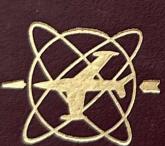
Ultimate Engines

C.R.S. YCTR973K MENA, ARKANSAS 71953` 501-394-5422



The Standard

ENGINE LOG

The Standard Engine Log SE-2

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Engine Record General Information

Manufacturer Teledyne Continental Motors Model 'IO-520-BA Serial 241697-R **Type Certificate** This engine is currently installed in aircraft: N1859W

Point Setting

Minimum Octane Fuel Oil Grade Summer

Magneto Time Spark Plug Gap Manufacturer's Recommended Overhaul at

hours

Winter

Firing Order

ULTIMATE ENGINES, INC.

Mena, Arkansas 71953 501/394-5422 C.R.S.# YCTR973K

Date: September 2, 1999 ETT: 1507.8 1781.8 Peturus Engine Data: 10-520 BA-S/N 241697-R W/O# 98343

Time Since Overhaul: 0000.

Performed major overhaul to new limits and specifications Teledyne-Continental engine model IO-520-BA, s/n 241697, in accordance with Teledyne-Continental overhaul manual #: X30039A. Teledyne-Continental parts catalog #: X30040A, and in accordance with FAA advisory Circular 43.12a and FAR 43.2. Engine ground run, tested and approved for return to service.

COMPONENTS Crankshaft - p/n; 649896. s/n; K029803N mfg. TCM -New

Connecting Rods (6) - p/n IO-520, s/n: S101696-1mfg. TCM - inspected, magnafluxed, resized, rebushed, and certified by Aircraft Specialties of Tulsa, OK w/o 101696 FAA CRS# DD2R764K. Camshaft - p/n 1058-1SL, s/n 197048, mfg. Ram Aircraft of Waco, TX, FAA PMA complies with DWG. 1058 Rev. T, w/o PP1581. Crankcase - p/n IO-520, s/n 4A235P, mfg. TCM - inspected, zygloed, repaired, surfaced, align-bored, stress

relieved, dowels installed, and certified, by Divco, Inc., of Tulsa, OK, w/o# 69232 FAA CRS# DB2R762K. Cylinders (6) - s/n: 2187, 2188, 2189, 2190, 2191 and 2192, mfg. Superior - all new parts installed and certified by Ultimate Engines, Inc., of Mena, AR, w/o 98335, FAA CRS# YCTR973K.

ACCESSORIES Alternator - p/n: ALX-9405, s/n: C037145.5 - Major overhaul by Aerotech of Louisville, Inc. CRS# PU4R453M w/o number 49883 dated 07-07-99

PERSONNING TODAYS | TOTAL

Description of Inspections, Tests, Repairs and Alterations

Starter - p/n: 646238, s/n: A-137283, mfg. TCM - inspected, rebuilt, tested, and certified by Aero Electric of Starter Adapter - p/n: 642087A11, s/n: 98343, mfg. TCM - inspected, rebuilt, tested, and certified by Ultimate Engines, Inc., of Mena, AR, w/o: 98343, FAA CRS# YCTR973K,

Starter Shaft - model #: 640803, s/n: S100364-1 dated 1-21-99, by Aircraft Specialties of Tulsa, OK w/o

Starter Gear - model #: 630568, s/n: S100605-2 dated 12-16-98, by Aircraft Specialties of Tulsa, OK w/o

Harness - p/n: C16-4BSII, - overhauled and tested by Skytronics, Inc. CRS# AE3R368L w/o #9E62. GAMIjectors – Installed General Aviation Modifications, Inc., GAMIjectors Kit No. GAD13A, s/n 5990, STC # SE09217SC, PMA # PQ821SW per GAMIjector Installation Procedure # IP-96-001(Rev. 004) dated September

Fuel Injection System - p/n: 649052A1, s/n: INJ-D299811AR, PUMP-D299824BR and D309814CR mfg. TCM - rebuilt in accordance with FAA approved design data TCM-AP Qap 1.4 and the applicable requirements of parts 21 and 43 of the Federal Aviation Regulations. Oil Cooler: - p/n: 635996, s/n:0779, - overhauled checked by Drake Air, Inc., of Tulsa, OK, w/o 41092/1771,

Magneto (RH) - p/n: 10-349350-5, s/n: 8329096 mfg. Bendix - inspected, rebuilt, tested, and certified by Ultimate Engines, Inc., of Mena, AR, w/o 98343, FAA CRS# YCTR973K.

Magneto (LH) - p/n: 10-349350-4, s/n: 8323138 mfg. Bendix - inspected, rebuilt, tested, and certified by Ultimate Engines, Inc., of Mena, AR, w/o: 98343, FAA CRS# YCTR973K.

STC'S AND ULTIMATE ENGINES PROCESSES

Crankshaft Assembly and Connecting Rods(6)- balanced crankshaft and connecting rods in accordance with Crankcase Dowels (8) and "0" Rings (8)- installed new crankcase alignment dowels and "0" rings in

accordance with Ultimate Engines Process Specification #914067-2.

Venturi Intake Valve Seat(6)- installed new venturi intake valve seats in accordance with Ultimate Engines

MLV-

Cylinder Flow Balancing(6)- balanced in accordance with Ultimate Engines Process Specification #914067-6.

Stainless Steel Valve Cover Screws(48)- installed new stainless steel socket head valve cover Fuel Injection Line Clamps (6)- installed new cushioned Adel fuel injection line support clamps in accordance with Ultimate Engines Process Specification #914068-A.

Rocker Arms - mfg. TCM - Installed IO-520 Exhaust Rocker Arms p/n: 652130, qty. 6 shop invoice number 02319 and IO-520 Intake Rocker Arms p/n: 652131, qty. 6 each Shop invoice number 02319. Repaired by Chuck Ney Enterprises, Inc. CRS# CQ2R751K.

OTHER SERVICES PERFORMED

Attaching Hardware - Hardware cleaned, bright cadmium plated class 3, Type II and baked 375 degrees Fahrenheit for three hours by United Plating Works of Tulsa, OK, w/o 00233270, FAA CRS# FA2R813K.

Engine Protective Coating - crankcase assembly and valve covers (6) have applied a protective coating by Acyroglo, acrylyd plus polyurethane April Green Met. p/n: HS10620A.G.

NEW PARTS INSTALLED

Superior Millennium IO-520-BA cylinder assemblies, major overhaul gasket/seal kit, starter adapter pilot roller brg, crank seal retaining plates, seal plate attaching bolts, crankshaft oil seal and spring assy, crankshaft dampner bushings, counterweight pin retaining plates, counterweight pin retaining rings, 6th order counterweight pins, 5th order counterweight pins, 4th order counterweight pins, main bearing and thrust washer set, connecting rod bushings, connecting rod botts, connecting rod nuts, connecting rod bearings, camshaft gear attaching screws, camshaft gear woodruff key, hydraulic valve lifter assemblies, pistons, top compression rings, 2th compression rings, oil control rings, scraper rings, piston pins, 12-point cylinder base nuts, silicone push rod seal kits, silicone valve cover gaskets, intake valve guides, exhaust valve guides, intake valve seats, exhaust valve guides, and intake valve keepers, exhaust roto-coils, exhaust valves, intake valves, exhaust nuts, stainless steel socket-head screws, Ram Cam. Self-locking heli-coils, rocker shaft retaining bolts, rocker shaft retaining washers, maganess, induction hose clamps, silicone induction hoses, crankcase dowel "O" rings, induction seals, engine oil sump felts, Magneto

drive coupling bushings, crankcase alignment dowels, counterweight torsional damper bushings, oil transfer collar assy, oil transfer collar "O" ring, fuel pump drive shaft (A.D. note).

Note #1 - use PHILLIPS 20w50 X/C oil for break-in period and when oil consumption stabilizes. Every 25-hour oil changes are highly recommended.

Note #2 – GAMIjectors fuel nozzles are flow matched to each individual cylinder, return to their original position if removed for cleaning.

