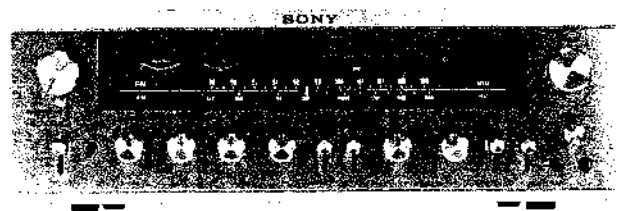


(USA Model)



(UK, AEP and GEP Model)

USA Model

UK Model

AEP Model

GEP Model

## TA-FX500 FM STEREO TUNING RANGE RECEIVER

### SPECIFICATIONS

#### FM TUNER SECTION

Frequency range	87.5 - 108 MHz
Antenna	300 Ω terminal (see page 26) 60 Ω terminal (see page 26)
Intermediate frequency	10.7 MHz
Sensitivity	20 μV (1 kHz) 1.0 μV (5 kHz) - 30 dB
Image rejection	70 dB
Spurious rejection	70 dB
SCA suppression	50 dB
Capture ratio	7 dB
Selectivity	0.4 dB (1 kHz)
S/N ratio	70 dB
Frequency response	20 - 20,000 Hz ± 1 dB
Harmonic distortion	1.0% (0.1% at 20 Hz, 100 Hz, 1 kHz) Stereo: 0.4% (0.1% at 100 Hz, 1 kHz)
Stereo separation	Greater than 15 dB at 400 Hz
SCA suppression	55 dB
Muting level	5 μV

#### A-M TUNER SECTION

Frequency range	530 - 1,605 kHz
Antenna	50 Ω terminal antenna and external antenna terminal
Intermediate frequency	455 kHz (USA and GEP Model) 488 kHz (AEP and UK Model)
Sensitivity	48 dB/m (built-in ferrite rod antenna) at 1,000 kHz 100 μV (external antenna)

Image rejection	50 dB at 100 kHz
IF rejection	40 dB at 100 kHz
S/N ratio	50 dB at 500 kHz
Harmonic distortion	1.0% at 500 kHz

#### POWER AMPLIFIER SECTION

Continuous RMS power output	4 W (100 W peak)
Maximum output power	60 W (100 W) (100 W) and 30 W (100 W) (50 W) (AEP and UK Model)
Power supply	100 V (100 V) (USA and GEP Model) 170 V (180 V) (AEP and UK Model) 180 V (190 V) (USA and GEP Model) 270 V (230 V) (AEP and UK Model)
Power capacity (1 kHz)	17 - 55,000 Hz
Damping factor	50 : 1
Harmonic distortion	Less than 0.01% (at continuous RMS power output) Less than 0.01% (A output)
IM distortion	Less than 0.01% (at continuous RMS power output) Less than 0.01% (A output)

CONTINUED ON PAGE 10

# SERVICE MANUAL

# STR-7065A

**Residual noise:** Less than 0.05  $\mu$ W

**S/N ratio:** Greater than 110 dB (closed circuit)

**Frequency response:** 10 – 100,000 Hz  $\pm \frac{0}{1}$  dB at 1 W output

**Input sensitivity and impedance:** 1 V at continuous RMS power output  
50 k $\Omega$

## PREAMPLIFIER SECTION

**Input sensitivity and impedance:**

	Sensitivity *	Impedance
PHONO	3 mV	47 k $\Omega$
MIC	1.6 mV	47 k $\Omega$
AUX	250 mV	50 k $\Omega$
TAPE 1, 2		
REC/PB(input)		

**Note:** \* Measured with continuous RMS power output into 8  $\Omega$  loads (both channels driven simultaneously) at 1 kHz.

**Maximum input capability:** 100 mV . . . . . PHONO

**Output level and impedance:**

	Level	Impedance
REC OUT	250 mV	10 k $\Omega$
REC/PB (output)	30 mV	82 k $\Omega$
PREAMP OUTPUT	1 V	4.7 k $\Omega$

**S/N ratio:**

	S/N	Weighting network	Input level
PHONO	72 dB	A	3 mV
MIC	65 dB	B	1.6 mV
AUX	90 dB	A	250 mV
TAPE 1, 2			
REC/PB(input)			

**Harmonic distortion:** Less than 0.2% at continuous RMS power output

**IM distortion:** Less than 0.2% at continuous RMS power output  
(60 Hz : 7 kHz = 4 : 1)

**Frequency response:** PHONO RIAA equalization curve  $\pm 1$  dB  
MIC 100 – 10,000 Hz  $\pm \frac{0}{3}$  dB

AUX  
TAPE 1, 2 } 10 – 70,000 Hz  $\pm \frac{0}{3}$  dB  
REC/PB (input) }

**Tone controls:** BASS  $\pm 10$  dB at 100 Hz  
TREBLE  $\pm 10$  dB at 10 kHz

**High filter:** 12 dB/oct. above 9 kHz

**Low filter:** 12 dB/oct. below 50 Hz

**Loudness control:** + 10 dB at 50 Hz, + 4 dB at 10 kHz  
(Attenuation : 30 dB)

## GENERAL:

**System:** Superheterodyne fm/a-m tuner  
Complementary symmetry circuit  
(SEPP OTL), Direct output coupling

**Power requirements:** 120 Vac, 60 Hz (USA Model)  
100, 120, 220, 240 Vac, 50/60 Hz  
(GEP Model)  
110, 127, 220, 240 Vac, 50/60 Hz  
(UK and AEP Model)

**Power consumption:** 180 W (USA Model)  
300 W (GEP Model)  
370 W (UK and AEP Model)

**AC outlets:** 2 switched, 200 W  
1 unswitched, 200 W (USA Model only)

**Dimensions:** 471 (w) x 157 (h) x 375 (d) mm  
18 $\frac{1}{4}$  (w) x 6 $\frac{1}{8}$  (h) x 14 $\frac{3}{4}$  (d) inches  
(USA Model)

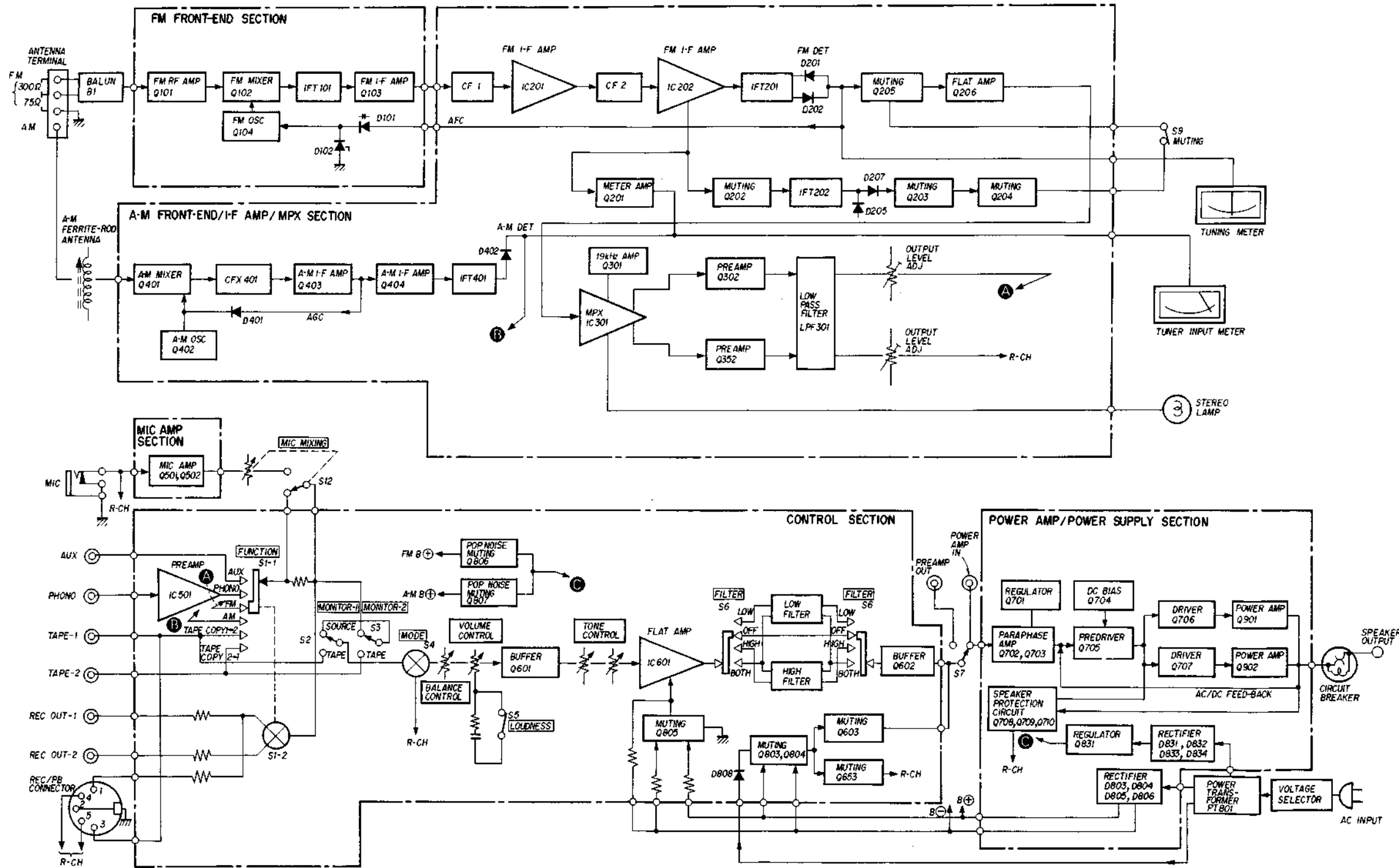
440 (w) x 148 (h) x 375 (d) mm  
17 $\frac{3}{8}$  (w) x 5 $\frac{7}{8}$  (h) x 14 $\frac{3}{4}$  (d) inches  
(UK, AEP and GEP Model)

**Net weight:** 15.2 kg, 33 lb 10 oz (USA Model)  
13.2 kg, 29 lb 2 oz (UK, AEP and GEP Model)

**Shipping weight:** 18.9 kg, 44 lb 10 oz (USA Model)  
16.9 kg, 37 lb 4 oz (UK, AEP and GEP Model)

SECTION 1  
BLOCK DIAGRAM

1-1 BLOCK DIAGRAM



## SECTION 2

## DISASSEMBLY AND REPLACEMENT

## 2-1. BOTTOM PLATE REMOVAL

Remove the eight self-tapping screws shown in Fig. 2-1.

## 2-2. FRONT PANEL REMOVAL

1. Remove all the knobs on the front panel.
2. Remove the three self-tapping screws shown in Fig. 2-1.
3. Remove the three screws shown in Fig. 2-2.

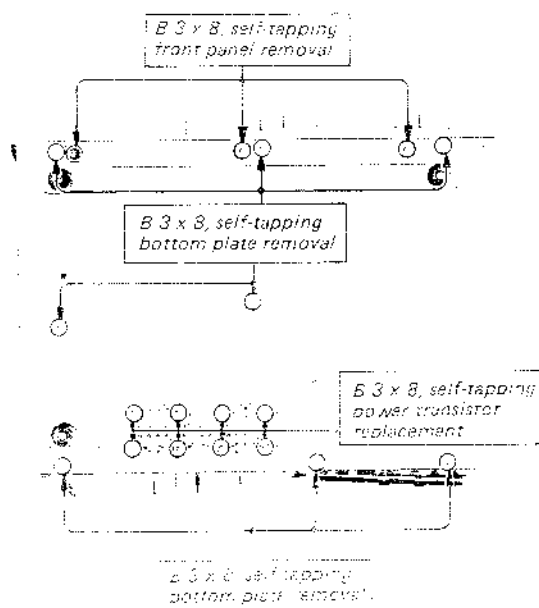


Fig. 2-1. Bottom plate and front panel removal

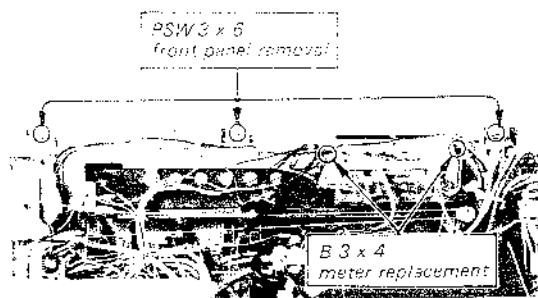


Fig. 2-2. Front panel removal and meter replacement

## 2-3. POWER TRANSISTOR REPLACEMENT

1. Remove the twelve self-tapping screws shown in Fig. 2-1 and Fig. 2-3.
2. Remove the two screws securing the power transistor to the heat sink.

**Note:** When replacing the power transistor, apply a coating of a heat-transferring grease to both sides of the mica insulator. Any excess grease squeezed out when the mounting bolts are tightened should be wiped off with a clean cloth. This prevents it from accumulating conductive dust particles that might eventually cause a short.

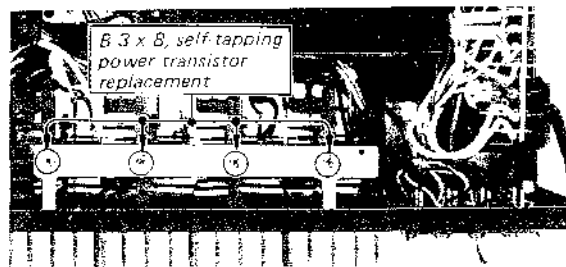


Fig. 2-3. Power transistor replacement

## 2-4. DIAL GLASS REMOVAL

Remove the six screws shown in Fig. 2-4.

