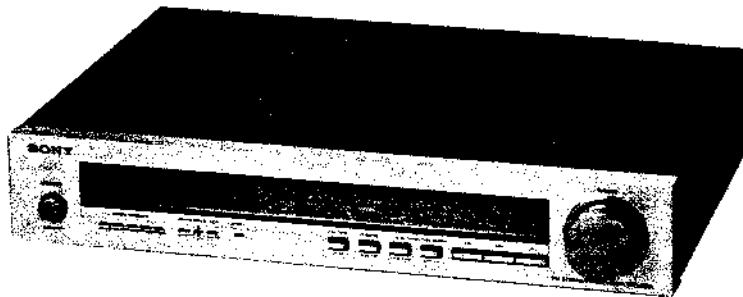


ST-A35L

AEP Model
UK Model



FM STEREO/FM-AM TUNER

SPECIFICATIONS

GENERAL


System:	FM stereo, FM/AM superheterodyne tuner Acute Servo Lock system	Sensitivity at 46dB Quieting:	4 μ V, 17.3 dBf (mono) 43 μ V, 37.9 dBf (stereo)
Power Requirements:	220 V ac \sim , 50/60 Hz (AEP model) 240 V ac \sim , 50/60 Hz (UK model)	Usable Sensitivity:	1.4 μ V, S/N = 26 dB (40kHz deviation) 1.9 μ V, 10.8 dBf; IHF
Power Consumption:	10 W	Limiting Threshold:	1 μ V (-3 dB)
Dimensions:	Approx. 430 (w) x 80 (h) x 345 (d) mm 17 (w) x 3 $\frac{1}{4}$ (h) x 13 $\frac{3}{8}$ (d) inches including projecting parts and controls	S/N Ratio:	77 dB (mono) 72 dB (stereo)
Weight:	Approx. 4.1 kg, 9 lb 1 oz (net) Approx. 5.2 kg, 11 lb 7 oz (in shipping carton)	Harmonic Distortion:	at 100 Hz 0.1 % (mono) 0.2 % (stereo) at 1 kHz 0.1 % (mono) 0.2 % (stereo) at 10 kHz 0.1 % (mono) 0.5 % (stereo)

FM TUNER SECTION

Tuning Range:	87.5-108 MHz
Antenna Terminals:	300 Ω balanced 75 Ω unbalanced
Intermediate Frequency:	10.7 MHz

IM Distortion:	0.1 % (mono) (40kHz deviation) 0.2 % (stereo)
Separation:	45 dB at 100 Hz 50 dB at 1 kHz 40 dB at 10 kHz

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS 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.

- Continued on page 2 -

SONY[®]

SERVICE MANUAL

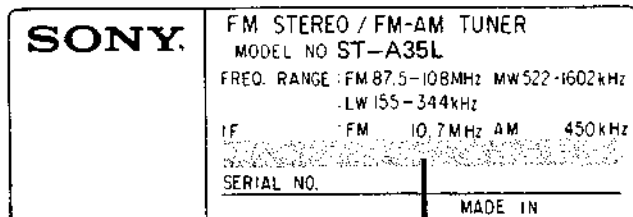
Frequency Response: 40 Hz – 12.5 kHz ± 0.3 dB
 30 Hz – 15 kHz $\begin{matrix} +0.3 \\ -2 \end{matrix}$ dB
Selectivity: 80 dB (300 kHz)
Capture Ratio: 1.0 dB
AM Suppression Ratio: 60 dB
Image Response Ratio: 85 dB
IF Response Ratio: 95 dB
Spurious Response Ratio: 95 dB
RF Intermodulation: 78 dB (IHF)
 93 dB (at 2.4 MHz)
Sub-carrier Product Ratio: 60 dB
Muting Threshold: Approx. 25.2 dB/10 μ V (LOW)
 Approx. 45.2 dB/100 μ V (HIGH)
Output Level/Impedance: 750 mV, 4.7 k Ω
Cal Tone: 50 % modulation, 400 Hz

AM (MW and LW) TUNER SECTION

		MW	LW
Tuning Range		522–1,602kHz	155–344kHz
Antenna	Built-in	provided	provided
	External	provided	provided
Intermediate Frequency		450kHz	
Usable Sensitivity	Built-in antenna	200 μ V/m (1,000kHz)	450 μ V/m (250kHz)
	External antenna	100 μ V (1,000kHz)	100 μ V (250kHz)
S/N Ratio		55dB	55dB
Harmonic Distortion		0.5%	0.5%
Selectivity		45dB (9kHz)	45dB (9kHz)
Image Response Ratio		45dB (1,000kHz)	75dB (250kHz)

