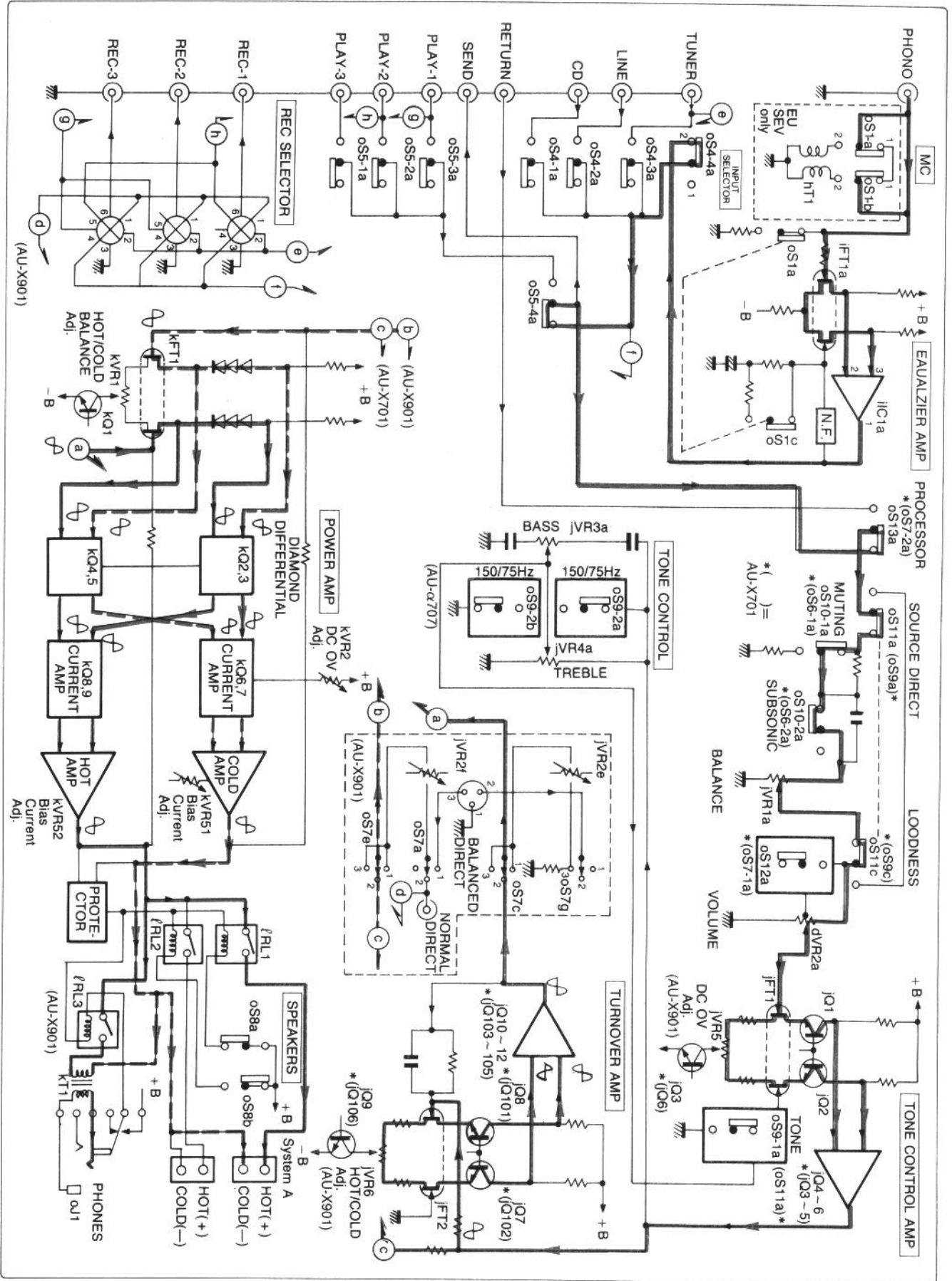


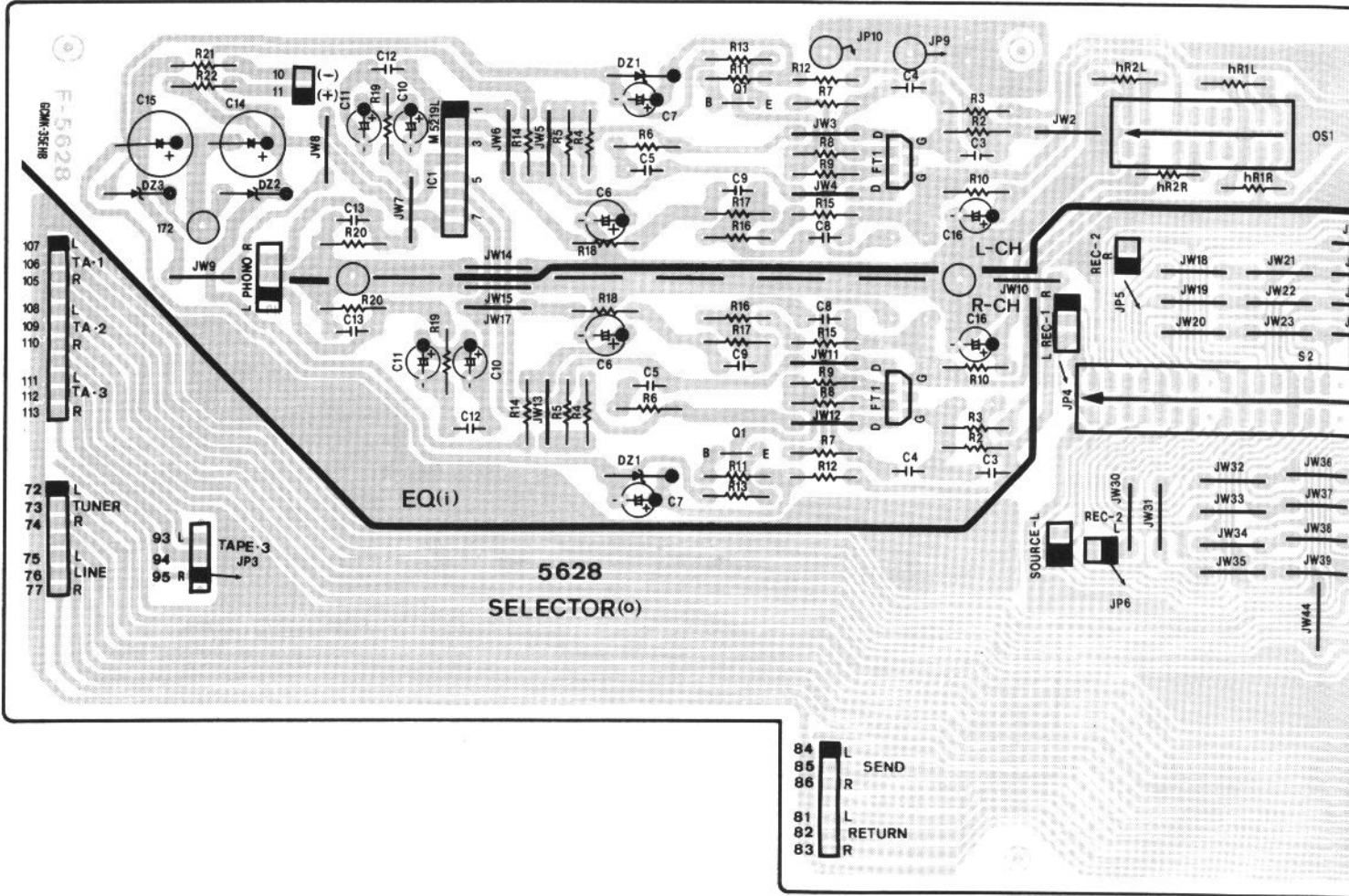
1. BLOCK DIAGRAM



4. PARTS LOCATION ON BOARD

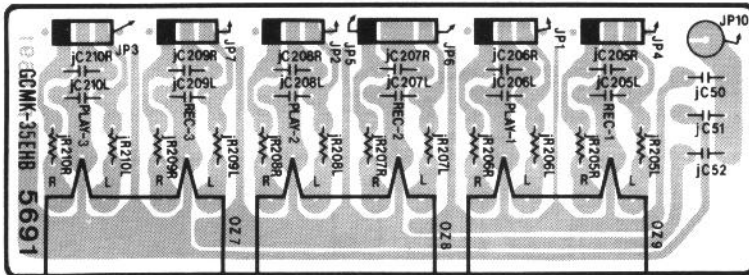
4-1. F-5628 EQ Amp & Input Terminal Board <AU-X701>

Pattern Side



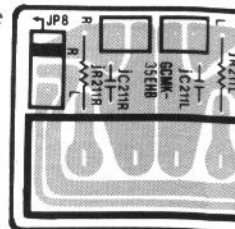
4-3. F-5691 Tape Terminal Board <AU-X701-EU·SEV/AU-X901-XX·UL·EU·SEV·CSA>

Component Side



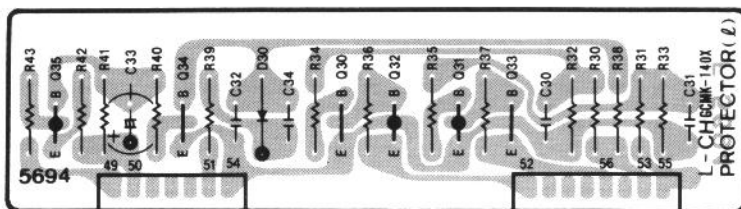
4-4. F-5692 Power Amp Direct

Component Side



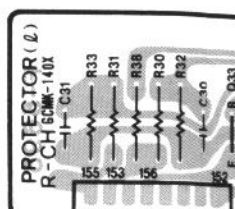
4-5. F-5694 L-CH Power Limiter Board

Component Side



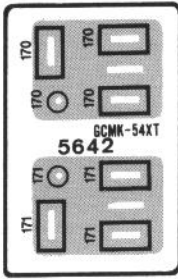
4-6. F-5695 R-CH Power Limite

Component Side



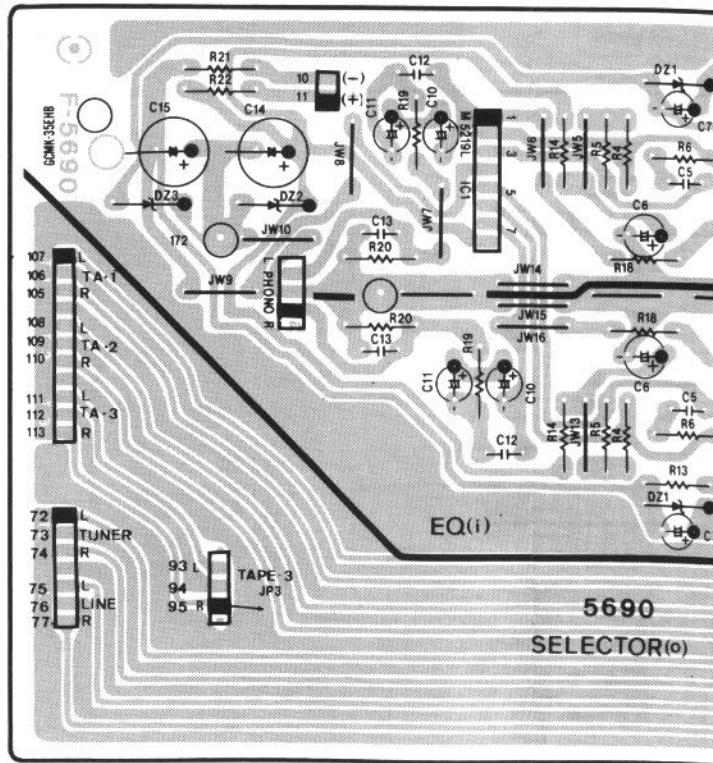
4-8. F-5642 AC Outlet Board (EU, SEV)

