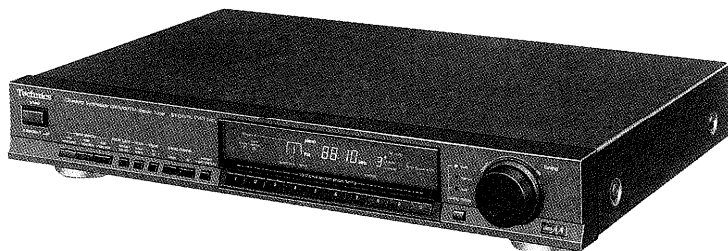


Service Manual

Tuner

ST-G570

QUARTZ Synthesizer
AM/FM Stereo Tuner

**Color**

(K) Black Type
(S) Silver Type

Area

Country Code	Area	Color
(EG)	F.R. Germany	(K) (S)

SPECIFICATIONS

(DIN 45 500)

■ FM TUNER SECTION

Frequency range	87.50~108.00 MHz
	87.525~108.00 MHz (+25 kHz shift)
Sensitivity	1.5 μ V (IHF, usable)
S/N 30 dB	1.3 μ V (75 Ω)
S/N 26 dB	1.2 μ V (75 Ω)
S/N 20 dB	0.9 μ V (75 Ω)
IHF 46 dB stereo quieting sensitivity	28 μ V/75 Ω
Total harmonic distortion	
MONO (normal)	0.015 %
STEREO (normal)	0.02 %
S/N	
MONO	72 dB (80 dB, IHF)
STEREO	66 dB (73 dB, IHF)
Frequency response	4 Hz~15 kHz, +0.5 dB~-1.0 dB
Alternate channel selectivity	
normal \pm 400 kHz	50 dB
super narrow \pm 200 kHz	25 dB
Capture ratio	1.0 dB
Image rejection at 98 MHz	100 dB
IF rejection at 98 MHz	100 dB
Spurious response rejection at 98 MHz	110 dB
AM suppression	55 dB
Stereo separation	
1 kHz	55 dB
10 kHz	40 dB
Carrier leak	
19 kHz	-75 dB (-80 dB, IHF)
38 kHz	-75 dB (-80 dB, IHF)
Channel balance (250 Hz~6,300 Hz)	\pm 1.0 dB
Limiting point	0.85 μ V
Bandwidth	
IF amplifier	180 kHz
FM demodulator	1000 kHz
Antenna terminals	75 Ω (unbalanced)

■ AM TUNER SECTION

Frequency range	
AM	522 kHz~1611 kHz (9-kHz steps) 530 kHz~1620 kHz (10-kHz steps)
Sensitivity (S/N 20 dB)	
AM	20 μ V, 300 μ V/m
Selectivity (\pm 9 kHz)	
AM (at 999 kHz)	50 dB
Image rejection	
AM (at 999 kHz)	40 dB
IF rejection	
AM (at 999 kHz)	60 dB

■ GENERAL

Output voltage	0.45 V (0.9 V IHF)
Power consumption	9 W
Power supply	AC 50 Hz/60 Hz, 220 V
Dimensions (W \times H \times D)	430 \times 69 \times 298 mm (16-15/16" \times 2-23/32" \times 11-23/32")
Weight	2.7 kg (6 lb.)

Note:

Specifications are subject to change without notice. Weight and dimensions are approximate.

Technics

Matsushita Electric Industrial Co., Ltd.
Central P.O. Box 288, Osaka 530-91, Japan

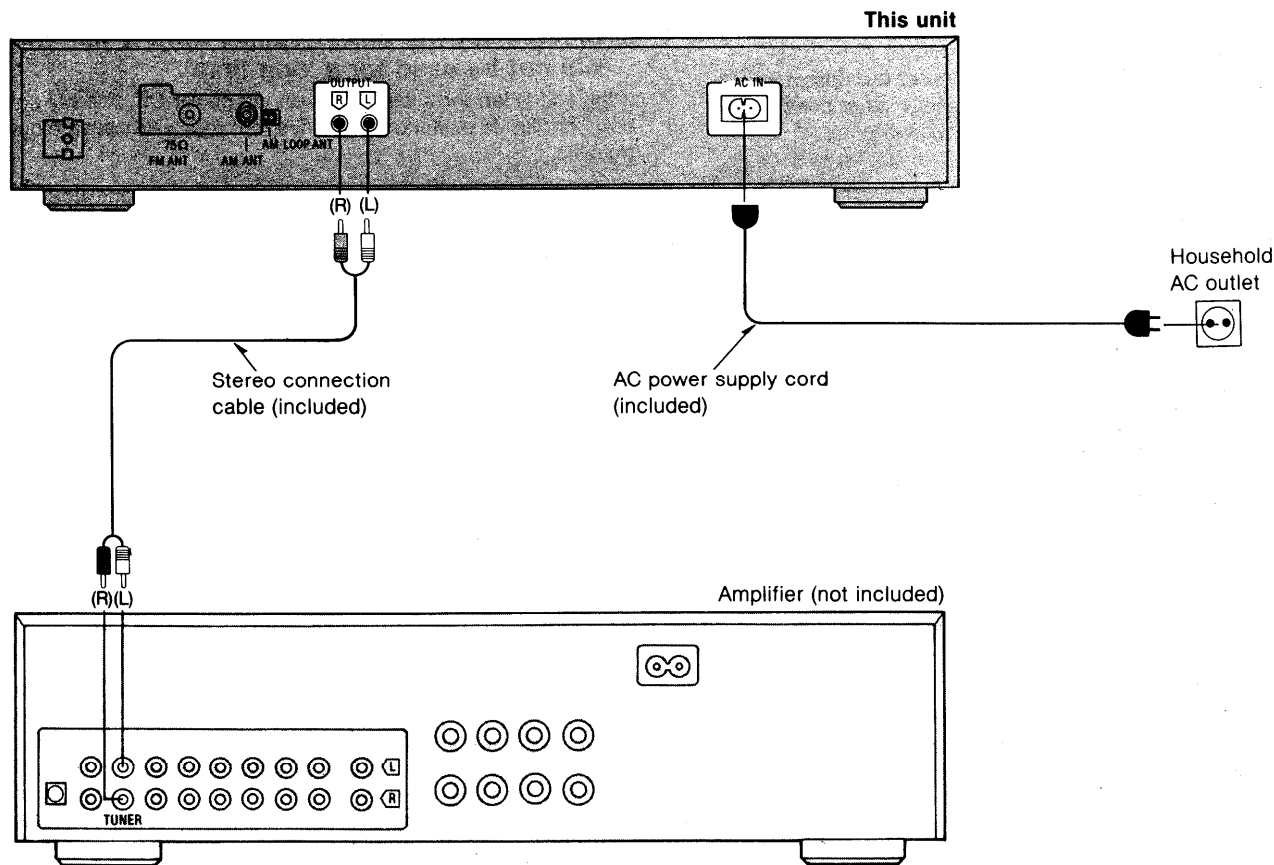
CONTENTS

	Page		Page
ACCESSORIES	2	SCHEMATIC DIAGRAM	9~12
CONNECTIONS	2	CIRCUIT BOARDS AND	
LOCATION OF CONTROLS	3	WIRING CONNECTION DIAGRAM	13~15
DISASSEMBLY INSTRUCTIONS	4, 5	FUNCTIONS OF IC TERMINALS	15
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TERMINAL GUIDE OF IC'S,		REPLACEMENT PARTS LIST	18~21
TRANSISTORS AND DIODES	8	EXPLODED VIEW	22
DESCRIPTION OF FL PANEL	8		

ACCESSORIES

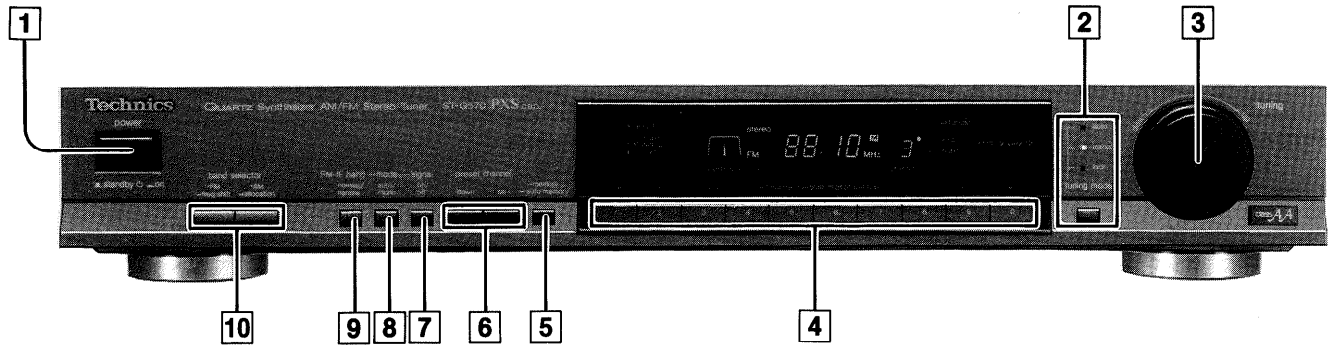
- AC power supply cord 1
(SFDAC05E03)
- Stereo connection cable 1
(SJP2276)
- FM indoor antenna 1
(SSA270M)
- AM loop antenna Ass'y 1
(SPB1162T)
- AM antenna holders 2
(SMA233-1M)
(SMA231M)
- Screws 2
(XTB3+10AFZ)

CONNECTIONS



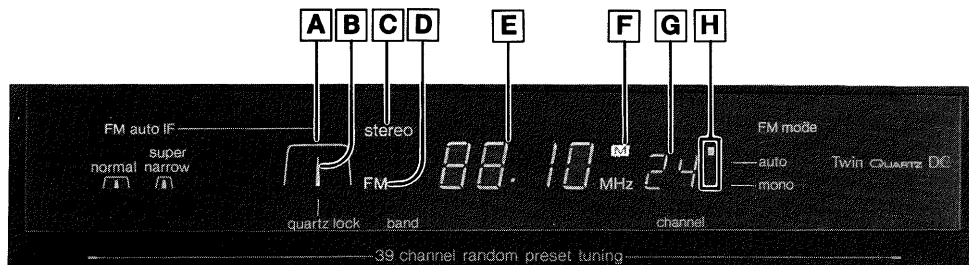
LOCATION OF CONTROLS

Control section



- | | |
|---|--|
| 1 Power "standby ⏻ / on" switch
(power/ \blacksquare standby ⏻ \blacksquare on) | 6 Preset channel buttons (preset channel) |
| 2 Tuning-mode selector/indicator (tuning mode) | 7 FM signal-strength indication button
(FM-signal) |
| 3 Tuning control (tuning) | 8 FM mode selector (FM-mode) |
| 4 Preset-tuning buttons (1 – 0)
(39 channel random preset tuning) | 9 FM IF band selector (FM-IF band) |
| 5 Memory button (memory) | 10 Band selectors (band selector) |