MODEL IDENTIFICATION

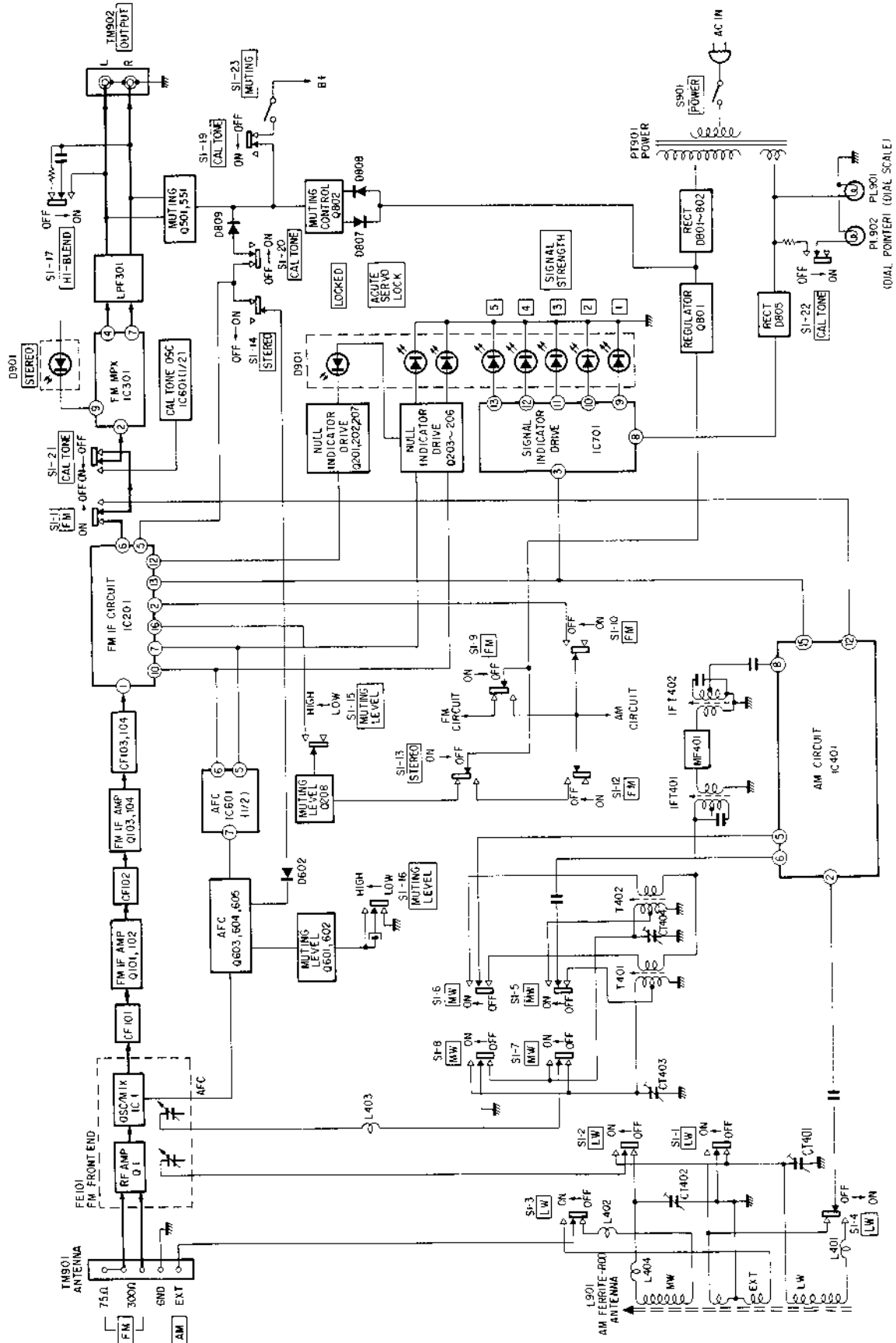
– Specification Label –



AEP model: 220V ~ 50/60Hz 10W
 UK model: 240V ~ 50/60Hz 10W

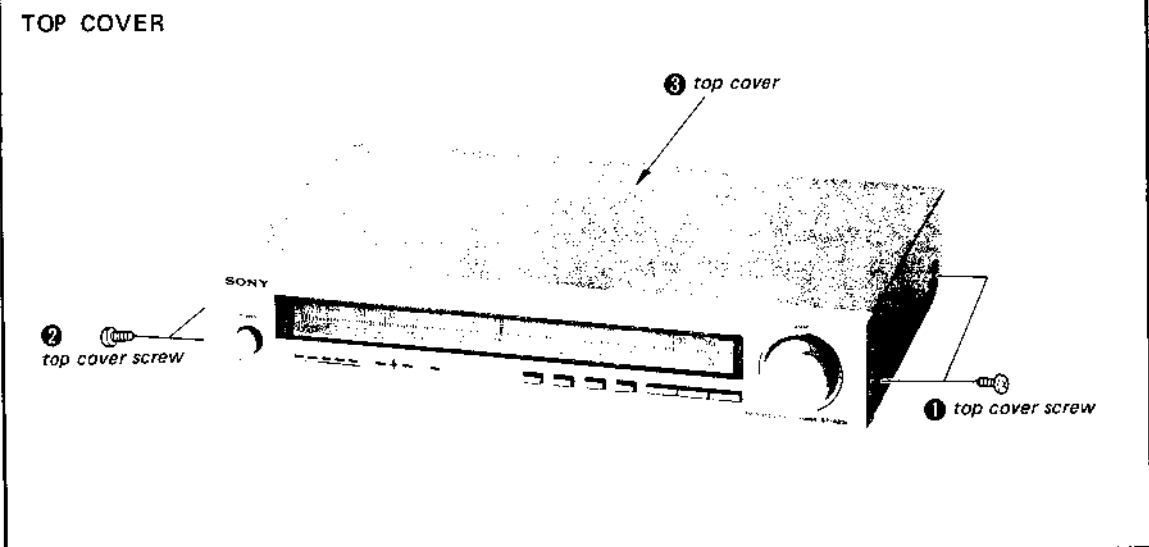
SECTION 1
OUTLINE

1-1. BLOCK DIAGRAM

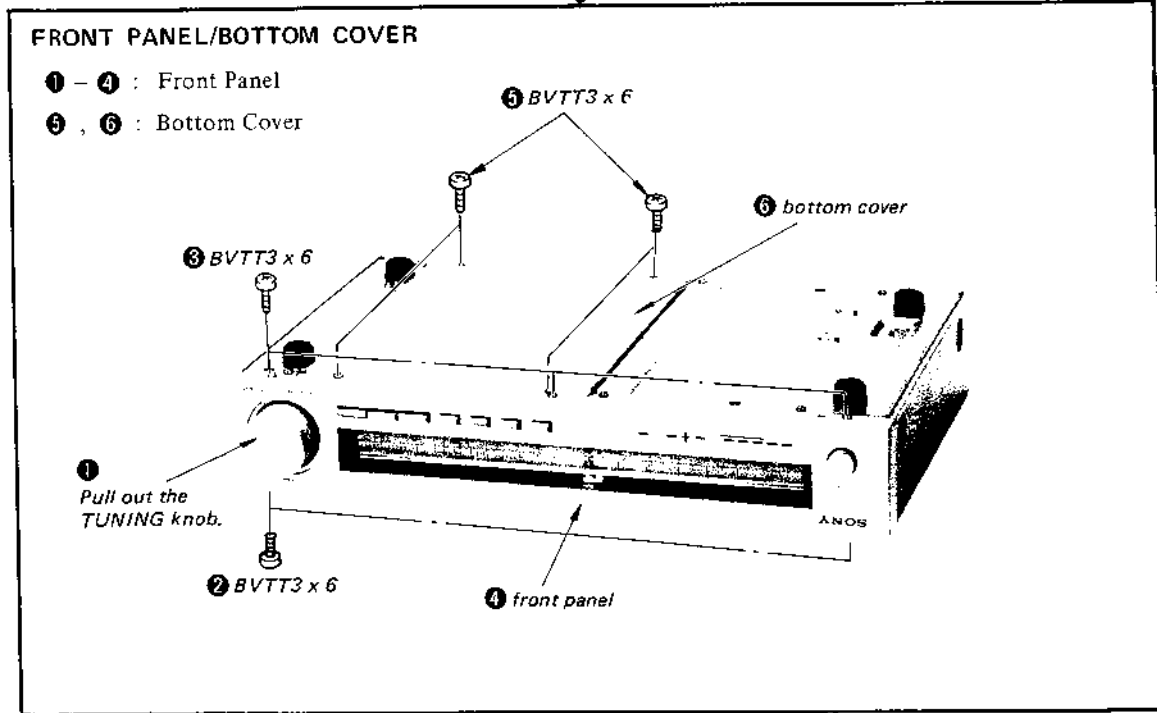


**SECTION 2
DISASSEMBLY**

Note: Follow the disassembly procedure in the numerical order given.

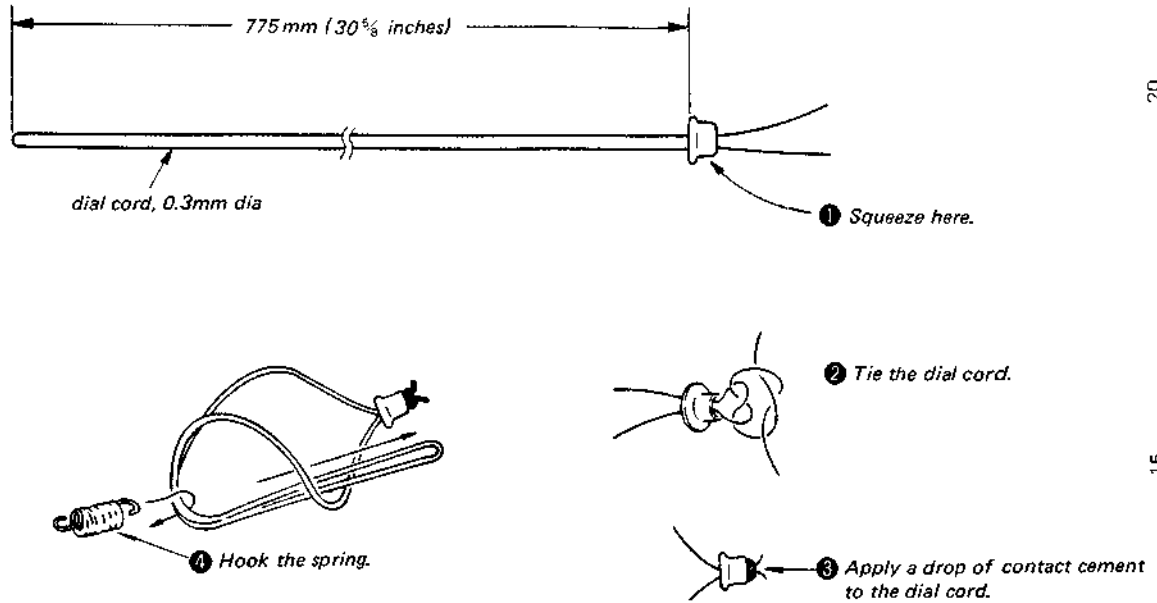


DIAL CORD STRINGING
• See page 5.



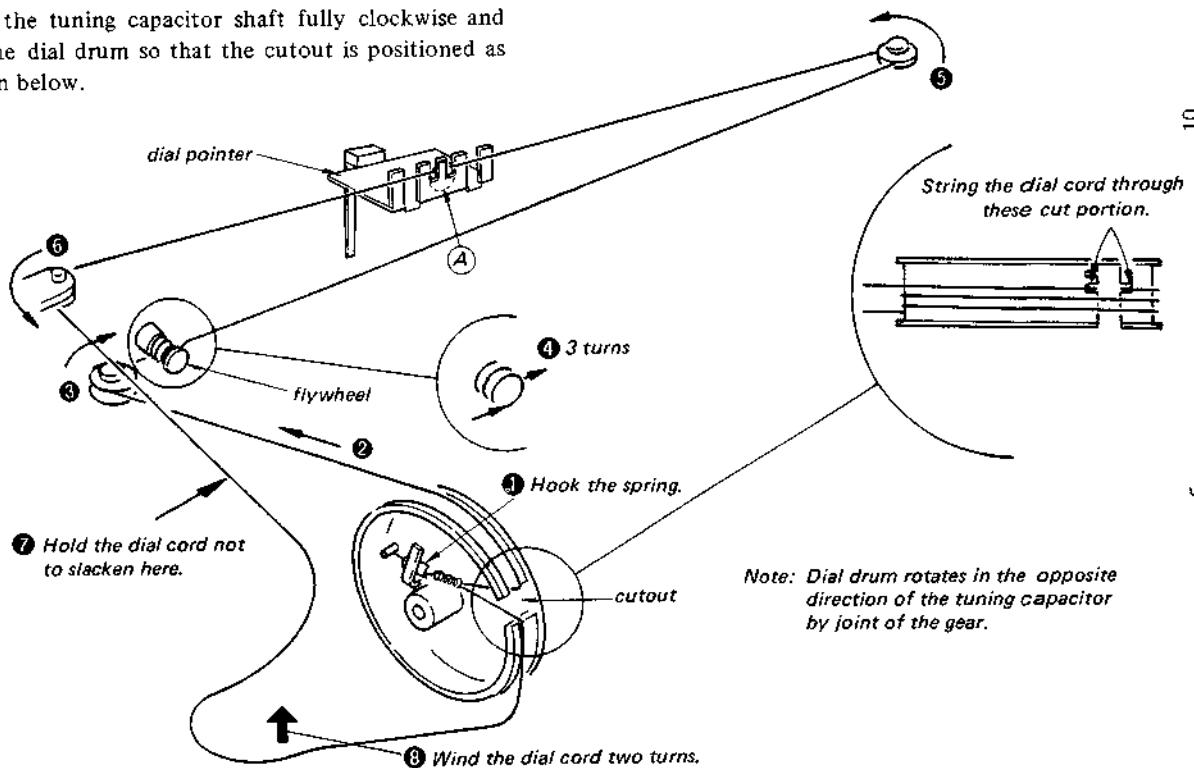
DIAL CORD STRINGING

1) Preparation



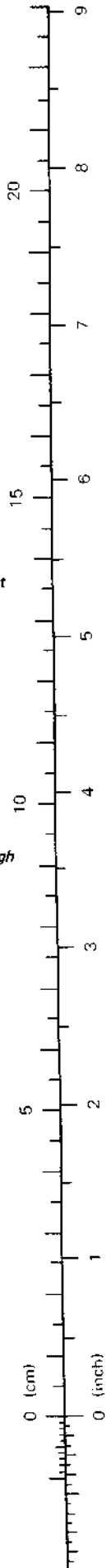
2) Stringing

Turn the tuning capacitor shaft fully clockwise and set the dial drum so that the cutout is positioned as shown below.



3) Dial Pointer Installation

1. Receive a broadcasting station signal and set the dial pointer on the dial scale.
2. Apply a drop of contact cement to the dial pointer (marked A).



SECTION 3 ADJUSTMENTS

MW SECTION

Setting:

Band Selector: MW

Setup:

AM rf signal generator

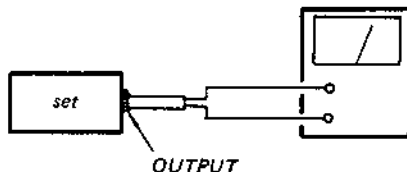


Put the lead-wire antenna close to the set.

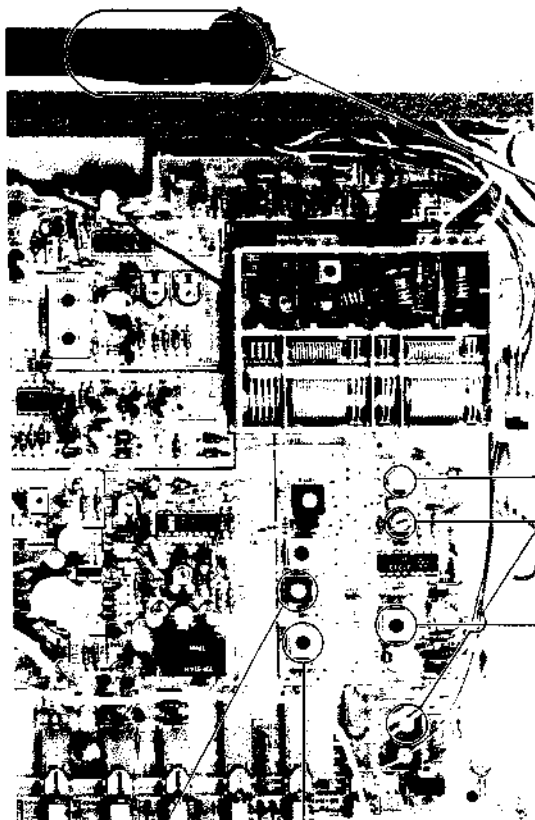
Carrier frequency: 1,000kHz

30% amplitude modulation by 400 Hz signal

VOM ①
(range: 0.5–5V ac)



- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.



MW TRACKING ADJUSTMENT

Adjust for a maximum reading on VOM ①.

L901	600kHz
CT402	1,400kHz

IFT401
IFT402
IFT403

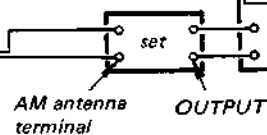
AM IF Alignment

Procedure:

AM rf signal generator



VOM ②
(range: 0.5–5V ac)



Carrier frequency: 1,000kHz
30% amplitude modulation by 400Hz signal
Output level: as low as possible

1. Tune the set to 1,000kHz and adjust IFT401–403 for a maximum reading on VOM ②.
2. Repeat the procedure in adjustment several times.

