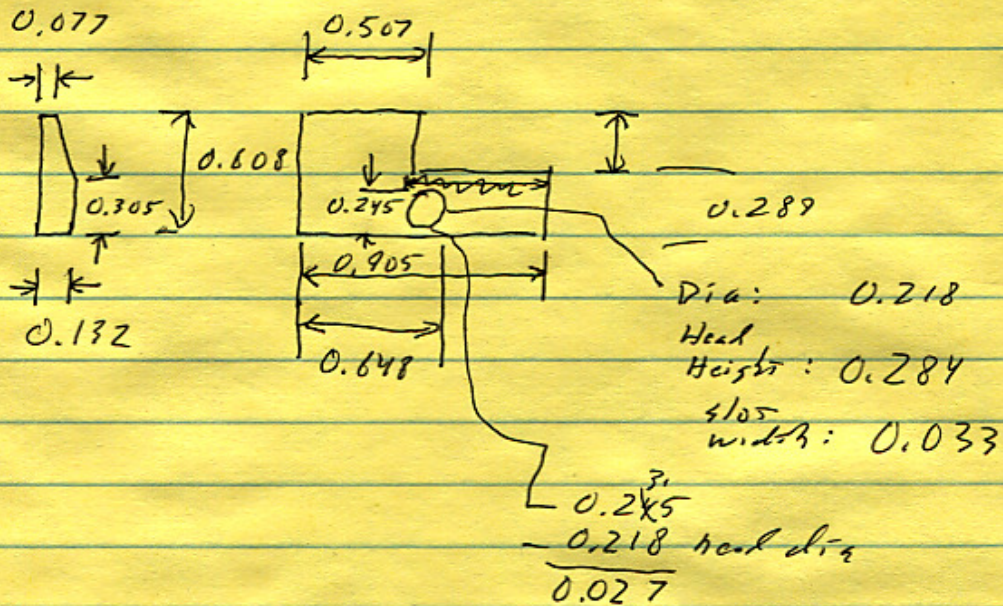
2015-04-26 (11)

6 HMA1 Body (bottom)



(3) through-holes
Tapped
