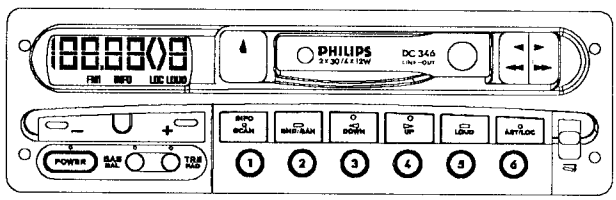
Cassette car radio 22DC213/00-216/02-243/00-246/02

22DC316/02-343/00-346/02

Service
Service
Service



For repair information of the Cassette deck see Service Manual of Auto Cassette Deck :
TN301NX265 (22DC213-216-243-246)
CDS36-PR (22DC316-343-346)

ServiceManual

12 V

Contents **page**

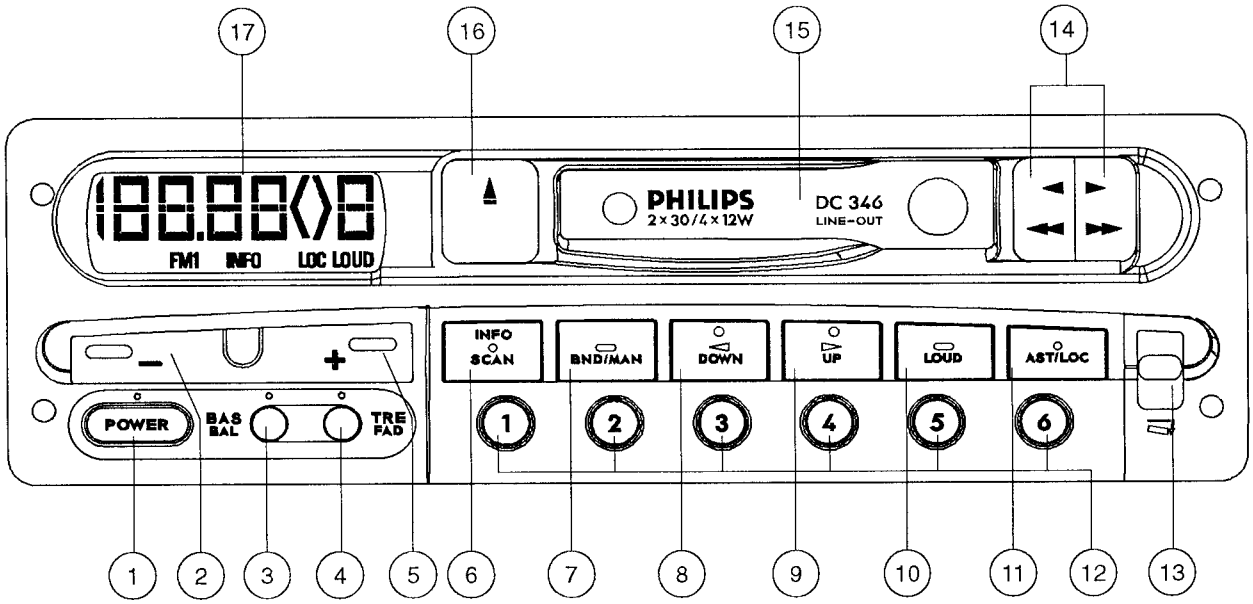
Published by Philips Car System

bject to modification 4822 725 24366

PCS 80 082

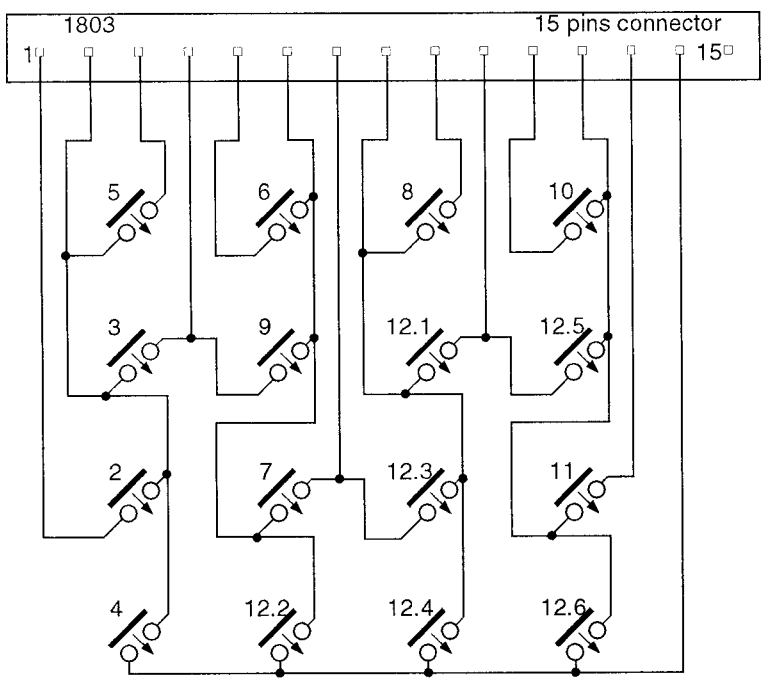
PHILIPS

CONTROLS

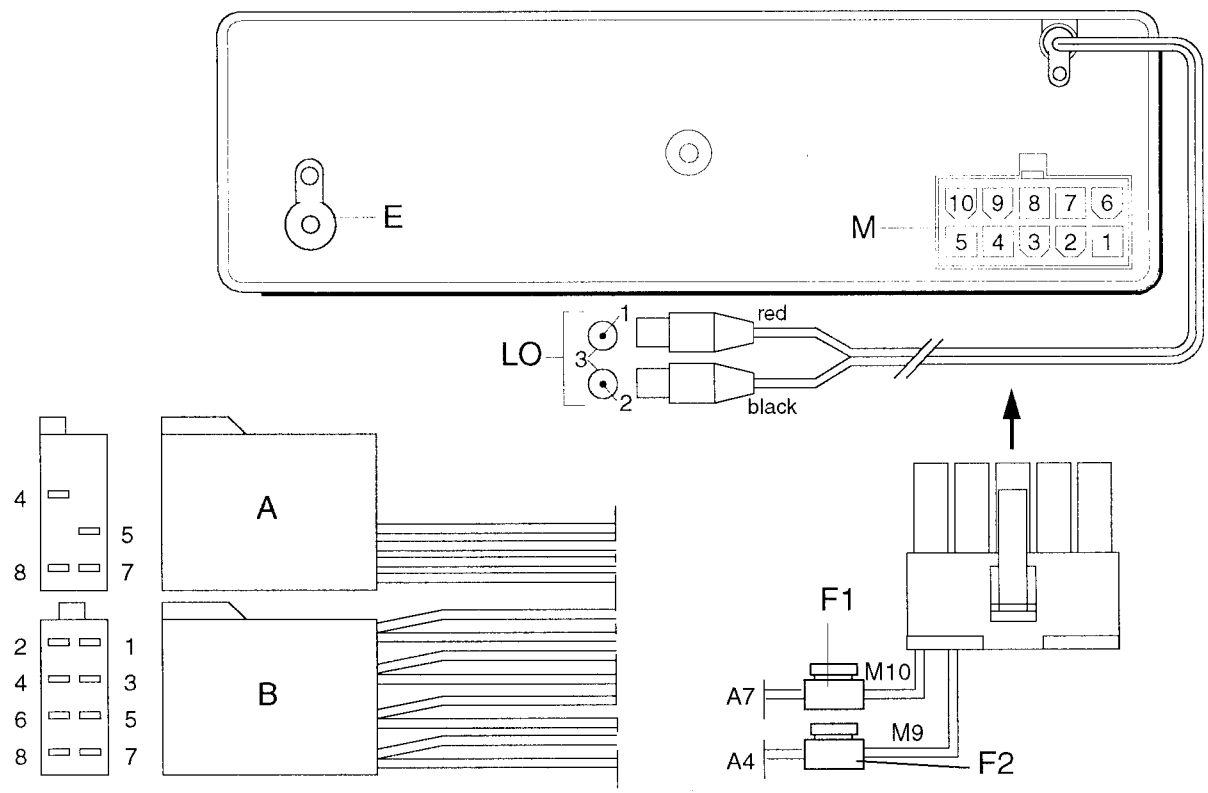


1	On / Off	10	Loudness
2	Volume -	11	Autostore / Local
3	Bass / Balance	12	Presets / Selection
4	Treble	13	Release Knob for detachable unit
5	Volume +	14	Ffw / Frw Buttons (316-343-346)
6	Scan Presets / Info (216-246-316-346)	15	Cassette Opening + Flap
	Scan Presets (213-243-343)	16	Reverse Button / Eject (316-343-346)
7	Band Selection / Manual Search Select		FFW / Eject (213-216-243-246)
8	Search Down	17	Display
9	Search Up		

KEYBOARD SCHEMATIC DIAGRAM



CONNECTIONS



A : POWER SUPPLY

A4 = M9	+12V PERMANENT	YELLOW / RED
A5 = M4	AUTOMATIC AERIAL	BLUE
A7 = M10	+12V SWITCHED	RED
A8 = M5	GROUND	BROWN

B : LOUDSPEAKERS

FOR 4 X 4.5 W CONFIGURATION :		FOR 2 X 15 W CONFIGURATION :	
B1 / B4 = M7	REAR RIGHT+ / FRONT RIGHT -		BLUE - GREY / BLACK
B2 = M8	REAR RIGHT -	B2 = M8 RIGHT CHANNEL -	BLUE / BLACK
B3 = M3	FRONT RIGHT+	B3 = M3 RIGHT CHANNEL +	GREY
B5 = M1	FRONT LEFT+	B5 = M1 LEFT CHANNEL +	GREEN
B6 / B7 = M2	FRONT LEFT- / REAR LEFT+		GREEN / BLACK - BROWN
B8 = M6	REAR LEFT -	B8 = M6 LEFT CHANNEL -	BROWN / BLACK

LO : LINE OUT CABLE (only 316 - 343 - 346)

LO1	RIGHT SIGNAL	RED
LO2	LEFT SIGNAL	BLACK
LO3	GROUND	SHIELDING

E AERIAL PLUG (DIN 41585)
F1 FUSE 5A
F2 FUSE 2A

TECHNICAL DATA

GENERAL

Power supply	:14.4V DC
Dimensions	:180x150x51.8 mm

RADIO

LW *	: 144-288 KHz
MW *	: 531-1629 KHz
FM	: 87.5-108 MHz
IF-AM *	: 450 KHz / 10.7 MHz
IF-FM	: 10.7 MHz / 72.2 MHz
Sensivity 26dB S/N	: 24 µV (LW)
	: 17.5 µV (MW)
	: 3,5 µV (FM)
Limitation α-3dB	: 3 to 15 µV

(*Only 243-246-343-346)

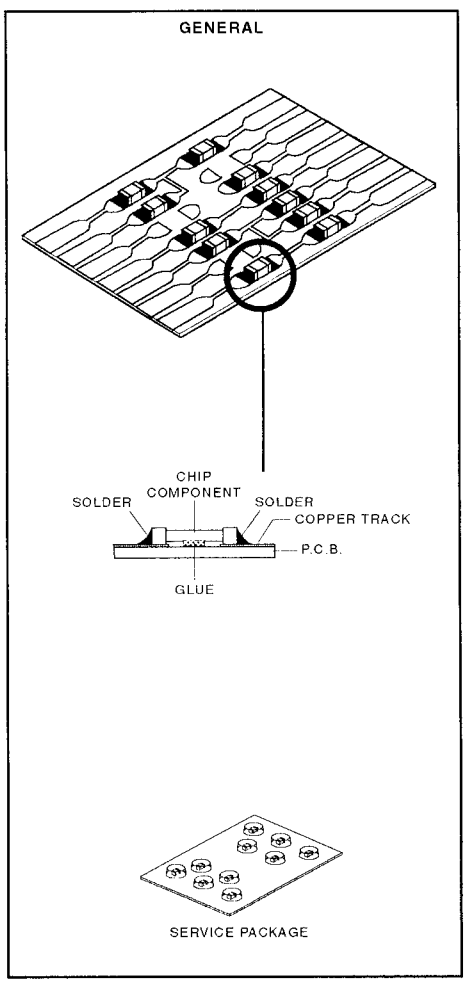
CASSETTE

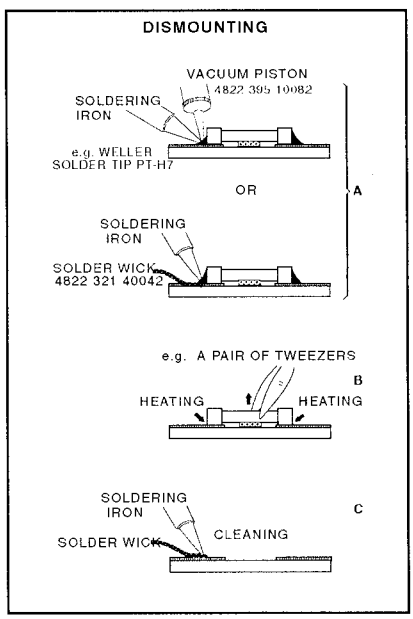
Cassette mechanism	:TN-301NX-265 (213-216-243-246)
Number of tracks	:2
Tape speed	:4.75 cm/sec
Wow and flutter	:≤ 0.35% (+5° to +35°)
Crosstalk	:> 21dB
Cassette mechanism	:CDS 36-PR (316-343-346)
Number of tracks	:2x2
Tape speed	:4.75 cm/sec
Wow and flutter	:≤ 0.35% (+10° to +45°)
Crosstalk	:> 21dB

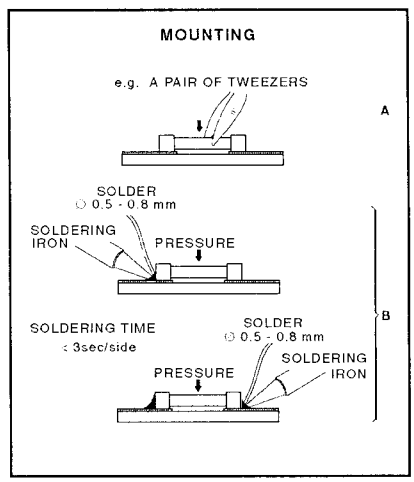
AMPLIFIER

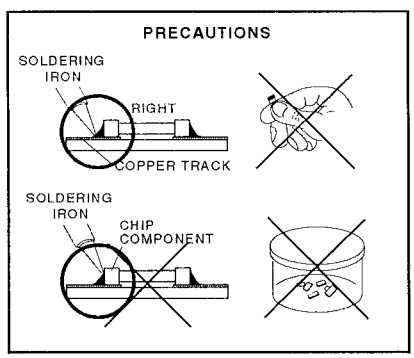
Output power	:2x15 or 4x4.5W / 4Ω (D = 10%)
Loudness	:+7dB ± 2dB at 60Hz
	:+4dB ± 2dB at 10kHz
Treeble control	:+10/-10 ± 2dB at 10kHz
Bass control	:+12/-12 ± 2dB at 60Hz
Balance control	:>12dB
Fader	:>12dB
Mute	:-70dB

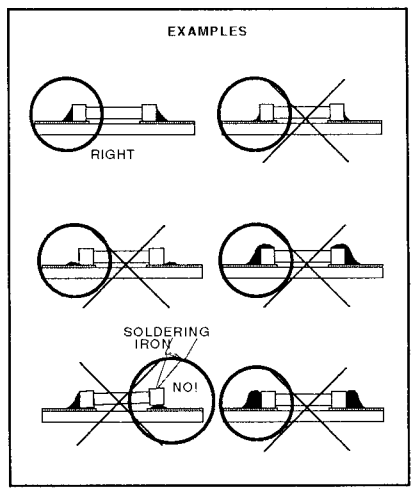
HANDLING CHIP COMPONENTS







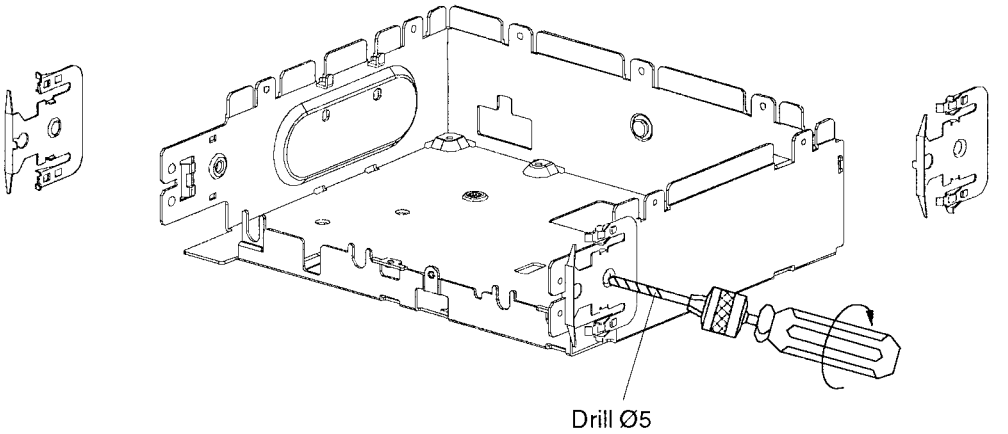




22DC213/00 - 22DC216/02 - 22DC243/00 - 22DC246/02 - 22DC316/02 - 22DC343/00 - 22DC346/02

PCS 80 085

LOCKING SPRING REMOVAL



If a Mounting Spring needs to be changed,you have to first eliminate the fastening by drilling it out with a Ø5mm hand-drill

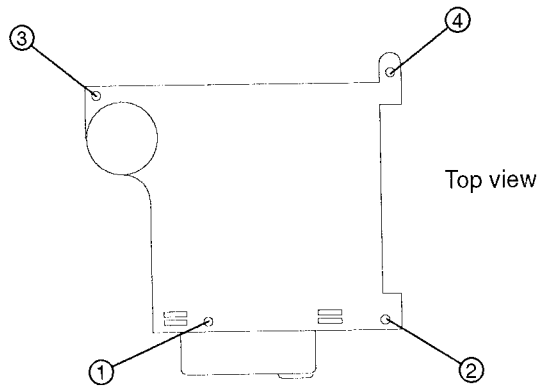
For the fixing of the new one , use a counter-sunk screw Ø3mm, length 5 or 6mm and an M3 nut

ESD

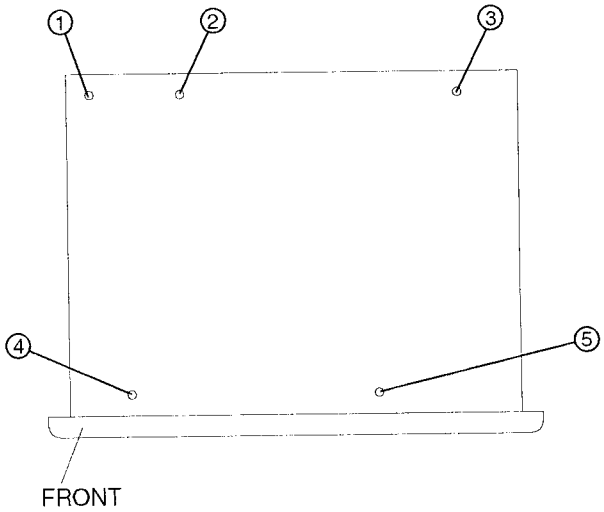
WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically.
When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

SCREWING SEQUENCE DECK



SCREWING SEQUENCE PWB



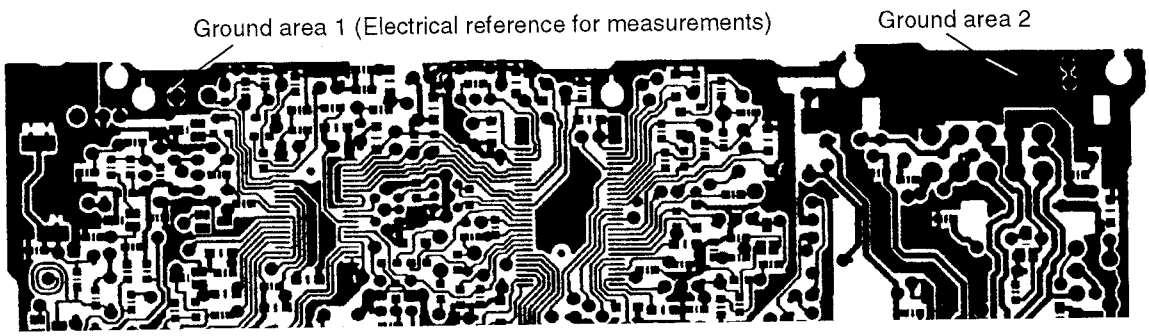
REMOVING THE PWB

1) Disconnect all the cables and flex foils, and disengage the lamp from the light box of the LCD
2) Remove the front
3) Remove the deck (see screwing sequence)
4) Disengage the lamps from the metal frame
5) Remove the transparent LED
6)Remove the bracket of the power IC
7) remove the antenna plug bracket

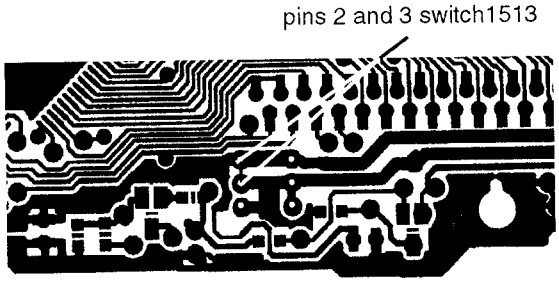
Now you can remove the PWB (see screwing sequence)

CONNECTING THE PWB FOR MEASUREMENTS ON THE COPPER SIDE.

