

PROPELLER SHAFT ENDS, DUAL ROTATION (PROPELLER SUPPLIED BEARING)

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CONCENTRICITY NOTES:

WITH EITHER SHAFT MOUNTED ON DIA G AND REAR BEARING SURFACE, DIA H KK GF (AS APPLICABLE) AND OTHER BEARING SURFACES 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,
OIA KK ON OUTBOARD SHAFT AND DIAG ON INBOARD
SHAFT SHALL BE CONCENTRIC WITHIN .048 FIR.

DIA H ON INBOARD SHAFT AND DIA H H 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. SHOULD NOT BE INTEGRAL WITH SHAFT.

SHOULDER NEED NOT BE INTEGRAL WITH DIA K K WITHIN 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

TAPER NOTE:

**TAPE RULE.
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**

SHAP 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 DIAS-

SEE ALSO FIG.2
CENTER OPTIONAL WITH MER-

DRILL W THRU 8 HOLES-

EQUALLY SPACED
CIRCUMFERENTIALLY
OIA OF TRUE LOCATION

.010 OF TRUE LOCATION

0.375

SECTION A
ROWS INDICATE REG

DIRECTION OF ROTATION BEAR RATIOS TO BE IDEAL

THREAD UNOERCUT O

READING METHOD

PEAK SHARP EDGES

LESS OTHERWISE SP

ALLOWABLE TOLERANCES IN DIMENSIONS

MOLECULAR DIMENSIONS

FOR ADDITIONAL DUAL ROTATION PROPELLER SHAFT SIZES SEE A5.91

SIZES SEE AS 91

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

FIG. 1

-2-

LET	TOLERANCE		41 — 60		51 — 70		65 — 80		80 — 90	
	OUT-BOARD SHAFT	IN-BOARD SHAFT	INVOLUTE SPLINES	INVOLUTE SPLINES	INVOLUTE SPLINES	INVOLUTE SPLINES	INVOLUTE SPLINES	INVOLUTE SPLINES	INVOLUTE SPLINES	INVOLUTE SPLINES
A	+0.000	-.005	3.083	4.680	3.750	5.539	5.250	6.411	6.411	7.554
B	MAX.		2.917	4.436	3.583	5.294	5.000	6.151	6.151	7.294
C	+0.000	-.020	2.850	—	3.517	—	4.900	—	—	—
D	+0.010	-.020	—	4.321	—	5.179	—	6.036	6.036	7.179
E	+0.0000	-.0030	.1299	.2233	.1299	.2233	.1953	.2233	.2233	.2234
F	+0.000	-.004	2.807	4.245	3.432	5.120	4.870	5.995	5.995	7.120
G	+0.000	-.005	2.688	4.062	3.312	4.938	4.688	5.812	5.812	6.938
H	+0.000	-.002	2.812	4.296	3.500	5.156	4.875	6.011	6.011	7.156
I	+0.000	-.002	3.125	4.687	3.812	5.562	5.281	6.426	6.426	7.570
J	±.020	±.025	4.438	1.812	7.375	1.812	11.250	3.250	15.125	3.312
