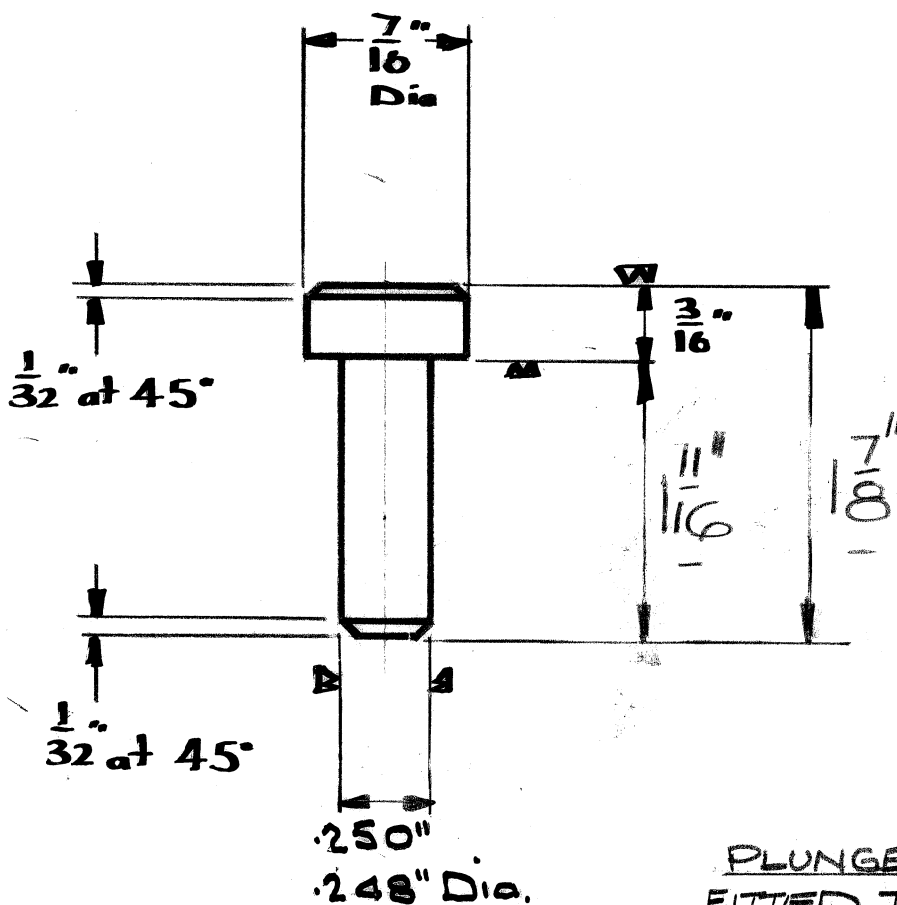
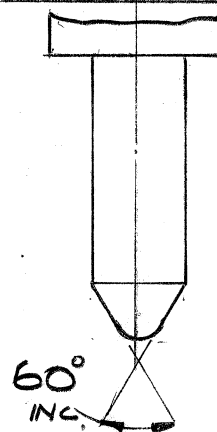


IF IN DOUBT ASK.



PLUNGER WHEN  
FITTED TO CHUCK  
GUARD K.O.



Machine at w

0" Viceroy Screwcutting Lathe - Micro-Switch Plunger

DENFORD MACHINE TOOLS LTD.  
(c.) DENFORD SMALL TOOLS (BRIG) LTD.

BRIGHOUSE,

DRAWN  
**M.M. Sowden**

CHECKED

PASSED

MAT. **M.S.**

MAT SIZE  $7 \frac{1}{16}$ " Dia x  $1 \frac{3}{4}$ "

No. REQD. **1**

SCALE

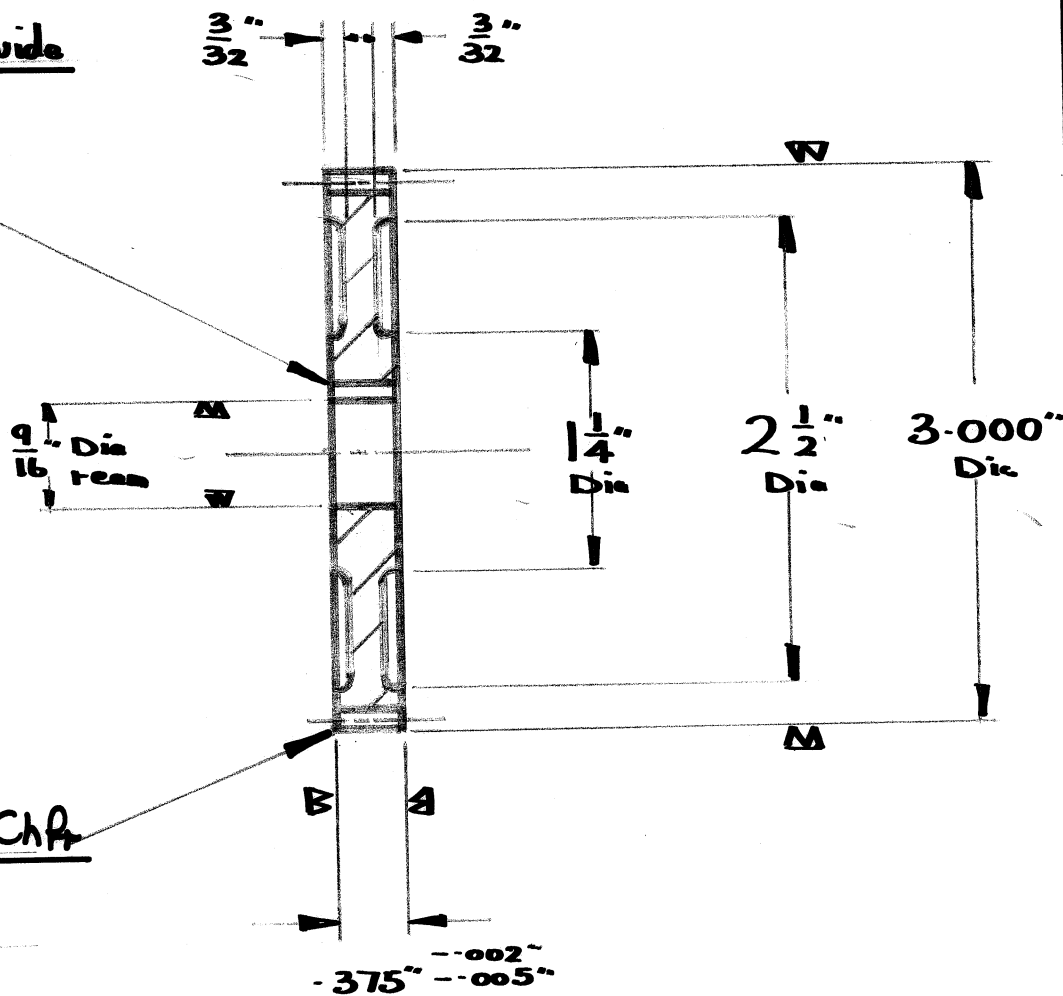
**Full**

DRAWING No.

IF IN DOUBT ASK.

Keyway:  $\frac{1}{8}$ " wide

x  $\frac{3}{32}$ " deep



$\frac{3}{16}$ " at  $15^\circ$  max. Chfr.

on both sides

Machine at W

| Caliper Settings. |       |
|-------------------|-------|
| Add.              | .056" |
| Width             | .086" |
|                   | .084" |

|              |         |
|--------------|---------|
| N° of Teeth  | 52      |
| Pitch        | 18 D.P. |
| Press. Angle | 20°     |
| P.C.D.       | 2.888"  |

5" Viceroy P.C.S. Lathe : 52 r Change Wheel.

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN  
M.M. Souden  
CHECKED  
PASSED  
DATE  
11-6-65

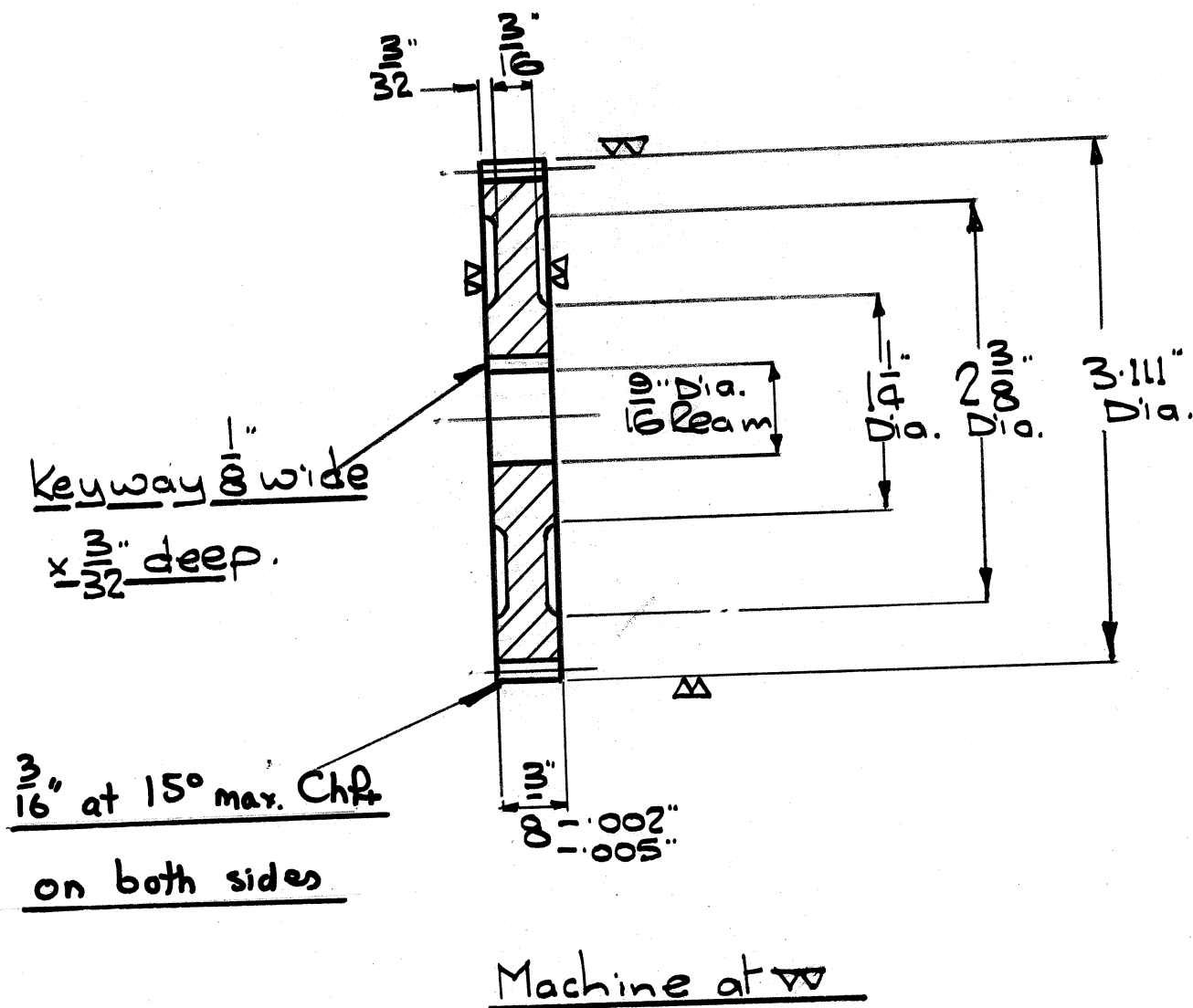
MAT. C.I.  
MAT SIZE Casting  
No. REQD. 1 SCALE Full  
DRAWING No.  
ML105/128

IF IN DOUBT ASK.

1303/66 8.3.66 S.

| CALIPER SETTINGS |       |
|------------------|-------|
| ADD.             | .056" |
| WIDTH            | .086" |
|                  | .084" |

|                 |         |
|-----------------|---------|
| No. TEETH       | 54      |
| PITCH           | 18 D.P. |
| PRESS. $\angle$ | 20°     |
| P.C.D.          | 3.000"  |



5" Metal Turning Lathe - 54T. CHANGE WHEEL.

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN *Ans. G. G. G.*  
CHECKED *[Signature]*  
PASSED  
DATE 1.4.64.

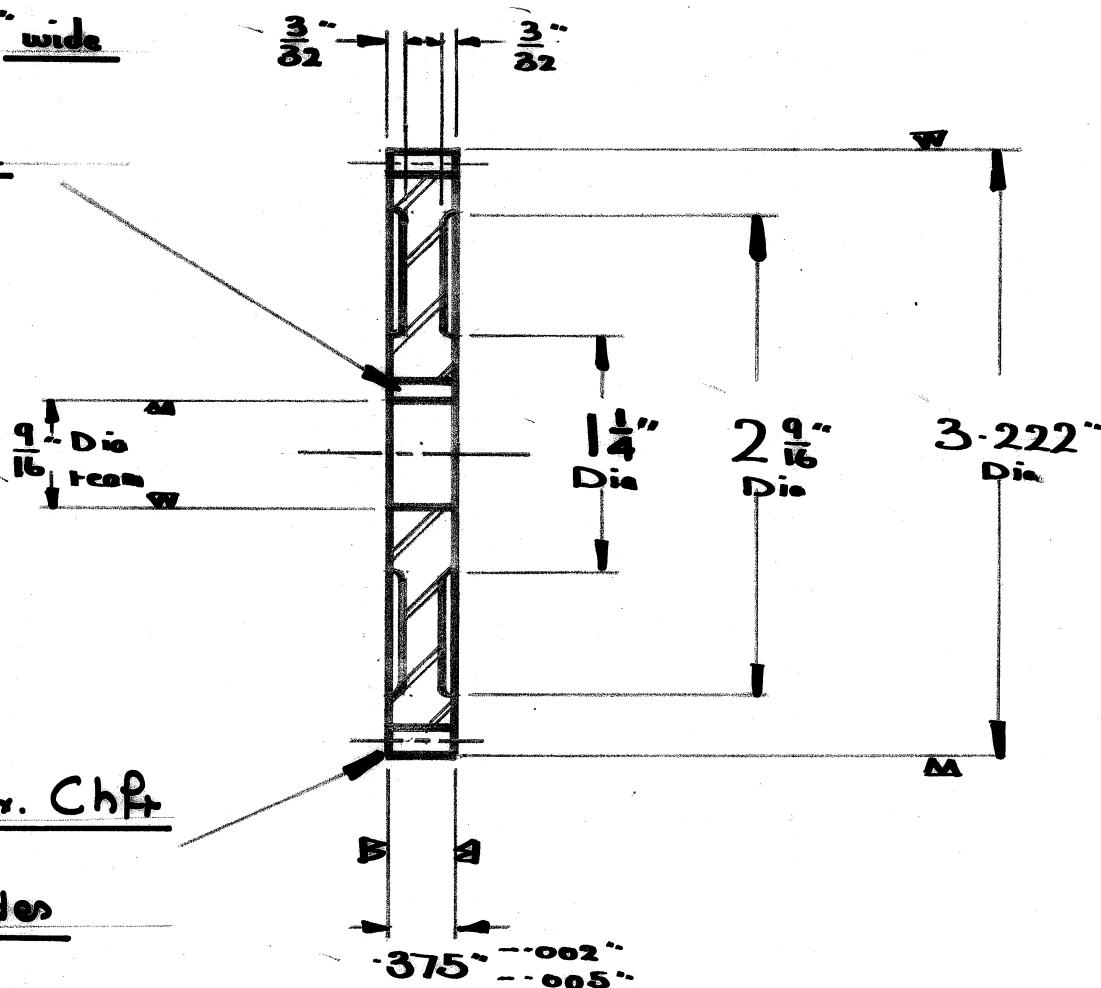
MAT. CAST IRON.  
MAT SIZE CASTING.  
No. REQD. 1 SCALE FULL.  
DRAWING No. M.L.105/129

IF IN DOUBT ASK.

10-6-65  
1303/66 8-3-66 8

Keyway:  $\frac{1}{8}$ " wide

x  $\frac{3}{32}$ " deep



Machine at W

| Caliper Settings |          |
|------------------|----------|
| Add.             | $.056$ " |
| Width            | $.086$ " |
|                  | $.084$ " |

|              |            |
|--------------|------------|
| N° of Teeth  | 56         |
| Pitch        | 18 D.P.    |
| Press. Angle | $20^\circ$ |
| P.C.D.       | $3.111$ "  |

5" Viceroy P.C.S. Lathe : 56 T. Change Wheel.

DUNFORD MACHINE TOOLS LTD.  
(Inc.) DUNFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN  
**M.M. Sowden**  
CHECKED   
PASSED  
DATE **10.6.65.**

MAT. **C.I.**  
MAT SIZE **Casting**  
No. REQD. **1** SCALE **Full**  
DRAWING No. **ML 105/130**

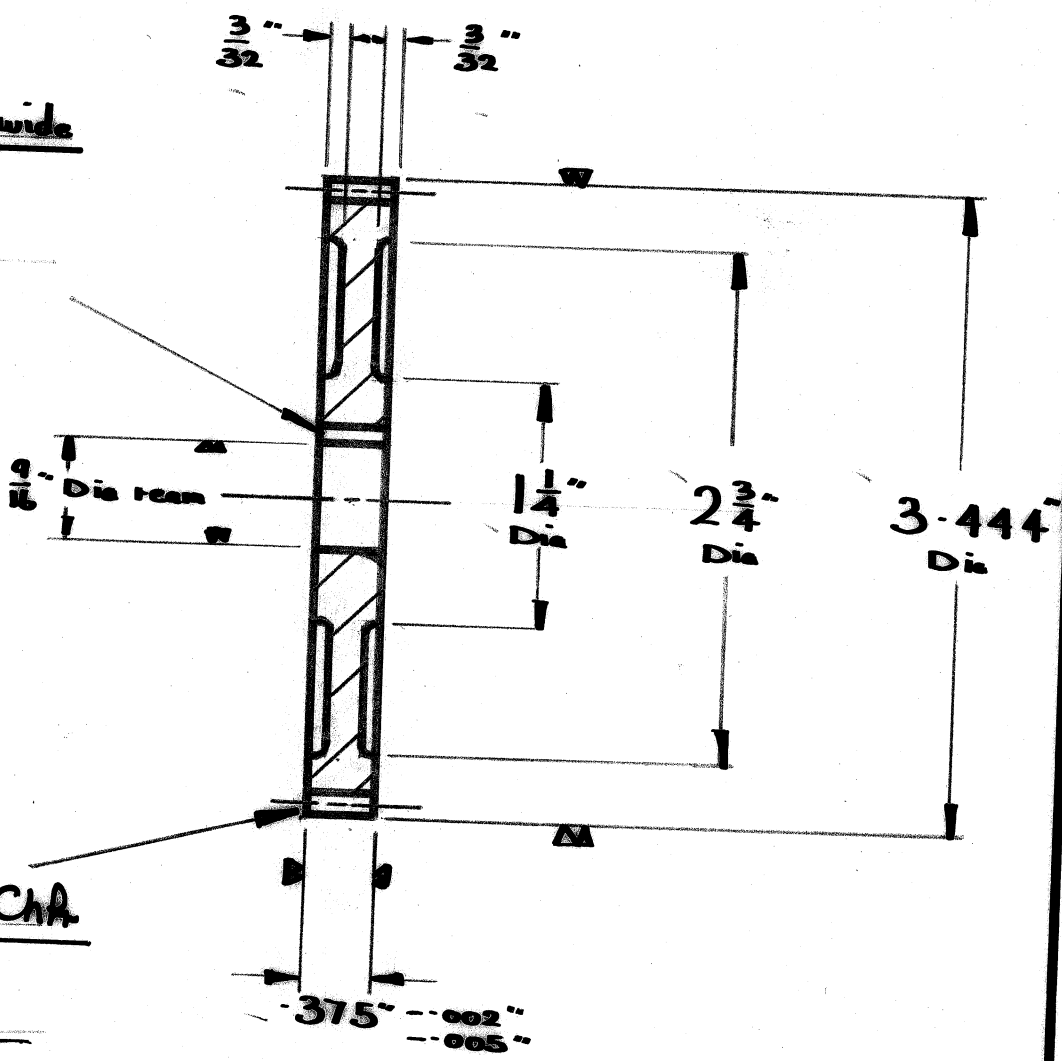


IF IN DOUBT ASK.

11-6-65  
1303/66 B-3-66 B

Key way:  $\frac{1}{8}$ " wide

x  $\frac{3}{32}$ " deep



$\frac{3}{16}$ " at 15° max. ChA.

on both sides

Machine of W

| Caliper Settings |         |
|------------------|---------|
| Add.             | - .056" |
| Width            | - .086" |
|                  | - .084" |

|              |         |
|--------------|---------|
| N° of Teeth  | 60      |
| Pitch        | 18 D.P. |
| Press. Angle | 20°     |
| P.C.D.       | 3.333"  |

5" Viceroy P.C.S. Lathe : 60T Change Wheel

DENFORD MACHINE TOOLS LTD.  
(INC.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN  
**M.M. Sowden**  
CHECKED  
PASSED  
DATE  
**11-6-65**

MAT. **C.I.**  
MAT SIZE **Casting**  
No. REQD. **1** SCALE **Full**  
DRAWING No.  
**ML 105/131**

IF IN DOUBT ASK.

Redrawn 16-6-65

1303/66 8.3.66 D.

1 oil hole drill  $\frac{1}{8}$ "

die when in position

with 1 tem ML105/120

$\frac{13}{16}$ " Dia ream

1 hole drill  $\frac{5}{32}$ " dia

tap 2 B.A.  $\frac{1}{2}$ " x  $\frac{1}{2}$  with

1 tem ML105/120

$\frac{3}{16}$ " at 15° max. Chfr.

on both sides.

Machine of W

| Caliper Settings |        |
|------------------|--------|
| Add.             | -.056" |
| Width            | -.086" |
|                  | -.084" |

|              |         |
|--------------|---------|
| N° of teeth  | 72      |
| Pitch        | 18 D.P. |
| Press. Angle | 20°     |
| P.C.D.       | 4.000"  |

5" Viceroy P.C.S. Lathe : 72 T. Gear.