1) Connect a wire (by soldering) between ground areas 1 and 2.
2) Short circuit the pins 2 and 3 of the detection switch.
3) Reconnect the flat foils of the front and the supply cable. Also reconnect the tape deck.

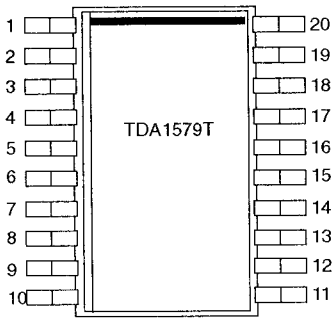


Main PWB copper side



TDA1579T Decoder for traffic warning radio transmissions

SYMBOL	PIN	DESCRIPTION
SK	1	SK indicator
DKout	2	DK output current
SKout	3	SK output current
τ_{BK}	4	time delay BK
V_{5BK}	5	filter output BK
V_{6BK}	6	filter input BK
V_P	7	supply voltage
$V_P/2$	8	half supply voltage
V_{9SK}	9	SK detector output
n.c.	10	not connected
n.c.	11	not connected
V_{12SK}	12	57kHz band pass filter
V_{AGC}	13	AGC
I_{14}	14	prestage biasing current
V_{MPX}	15	MPX input
V_{16DK}	16	filter input DK
V_{17DK}	17	filter output DK
τ_{DK}	18	time delay DK
I_{19}	19	reference current for BK, DK detector
GND	20	ground

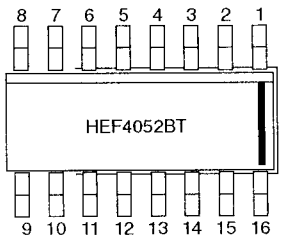


TEA6811 IC91 RF IC

SYMBOL	PIN	DESCRIPTION
GNDANF	1	analog ground 5 V
VCCANF	2	analog supply 5 V
LCKDET	3	lock detector flag
SDA	4	I2C bus data
SCL	5	I2C bus clock
FREFN	6	ref frequency from I2
FREFP	7	ref frequency from I2
GNDDIF	8	digital ground
VCCDIF	9	digital supply 5 V
NC	10	
FMIFON	11	outputs of FM-mixer
FMIFOP	12	first IF (72.2 MHz)
VCCE	13	analog supply 8.5 V
GNDE	14	analog ground 8.5 V
AMMOP	15	outputs of AMMIXEF
AMMON	16	of first IF (10.7 MHz)
NC	17	
AMMIN	18	AMMIXER input RF
VREF	19	reference voltage fro
NC	20	

HEF4052BT Dual 4 channel analogue multi/demultiplexer

SYMBOL	PIN	DESCRIPTION
Y_{0B}	1	independant input/output 0_B
Y_{2B}	2	independant input/output 2_B
Z_B	3	common input/output B
Y_{3B}	4	independant input/output 3_B
Y_{1B}	5	independant input/output 1_B
$\overline{E}$	6	enable input (active LOW)
V_{EE}	7	ground
V_{SS}	8	ground
A_1	9	address input 1
A_0	10	address input 0
Y_{3A}	11	independant input/output 3_A
Y_{0A}	12	independant input/output 0_A
Z_A	13	common input/output A
Y_{1A}	14	independant input/output 1_A
Y_{2A}	15	independant input/output 2_A
V_{DD}	16	supply

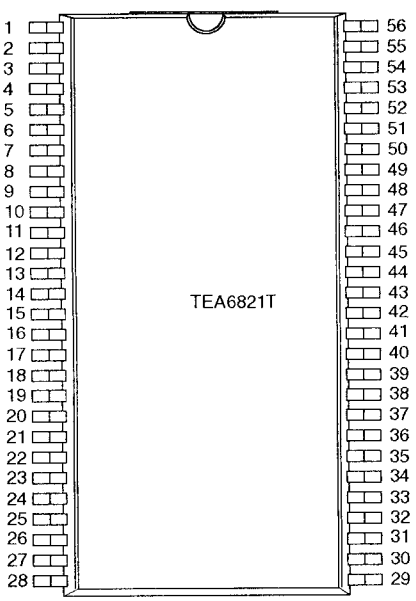


FUNCTION TABLE

inputs			channel
$\overline{E}$	A_1	A_0	ON
L	L	L	Y_{0A}-Z_A; Y_{0B}-Z_B
L	L	H	Y_{1A}-Z_A; Y_{1B}-Z_B
L	H	L	Y_{2A}-Z_A; Y_{2B}-Z_B
L	H	H	Y_{3A}-Z_A; Y_{3B}-Z_B
H	X	X	none

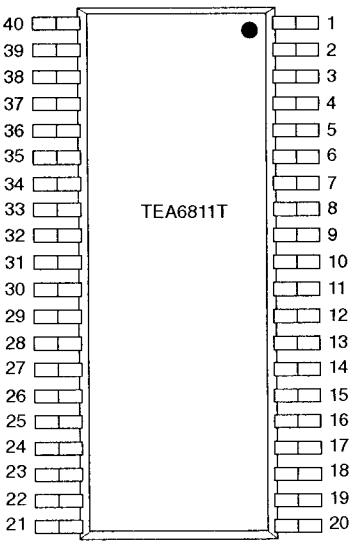
TEA6821T

SYMBOL	PIN	DESCRIPTION	SYMBOL	PIN	DESCRIPTION
QDET1	1	demodulator tank	FMIFAMPOUT	29	FM-IF amplifier output
QDET2	2	demodulator tank	AFGND	30	AF ground
TSWITCH	3	time switch	DEEMPHR	31	de-emphasis capacitor right
GND	4	analog ground	DEEMPHL	32	de-emphasis capacitor left
VPS	5	5 V supply voltage	AMIF2IN1	33	AM IF2 input1
HFBUS1	6	HF bus, pull-up to 5 V	AMIF2IN2	34	AM IF2 input2
HDBUS2	7	HF bus, pull-up to 5 V	FMIN2	35	FM limiter input
XTAL1	8	crystal oscillator	DCFEED	36	DC feed FM limiter
XTAL2	9	crystal oscillator	FMIN1	37	FM limiter input
F_{REFP}	10	PLL reference frequency	LEVELADJ	38	level adjust
F_{REFN}	11	PLL reference frequency	C_{AFC}	39	AFC capacitor
I_{REF}	12	reference current	MPBUF	40	multipath buffer time constant
FMIF1IN1	13	70 MHz FM-IF input	OUTLEFT	41	AF output left
FMIF1IN2	14	70 MHz FM-IF input	FMSTOP	42	FMSTOP adjust
TSDR	15	time constant for SDR	RDS/AMSTOP	43	MPX for RDS/AMSTOP adjust
TSDS	16	time constant for SDS	OUTRIGHT	44	AF output right
V_{SDS}	17	SDS control voltage	MPXIN	45	stereo decoder MPX input
V_{SDR}	18	SDR control voltage	IAC_{IN}	46	IAC input
FMIF2OUT1	19	FM mixer output	MPXOUT	47	FM demodulator MPX output
FMIF2OUT2	20	FM mixer output	AMAFOUT	48	AM demodulator AF output
V_{REF}	21	reference voltage	V_{MUTAML}	49	mute voltage / AM level
AMIF2OUT1	22	AM mixer output	LEVELUNWEIG	50	level unweighted
AMIF2OUT2	23	AM mixer output	$I_{ACCONTR}$	51	IAC control voltage
FMAMDEC	24	FM/AM 10.7 MHz decoupling	V_{PDIG}	52	V_P digital
PHASEDET	25	phase detector	SDA	53	SDA, pull-up to 5 V
PILDET	26	pilot detector	SCL	54	SCL, pull-up to 5 V
FMAM10.7	27	FM/AM 10.7 MHz input	BUSGND	55	bus ground
V_{PIF}	28	V_P IF amplifier	$V_{P8.5}$	56	V_P 8.5 V



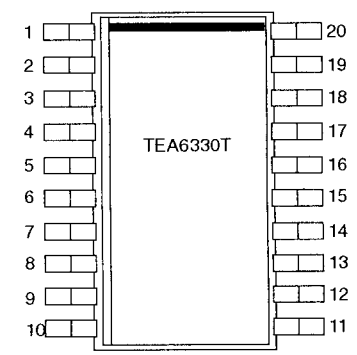
TEA6811 IC91 RF IC

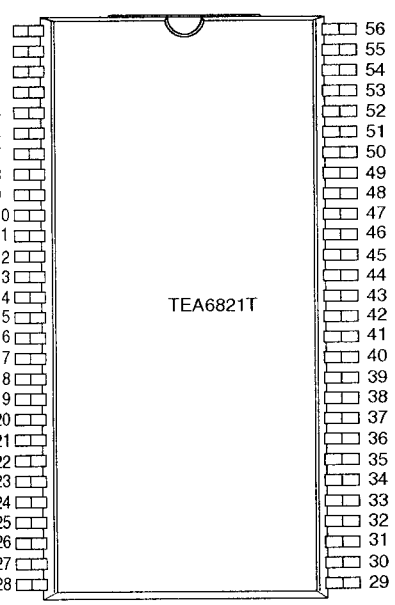
SYMBOL	PIN	DESCRIPTION	SYMBOL	PIN	DESCRIPTION
GNDANF	1	analog ground 5 V	GNDAMM	21	ground AMMIXER
VCCANF	2	analog supply 5 V	AMPREO	22	AMPREAMP output
LCKDET	3	lock detector flag	NC	23	
SDA	4	I2C bus data	AMSBI	24	AM feedback switch SB1
SCL	5	I2C bus clock	AMSBII	25	AM feedback switch SB2
FREFN	6	ref frequency from I2C N-terminal	AMPREI	26	AMPREAMP input
FREFP	7	ref frequency from I2C P-terminal	AMCAGC	27	AM AGC capacitor
GNDDIF	8	digital ground	AMCPRE	28	AM preamp decoupling capacitor
VCCDIF	9	digital supply 5 V	GNDRF	29	RF ground
NC	10		FMRFIP	30	FM MIXER inputs RF
FMIFON	11	outputs of FM-mixer of	FMRFIN	31	
FMIFOP	12	first IF (72.2 MHz)	IPIDIO	32	pin diode drive
VCCE	13	analog supply 8.5 V	FMAGC	33	FM AGC integrating capacitor
GNDE	14	analog ground 8.5 V	REFAGC	34	FM AGC reference voltage
AMMOP	15	outputs of AMMIXER	OSCFDB	35	oscillator FEEDBACK input
AMMON	16	of first IF (10.7 MHz)	GNDOSC	36	oscillator ground
NC	17		OSCTNK	37	oscillator tank output
AMMIN	18	AMMIXER input RF	VCCOSC	38	supply voltage VCO
VREF	19	reference voltage from AMBANDGAP	VTUNE	39	tuning voltage
NC	20		CHPOUT	40	charge pump output

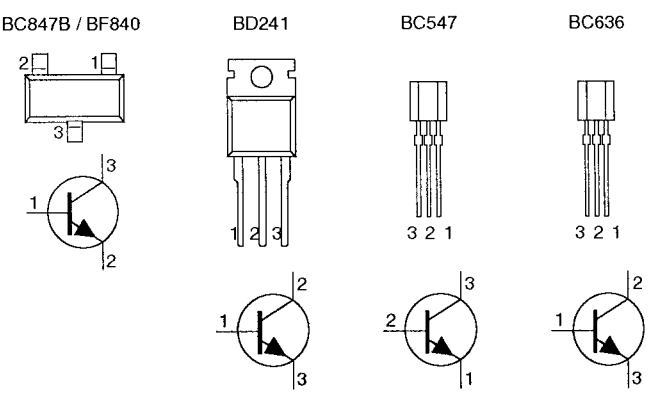


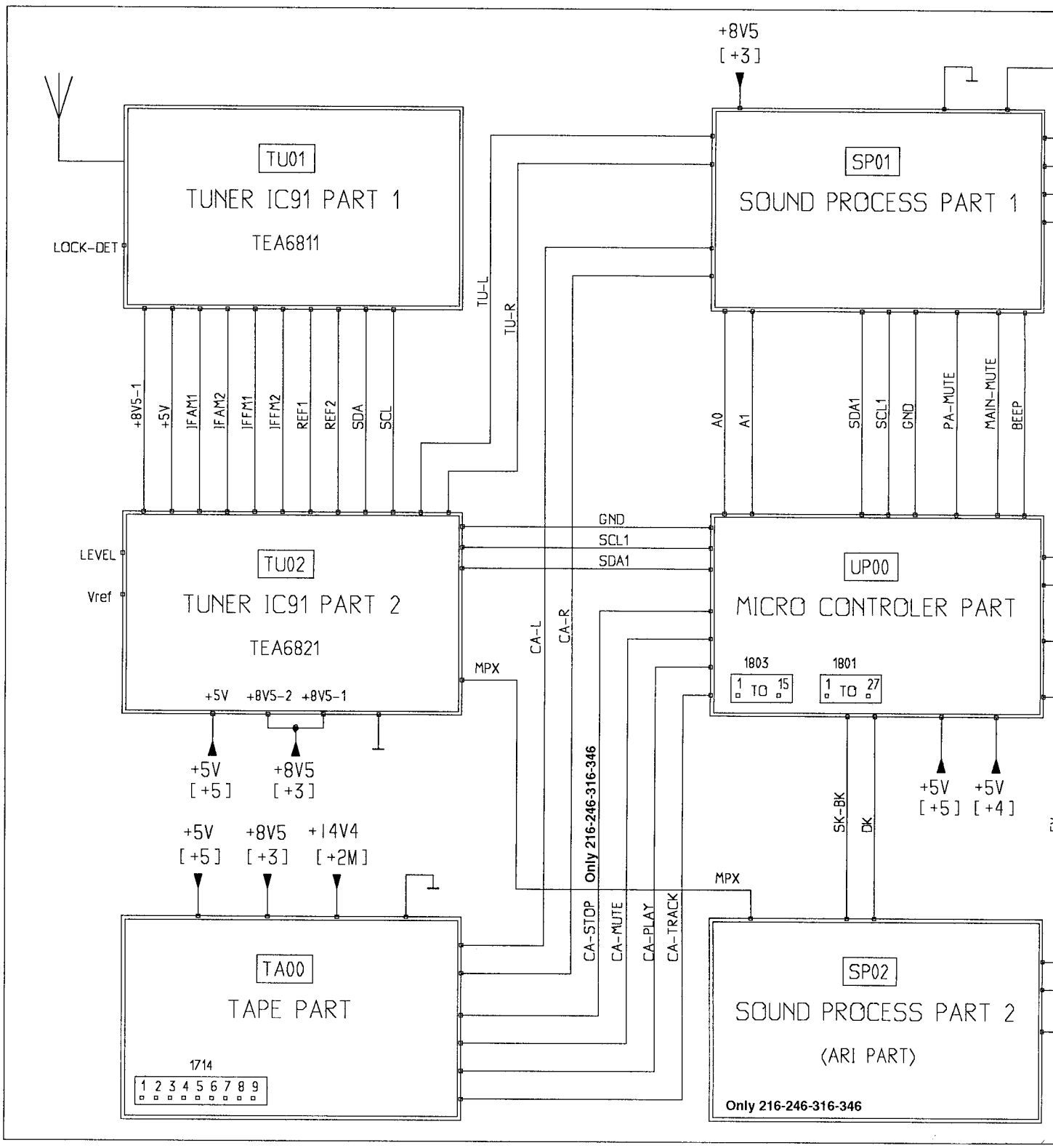
TEA6330T Sound FAder Control circuit (SOFAC)

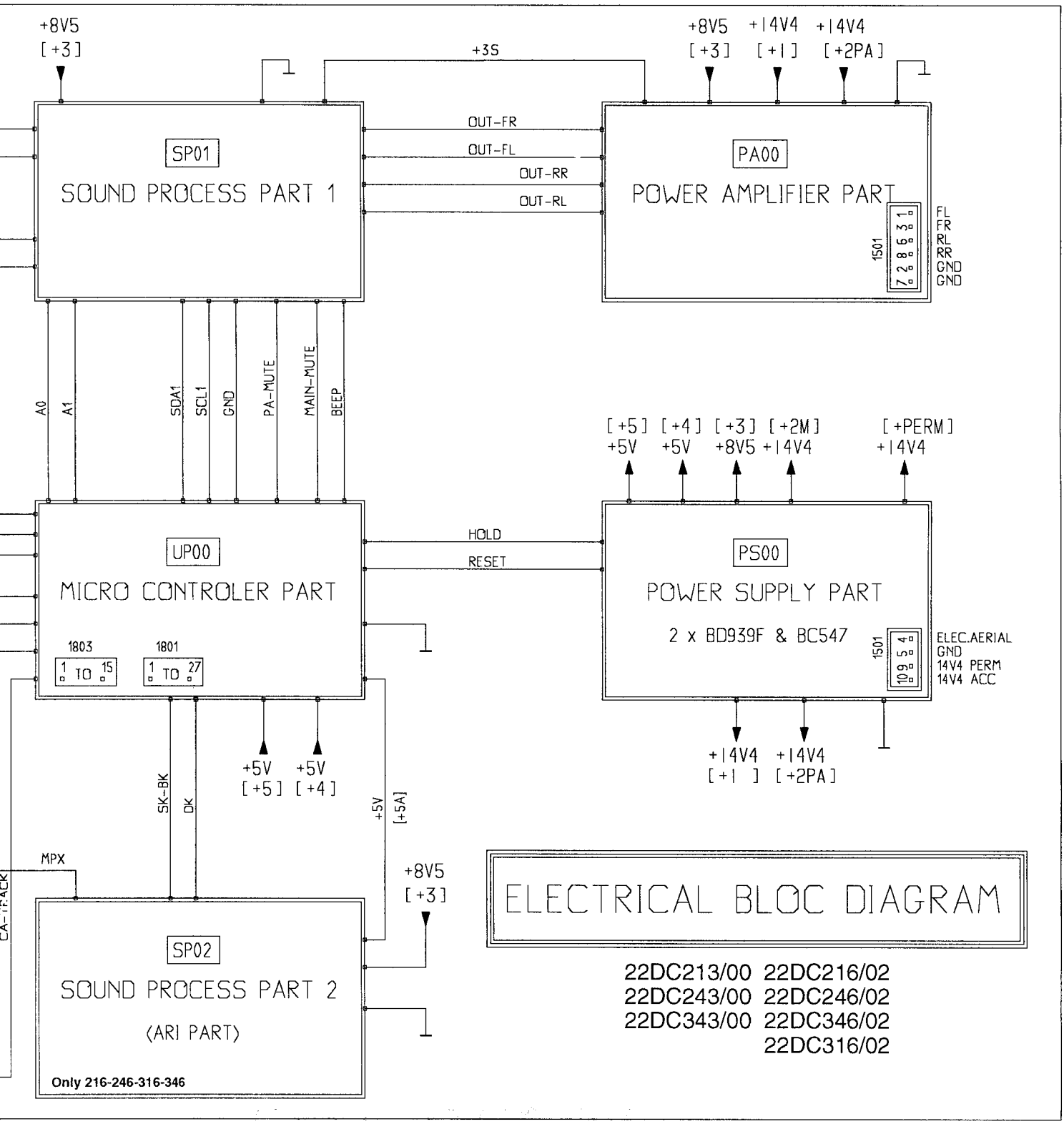
SYMBOL	PIN	DESCRIPTION
C_{PS}	1	filtering capacitor for power supply
IN-R	2	audio input signal RIGHT
GND1	3	analog ground (0 V)
C_{BR1}	4	capacitor for bass control RIGHTand signal to equalizer
C_{BR2}	5	capacitor for bass control RIGHT
C_{TR}	6	capacitor for treble control RIGHT, input signal for equalizer RIGHT
QRR	7	right audio output signal of rear channel
QRF	8	right audio output signal of front channel
MUTE	9	input to set mute externally
GND2	10	digital ground (0 V) for bus control
SCL	11	clock signal of I^2C-bus
SDA	12	data signal of I^2C-bus
QLF	13	left audio output signal of front channel
QLR	14	left audio output signal of rear channel
C_{TL}	15	capacitor for treble control LEFT, input signal for equalizer LEFT
C_{BL2}	16	capacitor for bass control LEFT
C_{BL1}	17	capacitor for bass control LEFT and signal to equalizer
V_p	18	+8.5 V supply voltage
IN-L	19	audio input signal LEFT
V_{ref}	20	reference voltage output (V_p/2)








