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**USER HANDBOOK
FOR
CLANSMAN
RADIO INSTALLATIONS
IN
ARMoured PERSONNEL CARRIER
FV 432**

**PART 2
CLANSMAN BASIC
AND COMMAND HARNESSSES**

Published under the authority of:-
**ASSISTANT CHIEF OF THE GENERAL STAFF
(OPERATIONAL REQUIREMENTS)
Ministry of Defence**

PUBLICATIONS AUTHORITY
QUALITY ASSURANCE DIRECTORATE (WEAPONS)
WOOLWICH LONDON
S.E.18 6ST.

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GENERAL DESCRIPTION

INTRODUCTION

101. The Clansman Radio Control Harness in the Armoured Personnel Carrier FV 432 is an interconnected system of control and junction boxes for the selection and operation of either one of two radio sets. There are two in service versions of the harness which are used with this vehicle:

- a. Basic Clansman Radio Control Harness.
- b. Clansman Command Harness which is the basic control harness with the addition of extra Crew Boxes 2-Set (CB-2) and certain audio facilities.

102. The two versions of the harness and the facilities provided are described in this chapter. The individual harness boxes and the associated audio equipment are described in Chapters 2 and 3 respectively.

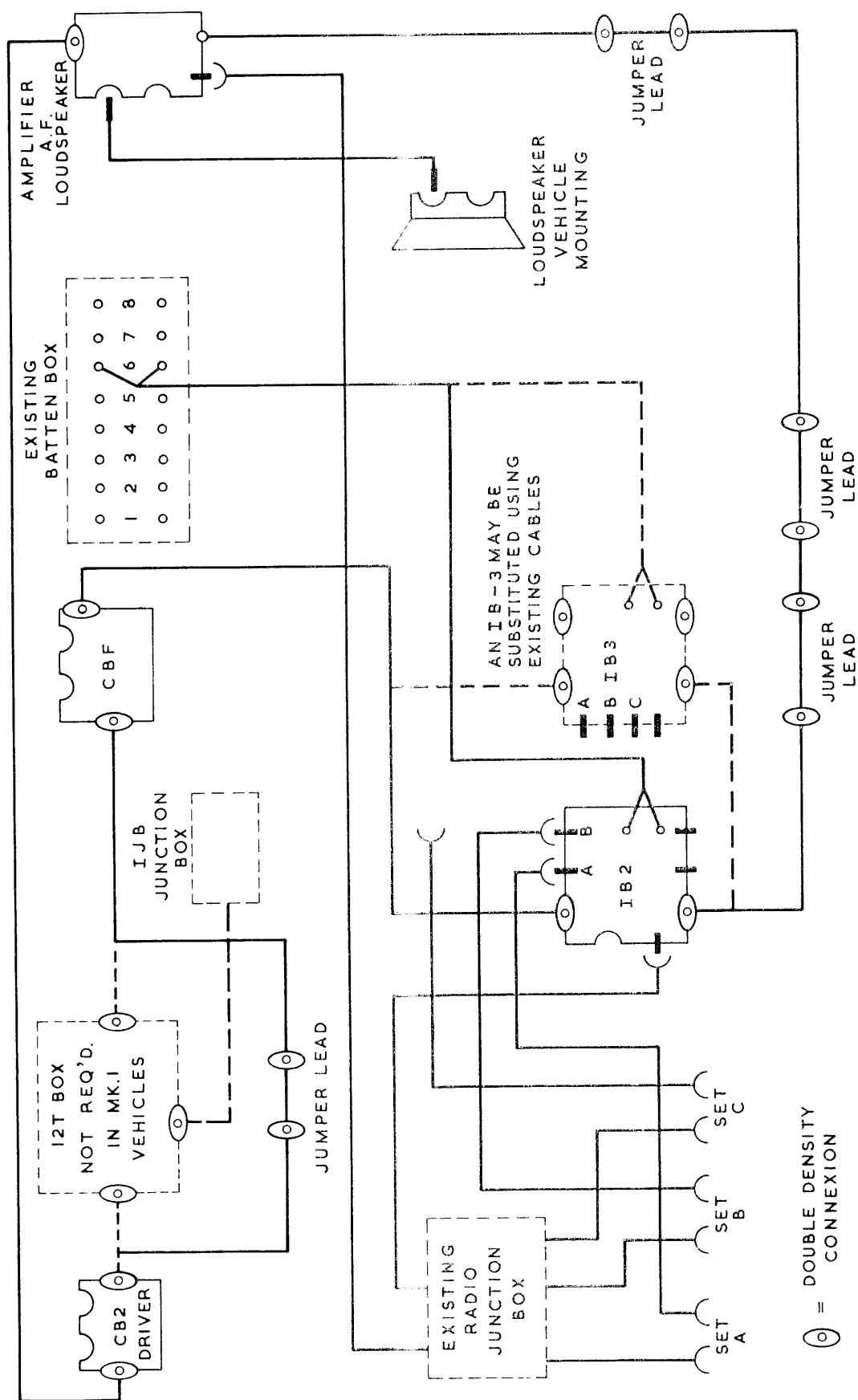
BASIC RADIO CONTROL HARNESS

103. The basic radio control harness (Fig 1) contains an Interconnecting Box 2-Radio (IB-2), or alternatively an Interconnecting Box 3-Radio (IB-3), to which are connected a Crew Box 2-Set (CB-2) for the Driver and a Commander's Box Fixed (CBF) for the Commander. An Amplifier Audio Frequency Loudspeaker (AAFL) and a Loudspeaker Vehicle Mounting (LSVM) are connected to the harness so that orders, etc., can be heard by occupants of the vehicle who are not equipped with headgear. The various units are shown in position in Fig 2.

CLANSMAN COMMAND HARNESS

104. The Clansman Command Harness (Fig 3) is the basic harness with the following additional items installed:

- a. Three additional Crew Boxes 2-Set (CB-2), located as shown in Fig 4, which are connected in place of the jumper leads on the basic harness.
- b. An additional loudspeaker is mounted above the LH side of the rear door (Fig 4) and is connected to the existing AAFL.
- c. Two free-standing, foot-operated pressel switches, the connectors of which can be plugged into the spare audio socket on CB-2s.
- d. An audio outlet socket in the rear LH corner (Fig 5) for the connexion of either a foot pressel or crewman's headgear. (The socket is connected to the CB-2 above the rear door).



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Fig 1 Block Diagram of Clansman Basic Harness

