MAINTENANCE AND INSPECTION PROCEDURES MANUAL

FOR SUPER PETREL XP

AIRPLANE SERIAL NUMBER:

AIRPLANE REGISTRATION NUMBER:

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00	All	All	New Issue	06/26/2023
01	0	I III IV-V VI-X	• Updated Revision Date • Updated Revision Control Page • Updated Revision List of Effective Pages • Updated Table of Contents	07/18/2024
	1	2	Revised 1.4 Safety of Flight and Service Difficulty Reporting • Updated Information	
	5	6-7	Revised 5.1.3 List of Disposable Replacement Items • Formatted Table • Updated Information • Added New Information	
		15	Revised 5.1.5.4.4 Nose Baggage Compartment and Ballast • Updated Information	
		17	Revised 5.1.7.1 Engine • Added New Oil Specification • Updated Engine Coolant Specification	
		18	Revised 5.1.8 Recommended Fastener Torque Values • Updated Propeller Bolts Torque Values	
		27	Revised 5.2.4.1 Daily Inspection • Added Landing Gear System	
		30	Revised 5.3.1.2.6 Canopy Inspection • Added Canopy Gas Spring Inspection	
		36	Revised 5.3.4 Landing Gear • Updated Information • Added Landing Gear Fluid Specification	
		39	Revised 5.3.4.1.3 Landing Gear Retraction System • Updated Information Added 5.3.4.1.4 Landing Gear Emergency Extension	
		40	Revised 5.3.4.1.5 Tires, Wheels and Brake System • Updated Item 2. Tires Condition	
		50	Added 5.4.3.2 Air Filter Inspection and Replacement	
		51	Added 5.4.3.3 Fine Fuel Filter Replacement	
		55	Revised 5.5.2 Fuel System Inspection • Updated Inspection Procedure • Added Fuel Quantity Indication Inspection	
		57-58	Revised 5.6.2 Propeller Inspection • Updated Inspection Procedure	

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01	5	59-60	Revised 5.6.4 Propeller Installation • Updated Installation Procedure	07/18/2024
	6	3	Revised 6.2.2.3 Coolant Replacement • Updated Table Information
		4	Revised 6.2.2.4 Lubrication Table • Updated Table Information • Added Caution
		7	Revised 6.2.2.3 Battery Replacement • Updated Information
		20	Added 6.2.3.7 Tire Replacement
		23	Added 6.2.3.8 Wheels Balancing
		27-29	Revised 6.2.3.9 Bearing Replacement • Updated Replacement Procedure
		30	Revised 6.2.3.11.2 Shock Absorber Calibration • Added Note
	7	14	Added 7.2.7.13 Engine Cowling Repair
	12	5-9	Revised 12.5 Line Maintenance Inspection Form • Updated Inspection Checklist
		13-15	Revised 12.6 Heavy Maintenance Inspection Form • Updated Inspection Checklist
02	0	I	Updated Revision Date Updated Zip Code and Phone Number	02/12/2025
		III	Updated Revision Control Page
		IV-VII	Updated Revision List of Effective Pages
		VIII-XII	Updated Table of Contents
	5	4	Revised 5.1 General • Item 6. Engine Revised, added 916 iS 2 A
		8	Revised 5.1.3 List of Disposable Replacement Parts • Added Instrument Panel Lights (Lane A, Lane B and Landing Gear)
		9	Revised 5.1.4 Engine Specifications • Added 916 iS 2A
		14	Revised 5.1.5 Loading Method • Changed Sample Loading Chart (Maximum Forward C.G) to 1500 lb (681 kg)
		15	Revised 5.1.5.4.1 Weight Definitions • Changed Maximum Takeoff Weight to 1500 lb (681 kg) • Changed Maximum Empty Weight to 1050 lb (477 kg)
		18	Revised 5.1.7 Approved Oils and Capacities • Added Rotax Engine Oil XPS® • Added 916 iS information for Engine and Coolant Specification
		22-23	Revised 5.1.9.1.2 Jacking Up • Added Pictures and Caution

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02	5	24-25	Revised 5.1.9.3 Parking • Added Pictures	02/12/2025
		31	Revised 5.2.4.2 First 25 Hours Inspection • Updated Information	
		34-36	Revised 5.3.1.2.6 Canopy Inspection • Added Canopy Scheme – Pictures	
		40	Revised 5.3.2.2.2 Lower Wings Inspection • Removed Fuel Tanks Vent	
		42	Revised 5.3.4 Landing Gear • Added Picture	
		43	Added 5.3.4.1 Landing Gear Schematic / Components • Added Picture Added 5.3.4.1.1 Main Landing Gear • Added Picture	
		44	Added 5.3.4.1.2 Nose Landing Gear • Added Picture	
		45	Added 5.3.4.1.3 Landing Gear Hydraulic Pump • Added Picture	
		46	Added 5.3.4.1.4 Emergency Extension • Added Picture	
		49	Revised 5.3.4.2.4 Landing Gear Emergency Extension • Updated Information • Added Picture	
		50	Revised 5.3.4.2.4 Landing Gear Emergency Extension • Added NOTE	
		51-56	Added 5.3.4.2.5 Landing Gear Retraction System Pressure Adjustment	
		57	Revised 5.4.1 Engine - Description • Added 916 iS	
		62	Revised 5.5 Fuel System – Description • Added Picture	
		63	Added 5.5.1.1 Fuel System Schematic / Components • Added Picture	
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		65	Added 5.5.1.1.3 Header Tanks • Added Picture	
		66	Added 5.5.1.1.4 Fuel Selector Valve • Added Picture Added 5.5.1.1.5 Inline Fuel Filter (Course Filter) • Added Picture	

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02	5	67	Added 5.5.1.1.6 Fuel Pump Assembly • Added Picture Added 5.5.1.1.7 Fine Fuel Filter • Added Picture	02/12/2025
		68	Added 5.5.1.1.8 Fuel Pressure Sender • Added Picture	
		69	Added 5.5.1.1.9 Check Valves • Added Picture	
		70	Added 5.5.1.1.10 Fuel Vent Lines • Added Picture	
		71	Added 5.5.1.2 Fuel Quantity Indicator - Variations	
		72	Revised 5.5.2 Fuel System Inspection • Revised Fuel Tank Vent Inspection	
		74	Revised 5.5.2.1 Electrical Fuel Pumps Inspection • Added Note for 916 iS	
		77	Revised 5.6.4 Propeller Installation • Added E-PROPS – 916 iS Blade Pitch	
		78	• Added Static RPM for 916 iS	
		84	Revised 5.9.1.1 Engine • Added 916 iS	
		91	Revised 5.9.1.3 Schematic Diagrams	
	7	1	Revised 7.1.1.1 Electrical Fuel Pumps Replacement (Main and Auxiliary) • Revised NOTE, Added 916 iS	
	12	6	Revised 12.5 Line Maintenance Inspection Form • Added Item 3.11	
		7	• Revised Item 3.14 • Added Item 3.15	
		13	Revised 12.6 Heavy Maintenance Inspection Form • Added Item 2.3 • Added Item 2.4	
		14	• Added Item 2.5	
		20	Added 12.7.1 General Information	
		26	Revised 12.7.1.1 Upper Wings • Updated picture item 7 (f) • Removed Note	
		29	Revised 12.7.1.3 Lower Wings • Added floats installation	
		40	Added 12.9 Electrical System Wiring Diagrams	
03	0	I	Updated Revision Date and Added Airplane Serial Number and Airplane Registration Number Field	04/29/2025
		III	Added Manual Revision Tracking	
		IV	Updated Revision Control Page	

