

AMC

SERVICE MANUAL

CVT3030

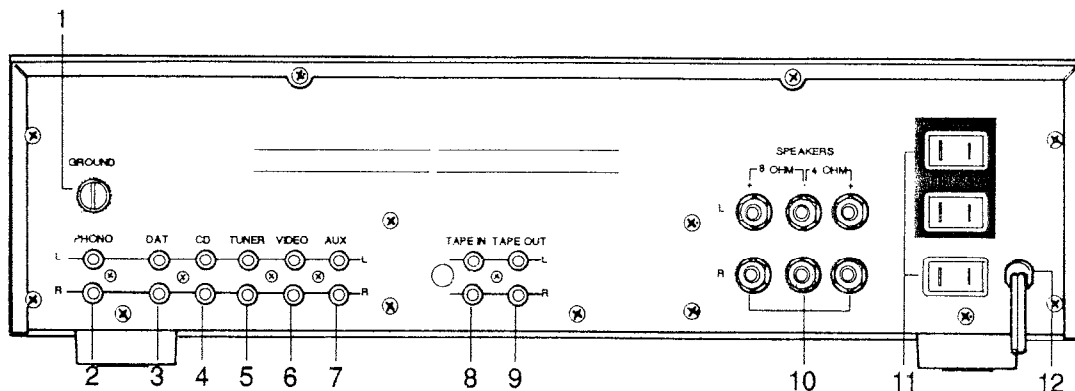
VALVE AMPLIFIER

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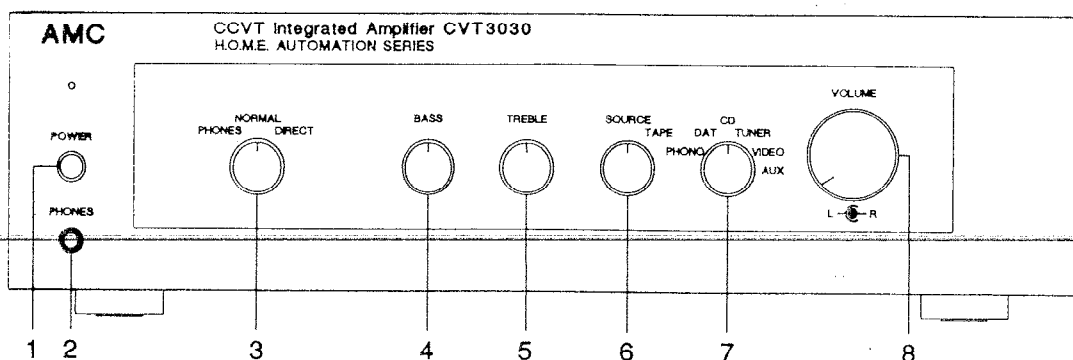
REAR PANEL CONNECTIONS/FRONT PANEL CONTROLS

REAR PANEL



- | | |
|--------------------------|----------------------------|
| 1. PHONO GROUND TERMINAL | 7. AUXILIARY INPUT |
| 2. PHONO MM INPUT | 8. TAPE INPUT |
| 3. DAT INPUT | 9. TAPE OUTPUT |
| 4. CD INPUT | 10. LOUDSPEAKER TERMINALS |
| 5. TUNER INPUT | 11. AC CONVENIENCE OUTLETS |
| 6. VIDEO INPUT | 12. AC LINE CORD |

FRONT PANEL



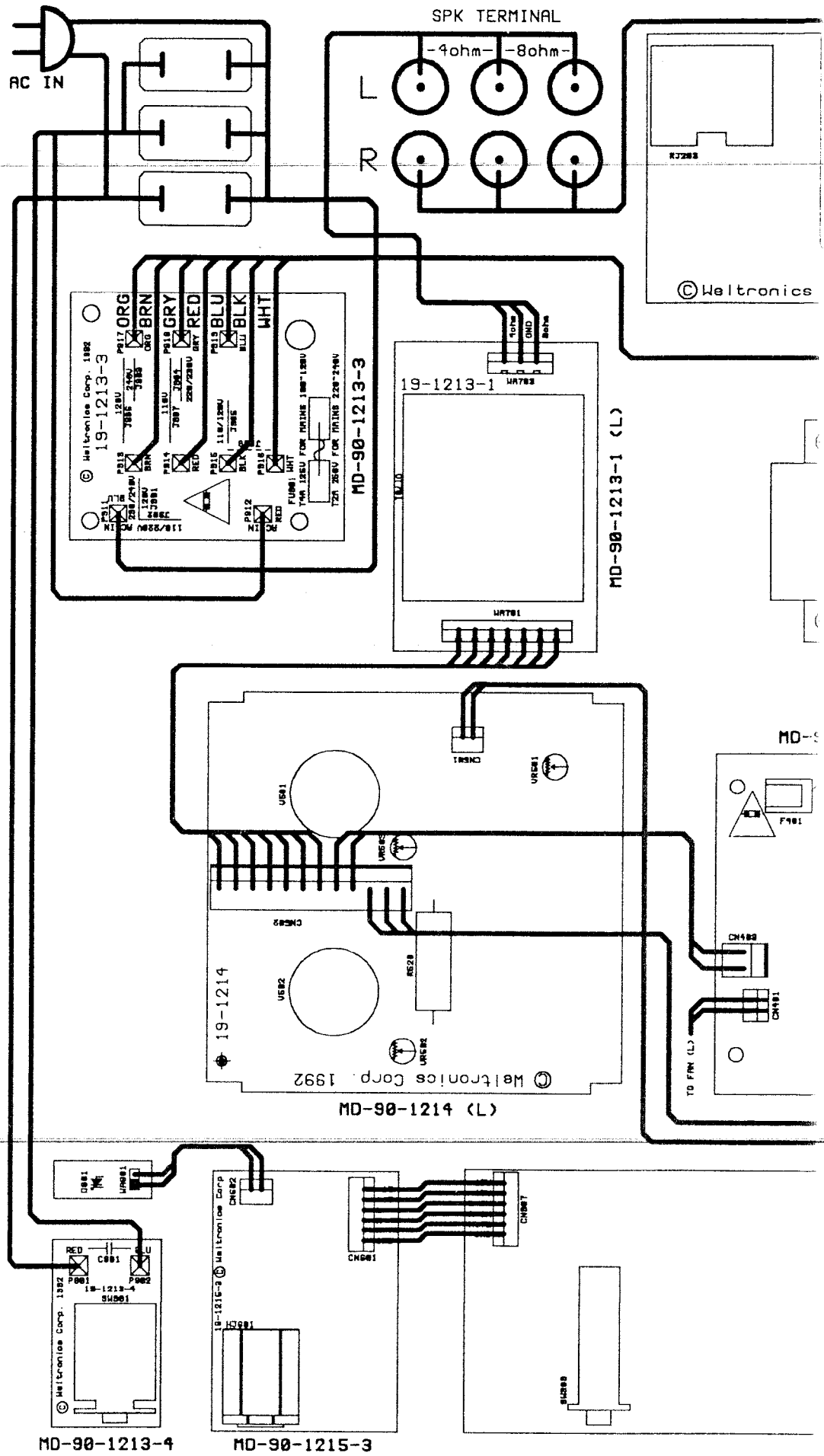
- | | |
|--------------------------------|---------------------------|
| 1. POWER SWITCH | 5. TREBLE CONTROL |
| 2. PHONES | 6. TAPE MONITOR SWITCH |
| 3. PHONES/NORMAL/DIRECT SWITCH | 7. INPUT SELECTION SWITCH |
| 4. BASS CONTROL | 8. VOLUME CONTROL |