Display section



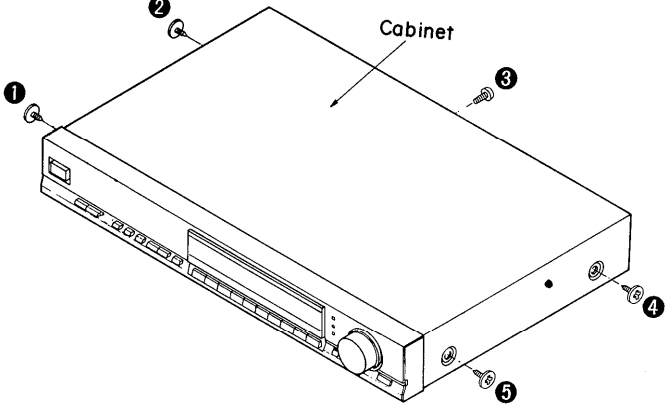
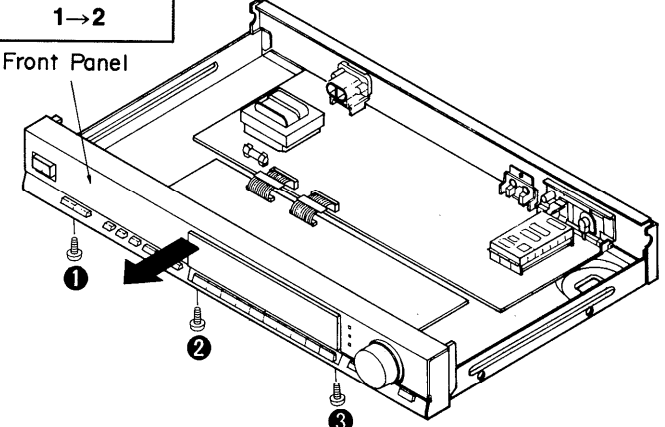
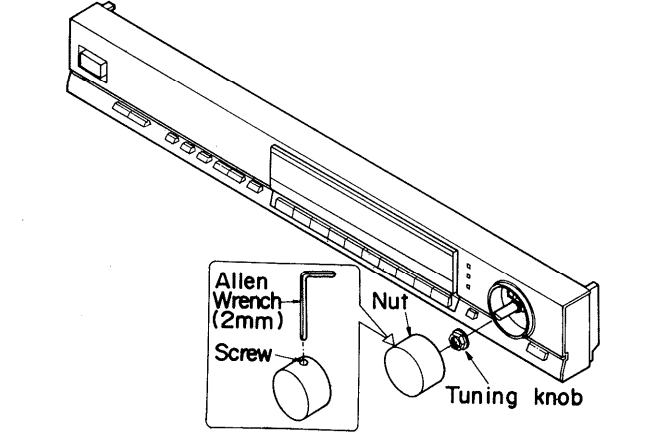
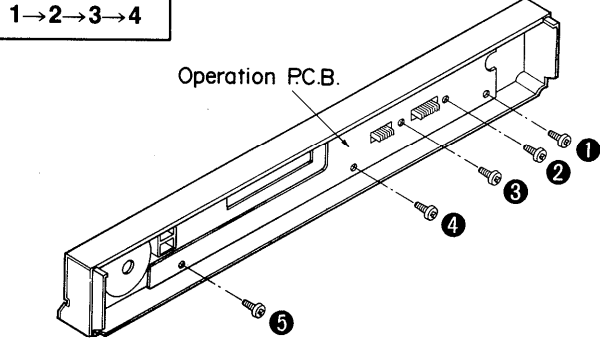
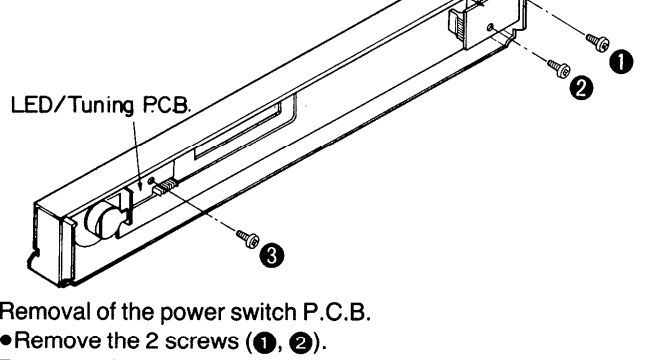
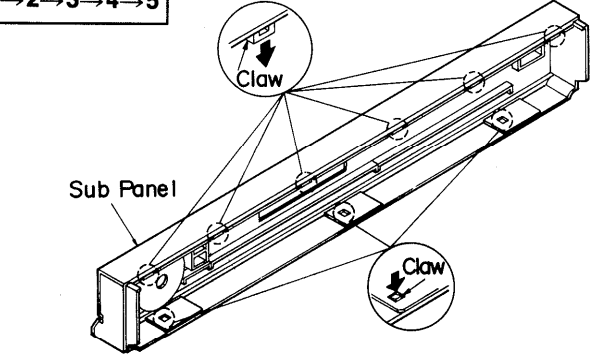
- | | |
|--|--|
| A FM IF band indicator (FM auto IF) | E Digital frequency display |
| B Quartz-lock indicator () | F Memory indicator (M) |
| C FM stereo indicator (stereo) | G Channel display (channel) |
| D Band indicator (band) | H FM mode indicator (FM mode) |

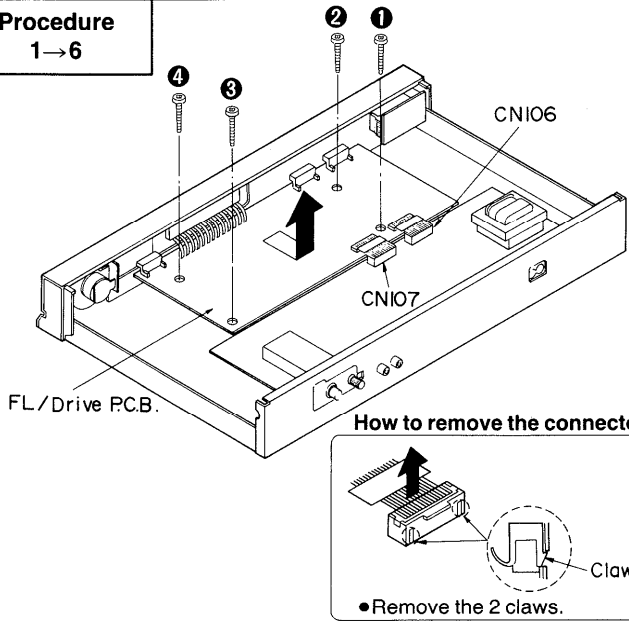
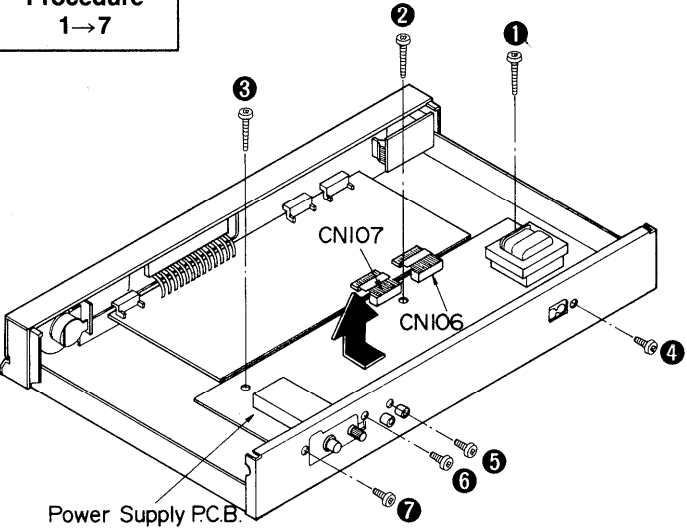
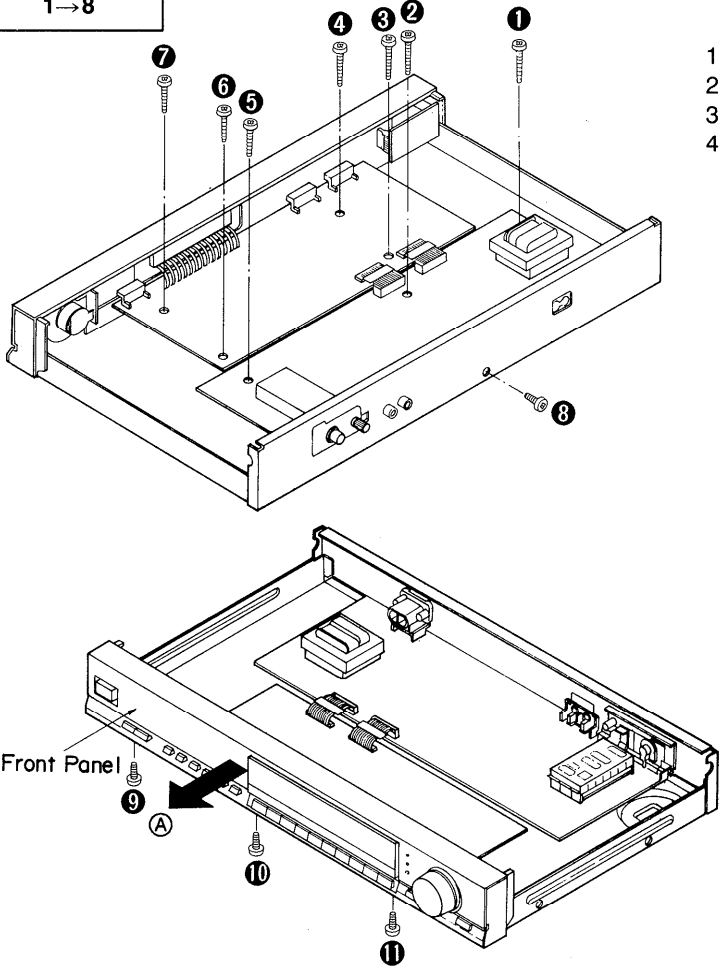
※The operating procedures and features are similar to those for and of the ST-G560.

DISASSEMBLY INSTRUCTIONS

"ATTENTION SERVICER"

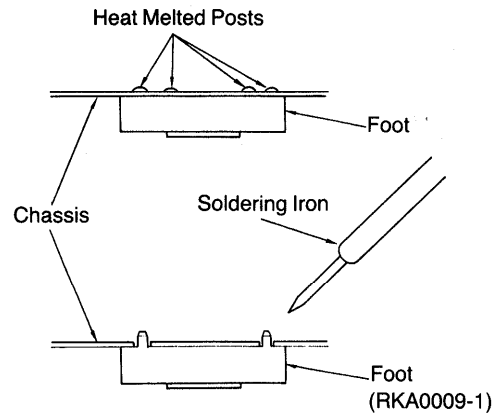
Some chassis components may have sharp edges. Be careful when disassembling and servicing.