TU01
TUNER IC91 PART 1
TEA6811
LOCK-DET
+8V5-1
+5V
IFAM1
IFAM2
IFFM1
IFFM2
REF1
REF2
SDA
SCL
TU-L
TU-R
+8V5
[+3]
SP01
SOUND PROCESS PART 1
A0
A1
SDA1
SCL1
GND
PA-MUTE
MAIN-MUTE
BEEP
LEVEL
Vref
TU02
TUNER IC91 PART 2
TEA6821
+5V +8V5-2 +8V5-1
+5V
[+5]
+8V5
[+3]
GND
SCL1
SDA1
UP00
MICRO CONTROLER PART
1803
1 TO 15
1801
1 TO 27
CA-L
CA-R
MPX
+5V
[+5]
+5V
[+4]
SK-BK
DK
+5V
[+5]
+8V5
[+3]
+14V4
[+2M]
Only 216-246-316-346
CA-STOP
CA-MUTE
CA-PLAY
CA-TRACK
MPX
TA00
TAPE PART
1714
1 2 3 4 5 6 7 8 9
SP02
SOUND PROCESS PART 2
(ARI PART)
Only 216-246-316-346



ELECTRICAL BLOC DIAGRAM

22DC213/00 22DC216/02
22DC243/00 22DC246/02
22DC343/00 22DC346/02
22DC316/02

DC VOLTAGES

7202 TEA6811V

1 = GND
2 = 3.0 V
3 = 4.9 V
4 = 5.1 V SDA
5 = 5.1 V SCL
6 = 5.0 V
7 = 4.9 V
8 = GND
9 = 5.2 V
10 = GND
11 = 8.5 V
12 = 8.5 V
13 =8.5 V
14 = GND
15 = 8.4 V
16 = 8.4 V
17 = GND
18 = 0.1 V
19 = 0.0 V
20 = GND
21 = GND
22 = 1.8 V
23 = GND
24 = 0.1 V
25 = 0.2 V
26 = 2.8 V
27 = 0.1 V
28 = 0.1 V
29 = GND
30 = 3.1 V
31 = 3.1 V
32 = 0.0 V
33 = 4.2 V
34 = 4.2 V
35 = 2.6 V
36 = GND
37 = 6.2 V
38 = 8.4 V
39 = 3.0 V
40 = 3.0 V

7300 TEA6821T/V2

1 = 4.0 V
2 = 4.0 V
3 = 0.8 V
4 = GND
5 = 5.0 V
6 = 5.0 V SDA
7 = 5.0 V SCL
8 = 61.5 MHz
9 = 61.5 MHz
10 = 5.0 V
11 = 4.9 V
12 = 4.2 V
13 =2.3 V
14 = 2.3 V
15 = N.C.
16 = 5.0 V
17 = 2.5 V
18 = 1.4 V
19 = 8.4 V
20 = 8.4 V
21 = 5.0 V
22 = 8.5 V
23 = 8.5 V
24 = 3.0 V
25 = 4.7 V
26 = 2.7 V
27 = 2.9 V
28 = 8.5 V
29 = 6.2 V
30 = 1.8 V
31 = 2.3 V
32 = 2.3 V
33 = 0.7 V
34 = 1.0 V
35 = 2.7 V
37 = 2.7 V
37 = 2.7 V
38 = 1.7 V
39 = 3.3 V
40 = 0.7 V
41 = 3.5 V
42 = 1.9 V
43 = 3.0 V
44 = 3.4 V
45 = 2.8 V
46 = 3.2 V
47 = 3.2 V
48 = 4.5 V
49 = 5.0 V
50 = 5.2 V
51 = 4.9 V
52 = 5.1 V
53 = 5.1 V
54 = 5.1 V
55 = GND
56 = 8.5 V

7402 TDA7374V

1 = 7.0 V
2 = 7.0 V
3 = 14.4 V
4 = 0.7 V
5 = 0.7 V
6 = 0.7 V
7 = 6.6 V
8 = Earth
9 = GND
10 = N.C.
11 =0.7 V
12 =0.7 V
13 = 14.4 V
14 = 7.0 V
15 = 7.0 V

7602 HEF 4052BT

1 = 3.4 V
2 = 5.5 V
3 = 3.4 V
4 = 3.4 V
5 = 3.8 V
6 = GND
7 = GND
8 = GND
9 = 0.0 V
10 = 0.0 V
11 = 3.4 V
12 = 3.5 V
13 = 3.4 V
14 = 3.9 V
15 = 5.5 V
16 = 7.7 V

7401 HEF 4052BT

1 = 3.9 V
2 = GND
3 = 3.9 V
4 = GND
5 = 3.9 V
6 = GND
7 = GND
8 = GND
9 = GND
10 = 6.4 V
11 = GND
12 = 3.9 V
13 = 3.9 V
14 = 3.9 V
15 = GND
16 = 7.7 V

7605 TEA 6330

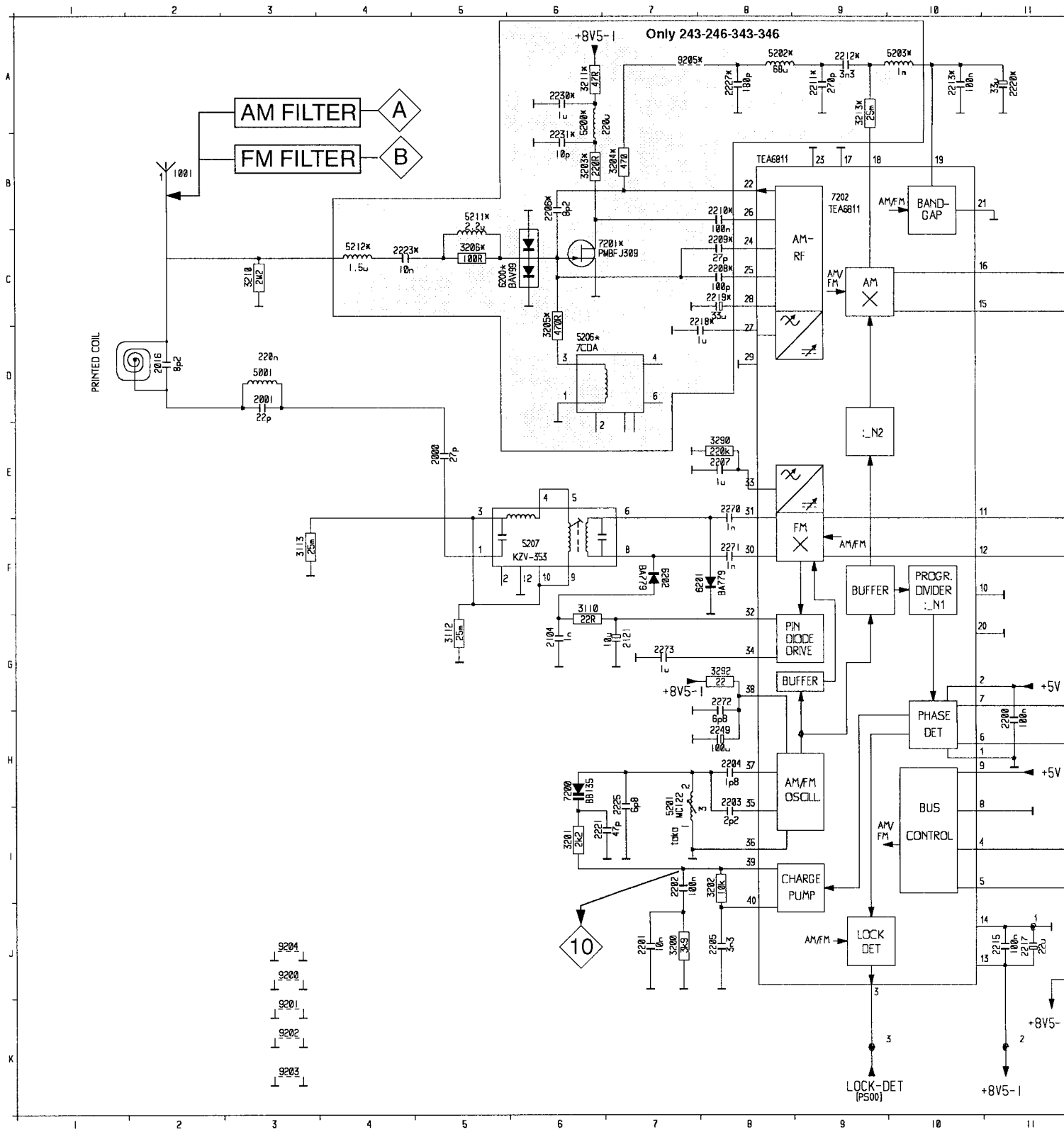
1 = 7.7 V
2 = 3.8 V
3 = GND
4 = 3.9 V
5 = 3.9 V
6 = 3.9 V
7 = 3.9 V
8 = 3.9 V
9 = 7.7 V
10 = GND
11 = 5.1 V SCL
12 = 5.1 V SDA
13 = 3.9 V
14 = 3.9 V
15 = 3.9 V
16 = 3.9 V
17 = 3.9 V
18 = 7.7 V
19 = 3.9 V
20 = 3.9 V

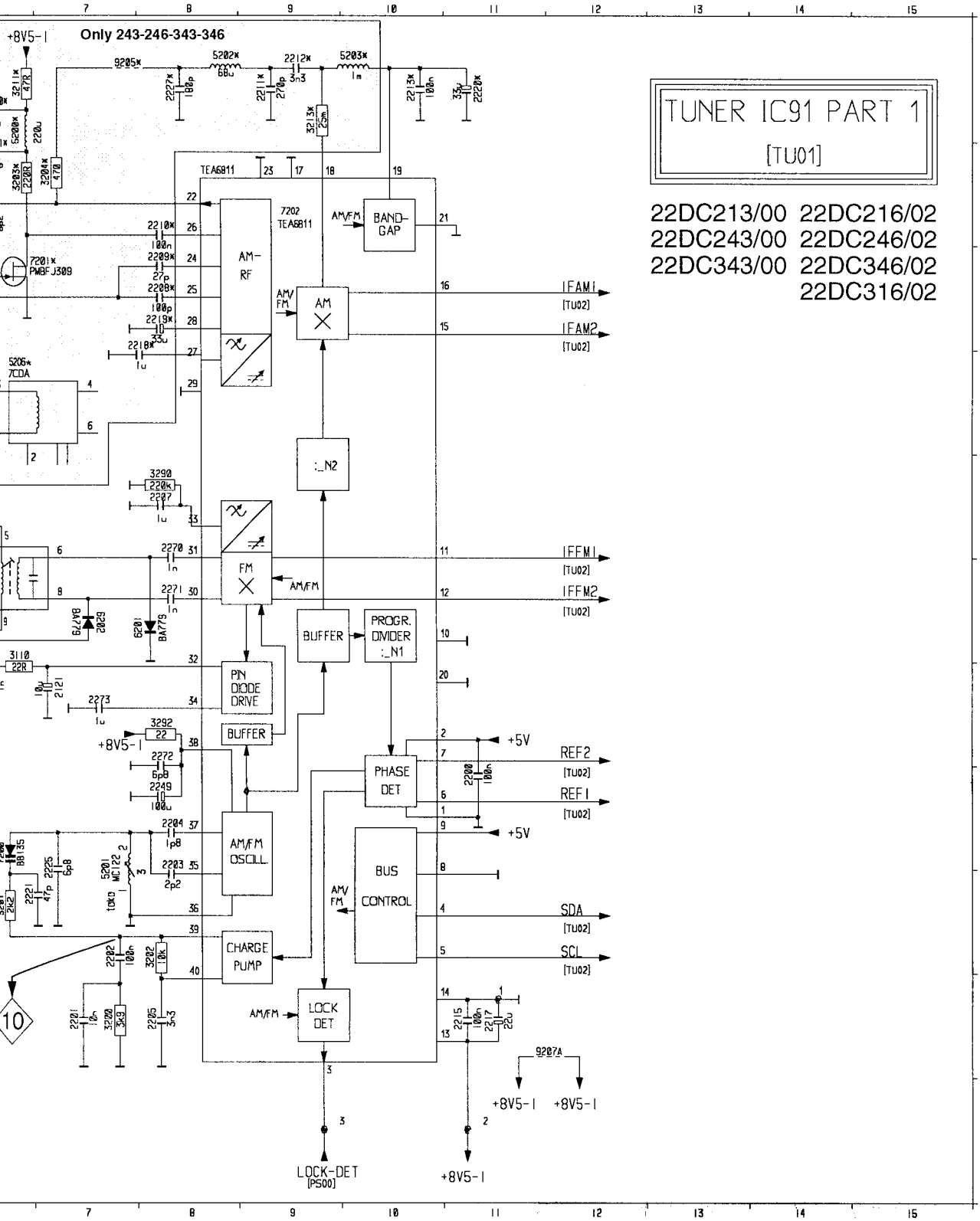
CHECK AND ALIGNMENT

For checking and adjusting see general procedures

Check	SK				Setting of controls		
Demodulated FM levels	FM	98 MHz 1 mV Δf=22.5 KHz f mod = 1 KHz	B			8 210 mV ± 40 mV	
		98 MHz 1 mV Δf = 6.75 KHz f mod = 19 KHz				8 60 mV ± 10 mV	
		98 MHz 1 mV Δf = 3.75 KHz f mod = 57 KHz				8 30 mV ± 10 mV	
Demodulated AM level	MW	1053 KHz 1 mV 1 KHz, 30% AM	A			250 mV ≤ 7 9 ≤ 350 mV	
VC FM	FM		B	87.5 MHz		10 > 1.2 V	
				108 MHz		10 < 5.5 V	
VC AM	LW		A	144 KHz		10 > 1.2 V	
	MW			1629 KHz		10 < 7.0 V	
FM Mute	FM	93 MHz 1mV	B			5 6 0 dB (775 mV)	
		No signal				5 6 < -10 dB	
0 Discriminator						4 3.4 V ± 400 mV	
Reference oscillator frenquencies						1 61.5 MHz ± 3kHz 2 6 MHz ± 0.5%	

Alignment	SK					
	FM	88 MHz 20µV no AF signal	B	88 MHz	5201	10 1.35 V ± 50 mV
	FM	93 MHz <20 µV no AF signal	B	93 MHz	5209 5210	Max DC voltage on pin 50 of IC 7300
	FM	93 MHz 20µV no AF signal	B	93 MHz	5208	Max DC voltage on pin 50 of IC 7300
	AM	1053 KHz 70µV 1 kHz 30%	A	1053 KHz	5301	Max DC voltage on pin 50 of IC 7300
Audio limiting	FM	98 MHz 1 mV Δf=22.5 KHz f mod = 1 KHz	B			5 6 0 dB (775 mV)
		98 MHz 6 µV Δf=22.5 KHz f mod = 1 KHz			3321	5 6 -3 dB


Only 243-246-343-346
+8V5-I
AM FILTER
A
FM FILTER
B
PRINTED COIL
TEA6811
7202
TEA6811
AM-
RF
AM
FM
BAND-
GAP
:_N2
PROGR.
DIVIDER
:_N1
BUFFER
PIN
DIODE
DRIVE
PHASE
DET
AM/FM
OSCILL.
BUS
CONTROL
CHARGE
PUMP
LOCK
DET
LOCK-DET
[PS00]
+8V5-I
+5V
10