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN  
M.M. Sowden  
CHECKED  
PASSED  
DATE 16-6-65

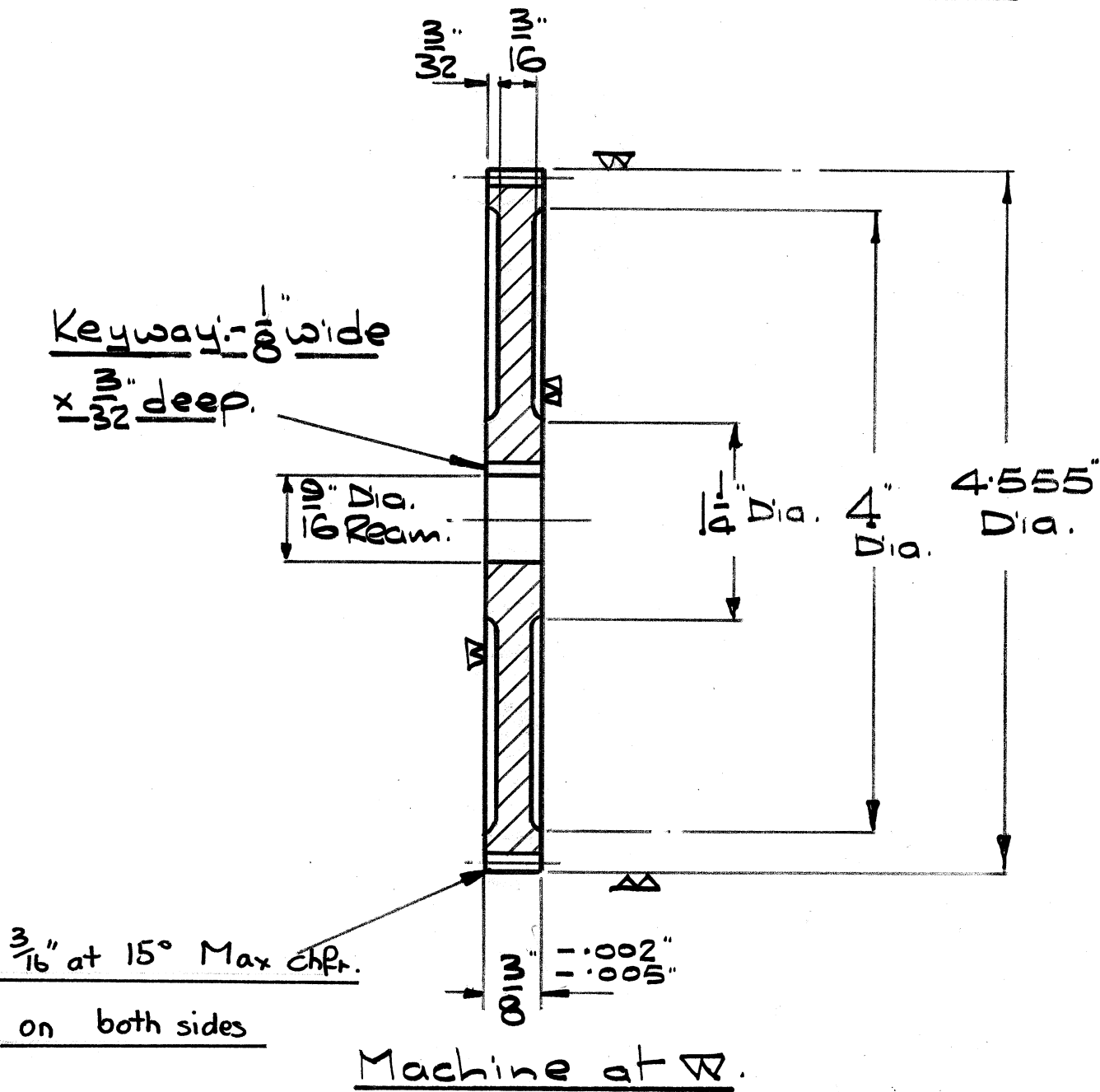
MAT. Cast Iron  
MAT SIZE - Casting  
No. REQD. 1 SCALE Full  
DRAWING No. ML105/132

IF IN DOUBT ASK.

1303/66 8.3.66 D.

| CALIPER SETTINGS. |       |
|-------------------|-------|
| ADD.              | .056" |
| WIDTH.            | .086" |
|                   | .084" |

|           |         |
|-----------|---------|
| Nº TEETH  | 80      |
| PITCH.    | 18 D.P. |
| PRESS. L. | 20°     |
| P.C.D.    | 4.444"  |



## 5" Metal Turning Lathe - 80 T. CHANGE WHEEL

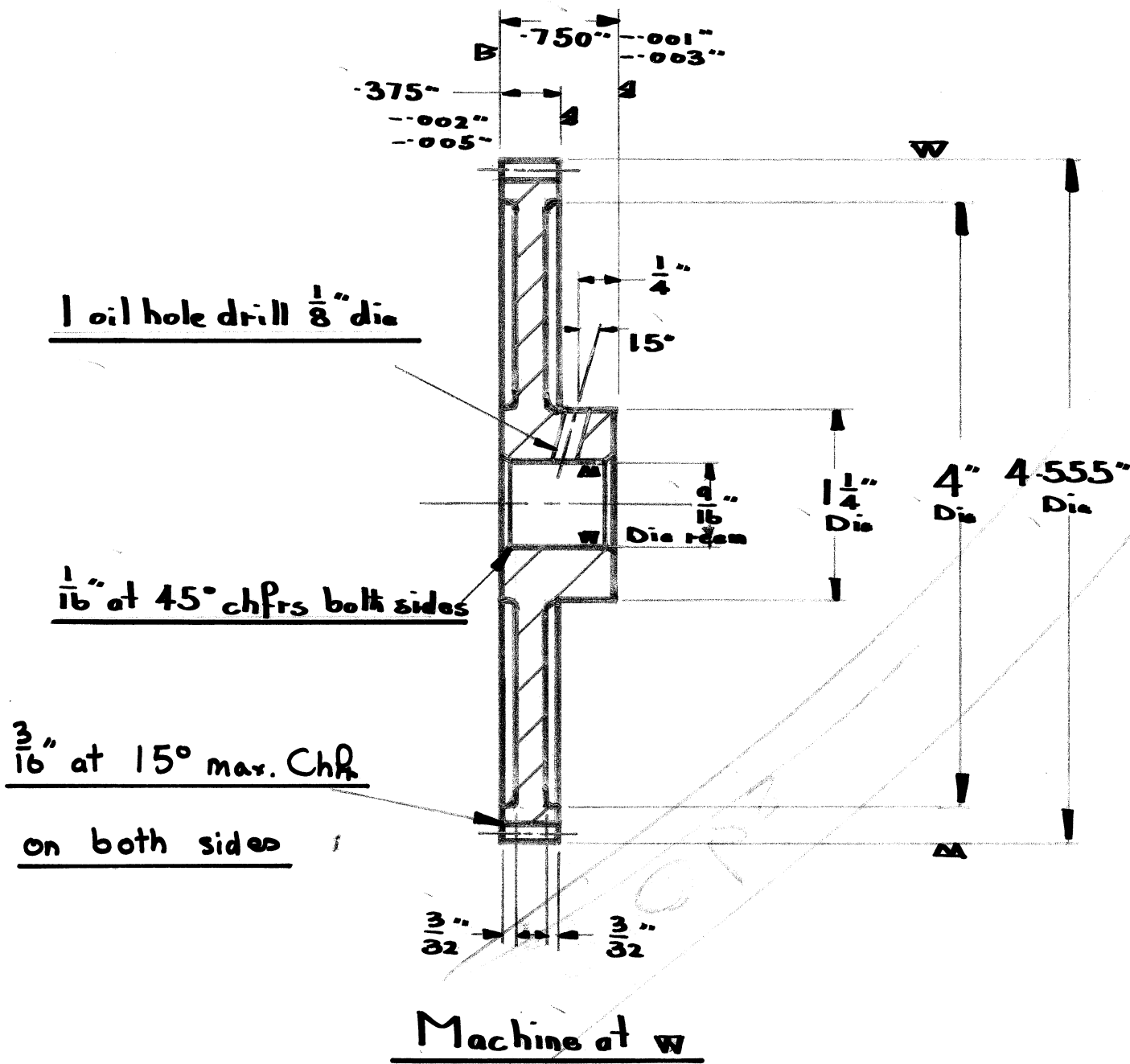
D'NFORDE MACHINE TOOLS LTD.  
(Inc.) D'NFORDE SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN *A. S. Clerk*  
CHECKED *AB*  
PASSED  
DATE 1.4.64.

MAT. CAST IRON.  
MAT SIZE CASTING.  
No. REQD. 1 SCALE FULL.  
DRAWING No. M.L.105/133

IF IN DOUBT ASK.

Reb. 16-6-65  
303/66 8-3-66 B.



| Caliper Settings |           |
|------------------|-----------|
| Add.             | $-.056''$ |
| Width            | $-.086''$ |
|                  | $-.084''$ |

|              |            |
|--------------|------------|
| N° of Teeth  | 80         |
| Pitch.       | 18 D.P.    |
| Press. Angle | $20^\circ$ |
| P.C.D.       | $4.444''$  |

5" Viceroy P.C.S. Lathe: 80T. Gear.

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN M.M. Sowden  
CHECKED   
PASSED  
DATE 16-6-65

MAT. Cast Iron  
MAT SIZE Casting  
No. REQD. 1 SCALE Full  
DRAWING No. ML 105/134

IF IN DOUBT ASK.

Rev. 22-6-65

1003/66 3-3-66 D.

Keyway:  $\frac{1}{8}$ " wide

x  $\frac{3}{32}$ " deep.

$\frac{3}{16}$ " at  $15^\circ$  max. Chk

on both sides

Machine all over

| Caliper Settings |      |
|------------------|------|
| Add.             | .056 |
| Width            | .086 |
|                  | .084 |

|                         |            |
|-------------------------|------------|
| N <sup>o</sup> of teeth | 18         |
| Pitch                   | 18 D.P.    |
| Press. Angle            | $20^\circ$ |
| P.C.D.                  | 1.000"     |

5" Viceroy P.C.S. Lathe : 18T. Change Wheel.

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN  
M.M. Sowden

CHECKED

PASSED

DATE  
22-6-65

MAT. M.S.

MAT SIZE  $1\frac{1}{4}$ " D. x  $\frac{5}{8}$ "

No. REQD. 1

SCALE Full

DRAWING No.

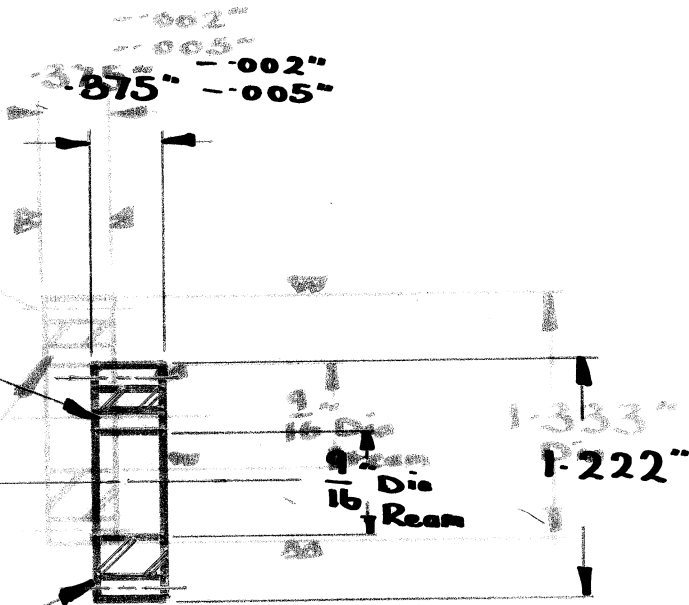
ML105/135

IF IN DOUBT ASK.

Ref. No. 22-6-65  
1303/668-1-668

$\frac{3}{16}$ " at  $15^\circ$  max ChA  
Keyway:  $\frac{1}{8}$ " wide x  
 $\frac{3}{32}$ " both sides  
 $\frac{3}{32}$ " deep.

$\frac{3}{16}$ " at  $15^\circ$  max. ChA  
 $\frac{3}{32}$ " deep  
on both sides



Machine all over  
Machine at W

| Caliper Settings |        |
|------------------|--------|
| Add.             | 0.056" |
| Width            | 0.086" |
| Add.             | 0.056" |
| Width            | 0.084" |

|                         |         |
|-------------------------|---------|
| N <sup>o</sup> of teeth | 20      |
| Pitch                   | 18 D.P. |
| N <sup>o</sup> of Teeth | 22 T.   |
| Press Angle             | 20°     |
| Pitch                   | 18 D.P. |
| P.C.D.                  | 1.111"  |
| Press Angle             | 20°     |
| P.C.D.                  | 1.222"  |

5" Viceroy P.C.S. Lathe - 22 T. Change Wheel.

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

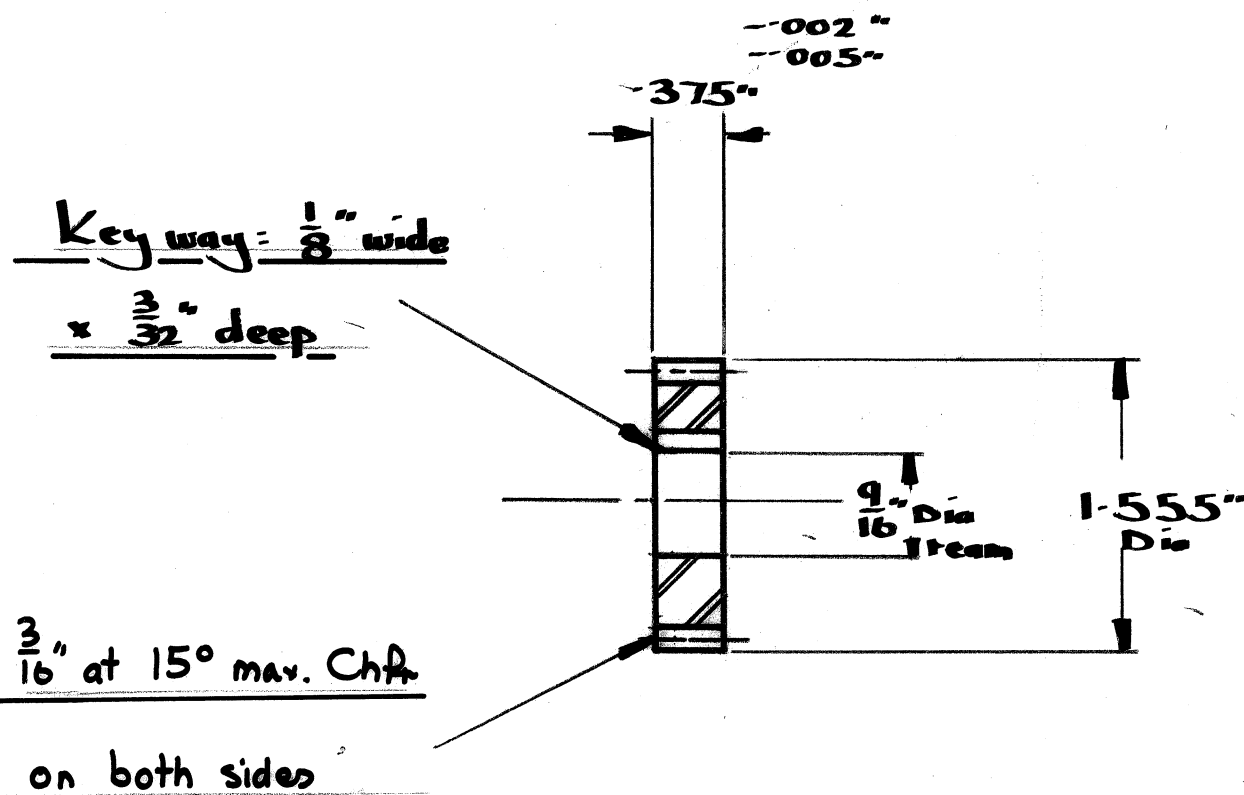
DRAWN  
M.M. Sowden  
CHECKED  
PASSED  
DATE 19.3.65

MAT. M.S.  
MAT. SIZE 1 1/8" x 5/8" x 5/16"  
No. REQD. 1  
SCALE Full  
DRAWING No. ML105/137

IF IN DOUBT ASK.

Revised 19-8-65

1303/66 2.3.66 D.



| Caliper Settings |       |
|------------------|-------|
| Add.             | .056" |
| Width            | .084" |
|                  | .086" |

|              |        |
|--------------|--------|
| N° of Teeth  | 26 r   |
| Pitch        | 18 DP  |
| Press. Angle | 20°    |
| P.C.D.       | 1.444" |

5" Viceroy Screwcutting Lathe - 26T Change Wheel.

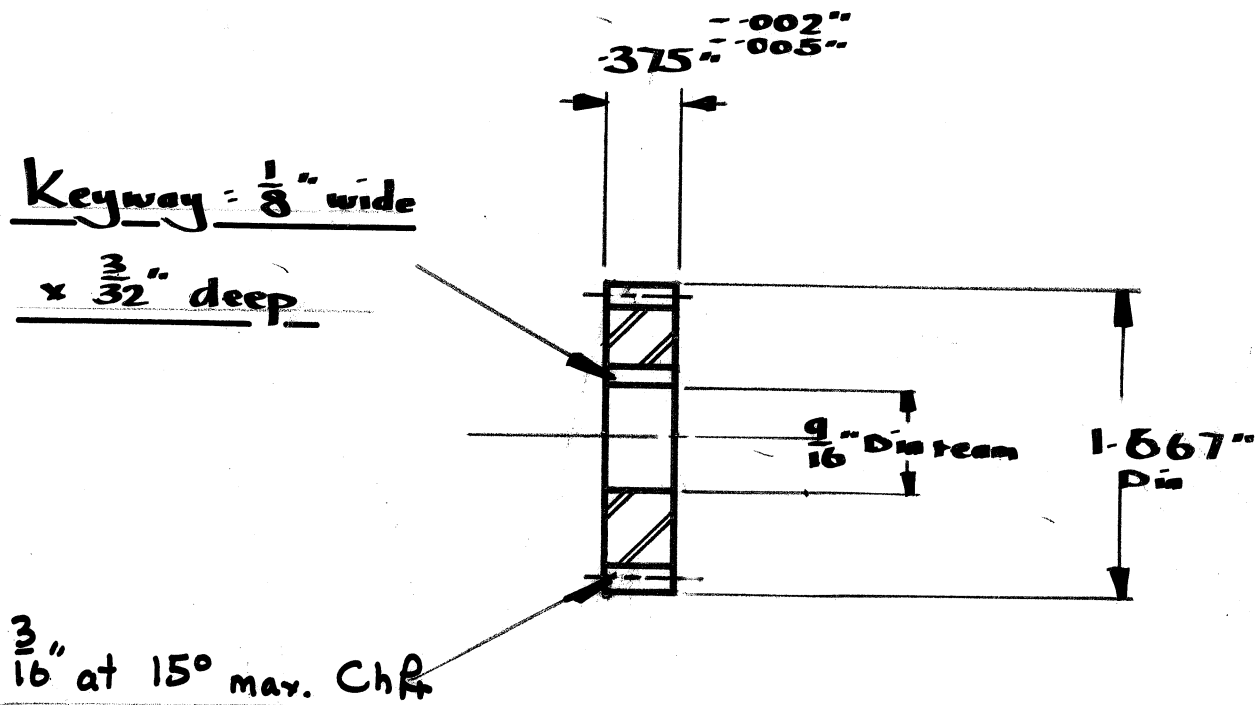
DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN  
**M.M. Souden**  
CHECKED  
  
PASSED  
DATE  
**19-8-65**

MAT. **M.S.**  
MAT SIZE **1 5/8" D. x 5/8"**  
No. REQD. **1** SCALE **Full**  
DRAWING No.  
**ML105/138**

IF IN DOUBT ASK.

Revised 19-8-65  
1303/66 8.3.66 2.



on both sides

Machine all over

| Caliper Settings |       |
|------------------|-------|
| Add.             | .056" |
| Width            | .084" |
|                  | .086" |

|              |         |
|--------------|---------|
| N° of Teeth  | 28      |
| Pitch        | 18 D.P. |
| Press. Angle | 20°     |
| P.C.D.       | 1.555"  |

5" Viceroy Screwcutting Lathe - 28 T. Change Wheel.

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN  
**M.M. Souden**  
CHECKED   
PASSED  
DATE **19-8-65**

MAT. **M.S.**  
MAT SIZE **1 3/4" Dia x 5/8"**  
No. REQD. **1** SCALE **Full**  
DRAWING No. **ML 105/139**



IF IN DOUBT ASK.

Rev. 19.8.65

1303/668.3.66 D.

$\frac{3}{16}$ " at 15° max. Chpt

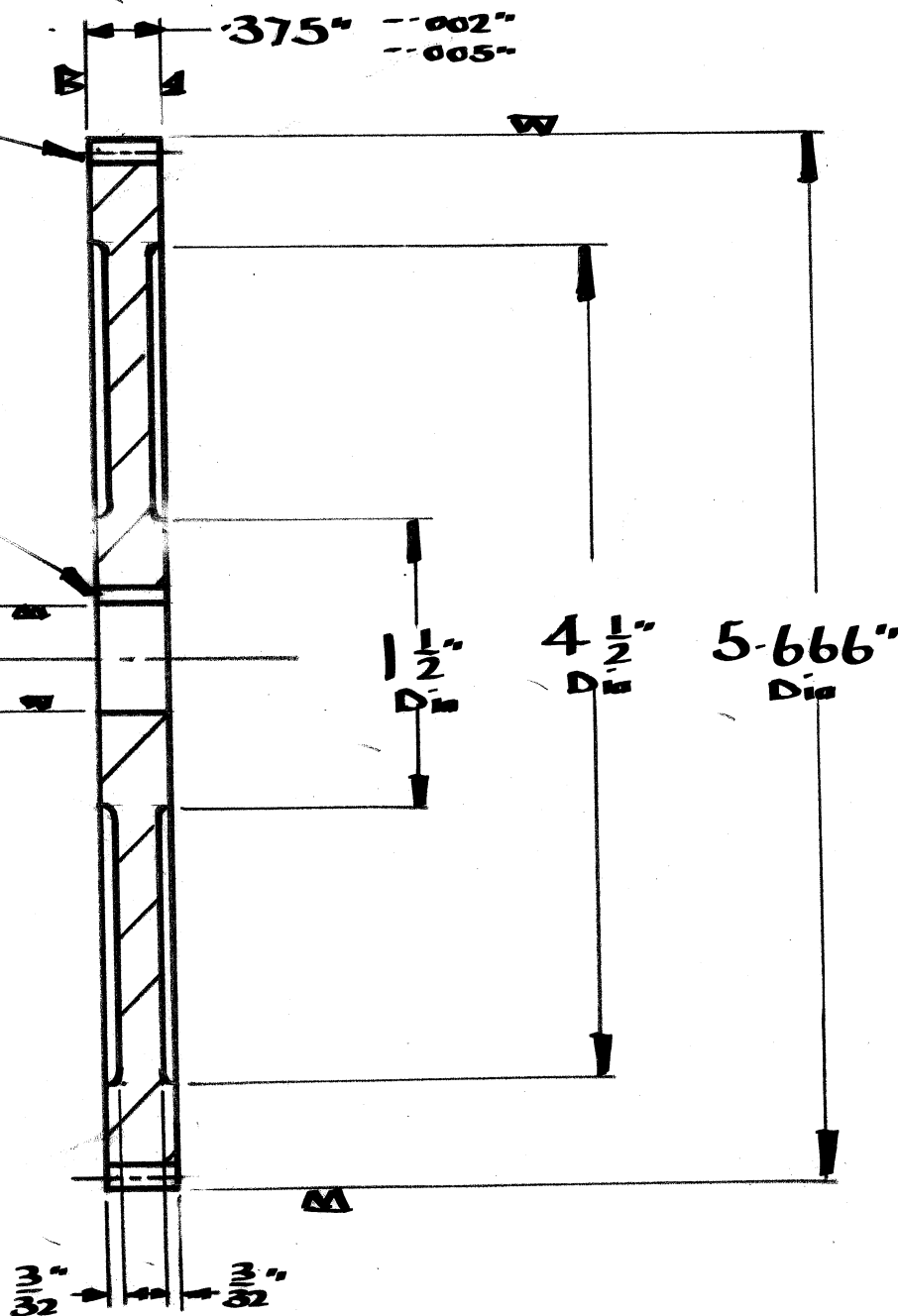
on both sides

Keyway:  $\frac{1}{8}$ " wide

x  $\frac{3}{32}$ " deep

$\frac{9}{16}$ " Dia. Ream.