 ≈ 0.18
Visual size
locate from
plate

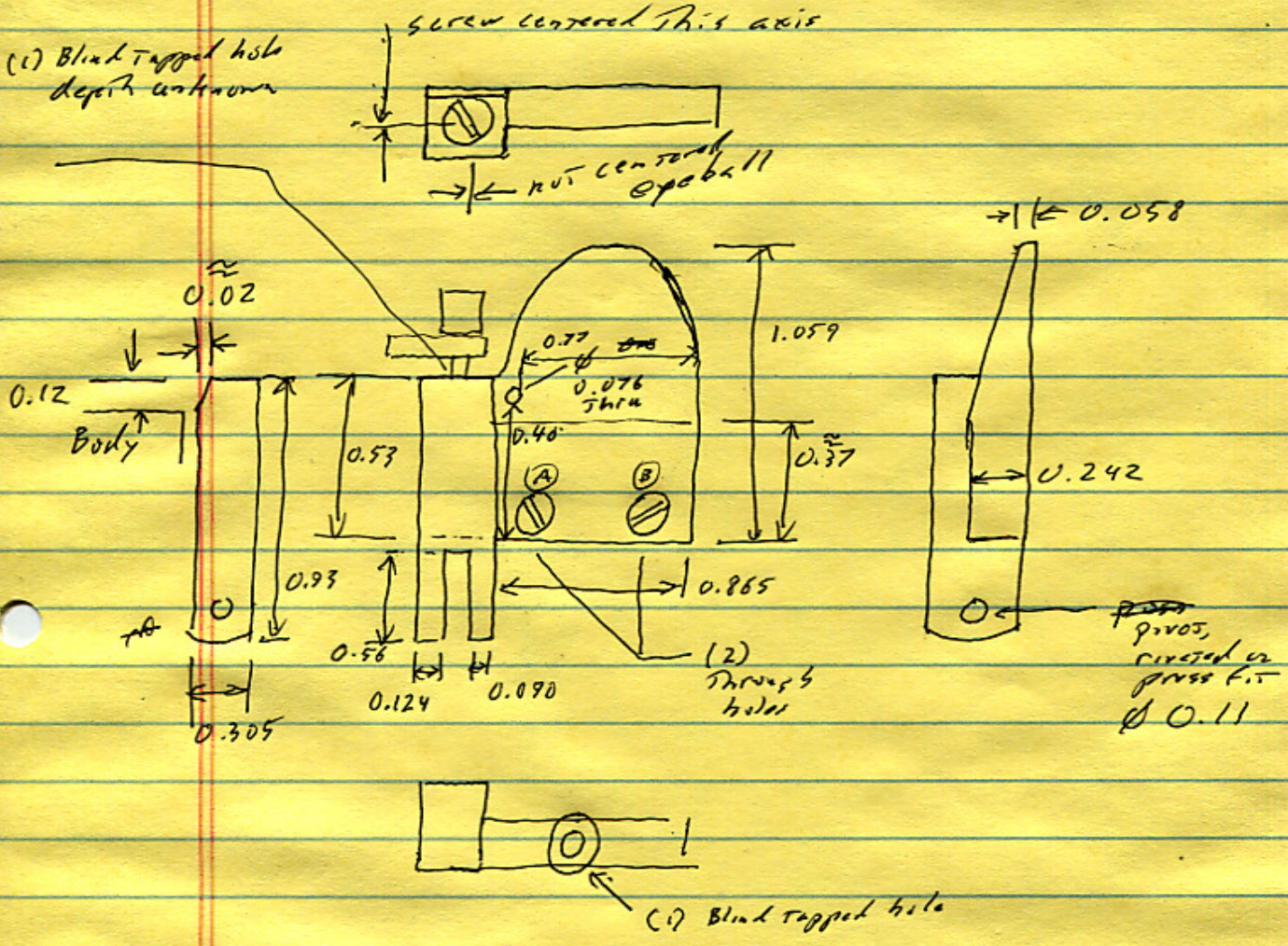
8 HMA1 Wing (bottom)