Ref. No. 1	Removal of the cabinet	Ref. No. 2	Removal of the front panel
Procedure 1		Procedure 1→2	
 <p>● Remove the 5 screws (1~5).</p>		 <p>1. Remove the 3 screws (1~3). 2. Remove the front panel in the direction of the arrow.</p>	
Ref. No. 3	Removal of the power switch P.C.B. and LED/Tuning P.C.B.	Ref. No. 4	Removal of the operation P.C.B.
Procedure 1→2→3		Procedure 1→2→3→4	
 <p>● Remove the 2 screws (1, 2). Removal of the LED/Tuning P.C.B. 1. Remove the tuning knob and nut. 2. Remove the 1 screw (3).</p>		 <p>● Remove the 5 screws (1~5).</p>	
Ref. No. 5	Removal of the sub panel		
Procedure 1→2→3→4→5			
 <p>● Remove the 9 claws.</p>			

Ref. No. 6	Removal of the FL Drive P.C.B.	Ref. No. 7	Removal of the power supply P.C.B.
Procedure 1→6	 <p>How to remove the connector.</p> <p>•Remove the 2 claws.</p> <ol style="list-style-type: none"> 1. Remove the 4 screws (①~④). 2. Remove the 2 connectors (CN106, CN107). 3. Remove the FL drive P.C.B. in the direction of the arrow. 	Procedure 1→7	 <ol style="list-style-type: none"> 1. Remove the 7 screws (①~⑦). 2. Remove the 2 connectors (CN106, CN107). 3. Remove the power supply P.C.B. in the direction of the arrow.
Ref. No. 8	Checking of the FL drive P.C.B. and power supply P.C.B.		
Procedure 1→8	 <p>•When checking the soldered surfaces of main P.C.B. and replacing the parts, do as show.</p> <ol style="list-style-type: none"> 1. Remove the 11 screws (①~⑪). 2. Pull out the front panel in the direction of the arrow (A). 3. Remove the bottom chassis in the direction of the arrow (B). 4. Reinstall the front panel to the FL drive P.C.B. 		

● Replacement of the Foot.

1. Remove the 4 heat melted posts on the chassis with a pair of nippers or similar tool.
2. To replace the foot (RKA0009-1) on the chassis, melt the 4 posts with a soldering iron.



■ MEASUREMENTS AND ADJUSTMENTS

■ FM

Control positions and equipment used

- FM signal generator (FM-SG)
- Stereo modulator
- Distortion analyser
- Oscilloscope
- Choke coil (100 μ H)
- Frequency counter
- AC and DC electronic voltmeter(EVM)

Note: For Z201, Z202, L301, L303 and L304, they are supplied as adjusted parts. So, do not turn the cores of the parts. It is not necessary to adjust AM circuit.

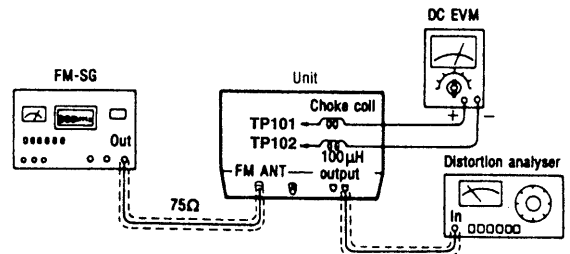
FM MONO DISTORTION ADJUSTMENT

1. Test equipment connection is shown in figure.
2. Set the unit to "FM and IF normal" mode.
3. Set the radio frequency display and signal generator to 100.10MHz.
4. Adjust the core of T101 so that the voltage measured in signal mode is 0mV(0 \pm 20mV) in 300mV range.
5. Adjust T102 so that the distortion factor of L-CH is minimized.
6. Repeat steps 4 and 5.
7. Make sure that the distortion factors of L-CH and R-CH are nearly the same and minimum.

Note: The adjusting screwdriver used should be made of resin.

FM SIGNAL GENERATOR CONDITION

Modulation100%
 Modulation frequency1kHz
 Output level66dB

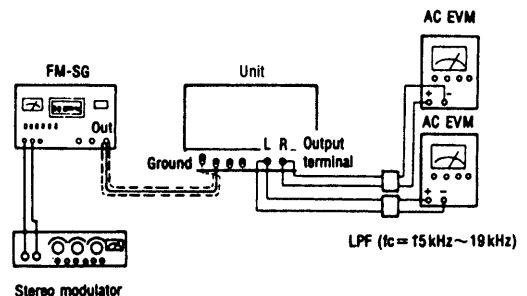


SEPARATION ADJUSTMENT

1. Test equipment connection is shown in figure.
2. Set the unit to "FM and IF normal" mode.
3. Set the radio frequency display and signal generator to 100.10MHz.
4. Adjust VR301 so that the R-CH output is minimized when stereo modulator is in "L"(L-CH modulation) mode.

FM SIGNAL GENERATOR CONDITION

Modulation.....Stereo "L" mode or "R" mode 90%, Pilot 10%
 Modulation frequency1kHz(Pilot 19kHz)
 Output level66dB

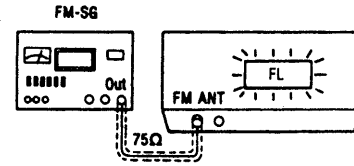


FM SIGNAL STRENGTH LEVEL ADJUSTMENT

1. Test equipment connection is shown in figure.
2. Set the unit to "FM and IF normal" mode.
3. Set the radio frequency display and signal generator to 100.10MHz.
4. Change FL display from "frequency" to "dB" by pressing the FM signal button.
5. Adjust VR101 so that 54dB is indicated. "54dB" is indicated on the FL display.
6. Repeat steps 4, 5.

FM SIGNAL GENERATOR CONDITION

Modulation30%
 Modulation frequency.....1kHz
 Output level.....66 dB



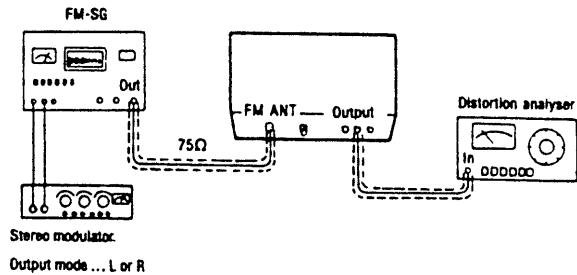
FM STEREO DISTORTION ADJUSTMENT

1. Test equipment connection is shown in figure.
2. Set the unit to "FM" mode.
3. Set the radio frequency display and signal generator to 100.10MHz.
4. Adjust L1 so that the distortion factor of L-CH is minimized.
5. Make sure that the distortion factors of L-CH and R-CH are nearly the same and minimum.

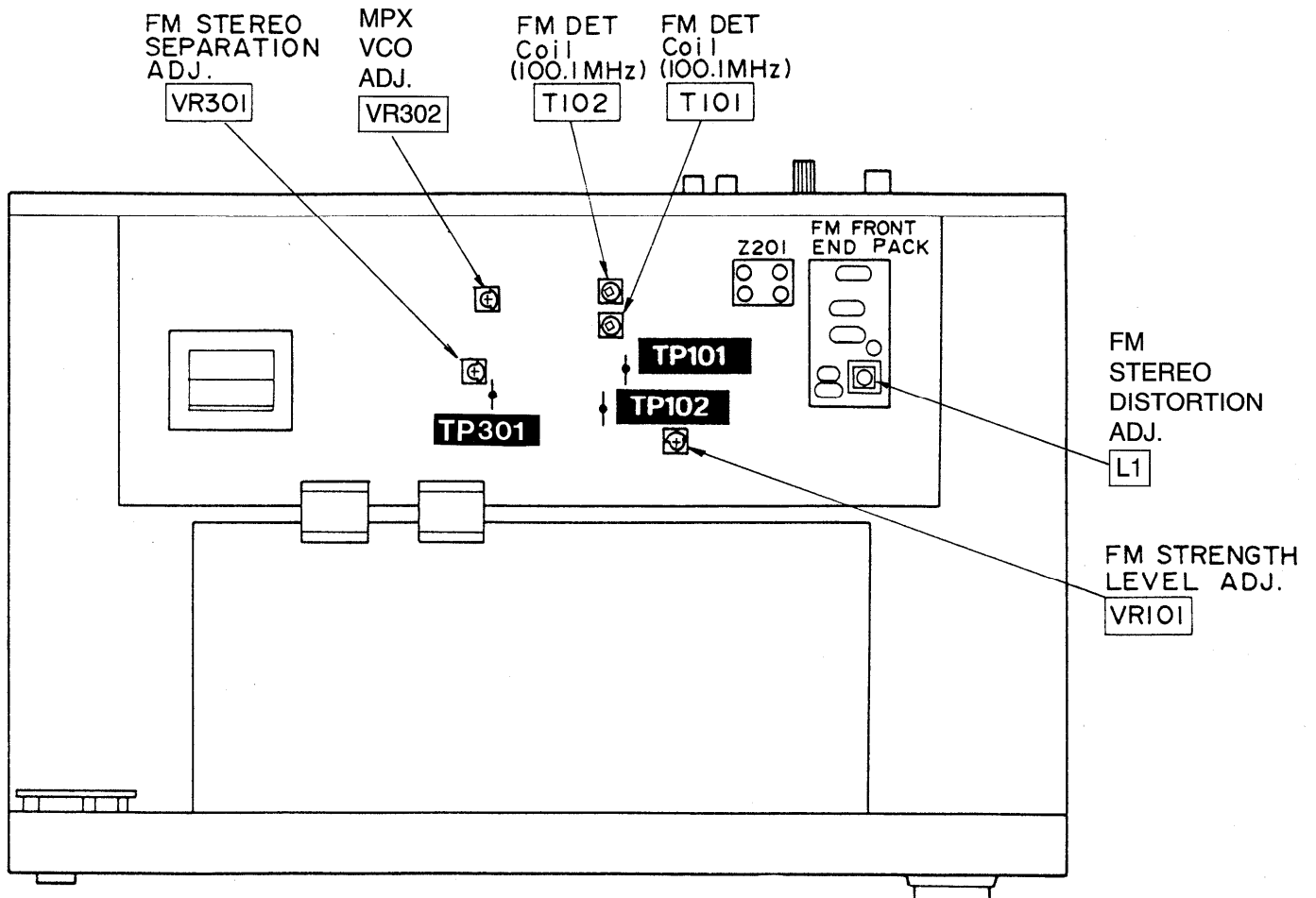
Note: The adjusting screwdriver used should be made of resin.

FM SIGNAL GENERATOR CONDITION

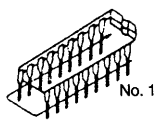
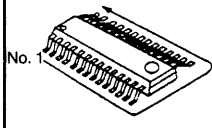
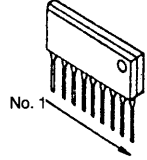
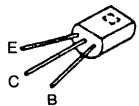
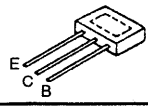
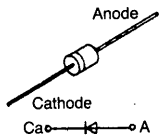
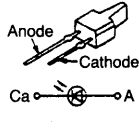
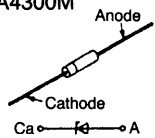
Modulation "L" mode or "R" mode 90%,
 Pilot 10%
 Modulation frequency1kHz (Pilot 19kHz)
 Output level.....66dB



• Adjustment points.

