

# SONY®

# STR-6065

*USA Model Only*

No. 1  
Jun. 1971

## SERVICE MANUAL SUPPLEMENT

Subject: Changes on Model STR-6065

### 1. INTRODUCTION

SONY has changed the Model STR-6065's front end and a-m conv./i-f amplifier section to improve its electrical performance. In addition, some transistors are changed in the power amplifier section.

### 2. DESCRIPTION OF THE MODIFICATIONS

#### 2-1. NEW FRONT END

To obtain more stable reception, a new front end with a dual gate MOS FET (3SK37) is incorporated. The mounting and schematic diagrams of new front end are given on page 7 and 8.

Part Number	Description
8-982-572-11	New Front End (FAF-020 AW)

#### Interchangeability

New and old front ends are mutually interchangeable.

#### Applicable Serial Numbers

803,701 and later

## 2-2. NEW A-M CONV./I-F AMPLIFIER

To obtain more stable reception in strong signal areas, a new circuit is employed. The mounting and schematic diagrams of the new circuit are given on page 4 to 6.

**Note:** This circuit is identical with the a-m conv./i-f amplifier section employed in Model STR-6045 except for reference numbers.

Part Number	Description
8-982-572-81	Mounted circuit board (a-m conv./i-f amplifier)

### Interchangeability

New and old circuit boards are mutually interchangeable.

### Applicable Serial Numbers

804,201 and later

## 2-3. PARTS CHANGED

- (1) Some transistors employed in the power amplifier have been changed. Only the new transistors are available for repair work.

Reference Numbers	Former Type	New Type
Q701(Q751), Q702(Q752)	2SA621	2SA705
Q707(Q757)	2SA610	2SA677
Q802	2SA621	2SA706

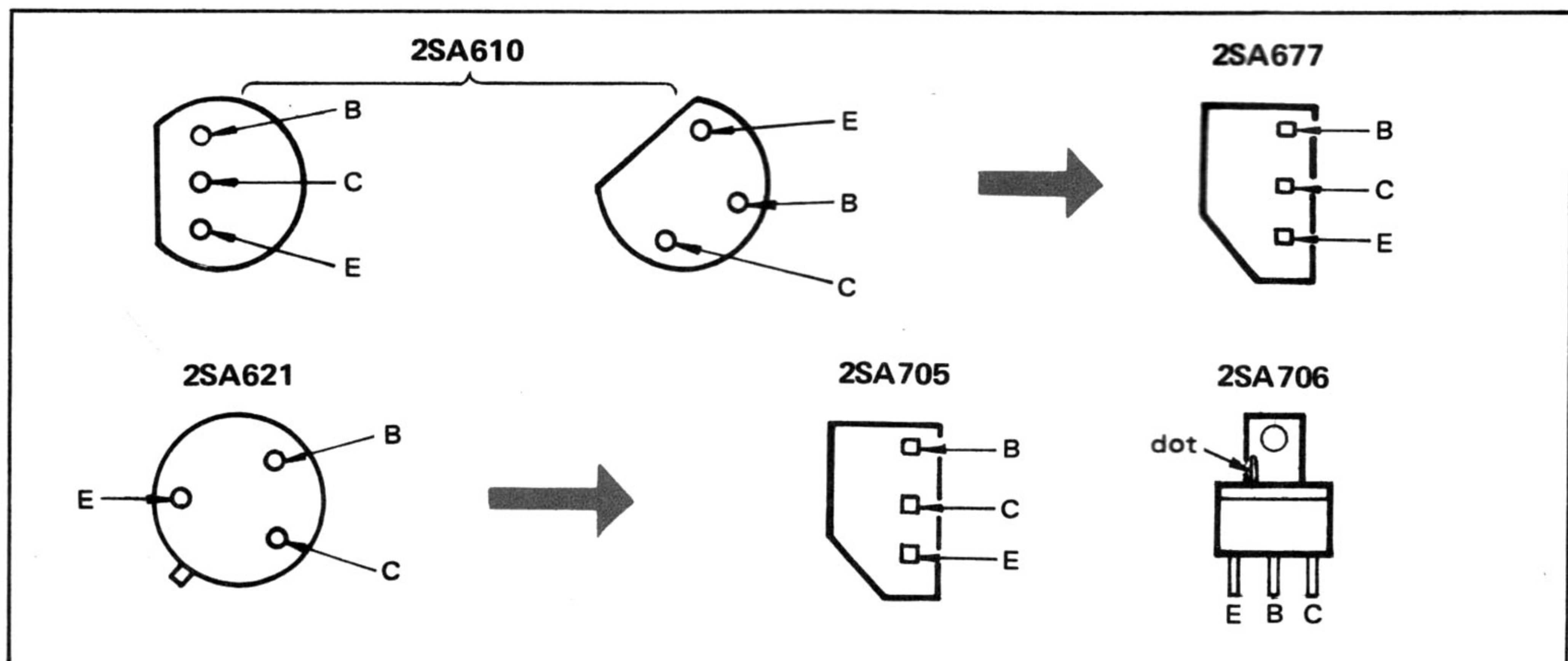


Fig. 1. Former and new type transistors

### Interchangeability

New and old type transistors are mutually interchangeable.

### Applicable Serial Numbers

805,001 and later

- (2) Power-supply diode D804 for the tuner section was changed to increase the current-supply capability.

