

JVC

SERVICEMANUAL

**MODEL
JR-S100**

STEREO RECEIVER



No. 2370
MAR. 1976

1. Specifications

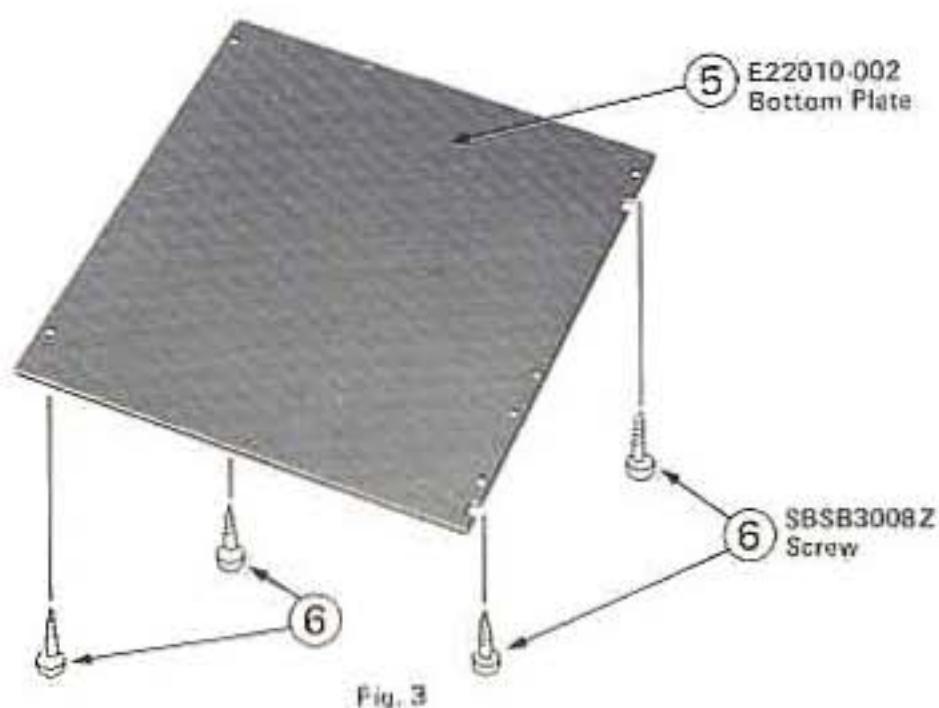
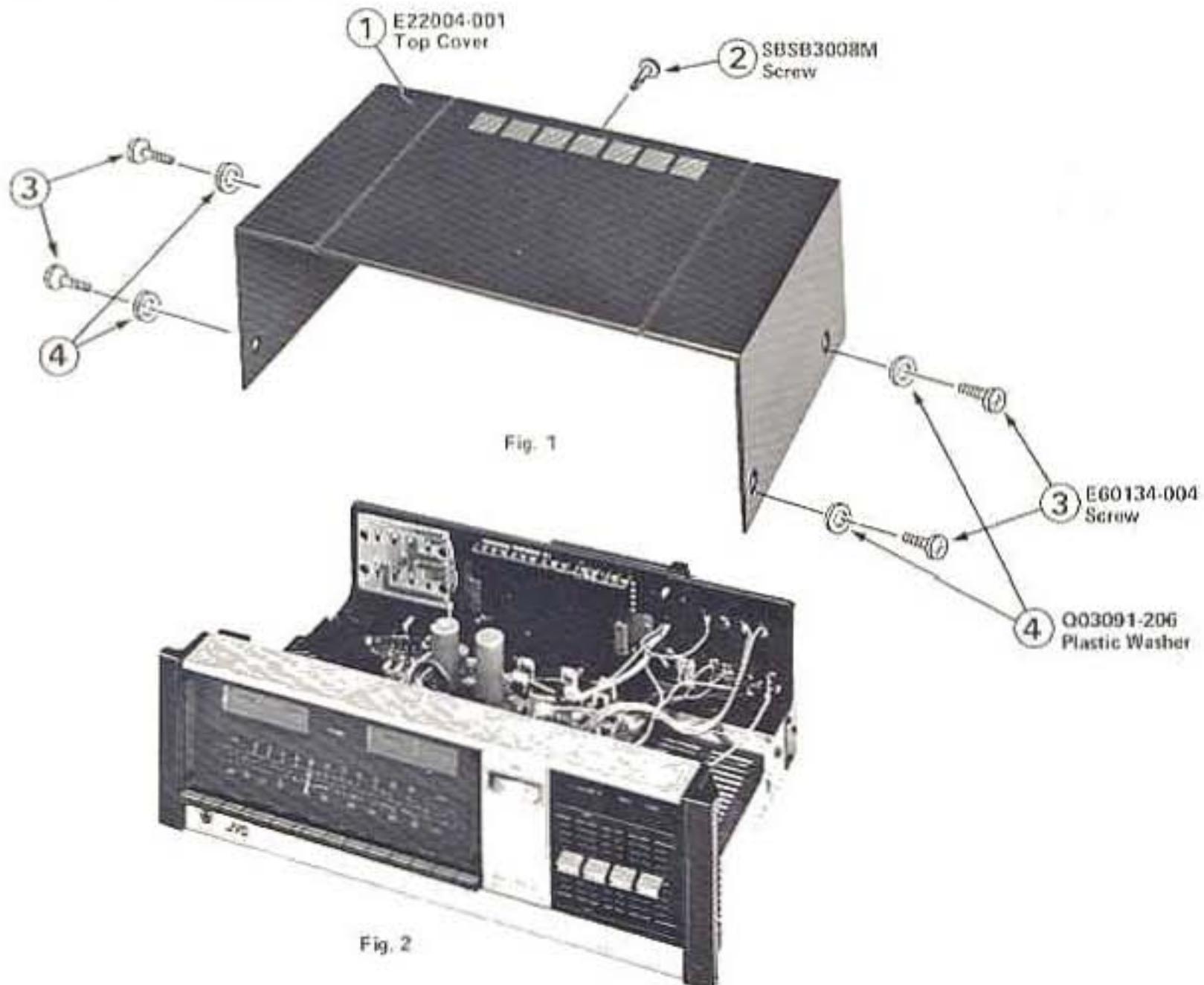
Dimensions	: 6-5/16"(H) x 19-11/16"(W) x 13-3/16"(D) (16cm x 50cm x 33.5cm)
Weight	: 16.5 lbs. (7.5kg)
Amplifier Section	
RMS Power Both channels driven	: 20W per channel, min. RMS at 8 ohms, from 20Hz to 20kHz with under 0.5% total harmonic distortion.
RMS Power Both channels driven at 1kHz	: 22W per channel at 8 ohms 25W per channel at 4 ohms
Total Harmonic Distortion	: 0.5% at rated output power
Damping Factor	: 40 at 8 ohms
Input Sensitivity, and Impedance and Signal to Noise Ratio	: Phono: 2.5mV/50kΩ & 70dB AUX: 150mV/70kΩ & 95dB Tape Mon: 150mV/70kΩ & 95dB
Recording Output Level	: 150mV (pin) 30mV/80kΩ (DIN)
Frequency Response	: 20Hz to 20kHz
Loudness Control	: +12dB at 50Hz +6dB at 10kHz
Bass Control	: ±10dB at 100Hz
Treble Control	: ±10dB at 10kHz
FM Tuner Section	
Usable Sensitivity	: 2.2μV IHF
Total Harmonic Distortion at 1kHz, 100% Modulation	: 0.4% (Mono) 0.6% (Stereo)
Signal to Noise Ratio	: 65dB at 1000μV input (Mono) 60dB at 1000μV input (Stereo)
Selectivity	: 50dB IHF Alternated
Capture Ratio	: 2.5dB
Image Rejection	: 50dB at 98MHz
IF Rejection	: 80dB at 98MHz
Stereo Separation	: 35dB at 1kHz
AM Tuner Section	
Usable Sensitivity	: 30μV, 300μV/m
Selectivity	: 25dB
Image Rejection	: 45dB
IF Rejection	: 50dB

2. Removal of Top Cover, Bottom Plate and Front Panel

Procedure and Part Numbers

1. Remove 4 screws (Item No. 3) through the both sides of the cover and one screw (Item No. 2) from the back of top cover.
2. Remove the top cover.
3. Remove 4 screws (Item No. 6) from bottom plate (Item No. 5) and remove the bottom plate from the chassis.

Removal of Top Cover and Bottom Plate



Procedure and Part Numbers

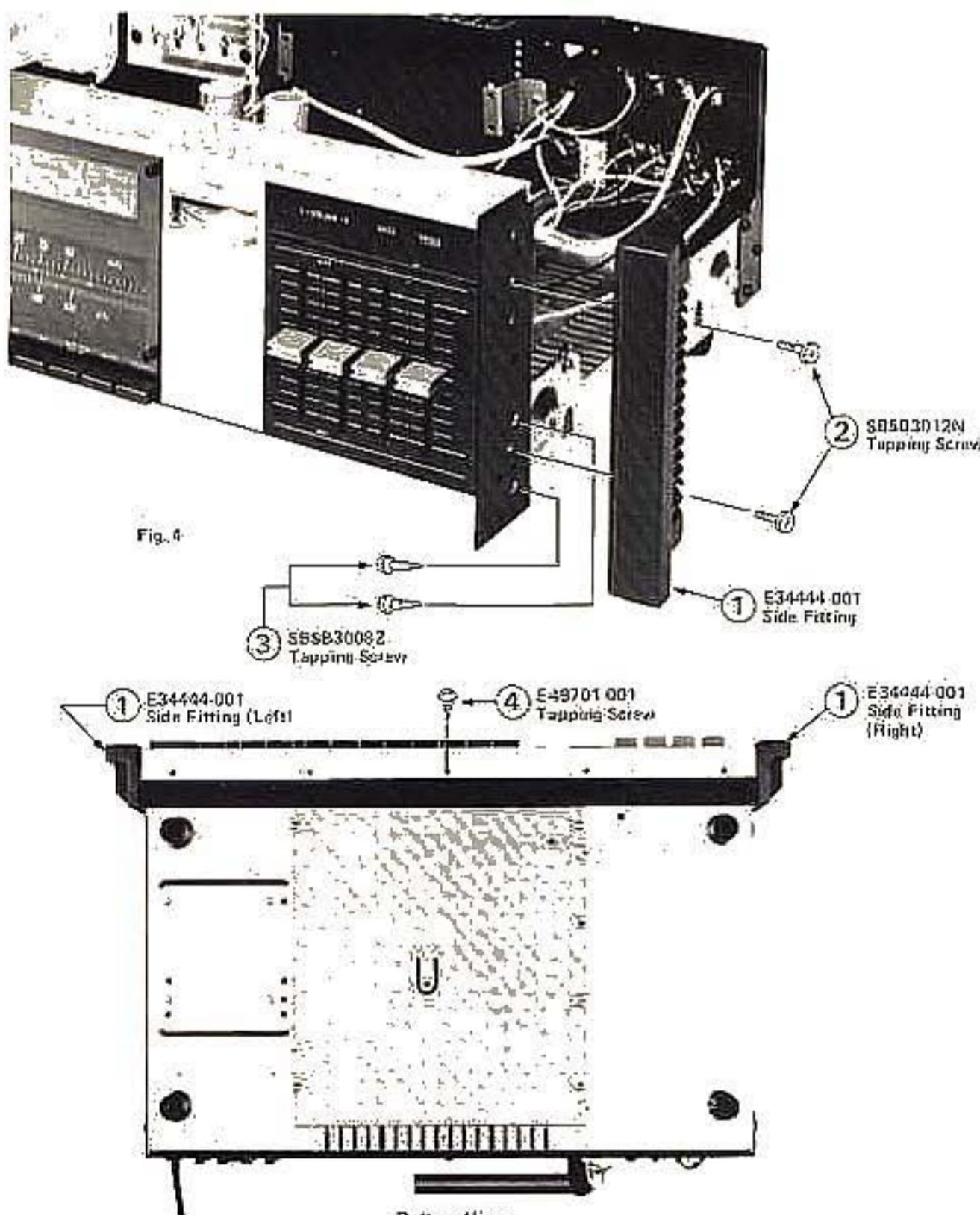
1. Remove the top cover. Refer to the removal of top cover on page 3.
2. Remove the dial pointer carefully according to the steps below:
 - a. Slide the dial pointer to the center position of the dial rail.
 - b. Remove the dial cord from the dial pointer. Do not pull the dial cord hard.
 - c. Remove the dial pointer from the dial rail carefully.
- Note: Refer to Fig. 10 of the dial stringing procedure on page 8 when replace the dial pointer onto dial rail.
3. Remove 4 screws, Item No. 2 located on the side fittings (Item No. 1, right and left sides).
4. Remove the both sides of side fitting from the front panel.
5. Remove one screw, Item No. 4 located on the bottom of the front panel.
6. Remove 4 screws, Item No. 3 located on the both sides of front panel.
7. Pull the front panel out carefully.

