

Engine Record General Information

ENGINE

Manufacturer TELEDYNE CONTINENTAL Model T510-360-MB(1)

Serial 317161 Type Certificate E9CE

This engine is currently installed in aircraft: MOONEY M20K Ser No 25-1160
REGISTRATION No N33RK

Minimum Octane Fuel 100, 100 LL Oil Grade Summer TMSpec MHS No 24 Winter TMSpec MHS No 24

Magneto Time 20° BTDC Point Setting _____ Firing Order _____

Spark Plug Gap _____

Manufacturer's Recommended Overhaul at _____ hours

YEAR	RECORDING TACH TIME	TODAY'S FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations
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DATE

Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)

Total Engine Time in Service 1260.7 – Hourmeter 1260.7 – SMOH 217.7

Received Mooney M20K, Australian Registration No. VH-SXQ, Serial No. 25-1160. Aircraft is equipped with Teledyne Continental TSIO-360-MB(1) engine, Serial No. 317161. Installed US registration markings N33RK. Attached overhaul records dated 22 March 2002 in back of logbook.

Verified that the engine and its installed appliances comply with the requirements of Type Certificate Data Sheet E9CE, Revision 17, dated August 7, 1997.

Determined the status of Airworthiness Directives as follows:

AD 71-09-03	Fuel Injection	Not Applicable – Model No.
AD 74-18-07	Cylinder Failure	Not Applicable – Model No.
AD 74-18-08	Fuel Nozzle Line	Not Applicable – Model No.
AD 81-13-10 R1	Oil Pump Drive Gear	Not Applicable – Model No.
AD 81-23-02	Oil Filter Adaptor Flange	Not Applicable – Model No.
AD 86-01-06	Air Pumps	Not Applicable – Part No. & Part Serial No.
AD 88-03-06	Oil Filter	Not Applicable – Suspect part not installed
AD 91-19-03	Engine Oil Filter	Not Applicable – Date code not suspect
AD 92-04-09	Rocker Arm & Cylinder Assys.	Not Applicable – Suspect cylinders not installed
AD 93-10-02	Cylinder Inspection	Not Applicable – Suspect parts not installed
AD 95-08-10	Oil Outlet Check Valve	Not Applicable – Suspect part not installed
AD 95-21-15	Engine Teardown and Inspection	Not Applicable – Registration No.
AD 96-12-22	Oil Filter Adapter	Not Applicable – Suspect parts not installed
AD 97-26-17	Crankshaft	Not Applicable – Serial No. per CSB96-8
AD 98-19-02	Superior Air Parts Piston Pins	Not Applicable – Suspect parts not installed
AD 00-23-21	Crankshaft Connect'g Rod Journal	Not Applicable – Suspect parts not installed
AD 02-13-04	Mag. Impulse Coupling Stop Pin	Not Applicable – Suspect parts not installed

YEAR DATE	RECORDING TACH TIME	TODAY'S 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.)
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Cleaned engine. Lubricated engine controls. Drained oil and refilled with 12 qts. Aeroshell W-100 oil. Replaced oil filter Champion CH 481084 Inspected old oil filter and found no metal particles. Checked engine timing. Differential compression test: #1 70/80; #2 78/80; #3 70/80; #4 74/80; #5 75/80; #6 74/80. See overhaul records in back of logbook.

I certify that this engine has been inspected in accordance with a 100-hour inspection and was determined to be in airworthy condition.

David B. Stevenson David B. Stevenson, A&P 1821216 1/15/07

I certify that this engine has been inspected in accordance with an annual inspection and was determined to be in airworthy condition.

James Kenneth Davis James Kenneth Davis 411600154 A&P, IA 15-Jan-2007

Total Engine Time in Service 1271.7 – Hourmeter 1271.7 – SMOH 228.7

Cleaned engine. Lubricated engine controls. Oil and oil filter change not due at this time. Checked engine timing. Differential compression test: #1 74/80; #2 75/80; #3 75/80; #4 73/80; #5 73/80; #6 76/80.

No Airworthiness Directives are due on this engine at this time.

I certify that this engine has been inspected in accordance with an annual inspection and was determined to be in airworthy condition.

