

DATE

TACH OR  
RECORDING  
METER  
TIMEDESCRIPTION OF WORK PERFORMED --  
SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
**WESTERN**  
*Skyways*  
 INC.

GOLD SEAL AIRCRAFT ENGINES

21 Creative Place  
Montrose, CO 81401  
www.westernskyways.com(800) 675-0829  
(970) 249-0282  
FAX: (970) 248-4108

Engine Make: CONTINENTAL Model: TSIO-520-NB  
 Serial Number: 290893-R W/O No: 21795 Date: 02/18/08  
 Warranty Number: B8041 Warranty Start Date: 03/08  
 Crankshaft Serial No: N02DA289 Cylinder Part Number: TIST71.2BCA

This engine and accessories listed below were overhauled to "Factory New Tolerances" per Overhaul Manual No: X30574A See back section for Airworthiness Directives and Service Bulletin compliance. This engine was run in a test cell. Total Previous Time: 3356.2 Hrs.

This engine meets requirements of CONTINENTAL SIL98-9A for 1600.0 Hour TBO.

The accessories listed below were new or overhauled and supplied with this engine:

Component	Part No.	Serial No.	Component	Part No.	Serial No.
L/H Mag:	10-349220-5	60020530	Vac Pump:	N/A	N/A
R/H Mag:	10-349260-6	K239401F	Wastegate:	N/A	N/A
Fuel Pump:	646210-22A4	GB07LA210R	Alt/Gen:	N/A	N/A
Inj/Carb:	636143A15	A07LA177R	Controller:	N/A	N/A
Man Valve:	634326-12A8	C07LA198R	Controller:	N/A	N/A
Starter:	ES646275-1	H09423	Fuel Limiter:	N/A	N/A
Turbo:	470810-9001	NER0147	Gov Prop:	N/A	N/A
			Hyd Pump:	N/A	N/A
			Hyd Pump:	N/A	N/A

### MAINTENANCE RELEASE

The engine and accessories listed above were overhauled and inspected in accordance with current Federal Aviation Regulations and were found airworthy for return to service. Pertinent details of this repair are on file at this Repair Station on above work order.

Signature:   
 Repair Station No. WS9R575J

DA

S/N 414A0070  
Hobbs 2386.9  
airframe TT 9771.2  
Date: 1/6/09

s/n 290893-R  
position: right  
engine time 0.0  
engine total time 3356.2

- Right engine s/n 290893-R was overhauled by Western Skyways on w/o 21795 was installed in accordance with Cessna 414/414A maintenance manual and Teledyne Continental overhaul manual and service bulletins
- Engine was installed with accessories listed in engine logbook.
- additional accessories consist of
  - Pressure relief valve 470944-9015 s/n HD0190 overhauled by Western Skyways
  - VAPC 470836-9020 s/n IC000232 overhauled by Western Skyways
  - Alternator ALV9510 s/n A94270 overhauled by Rocky Mountain Aircraft Accessories
  - Alternator Drive Coupling 646655 s/n DRK112487 overhauled by Drake Air, Inc.
  - existing hydraulic pump was reinstalled because of low hours
  - existing vacuum pump was reinstalled because of low hours
  - Complete exhaust system overhauled by Dawley
  - Tailpipe overhauled by Aerospace Welding
- All fluid carrying hoses installed new, manufactured by Aviall on w/o 41532919-0
- American Aviation Intercooler kit was installed in accordance with STC SA4956NM and SE4159NM
- Kit was installed in accordance with report 63-7 dated 05/04/93, drawing 63-11010 and drawing 63-11011 rev A
- Flight manual supplement was put into aircraft flight manual and the weight and balance was updated
- See two 337's for engines this date and see 337 for airframe this date

Josh Hartung *Josh Hartung* AP2751095

Cessna 414A  
S/N 414A0070  
Hobbs 2397.1  
TTAF 9781.4  
4/17/2009

4680N  
right engine

Teledyne Continental  
TSIO-520-NB  
s/n 290893-R  
r/h engine 10.2  
TT 3366.4

Perform 100 hr inspection in accordance with Cessna 414A service manual and checklist  
Oil and filter where not serviced at this time  
Compressions where not performed at this time because of low time on engines  
Balanced r/h propeller with 17.1 grams at 315 and 345 degrees final vibration was 0.07 at 290

Josh Hartung AP2751095 *Josh Hartung* 4/17/2009

10/20/09  
hobbs 2450.1  
TT 3419.4

Drained oil + removed oil filter. Serviced Ak w/ Phillips  
XC20W50 oil + CH 48108-1. Installed new seal in  
vacuum pump housing p/n 25102 installed new gaskets  
534865 + 653487 in vacuum pump housing adapter. Cut  
open filter + no metal noted at this time. Run up + 1k ck  
ok *Josh Hartung* AP2751095

