SENSENICH BROTHERS

World's Largest Manufacturers of Wood Aircraft Propellers

LITITZ, PENNA.

Adjoining Lancaster Municipal Airport

Right on the Nose!



ow to select and select and select and select and install a SENSENICH properties.

COPYRIGHT 1944 SENSENICH BROS. LITITZ, PA., U. S. A. omplete Information about
SENSENICH Propellers for Aircraft
up to 250 H.P. Also Test Clubs.

The SENSENICH Guarantee

All Sensenich propellers are guaranteed to be free from defects in materials and workmanship, and to fulfill to the satisfaction of the customer, the service for which they were designed and constructed.

Sensenich propellers are sold with the understanding that the customer must be satisfied after actual flight test on his own airplane. Any Sensenich propeller which fails to meet this test, or which shows defects of material or workmanship will be repaired or replaced without additional expense.

We cannot, of course, be held responsible for defects caused by accidents or improper care.

SENSENICH BROTHERS . LITITZ, PA.

Adjoining Lancaster Municipal Airport West Coast Branch: Glendale, California

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SENSENICH PROPELLERS RECOMMENDED FOR VARIOUS AIRCRAFT AND ENGINES

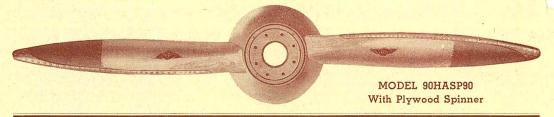


Every effort has been made to list all planes and engines currently in use. However, some errors or omissions are inevitable due to incomplete records available. If you do not find your propeller listed here, consult the Design & Designation Change list on page 11. If it is not there, specify aircraft and engine model numbers when ordering propeller.

	Airplane	Model	Engine Mfg.	Engine Model	H.P.	Recommended Sensenich Propeller Note
	Aeromarine Klemm	L 26, L 26 A	Leblond	5 D	65	84
,					26	63 A
,	Aeronca	C 2 C 3	Aeronca	E 113, A, B, C	36	69 A 33
	Aeronca	C 3	Aeronca	E 113, C	40	69 A 33
	Aeronca	C 3 S	Aeronca	E 113, C	40	69 A 33
	Aeronca	K	Aeronca Aeronca	E 113 CB, CD, CDB	42-45	69 A 35
	Aeronca	K	Aeronca	E 113 CB, CD, CDB	40	72 A 30
	Aeronca	KS	Aeronca	E 113 CB, CD, CDB	42-45	72 A 31
	Aeronca	K S K C	Continental	A 40 4	40	69 J
	Aeronca	LA	Leblond	5 E, 5 DE	70	78 R 52
	Aeronca	LB	Leblond	5 DF, 5 F	85-90	78 R 54
	Aeronca	LC	Warner	Scarab, Jr.	90	80 W (1) 84 J (1)
	Aeronca	LČS	Warner	Scarab, Jr.	90	
	Aeronca Aeronca	K C A, 50 C, 50 TC	Continental	A 50	50	76 B 51
	Aeronca	S 50 C	Continental	A 50	50	76 B 47, 76 B 49
	Aeronca '	50 F, KF	Franklin	4 AC 150	50	70 F 45
	Aeronca	S 50 F	Franklin	4 AC 150	50	70 F 43
	Aeronca	50 L, 50 LA, 50 TL	Lycoming	O 145 A 1	50	70 L 45
	Aeronca	50 L, 50 LA, 50 TL	Lycoming	O 145 A 2	55	70 L 47
	Aeronca	60 F, 60 TF	Franklin	4 AC 150	60	70 F 47
	Aeronca	60 F	Franklin	4 AC 171	60	72 F 40
	Aeronca	65 C, 65 CA	Continental	A 65	65	72 C 42, 72 C 44
	Aeronca	S 65 C, S 65 CA	Continental	A 65	65 65	76 C 40, 76 C 42 70 LY 34, 70 LY 36
	Aeronca	65 LA, 65 LB	Lycoming	O 145 B 2	65	70 L1 34, 70 L1 30 72 C 42, 72 C 44
	Aeronca	TAC, L 3	Continental	A 65	65	70 LY 34, 70 LY 36
	Aeronca	65 TC, 65 TL, TAL	Lycoming	O 145 B 2	65	72 F 42, 72 F 44
1	Aeronca	65 TF, TAF	Franklin	4 AC 176 B 2	05	72 F 42, 72 F 44
			Funk	E	63	755 CF
	Akron Funk	Funk B	Lycoming	GO 145 C 2	75	76 L 54
	Akron Funk	Funk L	Lycoming	GO 143 G 2		
		D 2	Szekely	SR 3	45	755
-	American Eaglet	B 3	Salmson	AD 9	40	A 1
	American Eaglet	231	Samoon		C Just Vary	
	American Eagle	101, A 1	Curtiss	OX 5	90	102
	American Eagle	129, 201	Kinner	K 5	100	90 BA 49 (1)
	American Eagle	127, 201				
	Arrow	F	Ford	V 8	82-90	90 E
	MIOW					