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03	0	V-VIX	Updated Revision List of Effective Pages	04/29/2025
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	5	3	Revised 5.1 General • Revised 4. Flight Controls – Added Aileron Electric Trim Information	
		6	Revised 5.1.3 List of Disposable Replacement Parts • Added First 25h Inline Fuel Filter (Interval)	
		33	Added 5.3.1.2.6 Fuselage Protection Adhesive	
		66	Added 5.4.3.4 Read Out the ECU Data Memory (Rotax Maintenance)	
		89	Revised 5.9.1.2 Circuit Breakers • Removed USB Power from the List	
	12	5	Revised 12.5 Line Maintenance Inspection Form • Added First 25h Interval Item 1.7	
		40	Revised 12. Electrical System Wiring Diagrams • Added Electrical System Wiring Diagrams – Super Petrel XP equipped with Rotax 916 iS	
04	0	I	Updated Revision Date	10/31/2025
		IV	Updated Revision Control Page	
		V-XI	Updated Revision List of Effective Pages	
		XII-XVI	Updated Table of Contents	
	5	7	Revised 5.1.3 List of Disposable Replacement Parts • Changed canopy gas spring force value (190 N)	
		19	Revised 5.1.8 Recommended Fastener Torque Values • Added Propeller Inner Bolts Torque Value	
		22-23	Revised 5.1.9.1.2 Jacking Up • Updated information and pictures • Added Jacking Up Kit Part Number	
		33	Revised 5.3.1.2 Fuselage Inspection • Added Caution	
		46	Revised 5.3.4.1.3 Landing Gear Hydraulic Pump • Added New Pressure Switch Model – pictures	
		55	Revised 5.3.4.2.5 Landing Gear Retraction System Pressure Adjustment • Updated pressure adjustment – hydraulic pump information	
		56	• Updated pressure switch adjustment – information – pictures	

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04	5	63	Revised 5.3.5.1.3 Elevator and Trim Tab	10/31/2025
			• Added Caution	
		66	Revised 5.4.2.1 Engine Cowlings	
			• Added item 3. Installation of the engine cowling	
		80	Revised 5.5.2 Fuel System Inspection	
			• Added Caution	
		84	Revised 5.6.2 Propeller Inspection	
			• Added Caution	
			• Updated information – torque of the inner bolts	
			• Updated inspection interval (100 h)	
		86	Revised 5.6.4 Propeller Installation	
			• Added Caution	
			• Updated information – torque of the inner bolts	
			• Updated inspection interval (100 h)	
			• Changed Throttle Detent percent for 916 iS	
		90	Revised Instruments and Avionics Inspection	
			• Added G3X Display removing and installation process	
	6	29	Revised 6.2.3.10 Nose Gear Doors Replacement	
		34	Revised 6.2.3.13.2 Hose and Lines Replacement	
			• Added table with hoses and lines specifications	
	7	1	Revised 7.2.1.1 Electric Fuel Pumps Replacement (Main and Auxiliary)	
			• Updated information	
			• Added fuel pumps part number	
		2	• Added information and pictures of check valves (915 and 916)	
		3-5	Revised 7.2.1.2 Empennage Assembly Inspection	
			• Added item 17	
			• Added 7.2.13 Elevator and Primary Pushrod Inspection	
		6	Added 7.2.4 Throttle Cable Inspection	
	12	5	Revised 12.5 Line Maintenance Inspection Form	
			• Added items 1.9 / 1.10 Electrical fuel pumps	
		6	• Revised items 2.6	
		13	Revised 12.6 Heavy Maintenance Inspection Form	
			• Added items 1.1 / 1.2	

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04	12	15	• Added items 4.21 / 4.22 • Revised items 5.1 • Added item 5.2	10/31/2025
		40	Revised 12.9 Electrical System Wiring Diagrams • Updated information	
05	0	I IV V-XII XIII-XVII	Updated Revision Date • Updated Revision Control Page • Updated Revision List of Effective Pages • Updated Table of Contents	01/05/2026
	5	3	Revised 5.1 General • Revised Aircraft Description Item 5 (Flight Controls)	
		4	• Added New Elevator Electric Trim Control Range • From aircraft serial number S0425 onwards • Revised Item 6 Instrument Panel and Flight Instruments • Added Dual Garmin G3X System (From aircraft serial number S0425 onwards)	
		12	Revised 5.1.5.1 Weight and Balance Chart • Added Description From aircraft serial number S0405 up to S0424 inclusive	
		13	• Added New Datum Line and Arms Location From aircraft serial number S0425 onwards	
		18	Revised 5.1.4.4 Nose Baggage Compartment and Ballast • Added New Lead Ballast Weight From aircraft serial number S0425 onwards	
		21	Revised 5.1.7.2 Brake Fluid • Added Aero Shell Fluid 41	
		67	Revised 5.4.2.2 Engine Suspension Frame • Added Bolts Orientation From aircraft serial number S0405 up to S0424 inclusive	
		68	• Added From aircraft serial number S0425 onwards	
		73	Added 5.5.1.1 Fuel System Schematic	
		85	Revised 5.5.2.1 Electrical Fuel Pump Inspection • Added Notes	
		92	Revised 5.8.1 Description (Instrument and Avionics)	
		93	• Added Instrument Panel Configuration From aircraft serial number S0425 onwards	
		94	Revised 5.8.1.1 Instrument Panel and Flight Instrument • Added Instrument Panel From aircraft serial number S0405 up to S0424 inclusive	

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05	5	98	Revised 5.9.1.2 Circuit Breaker • Added VP-X Maintenance Procedure (configuration and software updates)	
	7	1 2 3	Revised 7.2.1.1 Electric Fuel Pumps Replacement (Main and Auxiliary) • Revised Note (Return Check Valve - description) • Revised Note (Return Check Valve - description) • Added Picture (Check Valve) • Added 7.2.1.1.1 Electric Fuel Pumps Assy Installation Diagram and Parts • Added Picture (Fuel Pumps)	01/05/2026
	12	41	Revised 12.9 Electrical System Wiring Diagrams • Added Electrical System Wiring Diagrams For SPXP Dual Display From aircraft serial number S0425 onwards	
06	0	I IV XII	• Updated Revision Date • Updated Revision Control Page • Updated Revision List of Effective Pages	07/23/2026
	2	1	Revised 2 Reference Documents • Updated Continued Operational Safety Monitoring for LSA Standard Removed ASTM F2295 – Added ASTM F3198	
	5	3-4 12 18 67 71 92 93	Revised 5.1 General Revised 5.1.5.1 Weight and Balance Chart Revised 5.1.5.4.4 Nose Baggage Compartment and Ballast Revised 5.4.2.2 Engine Suspension Frame Revised 5.4.3.4 Read Out the ECU Data Memory (Rotax Maint.) Revised 5.8 Instrument and Avionics (Description) Revised 5.8.1.1 Instrument Panel and Flight Instruments	
	12	41	Revised 12.9 Electrical System Wiring	
07	0	I IV-V XIII-XIV XV-XIX	• Updated Revision Date • Updated Revision Control Page • Updated Revision List of Effective Pages • Updated Table of Contents	09/03/2026
	1	1 2	Revised 1.2 Super Petrel XP Training Courses • Revised Recurrent Training for Line Maintenance • Revised Recurrent Training for Heavy Maintenance	
	2	1	Revised m2 Reference Documents • Updated ASTM Standards	

