

MTAR 1/2017 Issue 2

MOSP - TECHNICAL AIRWORTHINESS REVISION

<u>Issue 2</u> includes FUSION V-LFP-12-15 battery approval plus advice on the appropriate battery charger.

MOSP SECTION: MOSP 3 18.9.2

SUBJECT: Approval – FUSION LiFePO4 Battery and Battery Charger.

INSTRUCTIONS: Gel-cell lead acid replacement approval is granted conditionally that:

- The FUSION brand battery only is used. FUSION replacement battery P/N V-LFP-12-10 or V-LFP-12-15 is a <u>direct replacement</u> for the standard gel cell. Where the battery is not a direct replacement, the guidance of Chapter 9 of Basic Sailplane Engineering must be followed.
- 2. <u>No inflight charging is allowed</u> battery charging is only approved with the battery outside the aircraft.
- 3. Members must familiarise themselves with any <u>safety requirements</u> and procedures and accept any risk.
- 4. The sailplane <u>owner must approve</u> the use of the LiFePO4 battery type in the aircraft.
- 5. The <u>battery will be suitably marked for identification purposes</u> with the registration, battery number and the date entering service.
- 6. The FUSION battery contains an internal 'Battery Management System' (BMS). A Repco 'Linear' battery charger (12V4A or 12V6A) or equivalent 'dumb' charger must be used. DO NOT USE A SMART CHARGER OR ANY CHARGER WITH PULSE CHARGING WITH THIS BATTERY TYPE. The user is responsible to refer applicable battery data sheet for correct charger specification / charging rates.

NOTE: The Projecta Automatic 12V 15A 5 stage lithium battery charger part number IC1500L is recommended by a major supplier of FUSION batteries.

- 7. If <u>dropped or damaged</u>, the battery must be <u>removed from service</u> and marked unserviceable
- 8. The battery will be fitted with a suitable fuse / circuit breaker and connecter.
- 9. The battery, fuse, wiring and connector shall be <u>Daily Inspected</u>. The inspection will be for evidence of damage to battery and assembly.
- 10. A <u>safety defect report</u> (SDR) shall be submitted on any occurrence or incident involving the battery, the battery charger in use or battery system.

NOTE: The V-LFP-12-10 and the V-LFP-12-15 are not suitable for engine starting.

Dennis Stacey CHIEF TECHNICAL OFFICER		THE GLIDING FEDERATION OF AUSTRALIA	
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