#### Appendix 1 to AD 2020-26-16 **Inspection Results Form** Email completed form to: Or mail to: Federal Aviation Administration 9-ASO-ATLCOS-Reporting@faa.gov Atlanta ACO Branch, AIR-7A1 and 1701 Columbia Avenue customer.service@piper.com College Park, GA 30337 and SUBJECT line: Docket No. FAA-2018-1046 Piper Certification Office 2926 Piper Drive Vero Beach, FL 32960 Include photos if applicable Aircraft Model No .: PA- 28-161 Serial Number: 28-7816082 Aircraft Total Hours Time-In-Service (TIS): Registration Number: NY7490 Factored Service Hours Left-Hand (LH) Wing: 9094 Right-Hand (RH) Wing: 9094 (If both wings are factory installed original, these numbers should be the same) **Inspection Results** LH Wing Spar Fwd Accepted Rejected RH Wing Spar Fwd Accepted Rejected □

RH Wing Spar Aft Accepted X Rejected

#### Inspector Information

LH Wing Spar Aft

Name (print): Kristen Dennis Signature:

Certificate No.: R\$# 9D\$R786B Date: 02/04/2021

Accepted Rejected

Inspector Comments (observed damage, condition of hole, etc)

Issued on December 30, 2020.

Gaetano A. Sciortino,

Deputy Director for Strategic Initiatives, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2021-00044 Filed 1-14-21; 8:45 am]



# Eddy Current Inspection NDT Report

wo#	Customer		Date							
CMS-47355	ance Service	January	25, 2021							
Item #	Item # Manufacturer			98,5/-132116						
1	Piper		9308.	5, /Tach:3211.5						
Part #	Serial #		Quantity	2/4/2021						
PA-28-161 (N47490)	28-7816082		1							
		Request								
	Perform eddy current inspection of the L/H and R/H Main Wing Spar Lower Cap two outermost (forward and									
aft sides) attach bolt holes	per customer supplied inforr	mation and instruc	ction.							
	Manual F	Reference								
Docket No. FAA-2018-1046	; Product Identifier 2018-CE-	-049-AD: Amendm	ent 39-213	371: AD 2020-26-16, Piper						
	ated March 27, 2020 & NPI I									
		ment								
Manufacturer	Model #	Serial #		Calibration Due Date:						
Olympus/Nortec	Nortec 600D	60001150093		04/07/2021						
, , ,	Preliminary	/ Inspection								
Inspector Hidden Damage Inspection										
8		N/A								
0	Work Pe	erformed								
Performed an eddy current	inspection of the L/H and R	/H Main Wing Spa	r Lower Ca	p two outermost (forward						
and aft sides) attach bolt ho	oles as required by Docket N	o. FAA-2018-1046	; Product I	dentifier 2018-CE-049-AD:						
Amendment 39-21371: AD	2020-26-16, Piper Service B	ulletin No. 1345 D	ated Marc	h 27, 2020 & NPI NDT						
Manual FAA-ET-100.0 Rev 0				· ·						
AD effective date February										
No cracks found at this time										
No cracks found at this time										
Prohat D/NI VM4101PDC 2/9	S/N MSC-2046, P/N VM250	2RΔFX-1/2 X 6/H 2	200KH7-2N	AHZ S/N NDP-1						
		21011 1 1 2 1 0 1 1 2	LOOKIIL LI							
Standard: P/N VM89A-2 S/I	V TAIL-01002									
Final Inspection By:	ET Level: _2	Date: 02/04/2022	1							
Non-destructive testir	ng method: Eddy Current wa	as accomplished in	accordan	ce with applicable FAA						
regulations. So far as the	work performed by this repa	air station, the airc	craft/comp	onents were found free of						
defects and i	s/are approved to be return	ed to service as of	f the date of	of this report.						
			Date:							
Signature:	EAA # 0	DSR786B	Dutc.	1 Coldary 04, 2021						
		ssionals, Inc.								
	13339 NE Airpoi	rt way, Suite 100	13339 NE Airport Way, Suite 100							