Component Side



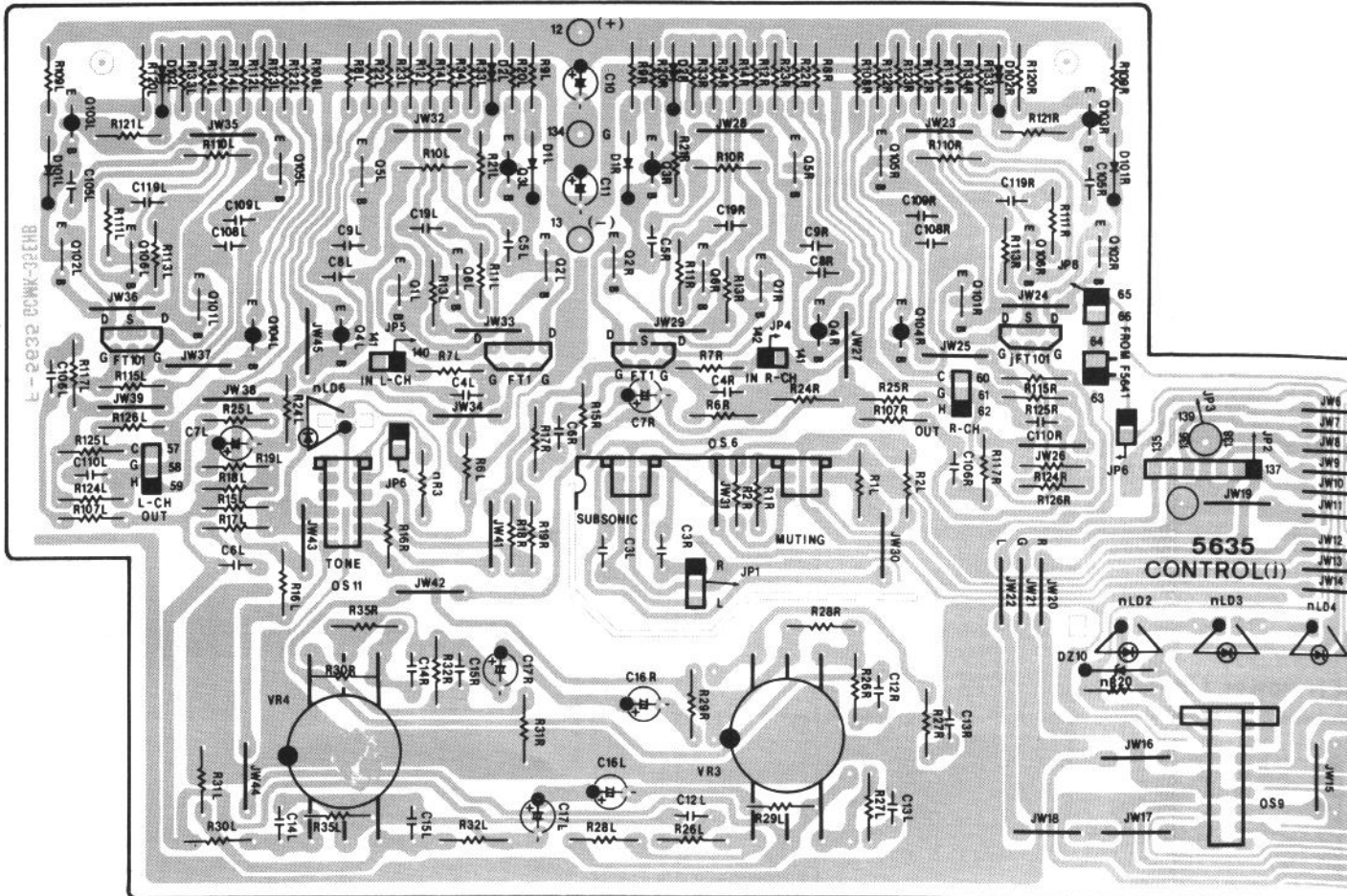
4-9. F-5690 EQ Amp & Input Terminal Board <AU-X901/AU-X701-EU>

Pattern Side



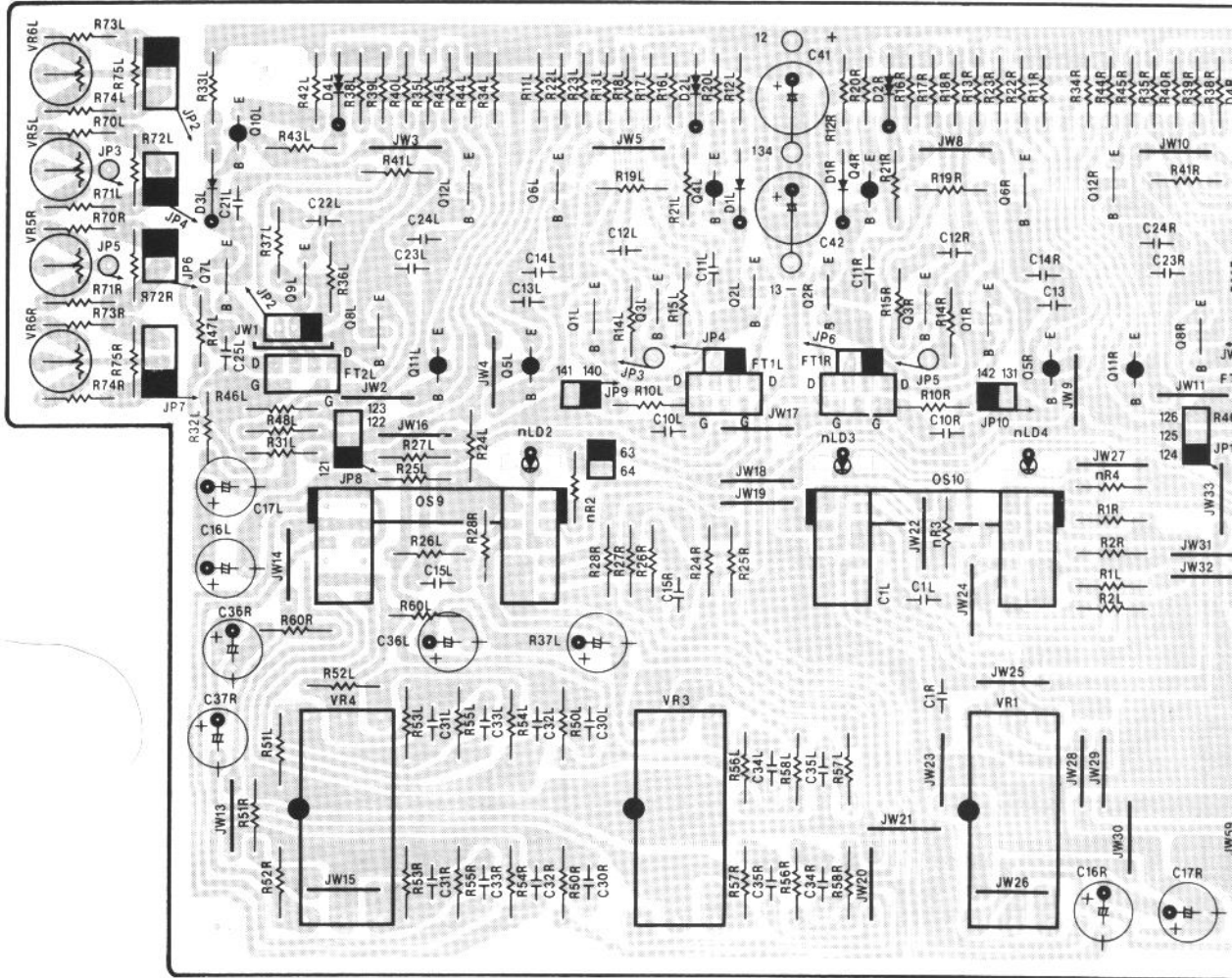
4-10. F-5635 Tone Control Amp Board <AU-X701>

Component Side



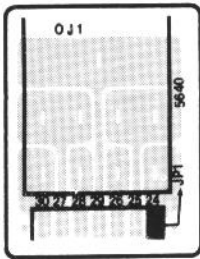
4-11. F-5643 Tone Control Amp Board <AU-X901>

Component Side



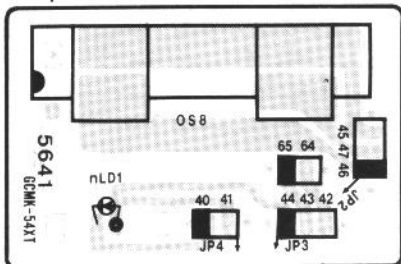
4-13. F-5640 Head Phones Board

Component Side



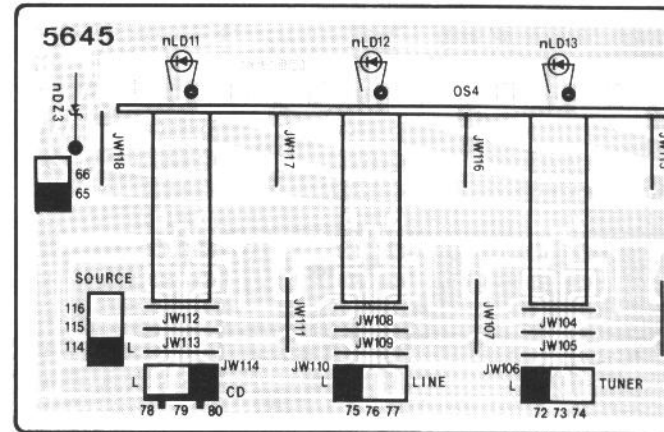
4-15. F-5641 SP SW. Board

Component Side



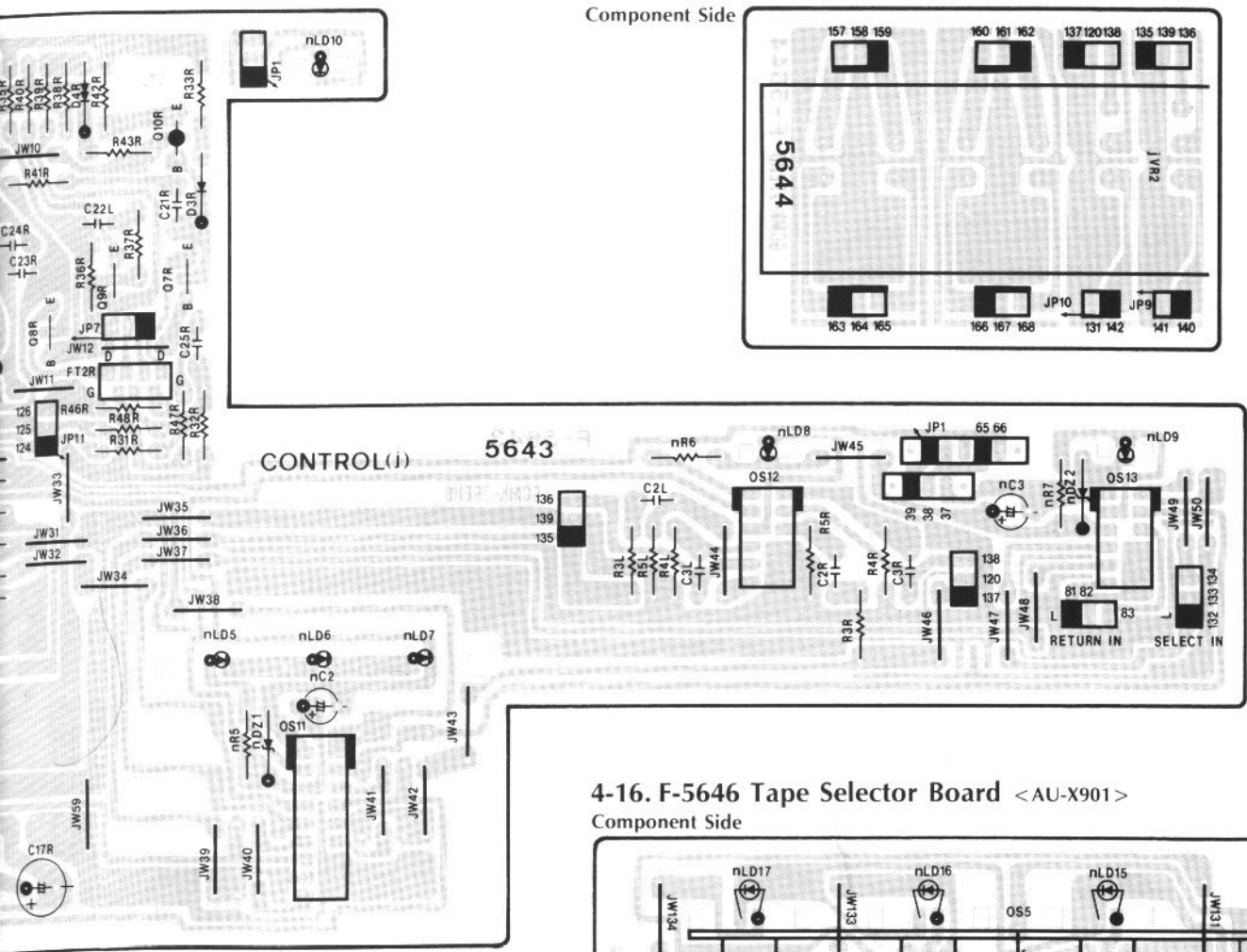
4-14. F-5645 Input Selector Board <AU-X901>