James Kenneth Davis James Kenneth Davis 411600154 A&P, IA 07 FEB. 2008

YEAR DATE	RECORDING TACH TIME	TODAY'S 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.)
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August 7, 2008 Total Engine Time: 1279.5
 Replaced turbocharger oil supply check valve P/N 642211
James Kenneth Davis James Kenneth Davis 411600154 A&P

Total Engine Time in Service 1291.1 – Hourmeter 1291.1 – SMOH 248.1

Cleaned engine. Lubricated engine controls. Drained oil and refilled with 8 qts. Aeroshell W-100 oil. Replaced oil filter Champion CH 48108-1 Inspected old oil filter and found no metal particles. Cleaned and gapped spark plugs. Checked engine timing. Differential compression test: #1 74/80; #2 74/80; #3 72/80; #4 76/80; #5 72/80; #6 76/80.

No Airworthiness Directives are due on this engine at this time.

I certify that this engine has been inspected in accordance with an annual inspection and was determined to be in airworthy condition.

James Kenneth Davis James Kenneth Davis 411600154 A&P, IA *2/16/2009*

YEAR DATE	RECORDING TACH TIME	TODAY'S 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.)
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Total Engine Time in Service 1293.5 – Hourmeter 1293.5 – SMOH 250.5

Cleaned engine. Lubricated engine controls. Oil and oil filter change not due at this time. Checked engine timing. Differential compression test: #1 70/80; #2 76/80; #3 75/80; #4 77/80; #5 78/80; #6 75/80.

No Airworthiness Directives are due on this engine at this time.

I certify that this engine has been inspected in accordance with an annual inspection and was determined to be in airworthy condition.

James Kenneth Davis James Kenneth Davis 411600154 A&P, IA 23-JUNE 2010

2010	1666	1503.1	Total time in Service 1303.1 TSMDH 260.1
			Replace ALL Rocker Box Cover Gaskets with New. Replace Cylinders # 2-3-4-6
			Push Rod tube Seals & Packings. Remove and
			Install turbocharger P/N 649151-1 S/N 040103L after 90 by Aircraft Division of Oklahoma Inc. See FAA Form # 8130-3 Cont to Next Page →

YEAR

DATE

BLAKNEY AVIATION, INC. — WILEY POST AIRPORT — BETHANY, OK 73008

N33RK

10-20-2011

Engine

Mooney M20K

S/N 25-1160

Tach 1319.4

Engine TSMOH 276.4 in 5-2002

Annual inspection completed and maintenance performed in accordance with FAR 43 Appendix D, referenced Mooney M20K maintenance manual and parts catalog, and TCM engine manual. C/W FAR 91.417 Para (A)(2)(V) Researched and verified AD notes thru issue 11-20. Compression test hot per TCM S/B 03-3 gauge test instructions and found all cylinders acceptable at this time. Minimum acceptable is 43/80. #1 69/80 #2 70/80 #3 70/80 #4 74/80 #5 70/80 #6 74/80. Changed oil and filter. Cut open oil filter. No metal found. Serviced engine with A/S 100AD oil. Washed engine and cowling. (Continued)

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BLAKNEY AVIATION, INC. — WILEY POST AIRPORT — BETHANY, OK 73008

Lubed turbo waste-gate. Tightened rocker box cover screws. Visually inspected engine area. All appears satisfactory. Cleaned, gapped, and tested all spark plugs and replaced copper washers. Visually inspected exhaust system, fuel & oil hoses, engine rubber mounts and firewall. All appears satisfactory at this time. See AD list for one time and recurring AD's. "I certify that this engine has been inspected in accordance with a 100 hour inspection and determined to be in airworthy condition at this time."


Brandon E. Blakney A&P 3228297 Blakney Aviation WO# 9519

YEAR DATE	RECORDING TACH TIME	TODAY'S 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.)
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BLAKNEY AVIATION, INC. — WILEY POST AIRPORT — BETHANY, OK 73008

N33RK

5-3-2012

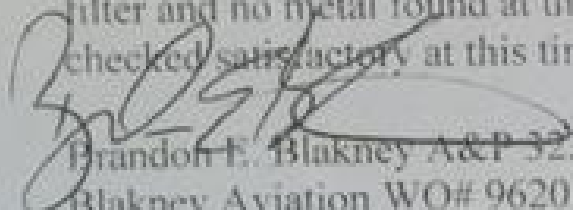
Engine

Mooney M20K

S/N 25-1160

Tach 1346.4

Changed oil (A/S 100 AD, 7 quarts) and filter (CH48108-1). Cut open
 filter and no metal found at this time. Washed engine, run up and leak
 checked satisfactory at this time.


