

Model	A Hub Width	B Hub Thickness	C Bolt Circle	D Spacer Thickness	E Hole		F Counterbore		G Dowel Depth ± 0.030	H Depth of Ream
					Quantity	Dia	Dia	Depth (Qty)		
1C160/										
CTM	4.94	3.31	4.750	3.500	6	0.453	0.639/0.634	0.688	2.750	4.40/4.34
EGM	5.63	3.44	4.750	—	6	0.391				
1C172/										
AGM	6.25	3.44	4.750	2.000	6	0.391	0.639/0.634	0.688	1.250	2.90/2.84
BTM	5.56	3.31	4.000	2.648		0.453				
EM	5.56		5.250	—	6	0.516	—	—	—	—
MDM	6.25	3.44	—	—	8	0.391	0.639/0.634	0.688	—	—
MFA	5.75		—	—		0.516	0.753/0.751	0.500(4)	—	—
MGM	5.56	3.31	4.750	3.500	6	0.391	0.639/0.634	0.688	2.750	4.40/4.34
MTM	4.94		—	2.648		0.453			1.875	4.30/4.27
SBTM	5.56		—	1.500		—			0.750	2.40/2.07
TM	4.94									

Figure 4-22. Blade Dimensions, Models 1C160, 1C172

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Table 4-28. BLADE DIMENSIONS, 1C160
(NEW BLADES)

Station (Fig. 4-22)	Width (inches)		Thickness (inches)		Edge Alignment (inches)		Face Alignment (inches)	
	Min	Max	Min	Max	Min	Max	Min	Max
5	5.525	5.634	2.372	2.432	2.531	2.593	1.184	1.246
9	5.672	5.766	1.140	1.190	2.493	2.555	0.479	0.541
12	5.702	5.796	.870	.920	2.502	2.564	.339	.401
15	5.732	5.826	.710	.760	2.577	2.515	.272	.334
18	5.682	5.776	.600	.650	2.493	2.555	.226	.288
24	5.232	5.326	.460	.510	2.292	2.354	.154	.216
30	4.448	4.510	.340	.390	1.935	1.997	.104	.166
33	3.848	3.910	.285	.335	1.668	1.730	.031	.143
36	2.919	2.981	.208	.258	1.281	1.219	.057	.119

Table 4-29. BLADE DIMENSIONS 1C172
(NEW BLADES)

Station (Fig. 4-22)	Width (inches)		Thickness (inches)		Edge Alignment (inches)		Face Alignment (inches)	
	Min	Max	Min	Max	Min	Max	Min	Max
4.5	5.340	5.447	2.599	2.659	2.469	2.531	1.474	1.536
9	5.393	5.487	1.125	1.175	2.400	2.462	0.473	0.535
12	5.423	5.517	0.855	0.905	2.409	2.471	0.339	0.401
15	5.453	5.547	0.695	0.745	2.422	2.484	0.272	0.334
18	5.403	5.497	0.585	0.635	2.400	2.462	0.226	0.288
24	4.953	5.047	0.415	0.465	2.199	2.261	0.154	0.216
30	4.169	4.231	0.295	0.345	1.842	1.904	0.104	0.166
33	3.569	3.631	0.240	0.290	1.575	1.637	0.081	0.143
36	2.919	2.981	0.185	0.235	1.285	1.347	0.057	0.119
38	2.469	2.531	0.155	0.205	1.084	1.146	0.045	0.107

Table 4-30. SECTION ANGLES, 1C160, 1C172
(NEW BLADES)

Station (Fig. 4-22)	Section Angle (degrees) at Specified Pitch (inches)							
	40	42	44	46	48	50	52	
15	21.9	22.5	23.1	23.7	24.3	24.8	25.4	
18	18.9	19.5	20.2	20.8	21.4	22.05	22.65	
24	14.85	15.45	16.15	16.75	17.35	17.9	18.5	
30	11.95	12.55	13.15	13.75	14.35	14.9	15.5	
33	10.75	11.35	11.95	12.55	13.15	13.7	14.3	
36	9.75	10.35	10.95	11.55	12.15	12.7	13.3	
38 (tip)	9.1	9.7	10.3	10.9	11.5	12.1	12.7	
	54	56	58	60	62	64	66	
15	26.0	26.55	27.1	27.7	28.3	28.9	27.8	
18	23.3	23.95	24.6	25.1	25.7	26.3	26.9	
24	19.1	19.7	20.3	20.85	21.45	22.05	22.6	
30	16.1	16.7	17.3	17.85	18.45	19.05	19.6	
33	14.9	15.5	16.1	16.65	17.25	17.85	18.4	
36	13.9	14.5	15.1	15.65	16.25	16.85	17.4	
38 (tip)	13.3	13.9	14.5	15.05	15.65	16.2	16.8	

Tolerance - plus zero, minus 0.2 degrees.