In Case of Removing the Window Screen From the Front Panel:

Remove 4 hexagonal screws, item No. 3, located on the window screen. Refer to Fig. 8 on page 6.

Warning: Use hexagonal wrench (size 3/32") and do not screw in excessively when replacing the window screen.

Removal of Front Panel



3. Main Parts Location and Part Numbers

Top View

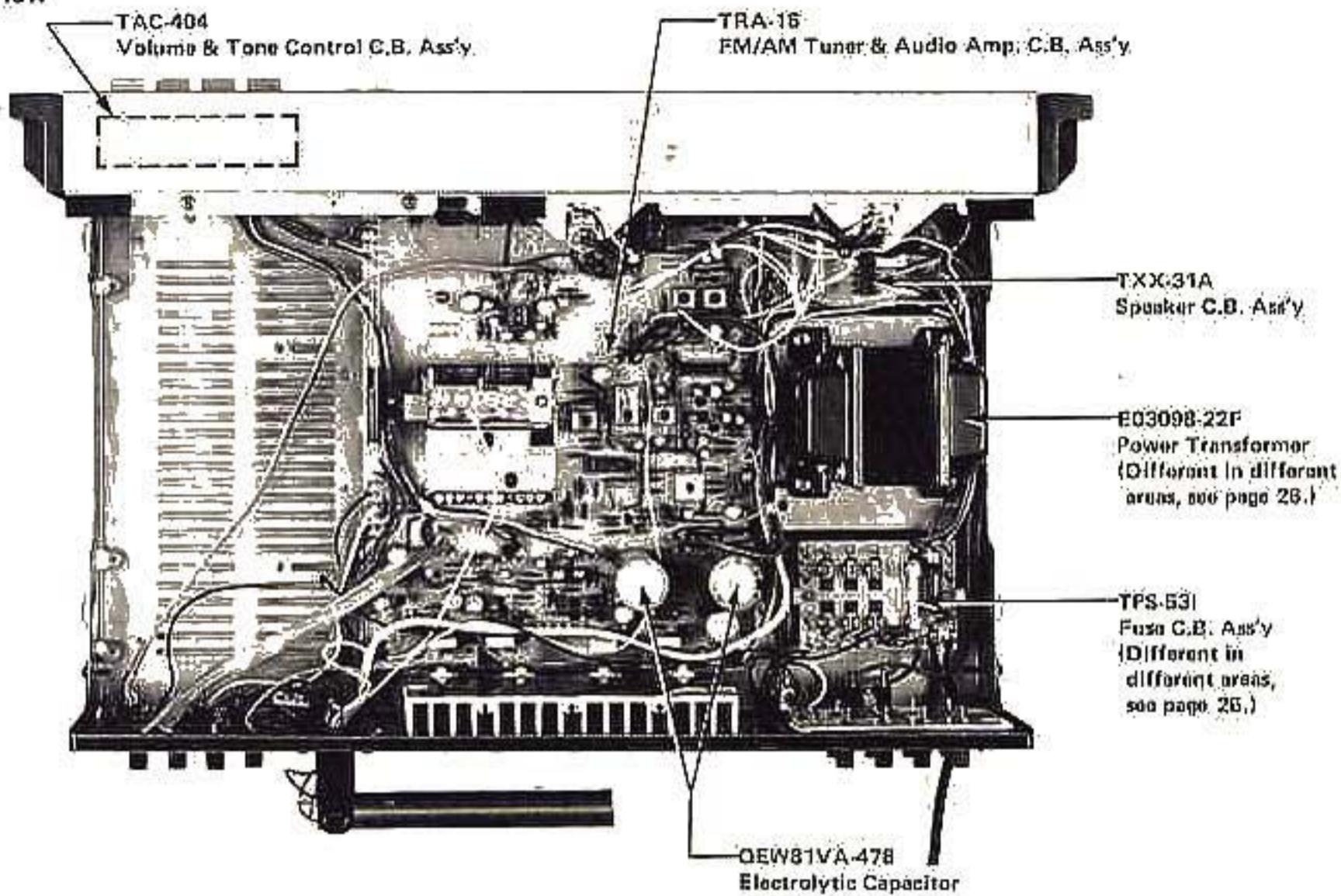


Fig. 6

Bottom View

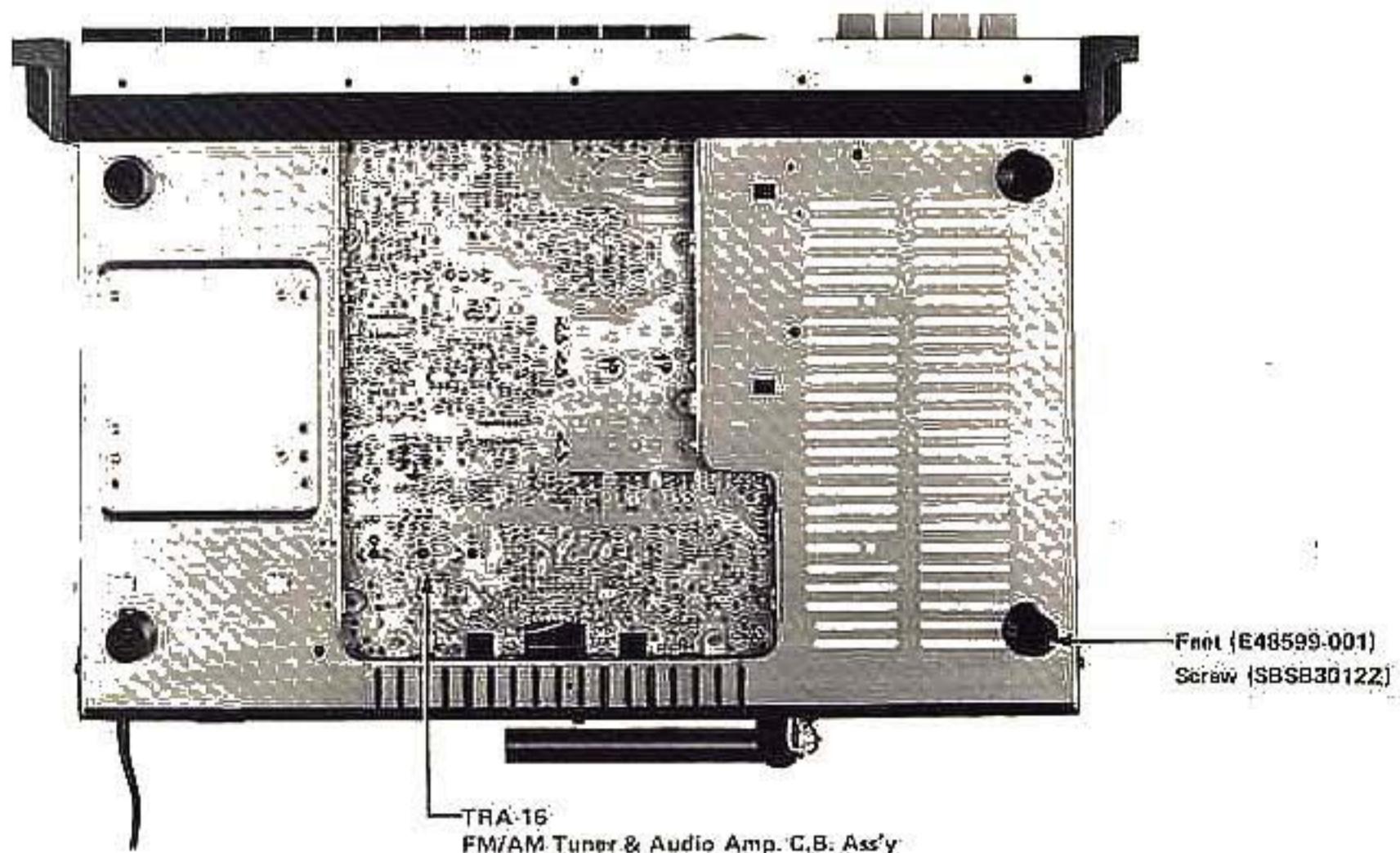


Fig. 7

4. Exploded View and Parts List

4-(1) Front Panel

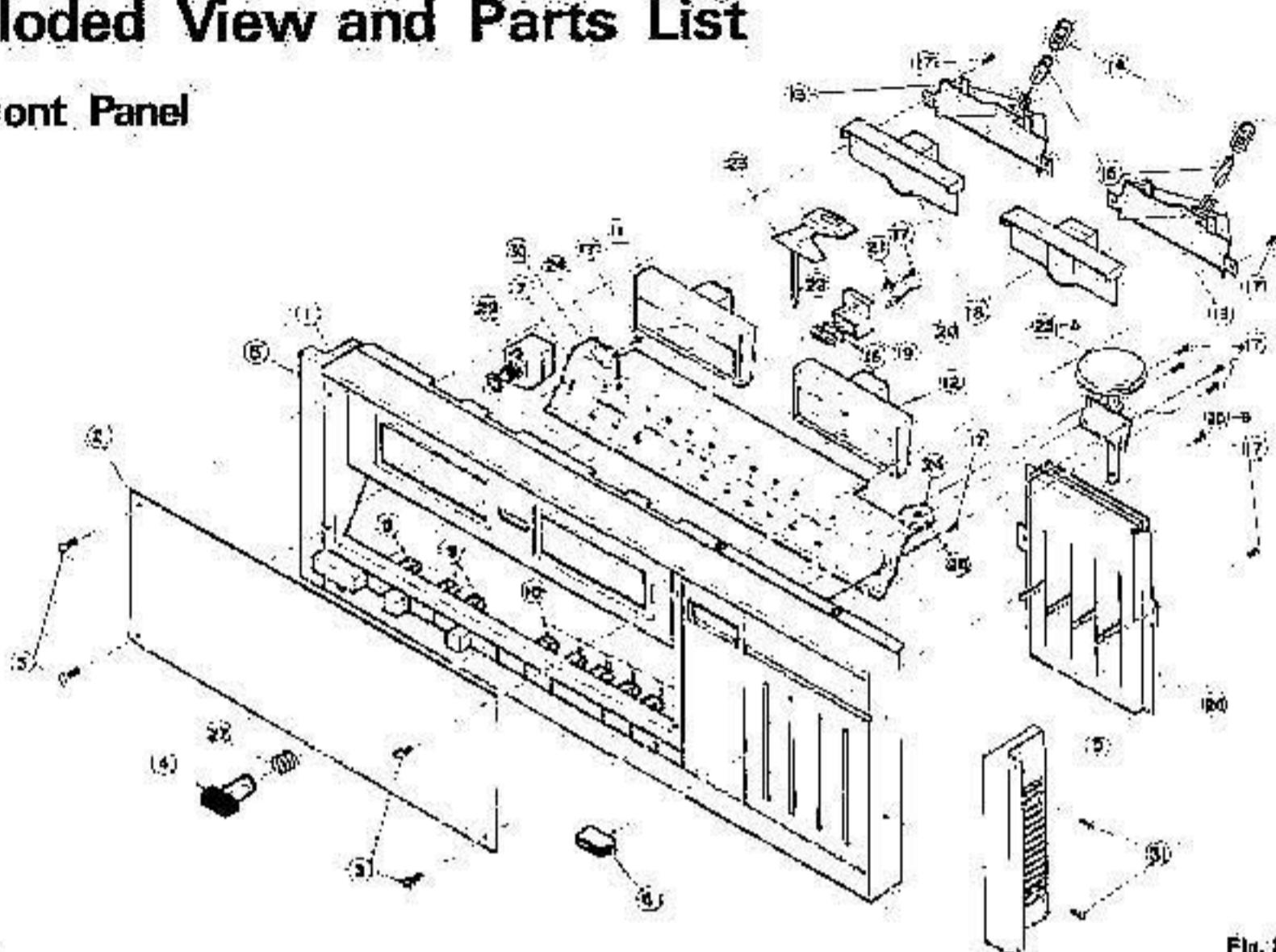


Fig. 8

Parts List

Item No.	Part Number	Description
1	E10099-001	Front Panel Ass'y
2	E22007-002	Window Screen
3	E60919-001	Hexagonal Bolt
4	E60875-001	Pushbutton
5	E34444-001	Side Fitting
6	E60884-001	Slide Knob
7	E22006-002	Dial Scale
* 8	QSU1130-001	Power Switch
9	QSP0229-004	Push Switch
10	QSP0289-103	Push Switch
11	E03680-202	Signal Meter
12	E03680-201	Tuning Meter
13	E34443-001	Meter Holder
14	QLS1000-003	Pilot Lamp Socket
15	QLP1001-010	Pilot Lamp
16	E46855-043	Color Screen
17	SB58301DZ	Tapping Screw
18	E34555-001	Meter Cover
19	E60874-001	Reflector
20	QLP3105-001	Indicator Lamp
21	Q03091-105	Washer
22	E60873-001	Stereo Indicator
23	E34422-001	Dial Pointer Ass'y (E32757-017: Dial Cord)
24	E45017-001	Roller
25-A	E60869-001	Tuning Knob
25-B	E34490-001	Tuning Shaft Ass'y (with Tuning Knob)
26	TAC-404	Volume & Tone Control C.B. Ass'y
27	E60876-001	Coil Spring
28	E45018-001	Shaft Screw
29	QMS6301-001	Headphone Jack Ass'y
30	E49447-001	Shaft Screw
31	SB583012N	Tapping Screw

* Different in different area, see page 26.

