

SERVICE MANUAL

INTEGRATED DC SERVO
STEREO AMPLIFIER

SANSUI A-1500R



CAUTION

1. Parts identified by the Δ symbol on the schematic diagram and the parts list are critical for safety. Use only replacement parts that have critical characteristics recommended by the manufacturer.
2. Make leakage-current or resistance measurements to determine that exposed parts are acceptably insulated from the supply circuit before returning the appliance to the customer.

•SPECIFICATIONS

Power output

Min. RMS, both channels driven, from 20 to 20,000 Hz,
with no more than 0.05% total harmonic distortion
160 watts per channel into 8 ohms

Load impedance..... 8 to 16 ohms

Total harmonic distortion

..... less than 0.05% at or below
rated min. RMS power output

Frequency response (at 1 watt)

..... 5 to 60,000 Hz
+1 dB, -3 dB

RIAA curve deviation (PHONO, 20 Hz to 20 kHz)

..... +0.5 dB, -0.5 dB

Input sensitivity and impedance

(1 kHz, for rated power output)

PHONO..... 2.5 mV/47 kohms

(Max. input capability; 120mV at 1 kHz, less than
0.1% total harmonic distortion)

TUNER, CD/AUX, TAPE PLAY -1:2, VCR

..... 150 mV/30 kohms

Output level (1 kHz)

TAPE REC..... 130 mV into 47 kohms

Signal to noise ratio (short-circuit, A-network)

PHONO..... 72 dB

TUNER, CD/AUX, TAPE PLAY

..... 95 dB

Power requirements

Power voltage..... 120/220/240V (50/60 Hz)
For U.S.A. & Canada

..... 120V (60 Hz)

Power consumption.... 500 watts 620 VA Rated

Dimensions..... 430 mm (16-15/16") W

139 mm (5-1/2") H

307 mm (12-1/8") D

Weight..... 10.1 kg (22.3 lbs.) net

- Design and specifications subject to changes without notice for improvements.
- Due to local laws and regulations, this unit sold in some areas are not equipped with variable voltage selectors.

Sansui

SANSUI ELECTRIC CO., LTD.

CAUTION

1. The symbols, UL, CSA, SA, BS, UK, EU, AS, XX <EXPORT> and XX-V <EXPORT(V)> on the parts list and the schematic diagram mean followings respectively.

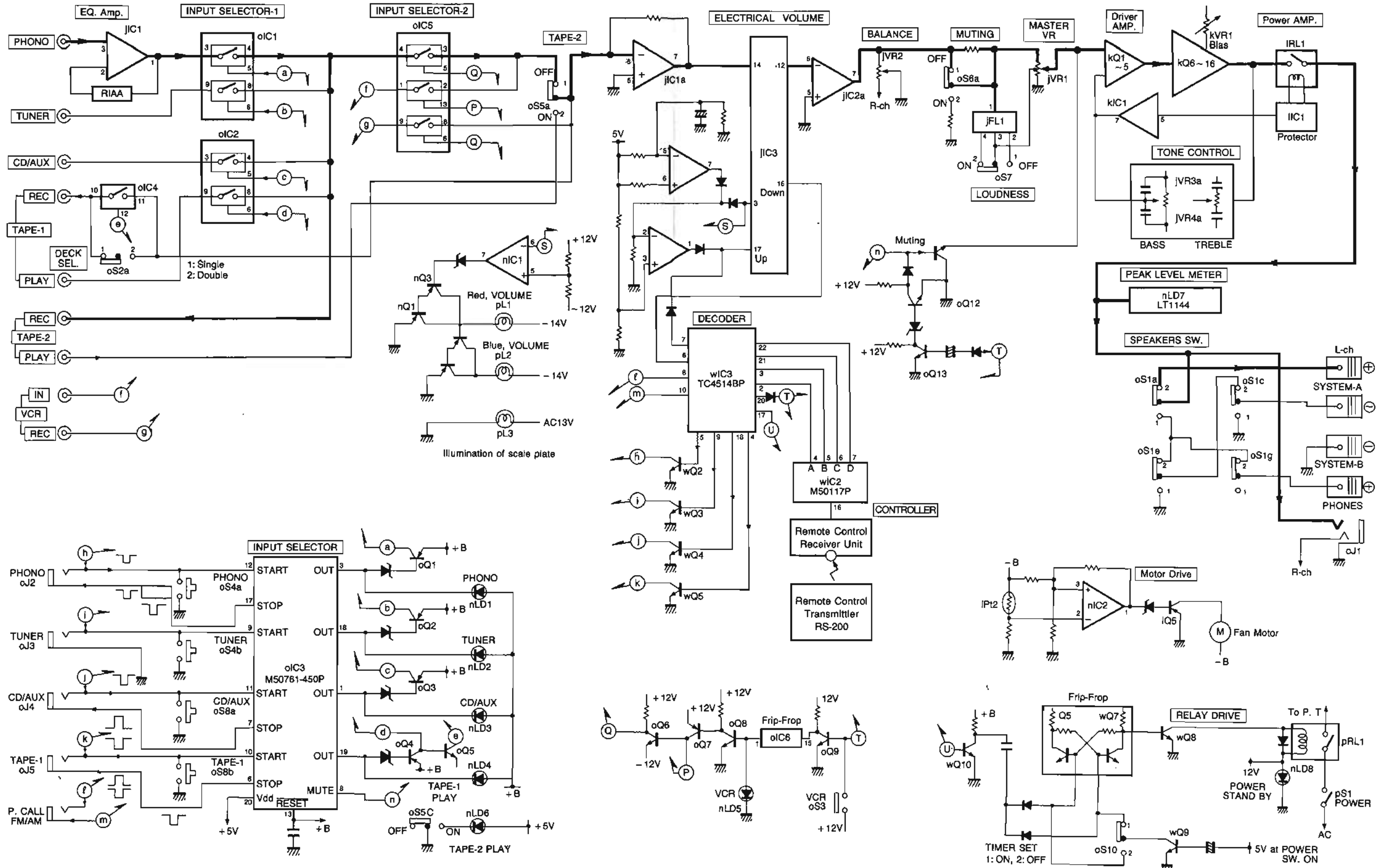
UL..... Manufactured for U.S.A market.
 (Underwriters Laboratories approved model.)
 CSA Manufactured for Canadian market.
 SA..... Manufactured for South African market.
 BS, UK Manufactured for United Kingdom market.
 EU Manufactured for European market.
 AS..... Manufactured for Australian market.
 XX <EXPORT> Standard Version with Inner Voltage Selector.
 XX-V
 <EXPORT(V)> ... Standard Version with Outer Voltage Selector.
 NON MARK Common Parts.

2. Some printed circuit boards are not supplied assembled.
 To separate these in this service manual, the stock numbers are not indicated for these boards. However, stock numbers for individual parts are indicated.
3. Since some capacitors and resistors are omitted from parts lists in this service manual, refer to the Common Parts List for capacitors & resistors, which was issued on February 1983.
4. Abbreviations in this service manual are as follows.

•Abbreviations List

C.R.	: Carbon Resistor	E.B.	: Bi-Polar Electrolytic Capacitor
S.R.	: Solid Resistor	E.B.L.	: Low Leakage Bi-Polar Electrolytic Capacitor
W.R.	: Wire Wound Resistor	Ta.C.	: Tantalum Capacitor
M.R.	: Metal Film Resistor	F.C.	: Film Capacitor
F.R.	: Fusing Resistor	M.P.	: Metallized Paper Capacitor
N.I.R.	: Non-Inflammable Resistor	P.C.	: Polystyrene Capacitor
R.A.	: Resistor Array	C.A.	: Capacitor Array
C.C.	: Ceramic Capacitor	V.R.	: Variable Resistor
C.T.	: Ceramic Capacitor, Temperature Compensation	SW.	: Switch
E.C.	: Electrolytic Capacitor	Chip R.	: Chip Resistor
E.L.	: Low Leakage Electrolytic Capacitor	Chip C.	: Chip Capacitor

