# SERVICE BULLETIN **Title: XT Series Battery Cover Install**

Identification	SB-009
Status	Active
Issue	1
Issue Date	27 October 2010
Applicability	XT-912, serial numbers 001 to 0244 inclusive,
	XT-582, serial numbers 001 to 0056 inclusive,
	unless previously accomplished.
Compliance	Optional

Issued by: Stuart Coad
Approved by: The technical content of this service bulletin is approved by CASA.

Summary of Changes: First issue

#### Introduction

There are three actions in this Service Bulletin.

The principle action of this service bulletin is to describe the application and fitment of the battery cover as supplied by Airborne WindSports.

The space below the rear seat above the battery can be used as a small secure storage area provided an appropriate cover, that protects the battery and terminals, is mounted and secured above the battery.

Airborne WindSports supply battery cover kits that are suitable for this purpose and can be retrofitted by owners or maintainers of XT aircraft.

There is a 2kg limit to the total weight of items that can be stored in this area so that the structural integrity of the cover and fastenings doesn't become compromised.

Note that in-house testing has shown that there is potential for fire through shorting the shielding in the aerial wiring if the wiring becomes chafed and the shielding exposed. The standard aerial routing is below the tank, but above the battery is allowed only if it is routed above a properly installed battery cover.

The secondary action of this bulletin is to inspect the routing and securing of the wiring and the fusible link.

The wiring should be inspected in accordance with the aircraft's maintenance manual paying particular attention to the way it is secured and routed.

The third action of this bulletin is to detail the routing of wiring in the vicinity of the water pump, ensuring that it is secured and mounted away from the water pump where appropriate.

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### Action

Comply with battery cover fitting instructions as specified in this service bulletin.

Inspect wiring in accordance with the aircraft's maintenance manual (Section 24. Electrical Power). Pay attention in particular that the wiring and fusible link is secured and routed properly.

Check the positioning of wiring in the vicinity of the water pump and ensure that any wiring other than the engine earth lead is mounted away from the water pump.

### Skills

The pilot and maintainer are expected to incorporate this service bulletin as standard practice.

# Weight and Balance

No change.

### **Documentation**

No checklist or compliance notes are provided with this service bulletin.

## Installing the Cover

## Position the cover

Note: Refer to Drawing A4-7586 as included in the Retro Kit.



Figure 1. Place cover in the well above the battery. Check for interference.

Note: Check for correct routing of any aerial wiring installation as a means of ensuring aircraft safety. Aerial wiring should be below the tank or above the battery cover, as testing in-house has shown that the shield in the outer wire of the aerial will act as a direct earth if the wire is chafed or damaged to such a point that the shield is exposed and is allowed to short the battery.

## Secure the cover



Figure 2. Secure cover into place using screws and washers. Refer to Drawing A4-7586 as included in the Retro Kit.

# Secure the battery wire

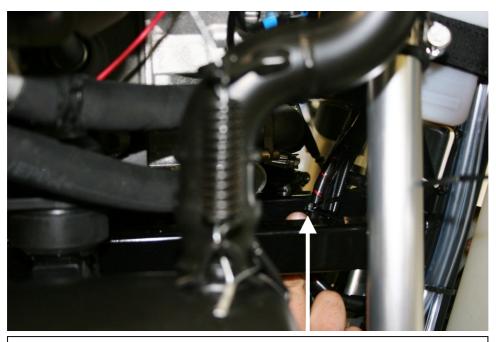


Figure 3. Confirm the battery wiring is zip-tied to the main loom near the rear of the tank.

# Checking the Fusible Link and Wiring

Prior to installing the cover is the best time to inspect the battery and connections.

Confirm the general wiring is well secured, visually check for chafing and that it is clear of chafe points.

## Battery and Cable Routing

- 1. Check the wiring loom is not routed near the battery and is routed underneath the tank.
- 2. Check the battery wiring is in good repair, the fusible link is secure, the connections are secure.

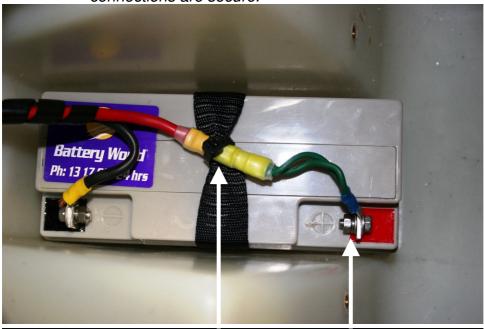


Figure 4. Fusible link in good repair and secure. Connections are tight.



Figure 5. Chafe points minimised.

## Inspecting the Mounting of the Wiring in the Vicinity of the Water Pump

Confirm that wiring other than the earth lead is clear from the water pump and that there is no chafing or chafe points.



Figure 6. Ensure wiring other than engine earth lead is clear of water pump.

End of Safety Bulletin