



SERVICE BULLETIN

from: TRIO-KENWOOD COMMUNICATIONS, INC.

TS-830S

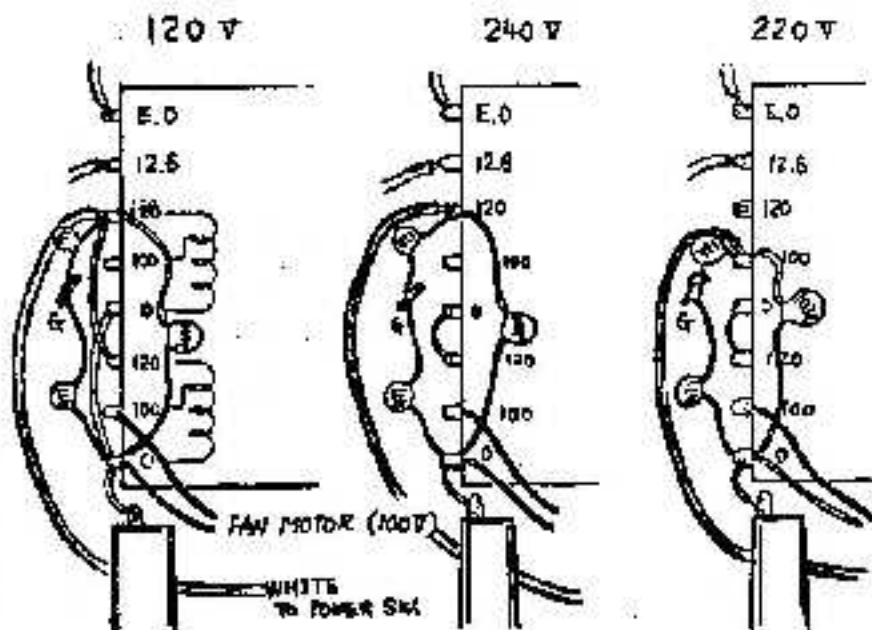
#837

SUBJECT: TS-830S OPERATION ON 240V AC

DATE 12/15/80

To operate the TS-830S on 240V AC, the power transformer split primaries must be rewired from parallel to series connection.

1. Unplug the AC power cable.
2. Remove the bottom cover.
3. Remove the jumper wires between the two ϕ terminals and two 120 terminals on the bottom of the power transformer.
4. Connect the adjacent 120 and ϕ terminals at the middle of the transformer. This will provide 240V AC operation.
For 220V A. operation, connect the adjacent 100 to ϕ winding.
5. Change the AC fuse from 6A to 4A. Tag the power cord at the back of the radio to indicate that the transformer is strapped for 240V AC, and the power fuse should be 4A, and not 6A.
6. Replace the bottom cover and reconnect power to verify your work.



JEB/yn



SERVICE BULLETIN

from: TRIO-KENWOOD COMMUNICATIONS, INC.

