

789		DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		SW-GADO	Form Approved Budget Bureau No. 04-R060.1
<b>MAJOR REPAIR AND ALTERATION</b> (Airframe, Powerplant, Propeller, or Appliance)				APR 26 1984	FOR FAA USE ONLY OFFICE IDENTIFICATION SW-GADO-7
INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.					
1. AIRCRAFT	MAKE	REPUBLIC	MODEL	RC-3	
	SERIAL NO.	765	NATIONALITY AND REGISTRATION MARK	N6499K	
2. OWNER	NAME (As shown on registration certificate)		ADDRESS (As shown on registration certificate)		
	Edmond F. Freeman		Greg Terrace Apt Johnson City, TN		
<p>The alteration identified herein complies with the airworthiness requirements and standards for the above described aircraft, subject to conformity inspection by a person authorized in FAR 43, section 43.7.</p> <p>4-24-84 (Date)      Anthony D. Puello (Signature of FAA Inspector, SW-GADO-7, Lubbock, Texas)</p>					
4. UNIT IDENTIFICATION					5. TYPE
UNIT	MAKE	MODEL	SERIAL NO.	REPAIR	ALTERATION
AIRFRAME	***** (As described in item 1 above) *****				
POWERPLANT	AVCO-LYCOMING	GO-480-G2D6	L-197-34		X
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				
6. CONFORMITY STATEMENT					
A. AGENCY'S NAME AND ADDRESS		B. KIND OF AGENCY		C. CERTIFICATE NO.	
Edmond F. Freeman 342 Westridge Ave Abilene, Tx 79605		<input checked="" type="checkbox"/> U.S. CERTIFICATED MECHANIC <input type="checkbox"/> FOREIGN CERTIFICATED MECHANIC <input type="checkbox"/> CERTIFICATED REPAIR STATION <input type="checkbox"/> MANUFACTURER		1580607	
D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.					
DATE	4-16-84		SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Edmond F. Freeman</i>		
7. APPROVAL FOR RETURN TO SERVICE					
Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is <input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> REJECTED					
BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	<input checked="" type="checkbox"/> INSPECTION AUTHORIZATION	OTHER (Specify)	
	FAA DESIGNEE	REPAIR STATION	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT		
DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL			
4-24-84	1580607	<i>Edmond F. Freeman</i>			