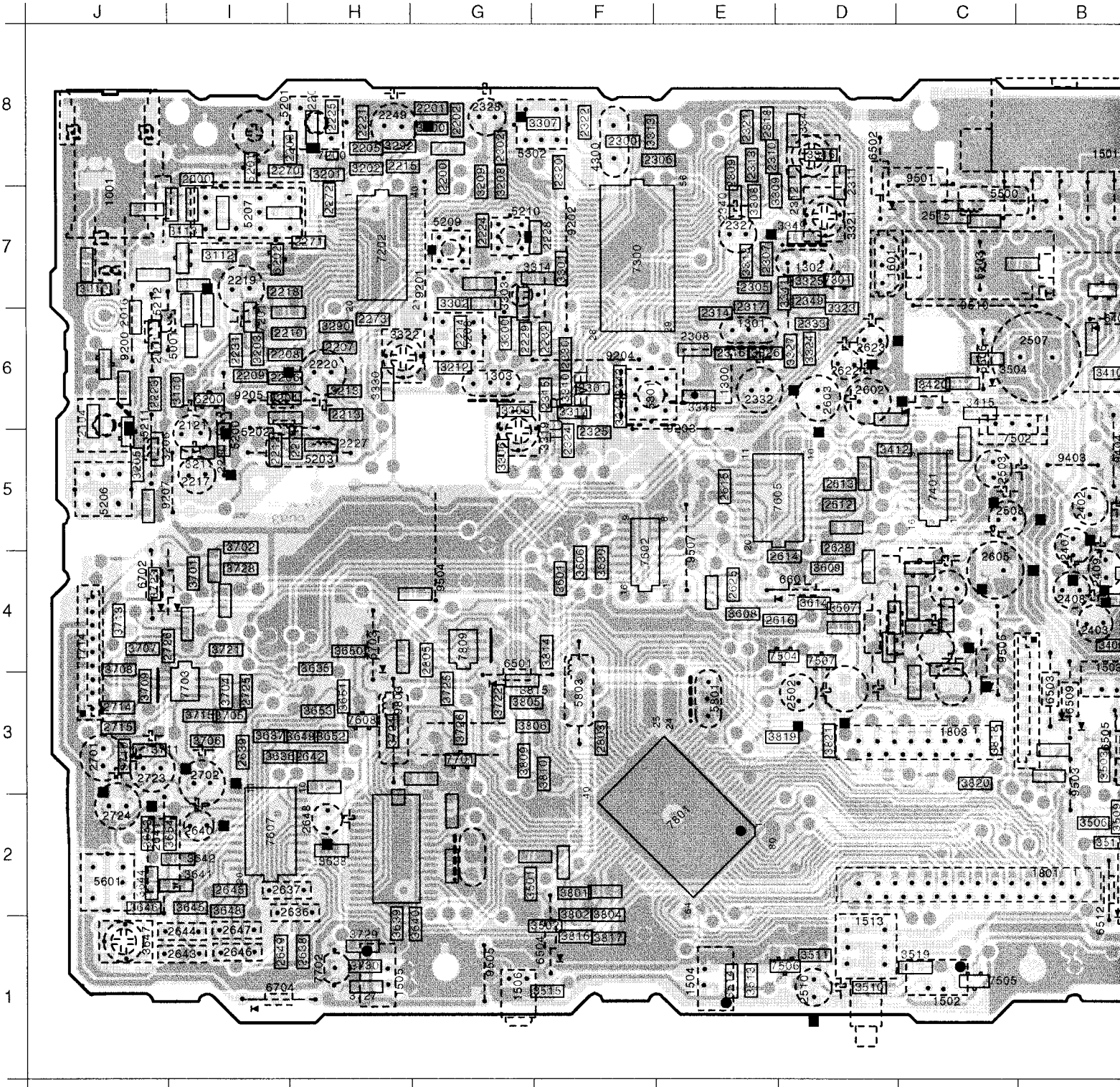


TUNER IC91 PART 1

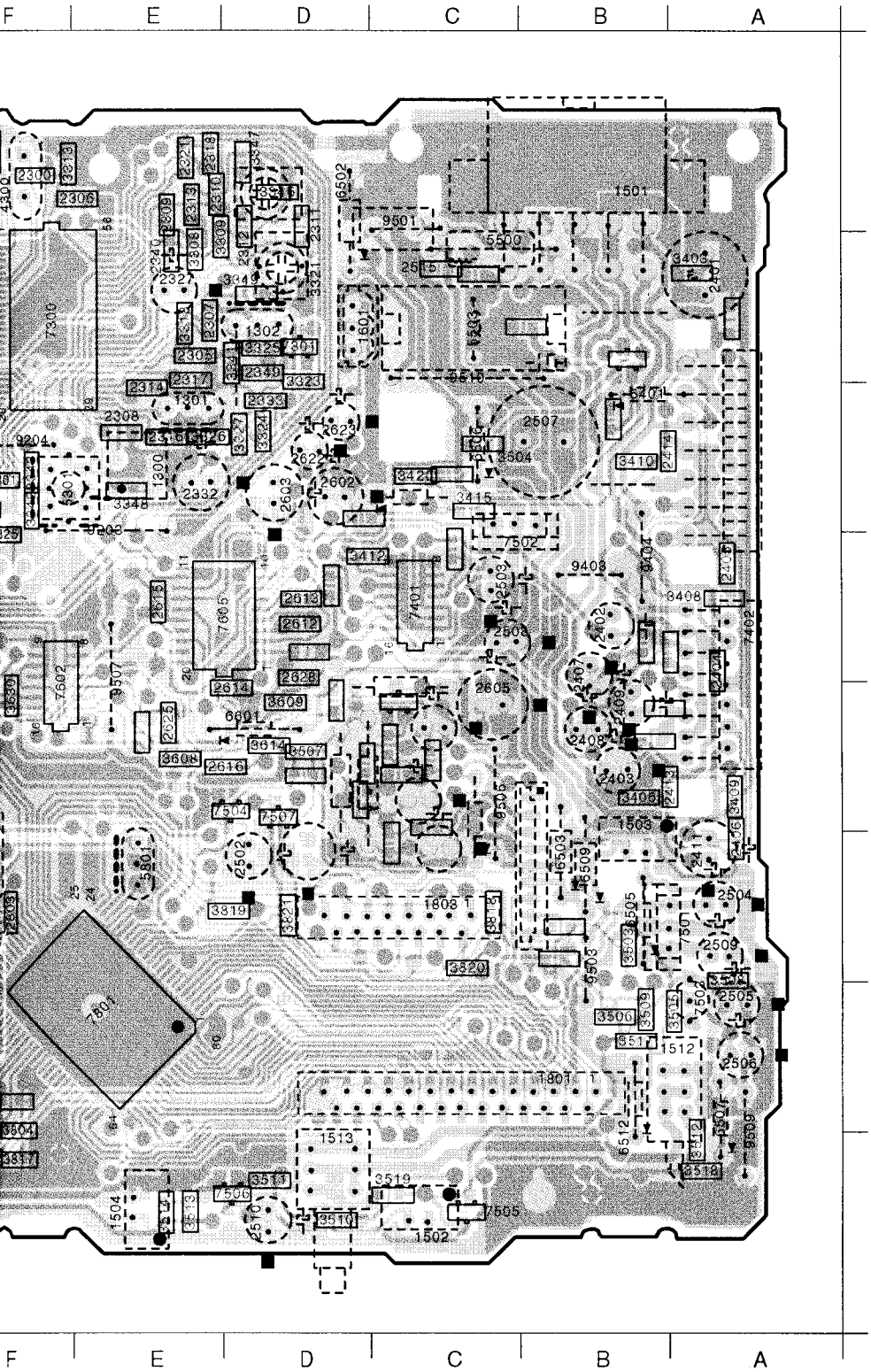
[TU01]

22DC213/00 22DC216/02
22DC243/00 22DC246/02
22DC343/00 22DC346/02
22DC316/02

1001 J 8	1506 G 1	2220 H 6	2409 B 5	2510 D 1	2643 I 2	3319 G 6	5206 J 5	5503 C 7	6506 C 7	7502 C 6	9403 B 6	9803 H 3	22D
1300 E 6	1512 B 2	2249 H 8	2411 A 4	2602 D 6	2644 I 2	3321 D 8	5207 I 8	5601 J 2	6507 A 2	7503 A 3	9404 B 6		22D
1301 E 7	1513 D 2	2327 E 8	2502 D 4	2603 D 6	2646 I 2	3322 H 7	5208 G 7	5801 E 4	6509 B 4	7702 H 2	9501 C 8		22D
1302 D 7	1601 D 7	2328 G 8	2503 C 6	2605 C 5	2647 I 2	3647 J 2	5209 G 7	5803 F 4	6512 B 2	9200 J 7	9503 B 3		22D
1303 G 6	1714 J 4	2332 E 6	2504 A 3	2622 D 6	2648 H 3	4300 F 8	5210 G 8	6401 B 7	6601 D 5	9201 G 7	9504 G 5		22D
1501 B 8	1801 B 2	2401 A 8	2505 A 3	2623 D 7	2701 J 3	5001 I 7	5211 J 6	6501 G 4	6702 J 5	9202 F 7	9505 G 1		22D
1502 C 1	1803 C 3	2402 B 5	2506 A 2	2636 H 2	2702 I 3	5200 I 6	5212 J 7	6502 D 8	6703 H 4	9203 E 6	9506 C 4		22D
1503 B 4	2121 I 6	2403 B 4	2507 B 7	2637 I 2	2723 J 3	5201 H 8	5301 F 6	6503 B 4	6704 I 1	9204 F 7	9507 E 5		22D
1504 E 1	2217 I 6	2407 B 5	2508 C 5	2640 I 3	2724 J 3	5202 I 6	5302 F 8	6504 F 2	7402 A 5	9205 I 6	9509 A 2		22D
1505 H 2	2219 I 7	2408 B 5	2509 A 3	2641 J 2	3303 G 7	5203 H 6	5500 C 8	6505 B 3	7501 A 3	9207 I 6	9510 C 7		



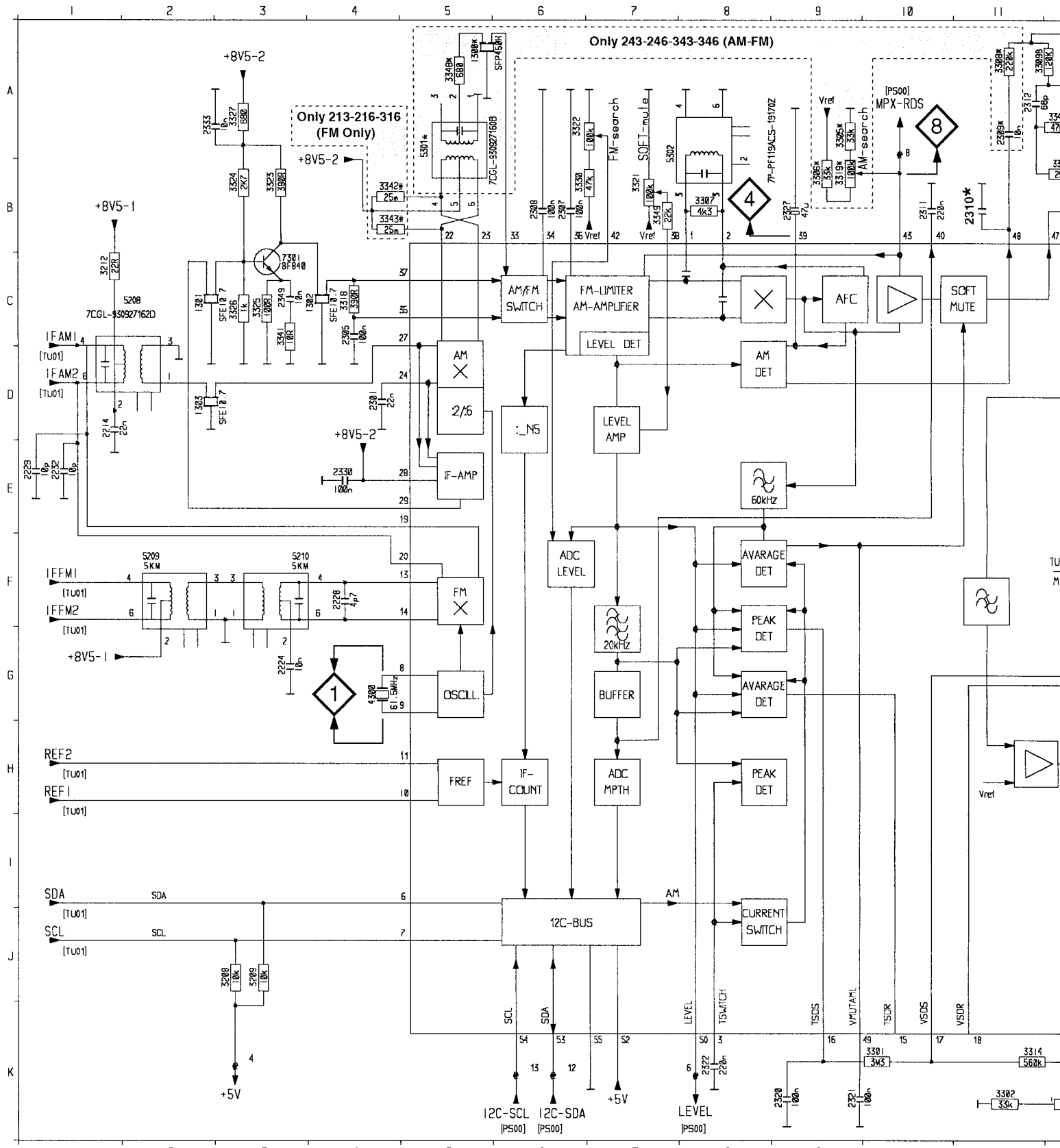
22DC213/00
22DC216/02
22DC243/00
22DC246/02
22DC316/02
22DC343/00
22DC346/02



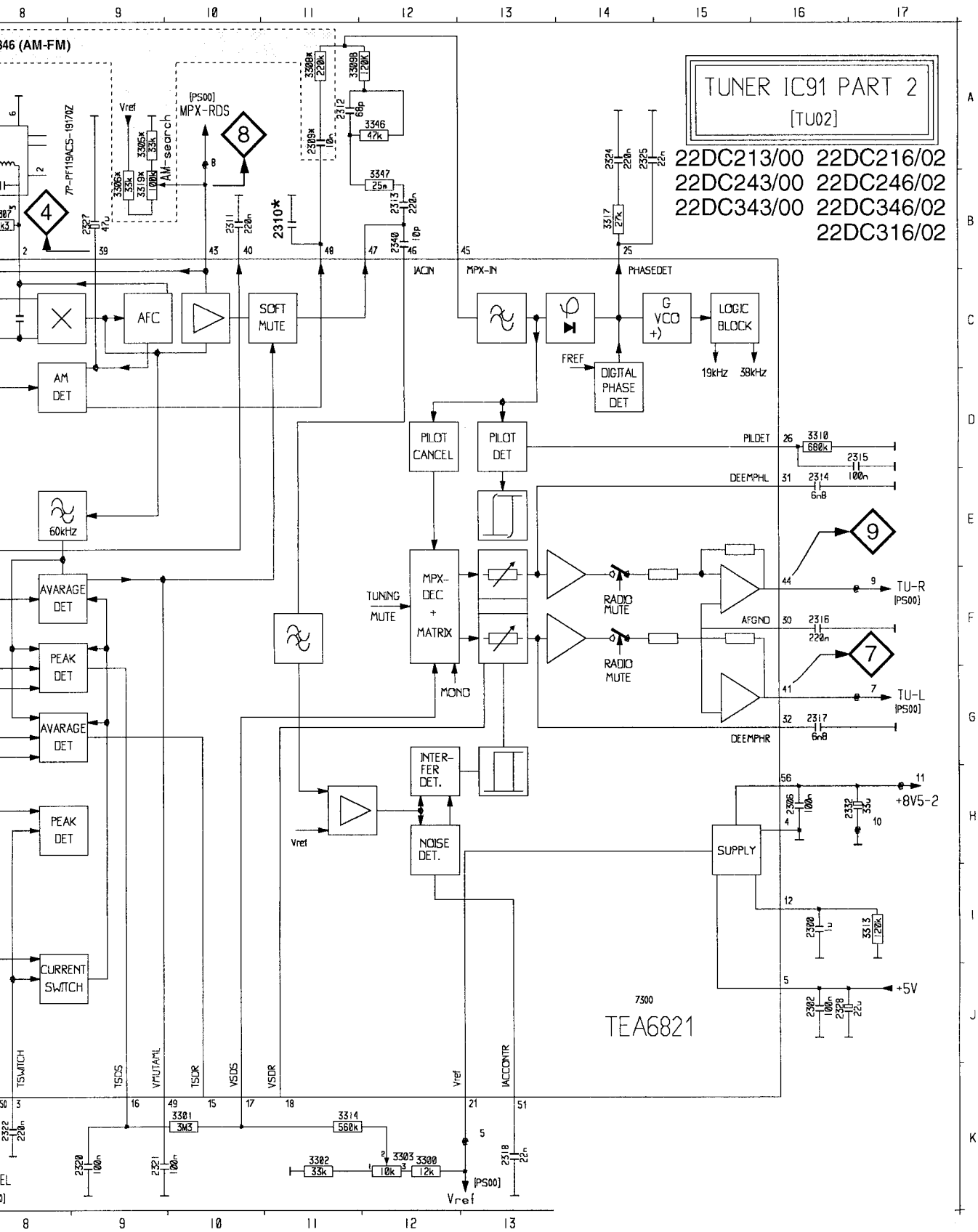
5206 J 5	5503 C 7	6506 C 7	7502 C 6	9403 B 6	9803 H 3	
5207 I 8	5601 J 2	6507 A 2	7503 A 3	9404 B 6		
5208 G 7	5801 E 4	6509 B 4	7702 H 2	9501 C 8		
5209 G 7	5803 F 4	6512 B 2	9200 J 7	9503 B 3		
5210 G 8	6401 B 7	6601 D 5	9201 G 7	9504 G 5		
5211 J 6	6501 G 4	6702 J 5	9202 F 7	9505 G 1		
5212 J 7	6502 D 8	6703 H 4	9203 E 6	9506 C 4		
5301 F 6	6503 B 4	6704 I 1	9204 F 7	9507 E 5		
5302 F 8	6504 F 2	7402 A 5	9205 I 6	9509 A 2		
5500 C 8	6505 B 3	7501 A 3	9207 I 6	9510 C 7		

2200 I 8	2645 I 2	3519 C 2	7605 E 5	
2201 G 7	2649 I 2	3601 F 5	7607 I 3	
2216 J 7	2714 J 4	3606 F 5	7608 H 4	
2104 J 6	2715 J 3	3608 E 4	7701 G 3	
2200 G 8	2725 E 4	3609 D 5	7703 I 4	
2201 G 8	2726 J 4	3614 D 5	7801 E 3	
2202 G 8	2803 F 3	3630 F 5	7809 G 4	
2203 H 8	2805 G 4	3635 H 4		
2204 H 8	3110 I 6	3636 I 3		
2205 H 8	3112 I 7	3637 I 3		
2206 I 6	3113 I 5	3638 H 2		
8 2207 H 7	3200 G 8	3639 H 2		
2208 I 7	3201 H 8	3640 G 2		
2209 I 6	3202 H 8	3641 I 2		
2210 I 7	3203 I 7	3642 I 2		
2211 H 6	3204 I 6	3643 J 3		
2212 I 6	3205 J 6	3644 J 2		
2213 H 6	3206 J 6	3645 I 2		
2214 G 7	3208 G 8	3646 J 2		
2215 H 8	3209 G 8	3648 I 2		
7 2218 I 7	3210 J 7	3649 H 3		
2221 H 8	3211 I 6	3650 H 4		
2223 J 6	3212 G 6	3651 H 4		
2224 G 8	3213 H 6	3652 H 3		
2225 H 8	3290 H 7	3653 H 4		
2227 H 6	3292 H 8	3654 J 3		
2228 F 8	3300 G 7	3701 I 5		
2229 G 7	3301 F 7	3702 I 5		
6 2230 I 6	3302 G 7	3704 I 4		
2231 I 7	3305 G 6	3705 I 4		
2232 F 7	3306 G 6	3706 I 3		
2270 I 8	3307 F 8	3707 J 4		
2271 H 7	3308 E 8	3708 J 4		
2272 H 8	3309 E 8	3709 J 4		
2273 H 7	3310 F 6	3710 J 3		
5 2300 F 8	3313 F 8	3711 J 3		
2301 F 6	3314 F 7	3713 J 4		
2302 G 8	3317 F 6	3715 I 4		
2305 E 7	3318 E 7	3721 I 4		
2306 E 8	3323 D 7	3722 G 4		
2307 E 7	3324 D 7	3723 J 5		
2308 E 7	3325 D 7	3724 H 3		
2309 E 8	3326 E 7	3725 G 4		
4 2310 E 8	3327 D 7	3726 G 3		
2311 D 8	3330 H 6	3727 H 1		
2312 D 8	3341 D 7	3728 I 5		
2313 E 8	3342 F 6	3729 H 2		
2314 E 7	3343 F 6	3730 H 2		
2315 F 6	3346 D 8	3801 F 2		
2316 E 7	3347 D 8	3802 F 2		
3 2317 E 7	3348 E 6	3804 F 2		
2318 E 8	3349 D 8	3805 G 4		
2320 F 8	3403 A 8	3806 G 3		
2321 E 8	3406 B 4	3809 G 3		
2322 F 8	3408 A 5	3810 F 3		
2324 F 6	3409 A 4	3814 F 4		
2325 F 6	3410 B 6	3815 G 4		
2330 F 7	3412 D 6	3816 F 2		
2 2333 D 7	3415 C 6	3817 F 2		
2340 E 8	3420 C 6	3818 C 3		
2349 D 7	3501 G 2	3819 D 3		
2404 A 5	3502 F 2	3820 C 3		
2405 A 6	3503 B 3	3821 D 3		
2406 A 4	3504 C 7	6200 I 6		
2413 B 4	3505 B 3	6201 I 8		
2414 B 6	3506 B 3	6202 I 7		
1 2515 C 8	3507 D 4	7200 H 8		
2612 D 5	3508 A 3	7201 I 7		
2613 D 5	3509 B 3	7202 H 7		
2614 D 5	3510 D 1	7300 F 7		
2615 E 5	3511 D 2	7301 D 7		
2616 D 4	3512 A 2	7401 C 5		
2625 E 5	3513 E 1	7504 D 4		
2628 D 5	3514 E 1	7505 C 1		
2638 H 2	3515 F 1	7506 D 2		
2639 I 3	3517 B 3	7507 D 4		
2642 H 3	3518 A 2	7602 F 5		