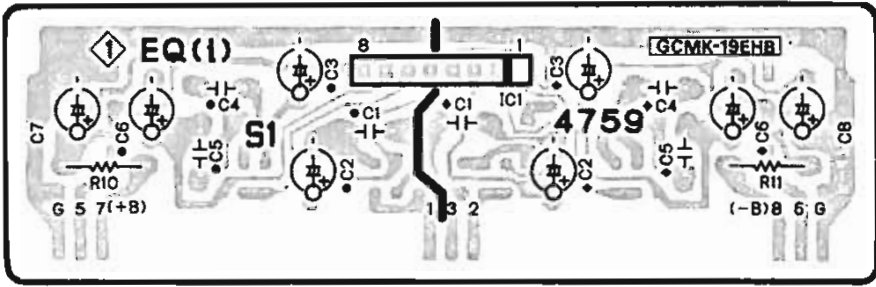
1. BLOCK DIAGRAM



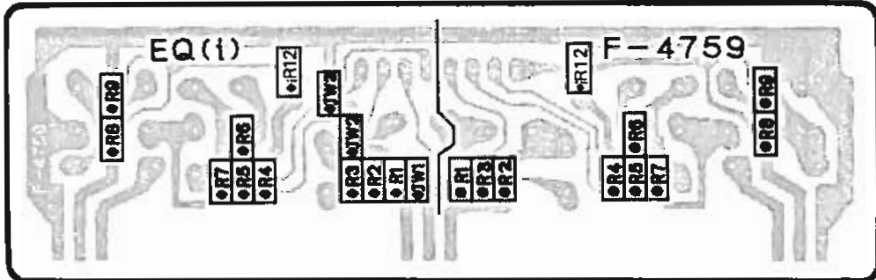
2. PARTS LOCATION OF BOARDS SECTION

2-1. F-4759 EQ. Amp. Board

Component Side

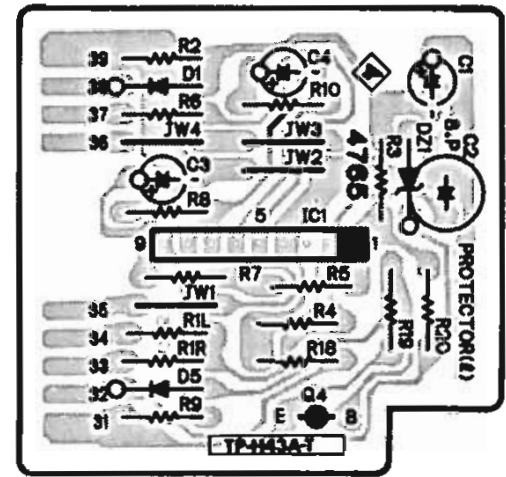


Pattern Side < Chip Parts >



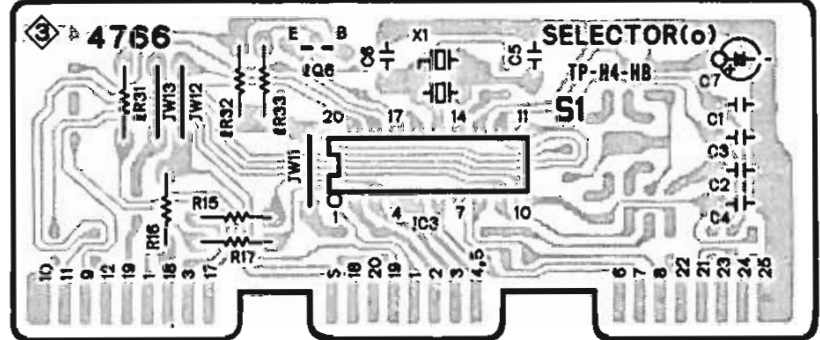
2-4. F-4765 Protector Board

Component Side

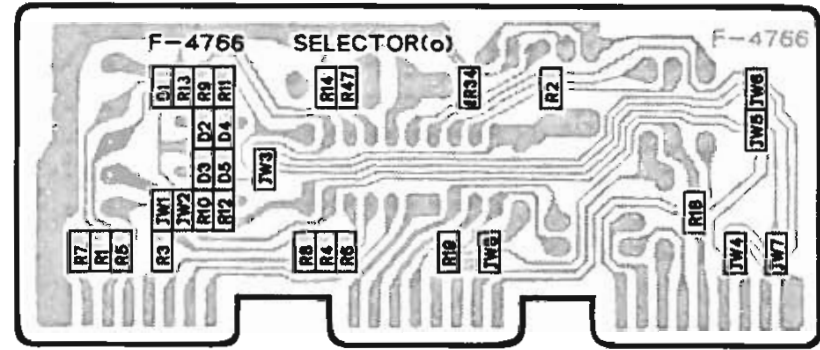


2-5. F-4766 Input Selector Control Board

Component Side

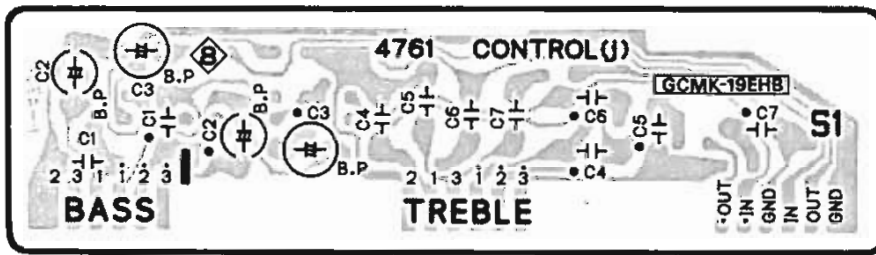


Pattern Side < Chip Parts >

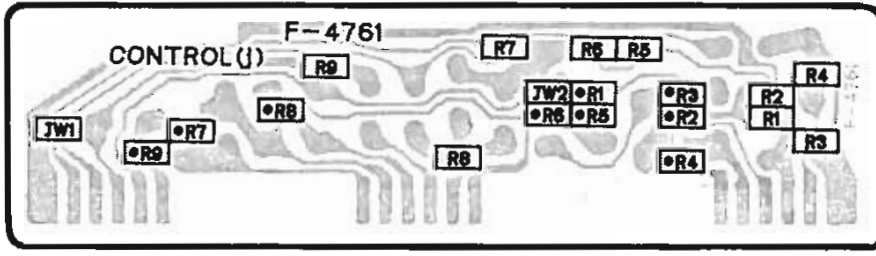


2-2. F-4761 Tone Control Board

Component Side

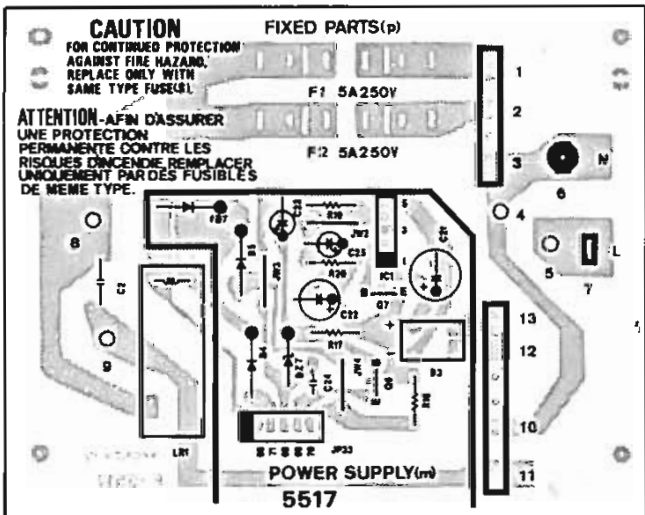


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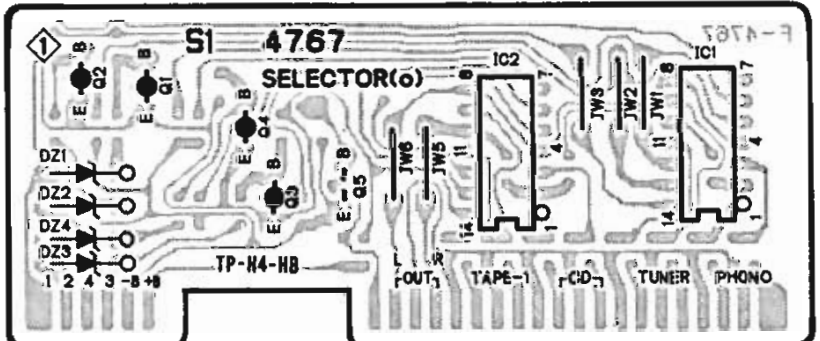
2-3. F-5517 AC Fuse Board

Component Side

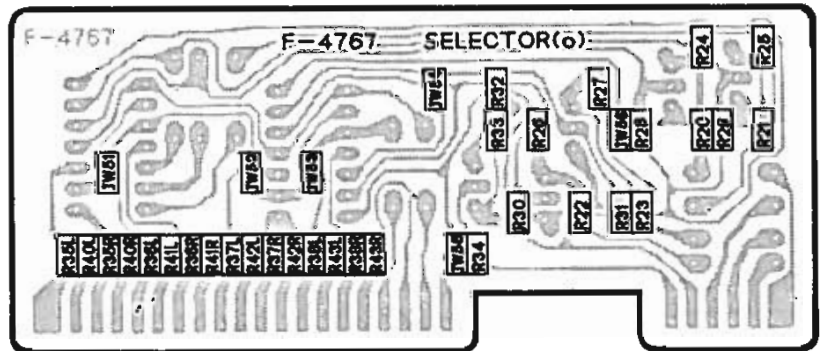


2-6. F-4767 Input Signal Selector Board

Component Side

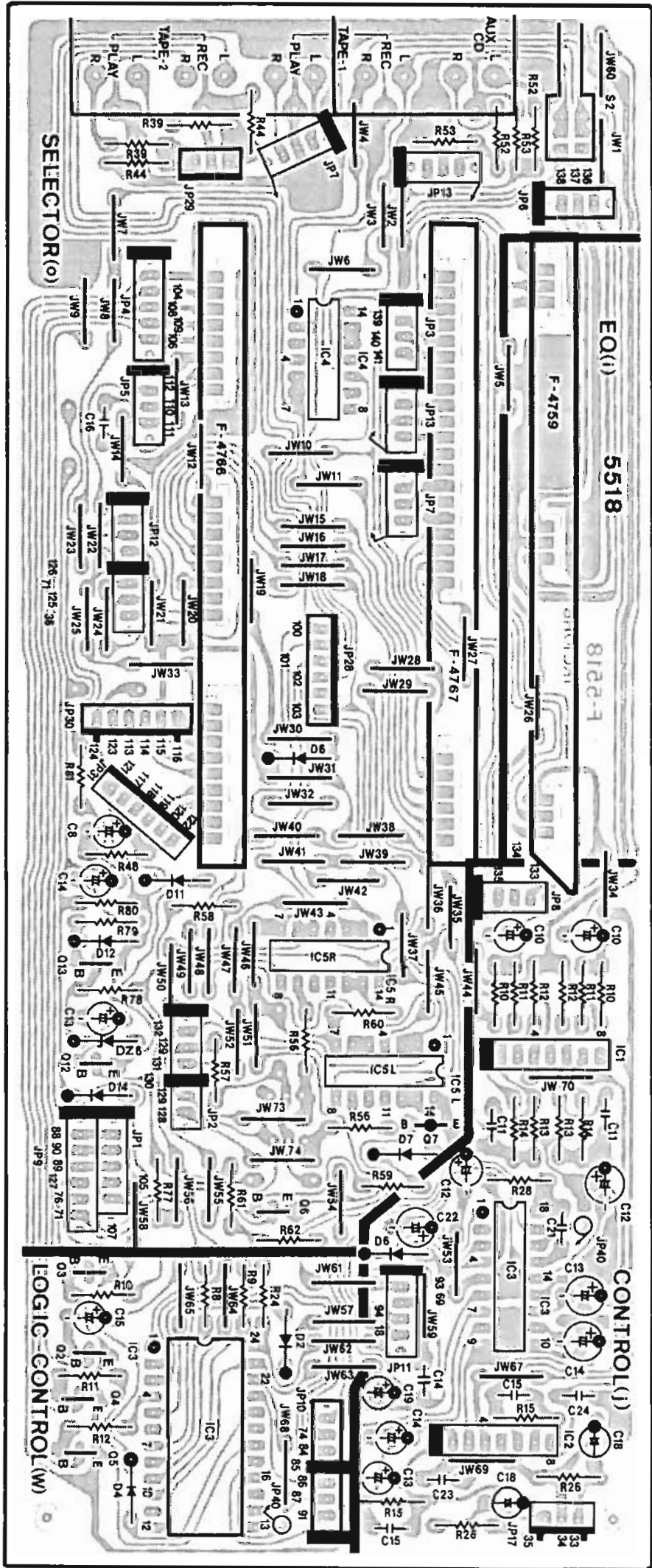


Pattern Side < Chip Parts >

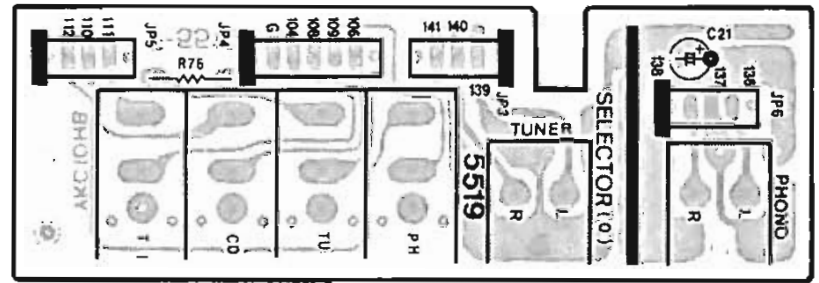


- | | | | | | | | | |
|---------|---------|--------|---------|-------------|--------|--------|---------|--------|
| 2SA992 | 2SB834 | 2SA949 | TA7317P | LC4066BH | M5218L | DBB10B | 1S1588 | 05Z2.7 |
| 2SA1015 | 2SD1407 | | | LC4966 | M5220L | DBB10E | 1S2473 | 05Z5.6 |
| 2SA1145 | | | | M5218P | | DBB10G | 1S2473D | 05Z6.2 |
| 2SC1815 | | | | M50117P | | | 10E2 | 05Z8.2 |
| 2SC1845 | | | | M50761-450F | | | | 05Z9.1 |
| 2SC2229 | | | | MN6632A | | | | 05Z10 |
| 2SC2705 | | | | TC4514BP | | | | 05Z13 |
| 2SC2878 | | | | TC9130P | | | | 05Z16 |
| 2SC3247 | | | | | | | | 05Z20 |

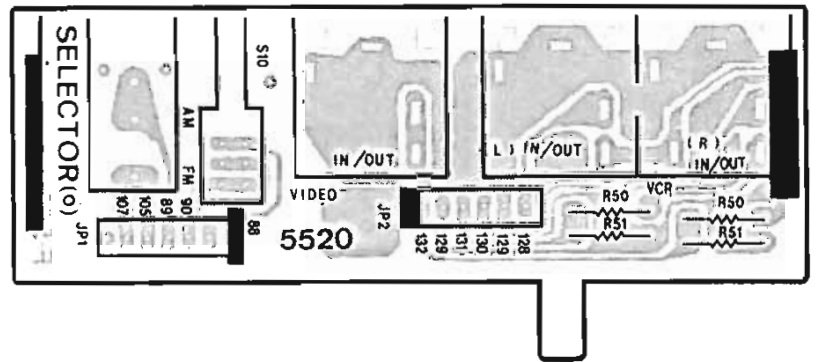
2-7. F-5518 CD/AUX. TAPE-1, 2
Component Side Input Terminal Board



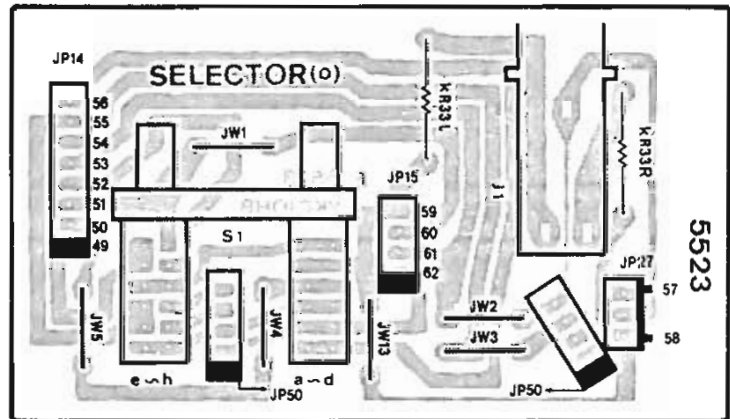
2-8. F-5519 PHONO, TUNER
Component Side Input Terminal Board



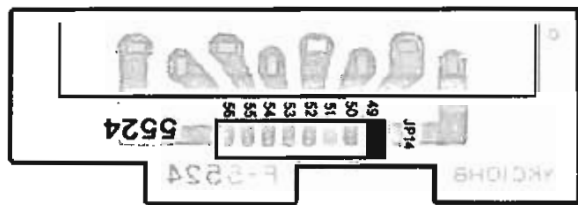
2-9. F-5520 AUDIO, VCR Input Terminal Board
Component Side