**ARAPAHOE AERO**  
12760 EAST CONTROL TOWER ROAD ENGLEWOOD, COLORADO 80112 (303) 799-8386  
N4680N Continental TSIO-520-NB S/N: 290893-R Right Engine Entry  
26 October 2009 Hobbs: 2451.8  
Removed P/N: 646275-1, S/N: H09042-3 starter and installed an overhauled exchange unit P/N: 646275-1,  
S/N: Q-130268. Ground run up, leak check and operational check good.  
*[Signature]* Scott L. Utz A&P523021803 w/o 28571



DATE

S/N 414A0070  
Hobbs 76.8  
TTAF 10180.4  
4/4/2012

right engine

TSIO-520-NB  
s/n 290893-R  
r/h engine 307.2  
r/h engine tt 3663.4

-Perform annual inspection in accordance with Cessna 414A service manual and checklist  
-Removed all six cylinders from engine and installed new Teledyne Continental cylinders/valve assemblies, p/n 658175A2BP, pistons, p/n 65480, and rings, p/n 654716.

Josh Hartung IA2751095 *Josh Hartung* 4/4/2012

5-16-2012 Hobbs: 0079.2 N4680N RH Engine

Installed repaired fuel pump p/n: 646210-22A4 s/n = 802FA118R  
on RH engine. Pump repaired by Western Skyway see 8130-3 dated MAY 15, 2012 for more info. Adjusted fuel flows and pressures IAW TCM SID97-3E. Ground run, leak check and test flight OK.  
Mark Rausch APP 2845001

### Kubick Aviation Services, Inc.

2300 Woodward Ave., Kingsford, MI 49802  
Ph: 906-779-5500 Fax: 906-779-5526 Email: [info@KubickAviation.com](mailto:info@KubickAviation.com)

#### R/H ENGINE LOG ENTRY N4680N

Date: 07/26/2013 Hobbs: 88.3 AFTT: 10191.9 R/HEngTT: 3776.9 R/HEngSMOH: 420.7

Performed Annual Inspection as per Kubick Aviation Services, Inc. annual inspection checklist and Cessna 414 maintenance manual.

1. Compression checks #1-74, #2-72, #3-74, #4-74, #5-77, #6-74.
2. Drained oil, removed and replaced oil filter, cut and inspected filter for metal. No appreciable metal found at this time. Serviced engine 11 quarts Phillips 20W50 X/C oil.
3. Removed, cleaned, gapped, inspected and reinstalled all spark plugs.
4. Washed down engine and lubed all engine controls.

Ground run up and leak check. O.K.

I certify that this ENGINE has been inspected in accordance with an Annual Inspection and was determined to be in airworthy condition. Pertinent details of the repair are on file at this agency. Work order #: 3197

Signed *[Signature]*  
Chad Kubick APIA3244207

### Kubick Aviation Services, Inc.

2300 Woodward Ave., Kingsford, MI 49802  
Ph: 906-779-5500 Fax: 906-779-5526 Email: [info@KubickAviation.com](mailto:info@KubickAviation.com)

#### R/H ENGINE LOG ENTRY N4680N

Date: 08/25/2013 Hobbs: 94.7 AFTT: 10198.3 R/HEngTT: 3783.3 R/HEngSMOH: 427.1

1. Checked and adjusted engine fuel flows and pressures IAW TCM SID97-3. Operational check engine, O.K.

I certify the aircraft and/or components identified hereon was repaired and inspected in accordance with the current Federal Air Regulation and was found airworthy for return to service. Pertinent details of the repair are on file at this agency. Work order No.: 3456

Signed *[Signature]*  
Chad Kubick APIA3244207

2300 Woodward Ave., Kingsford, MI 49802  
Ph: 906-779-5500 Fax: 906-779-5526 Email: [info@KubickAviation.com](mailto:info@KubickAviation.com)

**R/H PROPELLER LOG ENTRY N4680N**

Date: 9/27/2013 Hobbs: 108.3 TTAF: 10211.9 R/HPropTT: 2188.2 R/HPropSMOH: 24.6

1. Balanced R/H propellers with ACES systems propeller balancer as needed.

I certify the aircraft and/or components identified hereon was repaired and inspected in accordance with the current Federal Air Regulation and was found airworthy for return to service. Pertinent details of the repair are on file at this agency. Work order No.: 3527