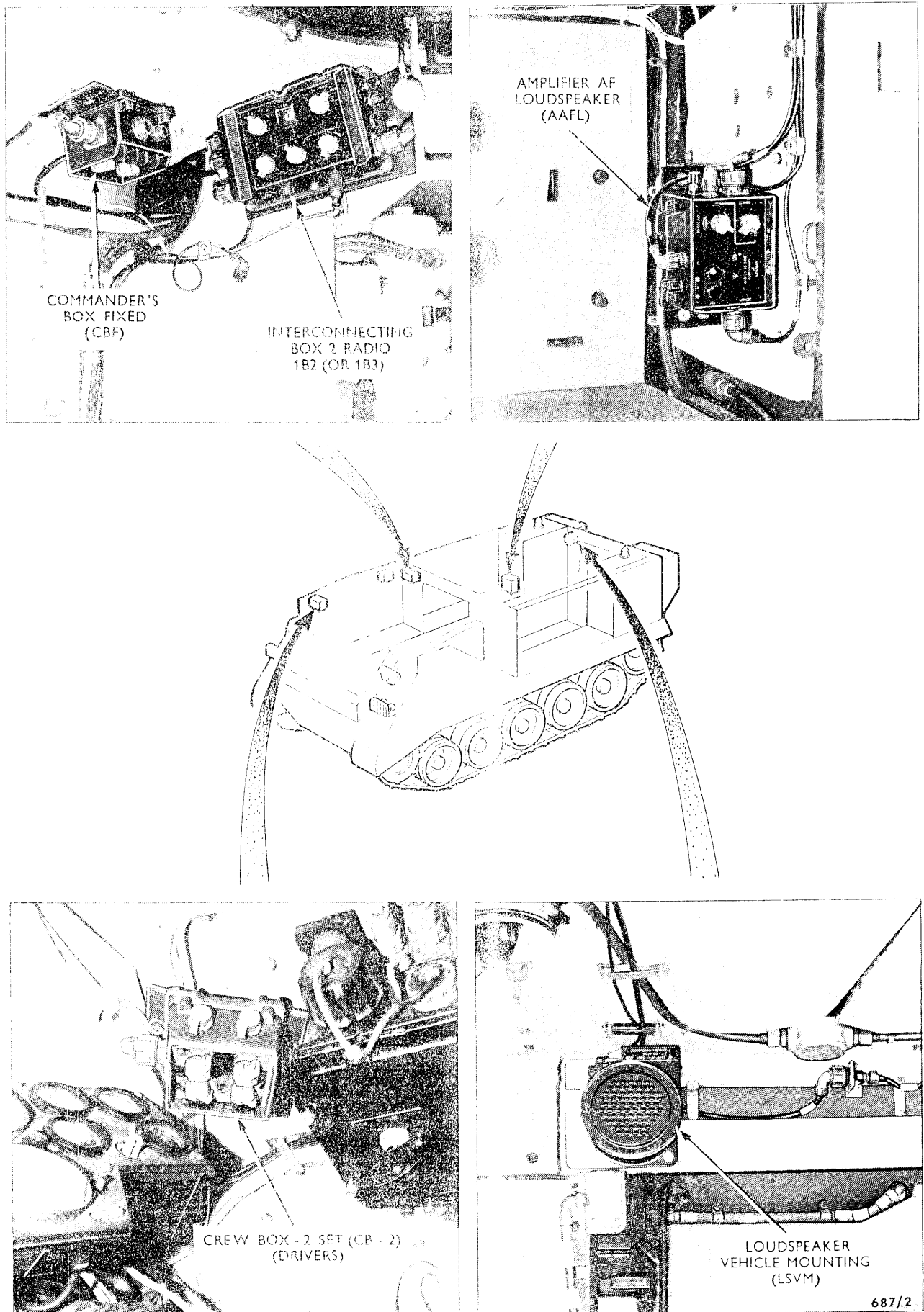


Fig 2 Location of Clansman Basic Harness Equipment in FV 432

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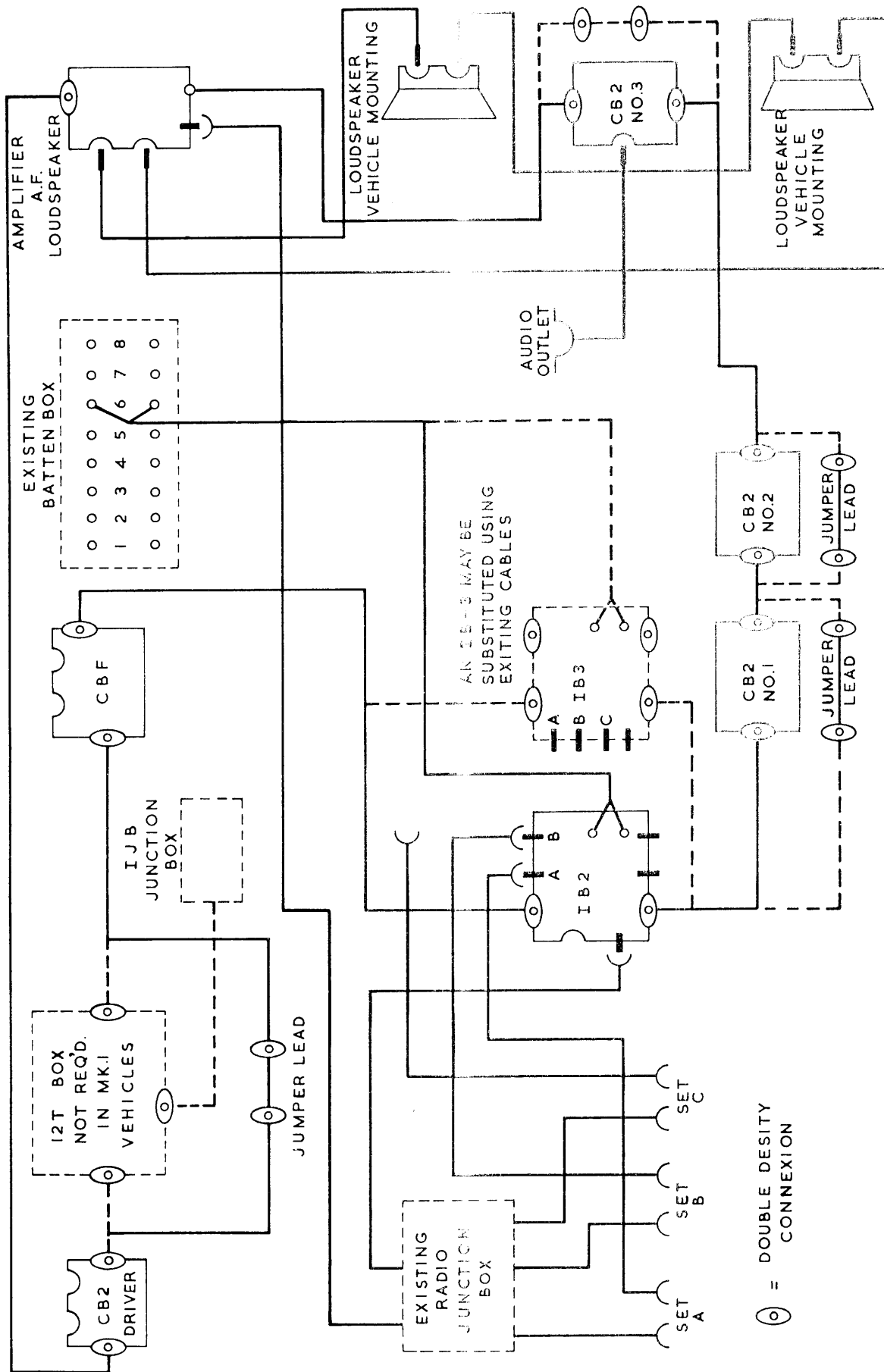


Fig 3 Block Diagram of Clansman Command Harness

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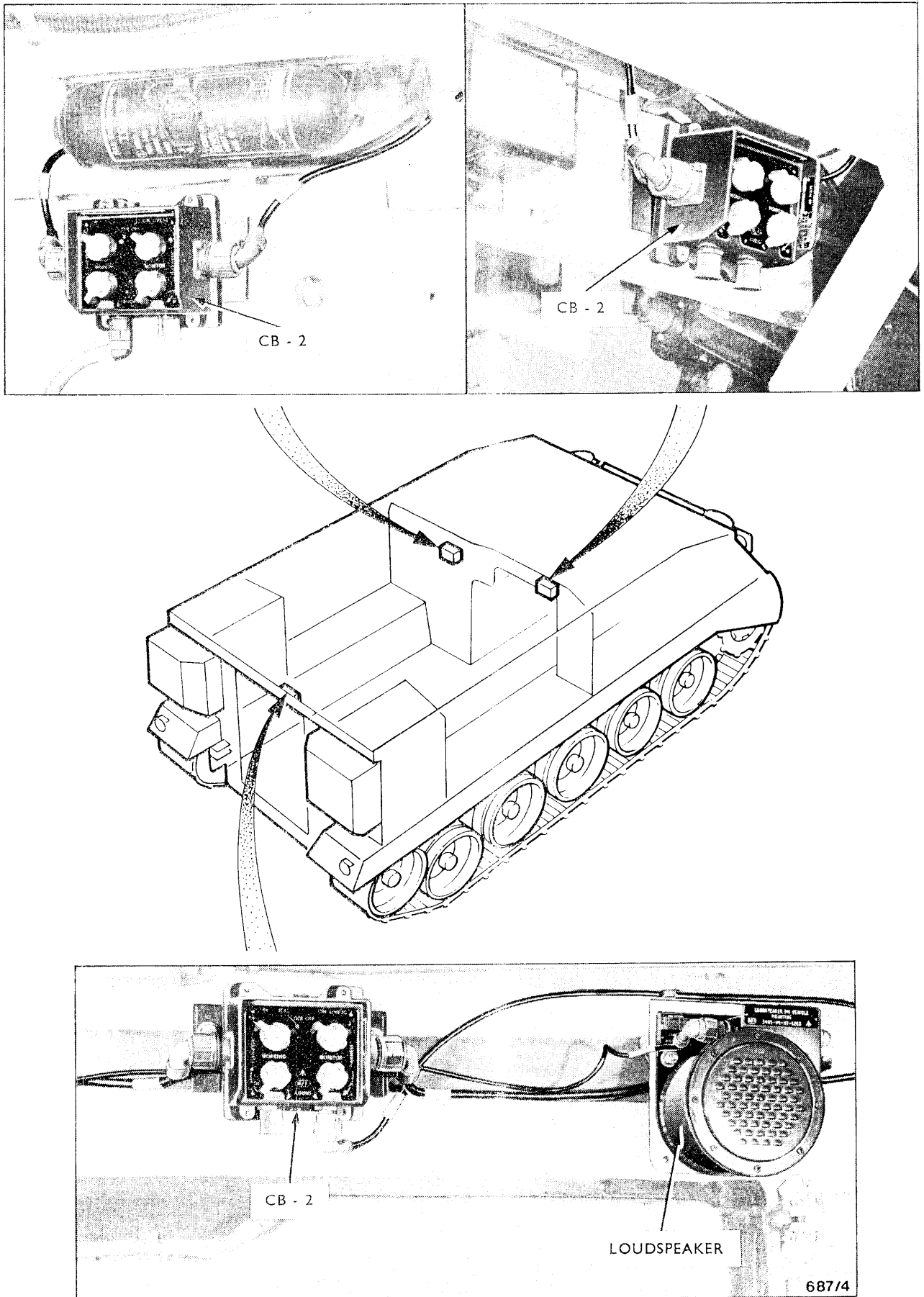


