

**>>> Service Letter**

Technical Aspects are FAA Approved

**Number: L01-08 D**  
**Replaces L01-08 C**

**Date:** 2/13/2007

**Subject:** Overhaul and repair of Superior Crankshafts.

**Application:**

Crankshaft Assemblies	Engine Applications
SL32500-A22 (Fixed Pitch Propeller)	See Superior Service Letter No. L01-07, latest revision
SL32500-A23 (Fixed Pitch Propeller)	
SL32500-A30 (Constant Speed Propeller)	
SL32500-A32 (Constant Speed Propeller)	
SL36400-A20 (Fixed Pitch Propeller)	
SL36400-A21 (Fixed Pitch Propeller)	
SL36500-A20 (Fixed Pitch Propeller)	
SL36500-A31 (Constant Speed Propeller)	

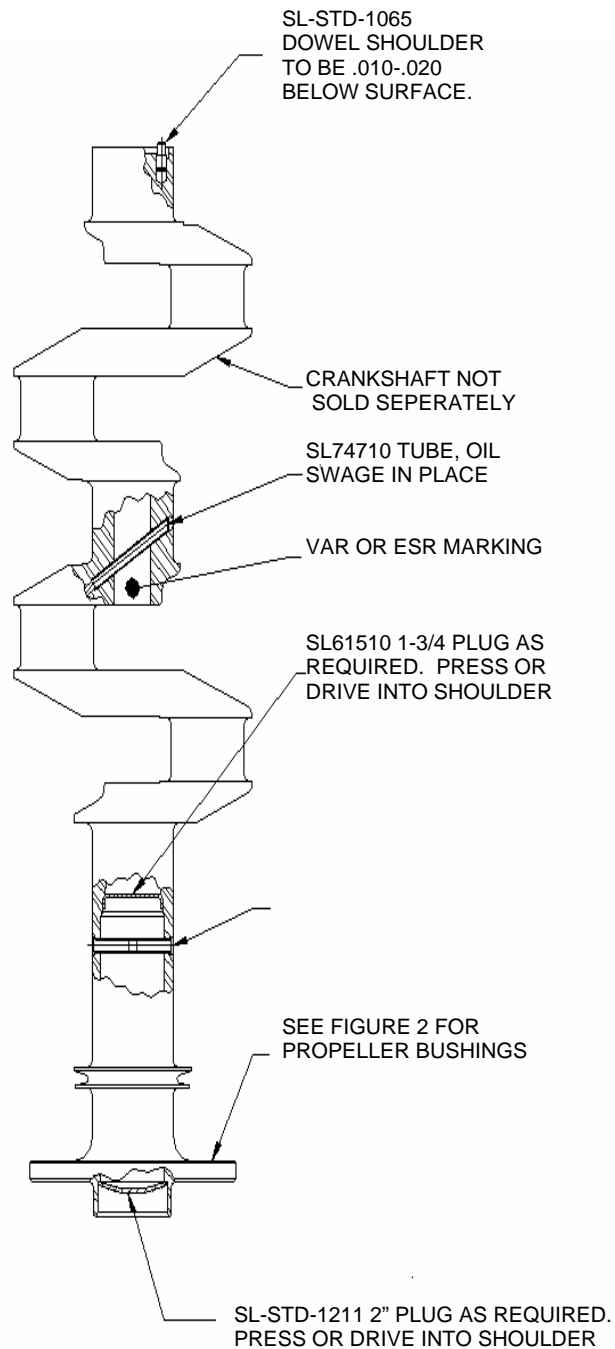
**Compliance:** At any time the Crankshaft Assembly is removed for overhaul and repair.

