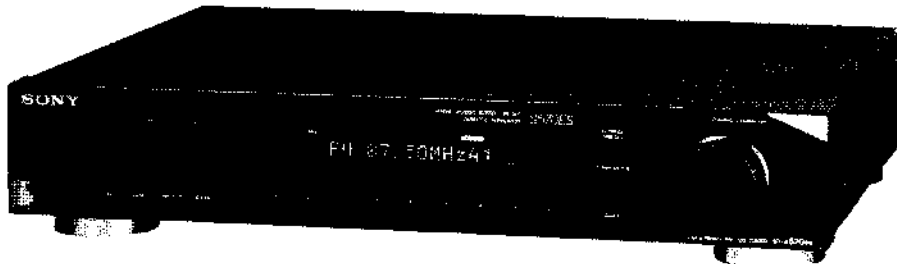


ST-S570ES

SERVICE MANUAL

AEP Model
UK Model



SPECIFICATIONS

General

Circuit System	FM stereo, FM-AM super-heterodyne tuner PLL quartz-locked digital synthesizer system
Power requirements	U.K. model: 240 V AC (or 220 V AC adjustable by authorized Sony person- nel), 50/60 Hz AEP, Germany, Italian model: 220 - 230 V AC (or 240 V AC adjustable by authorized Sony personnel), 50/60 Hz
Power consumption	11 watts
Dimension	Approx. 430 x 85 x 345 mm (w/h/d) (17 x 3 3/8 x 13 5/8 inches)
Weight	Approx. 3.8 kg (8 lb 7 oz)
Accessories Supplied	Connecting Cord (1) AM loop antenna (1) Remote control cord (4-pin) (1)

FM tuner

Tuning range	67.5-108 MHz	
Intermediate frequency	10.7 MHz	
Sensitivity	mono S/N 26 dB	10.3 dBf, 0.9 μ V/75 ohms
	stereo S/N 46 dB	38.5 dBf, 23 μ V/75 ohms
Usable sensitivity	10.3 dBf, 0.9 μ V/75 ohms (IHF)	
Signal-to-noise ratio	at 40 kHz deviation	
		80 dB (mono) 76 dB (stereo)
Harmonic distortion	WIDE	0.04% (mono)
		0.05% (stereo)
	NARROW	0.06% (mono)
		0.08% (stereo)
Separation at 1 kHz	WIDE	80 dB
		90 dB
	NARROW	45 dB
		70 dB
Selectivity	at 400 kHz	WIDE 80 dB
		NARROW 90 dB
	at 300 kHz	WIDE 45 dB
		NARROW 70 dB
Output	at 40 kHz deviation	
		400 mV (for UK model) 600 mV (for AEP, Germany, Italian model)

AM tuner

Tuning range	EXCEPT Italian model MW: 531-1602 kHz (9 kHz step) LW: 153-279 kHz (1 kHz step) Italian models MW: 522-1611 kHz (9 kHz step) LW: 144-288 kHz (1 kHz step)	
Intermediate frequency	450 kHz	
Usable sensitivity	MW	AM loop antenna: 250 μ V/m External antenna: 30 μ V/m
	LW	AM loop antenna: 700 μ V/m External antenna: 200 μ V/m
	Signal-to-noise ratio	54 dB
Harmonic distortion	0.3%	
Selectivity	at 9 kHz: 50 dB	

Design and specifications subject to change without notice.

MC-Service

FM STEREO/FM-AM TUNER
SONY®



TABLE OF CONTENTS

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Features

Precise Tuning with the large knob

The detected revolution of the tuning knob is under digital-control so that you can tune in the correct frequency and stored station easily.

This system employs a variable muting function that adjusts itself to the rotation speed of the TUNING knob and changes the muting time. This function realizes a feeling which is very close to that of an analog type tuner.

Direct comparator technology



An employed PLL IC allows the comparison frequency to be as high as the channel spacing frequency, thus eliminating the tendency of a low comparison frequency to slip into the audio range and degrade the signal-to-noise ratio.

RDS (Radio Data System) Service Reception Function (for Customers of ST-S570ES).

Among the various RDS services, the following functions are available.

PS (Program Service name), CT (Clock Time) and PTY (PTY alarm), TP (Traffic Program identification) and TA (Traffic Announcement) service, PI (Program Identification) and AF (Alternative Frequency list) services.

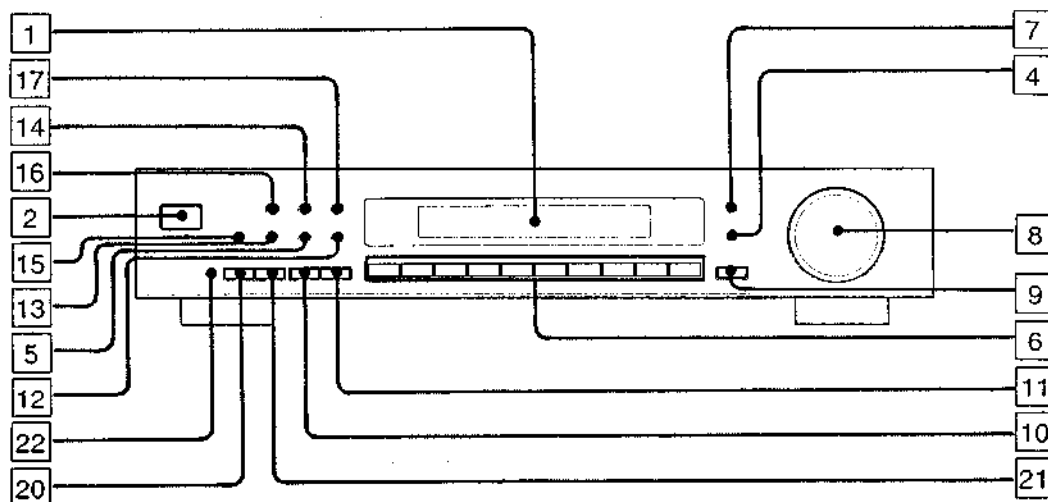
SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1 GENERAL

This section is extracted from instruction manual.

Parts Identification



Refer to the pages indicated in ● for the items which do not include explanation.

- | | |
|--|--|
| <p>1 Display window ●
 2 POWER switch
 3 CAL TONE (calibrating tone) button (for ST-S770ES/S333ESG only)
 Press this button to obtain a 400 Hz, 50% modulated signal for adjusting the recording level on a cassette deck. "CAL" will appear when a 400 Hz calibrating tone signal is provided. To deactivate the calibrating tone circuit, press the button again.
 4 TUNE MODE (tuning mode) button
 5 MUTING button 18
 6 PRESET buttons 18 24
 7 TUNING/PRESET button 18
 8 TUNING/CHARACTER knob
 9 SHIFT button 24
 10 MEMORY button 24
 11 Band selector 18
 12 FM MODE button
 Auto Stereo: Normally, select this mode (by making the HI-BLEND and MONO indicators disappear from the display window) when you tune in a strong FM broadcast.
 HI-BLEND: Select this position when the high-frequency sound is noisy in the FM band. The high-frequency noise will be reduced, but this lowers the stereo effect.
 MONO: Select this position when you tune in a very weak or noisy FM station. Although the sound will come out in monaural the noise will be greatly reduced.</p> | <p>13 IF (intermediate frequency) BAND button
 To prevent inter-station interference, press this button. The NARROW indicator appears on the display and the selectivity is improved.
 14 DISPLAY button 32
 15 RF MODE button
 16 CHARACTER button 35
 17 DISPLAY MODE button 22
 20 AF button
 21 RDS button
 22 WAIT indicator 34</p> |
|--|--|

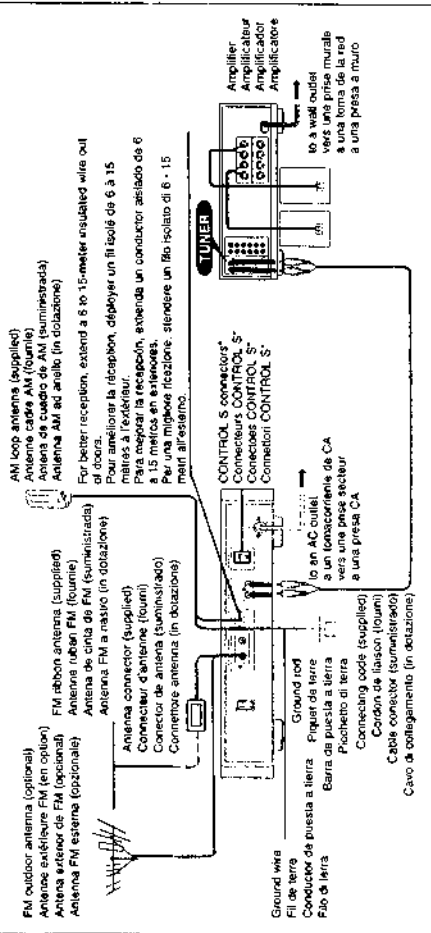
MC-Service

Connections

Notes on Connections

- Connect the AC power cord last. Make sure power is off.
- Cord plugs and jacks are color coded. Red plugs and jacks are for right channel (R) and white ones for left channel (L).
- Fully insert cable connectors into jacks. Loose connections may cause hum or noise.
- Keep the speaker cords, connecting cord and power cord away from the AM loop antenna or antenna lead in of the tuner to avoid possible noise pickup.

Connection Diagram



- **CONTROL S connector (with the supplied remote control cord)**
IN - Connect to the CONTROL S OUT connector of other Sony equipment for whole audio system remote control.
- OUT - Connect to the CONTROL S IN connector of other Sony equipment for whole audio system remote control.

Note on the CONTROL-S input

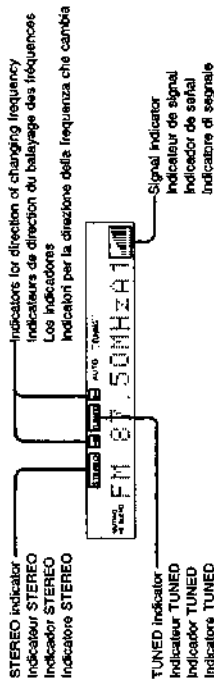
To remote control this unit through a receiver or amplifier, connect the input on this unit to the CONTROL-S output on a Sony receiver or amplifier, with a CONTROL-S cord. When this connection is used, only remote commands sent through the receiver or amplifier will be executed. The remote sensor on this unit will not function.

For customers supplied with the AC plug adaptor

When the AC plug is unsuitable for the type of AC outlet in your country, use the supplied AC plug adaptor.

Broadcast Reception

Indication on the display



STEREO indicator: Lights when an FM stereo program is tuned in.

Signal indicator: Indicates the signal strength of the station being received.

TUNED indicator: Lights when a station is tuned in accurately.

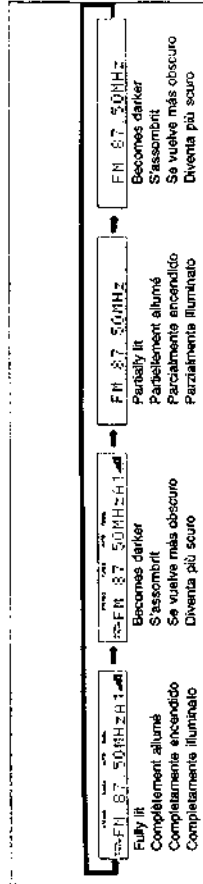
Direction indicators:

▶ : Lights when the frequency or the preset number increases.

◀ : Lights when the frequency or the preset number decreases.

Switching of the indication area in the display window

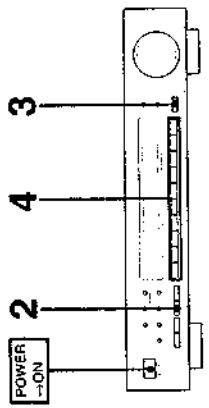
Each time the DISPLAY MODE button is pressed, the indication will change in the following manner:



If operate the any buttons or TUNING knob at not fully lit, the display will be fully lit for 4 seconds.

Broadcast Reception

Storing station frequency into memory



A total of 30 FM/AM stations in any band can be memorized.

- 1 Press **MEMORY**.
"MEMORY" appears in the window.
- 2 Press **TUNE MODE**.
"AUTO" appears and the tuner will automatically search for tuned stations and store them in the memory.
Scanning starts from the lowest frequency in the FM band and the received stations are automatically stored sequentially from code A-1.
• RDS mode: Only RDS stations are stored.
• RDS TP mode: Only RDS TP stations are stored

Storing one station at a time

- 1 Tune in the desired station.
- 2 Press **MEMORY**.
"MEMORY" appears in the window.
- 3 Press **SHIFT** to select the memory page A, B, or C.
- 4 Select a **preset number** with the **PRESET** button.

Repeat the above steps for each station to be stored in memory

Broadcast Reception

Receiving RDS (Radio Data System) Service

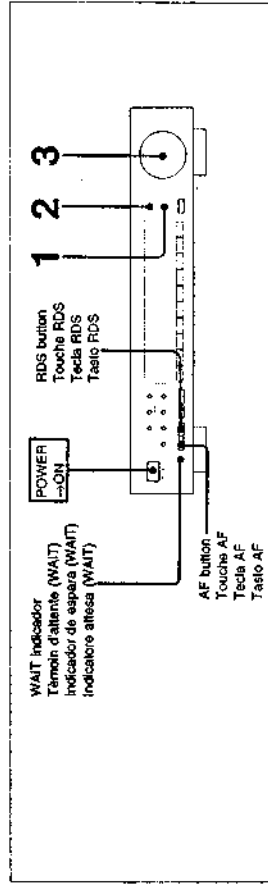
Some FM stations have started RDS services which is a method to display certain information with the program. By setting the tuner in the RDS mode, you can:

- display the station name and time ... PS (Program Service name), CT (Clock Time) display service
- receive emergency announcements ... PTY (Program Type) display service
- receive traffic information announcements ... TP (Traffic Program Identification) /TA (Traffic Announcement) service

Also, you can receive better frequency for your station ... PI (Program Identification) and AF (Alternative Frequency list)

To receive display service

When listening to an FM program,
Press **RDS** so that "RDS" appears in the window.
If the station you are receiving is an RDS station, "RDS Service" appears and the station name will be displayed.



If the station you are receiving is not an RDS station, "No RDS Signal" will be displayed. In such case,

- 1 Press **TUNE MODE** so that "AUTO" appears in the window.
- 2 Press **TUNING/PRESET** so that "TUNING" appears.
- 3 Turn the **TUNING knob**.

The tuner will search for other RDS station and first station name will be displayed

Broadcast Reception

Each time you press DISPLAY, the display will change as follows:

- frequency → digital signal strength → time (not display-able for stations without CT service) → station name
- Note:**
- * "No Time DATA" will appear for stations without CT service. If it appears for CT stations, time will appear within 1 minute
 - * If you have previously stored the station name, it will be cancelled when receiving an RDS station.
 - * Whenever there is an emergency announcement in any station, "PTY ALARM" will blink.

To return to normal FM reception

Press RDS twice so that "RDS" goes off.