**NOTICE**

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

**8. DESCRIPTION OF WORK ACCOMPLISHED (If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)**

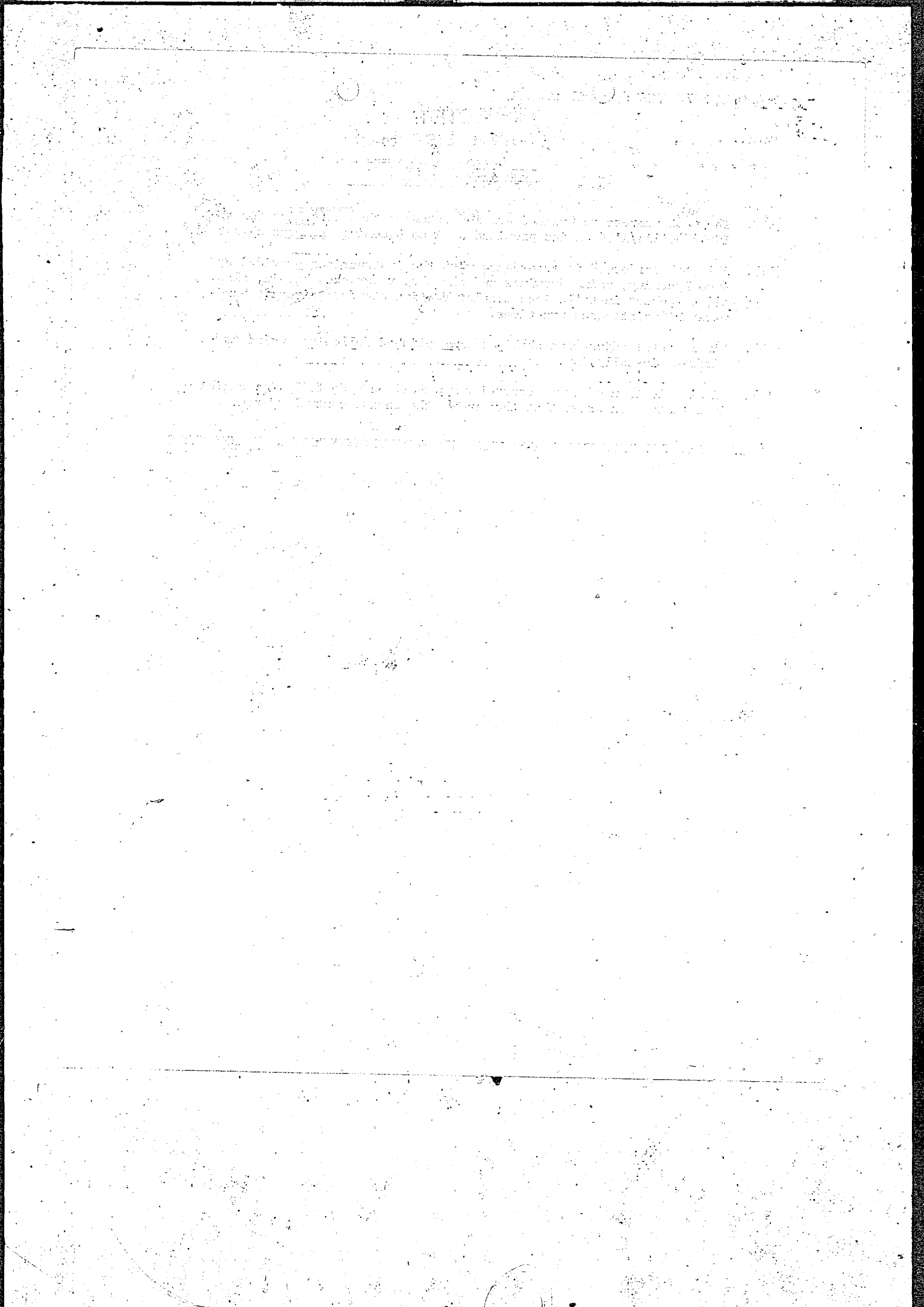
FUEL INJECTION SYSTEM

- (1). Contacted Avco Lycoming to obtain information regarding this conversion from a pressure carburetor to Bendix Fuel Injection. Information received may be found in attachment #1.
- (2). Type certificate data sheet No. E-275-10, page 7 and 8 indicates that this fuel injection system is utilized on the IGO-480-A1A6/A1B6 engines. Review of this T.C.D.S. also indicates, in note 4 that the only difference between the IGO-480-A1A6/A1B6 and the GO-480-G2D6 engine other than the fuel injection system is that the -G2D6 engine incorporates a flanged propeller shaft and a different magnetoe. This modification to a fuel injection system will be accomplished using information provided by Avco Lycoming to convert to the system on the IGO-480-A1A6/A1B6 engine.
- (3). Removed fuel pump, priming system and PS-5 pressure carburetor.
- (4). Installed engine driven fuel pump lear siegler P/N 17980-N.
- (5). Installed AN932-2 plugs in primer nozzle holes.
- (6). Using Lycoming special tool, drilled and heli-coiled holes in each cylinder head in accordance with sketch provided by Avco Lycoming, see attachment #1.
- (7). Installed P/N 74151 nozzle in each cylinder.
- (8). P/N LW-11789 bracket no longer available, so manufactured bracket to attach P/N LW-2524232-2 manifold assembly to top of engine case.
- (9). Installed six P/N LW-12098 lines of sufficient length between manifold and nozzles and secured with MS21919 clamps to push rod tubes.
- (10). Installed RSA-5ADI injector servo basic P/N 252469-A.
- (11). Installed a aeroquip 303-4 hose with 451-4 fittings between servo outlet and manifold assembly.
- (12). Installed a aeroquip 303-6 hose with 451-6 and 980005-6 fittings between fuel pump and servo, properly supported with MS21919 clamps.

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ADDITIONAL SHEETS ARE ATTACHED





RC-3, N6499K, FAA FORM DATED: 4-16-84  
ATTACHMENT # 1

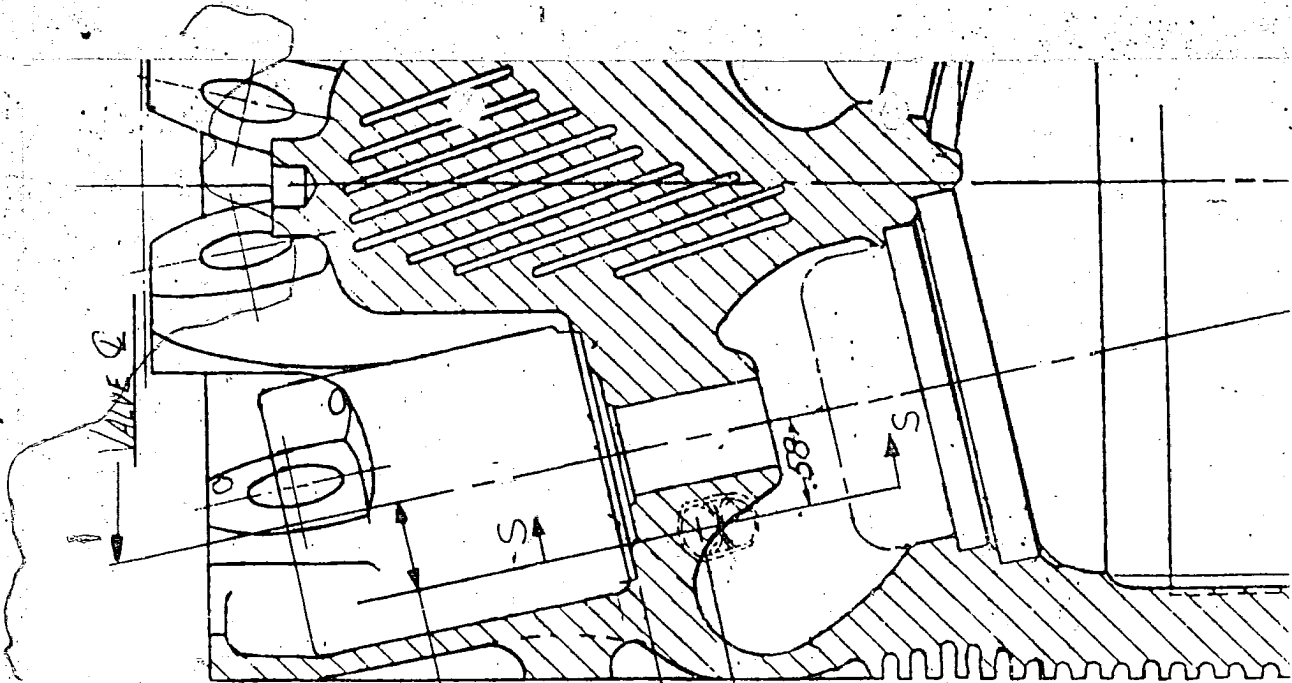
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EFFECTIVE  
PARTS LIST CO-480