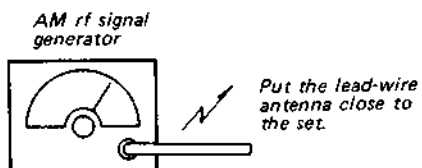
CT404	T402
1,660kHz	515kHz
Adjust for a maximum reading on VOM ①.	
MW FREQUENCY COVERAGE ADJUSTMENT	

LW SECTION

Setting:

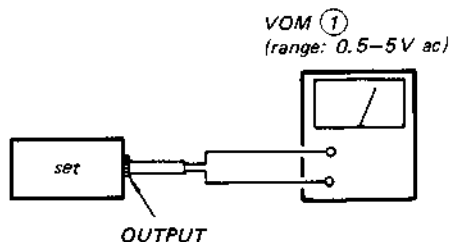
Band Selector: LW

Setup:

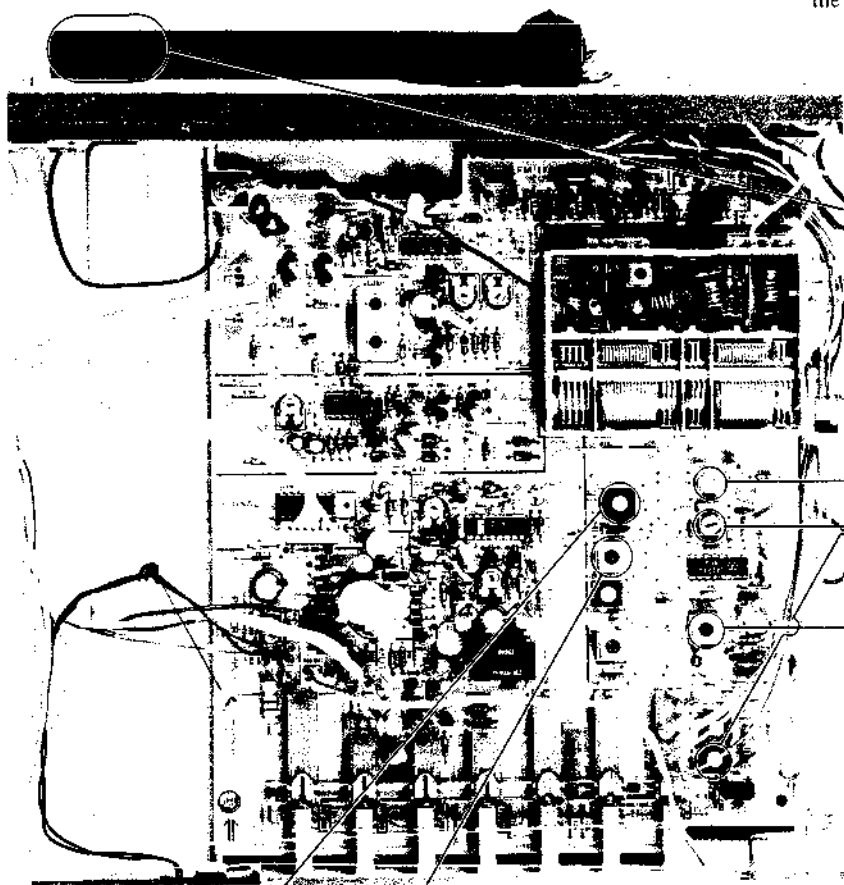


Carrier frequency: 250kHz

30% amplitude modulation by 400 Hz signal



- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.



LW TRACKING ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
L901	145kHz
CT401	365kHz

AM IF Alignment	
• See page 6.	

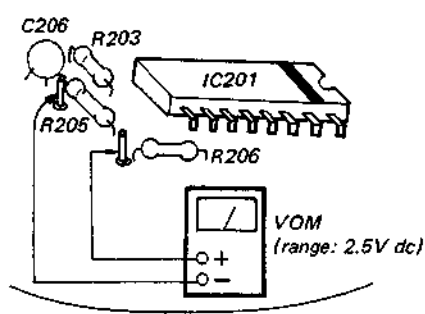
CT403	T401
365kHz	145kHz
Adjust for a maximum reading on VOM ①.	
LW FREQUENCY COVERAGE ADJUSTMENT	

FM SECTION

Setting:

Band Selector: FM

FM Discriminator Alignment 1

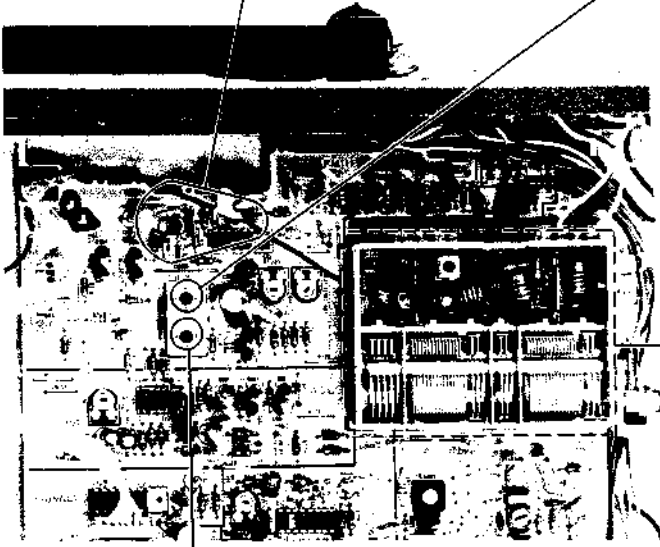


Setting:
STEREO switch: OFF

Procedure:

1. Detune the set.
2. Adjust the orange core (primary-side) of IFT201 for 0V reading on VOM.

Note: When replacing the ceramic filter (CF101-104), perform this alignment. Repeat the secondary-side and primary-side adjustments several times.



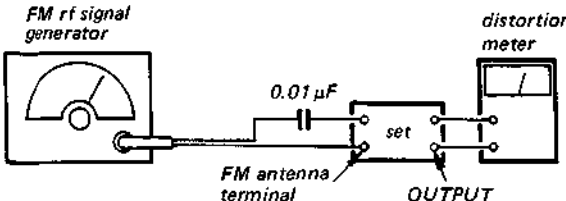
IFT201
(primary side: orange)

The FM front-end is carefully adjusted at the factory and is supplied as one whole block for replacement.

IFT201
(secondary side: black)

FM Discriminator Alignment 2

Setting:
STEREO switch: OFF



Procedure:
Adjust the black core (secondary side) of IFT201 for minimum distortion.

Carrier frequency: 98MHz
Output level: 1mV (60dB)
Modulation: 400Hz, 40kHz deviation (100%)

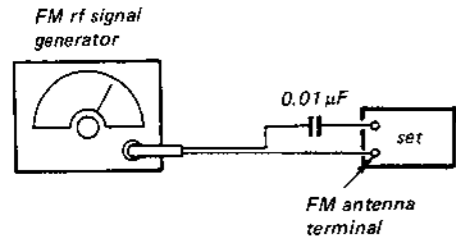
VCO Adjustment

A) Regular Method

Setting:

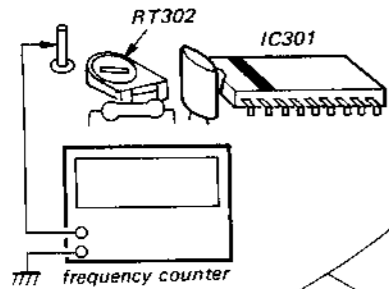
STEREO switch: OFF

Procedure:



Carrier frequency: 98MHz
 Modulation: 400Hz, 40kHz deviation (100%)
 Output level: 1mV (60dB)

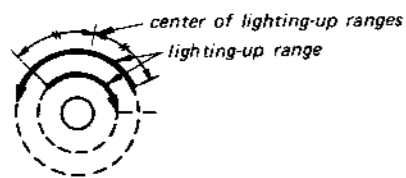
1. Tune the set to 98MHz
2. Adjust RT302 for 76kHz ± 100Hz on the counter.



B) Simple Method

Procedure:

1. Tune the set to the FM stereo broadcasting signal.
2. Turn RT302 clockwise or counterclockwise and memorize the lighting-up range of the stereo lamp.
3. Secure RT302 at the center of the lighting-up range of both turns as shown below.

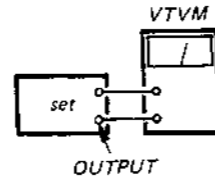


CAL TONE Level Adjustment

Setting:

CAL TONE switch: ON

Procedure:



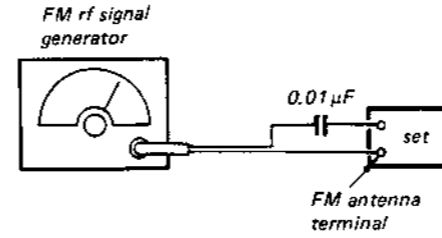
Adjust RT601 for 0.35–0.44V (–6 ±1dB) reading on the VTVM.

Signal Indicator Level Adjustment

Setting:

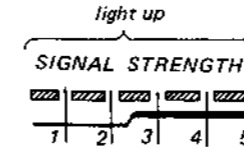
STEREO switch: OFF

Procedure:



Carrier frequency: 98MHz
 Modulation: 400Hz, 40kHz deviation (100%)
 Output level: 316μV (50dB)

Tune the set to 98MHz and adjust RT202 so that all signal elements light up. (See figure below.)

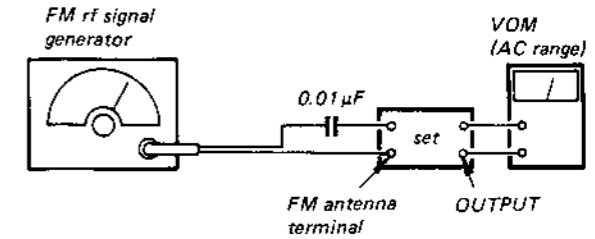


FM Muting Level Adjustment

Setting:

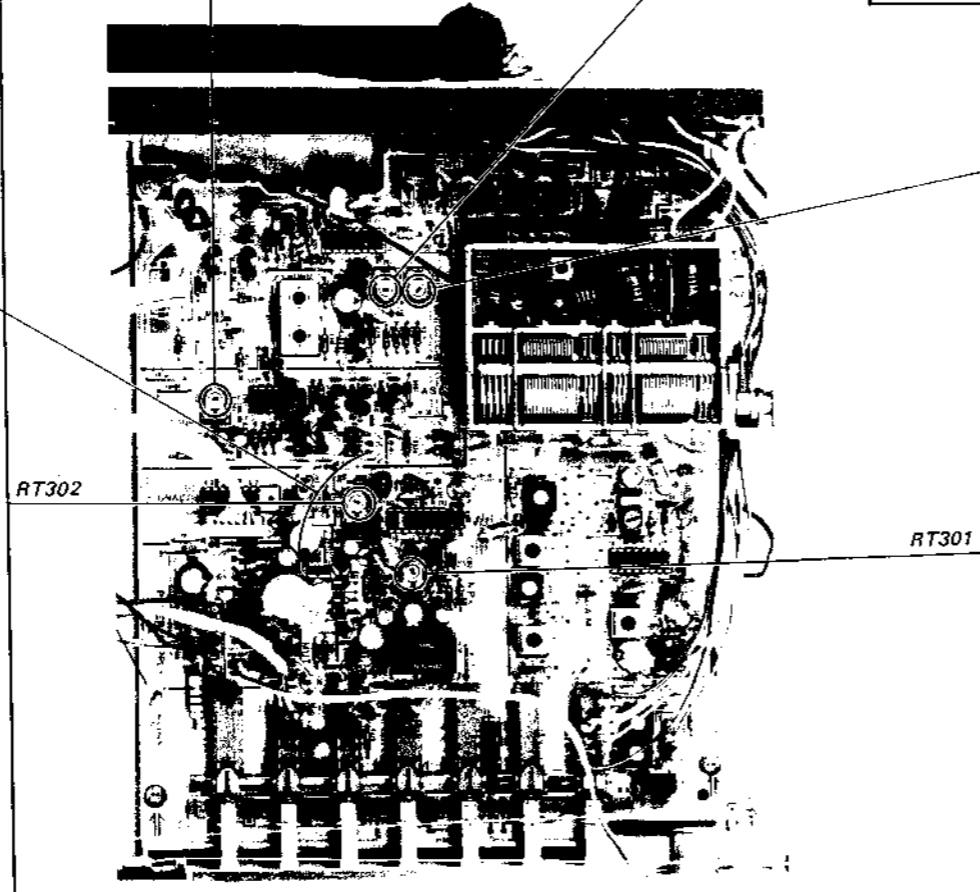
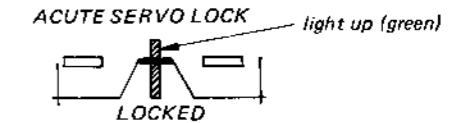
STEREO switch: ON (muting ON)

Procedure:



Carrier frequency: 98MHz
 Modulation: 400Hz, 40kHz deviation (100%)
 Output level: 7.9μV (18dB)

1. Tune the set to 98MHz.
2. Turn RT201 and stop it just when the VOM indication suddenly decreases.
3. Receive a signal stronger than the muting level. Confirm that the ACUTE SERVO LOCK lamp (green) lights up. (See figure below.)

