

ROTAX  
AEROPLANE ENGINES



# MOTOR LOGBUCH

ENGINE LOG BOOK

FÜR ROTAX® MOTORTYPEN 2 TAKT UND 4 TAKT

FOR ROTAX® ENGINE TYPES 2 STROKE AND 4 STROKE

~~N949CT~~  
N286TG

Nr. / no.

6.783.172

发动机履历本编号:  
Engine Log Book: PE150301

活塞式发动机适用  
for piston engine

1

发动机型号: 912ULS2  
Type of Engine: 912ULS2

齿轮箱结构: ULS2  
Model: ULS2

发动机序列号: 6.783.172  
Engine serial no.: 6.783.172

发动机制造商: BRP-Powertrain GmbH & CO KG.  
Manufacturer: A-4623 Gunskirchen, Austria

出厂年份: 2015  
Year of manufacture: 2015

型号认证书:  
Data Sheet:

起飞最大功率: 73.5 千瓦  
Take off Power: 73.5 kW

持续时间: 分钟 转速: 5800 转/分  
perm. duration: min. at: 5800 r.p.m.

最大持续功率: 69 千瓦  
Max. Cont. Power: 69 kW

转速: 5500 转/分  
at: 5500 r.p.m.

若遵照 Zivilluftfahrzeug- und Luftfahrtgerät- Verordnung (民用航空器及航空设备管理规则) 最新的相关操作和维护保养指令, 对上述发动机进行运作和维护保养, 则上述发动机被认为是可靠的。

The above mentioned engine is considered to be operationally reliable if operated and maintained in accordance with the Zivilluftfahrzeug- und Luftfahrtgerät-Verordnung, current issue and the pertinent operational and maintenance instructions.

备注: none  
Remarks: none

日期: May 8, 2015  
Date:

签署:  
Signature:



601583

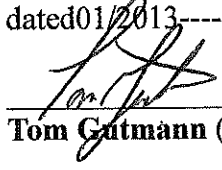
## Änderungsstand / Modification record

5

Lufftüchtigkeitsanweisung bzw. Änderung: <i>Airworthiness directive or modification:</i>	Ges. Std.: <i>TSN:</i>	Datum: <i>Date:</i>	Unterschrift & LFZ W. Nr.: <i>Signature &amp; Licence no.:</i>

03/15/2017    Aircraft TT: 2.1    Engine Time in Service: 2.1

This Rotax 912 ULS, Serial # 6.783.801, has been installed on a factory-built Flight Design GMBH, CTLS, Serial# F-16-05-52, N949CT aircraft by the Flight Design factory. A Neuform 3-blade propeller, Model CR3-65-47-101.6 was also installed, torqued, and safetied by the Flight Design factory. This engine was run up and all systems were leak and function checked and found to be good by the Flight Design factory. This engine has been inspected and found to be in a condition for safe operation and suitable for flight as per the Flight Design Quality Assurance manual (naming specifically Tom Gutmann) as well as the SI-ASTM -CTLS-27 Revision 00 dated 01/2013-----



**Tom Gutmann** ( President of Airtime Aviation Inc.)(Mfg. Authorized Technical Staff Member)


## Änderungsstand / Modification record

Lufttüchtigkeitsanweisung bzw. Änderung:  
Airworthiness directive or modification:

Ges. Std.:  
TSN:

Datum:  
Date:

Unterschrift & LFZ W. Nr.:  
Signature & Licence no.:

5 Dec 2017 ; Rotax 6.783.172; Total Time 5.1 ; Compression tested 80/80; 79/80;80/80; 79;80. Fuel filter cleaned, Alert service bulletin (ASB-912-007) was performed. Seal plug in crankcase was installed correctly. I certify this engine had a condition inspected in accordance with the Rotax maintenance manual. The engine was found to be in a condition for safe flight.

