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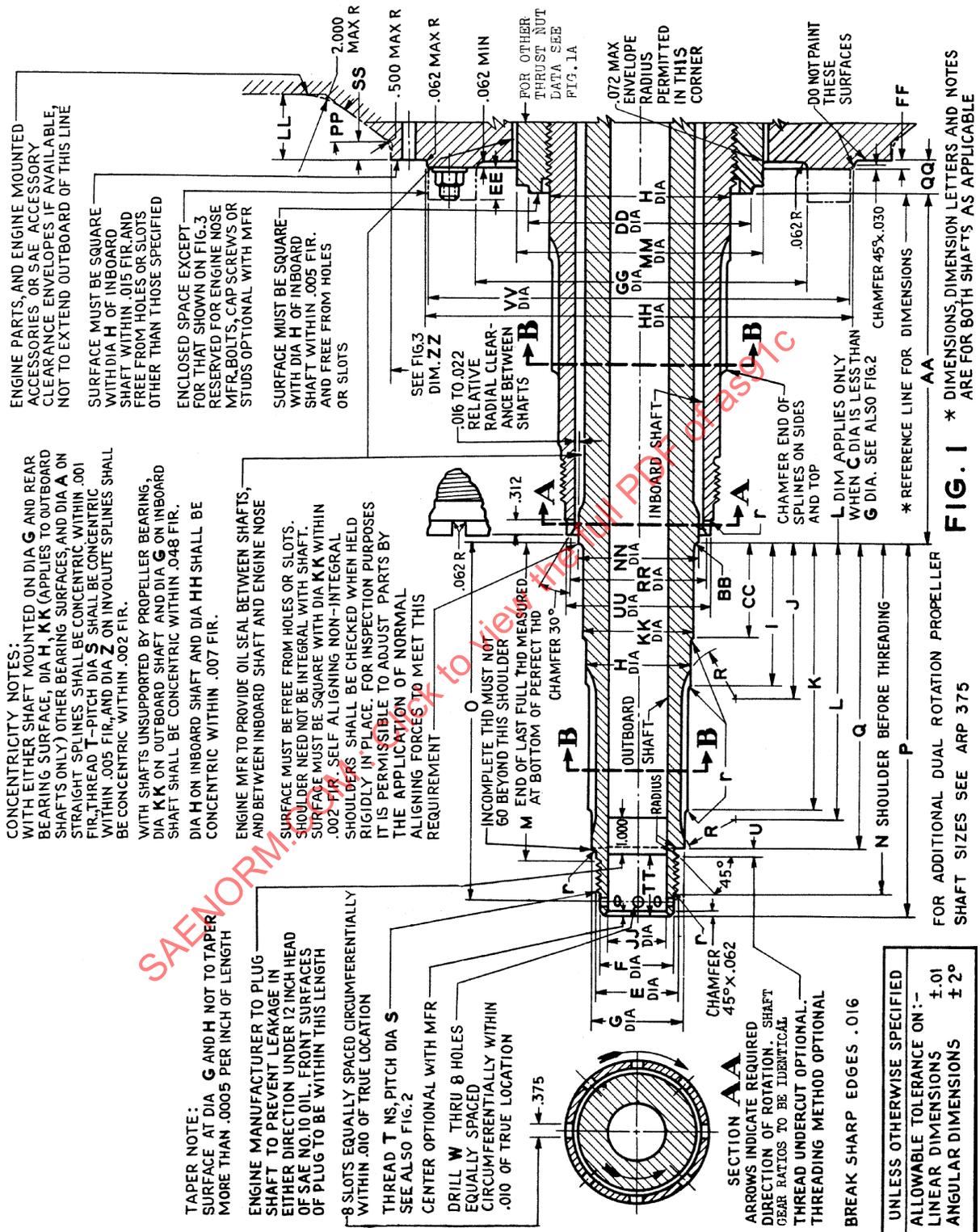
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FEDERAL SUPPLY CLASS

RATIONALE

THIS DOCUMENT HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE 5-YEAR REVIEW POLICY.