Revision Number	Chapter	Pages	Description of Revision	Date
07	5	1	Revised 5.1 General • Added ASTM 3746 – Specification for Maintenance Manuals for Light Sport Aircraft.	09/03/2026
		7	Revised 5.1.3 List of Disposable Replacement Parts • Updated Canopy and Brake System	
		20	Revised 5.1.8 Recommended Fastener Torque Values • Revised Firewall Bolts M10 Torque	
		36	• Revised 5.3.1.2.1 Canopy Inspection • Added 3. Canopy Guide Pin	
		37	• Added 5.3.1.2.3 Canopy Gas Spring Replacement	
		38-40	• Added 5.3.1.2.4 Canopy Removal and Installation Procedure	
		52-53	Revised 5.3.4.2.3 Landing Gear Retraction System • Added Hydraulic Pump Replenish Fluid	
		59	Revised 5.3.4.2.5 Landing Gear Retraction System Pressure Adjustment • Updated pressure switch adjustment	
		68	Revised 5.4.2.2 Engine Suspension Frame • Added NOTE	
		85	Revised 5.5.2 Fusel System Inspection • Revised fuel tank vents	
		90	Revised 5.6.4 Propeller Installation • Updated Item 4 Blade Pitch Adjustment	
		100	Revised 5.9.1.2 Circuit Breaker	
		108	• Software Firmware Updates	
	6	34	Revised 6.2.3.13.2 Hose and Line Replacement • Added NOTE	
	12	9	Revised 12.5 Line Maintenance Inspection Form • Revised 6. Fuselage (Added item 6.7)	
		11	Revised 10. Cockpit and Electrical System (Added item 10.3)	

Table of Contents

1 SCOPE

Scoda Aeronáutica Ltda has prepared this manual in accordance with the latest revision of the ASTM F2483 standard. The manual provides the practices for the servicing and the maintenance of the Super Petrel XP with guidance for the qualifications necessary to perform the various level of maintenance. It provides practices and guidance for servicing, preventive maintenance requirements of a 100-hour and annual condition inspection, and the corrective line maintenance action for the repairs, alterations, and the removal and re-installation of components.

1.1 Authorized Personnel

The Super Petrel XP is a composite biplane amphibious light sport aircraft powered by a compact size Rotax Aircraft Engine installed on pusher configuration. Considering these particularities, Scoda Aeronautica as well as ROTAX BRP-Powertrain authorized training are required to assure equally qualified technicians in the field.

Technicians that will service the Super Petrel XP need to be identifiable as having met a high standard of training, knowledge and experience on Super Petrel XP aircraft as well as Rotax Aircraft Engines. Therefore, every organization or individual should hold a formal instruction from Scoda Aeronautica and ROTAX BRP-Powertrain authorized training facility.

It is a requirement that all organizations or individuals have a recurrent knowledge status for the level of work they intend to perform. Any inspection, repair, and alteration outlined in this Maintenance Manual should be performed if the organization or individual holds the following maintenance rating:

- LSA Repairman Maintenance Certificate
- A&P Certificate
- iRMT Training (at least Service ROTAX® Aircraft Engines Rating)
- Super Petrel XP Maintenance Training (at least Line Maintenance Super Petrel XP Rating)

1.2 Super Petrel XP Training Courses

Scoda Aeronáutica established a globally standardized training guideline covering the different scope of work, target audiences and educational levels which ranges from familiarization to task specific on the Super Petrel XP aircraft. All technical training courses are offered by Scoda Aeronáutica or an authorized training center.

The Super Petrel XP Maintenance Training Pyramid is built on 3 main levels:

1. **Line Maintenance**

   The Line Maintenance course covers and gives the necessary knowledge to perform inspection on Super Petrel XP up to 100 hours inspection or annual inspection.

   Certification: Line Maintenance Super Petrel XP Aircraft

   Recurrent Training: It is recommended that this course/rating be renewed/refreshed every 3 years, with focus on the Maintenance Manual revisions or changes since the last course.

2. **Heavy Maintenance**

   Additional to Line Maintenance course, the Heavy Maintenance course covers and gives the necessary knowledge to perform 5 years / 1000 hours and 10 years inspection on Super Petrel XP.

   Certification: Heavy Maintenance Super Petrel XP Aircraft.

   Recurrent Training: It is recommended that this course/rating be renewed/refreshed every 3 years, with focus on the Maintenance Manual revisions or changes since the last course.

3. **Task Specific Training**

   This course is available by invite only. Applicants must meet requirements set by Scoda Aeronáutica to be eligible for the applicable training.

1.3 Owner / Operator Responsibilities

The owner / operator is reminded that it is their responsibility to ensure that Scoda Aeronáutica Ltda has the appropriate contact information on file, to allow for flight safety and other important information can be communicated in a timely manner. Please use the FORM_001_Aircraft Registration Form on Scoda Aeronáutica's website (www.scodaeronautica.com.br) to register any changes in ownership or address and sent via email to enginnering@scodaero.com.br.

Notices of Corrective Actions and the latest version of the Maintenance Manual for this aircraft may be found on Scoda Aeronáutica's website.

NOTE
SCODA AERONAUTICA cannot accept any responsibility for the quality of work performed. Please refer to the last revision of the Advisory Circular 43.13 – 1B Aircraft, Repair and Alterations Acceptable Methods, Techniques, and Practices.

NOTE
This maintenance manual does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this document to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

1.4 Safety of Flight and Service Difficulty Reporting

Please report any safety of flight or any other service difficulty directly to Scoda Aeronáutica Ltda using the FORM_002_Continued Operational Safety Reporting Form on Scoda Aeronáutica´s website (https://www.scodaeronautica.com.br/blog_anexos/78b8ec7d19365bce9bc36d98661f825e.pdf) and sent via email to:

engineering@scodaero.com.br.

1.5 Application of Notes, Cautions and Warnings

NOTES, **CAUTIONS** and **WARNINGS** are used in the Maintenance Manual to emphasize instructions for information considered to be unusual or critical. The conditions that warrant use of **NOTES**, **CAUTIONS** and **WARNINGS** are defined in the following:

2 Reference Documents

ASTM Standards:

- F2483 – Practice for Maintenance for Maintenance Program for Light Sport Aircraft.
- F3746 – Specification for Maintenance Manuals for Light Sport Aircraft.
- F2745 – Specification for Required Product Information to be provided with the Airplane.
- F3198 – Practice for Continued Operational Safety Monitoring of a Light Sport Aircraft.
- F2972 – Specification for Lights Sport Aircraft Manufacturer´s Quality Assurance System.

Federal Standards:

- 14 CFR Part 21.190 – Issue of a Special Airworthiness Certificate for a Light-Sport Category Aircraft.
- 14 CFR Part 43 – Maintenance, Preventive Maintenance, Rebuilding, and Alteration.
- 14 CFR Part 65 – Certification: Airmen Other Than Flight Crewmembers.
- AC 43.13-1B – Acceptable Methods, Techniques, and Practices – Aircraft Inspection and Repair

5 Aircraft Maintenance Manual

5.1 General

Scoda Aeronáutica Ltda developed this aircraft maintenance manual, which contains the information needed to maintain the Super Petrel Aircraft in an airworthy condition. The Aircraft Maintenance Manual was prepared to meet the ASTM F2483 – Practice for Maintenance and the Development of Maintenance Manuals for Light Sport Aircraft and ASTM F3746 – Specification for Maintenance Manuals for Light Sport Aircraft . Nevertheless, information about the engine, propeller and any other equipment not fabricated by Scoda Aeronáutica Ltda will never prevail over information supplied by their own manufacturer.

The provisions set forth in this manual will assist to apply and establish correct procedures. Any further modifications or variations will be advised through Notice of corrective Actions (Safety Alerts, Service Bulletins or Service Letter). For further information or explanation, contact Scoda Aeronáutica Ltda.

