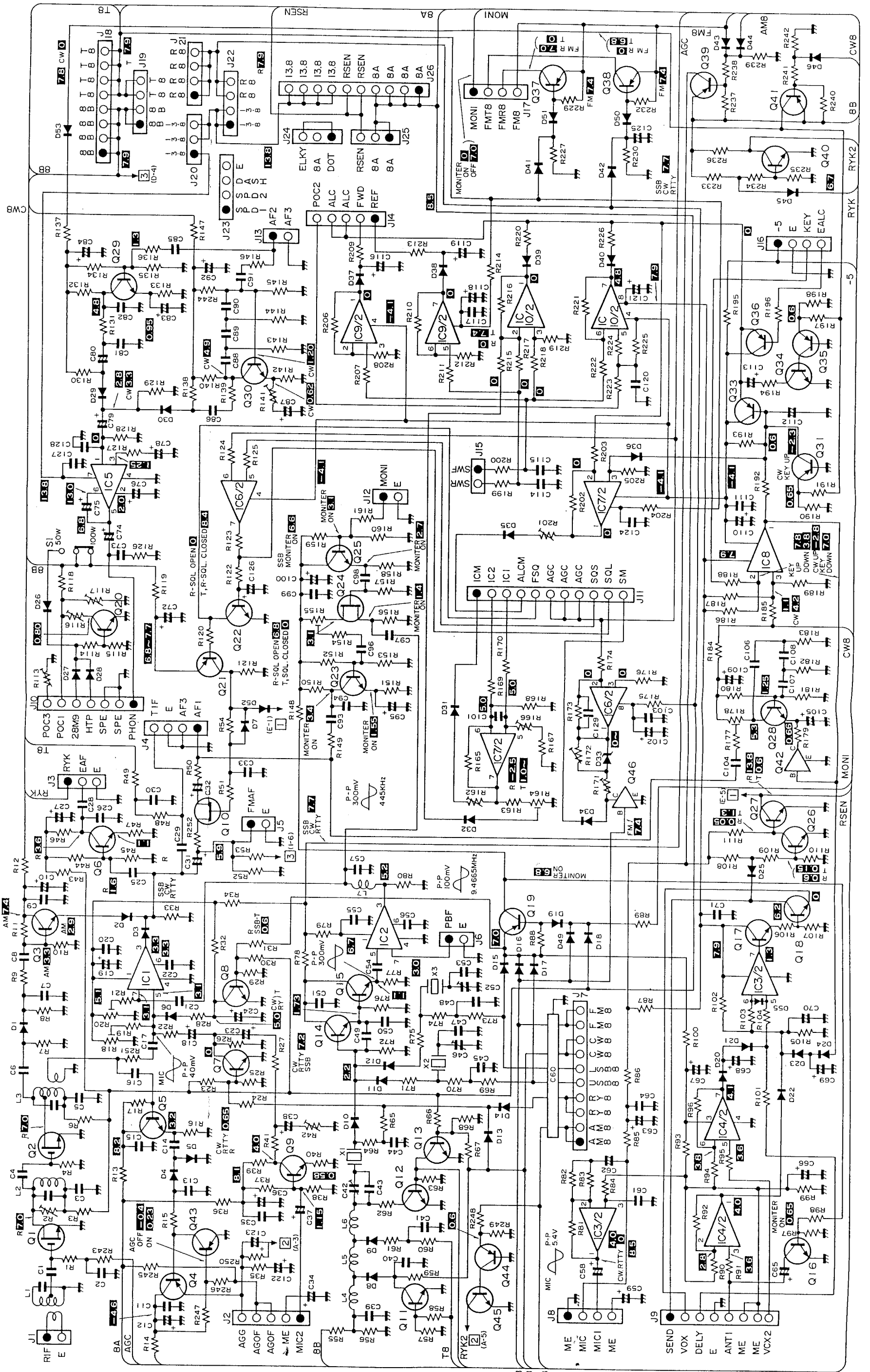
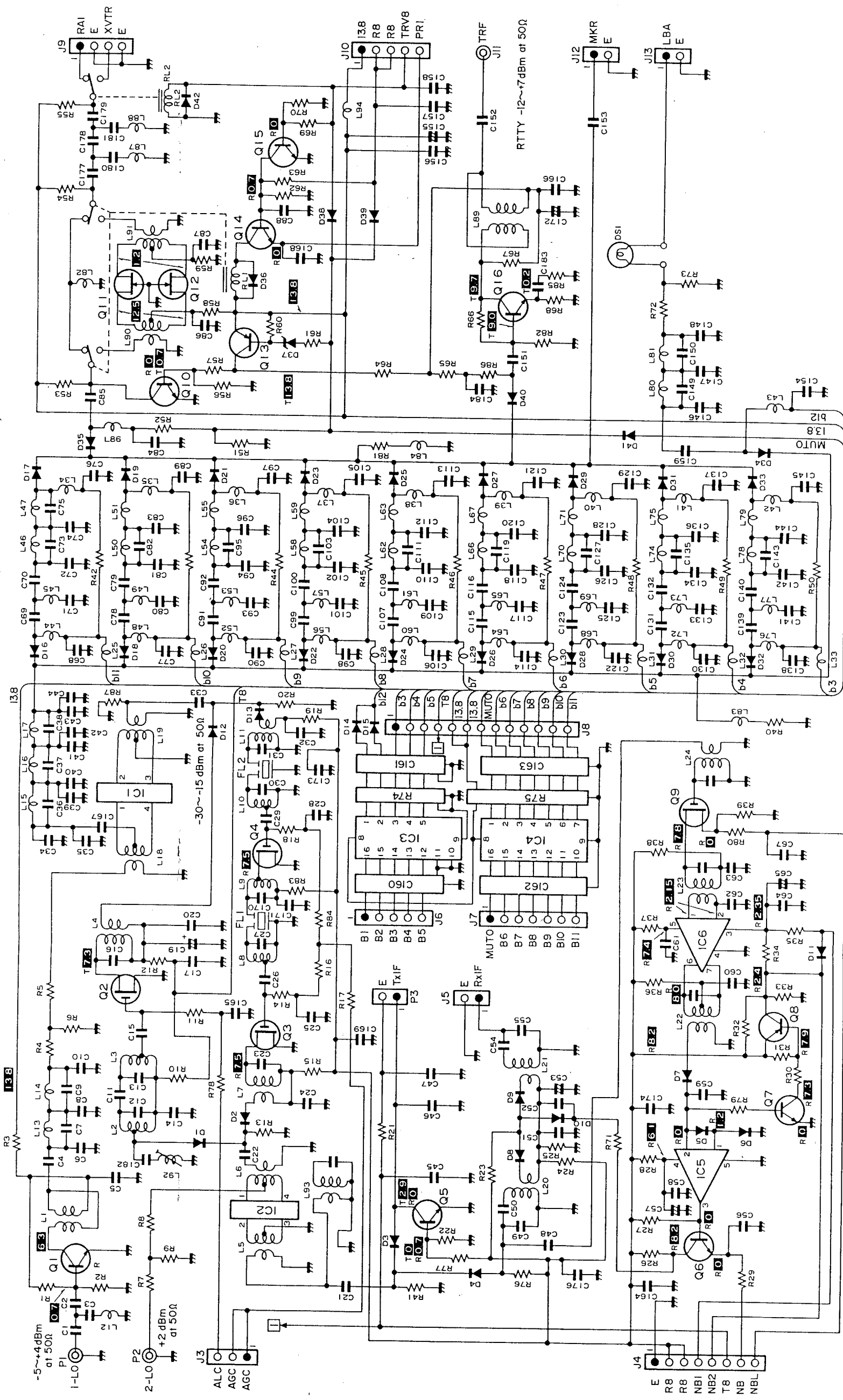


