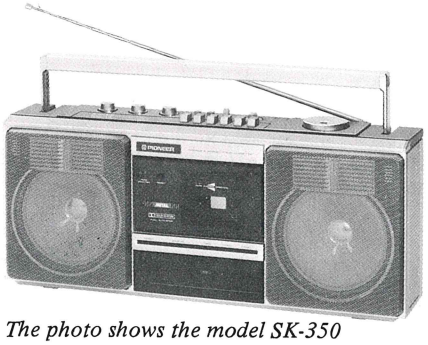
Service Manual

PIONEER



The photo shows the model SK-350

ORDER NO.
HRT-185-0

PORTABLE STEREO FM/AM RADIO CASSETTE RECORDER

SK-350 D, DP
SK-300 D, DP

SPECIFICATIONS

Max. output power . . . . . .2W + 2W
Max. music power. . . . . .15W (total music power)
Speakers 16cm 2-way
Frequency response . . . . . .Normal tape: 50Hz～14kHz
(SK-350) CrO_2 tape: 50Hz～15kHz
Metal Tape: 50Hz～16kHz
Frequency response. . . . . .50Hz～14kHz
(SK-300)
Frequency range . . . . . .FM: 88～108MHz
AM: 525～1,605kHz
Input jack . . . . . .AUX
Output jacks. . . . . .LINE OUT, PHONES
(SK-350)
Output jack . . . . . .PHONES
(SK-300)
Power source . . . . . .120/220/240V AC 50/60Hz
12V DC (eight 1.5V "D" batteries)
Dimensions (W x H x D) . . . .532 x 220 x 123mm
(SK-350) (21 x $8\,^{5}/_{8}$ x $4\,^{7}/_{8}$ in.)
Dimensions (W x H x D) . . . .532 x 220 x 120mm
(SK-300) (21 x $8\,^{5}/_{8}$ x $4\,^{3}/_{4}$ in.)
Weight . . . . . .4.6kg (10.1 lbs., without batteries)

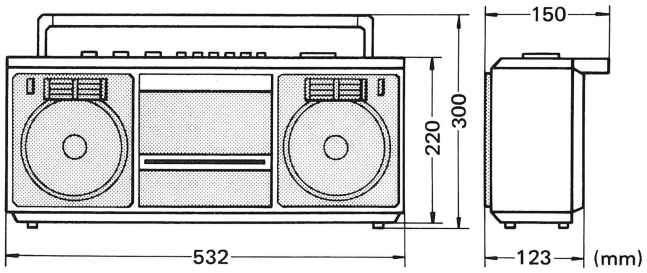
SK-350

(Subfunctions) . . . . . .Dolby NR, tape selector (METAL/CrO_2/NORM), one touch recording, music search, record muting, auto stop mechanism
(Indicators) . . . . . .POWER (red LED), DOLBY NR (green LED), REC (red LED), TUNING (green LED), STEREO (red LED)

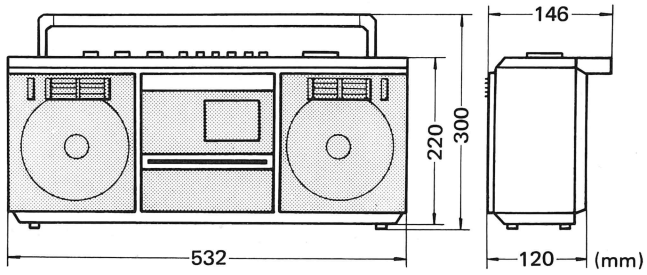
SK-300

(Subfunctions) . . . . . .One touch recording, music search, record muting, auto stop mechanism
(Indicators) . . . . . .POWER (red LED), REC (red LED), TUNING (green LED), STEREO (red LED)

SK-350



SK-300



Note: Specifications and design are subject to change without notice.

PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
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1. PARTS LOCATION

NOTE

- *For your Parts Stock Control, the fast moving items are indicated with the marks ★★ and ★.*
  ★★ : GENERALLY MOVES FASTER THAN ★.
  This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.
- *The ⚠ Mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical desgnation.*

- **SK-350**

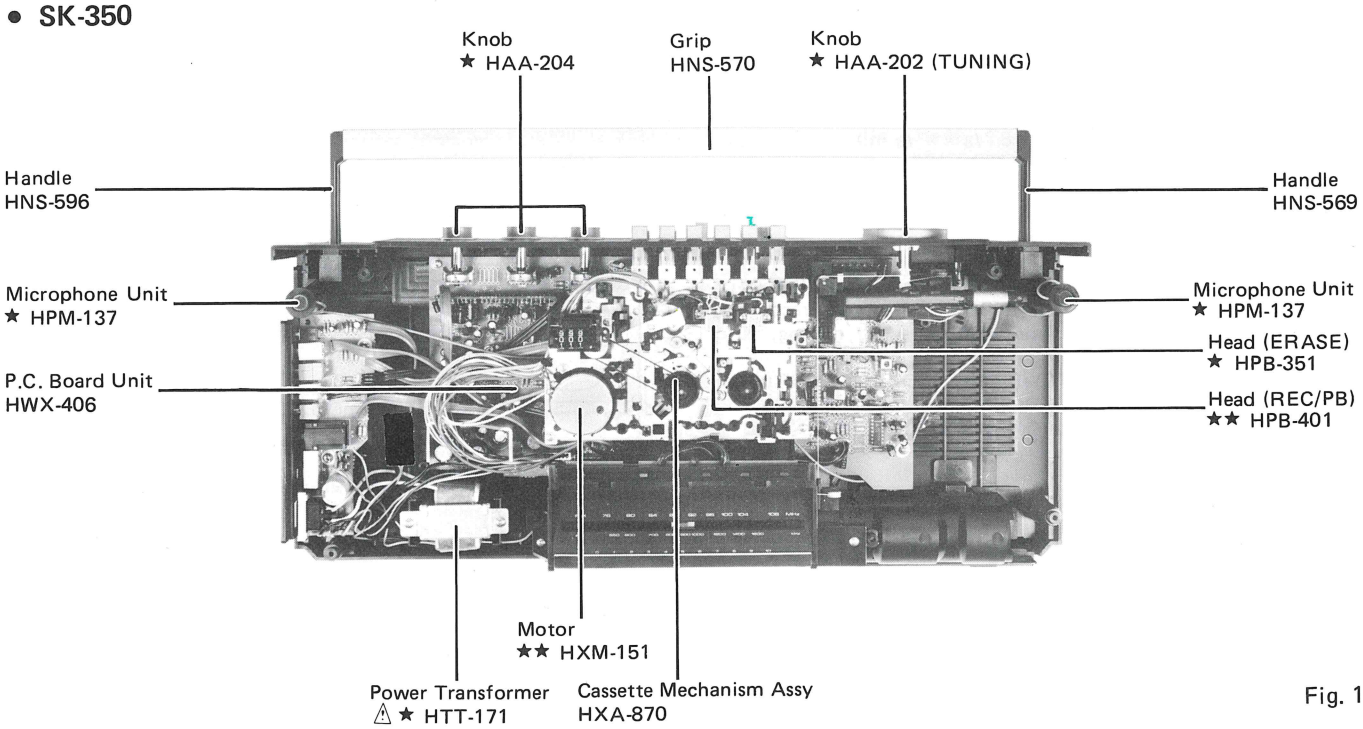


Fig. 1

- **SK-300**

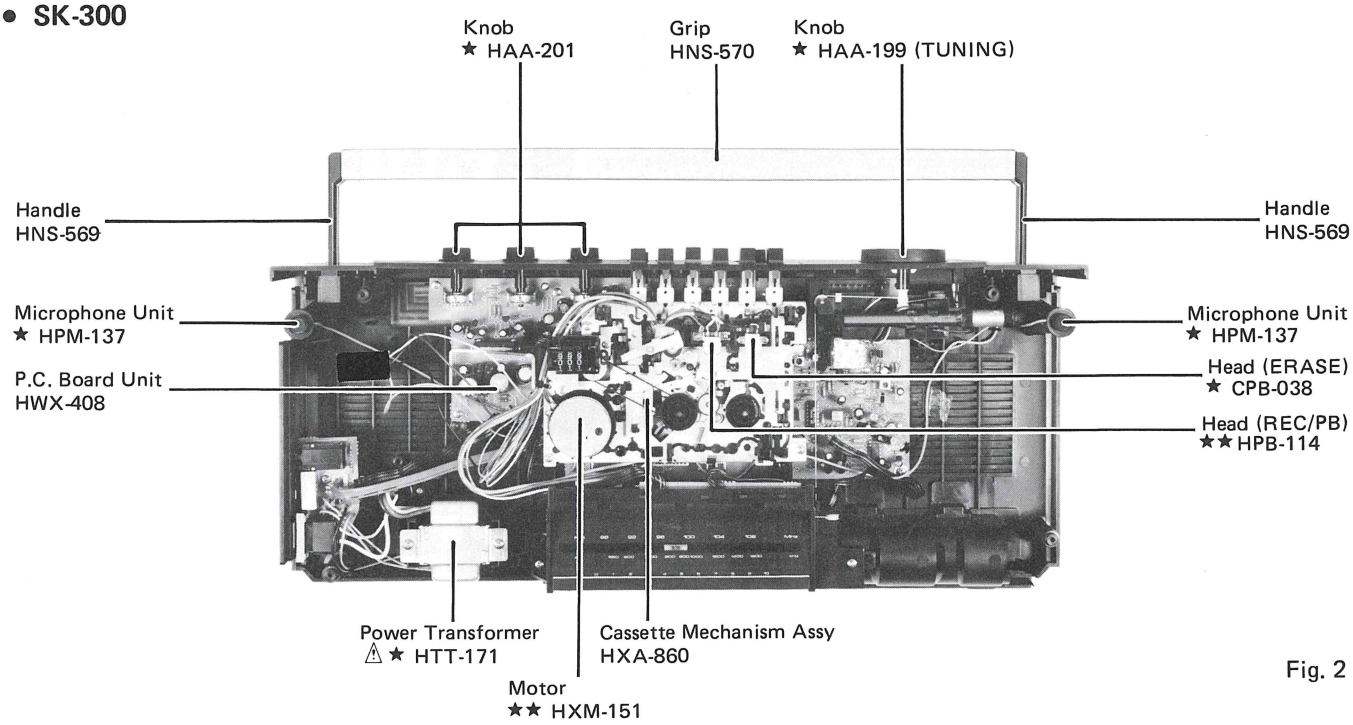


Fig. 2

2. MECHANISM DESCRIPTION

- **Play Mode**

When the PLAY lever is pressed, the head plate is pushed forward, resulting in the motor power switch being turned on to start the motor. The idler assembly is also activated, resulting in pulley unit rotation being transmitted to the reel unit.

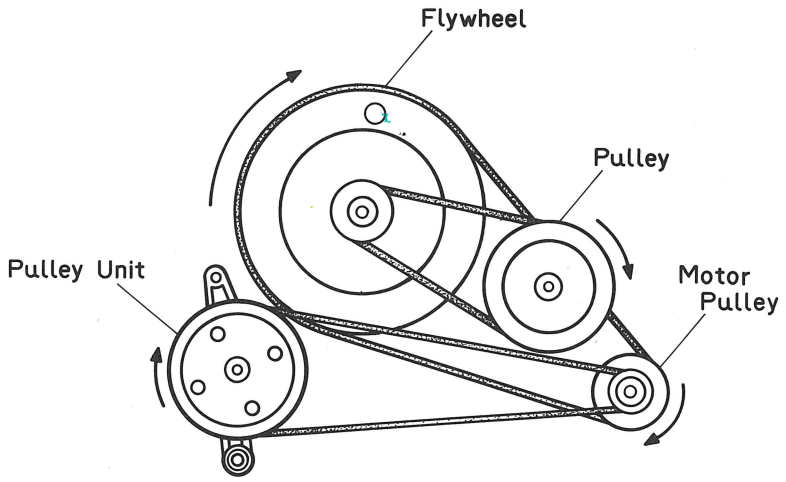


Fig. 3

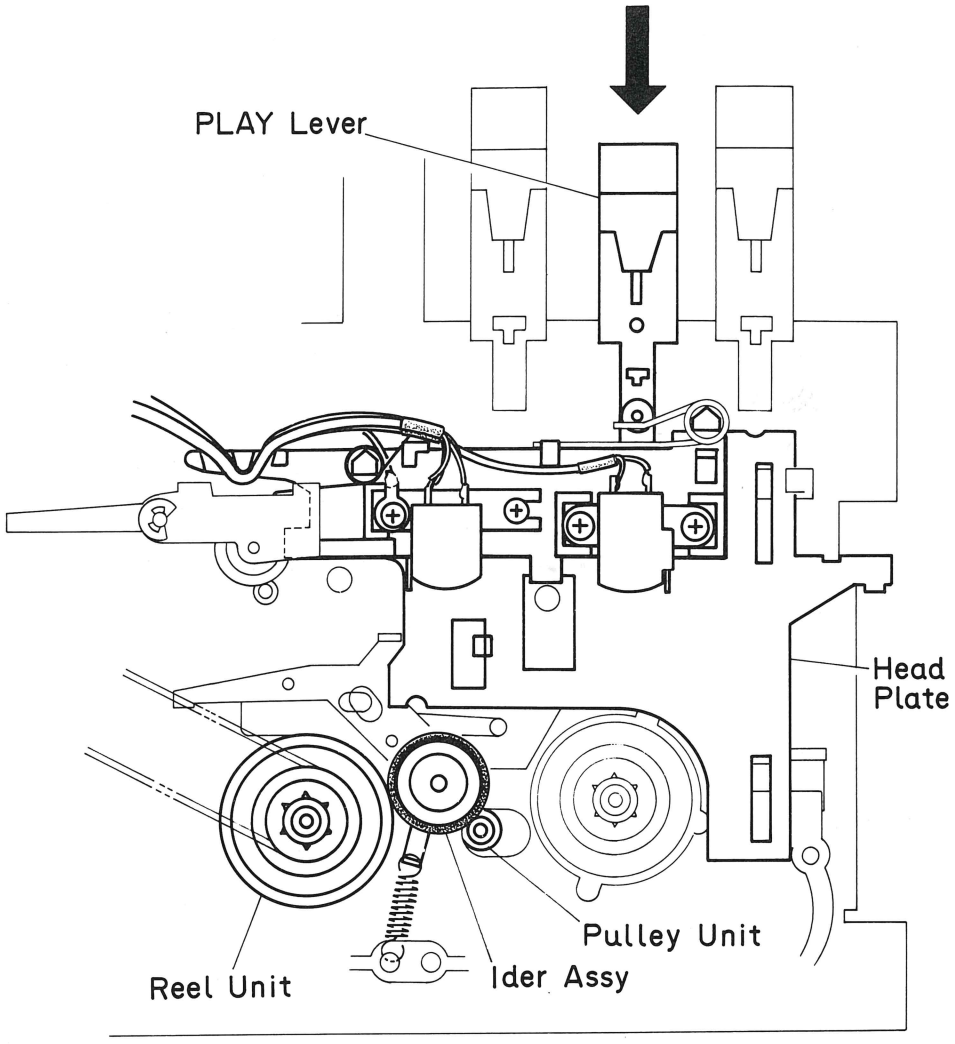


Fig. 4

- **Record Mode**

When the REC lever is pressed, the PLAY lever is also depressed, resulting in the same operation as during play mode. Depressing the REC lever also results in activation of the REC lever plate spring which switches the record/ playback selector switch to recording status.

- **Fast Forward Mode**

When the FF lever is pressed, the motor power and the FF/REW switches are both switched on by the same arm movement. The gear assembly is also activated, resulting in pulley unit rotation being transmitted to the reel unit.

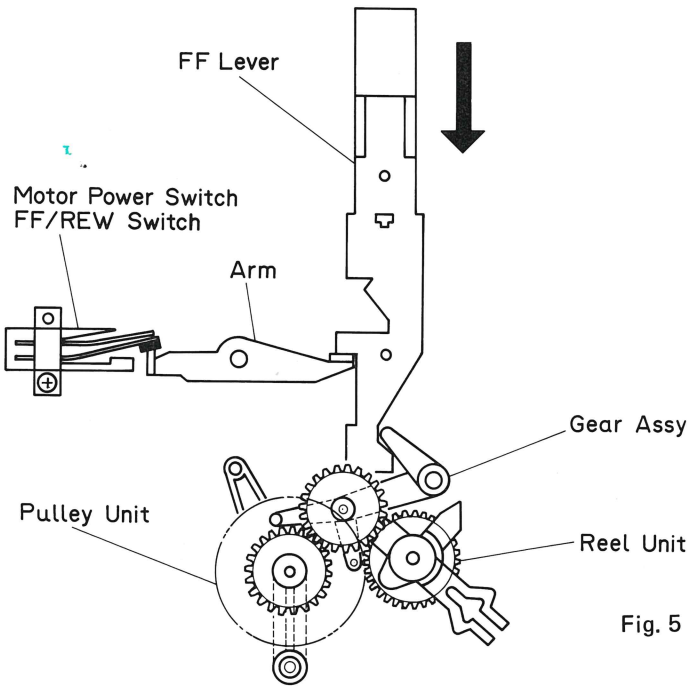


Fig. 5

• Rewind Mode

When the REW lever is pressed, the motor power and the FF/REW switches are both switched on by the same arm movement. The pulley unit is thus brought in contact with the reel unit for transmission of rotation.

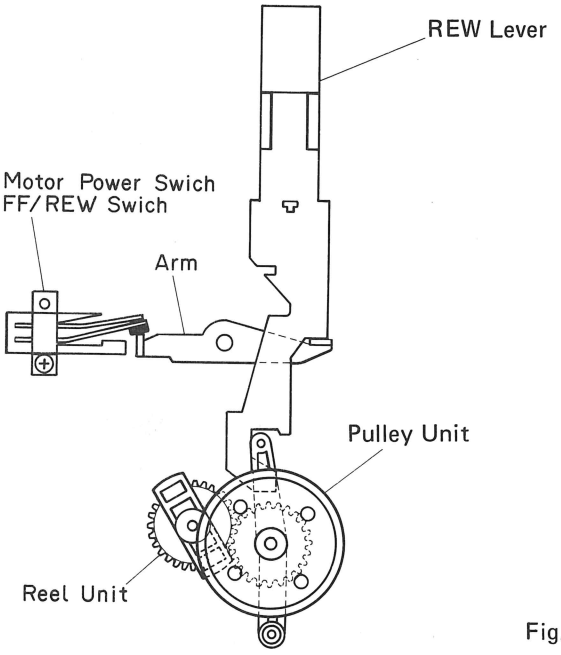


Fig. 6

• MS Fast Forward and Rewind Modes

1. MS fast forward or rewind mode is started when the FF or REW lever is pressed during play mode.
2. The head plate is moved back a little, and the rotating mechanism switched to fast forward or rewind operation.
3. When a blank section of tape is detected, a solenoid is activated, resulting in the lock lever being pulled back. The fast forward or rewind lock is cancelled, resulting in operation returning to play mode.

• Auto Stop Mode

1. Flywheel rotation is transmitted via pulley to the gear.
2. When the take-up reel unit is rotating during play, record, fast forward or rewind mode, the reel unit arm presses against the lever which is consequently forced to run around the inside of the gear groove. (Fig.8)
3. When the tape end is reached and the reel unit rotation stops, the lever moves to the tip of the reel unit arm and subsequently runs around the outside of the gear groove.
4. The lever then presses against the plate to cancel the transport mode and stop operation.

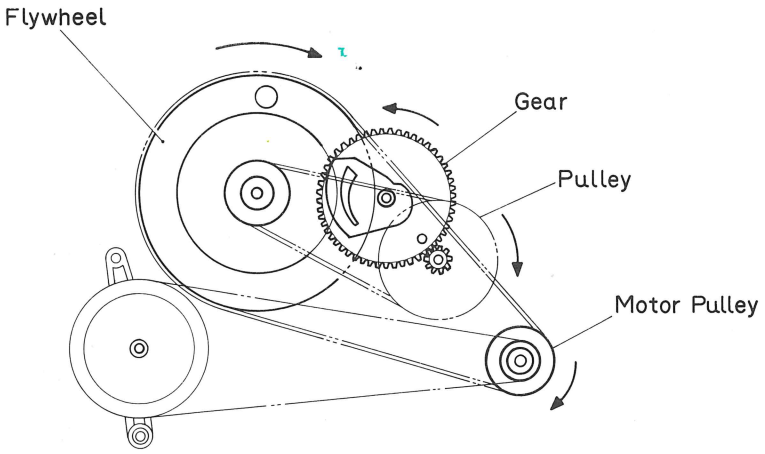


Fig. 7

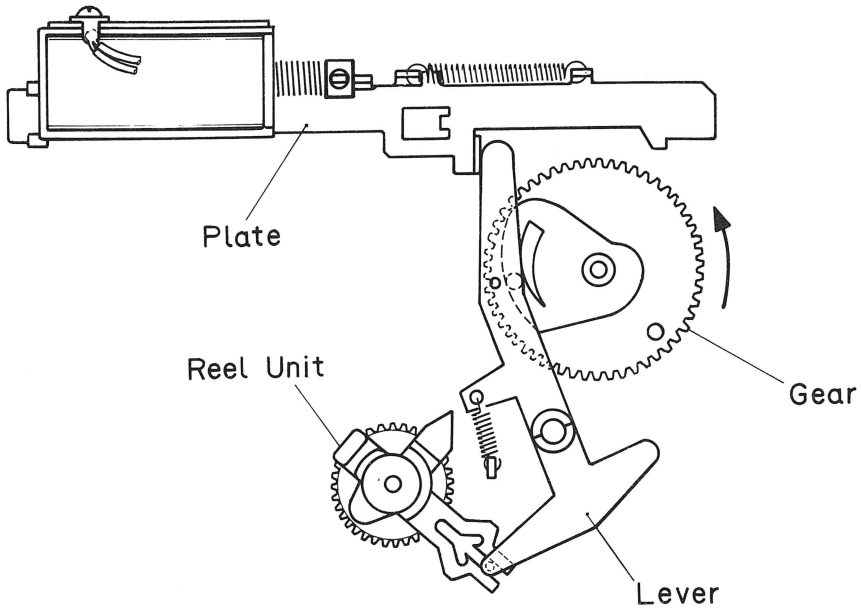


Fig. 8

3. CIRCUIT DESCRIPTION

3.1 TUNER SECTION

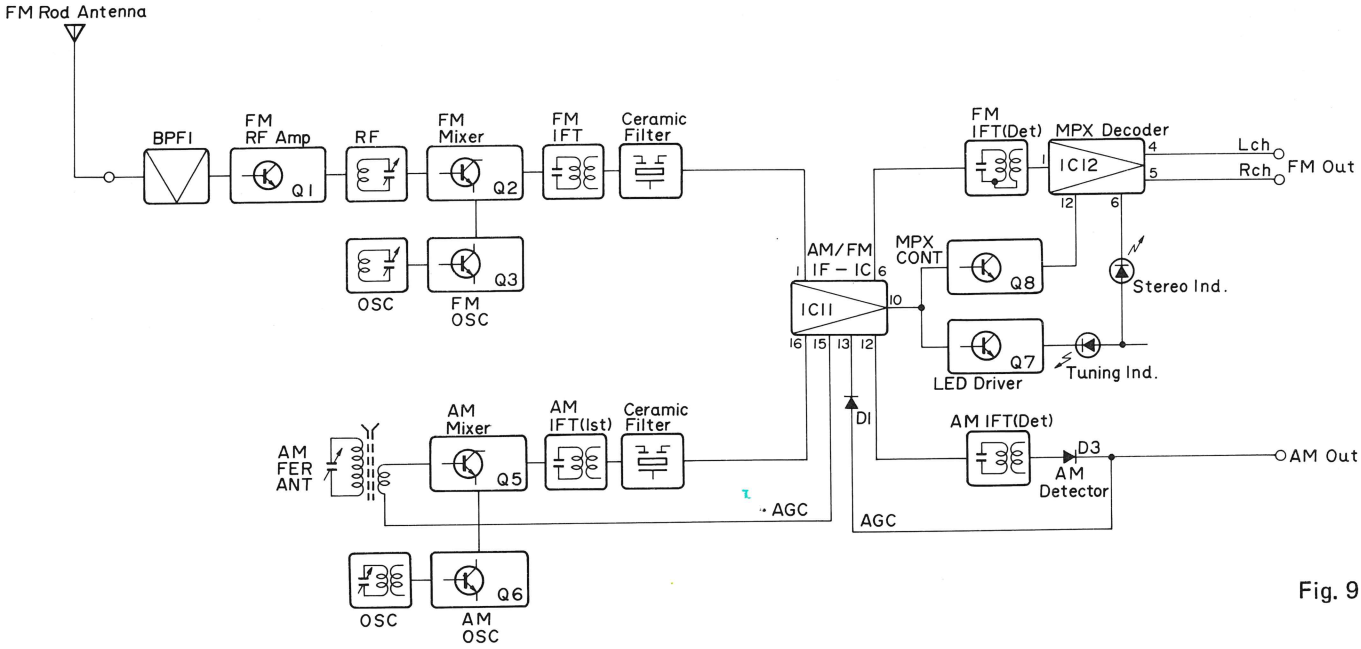


Fig. 9

• Front End

The front end consists of single stage RF amplifier (Q1) with a BPF on the antenna input side, a base injection mixer (Q2), and a modified Colpitts local oscillator (Q3).

• IF Amp and Detector

This stage consists of a 3-element ceramic filter and an IC (KB4419C – also used for AM) which contains a 4-stage differential amplifier quadrature detector.

• FM Stereo Demodulator

The FM stereo demodulator employs the PLL MPX IC (KB4424B). The stereo auto level is controlled by the tuning indicator output from the IF amplifier IC (KB4419C) via transistor Q8.

• AM Tuner

The AM tuner includes a 120mm ferrite bar antenna, an IF amplifier stage consisting of an externally-excited mixer and an IC (KB4419C), and AGC circuit and detector in addition to a dual variable capacitor and ceramic filter.

3.2 BLOCK DIAGRAM

• PLAY Mode (SK-350)

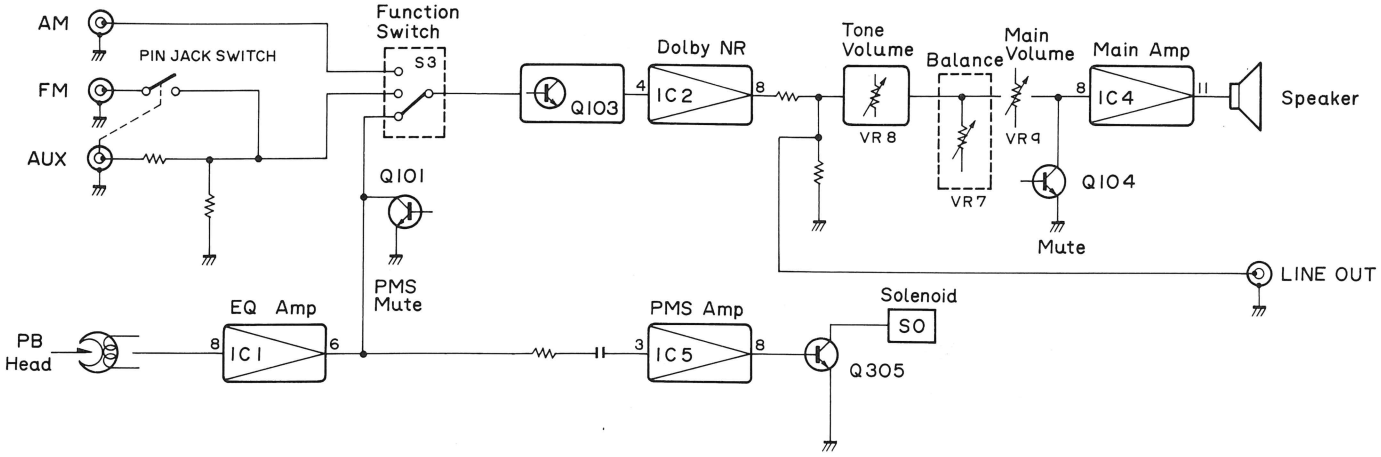


Fig. 10

• REC Mode (SK-350)

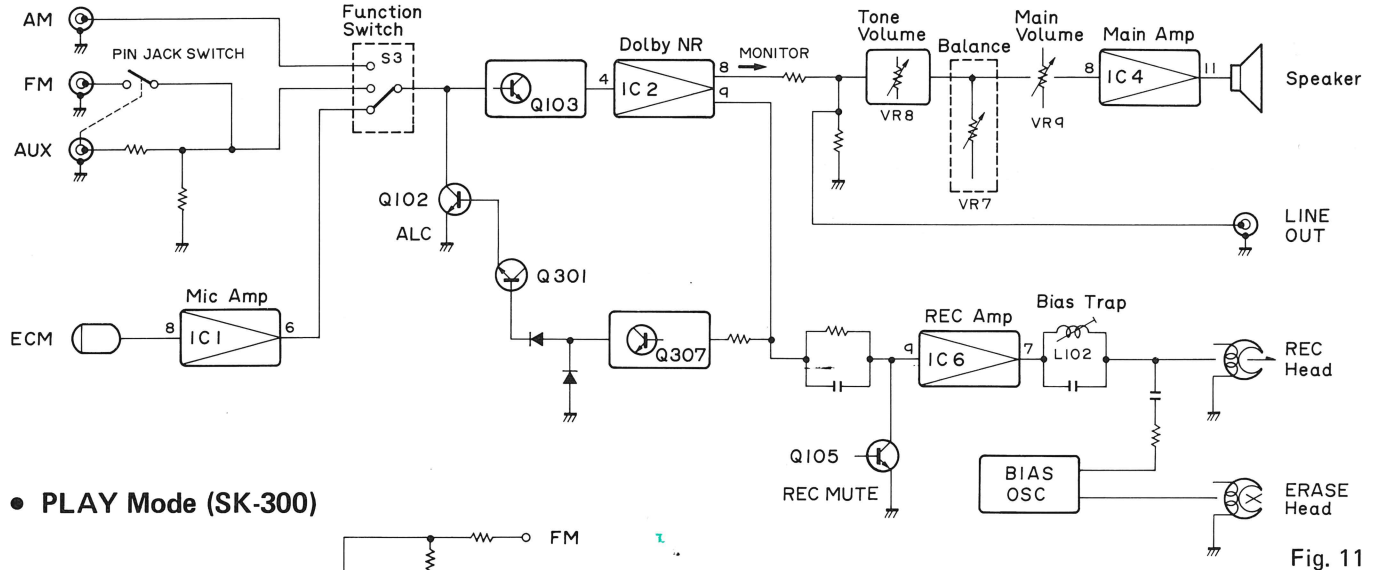


Fig. 11

• PLAY Mode (SK-300)