Former Ref. Number	Former Type	New Ref. Numbers	New Type
D804	CD-2	D818, D819	10D-2

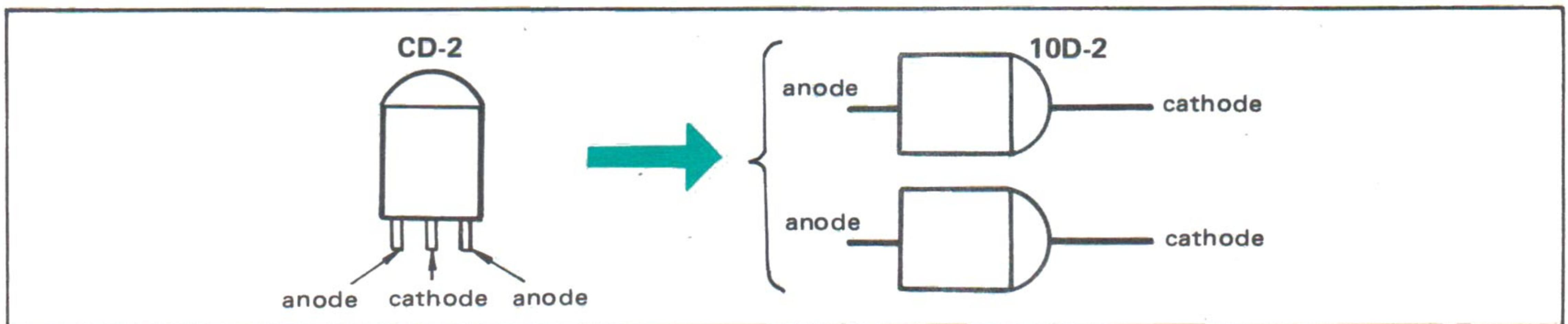


Fig. 2. Former and new type diodes

### Interchangeability

New and old type diodes are mutually interchangeable.

### Applicable Serial Numbers

805,001 and later

## 2-4. PARTS ADDED

Additional capacitors are now connected across filter capacitors C811 and C812.

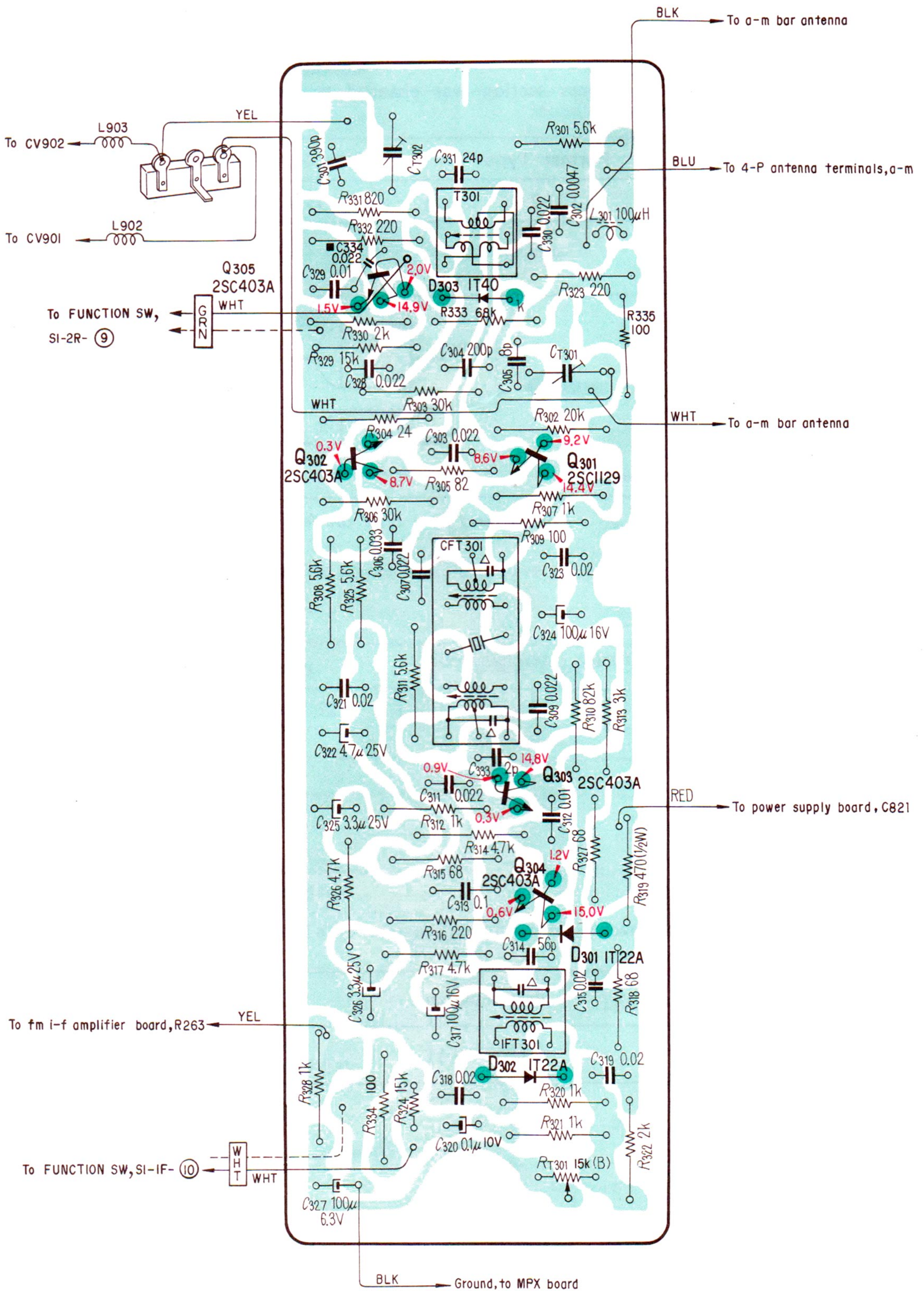
Ref. Numbers	Part Number	Description
C851, C852	1-105-719-12	C851, C852 0.033 $\pm$ 10% 50V mylar