Note #3 - spark plugs are fine-wire iridium Champion p/n RHB32S - careful cleaning, gapping, and rotation will ensure the expected extended life and performance of these high performance spark plugs.

Note #4 - see back of engine logbook for list of A D's.

Note #5 - engine warranty voided, if automobile fuel used.

Note #6 - TCM SID 97-3, Fuel System Set-up and Procedures, must be accomplished annually to ensure maximum serviceably to your engine.

PETER J. LO BELLO

CERTIFIED REPAIR STATION YCTR 973 K

The aircraft engine or appliance identified above was repaired and inspected in accordance with current Regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details of the repair are on file at this repair

station under Work Order No.: 98343

Date: 9-2-99

Signed: ULTIMATE ENGINES, INC.

Complied with Visual and Ultrasonic Inspections of crankshaft per paragraphs A and B, "Detailed Inspection Section", of Teledyne Continental Motors Critical Service Bulletin (CSB) 99-3A.

C.R.S. #YCTR973K

Signed TCM Representative

Ent 21/0-27 Ent 21/0324 OHB

ULTIMATE ENGINES, INC. Mena, Arkansas 71953 501394-5422 C.R.S.# YCTR973K

Date: September 2, 1999

No leaks noted.

W/O#: 98343

ETT: 1781.8

Time Since Overhaul: 0000.

Engine Data: IO-520-BA, S/N 241697-R

On this date the following work was accomplished.

Engine run in test cell and approved for return to service. Engine to be installed in aircraft at a later date.
 NOTE: Minor adjustments may have to be made to engine after installation in aircraft.

1 LiBello

PETER J. LO BELLO, AP73543036IA

CERTIFIED REPAIR STATION YCTR 973 K The aircraft engine or appliance identified above was repaired and inspected in accordance with current Regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details of the repair are on file at this repair

station under Work Order No.: 98343

Date:

Signed:

ULTIMATE ENGINES, INC C.R.S. #YCTR973K DATE

ons

Description of Inspections. Tests. Repairs and Alterations RECORDING TODAYS TOTAL TIME IN Entries must be endorsed with Name. Rating and Certificate Number of TACH FLIGHT 1999 TIME SERVICE Technician or Repair Facility. (See back pages for other specific entries.) September 28, 1999: Beech V35B, Ser. # D-9503, N1859W. Tach Time 1764.5 hrs. Acft. Total Time 4871.5 hrs. Tach removed and resit to 000.00 hrs. Engine Model IO-520-BA10B Ser.# 249709-R removed. Installed ULTIMATE engine model # IO-520-BA, Ser.# 241697-R. Engine TOTAL TIME 1781.8 hrs. TTSMOH 000.00 hrs. Replaced engine mounts. Replaced all fuel and oil lines from firewall to engine with Life long hoses. Baffle repaired and new seals installed. Added 12 qts Phillips 20 50M oil for break in purpose. Engine ground run and test flown. WORK ORder # 3958. Vausar Barbar AGP 13 98 894 Barber Aviation 4130 Aviation Dr. Madera, Ca 93637 **(209) 675-**0183

19 <u>99</u>	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (<i>See</i> back pages for other specific entries.)	DATE 19	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)
Ja BA	nuary 1 Ser.# anged t	Ser. anged 100W ORDER 30 Au dora, C 209) 6 1 2, 20 2416 his dieng. Barbe	# 24169 this da oil. A0 # 3979 Aviation iation Dr. A 93637 75-0/83	Tausan Barber Afr 1398894 Th V35B, N1859W. Eng. Cont. IO-520- Ich Time 57.32 hrs. Oil and filter ed 12 qts Aeroshell 100W. Filter # nd ground run. WORK ORDER # 4023.	insp filt #2-7 chec scre	ection of er change 2, #3-70 ked. Tiren check ground : BARB 4130 MADE	compleged, ranged, ranged, ranged, ranged arrun. ER AVIATICERA, CA	ted thin the start # CO-70, #5-checked. ATION DN DR.	15B, N1859W. Eng. Continental IO-520-BA10B, le 89.4 hrs. TTSMOH 89.4 hrs. 100 hr s date. OII changed Aeroshell 100W. Oil 1H48109 installed. Compartor check; #1-74, 170, #6-74/ 80PSI. Spark plugs cleaned and Intake and exhaust system checked. Fuel led. Engine controls checked. Engine washed ICERTIFY THAT THIS Eng. HAS BEEN INSPECTION AND WAS DETERMINED TO BE IN AIR WORTHY CONDITION. DATE 3/28/00TOTAL TIME 1871.2 HRS LAWSON E. BARBER 141398894 W.O. # 4081.
© 1991 ASA						•	-		© 1991 AS

	_	,		
DATE	RECORDING TACH	TODAYS FLIGHT	TOTAL TIME IN	Description of Inspections, Tests, Repairs and Alterations
19	TIME	ruuni	SERVICE	Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)
				h V35B, N1859W. Eng., Cont.
	IO-520-E	BA10,	Ser.# 2	49709-R. TAch Time 104.48 hrs.
	Starter	adapt	er repl	aced this date. Removed adapter
	part # 6	542087	A11, Se:	r.,# 98343. Installed adapter
	# 64208	7A11,	Ser.#	99447. Continental S.B. #MSB 00-
	5 CRANK WORK OR			AL N.A this Crankshaft Ser.#
	BAF	BER A	VIATION	1 2011
			TION DR.	Lawsa Fold A+P 1398894
	MA	DERA,	CA 93637	148 1398894
	((559) 67	5-0183	Atrice
				to the state of th
-5-00	TACH 46	2.3		
	C/N AD	20-08	-51 RF	TOVED CRANKSHAFT CORE SAMPLES FOR INSPECTION
	1 1			
Y T.C	M. PER	MSB	00-5B.	T. C.M. REPORTS NO DEFECTS. INSTALLED
ROP AX	DLEAK	CHECK	ED	Tong A Cour
, , , , , ,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
				CORPORATE AIR TECHNOLOGY
				1250 AVIATION AVE. STE. 125
				SAN JOSE, CA 95110 Faa CRS augr384L
				LWV OUR WORKINGSOME

DATE 19	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Entries must be endorse	ed with Name, Ra	s, Repairs and Alterations ting and Certificate Number of pages for other specific entries.)
					1	N. J. R. C. S.
ENG. M	ODEL FE)-520	ENG.	S/N 241697-R		
removed has dete	l from cranks rmined the m	haft seria etallurgio	l number <u>K</u>	the core samples DQ9803 W and of this crankshaft is		
	te all sections g the aircraft			or later revision, before		
		TELI		VINENTAL MOTORS		
			MI	MF 322-10		- 2
			1820			

991 ASA

2000 18	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (<i>See</i> back pages for other specific entries.)	_ L-	DATE	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (<i>See</i> back pages for other specific entries.)
7-20-00	473.0			CHANGED OIL & OIL FILTER TUSP OIL FILTER MO		1-1-01	10-0	<u></u> ',,	2000-0	Annual insp completed.
				CONTAMINATES FOUND. SEKVICED WITH . 12QTS AGNOSHELL 100 RETURNED to SERVICE	. (- S. S. S. S.	10 12 4 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CompCK 07/20 07/20 0 1/20 0 7/20 0 7/20 0 7/20
	St.		D	120ts ALLUS Hell 100 RETURNED to SERVICE	-		1377.4	Sec. 3.		Changed oil & filter, Servicedengine with Acroshell woo.
8-23-00	178.2	old	1960.0	anstalled a new tach reading	-					Replaced left exhaust stack and both mufflers.
	0.0	new		Ф. ф. Engine time 178.2 smot.	-				224	Repained battle crack at cyl #1.
				M Brown		JA 4				Inspected afternator pearings.
				A+P2028525	-			.,1		
9-15-00	0/6.0			CHANGED OILEGIL FITER INS OIL FITER NO CONTINUE	- etes					
				FOUND SERVICED WIZETS ARROSHELLION RETURNED TO	<u>5</u>				,	DATE 4-1-01 TOTAL TIME 2000.0 218-2 SMOH
	-			SERVICE MELMIELLLARISTA	j					I CERTIFY THAT THIS Eng HAS BEEN INSPECTED IN ACCORDANCE WITH A Annual
				0						INSPECTION AND WAS DETERMINED TO BE
C 1991 ASA									1-, 1	in airworthy condition my flower 4813628686 IA