Machine at w



| Caliper Settings |       |
|------------------|-------|
| Add.             | .056" |
| Width            | .084" |
|                  | .086" |

|              |         |
|--------------|---------|
| N° of Teeth  | 100     |
| Pitch        | 18 D.P. |
| Press. Angle | 20°     |
| P.C.D.       | 5.555"  |

5" Viceroy Screwcutting Lathe - 100 T Change Wheel

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN  
**M.M. Souden**  
CHECKED   
PASSED  
DATE **19.8.65**

MAT. - **C.I.**  
MAT SIZE **Casting**  
No. REQD. **1** SCALE **Full**  
DRAWING No. **ML 105/140**

## ALTERATIONS



|             |        |
|-------------|--------|
| N° OF TEETH | 100    |
| PITCH       | 18 DP  |
| PRESS &     | 20°    |
| P.C.D.      | 5.555" |

LIMITS ON DIMENSIONS UNLESS OTHERWISE STATED.

ANGULAR  $\pm \frac{1}{2}^{\circ}$  3 PLACE DECIMAL  $\pm .005''$ 

FRACTIONAL  $\pm .010''$  4 PLACE DECIMAL  $\pm .0005''$

5" METRIC & ENGLISH,  
SCR & P.C.S LATHE - 100T CHANGE WHEEL

|         |         |
|---------|---------|
| DRAWN   | IV      |
| CHECKED |         |
| PASSED  |         |
| DATE    | 18.5.83 |

|                           |            |
|---------------------------|------------|
| MAT. CAST IRON            |            |
| MAT. SIZE CASTING         |            |
| No. REOD. ONE             | SCALE FULL |
| DRAWING No. ML 105/140, A |            |



IF IN DOUBT ASK.

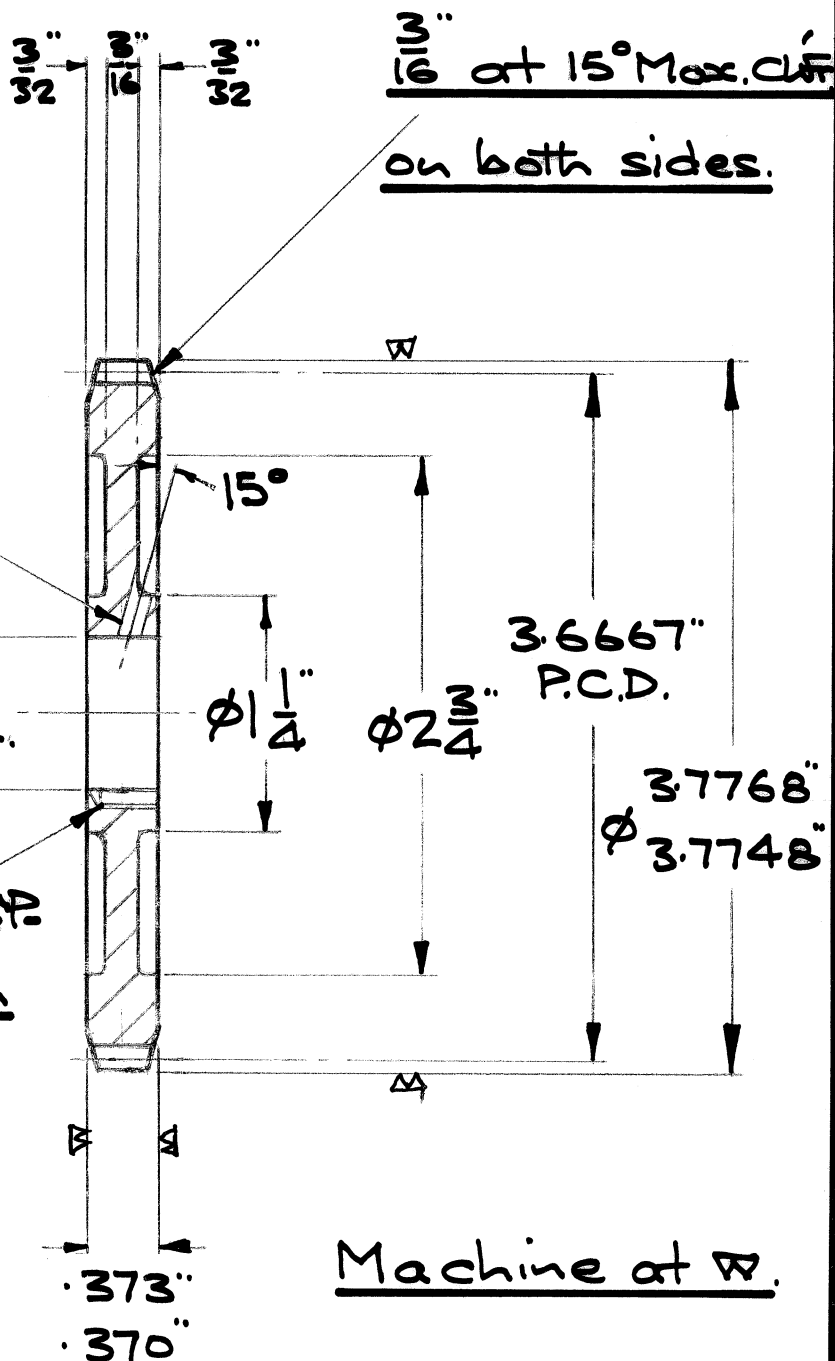
ALTERATIONS

1950/72.11.3.72.2.

| Caliper Setting. |       |
|------------------|-------|
| Add.             | .056" |
| Width.           | .086" |
|                  | .084" |

1 oil hole drill  $\frac{1}{8}$ "  
dia when in posn.  
with item ML105/120.

1 hole drill  $\frac{5}{32}$ " dia & tap  
2 B.A.  $\frac{1}{2}$  &  $\frac{1}{2}$  with item  
ML105/120.



66 Teeth - 18 D.P. - 20° Press. Angle.

Whole tooth depth = .1198"

5" Viceroy P.C.S. & Screwcutting Lathe:- 66T. Gear.

LIMITS ON DIMENSIONS UNLESS  
OTHERWISE STATED.

ANGULAR  $\pm \frac{1}{2}^\circ$  3 PLACE DECIMAL  $\pm .005^\circ$

FRACTIONAL  $\pm .010$ " 4 PLACE DECIMAL  $\pm .0005$ "

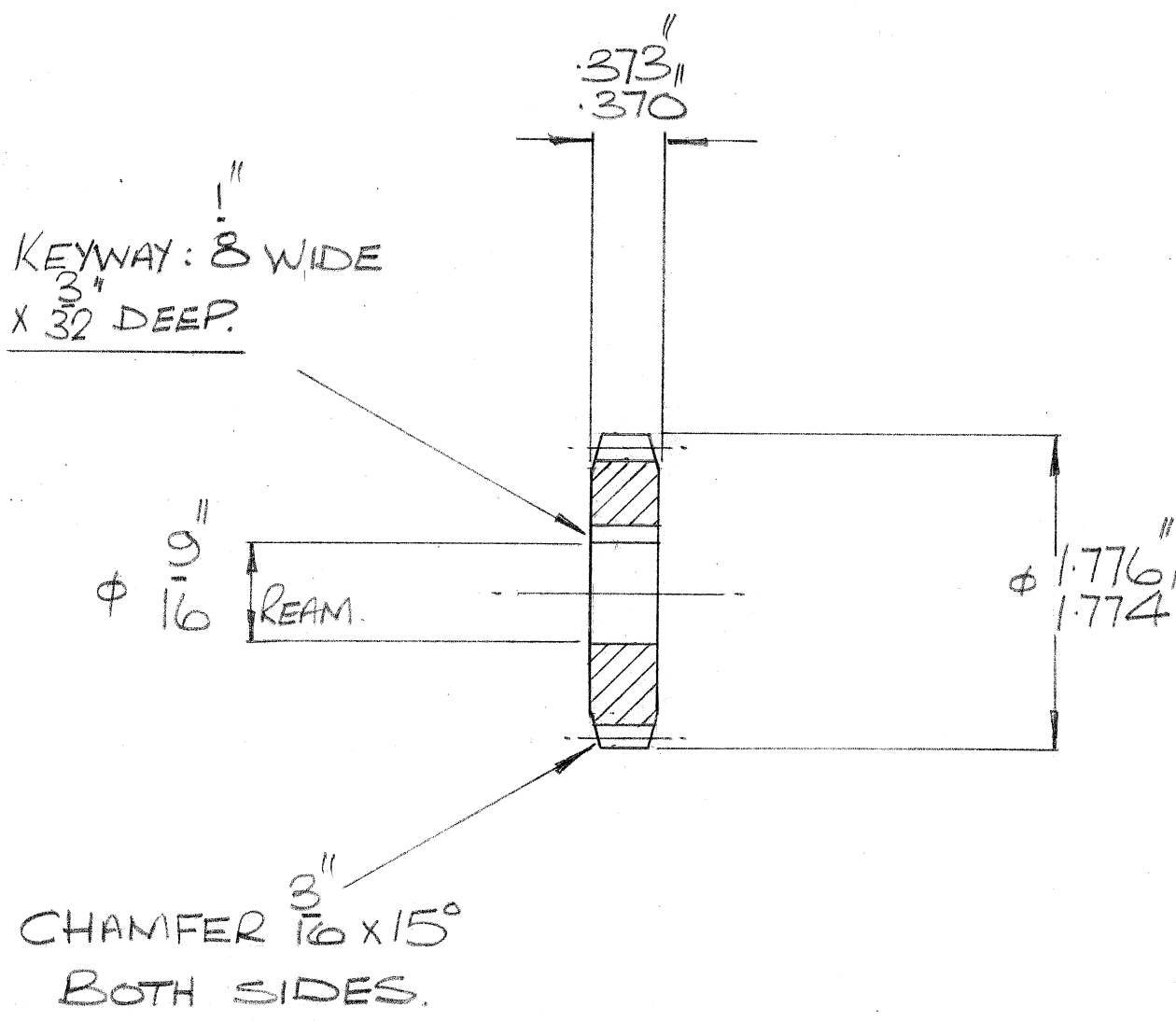
DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN R.D.  
CHECKED  
PASSED  
DATE 27.3.72.

MAT. Cast. Iron.  
MAT. SIZE Casting.  
No. REQD. 1. SCALE Full.  
DRAWING No. ML105/152.

IF IN DOUBT ASK

ALTERATIONS



|                   |        |
|-------------------|--------|
| N° OF TEETH       | 30     |
| PITCH             | 18 DP. |
| P.C.D.            | 1.666" |
| PRESS $\angle$    | 20°    |
| WHOLE TOOTH DEPTH | .1198" |

MACHINE ALL OVER.

5" VICEROY P.C.S./L/S LATHE - 30T CHANGE WHEEL

LIMITS ON DIMENSIONS UNLESS  
OTHERWISE STATED.

ANGULAR  $\pm \frac{1}{2}^\circ$  3 PLACE DECIMAL  $\pm .005$ "

FRACTIONAL  $\pm .010$ " 4 PLACE DECIMAL  $\pm .0005$ "

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN IV.

CHECKED

PASSED

DATE 19.11.72

MAT. MILD STEEL

MAT. SIZE  $\phi 1\frac{7}{8}$ "  $\times \frac{1}{2}$ "

No. REOD. 1.

SCALE FULL

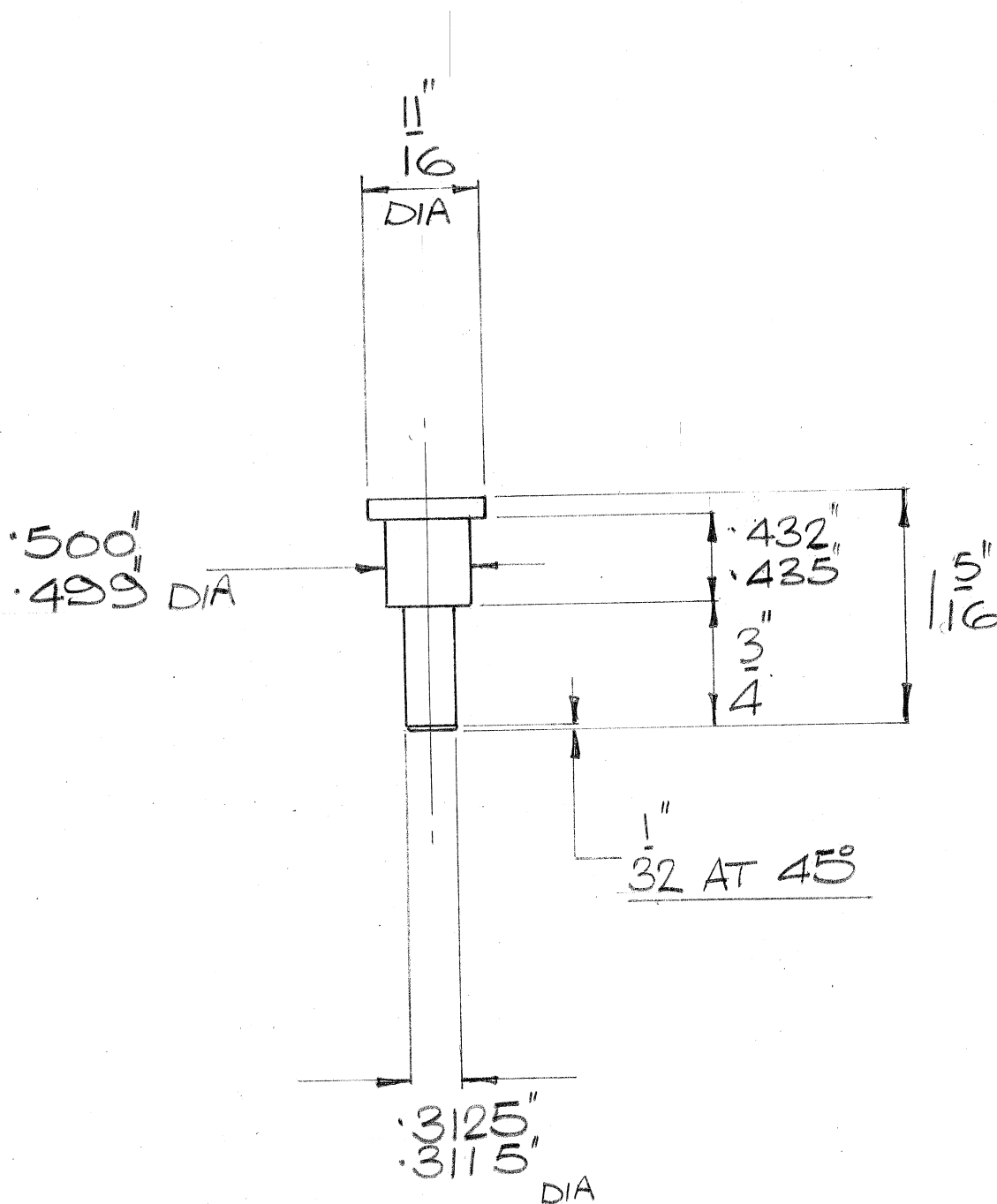
DRAWING No.

ML 105/153.

IF IN DOUBT ASK

ALTERATIONS

2135/79  
25.4.79.W.



LIMITS ON DIMENSIONS UNLESS  
OTHERWISE STATED.

ANGULAR  $\pm \frac{1}{2}^\circ$  3 PLACE DECIMAL  $\pm .005^\circ$

FRACTIONAL  $\pm .010$  4 PLACE DECIMAL  $\pm .0005$

5 & 280VS LATHES - HALF-NUT STUD.

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN IV.

CHECKED

PASSED

DATE 20.3.78

MAT. MILD

MAT. SIZE 3/8 DIA

No. REQD 2

DRAWING No.

1335/66  
6.6.66 2

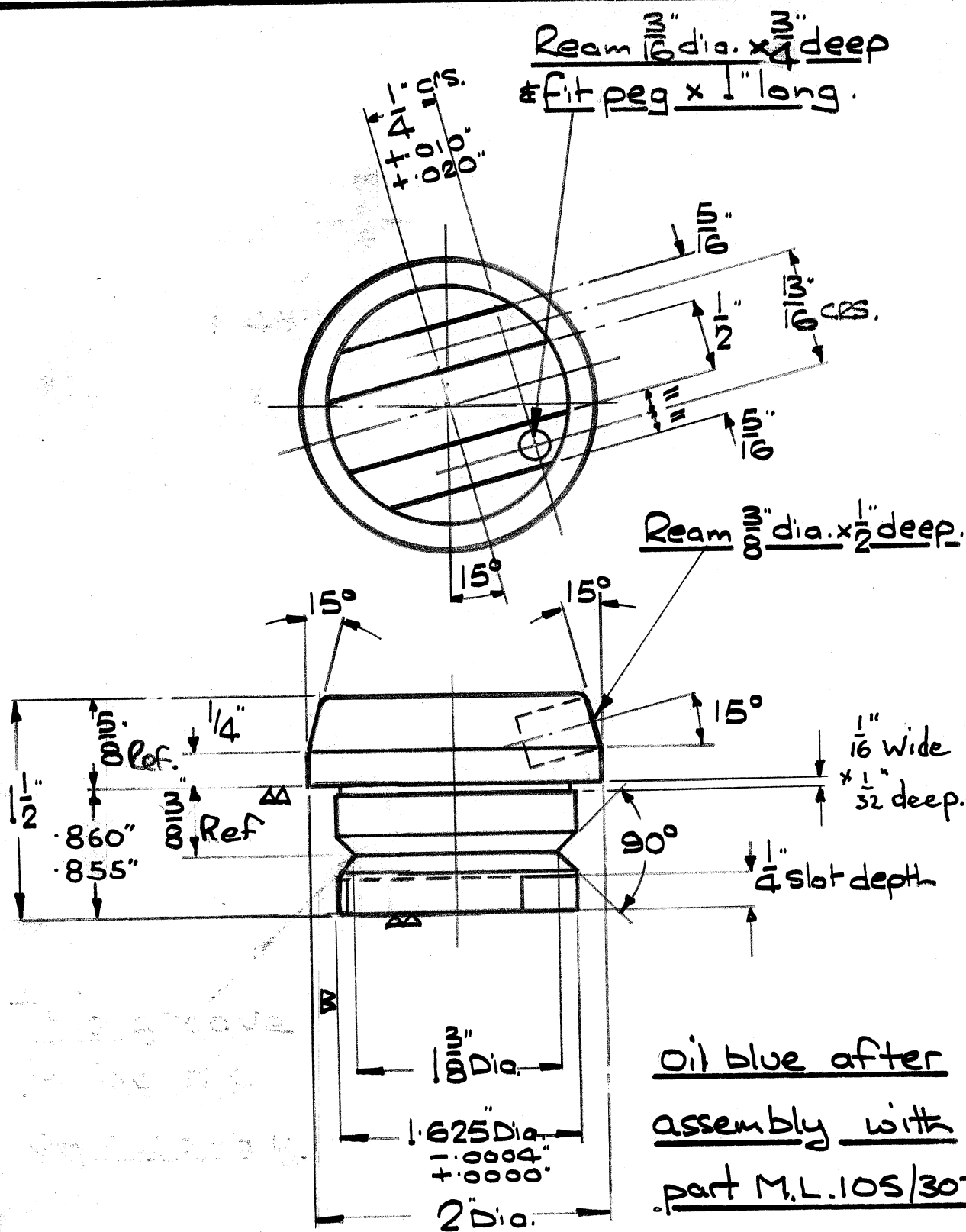


DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DATE 30.4.64.

M.L.105/302

1495/67 11.9.67 S  
 1551/68 21.3.68 P  
 1588/68 30.5.68 P  
 1797/71 13.1.71 S  
 1812/71 26.2.71 RD



# 5" Viceroy Metal Lathe. - SCREWCUTTING LEVER BOSS.

DENFORD MACHINE TOOLS LTD.  
 (Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
 BRIGHOUSE,  
 YORKSHIRE.

DRAWN A. S. Clarke  
 CHECKED AS  
 PASSED  
 DATE 26.3.64.

MAT. MILD STEEL BAR  
 MAT SIZE  $2\frac{1}{8}$ "  $\phi$  . x  $1\frac{3}{4}$ "  
 No. REQD. 1 SCALE FULL  
 DRAWING No. M.L.105/304



IF IN DOUBT ASK

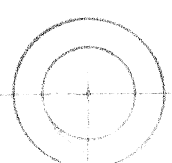
ALTERATIONS

REDRAWN

25.8.86 A.M.

25.8.86

FREE LENGTH



MADE FROM :-

SPRING 55501415 L

J1588B  $\frac{3}{16}$ " DIA X 20 SWG  
X 10 CRI. X 12" LENGTH

LIMITS ON DIMENSIONS UNLESS

OTHERWISE STATED.

ANGULAR  $\pm \frac{1}{2}^{\circ}$  3 PLACE DECIMAL  $\pm .005$ "

FRACTIONAL  $\pm .010$ " 4 PLACE DECIMAL  $\pm .0005$ "

SCREWCUTTING LATHE SCREWCUTTING LEVER CATCH SPRING

DENFORD MACHINE TOOLS LTD.

(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.

BRIGHOUSE,

YORKSHIRE.

DRAWN A.M.

CHECKED

PASSED

DATE 25.8-86

MAT. SEE ABOVE

MAT. SIZE SEE ABOVE

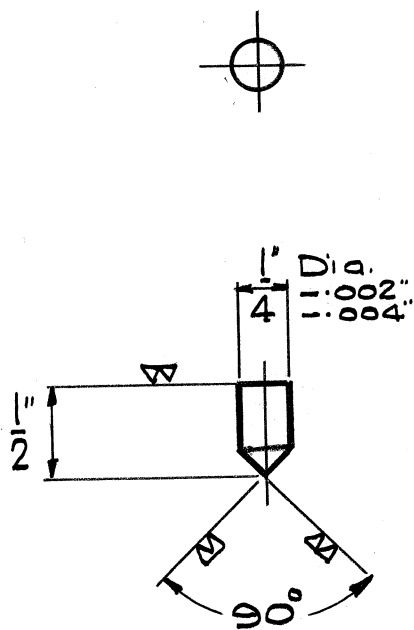
No. REOD. ONE

SCALE 4 x FULL

DRAWING No.

ML.105/ 305

IF IN DOUBT ASK.



Machine at W.

5" Viceroy Metal Lathe - SCREWCUTTING LEVER CATCH.

