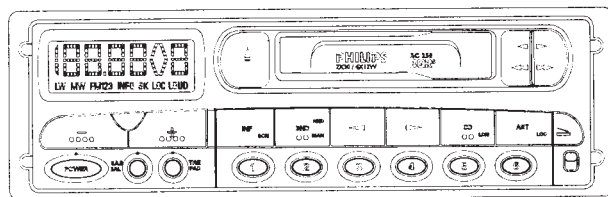


**Cassette car radio 22RC224/00 228/00 228/80 238/02  
22RC238/82 244/00 248/00 248/30  
22RC248/80 258/02 258/32 258/82**

Service  
Service  
**Service**



For repair information of the Cassette deck see Service Manual of Auto Cassette Deck :  
TN301NX265 ( 22RC224 - 228 - 238 )  
CDS36-PR ( 22RC244 - 248 - 258 )

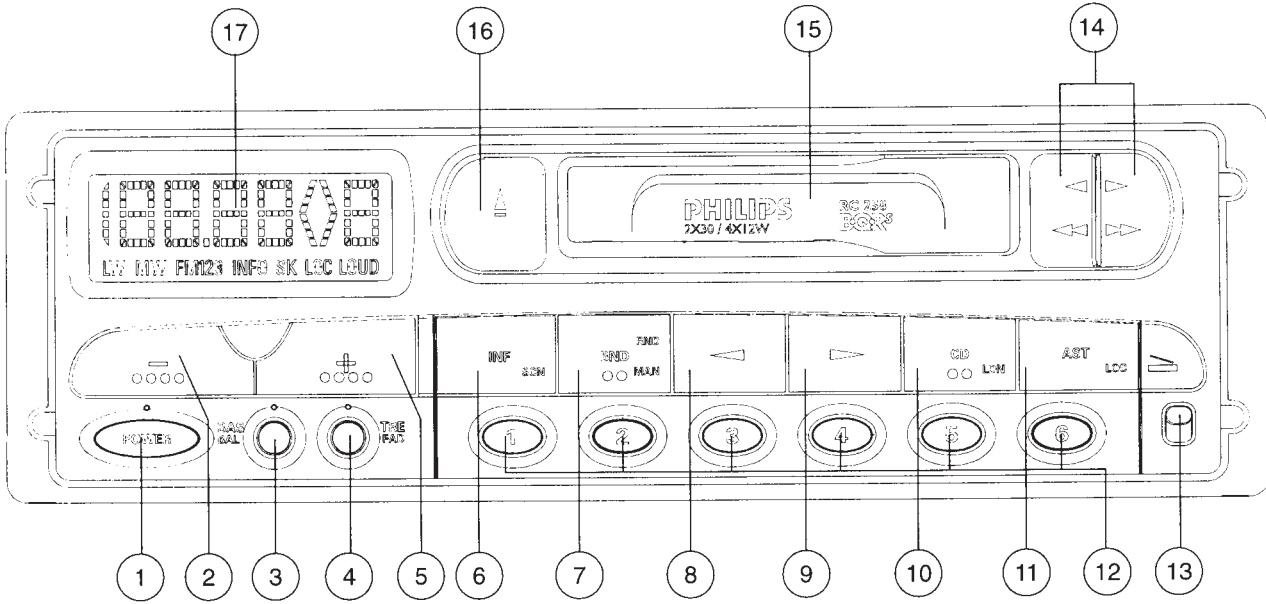
# Service Manual

12 V 

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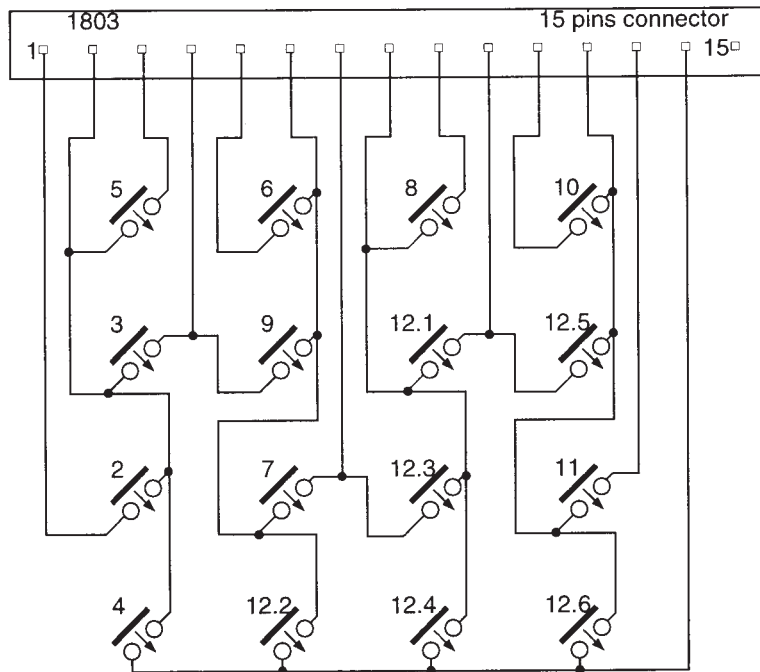