4-(2) Rear Panel

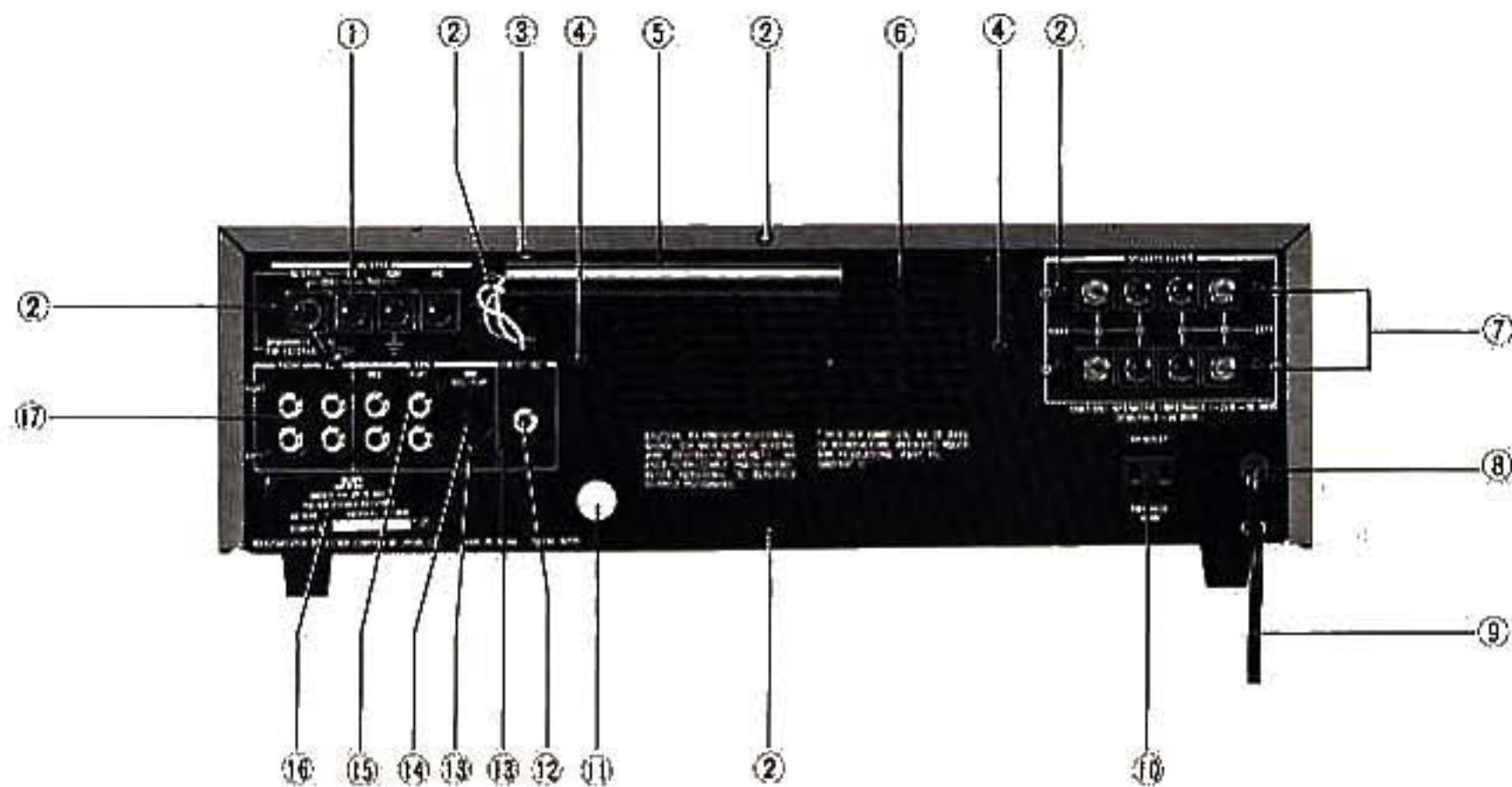


Fig. 9

Parts List

Item No.	Part Number	Description
1	E03572-004D	Bar Antenna Terminals Board
2	SBSB3008M	Tapping Screw
3	E49695-002	Bar Antenna Bracket
4	SPSP4006MS	Screw
5	E03037-36UD	Bar Antenna Coil
6	E10089-001	Rear Panel
7	E03572-004C	Speaker Terminals Board
* 8	QHS3876-162	Power Cord Stopper
* 9	QMP1200-244	Power Cord
10	QMC0235-002	AC Socket
11	E42803-004	Passed Mark
12	E03591-10	Pin Jack Ass'y
13	SPSD3008MS	Tapping Screw
14	E03623-002	DIN Socket
15	E03591-41D	4 Pins Jack Ass'y (Rec & Play)
16	E47330-222	Rating Label
17	E03591-40C	4 Pins Jack Ass'y (PHONO & AUX)

* Different in different area, see page 26.

5. Dial Stringing Procedure

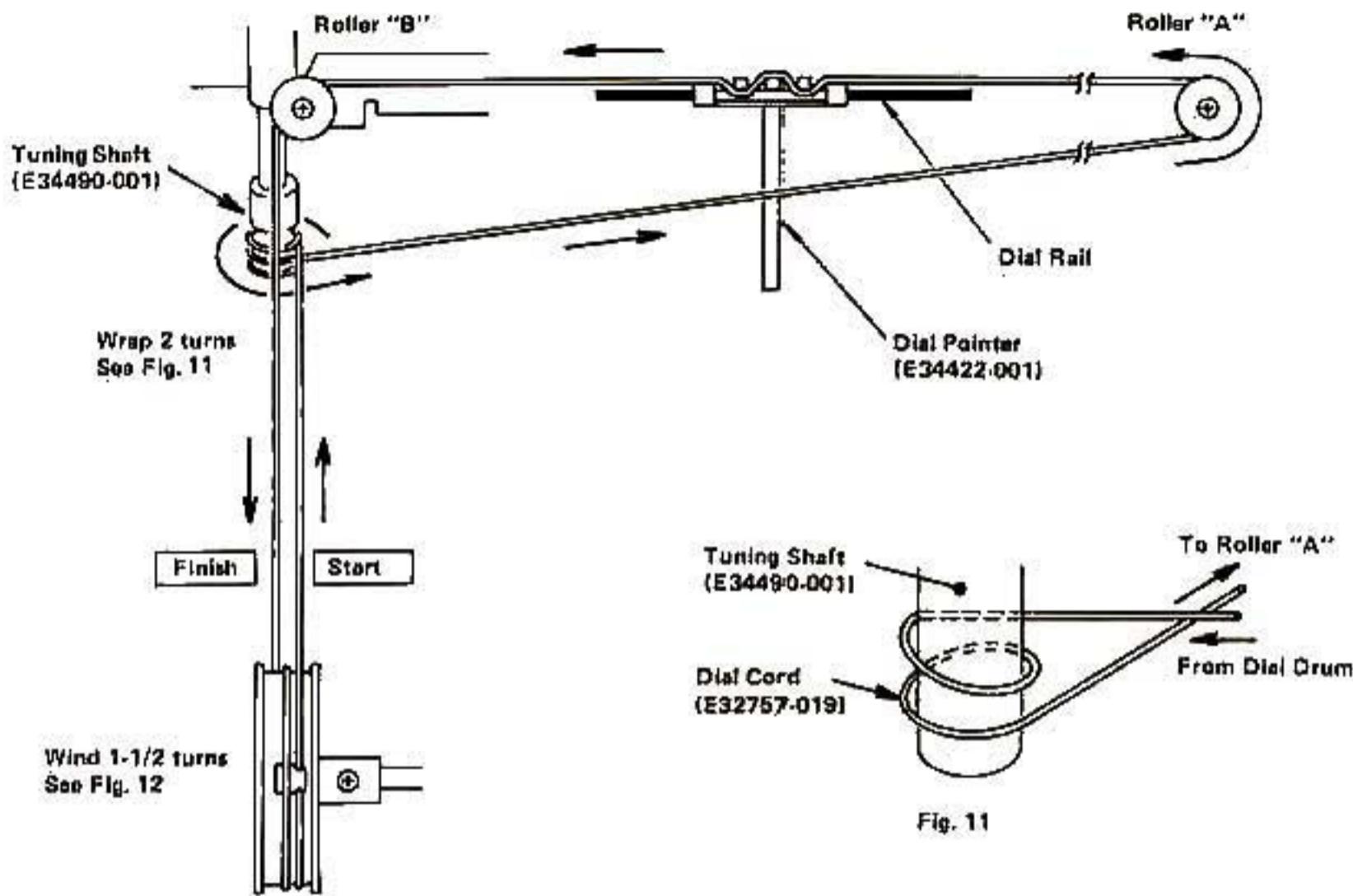


Fig. 10

Fig. 11

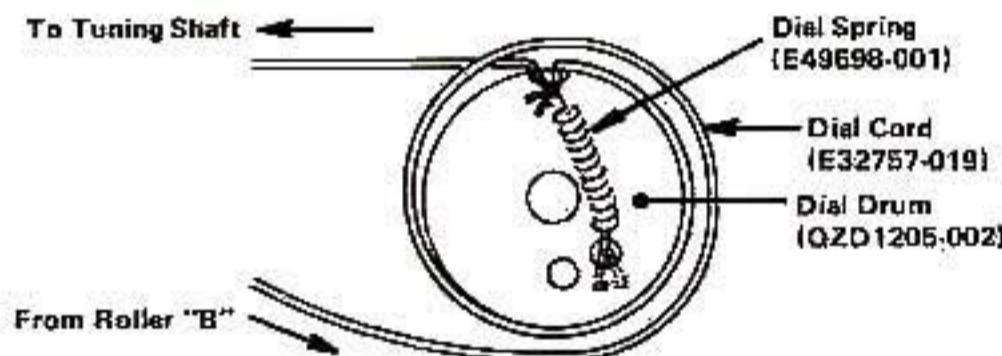
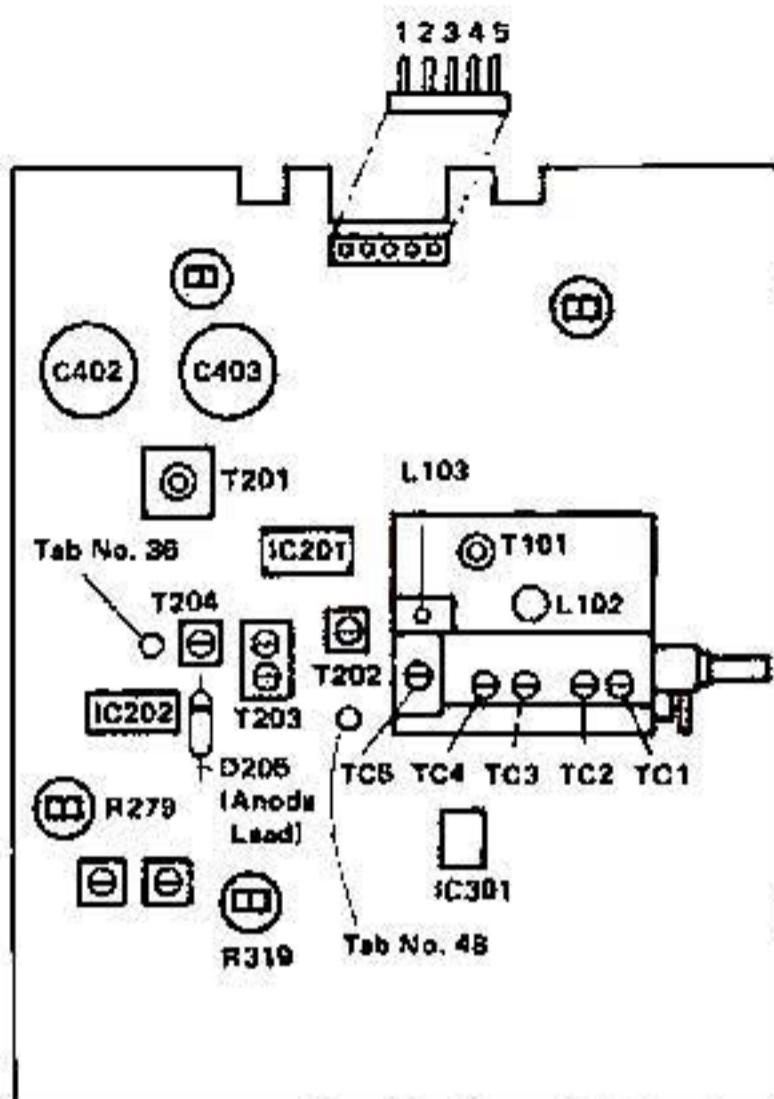