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

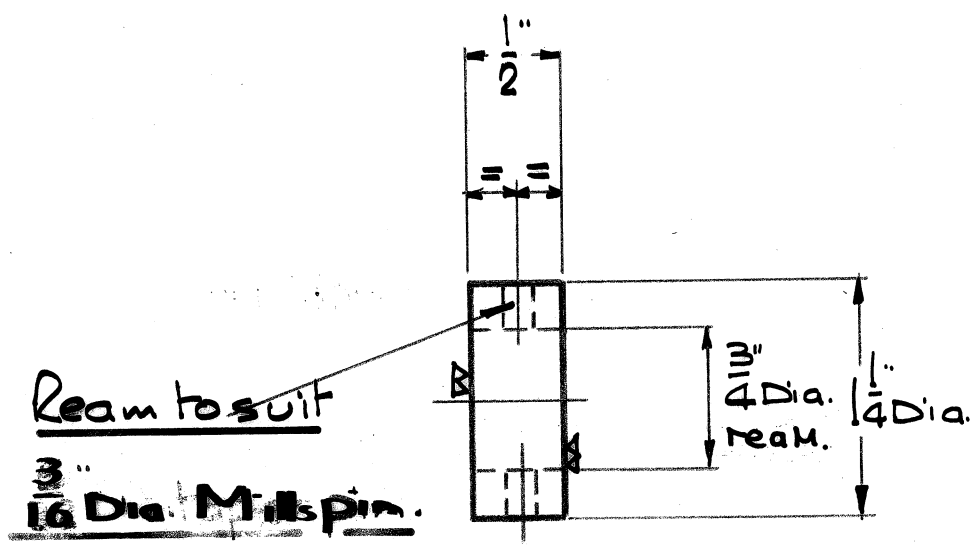
DRAWN *Aus Clarke*  
CHECKED *[Signature]*  
PASSED  
DATE *30.4.64.*

MAT. *M.S.*  
MAT SIZE *3/4" x 1/4" Dia*  
No. REQD. *1* SCALE *Full.*  
DRAWING No. *ML.105/306*

IF IN DOUBT ASK.

1535/68 22.2.68

LID  
BRIG LTD. 2P



Machine at W.

5" Viceroy Metal Lathe - LEADSCREW COLLAR.

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN A. S. Clarke  
CHECKED   
PASSED  
DATE 30.4.64.

MAT. M.S.  
MAT SIZE 1 1/4" Dia. x 3/4"  
No. REQD. 1 SCALE Full.  
DRAWING No. M.L.105/403

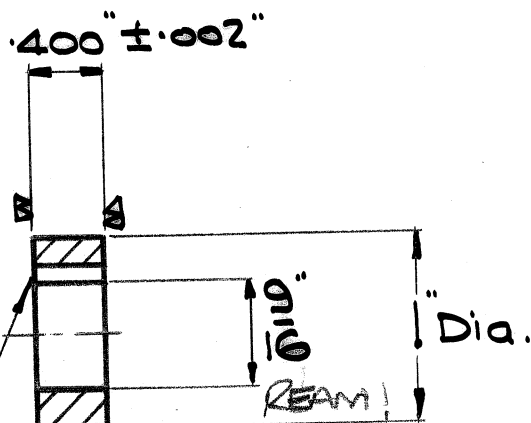
1379/66 29.8.66 D



## Handle

|                                        |                   |
|----------------------------------------|-------------------|
| MAT. <b>M.S.</b>                       |                   |
| MAT SIZE <b>7/8" dia x 3 1/8" long</b> |                   |
| No. REQD. <b>1</b>                     | SCALE <b>Full</b> |
| DRAWING No. <b>ML105/307</b>           |                   |

IF IN DOUBT ASK.



Keyway 1/8" wide  
3/32" deep.

Machine at W.

5" Viceroy Metal Lathe - SPACING COLLAR.

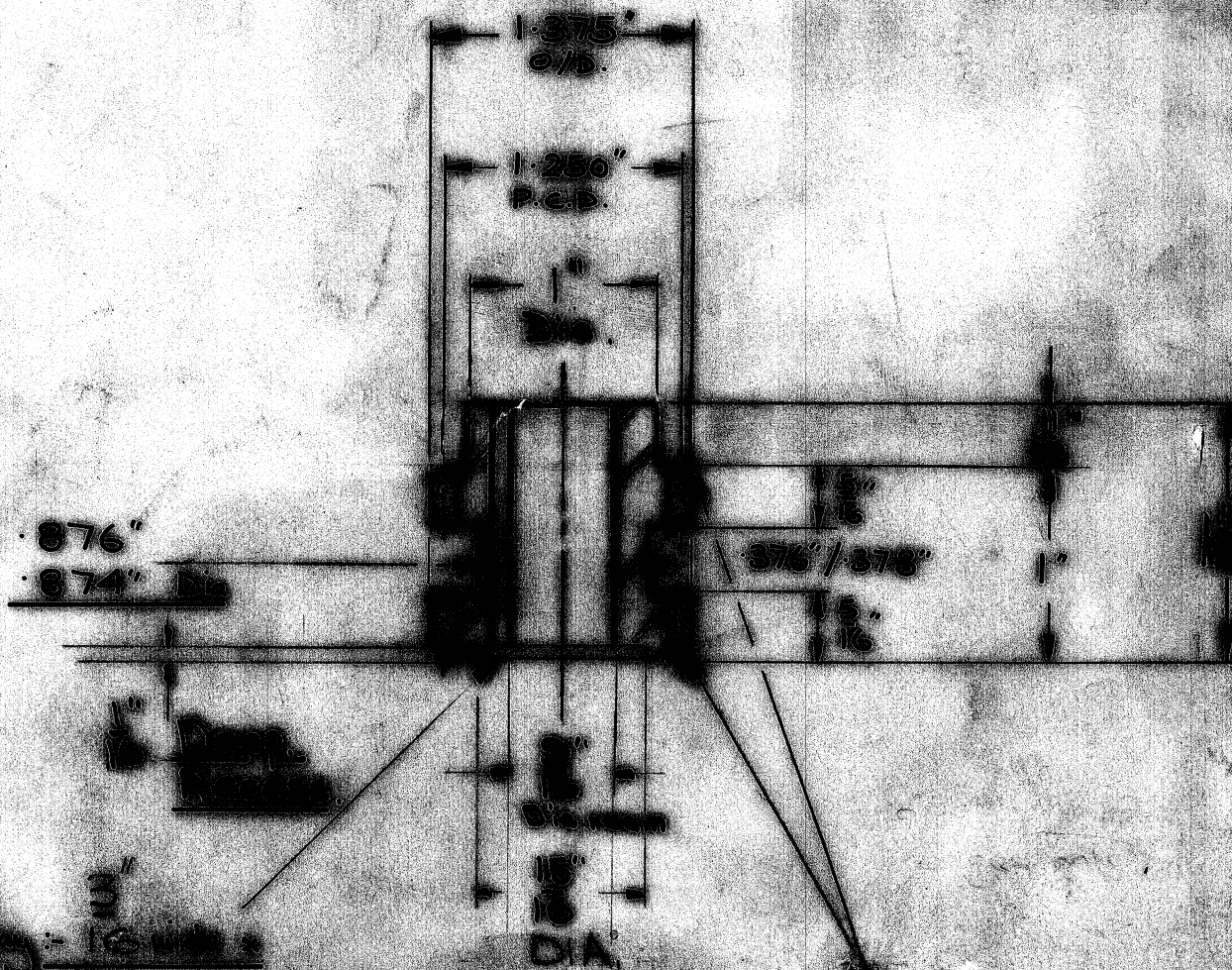
DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN Aus Clarke.  
CHECKED B  
PASSED  
DATE 30.4.64.

MAT. M.S.  
MAT SIZE 1" Dia. x 5/8"  
No. REQD. 1 SCALE Full  
DRAWING No. M.L.105/404



IF IN DOUBT ASK.



Keyway - 16 mm  
1/2" deep

Machine all over.

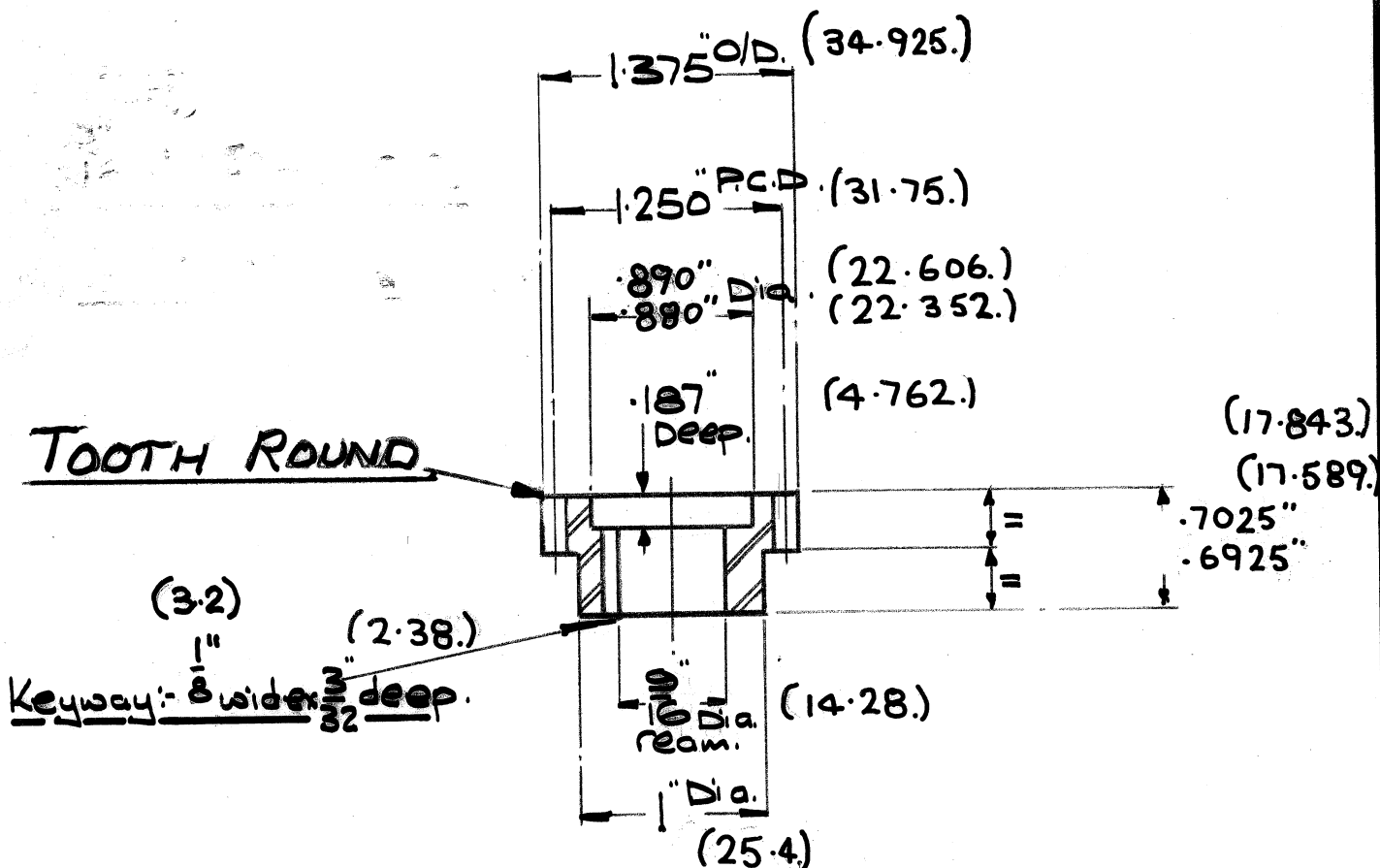
20 Teeth - 16 mm - 20° Press Fit

Whole tooth depth = .1348"

5' Viscosity

UNIT OF MEASUREMENT USED  
IN THIS DRAWING IS  
INCHES  
1" = 25.4 mm  
1" = 101.6 mm  
1" = 25.4 mm

1303/66 8.3.66 D.  
 1519/67 5.12.67 M.  
 1600/68 19.8.68 M.  
 1611/68 3.9.68 D.  
 1618/69 21.5.69 A.D.  
 1987/72 6.7.72 J.



20 Teeth - 16 D.P. - 20° Press. Angle.

Whole tooth depth = .1348"

Machine all over.

IF IN DOUBT ASK.

5" Vicemey Gear Box Lathe - LEADSCREW GEAR.

DENFORD MACHINE TOOLS LTD.  
 (Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
 BRIGHOUSE,  
 YORKSHIRE.

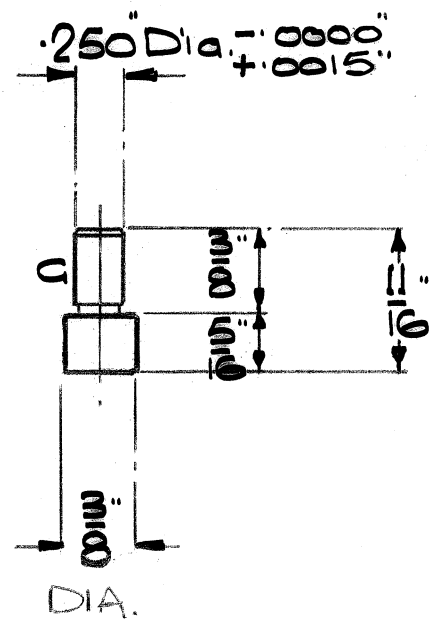
DRAWN A. S. D. D. K.  
 CHECKED Q  
 PASSED  
 DATE 2.2.62.

MAT. M.S. (38.1) x (23.8)  
 MAT SIZE 1 1/2" Dia x 15/16"  
 No. REQD. 1 SCALE Full.  
 DRAWING No. M.L. 110/103.



IF IN DOUBT ASK.

2136/75.14.2.7520



Machine all over.

REMOVE ALL SHARP  
CORNERS.

+ G.B. LATHE.

5" Viceroy P.C.S. Lathe - KICKER PIN.

|                                                                                                  |         |              |  |             |                   |            |
|--------------------------------------------------------------------------------------------------|---------|--------------|--|-------------|-------------------|------------|
| DENFORD MACHINE TOOLS LTD.<br>(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.<br>BRIGHOUSE,<br>YORKSHIRE. | DRAWN   | A. S. Carter |  | MAT.        | M.S.              |            |
|                                                                                                  | CHECKED |              |  | MAT SIZE    | 5/16" x 3/8" DIA. |            |
|                                                                                                  | PASSED  |              |  | No. REQD.   | 1                 | SCALE Full |
|                                                                                                  | DATE    | 23.6.61.     |  | DRAWING No. | M.L. 110/107      |            |



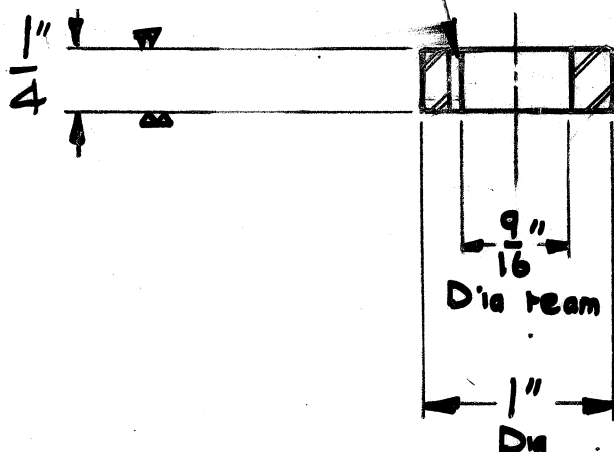
IF IN DOUBT ASK.

Redrawn 10.1.66 R.

1440/67 21.3.67 S

1968/72, 20.6.72 RD.

Keyway  $\frac{1}{8}$  wide x  $\frac{1}{16}$  deep.



Machine at  $\nabla$

5" Viceroy Metal Lathes - Sliding Gear Limit Collar

DENFORD MACHINE TOOLS LTD.  
(INC.) DENFORD SMALL TOOLS (ECC.) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN *M.M. Sewden*  
CHECKED *[Signature]*  
DATE 10.1.66

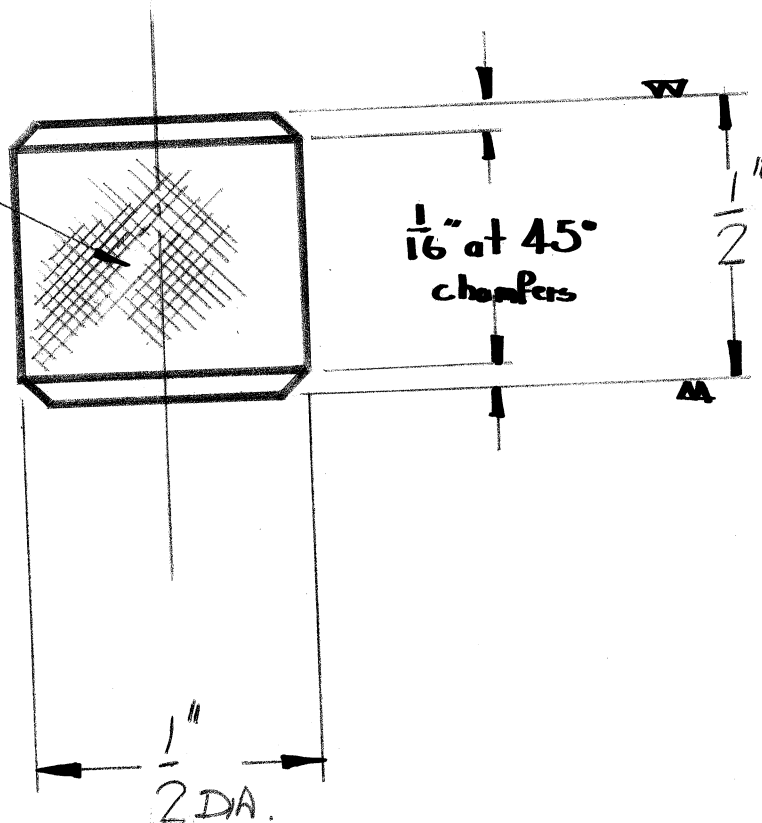
MAT. M.S.  
PART SIZE 1" Dia x  $\frac{1}{2}$ "  
FIN. LTH. 1 SCALE Full  
DRAWING No. ML 110/113

IF IN DOUBT ASK.

Medium knurl

to raise  $\frac{1}{2}$ " dia

by .003/.004"



Machine at w

5 Viceroy P.C.S. Lathes. : Stop.

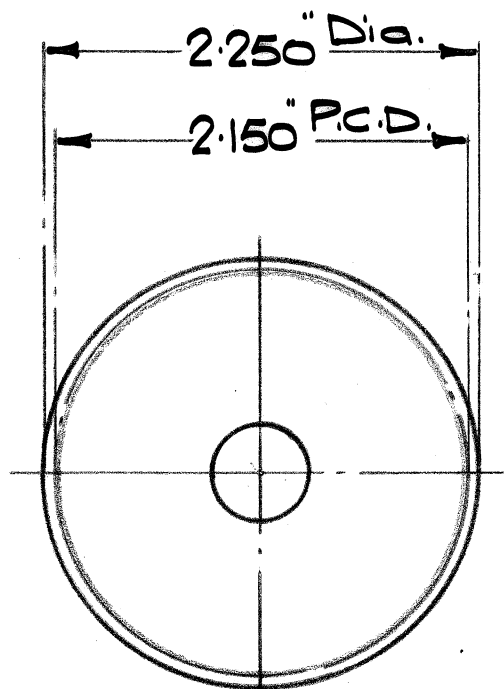
DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN  
**M.M.Sowden**  
CHECKED **AS**  
PASSED  
DATE **29.5.65.**

MAT. **M.S.**  
MAT SIZE  $\frac{1}{2}$ "  $\phi$  x  $\frac{3}{4}$ " long.  
No. REQD. **1** SCALE **Full**  
DRAWING No.  
**ML110/114**

IF IN DOUBT ASK.

1039/64 27-8-64  
1348/66-8-7-66  
1473/67 8-6-67  
1519/67 5-12-67  
1511/68 3-9-68  
1987/72 6-9-72



$\frac{3}{16}$ " at 15° chamfer both sides

$\frac{1}{2}$ " Dia.  
1.000"  $\pm .0012$ "  
Dia. Recess  
 $\times \frac{1}{2}$ " Deep

Apron pinion shown  
in posn. with taper pin.

$\pm .001$ "  $\frac{21}{64}$ "  
 $\pm .003$ "  $\frac{64}{64}$ "

$\frac{625}{1000}$ " trim to suit  
 $\pm .004$ " on assy.

TOOTH ROUND

$\frac{7}{16}$ " Dia  
ream.

Drill to suit  $\frac{5}{32}$ " taper pin with  
Items in posn. on  
Sub-assy.

43 Teeth - 20 D.P.  
Whole tooth depth = .1079"

Machine all over.

5" Viceroy P.C.S. Metal Lathe - APRON DRIVING GEAR.

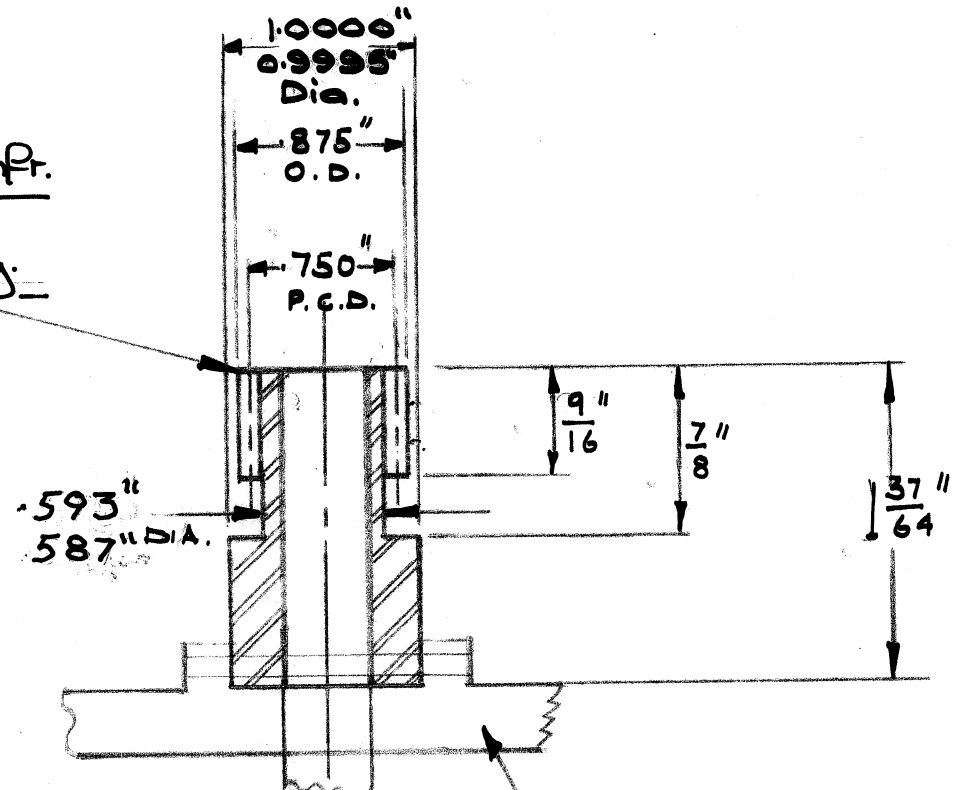
DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN Alan S. Clarke.  
CHECKED   
PASSED  
DATE 26.6.61.

MAT. M.S.  
MAT SIZE 2 3/8" Dia. x 7/8"  
No. REQD. 1 SCALE Full.  
DRAWING No. M.L. 110/302

1126/65 15-2-65  
 1473/67 8-6-67  
 1554/68 25-3-68  
 1607/68 21-8-68  
 1641/69 14-9-69

$\frac{3}{16}$ " at 15° Max. chfr.  
 at this side only.