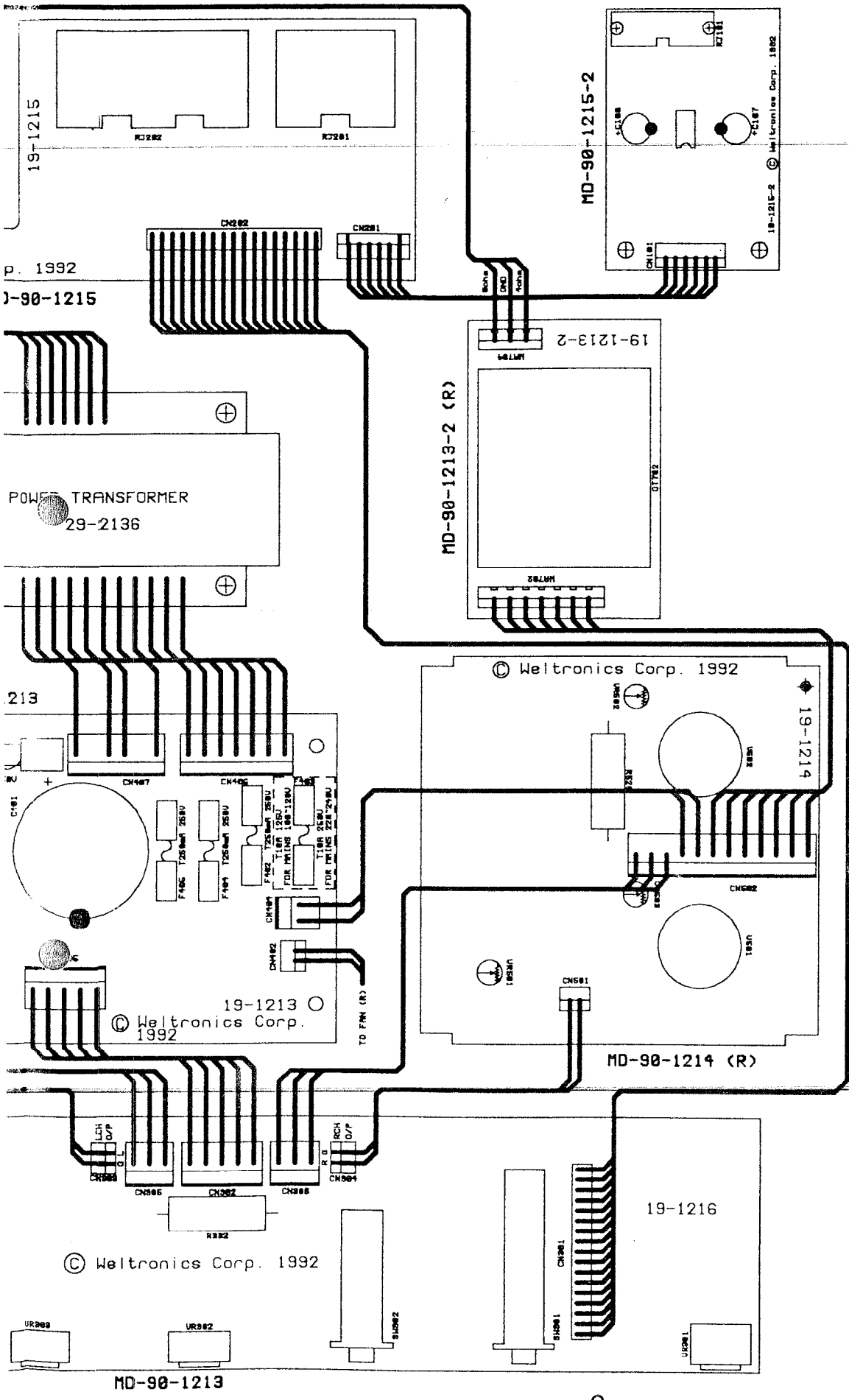
SPECIFICATIONS

Power output into 8/4 ohms	30W
With both channels driven	
Rated T.H.D. 45Hz–20KHz	1.0%
1KHz clipping power into 8/4 ohms.....	36W
Input sensitivity for 1W/30W into 8 ohms:	
High level inputs	34mV/180mV
Phono input.....	0.5mV/2.7mV
Input impedance:	
High level inputs	20K ohms/100pF
Phono input.....	47K ohms/100pF
Frequency response:	
Tone bypass 20Hz–20KHz	+/- 0.5dB
Normal 20Hz–20KHz	+/- 1.0dB
High level inputs -3dB	10Hz/80KHz
Signal to noise ratio (ref. 1W/8 ohms):	
High level inputs "A" WTD.	80dB
Phono input "A" WTD.	79dB
Separation 20Hz–20KHz	> 50dB
Tone control range:	
Bass at 50Hz	+/- 8dB
Treble at 10KHz	+/- 7dB

