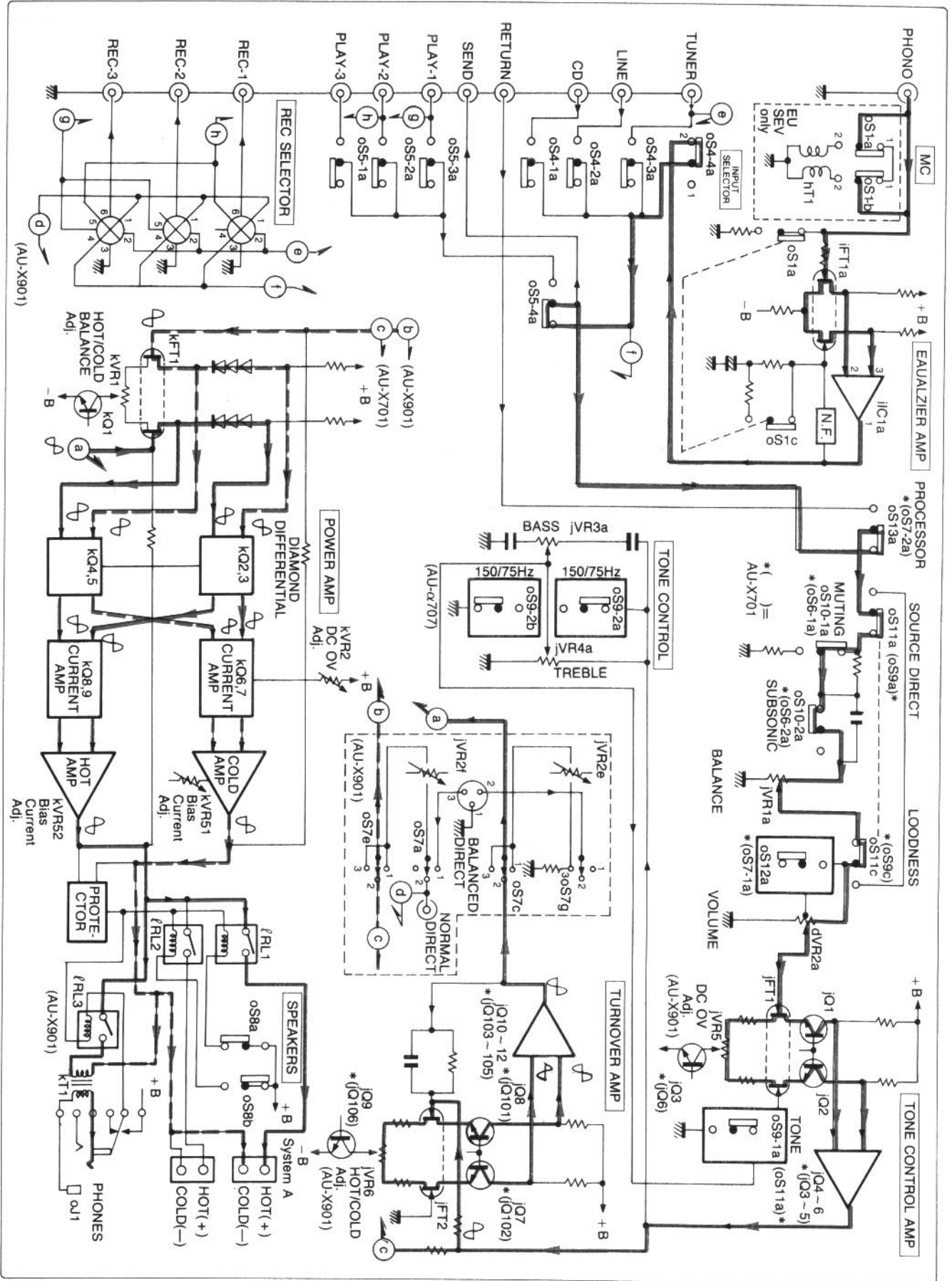


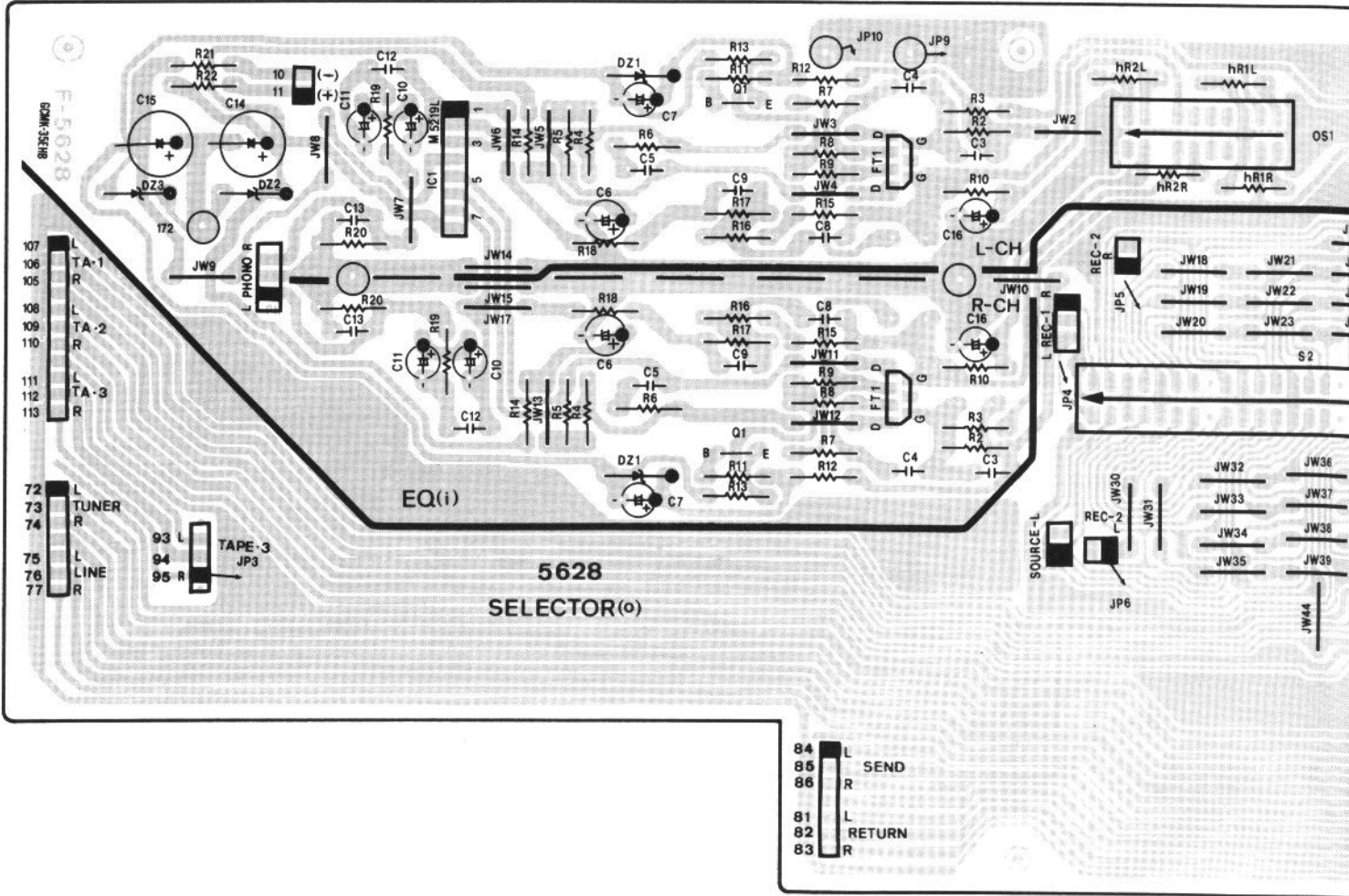
# 1. BLOCK DIAGRAM



# 4. PARTS LOCATION ON BOARD

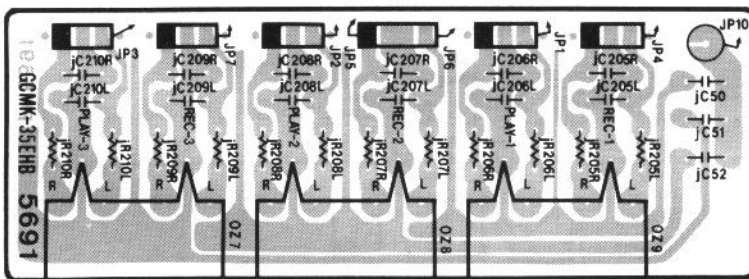
## 4-1. F-5628 EQ Amp & Input Terminal Board <AU-X701>

Pattern Side



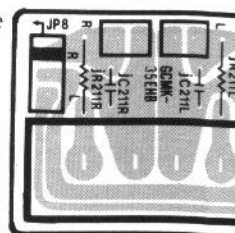
## 4-3. F-5691 Tape Terminal Board <AU-X701-EU·SEV/AU-X901-XX·UL·EU·SEV·CSA>