2-10. F-5523 Speaker SW. & PHONES Jack Board
Component Side



2-11. F-5524 Speaker Terminal Board
Component Side

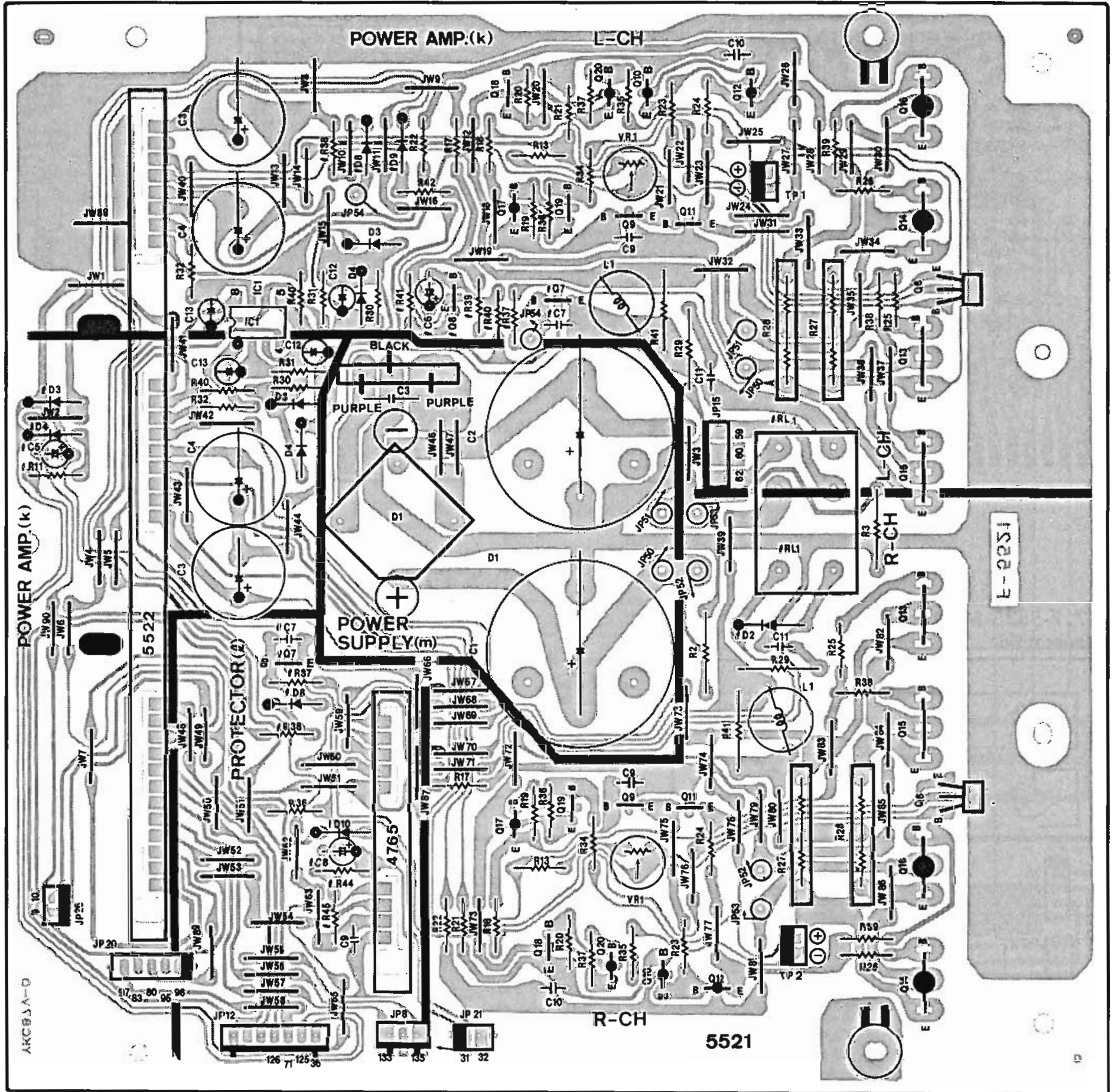


2-12. F-5528 Heat Sensor Board
Component Side

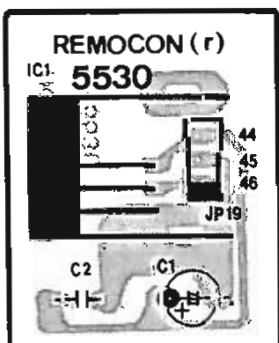


- | | | | | | | | | | | | | | | | | |
|---------|---------|---------|---------|----------|--------|---------|--------|---------|--------|--------|-------------|--------|---------|--------|--------|--------|
| 2SA979 | 2SA992 | 2SA949 | 2SB834 | 2SA1048 | 2SB536 | 2SA1491 | M5231L | TA7317P | M5218L | M5233L | LC4066BH | RB-602 | 1S1588 | DBB10B | 0522.7 | MV12 |
| 2SA1015 | 2SA1145 | 2SC1815 | 2SD1407 | 2SA1115 | 2SD381 | 2SC3855 | | | M5220L | | LC4966 | | 1S2473 | DBB10E | 0525.6 | MV103 |
| 2SC1845 | 2SC2229 | 2SC1845 | | 2SC2458 | 2SD880 | | | | | | M50117P | | 1S2473D | DBB10G | 0526.2 | |
| 2SC2705 | 2SC2878 | 2SC3247 | | 2SC2603 | | | | | | | M50761-450F | | 10E2 | | 0528.2 | |
| | | | | 2SC2786 | | | | | | | MN6632A | | | | 0529.1 | |
| | | | | DTC114YS | | | | | | | TC4514BP | | | | 05210 | |
| | | | | | | | | | | | TC9130P | | | | 05213 | |
| | | | | | | | | | | | | | | | 05216 | |
| | | | | | | | | | | | | | | | 05220 | |
| | | | | | | | | | | | | | | | | RLS-73 |

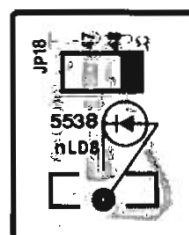
2-13. F-5521 Power Amp. & Power Supply Board
Component Side



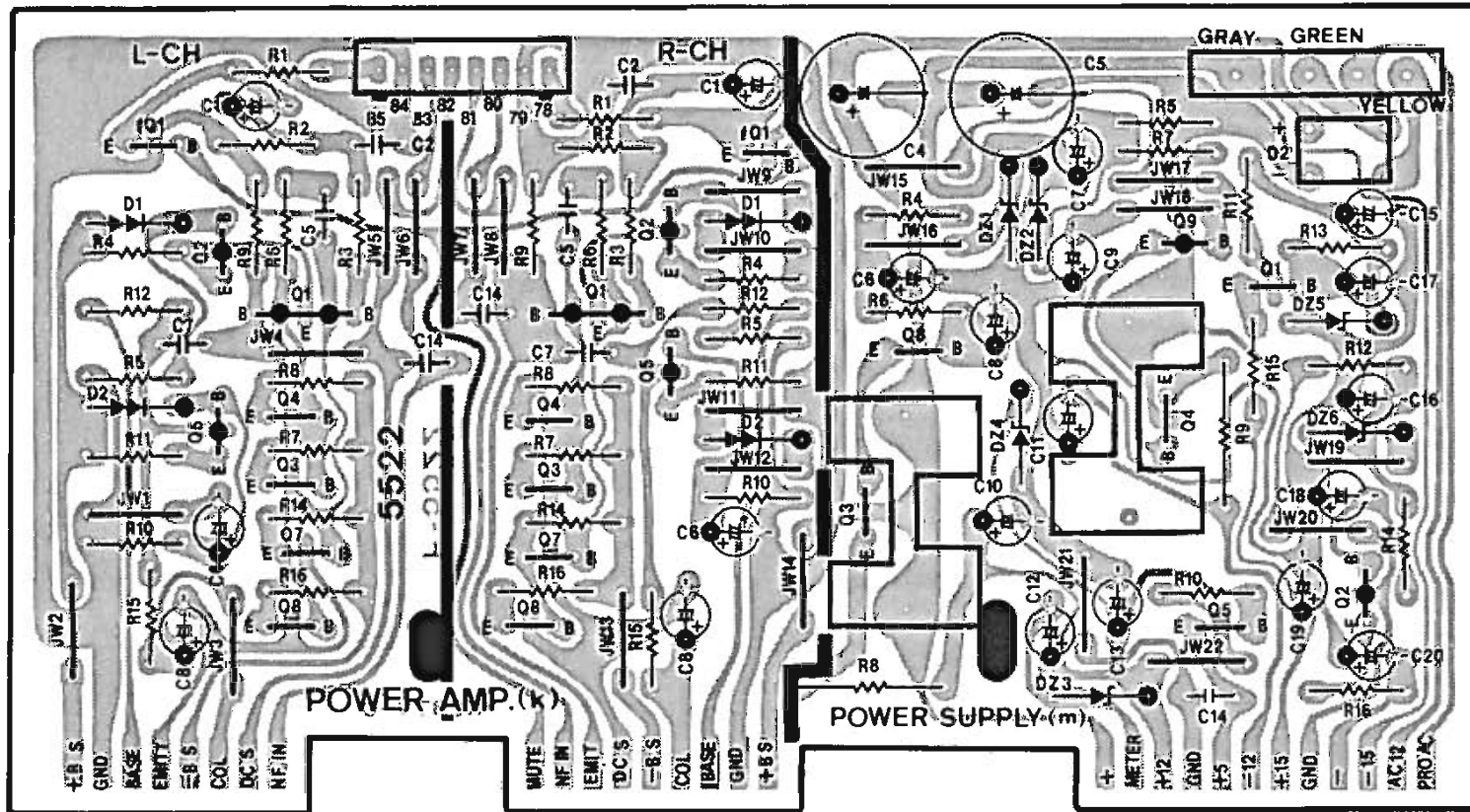
2-14. F-5530 Remote Control Receiver Unit Board
Component Side



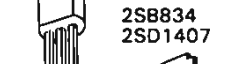
2-15. F-5538 Power STAND-BY Indicator Board
Component Side



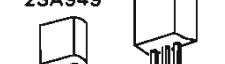
2-16. F-5522 Driver Amp. & Power Supply Board
Component Side



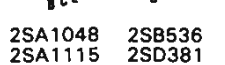
- 2SA992
- 2SA1015
- 2SA1145
- 2SC1815
- 2SC1845
- 2SC2229
- 2SC2705
- 2SC2878
- 2SC3247



- 2SB834
- 2SD1407



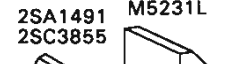
- 2SA949



- 2SA1048
- 2SA1115
- 2SC2458
- 2SC2603
- 2SC2786
- DTC114YS



- 2SB536
- 2SD381
- 2SD880



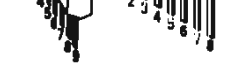
- 2SA1491
- 2SC3855



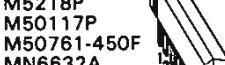
- M5231L



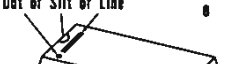
- TA7317P
- M5218L
- M5220L



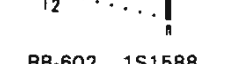
- LC4066BH
- LC4966
- M5218P
- M50117P
- M50761-450F
- MN6632A
- TC4514BP
- TC9130P



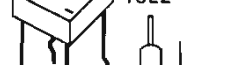
Dot or Slit or Line



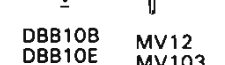
- RB-602
- 1S1588
- 1S2473
- 1S2473D
- 10E2



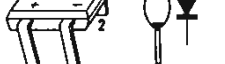
- DBB10B
- DBB10E
- DBB10G



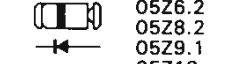
- MV12
- MV103



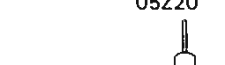
- RLS-73



- 05Z2.7
- 05Z5.6
- 05Z6.2
- 05Z8.2
- 05Z9.1
- 05Z10
- 05Z13
- 05Z16
- 05Z20



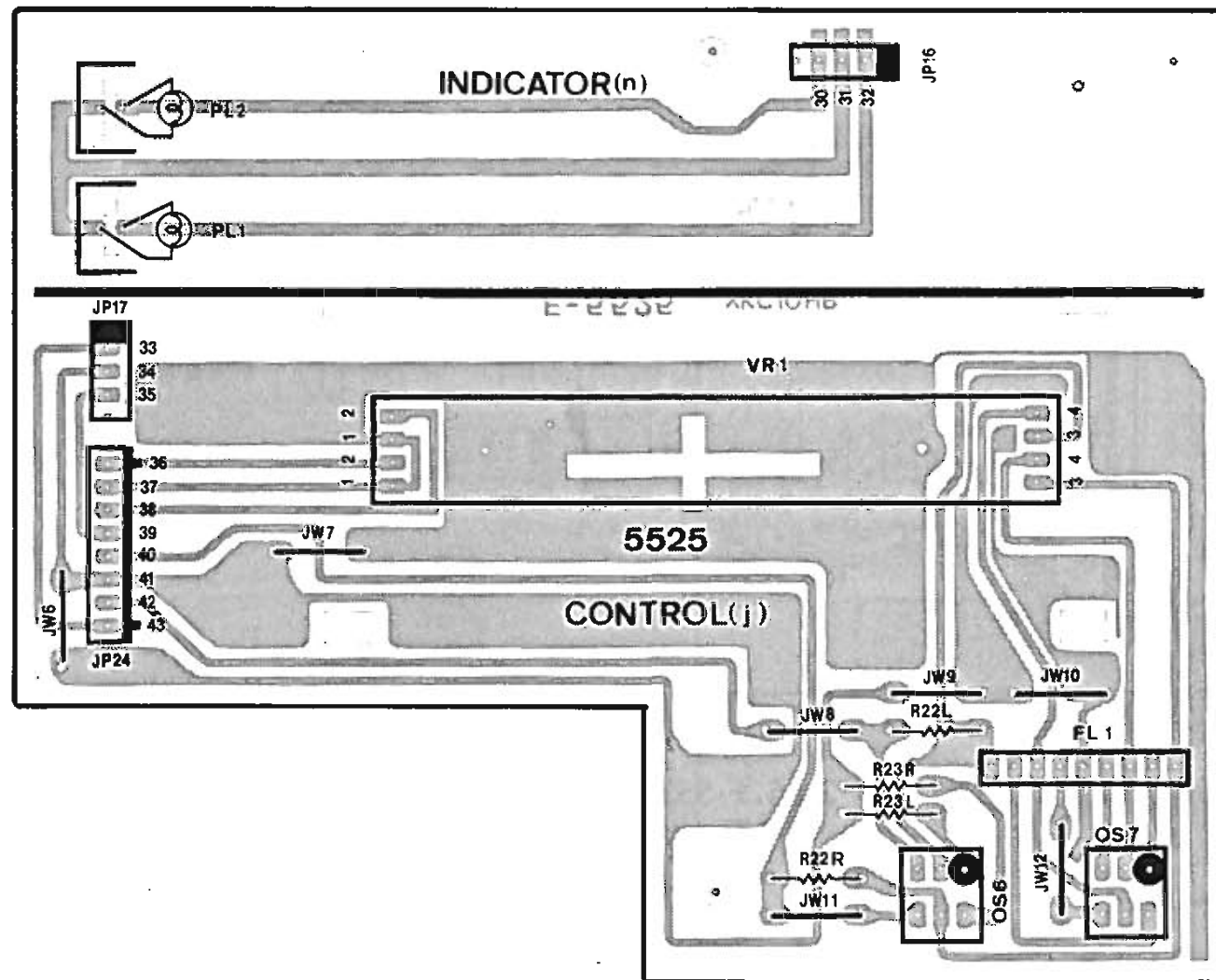
- 05Z2.7
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- 05Z16
- 05Z20