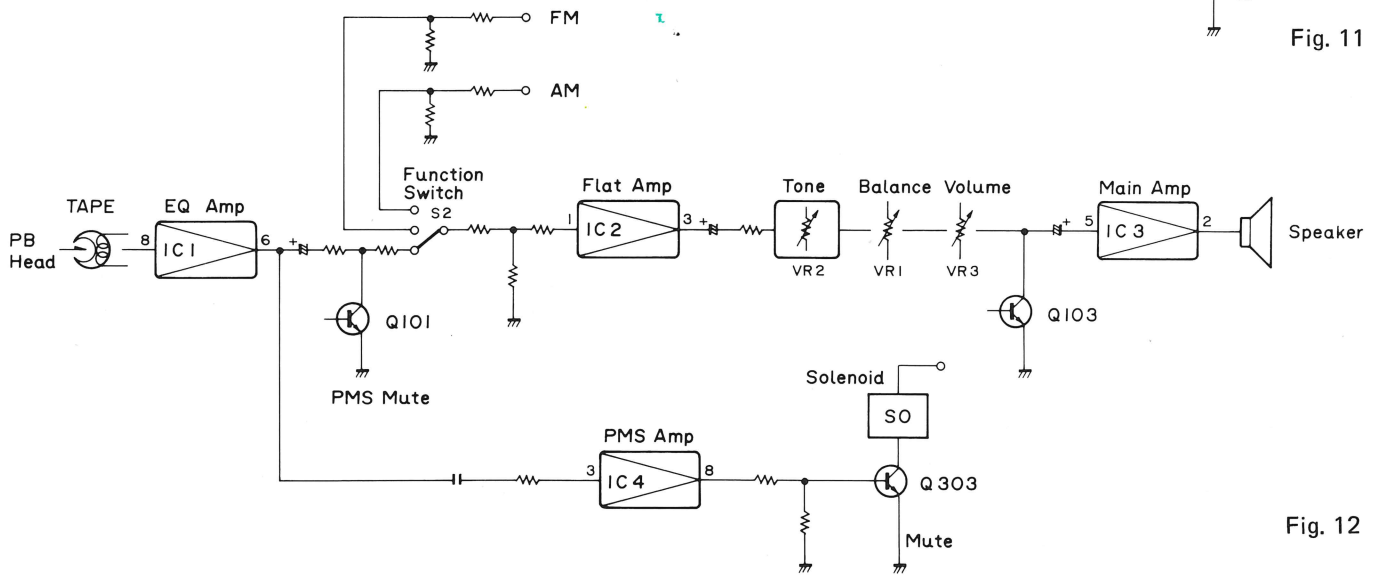


Fig. 12

- **REC Mode (SK-300)**

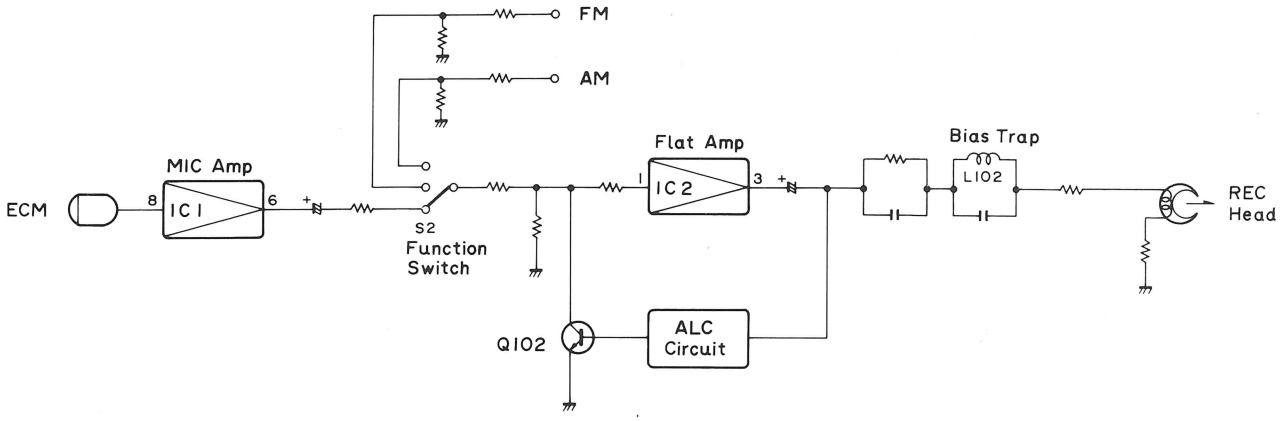


Fig. 13

3.3 LEVEL DIAGRAM

- **PLAY Mode (SK-350)**

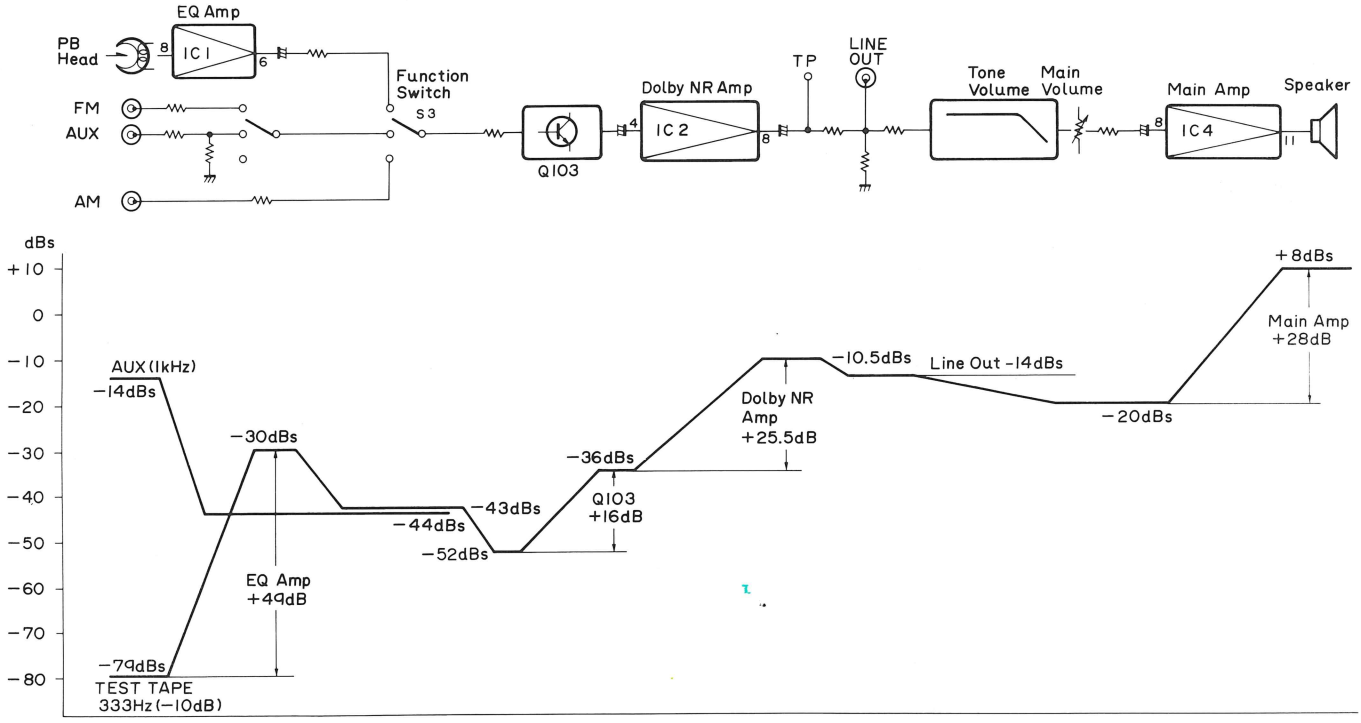
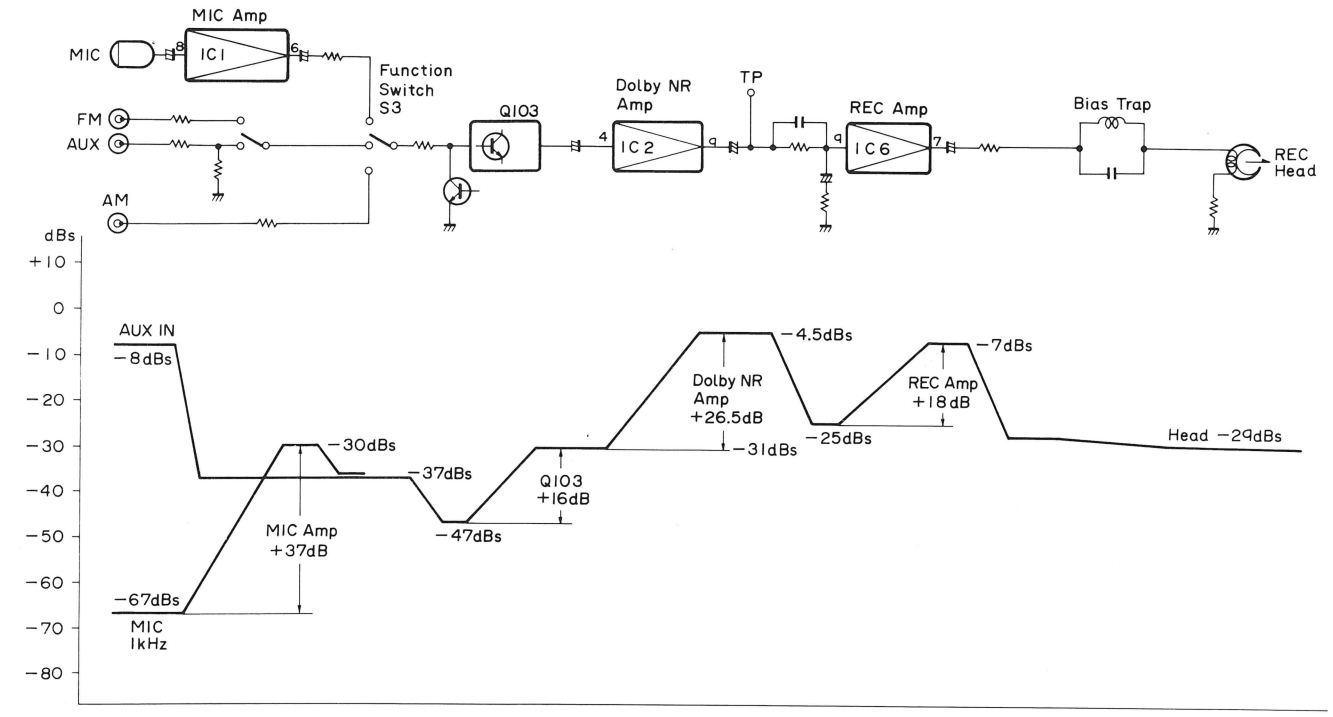


Fig. 14

• REC Mode (SK-350)



Fit. 15

• PLAY Mode (SK-300)

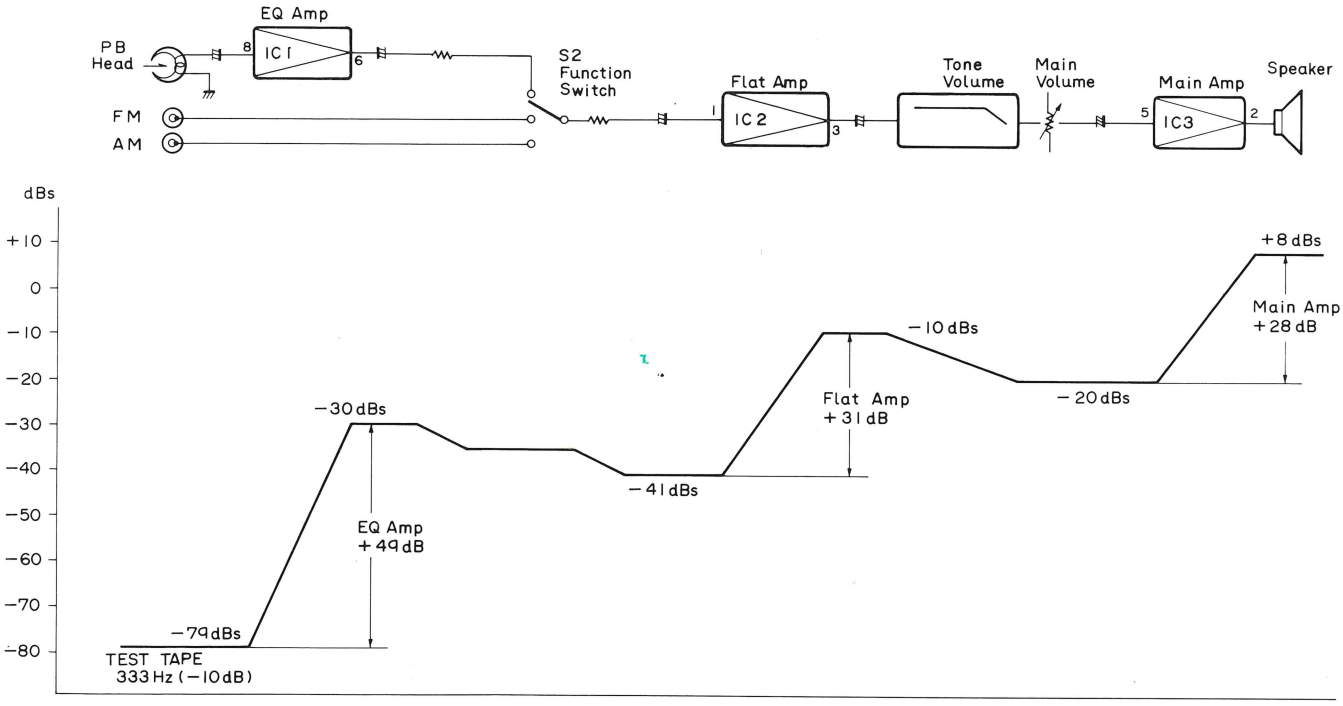
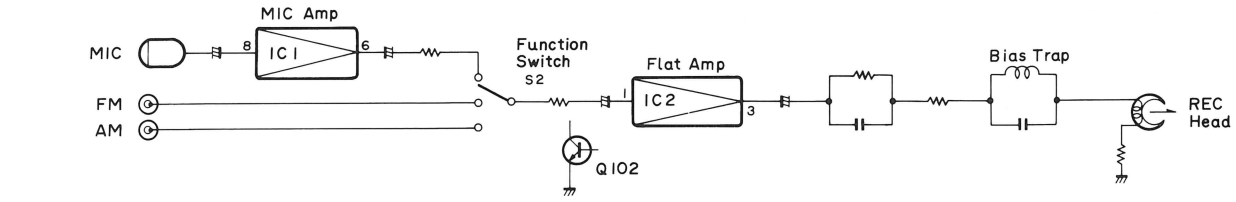


Fig. 16

- **REC Mode (SK-300)**



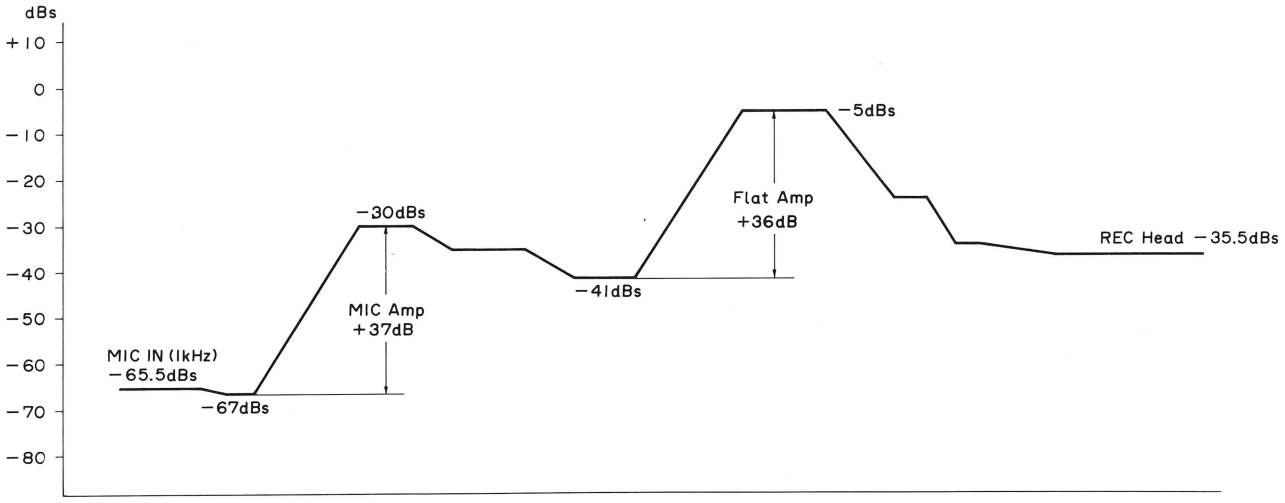


Fig. 17

4. DISASSMBLY

- **Removing the Rod Antenna**

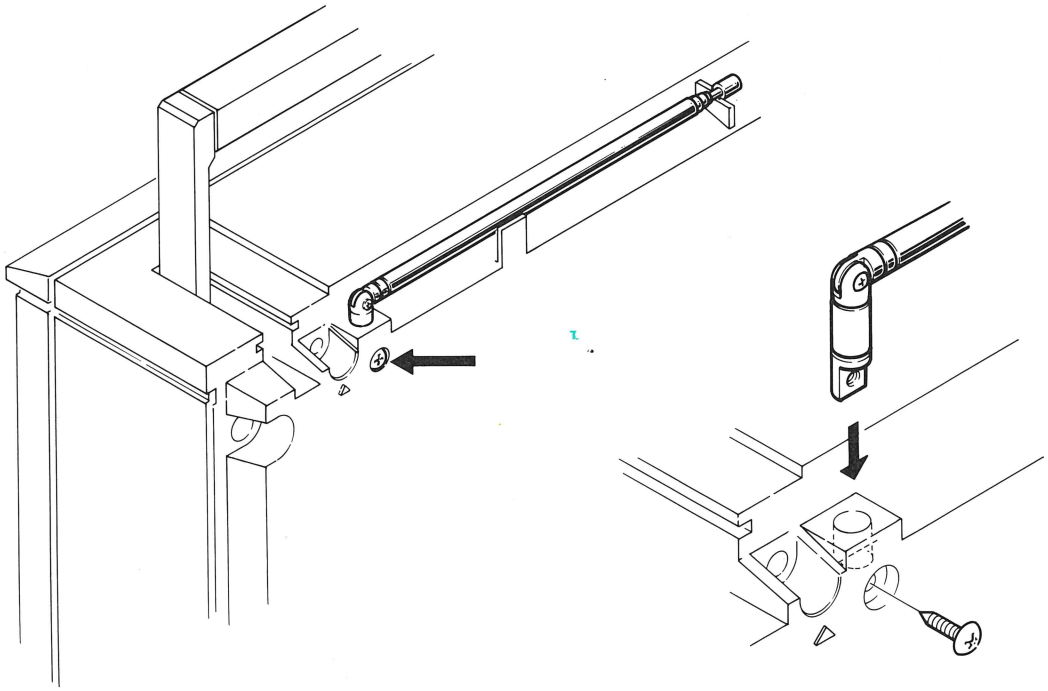


Fig. 18

1. The rod antenna may be removed by taking out the screw indicated by the arrow. (The case need not be removed.)
2. When reinstalling the rod antenna, the flat surface faces toward you.

• Removing the Front Case

1. Remove the cassette compartment door and the indicated screw.
2. Remove the battery compartment cover and the seven screws from the back of the unit.

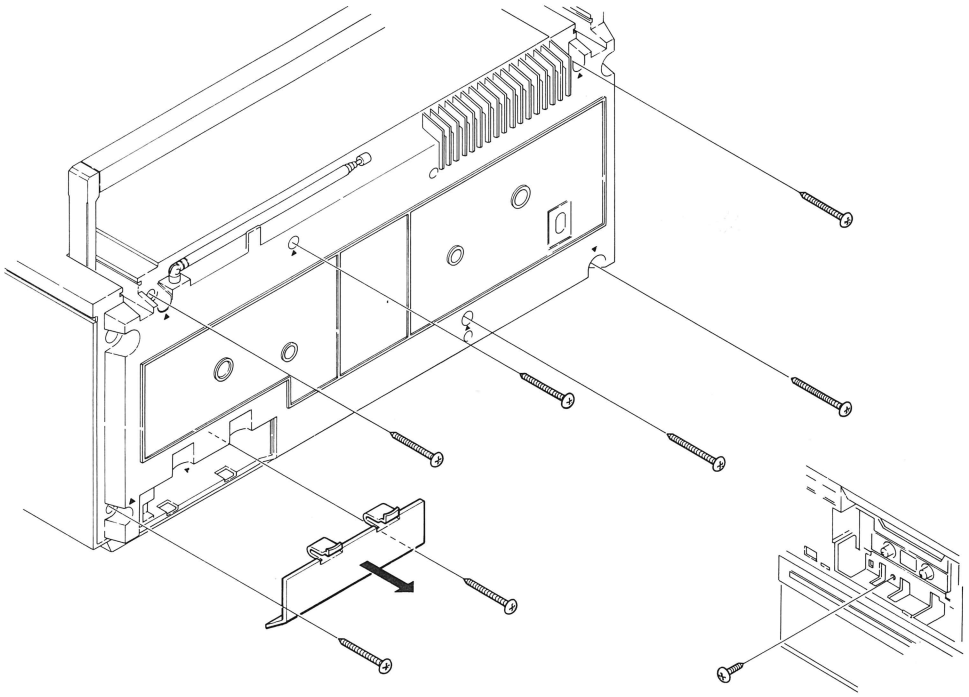


Fig. 19

• Removing the Tweeters (Speakers)

The tweeters are attached to the front case with a bond adhesive. Use a screwdriver as shown in the figure to remove these speakers.

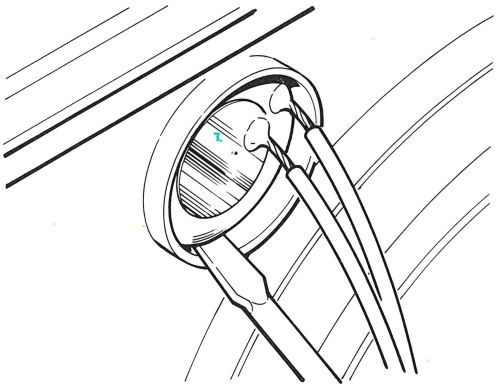


Fig. 20

• Removing the Speaker Net (SK-350)

The speaker nets also are attached to the front case with a bond adhesive. Cut part of the net open as shown in the figure and carefully pull away from the front case with a pair of pliers without scratching or otherwise damaging the speakers and front case.

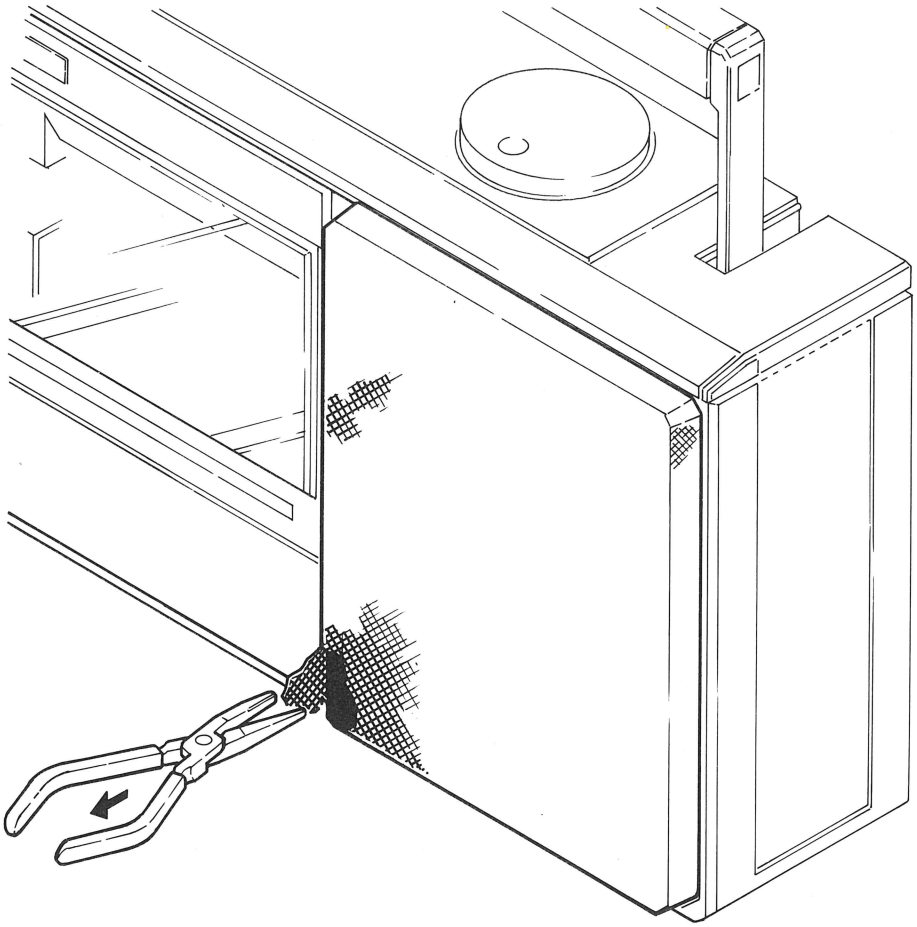


Fig. 21

• Removing the Mechanism Assembly

1. Remove the three screws as indicated.
2. Shift the cassette mechanism assembly downward as shown and disengage the button panel at the top. Pushing the rear case upward by hand at this time makes it easier for the button panel to slip out from the rear panel.

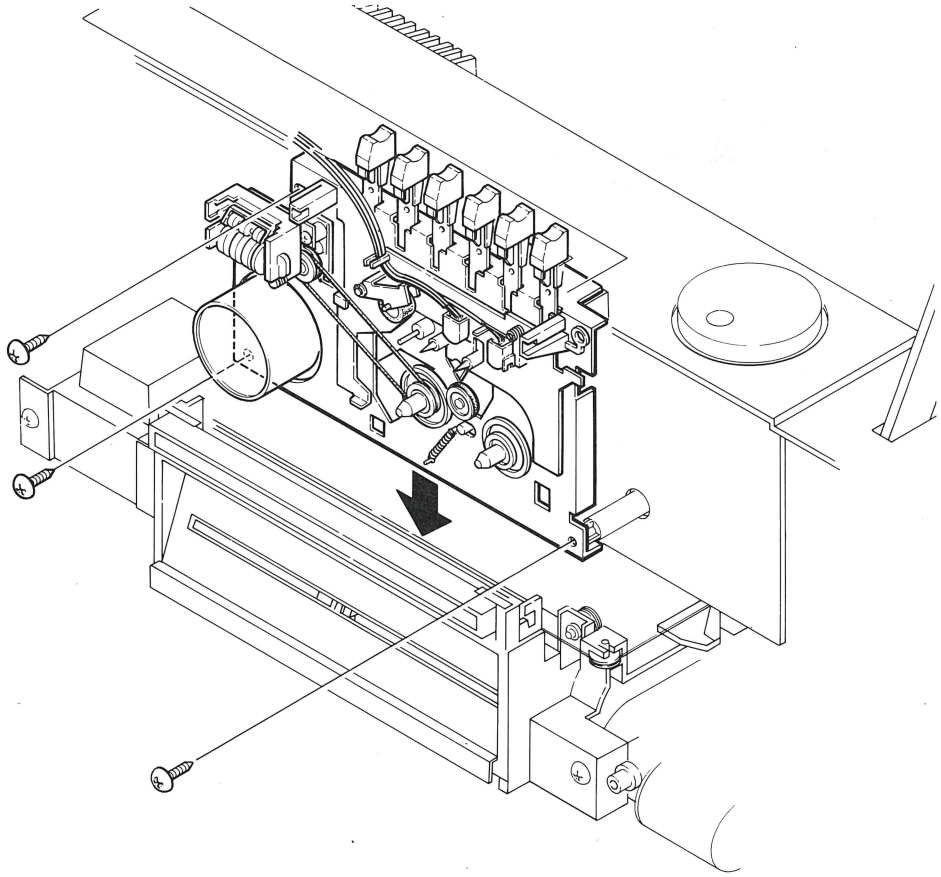


Fig. 22

• Cassette Mechanism Assembly Belt Replacement

1. Remove the take-up reel unit.

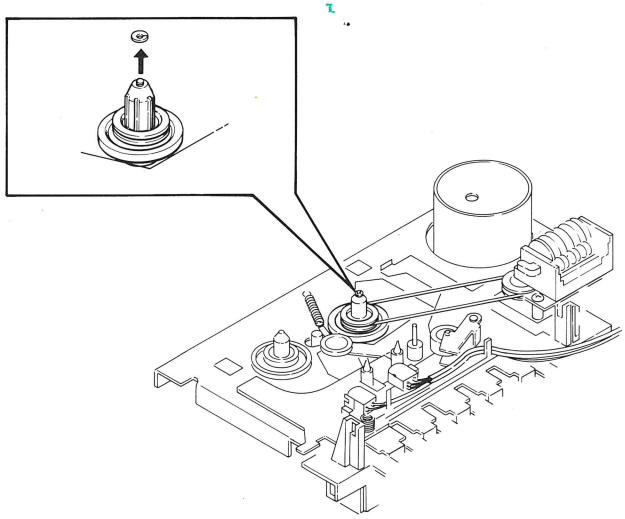


Fig. 23

2. Turn the set over as indicated and remove the three screws to remove the plate unit.

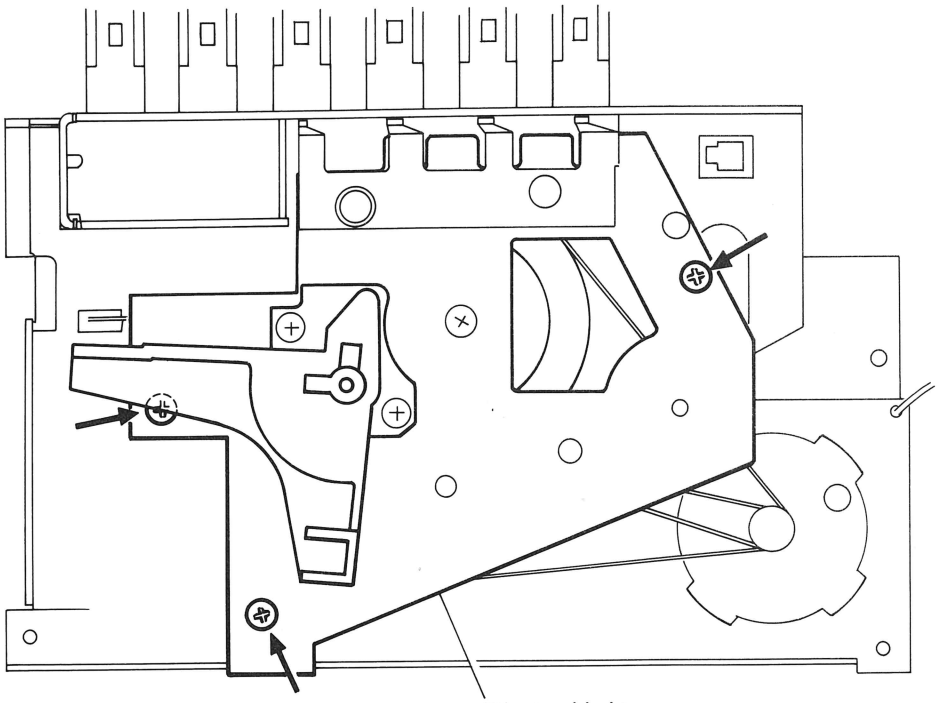


Fig. 24

3. Replace the belt.

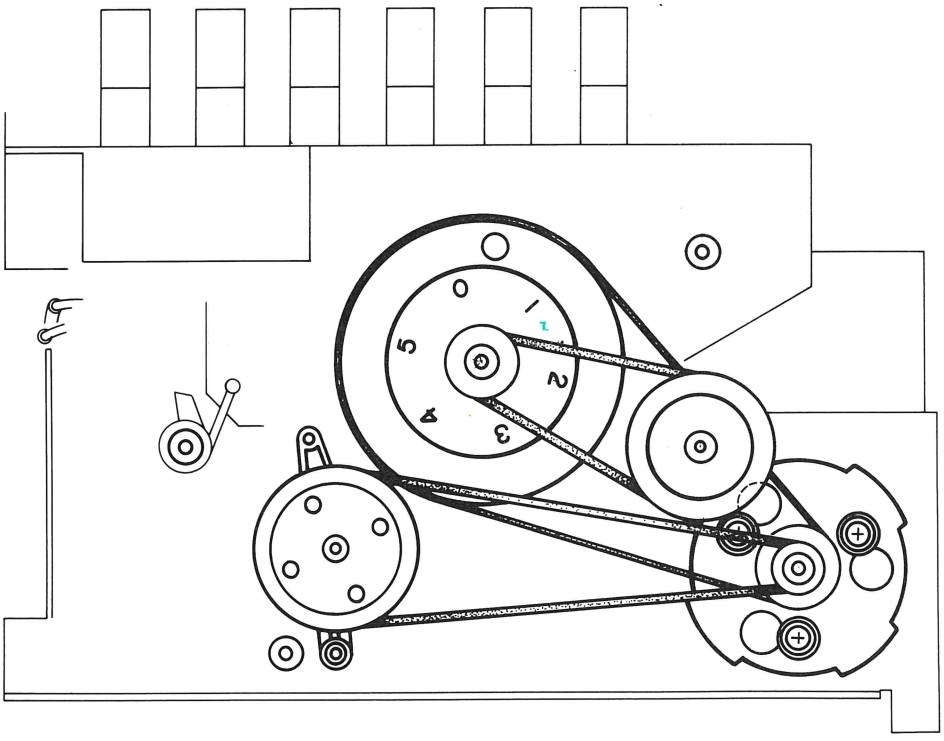


Fig. 25

4. Remount the plate unit.
   Before Remounting the plate unit, however, first check that the stopper pin is in the lever hole. Position the plate unit so that the edges of the plate unit spring fit into the four lever holes, and then tighten the three screws.
   Check that the plate unit spring is in the proper position as indicated by the figure.

