BARCO

BARCO Projection Systems

SECTION Q

service sheet

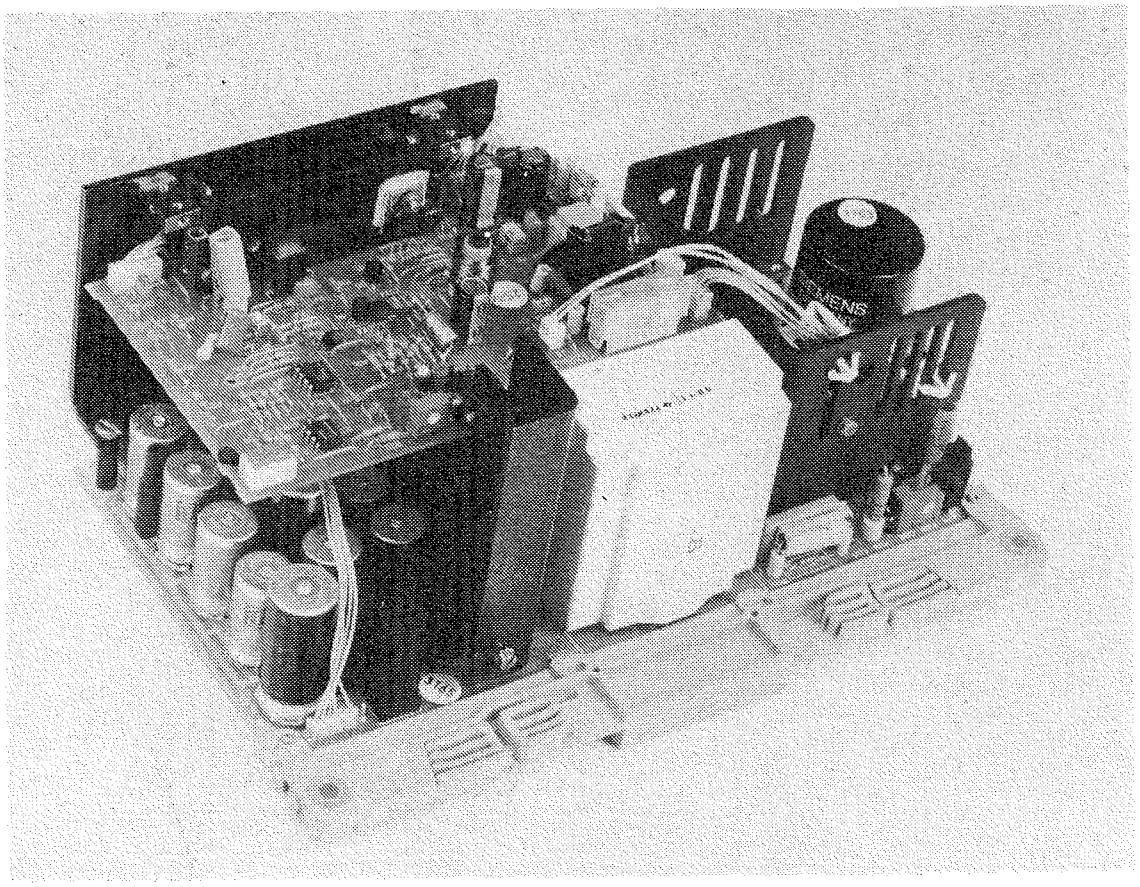
Noordlaan 5 B-8720 Kuurne - Belgium Telex 85.305 Tel. (056)36.82.11 Telefax (056)35.16.51

SM POWER SUPPLY MODULE 76 1736

SUB-MODULE SM POWER SUPPLY 76 1737

WARNING

THIS CIRCUIT BOARD IS HOT TO AC. THIS POWER SUPPLY, LIKE THE HIGH VOLTAGE POWER SUPPLY, DOES NOT USE A LINE ISOLATION TRANSFORMER, MEANING A PORTION OF THE CIRCUITRY IS HOT-TO-LINE AND SHOULD BE TREATED WITH CAUTION.



COMP.	LOC.	COMP.	LOC.
C1	E 6	Q100	E 1
C100	A 5	Q101	E 4
C101	A 5		
C102	B 4	R1	E 6
C103	A 5	R100	A 4
C104	C 1	R101	B 4
C105	D 1	R102	A 4
C106	E 1	R103	B 5
C107	C 2	R104	D 1
C108	D 2	R105	D 1
C109	D 2	R106	E 1
C110	D 2	R107	E 2
C111	D 2	R108	D 2
C112	E 3	R109	D 2
C113	D 3	R110	D 2
C114	D 4	R111	E 2
C115	E 4	R112	E 3
C116	C 4	R113	C 3
C117	C 5	R114	D 3
C118	D 5	R115	D 3
C119	E 5	R116	C 3
C120	C 5	R117	D 3
C121	D 6	R118	D 3
C122	E 6	R119	D 4
C200	F 1	R120	D 4
C201	F 1	R121	E 4
C202	F 3	R122	D 4
C203	G 3	R123	D 4
C204	F 3	R124	D 5
C205	G 3	R125	D 5
C206	F 4	R126	E 5
C207	F 4	R127	D 5
C208	F 5	R128	E 5
C209	F 5	R129	D 5
C210	F 5	R130	C 5
C211	F 6	R131	D 5
C212	F 6	R132	D 5
C213	F 4	R133	D 6
C214	F 1	R135	D 2
		R136	C 4
DI04	A 4	R202	F 6
DI05	B 4		
DI06	C 1	SR134	E 5
DI07	D 1	SR200	H 6
DI08	D 2		
DI09	D 4	TI	E 1
DI10	D 4	T2	E 3
DI11	D 5		
DI12	E 5	THYRI	A 4
D200	F 1		
D201	F 3	ZI00	A 4
D202	F 4	ZI01	D 2
D203	F 4		
D204	F 4		
D205	F 4		
D206	F 5		
D207	F 5		
D208	F 6		
D209	F 6		
D210	F 3		
D211	F 5		
FI00	B 5		
F200	F 3		
F201	F 4		
F202	F 4		
F203	F 4		
F204	F 5		
F205	F 6		
F206	F 6		
IC100	C 3		
IC101	C 6		
IC101	D 3		
IC101	C 5		
IC101	D 5		
IC102	C 5		
JI	B 4		
J2	B 5		
J3	G 5		
J4	H 5		
J6	D 3		
LI00	C 1		
LI01	C 4		
LI03	E 5		
LI05	E 2		
LI06	D 4		
L200	F 6		
L201	F 6		
L202	G 3		
L203	G 4		
L204	G 4		
L205	G 4		
PI00	D 5		

780010

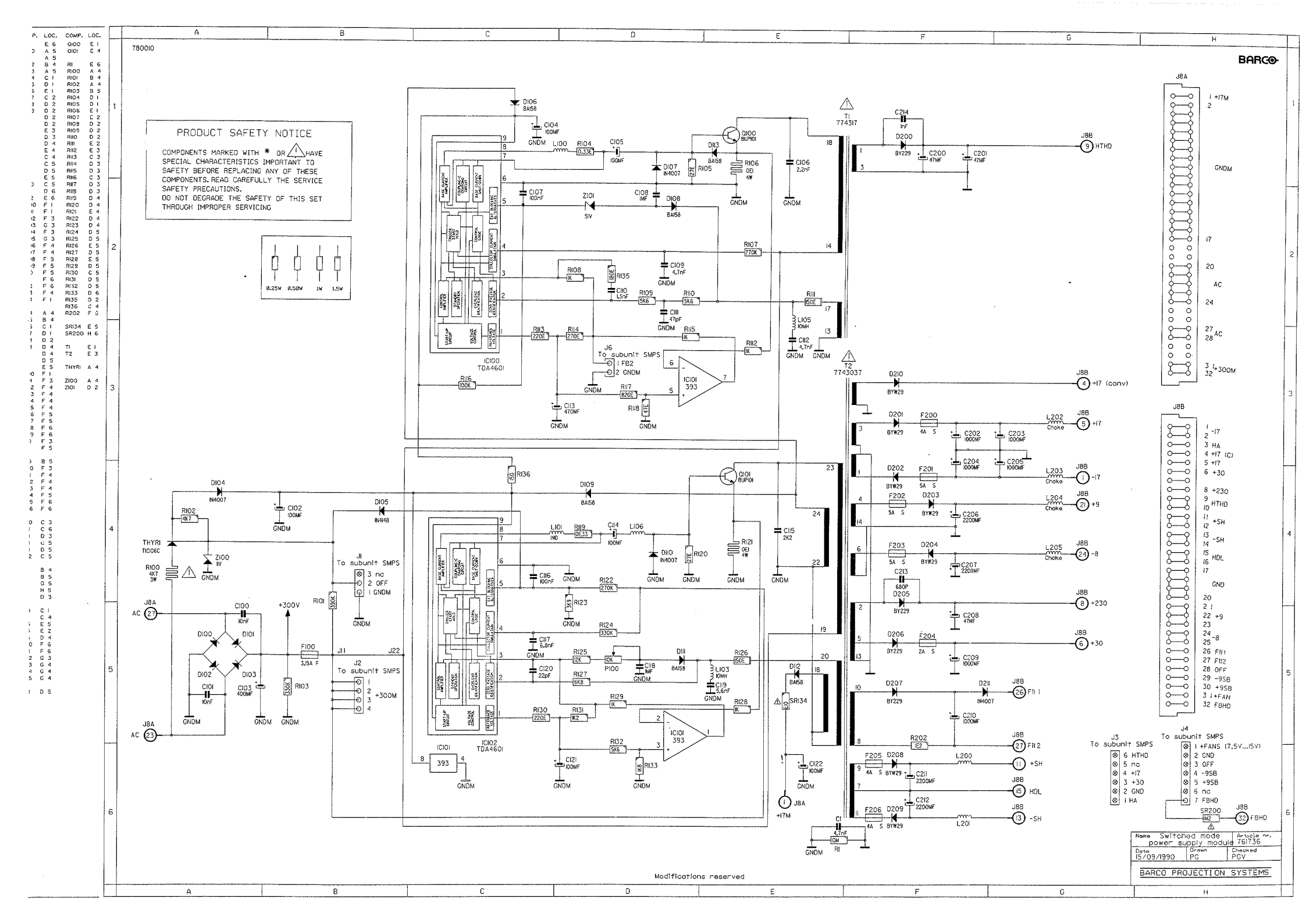
PRODUCT SAFETY NOTICE

COMPONENTS MARKED WITH * OR ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT TO SAFETY BEFORE REPLACING ANY OF THESE COMPONENTS. READ CAREFULLY THE SERVICE SAFETY PRECAUTIONS.
DO NOT DEGRADE THE SAFETY OF THIS SET THROUGH IMPROPER SERVICING

