AM/FM STEREO RECEIVER

SX-750

SERVICE MANUAL

PIONEER

This Service Manual is applicable only to the KC, KU model.

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1. SPECIFICATIONS

Semiconductors

FET 1
ICs 7
Transistors 42
Diodes 40

Amplifier Section

Continuous Power Output from 20 Hertz to 20,000 Hertz
(Both channels driven) . . 50 watts per channel (8 ohms)
60 watts per channel (4 ohms)

Total Harmonic Distortion
(20 Hertz to 20,000 Hertz, from AUX)
Continuous Rated Power Output . . . No more than 0.1%
25 watts per channel power
output, 8 ohms . . . . . No more than 0.05%
1 watt per channel power
output, 8 ohms . . . . . No more than 0.05%

Intermodulation Distortion
(*50 Hertz: 7,000 Hertz=4:1, from AUX*)
Continuous Rated Power Output . . No more than 0.1%
25 watts per channel power
output, 8 ohms . . . . . No more than 0.05%
1 watt per channel power
output, 8 ohms. . . . . No more than 0.05%

Damping Factor
(20 Hertz to 20,000 Hertz) 30

Input (Sensitivity/Impedance)
PHONO . . . . . 2.5mV/50k ohms
MIC . . . . . 5mV/50k ohms
AUX . . . . . 150mV/50k ohms
TAPE PLAY 1 . . . . . 150mV/50k ohms
TAPE PLAY 2 . . . . . 150mV/50k ohms
TAPE PLAY 2 (DIN connector) . . . 150mV/50k ohms

PHONO Overload Level (T.H.D. 0.1%)
. . . . . 200mV (1kHz)

Output (Level/Impedance)
TAPE REC 1 . . . . . 150mV
TAPE REC 2 . . . . . 150mV
TAPE REC 2 (DIN connector) . . . . . 30mV/80k ohms
SPEAKER . . . . . A, B, A+B
HEADPHONES . . . . . Low Impedance

Frequency Response
PHONO (RIAA equalization)
. . . . . 30 Hertz to 15,000 Hertz ±0.2dB
AUX, TAPE PLAY
. . . . . 10 Hertz to 50,000 Hertz $^{+0}_{-1}$ dB

Tone Control
BASS . . . . . +8dB, −7dB (100 Hz)
TREBLE . . . . . +9dB, −7dB (10 kHz)

Filter
HIGH . . . . . 6 kHz (6dB/oct.)

Loudness Contour (Volume control set
at −40dB position) . . . . +6dB (100 Hz), +3dB (10 kHz)

Hum and Noise
(IHF, short-circuited, A Network, rated power)
PHONO 70dB
AUX, TAPE PLAY 90dB

FM Section

Usable Sensitivity MONO 10.7dBf (1.9μV)
STEREO. 19.0dBf (9.8μV)

50dB Quieting Sensitivity
MONO 17.2dBf (4.0μV)
STEREO 39.2dBf (50μV)

Signal to Noise Ratio at 65dBf
MONO 72dB
STEREO 67dB

Distortion at 65dBf 100Hz . . . MONO 0.15%
STEREO 0.3%
1kHz . . . . MONO 0.15%
STEREO 0.3%
6kHz . . . . MONO 0.4%
STEREO 0.4%

Frequency Response . . . . . 30Hz to 15,000Hz $^{+0.2}_{-2.0}$ dB
Capture Ratio 1.0dB
Alternate Channel Selectivity 80dB
Spurious Response Ratio 90dB
Image Response Ratio 80dB
IF Response Ratio 100dB
AM Suppression Ratio 55dB
Muting Threshold 14dBf (2.8μV)
Stereo Separation . . . . . 40dB (1kHz), 30dB (30Hz ~15kHz)
Subcarrier Product Ratio 62dB
SCA Rejection Ratio 62dB
Antenna Input . . . . . .300 ohms balanced
75 ohms unbalanced

AM Section

Sensitivity (IHF, Ferrite antenna) 300μV/m
(IHF, Ext. antenna) 15μV
Selectivity 35dB
Signal to Noise Ratio 50dB
Image Rejection 40dB
IF Rejection 65dB
Antenna . . . . . Built-in Ferrite Loopstick Antenna

Miscellaneous

Power Requirements 120V, 60Hz
Power Consumption . . . . . 160W (UL), 350W (max.)
Dimensions . . . . . 480(W) x 149(H) x 371(D)mm
18-7/8 (W) x 5-7/8(H) x 14-5/8(D)in.
Weight without package . . . . . 13.7kg(30 lb 2 oz)
with package . . . . . 15.3kg (33 lb 11 oz)

Furnished Parts

FM T-type Antenna 1
Operating Instructions 1

NOTE:
Specifications and design subject to possible modification without notice, due to improvements.

2. FRONT PANEL FACILITIES

POWER INDICATOR LAMP

Lights when SPEAKERS switch is moved to any position from POWER OFF, and AC power is supplied to the receiver.

SIGNAL METER

For FM and AM reception, turn TUNING knob until needle of the SIGNAL meter is deflected a maximum to the right.

STEREO INDICATOR LAMP

Lights when FM stereo broadcast is being received.

SPEAKERS SWITCH

Functions both as power switch and speaker selection switch.

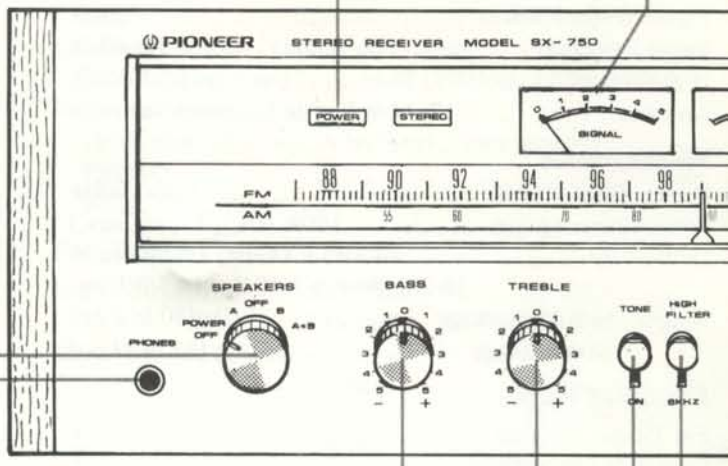
POWER OFF: AC power is off.

A: Sound will be heard from speakers connected to A speaker terminals.

OFF: No sound will be heard from speaker systems. This position should be used when listening with headphones.

B: Sound will be heard from speakers connected to B speaker terminals.

A + B: Sound will be heard from speakers connected to A terminals and from speakers connected to B terminals.



PHONES OUTPUT

Insert headphone plug into this jack when headphone listening is desired. In this case, SPEAKERS switch should be in OFF position.

BASS, TREBLE CONTROLS

For tone adjustment when TONE switch is in ON position. When knobs are turned clockwise from "0" position, response in bass or treble range, respectively, is boosted. Turning counterclockwise attenuates response.

TONE SWITCH

Controls ON-OFF operation of tone control circuit. In the ON position, tone control by means of BASS and TREBLE knobs may be accomplished. In the OFF position, the tone control circuit is bypassed and frequency response in high and low ranges is flat.

HIGH FILTER SWITCH

For high frequency noise due to scratches on the record, place switch in 6kHz position. This will provide 6dB/octave attenuation at frequencies above 6kHz. For normal operation switch should be in OFF (upper) position.

BALANCE CONTROL

For adjustment of relative output levels of L and R channels of speaker systems or headphones. Clockwise rotation from center position increases volume of R over L channel. Counterclockwise rotation increases volume of L channel over R.

VOLUME CONTROL

For adjustment of speaker or headphone output level. Level increases with clockwise rotation of knob.

LOUDNESS SWITCH

For listening at low volume level, placing this switch in the ON position will boost response in low and high frequency ranges.

The response of the human ear to low and high sound volumes is different. At low volume levels, the ear is relatively insensitive to sounds at either extreme of the frequency scale. By means of the LOUDNESS switch, these sounds are given additional amplification.

FM TUNING METER

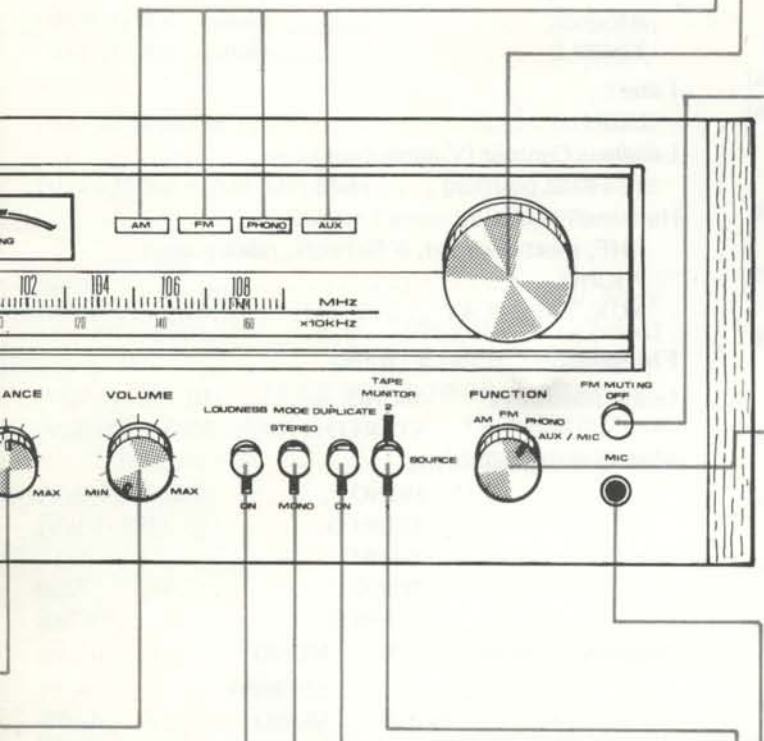
With the needle of the SIGNAL meter deflected to the right, fine-tune FM broadcast by centering needle of TUNING meter.

PROGRAM SOURCE INDICATORS

Indicate program source selected by means of FUNCTION switch.

TUNING KNOB

For selection of FM or AM stations.



FM MUTING BUTTON

For selection of FM broadcasts, button should be in ON (released) position.

When button is in ON position, unpleasant interstation noise is suppressed. When signal strength is poor, it may not be possible to bring in the desired station if MUTING is ON. In this case, press button to place it in the OFF position.

FUNCTION SELECTOR

For selection of program source.

AM:	AM broadcasts
FM:	FM broadcasts
PHONO:	Playing records
AUX/MIC:	For use of component connected at AUX terminals of receiver, or microphones which may be plugged into MIC jack.

NOTE:
AUX and MIC program sources cannot be used simultaneously. When using AUX hi-fi component, microphone should be disconnected.

MODE SWITCH

For selection of stereophonic or monophonic mode of playback. In normal operation, switch should be in STEREO position. In the MONO position, R and L channel signals will be mixed, and sounds coming from speakers of both channels will be the same.

NOTE:
Recording stereophonically with the MODE switch in the MONO position may cause channel separation to deteriorate.

MIC JACK

Accepts standard 6mmϕ plug. Microphone input signal enters both R and L channels.

TAPE MONITOR SWITCH

1:	For program sources other than tape deck (playback). (REC or PLAY).
SOURCE:	For program sources other than tape deck (playback).
2:	For monitoring of playback or record mode of tape deck connected to TAPE 2 terminals (REC or PLAY).

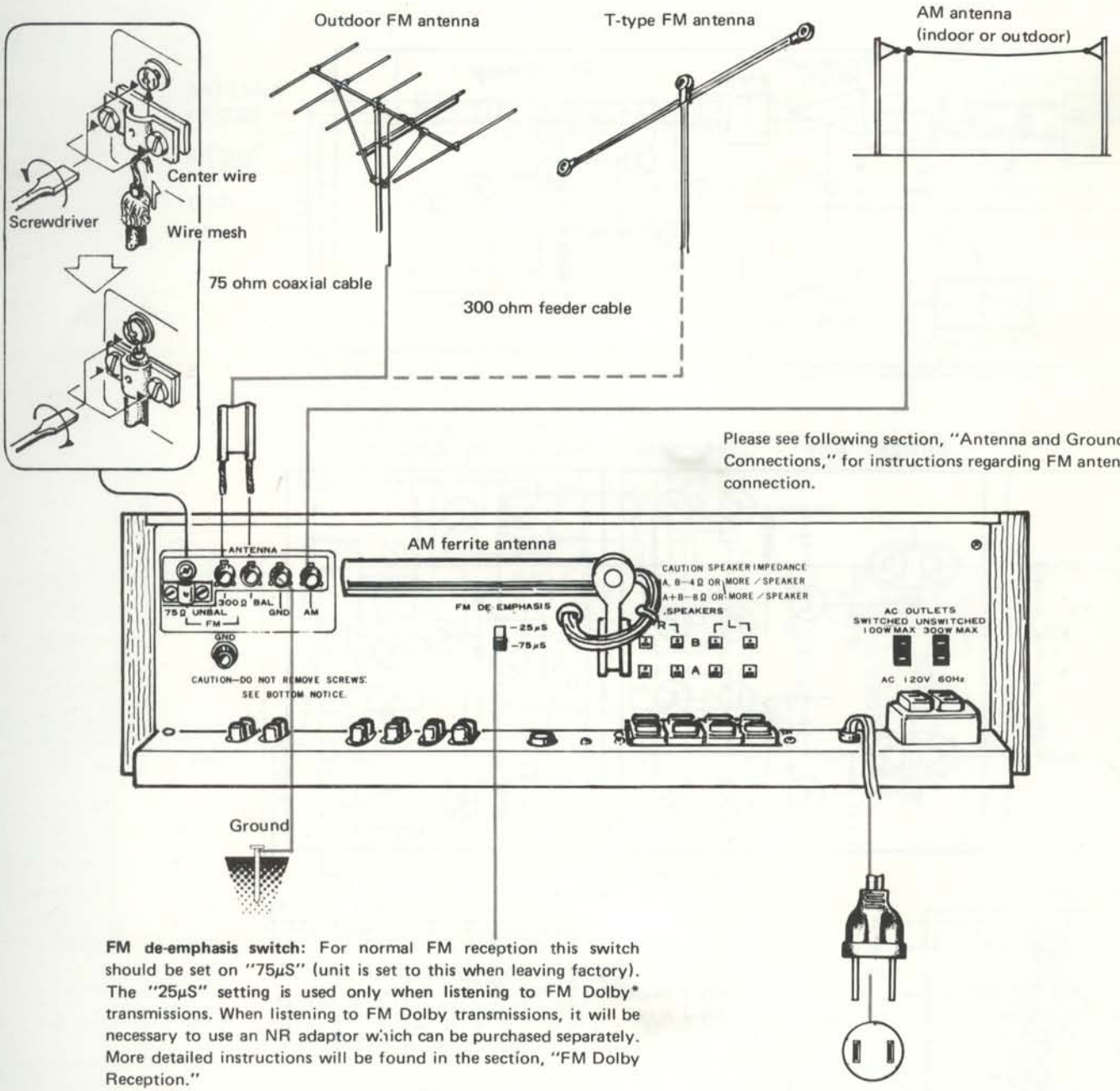
NOTE:
When not monitoring record or playback mode of a tape deck, switch should be in SOURCE position. In position 1 or 2, the program source indicated by the FUNCTION selector will not be heard through speaker systems or headphones.

DUPLICATE SWITCH

With switch in ON position, signals recorded on one of two tape decks connected to the receiver may be recorded onto the other, with or without editing. For normal operation, this switch must be in OFF (upper) position.

3. CONNECTION DIAGRAM

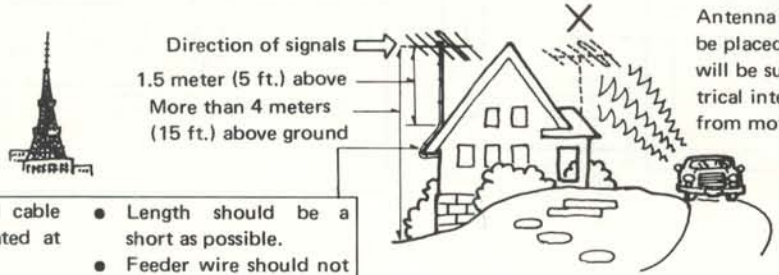
REAR VIEW



FM de-emphasis switch: For normal FM reception this switch should be set on "75μS" (unit is set to this when leaving factory). The "25μS" setting is used only when listening to FM Dolby* transmissions. When listening to FM Dolby transmissions, it will be necessary to use an NR adaptor which can be purchased separately. More detailed instructions will be found in the section, "FM Dolby Reception."

ANTENNA PLACEMENT

Make note of the following points when choosing a location for the FM antenna.



- Feeder wire and cable should be insulated at mounting points.
- Length should be a short as possible.
- Feeder wire should not be coiled.

Fig. 1

TOP VIEW

Accessory AC outlets:

Switched ..... Power to this outlet is controlled by the SX-750 power switch. When power to the receiver is "On," this outlet will provide AC current (**100 watts maximum).**

Unswitched ..... Power to this outlet is not controlled by the SX-750 power switch. As long as the power cord is plugged into a live outlet, this outlet will supply AC current (maximum 300 watts).

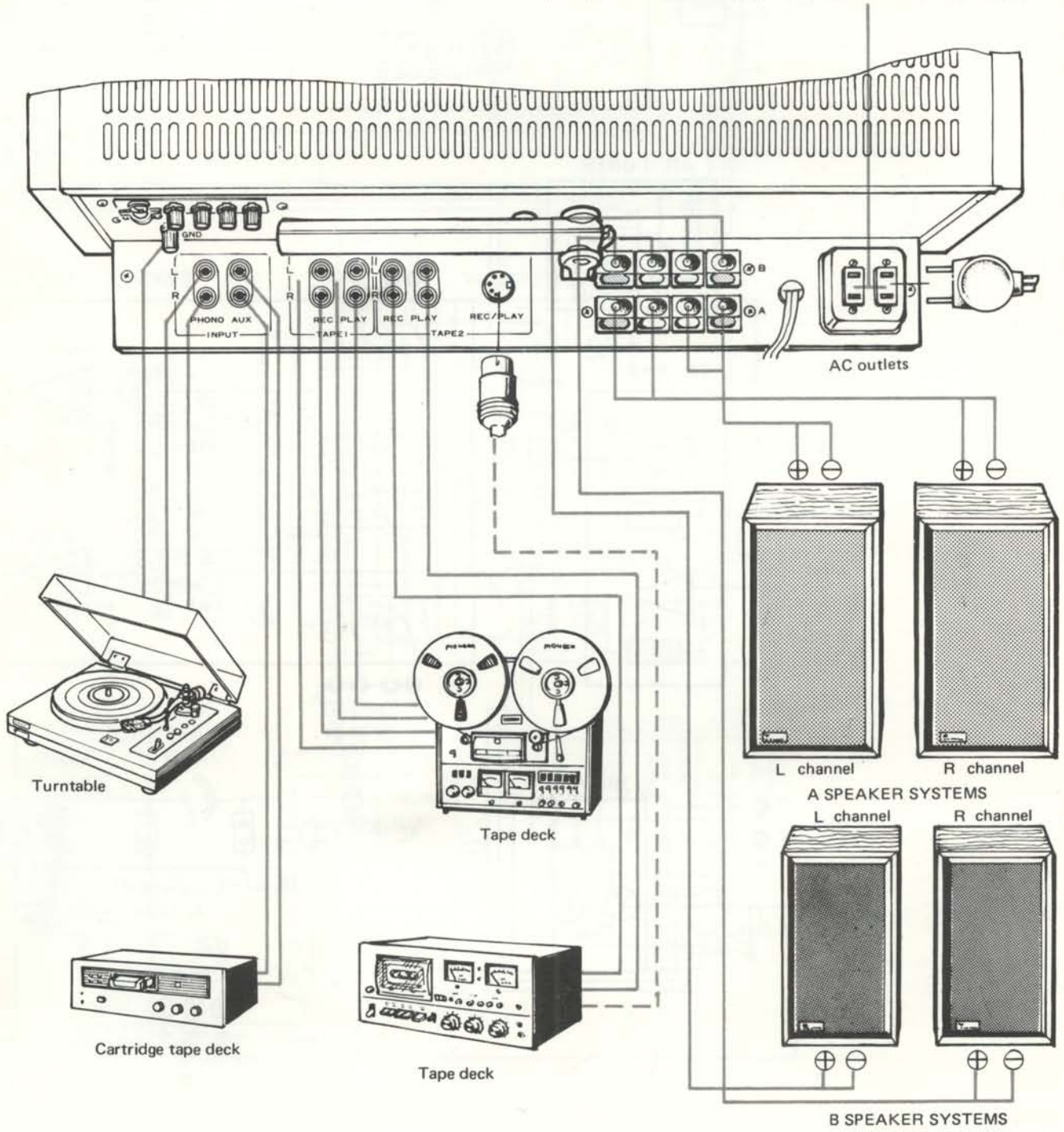
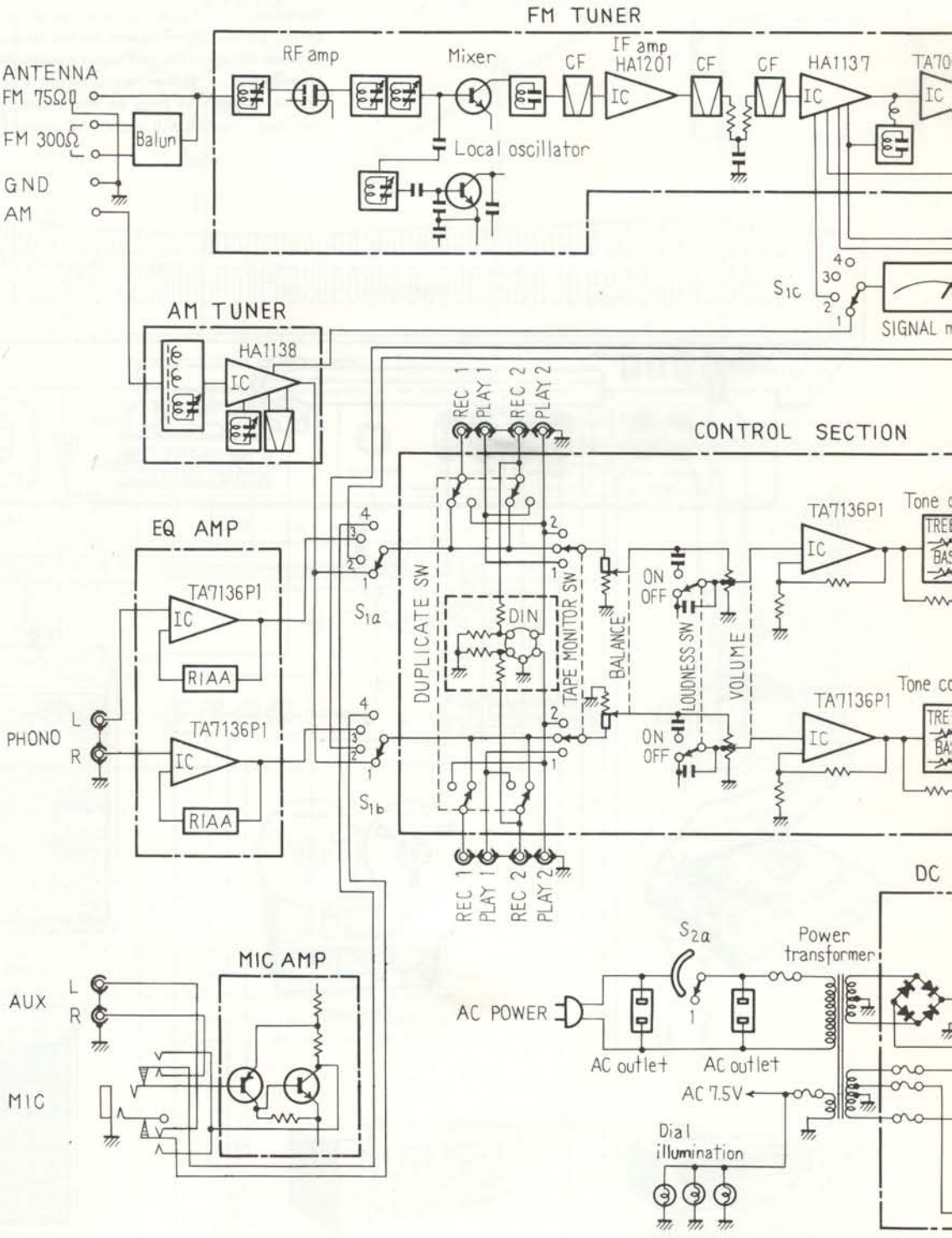
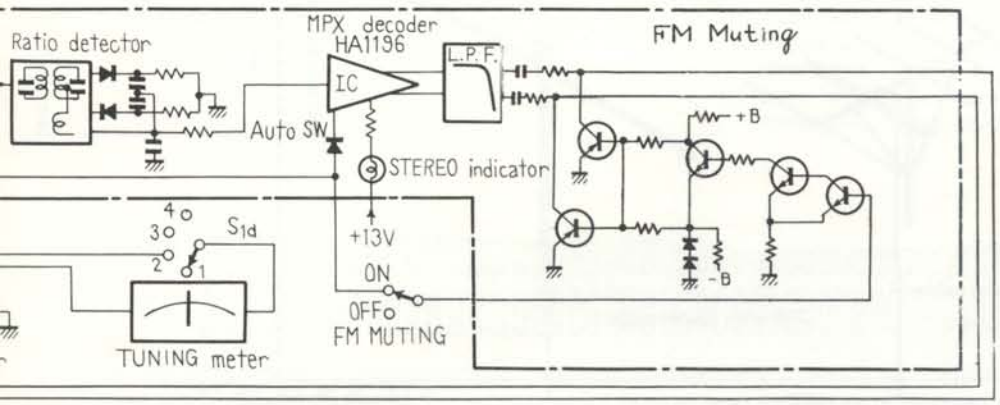
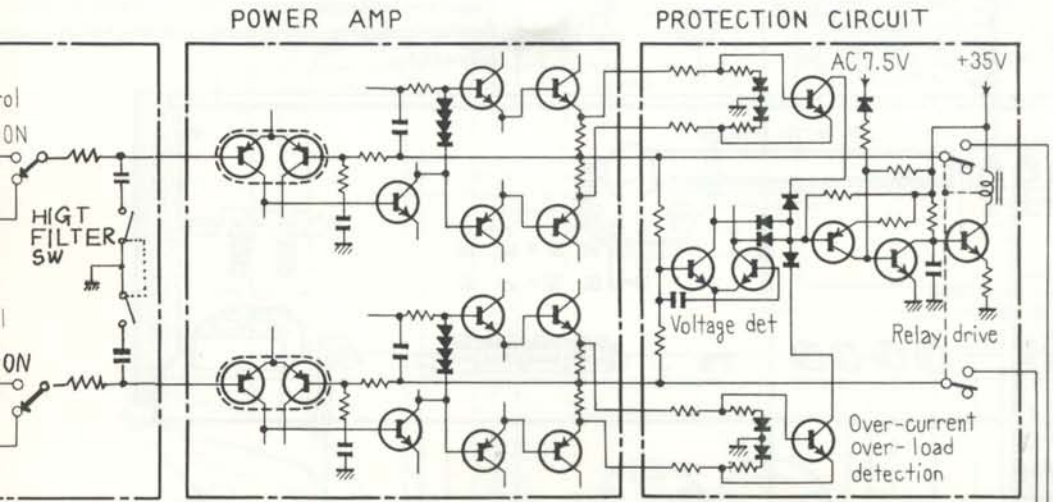


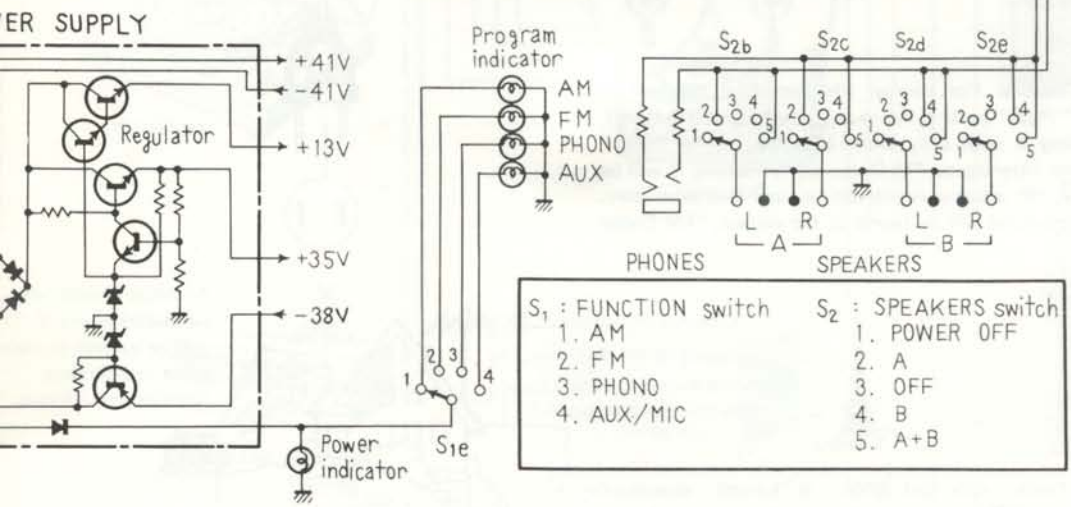
Fig. 2

4. BLOCK DIAGRAM









S_1 : FUNCTION switch
1. AM
2. FM
3. PHONO
4. AUX/MIC

S_2 : SPEAKERS switch
1. POWER OFF
2. A
3. OFF
4. B
5. A+B

5. CIRCUIT DESCRIPTIONS

5.1 AM TUNER

Composed of single IC (HA1138) combining a 1 stage RF amplifier and a 2 stage IF amplifier (Fig. 1).