ENGINE PARTS, AND ENGINE MOUNTED ACCESSORIES OR SAE ACCESSORY CLEARANCE ENVELOPES IF AVAILABLE, NOT TO EXTEND OUTBOARD OF THIS LINE

SURFACE MUST BE SQUARE WITH DIA H OF INBOARD SHAFT WITHIN .015 FIR AND FREE FROM HOLES OR SLOTS OTHER THAN THOSE SPECIFIED

ENCLOSED SPACE EXCEPT FOR THAT SHOWN ON FIG. 3 RESERVED FOR ENGINE NOSE MFR, BOLTS, CAP SCREWS OR STUDS OPTIONAL WITH MFR

SURFACE MUST BE SQUARE WITH DIA H OF INBOARD SHAFT WITHIN .005 FIR, AND FREE FROM HOLES OR SLOTS

CONCENTRICITY NOTES:
 WITH EITHER SHAFT MOUNTED ON DIA G AND REAR BEARING SURFACE, DIA H, K, K (APPLIES TO OUTBOARD SHAFTS ONLY) OTHER BEARING SURFACES, AND DIA A ON STRAIGHT SPLINES SHALL BE CONCENTRIC WITHIN .001 FIR, THREAD T-PITCH DIA S SHALL BE CONCENTRIC WITHIN .005 FIR, AND DIA Z ON INVOLUTE SPLINES SHALL BE CONCENTRIC WITHIN .002 FIR.
 WITH SHAFTS UNSUPPORTED BY PROPELLER BEARING, DIA K ON OUTBOARD SHAFT AND DIA G ON INBOARD SHAFT SHALL BE CONCENTRIC WITHIN .048 FIR.
 DIA H ON INBOARD SHAFT AND DIA HH SHALL BE CONCENTRIC WITHIN .007 FIR.
 ENGINE MFR TO PROVIDE OIL SEAL BETWEEN SHAFTS, AND BETWEEN INBOARD SHAFT AND ENGINE NOSE

SURFACE MUST BE FREE FROM HOLES OR SLOTS. SHOULDER NEED NOT BE INTEGRAL WITH SHAFT. SURFACE MUST BE SQUARE WITH DIA K, K WITHIN .002 FIR. SELF-ALIGNING NON-INTEGRAL SHOULDERS SHALL BE CHECKED WHEN HELD RIGIDLY IN PLACE. FOR INSPECTION PURPOSES IT IS PERMISSIBLE TO ADJUST PARTS BY THE APPLICATION OF NORMAL ALIGNING FORCES TO MEET THIS REQUIREMENT
 INCOMPLETE THD MUST NOT GO BEYOND THIS SHOULDER END OF LAST FULL THD MEASURED.
 M AT BOTTOM OF PERFECT THD
 CHAMFER 30°

TAPER NOTE:
 SURFACE AT DIA G AND H NOT TO TAPER MORE THAN .0005 PER INCH OF LENGTH
 ENGINE MANUFACTURER TO PLUG SHAFT TO PREVENT LEAKAGE IN EITHER DIRECTION UNDER 12 INCH HEAD OF SAE NO. 10 OIL. FRONT SURFACES OF PLUG TO BE WITHIN THIS LENGTH
 8 SLOTS EQUALLY SPACED CIRCUMFERENTIALLY WITHIN .010 OF TRUE LOCATION
 THREAD T NS, PITCH DIA S SEE ALSO FIG. 2
 CENTER OPTIONAL WITH MFR
 DRILL W THRU 8 HOLES EQUALLY SPACED CIRCUMFERENTIALLY WITHIN .010 OF TRUE LOCATION

CHAMFER 45° x .062
 ARROWS INDICATE REQUIRED DIRECTION OF ROTATION. SHAFT GEAR RATIOS TO BE IDENTICAL.
 THREAD UNDERCUT OPTIONAL.
 THREADING METHOD OPTIONAL.
 BREAK SHARP EDGES .016

