Introduction

This leaflet contains the required information to permit the fitment of a ConAir Soft Start Module (SSM) to a BMMAA microlight aircraft.

The SSM can be fitted to the Rotax 912UL and 912ULS engines. The intention is to reduce ‘kickback’ on starting, which can cause damage to the powerplant. The system is inserted between the ignition trigger coils and the ignition module on one of the dual ignition systems (the other remaining unaffected) and acts to retard the ignition on this circuit during starting. The system is only operative whilst the starter motor is energised and for a period of 2 seconds after release.

The SSM received initial approval via BMMA MAAN 2090. The unit is only intended for use on permit (non certified) aircraft that do not rely on the engine for flight safety.

Notwithstanding the simple approach taken by this TIL, it is the aircraft owner’s responsibility to ensure:
- All materials used in a modification are of adequate quality.
- Proper aircraft engineering standards are applied.
- The modification does not create any safety problem when combined with any other modification to the aircraft.
- No relevant information has been withheld from the BMMA or inspector.

Essential Safety Checks

1 Instructions
   1.1 It is essential that the most current set of installation instructions are in your possession all also that they have been well read and understood.

2 Cabling
   2.1 Any electrical cables must be firmly secured (without over-tightening) with cable ties to the aircraft.
   2.2 No holes must be drilled in any metal structure for cables to pass through.
   2.3 No holes must be cut in the sail for cables to pass through.

3 Placarding
   3.1 The ‘soft-start’ ignition position must be placarded as such (ignition switch).

It is acceptable to send in the form with your permit renewal form.

Aircraft must be wholly owned by BMMA members. A BMMA Ownership Trustee Grid should be submitted with this form for syndicate, group and company owned aircraft.

Prepared by:           Approved for Issue:

R S Mott
Airworthiness Engineer
British Microlight Aircraft Association

B J Syson
Chief Technical Officer
British Microlight Aircraft Association
### BMAA – STANDARD MINOR MODIFICATION CHECKLIST: TIL 111

<table>
<thead>
<tr>
<th>Reg: G-</th>
<th>Aircraft type:</th>
<th>Serial No:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owners name:</td>
<td>Owners BMAA No:</td>
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1 BMAA Aircraft Ownership Trustee Grid required for syndicate/group/company owned aircraft

#### Installation Details

<table>
<thead>
<tr>
<th>Engine Type</th>
<th>Installation Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotax 912-UL</td>
<td>Issue Number:</td>
</tr>
<tr>
<td>Rotax 912-ULS</td>
<td>Issue Date:</td>
</tr>
</tbody>
</table>

#### No. | ACTION | OWNER’S INITIALS | INSPECTOR’S INITIALS |
|-------|--------|-----------------|---------------------|

1 **Pre-installation checks**

1.1 Ensure SSM installed i.a.w the latest issue of ConAir SSM Installation Instructions.

1.2 Ensure SSM Installation Instructions are appended to the aircraft manual.

1.3 If existing combined ignition/starter switch fitted, confirm ConAair SSM Installation Instructions followed, and any additional starter switch, or change to wiring, satisfactory.

2 **Cabling**

2.1 All cable terminations properly made - no exposed conductor

2.2 Cables and other components properly secured

2.3 No holes or cuts made in airframe

3 **Placarding**

3.1 Ensure ‘soft-start’ ignition position placarded as such (ignition switch).

4 **Test Operation**

4.1 Ensure both ignition circuits operating satisfactorily (ground run only).

#### OWNER’S DECLARATION

I declare that the foregoing information is correct to the best of my knowledge and I will not change the installation design once approved.

Signed: Name. Date:

#### INSPECTOR’S DECLARATION

I declare that the foregoing information is correct and the installation is fit to be flown.

Signed: Name. Insp No: Date:

This form must be sent with payment as per BMAA Online Shop ([www.bmaa.org](http://www.bmaa.org)), and BMAA Aircraft Ownership Trustee Grid (if applicable) to*:- technical.office@bmaa.org

BMAA Office Approval: (signed) (Name)

Mod No.: G- _ _ _ / TIL111 / 20 _ _ / _ _ _ _

*Whilst waiting for this form to be returned by the BMAA the aircraft may be flown for upto one calendar month from the Inspection date above. Once this form is returned to you signed please enter the full modification approval number above in your aircraft logbook and retain this sheet with your aircraft records.