Component Side



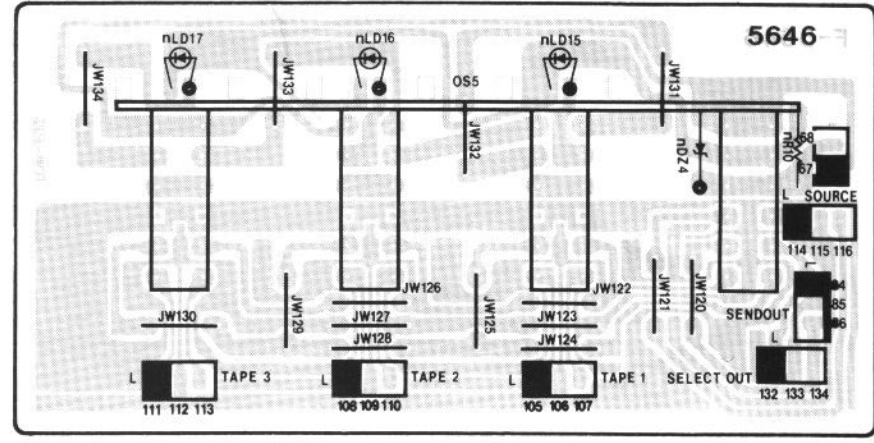
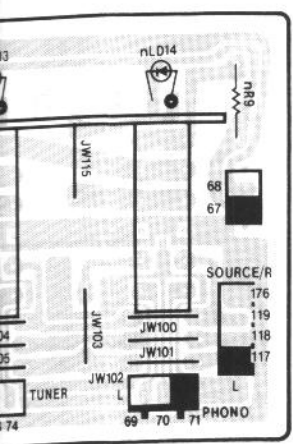
4-12. F-5644 Volume Board <AU-X901>

Component Side



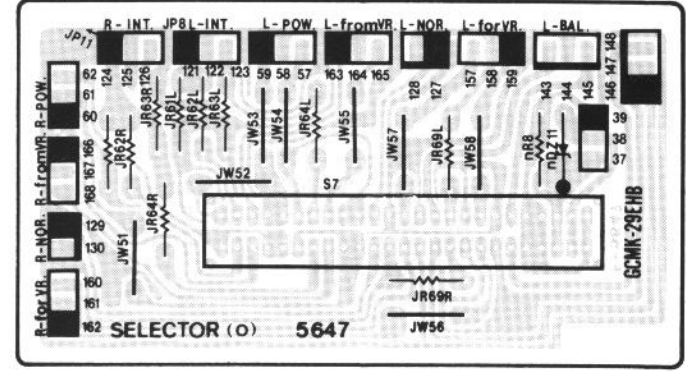
4-16. F-5646 Tape Selector Board <AU-X901>

Component Side



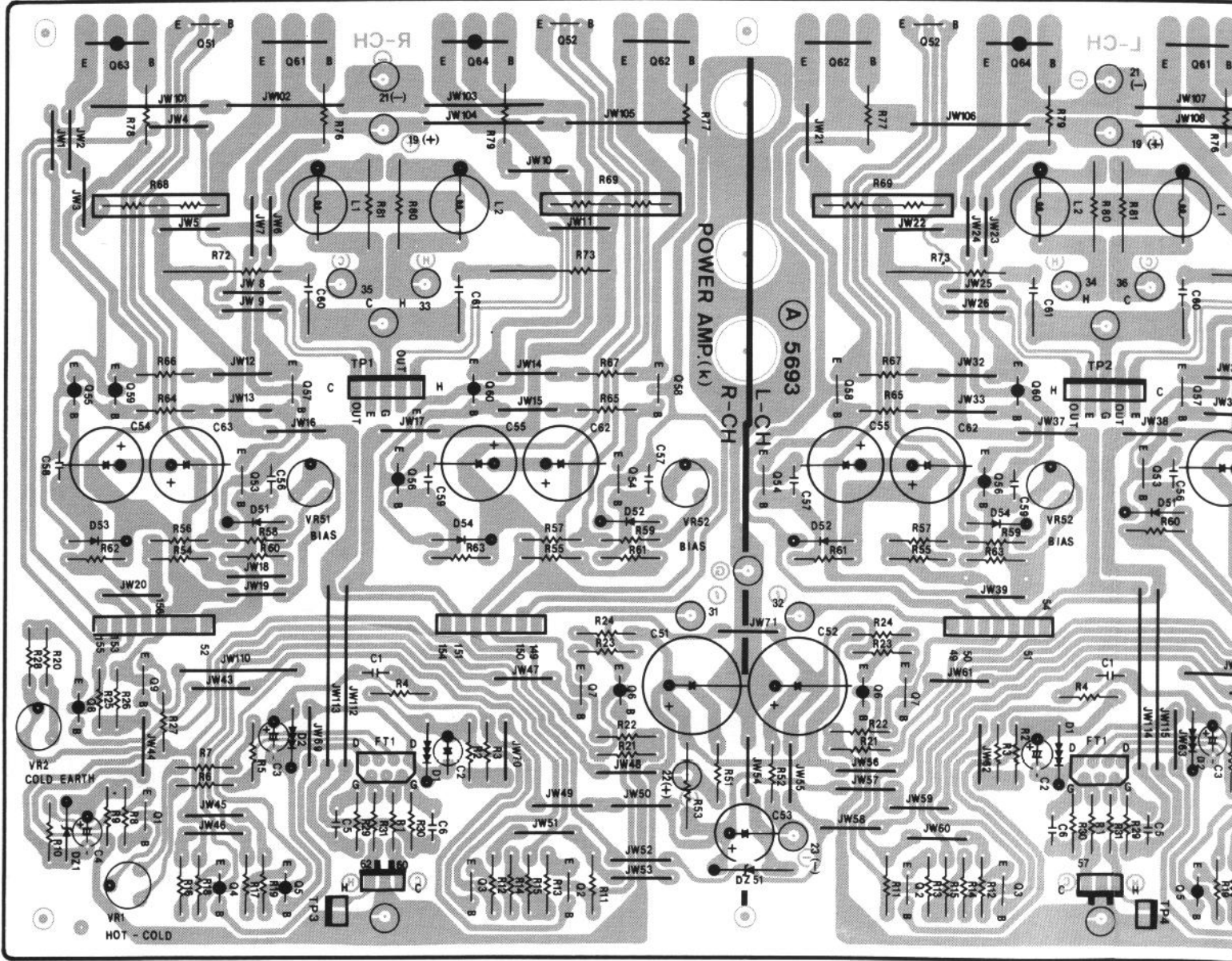
4-17. F-5647 Power Amp Direct SW. Board <AU-X901>

Component Side



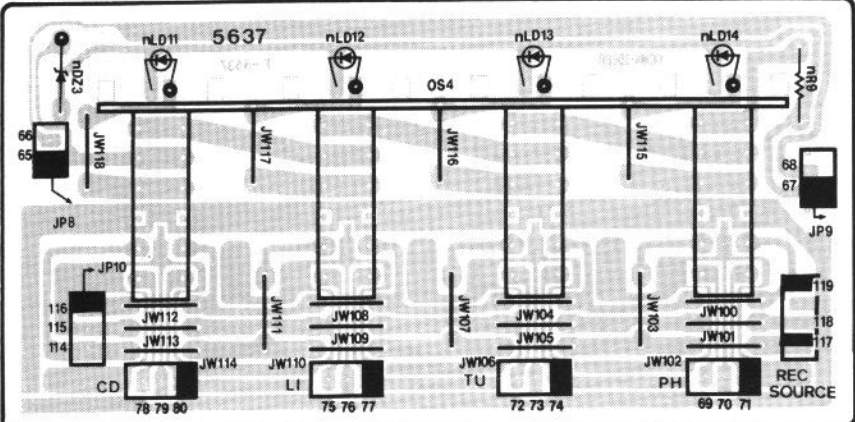
4-18. F-5693 Power Amp Board

Component Side



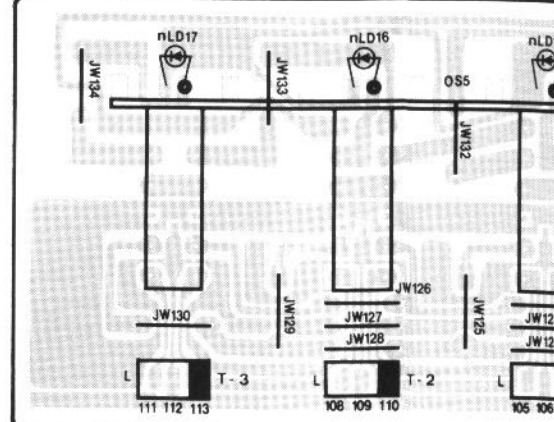
4-20. F-5637 Input Selector Board <AU-X701>

Component Side



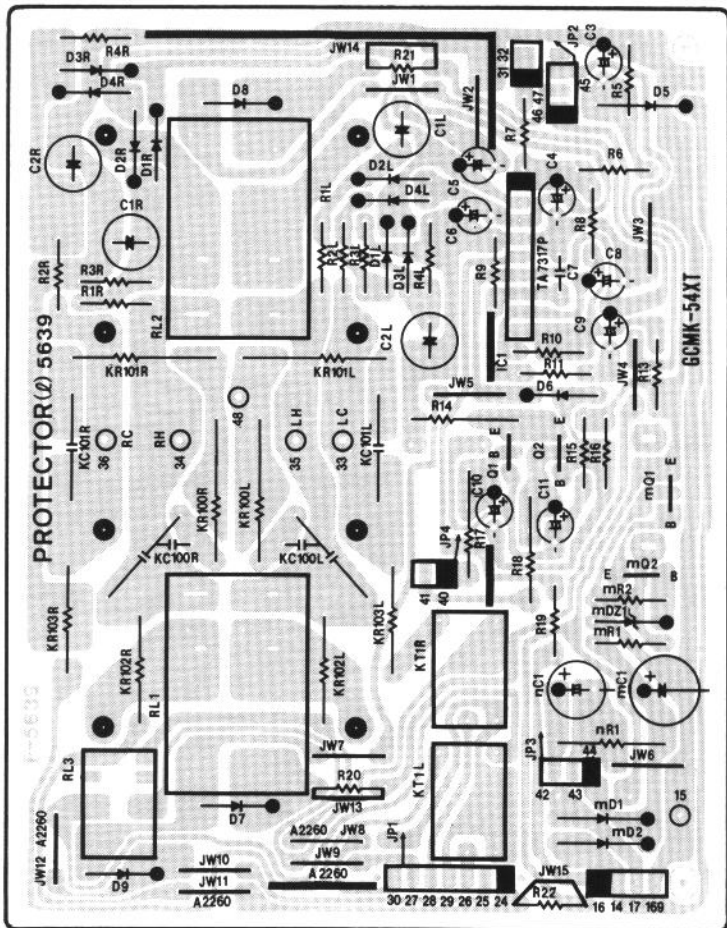
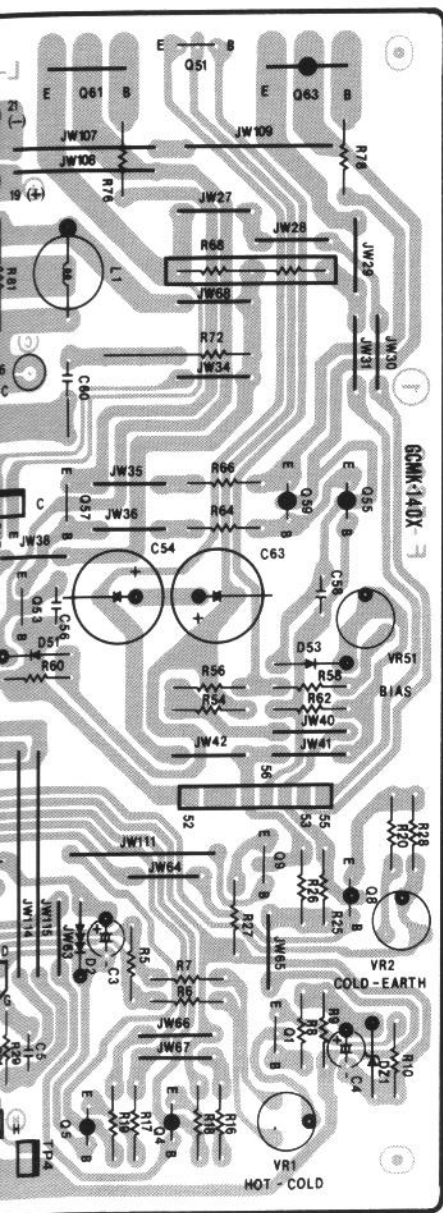
4-21. F-5638 Tape Selector Board <AU-X701>

