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|---|---|------------------------|
|  | <b>Standard Modification</b><br>Issue 1 | Mod No. SM10427        |
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|   |   | Compiled : I Rickard   |
|   |   | Approved : F Donaldson |

**TITLE :** Carburettor Heater for Rotax 912 series Engines.

**APPLICABILITY :** Rotax 912 / 912S engines in LAA aircraft.

**Mod Type :** Retro-fit

### 1. Introduction

This modification adds a small amount of heat to the carburettor body in order to maintain the carburettor body and throttle spindle at a temperature above freezing. As the heat is applied to the carburettor body, not the incoming air, there is negligible loss of engine power. This greatly reduces the possibility of carburettor icing; a major cause of rough running and engine failure.

The installation of the heating units will cause the carburettors to be moved approximately 17mm further from the propeller shaft end of the engine therefore this amount of clearance, plus an allowance for engine movement, from the air filters or airbox before installation is necessary.

### 2. Parts List

| Qty | Part No. | Description                    | Source   |
|-----|----------|--------------------------------|--|
| 1   | CH912    | 912 Coolant Carburettor Heater | Skydrive Ltd<br>Burnside,<br>Deppers Bridge<br>Southam<br>Warwickshire<br>CV47 2SU |

### 3. Action

Full installation instructions are provided with the carburettor heater kit.

### 4. Weight and balance

The carburettor heater components total approximately ½kg (1lb) in weight. Amend the aircraft weight and balance schedule accordingly.

### 5. Flight Test and Special Inspections

Check that there is sufficient clearance between any part of the engine and the airframe, including an allowance for engine movement during normal operations and that all hoses are properly secured.

With the aircraft properly restrained, carry out an engine run on the ground to check for correct running throughout the rev range and, after shut down, check that the coolant system is properly filled and purged of air and that there are no leaks from any part of the coolant system. Check also that the heater bodies have warmed. No flight test is required.

### 6. Certification

Before the modified aircraft may be flown a suitable LAA inspector must check the carburettor heater installation and, if satisfied, make an appropriate logbook entry, including reference to SM10427 and sign a Permit Maintenance Release (PMR).