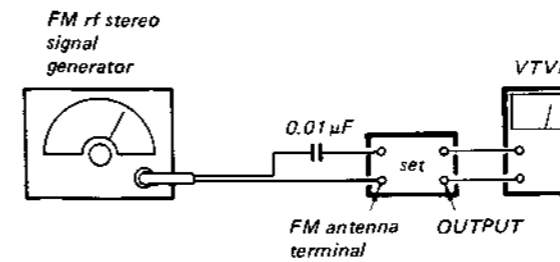


FM Stereo Separation Adjustment

Setting:

STEREO switch: ON (muting ON)

Procedure:



Carrier frequency: 98MHz
 Output level: 1mV (60dB)
 Modulation:
 Audio (400Hz): 16.25kHz deviation (45%)
 Pilot (19kHz): 7.5kHz deviation (10%)
 Sub-channel: 16.25kHz deviation (45%)

FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	(A)
R-CH	L-CH	(B) Adjust RT301 for minimum reading.
R-CH	R-CH	(C)
L-CH	R-CH	(D) Adjust RT301 for minimum reading.

L-CH Stereo separation: (A) – (B)
 R-CH Stereo separation: (C) – (D)

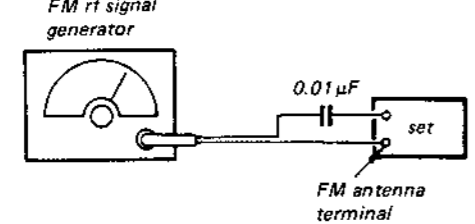
The separations of both channels should be equal.

ing on

Signal Indicator Level Adjustment

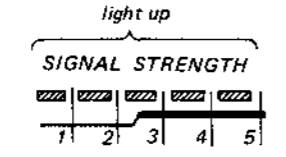
Setting:
STEREO switch: OFF

Procedure:



Carrier frequency: 98MHz
Modulation: 400Hz, 40kHz deviation (100%)
Output level: 316μV (50dB)

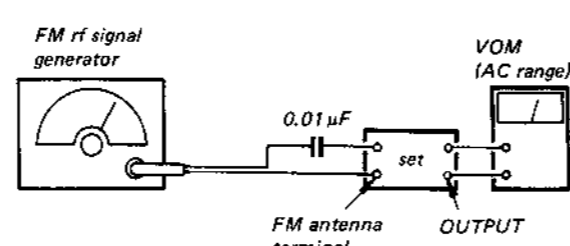
Tune the set to 98MHz and adjust RT202 so that all signal elements light up. (See figure below.)



FM Muting Level Adjustment

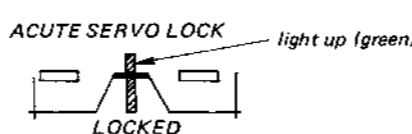
Setting:
STEREO switch: ON (muting ON)

Procedure:



Carrier frequency: 98MHz
Modulation: 400Hz, 40kHz deviation (100%)
Output level: 7.9μV (18dB)

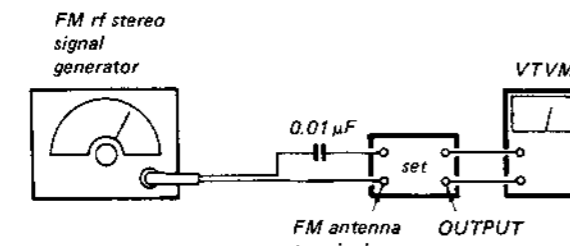
1. Tune the set to 98MHz.
2. Turn RT201 and stop it just when the VOM indication suddenly decreases.
3. Receive a signal stronger than the muting level. Confirm that the ACUTE SERVO LOCK lamp (green) lights up. (See figure below.)



FM Stereo Separation Adjustment

Setting:
STEREO switch: ON (muting ON)

Procedure:



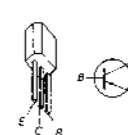
FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	(A)
R-CH	L-CH	(B) Adjust RT301 for minimum reading.
R-CH	R-CH	(C)
L-CH	R-CH	(D) Adjust RT301 for minimum reading.

Carrier frequency: 98MHz
Output level: 1mV (60dB)
Modulation:
Audio (400Hz): 16.25kHz deviation (45%)
Pilot (19kHz): 7.5kHz deviation (10%)
Sub-channel: 16.25kHz deviation (45%)

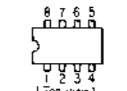
L-CH Stereo separation: (A) - (B)
R-CH Stereo separation: (C) - (D)
The separations of both channels should be equal.

