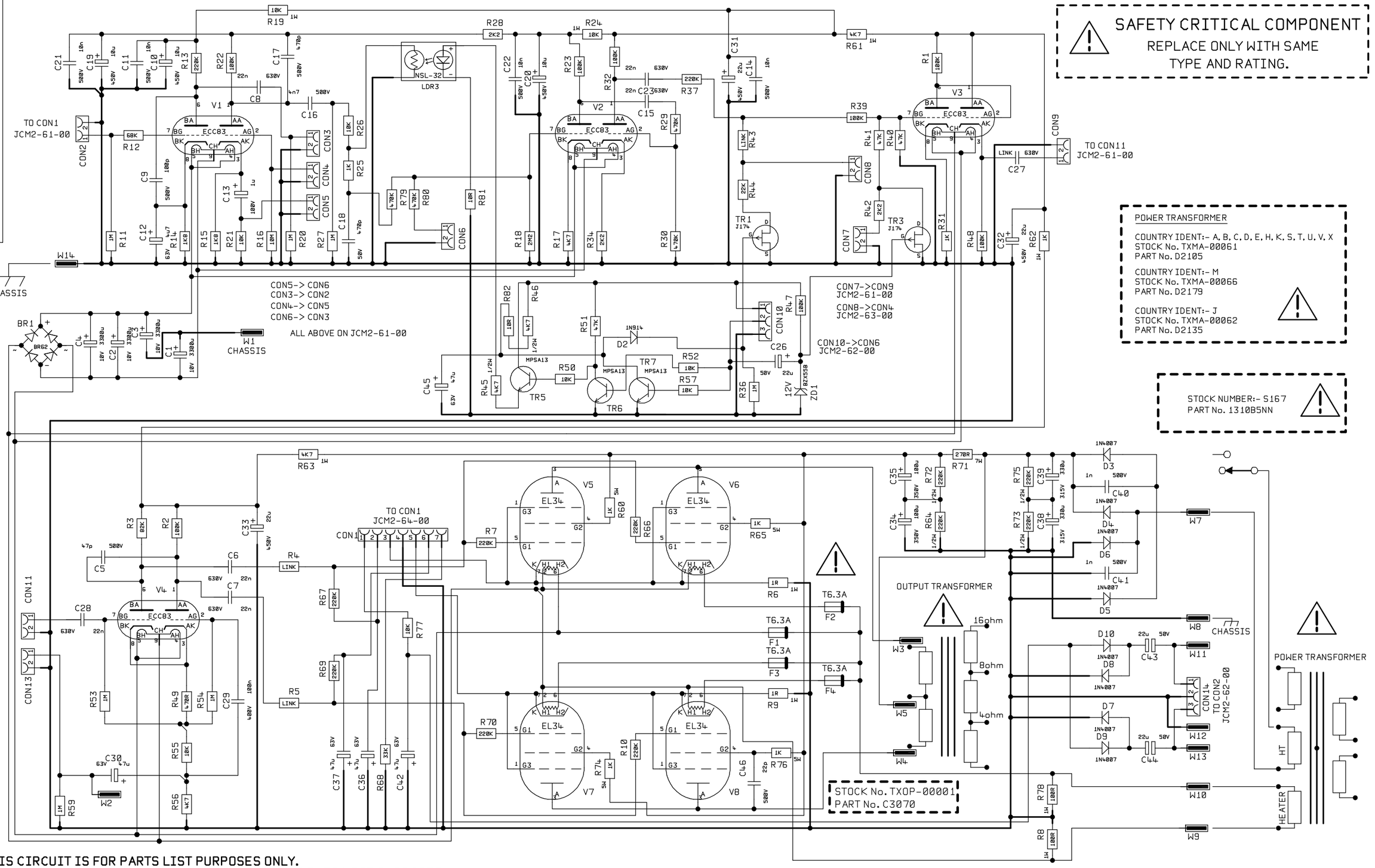
ignorelayers 7

DWG.No. JCM2-60-02.DGM



THIS CIRCUIT IS FOR PARTS LIST PURPOSES ONLY.
SCHEMATIC JCM2-68-02.DGM SHOULD BE USED FOR RATS NEST PURPOSES.