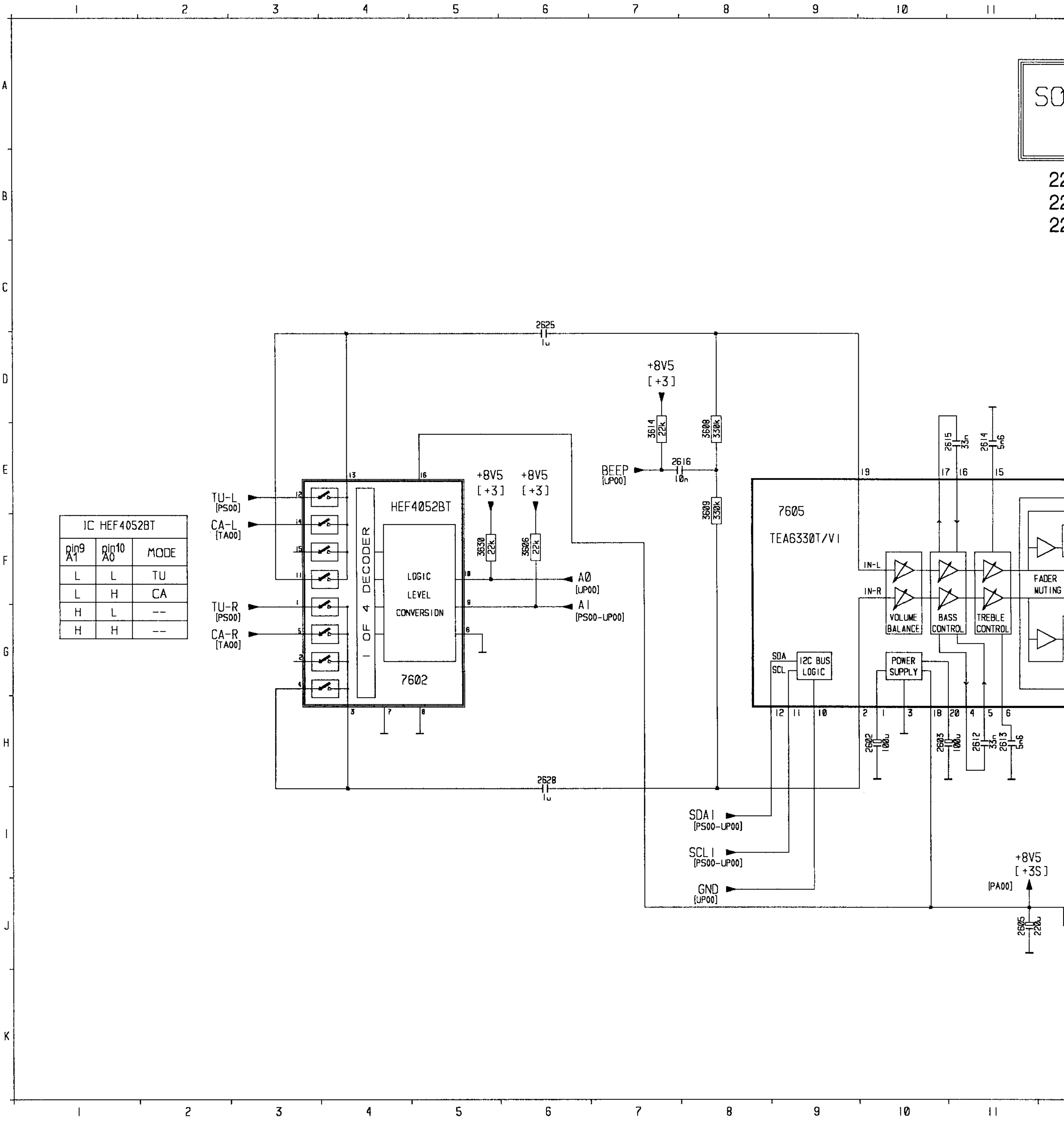
2310 = 10nF (213 - 216 - 316
3,3nF (243 - 246 - 343



2310 = 10nF (213 - 216 - 316)
3,3nF (243 - 246 - 343 - 346)



A	1300	A 5
	1301	C 2
	1302	C 4
	1303	D 2
	2214	D 1
	2224	G 3
	2228	F 4
	2229	E 1
	2232	E 1
	2300	I 16
B	2301	D 4
	2302	J 16
	2305	C 4
	2306	H 16
	2307	B 6
C	2308	B 6
	2309	A 11
	2310	B 11
	2311	B 10
	2312	A 11
D	2313	B 12
	2314	E 16
	2315	D 17
	2316	F 16
	2317	G 16
	2318	K 13
	2320	K 9
	2321	K 9
	2322	K 8
	2324	A 14
E	2325	A 15
	2327	B 9
	2328	J 17
	2330	E 4
	2332	H 17
F	2333	A 2
	2340	B 12
	2349	C 3
	3208	J 3
	3209	J 3
	3212	C 1
	3300	K 12
	3301	K 10
	3302	K 11
	3303	K 12
G	3305	A 9
	3306	B 9
	3307	B 8
	3308	A 11
	3309	A 12
H	3310	D 16
	3313	I 17
	3314	K 11
	3317	B 14
	3318	C 4
I	3319	B 9
	3321	B 7
	3322	A 6
	3323	B 3
	3324	B 3
	3325	C 3
	3326	C 3
	3327	A 3
	3330	B 6
	3341	C 3
J	3342	B 4
	3343	B 4
	3346	A 12
	3347	A 12
	3348	A 5
K	3349	B 7
	4300	G 4
	5208	C 2
	5209	F 2
	5210	F 4
	5301	A 5
	5302	B 7
	7300	J 14
	7301	C 3

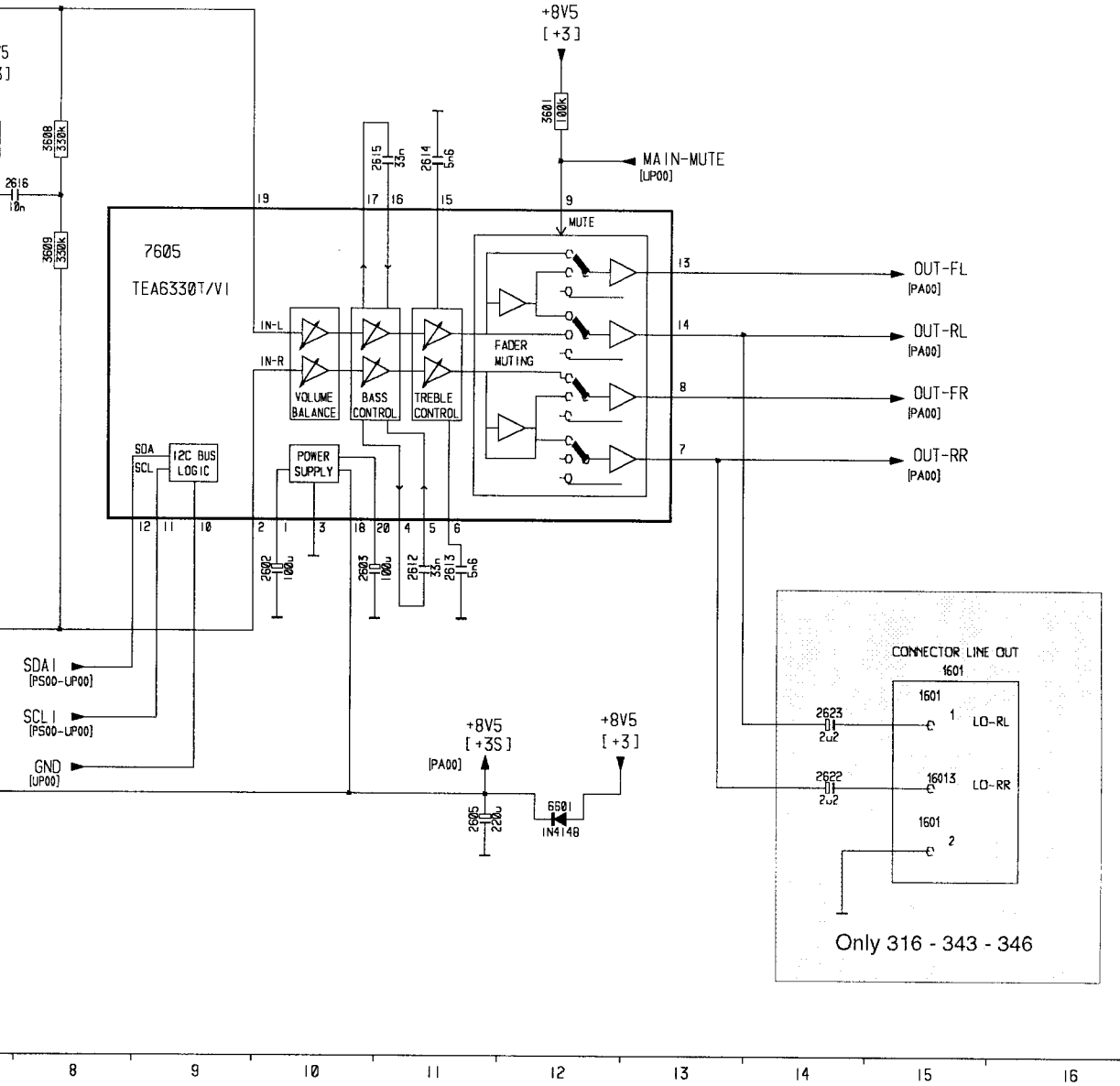


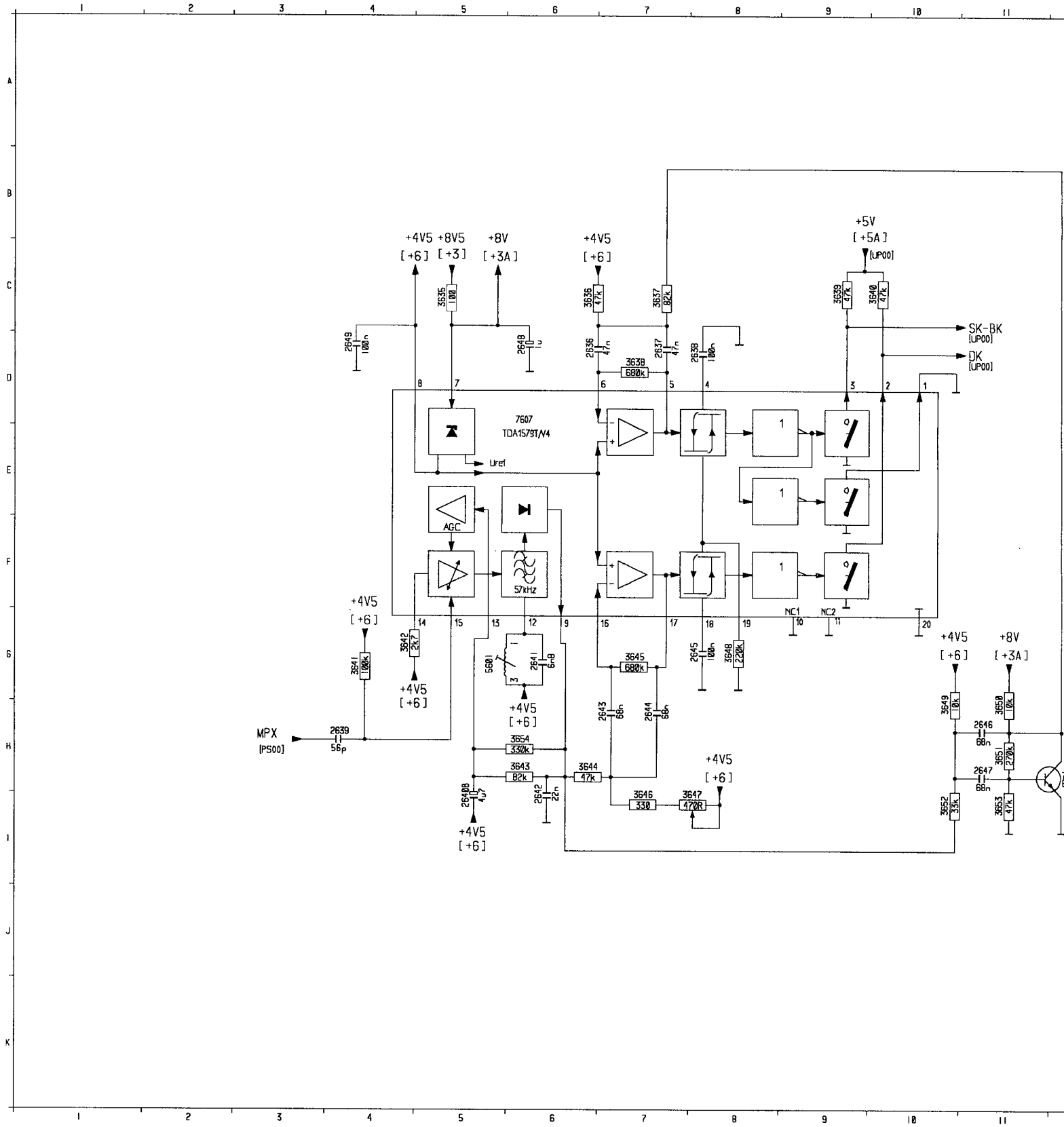
IC HEF4052BT		
pin9 A1	pin10 A0	MODE
L	L	TU
L	H	CA
H	L	--
H	H	--

SOUND PROCESS PART1
[SP01]

22DC213/00 22DC216/02
22DC243/00 22DC246/02
22DC343/00 22DC346/02
22DC316/02

	1601	I 5
	2602	H10
	2603	H 1
	2605	J 1
	2612	H 1
A	2613	H 1
	2614	E 1
	2615	E 1
	2616	E 8
	2622	J 4
	2623	I 4
	2625	D 6
	2628	I 6
B	3601	D12
	3606	F 6
	3608	E 8
	3609	F 8
	3614	E 7
	3630	F 5
	6601	J12
C	7602	G 5
	7605	F 9

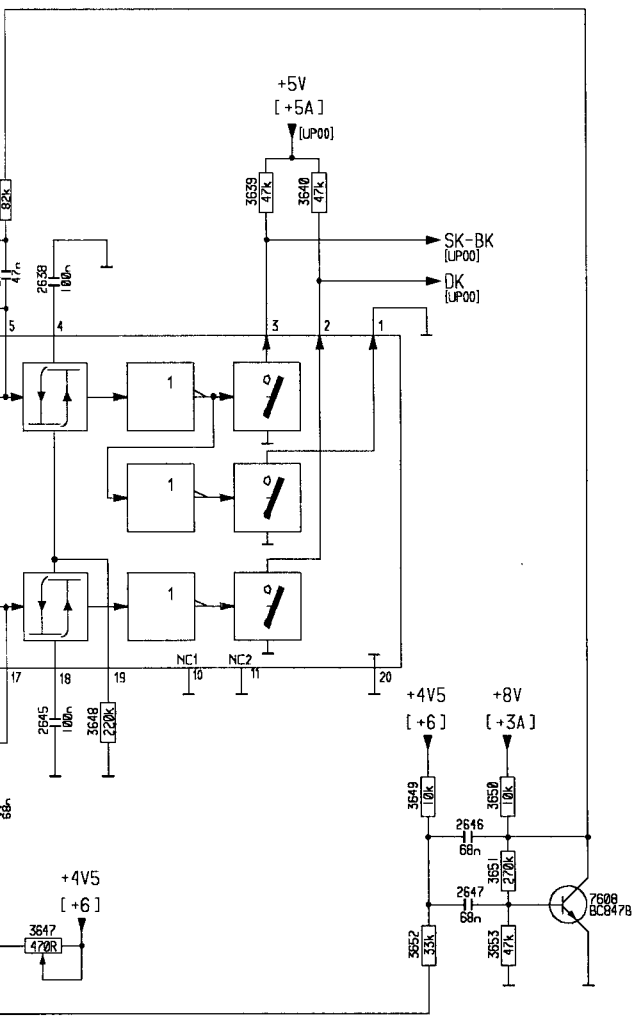



+4V5 [+6]
+8V5 [+3]
+8V [+3A]
+4V5 [+6]
+5V [+5A]
[UP00]
SK-BK [UP00]
DK [UP00]
7607
TDA1579T/V4
Uref
AGC
57kHz
NC1
NC2
MPX [PS00]
+4V5 [+6]
+8V [+3A]

SOUND PROCESS PART2

[SP02]

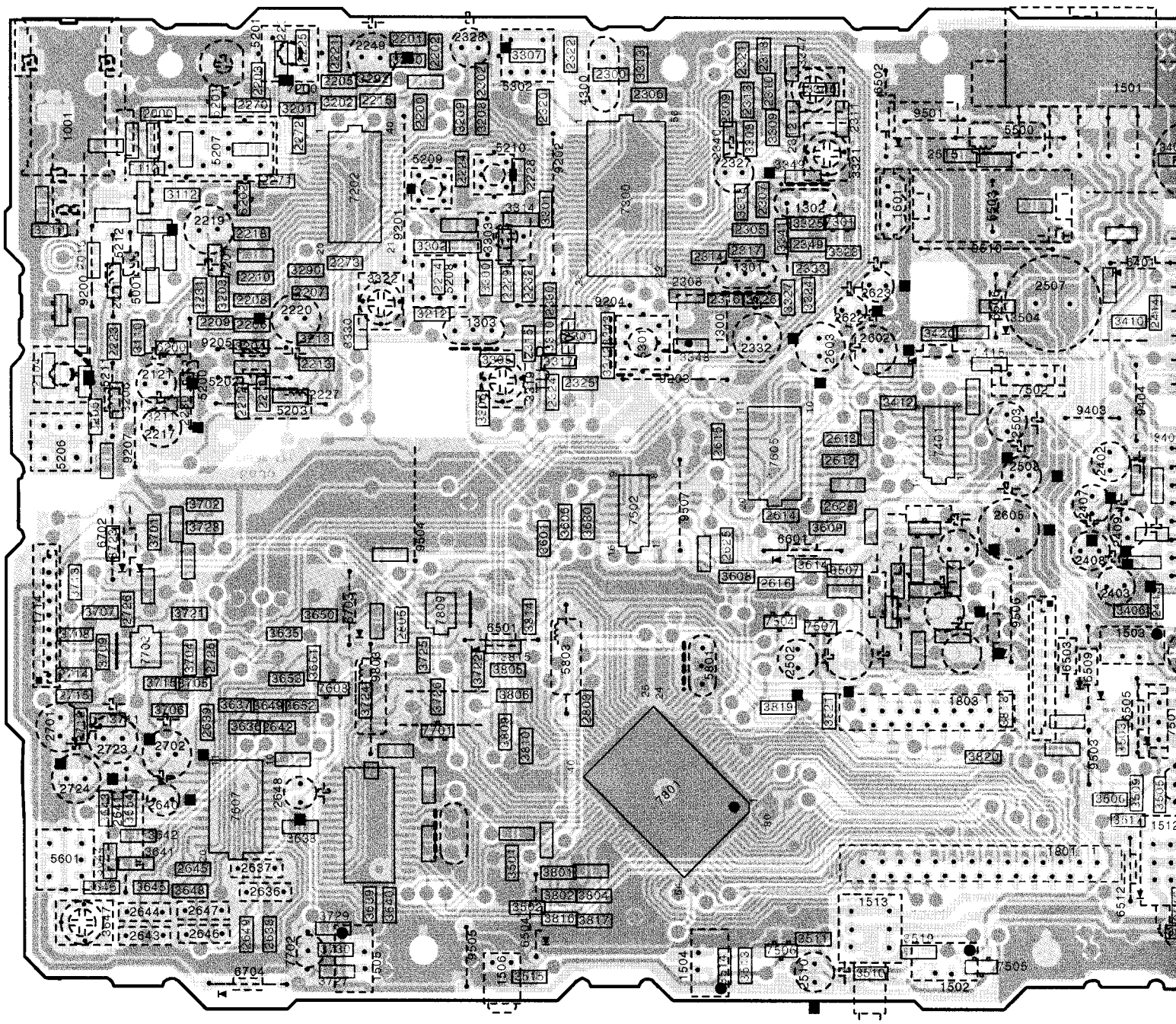
22DC216/02 22DC246/02
22DC316/02 22DC346/02



	2636	D 6
	2637	D 7
	2638	D 8
	2639	H 4
	2640	I 5
A	2641	G 6
	2642	I 6
	2643	H 7
	2644	H 7
	2645	G 8
	2646	HII
	2647	HII
	2648	D 6
B	2649	D 4
	3635	C 5
	3636	C 6
	3637	C 7
	3638	D 7
	3639	C 9
	3640	CI0
C	3641	G 4
	3642	G 4
	3643	H 6
	3644	H 6
	3645	G 7
	3646	I 7
D	3647	I 8
	3648	G 8
	3649	HI0
	3650	HII
	3651	HII
	3652	II0
	3653	III
E	3654	H 6
	5601	G 5
	7607	D 5
	7608	HI2

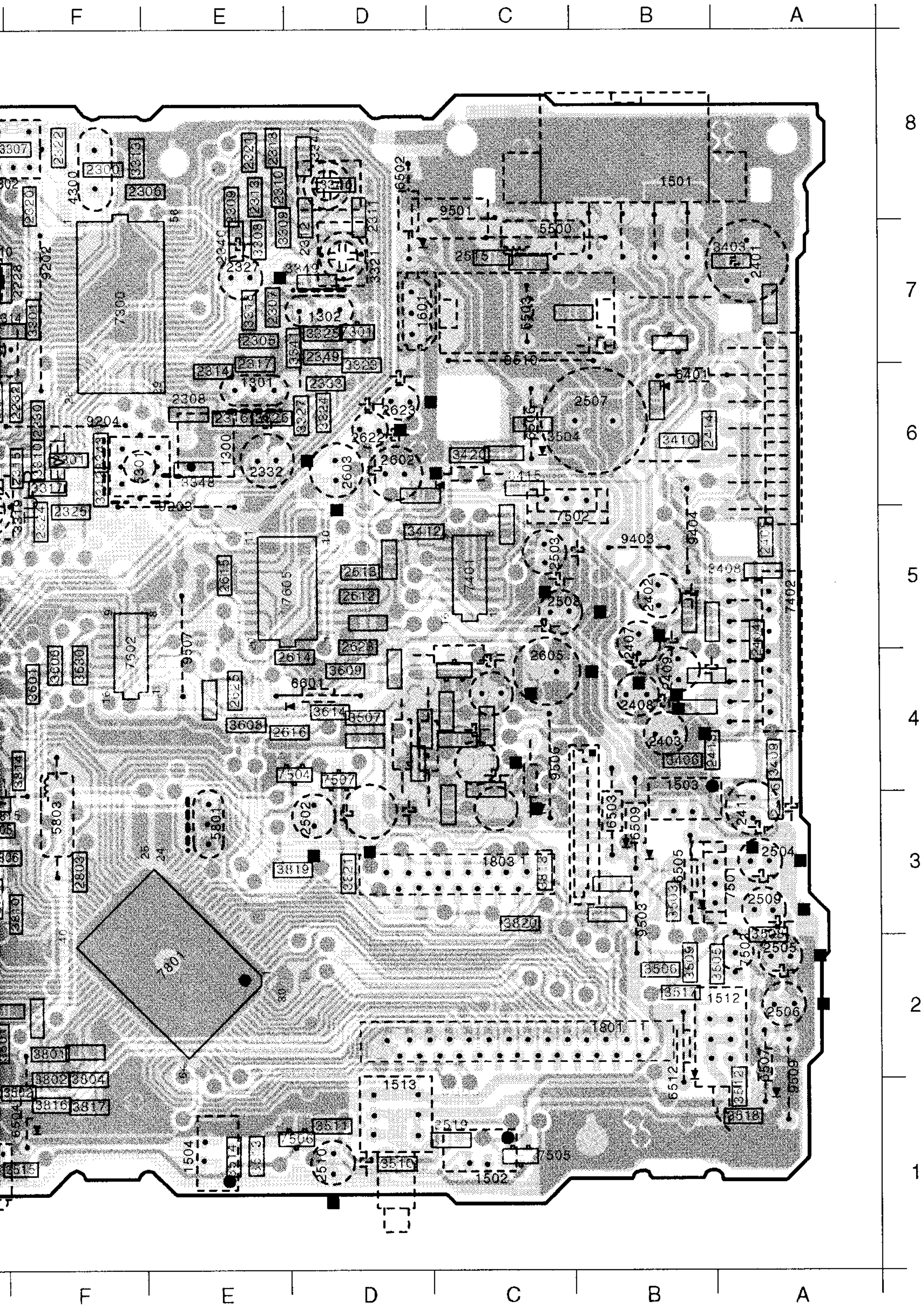
1001 J 8	1506 G 1	2220 H 6	2409 B 5	2510 D 1	2643 I 2	3319 G 6	5206 J 5	5503 C 7	6506 C 7	7502 C 6	9403 B 6	9803 H 3
1300 E 6	1512 B 2	2249 H 8	2411 A 4	2602 D 6	2644 I 2	3321 D 8	5207 I 8	5601 J 2	6507 A 2	7503 A 3	9404 B 6	
1301 E 7	1513 D 2	2327 E 8	2502 D 4	2603 D 6	2646 I 2	3322 H 7	5208 G 7	5801 E 4	6509 B 4	7702 H 2	9501 C 8	
1302 D 7	1601 D 7	2328 G 8	2503 C 6	2605 C 5	2647 I 2	3647 J 2	5209 G 7	5803 F 4	6512 B 2	9200 J 7	9503 B 3	
1303 G 6	1714 J 4	2332 E 6	2504 A 3	2622 D 6	2648 H 3	4300 F 8	5210 G 8	6401 B 7	6601 D 5	9201 G 7	9504 G 5	
1501 B 8	1801 B 2	2401 A 8	2505 A 3	2623 D 7	2701 J 3	5001 I 7	5211 J 6	6501 G 4	6702 J 5	9202 F 7	9505 G 1	
1502 C 1	1803 C 3	2402 B 5	2506 A 2	2636 H 2	2702 I 3	5200 I 6	5212 J 7	6502 D 8	6703 H 4	9203 E 6	9506 C 4	
1503 B 4	2121 I 6	2403 B 4	2507 B 7	2637 I 2	2723 J 3	5201 H 8	5301 F 6	6503 B 4	6704 I 1	9204 F 7	9507 E 5	
1504 E 1	2217 I 6	2407 B 5	2508 C 5	2640 I 3	2724 J 3	5202 I 6	5302 F 8	6504 F 2	7402 A 5	9205 I 6	9509 A 2	
1505 H 2	2219 I 7	2408 B 5	2509 A 3	2641 J 2	3303 G 7	5203 H 6	5500 C 8	6505 B 3	7501 A 3	9207 I 6	9510 C 7	

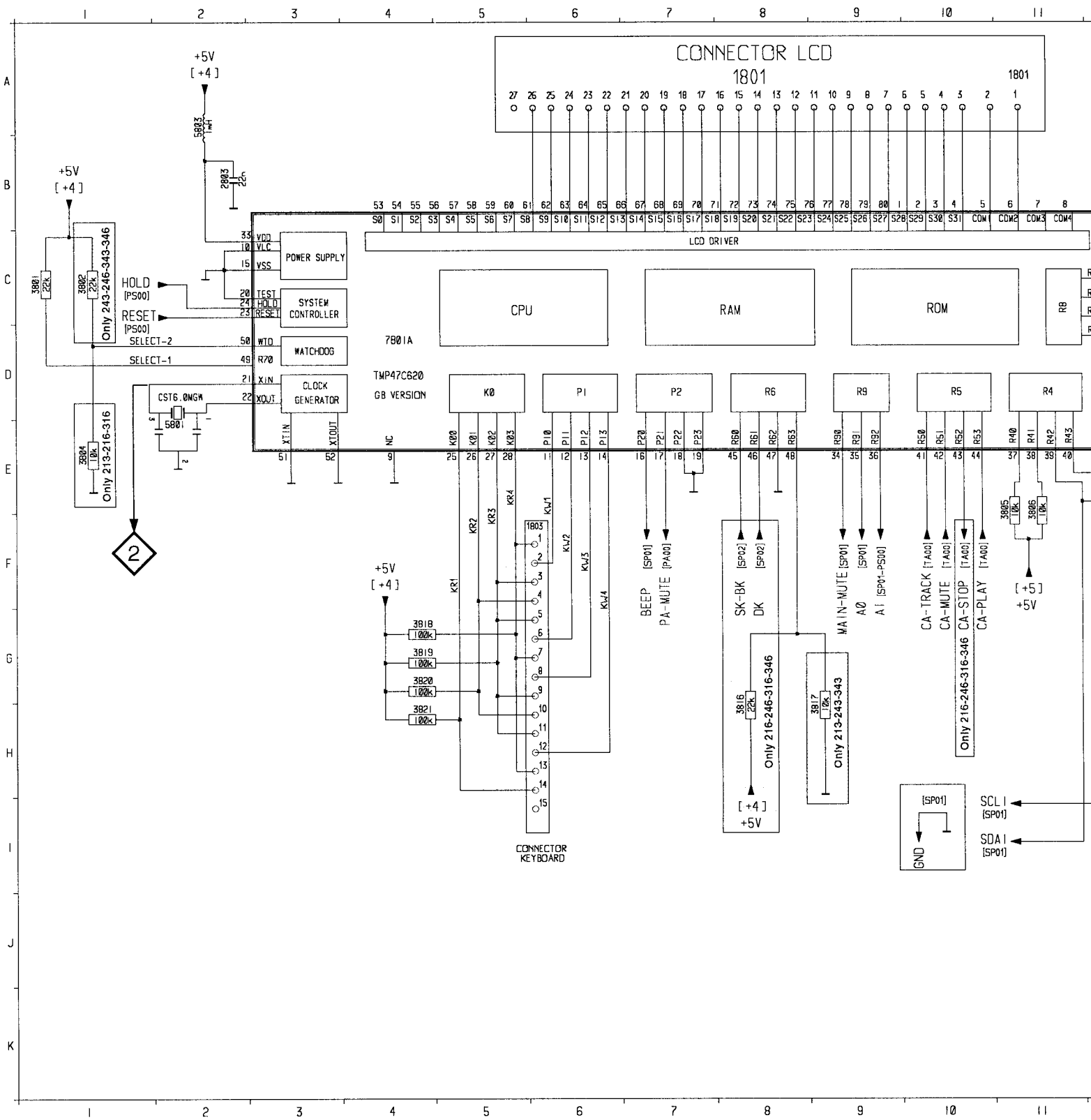
22DC2
22DC2
22DC2
22DC2
22DC3
22DC3
22DC3

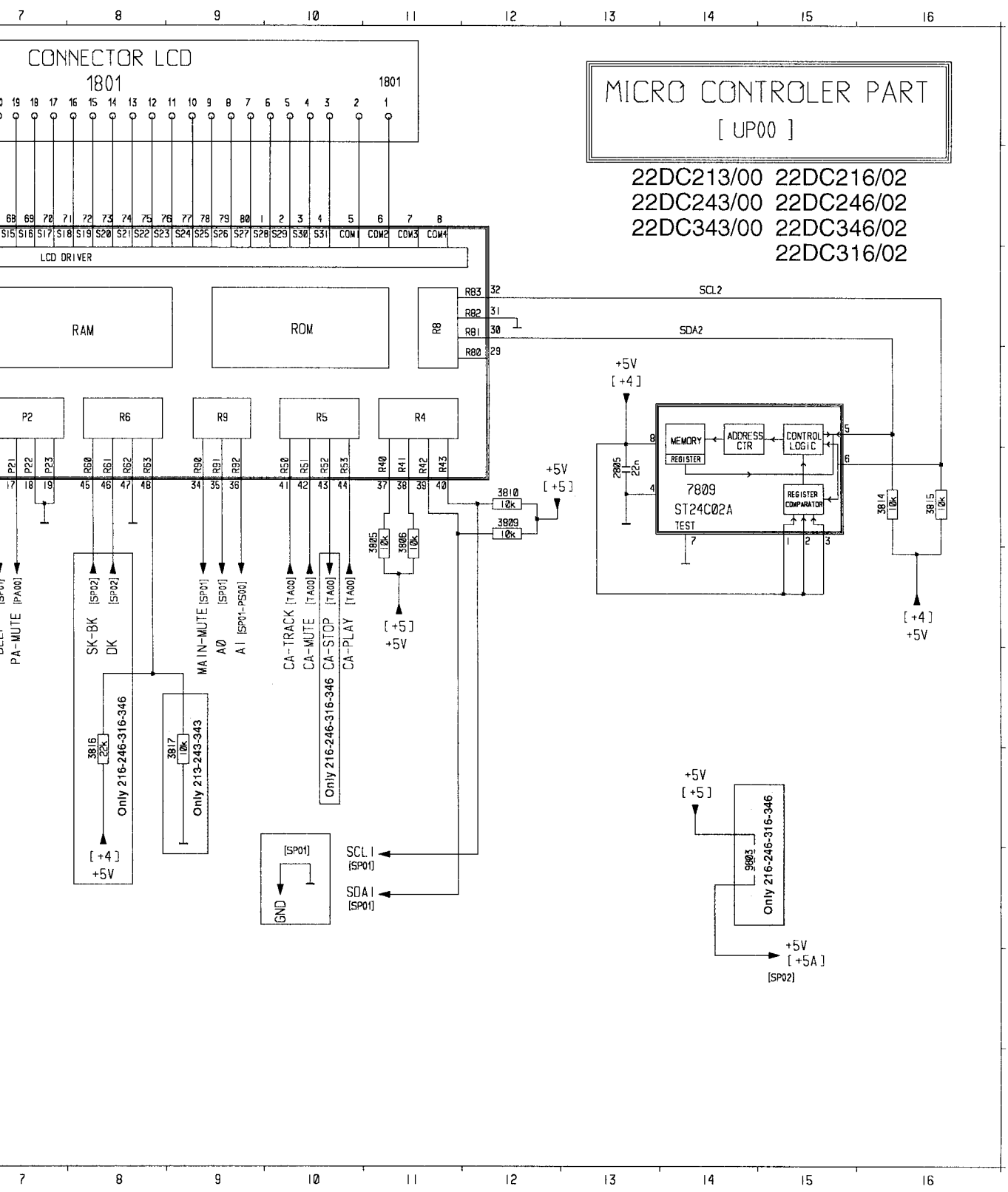


9 G 6	5206 J 5	5503 C 7	6506 C 7	7502 C 6	9403 B 6	9803 H 3
1 D 8	5207 I 8	5601 J 2	6507 A 2	7503 A 3	9404 B 6	
2 H 7	5208 G 7	5801 E 4	6509 B 4	7702 H 2	9501 C 8	
7 J 2	5209 G 7	5803 F 4	6512 B 2	9200 J 7	9503 B 3	
0 F 8	5210 G 8	6401 B 7	6601 D 5	9201 G 7	9504 G 5	
1 I 7	5211 J 6	6501 G 4	6702 J 5	9202 F 7	9505 G 1	
0 I 6	5212 J 7	6502 D 8	6703 H 4	9203 E 6	9506 C 4	
1 H 8	5301 F 6	6503 B 4	6704 I 1	9204 F 7	9507 E 5	
2 I 6	5302 F 8	6504 F 2	7402 A 5	9205 I 6	9509 A 2	
3 H 6	5500 C 8	6505 B 3	7501 A 3	9207 I 6	9510 C 7	

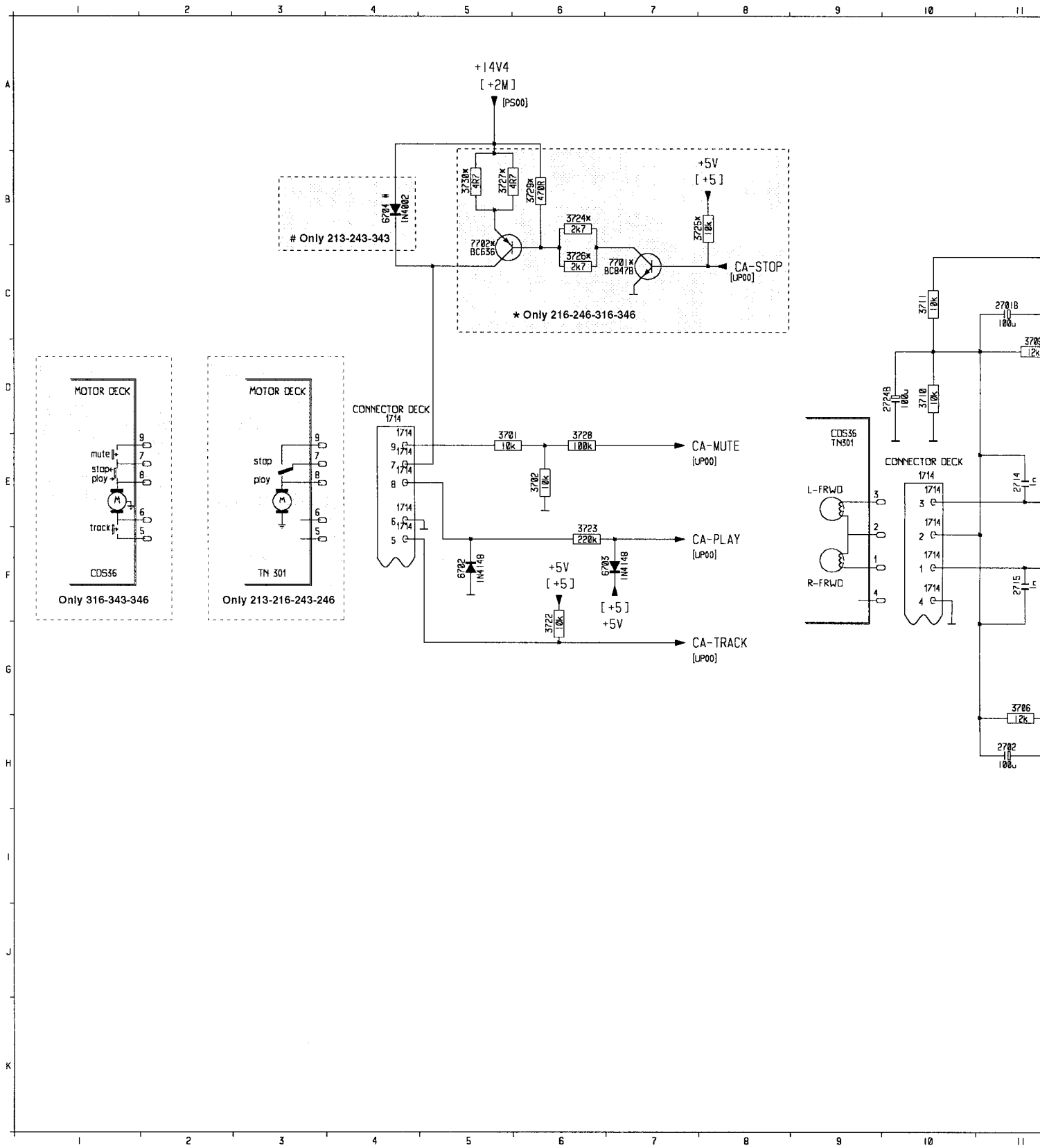
22DC213/00
22DC216/02
22DC243/00
22DC246/02
22DC316/02
22DC343/00
22DC346/02




CONNECTOR LCD
1801
LCD DRIVER
POWER SUPPLY
SYSTEM CONTROLLER
WATCHDOG
CLOCK GENERATOR
CPU
RAM
ROM
7801A
TMP47C620
GB VERSION
HOLD
[PS00]
RESET
[PS00]
SELECT-2
SELECT-1
CST6.0MGM
Only 243-246-343-346
Only 213-216-316
CONNECTOR KEYBOARD
BEEP
PA-MUTE
SK-BK
DK
MAIN-MUTE
A0
A1
CA-TRACK
CA-MUTE
CA-STOP
CA-PLAY
Only 216-246-316-346
Only 213-243-343
SCL I
SDA I
GND
+5V
[+4]
[+5]

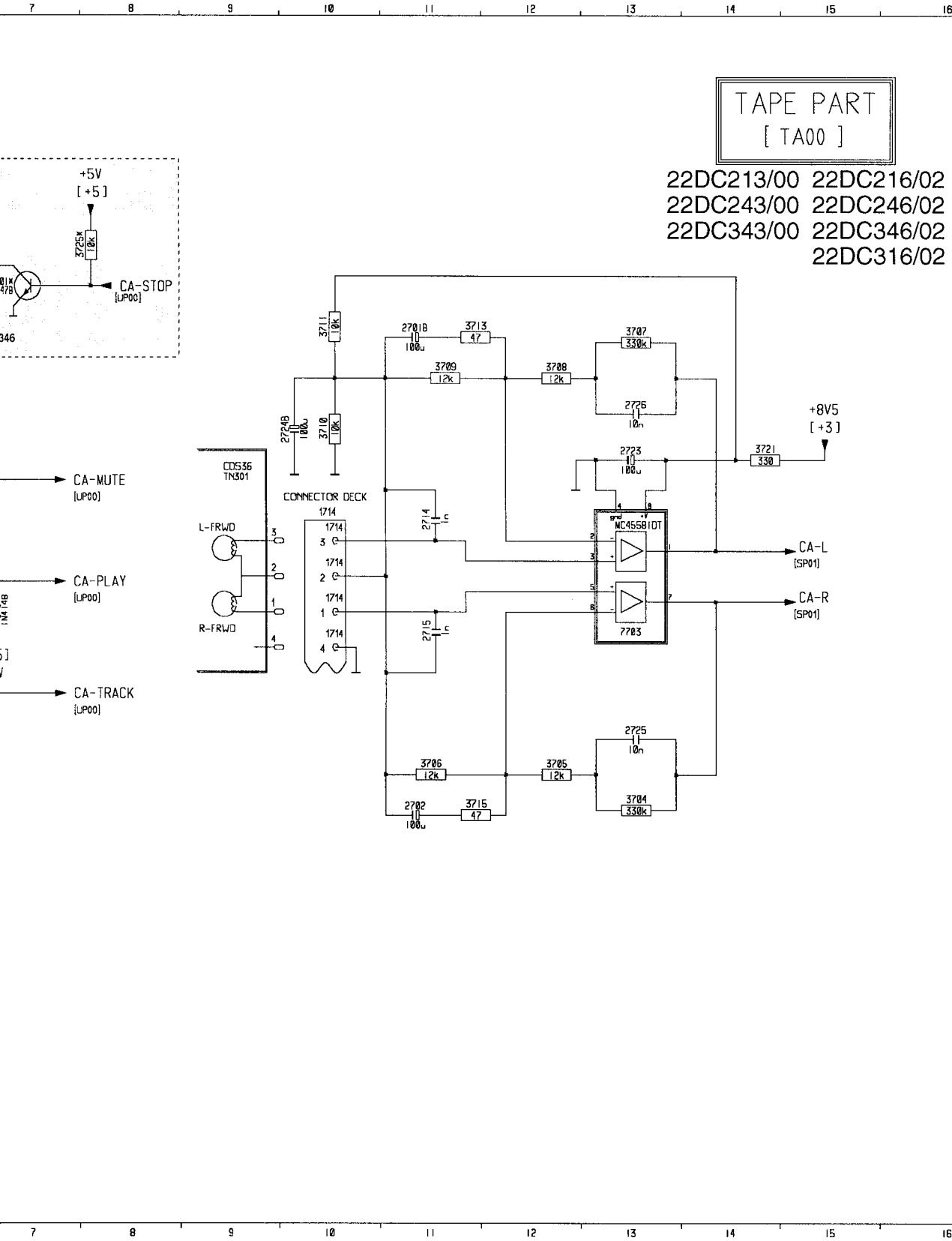


1801 A 8
1803 F 6
2803 B 2
2805 E13
3801 C 1
3802 C 1
3803 E 1
3804 E 1
3805 F11
3806 F11
3809 E12
3810 E12
3814 E16
3815 E16
3816 H 8
3817 H 9
3818 G 5
3819 G 5
3820 G 5
3821 H 5
5801 E 2
5803 A 2
7801A D 4
7809 E14
9803 I15