5.2 FM TUNER

Front End

The outstanding performance, exemplified by the remarkable 80dB imaging and 90dB spurious rejection, originates in the dual-gate MOS FET RF amplifier and 4-gang variable capacitor tuning circuit. A modified Clapp circuit is employed in the local oscillator, leading to high frequency stability. Since the output is taken from the oscillator tuning circuit, higher harmonics in the oscillator signal and spurious response become reduced.

IF Amplifier and Detector

Comprise 2 dual element ceramic filters, 1 transistor, and 1 IC (integrated circuit). The IC (HA1137) circuit is illustrated in Fig. 2.

FM IF Amplifier and Detector Circuit

Three dual element ceramic filters, an IC (HA1201) containing a differential amplifier, and an IC (HA1137) containing a 3-stage limiter amplifier compose the FM IF amplifier. Fig. 2 shows the HA1137 block diagram (see circuit diagram on page 65).

In addition to limiter amplifier. the HA1137 IC includes detector, meter drive circuits. The detector circuit in the HA1137 is not employed in this set however a separate ratio detector circuit is employed instead, resulting in improved S.N ratio.

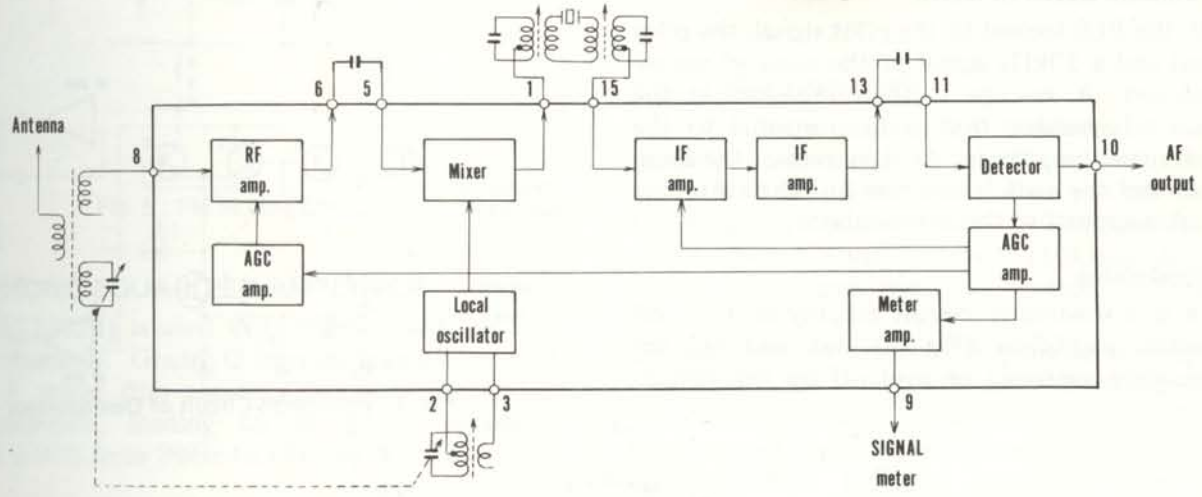


Fig. 1 Block Diagram of HA1138

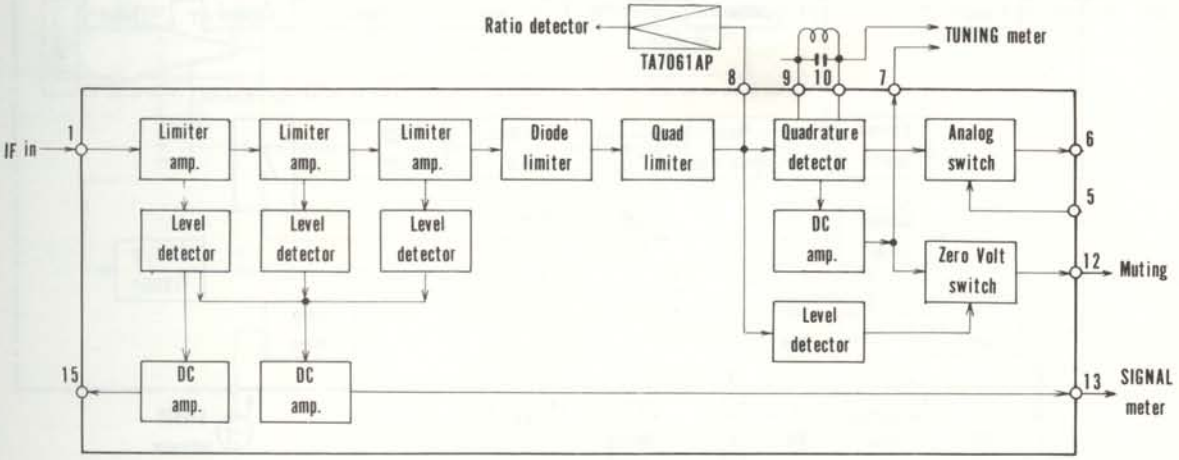


Fig. 2 Block Diagram of HA1137

Multiplex Decoder

Demodulation is performed by switching detection. A single IC (HA1196) composes the circuit, which is divided into 3 sections. Fig. 3 shows the HA1196 block diagram (see circuit diagram on page 65).

1. Switching signal generator

A PPL (phase locked loop) system is employed. 76kHz is generated by a VCO (voltage controlled oscillator: oscillator in which the frequency is varied by a control voltage) and converted into 19kHz by a frequency divider. This signal and the pilot (19kHz) of the received signal are applied to a phase comparator, which converts the phase differences of the two signals into a voltage. The voltage is then fed back to the VCO. The oscillator signal phase becomes locked to the pilot signal by this loop (PLL) and a 38kHz signal synchronised to the pilot signal is obtained and employed as the switching signal.

2. Automatic stereo detector

With the PLL locked to the pilot signal, the pilot signal and a 19kHz signal of the same phase are produced. A voltage is then obtained at the phase comparator that is proportional to the pilot signal amplitude. As it increases, the lamp lights and the switch becomes on. The switching signal is applied to the demodulator.

3. Demodulator

This is a switching circuit employing two differential amplifiers (Fig. 4). Q1 and Q2 are alternately switched on and off by the switching signal. The composite signal is amplified at Q3, switched and demodulated. Q6 and Q3 are loosely coupled at their emitters by R1 — R3. Q6 is driven in reverse phase to Q3. This is switched at Q4 and Q5, and by composing with Q1 and Q2 at the collector, crosstalk becomes cancelled.

Adequate current flow is required to Q3 and Q6 to improve distortion figures at this point. However, if the base bias voltage is raised, the voltage component at the collector becomes reduced and clipping occurs (power supply voltage is limited by IC voltage endurance). For this reason, current from an external source is inserted at Q3 and Q6 collectors to become I_1 and I_2. The same current amounts are obtained as I_3 and I_4 from the emitters. Q3 and Q6 therefore operate with adequate current, and distortion at this stage becomes remarkablly improved. A feedback amplifier amplifies the demodulated output.

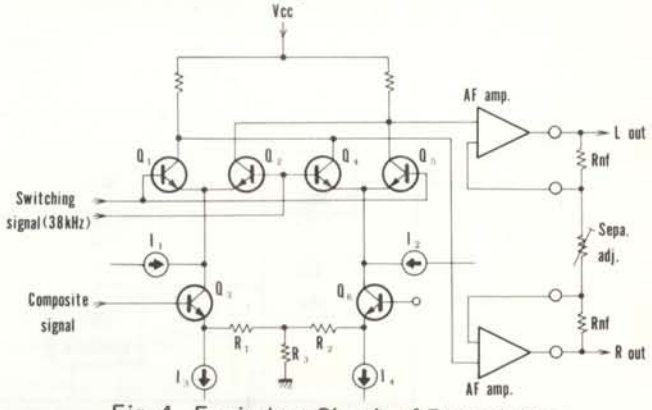


Fig. 4 Equivalent Circuit of Demodulator

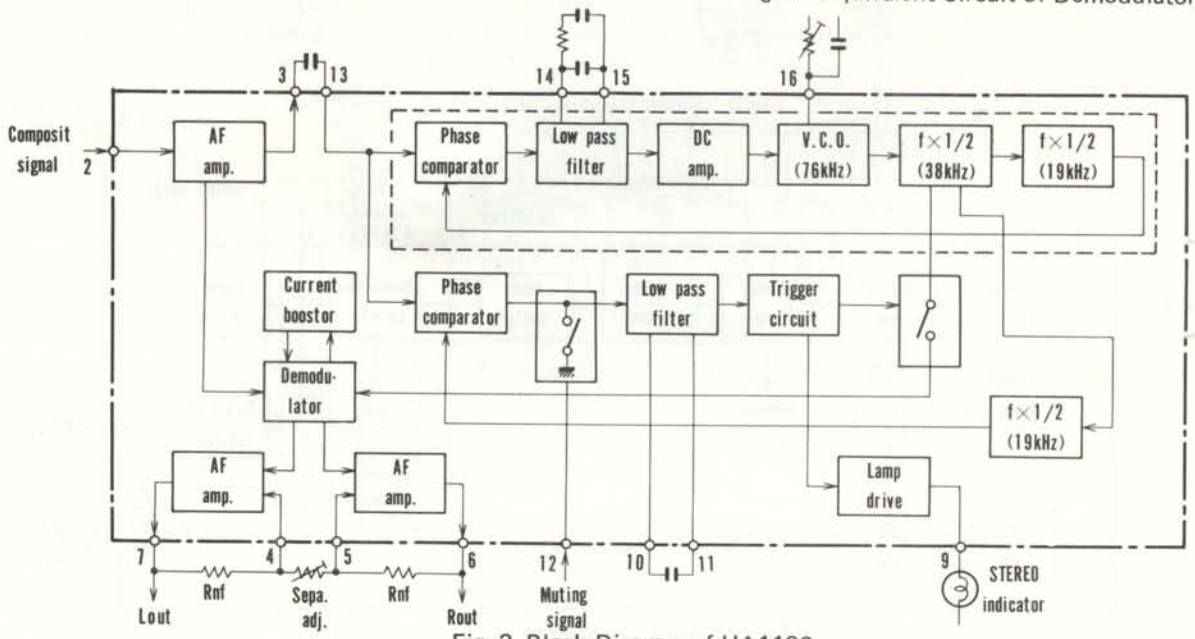


Fig. 3 Block Diagram of HA1196

5.3 FM MUTING CIRCUIT

At time of detuning (more than ± 70kHz) and with an antenna input of less than 10dB (0dB = 1μV), a DC voltage is produced at pin 12 of IC_1 (HA1137). This voltage is employed as the muting trigger.
With the MUTING switch ON, Q1 becomes ON and Q2 OFF in the Q1—Q2 Schmitt circuit as the muting trigger is produced. Q3 becomes ON when Q2 is OFF, and Q4, Q5 and Q6 also become ON. With Q4 & Q5 ON, the FM output becomes grounded, while IC_1 output is grounded by Q6 to apply muting.

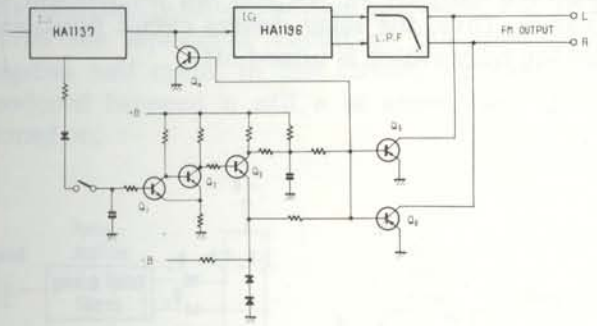


Fig. 5 FM Muting Circuit

5.4 PHONO EQUALIZER AMPLIFIER

IC (TA7136P1) is used with independent left and right channels. Grade G styrole capacitors and grade F metal film resistors comprise the equalizer elements, leading to an RIAA deviation within 0.2dB from 30Hz to 15kHz.

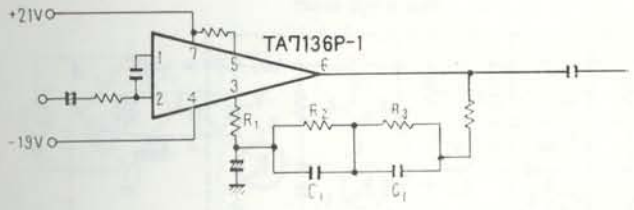


Fig. 6

5.5 MICROPHONE CIRCUIT

A 2 stage transistor amplifier (monophonic) is provided in addition to the phono equalizer amplifier. A selector switch cuts the AUX jack input when a plug is inserted into the MIC jack. The amplified microphone signal is then supplied to both the left and right channels. The FUNCTION switch is set to the AUX position when using a microphone.

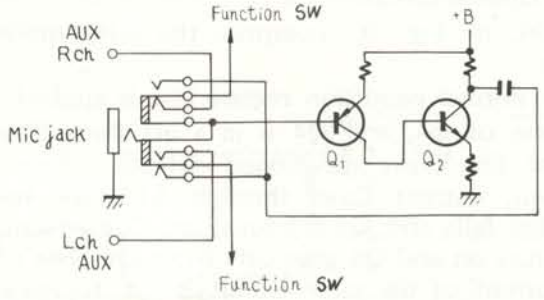


Fig. 7

5.6 TONE CONTROL

CR type tone controls are connected to an extremely low output impedance flat amplifier (IC = TA7136, 31dB gain). Bass can be varied in the range of +8dB ~ −7dB (100Hz) and treble in the range of +9dB ~ −7dB (10kHz). A TONE switch also allows the tone controls to be switch ON/OFF.
R1 and R2 are designed to provide the same loss when the TONE switch is OFF as obtained with the TONE switch ON and the BASS and TREBLE controls at center positions (flat). Frequency response thus becomes flat when the TONE switch is set to OFF.
R3, and C1 form a 6kHz 6dB/octave HIGH CUT filter which is connected following the TONE switch.

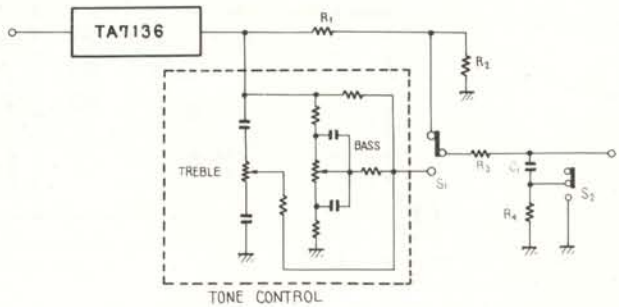


Fig. 8

5.7 PROTECTION CIRCUIT

This protection circuit functions to protect the speakers and the power amplifiers from damage due to short-circuit of the load, etc., and performs a muting operation to cut noise and distortion which occur when switching the power on and off. The circuit is shown in Fig. 15, and consists of a bridge type over-current and overload detector, a differential amplifier, DC voltage detector, and a

of −5.1 volts disappears immediately due to the small time constant of the power circuit. Thus a positive base potential remains, switching Q5 on, which in turn switches off Q6 and hence the relay.

Detection of DC Voltage

This is a differential amplifier consisting of Q2 and Q3, as shown in Fig. 10. The bases of Q2

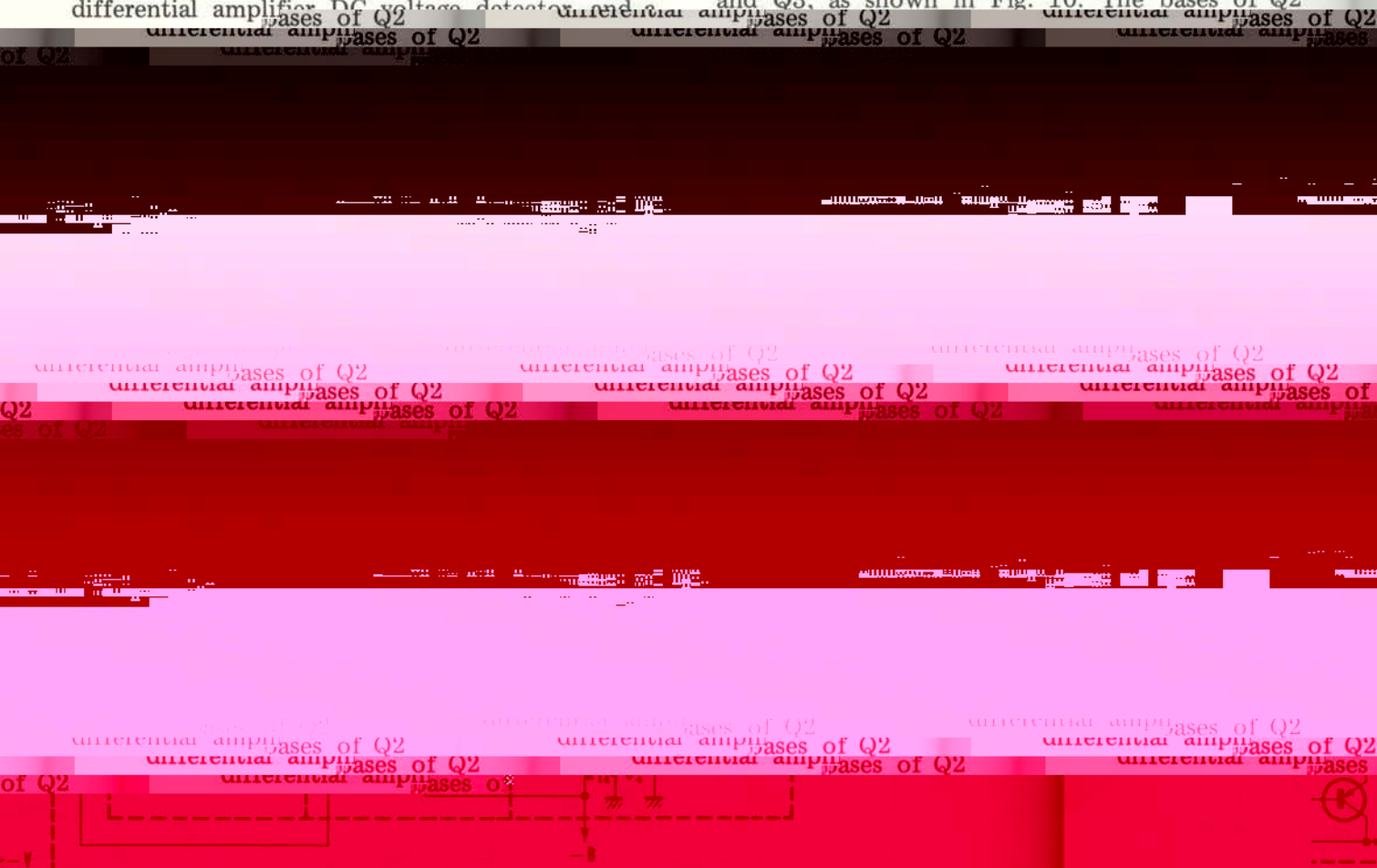


Fig. 9 Protection Circuit

Over-current and Overload Detection

The equivalent circuit of this detector section is shown in Fig. 11, and Fig. 12-a shows the equivalent circuit at the time of a positive half cycle. When this equivalent circuit is overloaded, the balance of the bridge, formed by RE1, R1, R3 and RL, is disturbed, and a potential is produced between b and a in such a direction that Q1 is turned on. When Q1 is turned on, the collector current increases, the relay driving circuit functions and the relay switch of the output circuit is turned off.

After the cause of the overload is removed, the bias of Q1 is reduced and the relay switch turns on to automatically restore normal operation, Fig. 18-b shows the equivalent circuit at the time of a negative half cycle. In this circuit, a potential is produced between b and e as above, and Q1 is turned on.

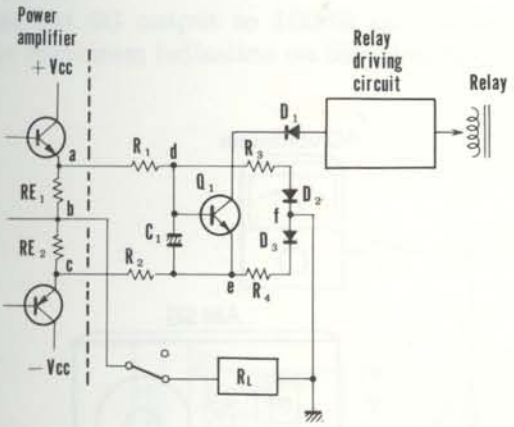


Fig. 11 Over-current and Overload Detection Circuit

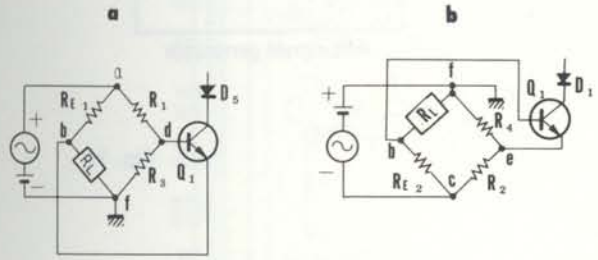


Fig. 12 Equivalent Circuit of

5.8 POWER AMPLIFIER CIRCUIT

Composed of differential first stage, all stages direct coupled pure complementary OCL circuit. Open gain at 1kHz is approximately 80dB and NFB amount is approximately 50dB. R3 and R4 are provided with this circuit in order to obtain adequate stability even with the NFB disconnected. Q1 form a differential amplifier: 100% d.c. feedback is applied from the junction point of the power stage to the base of Q1 so the potential of the junction point is always maintained at the same level.

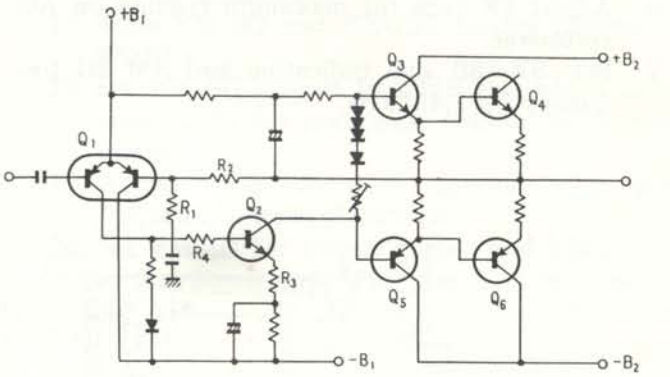


Fig. 13

5.9 POWER SUPPLY

Two windings are provided in the power transformer secondary and each is separately bridge rectified. One of these is sent as ±48 VDC to the voltage stabilizer circuit to become 13V, 33V and −37V regulated voltages for supply to each assembly.

The other secondary voltage is bridge rectified and becomes ±4IV or supply to the power amplifier predriver stage. Extremely low power supply impedance is maintained by a 15,000μF electrolytic capacitor.

6. ADJUSTMENTS

6.1. AM SECTION

1. Set function switch to AM.
2. Connect AM signal generator through 1k-ohm resistor to AM antenna terminal.
3. Set DUPLICATE switch to OFF and connect an AC voltmeter to TAPE 1 REC jacks.
4. Set AM SG for 400Hz 30% modulation 74dB output.
5. Set SX-750 dial indication and AM SG frequency for 600kHz.
6. Adjust T8 core for maximum reading on AC voltmeter.
7. Set SX-750 dial indication and AM SG frequency for 1,400kHz.
8. Adjust TC2 for maximum reading on AC voltmeter.
9. Set AM SG for 30dB output.
10. Set SX-750 dial indication and AM SG frequency for 600kHz.
11. Adjust T8 and bar antenna core for maximum reading on AC voltmeter.
12. Set SX-750 dial indication and AM SG frequency for 1,400kHz.
13. Adjust TC2, TC4 for maximum reading on AC voltmeter.
14. Repeat steps 10~13 to eliminate variations in AC voltmeter readings.

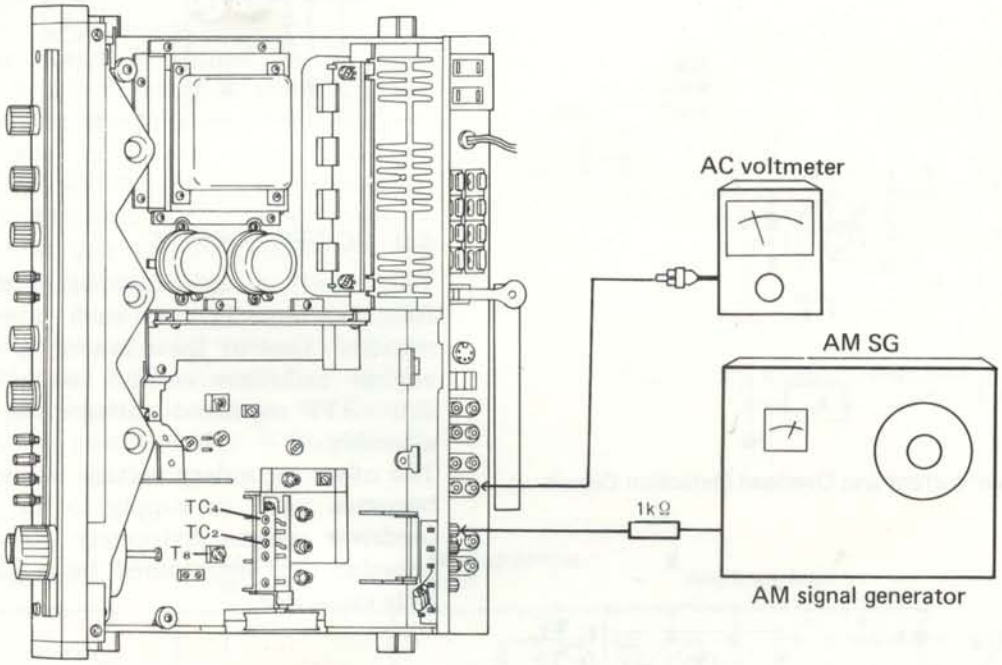


Fig. 14

6.2 FM SECTION

FM Tracking

1. Connect measuring equipment as shown in Fig. 15.
2. Set FM SG to 100% modulation (±75kHz deviation) at 400Hz and 100dB output.
3. On SX-750 front panel, set FM switch to ON, FM muting to OFF and VOLUME control to minimum position.
4. Set TC6 to center of turning range.
5. Tune FM SG and SX-750 to dial readings of 90MHz.
6. Adjust T4 core for maximum indication on Signal meter.
7. Adjust T6 core for center of scale indication on Tuning meter.
8. Set FM SG output to 8~ 10dB and adjust cores of T1, T2, and T3 for maximum indication on Signal meter.
9. Tune FM SG and SX-750 to dial readings of 106MHz.
10. Set FM SG output to 100dB and adjust TC6 for maximum indication on Signal meter.
11. Set FM SG output to 8~10dB and adjust TC1, TC3, TC5 and TC6 for maximum indication on Signal meter.
12. Repeat above adjustment steps 5~11 and adjust for optimum conditions.
13. Tune FM SG and SX-750 to dial readings of 90MHz.
14. Adjust T5 core for maximum indication on Signal meter.
15. Detune SX-750 (to noise only).
16. Adjust T6 for center of scale indication on Tuning meter.
17. Tune FM SG and SX-750 to dial readings of 98MHz.
18. Set FM SG output to 60dB and adjust upper core of T7 for maximum reading on AC voltmeter.
19. Adjust lower core of T7 for minimum audio frequency output distortion.
20. Set FM SG for 100dB output and adjust VR1 so that Signal meter indicates 5 of the scale.