RECOMMENDED PROPELLERS

Airplane	Model	Engine Mfg.	Engine Model	H.P.	Recommended Sensenich Propeller	Note
Arrow Sport Arrow Sport		Leblond Kinner	5 D, 5 DE K 5	65 100	84 90 BA 49	(1)
Avro Avian		Cirrus Mark	II or III	85-80	84 E	
Bellanca Bellanca	14 9 B 14 12 F 3	Ken Royce Franklin	5 F, 5 G 6 AC 264 F 3	90 120	74 B 58 74 CF 57	
Bird Bird Bird Bird Bird	A B W C J B K C K	Curtiss Warner Jacobs Kinner Kinner	OX 5 Scarab L A 1 K 5 R 5	90 125 170 100 125	102 90 BA 45 96 B 90 BA 49 90 D 67	(1) (1) (1)
Buhl	LA 1, LA 1 B	Szekely	SR 3	45	755	
Cessna Cessna Cessna Cessna	AW Airmaster C 145 Airmaster C 145 Airmaster C 165	Warner Warner Warner Warner	Scarab Super Scarab Super Scarab Super Scarab	125 145 145 165	90 BA 45 82 R 81 82 RA 81 82 RA 81	(1) (1) (2) (2)
Commandaire Commandaire Commandaire	3 C 3 3 C 3 A 3 C 3 B	Curtiss Warner Siemens H	OX 5 Scarab SH 14	90 125 113	102 90 BA 45 96 T 69	(1)
Culver Culver Culver Culver	L C A L F A Dart GK, G Dart GW	Continental Franklin Leblond Warner	A 75 4 AC 176 F 3 5 F Scarab Jr.	75 80 90 90	70 A 52, 70 A 54 70 AF 54, 70 AF 56 78 R 54 80 W	(1)
Curtiss Curtiss Curtiss Wright Jr.	Robin Robin C W 1	Curtiss Tank Szekely	OX 5 Y 502, V 470 S R 3	90 115 45	102 96 T 69 755 L	
Davis Davis Davis Davis	V 3, D 1 D 1 66 DIK DIW	Leblond Leblond Kinner Warner	5 DE 70 5 DF, 5 F K 5 Scarab	70 85 100 125	84 78 R 52 90 BA 49 90 BA 45	(1) (1)
D H Moth	60 G M	DeHavilland	Gipsy	85-90	84 D L	(4)
D H Trainer		Menasco	D 4	130	86 M 54	
Eaglerock	A 2	Curtiss	OX 5	90	102	-
Ercoupe	415 C	Continental	A 65	65	72 C 44	(3)