Portland, OR 97230

## PIPER AIRCRAFT PA-28-161 CADET AIRPLANE MAINTENANCE MANUAL

	BOLT LEGEND	MS21095		WASHER
POSITION	BOLT*	NUT*	UNDER HEAD	UNDER NUT
A-1	AN176-13A	MS20365-624C	(1) AN960-616	(1) AN960-616 & (1) 96352-3
A-2	AN176-12A	MS20365-62C	(1) AN960-616	(1) AN960-616 & (1) 96352-3
A-3	AN176-12A	MS20365-624C	(1) AN960-616	(1) AN960-616 & (1) 96352-3
A-4	AN176-12A	MS20365-624C	(1) AN960-616	(1) AN960-616 & (1) 96352-3
B-I	AN176 14A	MS20365-624C	(1) AN960-616	(2) AN960-616
B-2	AN176-13A	MS20365-624C	(1) AN960-616	(2) AN960-616
B-3	AN176-13A	MS20365-624C	(1) AN960-616	(2) AN960-616
B-4	AN176-13A	MS20365-624C	(1) AN960-616	(2) AN960-616
C-I	AN176-13A	MS20365-624C	(1) AN960-616	(1) AN960-616
C-2	AN176-13A	MS20365-624C	(1) 96352-3	(2) AN960-616
C-3	AN176-13A	MS20365-624C	(1) 96352-3	(2) AN960-616
C-4	AN176-13A	MS20365-624C	(1) 96352-3	(2) AN960-616
C-5	AN176-13A	MS20365-624C	(1) 96352-3	(1) 96352-3
D-I	AN176-13A	MS20365-624C	(1) 96352-3	(1) AN960-616
D-2	AN176-13A	MS20365-624C	(1) 96352-3	(2) AN960-616
D-3	AN176-13A	MS20365-624C	(1) 96352-3	(2) AN960-616
D-4	AN176-13A	MS20365-624C	(1) 96352-3	(2) AN960-616
D-5	AN176-13A	MS20365-624C	(1) 96352-3	(1) 96352-3
*Torque Bolt	heads on Upper Spa	r Cap and Nut on Lower	Spar Cap 360-390 ii	n-lbs

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Figure 4-2. Wing Installation (cont)

Issued: FEBRUARY. 28, 1989

# ENGINE LOG BOOK



## **Engine Log & Maintenance Record**

		LOG #:/
RECORD OF LYCOMING (MAKE)	<u>0-320-D3G</u> (MODEL)	1-7165-39E (SERIAL)
IRCRAFT REGISTRATION NUMBER	: <u>N47490</u>	
ROM <u>NOV</u> 2019	то	20
DETAILING TIME FROM 5726 (HOURS		_
f used on a multi-engine aircraft:	RightLeft _	FrontRear

#### **Overhaul Reciprocating Engine Certificate**

**XCOMING** 

This is to certify that the engine as described hereinafter has been OVERHAULED in accordance with the applicable Lycoming specifications. It has been determined airworthy to return to service and is in a condition for safe operation. All applicable Federal Aviation Administration Airworthiness Directives and Lycoming Service Publications have been complied with. All accessories as part of the type certificate are new or newly rebuilt or newly overhauled. Refer to enclosed Form ET001 for applicable accessory part numbers and serial numbers.

Part Number Serial Number Engine Model Work Order Total Time HENPL-RT8150 L-7165-39E O-320-D3G KM744275 5726.1 Authorized Representative

