

Service Bulletin

Alpha 1700 Clean Cab Radio

Feb 8, 1999

Service Bulletin: 42-0686-830

Subject: 12.5 kHz Channel Spacing Field Upgrade Kit, 1939-0686-830

Overview

Receiver

To enhance the performance of the IF/ Audio board from a bandwidth of ± 7.5 kHz to a bandwidth of ± 3.75 kHz. After checking the 12dB sensitivity, some slight tuning may be necessary.

Transmitter

To maximize the modulation from the present 5 kHz to 2.5 kHz.

Upgrade Procedure

Receiver

Remove the IF/Audio Board A1A3 (1939-0686-106). Replace with IF/Audio Board (1939-0686-829). Check the 12dB sinad sensitivity at the antenna jack for .5uv or better. If sensitivity is not met, slightly adjust A1A3-L1 and A1A3-L2 for maximum 12dB sinad. (see fig. 6-1)

Transmitter

On the Synthesizer Interface Board change R15 from 5.1k ohm resistor to a 9.1k ohm resistor. (see fig. 6-2 for location)

Adjust the modulation to 2.5kHz as follows: With a dummy load connected to the antenna and a modulation meter to check the modulation, key the transmitter and whistle or speak loudly into the microphone. Adjust A1A6-R17 until the peak modulation is slightly less than 2.5kHz.

Modified materials parts list: 1939-0686-830

Modified IF/Audio board: 1939-0686-829

9.1K resistor: 4764-9104-00