DATE 200 19	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (<i>See</i> back pages for other specific entries.)
1-23-01	085.4		2045.4	CHANGED oil toil Filter. INSP. oil Filter NO
				CONTAMINATES FOUND SERVICED WITH 11 QTS
				ALROSHELL 100 RETURNED to SERVICE - RUN-
				PRINTELL DES SERVICE - RUN-
G 02 - 1				
32701	128,0	-		CHANGED oil & oil Filter INST. oil Filter NO CONDIAN.
				FOUND SERVICED W/ 11 ats ACRESHELL 190 DEAK CK'S
				Returned to Service MIL MELLEL ANS 47419576
3-1102				INSTALED MCCAULE PROP MODAL & ABLO
				SIN 673750 TORQUE BOLT TO SOFT POUNTS
				Larry westernett
				A E P (823382
			E representative that the	, , , , , , , , , , , , , , , , , , , ,
3-2202	172.4			Engine removed for proportick inspection
			1	
				M. Brown A+P2028525
1991 ASA				

DATE	RECORDING	TODAYS	TOTAL	Description of Inspections, Tests, Repairs and Alterations
2002	TACH TIME	FLIGHT	TIME IN SERVICE	Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)

Control of the second s

UTIMATE ENGINES, LLC. Mena, Arkansas 71953 479/394-5422 C.R.S.# YCTR973K

Date: July 22, 2002 Tach: 172.4 W/O#: 22105
Engine Time Since Major Overhaul: 350.6 Engine Total Time: 2132.4
Engine Data: 10-520-BA, S/N: 241697.R

Disassembled, Inspected, repaired and re-assembled Teledyne -Continental engine model IO-520-BA, s/n: 241697.R, in accordance with Teledyne-Continental overhaul manual #: X30039AA, Teledyne-Continental parts catalog #: X30040A and in accordance with FAA advisory Circular 43.12a and FAR 43.2. Engine ground run, tested and approved for return to service.

COMPONENTS

<u>Crankshaft</u> – P/N: 649900, S/N: K029803N – Magnafluxed, Inspected, rods and mains standard, polished, cadmium plated and baked flange, re-bush Cwt. Blades. This VAR crankshaft complies with AD 97-26-17. Ultrasonic inspected in accordance with Continental MSB 96-10. Aircraft Specialties, Inc. of Tulsa, OK, FAA CRS DD2R764K, WO# 124650

Connecting Rods (6) –IO-520, serial number S124652-1, 6 each Magna-fluxed, rebushed, and inspected in acc. with overhaul manual by Aircraft Specialties, Inc. of Tulsa, OK, FAA CRS DD2R764K, WO# 124652 Camshaft –P/N: 1058-1A, s/n: 197048, Checked run-out of main journals and magna-fluxed by Ram Aircraft of Waco, TX, WO NO: 262.

<u>Crankcase</u> – P/N IO-520, S/N: 4A235PL. Has been repaired in accordance with the FAA approved processes for the following: welding, machining, lapping, align boring, and inspection, by DIVCO, Inc. of Tulsa, OK FAA CRS DB2R762K, WDC #79663.

Internal Steel (15) Magnafluxed IAW overhaul manual by Aircraft Specialties, CRS DD2R764K, WO 124651. <u>Ovlinders (6)</u> – S/N: 2187, 2188, 2189, 2190, 2191, and 2192, m/g. Superior, visually inspected and reinstalled.

2001	TACH TIME	FLIGHT	TIME IN SERVICE	Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)	200 18=	TACH TIME	FLIGHT	TIME IN SERVICE	Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)
L L L L L L L L L L L L L L L L L L L	Alternator- P/Starter- P/N 6 Oil Cooler - R Harness - Re Magneto (RH) Magneto (LH) Fuel System- Engine Pre-he Manufacture's OTHER SERV Engine Protect by Sherwin Wil NEW PARTS I Major overhaul bolts, cranksha counterweight counterweight counterweight geonecting rod pistons, top con ruts, silicone pu cushion retainer seals, engine oi transfer collar as Note #1 - use P oil changes are Note #2 - spark	pter –, P/N: P/N: ALX94(646238, S/I 646238, S/I Re-installed te-installed th) Bendix P/ 1] Bend	2405, S/N: C0371 S/N B34781- Re-led d d P/N 10-349350-5 P/N 10-349350-4 talled nstalled E-Z Heat ion instructions. ERFORMED ating - crankcase crylyd plus polyur LED seal kit, starter at al and spring assy ning rings, 6 th ord in bearing and th nnecting rod bea nn rings, 2 nd comp, seal kits, self-loc joil pressure relief elts, Magneto dri o il transfer colla commended re fine-wire iridiu	p-5, S/N 8329096, Re-installed p-4, S/N 8323138, Re-installed eat, Inc. aircraft engine heater, Model 441, on oil sump in accordance with		Note #4 - e Note #5 - maximum Crankcasi	engine warran - TCM SID 97- serviceably to se filled with p Engines, LLC. kansas 71953	anty voided, if al 17-3, Fuel System to your engine. Tillips 20w50	ok for list of A.D.'s. automobile fuel used. tem Set-up and Procedures, must be accomplished annually to ensure e. 0 X/C oil. Ground run and flight checked. The aircraft engine or appliance identified above was repaired and inspected in accordance with current Regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details of the repair are on file at this repair station under Work Order No.: Date: 7-2202 Signed: ULTIMATE ENGINES, INC. C R S. #YCTR973K

ATE 2002 B	RECORDING TACH TIME	TODAYS FLIGHT SM&H	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)		DATE 2003 185	RECORDING TACH TIME	TODAYS FLIGHT SMOH	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)
28.02	172.4	350.6	2132.4	Engine reinstalled in N 1859W. Serviced engine with Shell 100 uncompounder oil		6-3-03	223.B		2212.5	Exampsed oil and filler, Serviced engine with hell ios in Replaced
				engine will sheel 100 uncompounder oil	d.					fuel vapor return line and low-
										1
			la.	DATE 8.28-02 TOTAL TIME 2132.4 I CERTIFY THAT THIS ENGINE HAS BEEN	8					MBrown HLP2028525
				INSPECTED IN ACCORDANCE WITH A CONSTRUCTION AND WAS DETERMINED TO BE				ı		N-172028525
				IN AIRWORTHY CONDITION	¥.	8-29-03	252,5	430.7	22125	annual inspection completed.
				N1. Known AdP2028525IA						Comp. C.K. 1 78/80, 2 78/80, 3 76/80, 4 75/80, 5 77/80, 6 78/80 Changed oil and serviced engine with
26.62	196.3			changed oil and filter. Sewiew engine with Phillips ISU SOXC	+					Shell 1000. Retirned right mag.
				engine with Phillips ISUS-SOXC			DATE	29.03	ITOTAL TIM	Z212,5
				Mesheren			I CERT:	FY THA	THIS COLLANCE	WITH A CIRMUNA
				UN-P2628525				_	WAS DETE	MIRROUM ALPZUZESZITA
4SA					4					© 1991 ASA

DATE	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)	DATE	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN	Description of Inspections, Tests, Repairs and Alt Entries must be endorsed with Name, Rating and Certificate Nu
6-5-04	33/.4					_ IIME		SERVICE	Technician or Repair Facility. (See back pages for other specific
	337.7			CHANGED OIL AND FILTER, SERVICED ENGINE WITH SHELL W 100 OIL.	_				
				CHOINE WILL SHELL W 100 OIL.				٠	
				John Have A & P. 564601388					G. 7-04 77-5-0
				John Ham A 27.364601388					DATE 9.2.04 TOTAL TIME 2355.8 I CERTIFY THAT THIS ENGINE HAS BEEN A
									INSPECTED IN ACCORDANCE WITH A CONNECTED
0 = 11	- 0 - 1			\(\frac{1}{2}\)	<i>y</i>				THORROWS
9-2-04	395.8	574,0	2355.8	Cennual empedion completed					IN AIRWORTHY CONDITION W. Brown
				Compo Ck. 1 78/80, 2 72/80, 3 78/80, 4 75/00, 5 76/80, 6 78/80					M. Drown.
		-		Changed sil and litter. Serviced engine	7				A+P20285257
				with Shell 100w. Cleaned feel nogyles.		7			
				Replaced alternator with a sverhauled	, i				
				part, ALX-9524, SN E064475. C/WAD 96-12-	}				
				07 Magneto impulie coupling. Due					
				again at 2855 her engine total time.					
				my noss was engine (state come.)				