Component Side



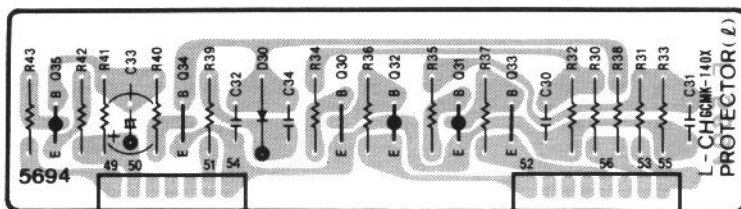
## 4-4. F-5692 Power Amp Direct

Component Side



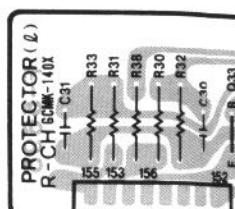
## 4-5. F-5694 L-CH Power Limiter Board

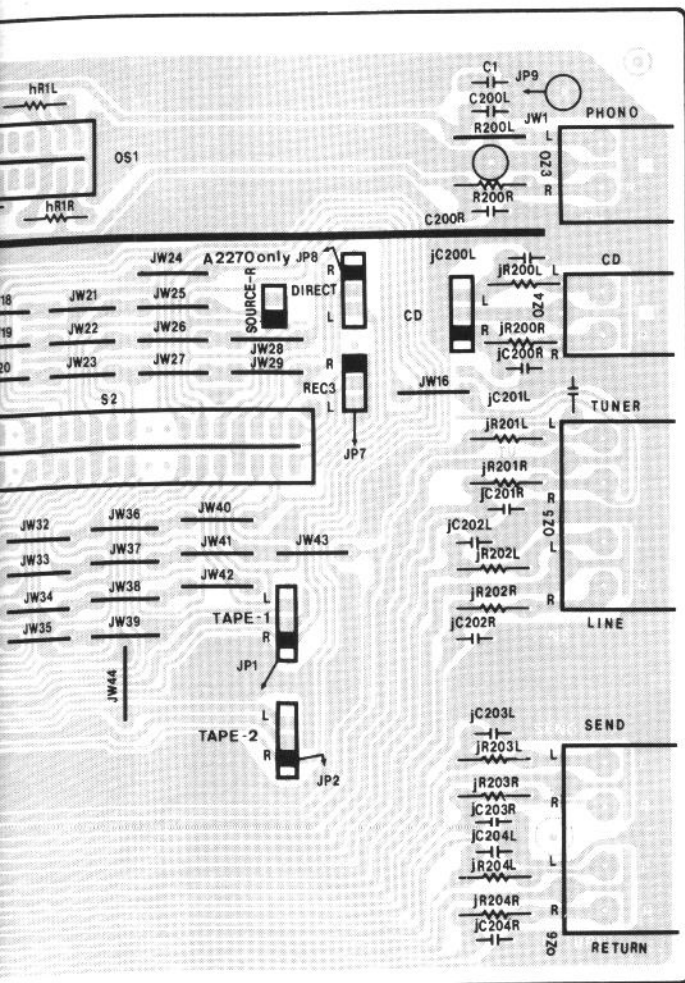
Component Side



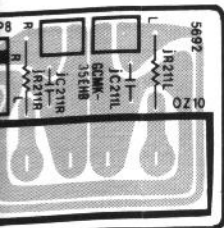
## 4-6. F-5695 R-CH Power Limite

Component Side

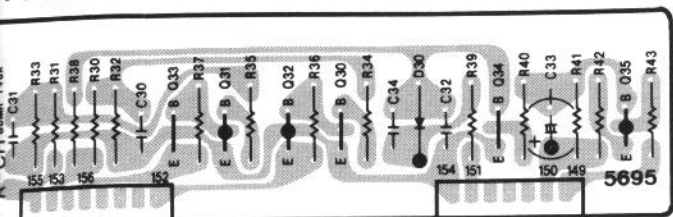




Amp Direct Terminal Board <AU-X901>

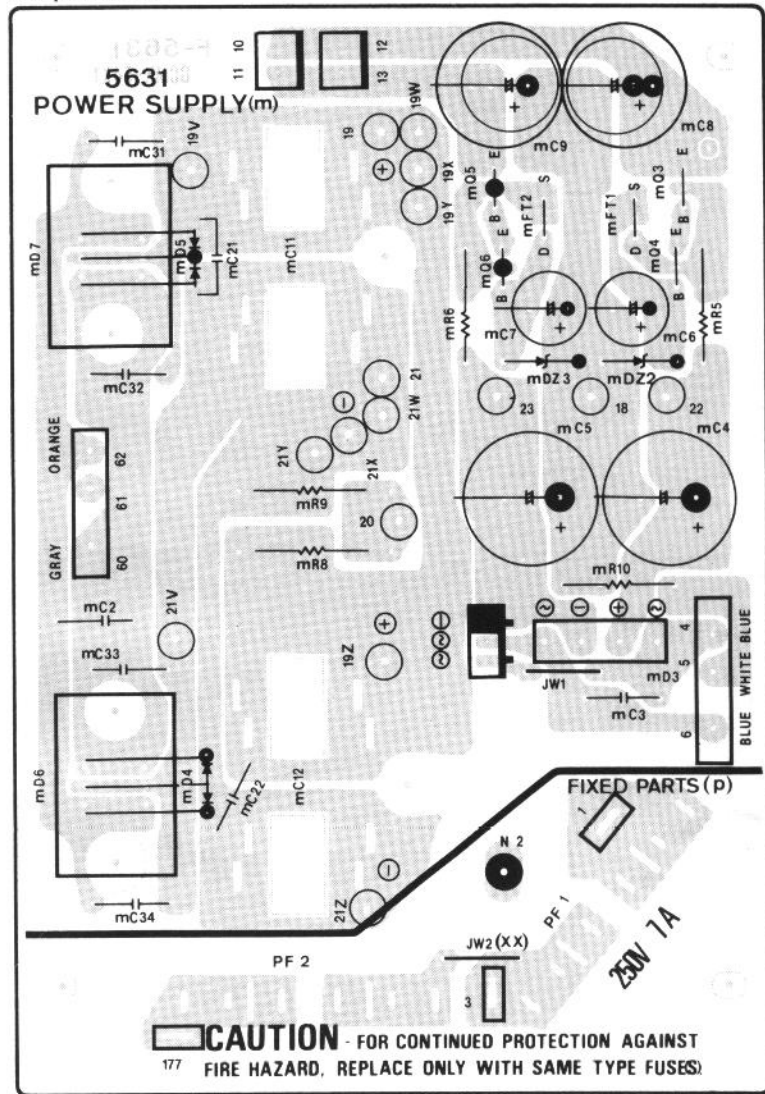


Power Limiter Board



### 4-2. F-5631 Power Supply Board

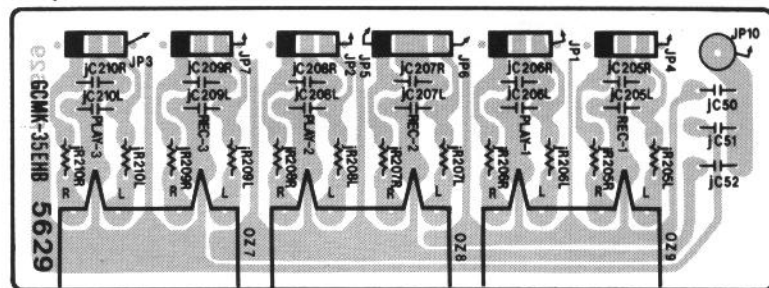
Component Side



**CAUTION** - FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE FUSES!

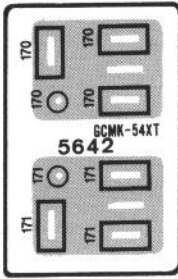
### 4-7. F-5629 Tape Terminal Board <AU-X701-XX-UL-CSA>

Component Side



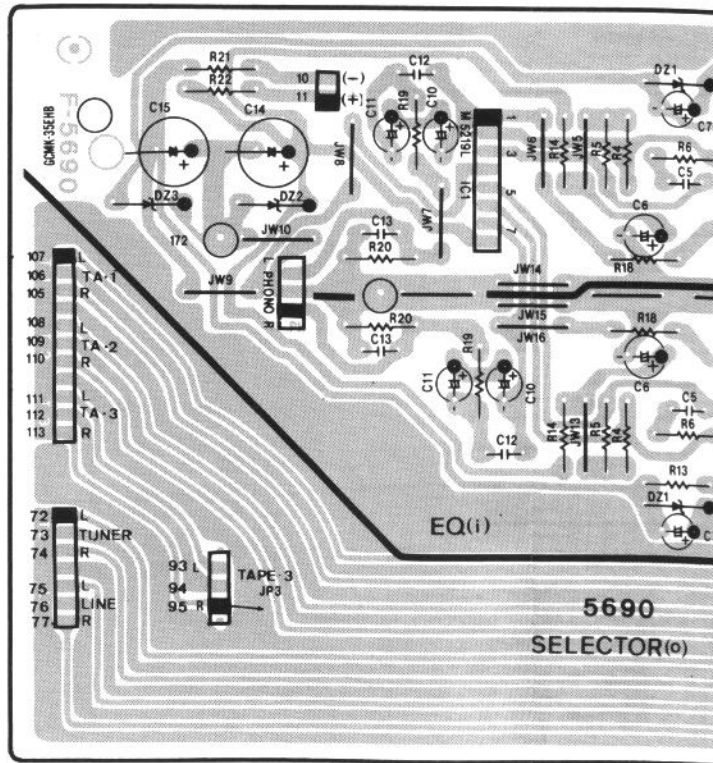
4-8. F-5642 AC Outlet Board (EU, SEV)

Component Side



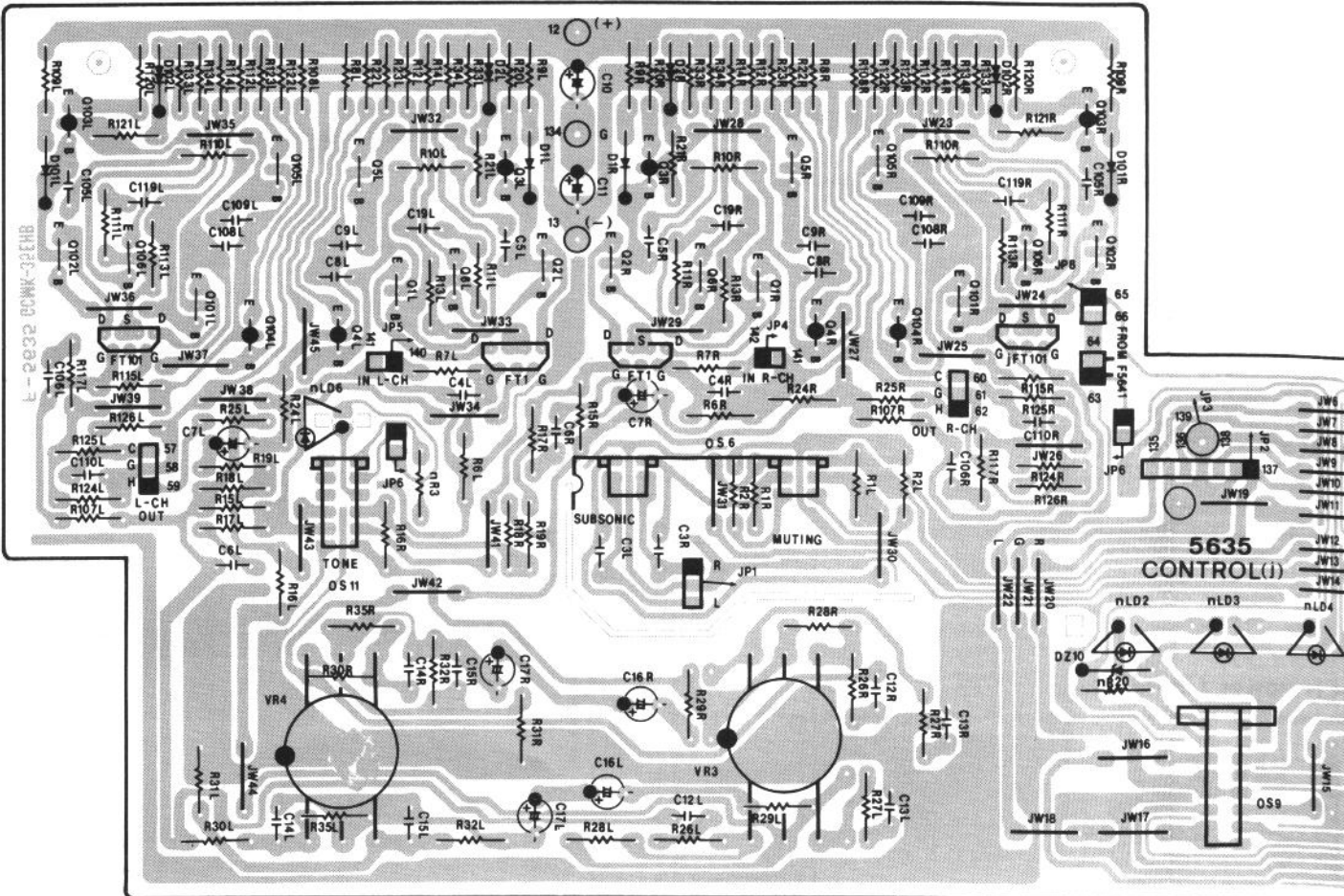
4-9. F-5690 EQ Amp & Input Terminal Board <AU-X901/AU-X701-EU>

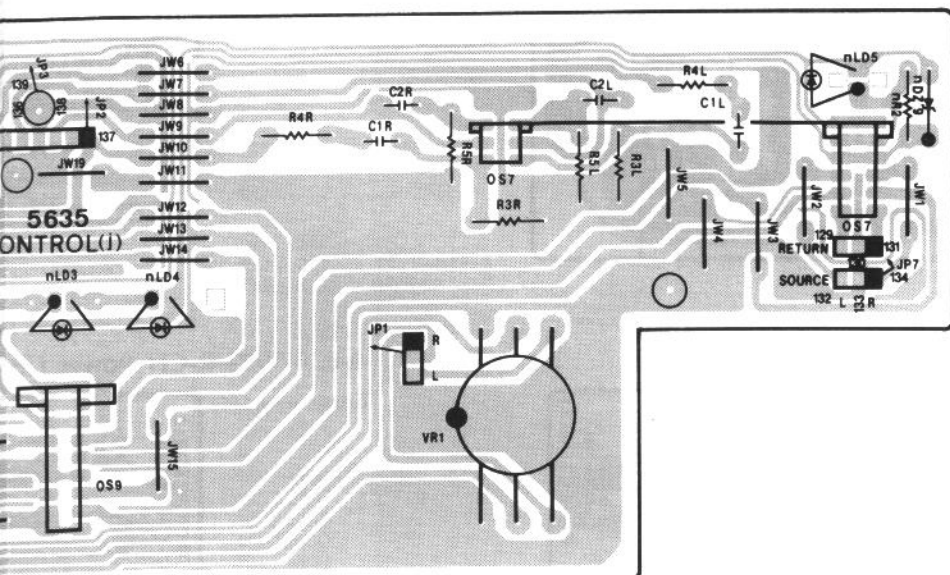
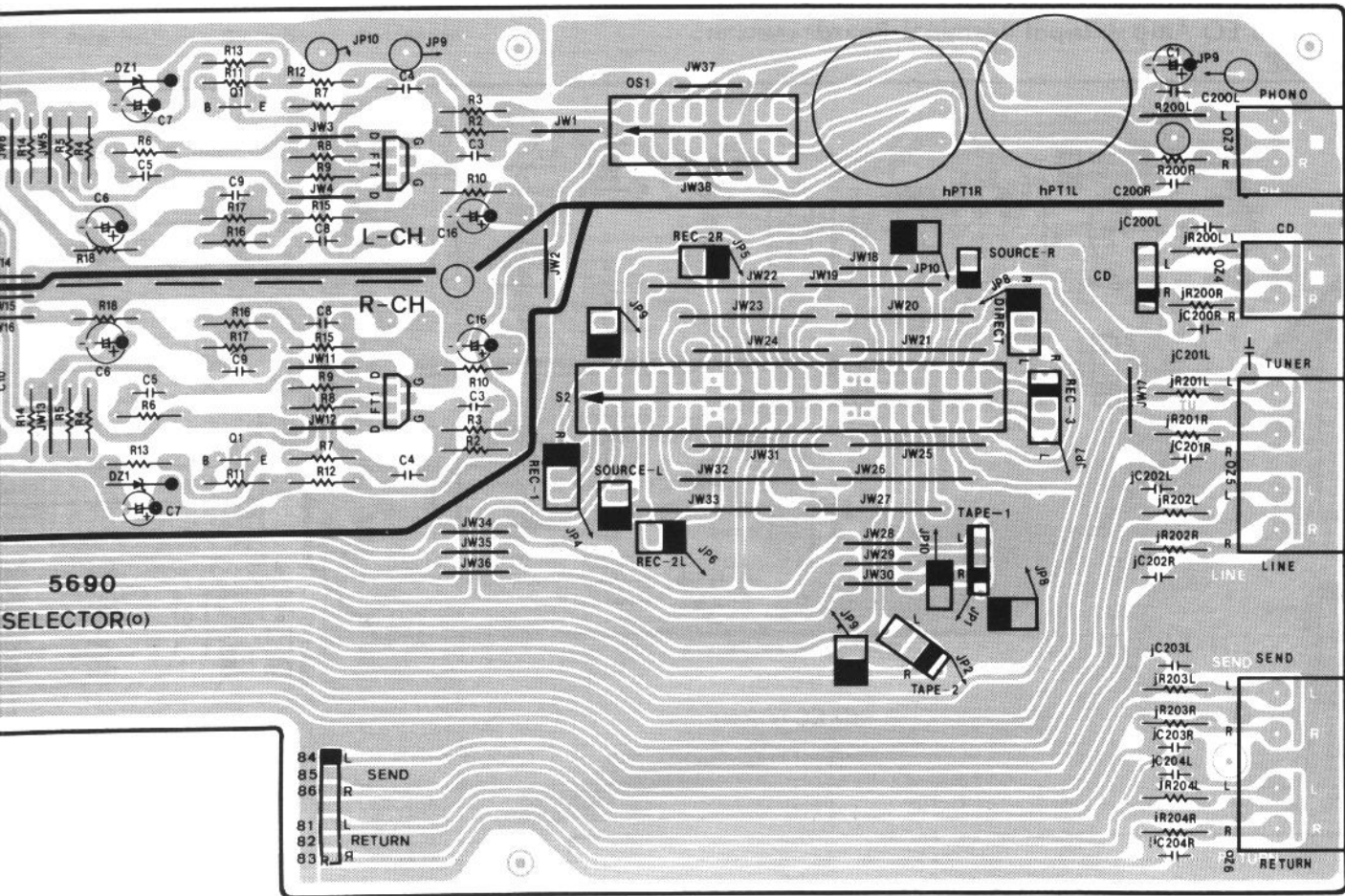
Pattern Side