RECOMMENDED PROPELLERS

Airplane	Model	Engine Mfg.	Engine Model	H.P.	Recommended Sensenich Propeller	Note
	WD 04 WD 04 4 D	vr.	T. F.	100	00 DA 40	(1)
Fairchild	KR 21, KR 31 A, B	Kinner	K 5	100	90 BA 49	(1)
Fairchild	KR 21, B	Kinner	B 5 OX 5	125 90	90 D 67 102	(1)
Fairchild	KR 31	Curtiss	L 267	75	84 C	
Fairchild	C 7	Rover			86 C 69	(1)
Fairchild	22 C 7 G, F	Warner	Super Scarab	145	86 CA 69	(1) (2) (1) (4) (4) (4) (4) (1) (2)
Fairchild	22 C 7 G, F	Warner	Super Scarab		90 BA 45	1
Fairchild	22 C 7 E, C 5, C 6, 24 C 8	A Scarab	Scarab	125	84 E	(1)
Fairchild	C 8	Cirrus Hidrive	Mark III Mark III	95 85	88 A	4
Fairchild	22 C 7 A	Cirrus		05		4
Fairchild	22 7	Cirrus Hidrive	Mark III	95	84 E 88 A	4
Fairchild	22 C 7 D	Wr. Gipsy	L 320	90		(4)
Fairchild	24 J, 24 G	Warner	Super Scarab	145	86 C 67	(2)
Fairchild	24 J, 24 G	Warner	Super Scarab	145	86 CA 67	(2)
Fairchild	C 8 F, 24 H	Ranger	6 390 D 3	150	86 B 58	
Fairchild	24 K	Ranger	6 410 B 1, B 2	165	86 B 58	
Fairchild	24 R 9, 24 R 9 S 24 W 9	Ranger	6 410 B 1, B 2	165	86 B 58, 86 B 55	(4)
Fairchild	24 W 9	Warner	Super Scarab	145	86 C 67	(1)
Fairchild	C8E, C8G, C8C	Warner	Super Scarab	145	86 C 63	(1)
Fairchild	C8E, C8G, C8C	Warner	Super Scarab	145	86 CA 63	(2)
Fairchild	C8F, C8H, C8D	Ranger	6 390 B, D, D 3	145	86 B 53	145
Fairchild	24 W 40, 24 W 41	Warner	Super Scarab	145	86 C 67	(1)
Fairchild	24 W 40, 24 W 41	Warner	Super Scarab	145	86 CA 67, 86 CA 6	(2)
Fairchild	24 W 41 A	Warner	Super Scarab	165	86 CA 69	(2)
Fairchild	24 R 40	Ranger	6 440 C 2, 6 410 B 3	175	86 B 55	
Fairchild	24 R 40 S	Ranger	6 440 C 2, 6 410 B 3	175	86 B 53	
Fairchild	24 Seaplane	Warner	Super Scarab	145	86 C 63	(1)
Fairchild	24 Seaplane	Warner	Super Scarab	145	86 CA 63	(2)
Fairchild	M 62 Å, PT 19	Ranger	6 440 C 2	175	86 R 61	
Fairchild	M 62 A, PT 19	Ranger	6 440 C 2	175	86 RA 61	(5)
Fairchild	M 62 A 3, PT 26	Ranger	6 440 C 5	200	86 R 61	
Fairchild	M 62 B	Warner	Super Scarab	165	86 CA 69	(2)
Fairchild	M 62 A 3, PT 26	Ranger	6 440 C 5	200	86 RA 61	(5)
Fairchild	P T 23	Continental	W 670	220	90 LA 78	(5)
Fairchild	C 61, UC 61	Ranger	6 440 C 5	200	86 B 58	
Fairchild	C 61, UC 61	Warner	Super Scarab	165	86 CA 69	
Fairchild	24	Kinner	R 56	160	92 H 72	(2)
Fleet	1	Warner	Scarab	125	90 BA 45	(1)
Fleet	7, 8, 9, 10	Kinner	B 5	125	90 D 67	(1)
Fleet	7, 8, 9, 10	Kinner	B 5 K 5	125	90 DA 67	(2)
Fleet	7, 8, 9, 10 91, 2	Kinner	K 5	100	90 BA 49	(1)
Count I alan		C!		85	84 E	
Great Lakes	2 T 1	Cirrus	Mark III			(A)
Great Lakes	2 T 1 E	Cirrus	Mark III	100	84 E	(4) (4)
Great Lakes	2 T 1 A	Cirrus Hidrive	Mark III	95	84 E	(4)
Grumman	Widgeon G 44	Ranger	6 440 C 5	200	82 RS 72	



MODEL 86 R-61 For PT 200 h.p.

RECOMMENDED PROPELLERS

Airplane	Model	Engine Mfg.	Engine Model	H.P.	Recommended Sensenich Propeller	Note
Howard Howard Howard Howard Howard	D G A 18 DGA 145 DGA 145 DGA, 18 K, 160 DGA 160	Warner Warner Warner Kinner Kinner	Scarab Super Scarab Super Scarab R 55 R 56	125 145 145 160 160	86 C 61 86 CA 67 86 C 67 92 HBSPA 74 92 H 72	(1) (2) (1) (1) (2)
Inland Inland Inland Interstate	S 300 R 400 W 500 S 1 A Cadet	Leblond Warner Warner Continental	5 D Scarab Jr. Scarab A 65	65 90 125 65	84 80 W 90 BA 45 72 C 44	(1) (1)
Interstate Interstate	S 1 A 65 F Cadet S 1 A, 90 F Cadet	Franklin Franklin	4 AC 176 B 2 4 AC 199 E 2	65 90	72 F 44 72 DF 49	(1)
Kinner Lincoln Lincoln Page	K Sportster P T K 1928	Kinner Kinner Curtiss	K 5 K 5 OX 5	100 100 90	90 BA 49 90 BA 49 102	(1)
Luscombe Luscombe Luscombe Luscombe Luscombe Luscombe Luscombe	Phantom 1, 1 S Phantom 1, 1 S 8 8 A 2 8 B 2 8 C, 8 D "Silvaire" 8 A Seaplane	Warner Warner Continental Continental Lycoming Continental Continental	Super Scarab Super Scarab A 50 A 65 O 145 B A 75 A 65	145 145 50 65 65 75 65	86 C 69 86 CA 69 76 B 51 76 C 46 70 LY 38, 70 LY 40 70 D 46 76 C 44	(1) (2)
Mercury Mercury	T 2 B T 120	Rearwin Rearwin	50 7 F, 7 G	90 120	78 R 50 78 R 59	
Meyers Meyers Meyers Meyers	OTW 120 OTW 145 OTW 145 OTW 160	Warner Warner Warner Kinner	Scarab Super Scarab Super Scarab R 56	125 145 145 160	90 BA 45 86 CA 67 86 C 67 92 H 76	(1) (2) (1) (2)
Monocoupe Monocoupe Monocoupe Monocoupe	Monoprep, 70, 113 70 113 90, 90 A 90 A F	Velie Velie Velie Lambert Franklin	M 5 M 5 M 5 R 266 4 AC 199 E 3	65 65 65 90 90	84 84 84 76 D 57 74 FDS 48	
Piper	E 2 F 2 J 2 J 3 C 40 J 3 C 50 J 3 C 65 L 4 J 3 C 65 S J 3 F 50 J 3 F 50 J 3 F 60 S J 3 F 60 S J 3 F 65 J 3 L	Continental Aeromarine Szekely Continental Continental Continental Continental Continental Franklin Franklin Franklin Franklin Franklin Franklin Franklin Lycoming Lycoming	A 40 AR 340 S R 3 A 40 A 50 A 50 A 50 A 65 A 65 4 A C 150 4 A C 150 4 A C 171 4 A C 171 5 A C 176 B O 145 A 1 O 145 A 2	40 40 35 40 40 50 50 65 50 60 60 65 50	69 C, 69 D 755 A 755 B 69 C, 69 D 69 C, 69 D 76 B 47, 76 B 49 72 C 42 76 C 40, 76 C 42 70 F 43, 70 F 45 70 F 47, 72 F 40 72 F 42 70 F 42 70 F 42 70 F 43	
Piper Piper Piper Piper Piper Piper	J3L S J3L 65 J3L 65 S J3P J4	Lycoming Lycoming Lycoming Lycoming Lenape Continental	O 145 A 2 O 145 B O 145 B L M 3, A R 3 A 50	55 65 65 50 50	70 L 43 70 LY 34, 70 LY 36 70 LY 34, 70 LY 36 72 L 76 B 47, 76 B 49	