						1						
p <u>e 1</u>	2005-02	NOTE	WO#12151 Mountain Ak N1859W Prop. Strike S COMPLIANCE RECORD		- Seminaria		and Alterations ificate Number of er specific entries.)	DATE 19	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)
ngine - Teledy	ne Continental - 10-520-BA		SN: 241697R				<u></u>	2.27.17	1/12			Distant
AD#	Applicable S.B. # & Subject H	Date & lours @ Comp.	Method of Compilance	Recurring One Time	Next Comp. @ Hrs/Date	Authorized Signature & Number		2-23-05	423.4			Sovered engine with Shell 1000
0-14-07 R2	Fuel injection pump needle	•	N/A By Fuel Pump Configuration	x	A	Air West Colo		1				
72-24-03	Oil filter adaptor	1	N/A by Oil Filiter Type	x	1	Air West TV3R881L		-				M. Brown
77-13-22 R1	Crankcase cracks		N/A Approved Heavy Case Installed	x	1	Air Word Con TV3R861L						A+P 2028525IA
79-06-09	Oil pressure relief valve		N/A by 64233KA1 Kit Installed	x		Air Woold Code TV3R881L		i.				
80-01-04	Cylinder holddown flanges		N/A Superior Cylinders Installed	×		Alr West & Back TV3R881L		7745	111171			1 +110 1/1 + 1 +1
81-24-06	Fuel pump		N/A By Fuel Pump Serial Number D299824BR and Pump O/H Date 9/99	×		Air West / C	DATE: 2/18/2005	7-26-05	443./			Installed a Shadin Feel John Transducer See Jorn 337. M. Brown A+P2028525.
86-13-04 R3	Cylinder assemblies		N/A Superior Cylinders Installed	1x		Air Wood A Cont	TTE: 2383.6 TSMOH: 601.8 TACH: 423.6					translucer. De form 337.
87-14-02	Starter adaptor shaftgear		N/A Aircraft Has No A/C	1x		Air Wost						M. Brown
67-23-06	Crankshaft fatigue cracks		Superseded by AD 97-26-17	x	1 1 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A	Air Wood TV3R881L						A4P2028525
89-03-06	Oil filter	Mich !	N/A TCM Oil Filter Not Installed	×	1 1000	Air West Con						
86-17-03	Starter adapter shaftgear		N/A Aircraft Has No A/C	x		Air Wood Con		8-1-05	A4 6		2115112	ald tach 444.9
91-19-03	Champion oil filter		N/A New Approved Champion Filter Instal	led x		Air Word TV3R881L	crankshaft s/n	8-1-03	00.0		2404.9	1 1
93-06-17	Incorrect oil pick-up tube		N/A by Engine Model	×		Air West All	✓ on per log ✓ Voil. Engine					New tach 00.0
93-10-02	Cylinder valve retainer		N/A Superior Cylinders Installed	×		Air West CO. TV3R881L	7					SMOH 623.1
93-16-15	Fuel pumps	09/02/9	9 P/C/W by 653359 Coupling Installed	×		Air West - CR.						Total time 2404.9
84-14-12	Low extane detonation	+	Superseded by AD 95-21-15	\x	1	Air West						
	Engine teardown and analytic	al	N/A by Aircraft N- Number (N1859W)	,		Air West TV3R861L						O 1991 ASA

TE	TACH	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)	DATE 19	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)
	TIME		SERVICE	Technical of Hopes 1 at 1	2-23-05	423.6			Seinstalled engine in N 1859w. Sourced engine with Shell 100w
	423,6								Sorvered engine with Shell 1000
					3				
									M. Bosen
									A+P 2028525IA
					į.				,
		1		DATE 2/18/2005	7-26-05	443.1			Installed a Shadin Feel # hu
	ENGINE MODE ENGINE S/N: 2 REG. NO: 1859	41697R		Air West Aircraft Engines TTA 670 Airport BMA 670 TSMOH 601 8	-				Installed a Shadin Feel Ffer Transducer See Jorn 337.
	WORK ORDER	12151		Repair Station No. TV3R881L)				M. Brown A4P2028525
	Engine En		Agents of the second	A decrease from propeller strike and reassembled in accordance					A4P2028525
	with TCM SB	96-11, TCM	10-520 senes (nbled, cleaned, inspected for damage from propeller strike and reassembled in accordance overhaul manual p/n X-30039A and IPC p/n X-30624A. Engine reassembled with new main viveight bushings, pins, plates and clips, exhaust hydraulic lifters, seals and gaskets.					
	Installed mad	netos repair	ed by Aero Acc	essories. Re-listation provided by the same of 620435 cheft and new p/n 629668 cover in	8-1-05	00.0		2404.9	ald tach 444.9
	accordance v	with TCM 10	520 series ove	ernaul manual p/11 X-300354, and in opinion and 10 of D/CAM by LIT inspection per log	4				New toch 00.0
	book entry. A	AD 2000-32-3 h prop gover	nor and alterna	ore samples by Town per log book emity					SMOH 623.1
	Air West Aircr	aft Engines cer	tifies that this eng	gine has been disassembled, inspected, repaired and tested. Procedures and limits used are in accordance ignes certifies the engine identified above was repaired and inspected in accordance with current regulations approved for return to service. Pertinent details of the repair are on file at this repair station.	- 1				Total time 2404.9
				MORK ORDER: 12151					i i
	DATE: 2/18	/2005	Nelson A	Andrade Printed by EBis (http://www.datcomedia.com)					
1991 ASA			Certified	Repair Station No. TV3R881L	Sec.				© 1991 A

### SERVICE Technician or Repair Fact Mount	ain Aire Aviation, Inc. ort Road, Sonora, CA 9 DATE BA TACH	8/22/2005 11.2
22363 S. Air REG # N1859W ENG MODEL 10-520- SERIAL # 241697-	DATE TACH R TOTAL TIME	8/22/2005 11.2 2416.1
22363 S. Air REG # N1859W ENG MODEL 10-520- SERIAL # 241697-	DATE TACH R TOTAL TIME	8/22/2005 11.2 2416.1
ENG MODEL 10-520- SERIAL # 241697-	R TACH TOTAL TIME	11.2 2416.1
ENG MODEL 10-520- SERIAL # 241697-	R TACH TOTAL TIME	2416.1
SERIAL # 241697-	R TOTAL TIME	
Annual inspection completed		
15W/50 oil. Retimed left ma I certify that this engine has inspection and was determined	to engine.	dance with an annual
	Michael B. Broy	vn, A&P 2028525
	(VIIICITACI D. D.C.	