Any discrepancies and/or non-conformities found during inspections and maintenance should be carried out by qualified personnel using adequate approved methods as well as tools, equipment and spare parts.

Only the aircraft's manufacturer, or the manufacturer of a component on the aircraft, may perform or authorize the performance of repair or modification to that aircraft or component.

Because of the fact, this manual contains information that will be useful to any future owners of this aircraft; it must be considered an integral part of the aircraft.

- **Manufacturer Data**

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SYSTEM	SPECIFICATION	SCODA PART NUMBER	SUPPLIER	SUPPLIER PART NUMBER	INTERVAL	ACTION
MAIN GEAR	4.00x6 6 Ply Tubeless Main LG Tire	DY-311.001	Aircraft Spruce	06-00944	On Condition	Replace
	Main LG Wheel Assembly	---	Beringer Aero USA	RF-004W(D)	On Condition	Replace
	Main Wheel Bearing SS Inner	---	Beringer Aero USA	B-BE-001W	On Condition	Replace
	Main Wheel Bearing SS Outer	---		B-BE-002W		
	Main LG Gas Spring (420 N)	XP-05081-00	Scoda Aeronáutica	XP-05081-00	On Condition	Replace
	Mai LG Shock Absorber	UA2000004D40	Scoda Aeronáutica	UA2000004D40	On Condition	Replace
CANOPY	Canopy Gas Spring (210 N)	GS-22-350	Scoda Aeronáutica	GS-22-350	On Condition	Replace
CONTROLS	Aileron Control Cable TFXTREME 10''	CCX633-10	Go2Marine / Defender	CCX633-10	On Condition	Replace
BRAKE SYSTEM	Brake Discs	---	Beringer Aero USA	DSC-006	On Condition	Replace
	Brake Pads	---	Beringer Aero USA	PQT-003 / PQT-004 (S0404 up to S0406)	On Condition	Replace
				PQT-103 (from S0407 onwards)	On Condition	Replace
BATTERY	EarthX Lithium Battery	ETX-900	Aircraft Spruce	11-13926	On Condition	Replace
	Odyssey Extreme Dry Cell 12V Battery	ODS-AGM16L		11-02233		
ELT	ELT Audio Alert Indicator	CR2	Various	CR2	As per manufacturer installation manual (ACK Technologies INC.)	Replace
	ELT Unit Lithium Battery Replacement	E-04.0	Aircraft Spruce	11-10012		Replace
	ELT Remote Control Panel Indicator	PX28L	Various	PX28L		Replace

- **Coolant Level:** It should be in the middle of the overflow bottle:

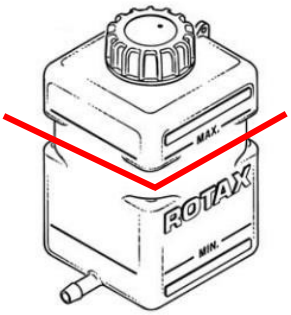


Figure 5-3

5.1.7.2 Brake Fluid

Super Petrel XP uses ATF (Automatic Transmission Fluid) Products in the lines of the brake system.

Brake Fluid Specification: The aircraft manufacturer recommends the use of **SHELL Spirax S1 ATF TASA, AeroShell Fluid 41 or similar - Mineral Fluid (MIL Fluid).**

CAUTION

It is not allowed the use of DOT type brake fluid.

5.1.8 Recommended Fastener Torque Values

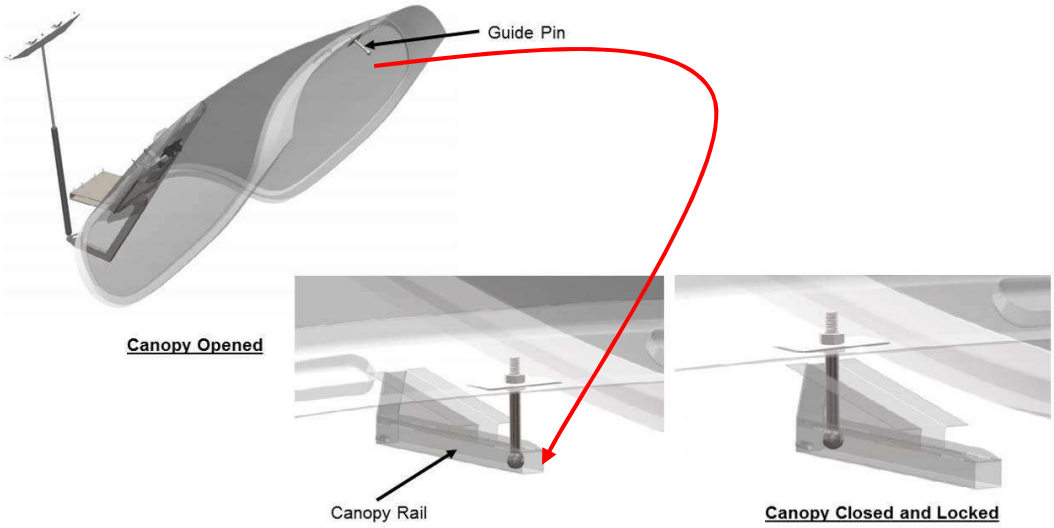
DESCRIPTION	TORQUE VALUE
Firewall Bolts M10	265 lb.in (30 N.m)
Engine Suspension Frame Bolts M10	350 lb.in (40 N.m)
Bolts M5 (E-Prop for Spinner and Plate)	44 lb.in (5 N.m)
Bolts M6 (E-Prop for Hub)	97 lb.in (11 N.m)
Bolts M6 (E- Props for Hub – **Inner Bolts**)	71 lb.in (8 N.m)
Nuts M8 (E-Prop for fixing the propeller to the engine)	212 lb.in (24 N.m)
Horizontal Stabilizer Allen Bolts M8 **(Empennage)**	86 lb.in (10 N.m)
Internal Stabilizer Allen Bolts M6 **(Empennage)**	86 lb.in (10 N.m)
External Stabilizer Hexagonal Bolts M6 **(Empennage)**	86 lb.in (10 N.m)
Front and Rear Fixation Bolts M8 **(Upper Wings)**	89 lb.in (10 N.m)
Rear Fixation Bolt M8 **(Lower Wings)**	177 lb.in (20 N.m)

CAUTION

Struts bolts torque values are not specified. These locknuts should be tightened until they are secure with at least one (1) thread protruding passed the nut.

For general information regarding aircraft hardware torque values and practices, refer also to the latest edition of **FAA ADVISORY CIRCULAR AC 43.13-1B Chapter 7.**

CANOPY FUNCTION



3. Canopy Guide Pin:

- Check the guide pin for general condition and installation. No gap between the lock-nut and canopy frame must be visible.

CAUTION

If the guide pin was adjusted or removed, application of Loctite 221 is required on the threaded part of the guide pin.

~~3.~~4. Canopy Gas Spring:

- Check the gas spring for general condition, any visible signs of damage, dents, holes or corrosion of the cylinder. If any such damage is present, it might be the gas spring is compromised and should be replaced.
- Check and observe the movement of the gas spring during operation of the canopy. The movement should be smooth without any jerking or sticking. Any inconsistency might indicate an internal problem with the gas spring.
- Check for any signs of oil leakage around the seals. The gas spring has a light oil film which is part of normal operation, however any significant leakage could signify seal failure.
- Check the mounting points and hardware. Loose or worn brackets can affect the performance of the gas spring and potentially lead to failure.