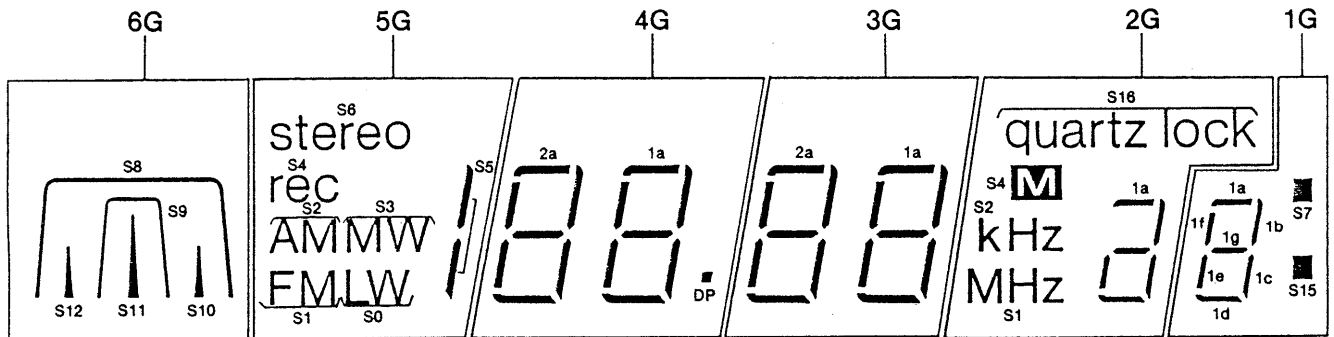


■ TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES

	AN6554F 14 pin		AN7274NS 28 pin	
	LM7001 16 pin		AN7472S 28 pin	
	M50941-421SP 64 pin			
2SC1310, 2SC3940 2SC2786	2SA1309, 2SC3311 2SD1450, DTC144ES, DTC114YS 2SA1253RSTAC	MA165, MA150FV 1SR35200	LN446YP, LN846RP	MA4062, MA4082M MA4140M, MA4051M MA4300M
				

■ DESCRIPTION OF FL PANEL [FL1 (SAD6MT117GK)]

• GRID ASSIGNMENT



• PIN CONNECTION

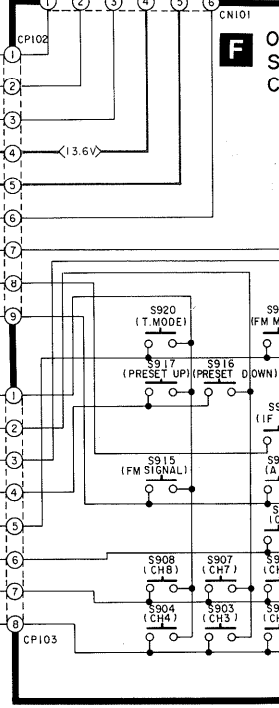
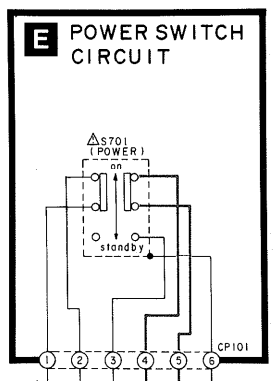
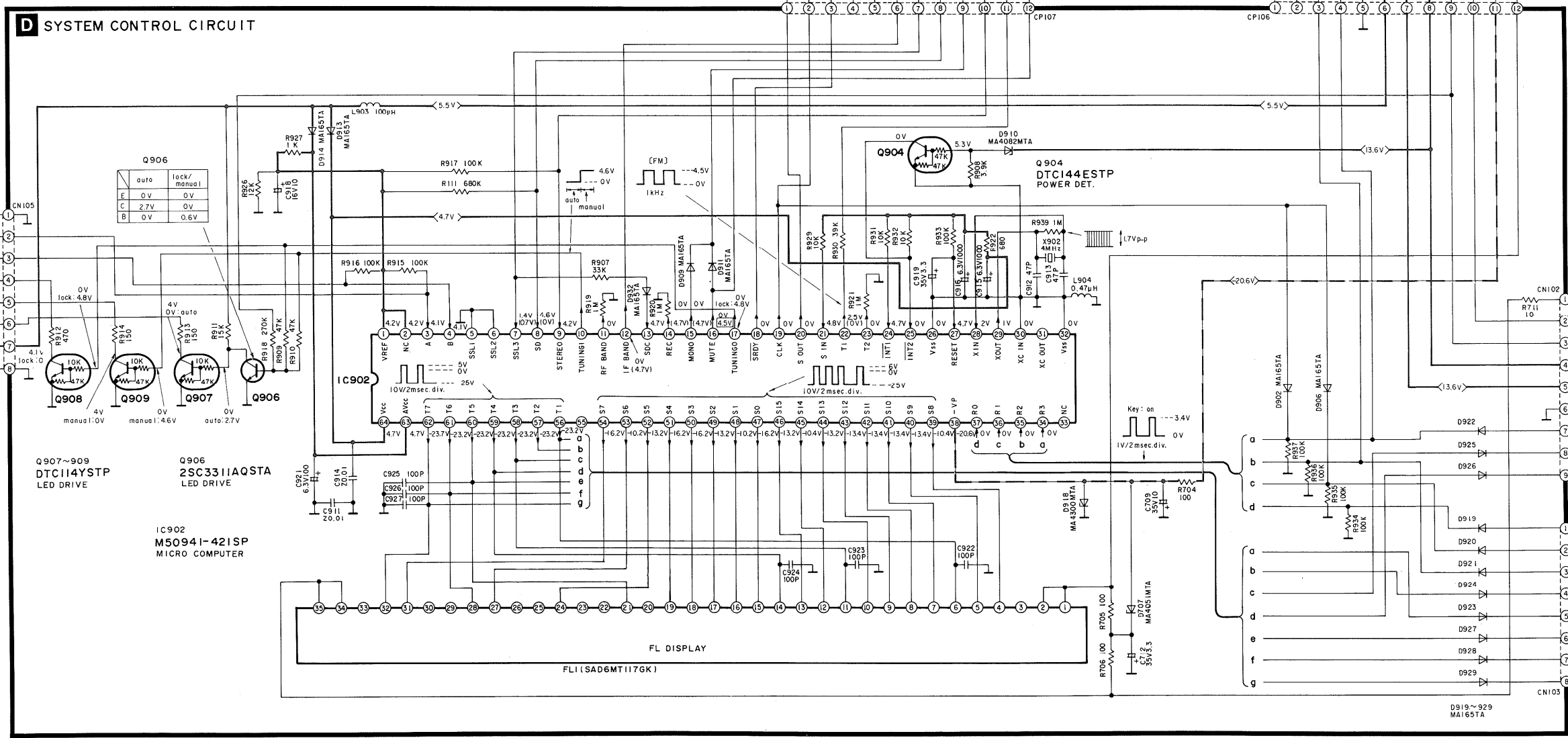
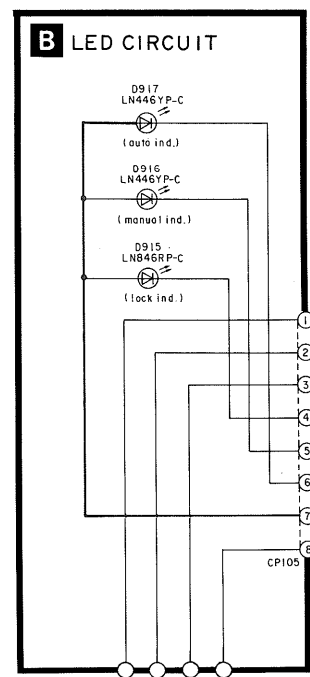
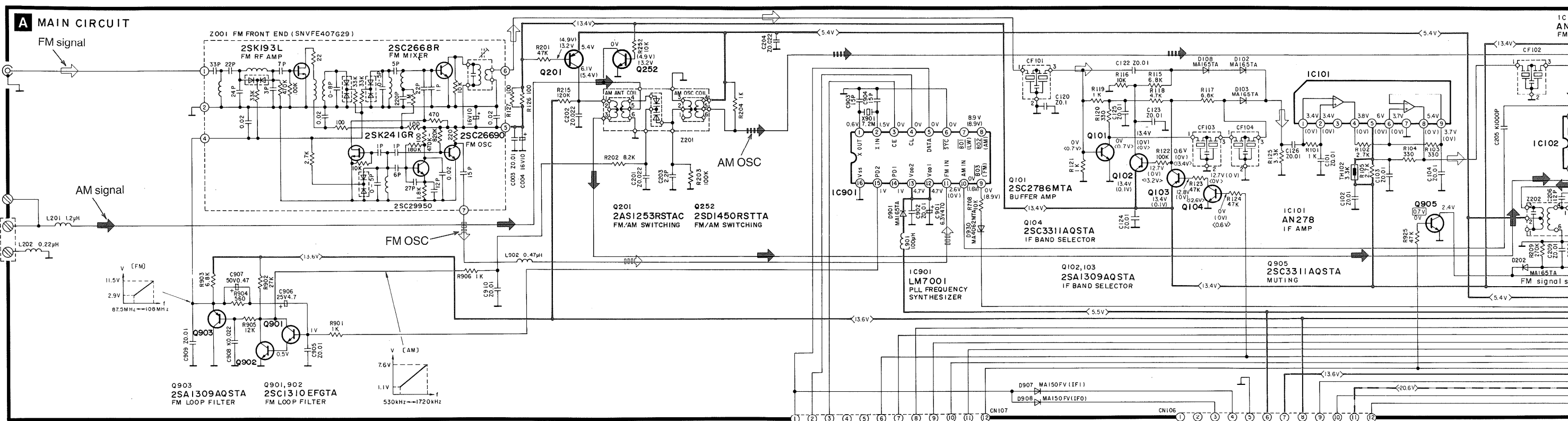
PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
CONNECTION	F	F	N	S	S	G	S	S	S	S	S	S	S	G	S	S	S	S	N	P	3	N	N	S	N	N	S	2	N	S	S	1	N	F	F

