

NBC Intercommunication Unit 10D/5831-99-658-0607
(Dowty/UEL Type 706)

Mod No B1472 (Class C/3)

File Ref: D/SM49/10/32/5816
ADP No ZBB 14720

Introduction of switch 5930-99-656-9763
in lieu of switch 5930-99-659-6599

1. INTRODUCTION

The NBC Intercommunication unit was originally fitted with a 3-position function switch, biased away from the SPEAKER position. In response to a later operational requirement, Mod. No. 1 (B0219) introduced a non-biased replacement switch. However, Service experience now shows that the original switch is preferable to the replacement switch and it has therefore been decided to raise a second, reversionary, modification to ensure that all units are fitted with the original biased switch.

(1) This modification is applicable only if Mod No 1 (B0219) is already embodied. Units at Mod State 0 should not be modified, but the numerals 1 and 2 on the modification record label should be struck off to indicate that the correct (ie original) switch is fitted.

2. EMBODIMENT

This modification is to be embodied as directed by Command Headquarters.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 2 $\frac{3}{4}$ man-hours (15 minutes to strip, 2 hours to embody, 15 minutes to reassemble, and 15 minutes to test).

4. DRAWINGS REQUIRED

Reference is made to fig 2 of Chap 1 in the Topic 1 section of this publication.

5. PARTS AND SPECIAL TOOLS REQUIRED

(1) Parts and materials

(a) RAF Units at home and abroad and all other users are to demand separately their requirements of items as indicated in sub-para (b) in accordance with current regulations.

(b) The following parts are to be provided under Unit arrangements:

<u>Ref No</u>	<u>Part No</u>	<u>Nomenclature</u>	<u>Qty</u>
5930-99-656-9763	12TW1-50	Switch, toggle	1
5365-99-349-6256	7-706-01-060	Spacer	1

(c) The following materials are to be provided under Unit arrangements:

<u>Ref No</u>	<u>Part No</u>	<u>Nomenclature</u>	<u>Qty</u>
8030-99-225-0471	Silcoset 153 (translucent)	Sealing compound	A/R
-	Loctite IS495	Adhesive, cyanoacrylate	A/R
6850-99-192-3265	Lotoxane	Cleaning solvent	A/R

(2) Special tools and test equipment

No special tools or test equipment are required for the embodiment of this modification.

6. MODIFICATION OF SPARES

No spares are affected by this modification.

7. CHANGE OF REFERENCE, PART AND ASSEMBLY NUMBERS

There are no changes of reference part or assembly numbers resulting from this modification.

8. SEQUENCE OF OPERATIONS

The following is the sequence of operations:

WARNING

1. BEFORE ANY ELECTRICAL CIRCUIT IS DISTURBED OR DISCONNECTED, ALL ELECTRICAL POWER SUPPLIES IN, TO OR FROM THE NBC INTERCOMMUNICATION UNIT ARE TO BE DISCONNECTED. POWER SUPPLIES ARE TO BE RECONNECTED ONLY WHEN THE PERSON RESPONSIBLE FOR EMBODYING OR INSPECTING THE MODIFICATION IS SATISFIED THAT ALL ACTION HAS BEEN TAKEN TO MAKE THE NBC INTERCONNECTION UNIT SAFE FOR RECONNECTION.

(1) All parts mentioned in the following procedure can be identified by reference to Topic 1, Chap 4, fig 2.

(2) Spring the retaining clips sideways to release the battery housing cover. Detach the cover and then remove the two clips.

(3) Withdraw and unplug the battery.

(4) Remove the eight raised countersunk-head screws securing the lid assembly. Retain these screws for later use.

(5) The lid assembly is sealed to the case with a silicone rubber compound. Break this seal by carefully prising the lid outwards at the jack socket end of the unit, and then remove the lid from the case.

(6) Release the locknut securing the toggle switch S2, and carefully remove the switch from the case.

(7) Note the wiring connections to the switch, ie brown to pin 2, grey to pin 4 and white to pin 6. (Also, pin 1 is linked to pin 5). Unsolder these connections and discard the switch.

▶ (8) Take the toggle switch and solder a short wiring link between ◀ pins 1 and 5.

▶ (9) Take the spacer and, using cyanoacrylate adhesive, bond it ◀ to the body of the switch at the same side as terminals 3 and 6 as shown in Topic 1, Chap 4, fig 2. On assembly, this spacer will then occupy the gap between the switch and the side-wall and thus prevent the switch rotating.

(10) Unscrew the outer locknut on the new toggle switch and discard any washers supplied. Then screw the inner locknut down to the bottom of the thread so that, when fitted, the switch will protrude as far as possible out of the case.

(11) Solder the three connecting leads to the switch terminals as noted in operation (7).

(12) Apply Silcoset 153 to the side-wall and also to the inside of the case around the mounting hole, and then secure the toggle switch in position using the locknut supplied. Ensure that the switch is correctly orientated, as shown in Topic 1, Chap 4, fig. 2, and clean off any excess Silcoset.

(13) Before refitting the lid, peel off the old silicone rubber adhering to the case and lid, and clean the mating surfaces with Lotoxane.

(14) Apply a thin fillet of sealant to the sealing ridge of the case surrounding the main compartment only, and place the lid in position. When closing the lid on the case, guide the two transducer leads towards the toggle switch to prevent them being trapped beneath the transducer.

(15) Apply a little sealant to each screw hole, and secure the lid using the eight screws removed in operation (4).

(16) Clean off all excess sealant from the case and lid.

(17) Fit the battery housing cover clips, the battery, and finally, the housing cover, securing this latter by means of the two clips.

(18) Strike off the numeral 2 on the modification record label.

9. SPECIAL TESTS AFTER EMBODIMENT

No special tests are required after the embodiment of this modification, but it is advisable to carry out a functional test as detailed in Topic 1, Chap 2, Para 17 onwards.

10. RECORDING ACTION

When this modification has been embodied and inspected in accordance with current authorized procedures the relevant entries are to be made in the appropriate records.

11. DISPOSAL OF REDUNDANT PARTS

Dispose of the redundant switch as indicated in local instructions.

12. EFFECT ON MASS

This modification has no effect on mass.

13. EFFECT ON EQUIPMENT OPERATION AND HANDLING

This modification changes the unit operating procedure by requiring the user to hold the function switch in the speaker position against the pressure of its bias spring while operating in the loudspeaker mode. When released, the switch will revert to the central position (microphone mode).

EQUIPMENT MODIFICATION LIST

MOD Mod. No.	Contractor Mod. No.	Mod. plate strike No.	Modification title	Class	Leaflet No.
30219			INTRO OF SWITCH PART NO 12TW-10 (5980-99-659-6599) IN LIEU OF SWITCH PART NO 12TW-50 (5980-99-656-9763)	C/3	1
B472			INTRO OF SWITCH 656-9763 IN LIEU OF SWITCH 659-6599	C/3	2