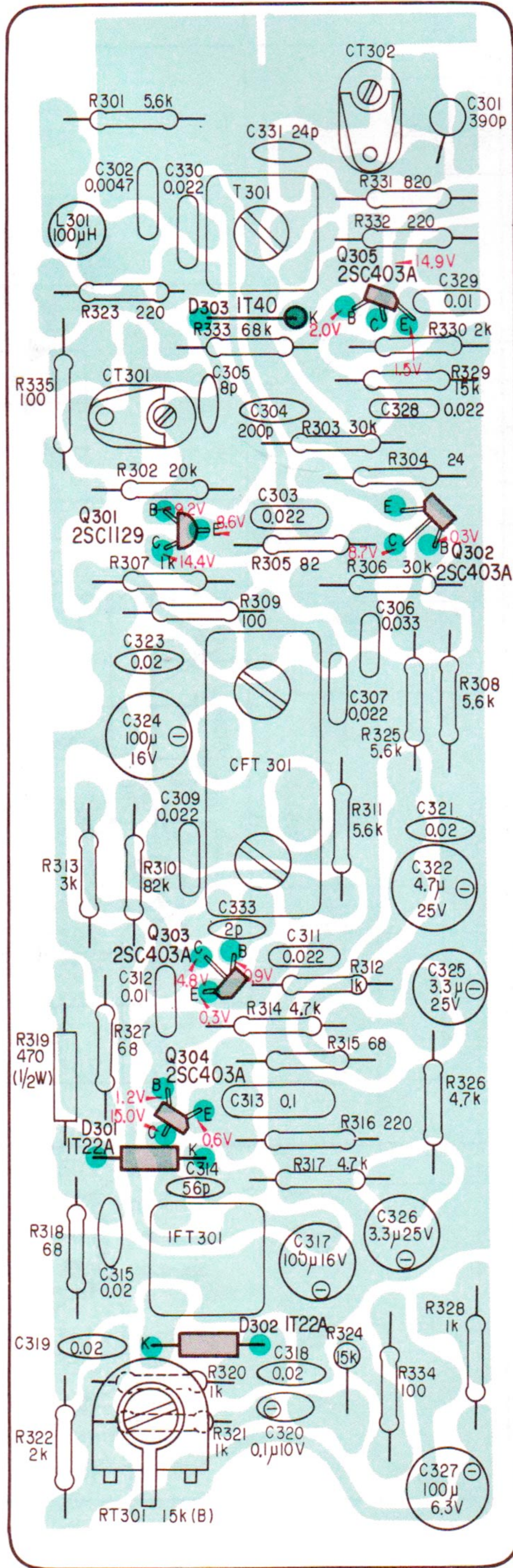
### Applicable Serial Numbers

805,001 and later

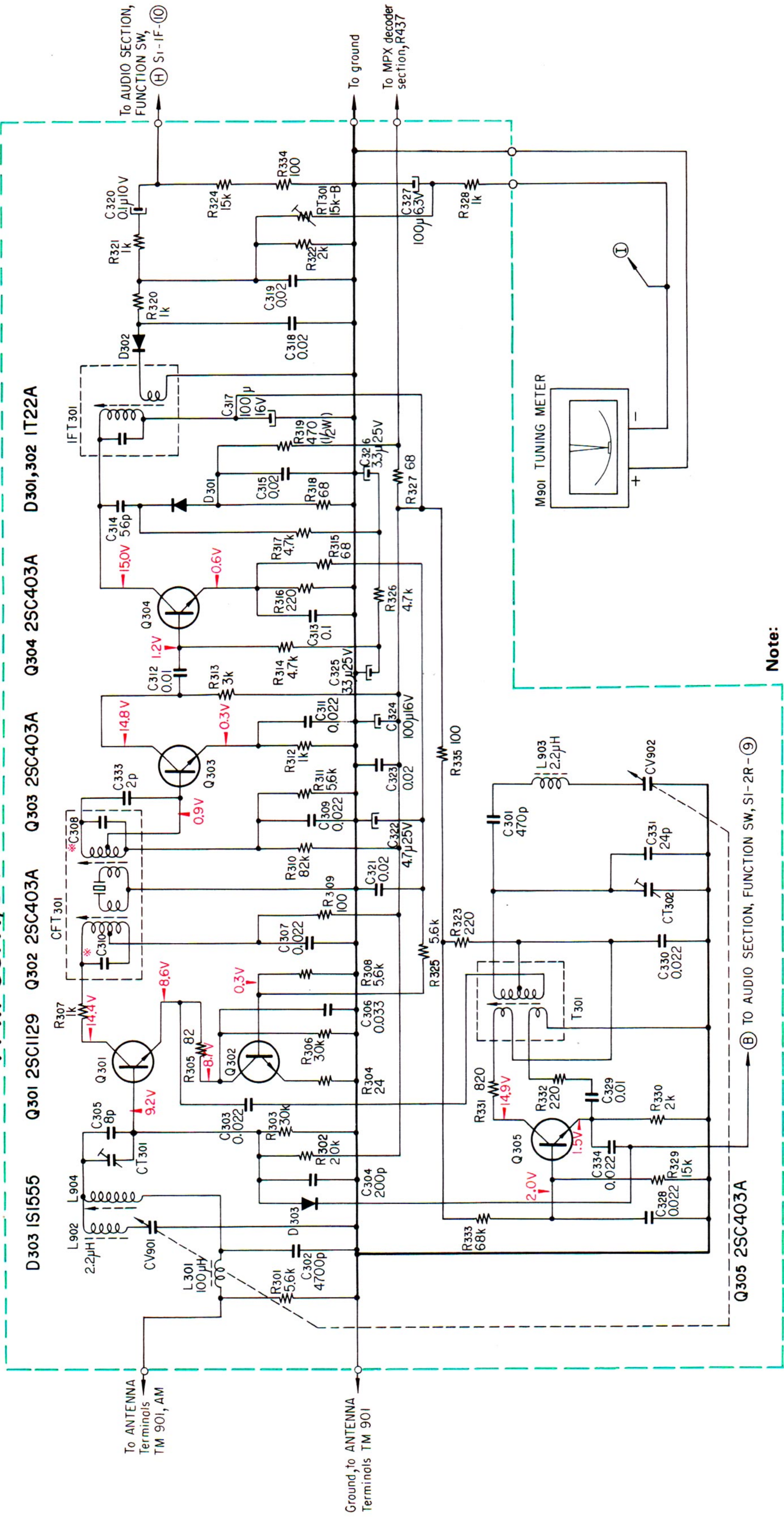
## 2-5. MOUNTING DIAGRAM – A-m I-f Board –