Component Side



4-19. F-5639 Protector Board

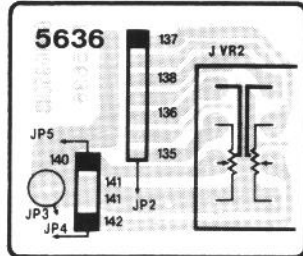
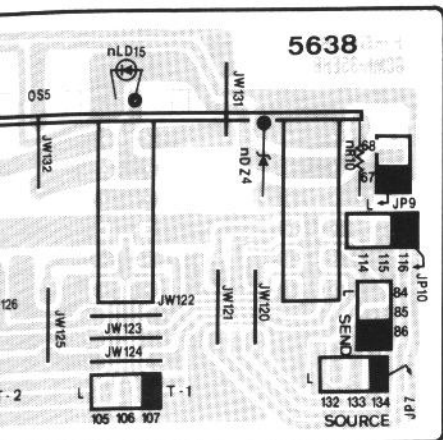
Pattern Side



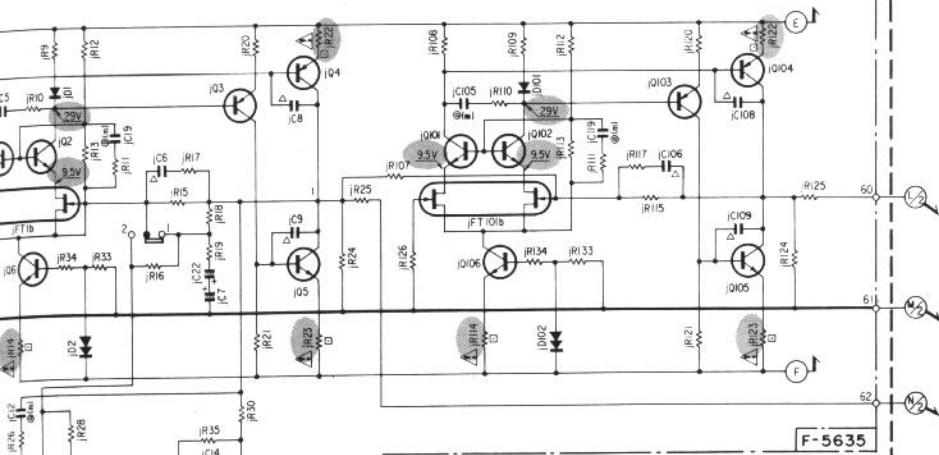
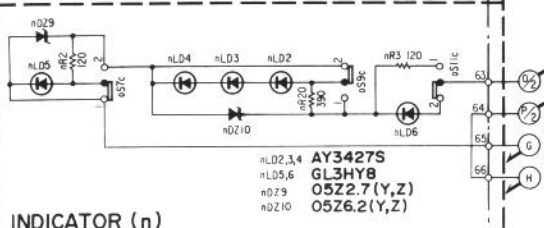
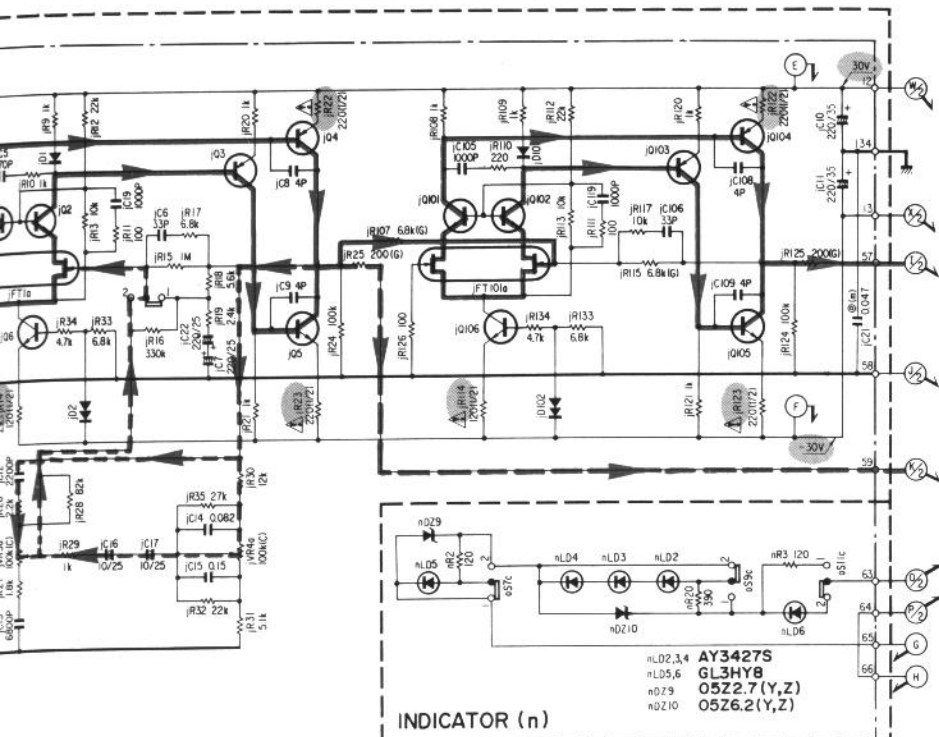
ard <AU-X701>

4-22. F-5636 Volume Board <AU-X701>

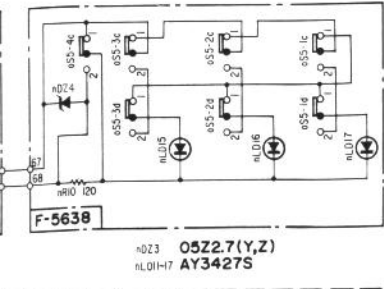
Component Side



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 * Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.



- SYMBOL OF FUNCTION**
- (h) MC
 - (i) EQ
 - (j) CONTROL
 - (k) POWER AMP
 - (l) PROTECTOR
 - (m) POWER SUPPLY
 - (n) INDICATOR
 - (o) SELECTOR
 - (p) FIXED PARTS
- SYMBOL**
- △ Ceramic
 - ⊖ Mylar
 - ⊗ Polystyrene
 - ⊕ Polypropylene film
 - Non-inflammable Resistor
 - ⚡ Safety Part
- Use only replacement parts recommended by the manufacturer.
- RESISTORS**
- Are in ohms, 1/4 Watts, 1.5% Tolerance Unless otherwise Noted as kΩ, M, MΩ
- TOLERANCE**
- G ± 2%
- CAPACITORS**
- Are in μF, Unless otherwise Noted p, pF
- ELECTROLYTIC CAPACITOR**
- Capacitance (μF / Volt/V)



- 25A982
- 25A1049
- 25A1145
- 25C1815
- 25C1845
- 25C2705
- 25D357
- 25A1438
- 25C3851
- 25A1115
- 25C2459
- 25C2603
- 25K163
- 25A1386
- 25C3519
- 25K389
- 25A1306
- 25C3298
- TA7317P
- M5219L
- FMG-22S
- UB-152LFF
- FMG-22R
- 1S1588
- 1S2091
- 1S2473D
- 10E2
- 11E2
- MV12
- MV103
- 05Z2.7
- 05Z6.2
- 05Z7.5
- 05Z20
- 05Z24
- 05Z33
- RD6.2E
- RD22F

- SWITCHES**
- o51 CARTRIDGE SELECTOR
 - 1 MM
 - 2 MC
 - o52 REC SELECTOR
 - 1 TUNER
 - 2 OFF
 - 3 SOURCE
 - 4 1 → 2,3
 - 5 2 → 1,3
 - o54 LINE SELECTOR
 - 1 CD
 - 2 LINE
 - 3 TUNER
 - 4 PHONO
 - o55 TAPE SELECTOR
 - 1 TAPE 3
 - 2 TAPE 2
 - 3 TAPE 1
 - 4 TAPE / LINE
 - o56-1 MUTING
 - 1 OFF 2 ON
 - o56-2 SUBSONIC
 - 1 OFF 2 ON
 - o57-1 LOUDNESS
 - 1 OFF 2 ON
 - o57-2 PROCESSOR
 - 1 SOURCE
 - 2 RETURN
 - o59 SOURCE DIRECT
 - 1 OFF 2 ON
 - o511 TONE
 - 1 OFF 2 ON



1

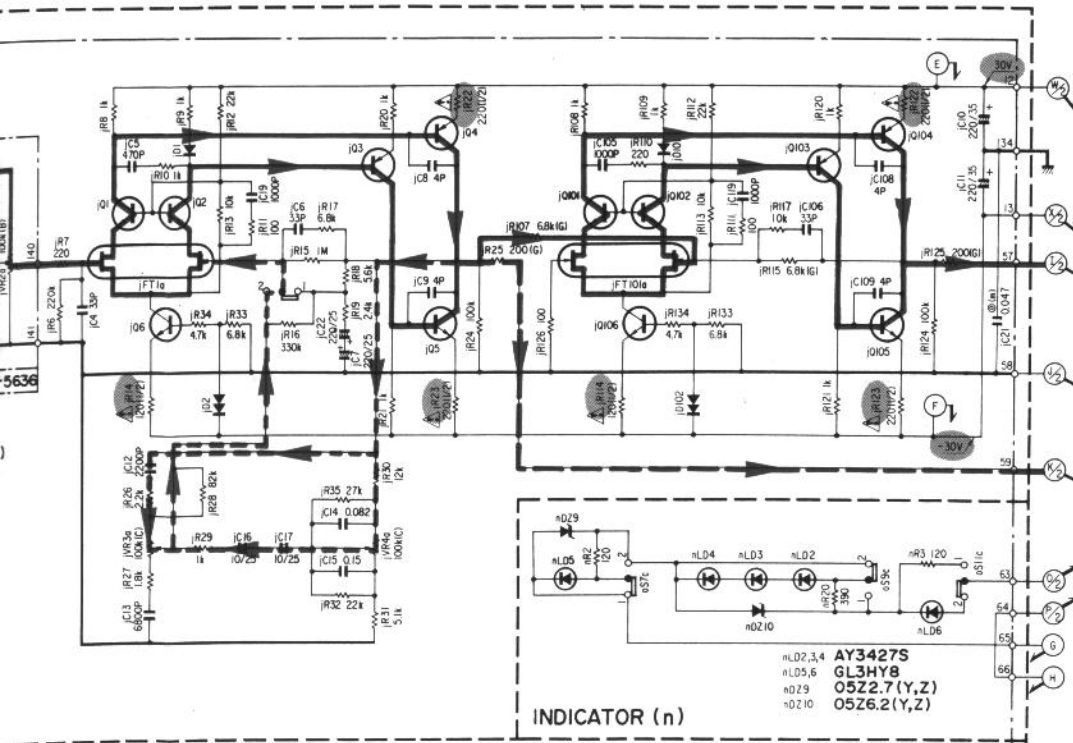
2

3

4

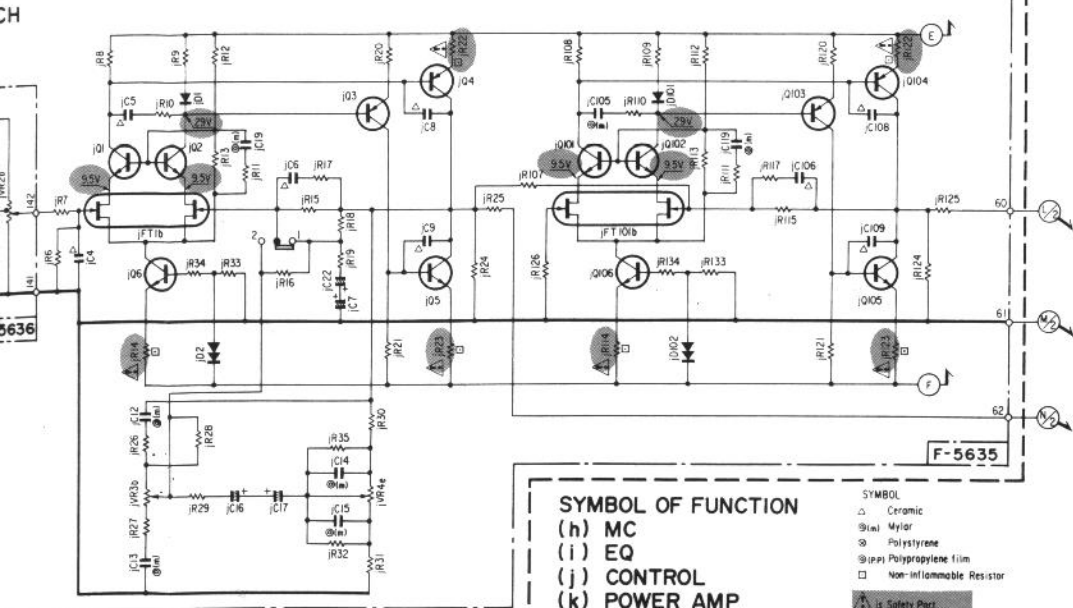
5

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INDICATOR (n)

nLD2,3,4 AY3427S
 nLD5,6 GL3HY8
 nD29 OSZ2.7 (Y,Z)
 nD10 OSZ6.2 (Y,Z)



