

WARRANTY

and accessories must be determined by the installing
 and returned to service.

Magnum Engines, Inc.
 Centerville, OH 45458
 Phone (614) 436-5080

The Standard
ENGINE LOG

MAGNUM ENGINES, INC.

Centerville, OH 45458

Phone (614) 436-5080

Engine Record General Information

Manufacturer TCM Model C85-12F
 Serial 26472-6-12 Type Certificate _____
 This engine is currently installed in aircraft: LUSCOMBE 230SK

Minimum Octane Fuel 100LL Oil Grade Summer per Mfg's Winter per Mfg's
 Magneto Time per Mfg's Point Setting per Mfg's Firing Order 1-3-2-4
 Spark Plug Gap per Mfg's

Manufacturer's Recommended Overhaul at 2,000 hours

EISMAN MAG POINT GAP .010-.022

R.H. MAG 28° BTDC

L.H. MAG 30° BTDC

CARB: MARVEL SCHEDLER MA3SPA S/N 39-2-3727

YEAR 2003 DATE 12-11	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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This Document Is To Serve As
CERTIFICATION

of
Overhaul
Magnum Engines, Inc.

MFG: TCM Model: C85-12F Serial No: 26472-6-12
Tach Time: 1034.91 Total Time Recorded: 716.02 SMOH: 0 (Zero)
A.D. Notes: Reference Engine Log Book
Pertinent Details of the Work Performed are on File at this Company under Work Order Number:
ME1177

Date: 11 December 2003

License: A&P [REDACTED] IA Gene Svoboda

Magnum Engines, Inc.
[REDACTED] Centerville, OH 45458
Phone: [REDACTED]

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ate Number of
specific entries

YEAR 2003 DATE 12-11	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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Magnum Engines, Inc.

[REDACTED] Centerville, OH 45458
Phone: [REDACTED]

11 December 2003 This engine model **TCM C85-12F** #Serial # **26472-6-12** was overhauled by Magnum Engines, Inc., of Centerville, OH according to factory recommended procedures, specifications, limits and pertinent Federal Aviation Regulations.

All internal steel parts were magnafluxed and all non-ferrous materials were checked for cracks. All the guidelines from the Lycoming Table of Limits and Overhaul Manual were followed at time of overhaul.

Engine case overhauled by CSI modified to accept TCM O-200 crankshaft. The magnetos customer supplied Eiseman and customer supplied harness. All new bearings, gaskets, seals, rod bolts and nuts, and spark plugs were installed.

New TCM O-200 crankshaft installed, overhauled replacement connecting rods, new pistons, pins, all rotating parts dynamically balanced. Camshaft reground Cam Design profile check performed. All tappets and hydraulics overhauled to specifications of manufacturer. Accessory housing repaired and oil pump housing certified. Four new ECI cylinder assemblies installed, 8130-3 provided. Cylinders intake and exhaust ports flow matched, Magnum valve set-up. Installed TAF oil filter kit per FM company STC SE7559SW dated March 15, 1989. Installed Sky-Tec starter per STC SE10076SC modified engine by installing C12ST2/S starter IAW Sky-Tec instructions dated 7-02-02. Weight difference negligible. A list of all parts used is on file at Magnum Engines.

WORK ORDER # ME1177

Magnum Engines, Inc.
Centerville, OH

Authorized

License # A&P [REDACTED] A Gene Svoboda

Signature: [REDACTED]

Number:

Gene Svoboda

YEAR	RECORDING TACH TIME	TODAY'S FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations
2003				Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)
DATE 2-11				

Magnum Engines, Inc.

MAINTENANCE RELEASE

The aircraft engine and/or component identified was overhauled and inspected in accordance with current Federal Aviation Regulations and was found airworthy for return to service.

Pertinent details of the repair are on file at this company under Work Order No. ME1177

Date: 11 December 2003

Signed: [Signature]
 LICENSE # [Redacted] A Gene Svoboda

Magnum Engines, Inc.
 Centerville, OH 45458
 PHONE [Redacted]

CAUTION

Avoid prolonged ground run or slow flight as this causes new engine damage and will void warranty. For proper warranty coverage consult Magnum Engines before any repairs or adjustments are made on the engine.

CAUTION

Warranty will be voided if all oil fed accessories are not cleaned, tagged and recorded in log book at time of engine overhaul; eg. prop governor, oil cooler, oil tank, and all fuel and oil lines.