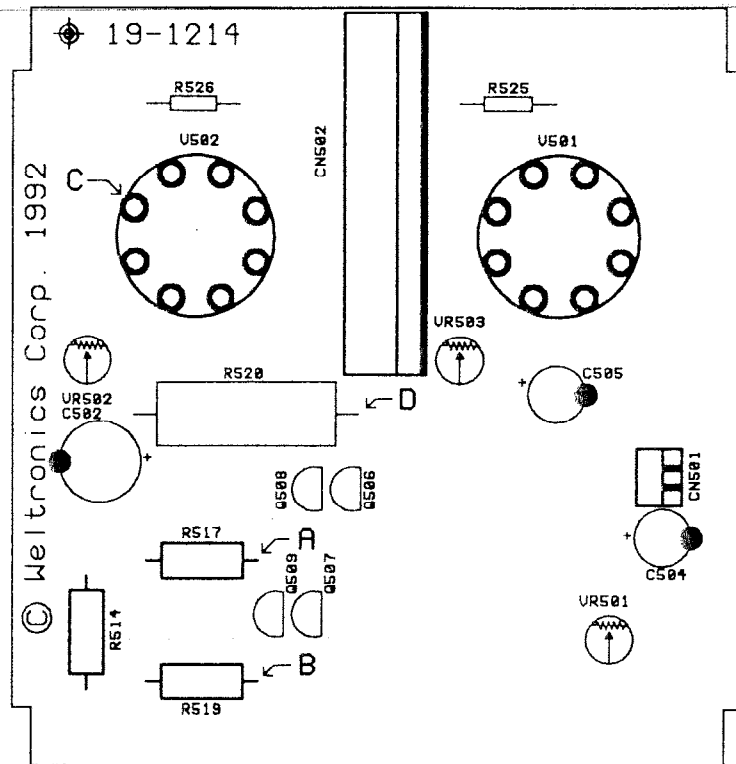
Overall feedback	14dB
Dimensions (WxHxD)	430x112x288mm
Net weight	14Kg
Shipping weight.....	15Kg

WIRING DIAGRAM





POWER AMPLIFIER ADJUSTMENT



IMPORTANT NOTES:

1. Make sure the primary voltage to be connected is accurately as the unit defined.
2. Set the PHONES / NORMAL / DIRECT switch in the PHONES position. Power amplifier is muted in PHONES position.
3. Before adjusting, turn VR502 counterclockwise and VR503 clockwise to the end position. (value of semi-potentiometer are setted at the maximum position.)
4. These adjustments are always necessary when power amplifier is repaired. (module of MD-90-1214)
5. Before adjustment is done, the tested unit must be pre-heated at least 3 to 5 minutes.

A. CENTER VOLTAGE ADJUSTMENT

1. Connect a voltmeter between A (the junction of the drain of Q508 and R517) and B (the junction of the drain of Q509 and R519). See figure - point A and B.
2. Adjust VR501 to give a reading on the voltmeter of 0 volts +/-5 volts.
3. Repeat above for another channel.

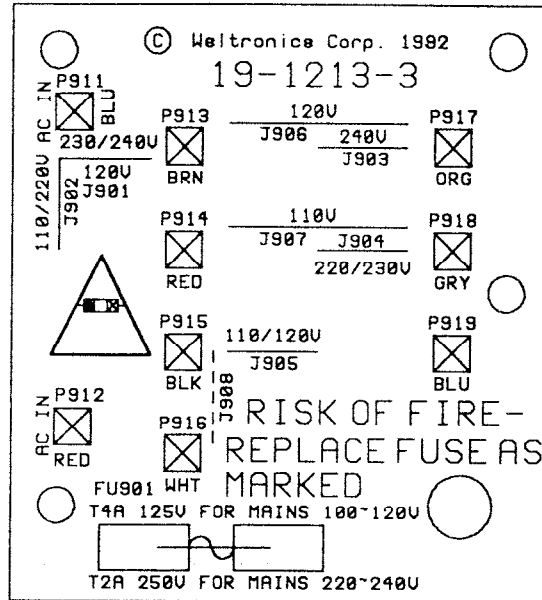
B. BIAS CURRENT ADJUSTMENT

1. Connect voltmeter between C (the plate of the tube) and D (the B+ supply). See figure -point C and D.
2. Adjust VR502 to give a reading of 6 volts.
3. Connect the output of the amplifier to an oscilloscope/analyser (with 20Hz H.P. Filter) and adjust the VR503 for minimum mains ripple at the output.
4. Repeat above for another channel.

MAINS WIRING INSTRUCTION

1. The power transformer of CVT-3030 is UNIVERSAL type can be wired to 110V/120V/220V/230V/240V mains voltages by changing the jumper wires on the MAINS PCB.

2. MAINS P.C.B. drawing:



3. Jumper wires connected chart:

Mains Voltages	Jumper wires shall be connected for the mains voltage			
110V		J902	J905	J907
120V	J901		J905	J906
220V		J902	J904	
230V	J901		J904	
240V	J901	J903		

(J908 is only a spare position for shorting connection of thermal fuse inside of the transformer.)

4. The FUSES shall be changed to correct rating and safety approved fuses as shown on PCB.

FU901: T4A 125V for Mains between 100V to 120V

T2A 250V for Mains between 220V to 240V

(FU901 is added into CVT-3030 from 1001 of the latest 4 digits of serial number to protect the power transformer more secure.)