SYMBOL OF FUNCTION

- (h) MC
- (i) EQ
- (j) CONTROL
- (k) POWER AMP
- (l) PROTECTOR
- (m) POWER SUPPLY
- (n) INDICATOR
- (o) SELECTOR
- (p) FIXED PARTS

SYMBOL
 ◻ Ceramic
 ◻ Mylar
 ◻ Polystyrene
 ◻ Polypropylene film
 ◻ Non-Inflammable Resistor

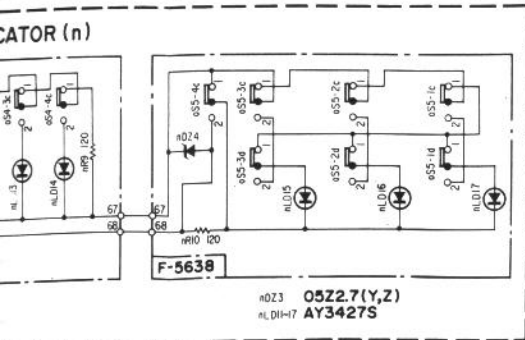
⚠ Safety Part
 Use only replacement parts recommended by the manufacturer.

RESISTORS
 Are in ohms, 1/4 Watts, ±5% Tolerance Unless otherwise noted. k, M, MG

TOLERANCE
 ± 2%

CAPACITORS
 Are in µF, Unless otherwise noted. P, pF

ELECTROLYTIC CAPACITOR
 Capacitance (µF) / Volt (V)



nD23 OSZ2.7 (Y,Z)
 nLD1-7 AY3427S



- 2SA992
- 2SA1049
- 2SA1145
- 2SC1815
- 2SC1845
- 2SC2705
- 2SD357
- 2SA1115
- 2SC2459
- 2SC2603
- 2SA1438
- 2SC3851
- 2SK163
- 2SA1386
- 2SC3519
- 2SK389
- 2SA1306
- 2SC3298
- TA7317P
- M5219L
- FMG-22S
- UB-152LFF
- FMG-22R
- 1S1588
- 1S2091
- 1S2473D
- 10E2
- 11E2
- MV12
- MV103
- OSZ2.7
- OSZ6.2
- OSZ7.5
- OSZ20
- OSZ24
- OSZ33
- RD6.2E
- RD22F

- SWITCHES
- oS1 CARTRIDGE SELECTOR
 - 1 MM
 - 2 MC
 - oS2 REC SELECTOR
 - 1 TUNER
 - 2 OFF
 - 4 1=SOURCE
 - 5 2=1,3
 - oS4 LINE SELECTOR
 - 1 CD
 - 2 LINE
 - 3 TUNER
 - 4 PHONO
 - oS5 TAPE SELECTOR
 - 1 TAPE 3
 - 2 TAPE 2
 - 3 TAPE 1
 - 4 TAPE /LINE
 - oS6-1 MUTING
 - 1 OFF 2 ON
 - oS6-2 SUBSONIC
 - 1 OFF 2 ON
 - oS7-1 LOUDNESS
 - 1 OFF 2 ON
 - oS7-2 PROCESSOR
 - 1 SOURCE
 - 2 RETURN
 - oS9 SOURCE DIRECT
 - 1 OFF 2 ON
 - oS11 TONE
 - 1 OFF 2 ON

* FT2 MODEL only

1

2

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4

5

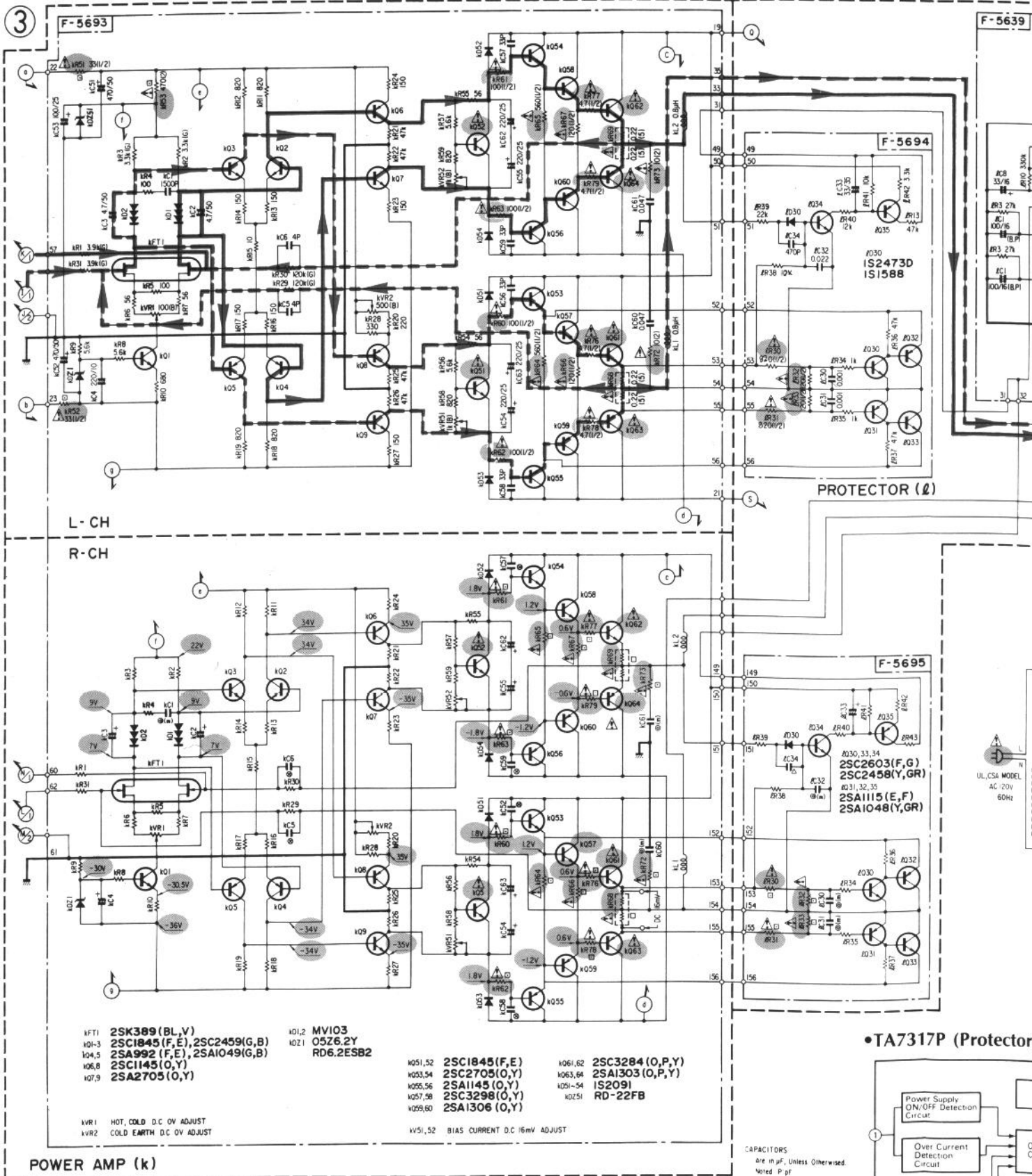
A

B

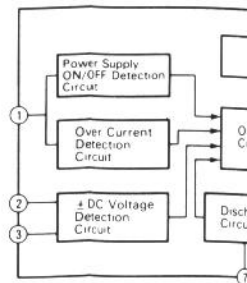
C

D

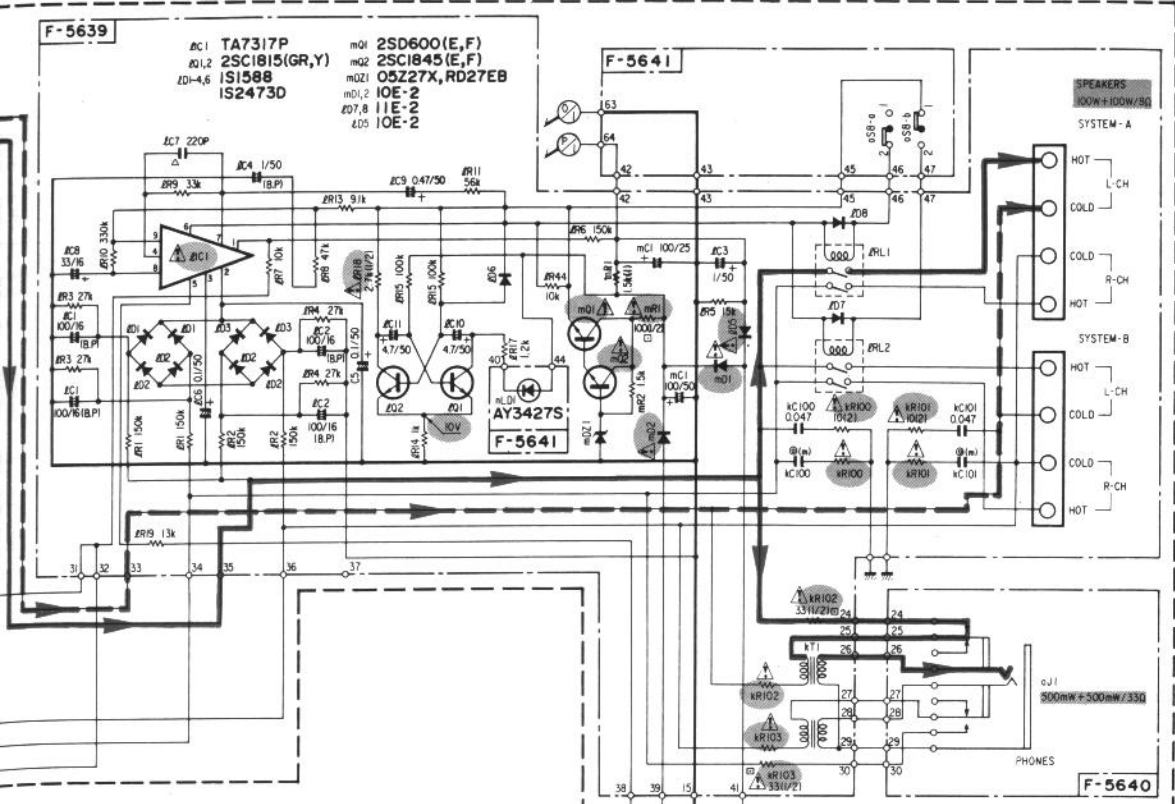
6-3. Power Amp & Power Section <AU-X701>



•TA7317P (Protector)



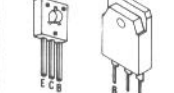
* Design and specifications subject to change without notice for improvement.
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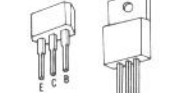
- 2SA992
- 2SA1049
- 2SA1145
- 2SC1815
- 2SC1845
- 2SC2705



- 2SA1303
- 2SC3284



- 2SA1048
- 2SA1115
- 2SC2459
- 2SC2603



- 2SK163
- 2SC2458



- 2SK389
- TA7317P



- M5219L



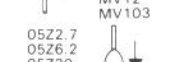
- FMU-22S



- RB-152
- FMU-22R



- 1S1588
- 1S2091
- 1S2473D
- 10E2
- 11F2



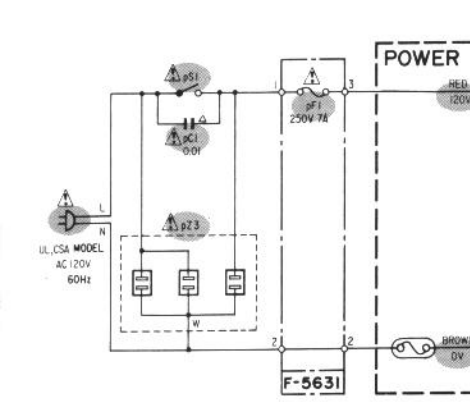
- MV12
- MV103



- 05Z2.7
- 05Z6.2
- 05Z20
- 05Z27
- 05Z33
- RD6.2E
- RD22F
- RD27E
- RD33E

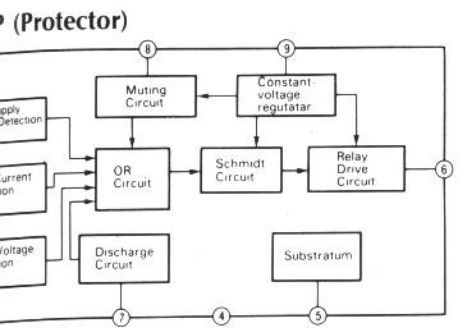


- 2SK163K2
- 2SC1845(F,E)
- 2SA992(F,E)
- 2SC3851(O,Y)
- 2SA1488(O,Y)



⚠ is Safety Part.
 Use only replacement parts recommended by the manufacturer.
 Each D.C. Voltage shows the nominal value in volts of no input signal.