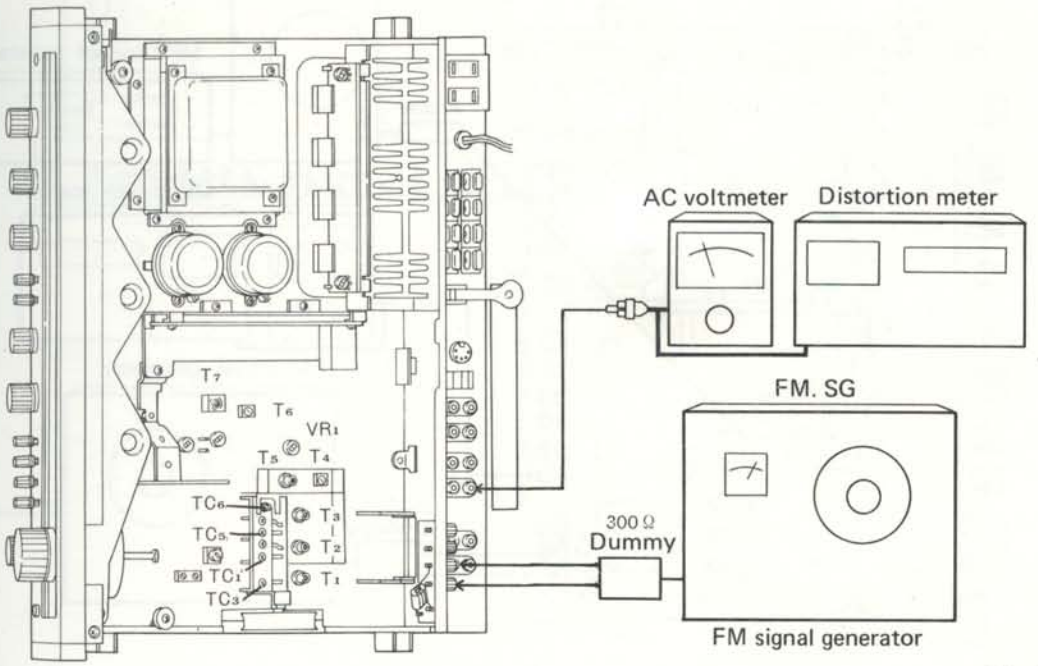


Fig. 15

6.3 MPX Adjustment

1. Connect measuring equipment as shown in Fig. 16.
2. Tune FM SG and SX-750 to dial readings of 98MHz.
3. Set FM SG for 60dB unmodulated output.
4. Connect the output signal (19kHz) of MPX SG PILOT OUT terminal to the horizontal input of an oscilloscope, and pin 20 of the tuner assembly (AWE-073) via a probe to the oscilloscope vertical input.
5. Adjust VR2 so that lissajous pattern displayed on oscilloscope becomes stationary (Fig. 16).
6. Set MPX SG to 67.5kHz deviation at 1kHz for left and right channels, and to 7.5kHz deviation for 19kHz pilot signal.
7. Adjust T5 core for minimum audio frequency distortion. Take care to turn core only within ±180°.
8. Adjust VR3 for minimum signal leakage from R channel to L channel, and from L channel to R channel.

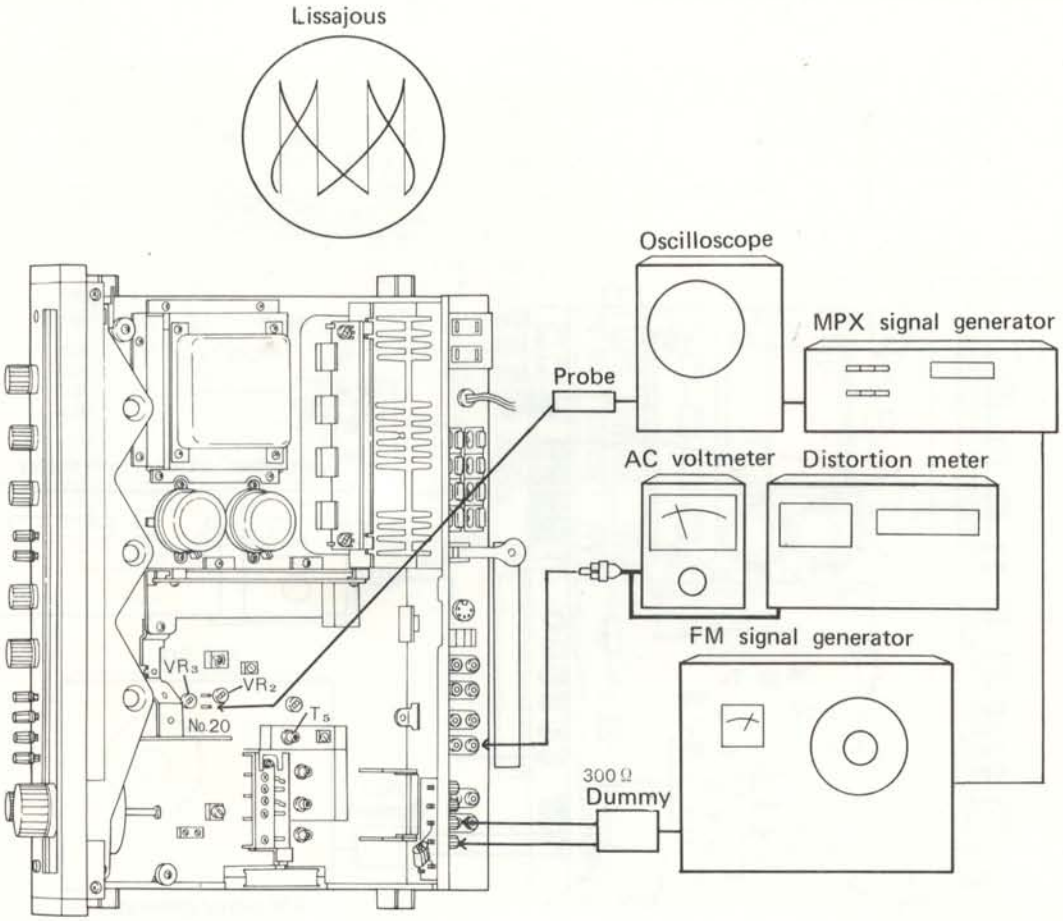


Fig. 16

6.4 POWER AMPLIFIER SECTION

Idle Current Adjustment

1. Connect DC voltmeter as shown in Fig. 17.
2. Do not connect load to speaker terminals. Set VOLUME control to minimum (fully counter-clockwise).
3. Turn VR1 and VR2 (shown in Fig. 17) fully counter-clockwise, then set POWER switch to ON.
4. 1~ 2 minutes after turning on the power, adjust VR3 (L channel) and VR4 (R channel) for 50mV indication on DC voltmeter.
5. 20 minutes after turning on the power, again adjust VR1 and VR2 for 30mV indication on DC voltmeter.

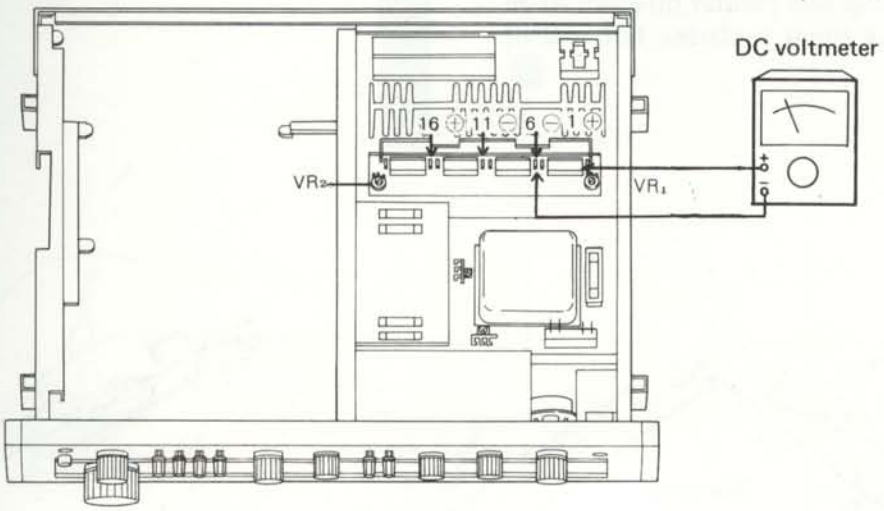


Fig. 17

7. DIAL CORD STRINGING

1. Remove the wooden cover and the front panel.
2. Turn tuning drum fully clockwise (as viewed from X direction in Fig. 18).
3. Tie one end of cord to stud on inner section of tuning drum (more easily performed by loosening setscrew and temporarily removing tuning drum from shaft).
4. Route cord through tuning drum cutout, make a half turn around the drum, then route in sequence to pulley A—dial pointer—pulley B—pulley C.
5. Wind cord 3 turns clockwise (as viewed from rear panel) around tuning shaft, then route to pulley D.
6. Wind cord two turns around tuning drum and tie to spring hook so that tension is applied to the cord.
7. Turn TUNING knob and confirm normal cord motion, then trim off excess cord.
8. With tuning drum at step 1 setting, restrain cord from moving and slip dial pointer on cord. Align it with the starting point (extreme left end of frequency scale).

Dial Pointer Installation Caution

Metal portion of dial pointer is plated. If this section is touched directly by hand or fingerprints and other impurities, it is difficult to remove dirt from aventurine finish. As this is not desirable in terms of both appearance and anticorrosion, take extreme care not to touch the metal section when handling the dial pointer.

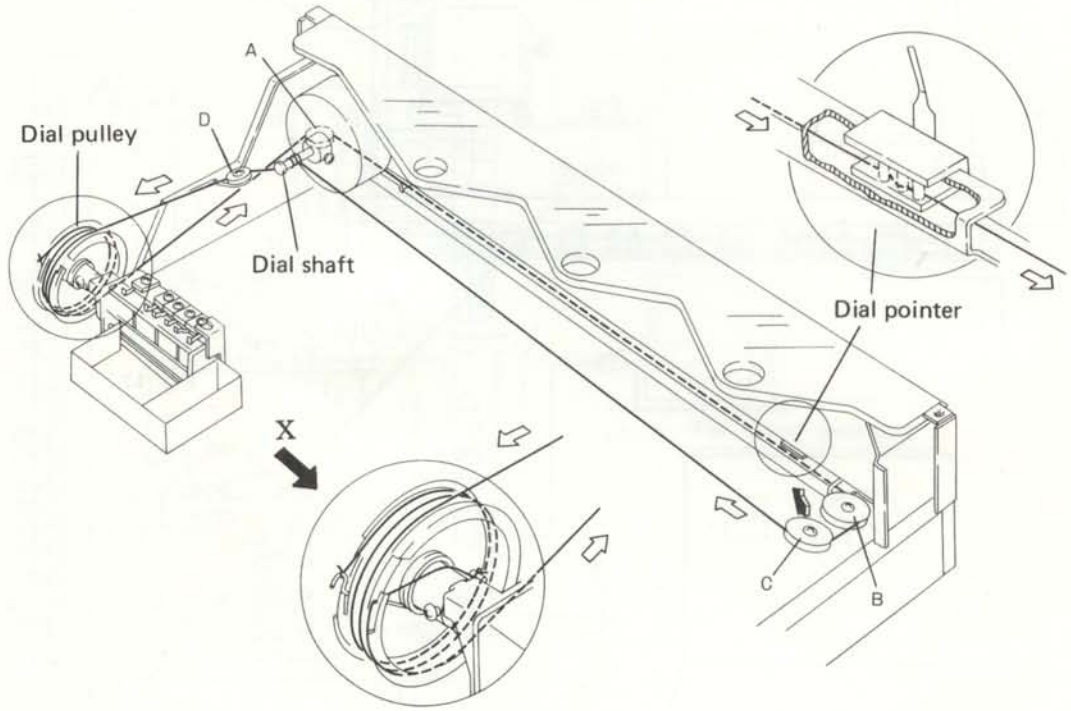
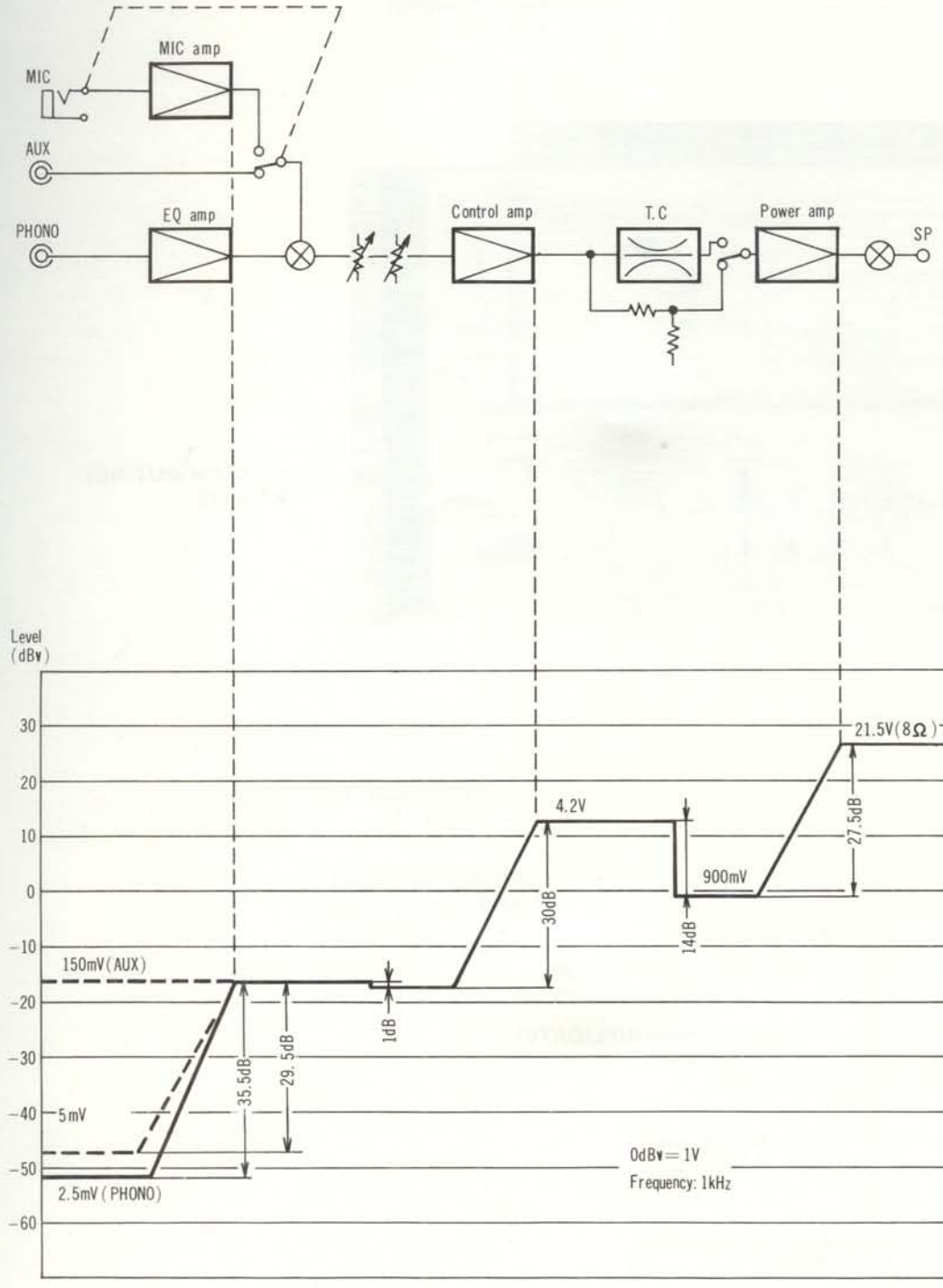


Fig. 18

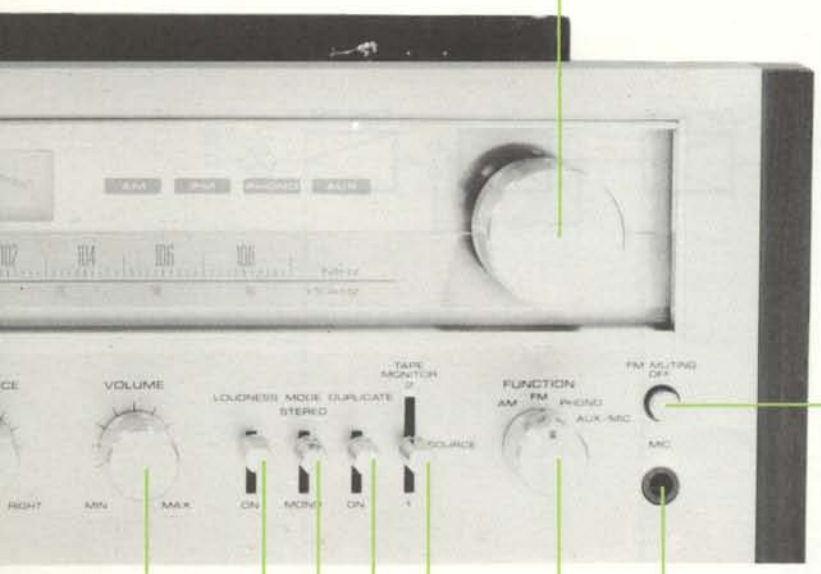
8. LEVEL DIAGRAM



9. DISASSEMBLY

Top Cover (Fig. 19)

Take out 2 screws each at left and right (total 4 screws) to remove.



Knob (TUNING)
AAA-036

Knob (FM MUTING)
AAD-112

Phone jack (MIC)
AKN-013

Knob (FUNCTION)
AAB-100

Knob (TAPE MONITOR)
AAD-013

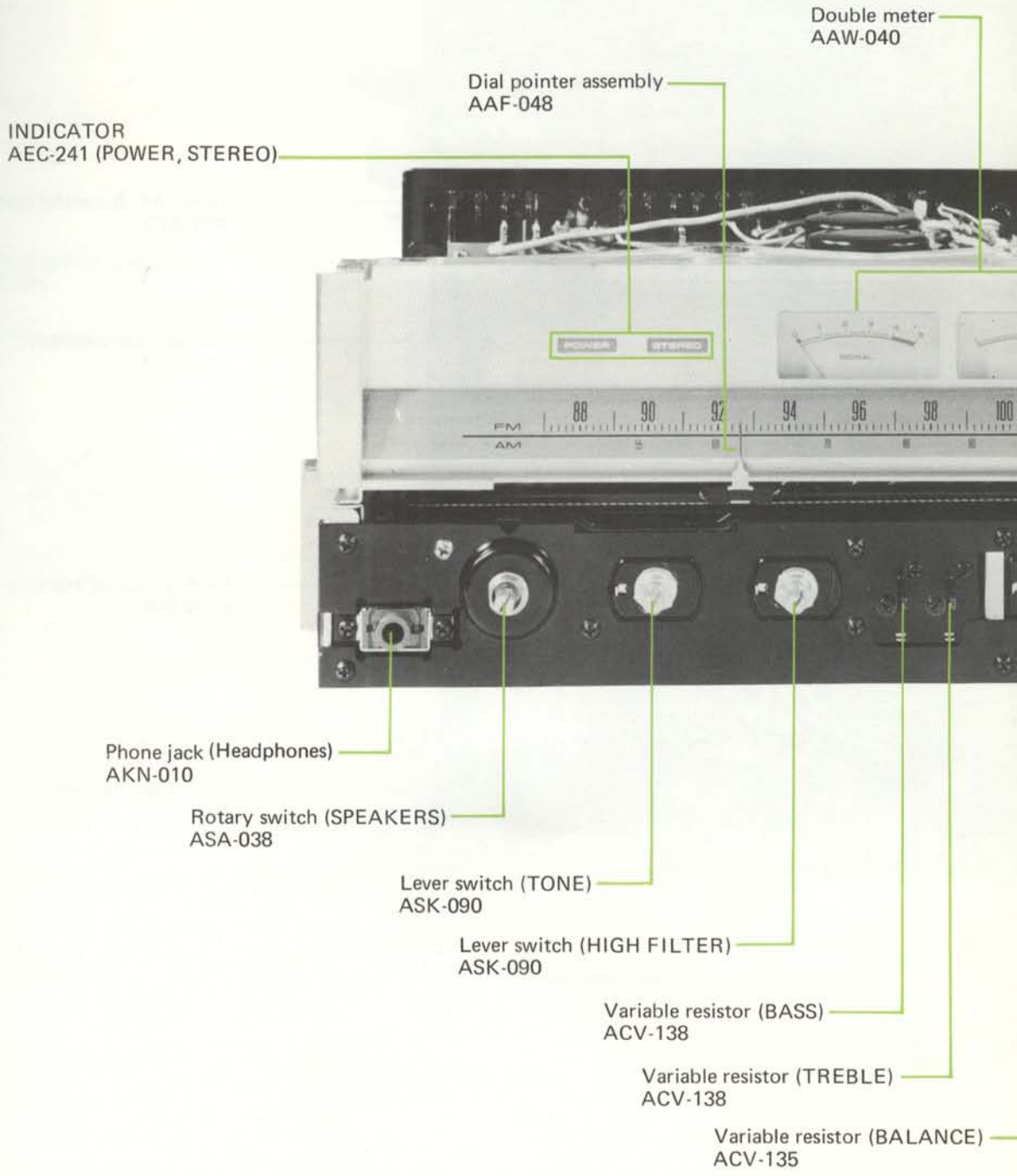
Knob (DUPLICATE)
AAD-013

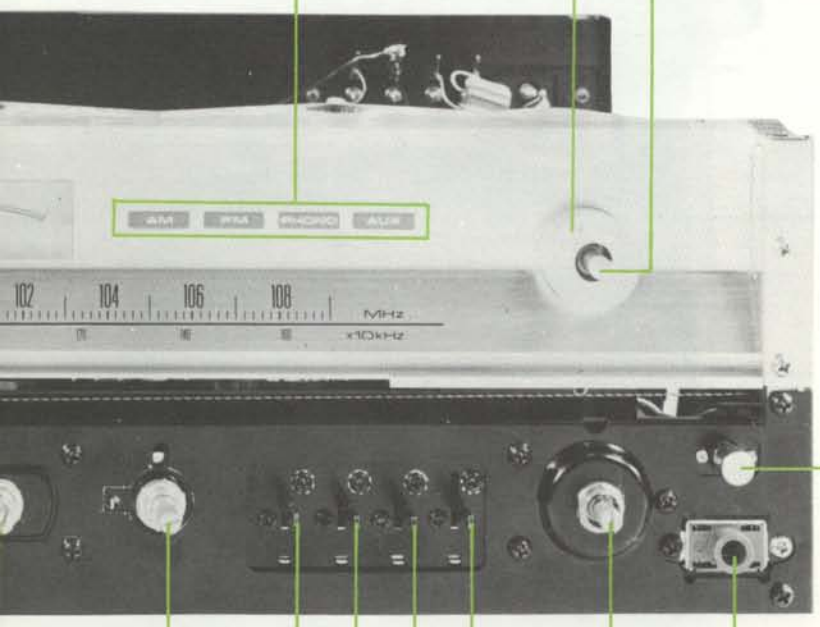
Knob (MODE)
AAD-013

Knob (LOUDNESS)
AAD-013

Knob (VOLUME)
AAB-100

10.2 FRONT PANEL VIEW (with removed Front panel)





INDICATOR (AM, FM, PHONO, AUX)
AEC-255

Shaft cover
AEC-254

Tuning shaft assembly
AXA-124

Knob (FM MUTING)
AAD-112

Phone jack (MIC)
AKN-013

Rotary switch (FUNCTION)
ASD-049

Lever switch (TAPE MONITOR)
ASK-102

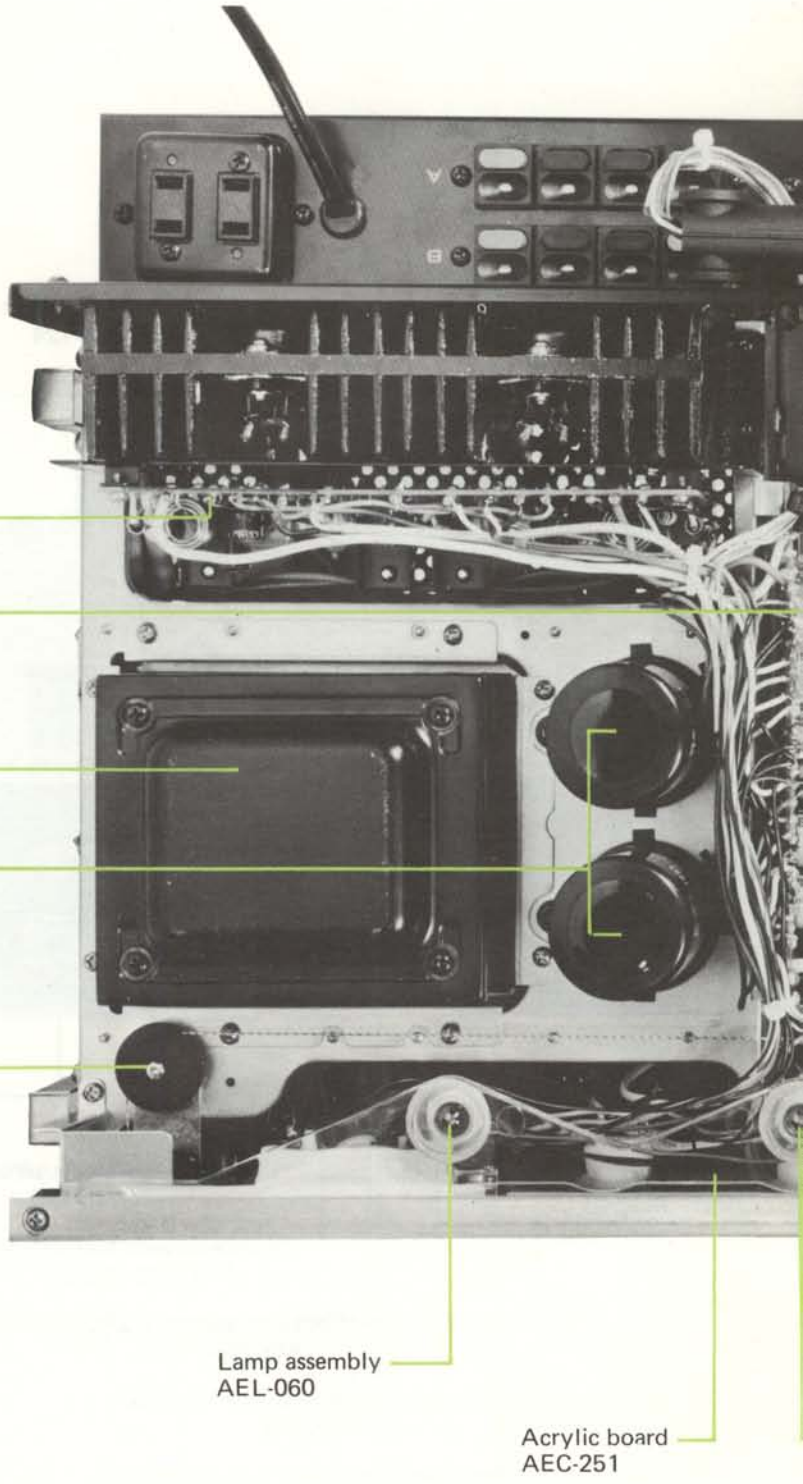
Lever switch (DUPLICATE)
ASK-092

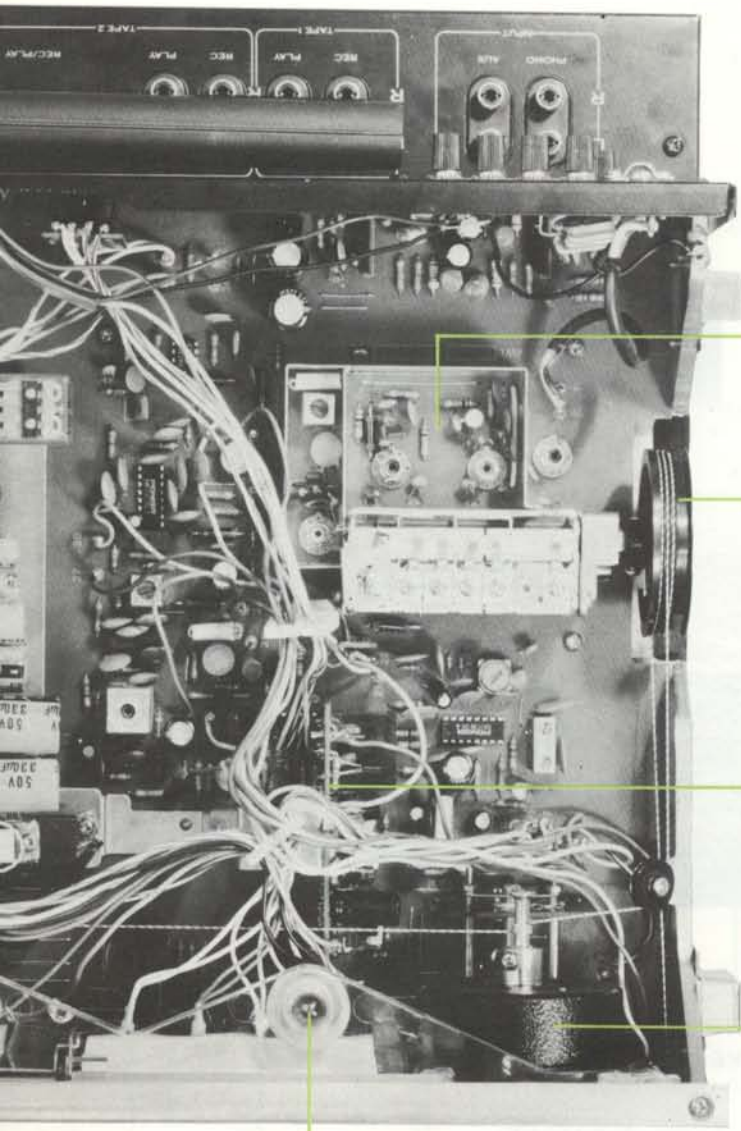
Lever switch (MODE)
ASK-090

Lever switch (LOUDNESS)
ASK-090

Variable resistor (VOLUME)
ACV-179

10.3 TOP VIEW


Power amplifier assembly
AWH-046
Power supply & Protection assembly
AWR-099
Power transfomer
ATT-264 (KU model)
ATT-301 (KC model)
Electrolytic capacitor
ACH-057
Pully
AEC-153
Lamp assembly
AEL-060
Acrylic board
AEC-251