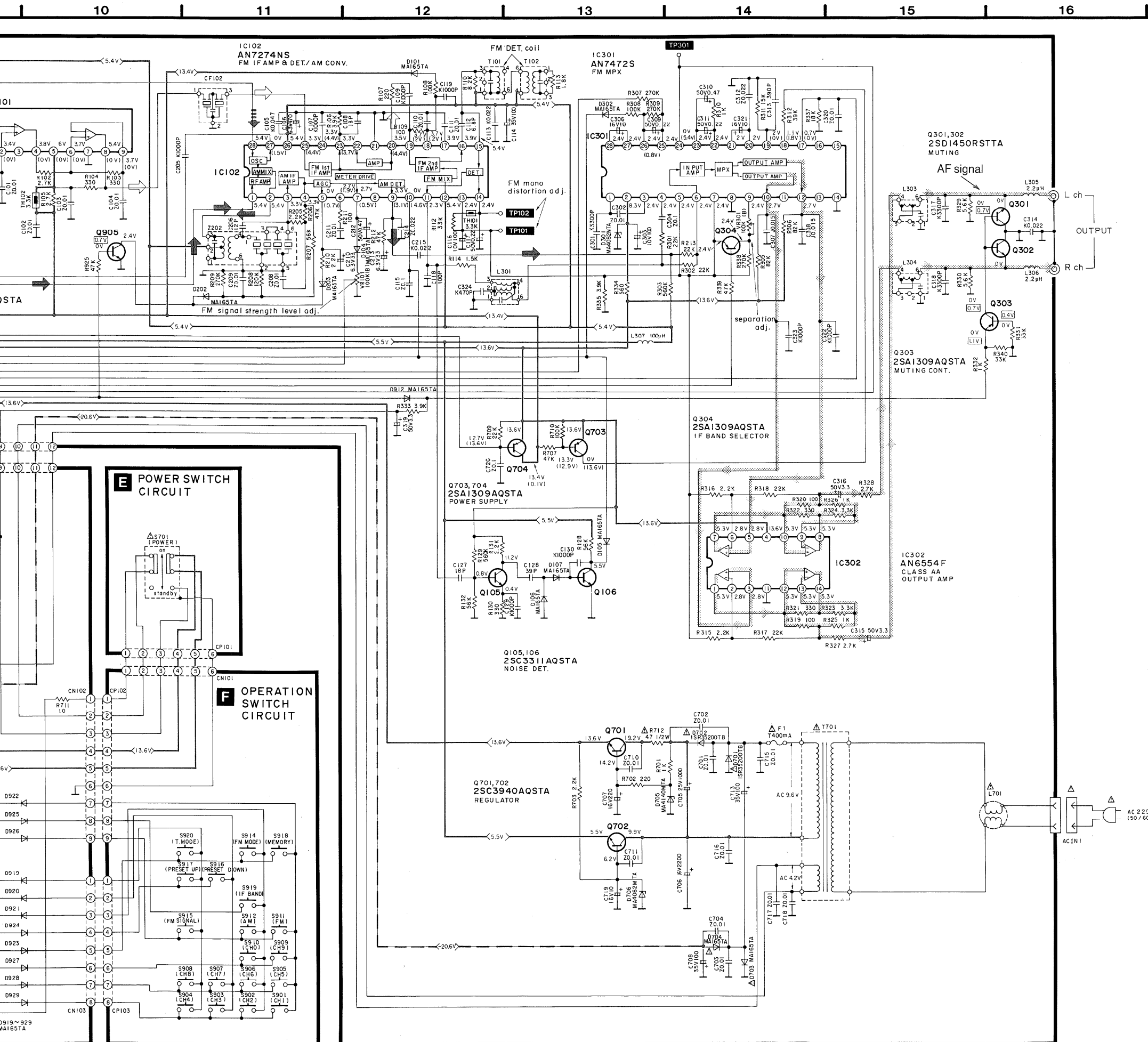
• ANODE CONNECTION

	6G	5G	4G	3G	2G	1G
S0	-	LW	2d	2d	-	-
S1	-	FM	2e	2e	MHz	-
S2	-	AM	2c	2c	kHz	-
S3	-	MW	2g	2g	-	-
S4	-	rec	2f	2f	M	-
S5	-	/	2b	2b	-	-
S6	-	stereo	2a	2a	-	-
S7	-	-	-	-	-	■
S8	∩	-	1d	1d	1d	1d
S9	∩	-	1e	1e	1e	1e
S10		-	1c	1c	1c	1c
S11		-	1g	1g	1g	1g
S12		-	1f	1f	-	1f
S13	-	-	1b	1b	1b	1b
S14	-	-	1a	1a	1a	1a
S15	-	-	DP	-	-	■
S16	-	-	-	-	quartz lock	-

1 2 3 4 5 6 7 8 9 10

A
B
C
D
E
F





SCHEMATIC DIAGRAM (Parts list on page 19~21)

(This schematic diagram may be modified at any time with the development of new technology.)

- Notes:**
- S701: Power switch in "on" position.
 - S901~S910: Preset tuning (39 channel random preset tuning) switches.
 - S901: CH1, S902: CH2, S903: CH3, S904: CH4, S905: CH5, S906: CH6, S907: CH7, S908: CH8, S909: CH9, S910: CH0
 - S911, S912: Band selectors (band selector) switches.
 - S911: FM, S912: AM
 - S914: FM mode selector (FM-mode) switch.
 - S915: FM signal-strength indication (FM-signal) switch.
 - S916, S917: Preset channel (preset channel) switches.
 - S916: DOWN, S917: UP
 - S918: Memory (memory) switch.
 - S919: FM IF band selector (FM-IF band) switch.
 - S920: Tuning mode selector (tuning mode) switch.

• Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.

- () : AM voltage
- ▭ : muting voltage
- : Positive voltage lines (+)
- - - : Negative voltage lines (-)

- ◻ FM OSC
- ▣ AM OSC
- ▤ IF super narrow signal
- ▥ AF signal lines
- ▧ FM signal
- ▨ AM signal

• Important safety notice
Components identified by Δ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

• Use of ceramic filters in pairs
The ceramic filters (CF101~CF104) for FM-IF circuit are available in three ranks. For this circuit, be sure to use the ceramics of the same rank in a pair. At repairing and replacement, pay close attention to the diodes (D907, D908) for use as different diodes must be used depending on each rank of the ceramic filters.

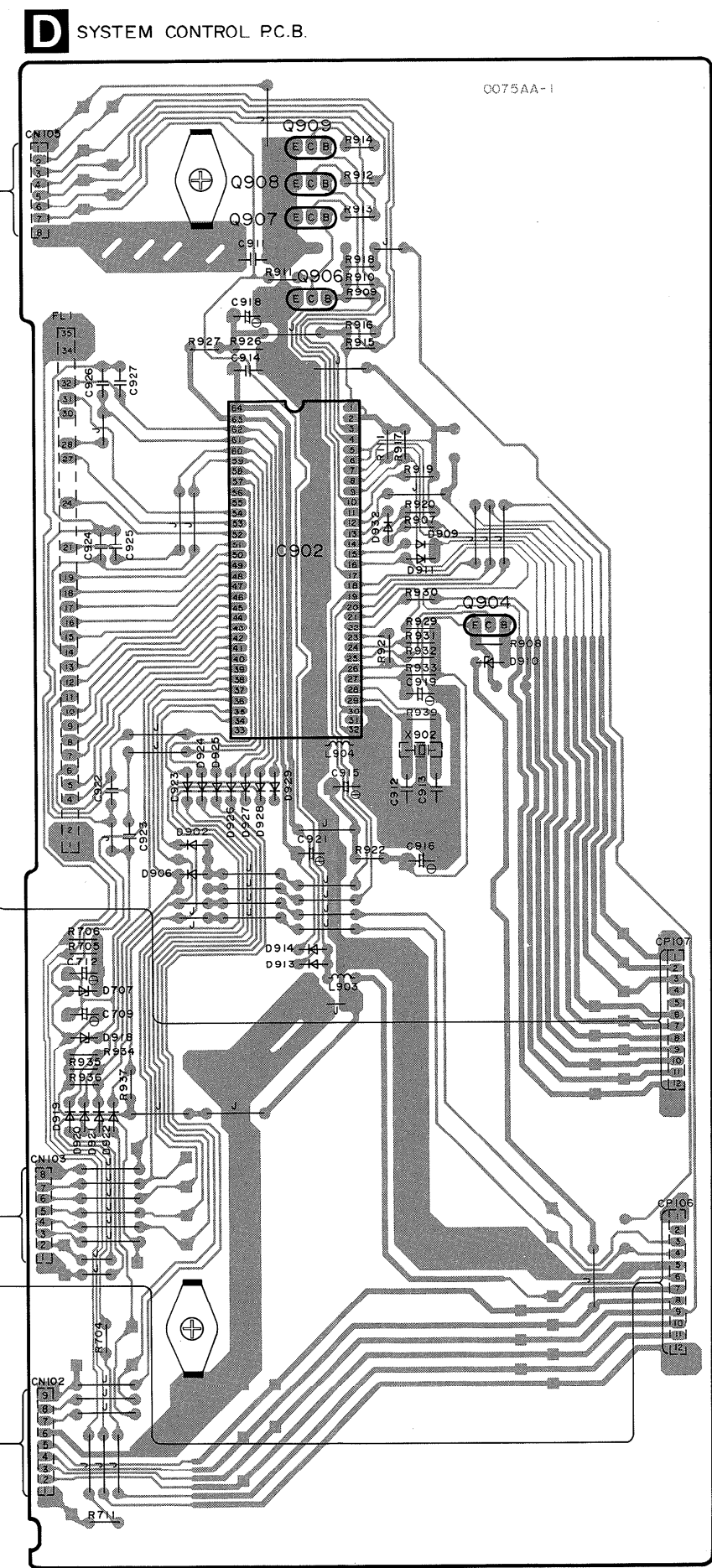
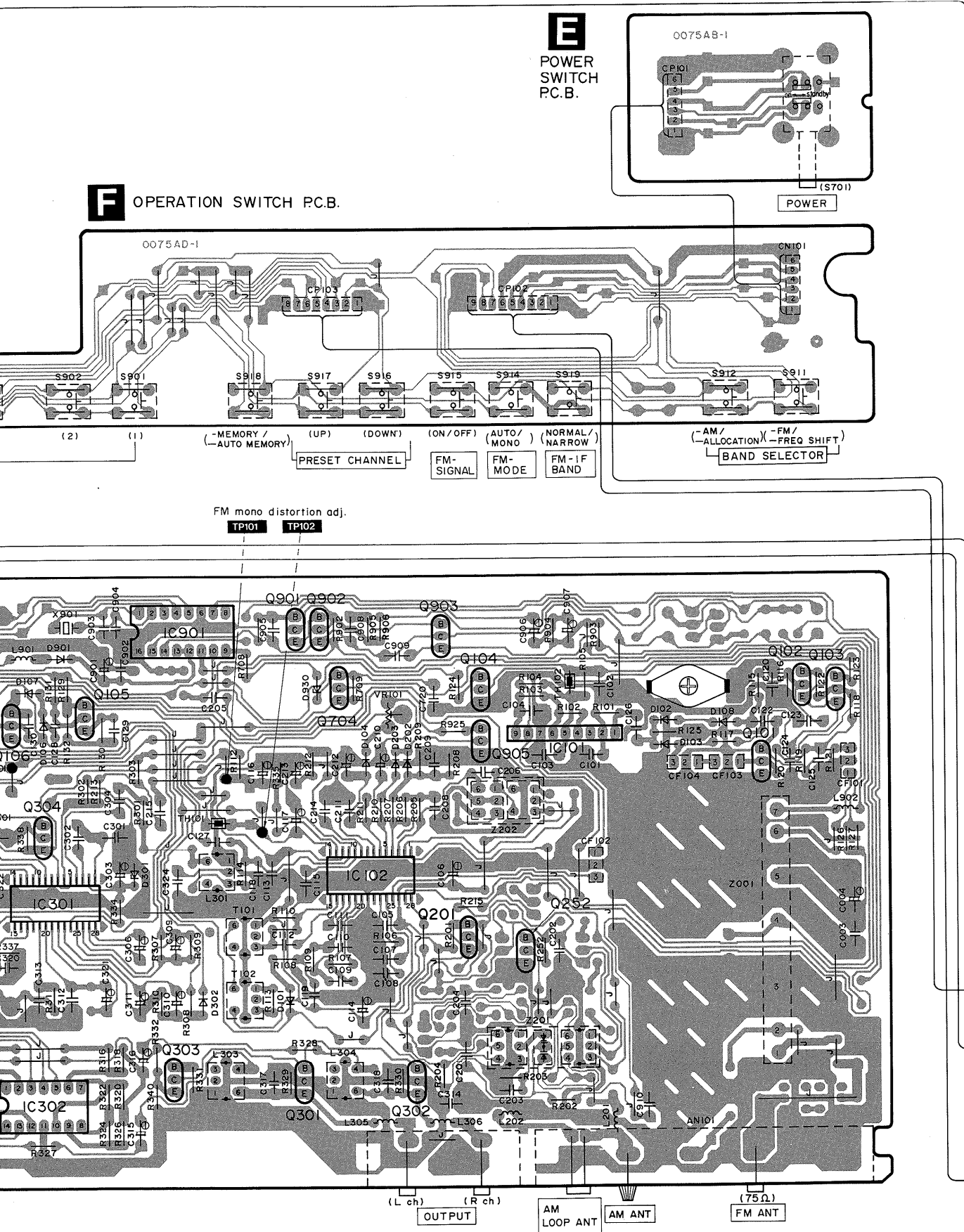
Color marking (Red, Blue or Orange)

RANK (Color)	D907	D908	CENTER FREQUENCY
Orange	○	○	10.72 MHz
Red	×	×	10.70 MHz
Blue	×	○	10.67 MHz

Note: ○ mark: Diode is used.
× mark: Diode is not used.