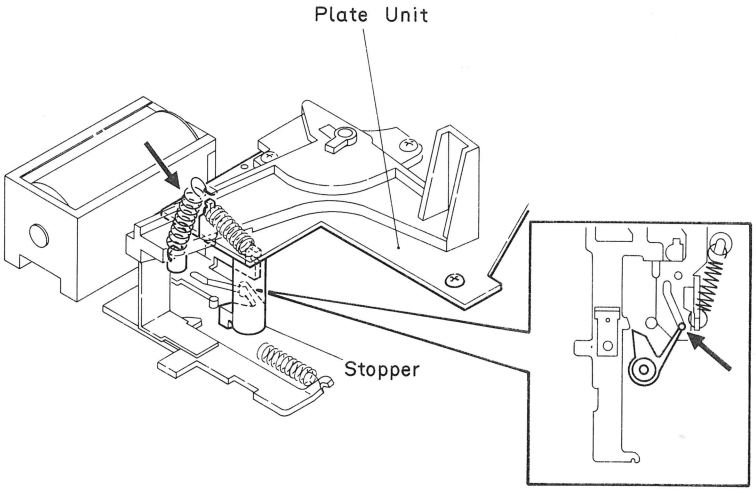


Fig. 26

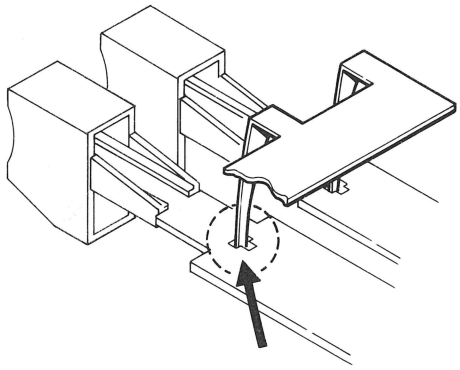


Fig. 27

5. Remount the reel unit into the front of the cassette mechanism (see accompanying figure for the correct position) and finally restring the counter belt.

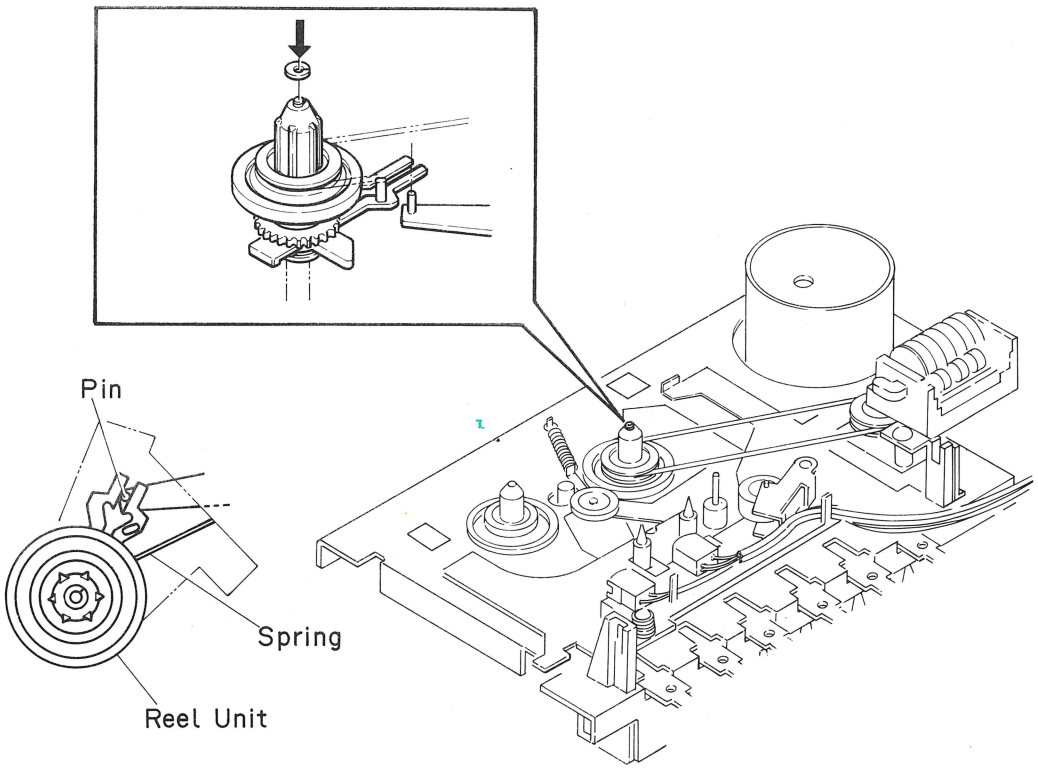


Fig. 28

• Removing the Main P.C. Board

After removing the control knobs, buttons and screws indicated in the figure remove the main P.C. board by pulling forward.

SK-350

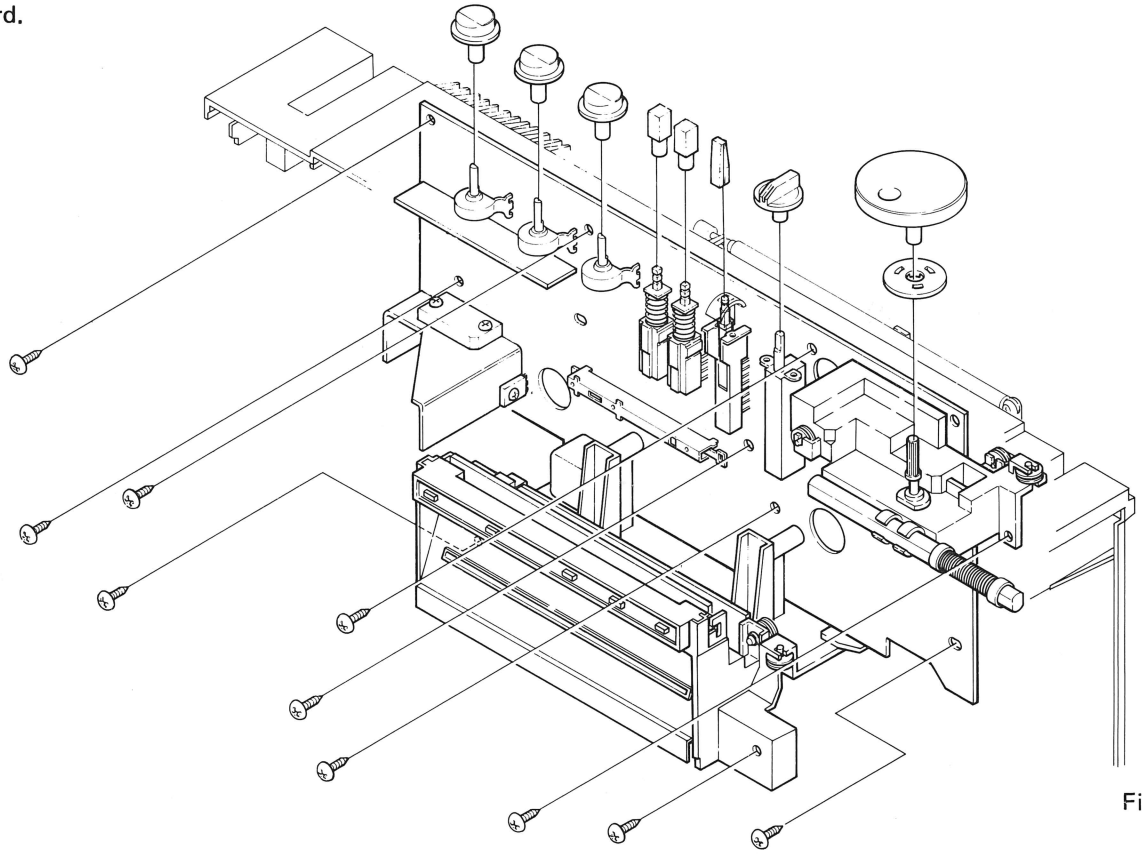


Fig. 29

SK-300

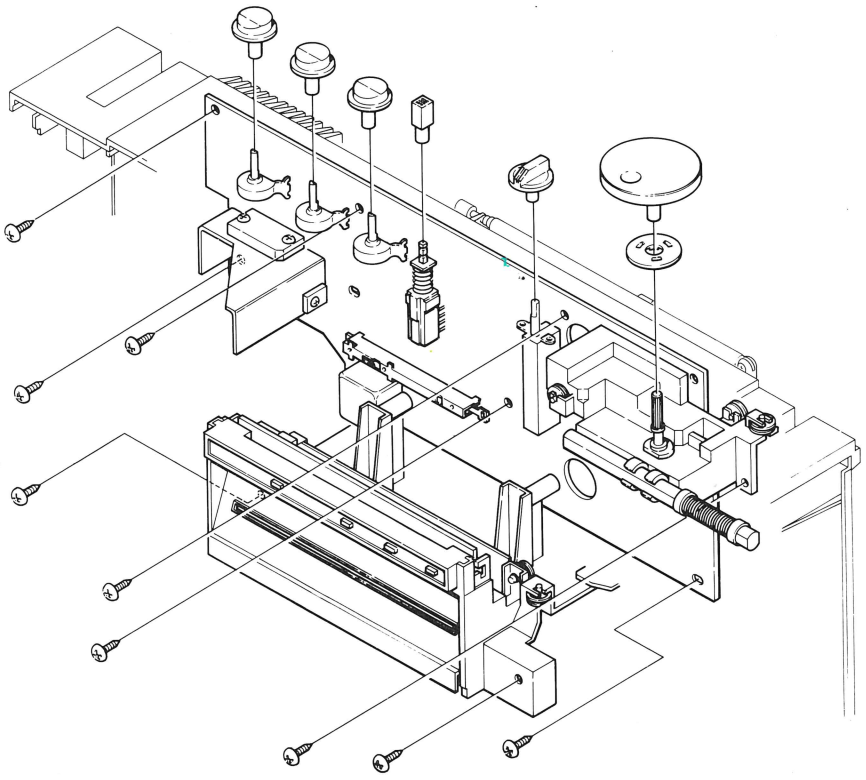


Fig. 30

• Removing the Handle

1. After removing the front case, pull the handle toward the rear while pushing the left and right holder catches inward.

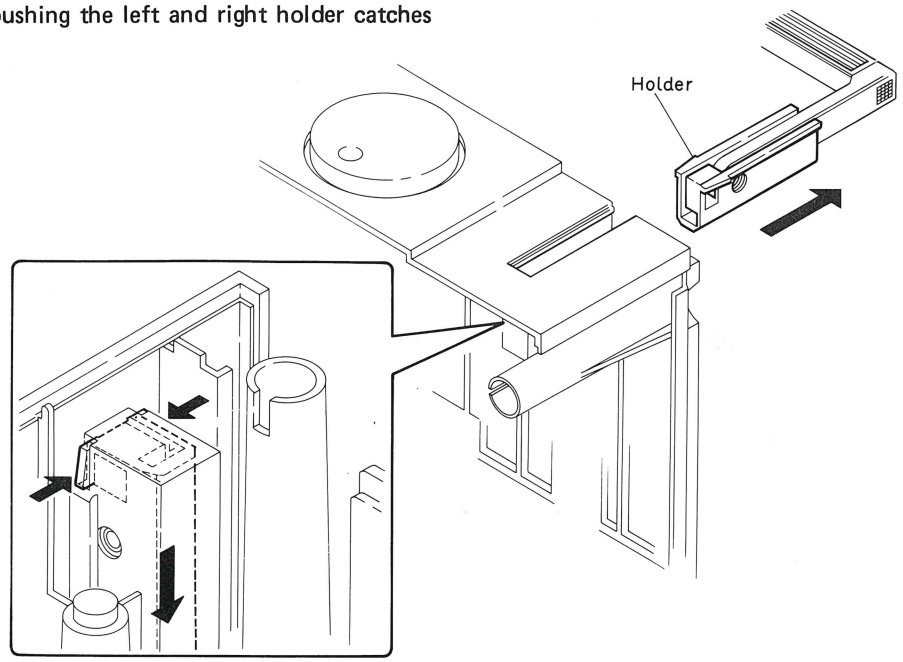


Fig. 31

2. When reconnecting the handle, align the holder with the grooves in the rear panel and push in firmly as far as possible.

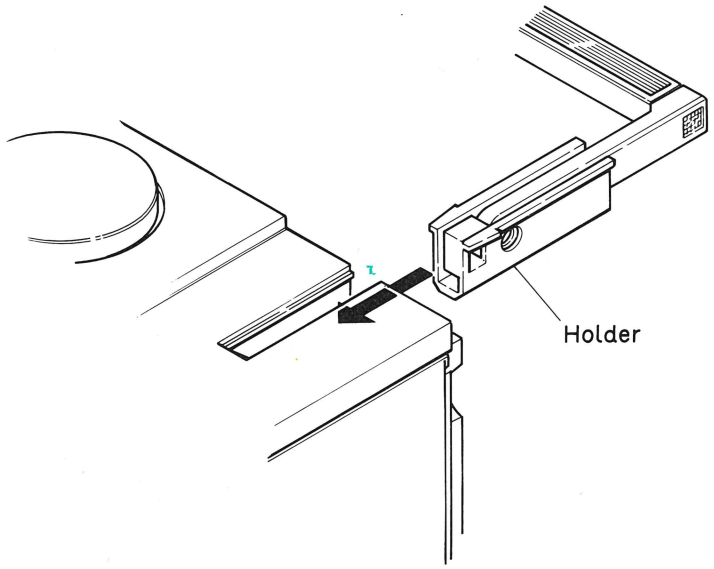
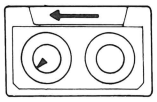
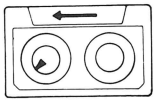
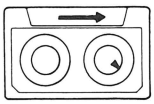
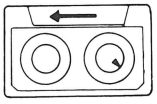
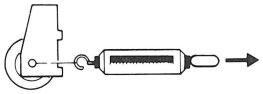


Fig. 32

5. ADJUSTMENT

5.1 CHECK POINTS OF CASSETTE MECHANISM

Confirm the following items when replacing parts of the cassette mechanism.	■ Tape speed diviation: 3,000 ±75 Hz (4.76 cm/s ±2.5%) Using an STD-301A, measure the speed at the start and end of winding and take the maximum value. Measureing time shall be 5 ~ 6 seconds.	■ Wow and flutter: Less than 0.12% (WRMS) Using an STD-301A, measure the wow and flutter at the start and end of winding and take the maximum value. If values indicated by the pointer vary considerably, adjust to 70% of the minimum and maximum values. Measuring time shall be 5 ~ 6 seconds.
■ Fast forward and rewinding time: **Less than 120 seconds** Using an C-60, set to fast forward and rewind, and measure the time with a stop watch.	■ Winding torque: **38 ~ 58 g·cm**  Using a cassette type torque meter (120 g.cm), measure the minimum value while in the play mode. Measuring time shall be 5 ~ 6 seconds.	■ F.F. torque: **85 ~ 150 g·cm**  Using a cassette type torque meter (160 g.cm), measure the value when the tope stops in the F.F. mode.
■ REW torque: **85 ~ 150 g·cm**  Using a cassette type torque meter (160 g.cm), measure the value when the tape stops in the REW mode.	■ Back tension torque: **2 ~ 6 g·cm**  After setting in the REW mode without loading a cassette tape for 5 minutes, measure the back tension torque in the play mode, using a cassette type torque meter.	■ Pinch roller pressure: **220 ~ 290 g**  Measure the pressure with a tension meter (1 kg) at the point where the rotor stops rotating at the center of the pinch roller.
■ Lever operating force: **F.F, REW, PAUSE, EJECT** **. . . . . .Less than 1.1 kg** **PLAY . . . . . .Less than 2.2 kg** **REC . . . . . .Less than 2.8 kg** **STOP, MS F.F, MS REW** **. . . . . .Les than 2 kg**	■ Clearance between flywheel and flywheel bracket: **0.05 ~ 0.25 mm**	

5.2 HEAD AZIMUTH ADJUSTMENT

- **To Adjust**

1. Remove the cassette holder door.
2. Playback the STD-341A (10 kHz, –20 dB) test tape.
3. Turn head azimuth alignment screw until mV meter pointer indicates maximum reading for both left and right channels.
4. Lock screw with adheasive (GYL-001) after adjustment is made.

5.3 PLAYBACK LEVEL ADJUSTMENT (SK-350)

- **Connection Diagram**

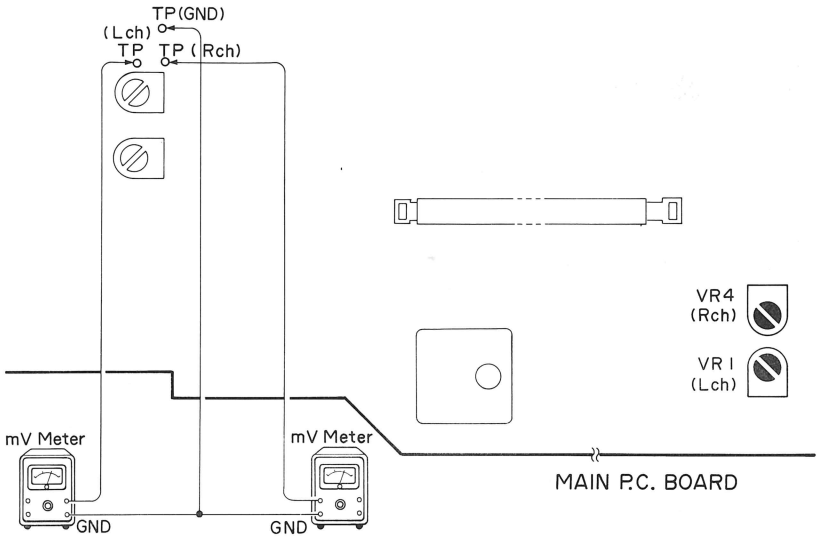


Fig. 33

- **To Adjust**

1. Playback the CT-150 (400 Hz, 200n wb/m) test tape, and adjust VR1 (L ch.) and VR4 (R ch.) so that the millivolt-meters read 580 mV ±1 dB.

5.4 BIAS FREQUENCY ADJUSTMENT (SK-350)

- **Connection Diagram**

Switch positions

BFC 2
FUNCTION SWITCH. . . . . FM/AUX
TAPE SELECTOR SWITCH . . . . . METAL

Note: Insert RCA pin into AUX teminal

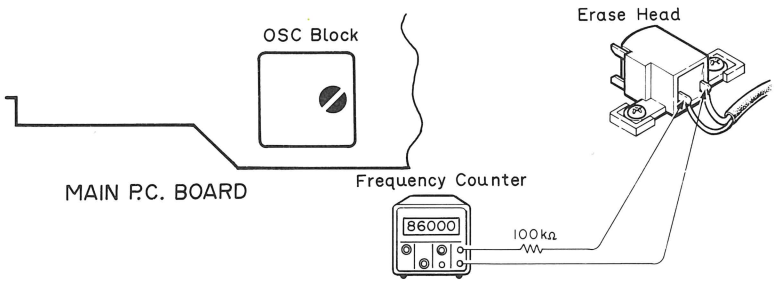


Fig. 34

- **To Adjust**

1. Put the unit into the record mode.
2. Adjust BIAS OSC so that frequency cunter indicates 86 kHz ±1 kHz.

5.5 BIAS ADJUSTMENT (SK-350)

- **Connection Diagram**

Switch positions

BFC 2
FUNCTION SWITCH. . . . . FM/AUX
TAPE SELECTOR SWITCH . . . . . METAL

Note: Insert RCA pin into AUX teminal

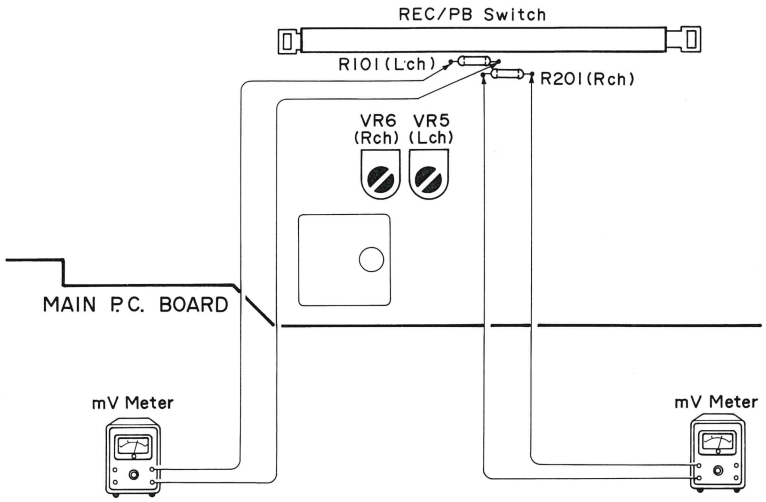


Fig. 35

- **To Adjust**

1. Put the unit into the record mode.
2. Adjust VR5 (L ch.) and VR 6 (R ch.) so that the milli-voltmeters read 6.4 mV ±0.2mV.

5.6 RECORDING AND PLAYBACK LEVEL ADJUSTMENT (SK-350)

• Connection Diagram

Switch positions

BFC 2
TAPE SELECTOR SWITCH . . . . . METAL

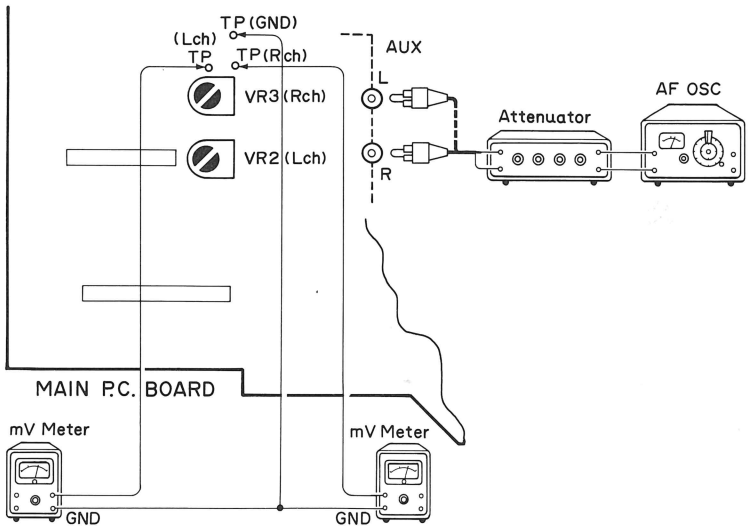


Fig. 36

• To Adjust

1. Turn the FUNCTION switch to the FM/AUX position, and apply a 400Hz signal to the AUX terminals.
2. Adjust the level of this 400Hz input signal to obtain a reading of 580mV in the mV meter.
3. Record the input signal on a metal tape.
4. Then turn the FUNCTION switch to the TAPE/OFF position, and play the recorded tape.
5. Adjust VR2 (left ch.) and VR3 (right ch.) to mV meter reading of 580mV ±1dB.

5.7 BIAS FREQUENCY ADJUSTMENT (SK-300)

- **Connection Diagram**

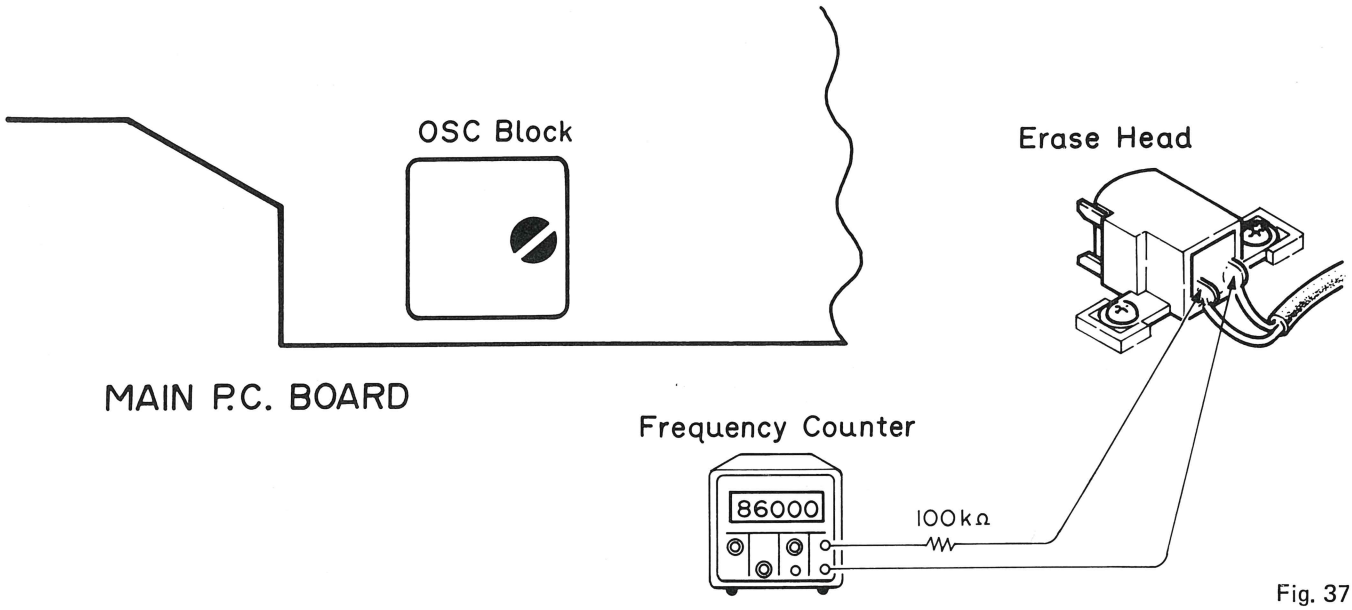


Fig. 37

- **To Adjust**

1. Put the unit into the record mode.
2. Adjust BIAS OSC so that frequency counter indicates 86 kHz ±1 kHz.

5.8 BIAS CURRENT ADJUSTMENT (SK-300)

- **Connection Diagram**

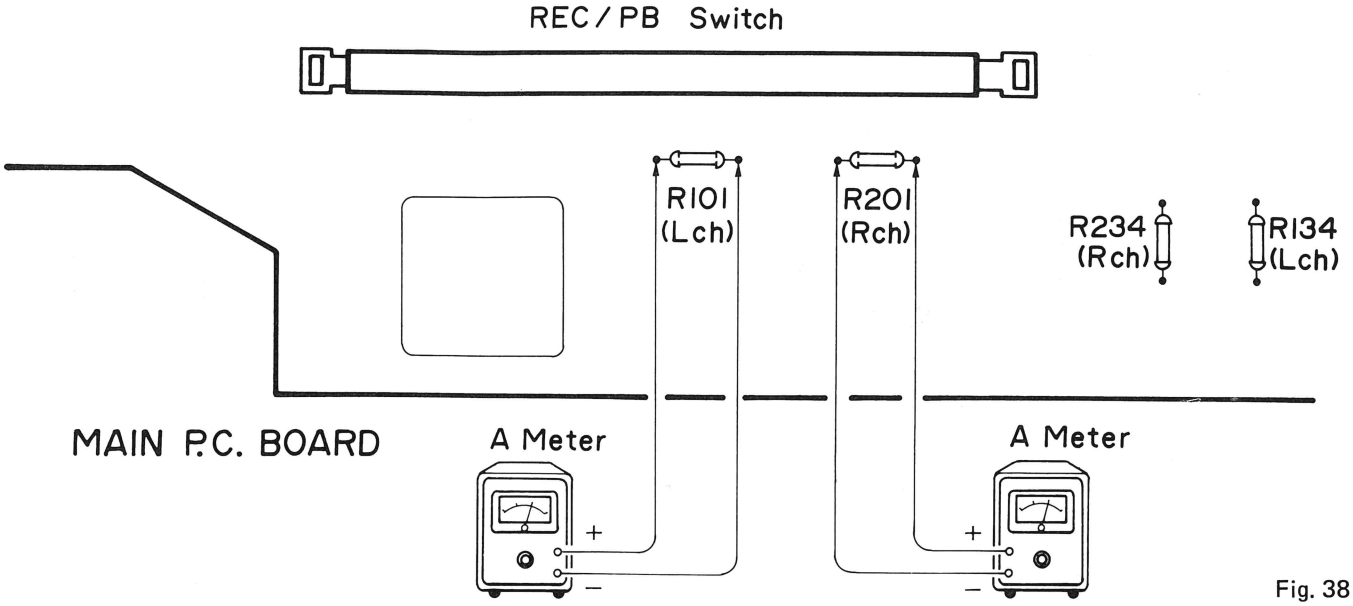


Fig. 38

- **To Adjust**

1. Check that the A meter shows in input current range of 340μA ± 70μA.
2. If the current exceeds this range, reduce it by removing R134 (left ch.) and R234 (right ch.).