- If gas spring fails any of these checks, consider replacing it. **See Section 5.3.1.2.3 Canopy Gas Spring Replacement.**

4.5. Plexiglass: Check that Plexiglass is bonded to the frame with no delaminations.

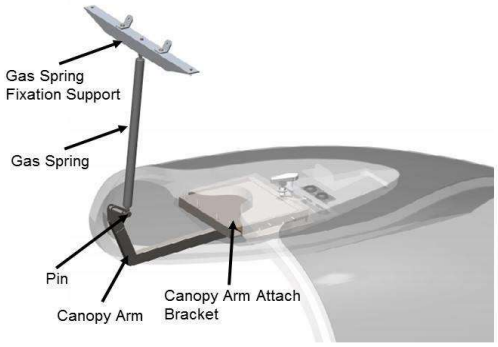
5.3.1.2.3 Canopy Gas Spring Replacement

Required Tools:	Combined Wrench 16 mm
	Combined Wrench 13 mm
	Ratchet Wrench 13 mm
	Loctite 221
	Torque Seal
Parts and Materials Required:	N/A
Type of Maintenance:	Line Maintenance
Level of Certification:	LSRM, A&P

1. Remove upper engine cowling.
2. Open the canopy fully.
3. Using two 16 mm combination wrenches remove the pin which is located in the bottom end of the gas spring (canopy arm). Remove the pin carefully. This process need to be completed with two people.

CAUTION

One person must keep the canopy fully open while the other person is removing the gas spring from the arm mechanism.



4. Remove the bottom end terminal from the old gas spring and install in the new one. Apply Loctite 221.
5. Protecting the gas spring piston rod with tape or similar and using gently a pressure plier, loose the gas spring from the upper terminal (this process will be made inside the pylon).

NOTE

The terminal will be kept in the upper support of the gas spring located inside the pylon.

6. Install manually the new gas spring in the upper terminal. Apply torque seal.
7. With the canopy fully open, push the gas spring and fit in the mechanism inside the canopy arm. Install the pin, apply Loctite 221. This process need to be completed with two people.

CAUTION

Do not tighten the pin to the maximum in order to avoid limiting the system to work properly.

~~5.3.1.2.3~~5.3.1.2.4 Canopy Removal and Installation Procedure

Required Tools:	Combined Wrench 16 mm (2 pcs)
	Allen Wrench, Phillips or Flat Head Screwdriver as applicable
	Nautical grease
	Loctite 221
Parts and Materials Required:	N/A
Type of Maintenance:	Line Maintenance
Level of Certification:	LSRM, A&P

NOTE

This process need to be completed with two people. It is not necessary to remove the baggage compartment.

NOTE

Use as reference the section 3 of the IPC_XP_001 (Illustrated Parts Catalogue).

Removal Procedure

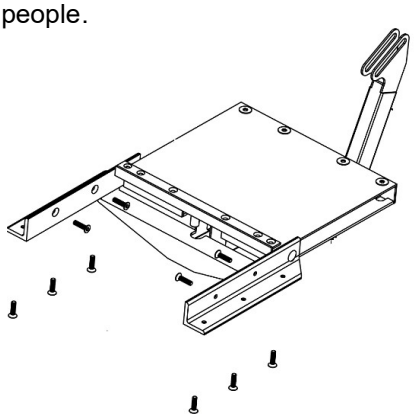
1. Remove the canopy latch cover.
2. Open the canopy fully.

3. Using two 16 mm combination wrenches remove the pin which is located in the bottom end of the gas spring (canopy arm). Remove the pin carefully.

CAUTION

One person must keep the canopy fully open while the other person is removing the gas spring from the arm mechanism.

4. Using the applicable tool (Allen, Phillips, or flat-head screwdriver), remove the 10 screws. This process need to be completed with two people.



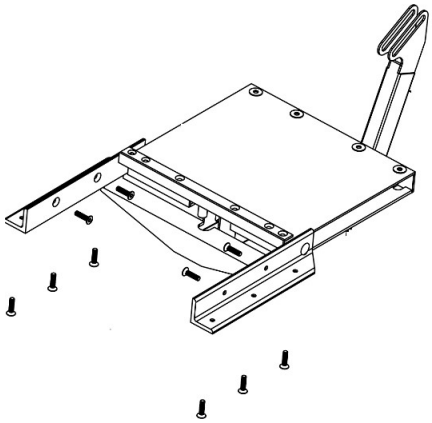
CAUTION

One person must hold the canopy fully open while the other person is removing the screws. Be careful to not let it fall.

5. After removing the screws, remove the canopy. This process need to be completed with two people.

Installation Procedure

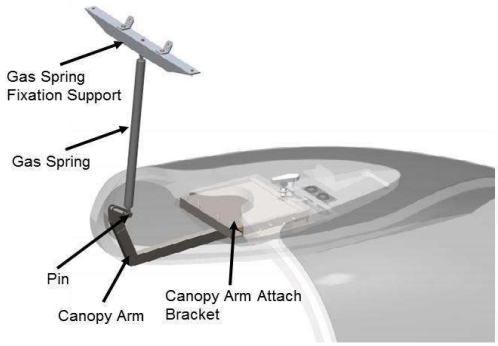
1. Place the canopy on the aircraft. Fit the guide pin inside the canopy rail and then fit in the mechanism. This process need to be completed with two people.
2. Using the applicable tool (Allen, Phillips, or flat-head screwdriver), install and tighten the 10 screws. This process need to be completed with two people.



3. With the canopy fully open, push the gas spring and fit in the mechanism inside the canopy arm. Install the pin, apply Loctite 221. This process need to be completed with two people.

CAUTION

Do not tighten the pin to the maximum in order to avoid limiting the system to work properly. .



4. Reinstall the canopy latch cover.
5. Check the canopy system for correct operation, fixation of the components, lock mechanism and security of the latching. Lubricate it as necessary. See section 5.3.1.2.2 of the Super Petrel XP Maintenance Manual.

~~5.3.1.2.4~~5.3.1.2.5 Seats Inspection

1. Upholstery: Check for general condition.
2. Pins: Check for general condition. Replace if necessary.

~~5.3.1.2.5~~5.3.1.2.6 Safety Belts Inspection

1. General Condition: Check the lap belt for cuts, fraying, extreme or unusual wear. Check the buckle for corrosion.
2. Attachment and Security: Check the safety belts for proper operation. Insert the latch and listening for an audible click.

~~5.3.1.2.6~~5.3.1.2.7 Fire Extinguisher Inspection

Monthly inspection

NOTE

As per manufacturer instructions the fire extinguisher must be inspected when initially placed in service and at minimum 30-day intervals or more frequently if circumstances dictate. Perform 30-day inspections are not be required to be certified.

NOTE

Nose Gear bearings should be replaced on condition, however, it is recommended to replace every 100 hours operation **(See Section 6.2.3.9 Bearing Replacement).**

2. Nose Gear Doors: put the nose of the aircraft up and use the flashlight.

- Inspect nose gear doors frequently for cracks, deformation, proper rigging, and general condition.
- Check for proper safetying of the hinge pins and for distorted.
- Check for correct operation of the nose gear doors.
- Replace the nose gear doors if necessary (**See 6.2.3.10 Nose Gear Doors Replacement**).

5.3.4.2.2 Main Gear

1. General Condition: lift the aircraft if necessary and use a flashlight.

- Check the condition of the bolts (loose and damaged).
- Check for cracks, excessive looseness, attachment and general condition of the main gear legs. Check the rubber foam for general condition and detachment.
- Check the condition of the wheel (cracks, corrosion, and free rotation).
- Check the bearings condition, free rotation of the wheel and looseness.