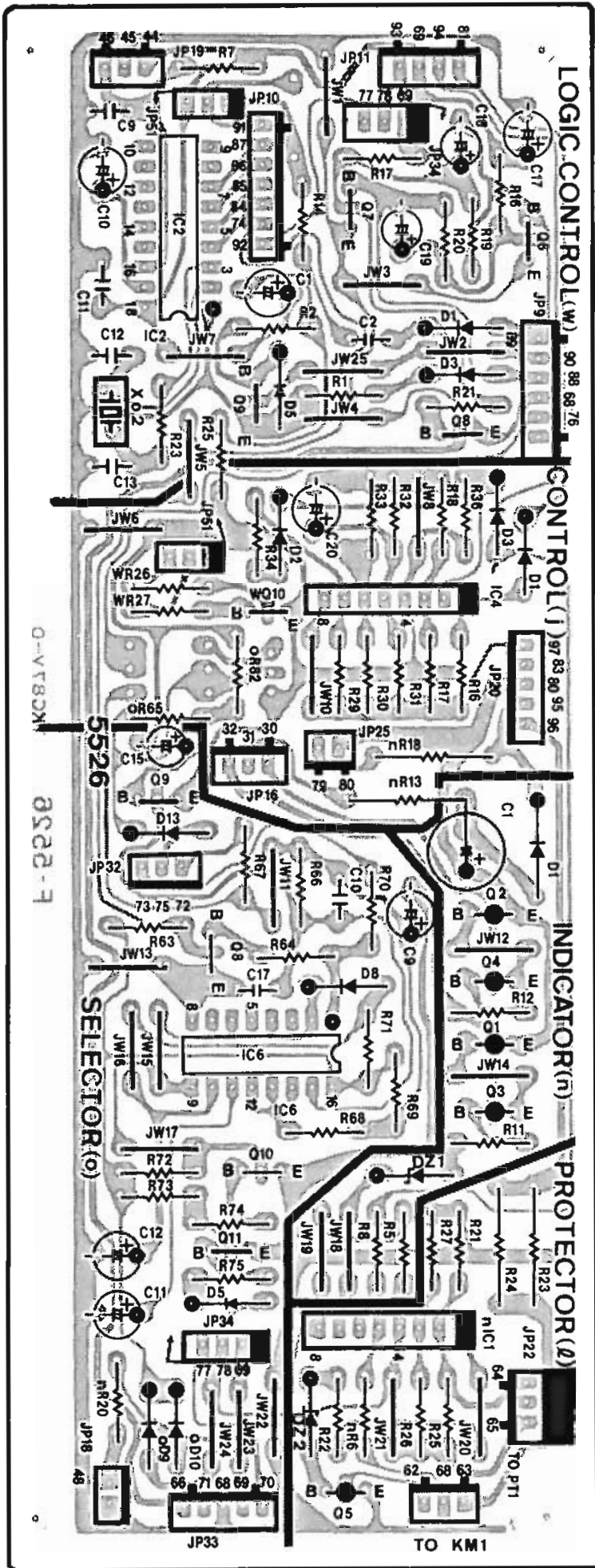
- 05Z2.7
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- 05Z13
- 05Z16
- 05Z20



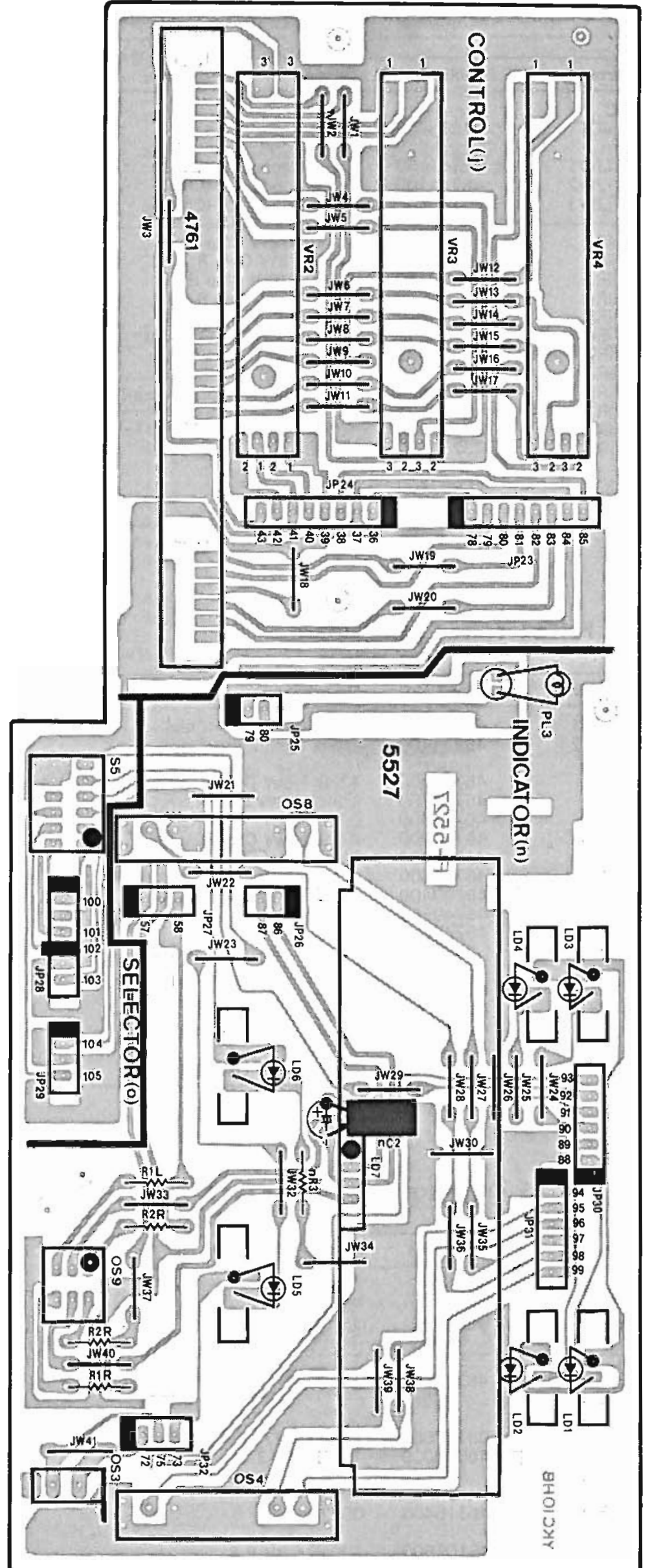
2-17. F-5525 Master Volume Board
Component Side



2-18. F-5526 VCR Signal Control & Lamp Control Board
Component Side



2-19. F-5527 Tone Control V.R. & Control SW. Board
Component Side



3. ELECTRIC PARTS LIST

3-1. F-4759 EQ. Amp. Board (Stock No. 00852601)

Parts No.	Stock No.	Description
•IC		
iIC1	46078900	M5218L
iJW1	46741100	Cross Conductor (Chip)
iJW2	46741100	Cross Conductor (Chip)
iJW3	46741100	Cross Conductor (Chip)
iR1	46752400	100k Ω 1/8W Chip R.
iR2	46746800	470 Ω 1/8W Chip R.
iR3	46752400	100k Ω 1/8W Chip R.
iR4	46746900	510 Ω 1/8W Chip R.
iR5	46746900	510 Ω 1/8W Chip R.
iR6	46750800	22k Ω 1/8W Chip R.
iR7	46753500	300k Ω 1/8W Chip R.
iR8	46746800	470 Ω 1/8W Chip R.
iR9	46752400	100k Ω 1/8W Chip R.
iR10	46229000	100 Ω 1/2W N.I.R.
iR11	46229000	100 Ω 1/2W N.I.R.
iR12	46752400	100k Ω 1/8W Chip R.
iC4	46282400	3300pF 50V F.C.
iC5	46283000	0.012 μ F 50V F.C.

3-2. F-4761 Tone Cotrol Board

Parts No.	Stock No.	Description
jJW1	46741100	Cross Conductor (Chip)
jJW2	46741100	Cross Conductor (Chip)
jR1	46750200	12k Ω 1/8W Chip R.
jR2	46748200	1.8k Ω 1/8W Chip R.
jR3	46753400	270k Ω 1/8W Chip R.
jR4	46751000	27k Ω 1/8W Chip R.
jR5	46751700	51k Ω 1/8W Chip R.
jR6	46748400	2.2k Ω 1/8W Chip R.
jR7	46749400	5.6k Ω 1/8W Chip R.
jR8	46749600	6.8k Ω 1/8W Chip R.
jR9	46747200	680 Ω 1/8W Chip R.
jC1	46283600	0.039 μ F 50V F.C.
jC2	46937000	0.22 μ F 50V E.B.
jC3	48101800	47 μ F 10V E.B.
jC4	46281800	1000pF 50V F.C.
jC5	46282800	8200pF 50V F.C.
jC6	46282700	6800pF 50V F.C.

3-3. F-4765 Protector Board (Stock No. 01008101)

Parts No.	Stock No.	Description
•Transistor		
IQ4	46367001 or 46367201	2SA1115 2SA1048
•IC		
iIC1	46207600	TA7317P
•Diode		
ID5	03117600 or 46086000	1S2473T77 1S1588TP-3
•Zener Diode		
IDZ1	46115400	05Z20-Y
IC2	48101500	100 μ F 6.3V E.B.

3-4. F-4766 Input Selector Control Board

(Stock No. 00999701)

Parts No.	Stock No.	Description
•Transistor		
IQ6	46367101 or 46367301	2SC2603 2SC2458
•IC		
oIC3	48158300	M50761-450P
oXO1	46396200 or 46668700	Ceramic Element, CSB400P Ceramic OSC Element, KBR-400B
•Diode		
oD1	46852000	RLS-73 (Chip)
oD2	46852000	RLS-73 (Chip)
oD3	46852000	RLS-73 (Chip)
oD4	46852000	RLS-73 (Chip)
oD5	46852000	RLS-73 (Chip)
oJW1	46741100	Cross Conductor (Chip)
oR1	46747600	1k Ω 1/8W Chip R.
oR2	46749200	4.7k Ω 1/8W Chip R.
oR3	46747600	1k Ω 1/8W Chip R.
oR4	46748000	1.5k Ω 1/8W Chip R.
oR5	46747600	1k Ω 1/8W Chip R.
oR6	46748000	1.5k Ω 1/8W Chip R.
oR7	46747600	1k Ω 1/8W Chip R.
oR8	46748000	1.5k Ω 1/8W Chip R.
oR9	46750000	10k Ω 1/8W Chip R.
oR10	46750000	10k Ω 1/8W Chip R.
oR11	46750000	10k Ω 1/8W Chip R.
oR12	46750000	10k Ω 1/8W Chip R.
oR13	46752400	100k Ω 1/8W Chip R.
oR14	46754800	1M Ω 1/8W Chip R.
oR19	46751800	56k Ω 1/8W Chip R.
oR47	46748700	3k Ω 1/8W Chip R.