Fig 4 Location of Additional Equipment for Command Role

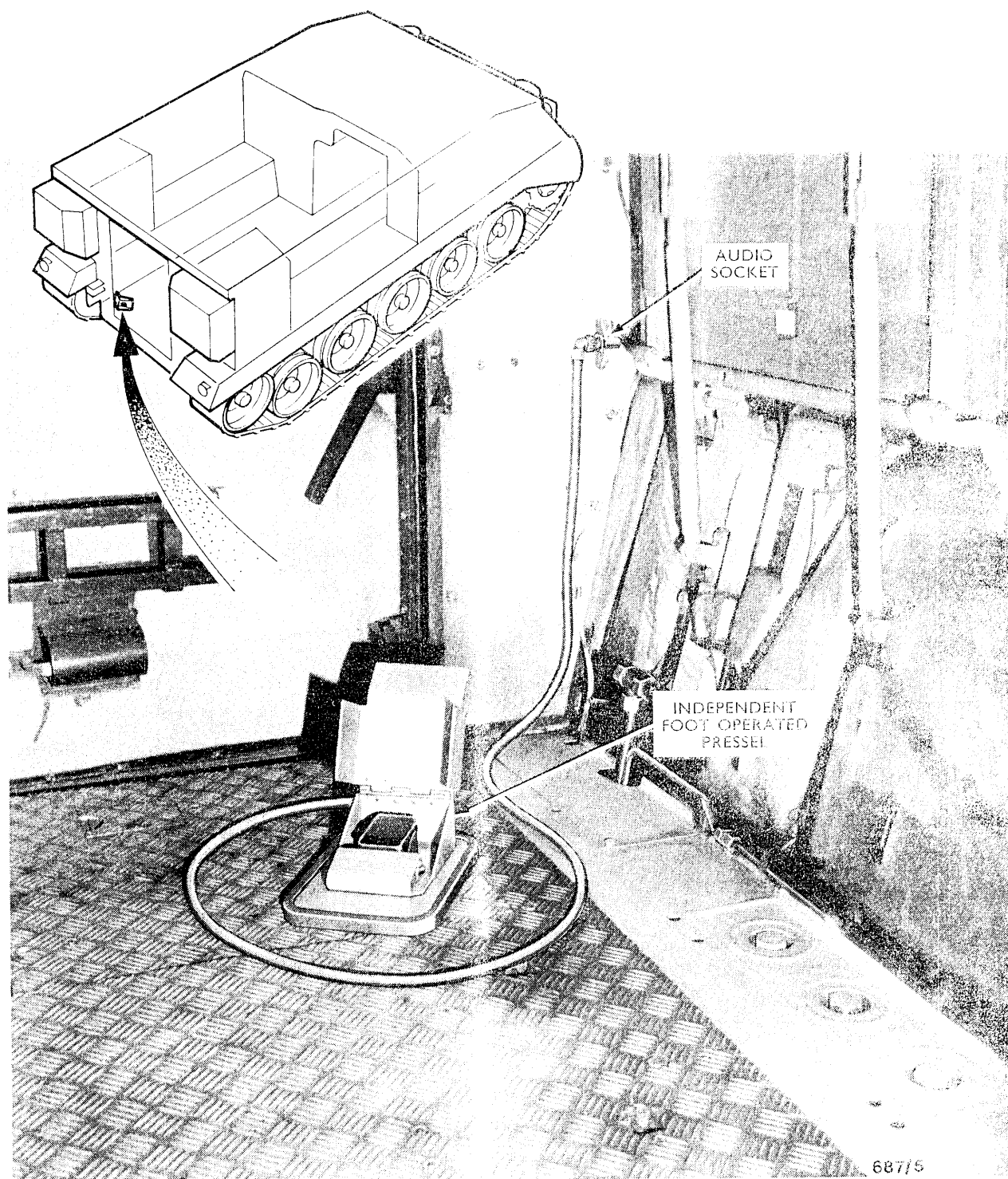


Fig 5 Audio Socket and Independent Foot-Operated Presser

HARNESS FACILITIES

105. The facilities available from the Basic and Command Harnesses are described in Table 1. Rebroadcast, remote control and remote IC facilities are not available when the IB-3 Box is installed.

TABLE 1

HARNESS FACILITIES

FACILITY	FUNCTION
Normal Operation	Selection and operation of 'A' or 'B' radio at IB-2, CB-2 and CPU Boxes. Sidetone and receiver signals are heard in both earpieces, unless the monitor facility is in use.
Monitor	Second radio can be monitored simultaneously in the RH earpiece. (CB-2 and CPU Boxes only).
Intercommunication (IC)	<p>a. NORMAL 'press to talk' IC facilities between all crew members. This is the mode of operation that should be selected for crew inter-communication on the majority of occasions.</p> <p>b. LIVE IC facility on CB-2 and CPU allows crew member to speak without using his pressel, i.e. microphone 'live'. (This facility should only be used when hands free operation of the IC is essential due to extreme circumstances, i.e. battle conditions. Every extra 'live' microphone on the IC circuit picks up extra vehicle noise and therefore reduces the efficiency of the IC system).</p> <p>WARNING ...</p> <p>Prolonged, inessential use of the LIVE IC facility will cause crew fatigue and will reduce the hearing ability of the crew. This reduction in hearing may be temporary or permanent, depending on the length of exposure to this high noise level. In other words it can cause DEAFNESS.</p> <p>c. OVERRIDE (O/R) facility on CB-2 and CPU allows crew member to be heard by all crew members, irrespective of the switch settings on their control boxes. The O/R call is heard in the RH earpiece.</p> <p>d. COMMUNAL IC between the vehicle and another vehicle with a compatible harness via the remote terminals on the batten box and the IB-2 or IB-3.</p> <p>e. REMOTE connexion to the vehicle's IC system via the remote terminals on the batten box and the IB-2 Box. A call facility, an audible tone, is provided. Remote IC is not available with IB-3 Box.</p>

TABLE 1 continued

HARNESS FACILITIES

FACILITY	FUNCTION
Rebroadcast (Available with IB-2 only)	<p style="text-align: center;">AUTOMATIC OR MANUAL</p> <p>a. LOCAL REBROADCAST (LRB) - Using two installed radios with the IB-2 switched for AUTOMATIC control when both sets are VHF, or for MANUAL control when one or both sets are HF.</p> <p>b. REMOTE REBROADCAST (RRB) - Using one installed set as selected by the IB-2, and one remote set connected by D10 cable via the remote terminals on the batten box to the IB-2.</p> <p>c. BREAK-IN (BK-IN) - This facility is provided to enable the operator connected to the IB-2 to monitor both sets during rebroadcast and to break into the rebro net, by operation of his pressel, causing both sets to go to transmit. Similarly, operation of a pressel at any other harness box switched to one of the radios, causes both radios to transmit.</p>
Remote Control of Radio (Available with IB-2 only)	A selected radio in the harness may be controlled from outside the vehicle by an operator using a remote handset connected by means of up to 3km (2 miles) of D10 cable to the remote terminals on the batten box.

CONNEXION OF RADIO SETS TO HARNESS

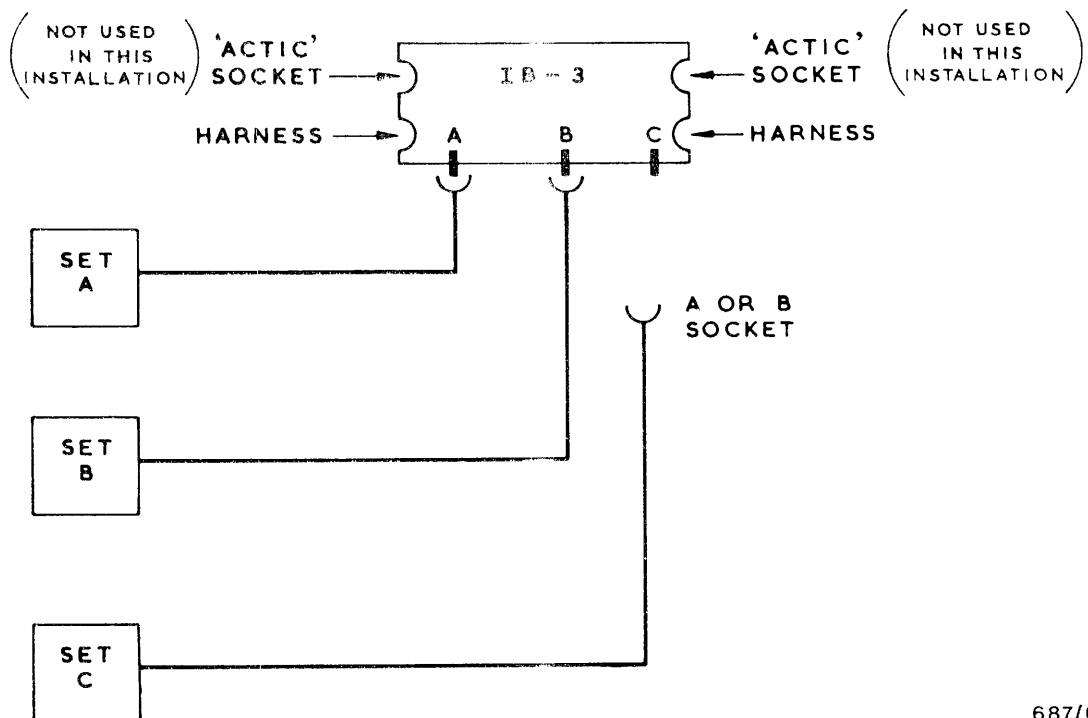
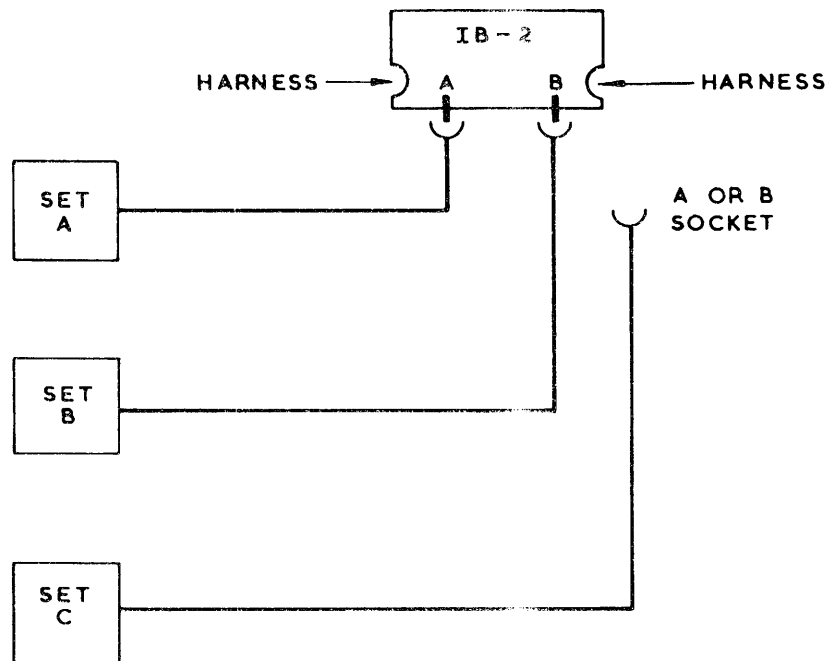
106. The Basic and Command Harnesses (Figs 1 and 3) cater for the 'in harness' operation of two radio sets, designated sets 'A' and 'B', with provision for a third set, designated set 'C', to be operated independently 'out of harness'.