RECOMMENDED PROPELLERS

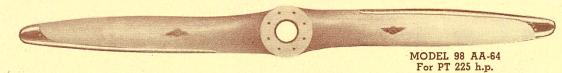
Airplane	Model	Engine Mfg.	Engine Model	H.P.	Recommended Sensenich Propeller	Note
Piper Piper Piper Piper Piper Piper Piper Piper	J 4 A J 4 A S J 4 B J 4 E J 4 F J 5 A, J 5 J 5 B J 5 B J 5 C, A E 1	Continental Continental Franklin Continental Lycoming Continental Lycoming Lycoming	A 65 A 65 4 A C 171 A 75 O 145 B A 75 G O 145 C O 235	65 65 60 75 65 75 75 75	72 C 42, 72 C 44 76 C 40, 76 C 42 70 F 47, 72 F 40 70 D 42, 70 D 44 70 LY 36, 70 LY 38 70 D 40, 70 D 42 78 LY 52 74 FE 46	
Porterfield	35-70 90 90 35 W, 75 C C P 40, C P 40 A C P 50, C P 55 F P 65 L P 65 T 5 C	Leblond Leblond Warner Warner Continental Continental Franklin Lycoming Continental	5 D E 5 D F Scarab, Jr. Scarab, Jr. A 40 A 50 A 65 4 AC 176 B 1 O 145 B A 75	70 90 90 90 40 50 65 65	78 R 50 78 R 50 80 W 80 W 69 J 76 B 49 72 C 44 72 F 46 70 L Y 38 70 D 44	(1) (1)
Rearwin	3000 4000 4000 4000 M 6000 M 7000 8125 8130 8135 8500 9000 K 9000 L Skyranger 165 Skyranger 175 Skyranger 180 Skyranger 180 F Skyranger 180 F Skyranger 190 F	Szekely Aeromarine Leblond Menasco Menasco Ken Royce Ken Royce Ken Royce Ken Royce Leblond Warner Ken Royce Leblond Continental Continental Franklin Franklin Continental	S R 3 A R 3 5 D E C 4 C 4 S 5 E 7 F, 7 G 5 F, 7 G 5 D F Scarab, Jr. 5 F, 5 G 5 D F A 65 A 75 A 80 4 A C 176 F 3 4 A C 199 E 3 A 40	45 50 70 125 150 70 120 90 120 85 90 90 65 75 80 80 90 40	755 C 755 C 80 R 70 80 R 70 80 R 72 78 R 50 78 R 50 79 R 50 79 R 50 70 R 70 R 50 70 R 70 R 50 70 R 70 R 50 70 R 70	(1)
Ryan Ryan Ryan Ryan Ryan Ryan Ryan Stearman Stearman Stearman Stinson Stinson Stinson	S T A S T A Special S C W 145 S C W 145 S T 3 K R, PT 21 S T 3 K R, PT 22 S T 3 K R, PT 22 N 2 S 3, P T 17 N 2 S 5, P T 13 D	Menasco Menasco Warner Warner Kinner Kinner Continental Lycoming Menasco Continental Continental Franklin	C 4 S Super Scarab Super Scarab B 54 R 56 R 56 C 4 S A 75 A 80 4 A C 199 E 2	125 150 145 145 132 160 160 220 225 150 75 80	80 R 70 80 R 72 82 RA 77 82 R 77 86 CASP 76 90 HSP 90 90 HA 98 A A 64 98 A A 64 98 O C 70 D 40, 70 D 42 70 D 42 72 DF 48, 72 DF 49	(2) (1) (2) (2) (5) (5) (5)
Stinson Swallow Taylorcraft Taylorcraft Taylorcraft	T P A B C B C S	Lycoming Curtiss Continental Continental Continental	O 435 OX 5 A 40 A 50 A 50	190 90 40 50 50	85 LY 57 102 69 J 76 B 51 76 B 49	

