## DEPARTMENT OF TRANSPORTATION / 1/2 1/4 CT FEDERAL AVIATION ADMINISTRATION DEPARTMENT OF TRANSPORTATION

Budget Bureau No. 04-R060.1

MAJOR REPAIR AND ALTERATION											
(Airframe, Powerplant, Propeller, or Appliance) Oil Carler - Sill Fitte											
INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 45 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.											
MAKE						MODEL					
1. AIRCRAFT	Piper					PA 22-150					
1. AIRCKAFI	SERIAL NO. 22-5250					NATIONALITY AND REGISTRATION MARK N7522D					
NAME (As shown on registration certificate)					ADDRESS (As shown on registration certificate)						
2. OWNER Thomas D. Stewart						405 Norman Ave.					
•		. 50	Cashmere, Wn. 98815								
3. FOR FAA USE ONLY THE ************************************											
Annual de la companya											
AND A SERVICION ARTEGINAL SERVICION TO CONFERENT WEST COUNTRING BY A PERCON AUTHORIZED IN FAR 43.7.											
l all all all all all all all all all a											
3-11-86 William F300-61											
	4. UNII 108				ICATION		<u> </u>		3.	TYPE ALTER-	
TINU	MAKE				WODEL		SERIAL NO.		REPAIR	ATION	
									200		
AIRFRAME	******	······································	scribe	ed in item 1 ab	n item 1 above)				XX		
							<u> </u>				
POWERPLANT				·							
POWEREAN											
PROPELLER										74.	
	•										
	APPLIANCE MANUFACTURER										
APPLIANCE									-		
		,									
			6.	CONF	DRMITY STATEM	LENT					
A. AGENCY'S NAME AND ADDRESS B. KIND OF AGENCY C. CERTIFICATE									TIFICATE	NO.	
William C. Markey Foreign Certificated Mechanic A&P 1740086									5		
1506 Walla Walla St.				FOREIGN CERTIFICATED MECH. CERTIFI: ATED REPAIR STATION							
Wenatchee, Wn. 98801					MANUFACTURER						
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											
attachmei	nts hereto have be	en made in accorda	nce v	vith (	the requiremen	ics of Part 4	3 of the U.S. I	ederal Aviat	ion Regu	lations	
	the information to	tunstied neten is t	iue a		<del></del>						
DATE SIGNATURE OF AUTHORIZED INDIVIDUAL											
3-11-86					William C Marke						
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 APPROVED REJECTED											
FAA	FLT. STANDARDS ECTOR	MANUFACTURER	X		PECTION AUTHORIZ	ZATION OTHER (Specify)					
FAA	DESIGNEE ;	REPAIR STATION		Of	IADIAN DEPARTME TRANSPORT INSPI AIRCRAFT						
DATE OF APPROVAL OR CERTIFICATE OR SIGNATURE OF AUTHORIZED INDIVIDUAL											
REJECTION DESIGNATION NO.					7,1200						
3-11-86 1740086 William CMonte								- 1			

## 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.)

  March 7, 1986
  - Oil Cooler: Removed original Earrison Oil cooler. Installed Stewart/Warner oil cooler in baffeling behind #4 Cyl. This is the same cooler and installation as used by Cessna in 172 A/C equipped with Lyc.

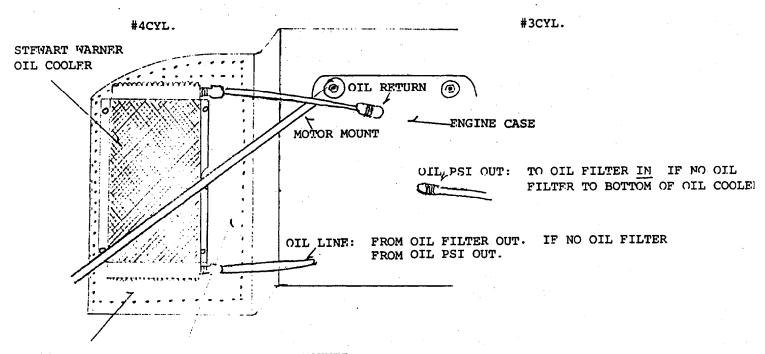
0-320 Eng.

Oil Filter: Installed Fram H.P. oil filter adapter on A/C firewall behind #3 cyl. This is an A/C universal type filter mount to remotely mount oil filter seperate from engine case. Designed for use with Champion spin on oil filter Part # 48-108 with

internal relief valve.

#2CYL.

#1CYL.