TS-830S

#840R

SUBJECT: TS-830S Frequency Shift

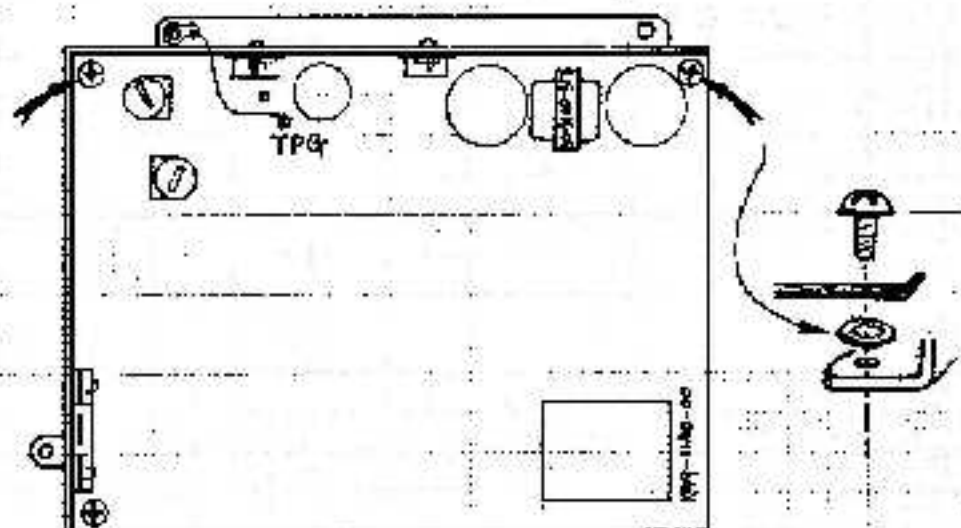
DATE 04/14/82

Some users may report an intermittent shift in display and operating frequency. This may typically be a 1 to 4 KHz random shift. Cause will be a loose grounding screw on the AF-AVR unit heat sink.

On the AF-AVR unit X49-1140-00, there are three self-tapping screws holding the aluminum heat sink to the PCB. These also supply the ground connection to that section of the board. Between the heat sink and PCB foil, add a tooth-lock washer N17-1030-41 at the two self-tapping screws shown. (The remaining screw already has a tooth-lock washer.) When replacing the board to the chassis, add a solder lug E23-0420-05 to the heat sink mounting screw as shown, and tighten all screws for this board. Solder an insulated lead between the TPG (Test Point Ground) wrap post adjacent to C81, and the added solder lug.

Procedure:

1. Remove the top cover (8 screws) and unplug the speaker.
2. Remove the bottom cover (8 screws).
3. Remove 5 screws holding the AF-AVR unit and swing the board over. Leads do not have to be unplugged.
4. Add two tooth-lock washers as shown.
5. Replace the circuit board and heat sink to the chassis, adding the solder lug as shown.
6. Solder a jumper between the TPG wrap post and the added solder lug.
7. Replace the top and bottom covers.



Installation time for this procedure is $\frac{1}{2}$ hour or less.

JEB/sh



SERVICE BULLETIN

from: TRIO-KENWOOD COMMUNICATIONS, INC.

TS-830S

#847R

SUBJECT: TS-830S low voltage Supply Optional Improvements

DATE 04/14/82

Power supply drift and stability may be improved by these optional component changes and additions.

On the AF AVR unit X49-1140-00 (Vicinity of Q27-Q30) change:

R124 from 1k Ω to 1.5k Ω (RD14CB2E152J) *
R127 from 470 Ω to 390 Ω (RD14CB2E391J) *
R130 from 47k Ω to 33k Ω (RD14CB2E333J) *
D25 from WZ-061 to XZ-053 (V11-4181-60) *

*This will improve temperature drift from a maximum of about 100mV to a maximum of 10mV, and may be applied to any unit before serial # 201xxxx.

Add two 22k Ω $\frac{1}{4}$ W resistors (RD14CB2E223J), one each across Q30 & Q34, collector to emitter. *

**This will improve overall stability and may be applied to any unit before serial #105xxxx.

NOTE: These changes are at the owners option and may not be performed in-warranty.



SERVICE BULLETIN

from: TRIO-KENWOOD COMMUNICATIONS, INC.

#851R

SUBJECT: TS-830S Noise Blanker Optional Improvements

DATE 7/26/82

Receiver Cross-modulation while using the noise blanker may be improved by these optional component changes and additions. Realignment is not required.

At the Noise Blanker level control VR8, change R19 from 22 Ω to 15 Ω (RD14BE2E150J)*

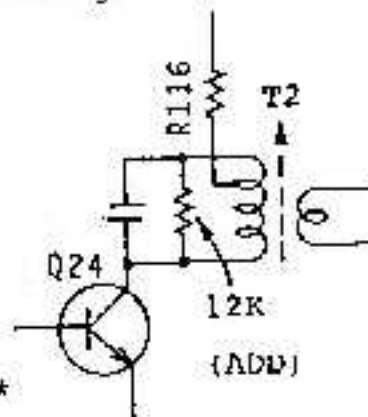
On the AF AVR unit X49-1140-00 (vicinity of Q20) change:
D22 from an MV-13 to an MV-203 (V11-3379-16)*
R96 from 2.2k Ω to 820 Ω (RD14CB2E821J)*

(vicinity of Q24)