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

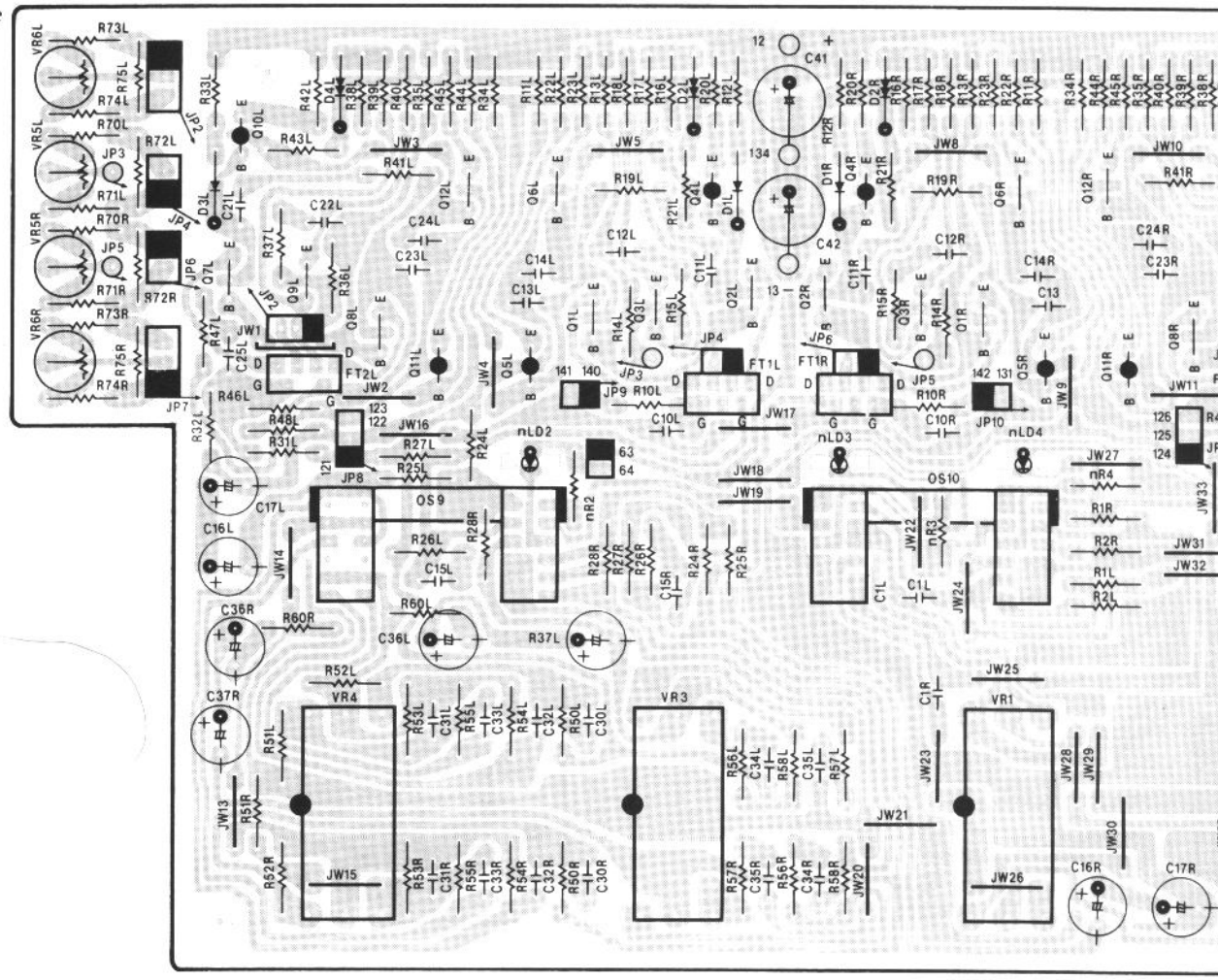
Component Side





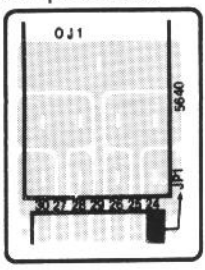
### 4-11. F-5643 Tone Control Amp Board <AU-X901>

Component Side



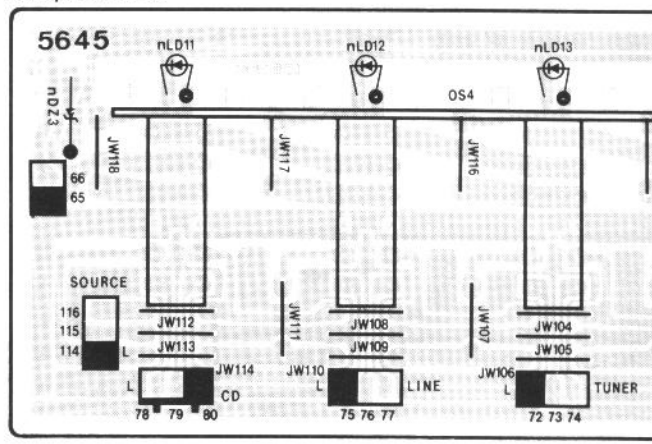
### 4-13. F-5640 Head Phones Board

Component Side



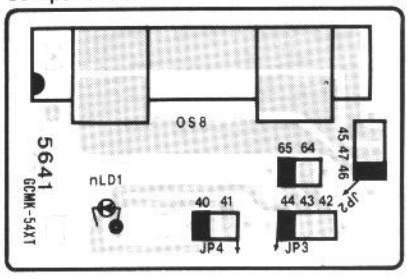
### 4-14. F-5645 Input Selector Board <AU-X901>