+14V4
[+2M]
[PS00]
Only 213-243-343
6704 # 1N4002
3730x 4R7
3727x 4R7
3729x 470R
+5V
[+5]
3724x 2k7
3725x 10k
7702x BC636
3726x 2k7
7701x BC847B
CA-STOP
[UP00]
* Only 216-246-316-346
MOTOR DECK
mute
stop
play
track
CDS36
Only 316-343-346
MOTOR DECK
stop
play
TN 301
Only 213-216-243-246
CONNECTOR DECK
1714
3701 10k
3728 100k
CA-MUTE
[UP00]
3702 10k
3723 220k
CA-PLAY
[UP00]
6702 1N4148
+5V
[+5]
6703 1N4148
[+5]
+5V
3722 10k
CA-TRACK
[UP00]
3711 10k
2701B 10 100u
3706 12k
2724B 10 100u
3710 10k
CDS36
TN301
L-FRWD
R-FRWD
CONNECTOR DECK
1714
2714 1n
2715 1n
3706 12k
2702 10 100u

TAPE PART
[TA00]

22DC213/00 22DC216/02
22DC243/00 22DC246/02
22DC343/00 22DC346/02
22DC316/02



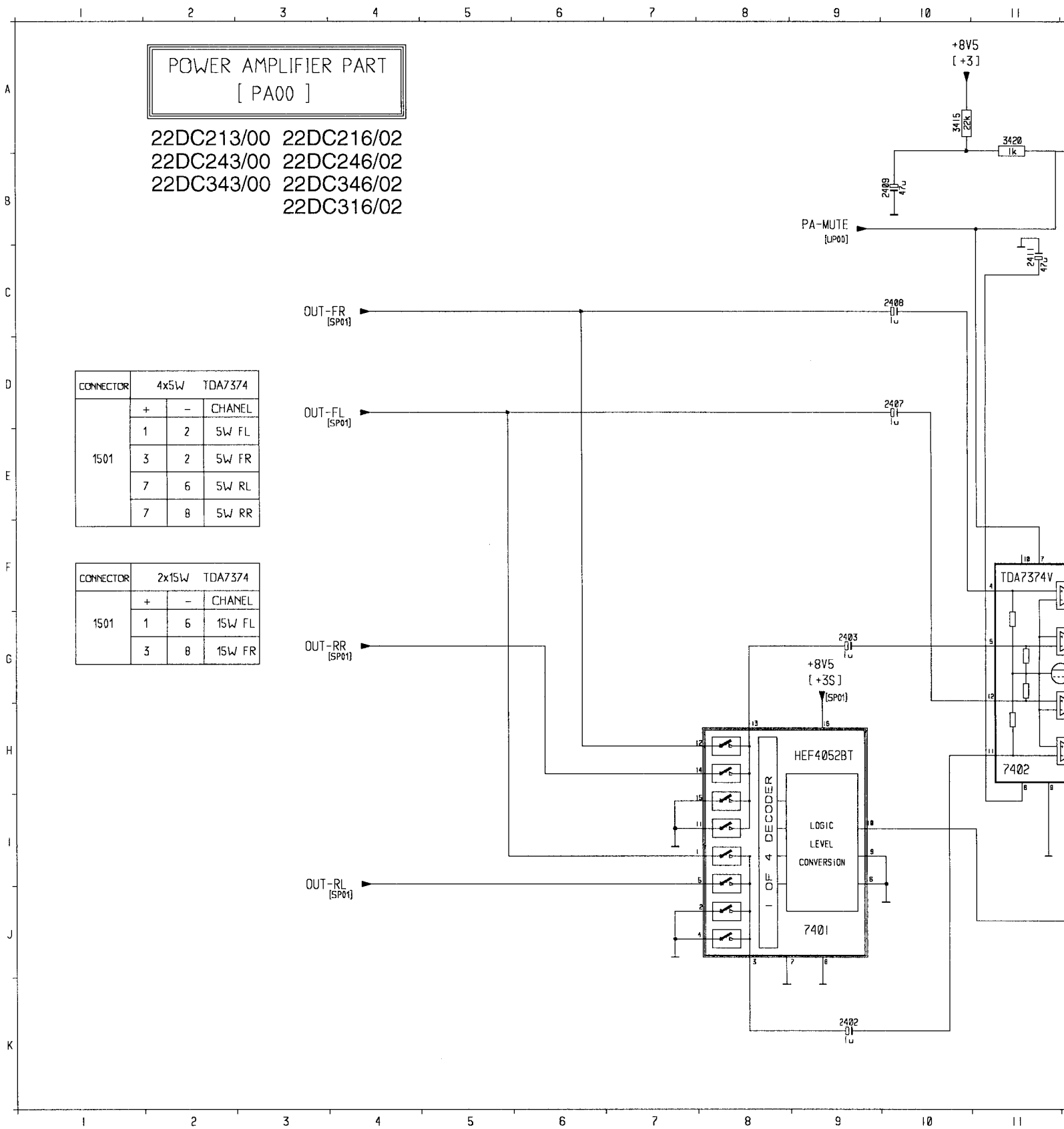
	1714	E10
	1714	E 4
	2701	C11
	2702	H11
	2714	E11
A	2715	F11
	2723	D13
	2724	D10
	2725	G13
	2726	D13
	3701	E 5
	3702	E 6
	3704	H13
B	3705	G12
	3706	G11
	3707	C13
	3708	D12
	3709	D11
	3710	D10
	3711	C10
C	3713	C11
	3715	H11
	3721	D14
	3722	G 6
	3723	F 6
	3724	B 6
D	3725	B 7
	3726	C 6
	3727	B 5
	3728	E 6
	3729	B 5
	3730	B 5
	6702	F 5
E	6703	F 7
	6704	B 4
	7701	C 7
	7702	C 5
	7703	F13
F		
G		
H		
I		
J		
K		

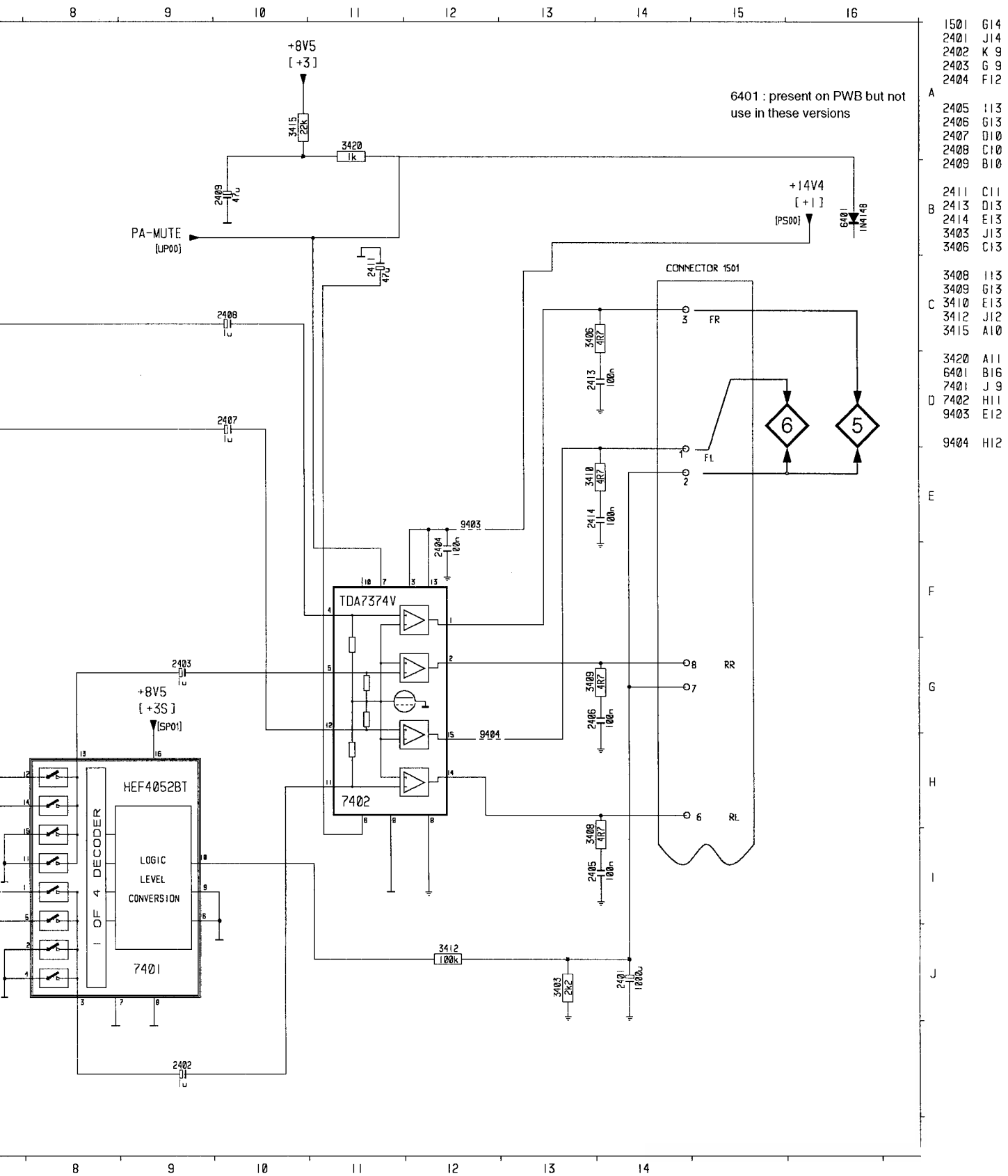
POWER AMPLIFIER PART
[PA00]

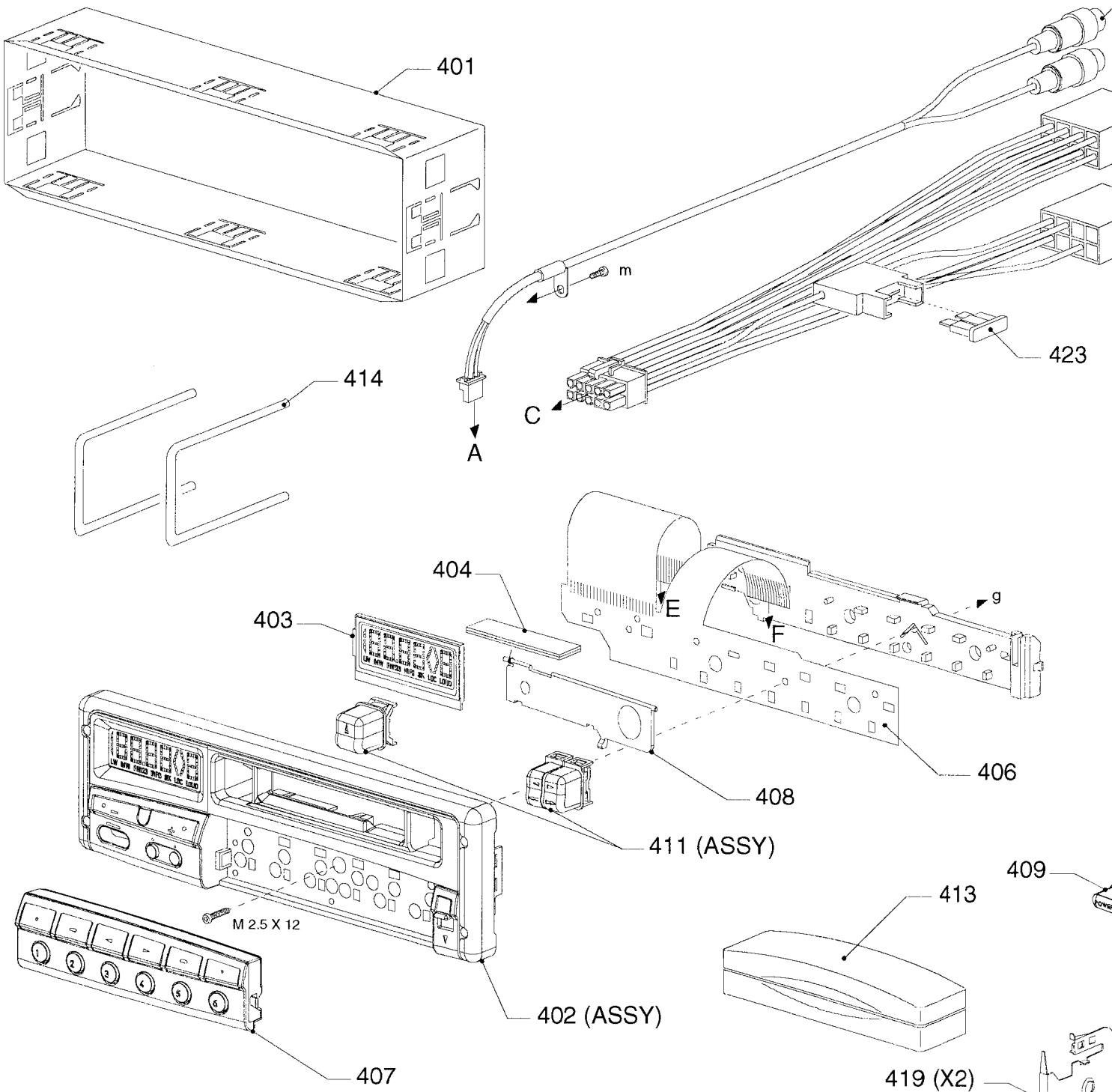
22DC213/00 22DC216/02
22DC243/00 22DC246/02
22DC343/00 22DC346/02
22DC316/02

CONNECTOR	4x5W		TDA7374
	+	-	CHANEL
1501	1	2	5W FL
	3	2	5W FR
	7	6	5W RL
	7	8	5W RR

CONNECTOR	2x15W		TDA7374
	+	-	CHANEL
1501	1	6	15W FL
	3	8	15W FR

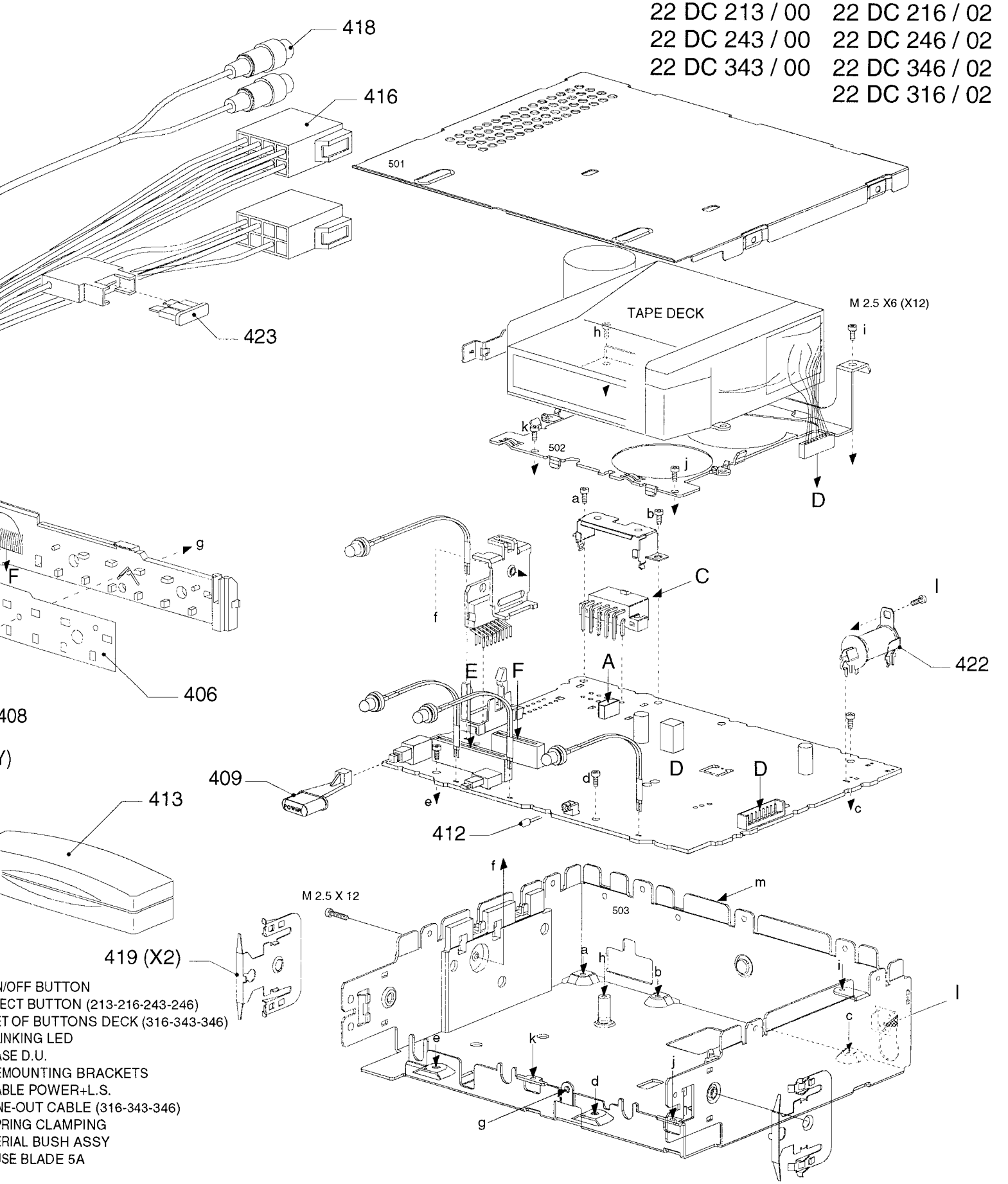



8 9 10 11 12 13 14 15 16
+8V5
[+3]
3415 22k
3420 1k
2409 47u
PA-MUTE
[UP00]
+14V4
[+1]
[PS00]
6401 1N4148
2411 47u
6401 : present on PWB but not use in these versions
CONNECTOR 1501
2408
2407
3406 4R7
2413 100n
3 FR
6
5
1 FL
2
3410 4R7
2414 100n
9403
2404 100n
TDA7374V
7402
2403
+8V5
[+3S]
[SP01]
8 RR
7
3409 4R7
2406 100n
9404
HEF4052BT
1 OF 4 DECODER
LOGIC LEVEL CONVERSION
7401
6 RL
3408 4R7
2405 100n
3412 100k
3403 2k2
2401 1000u
2402
1501 G14
2401 J14
2402 K 9
2403 G 9
2404 F12
2405 I13
2406 G13
2407 D10
2408 C10
2409 B10
2411 C11
2413 D13
2414 E13
3403 J13
3406 C13
3408 I13
3409 G13
3410 E13
3412 J12
3415 A10
3420 A11
6401 B16
7401 J 9
7402 H11
9403 E12
9404 H12
A B C D E F G H I J
8 9 10 11 12 13 14