Tom Gutmann A&P 2040778



Aircraft Make: Flight Design CTLS Reg: N949CT S/N F-16-05-52 A/C Hobbs time 28.0 Date: 03/06/2018  
Engine Make: Rotax 912ULS 2 S/N 6.783.172 Engine TT 28.0

- 1) Complied with engine initial 25 /100 hour inspection IAW Rotax Maintenance Manual 05-20-00/
- 2) Drained oil, removed old oil filter Rotax P/N 825-012, cut open and inspected. Installed new filter Rotax P/N 825-012/ drain crush washer
- 3) P/N Leaf Rotax 250-010 and serviced with 3 Liters of Aeroshell Sport Plus 4 oil.
- 4) Checked G/B magnetic plug, no metal noted.
- 5) Gearbox was inspected checking friction torque and found to be at 386 inch lbs. /33.07 ft. lbs.
- 6) Performed Carb Synchronization and set idle, synched carbs from idle to 4000 RPM
- 7) Performed Engine ground runs, no leaks noted.
- 8) Found broken spring on R/H exhaust, Installed new spring P/N 938-795

I certify all work was accomplished IAW FAA CFR FARs and Rotax technical publications and found engine in condition for safe operation in regards to work performed.

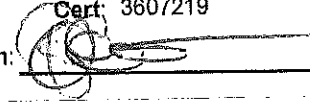
Signature: Gregory Espinoza A&P 3607219 IA.  
(RMP Certified Service Maintenance /Heavy)

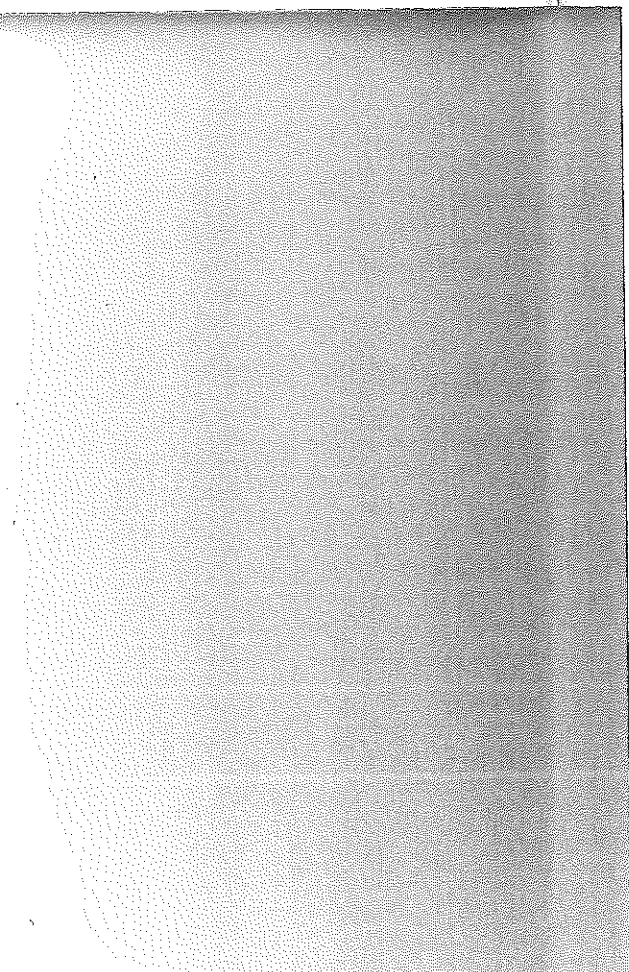






# Wartungsübersicht / Maintenance record

Datum: Date:	Betriebsstunden: Engine hours:		Durchgeführte Arbeiten: Work performed:	Unterschrift & LFZ Wart Nr.: Signature & Licence no.:
	Gesamt: TSN:	seit letzter GÜ.: TSO:		
	<b>Date:</b> 10/21/2018 <b>Hours:</b> 124.4 <b>Tail#:</b> N286TG <b>Make:</b> Flight Design <b>Model:</b> CTLS <b>S/N:</b> F-16-05-52			
	Removed and installed new exhaust spring P/N 938-795. Drained engine oil, removed Filter, installed new filter P/N 825016 and drain crush washer P/N 250-010 and serviced with 3 Qts. of Aeroshell Sport Plus 4. Took oil sample for SOAP analysis. Removed, and cleaned filter per Rotax MM Ran aircraft up, no leaks noted. Installed engine cowlings			
	I certify all work was accomplished IAW FAA CFR FARS and Rotax technical publications and found engine in condition For safe operation in regards to work performed.			
	<b>Name:</b> Felipe Gregory Esparza <b>Co:</b> Semper Fi Aviation		<b>Sign:</b>  <b>Cert:</b> 3607219	





Wartungsübersicht / Maintenance record

Datum:

Betriebsstunden:  
Engine hours:

Unterschrift &  
Zwart Nr.:  
Signature &  
Licence no.:



Aircraft Make: Flight Design CTLS Reg: N286TG S/N F-16-05-52 A/C Hobbs time 134.0 Date: 11/19/2018  
Engine Make: Rotax 912ULS 2 S/N 6.783.172 Engine TT 134.00

Changed 6 exhaust springs to stainless steel P/N 938-795, replaced one water line hose clamp from from water pump to cooler.  
Completed to ground runs, no leaks noted.

