IMPORTANT NOTICE

The transmitter section of this transceiver may only be serviced by, or under the direct supervision of a qualified technician having a valid First or Second Class FCC Radiotelephone license. This includes internal adjustments or replacement of crystals, transistors, or any other components which can affect the performance of the transmitter. Servicing should only be done by a licensed, capable technician using suitable equipment and having complete knowledge of proper CB servicing techniques.

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List of Illustrations

General Description

RCA CB Co-Pilot Citizen's Band Transceivers Models 14T260, 14T270, 14T303, 14T304 and 14T305 are fully transistorized, FCC type approved, 40 channel CB units designed for two-way AM radio communication in the 26.965 to 27.405 MHz Class D citizen's band. All models except 14T303 are mobile units and operate on 12-15 volts DC (13.8 V Nominal) with either positive or negative ground and are fused in the input power cable. Model 14T303 is a base station unit with built-in power supply and is designed to operate from a 120 VAC 50/60 Hz source. Operation on all 40 CB channels is provided through use of two built-in crystals operating in a highly stable PLL (phase-lock-loop) design. All receiver and transmitter crystal controlled frequencies are synthesized in the PLL circuitry.

All units feature switchable ANL circuitry for automatic noise limiting, squelch control and built in RF gain controls to optimize receiver sensitivity. External PA and speaker jacks are provided. Models 14T270, 14T303 and 14T305 incorporate a Noise Blanker switch, Delta Tune circuitry for improved reception of off-frequency signals and a LOCAL/DISTANT switch, also an RF/CAL/SWR switch and meter for adjusting antenna SWR ratio.

Other individual features such as an S/Mod Meter, Tone Control, front panel dimmer control, On-The-Air, Receive and Transmit Lights, Mod light and head phone jack are featured on one or more of the models as outlined in the specific operating instructions for the particular model.

Typical Specifications

General

Frequency Range	26.965 – 27.405 MHz
Channels	40 (PLL Synthesized)
Frequency Toleance	±0.005%
Operating Temperature Range	–30°C to +50°C (–22°F to +112°F)
Power Source	12–15 VDC (13.8 V nom.) Positive or Negative Ground (or 105–120 VAC 50/60 Hz for 14T303 only)
Current Drain	Transmit: 1.5A nom. Receive: 1.2A nom. (full audio)

Transmitter

Emission	6A3
RF Power Output	4W (FCC Maximum)
Modulation Type	AM
Modulation Level	Up to 100% Max (Limited to FCC Specs)
Attenuation of Spurious and Harmonic Radiation	60 dB (Min)
Antenna Input Impedance	50 Ohms

Receiver

Sensitivity	0.5 microvolts for 10 dB S/N
Adjacent Channel Rejection	–40 dB or more
Image Rejection (1st IF)	60 dB
Spurious Rejection (except images)	45 dB nom.
IF Frequencies	
1st IF	10.695 MHz
2nd IF	455 kHz
Squelch Sensitivity	1.5 uV to 100 uV
Audio Output	3 W

Mechanical

14T260

Dimensions	6-3/8" x 2-1/4" x 7-7/8" (162mm x 57mm x 200mm)
Weight	3.5 lbs (1.6 kg)

14T270

Dimensions	7" x 2-5/16" x 8-1/4" (178mm x 59mm x 209mm)
Weight	3 lbs 13.6 oz (1.75 kg)

14T303

Dimensions	12-1/4" x 10-1/8" x 4-1/4" (311mm x 257mm x 108mm)
Weight	8 lbs 13 oz (4 kg)

14T304

Dimensions	7" x 2-5/16" x 8-1/4" (178mm x 59mm x 209mm)
Weight	3 lbs 13.6 oz (1.75 kg)

14T305

Dimensions	7" x 2-5/16" x 8-1/4" (178mm x 59mm x 209mm)
Weight	3 lbs, 13.6 oz (1.75 kg)

Circuit Description

General

Transceiver Models 14T260, 14T270, 14T303, 14T304 and 14T305 are 40 channel CB units which use a Phase Locked Loop (PLL) system of frequency synthesization to produce the crystal controlled channel and IF signals used in operation of the transmitter and receiver sections of the transceivers. The basic PLL system is comprised of a free-running voltage controlled oscillator (Part of IC102), a phase detector, a reference crystal oscillator Q1 and a programmable divider IC1, as seen in PLL block diagram Figure 1 or Figure 3.

The VCO operates in the frequency range of 17.18 to 17.62 MHz and is used to produce two output signals; one at 37.66 to 38.10 MHz, a second at 2.86 to 3.3 MHz. Reference oscillator Q1, which is crystal controlled, operates at a frequency of 10.24 MHz. Its output is fed through a BPF/doubler resulting in an output signal of 20.48 MHz. This signal beats with the VCO 17 MHz free running signal producing a 37.66 to 38.10 MHz output which is fed to the receiver RF amplifier and also to

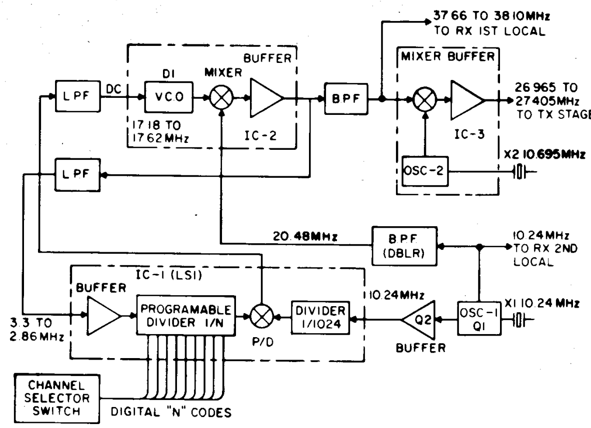
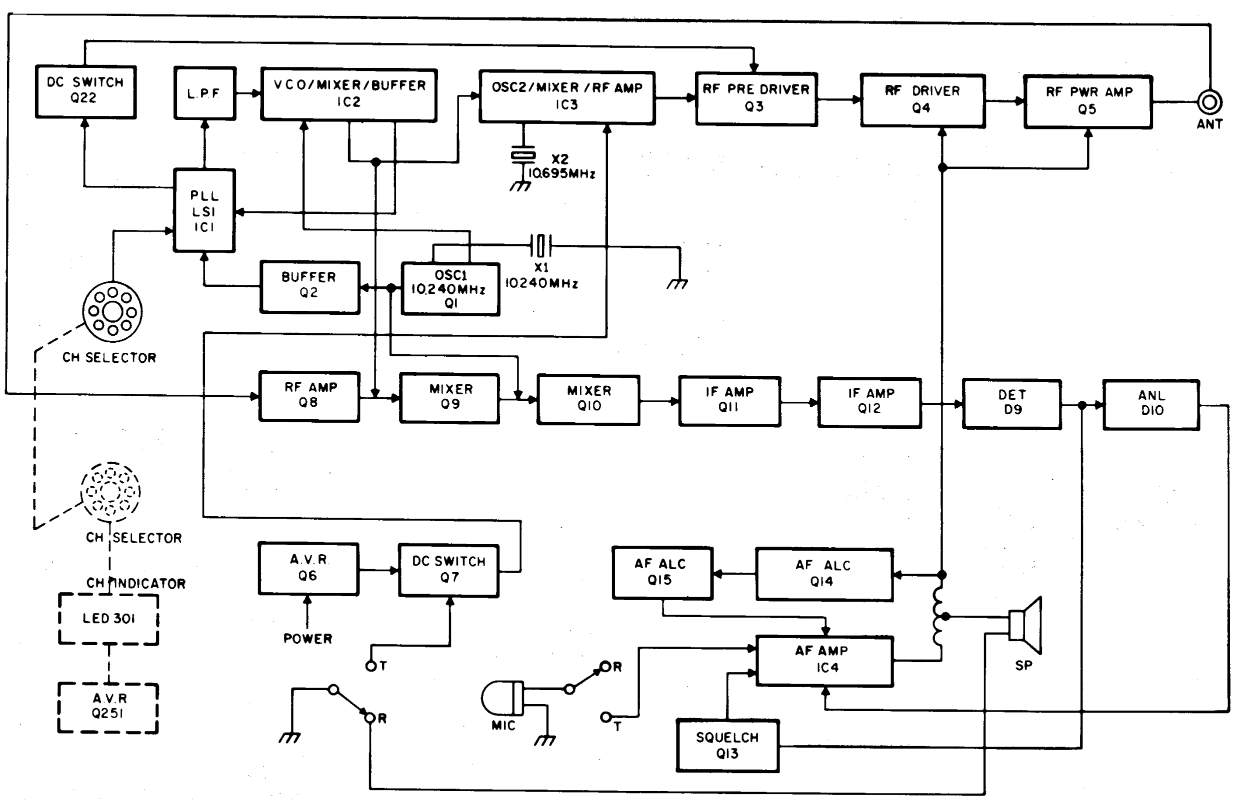