• Caution!
IC and LSI are sensitive to static electricity. Secondary trouble can be prevented by taking care during repair.

- Cover the parts boxes made of plastics with aluminum coil.
- Ground the soldering iron.
- Put a conductive mat on the work table.
- Do not touch the legs of IC or LSI with the fingers directly.

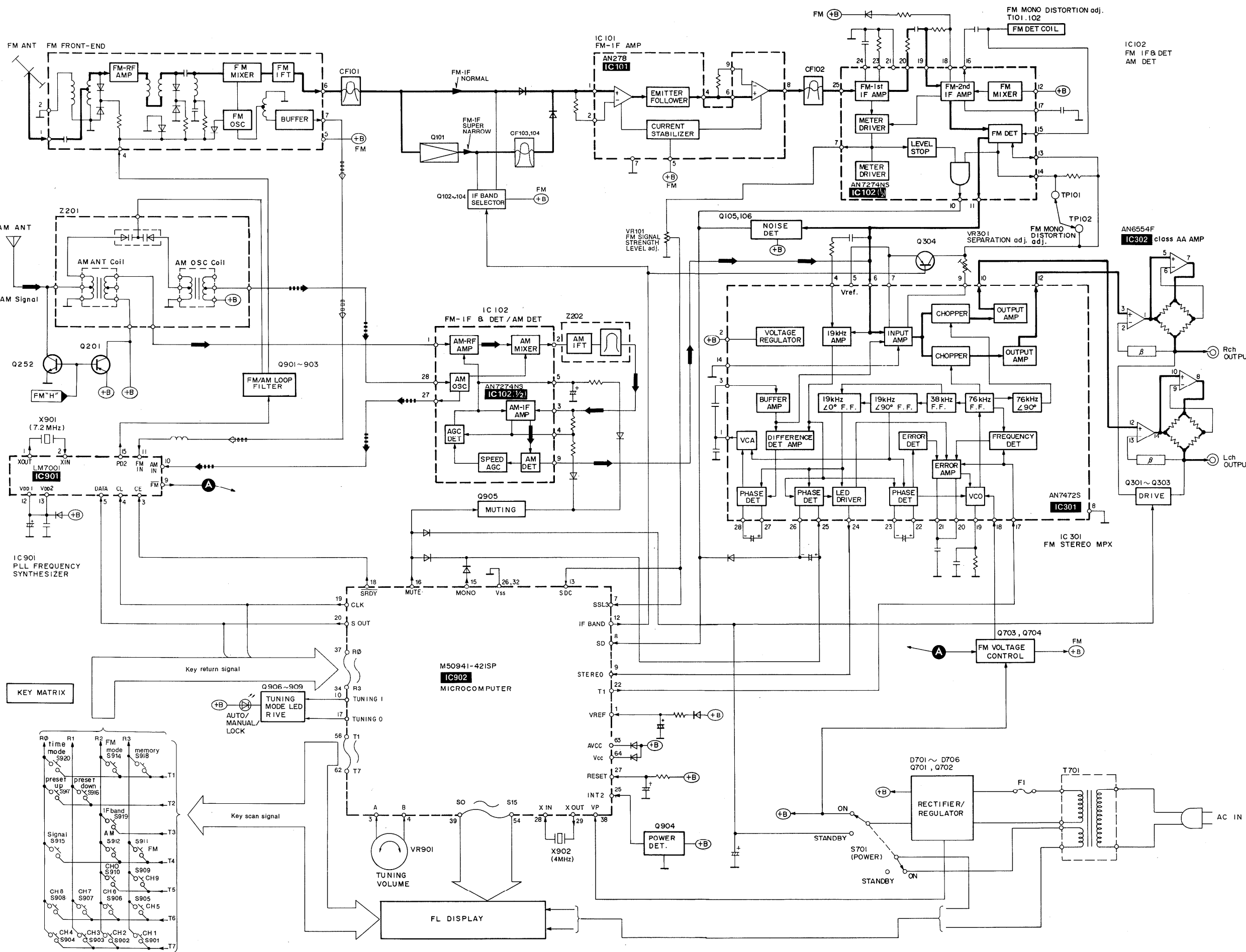


FUNCTIONS OF IC TERMINALS (IC902: M50941-421SP)

PIN NO.	IN/OUT	MARK	DESCRIPTION OF TERMINAL
1	INPUT	VREF	Reference voltage terminal.
2	---	NC	Not used in this unit.
3	---	A	Not used in this unit, connected to GND.
4	---	B	Not used in this unit, connected to GND.
5	---	SSL1	Not used in this unit.
6	---	SSL2	Not used in this unit.
7	INPUT	SSL3	FM signal level detector terminal.
8	INPUT	SD	Station detection of auto tuning terminal. • Received: "H", No signal: "L"
9	INPUT	STEREO	Reference voltage terminal.
10	---	TUNING 0	Not used in this unit.
17	---	TUNING 1	Not used in this unit.
11	---	RF BAND	Not used in this unit.
12	OUTPUT	IF BAND	FM IF BAND selector terminal. • "normal": "L", "super narrow": "H"
13	---	NC	Not used in this unit.
14	---	REC	Not used in this unit.
15	OUTPUT	MONO	Forcible monaural selection terminal. Forcible monaural mode
16	OUTPUT	MUTE	Terminal to eliminate shock noise due to unlocking at PLL. (Muting output) • Pin 25 (CE) is "L"→"H" or "H"→"L" • Power switch "off". • Frequency change. (up/down, FM→AM (MW/LW), REC). • FM RF/IF selection.
18	OUTPUT	SRDY	PLL data output terminal. SRDY: serial I/O enable signal, CLK: clock signal, SOUT: serial data signal.
19		CLK	
20		SOUT	
21	INPUT	SIN	Control input terminal.
22	OUTPUT	T1	Clock pulse waveform output terminal. • FM: 1 kHz signal (duty 50%)
23	---	T2	Not used in this unit.
24	INPUT	INT1	Remote control input terminal. Not used in this unit.
25	INPUT	INT2	Power supply detection terminal.
26	---	Vss	Ground terminal.
27	INPUT	RESET	Reset signal terminal.
28	INPUT	XIN	Connecting terminal for crystal oscillator.
29	OUTPUT	XOUT	Not used in this unit, connected to GND.
30	---	XCIN	Not used in this unit, connected to GND.
31	---	XCOU	Not used in this unit.
33	---	NC	Not used in this unit.
34	INPUT	R0	Terminal for key return signal to external key matrix. 0 1V/2msec. div.
37		R3	
38	INPUT	VP	Power supply terminal for FL display.
39	OUTPUT	S0	Segment signal terminal for FL display. 10V/5msec. div. -26.0V
54		S15	
55	---	NC	Not used in this unit.
56	OUTPUT	T1	Terminal for key scan signal to external key matrix and grid signal terminal for FL display. 10V/2msec. div. -26.0V
62		T7	
63	INPUT	AVcc	Power supply terminal of device.
64	INPUT	Vcc	Power supply terminal of device.

■ BLOCK DIAGRAM

■ REPLACEMENT PARTS LIST



Notes: Important Component only manu. The paren. Parts with "K" mark Parts with "S" mark Parts other

Ref. No.	Part No.
IC101	AN278
IC102	AN7274NS
IC301	AN7472S
IC302	AN6554F
IC901	LM7001
IC902	M50941-421P
Q101	2SC2786MTA
Q102, 103	2SA1309AQS
Q104-106	2SC3311AQS
Q201	2SA1253RST
Q252	2SD1450RST
Q301, 302	2SD1450RST
Q303, 304	2SA1309AQS
Q701, 702	2SC3940AQS
Q703, 704	2SA1309AQS
Q901, 902	2SC1310EFG
Q903	2SA1309AQS
Q904	DTC144ESTP
Q905, 906	2SC3311AQS
Q907-909	DTC114YSTP
D101-108	MA165TA
D202, 203	MA165TA
D301	MA4082MTA
D302	MA165TA
D701, 702	1SR35200TB
D703, 704	MA165TA
D705	MA4140MTA
D706	MA4062MTA
D707	MA4051MTA
D901, 902	MA165TA
D906	MA165TA
D907, 908	MA150FV
D909	MA165TA
D910	MA4082MTA
D911-914	MA165TA
D915	LN846RP-C

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
		TRANSFORMER (S)				SWITCH(ES)	
T101	RLI4B005-Z	TRANSFORMER		S701	SSH1218	POWER SWITCH	△
T102	RLI4B006-Z	TRANSFORMER		S901-912	EVQB005R	PUSH SWITCHES	
T701	SLT5K264-K	POWER TRANSFORMER	△	S914-920	EVQB005R	PUSH SWITCHES	
		CERAMIC FILTER (S)				JACK (S)	
CF101	SVFE107M2-A	CERAMIC FILTER	(RED)	AC1N1	SJS9236	AC INLET	△
CF101	SVFE107M2-B	CERAMIC FILTER	(BLUE)	AN101	SJF8305N	TERMINAL BOARD (ANT)	
CF101	SVFE107M2-C	CERAMIC FILTER	(ORANGE)	CN101	SJS50681BB	SOCKET (6P)	
CF102	SVFE107M2-A	CERAMIC FILTER	(RED)	CN102	RJU003K009M1	SOCKET (9P)	
CF102	SVFE107M2-B	CERAMIC FILTER	(BLUE)	CN103	RJU003K008M1	SOCKET (8P)	
CF102	SVFE107M2-C	CERAMIC FILTER	(ORANGE)	CN105	RJU003K008M1	SOCKET (8P)	
CF103	SVFE107M2-A	CERAMIC FILTER	(RED)	CN106, 107	RJU005W012	SOCKET (12P)	
CF103	SVFE107M2-B	CERAMIC FILTER	(BLUE)	CP101	SJT30648BB	CONNECTOR (6P)	
CF103	SVFE107M2-C	CERAMIC FILTER	(ORANGE)	CP102	RJT003K009M1	CONNECTOR (9P)	
CF104	SVFE107M2-A	CERAMIC FILTER	(RED)	CP103	RJT003K008M1	CONNECTOR (8P)	
CF104	SVFE107M2-B	CERAMIC FILTER	(BLUE)	CP105	RJT003K008M1	CONNECTOR (8P)	
CF104	SVFE107M2-C	CERAMIC FILTER	(ORANGE)	CP106, 107	RJT005W012	CONNECTOR (12P)	
		OSCILLATOR(S)					
X901	SVQ49U722T-S	OSCILLATOR					
X902	SVQ49U402T-S	OSCILLATOR					