– Conductor Side –



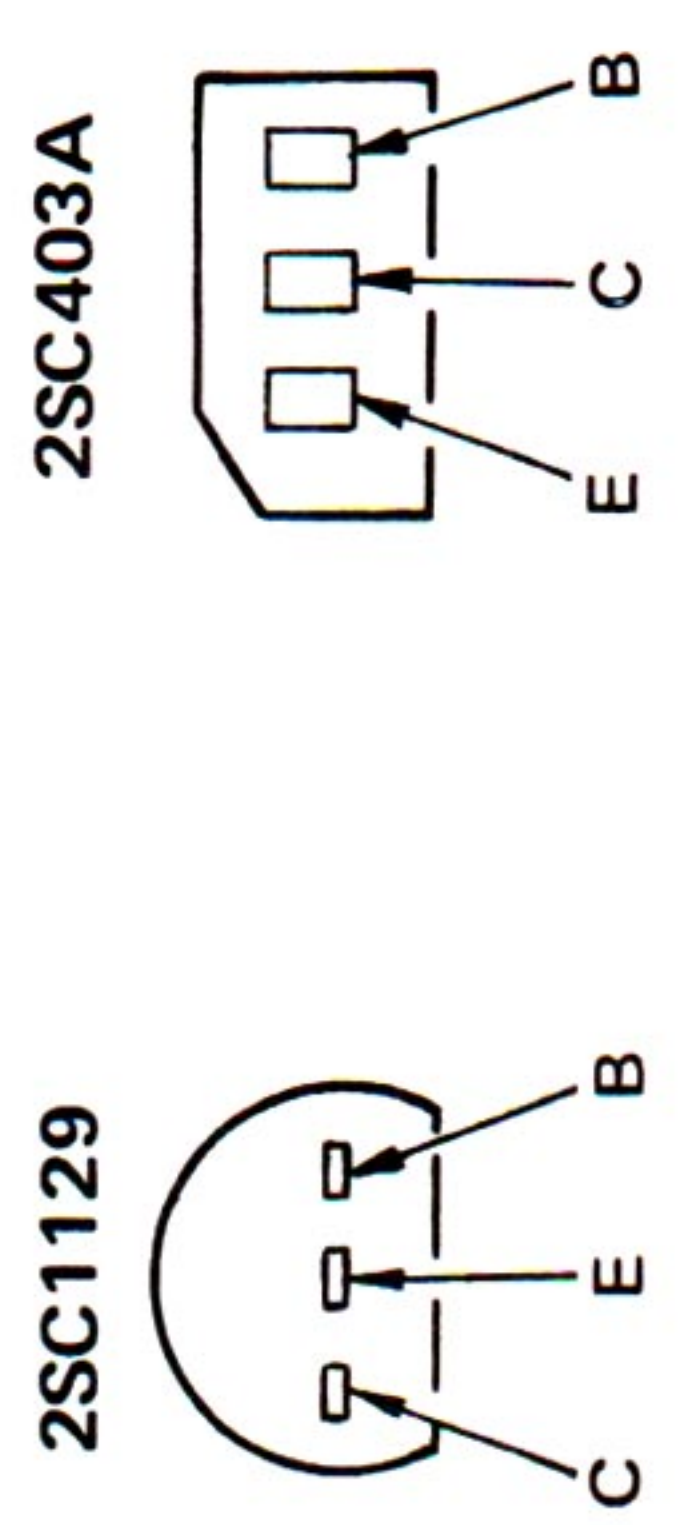


**A-M CONV/I-F AMPLIFIER SECTION**



**Note:**

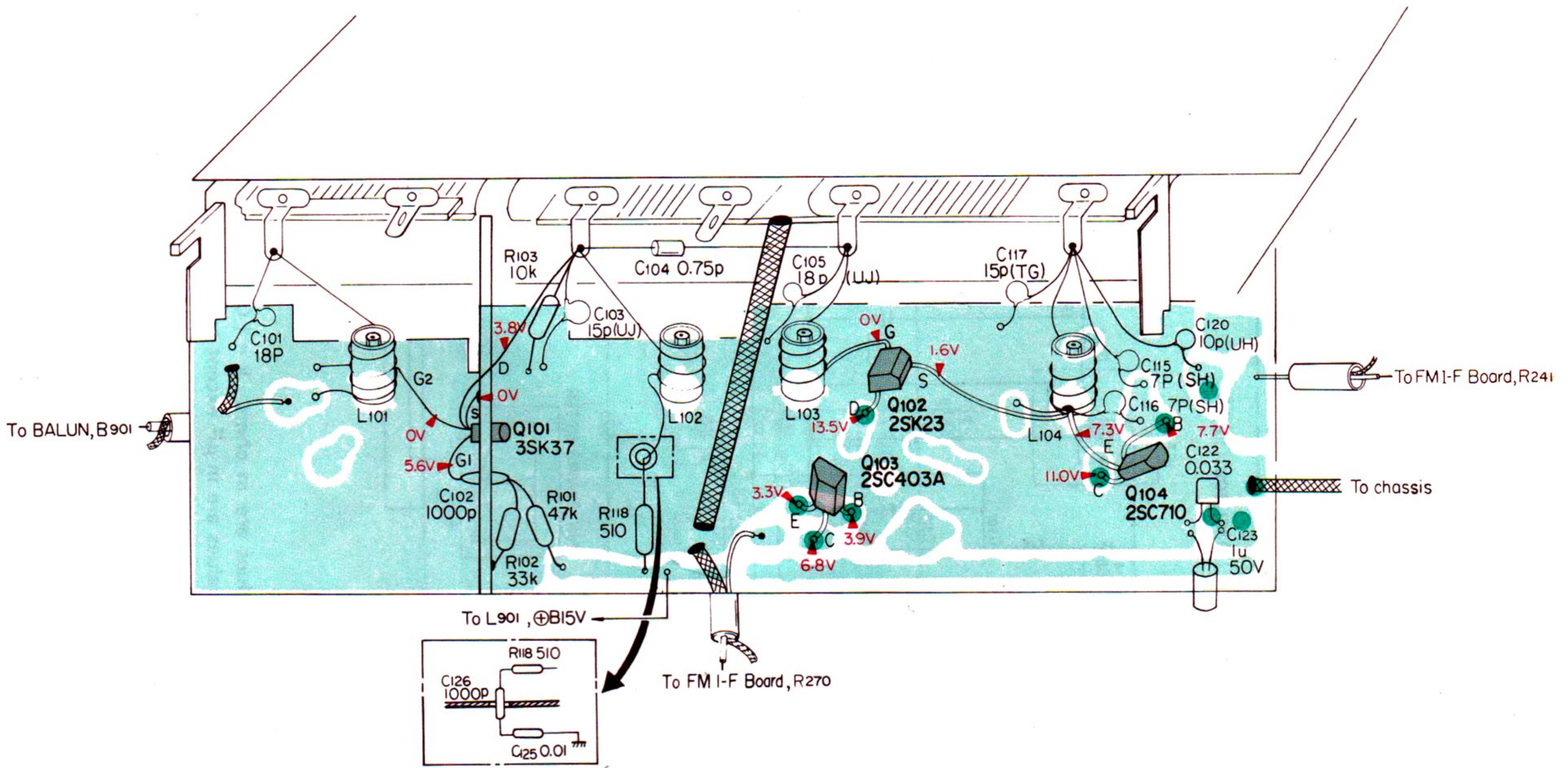
All resistance values are in ohms. k = 1,000, M = 1,000 k  
 All capacitance values are in µF except as indicated with p, which means µµF.  
 All voltages represent an average value and should hold within ±10%.  
 All voltages are dc measured with a VOM which has an input impedance of 20k ohms/volt. No signal in.