5.9 AM IF ADJUSTMENT

- **Connection Diagram**

IF Generator Scope

Sweep center frequency . . . . . 455 kHz
Input gain . . . . . 0.3V p-p/cm

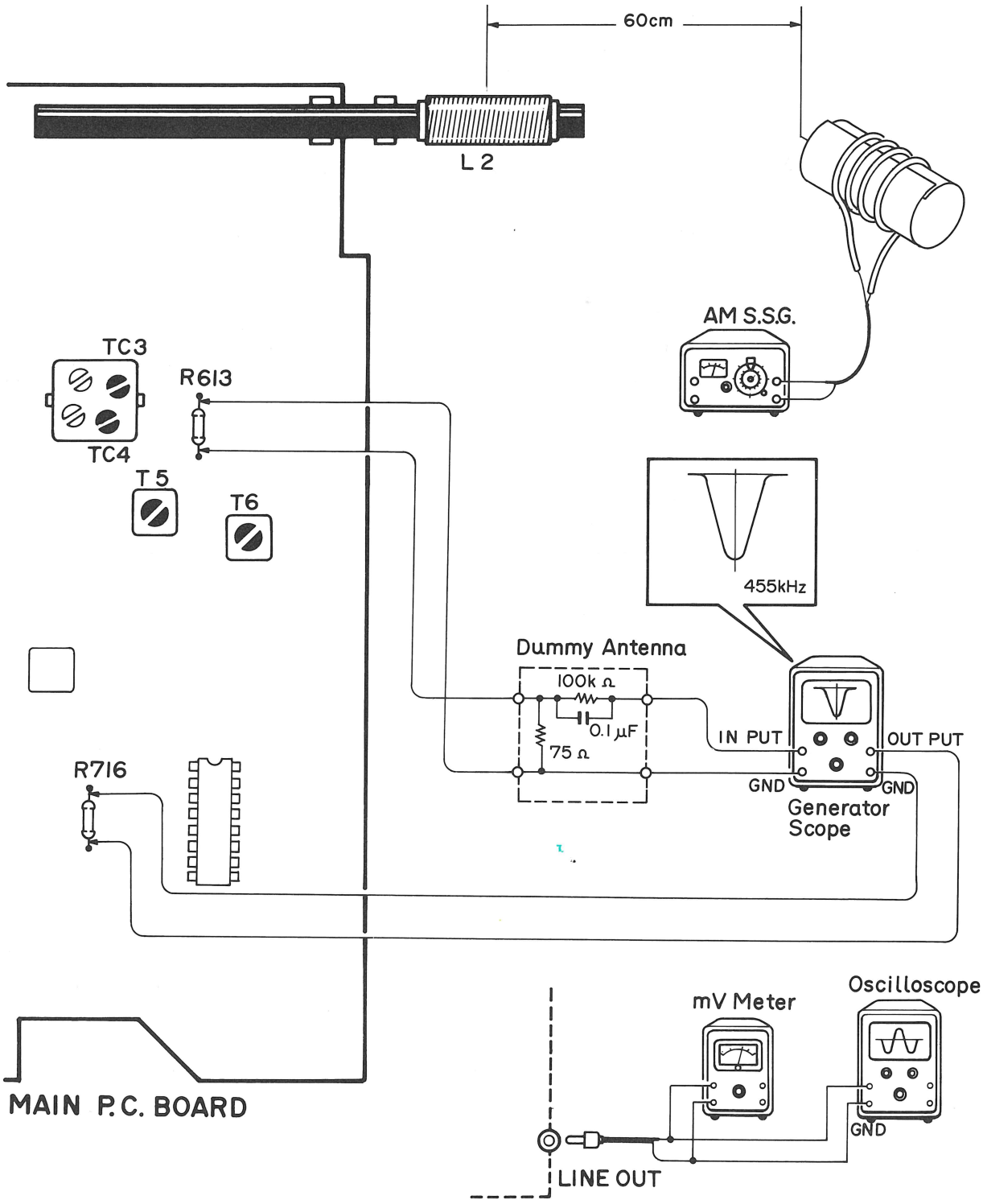


Fig. 39

- **To Adjust**

1. Apply minimum output signal required to check generator scope U curve and adjust T6 so that curve amplitude is at maximum point and there is optimum symmetry.

5.10 AM TRACKING ADJUSTMENT

- **Connection Diagram (Shown in Fig. 39)**

- **Preparation**

Emit radio waves from an AM SSG using coil antenna as shown in illustration.

- **To Adjust**

Frequency of AM SSG	Variable Capacitor Position	Adjusting Point	Remarks
1. 510 kHz (400 Hz, 30% modulation) output level 60 dB/m.	Maximum (turn the tuning knob counterclockwise until low end.)	T5	510 kHz can be received.
2. 1,670 kHz (400 Hz, 30% modulation) output level 60 dB/m.	Minimum (turn the tuning knob clockwise until high end.)	TC4	1,670 kHz can be received.
3. Repeat (1) and (2) alternately and adjust so that 510 ~ 1,670 kHz are covered.			
4. 600 kHz (400 Hz, 30% modulation) output level 40 ~ 50 dB/m.	Tuned to 600 kHz.	L2 (Coil of bar antenna)	Maximum output.
5. 1,400 kHz (400 Hz, 30% modulation) output level 40 ~ 50 dB/m.	Tuned to 1,400 kHz.	TC3	Maximum output.
6. Repeat (4) and (5) alternately and cofirm that tuning pointer indication is correct.			

Note: After adjusting L2 (Coil of bar antenna), melt electro wax with soldering iron and fix it in position.

5.11 FM IF ADJUSTMENT

• Connection Diagram

Generator Scope

Sweep center frequency . . . . . 10.7 MHz
Input gain . . . . . 0.3V p-p/cm
Marker . . . . . .OFF or minimum

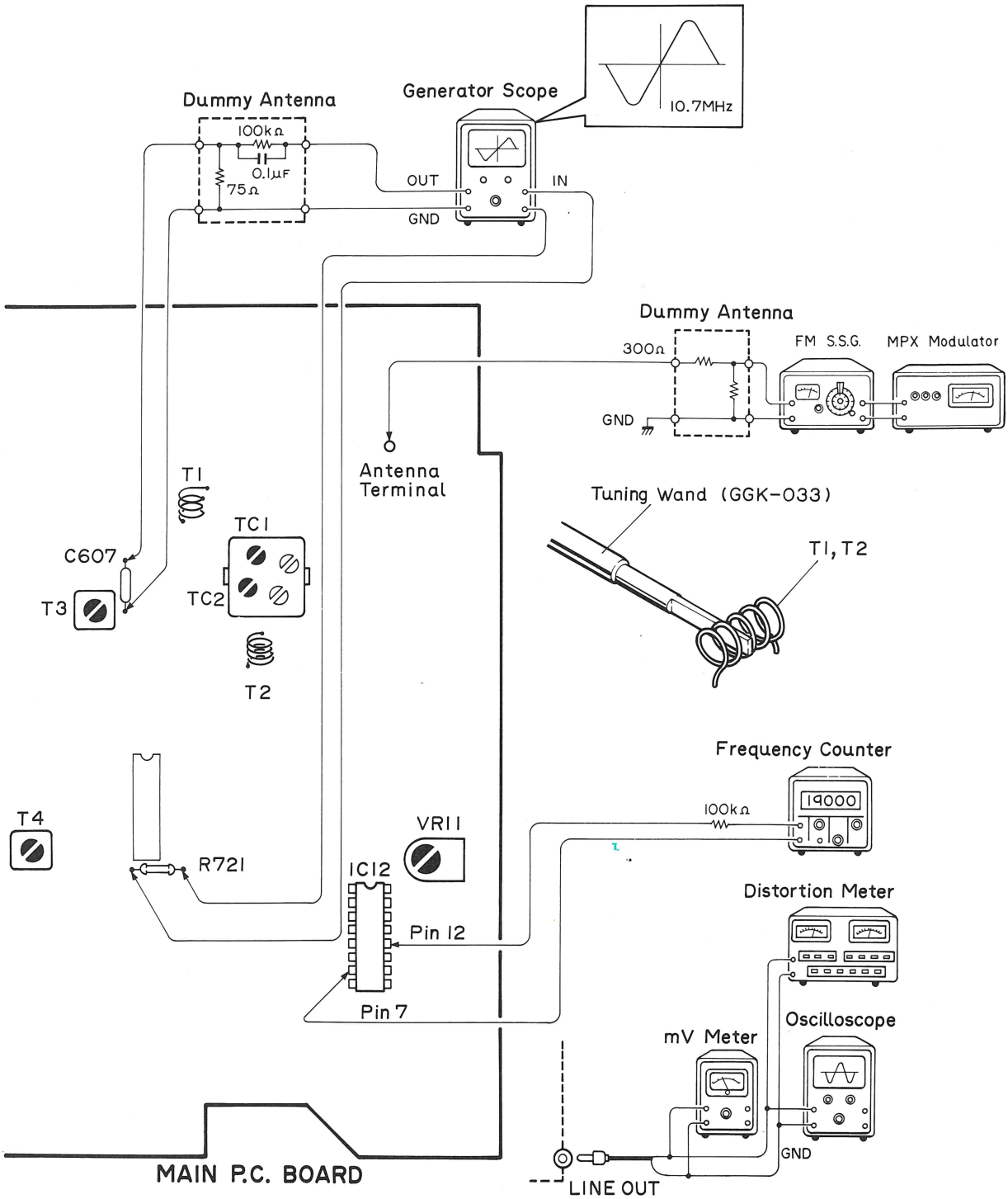


Fig. 40

- **To Adjust**

1. Appy minimum output signal required to check generator scope S curve and adjust T3 and T4 so that S curve wave is symmetnical at both top and bottom and so that the wave has optimum linearity.

5.12 FM TRACKING ADJUSTMENT

- **Connection Diagram (Shown in Fig. 40)**
- **To Adjust**

Frequency of FM SSG	Variable Capacitor Position	Adjusting Point	Remarks
1. 87 MHz (400 Hz, 75 kHz deviation) output level 20 ~ 60 dB (μV).	Maximum (turn the tuning knob counterclockwise until low end.)	T2	87 MHZ can be received.
2. 109.5 MHz (400 Hz, 75 kHz deviation) output level 20 ~ 60 dB (μV).	Minimum (turn the tuning knob clockwise until high end.)	TC2	109.5 MHz can be received.
3. Repeat (1) and (2) alternately and adjust so that 87 ~ 109.5 MHz are received.			
4. 90 MHz (400 Hz, 75 kHz deviation) output level 20 ~ 30 dB (μV).	Tuned to 90 MHz.	T1	Maximum output
5. 106 MHz (400 Hz, 75 kHz deviation) output level 20 ~ 30 dB (μV).	Tuned to 106 MHz.	TC1	Maximum output
6. Repeat (4) and (5) alternately and adjust until tracking error disappears.			

5.13 FM MPX ADJUSTMENT

- **Connection Diagram (Shwon in Fig. 40)**

Stereo Modulator

Modulation frequency . . . . . .1 kHz
Modulation ratio 100%
Pilot signal . . . . . 7.5 kHz deviation
Main signal . . . . . 67.5 kHz deviation

- **To Adjust**

1. Using the FM SSG, apply a 98 MHz, 10 dB signal to the antenna terminals and tune to 98 MHz.
2. Set output of the FM SSG to 60 dB and turn modulation OFF.
3. Adjust VR11 until a reading of 19 kHz ±20 Hz is obtained on the frequency counter.

- **To Adjust**

1. Appy minimum output signal required to check generator scope S curve and adjust T3 and T4 so that S curve wave is symmetnical at both top and bottom and so that the wave has optimum linearity.

5.12 FM TRACKING ADJUSTMENT

- **Connection Diagram (Shown in Fig. 40)**

- **To Adjust**

Frequency of FM SSG	Variable Capacitor Position	Adjusting Point	Remarks
1. 87 MHz (400 Hz, 75 kHz deviation) output level 20 ~ 60 dB (μV).	Maximum (turn the tuning knob counterclockwise until low end.)	T2	87 MHZ can be received.
2. 109.5 MHz (400 Hz, 75 kHz deviation) output level 20 ~ 60 dB (μV).	Minimum (turn the tuning knob clockwise until high end.)	TC2	109.5 MHz can be received.
3. Repeat (1) and (2) alternately and adjust so that 87 ~ 109.5 MHz are received.			
4. 90 MHz (400 Hz, 75 kHz deviation) output level 20 ~ 30 dB (μV).	Tuned to 90 MHz.	T1	Maximum output
5. 106 MHz (400 Hz, 75 kHz deviation) output level 20 ~ 30 dB (μV).	Tuned to 106 MHz.	TC1	Maximum output
6. Repeat (4) and (5) alternately and adjust until tracking error disappears.			

5.13 FM MPX ADJUSTMENT

- **Connection Diagram (Shwon in Fig. 40)**

Stereo Modulator

Modulation frequency . . . . . 1 kHz
Modulation ratio 100%
Pilot signal . . . . . 7.5 kHz deviation
Main signal . . . . . 67.5 kHz deviation

- **To Adjust**

1. Using the FM SSG, apply a 98 MHz, 10 dB signal to the antenna terminals and tune to 98 MHz.
2. Set output of the FM SSG to 60 dB and turn modulation OFF.
3. Adjust VR11 until a reading of 19 kHz ±20 Hz is obtained on the frequency counter.

6. DIAL STRINGING

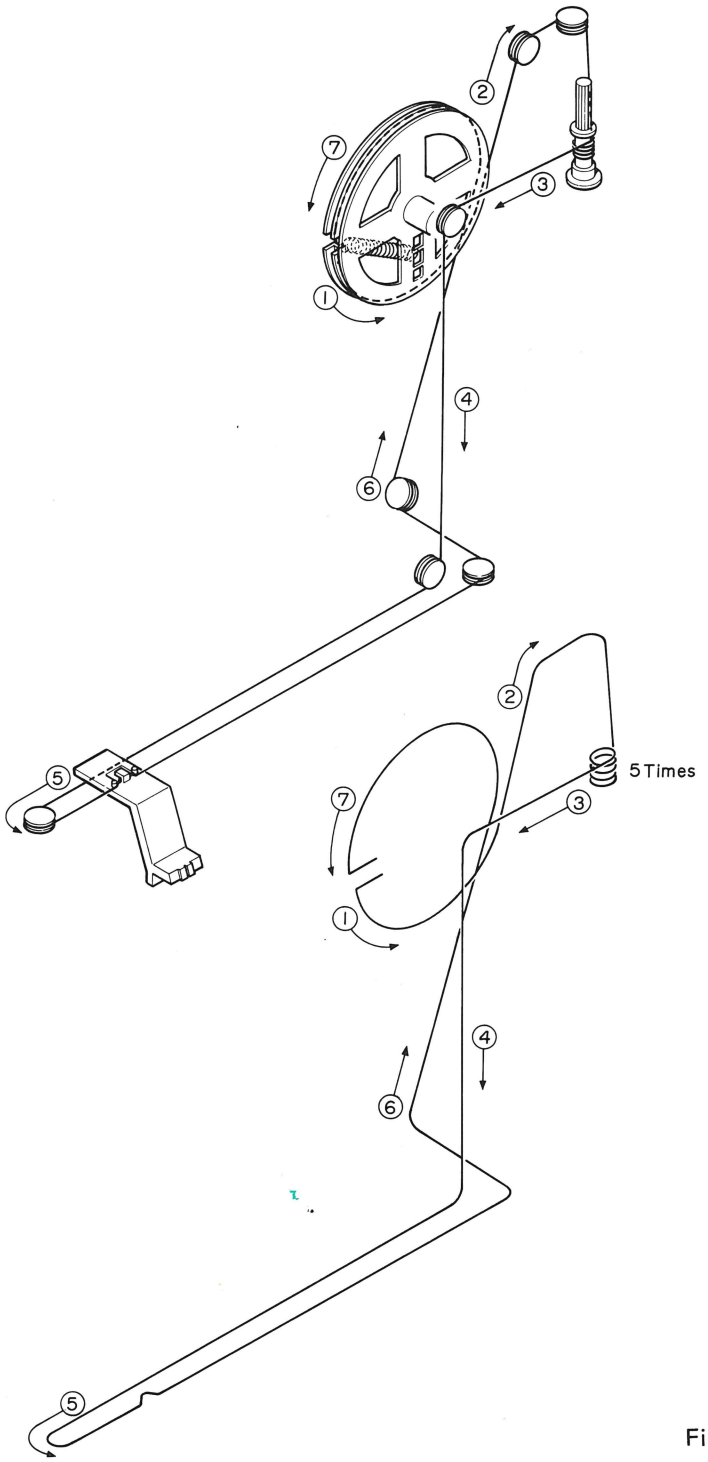
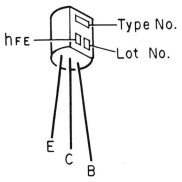