107. The two 'in harness' sets are connected to the 'A SET' and 'B SET' plugs on the Interconnecting Box 2-Radio (IB-2) or the Interconnecting Box 3-Radio (IB-3), whichever is installed, as shown in Fig 6. If appropriate, a 'C' set can be substituted for set 'A' or 'B' by disconnecting the appropriate cable at the IB-2 or IB-3 and connecting the 'C' set cable. For operating purposes, set 'C' will now become set 'A' or 'B', depending on which connexion is made, and the original set will assume the independent 'C' set function.

108. In addition to the basic set arrangement, additional vehicle and/or manpack radios designated set 'D', 'E' etc., may be installed and, if necessary, similarly substituted for set 'A' and/or 'B'.

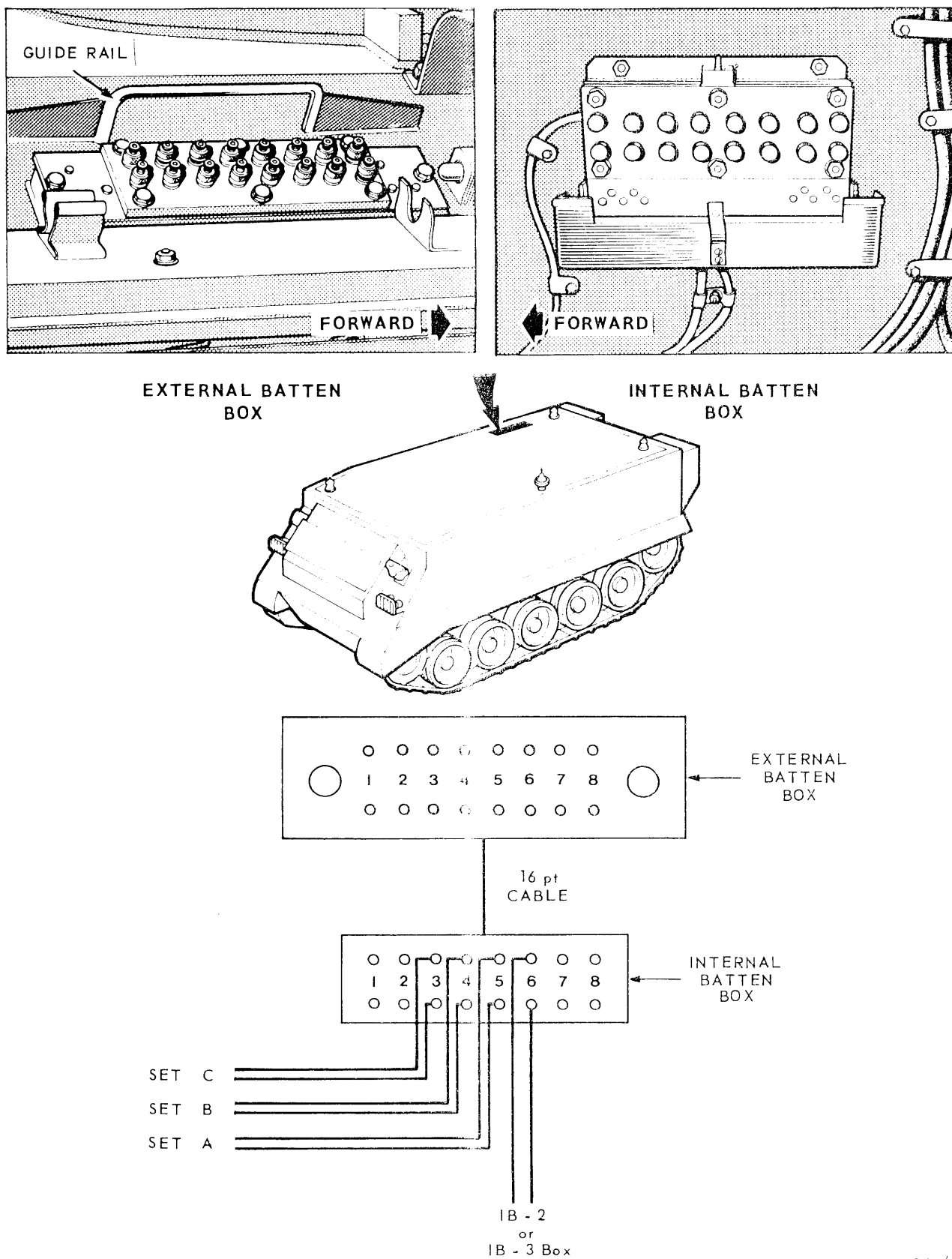
NOTE ...

The IB-3 has provision for three sets but the control boxes in the harness installed in the FV 432 have only a two set capability. The IB-3 has an 'ACTIC' facility whereby the 'B' set can be substituted by a 'C' set - Para 204 refers. This facility, however, offers no advantage over the above method of substituting the set cables and its use should be avoided.



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Fig 6 Set Connexions



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Fig 7 External and Internal Batten Box Connexions

REMOTE CONNEXIONS

109. To cater for all remote connexions to the harness and the radio sets an external batten box is provided on the RH side of the roof which is connected by a 16-point cable to terminals on a similar box on the underside of the roof as shown in Fig 7.

110. Each box contains eight pairs of terminals, numbered 1-8, of which only four pairs are used. Pairs 3, 4 and 5 are connected inside the vehicle to twin leads which run to set positions 'C', 'B' and 'A', respectively, for connexion to the remote terminals on the radio sets. This allows a radio set to be operated 'out of harness' from a remote position over D10 cable.

111. Pair 6 is connected to the remote terminals on the IB-2 Box for the 'in harness' remote control of radio sets, remote and communal IC. If the IB-3 box is installed as an alternative to the IB-2 the only facility available is communal IC.

POWER SUPPLY

112. The nominal 28V d.c. for the operation of the harness equipment is obtained from two float charged 12V 100Ah batteries located under the driver's seat. The supply is fed from the Radio Junction Box (RJB) on the wall above the forward RH sill and distributed by the IB-2 or IB-3 Box on the harness. For further information on the power supply circuit, see Part 1 of this User Handbook.

HARNESS ADAPTATIONS

113. If Clansman manpack (PRC) radios are to be used with the Basic or Command Harness an Interconnecting Box Harness Adaptor (IBHA) is required. For further information on this and other associated equipment, refer to the appropriate Part of this User Handbook for the PRC radio.