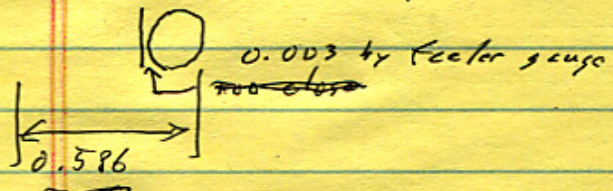
2015-04-26

(12)

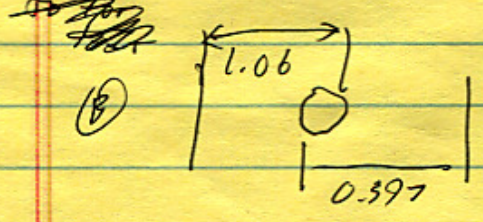
PHMA1 Register (bottom)



Ⓐ dia 0.277 probably modern replacement



see also Base Plate measurements

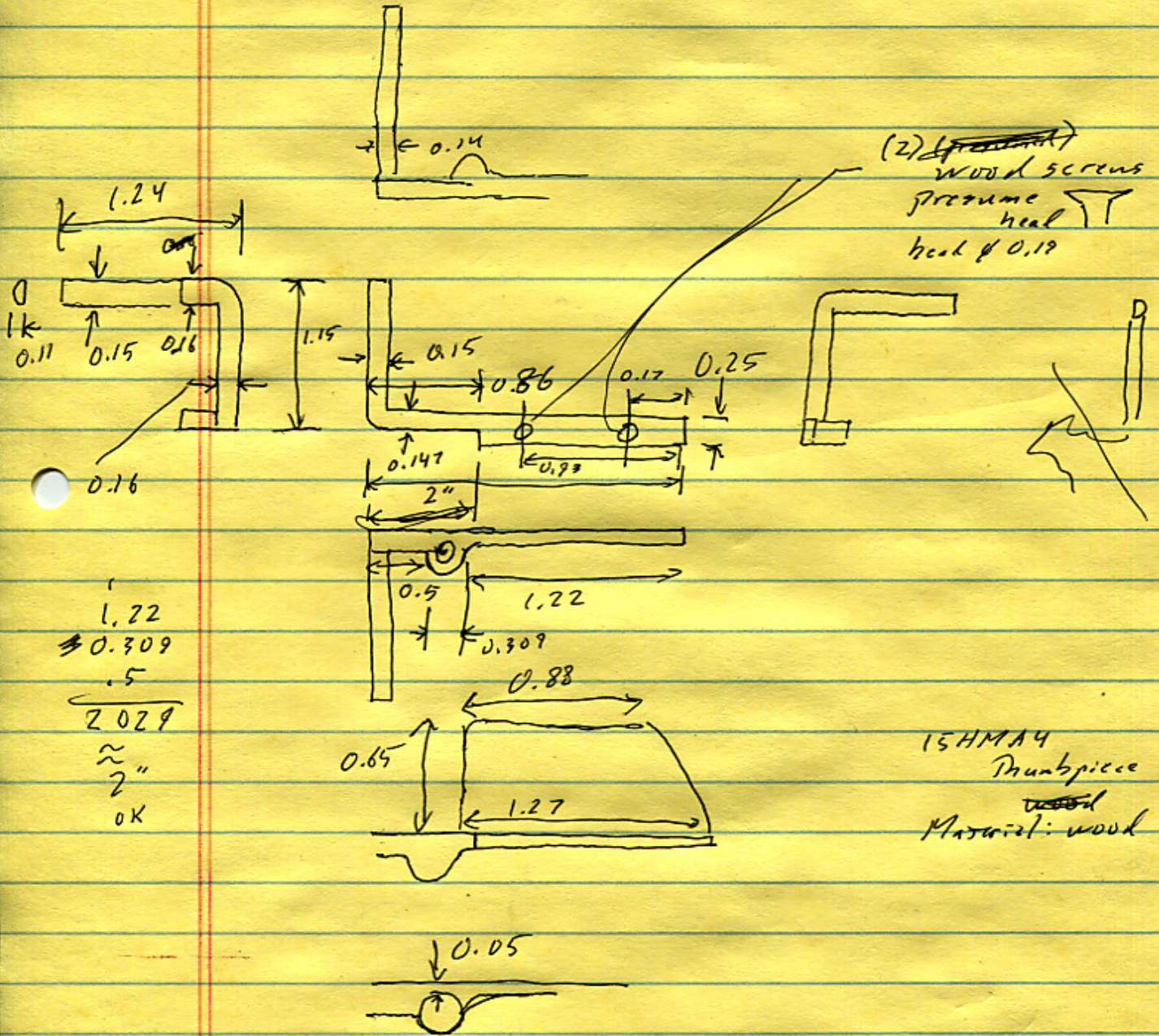


0.279 dia

2015-04-26

(13)

