



DO NOT EDIT PROGRAM WITHOUT PERMISSION. USE PCR FORM.

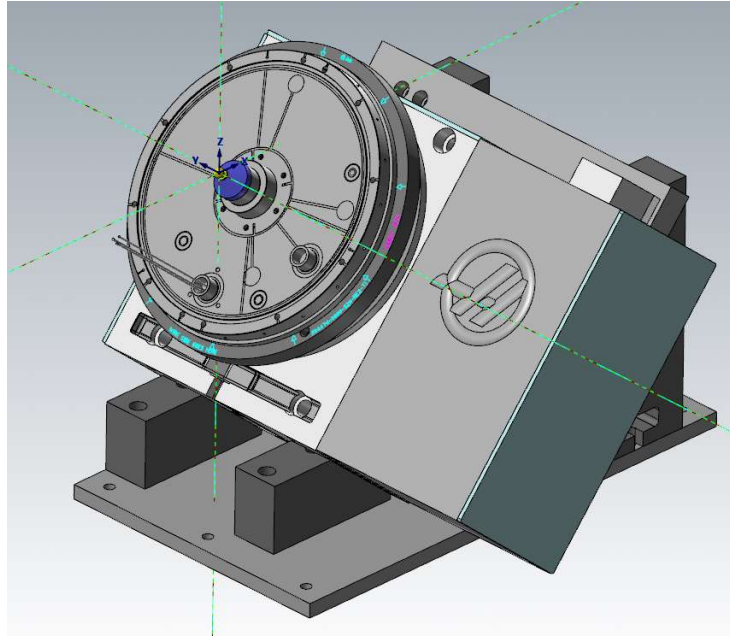
# SET-UP SHEET

PROGRAM #: 4474

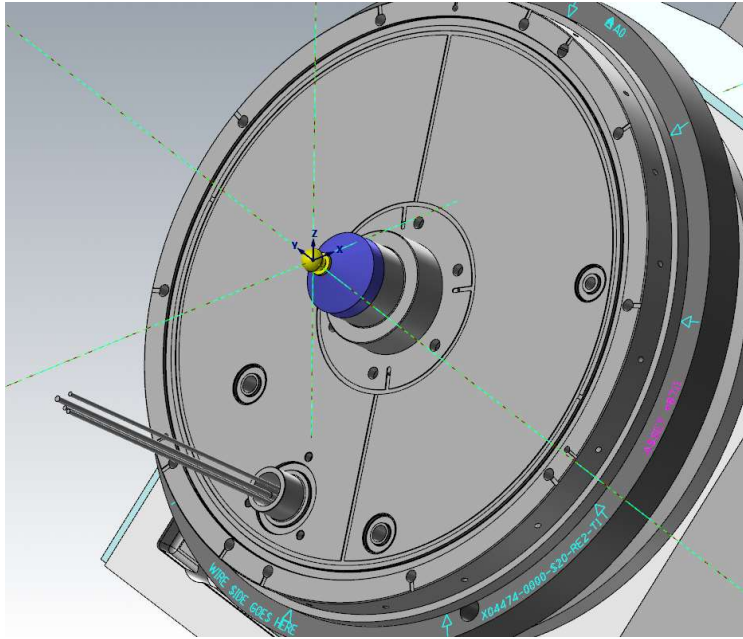
PROVEN: YES

<b>HOLDING:</b>	FIXTURE ASSET #611 AND #612	<b>EST. CUT TIME</b>	00:55:11	<b>OPERATION:</b>	04
<b>NC FILE:</b>	0044-3546 REV 02 MILL OP4 PROVEN.NCI	<b>PROGRAMMER:</b>	ADEM BEGIC	<b>REV:</b>	02
<b>MACHINE:</b>	HAAS WITH 4TH	<b>DRAWING: #:</b>	0044-3546		
<b>COMMENTS:</b>	FOLLOW IN PROGRAM INSTRUCTIONS - DRY RUN FIRST				