Component Side



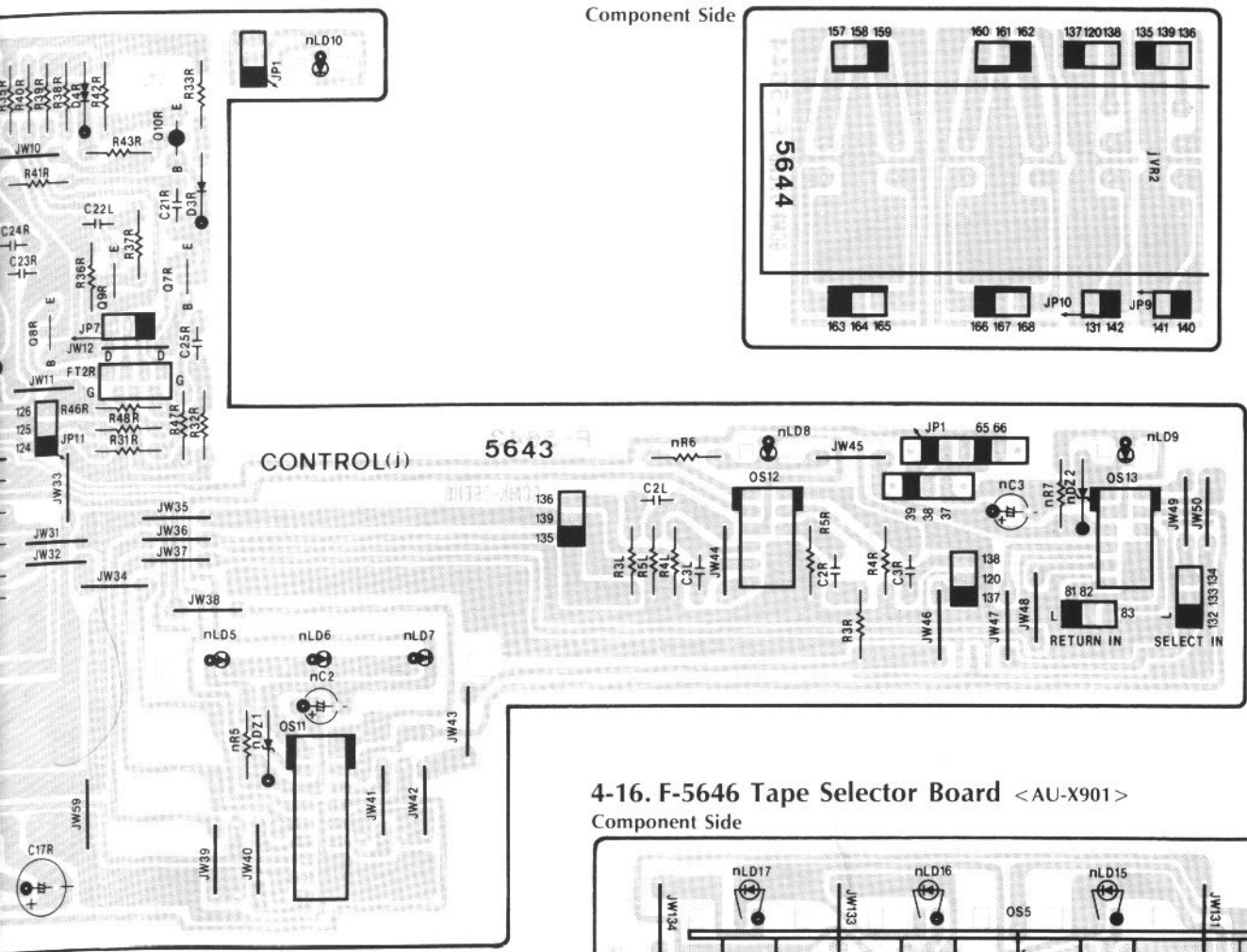
### 4-15. F-5641 SP SW. Board

Component Side



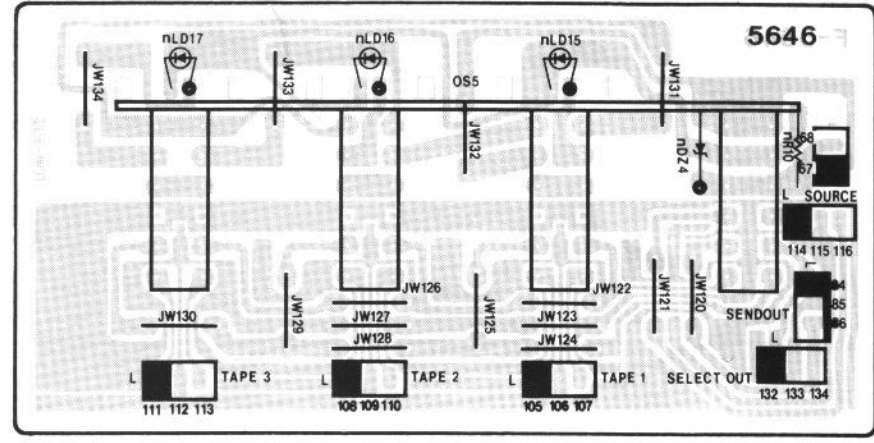
### 4-12. F-5644 Volume Board <AU-X901>

Component Side



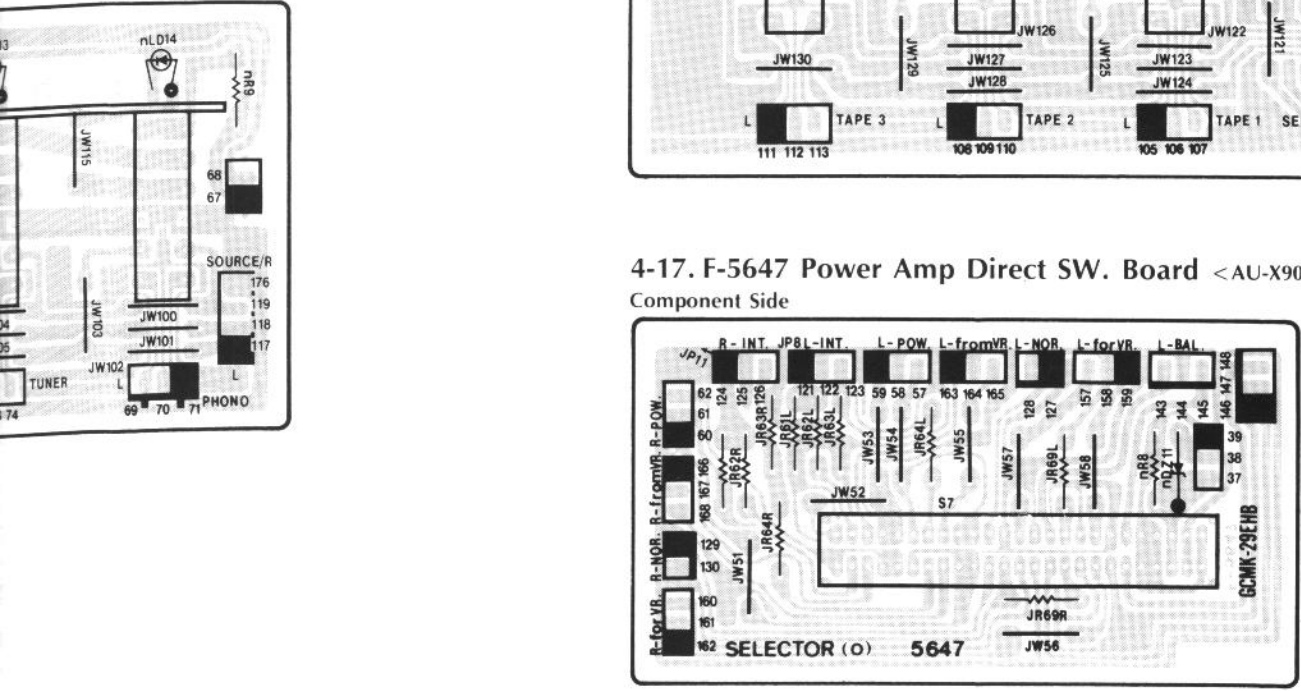
### 4-16. F-5646 Tape Selector Board <AU-X901>

Component Side



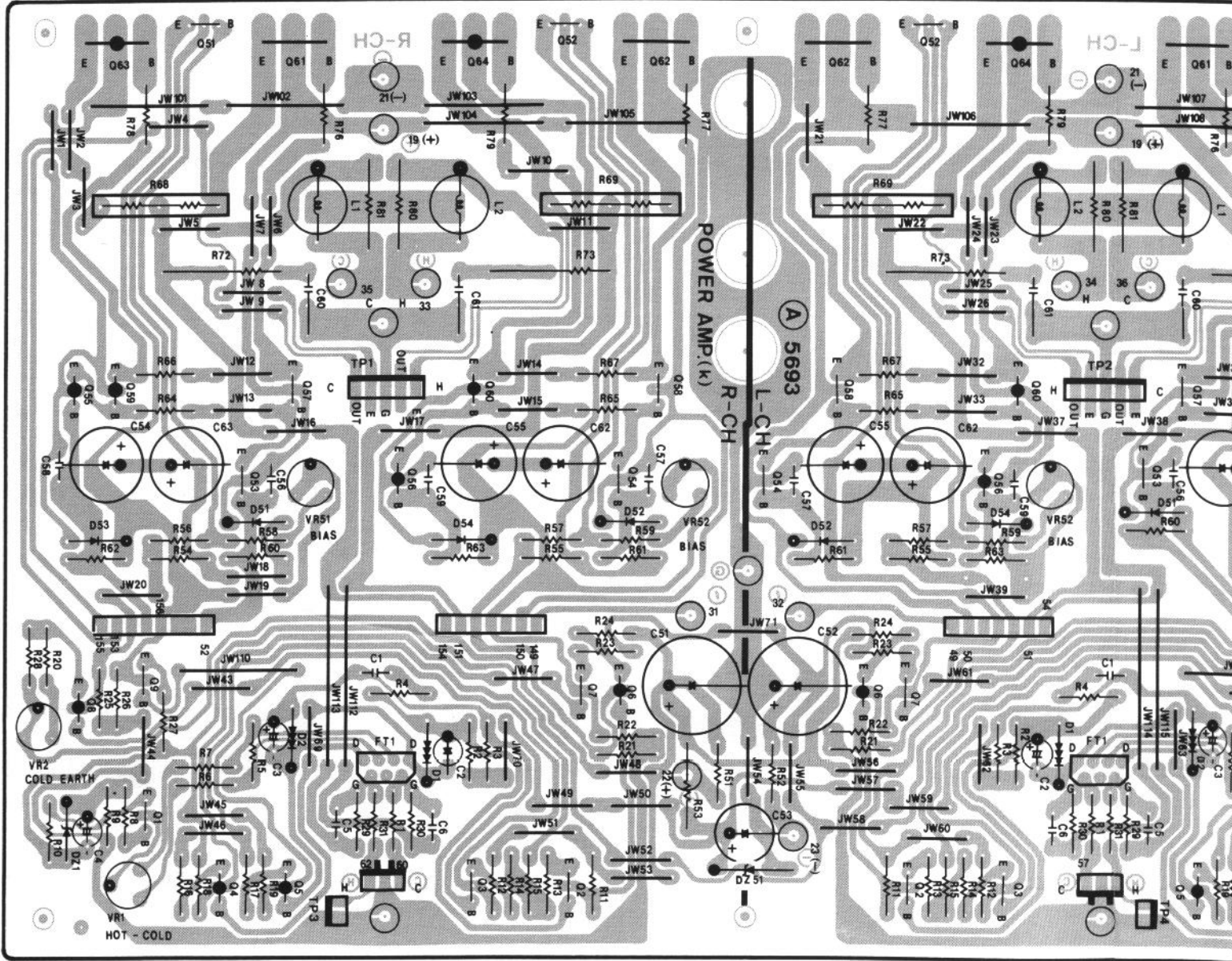
### 4-17. F-5647 Power Amp Direct SW. Board <AU-X901>

Component Side



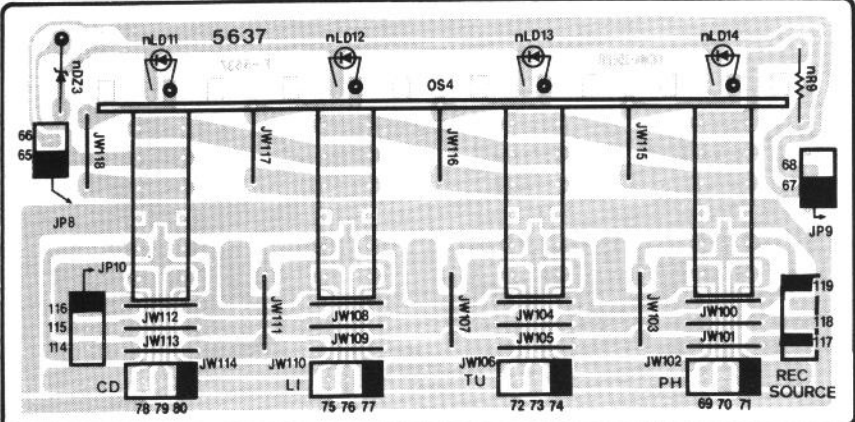
### 4-18. F-5693 Power Amp Board

Component Side



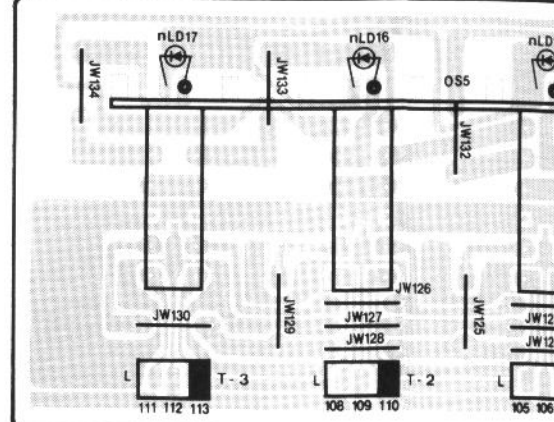
### 4-20. F-5637 Input Selector Board <AU-X701>

Component Side



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

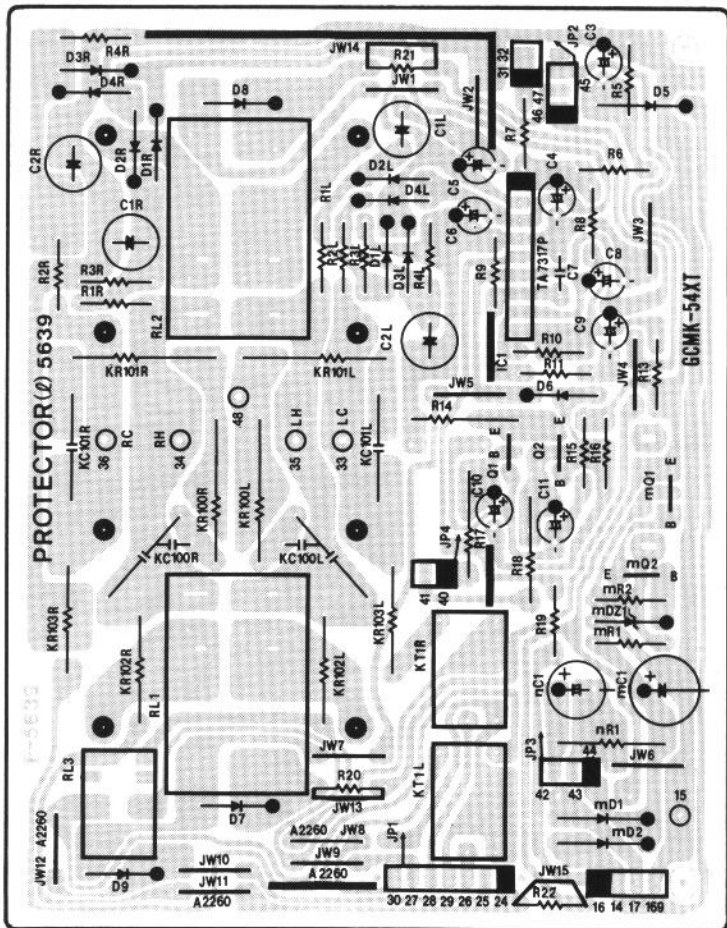
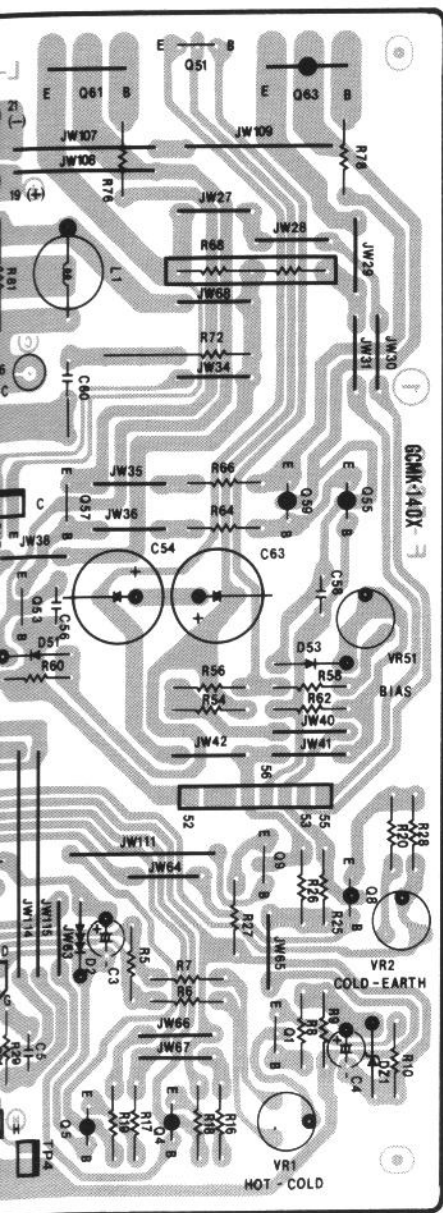
Component Side