RECOMMENDED PROPELLERS

Airplane	Model	Engine Mfg.	Engine Model	H.P.	Recommended Sensenich Propeller	Note
Taylorcraft	B C, B C 12 65	Continental	A 65	65	72 C 42, 72 C 44	
Taylorcraft	B C S, B C S 12 65	Continental	A 65	65	76 C 44, 76 C 42	
Taylorcraft	BCT, DC	Continental	A 65	65	72 C 42, 72 C 44	
Taylorcraft	BF.	Franklin	4 A C 150	50	70 F 45	
Taylorcraft	B F 60	Franklin	4 A C 171	60	70 F 47, 72 F 40	
Taylorcraft	B F B F 12 65	Franklin	4 A C 176 B 2	65	72 F 42, 72 F 44	
Taylorcraft	B F S, B F S 16 65	Franklin	4 A C 176 B 2	65	72 F 42	
Taylorcraft	BFT, DF	Franklin	4 A C 176 B 2	65	72 F 42, 72 F 44	
Taylorcraft	BL	Lycoming	O 145 A 1	50	70 L 45 70 L 47	
Taylorcraft	BL	Lycoming	O 145 A 2 O 145 A 1	55 50	70 L 47 70 L 43	
Taylorcraft	BLS	Lycoming	O 145 A 1 O 145 B	65	70 LY 36, 70 LY 38	
Taylorcraft	B L, B L 12 65	Lycoming	O 145 A 1	50	70 L 45	
Taylorcraft	BLT	Lycoming Lycoming	O 145 A 2	55	70 L 47	
Taylorcraft Taylorcraft	BLT BLT, DL	Lycoming	O 145 B 2	65	70 LY 36, 70 LY 38	
Taylorcraft	D C O, L 2	Continental	A 65	65	72 C 42	
Taylorcraft	Tandem	Continental	A 65	65	72 G 42, 72 G 44	
Taylorcraft	Tandem	Franklin	4 A C 176	65	72 F 42, 72 F 44	
Taylorcraft	Tandem	Lycoming	O 145 B 2	65	70 LY 36, 70 LY 38	
Travelair Travelair Travelair Travelair Travelair Travelair Travelair	2000 2000 T K 4000 W 4000 16 W, 12 W 16 K, 12 K 12 Q	Curtiss Tank Kinner Warner Warner Kinner Wr. Gipsy	O X 5 V 502 K 5 Scarab Scarab B 5 L 320	90 115 100 125 125 125 90	102 96 T 69 90 BA 49 90 BA 45 90 BA 45 90 D 67 88 A	(1) (1) (1) (1) (4)
Waco	9, 10, G X E	Curtiss	OX5	90	102	
Waco	10, G X E	Curtiss	O X 6	100	102 A	
Waco	10, G X E	Tank	V 502	115	96 T 69	(4)
Waco	RNF, RBA	Warner	Scarab	125	90 BA 45	(1) (1)
Waco	INF, IBA	Kinner	B 5	125	90 D 67	(1)
Waco	UBF, UMF Open	Continental	R 670 A C	210 210	94 A 60 100 A	
Waco	UIC, UBA, VEC, Cabin	Continental	R 670 A C	210	100 A	
Waco	YPT 14, UPF 7	Continental	W 670 B A	225	98 G 70	-
Waco	UKS7, UPF7	Continental	W 670 B A	225	98 C A 70	(5)
Waco	YQC, YPF, YKS, YKC	Jacobs	L 4	225	100	
Waco	PBA, F, PCF	Jacobs	LA1	170	96 B	
Waco	QCF, QDC, QSO	Continental	A 70, A 70, 2	165	100 B	
Welch	OW5M	Continental	A 40	40	69 J	
Welch	O W 6 M	Aeronca	E 113, A, B, C	36	69 A 33	

Notes:
(1) Taper shaft engine.
(2) Spline shaft engine.

(3) Monel tipping.
(4) Specify hub dimensions.
(5) For A N std. S A E No. 20 spline hub. Army des. 41G2325.