UNLESS OTHERWISE SPECIFIED
ALLOWABLE TOLERANCE ON :-
LINEAR DIMENSIONS ±.01
ANGULAR DIMENSIONS ±2°

FIG. 1 * DIMENSIONS, DIMENSION LETTERS AND NOTES ARE FOR BOTH SHAFTS AS APPLICABLE

FOR ADDITIONAL DUAL ROTATION PROPELLER SHAFT SIZES SEE ARP 375

PREPARED BY SAE COMMITTEE E-25, GENERAL STANDARDS FOR AEROSPACE PROPULSION SYSTEMS

SAE Aerospace
 An SAE International Group

AEROSPACE STANDARD
 PROPELLER SHAFT ENDS, DUAL ROTATION
 (PROPELLER SUPPLIED BEARING)

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 SHEET 1 OF 5

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ISSUED 1943-07 REVISED 1954-12 NONCURRENT 1973-08 REAFFIRMED NONCURRENT 2006-05

LET	TOLERANCE		40 — 60***		50 — 70***		60 — 80		60L — 80	
	OUTBOARD SHAFT	INBOARD SHAFT	STRAIGHT SPLINES	INVOLUTE SPLINES	STRAIGHT SPLINES	INVOLUTE SPLINES	INVOLUTE SPLINES	INVOLUTE SPLINES	INVOLUTE SPLINES	INVOLUTE SPLINES
A	+ .000	-.002	3.117	—	3.804	—	—	—	—	—
B	+ .000	-.005	—	4.680	—	5.539	4.680	6.411	4.680	6.411
C	MAX		2.875	4.436	3.554	5.294	4.436	6.151	4.436	6.151
C	MIN		2.783	—	3.462	—	—	—	—	—
D	+ .010	-.020	—	4.321	—	5.179	4.321	6.036	4.321	6.036
D	± .0008		.3040	—	.375	—	—	—	—	—
E	+ .0000	-.0030	—	.2233	—	.2233	.2233	.2233	.2233	.2233
F	+ .000	-.004	2.807	4.245	3.432	5.120	4.245	5.995	4.245	5.995
G	+ .000	-.005	2.688	4.062	3.312	4.938	4.062	5.812	4.062	5.812
H	+ .000	-.002	2.812	4.296	3.500	5.156	4.296	6.011	4.296	6.011
I	+ .000	-.002	3.125	4.687	3.812	5.562	4.687	6.426	4.687	6.426
J	± .020	± .025	4.438	1.812	7.375	1.812	8.250	3.250	13.250	3.250
K	± .030	± .040	4.938	2.312	7.875	2.312	8.750	3.750	13.750	3.750
L	± .020		8.250	5.375	11.188	5.375	12.297	7.400	17.297	7.400
M	± .020	—	8.375	—	11.312	—	—	—	—	—
