

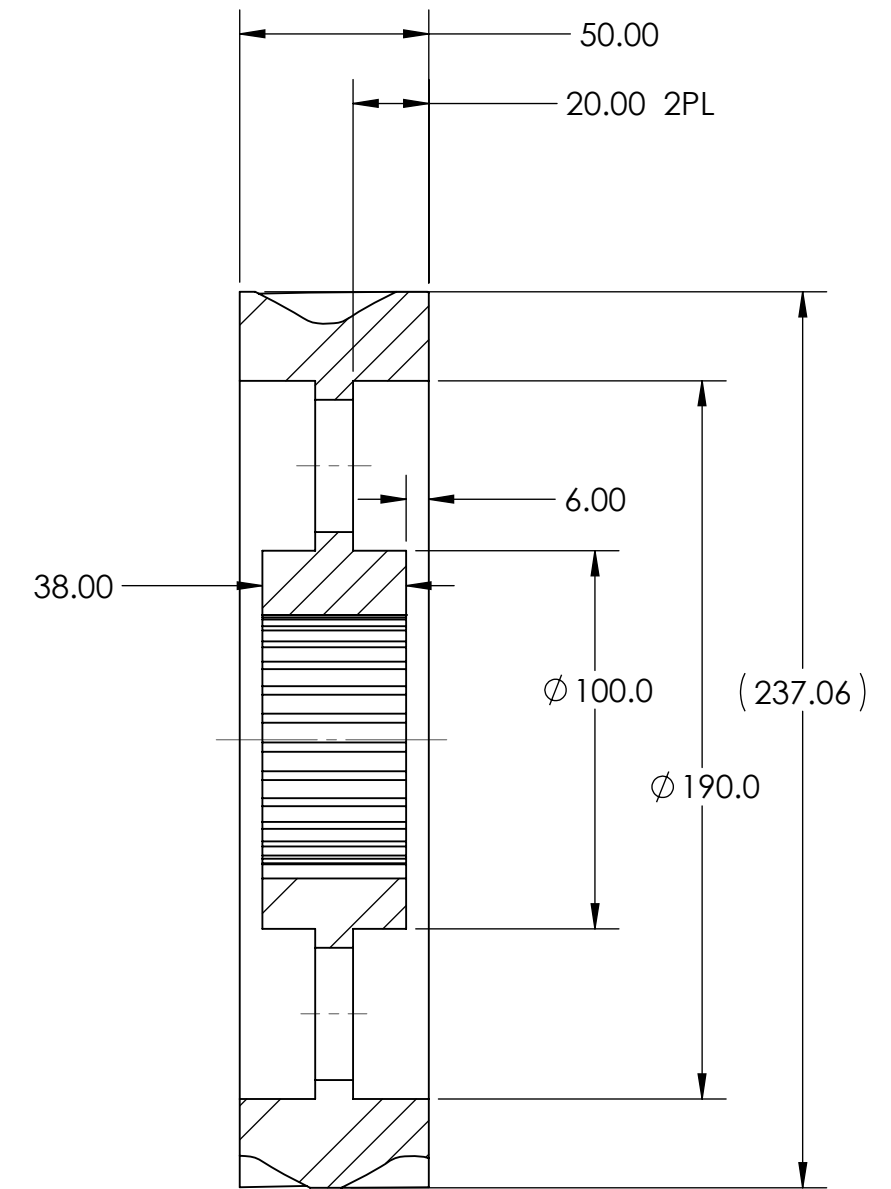
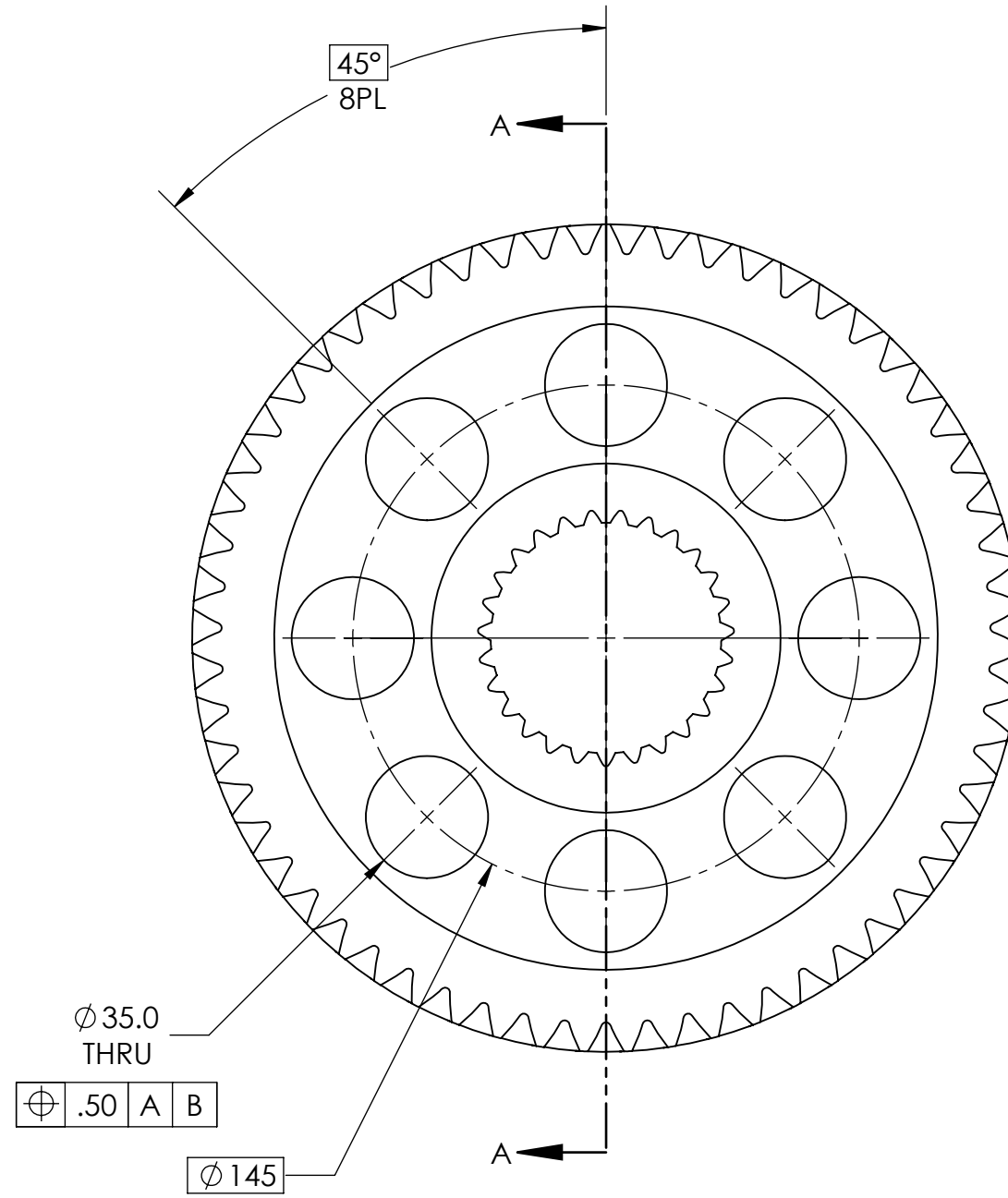
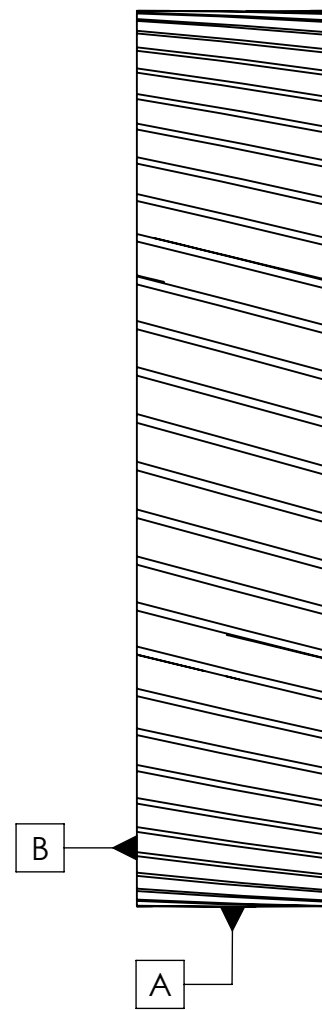
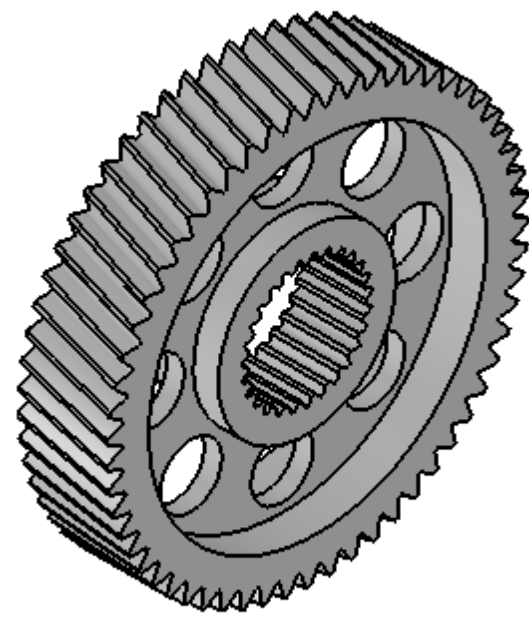
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REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED



SECTION A-A
SCALE 1 : 2

NOTES:

1. MAKE FROM AISI 8620 STEEL.
2. CASE HARDEN.
SURFACE HARDNESS: Rc58-60, CORE HARDNESS: Rc32-38
EFFECTIVE CASE DEPTH: .40 TO .80MM
3. GEAR TOOTH SURFACE FINISH TO BE REMCHEM ISOTROPIC SUPERFINISH.
4. PART TO BE CLEAN AND FREE FROM DIRT, GREASE, AND OIL.
5. PACKAGE IN VCI PAPER.