Signed   
Chad Kubick APIA3244207

ENGINE MODEL: TSIO-520-NB  
ENGINE S/N (R): 290893-R  
REG NO: 4680N  
WORK ORDER: 5427



**Kubick Aviation Services, Inc.**

Repair Station No. 2KAR596C  
250 Riverhills Road  
Kingsford, MI 49802  
Phone: 906-779-5500

DATE: 4/14/2016  
A/C TSN: 10222.1  
ENG TT (R): 3807.1  
TSMOH (R): 450.9  
HOBBS: 118.5

**Right Engine Entries**

- 3 C/W an Annual Inspection on this Engine this date. Changed oil and filter. Cut filter and found to be clean at this time. Serviced engine with 11 quarts of 20W50 Phillips. Completed a Compression Check and the results were as follows: (1) 70/80 (2) 70/80 (3) 69/80 (4) 72/80 (5) 76/80 (6) 71/80. Completed a run up and found the engine to operate to specs and to be free of leaks.
- 11 AD 2014-05-29 is not applicable as no Superior Air Parts cylinders are installed
- 23 Adjusted LH and RH magnetos on RH engine for 20 degrees BTDC. Replaced RH magneto gasket. Ops and leak check good.

**Maintenance Release**

This Engine was inspected IAW an Annual Inspection and the engine and/or component(s) on 4680N were repaired in accordance with current FARs rules of the Federal Aviation Regulations and was found Airworthy for return to service. Pertinent details of the repair are on file at this Repair Station under Work Order No. 5427, Dated 4/14/2016.

DATE: 4/14/2016

SIGNED: 

Tim Lawler  
Certified Repair Station No. 2KAR596C

Work Order: 5427

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Cessna 414A  
S/N 414A0070  
Hobbs 122.1  
TTAF 10225.7  
12/27/2016

**4680N**  
right engine

Teledyne Continental  
TSIO-520-NB  
s/n 290893-R  
r/h engine 454.5

Perform 100 hr inspection in accordance with Cessna 414A service manual and checklist  
Oil and filter where not serviced at this time  
Performed compression check #1. 72, #2. 75, #3. 72, #4. 76, #5. 76, #6. 76 all over 80

Kent Hersey AP2460727  12/27/2016

Cessna 414A  
S/N 414A0070  
Hobbs 122.1  
TTAF 10225.7  
12/1/2017

**4680N**  
right engine

Teledyne Continental  
TSIO-520-NB  
s/n 290893-R  
r/h engine 454.5

Perform 100 hr inspection in accordance with Cessna 414A service manual and checklist  
Installed new fluid carrying hoses. Hoses fabricated by Aviall in Denver, CO on order 1003283827  
Oil and filter where not serviced at this time  
Performed compression check #1. 73, #2. 74, #3. 73, #4. 74, #5. 76, #6. 75 all over 80

I certify that this engine has been inspected in accordance with Cessna 414A service manual and checklist and found to be in an airworthy condition

Josh Hartung IA 2751095 

12/1/2017



DATE

Cessna 414A  
S/N 414A0070  
Hobbs 229.1  
TTAF 10332.7  
5/15/2019

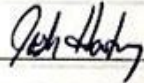
4680N  
right engine

Teledyne Continental  
TSIO-520-NB  
s/n 290893-R  
r/h engine 561.5

Perform 100 hr inspection in accordance with Cessna 414A service manual and checklist  
Performed compression check #1. 74, #2. 76, #3. 74, #4. 77, #5. 78, #6. 78 all over 80

I certify that this engine has been inspected in accordance with Cessna 414A service manual and checklist and found to be in an airworthy condition

Josh Hartung IA 2751095



5/15/2019

Cessna 414A  
S/N 414A0070  
Hobbs 240.1  
TTAF 10343.7  
05/01/2020

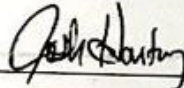
4680N  
right engine

Teledyne Continental  
TSIO-520-NB  
s/n 290893-R  
r/h engine 572.5

Perform 100 hr inspection in accordance with Cessna 414A service manual and checklist  
Performed compression check #1. 74, #2. 76, #3. 74, #4. 77, #5. 78, #6. 78 all over 80

I certify that this engine has been inspected in accordance with Cessna 414A service manual and checklist and found to be in an airworthy condition

Josh Hartung IA 2751095



05/01/2020

Cessna 414A  
S/N 414A0070  
Hobbs 247.3  
TTAF 10350.9  
04/23/2021

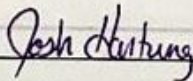
4680N  
right engine

Teledyne Continental  
TSIO-520-NB  
s/n 290893-R  
r/h engine 579.7

-Perform 100 hr inspection in accordance with Cessna 414A service manual and checklist  
-Performed compression check #1. 65, #2. 62, #3. 65, #4. 70, #5. 72, #6. 70 all over 80  
-Oil not changed at this time

