

CAP Aviation 9, rue de l'Aviation 21121 DAROIS - France Tel +33 380 35 65 10 Fax +33 380 35 65 15 www.capaviation.com		<b>S E R V I C E B U L L E T I N</b>
<b>NUMBER</b>	<b>TITLE</b>	<b>ATA SYSTEM</b>
000202	Starter relay	80

## 1. PLANNING INFORMATION

### 1.1 Approval

**NOTA:** This document is a courtesy translation of its original French version. Whereas the original French version of the information and instructions is approved, this *translation* is *not* approved.  
 As a consequence, the approval mentions below are to be understood as applicable to the *original French version* of this SB.

This Service Bulletin corresponds to the MINOR change Nr 000202 which has been approved under the privileges of the Design Organisation Agreement DGAC Nr°F.JAA.06.

The technical information contained in this document is approved under the privileges of the Design Organisation Agreement Nr°F.JAA.06.

Revision	Date	Description	Airworthiness Office Manager	Head of Design Organisation
			Recommendation for approval	Approval
0	09/11/2000	Original issue.		

### 1.2 Effectivity

<b>Aircraft : type</b>	CAP232
<b>Serial Nr</b>	Aircraft or parts delivered after the 05/12/97

<b>Spare parts with Serial Nr</b>	N/A
<b>Serial Nr</b>	N/A

### 1.2.1 For information :

The change corresponding to this Service Bulletin has been implemented during serial manufacturing:

<b>Aircraft : Type</b>	CAP232
<b>Serial Nr</b>	024 and after

<b>Spare parts with Serial Nr</b>	N/A
<b>Serial Nr</b>	N/A

### 1.3 Implementation

	SERVICE BULLETIN	DELAI D'APPLICATION
	Optional	
	Recommended	
X	Mandatory	Within the next <b>50</b> flight hours after reception of this SB, or at the latest during the next maintenance operation.

### 1.4 Reason

Some recent aircraft equipped with Cessna starter relay part number S-1991A1 have experienced problems in service. 2 types of problem were identified :

- ❖ Relay stay connected while starter button is released
- ❖ Relay get connected during flying while flying aerobatics maneuvers

=> Improve the starter relay reliability.

### 1.5 Description

CAP Aviation Airworthiness Office suspects the Cessna starter relay part number S-1991A1 reliability and conformity.

Replace systematically the starter relay part number S-1991A1 by the relay ref. 22735 for :

- ❖ The aircraft delivered after the 05/12/97
- ❖ The parts delivered after the 05/12/97

### 1.6 Manpower

The instructions contained in this Service Bulletin can be performed only by an approved workshop or maintenance unit.

The lead time necessary to implement the modification is evaluated to about:

- 1 hour for one mechanic, including removal of engine cowlings

### 1.7 Material

The new and modified parts make up the material, and are mentioned in the chapter 3 of this Service Bulletin.

For civil customers, spare parts are to be supplied at ASCO Aviation Service Centre (Tel : +33 380 35 61 98, Fax : +33 380 35 60 58).

### 1.8 Tooling

Approved mechanics standard tooling.

## 1.9 Weight and balance

### 1.9.1 Aircraft

None.

### 1.9.2 Engine

None.

### 1.9.3 Accessories or components for aircraft use

None.

## 1.10 References

None.

## 1.11 Affected publications

- A copy of this Service Bulletin must be inserted in the CAP232 Illustrated Parts Catalogue, until the next annual update of this document.
- Service Letter Nr 990813: User Documents List.

## 1.12 Feedback

Please do inform the Airworthiness Office of CAP Aviation, about the implementation of the instructions described herein.

You can use:

- postal mail : address on the first page of this Service Bulletin,
- fax : (+33) (0) 380 35 6515,
- e-mail : [caroline.morel@capaviation.com](mailto:caroline.morel@capaviation.com),
- the web page of Cap Aviation : <http://www.capaviation.com>.

## 1.13 Appendices

None.

## 2. ACCOMPLISHMENT INSTRUCTIONS

### 2.1 Removal operations

1. Remove engine cowlings
2. Disconnect the battery

### 2.2 Change operations

1. Disconnect the 3 wires from the starter relay S-1991A1
2. Remove and discard the original starter
3. Put in place the new starter relay
4. Connect the 3 wires on the new relay, isolate the unused connector with a thermo-shrinkable tubing of 9 or 10 mm (0.35 or 0.39 in.) (see picture below)

UNUSED CONNECTOR



### 2.3 Installation operations

1. Connect the battery

### 2.4 Controls / tests

1. Engine run (without the engine cowlings)
2. Put the engine cowlings back in place



### 3. MATERIAL INFORMATION

New P/N.	Quantity	Unit list price	Key word	Old P/N.	Instructions
22735	1	275,00 FHT	Relay	S-1991A1	Old P/N to be discarded
<p><i>This table has no contract value. Prices are given for information only and can be modified without previous notice. For current prices, please contact ASCO Aviation Service Center.</i></p>					