



**Steel Aviation**

53 North Street Ext  
 Phillipsburg, Ohio 45354  
 Danny Potter • Danny@steelaviation.com • 937 332 7587

**Invoice**

**WO\_562**

Date: November 01, 2024  
 N647MD ANNUAL

**AIRCRAFT**

**N647MD**

CIRRUS DESIGN CORP SR20 S/N: 1772  
 HOBBS: 1093.7 • TACH: 876.1

**BILL TO**

[REDACTED]  
 [REDACTED]  
 [REDACTED]  
 [REDACTED]

Item	Discrepancy	Parts	Labor	Misc
1.	<b>Airframe Annual</b> Corrective Action	\$0.00	\$1,680.00	\$0.00
1-1	C/W Annual Inspection in accordance with FAR 43 Appendix D - using Cirrus AMM as a guide.  -- labor: 10.0 hrs @ \$168.00			
1-2	C/W ELT Inspection IAW FAR 91.207(D).			
1-3	ELT Battery Due: 9/2025			
1-4	Airworthiness Directives checked through Bi-Weekly date 2024-21			
2.	<b>Engine Annual</b> Corrective Action	\$179.67	\$1,680.00	\$0.00
2-1	C/W Annual Inspection in accordance with FAR 43 Appendix D using Cirrus AMM as a guide  -- labor: 10.0 hrs @ \$168.00			
2-2	Drained oil and serviced.			
2-3	Removed and cut open oil filter. NDN			
2-4	Checked Compressions #1 72/80 #3 66/80 #5 58/80 # 2 70/80 # 4 60/80 #6 60/80 MO 44			
2-5	Checked Magneto timing Timed per data tag 24. LF/RH			
2-6	Removed and replaced Induction air filter 1 x BA-24 Air Filter @ \$27.10 8 x Phillips X/C 20W50 Oil @ \$11.29 1 x AA48108-2 Oil Filter @ \$62.25	\$27.10 \$90.32 \$62.25		
3.	<b>Prop Annual</b> Corrective Action	\$0.00	\$336.00	\$0.00
3-1	C/W Annual Inspection in accordance with FAR 43 Appendix D - using Hartzell manual 115N as a guide .  -- labor: 2.0 hrs @ \$168.00			
3-2	Lubricated propeller hub with Aeroshell 6			
4.	<b>ALT #1 REPLACEMENT/OVERHAUL</b> <i>Remarks: CH.5 ITEM DUE BY YEARS NOT HOURS - estimate on request</i>	\$0.00	\$0.00	\$0.00
5.	<b>BATT #2 REPLACEMENT</b> <i>Remarks: CH.5 2 YEAR ITEM DUE BY YEARS</i>	\$0.00	\$0.00	\$0.00
6.	<b>PROP GOVERNOR OVERHAUL</b> <i>Remarks: CH.5 ITEM DUE BY YEARS NOT HOURS - estimate on request</i>	\$0.00	\$0.00	\$0.00
7.	<b>PROPELLER OVERHAUL</b> <i>Remarks: CH.5 ITEM DUE BY YEARS NOT HOURS - estimate on request</i>	\$0.00	\$0.00	\$0.00
8.	<b>MUFFLER AND HEAT EXCHANGER REPLACEMENT</b> <i>Remarks: CH.5 ITEM DUE SOON IN 123.9 HOURS - estimate on request</i>	\$0.00	\$0.00	\$0.00
9.	<b>#1 push tube seals leaking oil.</b> Corrective Action	\$34.28	\$336.00	\$0.00

Item	Discrepancy	Parts	Labor	Misc
9-1	R/R # 1 cylinder push tube seals IN/EX . replaced rocker arm locking tab washers, torqued bolts to 120 in/lb. replaced rocker box gaskets.  -- labor: 2.0 hrs @ \$168.00 2 x 641607 TCM PUSH ROD SEAL @ \$5.98 2 x SA632310 SUPERIOR VALVE COVER GASKET, IO 360 @ \$6.28 4 x 08-50186-7 TCM LOCKING TAB WASHER @ \$2.44			
10.	#3 & #5 push tube seals weeping oil / slightly. <i>Remarks: 2 hours per cylinder</i> Corrective Action	\$68.56	\$672.00	\$0.00
10-1	R/R #3/ #5 push tube seals , IN/EX . replaced rocker arm tab washers, torqued nuts to 120 in/lb. replaced rocker box gaskets.  -- labor: 4.0 hrs @ \$168.00 4 x 641607 TCM PUSH ROD SEAL @ \$5.98 4 x SA632310 SUPERIOR VALVE COVER GASKET, IO 360 @ \$6.28 8 x 08-50186-7 TCM LOCKING TAB WASHER @ \$2.44			
11.	Drain tube hose from blower fan behind instrument panel disconnected. <i>Remarks: reminder for shop - no labor charged.</i> Corrective Action	\$0.00	\$0.00	\$0.00
11-1	Installed drain hose in cabin blower fan.			
12.	Pilot side B pillar needs reattached to window seal. <i>Remarks: reminder for shop - no labor charged.</i> Corrective Action	\$0.00	\$0.00	\$0.00
12-1	Installed tape to B pillar to frame			
13.	CAPs pin loose fit. to pull handle. Corrective Action	\$38.24	\$0.00	\$0.00
13-1	Installed new CAPs pin. 1 x 25322-001 CAPS Safety Flag Pin @ \$38.24			
14.	Compass card unreadable. Corrective Action	\$0.00	\$0.00	\$0.00
14-1	Made compass card readings legible.			
15.	CO-Pilot grab here peeling off. Corrective Action	\$22.50	\$42.00	\$0.00
15-1	Installed new Co-Pilot grab here placard.  -- labor: 0.25 hrs @ \$168.00 1 x 15735-001 Grab Placard @ \$22.50			
16.	CO-Pilot cup holder not closing fully.	\$0.00	\$0.00	\$0.00
17.	RH fuel vent hose barbed fitting broken from panel. <i>Remarks: upon inspection there has been a previous repair that isn't holding. Replacement is best option - 2 hours labor if new panel needs painted - Leadtime for the panel is 6-8 weeks we can get it on order but have since repaired it. Not sure if the repair will last it will be looked at the next annual.</i> Corrective Action	\$0.00	\$168.00	\$0.00
17-1	RH fuel vent barbed fitting @ OB inspection panel was reattached W/ 2part epoxy.  -- labor: 1.0 hrs @ \$168.00			
18.	LF Main inner wheel bearing & race have .excessive scoring/ burnt. need replaced. Corrective Action	\$153.25	\$168.00	\$0.00
18-1	R/R LF main inner wheel bearing & race. Found scored & burnt. Replaced both with new.  -- labor: 1.0 hrs @ \$168.00 1 x 13836-20629 BEARING RACE, MAIN WHEEL @ \$62.31 1 x 13889-20629 BEARING CONE, MAIN WHEEL @ \$90.94			
19.	RH Nose wheel fairing bracket broken. needs replaced. Corrective Action	\$120.00	\$84.00	\$0.00
19-1	R/R nose wheel pant bracket, W/ new .RH.  -- labor: 0.5 hrs @ \$168.00			