I certify all work was accomplished IAW FAR's 14 CFR, Flight Design Maintenance Manual, Rotax 912 maintenance manual and consider Aircraft to be safe for flight in regards to work performed.

*[Signature]*  
A&P I.A. 3607219

05 Dec 2018 ; Rotax 6.783.172; Total Time 139.1 ; Compression tested 80/79; 80/80;80/80; 80;80. Fuel filter cleaned. Gascollator removed and cleaned. Drain 1/4 qt. of oil. Decrease prop pitch 0.5 degree. Reseal cooling system, replace 6 defective hose clamps. I certify this engine had a condition inspected in accordance with the Rotax maintenance manual.

The engine was found to be in a condition for safe flight.

Tom Gutmann A&P 2040778

*[Signature]*



# Wartungsübersicht / Maintenance record

Datum: Date:	Betriebsstunden: Engine hours / cycles:	Durchgeführte Arbeiten: Work performed:	Unterschrift & LFZ Wart Nr.: Signature & ence no.:
-----------------	--	--	---



**Engine: Rotax 912 ULS S/N 6.783.172 TTSN 199.0 Aircraft Reg. No. N286TG**

- 1) Complied with a 25/50/100-200 Hour Inspection IAW Rotax Maintenance/Heavy Technical Manuals Chapter 05-20-00
- 2) The following maintenance operations were complied with:
  - A) Compression test results were attained #1 85/85, #2 85/85, #3 85/85, #4 85/85 IAW Rotax 12-20-00 p.15
  - B) Drained engine oil, removed oil filter P/N 825-012, cut opened and inspected, no anomalies noted, Cleaned Oil tank and installed new "O" Ring P/N 850-491, installed new oil filter P/N 825012, new crush washer P/N 250-010, and serviced with 3.2 liters of Aeroshell Sport plus 4 oil IAW Rotax Ch. 12-20-00 p. 11.5, 51-52
  - C) Checked friction torque of GB overload torque, results were 386 inch lbs. IAW 12-20-00, section 14.1
  - D) All (8) eight spark plugs P/N NGK DCPRE were changed with new spark plugs, same P/N and gapped to 0.027. Installed using heat sink paste per ROTAX HMM 12-20-00, p.65
  - E) Cleaned and serviced air filter IAW 12-00-00 page 5/6
  - F) During the 200 hour Carb removal and disassembly inspection, found both Diaphragms P/N 861-116 had deterioration, Installed two new Diaphragms P/N 861-116.
  - G) Found left hand Floats weighed 6.6 grams and Right hand failed weight test @ 10.1 grams. Installed new set of floats P/N 861-189, weighed 6.5 grams per 12-20-00 Sec. 10.4.1
  - G) Complied with synchronization of both carbs mechanical and pneumatic IAW 12-20-00 page 31-38 up to 4000 RPM
  - H) During run ups leaked checked, no leaks noted and checked fluids for proper levels.
  - I) Complied with oil sample (AOA), per customers request.
- 3) Complied with the following ROTAX S/B's:
 

A)	S/B 912-1-009	Oil Filter green dot inspection
B)	S/B 912-051	Magnetic Plug Inspection
C)	EXP-S/B- 912-010/055	Correct Oil Filter Installation and Servicing
D)	SI 912-018	Purging of Oil System

I certify that this Engine has been inspected in accordance with the scope and detail of the Manufacturer's Maintenance and Inspections procedures, Appendix D to Part 43, AC43.13.1B/2B and found to be in a condition for safe operation in regards to work performed.