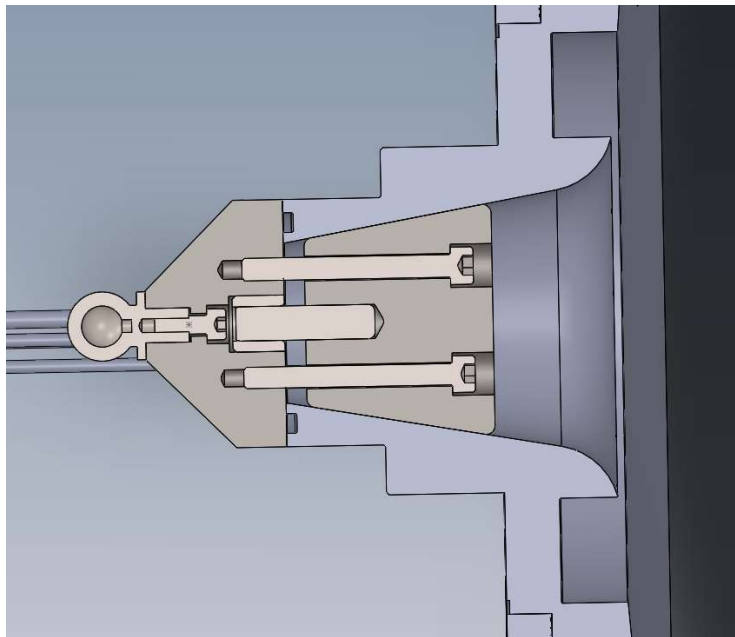
## ROTARY SETUP



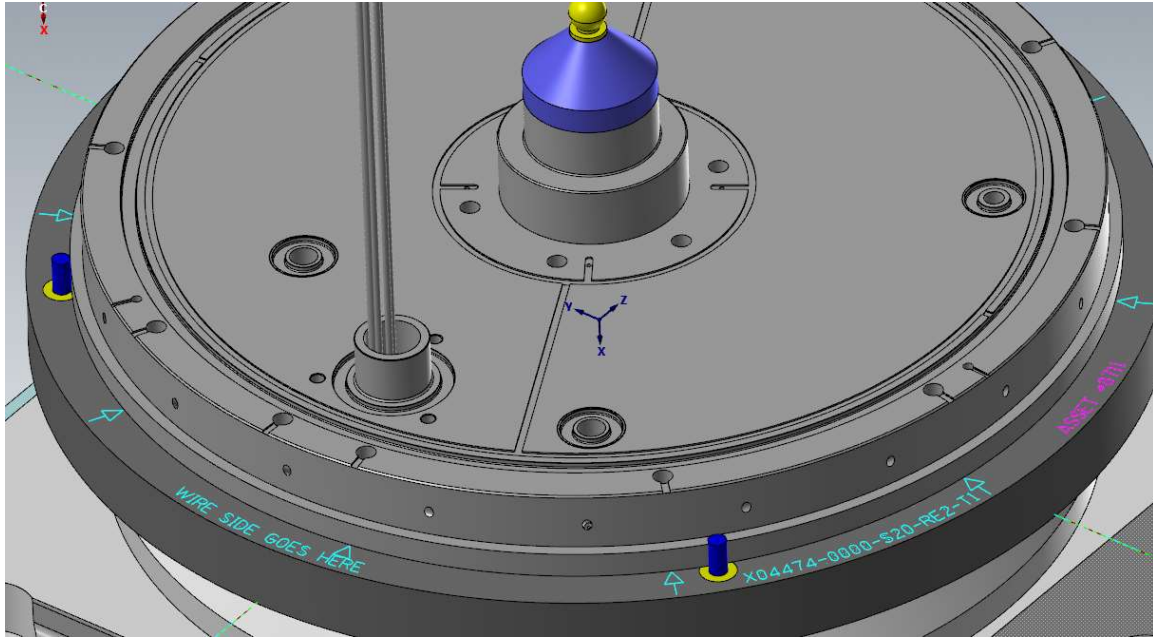
## G54 AT CENTER OF TOOLING BALL



### 1. INSTALL BALL INDICATOR PLUG AND CAP



## 2. PLACE PART AGAINST PINS. ALIGN HOLES.



PROGRAMMER INSTRUCTIONS	MACHINIST FEEDBACK
<p>DESCRIPTION OF OPERATIONS:                      DRILL HOLES WITH ANGLED ROTARY AXIS</p> <p>MATERIAL: 6061-T6 13.82" DIA FROM MILL OP2                      WORK HOLDING: FIXTURE ASSETS #8711 &amp; #8712                      AND HAAS HRT310 ROTARY AXIS</p> <p>WORK OFFSET : G54                      X ZERO: CENTER OF TOOLING BALL                      Y ZERO: CENTER OF TOOLING BALL                      Z ZERO: CENTER OF TOOLING BALL</p> <p>NOTES:                      - TOOLING BALL IS 0.500" DIA                      ASSEMBLY INSTRUCTIONS: REFER TO X04474-0000-T30                      1. INSTALL BALL INDICATOR PLUG AND CAP. USE TWO SCREWS                      2. PLACE AGAINST 1/4 PINS, ALIGN HOLES WITH ARROWS.                      WIRE SIDE IS AT THE BOTTOM OF THE FIXTURE.                      3. INSTALL 1/4-20 SCREWS AND NYLON WASHERS.</p>	<p><b>SETUP TIME</b> _____</p> <p><b>CYCLE TIME</b> _____</p> <p><b>WORK ORDER</b> _____</p> <p><b>NOTES</b></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>