- m21 IMPEDANCE SELECTOR
 1 A, B 6~16Ω A+B 16Ω
 2 A, B 4~6Ω A+B 8~12Ω



— Signal Line (HOT Amp.)
 — Signal Line (COLD Amp.)
 - - - N.F.B. Line

1

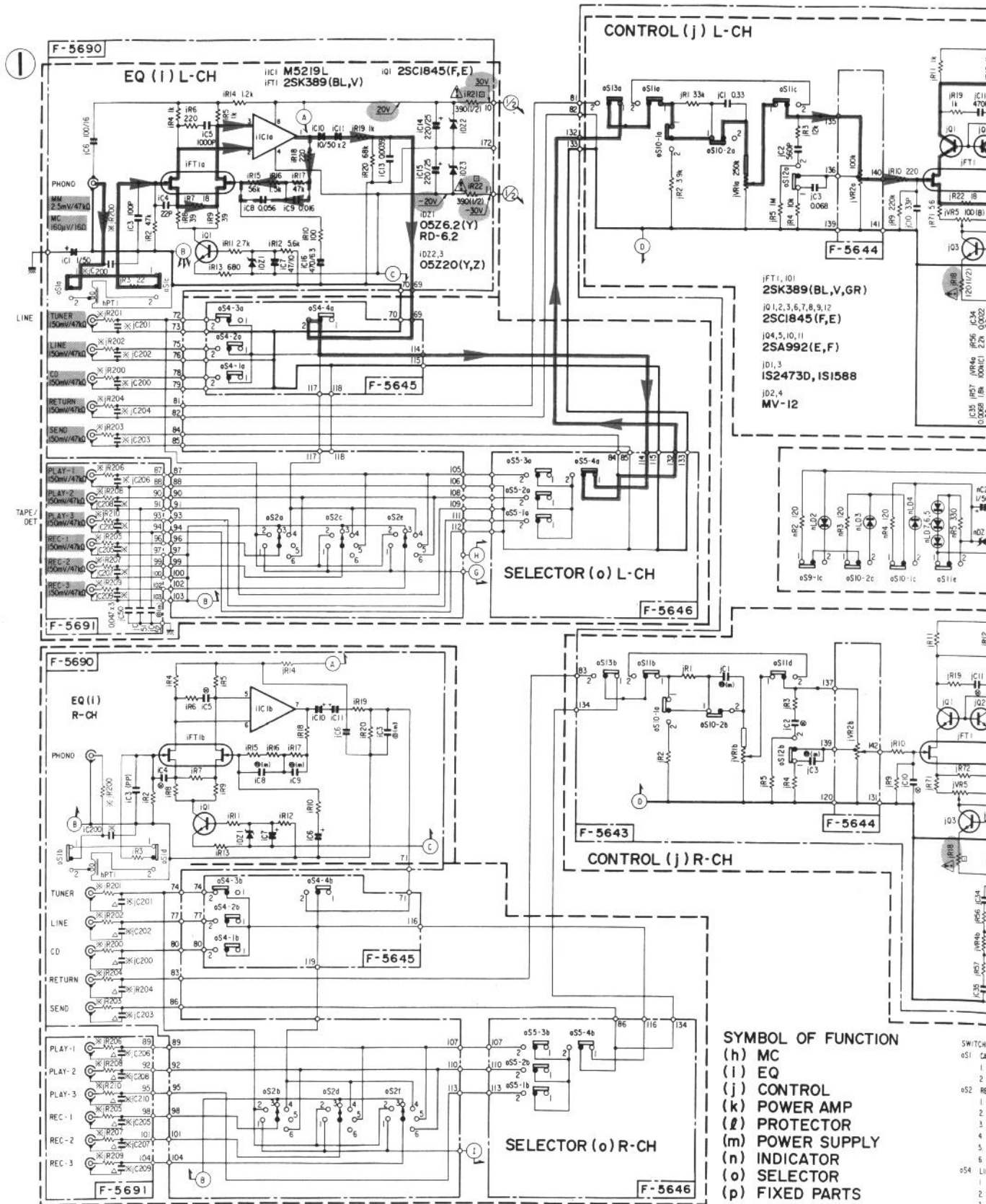
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3

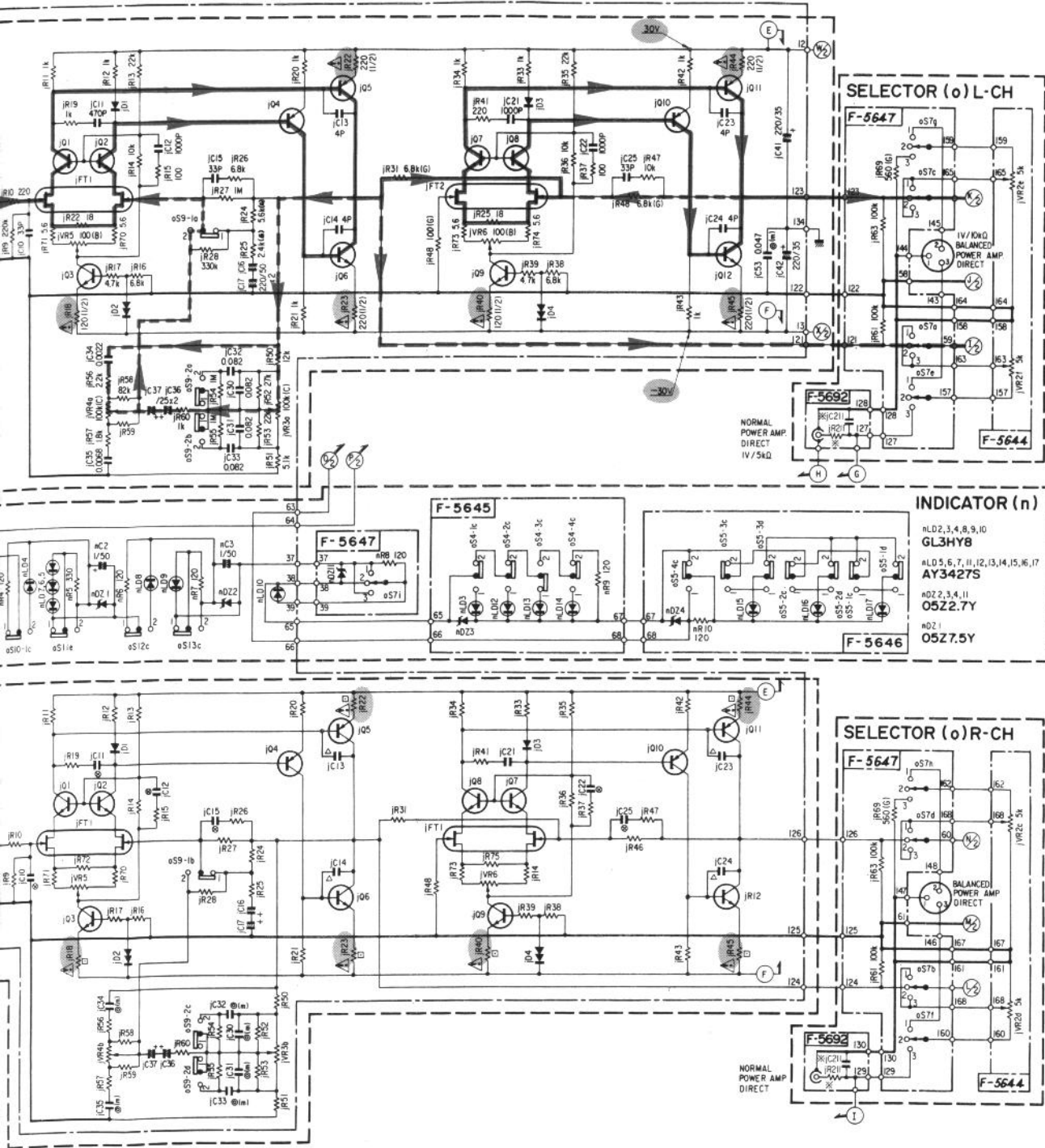
4

5

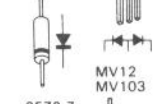
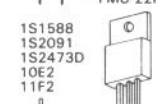
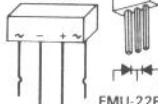
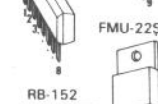
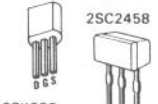
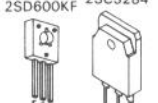
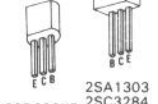
6-4. EQ Amp & Control Amp Section <AU-X901>



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- 2SA992
- 2SA1049
- 2SA1145
- 2SC1815
- 2SC1845
- 2SC2705



1

2

3

4

5

- SWITCHES**
- oS1 CARTRIDGE SELECTOR
 - 1. MM
 - 2. MC
 - oS2 REC SELECTOR
 - 1. DIRECT (NORMAL)
 - 2. TUNER
 - 3. OFF
 - 4. SOURCE
 - 5. 1-2,3
 - 6. 2-1,3
 - oS4 LINE SELECTOR
 - 1. CD
 - 2. LINE
 - 3. TUNER
 - 4. PHONO
 - oS5 TAPE SELECTOR
 - 1. TAPE 3
 - 2. TAPE 2
 - 3. TAPE 1
 - 4. TAPE / LINE
 - oS7 POWER AMP DIRECT OPERATION
 - 1. BALANCED
 - 2. INTEGRATED
 - 3. NORMAL
 - oS9-1 TONE
 - 1. OFF
 - 2. ON
 - oS9-2 TURNOVER
 - 1. 75Hz
 - 2. 150Hz

- oS10-1 MUTING
 - 1. OFF
 - 2. ON
- oS10-2 SUBSONIC
 - 1. OFF
 - 2. ON
- oS11 SOURCE DIRECT
 - 1. OFF
 - 2. ON
- oS12 LOUDNESS
 - 1. OFF
 - 2. ON
- oS13 PROCESSOR
 - 1. OFF
 - 2. ON

- SYMBOL**
- △ Ceramic
 - Mylor
 - ⊙ Polystyrene
 - ⊕ Polypropylene film
 - ⊞ Non-Inductive Resistor
 - ⚠ Safety Part. Use only replacement parts recommended by the manufacturer. * FTZ MODEL only

- RESISTORS**
- Are in ohms, 1/4 Watts, ±5% Tolerance
 Unless Otherwise Noted k kΩ, M, MΩ

TOLERANCE

- G ± 2%

CAPACITORS

- Are in μF, Unless Otherwise Noted P pF

ELECTROLYTIC CAPACITORS

- Capacitance μF/Volts(V)