Tuner, AF, & control assembly
AWE-073

Tuning drum assembly
AXA-070

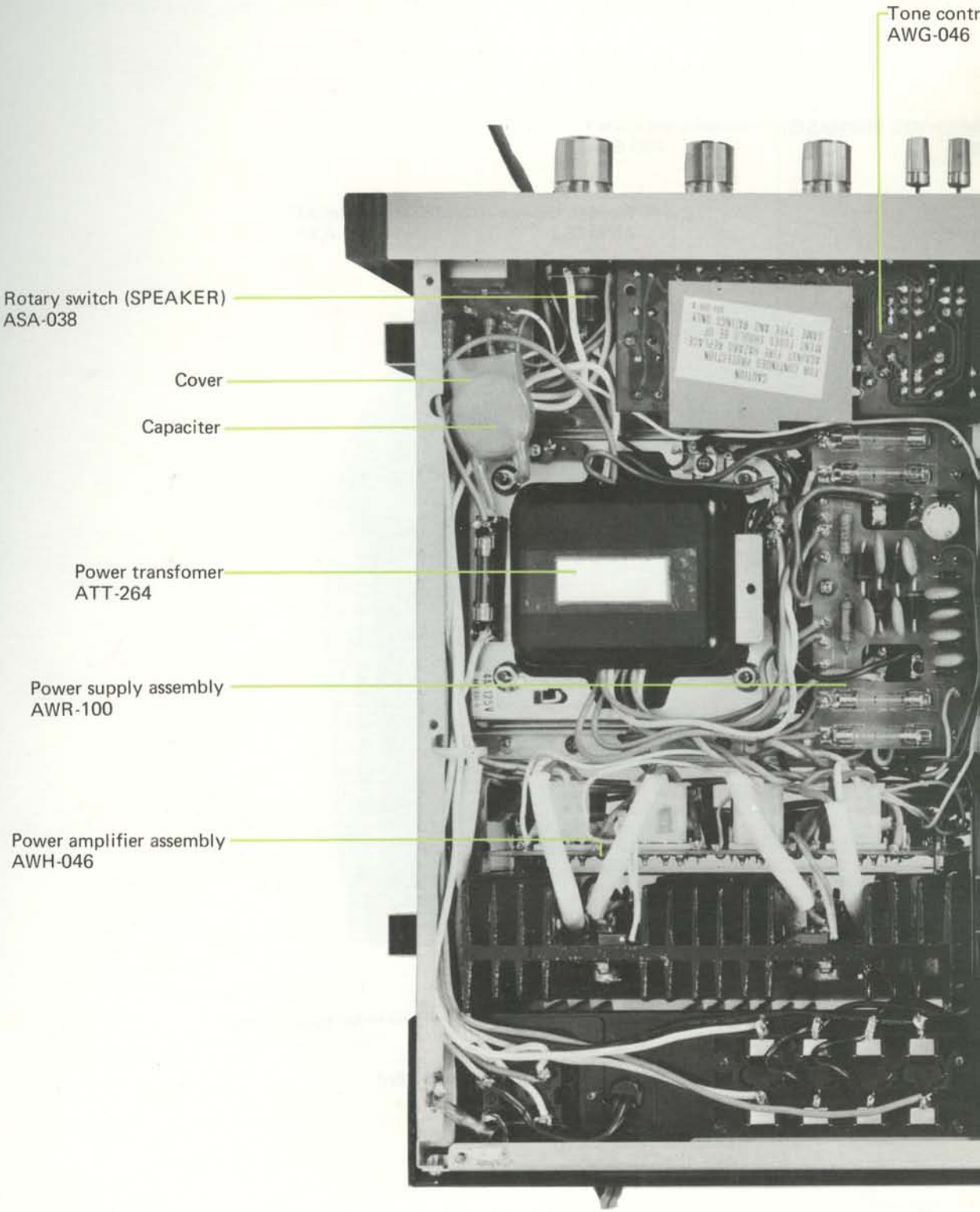
Filter & muting assembly
AWM-094

Tuning shaft assembly
AXA-124

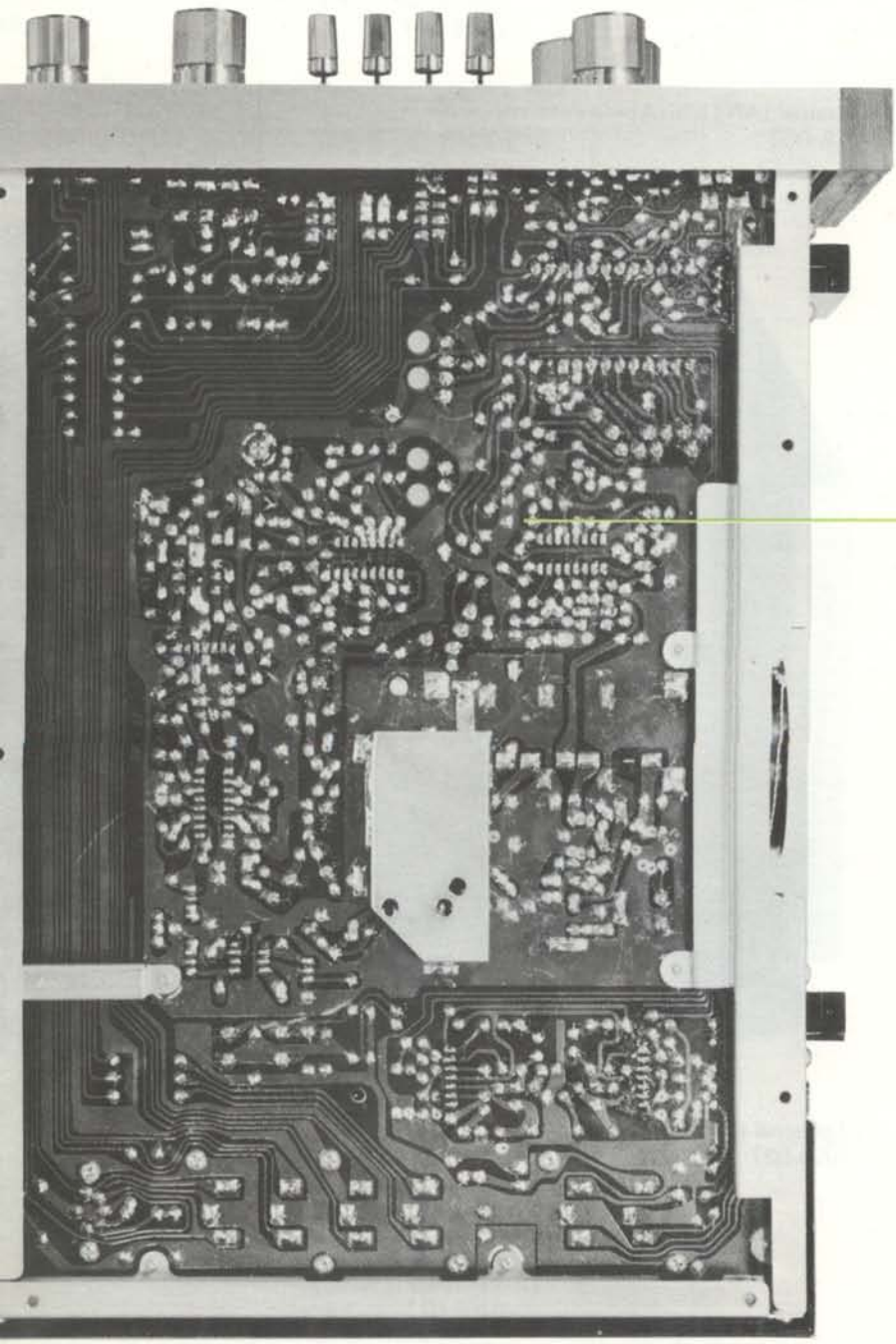
Lamp assembly
AEL-060

Lamp assembly
AEL-060

10.4 BOTTOM

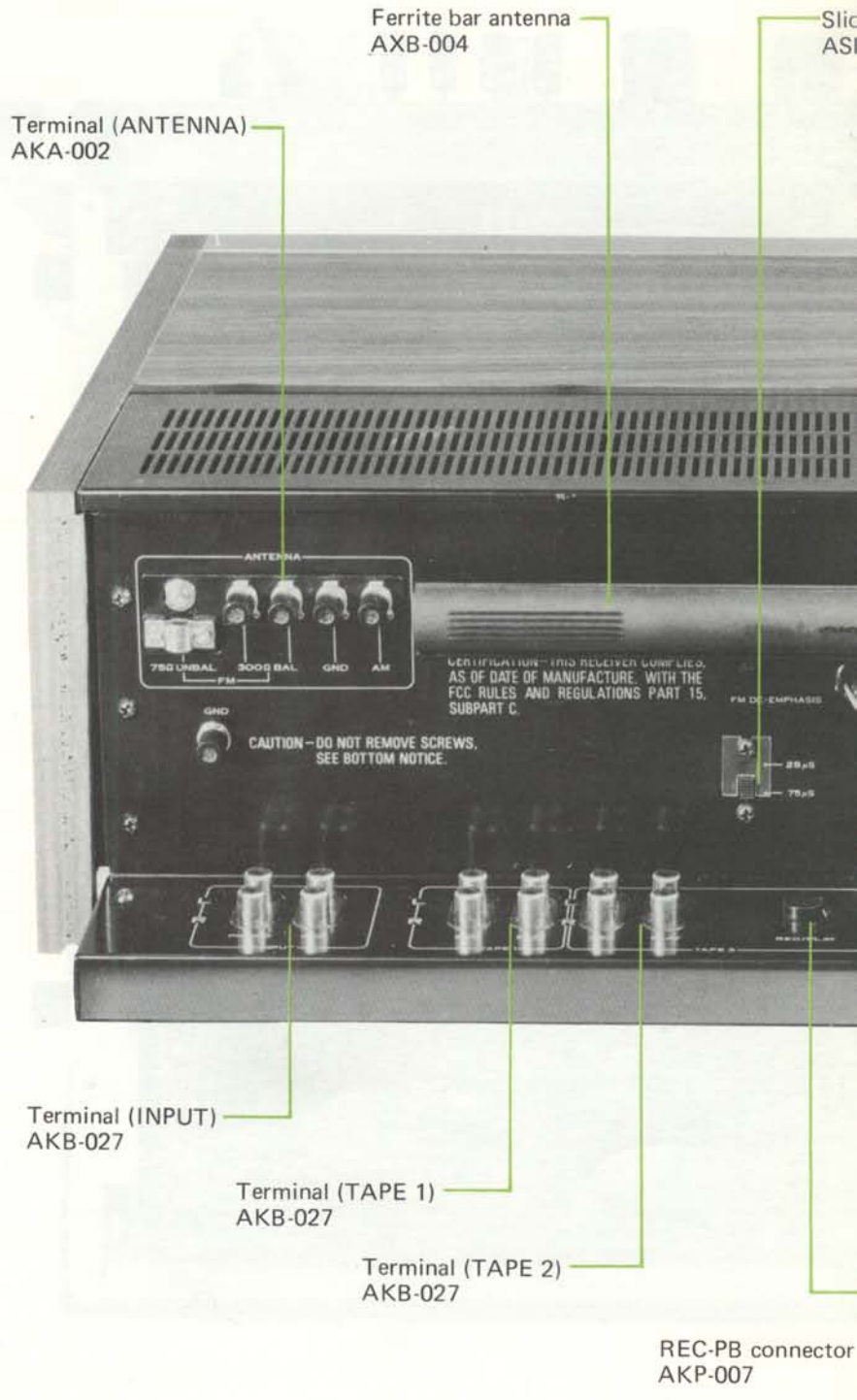

Tone contr
AWG-046
Rotary switch (SPEAKER)
ASA-038
Cover
Capaciter
Power transfomer
ATT-264
Power supply assembly
AWR-100
Power amplifier assembly
AWH-046

assembly



Tuner, AF & control assembly
AWE-073

10.5 REAR VIEW



switch (DE.EMPHASIS)
015

Wooden cabinet
AMM-053

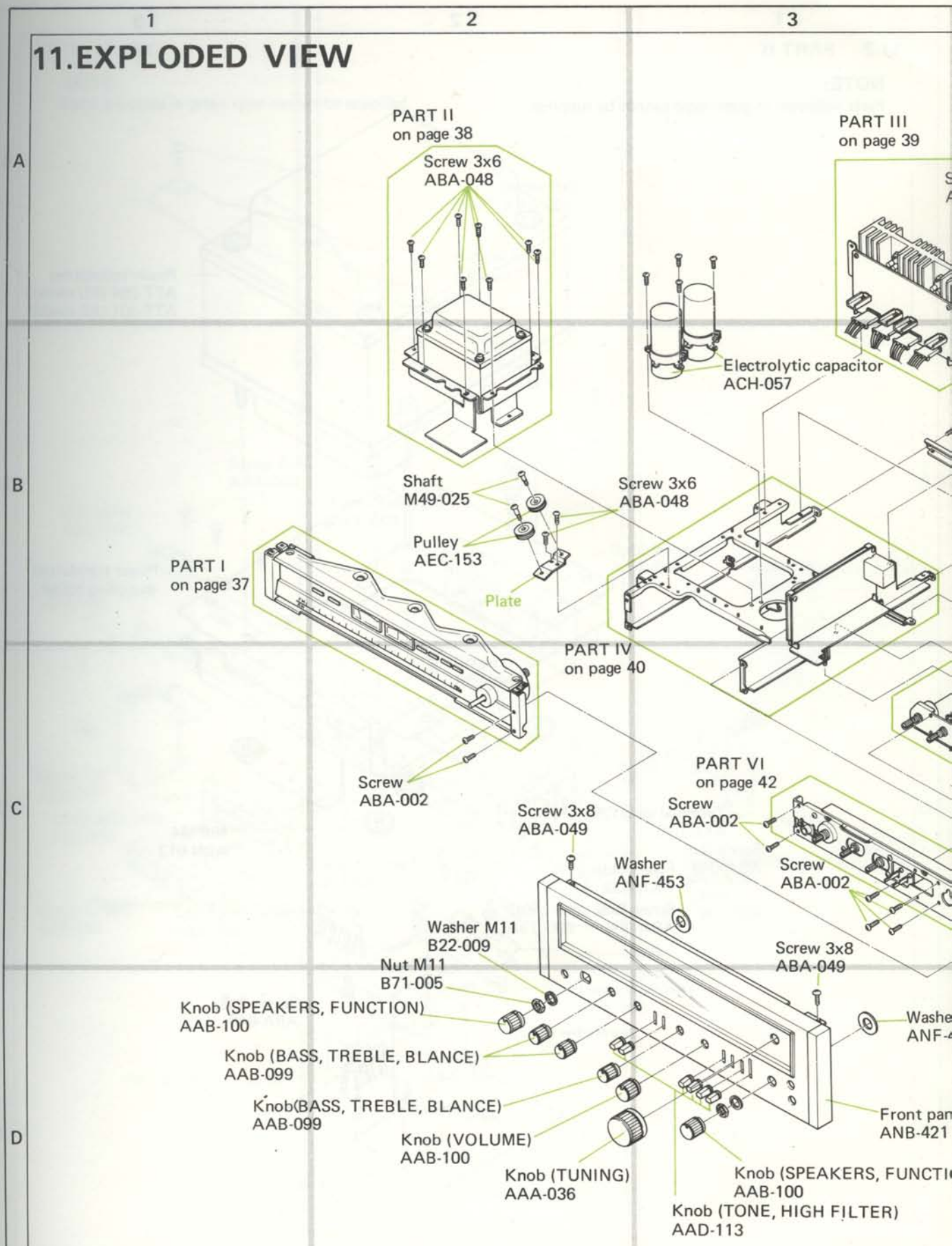
AC socket cover

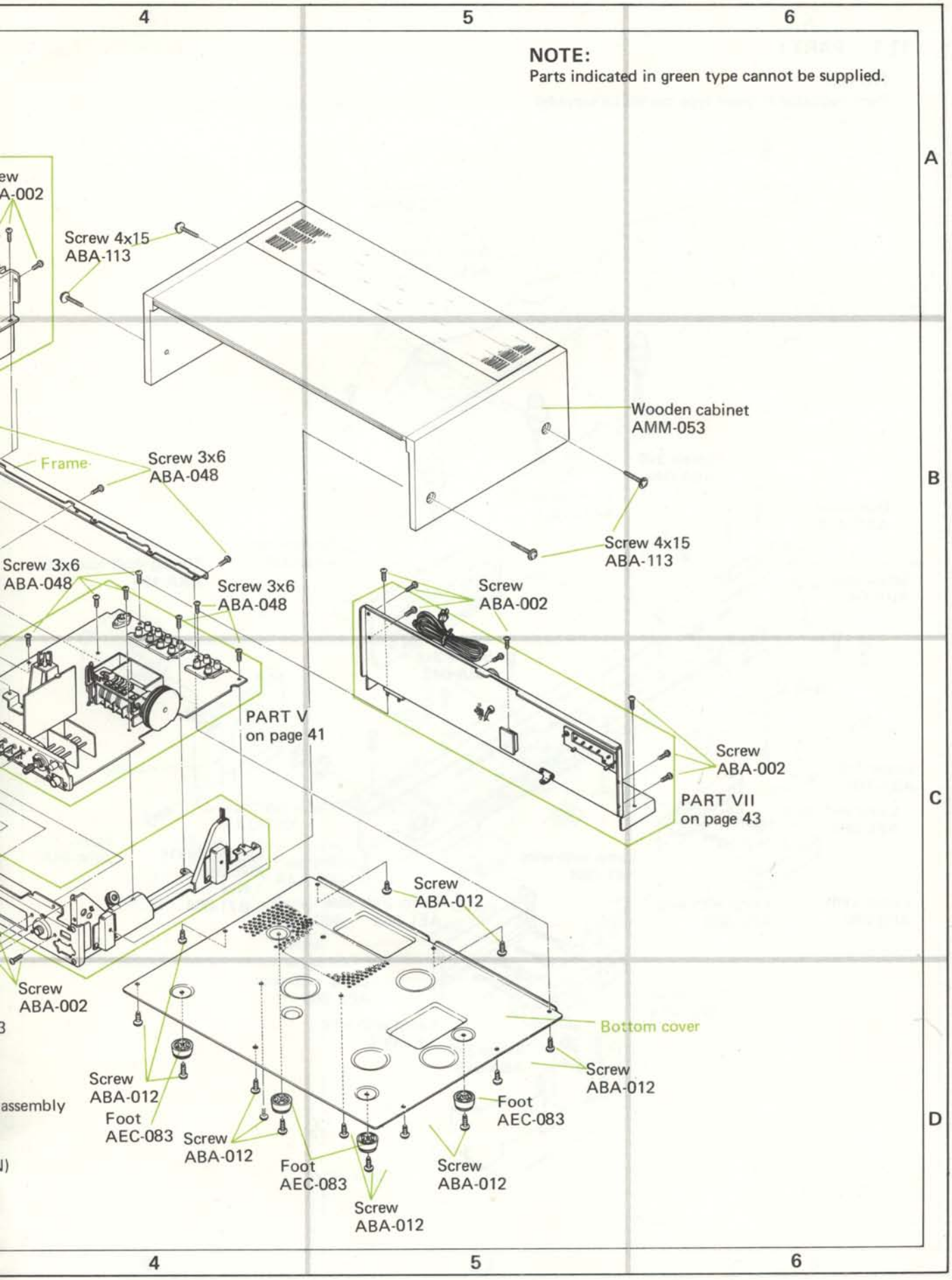
AC power cord
ADG-005

Terminal (SPEAKER)
AKE-029

cket (5P)

11.EXPLODED VIEW




4
5
6
A
B
C
D
NOTE:
Parts indicated in green type cannot be supplied.
ew
A-002
Screw 4x15
ABA-113
Wooden cabinet
AMM-053
Frame
Screw 3x6
ABA-048
Screw 3x6
ABA-048
Screw 3x6
ABA-048
Screw 4x15
ABA-113
Screw
ABA-002
PART V
on page 41
Screw
ABA-002
PART VII
on page 43
Screw
ABA-012
Screw
ABA-002
Bottom cover
Screw
ABA-012
Foot
AEC-083
assembly
Screw
ABA-012
Foot
AEC-083
Screw
ABA-012
Foot
AEC-083
Screw
ABA-012
Screw
ABA-012
4
5
6

11.1 PART I

NOTE:
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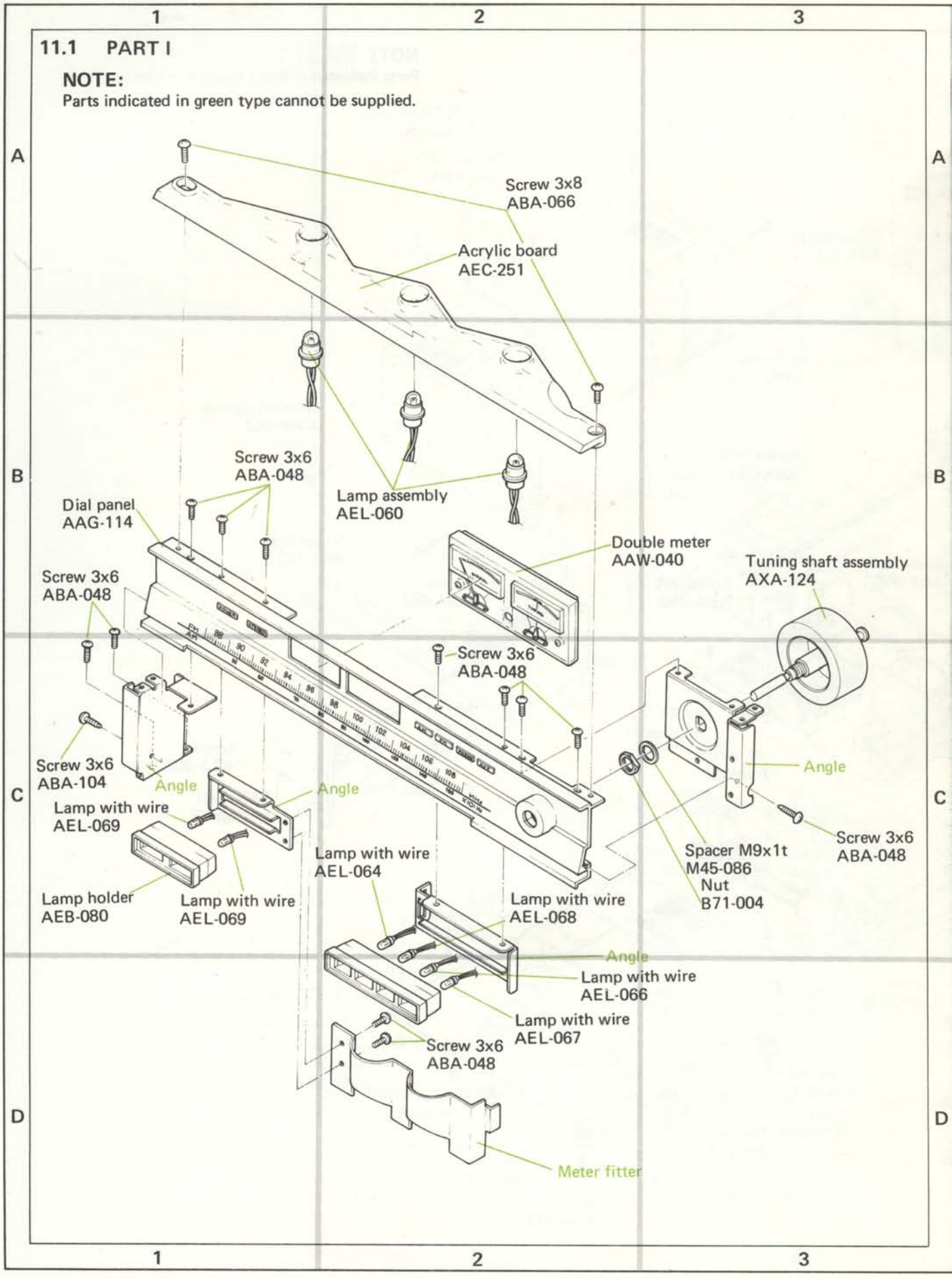

11.2 PART II

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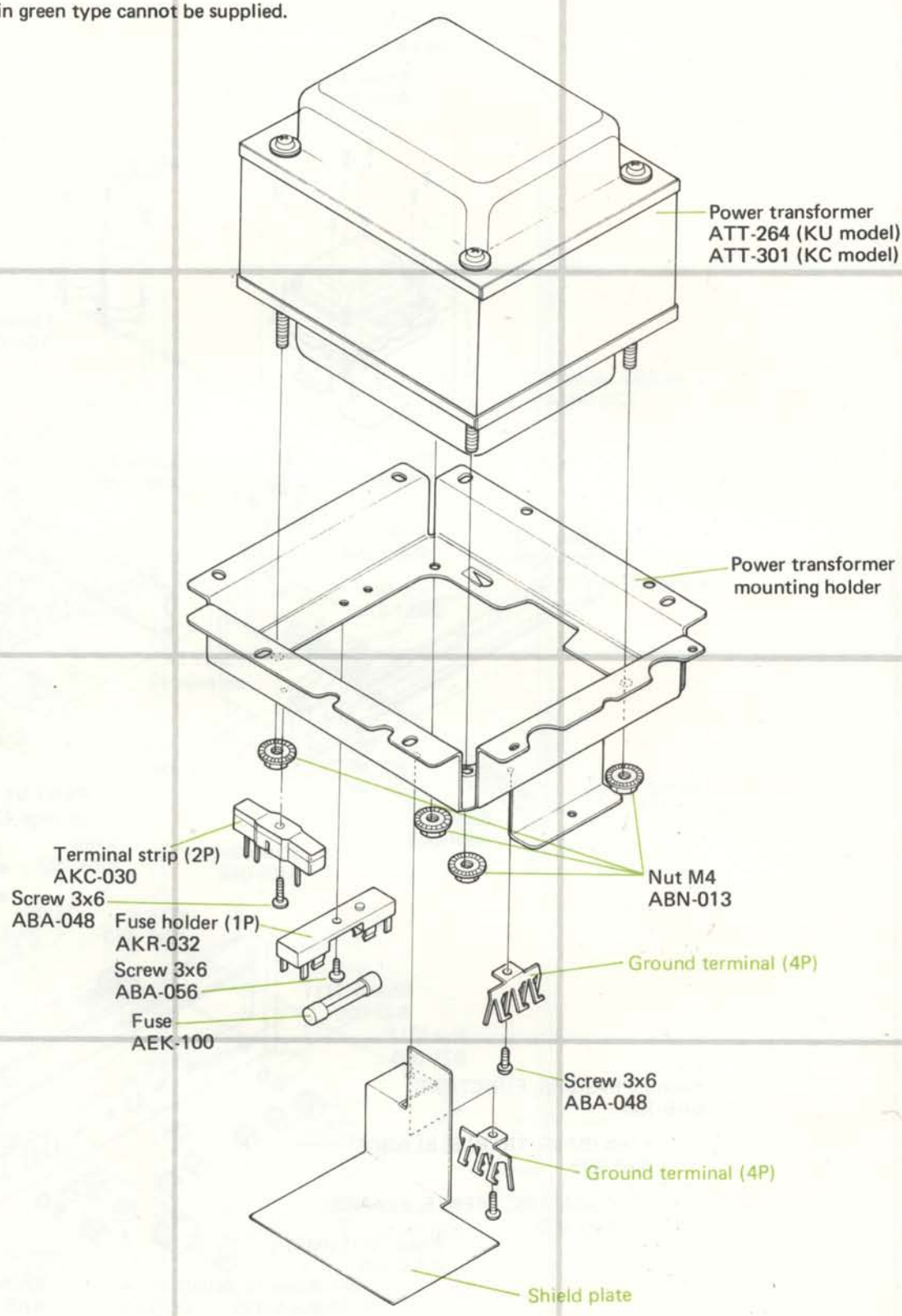