Crankshaft Assembly:

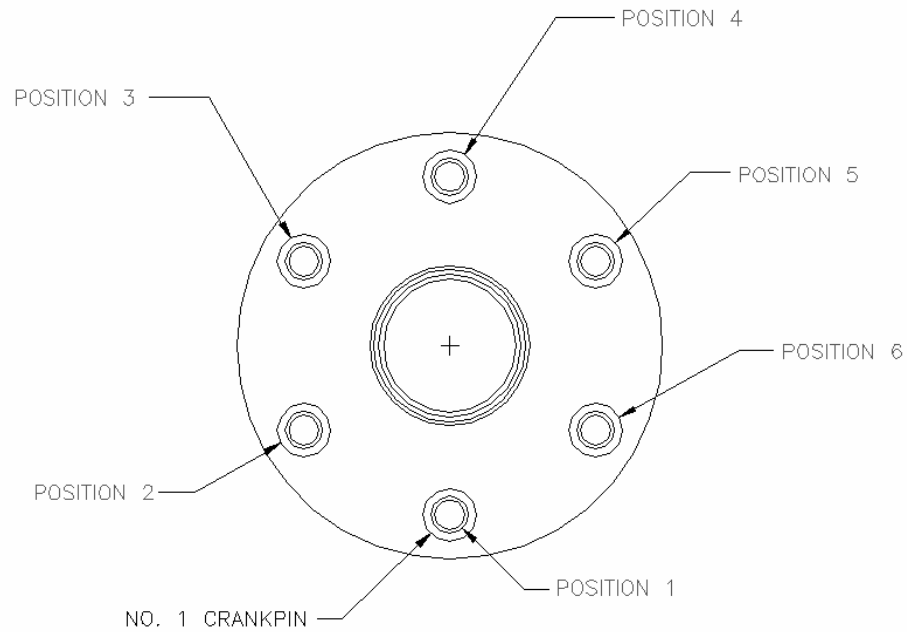
The Superior Crankshaft Assemblies are machined from aircraft quality, vacuum arc remelt (VAR) SAE 4340 alloy steel or proprietary alloy steel electro slag remelt (ESR) EO 251, nitrided and precision ground to finished dimensions.

Inspection:

The crankshaft should be visually inspected for abnormal wear or damage, paying close attention to the bearing journals and propeller flange. The crankshaft assembly is to be magnetic particle inspected per ASTM E1444 and accepted per MIL-STD-1907, grade A (or other FAA approved repair station procedures). Propeller bushings, plugs, dowels and oil tubes are PMA parts shown in Figures 1 and 2. The allowable journal sizes and runout for the various features are shown in Figure 3.



**Figure 1**  
**Crankshaft Assembly**



**Figure 2**  
**Bushing Locations**

**Table 1 – Position Locations of SL32500-AXX Crankshaft Assembly Items**

ITEM			CRANKSHAFT ASSEMBLY			
			SL32500-A22	SL32500-A23	SL32500-A30	SL32500-A32
1	SL32500-A1		✓	✓	✓	✓
2	SL18815	Bushing	2, 3, 4, 5, 6		2, 4, 5	2, 3, 4, 5, 6
3	SL18816	Bushing			3, 6	
4	SL18817	Bushing	1		1	1
5	SL18921	Bushing		1		
6	SL18922	Bushing		2, 3, 4, 5, 6		
8	SL61510	Plug, Oil			✓	✓
	SL-STD-1211	Expansion Plug	✓	✓		
<b>Note:</b> A “✓” indicates usage as identified item in Crankshaft Assy.						

**Table 2 – Position Locations of SL36400-AXX Crankshaft Assembly Items**

ITEM			CRANKSHAFT ASSY	
			SL36400-A20	SL36400-A21
1	SL36400	Crankshaft	✓	✓
2	SL75656	Bushing	1, 2, 4, 5	
3	SL72155	Bushing	3	
4	SL18818	Bushing		6
5	SL18819	Bushing		1, 2, 3, 4, 5,
6	SL75657	Bushing	6	
15	SL-STD-1065	Dowel	✓	✓
<b>Note:</b> A “✓” indicates usage as identified item in Crankshaft Assy.				