INDUCTION HARDEN  
GEARS.

POSITION OF DRIVING GEAR  
LOCATED BY PIN DRIVEN  
THROUGH SHAFT PINION &  
GEAR ON SUB - ASSY

WHOLE TOOTH DEPTH = .1348"  
12 TEETH - 16 D.P.  
M/C ALL OVER.

IF IN DOUBT ASK.

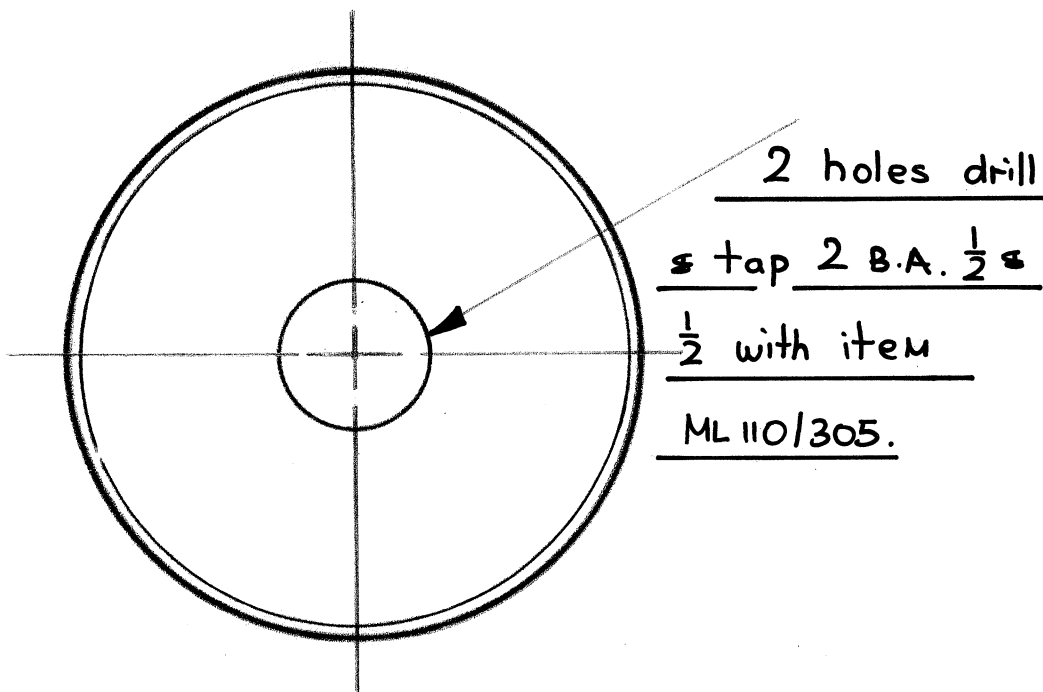
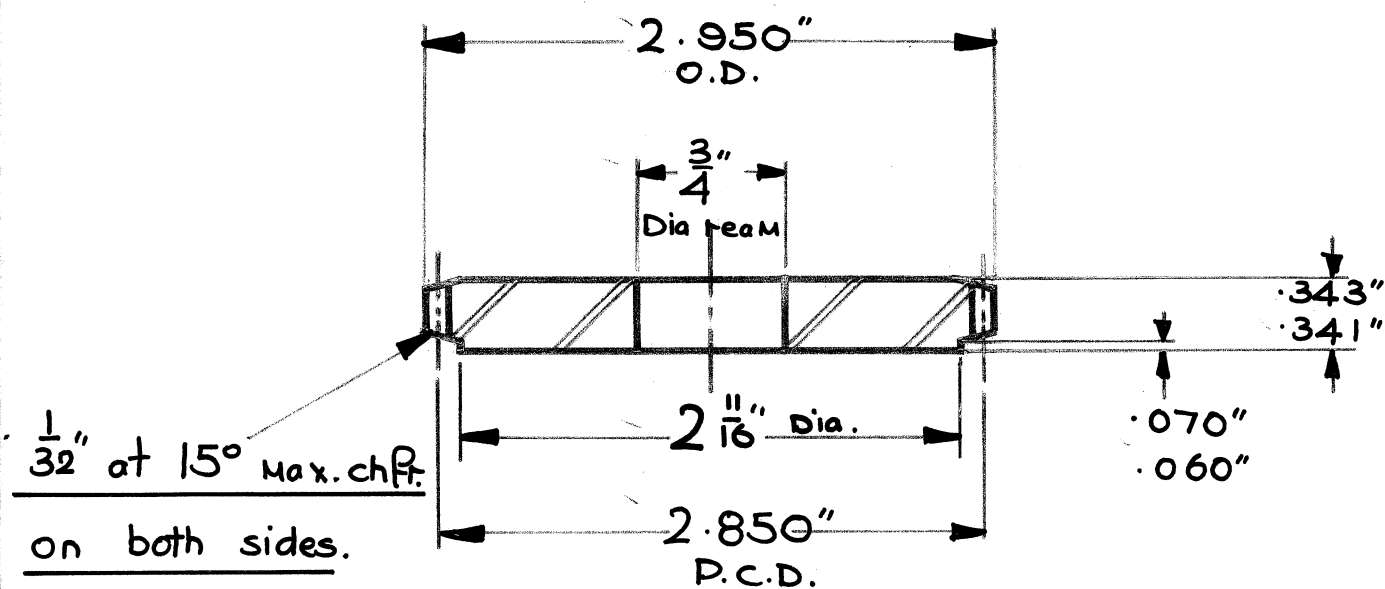
5" VICEROY "P.C.S." METAL LATHE - APRON PINION

|                                                                                                  |         |              |             |                                           |
|--------------------------------------------------------------------------------------------------|---------|--------------|-------------|-------------------------------------------|
| DENFORD MACHINE TOOLS LTD.<br>(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.<br>BRIGHOUSE,<br>YORKSHIRE. | DRAWN   | M. M. Sowden | MAT.        | EN.8.                                     |
|                                                                                                  | CHECKED | AZ.          | MAT SIZE    | $1\frac{13}{16}$ " x $1\frac{1}{8}$ " DIA |
|                                                                                                  | PASSED  |              | No. REQD.   | 1                                         |
|                                                                                                  | DATE    | 1. 7. 64.    | SCALE       | FULL                                      |
|                                                                                                  |         |              | DRAWING No. | M.L. 110/303.                             |

IF IN DOUBT ASK.

ALTERATIONS

Redrawn 9.6.67



57 Teeth - 20 D.P. - 20° Press. Angle

Whole Tooth Depth - .1079"

M/c all over.

5" Viceroy P.C.S. & G.B. Lathe - Cross Slide Driving Gear

LIMITS ON DIMENSIONS UNLESS  
OTHERWISE STATED.

ANGULAR  $\pm 1^\circ$  3 PLACE DECIMAL  $\pm .005^\circ$

FRACTIONAL  $\pm .010$  4 PLACE DECIMAL  $\pm .0005$

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

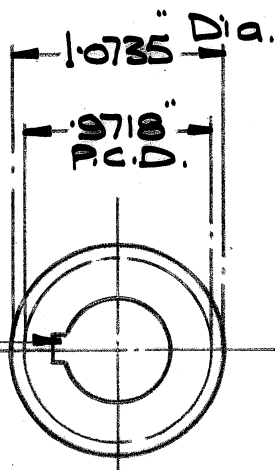
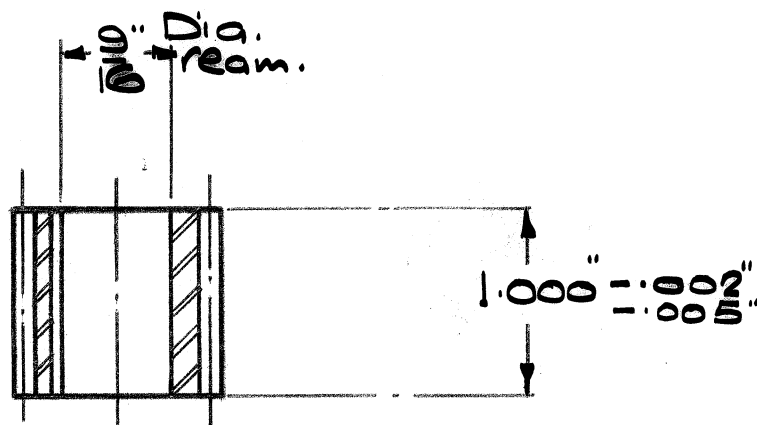
DRAWN M. H. Sowden.  
CHECKED   
PASSED  
DATE 9.6.67

MAT. Mild Steel  
MAT. SIZE 3" Dia x 5/8"  
No. REQD. 1 SCALE Full  
DRAWING No. ML 110/304

FOR WANDERER GEAR TRAIN USE

GEARS :-

$$\frac{38}{82} \times \frac{25}{100}$$



Keyway:-

 $\frac{1}{8}$ " wide  $\times \frac{3}{32}$ " deep.

L. Hand. - 5.75 T.P.I. - Lead  $\angle = 3^{\circ} 15'$  - Ax. pitch = .174"

Single start - circ. pitch = .174" - Clearance = .0123"

Whole tooth depth = .120"

18 D.P. -  $14\frac{1}{2}^{\circ}$  Pressure Angle

To work at 1.4026" crs.

Machine all over.

IF IN DOUBT ASK.

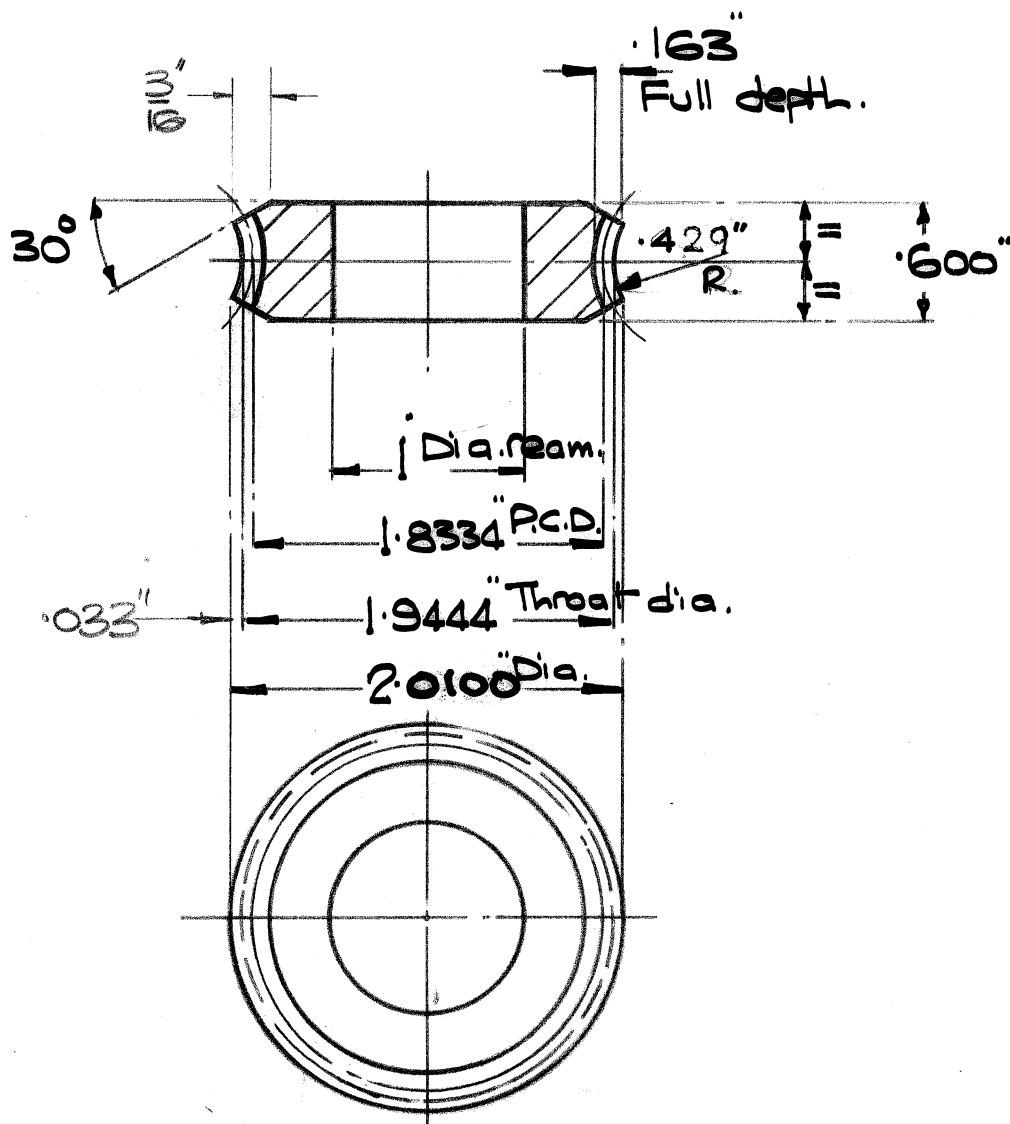
5" Viceroy P.C.S. Lathe - WORM.

STEWART MACHINE TOOLS LTD.  
(INC) DINTON SMALL TOOLS (DRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN A.S. Clarke.  
CHECKED AS  
PASSED  
DATE 23.6.61.

MAT. M.S.  
MAT SIZE  $1\frac{1}{4}$ "  $\times$   $1\frac{1}{8}$ " Dia.  
No. REQD. 1 SCALE Full.  
DRAWING No. M.L.110/308.

IF IN DOUBT ASK.



L. Hand. - 33 Teeth - Helix L. = 3°15' - Ax. pitch = .174"

Circ. pitch = .174" - Clearance = .0123"

Whole tooth depth = .120"

18 D.P. 14 1/2° Press. Angle.

To work at 1.4026 crs.

Machine all over.

.15117  
repurposed

5" Viceroy P.C.S. Lathe - WORM GEAR.

DINFORD MACHINE TOOLS LTD.  
(Inc.) DINFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN Alan Slatke.  
CHECKED ES  
PASSED  
DATE 26.6.61.

MAT. CAST IRON.  
MAT SIZE CASTING.  
No. REQD. 1 SCALE Full.  
DRAWING No. M.L.110/309

2050/73 4.973R



|                                |                                                   |
|--------------------------------|---------------------------------------------------|
| MAT. <b>M.S.</b>               |                                                   |
| MAT SIZE                       | <b>1<sup>15</sup>/<sub>16</sub> x 1 3/8" Dia.</b> |
| No. REQD.                      | <b>1</b> SCALE <b>Full.</b>                       |
| DRAWING No. <b>M.L.110/310</b> |                                                   |



IF IN DOUBT ASK.

Redrawn 7-4-65

1160/657-4-65B

1871/71.8.7.71.R.D.

2004/72.13.11.72.R.D.

2050/73.4.9.73.R.D.

2542/78.5.5.78.R.D.

2543/78.10.5.78.R.D.

C/BORE LETTER "C"

DIA. x  $\frac{5}{16}$ " DEEP.

$\cdot 625" \pm \cdot 0002"$   
Dia  $\pm \cdot 0008"$

$\frac{3}{32}$ " rad. dimple

$\frac{1}{16}"$  at  $45^\circ$

Drill oil holes

$\frac{1}{8}"$  dia

Clamp Groove  $\phi \cdot 597$

$\cdot 591" \times \cdot 043" / \cdot 045"$

wide.

Machine all over

Grind at 'G'

Cyanide Harden.

5" Viceroy P.C.S. Lathe : Worm Gear Shaft

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN  
M.M. Souden

CHECKED  


PASSED

DATE  
7.4.65

MAT. M.S.

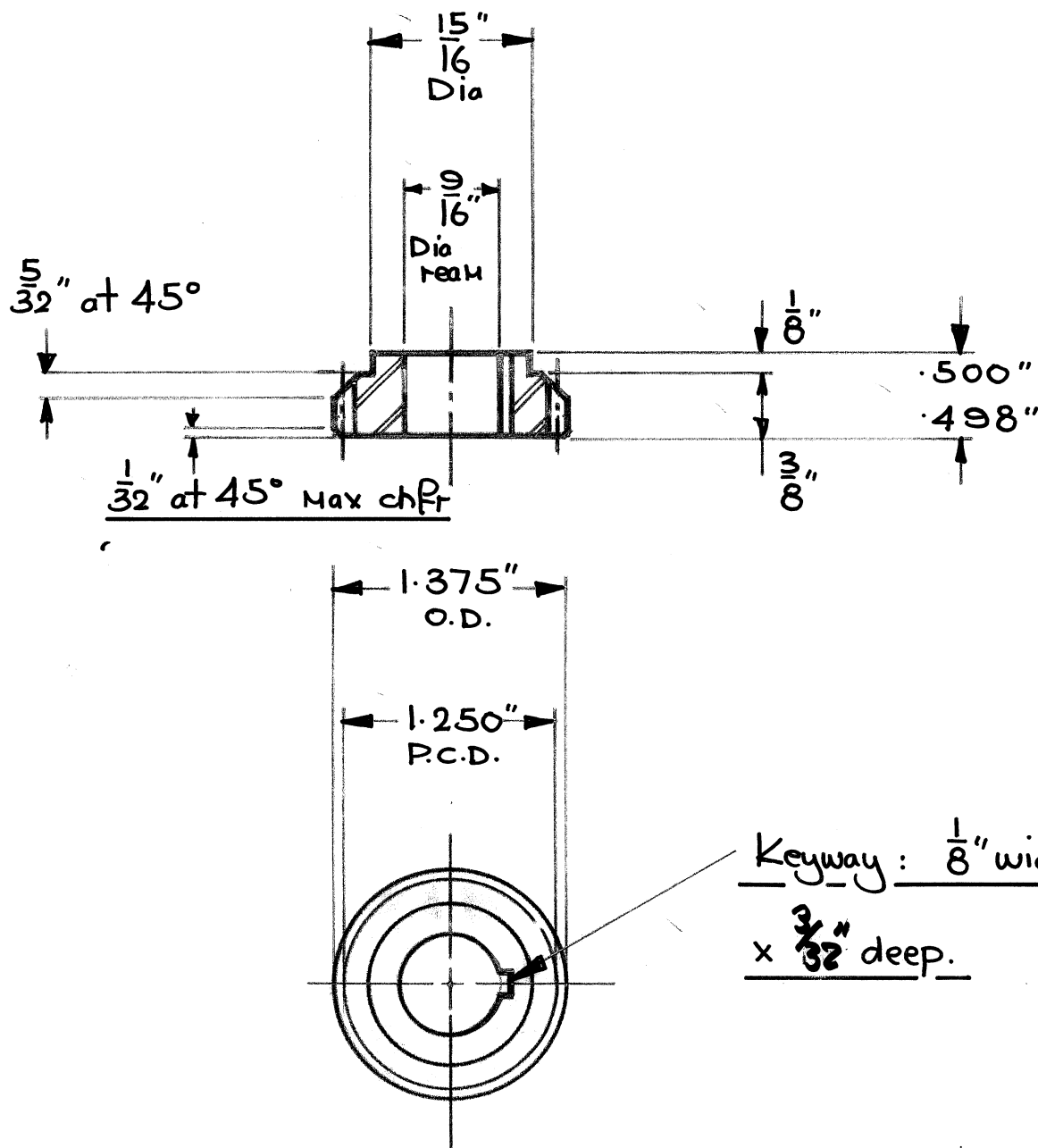
MAT SIZE  $3/4" \text{ D. } \times 3 1/4"$

No. REQD. 1 SCALE Full

DRAWING No.

ML110/311

IF IN DOUBT ASK.



Whole Tooth Depth - 1.348"

20 Teeth - 16 D.P.

Machine all over

5" Viceroy P.C.S & G.B. Lathes - Worm Driving Gear.

ALTERATIONS

1303/66 8.3.66D

1313/66 23 4.66D

1403/66 10.11.66D

1472/67 8.6.67D

2009/73 15.1.73P.

LIMITS ON DIMENSIONS UNLESS  
OTHERWISE STATED.

ANGULAR  $\pm 1^\circ$  3 PLACE DECIMAL  $\pm .005^\circ$

FRACTIONAL  $\pm .010$  4 PLACE DECIMAL  $\pm .0005$

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN *M. H. Souden*  
CHECKED *[Signature]*  
PASSED  
DATE 8.6.67

MAT. M.S.  
MAT. SIZE 1 1/2" dia x 3/4"  
No. REQD. 1 SCALE Full  
DRAWING No. ML110/312

IF IN DOUBT ASK.

1155/6520.3.65

1251/6523.11.65

Redrawn 23.11.65

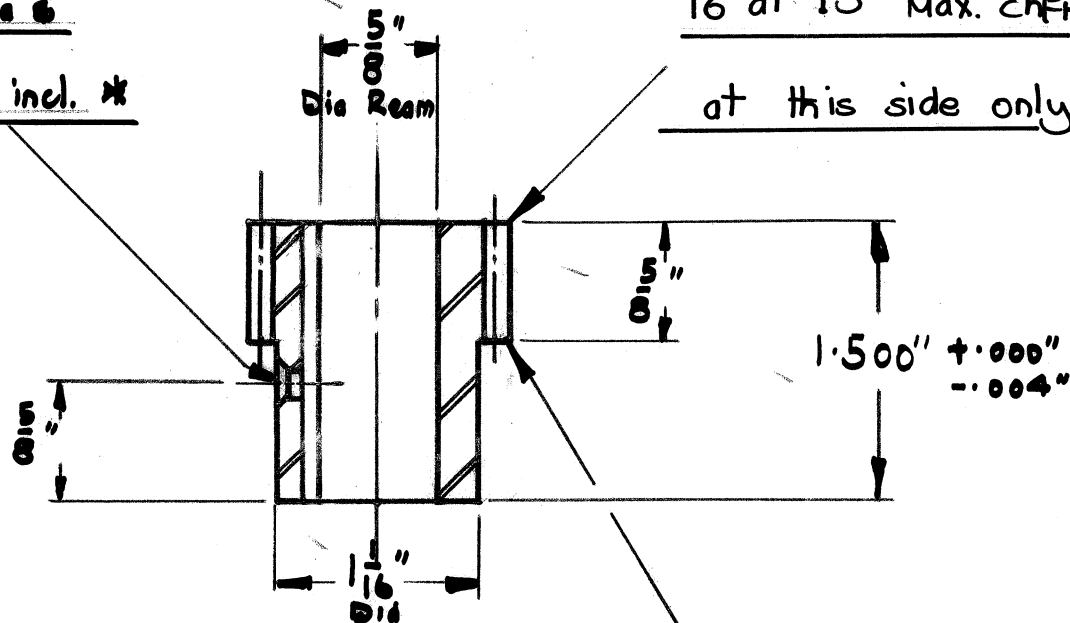
1473/67 8.6.67

1 hole drill  $\frac{5}{32}$ " dia

c'sk  $\frac{1}{4}$ " dia x 90° incl. \*

$\frac{3}{16}$ " at 15° Max. chft

at this side only.