Figure 1 – PLL Block Diagram (except 14T305)

IC3, the transmitter Osc/Mixer/Buffer. The second VCO output signal, at 2.86 to 3.3 MHz is fed to the programmable divider in IC1. Simultaneously the 10.24 MHz output of Q1 (through buffer Q2) is applied to the programmable divider in IC1 and is divided down in 10 kHz steps producing signals in the 2.86 to 3.3 MHz range. As a channel is chosen by the channel selector, an "N"



DOTTED ---- CIRCUITRY IS IN MODEL 14T304 ONLY.

Figure 2 – Block Diagram for 14T260 & 14T304

code signal (see Frequency table on page 13) is applied to the terminals of the programmable divider in IC1, to preset the divider. The two signals, the crystal signal from Osc1 Q1, and the signal from the VCO via the LPF and buffer, are compared in the phase detector of IC1 and the phase detector produces a DC output voltage derived from the phase difference in the signals fed to it – i.e., the 2.86 to 3.3 MHz signal from the VCO and the divided down signal from reference OSC1 (Q1). This DC output is applied through an LPF to the VCO, forming the phase loop. This DC voltage applied to the VCO causes it to shift frequency until its output signal locks up with the count-down frequency provided from reference oscillator Q1 (when the two signals are in phase) at which point no DC output is produced in the phase detector, and the VCO remains "locked" on frequency. When a new channel is selected a new "N" code is applied to the programmable divider. The VCO is no longer locked because of the resulting phase difference in the phase detector, and it again shifts frequency to a locked condition, in turn producing 37 MHz output signals corresponding to the new channel programmed by the new "N" code.

In summary, it will be seen that a range of stable VCO frequencies in the 17 MHz range will be produced, each

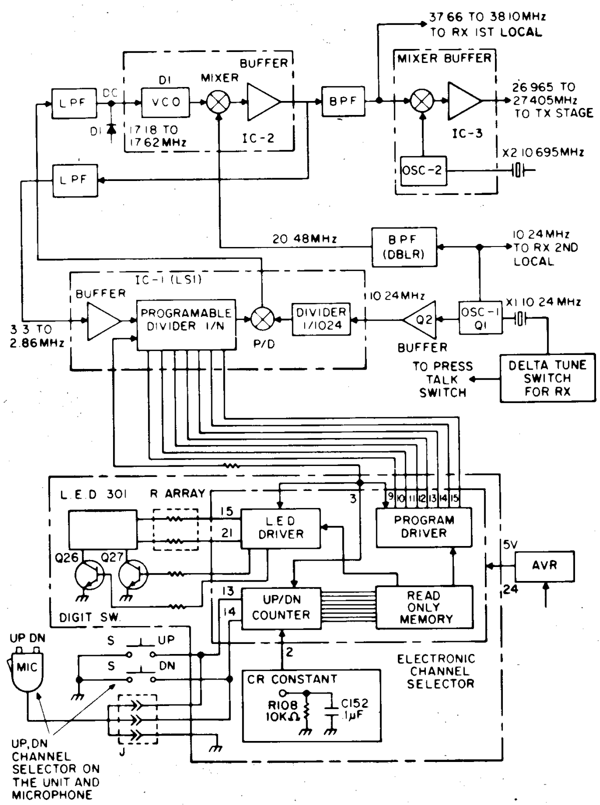


Figure 3 – PLL Block Diagram (14T305 only)

specific frequency being determined by the "N" code selected by the channel selector. As previously outlined one of the VCO outputs, that at 37.66 to 38.10 MHz, is fed to the receiver and transmitter sections. Its function is described in the separate sections which follow.

Electronic Channel Selection (14T305 only)

Model 14T305 provides for electronic channel selection by means of "Up" and "Down" pushbutton controls on the microphone, which take the place of the conventional rotary channel selector switch. (Refer to PLL block diagram Figure 3). Actual channel selection is developed in IC5 which incorporates a read only memory (ROM), a program driver, an up/down counter and an LED driver. The ROM is programmed with the "N" codes shown in the chart on page 13. When either the "up" or "down" pushbutton is actuated, the up/down counter shifts one channel up or down in approximately one second. After the initial channel change, if a pushbutton is held depressed the scanner in IC5 will operate at a rate change of approximately 6 channels/second. As the channel change is occurring the LED driver causes the channels to change on the LED indicator. When the desired channel appears, the pushbutton switch is released, and the up/down counter operation is suspended. At this point the appropriate "N" code signal for the selected channel is fed to the input of PLL IC1, causing the proper channel to be selected, as outlined previously in preceding chapters for conventional switch type channel selection. During the channel selection process, initiated by activating either the "up" or "down" pushbutton, the transmitter and receiver sections of the transceiver are inoperative. This is accomplished by removing the bias from the 455 kHz amplifier Q11/Q12 of the receiver and the bias on DC switch Q22 of the transmitter.

Transmitter

The transmitter crystal oscillator, OSC2 contained in IC3, is operating at 10.695 MHz, controlled by crystal X2. This signal is beat in the mixer section of IC3 with the 37 MHz signal output from the VCO IC2, the exact frequency of which was determined by channel selection and the PLL circuitry, as previously outlined. The resultant signal, therefore, that is fed to the RF amplifier in IC3, is the channel frequency of the channel selected (channel 1–40 between 26.965 and 27.405 MHz), see Frequency Chart on Page 13.