JUNCTION AND CONTROL BOXES

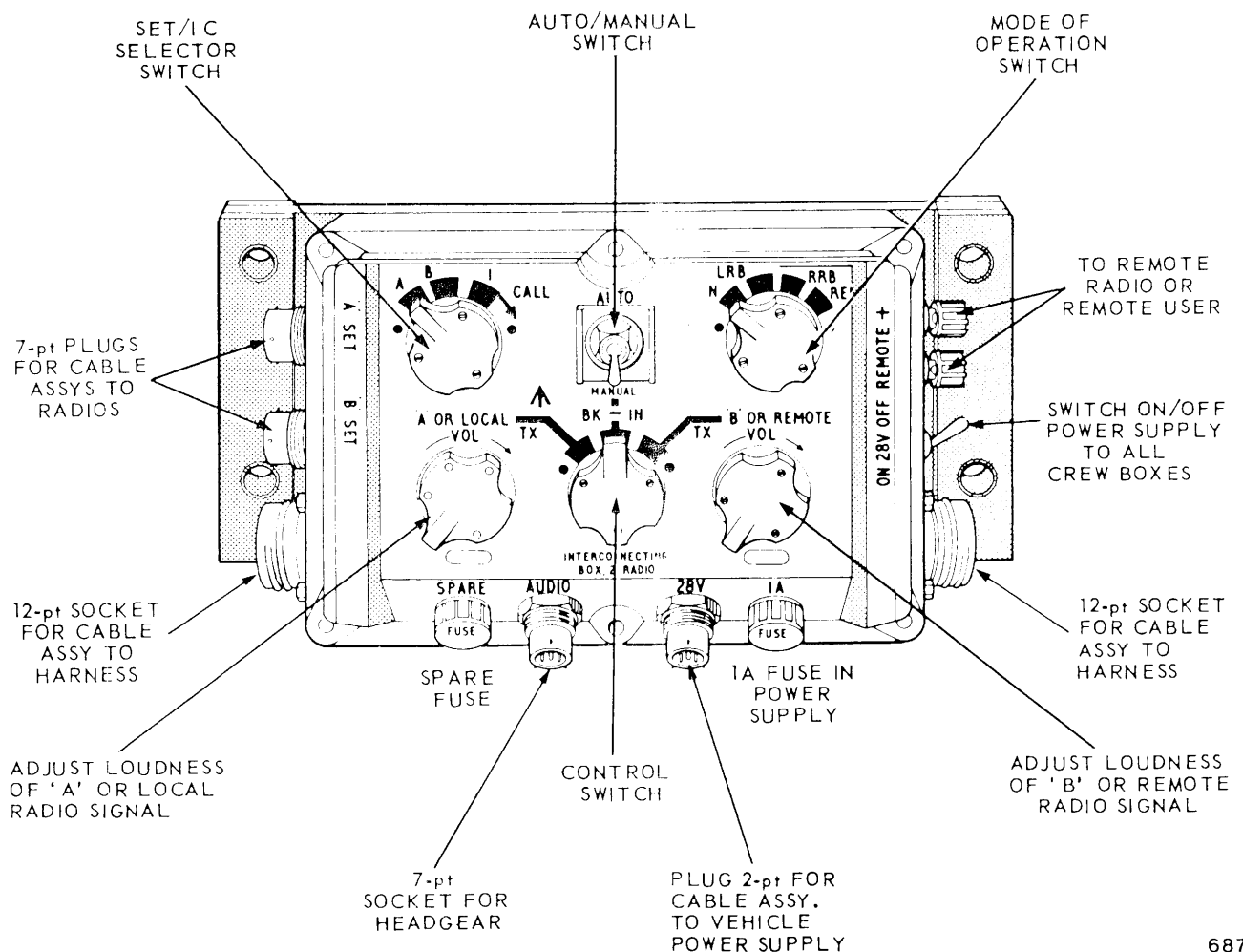
GENERAL

201. This chapter describes the various boxes used with the Clansman Basic and Command Harnesses in the FV 432. For more detailed information, reference should be made to the User Handbook for 'Clansman Radio Control Harness', Army Code No 61172.

INTERCONNECTING BOX 2-RADIO (IB-2)

202. The IB-2 is a combined control, junction and power distribution unit for the harness. It contains an IC amplifier and acts as the inlet and outlet to the harness for radios, remote users and communal IC. The controls, etc., and the connexions to the box are shown in Fig 8.

203. It enables two installed radios, or one installed radio and a remote radio to be connected for manual or auto rebroadcast, as appropriate, or a remote user to be connected into the harness to use an installed radio or talk to the crew using IC. These facilities are controlled by an operator with crew type headgear and pressel box plugged into the audio socket on the side of the IB-2.



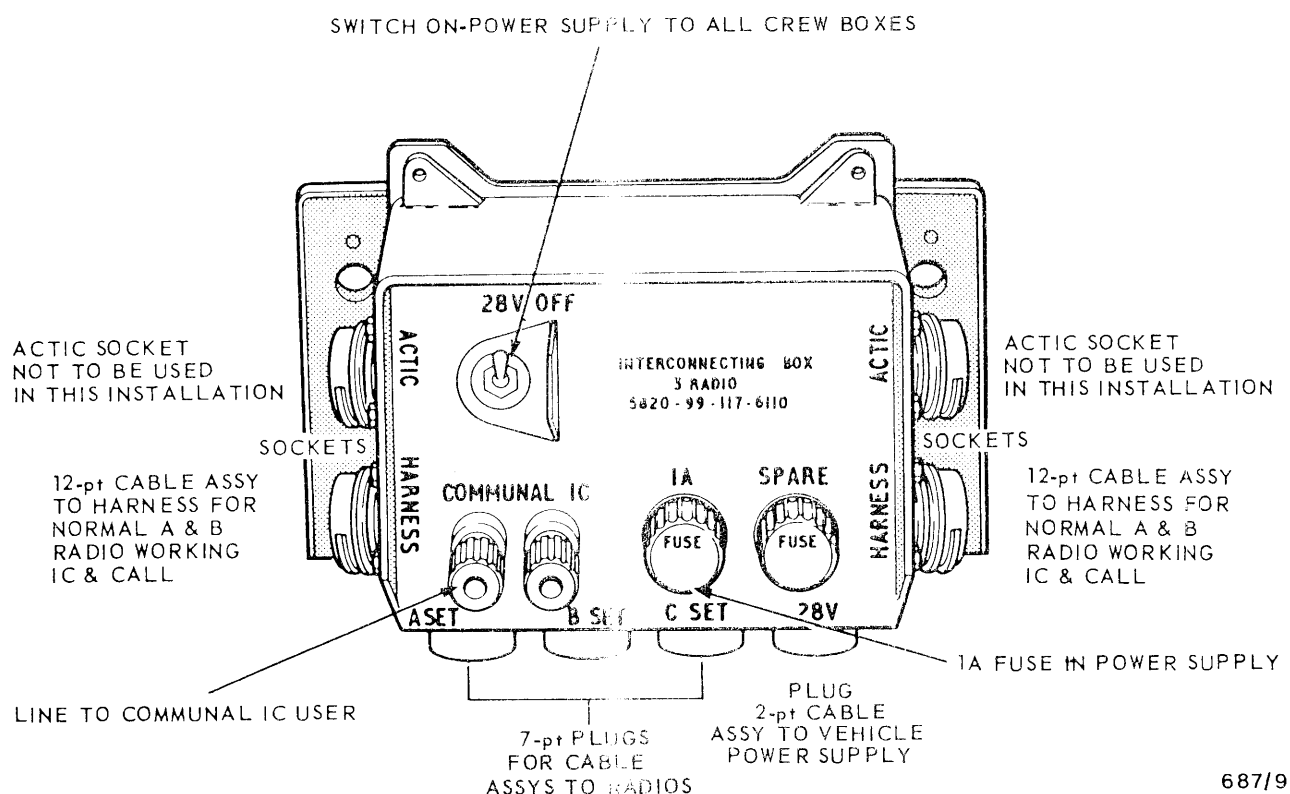
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Fig 8 Interconnecting Box 2-Radio (IB-2)

INTERCONNECTING BOX 3-RADIO (IB-3)

204. The IB-3 shown in Fig 9 may be mounted with adaptation and installed as an alternative to the IB-2 where rebroadcast facilities are not required. It is a combined junction, power distribution and IC amplifier for harness items in installations employing up to three radio sets. An 'ACTIC' facility is provided which can be used where two-set control boxes are employed, as in this installation. This enables a 'C' set to be selected in place of a 'B' set on a control box by removing the two HARNESS connectors from the IB-3 and inserting them into the 'ACTIC' sockets. This however has no advantage over simply substituting the 'A' or 'B' set connector for the 'C' set connector and its use should be avoided.

205. Apart from an ON/OFF switch for the power supply, there are no controls on the IB-3 and no provision is made for rebroadcasting, remote control and remote IC. (These facilities can only be obtained by a direct connexion 'out of harness' to the remote terminals on the radios, as described in the appropriate set user handbooks). Two terminals are provided however on the side of the box for communal IC which enables the independent IC's of up to eight vehicles to be joined to provide a common IC facility.



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Fig 9 Interconnecting Box 3-Radio (IB-3)

COMMANDER'S BOX FIXED (CBF) AND COMMANDER'S PERSONAL UNIT (CPU)

206. The Commander's boxes comprise a fixed box installed in the vehicle and a personal unit worn by the Commander. The units provide access to the two sets connected into harness and are as shown in Fig 10.

207. The CPU, which is a stowed item, is carried on a webbing strap around the Commander's neck and connected to the CBF by a 10-point flexible cable assembly. The webbing and cables are fitted with snatch release connectors.



The unit carries the imperative controls of radio selection, press-to-talk and override. Volume controls for the working and monitored radios are on the CBF. An independent foot pressel may be plugged into the CBF and will be in parallel with the press-to-talk button on the CPU. (This facility is used only in the Command role). Two switches on the CBF connect the independent foot pressel and select NORMAL/LIVE IC.

