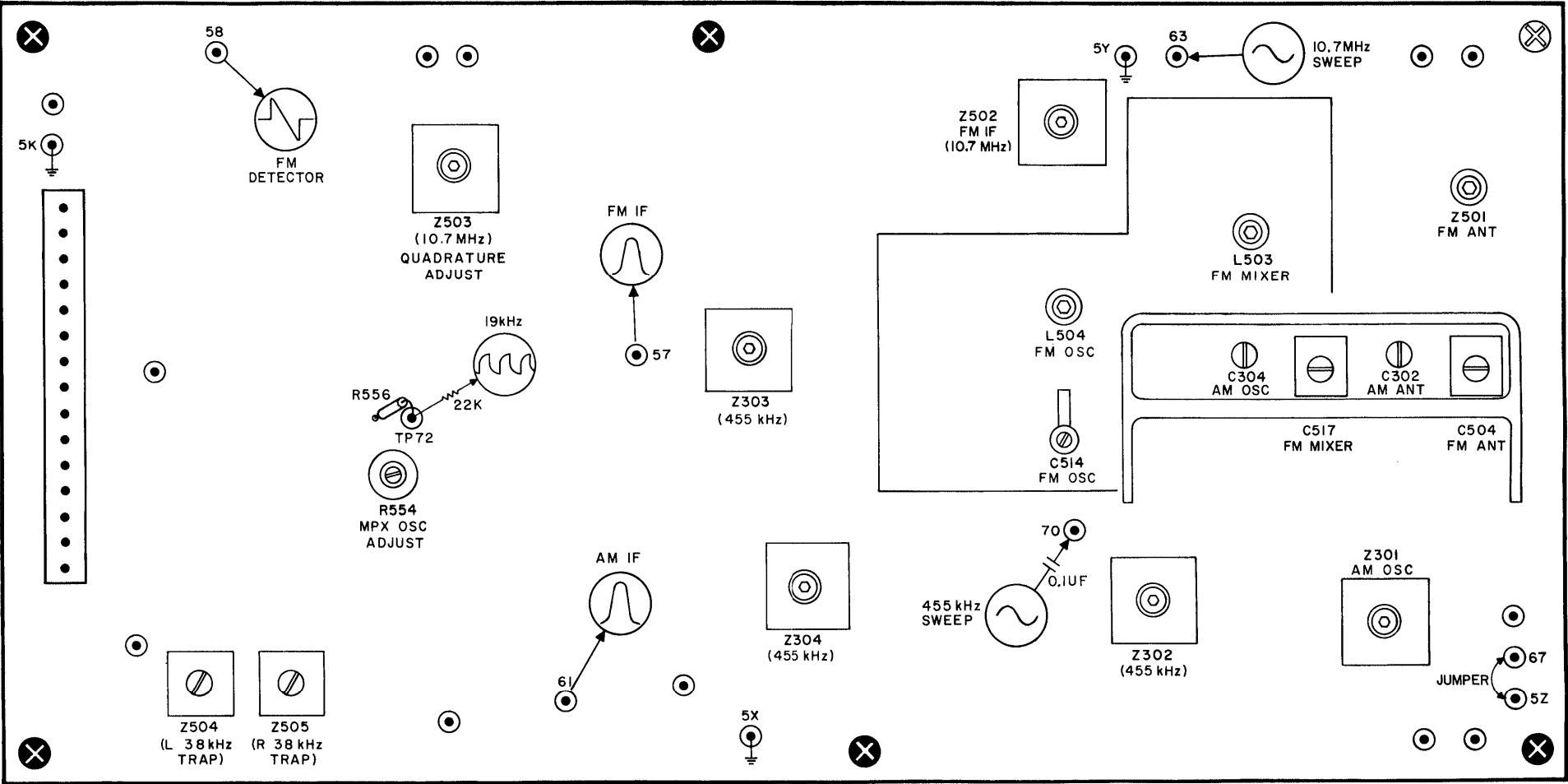


ITEM	GENERATOR	DIAL SETTING	INDICATOR	PROCEDURE
9. MPX OSC ADJUSTMENT	Set to position of non-interference, with CW output of 2 mV.	Tune to generator. Release FM MUTING OFF pushbutton.	Connect frequency counter to TP 72.	Adjust R554 for indication of 19,000 Hz ( $\pm 50$ Hz).
ALTERNATE MPX OSC ADJUSTMENT	Set to position of non-interference, with CW output of 2 mV.	Tune to generator. Release FM MUTING OFF pushbutton.	Scope vert input to TP 72 through 22K. Scope hor input to MPX generator 19,000 Hz pilot output.	Adjust R554 for stable Lissajou display as shown in MPX OSC response.
10. 38 kHz TRAP ADJUSTMENT			Scope vert input to audio oscillator output. Scope hor input to MPX generator 19,000 Hz pilot output.	Adjust osc frequency for stable 2:1 Lissajou display (38,000 Hz). Note: Do not change osc frequency; proceed with 38 kHz trap adjustment.
11.	Modulate generator with 38,000 Hz, $\pm 75$ kHz deviation. Set generator output to 2 mV.	Tune to generator.	AC VTVM and scope vert input to OUT TO RCDR FRONT LEFT jack, another AC VTVM and scope to FRONT RIGHT jack.	Adjust Z504 and Z505 for minimum (typically more than 40 dB below audio level).