K	±.030	±.040	4.938	2.312	7.875	2.312	11.750	3.750	15.625	3.812
L	±.020	—	8.250	5.375	11.188	5.375	16.125	7.400	20.750	8.000
M	+0.000*	+0.010*	9.475	8.360	12.412	8.360	18.297	10.360	23.735	11.610
N	+0.010	-.030	10.641	9.735	13.578	9.735	19.672	11.610	25.110	13.110
O	±.015	—	10.938	—	13.812	—	20.062	—	25.562	—
P	±.020	—	11.312	10.625	14.250	10.625	20.312	12.500	25.812	14.062
Q	±.010	±.020	9.375	8.250	12.312	8.250	18.188	10.250	23.625	11.500
R	MAX		1.530	2.030	1.530	2.030	2.030	2.030	2.030	3.030
r	MIN		1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125
r	+0.030	-.000	.062	.062	.062	.062	.062	.062	.062	.062
S	+0.0000	-.0030	2.7560	—	3.3810	—	—	—	—	—
S	+0.0000	-.0050	—	4.1668	—	5.0418	4.7918	5.9168	5.9168	—
S	+0.0000	-.0080	—	—	—	—	—	—	—	7.0418
T	—	—	2.8125-12	4.250-8	3.4375-12	5.125-8	4.875-8	6.000-8	6.000-8	7.125-8
U	±.030	—	.170	.250	.170	.250	.250	.250	.250	.250
V	APPROX	—	.035	.068	.035	.068	.060	.068	.068	.068
W	±.0100	—	.2656	—	.2656	—	.2656	—	.2656	—
X	—	—	36	32	44	38	41	44	44	52
Y	—	—	12/24	7/16	12/24	7/16	8/16	7/16	7/16	7/16
Z	THEO	—	3.0000	4.5714	3.6667	5.4286	5.1250	6.2857	6.2857	7.4286
AA	±.040	—	10.688	—	10.688	—	16.062	—	17.625	—
BB	MAX	—	.094	—	.094	—	.094	—	.094	—
CB	±.020	—	—	—	—	—	7.875	—	8.875	—
CC	±.020	—	2.375	—	2.375	—	3.875	—	4.875	—
CF	+0.0000	—	—	—	—	—	5.3149	—	6.4567	—
DD	±.010	—	5.812	—	6.688	—	7.562	—	8.750	—
EE	MAX	—	.750	—	.750	—	.750	—	1.000	—
FF	±.010	—	.312	—	.312	—	.312	—	.312	—
GG	MIN	—	7.750	—	8.750	—	9.625	—	11.375	—
HH	±.001	—	10.123	—	11.123	—	12.625	—	14.373	—
JJ	+0.005	—	2.188	—	2.812	—	4.125	—	5.156	—
KK	+0.0000	—	3.1498 (80 MM BRG)	—	3.8191 (97 MM BRG)	—	5.3543 (86 MM BRG)	—	6.4960 (104 MM BRG)	—
LL	MIN	—	2.062**	—	2.062**	—	4.000	—	4.000	—
MM	MAX	—	6.188	—	7.062	—	7.938	—	9.125	—
NN	+0.000	—	3.604	—	4.354	—	5.812	—	6.938	—
PP	MIN	—	35°**	—	35°**	—	45°	—	45°	—
QQ	±.035	—	.938	—	.938	—	.938	—	.938	—
RR	—	±.010	—	3.852	—	4.602	—	5.688	—	6.750
SS	MIN	—	.500	—	.500	—	.500	—	.500	—
TT	±.030	—	3.000	—	3.000	—	2.000	—	2.000	—
UU	—	+0.010	—	4.000	—	4.812	—	5.781	—	6.875
VV	MAX	—	10.102	—	11.072	—	12.574	—	14.250	—
WW	MAX	—	—	—	—	—	6.792	—	7.938	—