F401: T1A 250V

F402: T250mA 250V

F403: T10A 125V for Mains between 100V to 120V

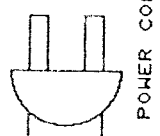
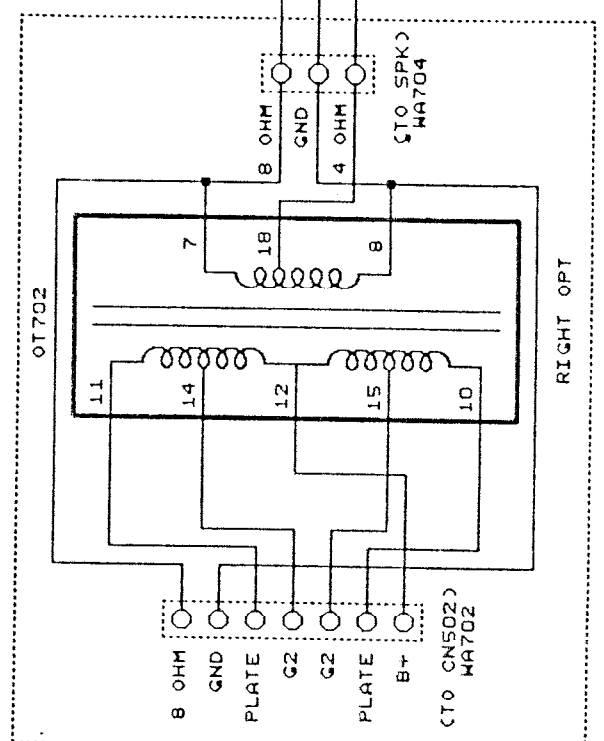
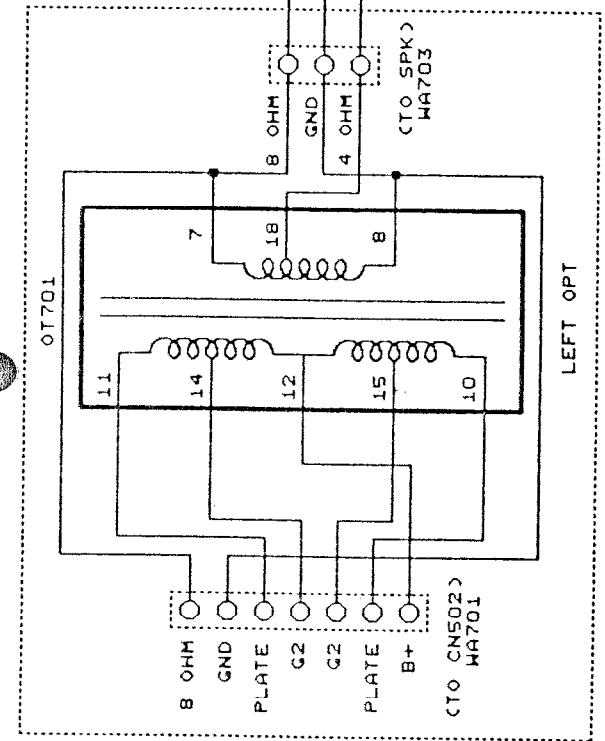
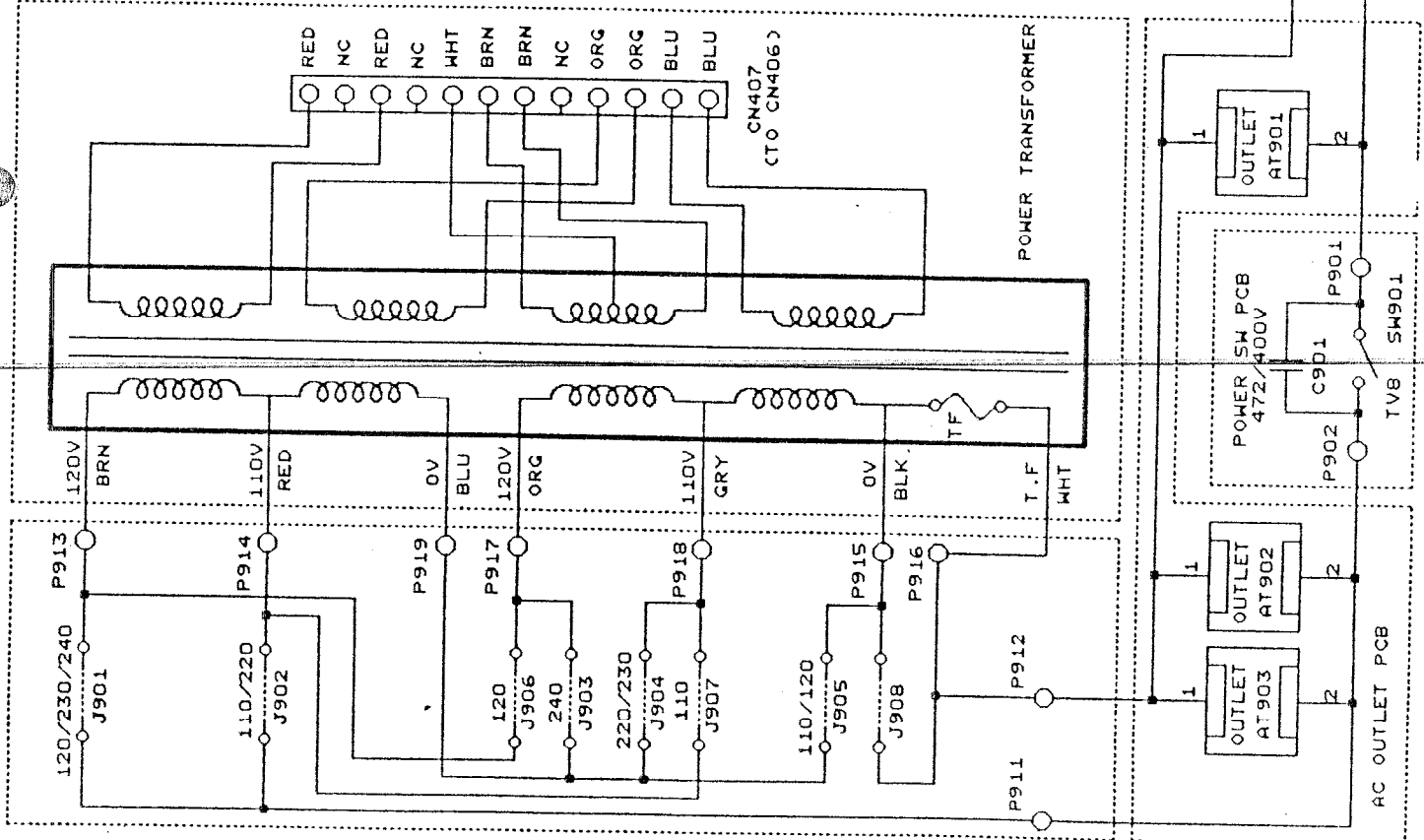
T10A 250V for Mains between 220V to 240V