DATE 19	RECORD TACH TIME	DING TODAY FLIGH	TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)						
11-18-05	40.3			Replaced spack plugs with 12 new- RHB 32 E plugs. adjusted prop governo for 2700 RPM.						
				RHB32E plugs. adjusted prop governo	7					
				for 2700 RPM.						
				M. Brown						
				A4P 2028525						
				MOUNTAIN AIRE AVIATION, INC., 22363 S. Airport Road, Sonora, CA 95370						
		Engine Make & N Engine Serial No		Tach: 81.7 Hobbs: Total Time: 2497.8 SMOH: 725.0						
		Annual inspection Serviced engine	n completed. Comp chec with Shell 15W/50. Clean	k: 1-76/80; 2-76/80; 3-76/80; 4-76/80; 5-78/80; 6-76/80. Changed oil and filter. ned fuel injector nozzles.						
		I certify that this condition.	engine has been inspecte	ed in accordance with an annual inspection and was determined to be in airworthy						
				Michael B. Brown A&P 2028525 IA						

		TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)	DATE 19	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)
8-16	166.9		Z583.0	Comp. Ck 1 72/80, 3 73/80, 4 74/80, 5 74/80 Changed oil and filter. I serviced engine with Shell 150 50.	5-28-08	207.16			Removed and Cleanle Rotated #3 aylund- Spork Phys. Regular Phys. alm Renumb #3 Chule Fuel yunter and Chend.
				DATE 8-16-07 TOTAL TIME ISSIC I CERTIFY THAT THIS ENGL HAS BEEN			,		Premied & 5 your four inguite and Chewal Perfound Rung no leck our all kehal to Sure for the Work Perford — Jan 440 #46723868 am
				INSPECTED IN ACCORDANCE WITH A ASSISTANCE INSPECTION AND WAS DETERMINED TO BE IN AIRWORTHY CONDITION M. Brown					
<u>5-1-08</u>	197.5			Performed Oil Changed Dromaid Oil Replace with 12gts of 50w 100 Acrostel					
A MALLEA				Repose of files and Cut over 16 Contominator france Repose with CHAB 107-1. (Clark					o 1991 ASA

						A STATE OF THE PARTY OF THE PAR	_		
DATE ನಿಎಂತಿ 19	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)	DATE 19	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (<i>See</i> back pages for other specific entries.)
8-1	222.0		2639,1	Comed inspection completed per Part 43, App. D. Comp. Ch. 179/2, 278/29, 379/20, 474/29, 577/20 Changed al and filter. Serviced engine with shell 150050, Cleaned fuel injector many less. Replaced aring seal on ail desir value. DATE 8-1-08 TOTAL TIME 2639. I CERTIFY THAT THIS Engure HAS BEEN INSPECTED IN ACCORDANCE WITH A DIMENUAL INSPECTION AND WAS DETERMINED TO BE IN AIRWORTHY CONDITION M. Brown At P2028525 IA	04101/09	0259.1			Drained Oil zolded 12gts of Acroshell Sac 50 100w. Removed Oil filter Cut Open and Impected for Metal None found. Peplace Oil filter with CHARIT. Perford Runny No beaker frank. and Sakh wind Oil filter this aircreft is Retruelto Securice for the worke terformed Jamefermandez Hoorfun Adtono3959 end

								·	
DATE 19	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (<i>See</i> back pages for other specific entries.)	DATE 19	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)
	Eng	umber ine Make & M ine Serial Nun					ke & Model rial Number	N1859W TCM I0520 B 241697-R 8/16/10	MOUNTAIN AIRE AVIATION, INC 22363 \$ Airport Road, Sonora, CA 95370 Tach: 315.8 Hobbs: 7otal Time: 2733.9 SMOH: 940.9
7	Ser on	mpression oviced engired oil drain val	check: 1-76/80; ne with Shell 15 lve.	in accordance with Part 43, App. D 2-77/80; 3-74/80; 4-73/80; 5-77/80, 6-78/80. Changed oil and filter. W50. Replaced spark plugs with 12 new RHB32E plugs. Replaced seal een inspected in accordance with an annual inspection and was condition. Michael B. Brown, A&P 2028525 IA		Compres nozzles.	ssion check	c 1-72/80; 2-74	coordance with Part 43, App. D. 4/80; 3-74/80; 4-72/80; 5-73/80; 6-73/80. Cleaned fuel injector inspected in accordance with an annual inspection and was dition. Michael B. Brown A&P 2028525 IA
(1-30-2610	305.2		i i	Performed oil Chaped Draws oil, Raplace with 129 to Bensh 1000 50 y Romes oil Silter Cutopen Chillps Matel No Motel Sond Per for Rung No health found all Reduct to Song	10/1/2010	531.0	∅	2. %.	Drawid Oil house Oil follow and Court and impute foud No metal Put 12gts of Oil across the 11 100 Sat 50. perjame they Chall for Lead No legter found from Jamen J
				Awardy Danter 2703959					D 1901 O

DATE 19	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Ale Entries must be endorsed with Name, Rating and Certificate Na Technician or Repair Facility. (See back pages for other specific	umber of	DATE 19	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (<i>See</i> back pages for other specific entries.)
8-5-2011	\$353.4	Ø		Reformed Gil Charge. Dranul Oil Replace with of Aeroshall 100050 sae. Remove oil filter out the Neworl Filter CH48109 Champia. Part Open Juggest for Hetal. No wetal found. Part or will Checked for Oil beals No Oil beals found. Old Return to Survice Jamment A210339 James end	Munup	6/21/12	387.3	φ		Personnel Oil Chan Dumil Oil Replace with 12 years of truste 10. 1050s. honore oil filter on a Replace with New on I filty cut 451 Chr. 21 in Cot oil filter green and desperte No Make from Performed Eyme Rung Chell for Oil lights None for Amen of hahre to Savire Jase to 1703757 from end you by
		er Make & Model Serial Number		MOUNTAIN AIRE AVIATION, INC. 22363 S. Airport Road, Sonora, CA 95370 Tach: 358.1 Hobbs: Total Time: 2776.2 SMOH: 983.2				N Number Engine Mak Engine Seria Date	e & Model Ti al Number 24	MOUNTAIN AIRE AVIATION, INC. 22363 S. Airport Road, Sonora, CA 95370 1859w Tach: 398.0 CM IOS20BA Hobbs: 2816.1 CM/J/2 SMOH: 1023.1
	Compl	ression che	eck: 1-74/80; 2	M/ Bever				Serviced H-M06136 Cleaned a	engine with S 99, Hartzell El and serviced a	oleted in accordance with Part 43, App. D. 70/80; 2-74/80; 3-69/80; 4-72/80; 5-74/80; 6-65/80. Changed oil and filter. hell 100W oil. Replaced alternator with an overhauled part, PN ALX-9524, SN ngine Technologies WO H-M061309. Replaced cabin heater inlet air duct. has been inspected in accordance with an annual inspection and was worthy condition.
C 1991 ASA	3			Michael B. Brown A&P 2028525 IA						Michael B. Brown A&P 2028525 IA

DATE 19	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)	DATE 19	TROM FILES	MOUNTAIN AIRE AV 22363 S. Airport Road, S	Sonora, CA 95370	n Managa Aka da Panda da Sistema Indonésia da Aka Managa Ang	A terations Sumber of c entries.)
21.1				12 22 100 100 100	bolt-6-7	N Number Engine Make & Model	N1859W TCM IO-520 BA	Tach:	434.6	to the
918/3013	427.3	Ø		taponel Oil Clay and Oil filter Replace		Engine Serial Number	241697	Total Time:	2852 7	ļ
(Date	11-1-2013	SMOH:	1059 7	
Management of the Control of the Con				Oil (lag ts) with Grosbeh 100 w. hyplane						
				Oil hi low with Changing Ch 4810h		Annual inspection of	completed in accordance with Part	43, App. D.		
				Cit open Oil hilte upen to ba untal	***	filter change 7.3 hrs	 1-73/80, 2-76/80, 3-77/80, 4-72/ prior to annual see log entry 8/2 	013. Run and leak of	check ok.	
				no notal found. Your and hugh		<u> </u>	2009-16-03 Cylinder inspection. N			
				No lealor famil at neture to			gine has been inspected in accord a airworthy condition.	dance with an annua	al inspection and was	
				Source				P	11	ļ
				Assurance and 4 203987			- 40	Renne	er L. Brewer A&P 3177530 IA	Admin 100 (100 (100 (100 (100 (100 (100 (100
				0 11			The second secon			And the second
							SEF	Vext Go	(ao . '	
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Militaria	1									