ISS	ECO NUMBER	DATE
5	1565	14/9/98
4	1553	15/12/97
3	1540	14/11/97
2	1466	1/8/97

ALL OTHER HOLES = X = (THROUGH PLATED)

A			E			J			N			
B			F			K			P			
C			G			L			Q			
D			H			M			R			

MATERIAL		DIMENSIONS IN	
MATERIAL THICKNESS		TOLERANCE (UNLESS UTHERWISE STATED)	
DRAWN	S.G	DATE	19/3/97
CHECKED		DATE	
APPROVED		DATE	
MODEL	DSL100		

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TITLE JCM2000 SUPERLEAD STANDARD

DWG.No JCM2-60-02.DGM ISS 5

ignorelayers 7

DWG.No. JCM2-61-00.DGM

CON2->CON3
JCM2-60-00
CON2

R13 10M
RL1c
C CONTACT DPDT 12V
R11 10M
RL1b
B CONTACT DPDT 12V

220p 50V C5
R6 100K
R8 82K
C8 4n7 63V
C2 4n7 63V
R2 10K
R7 150K
R10 100K
R12 470K
C7 470p 50V
1n
SW1a
Cu 100p 50V
C6 63V
SW1c
R5 10M
R9 10R
R4 1M
R3 1M
A1M VR1
SW1b

C10 4n7 63V
2n2 63V
R19 470K
C11
R20 47K
C12 470p 50V
R21 150K
A1M VR3
SW3b
C13 470p 50V
R22 10M
CON5
SW3a
CON6
CON3

CON3->CON6
CON6->CON5
JCM2-60-00

CON5->CON4
CON12->CON13
JCM2-60-00

CON12
C30 100n 63V
B5K VR10
SW5b
R43 10K
C29 10u 100V
IC2b RC4558P
R42 330R
R41 270R
10u 100V
C28

CON11->CON9
JCM2-60-00
CON11
R34 10M
470p 500V C19
SW4b
470p 500V C20
R35 33K
VR9 B200K
SW4a
R36 68K
22n 630V C21
C23 22n 630V
C22 VR8
SW4c
R37 10M
R38 10K
A1M VR7
A1M VR2
A1M VR4
220n C24

CON7->CON11
JCM2-60-00
12V DPDT CONTACT
B RL2b
MUTE
RL3b
B CONTACT DPDT 24V
R25 10M
CON7
2M2 R40
63V C26 220n
IC2a RC4558P
680K R39
C25 10u 100V

CON9->CON7 JCM2-60-00
CON8->CON2 JCM2-63-00

R27 10K
R28 10K
CON8
220n 63V
R29 10K
CON9
R33 10K
C14
C16 1n 63V
C15 4.7n 63V
C17 4.7n 63V
IC1 M5201
+VCC
-VCC
B22K VR5
B22K VR6
1K0 R30
R32 4.7K
R31 4.7K
TR4 MPSA13
C18 10n 63V
RC4558P IC2c
C27 10n 63V

CON10->CON3
JCM2-62-00
CON10

JS1
BEAD
L2
S2-PC MONOP
MUTE
LK1 LINK
C3 47p 50V
CON1
CON1->CON2
JCM2-60-00
D1 1N5408 1N5408
D2 10R 1/2W R1
SCREEN1
W1
C1 63V 220n

CON4->CON5
JCM2-62-00
CON4
R26 10K
R15 10K
C9 10n 63V
R18 4K7 1/2W
R17 100K
LED2 5mm RED
TR1 MPSA13
R16 10K
RL2a 12V COIL DPDT
RL1a COIL DPDT
D3 22u 25V
LED1 5mm GREEN
TR2 MPSA13
R23 10K
R24 10K
D4 1N4007
RL3a 24V COIL DPDT
TR3 MPSA13
SW2a