● Semiconductors

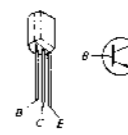
2SA1026
2SA1027R



μPC4558C

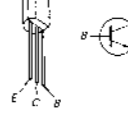


2SC710
2SC710-15

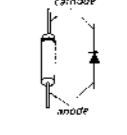


1S188AM
1T22AM
1S1555
10E2
HZ15-1L
1N4002
1N4148

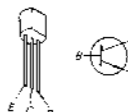
2SC945



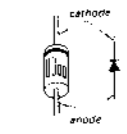
EQB01-15



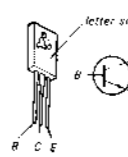
2SC1364
2SC930



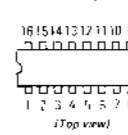
2SA733



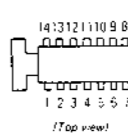
2SD809



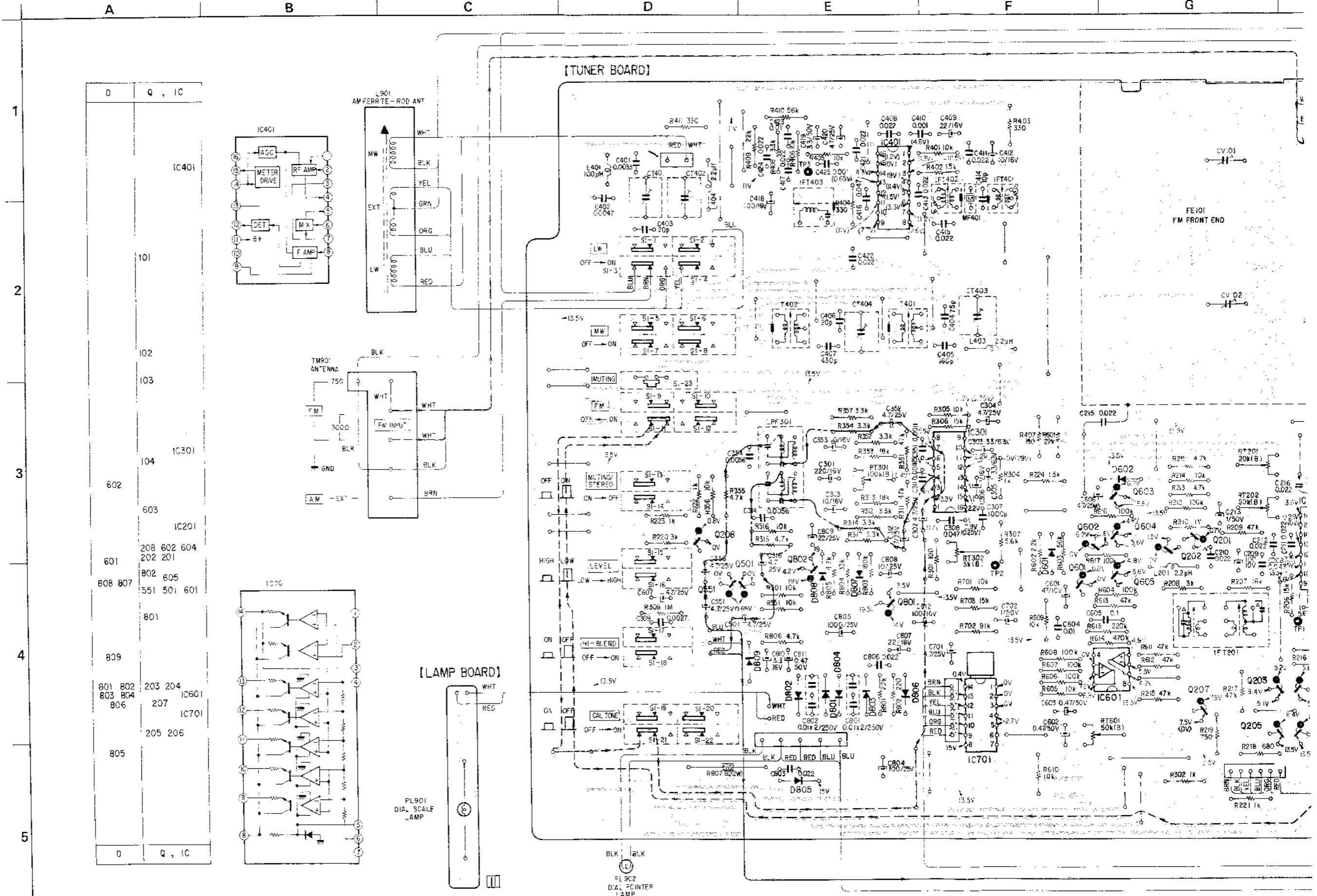
HA11225
HA12016
LA1240



LB1416

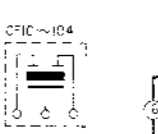
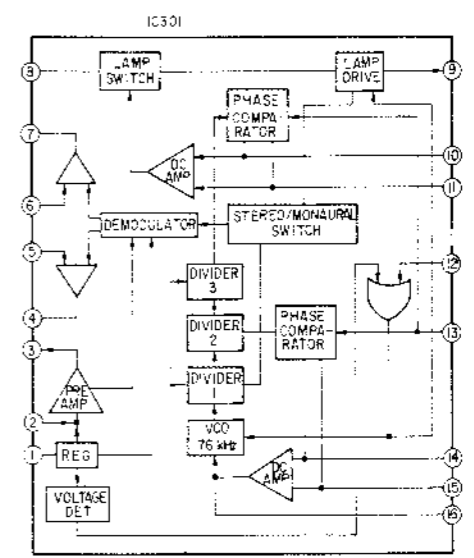
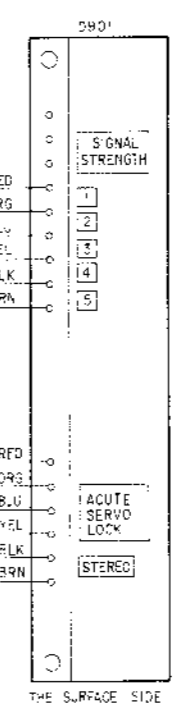
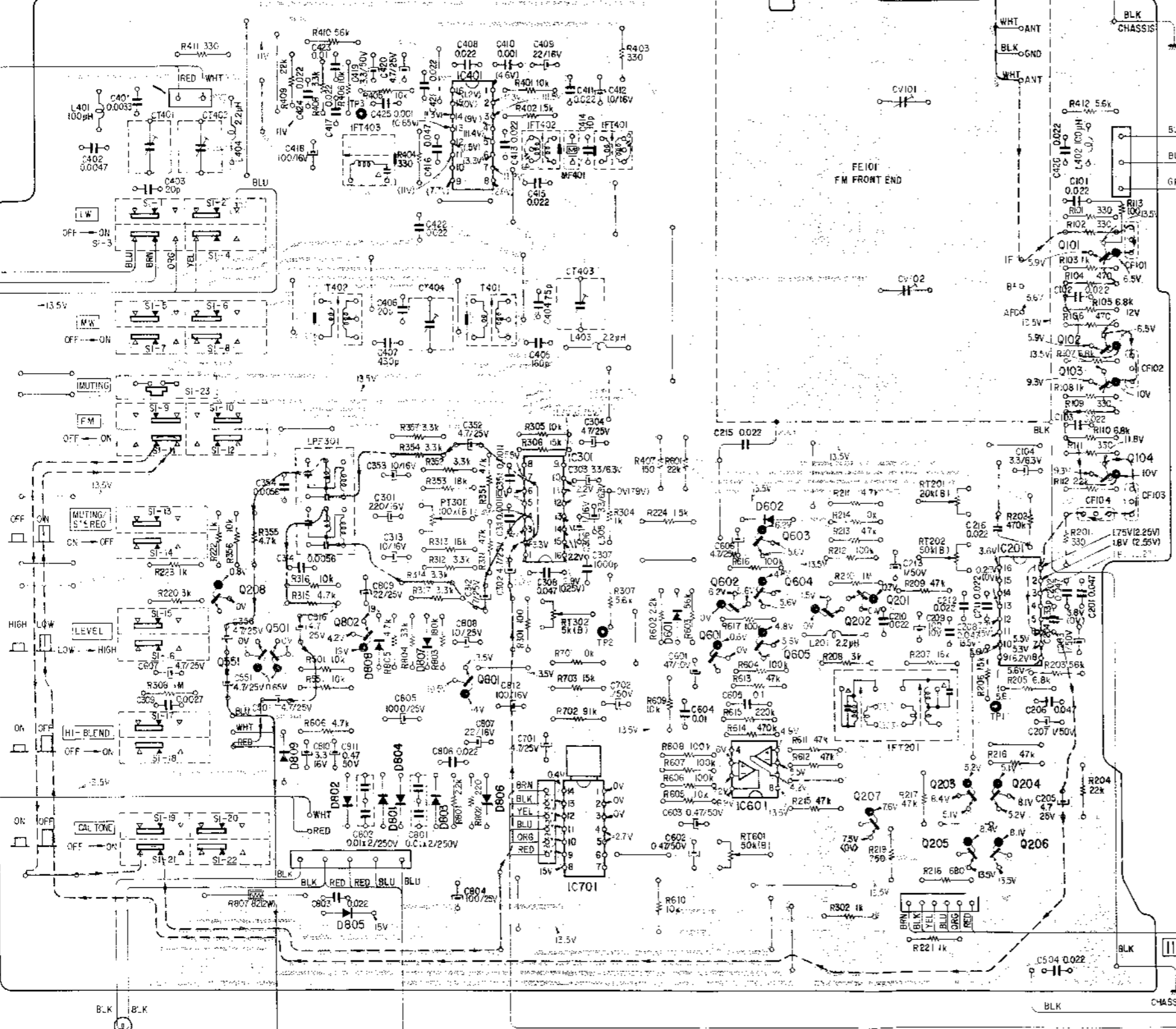


4-1. MOUNTING DIAGRAM
— Conductor Side —

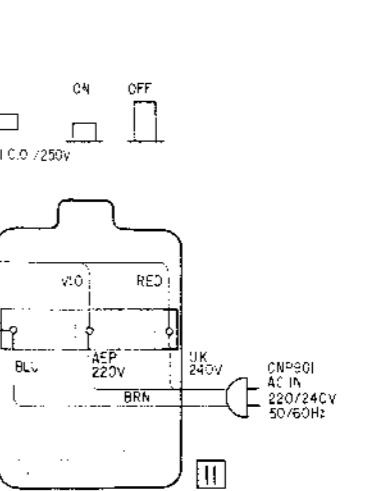
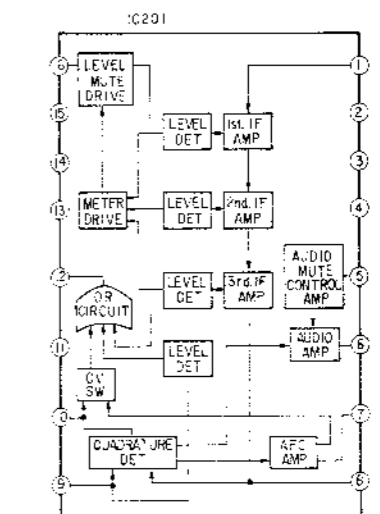
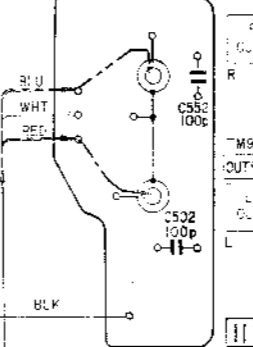


- [Symbol] indicates side identified with part number.
- [Symbol] B-pattern
- ◊ [Symbol] signal path
- ◊ [Symbol] L-CH signal path
- ◊ [Symbol] R-CH signal path

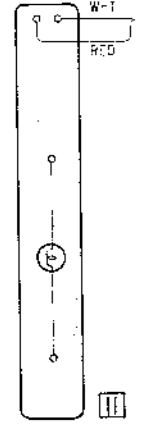
[TUNER BOARD]



[OUTPUT BOARD]