15 HMA 1 Thumb Lever



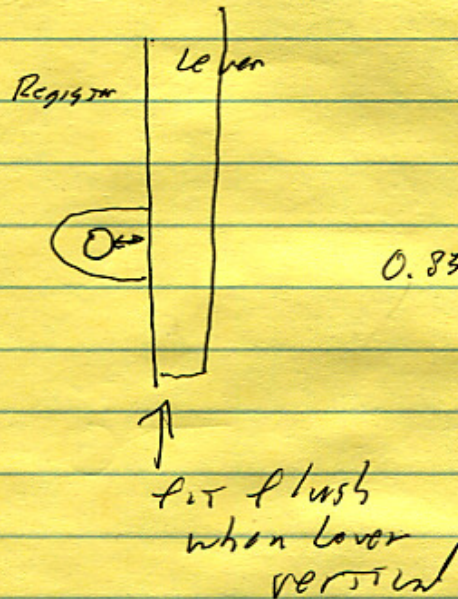
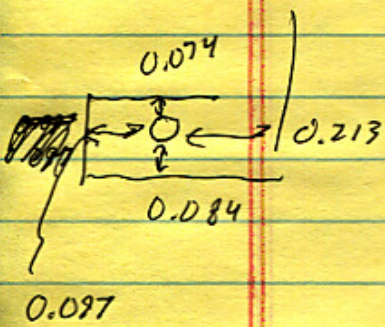
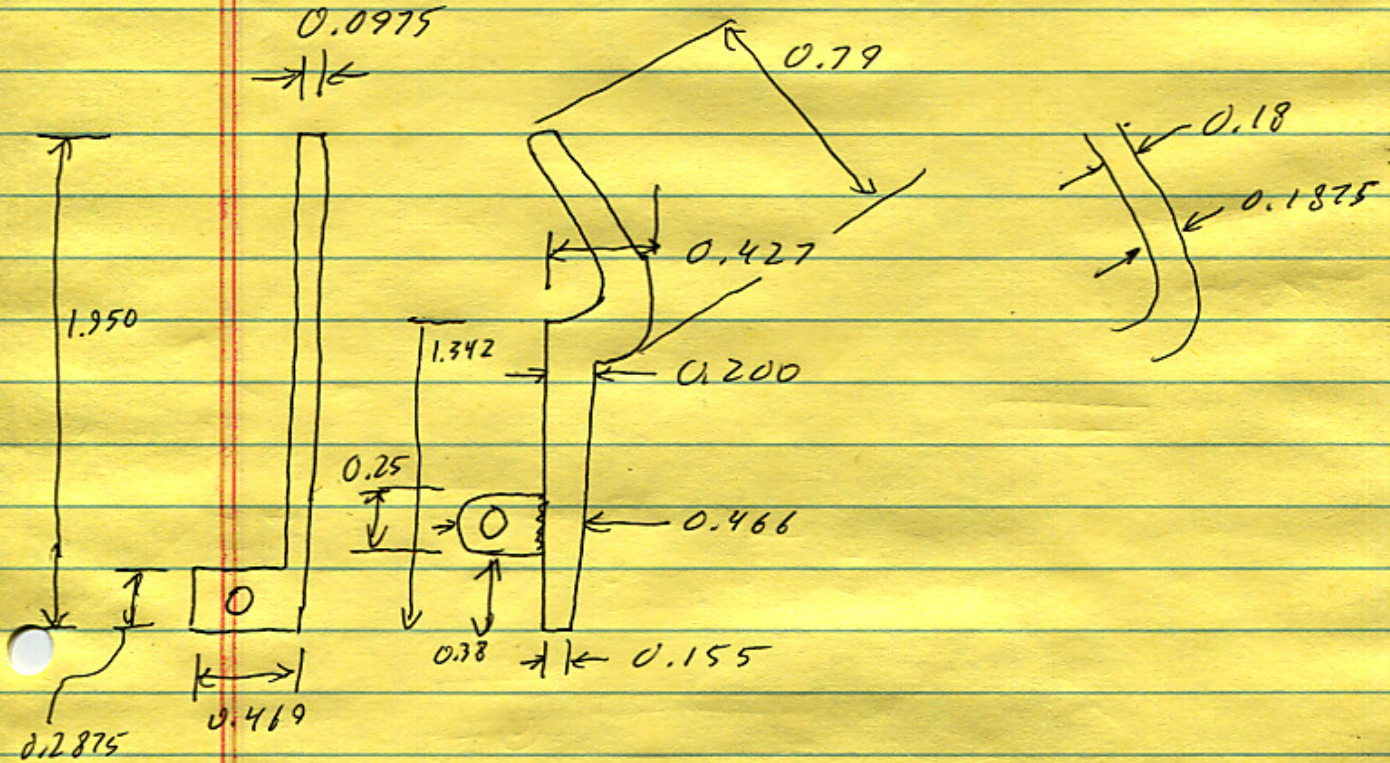
$$\begin{array}{r} 1.22 \\ + 0.309 \\ + .5 \\ \hline 2.029 \\ \approx 2'' \\ \text{OK} \end{array}$$

15HMA4
 Thumbpiece
 Material: wood

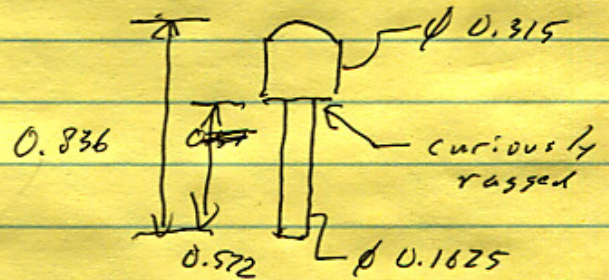
2015-04-26

(14)

