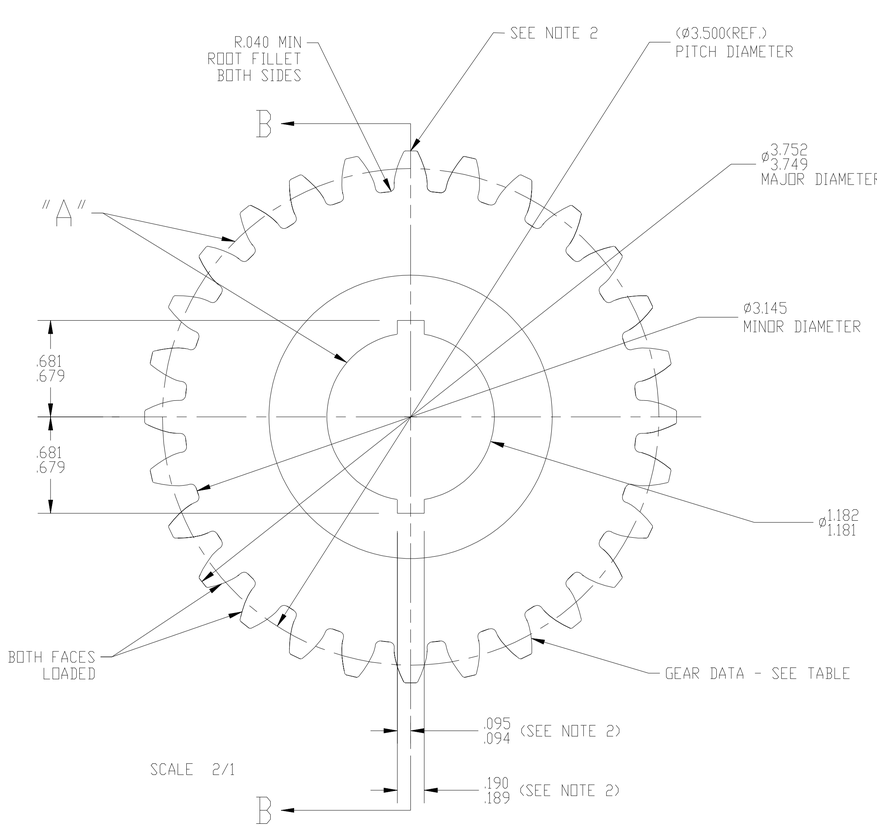
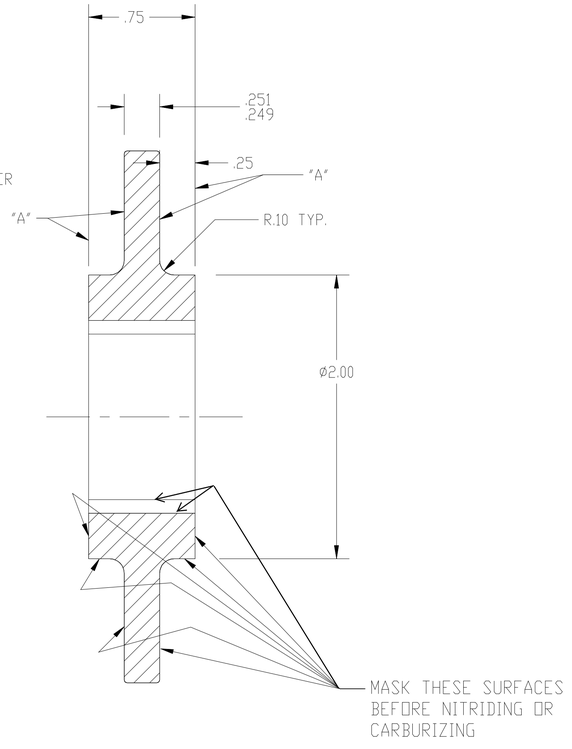