			ALL OTHER HOLES =			X = (THROUGH PLATED)												
4	1786	16-3-99	A			E			J			N						
3	1553	15/12/97	B			F			K			P						
2	1502	1/10/97	C			G			L			Q						
ISS	ECO NUMBER	DATE	D			H			M			R						

MATERIAL		DIMENSIONS IN	
MATERIAL THICKNESS		TOLERANCE (UNLESS UTHERWISE STATED)	
DRAWN SG	DATE 24_2_97		
CHECKED	DATE	MODEL JCM2000	
APPROVED	DATE		

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TITLE JCM2000 SUPERLEAD STANDARD

DWG.No JCM2-61-00.DGM ISS 4

ignorelayers 7

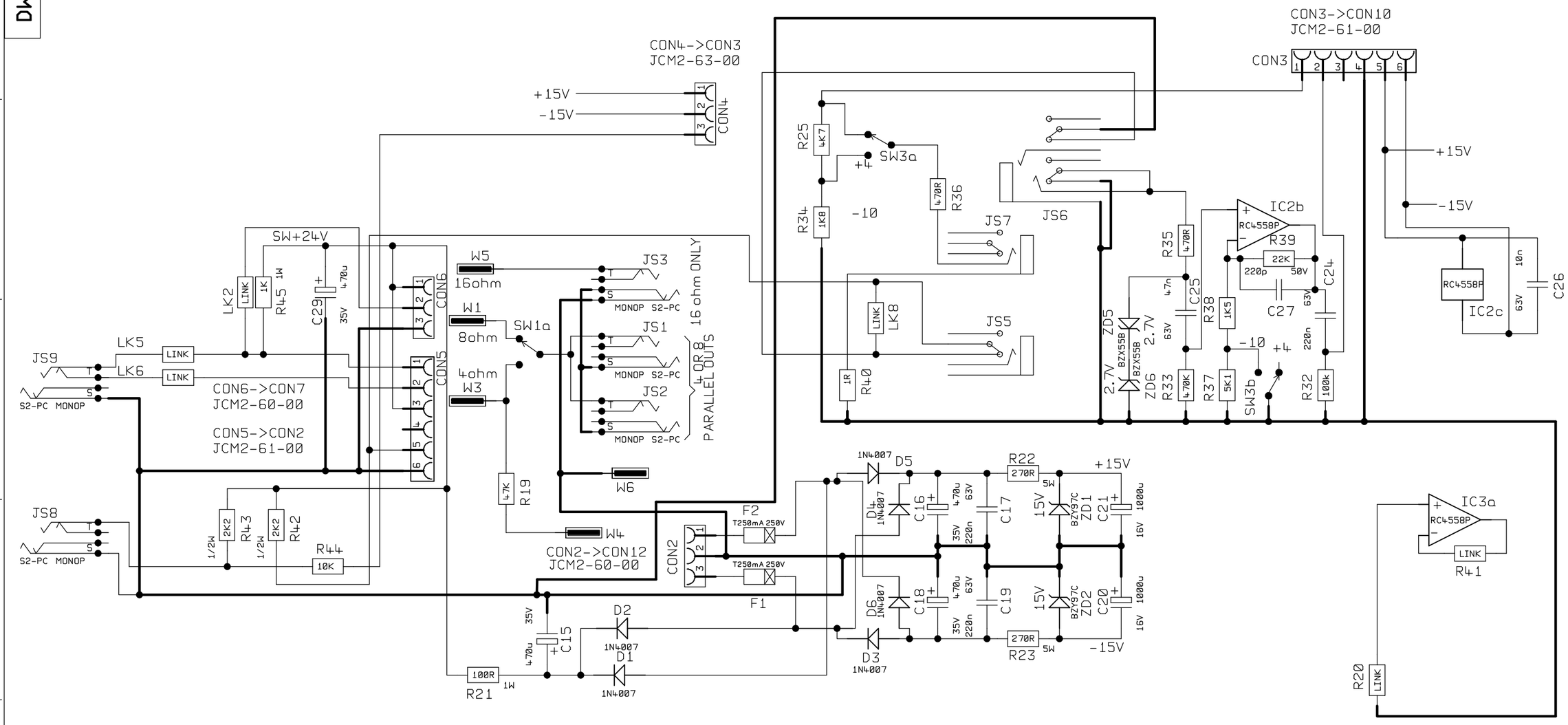
DWG.No. JCM2-62-02.DGM

NOTES

JS5 NOT FITTED

WIRE LINKS TO BE FITTED:- LK2, LK5, LK6, LK8