N	+ .000-*	+ .010-*	9.475	8.360	12.412	8.360	13.808	10.360	18.808	10.360
O	+ .010	-.030	10.641	9.735	13.578	9.735	15.183	11.610	20.183	11.610
P	± .015	—	10.938	—	13.812	—	15.438	—	20.438	—
Q	± .020		11.312	10.625	14.250	10.625	15.688	12.500	20.688	12.500
R	± .020	—	9.375	8.250	12.312	8.250	13.688	10.250	18.688	10.250
S	MAX		1.530	2.030	1.530	2.030	2.030	2.030	2.030	2.030
S	MIN		1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125
T	+ .030	-.000	.062	.062	.062	.062	.062	.062	.062	.062
U	+ .0000	-.0030	2.7560	—	3.3810	—	—	—	—	—
V	+ .0000	-.0050	—	4.1668	—	5.0418	4.1668	5.9168	4.1668	5.9168
W	—	—	2.8125-12	4.250-8	3.4375-12	5.125-8	4.250-8	6.000-8	4.250-8	6.000-8
X	± .030	—	.170	.250	.170	.250	.250	.250	.250	.250
Y	APPROX		—	.068	—	.068	.068	.068	.068	.068
Z	± .0100	—	.2656	—	.2656	—	.2656	—	.2656	—
AA	—	—	16	32	16	32	44	32	44	44
BB	—	—	7/16	—	7/16	—	7/16	7/16	7/16	7/16
CC	THEO	—	—	4.5714	—	5.4286	4.5714	6.2857	4.5714	6.2857
DD	± .040	—	10.688	—	10.688	—	12.562	—	12.562	—
EE	MAX	—	.094	—	.094	—	.094	—	.094	—
FF	± .020	—	2.375	—	2.375	—	4.938	—	5.938	—
GG	MAX	—	.750	—	.750	—	.750	—	.750	—
HH	MIN	—	.312	—	.312	—	.312	—	.312	—
II	MIN	—	7.750	—	8.750	—	9.625	—	9.625	—
JJ	± .001	—	10.123	—	11.123	—	12.625	—	12.625	—
KK	+ .005	—	2.188	—	2.812	—	3.562	—	3.562	—
LL	+ .005	—	3.1498(80MM BRG)	—	3.8191(97MM BRG)	—	4.7246(120MM BRG)	—	4.7246(120MM BRG)	—
MM	± .005	—	2.062 **	—	2.062 **	—	2.062 **	—	2.062 **	—
NN	MIN	—	3.594	—	4.344	—	5.375	—	5.375	—
OO	MIN	—	35° **	—	35° **	—	35° **	—	35° **	—
PP	± .025	—	.938	—	.938	—	.938	—	.938	—
QQ	—	—	3.852	—	4.602	—	5.688	—	5.688	—
RR	MIN	—	.500	—	.500	—	.500	—	.500	—
SS	± .030	—	3.000	—	3.000	—	3.000	—	3.000	—
TT	—	—	4.000	—	4.812	—	5.781	—	5.781	—
UU	MAX	—	10.102	—	11.072	—	12.574	—	12.574	—