Repair Station EJ1R115K

652 Oliver Street Williamsport, PA 17701 U.S.A. Lycoming Engines is a division of Avco Corporation

Form 2480 Rev 05/13

te	Time Run (Hours)	Total Time Since Overhaul	Repairs, Adjustments, Service, Remarks	Signature	Lic					
DUG	Corvallis A	Aero Service	5695 SW Airport Place Corvallis, OR. 9733	2						
		ming O-320-D3G		·  -	_					
_			10.1011, 0.0	1/29/2019 -	_					
_	A 100hr insp	ection was perforn	ned per FAR 43 Appendix D requirements using Manufactures C	perations						
	Manual as a g	guide.								
	Installed Lycoming overhauled engine Model O-320-D3G, s/n L-7165-39E, ETT 5726.1 TSMOH 0.0.									
_	Serviced engine with 8 qts A/S 80 straight mineral oil.									
	Installed the following new/rebuilt/overhauled parts: Engine mounts J-9613-40 -53 and mounting									
	nardware, Starter P/N ERZ-8011 s/n H-S020071, Alternator 4111810 s/n H-S101875 Alternator helt									
	/3965-015, C	arburetor Avstar p	/n LW-15986-70 s/n CK125518. Magnetos Slick left 4371, s/n 19	9080207						
-	Slick Right 4370, s/n 19080089, and Flex Hose assy's for oil and fuel. Replaced oil cooler with overhauled									
	unit p/n 8406E s/n 15009.									
	Paraired brok	p, p/n Tempest AA	3215CC was inspected and transferred from old engine.	I <del>-1</del>						
-	C/W Lycomia	ne SI 1241C Engl	stalled new induction filter, p/n BA-16.							
_	C/W Lycomia	ng SI 1241C, Engl	ne pre-lube prior to first start.							
	AD's current	thru Bi-weekly 19	e ground break-in procedure 1(B). Ground run Good.							
-	. Lo 5 current	und Di-weekly 19	-24 IIO IICW.							
-	I certify that t	this Engine has be	en inspected IAW a 100 HR Inspection and is in an AIRWORTH	, I						
	condition with	h respect to the wo	rk nerformed	1Y						
		a respect to the wo	in performed.							
-	W/O# 19-804	15	Hal C Howard 2777703AP/IA							
			That C Howard 2777705AF/IA							
	Corvallis A	Aero Service	5695 SW Airport Place Corvallis, OR, 9733	,	-					
			5095 SW Airport Place Corvallis, OR. 97333	<b>3</b>						
$\dashv$	N47490 Pi	per PA28-161 S/	N 7816082 TACH: 2818.9 AFTT: 11,805.9 DATE: 12	16/2010						
_			DATE: 12							
	found.	th Lycoming Servi	ce Instruction 1427C Dated: 12/29/2010 section C 10. No discrepa	ancies +						
	iouna.		шозорь	+						
-	I certify that t	hia Engine i								
_	recitify that t	ms Engine is in a	n Airworthy condition with respect to the work performed.							
	W/O# 19-817		946 Hus							
_	W/O# 12-017	<u> </u>	Clayton Anderson 4297401A	P  -						
10	Corvallis Ae	one Comice	PCOR CYVI							
	oi vains At	no Service	5695 SW Airport Place Corvallis, OR. 97333							
N	147490 Pina	- DA20 161 COV		-						
1	Tipel	FA20-101 S/N	7816082 TACH: 2842.2 AFTT: 11,829.2 DATE: 12/2	7/2019						
D	rained oil Serv	riced with Pata V/	2001/20	.,2015						
G	round run Goo	d with odis X/(	220W50. Installed new CH48110-1 oil filter. Filter insp. Good	d.						
		·u.								
I	certify that this	Fngine is in a.	IDWODE							
	J what tills	Luguic is in an A	IRWORTHY condition with respect to the work performed.							
W	//O# 19-8178									
	12 01/0		Clayton Anderson 4297401AP							
-										
I										
-										
			ı	9						
 	otal:									
 	otal:									
			All renair data must be	ear the endo	rsen					
			All renair data must be	ear the endo and his/her	rsen					
gh				and his/her	rati					

SSP-1872-1 © 2015 Avco Corporation. All Rights Reserved.