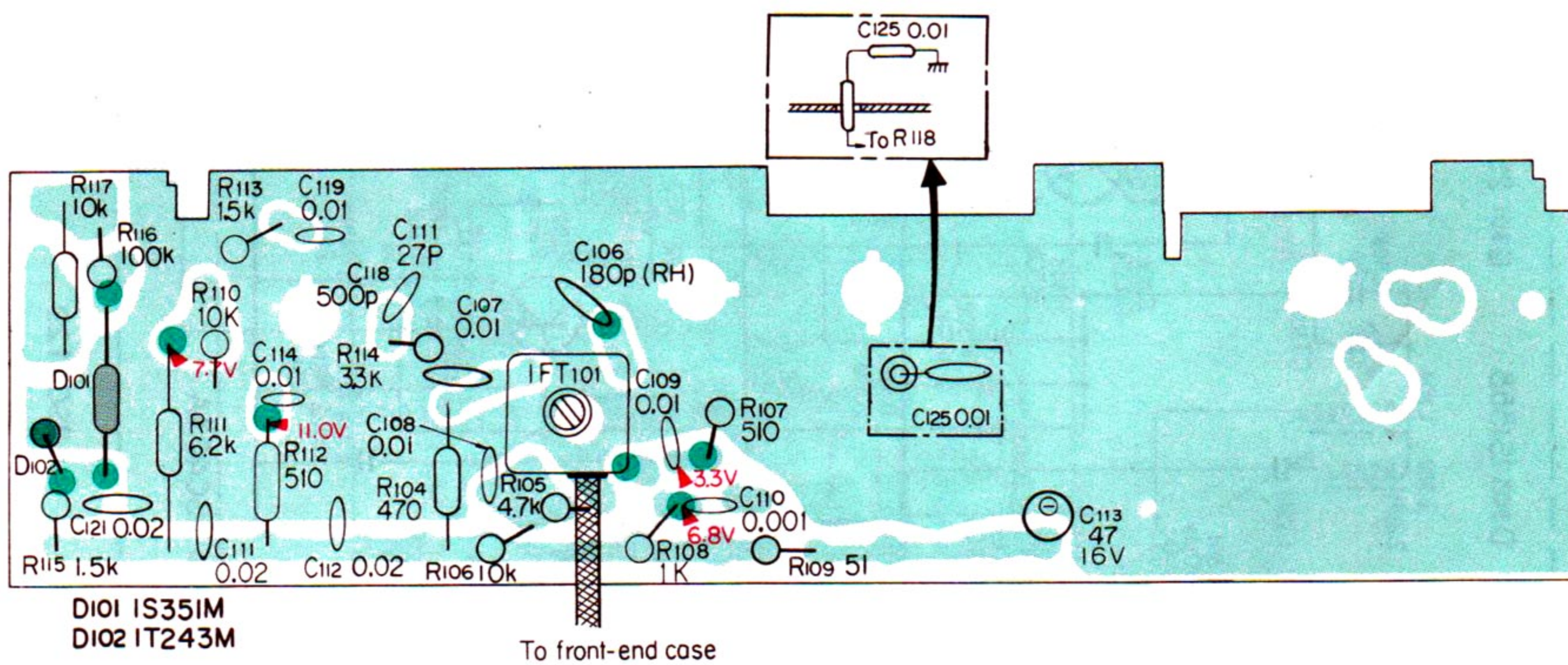
**SONY**  
**STR-6065**  
 © 1971

2-7. MOUNTING DIAGRAM – Fm Front End –

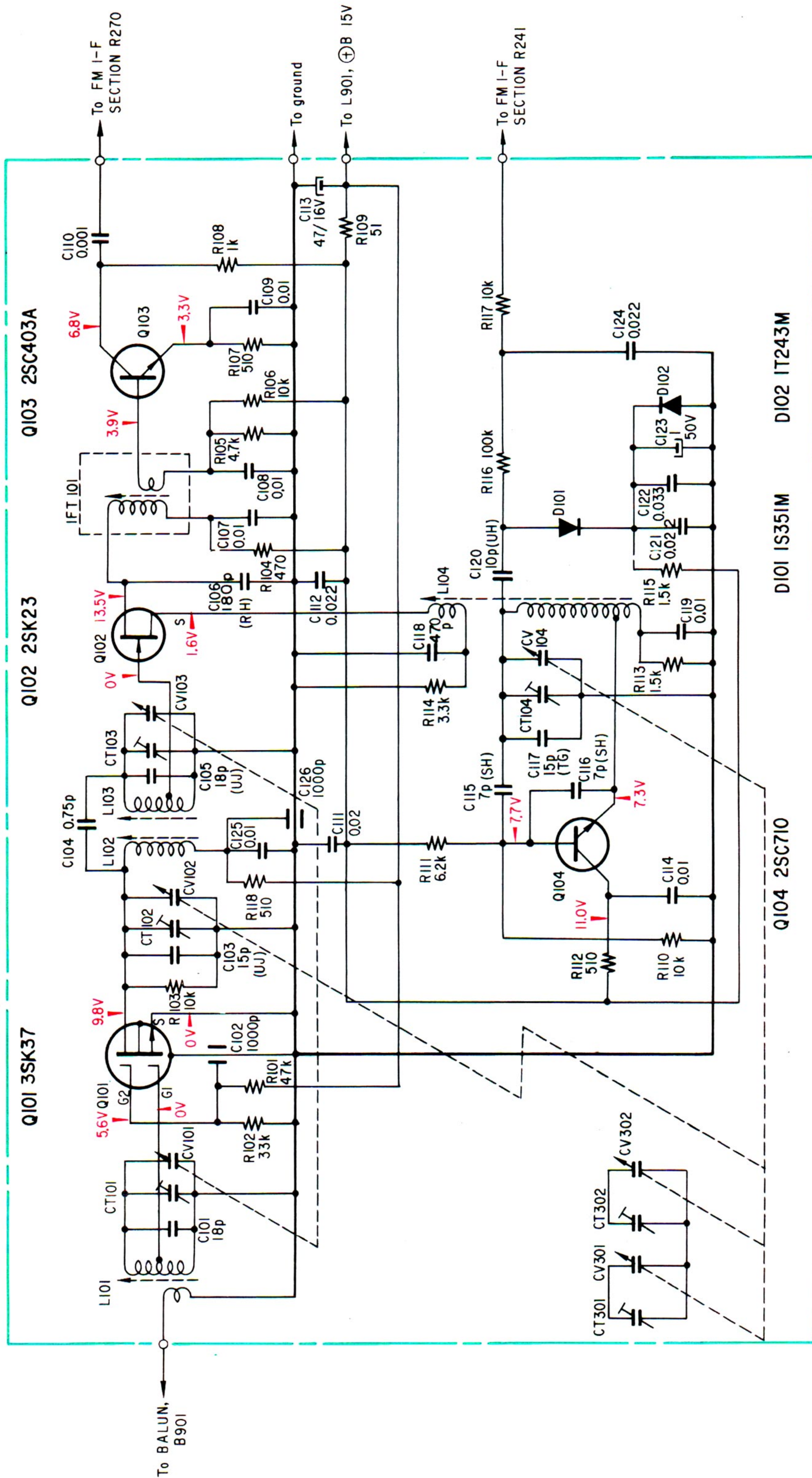
– Conductor Side –



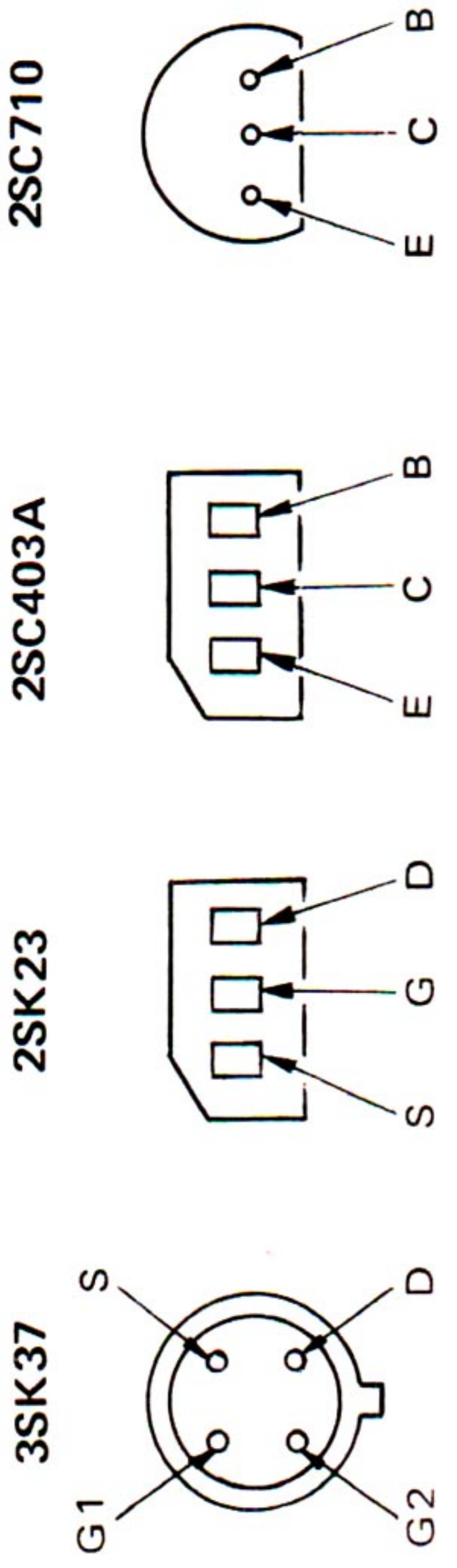
– Component Side –



FRONT END SECTION



**Note:**  
 All resistance values are in ohms. k = 1,000, M = 1,000 k  
 All capacitance values are in μF except as indicated with p,  
 which means μμF.  
 All voltages represent an average value and should hold  
 within ±10%.  
 All voltages are dc measured with a VOM which has an  
 input impedance of 20k ohms/volt. No signal in.



**SONY**  
**STR-6065**

© 1971

## 2-9. ELECTRICAL PARTS LIST

### A-m I-f Section

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
<b>MOUNTED CIRCUIT BOARD</b>			C327	1-121-413	100 $\pm 10\%$ 6.3V electrolytic
8-982-572-81	a-m circuit board		C328	1-105-837	0.022 $\pm 20\%$ 50V mylar
<b>SEMICONDUCTORS</b>			C329	1-105-673	0.01 $\pm 20\%$ 50V mylar
D301	diode	1T22A	C330	1-105-837	0.022 $\pm 20\%$ 50V mylar
D302	diode	1T22A	C331	1-102-960	24p $\pm 5\%$ 50V ceramic
D303	diode	1S1555	C332		- deleted -
Q301	transistor	2SC1129	C333	1-102-935	2p $\pm 0.25$ pF 50V ceramic
Q302	transistor	2SC403A	C334	1-105-837	0.022 $\pm 20\%$ 50V mylar