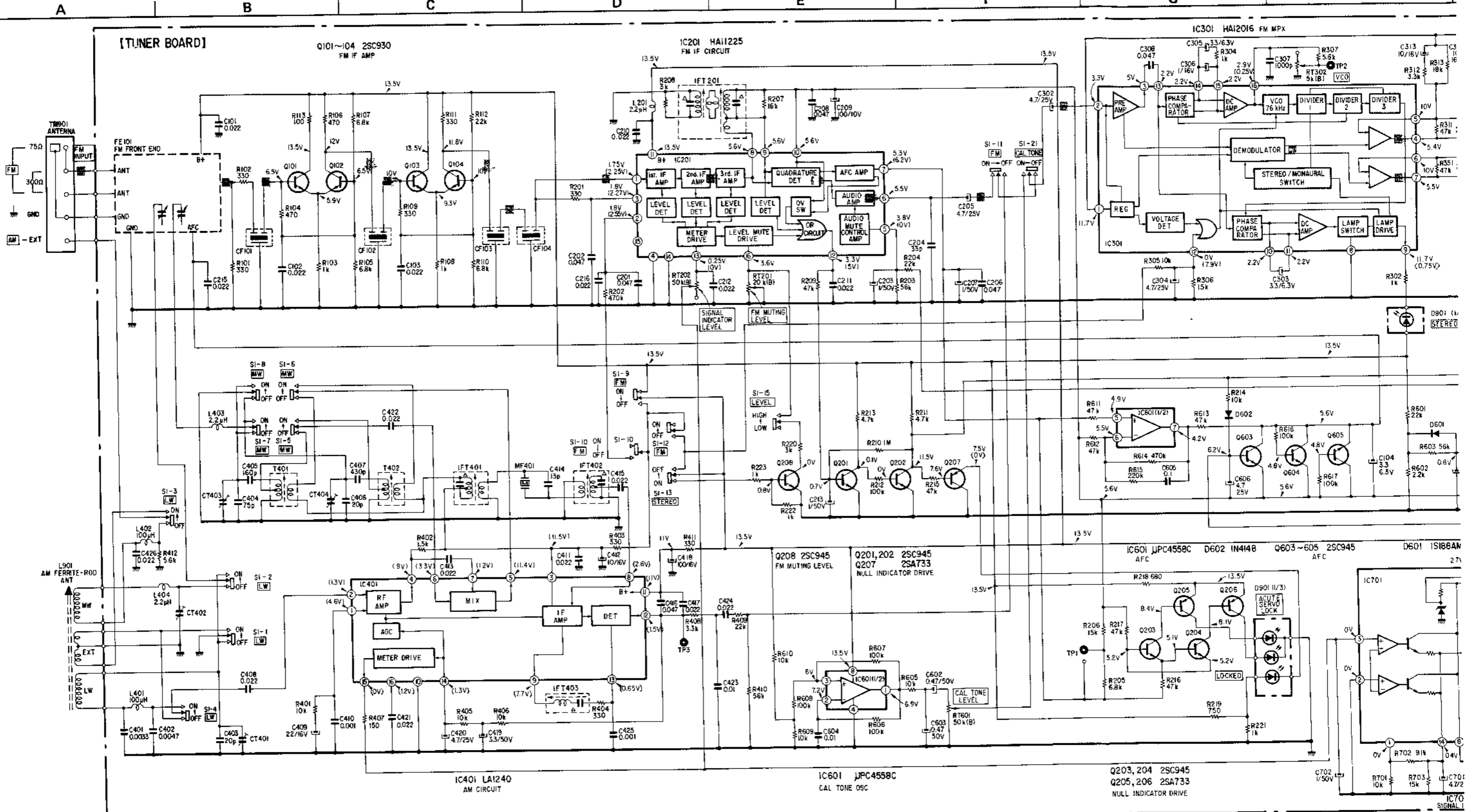


AMP BOARD



ST-A35L ST-A35L

4.2. SCHEMATIC DIAGRAM



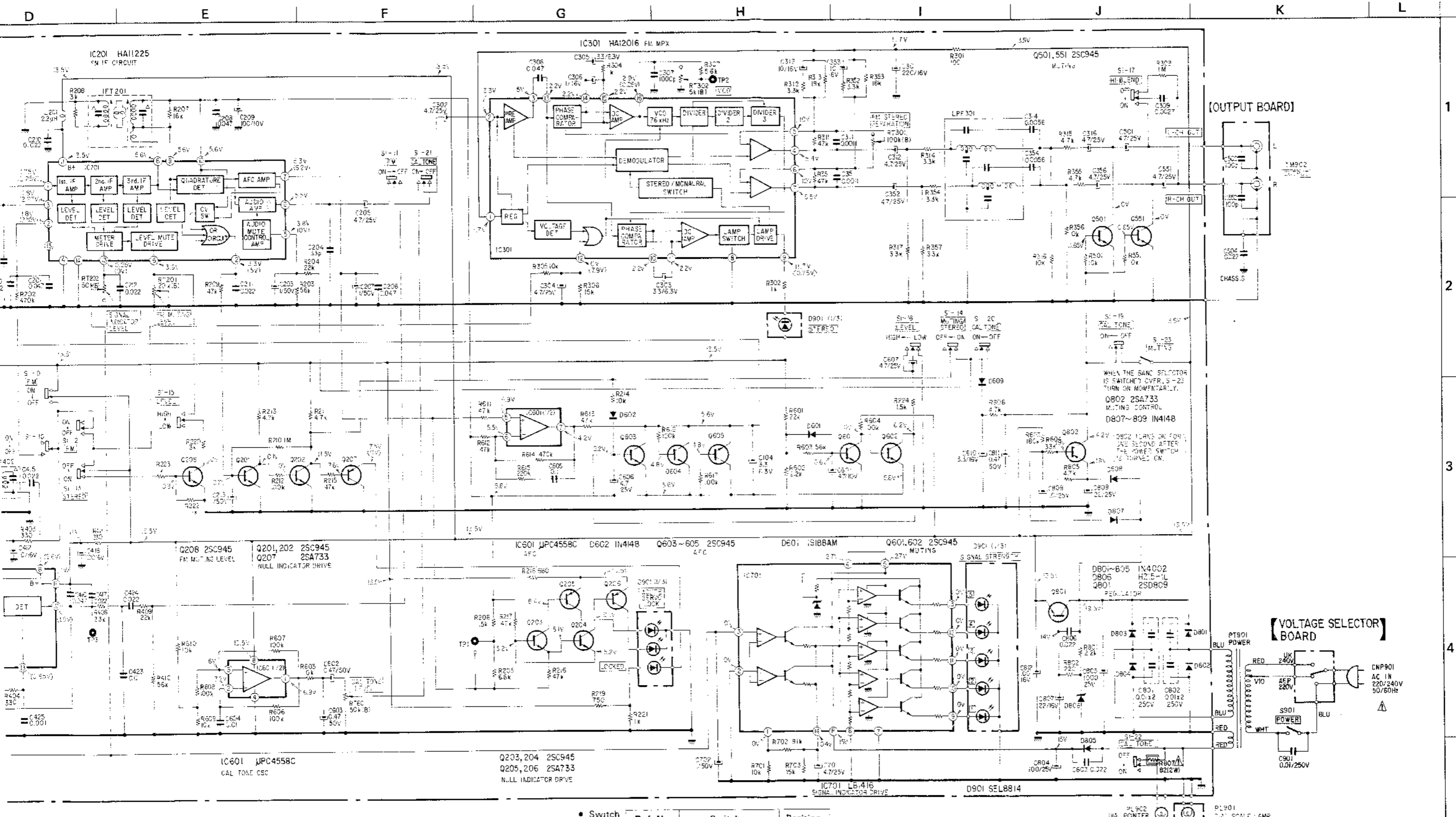
Note:

- All capacitors are in μF unless otherwise noted. μF : μF 50VV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, $\frac{1}{2}\text{W}$ unless otherwise noted. $\text{k}\Omega$: 1000 Ω , $\text{M}\Omega$: 1000 $\text{k}\Omega$
- : signal path

- : nonflammable resistor.
- Δ : internal component.
- : panel designation.
- : adjustment for repair.
- : B+ bus.

- Readings are taken under no-signal (detuned) conditions with a VOM (20k Ω /V).
- no mark: FM
- () : AM
- < > : FM STEREO with signal input

Ref. No.	Switch	Position
S1	LW	OFF
	MW	OFF
	FM	ON
	MUTING/STEREO	ON
	LEVEL	LOW
S901	HI-BLEND	OFF
	CAL TONE	OFF
	POWER	OFF



se noted. pF : μ F
 Δ for electrolytics
 otherwise noted.

- : nonflammable resistor.
- : internal component.
- : panel designation.
- : adjustment for repair.
- : B+ bus.

• Readings are taken under no-signal (detuned) conditions with a VOM (20k Ω /V).
 no mark: FM
 () : AM
 < > : FM STEREO with signal input

• Switch

Ref. No.	Switch	Position
S1	LW	OFF
	MW	OFF
	FM	ON
	MUTING/STEREO	ON
	LEVEL	LOW
S901	HI-BLEND	OFF
	CAL TONE	OFF
	POWER	OFF

Note: The components identified by shading and mark are critical for safety. Replace only with part number specified.

1

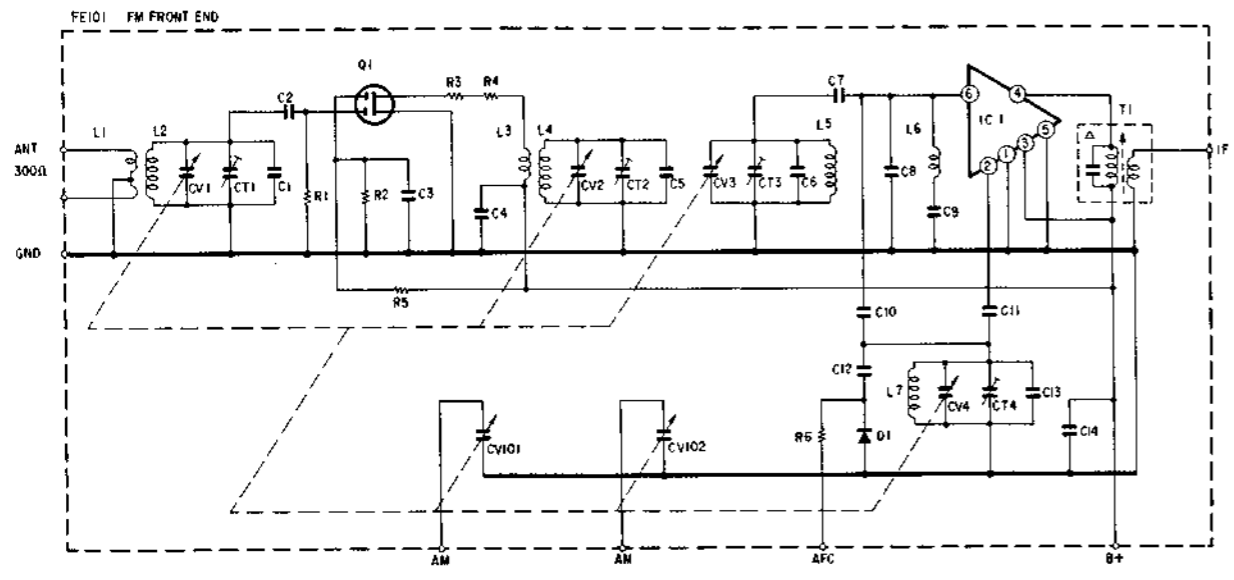
2

3

4

5

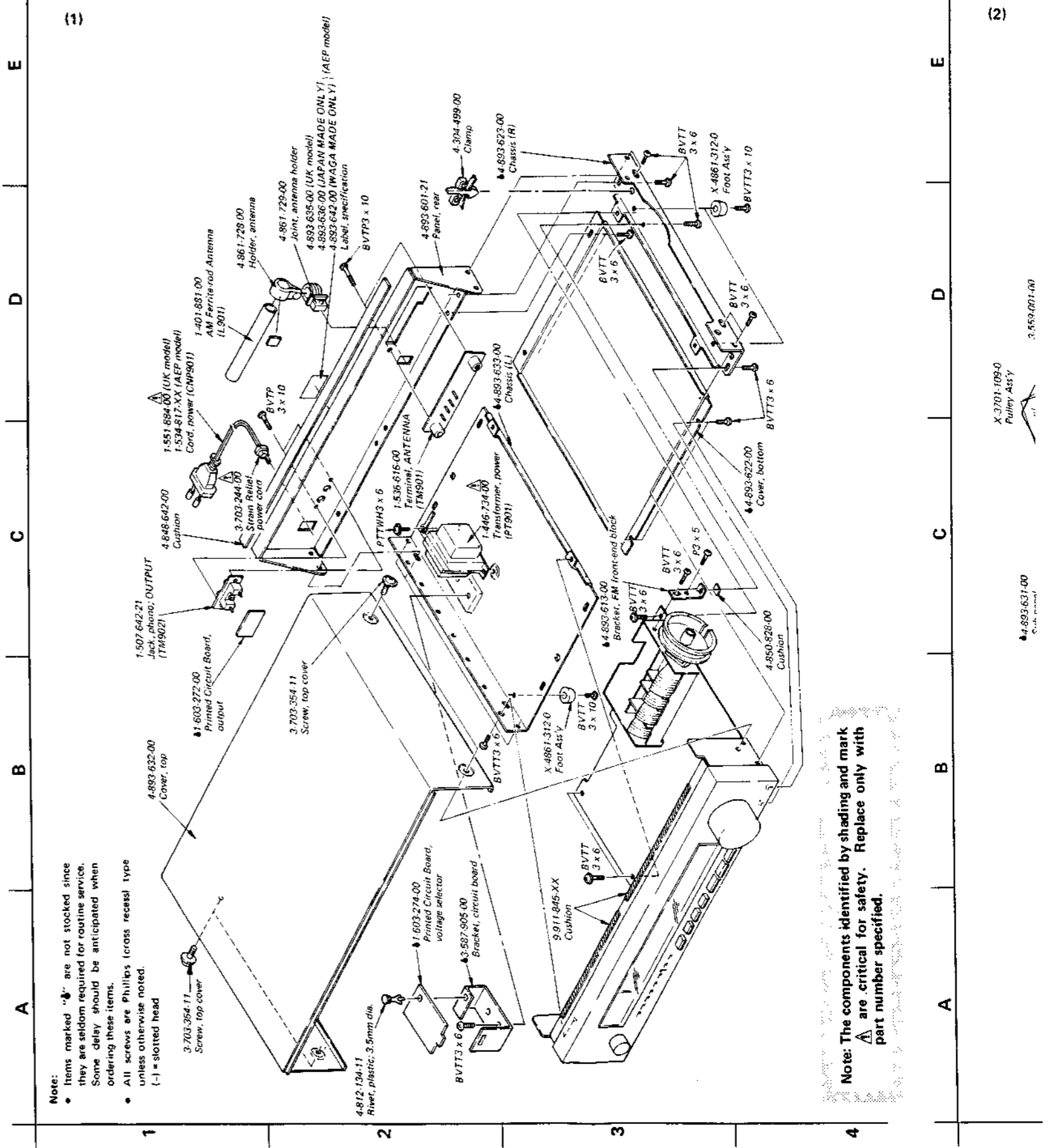
4-3. SCHEMATIC DIAGRAM - FM Front-end Section -



1/4 WATT CARBON RESISTORS

Table listing 1/4 watt carbon resistor part numbers and values. Columns include Part No., value (e.g., 1.0k, 10k, 100k), and other specifications.

