

HiFi ENGINE[®]

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FM/AM STEREO TUNER

MODEL No. ST-R22H,E,K,G

PRE AMPLIFIER

MODEL No. SA-C22H,E,K,G

DC STEREO POWER AMPLIFIER

MODEL No. SA-P22H,E,K,G

AIWA®

(SERVICE MANUAL)

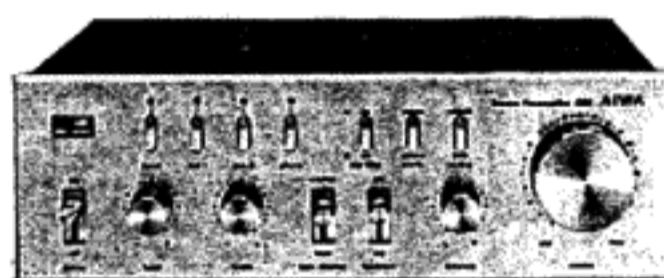
DATE OF ISSUE 5/1979

Cord No.15-220-000-53



ST-R22

Cord No.16-220-000-53



SA-C22

Cord No.17-220-000-53



SA-P22

SPECIFICATIONS

Semiconductors: 4 ICs, 2 FETs, 24 transistors, 21 diodes, 8 LEDs, 4-LED digit numerical display

Power source: AC 110/220V switchable
50/60 Hz (H model)
AC 220V 50/60 Hz (E model)
AC 240V 50/60 Hz (K, G model)

Power consumption: 8W

Dimensions: 210(W) x 71(H) x 173.5(D)mm

Weight: 2.0 kg

<FM SECTION>

Frequency range: 87.3 ~ 108.5 MHz

Intermediate frequency: 10.7 ± 0.1 MHz

Usable sensitivity: 6 ± 2 dB (at 88 MHz)
5 ± 3 dB (at 98, 108 MHz)

S/N 50 dB sensitivity: 13 ± 2 dB (at 88, 98, 108 MHz)

S/N ratio: More than 65 dB

Distortion: Less than 0.2%

Frequency response: 40 ~ 15,000 Hz (+0.5 dB, -1.5 dB)

Image interference ratio: More than 40 dB

IF interference ratio: More than 80 dB

Capture ratio: Less than 2 dB

AM suppression ratio: More than 50 dB

Selectivity: 43 ± 10 dB (± 300 kHz)

Stereo separation: More than 42 dB (at 1 kHz)
More than 38 dB (at 100 Hz, 6 kHz)

Muting sensitivity: 20 ± 6 dB

AFC holding range: 320 ± 30 kHz

<AM SECTION>

Frequency range: 515 ~ 1650 kHz

Intermediate frequency: 455 ± 1.5 kHz (H,E,G model)
460 ± 1.5 kHz (K model)

Sensitivity: 51 ± 3 dB (600 kHz)

(S/N 20 dB) 49 ± 3 dB (1000, 14000 kHz)

S/N ratio: 42 ± 5 dB

Distortion: Less than 1.2%

Image interference ratio: More than 40 dB

Selectivity: 30 ± 5 dB (± 9 kHz)

IF interference ratio: More than 35 dB

SPECIFICATIONS

Semiconductors: 7 ICs, 4 transistors, 17 diodes, 4 LEDs

Power source: AC 110/220V switchable
50/60 Hz (H model)
AC 220V 50/60 Hz (E model)
AC 240V 50/60 Hz (K, G model)

Power consumption: 3W

Dimensions: 210(W) x 71(H) x 173.5(D)mm

Weight: 1.7 kg

S/N ratio: More than 75 dB (Weighted)

Distortion: Less than 0.1% (20 Hz ~ 20 kHz)

Frequency response: 20 ~ 20,000 Hz (± 0.5 dB)

Tone controls: Bass 100 Hz +8.5 ± 1.5 dB
-11 ± 1.5 dB
Treble 10kHz +6 ± 1.5 dB
-10 ± 1.5 dB

Loudness: 100 Hz +6 ± 1 dB
10 kHz +4 ± 1 dB
30Hz -2 ± 1 dB

Low filter: 30Hz

Channel separation: phono More than 48 dB
tuner More than 45 dB
aux 1,2

Input sensitivity and impedance: phono 2.5mV (200mV max input)
tuner 150mV/47 kΩ
aux 1,2 150mV/47 kΩ
play 150mV/1 kΩ (H,G model)
recout 30mV/80 kΩ (E,K model)

Tape monitor:

Output level: 580mV ± 1 dB (phono 2.5mV)
720mV ± 1 dB (tuner, aux 1,2 150mV)

Residual noise: Less than 0.12mV

SPECIFICATIONS

Semiconductors: 5 ICs, 12 transistors, 25 diodes, 6 LEDs

Power source: AC 110/220V switchable
50/60 Hz (H model)
AC 220V 50/60 (E model)
AC 240V 50/60 Hz (K, G model)

Power consumption: 60W (H model)
160W (G model)
200W (E model)
210W (K model)

Dimensions: 210(W) x 72(H) x 207(D)mm

Weight: 3.8 kg

Power output: 30W + 30W (H, G model) (8Ω, 0.06% distortion, 20 Hz ~ 20 kHz)
30W + 30W (E, K model) (4Ω, 0.1% distortion, 20 Hz ~ 20 kHz)

Distortion: Less than 0.05% (H, G model)
Less than 0.08% (E, K model)
More than 95 dB

S/N ratio: (1 kHz, IHF A curve)

Frequency response: 10 ~ 50,000 Hz (± 1 dB)

Power bandwidth: Less than 0.1% (20 Hz ~ 20 kHz) (H, G model)
Less than 0.15% (20 Hz ~ 20 kHz) (E, K model)

Residual noise: Less than 1mV

Output voltage: phones More than 0.8mW (H, G model)
More than 1mW (E, K model)

• Specifications and external appearance are subject to change without notice due to product improvement.

PARTS LIST

MECHANICAL PARTS

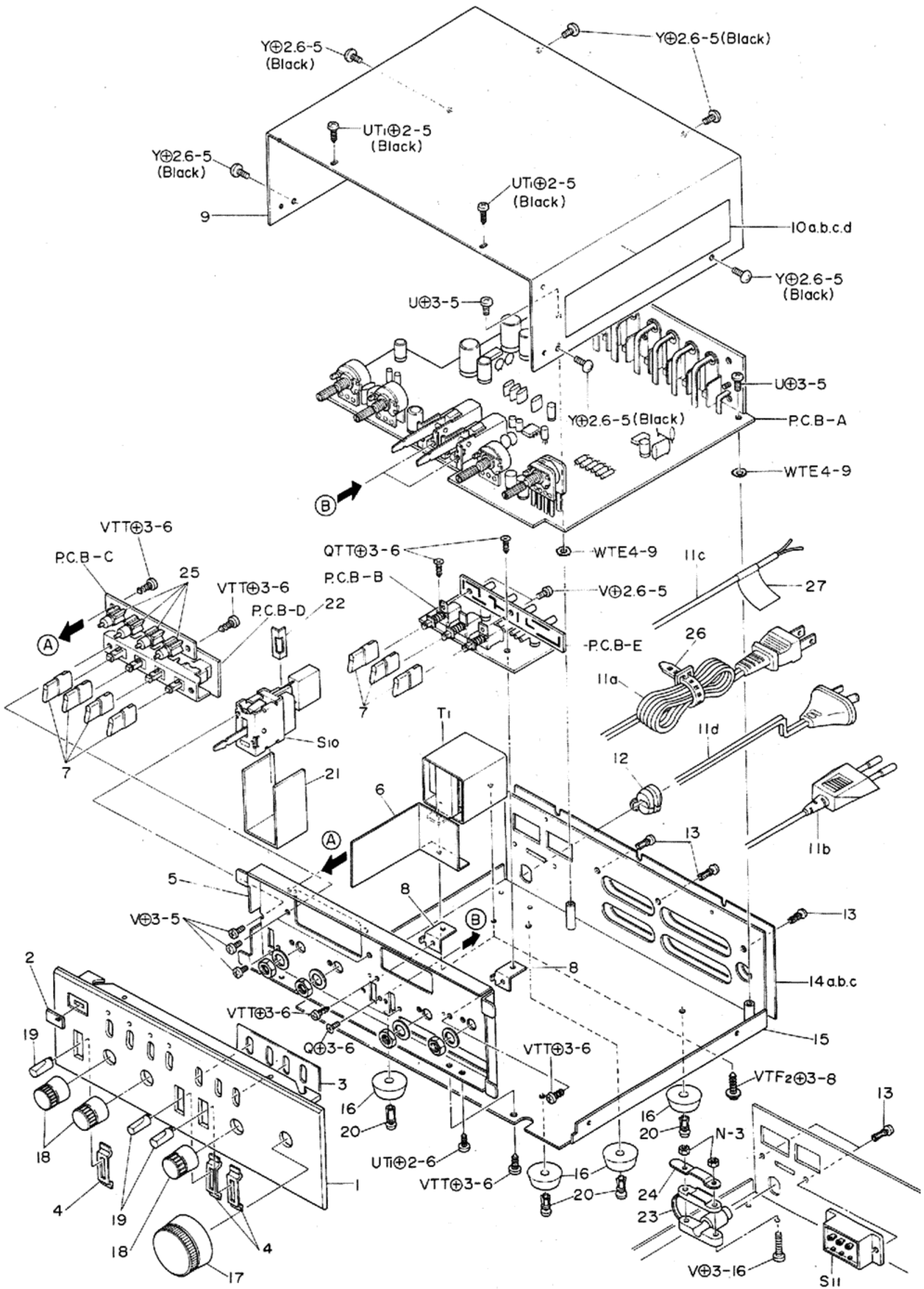
* mark in this part list shows exclusive part (which is used) for only Model No. ST-R22.

Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
1-1	82-730-015-01		Panel, Front	*	1
1-2	82-498-008-01		Lever guide	SA-C22	1
1-3	82-498-206-01		Guide, Button	SA-C22	1
1-4	86-992-013-01		Badge		1
1-5	82-730-006-01		Dial window	*	1
1-6	82-730-008-01		Decorative screw	*	2
1-7	82-730-005-01		Dial plate	*	1
1-8	82-730-201-01		Chassis, Front	*	1
1-9	82-730-217-01		Tuning flywheel	*	1
1-10	82-498-002-01		Steel cabinet	SA-C22	1
1-11	82-498-209-01		Cover, Insulation	SA-C22	1
1-12a	82-730-017-01		Name plate, Spec. (H model only)	*	1
1-12b	82-730-016-01		Name plate, Spec. (E model only)	*	1
1-12c	82-730-019-01		Name plate, Spec. (K model only)	*	1
1-12d	82-730-020-01		Name plate, Spec. (G model only)	*	1
1-13	87-085-101-01		Cord bushing		1
1-14	82-470-240-01		Drum, Tuning dial	AF-3200	1
1-15	82-461-378-01		Leaf nut	TPR-900	1
1-16	82-439-359-01		Spring, Drum	TPR-150	1
1-17	87-096-086-01		Dial string		1
1-18	82-473-013-01		Holder C, Antenna	AX-7500	1
1-19	82-473-010-31		Antenna holder ass'y	AX-7500	1
1-20	87-085-102-01		Nylon rivet 3.5-5.5		5
1-21	87-084-072-01		Nylon rivet 3.5-7		4
1-22a	82-730-013-01		Jack plate (H model only)	*	1
1-22b	82-730-014-01		Jack plate (E, K model only)	*	1
1-22c	82-730-038-01		Jack plate (G model only)	*	1
1-23	82-730-215-01		Amp. chassis H ass'y	*	1
1-24	82-498-003-01		Push-button	SA-C22	3
1-25	82-735-012-01		Rubber foot	SA-A22	4
1-26	82-730-203-01		Roller holder ass'y	*	1
1-27	82-473-220-01		Roller	AX-7500	2
1-28	82-730-012-01		Knob, Tuning	*	1
1-29	82-498-012-01		Knob, Power switch	SA-C22	1
1-30	82-730-206-01		Shaft bearing	*	1
1-31	82-730-207-01		Shaft, Tuning	*	1
1-32	82-735-206-01		Plate, IC (E, K model only)	SA-A22	1
1-33	81-301-040-01		Cushion, Circuit board		1
1-34	82-463-216-01		Rubber bushing	TPR-900	1
1-35	82-730-210-01		Cushion, Dial	*	1
1-36	82-730-216-01		Cushion	*	1
1-37	93-464-154-01		Cushion, Case	*	1
1-38	82-730-219-01		Cushion, Push-switch (H, E, K model only)	*	1
1-39a	87-034-826-01		AC power cord (H model only)		1
1-39b	87-034-877-01		AC power cord (E model only)		1
1-39c	87-034-872-01		AC power cord (K model only)		1
1-39d	87-034-878-01		AC power cord (G model only)		1
1-40	87-085-166-01		Holder, AC power cord (E, K model only)		1
1-41	87-085-165-01		Cord bushing (H, G model only)		1
1-42	87-085-023-01		Cord binder		1
1-43	87-056-008-01		Label, AC power cord (K model only)		1

ACCESSORIES/PACKAGE

Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
1	82-730-853-01		Printed indiv., Packing	*	1
2	82-498-857-01		Cushion L, Printed indiv. (H,K model only)	SA-C22	1
3	82-498-857-11		Cushion L, Printed indiv. (H ₁ ,E,G model only)	SA-C22	1
4	82-498-858-01		Cushion R, Printed indiv. (H,K model only)	SA-C22	1
5	82-498-858-11		Cushion R, Printed indiv. (H ₁ ,E,G model only)	SA-C22	1
6	87-056-603-01		Poly-vinyl sack (for case)		1
7a	82-730-904-01		Instructions booklet (H model only)	*	1
7b	82-730-907-01		Instructions booklet (H ₁ model only)	*	1
7c	82-730-905-01		Instructions booklet (E model only)	*	1
7d	82-730-906-01		Instructions booklet (K model only)	*	1
7e	82-730-910-01		Instructions booklet (G model only)	*	1
8	87-051-171-11		Poly-vinyl sack (for instruction)		1
9	87-056-009-41		Distributors list		1
10	87-056-008-01		Label, AC power cord (K model only)		1
11	87-058-023-01		Cord binder		1
12	82-498-010-01		Handle (H ₁ model only)	SA-C22	2
13	87-225-094-11		P + 3 - 6 (H ₁ model only)		4
14	87-051-130-11		Poly-vinyl sack (H ₁ model only)		1
15	87-032-845-01		Siemens plug (H,H ₁ model only)		1
16	85-450-001-01		Connection cord, CW-159K (H,H ₁ ,G model only)		1
17	87-043-025-01		FM antenna		1
18	87-051-131-11		Poly-vinyl sack		1
19	87-051-136-11		Poly-vinyl sack		1

EXPLODED VIEW



PARTS LIST

MECHANICAL PARTS

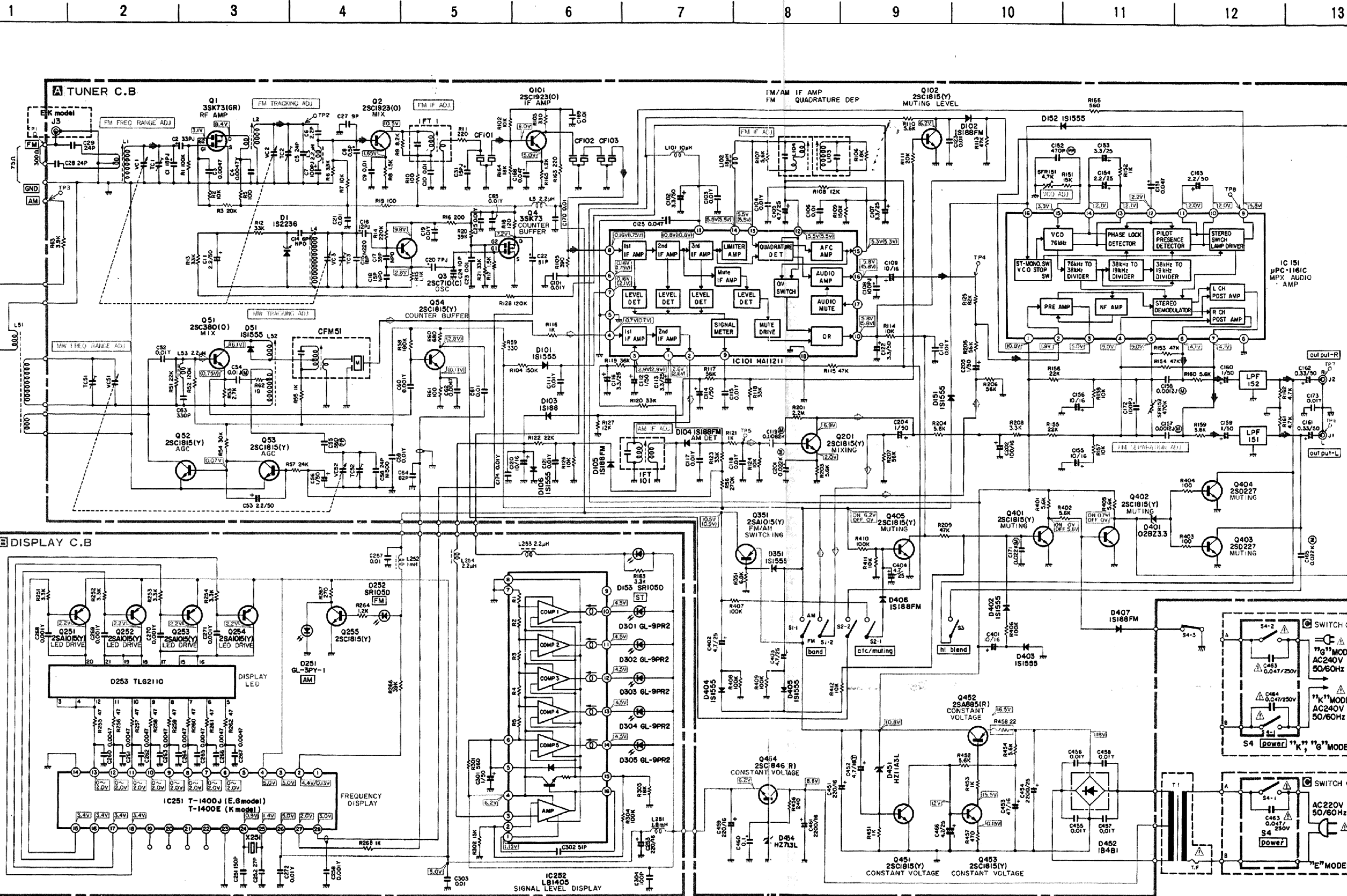
* mark in this part list shows exclusive part
(which is used) for only Model No. SA-C22.

Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
1-1	82-498-016-01		Panel, Front	*	1
1-2	86-992-013-01		Badge	MT-20	1
1-3	82-498-206-01		Guide, Button	*	1
1-4	82-498-008-01		Lever guide	*	3
1-5	82-498-201-01		Chassis, Front	*	1
1-6	82-498-622-01		Shield plate	*	1
1-7	82-498-003-01		Push-button	*	7
1-8	82-498-203-01		Holder, Circuit board	*	2
1-9	82-498-002-01		Steel cabinet	*	1
1-10a	82-498-018-01		Name plate, Spec. (H model only)	*	1
1-10b	82-498-017-01		Name plate, Spec. (E model only)	*	1
1-10c	82-498-021-01		Name plate, Spec. (K model only)	*	1
1-10d	82-498-022-01		Name plate, Spec. (G model only)	*	1
1-11a	87-034-826-01		AC power cord (H model only)		1
1-11b	87-034-877-01		AC power cord (E model only)		1
1-11c	87-034-872-01		AC power cord (K model only)		1
1-11d	87-034-878-01		AC power cord (G model only)		1
1-12	87-085-165-01		Cord bushing (H, G model only)		1
1-13	87-085-102-01		Nylon river 3.5-5.5		5
1-14a	82-498-014-01		Jack plate (H model only)	*	1
1-14b	82-498-015-01		Jack plate (E, K model only)	*	1
1-14c	82-498-025-01		Jack plate (G model only)	*	1
1-15	82-498-204-01		Amp. chassis ass'y	*	1
1-16	82-735-012-01		Rubber foot	SA-A22	4
1-17	82-735-001-01		Knob, Volume	SA-A22	1
1-18	82-735-003-01		Knob, Tone	SA-A22	1
1-19	82-498-012-01		Knob, Power switch	*	3
1-20	87-084-072-01		Nylon rivet 3.5-7		4
1-21	82-498-209-01		Cover, Insulation (E,K,G model only)	*	1
1-22	82-498-629-01		Barrier (E,K,G model only)	*	1
1-23	87-085-166-01		Holder, AC power cord (E,K,G model only)		1
1-24	82-735-206-01		Plate, IC (E,K,G model only)	SA-A22	1
1-25	82-498-207-01		Rubber cushion	*	4
1-26	87-058-023-01		Cord binder		1
1-27	87-056-008-01		Label, AC power cord (K model only)		1

ACCESSORIES/PACKAGE

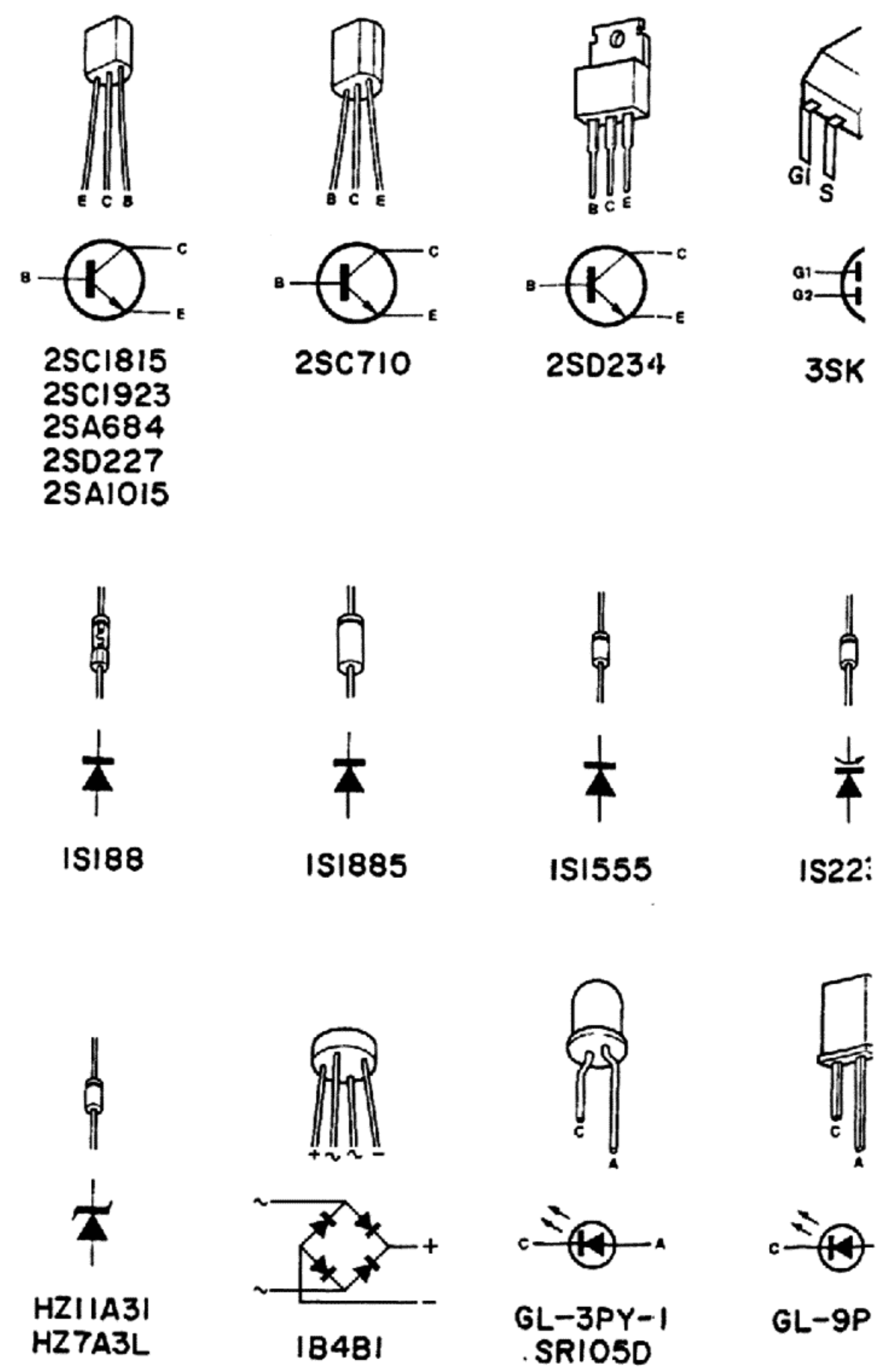
Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
1	82-498-855-01		Printed indiv., Packing	*	1
2	82-498-857-11		Cushion L, Printed indiv.	*	1
3	82-498-858-11		Cushion R, Printed indiv.	*	1
4	87-056-603-01		Poly-vinyl sack (for case)		1
5a	82-498-904-01		Instructions booklet (H model only)	*	1
5b	82-498-907-01		Instructions booklet (H1 model only)	*	1
5c	82-498-905-01		Instructions booklet (E1 model only)	*	1
5d	82-498-906-01		Instructions booklet (K model only)	*	1
5e	82-498-910-01		Instructions booklet (G model only)	*	1
6	87-051-171-11		Poly-vinyl sack (for instruction)		1
7	87-051-135-11		Poly-vinyl sack (K, G model only)		1
8	87-056-009-41		Distributors list		1
9	87-056-008-01		Label, AC power cord (K model only)		1
10	87-056-014-01		Tag, Main voltage (K model only)		1
11	87-056-032-01		Guarantee card (G model only)		1
12	87-051-130-11		Poly-vinyl sack (H1, E1 model only)		1
13	87-051-131-11		Poly-vinyl sack (H, H1 model only)		1
14	82-498-010-01		Handle (H1, E1 model only)	*	2
15	87-225-094-11		P + 3 - 6 (H1, E1 model only)		4
16	84-450-001-01		Connection cord, CW-159K		1
17	87-032-845-01		Siemens plug (H, H1 model only)		1
18	87-058-023-01		Cord binder		1

SCHEMATIC DIAGRAM



S1-1,2 band (FM) S4 power (off)
 S2-1,2 afc/muting (off)
 S3 hi blend (off)

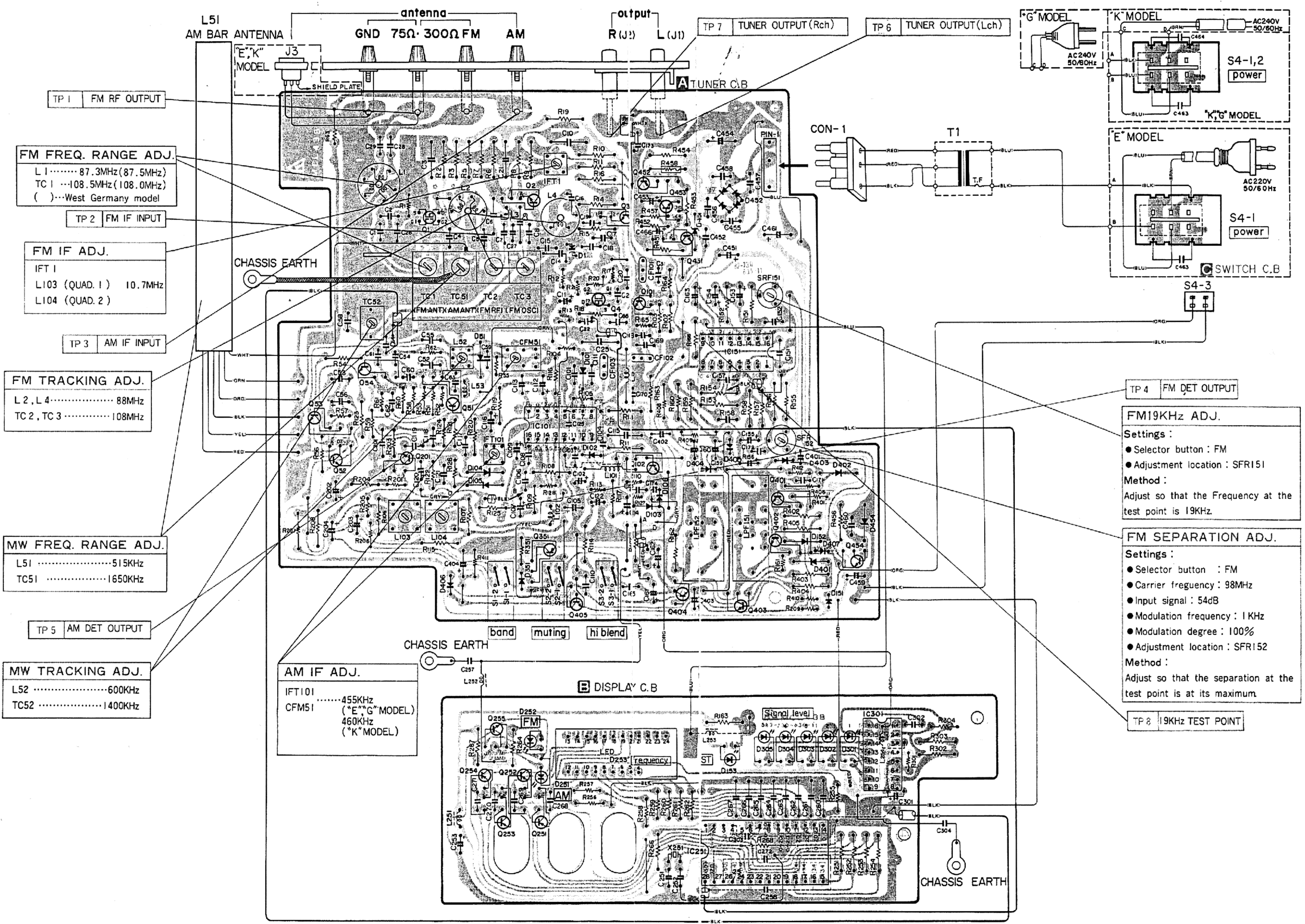
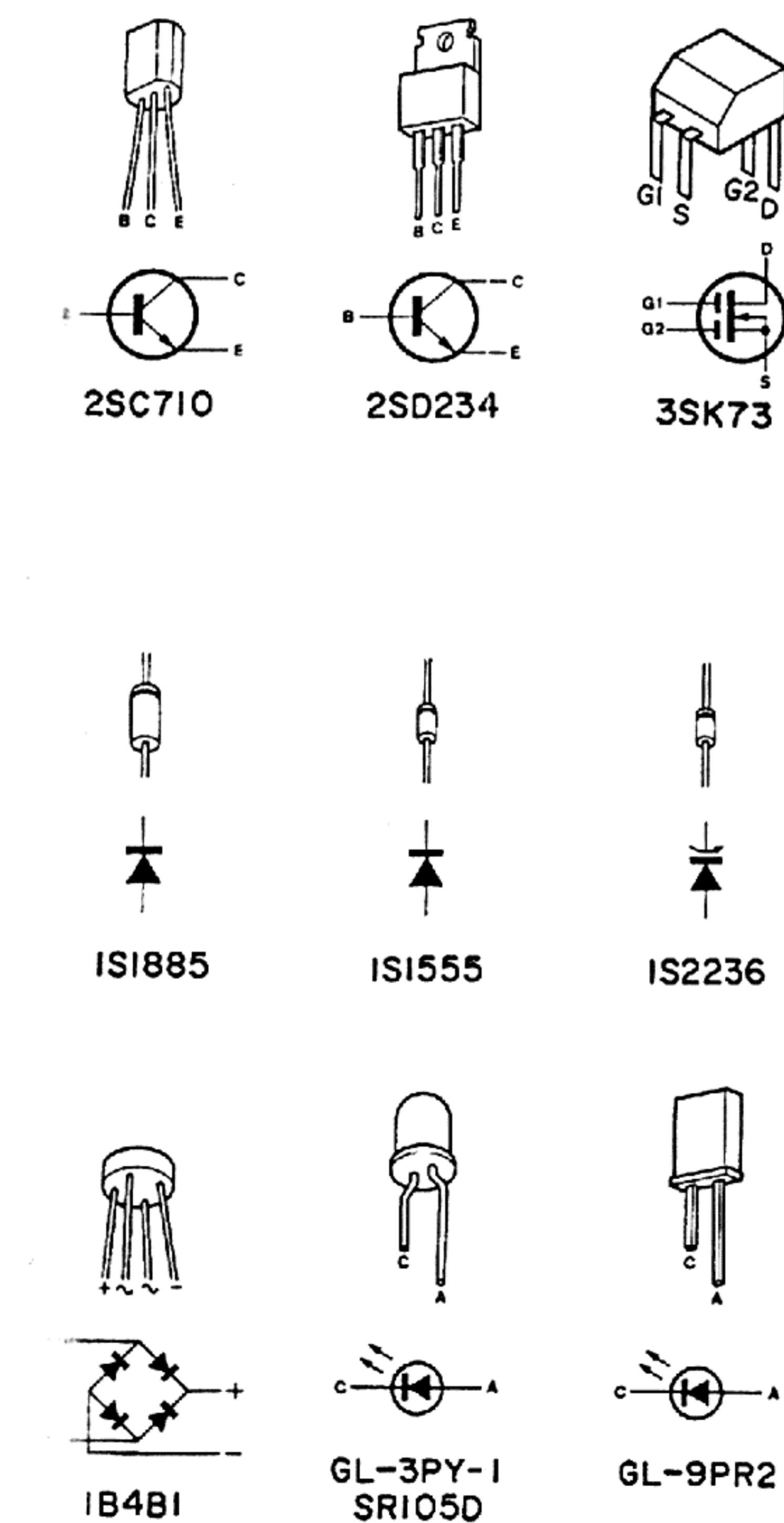
- NOTES:**
- 1) — B (+) power supply
 - 2) → Signal path
 - 3) ⇄ Rec path, AM signal path.
 - 3) The voltage is the reference value measured with tester (20 k-ohms/V DC) when there are no signals. But () is with AM reception.
 - 4) Resistors with no designation have a rated power 1/4W and a tolerance of ±5%.
 - 5) Capacitors with no designation have a dielectric strength of less than 50WV.
 - 6) The only capacitor tolerances indicated are ±5% and ±10% (K).
 - 7) Ceramic capacitor symbols:
 - For temperature compensation (SL)
 - ⊖ High dielectric constant system (YY)
 - ⊖ High dielectric constant system (YW, YP, YZ)
 - Semiconductor ceramic
 - 8) Explanation of symbols
 - (M) Mylar capacitor
 - (PP) Polypropylene film capacitor
 - (T) Tantalum capacitor
 - ⊞ Fuse resistor
 - ⚠ Safety component symbol
- This symbol is given to important parts which are to maintain the safety of the product, and which made to conform to special safety specifications. Therefore, when replacing a component with a symbol, make absolutely sure that you use a signated part.
- This schematic diagram is subject to change with notice in the interests of improved performance.



WIRING

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

power supply
 path
 path, AM signal path.
 is the reference value measured with a
 ohms/V DC) when there are no signals.
 is with AM reception.
 with no designation have a rated power of
 tolerance of ±5%.
 with no designation have a dielectric
 less than 50WV.
 capacitor tolerances indicated are ±5% (J
 K).
 capacitor symbols:
 temperature compensation (SL)
 dielectric constant system (YY)
 dielectric constant system (YW, YP, YZ)
 conductor ceramic
 of symbols
 capacitor
 polypropylene film capacitor
 electrolytic capacitor
 resistor
 component symbol
 is given to important parts which serve
 the safety of the product, and which are
 conform to special safety specifications.
 when replacing a component with this
 make absolutely sure that you use a de-
 part.
 diagram is subject to change without
 the interests of improved performance.



- TP 1 FM RF OUTPUT
- FM FREQ. RANGE ADJ.
 L 1 87.3MHz (87.5MHz)
 TC 1 108.5MHz (108.0MHz)
 () West Germany model
- TP 2 FM IF INPUT
- FM IF ADJ.
 IFT 1
 L103 (QUAD. 1) 10.7MHz
 L104 (QUAD. 2)
- TP 3 AM IF INPUT
- FM TRACKING ADJ.
 L 2, L 4 88MHz
 TC 2, TC 3 108MHz
- MW FREQ. RANGE ADJ.
 L51 515KHz
 TC51 1650KHz
- TP 5 AM DET OUTPUT
- MW TRACKING ADJ.
 L52 600KHz
 TC52 1400KHz
- AM IF ADJ.
 IFT101 455KHz
 CFM51 ("E" "G" MODEL)
 460KHz
 ("K" MODEL)

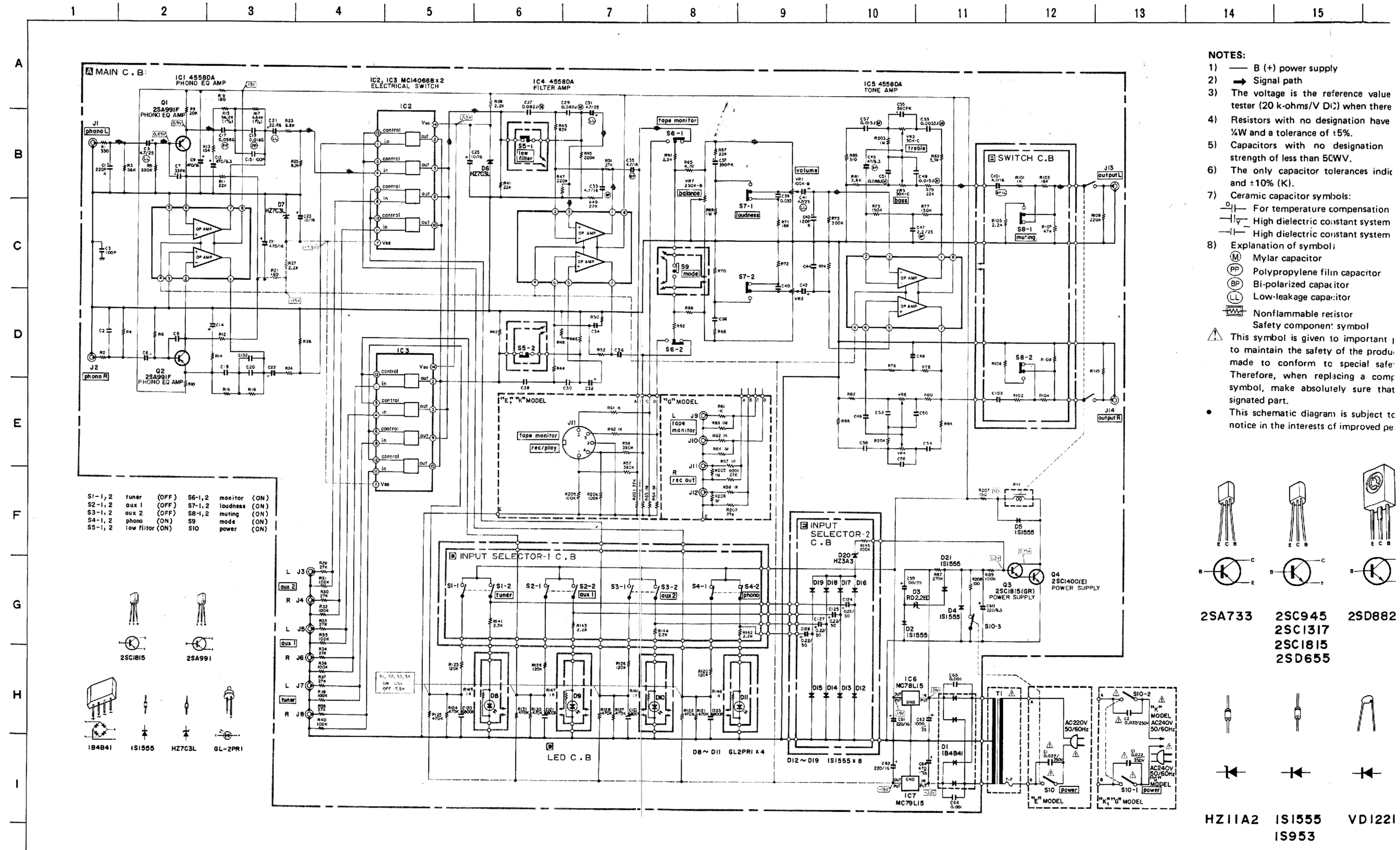
- G MODEL
- K MODEL
- E MODEL
- TP 4 FM DET OUTPUT
- FM19KHz ADJ.
 Settings:
 • Selector button : FM
 • Adjustment location : SFR151
 Method:
 Adjust so that the Frequency at the test point is 19KHz.
- FM SEPARATION ADJ.
 Settings:
 • Selector button : FM
 • Carrier frequency : 98MHz
 • Input signal : 54dB
 • Modulation frequency : 1KHz
 • Modulation degree : 100%
 • Adjustment location : SFR152
 Method:
 Adjust so that the separation at the test point is at its maximum.
- TP 2 19KHz TEST POINT