The 27 MHz RF amplifier output is coupled to RF predriver transistor Q3 through L5/T3 and C32. The predriver serves to isolate the oscillator and mixer stages from the output, and at the same time provide a certain amount of power gain. Q3 output is applied to the base

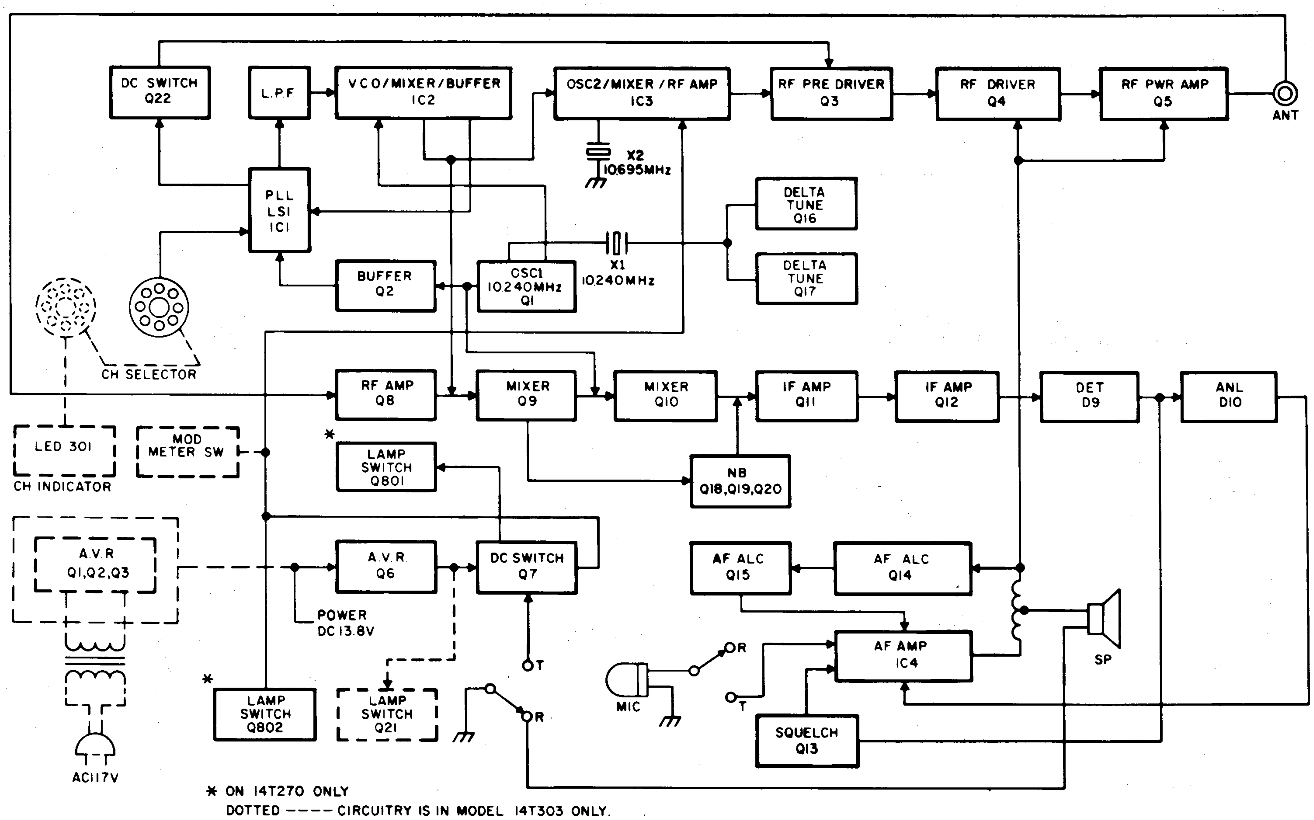


Figure 4 — Block Diagram for 14T270 & 14T303

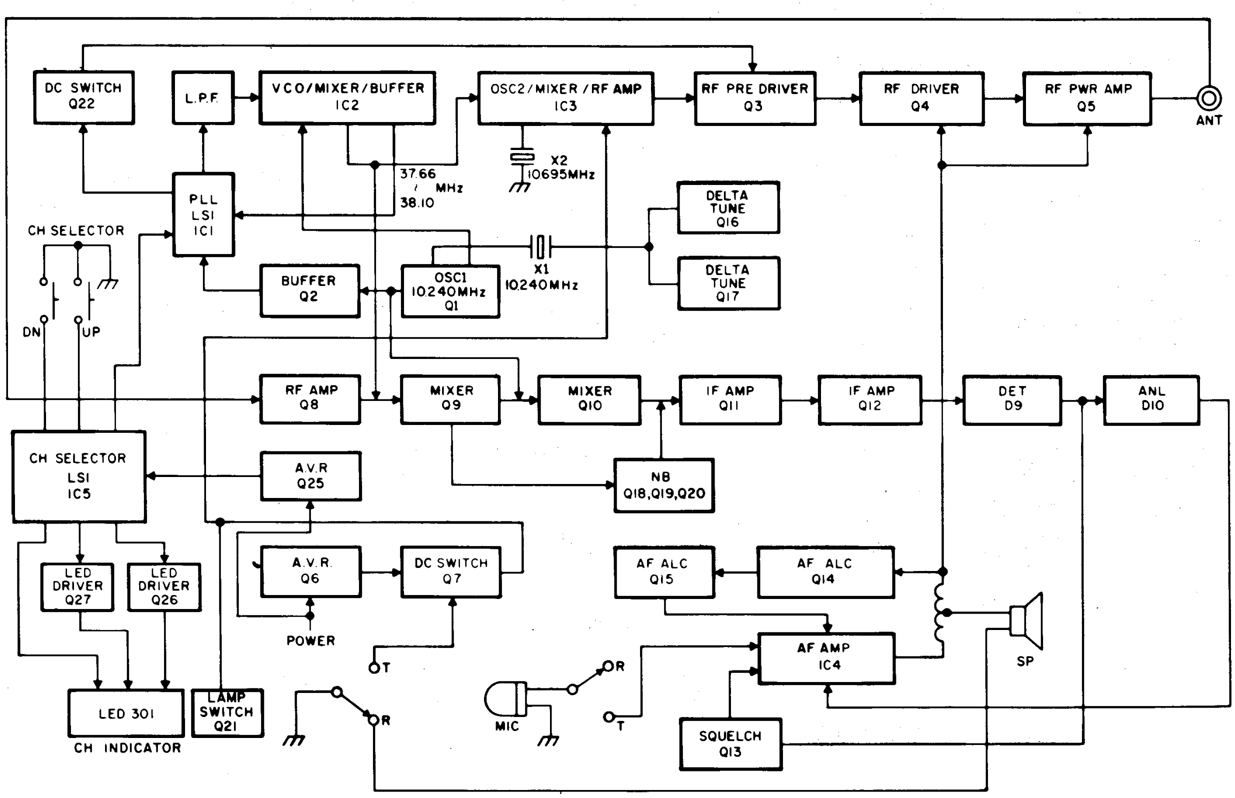


Figure 5 — Block Diagram for 14T305

input of Q4, the RF Driver stage and in turn to Q5 the RF output stage of the transmitter. These stages amplify the 27 MHz RF signal resulting in an output at L13 of 4 watts.

In the transmit mode, the microphone feeds audio through IC4 to the output transformer T11 and to the collectors of Q4 and Q5 thereby modulating the transmitter. This modulating audio is applied to both the driver and output stages to provide carrier modulation up to 100%. An ALC voltage derived from the audio signal at Q15 is fed to IC4 to control the output of T11 and prevent over-modulation. Factory adjustment of 90% modulation is achieved by adjustment of RV2 at Q14 output.

The low pass filter between the antenna and receiver and transmitter inputs serves to pass the 27 MHz signals, attenuating higher frequency signals. It also serves to match the antenna impedance to the output impedance of the transmitter output transistor stage Q5.