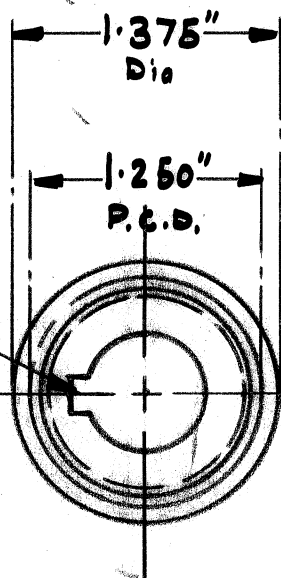


Keyway:  $\frac{1}{16}$ " wide x

$\frac{3}{32}$ " deep.

$\frac{1}{8}$ " at 15° Max. chft.

at this side only.



20 Teeth - 16 D.P.

Whole tooth depth - .1348"

Machine all over

\* Drill & tap the key 4 B.A. on assembly.

5" Viceroy P.C.S. Lathe - Feedshaft Gear

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (DRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN *M. H. Sowden*  
CHECKED *AB*  
FIXED  
DATE 23.11.65

MAT. M.S.  
MAT SIZE  $1\frac{1}{2}$ " dia x  $1\frac{3}{4}$ "  
No. REQD. 1 SCALE Full  
DRAWING No. ML 110/313

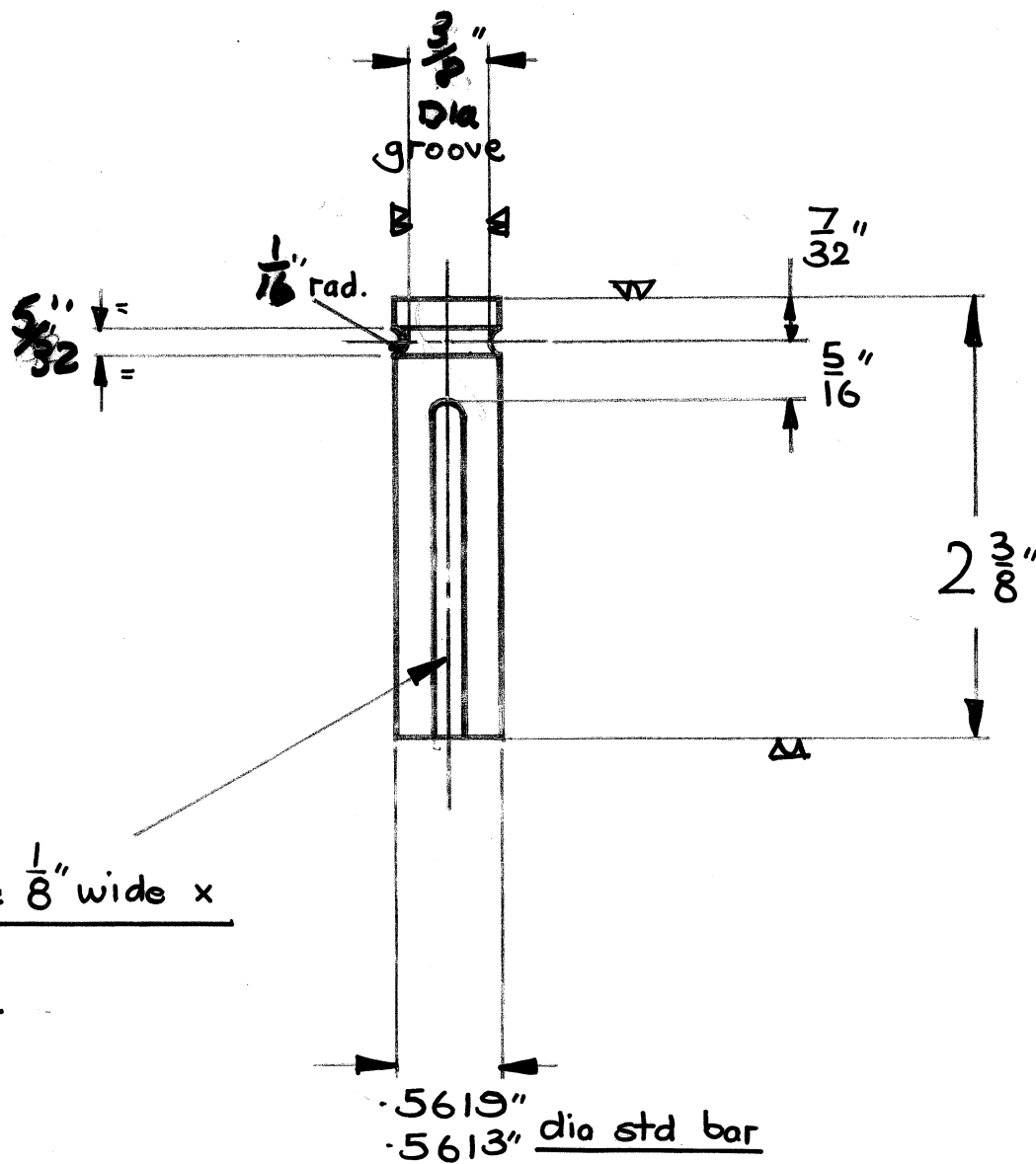
**IF IN DOUBT ASK.**

## ALTERATIONS

1468/67 6.6.67

Redrawn 6.6.67B.

1983/72-158750



Keyway :  $\frac{1}{8}$ " wide x  $\frac{1}{16}$ " deep.

Machine at  $\forall$

LIMITS ON DIMENSIONS UNLESS OTHERWISE STATED.

ANGULAR  $\pm \frac{1}{2}^\circ$  3 PLACE DECIMAL  $\pm .005''$

FRACTIONAL  $\pm .010''$  4 PLACE DECIMAL  $\pm .0005''$

5" Viceroy P.C.S & G.B. Lathes - Worm Shaft.

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN *M. M. Sowden*

CHECKED ASL

**PASSED**

DATE 6. 6. 67

MAT. Mild Steel

MAT. SIZE 9/16" dia x 2 5/8"

|           |   |       |      |
|-----------|---|-------|------|
| No. REQD. | 1 | SCALE | Full |
|-----------|---|-------|------|

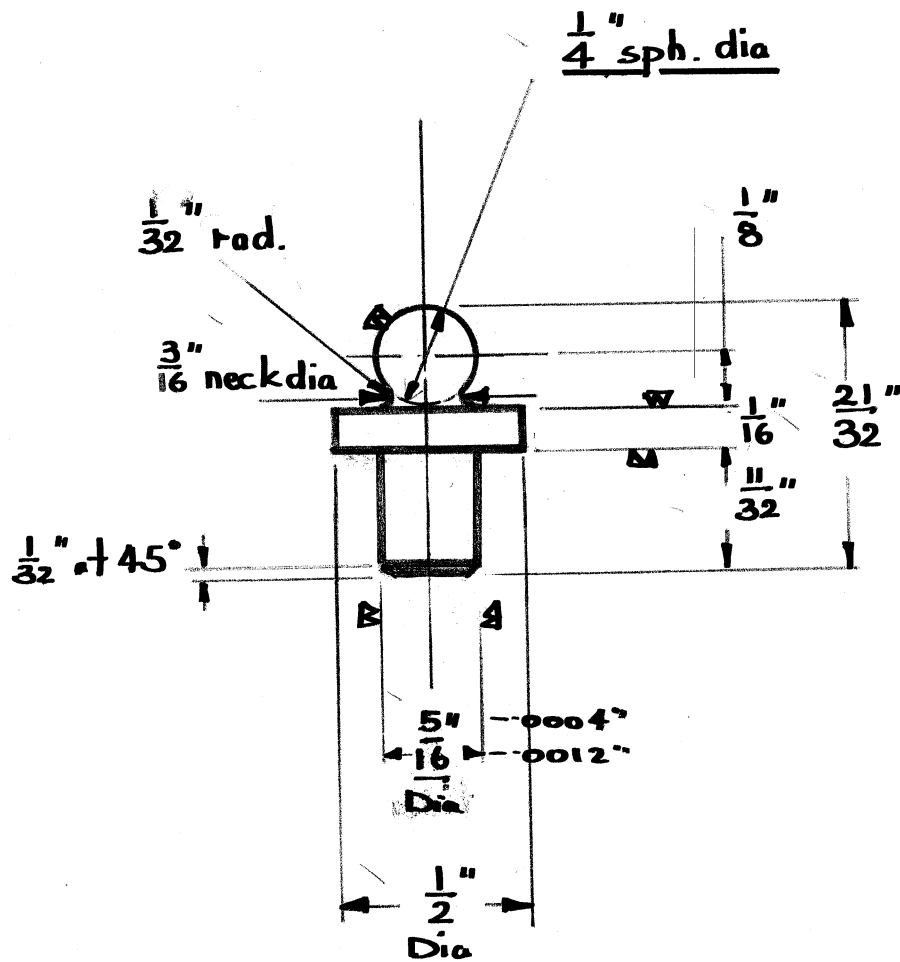
DRAWING No.

ML110/315

IF IN DOUBT ASK.

~~1/2" cut~~ : ~~1/16" wide~~ x

~~3/84" deep~~



5" Viceroy P.C.S. Lathe : Worm Carrier Lifter

DENFORD MACHINE TOOLS LTD.  
(INC) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

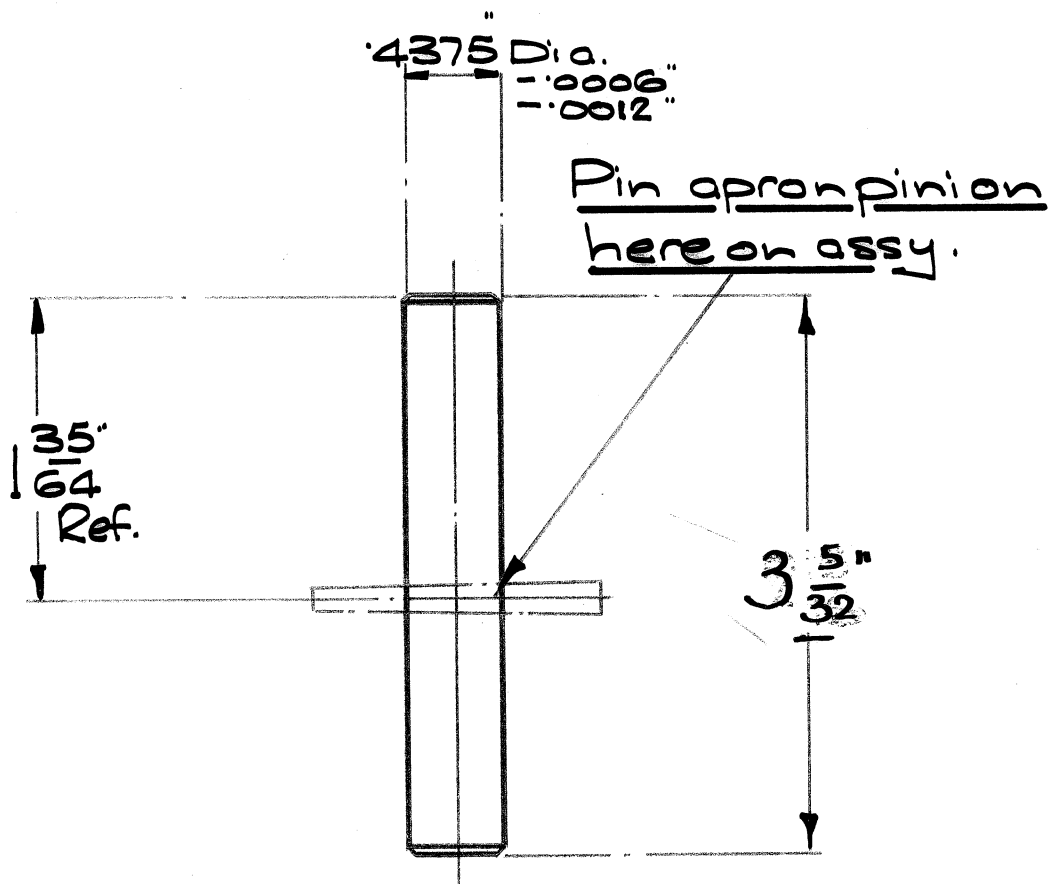
DRAWN M.M. Souden  
CHECKED AS  
PASSED  
DATE 22.2.65

MAT. Mild Steel  
MAT SIZE 1/2" Dia x 7/8" long  
No. REQD. 1 SCALE 2x Size  
DRAWING No. ML110/318

IF IN DOUBT ASK.

1129/65 15-2-65 Q.

1609/68.24.8.68.30



Machine all over.

5" Viceroy P.C.S. Lathe - APRON DRIVING GEAR SHAFT

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

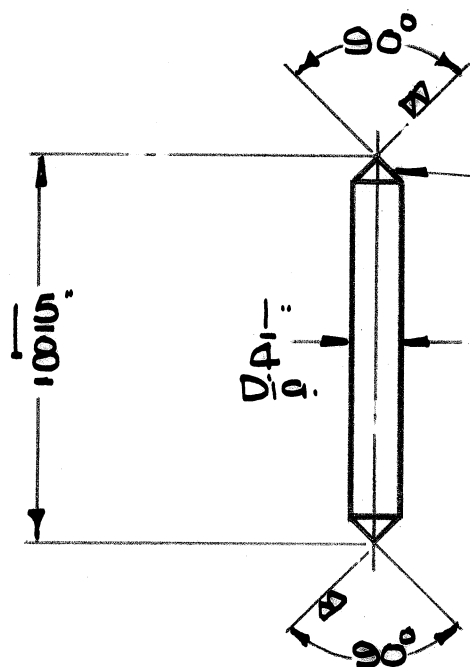
DRAWN *Alan S. Clarke*  
CHECKED *AS*  
PASSED  
DATE 26.6.61.

MAT. E.N.B.  
MAT SIZE  $3\frac{3}{8} \times 7\frac{1}{16}$  Dia.  
No. REQD. 1 SCALE Full.  
DRAWING No. M.L.110/319

IF IN DOUBT ASK.

1182/6526-5-65D

1309/6622-4-66D



Leave Square this end.  
Fitting shop will trim  
to suit.

Fitter:- Trim to suit on assy.  
Heat to dull red & oil quench.

Machine at W.

5" Viceroy P.C.S. Lathe - LOCKING PIN.

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN A.S. Catle.  
CHECKED AS  
PASSED  
DATE 23.3.61.

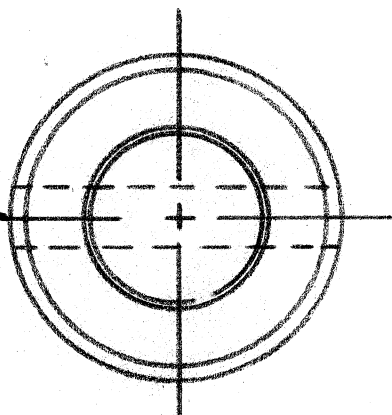
MAT Silver steel.  
MAT SIZE 1 7/8" x 1/4" dia.  
No. REQD. 1 SCALE Full.  
DRAWING No. M.L. 110/325

IF IN DOUBT ASK.

1054/64 25.9.64 MB

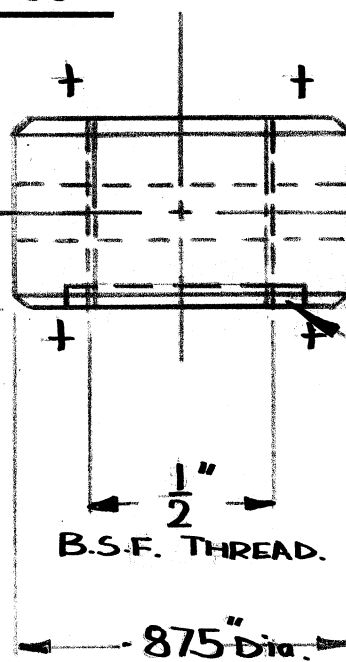
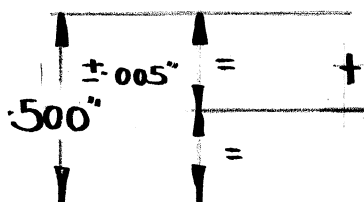
1095/64 15.12.64 MB

Drill  $\frac{1}{8}$ " dia through  
& fit  $\frac{1}{8}$ " 'Sel-lok' pin  
on assembly



+ These faces must be parallel  
& square within .001"

$\frac{1}{16}$ " at 45° chamfers



Recess  $\frac{1}{8}$ " wide x  
 $\frac{5}{8}$ " dia.

M/c all over  
Remove sharp corners

±.005"  
±.010"  
Fine Turn

5" Viceroy P.C.S. & G.B. Lathes. : Leadscrew Collar

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN M.M. Sowden  
CHECKED ~~ASD~~  
PASSED  
DATE 26.8.64

MAT. M.S.  
MAT SIZE  $\frac{7}{8}$ " dia x  $\frac{3}{4}$ " long  
No. REQD. 1 SCALE 2 x Full  
DRAWING No. M.L. 110/405



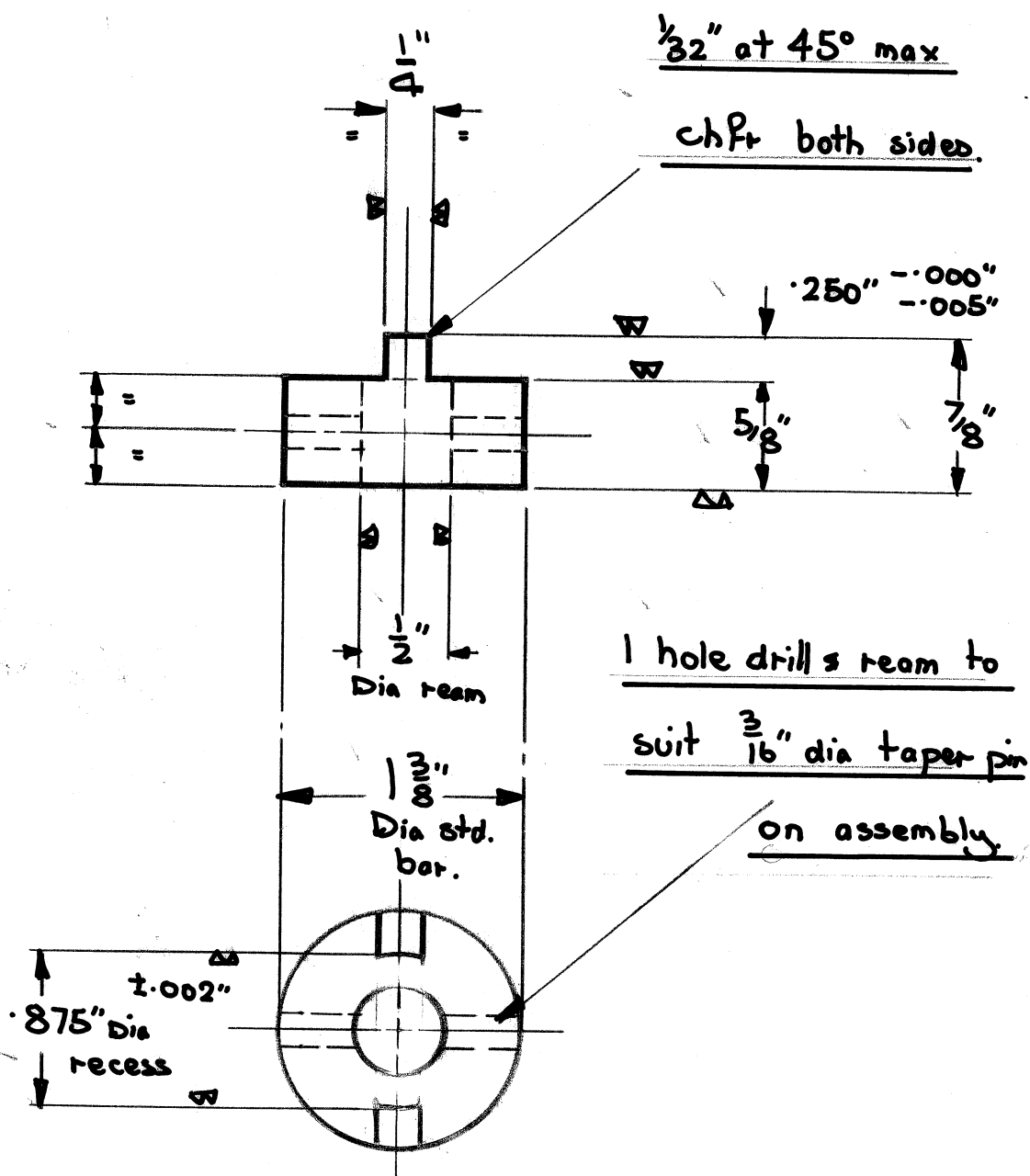
1179/65 24.5.65B

1336/66 6.6.66B

Redrawn 6.6.66B.

1645/69.14.4.69B

2135/75.28.1.75B



Machine at W

5" Viceroy Metal Lathes - Feedshaft Dog Drive.

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (ENG) LTD.  
BRIDGEHOUSE,  
YORKSHIRE.

DRAWN M. M. Sowden

CHECKED A. S. C. C. C.

PASSED

DATE

6.6.66

MAT.

M.S.

MAT SIZE

1 3/8" dia x 1 1/8" long

No. RECD.

1

SCALE

Full

DRAWING No.

ML110/407

IF IN DOUBT ASK.

Redrawn 11-1-65 J.B.

1179/65 24-5-65 J.B.

1209/65 22-7-65 J.B.

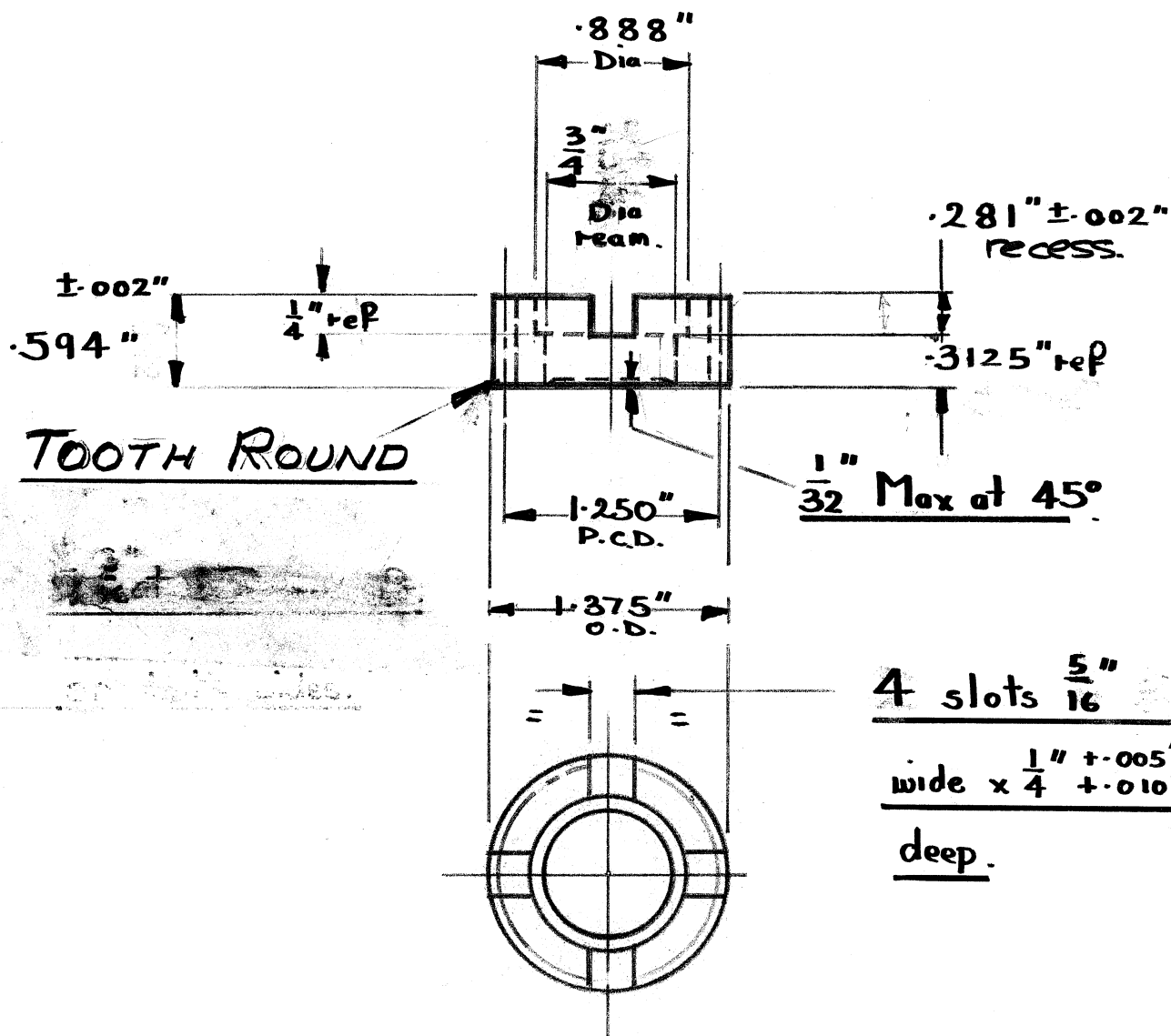
1473/67 8-6-67 J.B.