4-19. F-5639 Protector Board

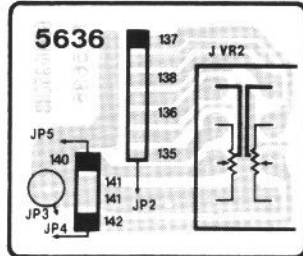
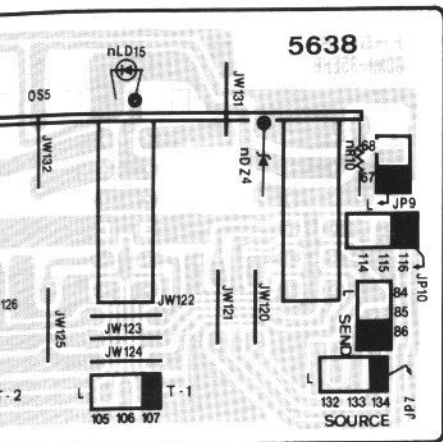
Pattern Side



ard <AU-X701>

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

Component Side



A

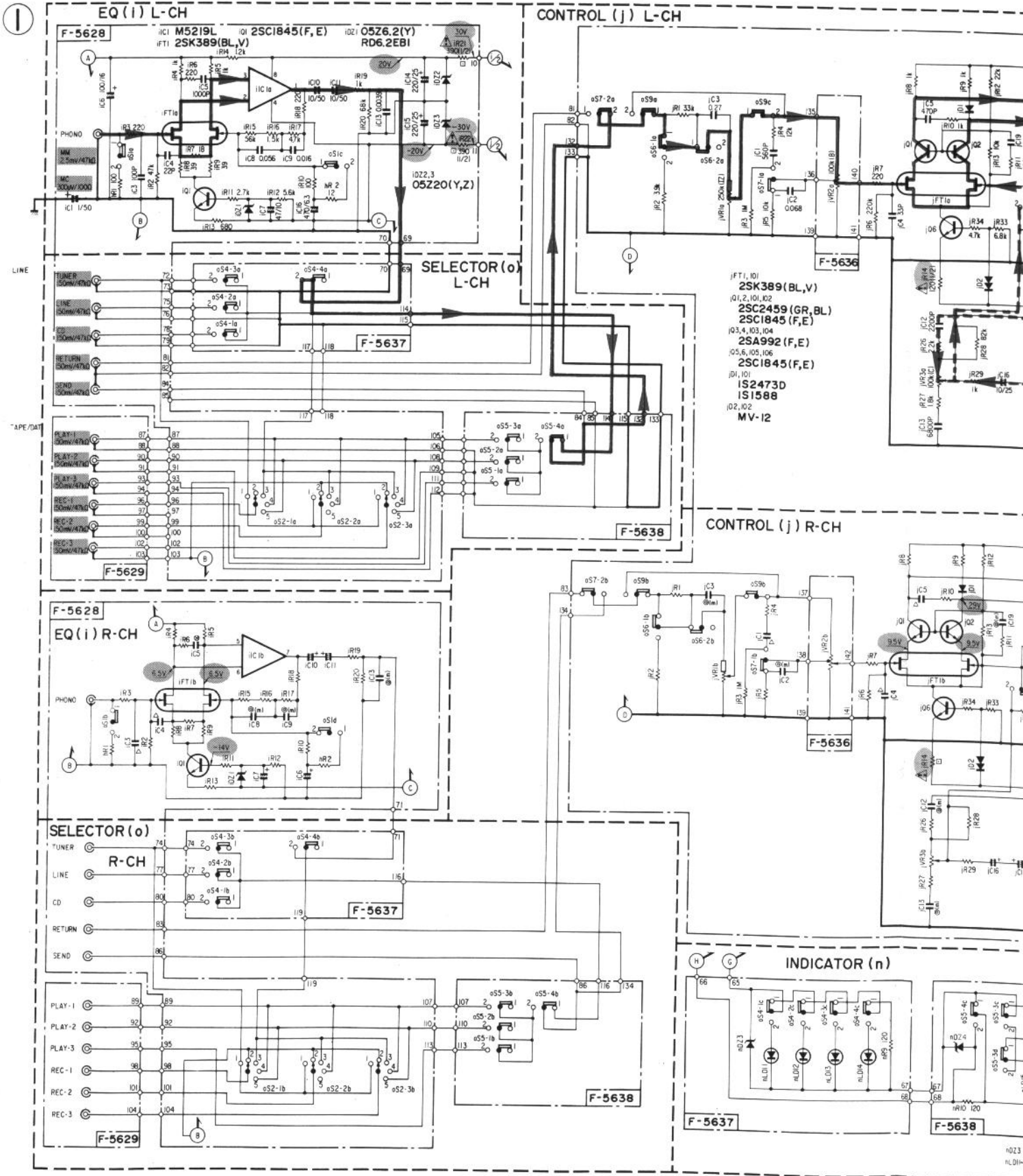
B

C

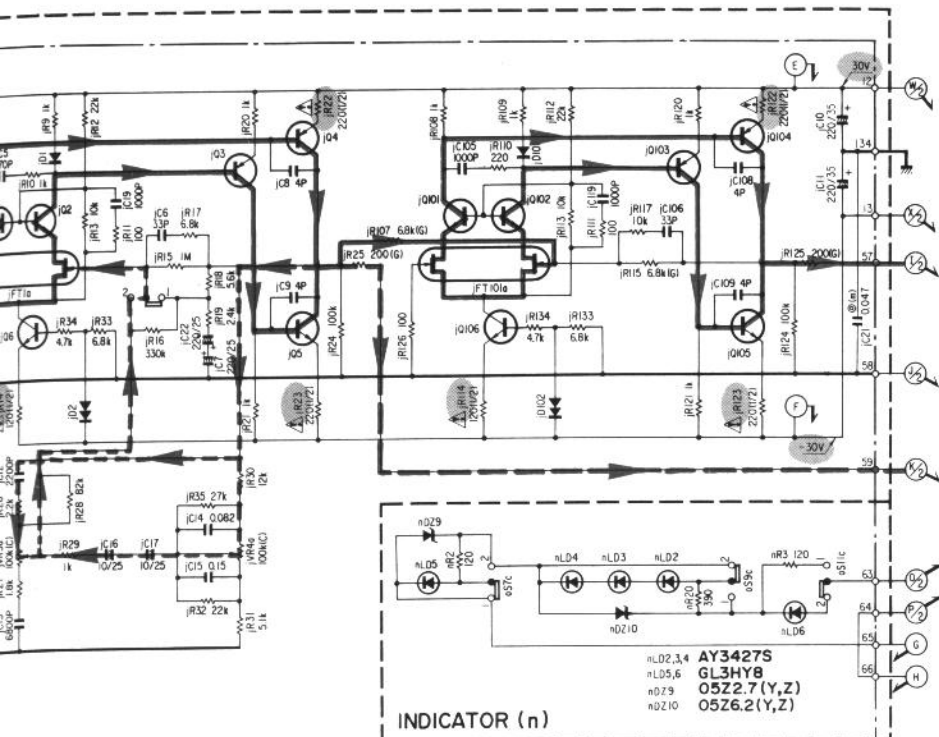
D

# 6. SCHEMATIC DIAGRAM

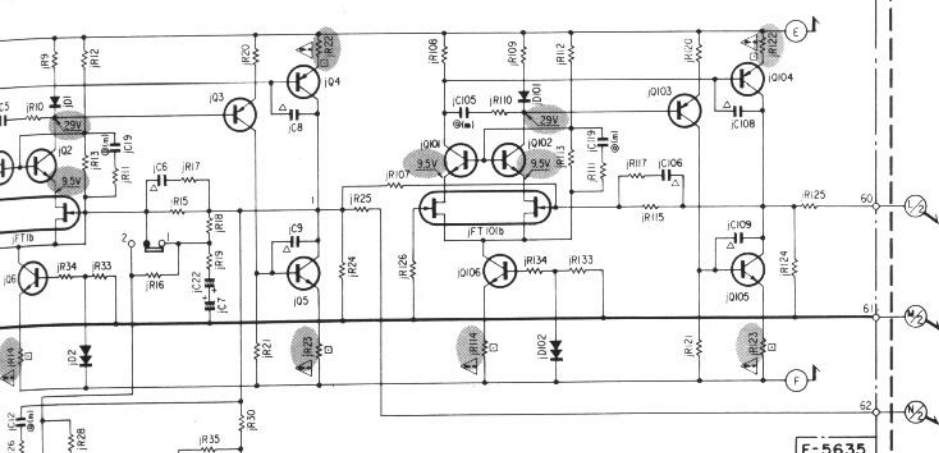
## 6-1. EQ Amp & Control Amp Section (XX, UL, CSA) <AU-X701>



\* Design and specifications subject to change without notice for improvement.  
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 \* Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.



INDICATOR (n)



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
  - ⊖/m Mylar
  - ⊖ Polystyrene
  - ⊖/p Polypropylene film
  - ⊖ Non-inflammable Resistor

⚠ is 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)

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

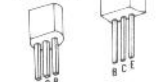
o59 SOURCE DIRECT

1 OFF 2 ON

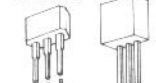
o511 TONE

1 OFF 2 ON

- 2SA982
- 2SA1049
- 2SA1145
- 2SC1815
- 2SC1845
- 2SC2705



- 2SA1115
- 2SC2459
- 2SC2603



- 2SK163
- 2SA1386
- 2SC3519



- 2SK389
- 2SA1306
- 2SC3298



- TA7317P
- M5219L



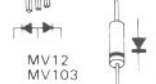
- FMG-22S
- UB-152LFF



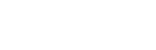
- FMG-22R
- 1S1588
- 1S2091
- 1S2473D
- 10E2
- 11E2