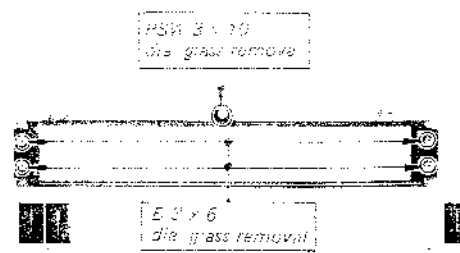


Fig. 2-4. Dial glass removal

## 2-5. METER REPLACEMENT

1. Remove the meter lamp shade by taking out the two screws shown in Fig. 2-2.
2. Remove the meter.

**2-6. DIAL CORD STRINGING**

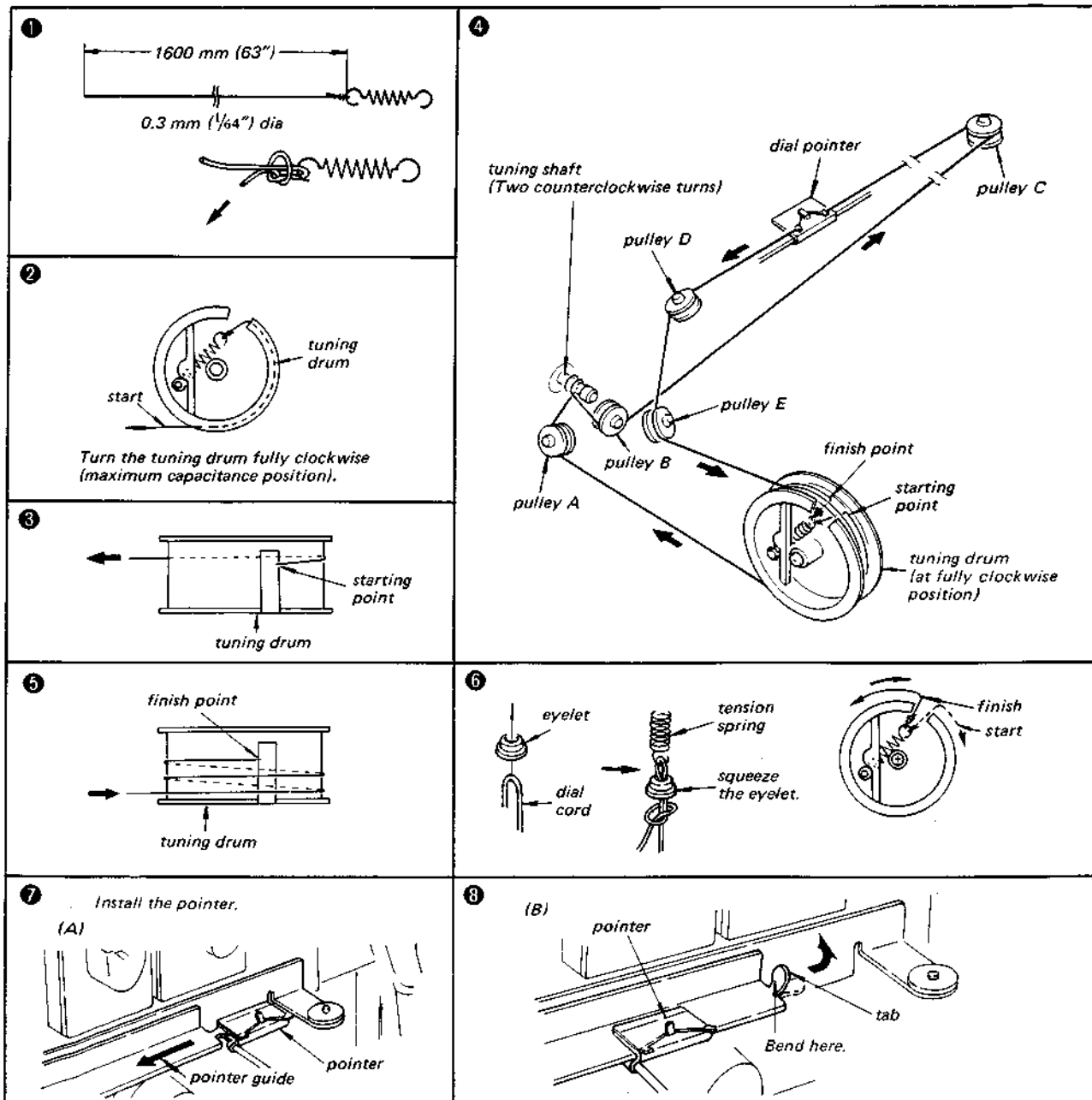


Fig. 2-5 Dial cord stringing

**2-7. DIAL CALIBRATION**

Tune the receiver to the local station. Move the pointer to the position where the dial indication coincides with the local station's carrier frequency. Apply a drop of contact cement to it.

2-8. VOLUME CONTROL REPLACEMENT

1. Remove the power amp/power supply board bracket (1) by taking out the screw as shown in Fig. 2-6.
2. Remove the front panel as described in Procedure 2-2.
3. Remove the nut securing the VOLUME control to the front subchassis shown in Fig. 2-7.
4. Remove the Loudness control board along with the VOLUME control.

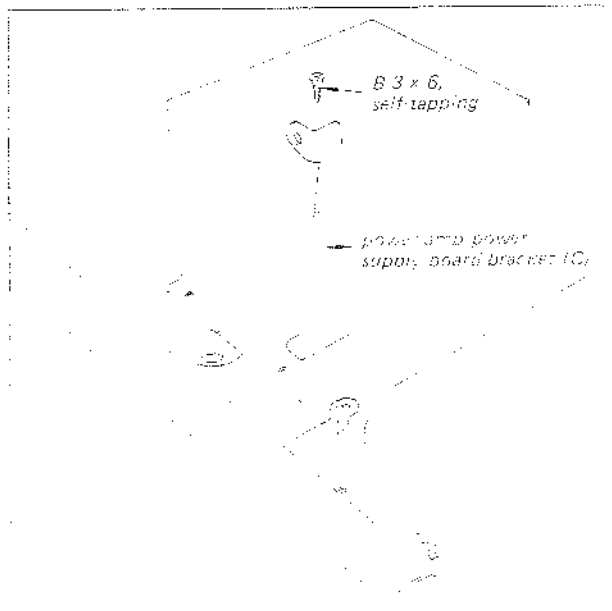


Fig. 2-6. Power amp/power supply board replacement

2-9. CONTROL, JACK AND SWITCH REPLACEMENT

Prepare for replacing any of the controls, jacks or switches by removing the front panel described in Procedure 2-2.

**Note.** Before removing the front subchassis, fasten the dial cord to the drum pulleys with cellophane tape. This helps you to resetting the dial cord.

POWER, MIC MIXING Switches and HEADPHONE, MIC Jacks

1. Remove two screws at the nut securing the defective switch or jack to front subchassis as shown in Fig. 2-7.
2. Unsolder the leads of defective switch board lead.
3. Install a new one.

SPEAKER, FILTER, MODE and FUNCTION Switches

1. Remove the securing nut securing the defective switch to front subchassis as shown in Fig. 2-7.
2. Fasten the drum pulley to defect switch lead with cellophane tape as shown in Fig. 2-7.

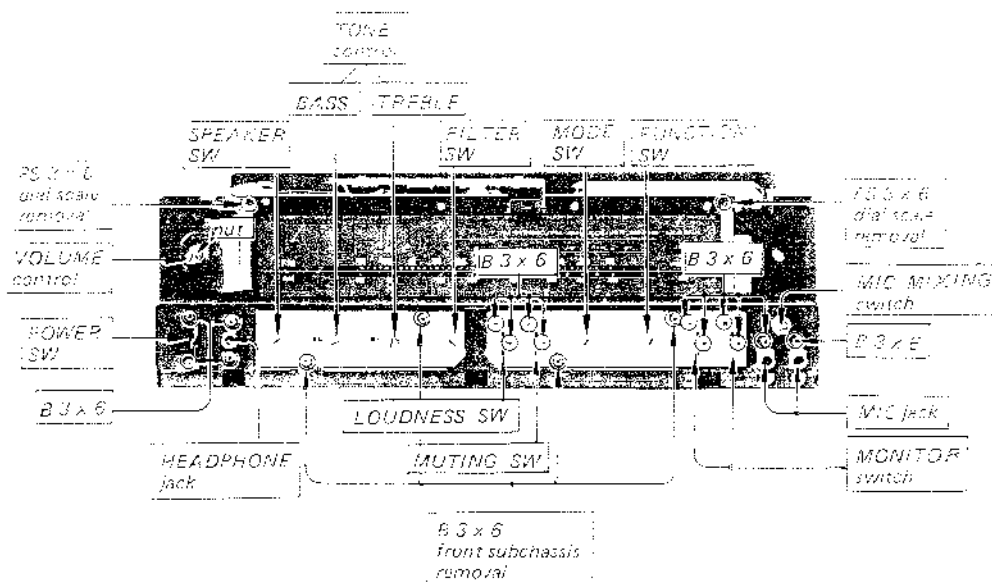


Fig. 2-7. Control, jack and switch replacement (1)

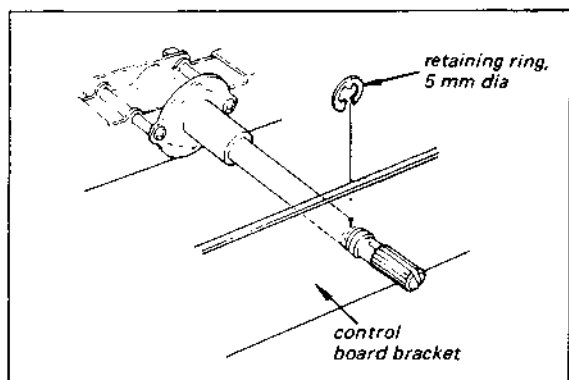


Fig. 2-8. Control board removal

3. Remove the bottom plate as described in Procedure 2-1.
4. With a soldering iron having a solder-sucking tip, clean the solder from each lug of the defective switch and the printed circuit board.
5. Remove the defective switch and install a new one.

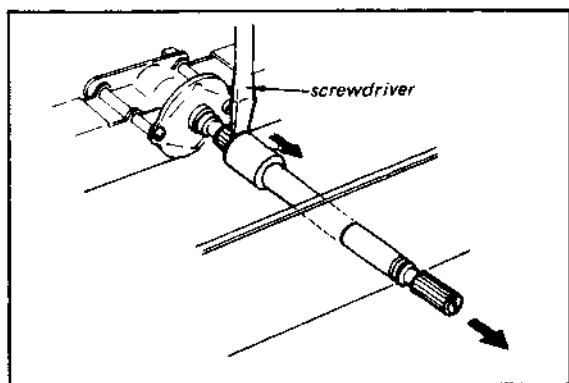


Fig. 2-9. Switch shaft removal

**LOUDNESS, MUTING, MONITOR Switches and TONE controls**

1. Remove the four screws (B 3 x 6) securing the control board bracket to the front subchassis as shown in Fig. 2-7.
2. Remove the three screws (PSW 3 x 6) securing the control board to the chassis as shown in Fig. 2-10.
3. Remove the nut securing the defective control or two screws (B 3 x 6) securing the defective switch to the control board bracket as shown in Fig. 2-7.
4. Remove the bottom plate as described in Procedure 2-1.
5. Move the control board toward power transformer as far as it goes. This helps in unsoldering the defective part on the board.
6. With a soldering iron having a solder-sucking tip, clean the solder from each lug of the defective part and the printed circuit board.
7. Remove the defective part and install a new one.

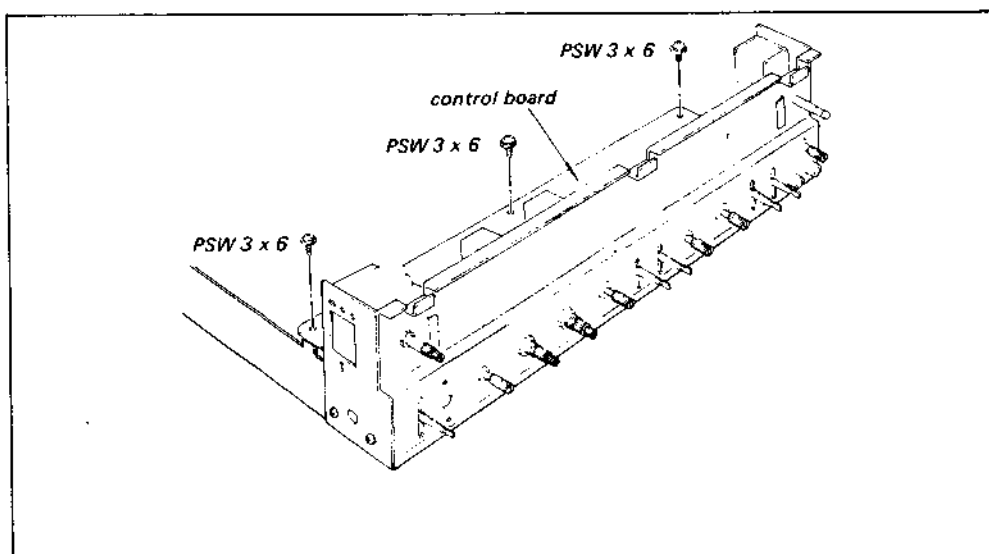


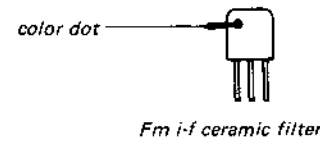
Fig. 2-10. Control, jack and switch replacement (2)

SECTION 3  
ALIGNMENTS AND ADJUSTMENTS

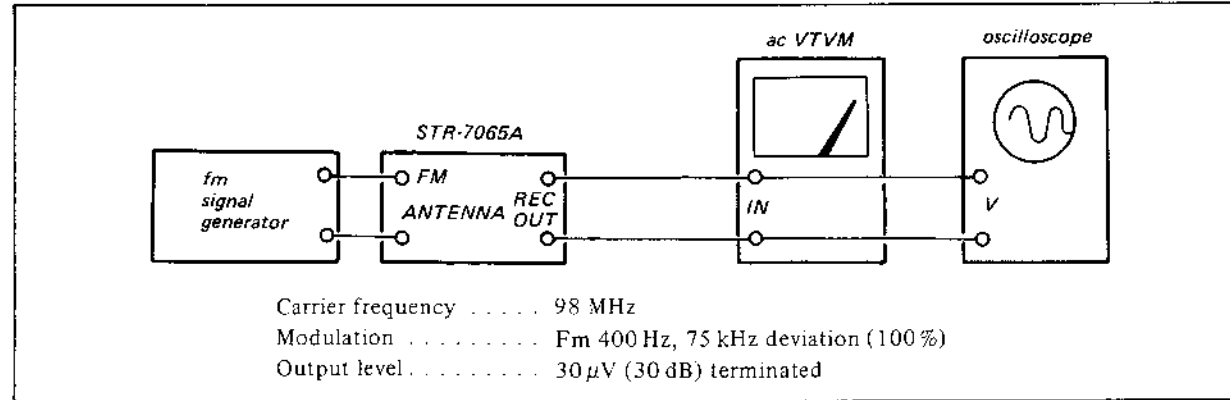
3-1. FM I-F STRIP ALIGNMENT

The center frequency (color code) of CF1 and CF2 should coincide with each other.

**Note:** It makes no difference, if the center frequency of the new filters is not the same as that of the defective ones.



Test setup:



Preparation:

Short the AFC circuit to ground as shown in Fig. 3-1.

Procedure:

1. Precisely tune the receiver to the SG frequency.
2. Adjust IFT101 (See Fig. 3-2.) for maximum deflection on the TUNER INPUT meter.
3. Carefully adjust IFT101 so that maximum reading on the TUNER INPUT meter always coincides with null-point of the TUNING meter.
4. Adjust the core (primary side) of IFT201 for maximum output on the VTVM, and adjust it so that the VTVM indication falls as the receiver is detuned in either direction (maximum output corresponds to null-point on the TUNING meter).

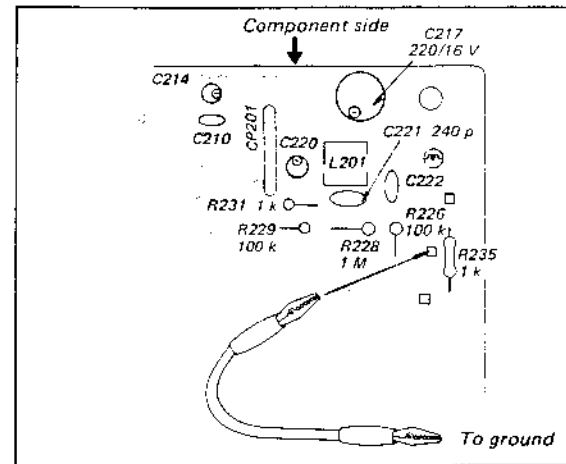


Fig. 3-1. Interruption of AFC circuit.

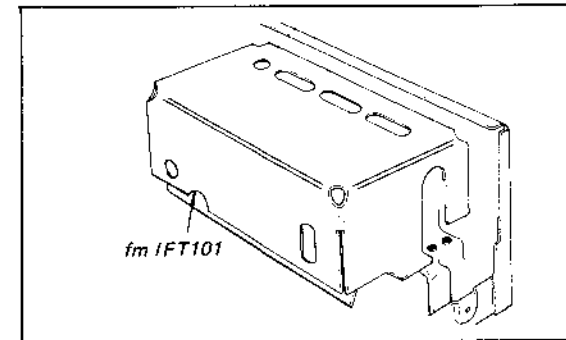


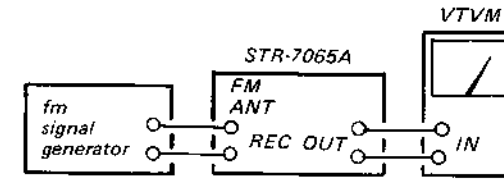
Fig. 3-2. Adjustment parts location

3-2. FM DISCRIMINATOR ALIGNMENT

1. Detune the receiver.
2. Turn the core (secondary side) of IFT201 for null-point reading on the TUNING meter.

3-3. MUTING ADJUSTMENT

Test Setup:



FM Signal Generator Setting:

- Carrier frequency: 98 MHz
- Modulation: Fm 400 Hz, 75 kHz deviation (100%)
- Output level: 60 dB (1,000  $\mu$ V)

Preparation:

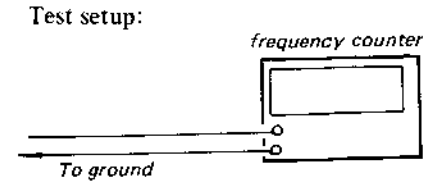
Short the AFC circuit to ground as shown in Fig. 3-1 on Page 9.