Q303	transistor	2SC403A	C335	1-102-935	2p $\pm 0.25$ pF 50V ceramic
Q304	transistor	2SC403A	CT301	1-141-095	capacitor, trimmer
Q305	transistor	2SC403A	CT302		
<b>TRANSFORMERS, COILS AND INDUCTORS</b>			<b>RESISTORS</b>		
CFT301	1-403-150	CFT, 455 kHz	All resistance values are in $\Omega$ , $\pm 5\%$ , $\frac{1}{4}W$ and carbon type unless otherwise indicated.		
IFT301	1-403-149	IFT, 455 kHz	R301	1-244-691	5.6 k
L301	1-407-169	inductor, micro 100 $\mu$ H	R302	1-244-704	20k
T301	1-405-459	coil, a-m osc.	R303	1-244-708	30k
L902	1-407-182	inductor, micro 2.2 $\mu$ H	R304	1-244-634	24
L903	1-407-182	inductor, micro 2.2 $\mu$ H	R305	1-244-647	82
L904	1-401-439-31	bar antenna, a-m	R306	1-244-708	30k
<b>CAPACITORS</b>			R307	1-244-673	1k
All capacitance values are in $\mu$ F except as indicated with p, which means $\mu\mu$ F.			R308	1-244-691	5.6 k
C301	1-103-617	470p $\pm 5\%$ 50V styrol	R309	1-244-649	100
C302	1-105-829	0.047 $\pm 20\%$ 50V mylar	R310	1-244-719	82k
C303	1-105-837	0.022 $\pm 20\%$ 50V mylar	R311	1-244-691	5.6 k
C304	1-102-977	200p $\pm 5\%$ 50V ceramic	R312	1-244-673	1k
C305	1-102-945	8p $\pm 5\%$ 50V ceramic	R313	1-244-684	3k
C306	1-105-679	0.033 $\pm 20\%$ 50V mylar	R314	1-244-689	4.7k