Fig. 12

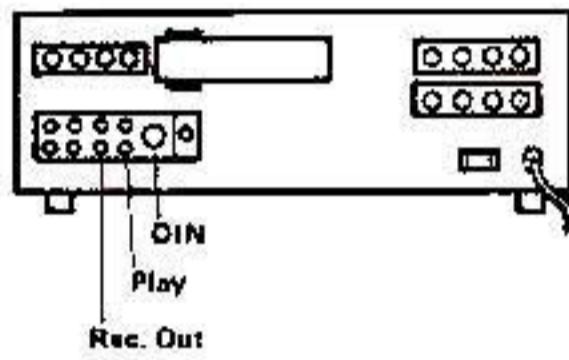
- (1) Remove dial pointer and old dial cord.
- (2) Tie end of new dial cord to one end of dial spring, connect other end of dial spring of bottom right eye inside dial drum. See Fig. 12.
- (3) Rotate the tuning capacitor dial drum to its maximum counterclockwise.
- (4) Run the dial cord through the slot in the rim of the dial drum.
- (5) Pull dial cord taut and wrap 2 turns counterclockwise around tuning shaft. Refer to Fig. 11.
- (6) Guide the dial cord under and around rollers "A" and "B". Keep the dial cord taut during this procedure.
- (7) Guide the dial cord over the dial drum and wind 1-1/2 turns counterclockwise. See Fig. 12.
- (8) Turn the tuning shaft to rotate the dial drum fully counterclockwise and fully clockwise to distribute the tensioning along the dial cord.
- (9) Place the dial cord over and under the tabs on the rear of the dial pointer and place the dial pointer on the top of the dial panel rail. Refer to Fig. 10.
- (10) Turn the tuning shaft clockwise. Slide the dial pointer to zero (0) calibration marker on the logging scale while holding tuning shaft fully clockwise. Cement the dial pointer to the dial cord to prevent slippage. Allow cement to dry thoroughly.
- (11) Check the dial calibration. Refer to FM/AM Alignment on pages 9 and 10.
- (12) Replace the top cover.

6. FM/AM Tuner Alignment Procedures



TRA-16 FM/AM Tuner & Audio Amp. C.B. Assembly

Fig. 13



Rear View

Fig. 14

6-(1) FM Section

Discriminator, Center Meter and Distortion

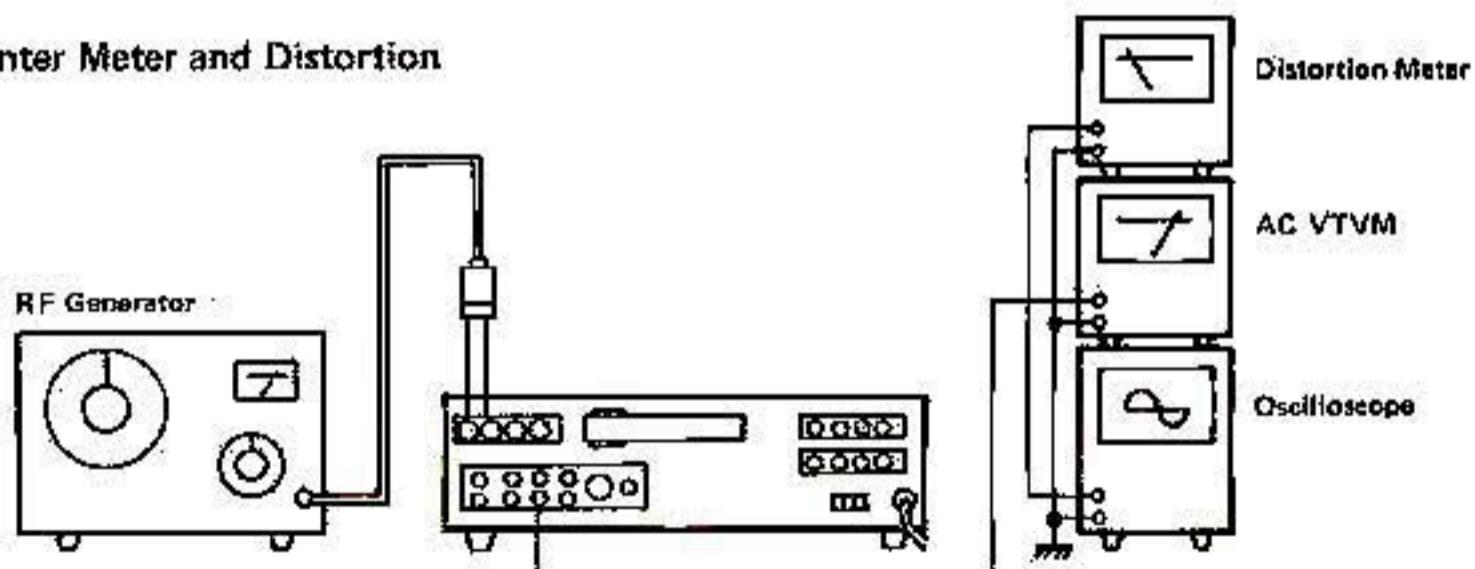


Fig. 15

1. Connect an RF generator, 1kHz modulation and 75kHz deviation to the antenna terminals on the rear panel through a dummy antenna.
2. Connect an oscilloscope, distortion meter and VTVM to the Rec. Out jacks on the rear panel.
3. Tune to a frequency where there is no broadcasting.
4. Adjust the bottom core of T201 so that the center meter indicates "0" (zero).
5. Set the RF generator to 98MHz.
6. Set the dial pointer to 98MHz.
7. Adjust the top core of T201 so that the distortion is minimized at a value less than 0.4%.

Tracking and Sensitivity

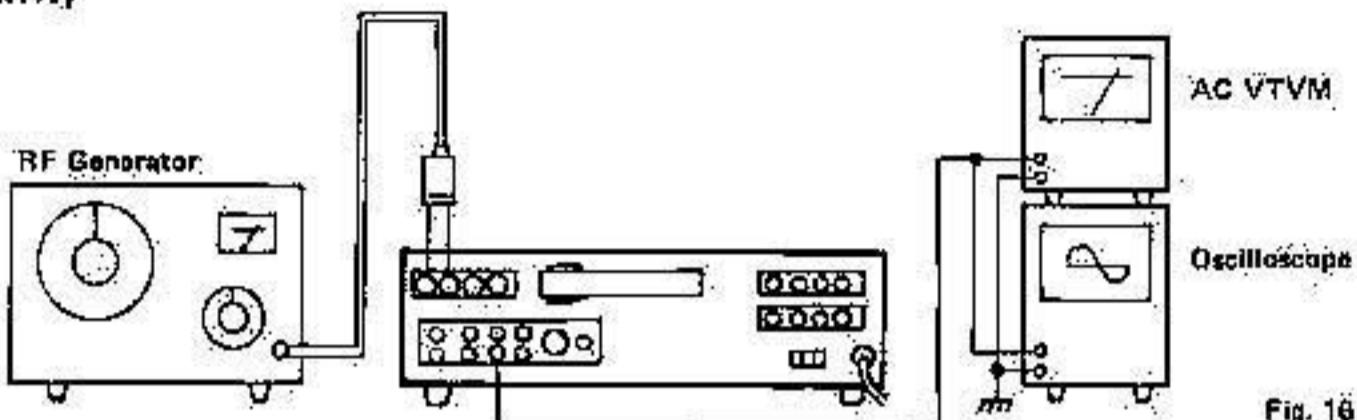


Fig. 16

Precaution: No adjustment is required. The tracking and sensitivity have been adjusted properly and completely at the factory. If any special reason occasioned, take the following procedures very carefully.

Low Frequency

1. Connect an RF generator to the antenna terminals on the rear panel through the dummy antenna.
2. Set the RF generator to 88MHz, a modulation of 1kHz and a deviation of 75kHz, to provide an input of $2\mu V$.
3. Connect a VTVM and an oscilloscope to the Rec. Out jacks on the rear panel.
4. Set the dial pointer to 88MHz.
5. Adjust two coils L103 and L102 in the tuning gang to maximize the output.

High Frequency

6. Set the RF generator to 108MHz, a modulation of 1kHz and a deviation of 75kHz, to provide an input of $2\mu V$.
7. Set the dial pointer to 108MHz.
8. Adjust the FM trimmers TCB, TC3 and TC1 in the tuning gang to maximize the output.
9. Adjust the IF transformer T101 until maximum sensitivity is obtained.

Note: Repeat these high and low frequency adjustments alternately until maximum sensitivity is obtained.

Multiplex and Stereo Separation

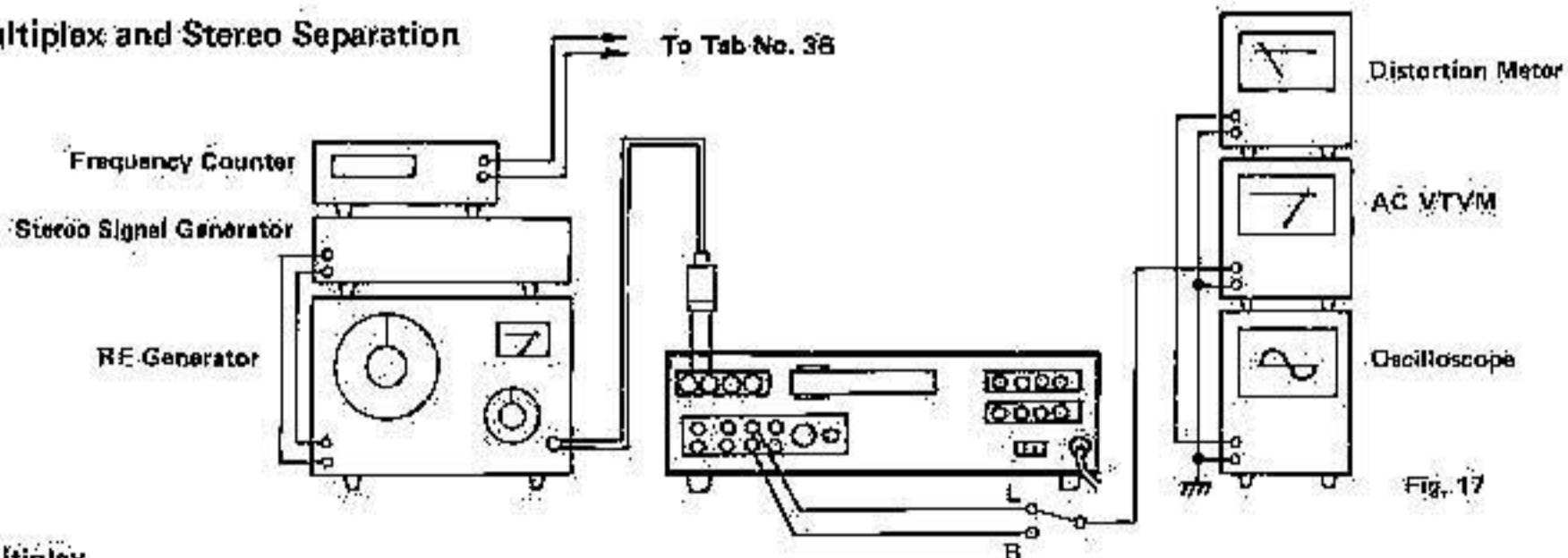


Fig. 17

Multiplex

1. Set a stereo signal generator as follows: Modulation frequency 1kHz, Deviation pilot signal 7.5kHz, Main and Sub 67.5kHz. Connect its output to an RF generator.
2. Connect the RF generator to the antenna terminals through a dummy antenna.
3. Connect a VTVM, an oscilloscope and a distortion meter to the Rec. Out jacks on the rear panel.
4. Set the RF generator to 98MHz and an output of 1mV.
5. Set the dial pointer to 98MHz.
6. Connect a frequency counter to Tab No. 36.
7. Switch off the pilot signal of the stereo modulator.
8. Adjust R279 so that the frequency counter indicates 19kHz ($\pm 0.01\text{kHz}$).