3-5. F-5517 AC Fuse Board (Stock No. 01001101)

Parts No.	Stock No.	Description
•Diode		
ID7	03117700	10E-2
•Transistor		
Δ mQ6	48113001	2SC2229
Δ mQ7	48497201	2SD1407
•IC		
Δ mIC1	48347300	M5231L
•Diode		
Δ mD3	46273600	DBB10B
Δ	or 48192000	DBB10E
Δ	or 48192100	DBB10G
mD4	03117700	10E-2
mD5	03117700	10E-2
•Zener Diode		
mDZ7	46111700 or 46111800	05Z6.2-X 05Z6.2-Y
Δ mR18	46228200	22 Ω 1/2W N.I.R.
mC24	46283300	0.022 μ F 50V F.C.
Δ pC2	46425800	0.01 μ F 400V C.C.
Δ	or 46943200	0.01 μ F 400V C.C.
Δ pF1	48267300	AC Fuse 5.0A 250V (XX-V)
Δ	48267700	AC Fuse 10A 250V (UL,CSA)
Δ pF2	48267300	AC Fuse 5.0A 250V (XX-V)
Δ pRL1	48449700	Relay, POWER

3-6. F-4767 Input Signal Selector Board
(Stock No. 00999801)

Parts No.	Stock No.	Description
•Transistor		
oQ1	46188601	2SA1015
	or 46367001	2SA1115
	or 46367201	2SA1048
oQ2	46188601	2SA1015
	or 46367001	2SA1115
	or 46367201	2SA1048
oQ3	46188601	2SA1015
	or 46367001	2SA1115
	or 46367201	2SA1048
oQ4	46188601	2SA1015
	or 46367001	2SA1115
	or 46367201	2SA1048
oQ5	46188701	2SC1815
	or 46367101	2SC2603
	or 46367301	2SC2458
•IC		
oIC1	46255000	LC4066BH
	or 48056800	LC4966
oIC2	46255000	LC4066BH
	or 48056800	LC4966
•Zener Diode		
oDZ1	46112700	05Z8.2-Y
oDZ2	46112700	05Z8.2-Y
oDZ3	46112700	05Z8.2-Y
oDZ4	46112700	05Z8.2-Y
oJW51	46741100	Cross Conductor (Chip)
oR20	46747200	680Ω 1/8W Chip R.
oR21	46747200	680Ω 1/8W Chip R.
oR22	46747200	680Ω 1/8W Chip R.
oR23	46747200	680Ω 1/8W Chip R.
oR24	46749200	4.7kΩ 1/8W Chip R.
oR25	46749200	4.7kΩ 1/8W Chip R.
oR26	46749200	4.7kΩ 1/8W Chip R.
oR27	46749200	4.7kΩ 1/8W Chip R.
oR28	46751600	47kΩ 1/8W Chip R.
oR29	46751600	47kΩ 1/8W Chip R.
oR30	46751600	47kΩ 1/8W Chip R.
oR31	46751600	47kΩ 1/8W Chip R.
oR32	46750800	22kΩ 1/8W Chip R.
oR33	46749200	4.7kΩ 1/8W Chip R.
oR34	46751600	47kΩ 1/8W Chip R.
oR35	46749200	4.7kΩ 1/8W Chip R.
oR36	46749200	4.7kΩ 1/8W Chip R.
oR37	46749200	4.7kΩ 1/8W Chip R.
oR38	46749200	4.7kΩ 1/8W Chip R.
oR40	46754000	470kΩ 1/8W Chip R.
oR41	46754000	470kΩ 1/8W Chip R.
oR42	46754000	470kΩ 1/8W Chip R.
oR43	46754000	470kΩ 1/8W Chip R.

3-7. F-5518 CD/AUX, TAPE-1, 2 Input Terminal Board
(Stock No. 00999901)

Parts No.	Stock No.	Description
•IC		
jIC1	46288800	M5220L
jIC2	46288800	M5220L
jIC3	48483500	MN6632A
•Diode		
jD6	03117600	1S2473T77
	or 46086000	1S1588TP-3
jC18	48103400	1μF 50V E.B.
jC21	46283700	0.047μF 50V F.C.
•Transistor		
oQ6	46367301	2SC2458
oQ7	46367001	2SA1115
oQ12	46367301	2SC2458
oQ13	46367301	2SC2458
•IC		
oIC4	46255000	LC4066BH
	or 48056800	LC4966
oIC5	46255000	LC4066BH
	or 48056800	LC4966
•Diode		
oD6	03117600	1S2473T77
	or 46086000	1S1588TP-3
oD7	03117600	1S2473T77
	or 46086000	1S1588TP-3
oD11	03117600	1S2473T77
	or 46086000	1S1588TP-3
oD12	03117600	1S2473T77
	or 46086000	1S1588TP-3
oD14	03117600	1S2473T77
	or 46086000	1S1588TP-3
•Zener Diode		
oDZ6	46112600	05Z8.2-X
	or 46112700	05Z8.2-Y
oS2	46670600	Push SW., DECK SELECTOR
oZ3	48528500	4P Terminal, CD/AUX, TAPE-1 (REC)
oZ4	48528300	6P Terminal, TAPE-1 (PLAY), TAPE-2
•Transistor		
wQ2	48171600	DTC114YS
wQ3	46367101	2SC2603
	or 46367301	2SC2458
	or 46393201	2SC2786
wQ4	46367101	2SC2603
	or 46367301	2SC2458
	or 46393201	2SC2786
wQ5	46367101	2SC2603
	or 46367301	2SC2458
	or 46393201	2SC2786
•IC		
wIC3	48449200	TC4514BP
•Diode		
wD2	03117600	1S2473T77
	or 46086000	1S1588TP-3
wD4	03117600	1S2473T77
	or 46086000	1S1588TP-3

3-8. F-5521 Power Amp. & Power Supply Board
(Stock No. 01000001)

Parts No.	Stock No.	Description
•Transistor		
kQ6	03067401	2SC1845
ΔkQ9	46728301	2SC2705
ΔkQ10	46728201	2SA1145
ΔkQ11	03085301	2SD381
ΔkQ12	03033701	2SB536
ΔkQ13	48490801	2SC3855
ΔkQ14	48490701	2SA1491
ΔkQ15	48490801	2SC3855
ΔkQ16	48490701	2SA1491
ΔkQ17	46581601	2SA992
kQ18	46581701	2SC1845
kQ19	46581701	2SC1845
kQ20	46581601	2SA992
•IC		
kIC1	46580100	M5218P
•Diode		
kD3	03117600	1S2473T77
	or 46086000	1S1588TP-3
kD4	03117600	1S2473
	or 03111800	1S1588
	or 03117600	1S2473T77
	or 46086000	1S1588TP-3
ΔkR17	46228800	68Ω 1/2W N.I.R.
ΔkR18	46229800	470Ω 1/2W N.I.R.
ΔkR21	46229800	470Ω 1/2W N.I.R.
ΔkR22	46228800	68Ω 1/2W N.I.R.
ΔkR23	46230200	1kΩ 1/2W N.I.R.
ΔkR24	46229200	150Ω 1/2W N.I.R.
ΔkR25	46227400	4.7Ω 1/2W N.I.R.
ΔkR26	46227400	4.7Ω 1/2W N.I.R.
ΔkR27	46637700	0.22ΩX2 7W W.R.
ΔkR28	46637700	0.22ΩX2 7W W.R.
ΔkR29	46623100	10Ω 2W N.I.R.
ΔkR34	46229000	100Ω 1/2W N.I.R.
ΔkR35	46229000	100Ω 1/2W N.I.R.
ΔkR36	46229000	100Ω 1/2W N.I.R.
ΔkR41	46622300	2.2Ω 2W N.I.R.
kC11	46283700	0.047μF 50V F.C.
kC12	48102600	22μF 25V E.B.
kC13	48102400	4.7μF 25V E.B.
kL1	42903700	Peaking Coil
kVR1	10350500	470Ω (B) S.V.R., Bias
•Transistor		
IQ7	46581701	2SC1845
IQ8	46581601	2SA992
•Diode		
ID2	03117700	10E-2
ID3	03117600	1S2473T77
	or 46086000	1S1588TP-3
ID4	03117600	1S2473T77
	or 46086000	1S1588TP-3
ID8	03117600	1S2473T77
	or 46086000	1S1588TP-3
ID9	03117600	1S2473T77
	or 46086000	1S1588TP-3
ID10	03117600	1S2473T77
	or 46086000	1S1588TP-3
ID11	03401700	Varistor MV103
ΔIR36	46229200	150Ω 1/2W N.I.R.
IC7	46283300	0.022μF 50V F.C.
IRL1	46446400	Relay, JC24V

< F-5521 >

Parts No.	Stock No.	Description
•Diode		
ΔmD1	48448400	RB602F
ΔmR2	46626600	8.2kΩ 2W N.I.R.
ΔmR3	46626600	8.2kΩ 2W N.I.R.
mC1	48448600	8200μF 90V E.C.
mC2	48448600	8200μF 90V E.C.
mC3	08680400	0.01μF 500V C.C.

3-9. F-5519 PHONO, TUNER Input Terminal Board

Parts No.	Stock No.	Description
oJ2	46547200	Jack, PHONO
oJ3	46547200	Jack, TUNER
oJ4	46547200	Jack, CD/AUX
oJ5	46547200	Jack, TAPE-1
oZ1	48528400	2P Terminal, PHONO
oZ2	48528400	2P Terminal, TUNER

3-10. F-5520 AUDIO, VCR Input Terminal Board

Parts No.	Stock No.	Description
oS10	46670600	Push SW., TIMER
oJ6	46547200	Jack, TUNER REMOTE
oZ5	48587400	2P Terminal, AUDIO-R-CH
oZ6	48588800	2P Terminal, AUDIO-L-CH
oZ9	48587300	Pin Jack, VCR

3-11. F-5523 Speaker SW. & PHONES Jack Board

Parts No.	Stock No.	Description
ΔkR33	48624700	220Ω 2W N.I.R.
oS1	48576600	Push SW., SPEAKERS
oJ1	46265700	Jack, PHONES

3-12. F-5524 Speaker Terminal Board

Parts No.	Stock No.	Description
oZ8	46947500	8P Terminal,

3-13. F-5526 VCR Signal Control & Lamp Control Board (Stock No. 01000701)

Parts No.	Stock No.	Description
•IC jIC4	48449300	M5233L
•Diode jD1	03117600 or 46086000	1S2473T77 1S1588TP-3
jD2	03117600 or 46086000	1S2473T77 1S1588TP-3
jD3	03117600 or 46086000	1S2473T77 1S1588TP-3
•Transistor ΔIQ5	03032601	2SB536
•Zener Diode IDZ2	46113300	05Z10-Y
ΔIR23	46249400	120Ω 1W N.I.R.
ΔIR24	46249400	120Ω 1W N.I.R.
•Transistor ΔnQ1	48112901	2SA949
ΔnQ2	48112901	2SA949
nQ3	46581601	2SA992
nQ4	46581601	2SA992
•IC nIC1	46078900	M5218L
•Diode ΔnD1	03117700	10E-2
•Zener Diode nDZ1	46112900 or 46113000	05Z9.1-X 05Z9.1-Y
ΔnR13	46248100	10Ω 1W N.I.R.
ΔnR18	46248100	10Ω 1W N.I.R.
•Transistor oQ8	46367301	2SC2458
oQ9	46367301	2SC2458
oQ10	46367301	2SC2458
oQ11	46367301	2SC2458
•IC oIC6	48239100	TC9130P
•Diode oD8	03117600 or 46086000	1S2473T77 1S1588TP-3
oD9	03117600 or 46086000	1S2473T77 1S1588TP-3
oD10	03117600 or 46086000	1S2473T77 1S1588TP-3
oD13	03117600 or 46086000	1S2473T77 1S1588TP-3
oD15	03117600 or 46086000	1S2473T77 1S1588TP-3
oC10	46282900	0.01μF 50V F.C.
•Transistor wQ6	46367101 or 46367301	2SC2603 2SC2458
wQ7	46367101 or 46367301	2SC2603 2SC2458
wQ8	48497101	2SC3247
wQ9	46540801	2SC2878
wQ10	46367101 or 46367301	2SC2603 2SC2458
•IC wIC2	48223600	M50117P
wXO2	48224300	Ceramic OSC Element KBR-455

<F-5526>

Parts No.	Stock No.	Description
•Diode wD1	03117600 or 46086000	1S2473T77 1S1588TP-3
wD3	03117600 or 46086000	1S2473T77 1S1588TP-3
wD5	03117600 or 46086000	1S2473T77 1S1588TP-3
wC2	46282400	3300pF 50V F.C.

3-14. F-5522 Driver Amp. & Power Supply Board (Stock No. 01000101)

Parts No.	Stock No.	Description
•Transistor kQ1	03010801	2SA979
kQ2	48112901	2SA949
kQ3	46581701	2SC1845
kQ4	46581701	2SC1845
kQ5	46728201	2SA1145
kQ7	46728301	2SC2705
kQ8	46728301	2SC2705
kD1	03401500	Varistor MV12
kD2	03401500	Varistor MV12
•Transistor IQ1	46367301 or 46581701	2SC2458 2SC1845
ΔmQ1	48113001	2SC2229
ΔmQ2	48112901	2SA949
ΔmQ3	46546701	2SD880
ΔmQ4	48150701	2SB834
ΔmQ5	46546701	2SD880
ΔmQ8	46581701	2SC1845
mQ9	46581601	2SA992
•Diode ΔmD2	46273600 or 48192000	DBB10B DBB10E
Δ	or 48192100	DBB10G
•Zener Diode mDZ1	46114200 or 46114300	05Z13-Y 05Z13-Z
mDZ2	46114200 or 46114300	05Z13-Y 05Z13-Z
mDZ3	46109100 or 46109200	05Z2.7-Y 05Z2.7-Z
mDZ4	46111500 or 46111600	05Z5.6-Y 05Z5.6-Z
mDZ5	46114800 or 46114900	05Z16-Y 05Z16-Z
mDZ6	46114800 or 46114900	05Z16-Y 05Z16-Z
ΔmR8	46622700	4.7Ω 2W N.I.R.
ΔmR9	46622700	4.7Ω 2W N.I.R.
ΔmR15	46229400	220Ω 1/2W N.I.R.
ΔmR16	46229400	220Ω 1/2W N.I.R.
mC14	46283300	0.022μF 50V F.C.