Notes : * Capacity value are in microfarads (uF) unless specified otherwise, P=Pico-farads (pF) F=Farads (F)
* Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM) , 1M=1,000k(OHM)

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
		RESISTORS	R118	ERDS2TJ472T	1/4W 4.7K	R207	ERDS2TJ563T	1/4W 56K
			R119	ERDS2TJ102T	1/4W 1K	R208	ERDS2TJ124T	1/4W 120K
			R120	ERDS2TJ331T	1/4W 330	R209	ERDS2TJ274T	1/4W 270K
R101	ERDS2TJ102T	1/4W 1K	R121	ERDS2TJ102T	1/4W 1K	R210	ERDS2TJ222T	1/4W 2.2K
R102	ERDS2TJ272T	1/4W 2.7K	R122	ERDS2TJ104T	1/4W 100K	R211	ERDS2TJ101T	1/4W 100
R103, 104	ERDS2TJ331T	1/4W 330	R123, 124	ERDS2TJ473T	1/4W 47K	R212	ERDS2TJ473T	1/4W 47K
R105	ERDS2TJ272T	1/4W 2.7K	R125	ERDS2TJ332T	1/4W 3.3K	R213	ERDS2TJ223T	1/4W 22K
R106	ERDS2TJ392T	1/4W 3.9K	R126, 127	ERDS2TJ101T	1/4W 100	R215	ERDS2TJ124T	1/4W 120K
R107	ERDS2TJ221T	1/4W 220	R128	ERDS2TJ563T	1/4W 56K	R252	ERDS2TJ103T	1/4W 10K
R108	ERDS2TJ104T	1/4W 100K	R129	ERDS2TJ564T	1/4W 560K	R301, 302	ERDS2TJ223T	1/4W 22K
R109	ERDS2TJ101T	1/4W 100	R130	ERDS2TJ331T	1/4W 330	R303	ERDS2TJ564T	1/4W 560K
R110	ERDS2TJ822T	1/4W 8.2K	R131	ERDS2TJ222T	1/4W 2.2K	R305, 306	ERDS2TJ823T	1/4W 82K
R111	ERDS2TJ684T	1/4W 680K	R132	ERDS2TJ563T	1/4W 56K	R307	ERDS2TJ274T	1/4W 270K
R112	ERDS2TJ333T	1/4W 33K	R201	ERDS2TJ473T	1/4W 47K	R308	ERDS2TJ104T	1/4W 100K
R113	ERDS2TJ182T	1/4W 1.8K	R202	ERDS2TJ822T	1/4W 8.2K	R309	ERDS2TJ274T	1/4W 270K
R114	ERDS2TJ152T	1/4W 1.5K	R203	ERDS2TJ104T	1/4W 100K	R310	ERDS2TJ102T	1/4W 1K
R115	ERDS2TJ682T	1/4W 6.8K	R204	ERDS2TJ102T	1/4W 1K	R311	ERDS2TKF1502	1/4W 15K
R116	ERDS2TJ103T	1/4W 10K	R205	ERDS2TJ222T	1/4W 2.2K	R312	ERDS2TJ393T	1/4W 39K
R117	ERDS2TJ682T	1/4W 6.8K	R206	ERDS2TJ473T	1/4W 47K	R315, 316	ERDS2TJ222T	1/4W 2.2K

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
R317, 318	ERDS2TJ223T	1/4W 22K				C320	ECKR1H103ZF5	50V 0.01U
R319, 320	ERDS2TJ101T	1/4W 100			CAPACITORS	C321	ECEA1CK100B	16V 10U
R321, 322	ERDS2TJ331T	1/4W 330				C322, 323	ECBT1H102KB5	50V 1000P
R323, 324	ERDS2TJ332T	1/4W 3.3K	C003	ECKR1H103ZF5	50V 0.01U	C324	ECKR1H471KB5	50V 470P
R325, 326	ERDS2TJ102T	1/4W 1K	C004	ECEA1CK100B	16V 10U	C701-704	ECKR1H103ZF5	50V 0.01U
R327, 328	ERDS2TJ272T	1/4W 2.7K	C101-104	ECKR1H103ZF5	50V 0.01U	C705	ECA1EPT102LE	25V 1000U
R329, 330	ERDS2TJ562T	1/4W 5.6K	C105	ECQM1H473KV3	50V 0.047U	C706	ECA1CPT222LE	16V 2200U
R331	ERDS2TJ333T	1/4W 33K	C106	ECEAOJU471B	6.3V 470U	C707	ECEA1CU221B	16V 220U
R332	ERDS2TJ102T	1/4W 1K	C107	ECQM1H102KV3	50V 1000P	C708	ECEA1VU101B	35V 100U
R333	ERDS2TJ392T	1/4W 3.9K	C108	ECBT1H180JC5	50V 18P	C709	ECEA1VK100B	35V 10U
R334	ERDS2TJ561T	1/4W 560	C109	ECBT1H102KB5	50V 1000P	C710, 711	ECKR1H103ZF5	50V 0.01U
R335	ERDS2TJ392T	1/4W 3.9K	C110, 111	ECKR1H103ZF5	50V 0.01U	C712	ECEA1VK3R3B	35V 3.3U
R337	ERDS2TJ183T	1/4W 18K	C112	ECBT1H6R8KC5	50V 6.8P	C713	ECEA1VU101B	35V 100U
R338	ERDS2TJ274T	1/4W 270K	C113	ECQM1H223KV3	50V 0.022U	C715-718	ECKR1H103ZF5	50V 0.01U
R339	ERDS2TJ473T	1/4W 47K	C114	ECEA1VU101B	35V 100U	C719	ECEA1CK100B	16V 10U
R340	ERDS2TJ333T	1/4W 33K	C115	ECFR1E104ZF5	25V 0.1U	C720	ECFR1E104ZF5	25V 0.1U
R701	ERDS2TJ102T	1/4W 1K	C116	ECEA1AU101B	10V 100U	C901	ECEAOJU471B	6.3V 470U
R702	ERDS2TJ221T	1/4W 220	C117	ECEA1HKR22B	50V 0.22U	C902	ECBT1E103ZF5	25V 0.01U
R703	ERDS2TJ222T	1/4W 2.2K	C118	ECBT1H101KB5	50V 100P	C903, 904	ECBT1H150JC5	50V 15P
R704-706	ERDS2TJ101T	1/4W 100	C119	ECBT1H102KB5	50V 1000P	C905	ECKR1H103ZF5	50V 0.01U
R707	ERDS2TJ473T	1/4W 47K	C120	ECFR1E104ZF5	25V 0.1U	C906	ECEA25M4R7RB	25V 4.7U
R708	ERDS2TJ103T	1/4W 10K	C122-126	ECKR1H103ZF5	50V 0.01U	C907	ECEA1HKR47B	50V 0.47U
R709	ERDS2TJ223T	1/4W 22K	C127	ECBT1H180JC5	50V 18P	C908	ECFR1E223KR	25V 0.022U
R710	ERDS2TJ104T	1/4W 100K	C128	ECBT1H390J5	50V 39P	C909-911	ECKR1H103ZF5	50V 0.01U
R711	ERDS2TJ100T	1/4W 10	C129, 130	ECBT1H102KB5	50V 1000P	C912, 913	ECBT1H470J5	50V 47P
R712	ERDS1FVJ470T	1/2W 47 Δ	C201, 202	ECKR1H223ZF5	50V 0.022U	C914	ECKR1H103ZF5	50V 0.01U
R901	ERDS2TJ102T	1/4W 1K	C203	ECBT1H2R2JC5	50V 2.2P	C915, 916	ECEAOJU102B	6.3V 1000U
R902	ERDS2TJ273T	1/4W 27K	C204	ECKR1H223ZF5	50V 0.022U	C918	ECEA1CK100B	16V 10U
R903	ERDS2TJ682T	1/4W 6.8K	C205	ECBT1H102KB5	50V 1000P	C919	ECEA1VK3R3B	35V 3.3U
R904	ERDS2TJ561T	1/4W 560	C206	ECBT1H120JC5	50V 12P	C921	ECEAOJU101B	6.3V 100U
R905	ERDS2TJ123T	1/4W 12K	C208, 209	ECKR1H103ZF5	50V 0.01U	C922-927	ECBT1H101KB5	50V 100P
R906	ERDS2TJ102T	1/4W 1K	C210	ECEAOJK330B	6.3V 33U			
R907	ERDS2TJ333T	1/4W 33K	C211	ECKR1H103ZF5	50V 0.01U			
R908	ERDS2TJ392T	1/4W 3.9K	C212	ECEA1HKR47B	50V 0.47U			
R909, 910	ERDS2TJ473T	1/4W 47K	C213	ECEAOJK330B	6.3V 33U			
R911	ERDS2TJ153T	1/4W 15K	C214	ECKR1H223ZF5	50V 0.022U			
R912	ERDS2TJ471T	1/4W 470	C215	ECFR1E223KR	25V 0.022U			
R913, 914	ERDS2TJ151T	1/4W 150	C301	ECFR1E332KR	25V 3300P			
R915-917	ERDS2TJ104T	1/4W 100K	C302	ECKR1H103ZF5	50V 0.01U			
R918	ERDS2TJ274T	1/4W 270K	C303	ECEA1AU101B	10V 100U			
R919-921	ERDS2TJ105T	1/4W 1M	C304	ECFR1E104ZF5	25V 0.1U			
R922	ERDS2TJ681T	1/4W 680	C306	ECEA1CK100B	16V 10U			
R925	ERDS2TJ473T	1/4W 47K	C307, 308	ECQB1H153JZ3	50V 0.015U			
R926	ERDS2TJ123T	1/4W 12K	C309	ECEA1HKR22B	50V 0.22U			
R927	ERDS2TJ102T	1/4W 1K	C310	ECEA1HKR47B	50V 0.47U			
R929	ERDS2TJ103T	1/4W 10K	C311	ECEA1HKR22B	50V 0.22U			
R930	ERDS2TJ393T	1/4W 39K	C312	ECKR1H223ZF5	50V 0.022U			
R931, 932	ERDS2TJ103T	1/4W 10K	C313	ECQP2A391GZT	100V 390P			
R933-937	ERDS2TJ104T	1/4W 100K	C314	ECQM1H223KV3	50V 0.022U			
R939	ERDS2TJ105T	1/4W 1M	C315, 316	ECEA1HPX3R3B	50V 3.3U			
			C317, 318	ECFR1E332KR	25V 3300P			
			C319	ECEA1HPX3R3B	50V 3.3U			