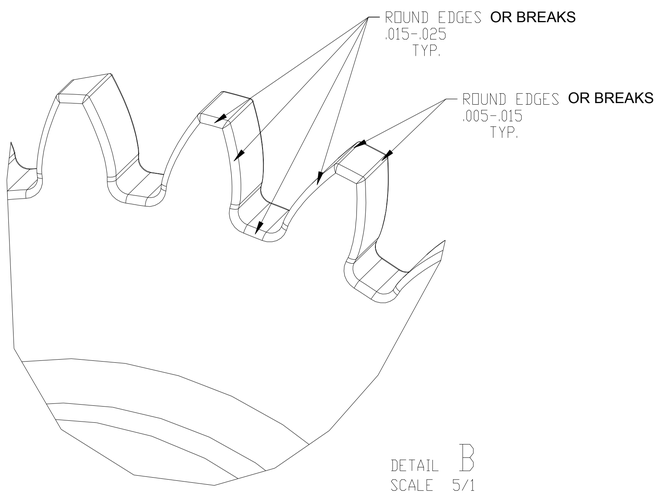
SCALE 2/1



SECTION B-B

NOTES:

1. "A" SURFACES AND P. D. OF TEETH MUST BE CONCENTRIC, PARALLEL, FLAT, SQUARE & TRUE AS APPLICABLE TO EACH OTHER WITHIN .001 FIR
2. LOCATE KEYWAY ON CENTERLINE OF TOOTH AS SHOWN WITHIN ± 0° 30'
3. MAXIMUM SURFACE ROUGHNESS 64 µIN. UNLESS OTHERWISE NOTED.
4. MATERIAL: FABRICATION AND INSPECTION MUST CONFORM TO SPECIFICATIONS SUPPLIED BY NASA. SEE PURCHASE ORDER AND PROCUREMENT SPECIFICATION FOR DETAILS.
5. GEAR TEETH SHALL HAVE INVOLUTE AND LEAD MODIFICATIONS. SEE PROCUREMENT SPECIFICATION FOR REQUIREMENTS.



DETAIL B
SCALE 5/1

GEAR DATA

NUMBER OF TEETH	28
DIAMETRAL PITCH	8
CIRCULAR PITCH	0.3927
WHOLE DEPTH	0.300
ADDENDUM	0.125
CHORDAL TOOTH THICKNESS (REF)	(0.191)
HELIX ANGLE	0°
PRESSURE ANGLE	20°
PITCH DIAMETER	3.500 in.
OUTSIDE DIAMETER	3.750 in.
ROOT FILLET	0.040 in. to 0.060 in.
MEASUREMENT OVER PINS	3.7867 in. / 3.7915 in.
PIN DIAMETER	0.216 in.
BACKLASH (REF)	(0.010)

CHG	ZONE	DESCRIPTION	APP/DATE

REVISIONS

PRIOR TO USE VERIFY THE INTENDED PURPOSE IN PDM ("FOR" ATTRIBUTE)

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

CONTRACT

CONTRACTOR

TOLERANCE ON	
.X	± 0.0
.XX	± 0.01
.XXX	± 0.005
FRACTION	± 1/32
ANGULAR	± 0.50°
BREAK EDGES .01 to.02	

TASK ORDER

DRAFTER

ENGINEER

DESIGNER

DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994

PDM REL LEVEL: *** PDM REVISION: ***

PDM DATABASE: ***

MODEL NAME: CD-851944-C

CHECK FOR ANY OUTSTANDING ECO'S PRIOR TO USE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
JOHN H. GLENN RESEARCH CENTER
LEWIS FIELD
CLEVELAND, OHIO

FOUR SQUARE GEAR TESTING

PITTING TEST GEAR - HIGH TORQUE

SIZE	DRAWING NUMBER	REV	BLDG	AREA
D	CD851944-4	A	23	CE-1

UNITS: INCH

SCALE:	INITIAL REL DATE	SHEET	DISCIPLINE
1/1	04/28/2010	1 OF 1	MECHANICAL

PRO/E VERSION: Wildfire 2.0

SIZE D DRAWING NUMBER CD851944-4 REV -