Receiving traffic information ... TP (Traffic Program Identification) service

When listening to an FM program,

Press RDS twice so that "RDS TP" appears in the window.

Whenever a traffic announcement starts at any station, "TA" will appear in the window. (It will appear in RDS mode also.)

If the station you are receiving does not have TP service, follow steps 1-3 above.

The tuner will search for other TP stations. Whenever a traffic announcement starts at any station, "TA" will appear in the window.

To return to normal FM reception

Press RDS so that "RDS TP" goes off.

Broadcast Reception

Receiving the clearest station ... PI (Program Identification) / AF (Alternative Frequency list)

If the reception of the FM program you are listening to is weak, the tuner will search for a better frequency in your area of the same program.

1 Press RDS so that "RDS" (or "RDS TP") appears in the window.

If the station you are receiving is an RDS station, "RDS Service" will be displayed. If the station you are receiving is not an RDS station, follow steps 1-3 on the previous page.

2 Press AF.

The tuner will search for and display its alternative frequency list (other frequencies of the same program) and then stop at the frequency of a stronger signal ("AF 1").

If there are no stronger alternative frequencies, "No AF list" will appear and return to the original frequency. If the WAIT indicator lights up

in some countries, the WAIT indicator will light up while the tuner is searching for alternative frequencies. In such case, wait 1 minute after step 1 and then press AF. (If you press AF while the indicator is blinking, the tuner might not search for the strongest signal station.)

Once the search is done, the tuner will memorize the alternative frequencies in the order of the strongest signals.

If you want to receive another alternative frequency, you can press AF and choose other better frequencies that the tuner displays ("AF 2", "AF 3", ...)

To return to normal FM reception

Press RDS so that "RDS" (or "RDS TP") goes off.

Broadcast Reception

Usable letters and symbols
For the memo, a space or any different characters can be used. When the TUNING CHARACTER knob is turned to the right, a blinking cursor appears first and you can select a blank space. As you continue to turn the TUNING CHARACTER knob, letters and symbols will appear in the following order.

To call up a previous character, turn the TUNING CHARACTER knob to the left.

(space), A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, [, \ ,] , ^ , _ , ` , a , b , c , d , e , f , g , h , i , j , k , l , m , n , o , p , q , r , s , t , u , v , w , x , y , z , { , | , } , ~ , 0 , 1 , 2 , 3 , 4 , 5 , 6 , 7 , 8 , 9 , ! , @ , # , \$, % , ^ , & , * , (,) , ~ , - , / , 0 , 1 , 2 , 3 , 4 , 5 , 6 , 7 , 8 , 9 , : ; , < , = , > , ? , @

To check the station frequency of a stored station

For ST-S570ES:

Press the DISPLAY button. This button can be used for switching between the indications of frequencies and memos as well as for indications of digital signal strength (on the FM bands only).

For ST-S770ES:

Each time you press DISPLAY, the frequency and memo will appear alternatively.

To preset station names of 20 stations automatically, see p 24

SECTION 2 ADJUSTMENTS

• Refer to Adjustment Location on page

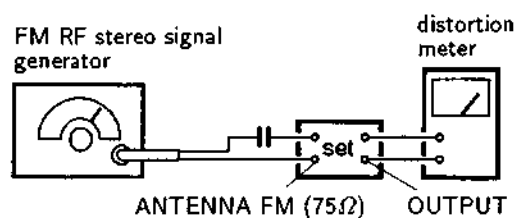
Note : As a front-end (FE101, 421 etc.) is difficult to repair if faulty, replace it with new one.

FM SECTION

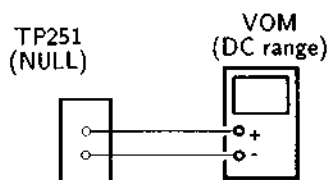
• Standard Setting of FM Stereo RF Signal Generator.

STEREO STANDARD SIGNAL	MONAURAL STANDARD SIGNAL
Carrier frequency : 98MHz Modulation : Audio 1kHz, 40kHz deviation Subchannel 38kHz, 40kHz deviation Pilot 19kHz, 7.5kHz deviation	98MHz 1kHz, 40kHz deviation

FM Discriminator Adjustment (NULL and MONO Distortion)



output level : 10mV (80dB μ)

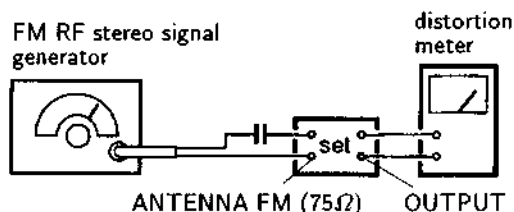


Procedure :

1. Tune the set to 98MHz.
2. Adjust T252 for 0V reading on the VOM.
..... NULL
3. Adjust T253 for a minimum reading on the distortion meter. MONO Distortion
4. Repeat the adjustments of 2 and 3 several times.

Note : When replacing the ceramic filter, perform this alignment.

FM Stereo Distortion Adjustment

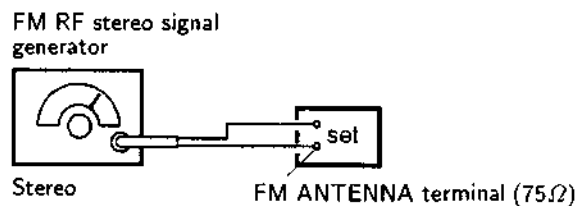


mode : stereo
output level : 10mV (80dB μ)

Procedure :

1. Tune the set to 98MHz.
2. Adjust IFT in FE101 for a minimum reading on the distortion meter.

FM Stereo Indication Lighting Level Adjustment

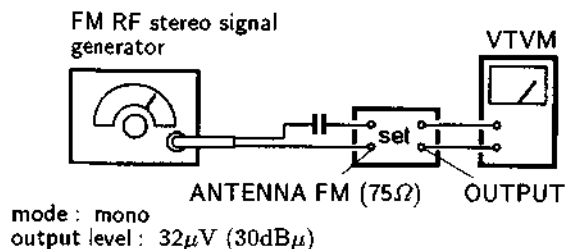


mode : Stereo
modulation : pilot only
output level : 18 μ V (25dB μ)

Procedure :

1. Tune the set to 98MHz.
2. Adjust RV251 to the place where "STEREO", "TUNED" indication lights.

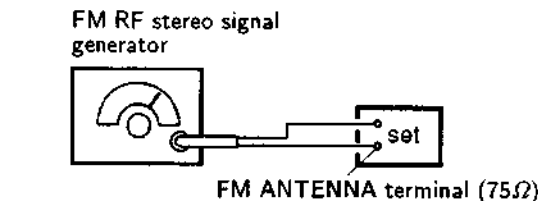
FM Muting Level Adjustment



Procedure :

1. Tune the set to 98MHz.
2. Push the MUTING switch and put on the light the "MUTING" indicator in the fluorescent display.
3. Set SSG output level to $32\mu\text{V}$ (30dB μ).
4. Adjust RV252 so that the reading of VTVM becomes within $25\mu\text{V}$ (28dB μ) – $40\mu\text{V}$ (32dB μ).

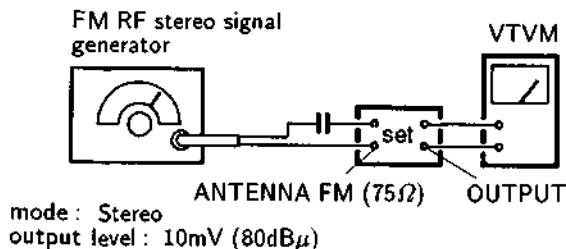
FM Signal Level Adjustment



Procedure :

1. Tune the set to 98MHz.
2. Push the display button to change the display mode for signal strength indication.
3. Adjust RV221 to the place where level 10 in the signal strength bar indicator lights and "75dB" indication lights on fluorescent tube.

FM Stereo Separation Adjustment



Procedure :

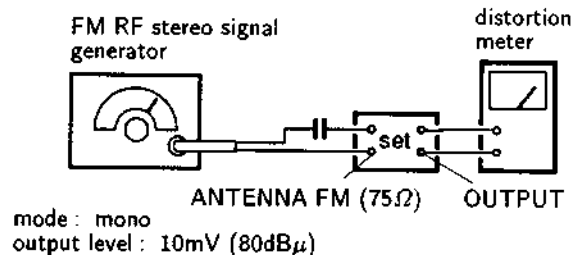
FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV301 minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV301 for minimum reading.

L-CH Stereo separation : Ⓐ – Ⓑ

R-CH Stereo separation : Ⓒ – Ⓓ

The separation of both channels should be equal.

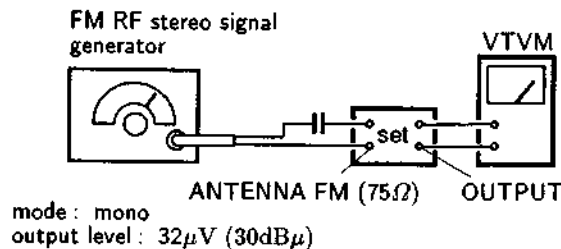
FM Narrow Distortion Adjustment



Procedure :

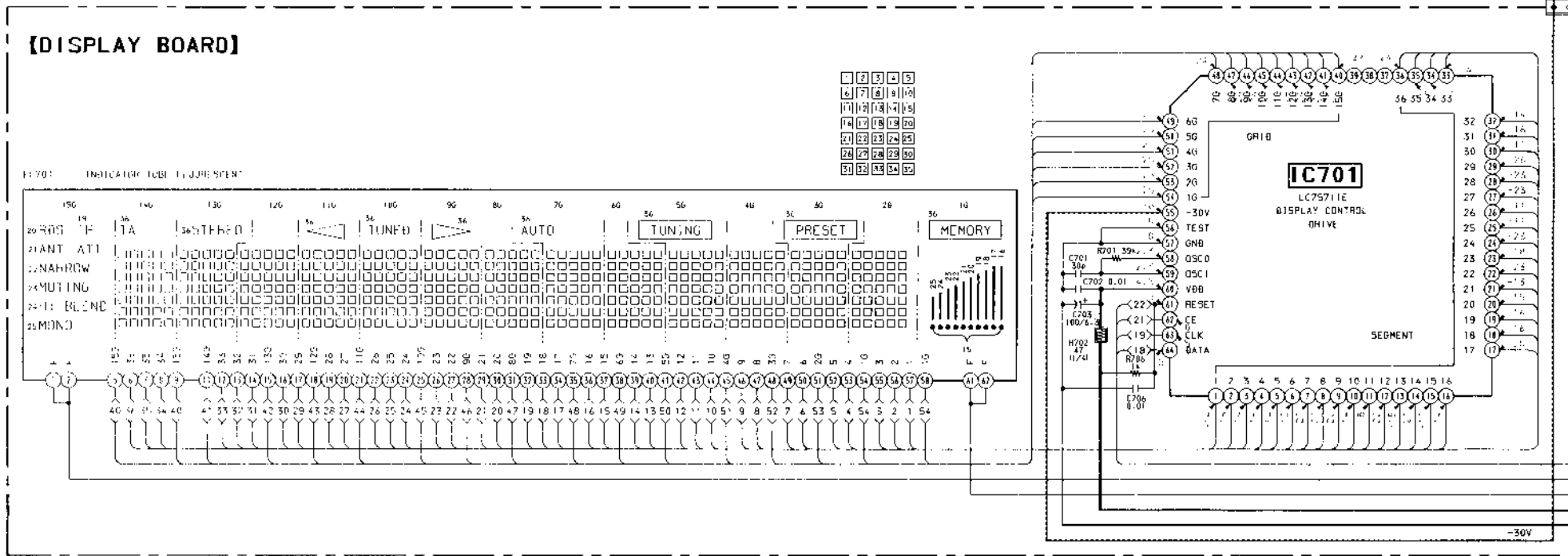
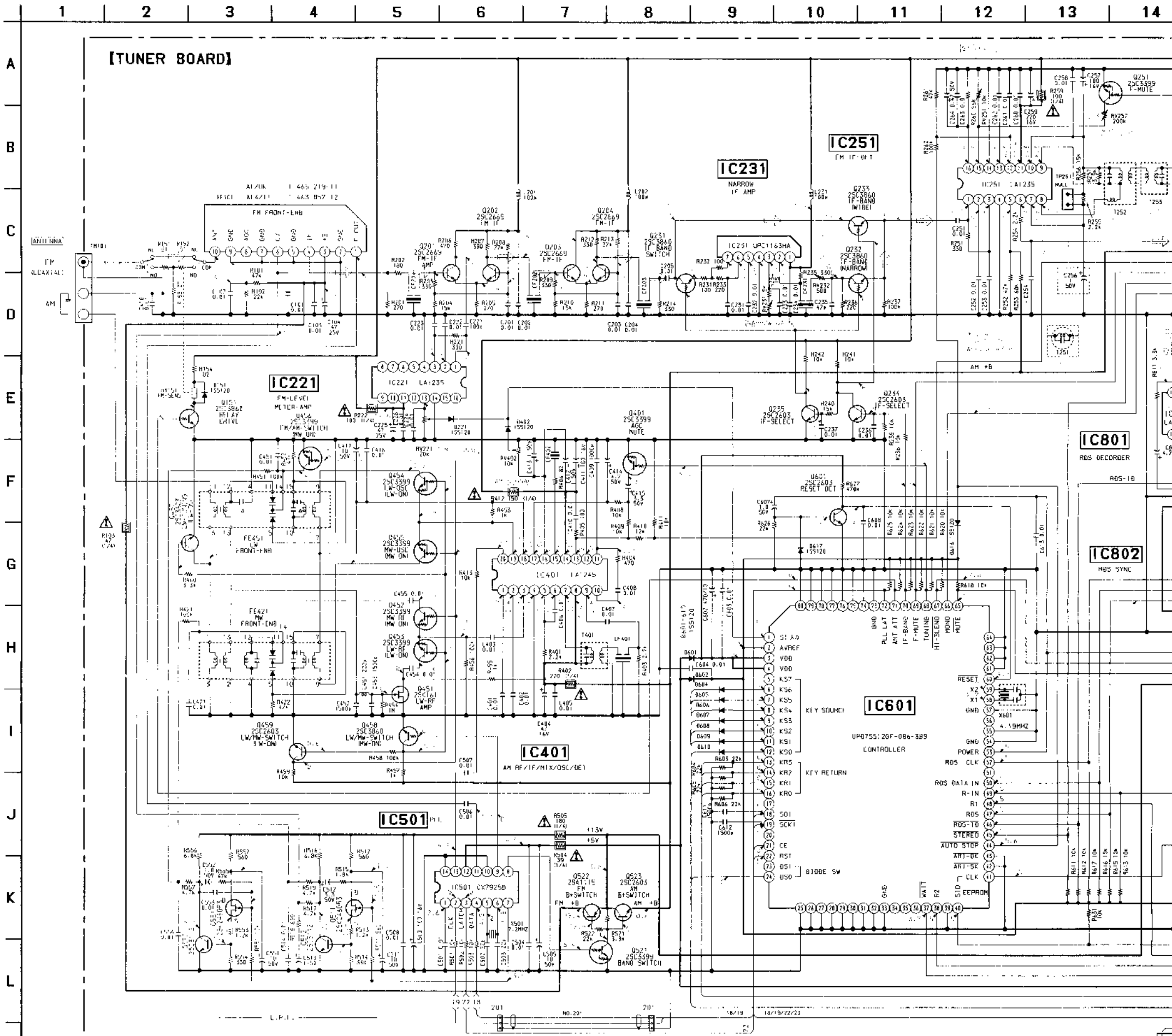
1. Tune the set to 98MHz.
2. Push the IF BAND switch and put on the light the "NARROW" indicator in the fluorescent display.
3. Adjust RV232 for a minimum reading on the distortion meter.