Receiver

The rf signal, at a frequency between 26.965 and 27.405 MHz, feeds from the antenna through L13, L12, L11 and T5 to the 27 MHz Neutralized RF Amp Q8. Then the amplified output signal from Q8 is coupled through T6 to Mixer Q9 where it is beat with an injection signal from the VCO in IC2.

The frequency of the injection signal from IC2 depends on the channel being received, as a signal in the 37 MHz range is programmed by the channel selector. The output of Mixer Q9 is therefore 10.695 MHz, the first IF frequency, and is the result of the RF input and mixing of IC2 VCO signals. (see Frequency Chart on Page 13).

This 10.695 MHz 1st IF signal is then fed to Q10 the second mixer. Also fed to the 2nd Mixer is a second signal from Q1, Oscillator No. 1. This oscillator signal is at 10.24 MHz. Mixing of these two signals results in a signal in the T8 output from the 2nd Mixer of 455 kHz, the second IF frequency.

The 455 kHz second IF signal passes through the ceramic bandpass filter CF, and feeds the 455 kHz signal to IF amplifiers Q11 and Q12 which include IF transformers T9 and T10. The output of Q12 is applied to D9 the diode detector.

The rectified audio signal from the detector is passed through the volume control VR1 to the input of the audio circuit IC4. The audio output is transformer coupled to the internal speaker, and to an external speaker if used.

Q13 is the squelch amplifier transistor. At low or no signal levels Q13 conducts heavily and its output, connected to pin 6 of IC4 results in no signal output from the audio section. As the incoming RF signal increases it results in a decreasing output from Q13. This results in opening up the AF amplifier and output is achieved. The point at which Q13 cuts off is determined by setting the SQUELCH control VR2.

Noise Blanker (except 14T260 & 14T304)

Placing the Noise Blanker switch to "ON" activates the noise blanker circuitry. The noise signals contained in the IF signals at Mixer Q9 output, feed through C134 to the base of Q18. The amplified output of Q18 is rectified by diodes D18 and D19. The resulting DC voltage turns on Q19 which in turn turns on Q20. This causes the IF signal at T8 to be shorted to ground through Q20 during the presence of the noise impulses, blanking out the noise at the receiver output.

Delta Tune (except 14T260 & 14T304)

Delta tune circuitry is employed in the oscillator No. 1 Q1 crystal stage. The "Delta-Tune" switch on the front panel acts to connect Q16 in the Q1 oscillator circuit. Depending upon whether the + position of switch or – position of switch is chosen the crystal frequency is "pulled" slightly above or below its normal operating frequency.

Public Address

Switching provision is made in the audio input circuit of the transceiver to provide a PA function by switching the microphone output. The audio output is also switched to an external PA speaker jack. This switching occurs when the CB/PA switch is set to the PA position.

In the PA mode, the transceiver serves as a public address amplifier providing 3 watts output to an external PA speaker. The other functions of the transceiver are deactivated in the PA mode per FCC Rules & Regulations.

Servicing

General

These RCA Co–Pilot Citizen's Band Transceivers performance depends upon the high quality of components employed and proper servicing techniques performed by licensed fully qualified technical personnel. Only use of the replacement parts given in the parts list on pages 37 through 44 should be employed.

Illustrations to aid in servicing and adjustment; such as top and bottom views, exploded views and superimposed printed board views, are provided to assist in proper and competent servicing. Block diagrams are shown in Figures 2, 4 and 5. The schematic diagrams are shown in Figures 34 through 37.

Figures 21 and 22 of the main printed circuit boards show map grid coordinates at the sides of the illustrations. These coordinates are keyed to corresponding key numbers in the replacement parts list, for instant location of smaller parts. Major components, not shown in Figures 21 and 22 are shown in views Figures 16 – 20. Exploded views identify all mechanical parts by means of balloon callouts. These balloons key to corresponding balloons shown in the mechanical parts list section.

Simple removal of the four Phillips screws at each side of the transceiver case permits removal of both halves of the case. The 14T303 base station requires removal of six screws in the cabinet top. Ten screws hold the bottom cabinet plate.

Servicing all models is fundamentally the same due to the similarity of the units.

Electronic switching is used in the units making them inoperable when the microphone is disconnected from the front of the unit. In order to activate a unit only for receiver service, a dummy plug must be used in place of the microphone plug. (Except Model 14T305 which provides remote selection of CHAN, SQ & VOL from controls on the microphone. The microphone must be used to activate the transceiver for 14T305 service). Use of this plug is HIGHLY RECOMMENDED TO ACTIVATE THE RECEIVER WHEN PERFORMING SERVICE. IF THE MICROPHONE IS USED ACCIDENTAL DEPRESSION OF THE TRANSMIT BUTTON COULD RESULT IN DAMAGE TO VALUABLE TEST EQUIPMENT. See Figure 7 for view and information on dummy plug.

Note – Crystals appear to be plug-in units. What appear to be sockets are spacers for thermal isolation, crystals are soldered to board.

Test Equipment

The following test equipment is required and recommended for servicing the 14T260, 14T270, 14T303, 14T304 and 14T305 Transceivers.

1. A 50 ohm resistive antenna load with a power capability of 5 watts or more, such as Bird Model 43 "thru line" wattmeter with a 5A Element and a Model 8053 RF Coaxial Load Resistor, or equivalent.
2. A frequency counter operable in the required CB range, such as Hewlett-Packard Model HP 5283A or suitable equivalent.
3. A HF Signal Generator which operates in the 50 kHz to 65 MHz frequency range with +1% accuracy such as Hewlett-Packard HP-606B, Wavetek Model 3000 or equivalent.
4. An oscilloscope capable of accurate monitoring of 27 MHz range AM signals.
5. High Input impedance Electronic Voltmeter such as a WV-500B or equivalent.
6. Dummy plug to activate transmitter without using microphone, see Figure 7.
7. Dummy mike plug for receiver servicing, with jumper between pins 2 and 3 as seen in Figure 7.
8. An 8 ohm 5 watt resistive dummy speaker load.
9. An Audio Signal Generator, 10 Hz to 20 kHz range.
10. An RF Voltmeter. (WV-500B with WG-301A Probe)
11. A regulated bench DC power supply capable of supplying 0 – 20 DC @ at least 2 amperes.
12. DC Ammeter with 0 – 2 amp. scale.
13. DC Voltmeter with 20k ohms/V rating.
14. A 120 volt 60 Hz AC source.
15. A digital voltmeter.

Tune Up and Alignment

Before performing any adjustments, check visually all jacks, plugs and solder joints for good connection. Shown in the schematics are nominal test voltage values for the transceiver transistors. In addition, certain other pertinent voltages are shown on the schematics. For tune-up and servicing identical procedures may be employed for all models. Use of an isolation transformer is recommended when servicing Model 14T303.

Transmitter Alignment

Connect test equipment to the transceiver as shown in the block diagram below, Figure 6. To activate the trans-

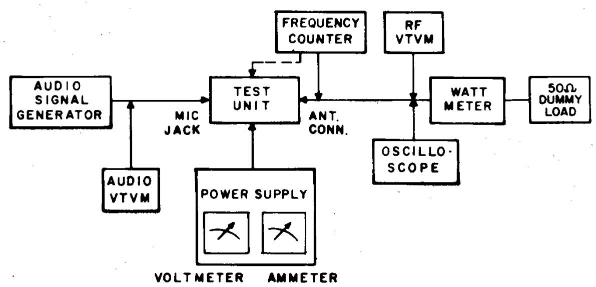


Figure 6 – Test Equipment Hook-Up

mitter without using the microphone, use the dummy microphone plug wired as shown in Figure 7A. This plug is also used to introduce a modulating audio signal to the microphone input circuit as described in the following procedure. (On 14T305 use the microphone to activate the transceiver)

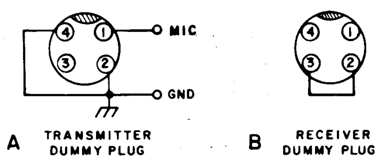


Figure 7 – Dummy Microphone Plugs

A. PLL CIRCUIT ALIGNMENT

Before proceeding with the PLL Alignment, check the Q1 control oscillator operating frequency at the emitter of Q2 on the frequency counter. (Use a 1000 pf capacitor in series with counter probe). Set "Delta Tune" switch to "0". If necessary adjust CT1 to obtain a reading of 10.240000 MHz ± 50 Hz. Set "Delta Tune" switch to + position, a reading between 10.24040 and 10.240750 MHz should be obtained. Switch to – position, a reading between 10.239750 and 10.239590 MHz should be obtained.

VCO Alignment

To more readily follow the frequencies involved during the alignment, refer to partial block diagram, Figure 8.

1. Set channel selector to channel 1. Check IC-1 for 5.4 volts ± .1 volt.
2. Connect DC Voltmeter, set to 5 V range, between ground and R2 high side at TP8, see Figures 16 – 20. (Meter input impedance should be 20k ohm/volt or higher).
3. Adjust L1 core clockwise to obtain 3.6 volts + 0.1 volt on meter. (Start with core at top of form).
4. Set channel selector to channel 40 position. A reading between 1.4 and 2.3 volts should be obtained.

B. ALIGNMENT OF MIXER, PREDRIVER Q3 AND DRIVER Q4.

a. Set channel selector to channel 19 position.

b. Connect oscilloscope to the base of Q3 and ground.

c. Adjust T1, L2, T2, L5 and T3 for maximum 27.185 MHz output on scope.

d. Adjust power supply for a supply voltage of 7.0 volts.

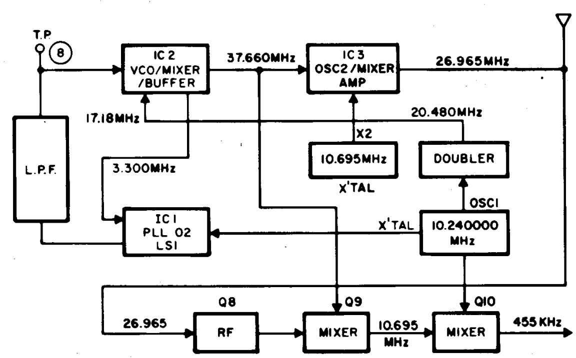


Figure 8 – Partial Block Diagram

e. Move oscilloscope to base of Q4, between C40 and ground.

f. Adjust T3 and T4 for maximum amplitude on the scope.

C. ALIGNMENT OF RF POWER AMPLIFIER

a. Set channel selector to channel 19. Return power supply voltage to 13.8 volts.

b. Adjust L7 for maximum reading on the RF wattmeter. See Figure 6.

c. Adjust L11 for maximum RF output.

d. Adjust L12 for maximum RF output.

e. Readjust L11 for maximum RF output.

f. Turn L7 clockwise for an output of 4.4 watts on the meter.

g. Turn L12 counter-clockwise to obtain a reading of 3.8 watts on the meter.

D. TRANSMITTER FREQUENCY CHECK

a. Connect the frequency counter to the ANT connector and check the frequency on each channel with no modulation. The frequency should be within ±800 Hz of the center frequency for each channel. Refer to the frequency table on page 13.

E. MODULATION SENSITIVITY ALIGNMENT

a. Connect the transmit dummy plug to the microphone jack. (Except 14T305)

b. Apply a 1 kHz 6 mV signal to the microphone input circuit.

c. Adjust RV2 to obtain 85–90% modulation, as observed on the scope, see Figure 6.

d. Increase the signal input to 60 mV and observe that modulation ratio is maintained at 95% or lower.

F. RF METER ADJUSTMENT

a. Adjust RV4 (RV502 on 14T303) so that the meter pointer is in the center of the red zone on meter scale. (This will indicate 3.8 watts output, the same as the wattmeter in step C.g.)

G. SWR BRIDGE ADJUSTMENT (except 14T260 & 14T304)

a. Connect 100 ohm non-inductive resistor across antenna jack. Set RF/CAL/SWR switch to "CAL", Adjust VR4 to put meter pointer exactly on "SET" mark.

b. Set RF/CAL/SWR switch to "SWR". Adjust RV501 so that meter pointer reads "2" on meter scale.

Receiver Alignment

Connect test equipment to the transceiver as shown in Figure 9. Unless noted otherwise, keep Delta Tune switch at "0" and ANL switch to "ON" positions for models where applicable.

A. RECEIVER SENSITIVITY ALIGNMENT

To activate the receiver without using the microphone, connect the dummy microphone plug shown in Figure 7B in place of the microphone (jumper on plug between pins 2 and 3). VOLUME control fully clockwise. On 14T305 the microphone must be connected to the receiver.

a. Set the signal generator output to 27.185 MHz with 1 kHz 30% modulation, use a minimum readable signal on meter.

b. Set the transceiver on channel 19.

c. Refer to Figures 16 – 20 and adjust T5, T6, L14, T7, T8, T9, and T10, in this order, for maximum audio output across the 8 ohm dummy speaker load. Keep reducing the generator input signal as adjustment is made to avoid inaccuracy due to AGC action. Make final adjustments at low input level. Repeat adjustment to achieve maximum alignment accuracy at low level, signal level at 1 uV or less.

d. After completion of step c., turn T5 core 1 turn clockwise.

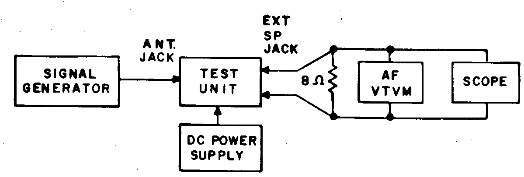


Figure 9 – Receiver Alignment Test Set-Up

B. SQUELCH CIRCUIT ADJUSTMENT

a. With signal generator and transceiver set to channel 19, 27.185 MHz, feed a 100 uV, 1 kHz signal modulated 30% into the RF input jack.

b. Rotate the SQUELCH control fully clockwise.

c. Adjust RV1, see Figures 16 – 20, for maximum audio output on VTVM and scope connected across 8 ohm dummy speaker load. Note the output level. Slowly turn RV1 to decrease the output level by 6 dB.

C. S-METER ADJUSTMENT

a. Set signal generator to produce a 100 uV signal to the RF input. (Set RF/CAL/SWR switch to "RF." – on 14T270, 14T303 & 14T305)

b. Adjust RV3, see Figures 16 – 20, so that RF meter pointer reads "9" on the meter.