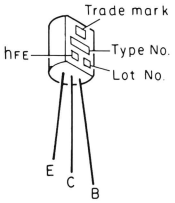
Fig. 41

• IC's and Transistors

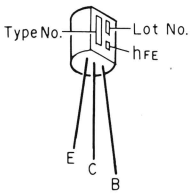
2SC1740LN



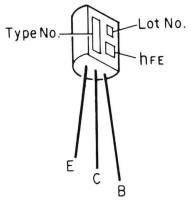
2SC2634NC



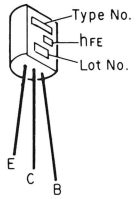
2SC945
2SC1674
2SC1675
2SC1815



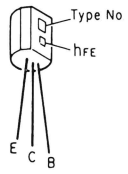
2SC380TM
2SC732TM
2SC2655



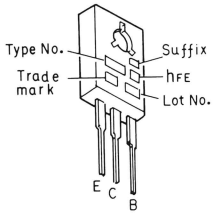
2SD468



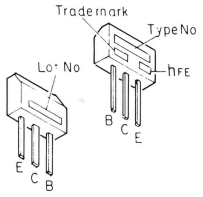
JC501



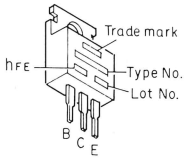
2SC2209



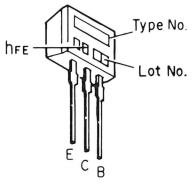
2SC460



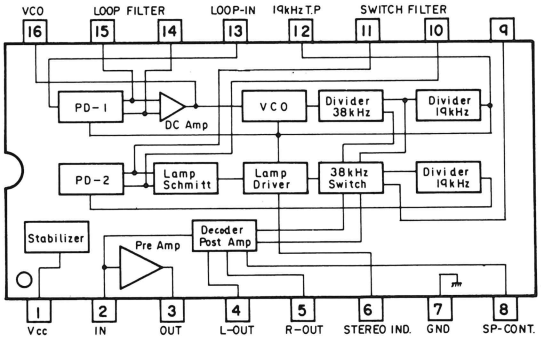
2SA473



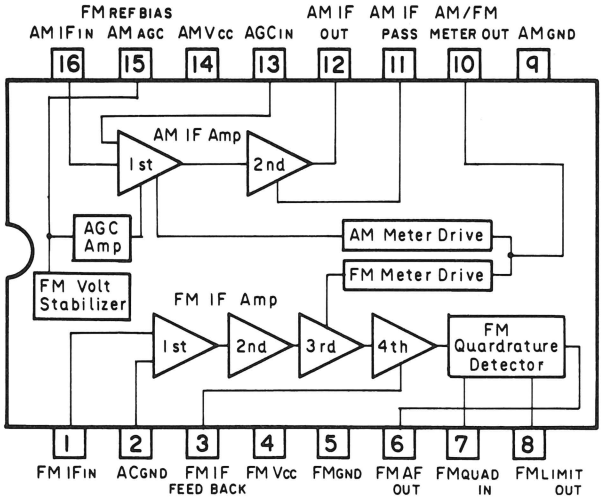
2SC2785



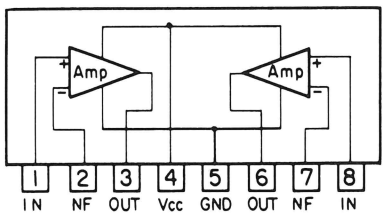
KB4424B



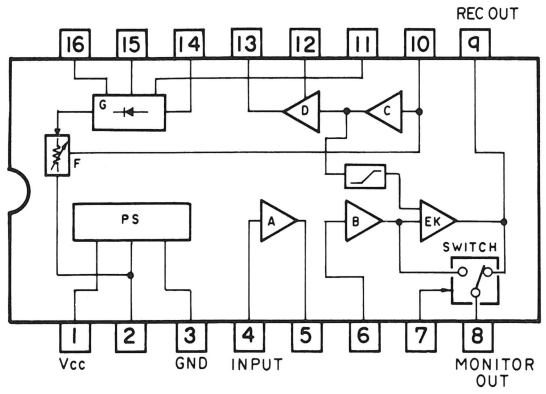
KB4419C



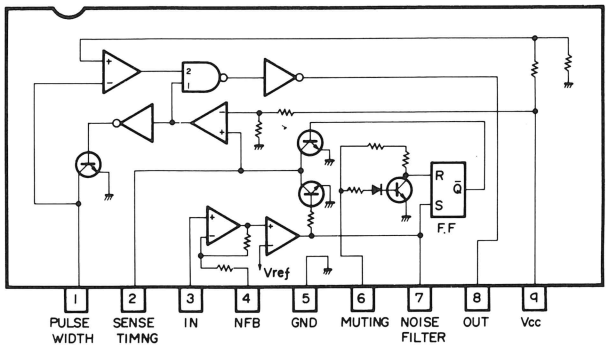
M51521L



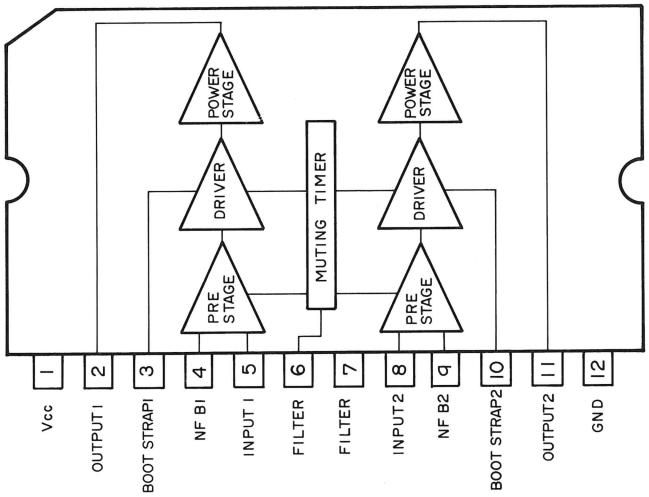
TA7629P



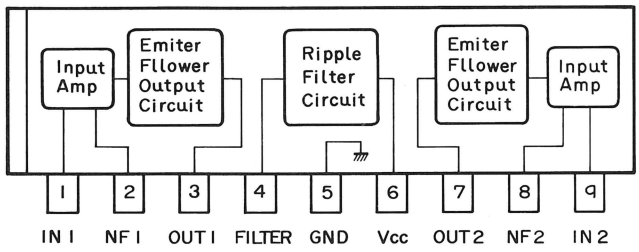
BA338



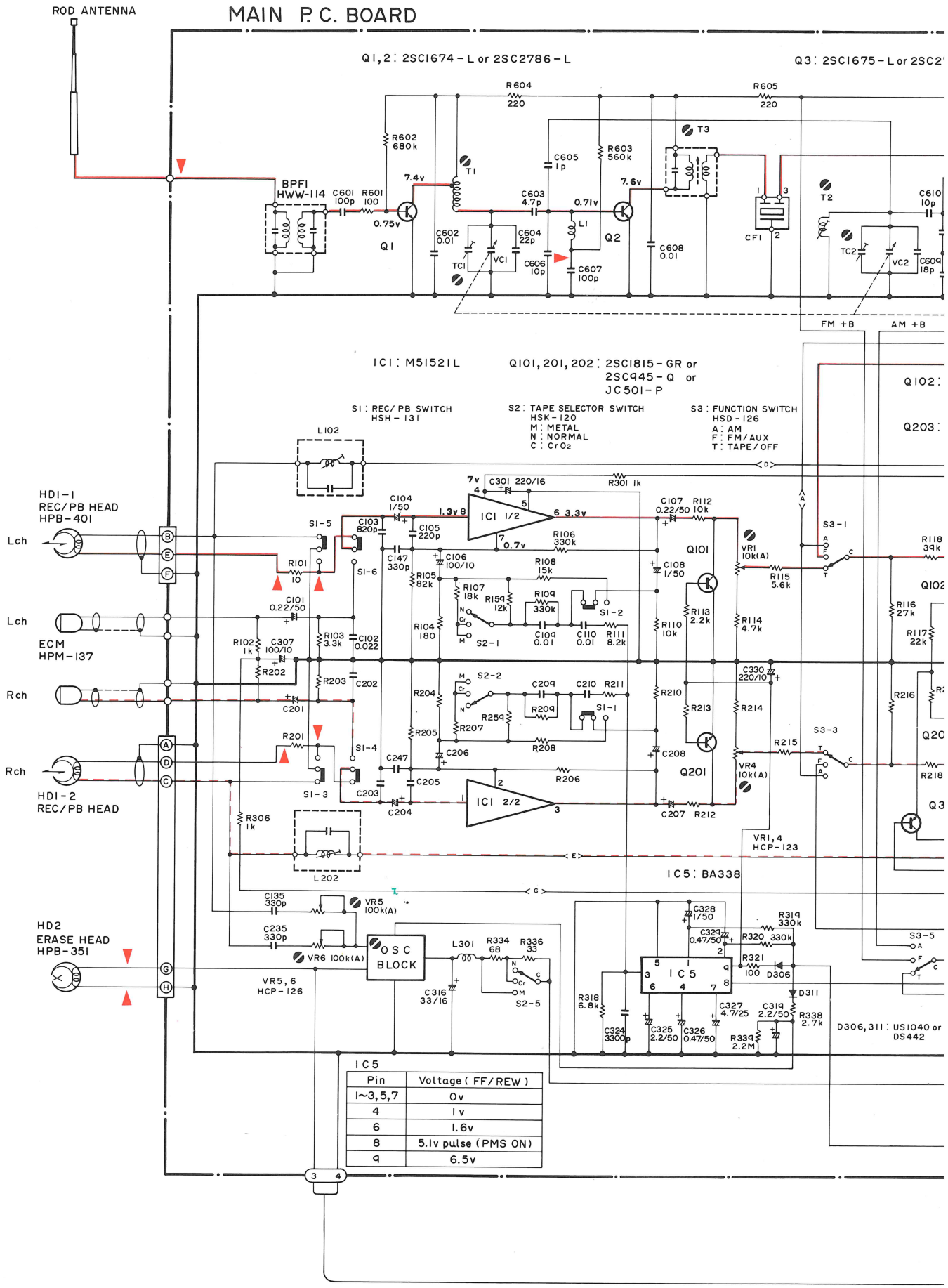
BA5402A



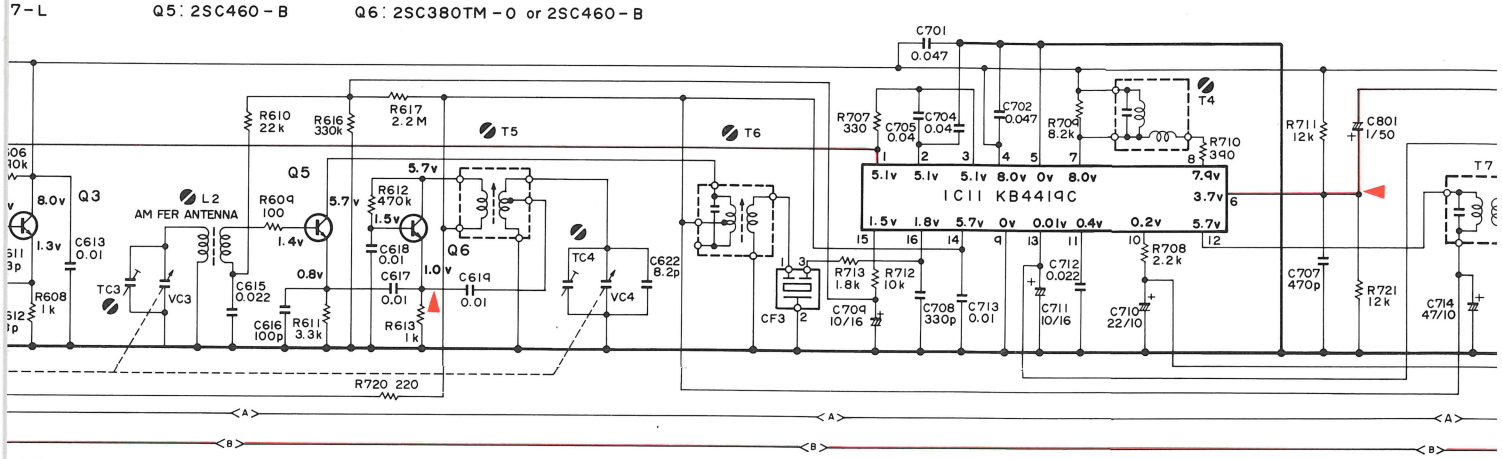
AN7310



7. SCHEMATIC CIRCUIT DIAGRAM (SK-350)



7-L Q5: 2SC460-B Q6: 2SC380TM-O or 2SC460-B



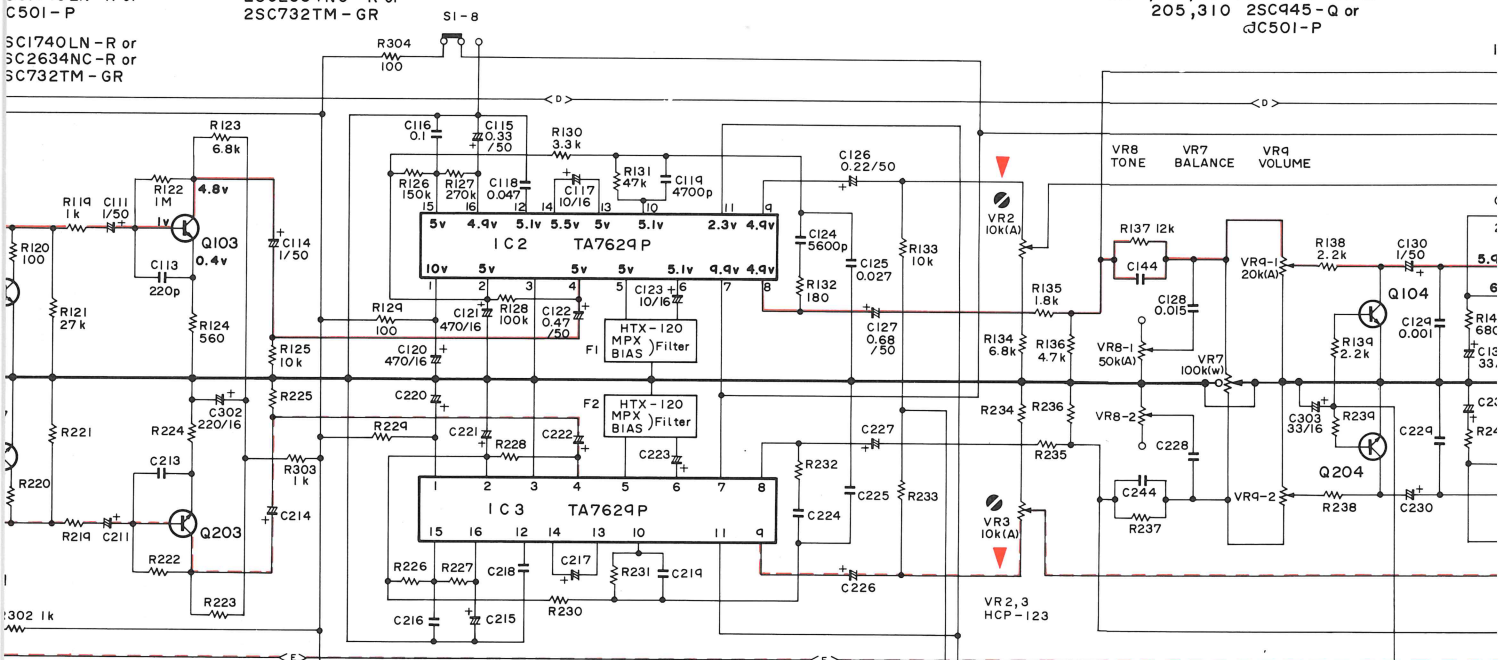
SCI815-GR or SCI740LN-R or C501-P

Q103: 2SCI740LN-R or 2SC2634NC-R or 2SC732TM-GR

Q104,105,204: 2SCI815-GR or 205,310 2SC945-Q or JC501-P

SCI740LN-R or SC2634NC-R or SC732TM-GR

S1-8



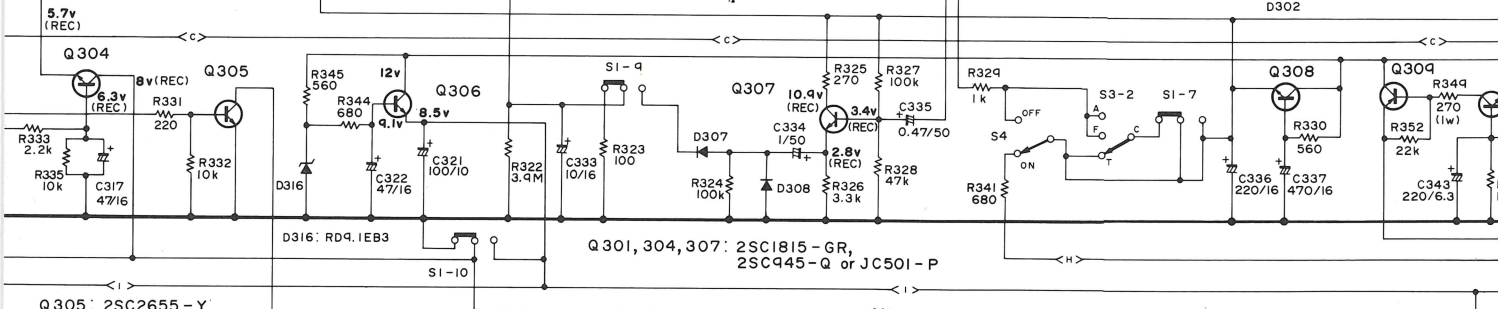
D307, 308: US1040 or DS442

S4: DOLBY NR SWITCH HSG-152

Q308: 2SD468-C

Q309: 2SA4

D302



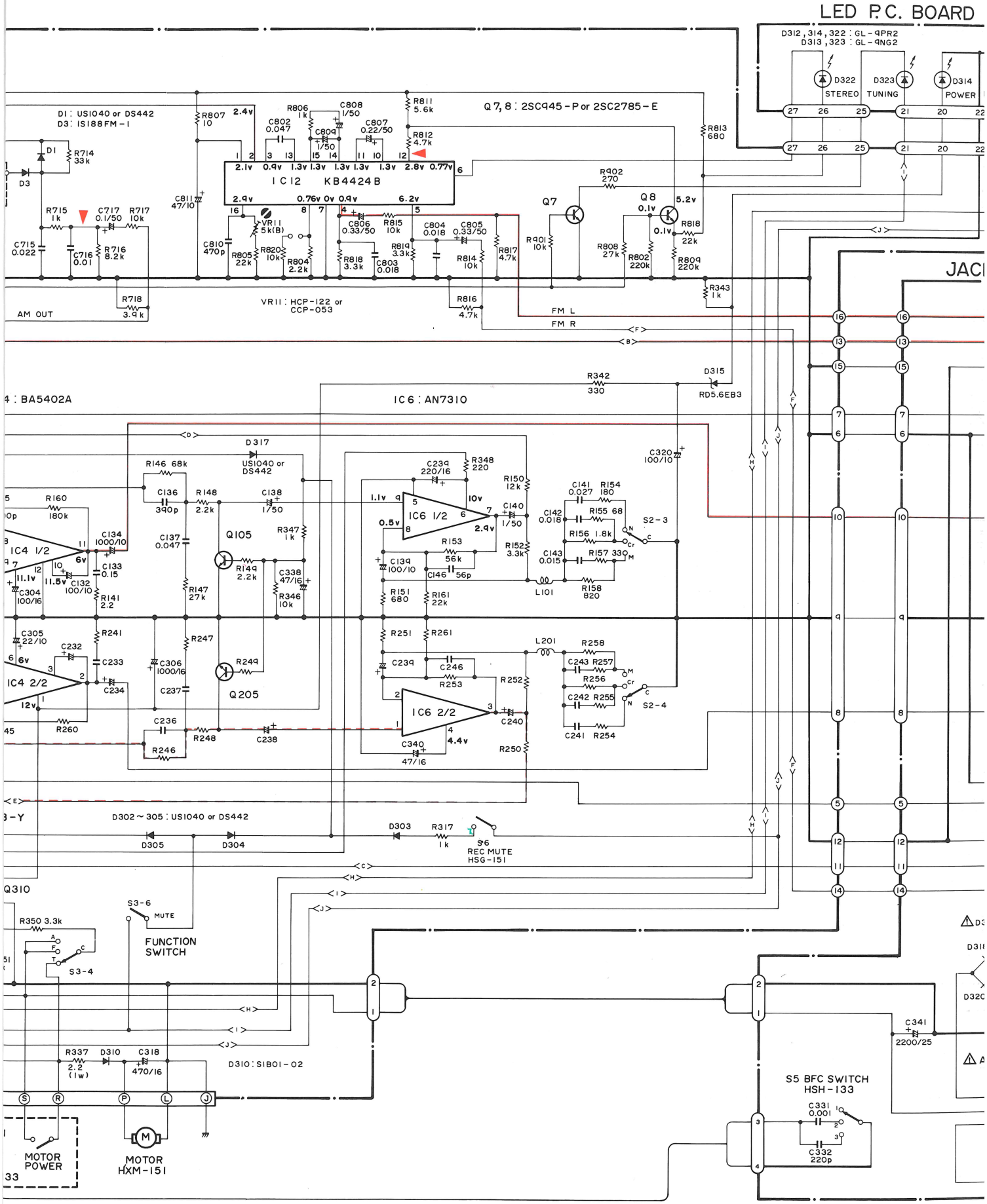
D316: RD9.1EB3

S1-10

Q301, 304, 307: 2SCI815-GR, 2SC945-Q or JC501-P

Q305: 2SC2655-Y

Q306: 2SC2209-Q


LED P.C. BOARD
D312, 314, 322 : GL-9PR2
D313, 323 : GL-9NG2
D322 STEREO
D323 TUNING
D314 POWER
D1 : US1040 or DS442
D3 : IS188FM-1
Q7, 8 : 2SC945-P or 2SC2785-E
IC12 KB4424B
VR11 : HCP-122 or CCP-053
AM OUT
FM L
FM R
IC4 : BA5402A
IC6 : AN7310
IC4 1/2
IC4 2/2
IC6 1/2
IC6 2/2
Q105
Q205
Q310
D302~305 : US1040 or DS442
D305
D304
D303
S6 REC MUTE HSG-151
S3-6 MUTE
FUNCTION SWITCH
S3-4
D310 : SIB01-02
MOTOR POWER
MOTOR HXM-151
S5 BFC SWITCH HSH-133
S2-3
S2-4
L101
L201
D315 RD5.6EB3
D317 US1040 or DS442

SWITCHES :

◎ MAIN P.C. BOARD

S1 : REC/PB SWITCH ····· REC-PB
S2 : TAPE SELECTOR ····· METAL-CrO_2-NORM
SWITCH
S3 : FUNCTION SWITCH ····· AM-FM/AUX-TAPE/OFF
S4 : DOLBY NR SWITCH ····· ON-OFF
S6 : REC MUTE SWITCH ····· ON-OFF

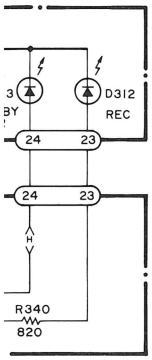
◎ JACK P.C. BOARD

S5 : BFC SWITCH ····· 1-2-3

◎ MISCELLANEOUS

S1 : FF/REW SWITCH ····· ON-OFF
MOTOR POWER ····· ON-OFF
SWITCH
S2 : VOLTAGE SELECTOR ····· 240v-220v-120v
SWITCH

The underlined indicates the switch position.



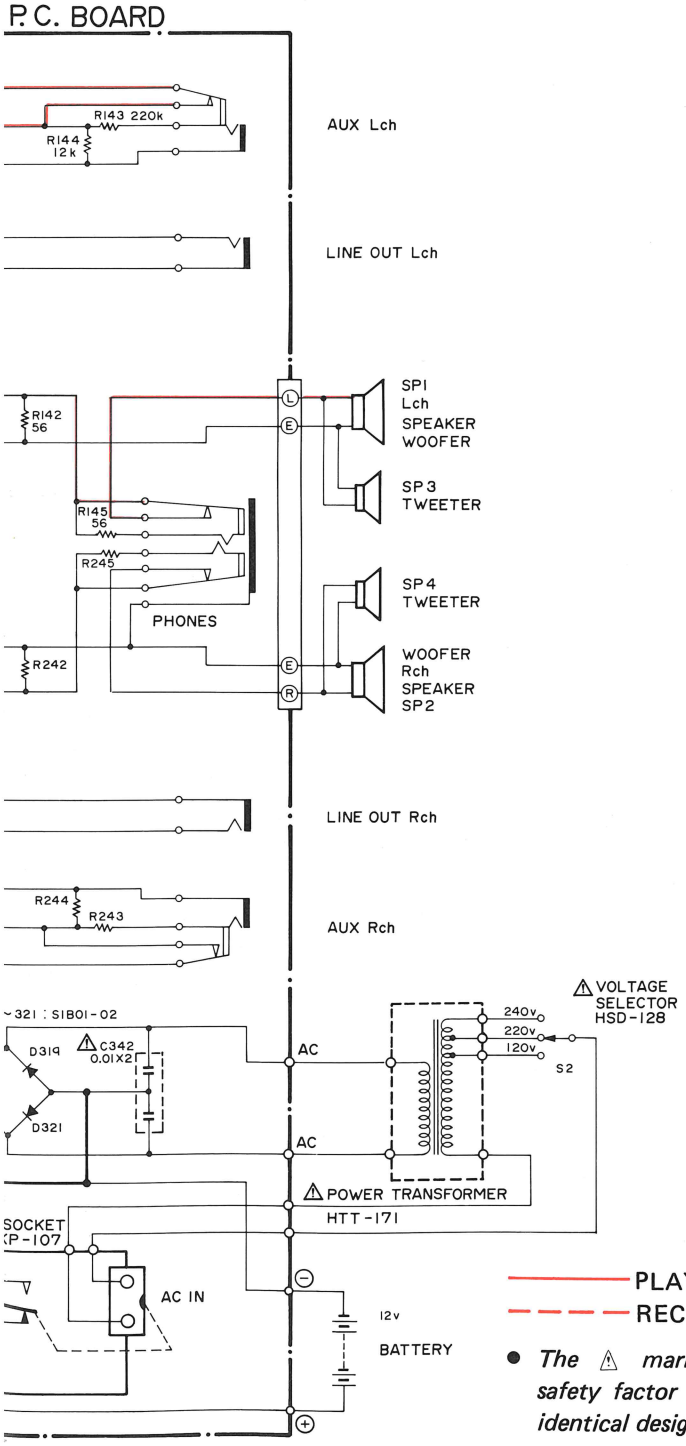
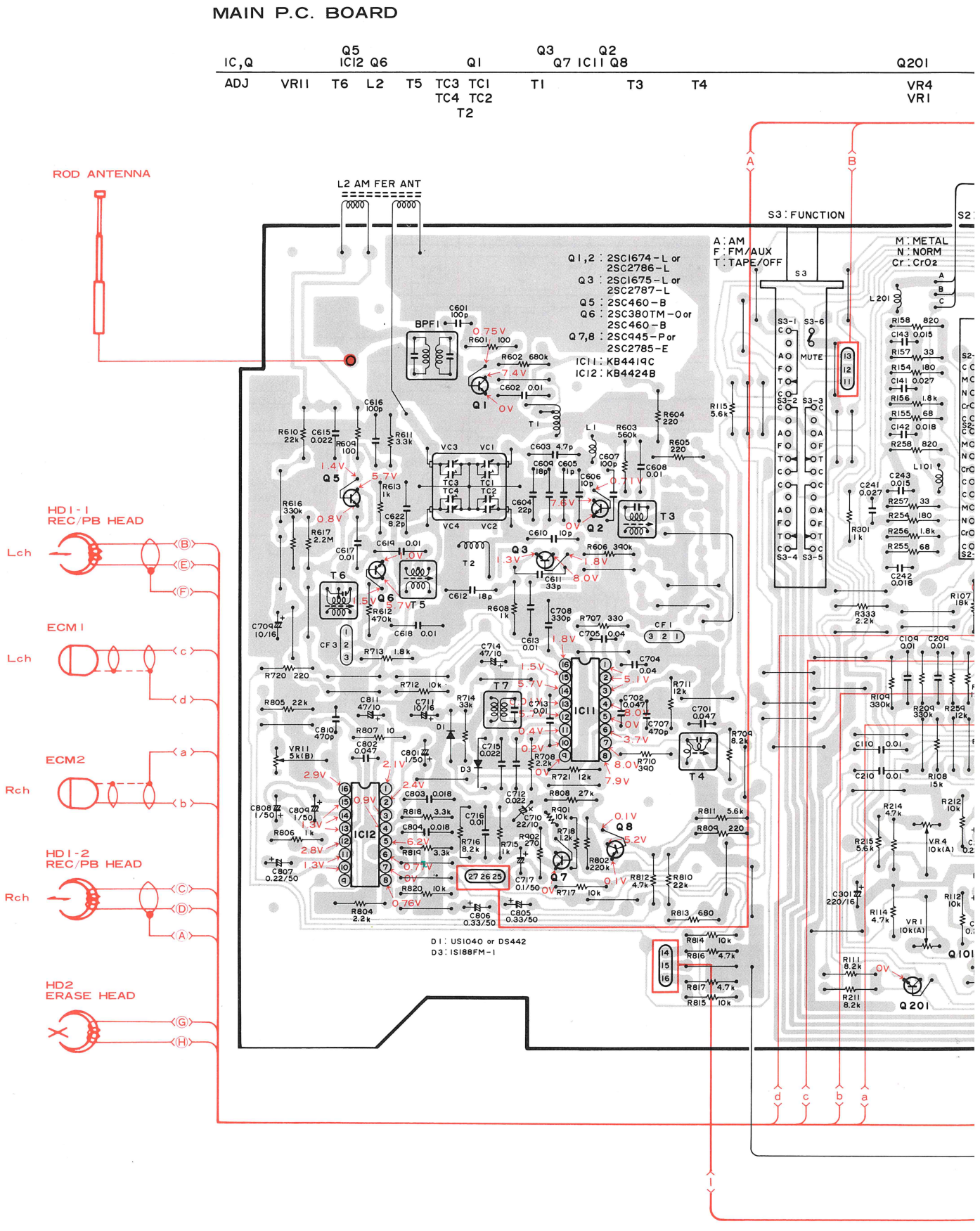


Fig. 42

PLAY MODE
REC MODE

- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*

8. CONNECTION DIAGRAM (SK-350)

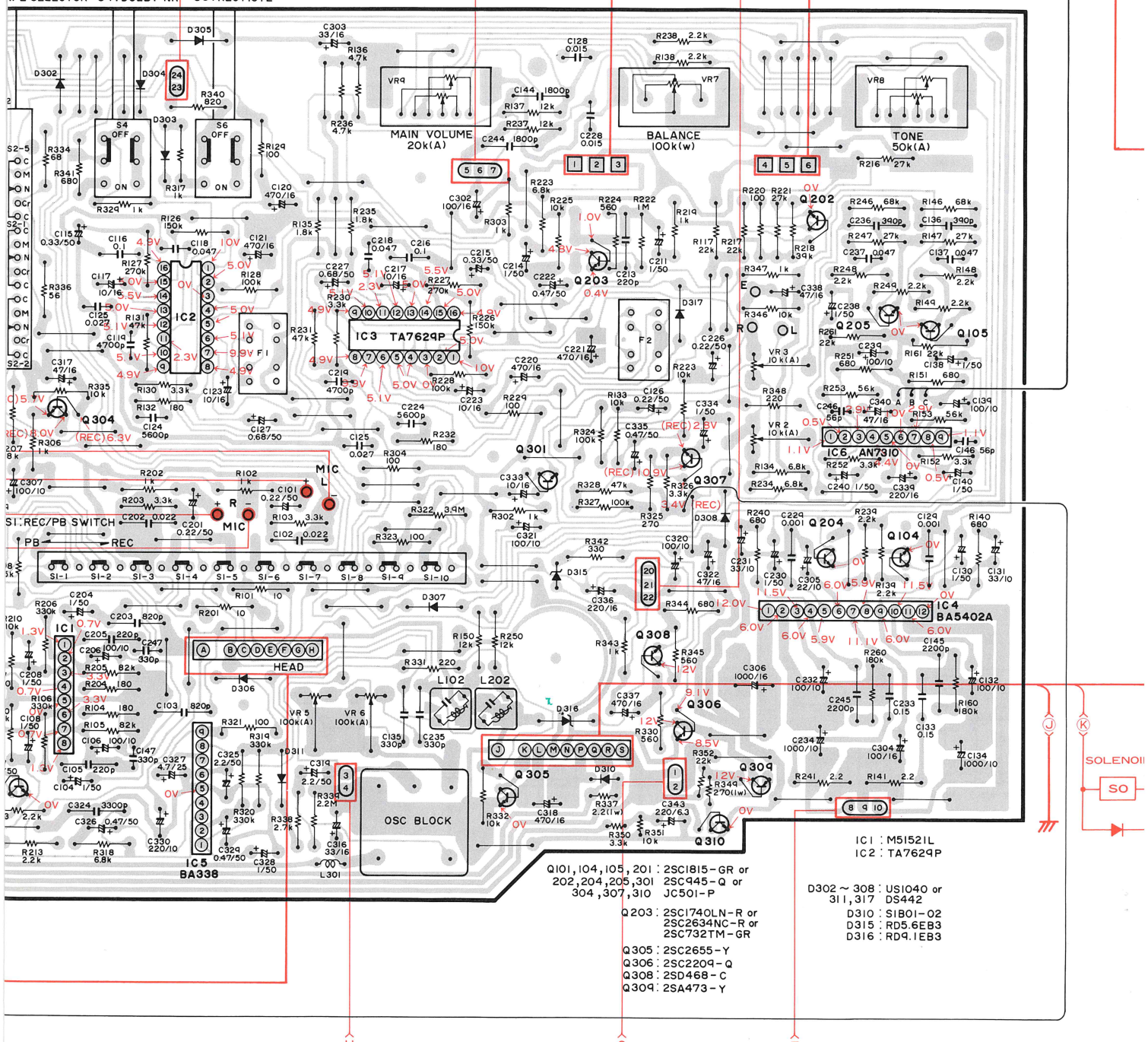


Q304
101 IC1 IC2 IC5 IC3 Q305 Q301 Q203 Q307 Q308 Q306 Q310 Q309 Q202 IC6 Q205 Q204 IC4 Q104 Q105

VR5 VR6
OSC BLOCK
VR3
VR2

C D E

APE SELECTOR S4 : DOLBY NR S6 : REC MUTE



IC1 : M51521L
IC2 : TA7629P

Q101, 104, 105, 201 : 2SC1815-GR or
202, 204, 205, 301 2SC945-Q or
304, 307, 310 JC501-P

Q203 : 2SC1740LN-R or
2SC2634NC-R or
2SC732TM-GR

Q305 : 2SC2655-Y
Q306 : 2SC2209-Q
Q308 : 2SD468-C
Q309 : 2SA473-Y

D302 ~ 308 : US1040 or
311, 317 DS442
D310 : SIB01-02
D315 : RD5.6EB3
D316 : RD9.1EB3

H G F

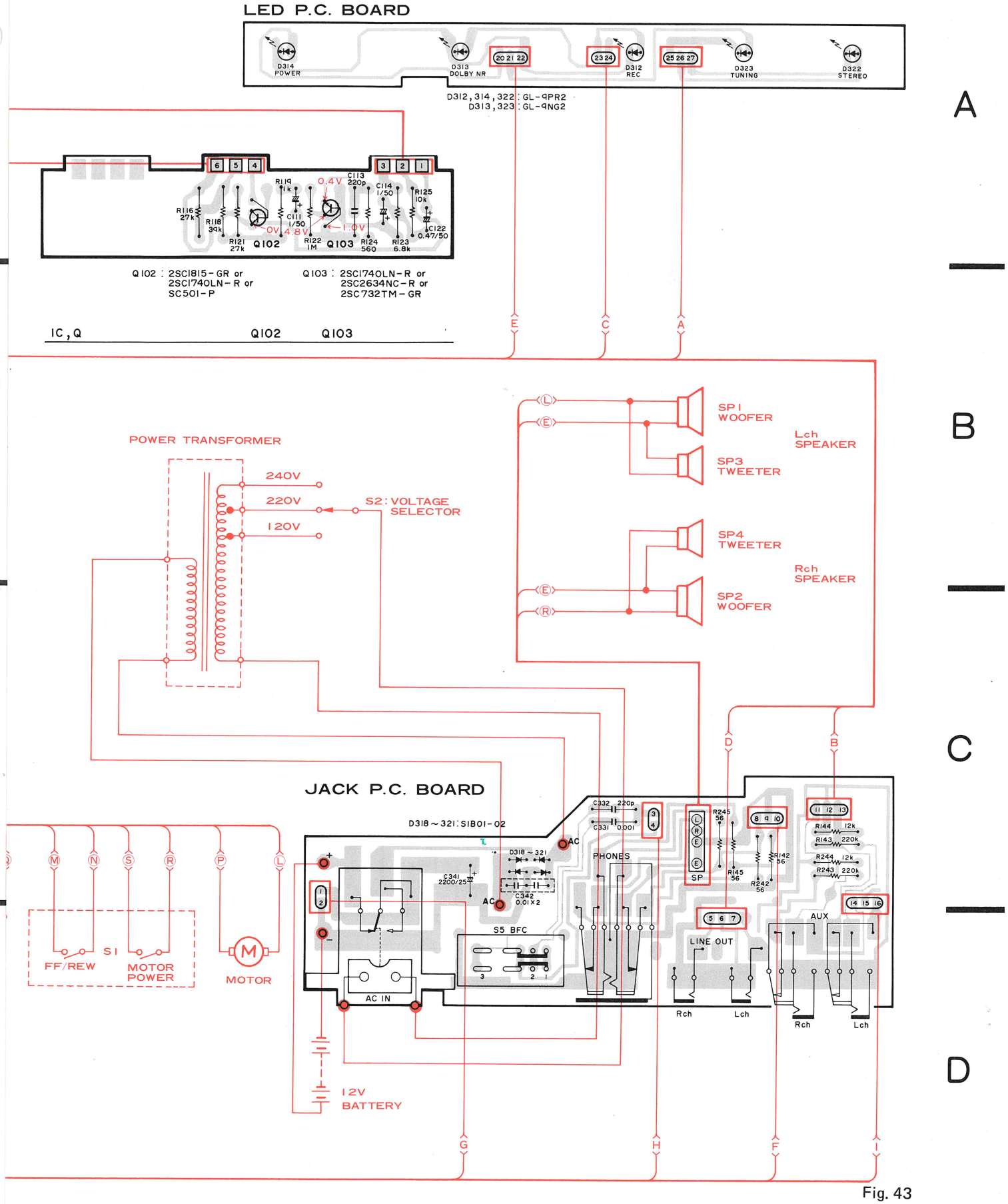
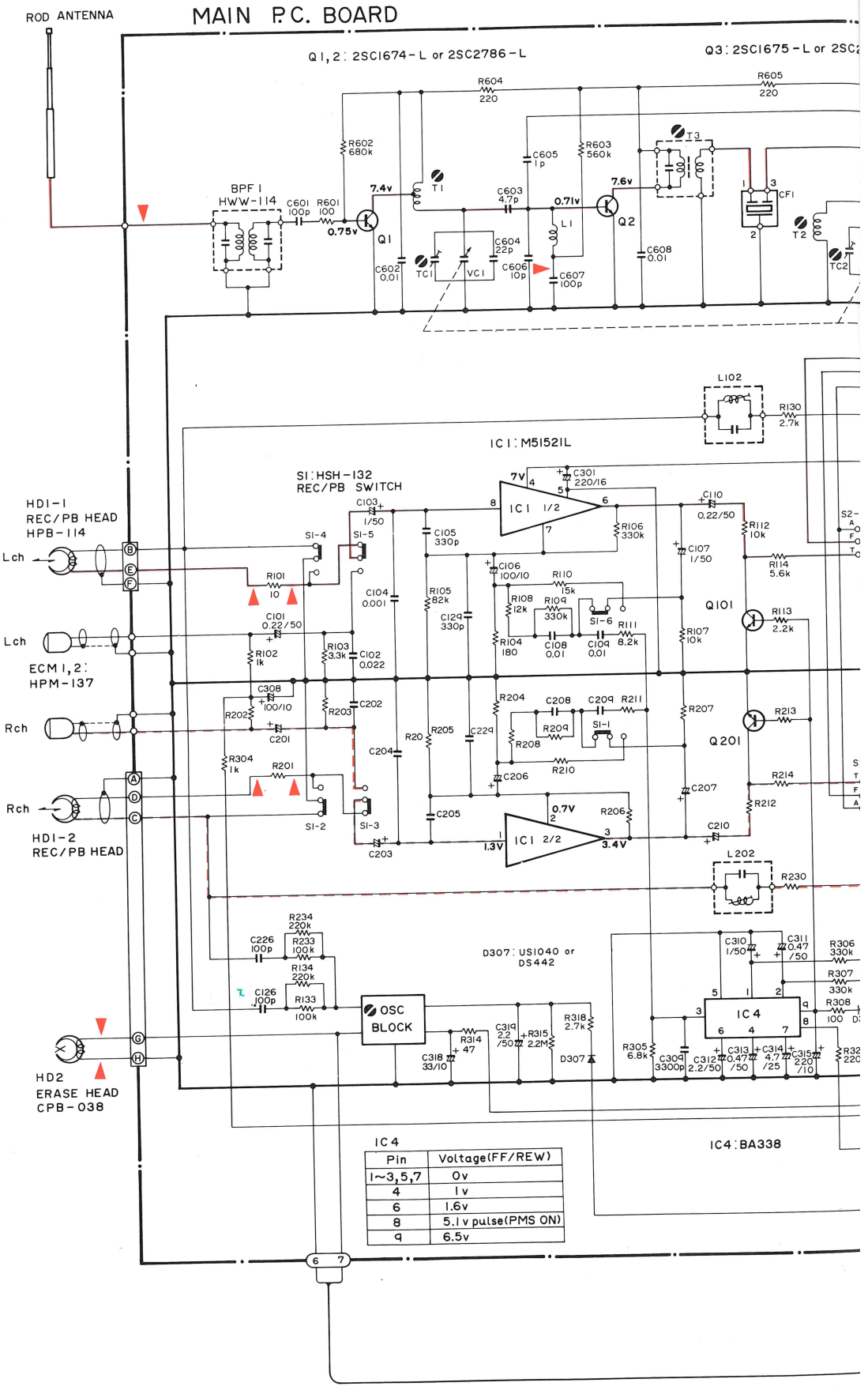
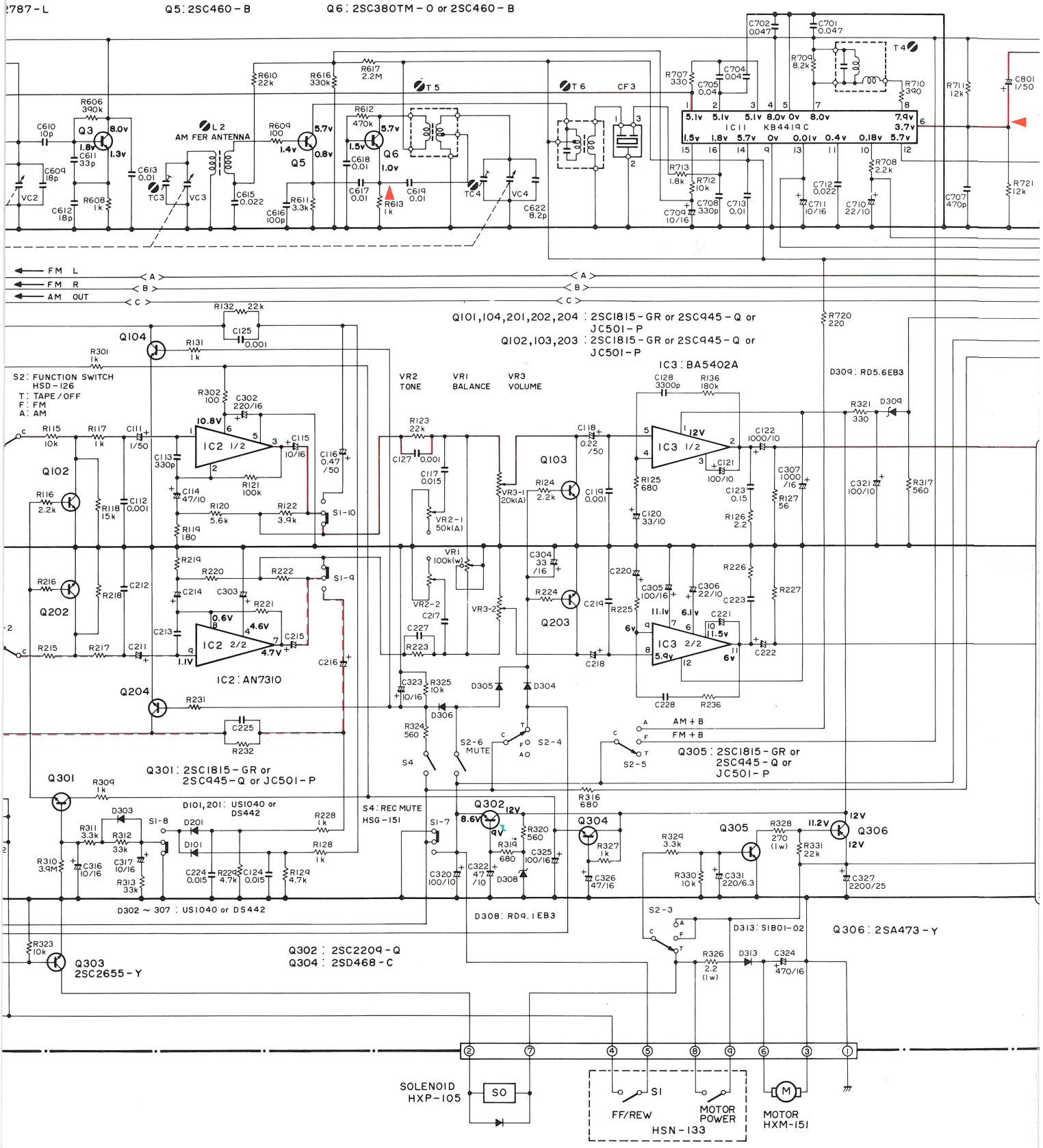
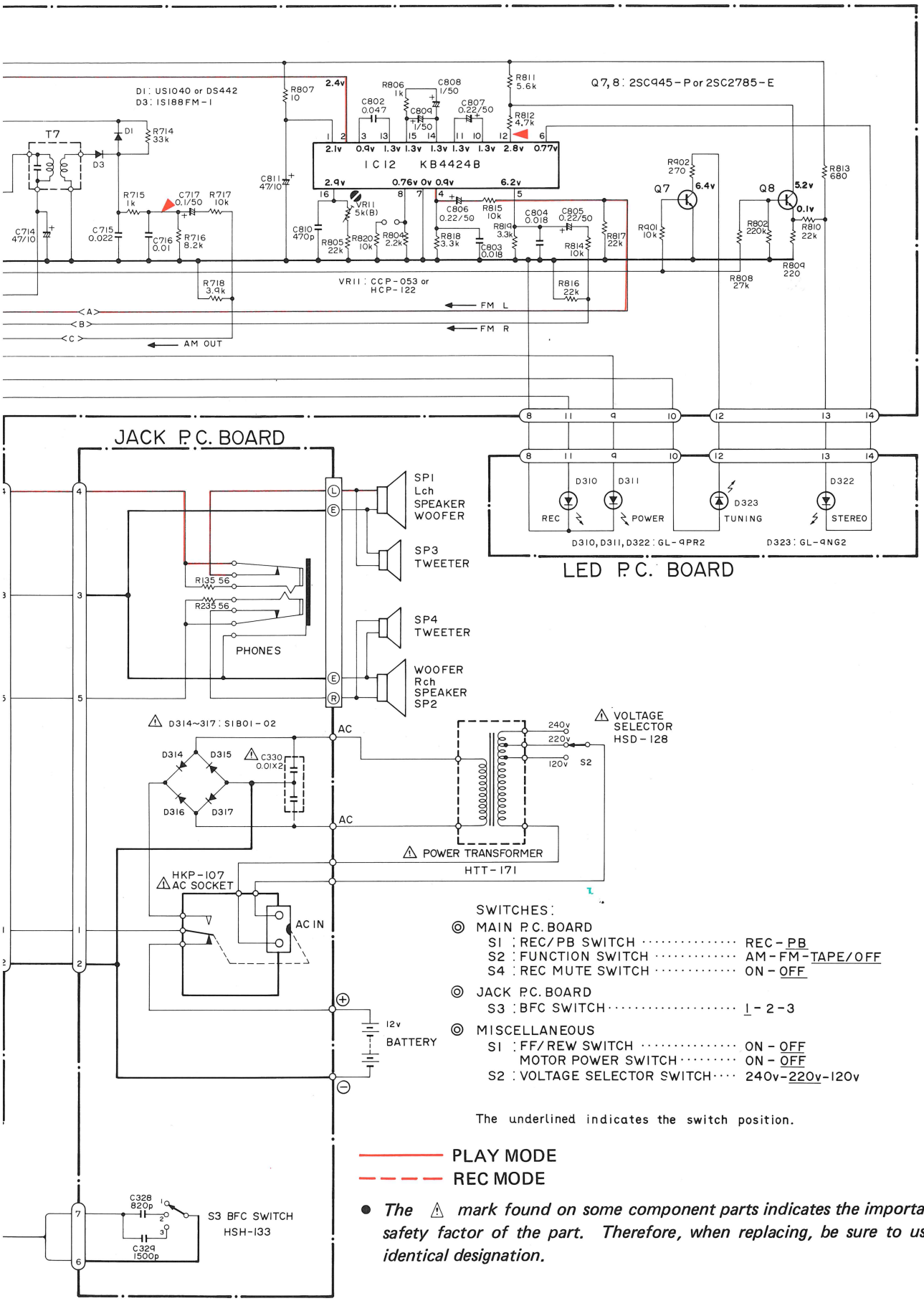