11.3 PART III

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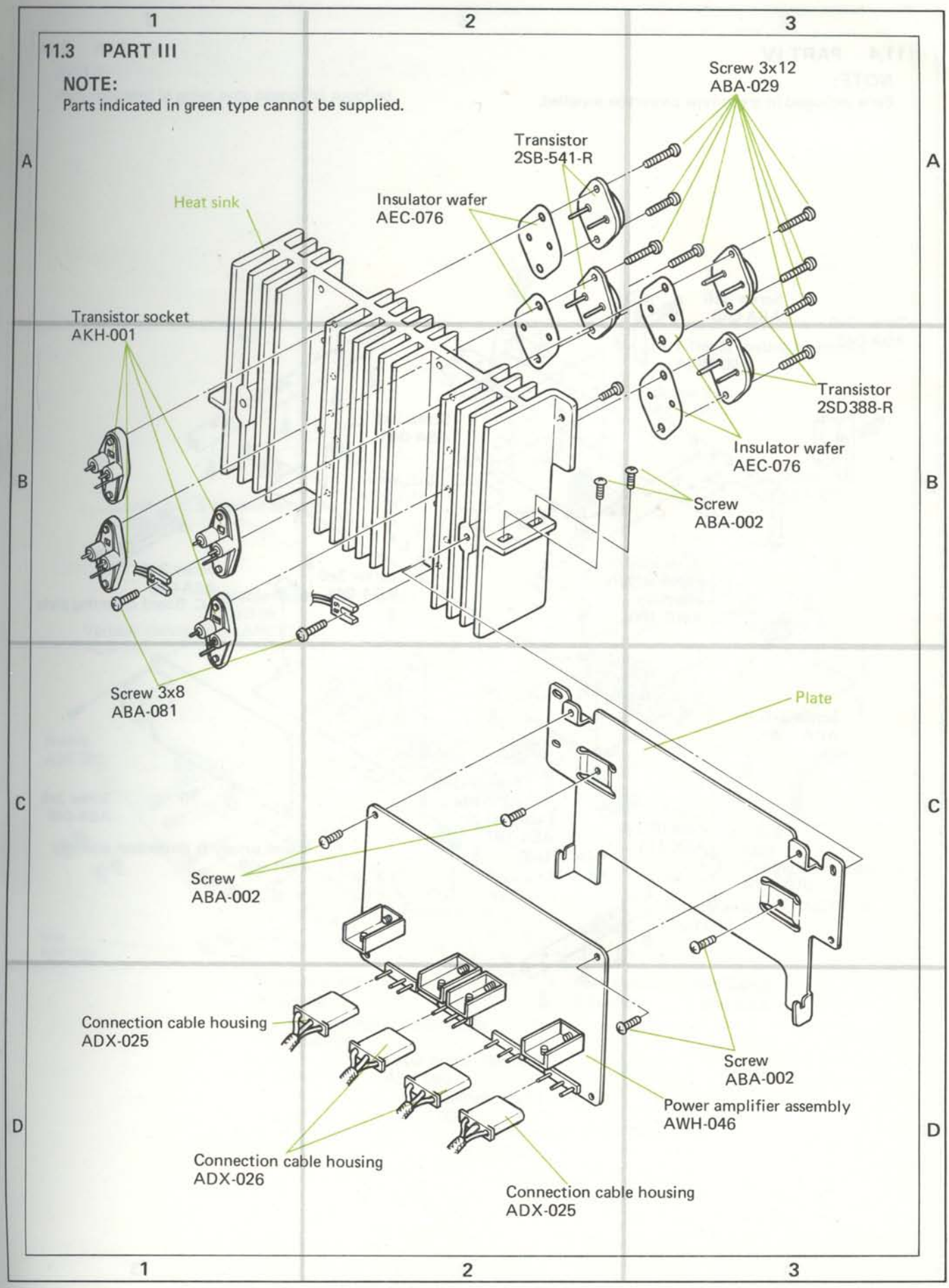

11.4 PART IV

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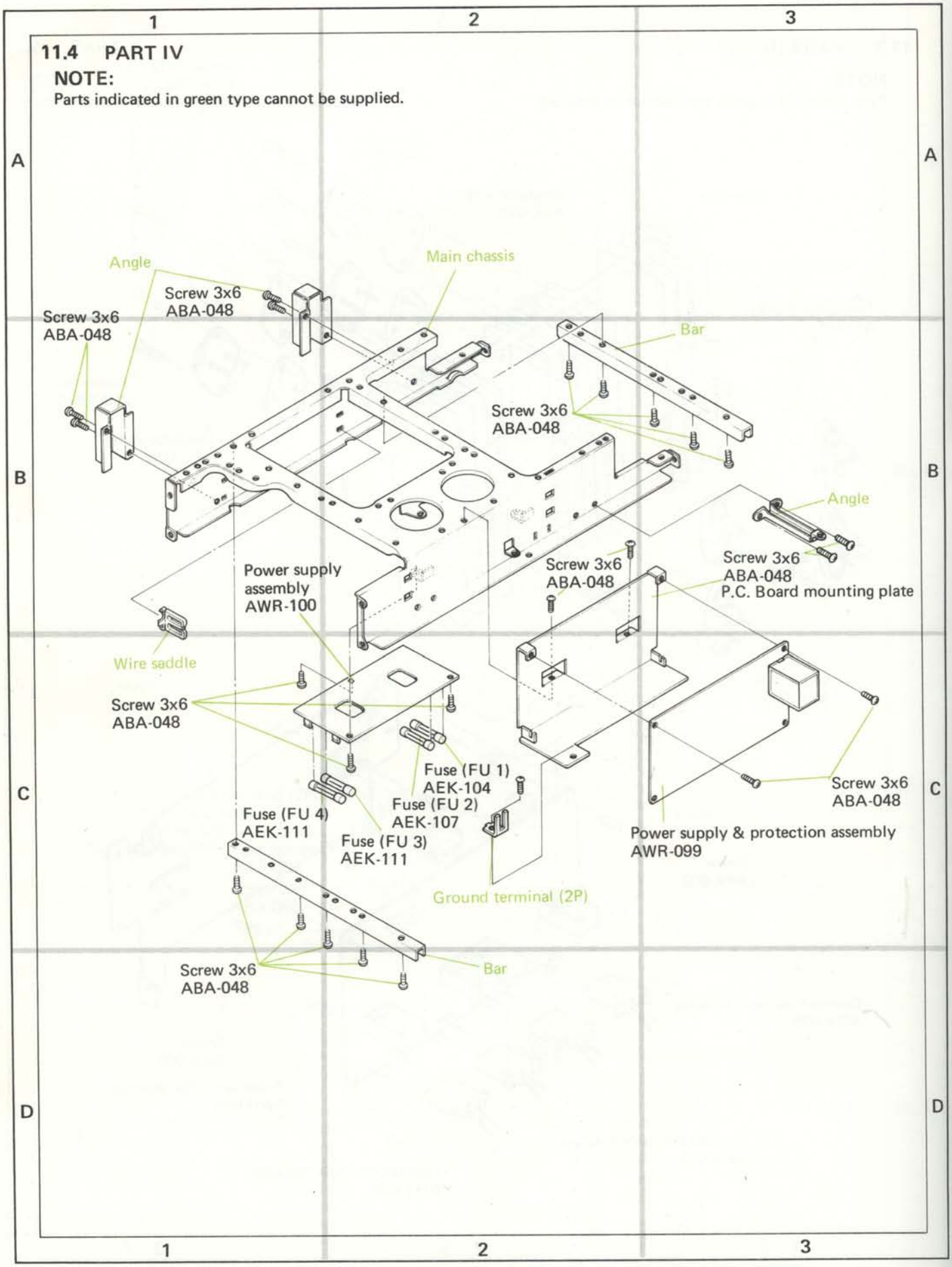

11.5 PART V

NOTE:

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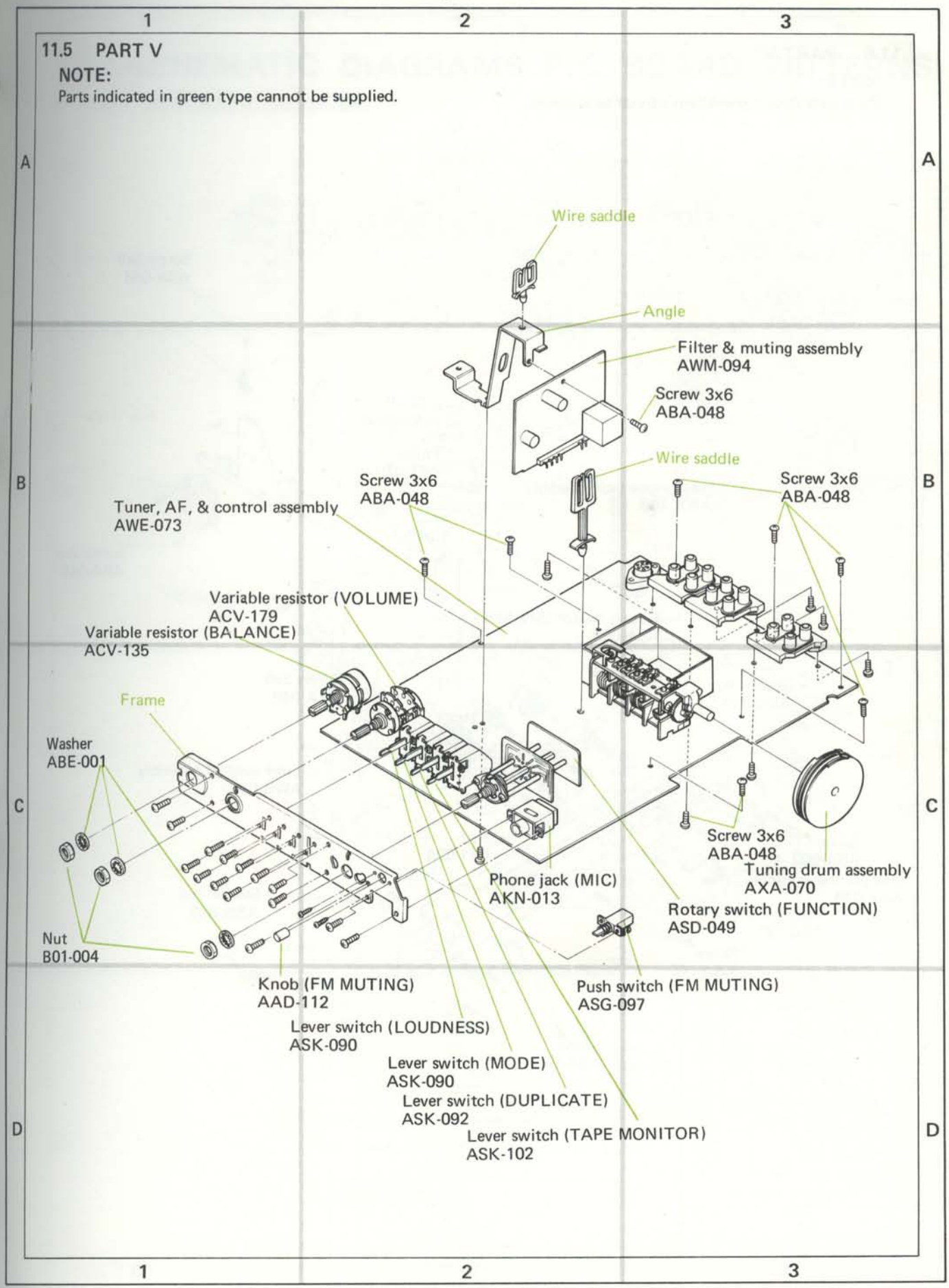

11.6 PART VI

NOTE:

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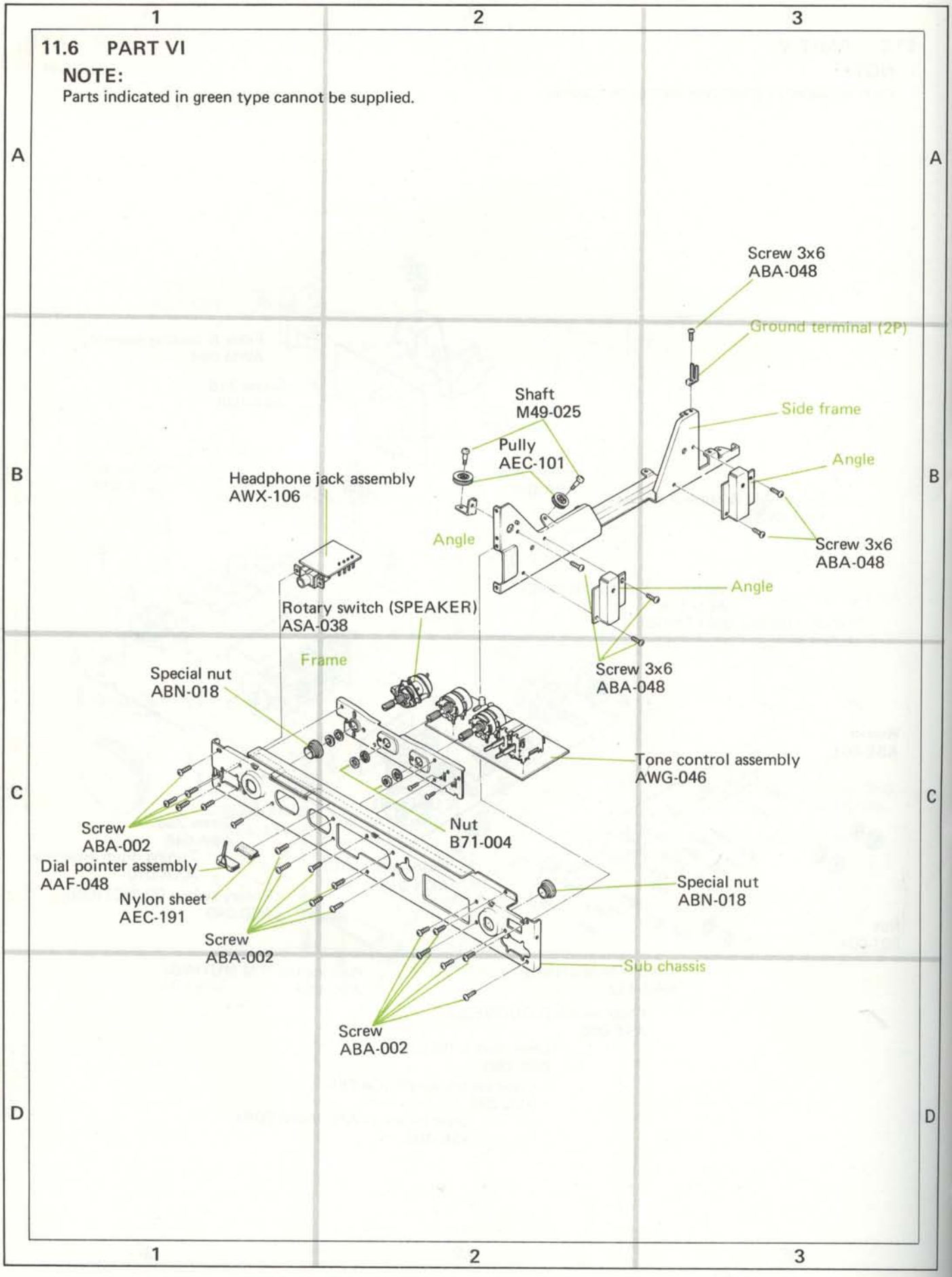

11.7 PART VII

NOTE:
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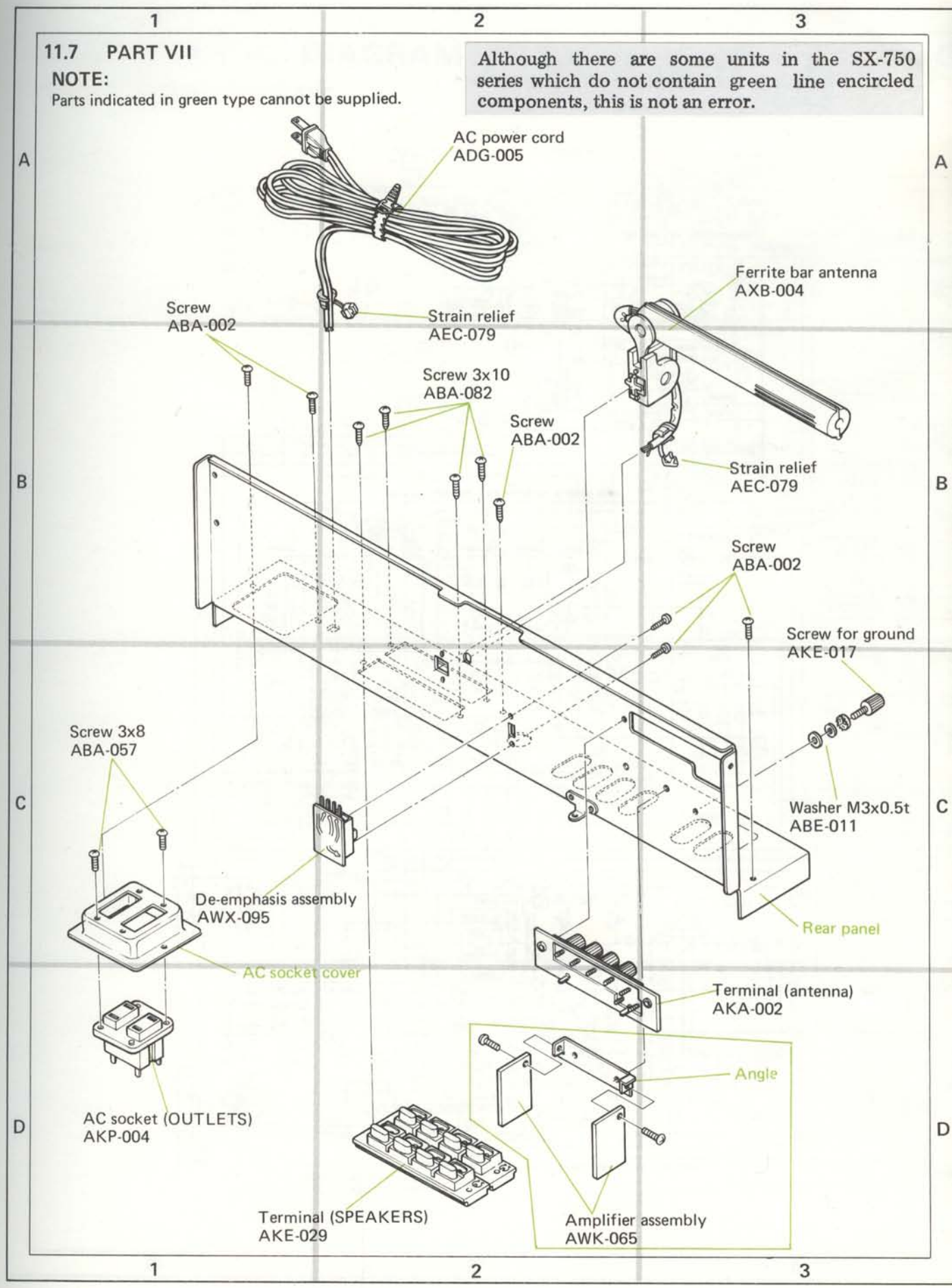
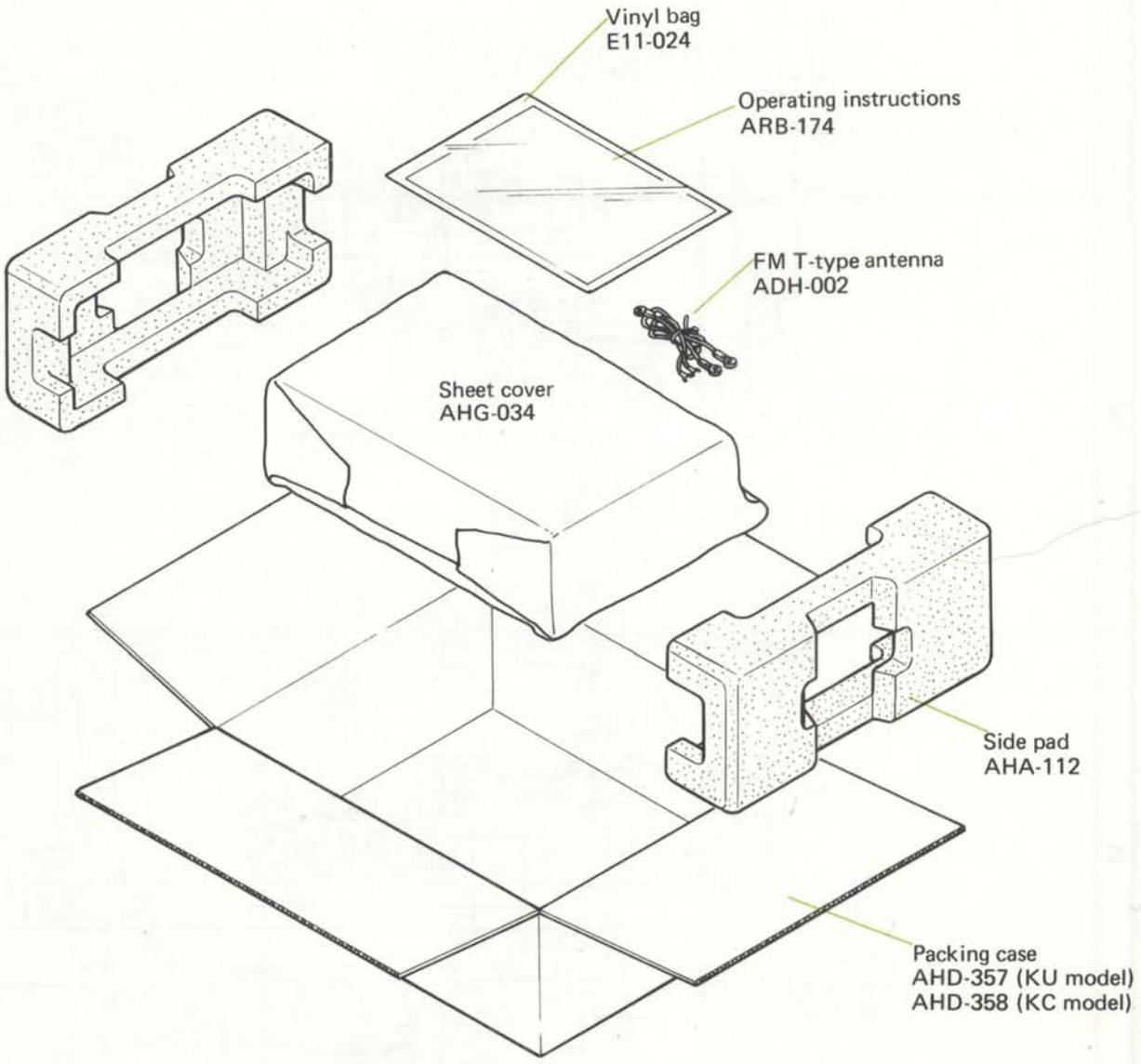
Although there are some units in the SX-750 series which do not contain green line encircled components, this is not an error.



11.8 PACKING

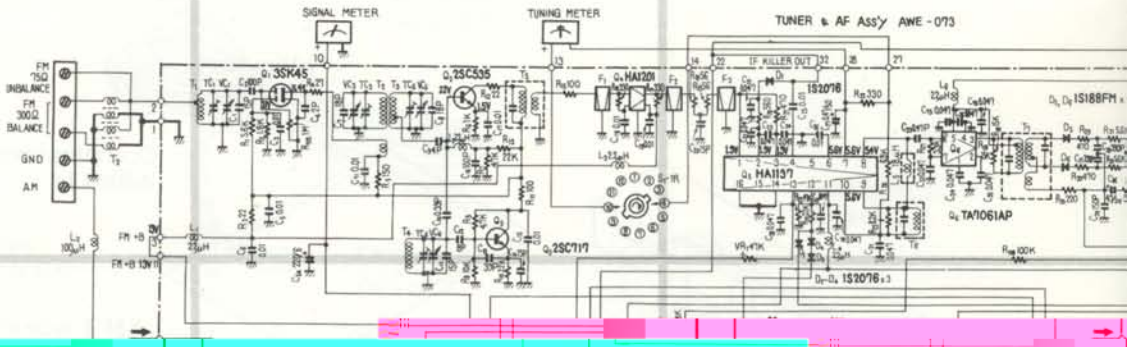

Vinyl bag
E11-024
Operating instructions
ARB-174
FM T-type antenna
ADH-002
Sheet cover
AHG-034
Side pad
AHA-112
Packing case
AHD-357 (KU model)
AHD-358 (KC model)

1 2 3

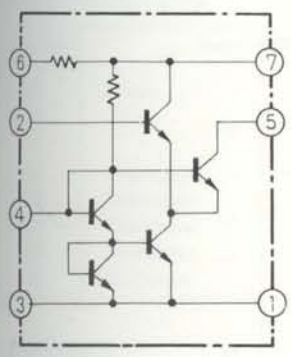
12. SCHEMATIC DIAGRAMS. P.C. BOARD PATTERNS AN

12.1 SCHEMATIC DIAGRAMS

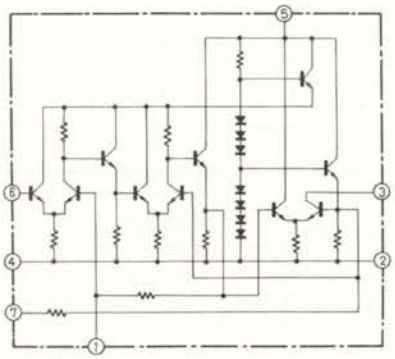
A



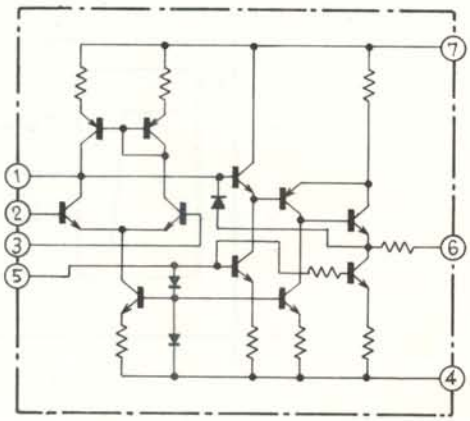
HA1201



TA7061AP

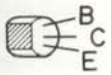


TA7136P1

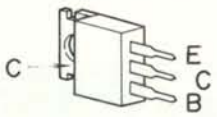


External Appearance of Transistors and ICs

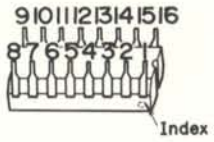
2SA823
2SC945A
2SC1438
2SC1647
2SC1649



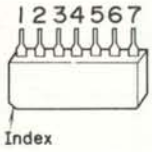
2SB507
2SD313



HA1137
HA1138
HA1196



TA7061AP
TA7136P1



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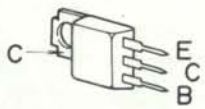
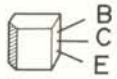
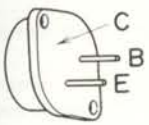
2SD357



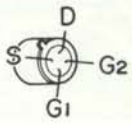
2SC461
2SC535
2SC1344



2SB541
2SD388



3SK45



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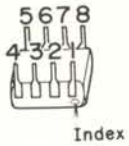

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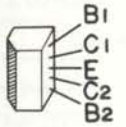

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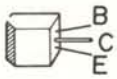

