



**Information release:  
CHECKING OF COMPONENT TEMPERATURE OF THE  
ELECTRONIC MODULES FOR ROTAX 912 AND 914 (SERIES)**

January 20, 2013

**1. Introduction:**

BRP-Powertrain GmbH & Co KG ("BRP-Powertrain") has found cases of failure of the modules. In many cases the cause for these failures was an exceeding of the maximum allowable component temperature (see relevant Installation Manual).

Long-term thermal overload of the electronic module can lead to ignition problems. In isolated cases this may even lead to a total failure of the ignition system with engine stop. It is important to review and test electrical components do not exceed the published peak temperatures.

**2. Applicability:**

All versions of the engine type:

<b>Engine type</b>	<b>Serial number</b>
912 A	All
912 F	All
912 S	All
914 F	All
912 UL	All
912 ULS	All
914 UL	All

**3. Compliance:**

An inspection of the engine's installation according to the accomplishment instructions in section 6 of this information has to be carried out by the aircraft manufacturer by April 1<sup>st</sup> 2013 at the latest.

Non-compliance with these instructions could result in engine damages, personal injuries or even fatal injury.

#### **4. References:**

In addition to this technical information refer to current issue

- Installation Manual (IM)
- Maintenance Manual (MM)

NOTE: The status of Manuals can be determined by checking the table of amendments of the Manual. The revision status can be found in the first column of this table.

Compare this number to the one listed on the ROTAX® Web Site: [www.FLYROTAX.com](http://www.FLYROTAX.com). Updates and current revisions can be downloaded for free.

#### **5. Material information:**

##### 5.1. Material requirement per engine:

Required parts:

<b>Fig. pos no.</b>	<b>New part no.</b>	<b>Qty / engine</b>	<b>Description</b>	<b>Old part no.</b>	<b>Application</b>
3	-	AR	Temperature sensitive label range 66/93C(149/199F)	897140*	ROTAX 912/914 Series

NOTE: Part no. 897140 includes 10 temperature sensitive labels.

#### **6. Accomplishment / Instructions:**

NOTE: Before maintenance review the entire documentation to make sure you have a complete understanding of the procedure and the requirements.

##### 6.1. Accomplishment:

All measures have to be implemented and certified by one of the following persons or organisations:

- Checking the temperature of the electronic module:  
Aircraft Manufacturer

##### 6.2. Checking the component temperature of the electronic module:

Various components influence the electronic module with temperature. Therefore the measuring points for reading the max. allowable component temperature are precisely defined locations.

The limit of 80 °C (176 °F) for the max. allowable component temperature remains unchanged.

Step	Procedure
1	Check if the component temperature for the initial assembly of the modules was measured at the specified measuring location (2).
2	If the component temperature was measured at a different location as specified a new measurement is required.

**NOTICE** Both modules must be measured at the same location. See fig. (2). The measurements must also be verified for "hot day conditions" and residual heat emission after stopping the engine.

Step	Procedure
3	According to the results of the verification the following actions are necessary:

### 6.3. The verification for the affected prototype is positive (OK)

- no further actions or notification to end user.
- Aircraft manufacturer should give notification of his positive testing to his BRP Powertrain (Rotax) distributor

### 6.4. The verification for the affected prototype is negative (NOT OK)

- Limit of 80 °C (176 °F) has been exceeded.

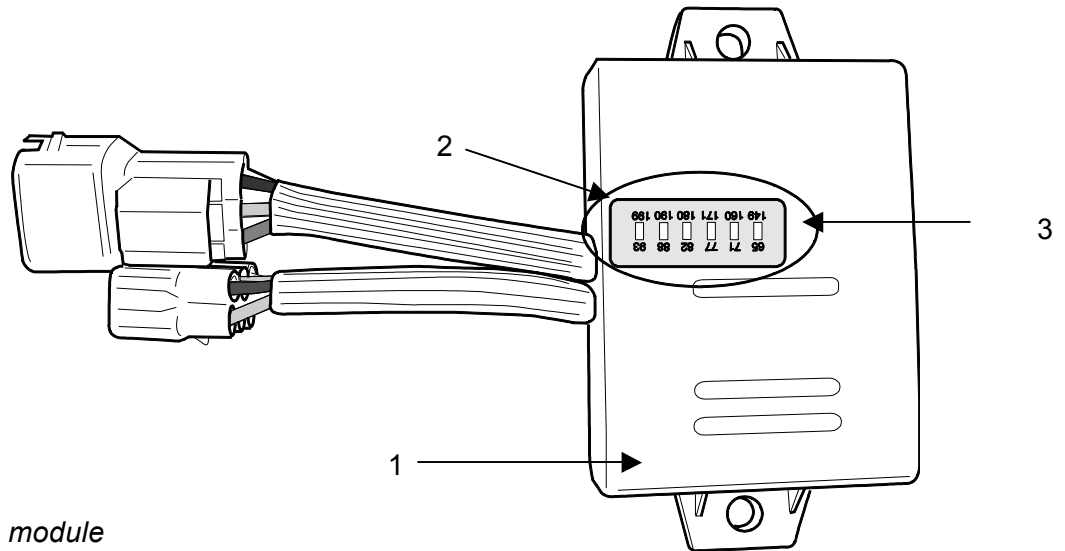
**NOTICE** Electronic modules that have been overheated in operation (i.e. the maximum component temperature has been exceeded) must be replaced. It may be necessary to replace both electronic modules. Any replacement has to be conducted in accordance with the relevant Maintenance Manual.

Step	Procedure
1	The corresponding prototype has to be modified in such a way as to ensure that the limit for the component temperature is not exceeded.
2	Information to the affected owners about the relevant measures.

- Aircraft manufacturer has to make provisions to cover this topic in a correct and airworthy way.
- Provide relevant information to the aircraft owners.
- Aircraft manufacturer should report his findings and further steps of rectification.

## 7. Additional Information:

The following illustration shall provide additional information:



- 1 electronic module
- 2 temperature readings
- 3 temperature sensitive label

Fig. 1  
Electronic module

**NOTE:** The illustration in this document shows the typical construction. It may not represent full detail or the exact shape of the parts that have the same or similar function. Exploded views are not technical drawings and are for reference only. For specific details see the current documentation for the respective engine type.

**NOTE:** For **Special Light Sport Aircraft** the OEM must carry out this testing. The OEM is responsible for all continued airworthiness information to the owners. Should modifications be necessary to an aircraft design this must be given to the owners with all conditions for continued airworthiness. Please consult the relevant ASTM standards for this process.