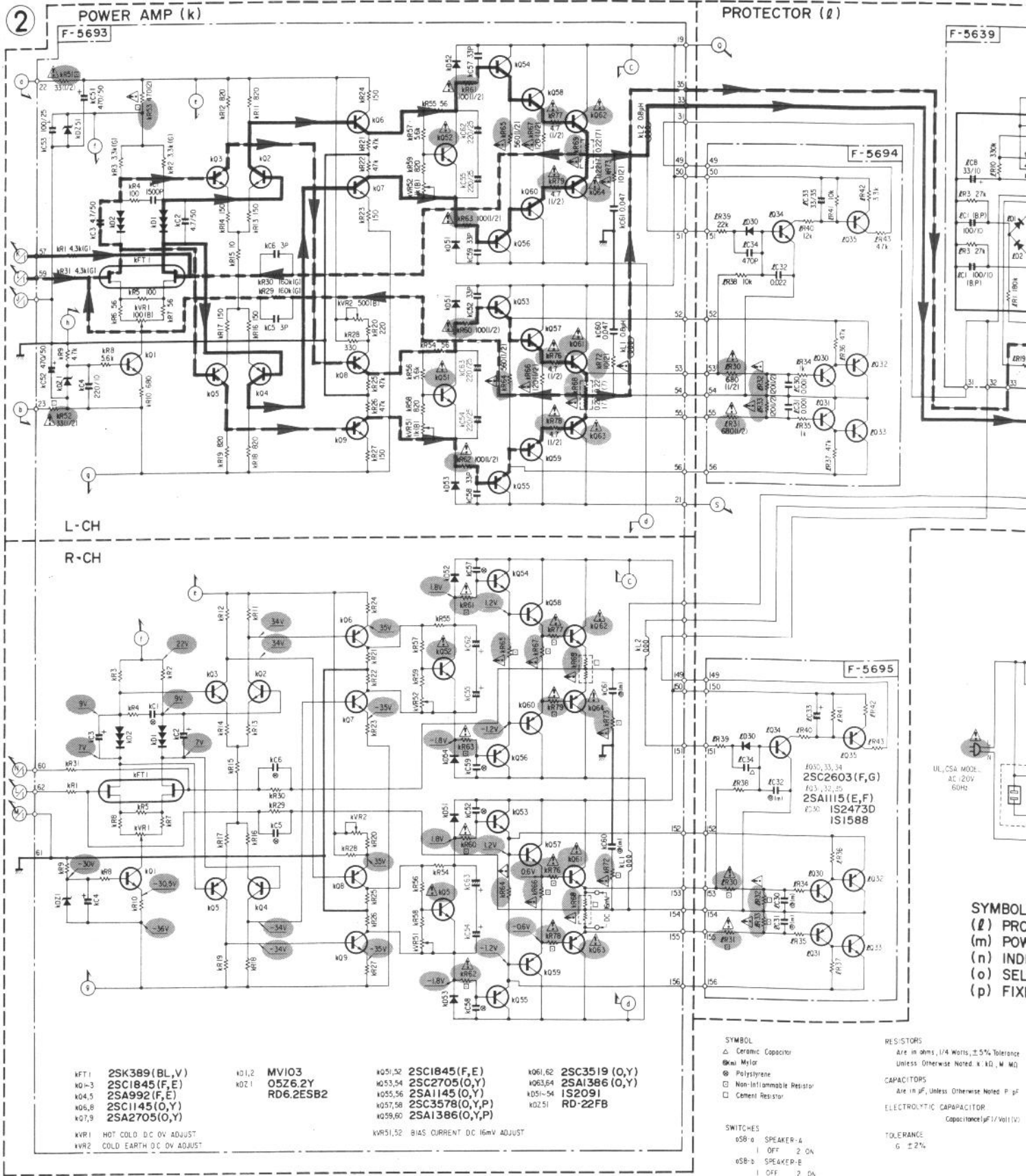
A

B

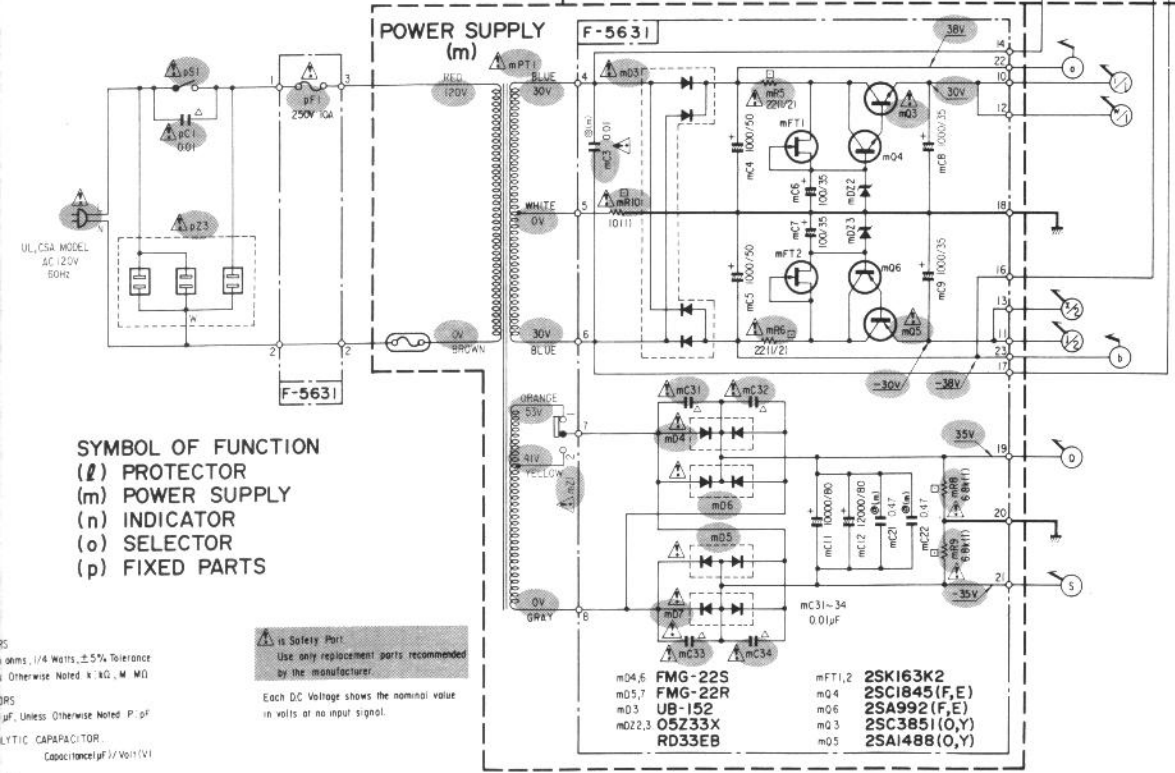
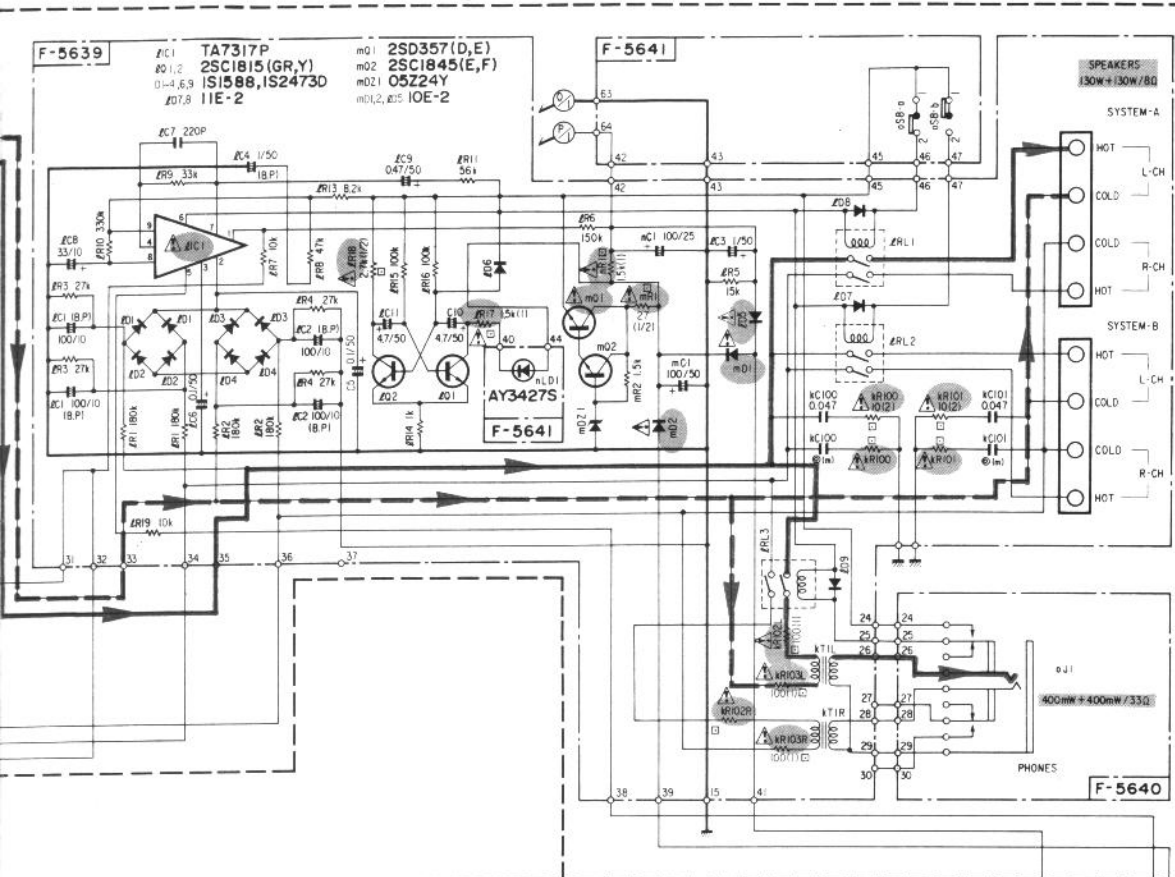
C

D

6-5. Power Amp & Power Section <AU-X901>



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SYMBOL OF FUNCTION
 (l) PROTECTOR
 (m) POWER SUPPLY
 (n) INDICATOR
 (o) SELECTOR
 (p) CHOICE PARTS

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

Each DC Voltage shows the nominal value in volts at no input signal.

- mD4,6 FMG-22S
- mD5,7 FMG-22R
- mD3 UB-152
- mD2,3 O5Z33X
- RD33EB
- mFT1,2 2SK163K2
- mD4 2SC1845(F,E)
- mD6 2SA992(F,E)
- mD3 2SC3851(O,Y)
- mD5 2SA1488(O,Y)

- 2SA992
- 2SA1049
- 2SA1145
- 2SC1815
- 2SC1845
- 2SC2705

- 2SA1438
- 2SC3851
- 2SA1115
- 2SC2459
- 2SC2603

- 2SK163
- 2SA1386
- 2SC3519

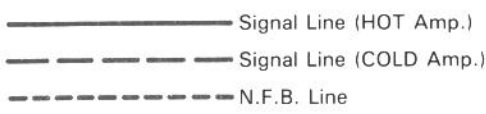
- 2SK389
- 2SA1306
- 2SC3298

- TA7317P
- MS219L

- FMG-22S
- UB 152LFF

- FMG-22R
- 1S1588
- 1S2091
- 1S2473D
- 10E2
- 11E2

- MV12
- MV103
- 05Z2.7
- 05Z6.2
- 05Z7.5
- 05Z20
- 05Z24
- 05Z33
- RD6.2E
- RD22E



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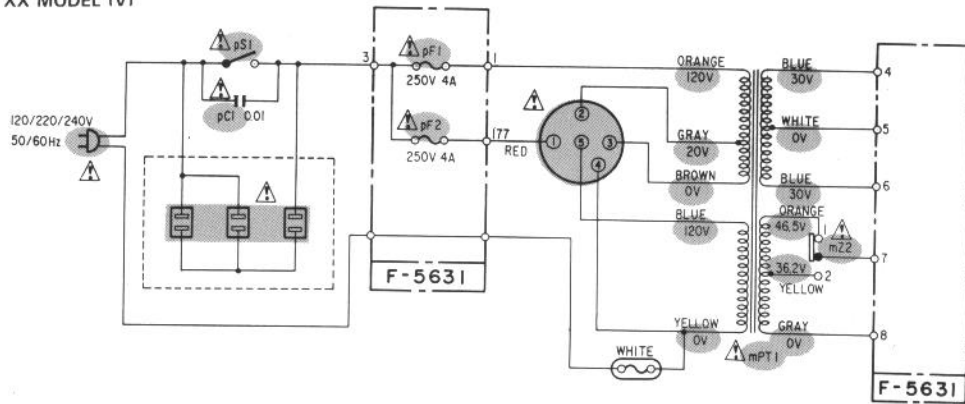
5