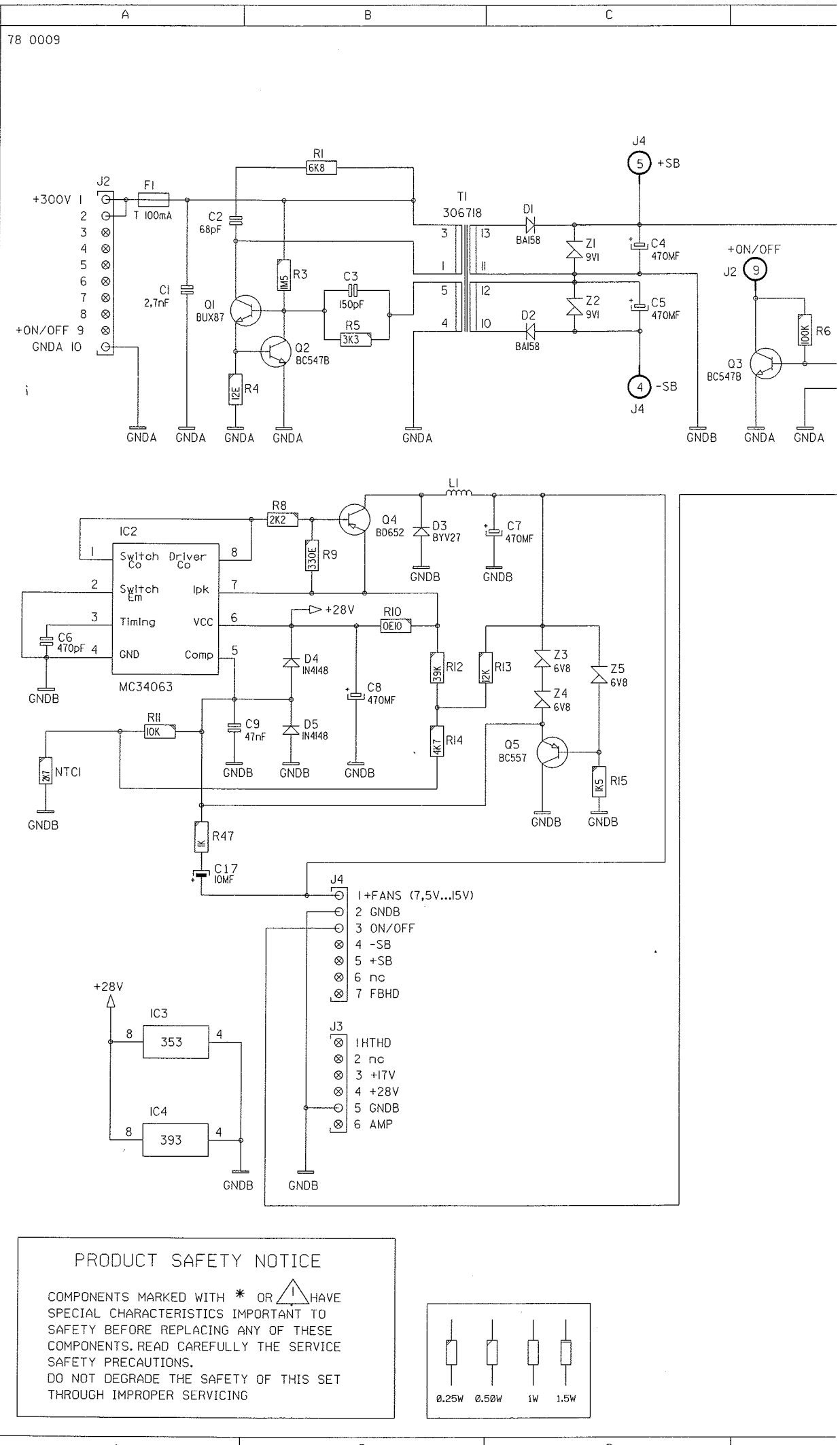
0.25W 0.50W 1W 1.5W

DI06 BAI58
CI04 100MF
GNDM
LI00
RI04 0,33E
CI07 100nF
ZI01 5IV
RI08 1K
RI13 220E
RI14 270E
RI16 100K
CI13 470MF
IC100 TDA4601

DI04 IN4007
CI02 100MF
DI05 IN4148
RI36 150
DI09 BAI58
RI02 4K7
THYRI TIC106C
ZI00 11V
RI00 4K7 3W
J1 To subunit SMPS
3 nc
2 OFF
1 GNDM
RI01 390K
J8A AC 27
CI00 10nF
+300V
DI00 DI01 DI02 DI03
FI00 3,15A F
J11 J22
J2 To subunit SMPS
1 2 +300M 3 4
CI01 10nF
CI03 400M
RI03 330K
J8A AC 23
LI01 IND
RI19 0E33
CI16 100nF
RI23 3K9
CI17 6,8nF
RI25 12K
CI20 22pF
RI27 6K8
RI30 220E
RI31 1K2
IC102 TDA4601
IC101 393
CI21 100MF
GNDM


780010
BARCO
PRODUCT SAFETY NOTICE
COMPONENTS MARKED WITH * OR ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT TO SAFETY BEFORE REPLACING ANY OF THESE COMPONENTS. READ CAREFULLY THE SERVICE SAFETY PRECAUTIONS.
DO NOT DEGRADE THE SAFETY OF THIS SET THROUGH IMPROPER SERVICING
0.25W 0.50W 1W 1.5W
IC100 TDA4601
IC101 393
IC102 TDA4601
T1 774317
T2 774303
J6 To subunit SMPS
J1 To subunit SMPS
J2 To subunit SMPS
J3 To subunit SMPS
J4 To subunit SMPS
J8A
J8B
SR134
SR200
THYR1
Modifications reserved
Name Switched mode power supply module
Article nr. 781736
Date 15/09/1990
Drawn PG
Checked PGV
BARCO PROJECTION SYSTEMS

COMP.	LOC.
C1	A 2
C2	A 1
C3	B 2
C4	C 1
C5	C 2
C6	A 3
C7	C 3
C8	B 3
C9	B 3
C10	G 2
C11	F 3
C12	E 3
C13	G 5
C14	E 6
C17	A 4
D1	C 1
D2	C 2
D3	B 3
D4	B 3
D5	B 3
D6	G 1
D7	G 1
D8	F 5
D10	E 5
D11	H 2
D12	F 6
F1	A 1
IC1	D 2
IC2	A 3
IC3	A 5
IC3	A 5
IC3	G 2
IC3	F 1
IC4	A 5
IC4	A 5
IC4	F 5
IC4	G 3
IC5	E 6
J2	A 1
J3	B 5
J4	B 4
J6	D 6
L1	B 2
NTC1	A 4
P1	E 2
P2	F 4
Q1	A 2
Q2	B 2
Q3	C 2
Q4	B 3
Q5	C 4
Q6	F 3
Q7	E 5
Q8	F 6
Q9	G 5
R1	B 1
R3	B 2
R4	B 2
R5	B 2
R6	D 2
R7	D 2
R8	B 3
R9	B 3
R10	B 3
R11	A 3
R12	B 3
R13	C 3
R14	B 4
R15	C 4
R16	F 1
R17	F 1
R18	E 1
R19	F 1
R20	E 1
R21	E 2
R22	H 2
R23	G 2
R24	G 2
R25	G 2
R26	G 1
R27	H 2
R28	E 3
R29	E 3
R30	F 3
R31	F 3
R32	G 3
R33	G 3
R34	E 4
R35	E 5
R36	E 5
R37	E 5
R38	F 4
R39	F 5
R40	F 4
R41	G 4
R42	G 5
R43	G 5
R44	E 6
R45	F 6
R46	F 6
R47	A 4
R48	G 1
R49	F 3
T1	B 1
Z1	C 1
Z2	C 2
Z3	C 3
Z4	C 3
Z5	C 3
Z6	F 2
Z7	E 3
Z8	F 3
Z9	E 5
Z10	F 5