Procedure:

1. Tune the receiver to 98 MHz.
2. Adjust IFT202 for proper muting operation. Muting should begin at point equidistant from zero center.

3-4. 19 kHz ADJUSTMENT

A) With frequency counter



1. Tune the receiver to 98 MHz.
2. Adjust RV301 for 19 kHz  $\pm$  100 Hz on the counter.

B) Without frequency counter

1. Tune the set to FM stereo signals.
2. Turn RV301 clockwise and counterclockwise and secure RV301 to the center in lighting up range of stereo lamp as shown below.

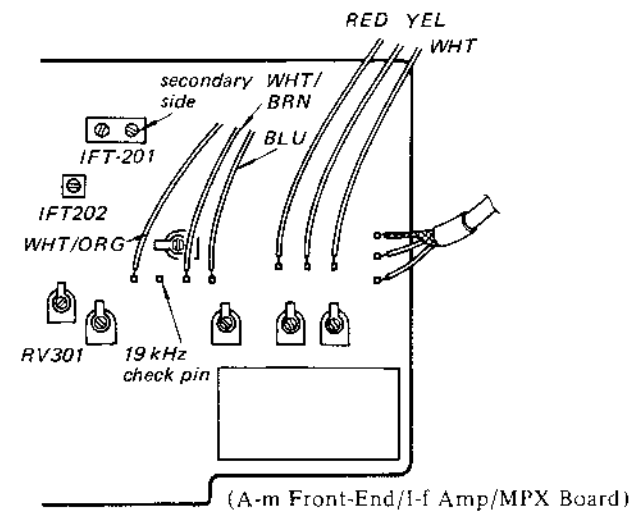
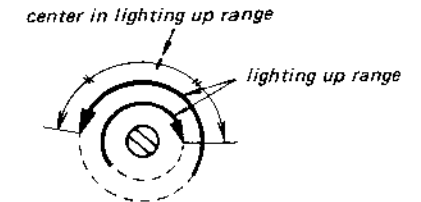
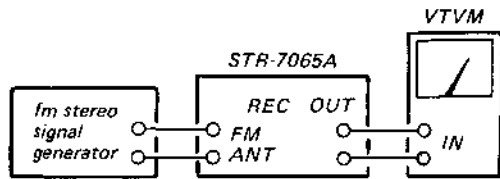


Fig. 3-3 Adjustment parts location



3-5. FM STEREO SEPARATION ADJUSTMENT

Test Setup:



FM Stereo Signal Generator Setting:

- Carrier frequency: 98 MHz
- Output level: 60 dB (1,000  $\mu$ V)
- Mode: Stereo
- Audio (400 Hz) Mod: 67.5 kHz (90 %)
- Pilot (19 kHz) Mod: 7.5 kHz (10 %)

Procedure:

1. Set the signal generator input selector to the left.
2. Tune the receiver to 98 MHz.
3. Adjust RV302 for maximum output on the VTVM at the left channel, and record the output level.
4. Record the residual signal level when the stereo signal generator input selector is to the right.

Note: The output level to residual-level ratio represents the separation.

5. Measure the separation at the right channel.
6. Readjust RV302 for minimum difference between left and right channel separation.

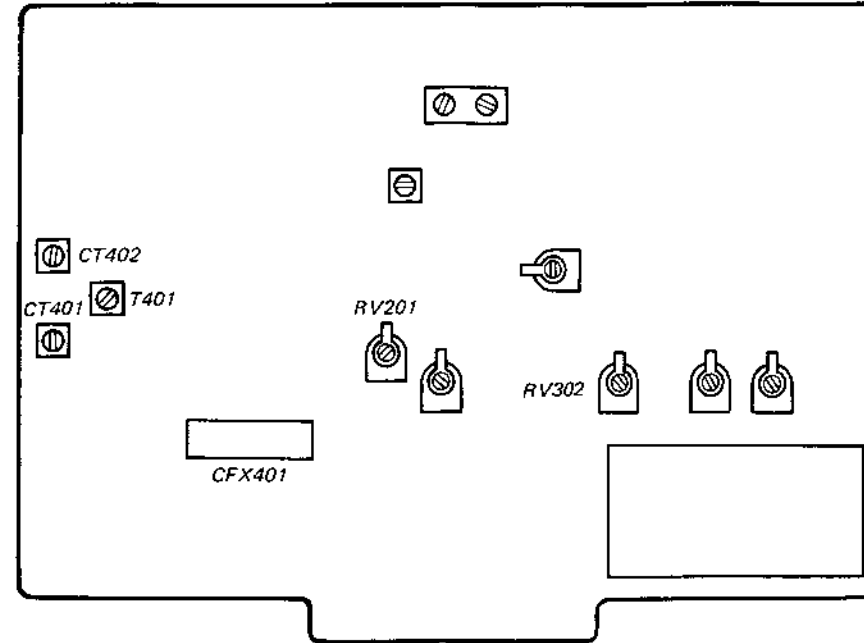


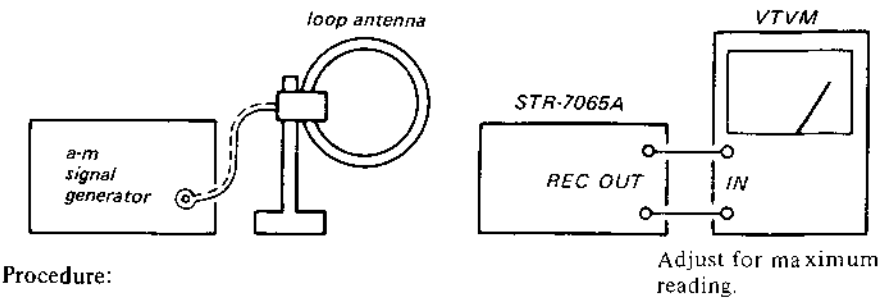
Fig. 3-4. Adjustment parts location

3-7. A-M I-F STRIP ALIGNMENT

Note: The i-f transformers [CFX401] in the a-m i-f amplifier circuit are adjusted at the factory, so very little adjustment is necessary in the field even if replacing any of these i-f transformers.

3-8. AM FREQUENCY COVERAGE AND AM TRACKING ALIGNMENT

Test Setup:



Procedure:

AM FREQUENCY COVERAGE
550 kHz (modulated)
1,600 kHz (modulated)

AM TRACKING
600 kHz (modulated)
1,400 kHz (modulated)

L901  
A-m Ferrite-rod antenna

3-6. FM FREQUENCY COVERAGE ALIGNMENT

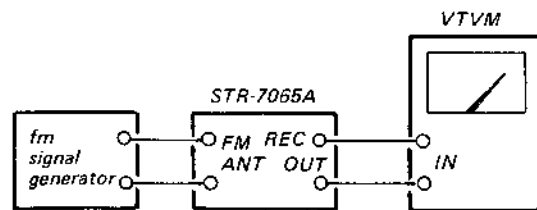
CAUTION

Never attempt alignment of the front-end section except for the frequency-coverage and dial-calibration adjustments. The front-end section of the receiver has been carefully adjusted at the factory. If an rf-stage adjustment is required, ask your nearest SONY Service Station to send your unit to the Factory Service Center for a complete front-end alignment.

Preparation:

1. Short the AFC circuit to ground as shown in Fig. 3-1.
2. Before starting this alignment, the fm discriminator alignment should be performed, and that the dial is mechanically calibrated as described in procedure 2-7 on Page 6.

Test Setup:



Adjust for maximum reading.

Procedure:

FM FREQUENCY COVERAGE ALIGNMENT
87.5 MHz (modulated)
108 MHz (modulated)

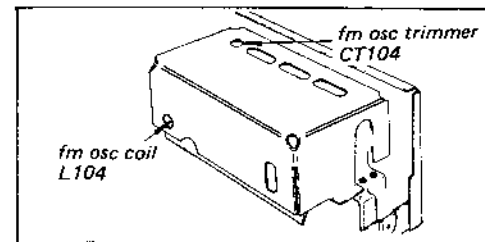
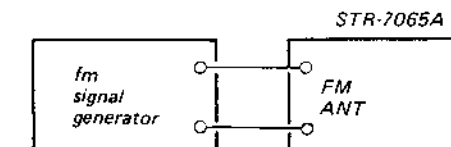


Fig. 3-5. Adjustment parts location

3-9. TUNER INPUT METER CALIBRATION

Test Setup:

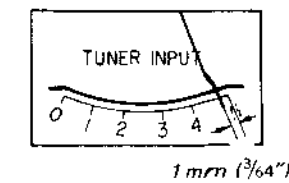


FM Signal Generator Setting:

- Carrier frequency: 98 MHz
- Modulation: 400 Hz, 75 kHz deviation (100 %)
- Output level: 60 dB (1,000  $\mu$ V)

Procedure:

1. Precisely tune the receiver to 98 MHz.
2. Adjust RV201 for specified position on the SIGNAL meter.



DC BIAS ADJUSTMENT

Note: Allow about five minutes for warm-up.

Test Setup:

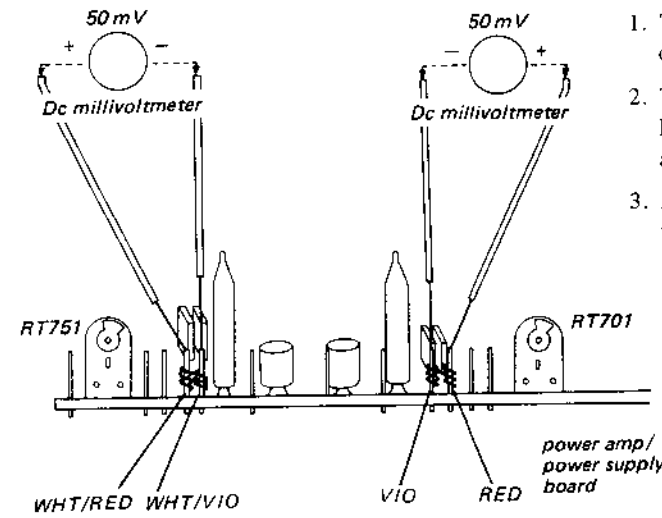
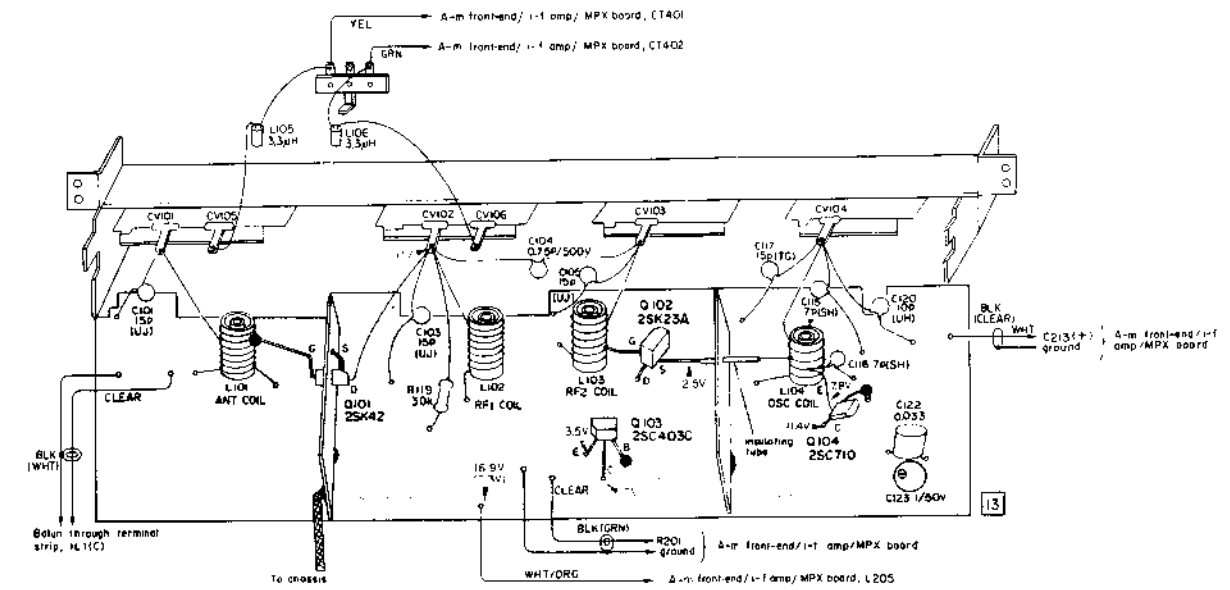


Fig. 3-6. Power-amplifier adjustment setup

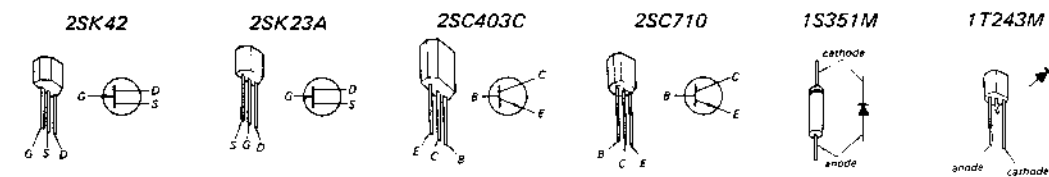
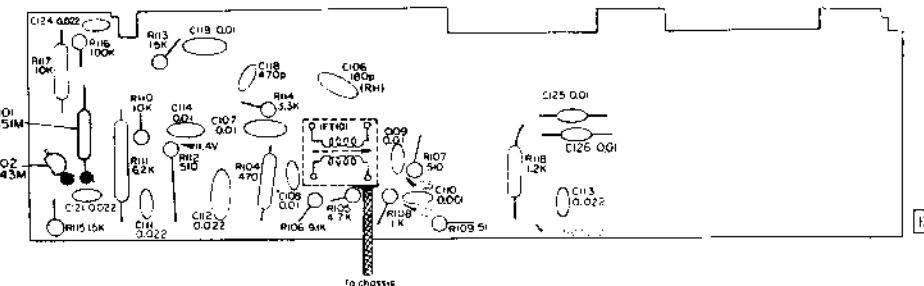
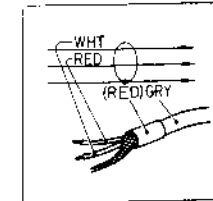
Procedure:

1. Turn RT701 (L-CH) and RT751 (R-CH) fully counterclockwise.
2. Turn on the POWER switch, and increase the ac line voltage up to the rated value by using a variable transformer.
3. Adjust RT701 and RT751 for 50 mV reading on the meter.