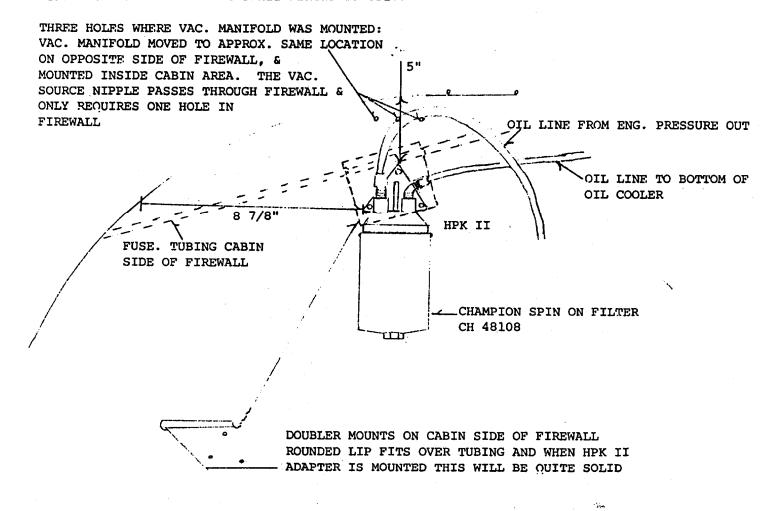


.040 DOUBLER SHOWN AS HASH LINES. MOUNTS ON ENGINE SIDE WITH 1/8" RIVETS

THIS MOD. USES THE ALUM. STEWART WARNER OIL COOLER FROM CESSNA 172 WITH 0-320 ENG.. ACTUAL COOLER # IS NOT TO IMPORTANT, HOWEVER SIZE IS AS ROOM FOR THE COOLER IS LIMITED. MY COOLER MEASURES 8"L X 4 3/8"W X 3 5/8"D, (THESE ARE TOTAL OUTSIDE DIMENSIONS) & IS MOUNTED WITH LONGEST DIMENSION VERTICAL WITH OIL LINE FITTINGS COMMING OUT THE SIDE OF COOLER TOWARD CENTER OF A/C.

- 1. PLACE OIL COOLER AGAINST FLAT BACK SIDE OF ENGINE BAFFLING BEHIND #4 CYL. LOCATE SO COOLER CLEARS ENG. MOUNT ETC. & THERE IS CLEARANCE FOR OIL LINES TO ATTACH TO COOLER WITHOUT INTERFERENCE. ( NOTE DIAGRAM: RELIEF AREA CUT TO CLEAR MOTOR MOUNT. MOUNTING LIPS ARE ON BOTH FACES OF COOLER & OUTER ONE WILL PROBABLY HAVE TO BE RELIEVED)
- 2. MARK COOLER MOUNTING HOLES & AREA TO BE CUT FROM BAFFEL FOR OPENING TO COOLER
- 3. DRILL MOUNTING HOLES & CUT OUT AREA FOR COOLER
- 4. WITH .040 ALUM. MAKE A DOUBLER TO STIFFEN THIS FLAT AREA OF BAFFLING & RIVET INPLACE
- 5. ATTACH OIL COOLER TO BAFFEL WITH # 10 BOLTS & LOCK NUTS
- 6. NEW HOSES WILL HAVE TO BE MALE UP FOR COOLER TO REPLACE LONG ONES USED ON OLD COOLER. IF THESE HOSES ARE GOOD THEY CAN BE SHORTENED AND USED

VIEW FROM ENG. SIDE OF FIREWALL BEHIND #3 CYL.:



THE REMOTE OIL FILTER MOUNT IS A HPK II UNIVERSAL OIL FILTER MOUNT & ACCEPTS THE CHAMPION SPIN ON OIL FILTER.

WHEN MOUNTING THE HPK II OIL FILTER MOUNT ADJUST POSITION SO TUBING BEHIND FIREWALL CAN BE USED TO ADD ADDITIONAL SUPPORT AS SHOWN IN DRAWING.

WHEN SATISFACTORY LOCATION IS FOUND DRILL MOUNTING HOLES THRU FIREWALL & WITH STIFENER INPLACE BOLT HPK II TO FACE OF FIREWALL.

MAKE UP HOSES AND INSTALL. THESE OIL HOSES ARE FAIRLY STIFF AND WON'T MAKE SHARP BENDS, SO KEEP THIS IN MIND WHILE PLANNING ROUTING FOR THEM

OIL FLOW SHOULD BE AS FOLLOWS: PRESSURE FROM ENGINE TO FILTER "IN", FILTER "OUT" TO BOTTOM OF OIL COOLER & FROM TOP OF COOLER TO ENGINE RETURN