SECTION 10 VOLTAGE (CIRCUIT) DIAGRAMS

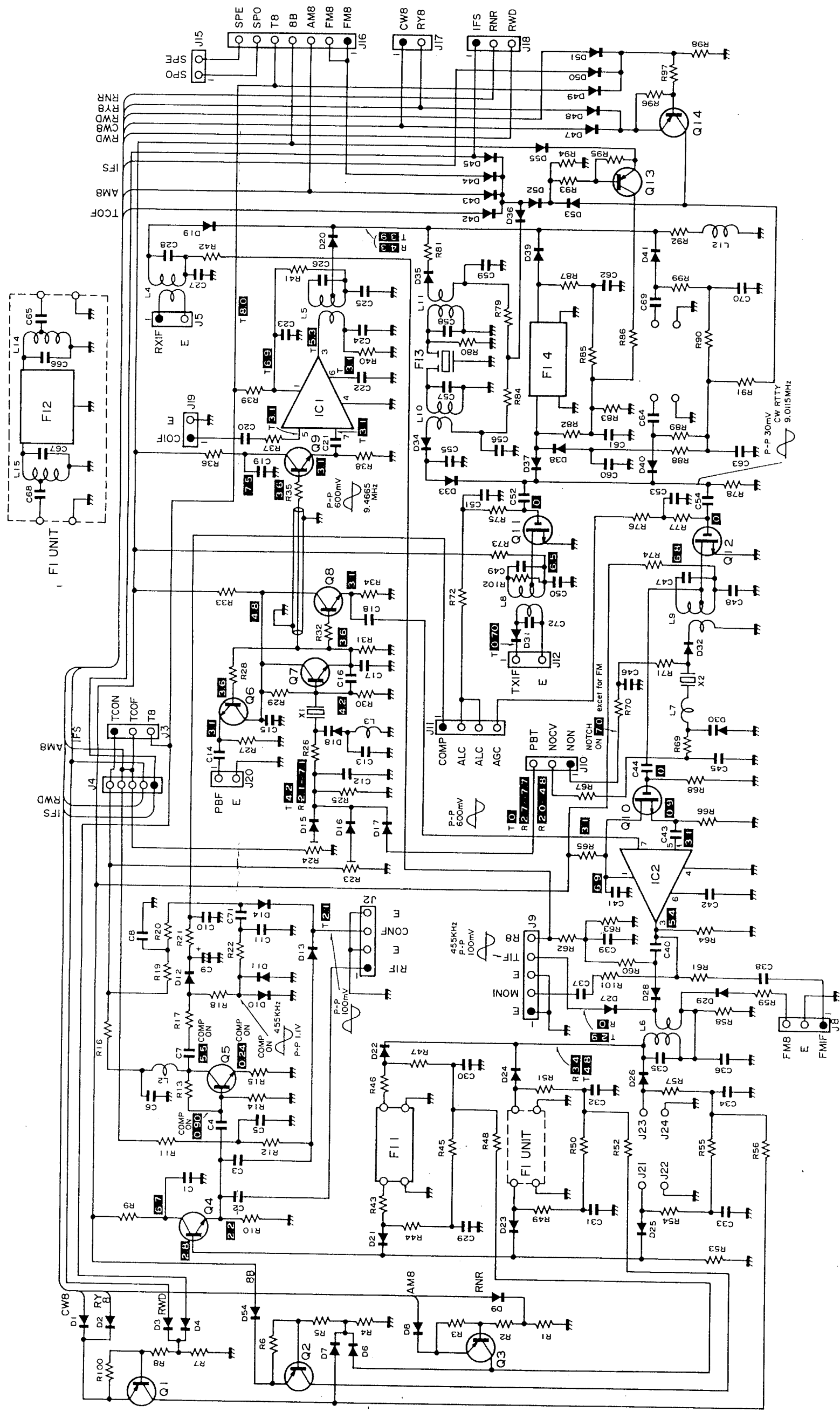
MAIN UNIT CIRCUIT AND VOLTAGE DIAGRAM



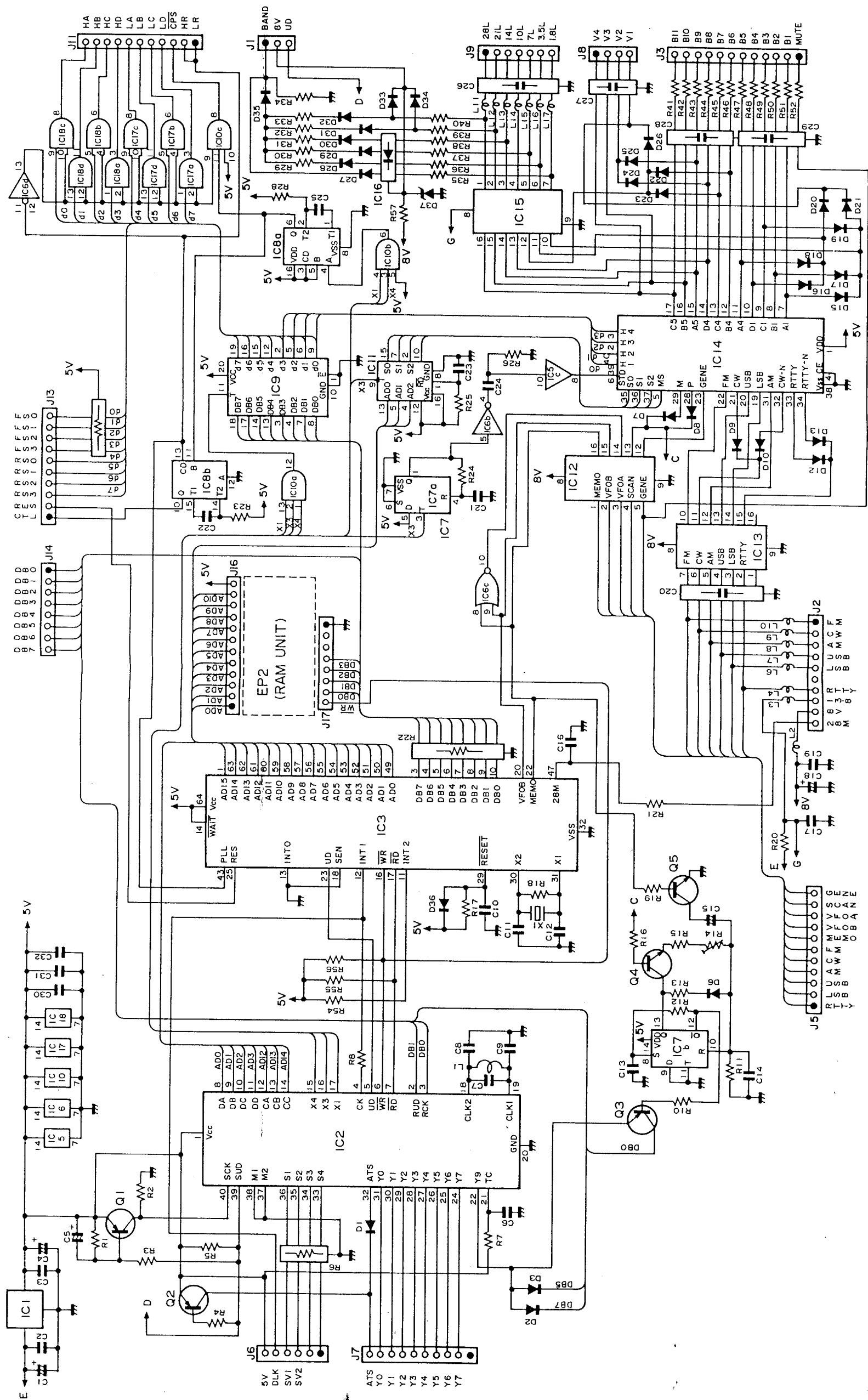
RF UNIT CIRCUIT AND VOLTAGE DIAGRAM

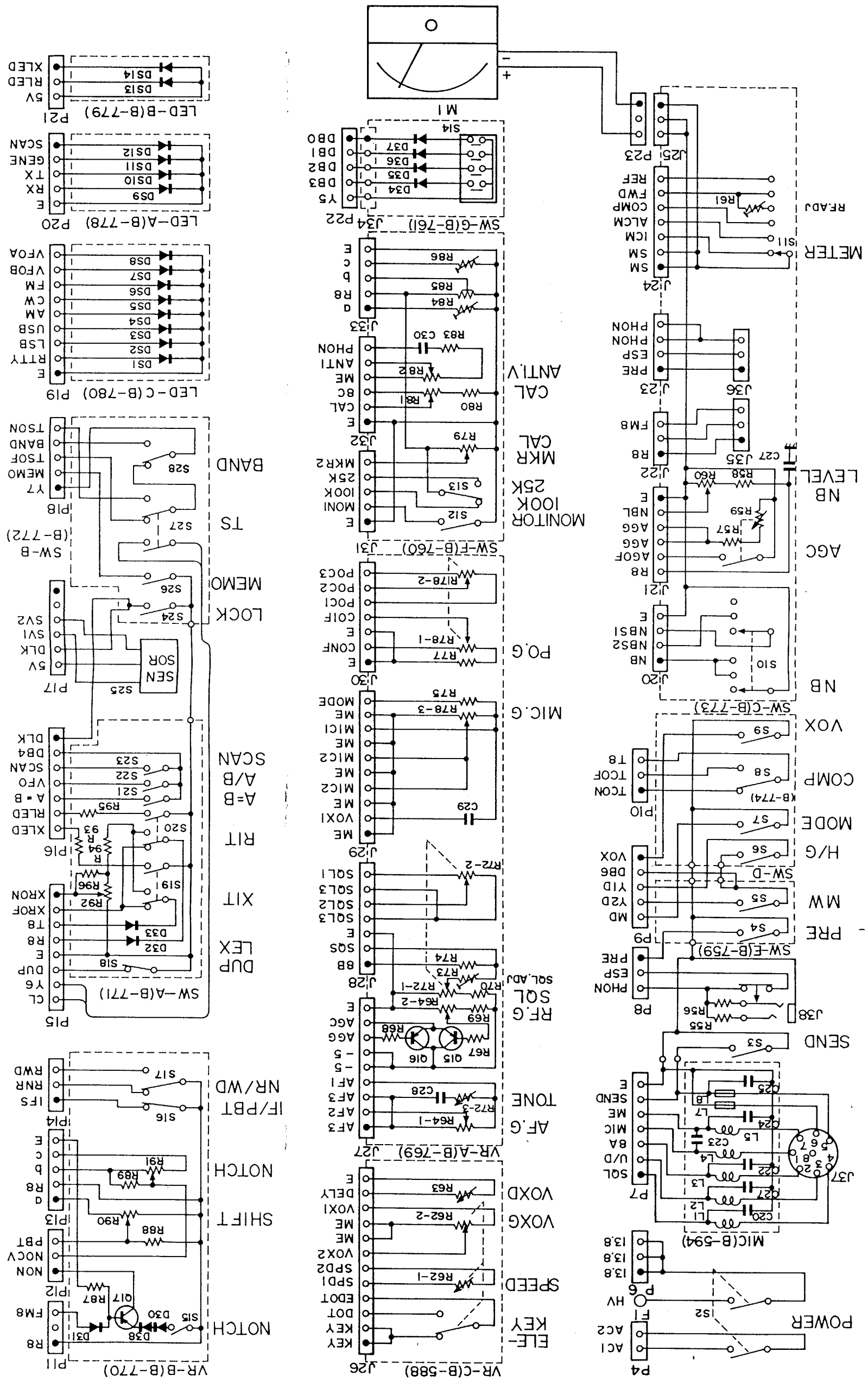


IF UNIT CIRCUIT AND VOLTAGE DIAGRAM

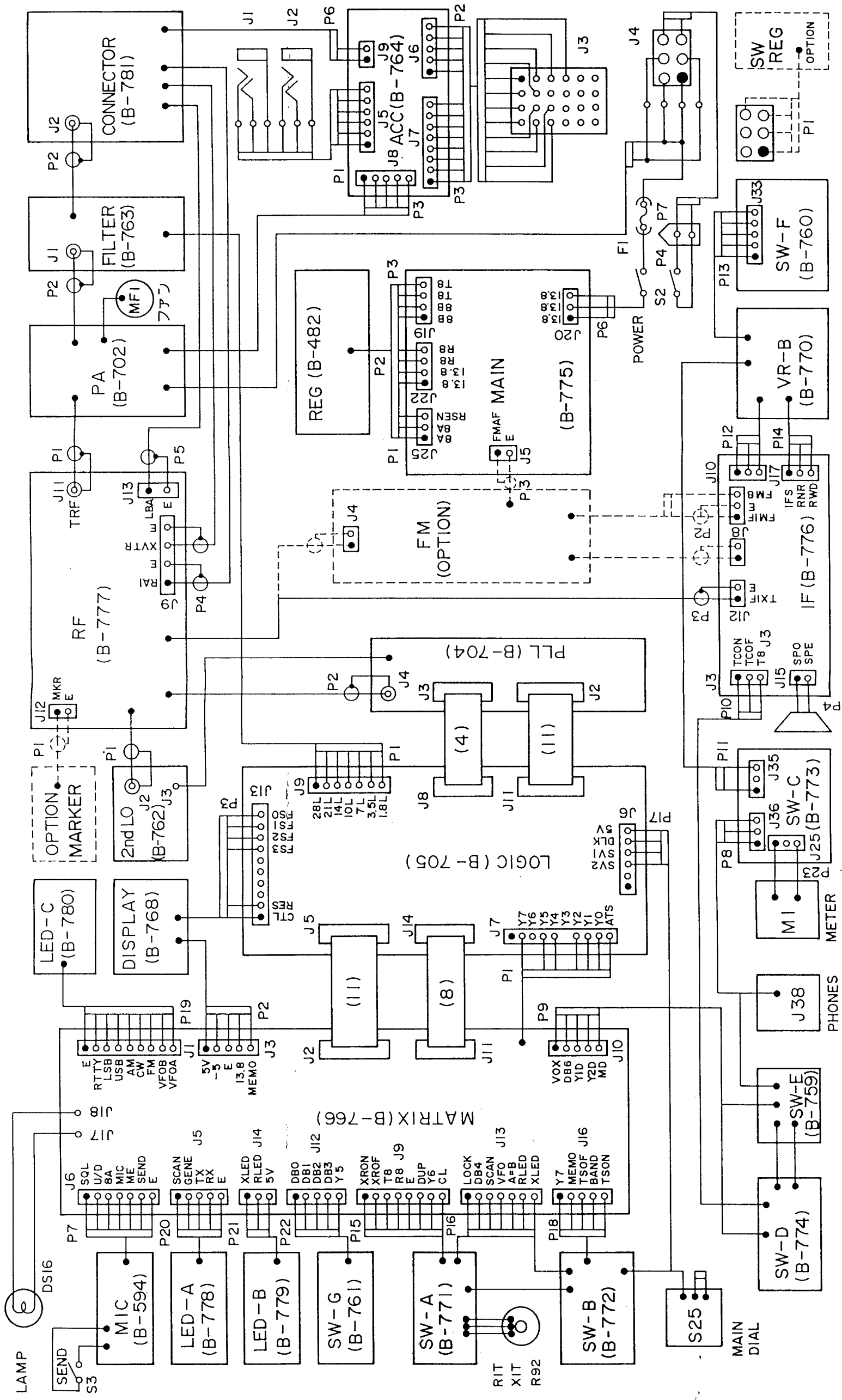


LOGIC UNIT CIRCUIT DIAGRAM

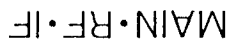




UNIT CONNECTION DIAGRAM



PLL • LOGIC

[illegible]

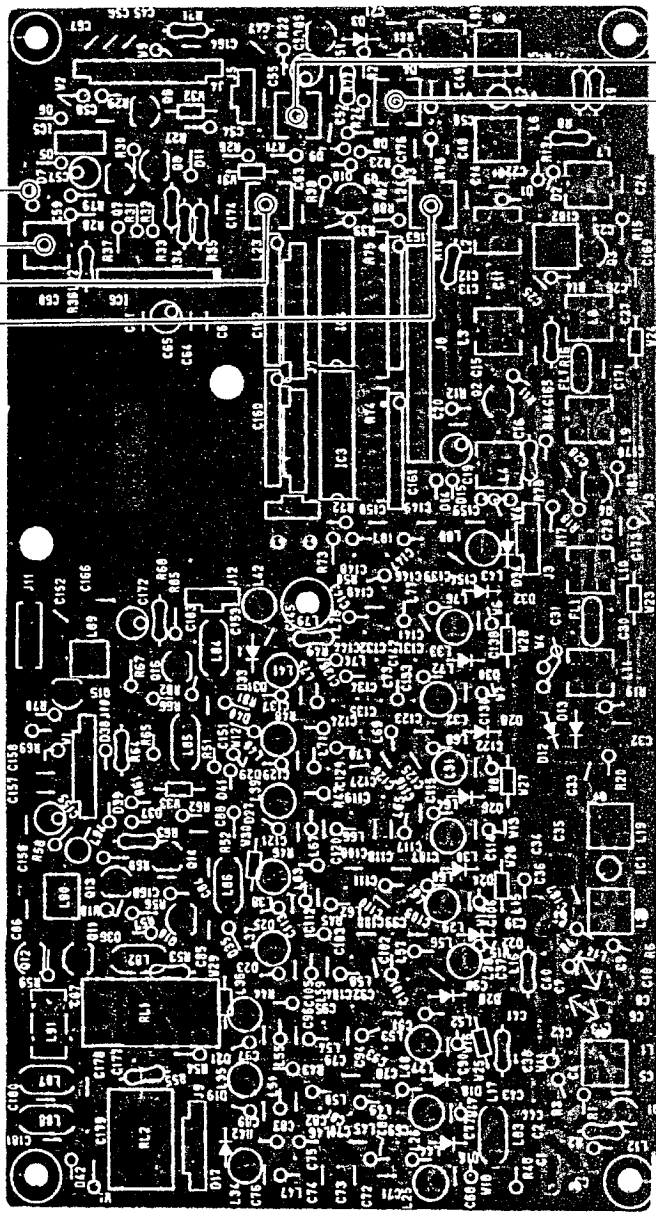
SECTION 9 MAINTENANCE AND ADJUSTMENT

9-1 RECEIVER ADJUSTMENT

Adjustment	Adjustment conditions	Unit	Measurement location	Adjust Value	Unit	Adjust point
INSTRUMENTS REQUIRED	(1) STANDARD SIGNAL GENERATOR (SSG) FREQUENCY RANGE 0.1 ~ 40MHz OUTPUT LEVEL (loaded value) -20 ~ +100dB (0dB=1μV)					
	(2) AC MILLIVOLT METER MEASURING RANGE 10mV ~ 3V					
	(3) EXTERNAL SPEAKER IMPEDANCE 8 ohms					
TOTAL GAIN	1. MODE : SSB • BAND : 14MHz • PRE AMP : OFF • P.B.T : Center • NOTCH : OFF • NB : OFF • SOL : MIN • RF GAIN : MAX • TONE : Fully clockwise • AGC : OFF • Set the output level of the SSG to -10dBμ.		• Connect the SSG to the ANT connector. • Connect the AC millivolt meter and external speaker to the EXT SP jack.	Adjust to maximum AF output.	RF	L20, L21
	2. • AGC : Center • Set the output level of the SSG to +40 ~ 60dBμ.			Adjust the AF GAIN control to get 2.5V AF output.	IF	L9
	3. • Turn off the output of the SSG.			Adjust R2 so that the noise level is 30dB down (about 80mV) from 2.5V.	MAIN	L1, L2, L3
CW PREAMP GAIN	1. • MODE : USB • Set the output level of the SSG to +40 ~ 60dBμ.		• Connect the SSG to the ANT connector. • Connect the AC millivolt meter and external speaker to the EXT SP jack.	Tune to get maximum AF output.	FRONT PANEL	AF GAIN
	2. Keep the condition of 1., and adjust the AF GAIN control to get 1V AF output.				MAIN	R2
	3. • MODE : CW • Set the output level of the SSG to +40 ~ 60dBμ.			Tune to get 800Hz beat tone and maximum AF output.	FRONT PANEL	Tuning Control
S-METER	4. Keep the condition of 3., and adjust R141 to get 1V AF output.		S-METER of the set.	Keep the condition of 3., and adjust R141 to get 1V AF output.	MAIN	R141
	1. • MODE : USB • BAND : 14MHz • PRE AMP : OFF • P.B.T : Center • AGC : Center • Set the output level of the SSG to +30dBμ.			S9	MAIN	R172
	2. • Set the output level of the SSG to +94dBμ.			S9 + 60dB		R171
NOISE BLANKER	3. Repeat adjustments of 1. and 2. several times. Confirm that the meter is full-scaled when the RF GAIN control is turned fully counterclockwise, and does not deflect in the FM mode.		Connect and oscilloscope to D7.			
	1. • MODE : USB Apply pulse noise to the ANT connector.	RF		Adjust to get maximum.	RF	L22 ~ L24
	2. When the NB switch is set at the NOR position, the noise blanker should not work for wide noises (pulse width: about 5 milliseconds). When the NB switch is set at the WIDE position, the noise blanker should work for either narrow noises (pulse width: about 0.4 ~ 0.5 milliseconds) or wide noises. Confirm that the NB amplifiers do not oscillate when the NB LEVEL controls is turned fully clockwise.					