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

TABLE FOR FIG. 1, IA AND 2

UNLESS OTHERWISE SPECIFIED

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

-3-

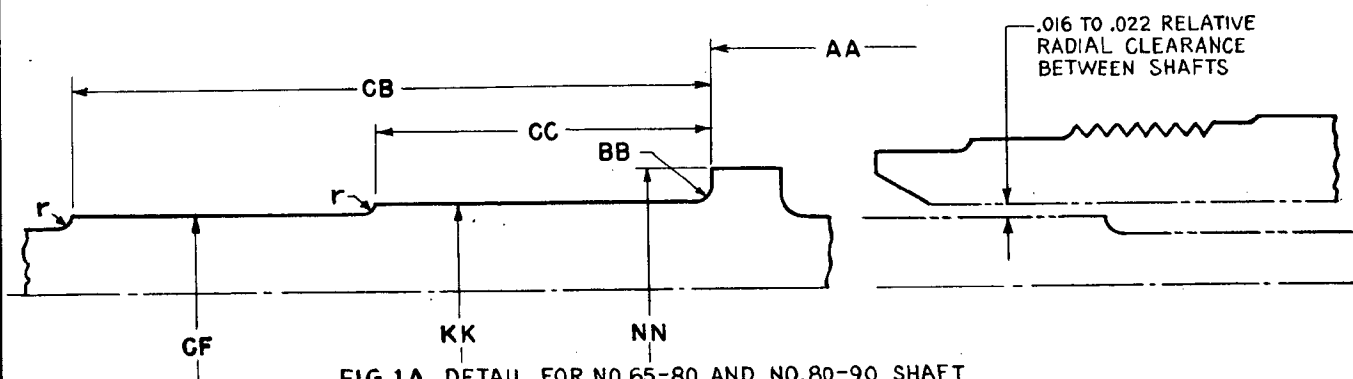
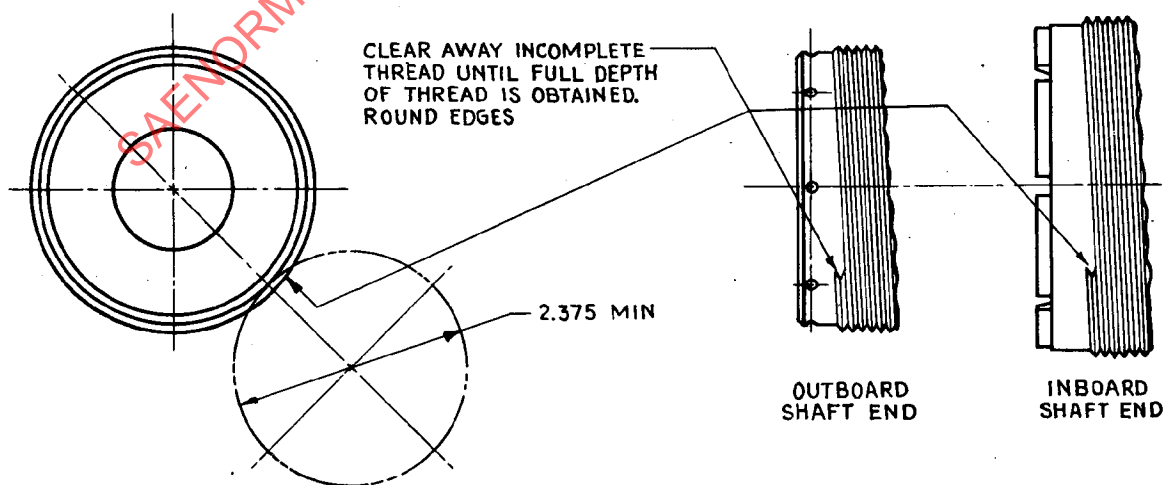
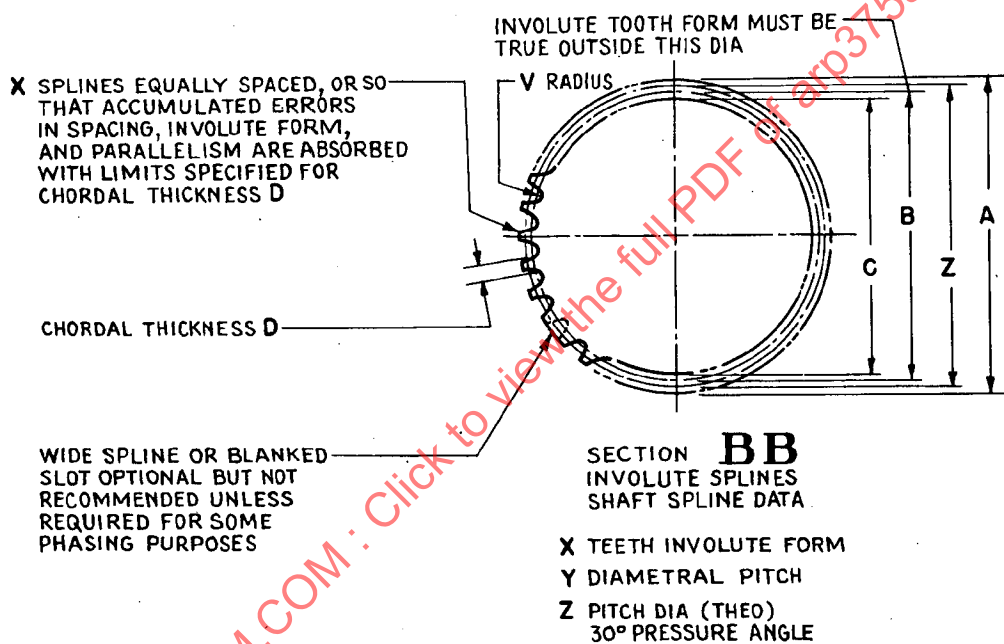


FIG. 1A DETAIL FOR NO.65-80 AND NO.80-90 SHAFT



REMOVAL OF INCOMPLETE THREAD
METHOD OF REMOVAL OPTIONAL

UNLESS OTHERWISE SPECIFIED
ALLOWABLE TOLERANCE ON:-
LINEAR DIMENSIONS $\pm .01$
ANGULAR DIMENSIONS $\pm 2^\circ$

FIG. 2