15 HMA6 Matrix Lever

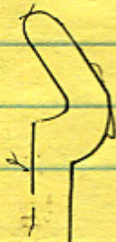


15 HMA8 Adjusting Screw



Brass
Fillister Head
no slot
not knurled

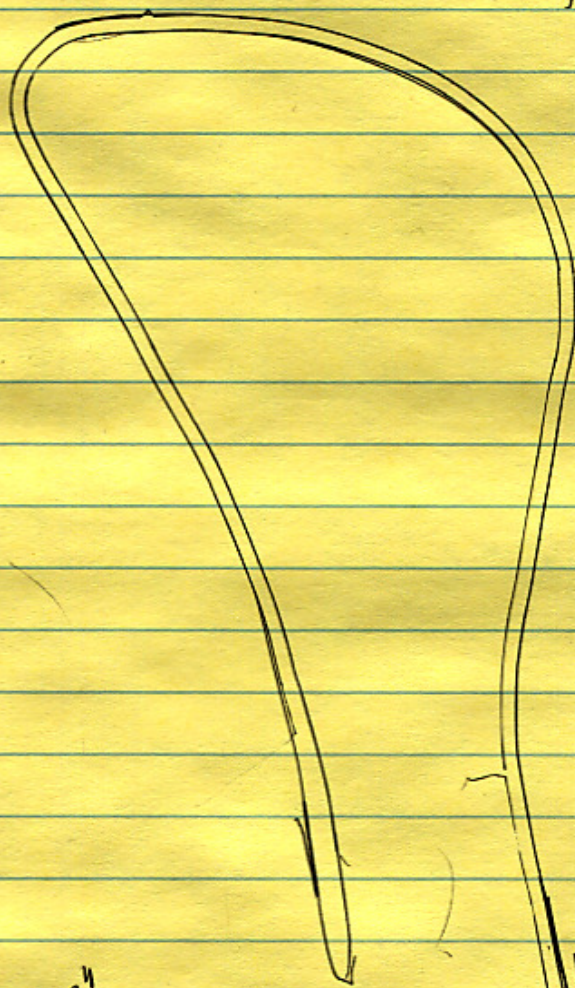
Tracing



2015-04-26 (15)

13HMA1 Bow

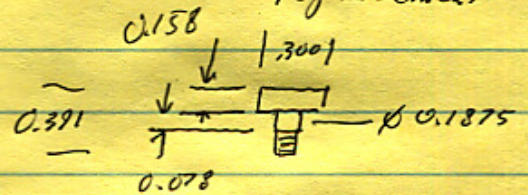
Tracing, pushed flat
Dimension to $\frac{1}{2}$ of
Tracing



Thickness
0.065

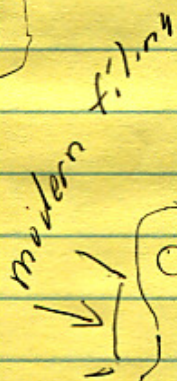
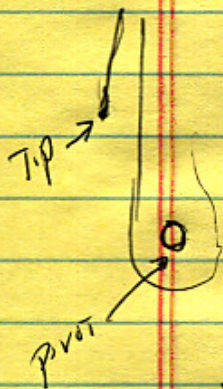
13HMA2 Bow screw

n.b. probably a
modern
replacement



slot width
0.038

n.b. screw is
crudely
cut down
from longer
one



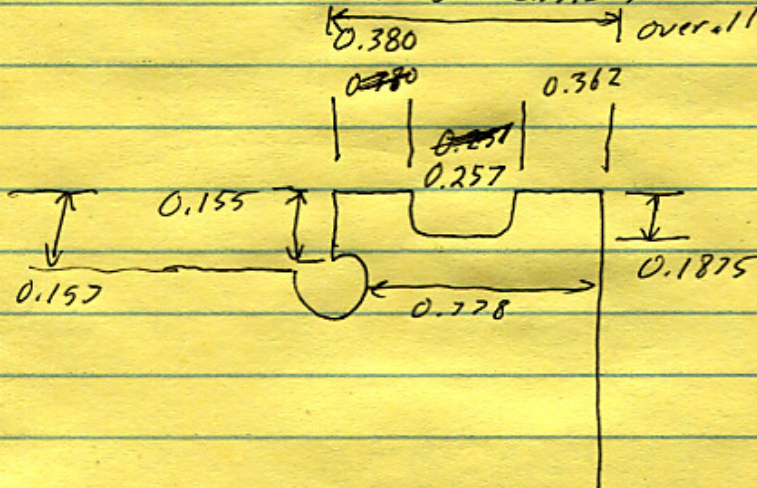
ϕ hole
0.1875

2015-04-26

(16)