NOTES (1) B(+) Pattern Others pattern
 (2) The voltage is the reference value measured with a tester (20 K ohms/V DC) when there are no signals. But () is with AM reception.

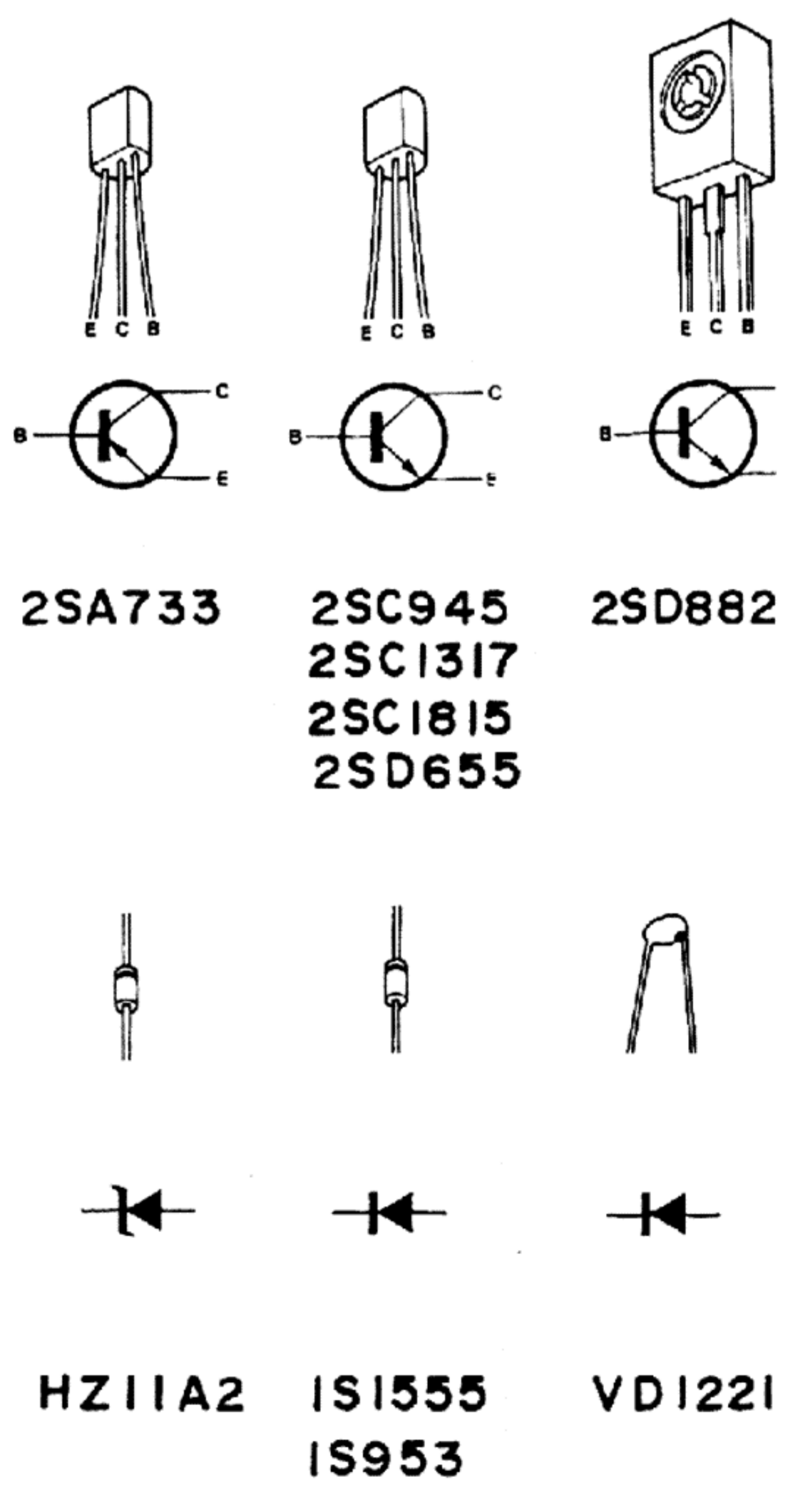
How to change the upper limit of FM frequency range from 108 MHz to 104 MHz

Symbol No.	Description	108 MHz	104 MHz
C15	Ceramic capacitor	18pF 88-254-180-01	39pF 88-254-270-01

SCHEMATIC DIAGRAM



- NOTES:**
- 1) — B (+) power supply
 - 2) → Signal path
 - 3) The voltage is the reference value tester (20 k-ohms/V DC) when there
 - 4) Resistors with no designation have 1/4W and a tolerance of ±5%.
 - 5) Capacitors with no designation strength of less than 50WV.
 - 6) The only capacitor tolerances indic and ±10% (K).
 - 7) Ceramic capacitor symbols:
 ○ For temperature compensation
 □ High dielectric constant system
 ▭ High dielectric constant system
 - 8) Explanation of symbol:
 (M) Mylar capacitor
 (PP) Polypropylene film capacitor
 (BP) Bi-polarized capacitor
 (LL) Low-leakage capacitor
 (NF) Nonflammable resistor
 (SC) Safety component symbol
- △ This symbol is given to important parts to maintain the safety of the product made to conform to special safety standards. Therefore, when replacing a component symbol, make absolutely sure that signated part.
- This schematic diagram is subject to notice in the interests of improved performance.



WIRING

14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

ES:

- B (+) power supply
- Signal path

The voltage is the reference value measured with a tester (20 k-ohms/V DC) when there are no signals.

Resistors with no designation have a rated power of 1/4W and a tolerance of ±5%.

Capacitors with no designation have a dielectric strength of less than 50WV.

The only capacitor tolerances indicated are ±5% (J) and ±10% (K).

Ceramic capacitor symbols:

- For temperature compensation (SL)
- High dielectric constant system (YY)
- High dielectric constant system (YW, YP, YZ)

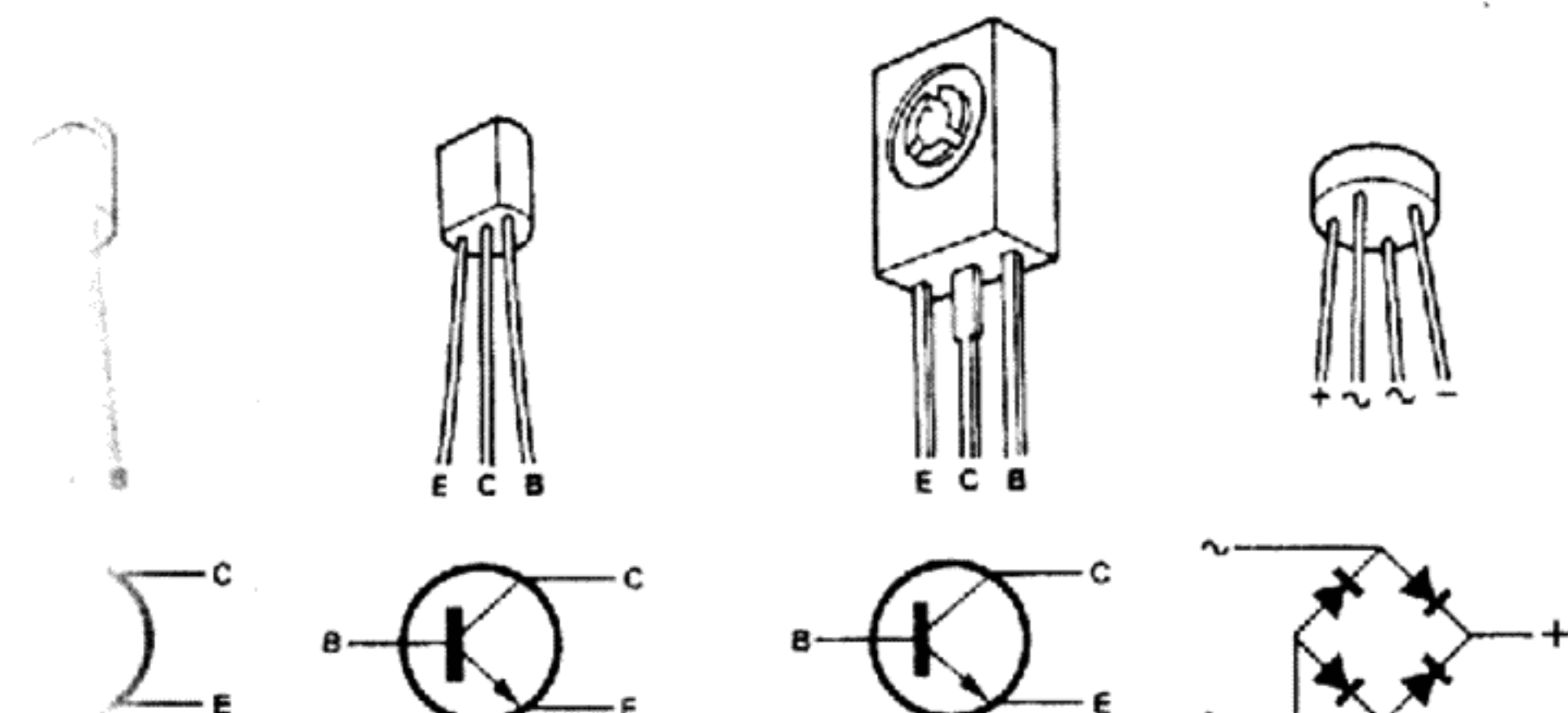
Explanation of symbol:

- Ⓜ Mylar capacitor
- Ⓟ Polypropylene film capacitor
- Ⓡ Bi-polarized capacitor
- Ⓛ Low-leakage capacitor
- Ⓢ Nonflammable resistor

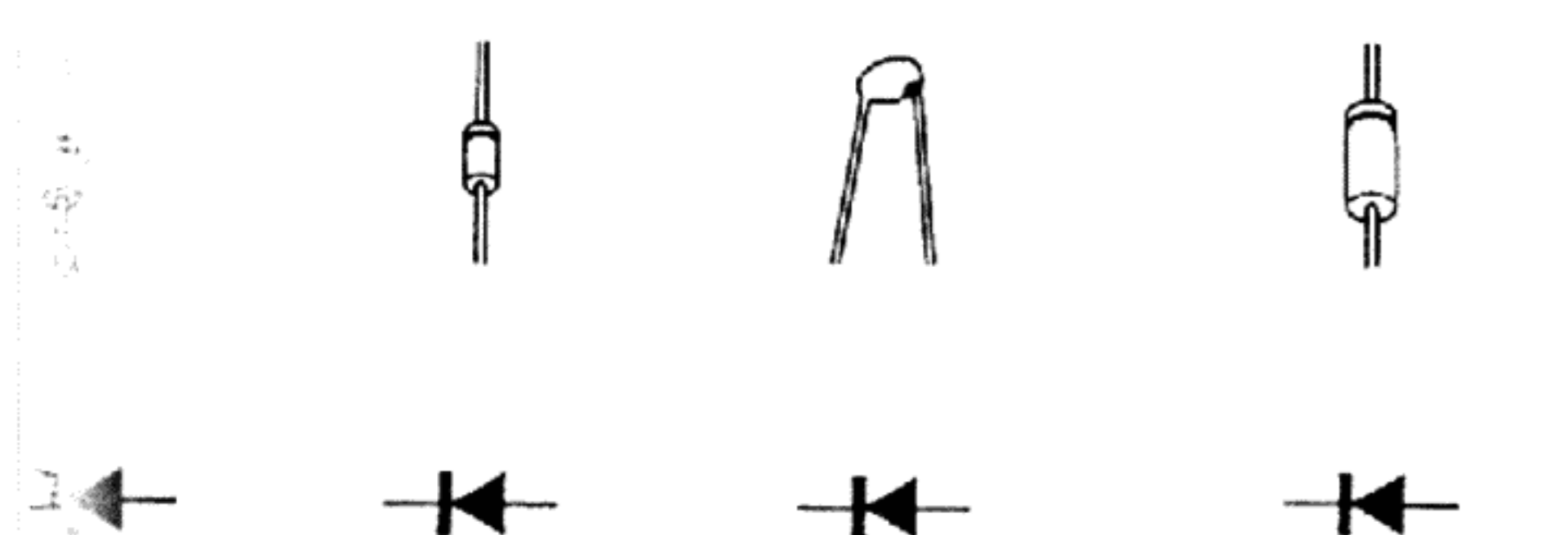
Safety component symbol

This symbol is given to important parts which serve to maintain the safety of the product, and which are made to conform to special safety specifications. Therefore, when replacing a component with this symbol, make absolutely sure that you use a designated part.

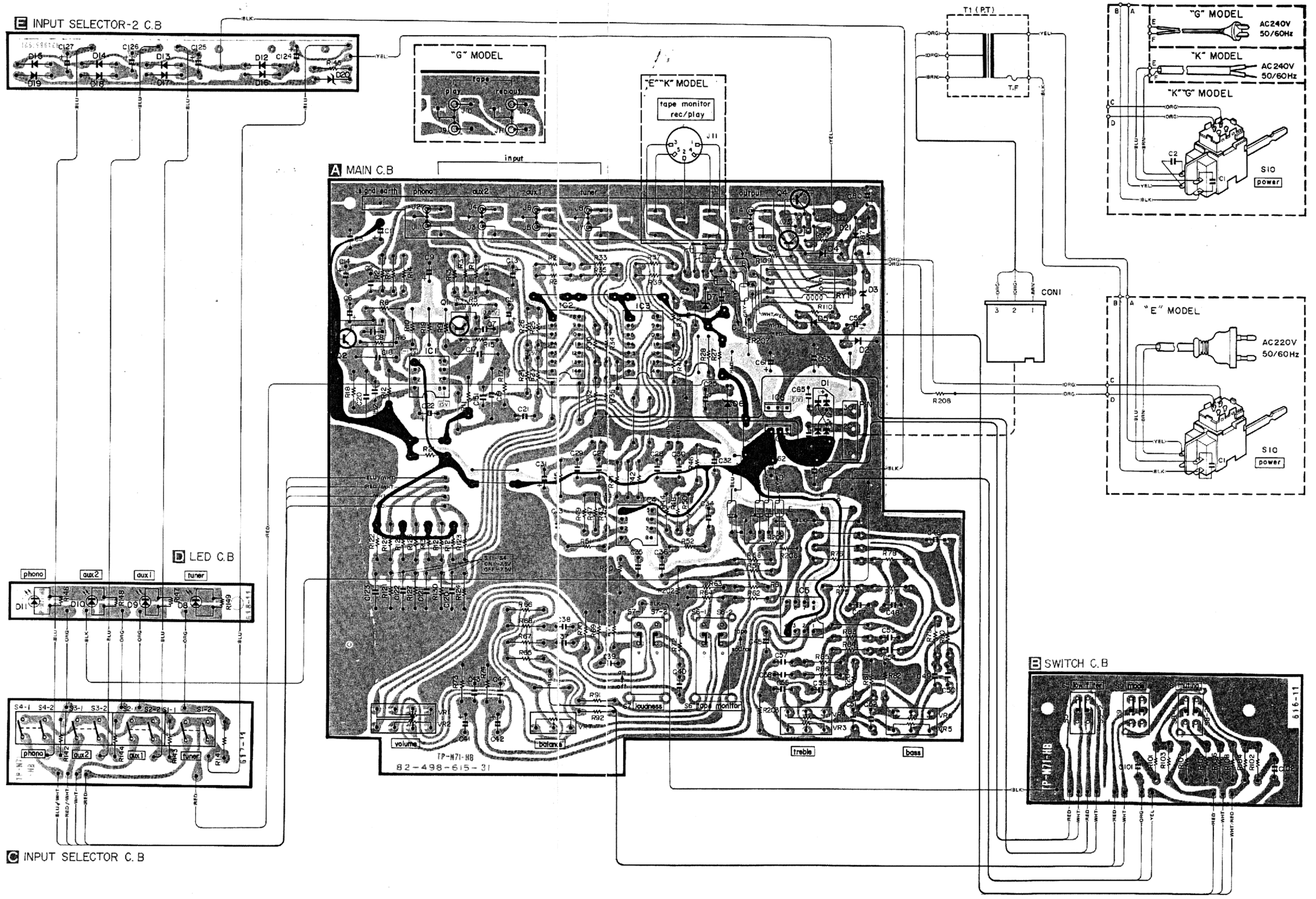
This schematic diagram is subject to change without notice in the interests of improved performance.