F404, F405: T250mA 250V

PARTS LIST

CVT3030 PARTS LIST

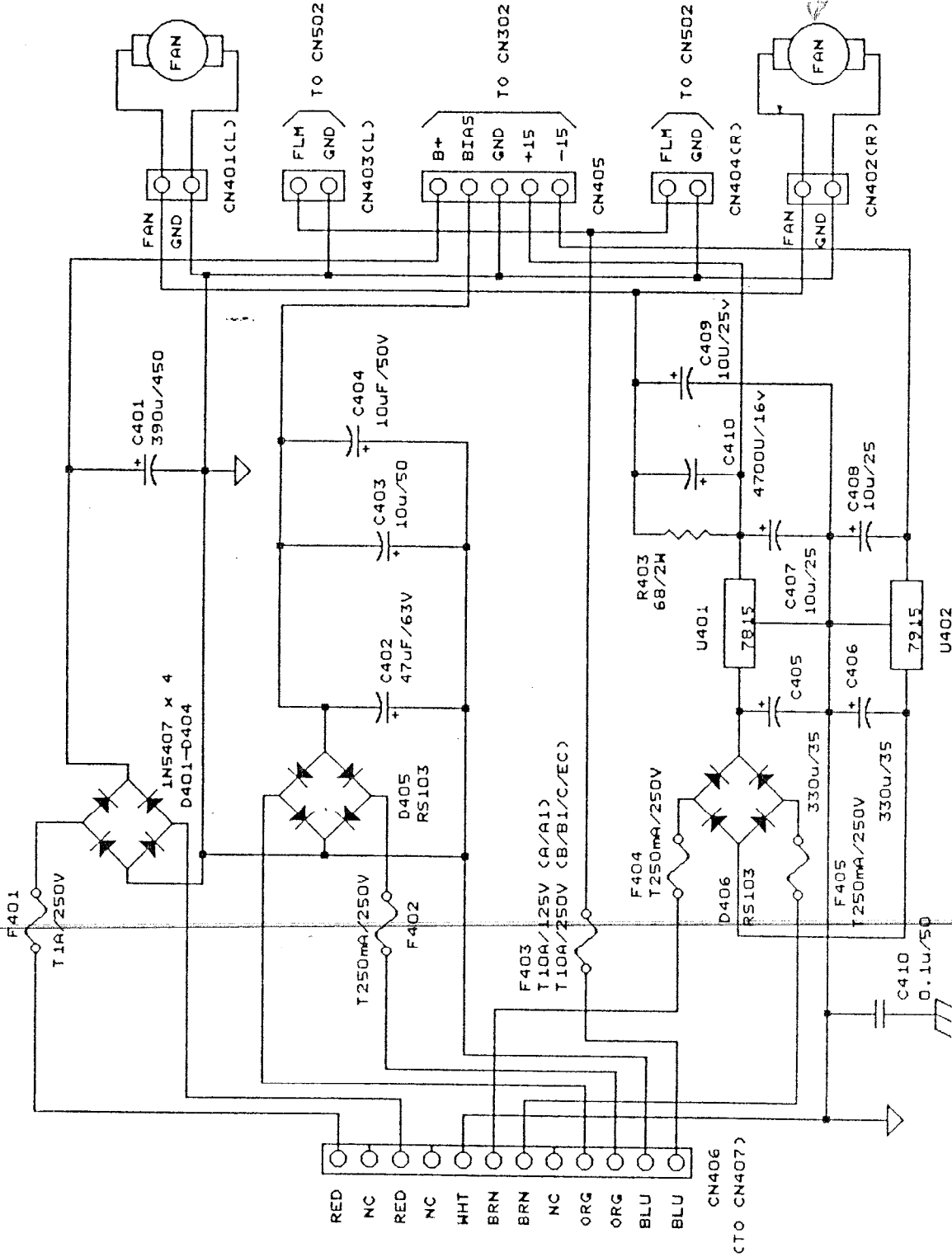
PARTS NO.	DESCRIPTION	SPRCIFICATION	REF	Q'TY
MD-90-1213	MODULE OF POWER SUPPLY	CVT3030 AMC		1
MD-90-1213-1	MODULE OF OPT (L)	CVT3030 AMC		1
MD-90-1213-2	MODULE OF OPT (R)	CVT3030 AMC		1
MD-90-1213-3	MODULE OF AC SELECTOR	CVT3030 AMC		1
MD-90-1214	MODULE OF POWER AMP	CVT3030 AMC		2
MD-90-1215	MODULE OF INPUT	CVT3030 AMC		1
MD-90-1215-2	MODULE OF PHONO	CVT3030 AMC		1
MD-90-1215-3	MODULE OF HEADPHONE	CVT3030 AMC		1
MD-90-1216	MODULE OF PREAMP	CVT3030 AMC		1
	PACKING ASS'Y	CVT3030 AMC		1
34-1065-1	POLYLONE, FRONT	CVT3030 AMC		1
34-1065-2	POLYLONE, REAR	CVT3030 AMC		1
21-4051	OWNER'S MANUAL	CVT3030 AMC		1
21-3015	WARRANTY CARD	AMC (120V VERSION FOR USA MARKET ONLY)		1
CT-5217	INNER CARTON	CVT3030 AMC		1
CT-5218	OUTER CARTON	CVT3030 AMC		0.5
26-0022	PE BAG FOR SET	450x600x0.07		1
26-0018	PE BAG FOR POWER CORD	100x260x0.07		1
26-0016	PE BAG FOR MANUAL	220x330x0.05		1
34-2001	PROTECTION SHEET, EPE	110x440x40mm		1
	CHASSIS ASS'Y	CVT3030 AMC		1
50-1038-1	CABINET	BLACK CVT3030		1
50-1038-2	CABINET	GRAY CVT3030		1
11-6146	MAIN CHASSIS			1
11-8418-1	FRONT PANEL	BLACK		1
11-8418-2	FRONT PANEL	GRAY		1
11-6150	CENTER CHASSIS L			1
11-6151	CENTER CHASSIS R	WITH GROUND ED		1
11-8419-1	AUX PANEL	BLACK		1
11-8419-2	AUX PANEL	GRAY		1
12-3149	VOLUMN KNOB A	FRONT		1
28-1049-3	CUSHION A	VOLUMN KNOB A		1
12-3150	VOLUMN KNOB B	REAR		1
28-1049-2	CUSHION B	VOLUMN KNOB B		1
12-3151	CONTROL KNOB			5
28-1049-1	CUSHION	CONTROL KNOB		5
12-3152GN	POWER SW. BUTTON	GREEN		1
13-8227B	BUSHING, POWER BUTTON	BLACK		1
28-1046	FOOT			4
28-2074	SPONGE	FOOT		4
11-6149	FRONT CHASSIS	CVT3030		1
11-8420-1	REAR PANEL (120V) A A1	CVT3030		1
11-8420-3	REAR PANEL (230V) EC	CVT3030		1
28-2076	RETAINER EVA	5x30x1mm REAR PANEL		2
12-2134N	BINDING POST, BLK			2
12-2133N	BINDING POST, RED			4
28-2078RD	CAP, BINDING POST	RED (230V AREA 4 PCS)		4
28-2078BK	CAP, BINDING POST	BLK (230V AREA 2 PCS)		2
14-5027	POWER CORD	UL/CSA US/CN (120V)		1
14-5028	POWER CORD	EMKO WG/EU (230V)		1
14-5022	POWER CORD	SA B1 VERSION ONLY		1
14-5003	BUSHING	4N-4 (4RF-5)		1
12-2110	AC OUTLET (A/A1/J/T)	US TYPE UL/CSA (A/A1 x3)		3
12-2122	AC OUTLET (B/B1/EC/C/C1)	EU TYPE EMKO (B/B1/C/EC x1)		1
11-8435-1	MODULE CASE	EXTRUSION		2
29-2136	POWER TRANSFORMER	0-110-120x2+T.F.		1
11-9064	FAN GUARD	80*80 KGI, G80-18		2
29-6113	DC FAN	12V 80x80x2.5 MM		2
21-1128	DECORATIUE PLATE	54x74x0.3t FOR P.T.		1
21-1129	DECORATIUE PLATE	28.5x71.5x0.3t FOR OPT		2



Title CVT3030
 Document Number XFMR/OPT/SPK
 A MD-AC003/MD-OT003(1) / MD-OT003/0
 REV 0