- MV12
- MV103



- 0522.7
- 0526.2
- 0527.5
- 05220
- 05224
- 05233
- RD6.2E
- RD22F



1

2

3

4

5



nD23 05Z2.7(Y,Z)  
 nL01-H7 AY3427S

A

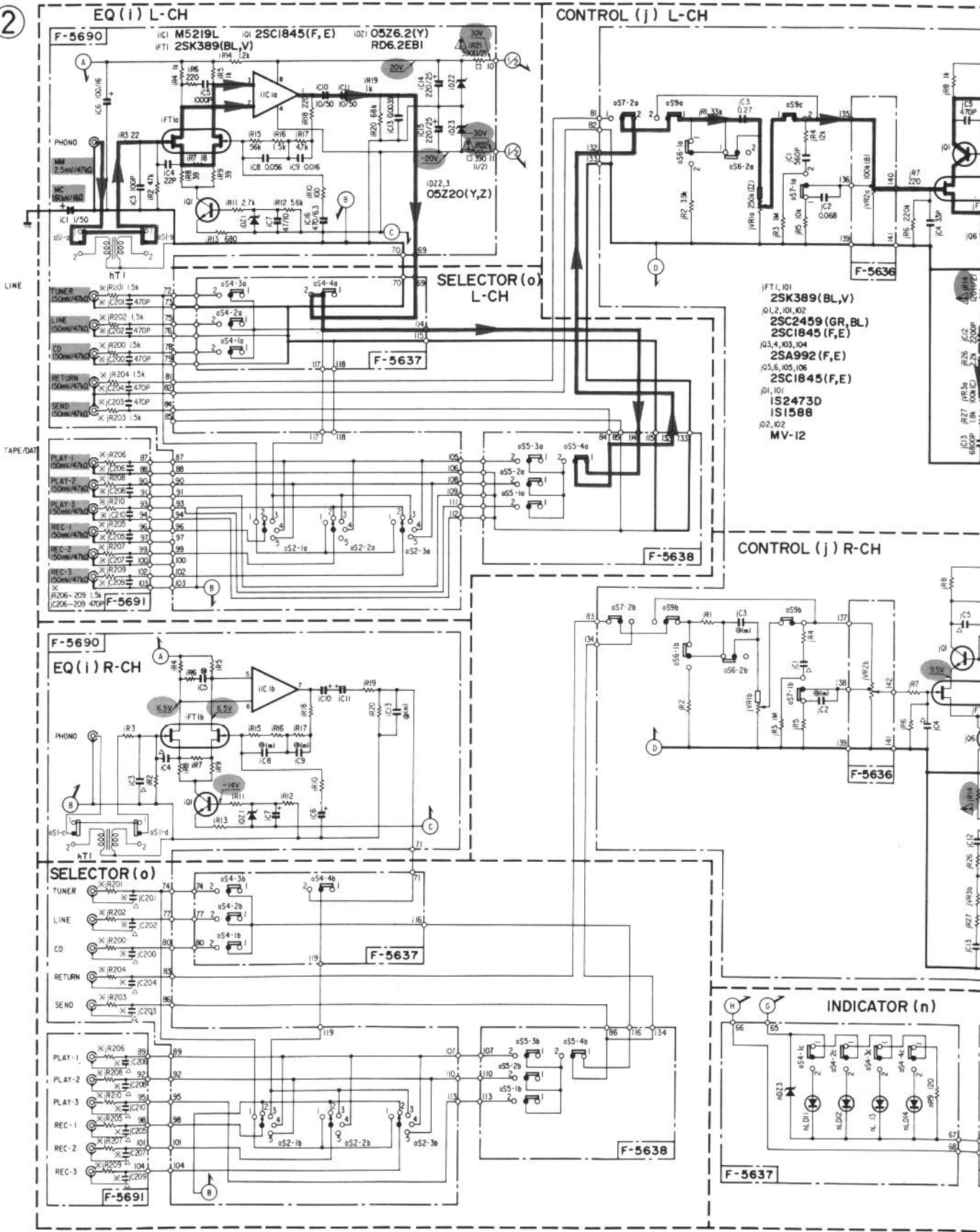
B

C

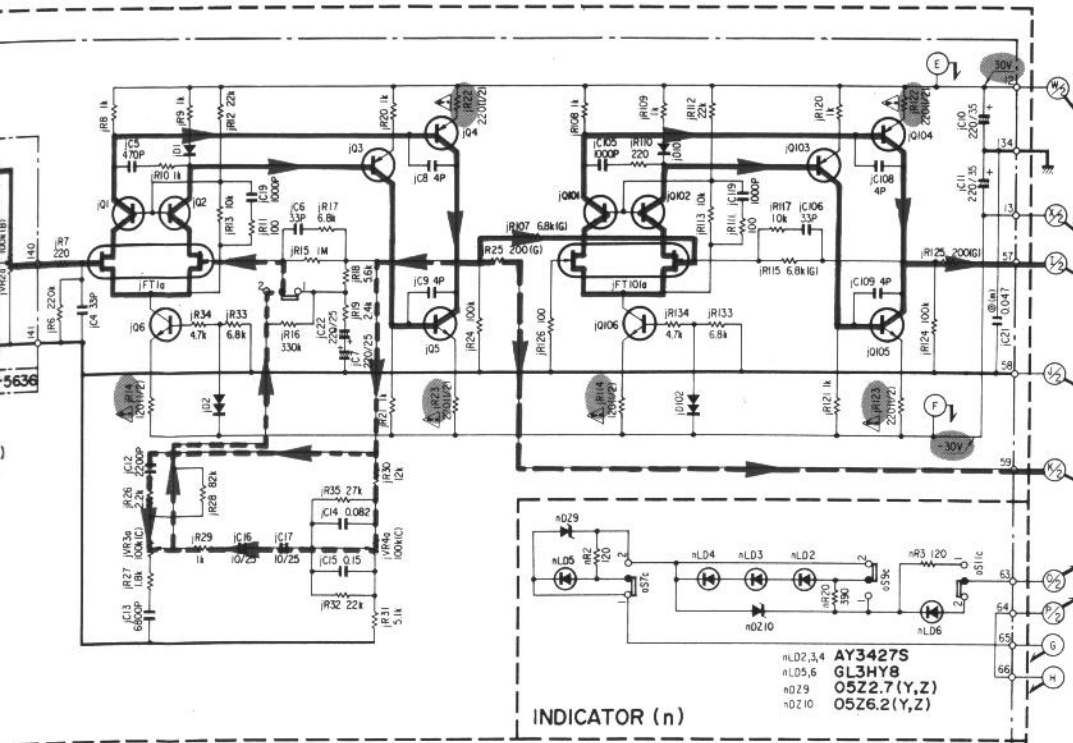
D

6-2. EQ Amp & Control Amp Section (EU, SEV) <AU-X701>

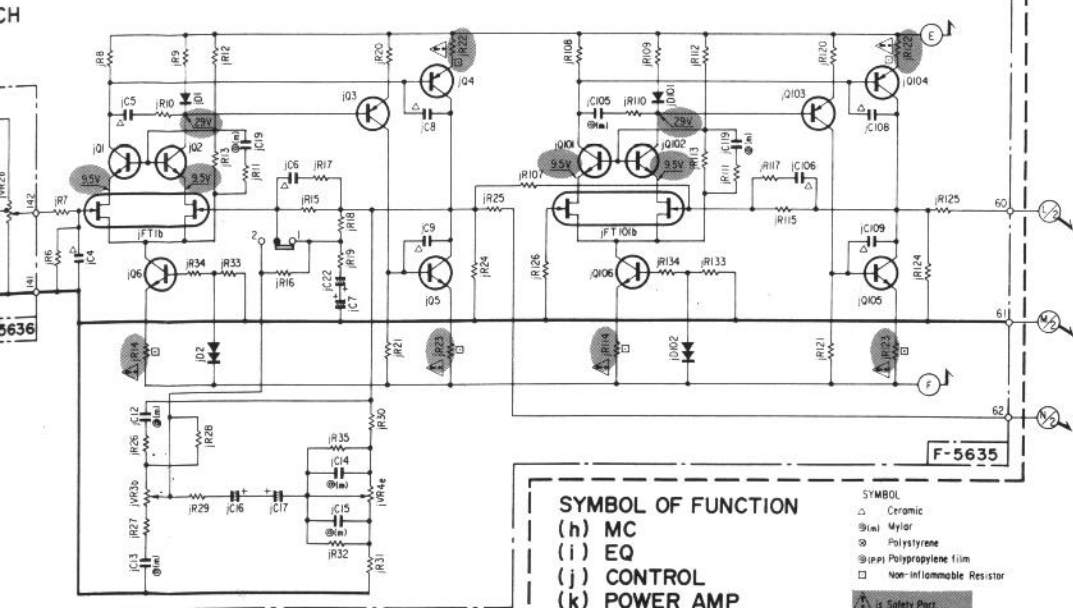
2



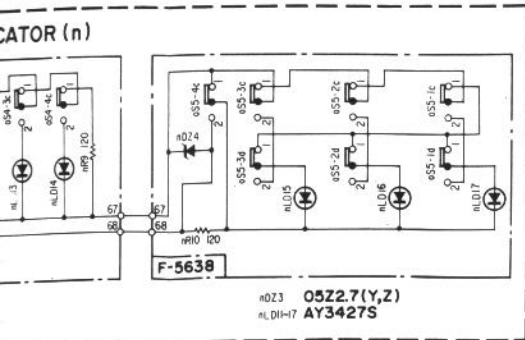
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 \* Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.



INDICATOR (n)



F-5635



F-5638  
 nD23 05Z2.7(Y,Z)  
 nLD1-17 AY3427S

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-Flammable Resistor

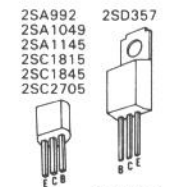
⚠ Safety Part  
 Use only replacement parts recommended by the manufacturer.

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)



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

\* FTZ MODEL only

1

2

3

4

5

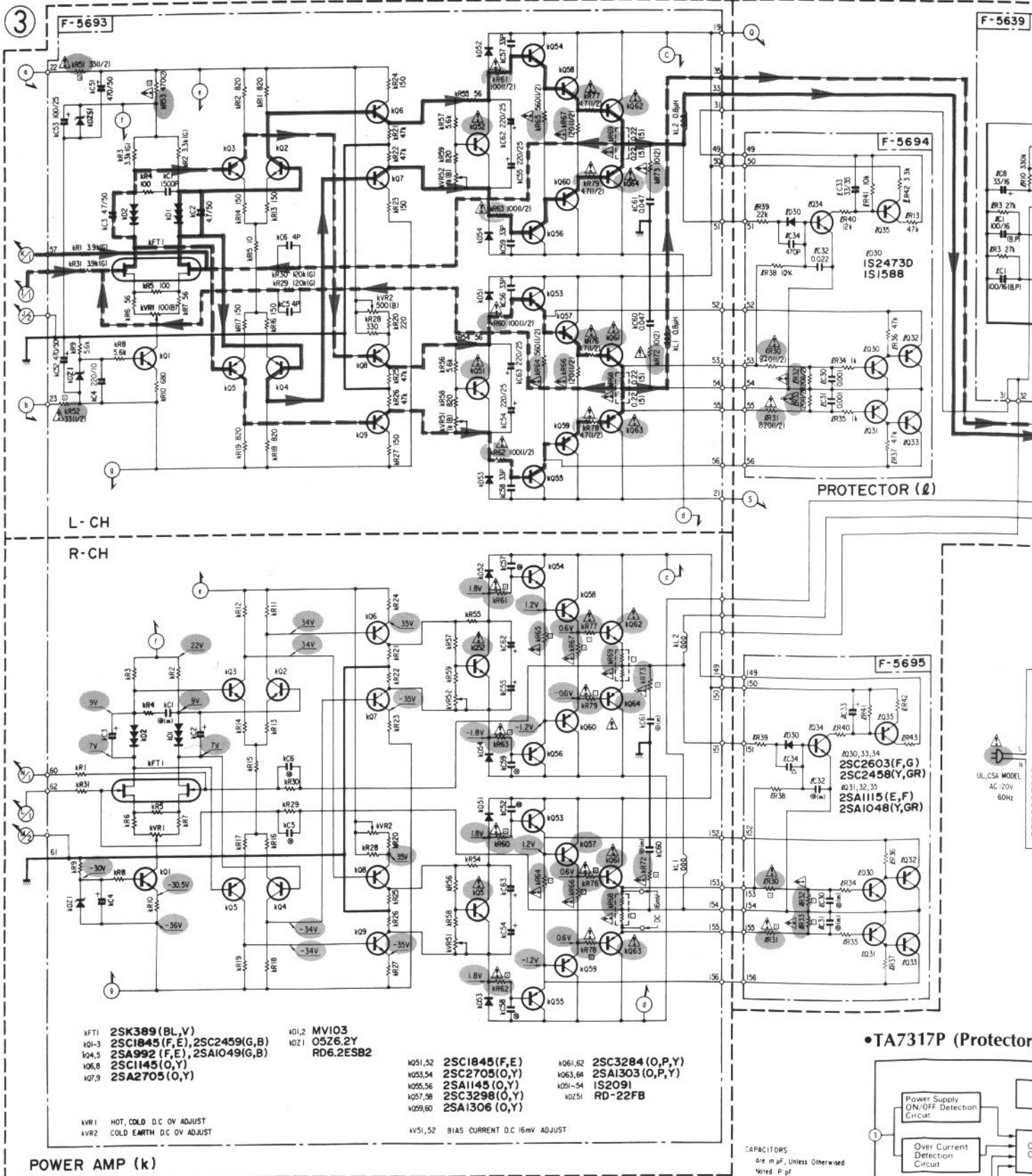
A

B

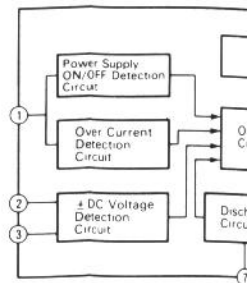
C

D

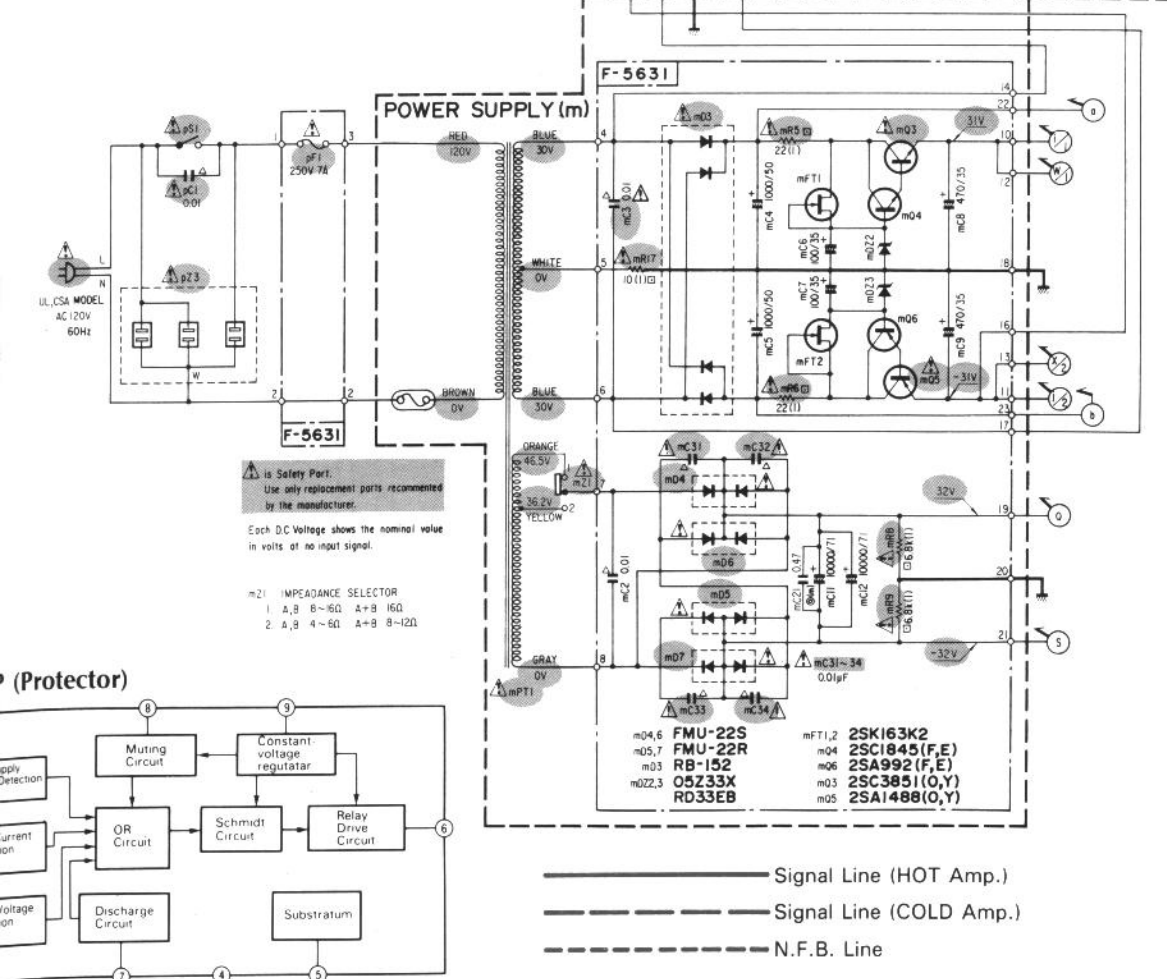
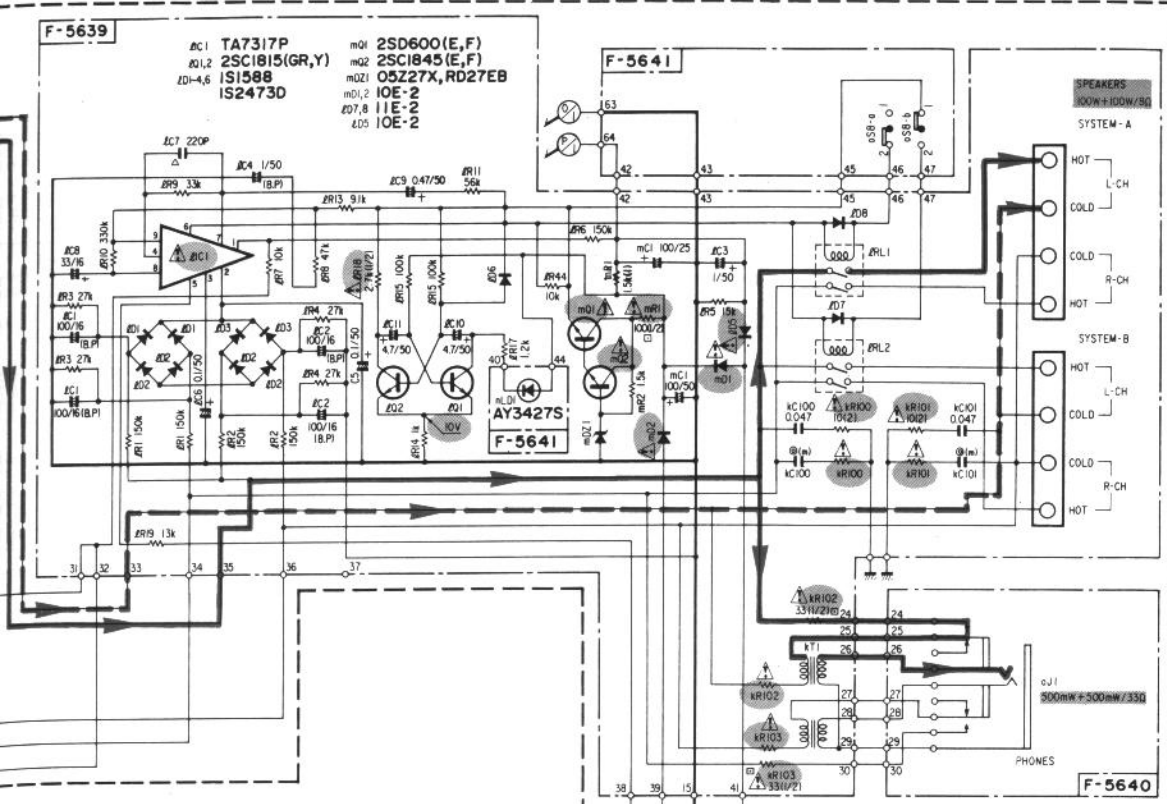
6-3. Power Amp & Power Section <AU-X701>