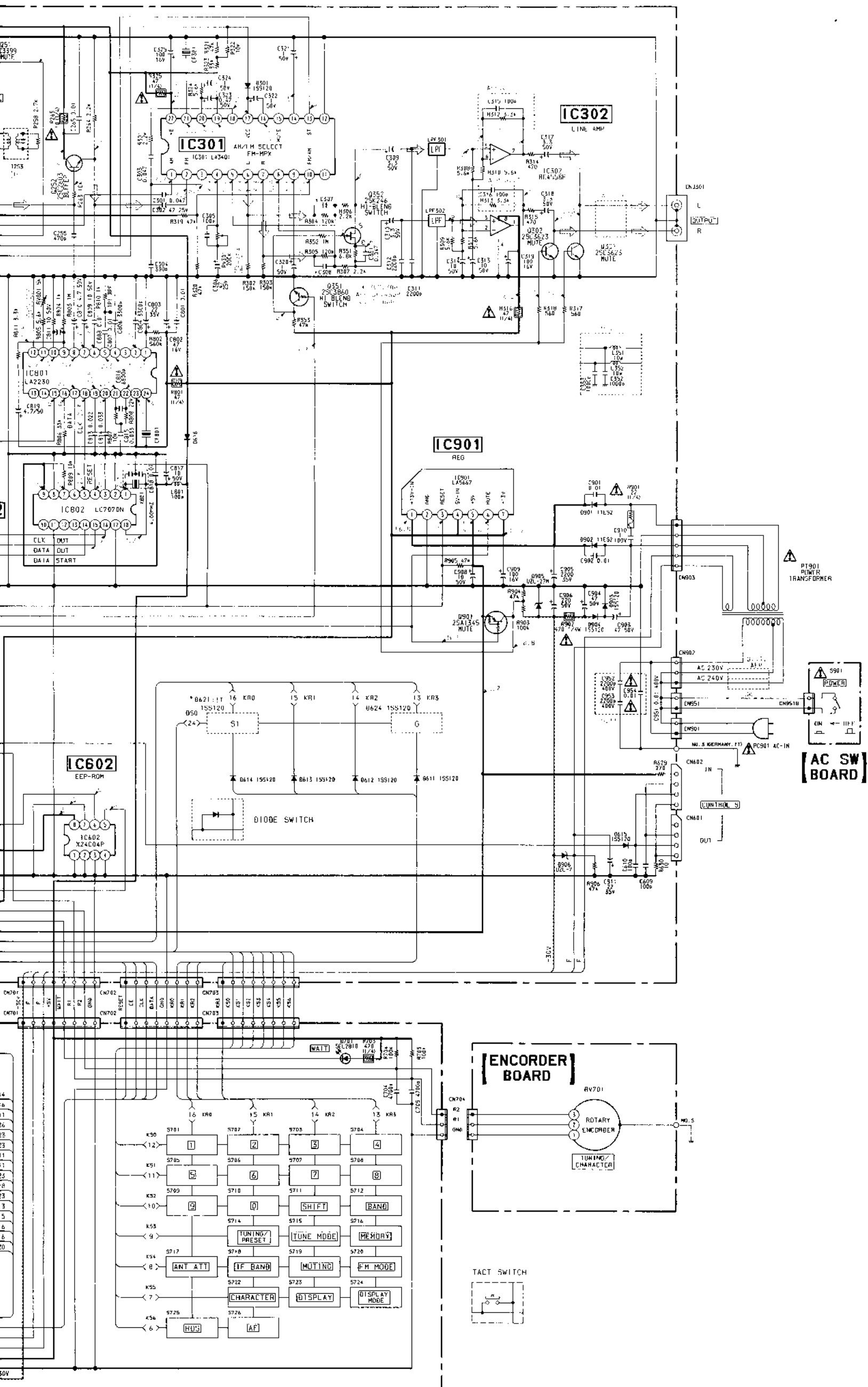
FM Narrow Gain Adjustment



Procedure :

1. Tune the set to 98MHz.
2. Push the IF BAND switch and put on the light the "NARROW" indicator in the fluorescent display.
3. Set SSG output level to $32\mu\text{V}$ (30dB μ).
4. Adjust RV231 so that the reading on VTVM becomes within $25\mu\text{V}$ (28dB μ) – $40\mu\text{V}$ (32dB μ).





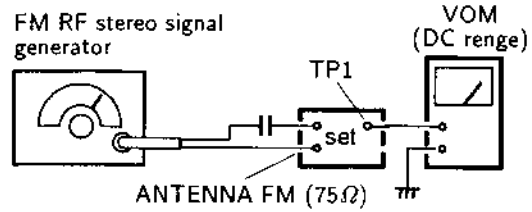
Note on Schematic Diagram :

- All capacitors are in μF unless otherwise noted. pF : μpF
50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{2}$ W or less unless otherwise specified.
- Δ : internal component.
- \square : nonflammable resistor.
- \square : fusible resistor.

Note : The components identified by mark or dotted line with mark are critical for safety. Replace only with part number specified.

- — : B + Line.
- - - - : B - Line.
- \square : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal(detuned)conditions.
no mark : FM
- Voltages are taken with a VOM (input impedance 10 M Ω).
Voltage variations may be noted due to normal production tolerances.
- Signal path.
⇒ : FM

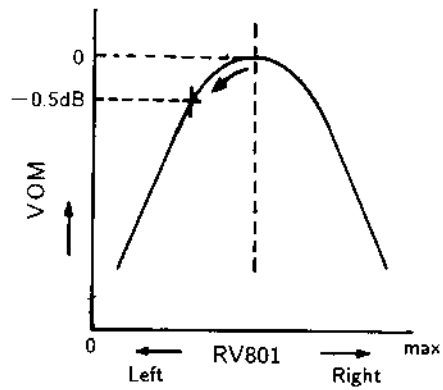
RDS, BPF Adjustment



output level : 10mV (80dBμ)
RDS Modulation : 2kHz deviation

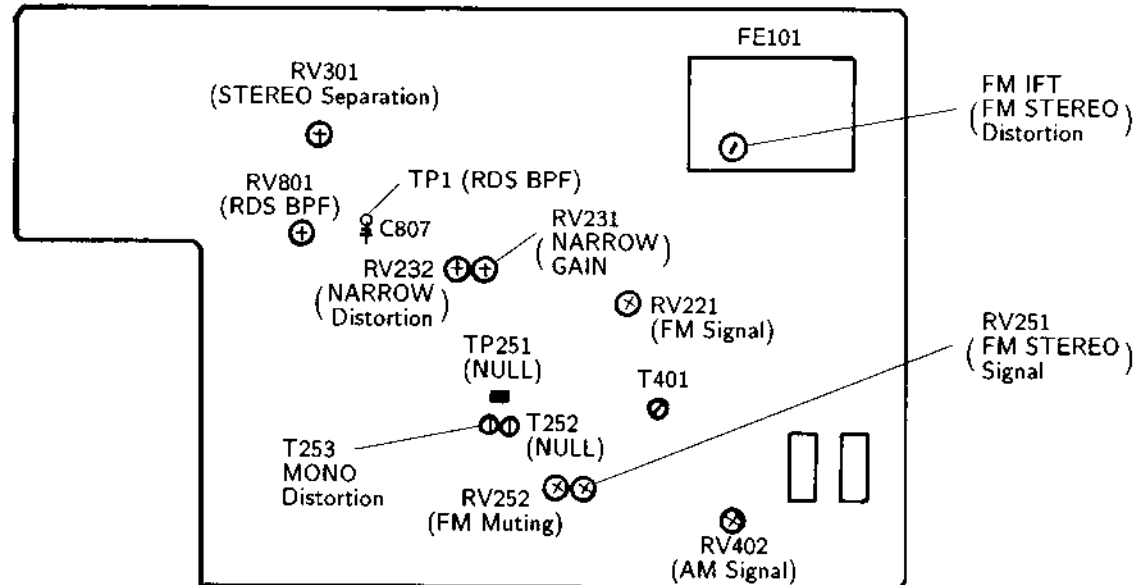
Procedure :

1. Turn RV801 to counterclockwise (left) and set the level below 0.5dB than maximum reading on the VOM. (refer to below drawing.)

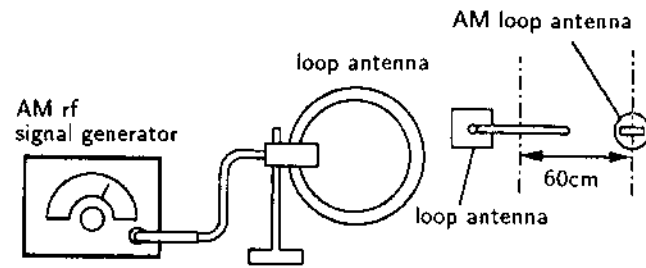


Adjustment Location

- TUNER BOARD -
(Component Side)



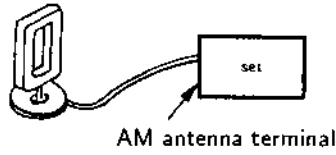
AM SECTION



30% amplitude modulation by 400Hz signal

Carrier frequency : 216kHz (LW Band)

AM loop antenna



$$dB\mu/m = (\text{SSG output level}) - 26dB$$

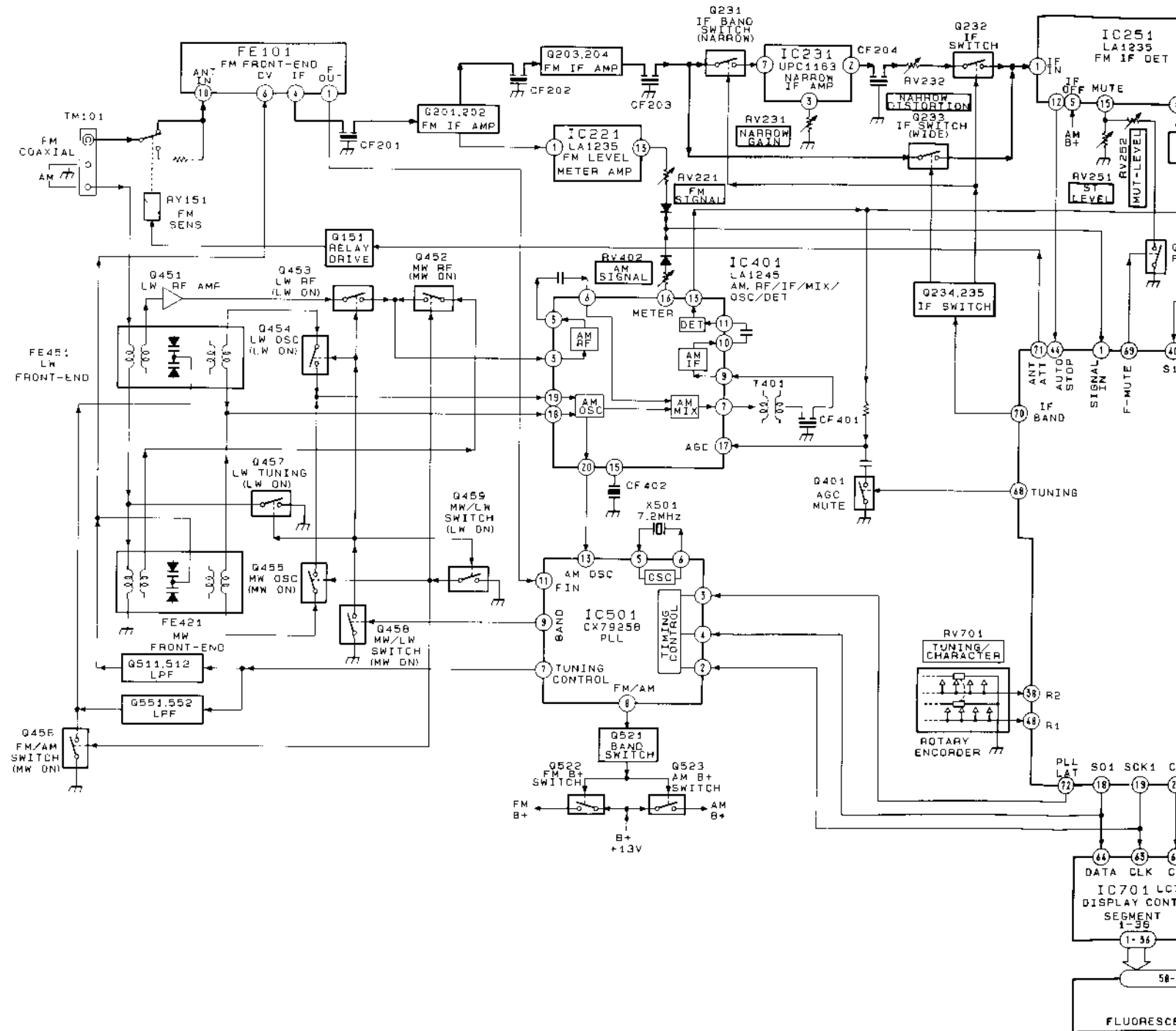
AM Signal Level Adjustment

Procedure :

1. Set SSG output level so that antenna input level of the set becomes 5.0mV (74dBμ/m).
2. Adjust RV402 to the place where level 10 in the signal strength indicator turns from dark to light.