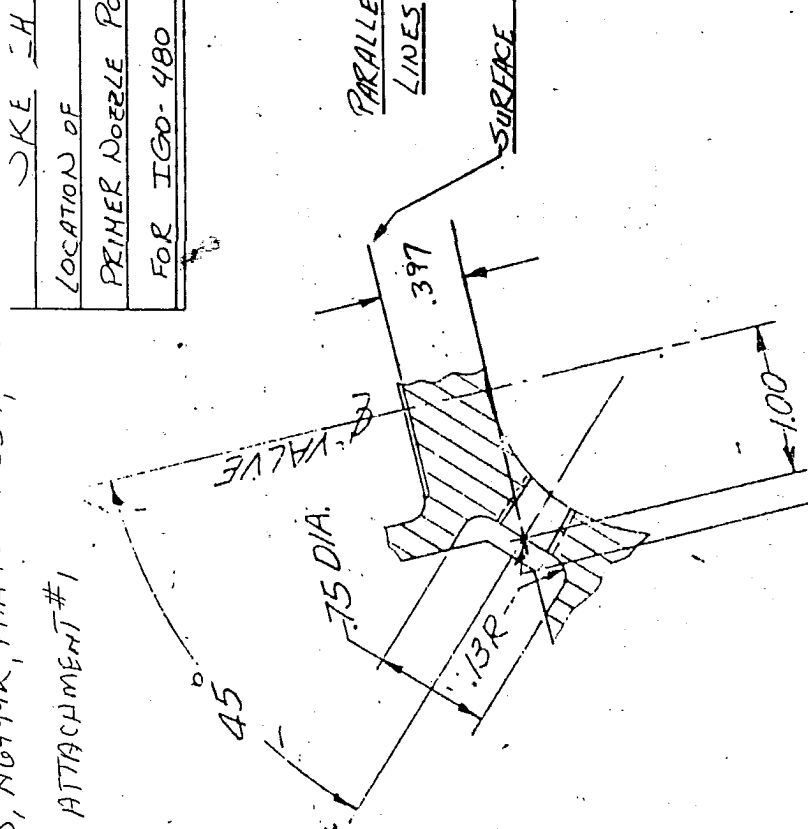
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MAJOR ITEM		ASSEMBLY PARTS LIST							
ASSEMBLY UNIT		LYCOMING IGO-480-A1B6							
PART NUMBER	SIZE	1	2	3	4	5	PART NAME	RE	
66224							Gasket-Fuel Injector		
LW-11792							Fuel Injector		
STD-35							Washer-.3125 Plain	F, E, D	
STD-37							Nut-.3125-24 Plain		
STD-36							Locknut-.3125 Palnut		
74151							Nozzle-Injection		
LW-11790							Manifold Assembly-Fuel		
LW-2524232-2							Manifold-Fuel	G, B	
AN 791-2							Elbow-.250 Flared Tube-450	A	
AN780-2							Nipple-Union-.125 NPT	A, 4	
2822-4							Elbow-.250 Flared Tube & .125 NPT-90°	C	
LW-12604							Nipple-.125 Tube to .125 NPT (Restricted)		
LW-11789							Bracket-Fuel Manifold		
STD-160							Washer-.250 Lock-Internal Teeth		
LW-25-.50							Bolt-.250-20 x .50 Long-Hex. Head	H	
STD-251							Washer-No. 10 Lock-Internal Teeth		
STD-82							Screw-No. 10-24 x .50 Lg. Fill. Head-Drilled		
STD-1823							Lockwire-.032 Dia.		
LW12533							PG-17980N, Pump-FUEL		



LOCATION OF
PRIMER NOERLE PORT
FOR IGO-480

RC-3, N6499K, FAA FORM 337, DATED 4-16-84  
 ATTACHMENT #1



DRILL .366-.373 THRU  
 TAP .125-27 HELI-COIL  
 THD FOR NPT  
 INSTALL STD-1872 HELI-COIL  
 TOP OF ASSEMBLED INSERT  
 .010-.020 BELOW SURFACE  
 OF BASS