C307	1-105-837	0.022 $\pm 20\%$ 50V mylar	R315	1-244-645	68
C308		included in CFT301	R316	1-244-657	220
C309	1-105-837	0.022 $\pm 20\%$ 50V mylar	R317	1-244-689	4.7k
C310		included in CFT301	R318	1-244-645	68
C311	1-105-837	0.022 $\pm 20\%$ 50V mylar	R319	1-202-565	470 $\pm 10\%$ $\frac{1}{2}W$ composition
C312	1-105-673	0.01 $\pm 20\%$ 50V mylar	R320	1-244-673	1k
C313	1-105-685	0.1 $\pm 20\%$ 50V mylar	R321	1-244-673	1k
C314	1-101-884	56p $\pm 5\%$ 50V ceramic	R322	1-244-680	2k
C315	1-101-073	0.02 $\pm 20\%$ 25V ceramic	R323	1-242-657	220
C316		included in IFT301	R324	1-242-701	15k
C317	1-121-415	100 $\pm 10\%$ 16V electrolytic	R325	1-244-691	5.6k
C318	1-101-073	0.02 $\pm 20\%$ 25V ceramic	R326	1-244-689	4.7k
C319	1-101-073	0.02 $\pm 20\%$ 25V ceramic	R327	1-244-645	68
C320	1-127-019	0.1 $\pm 20\%$ 10V solid, aluminium	R328	1-244-673	1k
C321	1-102-073	0.02 $\pm 20\%$ 50V ceramic	R329	1-244-701	15k
C322	1-121-395	4.7 $\pm 10\%$ 25V electrolytic	R330	1-244-680	2k
C323	1-101-073	0.02 $\pm 20\%$ 25V ceramic	R331	1-244-671	820
C324	1-121-415	100 $\pm 10\%$ 16V electrolytic	R332	1-244-657	220
C325	1-121-456	3.3 $\pm 10\%$ 25V electrolytic	R333	1-244-717	68k
C326	1-121-456	3.3 $\pm 10\%$ 25V electrolytic	R334	1-244-649	100
			R335	1-244-649	100