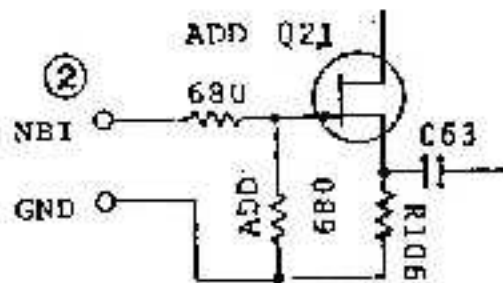
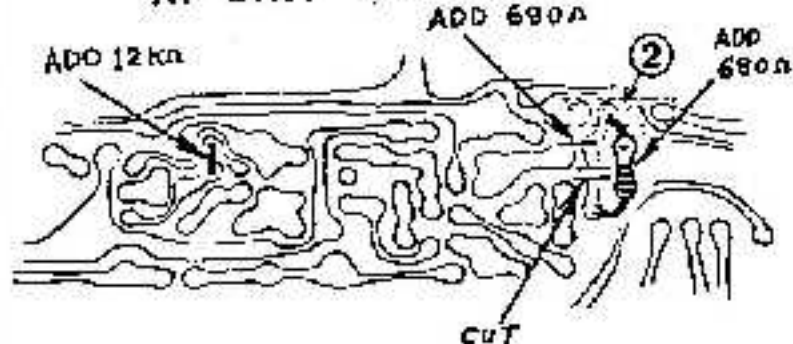
R112 from 47K Ω to 56K Ω (RD14CB2E563J)*

Across T2, (Fig. 1) add a 12K Ω (RD14CB2E123J)*

At Q21 (Fig. 2,3) add 2 pcs. 680 Ω (RD14CB2E681J)*



AF UNIT X49-1140-00



- NOTE: 1. Applies to any unit before serial: 2010000*, 1120950*, 1112058*.
2. These changes may be performed at the owners option and may not be performed in-warranty.

JEB/sh



SERVICE BULLETIN

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TS-830S

#857

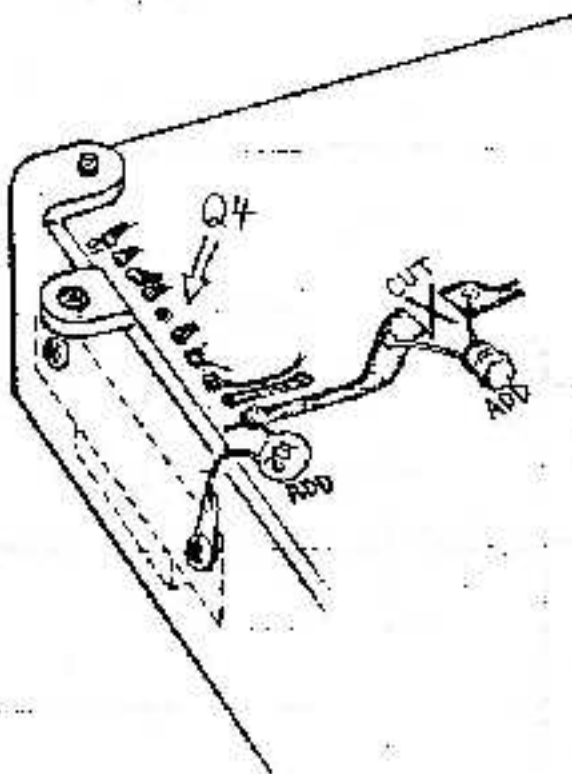
SUBJECT: TS-830S Transmitter "Talkback"

DATE 2/11/82

Transmitter "talkback", either with or without a linear amplifier, may be eliminated by adding a filter at the receiver audio power amplifier.

On the AF unit X49-1140-00 at Q4, cut the 12V DC B+ line between R47 and C28, and add a 1 μ h choke (L40-1092-02) in-line. Add a .01 μ F cap (C52-1710-36) from the 1C pin 1 to ground, as shown using a 3mm lug (E23-0015-04) under the IC mounting screw on the Heat Sink.

Note: Installation time for this procedure is 1/2 hour or less.



JEB/sh