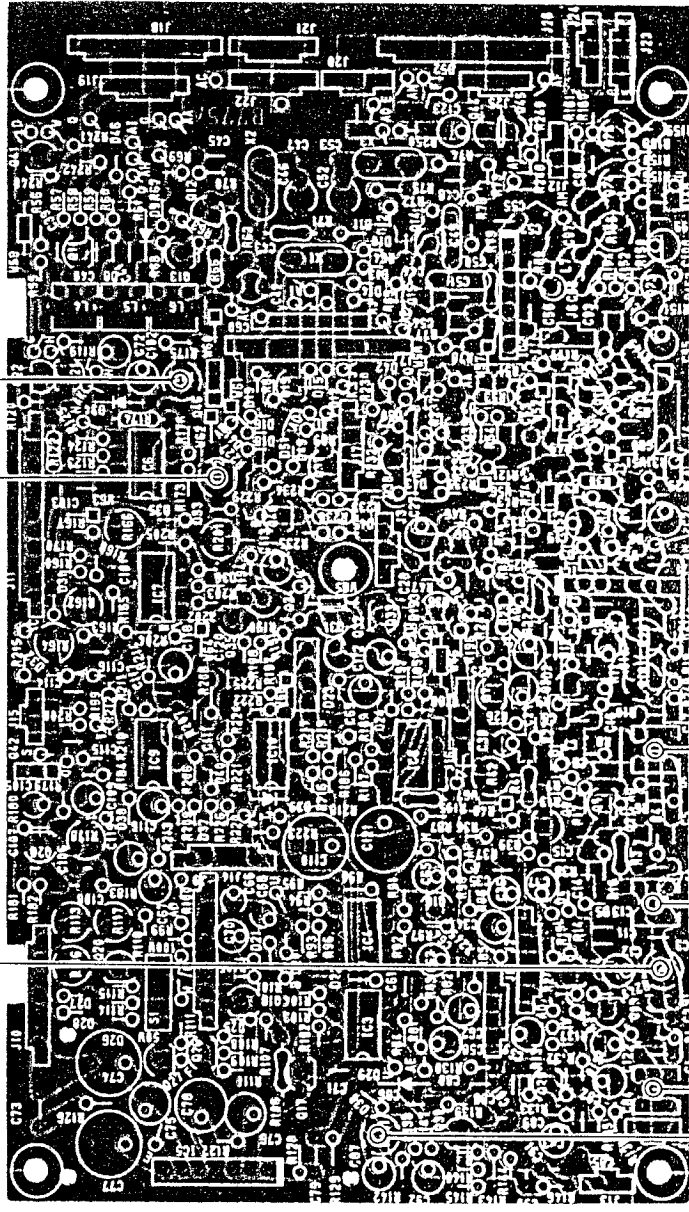
RF UNIT

CHECK POINT D7
NOISE BLANKER Adjust L22
NOISE BLANKER Adjust L23
NOISE BLANKER Adjust L24



MAIN UNIT

R2 TOTAL GAIN Adjust
S9 + 60dB Adjust R171
S9 Adjust R172

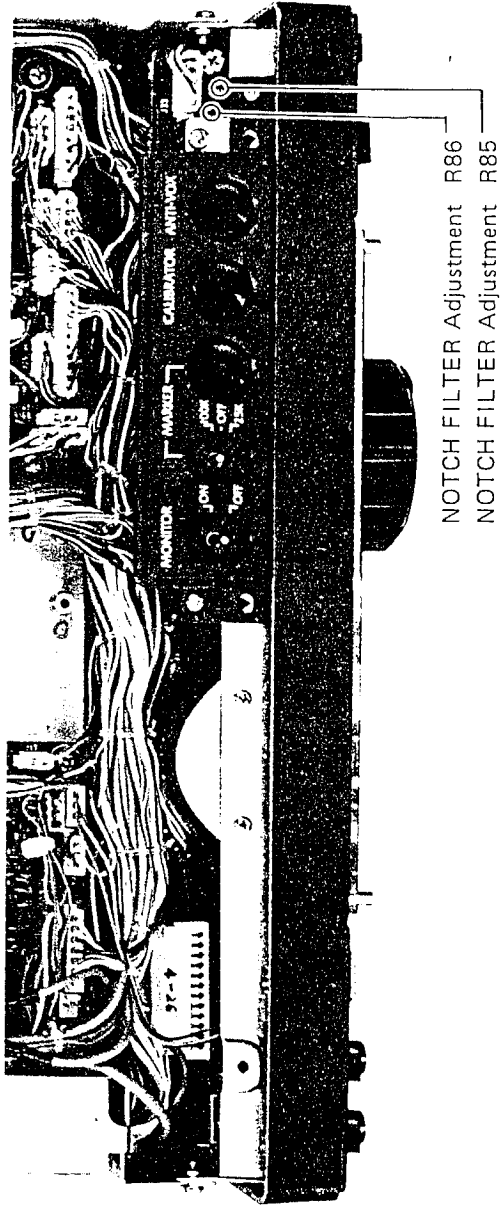


L3 TOTAL GAIN Adjust
L2 TOTAL GAIN Adjust
L1 TOTAL GAIN Adjust
R141 CW PREAMP GAIN Adjust

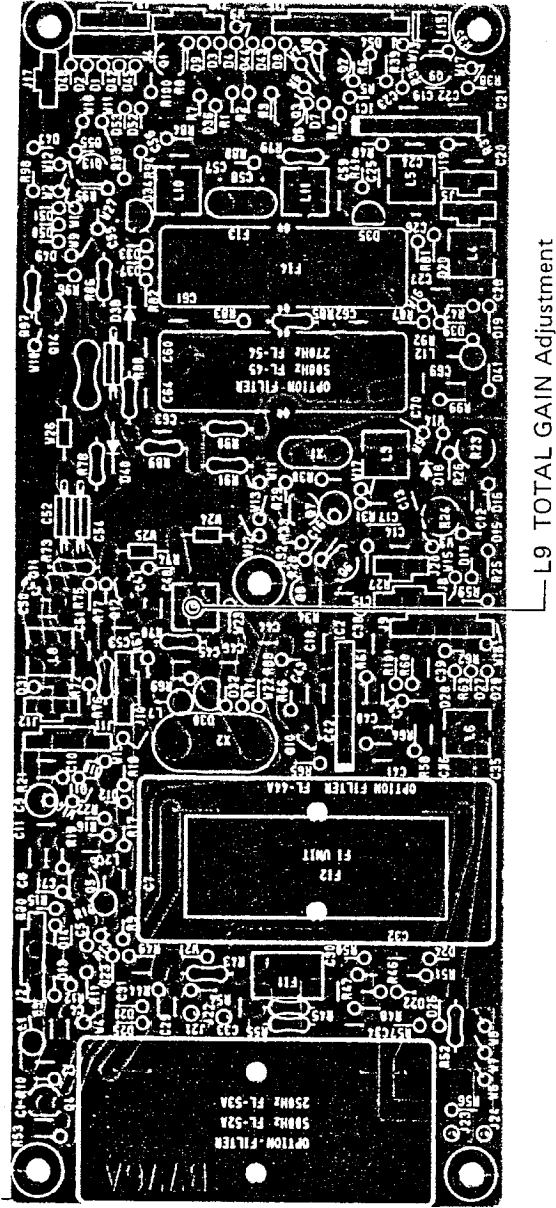
9-1 RECEIVER ADJUSTMENT (Continued)

Adjustment	Adjustment conditions	Unit	Measurement location	Adjust value	Unit	Adjust point
NOTCH FILTER	1. <ul style="list-style-type: none">• MODE : USB• BAND : 14MHz• IF/P.B.T : IF• IF SHIFT/P.B.T CONTROL : Fully Left• NOTCH FILTER : OFF• Set the output level of the SSG to +34dBμ.• NOTCH : ON			Tune to make zero-beat.	FRONT PANEL	Tuning Control
	2.		S-METER	Adjust R85 to get minimum meter deflection.	SW-F	R85
	3. <ul style="list-style-type: none">• MODE : LSB• IF SHIFT/P.B.T CONTROL : Fully Right• NOTCH : OFF• NOTCH FILTER : Fully Right• Set the output level of the SSG to +34dBμ.• NOTCH : ON			Tune to make zero-beat.	FRONT PANEL	Tuning Control
	4.		S-METER	Adjust R86 to get minimum meter deflection.	SW-F	R86
	5. Repeat adjustment of 1. ~ 4. several times. The notch deep will be more than 25dB.					
SQUELCH	1. <ul style="list-style-type: none">• MODE : SSB• RF GAIN: Fully counterclockwise• AGC : OFF• SQL CONTROL : At 10 o'clock position• Turn off the output of the SSG.			Adjust R73 to close the squelch.	VR-A	R73
	2. <ul style="list-style-type: none">• Confirm that the squelch will be opened by turning the RF GAIN control clockwise.• The squelch should be closed by turning the control clockwise when a S9 + 40dB signal is applied or the RF GAIN control is turned counterclockwise to deflect the S-METER.• Confirm that the RECEIVE indicator is lighted when the squelch is opened.					