4-1. MOUNTING DIAGRAM – Fm Front-End Board –  
– Conductor Side –

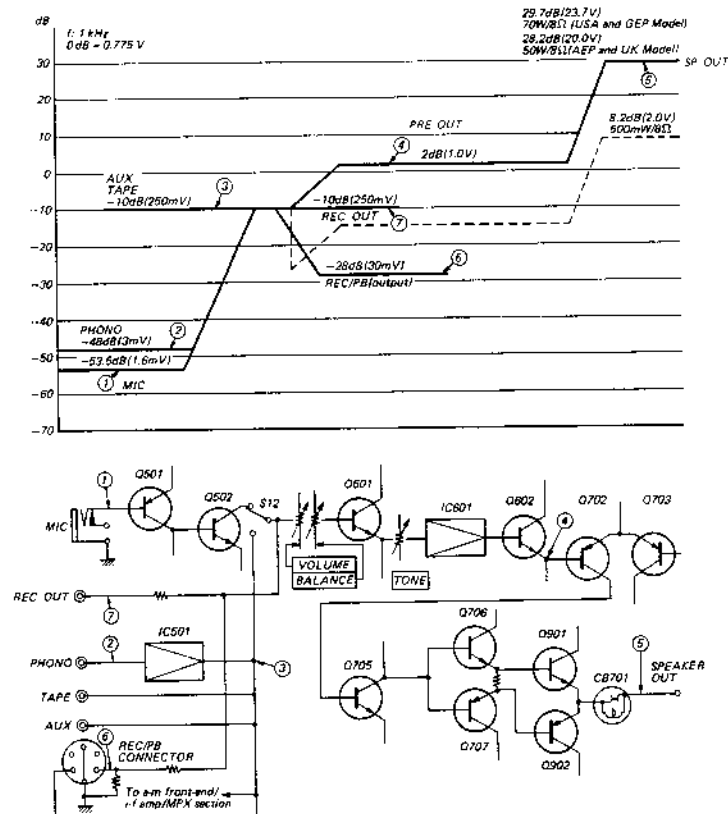


– Component Side –



Note: Signal voltages are measured with ac VTVM and expressed in dB referred to 0.775 V, 1 kHz.

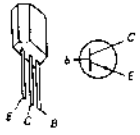
LEVEL DIAGRAM



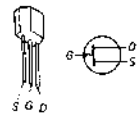
# STR-7065A STR-7065A

## 4-2. MOUNTING DIAGRAM – A-m Front-End/l-f Amplifier/MPX Board – – Conductor Side –

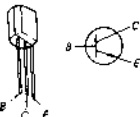
2SC634A  
2SC632A  
2SC403C



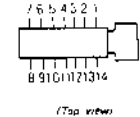
2SK23A



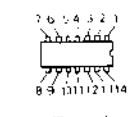
2SC710



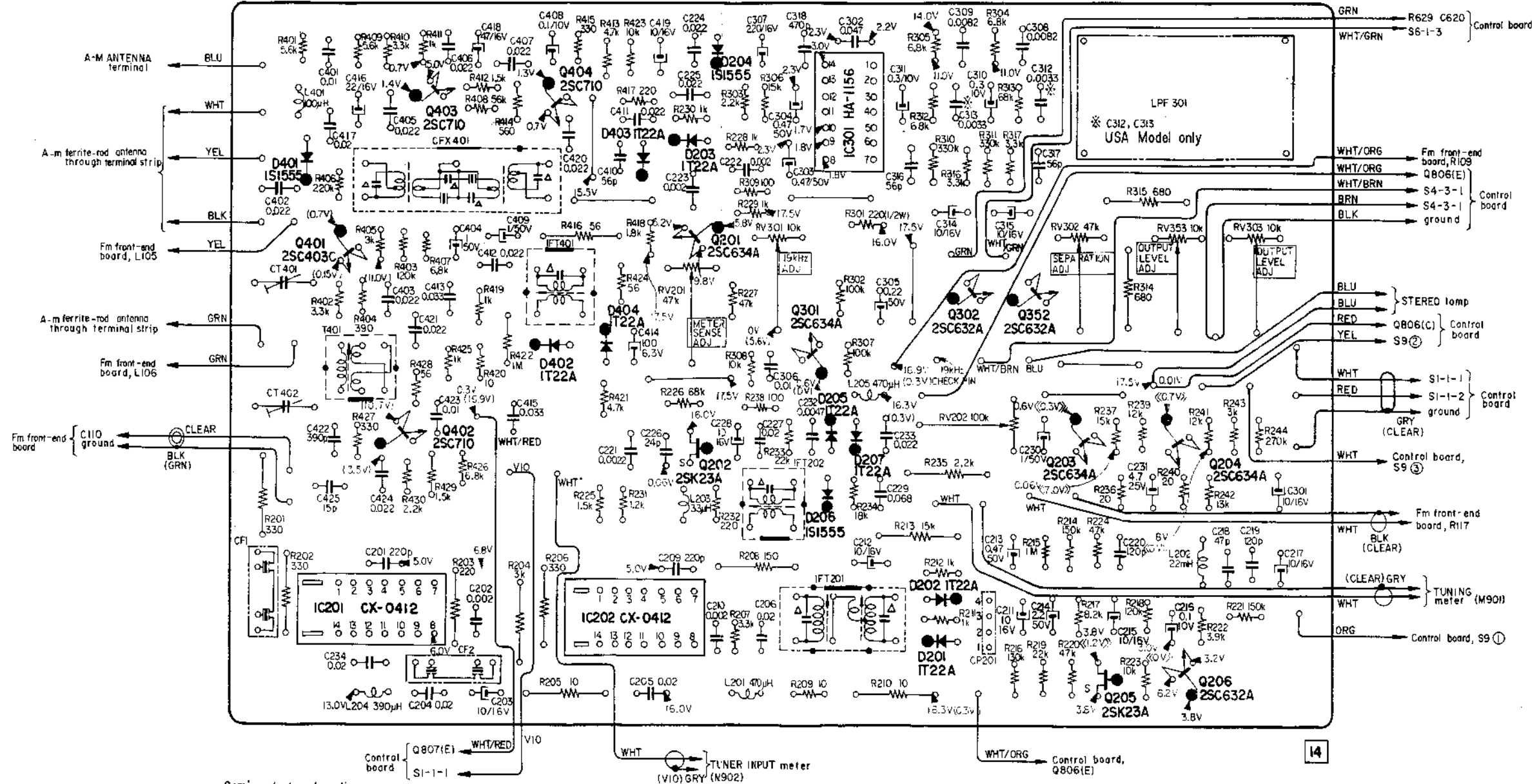
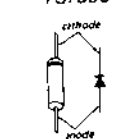
CX-0412



HA-1156



1T22A  
1S1555

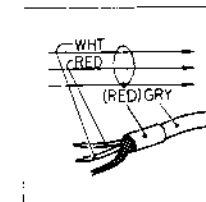


**Note:**

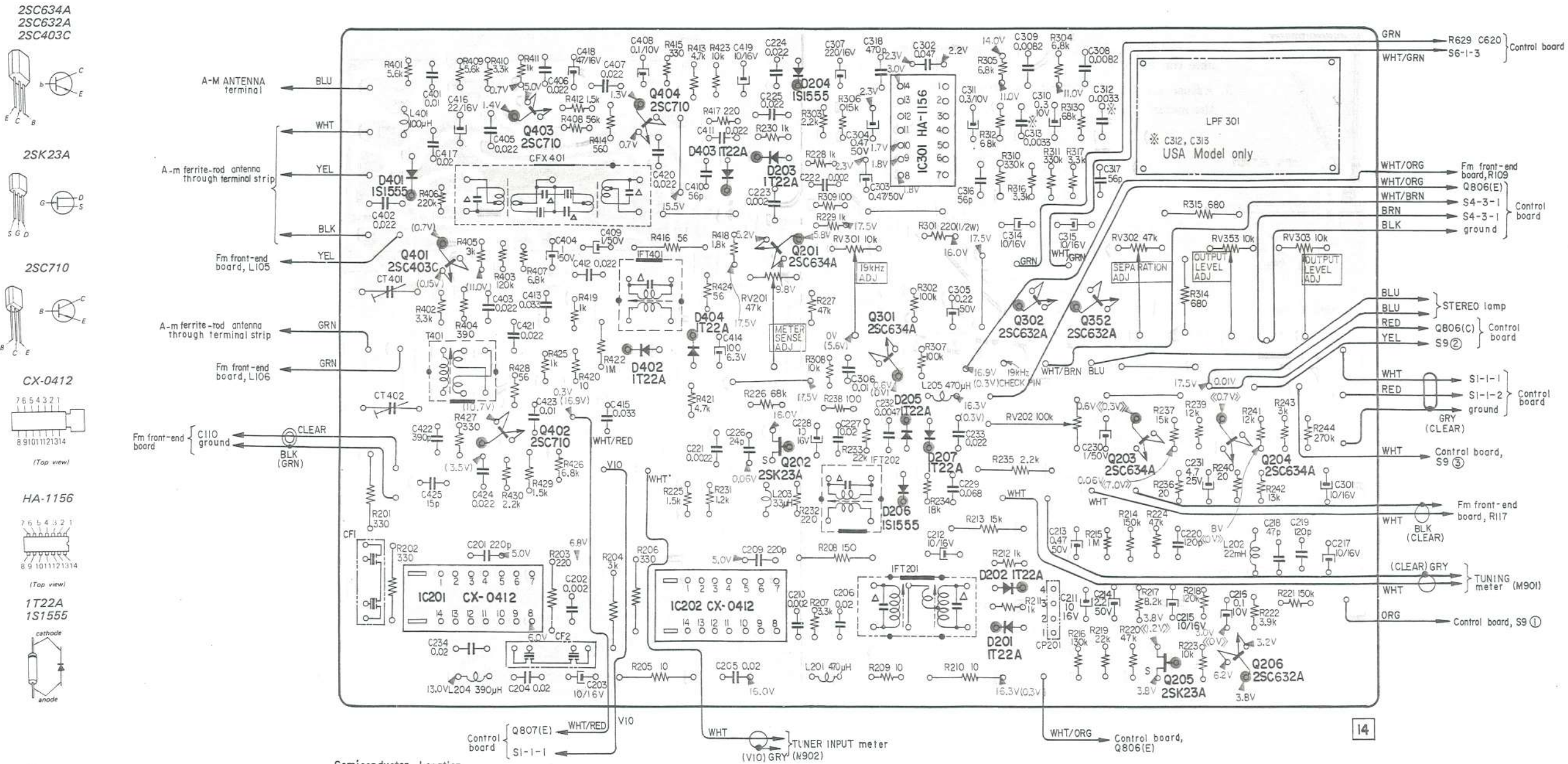
— A bold line shows the face of the coil (or the transformer) with its stencilled part number.  
 < > MUTING ON

**Semiconductor Location**

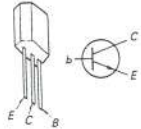
Q D I C	D401	Q403	Q404	D403	D203	D204	Q301	Q302	Q352	Q203	Q204
	Q401	Q402	D402	D404	Q201	Q202	D205	D207	D206	Q205	Q206
ADJ	CT401 CT402	T401	IFT401		RV201	RV301	IFT201	RV202	RV302	RV353	RV303



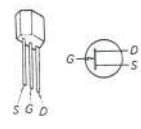
4-2. MOUNTING DIAGRAM - A-m Front-End/I-f Amplifier/MPX Board -  
- Conductor Side -



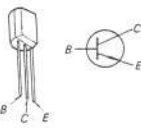
2SC634A  
2SC632A  
2SC403C



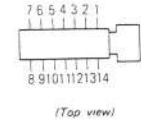
2SK23A



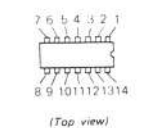
2SC710



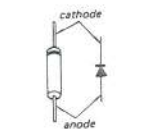
CX-0412



HA-1156



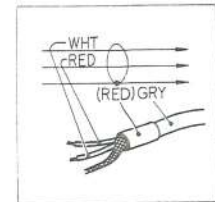
1T22A  
1S1555



Note:  
A bold line shows the face of the coil (or the transformer) with its stencilled part number.  
: MUTING ON

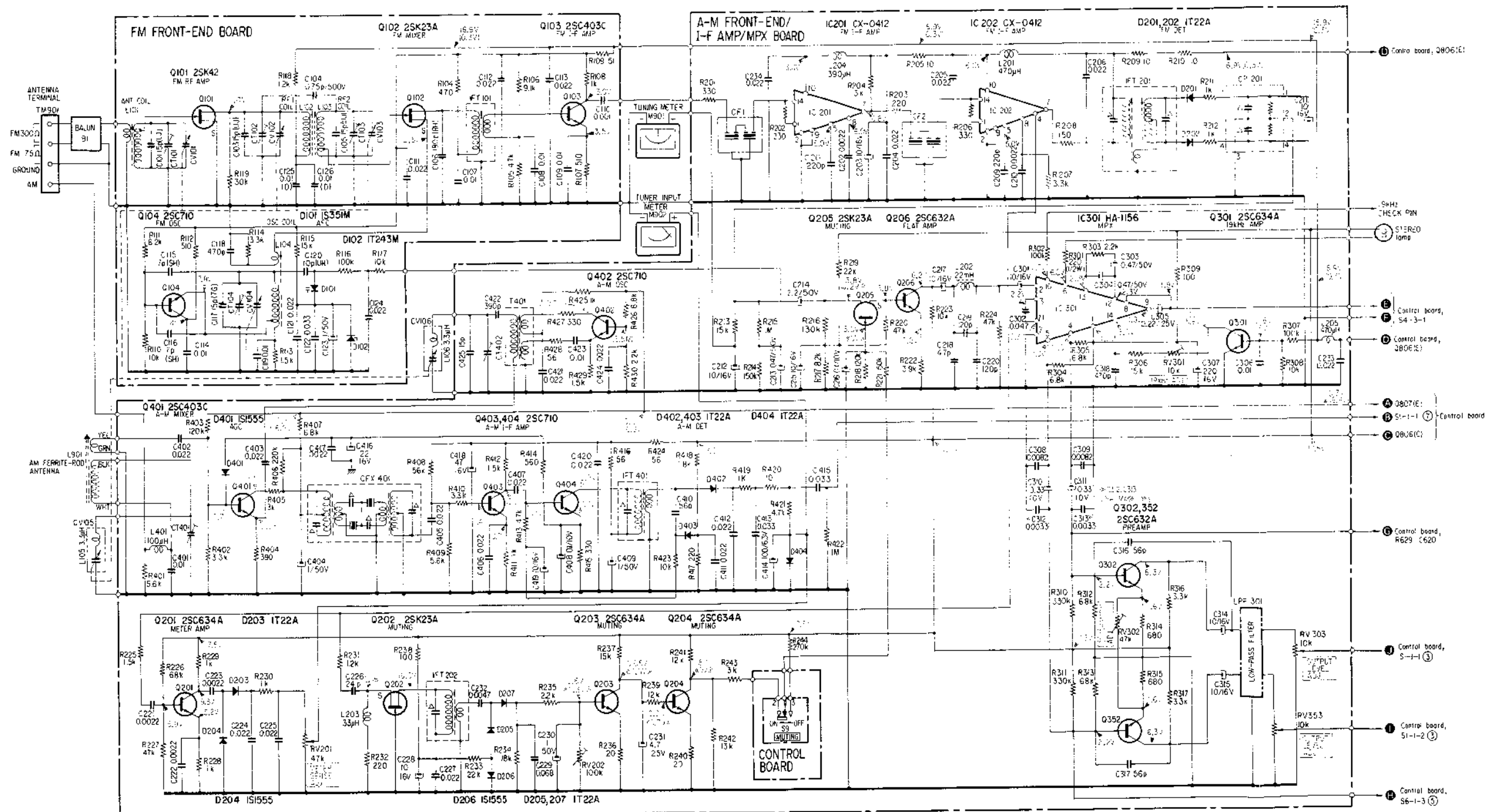
Semiconductor Location

Q	D401	Q403	Q404	D403	D403	D203	D204	Q301	Q302	Q352	Q203	Q204
D	Q401	Q402	D402	D404	IC202	Q201	Q202	D205	D207	D202	Q205	Q206
I	IC201											
C												
ADJ	CT401 CT402	T401		IFT401		RV201	RV301 IFT201	IFT201	RV202	RV302	RV353	RV303