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DATE 19	RECORDING TACH TIME	FLIGHT	TOTAL TIME IN SERVICE	Description of Inspect Entries must be endorsed w Technician or Repair Facility	vith Name, Rating and Cer	ificate Number of	DATE 19	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and A Entries must be endorsed with Name, Rating and Certificate I Technician or Repair Facility. (See back pages for other spec	Number of 🛰
		er Make & Model Serial Number	N1859W TCM IO-520 241697 11-17-2014		ch: 452.5 bbs: tal Time: 2870.6		En	Number gine Make & Model gine Serial Number te	N1859W TCM IO-5 241697 12-10-201	22363 S. Aii 20-BA	TAIN AIRE AVIATION, INC rport Road, Sonora, CA 95370 Tach: 459 1 Hobbs: Total Time: 2877 2 SMOH: 1084 2	
	Comp Inspec check Comp AD 20	ression chected old oil fill ok. Cleaned onents, Inc. 14-05-29 SA	k: 1-73/80, 2- ter, no finding fuel injectors CRS# S7HR8 P cylinder as	6	ero Shell 15W50 oil. Run and ator after repairs by Aircraft El 14/2014, oval.	leak ectrical	Co fin Co AL 50	ompression check dings in old oil fill omplied with the f 02014-05-29 SAF 19.1 Tach time.	t: 1-73/80, ter. Service ollowing A cylinder a gine has b	2-72/80, 3-76/ed engine with D: assemblies. By	with Part 43, App. D. //80, 4-76/80, 5-75/80, 6-75/80. Changed oil and filter, no 11Qts. Aero Shell 15W50. Run and leak check ok. // inspection per AD and Superior SB B14-01. Next due in accordance with an annual inspection and was Renner L. Brewer A&P 3177530 IA	Step
												o 1991 AS

19 TIME TODAYS TOTAL TIME I SERVICE	Entries must be endorsed with Name, Rating and Certificate Number	of	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repair Entries must be endorsed with Name, Rating and Ce Technician or Repair Facility. (See back pages for ot	ertificate Number of
SNEW/SMOH 1122				1859W Mi	FG Continenta	al Model IO520BA Serial # 241697-R Hr Meter 496	
Replaced harness pr Sealed up baffiing with Serviced engine with	n M1740 ith RTV102 ith RTV102 i 11 qts Aeroshell 15W-50, CH48109 filter, AOA sample taken sion / cylinder inspection IAW AD2014-05-29 and Superior SB B14-01,			d injector or service this	2		
Signature: David Beaver AP 3097750	Date: 6/9/2016		-			- - -	
						-	
D 1991 ASA							

		_							
DATE 19	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)	DATE	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)
- 100 l recor Phill of al	hr. 541.2 hr. insp. connditioned rollings X/C 20V 1 A.D's see hr. inspection	ocker are W50 oil. aircraft on and v	ms. AD 14- Cleaned ar records. I d was determine	N1859W IO-520-BA 1166.3 Total: 2959.3 S/N: 241697 Installed 6 overhauled cylinders from J & J Aircraft Parts with 05-29 no longer applies. Changed oil and filter. Serviced with and gapped spark plugs. Timed left magneto. For current status certify that this engine has been inspected in accordance with a med to be in airworthy condition. Hary W Shelt	Inst	checks satisfactory alled new D'Shann	agine on air See aircra on cooling ipe assemb	ETT: 295 frame after pr ft records for a air baffling pe	Lakeway, Texas 520-BA S/N: 241697-R TT: 541.2 Date: 9/2/2017
-F	Engine: Con	tinental	Model #: ETT rame and shipp	Lakeway, Texas IO-520-BA S/N: 241697-R TT: 541.2 Date: 3/4/2017 F: 2959.3 SMOH: 1166.3 ed out for Prop strike inspection in reference to the Bonanza MM.	Property of the state of the st	ne/component main 16/80 #6 -70/80. In m. No defects note ational check satisfa- mined to be in an a	al Mo 100hr/annu tenance ma spected end d. Cleaned, actory. I cer irworthy co	et al. 10-52 ETT: 2970 all inspection nuals. Perform gine wire harn inspected and tify that this e	
© 1991 ASA	•		-		Kevi	n Sandford A&P 26	598734 LA		- TO THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF T

DATE 19	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Entries must be end	nspections, Tests, Reporsed with Name, Rating and reacility. (See back pages for	d Certificate Number of	,	DATE 19	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alte Entries must be endorsed with Name, Rating and Certificate Nur Technician or Repair Facility. (<i>See</i> back pages for other specific	imber of
C 1901 ASA	This engine was serviceable cracrankshaft S/N Specialties Ser MSB 99-3C by Installed a serv Installed NEW Magnetos, P/N Engine was reaplates, and snay I/A/W Western Motors, Inc. On The engine and	GOLD: Place Mo st disasseminkcase M/N: K0298031 vices Inc. u CMI unde iceable mon Cam Gear, 10-34935(ssembled u o rings, new Skyways, verhaul Mar	bled and inspecte 4: 4A235P certifi N was visual, dim nder their W/O 2 r their W/O ES-7 unt leg, P/N: 632 P/N: AEC63184 0-4 and 10-34935 sing new rod and gaskets and seal nc. Repair Speci uual X30039 and ent identified abe	d for a prop strike inspection of the property	ments of MSB 05-8B. 9096 were 500 hour inspected. Its and nuts, new crankshaft & cour run in a test cell for leak and opera Application of Hylomar Sealant" da ons. ted I/A/W current FAA Regulation kyways, Inc. under the above work	7. Installed a serviceable 6-10B, by Aircraft ed in accordance with CMI and with per logbook entry. Iterweight bushings, pins, tions check. Assembled ted 11/10/2010, Continental s and found Airworthy for order.		Performed engine/compe #3-76/80 #4 exhaust syster AA48108-2. I inspection engine mand was deter W. Kevin Sandfor En Performed engine/compo #5-78/80 #6 defects noted Inspected all rengine has been the same performed engine has been the same performed engine/compo #5-78/80 #6 defects noted Inspected all rengine has been the same performed engine has been the same pe	onent maintenance. 16/80 #5 -74/8 m. No defects no Replenished engine run leak and mined to be in ar and A&P 2698734 Aviation gine: Continer an engine 100hr. nent maintenance. 12/80 Inspecte. Cleaned, inspect executed in the second of the	// Annual inspectation in the common of the	Model #: 10-52 ETT: 2973. Dection as requir All AD, s complia () Inspected and () Inspected and () Is of Philips X/(I check satisfactor condition. Indel #: 10-52 ETT: 2983. Dection as require Performed AD re the harmsesses for sked spark pluage () ted Post mapped () ted Post m	ed per FAR 91.409 in reference to FAR 43 appendix D and ied with at this time. Performed Compression check: # 1-70/80 # 2-72/80 gine wire harnesses for proper security and routing. Visually inspected the checked spark plug gaps. Removed and replaced the oil filter P/N: C 20-W50 engine oil. Inspected all required items. No defects noted. Post party. I certify that this engine has been inspected I/A/W an annual inspection **Lakeway, Texas** 20-BA S/N: 241697-R TT: 565.7 Date: 3/1/2020	
M.													© 1991 ASA