 Brandon E. Blakney A&P 3228297
 Blakney Aviation WO# 9620

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BLAKNEY AVIATION, INC. — WILEY POST AIRPORT — BETHANY, OK 73008

N33RK

11-22-2012

Engine
Aircraft

Mooney M20K

S/N 25-1160

Tach 1352.5

Engine TSMOH 309.5 in 5-2002

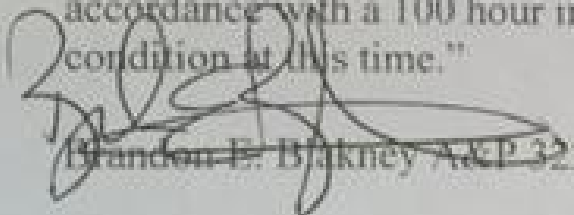
100 hour inspection completed and maintenance performed in accordance with FAR 43 Appendix D, referenced Mooney M20K maintenance manual and parts catalog, and TCM engine manual. C/W FAR 91.417 Para (A) (2) (V) Researched and verified AD notes thru issue 12-22. Completed a new up to date computerized AD Note list and put with the aircraft records. Compression test hot per TCM S/B 03-3 gauge test instructions and found all cylinders acceptable at this time. Minimum acceptable is 43/80. #1 68/80#2 73/80#3 69/80#4 72/80#5 72/80#6 68/80 Changed oil and filter. Cut open oil filters. No metal found. Serviced engine with A/S 80 AD oil. Washed engine and cowling. Lubed turbo waste-gate. (Continued)

YEAR

DATE

BLAKNEY AVIATION, INC. — WILEY POST AIRPORT — BETHANY, OK 73008

Tightened rocker box cover screws. Visually inspected engine area. All appears satisfactory. Cleaned, gapped, and tested all spark plugs and replaced copper washers. Cleaned and inspected engine air filter. Visually inspected exhaust system, fuel & oil hoses, engine rubber mounts and firewall. All appears satisfactory at this time. Replaced No. 1 top ignition lead (P/N M7502-72). Sonic cleaned all fuel injector nozzles. Replaced magneto pressurization filter (P/N 648038). Replaced all spark plugs with new (RHM38E). See AD list for one time and recurring AD's. "I certify that this engine has been inspected in accordance with a 100 hour inspection and determined to be in airworthy condition at this time."


Brandon E. Blakney A&P 3228297 Blakney Aviation WO# 9675

YEAR 2014 DATE	RECORDING TACH TIME	TODAY'S 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.)
2-11-14	1403.4	-	TSMOH	<p>360.4 Comp. CK #1 70/80 #2 75/80 #3 70/80 #4 70/80 #5 75/80 #6 70/80 Change Oil + filter Service Engine with 87W80 ARMOHELL + INSTALL NEW CN48108-1 filter. Got open old filter found no foreign material. Clean Gap, test, + inspect Spark Plugs. Clean Fuel Nozzles Assembly with New O-Rings, Seals, + Rubber Washers. Seal Push Rod tubes with New P/N 641607 Gray Seals + P/N 630286 O-Rings. Replace ALL Rocker Box Cover Gaskets Wash Engine and Cooling. test Run Check for Leaks None Noted @ this time.</p>

2-11-14 Tach 1403.4
I certify this engine has been inspected in
accordance with 100 hr.
determined to be in airworthy condition.
Signature: [Signature] ASD No. 446428269

YEAR 2015 DATE	RECORDING TACH TIME	TODAY'S 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.)
5-26-15	1449.5	-	TSMOH	<p>406.5 Comp CK #1 72/80 #2 74/80 #3 72/80 #4 74/80 #5 72/80 #6 74/80 Change Oil & filter Service Engine with 8qt W100 Aeroshell & Install New CD48108-1 filter Cut open old filter found no foreign material. Clean, Gap, test, & inspect spark plugs. Clean fuel nozzles. Install with New O-Rings, Seals, & Rubber washers. Inspect Exhaust & Heater Muff Systems. Wash Engine & Cooling. test Run Check for Leaks. None noted e this time. AD's checked to this engine using t. data, REV 2015-8. Date <u>5-26-15</u> total time <u>1449.5</u></p>

I certify the ENGINE has been inspected in
accordance with a 100 hr. inspection and was
determined to be in airworthy condition.