- 1733 25C945 2SD882 1B4B41
- 25C1317
- 25C1815
- 25D655



- 11A2 IS1555 VD1221 SRIK2
- IS953

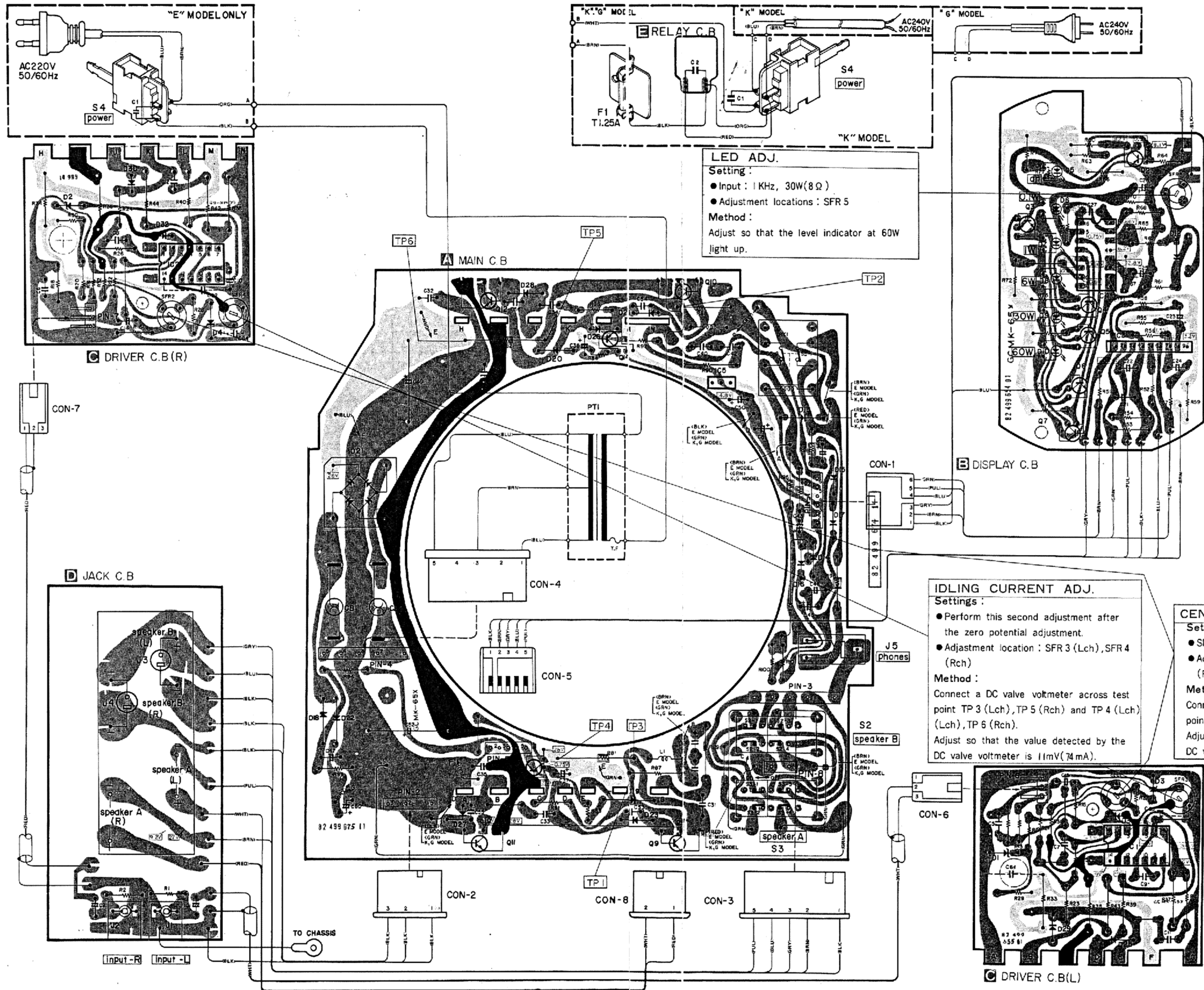


NOTES (1) [Pattern] B(+) Pattern [Pattern] B(-) Pattern [Pattern] Others pattern
 (2) The voltage is the reference value measured with a tester (20 K ohms/V DC) when there are no signals.

WIRING

15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30

power supply
 al path
 ge is the reference value measured with a
 k-ohms/V DC) when there are no signals.
 with no designation have a rated power of
 a tolerance of $\pm 5\%$.
 with no designation have a dielectric
 less than 50WV.
 capacitor tolerances indicated are $\pm 5\%$ (J)
 (K).
 capacitor symbols:
 or temperature compensation (SL)
 dielectric constant system (YY)
 dielectric constant system (YW, YP, YZ)
 ation of symbols
 ar capacitor
 propylene film capacitor
 polarized capacitor
 -leakage capacitor
 nonflammable resistor
 safety component symbol
 symbol is given to important parts which serve
 maintain the safety of the product, and which are
 to conform to special safety specifications.
 e, when replacing a component with this
 make absolutely sure that you use a de-
 part.
 amatic diagram is subject to change without
 the interests of improved performance.

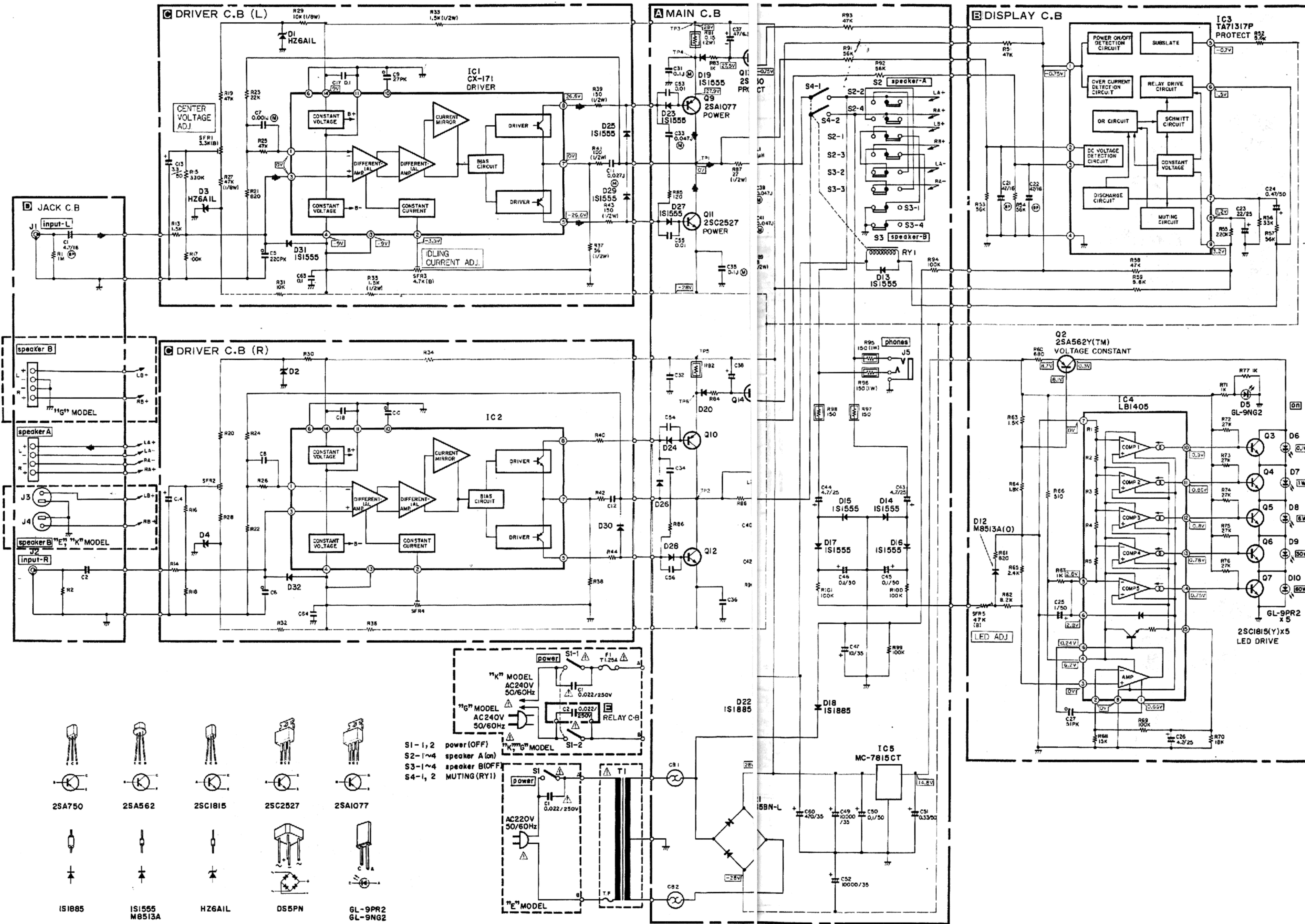


NOTES (1) B(+) Pattern B(-) Pattern Others pattern
 (2) The voltage is the reference value measured with a tester (20 K ohms/V DC) when there are no signals.

SCHEMATIC DIAGRAM

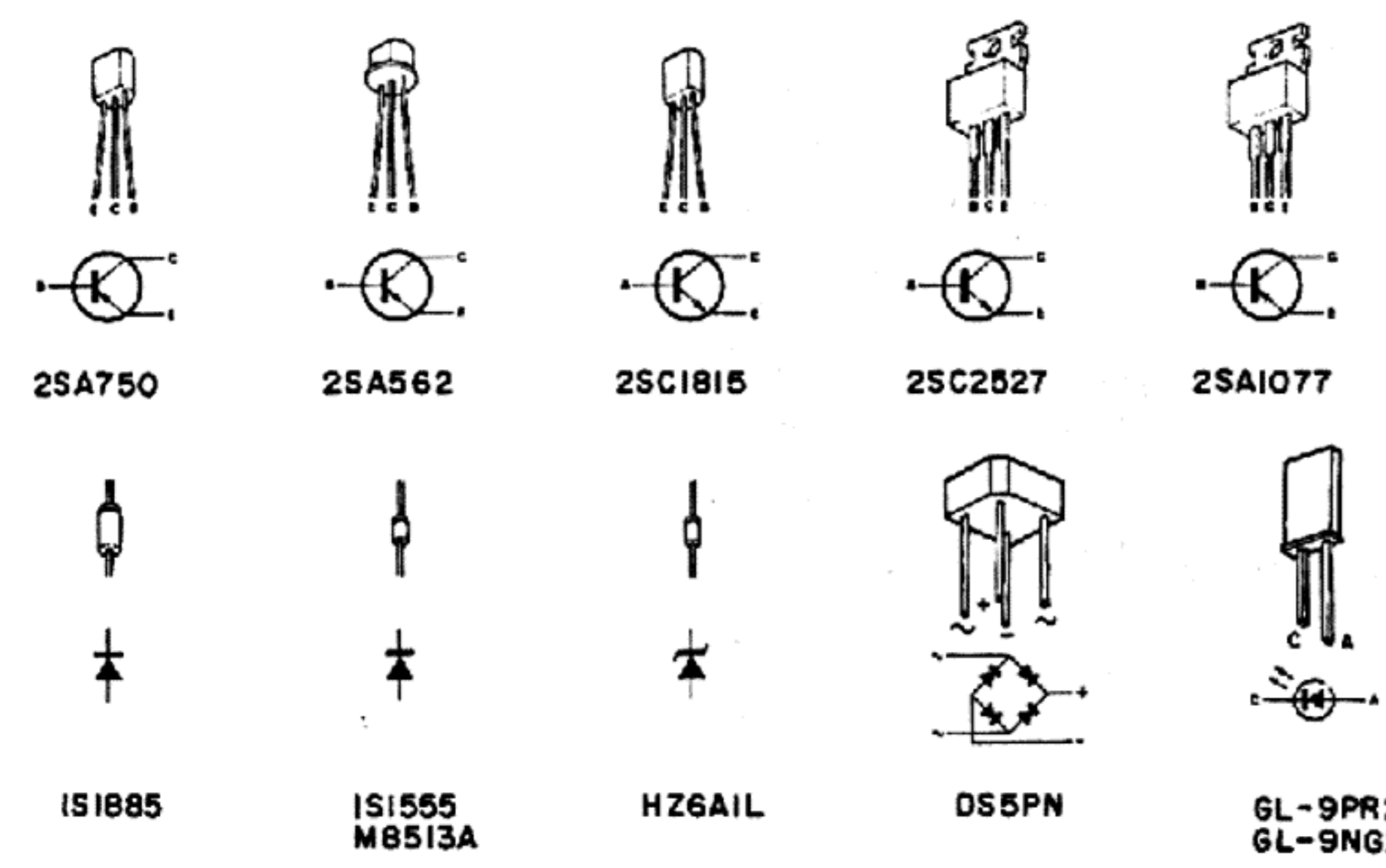
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