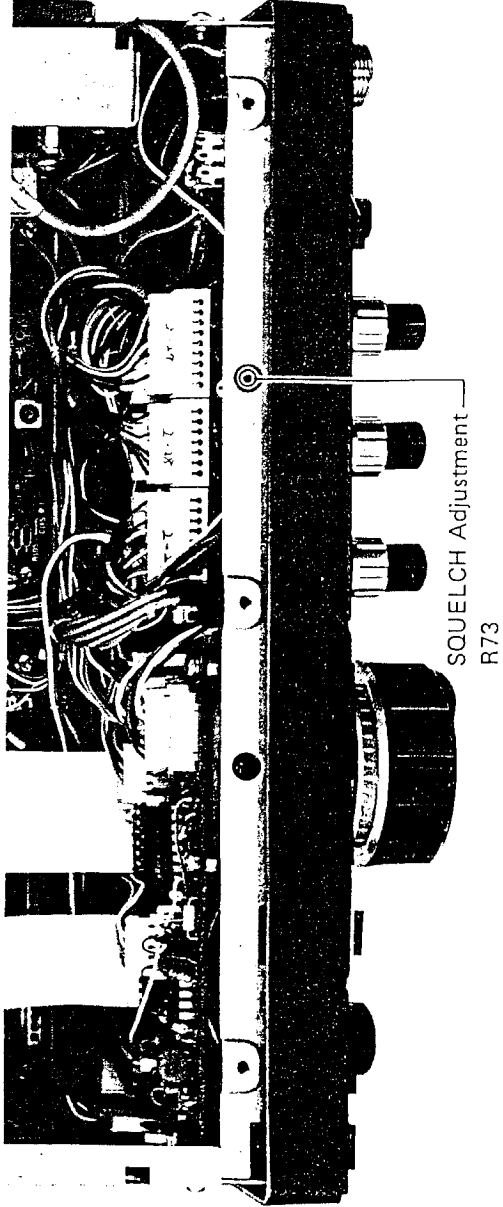
SW-F UNIT



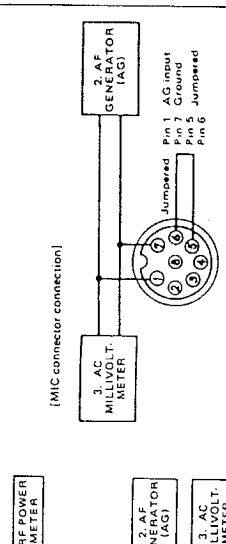
IF UNIT



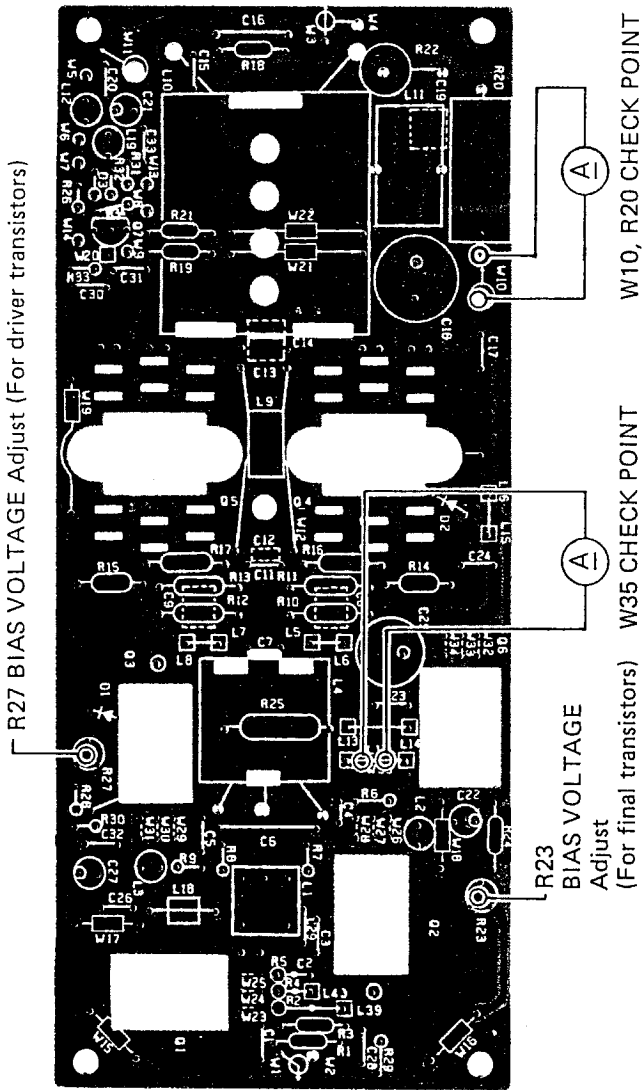
VR-A UNIT



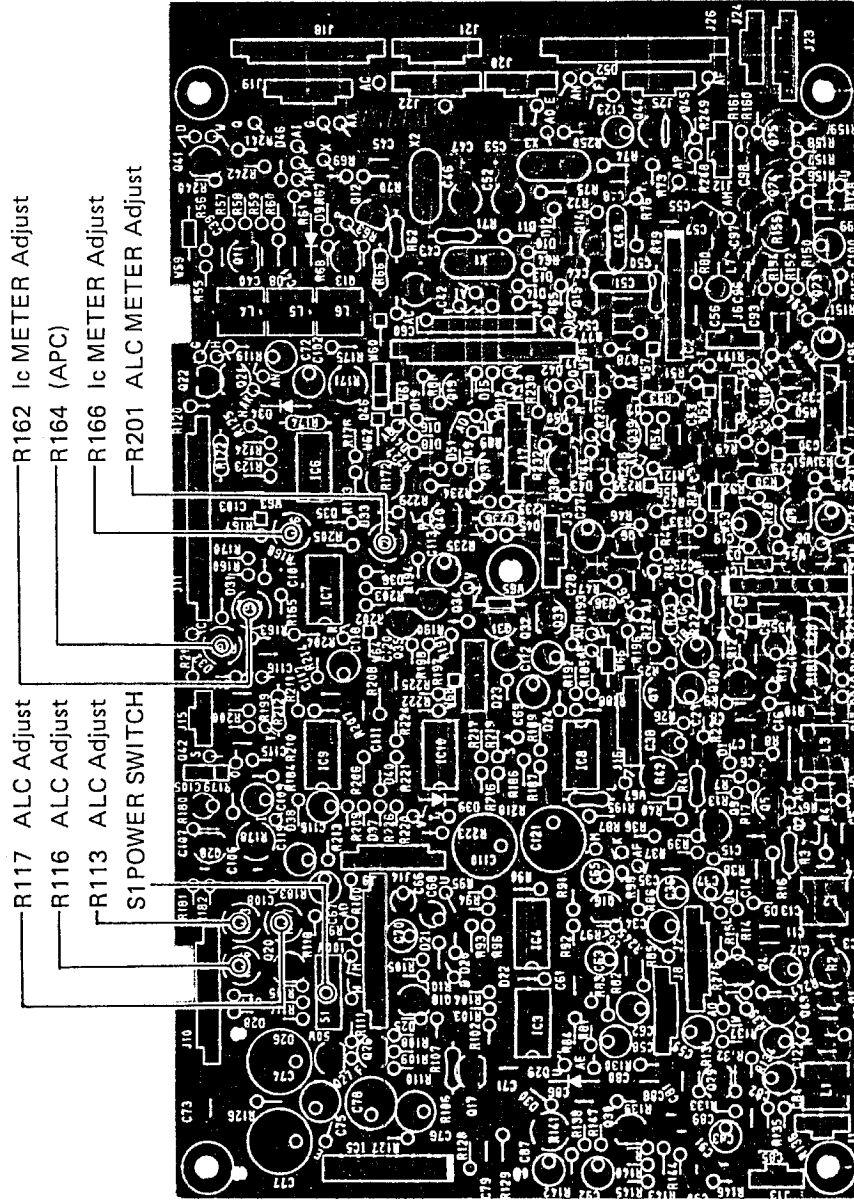
9-2 TRANSMITTER ADJUSTMENT

Adjustment	Adjustment conditions	Unit	Measurement location	Adjust value	Unit	Adjust point
INSTRUMENTS REQUIRED	1. (1) RF POWER METER (TERMINATED TYPE) MEASURING RANGE 20 ~ 200W FREQUENCY RANGE 1.8 ~ 30MHz IMPEDANCE 50 ohms SWR Less than 1.1 (2) AF GENERATOR (AG) FREQUENCY RANGE 200 ~ 3000Hz OUTPUT LEVEL 0 ~ 300mV (3) AC MILLIVOLTMETER MEASURING RANGE 10mV ~ 3V		 <p>[MIC connector connection]</p>			
	BIAS VOLTAGE	PA	Desolder at the center of W35 (jumper wire with 6 bead cores), and connect a DC ammeter there in series.	100mA	PA	R27 (For driver transistors)
			Desolder W10, and connect a DC ammeter between W10 and R20.	600mA		R23 (For final transistors)
ALC	1. ● MODE : RTTY ● BAND : 14MHz ● COMP : OFF ● RF POWER : MAX (Fully clockwise) ● Turn R164 on the MAIN unit fully clockwise.		RF POWER METER	100W	MAIN	R117
	2. ● RF POWER : MIN (Fully counterclockwise)			5 ~ 10W		R113
	3. ● RF POWER : MAX ● Set S1 on the MAIN unit to "50W" position.			50W		R116
Ic METER	1. ● MODE : CW ● METER SWITCH : Ic ● Set in TRANSMIT mode and key up.	FRONT PANEL	Ic METER	600mA	MAIN	R166
	2. ● MODE : RTTY ● METER SWITCH : Ic ● RF POWER : Fully clockwise		Connect a DC ammeter to the power cable in series.	Adjust to total current minus 3A.		R162
ALC METER	1. ● MODE : USB ● BAND : 14MHz ● COMP : ON ● RF POWER : MAX (Fully clockwise) ● MIC GAIN : MAX (Fully clockwise) ● METER SWITCH : ALC ● Apply 1.5K Hz/100 ~ 300mV signal from the AG.	FRONT PANEL	ALC METER	ALC ZONE Full level (Center of the meter scale)	MAIN	R201
	2. ● COMP : OFF			Meter deflection will be overscale from the ALC zone.		Confirming

PA UNIT



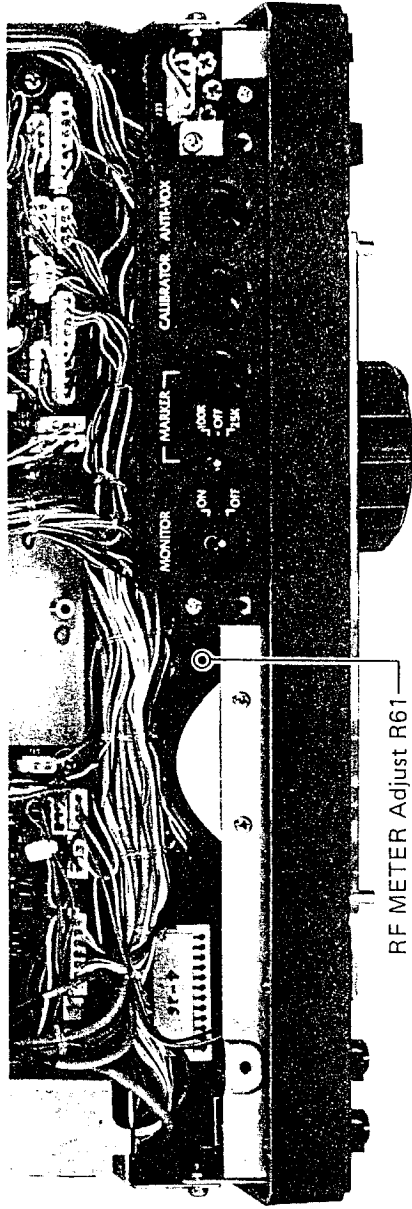
MAIN UNIT



9-2 TRANSMITTER ADJUSTMENT (Continued)

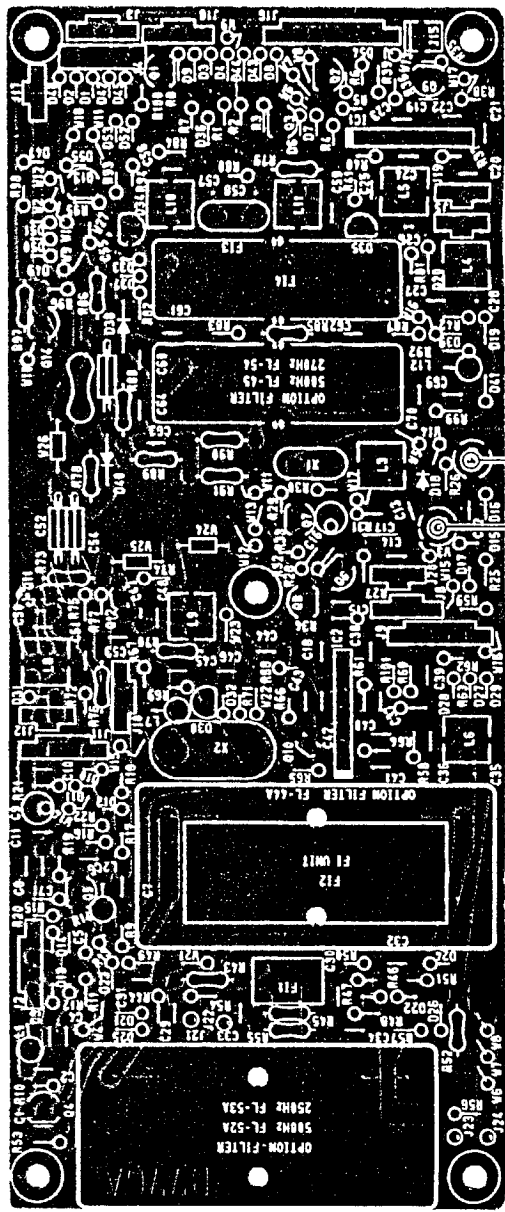
Adjustment	Adjustment conditions	Unit	Measurement location	Adjust value	Unit	Adjust point
COMP METER	1. <ul style="list-style-type: none">• MODE : RTTY• COMP : ON• METER SWITCH : COMP• RF POWER : Fully clockwise	FRONT PANEL	S-METER	Meter deflection will be about 20dB on the COMP scale.		Confirming
	2. <ul style="list-style-type: none">• MODE : USB• Apply 1.5KHz/100 ~ 300 mV signal from the AG.			Meter deflection will be over 20dB on the COMP scale.		
RF METER	1. <ul style="list-style-type: none">• MODE : RTTY• METER SWITCH : RF	FRONT PANEL	Po METER	80%	SW-C	R61
SWR METER	1. <ul style="list-style-type: none">• MODE : RTTY• RF POWER : Set to get 35 ~ 45W output power.• METER SWITCH : SET	FRONT PANEL	SWR METER	Adjust the RF POWER control so that the meter points "SET" mark.	FRONT PANEL	RF POWER Control
	2. <ul style="list-style-type: none">• BAND : EACH BAND• METER SWITCH : SWR			SWR should be less than 1.2 on each band.		Confirming

SW-C UNIT



RF METER Adjust R61

IF UNIT

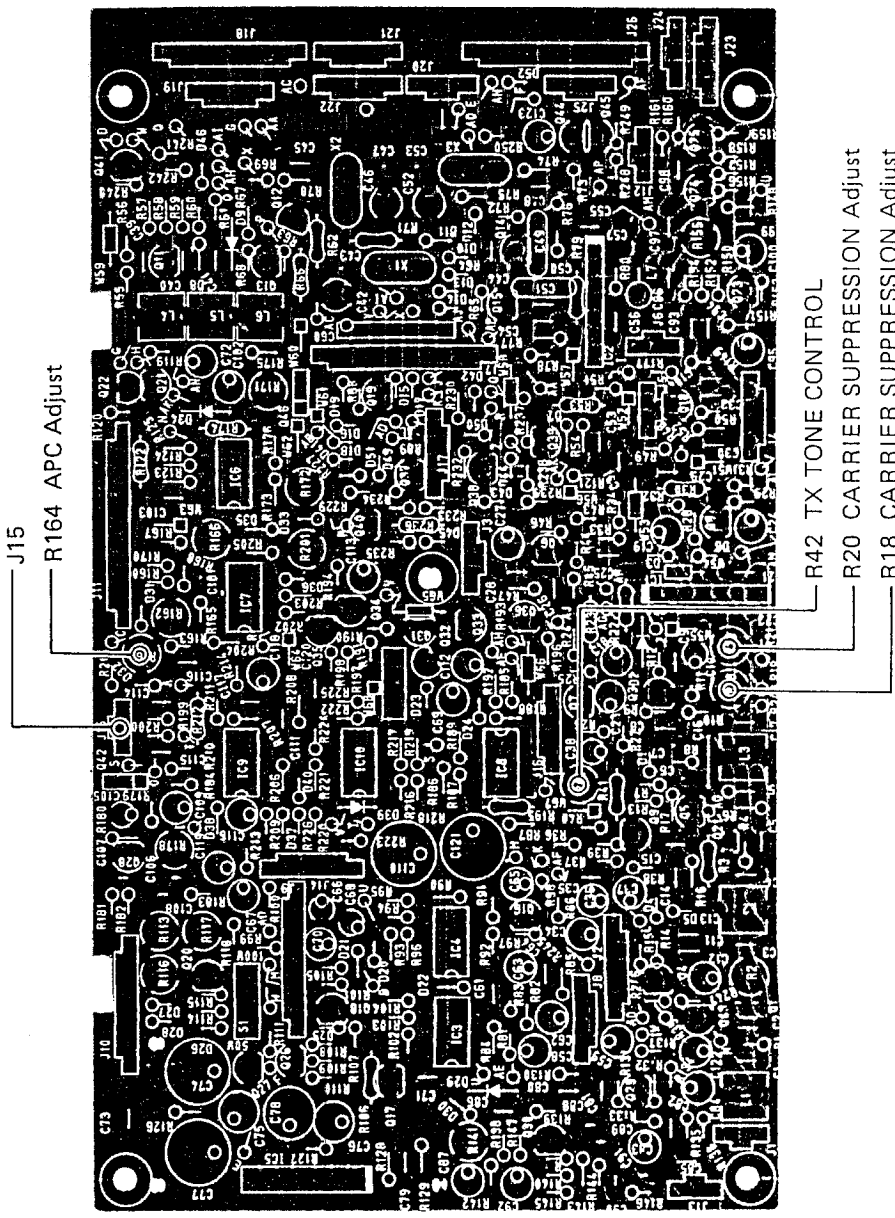


R23 CARRIER POINT Adjust

R24 CARRIER POINT Adjust

Adjustment	Adjustment conditions	Unit	Measurement location	Adjust value	Unit	Adjust point
APC	1. <ul style="list-style-type: none">• MODE : RTTY• BAND : 14MHz• RF POWER : Fully clockwise• Remove the connector inserted to J15 on the MAIN unit.		Read the ammeter provided in the power supply, or connect an ammeter to the power cable in series.	20A	MAIN	R164
	2. <ul style="list-style-type: none">• BAND : EACH BAND• Set in TRANSMIT mode with full output power, and do not connect anything to the ANT Connector.			Less than 12A		Confirm
CARRIER POINT	1. <ul style="list-style-type: none">• MODE : USB/LSB• BAND : 14MHz• COMP : OFF• TX TONE CONTROL (MAIN/R42) : MAX (Fully clockwise) Apply 2.7KHz/10 ~ 30mV signal from the AG then adjust the MIC GAIN control to get 10 ~ 20W output power.		Connect the RF POWER METER to the ANT connector.	Change the operating mode for USB and LSB alternately, and adjust R24 and R23 to get same output power in either mode.	IF	R24
	2. <ul style="list-style-type: none">• COMP : ON Apply 2.7KHz/10 ~ 30mV signal from the AG.					R23
CARRIER SUPPRESSION	1. <ul style="list-style-type: none">• MODE : USB/LSB• BAND : 14MHz• COMP : OFF• MIC GAIN : MIN		Connect an RF voltmeter or spectrum analyzer to the ANT connector.	Change the operating mode for USB and LSB alternately, and adjust R18 and R20 to get minimum output (less than -50dB).	MAIN	R18 R20
	2. <ul style="list-style-type: none">• COMP : ON			Less than -50dB		Confirm