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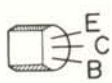
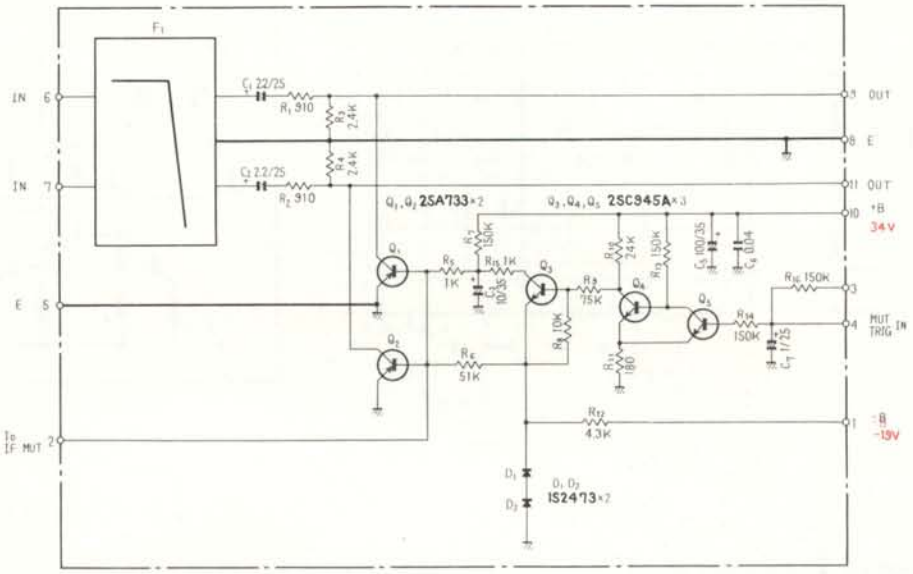
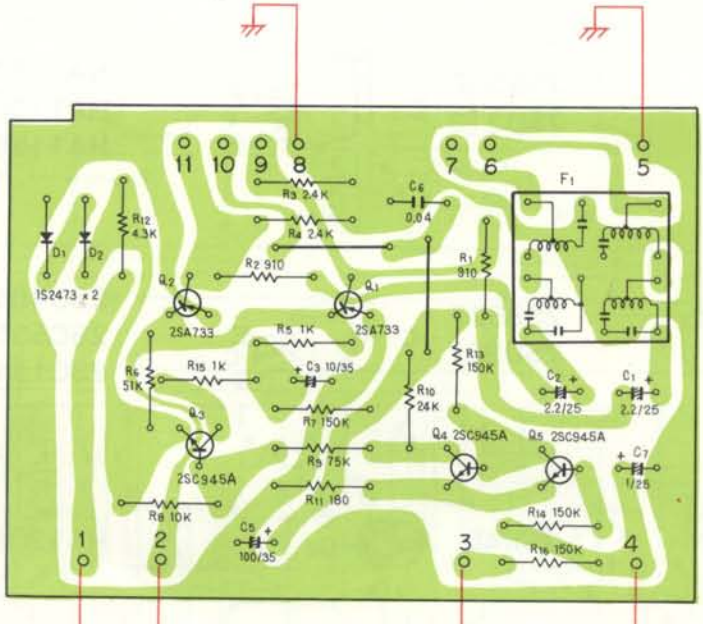
2SA725



12.4 FILTER & MUTING ASSEMBLY (AWM-094)





Parts List of Tone Control Assembly (AWG-046)

SEMICONDUCTORS

Symbol	Description	Part No.
Q1	IC	TA7136P1
Q2	IC	TA7136P1
	Volume switch	
VR1	Variable resistor (BASS) 100k-A2	ACV-138
VR2	Variable resistor (TREBLE)100k-A2	ACV-138
SW1	Lever switch (S1-TONE)	ASK-090
SW2	Lever switch (S2-HIGH FILTER)	ASK-090

RESISTORS

Symbol	Description		Part No.
R1	Carbon film	2.2k	RD¼PM 222J
R2	Carbon film	2.2k	RD¼PM 222J
R3	Carbon film	180k	RD¼PM184J
R4	Carbon film	180k	RD¼PS 184J
R5	Carbon film	100	RD¼PS 101J
R6	Carbon film	100	RD¼PS 101J
R7	Carbon film	2.7k	RD¼PM 272J
R8	Carbon film	2.7k	RD¼PM 272J
R9	Carbon film	100k	RD¼PM 104J
R10	Carbon film	100k	RD¼PM 104J
R11	Carbon film	47k	RD¼PM 473J
R12	Carbon film	47k	RD¼PM 473J
R13	Carbon film	51k	RD¼PS 513J
R14	Carbon film	51k	RD¼PS 513J
R15	Carbon film	270k	RD¼PM 274J
R16	Carbon film	270k	RD¼PS 274J
R17	Carbon film	24k	RD¼PM 243J
R18	Carbon film	24k	RD¼PM 243J
R19	Carbon film	4.3k	RD¼PM 432J
R20	Carbon film	4.3k	RD¼PM 432J
R21	Carbon film	10k	RD¼PM 103J
R22	Carbon film	10k	RD¼PS 103J
R23	Carbon film	6.8k	RD¼PM 682J
R24	Carbon film	6.8k	RD¼PS 682J
R25	Carbon film	12k	RD¼PS 123J
R26	Carbon film	12k	RD¼PS 123J
R27	Carbon film	1M	RD¼PS 105J
R28	Carbon film	1M	RD¼PS 105J
R29	Carbon film	2k	RD¼PS 202J
R30	Carbon film	2k	RD¼PS 202J

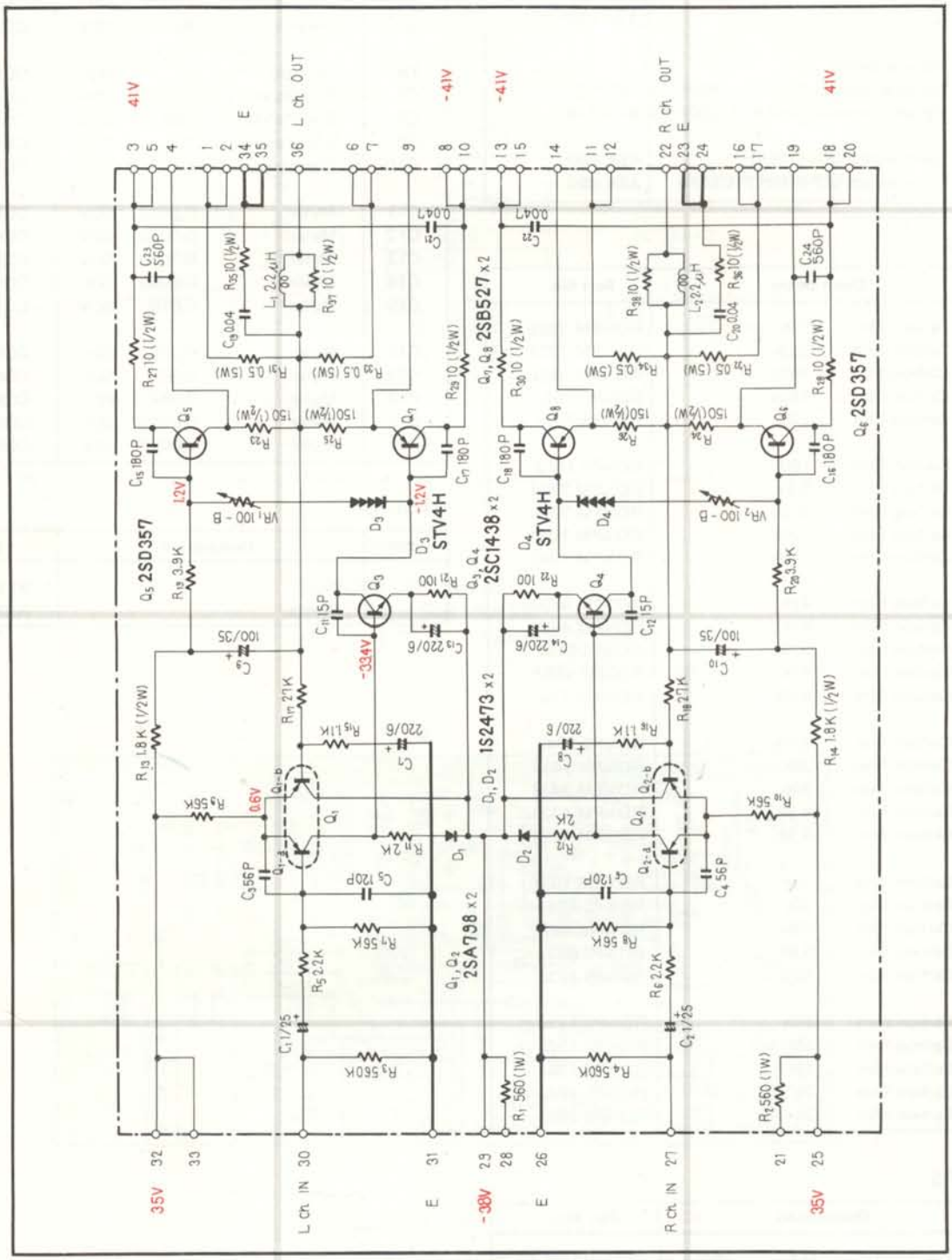
CAPACITORS

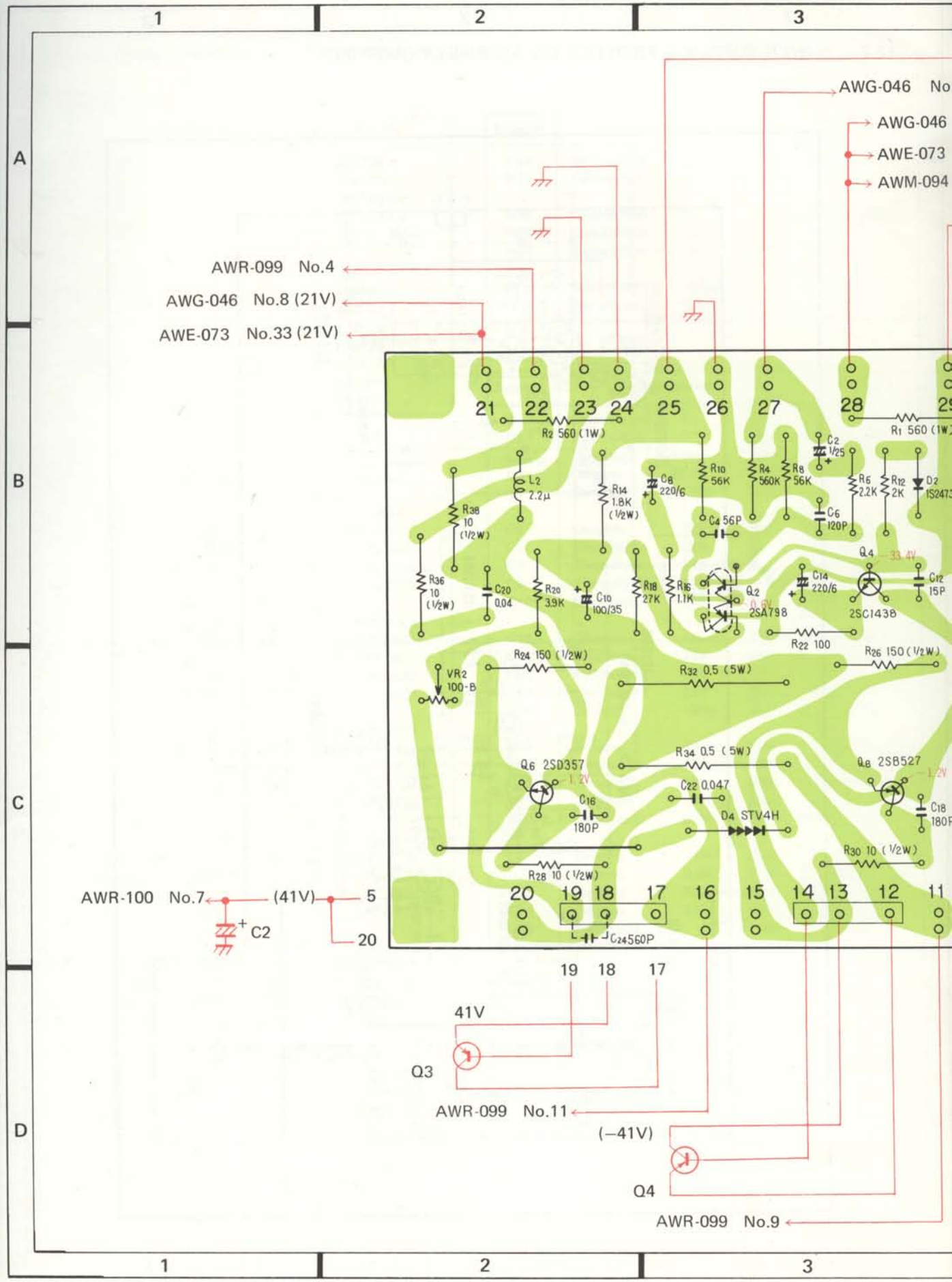
Symbol	Description			Part No.
C1	Electrolytic	0.47	25V	CSSA R47M 25
C2	Electrolytic	0.47	25V	CSSA R47M 25
C3	Electrolytic	100	6V	CEA 101P 6
C4	Electrolytic	100	6V	CEA 101P 6
C5	Ceramic	5p	50V	CCDSL 050D 50
C6	Ceramic	5p	50V	CCDSL 050D 50
C7	Electrolytic	220	35V	CEA 221P 35
C8	Electrolytic	220	35V	CEA 221P 35
C9	Electrolytic	4.7	25V	CEANL 4R7P 25
C10	Electrolytic	4.7	25V	CEANL 4R7P 25
C11	Mylar	0.0012	50V	CQMA 122J 50
C12	Mylar	0.0012	50V	CQMA 122J 50
C13	Mylar	0.0056	50V	CQMA 562J 50
C14	Mylar	0.0056	50V	CQMA 562J 50
C15	Mylar	0.018	50V	CQMA 183J 50
C16	Mylar	0.018	50V	CQMA 183J 50
C17	Mylar	0.082	50V	CQMA 823J 50
C18	Mylar	0.082	50V	CQMA 823J 50
C19	Mylar	0.0027	50V	CQMA 272J 50
C20	Mylar	0.0027	50V	CQMA 272J 50

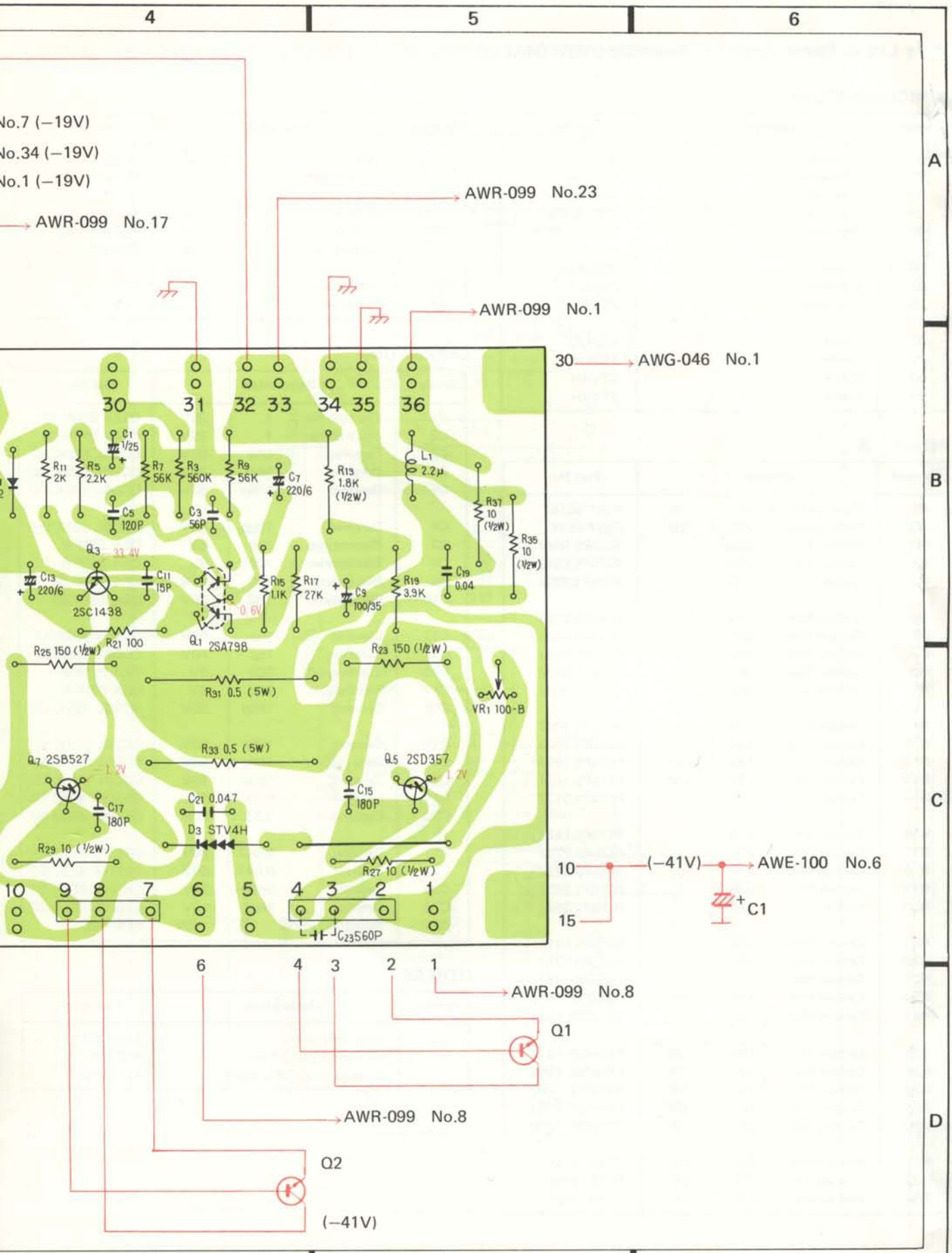
OTHERS

Symbol	Description	Part No.
	Nut	B71-004
	Washer	ABE-001

12.6 POWER AMPLIFIER ASSEMBLY (AWH-046)




1
2
3
A
B
C
D
AWG-046 No
AWG-046
AWE-073
AWM-094
AWR-099 No.4
AWG-046 No.8 (21V)
AWE-073 No.33 (21V)
21 22 23 24 25 26 27 28
R2 560 (1W)
R1 560 (1W)
L2 2.2μ
R14 1.8K (1/2W)
C8 220/6
R10 56K
R4 560K
R8 56K
C2 1/25
R6 2.2K
R12 2K
D2 1S247
C6 120P
C4 56P
R38 10 (1/2W)
R36 10 (1/2W)
C20 0.04
R20 3.9K
C10 100/35
R18 27K
R16 1.1K
Q2 2SA798
C14 220/6
Q4 33.4V
2SC1438
C12 15P
R22 100
R24 150 (1/2W)
R26 150 (1/2W)
R32 0.5 (5W)
VR2 100-B
R34 0.5 (5W)
Q6 2SD357 1.2V
C16 180P
C22 0.047
D4 STV4H
Q8 2SB527 1.2V
C18 180P
R30 10 (1/2W)
R28 10 (1/2W)
20 19 18 17 16 15 14 13 12 11
C24 560P
AWR-100 No.7
(41V)
5
20
C2
19 18 17
41V
Q3
AWR-099 No.11
(−41V)
Q4
AWR-099 No.9
1
2
3


4
5
6
A
B
C
D
No.7 (−19V)
No.34 (−19V)
No.1 (−19V)
AWR-099 No.17
AWR-099 No.23
AWR-099 No.1
30 → AWG-046 No.1
30 31 32 33 34 35 36
C1 1/25
R11 2K
R5 2.2K
R7 56K
R3 560K
R9 56K
C7 220/6
R13 1.8K (1/2W)
L1 2.2μ
R37 10 (1/2W)
R35 10 (1/2W)
C5 120P
C3 56P
Q3 33.4V
C13 220/6
C11 15P
2SC1438
R15 1.1K
R17 27K
C9 100/35
R19 3.9K
C19 0.04
0.6V
Q1 2SA798
R21 100
R25 150 (1/2W)
R23 150 (1/2W)
R31 0.5 (5W)
VR1 100-B
R33 0.5 (5W)
Q7 2SB527
1.2V
Q5 2SD357
1.2V
C17 180P
C21 0.047
C15 180P
D3 STV4H
R29 10 (1/2W)
R27 10 (1/2W)
10 9 8 7 6 5 4 3 2 1
C23 560P
10 → (−41V) → AWE-100 No.6
15
C1
6 4 3 2 1
AWR-099 No.8
Q1
AWR-099 No.8
Q2
(−41V)

Parts List of Power Amplifier Assembly (AWH-046)

SEMICONDUCTORS

Symbol	Description	Part No.
Q1	Transistor	2SA798-F
Q2	Transistor	2SA798-F
Q3	Transistor	2SC1438-V
Q4	Transistor	2SC1438-V
Q5	Transistor	2SD357-C
Q6	Transistor	2SD357-C
Q7	Transistor	2SB527-C
Q8	Transistor	2SB527-C
D1	Diode	1S2473
D2	Diode	1S2473
D3	Diode	STV4H
D4	Diode	STV4H

RESISTORS

Symbol	Description			Part No.
R1	Metal oxide	560	1W	RS1P 561K
R2	Metal oxide	560	1W	RS1P 561K
R3	Carbon film	560k		RD¼PS 564J
R4	Carbon film	560k		RD¼PS 564J
R5	Carbon film	2.2k		RD¼PS 222J
R6	Carbon film	2.2k		RD¼PS 222J
R7	Carbon film	56k		RD¼PS 563J
R8	Carbon film	56k		RD¼PS 563J
R9	Carbon film	56k		RD¼PS 563J
R10	Carbon film	56k		RD¼PS 563J
R11	Carbon film	2.0k		RD¼PS 202J
R12	Carbon film	2.0k		RD¼PS 202J
R13	Carbon film	1.8k	½W	RD½PS 182J
R14	Carbon film	1.8k	½W	RD½PS 182J
R15	Carbon film	1.1k		RD¼PS 112J
R16	Carbon film	1.1k		RD¼PS 112J
R17	Carbon film	27k		RD¼PS 273J
R18	Carbon film	27k		RD¼PS 273J
R19	Carbon film	3.9k		RD¼PS 392J
R20	Carbon film	3.9k		RD¼PS 392J
R21	Carbon film	100		RD¼PS 101J
R22	Carbon film	100		RD¼PS 101J
R23	Carbon film	150	½W	RD½PSF 151J
R24	Carbon film	150	½W	RD½PSF 151J
R25	Carbon film	150	½W	RD½PSF 151J
R26	Carbon film	150	½W	RD½PSF 151J
R27	Carbon film	10	½W	RD½PSF 100J
R28	Carbon film	10	½W	RD½PSF 100J
R29	Carbon film	10	½W	RD½PSF 100J
R30	Carbon film	10	½W	RD½PSF 100J
R31	Wire wound	0.5	5W	RT5B 0R5K
R32	Wire wound	0.5	5W	RT5B 0R5K
R33	Wire wound	0.5	5W	RT5B 0R5K
R34	Wire wound	0.5	5W	RT5B 0R5K
R35	Carbon film	10	½W	RD½PSF 100J
R36	Carbon film	10	½W	RD½PSF 100J
R37	Carbon film	10	½W	RD½PS 100J
R38	Carbon film	10	½W	RD½PS 100J
VR1	Semi-fixed	100-B		ACP-019
VR2	Semi-fixed	100-B		ACP-019

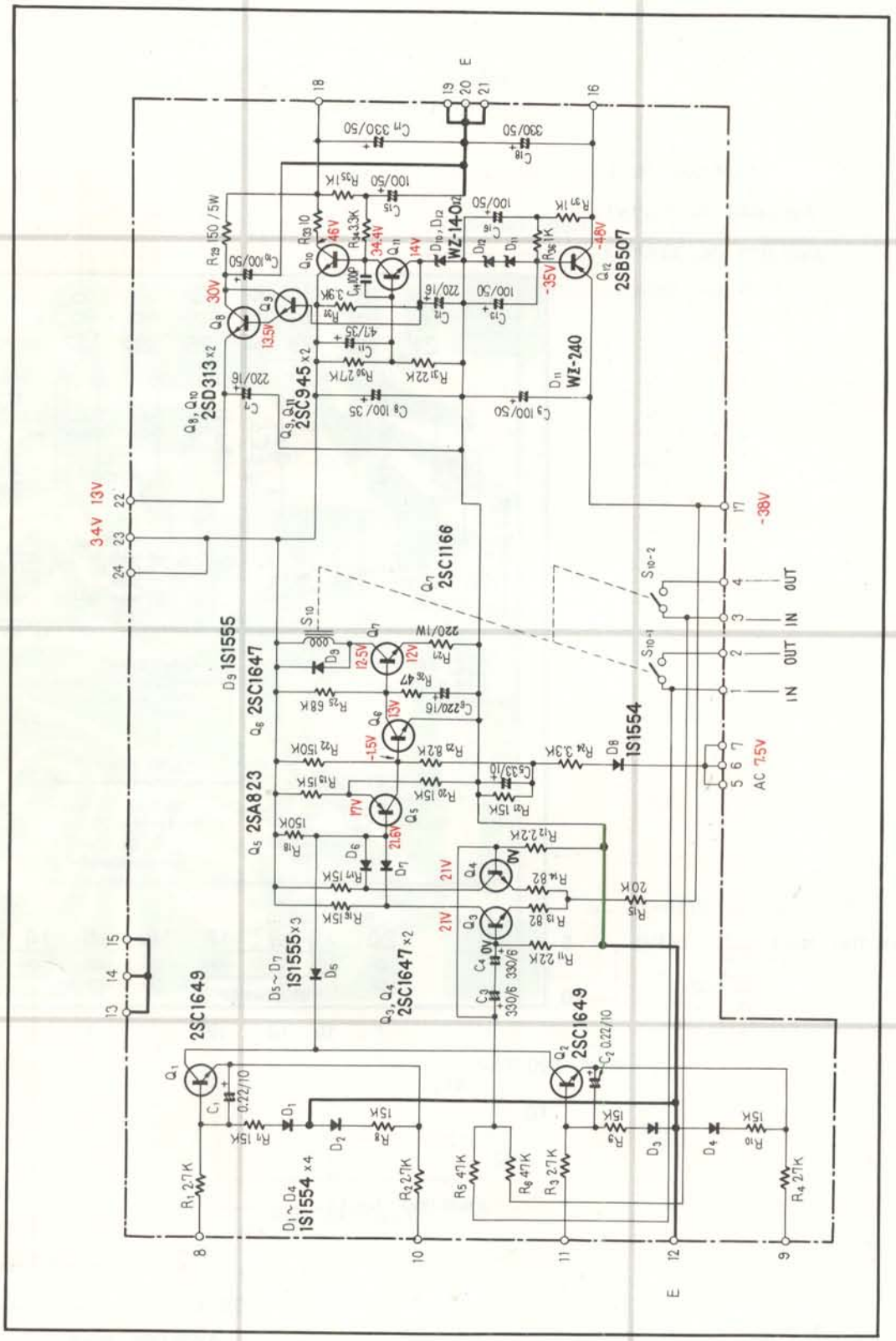
CAPACITORS

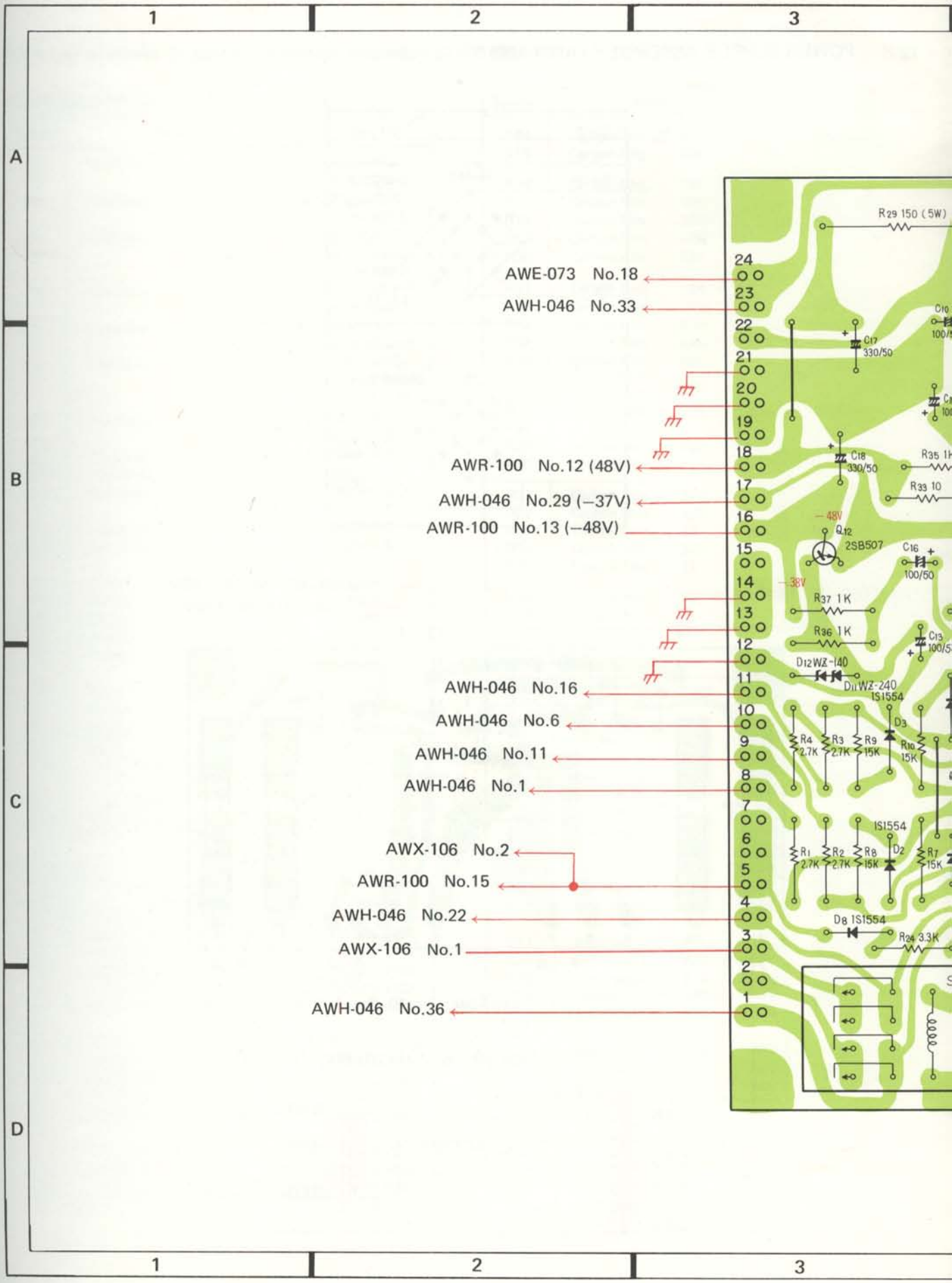
Symbol	Description			Part No.
C1	Electrolytic	1	25V	CSZA 010M 25
C2	Electrolytic	1	25V	CSZA 010M 25
C3	Ceramic	56p	50V	CCDSL 560K 50
C4	Ceramic	56p	50V	CCDSL 560K 50
C5	Ceramic	120p	50V	CCDSL 121K 50
C6	Ceramic	120p	50V	CCDSL 121K 50
C7	Electrolytic	220	6V	CEA 221P 6
C8	Electrolytic	220	6V	CEA 221P 6
C9	Electrolytic	100	35V	CEA 101P 35
C10	Electrolytic	100	35V	CEA 101P 35
C11	Ceramic	15p	50V	CCDSL 150K 50
C12	Ceramic	15p	50V	CCDSL 150K 50
C13	Electrolytic	220	6V	CEA 221P 6
C14	Electrolytic	220	6V	CEA 221P 6
C15	Ceramic	180p	50V	CCDSL 181K 50
C16	Ceramic	180p	50V	CCDSL 181K 50
C17	Ceramic	180p	50V	CCDSL 181K 50
C18	Ceramic	180p	50V	CCDSL 181K 50
C19	Ceramic	0.04	50V	CKDYF 403Z 50
C20	Ceramic	0.04	50V	CKDYF 403Z 50
C21	Ceramic	0.047	50V	CKDYF 473Z 50
C22	Ceramic	0.047	50V	CKDYF 473Z 50
C23	Ceramic	560p	50V	CKDYB 561K 50
C24	Ceramic	560p	50V	CKDYB 561K 50
C25	Metallized mylar	1	100V	ACE-008