Z HMA 3 Base Plate (Top)

further dimensions

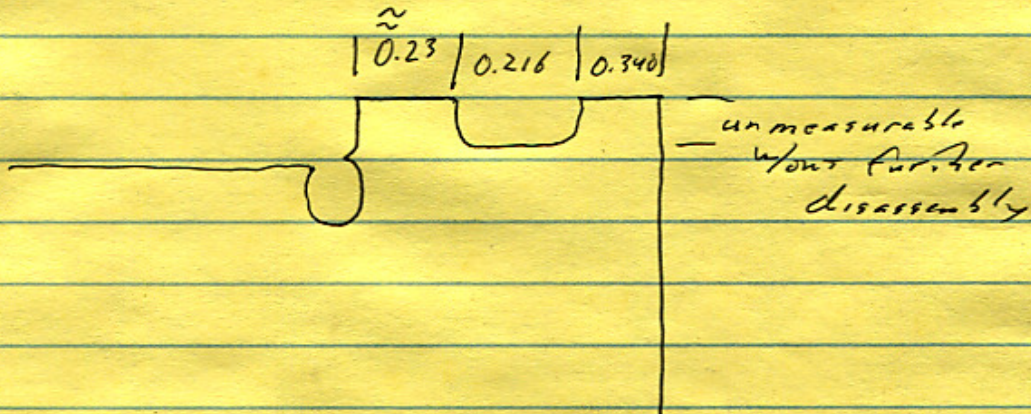


2
Both .380
OK .275
 .362

 1.017

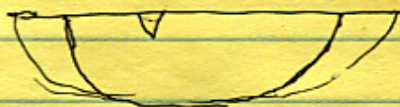
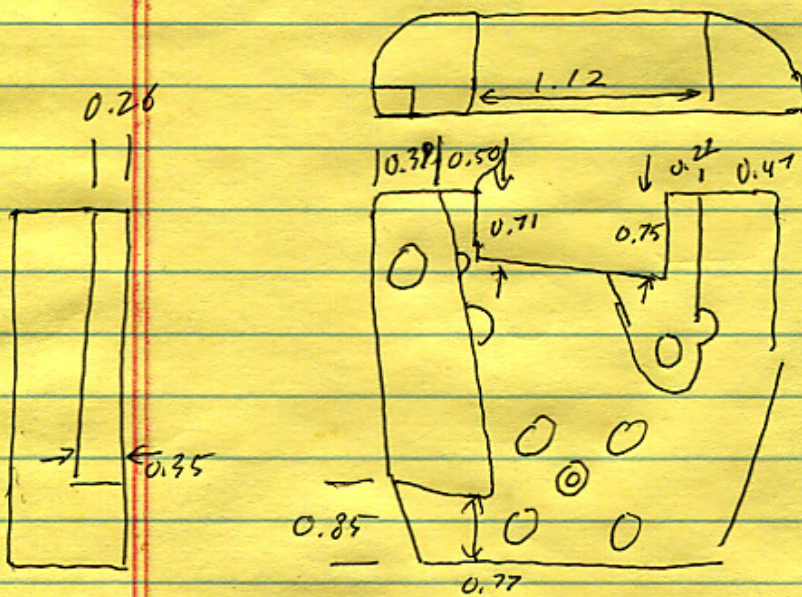
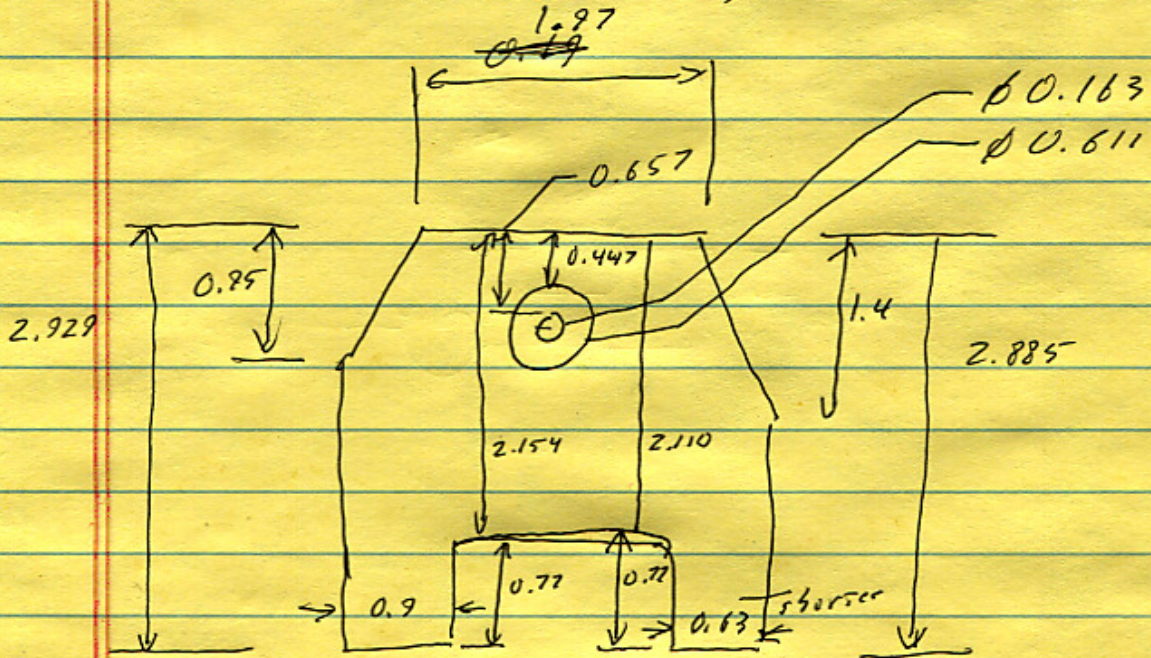
Z HMA 1 Base Plate (bottom)

