

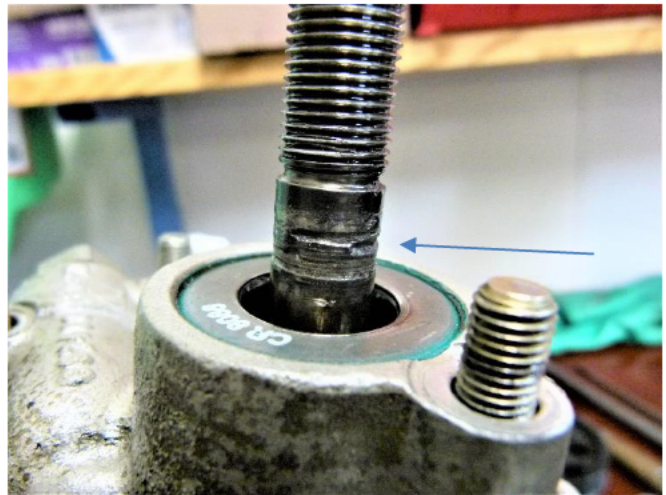
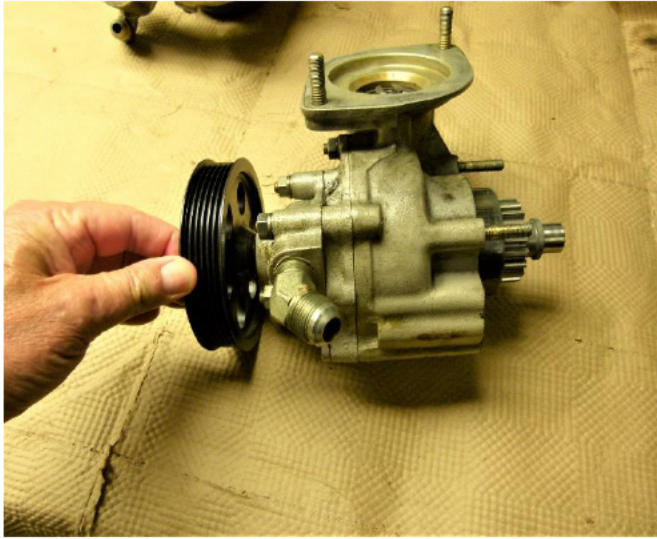


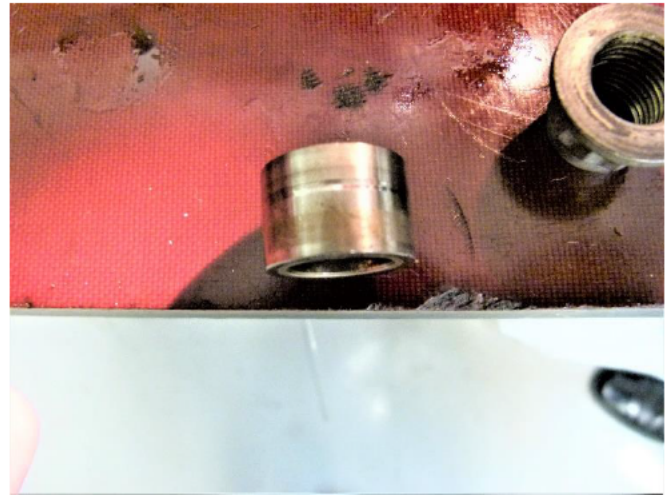
Continental Motors

Component Examination Report

N/R = Not Reported / N/A = Not Applicable

Date Received:	N/A		Analytical Date:	10-10-2017	
Warranty Claim #:	N/A		RGA #:	N/A	
Engine Model:	TSIO550C (9B)		Engine S/N:	914445	
Component P/N:	642087- Starter Adapter Assembly		Component P/N:	AL-00028-Pulley- Kelly Aerospace (part of Kelly Aerospace STC)	
Component P/N:	655711 -Starter Shaft Gear		Component P/N:	653171-Starter Shaft Seal	
Component P/N:	649865-Spacer		Component P/N:	637817-Ball Bearing	
Engine:	Component:	☒	New:	☒	Rebuilt:
					Overhaul:
					Date:
					N/R
Aircraft Make/Model:	Columbia LC41-550FG		Aircraft S/N:	41605	Reg. #:
					N8725
Engine Position:	Single:	☒	Left:	☐	Right:
					Front:
					Rear:
Engine Build Date:	5-16-2006		Date in Service:	Undetermined	
					Date Removed:
					8-9-2017
Occurrence Date:	7-31-2017		Date Received:	N/R	
Occurrence Location:	Chandler, AZ		Returned By:	Andrew Swick, NTSB IIC	
Reason for Return:	NTSB IIC Request				
Customer Comments:	N/A				
Inspection Performed By:	Phillip Grice		Search Code:	N/A	
	Mike Council				
Analytical Report:	N/A				
Comments:	The airplane was equipped with an optional third alternator. A pulley was installed on the starter adapter shaft to provide a power source for a third airframe alternator. The pulley assembly hardware (nut and washer) were tight but the pulley was found to be loose on the starter shaft allowing the pulley to wobble. The pulley was removed and found to be damaged. The ball bearing, shaft seal, spacer and shaft were also damaged. The condition of the pulley is consistent with damage caused by over-tensioning the accessory belt causing excessive side-load on the bearing, seal and shaft. The starter adapter assembly, including aftermarket pulley and belt as installed were located directly above the rear exhaust cross-over pipe which exhibited baked on engine oil.				





View looking up from beneath the engine near the firewall. The red arrow points to the starter adapter and aftermarket pulley used to power the optional third alternator. NOTE the baked-on oil on the outer surface of the exhaust cross-over tube located directly under the starter adapter pulley (yellow arrow).

Engine / Component Disposition			
Return to customer:	X	Date/Sign:	Andrew Swick approved return 10-10-2017
Customer Name/Company:	Air Transport		
Address:	[REDACTED] Phoenix, AZ		

-----END OF REPORT-----