LED P.C. BOARD
D314 POWER
D313 DOLBY NR
20 21 22
23 24
D312 REC
25 26 27
D323 TUNING
D322 STEREO
D312, 314, 322 : GL-9PR2
D313, 323 : GL-9NG2
6 5 4
3 2 1
R116 27k
R118 39k
R119 1k
C111 1/50
R121 27k
Q102
R122 1M
Q103
C113 220p
C114 1/50
R124 560
R123 6.8k
R125 10k
C122 0.47/50
0.4V
0V
4.8V
1.0V
Q102 : 2SC1815-GR or 2SC1740LN-R or SC501-P
Q103 : 2SC1740LN-R or 2SC2634NC-R or 2SC732TM-GR
IC, Q
Q102
Q103
E
C
A
POWER TRANSFORMER
240V
220V
120V
S2 : VOLTAGE SELECTOR
L
E
SP1 WOOFER
SP3 TWEETER
Lch SPEAKER
SP4 TWEETER
SP2 WOOFER
Rch SPEAKER
R
JACK P.C. BOARD
D318 ~ 321 : SIB01-02
C332 220p
C331 0.001
D318 ~ 321
C341 2200/25
C342 0.01X2
AC
PHONES
SP
R245 56
R145 56
R242 56
R142 56
R144 12k
R143 220k
R244 12k
R243 220k
AUX
LINE OUT
S5 BFC
AC IN
Rch
Lch
S1
FF/REW
MOTOR POWER
MOTOR
12V BATTERY
D
B
G
H
F
I

Fig. 43

9. SCHEMATIC CIRCUIT DIAGRAM (SK-300)




2787-L
Q5: 2SC460-B
Q6: 2SC380TM-O or 2SC460-B
L2 AM FER ANTENNA
T4
T5
T6
CF3
IC11 KB4419C
FM L
FM R
AM OUT
Q101,104,201,202,204 : 2SC1815-GR or 2SC945-Q or JC501-P
Q102,103,203 : 2SC1815-GR or 2SC945-Q or JC501-P
IC3: BA5402A
D309: RD5.6EB3
S2: FUNCTION SWITCH HSD-126
T: TAPE/OFF
F: FM
A: AM
VR2 TONE
VR1 BALANCE
VR3 VOLUME
IC2: AN7310
Q301: 2SC1815-GR or 2SC945-Q or JC501-P
D101,201: US1040 or DS442
S4: REC MUTE HSG-151
D302 ~ 307: US1040 or DS442
D308: RD9.1EB3
Q302: 2SC2209-Q
Q304: 2SD468-C
Q303 2SC2655-Y
Q305: 2SC1815-GR or 2SC945-Q or JC501-P
Q306: 2SA473-Y
D313: S1B01-02
SOLENOID HXP-105
SO
S1
FF/REW
MOTOR POWER
HSN-133
MOTOR HXM-151



SWITCHES:

◎ MAIN P.C. BOARD
- S1 : REC/PB SWITCH ..... REC-PB
- S2 : FUNCTION SWITCH ..... AM-FM-TAPE/OFF
- S4 : REC MUTE SWITCH ..... ON-OFF

◎ JACK P.C. BOARD
- S3 : BFC SWITCH 1-2-3

◎ MISCELLANEOUS
- S1 : FF/REW SWITCH ..... ON-OFF
- MOTOR POWER SWITCH ..... ON-OFF
- S2 : VOLTAGE SELECTOR SWITCH 240v-220v-120v

The underlined indicates the switch position.

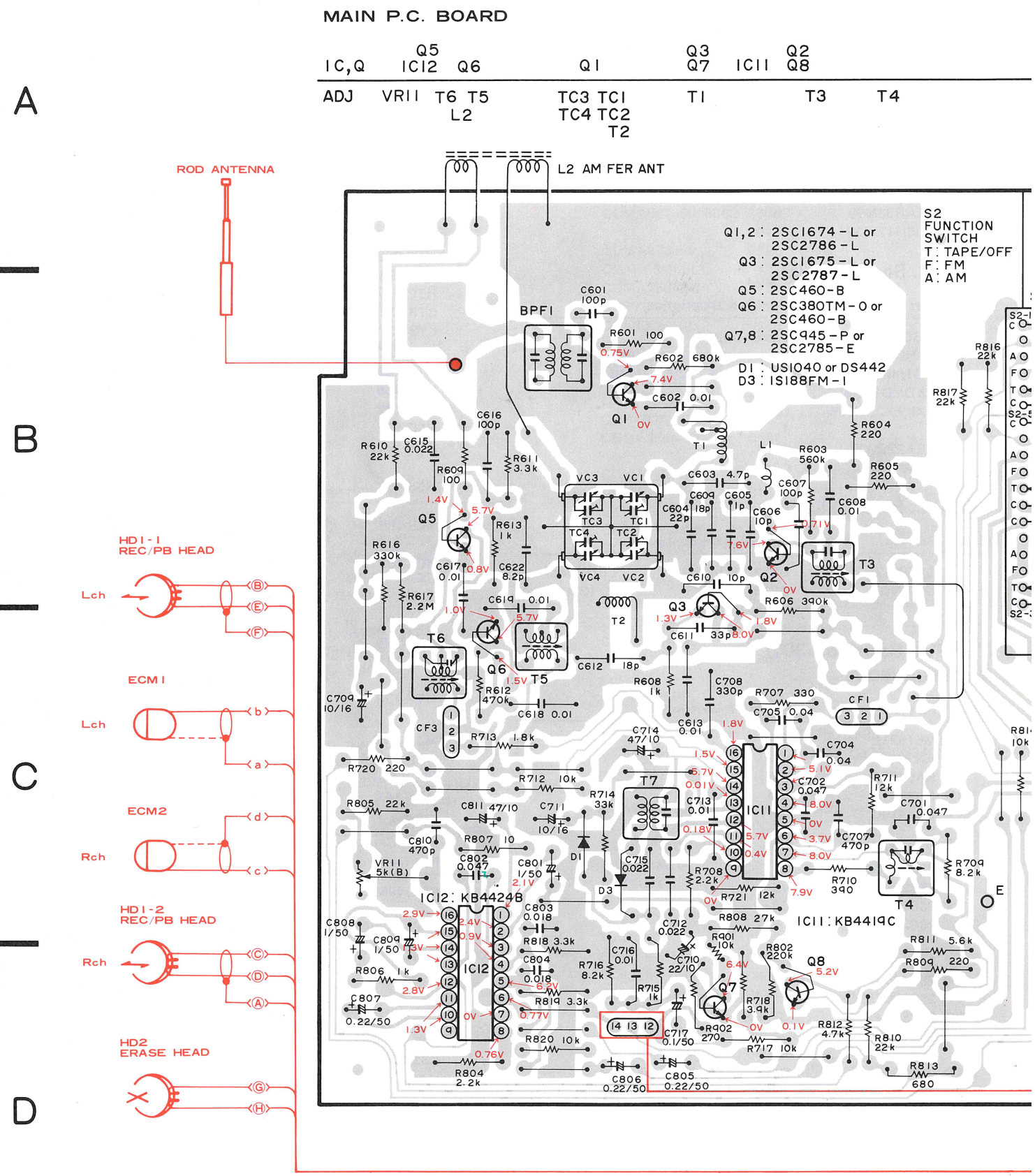
PLAY MODE

REC MODE

- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*

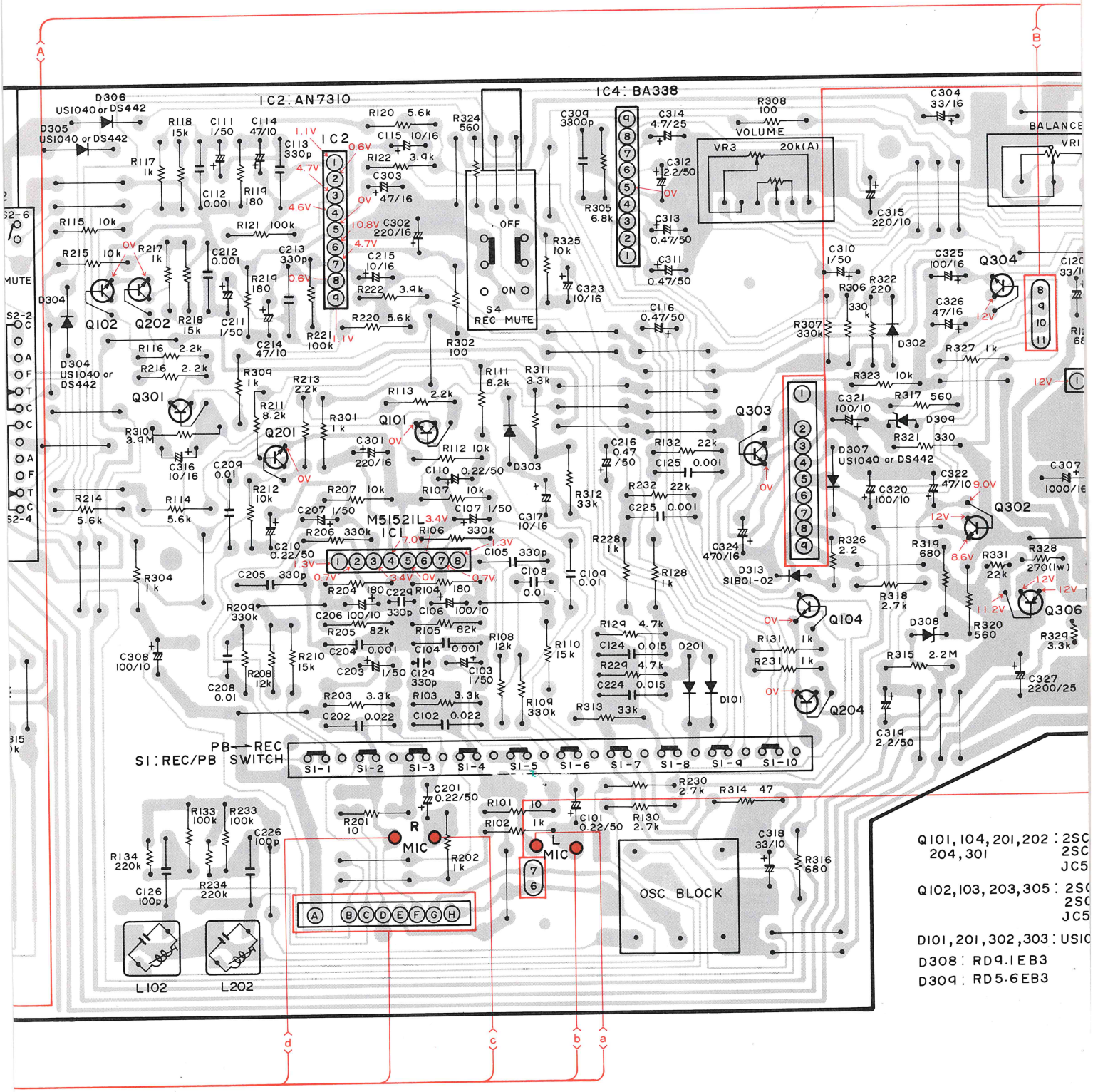
Fig. 44

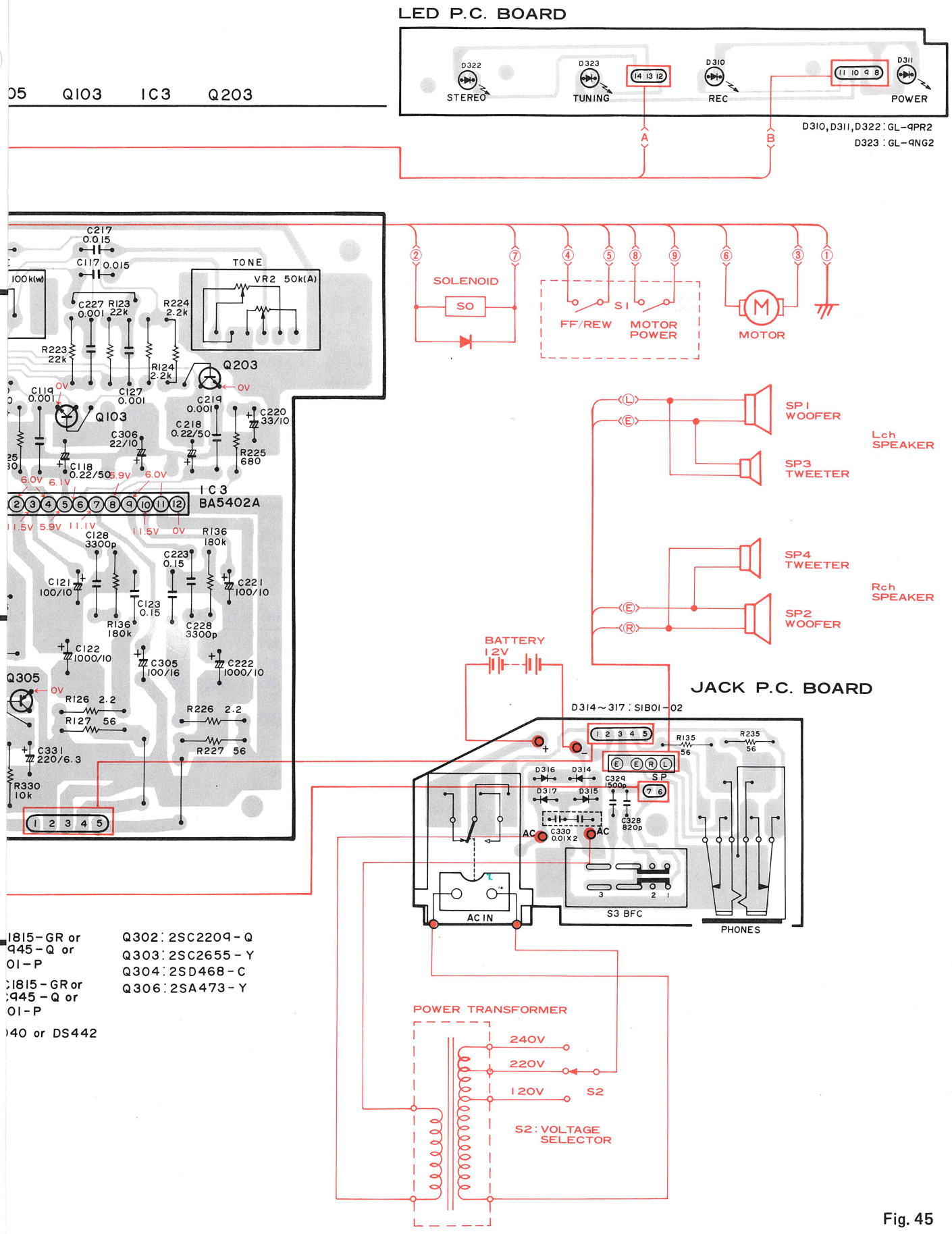
10. CONNECTION DIAGRAM (SK-300)



Q102 Q202 Q301 Q201 IC2 Q101 IC1 IC4 Q303 Q104 Q204 Q304 Q302 Q306 Q3

OSC BLOCK





1815-GR or
945-Q or
01-P

C1815-GR or
C945-Q or
01-P

040 or DS442

Q302 : 2SC2209-Q
Q303 : 2SC2655-Y
Q304 : 2SD468-C
Q306 : 2SA473-Y

Fig. 45

11. ELECTRICAL PARTS LIST

NOTE:

When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω 56 × 10^1 561 . . . . . RD1/4PS 5 6 1 J

47kΩ 47 × 10^3 473 . . . . . RD1/4PS 4 7 3 J

0.5Ω 0R5 . . . . . .RN2H 0 R 5 K

1Ω 010 . . . . . RS1P 0 1 0 K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ 562 × 10^1 . . . . . .RN1/4SR 5 6 2 1 F

- *For your parts Stock Control, the fast moving items are indicated with the marks ★ ★ and ★.*
  ★ ★: GENERALLY MOVES FASTER THAN ★.
  This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.
- *Parts whose parts numbers are omitted are subject to being not supplied.*
- ***The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.***

Main P.C. Board (SK-350)

MISCELLANEOUS

Mark	Part No.	Symbol & Description
★★	M51521L	IC1
★★	TA7629P	IC2, IC3
★★	BA5402A	IC4
★★	BA338	IC5
★★	AN7310	IC6
★★	KB4419C	IC11
★★	KB4424B	IC12
★★	2SC1674-L or 2SC2786-L	Q1, Q2
★★	2SC1675-L or 2SC2787-L	Q3
	VACANT	Q4
★★	2SC460-B	Q5
★★	2SC460-B or 2SC380TM-O	Q6
★★	2SC945-P or 2SC2785	Q7, Q8
★★	2SC1815 or 2SC945 or JC501	Q101, Q104, Q105, Q201, Q202, Q204, Q205, Q301, Q304 Q307, Q310
★★	2SC1815 or 2SC1740LN or JC501	Q102
★★	2SC1740LN or 2SC2634NC or 2SC732TM	Q103, Q203
★★	2SC2655-Y	Q305
★★	2SC2209	Q306
★★	2SD468	Q308
★★	2SA473-Y	Q309
★	US1040 or DS442	D1, D302–D308, D311, D317
	VACANT	D2, D309, D312–D314
★	1S188FM-1	D3
★	SIB01-02	D310
★	RD5.6EB3	D315
★	RD9.1EB3	D316
	HTF-121	L1 Micro-Inductor
	HTX-142	L2 Antenna Unit
	HTH-105	L101, L201 Coil
	HTF-112	L102, L202 Coil
	HTF-117	L301 Coil
	HTC-199	T1 Coil
	HTC-201	T2 Coil
	HTC-202 or CTC-028	T3 IF Transformer
	HTC-198	T4 IF Transformer
	CTB-031 or CTB-037	T5 Coil
	HTE-135	T6 IF Transformer
	HTE-136	T7 IF Transformer
★★	HSH-131	S1 Switch (REC/PB)
★★	HSK-120	S2 Switch (TAPE SELECTOR)
★★	HSD-126	S3 Switch (FUNCTION)
★★	HSG-152	S4 Switch (DOLBY NR)
★★	HSG-151	S6 Switch (REC MUTE)

Mark	Part No.	Symbol & Description	
★	HCP-123	VR1–VR4	Semi-fixed, 10kΩ(B)
★	HCP-126	VR5, VR6	Semi-fixed, 100kΩ(B)
★	HCS-157	VR7	Volume, 100kΩ(W) (BALANCE)
★	HCS-155	VR8	Volume, 50kΩ(A) (TONE)
★	HCS-158	VR9	Volume, 20kΩ(A) (VOLUME)
★	HCP-122 or CCP-053	VR11	Semi-fixed, 5kΩ(B)
	HTF-126	CF1	Ceramic Filter
	VACANT	CF2	
	HTF-125	CF3	Ceramic Filter
	HCL-112	VC1–VC4, TC1–TC4	Variable Capacitor
	HWW-114	BPF1	Filter
	HTX-120	F1, F2	Filter
	HTX-140	OSC Block	

RESISTORS

Mark	Part No.	Symbol & Description
	RD1/4PM □□□ J	R101–R141, R146–R161, R201–R241, R246–R261, R301–R304, R306, R317–R336, R338–R348, R601–R606, R608–R613, R616, R617, R707–R718, R720, R721, R802, R804–R820, R902
	RD1/4VM □□□ J	R350–R352, R901
	RN1P □□□ K	R337
	RS1P □□□ K	R349
	VACANT	R142–R145, R162–R200, R242–R245, R262–R300, R305, R307–R316, R353–R600, R607, R614, R615, R618–R706, R719, R722–R801, R803, R821–R900

CAPACITORS

Mark	Part No.	Symbol & Description
	CEAR22M50L	C101, C107, C126, C201, C207, C226, C807
	CKPYY223N16	C102, C202
	CKPYB821K50	C103, C203
	CEA010M50L	C104, C108, C111, C114, C130, C138, C140, C204, C208, C211, C214, C230, C238, C240, C328, C334, C801, C808, C809
	CKPYB221K50	C105, C113, C205, C213
	CEA101M10L	C106, C132, C139, C206, C232, C239, C307, C320, C321
	CQMA103K50	C109, C209
	CKPYX103N25	C110, C210, C602, C608, C613, C617–C619, C713, C716
	VACANT	C112, C212
	CSZAR33M35	C115, C215
	CQMA104J50	C116, C216
	CEA100M16L	C117, C123, C217, C223, C333
	CQMA473J50	C118, C218, C137, C237
	CQMA472J50	C119, C219
	CEA471M16L	C120, C121, C220, C221, C318, C337
	CEAR47M50L	C122, C222, C326, C329, C335
	CQMA562J50	C124, C224
	CQMA273J50	C125, C225
	CEAR68M50LL	C127, C227
	CQMA153K50	C128, C228
	CKPYD102M50	C129, C229
	CEA330M10L	C131, C231
	CQMA154K50	C133, C233
	CEA102M10L	C134, C234
	CKPYB331K50	C135, C235
	CKPYB391K50	C136, C236
	CQMA273K50	C141, C241
	CQMA183K50	C142, C242, C803, C804
	CQMA153K50	C143, C243
	CKPYX182M25	C144, C244
	CKPYX222M25	C145, C245
	CCDSL560K50	C146, C246
	CCDSL331K50	C147, C247
	VACANT	C148–C200, C248–C300
	CEA221M16L	C301, C302, C336, C339
	CEA330M16L	C303, C316
	CEA101M16L	C304
	CEA220M10L	C305
	CEA102M16L	C306
	VACANT	C308–C305, C323
	CEA470M16L	C317, C322, C338, C340, C714, C811
	CEA2R2M50L	C319, C325
	CKPYX332M25	C324
	CEA4R7M25L	C327
	CEA221M10L	C330
	VACANT	C331, C332, C341, C342
	CEA221M6R3L	C343
	VACANT	C344–C600
	CKDYB101K50	C601
	CCPSL4R7K50	C603
	CCPSL220J50	C604
	CCPSL010M50	C605
	CCPSL100J50	C606
	CCPSL101J50	C607, C616
	CCPCH180J50	C609, C612
	CCPCH100J50	C610
	CCPCH330J50	C611
	VACANT	C614, C620, C621
	CKPYY223N16	C615, C712, C715
	CCPUJ8R2K50	C622
	VACANT	C623–C700, C703, C706
	CKDBC473M25	C701, C702

Mark	Part No.	Symbol & Description
	CKDYF403Z25	C704, C705
	CKDYB471K50	C707
	CKPYB331K50	C708
	CEA100M16L	C709, C711
	CEA220P10	C710
	CEAR10M50	C717
	VACANT	C718–C800
	CQMA473K50	C802
	CEAR33M50	C805, C806
	CQSH471J50	C810

Jack P.C. Board (SK-350)

Mark	Part No.	Symbol & Description
⚠ ★	SIB01-02	D318–D321
★★	HSH-133	D5 Switch (BFC)
	RD1/4PM □□□ J	R142–R145, R242–R245
	CKDYD102M50	C331
	CKPYX222M25	C332
	CEA222M25L	C341
⚠	CWW-006	C342

LED P.C. Board (SK-350)

Mark	Part No.	Symbol & Description
★	CL-9PR2	D312, D314, D322 LED (Red)
★	GL-9NG2	D313, D323 LED (Green)

Main P.C. Board (SK-300)

MISCELLANEOUS

Mark	Part No.	Symbol & Description
★★	M51521L	IC1
★★	AN7310	IC2
★★	BA5402A	IC3
★★	BA338	IC4
★★	KB4419C	IC11
★★	KB4424B	IC12
★★	2SC1674-L or 2SC2786-L	Q1, Q2
★★	2SC1675-L or 2SC2787-L	Q3
★★	2SC460-B	Q5
★★	2SC460-B or 2SC380TM-O	Q6
★★	2SC945-P or 2SC2785	Q7, Q8
★★	2SC1815 or JC501 or 2SC945	Q101–Q104, Q201–Q204, Q301, Q305
★★	2SC2209	Q302
★★	2SC2655-Y	Q303
★★	2SD468	Q304
★★	2SA473-Y	Q306
★	US1040 or DS442	D1, D101, D201, D302–D307
	VACANT	D2, D301, D310–D312
★	1S188FM-1	D3
★	RD9.1EB3	D308
★	RD5.6EB3	D309
★	SIB01-02	D313
	HTF-121	L1 Micro-Inductor
	HTX-142	L2 Antenna Unit
	HTF-112	L102, L202
	HTC-199	T1 Coil
	HTC-201	T2 Coil
	HTC-202 or CTC-028	T3 IF Transformer
	HTC-198	T4 IF Transformer
	CTB-031 or CTB-037	T5 Coil
	HTE-135	T6 IF Transformer
	HTE-136	T7 IF Transformer
★★	HSH-132	S1 Switch (REC/PB)
★★	HSD-126	S2 Switch (FUNCTION)
★★	HSG-151	S4 Switch (REC MUTE)
★	HCS-157	VR1 Volume, 100kΩ(W) (BALANCE)
★	HCS-155	VR2 Volume, 50kΩ(A) (TONE)
★	HCS-158	VR3 Volume, 20kΩ(A) (VOLUME)
★	HCP-122 or CCP-053	VR11 Semi-fixed, 5kΩ(B)
	HCL-112	VC1–VC4, TC1–TC4 Variable Capacitor
	HTF-126	CF1 Ceramic Filter
	VACANT	CF2
	HTF-125	CF3 Ceramic Filter
	HWW-114	BPF1 Filter
	HTX-141	OSC Block

RESISTORS

Mark	Part No.	Symbol & Description
	RD1/4PM □□□ J	R101–R133, R136, R201–R233, R236, R301, R302, R304–R325, R327, R330, R601–R606, R608–R613, R616, R617, R707–R718, R720, R721, R802, R804–R820, R902
	RD1/4VM □□□ J	R134, R234, R329, R331, R901
	RN1P □□□ K	R326
	RS1P □□□ K	R328
	VACANT	R135, R137–R200, R235, R237–R300, R303, R332–R600, R607, R614, R615, R618–R706, R719, R722–R801, R803, R821–R900