Typ AD0812LS-A70 12V/0.1A

APPA



CVT3030

POWER SUPPLY

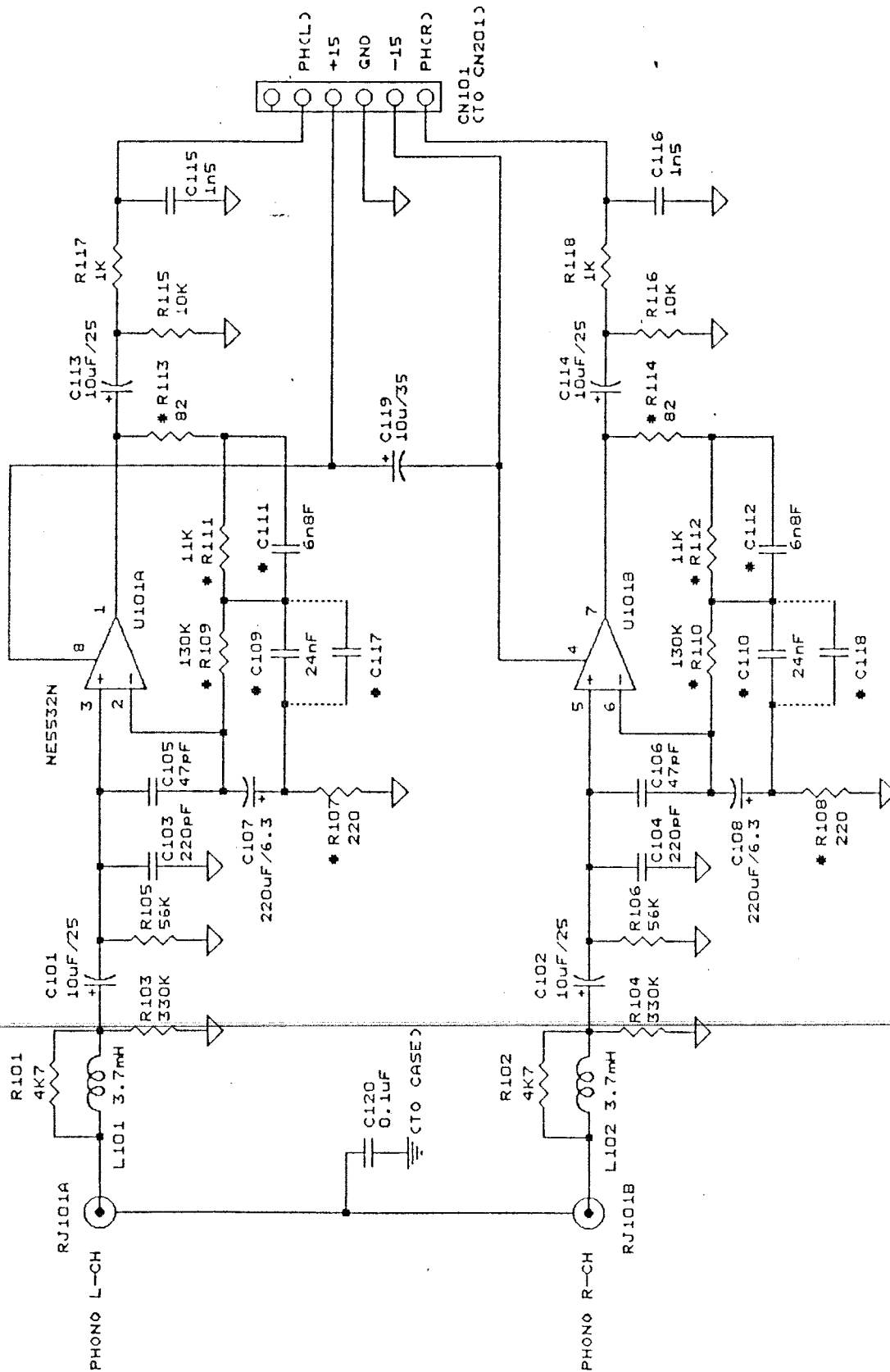
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MD-P5003

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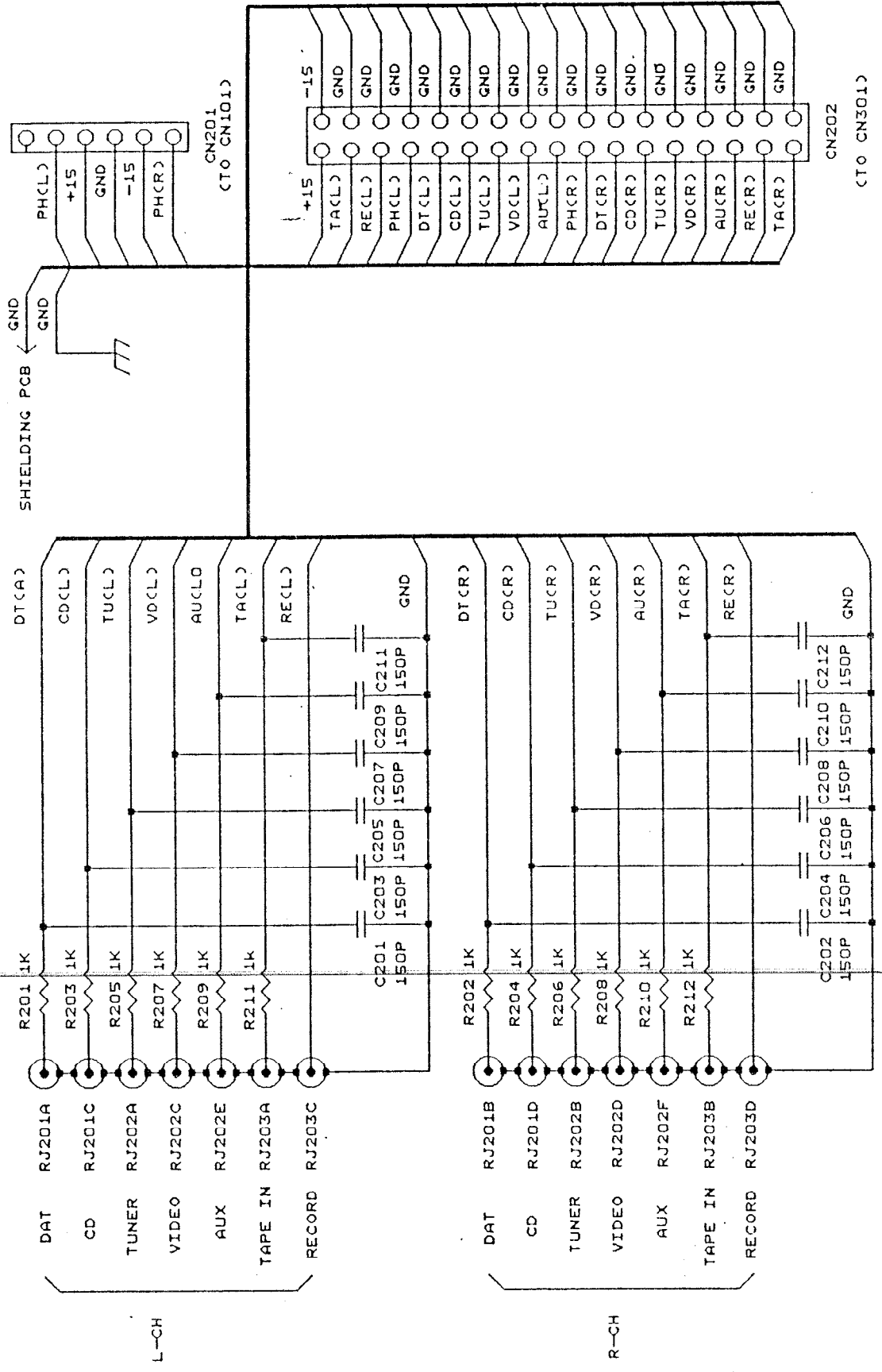
REV