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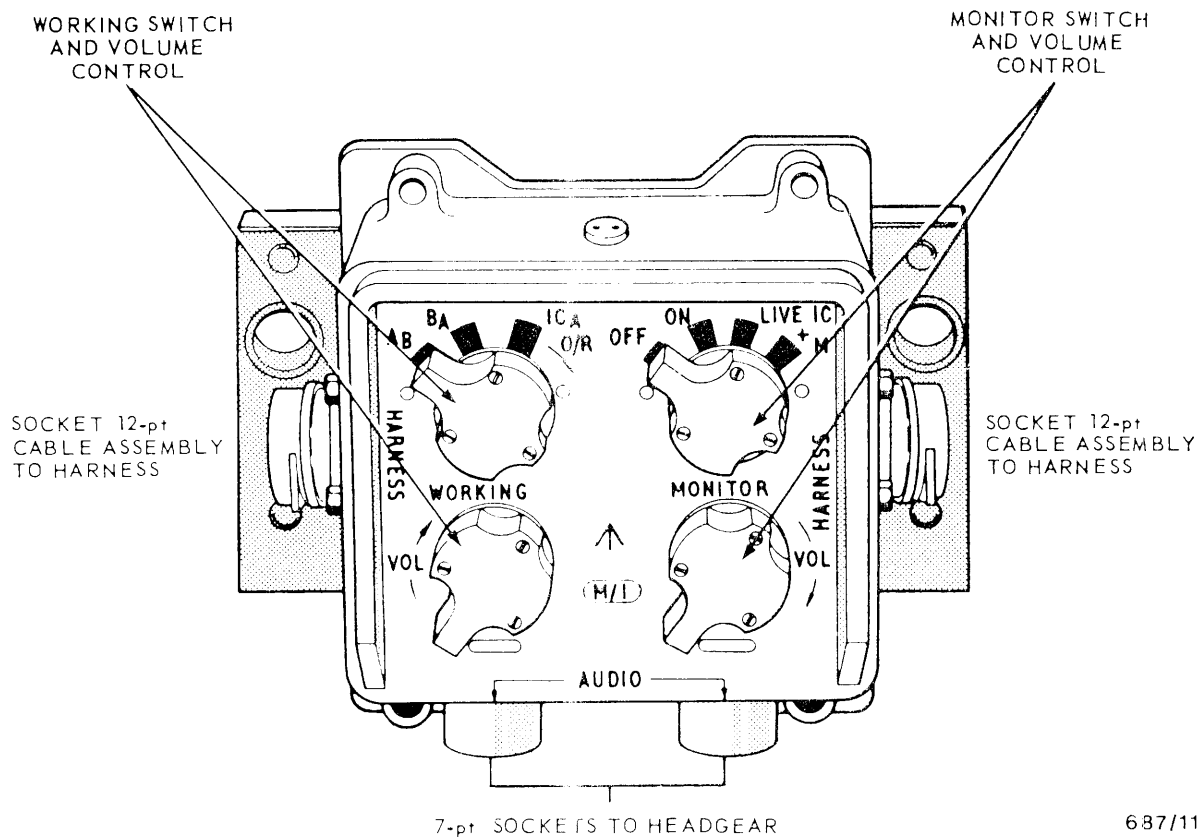


Fig 11 Crew Box 2-Set (CB-2)

CREW BOX 2-SET (CB-2)

208. The CB-2 (Fig 11) is a selection and control box which enables the driver and other crew members to select and operate one of the two installed radios, monitor the other and have IC and override facilities. Two sockets engraved AUDIO are provided for the connexion of crew type headgear with pressel boxes. In the Command role, one socket may be used for the connexion of an independent foot pressel.

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AUDIO EQUIPMENT

GENERAL

301. This chapter describes the amplifier and the loudspeaker employed with both harnesses and the various stowed items, such as headgear and handsets etc., which are provided. For further information on these items, reference should be made to the User Handbook for 'Clansman Radio Control Harness', Army Code No 61172.

AMPLIFIER AND LOUDSPEAKER

302. The Amplifier AF Loudspeaker (AAFL) and the Loudspeaker Vehicle Mounting (LSVM) are shown in Fig 12. The amplifier is provided with a volume control and a switch for selecting either of the three operating modes on the harness, i.e. IC, 'A' and 'B' radio, or an externally connected radio. Provision is made so that an override signal from any harness box replaces the selected signal.

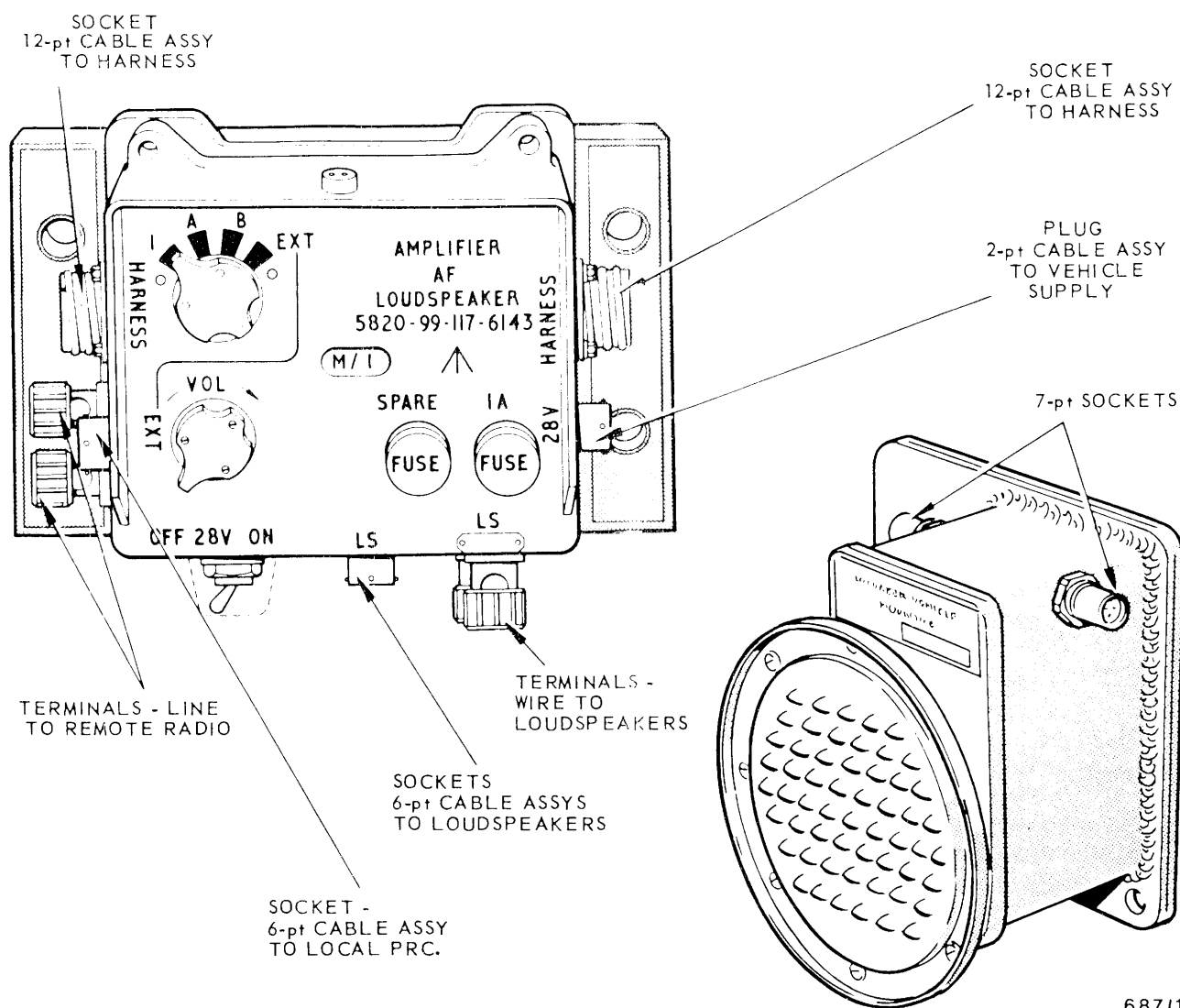


Fig 12 Amplifier (AAFL) and Loudspeaker (LSVM)

303. Sockets are provided for local loudspeakers and a local PRC radio, but the latter facility is not used in the FV 432. Terminals are provided for a remote loudspeaker and a remote radio. An ON/OFF switch controls the supply from the radio batteries and two 1A fuses, one active and one spare, are provided.

304. The loudspeaker is fitted with two sockets, one for the connexion to the LS socket on the amplifier and the other for the connexion to a second loudspeaker, as in the Command role (Fig 3 refers).

CREWMAN'S HEADGEAR

305. The Crewman's headgear (Fig 13) consists of a protective helmet fitted with rocking armature type receivers in noise excluding earshells and a boom mounted pressure gradient (noise cancelling) microphone. The earshells are fitted with acoustic valves to allow noise exclusion to be varied. The headgear can be connected to either a Commander's Personal Unit (CPU) or a Crewman's Pressel Box.

306. A feature of the headgear is the wiring of the receivers (earphones) which is so arranged that the LH receiver is electrically independent of the RH receiver. As a result, the same signal can be applied to both receivers or, alternatively, the working signal can be heard in the LH receiver and a monitored signal in the RH receiver, dependent on the switch settings on the control box.