SECTION 5 EXPLODED VIEWS



Note: Items marked with a circled 'A' are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items. All screws are Phillips (cross recess) type unless otherwise noted. (-) = slotted head

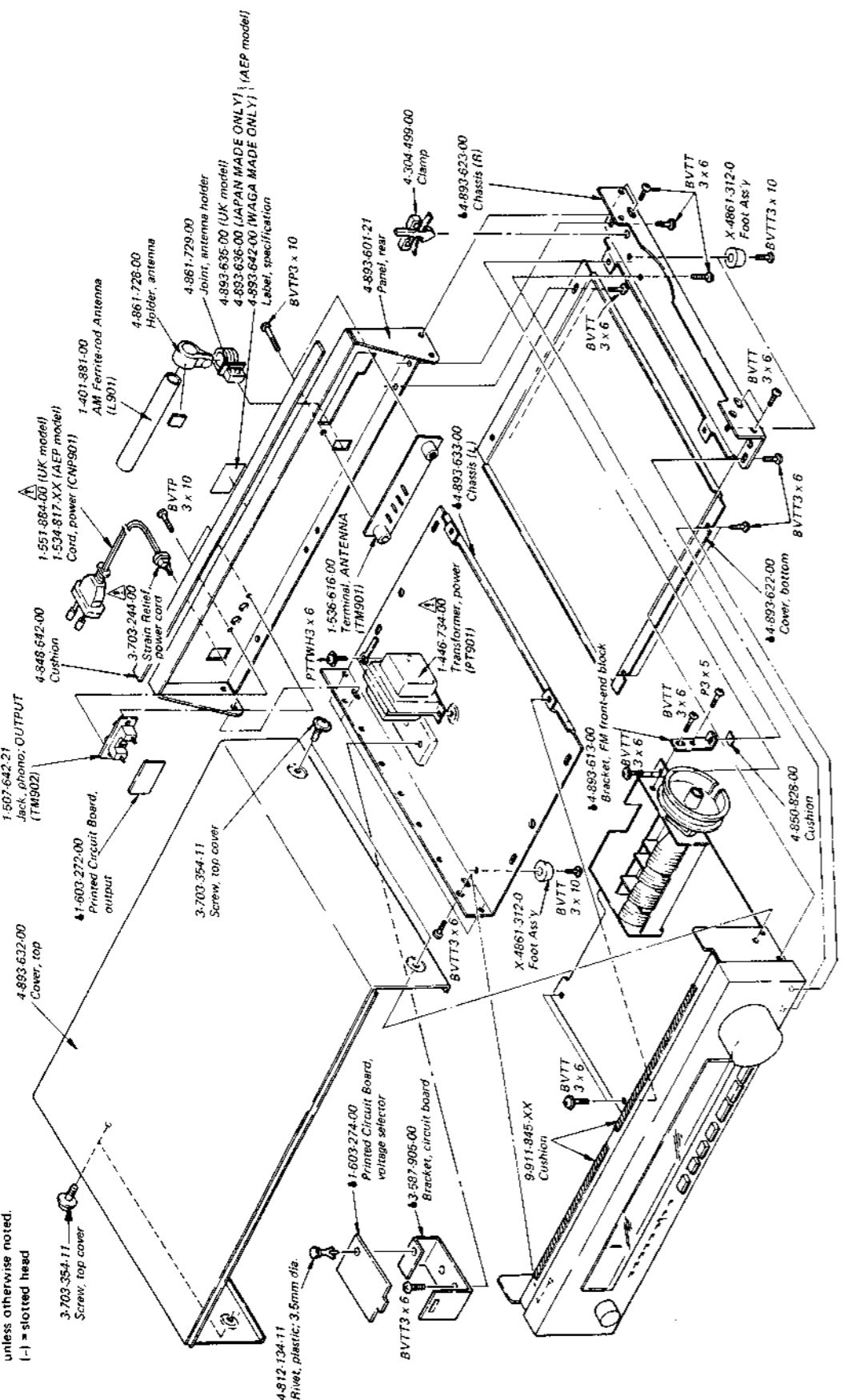
Note: The components identified by shading and mark A are critical for safety. Replace only with part number specified.

X-3701-109-0 Pulley Assy 3-559-001-00 4-893-631-00 Cushion

SECTION 5
EXPLODED VIEWS

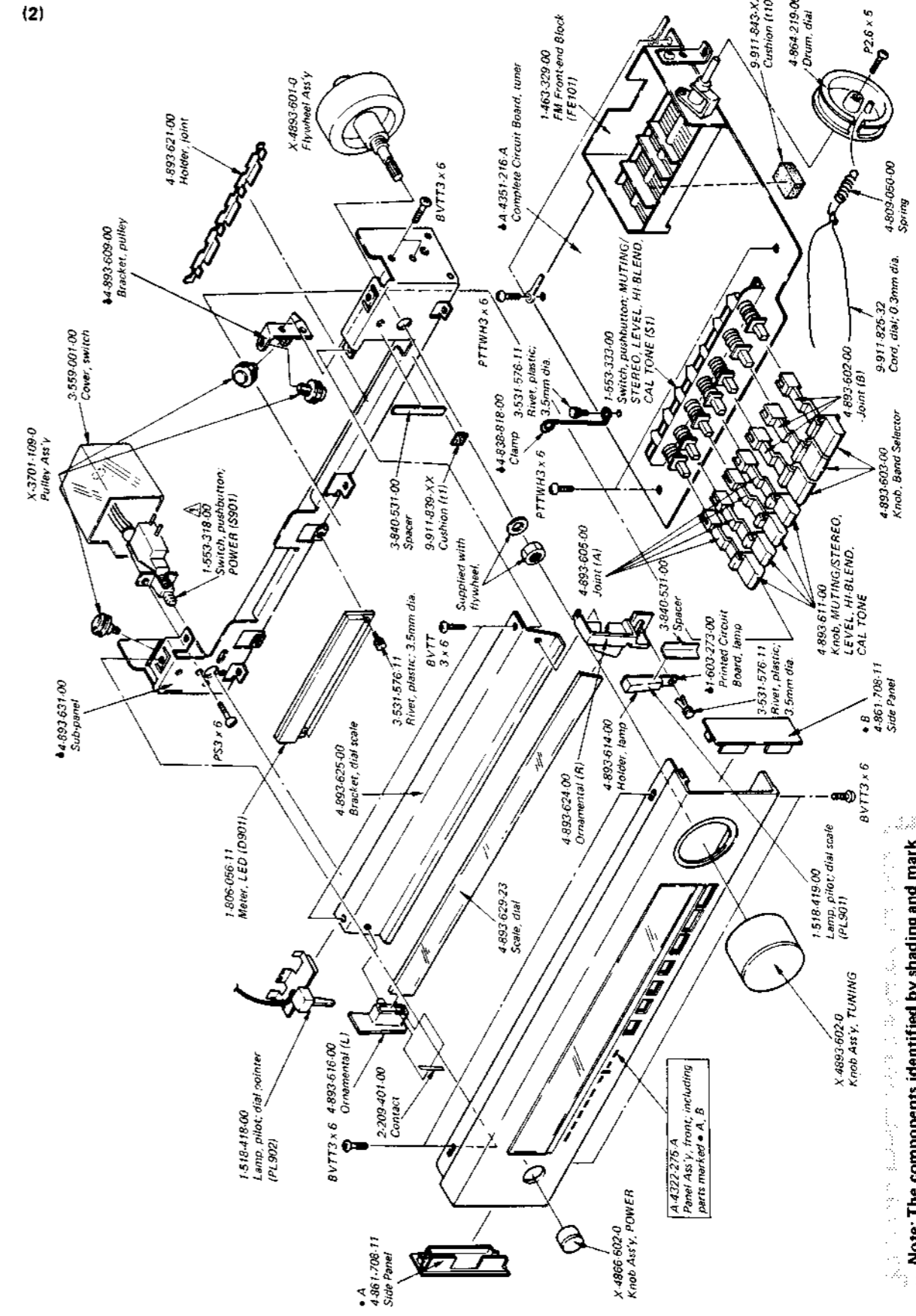
ST-A35L ST-A35L

Note:
• Items marked "A" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
• All screws are Phillips (cross recess) type unless otherwise noted.
(-) = slotted head



Note: The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

Note:
• Items marked "A" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
• All screws are Phillips (cross recess) type unless otherwise noted.
(-) = slotted head



Note: The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

SECTION 6

ELECTRICAL PARTS LIST

Ref. No. Part No. Description

SEMICONDUCTORS

Transistors

Q101-104	8-729-803-04	2SC930
Q201-204	8-729-663-47	2SC1364
Q205-207	8-729-612-77	2SA1027R
Q208	8-729-663-47	2SC1364
Q501, 551 Q601-605	8-729-663-47	2SC1364
Q801	8-729-984-70	2SD809
Q802	8-729-612-77	2SA1027R

ICs

IC201	1-806-066-11	HA11225
IC301	8-759-320-16	HA12016
IC401	8-759-812-40	LA1240
IC601	8-759-145-58	μPC4558C
IC701	8-759-814-16	LB1416

Diodes

D601	8-719-422-21	1T22AM
D602	8-719-815-55	1S1555
D801-805	8-719-200-02	10E2
D806	8-719-931-15	EQB01-15
D807-809	8-719-815-55	1S1555
D901	1-806-056-11	SEL88-14

CAPACITORS

All capacitors are in μF. Common capacitors are omitted. Refer to the lists on pages 23 and 24 for their part numbers.

C801, 802	1-102-394-00	0.01+0.01	250V	ceramic
C901	△1-130-455-00	0.01	250V	film
CT401-403	1-141-147-XX			Trimmer
CT404	1-141-179-12			Trimmer

- Items marked "△" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Ref. No. Part No. Description

RESISTORS

All resistors are in ohms. Common ¼W carbon resistors are omitted. Refer to the list on page 18 for their part numbers.

R807	△1-206-485-00	82	2W	metal oxide (nonflammable)
RT201	1-226-237-00	20k-B, adjustable;		FM muting level
RT202	1-226-238-00	50k-B, adjustable;		Signal Indicator level
RT301	1-226-239-00	100k-B, adjustable;		FM Stereo Separation
RT302	1-226-235-00	5k-B, adjustable;		VCO
RT601	1-226-238-00	50k-B, adjustable;		CAL TONE level

MISCELLANEOUS

CF101-104	1-527-344-91	Filter, ceramic
CNP901	{ △1-534-817-XX △1-551-884-00	Cord, power (AEP model) Cord, power (UK model)
FE101	1-463-329-00	FM Front-end Block
IFT201	1-404-275-00	FM Discriminator
IFT401	1-409-323-00	AM IFT
IFT402	1-409-324-00	AM IFT
IFT403	1-404-220-00	AM detector
L201	1-408-109-00	2.2μH, microinductor
• L401, 402	1-407-750-00	100μH, microinductor
L403, 404	1-408-109-00	2.2μH, microinductor
L901	1-401-881-00	Antenna, AM ferrite-rod
LPF301	1-231-574-00	Filter, low-pass
MF401	1-527-538-00	Filter, mechanical; AM
PL901	1-518-419-00	Lamp, pilot; dial scale
PL902	1-518-418-00	Lamp, pilot; dial pointer
PT901	△1-446-734-00	Transformer, power
S1	1-553-333-00	Switch, pushbutton; Band Selector, HI-BLEND, CAL TONE, LEVEL, MUTING/STEREO
S901	△1-553-318-00	Switch, pushbutton; POWER
T401	1-405-910-00	Coil, LW OSC
T402	1-405-857-00	Coil, MW OSC
TM901	1-536-616-00	Terminal, ANTENNA
TM902	1-507-642-21	Jack, phono; 2P; OUTPUT
•	1-561-442-00	Socket, 6P

Note: The components identified by shading and mark △ are critical for safety. Replace only with part number specified.