3-15. F-5525 Master Volume Board

Parts No.	Stock No.	Description
jFL1	48172000	CR Module
jVR1	48171000	150kΩ (B) V.R., VOLUME
nPL1	48483100	12V 0.15A Pilot Lamp
nPL2	46286600	12V 0.15A Pilot Lamp
oS6	48169400	Push SW., MUTING
oS7	48169400	Push SW., LOUDNESS

3-16. F-5527 Tone Control V.R. & Control SW. Board (Stock No. 01000801)

Parts No.	Stock No.	Description
jVR2	48449600	250kΩ (MN) V.R., BALANCE
jVR3	48171200	50kΩ (C) V.R., BASS
jVR4	48171200	50kΩ (C) V.R., TREBLE
•LED nLD1	48172100	BR3447S, PHONO
nLD2	48172100	BR3447S, TUNER
nLD3	48172100	BR3447S, CD/AUX
nLD4	48172100	BR3447S, TAPE-1
nLD5	48572000	GL3HY, VCR
nLD6	48572000	GL3HY, TAPE-2
nLD7	48449500	LT1168, POWER LEVEL METER
nPL3	48191900	12V 0.15A Pilot Lamp, Scal Plage
oS3	46396700	Push SW., VCR
oS4	48203400	Push SW., PHONO/TUNER
oS5	48372900	Push SW., TAPE-2
oS8	48203400	Push SW., TAPE-2
oS9	48169400	Push SW., METER RANGE

3-17. F-5528 Heat Sensor Board

Parts No.	Stock No.	Description
IPT1	48262800	Thermistor, ZPP221C501A110
ΔIPT2	48262700	Thermistor, ZPP220T501A80

3-18. F-5530 Remote Control Receiver Unit Board

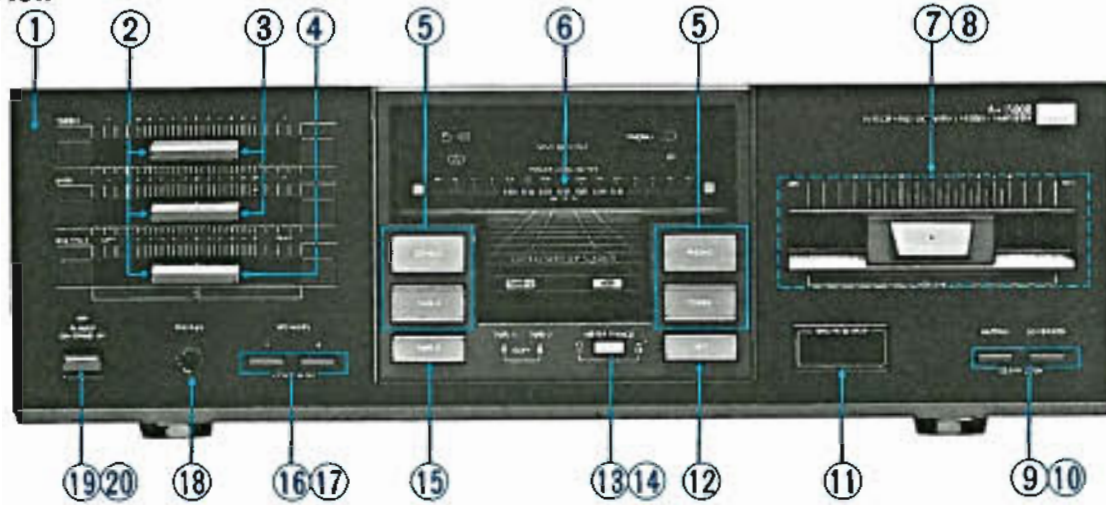
Parts No.	Stock No.	Description
nC1	48499100	REMOTE CONTROL RECEIVER, BX1395

3-19. F-5538 Power STAND-BY Indicator Board

Parts No.	Stock No.	Description
•LED nLD8	48126300	SEL2210S

4. OTHER PARTS

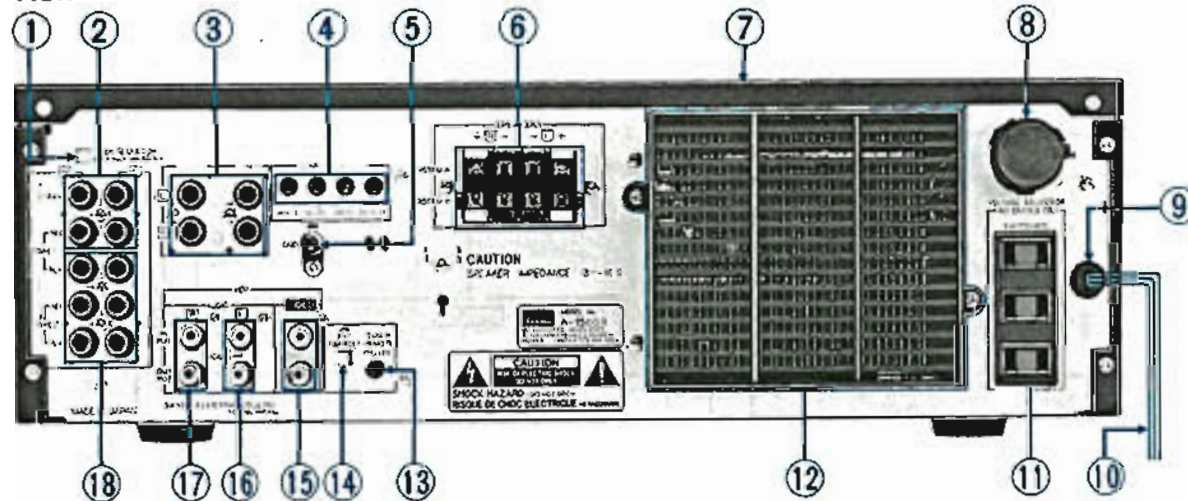
4-1. Front View



Parts No.	Stock No.	Description
1	27249200	Front Panel Ass'y (XX-V, CSA)
	27249300	Front Panel Ass'y (UL)
2	27190710	Knob, BALANCE, BASS, TREBLE
3	48171200	50kΩ Slide V.R., BASS, TREBLE
4	48449600	250kΩ Slide V.R., BALANCE
5	48203400	Push SW., PHONO, TUNER, CD/AUX, TAPE-1
6	48449500	LED, Power Level Meter
7	27249100	V.R. Holder Ass'y
8	48171000	150kΩ V.R., VOLUME
9	27193200	Knob, MUTING, LOUDNESS
10	48169400	Push SW., MUTING, LOUDNESS

Parts No.	Stock No.	Description
11	48499100	BX1395, REMOTE CONTROL SENSOR
12	46398700	Push SW. VCR
13	47747200	Knob, METER RANGE
14	48169400	Push SW., METER RANGE
15	48372900	Push SW., TAPE-2
16	07911000	Knob, SPEAKERS
17	48576600	Push SW., SPEAKERS
18	46265700	Jack, PHONES
19	47746900	Knob, POWER
Δ 20	46612900	Push SW., POWER

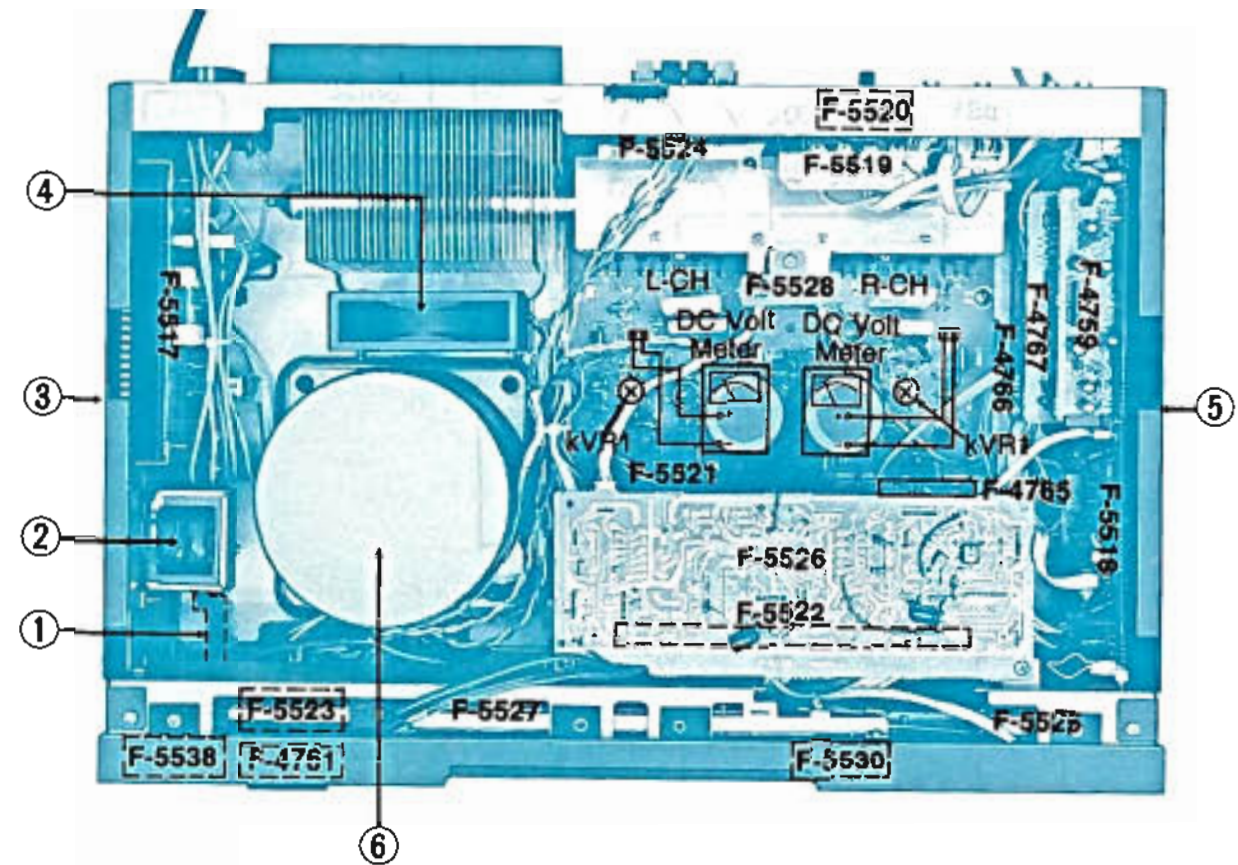
4-2. Rear View



Parts No.	Stock No.	Description
1	46670600	Push SW., DECK SELECTOR
2	48528500	4P Terminal, CD/AUX, TAPE-1 (REC)
3	48528400	2P Terminal, PHONO, TUNER
4	46547200	Jack, COMPU SELECTOR
5	22301510	Ground Terminal
6	48947500	8P Terminal, SPEAKERS
7	27261100	Bonnet
Δ 8	48175200	Plug, VOLTAGE SELECTOR (XX-V)
9	39104900	Strain Relief
Δ 10	38005000	Power Supply Cord (XX-V)

Parts No.	Stock No.	Description
Δ	48188200	Power Supply Cord-polarized (XX-V, UL, CSA)
Δ 11	46360100	AC OUTLETS (XX-V)
Δ	48184800	AC OUTLETS-polarized (XX-V, UL, CSA)
12	27191900	HS Cover
13	46547200	Jack, TUNER REMOTE
14	46670600	Push SW., TIMER SET
15	48587300	2P Terminal, VCR
16	48588800	2P Terminal, AUDIO (L-CH)
17	48587400	2P Terminal, AUDIO (R-CH)
18	48528300	6P Terminal, TAPE-1 (PLAY), TAPE-2

4-3. Top View



Parts No.	Stock No.	Description
1	47809700	Joint Shaft, power
Δ 2	15024901	Power Transformer (XX-V)
Δ	15024902	Power Transformer (UL, CSA)
3	27192200	Left Side Panel

Parts No.	Stock No.	Description
4	48449800	Fan Motor
5	27192100	Right Side Panel
Δ 6	15024809	Power Transformer (XX-V)
Δ	15024802	Power Transformer (UL, CSA)