**Fm Front End Section**

Ref. No.      Part No.      Description

**MOUNTED CIRCUIT BOARD**  
8-982-572-11    fm front end ass'y

**SEMICONDUCTORS**

D101		diode	1S351M
D102		diode	1T243M
Q101		FET	3SK37
Q102		FET	2SK23
Q103		transistor	2SC403A
Q104		transistor	2SC710

**TRANSFORMER AND COILS**

IFT101	1-403-295	IFT, fm
L101	1-401-453	coil, fm antenna
L102	1-425-446	coil, fm rf
L103	1-425-668	coil, fm rf
L104	1-405-377	coil, fm osc.

**RESISTORS**

All resistance values are in  $\Omega$ ,  $\pm 5\%$ ,  $\frac{1}{4}W$  and carbon type unless otherwise indicated.

R101	1-244-713	47k
R102	1-244-709	33k
R103	1-244-697	10k
R104	1-244-665	470
R105	1-242-689	4.7k
R106	1-242-697	10k
R107	1-242-666	510
R108	1-242-673	1k
R109	1-242-642	51
R110	1-242-697	10k
R111	1-244-692	6.2k
R112	1-242-666	510
R113	1-242-673	1.5k
R114	1-242-685	3.3k
R115	1-242-677	1.5k
R116	1-242-721	100k

Ref. No.      Part No.      Description

R117      1-244-697      10k  
R118      1-244-666      510

**CAPACITORS**

All capacitance values are in  $\mu F$  except as indicated with p, which means  $\mu\mu F$ .

C101	1-102-893	18p	$\pm 5\%$	50V	ceramic
C102	1-102-217	1,000p	$\pm 100\%$	50V	ceramic
C103	1-102-880	15p(UJ)	$\pm 5\%$	50V	ceramic
C104	1-101-937	0.75p	$\pm 10\%$	500V	ceramic
C105	1-102-893	18p(UJ)	$\pm 5\%$	50V	ceramic
C106	1-102-848	180p(RH)	$\pm 5\%$	50V	ceramic
C107	1-101-923	0.01	$\pm 80\%$	25V	ceramic
C108	1-101-923	0.01	$\pm 80\%$	25V	ceramic
C109	1-101-923	0.01	$\pm 80\%$	25V	ceramic
C110	1-101-918	0.001	$\pm 80\%$	25V	ceramic
C111	1-101-924	0.022	$\pm 80\%$	25V	ceramic
C112	1-101-924	0.022	$\pm 80\%$	25V	ceramic
C113	1-121-409	47	$\pm 100\%$	16V	electrolytic
C114	1-101-923	0.01	$\pm 80\%$	25V	ceramic
C115	1-102-875	7p(SH)	$\pm 5\%$	50V	ceramic
C116	1-102-875	7p(SH)	$\pm 5\%$	50V	ceramic
C117	1-102-894	15p(TG)	$\pm 5\%$	50V	ceramic
C118	1-102-114	470p	$\pm 10\%$	50V	ceramic
C119	1-101-118	0.01	$\pm 20\%$	50V	ceramic
C120	1-102-986	10p(UH)	$\pm 0.5pF$	50V	ceramic
C121	1-101-924	0.022	$\pm 80\%$	25V	ceramic
C122	1-105-679-12	0.033	$\pm 10\%$	50V	mylar
C123	1-121-391	1	$\pm 150\%$	50V	electrolytic
C124	1-101-924	0.022	$\pm 80\%$	25V	ceramic
C125	1-101-118	0.01	$\pm 20\%$	50V	ceramic
C126	1-102-217	1,000p	$\pm 100\%$	50V	ceramic

CV101	1-151-193-13	capacitor, tuning
CV102		
CV104		
CV901		
CV902		

**SONY CORPORATION**