







Description: Audio Selector Panel Service Manual: 803-16-1 803-16-3, 803-16-8, 803-16-9 ECR No.: None	Service Bulletin No.: 803 603-0001 Subject: Replacement of Norm/Fail, Norm/Emerg toggle switch with alternate manufacturer part
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1. Planning Information

This Service Bulletin incorporates a replacement toggle switch for the existing C&K (ITT) 7401K2ZQE (now unapproved by engineering) with the new Electroswitch A423K12KZQ (NAT P/N 85-03-401). This Service Bulletin incorporates the replacement switch for the Norm/Fail and Norm/Emerg switch position of the following Model 803-[] products:

Base model 803, Model 803-002, 803-003, 803-004, 803-005, 803-006, 803-007, 803-010, 803-011 and 803-015.

1.1 Applicability

This modification is applicable to all Base model 803, Model 803-002, 803-003, 803-004, 803-005, 803-006, 803-007, 803-010, 803-011 and 803-015 product returns manufactured prior to September 2011.

1.2 Reason

A customer reported intermittent operation of a Model 803-[] which led to investigation of the cause by our Service and Support Department. Service and Support uncovered an intermittent C & K toggle switch installed in one of their Model 803-005 returns. By wiggling the handle of the switch, R & O personnel found that connection of the switch contacts of SW2 when set to the Normal position led to intermittent drop out of the microphone audio to the intercom as the handle of the switch was wiggled laterally, even while the handle was not moved from the Norm position to the Emerg position. The same switch is used on several Model 803 derivatives for the Norm/Fail and Norm/Emerg toggle switch (depending on model).

1.3 Description

This Service Bulletin incorporates a replacement toggle switch for the existing C&K (ITT) 7401K2ZQE (which has now been made unapproved by engineering) with the new Electroswitch A423K12KZQ (NAT P/N 85-03-401). This Service Bulletin incorporates the replacement switch for the Norm/Fail and Norm/Emerg switch position SW2.

The Electroswitch component is believed to be a higher reliability component based on successful performance of Electroswitch parts on previous applications and based on an analysis of the replacement part's specifications. Additionally, a temperature test was performed on a sample of the Electroswitch component within the same family of parts to validate that the part was able to operate within the expected thermal environment within the Model 803 products with DC current applied to the contacts. The switch met the test requirements.

1.4 Compliance

Mandatory product return of all Model 803-[] products is not required. The Model 803 products have been in service for many years with only recent incidence of a problem with the Norm/Fail or Norm/Emerg toggle switches. The C & K product line has been sold in recent years to ITT and we believe that the recent problems reflect a drop in quality of the parts due to the change of manufacturer.

Cobham will incorporate this change to all Base Model 803, Model 803-002, 803-003, 803-004, 803-005, 803-006, 803-007, 803-010, 803-011 and 803-015 units returned for repair.

1.5 Approval

None.

1.6 Costing

This change has warranty coverage for units still covered within the warranty period.

1.6.1 Parts and Labour

One (1) hour estimated. Includes required test time.

1.6.2 Additional Information

This is a factory-only modification.

1.7 Special Equipment Required

None.

1.8 Weight and Balance

Not affected.

1.9 Electrical Load Data

Not affected.

1.10 References

Equipment Manual: 803-16-1, 803-16-3, 803-16-8 and 803-16-9

1.11 Other Publications Affected

The next edition of the equipment manual will include the changes described in this bulletin.

2. Procedure Instructions

2.1 Modification Procedure

All work must be performed in a static controlled work environment.

- 1) Disassemble the enclosure of the Model 803-[] unit under repair. Refer to the assembly drawing in appropriate equipment manual for assembly instructions.
- 2) Replace SW2 with the new switch, Electroschwitch A423K12KZQ (NAT P/N 85-03-401).
- 3) Carefully inspect the replaced components and rework under magnification to ensure solder joints meet all required standards.
- 4) Reassemble the unit and perform acceptance test. After testing is completed and has passed the requirements of the ATP, perform QA inspection prior to release.

2.2 Acceptance Test Procedure

Test in accordance with appropriate Acceptance Test Procedure.

2.4 Modification Status Marking

None.

3. Material Information

The following part is required to be removed and then replaced with the new part.

Remove:

IDENT	DESCRIPTION	MFR.P/N OR VALUE	PACKAGE	NATP/N	QTY
SW2	Switch, Toggle, 4PDT	C&K (ITT) 7401K2ZQE	-	85-03-401	1

Add:

IDENT	DESCRIPTION	MFR.P/N OR VALUE	PACKAGE	NAT P/N	QTY
SW2	Switch, Toggle, 4PDT	Electroschwitch A423K12KZQ	-	85-03-401	1

Note: C&K (ITT) 7401K2ZQE is now unapproved for use.

4. Reference Documents

The following documents are required to complete the modification. If additional documents are required, refer to the applicable equipment manual.

DOCUMENT	REV.	DESCRIPTION	TYPE
803-16-9	1.10*	Equipment Manual	Maintenance (ITAR)
803-16-3	2.10*	Equipment Manual	Maintenance (ITAR)
803-4-1	1.12*	Acceptance Test Procedure	ATP (ITAR)
803-16-1	2.20*	Equipment Manual	Maintenance
803-16-8	1.10*	Equipment Manual	Maintenance
803-4	4.11*	Acceptance Test Procedure	ATP
150-044527	A*	Component Maintenance Manual	CMM
150-044086	A*	Component Maintenance Manual	CMM

Note: The equipment manuals include all drawings, parts lists and modification instructions necessary to repair the Model 803-[]. Use the equipment manual listed above in conjunction with this service bulletin as appropriate to the model being repaired.

* This revision or later, perform ATP in accordance with the CMM.

ManualsModels

803-16-1
150-044527

Models 803-002, 803-003, 803-004, 804-005, 803-006, 803-007

803-16-3
150-044086

Model 803-015

803-16-8
150-044527

Models 803-010, 803-011

803-16-9
150-044527

Base Model 803

ATPModels

803-4

Models 803-002, 803-003, 803-004, 804-005, 803-006, 803-007, 803-010, 803-011

803-4-1

Base Model 803, 803-015

End of Service Bulletin