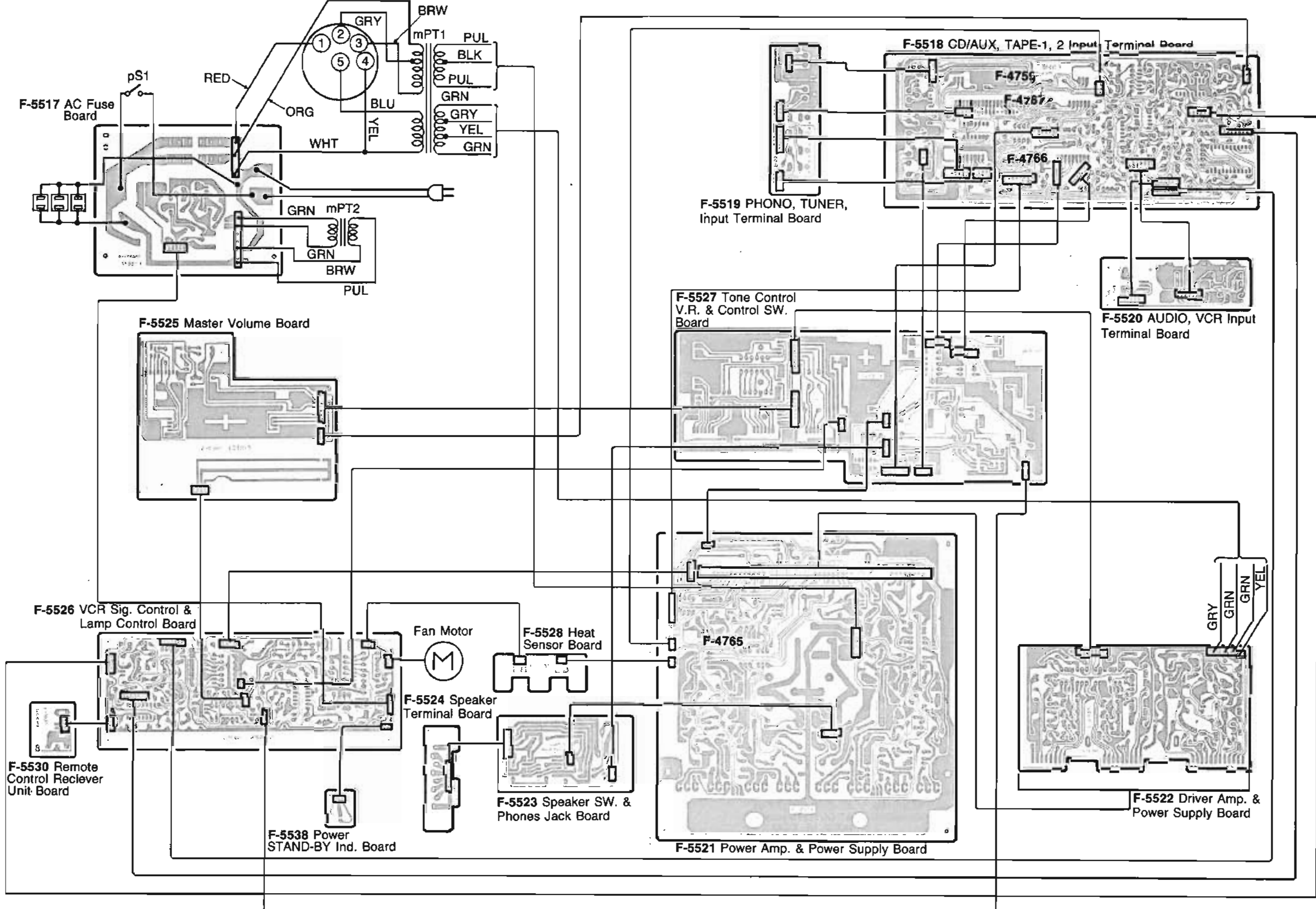
5. ADJUSTMENT (See Top View)

Note: 1) Master Volume Minimum
 2) Room Temperature 18°C ~ 28°C (65°F ~ 83°F)
 3) For this adjustment, run the unit for more than 20 minutes after the power is switched ON.

4) Before turning ON power switch, set kVR1 on F-5521 to center position.

STEP	SUBJECT	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
1.	Bias Current Adj. L-CH	Test Terminal (L-CH) (Across KR27L or LR28L)	kVR1, L-ch (F-5521)	DC 16mV ± 5mV	• This bias value is converted from current value into voltage by ohms law.
2.	Bias Current Adj. R-CH	Test Terminal (R-CH) (Across KR27R or KR28R)	kVR1, R-ch (F-5521)	DC 16mV ± 5mV	

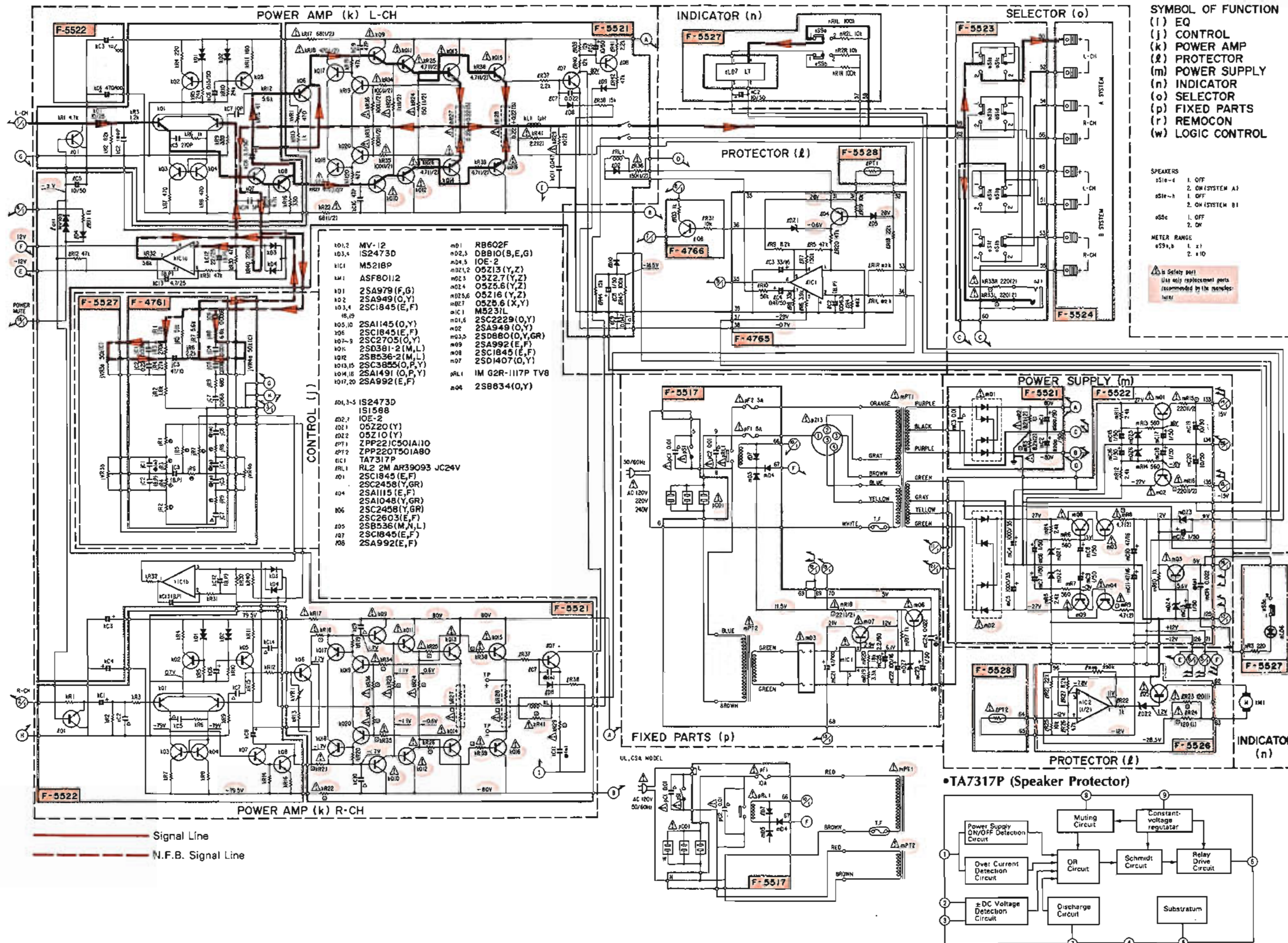
6. OVERALL WIRING DIAGRAM



7. SCHEMATIC DIAGRAM 7-1. Power Amplifier & Power Supply Section

Design and specifications subject to change without notice for improvement.
 La présentation et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles.
 Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.

②



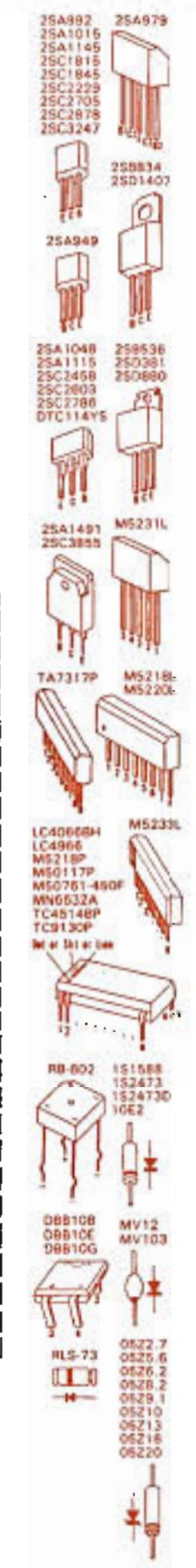
SYMBOL OF FUNCTION

(i) EQ
 (j) CONTROL
 (k) POWER AMP
 (l) PROTECTOR
 (m) POWER SUPPLY
 (n) INDICATOR
 (o) SELECTOR
 (p) FIXED PARTS
 (r) REMOCON
 (w) LOGIC CONTROL

SPEAKERS
 1510-4 1. OFF
 2. ON (SYSTEM A)
 1510-1 1. OFF
 2. ON (SYSTEM B)
 155c 1. OFF
 2. ON

METER RANGE
 1. 10
 2. 10

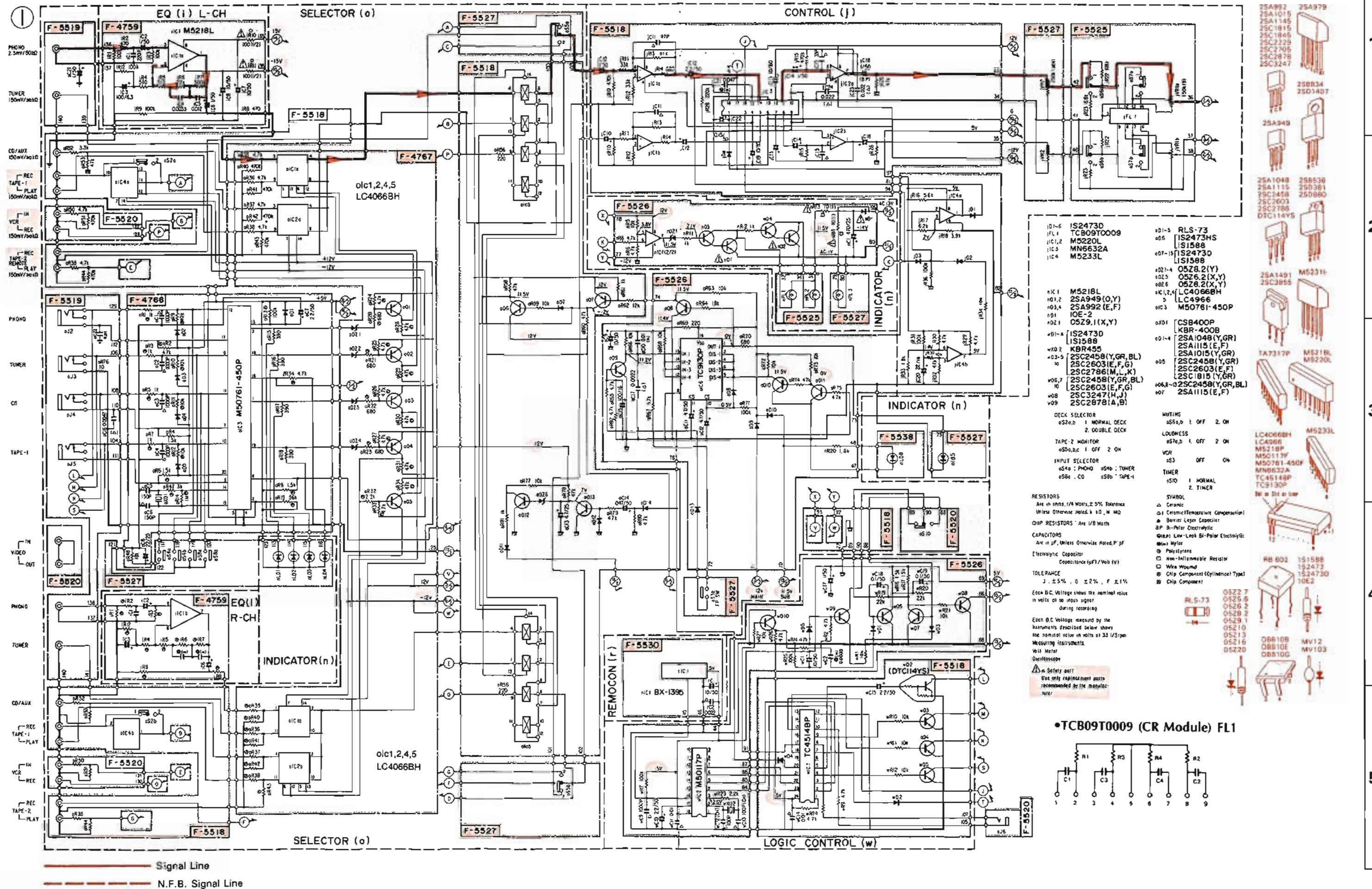
⚠ Safety part!
 Use only replacement parts recommended by the manufacturer.



1
 2
 3
 4
 5

7-2. Equalizer Amplifier & Control Amplifier Section

Design and specifications subject to change without notice for improvement.
 La présentation et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles.
 Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.



IC1-6	IS2473D	IC1-5	RLS-73
IC7	TC809T0009	IC6	IS2473HS
IC8	M5220L	IC9	IS1588
IC9	MN6632A	IC10	IS2473D
IC10	M5233L	IC11	IS1588
IC11	M5218L	IC12	OS28.2(Y)
IC12	2SA949(O,Y)	IC13	OS26.2(X,Y)
IC13	2SA992(E,F)	IC14	OS28.2(X,Y)
IC14	IOE-2	IC15	LC4066BH
IC15	OS29.1(X,Y)	IC16	LC4966
IC16	IS2473D	IC17	M50781-450P
IC17	IS1588	IC18	CSB400P
IC18	KBR455	IC19	KBR-400B
IC19	2SC2458(Y,GR,BL)	IC20	2SA1048(Y,GR)
IC20	2SC2603(E,F,G)	IC21	2SA1115(E,F)
IC21	2SC2786(M,L,K)	IC22	2SA1015(Y,GR)
IC22	2SC2458(Y,GR,BL)	IC23	2SC2458(Y,GR)
IC23	2SC2603(E,F,G)	IC24	2SC2603(E,F)
IC24	2SC2603(E,F,G)	IC25	2SC1815(Y,GR)
IC25	2SC3247(H,J)	IC26	2SC2458(Y,GR,BL)
IC26	2SC2878(A,B)	IC27	2SA1115(E,F)

DECK SELECTOR	e52a,b 1 NORMAL DECK 2 DOUBLE DECK
MUTING	e55a,b 1 OFF 2 ON
LOUDNESS	e57a,b 1 OFF 2 ON
TAPE-2 MONITOR	e59a,b 1 OFF 2 ON
VCR	e63 OFF ON
TIMER	e51D 1 NORMAL 2 TIMER

RESISTORS
 Are in ohms, 1/4 Watts, ±5% Tolerance
 Unless Otherwise Noted: K, M, Ω

CHIP RESISTORS Are 1/8 Watts

CAPACITORS
 Are in μF, Unless Otherwise Noted, P, μF
 Electrolytic Capacitor
 Capacitance (μF) / Volt (V)

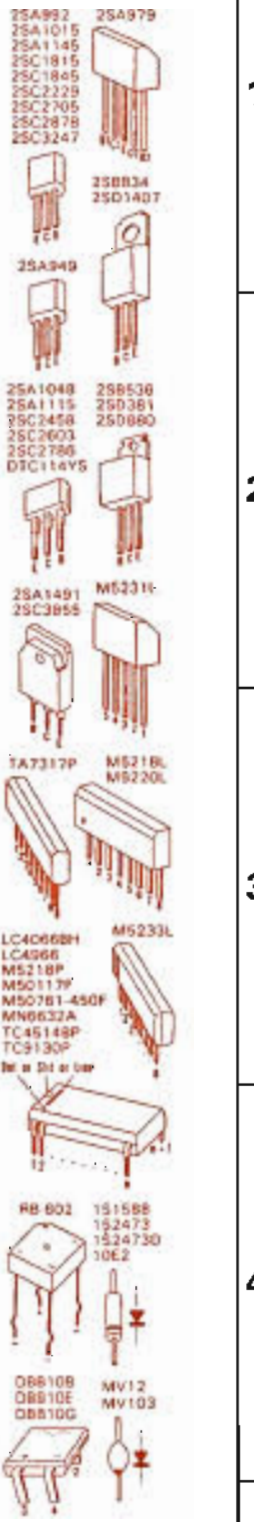
TOLERANCE
 J, ±5%, K, ±10%, F, ±1%

Each D.C. Voltage shown by the instruments described below shows the nominal value in volts at 33 1/3rpm during recording.

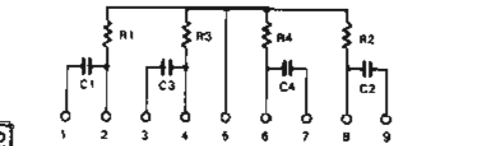
Each D.C. Voltage measured by the instruments described below shows the nominal value in volts at 33 1/3rpm.

Measuring Instruments:
 Volt Meter
 Oscilloscope

⚠ Safety Part
 Use only replacement parts recommended by the manufacturer.

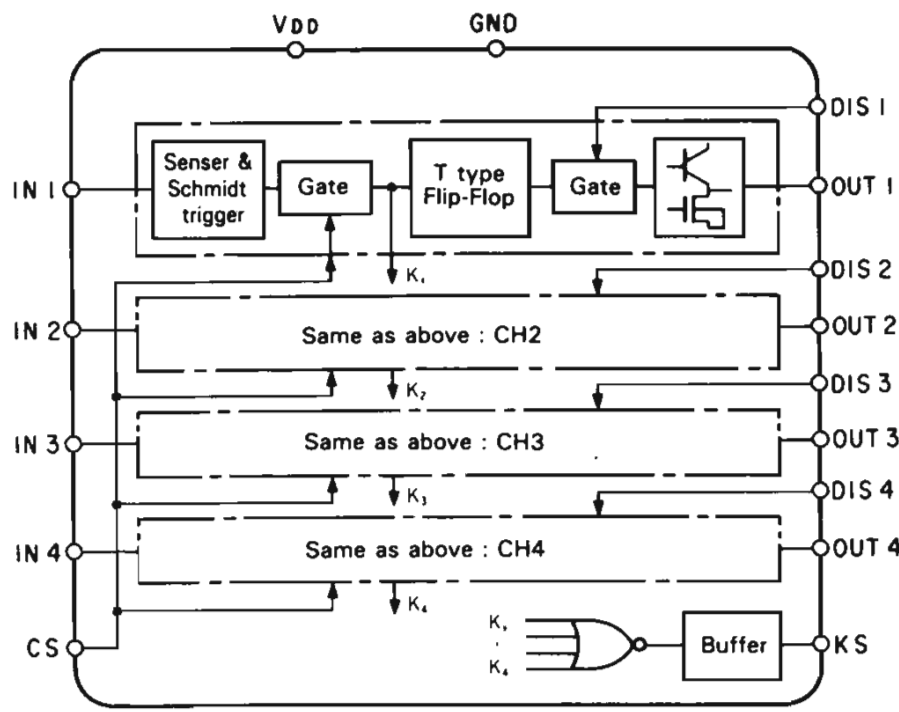


•TCB09T0009 (CR Module) FL1



8. INTERIOR BLOCK DIAGRAM OF ICs

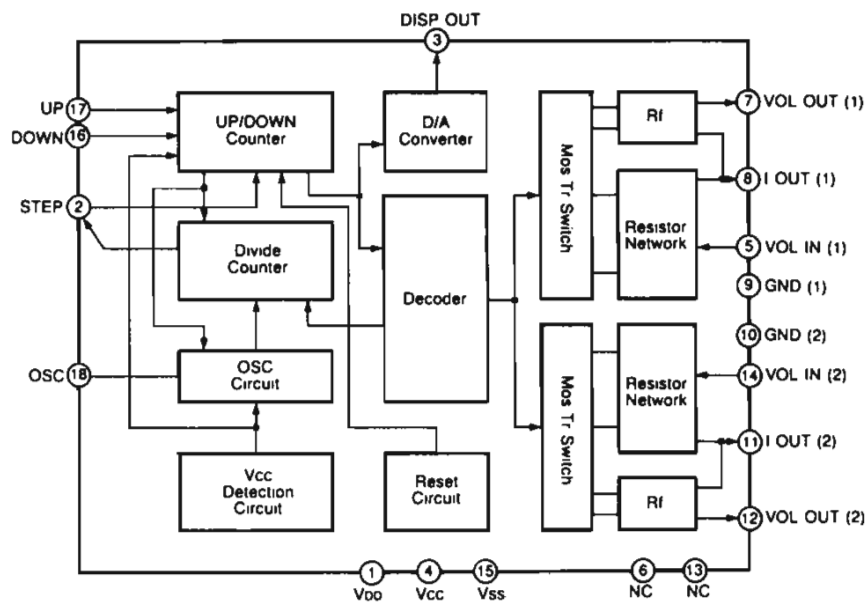
•TC9130P (Cycle Type Flip-Flop)



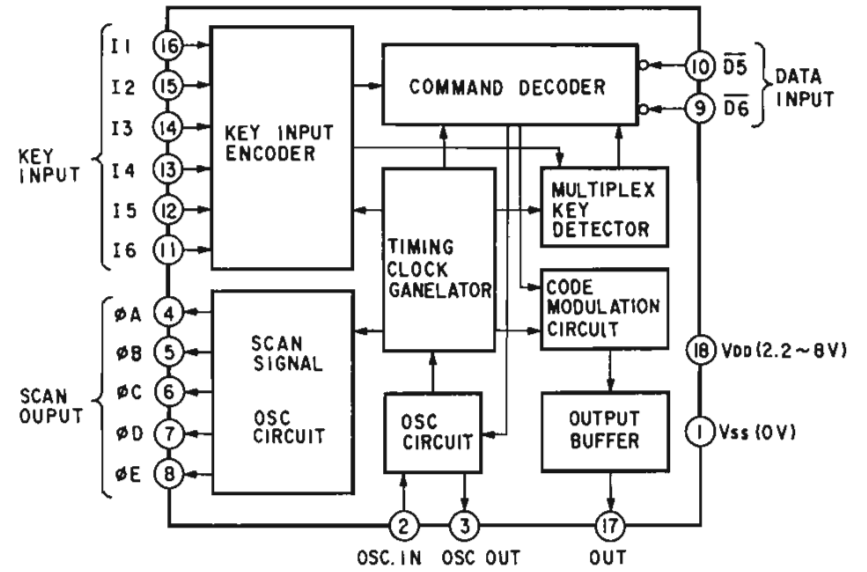
•Function Table <TC9130P>

Pin No.	Symbols	Terminal Name	Function and Operation
15 to 12	IN-1 } IN-4	Input signal terminals	When a voltage applied to these terminals changes from "H" to "L", the output of the corresponding channel is inverted.
1, 3, 5, 7	OUT-1 } OUT-4	Output terminals	Whenever the corresponding input terminal changes from "H" to "L", the output level is inverted. The output circuit is of complementary type of bipolar NPN transistor and Nch MOS FET.
2, 4, 6, 9	DIS-1 } DIS-4	Output-disable terminal	If this terminal is set to "L", the corresponding output terminal is fixed at "L" irrespective of the internal flip-flop condition. In this case, an input signal is receivable as usual.
10	CS	Input-disable terminal	If this terminal is set to "L", all the inputs from IN1 to 4 are disabled and the internal flip-flop condition is held.
11	KS	Input detection terminal	When a "L" signal is given to any one of the input terminals IN1 to 4, this terminal is changed to "L" level.
16	V _{DD}	Power voltage terminal	
8	GND	Ground terminal	

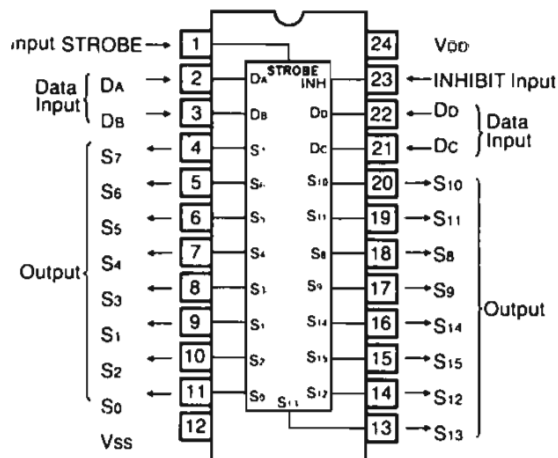
•MN6632A (Electronic Volume)



•M50117P (Function Remote Control Receiver)



•TC4514BP (4 Bit Latch 14 to 16 Line Decoder)



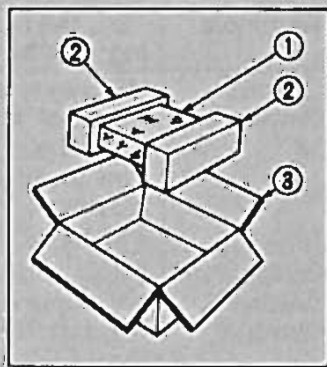
< Function Table >

Note: X: "H" or "L" ↓: Level changes from "H" to "L"

Input						Output																
STORE	INH	Dd	Dc	Db	DA	S0	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	
H	L	L	L	L	L	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
H	L	L	L	L	H	L	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
H	L	L	L	H	L	L	L	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L
H	L	L	L	H	H	L	L	L	H	L	L	L	L	L	L	L	L	L	L	L	L	L
H	L	L	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
H	L	L	H	L	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
H	L	L	H	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
H	L	L	H	H	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
H	L	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
H	L	H	L	L	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
H	L	H	L	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
H	L	H	L	H	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
H	L	H	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
H	L	H	H	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
H	L	H	H	H	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
X	H	X	X	X	X	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
↓	L	X	X	X	X	S0 ⁰	S1 ⁰	S2 ⁰	S3 ⁰	S4 ⁰	S5 ⁰	S6 ⁰	S7 ⁰	S8 ⁰	S9 ⁰	S10 ⁰	S11 ⁰	S12 ⁰	S13 ⁰	S14 ⁰	S15 ⁰	

9. PACKING LIST

Parts No.	Stock No.	Description
1	27306700	Vinyl Bag
2	27249400	Styrofoam Packing
3	27249000	Carton Case



10. ACCESSORY LIST

Stock No.	Description
46998000	Operating instruction
48181700	Mini Pin Plug Cord
—	Remote Controller Unit
—	Dry Battery (SUM-3K)

SANSUI ELECTRIC CO., LTD.:
 SANSUI ELECTRONICS CORPORATION:
 SANSUI ELECTRONICS (U.K.) LTD.:
 SANSUI ELECTRONICS G.M.B.H.:

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(SM1-321)

(1986.7.M) <Stock No. 36525400>