INBOARD AXIAL DIMENSIONS ARE FROM THRUST NUT

M DIM. MAX LIMIT GIVES MIN FULL THREAD

* MINUS VALUE DEPENDS ON METHOD OF THREADING AND THD RUNOUT RELATION TO SHOULDER Q

TO OBTAIN DIM. FOR FULL NUMBER OF PITCHES, WHEN DESIRED, DEDUCT BASIC M FROM BASIC N

M DIM. DOES NOT APPLY WHEN UNDERCUT IS USED

** LL TO BE 4.000 AND PP TO BE 45° WHEN PRACTICABLE

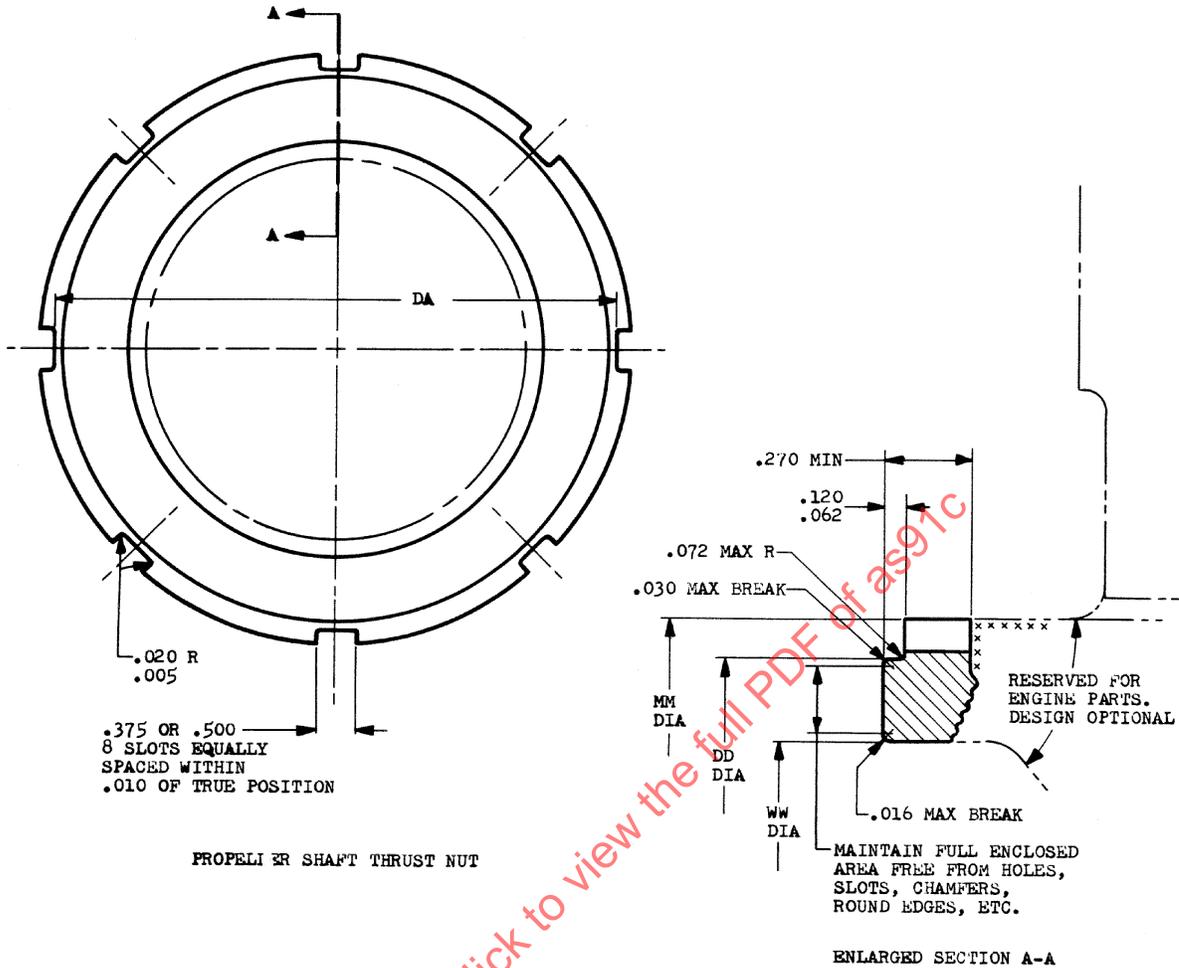
*** INACTIVE FOR NEW DESIGN

TABLE FOR FIG. 1 AND 2

UNLESS OTHERWISE SPECIFIED	
ALLOWABLE TOLERANCE ON:-	
LINEAR DIMENSIONS	±.01
ANGULAR DIMENSIONS	±2°

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PROPELLER SHAFT THRUST NUT

ENLARGED SECTION A-A

LETTER	TOLERANCE	SHAFT SIZE			
		40-60***	50-70***	60-80	60L-80
DA	±.010	5.880	6.770	7.500	7.600
DD	±.010	5.812	6.688	7.562	7.562
MM	MAX	6.188	7.062	7.938	7.938
	MIN #	6.120	6.995	7.910	7.910
WW	MAX	5.010	5.885	6.760	6.760