MAIN UNIT



J15

R164 APC Adjust

R42 TX TONE CONTROL

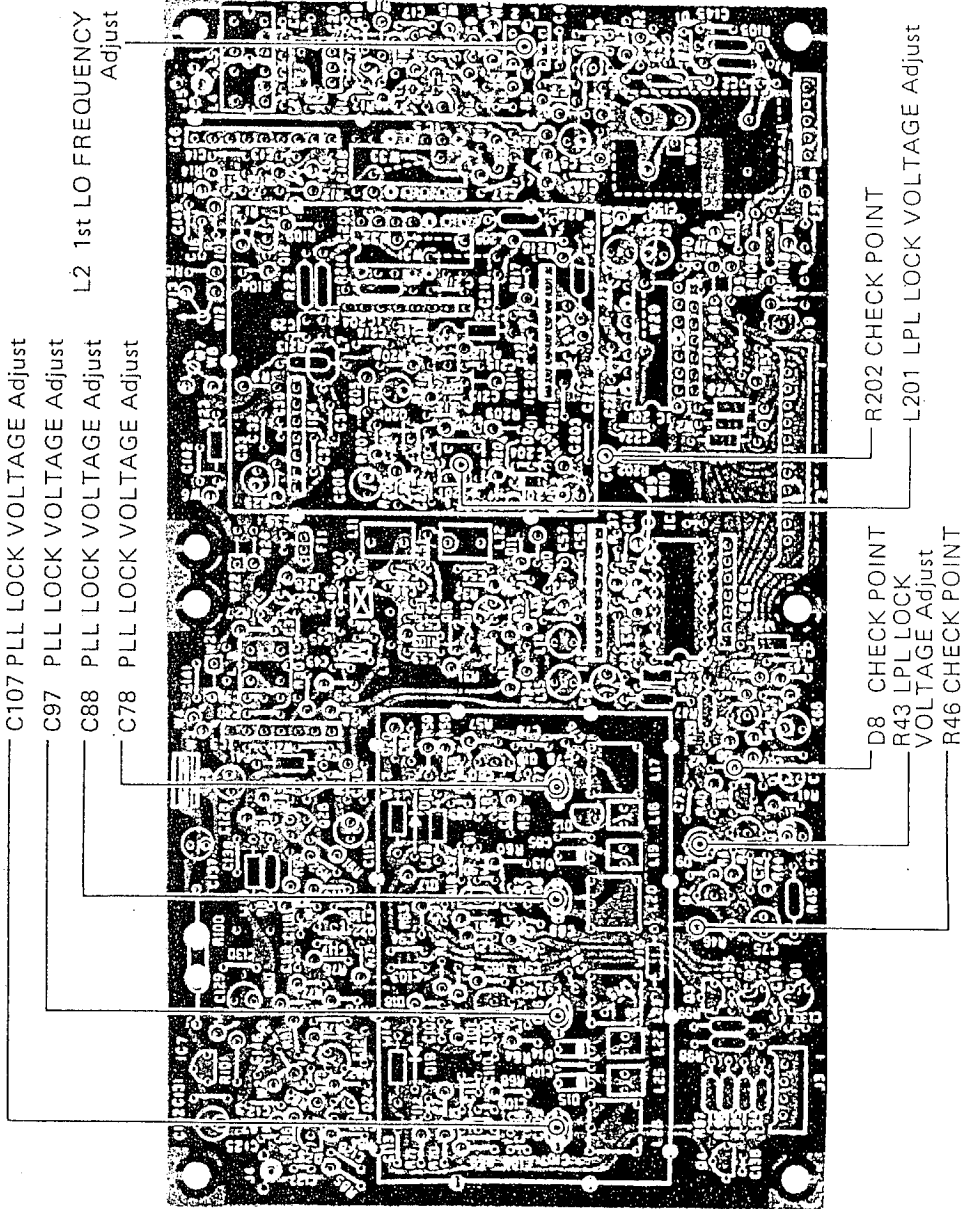
R20 CARRIER SUPPRESSION Adjust

R18 CARRIER SUPPRESSION Adjust

9-3 PLL ADJUSTMENT

Adjustment	Adjustment conditions	Unit	Measurement location	Adjust value	Unit	Adjust point
1st-LO	1. MODE : RTTY • Display frequency : 30.0015MHz	RF	Connect a frequency counter to R4 on the RF unit.	100.4530MHz	PLL	L2
	2. • Display frequency : 0.0985MHz			70.5500MHz		Confirming
						L201
LPL LOCK VOLTAGE	1. MODE : RTTY • Display frequency : 8.0000MHz	PLL	Connect an oscilloscope to R202 on the PLL unit.	3V	PLL	
	2. • Display frequency : 7.9999MHz			1.5V ~ 2.0V		Confirming
	3.			2.0V ~ 2.5V		
PLL LOCK VOLTAGE	1. MODE : RTTY • Display frequency : 7.9999MHz	PLL	Connect the oscilloscope to D8 on the PLL unit.	6.5V	VCO	C78
	2. • Display frequency : 14.9999MHz					C88
	3. • Display frequency : 21.9999MHz					C96
	4. • Display frequency : 30.0015MHz					C107
	5. • Display frequency : 8.0000MHz			2.0V ~ 3.0V		Confirming
	6. • Display frequency : 15.0000MHz					
	7. • Display frequency : 22.0000MHz					

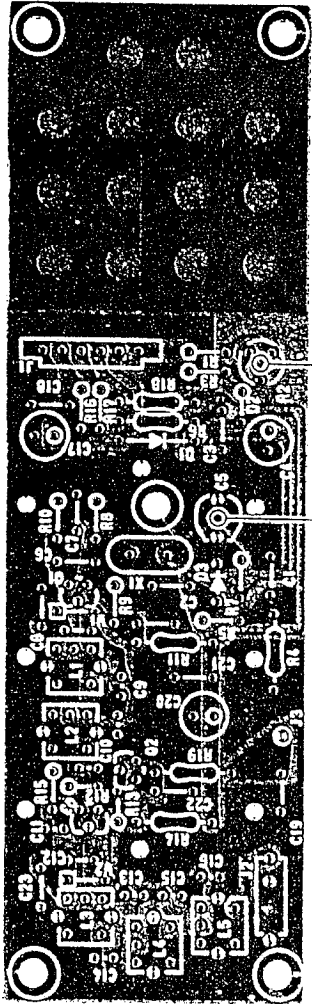
PLL UNIT



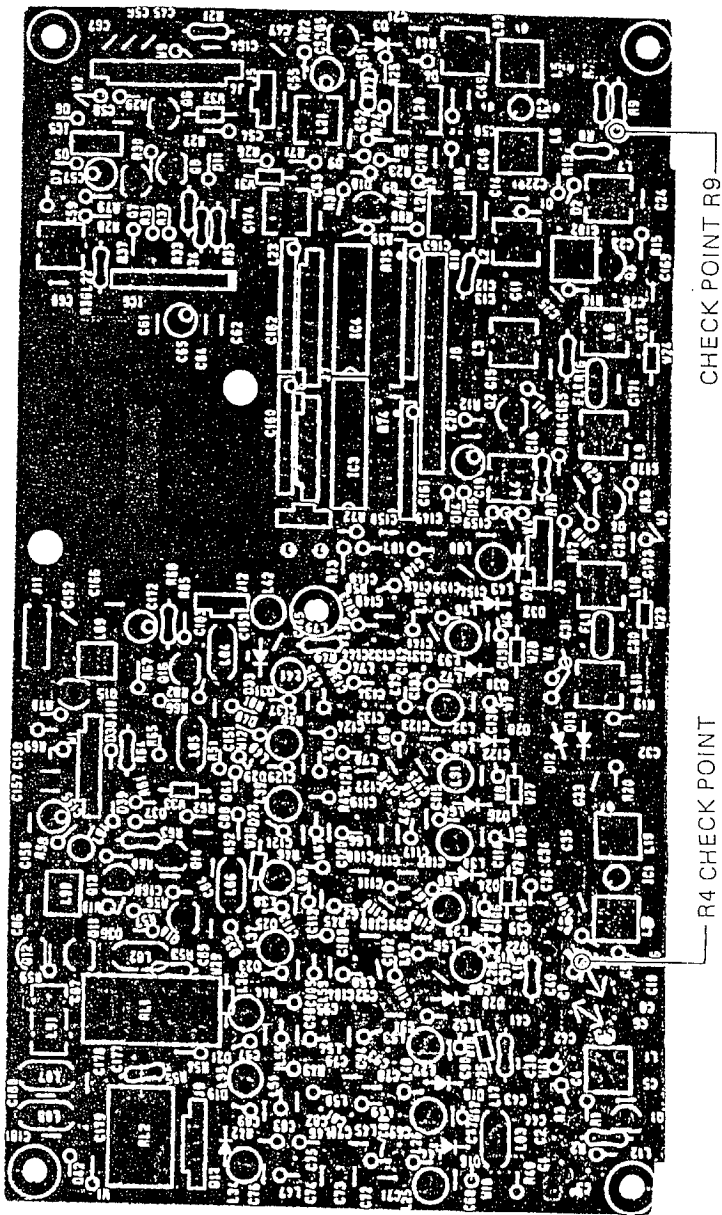
9-4 COMMON CIRCUITS ADJUSTMENT

Adjustment	Adjustment conditions	Unit	Measurement location	Adjust value	Unit	Adjust point
RIT/XIT FREQUENCY	1. • CALIBRATOR : CENTER • T/R SWITCH : RECEIVE • RIT SWITCH : ON • INCREMENTAL TUNING CONTROL : Center	RF	Connect the frequency counter to R9 on the RF unit through a 470 ohm resistor.	61.4400MHz	2nd-LO	C5
	2. • RIT SWITCH : OFF			61.4400MHz		R2
	3. • RIT SWITCH : ON			Turn the incremental tuning control fully clockwise and counter clockwise alternately, and confirm that the frequency changes more than ± 1 KHz.		Confirming
	4. • T/R SWITCH : TRANSMIT • RIT SWITCH : OFF • XIT SWITCH : ON Make adjustment with the same manner as 1. ~ 3.			The same as 1. ~ 3.		The same as 1. ~ 3.