A
B
C
D
E
F
G
H
I

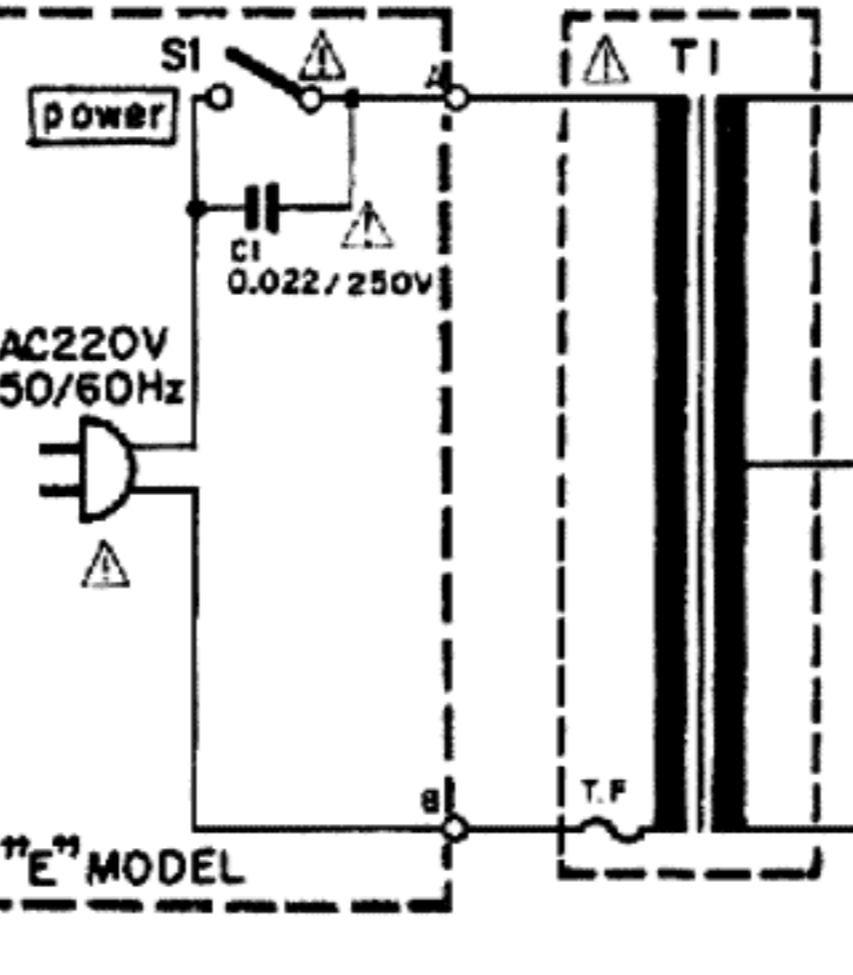


NOTES:

- 1) — B (+) power supply
 - 2) → Signal path
 - 3) The voltage is the reference value measured by a multimeter (20 k-ohms/V DC) when there are no signals.
 - 4) Resistors with no designation have a rated value of 1/4W and a tolerance of ±5%.
 - 5) Capacitors with no designation have a tolerance of less than 50WV.
 - 6) The only capacitor tolerances indicated are ±10% (K).
 - 7) Ceramic capacitor symbols:
 - For temperature compensation (SL)
 - High dielectric constant system (YY)
 - ▭ High dielectric constant system (YW, Y)
 - 8) Explanation of symbols:
 - Ⓜ Mylar capacitor
 - Ⓟ Polypropylene film capacitor
 - Ⓡ Bi-polarized capacitor
 - Ⓛ Low-leakage capacitor
 - Ⓜ Nonflammable resistor
 - ⚠ Safety component symbol
- This schematic diagram is subject to change without notice in the interests of improved performance.



- S1-1, 2 power (OFF)
- S2-1~4 speaker A (on)
- S3-1~4 speaker B (OFF)
- S4-1, 2 MUTING (RY1)



PARTS LIST

MECHANICAL PARTS

* mark in this part list shows exclusive part
(which is used) for only Model No. SA-P22.

Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
1-1a	82-499-009-01		Panel, Front (H model only)	*	1
1-1b	82-499-008-01		Panel, Front (E, K, G model only)	*	1
1-2	86-992-013-01		Badge	MT-20	1
1-3	82-499-207-01		Amp. chassis	*	1
1-4	87-084-072-01		Nylon rivet		H, H ₁ : 6 E, K, G: 4
1-5	82-735-012-01		Rubber foot	SA-A22	4
1-6	82-533-230-01		Cushion		1
1-7	82-499-002-01		Steel cabinet	*	1
1-8a	82-499-006-01		Jack plate (H model only)	*	1
1-8b	82-499-007-01		Jack plate (E, K, G model only)	*	1
1-9	87-085-102-01		Nylon rivet 3.5-5.5		5
1-10	82-499-201-21		Chassis, Front	*	1
1-11	82-498-203-01		Holder, Circuit board	SA-C22	1
1-12	82-499-012-01		Panel A, Top	*	1
1-13a	82-499-011-01		Name plate, Spec. (H model only)	*	1
1-13b	82-499-010-01		Name plate, Spec. (E model only)	*	1
1-13c	82-499-016-01		Name plate, Spec. (K model only)	*	1
1-13d	82-499-017-01		Name plate, Spec. (G model only)	*	1
1-14	82-499-601-01		Heat sink	*	2
1-15	82-499-638-01		Insulation fiber	*	1
1-16	87-085-166-01		Holder, AC power cord (E, K model only)		1
1-17	82-499-204-01		Cushion	*	1
1-18	82-499-206-01		Guide, LED	*	1
1-19	87-085-146-01		Spacer		2
1-20	82-498-629-01		Barrier (E, K model only)	SA-C22	1
1-21	82-499-208-01		Holder A, AC (K model only)	*	1
1-22	82-499-209-01		Holder B, Fuse	*	1
1-23	82-499-210-01		Sheet, Insulation (K, G model only)	*	1
1-24	82-499-211-01		Holder C (K model only)	*	1
1-25	87-085-165-01		Gord bushing (H, G model only)		1
1-26	82-498-012-01		Knob, Power switch	SA-C22	3
1-27a	87-034-826-01		AC power cord (H model only)		1
1-27b	87-034-877-01		AC power cord (E model only)		1
1-27c	87-034-872-01		AC power cord (K model only)		1
1-27d	87-034-878-01		AC power cord (G model only)		1
1-28	82-498-008-01		Lever guide	SA-C22	3
1-29	82-499-644-01		Shield plate (P.T)	*	1
1-30	87-058-023-01		Cord binder		1
1-31	87-056-008-01		Label, AC power cord (K model only)		1
1-32	82-499-212-01		Holder D (E model only)	*	1

ACCESSORIES/PACKAGE

Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
1	82-499-856-01		Printed indiv., Packing	*	1
2	82-499-860-11		Cushion L, Printed indiv.	*	1
3	82-499-861-11		Cushion R, Printed indiv.	*	1
4	87-056-603-01		Poly-vinyl sack (for case)		1
5	82-499-855-01		Cushion, Sub A	*	1
6a	82-499-905-01		Instructions booklet (H model only)	*	1
6b	82-499-908-01		Instructions booklet (H ₁ model only)	*	1
6c	82-499-904-01		Instructions booklet (E ₁ model only)	*	1
6d	82-499-906-01		Instructions booklet (K model only)	*	1
6e	82-499-910-01		Instructions booklet (G model only)	*	1
7	87-051-171-11		Poly-vinyl sack (for instruction)		1
8	87-056-009-41		Distributors list		1
9	87-056-008-01		Label, AC power cord (K model only)		1
10	87-058-023-01		Cord binder		1
11	87-051-135-11		Ploy-vinyl sack (E ₁ , K, G model only)		1
12	87-051-130-11		Poly-vinyl sack (H ₁ , E ₁ model only)		1
13	87-051-131-11		Poly-vinyl sack (H, H ₁ model only)		1
14	87-056-032-01		Guarantee card (G model only)		1
15	82-498-010-01		Handle (H ₁ , E ₁ model only)	SA-C22	2
16	87-225-094-11		P + 3 - 6 (H ₁ , E ₁ model only)		4

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