

Rough Drop During Magnetos Check Run-Up Aquila A210



In line with our safety culture, this brief highlights key lessons from a recent occurrence during pre-flight checks on the Aquila A210 at EHSE. The goal is to reinforce awareness around **run-up checks, early detection of irregularities, and sound decision-making.**

What Happened

During a standard run-up check, the pilot noticed a **rough drop** when switching to the right magneto. The engine showed **unstable RPM** and an unusual **knocking sound** during right/left magneto selection.

The pilot aborted the departure and immediately informed AMO/Fleet Management. A mechanic inspection on-site revealed a disconnected spark plug cap, caused by a broken internal spring. This resulted in the engine running on only 3 cylinders on the affected magneto.

The issue was corrected by replacing the spark plug cap, and the aircraft was released back into service after all checks were completed.

Lessons Learned

✓ Pre-Flight Checks Work

The magneto check did its job — the issue was caught before takeoff, preventing a potentially dangerous situation in flight.

⚠ Don't Ignore Rough Running

Symptoms like knocking or unstable RPM during checks may indicate something more serious.

● Know When to Stop

If abnormal engine behaviour persists, do not proceed with the flight. Always follow procedure and ground the aircraft for inspection.

🔧 Report, Don't Guess

In the Rotax engines used in our Aquila fleet, “burning off” fouled spark plugs on the ground by increasing RPM is not as effective as with Lycoming or Continental engines, because we don't have control of the mixture. Therefore, any persistent engine roughness should always be reported to maintenance, rather than attempting to resolve it through throttle adjustments.


It's also a good reminder to **review** and **memorise** the **emergency checklist** items for dealing with **In-Flight Engine Engine Roughness**. Refer to the [Aquila AT01 Airplane Flight Manual, Section 3 - Emergency Procedures](#), specifically [3.3.3 -Engine Failure During Flight](#).

✈ Final Word

We thank the pilot involved for sharing this experience. These situations remind us how critical our role is in detecting small issues before they become serious. By reporting and communicating clearly, we keep our aircraft — and each other — safe.

Fly smart, stay safe.

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