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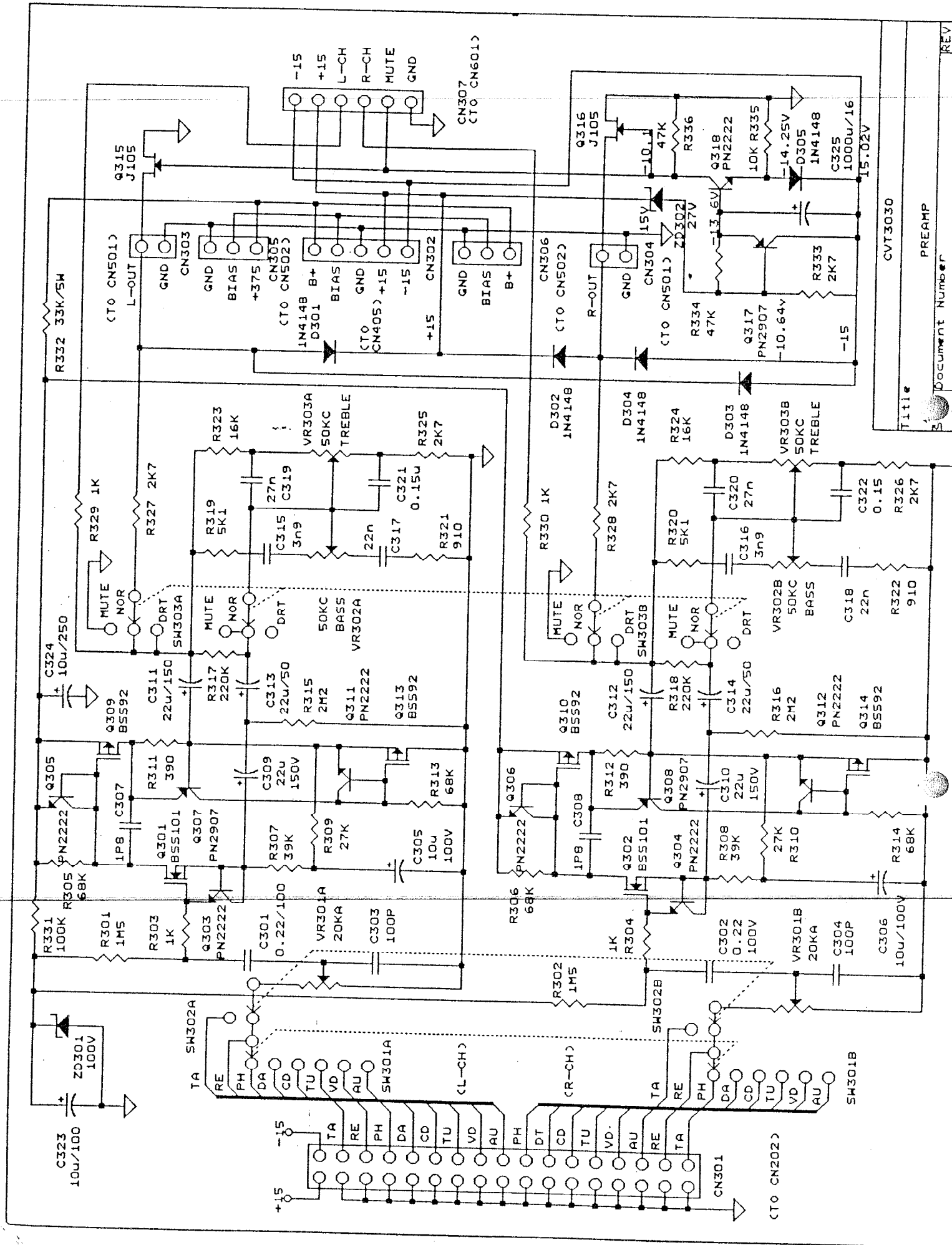