PROPRIETARY AND CONFIDENTIAL
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UNLESS OTHERWISE SPECIFIED:		DRAWN	NAME	DATE	HUMMINBIRD EV, INC. 5787 NAYLOR AVE. LIVERMORE, CA 94551 TITLE: <h2>G1 GEAR</h2>
DIMENSIONS ARE IN MILLIMETERS		CHECKED	HM	7/29/16	
TOLERANCES:		ENG APPR.			
ANGULAR: MACH ± 1° BEND ± 1°		MFG APPR.			
ONE PLACE DECIMAL ± .25		Q.A.			SIZE DWG. NO. REV C 0040233 0
TWO PLACE DECIMAL ± .13		COMMENTS:			
THREE PLACE DECIMAL ± .025					SCALE: 1:1 WEIGHT: SHEET 1 OF 2
INTERPRET GEOMETRIC TOLERANCING PER:		MATERIAL		FINISH	
SEE NOTES		SEE NOTES		DO NOT SCALE DRAWING	
NEXT ASSY	USED ON				
APPLICATION					

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G1 GEAR DATA


NUMBER OF TEETH	59
NORMAL MODULE	3.750
NORMAL PRESSURE ANGLE	25°
HELIX ANGLE	15°
HELIX HAND	RIGHT
HELIX LEAD	2685.573
PITCH DIAMETER (PD)	229.055
BASE DIAMETER	206.276
ADDENDUM MODIFICATION	-0.25
TOOTH TIP DIAMETER	234.300/234.400
MAX. FORM DIAMETER	219.787
ROOT DIAMETER	217.374/217.524
NORMAL CIRC. TOOTH THICKNESS AT PD	4.815/4.855
TIP RADIUS or CHAMFER	0.10
MIN. FACE WIDTH	50.00
BALL DIAMETER	8.000
MEASUREMENT OVER TWO BALLS	240.829/240.970
AGMA ACCURACY per AGMA 2000-AB	Q11B
RUNOUT TOLERANCE	0.036
PITCH VARIATION	±0.009
PROFILE TOLERANCE	0.012
LEAD TOLERANCE	0.011
TOOTH-TO-TOOTH ERROR	0.015
TOTAL COMPOSITE ERROR	0.051
MATING GEAR NUMBER OF TEETH	33
CENTER DISTANCE	178.585±0.025
TOOTH TIP RELIEF	0.003/0.005
LEAD CROWNING	0.004/0.008

G1 SPLINE DATA

APPLICABLE STANDARD	ANSI DIAMETRAL B92 1 1996
ROOT AND FIT	FILLET ROOT SIDE FIT
MANUFACTURING METHOD, DIN	BROACHING
DIAMETRICAL PITCH	10.000
MODULE	2.540
NUMBER OF TEETH	27
PRESSURE ANGLE	30.000 DEG
PITCH DIAMETER	68.580
BASE DIAMETER	59.392
TOLERANCE CLASS, ANSI	CLASS 5
FIT CLASS, ANSI	H
TOLERANCE GRADE, DIN	8
DEVIATION, DIN	H
MAJOR DIAMETER MINIMUM	73.152
MINOR DIAMETER MAXIMUM	73.690
MINOR DIAMETER MINIMUM	66.040
MINOR DIAMETER MAXIMUM	66.167
ADDENDUM	1.270
DEDENDUM	2.286
FILLET RADIUS	0.864mm
SPACE WIDTH, BASIC	3.990mm

h Inspection	
Pin_Diameter	4.38912mm
Measurement_Between_Pins_Act_Max	62.277mm
Measurement_Between_Pins_Act_Min	62.211mm
Measurement_Between_Pins_Eff_Min	62.122mm
Chordal_Measurement_Teeth_to_Gage_Over	6
Chordal_Measurement	41.130mm/41.160mm

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MATERIAL				
SEE NOTES				
FINISH				
SEE NOTES				
APPLICATION				
DO NOT SCALE DRAWING				

SIZE	DWG. NO.	REV
C	0040233	0
SCALE: 1:1	WEIGHT:	SHEET 2 OF 2

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