NOTE

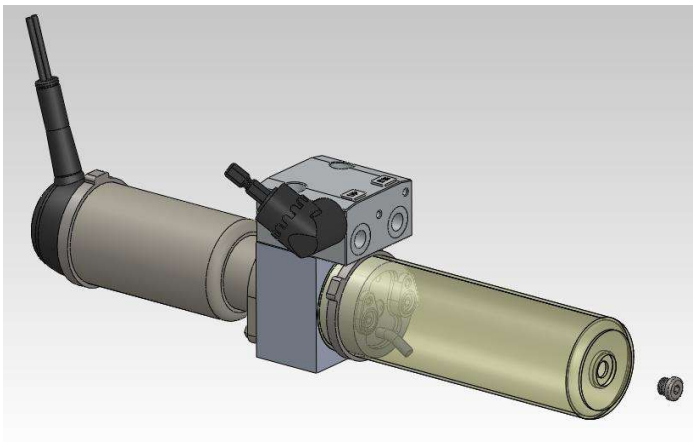
Main Gear bearings should be replaced on condition, however, it is recommended to replace every 100 hours operation **(See Section 6.2.3.9 Bearing Replacement).**

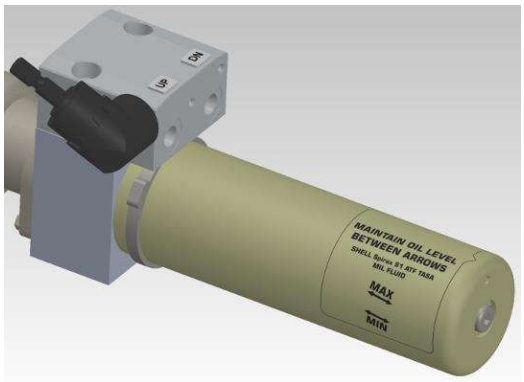
5.3.4.2.3 Landing Gear Retraction System

CAUTION

Jack the aircraft up for accomplishing this process (See Section 5.1.9.1.2 Jacking Up)

- Gas spring: Check for wear, looseness, leakage, attachment and correct operation.
- Inspect the landing gear system for wear, deterioration, corrosion, alignment and other causes that may cause failure or unsatisfactory operation.
- Inspect the landing gear retraction mechanisms for wear looseness in any joint, trunnion, or bearing.
- Inspect the hydraulic system of the landing gear for any leakage of fluid from the hydraulic line and units.
- Check the condition and level of the hydraulic fluid. **Replace every 5 years / 1000 hours.**
- Remove the Allen screw of the hydraulic pump reservoir for replenish the fluid.





- The hydraulic pump need to be removed and placed in vertical position for replenish the fluid (From serial number S0404 up to S0424). The hydraulic pump support need to be removed and placed in vertical position for replenish the fluid (From serial number S0425 onwards).

- Inspect the landing gear retraction system for smooth of operation.

- Perform an operational test of the landing gear retraction system. During the test, the following should be checked:

    - The smoothness of operation
    - Effectiveness of up-and-down locks
    - Landing gear alerting system (pilot report)
    - Clearance of tires in wheels wells
    - Operation of landing gear doors
    - Looseness of mounting points
    - Play in torque links
    - Condition of inner strut cylinders
    - Play in wheel bearings
    - Play in actuating linkages

- Check the landing gear system for correct operation of indicating systems (Sensors – Display).

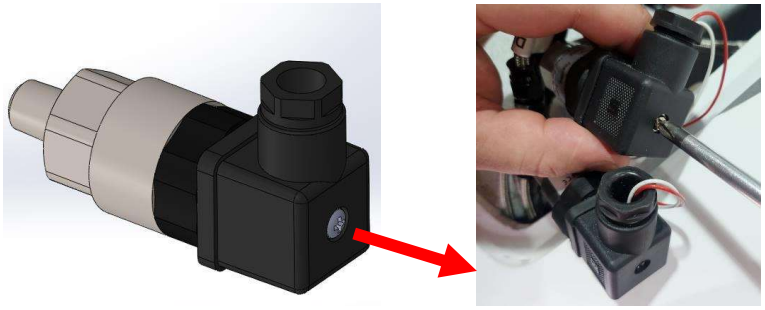
- When main and nose gear are extended and locked, GEAR DOWN in green is displayed on the PFD. When main and nose gear are retracted and locked, GEAR UP in blue is displayed on the PFD. While the landing gear is cycling UP or cycling DOWN, UNSAFE GEAR in red is temporarily displayed on the PFD.

- If necessary repeat the process of the adjustment to reach the pressure of 80 bar.

➢ **PRESSURE SWITCH ADJUSTMENT**

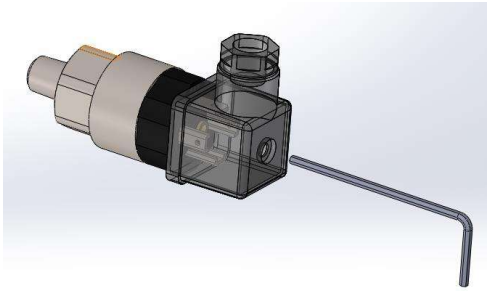
→ **New pressure switches from aircraft serial number S0419**

- Remove the Phillips screw of the cover (old ones).



Pressure switch up to aircraft serial number S0418

- For adjustment of the pressure switch use the Allen key 2 mm **(new ones use flat screwdriver)**. Tighten (clockwise) the screw up to hydraulic pump turning on. Loose (counterclockwise) the screw up to hydraulic pump turning off.



Allen Key

Flat Screwdriver

- Perform an operational test of the landing gear system. Check if the final pressure for DOWN and UP at the end of the cycle stabilizes at 70 bar +/- 5 bar.

3. Installation of the engine cowling:

- Place the lower cowlings and install the screws but without tight them completely
- Place the upper cowling and lock all Dzus fasteners.
- Check the position of the engine cowling using as reference the propeller plate.
- Once the engine cowling is properly fit (centralized) tighten the screws of the lower cowlings. It is recommended to tighten alternating the screws around the lower cowlings.

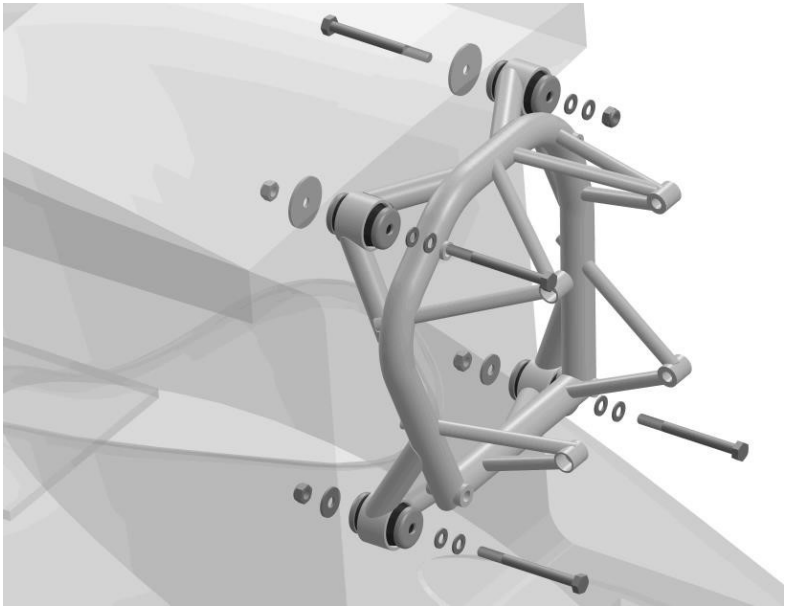
5.4.2.2 Engine Suspension Frame

NOTE
See the Recommended Fastener Torque Values Section of this Manual 5.1.8

NOTE
In order to facilitate the process it is recommended to remove the intercooler.