CAPACITORS

Mark	Part No.	Symbol & Description
	CEAR22M50L	C101, C110, C118, C201, C210, C218, C806, C807
	CKPYY223N16	C102, C202
	CEA010M50L	C103, C107, C111, C203, C207, C211, C310, C801, C808, C809
	CKPYB102K50	C104, C112, C119, C125, C127, C204, C212, C219, C225, C227
	CKPYB331K50	C105, C113, C205, C213
	CEA101M10L	C106, C121, C206, C221, C308, C320, C321
	CQMA103K50	C108, C208
	CKPYX103N25	C109, C209, C602, C608, C613, C617—C619, C713, C716
	CEA470M10L	C114, C214, C322
	CEA100M16L	C115, C215, C316, C317, C323, C709, C711
	CEAR47M50L	C116, C216, C311, C313
	CQMA153K50	C117, C217
	CEA330M10L	C120, C220, C318
	CEA102M10L	C122, C222
	CQMA154K50	C123, C223
	CKPYX153N25	C124, C224
	CCPSL101J50	C126, C226
	CKPYV332K25	C128, C228
	CCDSL331K50	C129, C229
	VACANT	C130—C200, C230—C300
	CEA221M16L	C301, C302
	CEA470M16L	C303, C326, C714, C811
	CEA330M16L	C304
	CEA101M16L	C305, C325
	CEA220M10L	C306
	CEA102M16L	C307
	CKPYZ332M25	C309
	CEA2R2M50L	C312, C319
	CEA4R7M25L	C314
	CEA221M10L	C315
	CEA471M16L	C324
	CEA222M25L	C327
	VACANT	C328—C600
	CKDYB101K50	C601
	CCPSL4R7K50	C603
	CCPSL220J50	C604
	CCPSL010M50	C605
	CCPSL100J50	C606
	CCPSL101J50	C607, C616
	CCPCH180J50	C609, C612
	CCPCH100J50	C610
	CCPCH330J50	C611
	VACANT	C614, C620, C621, C623—C700
	CKPYY223N16	C615, C712, C715
	CCPUJ8R2K50	C622
	CKDBC473M25	C701, C702
	VACANT	C703, C706
	CKDYF403Z25	C704, C705
	CKDYB471K50	C707
	CKPYB331K50	C708
	CEA220P10	C710
	CEAR10M50	C717
	VACANT	C718—C800
	CQMA473K50	C802
	CQMA183K50	C803, C804
	CEAR22M50	C805
	CQSH471J50	C810

Jack P.C. Board (SK-300)

Mark	Part No.	Symbol & Description	
⚠ ★	SIB01-02	D314—317	
★★	HSH-133	S3	Switch (BFC)
	RD1/4PM □□□ J	R135, R235	
	CKPYB821K50	C328	
	CKPYX152M25	C329	
⚠	CWW-006	C330	

LED P.C. Board (SK-300)

Mark	Part No.	Symbol & Description	
★	GL-9PR2	D310, D311, D322	LED (Red)
★	GL-9NG2	D323	LED (Green)

Miscellaneous Parts List

Mark	Part No.	Symbol & Description	
★★	HPV-119	SP1, SP2	Speaker (Woofer)
★★	HPV-118 or HPV-120	SP3, SP4	Speaker (Tweeter)
★	HPM-137	ECM1, ECM2	Microphone Unit
⚠ ★	HTT-171	Power Transformer(120V/220V/240V)	
★★	HPB-401	HD1 (SK-350)	Head (REC/PB)
★★	HPB-114	HD1 (SK-300)	Head (REC/PB)
★	HPB-351	HD2 (SK-350)	Head (ERASE)
★	CPB-038	HD2 (SK-300)	Head (ERASE)
	HXP-105	SO	Solenoid
★★	HXM-151	M	Motor
★★	HSN-133	S1	Switch (FF/REW, Motor Power)
⚠ ★★	HSD-128	S2	Switch (Voltage Selector)

12. CABINET EXPLODED VIEW (SK-350)

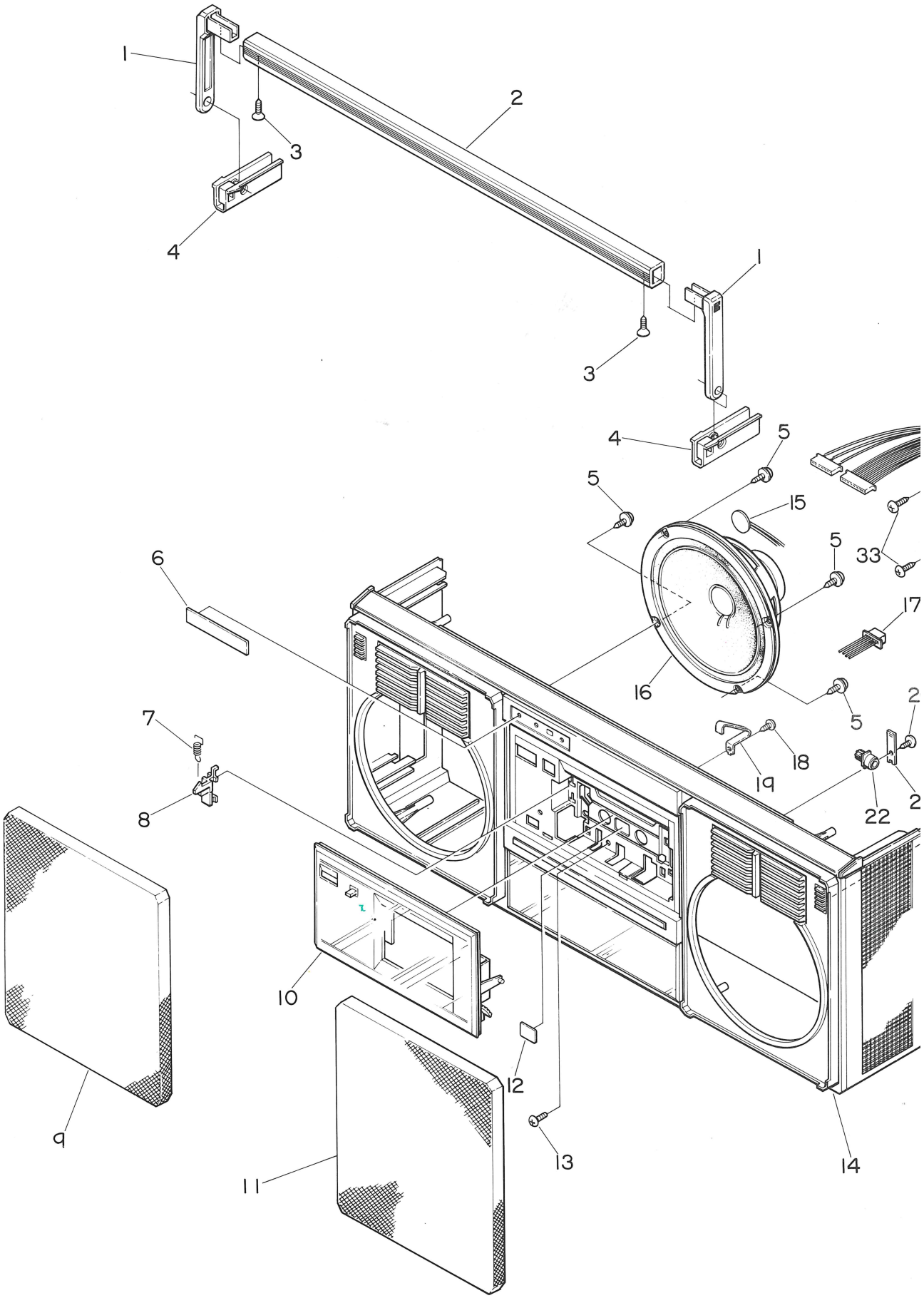
• Parts List

NOTE

- *For your parts Stock Control, the fast moving items are indicated with the marks ★ ★ and ★.*
  ★ ★: GENERALLY MOVES FASTER THAN ★.
  This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.
- ***The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.***
- *Parts whose parts numbers are omitted are subject to being not supplied.*

Mark	No.	Part No.	Description
	1.	HNS-569	Handle
	2.	HNS-570	Grip
	3.	CMZ30P100FBK	Screw
	4.	HNV-518	Holder
	5.	BLF30P080FMC	Screw
	6.	HAM-117	Badge
	7.	HBH-371	Spring
	8.	HNV-521	Lever
	9.	HNB-199	Net
★★	10.	HXA-877	Cassette Door Assy
	11.	HNB-200	Net
	12.	HNM-312	Seal
	13.	BSZ26P010FMC	Screw
★	14.	HXA-875	Front Case Assy
★★	15.	HPV-120 or	Speaker (Tweeter)
		HPV-118	
★★	16.	HPV-119	Speaker (Woofer)
	17.	HDE-276	Connector
	18.	BMC30P080FMC	Screw
	19.	HBL-174	Spring
	20.	BMC30P100FMC	Screw
	21.	HNC-650	Bracket
	22.	HXA-878	Damper Unit
★	23.	HAC-289	Button (PAUSE)
★	24.	HAC-290	Button (STOP/EJECT)
★	25.	HAC-291	Button (FF)
★	26.	HAC-292	Button (REW)
★	27.	HAC-293	Button (PLAY)
★	28.	HAC-294	Button (REC)
	29.	PMZ26P080FMC	Screw
	30.	HNV-520	Arm
	31.	HNV-523	Holder
	32.	HXA-870	Cassette Mechanism Assy
	33.	BMC30P120FMC	Screw
	34.	HBL-164	Spring
	35.	PSZ26P060FMC	Screw
	36.		Shield
	37.	HNC-625	Terminal
	38.	HAC-279	Cover
★	39.	HNS-572	Rear Case
★	40.	HAA-204	Knob (TONE, BALANCE, VOLUME)
★	41.	HAC-278	Button (REC MUTE, DOLBY NR)
★	42.	HAC-263	Knob (TAPE SELECTOR)
★	43.	HAA-203	Knob (FUNCTION)
★	44.	HAA-202	Knob (TUNING)
	45.	HNV-476	Spacer
	46.	HBA-145	Screw
★★	47.	HDX-109	Antenna
	48.	PMZ30P120FBK	Screw
★★	49.	HNS-565	Cover

- **Cabinet (SK-350)**



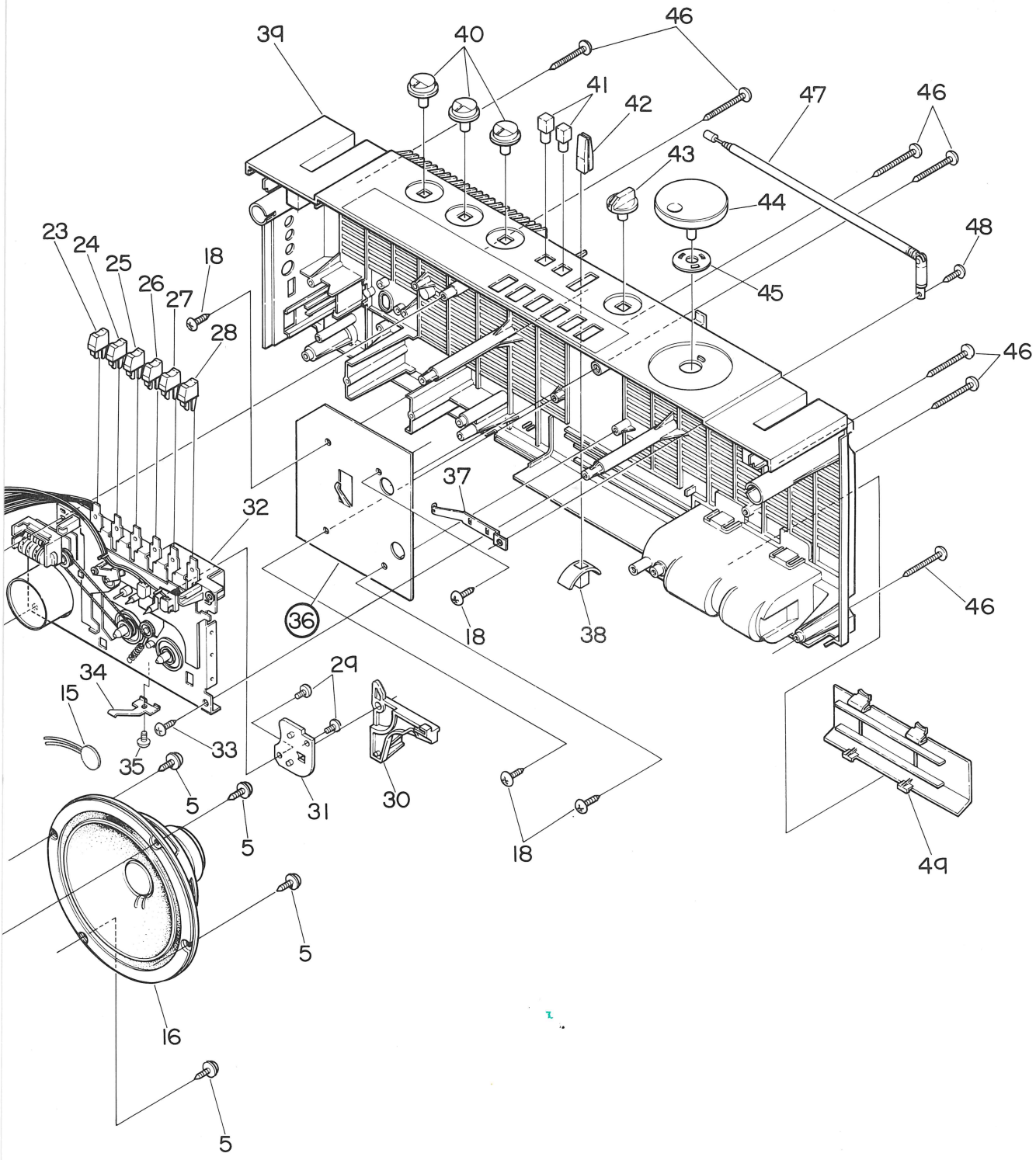

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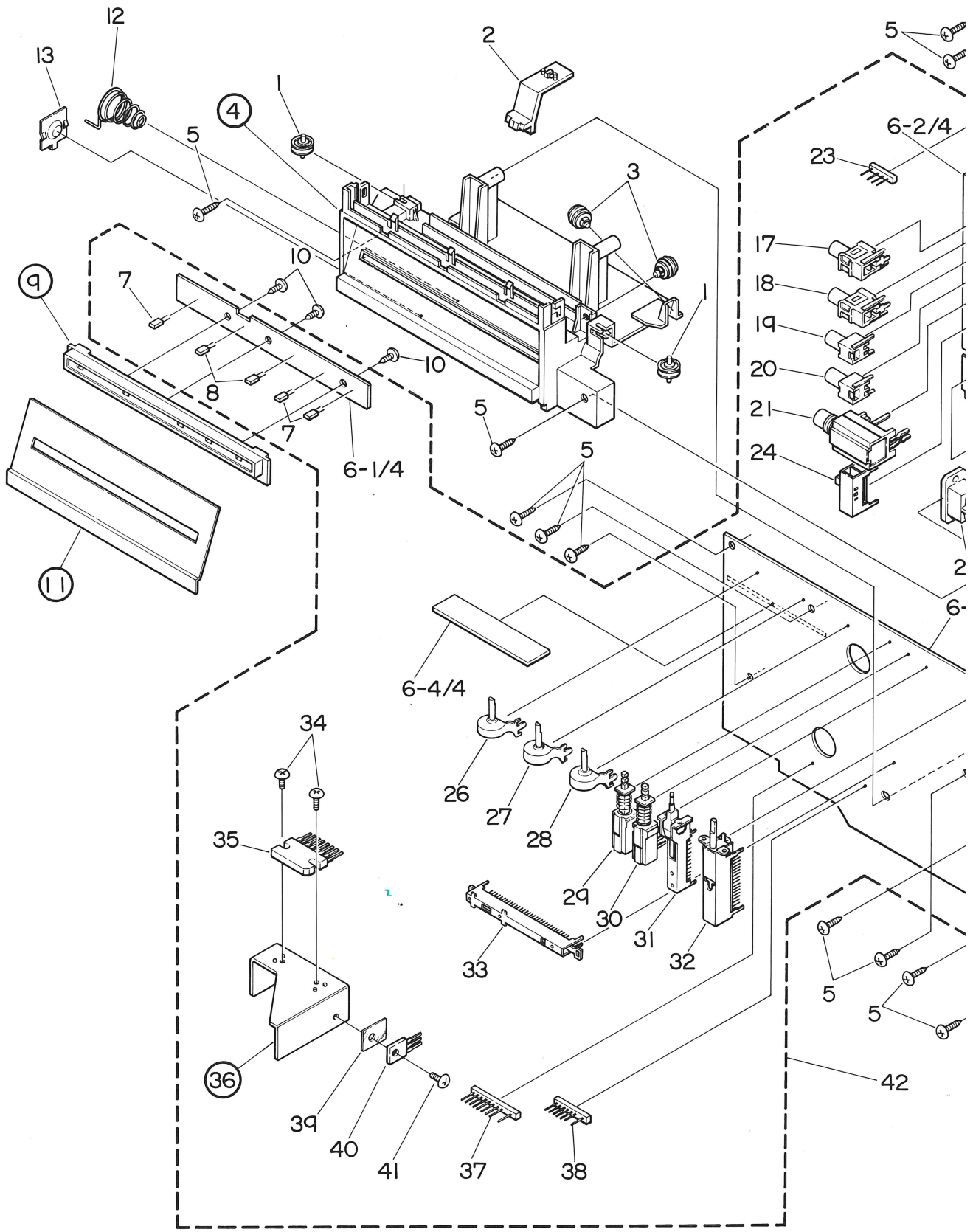
Fig. 46

13. CHASSIS EXPLODED VIEW (SK-350)



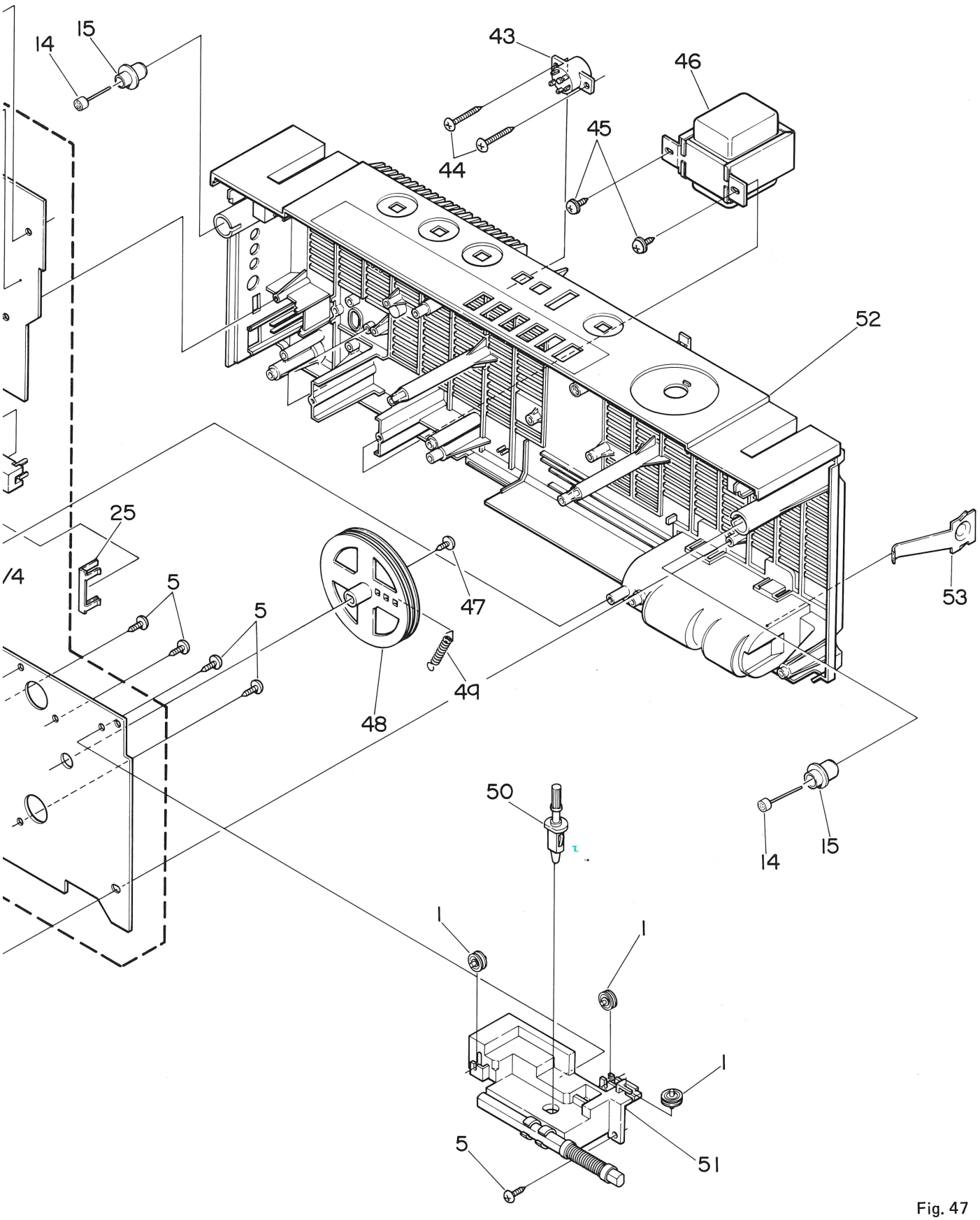


Fig. 47

• Parts List

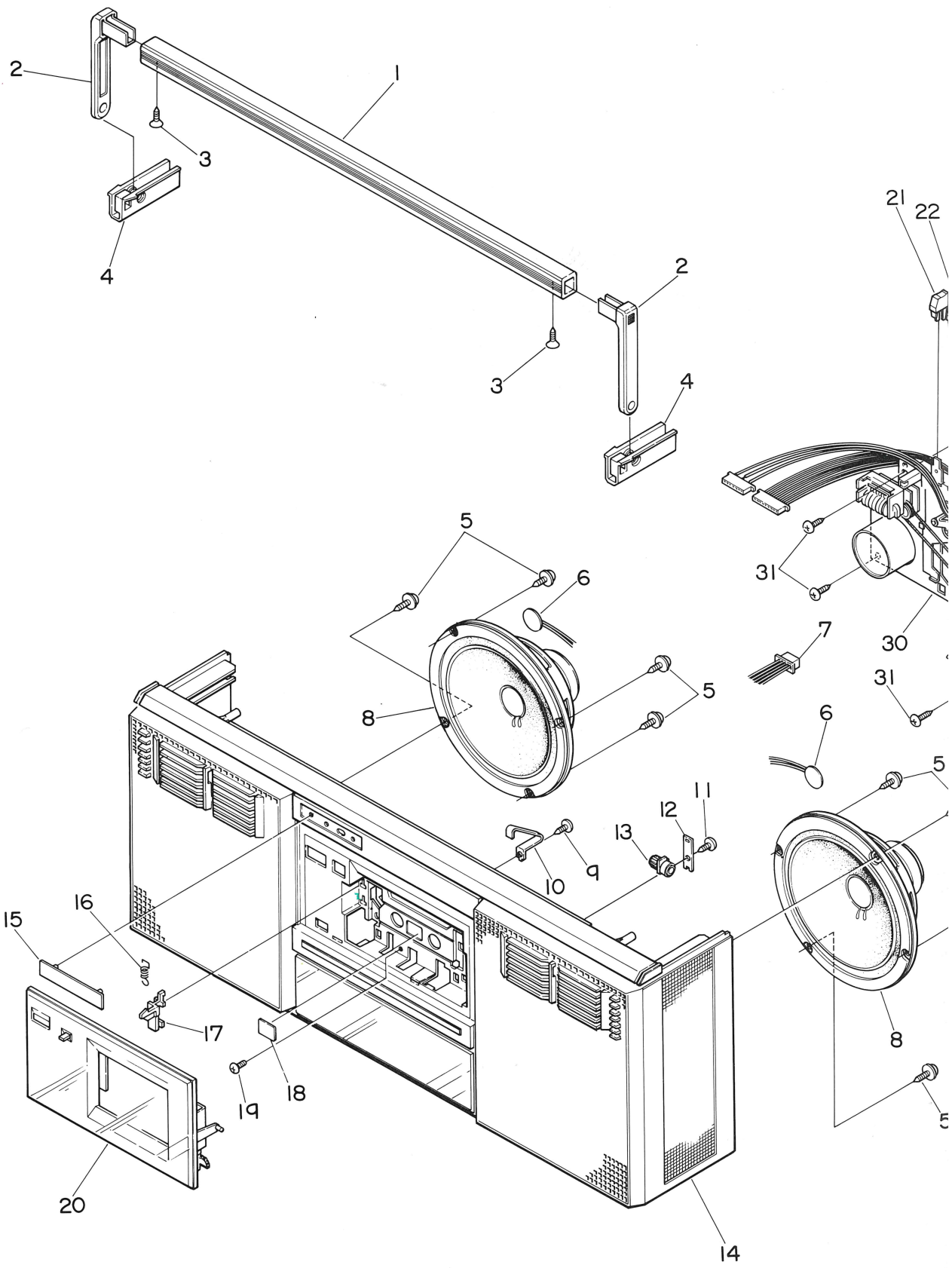
Mark	No.	Part No.	Description
	1.	CNV-800	Pulley
	2.	HAF-120	Pointer
	3.	HXA-777	Pulley Assy
	4.		Chassis
	5.	BNC30P100FMC	Screw
	6.	HNX-207	P.C. Board
★	7.	GL-9PR2	LED (Red)
★	8.	GL-9NG2	LED (Green)
	9.		Holder
	10.	BNC30P080FMC	Screw
	11.		Scale
	12.	HBH-370	Spring
	13.	HNC-622	Terminal
★	14.	HPM-137	Microphone Unit
	15.	HNV-294	Holder
	16.	VACANT	
	17.	HKN-121	Jack (AUX, White)
	18.	HKN-122	Jack (AUX, Red)
	19.	HKN-123	Jack (LINE OUT, White)
	20.	HKN-124	Jack (LINE OUT, Red)
	21.	HKN-139	Jack (Phones)
⚠	22.	HKP-107	AC Socket
	23.	CKS-032	Plug
★★	24.	HSH-133	Switch (BFC)
	25.	HNC-633	Holder
★	26.	HCS-155	Volume, 50kΩ(A) (TONE)
★	27.	HCS-157	Volume, 100kΩ(W) (BALANCE)
★	28.	HCS-158	Volume, 20kΩ(A) (VOLUME)
★★	29.	HSG-151	Switch (REC MUTE)
★★	30.	HSG-152	Switch (DOLBY NR)
★★	31.	HSK-120	Switch (TAPE SELECTOR)
★★	32.	HSD-126	Switch (FUNCTION)
★★	33.	HSH-131	Switch (REC/PB)
	34.	BMZ30P080FMC	Screw
★★	35.	BA5402A	IC
	36.		Heat Sink
	37.	CKS-051	Plug (9P)
	38.	CKS-063	Plug (8P)
	39.	HNM-351	Insulating Plate
★★	40.	2SC2209	Transistor
	41.	BMZ30P060FMC	Screw
	42.	HWX-406	P.C. Board Unit
⚠★★	43.	HSD-128	Switch (Voltage Selector)
	44.	BNC30P120FMC	Screw
	45.	BNM30P120FMC	Screw
⚠ ★	46.	HTT-171	Power Transformer(120V/220V/240V)
	47.	BMZ26P050FMC	Screw
	48.	HNV-519	Pulley
	49.	HBH-368	Spring
	50.	HNV-475	Tunig Shaft
	51.	HTX-142	Antenna Unit
★	52.	HNS-572	Rear Case
	53.	HNC-623	Terminal

14. CABINET EXPLODED VIEW (SK-300)

• Parts List

Mark	No.	Part No.	Description
	1.	HNS-570	Grip
	2.	HNS-569	Handle
	3.	CMZ30P100FBK	Screw
	4.	HNV-518	Holder
	5.	BLF30P080FMC	Screw
★★	6.	HPV-120 or HPV-118	Speaker (Tweeter)
	7.	HDE-276	Connector
★★	8.	HPV-119	Speaker (Woofer)
	9.	BMC30P080FMC	Screw
	10.	HBL-174	Spring
	11.	BMC30P100FMC	Screw
	12.	HNC-650	Bracket
	13.	HXA-878	Damper Unit
★	14.	HXA-874	Front Case Assy
	15.	HAM-117	Badge
	16.	HBH-371	Spring
	17.	HNV-521	Lever
	18.	HWM-312	Seal
	19.	BSZ26P100FMC	Screw
★★	20.	HXA-877	Cassette Door Assy
★	21.	HAC-287	Button (PAUSE)
★	22.	HAC-288	Button (STOP/EJECT)
★	23.	HAC-285	Button (FF)
★	24.	HAC-284	Button (REW)
★	25.	HAC-286	Button (PLAY)
★	26.	HAC-283	Button (REC)
	27.	PMZ26P080FMC	Screw
	28.	HNV-520	Arm
	29.	HNV-523	Holder
	30.	HXA-860	Cassette Mechanism Assy
	31.	BNC30P120FMC	Screw
	32.	HBL-164	Spring
	33.	PSZ26P060FMC	Screw
	34.	BMC30P080FMC	Screw
★	35.	HNS-563	Rear Case
	36.	HNC-625	Terminal
	37.		Shield
★	38.	HAA-201	Knob (TONE, BALANCE, VOLUME)
★	39.	HAC-271	Button (REC MUTE)
★	40.	HAA-200	Knob (FUNCTION)
★	41.	HAA-199	Knob (TUNING)
	42.	HNV-476	Spacer
	43.	HBA-145	Screw
★★	44.	HDX-109	Antenna
	45.	PMZ30P120FBK	Screw
★★	46.	HNS-565	Cover