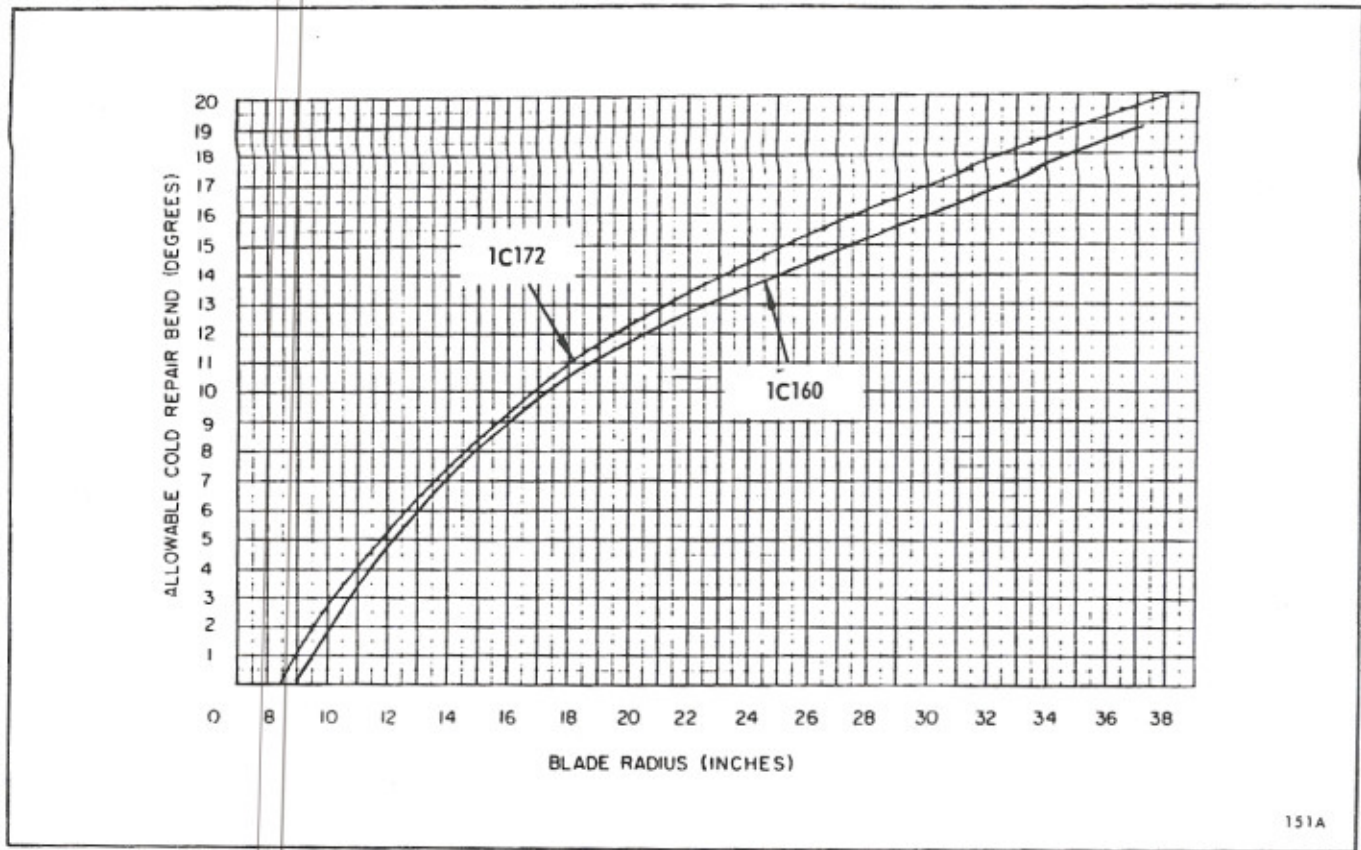


Figure 4-23. Maximum Allowable Bend for Cold Repair, IC160, IC172

Table 4-31. MINIMUM PERMISSIBLE BLADE WIDTH & THICKNESS, IC160
(FOR REPAIR)

Station (Fig. 4-22)	Width (Inches) at Propeller Dia. 75 and 74 In.	Thickness (Inches)
5	5.410	2.320
9	5.545	1.115
12	5.565	0.845
15	5.585	0.690
18	5.525	0.580
24	5.040	0.440
30	4.150	0.315
33	3.435	0.255
36 (75 In. dia)	2.480	0.180
36 (74 In. dia)	2.400	0.170

Table 4-32. MINIMUM PERMISSIBLE BLADE WIDTH & THICKNESS, 1C172(EXCEPT MTM & TM)
(FOR REPAIR)