ATE 19	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterati Entries must be endorsed with Name, Rating and Certificate Number Technician or Repair Facility. (See back pages for other specific entri	of
	Sandte	ch Aviat	ion Service	es Lakeway, Te	xas
	Perform engine 60 defects rannual is	med an engin imponent ma in #6-72/80 No defects in il filter P/N: noted. Post in inspection an	Inspected enginerated. Cleaned and AA48108-2. Representation engine	Model #: 10-520-BA S/N: 241697-R TT: 592.5 Date: 4/1/2021 ETT: 3010.6 SMOH: 1217.6 inspection as required per FAR 91.409 in reference to FAR 43 appendix D and als Performed AD research. Compression check: # 1.74/80 # 2-72/80 #3-78/80 #4-74/80 we wire harnesses for proper security and routing. Pressure checked and inspected the exhau d inspected the spark plugs. Inspected and cleaned ignition leads. Removed and replaced it plenished engine with 10Qts of Philips X/C 20-W50 engine oil. Inspected all required item run leak and operational check satisfactory. I certify that this engine has been inspected 1// d to be in an airworthy condition.	ist ne ns. No
	Sandtech A	\ viation	Services	Lakeway, Texas	
-	Performed at engine/compon #5-70/80 #6-defects noted P/N. AA48101	ent maintene 70/80. Inspe Cleaned and 8-2. Repleni n engine run	ohr/annual inspectance manuals. Per sected engine wire inspected the spe shed engine with leak and operation	tel #: 10-520-BA S/N: 241697-R TT: 613.9 Date: 5/1/2022 ETT: 3032.0 SMOH: 1239.0 SMOH: 1239.0 SMOH: 1239.0 Tommed AD research. Compression check: #1-74/80 #2-72/80 #3-74/80 #4-74/80 harmesses for proper security and nouting. Performed inspected of the exhaust system. No ark plugs. Inspected and cleaned ignition leads. Removed and replaced the engine oil filter 19 Qts of Philips X/C 20-W50 engine oil. Inspected all required items. No defects noted. onal check satisfactory. I certify that this engine has been inspected I/A/W an annual airworthy condition.	

DATE 19	RECORDING TACH TIME	TODAYS Flight	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)
				reclinician of Repair Facility. (See back pages for other specific entries.)

Sandtech Aviation Services

Lakeway, Texas

TT: 614.0 Date: 7/15/2023 Model #: IO-520-BA S/N: 241697-R **Engine: Continental** SMOH: 1239.1 ETT: 3032.1

Performed an engine 100hr/annual inspection as required per FAR 91.409 in reference to FAR 43 appendix D and engine/component maintenance manuals. Performed AD research. Compression check: # 1-70/80 # 2-72/80 #3-76/80 #4-70/80 #5-70/80 #6-72/80 Inspected engine wire harnesses for proper security and routing. Performed inspected of the exhaust-system. No defects noted. Cleaned and inspected the spark plugs. Inspected and cleaned ignition leads. Lubricated engine controls. Inspected all required items. No defects noted. Post inspection engine run leak and operational check satisfactory. I certify that this engine has been inspected I/A/W an annual inspection and was determined to be in an airworthy condition.

Kevin Sandford A&P 2698734 LA

Sandtech Aviation Services Lakeway, Texas Engine: Continental Model #: IO-520-BA S/N: 241697-R TT: 625.5 Date: 12/10/2024

ETT: 3043.6 SMOH: 1250.6

Performed an engine 100hr/annual inspection as required per FAR 91.409 in reference to FAR 43 appendix D and engine/component maintenance manuals. Performed AD research. Compression check: # 1-60/80 # 2-64/80 # 3-64/80 # 4-62/80 #5-60/80 #6-62/80. Inspected intake and exhaust systems. Performed boroscope inspection of all 6 cylinders. No defects noted. Drained and replenished oil with 9 qts of Philips X/C 20W-50 engine oil. Cleaned and inspected all spark plugs and ignition leads. Eubricated engine controls. Inspected all required items. No defects noted, Post inspection engine run leak and operational checks satisfactory. I certify that this engine has been inspected I/A/W an annual inspection and was determined to be in an airworthy

Report Produced By: Address: Phone: 501-394-5422 106 Elk Drive, Mena, Arkansas 71953 Ultimate Engines, Inc. File ID: **Directive Compliance Record** NEW Airworthiness USARL Research Date: 98343 Manufacturer Model Part #: Teledyne Continental O-520-BA Serial #: 241697 3. Cert. Num. Complied Once Next Due 1. Facility AD Number Date Status TO THE TOTAL PROPERTY. or Date 2. Cert. Type 4. Author. by Effective date Method of Compliance/ Applicability Description Time Recur Time 77-13-22 To prevent the possibility of Recur 09-02-99 N/A Not Light Case 04/17/1978 undetected crankcase cracks Improved Design Crankcase progressing into a crankcase failure Installed CATP **©ATP ©ATP** Signature 79-05-09 To prevent the possible loss of oil One N/A 642335KA1 Kit 09-02-99 pressure indication 03/12/1979 Installed YCTR973K Signature CATP CATP **©ATP** To prevent failure of cylinder 80-01-04 One 09-02-99 N/A Cylinders not holddown flanges 01/25/1980 Rebarrled by Airmotive CATP CATP **©ATP** Signature: 81-24-06 To prevent possible fuel leakage and Recur 09-02-99 N/A TCM Overhauled Pump potential fire hazard 11/23/1981 S/N: K199821B CATP **©ATP ©ATP** Signature To prevent possible cylinder head to Recur 86-13-04 R3 09-02-99 N/A Superior Millinuim barrel separation, engine failure 02/24/1988 Cylinders Installed and/or engine compartment fire **©ATP ©ATP** GATP Signature: 87-12-12 L Superseded by 87-14-02 One 09-02-99 Superseded 07/02/1987 **GATP CATP ©ATP** Signature:

ST-26-01 O4/17/1988 Superseded by 87-26-17 O9-02-99	Method of Compliance N/A Aircraft ha	e Record	983 <u>!</u> <u>S</u>	343 Part#: Serial#: 2	NEW 241697 1. Facility 3. Cert. Num. 2. Cert. Type 4. Author. by
Manufacturer Model IO-520-BA IO-52	Method of Compliance N/A Aircraft ha	as No AC	983 S Once N or Recur	343 Part # : 2 Serial # : 2 Text Due : 2	241697 1. Facility 3. Cort. Num.
AD Number Effective date 87-14-02 10/05/1987 To prevent possible starter adapter shaftgear failure, which could result in loss of lubricating oil, contd. 9ATP 87-23-08 11/30/1987 Superseded by 97-26-17 99-02-99 6ATP 87-26-01 04/17/1988 Superseded by 88-17-03 09-02-99 To prevent possible loss of engine oil on shaftgear failure 909-02-99 To prevent possible starter adapter and subsequent engine failure 99-02-99 To prevent possible starter adapter 99-02-99	N/A Aircraft ha	as No AC	Once N or Recur	Part # : 2 Serial # : 2 Sext Due : 2	1. Facility 3. Cert. Num.
## AD Rumber Effective date	N/A Aircraft ha	as No AC	Once N or Recur	Vext Due	1. Facility 3. Cert. Num.
### Shaftgear failure, which could result in loss of lubricating oil, contd. #### ST-23-08 ### 1/30/1987 #### Superseded by 97-26-17 ###################################	Supercaded	as NO AC	One	6	
87-23-08 11/30/1987 Superseded by 97-26-17 09-02-99 87-26-01 04/17/1988 Superseded by 88-17-03 09-02-99 CATP Samp Superseded by 88-17-03 09-02-99 CATP Samp Superseded by 88-17-03 09-02-99 CATP Samp CATP O9-02-99 CATP O9-02-99 CATP CATP CATP O9-02-99 CATP CATP CATP O9-02-99	Superseded		CATP Sig	CR gnature:	Farans S. # YCTR973
## Superseded by 88-17-03 09-02-99 04/17/1988 09-02-99 09-			Recur		Parkall
## ST-26-01 Superseded by 88-17-03 09-02-99 ### O4/17/1988 To prevent possible loss of engine oil 09-02-99 ### PATP EATP O9-02-99 ### EATP EATP O9-02-99 ### EATP EATP O9-02-99 O9-02-99 #### EATP O9-02-99 O9-02-99		_		gnatula.	5. # YCTR9731
88-03-06 04/15/1988 To prevent possible loss of engine oil 09-02-9 and subsequent engine failure 6ATP 6ATP To prevent possible starter adapter 09-02-9	Superseded		One	-	Parkarah # VCTR 973
O4/15/1988 and subsequent engine failure CATP CATP CATP To prevent possible starter adapter 09-02-9				ignature	S. # YC.18913
88-17-03 To prevent possible starter adapter 09-02-9	N/A TCM Oil Fi	ilter	One	C	Particula
88-17-03 To prevent possible starter adapter 09-02-9			EATP S	ig (atur	S. # YCTR973
	9 N/A Aircraft	has no AC	One		Particolo
1	# L - L		CATP S	igratur ?	S # VCTR973
CATP			One		
91-19-03 To prevent operation with collapsed oil filter elements, which can result in loss of oil pressure, contd.					1 affarall
CATP	9 Not Installed		GATP S	Signature)	S. # VCTR973

