



Rockwell
International

instructions

Collins Telecommunications Products Division

523-0767965-003211

3rd Edition, 1 January 1979

Channel B IF (637-2647-())

Printed in USA

1. DESCRIPTION

Channel B IF 637-2647-(), shown in figure 1, is a 2-layer planar card with 56-pin, edge-on connector (2 layers, 28 pins each). The channel B if card has subminiature rf connectors for connecting to channel A if output (J1), channel A if input (J4), 450-kHz injection input (J5), and 450-kHz receive if input (J6).

The channel B if card consists of filter control, channel B if, channel B audio detector, and channel B AGC circuits.

The channel B if configuration differences are as follows:

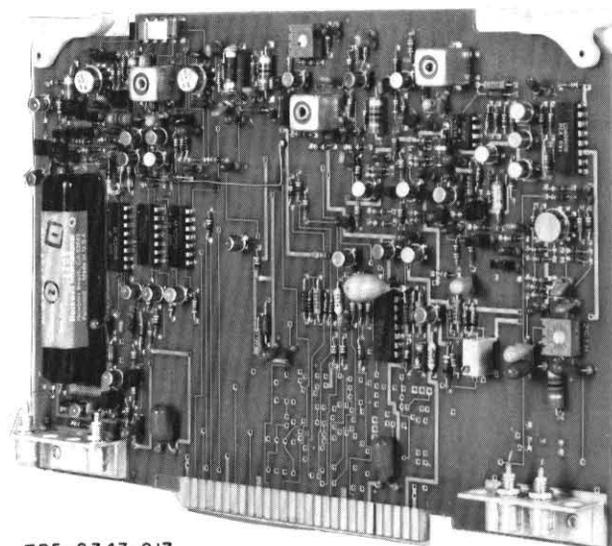
- 637-2647 -001, FL2 has 2.75-kHz bandwidth (250 to 3000 Hz, LSB).
- 637-2647-002, FL2 has 3.05-kHz bandwidth (250 to 3300 Hz, LSB).
- 637-2647-003, FL2 has 3.10-kHz bandwidth (300 to 3400 Hz, LSB).

2. PRINCIPLES OF OPERATION

2.1 General

The channel B if receives the 450-kHz receive if input, filters the 450-kHz receive if signal, and provides the following:

- 450-kHz receive if output
- A product-detected channel B SSB audio output
- AGC control signals



TP5-2343-017

Channel B IF
Figure 1

2.2 Bandpass Filter Control Circuits (Refer to figure 2.)

The channel B if provides filter selection for receive if signals. Filter selection is initiated by the mode control signal, bandwidth control signal, and/or rf transmit signal. This means only that these signals are applied to the channel B if card to initiate filter selection; it does not reflect a mode of operation, selection of a bandwidth, or transmission of an rf signal.

FL2 (LSB) is selected when an FL2 (LSB) enable signal or an ISB enable and rf transmit signals are applied to the channel B if card.

NOTICE: This section replaces second edition dated 1 June 1978.