Stereo Separation

9. Switch the selector of stereo modulator to left channel modulation.
10. Adjust R319 so that the output of right channel is minimized.
11. Switch the selector of the stereo modulator to right channel modulation.
12. Adjust R319 so that the output of left channel is minimized.
13. Set R319 to average, if the separation of right and left are different.

Note: Keep the "MONO" pushbutton out during this adjustment procedure of stereo separation.

6-(2) AM Section

IF Stage

1. Connect an output of sweep generator to the AM input Tab No. 48.
2. Set the sweep generator to 455kHz.
3. Connect an input of sweep generator to the anode lead of diode D205 (AM output).
4. Adjust the cores of I.F. Transformer T203 and T204 so that the output is maximized. Refer to Fig. 18.

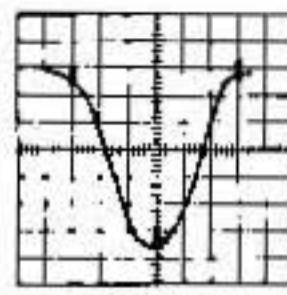


Fig. 18

Tracking and Sensitivity

Low Frequency

1. Connect an RF generator to the antenna terminals on the rear panel, set this to 600kHz with 30% modulation at 400Hz.
2. Connect an AC VTVM and an oscilloscope to the Rec. Out Jacks on the rear panel.
3. Set the dial pointer to 600kHz.
4. Adjust the Osc. transformer T202 and the ferrite bar antenna to maximize the output signal.

High Frequency

5. Set the RF generator to 1,400kHz with 30% modulation at 400Hz.
6. Set the dial pointer to 1,400kHz.
7. Adjust the trimmers TC4 and TC2 in the AM tuning gang so that the output signal is maximized.
8. Repeat these high and low frequency adjustments until maximum sensitivity is obtained.

7. Power Amplifier Adjustment Procedures

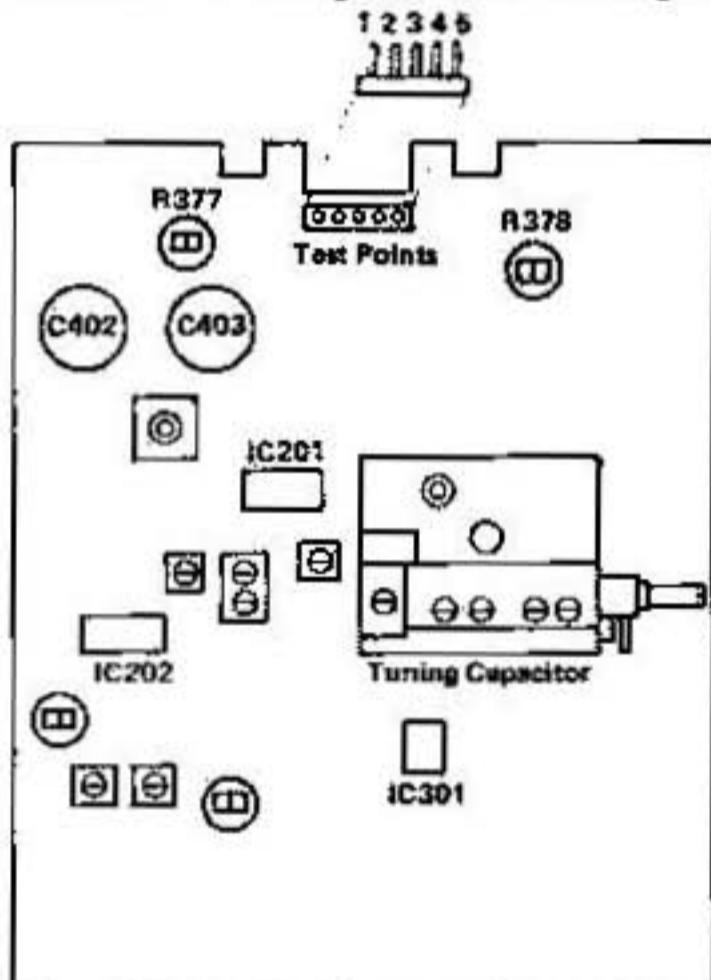


Fig. 19

TRA-16 FM/AM Tuner & Audio Amp. C.B. Ass'y

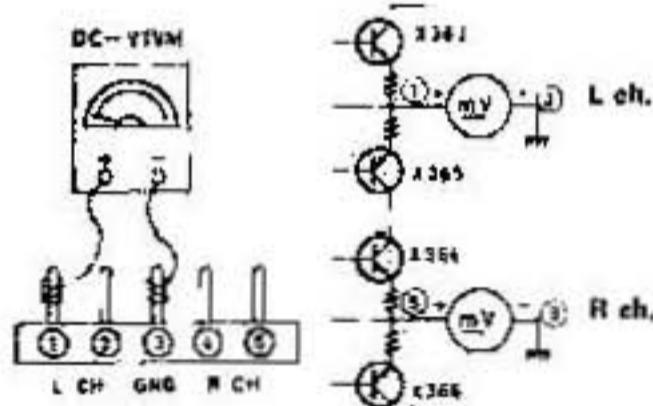


Fig. 20A

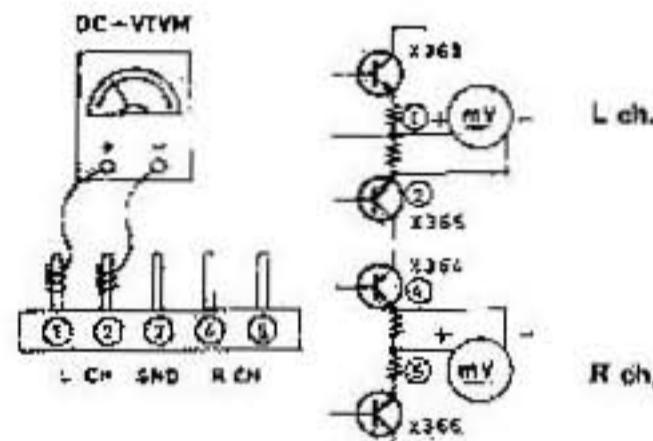


Fig. 20B

7-(1) Center Voltage

(): For right channel adjustment

Precaution: Allow set to warm up at least 5 minutes before connecting DC VTVM.

1. Tune volume control to minimum.
2. Connect ground lead of DC VTVM to pin 3 (pin 3) and connect probe of DC VTVM to pin 1 (pin 5). Refer to Fig. 20A.
3. So that meter should read 0 volt (± 0.05). If not, replace a pair of power transistors, then, back to step 1, to repeat this procedure.

7-(2) Idling Current

4. Connect ground lead of DC VTVM to pin 1 (pin 5) and connect probe of DC VTVM to pin 2 (pin 4). Refer to Fig. 20B.
5. Adjust pot R377 (R378) for DC VTVM reading of 10mV. Refer to Fig. 19.

