

Figure 3-3 Receiver Principles of Operation

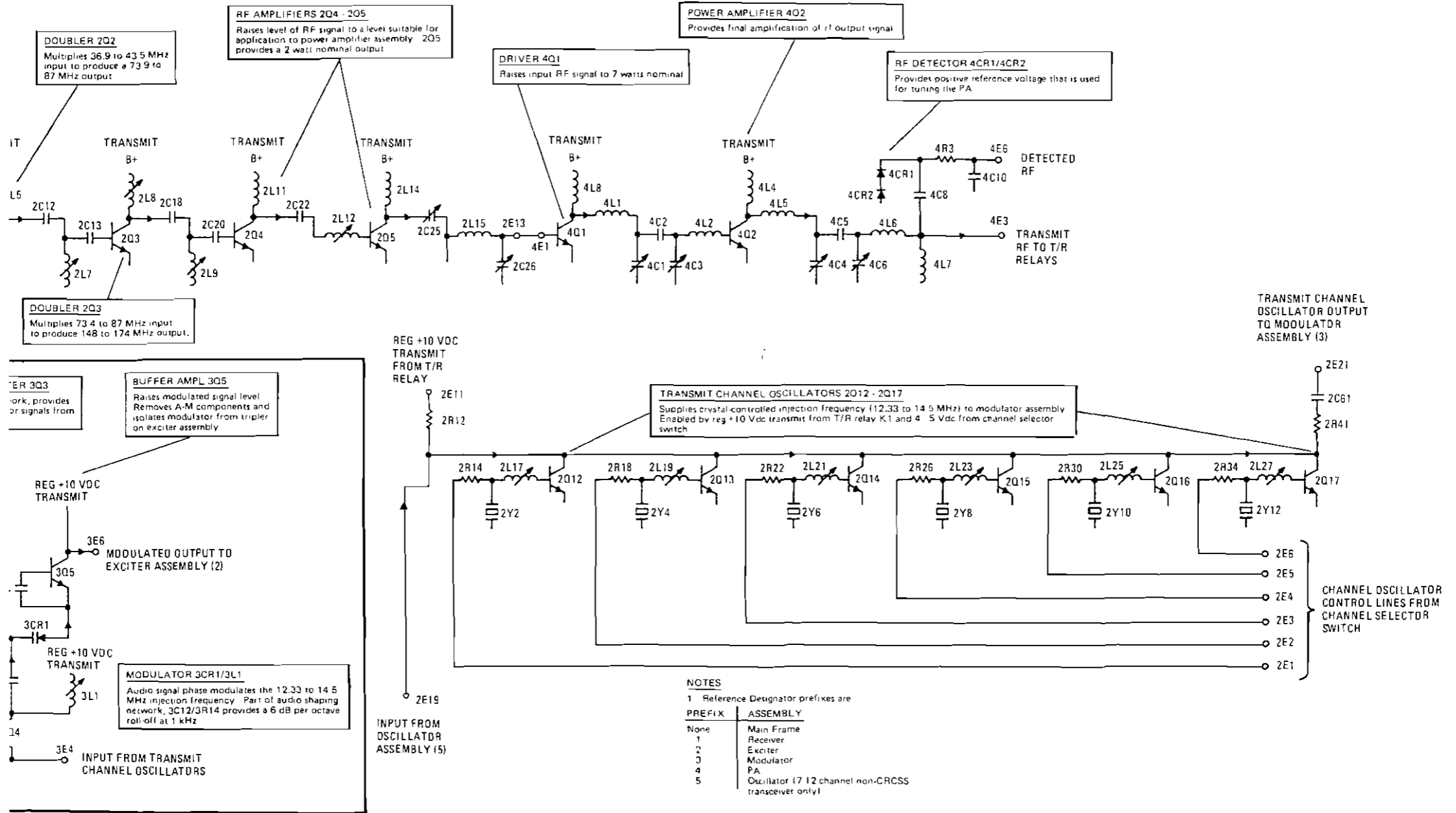
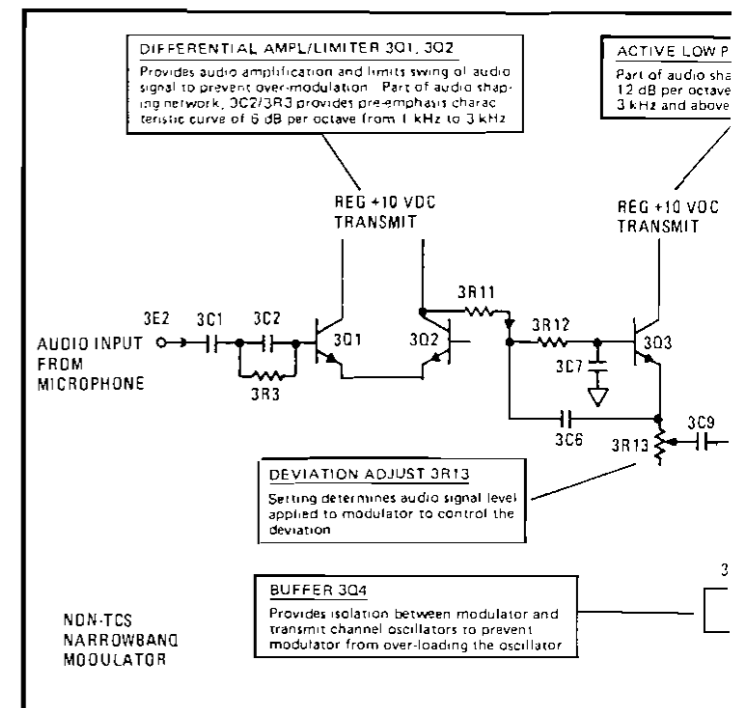
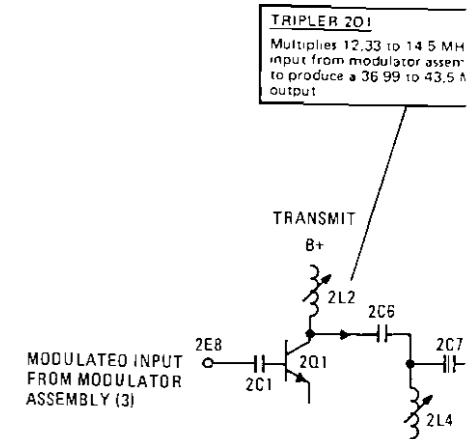
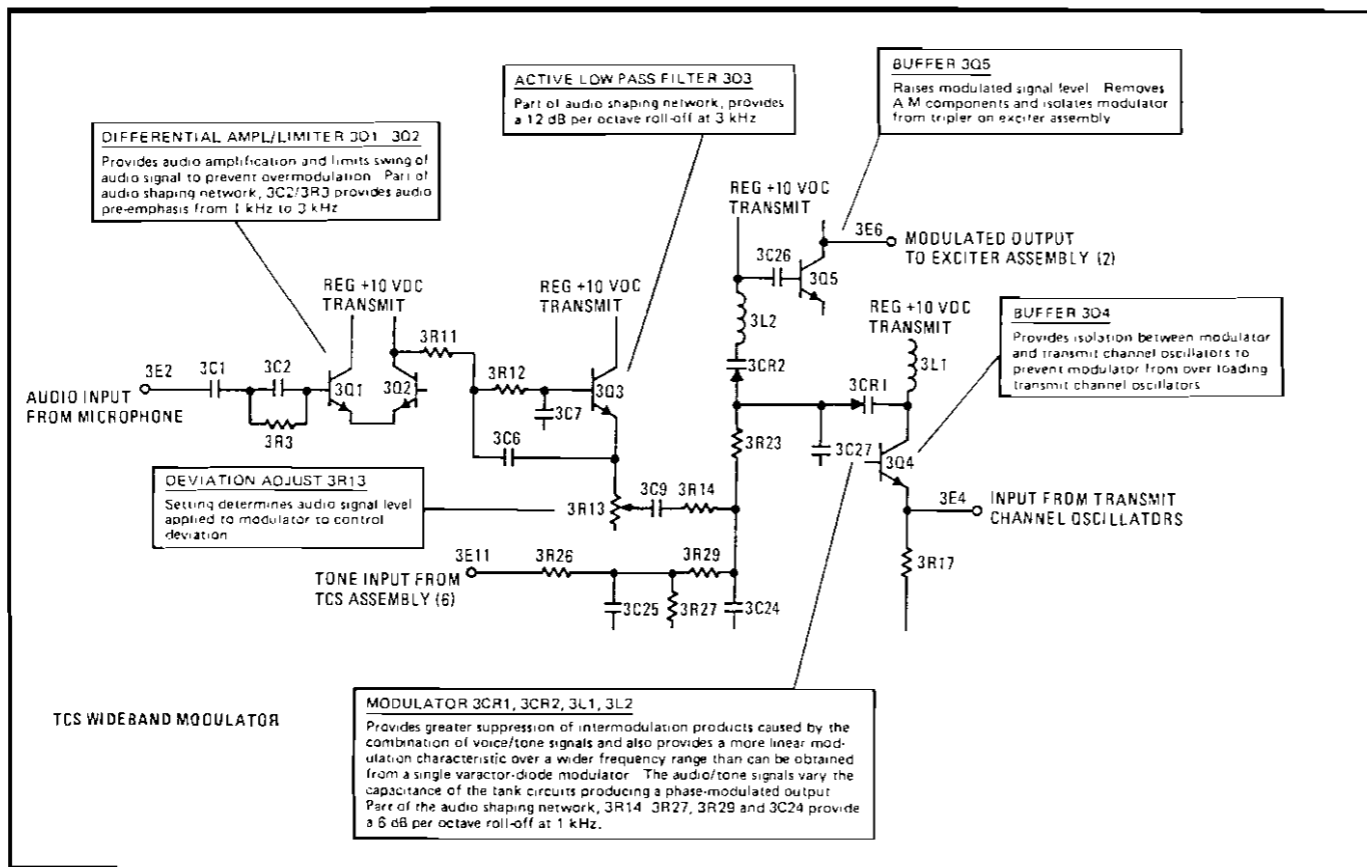


Figure 3-4. Transmitter Principles of Operation



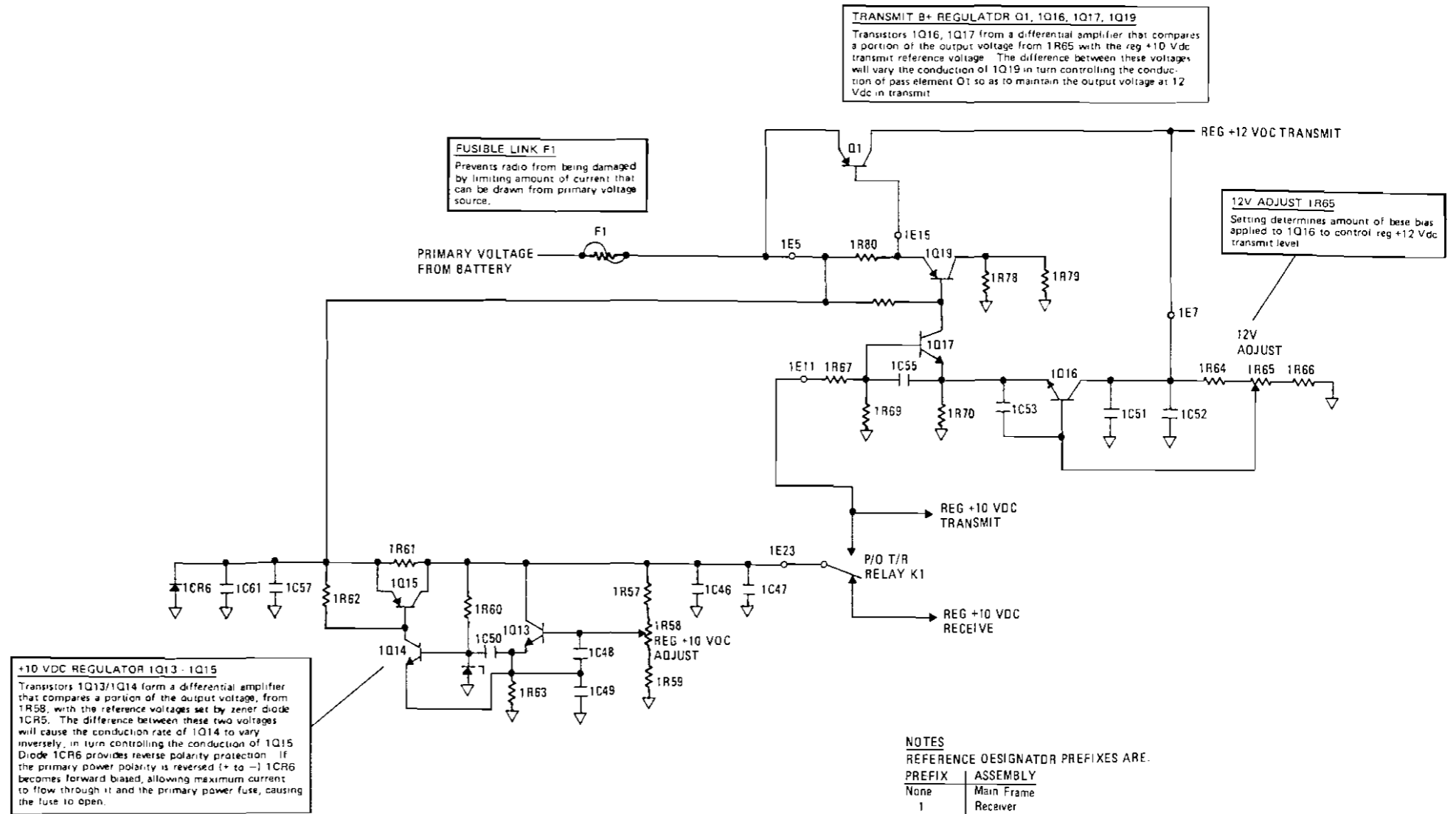


Figure 3-5 Voltage Regulators, Principles of Operation

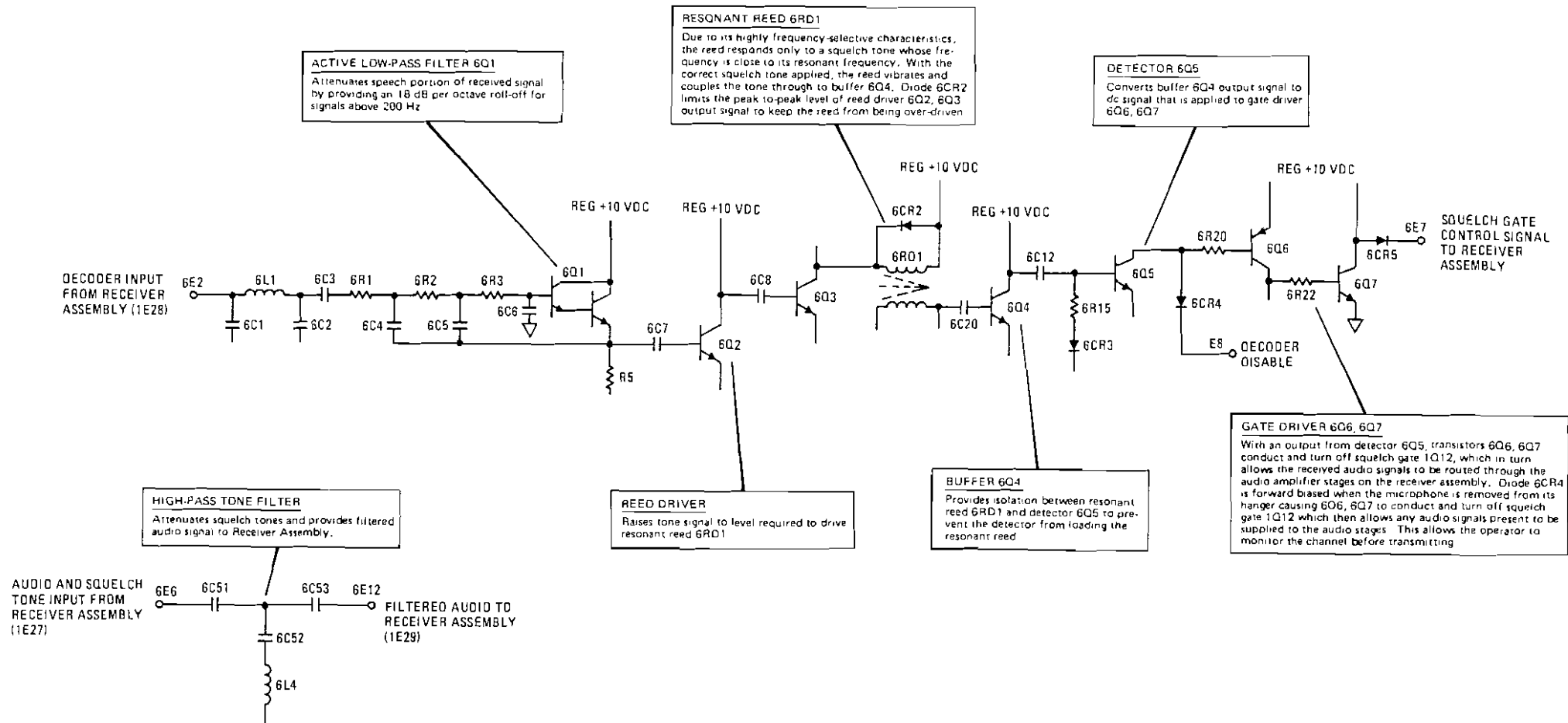


Figure 3-6. TCS Decoder, Principles of Operation

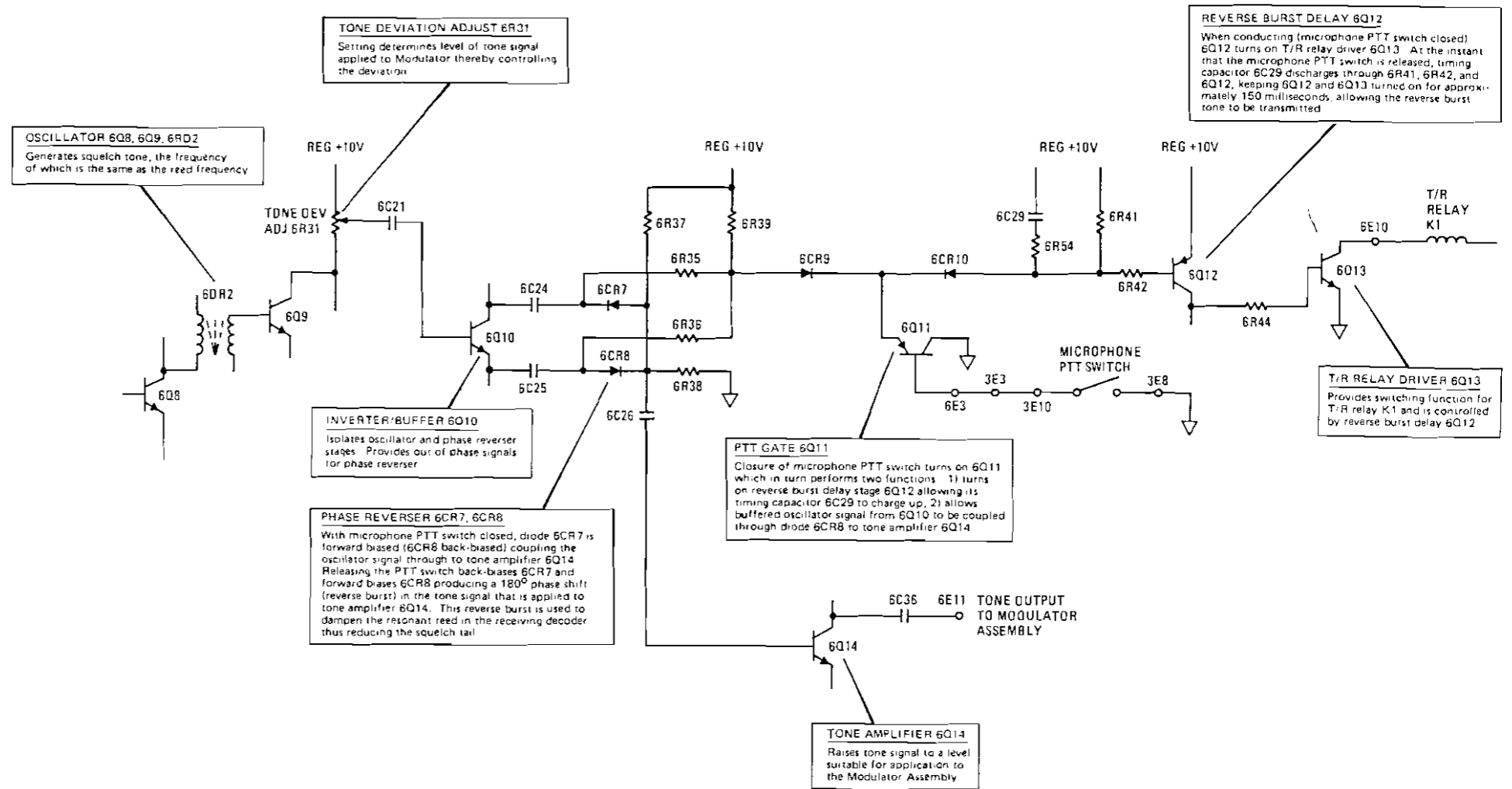


Figure 3-7. TCS Encoder, Principles of Operation

**NOTES**

1. Through the use of a double detector, the receiver can be aligned using a 20K ohm-volt VOM. The detector shown can be read by installing standard components.

- C1 Cap disc, per .001 of GMV, 500 VDCW
- C2 Cap disc, per .001 of GMV, 500 VDCW
- CR1 Slide 1N270, 1N39A or 1N295
- R1 Res, comp 10K, 10% 1/4W



2. Perform the following calculations to determine the alignment channel or frequency.

Calculate bandwidth, in percent, as follows:

± 0.001% stability

$$BW(\%) = \left[ \frac{F2 - F1}{F1 + F2} \right] \times 100$$

F1 = lowest carrier frequency  
F2 = highest carrier frequency

± 0.0005% stability

$$BW(\%) = \left[ \frac{F2 - F1}{(F1 + F2) / 10} \right] \times 100$$

If calculated bandwidth is less than 0.40%, use channel that is closest to the middle (on the high side) of the frequency range for alignment.

If calculated bandwidth is greater than 0.40%, calculate alignment injection frequency (fa) as follows:

± 0.001% stability

$$f_a = \left[ \left( \frac{F1 - F2}{2} \right) / 20 \right] + 2$$

± 0.0005% stability

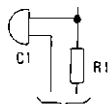
$$f_a = \left[ \left( \frac{F1 - F2}{2} \right) / 20 \right] - 10$$

3. An alignment crystal (R/F Part No. Y-0002 (± 0.001%) or Y-0003 (± 0.0005%)) can be used to provide the correct injection frequency (fa) as calculated in Note 2.

Though not as accurate as the above alignment crystal, the R/C network shown below can be used in one of the receive channel oscillator crystal sockets to provide the injection signal for aligning the front end.

No matter which one of the above two devices is used, be sure to set the frequency, measured at 1TP1, at the alignment frequency (fa) as calculated above.

- C1 Cap disc, per .0001 of GMV, 500 VDCW
- R1 Res, comp 18 ohm, 10% 1/4W



4. Reference designator prefixes are:

PREFIX	ASSEMBLY
None	Chassis
1	Receiver
2	Exciter

**ALIGNMENT INSTRUCTIONS**

Preliminary Checks and Adjustments

1. Set controls as follows:  
Rotate volume control clockwise to apply biggest.  
Rotate squelch control fully clockwise.
2. Ensure that primary voltage is 113.8 Vdc.
3. Ensure that voltage measured at terminal 1E23 is at +10 Vdc. If not, adjust 1A5B to obtain +10 Vdc indication at 1E23.

Complete Receiver Alignment

Perform steps 1a through 23 exactly as given.

IF Alignment

Perform steps 4 through 12.

Front End Alignment

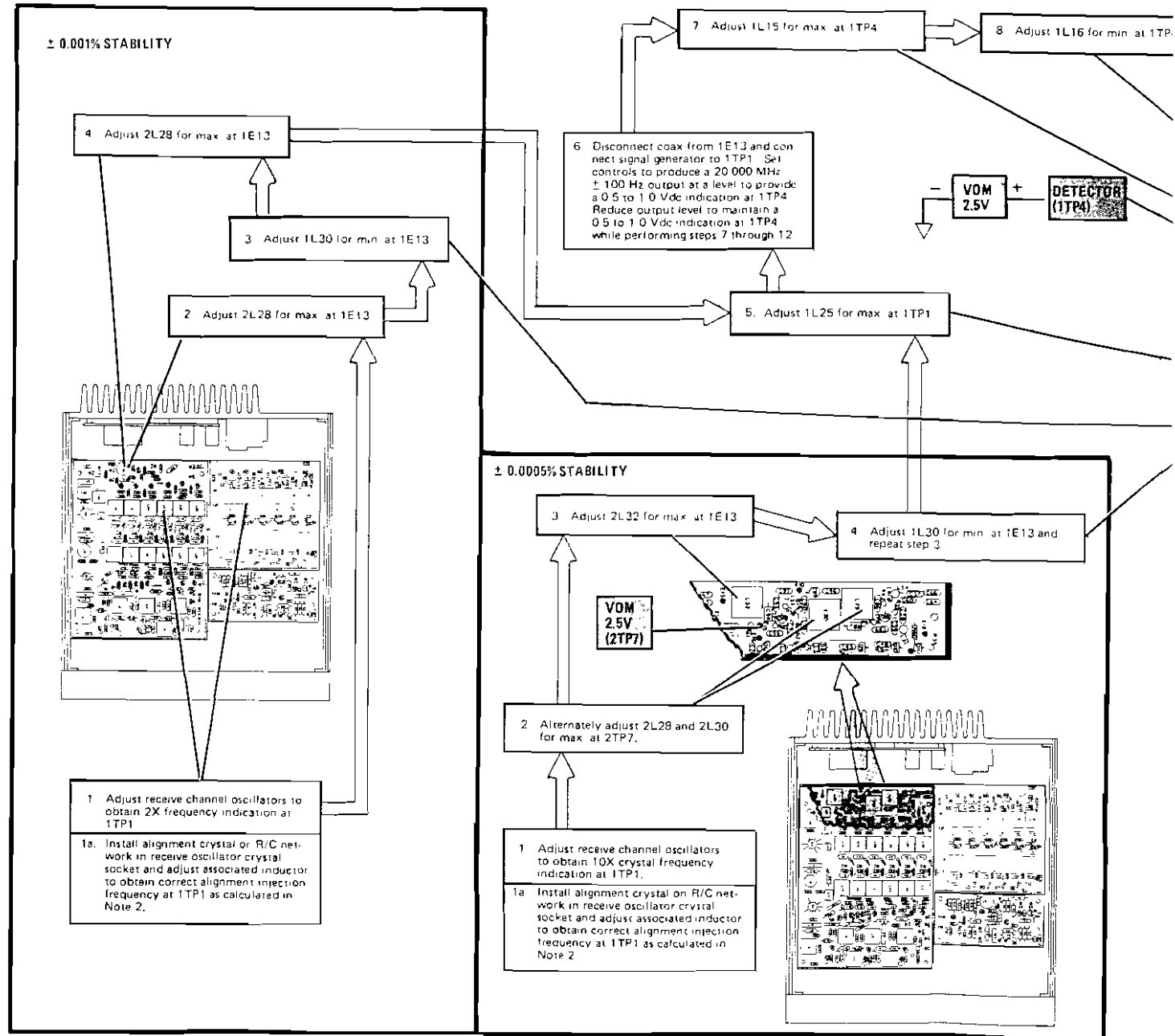
Perform steps 13 through 23.

Discriminator Alignment

Perform steps 6 and 9.

Oscillator Frequency Adjustment

Perform steps 1 through 5.





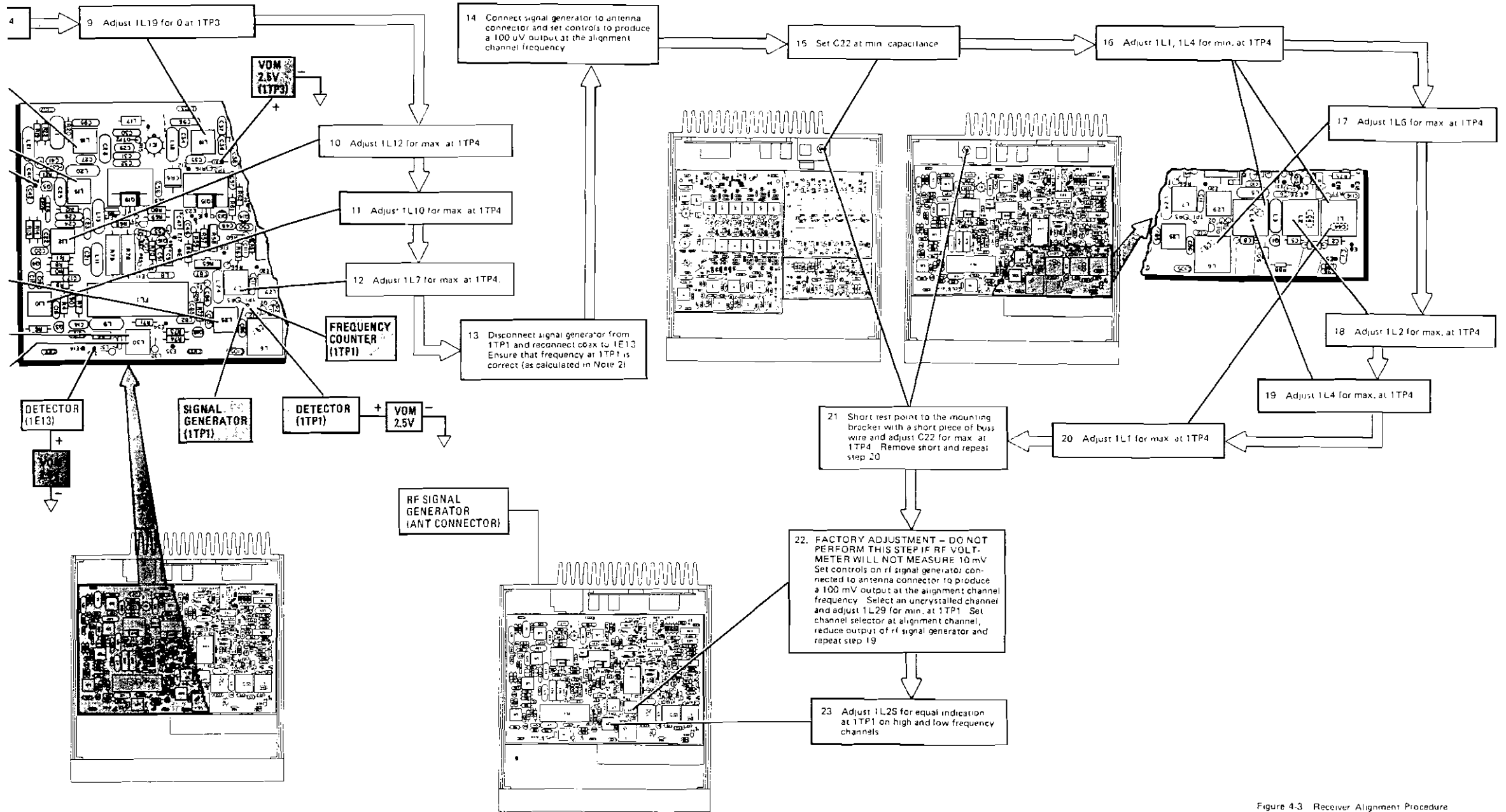
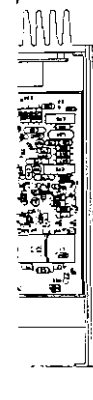


Figure 4-3 Receiver Alignment Procedure

**ON MEASUREMENT**

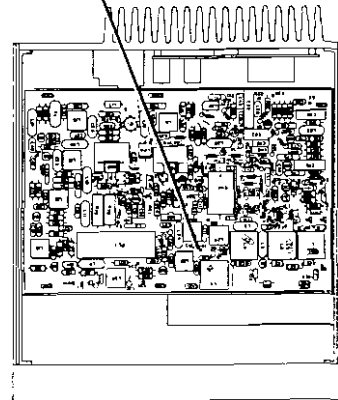
**MODULATION ANALYZER (M)**



output at the channel  
rating frequency. Set  
to output voltage  
RMS indication on  
modulation. The indicated

**CHANNEL FREQUENCY MEASUREMENT**

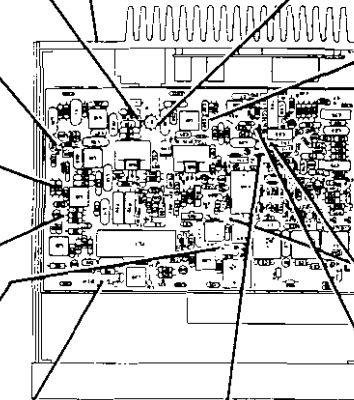
**FREQUENCY COUNTER (1TP1)**



1. Set channel selector switch at channel to be checked and observe indication on frequency counter. The frequency indication must be within  $\pm 250$  Hz of 2X (for 10 PPM crystal) or 10X (for 5 PPM crystal) of the crystal frequency.
2. Repeat step 1 for the remaining channels. If the frequency indication is not within limits refer to figure 4-3 and perform steps 1 through 5.

**GAIN MEASUREMENT**

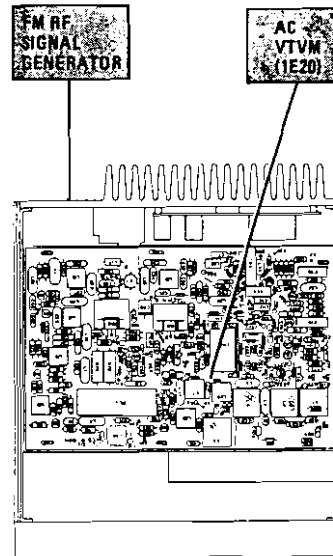
**FM RF SIGNAL GENERATOR**



1. With no input signal at J2, rf voltmeter at 1E13 should indicate 200 mV (min)
2. With no input signal at J2, rf voltmeter at 1 TP3 should indicate 600 mV (typical)
3. Set rf signal generator for a 10 mV output at the channel frequency. Rf voltmeter at 1R8 should indicate 210 mV (typical)
4. With no input signal at J2, rf voltmeter at 1R13 should indicate 100 mV (typical)
5. Set rf signal generator for a 10 uV output at the channel frequency. Rf voltmeter at 1 TP4 should indicate 800 mV (typical)
6. Set rf signal generator for a 10 uV output at the channel frequency. Rf voltmeter at 1 TP2 should indicate 60 mV (typical)
7. Set rf signal generator for a 10 mV output at the channel frequency. VOM/detector at pin 5 of 11C1 should indicate +3.5 vdc (typical).  
Set rf signal generator for 0 output. VOM/detector at pin 5 of 11C1 should indicate +3.5 vdc (typical)
8. Set rf signal generator for a 10 mV output at the channel frequency. VOM at 1R17 should indicate -2.5 vdc (typical)
9. Set rf signal generator for a 10 uV output at the channel frequency with a 1 kHz modulating tone and  $\pm 3.5$  kHz deviation
10. Set volume control to obtain a 0.2 VRMS AC VTVM indication at 1E20.
11. AC VTVM at 1E3 should indicate 400 mV RMS (typical)
12. AC VTVM at 1E28 should indicate 400 mV RMS (typical)
13. AC VTVM at 1R30 should indicate 400 mV RMS (typical)

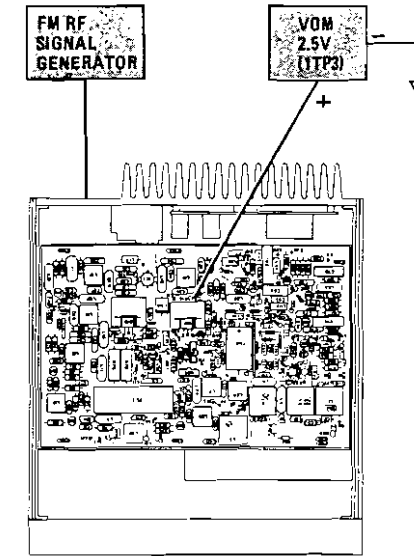
Figure 4-4. Receiver Performance Tests

### QUIETING SENSITIVITY MEASUREMENT



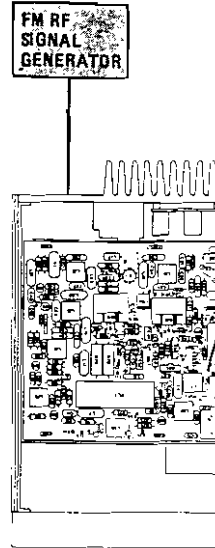
1. With no output from rf signal generator, adjust VOLUME control to obtain a 1 volt RMS indication on AC VTVM.
2. Set rf signal generator controls to produce a 10  $\mu$ V output at the channel frequency. Reduce rf signal generator output level until AC VTVM indication is 20 dB below the 1 volt RMS reference. Fine tune frequency and readjust output level for 20 dB indication. The rf signal generator output level should be 0.5  $\mu$ V or less.

### SQUELCH SENSITIVITY MEASUREMENT



1. Set rf signal generator controls to produce an output at the channel frequency at a 0.5  $\mu$ V level with a 1 kHz modulating frequency. Set deviation at 3.3 kHz. Adjust frequency control to obtain 0 VOM indication. Set output level control for no output.
2. Rotate SQUELCH control counterclockwise until receiver is just squelched.
3. Slowly increase rf signal generator output level until squelch threshold is just overridden. The rf signal generator output level should be 0.35  $\mu$ V or less.

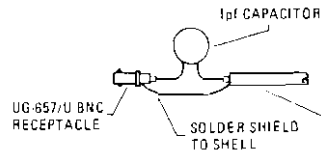
### AUDIO OUTPUT POWER AND DIST



1. Set rf signal generator controls to produce an output at the channel frequency at a 100  $\mu$ V level with a 1 kHz deviation at 3.3 kHz.
2. Set distortion analyzer controls to measure distortion. Adjust VOLUME control to obtain a 4 V distortion analyzer indication.
3. Set distortion analyzer controls to measure distortion. The distortion should not exceed 10%.

**NOTES**

- All adjustments are made with transmitter keyed.
- The attenuator shown below can be used to couple the rf output into the frequency counter.



- Reference designator prefixes are:

PREFIX	ASSEMBLY
1	Receiver
2	Exciter
3	Modulator
4	PA
5	Oscillator
6	Type Synthesizer (TCS)

- To ensure transmit channel frequency accuracy, chassis should be at room temperature. When adjusting transmit channel frequency, use a duty cycle of 1/2 minute on, 1/2 minute off.

- Perform the following calculations to determine the alignment channel or frequency.

Calculate bandwidth in percent as follows:

$$dB BW = \left[ \frac{F2 - F1}{\frac{F1 + F2}{2}} \right] \times 100$$

F1 = lowest carrier frequency  
F2 = highest carrier frequency

If calculated bandwidth is less than 0.40%, use channel that is closest to the middle (on the high side) of the frequency range.

If calculated bandwidth is greater than 0.40%, calculate alignment injection frequency (fa) as follows:

$$f_a = \left( \frac{F1 - F2}{2} \right) - 12$$

- An alignment crystal can be used to provide the alignment injection frequency. Order part number as follows and specify frequency (fa) as calculated in 5 above:

$$Y 0003 - 15 \text{ ppm} \pm 0.0005\%$$

- For TCS Transceiver, refer to wide band modulator alignment procedure in box.

- Use VOM at 4TP1 and 4TP2 for steps 10, 11 and 12 only if there is no indication on the VOM at 4E6 or the rf wattmeter at J2. If there is an indication at 4E6 or J2, then use either of these points for steps 10, 11 and 12.

**ALIGNMENT INSTRUCTIONS**

Preliminary Adjustments

- Set controls:  
VOLUME — Rotate clockwise to apply power.  
SQUELCH — Rotate fully clockwise.  
Channel Selector — See Note 5.
- Ensure that primary voltage is at +13.8 VDC unless otherwise specified.
- Ensure that voltage at primary at 1E23 is at +10 VDC. If not, adjust 1R58 to obtain +10 VDC indication at 1E23.
- Connect equipment as shown in figure A.

Complete Transmitter Alignment

Perform all steps 1 through 21 exactly as given.

Exciter Alignment

Perform steps 1 through 10.

PA Tuning

Perform steps 11 through 14. If PA is initially tuned into a dummy load that has an impedance significantly different from the antenna, perform steps 13 and 14 with radio connected to the antenna.

Deviation Adjustment

Perform step 19. (See note 7).

Transmit Channel Frequency Adjustment

Perform step 21.

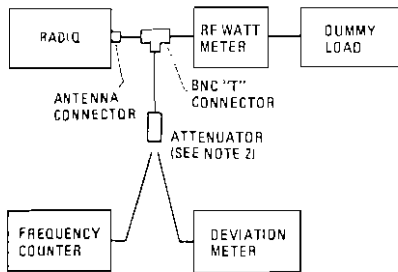
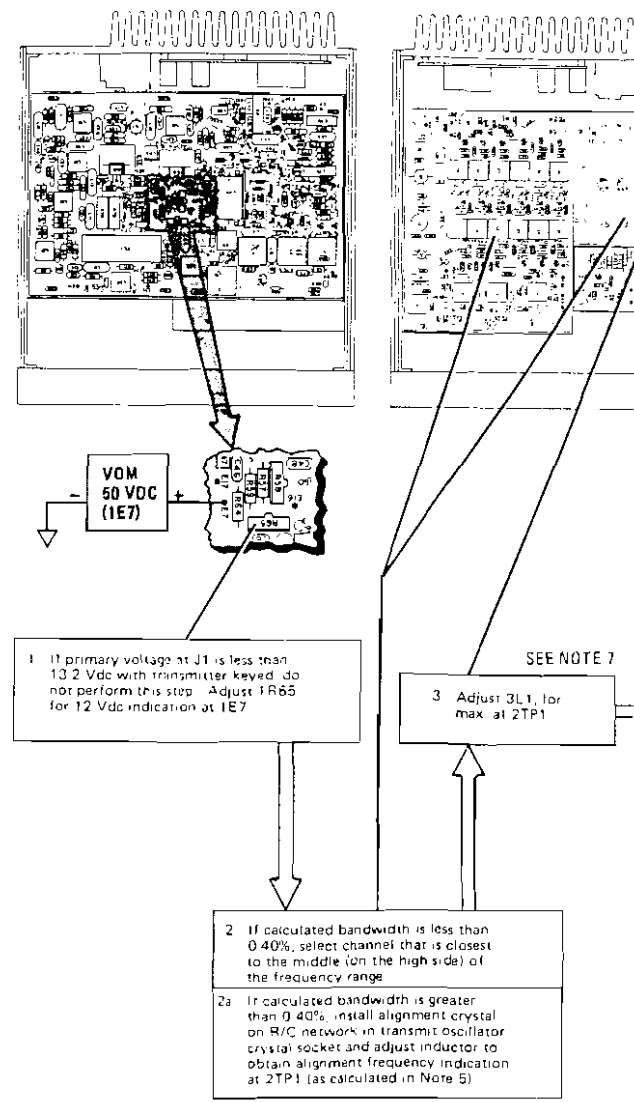
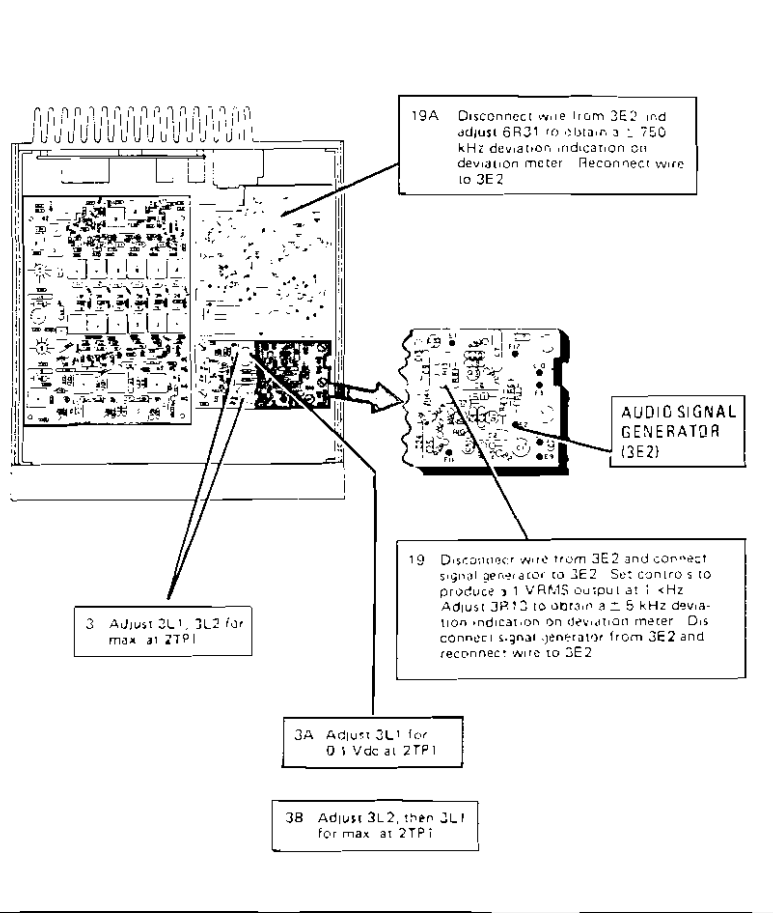


Figure A. Test Equipment Connection Diagram

**WIDEBAND MODULATOR ALIGNMENT AND TCS ASSEMBLY DEVIATION ADJUSTMENT**



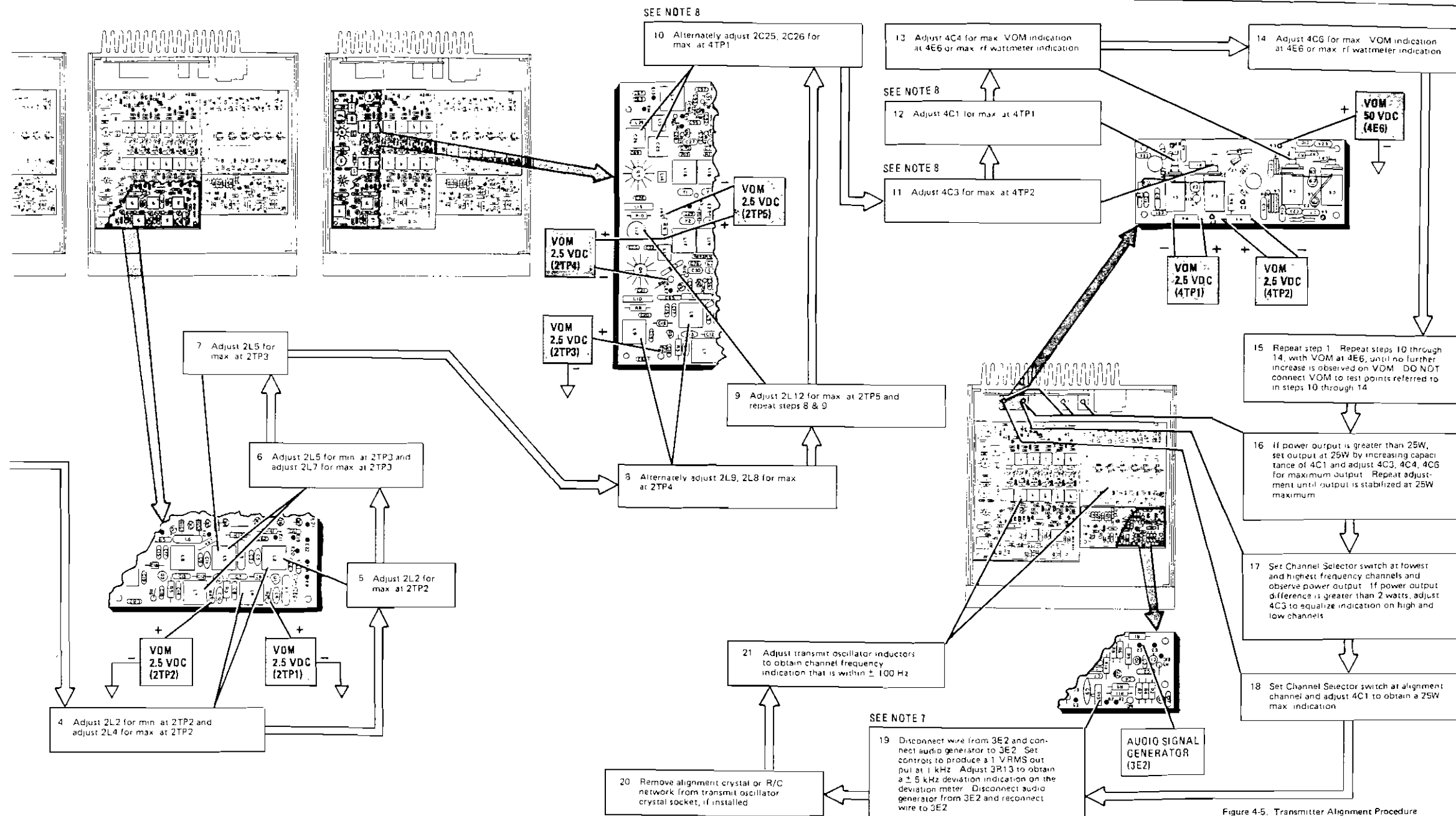
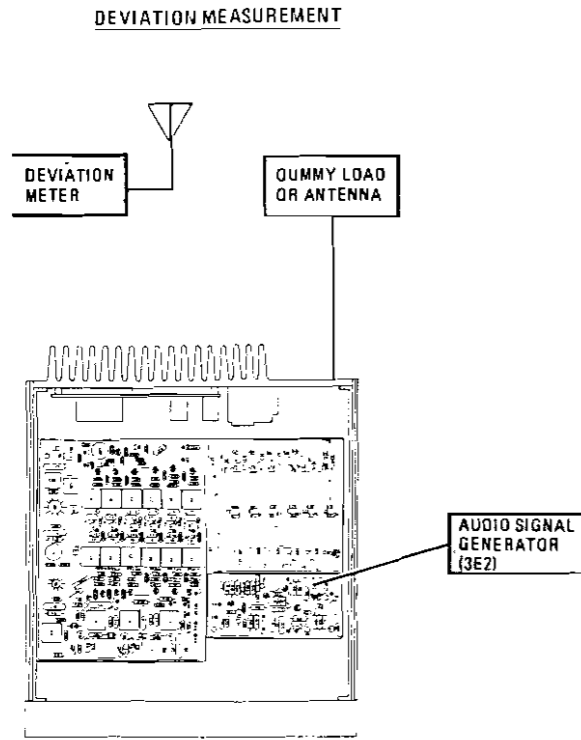


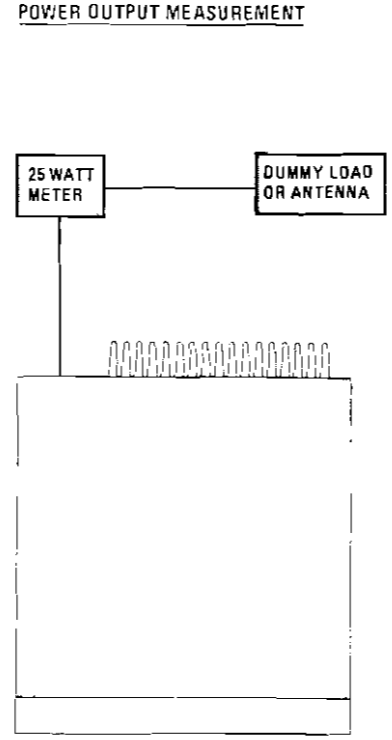
Figure 4-5. Transmitter Alignment Procedure



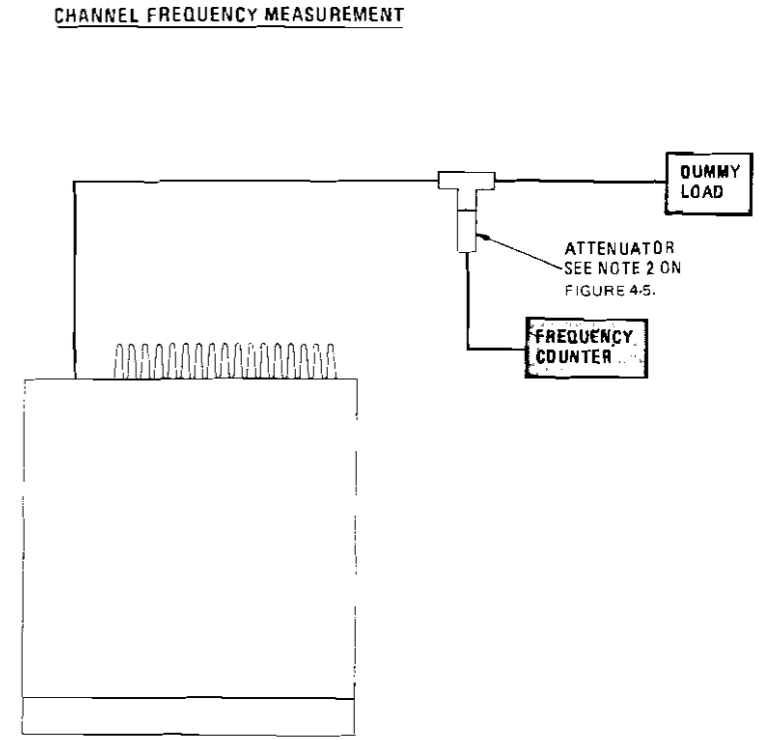
Set audio signal generator controls to produce a 1 kHz output at 1 volt RMS.

Key transmitter and observe deviation meter. The indicated deviation should not be greater than 5 kHz on either the positive or negative deviation scale.

If indicated deviation is not within limits, refer to figure 4-5 and perform step 21.



1. Key transmitter and observe wattmeter. The wattmeter should indicate 25 watts maximum. If power output is not correct, refer to figure 4-5 and perform steps 13 through 16.



1. Set Channel Selector switch at channel to be checked. Key transmitter and observe indication on frequency counter. The indicated channel frequency must be within  $\pm 250$  cycles of the channel frequency.

2. Repeat step 1 for the remaining channels. If the indicated frequency is not within limits, refer to figure 4-5 and perform step 23.

Figure 4-6 Transmitter Performance Tests

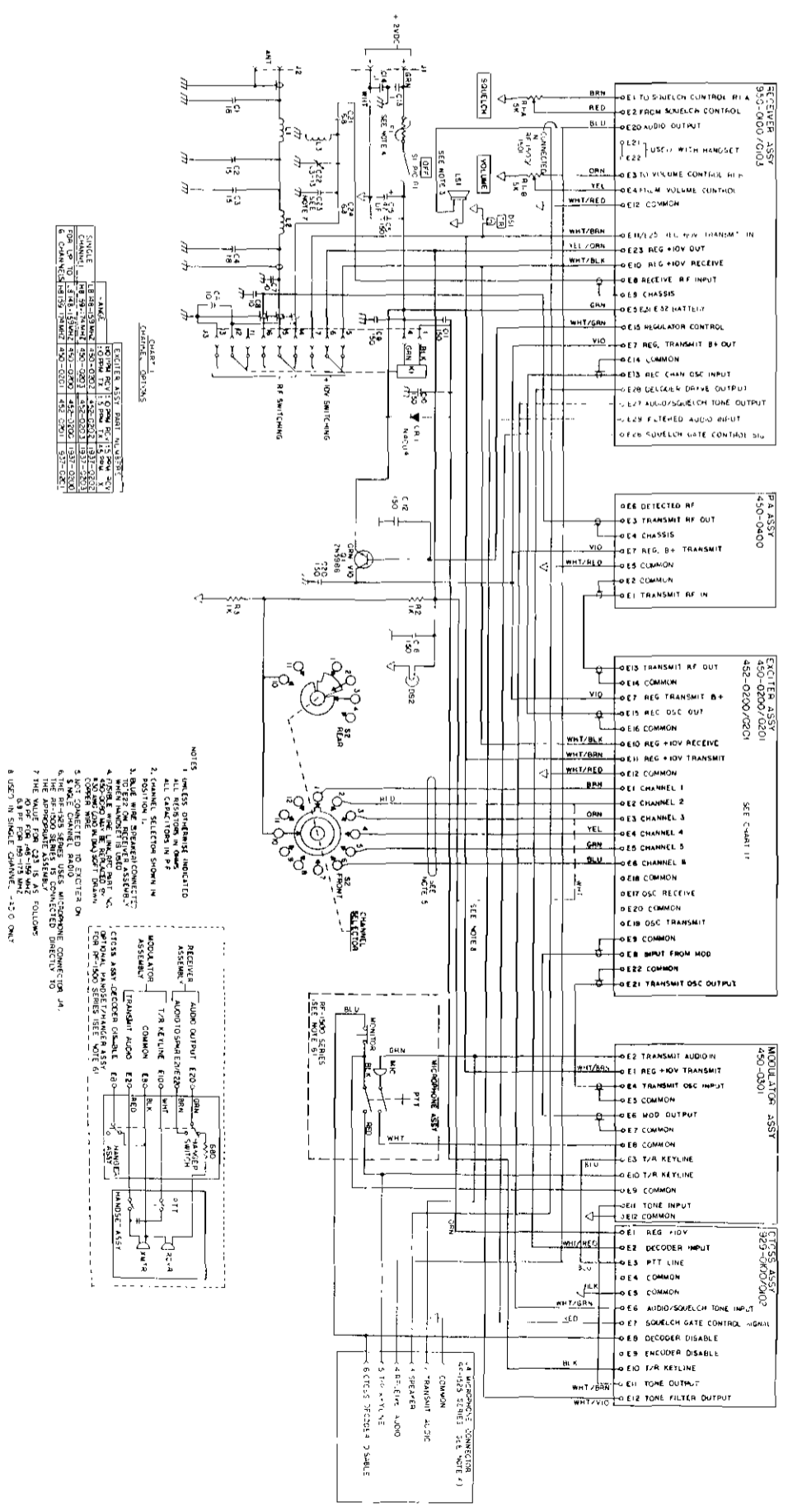


Figure 5-2. Front Mount (TCS) Main Frame Schematic Diagram



REF DESIG	DESCRIPTION	RF PART NUMBER
1	Receiver Assembly, see separate parts list	
	148-159 MHz	954-0100
	159-174 MHz	954-0101
2	Exciter Assembly, $\pm 0.0005\%$ , Transmit Stability $\pm 0.001\%$ Receive Stability	
	See separate parts list	
	148-159 MHz, 1 Channel	452-0202
	159-174 MHz, 1 Channel	452-0203
	148-159 MHz, 2 Channel	452-0204
	159-174 MHz, 2 Channel	452-0205
	148-159 MHz, 6 Channel	452-0200
	159-174 MHz, 6 Channel	452-0201
	Exciter Assembly, $\pm 0.0005\%$ Transmit Stability, $\pm 0.0005\%$ Receiver Stability	
	See separate parts list	
	148-159 MHz, 1 Channel	1937-0202
	159-174 MHz, 1 Channel	1937-0203
	148-159 MHz, 2 Channel	1937-0204
	159-174 MHz, 2 Channel	1937-0205
	148-159 MHz, 6 Channel	1937-0200
	159-174 MHz, 6 Channel	1937-0201
3	Modulator Assembly, see separate parts list	
	Wideband	450-0301
4	PA Assembly, see separate parts list	450-0400
5	Not Assigned	
6	TCS Assembly, see separate parts list	
	Encoder	929-0101
	Decoder	929-0100
	Encoder/Decoder	929-0102
C1	Cap, Disc, NPO, 18 pf, 5%, 1 KVDCW	C-4744
C2	Cap, Disc, NPO, 15 pf, 5%, 1 KVDCW	C-4743
C3	Cap, Disc, NPO, 15 pf, 5%, 1 KVDCW	C-4743
C4	Cap, Disc, NPO, 18 pf, 5%, 1 KVDCW	C-4744
C5	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C6	Cap, Disc, NPO, 10 pf, 5%, 1KVDCW	C-4741
C7	Cap, Disc, NPO, 10 pf, 5%, 1 KVDCW	C-4741
C8	Cap, Disc, NPO, 10 pf, 5%, 1 KVDCW	C-4741
C9	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C10	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C11	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794

REF DESIG	DESCRIPTION	RF PART NUMBER
C12	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C13	Cap, Disc, 0.1 uf, +80%, -20%, 30 VDCW	C-2210
C14	Cap, Disc, 0.1 uf, +80%, -20%, 30 VDCW	C-2210
C15	Cap, Tant, 47 uf, 20%, 20 VDCW	C-2171
C16	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C17	Not Used	
C18	Not Used	
C19	Not Used	
C20	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C21	Cap, Disc, NPO, 6.8 pf, 5%, 1 KVDCW	C-4739
C22	Cap, Var, 1.3 - 14 pf	C-4649
C23	148-159 MHz Cap, Disc, NPO, 10 pf, 5%, 1 KVDCW	C-4741
	159-174 MHz	
	Cap, Disc, NPO, 6.8 pf, 5%, 1 KVDCW	C-4739
	Cap, Disc, NPO, 6.8 pf, 5%, 1 KVDCW	C-4739
C24	Diode, 1N4454	CR-0705
CR1	Lamp, T/R	DS-0088
DS1	Lamp, Channel DS	DS-0206
DS2	Fusible Link	450-0080
F1	Connector, Power	J-0036
J1	Connector, Antenna	J-0003
J2	Connector, T/R Relay	X-1005
J3	Connector Assembly, Microphone	452-0017
J4	Relay, T/R	K-0069
K1	Inductor, Fixed	483-0391
L1	Inductor, Fixed	483-0391
L2	Inductor, Fixed	954-0014
L3	Inductor, Fixed	954-0014
LS1	Speaker	LS-0014
Q1	Transistor, 2N59B6	Q-0427
R1	Volume/Squelch Control, 5K, Linear Taper	R-3175
R2	Res, Comp, 1K, 10%, 1/2W	R-0024
R3	Res, Comp, 1K, 10%, 1/2W	R-0024
S1	Switch, Power, Part of R1	
S2	Switch, Channel Selector	B50-0021
	Knob, Squelch	MP-0248
	Knob, Volume	MP-0247
	Knob, Channel Selector	B50-0022
	Cover, Top, Non-locking	B50-0004-2
	Cover, Bottom, Non-locking	B50-0004-1
	Cover, Top, Locking	972-1090
	Cover, Bottom, Locking	972-1091
	Lock Assembly, with Key	MP-4157
	Lock Pawl	MP-4158



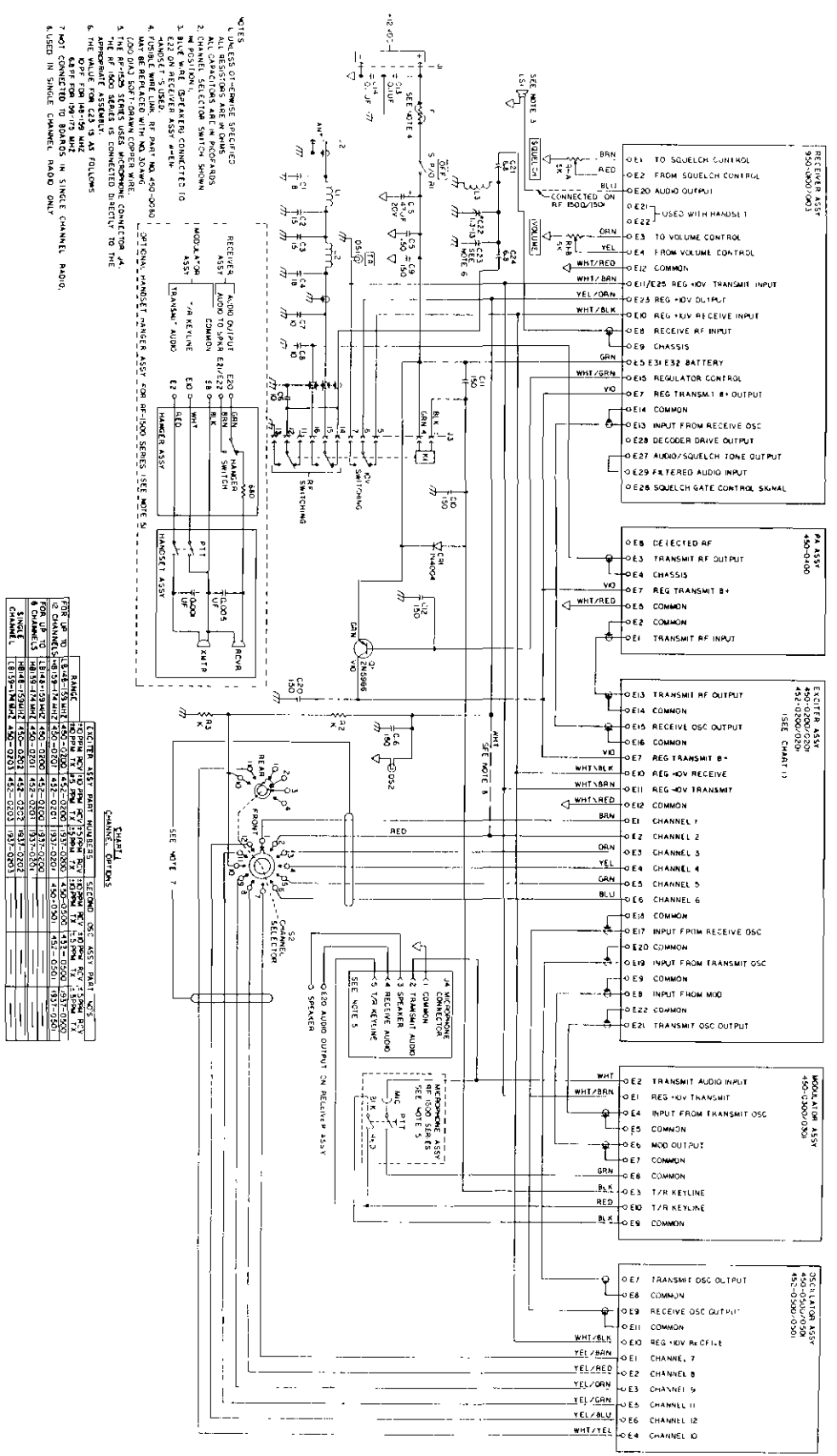


Figure 5-3 Front Mount (Non-TCS) Main Frame Schematic Diagram



REF DESIG	DESCRIPTION	RF PART NUMBER
1	Receiver Assembly, see separate parts list 148-159 MHz	
2	Exciter Assembly, $\pm 0.0005\%$ , Transmit Stability $\pm 0.001\%$ Receive Stability. See separate parts list 148-159 MHz, 1 Channel 159-174 MHz, 1 Channel 148-159 MHz, 2 Channel 159-174 MHz, 2 Channel 148-159 MHz, 6 Channel 159-174 MHz, 6 Channel Exciter Assembly, $\pm 0.0005\%$ Transmit Stability, $\pm 0.0005\%$ Receive Stability See separate parts list 148-159 MHz, 1 Channel 159-174 MHz, 1 Channel 148-159 MHz, 2 Channel 159-174 MHz, 2 Channel 148-159 MHz, 6 Channel 159-174 MHz, 6 Channel Modulator Assembly, see separate parts list Narrowband PA Assembly, see separate parts list Oscillator Assembly, $\pm 0.0005\%$ Transmit Stability, $\pm 0.001\%$ Receive Stability See separate parts list 148-159 MHz 159-174 MHz Oscillator Assembly, $\pm 0.0005\%$ Transmit Stability, $\pm 0.0005\%$ Receive Stability See separate parts list 148-159 MHz 159-174 MHz	954-0100 954-0101  452-0202 452-0203 452-0204 452-0205 452-0200 452-0201   1937-0202 1937-0203 1937-0204 1937-0205 1937-0200 1937-0201  450-0300 450-0400   452-0500 452-0501   1937-0500 1937-0501
C1	Cap, Disc, NPO, 18 pf, 5%, 1 KVDCW	C-4744
C2	Cap, Disc, NPO, 15 pf, 5%, 1 KVDCW	C-4743
C3	Cap, Disc, NPO, 15 pf, 5%, 1 KVDCW	C-4743
C4	Cap, Disc, NPO, 18 pf, 5%, 1 KVDCW	C-4744
C5	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C6	Cap, Disc, NPO, 10 pf, 5%, 1 KVDCW	C-4741
C7	Cap, Disc, NPO, 10 pf, 5%, 1 KVDCW	C-4741
C8	Cap, Disc, NPO, 10 pf, 5%, 1 KVDCW	C-4741
C9	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C10	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794