I certify that this engine has been inspected in accordance with Cessna 414A service manual and checklist and found to be in an airworthy condition

Josh Hartung IA 2751095



04/23/2021

6/26/21	268.3	Drained oil, removed & examined filter - no anomalies noted. Installed new filter 48108 & 11qt Philips 20w-50 + 1pt Camguard <del>4117490</del> 4117490
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DATE

RECORDING  
METER  
TIMEDESCRIPTION OF WORK PERFORMED --  
SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK

REG #	N4680N	DATE	9/1/2021
MODEL	Cessna 414A		
SERIAL #	414A-0070	HOBBS	276.8
Engine Model	TSIO-520-NB	A/C TT	10380.4
Engine S/N	290893-R	CYCLES	

## LOGBOOK INSERT

Right Engine: TSO 627.2

1. Complied with A.D. 2000-01-16 para. B by visual inspection of the exhaust system. Due each 50-hrs/ 30-days whichever is later. Next due at AFTT: 10430.4 (Hobbs 326.8) or 10/1/2021 whichever is later.
2. Removed and replaced six (6) fuel nozzles with new GAMI Injectors IAW STC SE09289SC. See 337 form filed this date.
3. Installed a Tanis engine pre-heater system TSP6CYL-2927-115 IAW STC SE03309CH. See 337 form filed this date.

The Aircraft and/or Component(s) identified above in the scope of this work order were repaired and/or inspected in accordance with current applicable Federal Aviation Regulations and were determined to be airworthy for return to service for the work performed at this time/date.

DATE 9/1/2021

SIGNED Thomas W. Thunstrom A/P 476860448 IA

Thomas W. Thunstrom A/P 476860448IA

10/12/21 292.4 Drained oil, removed & inspected filter - no anomalies noted. Installed new filter 48108 + 11qt Philips 20w-50 + 1pt camguard # 4187490

12/12/21 312.7 Drained oil, removed & inspected filter - no anomalies noted. Installed new filter 48108 + 11qt Philips 20w-50 + 1pt camguard # 4187490

3/14/22 337.9 Drained oil, removed & inspected filter - no anomalies noted. Installed new filter 48108 + 11qt Philips 20w-50 + 1pt camguard # 4187490

06/02/2022; Aircraft: N4680N, RH Engine; Model: 414A; S/N: 414A0070; Hour Meter: 349.3

Repaired capacitor wire in RH magneto. Reinstalled magneto with new gasket. Operations and leak check OK.

Jordan Rumohr Jordan Rumohr AP/IA3739346  
St. Cloud Aviation, 1544 45th Ave SE St Cloud, MN 56304

DA

<b>REG #</b>	<b>N4680N</b>	DESCRIPTION OF WORK PERFORMED CERTIFICATE NO. OF PERSON PERFORMING WORK <b>LOGBOOK INSERT</b>	<b>DATE</b>	6/02/2022
<b>MODEL</b>	Cessna 414A			
<b>SERIAL #</b>	414A-0070		<b>HOBBS</b>	350.0
<b>Engine Model</b>	TSIO-520-NB		<b>A/C TT</b>	10453.6
<b>Engine S/N</b>	290893-R		<b>CYCLES</b>	

Right Engine: ETT: 4056.6 TSO 700.4

1. Completed a 100-hr inspection of the engine.
2. Completed compression test. #1) 68/80 #2) 70/80 #3) 64/80 #4) 75/80 #5) 70/80 #6) 74/80. Master orifice reading 43 psi. Completed boroscope of engine cylinders. No anomalies noted.
3. Drained oil. Complied with CSB07-01A, no particles noted. Removed oil filter and examined, no anomalies noted at this time/date. Installed new oil filter P/N CH48108. Added 11 quarts Phillips 20w-50 oil and 1 pint of CAMGARD.
4. Timed magnetos to engine.
5. Removed turbo support, removed corrosion, treated, painted and reinstalled.
6. Completed post maintenance leak and operational checks. Both found good.

I certify that this engine has been inspected in accordance with a 100-hr inspection and was determined to be in airworthy condition at this time/date.

The Aircraft and/or Component(s) identified above in the scope of this work order were repaired and/or inspected in accordance with current applicable Federal Aviation Regulations and were determined to be airworthy for return to service for the work performed at this time/date.

DATE 6/02/2022 SIGNED Thomas W. Thunstrom A/P 476860448 IA  
 Thomas W. Thunstrom A/P 476860448IA