



<b>SURFACE VEHICLE STANDARD</b>	<b>J501</b>	<b>JUN2014</b>
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Superseding J501 MAY1948		
Shaft Ends		

#### RATIONALE

This document has been determined to contain basic and stable technology which is not dynamic in nature. Expertise on this subject is no longer available.

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1. **Scope**

2. **References**

2.1 **Applicable Publication**—The following publication forms a part of this specification to the extent specified herein. Unless otherwise indicated, the latest version of SAE publications shall apply.

2.1.1 SAE PUBLICATION—Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

SAE J498—Involute Splines, Serrations, and Inspections

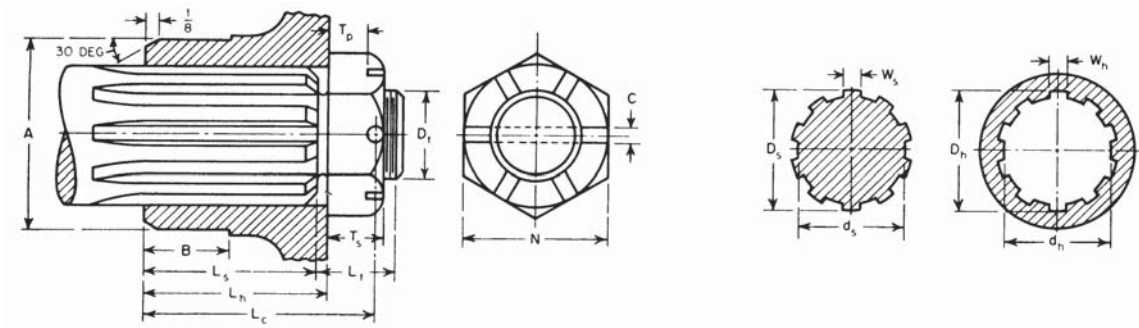


FIGURE 1—PERMANENT FIT SPLINE SHAFT ENDS (SEE TABLE 1)

TABLE 1A—PERMANENT FIT SPLINE SHAFT ENDS FOR UNIVERSAL JOINTS AND SIMILAR APPLICATIONS

Nominal Shaft Dia	10-Spline Shaft <sup>(1)</sup>		10-Spline Shaft <sup>(1)</sup>		10-Spline Shaft <sup>(1)</sup>		10-Spline Hole <sup>(1)</sup>		10-Spline Hole <sup>(1)</sup>		Hub Dimensions		Hub Dimensions	
	$D_8$ +0.000 -0.001	$W_8$ +0.000 -0.0015	$d_8$ +0.000 -0.010	$D_h$	$W_h$ +0.000 -0.0015	$d_h$ +0.010 -0.000	$L_c$	$L_8$	$L_h$	Dimensions	Dimensions	Dimensions	Dimensions	Dimensions
3/4	0.749	0.1170	0.632	{ 0.751 0.749 }	0.1170	0.682	1-11/32	15/16	1					
7/8	0.874	0.1370	0.745	{ 0.876 0.874 }	0.1370	0.795	1-11/16	1-1/8	1-1/4					
1	0.999	0.1560	0.859	{ 1.001 0.999 }	0.1560	0.909	1-15/16	1-3/8	1-1/2					
1-1/8	1.124	0.1760	0.973	{ 1.126 1.124 }	0.1760	1.023	1-15/16	1-3/8	1-1/2					
1-1/4	1.249	0.1950	1.087	{ 1.251 1.249 }	0.1950	1.137	1-15/16	1-3/8	1-1/2					
1-3/8	1.374	0.2150	1.200	{ 1.376 1.374 }	0.2150	1.250	2-7/16	1-7/8	2					
1-1/2	1.499	0.2340	1.304	{ 1.501 1.499 }	0.2340	1.364	2-7/16	1-7/8	2					
1-5/8	1.624	0.2540	1.347	{ 1.627 1.624 }	0.2540	1.397	2-13/16	2-1/8	2-1/4					
1-3/4	1.749	0.2730	1.454	{ 1.752 1.749 }	0.2730	1.504	2-13/16	2-1/8	2-1/4					
2	1.999	0.3120	1.668	{ 2.002 1.999 }	0.3120	1.718	3-9/16	2-7/8	3					
2-1/4	2.249	0.3510	1.883	{ 2.252 2.249 }	0.3510	1.933	3-9/16	2-7/8	3					
2-1/2	2.499	0.3900	2.098	{ 2.502 2.499 }	0.3900	2.148	4-9/32	3-3/8	3-1/2					
3	2.999	0.4680	2.528	{ 3.002 2.999 }	0.4680	2.578	4-25/32	3-7/8	4					

1. SAE Standard, Involute Splines, Serrations, and Inspection—SAE J498 optional.