WIRE LINKS TO BE OMMITTED:- LK1, LK3, LK4, LK7



GENERIC PCB JCM2-62-00.ART

SEE JCM2-69-00.DGM FOR DESIGN SCHEMATIC

ALL OTHER DESIGNATIONS (EXCEPT REQUIRED LINKS) SHOULD BE UNFILLED

			ALL OTHER HOLES =			X = (THROUGH PLATED)								
			A		E		J		N					
2	1466	1/8/97	B		F		K		P					
1	PRODUCTION	20/6/97	C		G		L		Q					
ISS	ECO NUMBER	DATE	D		H		M		R					

MATERIAL		DIMENSIONS IN	
MATERIAL THICKNESS		TOLERANCE (UNLESS UTHERWISE STATED)	
DRAWN SG	DATE 25-2-97		
CHECKED	DATE	MODEL	DSL100/DSL50
APPROVED	DATE		

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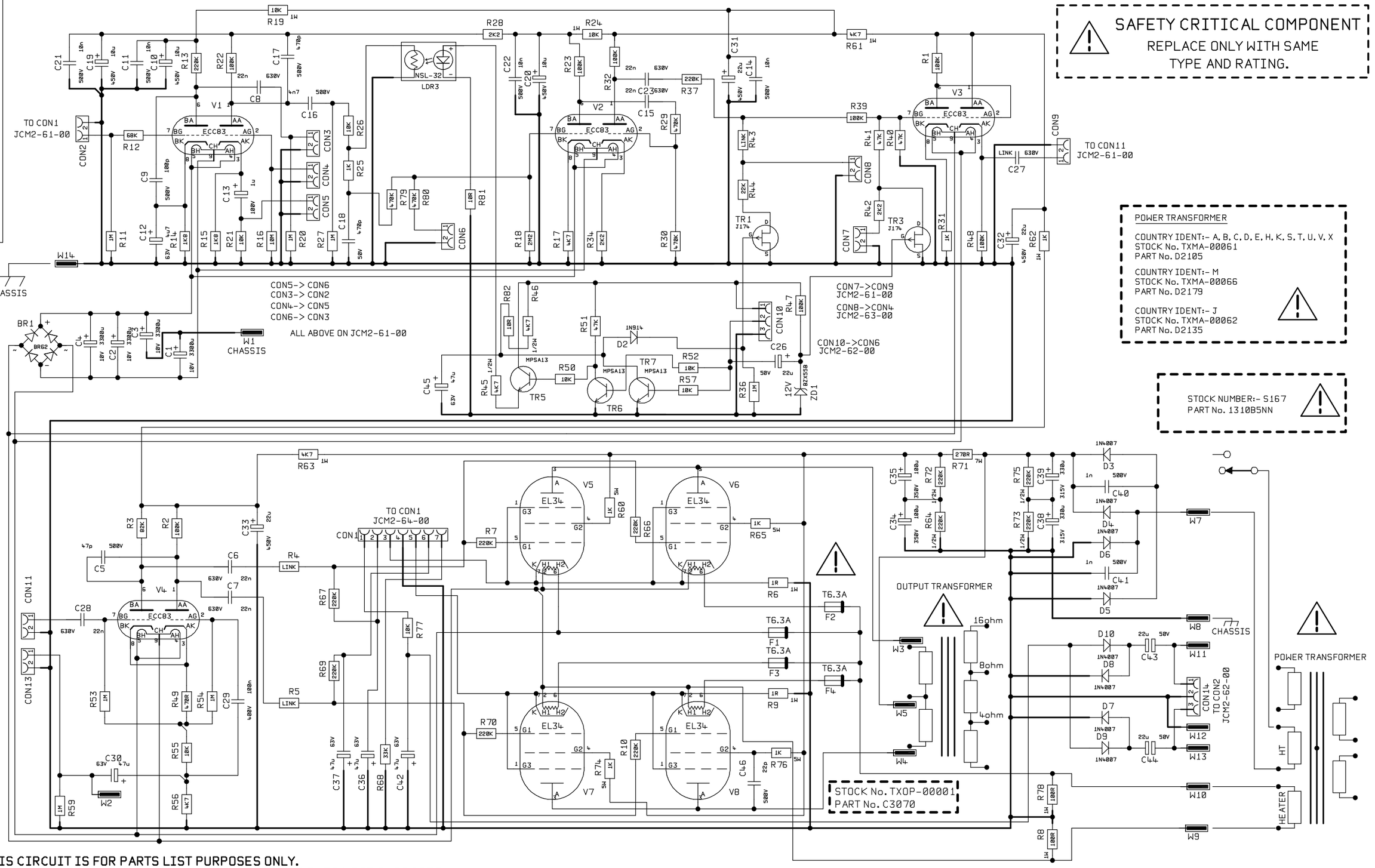
TITLE JCM2000
REAR OUTPUT PCB SCHEMATIC