# STR-7065A STR-7065A

## 4.3. SCHEMATIC DIAGRAM – Tuner Section –



**Note:**

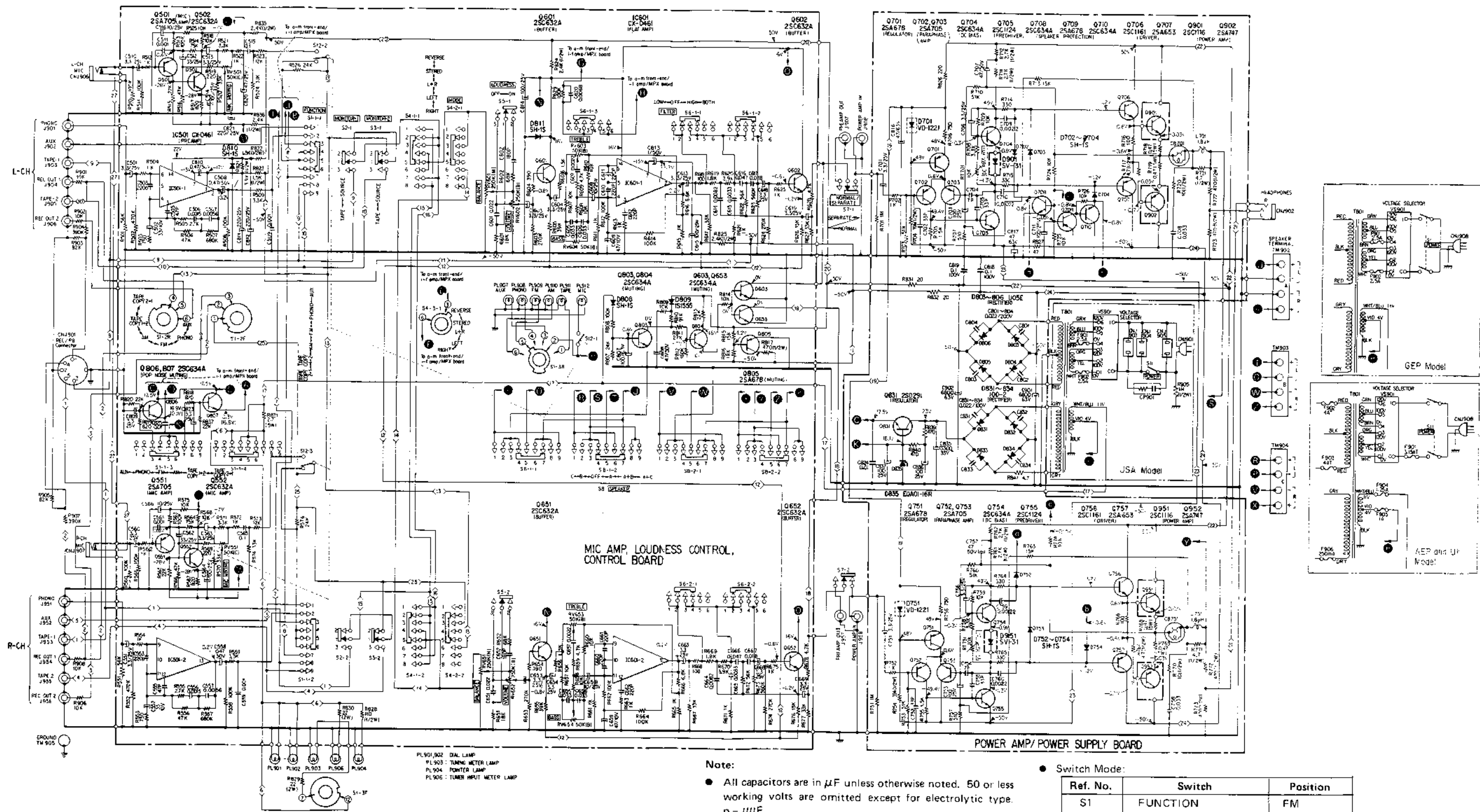
- All capacitors are in  $\mu\text{F}$  unless otherwise noted. 50 or less working volts are omitted except for electrolytic type.  $\rho = \mu\mu\text{F}$
- All resistors are in  $\Omega$ ,  $\frac{1}{2}\text{W}$ , unless otherwise noted.  $k = 1,000$   $M = 1,000k$ .
- $\Delta$  indicates internal components.

- Voltages are DC with respect to ground unless otherwise noted. Readings taken under no-signal conditions with a VOM (20  $k\Omega/V$ ).
- $\text{AM}$ ,  $\text{MUTING ON}$
- Voltage variations may be noted due to normal production tolerances.
- Switch Mode:

Ref. No.	Switch	Position
S9	MUTING	ON

# STR-7065A STR-7065A

## 4.4. SCHEMATIC DIAGRAM—Audio Amplifier Section—



**Note:**

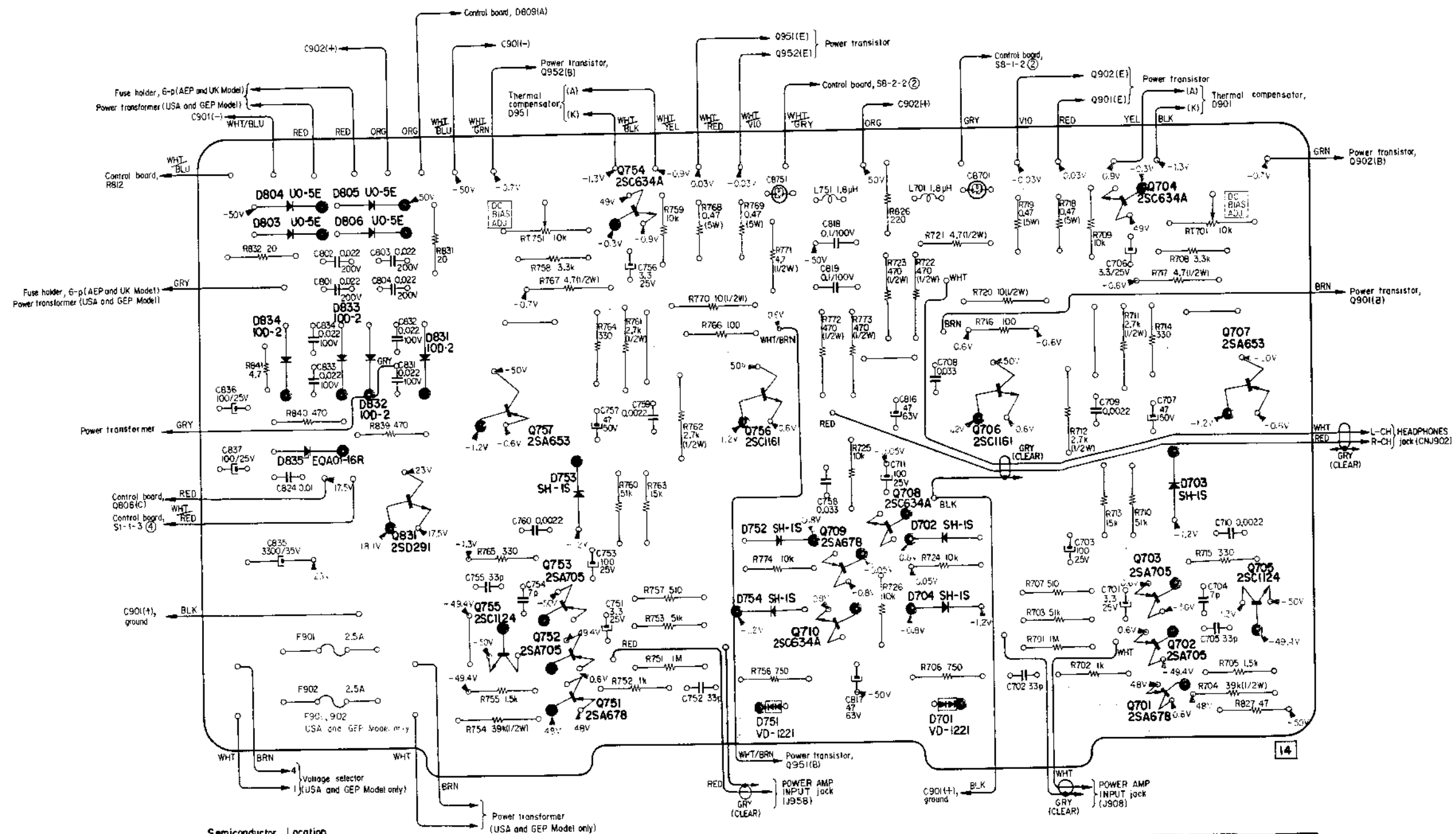
- All capacitors are in  $\mu\text{F}$  unless otherwise noted. 50 or less working volts are omitted except for electrolytic type.  $\mu = \mu\text{F}$
- All resistors are in  $\Omega$ ,  $\frac{1}{4}\text{W}$ , unless otherwise noted.  $k = 1,000$   $M = 1,000k$ .
- indicates chassis ground.
- Voltages are DC with respect to ground unless otherwise noted. Readings taken under no-signal conditions with a VOM (20  $k\Omega/V$ ). ( ) : AM
- Voltage variations may be noted due to normal production tolerances.

• Switch Mode:

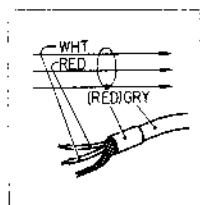
Ref. No.	Switch	Position
S1	FUNCTION	FM
S2	MONITOR-1	SOURCE
S3	MONITOR-2	SOURCE
S4	MODE	STEREO
S5	LOUDNESS	ON
S6	FILTER	OFF
S7	NORMAL/SEPARATE	NORMAL
S8	SPEAKER	A
S11	POWER	OFF
S12	MIC MIXING	OFF

# STR-7065A STR-7065A

## 4-5. MOUNTING DIAGRAM -- Power Amplifier/Power Supply Board -- -- Conductor Side --



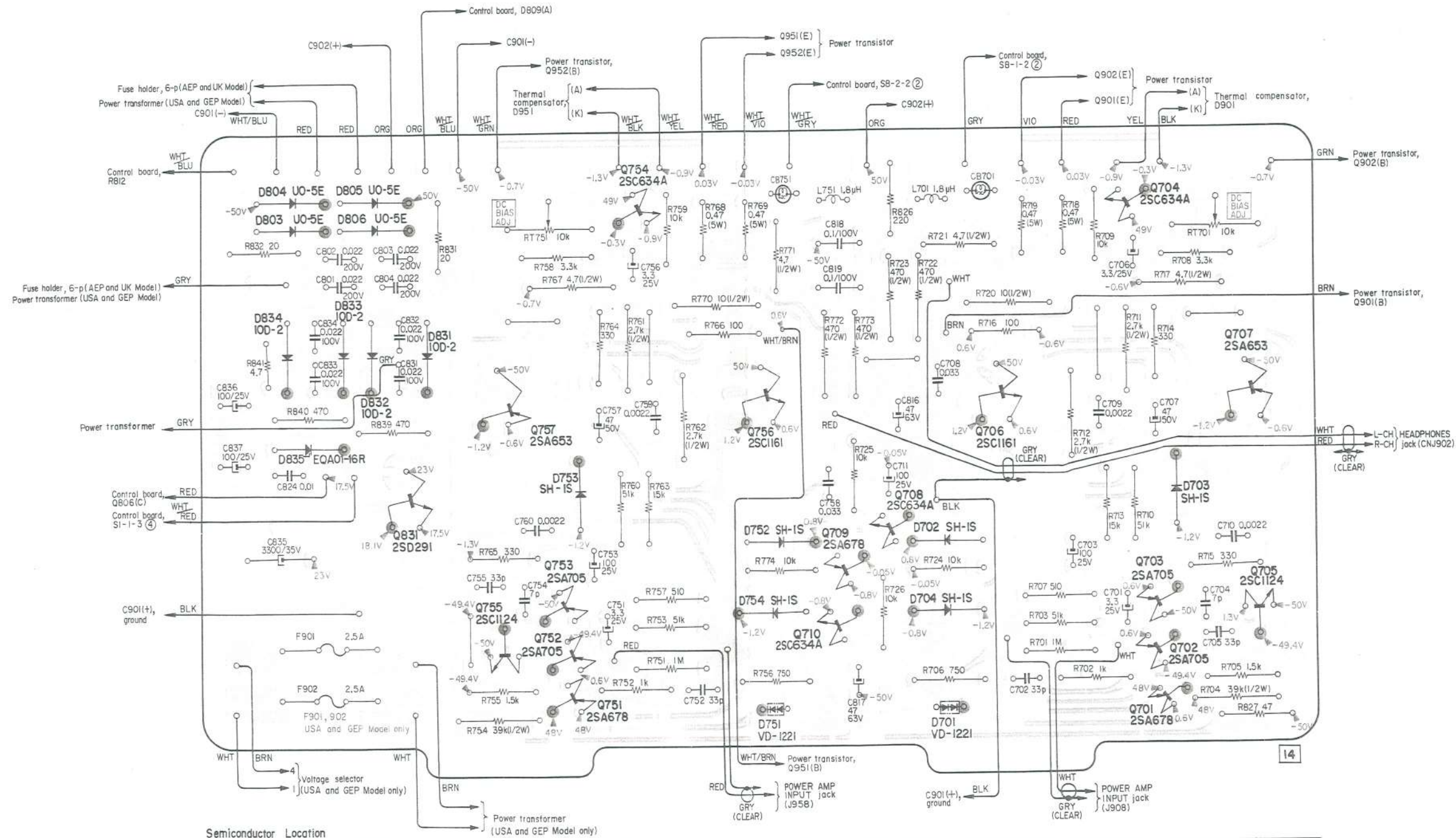
Q	D804 D805 D806	D803 D834 D833 D832 D831	D757 D753 D752 D751	D755 D754 D751	D752 D709 D708 D702 D704 D701	D703 D707	D705
D							
ADJ			RT751				RT701



- 2SA678  
2SA705
- 2SC1124
- 2SC1161  
2SD291
- 2SA653
- 2SC634A
- VD-1221
- SH-1S
- UO-5E
- 10D-2
- EQA01-16R

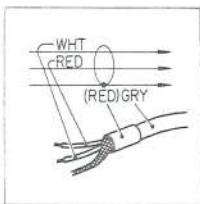
# STR-7065A STR-7065A

## 4-5. MOUNTING DIAGRAM — Power Amplifier/Power Supply Board — — Conductor Side —



Semiconductor Location

Q	D804 D803	D805 D806	D831	Q754	Q704
D	D834 D833 D832	D831	Q757 Q753 Q752 Q751	Q756 D752 D754 D751	Q708 D702 D704 D701
ADJ	RT751			RT701	