8.Circuit Board Ass'y Part Locations and Parts List

8-(1) TRA-16 FM/AM Tuner & Audio Amp. C.B. Ass'y

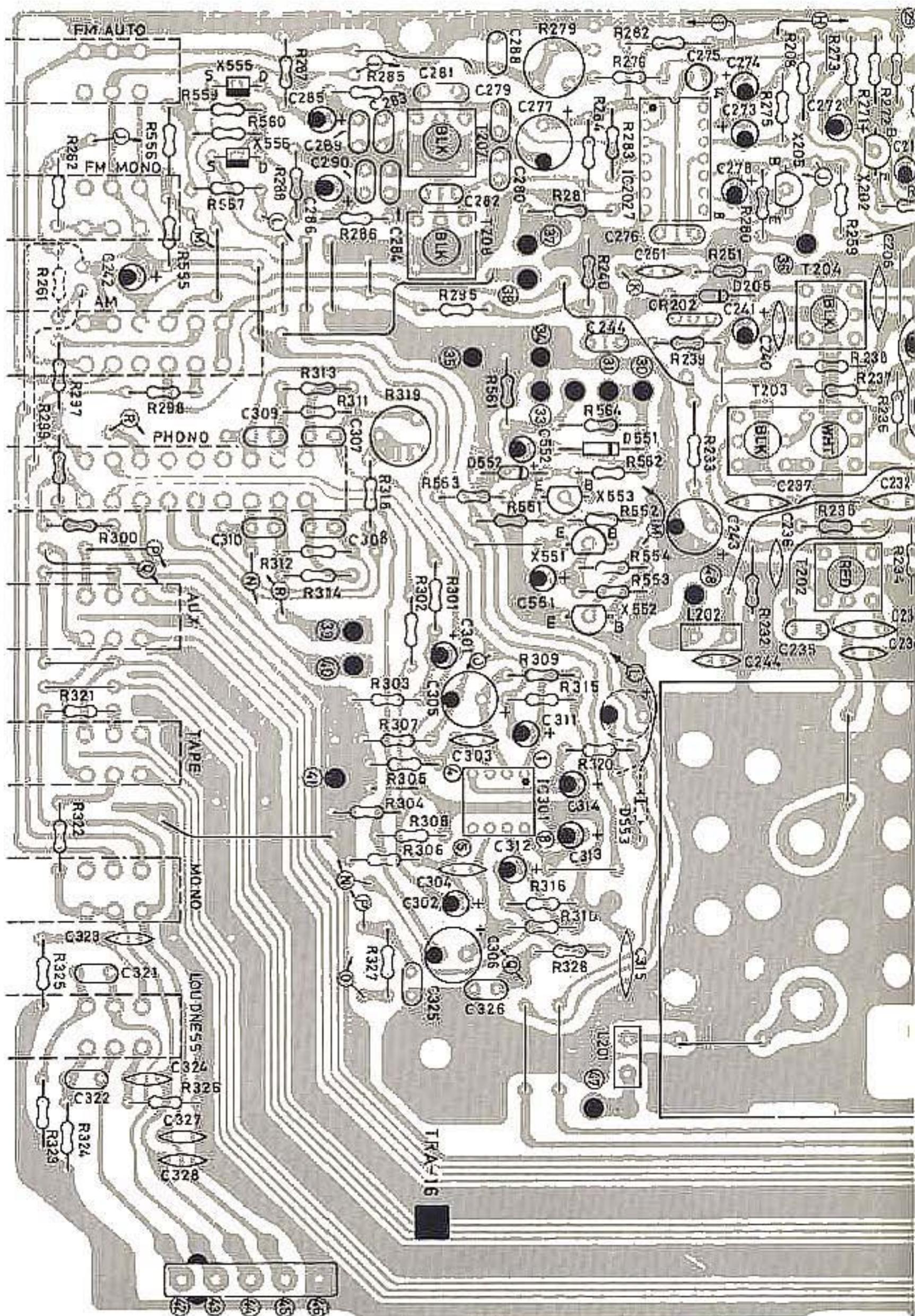
Transistors

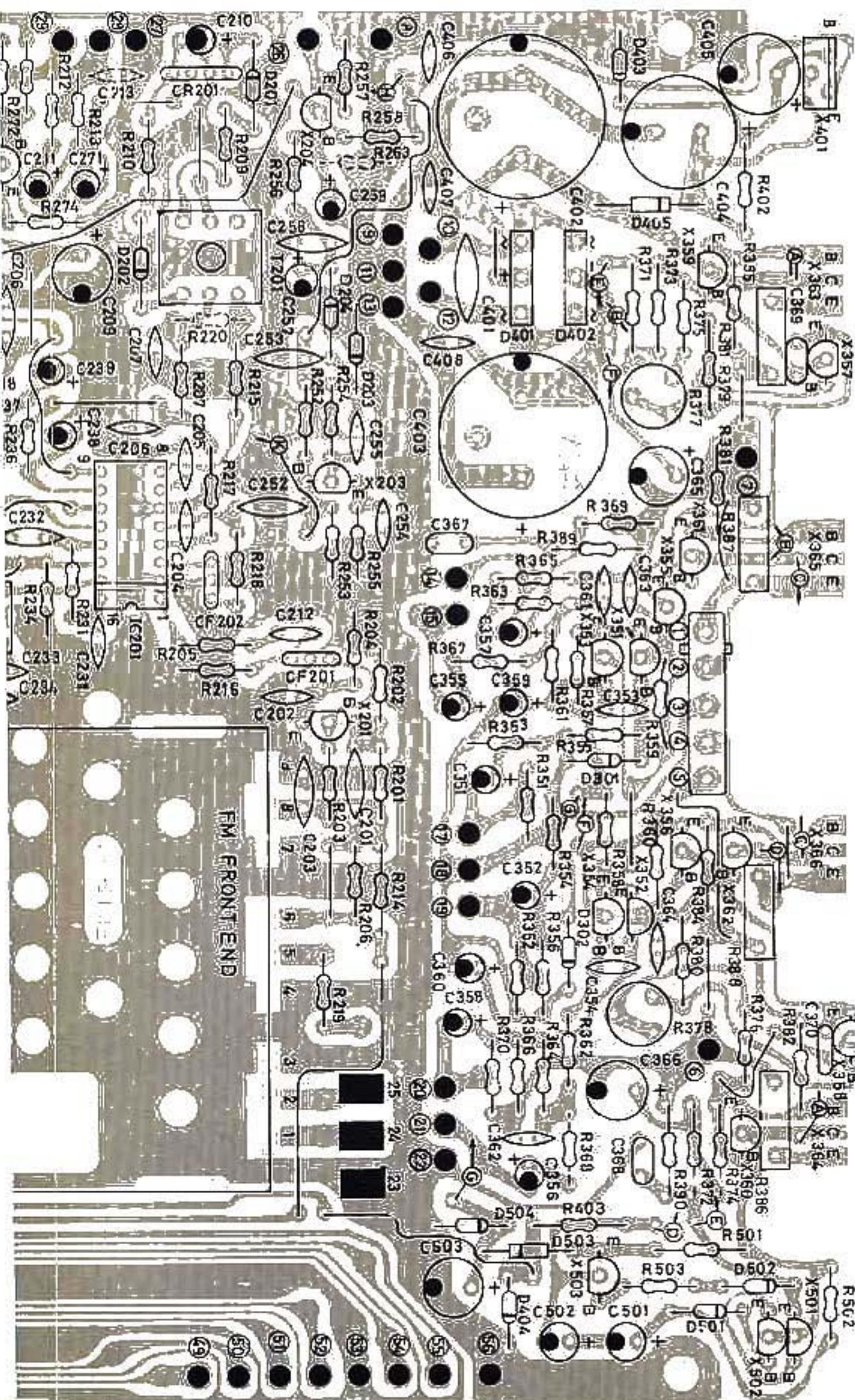
Item No.	Part Number	Rating		Description	Maker
		Pc	fT		
X201	2SC710 (B)	200mW	150MHz	Silicon	Mitsubishi
X202	2SC711 (F)		"		"
X203	2SC710 (B)		"		"
X204	2SC711 (F)		"		"
X205	2SC711 (F)		"		"
X351	2SA872AV (E)	300mW	200MHz	"	Hitachi
X352	2SA872AV (E)	"	"		"
X353	2SA872AV (E)	"	"		"
X354	2SA872AV (E)	"	"		"
X355	2SD438 (E)	750mW	100MHz		Sanyo
X356	2SD438 (E)	"	"	"	"
X357	2SC711 (F)	200mW	150MHz		Mitsubishi
X358	2SC711 (F)	"	"		"
X359	2SD438 (E)	750mW	100MHz		Sanyo
X360	2SD438 (E)	"	"		"
X361	2SB560 (E)	"	"	"	"
X362	2SB560 (E)	"	"		"
X363	2SD313V (E)	30W	8MHz		"
X364	2SD313V (E)	"	"		"
X365	2SB507V (E)	"	"		"
X366	2SB507V (E)	"	"	"	"
X401	2SD325 (E)	10W	"		"
X501	2SD438 (E)	750mW	100MHz		"
X502	2SC1775AV (F)	300mW	200MHz		Hitachi
X503	2SA872AV (E)	"	"		"
X551	PT-054	300mW	200MHz	A Pair of Power Transistors Silicon	Sanyo
X552	2SA872AV (E)		150MHz		Hitachi
X553	2SC711 (F)		"		Mitsubishi
X554	2SC711 (F)		"		"
X555	2SK40	IDSS=3mA, NF: 5dB (f=120Hz)		F.E.T.	Hitachi
X556	2SK40	"		"	"

Integrated Circuits

Item No.	Part Number	Rating		Description	Maker
		Pc			
IC201	AN217BB	200mW		I.C.	Matsushita
IC202	HA1156W	400mW		"	Hitachi
IC301	NJM4558D-D	500mW		"	J.R.C.

TRA-16 FM/AM Tuner & Audio Amp. C.B. Ass'y





Diodes

Item No.	Part Number	Rating	Description	Maker
D201	1S188FM		Germanium	Sanyo
D202	1S188FM		"	"
D203	1S188FM		"	"
D204	1S1B8FM		"	"
D205	1S188FM		"	"
D301	1S2473		Silicon	Toyo Dengu
D302	1S2473		"	"
D401	ESAB02-02C		Zener	Kyodo Denki
D402	ESAB02-02N		"	"
D403	E0771-12		"	Fuji
D404	E0771-12		"	"
D405	SIB01-02		Silicon	Fujitsu
D501	1S2473F		"	Toyo Dengu
D502	1S2473F		"	"
D503	SIB01-02		"	Fujitsu
D551	SIB01-02		"	"
D552	1S2473		"	Toyo Dengu

Coils & Transformers

Item No.	Part Number	Rating	Description
T201	E03134-018		FM Detector Transformer
T202	E03079-27		OSC. Coil
T204	E03062-35		I.F. Transformer
T205	E03062-6		AM I.F. Transformer
T207	E03407-005		MPX Coil
T208	E03407-005		"
L201	E03522-2R2KY		Choke Coil
L202	E03522-2R2KY		"

Capacitors

Item No.	Part Number	Rating		Description
C201	QCF11HP-223A	0.022μF	50V	Ceramic
C202	QCF11HP-223A	"	"	"
C203	QCF11HP-223A	"	"	"
C204	QCF11HP-223A	"	"	"
C205	QCF11HP-223A	"	"	"
C206	QCF11HP-223A	"	"	"
C207	QCF11HP-473A	0.047μF	"	"
C209	QEWF41CA-107	100μF	16V	Electrolytic
C210	QEWF41CA-106	10μF	"	"
C211	QEWF41EA-475	4.7μF	25V	"

Capacitors

Item No.	Part Number	Rating		Description
C212	QCF11HP-223A	0.022μF	50V	Ceramic
C213	QCF11HP-223A	"	"	"
C231	QCF11HP-223A	"	"	"
C232	QCF11HP-223A	"	"	"
C233	QCS11HJ-331	330pF	"	"
C234	QCS11HJ-150	15pF	"	"
C235	QFM41HK-103	0.01μF	"	Mylar
C238	QCF11HP-223A	0.022μF	"	Ceramic
C237	QCF11HP-223A	"	"	"
C238	QEWF41HA-105	1μF	"	Electrolytic
C239	QEWF41HA-105	"	"	"
C240	QCF11HP-223A	0.022μF	"	Ceramic
C241	QEWF41CA-106	10μF	16V	Electrolytic
C242	QEWF41CA-106	"	"	"
C243	QEWF41CA-107	100μF	"	"
C244	QCS11HJ-470	47pF	50V	Ceramic
C251	QCS11HJ-150	15pF	"	"
C252	QCS11HJ-180	18pF	"	"
C253	QCF11HP-223A	0.022μF	"	"
C264	QCF11HP-223A	"	"	"
C255	QCS11HJ-151	150pF	"	"
C266	QCF11HP-223A	0.022μF	"	"
C257	QEWF41HA-105	1μF	"	Electrolytic
C258	QEWF41AA-107	100μF	10V	"
C269	QEWF41HA-105	1μF	50V	"
C271	QEWF41CA-106	10μF	16V	"
C272	QEWF41CA-106	"	"	"
C273	QEWF41HM-224	0.22μF	50V	L.L.C. Electrolytic
C274	QEWF41EM-106	10μF	25V	"
C275	QFS42BJ-471	"	"	Polystyrene
C276	QFM41HK-473	0.047μF	50V	Mylar
C277	QEWF41CA-227	220μF	16V	Electrolytic
C278	QEWF41HM-474	0.47μF	50V	L.L.C. Electrolytic
C279	QFM41HK-153	0.015μF	"	Mylar
C280	QFM41HK-153	"	"	"
C281	QFM41HK-182	1800pF	"	"
C282	QFM41HK-182	"	"	"
C283	QFM41HK-102	1000pF	"	"
C284	QFM41HK-102	"	"	"
C285	QEWF41HA-474	0.47μF	"	Electrolytic
C286	QEWF41HA-474	"	"	"
C288	QFM41HK-223	0.022μF	"	Mylar
C289	QFM41HK-562	5600pF	"	"
C290	QFM41HK-562	"	"	"
C291	QEWF41CA-106	10μF	16V	Electrolytic
C301	QEWF41HM-475	4.7μF	50V	"
C302	QEWF41HM-475	"	"	"

Capacitors

Item No.	Part Number	Rating		Description
C303	QCS11HJ-331	330pF	50V	Ceramic
C304	QCS11HJ-331	"	"	"
C305	QEWF1AA-107	100μF	10V	Electrolytic
C306	QEWF1AA-107	"	"	"
C307	QFM41HK-102	1000pF	50V	Mylar
C308	QFM41HK-102	"	"	"
C309	QFM41HK-332	3300pF	"	"
C310	QFM41HK-332	"	"	"
C311	QEWF1HA-475	4.7μF	"	Electrolytic
C312	QEWF1HA-475	"	"	"
C313	QEWF1CA-475	4.7μF	16V	"
C314	QEWF1HA-476	47μF	50V	"
C315	QCF11HP-103	0.01μF	"	Ceramic
C321	QFM41HK-273	0.027μF	"	Mylar
C322	QFM41HK-273	"	"	"
C323	QCS11HJ-331	330pF	"	Ceramic
C324	QCS11HJ-331	"	"	"
C325	QFM41HK-102	1000pF	"	Mylar
C326	QFM41HK-102	"	"	"
C327	QCS11HJ-331	330pF	"	Ceramic
C328	QCS11HJ-331	"	"	"
C351	QEWF1HA-105	1μF	"	Electrolytic
C352	QEWF1HA-105	"	"	"
C353	QCS11HJ-391	390pF	"	Ceramic
C354	QCS11HJ-391	"	"	"
C355	QEWF1CA-106	10μF	16V	Electrolytic
C356	QEWF1CA-106	"	"	"
C357	QEWF1CA-106	"	"	"
C358	QEWF1CA-106	"	"	"
C359	QEWF1CA-226	22μF	"	"
C360	QEWF1CA-226	"	"	"
C361	QCS11HJ-100	10pF	50V	Ceramic
C362	QCS11HJ-100	"	"	"
C363	QCS11HJ-180	18pF	"	"
C364	QCS11HJ-180	"	"	"
C365	QEWF1HA-226	22μF	"	Electrolytic
C366	QEWF1HA-226	"	"	"
C367	QFM41HK-473	0.047μF	"	Mylar
C368	QFM41HK-473	"	"	"
C369	QFM41HK-122	1200pF	"	"
C370	QFM41HK-122	"	"	"
C401	QCF12HP-103	0.01μF	"	Ceramic
C402	QEWF1VA-478	4700μF	35V	Electrolytic
C403	QEWF1VA-478	"	"	"
C404	QEWF1VA-477	470μF	"	"
C405	QEWF1EA-107	100μF	25V	"
C406	QCF11HP-103	0.01μF	50V	Ceramic
C407	QCF11HP-103	"	"	"
C408	QCF11HP-103	"	"	"
C501	QEWF1HA-106	10μF	"	Electrolytic
C502	QEWF1HA-106	"	"	"
C503	QEWF1VA-107	100μF	35V	"
C551	QEWF1HA-106	10μF	50V	"
C552	QEWF1HA-106	"	"	"