SECTION 3 DIAGRAMS

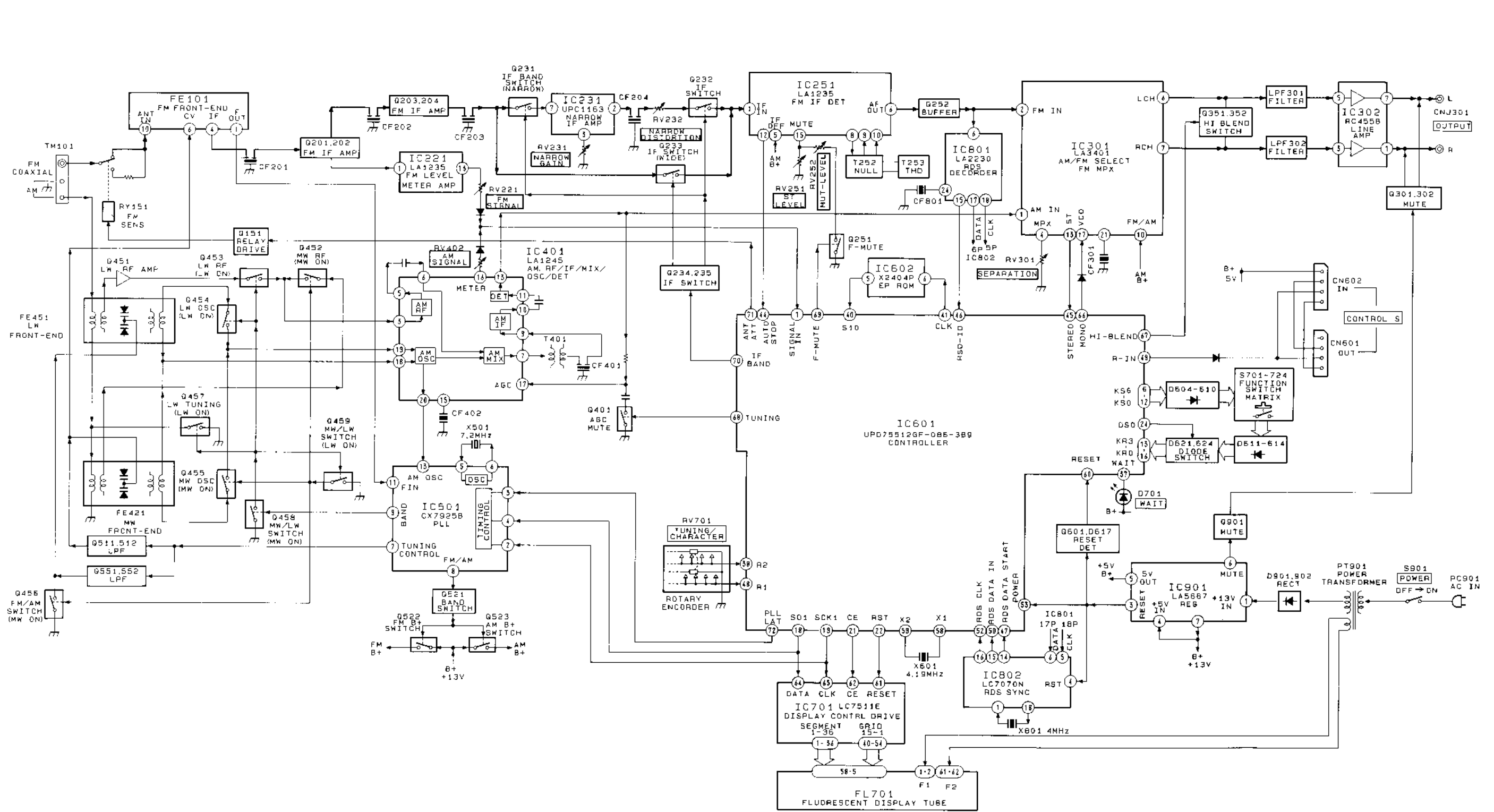
3-1. BLOCK DIAGRAM



MC-Service

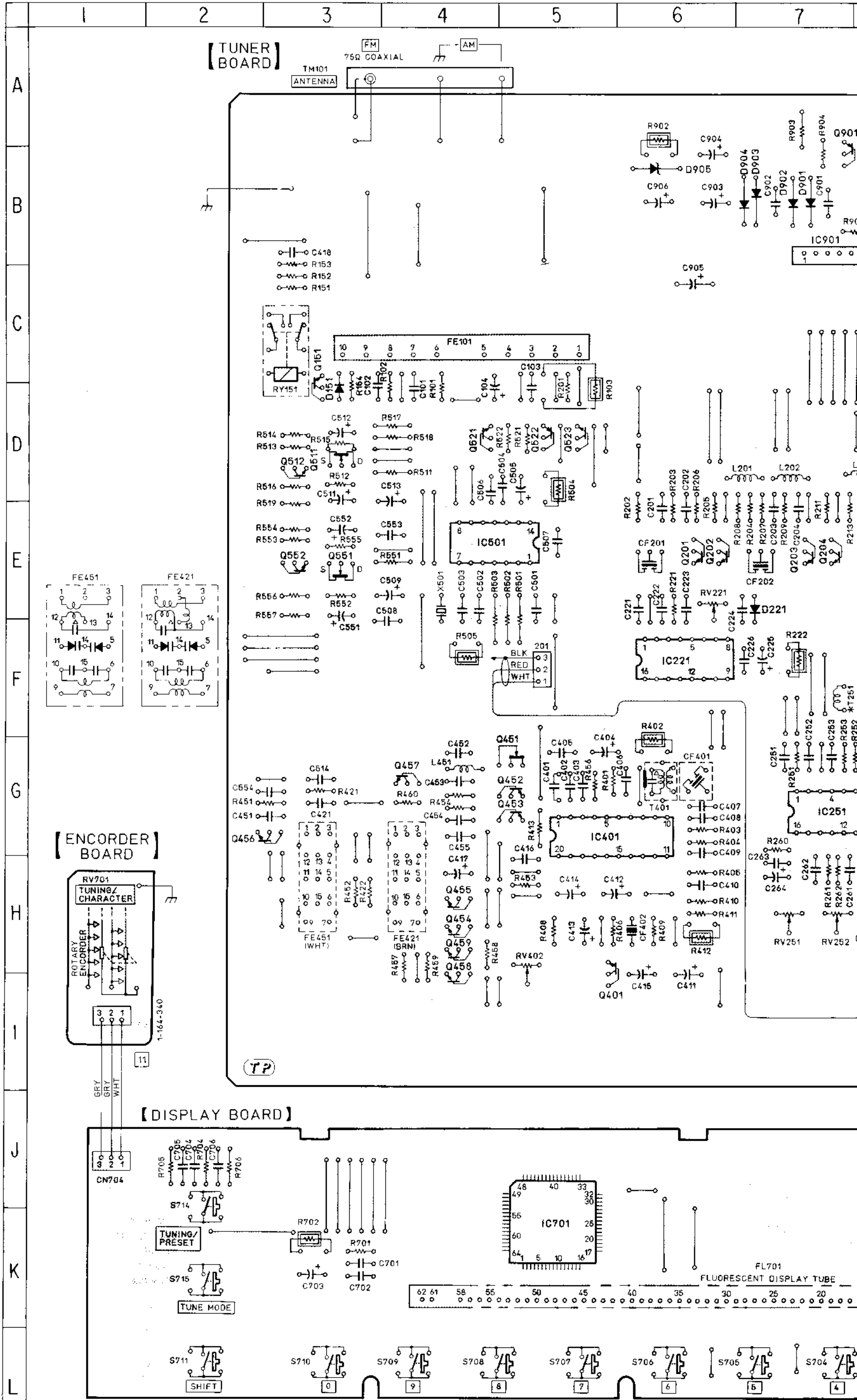
SECTION 3 DIAGRAMS

3-1. BLOCK DIAGRAM



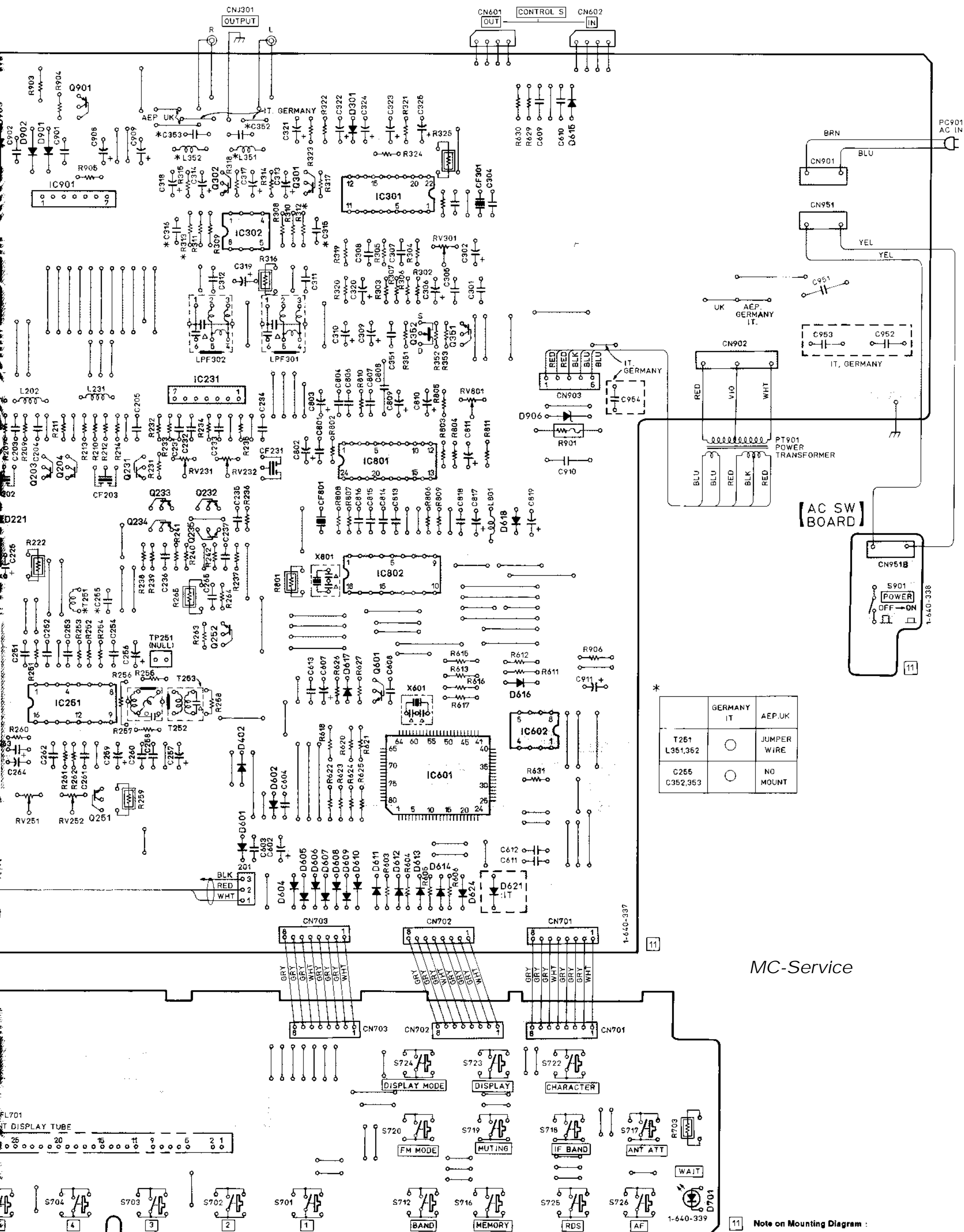
MC-Service

3-3. PRINTED WIRING BOARDS • See page 20 for Semiconductor Lead Layouts.



• Semiconductor Location

Ref. No.	Location
D151	D-3
D221	E-7
D301	B-10
D402	H-9
D601	H-9
D602	H-9
D604	I-9
D605	I-10
D606	I-10
D607	I-10
D608	I-10
D609	I-10
D610	I-10
D611	I-10
D612	I-10
D613	I-11
D614	I-11
D615	B-12
D616	G-12
D617	G-10
D618	E-11
D621	I-11
D624	I-11
D701	L-13
D901	B-7
D902	B-7
D903	B-7
D904	B-7
D905	B-6
D906	D-12
IC221	F-6
IC231	D-9
IC251	G-7
IC301	B-10
IC302	C-9
IC401	G-5
IC501	E-4
IC601	H-11
IC602	G-12
IC701	K-5
IC801	H-10
IC802	I-10
IC901	B-7
Q151	D-3
Q201	E-6
Q202	E-6
Q203	E-7
Q204	E-7
Q231	E-8
Q232	E-9
Q233	E-8
Q234	E-8
Q235	F-9
Q251	H-8
Q252	F-9
Q301	B-10
Q302	B-9
Q351	D-11
Q352	D-11
Q401	T-5
Q451	G-5
Q452	G-5
Q453	G-5
Q454	H-4
Q455	H-4
Q456	G-2
Q457	G-4
Q458	I-4
Q459	H-4
Q511	D-3
Q512	D-3
Q521	D-4
Q522	D-5
Q523	D-5
Q551	E-3
Q552	E-3
Q601	G-10
Q901	B-7



*

	GERMANY IT	AEP, UK
T261 L351,362	○	JUMPER WIRE
C255 C352,353	○	NO MOUNT

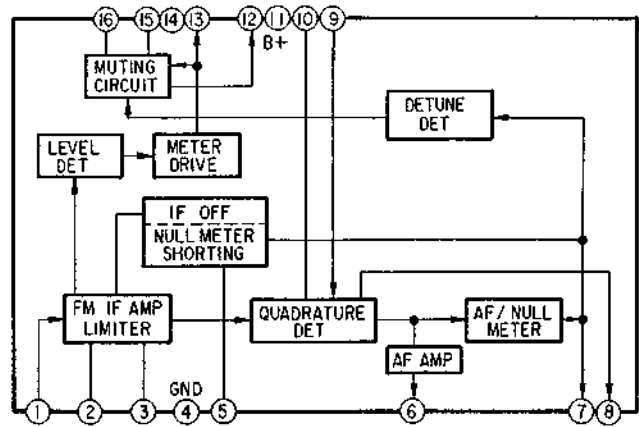
MC-Service

11 Note on Mounting Diagram :

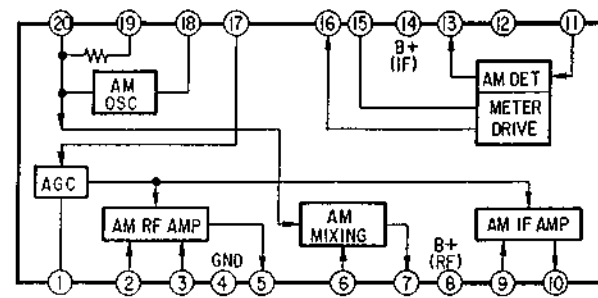
- ○ : Parts extracted from the component side.
- ⊠ : Indicates side identified with part number.
- ▨ : Pattern on the side which is seen.