further dimensions



2019-04-26 (17)

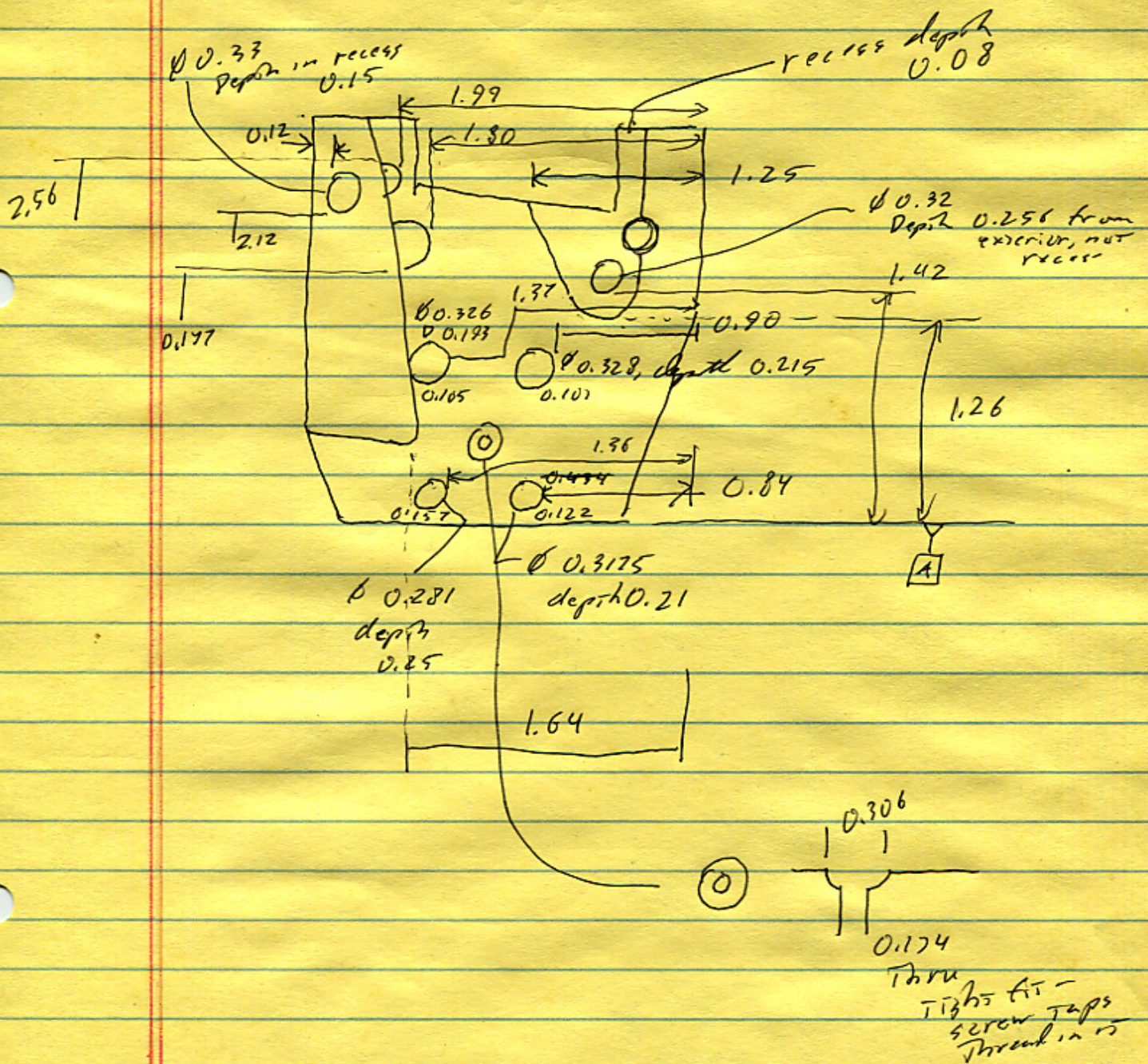
1 HMA1 Wood (bottom)