Item	Discrepancy	Parts	Labor	Misc
	1 x 11799-004D NLG WHEEL PANT BRACKET @ \$120.00	\$120.00		
20.	<b>BATT #1 CAPACITY TEST</b> <i>Remarks: Charged and added distilled water to battery. CAPS tested, battery failed. Charging again to CAPS test again. Battery could need replaced.</i>	\$0.00	\$0.00	\$0.00
21.	<b>MSB2X-25-30R1 DUE</b> <i>Remarks: PART OF ANNUAL INSPECTION COST</i> Corrective Action	\$0.00	\$0.00	\$0.00
21-1	C/W SB2X-25-30R1 IAW CIRRUS AMM CH. 05-20			
22.	<b>MSB2X-78-07R1 / AD 08-11-18</b> Corrective Action	\$16.62	\$252.00	\$0.00
22-1	C/W AD 08-11-18 per MSB2x -78-07R1. Due every 100 hours.  -- labor: 1.5 hrs @ \$168.00			
	3 x AN3C14 Bolt @ \$2.05	\$6.15		
	3 x AN310C3 Nut @ \$3.31	\$9.93		
	9 x AN960C10L SS FLAT WASHER @ \$0.06	\$0.54		
23.	<b>MSB2X-95-27R5 DUE within 25 flight hours or at next scheduled maintenance</b> <i>Remarks: - MUST BE DONE BY CAPS TECHNICIAN / CIRRUS SERVICE CENTER</i>	\$0.00	\$0.00	\$0.00
24.	<b>MSB2X-95-31R1 DUE at next (CAPS) parachute and rocket motor assembly replacement</b> Corrective Action	\$0.00	\$0.00	\$0.00
24-1	MSB2X-95-31R1 DUE at next (CAPS) parachute and rocket motor assembly replacement			
25.	<b>MSB2X-95-33R1 DUE at next (CAPS) parachute and rocket motor assembly replacement</b> Corrective Action	\$0.00	\$0.00	\$0.00
25-1	MSB2X-95-33R1 DUE at next (CAPS) parachute and rocket motor assembly replacement			
26.	<b>EGT Probe 1 was erratic</b> Corrective Action	\$158.90	\$168.00	\$0.00
26-1	R/R #1 EGT probe /W new.  -- labor: 1.0 hrs @ \$168.00			
	1 x 16579-002 EGT SENSOR, LARGE CLAMP @ \$158.90	\$158.90		
27.	<b>The pilot door seal was coming off a little near the hinge</b> <i>Remarks: DOOR SEAL NEEDS TAPED</i> Corrective Action	\$0.00	\$0.00	\$0.00
27-1	Re attached Pilot door seal when B pillar tape applied.			
28.	<b>There was a "Datalink Receiver Fault" that displayed during the whole flight</b> <i>Remarks: UPDATED IFDS to 10.3.1.2 , updated cnfg in IFD and FREE flight, rang out wiring, IFD540 has BAD RS232 port 4 input. IFD need sent in to Avidyne for repair.</i> Corrective Action	\$0.00	\$1,008.00	\$0.00
28-1	C/W AVIDYNE 10.3.1.2 IFD UPDATE I/A/W SB 601-00182-034. IFD 1&2  -- labor: 3.0 hrs @ \$168.00			
28-2	Trouble shoot ADSB FAULT, on IFD 550 FREE FLIGHT RANGER BOX not compatible with past IFD SW UPDATE : cnfg RANGER ,ADSB out to CAP WX TR 34000 AND GPS IN ADAB+G 34000 as not to conflict with IFD 550 RS232 in/out put  -- labor: 3.0 hrs @ \$168.00			

LABOR	\$6,594.00
PARTS	\$792.02
MISC	\$0.00
SALES TAX	\$0.00
<b>TOTAL</b>	<b>\$7,386.02</b>

Payments are due upon completion of the services performed unless prior arrangements have been made.