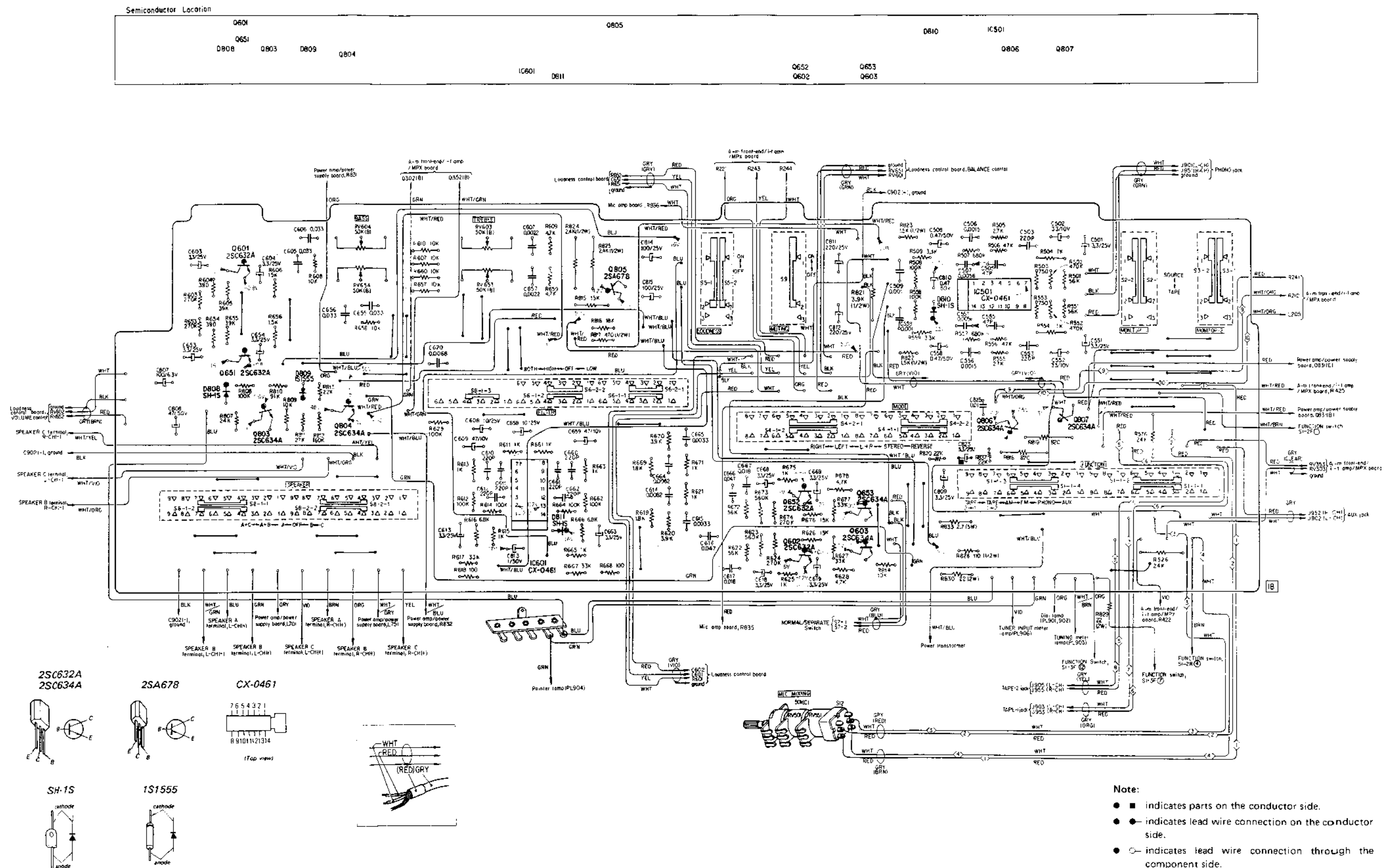


- 2SA678  
2SA705
- 2SC1124
- 2SC1161  
2SD291
- 2SA653
- 2SC634A
- VD-1221
- SH-1S
- UO-5E
- 10D-2
- EQA01-16R

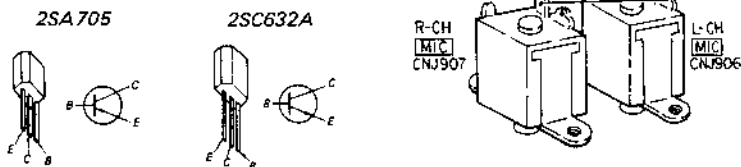
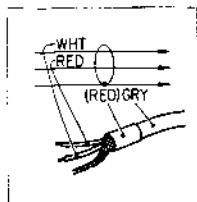
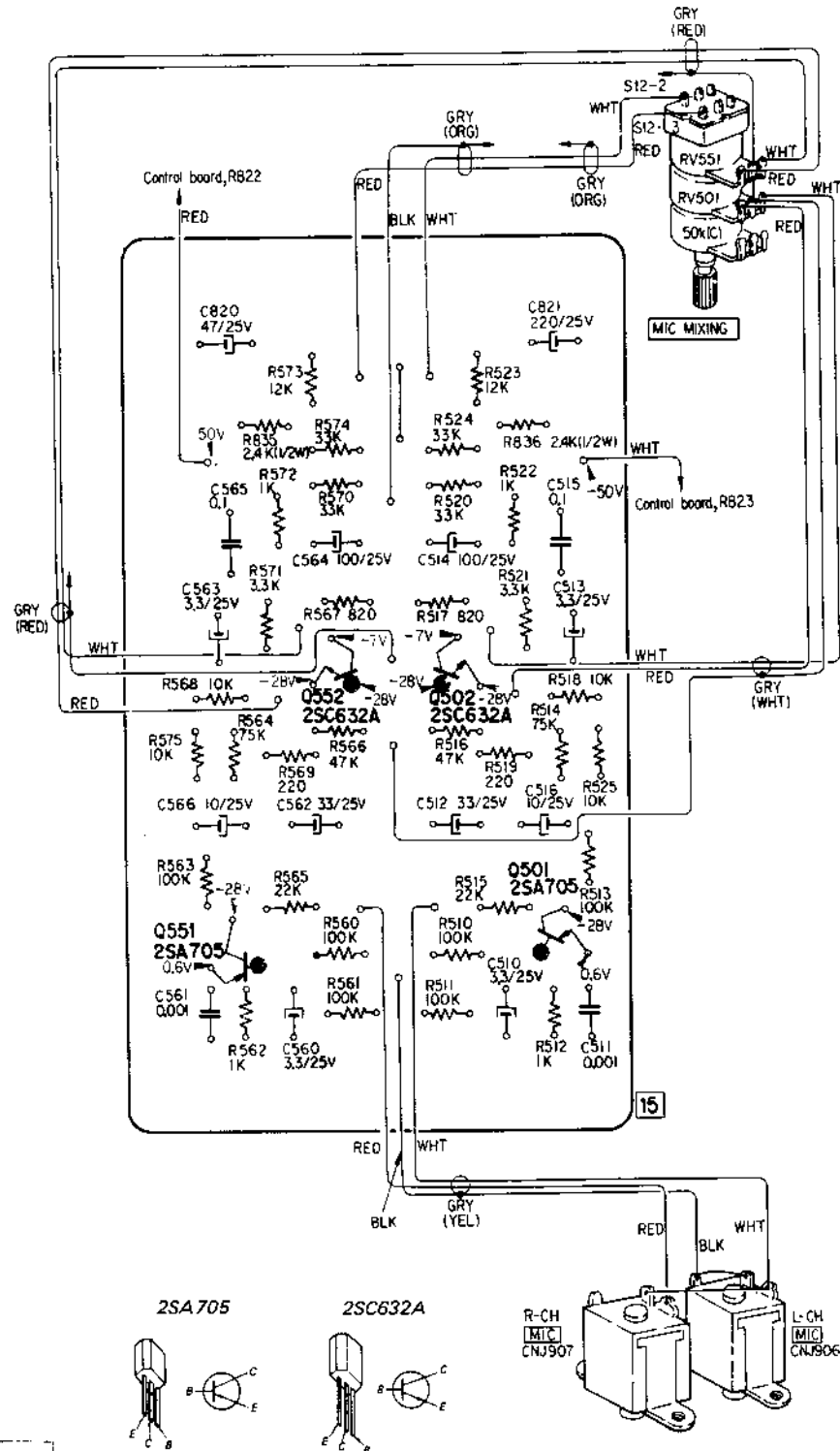


# STR-7065A STR-7065A

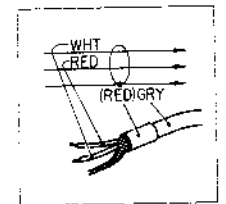
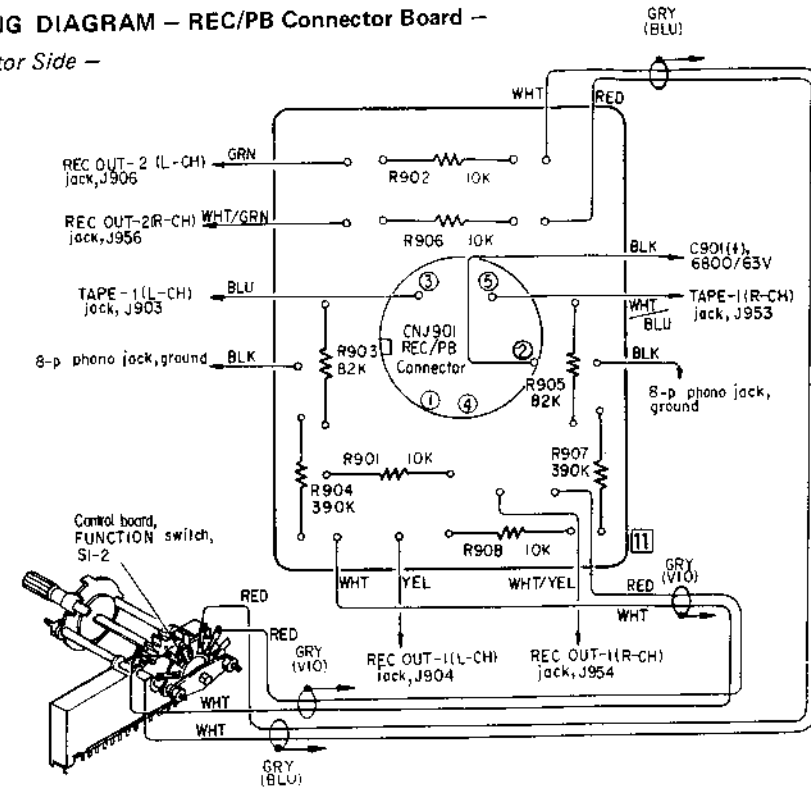
## 4-6. MOUNTING DIAGRAM – Control Board – – Conductor Side –



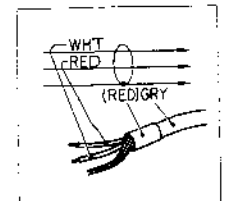
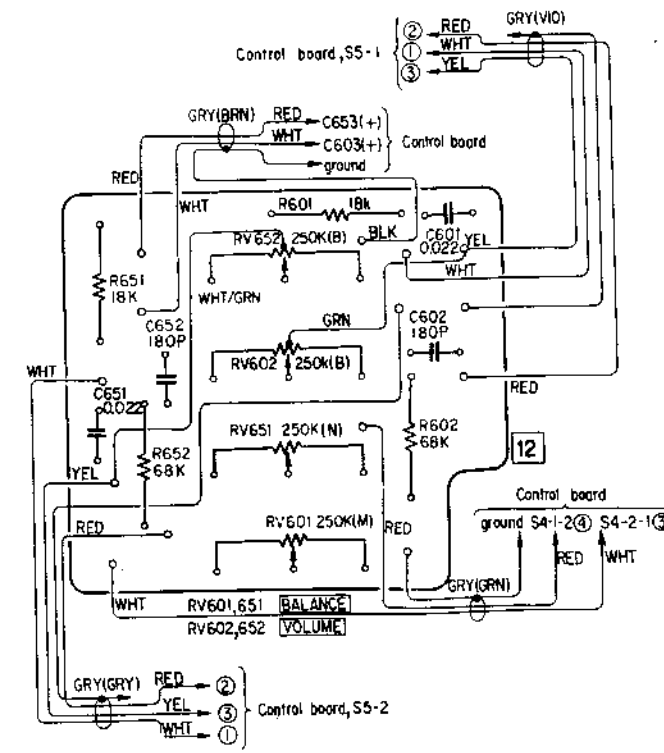
4-7. MOUNTING DIAGRAM – MIC Amp Board –  
– Conductor Side –