DESIGN & DESIGNATION CHANGES

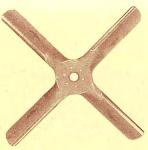
SINCE PREVIOUS PRICE LIST

Please note the following new models which replace former models and designations.

Former	New	Former	New
69A	69A-35	80B	78R-52
69B	69A-33	80D	78R-50
69E	69A-33	80R	80R-72
69F	69J	80R-1	80R-70
70F	70F-43	82	80W
70F-1	70F-45	86B	86B-53
70L	70L-43	86B-1	86B-55
70L-1	70L-45	86C	86C-67
72	72A-30	86C-1	86C-63
76B	76B-51	86CA	86CA-67
76B-1	76B-49	88B	86B-53
76B-2	76B-51	88B-1	86B-55
76B-3	76B-47	90	90BA-49
78L-50	78R-50	90A	90BA-51
78L-52	78R-52	90B	90BA-45
78L-54	78R-54	90HSP	90HA







CLUBS

Sensenich test clubs of standard design can be furnished for engines up to 2000 H.P. Special clubs will be made to order or designed to meet specific testing problems.

All test clubs must be calibrated for the individual test stand or test house installation. The accepted method is to "cut down" test clubs to the required diameter. For that reason all Sensenich test clubs are designed over size.

Prices—which will be quoted on application—are net. Test clubs are generally supplied without tipping, but fabric and metal tipping can be added at a slight additional charge.

If your engine is not listed on the following pages, a recommendation will be made promptly upon receipt of the following information:

- (A) Rated engine R.P.M. (C) If geared, propeller shaft R.P.M.
- (B) Rated H.P.

(D) Hub make and model or Hub dimensions.

RECOMMENDED TEST CLUBS (Prices on Application)

			Recom. Senseni	ch
Engine Model	Rating	Hub Type	Test Club	Notes
Continental, A50-7, -8, -9	50 HP @ 1900	Continental No. 0 Taper	TC4CC-40	(1)
Continental, A65-7, -8, -9	65 HP @ 2300	Continental No. 0 Taper	TC4CC-40	(1)
Continental, A75-8, -9	75 HP @ 2600	Continental No. 0 Taper	TC4CC-40	(1)
Continental, A80-8, -9	80 HP @ 2700	Continental No. 0 Taper	TC4CC-40	(1)
Continental, W670K	225 HP @ 2175	Cont Hub No. 4064 or 4273	TC4FD-48	(2)
Continental, W670M	240 HP @ 2200	Cont Hub No. 4064 or 4273	TC4FD-48	(2)
Continental, W670-6A, 6N	220 HP @ 2075	Cont Hub No. 4064 or 4273	TC4FD-50	(2)
Franklin, 4AC-150	50 HP @ 2300	Integral Engine Flange	TC4CB-40	(3)
Franklin, 4AC-176-B2	65 HP @ 2200	Integral Engine Flange	TC4CB-40	(3)
Franklin, 4AC-176-F	80 HP @ 2500	Integral Engine Flange	TC4CB-40	(3)
Franklin, 4AC-199-E3	90 HP @ 2500	Integral Engine Flange	TC4CB-40	1

RECOMMENDED TEST CLUBS (Prices on Application)