Resistors

Item No.	Part Number	Rating		Description
R201	ORD181J-822	8.2kΩ	1/8W	Carbon
R202	QRD181J-822	"	"	"
R203	QRD181J-561	560Ω	"	"
R204	ORD181J-182	1.8kΩ	"	"
R205	ORD181J-681	680Ω	"	"
R206	QRD181J-471	470Ω	"	"
R207	ORD181J-100	10Ω	"	"
R208	QRD126J-331	330Ω	1/2W	Uninflammable Carbon
R209	QRD181J-471	470Ω	1/8W	Carbon
R210	ORD181J-471	"	"	"
R211	ORD181J-680	68Ω	"	"
R212	ORD181J-103	10kΩ	"	"
R213	ORD181J-472	4.7kΩ	"	"
R214	QRX129J-100	10Ω	1/2W	Uninflammable Metalized Film
R215	ORD181J-100	"	1/8W	Carbon
R216	ORD181J-102	1kΩ	"	"
R217	QRD181J-100	10Ω	"	"
R218	QRD181J-471	470Ω	"	"
R219	QRD181J-472	4.7kΩ	"	"
R220	QRD181J-821	820Ω	"	"
R233	QRD126J-561	560Ω	1/2W	Uninflammable
R234	QRD181J-152	1.5kΩ	1/8W	Carbon
R235	QRD181J-332	3.3kΩ	"	"
R236	QRD181J-223	22kΩ	"	"
R237	QRD181J-223	"	"	"
R238	QRD181J-224	220kΩ	"	"
R239	QRD181J-103	10kΩ	"	"
R240	QRD181J-823	82kΩ	"	"
R251	QRD181J-102	1kΩ	"	"
R252	QRD181J-183	18kΩ	"	"
R253	QRD181J-332	3.3kΩ	"	"
R254	QRD181J-472	4.7kΩ	"	"
R255	QRD181J-821	820Ω	"	"
R256	QRD181J-104	100kΩ	"	"
R257	QRD181J-102	1kΩ	"	"
R258	QRD181J-473	47kΩ	"	"
R259	QRD181J-224	220kΩ	"	"
R262	QRD181J-224	"	"	"
R271	QRD181J-154	150kΩ	"	"
R272	QRD181J-273	27kΩ	"	"
R273	QRD181J-472	4.7kΩ	"	"
R274	QRD181J-681	680Ω	"	"
R275	QRD181J-102	1kΩ	"	"
R276	QRD181J-163	16kΩ	"	"
R279	QVP4A0B-472	4.7kΩ		Variable
R280	QRD181J-105	1MΩ	1/8W	Carbon
R281	QRD126J-181	180Ω	1/2W	Uninflammable Carbon
R282	QRG129J-101	100Ω	"	Uninflammable O.M.
R283	QRD181J-392	3.9kΩ	1/8W	Carbon
R284	QRD181J-392	"	"	"
R285	QRD181J-472	4.7kΩ	"	"
R286	QRD181J-472	"	"	"
R287	QRD181J-104	100kΩ	"	"
R288	QRD181J-104	"	"	"

Resistors

Item No.	Part Number	Rating		Description
R295	QRD181J-472	4.7kΩ	1/8W	Carbon
R297	QRD181J-223	22kΩ	"	"
R298	QRD181J-223	"	"	"
R299	QRD181J-222	2.2kΩ	"	"
R300	QRD181J-222	"	"	"
R301	ORD181J-222	"	"	"
R302	ORD181J-222	"	"	"
R303	ORD181J-104	100kΩ	"	"
R304	ORD181J-104	"	"	"
R305	ORD181J-104	"	"	"
R306	ORD181J-104	"	"	"
R307	QRD181J-102	1kΩ	"	"
R308	QRD181J-102	"	"	"
R309	QRD181J-824	820kΩ	"	"
R310	QRD181J-824	"	"	"
R311	QRD181J-753	75kΩ	"	"
R312	QRD181J-753	"	"	"
R313	QRD181J-105	1MΩ	"	"
R314	QRD181J-105	"	"	"
R315	QRD181J-473	47kΩ	"	"
R316	QRD181J-473	"	"	"
R318	QRD181J-223	22kΩ	"	"
R319	QVP4A0B-223	"		Variable Carbon
R320	QRD181J-391	390Ω	1/8W	
R321	QRD181J-472	4.7kΩ	"	"
R322	QRD181J-472	"	"	"
R323	QRD181J-153	15kΩ	"	"
R324	QRD181J-153	"	"	"
R325	QRD181J-105	1MΩ	"	"
R326	QRD181J-105	"	"	"
R327	QRD181J-102	1kΩ	"	"
R328	QRD181J-102	"	"	"
R351	QRD181J-224	220kΩ	"	"
R352	QRD181J-224	"	"	"
R353	QRD181J-184	180kΩ	"	"
R354	QRD181J-184	"	"	"
R355	QRD181J-102	1kΩ	"	"
R356	QRD181J-102	"	"	"
R357	QRD181J-103	10kΩ	"	"
R358	QRD181J-103	"	"	"
R359	ORG129J-152	1.5kΩ	1/2W	Uninflammable O.M.
R360	ORG129J-152	"	"	"
R361	QRD181J-102	1kΩ	1/8W	Carbon
R362	QRD181J-102	"	"	"
R363	QRD181J-122	1.2kΩ	"	"
R364	QRD181J-122	"	"	"
R365	QRD181J-184	180kΩ	"	"
R366	QRD181J-184	"	"	"
R367	QRD181J-562	5.6kΩ	"	"
R368	QRD181J-562	"	"	"
R369	ORD181J-472	4.7kΩ	"	"
R370	QRD181J-472	"	"	"
R371	ORG129J-272	2.7kΩ	1/2W	Uninflammable O.M.
R372	ORG129J-272	"	"	"
R373	ORG129J-392	3.9kΩ	"	O.M.

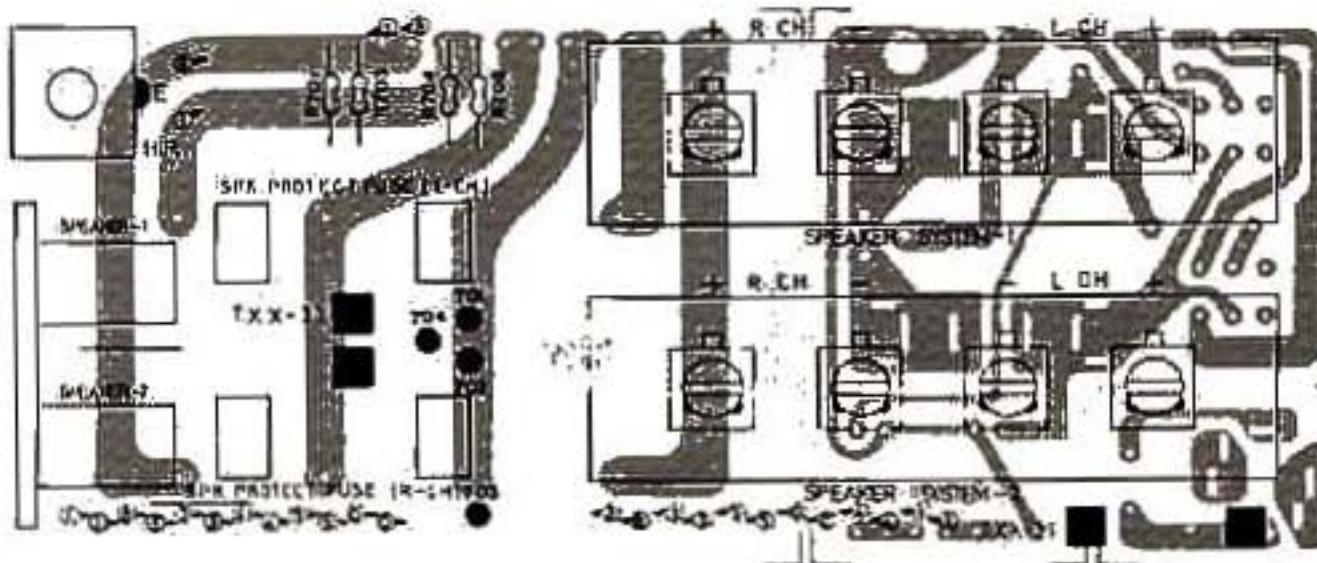
Resistors

Item No.	Part Number	Rating		Description
R374	QRG129J-392	3.9kΩ	1/2W	O.M.
R375	ORD181J-222	2.2kΩ	1/8W	Carbon
R376	QRD181J-222	"	"	"
R377	QVP4A0B-102	1kΩ		Variable
R378	QVP4A0B-102	"		"
R379	QRG129J-102	"	1/2W	Uninflammable O.M.
R380	QRG129J-102	"	"	"
R381	ORG129J-391	390Ω	"	Uninflammable Carbon
R382	QRG129J-391	"	"	"
R383	QRG129J-391	"	"	"
R384	QRG129J-391	"	"	"
R385	ORMD24K-R47	0.47Ω	2W	Metal Plate
R386	ORMD24K-R47	"	"	"
R387	ORMD24K-R47	"	"	"
R388	ORMD24K-R47	"	"	"
R389	ORX129J-100	10Ω	1/2W	Uninflammable M.F.
R390	ORX129J-100	"	"	"
R402	ORG129J-392	3.9kΩ	"	O.M.
R403	ORG129J-102	1kΩ	"	Uninflammable O.M.
R501	ORG129J-272	2.7kΩ	"	"
R502	ORD181J-105	1MΩ	1/8W	Carbon
R503	ORD181J-104	100kΩ	"	"
R551	ORD181J-103	10kΩ	"	"
R552	ORD181J-123	12kΩ	"	"
R553	ORD181J-393	39kΩ	"	"
R554	QRD181J-153	15kΩ	"	"
R555	QRD181J-273	27kΩ	"	"
R556	QRD181J-683	68kΩ	"	"
R557	QRD181J-104	100kΩ	"	"
R559	QRD181J-564	560kΩ	"	"
R560	QRD181J-564	"	"	"
R561	QRD181J-682	6.8kΩ	"	"
R562	QRD181J-154	150kΩ	"	"
R563	QRD181J-334	330kΩ	"	"
R564	QRG129J-180	18Ω	1/2W	O.M.F.

Others

Item No.	Part Number	Rating	Description
	E03546-009 E03628-5 E34083-002 E46449-004 E46934-001 E46934-002 E49003-002 QSP0289-103 SBSB300BZ E60171-001		FM Front End 5 Pins Plug Heat Sink Bracket " Bracket (B) Shield Cover Push Switch Tapping Screw Heat Sink (X401 2SD325)

8-(2) TXX-31A Speaker C.B. Ass'y



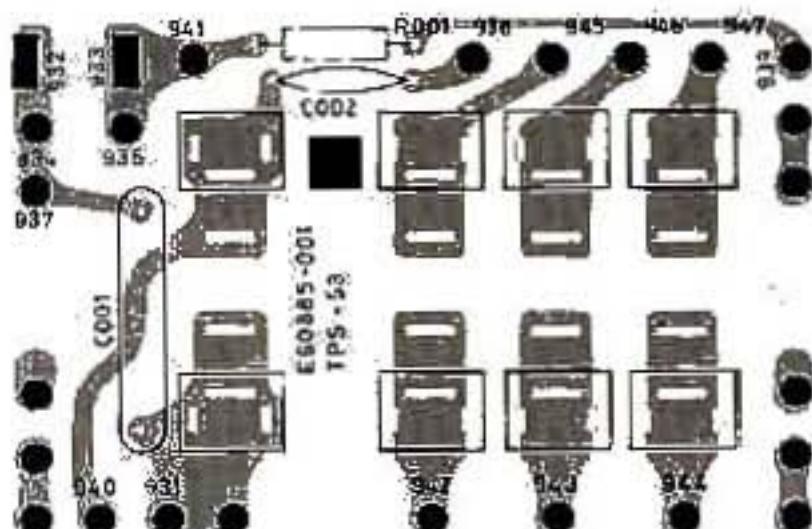
Resistors

Item No.	Part Number	Rating		Description
R701	ORD126J-221	220Ω	1/2W	Uninflammable Carbon
R702	ORD126J-221	"	"	"
R703	QRD126J-102	1kΩ	"	"
R704	QRD126J-102	"	"	"

Others

Item No.	Part Number	Rating		Description
	QSP0229-004			Push Switch
	QMS6301-001			Jack Ass'y.
	E03572-004C			Speaker Terminals Board
	E45524-001			Contact Clip

8-(3) TPS-531 Fuse C.B. Ass'y



Different assemblies are used in units intended for different areas. Make sure of where the unit was sold. Refer to page 26.