6-6. Power Supply (Primary Side) Section <AU-X701>

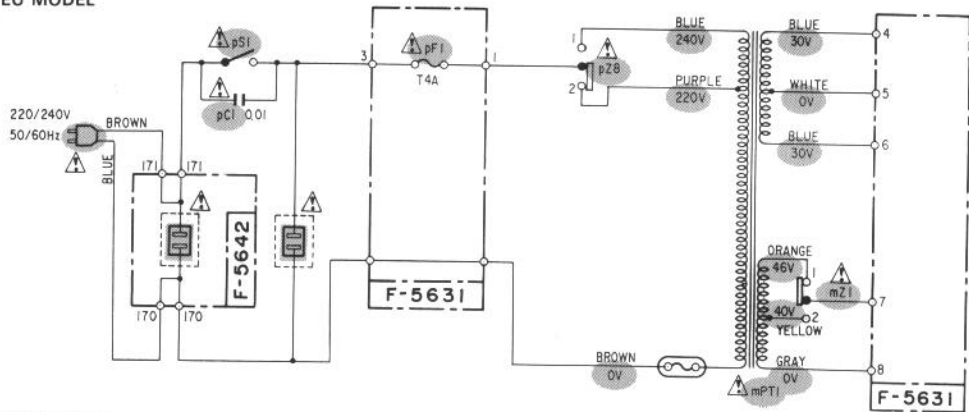
•AU-X701

④

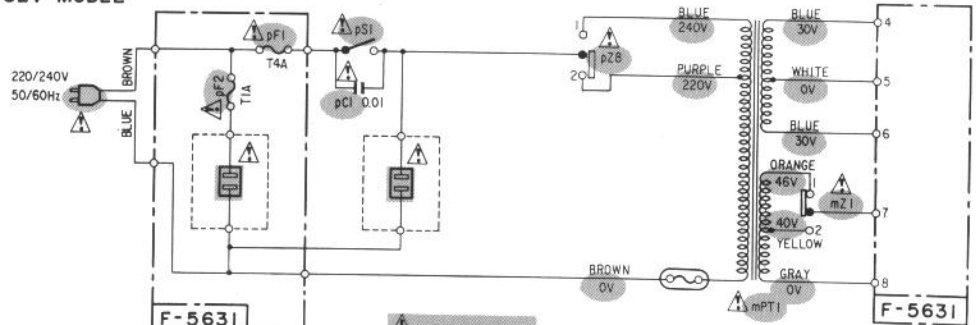
XX MODEL (V)



EU MODEL



SEV MODEL



- pZ8 VOLTAGE SELECTOR
 1. 240V 2. 220V
- mZ1 SPEAKER IMPEADANCE SELECTOR
 1. A+B 8~12Ω, A,B 4~16Ω
 2. A+B 16Ω, A,B 8~16Ω

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

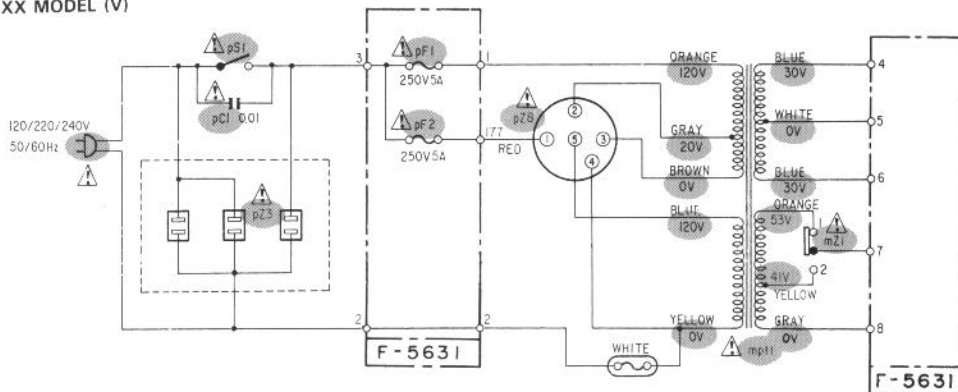
* Design and specifications subject to change without notice for improvement.
 * La présentation et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles.
 * Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.

6-7. Power Supply (Primary Side) Section <AU-X901>

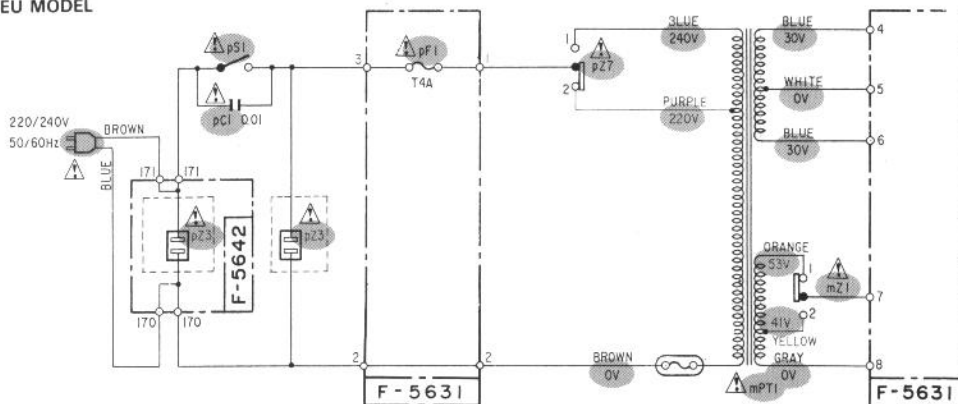
•AU-X901

③

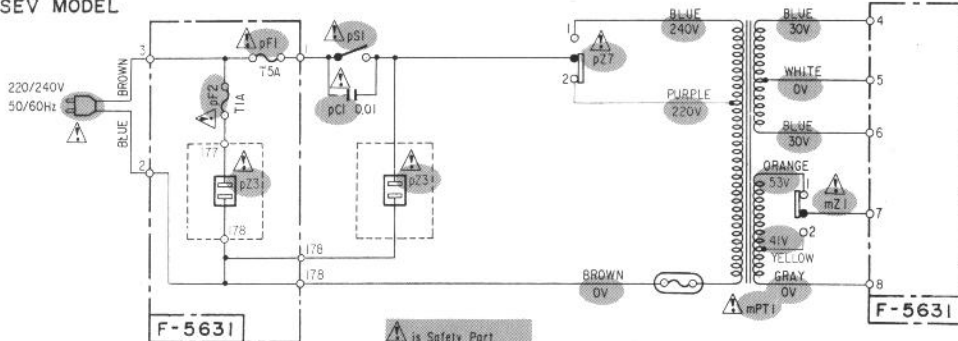
XX MODEL (V)



EU MODEL



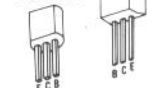
SEV MODEL



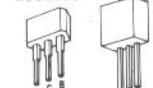
- pZ7 VOLTAGE SELECTOR
 1. 240V 2. 220V
- mZI SPEAKER IMPEADANCE SELECTOR
 1. A or B 8-16Ω A and B 16Ω
 2. A or B 4-6Ω A and B 8-12Ω

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

- 2SA992
- 2SA1049
- 2SA1145
- 2SC1815
- 2SC1845
- 2SC2705



- 2SA1438
- 2SC3851



- 2SA1115
- 2SC2459
- 2SC2603



- 2SK163
- 2SA1386
- 2SC3519



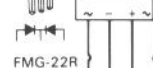
- 2SK389
- 2SA1306
- 2SC3298



- TA7317P
- M5219L



- FMG-22S
- UB-152LFF



- FMG-22R
- 1S1588
- 1S2091
- 1S2473D
- 10E2
- 11E2



- MV12
- MV103



- 05Z2.7
- 05Z6.2
- 05Z7.5
- 05Z20
- 05Z24
- 05Z33
- RD6.2E
- RD22F



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7. ADJUSTMENT

Condition: 1. Master Volume Minimum
 2. Room Temperature 18°C ~ 28°C (65°F ~ 83°F)

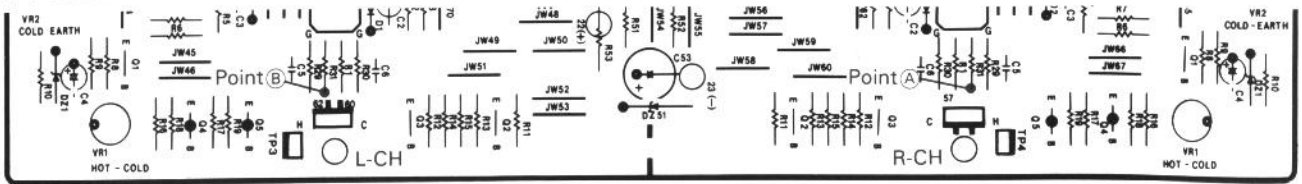
7-1. F-5693 Power Amp. Adjustment

STEP	SUBJECT	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
1.	Center DC 0V Adj. <L-ch>	DC Voltage between Speaker Terminals COLD and GND <L-ch>	kVR2L	DC 0V ± 3 mV	<ul style="list-style-type: none"> •Set Speaker-A switch to "ON". •Set the POWER AMP DIRECT <AU-X901> switch to normal position.
2.	Center DC 0V Adj. <R-ch>	DC Voltage between Speaker Terminals COLD and GND <R-ch>	kVR2R	DC 0V ± 3 mV	
3.	Hot/Cold Balance Adj. <L-ch>	DC Voltage between Speaker Terminal HOT and GND. <L-ch>	kVR1L	DC 0V ± 3 mV	
4.	Hot/Cold Balance Adj. <R-ch>	DC Voltage between Speaker Terminal HOT and GND. <R-ch>	kVR1R	DC 0V ± 3 mV	

7-2. F-5643 Tone Control Amp. Adjustment <AU-X901>

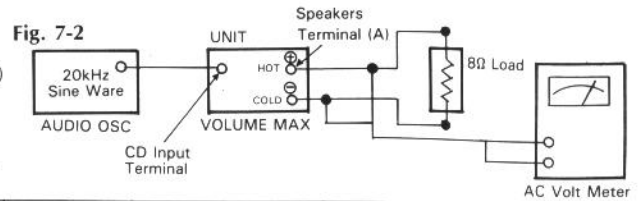
STEP	SUBJECT	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
1.	Center DC 0V Adj. <L-ch>	DC Voltage between F-5693 Point(A) (kR31) and Chassis (See Fig. 7-1)	jVR5L	DC 0V ± 3 mV	<ul style="list-style-type: none"> •For this adjustment, remove the front panel. •Set the POWER AMP DIRECT switch to integrated position. •Set Speaker-A switch to "ON".
2.	Center DC 0V Adj. <R-ch>	DC Voltage between F-5693 Point(B) (kR31) and Chassis (See Fig. 7-1)	jVR5R	DC 0V ± 3 mV	
3.	Hot/Cold Balance Adj. <L-ch>	DC Voltage between Speaker Terminals HOT and GND. <L-ch>	jVR6L	DC 0V ± 3 mV	
4.	Hot/Cold Balance Adj. <R-ch>	DC Voltage between Speaker Terminals HOT and GND. <R-ch>	jVR6R	DC 0V ± 3 mV	

Fig. 7-1 F-5693



7-3. F-5693 Power Amp. Adjustment

- Note:** Perform this adjustment after the preheating (more than five minutes)
- Preheating**
 1. Arrange the connection as shown in Fig. 7-2.
 2. Set the output level of Audio OSC for obtaining 16.8V (35W) <AU-X701> or 20.6V (53W) <AU-X901> on the AC Volt Meter.
 3. Set the Volume to minimum position after the preheating.



STEP	SUBJECT	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
1.	Bias Current Adj. <Hot Side Amp. of L-ch>	DC Voltage between both edges of kR69 <L-ch> (See Fig. 7-3)	kVR52L	DC 17mV ± 2 mV	<ul style="list-style-type: none"> •Set the POWER AMP DIRECT <AU-X901> switch to normal position. •After this adjustment position (Bias Current), repeat procedures as stated in 7-1 & 7-2.
2.	Bias Current Adj. <Cold Side Amp. of L-ch>	DC Voltage between both edges of kR68 <L-ch> (See Fig. 7-3)	kVR51L	DC 17mV ± 2 mV	
3.	Bias Current Adj. <Hot Side Amp. of R-ch>	DC Voltage between both edges of kR69 <R-ch> (See Fig. 7-3)	kVR52R	DC 17mV ± 2 mV	
4.	Bias Current Adj. <Cold Side Amp. of R-ch>	DC Voltage between both edges of kR68 <R-ch> (See Fig. 7-3)	kVR51R	DC 17mV ± 2 mV	

Fig. 7-3 F-5693