(5)
 Alterations
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 ecific entries.)

ccordance

E1177

t Engines, Inc.
 erville, OH 45458
 NE [Redacted]

nty coverage

haul; eg. prop,

YEAR	RECORDING TACH TIME	TODAY'S FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations
2003				Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)
DATE 2-11				

Magnum Aircraft Engines, Inc.

Centerville, OH 45459

Phone: [Redacted]

After assembly, engine was test run on aircraft. Temperatures and pressures were all within limits. No leaks were detected. Break-in procedures were supplied by Magnum for installer.

WORK ORDER #ME1177

Magnum Aircraft Engines, Inc.
 Centerville, OH
 11 December 2003

Authorized Signature: [Signature]
 License: A&P [Redacted] A Gene Svoboda

YEAR 2004 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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December 01, 2004
 N2305K Luscombe 8E S/N 5032 Tach Time 1034.91 Hobbs: 1464.0
 Aircraft Total Time: 2239.91 Prop: Zero SMOH Engine: Zero SMOH, TT 716.02
 Install in Luscombe 8E, S/N 5032, N2305K using new mount bushings, new baffling, remanufactured Marvel Schebler MA-3SPA carburetor, overhauled Delco Remy Generator S/N7418, Remove Flatrop propeller and install Zero SMOH McCauley 1A90/CF7051 S/N 5432 propeller (see 337), install Westach K28PX EGT on #3 cylinder (see 337), install new Challenger air filter. Run engine, check for leaks and perform function check on all engine controls and systems.
 I certify that this engine has been inspected in accordance with a 100 hour inspection and was determined to be airworthy.

CAEB S/N 35-7-3727

Valentine J. Kozak Jr. A&P

I certify that this ENGINE has been inspected in accordance with a 100 hour inspection and was determined to be airworthy. Time in service 0 hrs.
 Cert. # [REDACTED]
 Date: 10/22/05 By: [REDACTED]

10/22/05 Changed oil & filter @ Tach 1095.90

Alterations
 ate Number of
 specific entries.)

SPA
 CF7051
 gine,

YEAR 2006 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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July 7, 2006
 Engine Mfg: TCM Model: C85-12F S/N 26472-6-12 Tach: 1099.41 Hobbs: 1561.4
 Total Time: 780.52 SMOH: 64.5 Prop: McCauley 1A90/CF7951 64.5 SMOH

Install new Tach cable (inner & outer), check mag timing & retimed R.H. mag. Remove, clean & re-oil Challenger air filter. Check cylinder compression: #1 79/80, #2 75/80, #3 79/80, #4 77/80. Run engine, check for leaks and perform functional ckeck on all engine controls and systems.

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

Valentine J. Kozak Jr. A&P

I certify that this ENGINE has been inspected in accordance with a 100 hour inspection and was determined to be airworthy. Time in service 645 hrs.
 Cert. # [REDACTED]
 Date: 7/8/06 By: [REDACTED]

03/06/09 CHANGED OIL + FILTER @ Tach 1146.51 by G-Owner

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.)
July 20, 2007	N2305K Luscombe 8E S/N 5032			Tach Time: 1122.12 Prop: 87.21 Hobbs: 1594.8 Engine: 87.21 SMOH
	Aircraft Total Time: 2327.12			
				Remove Sky-Tec starter and return to Sky-Tec for repair. Repaired by Sky-Tec under Work Order #7070314. Reinstall starter. Remove, clean & re-oil Challenger air filter. Check mag timing and re-time R.H. mag. Replace forward cabin heat "scat tube". Inspect baffling for cracks and security. Check cylinder compression: #1 79/80, #2 78/80, #3 79/80, #4 79/80. Run engine, check for leaks and perform functional check on all engine controls and systems.
				I certify that this engine has been inspected in accordance with a 100 hour inspection and determined to be airworthy.
				Valentine J. Kozak Jr. A&P [REDACTED] ELT Battery Due: 07/09
				I certify that this <u>ENGINE</u> has been inspected in accordance with a <u>ANNUAL</u> inspection and was determined to be airworthy. Time: <u>87.21</u> hrs. SMOH
				Cert. # [REDACTED] IA
				Date: <u>7/28/07</u> By: [REDACTED]