**Table 3 – Position Locations of SL36500-AXX Crankshaft Assembly Items**

ITEM			CRANKSHAFT ASSY	
			SL36400-A20	SL36500-A31
1	SL36500-A1	Crankshaft	✓	✓
2	SL75656	Bushing	1, 2, 4, 5	1, 2, 4, 5
3	SL72155	Bushing	3	3
4	SL18818	Bushing		6
5	SL18819	Bushing		
6	SL75657	Bushing	6	6
8	SL61510	Plug, Oil		✓
8	SL-STD-1211	Plug, Expansion	✓	
<b>Note:</b> A “✓” indicates usage as identified item in Crankshaft Assy.				

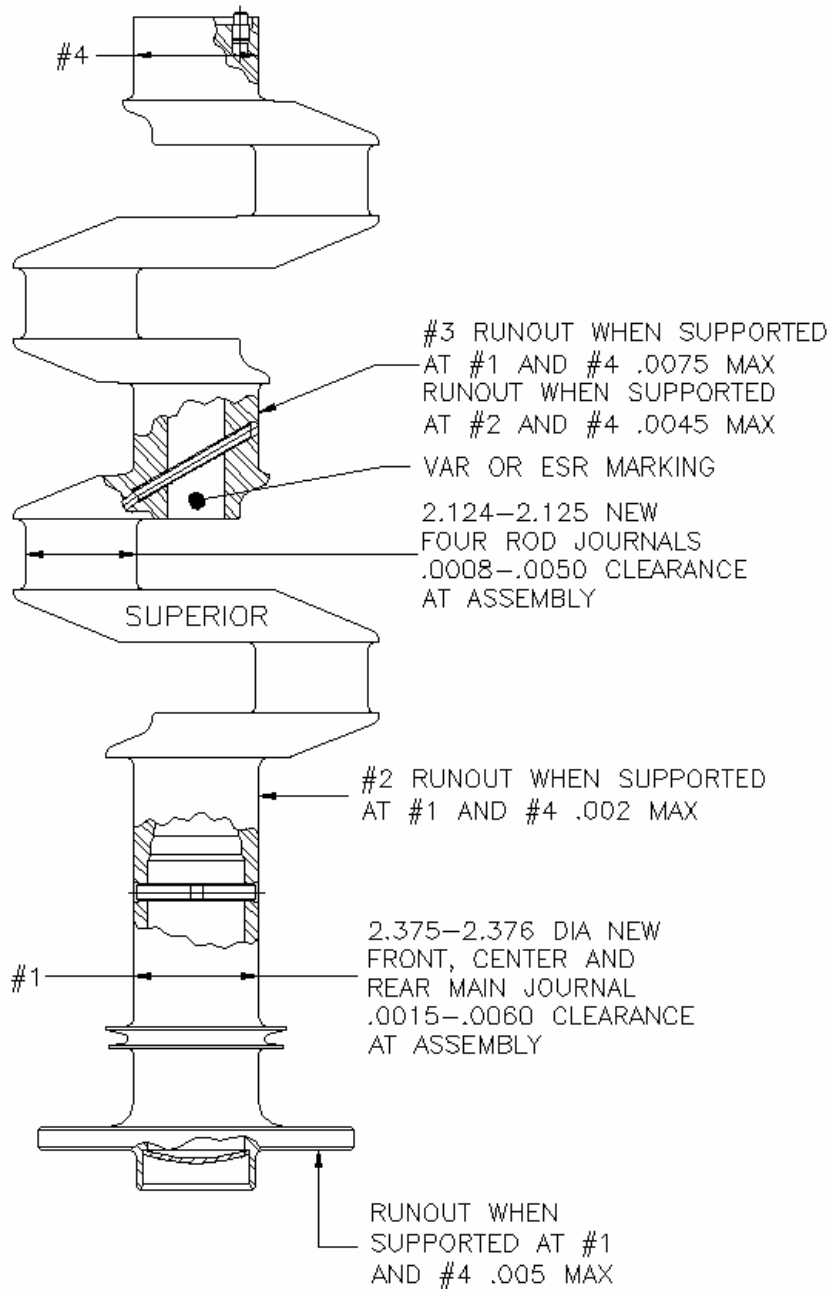


Figure 3  
Crankshaft Assembly