1519/67 5-12-67 H.S.

1611/68 3-9-68 J.B.

1645/69 14-4-69 J.B.

1987/72 6-9-72 J.B.



Machine at W

20 Teeth : 16 D.P. 20° Press Angle

Whole tooth depth = .1348"

To work at 1.250" cts.

5" Viceroy Metal Lathe : Driven Dog Gear.

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

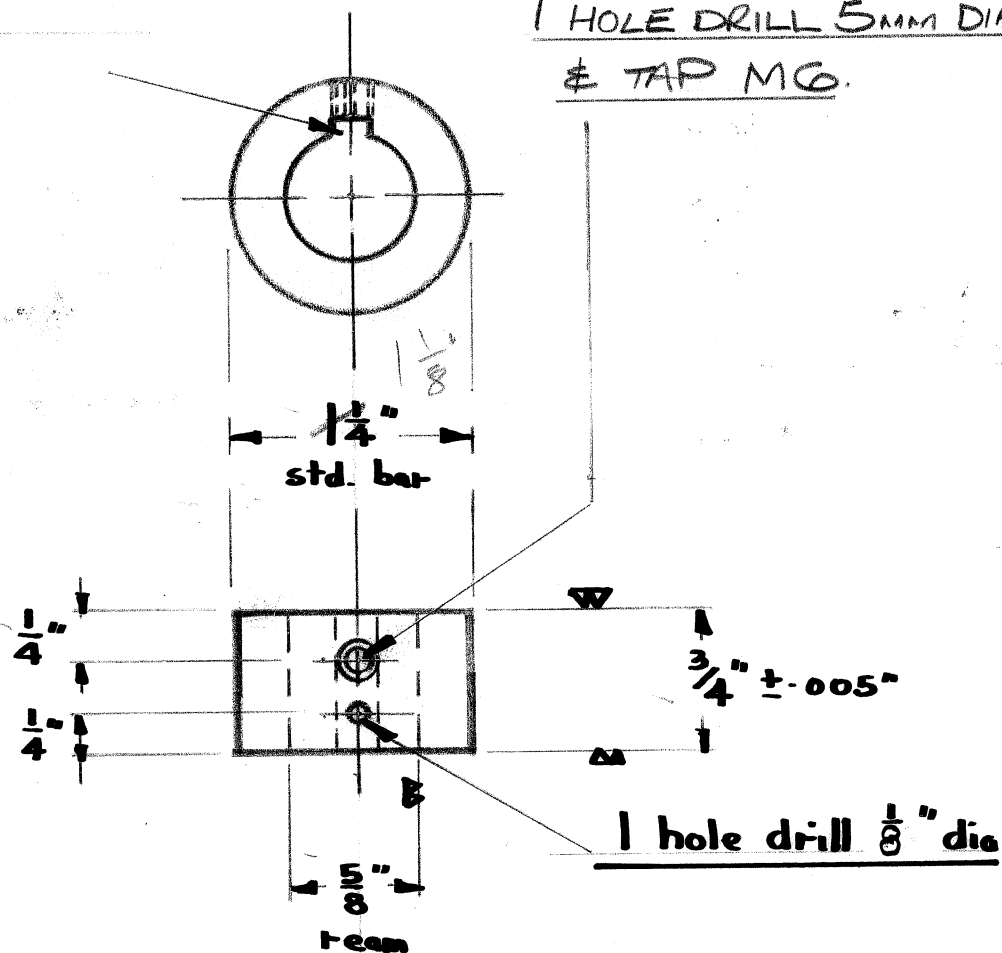
DRAWN M.M.Sowden.  
CHECKED AS  
PASSED  
DATE 11-1-65.

MAT. Mild Steel.  
MAT SIZE 1 1/2" Dia x 13/16" long  
No. REQD. 1 SCALE Full  
DRAWING No. M.L. 110/408

2010/73JR16-173

2559/78 47.78  
10.

IF IN DOUBT ASK.

Keyway  $\frac{3}{16}$ " wide x $\frac{3}{32}$ " deep.1 HOLE DRILL 5mm DIA  
& TAP M6.M/c at w Remove sharp corners.5" Viceroy P.C.S. Lathes. : Collar.

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE

DRAWN  
**M.M. Souden**  
CHECKED **AS**  
PASSED  
DATE  
**16.3.65**

MAT. **Mild Steel**  
MAT SIZE  **$1\frac{1}{4}$ " Dia x 1" long**  
No. REQD. **1** SCALE **Full**  
DRAWING No.  
**ML110/409**

**IF IN DOUBT ASK.**

## ALTERATIONS

Redrawn 22.70 ●

175070, 8.4.70 IV

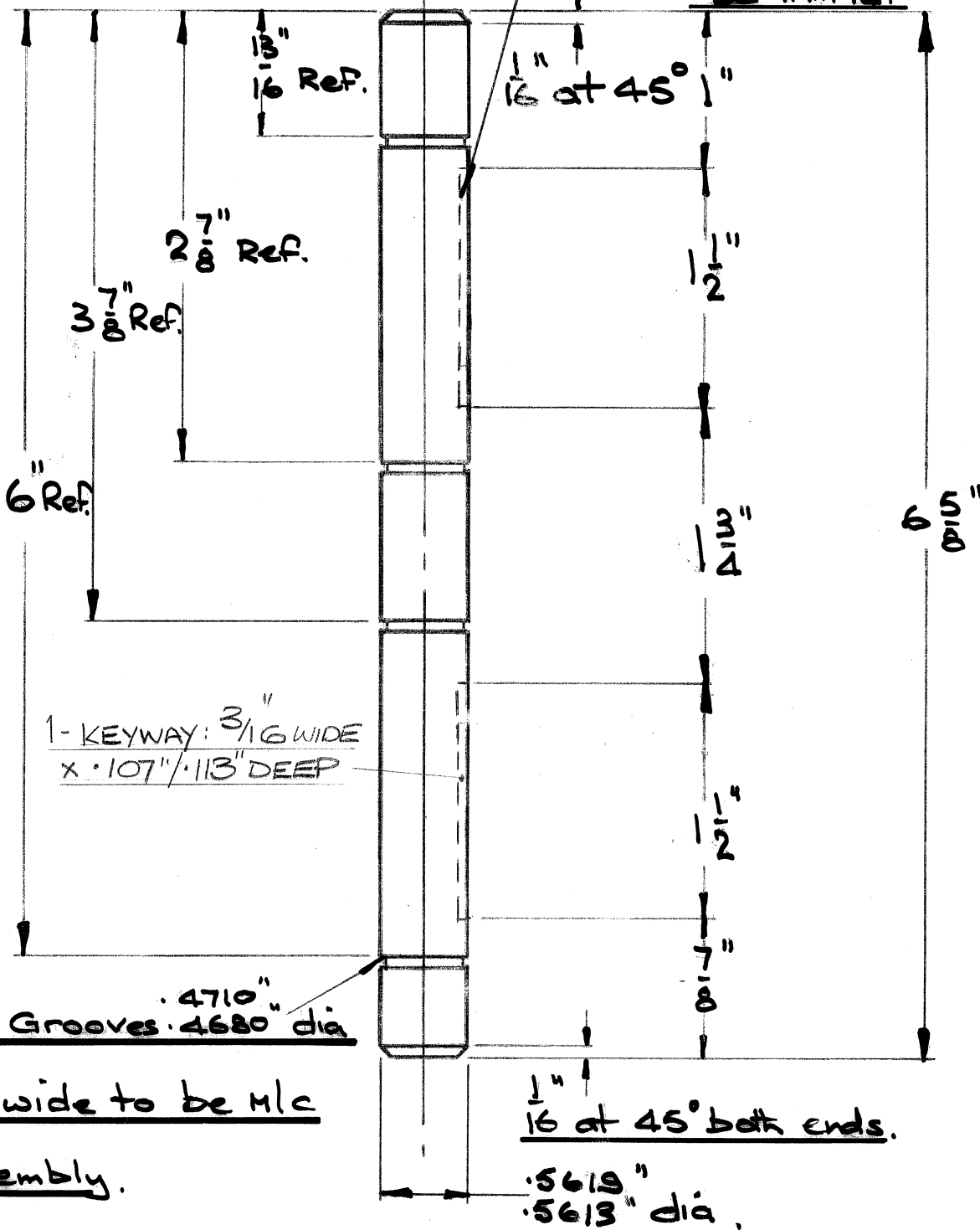
1760/70. 24.4.70.R1

2769 79.9.1179 W

Machine all over.

1- Keyway :  $\frac{1}{8}$ " wide

x is deep. NB keyway's to be inline.



4 c/c lip Grooves .4710" dia  
x .055" wide to be M/c  
on assembly.

LIMITS ON DIMENSIONS UNLESS OTHERWISE STATED.

ANGULAR  $\pm 1^\circ \frac{1}{2}$  3 PLACE DECIMAL  $\pm .005"$

FRACTIONAL  $\pm .010"$  4 PLACE DECIMAL  $\pm .0005"$

5" Viceroy P.C.S. Lathe - Coarse / Fine Feed G.B. <sup>Sliding</sup> Gear Shaft

**DENFORD MACHINE TOOLS LTD.**  
**(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.**  
**BRIGHOUSE,**  
**YORKSHIRE.**

DRAWN  
R. D. Derdowski.

CHECKED 

**PASSED**

DATE 22.1.70.

MAT. M.S.

MAT. SIZE 9" dia x 6 7/8" long.

|           |    |       |       |
|-----------|----|-------|-------|
| No. REQD. | 1. | SCALE | Full. |
|-----------|----|-------|-------|

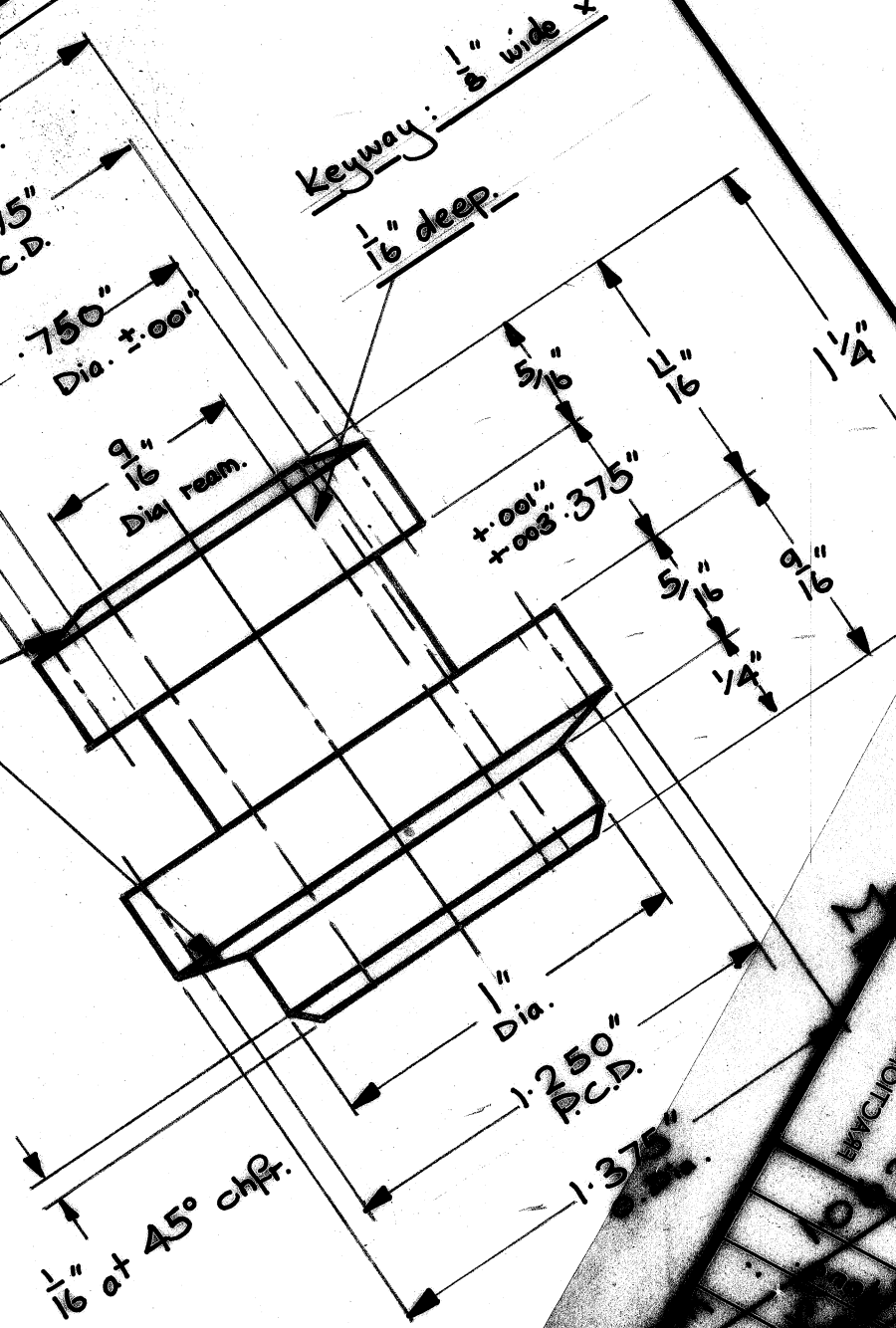
DRAWING No.

M.L 110/411

IF IN DOUBT ASK.

$\frac{3}{16}$ " at  $15^\circ$  max. chfr  
Teeth Round on  
outside edges only.

Keyway:  $\frac{1}{8}$ " wide x  
 $\frac{1}{16}$ " deep.



1.375" O.Dia -  
16 D.P.  
Whole

5" Viceroy P.C.S. Lathe: Coarse  
DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE, YORKSHIRE.

IF IN DOUBT ASK.

ALTERATIONS

1473/67 8.6.67

Redrawn 9.6.67

1519/67 5.12.67

1987/72 6.9.72

2 holes drill & tap 2BA  
x  $\frac{5}{16}$ " deep,  $\frac{1}{2}$  &  $\frac{1}{2}$  with  
item ML110/304

.7515"  
.7510"  
Dia  
Drive Fit

U/cut:  $\frac{1}{16}$ " wide x  $\frac{1}{64}$ "

Max. depth.

$\frac{7}{8}$ " Dia.

.349"  
.345"

1.046"

1.042"

1.374"

1.370"

$\frac{21}{64}$ "

$\frac{1}{32}$ " at 45° Max chfr.

on both sides.

1.200"  
Dia.

1.100"  
P.C.D.

TOOTH ROUND

22 Teeth - 20 D.P. - 20° Pressure Angle

Whole Tooth Depth - .1079"

Machine all over.

5" Viceroy P.C.S. & G.B. Lathes. - Cross Slide Gear Pinion

LIMITS ON DIMENSIONS UNLESS  
OTHERWISE STATED.

ANGULAR  $\pm 1^\circ$  3 PLACE DECIMAL  $\pm .005^\circ$

FRACTIONAL  $\pm .010$ " 4 PLACE DECIMAL  $\pm .0005$ "

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN

M M Souden.

CHECKED

PASSED

DATE

9.6.67

MAT.

M.S.

MAT. SIZE

1  $\frac{1}{4}$ " Dia x 1  $\frac{5}{8}$ "

No. REQD.

1

SCALE

Full

DRAWING No.

ML110/305

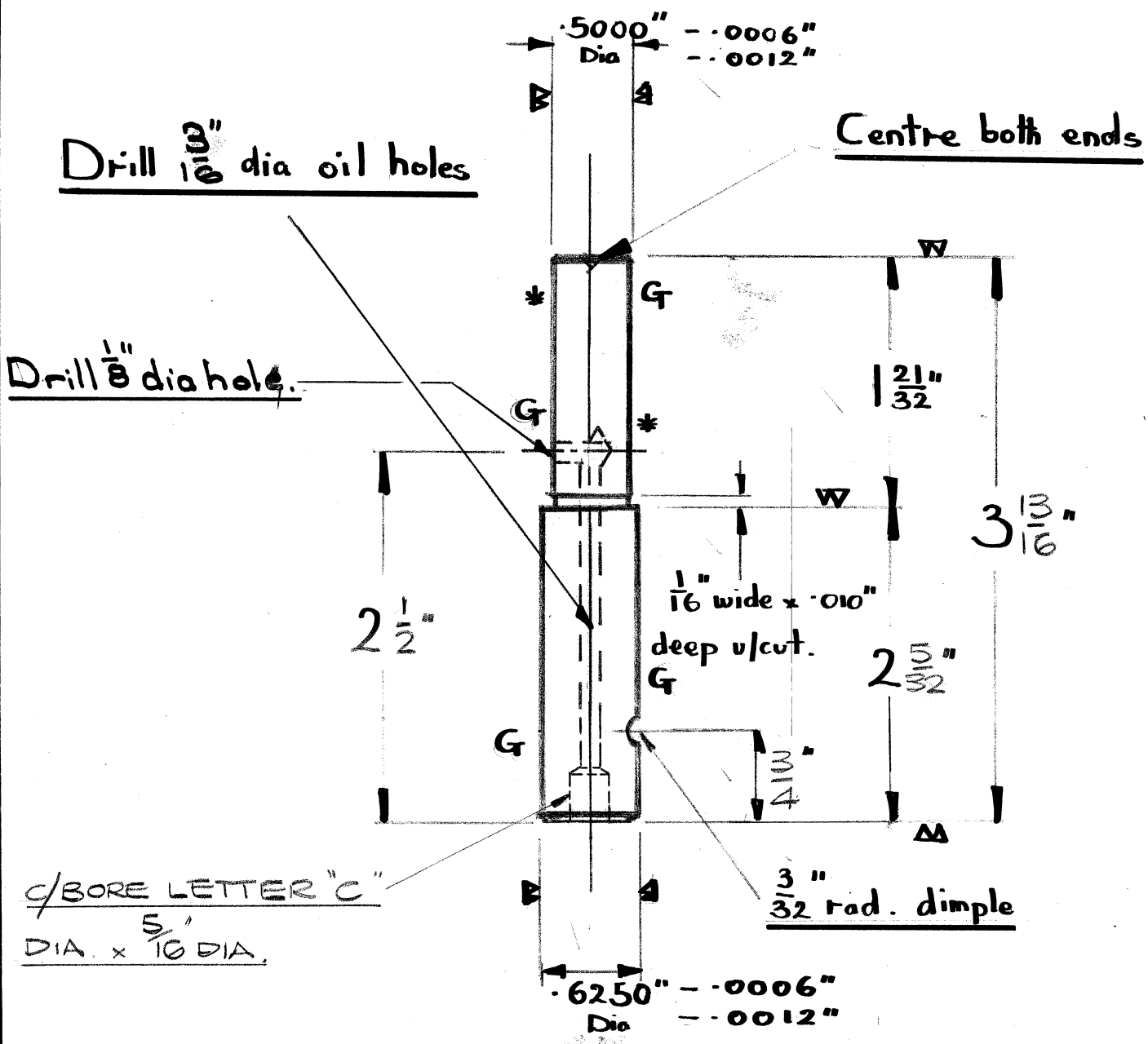
IF IN DOUBT ASK.

Redrawn 19-2-65  
1131/65 19-2-65

1643/65.  
14.4.65

2542/78.5 578

2543/78.10 578



Drill  $\frac{3}{16}''$  dia oil holes

Drill  $\frac{1}{8}''$  dia hole.

C/BORE LETTER "C"  
DIA. x  $\frac{5}{16}$  DIA.

Centre both ends

M/c at W

Cyanide Hdn at \*

Grind at G.