RL Research Date:			ive Compliance Record		98343	
Manufacturer	<u>Model</u>				Serial # :	241697
dyne Continental	IO-520-BA					
AD Number Effective date	Description	Complied Date Time	Status Method of Compliance/ Applicability	Once or Recur	Next Due Date Time	1. Facility 3. Cert. Num. 2. Cert. Type 4. Author. by
93-10-02 08/12/1993	To prevent an engine failure due to a missing cylinder valve retainer key	09-02-99	Not Factory Engine N/A Superior Millinuim Cylinders Installed	One	C R	S. # YCTR9731
93-16-15 12/14/1993	To prove the possible five leaves down	09-02-99	Installed 653359 Coupling	One	-	Particula
CATP	CATP			CATP	Signature	S. # YCTR973K
97-26-17 C 01/23/1998	To prevent crankshaft failure and subsequent engine failure	09-02-99	Installed New VAR Crankshaft	Recur	•	Particula
CATP	GATP			GATP	Signary R	S. # YCTR9731
98-01-08 L 01/15/1998	To prevent exhaust roller rocker arm failure, which can result in bent push rods, ruptured rocker arm,contd.	09-02-99	N/A not Installed	One	Signatuya:	Parking
98-17-11 10/19/1998	To prevent crankshaft failure due to cracking, which could result in an inflight engine failure and possible contd.	09-02-99	Installed New VAR Crankshaft	One	C.IC.	Parket.
99-09-17L	To Prevent crankshaft	09-02-99	N/A V	SAIR	Signature:	Tourse of
04/22/1999	failure due to number 2 and amps; number 5 cheek cracks, which		N/A per Manufacture date.		C.R.S	# VCTR973K

Inc. 106 E	Address: Lk Drive, M	iena, Arkansas 71953	501	Left : Phone: -394-5422	
Airworthiness		ve Compliance Record		File ID:	NEW
Description	Post Date of the	Status Method of Compliance/ Applicability	Once or Recur	Next Due Date Time	1. Facility 3. Cert. Nun 2. Cert. Type 4. Author. b
Appliance Category Magnetos			1 Inches	Part#;	10-349350-4 6323138
Superseded by 94-01-03	09-02-99	Superseded	One		Tay Tools
S-20,-200,-1200 series magnetos				C.R.S	# YCTR973
	09-02-99	N/A	One		Harfar Bal
CATP			CATP	SIGHAL	# VCTR973
Superseded by 96-12-07	09-02-99	Superseded	Recur	RS.	# VCTR973K
Magneto and engine malfunction			CATP		1 · OI IOID
	09-02-99	n/a	Recur	° t	HYCTRO73K
CATP		A .	CATP	Signature:	21.1.1.1.7/31
To prevent failure of impulse coupling due to improperly heat treated (soft) flyweights resulting in engine,contd.	09-02-99	Complied	One	t.	of Trans
GATP			CATE	Signature	# 073K
To prevent magneto failure and subsequent engine failure	09-02-99	Complied	One	LR.S.	#YCTP973K

Left Hand Phone: 501-394-5422 Report Produced By: 106 Elk Drive, Mena, Arkansas 71953 Ultimate Engines, Inc. NEW File ID: Airworthiness Directive Compliance Record 98343A USARL Research Date: 1. Facility 3. Cert. Num. 2. Cert. Type 4. Author. by Next Due Once Complied 12.7. 24 SESSER 120 1.4 Date Status Control co a such in Hammad Californi Date AD Number Method of Compliance/ Applicability Recur Time Time Description Effective date 10-349350-4 Part#; Manufacturer **Appliance Category** Serial #: 323138 S-1200 SERIES S6RN-1225 Bendix Corporation Magnetos To prevent injury or death to ground personnel due to a non-grounded 94-06-09 09-02-99 New Condenser 05/20/1994 magneto C.R.\$. # YCTR973K Recur Signature **OATP** DATE 96-12-07 To prevent magneto failure and 09-02-99 In Compliance subsequent engine failure 07/18/1996 C.R.S. # YCTR973K CATP Signature: DATE CATP Signature: Signature:

Address 106 Elk Drive, Mena, Arkansas 71953 Phone 501-394-5422

Airworthiness Directive Compliance Record File ID NEW

Research Date:	Airworthiness	Directi	ve Compliance Record	501-5	ile ID:	NEW
AD Number Effective date	Description	Complied Date	Status Method of Compliance/ Applicability	983 Once or Recur	Next Due Date Time	1. Facility 3. Cert. Num. 2. Cert. Type 4. Author. by
Manufacturer Corporation	Appliance Category Magnetos		Model S-1200 SERIES SARK-1225	-	Part#;	10-349350-5
73-07-04 10/11/1973	Superseded by 94-01-03	09-02-99	S-1200 SERIES S6RN-1225 Superseded	One	Serial #	8329096
GATP	CATP			CATP(RS	#YCTR973K
74-26-09 12/24/1974	S-20,-200,-1200 series magnetos	09-02-99	n/a	One	Signature	E LEAN
78-09-07 R3	Superseded by 96-12-07			- 01C	Signature	#IVCTR973K
01/17/1983 CATP	CATP	09-02-99	Superseded	Recur	Gighatun	HARAL VETROZZK
82-13-01 06/28/1982	Magneto and engine malfunction	09-02-99	N/A	Recu	T.	2 2800
82-20-01	To prevent failure of impulse	-		•	Signatur	#YCTR973K
06/14/1983 SATP	coupling due to improperly heat treated (soft) flyweights resulting in engine,contd.	09-02-9	9 Complied	One		tagasas
94-01-03 R2	To prevent magneto failure and	-			Signatu	ne 1 1 C110 13 K
06/28/1995	subsequent engine failure	09-02-9	9 Complied	One	-	Tagasa.

CATP

Right Hand Report Produced By: Address: 106 Elk Drive, Mena, Arkansas 71953 501-394-5422 Ultimate Engines, Inc. Airworthiness Directive Compliance Record File ID: NEW USARL Research Date: 98343B Compiled Date Status Once Next Due 1. Facility 3. Cert. Num. Date Time Method of Compilance/ Applicability Recur Time AD Number Effective date Description Manufacturer Appliance Category Model Part#: 10-349350-5 Bendix Corporation Magnetos S-1200 SERIES S6RN-1225 94-06-09 To prevent injury or death to ground personnel due to a non-grounded magneto 09-02-99 05/20/1994 Complied CATP EATP Signature: 96-12-07 To prevent magneto failure and subsequent engine failure 07/18/1996 09-02-99 In Compliance CRS # VCTR973K CATP GATP Signature Signature: Signature: