

J A M O P R O A M P

JAMO's professional ProAmp power amplifiers have been designed according to the most up-to-date principles and utilise MOS-FET output transistors and advanced overload protection circuits, protecting electronics as well as loudspeakers against overload and breakdown. The ProAmp 200 has a continuous output effect of 2 x 200 watt in 4 ohm, but the dynamic effect is as high as 400 watt. This is due to the oversized power supply unit and the Dyna Phase coupling of the two channels. This technology means that channels draw from the power supply unit in phase opposition and are fully utilising its capacity. Furthermore the two channels may be directly bridge coupled when very high outputs are required.

Output power			
Max power 4 ohm	1 kHz	1 % THD+N	220 W
Max power 8 ohm	1 kHz	1 % THD+N	160 W
Max dynamic Power 2 Ohm	1 kHz	20 mS burst	380 W
Max power 8 Ohm	1 kHz	1% THD+N bridge mode	360 W
Max dynamic power 2 Ohm	1 kHz	20 ms burst	400 W
Distorsion			
THD+N V 4 Ohm	1 kHz	Max power-3 dB	0,03 %
THD+N V 8 Ohm	1 kHz	Max power-3 dB	0,016 %
IMD V 4 Ohm	7 kHz+60 Hz	Max power-3 dB	0,05 %
IMD V 8 Ohm	7 kHz+60 Hz	Max power-3 dB	0,05 %
Frequency response	20H-40 KHz		± 0,5 dB
S/N			
CCIR weighted			-110 dB
Sensitivity			
For full output into 4 Ohms			600 mV
For full output into 8 Ohms			680 mV
For full output into 8 Ohms bridge mode			530 mV
Input impedance			
			10 kOhm
Damping factor			
	100 Hz		> 250
Channel separation			
			>70 dB
Power Supply			
Voltage	220/240 V (switchable)		50/60 Hz
Connectors			
Phono for input			1 pr. channel
6-square binding post for output			2 pr. channel
Protection			
DC protected (prevents DC on the speaker-output)			
Short circuit protected (protects the amplifier against short circuits of speaker cable)			
High temp protected (disconnects the loudspeaker if the temperature exceeds safe area)			
Dimensions			
W x H x D	482 x 177 x 170 mm (19 x 7 x 6 ³ / ₄ in)		Weight 9,5 kg (21 lb)
Subject to technical changes.			

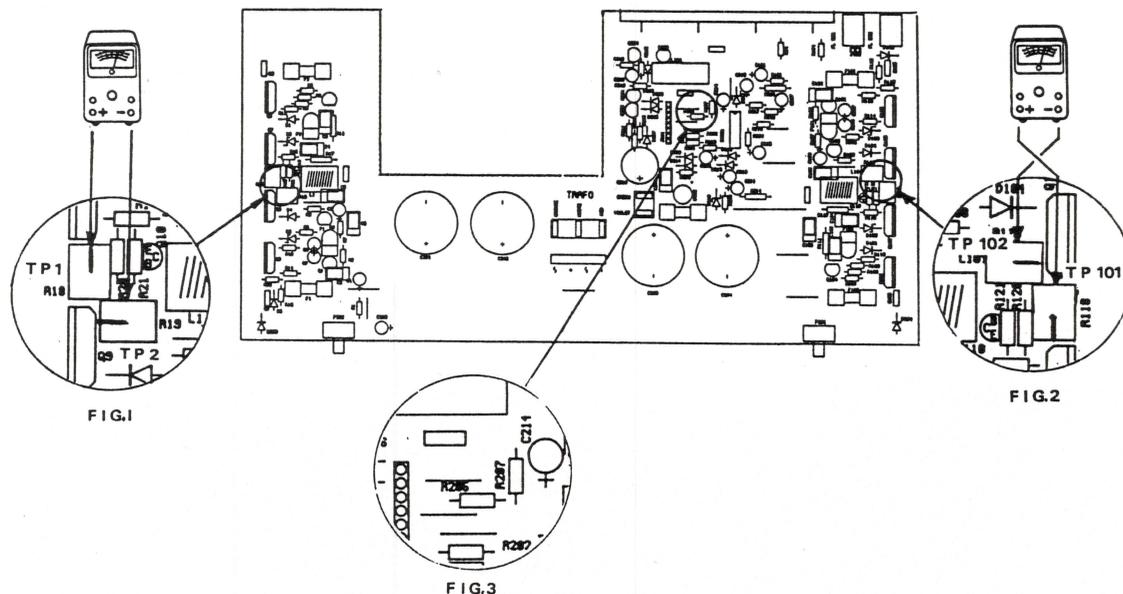
Separation

Unscrew the 4 screws on the top plate and the 4 screws from the bottom plate, and you can now repair amplifier.

Spare parts

All components are on the spare parts list (k8 - k12). However most of spare parts are standard components, and therefore you can just order items marked with *.

ADJUSTMENT PROAMP 200



1. DC adjustment.
 Left channel: DC between output terminals are adjusted to $<+- 10$ mV on potentiometer P1.

 Right channel: DC between output terminals are adjusted to $<+- 10$ mV on P101.
2. Quiescent Current.
 Left channel (See dia. 1): are adjusted to 100 mA on potentiometer P2, and are measured as 20 mV between TP1 (the peak of ceramic resistance R18) and TP2 (the peak of ceramic resistance R19).

 Right channel (see dia. 2): are adjusted to 100 mA on potentiometer P102, and are measured as 20 mV between TP101 (the peak of ceramic resistance P118) and TP102 (the peak of ceramic resistance R119).
3. Temperature Protection.
 The thermal protective circuit of the amplifier is constructed (because of DEMKO regulation) to switch off the load at about 72 C.

If you want this temperature to be increased, you can change R 205 (see dia. 3) to 10 KOhm.

Diagram A (Left channel) for JAMO ProAmp 200

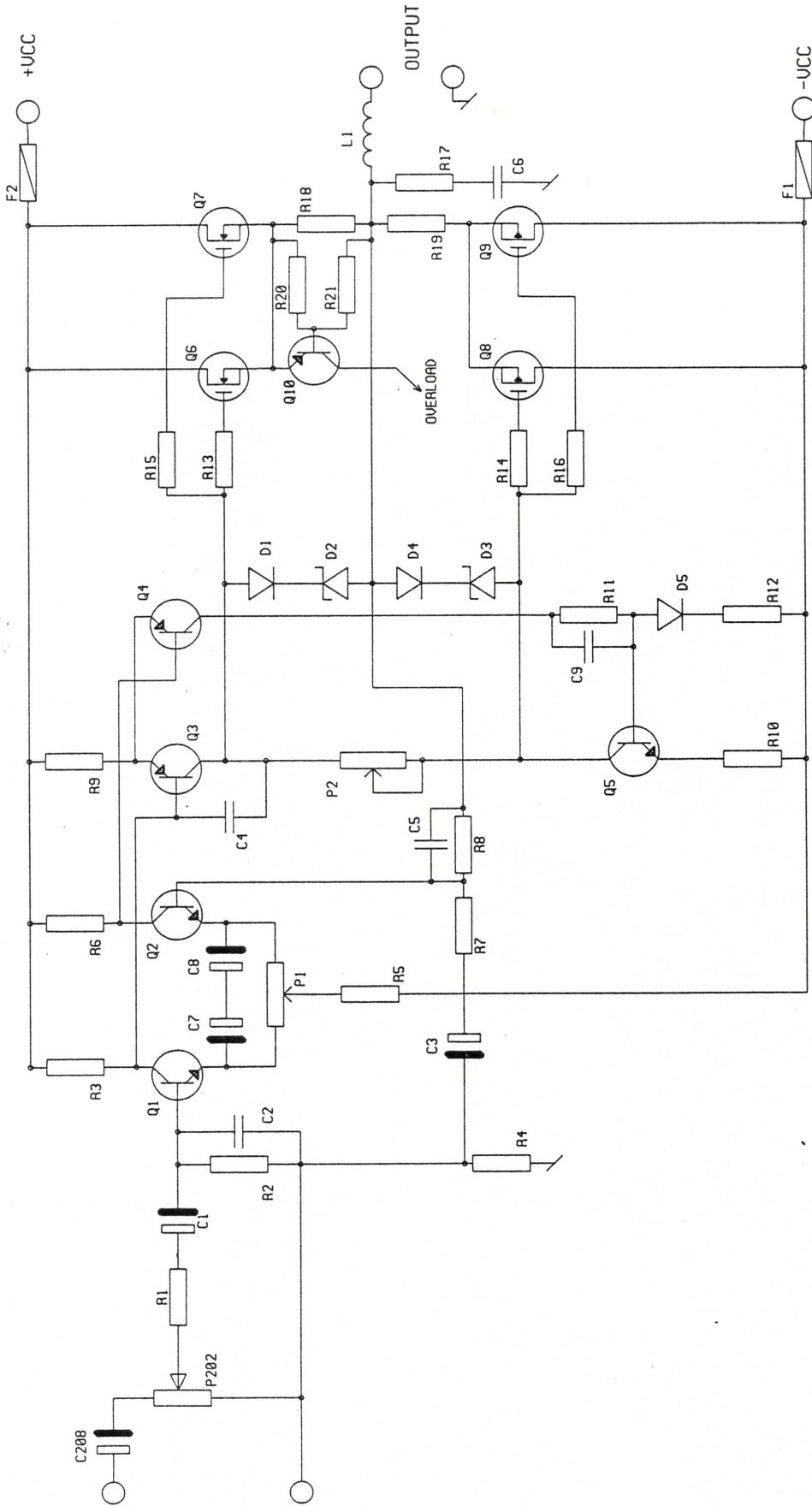


Diagram B (Right channel) for JAMO ProAmp 200

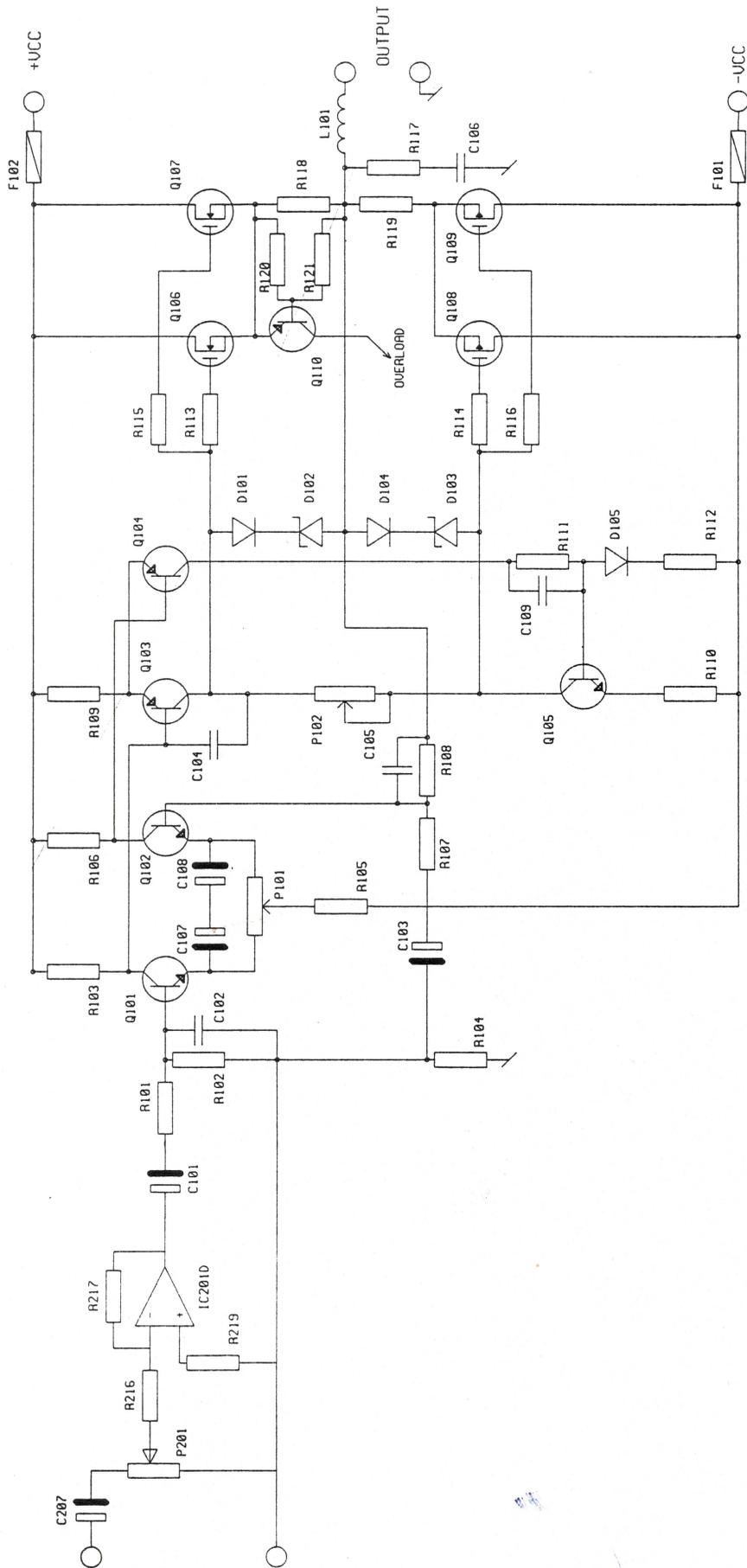


Diagram D (Protection circuit) for JAMO ProAmp 200

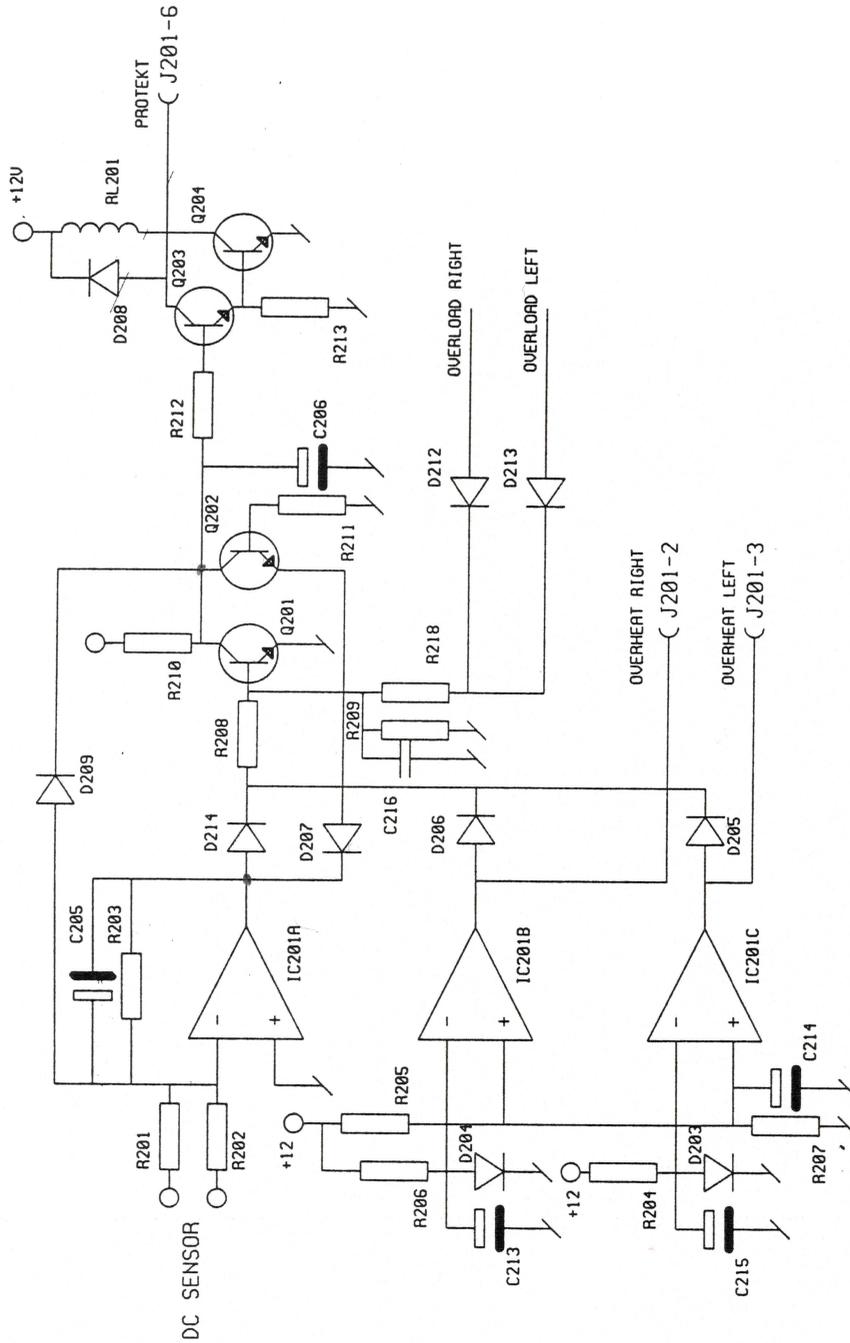
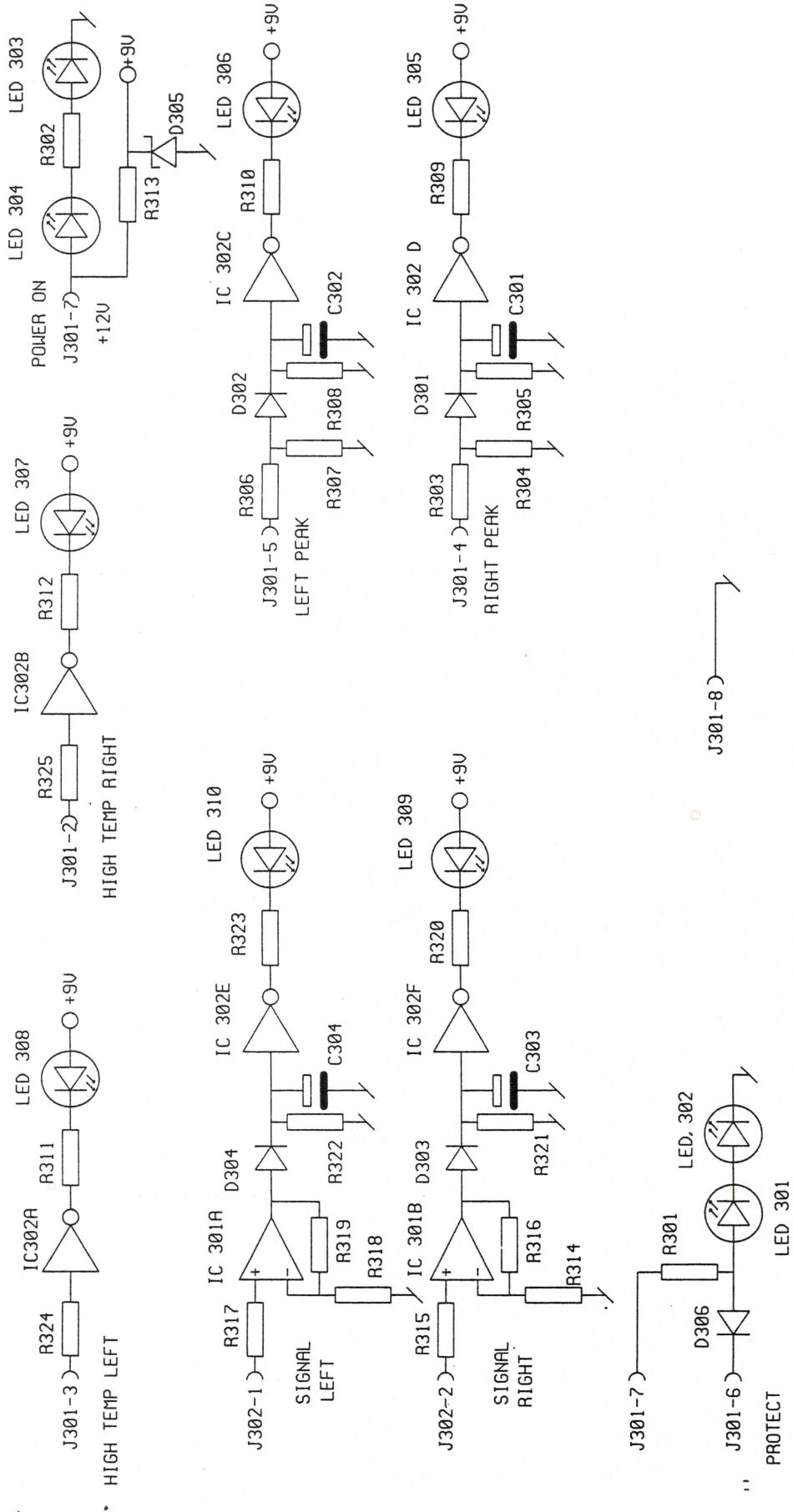


Diagram E (Display) for JAMO ProAmp 200



Spare parts list for JAMO ProAmp 200

Antal	Referencenr.	Komponent	Extern varebetegnelse
1	C 001	265610113	10uF 25V RADIAL ELECTROLYTIC CAP.
1	C 002	260147122	470pF CERAMIC CAPACITOR
1	C 003	265647112	47uF 25V RADIAL ELECTROLYTIC CAP.
1	C 004	260047112	47pF 100V CERAMIC CAPACITOR
1	C 005	260047112	47pF 100V CERAMIC CAPACITOR
1	C 006	261422121	22nF 100V FILM CAPACITOR
1	C 007	265610113	10uF 25V RADIAL ELECTROLYTIC CAP.
1	C 008	265610113	10uF 25V RADIAL ELECTROLYTIC CAP.
1	C 009	260047112	47pF 100V CERAMIC CAPACITOR
1	C 101	265610113	10uF 25V RADIAL ELECTROLYTIC CAP.
1	C 102	260147122	470pF CERAMIC CAPACITOR
1	C 103	265647112	47uF 25V RADIAL ELECTROLYTIC CAP.
1	C 104	260047112	47pF 100V CERAMIC CAPACITOR
1	C 105	260047112	47pF 100V CERAMIC CAPACITOR
1	C 106	261422121	22nF 100V FILM CAPACITOR
1	C 107	265610113	10uF 25V RADIAL ELECTROLYTIC CAP.
1	C 108	265610113	10uF 25V RADIAL ELECTROLYTIC CAP.
1	C 109	260047112	47pF 100V CERAMIC CAPACITOR
* 1	C 201	265847048	4700 uF 80V RADIAL ELECTROLYTIC CAP.
* 1	C 202	265847048	4700 uF 80V RADIAL ELECTROLYTIC CAP.
* 1	C 203	265847048	4700 uF 80V RADIAL ELECTROLYTIC CAP.
* 1	C 204	265847048	4700 uF 80V RADIAL ELECTROLYTIC CAP.
1	C 205	265610113	10uF 25V RADIAL ELECTROLYTIC CAP.
1	C 206	265710112	100uF 25V RADIAL ELECTROLYTIC CAP.
1	C 207	265610113	10uF 25V RADIAL ELECTROLYTIC CAP.
1	C 208	265610113	10uF 25V RADIAL ELECTROLYTIC CAP.
1	C 210	265747122	470uF 25V RADIAL ELECTROLYTIC CAP.
1	C 211	265647112	47uF 25V RADIAL ELECTROLYTIC CAP.
1	C 212	265647112	47uF 25V RADIAL ELECTROLYTIC CAP.
1	C 213	265610113	10uF 25V RADIAL ELECTROLYTIC CAP.
1	C 214	265610113	10uF 25V RADIAL ELECTROLYTIC CAP.
1	C 215	265610113	10uF 25V RADIAL ELECTROLYTIC CAP.
1	C 216	260310121	10nF 63V CERAMIC CAPACITOR
1	C 301	265510011	1uF 63V RADIAL ELECTROLYT CAP.
1	C 302	265510011	1uF 63V RADIAL ELECTROLYT CAP.
1	C 303	265610113	10uF 25V RADIAL ELECTROLYTIC CAP.
1	C 304	265610113	10uF 25V RADIAL ELECTROLYTIC CAP.
* 1	CABINET 01	380PA02039	FRONT PANEL, PRINT
* 1	CABINET 02	387PA0204	BACK PANEL, PRINT
* 1	CABINET 03	387PA0202	TOP PLATE, PAINT
* 1	CABINET 04	387PA0201	BOTTOM, PAINT
* 1	CABINET 05	3800800057	HANDLE, PAINT
* 1	CABINET 06	3800800057	HANDLE, PAINT
1	D 001	246414800	1N 4148 DIODE
1	D 002	245150051	15V (Z) ZENER DIODE
1	D 003	245150051	15V (Z) ZENER DIODE
1	D 004	246414800	1N 4148 DIODE
1	D 005	246414800	1N 4148 DIODE
1	D 101	246414800	1N 4148 DIODE
1	D 102	245150051	15V (Z) ZENER DIODE
1	D 103	245150051	15V (Z) ZENER DIODE
1	D 104	246414800	1N 4148 DIODE
1	D 105	246414800	1N 4148 DIODE
* 1	D 201	2472122500	1200V 25A BRIDGE CIRCUIT
* 1	D 202	2471600150	BRIDGE RECTIFIER
1	D 203	246414800	1N 4148 DIODE
1	D 204	246414800	1N 4148 DIODE
1	D 205	246414800	1N 4148 DIODE
1	D 206	246414800	1N 4148 DIODE

Spare parts list for JAMO ProAmp 200

Antal	Referencenr.	Komponent	Extern varebetegnelse
1	D 207	246414800	1N 4148 DIODE
1	D 208	246414800	1N 4148 DIODE
1	D 209	246414800	1N 4148 DIODE
1	D 210	245120050	12V 1/2W ZENER (Z) DIODE
1	D 211	245120050	12V 1/2W ZENER (Z) DIODE
1	D 212	246414800	1N 4148 DIODE
1	D 213	246414800	1N 4148 DIODE
1	D 214	246414800	1N 4148 DIODE
1	D 301	246414800	1N 4148 DIODE
1	D 302	246414800	1N 4148 DIODE
1	D 303	246414800	1N 4148 DIODE
1	D 304	246414800	1N 4148 DIODE
1	D 305	245090050	9V 1/2W ZENER (Z) DIODE
1	D 306	246414800	1N 4148 DIODE
1	F 001	3502060000	6,3 AT FUSE
1	F 002	3502060000	6,3 AT FUSE
1	F 101	3502060000	6,3 AT FUSE
1	F 102	3502060000	6,3 AT FUSE
1	F 201	3502020AT	FUSE 2 A SLOW BLOW
1	F 202	3502003100	0,315AT FUSE
*	1	FITT 1	3800000110 PROFIL F/PROAMP 105 MM
*	1	FITT 2	37400002 ISOLATOR F/ POWER SWITCH
*10	FITT 3	35100SHPR3	FUSE HOLDER
4	FITT 4	3621101304	13x10MM BLACK, RUBBER FOOT
8	GLIM	3702TO3P1	MICA WASHER
1	HEATS 401	366PA02322	HEAT SINK
1	HEATS 402	366PA02322	HEAT SINK
1	IC 201	220700840	TL 084 QUAD OP AMP
1	IC 301	220700820	TL 082
1	IC 302	218001060	CD 40106 C-MOS
*	1	KN 01	3562000001 BUTTON FOR NETSWITCH
*	2	KN 02	355060001 KNOB
1	L001	337061000	10uH DROSSEL COIL
1	L101	337061000	10uH DROSSEL COIL
1	LD 301	250003201	LED 3MM RED
1	LD 302	250003201	LED 3MM RED
1	LD 303	250003201	LED 3MM RED
1	LD 304	250003201	LED 3MM RED
1	LD 305	250003201	LED 3MM RED
1	LD 306	250003201	LED 3MM RED
1	LD 307	250003201	LED 3MM RED
1	LD 308	250003201	LED 3MM RED
1	LD 309	250003201	LED 3MM RED
1	LD 310	250003201	LED 3MM RED
10	LIGL 01	391000010	LED FITTING
0	MIC	374SILICON	SILICONE COMP.
1	P 001	280101300	1K0 OHM VARIABEL RESISTOR HORIZONTAL
1	P 002	280101300	1K0 OHM VARIABEL RESISTOR HORIZONTAL
1	P 101	280101300	1K0 OHM VARIABEL RESISTOR HORIZONTAL
1	P 102	280101300	1K0 OHM VARIABEL RESISTOR HORIZONTAL
*	1	P 201	2830210126 10K OHM POTMETER LOG + 6MM AXEL
*	1	P 202	2830210126 10K OHM POTMETER LOG + 6MM AXEL
*	1	PACK 01	4501002000 CARDBOARD BOX FOR PROAMP 200
*	1	PACK 02	4524000600 400x600x0,025 PLAST BAG
1	PACK 03	4522000400	PLASTBAG FOR WARRANTY CARD + MANUAL
2	PACK 04	4551001000	POLYSTYRENE PACKING
1	PACK 07	50JAMOPM02	USERS GUIDE
1	PCB	100PA02201	PCB PROAMP 200
*	1	PL 201	316010303 CINCH CONNECTOR

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Antal	Referencenr.	Komponent	Extern varebetegnelse
*	1	PL 202	316010303 CINCH CONNECTOR
*	1	PL 203	327070402 LOADSPEAKER TERMINAL
*	1	PL 204	327070402 LOADSPEAKER TERMINAL
*	1	PL 205	318030011 POWER SOCKET/FUSE/SWITCH
	1	PW 1	3041307502 MAINS CABLE
	1	Q 001	2300639001 BC 639
	1	Q 002	2300639001 BC 639
	1	Q 003	2320472002 BF 472
	1	Q 004	2320640001 BC 640
	1	Q 005	2300471002 BF 471
*	1	Q 006	2300040511 2 SK 405 MOS
*	1	Q 007	2300040511 2 SK 405 MOS
*	1	Q 008	2320011511 2 SJ 115 MOS
*	1	Q 009	2320011511 2 SJ 115 MOS
	1	Q 010	2320640001 BC 640
	1	Q 101	2300639001 BC 639
	1	Q 102	2300639001 BC 639
	1	Q 103	2320472002 BF 472
	1	Q 104	2320640001 BC 640
	1	Q 105	2300471002 BF 471
*	1	Q 106	2300040511 2 SK 405 MOS
*	1	Q 107	2300040511 2 SK 405 MOS
*	1	Q 108	2320011511 2 SJ 115 MOS
*	1	Q 109	2320011511 2 SJ 115 MOS
	1	Q 110	2320640001 BC 640
	1	Q 201	2300547001 BC 547B / BC 237B
	1	Q 202	2300547001 BC 547B / BC 237B
	1	Q 203	2300547001 BC 547B / BC 237B
	1	Q 204	2300547001 BC 547B / BC 237B
	1	R 001	270402220 2K2 OHM RESISTOR
	1	R 002	270403270 27K OHM RESISTOR
	1	R 003	270402330 3K3 OHM RESISTOR
	1	R 004	270400100 10 OHM RESISTOR
	1	R 005	270403470 47K OHM RESISTOR
	1	R 006	270402330 3K3 OHM RESISTOR
	1	R 007	270402100 1K0 OHM RESISTOR
	1	R 008	270403560 56K OHM RESISTOR
	1	R 009	270401120 120 OHM RESISTOR
	1	R 010	270401120 120 OHM RESISTOR
	1	R 011	272103160 10K OHM 1,6 WATT RESISTOR
	1	R 012	270401120 120 OHM RESISTOR
	1	R 013	270402100 1K0 OHM RESISTOR
	1	R 014	270402100 1K0 OHM RESISTOR
	1	R 015	270402100 1K0 OHM RESISTOR
	1	R 016	270402100 1K0 OHM RESISTOR
	1	R 017	270200100 10 OHM 1/2 WATT RESISTOR
	1	R 018	270001501 0,1 OHM 5 WATT RESISTOR
	1	R 019	270001501 0,1 OHM 5 WATT RESISTOR
	1	R 020	270401470 470 OHM RESISTOR
	1	R 021	270402100 1K0 OHM RESISTOR
	1	R 101	270402220 2K2 OHM RESISTOR
	1	R 102	270403270 27K OHM RESISTOR
	1	R 103	270402330 3K3 OHM RESISTOR
	1	R 104	270400100 10 OHM RESISTOR
	1	R 105	270403470 47K OHM RESISTOR
	1	R 106	270402330 3K3 OHM RESISTOR
	1	R 107	270402100 1K0 OHM RESISTOR
	1	R 108	270403560 56K OHM RESISTOR
	1	R 109	270401120 120 OHM RESISTOR

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Antal	Referencenr.	Komponent	Extern varebetegnelse
1	R 110	270401120	120 OHM RESISTOR
1	R 111	272103160	10K OHM 1,6 WATT RESISTOR
1	R 112	270401120	120 OHM RESISTOR
1	R 113	270402100	1K0 OHM RESISTOR
1	R 114	270402100	1K0 OHM RESISTOR
1	R 115	270402100	1K0 OHM RESISTOR
1	R 116	270402100	1K0 OHM RESISTOR
1	R 117	270200100	10 OHM 1/2 WATT RESISTOR
1	R 118	270001501	0,1 OHM 5 WATT RESISTOR
1	R 119	270001501	0,1 OHM 5 WATT RESISTOR
1	R 120	270401470	470 OHM RESISTOR
1	R 121	270402100	1K0 OHM RESISTOR
1	R 201	270404100	100K OHM RESISTOR
1	R 202	270404100	100K OHM RESISTOR
1	R 203	270404100	100K OHM RESISTOR
1	R 204	270403100	10K OHM RESISTOR
1	R 205	270402820	8K2 OHM RESISTOR
1	R 206	270403100	10K OHM RESISTOR
1	R 207	270401330	330 OHM RESISTOR
1	R 208	270403100	10K OHM RESISTOR
1	R 209	270403100	10K OHM RESISTOR
1	R 210	270404100	100K OHM RESISTOR
1	R 211	270403100	10K OHM RESISTOR
1	R 212	270404100	100K OHM RESISTOR
1	R 213	270402100	1K0 OHM RESISTOR
1	R 214	272222201	2K2 OHM 2 W RESISTOR
1	R 215	272222201	2K2 OHM 2 W RESISTOR
1	R 216	270403220	22K OHM RESISTOR
1	R 217	270403220	22K OHM RESISTOR
1	R 218	270402470	4K7 OHM RESISTOR
1	R 219	270403100	10K OHM RESISTOR
1	R 301	270402100	1K0 OHM RESISTOR
1	R 302	270402100	1K0 OHM RESISTOR
1	R 303	270402680	6K8 OHM RESISTOR
1	R 304	270402100	1K0 OHM RESISTOR
1	R 305	270404100	100K OHM RESISTOR
1	R 306	270402680	6K8 OHM RESISTOR
1	R 307	270402100	1K0 OHM RESISTOR
1	R 308	270404100	100K OHM RESISTOR
1	R 309	270402100	1K0 OHM RESISTOR
1	R 310	270402100	1K0 OHM RESISTOR
1	R 311	270402100	1K0 OHM RESISTOR
1	R 312	270402100	1K0 OHM RESISTOR
1	R 313	270601100	100 OHM 1 WATT RESISTOR
1	R 314	270400100	10 OHM RESISTOR
1	R 315	270404100	100K OHM RESISTOR
1	R 316	270405100	1M0 OHM RESISTOR
1	R 317	270404100	100K OHM RESISTOR
1	R 318	270400100	10 OHM RESISTOR
1	R 319	270405100	1M0 OHM RESISTOR
1	R 320	270402100	1K0 OHM RESISTOR
1	R 321	270404100	100K OHM RESISTOR
1	R 322	270404100	100K OHM RESISTOR
1	R 323	270402100	1K0 OHM RESISTOR
1	R 324	270403100	10K OHM RESISTOR
1	R 325	270403100	10K OHM RESISTOR
*	1	RELAY	330012206 12V RELAY
2	S 1	3080050001	FLEXIBLE SLEEVE 5MM x 170MM
1	S 2	3080050002	FLEXIBLE SLEEVE 5MM x 100MM

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Antal	Referencnr.	Komponent	Extern varebetegnelse
13	SCREW 1	3603006411	M3x6MM BLACK
5	SCREW 10	363700300	M3 STAR WASHER
1	SCREW 11	3604016411	M4x16MM BLACK
1	SCREW 12	36300400	M4 NUT, SHINY
10	SCREW 2	3611041010	3 mm x 1/2', BLACK
8	SCREW 3	3603012011	M3x12MM, SHINY
4	SCREW 4	3615041010	5 mm x 1/2', BLACK
4	SCREW 5	3604170411	M4x170MM, BLACK
1	SCREW 6	360690050	M6x90, SHINY
1	SCREW 7	36300600	M6 NUT
5	SCREW 8	363700440	M4 STAR WASHER, BLACK
1	SCREW 9	363700600	M6 STAR WASHER
* 1	SW 201	3551000402	NETSWITCH W.FITTINGS
* 1	TR 1	336332002	TRANSFORMER
1	W 1	302080140	180mm 8 CORE
1	W 2	302020140	250MM 2 CORE
1	W 3	3000150110	60MM 0.75# YELLOW/GREEN /TAG
1	W 4	3000075105	250MM 0.75# BROWN
1	W 5	3000075106	140MM 0.75# BLUE
1	W 6	3000075107	260MM 0.2# BLACK
1	W 8	3092524415	150MM 2x0.75# BROWN/BLACK W/TAG/SLEWE
1	W7	3000075108	100MM 0.2# BLACK