3-4. IC BLOCK DIAGRAMS

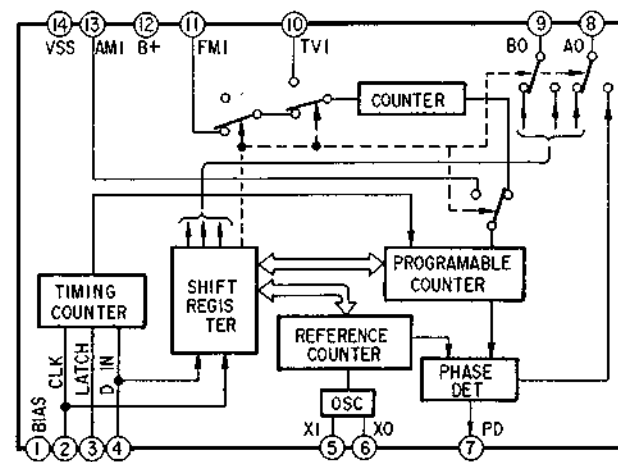
IC221, IC251 LA1235



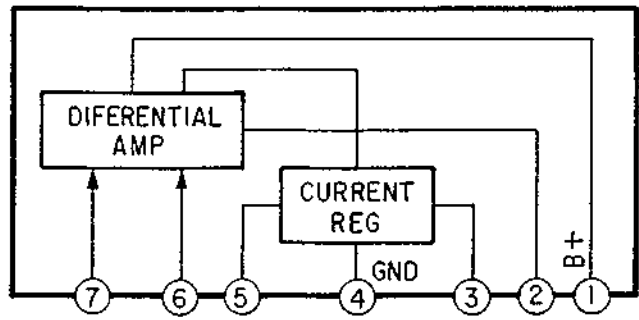
IC401 LA1245



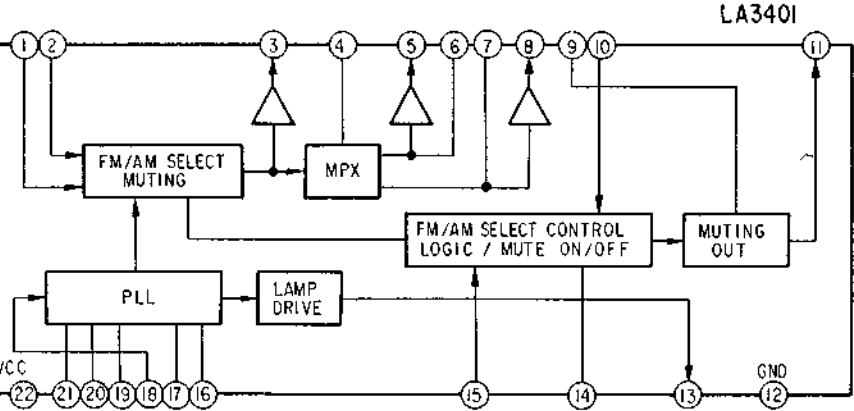
IC501 CX7925B



IC231 µPC1163HA

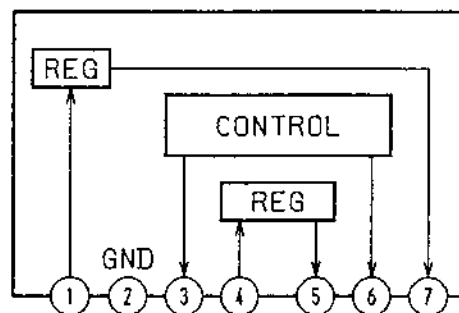


IC301 LA3401

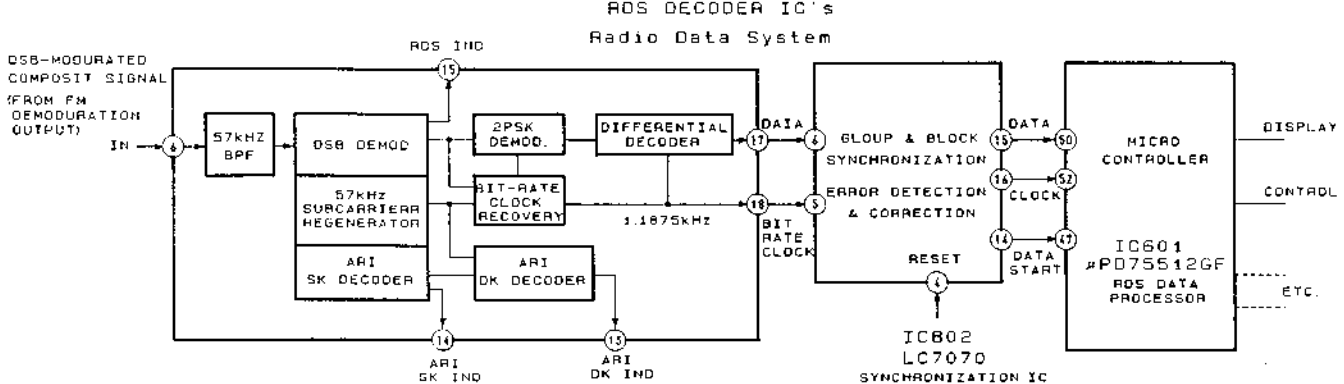


LA3401

IC901 LA5667

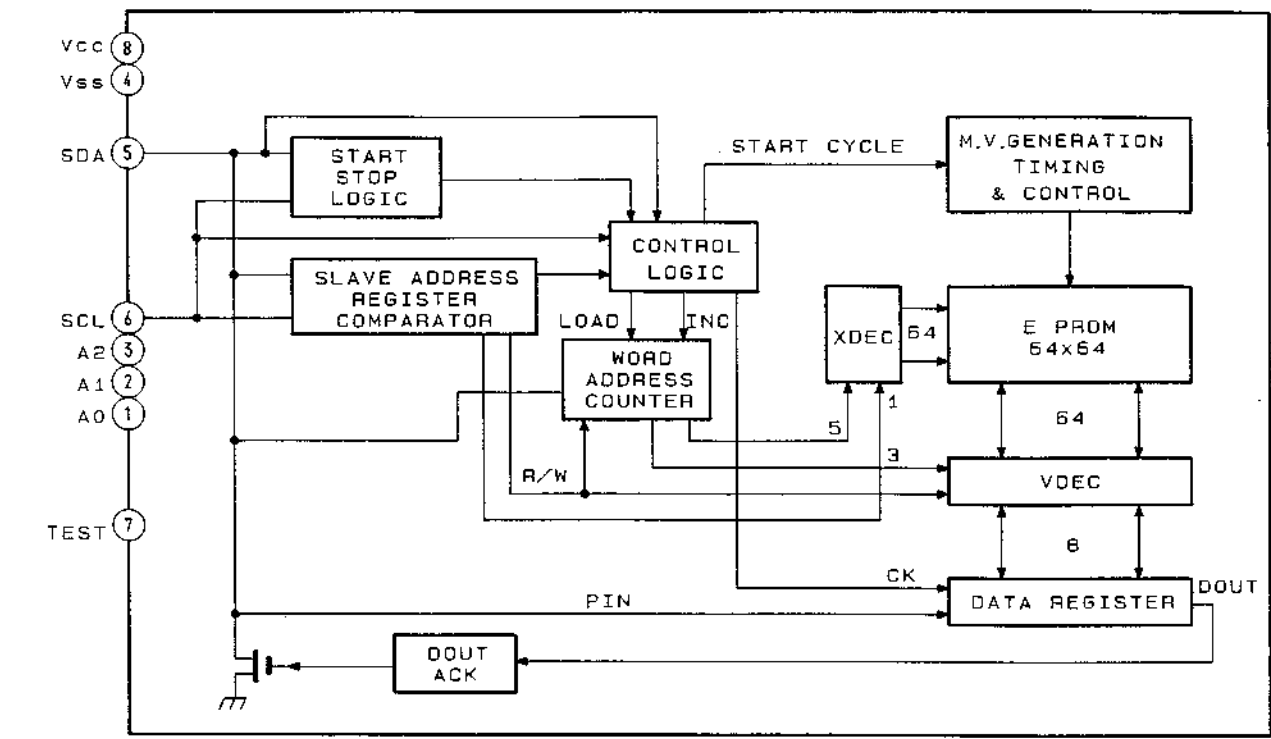


IC601 µPD75512GF, IC802 LC7070, IC801 LA2230

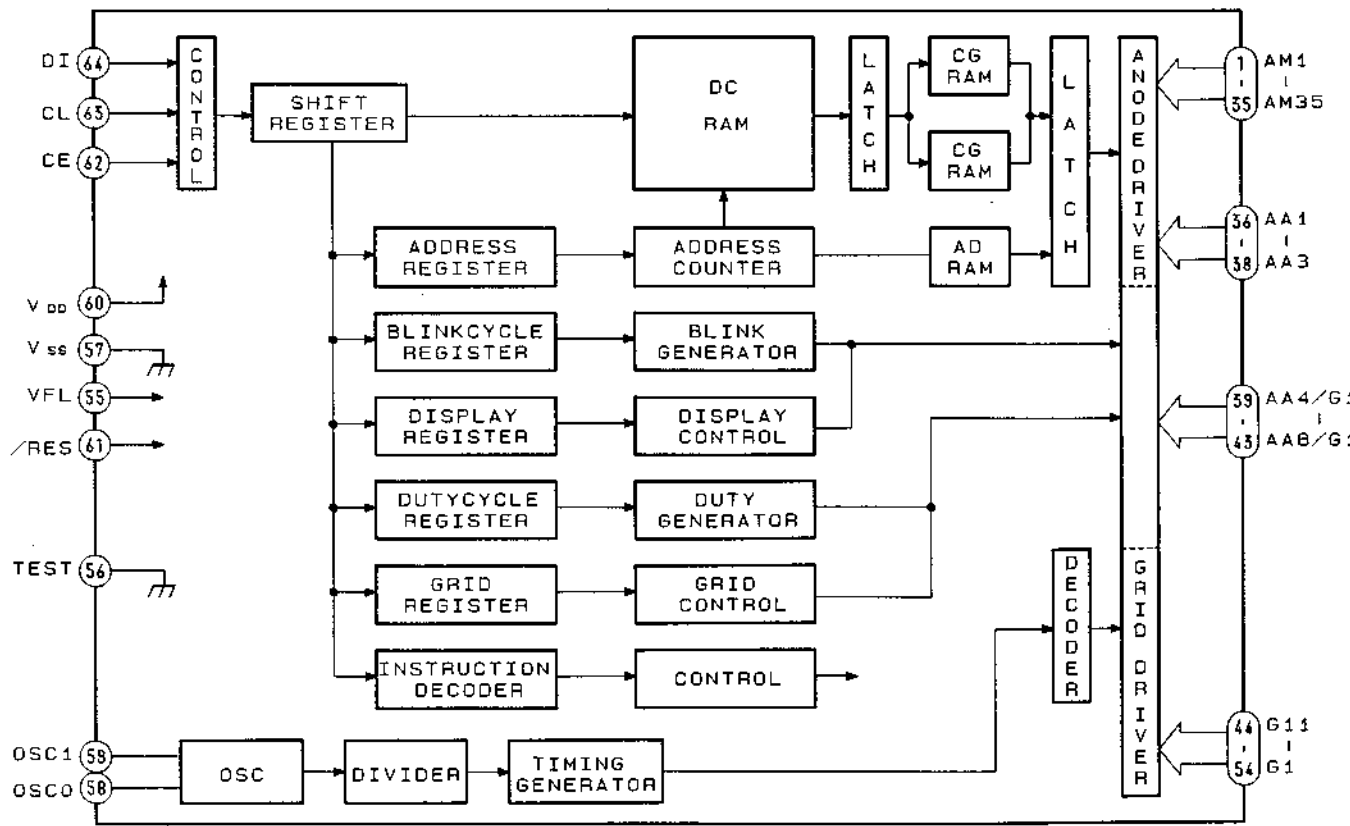


IC801 LA2230 RDS DECODER IC WITH BPF

IC602 X24C04P



IC701 LC75711E



3-5. FM

GERMANY ITALIAN

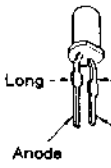
ANT (10)

AGC (8)

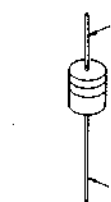
GND (9)