P/S: 1. THE RESISTORS MARKED WITH '*' ARE 2% IN TOLERANCE
 2. THE CAPACITORS MARKED WITH '**' ARE 5% IN TOLERANCE

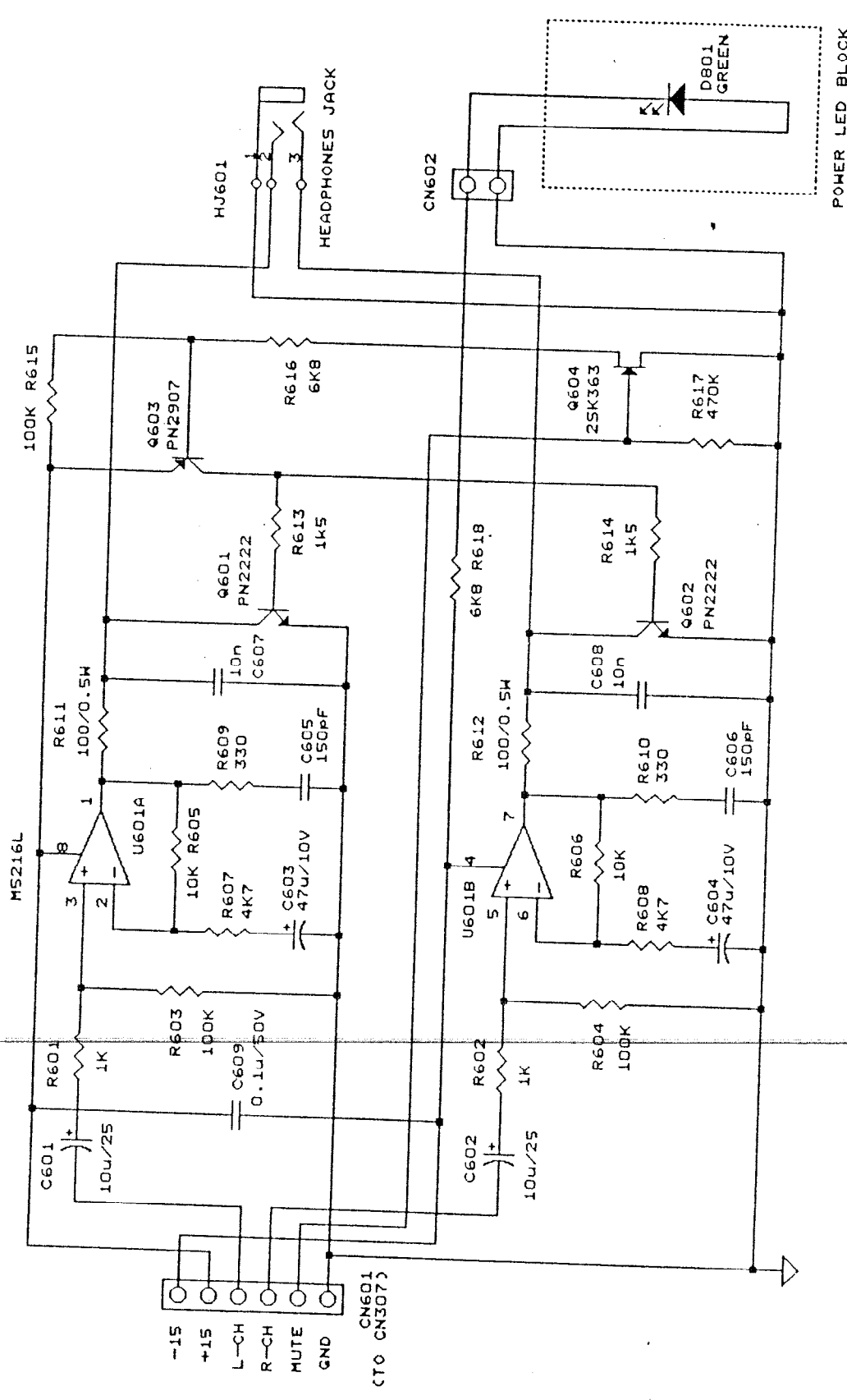
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Document Number		PHONO	
REV	MD-PH003	Date:	February 25, 1992
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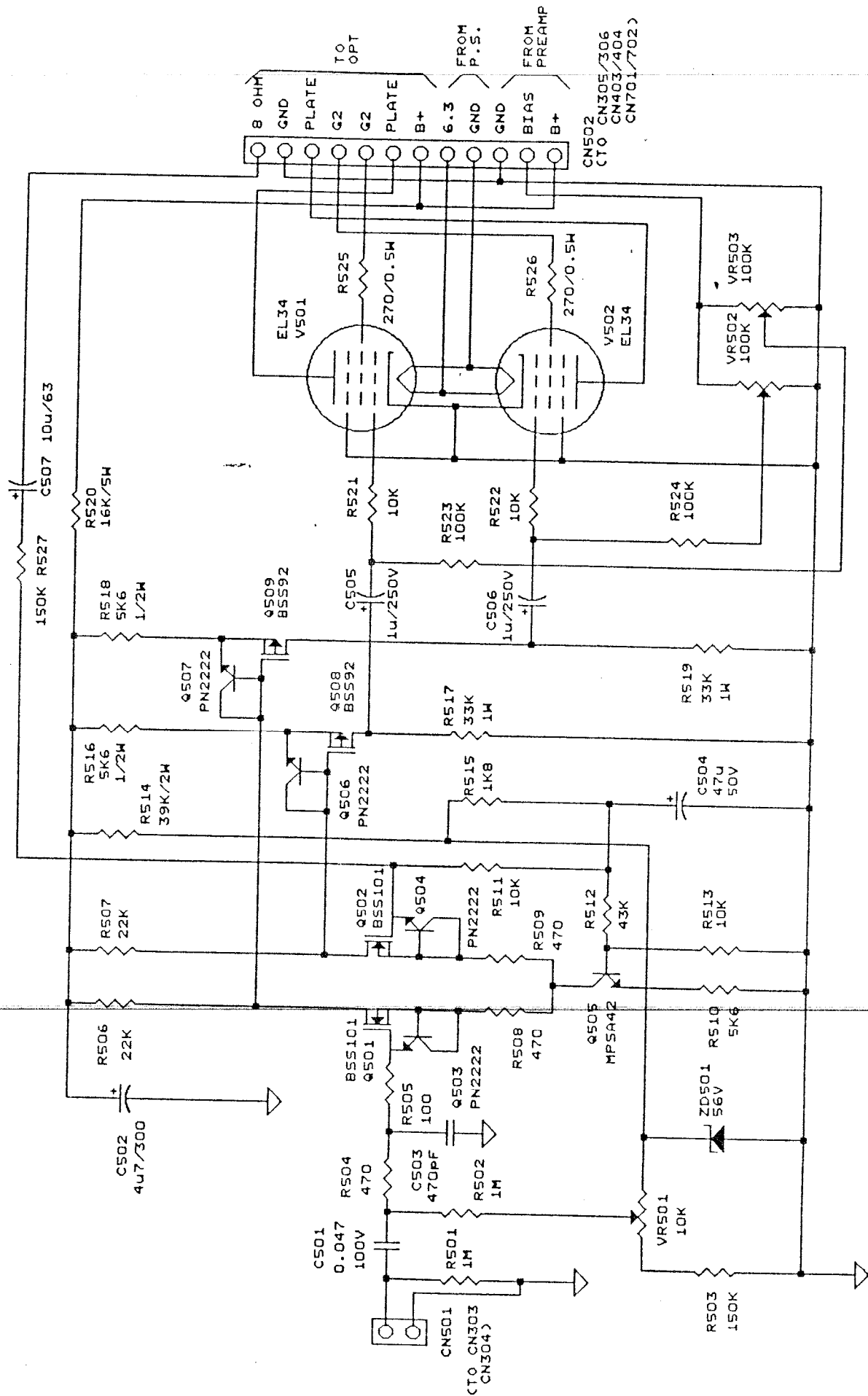
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INPUT/OUTPUT			
S.D. Document Number		MD-IP003	
REV	B	DATE	MARCH 12, 1992
		SHEET	4 OF 7



Title
 Document Number
 CVT3030
 PREAMP
 REV



Title	CVT3030
Document Number	MD-HP003
REV	B



Title
 Document Number
 AMP
 CVT3030
 REV