DWG.No JCM2-62-02.DGM ISS 2

ignorelayers 7

DWG.No. JCM2-60-02.DGM



THIS CIRCUIT IS FOR PARTS LIST PURPOSES ONLY.
SCHEMATIC JCM2-68-02.DGM SHOULD BE USED FOR RATS NEST PURPOSES.

ISS	ECO NUMBER	DATE
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ALL OTHER HOLES = X = (THROUGH PLATED)

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B			F			K			P			
C			G			L			Q			
D			H			M			R			

MATERIAL		DIMENSIONS IN	
MATERIAL THICKNESS		TOLERANCE (UNLESS UTHERWISE STATED)	
DRAWN	S.G	DATE	19/3/97
CHECKED		DATE	
APPROVED		DATE	
MODEL	DSL100		

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TITLE JCM2000 SUPERLEAD STANDARD

DWG.No JCM2-60-02.DGM ISS 5

MARSHALL SERVICE BULLETIN

SUBJECT: Bias Info/Procedure for JCM2000 series Marshall amplifiers

THEORY OF OPERATION: We are setting the bias using the current method instead of cross over distortion method. The molex connector CON2 pin out as follows:
PR1: Bias mini-pot adjustment for pin1 and for two output tubes(100w) or one output tube(50w) or one side of the push/pull amp.
Pin1: Connected to the cathode of the output tube which then goes through a 1 ohm resistor then to ground.
Pin2: ground reference
Pin3: Same as pin1 but for the other side of the push/pull amp.
PR2: Bias mini-pot adjustment for pin3 and other side of the push/pull amp

PROCEDURE:

1. Make sure amplifier is connected to a load with the proper impedance selected.
2. Power up amplifier on STANDBY and let the circuit stabilize for a couple of minutes.
3. Locate the male three pin molex connector (CON2) with the two mini-pots (PR1 and PR2) on both ends found on the bottom of the tube bay.
4. Connect DMM (set to read mV) with alligator leads, reference common lead to center pin (pin2) on molex connector CON2 and positive lead to pin1 on CON2.
5. Take amplifier off of STANDBY with no signal, adjust mini-pot (PR1) closest to pin that the positive lead from your DMM is connected to and set it to the mV voltage that is listed in the chart below.
6. Repeat steps 4 & 5 for pin3 and until both pin1 and pin3 mV are the same.

BIAS CHART mV SETTINGS

(pin1 and pin3)

DSL50	**45mV**	**TSL60/1/2**	**80mV**
DSL100	**90mV**	**DSL401**	**1.375V**
TSL100/122	**90mV**	**DSL201**	**.675V**