Engine Model	Rating		m. Senseni Test Club	ch Notes
Franklin, 4ACG-199-H3	113 HP @ 3500	Kinner SAE 10 Spline	TC4AN-48	AVY TO S
Franklin, 6AC-298	130 HP @ 2600		TC4AO-44	
acobs, L-4	225 HP @ 2000		TC4FB-50	(2)
facobs, L-5	285 HP @ 2000		TC4FB-54	(2)
acobs, L-6	300 HP @ 2100		TC4FB-52	(2)
Ken Royce 90-5G	90 HP @ 2250		TC4AP-44	
Ken Royce 7G	120 HP @ 2225		TC4AP-48	
Kinner B-5	125 HP @ 1925		TC4AQ-54	
Kinner B-54	125 HP @ 1925	Kinner Hub No. 1475	TC4AN-54	
Kinner R-53, 54, 56	160 HP @ 1850	AN Std. SAE No. 20 Spline Hub	TC4FA-50	
eBlond 85-5F & 5DF	85 HP @ 2125	LeBlond No. 1 Taper	TC4AP-44	
eBlond 90-5F	90 HP @ 2250		TC4AP-44	
ycoming O-145-A1	50 HP @ 2300		TC4CA-40	(3)
ycoming O-145-A2	55 HP @ 2300		TC4CA-40	(3)
ycoming O-145-B2	65 HP @ 2550		TC4CA-40	(3)
vcoming GO-145-C2	75 HP @ 3200		TC4AL-46	(4)
ycoming O-235	100 HP @ 2550		TC4AB-44	
ycoming O-290	125 HP @ 2450		TC4AH-44	
ycoming O-290-B, -C	125 HP @ 2600		TC4AH-44	
ycoming O-350	150 HP @ 2500	AN Std. SAE No. 20 Spline Hub	TC4AD-46	(5)
ycoming O-435	175 HP @ 2300	AN Std. SAE No. 20 Spline Hub		(5)
ycoming O-435C	185 HP @ 2450	AN Std. SAE No. 20 Spline Hub		(5)
ycoming R-680B	225 HP @ 2100	AN Std. SAE No. 20 Spline Hub		
ycoming R-680E1	275 HP @ 2200	AN Std. SAE No. 20 Sipine Hub		
vcoming R-680E2	265 HP @ 2200	AN Std. SAE No. 20 Spline Hub		
ycoming R-680E3	285 HP @ 2300	AN Std. SAE No. 20 Spline Hub		
Ranger 6-410	175 HP @ 2450		TC4AR-48	
Ranger 6-440-C2	175 HP @ 2450	AN Std. SAE No. 20 Spline Hub	TC4AD-48	(5)
Ranger 6-440-C3	180 HP @ 2450	AN Std. SAE No. 20 Spline Hub	TC4AD-48	(5)
Ranger 6-440-C5	200 HP @ 2450	AN Std. SAE No. 20 Spline Hub		(5)
Ranger SGV-770	450 HP @ 2900	AN Std. SAE No. 30 Spline Hub		
Warner Scarab Jr40, -50	90 HP @ 2025		TC4AR-48	
Varner Scarab 40, 50	125 HP @ 2025		TC4AR-52	
Varner Super Scarab 40, 50			TC4AR-52	
Varner Super Scarab 50A	145 HP @ 2050	AN Std. SAE No. 20 Spline Hub	TC4AD-52	(5)
Warner Super Scarab 165	165 HP @ 2100	AN Std. SAE No. 20 Spline Hub		(5)

 ⁽¹⁾ Hub bolts 5/8" longer than standard are required. 4" thickness between flanges.
 (2) If AN Std. SAE 20 Spline hub use Model TC4FA series.

⁽³⁾ Hub bolts $\frac{3}{4}$ longer than standard are required, $\frac{4}{4}$ thickness between flanges. (4) Hub bolts $\frac{1}{2}$ longer than standard are required, $\frac{4}{4}$ thickness between flanges.

⁽⁵⁾ If Warner Hub No. 7900 or No. 8599 is used, Model TC4AC series are required. The AAF design number for the AN Std. SAE No. 20 spline hub is 41G2325.

SENSENICH MODEL NUMBERS and THEIR MEANINGS

Sensenich Simplified Model or Part Number system can be explained by use of the following examples:

- (a) 86C-67
- (b) 86CA-67
- (c) 86CASP-72
- (d) 86CS-72
- (e) 86CAL-67

The first two figures, 86, indicate the propeller diameter in inches. The following letter, C, designates one basic blade design selected from a group applicable to the particular diameter. All of the above listed propellers have the same basic blade design.

A letter other than 'L' or 'S' following the first letter in the Model designation indicates a variation in hub dimensions from another Model having the same diameter and same basic blade design.

The letter 'L' following in any position after the first letter in the Model designa-

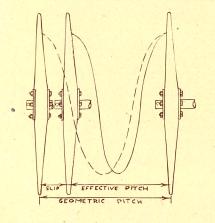
tion indicates a left-hand rotating propeller. All other propellers are right-hand rotation. Example (e) is the same as example (b) except that it is left-handed.

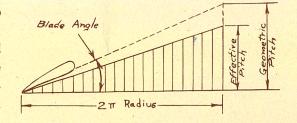
The letter 'S' following in any position after the first letter in the Model designation indicates that the propeller has a built-in spinner. If the letter 'S' is followed by the letter 'P' the spinner is constructed of plywood. Example (c) is of the same basic blade design, fits the same hub and differs from example (b) only in so far as it has an integral spinner constructed of plywood. If the letter 'P' does not follow the letter 'S' then the integral spinner is of solid wood construction as in example (d).

The last two numbers indicate the pitch of the propeller in inches. Examples (a), (b), and (e) have a pitch of 67 inches. Examples (c) and (d) each have a pitch of 72 inches. This is the geometric pitch measured at 75% of the radius.

TECHNICAL DEFINITIONS

pitch of an element of a propeller is the distance which the element would advance along a helix of slope equal to its blade angle. The nominal or standard pitch of our propellers is the geometric pitch as determined at 75% of the radius.





PITCH, EFFECTIVE—The effective pitch of a propeller is the distance an aircraft actually advances along its flight path in one revolution of the propeller.

ROTATION—The rotation of the propeller is determined when viewing the propeller from the slipstream. A right-hand propeller is one which rotates clockwise when viewed from the slipstream, that is, from the cockpit in a tractor installation. A left-hand propeller is one which rotates counterclockwise when viewed in the same manner.