OTHERS

Symbol	Description	Part No.
	Heat sink	ANH-117
	AF chock coil 2.2μH	T63-009
	Contact strip (3PL-type)	AKM-018

12.7 POWER SUPPLY & PROTECTION ASSEMBLY (AWR-099)




1
2
3
A
B
C
D
AWE-073 No.18
AWH-046 No.33
AWR-100 No.12 (48V)
AWH-046 No.29 (−37V)
AWR-100 No.13 (−48V)
AWH-046 No.16
AWH-046 No.6
AWH-046 No.11
AWH-046 No.1
AWX-106 No.2
AWR-100 No.15
AWH-046 No.22
AWX-106 No.1
AWH-046 No.36
R29 150 (5W)
C17 330/50
C18 330/50
R35 1K
R33 10
−48V
Q12 2SB507
C16 100/50
−38V
R37 1K
R36 1K
C13
D12 WZ-140
D11 WZ-240
1S1554
D3
R4 2.7K
R3 2.7K
R9 15K
R10 15K
R1 2.7K
R2 2.7K
R8 15K
D2
R7 15K
D8 1S1554
R24 3.3K

22 → AWE-073 No.26 (+13V)
→ AWE-073 No.9 (+13V)
PL8
→ AWE-073 No.24

15 → AWX-106 No.4
PL9
1 S10-b F
2 SPEAKER OUT A R ch

7
6
PL1 PL2 PL3

2 → AWX-106 No.3
7
8 SPEAKER A L

Parts List of Power Supply & Protection Assembly (AWR-099)

SEMICONDUCTORS

Symbol	Description	Part No.
Q1	Transistor	2SC1649-N or 2SC869-C
Q2	Transistor	2SC1649-N or 2SC869-C
Q3	Transistor	2SC1647-P or 2SC945-A
Q4	Transistor	2SC1647-P or 2SC945-A
Q5	Transistor	2SA823-P or 2SA733-Q
Q6	Transistor	2SC1647-P or 2SC945-A
Q7	Transistor	2SC1167-Y or 2SC1384-R
Q8	Transistor	2SD313-D
Q9	Transistor	2SC945-Q
Q10	Transistor	2SD313-D
Q11	Transistor	2SC945-Q
Q12	Transistor	2SB507-D
D1	Diode	1S1554
D2	Diode	1S1554
D3	Diode	1S1554
D4	Diode	1S1554
D5	Diode	1S1555
D6	Diode	1S1555
D7	Diode	1S1555
D8	Diode	1S1554
D9	Diode	1S1555
D10	Zener diode	WZ-140
D11	Zener diode	WZ-240
D12	Zener diode	WZ-140

RESISTORS

Symbol	Description		Part No.
R1	Carbon film	2.7k	RD¼PS 272J
R2	Carbon film	2.7k	RD¼PS 272J
R3	Carbon film	2.7k	RD¼PS 272J
R4	Carbon film	2.7k	RD¼PS 272J
R5	Carbon film	47k	RD¼PS 473J
R6	Carbon film	47k	RD¼PS 473J
R7	Carbon film	15k	RD¼PS 153J
R8	Carbon film	15k	RD¼PS 153J
R9	Carbon film	15k	RD¼PS 153J
R10	Carbon film	15k	RD¼PS 153J
R11	Carbon film	2.2k	RD¼PS 222J
R12	Carbon film	2.2k	RD¼PS 222J
R13	Carbon film	82	RD¼PS 820J
R14	Carbon film	82	RD¼PS 820J
R15	Carbon film	20k	RD¼PS 203J
R16	Carbon film	15k	RD¼PS 153J
R17	Carbon film	15k	RD¼PS 153J
R18	Carbon film	150k	RD¼PS 154J
R19	Carbon film	15k	RD¼PS 153J
R20	Carbon film	15k	RD¼PS 153J
R21	Carbon film	15k	RD¼PS 153J
R22	Carbon film	150k	RD¼PS 154J
R23	Carbon film	8.2k	RD¼PS 822J
R24	Carbon film	3.3k	RD¼PS 332J
R25	Carbon film	68k	RD¼PS 683J
R26	Carbon film	47	RD¼PS 470J
R27	Metal oxide	220 1W	RS1P 221K
R28			
R29	Wire wound	150 5W	RT5B 151K
R30	Carbon film	27k	RD¼PS 273J
R31	Carbon film	22k	RD¼PS 223J
R32	Carbon film	3.9k	RD¼PS 392J
R33	Carbon film	33 ½W	RD½PSF 330J
R34	Carbon film	3.3k	RD¼PS 332J
R35	Carbon film	1k	RD¼PS 102J
R36	Carbon film	1k	RD¼PS 102J
R37	Carbon film	1k	RD¼PS 102J

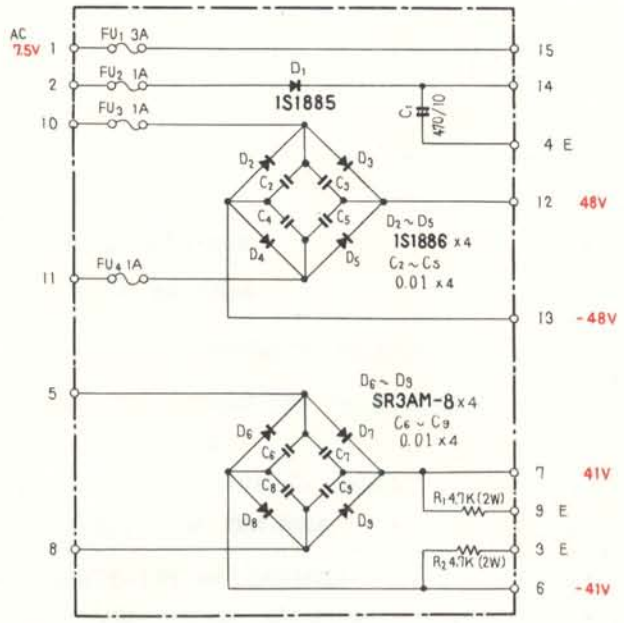
CAPACITORS

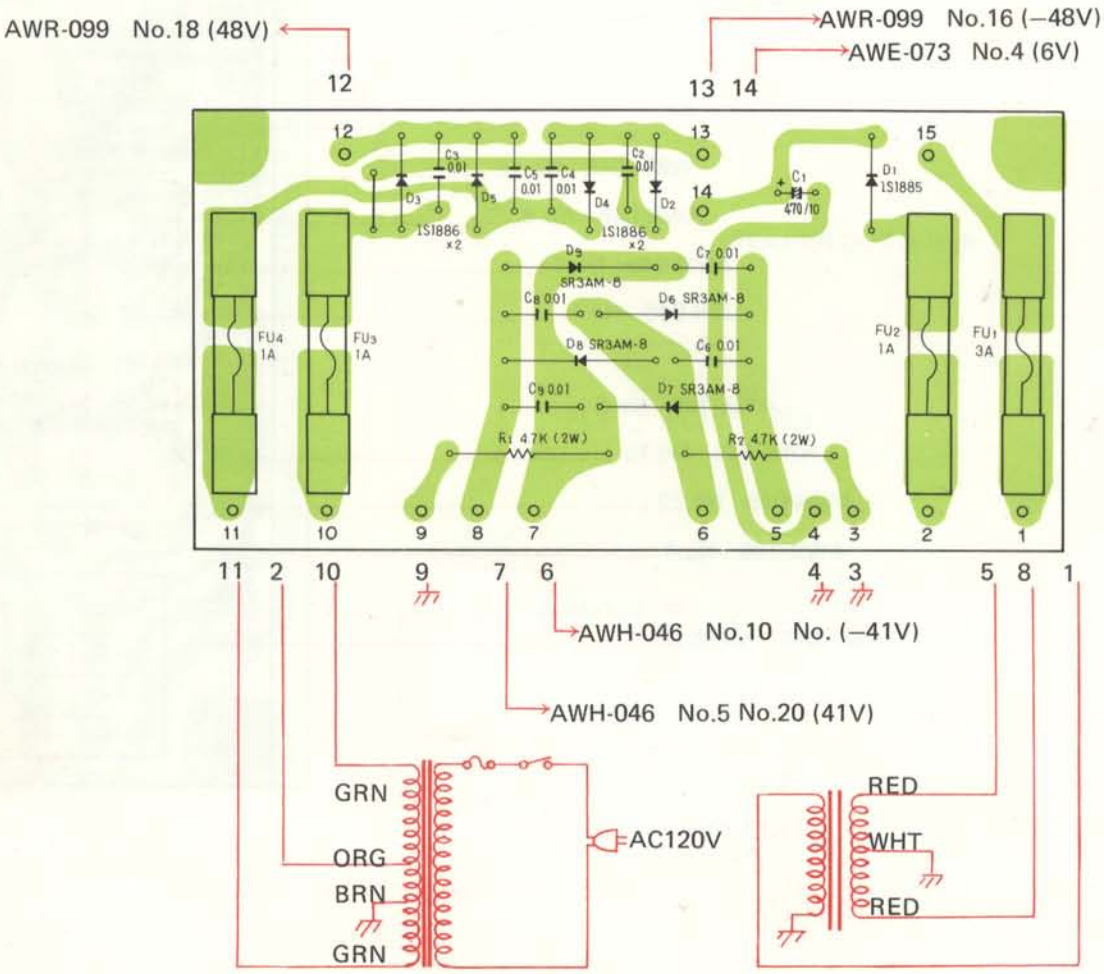
Symbol	Description			Part No.
C1	Electrolytic	0.22	10V	CSSA R22M 10
C2	Electrolytic	0.22	10V	CSSA R22M 10
C3	Electrolytic	330	6V	CEA 331P 6
C4	Electrolytic	330	6V	CEA 331P 6
C5	Electrolytic	3.3	10V	CEA 3R3P 10
C6	Electrolytic	220	16V	CEA 221P 16
C7	Electrolytic	220	16V	CEA 221P 16
C8	Electrolytic	100	35V	CEA 101P 35
C9	Electrolytic	100	50V	CEA 101P 50
C10	Electrolytic	100	50V	CEA 101P 50
C11	Electrolytic	4.7	35V	CEA 4R7P 35
C12	Electrolytic	220	16V	CEA 221P 16
C13	Electrolytic	110	35V	CEA 101P 35
C14	Ceramic	100p	50V	CCDSL 101K 50
C15	Electrolytic	100	50V	CEA 101P 50
C16	Electrolytic	100	50V	CEA 101P 50
C17	Electrolytic	330	50V	CEA 331P 50
C18	Electrolytic	330	50V	CEA 331P 50

OTHERS

Symbol	Description	Part No.
	Heat sink	ANH-117-0
	Heat sink	ANH-259-0
	Relay	ASR-018

12.8 POWER SUPPLY ASSEMBLY (AWR-100)





Parts List of Power Supply Assembly (AWR-100)

SEMICONDUCTORS

Symbol	Description	Part No.
D1	Diode	1S1885
D2	Diode	1S1886
D3	Diode	1S1886
D4	Diode	1S1886
D5	Diode	1S1886
D6	Diode	SR3AM-8
D7	Diode	SR3AM-8
D8	Diode	SR3AM-8
D9	Diode	SR3AM-8

RESISTORS

Symbol	Description			Part No.
R1	Metal oxide	4.7k	2W	RS2P 472K
R2	Metal oxide	4.7k	2W	RS2P 472K

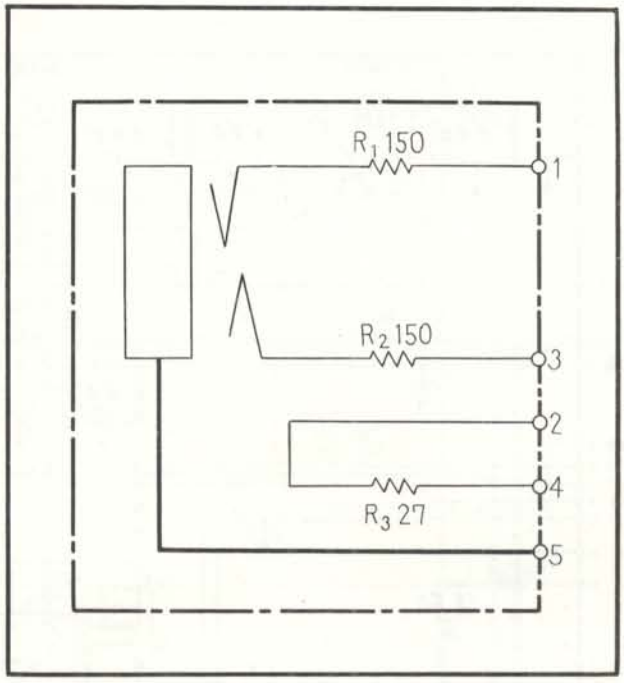
CAPACITORS

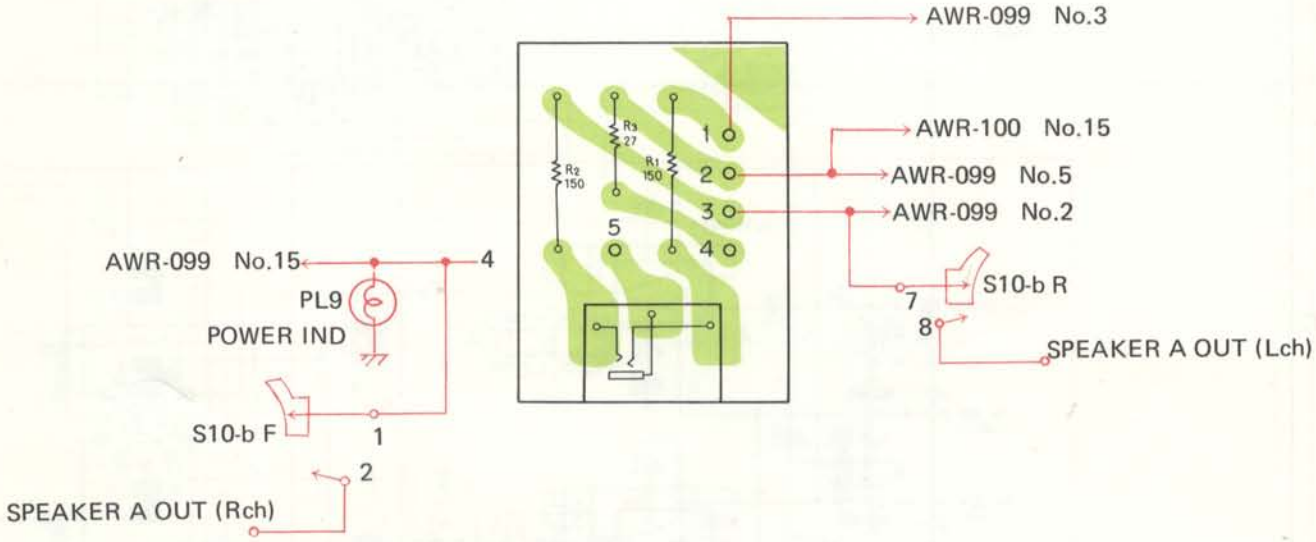
Symbol	Description			Part No.
C1	Electrolytic	470	10V	CEA 471P 10
C2	Electrolytic	0.01	250V	ACG-001
C3	Electrolytic	0.01	250V	ACG-001
C4	Electrolytic	0.01	250V	ACG-001
C5	Electrolytic	0.01	250V	ACG-001
C6	Electrolytic	0.01	250V	ACG-001
C7	Electrolytic	0.01	250V	ACG-001

OTHERS

Symbol	Description	Part No.
	Fuse clip	AKR-013
	Fuse clip	AKR-030

12.9 HEADPHONE JACK ASSEMBLY (AWX-106)



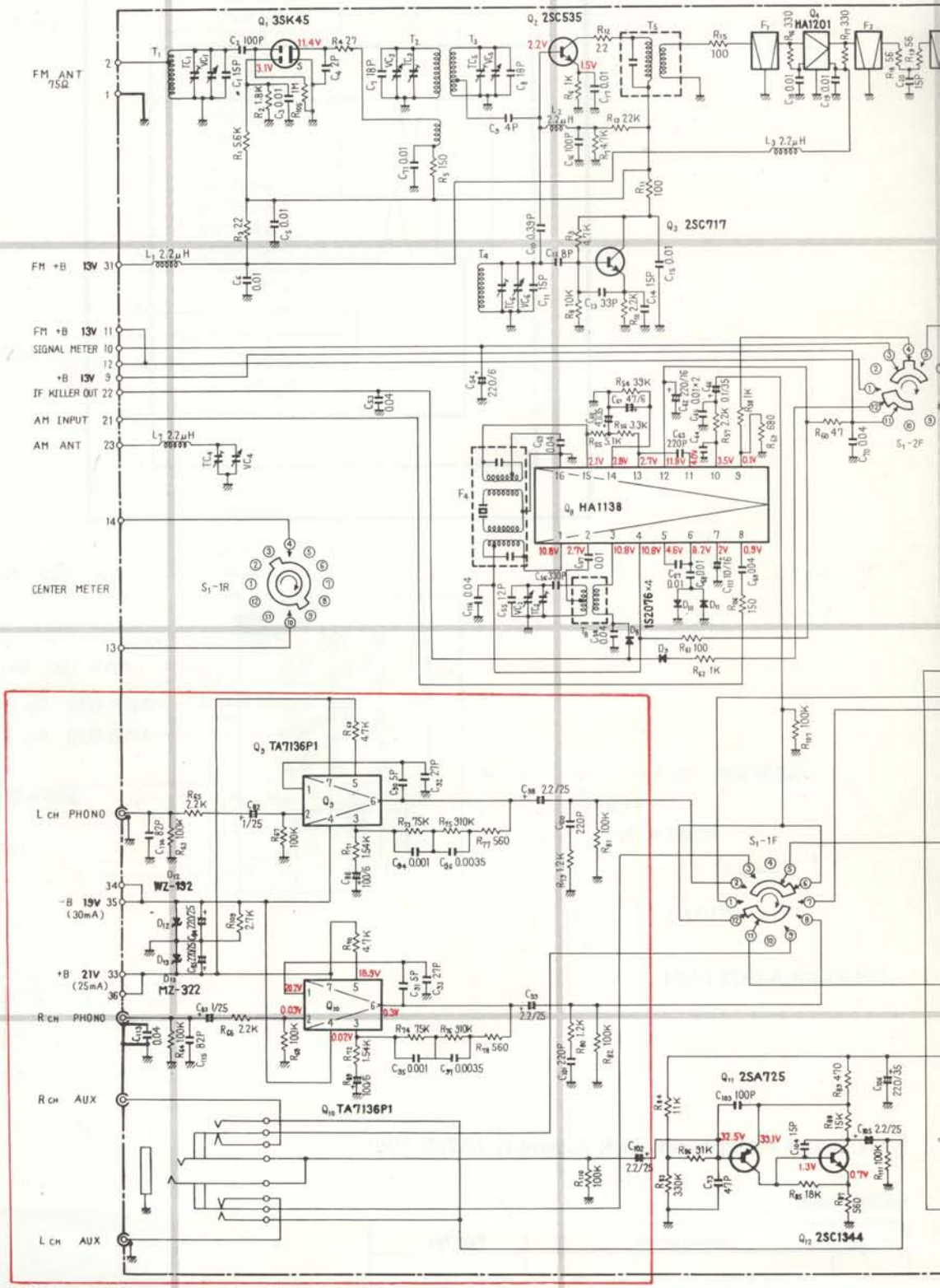


Parts List of Headphones Jack Assembly (AWX-106)

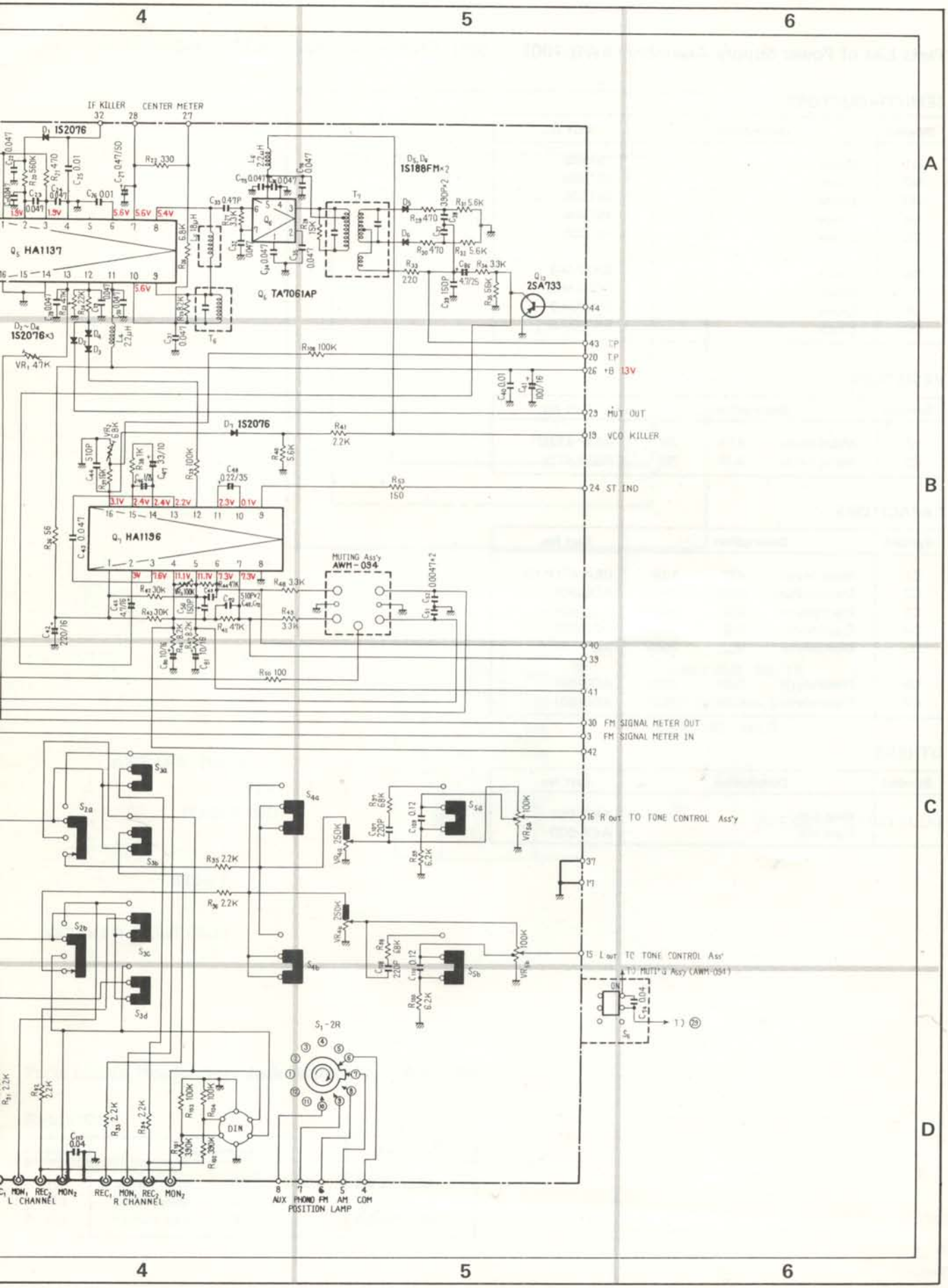
RESISTORS

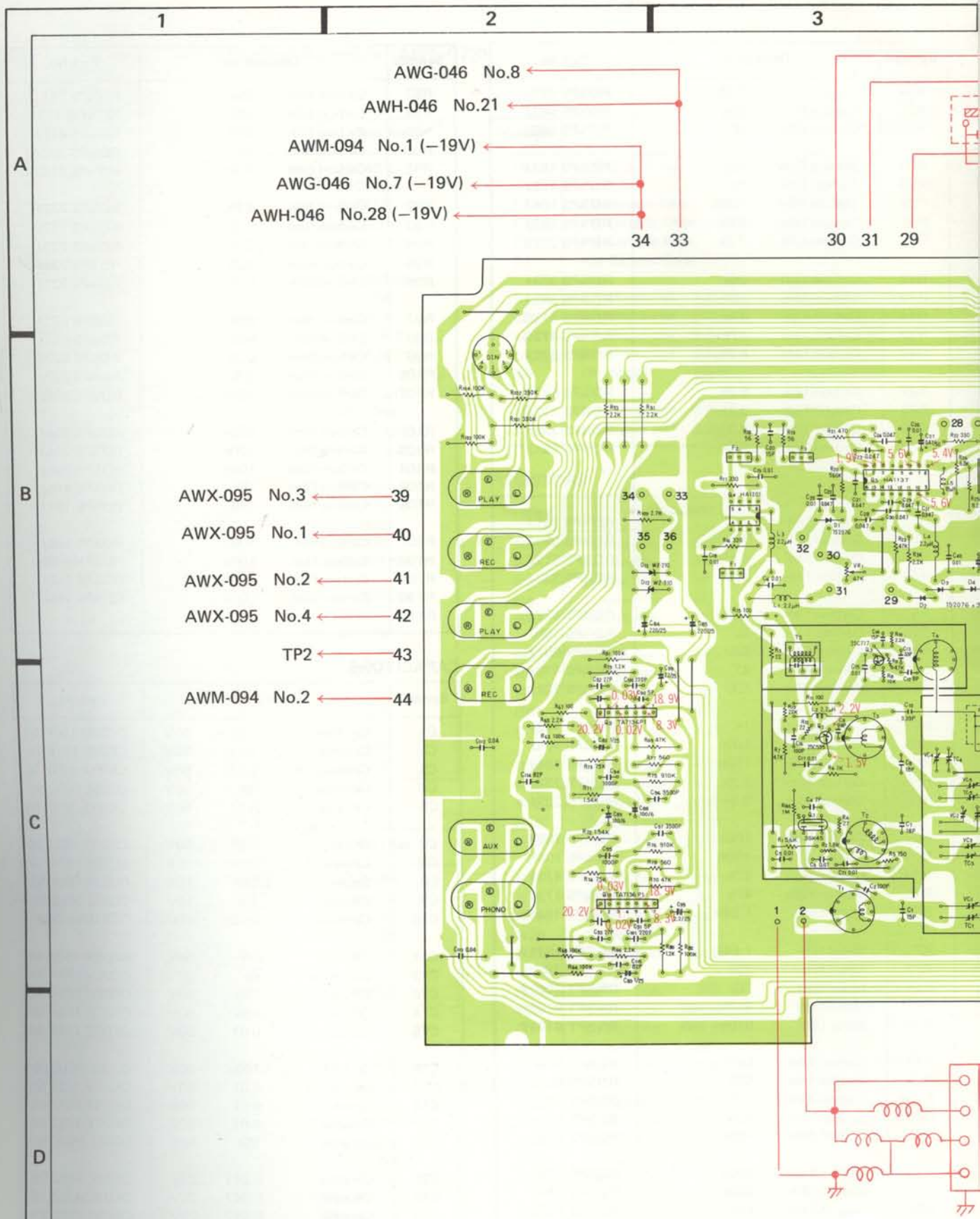
Symbol	Description			Part No.
R1	Metal oxide	150	2W	RS 2P 151J
R2	Metal oxide	150	2W	RS 2P 151J
R3	Carbon film	27		RD¼PS 270J