STAFF USERS HEADGEAR

307. This headgear (Fig 13) is designed to be worn under the new infantry helmet. It is also equipped with noise excluding earshells with adjustable valves and a boom mounted microphone. A snatch connector is fitted which can be plugged into either a Commander's Personal Unit (CPU) or a Crewman's Pressel Box.

RESPIRATOR MICROPHONE

308. The respirator microphone allows full voice communication to be maintained when wearing AFV Crewman's or Staff Users Headgear with the Respirator Anti-Gas No S6. The microphone is snap fitted, allowing snatch off without disturbing the respirator, and consists of a rocking armature type receiver (used as a microphone) mounted on a rubber housing which is designed to clip over the outlet of the voice tube. The cord of the microphone terminates in a 3-pin plug which fits into the microphone socket on the headgear assembly.

PRESSEL BOX

309. The Pressel Box ('Cable Assembly Switch Electrical') can be used with either type of headgear as shown in Fig 13, and can be plugged into CB-2 and IB-2 Boxes. The switch on the Pressel Box may be set to either the 'live microphone' or the normal 'ON/OFF' mode by adjusting the stepped washer at the cord outlet end to the appropriate limit of its travel and tightening the retaining screw. A clip is provided on the box for attachment to the uniform.

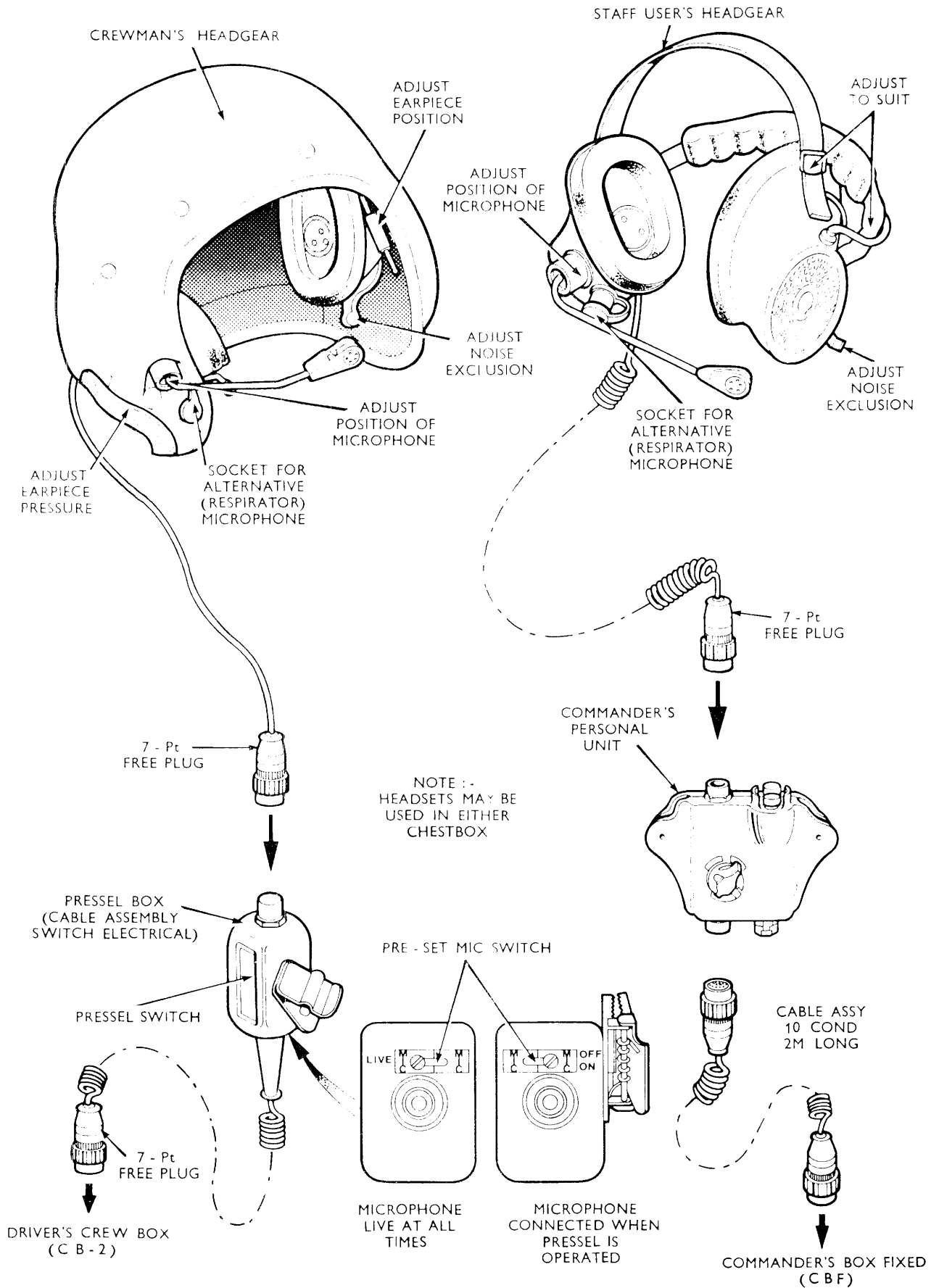
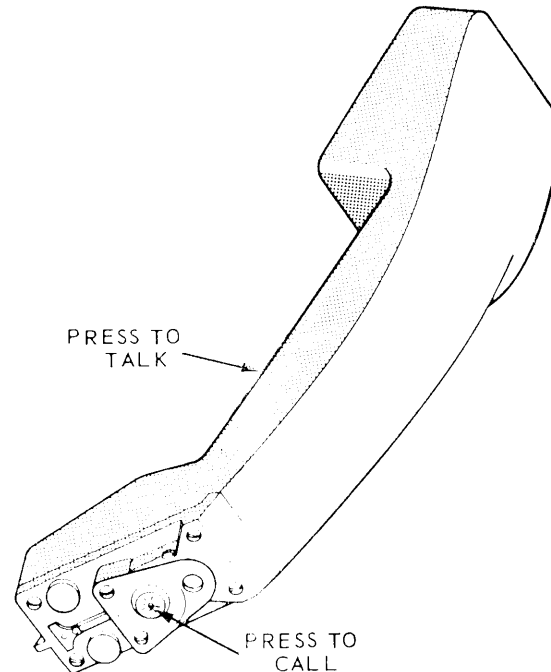


Fig 13 Clansman Headset Assemblies

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HANDSET REMOTE CONTROL

310. This handset, shown in Fig 14, can be used to remote control an installed radio at distances up to 3km (2 miles) over D10 cable connected to the batten box - Para 109 refers. It contains a transistorised amplifier to increase the signal to line and to provide a locally generated side tone. A pressel switch on the handset operates the radio transmit/receive or IC switching. A call button initiates the call tone which is heard by all connected to the harness. The handset is polarity conscious; if it is incorrectly connected to line a call tone will be heard at both local and remote positions.



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Fig 14 Handset Remote Control

INDEPENDENT FOOT-OPERATED PRESSELS

311. When the Command Harness is installed, two independent foot-operated pressel switches are provided which can be plugged into the audio sockets on CB-2 Boxes and the vehicle audio outlet. The pressels are free standing on the floor of the vehicle and can be easily moved as required. A hinged metal guard on each pressel provides protection against damage.

VEHICLE AUDIO OUTLET

312. An audio outlet socket is fitted on the LH side of the rear door (Fig 5) when the Command Harness is installed. A foot-operated pressel is connected into the socket which in turn connects with the CB-2 located above the rear door, midway between the two loudspeakers. The audio socket can also be used for crewman's headgear.

CHAPTER FOUR

SETTING UP AND OPERATING

GENERAL

401. This chapter gives step-by-step instructions for the various modes of operation available with the Basic and Command Harnesses. Note that rebroadcasting and remote control, apart from communal IC, are not available if an IB-3 Box is provided in place of an IB-2. The location of the various control boxes referred to in the instructions are shown in Figs 2 and 4. Instructions for the operation of radio sets are given in the appropriate set user handbooks.

CONNECTING THE HEADGEAR

402. Commander. Plug a Crewman's (or Staff Users) Headgear with Commander's Personal Unit (CPU) into the Commander's Fixed Box (CBF).

403. Crew. Plug a Crewman's Headgear with Pressel Box ('Cable Assembly Switch Electrical') into the CB-2 Box/es and the IB-2 Box if required.

SWITCHING ON THE SUPPLY

404. Switch ON the supply in the following sequence:

- a. The Radio Distribution Box (RDB) on the rear RH sill.
- b. The radio sets.
- c. The IB-2 (or IB-3) Box above the forward RH sill.
- d. The amplifier (AAFL) on the rear RH bulkhead above the sill, if required.

NOTE ...

This sequence minimises the risk of damage due to switching surges and transients. Switching off should follow the reverse sequence.

OPERATING THE AMPLIFIER AND LOUDSPEAKER (AAFL)

405. Set the selector switch to 'A' or 'B' (set) or 'I' (IC) as required and adjust the VOL control accordingly.

OPERATING THE CONTROL HARNESS (Normal Working - IB-2 or IB-3 Box Installed)

406. Commander Using the 'A' or 'B' Set

- a. Set the Radio Selector Switch on the Commander's Personal Unit (CPU) to 'A' or 'B' as required.
- b. Set the Monitor Switch on the CPU to 'OFF' or to 'MON' if the alternative set is to be monitored in the RH receiver (earphone).
- c. Adjust the WORKING VOLUME Control on the Commander's Fixed Box (CBF) for the required level from the working set. (This will be heard in the LH receiver if the alternative set is to be monitored).