Capacitor

Item No.	Part Number	Rating		Description
C003	QCZ9008-101	100pF	500V	Ceramic

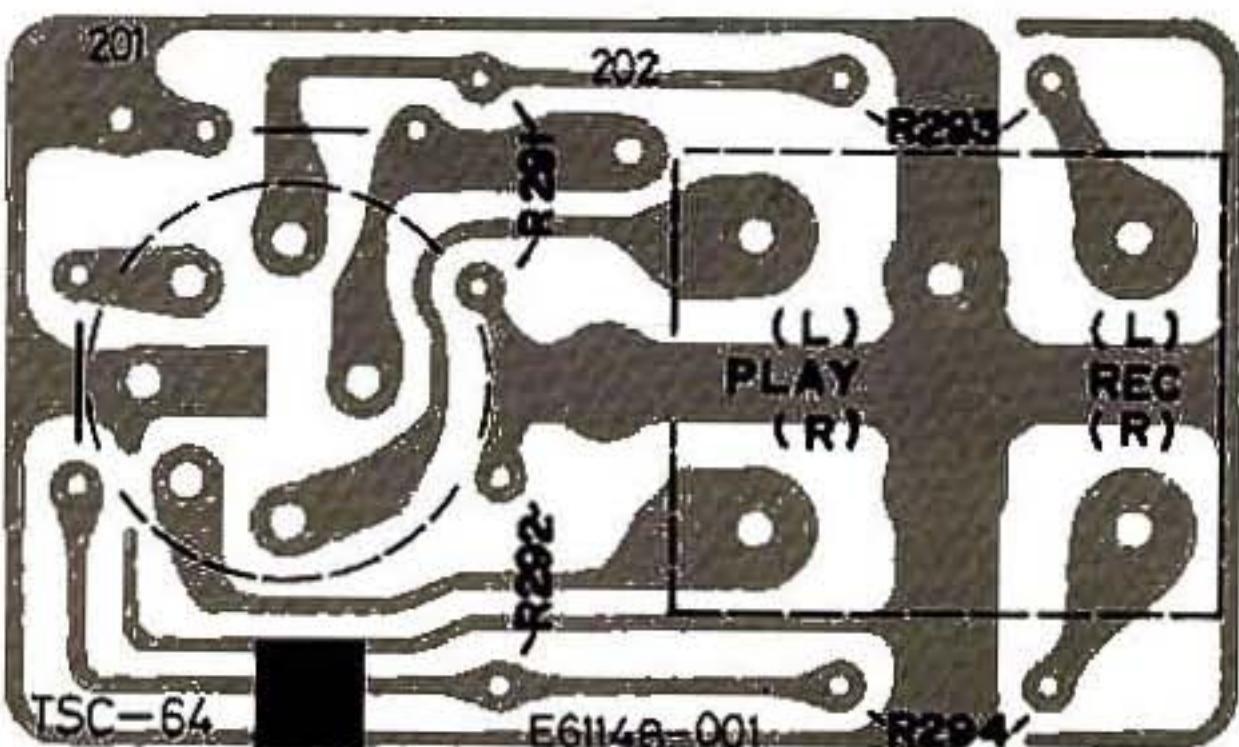
Resistor

Item No.	Part Number	Rating		Description
R001	QRC121K-275E	2.7kΩ	1/2W	Composition

Other

Item No.	Part Number	Rating		Description
	E60885-002			Contact Clip (Fuse)

8-(4) TSC-64 Tape C.B. Ass'y



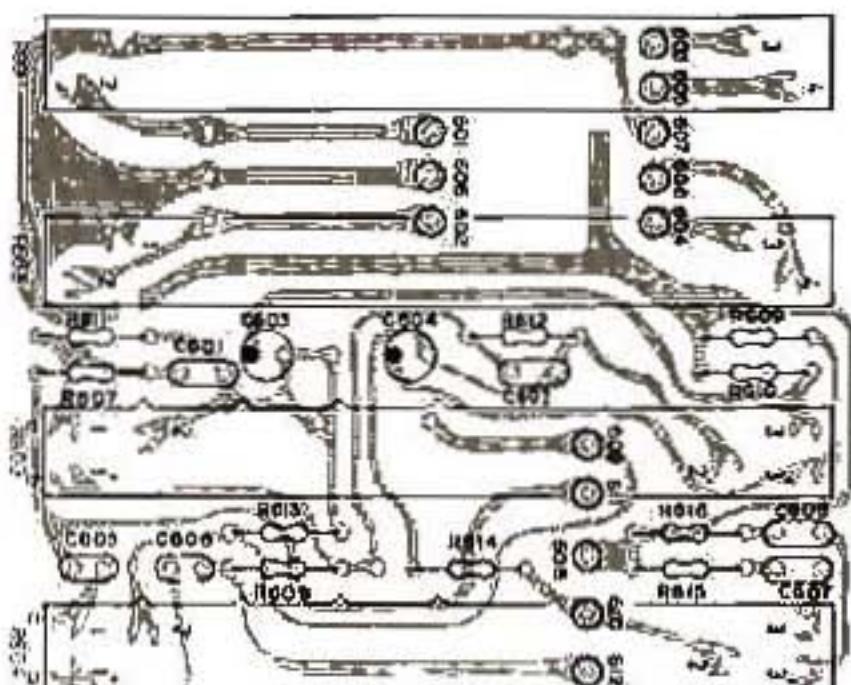
Resistors

Item No.	Part Number	Rating		Description
R291	QRD181J-124	120kΩ	1/8W	Carbon
R292	QRD181J-124	"	"	"
R293	QRD181J-334	330kΩ	"	"
R294	QRD181J-334	"	"	"

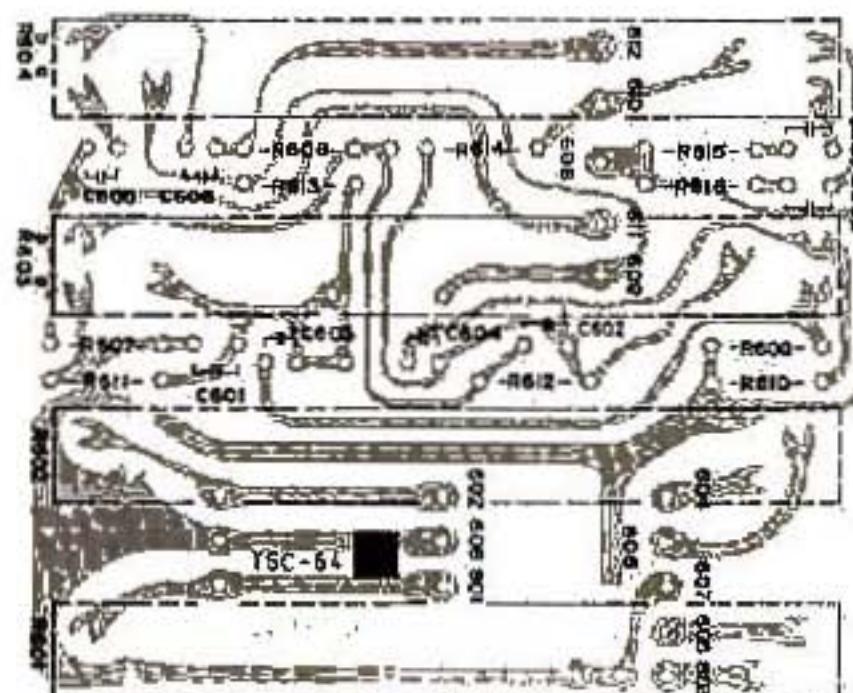
Others

Item No.	Part Number	Rating	Description
	E03591-41D E03623-002		4 Pins Jack Ass'y (Rec. & Play) DIN Socket

8-(5) TAC-404 Volume & Tone Control C.B. Ass'y



Front View



Rear View

Capacitors

Item No.	Part Number	Rating		Description
C601	QFM41HK-273	0.027 μ F	50W	Mylar
C602	QFM41HK-273	"	"	"
C603	QEB41HM-224	0.22 μ F	"	Low Leakage Current Electrolytic
C604	QEB41HM-224	"	"	"
C605	QFM41HK-332	3300pF	"	Mylar
C606	QFM41HK-332	"	"	"
C607	QFM41HK-333	0.033 μ F	"	"
C608	QFM41HK-333	"	"	"

Resistors

Item No.	Part Number	Rating		Description
R601	QVT6C2B-5G5E	150k Ω		Variable
R602	QVT6C2B-5G5E	"		"
R603	QVR4C2G-215	100k Ω		"
R604	QVR4C2G-215	"		"
R607	QRD141J-123	12k Ω	1/4W	Carbon
R608	QRD141J-123	"	"	"
R609	QRD141J-152	1.5k Ω	"	"
R610	QRD141J-152	"	"	"
R611	QRD141J-104	100k Ω	"	"
R612	QRD141J-104	"	"	"
R613	QRD141J-182	1.8k Ω	"	"
R614	QRD141J-182	"	"	"
R615	QRD141J-561	560 Ω	"	"
R616	QRD141J-561	"	"	"

Others

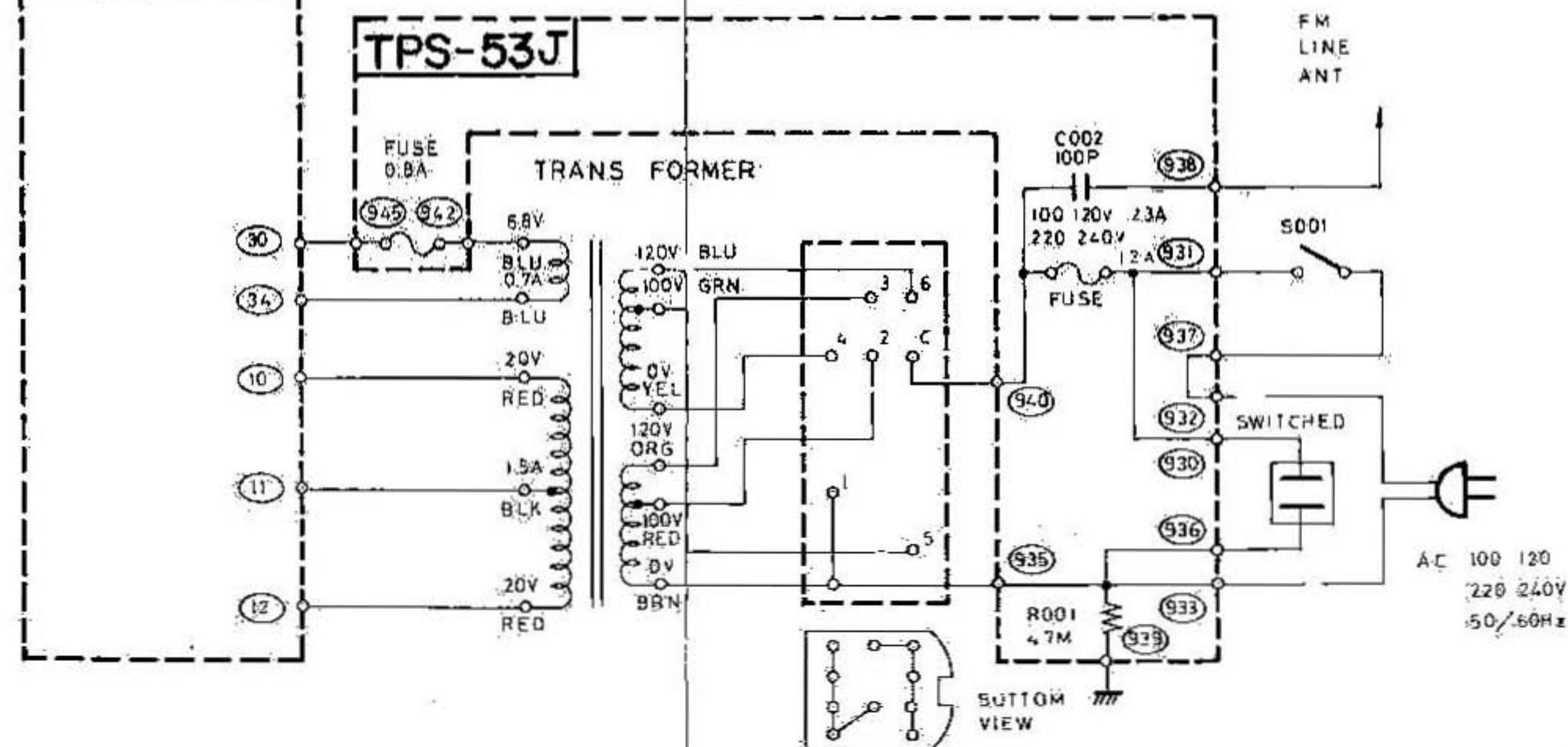
Item No.	Part Number	Rating		Description
	E34428-001			Control Bracket
	E60882-001			Felt Spacer
	SSSP3006NS			Screw

(P) FOR PACEX
(U) FOR OTHER COUNTRIES

PRIMARY AC100v, 120v, 220v, 240v, 50/60Hz

TRA - 16

TPS-53J



13. Schematic Diagram