Wood Propellers-INSTALLATION

The propellers covered by these instructions are all of the two-blade, fixed-pitch type constructed of laminated birch wood. They have metal leading edge strips which protect the wood against abrasion. The metal strips are attached to the wood with wood screws and rivets. In addition to the metal strips, 10 to 15 inches of the outer area of each blade is covered with sturdy fabric as further protection against damage from stones during take-off or landing.

Some of the propellers covered by these instructions have integral spinners constructed of molded plywood.

INSTALLATION OF HUB

- 1. Make sure threads on the bolts are free from metal chips and other foreign matter.
 - 2. Coat threads with light engine oil.
- 3. Insert bolts in holes so that nuts will be on front face of propellers. On some flange-mounted installations it may be necessary to install bolts with heads on

front face of propeller. Use soft headed hammer, if necessary, to drive bolts through the hub.

- 4. Put on hub bolt nuts and draw up evenly, a little at a time, moving back and forth across the hub from one bolt to another. This will help prevent throwing the propeller out of track and pitch.
- 5. Use a torque wrench to tighten the nuts to a torque reading as recommended in table below. A tolerance of plus or minus 25 inch-pounds can be allowed on these values. It is important that the nuts are not tightened beyond the recommended value, in order that the surface of the wood propeller hub will not be fractured. Any fracture of the wood at the edge of the hub flange will allow moisture to enter the wood, thus leading to checking of the wood and consequent early rejection from service.

Bolt Diameter	Recommended Torque
3/8 inch	200 inch-pounds
7/16 inch	250 inch-pounds
1/2 inch	300 inch-pounds

TRACK

- 1. After the hub has been installed the complete assembly should be placed on a conventional checking stand and checked to determine if the blades track within 1/16 inch of each other.
- 2. If the blades do not track the hub bolts should be loosened and hard paper, pasteboard, or thin metal shims placed between the fixed hub flange and the propeller hub face, so as to bring the tips of the blades in alignment within 1/16 inch of each other. Tighten the hub bolts nuts with the recommended torque when checking the track.

BALANCE

All propellers should be checked for balance before installation on an engine. This is especially true of propellers coming from spare propeller stocks. Propelers that have been in stock any length of time may have lost their balance and, therefore, should be checked and corrected before installation on engine.

INSTALLATION ON ENGINE

1. GENERAL—After balance has been

corrected and cotter pins or safety wire installed through hub bolts, the propeller is ready for installation on lengine.

2. **PRE-INSTALLATION OPERATIONS**Observe, where applicable, the following operations:

- (a) Recheck entire surface of propeller including fabric covering and tipping.
- (b) Clean shaft threads and splines thoroughly, removing all nicks, burns, and galls from the shaft.
- (c) In the case of spline shaft installations, clean the rear cone and place it on the shaft.
- (d) Clean thoroughly and coat the threads of the propeller shaft and nut with an approved antiseize compound.
- (e) Locate propeller on the shaft, being careful not to damage the shaft, shaft threads, or rear cone seat.
- (f) On spline shaft installations make certain the halves of the front cone are mates. Place them on the nut. If the cone is new it may come in one piece, in which case it will be necessary to saw the halves apart and carefully remove the metal left in the split.

Wood Propellers—INSTALLATION—(Continued)

(g) Carefully start the nut on the threads of the engine shaft. Tighten the nut by means of a 3-foot bar placed through the holes in the nut. This applies to the No. 20 shaft only. On the No. 0 taper shaft and the No. 10 splined shaft use an 18-inch bar.

CAUTION

Hammering on the bar should be avoided.

- (h) Install the snap ring and safety the shaft nut in the manner provided on the particular hub being used.
- (i) When installing propellers on integral hub flange shafts, place propeller on the stub shaft, insert bolts in the flange and tighten, as explained previously.

STORAGE

If the propeller does not go into service immediately after repair, it should be stored in a horizontal position, supported at the hub and not at the blades. Propellers should never be allowed to stand against a wall, or be stored in such a manner that the weight is taken by the blades. Propellers should not be stored where they are close to, or in a direct line with, the flow of air from any heating or cooling equipment If at all possible, a relative humidity of from 30 to 60 per cent should be maintained in the storage room.

REPAIRS

We strongly recommend that propellers needing repairs be sent only to approved propeller repair stations or propeller manufacturers or their branches.

Confidence in Quality

These aircraft manufacturers have selected **SENSENICH**Propellers as standard equipment on many of their
airplanes for both military and commercial use.

Aeronca Meyers
Akron Funk Monocco

kron Funk Monocoupe

Bellanca Piper

Culver Porterfield
Ercoupe Rearwin
Fairchild Ryan

Grumman Stinson

Howard Taylorcraft

Luscombe Welch