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- d. If appropriate, adjust the MONITOR VOLUME Control on the CBF for the required level from the monitored set.
- e. Set the NORMAL/LIVE IC Switch on the CBF to 'NORMAL'.
- f. To transmit, operate the Press-to-Talk button on the CPU.

407. Commander Using IC

a. Over-Ride

(1) Depress the Over-Ride button on the CPU; the microphone is now 'live' for speech to all crew members, irrespective of their switch settings.

(2) Release the Over-Ride button and, if necessary, continue with IC as in Para b. or c. below.

b. Live IC (With 'A' or 'B' Set Working)

WARNING ...

Not to be used unless hands free operation of IC is essential. Prolonged, inessential use of this facility will cause crew fatigue and will reduce the hearing ability of the crew. This reduction in hearing may be temporary or permanent, depending on the length of exposure to the high noise level. In other words it can cause DEAFNESS. See Table 1, Para b.

(1) With the controls set as in Para 406, reset the NORMAL/LIVE IC Switch on the CBF to 'LIVE IC'.

(2) The microphone is now 'live' for IC but to initiate a call when the crew members are not switched for IC, depress the Over-Ride button on the CPU and speak. (The monitored set, if appropriate, will be heard at reduced level in the RH receiver with the IC).

(3) To transmit on the selected set, operate the Press-to-Talk button on the CPU.

c. Normal IC

(1) Set the Radio Selector switch on the CPU to 'I'.

(2) Set the Monitor Switch on the CPU to 'MON' if the 'A' set is to be monitored in the RH receiver.

(3) To initiate a call when the crew members are not switched for IC, depress the Over-Ride button on the CPU and speak.

(4) Use the Press-to-Talk button on the CPU for further speech.

408. Crewmen Using the 'A' or 'B' Set

- a. Set the WORKING Switch on the Crew Box 2-Set (CB-2) to 'AB' or 'BA' ('A' or 'B' set) as required. (Note that the second letter of 'AB' and 'BA' indicates which set will be monitored if that facility is selected).

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- b. Set the MONITOR Switch on the CB-2 to 'OFF' or 'ON' if the alternative set is to be monitored.
- c. Adjust the WORKING VOL Control on the CB-2 for the required level from the working set. (This will be heard in the LH receiver (earphone) if the alternative set is to be monitored).
- d. If appropriate, adjust the MONITOR VOL Control on the CB-2 to the required level from the monitored set. (This will be heard in the RH receiver).
- e. To transmit, operate the switch on the pressel box or the independent foot pressel if connected (Command role only).

409. Crewmen Using IC

a. Over-Ride

(1) Hold the WORKING Switch on the CB-2 against the spring at the 'O/R' position; the microphone is now 'live' for speech to all crew members, irrespective of their switch settings.

(2) Reset the WORKING Switch and, if necessary, continue with IC as in Para b. or c. below.

b. Live IC (With 'A' or 'B' Set Working)

WARNING ...

Not to be used unless hands free operation of IC is essential. Prolonged, inessential use of this facility will cause crew fatigue and will reduce the hearing ability of the crew. This reduction in hearing may be temporary or permanent, depending on the length of exposure to the high noise level. In other words it can cause DEAFNESS. See Table 1, Para b.

(1) With the controls set as in Para 408, reset the MONITOR Switch to 'LIVE IC' or to '+M' if, in addition, the alternative set is to be monitored.

(2) The microphone is now 'live' with reduced output for IC but to initiate a call when the other crew members are not switched for IC, it will be necessary to use the over-ride facility in Para a. above. (The monitored set, if appropriate, will be heard at reduced level in the RH receiver with the IC).

(3) To transmit on the selected set, operate the switch on the pressel box or the independent foot pressel if connected.

c. Normal IC

(1) Set the WORKING Switch on the CB-2 to 'ICA'.

(2) Set the MONITOR Switch on the CB-2 to 'OFF' or to 'ON' if the 'A' set is to be monitored in the RH receiver.

(3) To initiate a call when the other crew members are not switched for IC, it will be necessary to use the over-ride facility in Para a. above.

(4) For further communication, use the switch on the pressel box or the independent foot pressel if connected.

REBROADCAST AND REMOTE FACILITIES (Installations Equipped with IB-2 Box)

NOTE ...

To obtain the following facilities it is only necessary for the operator to transfer his headgear with pressel box to the AUDIO socket on the IB-2 Box when establishing a communication link or performing a Manual rebroadcast. At all other times he should use the CB-2, thereby retaining all the harness facilities.

410. Local Rebroadcast (LRB)

a. Set the top RH Mode of Operation Switch to 'LRB' and the AUTO/MANUAL Switch as required; to 'AUTO' for LRB between two VHF sets: to 'MANUAL' for LRB between one VHF and one HF set, or between two HF sets. (On rebroadcast the operator hears the 'A' set in his LH receiver and the 'B' set in his RH receiver. If rebroadcast is working, he hears the same signal in both receivers). Adjust the two VOL controls as appropriate.

b. For manual operation use the bottom centre Control Switch to control the direction of the rebroadcast.

c. The above switch is biased to the 'BK-IN' position which enables the local operator to listen to both radios and, by pressing his pressel, to break into the net by causing both radios to transmit. (Operation of a pressel at a crew box switched to 'A' or 'B' will also cause both radios to transmit).

411. Remote Rebroadcast (RRB)

a. Ensure that the leads from terminal pair 6 on the internal batten box are connected to the terminals on the IB-2 Box.

b. Outside the vehicle, connect the D10 cable provided with the kit to terminal pair 6 on the external batten box. Connect the other end of the cable to the remote vehicle or radio which must have a similar Clansman type remote interface. (Up to 3km (2 miles) of cable can be used for this connexion).

c. Set the local set ('A' or 'B') on the top LH Set Selector Switch on the IB-2 Box. (The remaining set can be operated normally from the harness).

d. Set the top RH Mode of Operation Switch to 'RRB' and the AUTO/MANUAL Switch as required; to 'AUTO' for RRB between two VHF sets: to 'MANUAL' for RRB between one VHF and one HF set, or between two HF sets. (On rebroadcast the operator hears the local set in his LH receiver and the remote set in his RH receiver. If rebroadcast is working, he hears the same signal in both receivers). Adjust the two VOL controls as appropriate.

NOTE ...

An IB-2 at a remote station must be set to 'AUTO' for manual control at the local station. For manual control at the remote station, set the local station IB-2 to 'AUTO' and the remote station to 'MANUAL'.

e. For manual operation use the bottom centre Control Switch (at the controlling station) to control the direction of the rebroadcast.

f. The above switch is biased to the 'BK-IN' position which enables the local operator to listen to both radios and, by pressing his pressel, to break into the net by causing both radios to transmit. (Operation of a pressel at a crew box switched to the local set participating in the rebroadcast causes both local and remote sets to transmit).

412. Remote Control of Radio and Remote IC

a. Ensure that the leads from terminal pair 6 on the internal batten box are connected to the terminals on the IB-2 Box.

b. Outside the vehicle, connect D10 cable to terminal pair 6 on the external batten box. Connect the other end of the cable to a remote handset (or a Remote Combining Unit) - see Para 310.

c. Set the top RH Mode of Operation Switch on the IB-2 to 'REM'.

d. For remote control of a radio, set the top LH Set Selector Switch to 'A' or 'B' (set) as required.

e. For IC within the vehicle and to the remote user, set the top LH switch to 'I'.

REBROADCAST AND REMOTE FACILITIES (Installations Equipped with IB-3 Box)

413. Rebroadcast and remote facilities, except for communal IC, are not available 'in harness' when the IB-3 Box is installed. These facilities, however, can be obtained 'out of harness' by a direct connexion to a radio set via the batten box, as described in Para 109 and in the appropriate set user handbooks.

COMMUNAL IC (Installations Equipped with IB-2 or IB-3 Box)

414. Ensure that the leads from terminal pair 6 on the internal batten box are connected to the terminals on the IB-2 or IB-3 Box.

415. Outside the vehicle, connect the D10 cable provided with the kit to terminal pair 6 on the external batten box. Connect the other end of the cable to the terminal box of the other vehicle which must be equipped with a similar type harness. (Up to 3km (2 miles) of cable may be used for this connexion).

416. Set the controls on CPU and CB-2 Boxes for any of the IC modes described earlier.

417. Set the controls on the IB-2 Box, if fitted, to 'I' and 'REM'.

FUSE REPLACEMENT DATA

418. Fuse data is given in Table 2. Always ensure that the supply is switched OFF before attempting to replace a defective item.

TABLE 2

FUSE REPLACEMENT DATA

UNIT	DESCRIPTION	NATO STOCK No
IB-2	Fuse link cartridge 1A 250V size 00	Z32/5920-99-059-0138
IB-3	Fuse link cartridge 1A 250V size 00	Z32/5920-99-059-0138
AAFL	Fuse link cartridge 1A 440V size 00	Z32/5920-99-059-0109