- **Cabinet (SK-300)**



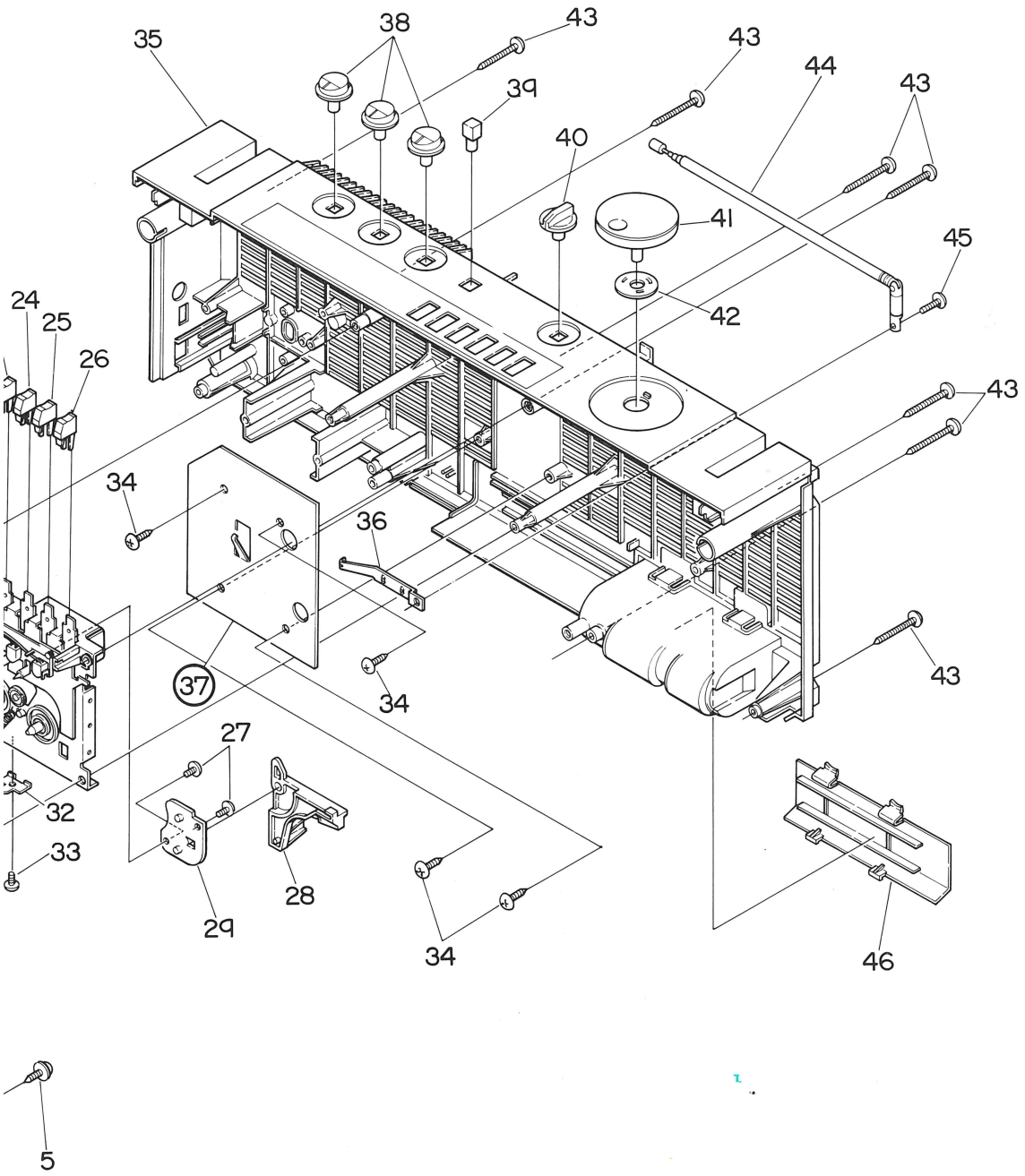

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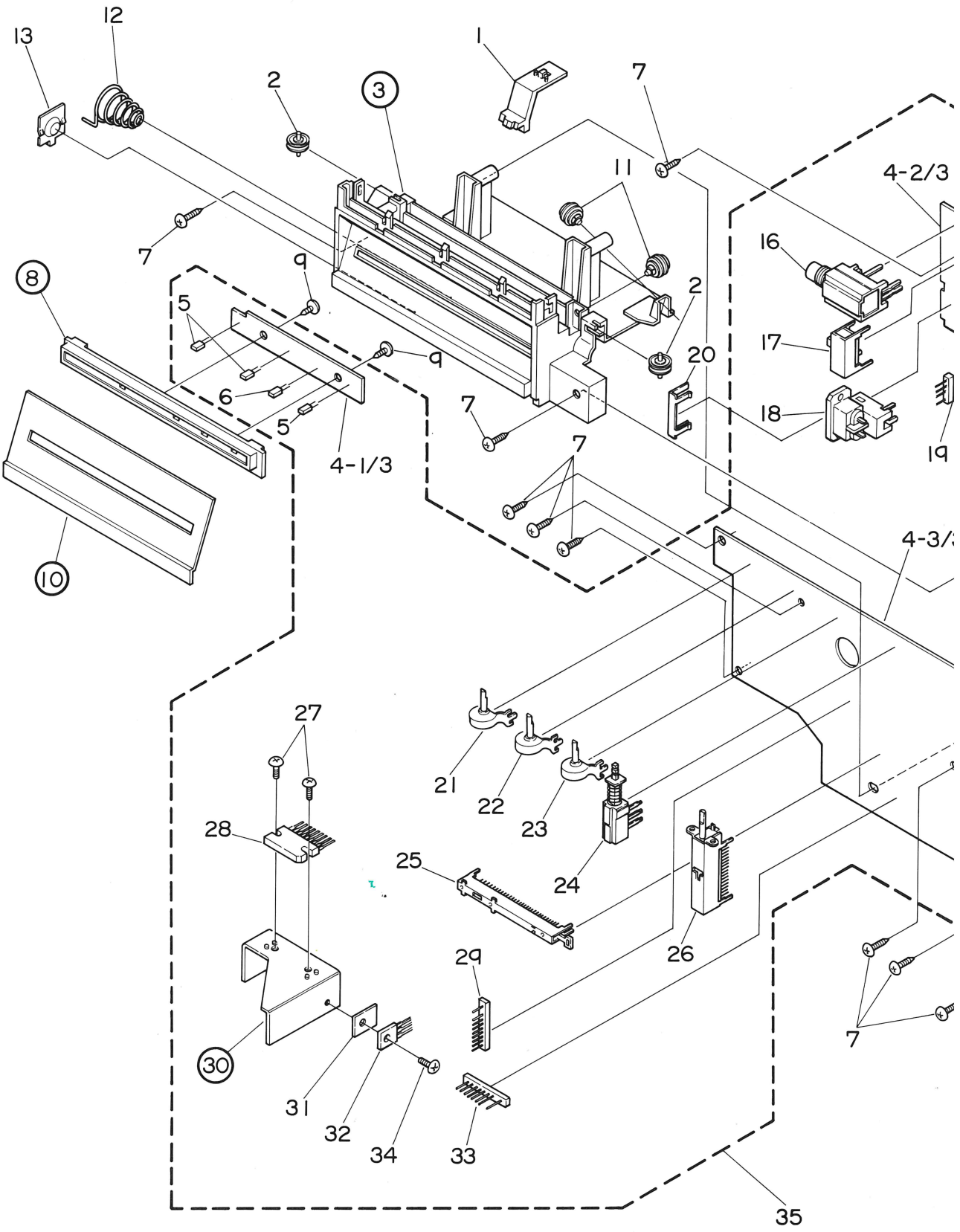
Fig. 48

15. CHASSIS EXPLODED VIEW (SK-300)



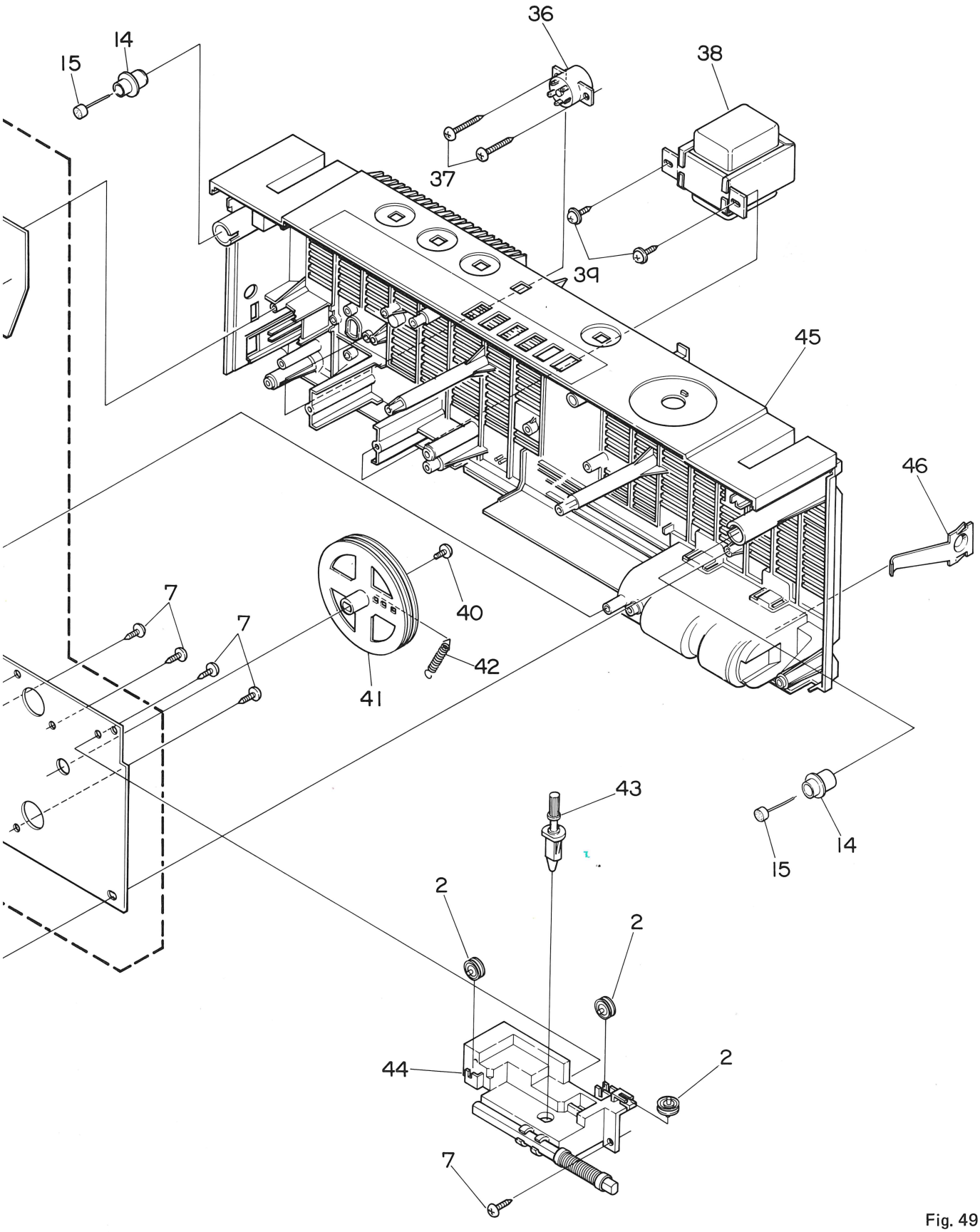


Fig. 49

• Parts List

Mark	No.	Part No.	Description
	1.	HAF-120	Pointer
	2.	CNV-800	Pulley
	3.		Chassis
	4.	HNX-204	P.C. Board
★	5.	GL-9PR2	LED (Red)
★	6.	GL-9NG2	LED (Green)
	7.	BNC30P100FMC	Screw
	8.		Holder
	9.	BNC30P080FMC	Screw
	10.		Scale
	11.	HXA-777	Pulley Assy
	12.	HBH-370	Spring
	13.	HNC-622	Terminal
	14.	HNV-294	Holder
★	15.	HPM-137	Microphone Unit
	16.	HKN-139	Jack (Phones)
★★	17.	HSH-133	Switch (BFC)
⚠	18.	HKP-107	AC Socket
	19.	CKS-032	Plug
	20.	HNC-633	Holder
★	21.	HCS-155	Volume, 50kΩ(A) (TONE)
★	22.	HCS-157	Volume, 100kΩ(W) (BALANCE)
★	23.	HCS-158	Volume, 20kΩ(A) (VOLUME)
★★	24.	HSG-151	Switch (REC MUTE)
★★	25.	HSH-132	Switch (REC/PB)
★★	26.	HSD-126	Switch (FUNCTION)
	27.	BMZ30P080FMC	Screw
★★	28.	BA5402A	IC
	29.	CKS-051	Plug (9P)
	30.		Heat Sink
	31.	HNM-351	Insulating Plate
★★	32.	2SC2209	Transistor
	33.	CKS-063	Plug (8P)
	34.	BMZ30P060FMC	Screw
	35.	HWX-408	P.C. Board Unit
⚠★★	36.	HSD-128	Switch (Voltage Selector)
	37.	BNC30P120FMC	Screw
⚠ ★	38.	HTT-171	Power Transformer(120V/220V/240V)
	39.	BNM30P120FMC	Screw
	40.	BMZ26P050FMC	Screw
	41.	HNV-519	Pulley
	42.	HBH-368	Spring
	43.	HNV-475	Tuning Shaft
	44.	HTX-142	Antenna Unit
★	45.	HNS-563	Rear Case
	46.	HNC-623	Terminal

16. PACKING METHOD

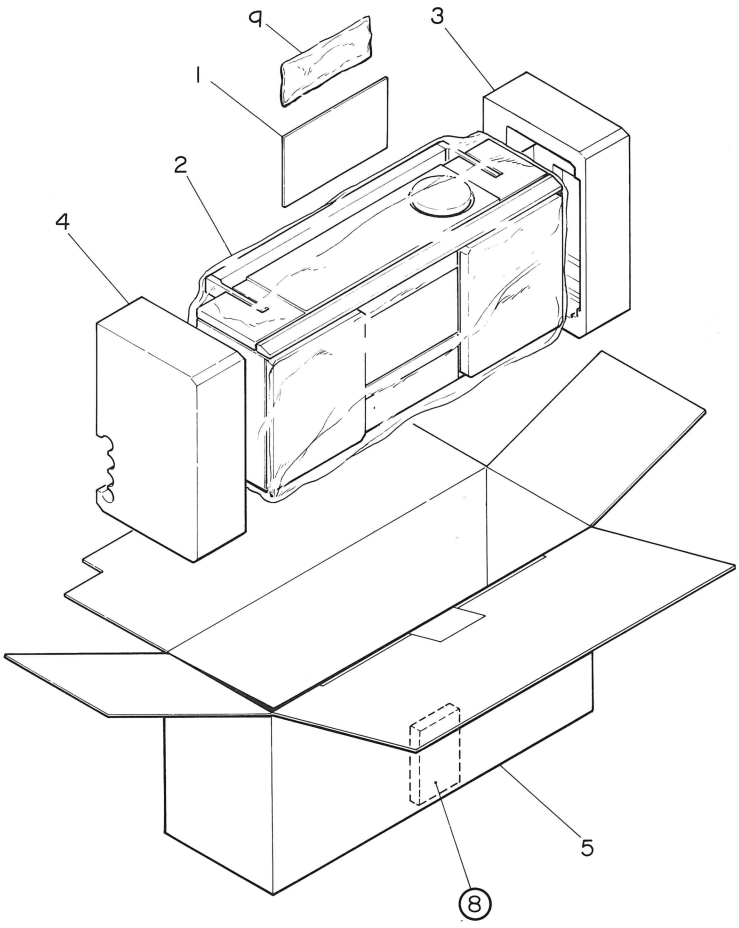


Fig. 50

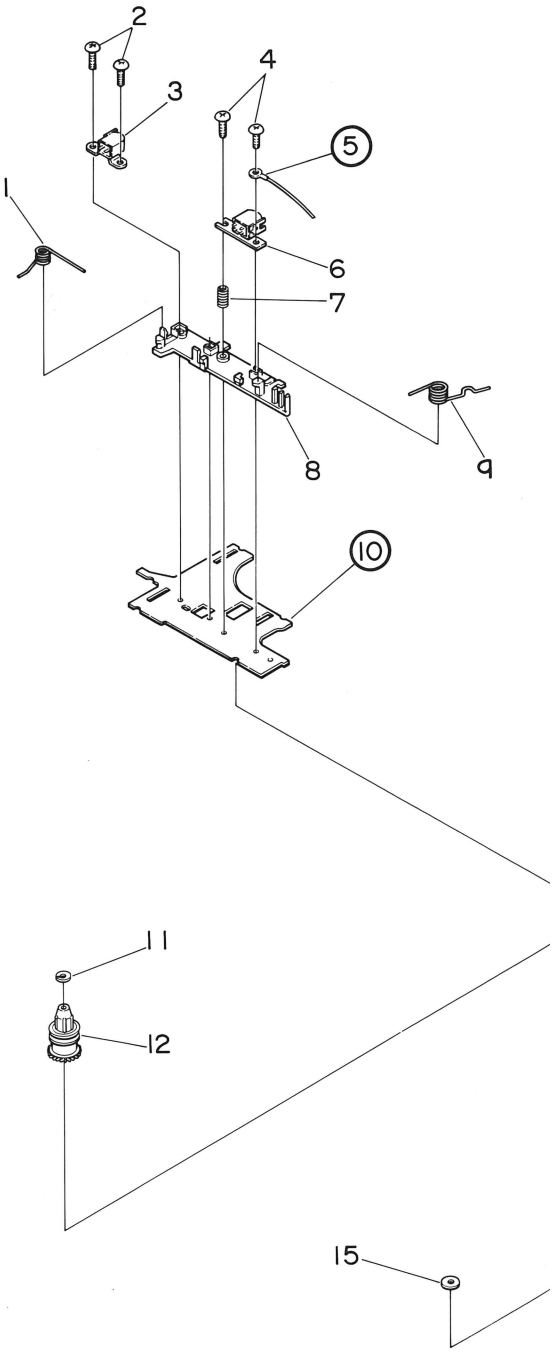
• Parts List

Mark	No.	Part No.	Description
	1.	HRB-190	Owner's Manual (SK-350/D, DP) (English)
		HRD-177	Owner's Manual (SK-350/D) (Spanish, Arabic)
		HRB-188	Owner's Manual (SK-300/D, DP) (English)
		HRD-176	Owner's Manual (SK-300/D) (Spanish, Arabic)
⚠		HDG-114	AC Cord (SK-350/D, SK-300/D)
	2.	HEG-151	Cover
	3.	HHA-634	Styrofoam
	4.	HHA-633	Styrofoam
	5.	HHA-647	Carton (SK-350/D)
		HHA-651	Carton (SK-350/DP)
		HHA-645	Carton (SK-300/D)
		HHA-649	Carton (SK-300/DP)
	6.	VACANT	
	7.	VACANT	
	8.		Styrofoam
⚠	9.	HDG-117	AC Cord (SK-350/DP, SK-300/DP)

17. CASSETTE MECHANISM EXPLODED VIEW (TOP)

• Parts List

Mark	No.	Part No.	Description
	1.	HBH-356	Spring
	2.	BMZ20P080FMC	Screw (SK-350)
		BMZ20P090FMC	Screw (SK-300)
★	3.	HPB-351	Head (ERASE) (SK-350)
★		CPB-038	Head (ERASE) (SK-300)
	4.	BMZ20P090FMC	Screw
	5.		Connector
★★	6.	HPB-401	Head (REC/PB) (SK-350)
★★		HPB-114	Head (REC/PB) (SK-300)
	7.	HBH-353	Spring
	8.	HNV-502	Base
	9.	HBH-357	Spring
	10.		Head Plate
	11.	HBF-145	Washer
★★	12.	HXA-852	Reel Unit
★★	13.	HXA-854	Ider Assy
	14.	HBH-361	Spring
	15.	HBF-147	Washer
	16.		Chassis Unit
	17.		Lever
	18.	HBH-378	Spring
	19.	HNV-507	Arm
	20.	YE25FUC	Washer
	21.	HXA-857	Roller Unit
	22.	HNV-527	Arm
	23.	HBH-358	Spring
	24.	BRZ26P060FMC	Screw
	25.	HAW-135	Counter
	26.		Plate
★★	27.	HNT-140	Belt (Counter)
★★	28.	HXA-851	Reel Unit
★★	29.	HXM-151	Motor
	30.	HNV-509	Cushion
	31.	HBA-141	Screw



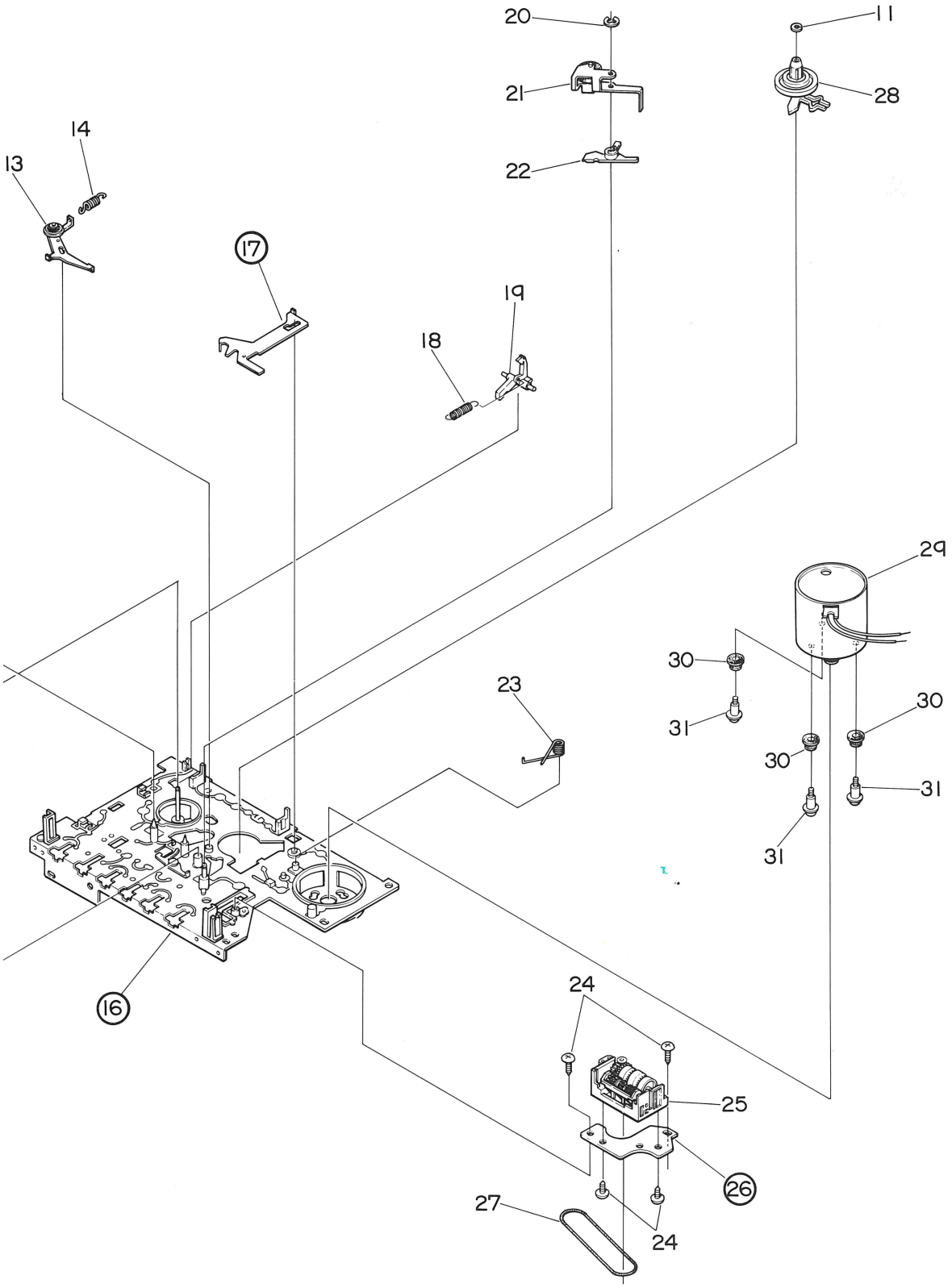
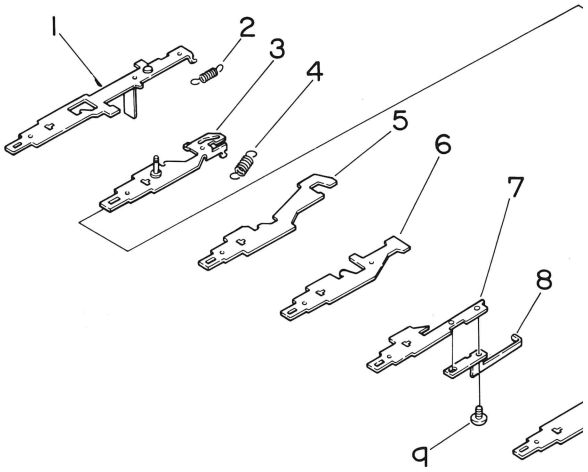


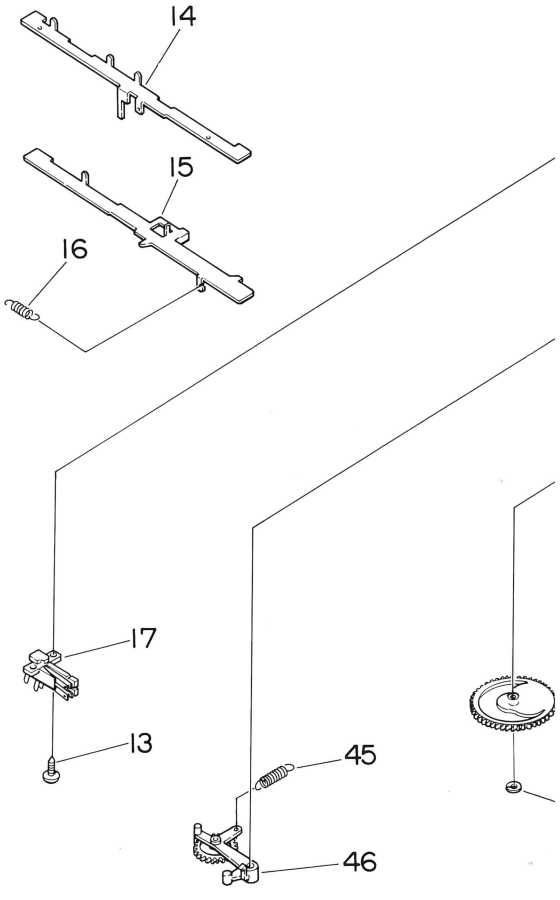
Fig. 51

18. CASSETTE MECHANISM EXPLODED VIEW (BOTTOM)

• Parts List

Mark	No.	Part No.	Description
	1.	HXA-861	Lever Unit
	2.	HBH-367	Spring
	3.	HXA-858	Lever Unit
	4.	HBH-365	Spring
	5.	HNC-595	Lever
	6.	HNC-594	Lever
	7.	HNC-596	Lever
	8.	HBL-165	Spring
	9.	BMZ20P025FMC	Screw
	10.	HXA-859	Lever Unit
	11.	HNC-608	Arm
	12.	HBH-355	Spring
	13.	BRZ26P060FMC	Screw
	14.	HNC-601	Plate
	15.	HNC-602	Plate
	16.	HBH-359	Spring
★★	17.	HSN-133	Switch (FF/REW, Motor Power)
	18.	HNC-604	Arm
	19.	HBH-366	Spring
	20.	HNV-444	Spacer
	21.	HBF-147	Washer
	22.	HNR-155	Flywheel
★★	23.	NNT-137	Belt (Main)
★★	24.	HNT-139	Belt (Sub)
	25.	HXP-105	Solenoid
	26.	HBH-354	Spring
	27.	HNC-605	Arm
	28.		Lag Plate
	29.	BMZ26P040FMC	Screw
	30.		Chassis Unit
	31.	HNV-508	Stopper
	32.	HXA-853	Pulley Unit
	33.	HBH-362	Spring
★★	34.	HNT-138	Belt (Sub)
	35.	HBH-364	Spring
	36.		Plate Unit
	37.	HBL-160	Spring
	38.		Clamper
	39.		Screw
	40.	HNV-503	Pulley
	41.	HBH-360	Spring
	42.	HNV-505	Lever
	43.	HDE-258	Connector
	44.	HDE-257	Connector
	45.	HBH-363	Spring
	46.	HXA-856	Gear Assy
	47.	HNV-504	Gear
	48.	HBF-145	Washer





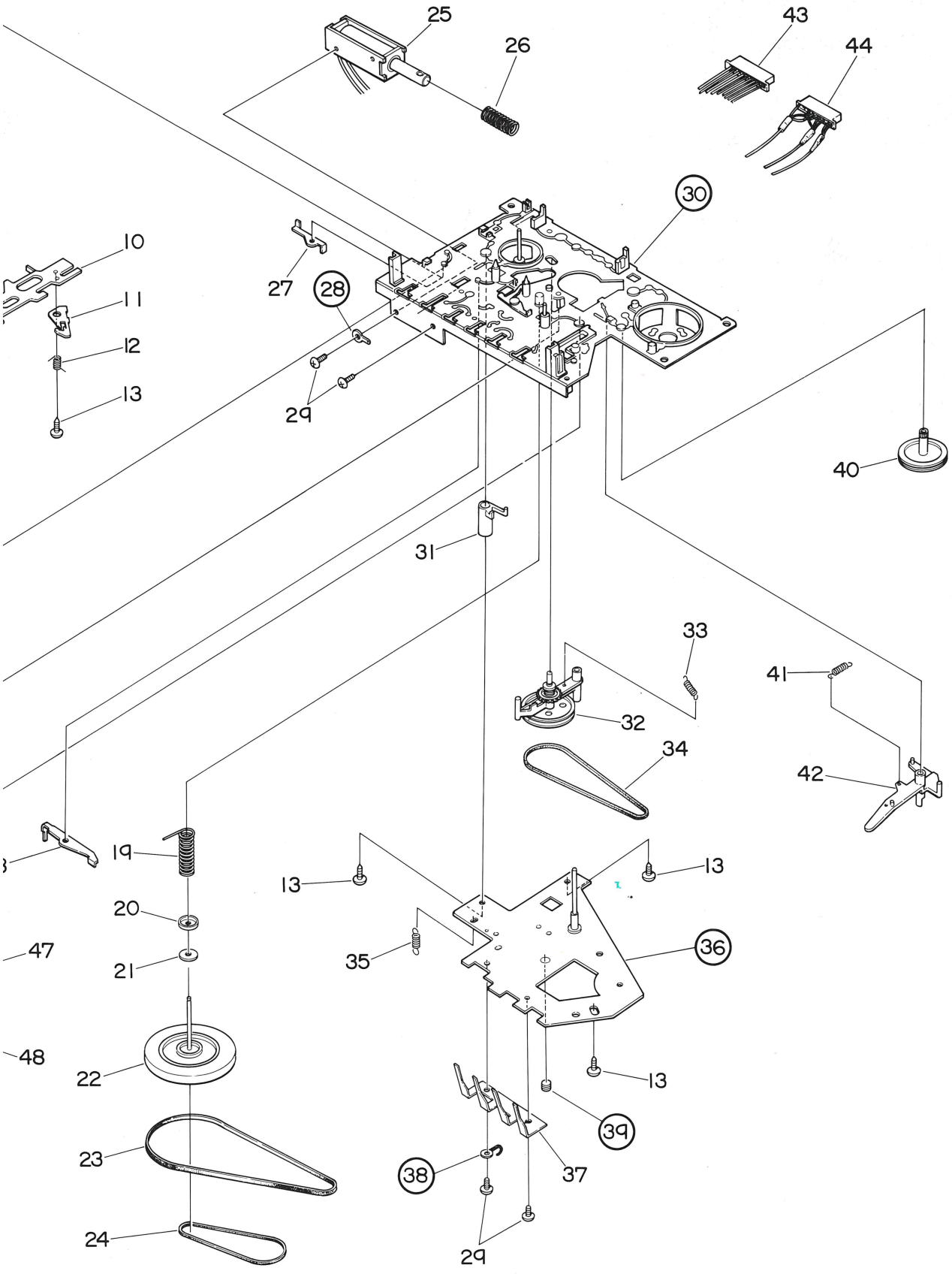

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Fig. 52