CHANNEL NO.	CHANNEL FREQ. (MHz)	"N" CODES	VCO FREQ. (MHz)	CHANNEL SW. OUTPUT A	B	C	D	A'	B'	C'	Rx 1st LOCAL FREQ. (MHz)
1	26.965	330	17.18	0	1	0	1	0	0	1	37.66
2	26.975	329	17.19	1	0	0	1	0	0	1	37.67
3	26.985	328	17.20	0	0	0	1	0	0	1	37.68
4	27.005	326	17.22	0	1	1	0	0	0	1	37.70
5	27.015	325	17.23	1	0	1	0	0	0	1	37.71
6	27.025	324	17.24	0	0	1	0	0	0	1	37.72
7	27.035	323	17.25	1	1	0	0	0	0	1	37.73
8	27.055	321	17.27	1	0	0	0	0	0	1	37.75
9	27.065	320	17.28	0	0	0	0	0	0	1	37.76
10	27.075	319	17.29	1	1	1	1	1	1	0	37.77
11	27.085	318	17.30	0	1	1	1	1	1	0	37.78
12	27.105	316	17.32	0	0	1	1	1	1	0	37.80
13	27.115	315	17.33	1	1	0	1	1	1	0	37.81
14	27.125	314	17.34	0	1	0	1	1	1	0	37.82
15	27.135	313	17.35	1	0	0	1	1	1	0	37.83
16	27.155	311	17.37	1	1	1	0	1	1	0	37.85
17	27.165	310	17.38	0	1	1	0	1	1	0	37.86
18	27.175	309	17.39	1	0	1	0	1	1	0	37.87
19	27.185	308	17.40	0	0	1	0	1	1	0	37.88
20	27.205	306	17.42	0	1	0	0	1	1	0	37.90
21	27.215	305	17.43	1	0	0	0	1	1	0	37.91
22	27.225	304	17.44	0	0	0	0	1	1	0	37.92
23	27.255	301	17.47	1	0	1	1	0	1	0	37.95
24	27.235	303	17.45	1	1	1	1	0	1	0	37.93
25	27.245	302	17.46	0	1	1	1	0	1	0	37.94
26	27.265	300	17.48	0	0	1	1	0	1	0	37.96
27	27.275	299	17.49	1	1	0	1	0	1	0	37.97
28	27.285	298	17.50	0	1	0	1	0	1	0	37.98
29	27.295	297	17.51	1	0	0	1	0	1	0	37.99
30	27.305	296	17.52	0	0	0	1	0	1	0	38.00
31	27.315	295	17.53	1	1	1	0	0	1	0	38.01
32	27.325	294	17.54	0	1	1	0	0	1	0	38.02
33	27.335	293	17.55	1	0	1	0	0	1	0	38.03
34	27.345	292	17.56	0	0	1	0	0	1	0	38.04
35	27.355	291	17.57	1	1	0	0	0	1	0	38.05
36	27.365	290	17.58	0	1	0	0	0	1	0	38.06
37	27.375	289	17.59	1	0	0	0	0	1	0	38.07
38	27.385	288	17.60	0	0	0	0	0	1	0	38.08
39	27.395	287	17.61	1	1	1	1	1	0	0	38.09
40	27.405	286	17.62	0	1	1	1	1	0	0	38.10

1 = H Level (4.5 – 5.5 V)

0 = L Level (0.05 – 0.4 V)

Figure 10 – Channel Frequency Chart

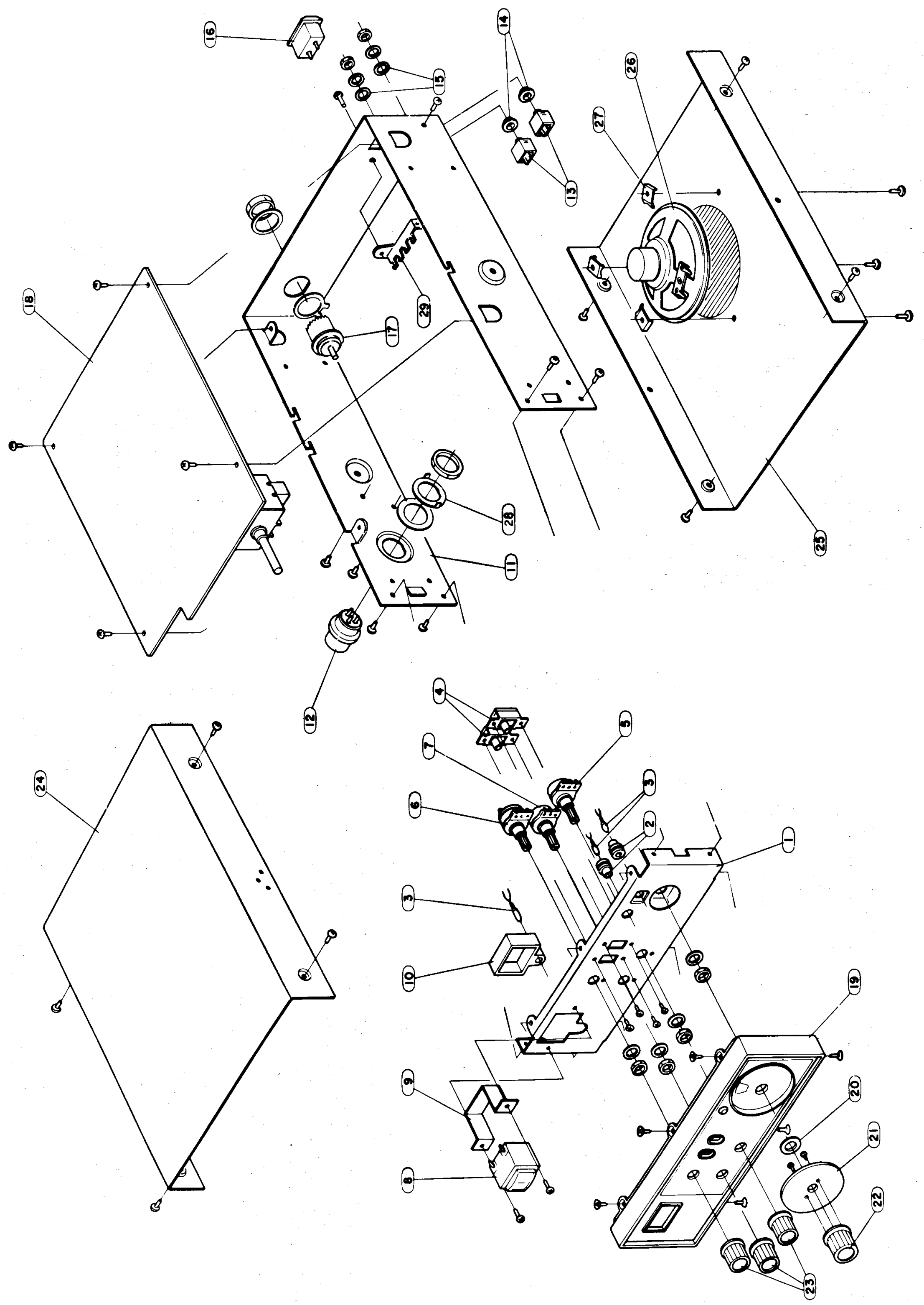


Figure 11 — Exploded View — Model 14T260

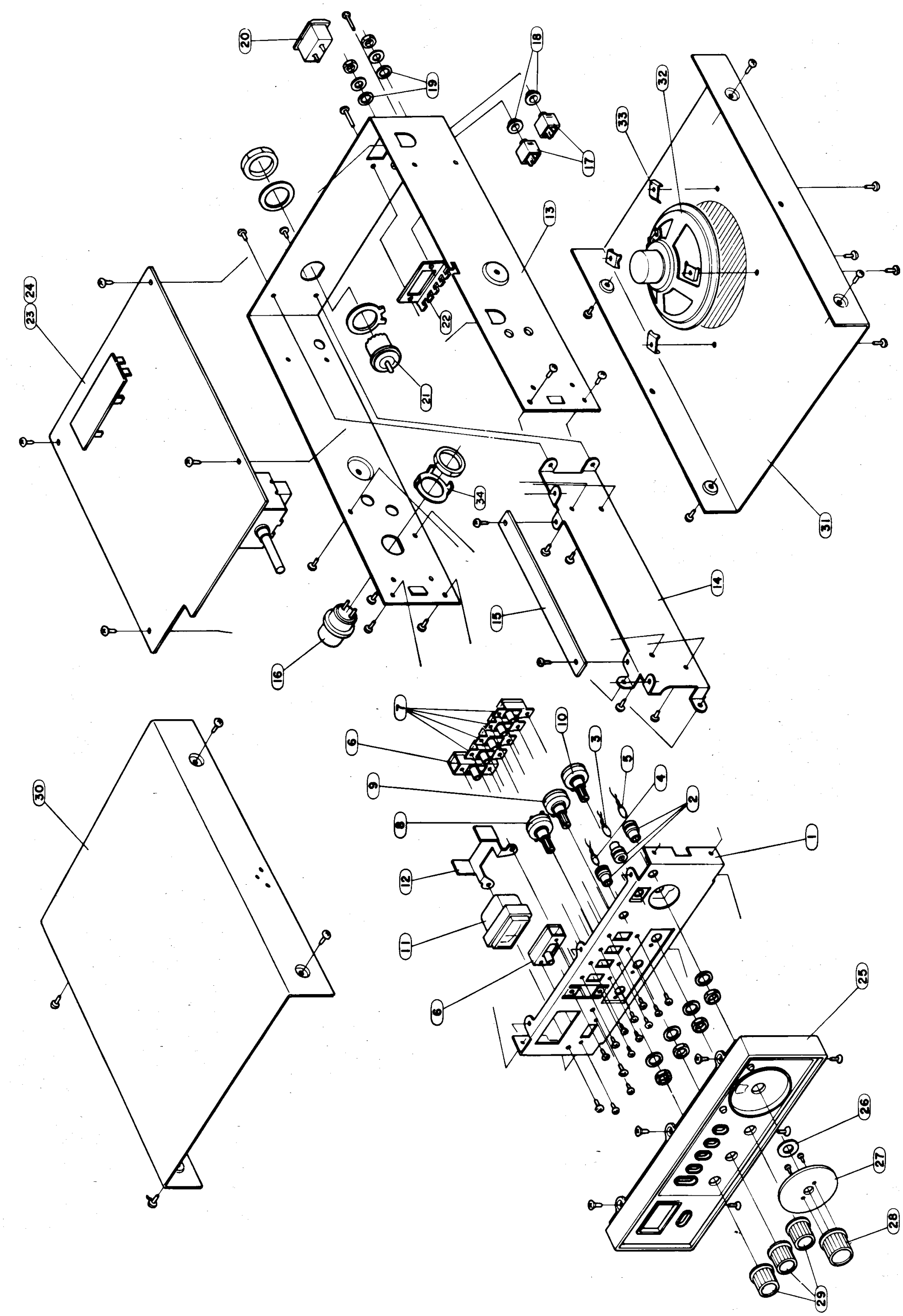


Figure 12 – Exploded View – Model 14T270

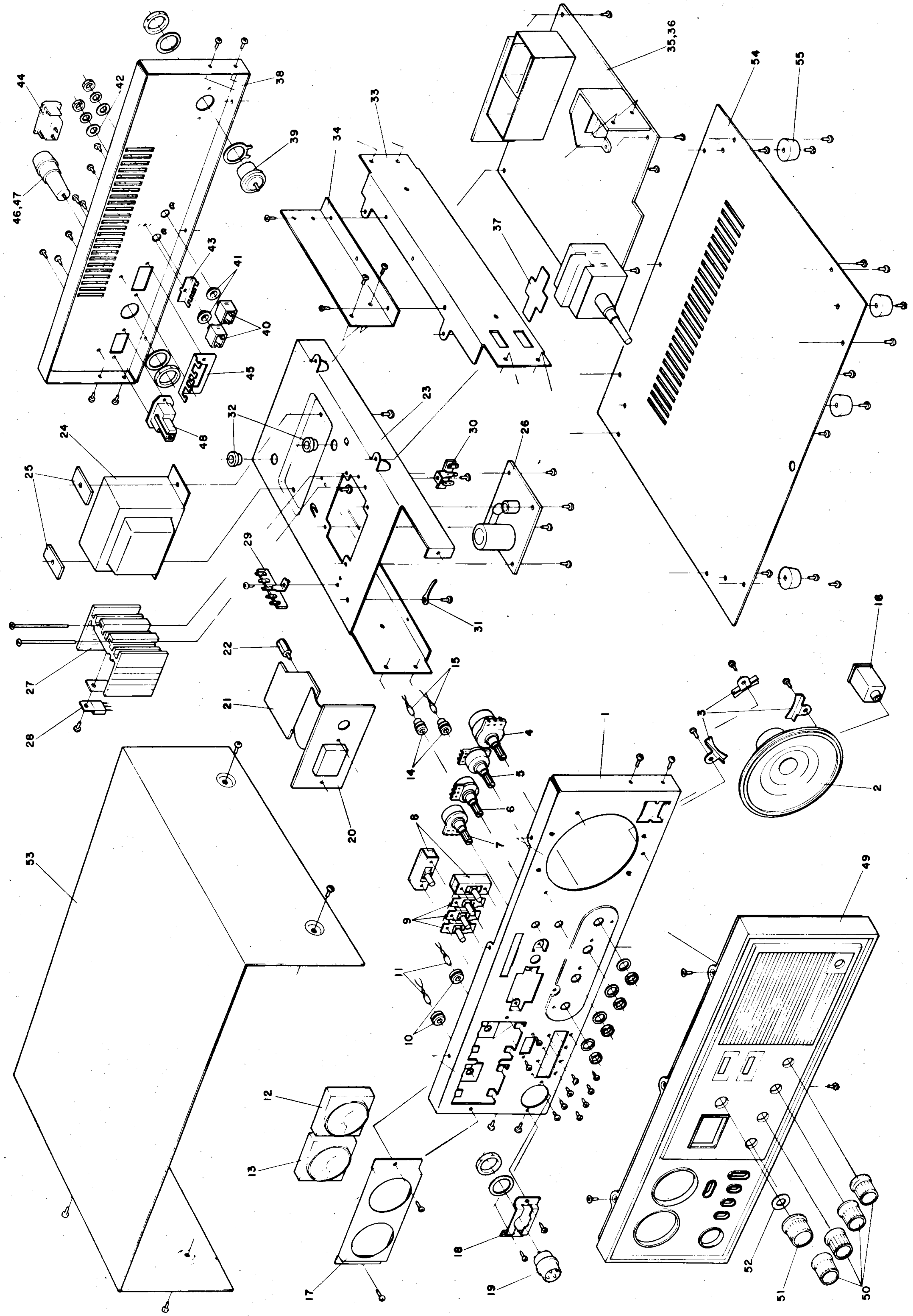