Total to Date:\_\_\_

Date	Time R (Hour	tun s)	Total Time Since Overhaul	Repairs, Ad	ljustments, Service,		Signature	Licence #				
4	IT FORW		rvallis Aero Sei	vice 5695 S	W Airport Place	Corvallis, C	R. 97333					
ВКОО				161 S/N 7816082	TACH: 2882.9 A	AFTT: 11,869.9	DATE: 1/21/202	20				
		Dra	ined oil Serviced w	th 8qts X/C 20W50.	Installed new CH48	110-1 oil filter. Filte	er insp. Good.					
		Ground run Good.										
		I ce	I certify that this Engine is in an AIRWORTHY condition with respect to the work performed.  W/O# 20-8203  Clayton Anderson 4297401AP									
		W/C										
		Corvallis Aero Service 5695 SW Airport Place Corvallis, OR. 97333										
				0-D3G S/N L-7165 61 S/N 7816082		5.5 TSMOH: 9 TT: 11,901.9 D	99.4 ATE: 2/12/2020	,   _				
		A 10	Ohr inspection was ual as a guide.	performed per FAR	43 Appendix D require	ments using Manuf	actures Operation	ons				
		Com	pressions: #1 73/80	#2 76/80 #3 73/80 #	#4 73/80. Timed mags	to engine.	inen Good					
		Rem	oved, Inspected spa	rk plugs and rotated a	Installed new CH481 nd reinstalled with new	v gaskets P/N M674	lisp. Good.					
			nired broken primer s current thru Bi-we	line on Left side of en ekly 20-03 no new.	ngine							
		Grou	and run Good.									
				has been inspected IA the work performed.	AW a 100 HR Inspecti	on and is in an AIF	RWORTHY					
			# 20-8215	, , , , , , , , , , , , , , , , ,	//	n Anderson 429740	1 A D					
		W/O	# 20-8213			ii Anderson 429740	IAI					
		Co	rvallis Aero Ser	vice 5695 SV	W Airport Place	Corvallis, O	R. 97333					
		N47	490 Piper PA28-	161 S/N 7816082	TACH: 2965.1 A	FTT: 11,952.1 D	ATE: 3/9/2020					
		Drained oil Serviced with 8qts X/C 20W50. Installed new CH48110-1 oil filter. Filter insp. Good.										
		I cer	tify that this Engine	is in an AIRWORT	HY condition with res	spect to the work pe	rformed.					
		W/C	0# 20-8249		Cla	ayton Anderson 429	7401AP					
	SI.							-				
		_										
$\rightarrow$		+										
age 1	otal:											
					— All repa	air data must be	ar the end					
	nt For		rd:		— a certii	fied mechanic, a rtificate number	and his/her i	rating and				

ate	Time Run (Hours)	Total Time Since Overhaul	Repairs, Adjustments, Service, Remarks	Signature
ougi	HT FORWARD			
			ECOE CINI A	
-   (	Corvallis M	aintenance Ser		. 97333
-   !	Engine Lycom	ing O-320-D3G r PA28-161 S/N	S/N L-7165-39E ETT: 6172.7 TSMOH: 446.6 7816082 TACH: 3262.1 AFTT: 12198.5 DATE: 3/4/0	
-   [	N47490 Pipe	FPA20-101 5/1V	7816082 TACH: 3262.1 AFTT: 12198.5 DATE: 3/4/2	2021
.   т	Orained oil Ser	viced with 8qts X/C	220W50. Installed new CH48110-1 oil filter. Filter insp. Good	a
6	Ground run Go	od.	The msp. door	u.  —
			IDWODTING THE STATE OF THE STAT	
I	certify that thi	s Engine is in an A	IRWORTHY condition with respect to the work performed.	//  -
v	V/O# 21-0035		Hal C. Howard 2777703A	<u> </u>
L	V/OII 21 0000		7 Hai C. Howard 2////03A	P/IA
	G II: N	I - : - 4 C	ECOE CVV A: A PL CO UI OR	07000
	Corvailis M	laintenance Ser ning O-320-D3G	vice 5695 SW Airport Place Corvallis, OR. 9 S/N L-7165-39E ETT: 6221.2 TSMOH: 495.1	97333
			S/N L-7165-39E ETT: 6221.2 TSMOH: 495.1 7816082 TACH: 3310.6 AFTT: 12297.6 DATE: 4/22/2	021
			d per FAR 43 Appendix D requirements using Manufactures Oper	
_	Manual as a gu	iide.		
			#3 73/80 #4 77/80.	
			C 20W50. Installed new AA48110-2 oil filter. Filter insp. Good. spark plugs, rotated and reinstalled.	
			th Magnetos by AEC.	
	Ground run Go		in Magnetos by Albe.	
-		71 11 2001	22	
_	AD's current th	hru Bi-weekly 2021	-08 no new.	
	I certify that th	is Engine has been	inspected IAW a 100 HR Inspection and is in an AIRWORTHY	
		respect to the work		0
		and the second s	Hal C. Howard 2777703AP	TA T
_ [	W/O# 21-0051		Hal C. Howard 2777705A17	
+				
<b>-</b>  F	Cowrollia N	Taintananaa Car	rvice 5695 SW Airport Place Corvallis, OR	07333
			S/N L-7165-39E ETT: 6267.3 TSMOH: 541.2	. 77333
	N47490 Pip	er PA28-161 S/N	7816082 TACH: 3356.7 AFTT: 12343.7 DATE: 7/29	/2021
	Drained oil Se	rviced with 8qts X/	C 20W50. Installed new AA48110-2 oil filter. Filter insp. Goo	od.
-1-	Ground Run C	Good.	was a state of the	
-	i certify that th	nis Engine is in an	AIRWORTHY condition with respect to the work performed.	Anne Commence of the Commence
-	W/O# 21-0110	)	Hal C. Howard 2777703A	.P/IA
			State and the state of the stat	
$\perp$				
$\top$				
e T	otal:			
	otal:		All repair data must bear a certified mechanic, an	the endors

