

**TITLE** Oil cooler to tank suction hose joint (oil cooler end), incorporation of minor modification M126, hose clamp wire locking.

**CLASSIFICATION** The CAA have classified this bulletin as Mandatory.

**COMPLIANCE** Before further flight.

**APPLICABILITY** All Pegasus Quik and Quantum with Rotax 912 and 912-S engines, up to serial number 8074 (before 02/09/04).

**INTRODUCTION**

The oil suction hose connection to the 90 degree fitting on the port side of the oil cooler has been known to loosen. If the hose detaches, the engine will be starved of oil and may seize, possibly requiring a forced landing and engine rebuild.

**INVESTIGATION**

The ROTAX supplied 90 degree oil cooler fitting (part no. 924583), has barbs on it which are intended to prevent the hose moving once clamped in position. The barb profiles on recent fittings appear to have been partially machined down from a sharp rear edge to a truncated profile which gives less security. If the hose is not pushed on far enough and the hose clamp is not positioned correctly over the barbs, the hose may loosen. Further tightening of the clamp may actually squeeze the hose off the fitting.

**ACTION**

Check the hose to fitting joint is correct in accordance with the procedure below, and that the clamp is secure.

- 1) Remove the hose and clamp. Check the hose and fitting are undamaged and that the hose clamp is suitable for this application (ROTAX original part number is 853725)
- 2) Degrease the hose and fitting with acetone or petrol, being sure not to get rag etc. lodged in the oil cooler or hose.
- 3) Make a felt tip pen mark, 20 mm from the end of the fitting. Push the oil hose onto the fitting up to the felt pen mark.
- 4) Position the hose clamp 8 mm back from the hose end, to ensure correct positioning of the clamp over the barbs as depicted in attached drawing. Tighten the clamp.
- 5) Wire lock the clamp to the threads on the oil cooler as shown. (monal locking wire)

**Important.** When carrying out any maintenance that disturbs the oil system (as in this instance), it is important to ensure continuity of oil supply to the engine bearings. To that end, remove a spark plug from each cylinder and, with the ignition switches to OFF and the oil pressure instrumentation switched on, turn the propeller vigorously by hand in the normal direction of rotation until a sustained oil pressure reading of 1 bar or more is observed.

On completion, switch off the instrumentation and refit the spark plugs and caps in accordance with the engine maintenance manual.

**Continued inspection**

Check the connection is secure and the wire locking is undamaged as part of the daily inspection of the aircraft.

**DOCUMENTATION**

The above actions must be entered in the aircraft technical log as "Service Bulletin 118, port oil cooler hose", and signed as inspected by a BMAA inspector.

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