Part No. Description

COMPLETE CIRCUIT BOARD

◆ A-4351-216-A Tuner

PRINTED CIRCUIT BOARDS

◆ 1-603-272-00 Output
◆ 1-603-273-00 Lamp
◆ 1-603-274-00 Voltage Selector

ACCESSORIES AND PACKING MATERIALS

Part No. Description

1-501-161-00 Antenna, ribbon
1-551-918-00 Cord, connection
3-701-630-00 Bag, plastic
3-783-192-11 Manual, instruction
4-863-543-00 Cushion

4-866-723-00 Sheet
4-893-637-00 Carton (UK model)
4-893-638-00 Carton (KOREA MADE ONLY)
(AEP model)
4-893-645-00 Carton (WEGA MADE ONLY)
(AEP model)

ELECTROLYTIC CAPACITORS

CAP. (μF)	RATING → Use the high voltage rated one.					
	6.3 VOLT.	10 VOLT.	16 VOLT.	25 VOLT.	35 VOLT.	50 VOLT.
	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.
0.47					→	1-121-726-00
1.0					→	1-121-391-00
2.2					→	1-121-450-00
3.3	→		→	1-121-392-00	→	1-121-393-00
4.7	→		→	1-121-395-00	→	1-121-396-00
10	→		1-121-651-00	1-121-398-00	→	1-121-738-00
22	→		1-121-479-00	1-121-480-00	1-121-662-00	1-121-152-00
33	→		1-121-403-00	1-121-404-00	1-121-652-00	1-121-405-00
47	→	1-121-352-00	1-121-409-00	1-121-410-00	1-121-653-00	1-121-411-00
100	→	1-121-414-00	1-121-415-00	1-121-416-00	1-121-357-00	1-121-417-00
220	1-121-415-00	1-121-420-00	1-121-421-00	1-121-422-00	1-121-261-00	1-121-423-00
330	1-121-751-00	1-121-805-00	1-121-521-00	1-121-654-00	1-121-655-00	1-121-656-00
470	1-121-424-00	1-121-425-00	1-121-426-00	1-121-733-00	1-121-361-00	1-121-810-00
1000		1-121-736-00	1-121-245-00	1-121-657-00	1-121-388-00	1-123-061-00
2200	1-121-658-00	1-121-659-00	1-121-660-00	1-123-067-00	1-121-984-00	
3300	1-121-661-00	1-123-075-00	1-123-071-00			

CAP. (μF)	100 VOLT.	160 VOLT.	250 VOLT.	350 VOLT.
	PART No.	PART No.	PART No.	PART No.
0.47	-	-	-	-
1.0	1-123-249-00	1-123-252-00	1-123-003-00	1-121-168-00
2.2	1-123-250-00	1-123-026-00	-	1-123-028-00
3.3	1-121-995-00	-	1-123-004-00	1-123-006-00
4.7	1-123-255-00	1-121-246-00	1-121-759-00	1-123-007-00
10	1-121-126-00	1-121-999-00	1-123-254-00	1-123-008-00
22	1-121-996-00	1-123-253-00	1-123-005-00	1-123-022-00
33	1-121-997-00	1-121-757-00	-	-
47	1-123-251-00	1-121-919-00	-	-
100	1-123-084-00	-	-	-

CERAMIC CAPACITORS

CAP. (pF)	RATING						
	50 VOLT.	CAP. (pF)	50 VOLT.	CAP. (pF)	50 VOLT.	CAP. (μF)	
	PART No.		PART No.		PART No.		
0.5	1-101-837-00	22	1-102-959-00	150	1-101-361-00	0.001	1-102-074-00
0.75	1-101-586-00	24	1-102-960-00	160	1-101-367-00	0.0012	1-102-118-00
1.0	1-102-934-00	27	1-102-961-00	180	1-102-976-00	0.0015	1-102-119-00
1.5	1-101-576-00	30	1-102-962-00	200	1-102-977-00	0.0018	1-102-120-00
2.0	1-102-935-00	33	1-102-963-00	220	1-102-978-00	0.0022	1-102-121-00
3	1-102-936-00	36	1-102-964-00	240	1-102-979-00	0.0027	1-102-122-00
4	1-102-937-00	39	1-102-965-00	270	1-102-980-00	0.0033	1-102-123-00
5	1-102-942-00	43	1-102-966-00	300	1-102-981-00	0.0039	1-102-124-00
6	1-102-943-00	47	1-101-880-00	330	1-102-820-00	0.0047	1-102-125-00
7	1-102-944-00	51	1-101-882-00	360	1-102-821-00	0.0056	1-102-126-00
8	1-102-945-00	56	1-101-884-00	390	1-102-822-00	0.0068	1-102-127-00
9	1-102-946-00	62	1-101-886-00	430	1-102-823-00	0.0082	1-102-128-00
10	1-102-947-00	68	1-101-888-00	470	1-102-824-00	0.01	1-102-129-00
11	1-102-948-00	75	1-101-890-00	510	1-101-059-00	0.022	1-101-005-00
12	1-102-949-00	82	1-102-971-00	560	1-102-115-00	0.047	1-101-006-00
13	1-102-950-00	91	1-102-972-00	680	1-102-116-00		
15	1-102-951-00	100	1-102-973-00	820	1-102-117-00		
16	1-102-952-00	110	1-102-815-00				
18	1-102-953-00	120	1-102-816-00				
20	1-102-958-00	130	1-101-081-00				

0.001μF = 1,000pF

CERAMIC (SEMICONDUCTOR) CAPACITORS

CAP. (μF)	RATING → Use the high voltage rated one.				
	25 VOLT.	50 VOLT.	CAP. (μF)	25 VOLT.	50 VOLT.
	PART No.	PART No.		PART No.	PART No.
0.001	→	1-161-039-00	0.018	1-161-016-00	1-161-054-00
0.0012	→	1-161-040-00	0.022	1-161-017-00	1-161-055-00
0.0015		1-161-041-00	0.027	1-161-018-00	1-161-056-00
0.0018		1-161-042-00	0.033	1-161-019-00	1-161-057-00
0.0022		1-161-043-00	0.039	1-161-010-00	1-161-058-00
0.0027	→	1-161-044-00	0.047	1-161-021-00	1-161-059-00
0.0033	→	1-161-045-00	0.056	→	1-161-060-00
0.0039	→	1-161-046-00	0.068	→	1-161-061-00
0.0047	→	1-161-047-00	0.082	1-161-024-00	1-161-062-00
0.0056	→	1-161-048-00	0.1	1-161-025-00	1-161-063-00
0.0068	→	1-161-049-00			
0.0082	1-161-012-00	1-161-050-00			
0.01	1-161-013-00	1-161-051-00			
0.012	→	1-161-052-00			
0.015	1-161-015-00	1-161-053-00			

MYLAR CAPACITORS

CAP. (μF)	RATING																		
	50 VOLT.			100 VOLT.			200 VOLT.			CAP. (μF)	50 VOLT.			100 VOLT.			200 VOLT.		
	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.		PART No.	PART No.	PART No.	PART No.	PART No.	PART No.			
0.001	1-108-227-00	1-108-365-00	1-108-409-00	0.01	1-108-239-00	1-108-377-00	1-108-421-00	0.1	1-108-251-00	1-108-389-00	1-108-433-00								
0.0012	1-108-351-00	1-108-366-00	1-108-410-00	0.012	1-108-357-00	1-108-378-00	1-108-422-00	0.12	1-108-363-00	1-108-390-00	1-108-434-00								
0.0015	1-108-228-00	1-108-367-00	1-108-411-00	0.015	1-108-240-00	1-108-379-00	1-108-423-00	0.15	1-108-252-00	1-108-391-00	1-108-435-00								
0.0018	1-108-352-00	1-108-368-00	1-108-412-00	0.018	1-108-358-00	1-108-380-00	1-108-424-00	0.18	1-108-364-00	1-108-392-00	1-108-436-00								
0.0022	1-108-230-00	1-108-369-00	1-108-413-00	0.022	1-108-242-00	1-108-381-00	1-108-425-00	0.22	1-108-254-00	1-108-393-00	1-108-437-00								
0.0027	1-108-353-00	1-108-370-00	1-108-414-00	0.027	1-108-359-00	1-108-382-00	1-108-426-00	0.27	1-108-854-00	-	-								
0.0033	1-108-232-00	1-108-371-00	1-108-415-00	0.033	1-108-244-00	1-108-383-00	1-108-427-00	0.33	1-108-855-00	-	-								
0.0039	1-108-354-00	1-108-372-00	1-108-416-00	0.039	1-108-360-00	1-108-384-00	1-108-428-00	0.39	1-108-856-00	-	-								
0.0047	1-108-234-00	1-108-373-00	1-108-417-00	0.047	1-108-246-00	1-108-385-00	1-108-429-00	0.47	1-108-857-00	-	-								
0.0056	1-108-355-00	1-108-374-00	1-108-418-00	0.056	1-108-361-00	1-108-386-00	1-108-430-00												
0.0068	1-108-237-00	1-108-375-00	1-108-419-00	0.068	1-108-249-00	1-108-387-00	1-108-431-00												
0.0082	1-108-356-00	1-108-376-00	1-108-420-00	0.082	1-108-362-00	1-108-388-00	1-108-432-00												



TANTALUM CAPACITORS

CAP. (μF)	RATING						
	→ Use the high voltage rated one.						
	3.15 VOLT.	6.3 VOLT.	10 VOLT.	16 VOLT.	20 VOLT.	25 VOLT.	35 VOLT.
PART No.	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.
0.01					→	→	1-131-396-00
0.015					→	→	1-131-397-00
0.022					→	→	1-131-398-00
0.033					→	→	1-131-399-00
0.047					→	→	1-131-400-00
0.068					→	→	1-131-401-00
0.1					→	→	1-131-402-00
0.15					→	→	1-131-403-00
0.22					→	→	1-131-404-00
0.33					→	1-131-409-00	1-131-405-00
0.47	-	-	-	-	1-131-412-00	→	1-131-406-00
0.68	-	-	-	1-131-415-00	→	1-131-410-00	1-131-407-00
1.0	-	-	1-131-418-00	-	1-131-413-00	→	1-131-408-00
1.5	-	1-131-421-00	-	1-131-416-00	→	1-131-411-00	1-131-348-00
2.2	1-131-424-00	-	1-131-419-00	-	1-131-414-00	→	1-131-349-00
3.3	-	1-131-422-00	-	1-131-417-00	1-131-362-00	1-131-356-00	1-131-350-00
4.7	1-131-425-00	-	1-131-420-00	1-131-369-00	1-131-363-00	1-131-357-00	1-131-351-00
6.8	-	1-131-423-00	1-131-376-00	1-131-370-00	1-131-364-00	1-131-358-00	1-131-352-00
10	1-131-426-00	1-131-383-00	1-131-377-00	1-131-371-00	1-131-365-00	1-131-359-00	1-131-353-00
15	1-131-390-00	1-131-384-00	1-131-378-00	1-131-372-00	1-131-366-00	1-131-360-00	-
22	1-131-391-00	1-131-385-00	1-131-379-00	1-131-373-00	1-131-367-00		
33	1-131-392-00	1-131-386-00	1-131-380-00	1-131-374-00			
47	1-131-393-00	1-131-387-00	1-131-381-00	-			
68	1-131-394-00	1-131-388-00	-	-			
100	1-131-395-00	-	-	-			



TANTALUM CAPACITORS

CAP. (μF)	RATING					
	3 VOLT.	6.3 VOLT.	10 VOLT.	16 VOLT.	20 VOLT.	35 VOLT.
	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.
0.033						1-131-273-00
0.047						1-131-274-00
0.068						1-131-275-00
0.1						1-131-276-00
0.15						1-131-277-00
0.22					1-131-262-00	1-131-278-00
0.33					1-131-263-00	1-131-279-00
0.47			1-131-169-00		1-131-264-00	1-131-280-00
0.68				1-131-258-00	1-131-265-00	1-131-281-00
1.0			1-131-254-00		1-131-266-00	1-131-282-00
1.5		1-131-250-00			1-131-267-00	1-131-283-00
2.2				1-131-259-00	1-131-268-00	1-131-284-00
3.3			1-131-255-00		1-131-269-00	-
4.7		1-131-251-00	1-131-171-00		1-131-270-00	-
6.8				1-131-260-00	1-131-271-00	-
10			1-131-256-00		1-131-272-00	-
15		1-131-252-00		1-131-261-00		-
22			1-131-257-00			-
33	1-131-176-00	1-131-253-00	1-131-173-00			-
47	1-131-288-00	1-131-174-00				-
100	1-131-177-00					-

Sony Corporation