5" Viceroy P.C.S. Lathe : Cross-Slide Gear Shaft

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN M.M. Souden  
CHECKED AS  
PASSED  
DATE 19.2.65

MAT. Mild Steel  
MAT SIZE  $\frac{11}{16}''$  Dia x 4"  
No. REQD. 1 SCALE Full  
DRAWING No. ML110/306

1923/72, 4.2.72, II

FRACTIONAL  $\pm .010''$  4 PLACE DECIMAL  $\pm .0005''$ 

ML110/412



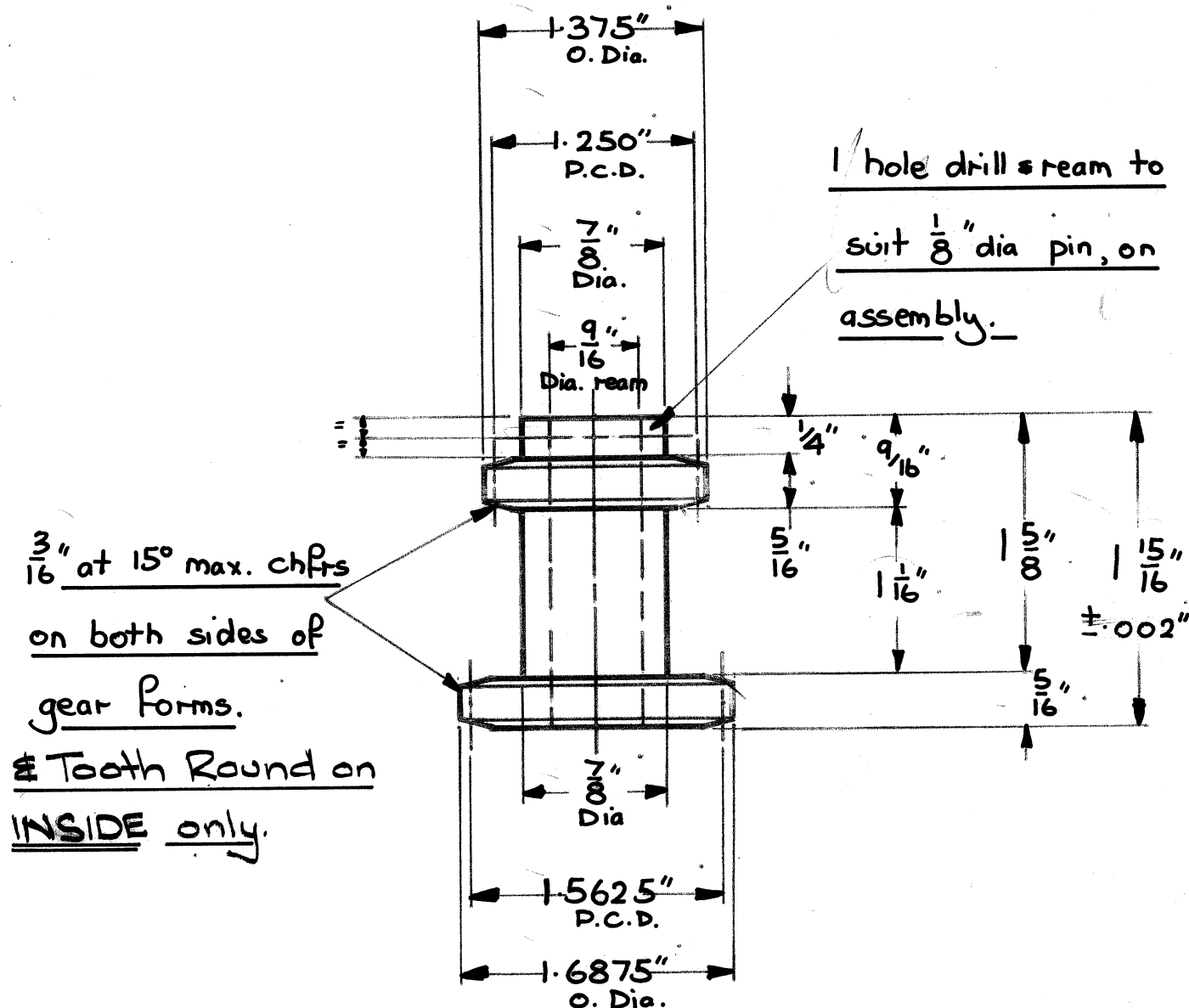
IF IN DOUBT ASK.

ALTERATIONS

Redrawn 16.11.66 B.

1760/70.24.4.70 R.R.

1923/72.4.2.72 Z



Machine all over.

1.6875" o.Dia - 25 teeth ; 1.375" o.Dia - 20 teeth

16 D.P. - 20° Pressure Angle.

Whole Tooth depth - .1348"

LIMITS ON DIMENSIONS UNLESS OTHERWISE STATED.

ANGULAR  $\pm \frac{1}{2}^\circ$  3 PLACE DECIMAL  $\pm .005^\circ$

FRACTIONAL  $\pm .010$  4 PLACE DECIMAL  $\pm .0005$

5" Viceroy P.C.S. Lathe. Coarse/Fine Feed. G.B. : Driving Gear.

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN M. M. Sowden.  
CHECKED [Signature]  
PASSED  
DATE 16.11.66

MAT. M.S.  
MAT. SIZE 1 3/4" dia x 2 3/16" long.  
No. REQD. 1 SCALE Full  
DRAWING No. ML110/414.

IF IN DOUBT ASK.

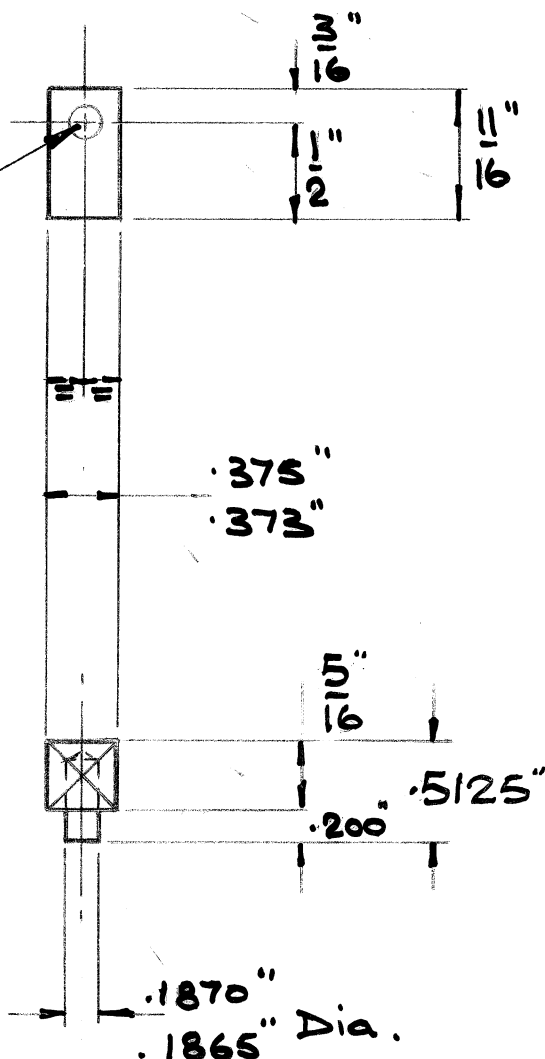
ALTERATIONS

1760/70.24.4.70.R.D.

1969/72.20.6.72.R.D.

Remove all sharp corners.

Mills Pin  $\frac{3}{16}$ " dia x  $\frac{7}{16}$ " long.  
Fit on assembly.



LIMITS ON DIMENSIONS UNLESS  
OTHERWISE STATED.

ANGULAR  $\pm \frac{1}{2}^{\circ}$  3 PLACE DECIMAL  $\pm .005^{\circ}$

FRACTIONAL  $\pm .010$  4 PLACE DECIMAL  $\pm .0005$

5" Viceroy P.C.S. Lathe: Coarse/Fine Feed G.B.:- Kicker Pin.

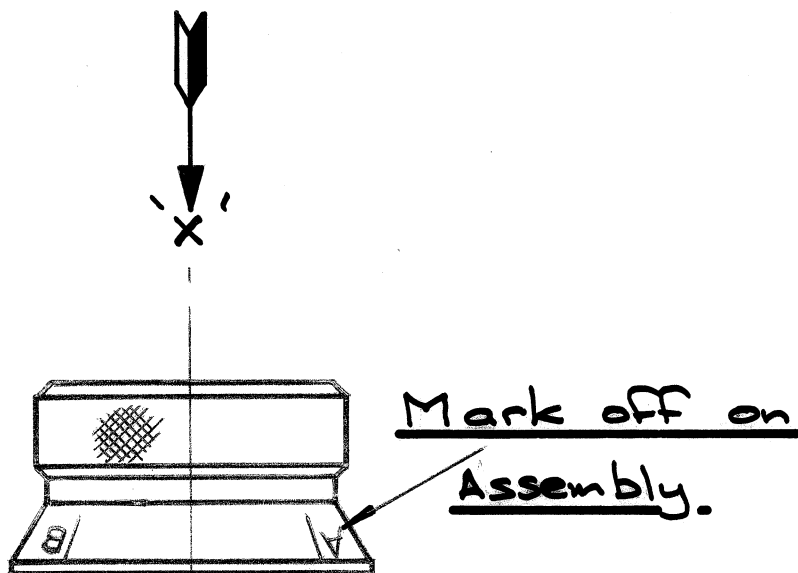
DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN  
R. Dendowski  
CHECKED  
PASSED  
DATE  
22.1.70.

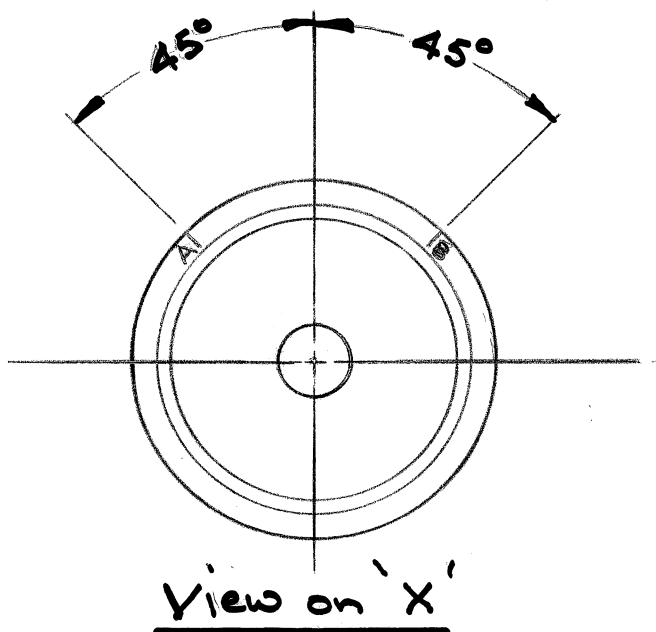
MAT. Key Steel.  
MAT. SIZE  $\frac{3}{8} \times \frac{5}{16} \times \frac{11}{16}$ " long.  
No. REQD. 1. SCALE Full.  
DRAWING No. M.L. 110/416.

IF IN DOUBT ASK.

ALTERATIONS



Delete letters A & B for  
Feedshaft & leadscrew dial (M.L.110/417B).



N.B. For all machining dim's see drg M.L.115/955.

5" Viceroy P.C.S. Lathes :- Coarse & St'd Feed dial (M.L.110/417A).

Feedshaft & Leadscrew Selector dial (M.L.110/417B).

LIMITS ON DIMENSIONS UNLESS  
OTHERWISE STATED.

ANGULAR  $\pm \frac{1}{2}^\circ$  3 PLACE DECIMAL  $\pm .005^\circ$

FRACTIONAL  $\pm .010$  4 PLACE DECIMAL  $\pm .0005$

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN R.D.  
CHECKED AR  
PASSED  
DATE 16.9.70.

MAT. M.S.  
MAT. SIZE 2" Dia x 1 1/4"  
No. REQD. 2 SCALE Full.  
DRAWING No.  
M.L.110/417A & B.

IF IN DOUBT ASK.

ALTERATIONS

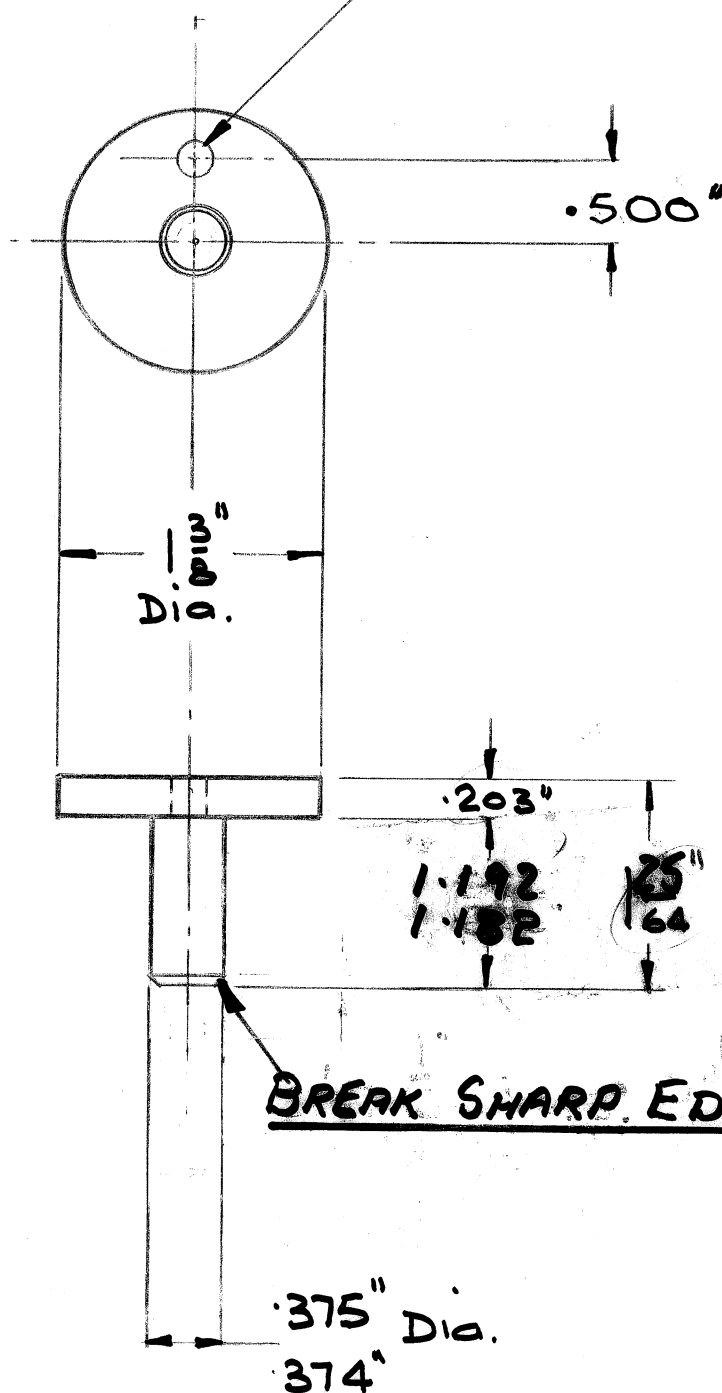
1949/723372 RD

1985/7225872 RP

Machine all over.

Remove all sharp  
corners.

1 hole drill & ream  $\frac{3}{16}$ " dia.



LIMITS ON DIMENSIONS UNLESS  
OTHERWISE STATED.

ANGULAR  $\pm \frac{1}{2}^\circ$  3 PLACE DECIMAL  $\pm .005^\circ$

FRACTIONAL  $\pm .010$  4 PLACE DECIMAL  $\pm .0005$

5" Viceroy P.C.S. Lathe:- Eccentric Kicker Pin Carrier.

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

DRAWN  
R. Dendowski  
CHECKED  
PASSED  
DATE  
17.9.69.

MAT. M.S.  
MAT. SIZE  $1\frac{3}{8}$ " dia x  $1\frac{1}{4}$ " long.  
No. REQD. 2. SCALE Full.  
DRAWING No.  
M.L.110/502.

**IF IN DOUBT ASK.**

ALTERATIONS  
Redrawn 8.12.69

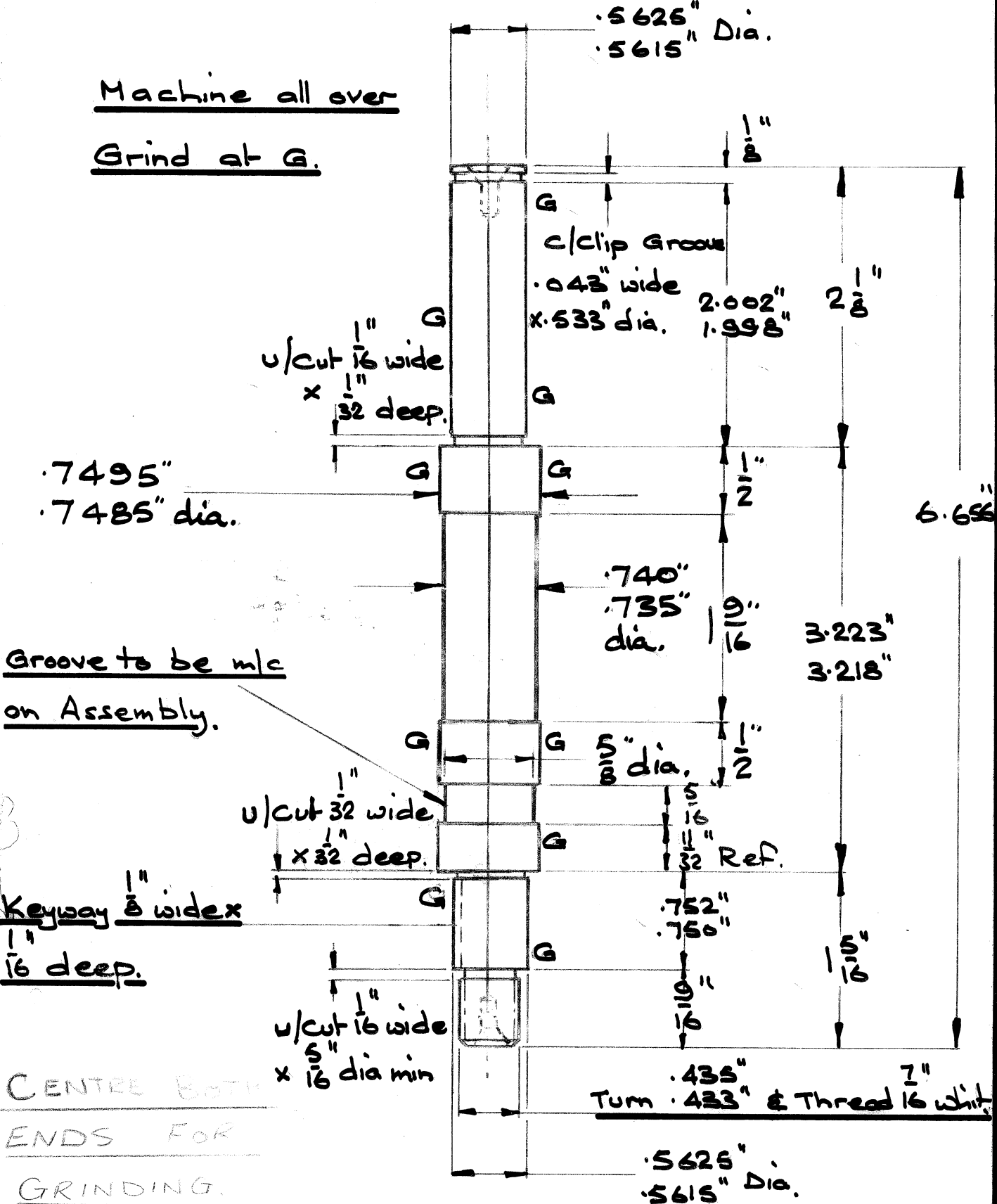
Redrawn 8.12.69.0

1760/72.24.4.70.R.D

1971/72, 21.6.72 RD.

2042/732087

Machine all over  
Grind at G.



Groove to be m/c  
on Assembly.

Keyway  $\frac{1}{8}$ " wider  
 $\frac{1}{4}$ " deep.

CENTRE BOTH  
ENDS FOR  
GRINDING.

5" Viceroy P.C.S. Lathe: Coarse / Fine Feed G.B.: Quad. Bracket Shift.

LIMITS ON DIMENSIONS UNLESS OTHERWISE STATED.

ANGULAR  $\pm \frac{1}{2}^\circ$  3 PLACE DECIMAL  $\pm .005''$

FRACTIONAL  $\pm .010''$  4 PLACE DECIMAL  $\pm .0005''$

DENFORD MACHINE TOOLS LTD.  
(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.  
BRIGHOUSE,  
YORKSHIRE.

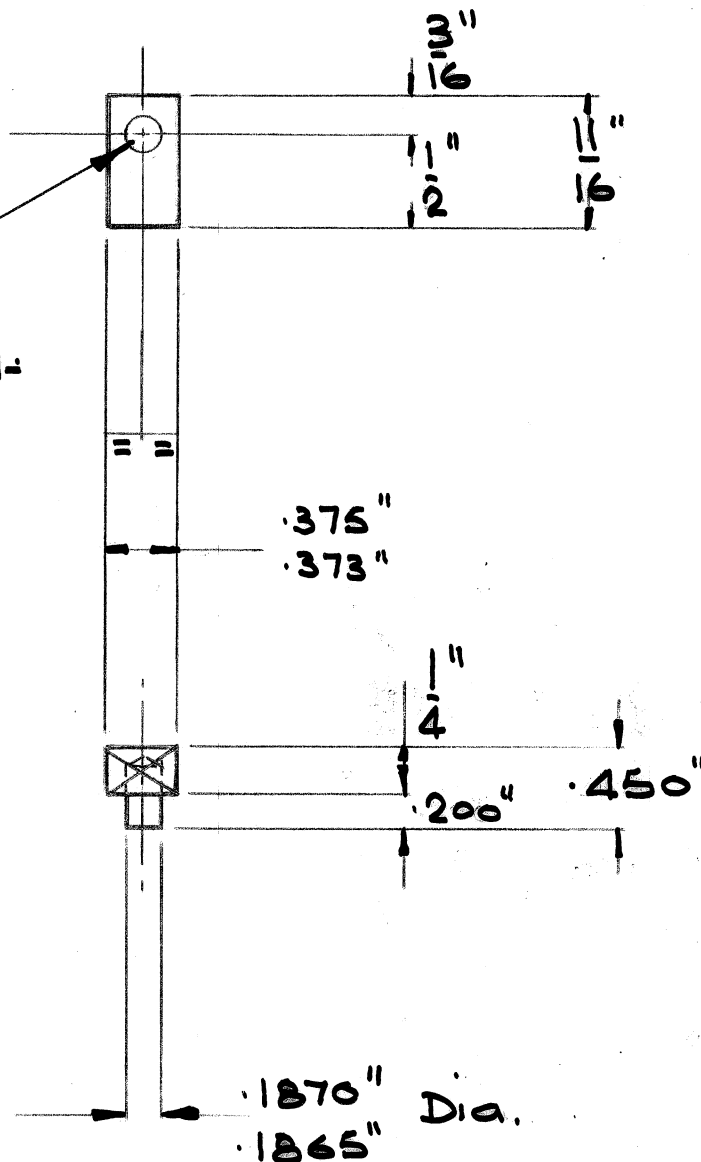
DRAWN  
R. Dendowski  
CHECKED  
PASSED  
DATE  
8.12.69.

|               |   |                       |       |
|---------------|---|-----------------------|-------|
| MAT.          |   | M.S.                  |       |
| MAT. SIZE     |   | 1" dia x 6 3/4" long. |       |
| No. REQD.     | 1 | SCALE                 | Full. |
| DRAWING No.   |   |                       |       |
| M.L. 110/413. |   |                       |       |

## ALTERATIONS

Mills Pin  $3''$  dia x  $5''$  long.

### Fit on assembly:



LIMITS ON DIMENSIONS UNLESS OTHERWISE STATED.

ANGULAR  $\pm 1^{\circ}$  3 PLACE DECIMAL  $\pm .005^{\circ}$

FRACTIONAL  $\pm .010"$  4 PLACE DECIMAL  $\pm .0005"$

5" Viceroy P.C.S. Lathe :- KICKER PIN.

**DENFORD MACHINE TOOLS LTD.**  
**(Inc.) DENFORD SMALL TOOLS (BRIG) LTD.**  
**BRIGHOUSE,**  
**YORKSHIRE.**

|         |                                                                                     |
|---------|-------------------------------------------------------------------------------------|
| DRAWN   | R Dendowski                                                                         |
| CHECKED |  |
| PASSED  |                                                                                     |
| DATE    | 10.9.69.                                                                            |

|               |  |                                      |             |
|---------------|--|--------------------------------------|-------------|
| MAT.          |  | Key Steel.                           |             |
| MAT. SIZE     |  | $3/8" \times 1/4" \times 15/16$ Bar. |             |
| No. REQD.     |  | 1.                                   | SCALE Full. |
| DRAWING No.   |  |                                      |             |
| M.L. 110/503. |  |                                      |             |