Figure 13 — Exploded View — Model 14T303

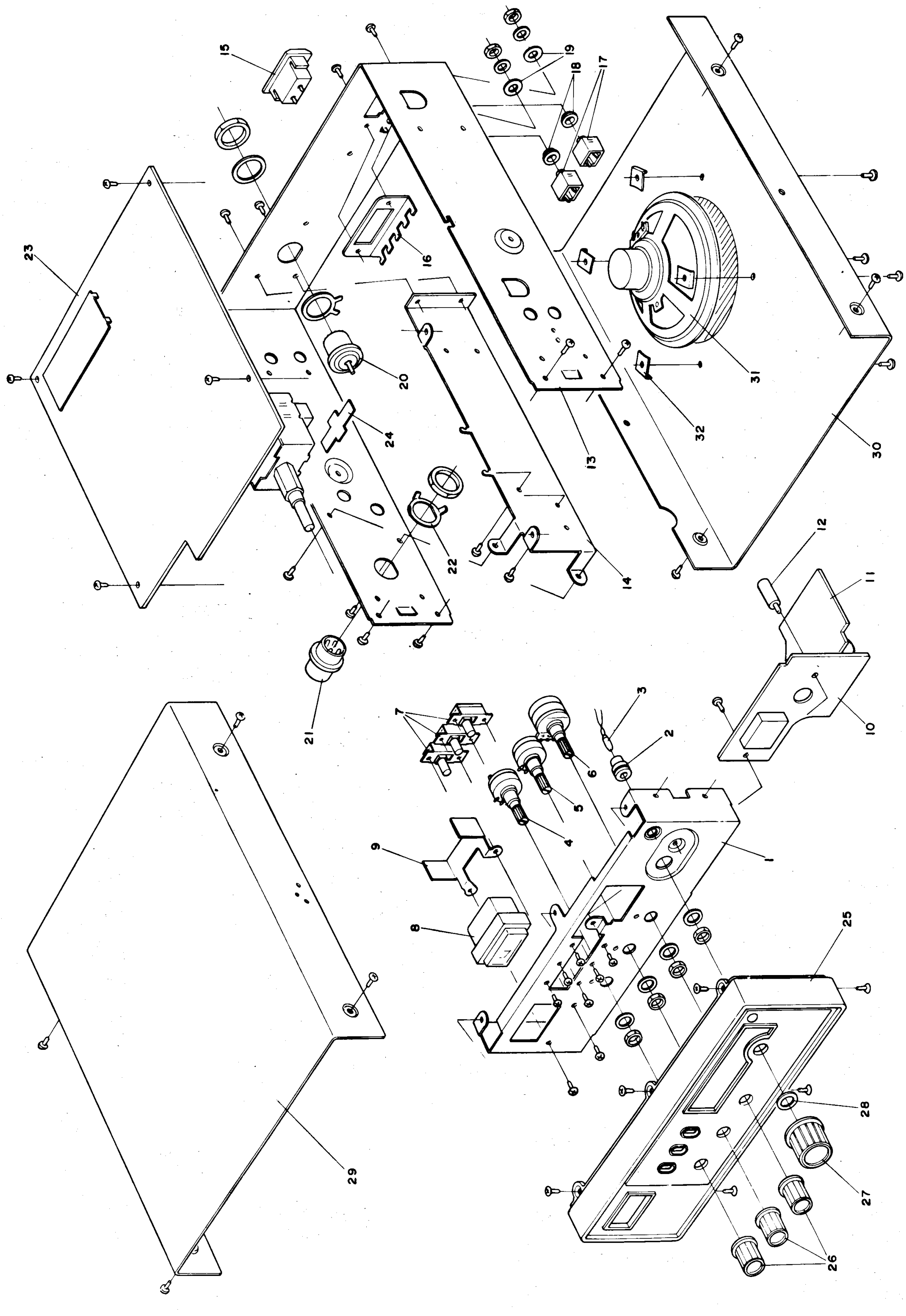


Figure 14 – Exploded View – Model 14T304

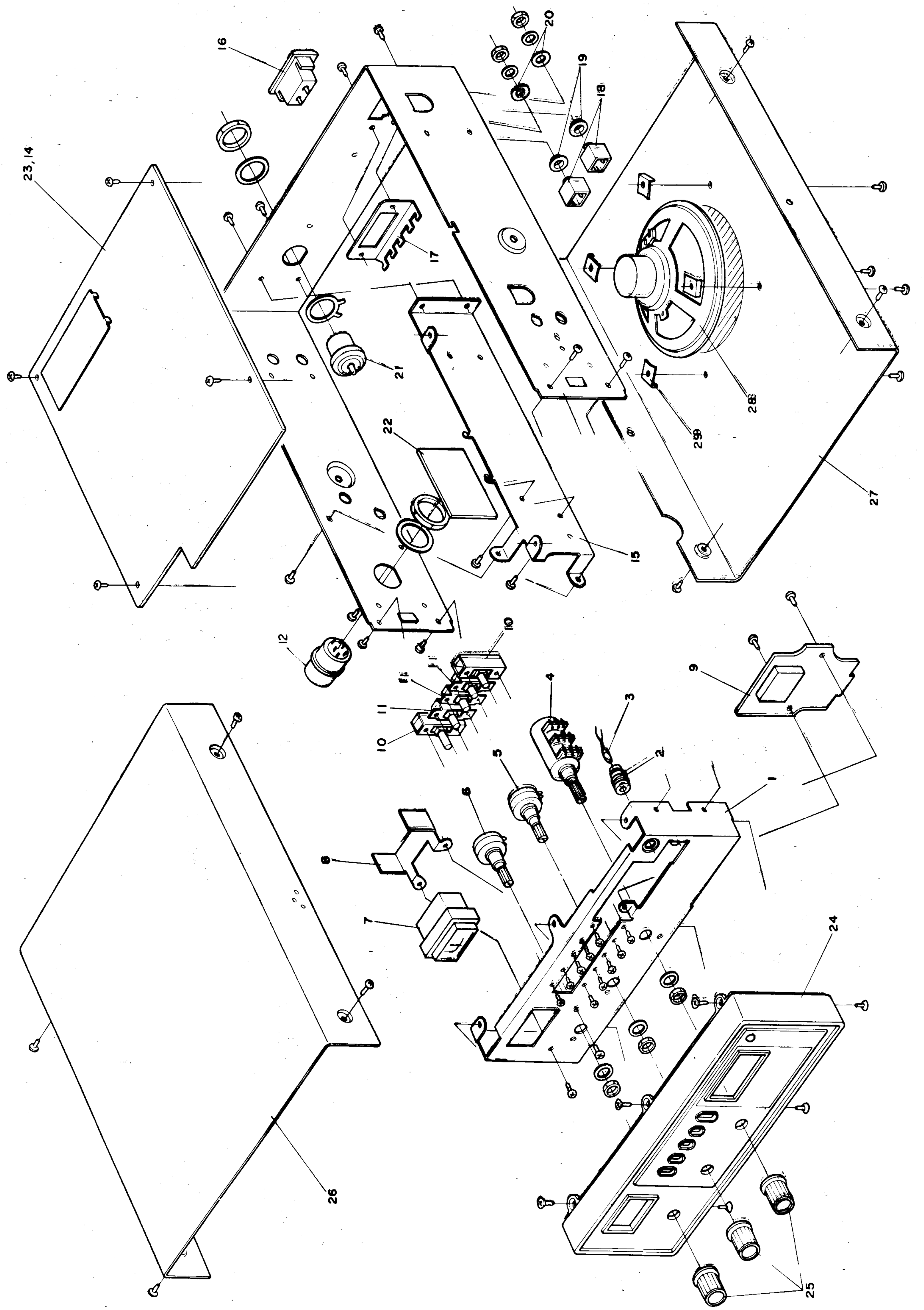


Figure 15 — Exploded View — Model 14T305