*[Signature]*  
 Robert C. Sparka AWP/IA, 3607219 7/25/2019

# Wartungsübersicht / Maintenance record

Datum:  
Date:

Betriebsstunden:  
Engine hours:

Gesamt:  
TSM:

seit letzter GÜ.:  
TSM:

Durchgeführte Arbeiten:  
Work performed:

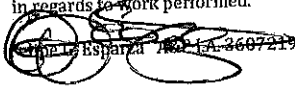
Unterschrift &  
LFZ Wart Nr.:  
Signature &  
Licence no.:



Engine: Rotax 912 ULS S/N 6.783.172 TTSN 241.3 Aircraft Reg. No. N286TG

- 1) Complied with a 100 / Annual Condition Inspection IAW Rotax Maintenance/Heavy Technical Manuals Chapter 05-20-00
- 2) The following maintenance operations were complied with:
  - A) Compression test results were attained #1 85/85, #2 85/85, #3 85/85, #4 84/85 IAW Rotax 12-20-00 p.15
  - B) Checked friction torque of GB overload torque, results were 386 inch lbs. IAW 12-20-00, section 14.1
  - C) All (8) eight spark plugs P/N NGK DCPR8E were removed, gap checked (0.027) and re-installed using heat sink paste per ROTAX HMM 12-20-00, p.65
  - E) Cleaned and serviced air filter IAW 12-00-00 page 5/6
  - G) Magnetic chip plug check, no abnormalities found.
  - H) Removed and cleaned Fuel pressure sensor, re-installed.
  - G) Complied with synchronization of both carbs mechanical and pneumatic IAW 12-20-00 page 31-38 up to 4000 RPM
  - H) During run ups leaked checked, no leaks noted and checked fluids for proper levels.
- 3) Complied with the following ROTAX S/B's:
  - A) S/B 912-1-009 Oil Filter green dot inspection
  - B) S/B 912-051 Magnetic Plug Inspection

I certify that this Engine has been inspected in accordance with the scope and detail of the Manufacturer's Maintenance and Inspections procedures, Appendix D to Part 43, and found to be in a condition for safe operation in regards to work performed.

 Date: 12/23/2019

# Wartungsübersicht / Maintenance record



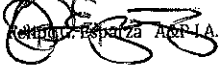
**Engine: Rotax 912 ULS S/N 6.783.172 TTSN 245.0 Aircraft Reg. No. N286TG**

Complied with Oil change, removed old filter P/N ROTAX 852016, drained oil, and installed new filter P/N ROTAX 852016, new crush washer P/N 250-010 serviced with 3 liters of Aeroshell Sport Plus 4. Took AOA Oil SOAP sample. Cut open filter, no abnormalities found. Ground run performed with no leaks noted.

**Complied with the following ROTAX S/B's:**

- A) S/B 912-1-009 Oil Filter green dot inspection

Complied with oil service IAW ROTAX 912ULS technical publications found to be in a condition for safe operation in regards to work performed.

 Reinhold Esparza A&P L.A. 3607219 Date: 12/26/2019

Unterschrift &  
LFZ Wart Nr.:  
Signature &  
Licence no.:




**Engine: Rotax 912 ULS S/N 6.783.172 TTSN 300.0 Aircraft Reg. No. N286TG**

Complied with Oil change, removed old filter P/N ROTAX 852016, drained oil, and installed new filter P/N ROTAX 852016, new crush washer P/N 250-010 serviced with 3 liters of Aeroshell Sport Plus 4. Cut open filter, Filter clean. Checked GB magnetic plug, found good. Ground run performed with no leaks noted.

**Complied with the following ROTAX S/B's:**

- A) S/B 912-1-009 Oil Filter green dot inspection

Complied with oil service IAW ROTAX 912ULS technical publications found to be in a condition for safe operation in regards to work performed.

 Reinhold Esparza A&P L.A. 3607219 Date 10/3/2020

# Wartungsübersicht / Maintenance record

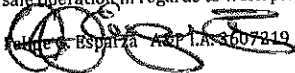
Datum: Date:	Betriebsstunden: Engine hours:		Durchgeführte Arbeiten: Work performed:	Unterschrift & LFZ Wart Nr.: Signature & Licence no.:
	Gesamt: TSN:	seit letzter GÜ.: TSO:		






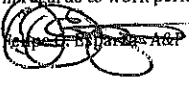
Engine: Rotax 912 ULS S/N 6.783.172 TTSN 319.6 Aircraft Reg. No. N286TG