2nd-LO UNIT



RF UNIT

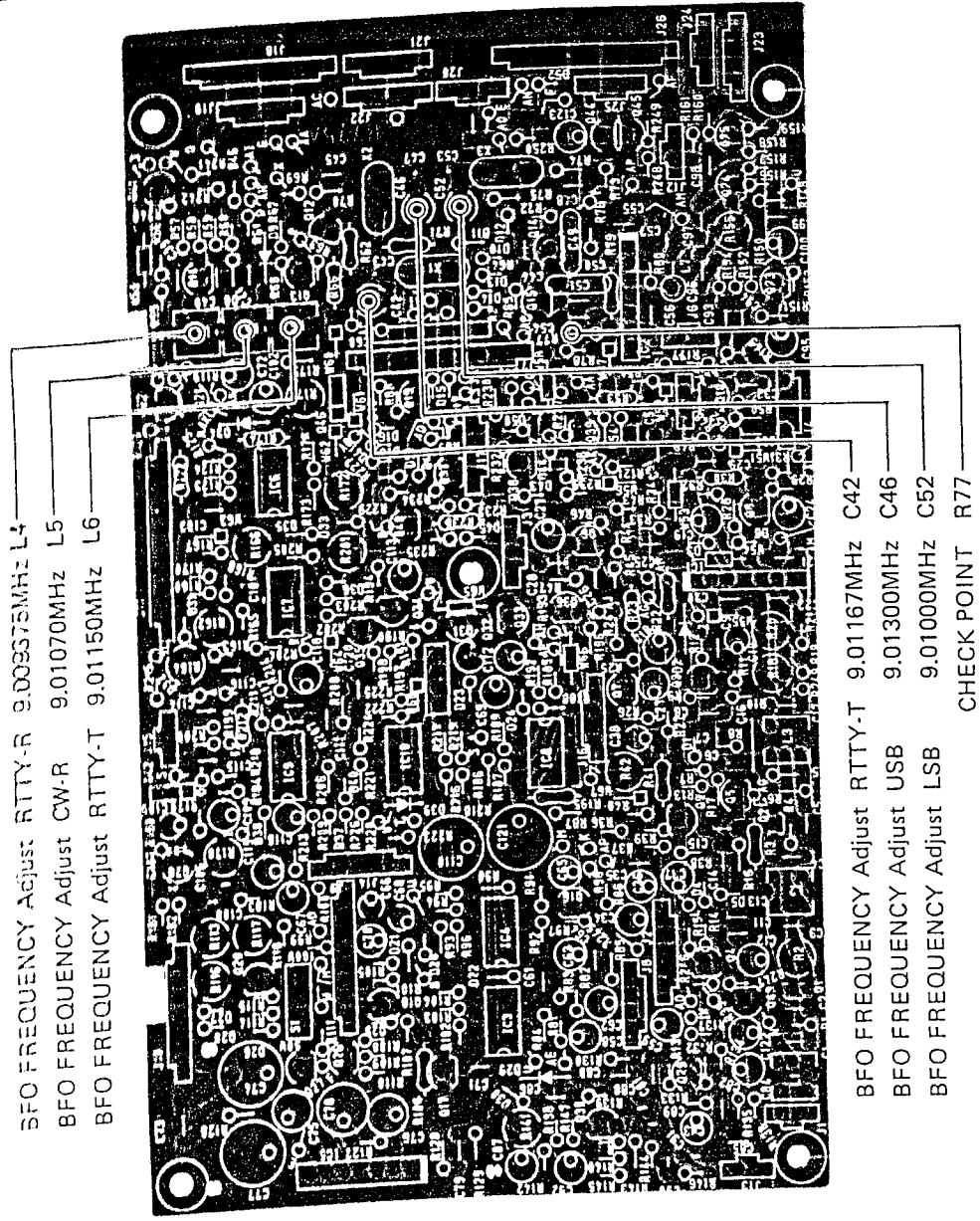


3-4 COMMON CIRCUITS ADJUSTMENT (Continued)

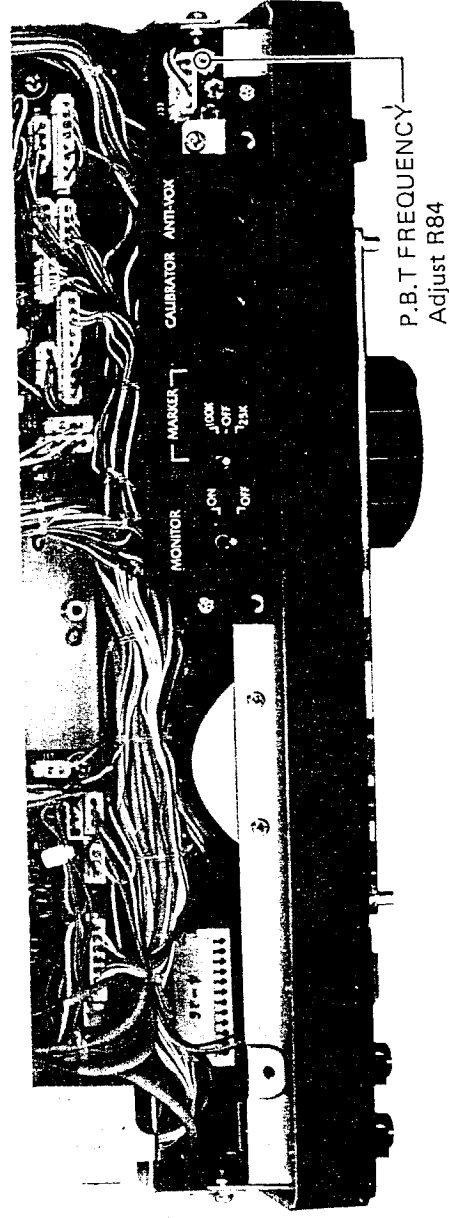
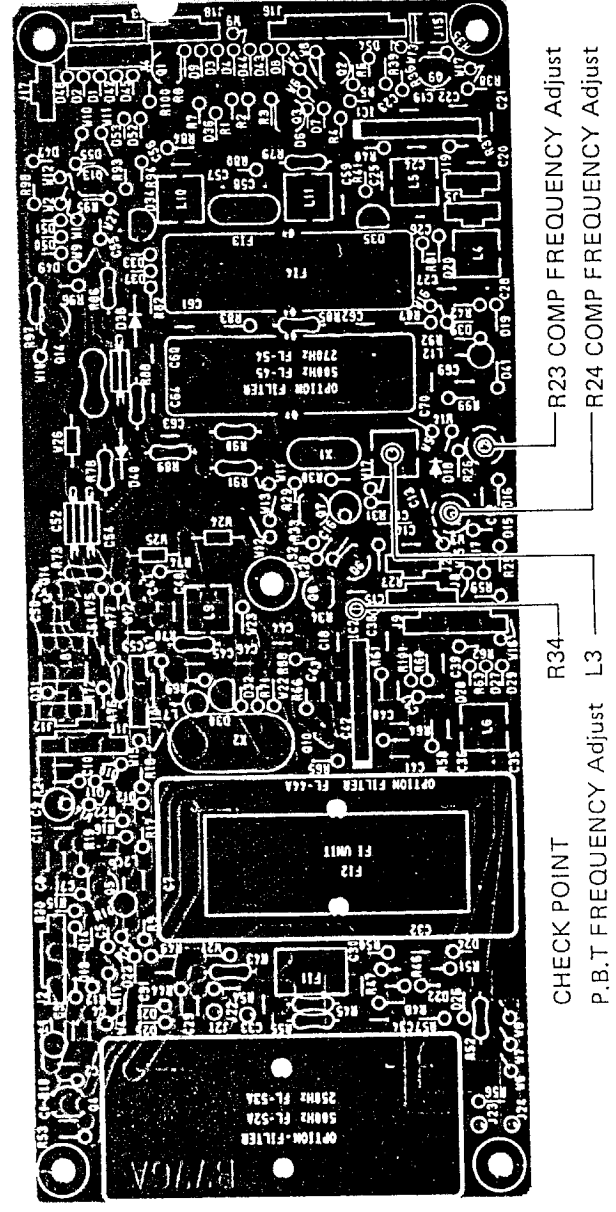
Adjustment	Adjustment conditions	Unit	Measurement location	Adjust value	Unit	Adjust point
BFO FREQUENCY	1. MODE : LSB T/R SWITCH : RECEIVE	MAIN	Connect a frequency counter to R77 on the MAIN unit through a 470 ohm resistor.	9.01000MHz	MAIN	C52
	2. MODE : USB			9.01300MHz		C46
	3. MODE : RTTY T/R SWITCH : TRANSMIT Jumper between J3 pin 1 and ground (SPACE).			9.01167MHz		C42
	4. Remove the jumper between J3 pin 1 and ground (MARK).			9.01150MHz		L6
	5. MODE : CW			9.01150MHz		Confirming L5
	6. T/R SWITCH : RECEIVE			9.01070MHz		L4
	7. MODE : RTTY			9.009375MHz		L3
P.B.T/COMP FREQUENCY	1. IF SHIFT/P.B.T CONTROL : Fully left	IF	Connect the frequency counter to R34 on the IF unit through a 470 ohm resistor.	9.46830MHz	IF	
	2. T/R SWITCH : RECEIVE			9.46650MHz	SW-F	R84
	3. IF SHIFT/P.B.T CONTROL : Center			9.46500MHz or lower		Confirming
	4. COMP : OFF T/R SWITCH : TRANSMIT			9.46650MHz	IF	R24
	5. COMP : ON			9.46650MHz		R23