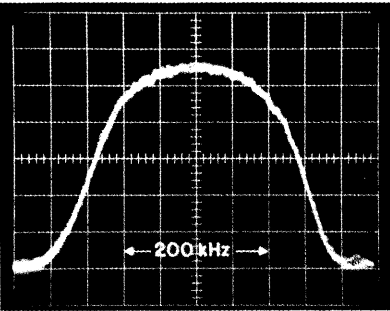
AM ALIGNMENT – AUDIO DISPLAY and AM DNL depressed, TONE CONTROLS and MASTER BALANCE to center. SPEAKERS to PHONES ONLY, MODE/MONITOR to STEREO, SELECTOR to AM, MASTER VOLUME to MIN.

Maintain generator output as low as possible for suitable indication.

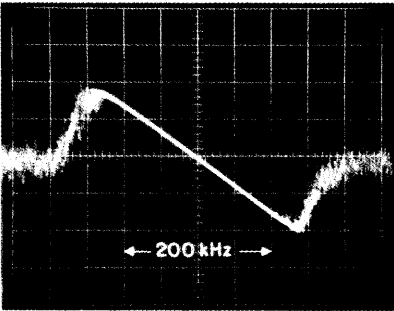
ITEM	GENERATOR	DIAL SETTING	INDICATOR	PROCEDURE
1. IF ALIGNMENT	455 kHz sweep generator to pin 70, gnd to pin 5X. Use 0.1 uF capacitor in series with generator lead.	Position of non-interference near 1400 kHz.	Scope vert input to pin 61, gnd to pin 5X.	Connect a jumper between pin 67 and pin 5Z. Adjust Z304, Z303, Z302 top and bottom slugs for max gain and best symmetry. Keep signal low enough for noise on response as shown in AM IF. Disconnect jumper.
2. FRONT END ALIGNMENT	AM generator to EXT AM ANT and GND terminals. Open GND link. Set to 600 kHz. Modulate with 400 Hz, 30% modulation.	Center of 600 kHz calibration mark on dial.	Front panel signal meter, M1.	Adjust Z301 and L300 (antenna) for max deflection. Reduce generator output to keep panel meter at approx 3.
3.	Set to 1400 kHz.	Center of 1400 kHz calibration mark on dial.	Front panel signal meter, M1.	Adjust C304 and C302 for max deflection. Keep meter at approx 3. Repeat steps 2 and 3 for max signal and accurate dial calibration.



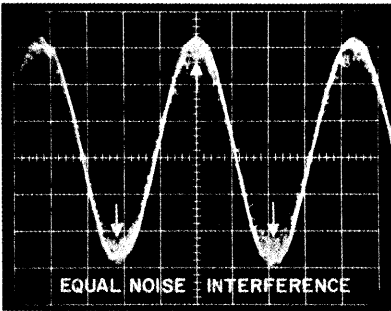
NOTE: CHASSIS GROUNDS ARE COMPLETED THROUGH MOUNTING SCREWS (X). TIGHTEN BEFORE ATTEMPTING ALIGNMENT.  
AL2301-177 304, 404, 504



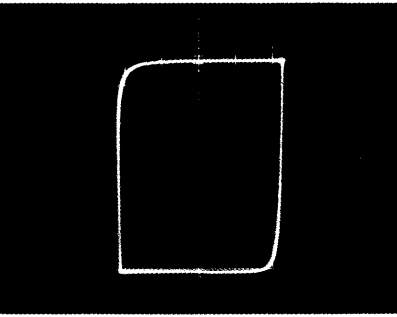
FM IF



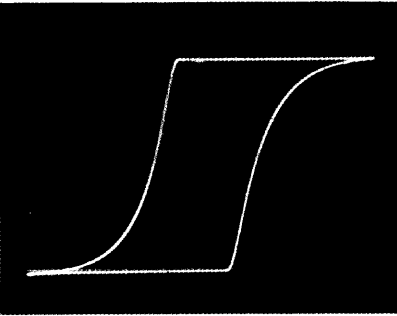
FM DETECTOR



SYMMETRICAL TUNING



MPX OSC



AM IF