ENGINE SUSPENSION FRAME → BOLTS ORIENTATION

- UPPER LEFT CORNER: head facing forward
- UPPER RIGHT CORNER: head facing backward (nut facing forward)
- LOWER LEFT CORNER: head facing forward
- LOWER RIGHT CORNER: head facing forward



(From aircraft serial number S0404 up to S0424 inclusive)

- Fuel Tanks Vent: use a flashlight if necessary.
  - Ensure lines are connected correctly and well-supported inside the fuselage Pylon, Header Tank and Wings.
  - Check for loose clamps, rubber hoses condition and fixation of the vent hoses.
  - Check the external surface of the hoses for cracks, which can be caused by aging.
  - For inspection disconnect the nylon hose from the rubber hose located inside the pylon and blow to the wing and header tank lines. Make the same procedure to the other wing. Fuel tank caps need to be out. **(For reference see pictures in the section 5.5.1.2.10 Fuel Vent Lines).**

CAUTION

Blowing with high pressure may cause damage or disconnection in the fuel vent lines.

- Inline Fuel Filter **(Andair FX375-M)**:
  - Fuel Selector Valve in OFF position.
  - Remove the fuel filter.

NOTE

Use a tray in order to collect the small quantity of residue fuel.

  - Open the fuel filter
  - Inspect and clean the filter screen. If necessary replace the fuel filter assembly. **(See 6.2.3.2 Fuel Filter Replacement).**

NOTE

Replace the O-Ring of the fuel filter as necessary.

  - Close the fuel filter. Re-safety the filter housing.
  - Install new ear clamps.
  - Fuel Selector Valve OPEN and check for leakage.
  - Check the fuel filter for general condition (leakage and attachment).

- Fuel System: check all fuel system for leakage (blue spots in the connections). Use a flashlight if necessary.
  - Check the header tanks for general condition and any presence of leakage (hose connection).
  - Check electrical terminals (connectors) for corrosion and general condition of the sensor and ground located on the top of the header tank sensor. Replace them if necessary.
  - Check the lower wing for any presence of leakage (hose connection inside the fuselage).
  - Check the wing tanks for general condition and any presence of leakage (cracks, denting, and damages) and the condition of the fuel cap (rubber, operation, sealing).

- Put the blade fleet in the half hub following the marking with the colored stickers.
- Put the second half hub on top always following the colored stickers.
- Tighten the 6 middle screws M6x22 without using force with the 5 mm Allen wrench.
- Place the blades + hub assembly on the spacer.
- Approach the 9 external screws M6x22

3. Once the propeller is assembled, screws not fully tightened, mount it on the gearbox flange:

- Approach the 6 flange nuts with a 13 mm bushing.
- Never put a threadlocker (Loctite) on the screws, otherwise it would not be possible to check the tightening torque.
- Take a torque wrench and set at 24 N.m and tighten the 6 nuts to the right torque.

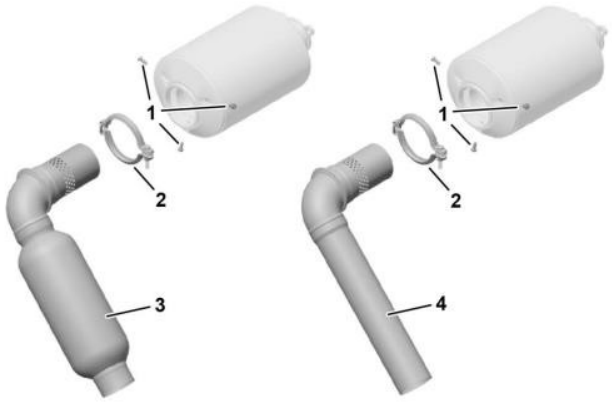
4. Blade pitch setting can be made using a Pitch Adjustment Tool:

E-PROPS – 915 iS
27.0° (+/- 0.5°)

E-PROPS – 916 iS
28.5~~0~~° (+/- 0.5°)

NOTE

Depending of the type of exhaust elbow which the engine is equipped, different pitch setting may be necessary.



NOTE

Refer to the latest version of the SI-PAC-030 - Optional exhaust system parts for ROTAX® Aircraft Engines.

- Set the first blade to the correct pitch with the pitch adjustment tool.

5.9.1.2 Circuit Breakers

The installed VP-X unit provides circuit protection and controls the electrical system. Some circuit protection are made by circuit breakers or fuses according to the table below:

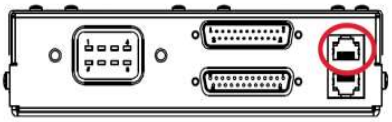
Equipment	Amps	Location
Cockpit Lights	3	Fuse Box
Bilge Pump	3	Fuse Box
Fuel Drain	10	Fuse Box
ECU Power	25	Instrument Panel
ECU Backup Battery	25	Instrument Panel
Landing Gear	25	Instrument Panel

From aircraft serial number S0425 onwards → fuses are located inside the instrument panel tray.

VP-X Maintenance (Configuration and Software Updates)

VP-X unit contains an Ethernet port for communicating with a PC. For configuration or software updates, please follow the steps below:

1. Remove the Garmin display.
2. Connect the PC´s Ethernet port directly to the VP-X Ethernet port using the cable supplied with the VP-X. (Plug the Ethernet cable into the TOP jack on the VP-X)



3. Turn on the aircraft master switch.
4. On the PC click on VP-X Configurator to start the application.
5. Press “Connect using Ethernet”.

NOTE

From aircraft serial number S0425 onwards, the Ethernet cable is already connected in the Ethernet port of VP-X unit.

CAUTION

The VP-X parameters are set during the manufacturing of the aircraft. The alteration of the limits previously established is prohibited, and can compromise the aircraft systems.

5.9.1.3 Schematic Diagrams

Refer to the section 12.9 of this manual.

For more information in order prevent, control, identify, and treat various types of corrosion, refer to the latest edition of FAA ADVISORY CIRCULAR AC 43-13-1B, Chapter 6. Corrosion, Inspection and Protection.

NOTE
Apply a corrosion inhibitor (Ardrox AV8, CorrosionX or similar) as necessary in order to mitigate general corrosion.

NOTE
Refer to the latest edition of FAA ADVISORY CIRCULAR AC 43-4B, CORROSION CONTROL FOR AIRCRAFT for a more in-depth study on the detection and treatment of corrosion.

5.12 Software Firmware Updates

NOTE
Check the manufacturer´s website for updates to operating software and install as appropriate.

Required Tools:	Refer to the Garmin G3X Instructions
Parts and Materials Required:	N/A
Type of Maintenance:	Line Maintenance
Level of Certification:	LSRM, A&P

- Software updates are often available online for Garmin G3X System.
- Periodic checks should be made at a minimum of each 100-h inspection / Annual Condition Inspection to determine if any software updates have been issued for the Garmin G3X System.
- Refer to the Software Loading Procedure section of the G3X Installation Manual.

5.13 Revisions

Revisions to this maintenance manual can be located in the revision control page and the list of effective pages section.

5.14 Feedback Form

Reports, comments or difficulties in relation with the use of this manual are welcome by sending an email to: engineering@scodaero.com.br

- Ensure the hose is not twisted. High pressures applied to a twisted hose can cause failure of the hose or loosening of the fitting.
- Provide a large bend radius (as much as allowable), however, never use a bend radius less than the minimum specified by the hose manufacturer.
- Do not attempt to straighten a hose having a bend in it as this could result in damage to the hose. Rubber hoses will take a permanent set during extended service periods. Care should also be taken during removal and reinstallation of such hoses to assure that are not bent excessively and that they are returned to their original position.