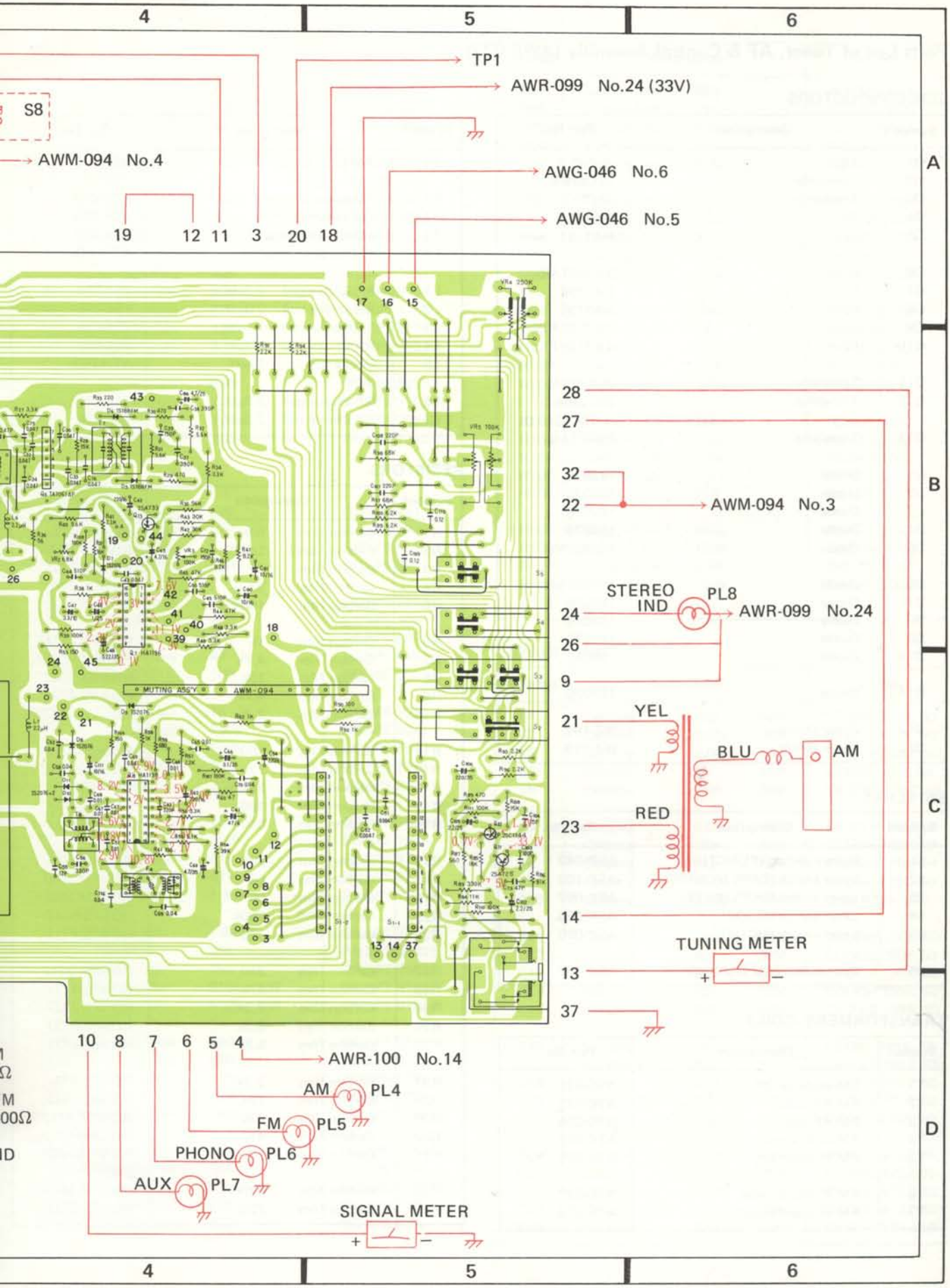
12.10 TUNER, AF, & CONTROL ASSEMBLY (AWE-073)



For units in which amplifier assembly (AWK-065) is used in place of IC (Q9, Q10 = TA7136P) indicated by red line, see Page 73.


4
5
6
A
B
C
D
IF KILLER
CENTER METER
D1 1S2076
Q5 HA1137
Q6 TA7061AP
D5, D6 1S188FM×2
Q12 2SA733
D7 ~ D9 1S2076×3
VR1 47K
D7 1S2076
Q7 HA1136
MUTING Ass'y AWM-054
43 TP
20 TP
26 +B 13V
29 MUT OUT
19 VCO KILLER
24 ST IND
40
39
41
30 FM SIGNAL METER OUT
3 FM SIGNAL METER IN
42
16 R out TO TONE CONTROL Ass'y
37
17
15 L out TO TONE CONTROL Ass'y
TO MUTING Ass'y (AWM-054)
S1-2R
DIN
MON1 REC2 MON2
L CHANNEL
REC1 MON1 REC2 MON2
R CHANNEL
8 AUX
7 PHONO FM
6
5 AM
4 COM
POSITION LAMP


1
2
3
A
B
C
D
AWG-046 No.8
AWH-046 No.21
AWM-094 No.1 (−19V)
AWG-046 No.7 (−19V)
AWH-046 No.28 (−19V)
34
33
30
31
29
AWX-095 No.3
AWX-095 No.1
AWX-095 No.2
AWX-095 No.4
TP2
AWM-094 No.2
39
40
41
42
43
44
PLAY
REC
PLAY
REC
AUX
PHONO
35
36
32
1
2


4
5
6
A
B
C
D
TP1
AWR-099 No.24 (33V)
S8
AWM-094 No.4
AWG-046 No.6
AWG-046 No.5
19
12
11
3
20
18
17
16
15
28
27
32
22
AWM-094 No.3
STEREO IND
PL8
24
AWR-099 No.24
26
9
21
YEL
BLU
AM
23
RED
14
TUNING METER
13
37
MUTING ASSY
AWM-094
10
8
7
6
5
4
AWR-100 No.14
AM
PL4
FM
PL5
PHONO
PL6
AUX
PL7
SIGNAL METER

Parts List of Tuner, AF & Control Assembly (AWE-073)

SEMICONDUCTORS

Symbol	Description	Part No.
Q1	FET	3SK45-B
Q2	Transistor	2SC535-B
Q3	Transistor	2SC717
Q4	IC	HA1201
Q5	IC	HA1137
Q6	IC	TA7061AP
Q7	IC	HA1196
Q8	IC	HA1138
Q9	IC	TA7136 P1
Q10	IC	TA7136 P1
Q11	Transistor	2SA725-G
Q12	Transistor	2SC1344-D or 2SC1345-D
Q13	Transistor	2SA733-Q
D1	Diode	1S2076
D2	Diode	1S2076
D3	Diode	1S2076
D4	Diode	1S2076
D5	Diode	1S188FM-1
D6	Diode	1S188FM-1
D7	Diode	1S2076
D8	Diode	1S2076
D9	Diode	1S2076
D10	Diode	1S2076
D11	Diode	1S2076
D12	Zener Diode	WZ-192
D13	Zener Diode	WZ-210

SWITCHES

Symbol	Description	Part No.
S1	Rotary switch (FUNCTION)	ASD-049
S2	Lever switch (TAPE MONITOR)	ASK-102
S3	Lever switch (DUPLICATE)	ASK-092
S4	Lever switch (MODE)	ASK-090
S5	Lever switch (MODE)	ASK-090
S6	Push switch (FM MUTING)	ASG-097

TRANSFORMERS, COILS

Symbol	Description	Part No.
T1	FM antenna coil	ATC-021
T2	FM RF coil	ATC-015
T3	FM RF coil	ATC-016
T4	FM O, S, C coil	ATC-022
T5	FM IF transformer	ATE-026
T6	FM IF transformer	ATE-027
T7	FM IF transformer	ATE-013
T8	AM O, S, C coil	ATB-013

Symbol	Description	Part No.
F1	FM ceramic filter	ATF-013
F2	FM Ceramic filter	ATF-013
F3	FM Ceramic filter	ATF-013
F4	AM Ceramic filter	ATF-027
L1	RF Choke coil 2.2μH	T24-028
L2	RF Choke coil 2.2μH	T24-028
L3	RF Choke coil 2.2μH	T24-028
L4	RF Choke coil 2.2μH	T24-028
L5	Choke coil 18μH	ATH-007
L6	RF Choke coil 2.2μH	T24-028
L7	RF Choke coil 2.2μH	T24-028

RESISTORS

Symbol	Description	Part No.
R1	Carbon film 5.6k	RD¼PS 562J
R2	Carbon film 1.8k	RD¼VS 182J
R3	Carbon film 22	RD¼PS 220J
R4	Carbon film 27	RD¼VS 270J
R5	Carbon film 150	RD¼VS 151J
R6	Carbon film 1k	RD¼PS 102J
R7	Carbon film 4.7k	RD¼PS 472J
R8	Carbon film 10k	RD¼VS 103J
R9	Carbon film 4.7k	RD¼VS 472J
R10	Carbon film 2.2k	RD¼VS 222J
R11	Carbon film 100	RD¼PS 101J
R12	Carbon film 22	RD¼VS 220J
R13	Carbon film 22k	RD¼VS 223J
R15	Carbon film 100	RD¼PS 101J
R16	Carbon film 330	RD¼PS 331J
R17	Carbon film 330	RD¼PS 331J
R18	Carbon film 56	RD¼PM 560J
R19	Carbon film 56	RD¼PM 560J
R20	Carbon film 560k	RD¼PS 564J
R21	Carbon film 470	RD¼PS 471J
R22	Carbon film 330	RD¼PM 331J
R23	Carbon film 47k	RD¼PS 473J
R24	Carbon film 2.2k	RD¼PS 222J
R25	Carbon film 8.2k	RD¼PS 822J
R26	Carbon film 6.8k	RD¼PS 682J
R27	Carbon film 3.3k	RD¼PS 332J
R28	Carbon film 15k	RD¼PS 153J
R29	Carbon film 470	RD¼PM 471J
R30	Carbon film 470	RD¼PM 471J
R31	Carbon film 5.6k	RD¼PM 562J
R32	Carbon film 5.6k	RD¼PM 562J
R33	Carbon film 220	RD¼PS 221J

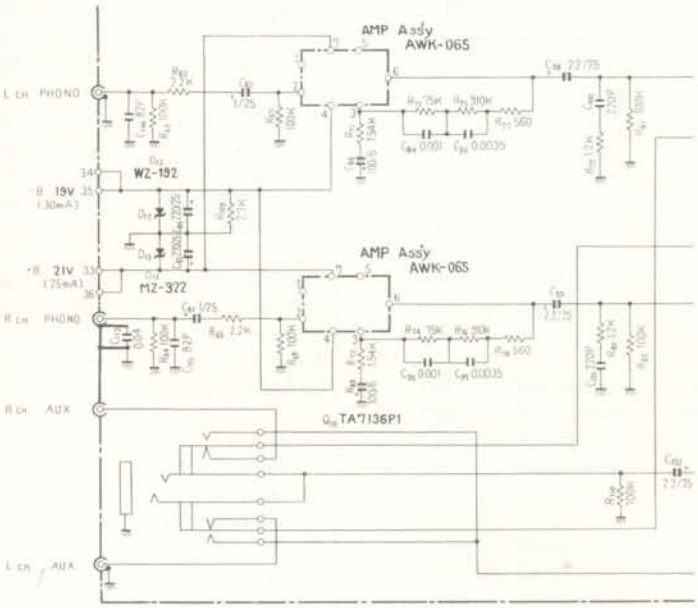
Symbol	Description	Part No.
R34	Carbon film 3.3k	RD¼PS 332J
R35	Carbon film 56k	RD¼PS 563J
R36	Carbon film 56	RD¼PS 560J

Symbol	Description	Part No.
R87	Carbon film 560	RD¼PS 561J
R88	Carbon film 15k	RD¼PM 153J
R89	Carbon film 470	RD¼PS 471J
R90		

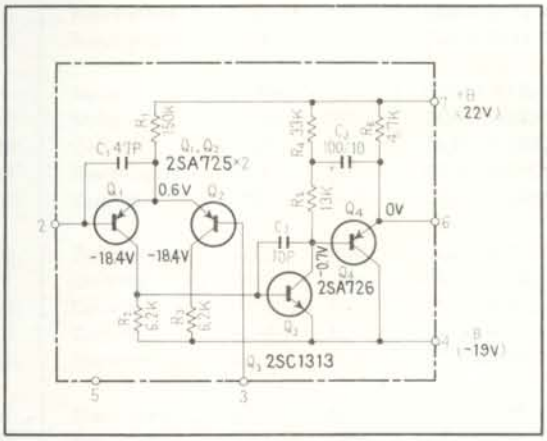
Symbol	Description	Part No.
	Nut	B71-004
	Washer	ABE-001
	Screw	ABA-121

12.11 AMPLIFIER ASSEMBLY (AWK-065)

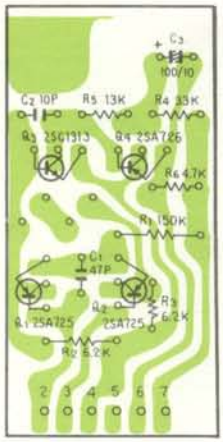
Tuner, AF & Control assembly (AWE-073)



AWK-065 circuit diagram



AWK-065 PCB



Parts List of Amplifier Assembly (AWK-065)

SEMICONDUCTORS

Symbol	Descripton	Part No.
Q1	Transistor	2SA725-G (2SA640-E)
Q2	Transistor	2SA725-G (2SA640-E)
Q3	Transistor	2SC1313-G
Q4	Transistor	2SA726-G_2 (2SA640-E)

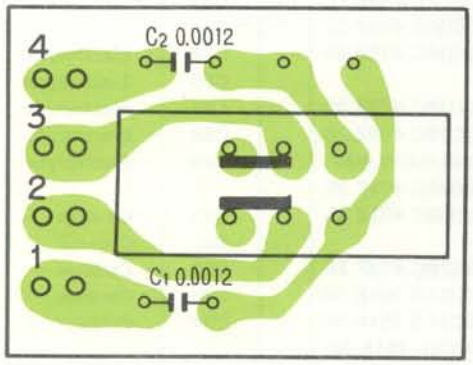
RESISTORS

Symbol	Description		Part No.
R1	Carbon film	150k	RD¼VS 154J NL
R2	Carbon film	6.2k	RD¼VS 622J
R3	Carbon film	6.2k	RD¼VS 622J
R4	Carbon film	33k	RD¼VS 333J
R5	Carbon film	13k	RD¼VS 133J
R6	Carbon film	4.7k	RD¼VS 472J

CAPACITORS

Symbol	Description			Part No.
C1	Ceramic	47p	50V	CCDSL 470K 50
C2	Ceramic	10p	50V	CCDSL 100K 50
C3	Electrolytic	100	10V	CEA 101P 10

12.12 DE-EMPHASIS SWITCH ASSEMBLY (AWX-095)



Parts List of De-emphasis Switch Assembly (AWX-095)

Symbol	Description	Part No.
	Slide switch (DE-EMPHASIS)	ASH-015
C1	Mylar capacitor 0.0012 50V	CQMA 122J 50
C2	Mylar capacitor 0.0012 50V	CQMA 122J 50

PIONEER ELECTRONIC CORPORATION
4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
U.S. PIONEER ELECTRONICS CORPORATION
75 Oxford Drive, Moonachie, New Jersey 07074, U.S.A.
PIONEER ELECTRONIC (EUROPE) N.V.
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<76E04Y51K>

Printed in Japan
<ART-181-0>

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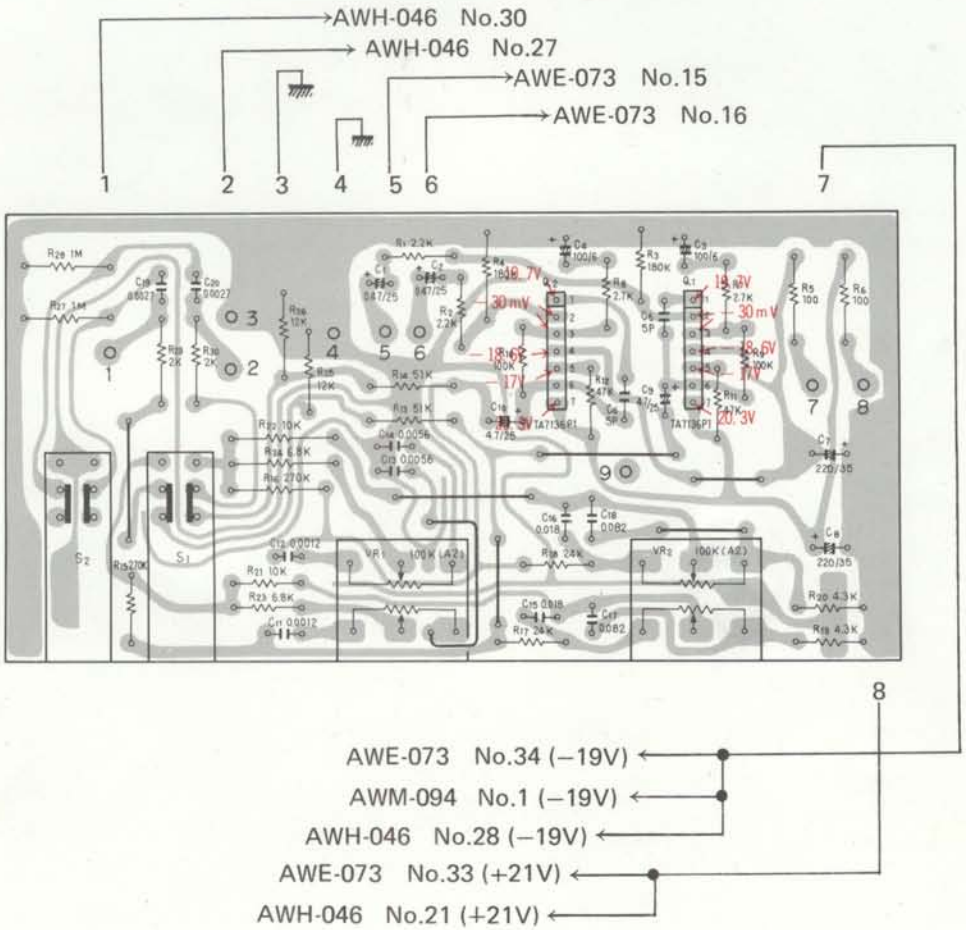
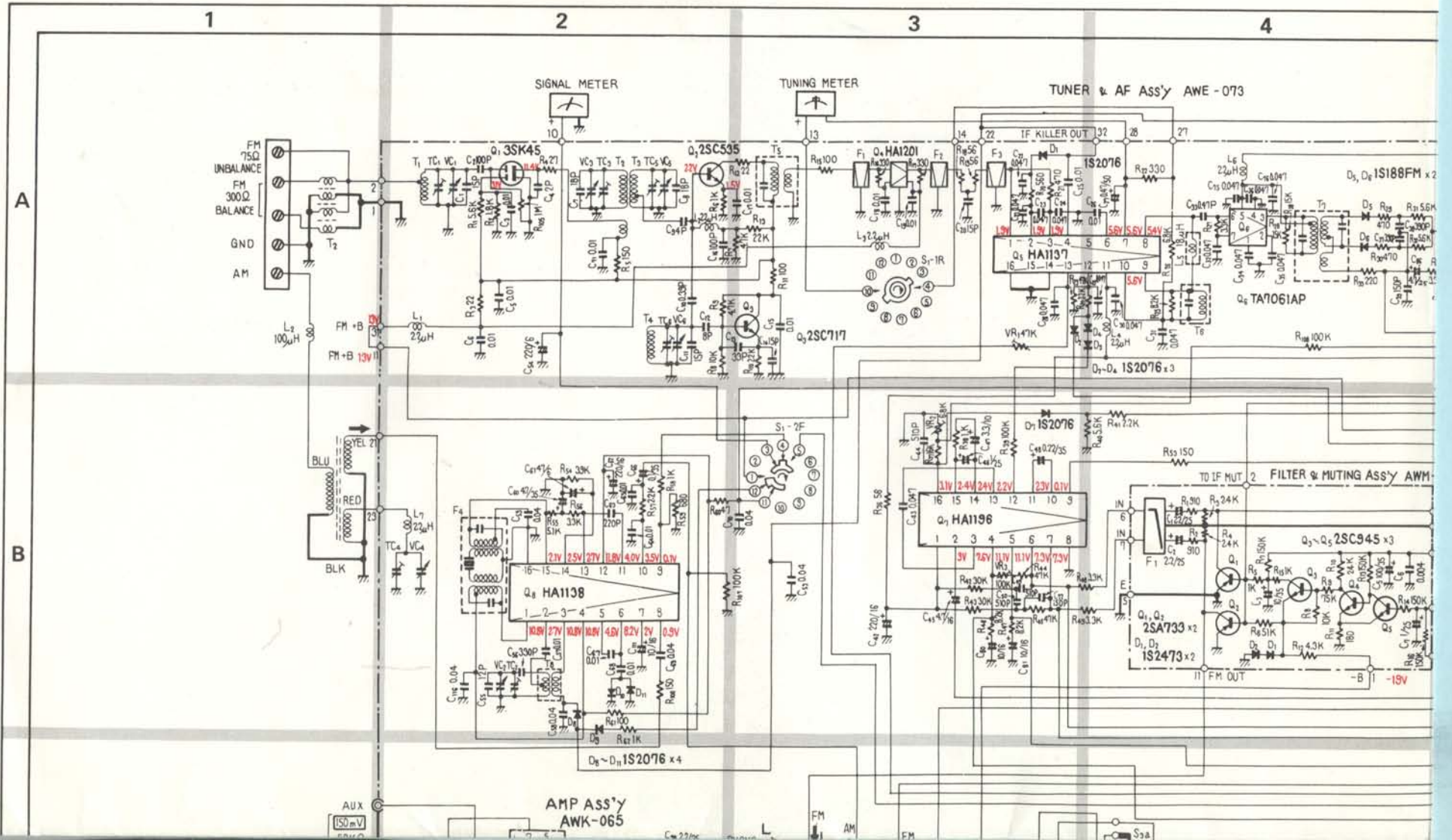
AMENDMENT TO SX-750/KU·KC Service Manual

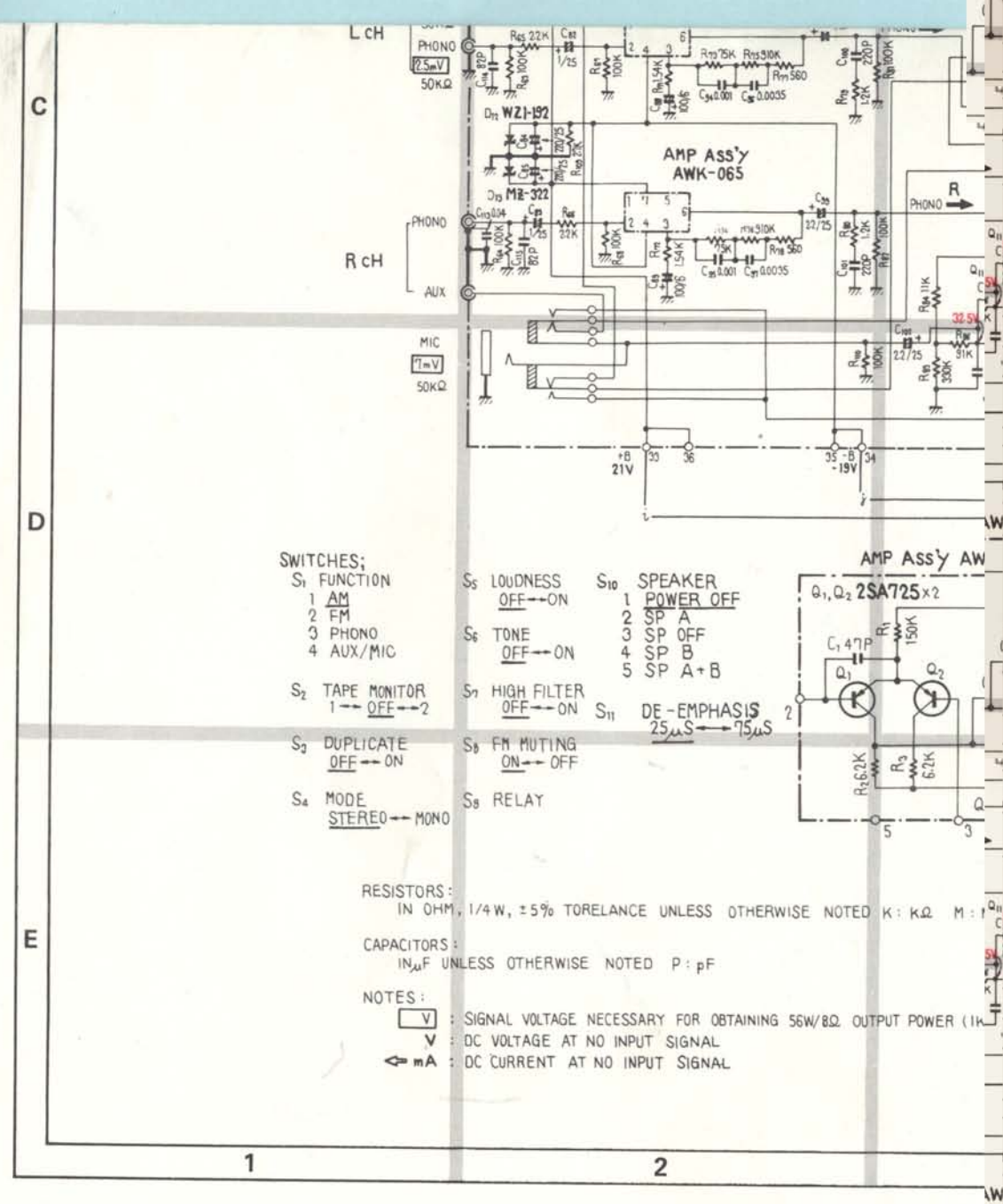
A misprint appears on page 52 "12.5 TONE CONTROL ASSEMBLY (AWG-046)" in point of voltage value.
Please replace the original P.C. Board by the ones provided below.



AM/FM STEREO RECEIVER

SX-750 KC KU




L cH
PHONO
2.5mV
50KΩ
D72 WZ1-192
D73 MZ-322
AMP Ass'y
AWK-065
R cH
PHONO
AUX
MIC
1mV
50KΩ
R
PHONO
32.5V
+B
21V
-B
-19V
SWITCHES;
S1 FUNCTION
1 AM
2 FM
3 PHONO
4 AUX/MIC
S2 TAPE MONITOR
1 ↔ OFF ↔ 2
S3 DUPLICATE
OFF ↔ ON
S4 MODE
STEREO ↔ MONO
S5 LOUDNESS
OFF ↔ ON
S6 TONE
OFF ↔ ON
S7 HIGH FILTER
OFF ↔ ON
S8 FM MUTING
ON ↔ OFF
S8 RELAY
S10 SPEAKER
1 POWER OFF
2 SP A
3 SP OFF
4 SP B
5 SP A+B
S11 DE-EMPHASIS
25μS ↔ 75μS
AMP Ass'y AW
Q1, Q2 2SA725×2
RESISTORS:
IN OHM, 1/4W, ±5% TORELANCE UNLESS OTHERWISE NOTED K: KΩ M:
CAPACITORS:
IN μF UNLESS OTHERWISE NOTED P: pF
NOTES:
V : SIGNAL VOLTAGE NECESSARY FOR OBTAINING 56W/8Ω OUTPUT POWER (1K
V : DC VOLTAGE AT NO INPUT SIGNAL
mA : DC CURRENT AT NO INPUT SIGNAL
C
D
E
1
2