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
				19	RGU0113-K	MODE BUTTON	K
		CABINET PARTS		19	RGU0113-S	MODE BUTTON	S
1	RKMO032-K	CABINET	K	20	RJH3201N	TERMINAL BOARD	
1	RKMO032-S	CABINET	S	21	SJT390	FUSE HOLDER	△
2	SNE2129-1	SCREW	K	22	RMRO128	FL HOLDER	
2	SNE2129	SCREW	S	23	RFKGTG570EGK	FRONT PANEL	K
3	RGRO018A-Y	REAR PANEL		23	RFKGTG570EGS	FRONT PANEL	S
4	RGU0030	POWER BUTTON	K			PACKING MATERIAL	
4	RGU0030-S	POWER BUTTON	S				
5	RGW0024-K	TUNING KNOB	K	P1	RPG0515	CARTON BOX	K
5	RGW0024-S	TUNING KNOB	S	P1	RPG0516	CARTON BOX	S
5-1	XXE4D5FZS	SCREW		P2	SPSD152	ACCESSORIES BOX	
7	RMA0074	HOLDER		P3	RPNO124-1	PAD	
8	RFKJT610LE-K	CHASSIS ASS'Y		P4	XZB52X60A01Z	PROTECTION COVER	
8-1	RKA0009-1	FOOT				ACCESSORIES	
8-2	XTB3+6J	SCREW					
9	SHE187-2	HOLDER		A1	RQA0013	WARRANTY CARD	
10	SNE4021	NUT		A2	RQCB0169	SERVICENTOR LIST	
11	XTBS3+8JFZ1	SCREW		A3	RQT0516-D	INSTRUCTIONS MANUAL	
12	XTB3+20JFZ	SCREW		A4	SFDAC05E03	AC CORD	△
13	XTB3+8JFZ	SCREW		A5	SJP2276	CORD	
14	SHG6374-2	SPACER		A6	SPB1162T	AM LOOP ANTENNA	
15	RGK0089-K	ORNAMENT	K	A6-1	SMA233-1M	HOLDER	
15	RGK0089-S	ORNAMENT	S	A6-2	SMA231M	HOLDER	
16	RFKNTG560E-K	FRONT GRILL	K	A6-3	XTB3+10AFZ	SCREW	
16	RFKNTG560E-S	FRONT GRILL	S	A7	SSA270M	FM ANTENNA	
17	RFKNTG570EGK	FUNCTION BUTTON	K	A8	RQCS0009	CAUTION NOTE for FTZ	
17	RFKNTG570EGS	FUNCTION BUTTON	S				
18	RGU0112-K	PRESET BUTTON	K				
18	RGU0112-S	PRESET BUTTON	S				

1 2 3 4 5

EXPLODED VIEW

A

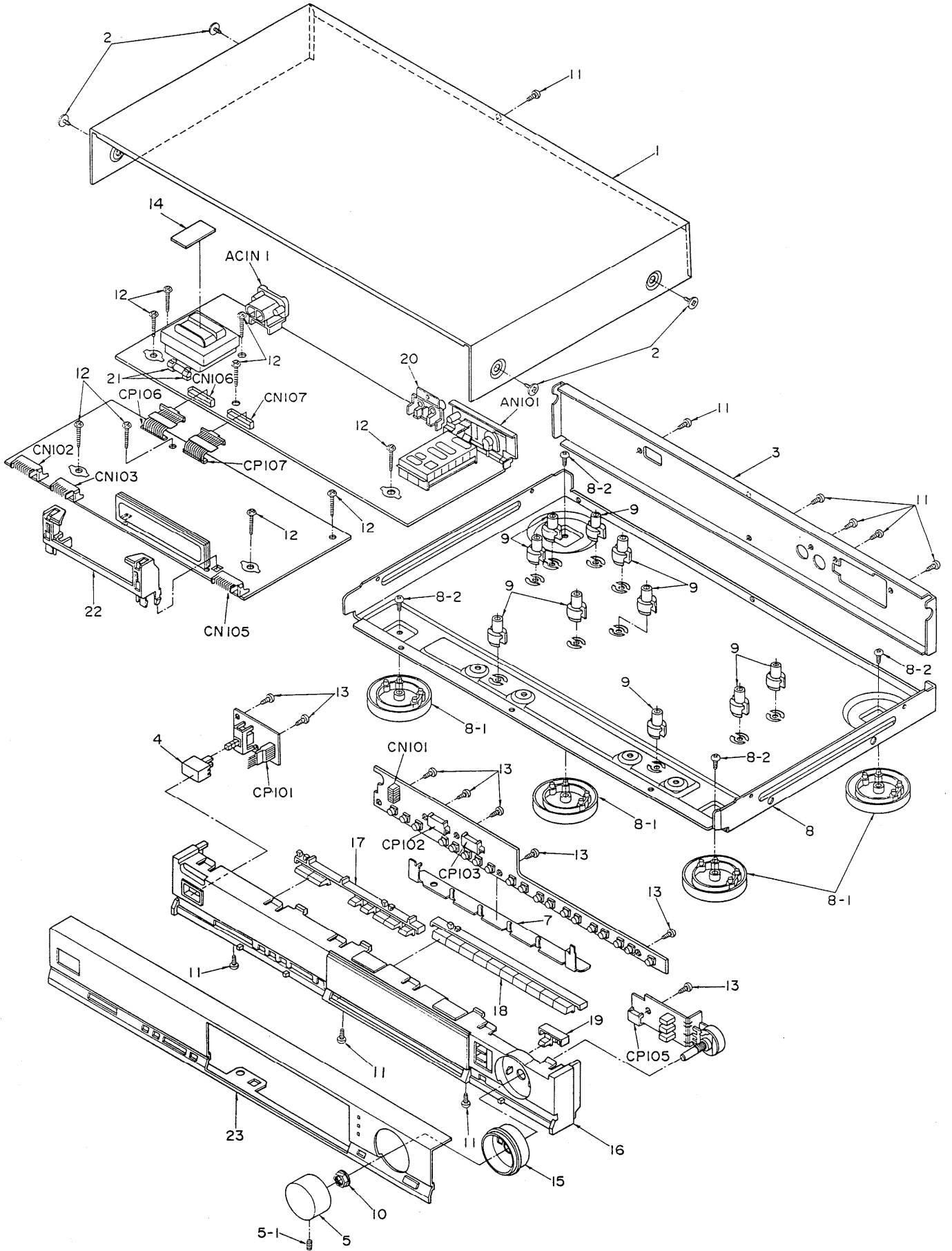
B

C

D

E

F



Tuner

ST-G570

DEUTSCH

■ MESSUNGEN UND EINSTELL METHODEN

■ FM

Einstellungen der Bedienelemente und zu verwendende Geräte.

- UKW Meßsender (UKW Nebsender)
- Stereo-Modulator
- Verzerrungs-Analysator
- Elektronische Wechselstrom-und Gleichstrom-Voltmeter (EVM)
- Oszilloskop
- Frequenzzähler
- Drosselspule (100 μ H)

Anmerkung: Für Z201, Z202, L301, L303 und L304, werdeven justiert Ersatzteil geliefert. Dien Kern dieses Teils daher nicht drehen.

UKW-MONO-VERZERRUNGS-JUSTIERUNG

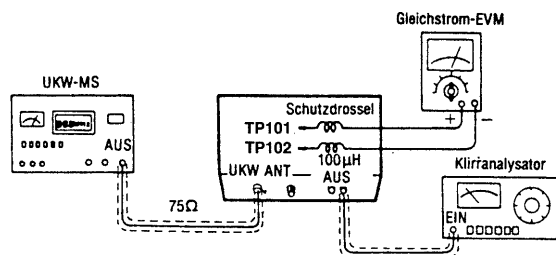
1. Der Testaufbau ist in der Abbildung gezeigt.
2. Stellen Sie die Einheit auf "FM(UKW)" Betrieb.
3. Die Radiofrequenzanzeige und den Messender auf 100.10MHz einstellen.
4. Den Kern von T101 so justieren, daß die im Signalzustand gemessene Spannung 0mV (0 \pm 20mV) im 300mV-Bereich beträgt.
5. T102 so justieren, daß der Verzerrungsfaktor des linken Kanals minimal wird.
6. Schritte 4 und 5 einige Male wiederholen.
7. Versichern Sie sich, daß die Verzerrungsfaktoren von Kanal L und Kanal R annähernd gleich sind und auf ein Minimum gehalten sind.

Anmerkung:

Für die Justierung ist ein Schraubendreher aus Kunststoff zu verwenden.

ZUSTAND DES UKW-MESSENDERS

Modulation100%
 Modulationsfrequenz1kHz
 Ausgangspegel66dB

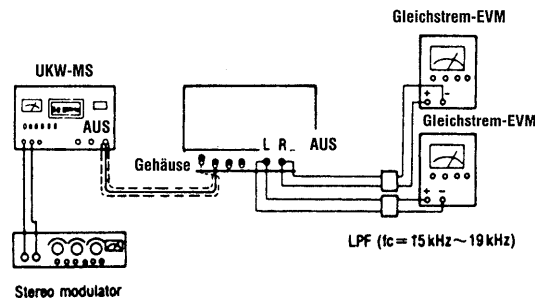


TRENNUNGS-JUSTIERUNG

1. Der Testaufbau ist in der Abbildung gezeigt.
2. Stellen Sie die Einheit auf "FM und IF normal" Betrieb.
3. Die Radiofrequenzanzeige und den Messender auf 100.10 MHz einstellen.
4. VR301 so justieren, daß der R-Ausgang minimal ist, wenn der Stereomodulator im L-Betriebszustand (Linker Kanal moduliert) ist.

ZUSTAND DES UKW-MESSENDERS

Modulation "L" oder "R" Betriebsart 90%,
 Pilotssignal 10%
 Modulationsfrequenz 1kHz (Pilot 19kHz)
 Ausgangspegel 66dB



UKW STEREO KLIRRFAKTOR-JUSTIERUNG

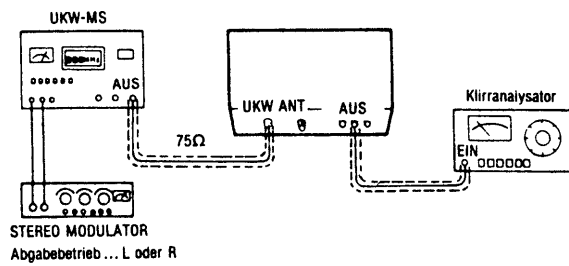
1. Der Testaufbau ist in der Abbildung gezeigt.
2. Stellen Sie die Einheit auf "FM(UKW)" Betrieb.
3. Die Radiofrequenzanzeige und den Messender auf **100.10MHz** einstellen.
4. **T1** so justieren, daß der Verzerrungsfaktor des linken Kanals minimal wird.
5. überprüfen, daß die Verzerrungsfaktoren des linken und rechten Kanals fast gleich sind.

Anmerkung:

Für die Justierung ist ein Schraubendreher aus Kunststoff zu verwenden.

ZUSTAND DES UKW-MESSENDERS

Modulation "L" oder "R" Betriebsart
90%, Pilotssignal 10%
Modulationsfrequenz 1kHz (Pilot 19kHz)
Ausgangspegel 66dB



UKW-SIGNALSTÄRKEPEGELS-JUSTIERUNG

1. Für den Anschluß des Prüfgerätes siehe die Abbildung.
2. Das Gerät auf "FM und IF normal" stellen.
3. Das Hochfrequenz-Anzeigegerät und den Signalgenerator auf **100.10 MHz** stellen.
4. Durch Drücken der UKW-Signaltaste das Flüssigkristalldisplay von "frequency" auf "dB" umschalten.
5. **VR101** so einstellen, daß **54dB** angezeigt wird. "54dB" wird auf dem Flüssigkristalldisplay angezeigt.
6. Die Schritte 4, 5 wiederholen.

ZUSTAND DES UKW-MESSENDERS

Modulation 30%
Modulationsfrequenz 1kHz
Ausgangspegel 66dB