•TA7317P (Protector)



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



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

2SA1488  
 2SC3851  
 2SA1303  
 2SC3284

2SD600KF  
 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

m04,6 FMU-22S  
 m05,7 FMU-22R  
 m03 RB-152  
 m02,3 05Z33X  
 RD33EB

mFT1,2 2SK163K2  
 m04 2SC1845(F,E)  
 m06 2SA992(F,E)  
 m03 2SC3851(O,Y)  
 m05 2SA1488(O,Y)

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

1

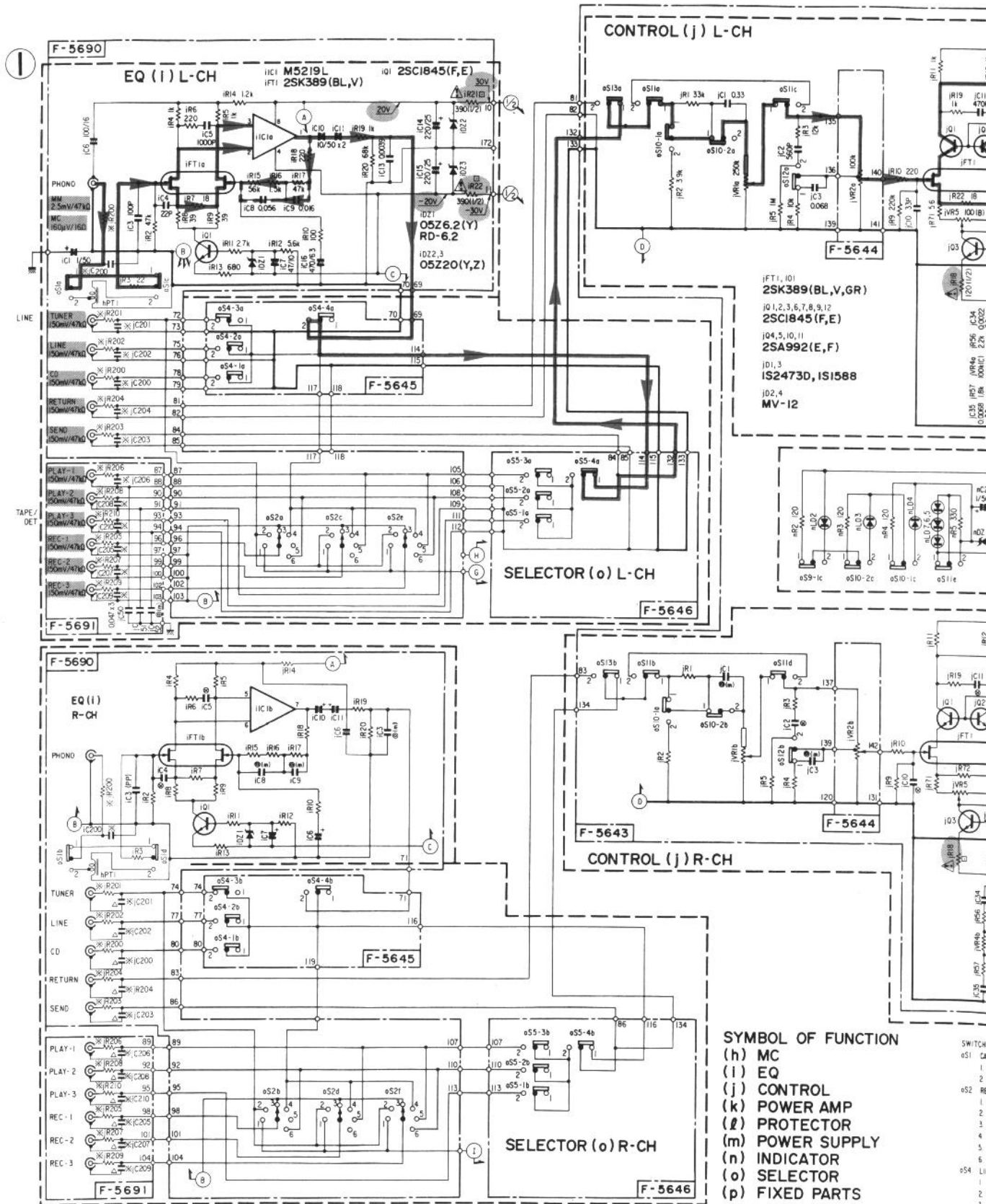
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3

4

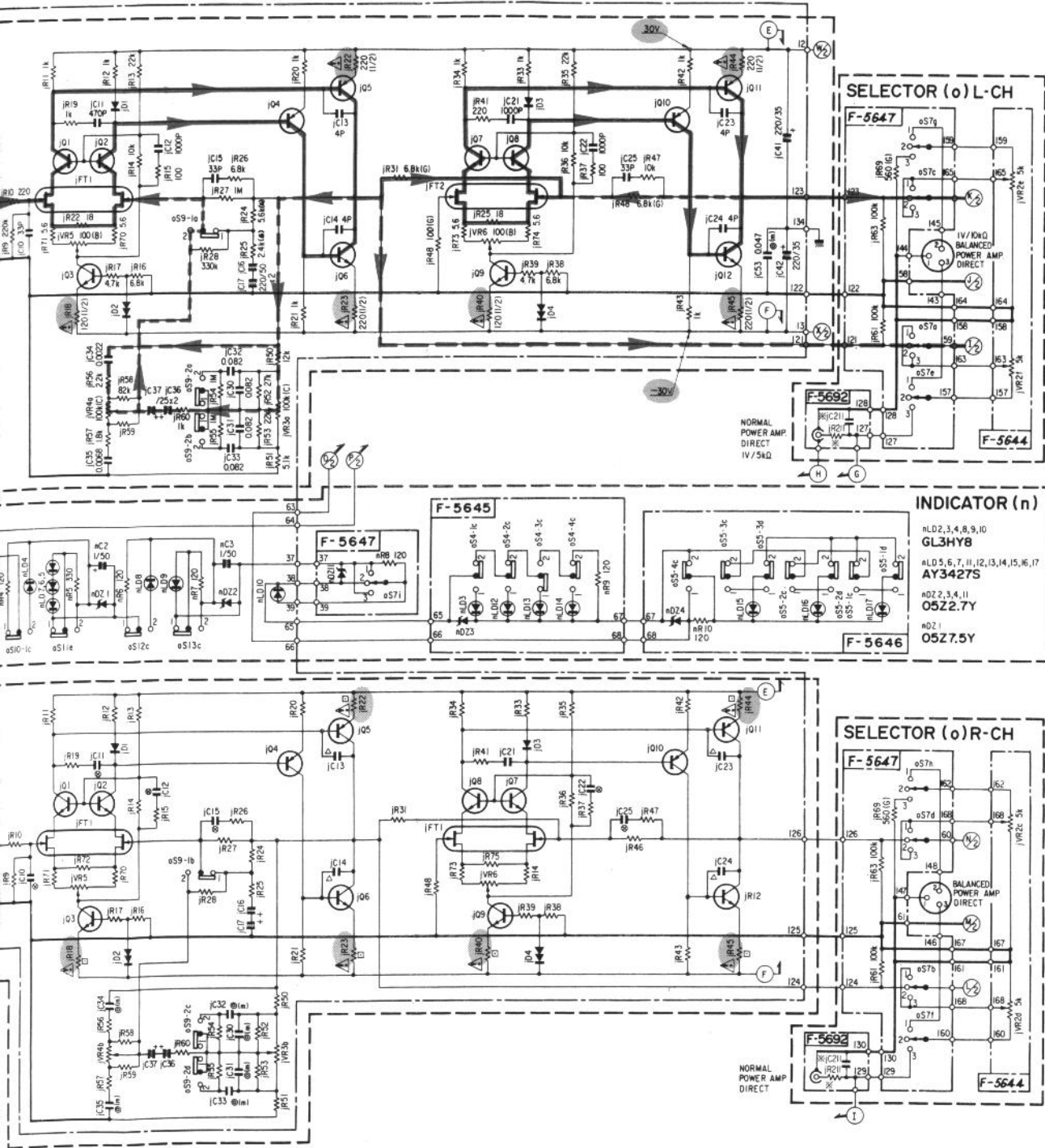
5

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

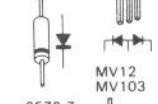
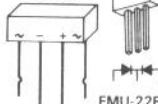
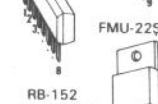
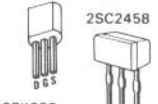
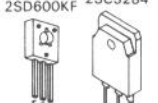
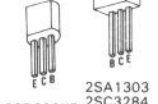




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 \* Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.