2015-04-26

(18)

1HMA1 Wood (bottom)
further dimensions

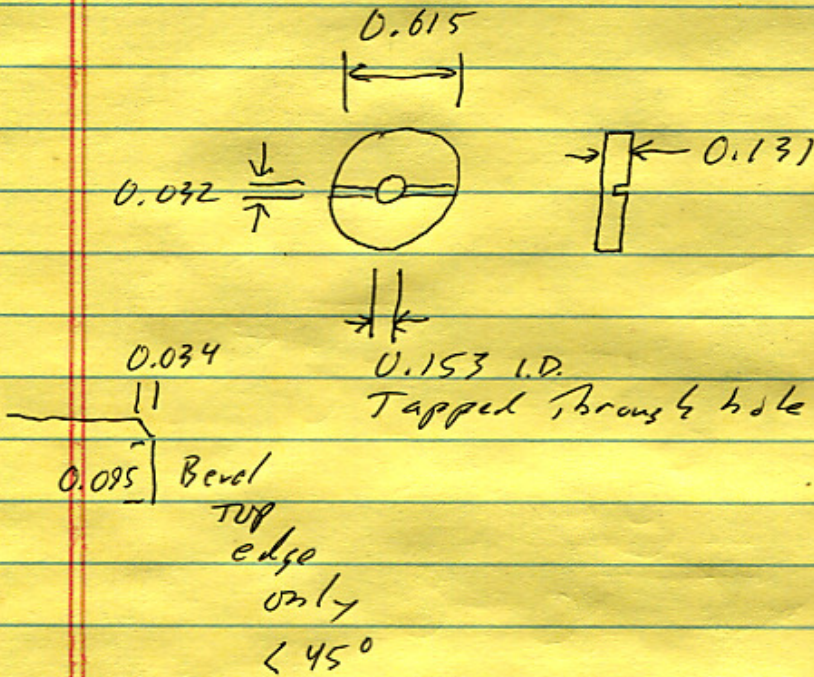


2015-04-26

(19)

1 HMA2 Wood (bottom), nut

Material: Brass



2015-04-26

9HMx Registers

9HMx1 Register (bottom)

2	"	"	Screw, left
3	"	"	Screw, right
4	"	"	" , bottom
5, 6, reserved for further screws			

~~[Lever Mold Register Parts]~~

7	"	(bottom)	STUD (Lever Mold)
8	"	"	" " " Screw

~~[Int. pin for Matrix Lever]~~

9HMx7 Register (top)

8	"	"	Screws, left
9	"	"	" , right
10	"	"	" , bottom

2015-04-26

10 HMx Stool (non-Lever)

11 HMx Stool (Lever)

11 HMx 1 Stool

11 HMx 2 Stool screw

12 HMx Non-Lever Matrix Equipment

12 HMx 1 Tabbet

12 HMx 2 Gimlet

13 HMx Bow (Spring)

14 13 HMx 1 Bow

13 HMx 2 Bow screw (n.b. both lever & non-lever)

14 HMx Hooks

14 HMx 1 Hook (bottom)

14 HMx 2 Hook (top)

2015-04-26

15 HMx Levers (Lever Molds only)

16 HMx 1 ^{Finger} Thumb Lever

2 " " ~~screw~~ PIVOT screw

3 " "

4 " " ^{Finger} Thumb piece

5 " " " screws (2)

15 HMx 6 Matrix Lever

7 " " PIVOT

8 " " ~~Adjusting~~ Adjusting screw

16 HMx Mold Tools

16 HMx 1 Turn screw for Wood nuts, plain

2 " " " " " , two-pronged

3 " " screws

4 Ladles (size as appropriate)

5 Glove (left hand)