401	4822 443 30463	SLEEVE	409	4822 410 63582	ON/OFF BUTTON
402	4822 459 50902	FRONT PLATE ASSY (213-216-243-246)	411	4822 410 63082	EJECT BUTTON (213-216-243-246)
	4822 459 50898	FRONT PLATE ASSY (316-343-346)		4822 410 63058	SET OF BUTTONS DECK (316-343-346)
403	4822 130	L.C.D	412	4822 130 83612	BLINKING LED
404	4822 265	ZEBRA CONNECTOR	413	4822 600 70757	CASE D.U.
406	4822 321 62348	FLEX-FOIL	414	4822 404 20437	DEMOUNTING BRACKETS
407	4822 459	DET-UNIT (213-243-343)	416	4822 321 62354	CABLE POWER+L.S.
	4822 459	DET-UNIT (216-246-316-346)	418	4822 321 62351	LINE-OUT CABLE (316-343-346)
408	4822 443 64379	FLAP CASSETTE (213)	419	4822 492 71046	SPRING CLAMPING
	4822 443 64381	FLAP CASSETTE (216)	422	4822 267 30883	AERIAL BUSH ASSY
	4822 443 64382	FLAP CASSETTE (243)	423	4822 071 25002	FUSE BLADE 5A
	4822 443 64372	FLAP CASSETTE (246)			
	4822 443 64362	FLAP CASSETTE (316)	TAPE DECK : TN-301NX-265		(213-216-243-246)
	4822 443 64367	FLAP CASSETTE (343)		CDS36-PR	(316-343-346)
	4822 443 64368	FLAP CASSETTE (346)			

22 DC 213 / 00 22 DC 216 / 02
22 DC 243 / 00 22 DC 246 / 02
22 DC 343 / 00 22 DC 346 / 02
22 DC 316 / 02



N/OFF BUTTON
ECT BUTTON (213-216-243-246)
T OF BUTTONS DECK (316-343-346)
INKING LED
SE D.U.
EMOUNTING BRACKETS
BLE POWER+L.S.
NE-OUT CABLE (316-343-346)
PRING CLAMPING
ERIAL BUSH ASSY
SE BLADE 5A

13-216-243-246)
16-343-346)

Miscellaneous

1300	4822 242 81503	SFP450H
1301	4822 242 73779	SFE10,7MS3-K18-A
1302	4822 242 73779	SFE10,7MS3-K18-A
1303	4822 242 73779	SFE10,7MS3-K18-A
1501	4822 265 41379	CONNECTOR 10P
1502	4822 134 41174	50MA 14V T1.25
1503	4822 134 41173	50MA 14V T1.25
1504	4822 134 41175	80MA 14V T1.25
1505	4822 134 41175	80MA 14V T1.25
1512	4822 276 13483	SWITCH
1513	4822 276 13484	SWITCH
1601	4822 267 40678	CONNECTOR 3P M2.5
1714	4822 265 41385	CONNECTOR 9P
1801	4822 267 60378	CONNECTOR 27P
1803	4822 267 50915	CONNECTOR 15P

⊣⊢		
2000	5322 122 31946	27PF 5%NP0 63V
2001	5322 122 32658	22PF 5% 50V
2016	5322 122 33244	8,2PF 5%NPO 50V
2104	5322 122 34123	1NF10%X7R 50V
2121	4822 124 41017	10UF 20% 16V
2200	4822 122 33496	100NF10%X7R 63V
2201	5322 122 34098	10NF10%X7R 63V
2202	4822 122 33496	100NF10%X7R 63V
2203	5322 122 33063	2,2PF 5%NP0 50V
2204	5322 126 10343	1,8PF 5%NP0 63V
2205	5322 122 33446	3,3NF10%X7R 63V
2206	5322 122 33244	8,2PF 5%NPO 50V
2207	4822 126 11692	1UF 20%
2208	5322 122 32531	100PF 5%NP0 50V
2209	5322 122 31946	27PF 5%NP0 63V
2210	4822 122 33496	100NF10%X7R 63V
2211	4822 122 33216	270PF 5%NP0 50V
2212	5322 122 33446	3,3NF10%X7R 63V
2213	4822 122 33496	100NF10%X7R 63V
2214	5322 122 32654	22NF10%X7R 63V
2215	4822 122 33496	100NF10%X7R 63V
2217	4822 124 23279	22UF20% 16V
2218	4822 126 11692	1UF 20%
2219	4822 124 80837	33UF20% 16V
2220	4822 124 23281	33UF20% 16V
2221	5322 122 32452	47PF 5%NP0 63V
2223	5322 122 34098	10NF10%X7R 63V
2224	5322 122 34098	10NF10%X7R 63V
2225	5322 122 32269	6,8PF 5% 50V
2227	4822 126 10326	180PF 5%NP0 63V
2228	5322 122 32287	4,7PF 5%NP0 50V
2229	5322 122 32448	10PF 5% 50V
2230	4822 126 11692	1UF 20%
2231	5322 122 32448	10PF 5% 50V
2232	5322 122 32448	10PF 5% 50V
2249	4822 124 41584	100UF 20% 10V
2270	5322 122 34123	1NF10%X7R 50V
2271	5322 122 34123	1NF10%X7R 50V
2272	5322 122 32269	6P8 5% NPO 0805
2273	4822 126 11692	1UF 20%
2300	4822 126 11692	1UF 20%
2301	5322 122 32654	22NF10%X7R 63V
2302	4822 122 33496	100NF10%X7R 63V
2305	4822 122 33496	100NF10%X7R 63V
2306	4822 122 33496	100NF10%X7R 63V
2307	4822 122 33496	100NF10%X7R 63V
2308	4822 122 33496	100NF10%X7R 63V
2309	5322 122 34098	10NF10%X7R 63V
2310	5322 122 33446	3,3NF10%X7R 63V
2310	5322 122 34098	10NF 10% X7R 63V
2311	4822 126 13057	220NF10% X7R 25V
2312	4822 122 33514	68PF 5%NP0 50V
2313	4822 126 13057	220NF10% X7R 25V
2314	5322 122 31866	6,8NF10%X7R 63V
2315	4822 122 33496	100NF10%X7R 63V
2316	4822 126 13057	220NF10% X7R 25V
2317	5322 122 31866	6,8NF10%X7R 63V
2318	5322 122 32654	22NF10%X7R 63V
2320	4822 122 33496	100NF10%X7R 63V
2321	4822 122 33496	100NF10%X7R 63V
2322	4822 126 13057	220NF10% X7R 25V
2324	4822 126 13057	220NF10% X7R 25V
2325	5322 122 32654	22NF10%X7R 63V
2327	4822 124 23256	47UF 20% 16V
2328	5322 124 41431	22UF20% 35V
2330	4822 122 33496	100NF10%X7R 63V
2332	4822 124 80837	33UF20% 16V
2333	5322 122 34098	10NF10%X7R 63V
2340	5322 122 32448	10PF 5% NP0
2349	5322 122 34098	10NF10%X7R 63V
2401	4822 124 40201	1000UF20% 16V
2402	4822 124 23282	1UF20% 50V
2403	4822 124 23282	1UF20% 50V
2404	4822 122 33496	100NF10%X7R 63V
2405	4822 122 33496	100NF10%X7R 63V
2406	4822 122 33496	100NF10%X7R 63V
2407	4822 124 23282	1UF20% 50V
2408	4822 124 23282	1UF20% 50V
2409	4822 124 23256	47UF 20% 16V
2411	4822 124 23256	47UF 20% 16V
2413	4822 122 33496	100NF10%X7R 63V
2414	4822 122 33496	100NF10%X7R 63V
2502	4822 124 23504	2,2UF20% 50V
2503	5322 124 41431	22UF20% 35V
2504	5322 124 41431	22UF20% 35V
2505	5322 124 41431	22UF20% 35V
2506	4822 124 40248	10UF20% 63V
2507	4822 124 80629	2200UF 20% 16V
2508	5322 124 41431	22UF20% 35V
2509	4822 124 40248	10UF20% 63V
2510	5322 124 41431	22UF20% 35V
2515	5322 122 32531	100PF 5%NP0 50V
2602	4822 124 80453	100UF20% 10V
2603	4822 124 80453	100UF20% 10V
2605	4822 124 80836	220UF20% 10V
2612	4822 122 33342	33NF 10% X7R 63V
2613	4822 122 32646	5,6NF10%X7R 50V
2614	4822 122 32646	5,6NF10%X7R 50V
2615	4822 122 33342	33NF10%X7R 63V
2616	5322 122 34098	10NF10%X7R 63V
2622	4822 124 23504	2U2 20% 50V
2623	4822 124 23504	2U2 20% 50V
2625	4822 126 11692	1UF 20%
2628	4822 126 11692	1UF 20%

2636	4822 121 43526	47N 5% 100V
2637	4822 121 43526	47N 5% 100V
2638	4822 122 33496	100NF 10% 63V
2639	5322 126 12506	56P 5% NPO 63V
2640	4822 124 80765	4MU7 20% 35V
2641	4822 121 43101	6N8 5% 63V
2642	5322 122 32654	22N 10% X7R 63V
2643	5322 121 42465	68N 5% 63V
2644	5322 121 42465	68N 5% 63V
2645	4822 122 33496	100N 10% 63V
2646	5322 121 42465	68N 5% 63V
2647	5322 121 42465	68N 5% 63V
2648	4822 124 23282	1MU 10% 50V
2649	4822 122 33496	100N 10% 63V
2701	4822 124 80453	100UF20% 10V
2702	4822 124 80453	100UF20% 10V
2714	5322 122 34123	1NF10%X7R 50V
2715	5322 122 34123	1NF10%X7R 50V
2723	4822 124 80453	100UF20% 10V
2724	4822 124 80453	100UF20% 10V
2725	5322 122 34098	10NF10%X7R 63V
2726	5322 122 34098	10NF10%X7R 63V
2803	5322 122 32654	22NF10%X7R 63V
2805	5322 122 32654	22NF10%X7R 63V

3110	4822 051 20229	22R00 5% 0,1W
3112	4822 051 20008	0R00 JUMP. (0805)
3113	4822 051 20008	0R00 JUMP. (0805)
3200	4822 051 20392	3K90 5% 0,1W
3201	4822 051 20222	2K20 5% 0,1W
3202	4822 051 20103	10K00 5% 0,1W
3203	4822 051 20221	220R00 5% 0,1W
3204	4822 051 20471	470R00 5% 0,1W
3205	4822 051 20471	470R00 5% 0,1W
3206	4822 051 20101	100R00 5% 0,1W
3208	4822 051 20103	10K00 5% 0,1W
3209	4822 051 20103	10K00 5% 0,1W
3210	4822 051 20225	2M20 5% 0,1W
3211	4822 051 20479	47R00 5% 0,1W
3212	4822 051 20229	22R00 5% 0,1W
3213	4822 051 20008	0R00 JUMP. (0805)
3290	4822 051 20224	220K00 5% 0,1W
3292	4822 051 20229	22R00 5% 0,1W
3301	4822 051 20335	3M30 5% 0,1W
3302	4822 051 20333	33K00 5% 0,1W
3303	4822 100 20166	10K 30%LIN 0,1W
3305	4822 051 20333	33K00 5% 0,1W
3306	4822 051 20333	33K00 5% 0,1W
3307	4822 051 20432	4K30 5% 0,1W
3308	4822 051 20224	220K00 5% 0,1W
3309	4822 051 20124	120K00 5% 0,1W
3310	4822 051 20684	680K00 5% 0,1W
3313	4822 051 20124	120K00 5% 0,1W
3314	4822 051 20564	560K00 5% 0,1W
3317	4822 051 20273	27K00 5% 0,1W
3318	4822 051 20391	390R00 5% 0,1W
3319	4822 100 11163	100K 30%LIN 0,1W
3321	4822 100 11163	100K 30%LIN 0,1W
3322	4822 100 11163	100K 30%LIN 0,1W
3323	4822 051 20391	390R00 5% 0,1W
3324	4822 051 20272	2K70 5% 0,1W
3325	4822 051 20101	100R00 5% 0,1W
3326	4822 051 20102	1K00 5% 0,1W
3327	4822 051 20681	680R00 5% 0,1W
3330	4822 051 20473	47K 5% 0.1W
3341	4822 051 20109	10R00 5% 0,1W
3342	4822 051 20008	0R00 JUMP. (0805)
3343	4822 051 20008	0R00 JUMP. (0805)
3346	4822 051 20473	47K00 5% 0,1W
3347	4822 051 20008	0R00 JUMP. (0805)
3348	4822 051 20681	680R00 5% 0,1W
3349	4822 051 20223	22K00 5% 0,1W
3403	4822 051 20222	2K20 5% 0,1W
3406	4822 051 20478	4R70 5% 0,1W
3408	4822 051 20478	4R70 5% 0,1W
3409	4822 051 20478	4R70 5% 0,1W
3410	4822 051 20478	4R70 5% 0,1W
3412	4822 051 20104	100K 5% 0,1W
3415	4822 051 20223	22K00 5% 0,1W
3420	4822 051 20102	1K00 5% 0,1W
3501	4822 051 20104	100K00 5% 0,1W
3502	4822 051 20103	10K00 5% 0,1W
3503	4822 051 20222	2K20 5% 0,1W
3504	4822 051 20681	680R00 5% 0,1W
3505	4822 051 20222	2K20 5% 0,1W
3506	4822 051 20104	100K00 5% 0,1W
3507	4822 051 20103	10K00 5% 0,1W
3508	4822 051 20103	10K00 5% 0,1W
3509	4822 051 20473	47K00 5% 0,1W
3510	4822 051 20273	27K00 5% 0,1W
3511	4822 051 20123	12K00 5% 0,1W
3512	4822 051 20223	22K00 5% 0,1W
3513	4822 051 20123	12K00 5% 0,1W
3514	4822 051 20222	2K20 5% 0,1W
3515	4822 051 20222	2K20 5% 0,1W
3517	4822 051 20272	2K70 5% 0,1W
3518	4822 051 20334	330K00 5% 0,1W
3519	4822 051 20473	47K00 5% 0,1W
3601	4822 051 20104	100K00 5% 0,1W
3606	4822 051 20223	22K00 5% 0,1W
3608	4822 051 20334	330K00 5% 0,1W
3609	4822 051 20334	330K00 5% 0,1W
3614	4822 051 20223	22K00 5% 0,1W
3630	4822 051 20223	22K00 5% 0,1W
3635	4822 051 20101	100R00 5% 0,1W
3636	4822 051 20473	47K00 5% 0,1W
3637	4822 051 20823	82K 5% 0,1W
3638	4822 051 20684	680K 5% 0,1W
3639	4822 051 20473	47K00 5% 0,1W
3640	4822 051 20473	47K00 5% 0,1W
3641	4822 051 20104	100K 5% 0,1W
3642	4822 051 20272	2K7 5% 0,1W
3643	4822 051 20823	82K 5% 0,1W
3644	4822 051 20473	47K 5% 0,1W
3645	4822 051 20684	680K 5% 0,1W
3646	4822 051 20331	330R 5% 0,1W
3647	4822 100 11677	470R 5% 30% LIN 0,1W
3648	4822 051 20224	220K 5% 0,1W
3649	4822 051 20103	10K 5% 0,1W
3650	4822 051 20103	10K 5% 0,1W

3651	4822 051 20274	270K 5% 0,1W
3652	4822 051 20333	33K 5% 0,1W
3653	4822 051 20473	47K 5% 0,1W
3654	4822 051 20334	330K 5% 0,1W
3701	4822 051 20103	10K00 5% 0,1W
3702	4822 051 20103	10K00 5% 0,1W
3704	4822 051 20334	330K00 5% 0,1W
3705	4822 051 20123	12K00 5% 0,1W
3706	4822 051 20123	12K00 5% 0,1W
3707	4822 051 20334	330K00 5% 0,1W
3708	4822 051 20123	12K00 5% 0,1W
3709	4822 051 20123	12K00 5% 0,1W
3710	4822 051 20103	10K00 5% 0,1W
3711	4822 051 20103	10K00 5% 0,1W
3713	4822 051 20479	47R00 5% 0,1W
3715	4822 051 20479	47R00 5% 0,1W
3721	4822 051 20331	330R00 5% 0,1W
3722	4822 051 20103	10K00 5% 0,1W
3723	4822 051 20224	220K00 5% 0,1W
3724	4822 051 20272	2K70 5% 0,1W
3725	4822 051 20103	10K00 5% 0,1W
3726	4822 051 20272	2K70 5% 0,1W
3727	4822 051 20478	4R70 5% 0,1W
3728	4822 051 20104	100K00 5% 0,1W
3729	4822 051 20471	470R00 5% 0,1W
3730	4822 051 20478	4R70 5% 0,1W
3801	4822 051 20223	22K00 5% 0,1W
3802	4822 051 20223	22K00 5% 0,1W
3804	4822 051 20103	10K00 5% 0,1W
3805	4822 051 20103	10K00 5% 0,1W
3806	4822 051 20103	10K00 5% 0,1W
3809	4822 051 20103	10K00 5% 0,1W
3810	4822 051 20103	10K00 5% 0,1W
3814	4822 051 20103	10K00 5% 0,1W
3815	4822 051 20103	10K00 5% 0,1W
3816	4822 051 20223	22K00 5% 0,1W
3817	4822 051 20103	10K00 5% 0,1W
3818	4822 051 20104	100K00 5% 0,1W
3819	4822 051 20104	100K00 5% 0,1W
3820	4822 051 20104	100K00 5% 0,1W
3821	4822 051 20104	100K00 5% 0,1W

4300	4822 242 81698	AF9192C-A (61,5MHZ)
5001	4822 156 21723	IND FXD LAL02 A 0UH22 5%
5200	4822 157 63315	IND FXD LAL02 220UH 10%
5201	4822 157 71059	IND VAR 7MM 100MHz
5202	4822 152 20679	IND FXD LAL02A 68UH 10%
5203	4822 157 53473	IND FXDLAL04 1000UH 10%
5206	4822 157 71057	IND VAR 7MM 7CDA 47000U
5207	4822 157 71058	FIL LC VAR 98M KZV-353
5208	4822 156 21722	IND VAR 7CGL 10.7MHZ
5209	4822 157 71055	IND VAR 72MHZ2 5MM
5210	4822 157 71055	IND VAR 72MHZ2 5MM
5211	4822 156 21721	IND FXD LAL02A 2UH2 10%
5212	4822 156 21719	IND FXD LAL02A 1UH5 10%
5301	4822 156 21724	IND VAR 7CGL 10.7MHZ
5302	4822 157 71061	IND VAR 7MM 7P 10.7MHz
5500	4822 152 20677	IND FXD LAL02 10UH 10%
5503	4822 157 70839	CHOCK COIL ASSY

5601	4822 156 40738	DECODER COIL
5801	4822 242 81002	RES CER 6MHz CST6.00
5803	4822 157 53473	IND FXDLAL04 1000UH 10%

6200	5322 130 34337	BAV99
6201	4822 130 83613	BA779
6202	4822 130 83613	BA779
6401	4822 130 30621	1N4148
6501	4822 130 30621	1N4148
6502	4822 130 80291	1N4002GP
6503	4822 130 30621	1N4148
6504	4822 130 34173	BZX79-C5V6
6505	4822 130 34173	BZX79-C5V6
6506	4822 130 30862	BZX79-C9V1
6507	4822 130 34173	BZX79-C5V6
6509	4822 130 30621	1N4148
6512	4822 130 30621	1N4148
6601	4822 130 30621	1N4148
6702	4822 130 30621	1N4148
6703	4822 130 30621	1N4148

7200	4822 130 83614	BB135
7201	4822 130 63534	PMBFJ309
7202	4822 209 33168	TEA6811V/C2/R1
7300	4822 209 33167	TEA6821T/V2
7301	4822 130 60887	BF840
7401	5322 209 11102	HEF4052BT
7402	4822 209 31132	TDA7374V
7501	4822 130 62732	BD241A
7502	4822 130 62732	BD241A
7503	4822 130 44257	BC547
7504	4822 130 60511	BC847B
7505	4822 130 60511	BC847B
7506	4822 130 60511	BC847B
7507	4822 130 60511	BC847B
7602	5322 209 11102	HEF4052BT
7605	4822 209 31979	TEA6330T/V1
7607	4822 209 31007	TDA1579
7608	4822 130 60511	BC847B
7701	4822 130 60511	BC847B
7702	4822 130 44283	BC636
7703	4822 209 33162	MC4558IDT
7801	4822 209 33191	TMP47C620F/N744
7809	4822 900 10571	ST24C02AM6