AIRCRAFT SYSTEM	DESCRIPTION	ENGINE	TECHNICAL SPECIFICATION				SCODA PART NUMBER
			SAE	DIAMETER Ø	WORK PRESSURE Psi	TEMPERATURE °F (°C)	
Fuel System	Fuel Supply Line	All	30R2	3/8"	300 psi	-40 to 212 (-40 to 100)	2556-6
	Fuel Return Line						
	Fuel Drain Line			1/4"			
	Fuel Drain Line		30R7	1/4"	50 psi	-40 to 257 (-40 to 125)	MP-900.412
	Fuel Drain Line		J30R14 TYPE 2	1/4"	225 Psi	-40 to 275 (-40 to 135)	SAEJ30R14T2 - 1/4
	Fuel Supply / Return Line		J30R14 TYPE 2	3/8"			SAEJ30R14T2 - 3/8
Oil System	Input Line	All	100R6	1/2"	400 psi	-40 to 212 (-40 to 100)	MP-900.653
	Output Line			5/8"			MP-900.704
	Turbocharger Return Line			5/16"			MP-900.573
Coolant System	Expansion Tank Output Line	All	---	Rotax Form Hose 1			822423
				Rotax Form Hose 3			822443
	Expansion Tank / Overflow Line	All	100R6	1/4"	400 psi	-40 to 212 (-40 to 100)	C6H-SAE100R6-1/4
	Radiator Output / Input Line	All	---	Molded Hose Gates 20498			PB-413.005
Bilge Pump	Drain Line	All	---	Clear hose 3/4"			MP-900.035
Cabin Heater	Radiator Input Line	All	30R7	1/4"	50 psi	-40 to 257 (-40 to 125)	MP-900.412
	Radiator Output Line	All					
Ballast Tank	Output Line	All	---	Clear hose 1/2"			MP-900.034

NOTE

Any hose that meets or surpasses the specification for temperature and pressure described in the table above can be used. Attention should be taken for installation of the hoses for routing and bending.

NOTE

SCODA AERONAUTICA cannot accept any responsibility for the quality of work performed. Please refer to the last revision of the Advisory Circular 43.13 – 1B Acceptable Methods, Techniques, and Practices Aircraft Inspection and Repair.

6.2.4 Repairs of Components

6.2.4.1 Repair of Non-Structural Composite Components

Required Tools:	As applicable
Parts and Materials Required:	As applicable
Type of Maintenance:	Line Maintenance
Level of Certification:	LSRM, A&P

Damage to non-structural composite components may be repaired using techniques described in the latest edition of the FAA ADVISORY CIRCULAR AC 43.13-1B – Acceptable Methods, Techniques and Practices.

Item	Description	Inspection		Initials	Comments
		Special	Annual		
6.5	Check visually the canopy condition for cracks, scratch and other damages.	First 25 h	✓		
6.6	Check the canopy latching mechanism and lock for general condition and functionality.	First 25 h	✓		
6.7	Check the guide pin for general condition and installation		✓		
6.8	Check the canopy gas spring for general condition, any visible signs of damage, dents, holes or corrosion of the cylinder.		✓		
6.9	Check and observe the movement of the gas spring during operation of the canopy.		✓		
6.10	Check for any signs of oil leakage around the seals of the canopy gas spring.		✓		
6.11	Check the mounting points and hardware of the canopy gas spring.		✓		
6.12	Check that Plexiglass is bonded to the frame with no delaminations.	First 25 h	✓		
7. EMPENNAGE					
7.1	Check visually the tail cone surface and horizontal stabilizer leading edges for damages, cracks, impacts, denting. Check visually the elevators and rudder for general condition on the surface.	First 25 h	✓		
7.2	Check the condition of horizontal stabilizer attachment with vertical stabilizer.	First 25 h	✓		
7.3	Check the elevator for free operation, hinges and looseness.	First 25 h	✓		
7.4	Check visually the drain holes of elevator and rudder for obstruction.	First 25 h	✓		
7.5	Check visually the elevator electric trim tab for attachment and correct operation.	First 25 h	✓		
7.6	Check for looseness of elevator, rudder and trim tab.	First 25 h	✓		
7.7	Check visually all the nuts, tail bolts, control rods, bell-crank attachment, and safety wires.	First 25 h	✓		
7.8	Check visually the hinges, pins, rod of elevator electric trim tab for general condition.	First 25 h	✓		
7.9	Check visually the rudder control cables and the castle nut.	First 25 h	✓		
8. BATTERY					
EARTHX BATTERY					
8.1	Check visually the battery for signs of damage, plastic case cracks, and wrapped plastic or long side of the battery is swollen. Replace if damaged.	First 25 h	✓		
8.2	Verify the battery fault / status LED circuit is operational.	First 25 h	✓		
8.3	Ensure the battery is fully charged	First 25 h	✓		
8.4	Check visually the battery terminals are clean and terminal screws are properly secured.	First 25 h	✓		

Item	Description	Inspection		Initials	Comments
		Special	Annual		
10.17	Check the correct operation of electric elevator trim tab and electric aileron tab.	**First 25 h**	✓		
10.18	Check the entire cabin heater system for general condition, security, proper installation and evidence of any leaks.	**First 25 h**	✓		
10.19	Check visually the safety belts for condition, attachment and security. Replace if necessary.	**First 25 h**	✓		
10.20	Check visually the upholstery condition and seats pins.	**First 25 h**	✓		
10.21	Inspection of the fire extinguisher should be following the instructions detailed in this Maintenance Manual.	**First 25 h Monthly Six Year**	✓		
10.22	Check the controls for freedom of operation. Check for any presence of objects/FOD in the hull internal part.	**First 25 h**	✓		
10.23	Check the control surfaces for deflections and looseness.	**First 25 h**	✓		
10.24	Check the pedals for movement strength, joints safety, general condition and cables attachment.	**First 25 h**	✓		
10.25	Inspect the ELT transmitter and mounting tray to insure all fasteners, and mechanical assemblies are secure.	**First 25 h**	✓		
10.26	Inspect the coaxial cable connecting the ELT transmitter to the antenna for cuts or abrasions on its outer jacket. Inspect for general condition and corrosion.	**First 25 h**	✓		
10.27	Inspect the modular cable connecting the ELT to the RCPI unit for signs of wear or abrasion on its outer jacket.	**First 25 h**	✓		
10.28	Check the condition of the batteries. Verify the expiration date and replace them if necessary.	**First 25 h**	✓		
10.29	Perform a G switch test of the ELT. See the OEM instructions	**First 25 h**	✓		
10.30	When the inspection is finished, clean the hull internally with water and remove all dirt and material loose, which could obstruct the bilge pump. Drain the water from the washing using the bilge pump and clean the protective cover if necessary.	**First 25 h**	✓		
10.31	Check for software and firmware updates of the Garmin G3X System.		✓		
11. CORROSION					
NOTE *Make a detailed inspection of the following components and parts of the Super Petrel XP for corrosion. Use the latest edition of the FAA ADVISORY CIRCULAR AC 43-13-1B, Chapter 6. Corrosion, Inspection and Protection.*					
11.1	**Engine:** Throttle control lever, throttle cable, engine suspension frame, exhaust, fixation support of the lower engine cowling.		✓		
11.2	**Propeller:** Hub, Spacer and fasteners.		✓		
11.3	**Landing Gear System:** Retraction mechanism, rods, sensors connectors, gas spring, rod end and body of the shock absorber, main gear wheel axle, main gear wheel nut, main and nose gear wheel halves, nose gear fork, nose gear springs, landing gear retraction system joints and trunnions.		✓		