3-6. SEMI

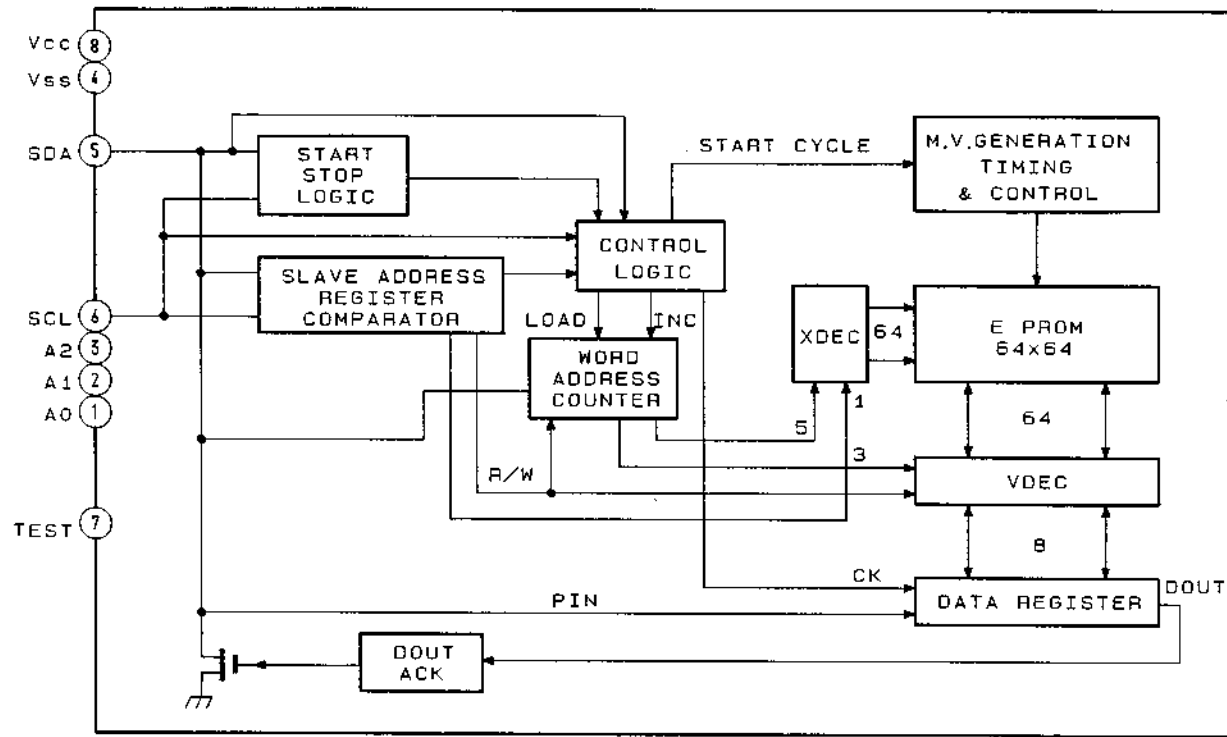
SEL2810A



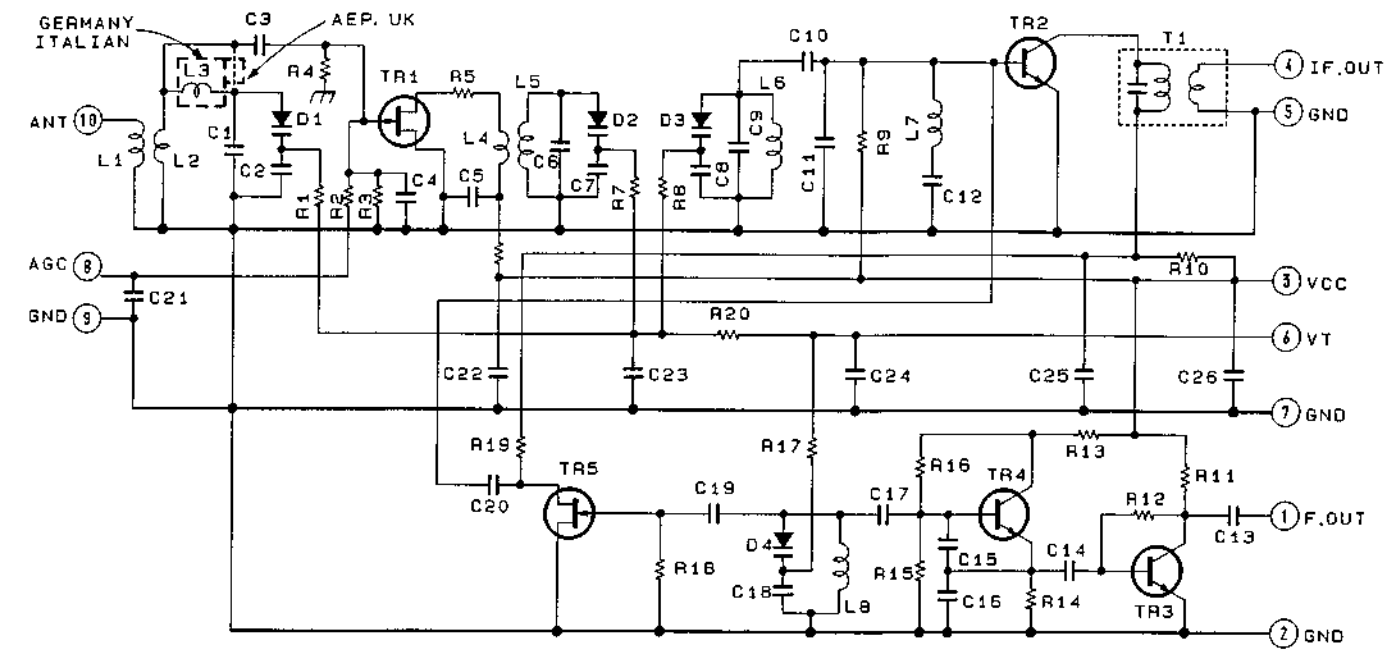
138120 HZ57B2 HZ527-



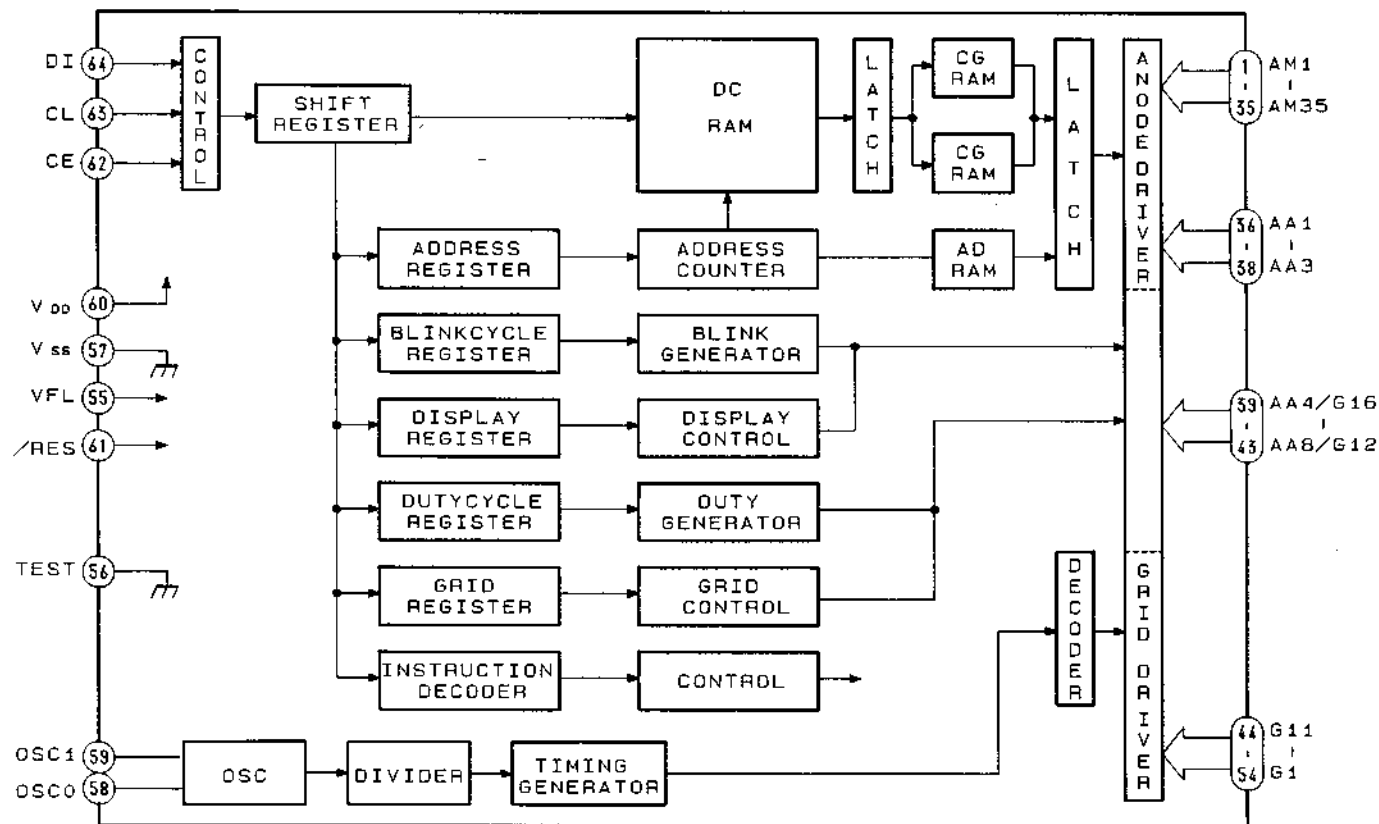
IC602 X24C04P



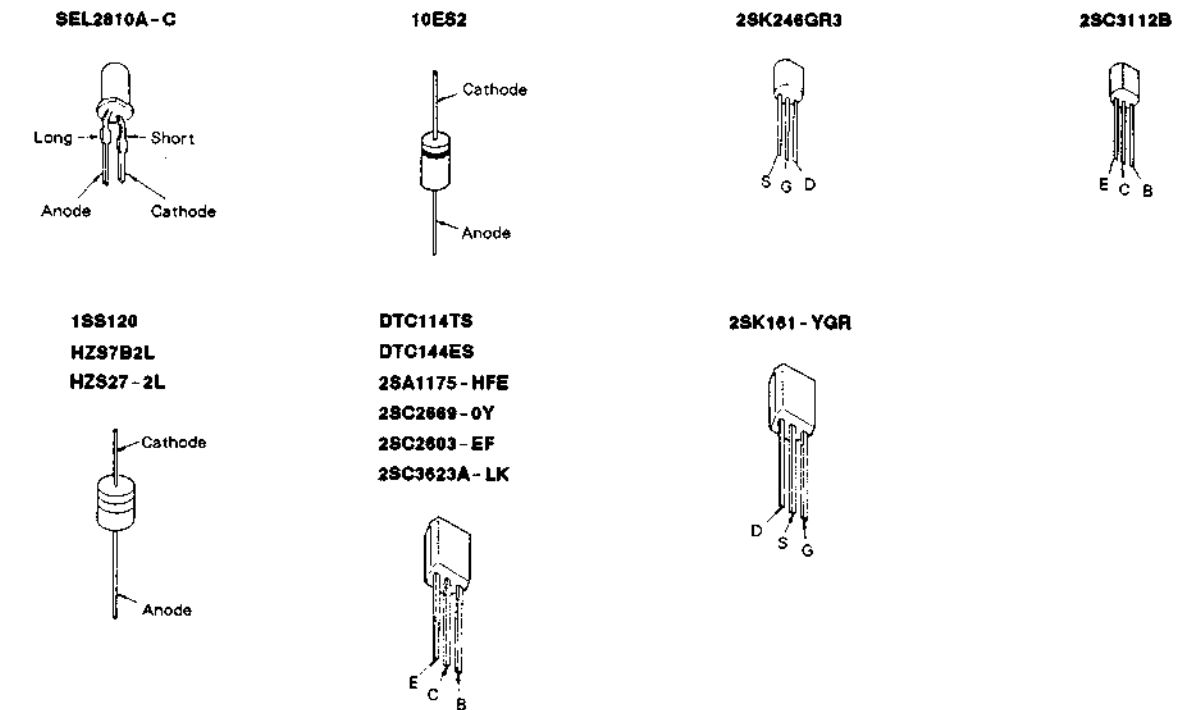
3-5. FM FRONT-END (FE101)



IC701 LC75711E



3-6. SEMICONDUCTOR LEAD LAYOUTS



DISPLAY ENCODER

TUNER

**SECTION 5
ELECTRICAL PARTS LIST**

NOTE :

The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

G : Germany model

IT : Italian model

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- - XX, - X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL : metal-film resistor
METAL OXIDE : Metal Oxide-film resistor
F : nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
in each case, u : μ , for example :
uA... : μ A..., uPA..., μ PA...,
uPB..., μ PB..., uPC..., μ PC...,
uPD..., μ PD...
- CAPACITORS :
uF : μ F
- COILS
uH : μ H

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
	* A-4345-294-A	DISPLAY BOARD, COMPLETE *****				< VARIABLE RESISTOR >	
	* 1-640-340-11	ENCODER BOARD *****		RV701	1-466-336-11	ENCODER, ROTARY (TUNING, CHARACTER) < SWITCH >	
	* 4-945-292-01	HOLDER, INDICATION TUBE < CAPACITOR >		S701	1-554-303-21	SWITCH, TACTILE (1)	
C701	1-102-962-00	CERAMIC 30PF 5% 50V		S702	1-554-303-21	SWITCH, TACTILE (2)	
C702	1-101-004-00	CERAMIC 0.01uF 50V		S703	1-554-303-21	SWITCH, TACTILE (3)	
C703	1-126-177-11	ELECT 100uF 20% 10V		S704	1-554-303-21	SWITCH, TACTILE (4)	
C704	1-161-377-00	CERAMIC 0.0047uF 30% 16V		S705	1-554-303-21	SWITCH, TACTILE (5)	
C705	1-161-377-00	CERAMIC 0.0047uF 30% 16V		S706	1-554-303-21	SWITCH, TACTILE (6)	
C706	1-161-379-00	CERAMIC 0.01uF 20% 25V		S707	1-554-303-21	SWITCH, TACTILE (7)	
		< CONNECTOR >		S708	1-554-303-21	SWITCH, TACTILE (8)	
CN701	* 1-564-342-11	PIN. CONNECTOR 8P		S709	1-554-303-21	SWITCH, TACTILE (9)	
CN702	* 1-564-342-61	PIN. CONNECTOR 8P		S710	1-554-303-21	SWITCH, TACTILE (0)	
CN703	* 1-564-342-11	PIN. CONNECTOR 8P		S711	1-554-303-21	SWITCH, TACTILE (SHIFT)	
		< DIODE >		S712	1-554-303-21	SWITCH, TACTILE (BAND)	
D701	8-719-301-52	DIODE SEL2810A-C (WAIT)		S714	1-554-303-21	SWITCH, TACTILE (TUNING/PRESET)	
		< INDICATOR >		S715	1-554-303-21	SWITCH, TACTILE (TUNE MODE)	
FL701	1-519-643-11	INDICATOR TUBE, FLUORESCENT		S716	1-554-303-21	SWITCH, TACTILE (MEMORY)	
		< IC >		S717	1-554-303-21	SWITCH, TACTILE (ANT ATT)	
IC701	8-759-823-57	IC LC75711E		S718	1-554-303-21	SWITCH, TACTILE (IF BAND)	
		< RESISTOR >		S719	1-554-303-21	SWITCH, TACTILE (MUTING)	
R701	1-249-436-11	CARBON 39K 5% 1/4W		S720	1-554-303-21	SWITCH, TACTILE (FM MODE)	
R702	Δ 1-249-401-11	CARBON 47 5% 1/4W		S722	1-554-303-21	SWITCH, TACTILE (CHARACTER)	
R703	Δ 1-249-413-11	CARBON 470 5% 1/4W		S723	1-554-303-21	SWITCH, TACTILE (DISPLAY)	
R704	1-249-441-11	CARBON 100K 5% 1/4W		S724	1-554-303-21	SWITCH, TACTILE (DISPLAY MODE)	
R705	1-249-441-11	CARBON 100K 5% 1/4W		S725	1-554-303-21	SWITCH, TACTILE (RDS)	
R706	1-249-417-11	CARBON 1K 5% 1/4W		S726	1-554-303-21	SWITCH, TACTILE (AF)	

				* A-4345-287-A	TUNER BOARD, COMPLETE (AEP)		
				* A-4345-288-A	TUNER BOARD, COMPLETE (G)		
				* A-4345-289-A	TUNER BOARD, COMPLETE (UK)		
				* A-4345-290-A	TUNER BOARD, COMPLETE (IT)		

