



MAINTENANCE AND INSPECTION PROCEDURES MANUAL

FOR SUPER PETREL LS

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10	6	37	Revised 6.2.3.21.3 Hoses and Lines Specification	
	7	2 3-5 6 20-21 21-24 24-25	• Updated and reformatted table • Added hoses and lines technical specification data • Added new hose SAEJ30R14 Type 2 • Revised 7.2.1.2 Empennage Assembly Inspection • Added 7.2.1.3 Elevator and primary pushrod inspection • Added 7.2.5 Throttle cable inspection • Added 7.2.8.13 Trailing Edge Repair • Added 7.2.8.14 Wing Ribs Repair • Added 7.2.8.15 Rib Cap Strip Repair	
	12	12	• Revised 12.6 Heavy Maintenance Inspection Form • Revised item 4. Empennage • → Added items 4.21 / 4.22 Elevator and primary pushrod inspection (5 years) • Revised item 5. Cables • → Added Throttle cable inspection (10 years)	
11	0	I III-IV V-XII XIII-XVII	Updated Revision Date Updated Revision Control Page Updated List of Effective Pages Updated Table of Contents	09/16/2026
	5	35 42 44 54 61 82	• Revised 5.3.1.3 Fuselage Repairs and Alterations • Revised 5.3.2.3 Wings Repairs and Alterations • Revised 5.3.3.3 Empennage Repairs and Alterations • Revised 5.3.4.2 Landing Gear Repairs and Alterations • Revised 5.3.5.2 Control Surfaces Repairs and Alterations • Revised 5.5.3 Fuel System Repairs and Alterations	
	9	1	• Revised 9 Major Repairs and Alterations	



Figure 5-15

5.3.1.2.10 Ballast Draining

The ballast tank is located inside the fuselage front part. To accomplish this process the following steps must be completed:

1. Open the drain valve located below the passenger seat.
2. The water will begin entering into the hull; therefore, the bilge pump is activated automatically to drain the water.

NOTE

The bilge pump can be activated manually as well.

3. After completing the draining process, activate the bilge pump manually for any remaining presence of water in the hull.

5.3.1.3 Fuselage Repair and Alteration

Repairs or alterations on the fuselage, windshield, windows and doors that are not described in the section 7 of this Manual are not authorized at this time. To obtain engineering approvals, please contact Scoda Aeronáutica at engineering@scodaero.com.br

5.3.2 Wings

5.3.2.1 Description

The upper wings structure consists of a C channel carbon front spar and PVC foam ribs. The ribs, which carry loads (root rib, and ribs where the struts are attached), are reinforced. A C channel composite rear spar supports the aileron and the rest of the wing has a thin rear spar, which connects the ribs at the trailing edge. The leading edge, made of fiberglass composite, forms a “D” box when bonded to the front spar. The covering consists of fabric.

(From aircraft serial number S0380 left aileron contains an electric trim actuator)

The lower wings structure, as the upper wings, consists of a C channel carbon front spar, a thin trailing edge and foam ribs. The leading edge is also made in fiberglass composite and forms a “D” box when bonded to the front spar. The principal difference between upper and lower wings is that the leading edge of lower wings shelters the integrated wing fuel tanks. The covering also consists of fabric.

4. Pitot Tube:

- Check the attachment of the Pitot tube located on the left inner strut wing.
- Check the general condition and correct operation.

5.3.2.3 Wings Repair and Alteration

Repairs or alterations in the internal wings structure and wings surface that are not described in the section 7 of this Manual are not authorized at this time. To obtain engineering approvals, please contact Scoda Aeronáutica at engineering@scodaero.com.br.

5.3.3 Empennage

5.3.3.1 Description

The tail cone (fin), horizontal stabilizers (left and right), elevators (left and right), rudder and their components compose the empennage. The gluing of the tail cone with the fuselage is made with mixture of resin epoxy with cotton flocks, resulting in only one set.