REF DESIG	DESCRIPTION	RF PART NUMBER
C11	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C12	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C13	Cap, Disc, 0.1 uf, +80%, -20%, 30 VDCW	C-2210
C14	Cap, Disc, 0.1 uf, +80%, -20%, 30 VDCW	C-2210
C15	Cap, Tant, 47 uf, 20%, 20 VDCW	C-2171
C18	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C17	Not Used	
C18	Not Used	
C19	Not Used	
C20	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C21	Cap, Disc, NPO, 6.8 pf, 5%, 1 KVDCW	C-4739
C22	Cap, Var, 1.3 - 14 pf 148-159 MHz	C-4649
C23	Cap, Disc, NPO, 10 pf, 5%, 1 KVDCW 159-174 MHz	C-4741
	Cap, Disc, NPO, 6.8 pf, 5%, 1 KVDCW	C-4739
C24	Cap, Disc, NPO, 6.8 pf, 5%, 1 KVDCW	C-4739
CR1	Diode, 1N 4454	CR-0705
DS1	Lamp, T/R	DS-0086
DS2	Lamp, Channel	DS-0206
F1	Fusible Link	450-0080
J1	Connector, Power	J-0036
J2	Connector, Antenna	J-0003
J3	Connector, T/R Relay	X-1005
J4	Connector Assembly, Microphone	452-0016
K1	Relay, T/R	K-0069
L1	Inductor, Fixed	483-0391
L2	Inductor, Fixed	483-0391
L3	Inductor, Fixed	954-0014
LS1	Speaker	LS-0014
Q1	Transistor, 2N5986	Q-0427
R1	Volume/Squelch Control, 5K, Linear Taper	R-3175 R-0024
R2	Res, Comp, 1K, 10%, 1/4W	R-0024
R3	Res, Comp, 1K, 10%, 1/4W	R-0024
S1	Switch, Power, Part of R1	
S2	Switch, Channel Selector Knob, Squelch Knob, Volume Knob, Channel Selector Cover, Top, Non-locking Cover, Bottom, Non-locking Cover, Top, Locking Cover, Bottom, Locking Lock Assembly, with Key Lock Pawl	850-0021 MP-0248 MP-0247 850-0022 850-0004-2 850-0004-1 972-109D 972-1091 MP-4157 MP-4158

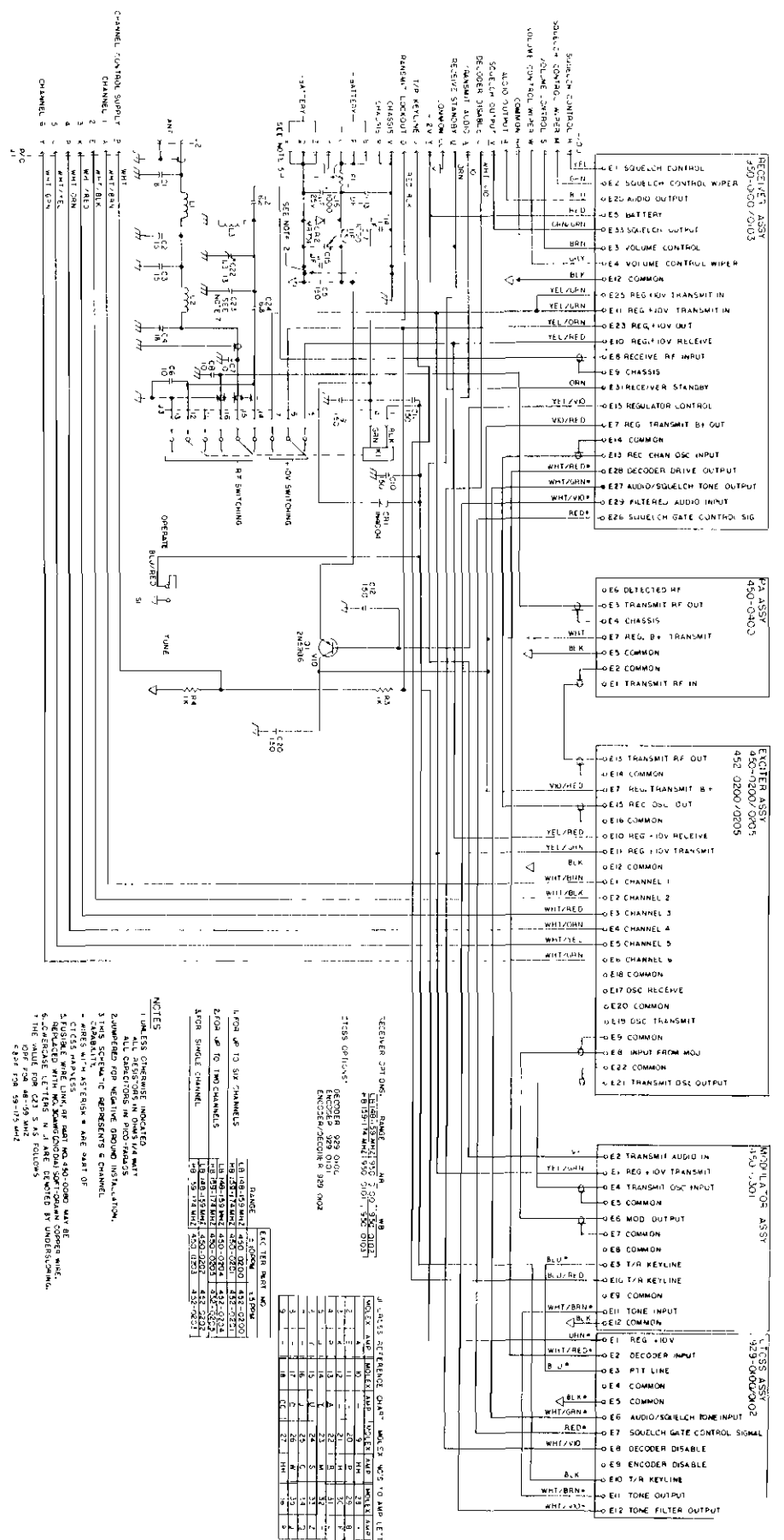


Figure 5-4. Trunk Mount (TCS) Main Frame Assembly



REF DESIG	DESCRIPTION	RF PART NUMBER	REF DESIG	DESCRIPTION	RF PART NUMBER
1	Receiver Assembly, see separate parts list		C10	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
	148-159 MHz	954-0100	C11	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
	159-174 MHz	954-0101	C12	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
2	Exciter Assembly, $\pm$ 0.0005% Transmit Stability, $\pm$ 0.001% Receive Stability See separate parts list		C13	Cap, Disc, 0.1 uf, +80%, -20%, 30 VDCW	C-2210
	148-159 MHz, 1 Channel	452-0202	C14	Cap, Disc, 0.1 uf, +80%, -20%, 30 VDCW	C-2210
	159-174 MHz, 1 Channel	452-0203	C15	Cap, Disc, 0.1 uf, +80%, -20%, 30 VDCW	C-2210
	148-159 MHz, 2 Channel	452-0204	C16	Cap, Elect., 1000 uf, +50%, -10%, 25 VDCW	C-1421
	159-174 MHz, 2 Channel	452-0205	C17	Cap, Elect., 1000 uf, +50%, -10%, 25 VDCW	C-1421
	148-159 MHz, 6 Channel	452-0200	C18	Not Used	
	159-174 MHz, 6 Channel	452-0201	C19	Not Used	
	Exciter Assembly, $\pm$ 0.0005% Transmit Stability, $\pm$ 0.0005% Receive Stability See separate parts list		C20	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
	148-159 MHz, 1 Channel	1937-0202	C21	Cap, Disc, NPO, 6.8 pf, 5%, 1 KVDCW	C-4739
	159-174 MHz, 1 Channel	1937-0203	C22	Cap, Var, 1.3 - 14 pf	C-4649
	148-159 MHz, 2 Channel	1937-0204	C23	148-159 MHz Cap, Disc, NPO, 10 pf, 5%, 1 KVDCW	C-4741
	159-174 MHz, 2 Channel	1937-0205		159-174 MHz Cap, Disc, NPO, 6.8 pf, 5%, 1 KVDCW	C-4739
	148-159 MHz, 6 Channel	1937-0200	C24	Cap, Disc, NPO, 6.8 pf, 5%, 1 KVDCW	C-4739
	159-174 MHz, 6 Channel	1937-0201	CR1	Diode, 1N 4454	CR-0705
3	Modulator Assembly, see separate parts list		CR2	Diode, MR751	CR-0407
	Wideband	450-0301	F1	Fusible Link	450-0080
4	PA Assembly, see separate parts list	450-0400	J1	Connector, Control/Power	P-0103
5	Not Assigned		J2	Connector, Coax	J-0003
6	TCS Assembly, see separate parts list		J3	Connector, T/R Relay	X-1005
	Encoder	929-0101	K1	Relay, T/R	K-0069
	Decoder	929-0100	L1	Inductor, Fixed	483-0391
	Encoder/Decoder	929-0102	L2	Inductor, Fixed	483-0391
C1	Cap, Disc, NPO, 18 pf, 5%, 1 KVDCW	C-4744	L3	Inductor, Fixed	954-0014
C2	Cap, Disc, NPO, 15 pf, 5%, 1 KVDCW	C-4743	O1	Transistor, 2N5985	Q-0427
C3	Cap, Disc, NPO, 15 pf, 5%, 1 KVDCW	C-4743	R1	Not Used	
C4	Cap, Disc, NPO, 18 pf, 5%, 1 KVDCW	C-4744	R2	Not Used	
C5	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794	R3	Res, Comp, 1K, 10%, 1/4W	R-0024
C6	Cap, Disc, NPD, 10 pf, 5%, 1 KVDCW	C-4741	R4	Res, Comp, 1K, 10%, 1/4W	R-0024
C7	Cap, Disc, NPD, 10 pf, 5%, 1 KVDCW	C-4741	S1	Switch, Tune/Operate	S-0054
C8	Cap, Disc, NPD, 10 pf, 5%, 1 KVDCW	C-4741		Cover, Top	972-1090
C9	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794		Cover, Bottom	972-1091
				Lock Assembly, with Keys	MP-4157
				Lock Pawl	MP-4158