SW-F UNIT

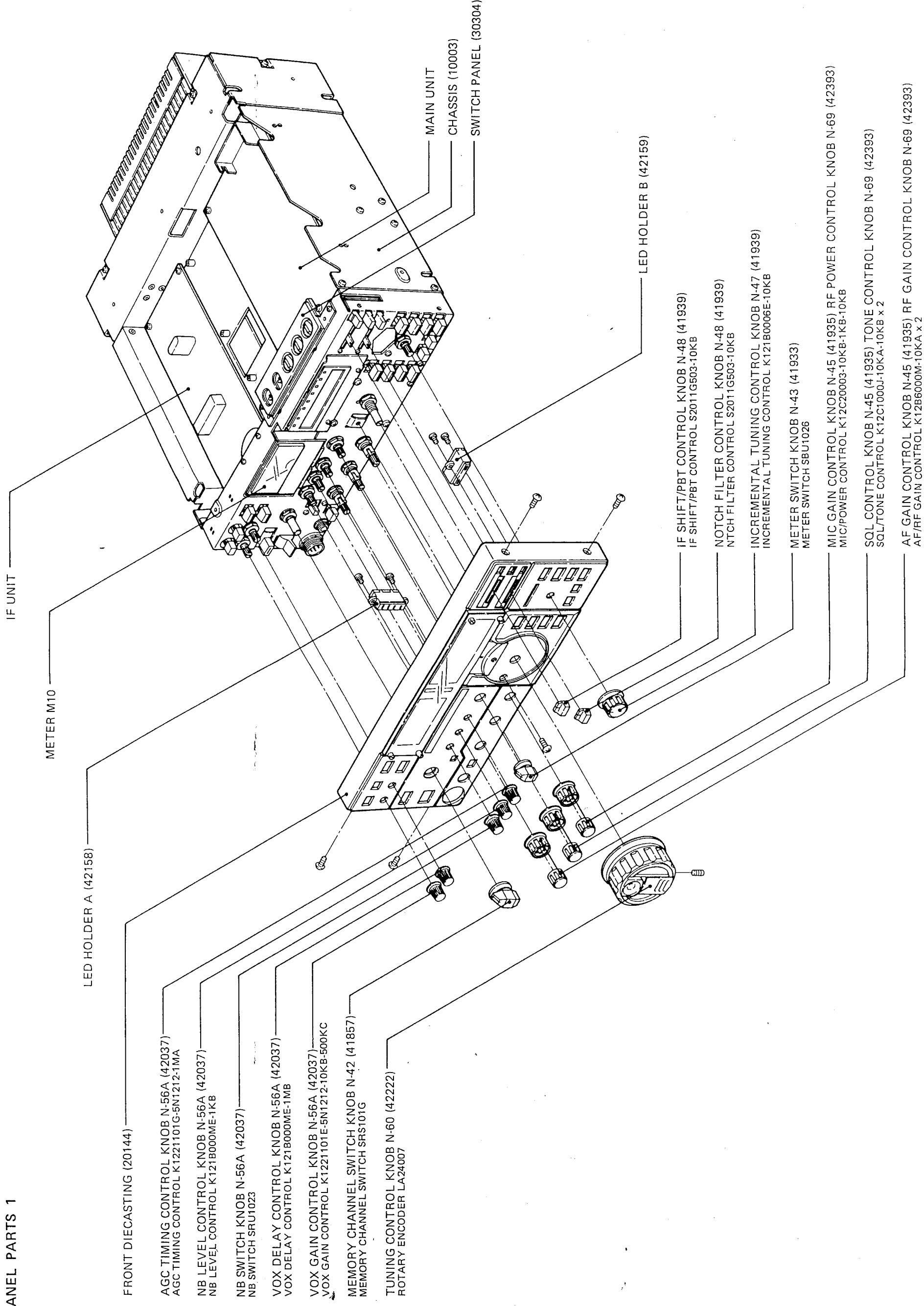
MAIN UNIT



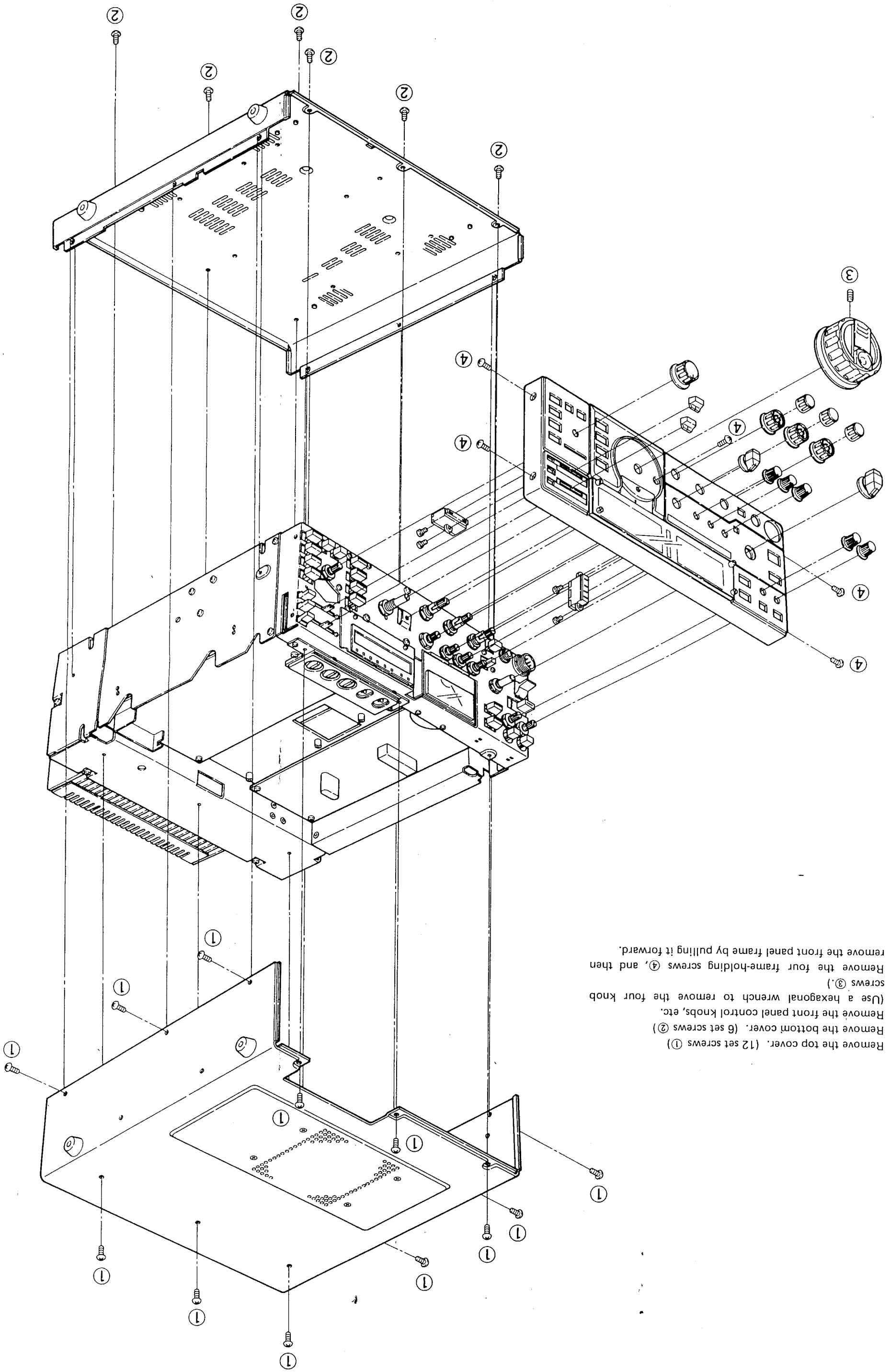
IF UNIT

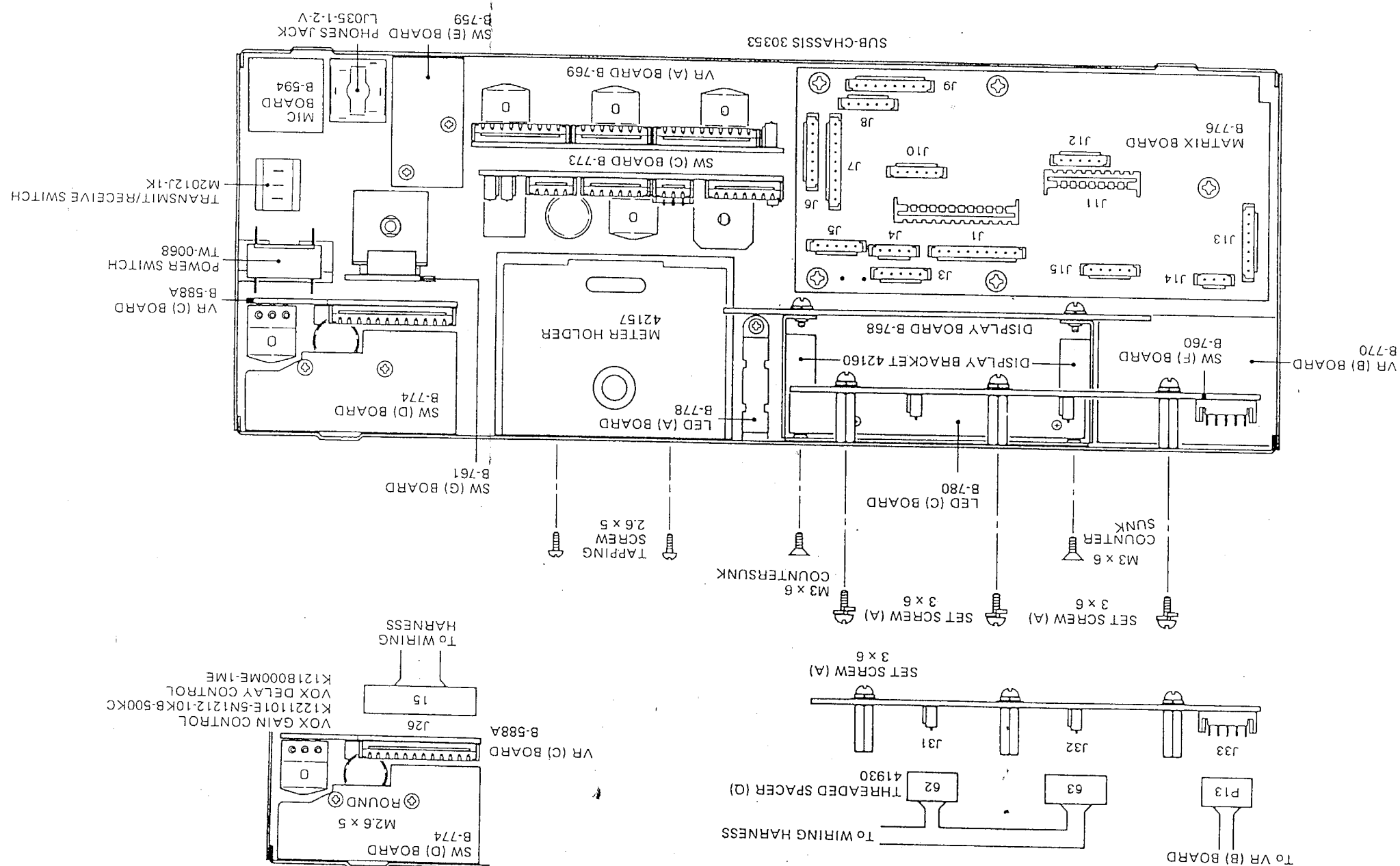
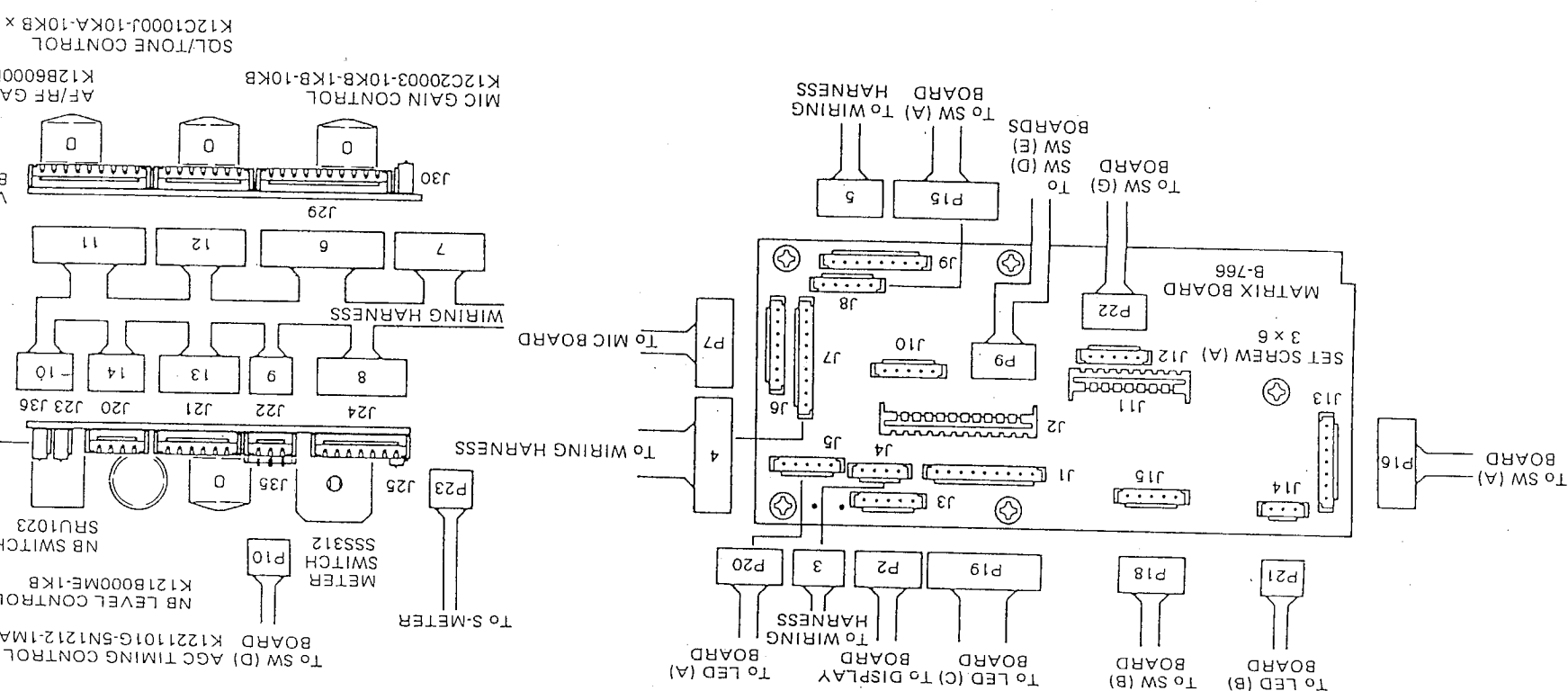


FRONT PANEL PARTS 1



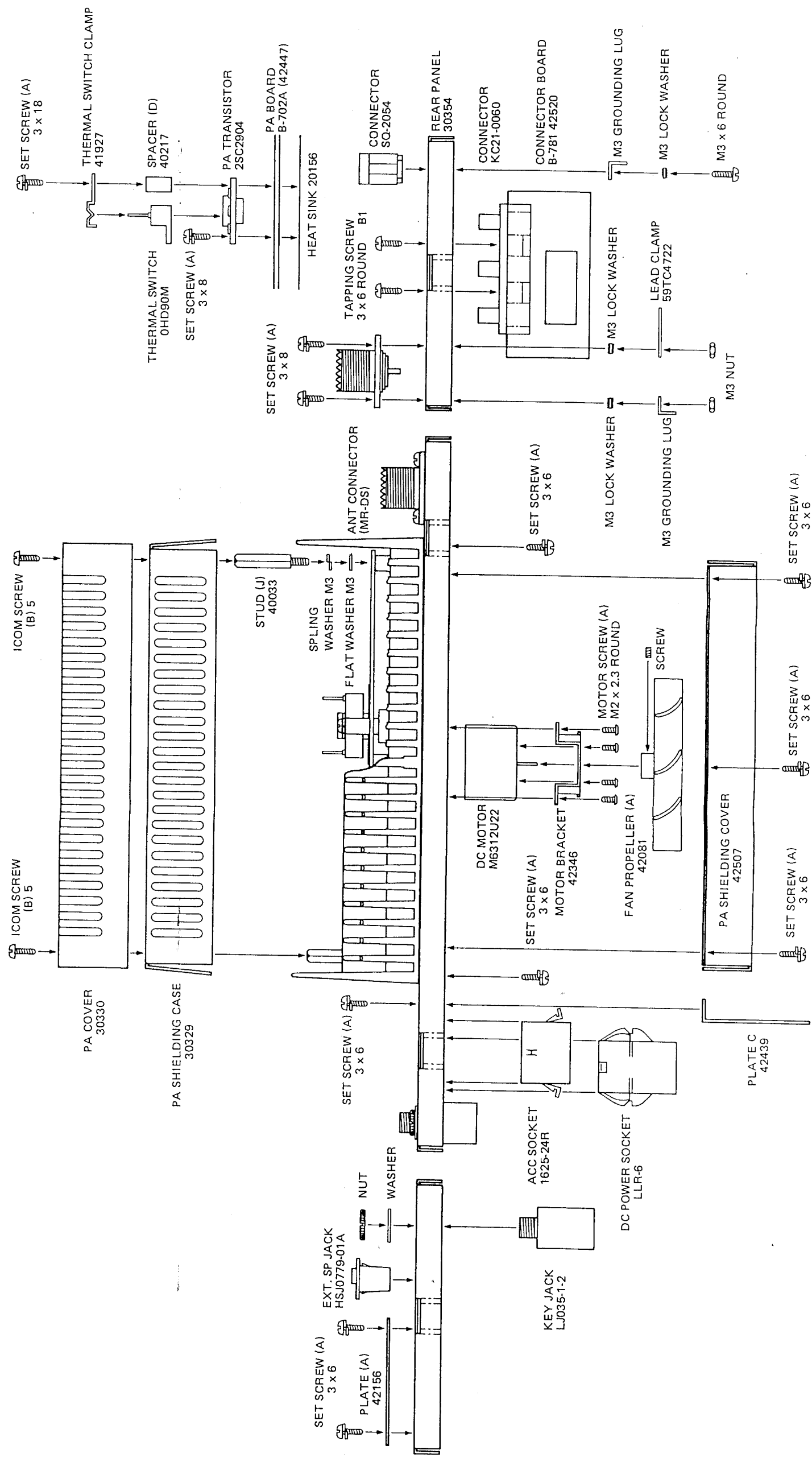
SECTION 8 MECHANICAL PARTS AND DISASSEMBLY



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REAR UNIT DISASSEMBLY

PA TRANSISTOR MOUNTING



取扱説明書

Marker Unit	IC-EX241
FM Unit	IC-EX242
c keyer Unit	IC-EX243

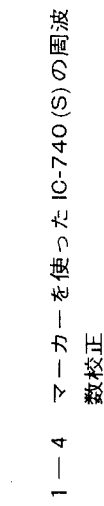
② IC-740(S) 本体上部の MARKER スイッチを 25KHz または 100KHz の位置にします。これにより、標準電波のピート音とマーカのピート音がダブルピートになりますので、ふたつのピートがゼロピートになるように MARKER 校正ツマミをゆっくり回

なお、ゼロビートの点に近づいてくると両方のビート音が互いに干渉しあい周期的に音が大きくなったり、小さくなったりします。その周期が長くなるように校正用ツマミを回すのがコツです。（ゼロビートのときは、両方のビート音が同じトーンになります）

“を回すのがコツです。(ゼロビートのときは、両方のゼロ音が同じトーンになります)”

以上の操作によりマーカーの周波数校正が完了します。

※以上の操作によりマーカーの周波数校正が完了します。

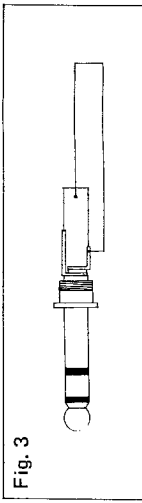


ットします。このとき、RITスイッチは必ずOFFにしておきます。

② IC-740 (S) 上部のマーカースイッチを25KHzまたは100KHzの位置にします。これにより、25KHzまたは100KHzごとにマーカ発振器の信号を聞くことができます。

③IC-740(S)のメインダイヤルを回して校正点(25KHzまたは100KHzごとの周波数)になるように周波数ディスプレイを合せます。この点で、約800Hzのビート音が聞えてきます。