Signature [Signature] A&P No 446425169



NORTHAM AIR SERVICES

Northam Air Services P/L ABN 48 652 692 862
 Northam Aerodrome PO Box 571 Northam WA 6401 • Phone: (08) 9622 1550 • Fax: (08) 9622 1370

ENGINE LOG BOOK STATEMENT

JOB NUMBER: 2054
 REG: VH-SXQ
 ENG TYPE: CONT
 ENG MODEL: TS10-360-MB
 ENGINE S/N: 317181

This page constitutes a loose leaf log book statement for Engine Overhaul
 The engine was overhauled IAW of CAO, SB and O/M Manual X-30013

MANDATORY ENGINE PARTS REPLACED

QTY	PART NO	DESCRIPTION	QTY	PART NO	DESCRIPTION
1	SA530917	HOSE SEAL	8	SA46480	VALVE - EXHAUST
12	SA527891	SPACER	24	SA527731	KEY SET
24	SA507881	WASHER - LOCK	4	SA52960	ROCK T
24	SA50990	WASHER - TRUCKET	4	SA52950	BUSH
24	SA527883	BUSHES - PUCKER	2	SA52091-44	PIN
1	805054	SCREEN ASSY	2	SA52091-45	PIN
1	SA5290	OLC DRAIN VALVE	8	801141	PLATE
1	805240	CAMSHAFT	8	SA520004	SPACER - RETAINER
8	SA53092	SLIDE - EXHAUST	8	SA53018	BUSH
8	SA53094	BUSHINGS	8	SA53010-SC0015	RING SET
8	84217-18	HOSE INDUCTION	8	SA547430015	PISTON
12	MS24865-227	SPLIT PIN	12	SA52092	SPRING
12	SA529140	WASHER	12	SA52090	SPRING
12	SA530713	ROCK T	8	SA521054	ROTOR/CUR
12	SA54238	BEARING	8	SA52090	PIN - PISTON
1	SA548507-41	BEARING SET	4	WASH	TAG WASHERS
1	SA521345-13	GASKET SET	4	80481	PUMP BOLTS
4	SA520743	ROCK T	12	SA52106	LIFTERS
1	MS30750-8	KEY	1	821408	SPRING
			2	82006-18	BEARING

NON MANDATORY ENGINE PARTS REPLACED

QTY	PART NO	DESCRIPTION	QTY	PART NO	DESCRIPTION
1	845284	TUBE - INDUCTION	1	84120	GEAR
1	845284-1	TUBE - INDUCTION	1	80814	GEAR
1	826877	INDUCTION TUBE MODEL KIT	1	80813	GEAR
1	845284-2	TUBE			

SUB-CONTRACTED WORK & COMPONENTS

PART DESCRIPTION	PART NO	SER NO	AUTHORITY	R/N NUMBER
3 X CYLINDER BORE TO 8.0111	84884	UNKNOWN	SAMOTITE	SAM074
MPR ENGINE INTERNALS	VARIOUS	VARIOUS	SAMOTITE	SAM093
3 X BRUSH CON-RODS	826188	UNKNOWN	SAMOTITE	SAM077

AD'S, SB'S & SI'S COMPLIED WITH

M71-REV1	M78-11	M71-23REV1	M81-25	M8C-18
M81-8	M87-25	M87-23	M84-11	M86-13
M84-REV1	M90-17	M91-9	M91-REV1	M93-4
M93-4	1094-4	1095-5	1096-7	1098-4
1098-9	1099-18	1091-3	1097-4	C-2007-10
1098-2	1099-4	1098-9	1098-2	1099-3
ADCON81	AD CON82	ADCON82	ADCON83 AMO 1	ADCON84

COMPRESSION TEST

CYL 1	73	CYL 2	74	CYL 3	72	CYL 4	72	CYL 5	74	CYL 6	75
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NOTE: CORE ENGINE WAS OVERHAULED ONLY. ALL COMPONENTS REFITTED AS REMOVED.

H Gardner 6524479
 H GARDNER
 APPROVAL No CE38892

5/22/02
 Total Time in Service: 1043 hrs