- **Horizontal Stabilizer:** The structure of the horizontal stabilizer consists of a circular carbon front spar, a “C” channel carbon rear spar and reinforced foam ribs. The skin consists of a composite shell. These parts are all integrally assembled as the right and left horizontal stabilizers.
- **Vertical Stabilizer:** The structure of the vertical stabilizer consists of reinforced foam ribs, fiberglass/PVC foam bulkheads and its skin consists of a composite shell. These parts are all integrally assembled as the vertical stabilizer.

5.3.3.2 Empennage Inspection

Required Tools:	Ladder support
Parts and Materials Required:	N/A
Type of Maintenance:	Line Maintenance
Level of Certification:	LSRM, A&P

In this section, the empennage will be completely inspected. Check before every flight the correct assembling. Do not take off if you suspect any kind of abnormal behavior.

To avoid any future problems, the instructions listed below should be accurately followed to ensure that all parts of the empennage are in within condition. These should be carried out after 25 flight hours, 100 flight hours or annually.

All the inspections must be visually made. It is not necessary to disassemble, just check the general condition of the components.

The inspection of the empennage control surfaces (rudder, elevators and electric trim tab) are describe in the Structural Control Surfaces of this manual.

- Torque the empennage bolts using one (1) Allen wrench 6 mm. **Tightening torque: 70 lb.in (8 N.m)**
- Reinstall the safety wire.
- Reinstall rudder.

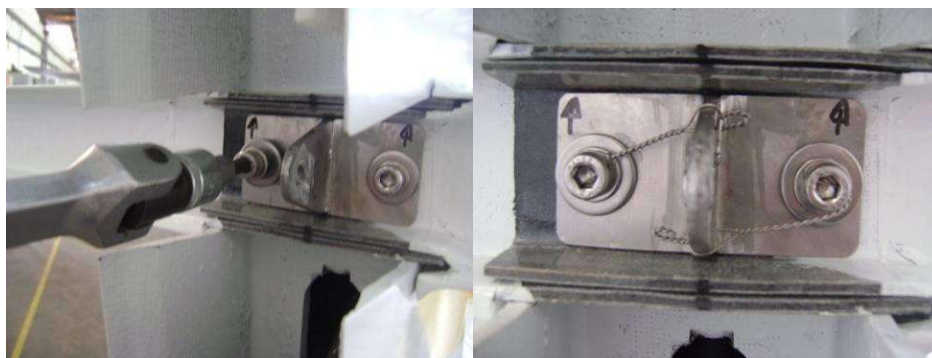


Figure 5-23

5.3.3.3 Empennage Repair and Alterations

Repairs or alterations in the internal empennage structure and empennage surface that are not described in the section 7 of this Manual are not authorized at this time. To obtain engineering approvals, please contact Scoda Aeronáutica at engineering@scodaero.com.br.

5.3.4 Landing Gear

The Super Petrel LS is equipped with a retractable tricycle landing gear with mechanical actuation. The nose gear is free swivel and the main landing gear legs are manufactured in fiberglass composite and equipped with oil pneumatic shock absorbers and aluminum wheels.

Main wheels are fitted with disk brakes, hydraulic operated and controlled by pedals.

	USABLE TIRES
MAIN LANDING GEAR	11x4.00-5 – 8 Ply
NOSE LANDING GEAR	10x3.00-4 – 4 Ply

NOTE

Aircraft manufacturer recommends to use MATCO mfg Tires or similar.

NOTE

Shock absorber should be replaced on condition.



Figure 5-40

2. Attachment: use the flashlight if necessary

- Check the shock absorber attachment with the main gear leg and inside fuselage.



a) Attachment with the main gear leg



b) Attachment inside the fuselage

Figure 5-41

5.3.4.2 Landing Gear Repair and Alterations

Repairs or alterations in landing gear structure (composite parts) that are not described in the section 7 of this Manual are not authorized in this time. To obtain engineering approvals, please contact Scoda Aeronáutica at engineering@scodaero.com.br.

**Figure 5-54**

5.3.5.1.4 Joysticks and Pedals

1. Check the joysticks for free operation. Remove foreign objects and contamination.
2. Check the pedals for movement strength, joints safety, general condition and cables attachment.

5.3.5.2 Control Surfaces Repair and Alterations

Repairs or alterations in the internal control surfaces structure that are not described in the section 7 of this Manual are not authorized in this time. To obtain engineering approvals, please contact Scoda Aeronáutica at engineering@scodaero.com.br.

5.4 Engine

5.4.1 Description

Description	912 ULS	914 UL	912 iS Sport
4 strokes, 4 cylinder horizontally opposed, spark ignition engine, one central camshaft – push-rods – OHV	✓	✓	✓
Liquid cooled cylinder heads	✓	✓	✓
Ram air cooled cylinders	✓	✓	✓
Dry sump forced lubrication	✓	✓	✓
Dual breakerless capacitor discharge ignition	✓	✓	X
2 constant depression carburetors	✓	✓	X

NOTE

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

1. Remove the baggage compartment (upper and lower).
2. Close the shut off and selector fuel valve.
3. Remove the fuel pump assembly's cover without removing the FPA from the aircraft (only for Rotax 912 iS Sport).
4. Inspect the electric fuel pumps for corrosion, leakage, general condition, lines and connectors.
5. Clean the housing, pumps, and connections as necessary.
6. Apply CorrosionX Aviation or similar as necessary.
7. Install the Fuel Pump Assembly's cover (only for Rotax 912 iS Sport).
8. Make an operational check of the electric fuel pumps.
9. Install the baggage compartment (upper and lower).

CAUTION

Aircraft in operation on salt-water environment must have a recurrent corrosion inspection, cleaning and lubricating of the electric fuel pumps every 25 hours.

WARNING

IF THE ALUMINUM FUEL PUMP'S BODY PRESENTS CORROSION (SEE PICTURE BELOW), REPLACE THE FUEL PUMP IMMEDIATELY.



Figure 5-74

5.5.3 Fuel System Repair and Alterations

Repairs or alterations in the Fuel System of the Super Petrel LS that are not described in the section 7 of this Manual are not authorized in this time. To obtain engineering approvals, please contact Scoda Aeronáutica at engineering@scodaero.com.br.

9 Major Repairs and Alterations

Repairs or alterations that are not described in the section 7 of this Manual are not authorized at this time. To obtain engineering approvals, please contact Scoda Aeronáutica at engineering@scodaero.com.br

- 9.1** All major repairs or alterations made to aircraft subsequent to its initial design and production acceptance testing to applicable ASTM standards and sale to a consumer are evaluated relative to the requirements of the applicable ASTM design and production specification(s).
- 9.2** Scoda Aeronáutica Ltda will provide a written affidavit that the aircraft being altered will still meet the requirements of the applicable ASTM design and performance specification subsequent to the alteration through a Letter of Authorization (LOA).
- 9.3** Scoda Aeronáutica Ltda will provide written instructions and diagrams on how, who, and the level of certification needed to perform the alteration or repair through a Letter of Authorization (LOA).
- 9.4** Scoda Aeronáutica Ltda will provide information to the owner of the aircraft for the documentation of the alteration in the aircraft's records.

MAJOR REPAIRS AND ALTERATIONS PROCEDURE

- 1.** Owner/Operator will request a LOA using the FORM_SPLS_005_LSA Major Repair and Alterations MRA Form, which is located on the <http://www.scodaeronautica.com.br/avioes/index.php?pagina=blog>. This form should be sent to engineering@scodaero.com.br.
- 2.** Scoda Aeronáutica Ltda will analyze the MRA Form and issue a LOA with approval or not.
- 3.** If LOA is approved, Owner/Operator should demonstrate that the alteration or repair described in the LOA was performed correctly and the aircraft is in a condition for safe operation.