*** INACTIVE FOR NEW DESIGN.

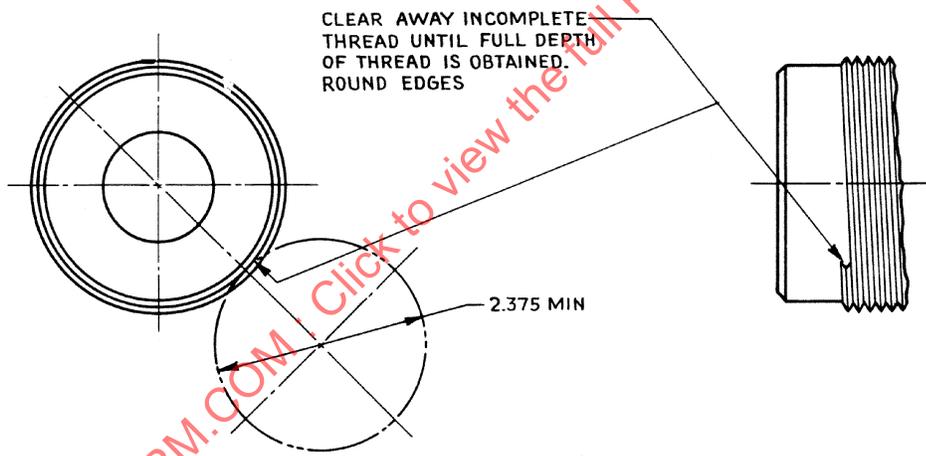
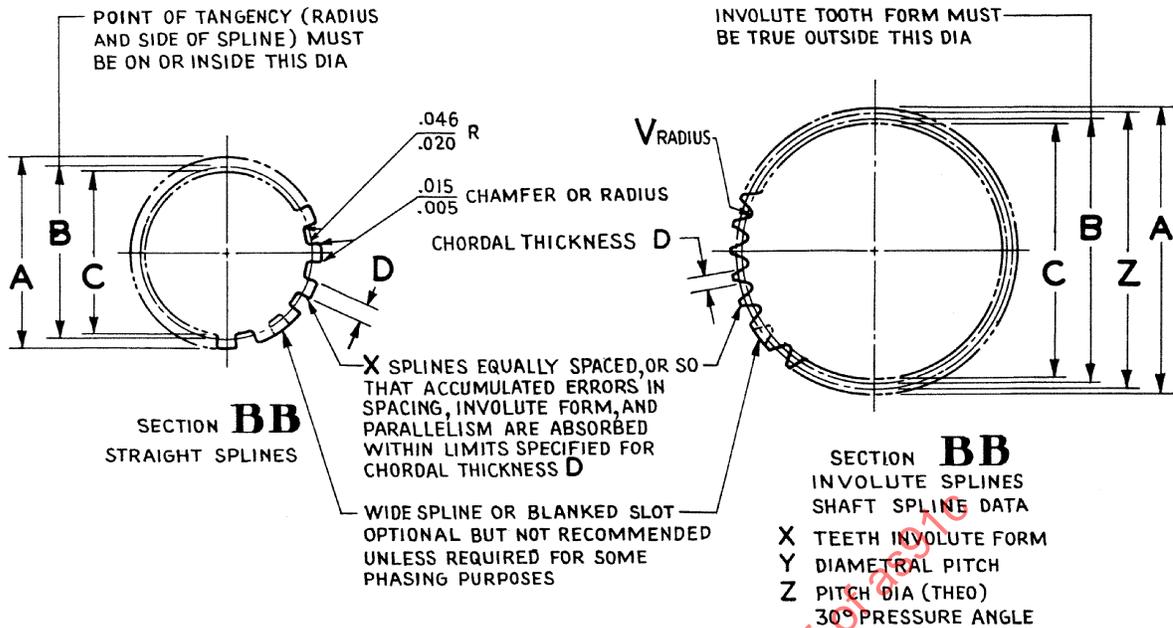
MIN VALUE OF MM APPLIES ONLY TO .270 MIN LENGTH DETAILED ABOVE, BEYOND WHICH MM MAX ONLY APPLIES AND MM MIN MAY SUIT DESIGN AS FAR AS ENGINE NOSE OUTLINE.

FIG. 1A

UNLESS OTHERWISE SPECIFIED
 BREAK ALL EDGES .005-.016
 ALLOWABLE TOLERANCE ON: -
 LINEAR DIMENSIONS ±.01
 ANGULAR DIMENSIONS ±2°

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REMOVAL OF INCOMPLETE THREAD
METHOD OF REMOVAL OPTIONAL

FIG. 2

UNLESS OTHERWISE SPECIFIED	
ALLOWABLE TOLERANCE ON :-	
LINEAR DIMENSIONS	±.01
ANGULAR DIMENSIONS	± 2°