- 1) Complied with a 100 / Annual Condition Inspection IAW Rotax Maintenance/Heavy Technical Manuals Chapter 05-20-00
- 2) The following maintenance operations were complied with:
  - A) Compression test results were attained #1 85/85, #2 84/85, #3 84/85, #4 85/85 IAW Rotax 12-20-00 p.15
  - B) Checked friction torque of GB overload torque, results were 383 inch lbs. IAW 12-20-00, section 14.1
  - C) All (8) eight spark plugs P/N NGK DCPR8E were removed, gap checked (0.028) and re-installed using heat sink paste per ROTAX HMM 12-20-00, p.65
  - E) Cleaned and serviced air filter IAW 12-00-00 page 5/6
  - G) Magnetic chip plug check, no abnormalities found.
  - H) Removed and cleaned Fuel pressure sensor, re-installed.
  - I) Added clamp to water hose from water pump.
  - J) Cleaned Gascolator screen
  - G) Complied with synchronization of both carbs mechanical and pneumatic IAW 12-20-00 page 31-38 up to 4000 RPM
  - H) During run ups leaked checked, no leaks noted and checked fluids for proper levels.
- 3) Complied with the following ROTAX S/B's:
  - A) S/B 912-074UL/SB-2ST-004 N/A per engine S/N installed
  - B) S/B 912-051 Magnetic Plug Inspection

I certify that this Engine has been inspected for an Annual/100 Hour Safety Conditional Inspection in accordance with the scope and detail of the Manufacturer's Maintenance and Inspections procedures, Appendix D to Part 43, and found to be in a condition for safe operation in regards to work performed.

 Date: 12/23/2020

# Wartungsübersicht / Maintenance record

Datum: Date:	Betriebsstunden: Engine hours:	Durchgeführte Arbeiten: Work performed:	Unterschrift & LFZ Wart Nr.: Signature & Licence no.:		
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;">                             Gesamt: TSN:                         </td> <td style="width: 50%; vertical-align: top;">                             seit letzter GÜ.: TSO:                         </td> </tr> </table>	Gesamt: TSN:	seit letzter GÜ.: TSO:		
Gesamt: TSN:	seit letzter GÜ.: TSO:				
					
	Engine: Rotax: 912 ULS S/N 6.783.172 TTSN 349.4 Aircraft Reg. No. N286TG				
	Complied with Oil change, removed old filter P/N ROTAX 852016, drained oil, and installed new filter P/N ROTAX 852016, new crush washer P/N 250-010 serviced with 3 liters of Aeroshell Sport Plus 4. Took AOA Oil SOAP sample. Cut open filter, no abnormalities found. Ground run performed with no leaks noted.				
	Complied with the following ROTAX S/B's: A) S/B 912-1-009 Oil Filter green dot inspection				
	Complied with oil service IAW ROTAX 912ULS technical publications found to be in a condition for safe operation in regards to work performed.				
	 A&P I.A. 3607219 Date: 05/11/2021 Flight Design Service Center				
					
	Engine: Rotax: 912 ULS S/N 6.783.172 TTSN 354.0 Aircraft Reg. No. N286TG				
	Drained oil, removed oil tank, cleaned tank, installed new drain seal P/N 250-010, new tank cover Oring P/N 850-491. Serviced with 3 liters of Aeroshell Sport Plus 4. Purged oil system per ROTAX MM 12-20-00 Ground run performed with no leaks noted.				
	Complied with oil service IAW ROTAX 912ULS technical publications found to be in a condition for safe operation in regards to work performed.				
	 A&P I.A. 3607219 Date: 06/03/2021 Flight Design Service Center				

# Wartungsübersicht / Maintenance record

Datum  
Date

Betriebsstunden:  
Engine hours:

Durchgeführte Arbeiten:

Unterschrift &  
LFZ Wart Nr.:



Semper Fi Aviation  
2304 Dartford Drive  
Crowley TX 76036  
8177343558

Make: Flight Design

Model: CTLS

Tail: N286TG

S/N: F-16-05-52

Hours: AC: 391.7 TT: 391.7 EngTT: 391.7 PropTT: 391.7 Hobbs: Misc:

Complied with Compression check and found the following: #1 85/85, #2 84/85, #3 84/85, #4 85/85. Mag Plug check was normal, reinstalled. Removed spark plugs, customer uses unleaded more than 70%, plugs were clean, re gapped at 0.029,, reinstalled using heat sink paste, and torqued. Cleaned and serviced Air filter (K/N)  
Drained Oil, took Oil Sample, removed Oil filter. Cut Open Oil Filter and no abnormal conditions were observed. Oil sample to be sent off to AOA Labs as part of aircraft maintenance routine. Removed Oil tank, cleaned, no lead sludge found, cleaned, reinstalled using new Oring P/N 850-491, crush washer on drain plug, P/N 250-010. Installed new Oil Filter P/N 852016, C/W SB 912-1-009. Serviced Engine with 3.2 liters of Aeroshell Sport Plus 4 Oil. Removed both Bing Carbs, Disassembled per Level 5 maintenance Manual. Installed new Floats, that came in kit, and all new seals, jets, float arms, everything in kit. Reassembled, installed, complied with ground run idle sync, and pneumatic sync all the way up to 5200 RPM, adjusted as needed and ops checked good, both being in sync. Complied with GB Friction torque and found at 385 inch lbs.  
During ground runs complied with leak check, no leaks noted. All work accomplished IAW ROTAX Technical Publications, Chapters 5, 20

Signed:

Name: Felipe Gregorio Esparza

Cert: A&PIA 3607219

Date: 09/28/2021






**Wartungsübersicht / Maintenance record**

Datum: Date:	Betriebsstunden: Engine hours:		Durchgeführte Arbeiten: Work performed:	Unterschrift & LFZ Wart Nr.: Signature & Licence no.:
	Gesamt: TSN:	seit letzter GÜ.: TSO:		
17-December-2021			N286TG F-16-05-52 912LS 6.83.172 Hobbs 409.00	
<p>C/W Annual/100 hour condition Inspection. Changed oil and filter: Cleaned oil tank and installed new Rotax oil filter and serviced with Aeroshell Sport +4 oil. Leak checked Ok. Replaced, gaped, applied heat transfer paste, and installed 8 new DCPR8E Spark plugs. Checked all Rotax Engine Service bulletins for compliance. C/W Rotax 100 hour Diff. Compression Test. Results: Cylinder #1, 79/80, #2 79/80, #3 78/80, #4 80/80.. C/W 200 hour spark plug connector pull-off check, good. C/W Rotax 5-year Rubber Component replacement: Removed and replaced all fuel, water, and oil hoses. Replaced wing fuel tubes, and wing fuel sight tubes. Cleaned fuel filter. Filled with DexCool 50/50 , Leak checked OK. All systems OP's &amp; Leak checked OK.</p>				
Tom Gutmann A&P 2040778				



# Wartungsübersicht / Maintenance record

Datum: Date:	Betriebsstunden: Engine hours / cycles:		Durchgeführte Arbeiten: Work performed:	Unterschrift & LFZ Wart Nr.: Signature & Licence no.:
	Gesamt: TSN:	seit letzter GÜ.: TSO:		
Aircraft Inspection and Repair P.O. Box 2604 Laurel MS 39442 601-270-5507			Make: <u>N286TG Flight Design LSA</u> Model: <u>GMBH CTS</u> Tail: <u>N286TG</u> S/N: <u>F-16-05-52</u>	
Hours: _____				
Complied with Rotax 100 hour inspection IAW Rotax manual chapter 5-20-00 Changed oil, serviced with 3 liters of Aeroshell Sport Plus 4 oil and installed new filter p.n. 825-012 Checked gear box magnetic plug no metal found. Checked Gear box friction torque (387 inch pounds) I certify this Engine has been inspected in accordance with Rotax maintenance Manual and has been determined to be in airworthy condition.				
Signed:  Name: <u>David Sanford</u>			Cert: <u>3032129</u> Date: <u>02/18/2023</u>	

Signed:  Name: <u>David Sanford</u>		Make: <u>N286TG Flight Design LSA</u> Model: <u>GMBH CTS</u> Tail: <u>N286TG</u> S/N: <u>F-16-05-52</u>	Cert: <u>3032129</u> Date: <u>02/18/2023</u>
Hours: <u>Hobbs: 430.7</u>			
ENGINE: Compressions: (1) 80/80, (2) 80/80, (3) 80/80, (4) 80/80. Drained engine oil and removed used engine oil filter. Serviced engine with Aeroshell Oil Sport Plus 4 and a Rotax oil filter P/N: 825-016. Removed, cleaned, gapped, inspected, and installed spark plugs. Performed engine run up and leak checked GOOD. Performed annual condition inspection IAW Rotax maintenance manual and FAR 43 appendix D. I certify this engine has been inspected IAW an annual inspection an determined to be in airworthy condition.			
Signed:  Name: <u>David Sanford</u>			Cert: <u>3032129</u> Date: <u>03/07/2024</u>

(25-60)