TUNER

AC SW

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
*	1-640-338-11	AC SW BOARD				C305	1-110-335-11	MYLAR	100PF	5%	50V
		*****				C306	1-124-910-11	ELECT	47uF	20%	50V
	4-352-844-01	PIN, LEAD. COATING (UK, IT)				C307	1-104-293-11	POLYSTYRENE	430PF	5%	50V (AEP, UK)
*	4-911-383-01	HEAT SINK				C307	1-104-296-11	POLYSTYRENE	560PF	5%	50V (G. IT)
	7-682-548-09	SCREW +B 3X8				C308	1-104-293-11	POLYSTYRENE	430PF	5%	50V (AEP, UK)
		< CAPACITOR >				C308	1-104-296-11	POLYSTYRENE	560PF	5%	50V (G. IT)
C101	1-161-379-00	CERAMIC	0.01uF	20%	25V	C309	1-123-382-00	ELECT	3.3uF	20%	100V
C102	1-161-379-00	CERAMIC	0.01uF	20%	25V	C310	1-123-382-00	ELECT	3.3uF	20%	100V
C103	1-161-379-00	CERAMIC	0.01uF	20%	25V	C311	1-130-475-00	MYLAR	0.0022uF	5%	50V
C104	1-124-910-11	ELECT	47uF	20%	50V	C312	1-130-475-00	MYLAR	0.0022uF	5%	50V
C201	1-161-379-00	CERAMIC	0.01uF	20%	25V	C313	1-126-059-11	ELECT	10uF	20%	50V
C202	1-161-379-00	CERAMIC	0.01uF	20%	25V	C314	1-126-059-11	ELECT	10uF	20%	50V
C203	1-161-379-00	CERAMIC	0.01uF	20%	25V	C315	1-110-335-11	MYLAR	100PF	5%	50V (AEP, G. IT)
C204	1-161-379-00	CERAMIC	0.01uF	20%	25V	C316	1-110-335-11	MYLAR	100PF	5%	50V (AEP, G. IT)
C205	1-161-379-00	CERAMIC	0.01uF	20%	25V	C317	1-123-382-00	ELECT	3.3uF	20%	100V
C221	1-162-282-31	CERAMIC	100PF	10%	50V	C318	1-123-382-00	ELECT	3.3uF	20%	100V
C222	1-161-379-00	CERAMIC	0.01uF	20%	25V	C319	1-126-023-11	ELECT	100uF	20%	16V
C223	1-161-379-00	CERAMIC	0.01uF	20%	25V	C320	1-126-044-11	ELECT	1uF	20%	50V
C224	1-161-379-00	CERAMIC	0.01uF	20%	25V	C321	1-126-044-11	ELECT	1uF	20%	50V
C225	1-124-910-11	ELECT	47uF	20%	50V	C322	1-126-044-11	ELECT	1uF	20%	50V
C226	1-161-379-00	CERAMIC	0.01uF	20%	25V	C323	1-126-043-11	ELECT	0.47uF	20%	50V
C231	1-161-379-00	CERAMIC	0.01uF	20%	25V	C324	1-126-044-11	ELECT	1uF	20%	50V
C232	1-161-379-00	CERAMIC	0.01uF	20%	25V	C325	1-126-023-11	ELECT	100uF	20%	16V
C233	1-161-379-00	CERAMIC	0.01uF	20%	25V	C351	1-136-161-00	FILM	0.047uF	5%	50V
C234	1-161-379-00	CERAMIC	0.01uF	20%	25V	C352	1-130-471-00	MYLAR	0.001uF	5%	50V (G. IT)
C235	1-162-215-31	CERAMIC	47PF	5%	50V	C353	1-130-471-00	MYLAR	0.001uF	5%	50V (G. IT)
C236	1-161-379-00	CERAMIC	0.01uF	20%	25V	C401	1-161-379-00	CERAMIC	0.01uF	20%	25V
C237	1-161-379-00	CERAMIC	0.01uF	20%	25V	C402	1-161-379-00	CERAMIC	0.01uF	20%	25V
C251	1-161-379-00	CERAMIC	0.01uF	20%	25V	C403	1-161-379-00	CERAMIC	0.01uF	20%	25V
C252	1-161-379-00	CERAMIC	0.01uF	20%	25V	C404	1-124-910-11	ELECT	47uF	20%	50V
C253	1-161-379-00	CERAMIC	0.01uF	20%	25V	C405	1-161-379-00	CERAMIC	0.01uF	20%	25V
C254	1-110-335-11	MYLAR	100PF	5%	50V (AEP, UK)	C406	1-161-379-00	CERAMIC	0.01uF	20%	25V
C254	1-110-341-11	MYLAR	330PF	5%	50V (G. IT)	C407	1-161-379-00	CERAMIC	0.01uF	20%	25V
C255	1-130-467-00	MYLAR	470PF	5%	50V (G. IT)	C408	1-161-379-00	CERAMIC	0.01uF	20%	25V
C256	1-126-044-11	ELECT	1uF	20%	50V	C409	1-162-294-31	CERAMIC	0.001uF	10%	50V
C257	1-126-023-11	ELECT	100uF	20%	16V	C410	1-161-379-00	CERAMIC	0.01uF	20%	25V
C258	1-161-379-00	CERAMIC	0.01uF	20%	25V	C411	1-126-023-11	ELECT	100uF	20%	16V
C259	1-126-024-11	ELECT	220uF	20%	16V	C412	1-126-044-11	ELECT	1uF	20%	50V
C260	1-161-379-00	CERAMIC	0.01uF	20%	25V	C413	1-126-044-11	ELECT	1uF	20%	50V
C261	1-161-379-00	CERAMIC	0.01uF	20%	25V	C414	1-126-163-11	ELECT	4.7uF	20%	50V
C262	1-161-379-00	CERAMIC	0.01uF	20%	25V	C415	1-123-382-00	ELECT	3.3uF	20%	100V
C263	1-161-379-00	CERAMIC	0.01uF	20%	25V	C416	1-161-379-00	CERAMIC	0.01uF	20%	25V
C264	1-126-043-11	ELECT	0.47uF	20%	50V	C417	1-126-059-11	ELECT	10uF	20%	50V
C265	1-161-379-00	CERAMIC	0.01uF	20%	25V	C418	1-161-379-00	CERAMIC	0.01uF	20%	25V
C301	1-136-161-00	FILM	0.047uF	5%	50V	C421	1-161-379-00	CERAMIC	0.01uF	20%	25V
C302	1-124-910-11	ELECT	47uF	20%	50V	C451	1-161-379-00	CERAMIC	0.01uF	20%	25V
C303	1-136-161-00	FILM	0.047uF	5%	50V						
C304	1-162-288-31	CERAMIC	330PF	10%	50V						

TUNER

AC SW

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C452	1-161-374-11	CERAMIC	0.0015uF 20% 50V	C902	1-101-004-00	CERAMIC	0.01uF 50V
C453	1-161-374-11	CERAMIC	0.0015uF 20% 50V	C903	1-126-051-11	ELECT	47uF 20% 50V
C454	1-161-379-00	CERAMIC	0.01uF 20% 25V	C904	1-126-051-11	ELECT	47uF 20% 50V
C455	1-161-379-00	CERAMIC	0.01uF 20% 25V	C905	1-124-602-00	ELECT	2200uF 20% 35V
C501	1-161-379-00	CERAMIC	0.01uF 20% 25V	C906	1-126-053-11	ELECT	220uF 20% 50V
C502	1-102-959-00	CERAMIC	22PF 5% 50V	C908	1-126-059-11	ELECT	10uF 20% 50V
C503	1-102-959-00	CERAMIC	22PF 5% 50V	C909	1-126-023-11	ELECT	100uF 20% 16V
C504	1-161-379-00	CERAMIC	0.01uF 20% 25V	C910	1-130-789-00	FILM	1uF 5% 100V
C505	1-126-059-11	ELECT	10uF 20% 50V	C911	1-126-049-11	ELECT	22uF 20% 50V
C506	1-161-379-00	CERAMIC	0.01uF 20% 25V	C951	△ 1-161-744-00	CERAMIC	0.01uF 400V
C507	1-161-379-00	CERAMIC	0.01uF 20% 25V	C952	△ 1-161-742-00	CERAMIC	0.0022uF 20% 400V (G, IT)
C508	1-161-379-00	CERAMIC	0.01uF 20% 25V	C953	△ 1-161-742-00	CERAMIC	0.0022uF 20% 400V (G, IT)
C509	1-126-023-11	ELECT	100uF 20% 16V	C954	1-101-004-00	CERAMIC	0.01uF 50V (G, IT)
C511	1-126-059-11	ELECT	10uF 20% 50V			< FILTER >	
C512	1-123-382-00	ELECT	3.3uF 20% 100V	CF201	1-567-389-11	FILTER, CERAMIC	
C513	1-126-044-11	ELECT	1uF 20% 50V	CF202	1-567-389-11	FILTER, CERAMIC	
C514	1-161-379-00	CERAMIC	0.01uF 20% 25V	CF203	1-567-389-11	FILTER, CERAMIC	
C551	1-126-059-11	ELECT	10uF 20% 50V	CF231	1-567-107-71	FILTER, CERAMIC	
C552	1-126-044-11	ELECT	1uF 20% 50V	CF301	1-567-250-11	OSCILLATOR, CERAMIC	
C553	1-136-153-00	FILM	0.01uF 5% 50V	CF401	1-527-826-00	FILTER, CERAMIC	
C554	1-161-379-00	CERAMIC	0.01uF 20% 25V	CF402	1-527-981-00	FILTER, CERAMIC	
C602	1-124-997-11	ELECT	470uF 20% 10V	CF801	1-577-075-11	OSCILLATOR, CERAMIC	
C603	1-161-379-00	CERAMIC	0.01uF 20% 25V			< CONNECTOR >	
C604	1-161-379-00	CERAMIC	0.01uF 20% 25V	CN601	1-564-980-11	PIN, CONNECTOR 4P (CONTROL OUT)	
C607	1-126-044-11	ELECT	1uF 20% 50V	CN602	1-564-980-11	PIN, CONNECTOR 4P (CONTROL IN)	
C608	1-161-379-00	CERAMIC	0.01uF 20% 25V	CN701	* 1-564-342-11	PIN, CONNECTOR 8P	
C609	1-162-282-31	CERAMIC	100PF 10% 50V	CN702	* 1-564-342-61	PIN, CONNECTOR 8P	
C610	1-162-282-31	CERAMIC	100PF 10% 50V	CN703	* 1-564-342-11	PIN, CONNECTOR 8P	
C611	1-161-374-11	CERAMIC	0.0015uF 20% 50V	CN901	* 1-564-321-00	PIN, CONNECTOR 2P	
C612	1-161-374-11	CERAMIC	0.0015uF 20% 50V	CN902	* 1-564-687-11	PIN, CONNECTOR 3P	
C613	1-161-379-00	CERAMIC	0.01uF 20% 25V	CN903	* 1-560-063-00	PIN, CONNECTOR 5P	
C801	1-161-379-00	CERAMIC	0.01uF 20% 25V	CN951	1-564-321-00	PIN, CONNECTOR 2P	
C802	1-124-910-11	ELECT	47uF 20% 50V	CN951B	1-690-122-51	REED (WITH CONNECTOR) (2 CORE)	
C803	1-126-049-11	ELECT	22uF 20% 50V	CNJ301	1-568-250-21	JACK, PIN 2P (OUTPUT)	
C804	1-161-327-00	CERAMIC	0.0033uF 30% 16V			< DIODE >	
C806	1-161-327-00	CERAMIC	0.0033uF 30% 16V	D151	8-719-912-20	DIODE 1SS120	
C807	1-161-379-00	CERAMIC	0.01uF 20% 25V	D221	8-719-912-20	DIODE 1SS120	
C808	1-161-379-00	CERAMIC	0.01uF 20% 25V	D301	8-719-912-20	DIODE 1SS120	
C809	1-126-059-11	ELECT	10uF 20% 50V	D402	8-719-912-20	DIODE 1SS120	
C810	1-126-163-11	ELECT	4.7uF 20% 50V	D601	8-719-912-20	DIODE 1SS120	
C811	1-126-059-11	ELECT	10uF 20% 50V	D602	8-719-912-20	DIODE 1SS120	
C813	1-136-157-00	FILM	0.022uF 5% 50V	D604	8-719-912-20	DIODE 1SS120	
C814	1-136-159-00	FILM	0.033uF 5% 50V	D605	8-719-912-20	DIODE 1SS120	
C815	1-136-159-00	FILM	0.033uF 5% 50V	D606	8-719-912-20	DIODE 1SS120	
C816	1-161-329-00	CERAMIC	0.0068uF 30% 16V	D607	8-719-912-20	DIODE 1SS120	
C817	1-126-059-11	ELECT	10uF 20% 50V				
C818	1-161-379-00	CERAMIC	0.01uF 20% 25V				
C819	1-126-163-11	ELECT	4.7uF 20% 50V				
C901	1-101-004-00	CERAMIC	0.01uF 50V				

Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

TUNER

AC SW

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
D608	8-719-912-20	DIODE 1SS120				< FILTER >	
D609	8-719-912-20	DIODE 1SS120		LPF301	1-235-164-00	FILTER, LOW PASS	
D610	8-719-912-20	DIODE 1SS120		LPF302	1-235-164-00	FILTER, LOW PASS	
D611	8-719-912-20	DIODE 1SS120				< TRANSISTOR >	
D612	8-719-912-20	DIODE 1SS120		Q151	8-729-904-39	TRANSISTOR DTC114TS	
D613	8-719-912-20	DIODE 1SS120		Q201	8-729-230-XX	TRANSISTOR 2SC26690Y	
D614	8-719-912-20	DIODE 1SS120		Q202	8-729-230-XX	TRANSISTOR 2SC26690Y	
D615	8-719-912-20	DIODE 1SS120		Q203	8-729-230-XX	TRANSISTOR 2SC26690Y	
D616	8-719-912-20	DIODE 1SS120		Q204	8-729-230-XX	TRANSISTOR 2SC26690Y	
D617	8-719-912-20	DIODE 1SS120		Q231	8-729-904-39	TRANSISTOR DTC114TS	
D618	8-719-912-20	DIODE 1SS120		Q232	8-729-904-39	TRANSISTOR DTC114TS	
D621	8-719-912-20	DIODE 1SS120 (1T)		Q233	8-729-904-39	TRANSISTOR DTC114TS	
D624	8-719-912-20	DIODE 1SS120		Q234	8-729-620-05	TRANSISTOR 2SC2603-EF	
D901	8-719-200-82	DIODE 11ES2		Q235	8-729-620-05	TRANSISTOR 2SC2603-EF	
D902	8-719-200-82	DIODE 11ES2		Q251	8-729-900-89	TRANSISTOR DTC144ES	
D903	8-719-912-20	DIODE 1SS120		Q252	8-729-620-05	TRANSISTOR 2SC2603-EF	
D904	8-719-912-20	DIODE 1SS120		Q301	8-729-141-30	TRANSISTOR 2SC3623A-LX	
D905	8-719-934-18	DIODE HZS27-2L		Q302	8-729-141-30	TRANSISTOR 2SC3623A-LX	
D906	8-719-933-47	DIODE HZS7B2L		Q351	8-729-904-39	TRANSISTOR DTC114TS	
		< FRONT END >		Q352	8-729-202-67	TRANSISTOR 2SK246GR3	
FE101	1-463-857-11	FRONT END (FM) (G. 1T)		Q401	8-729-900-89	TRANSISTOR DTC144ES	
FE101	1-465-219-11	FRONT END (AEP, UK)		Q451	8-729-231-21	TRANSISTOR 2SK161-YGR-TPE4	
FE421	1-236-462-11	ENCAPSULATED COMPONENT		Q452	8-729-900-89	TRANSISTOR DTC144ES	
FE451	1-236-463-11	ENCAPSULATED COMPONENT		Q453	8-729-900-89	TRANSISTOR DTC144ES	
		< IC >		Q454	8-729-900-89	TRANSISTOR DTC144ES	
IC221	8-759-812-35	IC LA1235		Q455	8-729-900-89	TRANSISTOR DTC144ES	
IC231	8-759-111-72	IC uPC1163HA		Q456	8-729-900-89	TRANSISTOR DTC144ES	
IC251	8-759-812-35	IC LA1235		Q457	8-729-141-30	TRANSISTOR 2SC3623A-LX	
IC301	8-759-801-80	IC LA3401		Q458	8-729-904-39	TRANSISTOR DTC114TS	
IC302	8-759-945-58	IC RC4558P		Q459	8-729-620-05	TRANSISTOR 2SC2603-EF	
IC401	8-759-812-45	IC LA1245		Q511	8-729-202-67	TRANSISTOR 2SK246GR3	
IC501	8-757-925-20	IC CX-7925B		Q512	8-729-201-84	TRANSISTOR 2SC3112B	
IC601	8-759-153-09	IC uPD755120F-086-3B9		Q521	8-729-900-89	TRANSISTOR DTC144ES	
IC602	8-759-720-89	IC X24C04P		Q522	8-729-119-76	TRANSISTOR 2SA1175-HFE	
IC801	8-759-823-61	IC LA2230		Q523	8-729-620-05	TRANSISTOR 2SC2603-EF	
IC802	8-759-823-62	IC LC7070N		Q551	8-729-202-67	TRANSISTOR 2SK246GR3	
IC901	8-759-820-09	IC LA5667		Q552	8-729-201-84	TRANSISTOR 2SC3112B	
		< COIL >		Q601	8-729-620-05	TRANSISTOR 2SC2603-EF	
L201	1-410-521-11	INDUCTOR	100uH	Q901	8-729-900-85	TRANSISTOR DTA144ES	
L202	1-410-521-11	INDUCTOR	100uH			< RESISTOR >	
L231	1-410-521-11	INDUCTOR	100uH	R101	1-259-468-11	CARBON	47K 5% 1/6W
L351	1-410-509-11	INDUCTOR	10uH (G. 1T)	R102	1-259-460-11	CARBON	22K 5% 1/6W
L352	1-410-509-11	INDUCTOR	10uH (G. 1T)	R103	1-249-401-11	CARBON	47 5% 1/4W
L451	1-410-336-11	INDUCTOR	220uH	R151	1-259-397-11	CARBON	51 5% 1/6W
L801	1-410-521-11	INDUCTOR	100uH	R152	1-259-397-11	CARBON	51 5% 1/6W

Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

TUNER

AC SW

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R153	1-259-390-11	CARBON	27 5% 1/6W	R305	1-259-478-11	CARBON	120K 5% 1/6W
R154	1-259-402-11	CARBON	82 5% 1/6W	R306	1-259-436-11	CARBON	2.2K 5% 1/6W
R201	1-259-412-11	CARBON	220 5% 1/6W	R307	1-259-436-11	CARBON	2.2K 5% 1/6W
R202	1-259-410-11	CARBON	180 5% 1/6W	R308	1-259-446-11	CARBON	5.6K 5% 1/6W
R203	1-259-416-11	CARBON	330 5% 1/6W	R309	1-259-446-11	CARBON	5.6K 5% 1/6W
R204	1-259-456-11	CARBON	15K 5% 1/6W	R310	1-259-446-11	CARBON	5.6K 5% 1/6W
R205	1-259-414-11	CARBON	270 5% 1/6W	R311	1-259-446-11	CARBON	5.6K 5% 1/6W
R206	1-259-420-11	CARBON	470 5% 1/6W	R312	1-259-440-11	CARBON	3.3K 5% 1/6W (AEP, G, IT)
R207	1-259-416-11	CARBON	330 5% 1/6W	R313	1-259-440-11	CARBON	3.3K 5% 1/6W (AEP, G, IT)
R208	1-259-462-11	CARBON	27K 5% 1/6W	R314	1-259-420-11	CARBON	470 5% 1/6W
R209	1-259-416-11	CARBON	330 5% 1/6W	R315	1-259-420-11	CARBON	470 5% 1/6W
R210	1-259-456-11	CARBON	15K 5% 1/6W	R316	△ 1-249-401-11	CARBON	47 5% 1/4W
R211	1-259-414-11	CARBON	270 5% 1/6W	R317	1-259-422-11	CARBON	560 5% 1/6W
R212	1-259-416-11	CARBON	330 5% 1/6W	R318	1-259-422-11	CARBON	560 5% 1/6W
R213	1-259-462-11	CARBON	27K 5% 1/6W	R319	1-259-468-11	CARBON	47K 5% 1/6W
R214	1-259-416-11	CARBON	330 5% 1/6W	R320	1-259-468-11	CARBON	47K 5% 1/6W
R221	1-259-416-11	CARBON	330 5% 1/6W	R321	1-259-468-11	CARBON	47K 5% 1/6W
R222	△ 1-249-405-11	CARBON	100 5% 1/4W	R322	1-259-452-11	CARBON	10K 5% 1/6W
R231	1-259-404-11	CARBON	100 5% 1/6W	R323	1-259-464-11	CARBON	33K 5% 1/6W
R232	1-259-404-11	CARBON	100 5% 1/6W	R324	1-259-446-11	CARBON	5.6K 5% 1/6W
R233	1-259-412-11	CARBON	220 5% 1/6W	R325	△ 1-249-401-11	CARBON	47 5% 1/4W
R234	1-259-384-11	CARBON	15 5% 1/6W	R351	1-259-448-11	CARBON	6.8K 5% 1/6W
R235	1-259-416-11	CARBON	330 5% 1/6W	R352	1-259-500-11	CARBON	1M 5% 1/6W
R236	1-259-412-11	CARBON	220 5% 1/6W	R353	1-259-468-11	CARBON	47K 5% 1/6W
R237	1-259-476-11	CARBON	100K 5% 1/6W	R401	1-259-436-11	CARBON	2.2K 5% 1/6W
R238	1-259-452-11	CARBON	10K 5% 1/6W	R402	△ 1-249-409-11	CARBON	220 5% 1/4W
R239	1-259-452-11	CARBON	10K 5% 1/6W	R403	1-259-438-11	CARBON	2.7K 5% 1/6W
R240	1-259-456-11	CARBON	15K 5% 1/6W	R404	1-259-420-11	CARBON	470 5% 1/6W
R241	1-259-452-11	CARBON	10K 5% 1/6W	R405	1-259-404-11	CARBON	100 5% 1/6W
R242	1-259-452-11	CARBON	10K 5% 1/6W	R406	1-259-402-11	CARBON	82 5% 1/6W
R251	1-259-416-11	CARBON	330 5% 1/6W	R408	1-259-452-11	CARBON	10K 5% 1/6W
R252	1-259-468-11	CARBON	47K 5% 1/6W	R409	1-259-452-11	CARBON	10K 5% 1/6W
R253	1-259-472-11	CARBON	68K 5% 1/6W	R410	1-259-454-11	CARBON	12K 5% 1/6W
R254	1-259-436-11	CARBON	2.2K 5% 1/6W	R411	1-259-452-11	CARBON	10K 5% 1/6W
R255	1-259-436-11	CARBON	2.2K 5% 1/6W	R412	△ 1-249-407-11	CARBON	150 5% 1/4W
R256	1-259-456-11	CARBON	15K 5% 1/6W	R413	1-259-452-11	CARBON	10K 5% 1/6W
R257	1-259-442-11	CARBON	3.9K 5% 1/6W	R421	1-259-476-11	CARBON	100K 5% 1/6W
R258	1-259-438-11	CARBON	2.7K 5% 1/6W	R422	1-259-468-11	CARBON	47K 5% 1/6W
R259	△ 1-249-405-11	CARBON	100 5% 1/4W	R451	1-259-476-11	CARBON	100K 5% 1/6W
R260	1-259-470-11	CARBON	56K 5% 1/6W	R452	1-259-468-11	CARBON	47K 5% 1/6W
R261	1-259-468-11	CARBON	47K 5% 1/6W	R453	1-259-428-11	CARBON	1K 5% 1/6W
R262	1-259-476-11	CARBON	100K 5% 1/6W	R454	1-259-500-11	CARBON	1M 5% 1/6W
R263	1-259-452-11	CARBON	10K 5% 1/6W	R455	1-259-428-11	CARBON	1K 5% 1/6W
R264	1-259-436-11	CARBON	2.2K 5% 1/6W	R456	1-259-476-11	CARBON	100K 5% 1/6W
R265	△ 1-249-393-11	CARBON	10 5% 1/4W	R457	1-259-428-11	CARBON	1K 5% 1/6W
R301	1-259-436-11	CARBON	2.2K 5% 1/6W	R458	1-259-476-11	CARBON	100K 5% 1/6W
R302	1-259-480-11	CARBON	150K 5% 1/6W	R459	1-259-452-11	CARBON	10K 5% 1/6W
R303	1-259-480-11	CARBON	150K 5% 1/6W	R460	1-259-440-11	CARBON	3.3K 5% 1/6W
R304	1-259-478-11	CARBON	120K 5% 1/6W	R501	1-259-452-11	CARBON	10K 5% 1/6W

Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

TUNER

AC SW

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R502	1-259-452-11	CARBON	10K 5% 1/6W	R806	1-259-464-11	CARBON	33K 5% 1/6W
R503	1-259-452-11	CARBON	10K 5% 1/6W	R807	1-259-452-11	CARBON	10K 5% 1/6W
R504	△ 1-249-400-11	CARBON	39 5% 1/4W	R808	1-259-460-11	CARBON	22K 5% 1/6W
R505	△ 1-249-408-11	CARBON	180 5% 1/4W	R809	1-259-452-11	CARBON	10K 5% 1/6W
R511	1-259-422-11	CARBON	560 5% 1/6W	R810	1-259-428-11	CARBON	1K 5% 1/6W
R512	1-259-422-11	CARBON	560 5% 1/6W	R811	1-259-440-11	CARBON	3.3K 5% 1/6W
R513	1-259-430-11	CARBON	1.2K 5% 1/6W	R901	△ 1-212-865-00	FUSIBLE	22 5% 1/4W F
R514	1-259-416-11	CARBON	330 5% 1/6W	R902	△ 1-249-413-11	CARBON	470 5% 1/4W
R515	1-259-434-11	CARBON	1.8K 5% 1/6W	R903	1-259-476-11	CARBON	100K 5% 1/6W
R516	1-259-448-11	CARBON	6.8K 5% 1/6W	R904	1-259-468-11	CARBON	47K 5% 1/6W
R517	1-259-444-11	CARBON	4.7K 5% 1/6W	R905	1-259-468-11	CARBON	47K 5% 1/6W
R518	1-259-424-11	CARBON	680 5% 1/6W	R906	1-259-468-11	CARBON	47K 5% 1/6W
R519	1-259-444-11	CARBON	4.7K 5% 1/6W			< VARIABLE RESISTOR >	
R521	1-259-440-11	CARBON	3.3K 5% 1/6W	RV221	1-237-460-11	RES. ADJ. CARBON 20K (FM SIGNAL)	
R522	1-259-460-11	CARBON	22K 5% 1/6W	RV231	1-237-458-21	RES. ADJ. CARBON 5K (NARROW GAIN)	
R551	1-259-452-11	CARBON	10K 5% 1/6W	RV232	1-237-455-11	RES. ADJ. CARBON 500	(NARROW DISTORTION)
R552	1-259-422-11	CARBON	560 5% 1/6W	RV251	1-237-459-11	RES. ADJ. CARBON 10K (STEREO LEVEL)	
R553	1-259-430-11	CARBON	1.2K 5% 1/6W	RV252	1-237-463-11	RES. ADJ. CARBON 200K (MUTING LEVEL)	
R554	1-259-416-11	CARBON	330 5% 1/6W	RV301	1-237-463-11	RES. ADJ. CARBON 200K (SEPARATION)	
R555	1-259-468-11	CARBON	47K 5% 1/6W	RV402	1-237-459-11	RES. ADJ. CARBON 10K (AM SIGNAL)	
R556	1-259-448-11	CARBON	6.8K 5% 1/6W	RV801	1-237-458-21	RES. ADJ. CARBON 5K (RDS BPF)	
R557	1-259-444-11	CARBON	4.7K 5% 1/6W			< RELAY >	
R603	1-259-460-11	CARBON	22K 5% 1/6W	RY151	1-515-614-11	RELAY (ANT ATT)	
R604	1-259-460-11	CARBON	22K 5% 1/6W			< SWITCH >	
R605	1-259-460-11	CARBON	22K 5% 1/6W	S901	1-572-267-51	SWITCH, PUSH (AC POWER) (1 KEY) (POWER)	
R606	1-259-460-11	CARBON	22K 5% 1/6W			< TRANSFORMER >	
R611	1-259-452-11	CARBON	10K 5% 1/6W	T251	1-235-126-00	ENCAPSULATED COMPONENT (G. IT)	
R612	1-259-452-11	CARBON	10K 5% 1/6W	T252	1-404-845-11	COIL, DISCRI (PRIMARY) (NULL)	
R613	1-259-452-11	CARBON	10K 5% 1/6W	T253	1-404-846-11	COIL, DISCRI (SECONDARY) (THD)	
R615	1-259-452-11	CARBON	10K 5% 1/6W	T401	1-404-326-00	TRANSFORMER, IF	
R616	1-259-452-11	CARBON	10K 5% 1/6W			< TERMINAL >	
R617	1-259-452-11	CARBON	10K 5% 1/6W	TM101	1-537-155-11	TERMINAL BOARD (ANTENNA)	
R618	1-259-452-11	CARBON	10K 5% 1/6W			< TEST PIN >	
R620	1-259-452-11	CARBON	10K 5% 1/6W	TP251	* 1-565-513-11	PIN, CONNECTOR 2P (NULL)	
R621	1-259-452-11	CARBON	10K 5% 1/6W			< VIBRATOR >	
R622	1-259-452-11	CARBON	10K 5% 1/6W	X501	1-567-826-21	VIBRATOR, CRYSTAL (7.2MHz)	
R623	1-259-452-11	CARBON	10K 5% 1/6W	X601	1-577-359-21	VIBRATOR, CERAMIC (4.19MHz)	
R624	1-259-452-11	CARBON	10K 5% 1/6W	X801	1-577-358-21	VIBRATOR, CERAMIC (4MHz)	
R625	1-259-452-11	CARBON	10K 5% 1/6W				
R626	1-259-460-11	CARBON	22K 5% 1/6W				
R627	1-259-492-11	CARBON	470K 5% 1/6W				
R629	1-259-414-11	CARBON	270 5% 1/6W				
R630	1-259-380-11	CARBON	10 5% 1/6W				
R631	1-259-452-11	CARBON	10K 5% 1/6W				
R801	△ 1-249-401-11	CARBON	47 5% 1/4W				
R802	1-259-494-11	CARBON	560K 5% 1/6W				
R803	1-259-500-11	CARBON	1M 5% 1/6W				
R804	1-259-428-11	CARBON	1K 5% 1/6W				
R805	1-259-446-11	CARBON	5.6K 5% 1/6W				

Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
		MISCELLANEOUS *****	
PC901	△ 1-574-383-11	CORD, POWER (AEP, G, IT)	
PC901	△ 1-574-384-11	CORD, POWER (UK)	
PT901	△ 1-450-406-11	TRANSFORMER, POWER	

ACCESSORY & PACKING MATERIAL

- 1-501-374-11 ANTENNA, LOOP
- 1-558-233-11 CORD (WITH CONNECTOR) (SIRCS) 4P
- 1-558-271-11 CORD, CONNECTION
- 3-703-845-01 LABEL (N) (U/C). MAIN CAUTION (UK)

- 3-753-233-11 MANUAL, INSTRUCTION (ENGLISH, FRENCH,
SPANISH, ITALIAN) (AEP, UK, IT)
- 3-753-233-41 MANUAL, INSTRUCTION (GERMAN, DUTCH,
SWEDISH, PORTUGUESE) (AEP, G)
- * 4-930-835-01 CUSHION
- * 4-935-823-21 INDIVIDUAL CARTON

MC-Service

Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.