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



- 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)



1

2

3

4

5

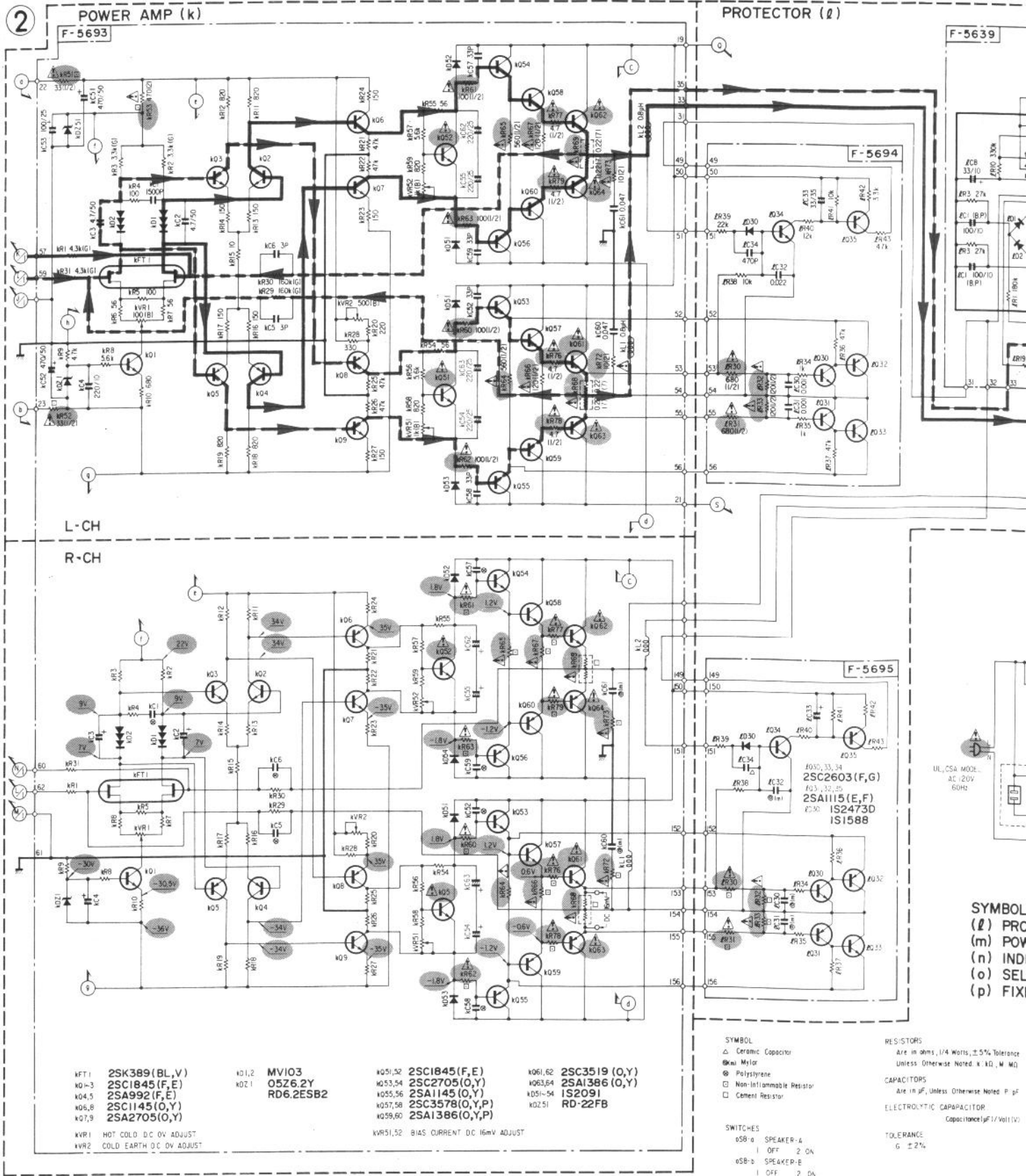
A

B

C

D

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



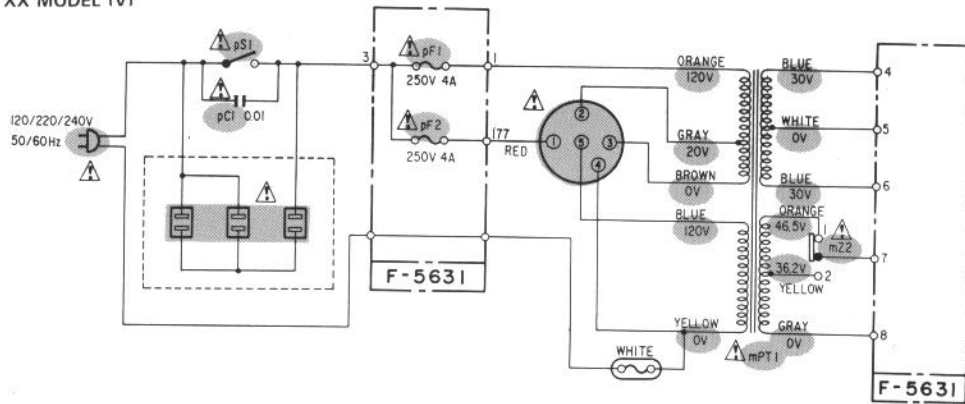


6-6. Power Supply (Primary Side) Section <AU-X701>

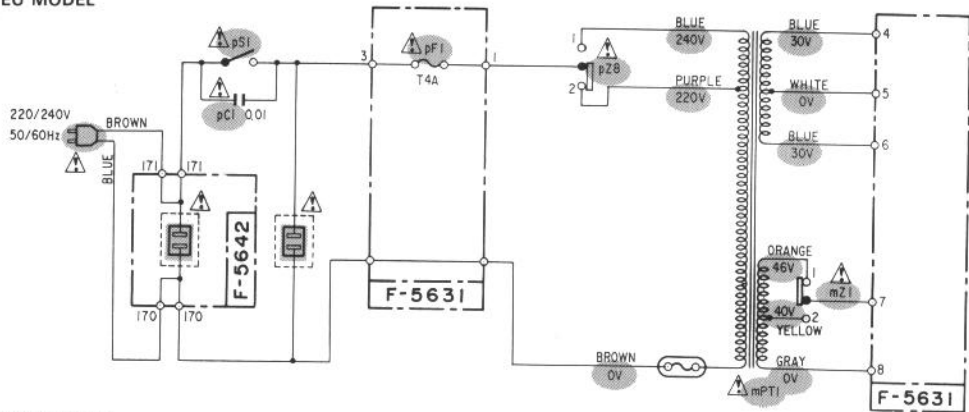
•AU-X701

④

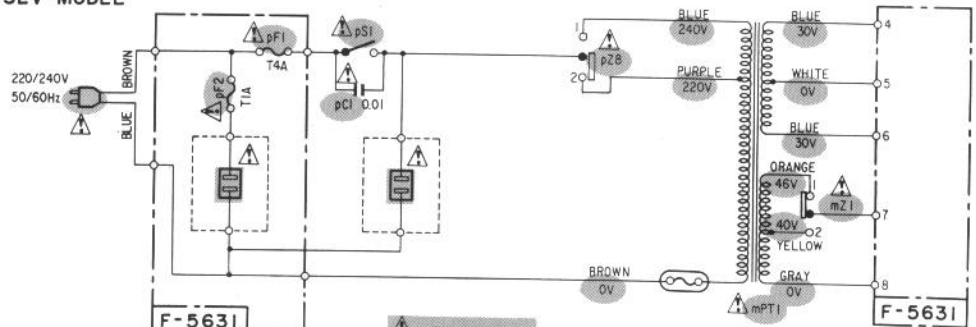
XX MODEL (V)



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.

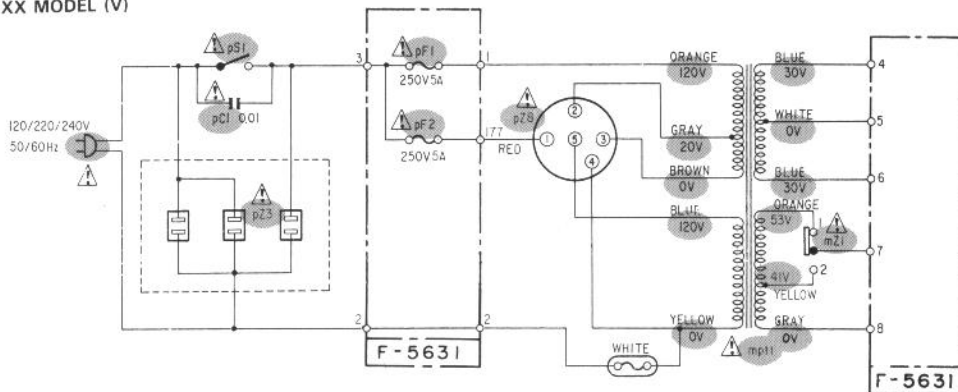
\* Design and specifications subject to change without notice for improvement.  
 \* La présentation et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles.  
 \* Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.

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

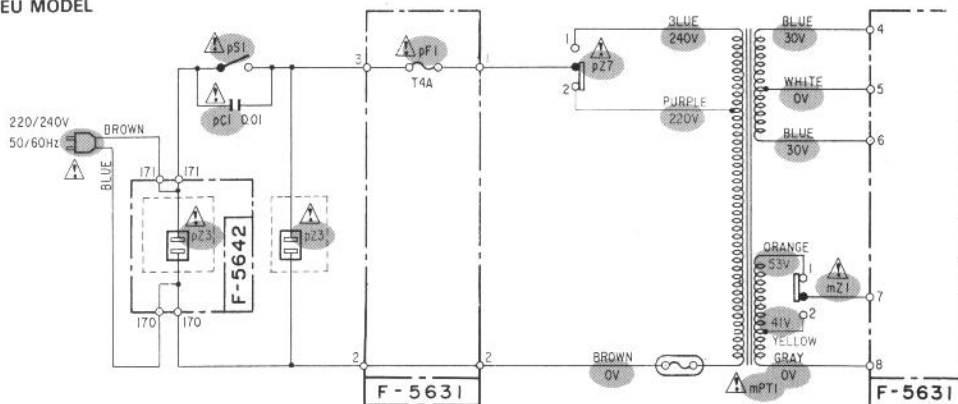
•AU-X901

③

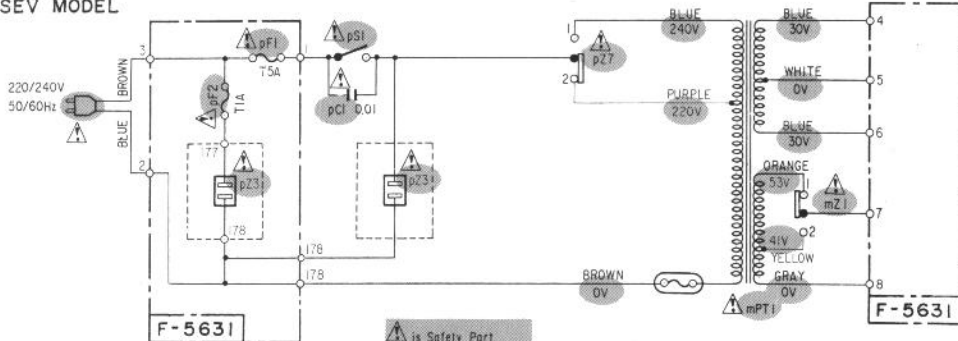
XX MODEL (V)



EU MODEL



SEV MODEL

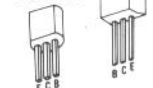


- pZ7 VOLTAGE SELECTOR  
 1. 240V 2. 220V
- mZI SPEAKER IMPEADANCE SELECTOR  
 1. A or B 8-16Ω A and B 16Ω  
 2. A or B 4-6Ω A and B 8-12Ω

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

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

2SD357



- 2SA1115
- 2SC2459
- 2SC2603

2SA1438



- 2SK163

- 2SA1386
- 2SC3519



- 2SK389



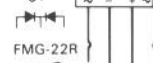
- 2SA1306
- 2SC3298



- TA7317P



- M5219L



- FMG-22S



- UB-152LFF



- FMG-22R

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



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



1

2

3

4

5

# 7. ADJUSTMENT

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

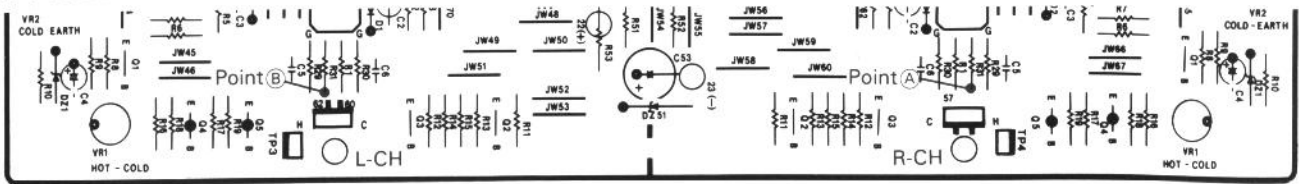
## 7-1. F-5693 Power Amp. Adjustment

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"> <li>•Set Speaker-A switch to "ON".</li> <li>•Set the POWER AMP DIRECT &lt;AU-X901&gt; switch to normal position.</li> </ul>
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>

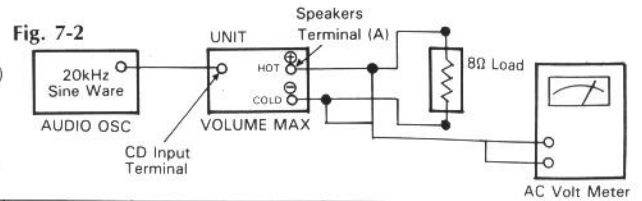
STEP	SUBJECT	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
1.	Center DC 0V Adj. <L-ch>	DC Voltage between F-5693 Point(A) (kR31) and Chassis (See Fig. 7-1)	jVR5L	DC 0V ± 3 mV	<ul style="list-style-type: none"> <li>•For this adjustment, remove the front panel.</li> <li>•Set the POWER AMP DIRECT switch to integrated position.</li> <li>•Set Speaker-A switch to "ON".</li> </ul>
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"> <li>•Set the POWER AMP DIRECT &lt;AU-X901&gt; switch to normal position.</li> <li>•After this adjustment position (Bias Current), repeat procedures as stated in 7-1 &amp; 7-2.</li> </ul>
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