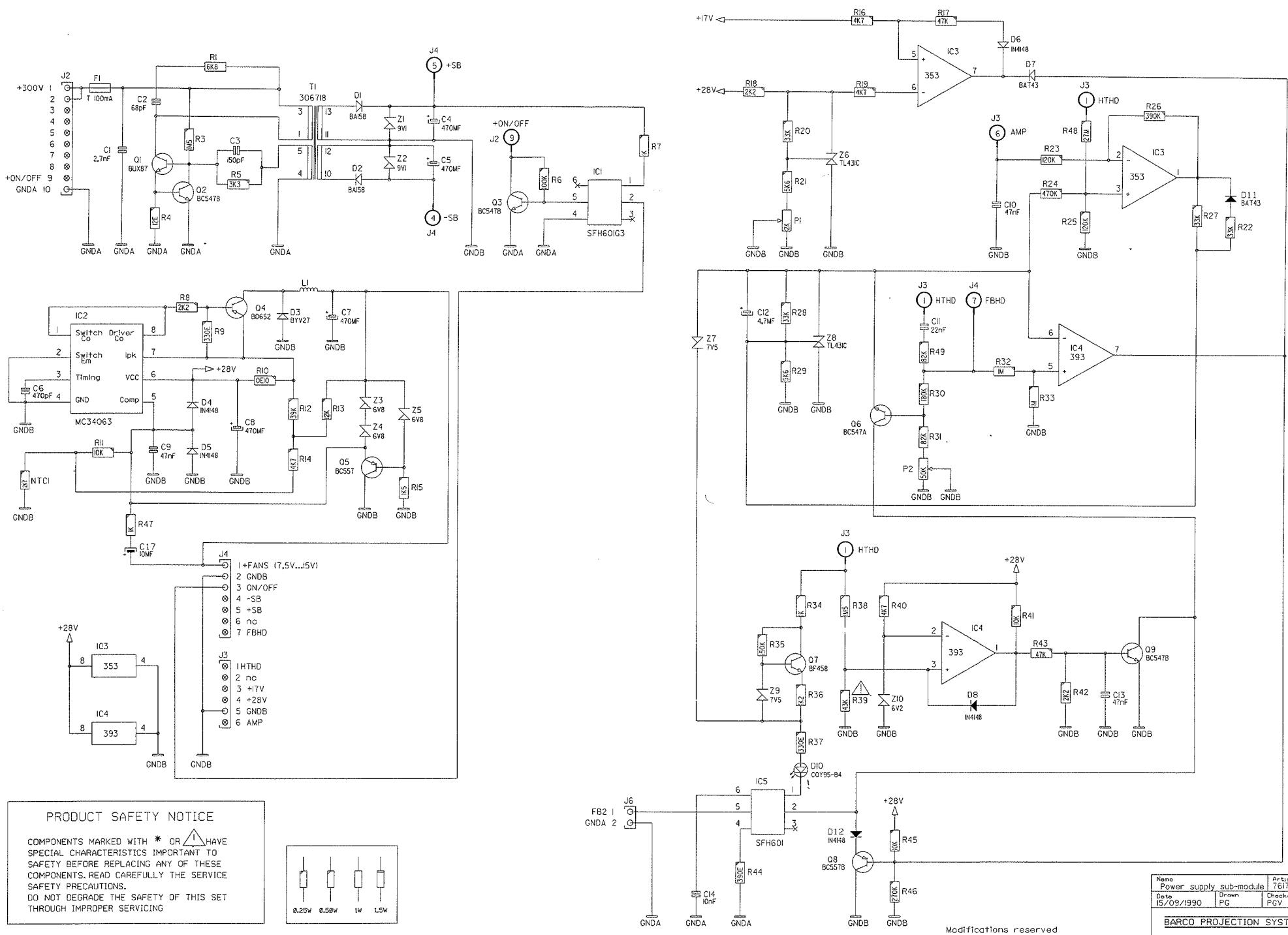


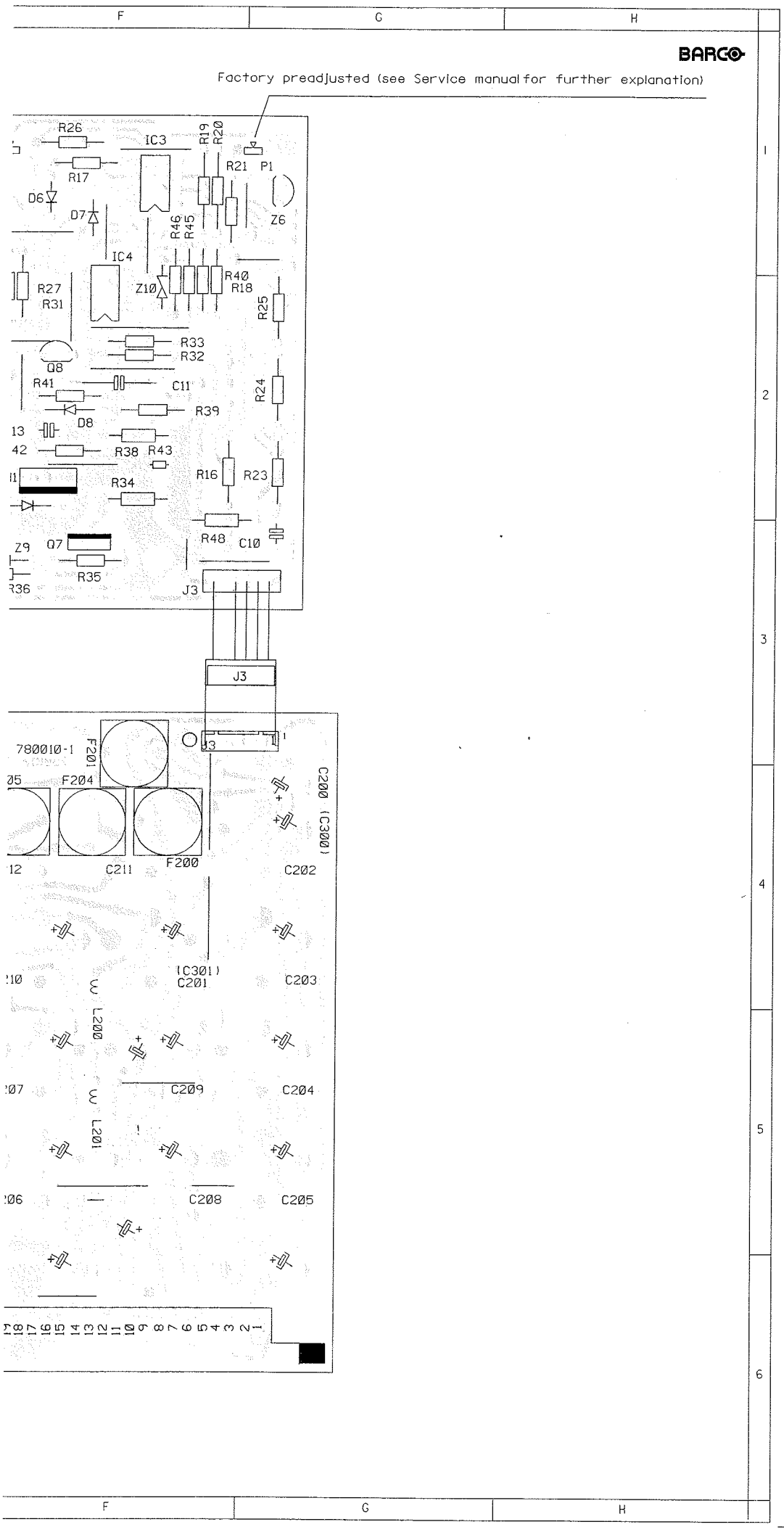
PRODUCT SAFETY NOTICE

COMPONENTS MARKED WITH * OR ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT TO SAFETY BEFORE REPLACING ANY OF THESE COMPONENTS. READ CAREFULLY THE SERVICE SAFETY PRECAUTIONS.
DO NOT DEGRADE THE SAFETY OF THIS SET THROUGH IMPROPER SERVICING

78 0009

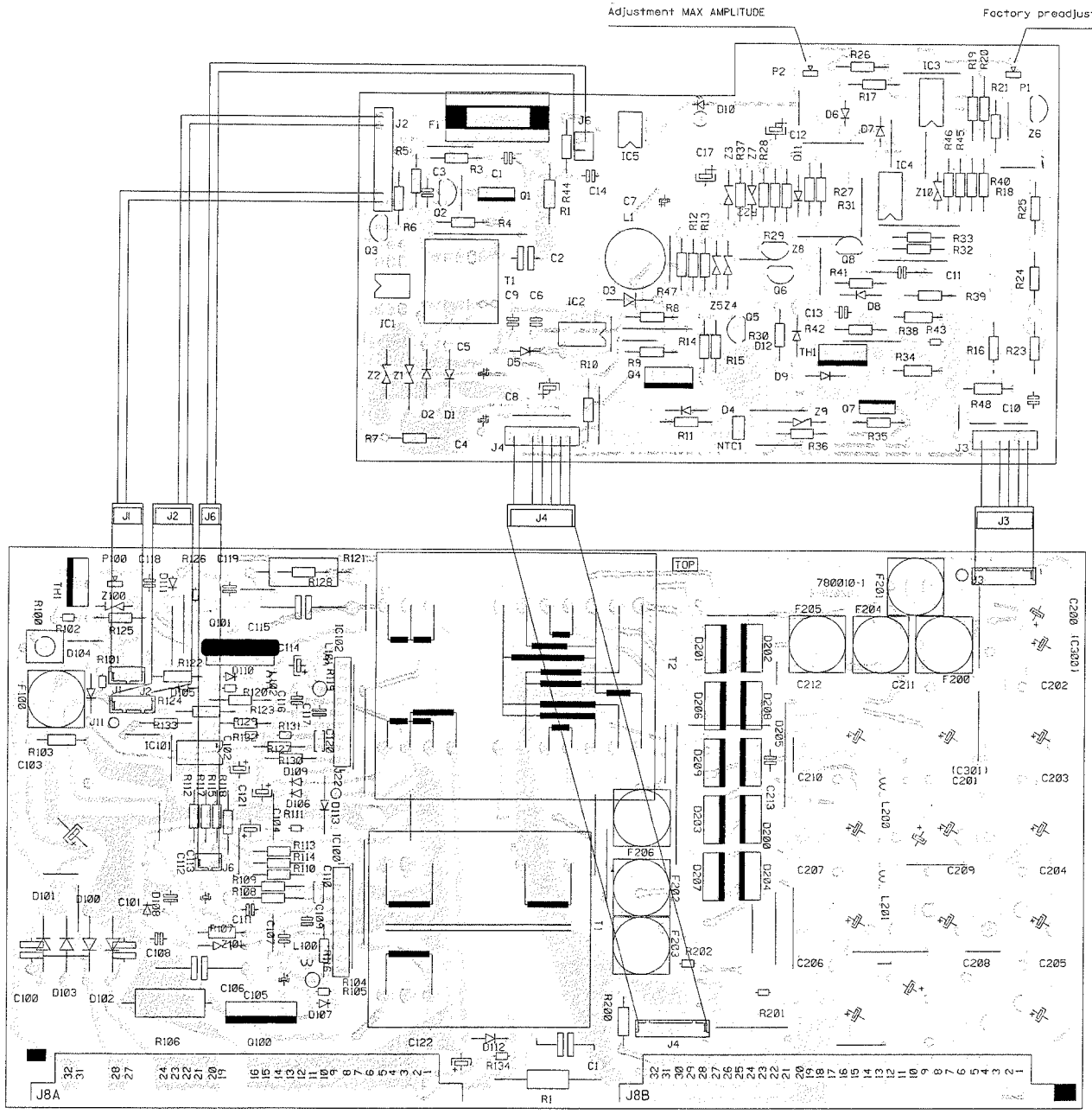
BARCO





COMP.	LOC.
C1	E 6
C1	D 2
C2	D 2
C3	D 2
C4	D 3
C5	D 2
C6	D 2
C7	E 2
C8	D 3
C9	D 2
C10	G 3
C11	F 2
C12	F 1
C13	F 2
C14	E 2
C17	E 1
C100	B 5
C101	B 5
C102	C 4
C103	B 4
C104	C 5
C105	C 5
C106	C 5
C107	C 5
C108	C 5
C109	C 5
C110	C 5
C111	C 5
C112	C 5
C113	C 5
C114	C 4
C115	C 4
C116	C 4
C117	C 4
C118	B 3
C119	C 3
C120	C 4
C121	C 4
C122	D 6
C200	G 4
C201	F 4
C202	G 4
C203	G 4
C204	G 5
C205	G 5
C206	F 5
C207	F 5
C208	F 5
C209	F 5
C210	F 4
C211	F 4
C212	F 4
C213	E 4
C300	G 4
C301	F 4
D1	D 3
D2	D 3
D3	E 2
D4	E 3
D5	D 2
D6	F 1
D7	F 1
D8	F 2
D9	E 2
D10	E 1
D11	F 1
D12	E 2
D100	B 5
D101	B 5
D102	B 5
D103	B 5
D104	B 4
D105	C 4
D106	C 5
D107	C 6
D108	C 5
D109	C 4
D110	C 4
D111	C 3
D112	D 6
D113	C 5
D200	E 5
D201	E 4
D202	E 4
D203	E 5
D204	E 5
D205	E 4
D206	E 4
D207	E 5
D208	E 4
D209	E 4
F1	D 1
F100	B 4
F200	F 4
F201	F 3
F202	E 5
F203	E 5
F204	F 4
F205	F 4
F206	E 5
IC1	D 2
IC2	D 2
IC3	F 1
IC4	F 1
IC5	E 1
IC100	C 5
IC101	C 4
IC102	C 4
J1	B 4
J2	B 4
J2	D 1
J3	F 3
J3	F 3
J4	E 6
J4	D 3
J6	C 5
J6	E 1
J10	B 6
J11	B 4
J20	G 6
J22	C 4
L1	E 2
L100	C 5
L101	C 4
L102	C 4
L200	F 5
L201	F 5

COMP.	LOC.
NTC1	E 3
P1	G 1
P2	E 1
P100	B 3
Q1	D 2
Q2	D 2
Q3	D 2
Q4	E 2
Q5	E 2
Q6	E 2
Q7	F 3
Q8	F 2
Q100	C 6
Q101	C 4
R1	D 6
R1	D 2
R3	D 2
R4	D 2
R5	D 1
R6	B 2
R8	E 2
R9	E 2
R10	E 2
R11	E 3
R12	E 2
R13	E 2
R14	E 2
R15	E 2
R16	F 2
R17	F 1
R18	F 2
R19	F 1
R20	F 1
R21	F 1
R22	E 2
R23	G 2
R24	G 2
R25	G 2
R26	F 1
R27	F 2
R28	E 1
R29	E 2
R30	E 2
R31	F 2
R32	F 2
R33	F 2
R34	F 2
R35	F 3
R36	F 3
R37	E 1
R38	F 2
R39	F 2
R40	F 2
R41	F 2
R42	F 2
R43	F 2
R44	D 2
R45	F 1
R46	F 1
R47	E 2
R48	F 3
R100	B 4
R101	B 4
R102	B 4
R103	B 4
R104	C 5
R105	C 5
R106	C 6
R107	C 5
R108	C 5
R109	C 5
R110	C 5
R111	C 5
R112	C 4
R113	C 5
R114	C 5
R115	C 4
R116	C 5
R117	C 4
R118	C 4
R119	C 4
R120	C 4
R121	C 3
R122	C 4
R123	C 4
R124	C 4
R125	B 4
R126	C 3
R127	C 4
R128	C 3
R129	C 4
R130	C 4
R131	C 4
R132	C 4
R133	C 4
R134	D 6
R200	E 5
R201	E 6
R202	E 5
T1	E 5
T1	D 2
T2	E 4
TH1	B 3
TH1	F 2
Z1	D 2
Z2	D 2
Z3	E 1
Z4	E 2
Z5	E 2
Z6	G 1
Z7	E 1
Z8	F 2
Z9	F 3
Z10	F 2
Z100	B 4
Z101	C 5



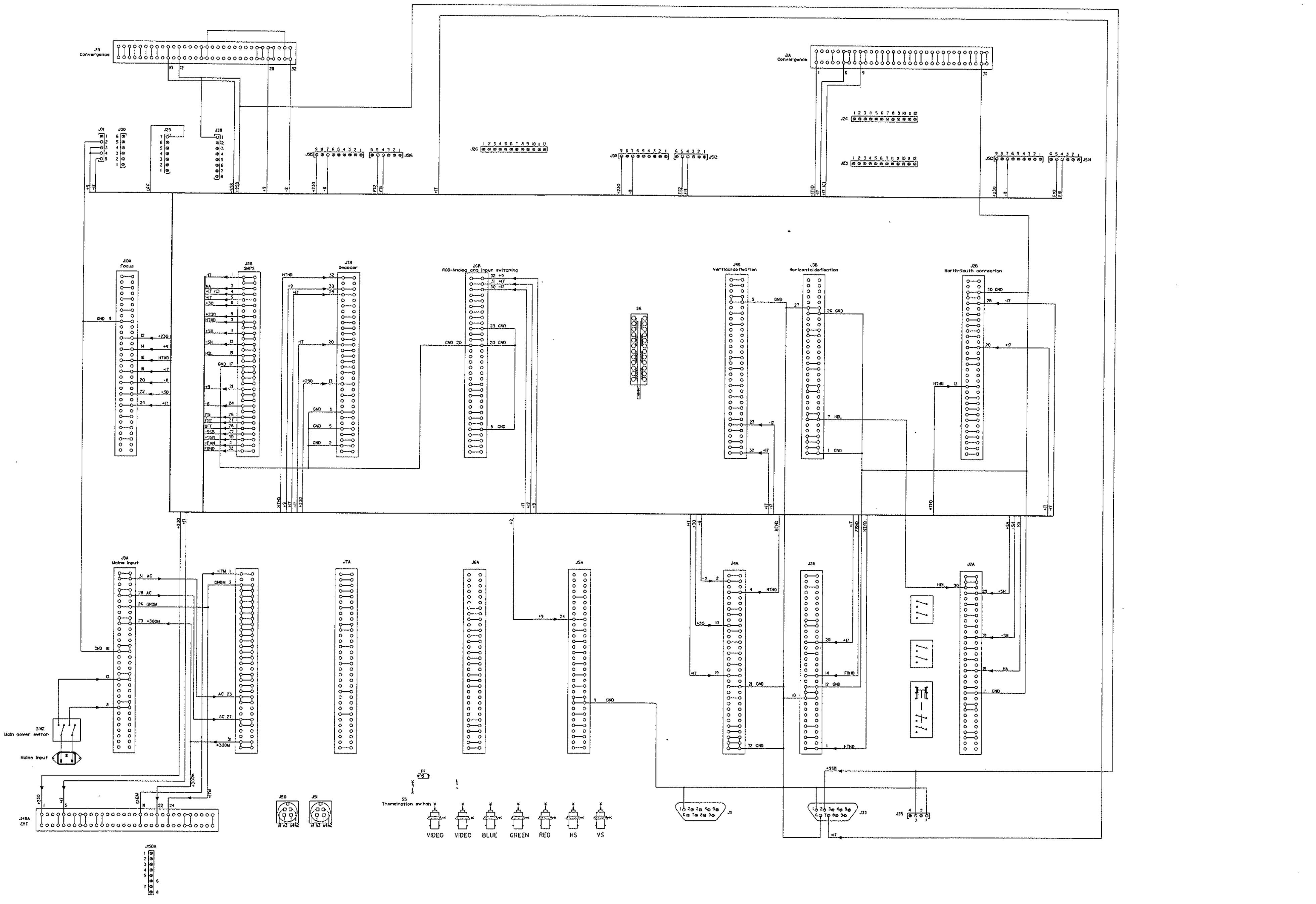
Name	SMPS pcb-interconnection	Article nr.	76736-76737
Date	15/09/1990	Drawn	PC
		Checked	PGV

BARCO PROJECTION SYSTEMS

Modifications reserved

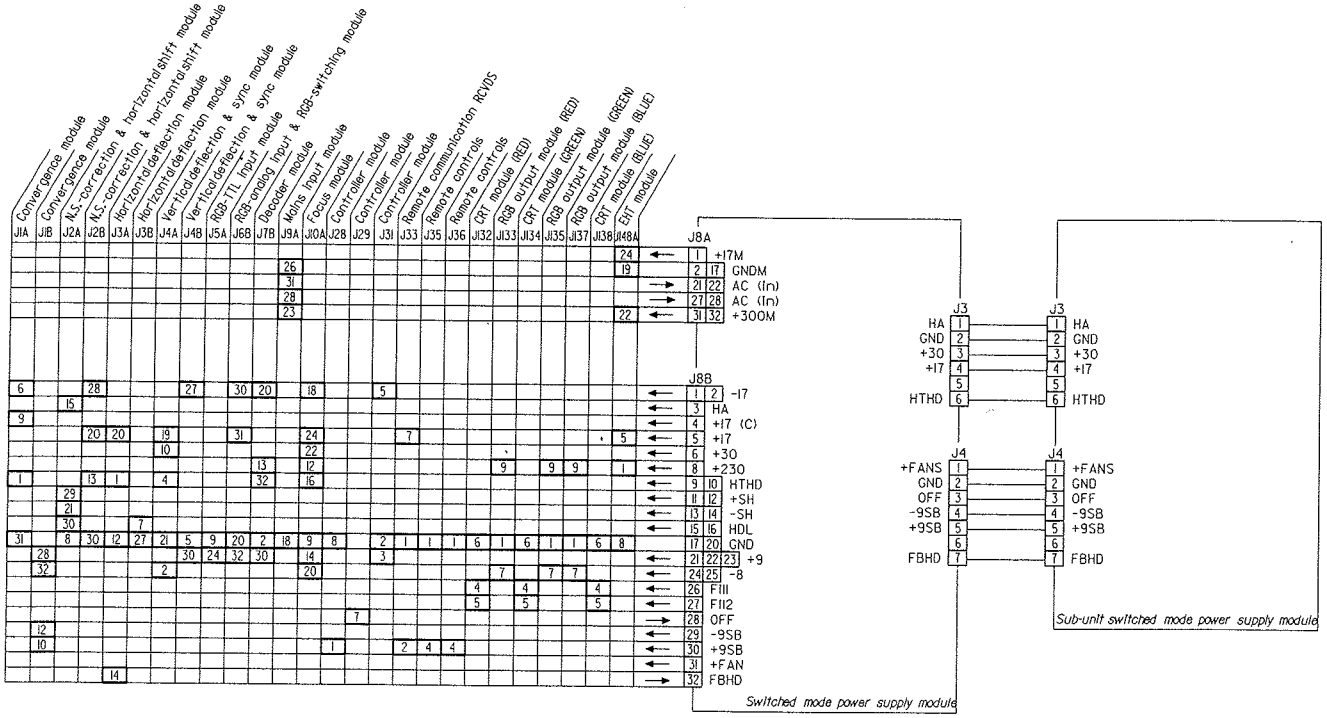
COMP.	LOC.
C1	E 6
C2	D 2
C3	D 2
C4	D 3
C5	D 2
C6	D 2
C7	E 2
C8	D 3
C9	D 2
C10	G 3
C11	F 2
C12	F 1
C13	F 2
C14	E 2
C17	E 1
C100	B 5
C101	B 5
C102	C 4
C103	B 4
C104	C 5
C105	C 5
C106	C 5
C107	C 5
C108	C 5
C109	C 5
C110	C 5
C111	C 5
C112	C 5
C113	C 5
C114	C 4
C115	C 4
C116	C 4
C117	C 4
C118	B 3
C119	C 3
C120	C 4
C121	C 4
C122	D 6
C200	G 4
C201	F 4
C202	G 4
C203	G 4
C204	G 5
C205	G 5
C206	F 5
C207	F 5
C208	F 5
C209	F 5
C210	F 4
C211	F 4
C212	F 4
C213	E 4
C300	G 4
C301	F 4
D1	D 3
D2	D 3
D3	E 2
D4	E 3
D5	D 2
D6	F 1
D7	F 1
D8	F 2
D9	E 2
D10	E 1
D11	F 1
D12	E 2
D100	B 5
D101	B 5
D102	B 5
D103	B 5
D104	B 4
D105	C 4
D106	C 5
D107	C 5
D108	C 5
D109	C 4
D110	C 4
D111	C 3
D112	D 6
D113	C 5
D200	E 5
D201	E 4
D202	E 4
D203	E 5
D204	E 5
D205	E 4
D206	E 4
D207	E 5
D208	E 4
D209	E 4
F1	D 1
F100	B 4
F200	F 4
F201	F 3
F202	E 5
F203	E 5
F204	F 4
F205	F 4
F206	E 5
IC1	D 2
IC2	D 2
IC3	F 1
IC4	F 1
IC5	E 1
IC100	C 5
IC101	C 4
IC102	C 4
J1	B 4
J2	B 4
J2	D 1
J3	F 3
J3	F 3
J4	E 6
J4	D 3
J6	C 5
J6	E 1
J8	B 6
J8	B 4
J20	G 6
J22	C 4
L1	E 2
L100	C 5
L101	C 4
L102	C 4
L200	F 5
L201	F 5

Main frame Interconnection
Switched Mode Power Supply module



Modifications reserved

BARCO PROJECTION SYSTEMS



Name Interconnection Switched mode power supply		Article nr. 761736-761737
Date 15/09/1990	Drawn PG	Checked PGV

BARCO PROJECTION SYSTEMS

TECHNICAL DESCRIPTION SWITCHED MODE POWER SUPPLY (76 1771).

Introduction.

On the main board of this module we find the generation of all stable voltages , we mean voltages independent on the line frequency, and the variable +HTHD voltage (referred to as the second SMPS).

This second SMPS is linked via the subunit with the horizontal deflection board as the +HTHD voltage (horizontal scan voltage) is linearly proportional with the line frequency.

Because the 'second' SMPS utilises the rectified voltage from the winding 22-24, this SMPS totaly depends on the 'first' one' , on other terms, if the first SMPS is down , the second one 'follows' equally.

The ON/OFF voltage delivered by the controller board can stop or start up these Switched Mode Power Supplies.

The subunit comprises the DC-fan control,the regulation circuit for the +HTHD, its Under- and Overvoltage protection circuits, the +17volts drop protection and the stand-by power supply.

Generation of the line frequency independent voltages.

The mains voltage is rectified by the bridge D100-D103 and the +300 volts is the supply voltage for the power switches Q100 and Q101 on the main board. The connector J2 brings this voltage to the subunit where it is used for the production of the standby voltages -/+SB.

We assume that the thyristor TIC106C is conducting (its gate is not clamped at ground level, see later).

The positive halfwave of the mains voltage charges C102 via D104 . The gate of the thyristor is set at 11 volts with the zener Z100 through R101 from the +300volts.

As soon the capacitor voltage of C102 reaches approximately 12 volts, the IC can start up by driving the base of the power switch.

The diode D104 stops conducting as its anode is at about (11 + 0.6) volts.

The thyristor gets blocked as well, because its cathode equals the gate voltage.

In the meantime the IC102 has started up and the voltage at pin 9 receives its supply voltage now from the winding 24-22 of the T2 transformer via D109.

The push-pull outputs, pins 7 and 8, drive the Q101 power switch and during the off time of the latter the accumulated energy in the primary winding is transferred to the secondary capacitors via the rectifying diodes (flyback principle).

The feedback winding 20-22 provides two informations for the control IC :

Firstly, the waveform is sent to pin 2 where the **zero passages** are detected, useful to drive the power switch on at the the exact moment.

The base drive is delayed untill the energy in the transformer has been completely transferred to the secondary side. By this measure, the current through the power switch is reduced to a minimum.

Secondly, the negative amplitude is rectified by D111 and compared with the reference 4 volts that is available at pin 1.

The error voltage is now sent to pin 3 and serves as a control voltage to adjust and duty cycle and frequency.

The current through the power switch is at all times checked and if too high (in the event of a short on the secondary side) the comparator 393 (IC101) output drops the error voltage in order to adapt the duty cycle of the switcher.

Note that a"special" winding is provided, delivering **+17M**, or, a voltage related to the **Mains** ground and not the chassis ground. This voltage is utilised on the EHT board, because the drive circuit for the power switcher is Mains ground and not Chassis ground. (see description EHT board).

Generation of the +HTHD voltage (scan voltage).

This voltage is linked with the horizontal deflection board as it has to be adapted to the scanning frequency. A feedback voltage (FBHD) is for that reason arriving on the subunit.

This feedback voltage, at contact J4(7) of the subunit, is sent to the base of the error amplifier Q6. The potentiometer P2 allows an adjustment of this feedback, on other terms, the horizontal width can be aligned with P2.

The emitter is set at a reference zener voltage, adjustable with the voltage at the regulating pin of Z8. This voltage is the result of the output of the DC-amplifier-buffer 353, combined with the +HTHD voltage.

By this measure, we reduce the range of the horizontal width at high scanning frequencies. Indeed, at standard video frequency we need much more range to overscan.

The collector current of the regulating transistor Q6 flows into the opto-coupler IC5 and the phototransistor of this insulating device is now regulating the DC voltage at pin 3 of IC100, in order to stabilise the +HTHD voltage for one typical line frequency and amplitude setting.

Q7 is a 5mA current generator and D10 a **green** LED to visualise the +HTHD voltage.

Overvoltage protection.

Pin 2 of the 393 (IC4) is set at 5.6 volts with Z10 and, the other input, pin 3 is the scan voltage divided by R38/R39.

As soon this input exceeds the zener voltage, the output switches high and fires the thyristor TH1.

The +HTHD capacitors are very quickly discharged and the diode D9 pulls pin 2 of IC5 at ground level.

The original overvoltage protection is now is causing an undervoltage protection.

Undervoltage protection.

The stabilised zener voltage with Z8 is used as reference voltage for the comparator 393, pin 6. Now, the other pin 5 is the +HTHD voltage.

If, obviously, the pin 5 drops below the reference voltage, the output switches low, and the transistor Q8 saturates, pulling again pin 2 of IC5 low.

Protection against too low +17 volts.

If, for some reasons, the +17 volts (and all the other voltages as well) are, even temporarily, too low, it is then advised to shut down the +HTHD voltage (coming from the other SMPS).

Pin 6 is preadjusted, ex factory, at approx. 14 volts with P1

This happens with the comparator in IC3 and its output pin 7 saturates again Q8.

Stand-by / ON-OFF switching.

An oscillator, built up around Q1/Q2 and the transformer T1.
Q1 gets its base current via R3. The collector current of the latter flows in the winding 1-3 and induces a voltage in the winding 5-4 ' encouraging' the base current.

As soon the emitter voltage of Q1 can drive the Q2 and saturate it, this transistor clamps the base of Q1 at ground level and cuts off Q1. The cycle starts allover again.
Two opposite polarity SB voltages (+/- 9 volts) are available at the secondary side.

a) Stand-by mode (OFF).

The voltage at contact 3 of the J4 connector ('OFF') is in this case 'high' and this means for the optocoupler IC1 that the phototransistor is not conducting.

Q3 is thus saturated as R6 can provide the required base-emitter current.

The collector of Q3 is 'low' and the gate of the thyristor THYR1 on the motherboard is at ground level.

Furthermore, pin 5 of IC102 is below its active level via the diode D105 meaning an impossibility to start up.

As a conclusion, only the standby voltages +/- 9 SB voltages are available.

b) Operational mode (ON).

The I/O block of the controller board (collector of a transistor) pulls now contact 3 of J4 at a low level as to lid the LED in the opto-coupler IC1.

Now, the phototransistor of the latter is saturated and brings the base of Q3 at nearly ground level. This means now for this transistor an OFF state.

The zener Z100 on the motherboard can now install +11 volts at the gate of the thyristor allowing the charge of the capacitor C102.

DC Fan control of the fans.

The speed of the fans is regulated by means of a sensor (NTC resistor) mounted close to the heatsink of the SMPS board.

IC2 is an integrated circuit regulating the speed of the fans by adapting the duty cycle of the output drive for the power transistor Q4. L1 and C7 filters the output voltage.

The feedback is applied to pin 5 which is protected against arcing with D4/D5.

MC34063 is a switching regulator. An oscillator trimmed with C6 is applied together with a dc voltage to an RS-flipflop via an AND gate. That DC voltage now is the result of a comparator outpt receiving an internal reference voltage of 1.25 volts and the feedback voltage at pin 5 (comp). Consequently, the dutu cycle depends on the DC voltage that is built up as follows :
- it is determined by the output voltage via R13 / R14 / R11 in order to stabilise the latter for a well-determined value of the NTC resistor.
- it is equally influenced by any change of the NTC resistir itself, sensing the heatsink of the SMPS board.

The minimun voltage is set by Z5 at approximately 7.5 volts and the maximum speed by Z4 + Z4. at 15 volts.

The maximum current output is limited by R10, and an RC feedback straight from the output to pin 5 provides a more regulor speed at any time.

Power supply for the EHT generator.

The EHT generator is supplied directly from the rectified mains voltage. The +300M volts is leaving the board at the contacts 31/32 of the J8A connector for the EHT board (see description of that board)

By above measure, we eliminate the influence of the EHT load on the performance of the power supply, and the maximum peak current of the EHT generator is increased.

SM POWER SUPPLY MODULE 76 1736

SUB-MODULE SM POWER SUPPLY 76 1737

IMPORTANT

The SM POWER SUPPLY has to be adjusted when the projector displays a picture of the internal generated testpattern or of an input signal at standard line- and frame frequency.

PREPARATION

Select the internal generated test pattern or an input source at standard frequency (refer to owner's and installation manual).

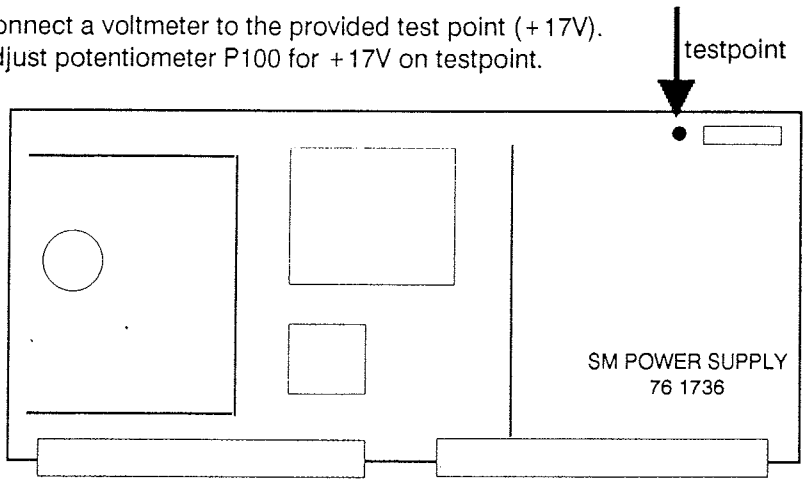
Put the BRIGHTNESS and CONTRAST level in mid-position (refer to owner's manual).

ADJUSTMENTS

Adjustment on main board

a) Adjusting Vout P100

Connect a voltmeter to the provided test point (+17V).
Adjust potentiometer P100 for +17V on testpoint.



Adjustments on sub-board

b) Adjusting +14V P1

Important: P1 is factory pre-adjusted. A readjustment is only necessary after a replacement of a defective component in the +17V drop circuit.

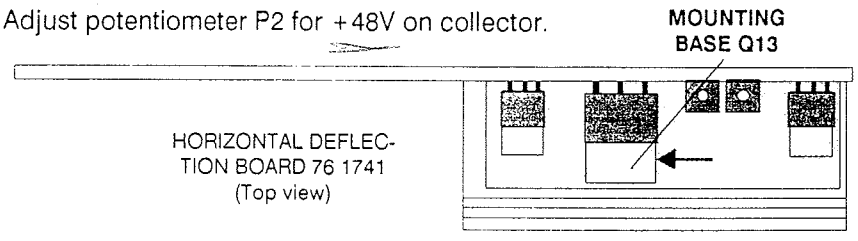
Connect a voltmeter to the node R19/Z6
Adjust potentiometer P1 for +14V on that node.

c) Adjusting MAX HOR AMPL P2

Adjust the Horizontal Amplitude of the displayed picture by means of the RCU800 on its maximum (bar scale on screen indicates 99). (Refer to the owner's manual to select the corresponding menu).

Connect a voltmeter to the collector (Collector connected to mounting base) of transistor Q13 (BDV65C) on the Hor. Defl. board.

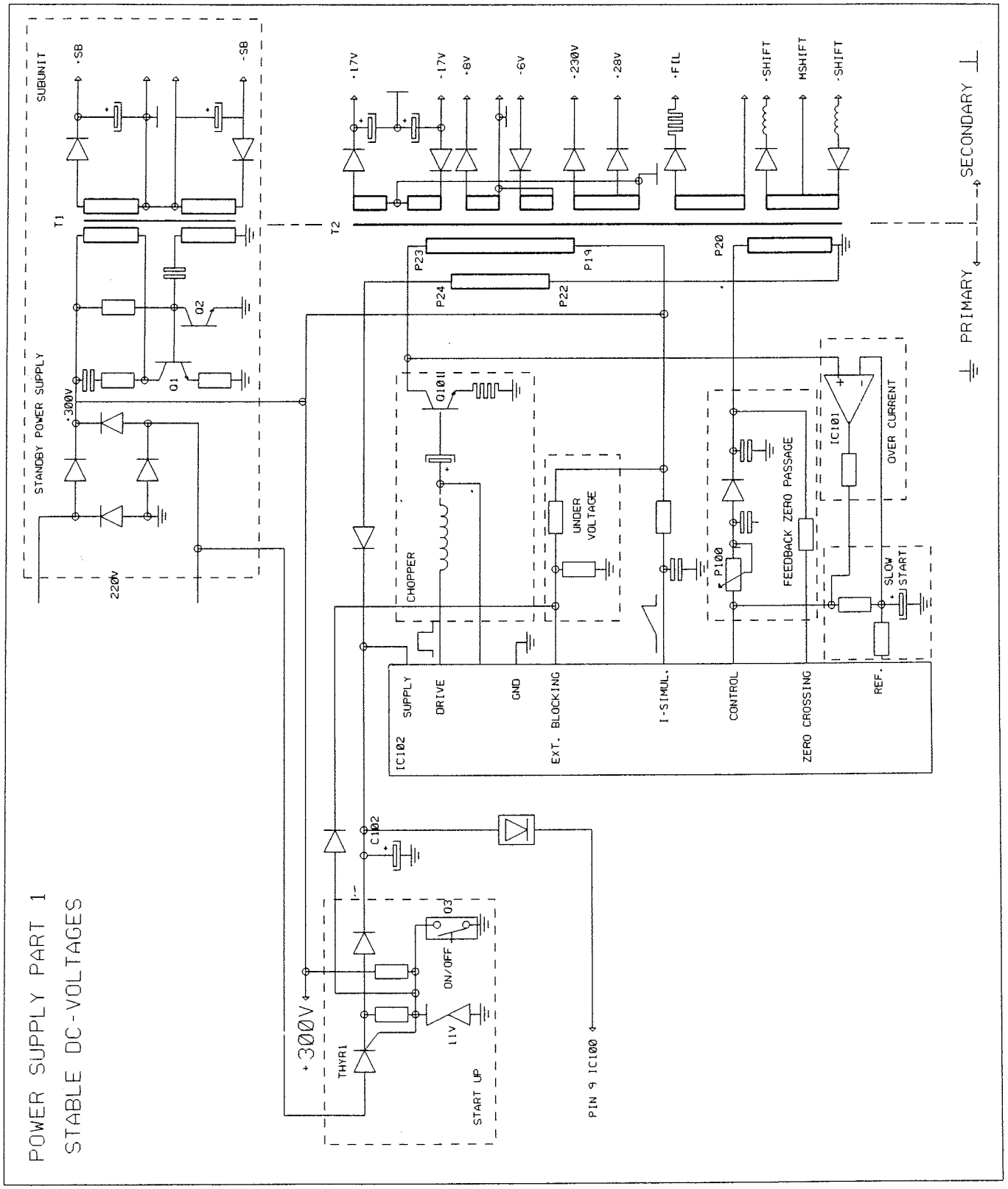
Adjust potentiometer P2 for +48V on collector.



HORIZONTAL DEFLECTION BOARD 76 1741
(Top view)

SM POWER SUPPLY MODULE 76 1736

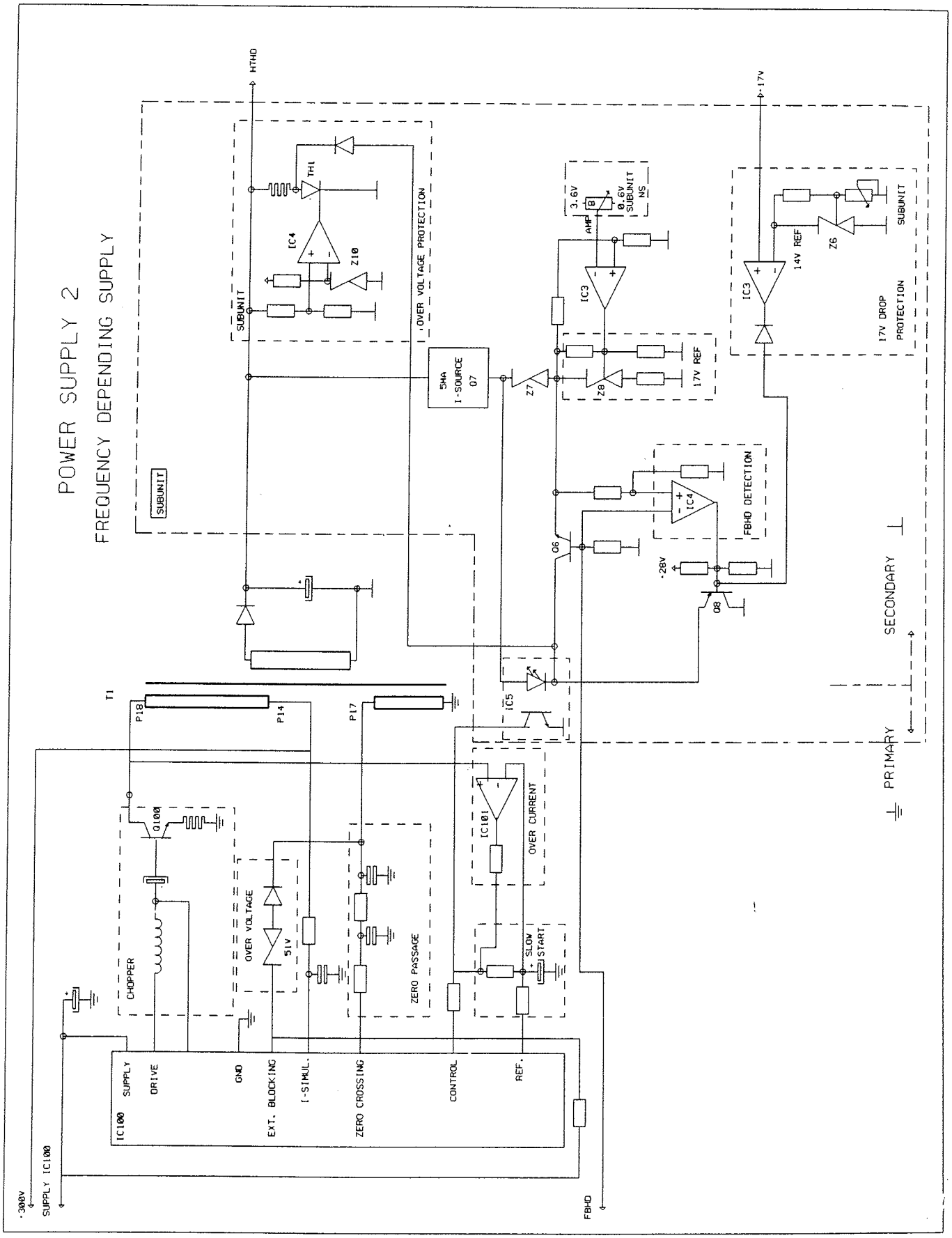
SUB-MODULE SM POWER SUPPLY 76 1737



SM POWER SUPPLY MODULE

SUB-MODULE SM POWER SUPPLY

76 1736
76 1737



BLOCKDIAGRAM POWER SUPPLY 1

Date : 28/08/90 761736

SM POWER SUPPLY MODULE 76 1736

SUB-MODULE SM POWER SUPPLY 76 1737

ITEM NO.	SIT.	DESCRIPTION
11 47009	C..1	CAP CESADI 4K7 M AC400
11 2837	C100	CAP CE DI 10K S 400
11 2837	C101	CAP CE DI 10K S 400
11 1477	C102	CAP ELPR 100M Z5 25
11 1655	C103	CAP ELRA 400M T 385
11 1477	C104	CAP ELPR 100M Z5 25
11 1477	C105	CAP ELPR 100M Z5 25
11 50051	C106	CAP PPMEPO 2K2 J 1500
11 3724	C107	CAP POME 100K K5 63
11 4090	C108	CAP POMEPO 1M M5 63
11 5936	C109	CAP PP RA 6K8 J5 63
11 2741	C110	CAP CE MI 1K5 K5 63
11 2238	C111	CAP NPO MI 47P G5 63
11 5932	C112	CAP PP RA 4K7 J5 63
11 1468	C113	CAP ELPR 470M Z5 16
11 1477	C114	CAP ELPR 100M Z5 25
11 50051	C115	CAP PPMEPO 2K2 J 1500
11 3724	C116	CAP POME 100K K5 63
11 5936	C117	CAP PP RA 6K8 J5 63
11 4090	C118	CAP POMEPO 1M M5 63
11 5934	C119	CAP PP RA 5K6 J5 63
11 2434	C120	CAP NPO MI 22P G2 63
11 1477	C121	CAP ELPR 100M Z5 25
11 1477	C122	CAP ELPR 100M Z5 25
11 1639	C200	CAP ELRA 47M T 250
11 1639	C201	CAP ELRA 47M T 250
11 1626	C202	CAP ELRA 1000M T 40
11 1626	C203	CAP ELRA 1000M T 40
11 1626	C204	CAP ELRA 1000M T 40
11 1626	C205	CAP ELRA 1000M T 40
11 1616	C206	CAP ELRA 2200M T 16
11 1616	C207	CAP ELRA 2200M T 16
11 1649	C208	CAP ELRA 47M T 350
11 1626	C209	CAP ELRA 1000M T 40
11 1626	C210	CAP ELRA 1000M T 40
11 1616	C211	CAP ELRA 2200M T 16
11 1616	C212	CAP ELRA 2200M T 16
11 1716	C213	CAP CE 680P 1000
11 1718	C302	CAP CE DI 1K 2000
13 19025	D100	DIODE BY255,BYM56 1300V/3A R
13 19025	D101	DIODE BY255,BYM56 1300V/3A R
13 19025	D102	DIODE BY255,BYM56 1300V/3A R
13 19025	D103	DIODE BY255,BYM56 1300V/3A R
13 1646	D104	DIODE 1N4007 1300V/1A
13 1621	D105	DIODE 1N4148 SWITCH
13 1637	D106	DIODE BA158 SWITCH
13 1646	D107	DIODE 1N4007 1300V/1A
13 1637	D108	DIODE BA158 SWITCH
13 1637	D109	DIODE BA158 SWITCH
13 1646	D110	DIODE 1N4007 1300V/1A
13 1637	D111	DIODE BA158 SWITCH
13 1637	D112	DIODE BA158 SWITCH
10 1126	D113	RES CF 150E J 0W25
13 1913	D200	DIODE BY229-1000 1000V/7A FSR
13 1954	D201	DIODE BYW19-200
13 1954	D202	DIODE BYW19-200
13 1954	D203	DIODE BYW19-200
13 1954	D204	DIODE BYW19-200
13 1913	D205	DIODE BY229-1000 1000V/7A FSR
13 1927	D206	DIODE BY229-600 600V/7A FSR
13 1927	D207	DIODE BY229-600 600V/7A FSR
13 1954	D208	DIODE BYW19-200
13 1954	D209	DIODE BYW19-200
13 1954	D210	DIODE BYW19-200
31 4147	F100	FUSE 3A150 5X20 FAST

ITEM NO.	SIT.	DESCRIPTION
31 41041	F200	FUSE 4A 5X20 SLOW
31 4104	F201	FUSE 5A 5X20 SLOW
31 4104	F202	FUSE 5A 5X20 SLOW
31 4104	F203	FUSE 5A 5X20 SLOW
31 4116	F204	FUSE 2A 5X20 SLOW
31 41041	F205	FUSE 4A 5X20 SLOW
31 41041	F206	FUSE 4A 5X20 SLOW
31 4516	H100	FUSE HOLDER 5X20 V FASTENER
31 45161	H110	FUSE HOLDER 5X20 V CARRIER
31 4516	H200	FUSE HOLDER 5X20 V FASTENER
31 4516	H201	FUSE HOLDER 5X20 V FASTENER
31 4516	H202	FUSE HOLDER 5X20 V FASTENER
31 4516	H203	FUSE HOLDER 5X20 V FASTENER
31 4516	H204	FUSE HOLDER 5X20 V FASTENER
31 4516	H205	FUSE HOLDER 5X20 V FASTENER
31 4516	H206	FUSE HOLDER 5X20 V FASTENER
31 45161	H210	FUSE HOLDER 5X20 V CARRIER
31 45161	H211	FUSE HOLDER 5X20 V CARRIER
31 45161	H212	FUSE HOLDER 5X20 V CARRIER
31 45161	H213	FUSE HOLDER 5X20 V CARRIER
31 45161	H214	FUSE HOLDER 5X20 V CARRIER
31 45161	H215	FUSE HOLDER 5X20 V CARRIER
31 45161	H216	FUSE HOLDER 5X20 V CARRIER
13 2787	I100	IC 4601 TDA SMP CTRL
13 4114	I101	IC 393 DUAL VOLT COMP
13 2787	I102	IC 4601 TDA SMP CTRL
31 3525	J10.	CONN EURO MBS P64
31 3525	J20.	CONN EURO MBS P64
30 61322	L...	CHOKE AX NS 10 UH
77 4154	L...	COIL CHOKE HOR DATA HR45
30 61322	L..A	CHOKE AX NS 10 UH
30 2108	L100	CORE TUBE 1,3/3,5 X3
30 2108	L101	CORE TUBE 1,3/3,5 X3
30 2102	L102	CORE TUBE 1,3/4,95X40,5
77 4154	L200	COIL CHOKE HOR DATA HR45
77 4154	L201	COIL CHOKE HOR DATA HR45
10 6829	P100	TRIMPOT CEMV 10K K 0W50
78 0010	PC..	PC PJ 49 SMP *800 761737
13 25096	Q100	TSTR BU508A,ON4046 N1500*/ 8A
13 2913	Q101	TSTR BUP101 N1000 /15A
10 11917	R...	RES CFF E22 J 0W40
10 46781	R..1	RES HV 10M J 1W
10 4171	R100	RES WW V 4K7 K 4W
10 41808	R100	RES WWFV 4K7 K 3W
10 1267	R101	RES CF 390K J 0W50
10 1144	R102	RES CF 4K7 J 0W25
10 1266	R103	RES CF 330K J 0W50
10 2499	R104	RES MF 0E33 J 0W25
10 1217	R105	RES CF 27E J 0W50
10 3600	R106	RES WW H 0E10 K 4W
10 1265	R107	RES CF 270K J 0W50
10 1136	R108	RES CF 1K J 0W25
10 1145	R109	RES CF 5K6 J 0W25
10 1145	R110	RES CF 5K6 J 0W25
10 3226	R111	RES MO 150E J 1W50
10 1136	R112	RES CF 1K J 0W25
10 1128	R113	RES CF 220E J 0W25
10 1129	R114	RES CF 270E J 0W25
10 1136	R115	RES CF 1K J 0W25

SM POWER SUPPLY MODULE 76 1736

SUB-MODULE SM POWER SUPPLY 76 1737

ITEM NO.	SIT.	DESCRIPTION
10 1160	R116	RES CF 100K J 0W25
10 1135	R117	RES CF 820E J 0W25
10 1127	R118	RES CF 180E J 0W25
10 2499	R119	RES MF 0E33 J 0W25
10 1217	R120	RES CF 27E J 0W50
10 3600	R121	RES WW H 0E10 K 4W
10 1265	R122	RES CF 270K J 0W50
10 1143	R123	RES CF 3K9 J 0W25
10 1266	R124	RES CF 330K J 0W50
10 1149	R125	RES CF 12K J 0W25
10 3226	R126	RES MO 150E J 1W50
10 1146	R127	RES CF 6K8 J 0W25
10 1136	R128	RES CF 1K J 0W25
10 1136	R129	RES CF 1K J 0W25
10 1128	R130	RES CF 220E J 0W25
10 1137	R131	RES CF 1K2 J 0W25
10 1145	R132	RES CF 5K6 J 0W25
10 1139	R133	RES CF 1K8 J 0W25
10 11907	R134	RES CFF E10 J 0W40
10 1127	R135	RES CF 180E J 0W25
10 4656	R200	RES HV 1M2 J 0W50
13 1646	R201	DIODE 1N4007 1300V/1A
10 1300	R202	RES CF 1E J 1W15
77 4317	T..1	TRANSF PJ 49 SMP VAR D800
77 43037	T..2	TRANSF PJ 49 SMP FIX D/GR800
13 22101	TH.1	THYRISTOR TIC106D
13 1740	Z100	DIODE ZENER 12V 0W5 C
13 1787	Z101	DIODE ZENER 51V 0W5 C
30 2102	0010	CORE TUBE 1,3/4,95X40,5

ITEM NO.	SIT.	DESCRIPTION
36 7699	0010	RIVET CHOBERT D2,38 L6,35
80 2666	0020	SPACER RIV L17 D 6 M3 MS
13 3036	0030	SPACER L 6 D 6 D2,4 CER
13 30391	0040	SPACER L 8 D 4 D1,5 CER
13 3039	0050	SPACER L 8 D 4 D1,2 CER
31 5302	0060	CONN PIN MBT D 1,3 L 5,5+3
34 81067	0070	WIRE JUMPER ISO M 17,5
34 81067	0071	WIRE JUMPER ISO M 17,5
80 2630	0100	HEATSINK PJ 49 SMP PART 1
36 7600	0110	FIXING BLOC UNIVERSEL M3
36 20216	0111	SCREW DIN84 M 3 X 6 MP-
36 7502	0112	WASHER DIN6798 A 3,2
80 2686	0120	FIX PJ 49 TSTR SPRING 1X M3
13 3063	0121	TSTR MICA INSULAT SOT-93
36 20216	0122	SCREW DIN84 M 3 X 6 MP-
36 7502	0123	WASHER DIN6798 A 3,2
36 20216	0130	SCREW DIN84 M 3 X 6 MP-
36 7502	0131	WASHER DIN6798 A 3,2
34 8086	0140	FASTENER WIRE SLCSE DIA 8,9
80 2631	0200	HEATSINK PJ 49 SMP PART 2
36 7600	0210	FIXING BLOC UNIVERSEL M3
36 20216	0211	SCREW DIN84 M 3 X 6 MP-
36 7502	0212	WASHER DIN6798 A 3,2
36 19125	0213	SCREW DIN965 M 3 X 6 MC+
80 2633	0220	FIX PJ 49 TSTR SPRING SMP
80 2687	0221	FIX PJ 49 TSTR SPRING 3X M3
80 2916	0222	IC FOIL INSULAT 82,5X25
36 2022	0223	SCREW DIN84 M 3 X 8 MP-
36 7502	0224	WASHER DIN6798 A 3,2
36 26696	0230	SCREW DIN921 M 3 X 8 MP-
34 8024	0240	FASTENER CABLE

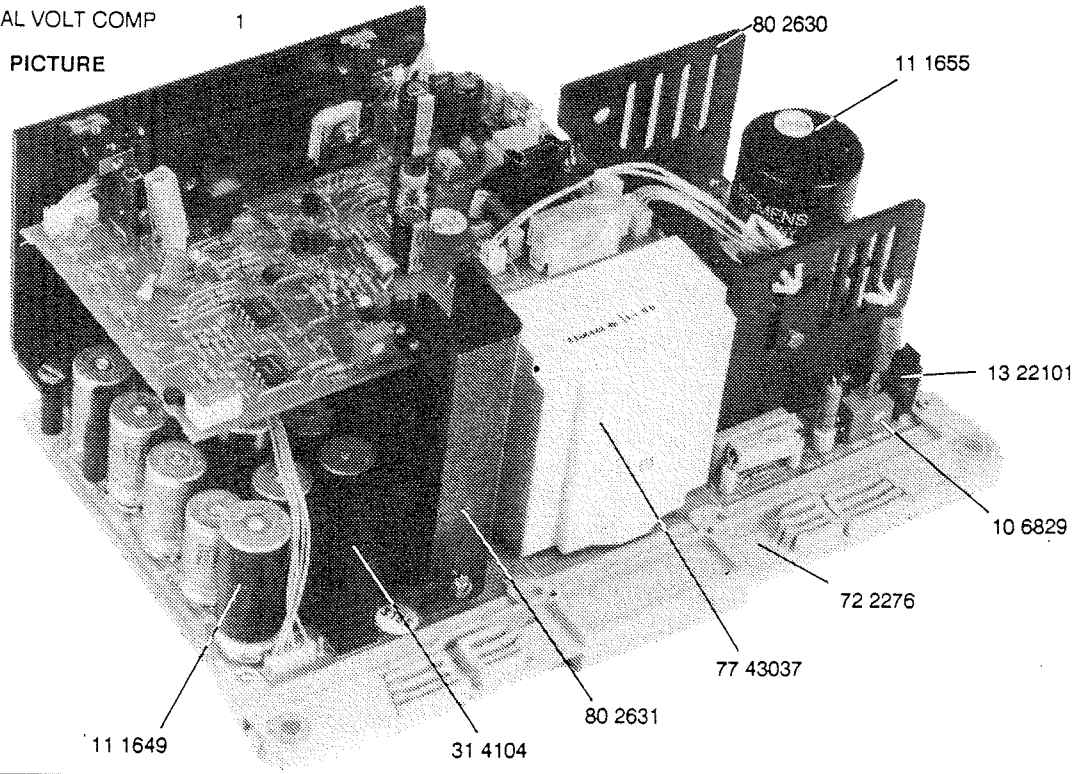
SM POWER SUPPLY MODULE 76 1736

SUB-MODULE SM POWER SUPPLY 76 1737

ART NO.	DESCRIPTION	QUANTITY
10 11907	RES CFF E10 J 0W40	1
10 11917	RES CFF E22 J 0W40	1
10 1300	RES CF 1E J 1W15	1
10 3226	RES MO 150E J 1W50	2
10 3600	RES WW H 0E10 K 4W	2
10 4171	RES WW V 4K7 K 4W	1
10 41808	RES WWFV 4K7 K 3W	1
10 4656	RES HV 1M2 J 0W50	1
10 46781	RES HV 10M J 1W	1
10 6829	TRIMPOT CEMV 10K K 0W50	1 *
11 1639	CAP ELRA 47M T 250	2 *
11 1649	CAP ELRA 47M T 350	1
11 1655	CAP ELRA 400M T 385	1 *
11 1716	CAP CE 680P 1000	1
11 1718	CAP CE DI 1K 2000	1
11 2837	CAP CE DI 10K S 400	2
11 4090	CAP POMEPO 1M M5 63	2
11 47009	CAP CESADI 4K7 M AC400	1
11 50051	CAP PPMEPO 2K2 J 1500	2
13 1621	DIODE 1N4148 SWITCH	1
13 1637	DIODE BA158 SWITCH	5
13 1646	DIODE 1N4007 1300V/1A	4
13 1740	DIODE ZENER 12V 0W5 C	1
13 1787	DIODE ZENER 51V 0W5 C	1
13 19025	DIODE BY255,BYM56 1300V/3A R	4
13 1913	DIODE BY229-1000 1000V/7A FSR	2
13 1927	DIODE BY229-600 600V/7A FSR	2
13 1954	DIODE BYW19-200	7
13 22101	THYRISTOR TIC106D	1 *
13 25096	TSTR BU508A,ON4046 N1500*/ 8A	1
13 2787	IC 4601 TDA SMP CTRL	2
13 2913	TSTR BUP101 N1000 /15A	1
13 3036	SPACER L 6 D 6 D2,4 CER	4
13 3039	SPACER L 8 D 4 D1,2 CER	4
13 30391	SPACER L 8 D 4 D1,5 CER	8
13 3063	TSTR MICA INSULAT SOT-93	2
13 4114	IC 393 DUAL VOLT COMP	1

ART NO.	DESCRIPTION	QUANTITY
30 2102	CORE TUBE 1,3/4,95X40,5	2
30 2108	CORE TUBE 1,3/3,5 X3	2
30 61322	CHOKE AX NS 10 UH	2
31 3525	CONN EURO MBS P64	2
31 4104	FUSE 5A 5X20 SLOW	3 *
31 41041	FUSE 4A 5X20 SLOW	3
31 4116	FUSE 2A 5X20 SLOW	1
31 4147	FUSE 3A150 5X20 FAST	1
31 4516	FUSE HOLDER 5X20 V FASTENER	8
31 45161	FUSE HOLDER 5X20 V CARRIER	8
31 5302	CONN PIN MBT D 1,3 L 5,5+3	1
34 8024	FASTENER CABLE	2
34 8086	FASTENER WIRE SLCSE DIA 8,9	2
36 19125	SCREW DIN965 M 3 X 6 MC+	1
36 20216	SCREW DIN84 M 3 X 6 MP-	13
36 2022	SCREW DIN84 M 3 X 8 MP-	4
36 26696	SCREW DIN921 M 3 X 8 MP-	1
36 7502	WASHER DIN6798 A 3,2	17
36 7600	FIXING BLOC UNIVERSEL M3	5
36 7699	RIVET CHOBERT D2,38 L6,35	4
72 2276	LOCKING PCB BOARD	1 *
77 4154	COIL CHOKE HOR DATA HR45	6
77 43037	TRANSF PJ 49 SMP FIX D/GR800	1 *
77 4317	TRANSF PJ 49 SMP VAR D800	1
80 2630	HEATSINK PJ 49 SMP PART 1	1 *
80 2631	HEATSINK PJ 49 SMP PART 2	1 *
80 2633	FIX PJ 49 TSTR SPRING SMP	2
80 2666	SPACER RIV L17 D 6 M3 MS	1
80 2686	FIX PJ 49 TSTR SPRING 1X M3	2
80 2687	FIX PJ 49 TSTR SPRING 3X M3	2
80 2916	IC FOIL INSULAT 82,5X25	1

*NUMBERS REFERRING TO PICTURE



SM POWER SUPPLY MODULE 76 1736

SUB-MODULE SM POWER SUPPLY 76 1737

ITEM NO.	SIT.	DESCRIPTION
11 2830	C..1	CAP CE DI 2K7 S 400
11 28111	C..2	CAP CE DI 68P M 1000
11 2815	C..3	CAP CE DI 150P M 400
11 1468	C..4	CAP ELPR 470M Z5 16
11 1468	C..5	CAP ELPR 470M Z5 16
11 59081	C..6	CAP PP RA 470P J5 100
11 1479	C..7	CAP ELPR 470M Z5 25
11 1489	C..8	CAP ELPR 470M T 40
11 3720	C..9	CAP POME 47K K5 63
11 3720	C.10	CAP POME 47K K5 63
11 4154	C.11	CAP POMEFF 22K K 400
11 1550	C.12	CAP ELPRMI 4M7 M5 50
11 3720	C.13	CAP POME 47K K5 63
11 37121	C.14	CAP POME 10K K5 100
11 1531	C.17	CAP ELPRMI 10M M5 35
13 1637	D..1	DIODE BA158 SWITCH
13 1637	D..2	DIODE BA158 SWITCH
13 1950	D..3	DIODE BYV27/150 150V/2A R
13 1621	D..4	DIODE 1N4148 SWITCH
13 1621	D..5	DIODE 1N4148 SWITCH
13 1621	D..6	DIODE 1N4148 SWITCH
13 1636	D..7	DIODE BAT43,(85) SCHOTTKY
13 1621	D..8	DIODE 1N4148 SWITCH
13 1667	D.10	DIODE CQY95-B4 LED D3 GRE
13 1636	D.11	DIODE BAT43,(85) SCHOTTKY
13 1621	D184	DIODE 1N4148 SWITCH
31 4108	F..1	FUSE 0A100 5X20 SLOW
31 4514	H..1	FUSE HOLDER 5X20 CAP+HOLDER
13 1691	I..1	OPTO COUPLER 601G-3 SFH
13 7625	I..2	IC 34063 DC DC CONVERTER
13 4116	I..3	IC 353 JFET DUAL OPAMP
13 4114	I..4	IC 393 DUAL VOLT COMP
13 1691	I..5	OPTO COUPLER 601G-3 SFH
31 3923	J2A.	CONN CT-MT MBT P 3
31 3924	J2B.	CONN CT-MT MBT P 4
31 3926	J3..	CONN CT-MT MBT P 6
31 3927	J4..	CONN CT-MT MBT P 7
31 3922	J6..	CONN CT-MT MBT P 2
77 4223	L..1	COIL CHOKE PJ 49 SMP FAN CTRL
10 5016	NTC1	RES NTC 2K7
10 6827	P..1	TRIMPOT CEMV 2K K 0W50
10 6832	P..2	TRIMPOT CEMV 50K K 0W50
78 0009	PC..	PC PJ 49 SMP *800 SUB 761737
13 2935	Q..1	TSTR BUX87 N 450 / 0A5
13 14071	Q..2	TSTR BC547B,BC237B N 45 / 0A1
13 14071	Q..3	TSTR BC547B,BC237B N 45 / 0A1
13 2909	Q..4	TSTR BD652 P 120 / 8A
13 1413	Q..5	TSTR BC557,BC307 P 45 / 0A1
13 14072	Q..6	TSTR BC547A,BC237A N 45 / 0A1
13 2948	Q..7	TSTR BF459 N 300 / 0A1
13 14131	Q..8	TSTR BC557B,BC307B P 45 / 0A1
13 14071	Q..9	TSTR BC547B,BC237B N 45 / 0A1
10 1346	R..1	RES CF 6K8 J 1W
10 4656	R..3	RES HV 1M2 J 0W50
10 11134	R..4	RES MF 12E J 0W25
10 1142	R..5	RES CF 3K3 J 0W25

ITEM NO.	SIT.	DESCRIPTION
10 1160	R..6	RES CF 100K J 0W25
10 1136	R..7	RES CF 1K J 0W25
10 1140	R..8	RES CF 2K2 J 0W25
10 1130	R..9	RES CF 330E J 0W25
10 11907	R.10	RES CFF E10 J 0W40
10 1148	R.11	RES CF 10K J 0W25
10 1155	R.12	RES CF 39K J 0W25
10 1149	R.13	RES CF 12K J 0W25
10 1144	R.14	RES CF 4K7 J 0W25
10 1138	R.15	RES CF 1K5 J 0W25
10 1144	R.16	RES CF 4K7 J 0W25
10 1156	R.17	RES CF 47K J 0W25
10 1140	R.18	RES CF 2K2 J 0W25
10 1144	R.19	RES CF 4K7 J 0W25
10 1154	R.20	RES CF 33K J 0W25
10 1145	R.21	RES CF 5K6 J 0W25
10 1154	R.22	RES CF 33K J 0W25
10 1161	R.23	RES CF 120K J 0W25
10 1168	R.24	RES CF 470K J 0W25
10 1161	R.25	RES CF 120K J 0W25
10 1167	R.26	RES CF 390K J 0W25
10 1154	R.27	RES CF 33K J 0W25
10 1154	R.28	RES CF 33K J 0W25
10 1144	R.29	RES CF 4K7 J 0W25
10 1163	R.30	RES CF 180K J 0W25
10 1159	R.31	RES CF 82K J 0W25
10 1172	R.32	RES CF 1M J 0W25
10 1172	R.33	RES CF 1M J 0W25
10 1236	R.34	RES CF 1K J 0W50
10 1162	R.35	RES CF 150K J 0W25
10 1137	R.36	RES CF 1K2 J 0W25
10 1130	R.37	RES CF 330E J 0W25
10 4658	R.38	RES HV 1M5 J 0W50
10 25561	R.39	RES MF 43K G 0W25
10 1144	R.40	RES CF 4K7 J 0W25
10 1148	R.41	RES CF 10K J 0W25
10 1140	R.42	RES CF 2K2 J 0W25
10 1156	R.43	RES CF 47K J 0W25
10 1131	R.44	RES CF 390E J 0W25
10 1148	R.45	RES CF 10K J 0W25
10 1165	R.46	RES CF 270K J 0W25
10 1136	R.47	RES CF 1K J 0W25
10 4688	R.48	RES HV 27M J 0W50
10 1159	R.50	RES CF 82K J 0W25
30 6718	T..1	TRANSF PJ 49 SMP STAND-BY
13 1706	Z..1	DIODE ZENER 9V1 0W5 C
13 1706	Z..2	DIODE ZENER 9V1 0W5 C
13 1767	Z..3	DIODE ZENER 6V8 0W5 B
13 1767	Z..4	DIODE ZENER 6V8 0W5 B
13 1742	Z..5	DIODE ZENER 6V8 0W5 C
13 4031	Z..6	IC 431C +3+30V/0A1 REGULATOR
13 1756	Z..7	DIODE ZENER 7V5 0W5 C
13 4031	Z..8	IC 431C +3+30V/0A1 REGULATOR
13 1756	Z..9	DIODE ZENER 7V5 0W5 C
13 1734	Z.10	DIODE ZENER 5V6 0W5 B
72 1850	0010	CLIPS PROTECTION TRIMPOT CEMH
13 3052	0020	TSTR COOLER TO-126
80 2646	0040	FIX PJ 49 SMP SUB
36 7435	0041	RIVET P AL AL AD34ABS D2,4
72 1632	0050	SMCDIOSPACER LED5
13 3039	0060	SPACER L 8 D 4 D1,2 CER
80 2632	0100	HEATSINK PJ 49 SMP SUB
36 7600	0110	FIXING BLOC UNIVERSEL M3
36 7502	0111	WASHER DIN6798 A 3,2

SM POWER SUPPLY MODULE 76 1736

SUB-MODULE SM POWER SUPPLY 76 1737

ITEM NO.	SIT.	DESCRIPTION
36 20226	0112	SCREW DIN84 M 3 X 8 MP-
13 30291	0120	TSTR MICA INSULAT TO-220
13 30292	0121	TSTR BUSH INSULAT TO-220
36 20236	0122	SCREW DIN84 M 3 X10 MP-
36 7502	0123	WASHER DIN6798 A 3,2
36 6102	0124	NUT DIN934 M 3 HEXAGON
13 30191	0130	TSTR WASHER TO-126
13 30192	0131	TSTR MICA INSULAT TO-126
13 30193	0132	TSTR BUSH INSULAT TO-126
36 20157	0133	SCREW DIN84 M 2,5X12 MP-
36 6110	0134	NUT DIN934 M 2,5 HEXAGON
36 7528	0135	WASHER DIN6798 A 2,7
36 26696	0140	SCREW DIN921 M 3 X 8 MP-
80 2640	0150	HEATSINK PJ 49 SMP SUB WASHER
36 20226	0151	SCREW DIN84 M 3 X 8 MP-
34 6993	1000	SLEEVE SHRINK D9,5/4,8 BLA
34 8100	8100	WIRE JUMPER 0,6 M AUTOM

SM POWER SUPPLY MODULE 76 1736

SUB-MODULE SM POWER SUPPLY 76 1737

ART NO.	DESCRIPTION	QUANTITY		ART NO.	DESCRIPTION	QUANTITY	
10 11907	RES CFF E10 J 0W40	1		13 3052	TSTR COOLER TO-126	1	
10 4656	RES HV 1M2 J 0W50	1		13 4031	IC 431C +3+30V/0A1 REGULATOR	2	
10 4658	RES HV 1M5 J 0W50	1		13 4114	IC 393 DUAL VOLT COMP	1	
10 4688	RES HV 27M J 0W50	1		13 4116	IC 353 JFET DUAL OPAMP	1	
10 5016	RES NTC 2K7	1		13 7625	IC 34063 DC DC CONVERTER	1	
10 6827	TRIMPOT CEMV 2K K 0W50	1	*				
10 6832	TRIMPOT CEMV 50K K 0W50	1	*	30 6718	TRANSF PJ 49 SMP STAND-BY	1	*
11 28111	CAP CE DI 68P M 1000	1		31 3922	CONN CT-MT MBT P 2	1	
11 2815	CAP CE DI 150P M 400	1		31 3923	CONN CT-MT MBT P 3	1	
11 2830	CAP CE DI 2K7 S 400	1		31 3924	CONN CT-MT MBT P 4	1	
11 4154	CAP POMEFF 22K K 400	1		31 3926	CONN CT-MT MBT P 6	1	*
				31 3927	CONN CT-MT MBT P 7	1	
13 14071	TSTR BC547B,BC237B N 45 / 0A1	3		31 4108	FUSE 0A100 5X20 SLOW	1	
13 14072	TSTR BC547A,BC237A N 45 / 0A1	1		31 4514	FUSE HOLDER 5X20 CAP+HOLDER	1	
13 1413	TSTR BC557,BC307 P 45 / 0A1	1					
13 14131	TSTR BC557B,BC307B P 45 / 0A1	1		34 6993	SLEEVE SHRINK D9,5/4,8 BLA	1	
13 1621	DIODE 1N4148 SWITCH	5					
13 1636	DIODE BAT43,(85) SCHOTTKY	2		36 20157	SCREW DIN84 M 2,5X12 MP-	1	
13 1637	DIODE BA158 SWITCH	2		36 20226	SCREW DIN84 M 3 X 8 MP-	8	
13 1667	DIODE CQY95-B4 LED D3 GRE	1		36 20236	SCREW DIN84 M 3 X10 MP-	1	
13 1691	OPTO COUPLER 601G-3 SFH	2		36 26696	SCREW DIN921 M 3 X 8 MP-	1	
13 1706	DIODE ZENER 9V1 0W5 C	2		36 6102	NUT DIN934 M 3 HEXAGON	1	
13 1734	DIODE ZENER 5V6 0W5 B	1		36 6110	NUT DIN934 M 2,5 HEXAGON	1	
13 1742	DIODE ZENER 6V8 0W5 C	1		36 7435	RIVET P AL AL AD34ABS D2,4	2	
13 1756	DIODE ZENER 7V5 0W5 C	2		36 7502	WASHER DIN6798 A 3,2	7	
13 1767	DIODE ZENER 6V8 0W5 B	2		36 7528	WASHER DIN6798 A 2,7	1	
13 1950	DIODE BYV27/150 150V/2A R	1		36 7600	FIXING BLOC UNIVERSEL M3	4	
13 2909	TSTR BD652 P 120 / 8A	1					
13 2935	TSTR BUX87 N 450 / 0A5	1	*	72 1632	SMCDIOSPACER LED5	1	
13 2948	TSTR BF459 N 300 / 0A1	1		72 1850	CLIPS PROTECTION TRIMPOT CEMH	1	
13 30191	TSTR WASHER TO-126	1					
13 30192	TSTR MICA INSULAT TO-126	1		77 4223	COIL CHOKE PJ 49 SMP FAN CTRL	1	*
13 30193	TSTR BUSH INSULAT TO-126	1					
13 30291	TSTR MICA INSULAT TO-220	1		80 2632	HEATSINK PJ 49 SMP SUB	1	*
13 30292	TSTR BUSH INSULAT TO-220	1		80 2640	HEATSINK PJ 49 SMP SUB WASHER	2	
13 3039	SPACER L 8 D 4 D1,2 CER	6		80 2646	FIX PJ 49 SMP SUB	1	

*NUMBERS REFERRING TO PICTURE