④ IC-740(S)の後面のKEYジャックに付属のキープラグ(3P)を差し、下図のようにショートしてCWモニター音を出します。



※エレキユニユニットを装着しているときは
前面のELE-KEY SPEEDツマミをOFF
にしておきます。

⑤マーカーの受信ピート音とCWモニータ音とでゼロピートになるようにIC-740(S)上のCALBRATIONツマミをゆっくり回します。これにより、本体の周波数校正が完了します。

ご注意
VFOのチューニングピッチを10Hzで操作しているときは、周波数ディスプレイに表われない周波数の変化がありますので、メインダイヤルを時計方向に回し25KHzまたは100KHzの周波数にかわる点になるようにチューニングしてください。

2. FMユニッ ト(IC-EX242)

2-1 特長

2-2 ユニットの取付け

①ユニットを付属のビス4本で指定の位置に取付けます。

②ユニットから出ているプラグおよび他ユニットからのプラグを次表のように差します。

FMユニットから出ている線(プラグ)

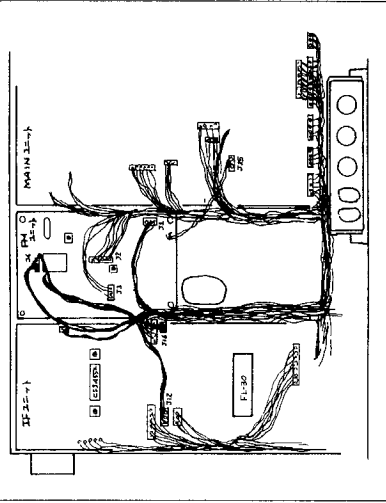
アラブのピン数	線の種類	芯ユニットとシールド
3P	同軸ケーブル・緑色線	IFユニットのJ12
2P	同軸ケーブル	IFユニットのJ16 ④
2P	シールド線(灰色)	MAINユニットのJ25

④取付けは前にJ16に差されていた2Pプラグ(同軸ケーブル)は、FMユニットのJ4に差す。

FMユニットに差される線

ユニークの J番号	録の録誌	録のサレバ リソク	録の出所
J1 (3P)	シモノ録 (氏色) 赤糸巻	26	IFユニーク型のバーニス
J2 (7P)	白、灰、黄、赤、黒、 茶の録	28	MANユニーク型のバーニス
J3 (3P)	茶、黄、黒の録	29	"
J4 (2P)	同録カラーブルー	ナシ	IFユニークのJ16に相当する 色は同録カラーブルー

Fig. 4 取付け図



2-3 センターメーターの接線
IC-740(S)は、FMユニット装着時には後面パネルのACCソケットの1番ピンにセンターメーター用の出力がでています。センターメーターを接続するときは、下図に従ってください。
センターメーター(±50~100μA) さい。



※メーターに合せて半固定抵抗を入れてください。

3. エレクトロニクス・キヤ－(IC-EX243)

3-1 特長

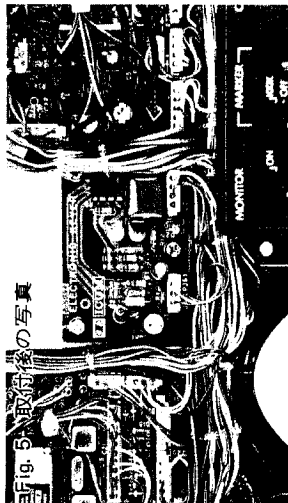
CW通信を行なうときに便利なエレキューニットです。専用のC-MOSワンチップICを使用していますので、長短点のメモリー、スクイーズキヤヤーによるアイアンビック動作やウェイトコントロールが可能です。スピードは、本体前面パネルの調整により37.5~225字/分の範囲で可変できます。

3-2 取付方法

①取付部にある3Pプラグ(No.36)および4Pプラグ(No.37)をあらかじめユニットのJ1, J2にそれぞれ差し込みます。

②付属のビス2本でユニット取付け部にとめます。このとき、ユニットが左右のハーネス（線材）の下になるようにしますと取付けやすくなります。以上で取付けは完了します。

Fig. 5 取付け後の写真





OPTION UNIT
For **IC-740**
IC-745

INSTRUCTION MANUAL
Marker Unit **IC-EX241**
FM Unit **IC-EX242**
Electronic keyer Unit **IC-EX243**

This instruction manual gives descriptions and installation instructions for the optional units for ICOM's HF transceiver IC-740/IC-745. It also provides information you need while using them. Please read all the instructions carefully before installation so you will get maximum performance and full value from the set.

PREPARATION

Before performing any work on the set, make sure that the power cord is unplugged from the transceiver.

Remove the top cover by unscrewing the six screws on the top and the two screws on each side, while taking care not-to damage the internal speaker, and unplug its connector. (Refer to Fig. 1 on the reverse side.)

1. MARKER UNIT IC-EX241

This unit generates marker signals to calibrate transceivers operation frequency. The marker generator puts out accurate 100KHz or 25KHz signals on the entire band, and gives easy and accurate frequency calibration.

ASSEMBLY PROCEDURE

1. Install this unit in the position as shown in the photo (Fig. 1) on the reverse side, using the attached screws.
2. Plug P14 (3 pins) of the set to J1 of this unit.
3. Plug P1 (2 pins) of this unit to J9 of the RF unit.
4. Replace the speaker cord connector and top cover.

CALIBRATION OF THE MARKER

1. Set the MODE Switch in the CW position and BAND switch in the 10MHz position, then turn ON the POWER switch.
2. The FREQUENCY DISPLAY will show "10.100.0". Turn the TUNING CONTROL knob to tune to WWV (or other standard frequency station) on 10.000MHz, and a 800Hz beat tone will be heard. Set the TUNING RATE switch in 10Hz steps for fine tuning.
3. Set the MARKER Switch on the top cover in the "100K" or "25K" and adjust the MARKER CALIBRATION CONTROL on the top cover, so that the two tones are of the same pitch (in zero beat).

CALIBRATION OF THE TRANSCEIVER

1. Set the MODE switch in the CW position and the TUNING RATE switch in 100Hz position. Tune to the lower band edge

of the band you want to calibrate, as an example, "21.000.0".

2. Ground the KEY jack on the rear panel so that the CW sidetone becomes audible. (Don't transmit.)
3. Set the MARKER switch in the "100K" or "25K", and adjust the FREQUENCY SET CONTROL of the set so that the two tones are of the same pitch (in zero beat).
4. The frequency calibration is sufficient on a frequency on the same band, but it is required for each band.

2. FM UNIT IC-EX242

This unit has a 9.0115MHz FM generator, 2nd IF amplifier, and FM detector circuits that will upgrade the IC-740/IC-745 to a complete all-mode transceiver. The unit provides a clear, powerful FM signal, and interference-free steady reception for 29MHz FM and/or a VHF/UHF transverter.

ASSEMBLY PROCEDURE

1. Install this unit into the position shown in the illustration (Fig. 4) on the reverse side (or on page 20 of the IC-740/IC-745 instruction manual), using the attached screws.
2. Unplug P25 (2 pins with a coaxial cable) which is plugged into J16 of the IF unit, and then plug it into J4 of this unit.
3. Plug P26 (3 pins with a shielded wire and red wire) from the IF unit, into J1 of this unit.
4. Plug P28 (7 pins with white, gray, yellow, purple, red, black, and brown wires) from the front panel, into J2 of this unit.
5. Plug P29 (3 pins with brown, blue and yellow wires) from the front panel, into J3 of this unit.
6. Plug P1 (2 pins with a coaxial cable) of this unit, into J16 of the IF unit.

7. Plug P2 (3 pins with a coaxial cable and green wire) of this unit into J12 of the IF unit.

8. Plug P3 (2 pins with a shielded wire) of this unit, into J25 of the MAIN unit.

9. Replace the speaker cord connector and top cover.

10. No adjustment is required, and the unit provides a complete FM operation.

OPERATION

Refer to the IC-740/IC-745 instruction manual for the FM operations. When you would like to use a discriminator-meter, connect a meter ($\pm 50\mu\text{A}$ - $100\mu\text{A}$) across Pin 1 and Pin 8 (ground) of the ACCESSORY socket on the rear panel of the set.

3. ELECTRONIC KEYER UNIT IC-EX243

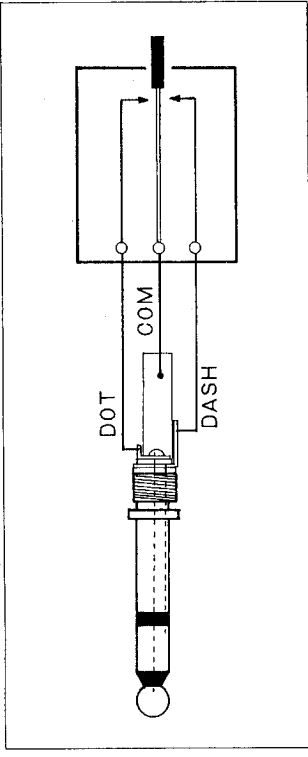
This unit provides automatic keying function with an iambic paddle. This unit is built with a single CMOS IC.

Features designed into this IC include contact debouncing, RF immunity, self-completing character generation, dot memory and weight control.

The keying speed can be changed between 5 - 45 wpm by the VOX GAIN/KEYER SPEED CONTROL on the front panel of the set.

ASSEMBLY PROCEDURE

1. Install this unit into the position shown in the photo (Fig. 5) on the reverse side (or refer to the IC-740/IC-745 instruction manual), using the attached screws.
2. Plug P36 (3 pins) from the front panel, into J1 of this unit.
3. Plug P37 (4 pins) from the front panel, into J2 of this unit.
4. Connect an iambic paddle with a 3-p 1/4 inch key plug as shown in the following illustration.



5. Plug the key plug to the KEY JACK on the rear panel.
6. Check the operation of the keyer. If you would like to increase the weight (to alter the dot-space ratio), turn the weight control on this unit clockwise for your favorite position.
7. Replace the speaker cord connector and top cover.

OPERATION

Turn the VOX GAIN/KEYER SPEED CONTROL click on, and adjust keying speed by turning the control further clockwise for the most comfortable speed for you.

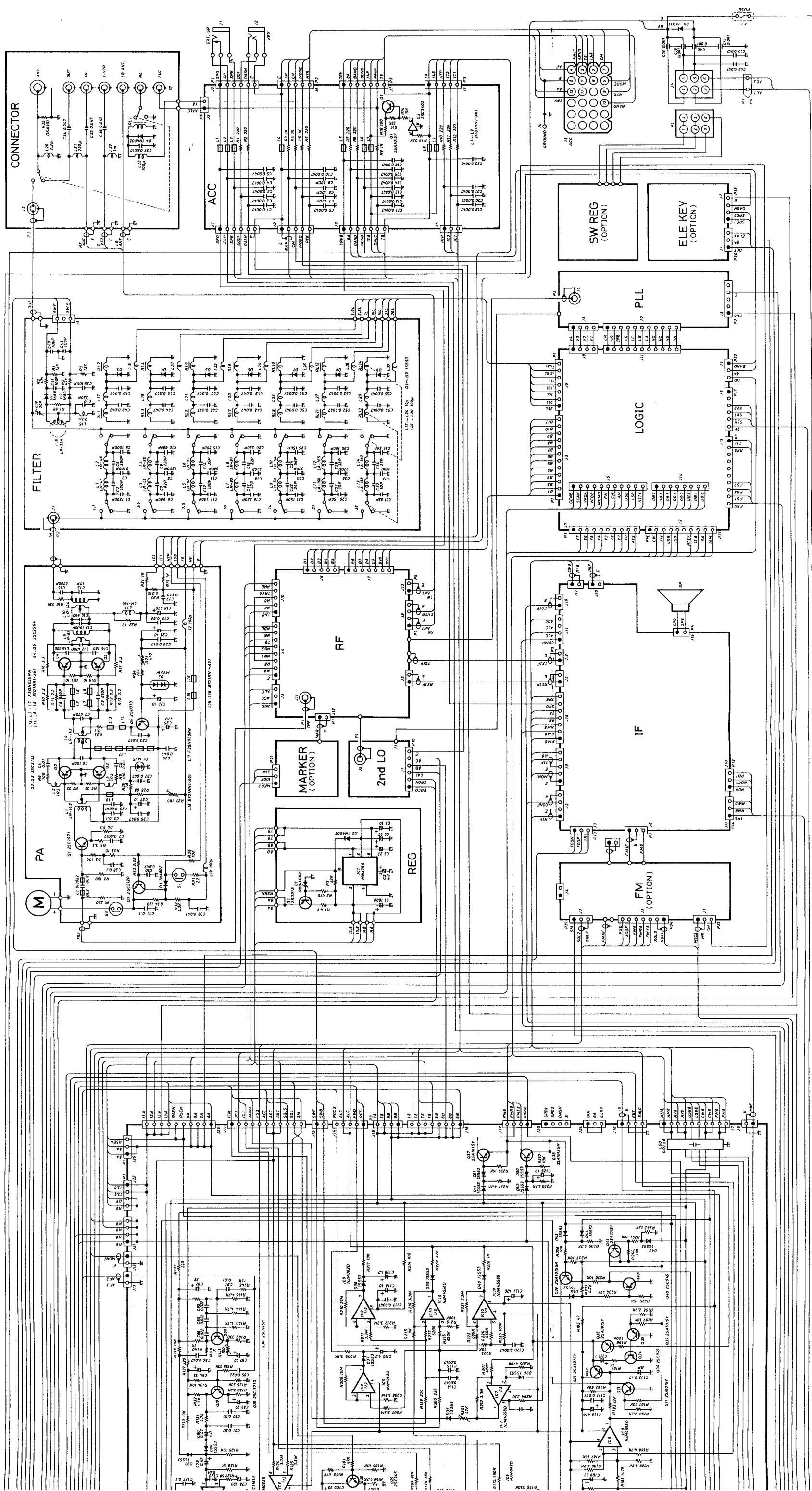
When you don't wish to use the keyer, turn the VOX GAIN/KEYER SPEED CONTROL completely counterclockwise and click off. Then connect a hand key to the KEY JACK on the rear panel.

For other operations, please refer to the IC-740/IC-745 instruction manual.

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IC-745