4-8. MOUNTING DIAGRAM – REC/PB Connector Board –  
– Conductor Side –

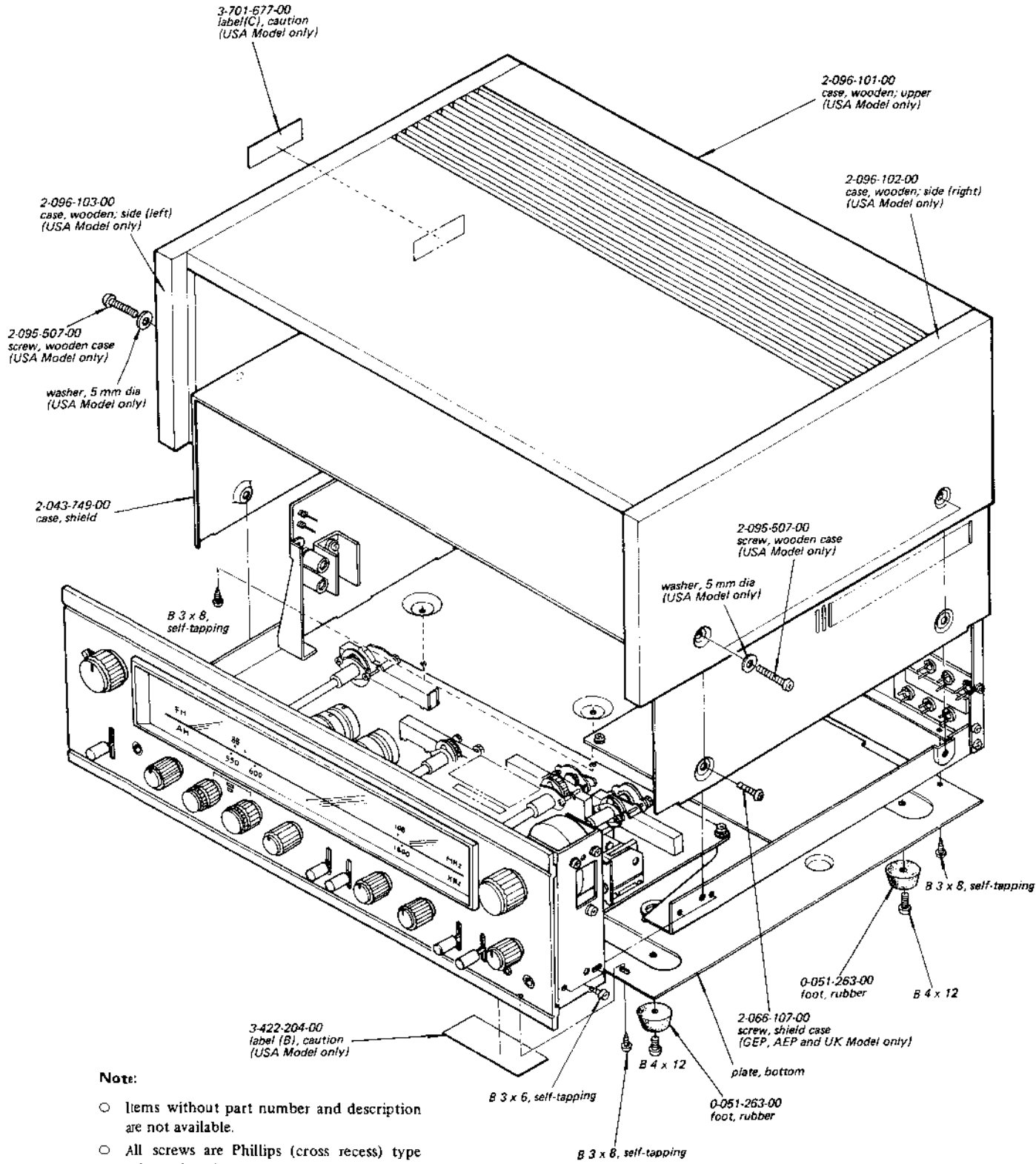


4-9. MOUNTING DIAGRAM – Loudness Control Board –  
– Conductor Side –



**SECTION 5  
EXPLODED VIEWS**

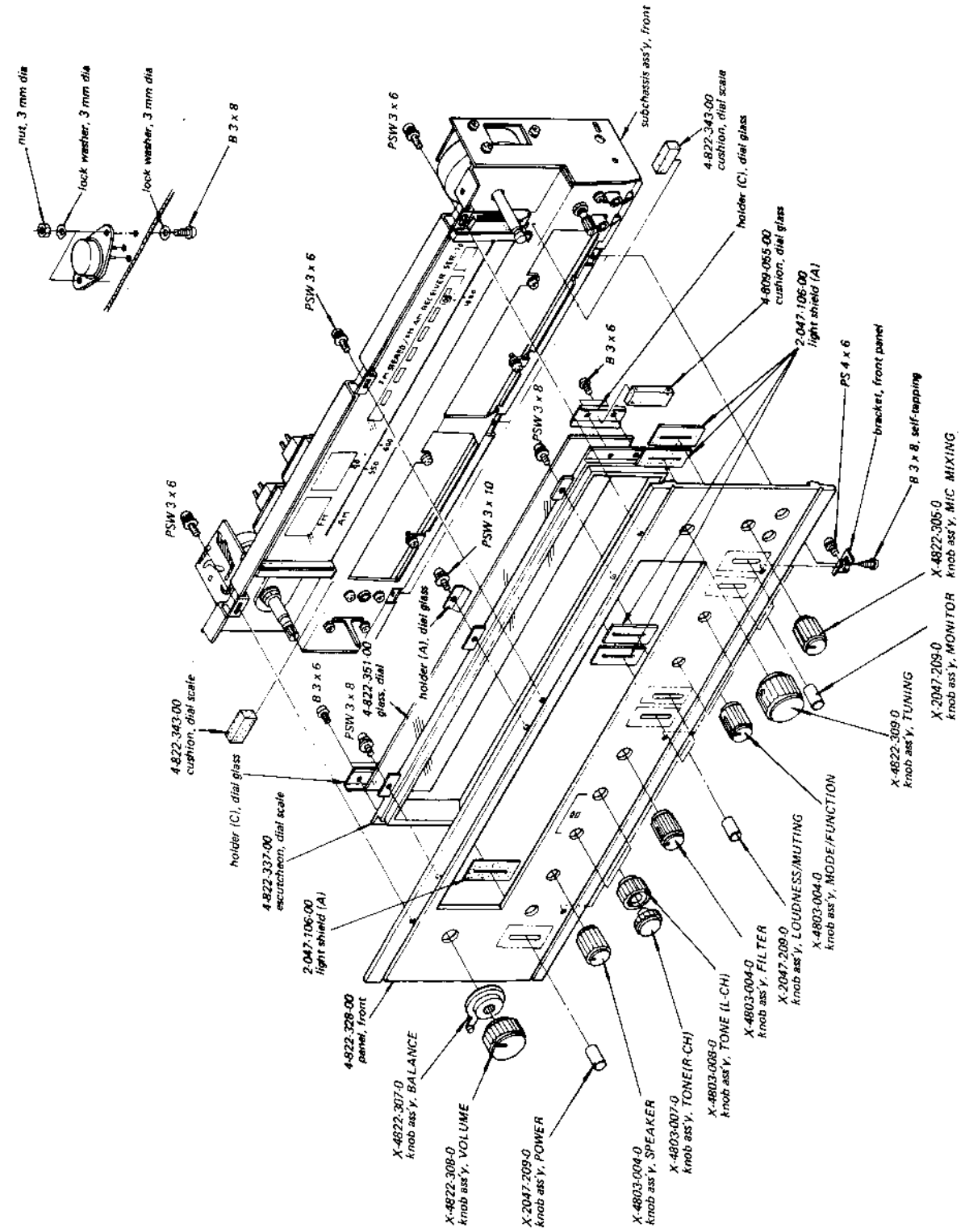
(1)



**Note:**

- Items without part number and description are not available.
- All screws are Phillips (cross recess) type unless otherwise noted.  
(-) = slotted head

(2)

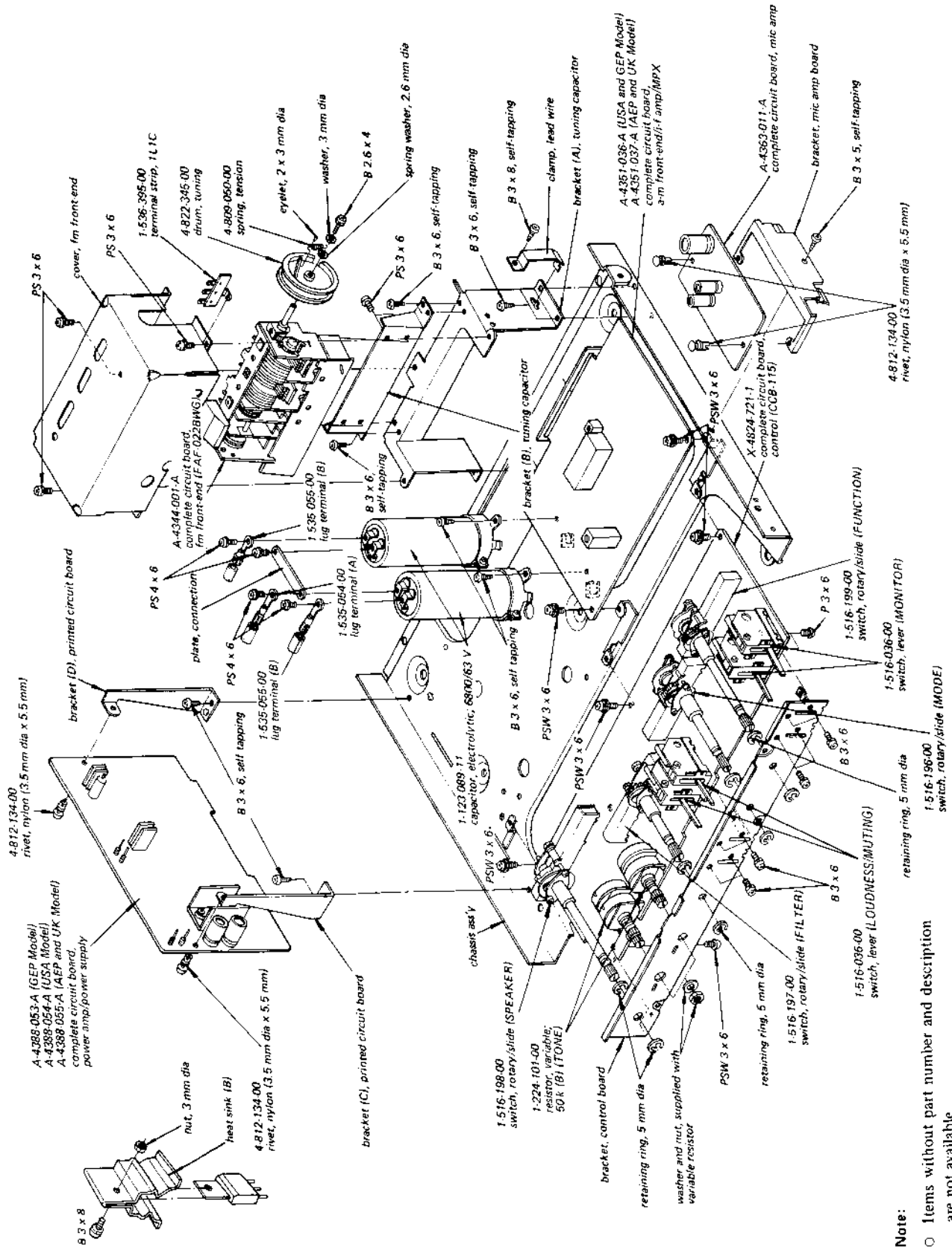


**Note:**

- Items without part number and description are not available.
- All screws are Phillips (cross recess) type unless otherwise noted.  
(-) = slotted head



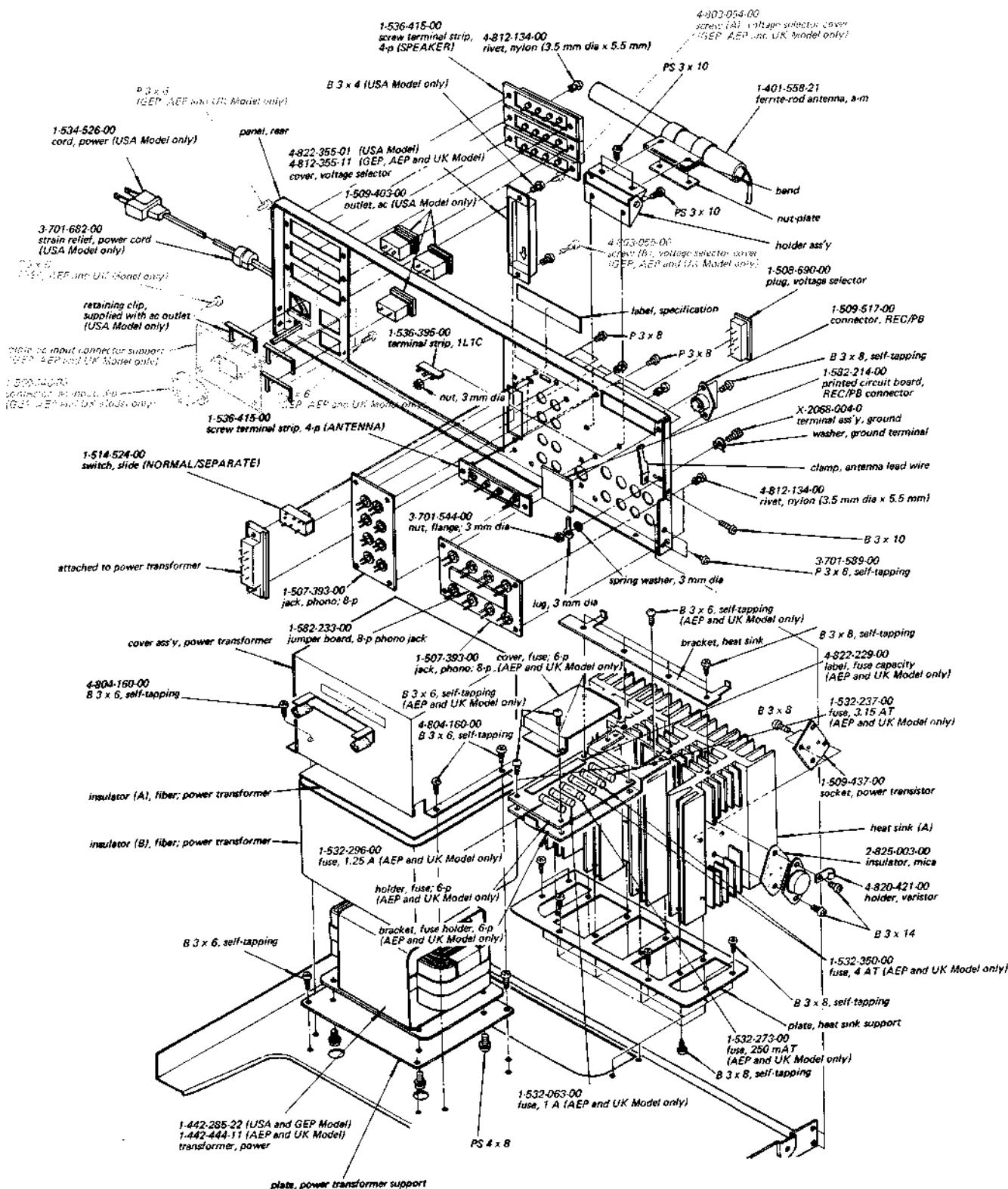
(4)



- Note:**
- Items without part number and description are not available.
  - All screws are Phillips (cross recess) type unless otherwise noted.
  - (-) = slotted head

**SECTION 6  
ELECTRICAL PARTS LIST**

(5)



**Note:**

- Items without part number and description are not available.
- All screws are Phillips (cross recess) type unless otherwise noted.
- (-) = slotted head

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
<b>CIRCUIT BOARDS</b>					
	Q701 (751)			2SA678	
	Q702 (752)			2SA705	
A-4344-001-A		F-m Front-end (FAF-022BWG), complete	Q703 (753)	2SA705	
A-4351-036-A		A-m Front-end/I-f Amp/MPX, complete (USA, GEP Model)	Q704 (754)	2SC634A	
A-4351-037-A		A-m Front-end/I-f Amp/MPX, complete (AEP, UK Model)	Q705 (755)	2SC1124	
A-4363-011-A		MIC Amp, complete	Q706 (756)	2SC1161	
A-4368-001-A		Loudness Control, complete	Q707 (757)	2SA653	
	Q708			2SC634A	
A-4388-053-A		Power Amp/Power Supply, complete (GEP Model)	Q709	2SA678	
A-4388-054-A		Power Amp/Power Supply, complete (USA Model)	Q710	2SC634A	
A-4388-055-A		Power Amp/Power Supply, complete (AEP, UK Model)	Q803, 804	2SC634A	
X-4824-721-1		Control (CCB-115), complete	Q805	2SA678	
1-582-214-00		REC/PB Connector	Q806, 807	2SC634A	
	Q831			2SD291	
	Q901 (951)			2SC1116	
	Q902 (952)			2SA747	
<b>SEMICONDUCTORS</b>					
<b>Transistors</b>					
Q101		2SK42 (FET)			<b>ICs</b>
Q102		2SK23A (FET)	IC201, 202	CX-0412	
Q103		2SC403C	IC301	HA-1156	
Q104		2SC710	IC501	CX-0461	
Q201		2SC634A	IC601	CX-0461	
Q202		2SK23A (FET)			
Q203, 204		2SC634A			
Q205		2SK23A (FET)			<b>Diodes</b>
Q206		2SC632A			
Q301		2SC634A	D101	1S351M	
Q302 (352)		2SC632A	D102	1T243M	
Q401		2SC403C	D201~203	1T22A	
Q402~404		2SC710	D204	1S1555	
Q501 (551)		2SA705	D205	1T22A	
Q502 (552)		2SC632A	D206	1S1555	
			D207	1T22A	
Q601 (651)		2SC632A	D401	1S1555	
Q602 (652)		2SC632A	D402~404	1T22A	
Q603 (653)		2SC634A	D701 (751)	VD-1221	

**STR-7065A    STR-7065A**

Ref. No.	Part No.	Description
D702 (752)	SH-1S	
D703 (753)	SH-1S	
D704 (754)	SH-1S	
D803~806	UO-5E	
D808	SH-1S	
D809	1S1555	
D810, 811	SH-1S	
D831~834	10D-2	
D835	EQA01-16R	
D901 (951)	SV-31	
<b>TRANSFORMERS, COILS AND INDUCTORS</b>		
B1	1-417-014-00	Balun
CFX401	1-403-963-11	IFT, a-m (USA, GEP Model)
	1-403-963-21	IFT, a-m (AEP, UK Model)
	1-403-295-00	IFT, fm
IFT101	1-403-295-00	IFT, fm
IFT201	1-403-964-00	Transformer, discriminator
IFT202	1-403-299-00	Coil, muting
IFT401	1-403-149-00	IFT, a-m
L101	1-401-489-00	Coil, antenna
L102	1-425-446-00	Coil, rfi
L103	1-425-668-00	Coil, rf2
L104	1-405-377-00	Coil, osc
L105, 106	1-407-184-00	Microinductor, 3.3 μH
L201	1-407-177-00	Microinductor, 470 μH
L202	1-407-418-00	Shielded Inductor, 22 mH
L203	1-407-163-00	Microinductor, 33 μH
L204	1-407-176-00	Microinductor, 390 μH
L205	1-407-177-00	Microinductor, 470 μH
L401	1-407-169-00	Microinductor, 100 μH
L701 (751)	1-407-592-00	Microinductor, 1.8 μH
L901	1-401-558-21	Ferrite-rod Antenna, a-m
T401	1-405-459-00	Coil, a-m osc
T801	1-442-285-22	Transformer, power (USA, GEP Model)
	1-442-444-11	Transformer, power (AEP, UK Model)