PAIRS AND ALTERATIONS nd Certificate Number of for other specific entries.)	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.)
MOH	October 15, 2008	N2305K Luscombe 8E S/N 5032			Tach Time: 1133.75 Prop: 98.84 Hobbs: 1612.7 Engine: 98.84
Order and re-time R.H.		Aircraft Total Time: 23438.75			
IS.					Remove Sky-Tec starter and return to Sky-Tec for repair. Repaired by Sky-Tec under Work Order # Reinstall starter. Remove and repair carb heat box, reinstall. Remove, clean & re-oil Challenger air filter. Check mag timing. Check cylinder compression: #1 78/80, #2 78/80, #3 67/80, #4 76/80. Run engine, check for leaks and perform functional check on all engine controls and systems.
etermined to be					I certify that this engine has been inspected in accordance with a 100 hour inspection and determined to be airworthy.
					Valentine J. Kozak Jr. A&P [REDACTED]
					I certify that this <u>ENGINE</u> has been inspected in accordance with a <u>ANNUAL</u> inspection and was determined to be airworthy. Time: <u>98.84</u> hrs.
					Cert. # [REDACTED] IA
					Date: <u>10/20/08</u>
					03/06/09 CHANGED OIL + FILTER @ TACH 1146.51 IN OWNER [REDACTED]

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.)
December 1, 2009	N2305K Luscombe 8E S/N 5032			Tach Time: 1185.09 Prop SMOH: 150.18 Hobbs: 1690.5 Engine SMOH: 150.18
	Aircraft Total Time: 2390.09			
				Remove, clean & re-oil Challenger air filter. Check magneto timing (no adjustment necessary). Perform compression check: #1 76/80, #2 76/80, #3 78/80, #4 78/80. Inspect exhaust system and heat muffers for leaks and/or wear. Inspect engine control cables for wear, security and proper operation. Inspect baffling for cracks and security. Inspect engine mounting for security. Run engine, check for leaks and perform functional check of all engines controls and systems.
				I certify that this engine has been inspected in accordance with a 100 hour inspection and determined to be airworthy.
				
				Valentine J. Kozak Jr. A&P 
				<i>5/27/10 Change oil: FILTER TACH 1202.99</i>
				I certify that this <u>ENGINE</u> has been inspected in accordance with a <u>100 hr</u> inspection and was determined to be airworthy. Time in service <u>150.18</u> hrs.
				Cert. # 
				Date: <u>2/9/09</u> By 

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ther specific entries.)

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.)
April 1, 2011	N2305K Luscombe 8E S/N 5032			Tach Time: 1231.71 Prop: 196.8 Hobbs: 1756.9 Engine: TCM, C85-12F S/N: 26472-6-12 TT: 912.82 SMOH: 196.8
	Aircraft Total Time: 2436.71			
	Engine: TCM, C85-12F S/N: 26472-6-12			Remove and repair cracked heat muff on left side. Remove, clean & re-oil Challenger air filter. Check mag timing. Check cylinder compression: #1 77/80, #2 75/80, #3 76/80, #4 77/80. Run engine, check for leaks and perform functional check on all engine controls and systems.
				I certify that this engine has been inspected in accordance with a 100 hour inspection and determined to be airworthy.
				
				Valentine J. Kozak Jr. A&P 
				<i>5/27/10 Change oil: FILTER</i>
				I certify that this <u>ENGINE</u> has been inspected in accordance with a <u>100 hr</u> inspection and was determined to be airworthy. Time in service <u>196.8</u> hrs.
				Cert. # 
				Date: <u>5/10/11</u> By 

YEAR DATE	RECORDING TACH TIME	TODAY'S 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
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June 5, 2012
N2305K Luscombe 8E S/N 5032
Aircraft Total Time: 2452.07
Engine: TCM, C85-12F S/N: 26472-6-12

Tach Time: 1247.07
Prop: 212.16
TT: 928.18

Hobbs: 1781.3
SMOH: 212.16

Remove, clean & re-oil Challenger air filter. Remove magnetos, adjust point gap, clean impulses, reinstall and adjust timing. Check cylinder compression: #1 78/80, #2 78/80, #3 77/80, #4 78/80. Inspect exhaust system and heat muffs for leaks and/or wear. Inspect engine control cables for wear, security and proper operation. Inspect baffling for cracks and security. Run engine, check for leaks and perform functional check on all engine controls and systems.