Station (Fig. 4-22)	Width (Inches) at Propeller Diameter			Thickness (Inches) at Propeller Diameter		
	72	74	76	72	74	76
4.5	5.230	5.230	5.232	2.545	2.545	2.545
9	5.275	5.275	5.275	1.100	1.100	1.100
12	5.293	5.295	5.295	0.835	0.835	0.835
15	5.315	5.315	5.315	0.678	0.678	0.678
18	5.250	5.255	5.255	0.570	0.570	0.570
24	4.760	4.775	4.775	0.400	0.400	0.400
30	3.830	3.875	3.910	0.270	0.275	0.275
33	3.115	3.165	3.210	0.210	0.212	0.215
36	---	---	2.500	---	---	0.160

Table 4-33. MINIMUM PERMISSIBLE BLADE WIDTH & THICKNESS, 1C172/MTM & TM
(FOR REPAIR)

Station (Fig. 4-22)	Width (Inches) at Propeller Diameter					
	72	74	Sq or Ellip. Tip	Elliptical Tip		*Square Tip
			74.5	75.0	75.5	75-76.0
4.5	5.230	5.285	5.280	5.295	5.310	5.340
9	5.275	5.334	5.330	5.345	5.360	5.393
12	5.293	5.258	5.360	5.375	5.390	5.423
15	5.315	5.384	5.380	5.400	5.420	5.453
18	5.250	5.327	5.330	5.350	5.370	5.403
24	4.760	4.857	4.860	4.890	4.915	4.953
30	3.830	4.000	4.050	4.080	4.110	4.169
33	3.115	3.342	3.420	3.455	3.490	3.569
36	-----	-----	-----	2.500	2.600	2.919
Station (Fig. 4-22)	Thickness (Inches) at Propeller Diameter					
	72	74	74.5	75.0	75.5	75-76.0
4.5	2.545	2.572	2.570	2.580	2.590	2.599
9	1.100	1.063	1.110	1.115	1.120	1.125
12	0.835	0.845	0.845	0.845	0.850	0.855
15	0.678	0.687	0.685	0.685	0.690	0.695
18	0.570	0.577	0.575	0.575	0.580	0.585
24	0.400	0.407	0.405	0.405	0.410	0.415
30	0.270	0.283	0.285	0.285	0.290	0.295
33	0.210	0.225	0.225	0.230	0.235	0.240
36	-----	-----	-----	-----	0.175	0.185

* If the repair of a 75 to 76 inch diameter 1C172/MTM or TM model necessitates the reduction of width or thickness below the minimum specified, the propeller must be reduced to 75-75.5 inches diameter with an elliptical tip or to 74.5 inches diameter with either a square or an elliptical tip.

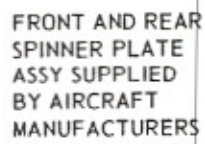


Figure 4-24. Propeller Assemblies, 1C160, 1C172

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INDEX	PART NO.	DESCRIPTION	QTY	1C160/CTM	1C160/EGM	1C172/AGM	1C172/BTM	1C172/EM	1C172/MDM	1C172/MFA	1C172/MGM	1C172/MTM	1C172/SBTM	1C172/TM
1	A-1639-2	Nut (AP)	6											
2	A-1638-11	Washer (AP)	6	•			•	•				•	•	•
	A-1638-13	Washer (AP)			6	6			8†		6			
	A-1638-2	Washer (AP)						12*		6				
3	A-2513-10	Bolt (AP)	8						•†					
	A-2513-13	Bolt (AP)	6							•				
	A-2513-14	Bolt (AP)	6					•						
	A-2513-19	Bolt (AP)	6		•						•			
	A-2513-25	Bolt (AP)	6			•								
	A-2513-35	Bolt (AP)	6											•
	A-2513-38	Bolt (AP)	6	•								•		
	A-2513-54	Bolt (AP)	6				•						•	
4	B-3515	Spacer	1			•								
	B-3821	Spacer	1											•
	B-3898	Spacer	1	•								•		
	B-4381	Spacer	1				•							
	B-4425	Spacer	1										•	
5	A-2973-6	Pin, Dowel	2	•		•	•					•	•	•
	†A-2973-2	Pin, Dowel (Optional)	AR	•		•	•					•	•	•
6	A-4001	Dowel	2					•						
	A-4001-30	Dowel (0.0015 in. OS)	AR					•						
	A-4001-45	Dowel (0.0030 in. OS)	AR					•						
	A-1636-17	Ring, Ext retaining (Part of A-4001) . .	2					•						
7	A-1635-39	Screw (AP)	20							•				
8	A-1635-5	Washer (AP)	20							•				
9	D-3337	Shell, Spinner	1							•				
10	D-3353	Plate Assy, Front	1							•				
11	A-1639-3	Nut (AP)	12							•				
12	A-1638-4	Washer (AP)	12							•				
13	A-1635-23	Bolt (AP)	12							•				
14	D-3338	Bulkhead Assy	1							•				
15	No Number	Propeller Assy	1	•	•	•	•	•	•	•	•	•	•	•

*Use A-1638-10 when spinner is installed.

†Use A-1638-14 and A-2513-23 for Maule M-4 aircraft.

‡May be used as oversize replacement for A-2973-6.