Ref. No.	Part No.	Description
<b>CAPACITORS</b>		
Capacitors here are in μF, ceramic type unless otherwise noted (p = μμ, elect = electrolytic)		
The working voltages of 50 volts or less are omitted except for electrolytic type.		
C101, 103	1-102-880-11	15 p
C104	1-102-064-11	0.75 p 500 V
C105	1-102-880-11	15 p
C106	1-102-848-11	180 p
C107~109	1-101-923-11	0.01
C110	1-101-918-11	0.001
C111~113	1-101-924-11	0.022
C114	1-101-923-11	0.01
C115, 116	1-102-875-11	7 p
C117	1-102-894-11	15 p
C118	1-102-114-11	470 p
C119	1-101-118-11	0.01
C120	1-102-986-11	10 p
C121	1-101-924-11	0.022
C122	1-105-679-12	0.033 mylar
C123	1-121-391-11	1 50 V elect
C124	1-101-924-11	0.022
C125, 126	1-101-118-11	0.01
C201	1-102-978-11	220 p
C202	1-101-919-11	0.0022
C203	1-121-651-11	10 16 V elect
C204~206	1-101-924-11	0.022
C209	1-102-978-11	220 p
C210	1-101-919-11	0.0022
C211, 212	1-121-651-11	10 16 V elect
C213	1-121-726-11	0.47 50 V elect
C214	1-121-450-11	2.2 50 V elect
C215	1-121-651-11	10 16 V elect
C216	1-127-019-11	0.1 10 V solid aluminum
C217	1-121-651-11	10 16 V elect

Ref. No.	Part No.	Description
C218	1-101-880-11	47 p
C219, 220	1-102-816-11	120 p
C221~223	1-101-919-11	0.0022
C224, 225	1-101-924-11	0.022
C226	1-102-960-11	24 p
C227	1-101-924-11	0.022
C228	1-121-651-11	10 16 V elect
C229	1-105-683-12	0.068 mylar
C230	1-121-391-11	1 50 V elect
C231	1-121-395-11	4.7 25 V elect
C232	1-105-509-12	0.0047 mylar
C233, 234	1-101-924-11	0.022
C301	1-121-651-11	10 16 V elect
C302	1-105-681-12	0.047 mylar
C303, 304	1-121-726-11	0.47 50 V elect
C305	1-127-091-11	0.22 25 V solid aluminum
C306	1-101-923-11	0.01
C307	1-121-421-11	220 16 V elect
C308, 309	1-105-512-12	0.0082 mylar
C310, 311	1-127-021-11	0.33 10 V solid aluminum
C312, 313	1-105-507-12	0.0033 mylar (USA Model only)
C314, 315	1-121-916-11	10 16 V elect
C316, 317	1-101-884-11	56 p
C318	1-103-717-11	470 p styrol
C401	1-105-673-12	0.01 mylar
C402, 403	1-105-677-12	0.022 mylar
C404	1-121-391-11	1 50 V elect
C405	1-105-677-12	0.022 mylar
C406	1-101-924-11	0.022
C407	1-105-677-12	0.022 mylar
C408	1-127-019-11	0.1 10 V solid aluminum
C409	1-121-391-11	1 50 V elect
C410	1-101-884-11	56 p
C411	1-101-924-11	0.022
C412	1-105-677-12	0.022 mylar
C413	1-105-679-12	0.033 mylar
C414	1-121-413-11	100 6.3 V elect

Ref. No.	Part No.	Description
C415	1-105-679-12	0.033 mylar
C416	1-121-479-11	22 16 V elect
C417	1-101-924-11	0.022
C418	1-121-409-11	47 16 V elect
C419	1-121-651-11	10 16 V elect
C420, 421	1-101-924-11	0.022
C422	1-103-715-11	390 p styrol
C423	1-101-923-11	0.01
C424	1-101-924-11	0.022
C425	1-102-951-11	15 p
C501 (551)	1-131-206-11	3.3 25 V tantalum
C502 (552)	1-121-926-11	33 10 V elect
C503 (553)	1-102-978-11	220 p
C505 (555)	1-101-880-11	47 p
C506 (556)	1-106-005-12	0.0015 mylar
C507 (557)	1-106-019-12	0.0056 mylar
C508 (558)	1-121-911-11	0.47 50 V elect
C509 (559)	1-105-661-12	0.001 mylar
C510 (560)	1-131-206-21	3.3 25 V tantalum
C511 (561)	1-105-661-12	0.001 mylar
C512 (562)	1-123-044-11	33 25 V elect
C513 (563)	1-121-913-11	3.3 25 V elect
C514 (564)	1-121-416-11	100 25 V elect
C515 (565)	1-105-685-12	0.1 mylar
C516 (566)	1-121-398-11	10 25 V elect
C601 (651)	1-105-677-12	0.022 mylar
C602 (652)	1-107-137-11	180 p silvered mica
C603 (653)	1-131-206-11	3.3 25 V tantalum
C604 (654)	1-121-392-11	3.3 25 V elect
C605 (655)	1-105-679-12	0.033 mylar
C606 (656)	1-105-679-12	0.033 mylar
C607 (657)	1-105-665-12	0.0022 mylar
C608 (658)	1-121-398-11	10 25 V elect
C609 (659)	1-121-352-11	47 10 V elect
C610 (660)	1-102-978-11	220 p
C611 (661)	1-102-978-11	220 p
C612 (662)	1-102-978-11	220 p
C613 (663)	1-121-392-11	3.3 25 V elect

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>		
C614 (664)	1-106-023-11	0.0082		mylar
C615 (665)	1-106-013-12	0.0033		mylar
C616 (666)	1-106-041-12	0.047		mylar
C617 (667)	1-106-031-12	0.018		mylar
C618 (668)	1-121-392-11	3.3	25 V	elect
C619 (669)	1-121-392-11	3.3	25 V	elect
C620	1-105-671-12	0.0068		mylar
C701 (751)	1-121-392-11	3.3	25 V	elect
C702 (752)	1-102-963-11	33 p		
C703 (753)	1-121-935-11	100	25 V	elect
C704 (754)	1-102-944-11	7 p		
C705 (755)	1-102-963-11	33 p		
C706 (756)	1-121-392-11	3.3	25 V	elect
C707 (757)	1-123-058-11	47	50 V	elect
C708 (758)	1-105-679-12	0.033		mylar
C709 (759)	1-105-665-12	0.0022		mylar
C710 (760)	1-105-665-12	0.0022		mylar
C711	1-121-935-11	100	25 V	elect
C801~804	1-105-917-12	0.022	200 V	mylar
C807	1-121-413-11	100	6.3 V	elect
C808	1-121-411-11	47	50 V	elect
C809	1-121-392-11	3.3	25 V	elect
C810	1-121-726-11	0.47	50 V	elect
C811, 812	1-121-936-11	220	25 V	elect
C814, 815	1-121-935-11	100	25 V	elect
C816, 817	1-123-090-11	47	63 V	elect
C818, 819	1-105-725-12	0.1	100 V	mylar
C820	1-121-410-11	47	25 V	elect
C821	1-121-936-11	220	25 V	elect
C823	1-121-392-11	3.3	25 V	elect
C824	1-105-673-12	0.01		mylar
C825	1-101-923-11	0.01		
C831~834	1-105-717-12	0.022	100 V	mylar
C835	1-123-118-11	3300	35 V	elect
C836, 837	1-121-935-11	100	25 V	elect
C901, 902	1-123-089-11	6,800	63 V	elect
CT401, 402	1-141-147-00	trimmer		

Ref. No.    Part No.    Description

## RESISTORS

All resistors are in  $\Omega$ ,  $\frac{1}{4}$  W,  $\pm 5\%$ , carbon resistors (except special type) are omitted.

Check schematic diagram for the resistance values.

(k = 1000, M = 1000k)

R301	1-202-557-11	220	$\frac{1}{2}$ W	composition
R704 (754)	1-211-676-11	39 k	$\frac{1}{2}$ W	carbon (nonflammable)
R711 (761)	1-202-583-11	2.7 k	$\frac{1}{2}$ W	composition
R712 (762)	1-202-583-11	2.7 k	$\frac{1}{2}$ W	composition
R714 (764)	1-211-534-11	330	$\frac{1}{4}$ W	carbon (nonflammable)
R715 (765)	1-211-534-11	330	$\frac{1}{4}$ W	carbon (nonflammable)
R716 (766)	1-211-522-11	100	$\frac{1}{4}$ W	carbon (nonflammable)
R717 (767)	1-211-582-11	4.7	$\frac{1}{2}$ W	carbon (nonflammable)
R718 (768)	1-217-158-11	0.47	5 W	metal
R719 (769)	1-217-158-11	0.47	5 W	metal
R720 (770)	1-202-525-11	10	$\frac{1}{2}$ W	composition
R721 (771)	1-202-517-11	4.7	$\frac{1}{2}$ W	composition
R722 (772)	1-202-565-11	470	$\frac{1}{2}$ W	composition
R723 (773)	1-202-565-11	470	$\frac{1}{2}$ W	composition
R817	1-202-565-11	470	$\frac{1}{2}$ W	composition
R821	1-202-587-11	3.9 k	$\frac{1}{2}$ W	composition
R822, 823	1-202-577-11	1.5 k	$\frac{1}{2}$ W	composition
R824, 825	1-202-582-11	2.4 k	$\frac{1}{2}$ W	composition
R826	1-211-530-11	220	$\frac{1}{4}$ W	carbon (nonflammable)
R827	1-211-514-11	47	$\frac{1}{4}$ W	carbon (nonflammable)
R828	1-202-550-11	110	$\frac{1}{2}$ W	composition
R829, 830	1-207-630-11	22	2 W	wirewound
R831, 832	1-211-505-11	20	$\frac{1}{4}$ W	carbon (nonflammable)
R833	1-207-929-11	2.7	5 W	wirewound
R835, 836	1-202-582-11	2.4 k	$\frac{1}{2}$ W	composition
R841	1-211-490-11	4.7	$\frac{1}{4}$ W	carbon (nonflammable)



# STR-7065A

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
R905	1-202-719-11	1 M $\frac{1}{2}$ W composition (USA Model only)
RT701 (751)	1-221-967-00	10 k, adjustable
RV201	1-222-765-00	47 k, adjustable
RV202	1-222-766-00	100 k, adjustable
RV301	1-222-752-00	10 k, adjustable
RV302	1-222-765-00	47 k, adjustable
RV303 (353)	1-222-752-00	10 k, adjustable
RV501 (551)	1-224-103-00	50 k(C), variable (MIC MIX)
RV601 (651)	1-224-102-00	250 k(M/N), variable (BALANCE)
RV602 (652)	1-224-102-00	250 k(B), variable (VOLUME)
RV603 (653)	1-224-101-00	50 k(B), variable (TREBLE)
RV604 (654)	1-224-101-00	50 k(B), variable (BASS)

## SWITCHES

S1	1-516-199-00	Rotary/Slide (FUNCTION)
S2, 3	1-516-036-00	Lever/Slide (MONITOR)
S4	1-516-196-00	Rotary/Slide (MODE)
S5	1-516-036-00	Lever/Slide (LOUDNESS)
S6	1-516-197-00	Rotary/Slide (FILTER)
S7	1-514-524-00	Slide (NORMAL/SEPARATE)
S8	1-516-198-00	Rotary/Slide (SPEAKER)
S9	1-516-036-00	Lever/Slide (FM MUTING)
S11	1-516-007-00	Lever (POWER) (USA Model)
	1-516-315-00	Lever (POWER) (AEP, GEP, UK Model)
S12		- built in RV501 (551) -

## FILTERS

CF1, 2	1-527-240-00	Fm 1-f, ceramic
LPF301	1-231-219-00	Low-pass

## LAMPS

PL901, 902	1-518-116-00	Dial, 11 V 360 mA
PL903	1-518-124-00	TUNING Meter, 8 V 250 mA
PL904	1-518-151-00	Pointer (with lamp), 5 V 60 mA
PL905	1-518-169-XX	STEREO, 4.5 V 40 mA
PL906	1-518-124-00	TUNER INPUT Meter, 8 V 250 mA
PL907~912	1-518-169-XX	FUNCTION 4.5 V 40 mA

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
<b>FUSES</b>		
F901	1-532-237-00	3.15 AT (AEP, UK Model)
	1-532-252-00	2.5 A (GEP Model)
	1-532-269-00	2.5 A (USA Model)
F902	1-532-252-00	2.5 A (GEP Model)
	1-532-269-00	2.5 A (USA Model)
	1-532-350-00	4.0 AT (AEP, UK Model)
F903	1-532-350-00	4.0 AT (AEP, UK Model only)
F904	1-532-296-00	1.25 A (AEP, UK Model only)
F905	1-532-063-00	1.0 A (AEP, UK Model only)
F906	1-532-273-00	0.25 A (AEP, UK Model only)

## MISCELLANEOUS

CB701 (751)	1-515-194-00	Breaker, circuit
CNJ902	1-507-265-00	Jack, HEADPHONE
CNJ903 ~905	1-509-403-00	Outlet, ac (USA Model only)
CNJ906, 907	1-507-394-00	Jack, MIC
CP201	1-231-278-00	Encapsulated Component
CP901	1-231-057-00	Encapsulated Component (USA Model only)
J901~908 (J951~958)	1-507-393-00	Jack, phono: 8-p
M901	1-520-140-00	Meter, TUNING
M902	1-520-141-00	Meter, TUNER INPUT
TM901 ~904	1-536-415-00	Screw Terminal Strip, 4-p (SPEAKER/ANTENNA)
	1-508-690-00	Plug, voltage selector
	1-509-437-00	Socket, power transistor
	1-509-517-00	Connector, REC/PB
	1-509-546-00	Connector, ac input; 3-p (AEP, GEP, UK Model only)
	1-517-057-00	Holder, meter lamp: 2-p
	1-533-090-00	Holder, dial lamp
	1-534-526-00	Cord, power (USA Model only)
	1-535-054-00	Lug Terminal (A)
	1-535-055-00	Lug Terminal (B)
	1-536-395-00	Terminal Strip, 1L1 (C)
	1-536-398-00	Terminal Strip, 2L2 (C)
	1-536-430-00	Terminal Strip
	1-582-233-00	Jumper Board, 8-p phono jack

**ACCESSORIES AND PACKING MATERIALS**

<u>Part No.</u>	<u>Description</u>
X-3701-029-0	Card Ass'y, warranty (USA Model only)
X-4490-002-0	Cloth Ass'y, polishing
1-501-083-21	Ribbon Antenna, fm
1-506-138-11	Plug, phono (red)
1-506-138-12	Plug, phono (white)
3-429-126-00	Bag, polyethylene; unit
3-701-020-00	Bag, polyethylene; instruction manual
3-701-622-00	Bag, polyethylene; warranty card (UK Model only)
3-701-730-00	Bag, polyethylene; IBM card (USA Model only)
3-701-742-00	Card, IBM (USA Model only)
3-780-670-11	Manual, instruction (AEP, GEP, UK Model)
3-780-670-21	Manual, instruction (USA Model)
3-793-520-00	Card, warranty (UK Model only)
3-793-831-11	Diagram, schematic (AEP, GEP, UK Model)
3-793-831-21	Diagram, schematic (USA Model)
4-822-390-00	Carton (AEP, GEP, UK Model)
4-822-391-00	Carton (USA Model)
4-822-392-00	Cushion