**0044-3546 REV 02 MILL OP4 PROVEN.NCI**

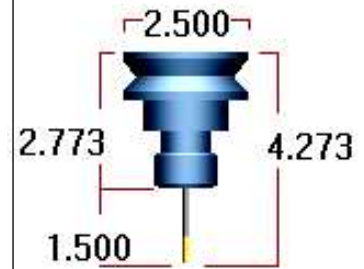
ESTIMATED TOTAL CYCLE TIME: 0 HOURS, 55 MINUTES, 11 SECONDS

<b>OP</b>	<b>TOOL</b>	<b>OPERATION</b>	<b>DESCRIPTION</b>	<b>COOLANT</b>	<b>RPM</b>	<b>FEED</b>	<b>D / H</b>
14	1	SPOT FACE	.125 HOLE	Flood	5000 RPM	2.0 /	1 / 1
15	1	SPOT FACE	.125 HOLE	Flood	5000 RPM	2.0 /	1 / 1
16	1	SPOT FACE	.125 HOLE	Flood	5000 RPM	2.0 /	1 / 1
18	2	SPOT	.125 HOLE	Flood	5000 RPM	7.0 /	2 / 2
19	2	SPOT	.125 HOLE	Flood	5000 RPM	7.0 /	2 / 2
20	2	SPOT	.125 HOLE	Flood	5000 RPM	7.0 /	2 / 2
22	3	DRILL	.125 HOLE TO DEPTH	Flood	4000 RPM	8.0 /	3 / 3
23	3	DRILL	.125 HOLE TO DEPTH	Flood	4000 RPM	8.0 /	3 / 3
24	3	DRILL	.125 HOLE TO DEPTH	Flood	4000 RPM	8.0 /	3 / 3
26	4	DRILL	.040 HOLE	Flood	9000 RPM	3.5 /	4 / 4
27	4	DRILL	.040 HOLE	Flood	9000 RPM	3.5 /	4 / 4
28	4	DRILL	.040 HOLE	Flood	9000 RPM	3.5 /	4 / 4

**TOOL LIST**

**T # 1 1/8 EM .500 LOC 3FL UNC ALUM ROUGH/FINISH**

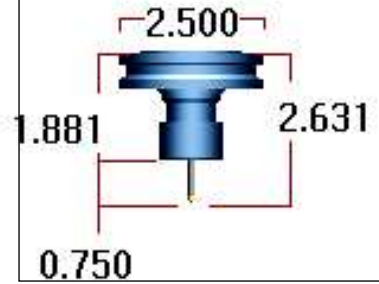
<b>TOOL MFG &amp; ID:</b> MA FORD 13812504	<b># FL</b> 3
<b>MILL HOLDER:</b> COLLET STUB LENGHT	<b>LOC:</b> 0.5
<b>MILL TOOL DIA:</b> 0.125	
<b>MILL TOOL RAD:</b> 0.0	<b>TIP DEG:</b> NA



**USED BY:** # 14 SPOT FACE .125 HOLE  
**USED BY:** # 15 SPOT FACE .125 HOLE  
**USED BY:** # 16 SPOT FACE .125 HOLE

**T # 2 SPOTTING DRILL 1/8-120 X 1.930AL COBALT**

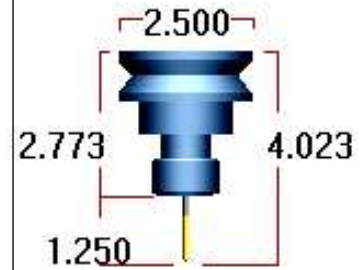
<b>TOOL MFG &amp; ID:</b> SLT 92125	<b># FL</b> 2
<b>MILL HOLDER:</b> CAT 40 - ER 16 STUBBY	<b>LOC:</b> 0.1
<b>MILL TOOL DIA:</b> 0.125	
<b>MILL TOOL RAD:</b> 0.0	<b>TIP DEG:</b> 120.0



**USED BY:** # 18 SPOT .125 HOLE  
**USED BY:** # 19 SPOT .125 HOLE  
**USED BY:** # 20 SPOT .125 HOLE

**T # 3 DRILL 1/8 STUB COBALT**

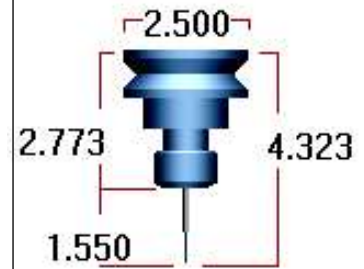
<b>TOOL MFG &amp; ID:</b> PTD 040308	<b># FL</b> 2
<b>MILL HOLDER:</b> COLLET STUB LENGHT	<b>LOC:</b> 0.875
<b>MILL TOOL DIA:</b> 0.125	
<b>MILL TOOL RAD:</b> 0.0	<b>TIP DEG:</b> 135.0



**USED BY:** # 22 DRILL .125 HOLE TO DEPTH  
**USED BY:** # 23 DRILL .125 HOLE TO DEPTH  
**USED BY:** # 24 DRILL .125 HOLE TO DEPTH

**T # 4 .040" DIA 14MMLOC DRILL**

<b>TOOL MFG &amp; ID:</b> HARVEY DQW0400-C8	<b># FL</b> 2
<b>MILL HOLDER:</b> COLLET STUB LENGHT	<b>LOC:</b> 0.6567
<b>MILL TOOL DIA:</b> 0.04	
<b>MILL TOOL RAD:</b> 0.0	<b>TIP DEG:</b> NA



**USED BY:** # 26 DRILL .040 HOLE  
**USED BY:** # 27 DRILL .040 HOLE  
**USED BY:** # 28 DRILL .040 HOLE