Total to Date:\_\_

Serial	#	
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Date	Time Run (Hours)	Total Time Since Overhaul	Repairs, A	Adjustments, Service, Re	marks	Signature	Licence #
	T FORWARD						
BROUGH	Engine Ly N47490  A 100hr ir Manual as Compressic corrosion of Drained oil Removed, Ground rur AD's curre I certify the condition v W/O# 21-0	a guide. ons: #1 68/80 #2 7 on valve seats. Repa I Serviced with 8qts Cleaned and Inspect in Good. ont thru Bi-weekly 2 at this Engine has be with respect to the w	G S/N L-7165-39I S/N 7816082 TAG med per FAR 43 A D/80 #3 70/80 #4 red cracked engine X/C 20W50. Instated spark plugs, rotated D21-18 no new. Deen inspected IAW a ork performed.	ppendix D requirements usi 68/80. Borescope inspection baffling. illed new AA48110-2 oil fi ited and reinstalled.  a 100 HR Inspection and is Hal C	rsMOH: 594.8 7.3 DATE: ng Manufacture n of cylinders re lter. Filter insp.	RTHY 703AP/IA	
	N47490 P A 100hr ins Manual as a Compressio Filler Tube. Drained oil Removed, C Ground run	siper PA28-161 Shippection was perform guide. ns: #1 72/80 #2 72 Serviced with 8qts 2 Cleaned and Inspected Good. t thru Bi-weekly 20	N 7816082 TAC ned per FAR 43 Ap /80 #3 72/80 #4 7 K/C 20W50. Install d spark plugs, rotate 21-25 no new.	H: 3456.3 AFTT: 12443 opendix D requirements using 73/80. Replaced induction F led new AA48110-2 oil file	.3 DATE: 1 ag Manufactures ilter BA-16. Re- ter. Filter insp. 0	-safetyed Oil Good.	
	AIRWORT W/O# 21-01	HY condition with	respect to the work	performed.	Howard 27777	ev	
+							
	N47490 Sealed I I certify W/O# 2	22-052	S/N 7816082  nsor.  n an airworthy cond	95 SW Airport Place TACH: 3498.7  ition with respect to the wor	DATE	OR. 97333 : 6/2/2022	
ough	it Forwa	rd:		a certifie	d mechanic,	ear the endo and his/her er MUST be	rating an

Serial	#	
00.10.		

Date	Time   (Hou		Total Time Since Overhaul	Repairs, Adjustments, Service, Remarks	Signature	Licence #					
BROUGH	T EODW	ADD	is Maintenance	Service 5695 SW Airport Place Corvallis,	OR. 97333						
	I 17-	T		GG S/N L-7165-39E ETT: 6416.5 TSMOH: 690.4 S/N 7816082 TACH: 3505.9 AFTT: 12492.9 DATE: 6	10.						
	_ Dr. Gr	ained o	oil Serviced with 8qt un Good.	ts X/C 20W50.							
		I certify that this Engine is in an AIRWORTHY condition with respect to the work performed.  W/O# 22-060  Hal C. Howard 2777703AP/IA									
		W/O# 22-060									
		_									
						_					
	-										
						_					
						$\dashv$					
	1										
	1										

Brought Forward:\_\_\_\_\_

All repair data must bear the endorsemen a certified mechanic, and his/her rating certificate number MUST be shown.

Total to Date: