

## SERVICE BULLETIN

### Title: Fuel Drain Cock Inspection

Identification	SB-020
Status	Mandatory
Issue	1
Issue Date	30 November 2017
Applicability	XT1 & XT2 series trike bases.
Compliance	Prior to next flight and incorporated in pre-flight inspection.

Issued by: Rick Duncan

Approved by: Rick Duncan – AirBorne Windsports.

Summary of Changes:  
First issue

### ***Introduction***

Airborne Windsports has received reports relating to failure of the XT fuel tank sump draincock.

The draincock is positioned at the lowest point of the fuel tank to allow removal of contaminants including water from the bottom of the fuel tank. When the tank is not regularly drained water can be trapped and the fuel drain assembly can become permanently submerged in water.

The water will cause corrosion of the metal stem. The corrosion can adversely affect the groove in the stem which retains the C-clip. Failure of the C-Clip retainer and subsequent failure of the O-Ring will allow the assembly to come out of the housing resulting in rapid fuel loss.

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**Action**

The Aircraft Operating Instruction, section 4.5 advises to check for water as part of the aircraft pre-flight inspection.

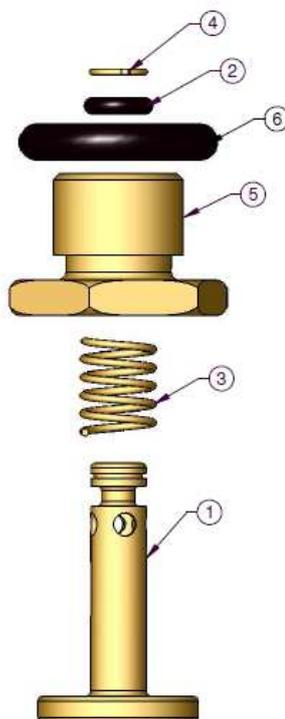
Immediate action is to drain the sump as per the Aircraft Operating Instruction, section 4.5.

If there is any sign of a leak at the drain cock assembly, the fuel should be drained, and the parts should be replaced as per the maintenance instructions outlined in this Service Bulletin.

**Draincock Assembly**

The assembly below shows the parts referred to in this Service Bulletin

ITEM NO.	NAME	DWG	PART NO.	QTY.
1	STEM - DRAIN COCK CAV160	5710	105512	1
2	O-RING - DRAIN COCK CAV160	5932	105488	1
3	SPRING DRAIN COCK CAV160	5710	105511	1
4	CIRCLIP - DRAIN COCK CAV160	5710	105487	1
5	DRAIN COCK BODY XT	5539	105251	1
6	O-RING FUEL TANK	5932	103181	1



DRAIN COCK ASSEMBLY:  
 USING STEM, SPRING AND CIRCLIP FROM CAV-160 (SEE A4-5710)  
 1. INSERT STEM AND SPRING  
 2. PLACE NEW O-RING ON STEM  
 3. PLACE CIRCLIP BACK ON STEM

**Skills**

The maintainer is expected to have the skills as required by the National Aviation Authority (NAA) of the respective country.

## Tools

Adjustable wrench

1/8" rivet

Loctite 567 Thread Sealant

## Procedure to replace parts

The following maintenance procedure is to be followed:

### 1/ DRAIN FUEL

Fully drain all fuel from the tank using the drain cock. Ensure that the fuel is placed in a suitable container.

### 2/ REMOVE DRAINCOCK



Use adjustable wrench or similar, to remove the draincock assembly.

Whilst the drain cock is removed it is a good opportunity to clean the sump area of the tank removing all visible residue.

Clean the existing Loctite from tank and fitting ensuring a clean surface on both threads and the draincock body.

### 3/ DISASSEMBLE DRAINCOCK



Compress spring in body and place shear part of 1/8" rivet or similar in cross holes to hold spring compressed. SEE PHOTO.

Remove C clip with thumbnail over a white piece of paper, so as not to lose parts.

Remove existing small "O" Ring (P/N 105488) using a first aid splinter removal tool or similar instrument with sharp point. Discard "O" Ring.

Remove rivet, disassemble and clean parts thoroughly.

#### 4/ REASSEMBLE DRAINCOCK

Reassemble parts using rivet to compress the spring.

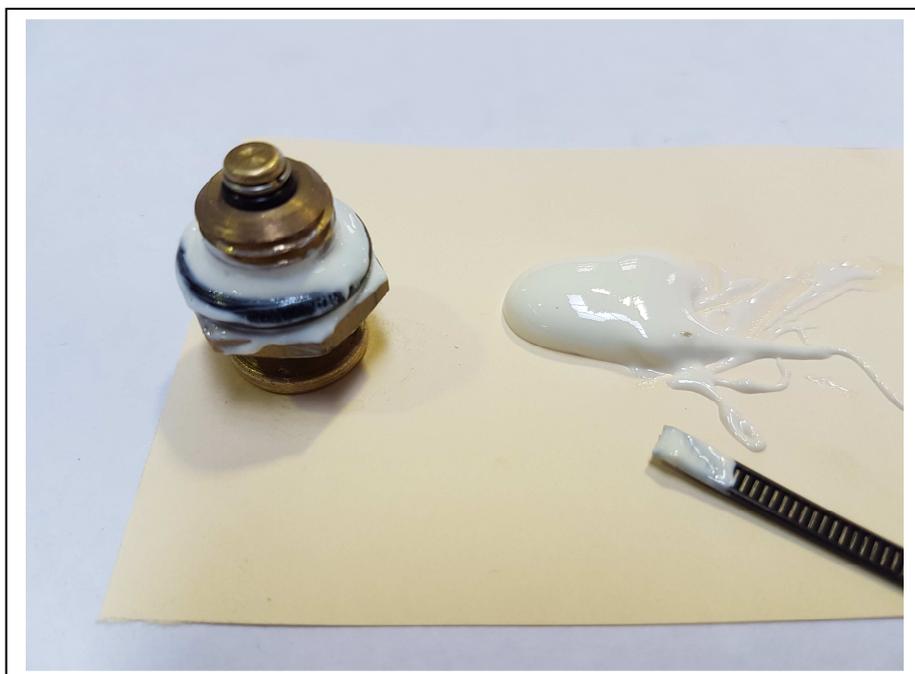
Fit new "O" Ring (P/N 105488) using thumbnail, slightly dampened with water to assist assembly.

Insert C clip in stem groove. Note: The C clip can be slightly squeezed together to tighten.

Fit large "O" ring (P/N 103181) to fitting using Loctite 567 under the "O" ring.

Add Loctite 567 to top of "O" ring and thread, ensuring no paste past first 2 threads. SEE PHOTO.

#### 5/ FIT DRAINCOCK ASSEMBLY TO TANK



Refit Drain Cock slightly compressing "O" ring. JUST NOT LOOSE.

Clean off excess Loctite 567.

Allow to cure.

Add fuel and check for leaks.

#### **Documentation**

Include maintenance procedure to maintenance log.

**End of Service Bulletin.**