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

Valentine J. Kozak Jr. A&P

I certify that this Engine has been inspected in accordance with a 100 hr inspection and was determined to be airworthy. Time in service 2818 hrs.

Cert. #

Date: 6/11/12 By

09-14-12 CHANGED OIL & FILTER @ TACH 1259.2 BY CO-OWNER
S-GTS AERCHIE 15W-50

s and Alterations
Certificate Number of
other specific entries.)

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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December 3, 2013
N2305K Luscombe 8E S/N 5032
Aircraft Total Time: 2532.40 2454.78
Tach Time: 1279.78
Prop SMOH: 201.49
Hobbs: 1827.3
Engine SMOH: 201.49 244.87 (94)

Remove, clean & re-oil Challenger air filter. Recondition #4 cylinder. Perform compression check: #1 74/80, #2 76/80, #3 79/80, #4 73/80. Check mag timing, inspect exhaust system and heat muffs for leaks and/or wear. Inspect engine control cables for wear, security and proper operation. Inspect baffling for cracks and security. Inspect engine mounting for security. Run engine, check for leaks and perform functional check of all engines controls and systems.

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

Valentine J. Kozak Jr. A&P

07/12/15 TACH: 1279.78 Hobbs 1844.6 SMOH: 201.49 257.69 (V910)

REMOVE, CLEAN & RE-OIL CHALLENGER AIR FILTER. COMPRESSION #1-76, #273, #379, #478
CHECK MAG TIMING. INSPECT EXHAUST SYSTEM & HEAT MUFFS FOR LEAKS AND OR WEAR.
INSPECT ENGINE CONTROL CABLES WEAR, SECURITY & PROPER OPERATION. INSPECT BAFILING
FOR CRACKS & SECURITY. INSPECT ENGINE MOUNTING FOR SECURITY - RUN ENGINE
CHECK FOR LEAKS & PERFORM FUNCTIONAL CHECK OF ALL ENGINE CONTROLS & SYSTEMS.

I CERTIFY THAT THIS ENGINE HAS BEEN INSPECTED IN ACCORDANCE WITH A 100 HOUR INSPECTION AND DETERMINED TO BE AIRWORTHY

A&P CERT#

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.)
				17
				AUGUST 10, 2018
				LUSOMAR OE S/N 5032 TACH TIME 1324.84
				AIRCRAFT TOTAL TIME: 2529.84 HOBBS TIME 1888.5
				PROP SMOH 289.93 ENGINE SMOH 289.93
				REPLACE ROBBER INTAKE SEALS, REPAIR BROKEN WIRE AT REAR POSITION LIGHT, REPLACE ELT BATTERY, CHANGE OIL AND FILTER. REMOVE, CLEAN & RE-OIL CHALLENGER AIR FILTER
				PERFORM COMPRESSION CHECK #1 76/80, #2 77/80, #3 75/80, #4 72
				CHECK MAG TIMING, INSPECT EXHAUST SYSTEM AND HEAT MOVES FOR LEAKS AND/OR WEAR. INSERT Baffle for CRACKS! SECURITY.
				INSPECT ENGINE MOUNTING FOR SECURITY. INSPECT ENGINE CONTROL CABLES FOR WEAR, SECURITY AND PROPER OPERATION.
				RUN ENGINE, CHECK FOR LEAKS AND PERFORM FUNCTIONAL CHECK OF ALL ENGINE CONTROLS & SYSTEMS
				I CERTIFY THAT THIS ENGINE HAS BEEN INSPECTED IN ACCORDANCE WITH A 100 HOUR INSPECTION AND DETERMINED TO BE AIRWORTHY.
				AP [REDACTED] ELT BATTERY DIE!
				VALENTINE J. FORAK JR.

Repairs and Alterations and Certificate Number of for other specific entries.)	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.)
					18
	10 Aug 2018				I certify that this engine has been inspected in accordance with 90 ANNUAL inspection and determined to be AIRWORTHY
4					[REDACTED] IA
2.5					
E AT					
AGE					
OR AIR FILTER					
75/80, #4 72/80					
MOVES FOR					
SECURITY.					
INE CONTROL					
CTIONAL CHECK					
ACCORDANCE					
READY.					