**CONTROLS**

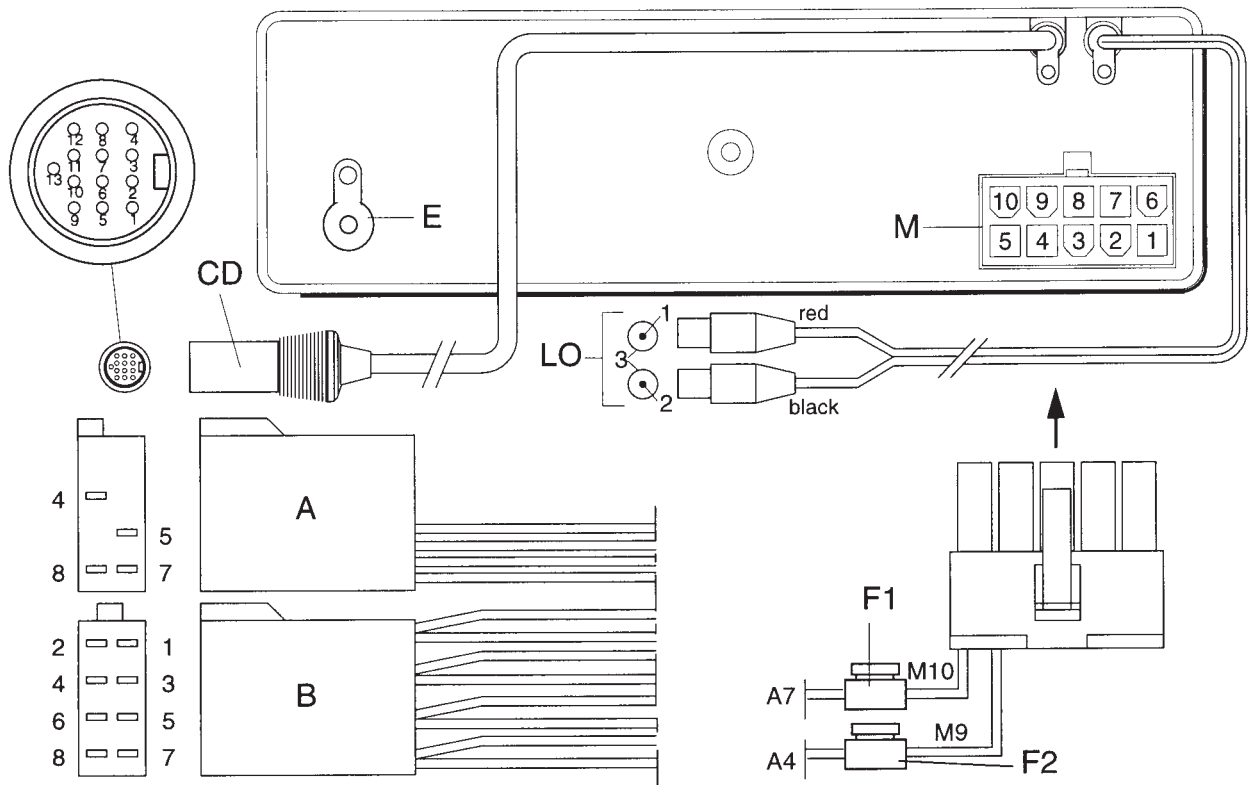


- |   |   |    |   |
|---|---|----|---|
| 1 | On / Off  | 10 | CD mode / Loudness  |
| 2 | Volume -  | 11 | Autostore / Local - DX  |
| 3 | Bass / Balance  | 12 | Presets / Selection   |
| 4 | Treble  | 13 | Release Knob for detachable unit                              |
| 5 | Volume +  | 14 | Ffw / Frw Buttons ( 248 - 258 )                               |
| 6 | Info / Scan Presets ( 238 - 258 )<br>Scan Presets ( 228 - 248 ) | 15 | Cassette Opening + Flap                                       |
| 7 | Band Selection / Manual Search Select<br>Random (in CD mode)    | 16 | Reverse Button / Eject ( 248-258 )<br>FFW / Eject ( 228-238 ) |
| 8 | Search Down   | 17 | Display   |
| 9 | Search Up   |    |   |

**KEYBOARD SCHEMATIC DIAGRAM**



## CONNECTIONS



A4 = M9 +12V PERMANENT  
 A5 = M4 AUTOMATIC AERIAL  
 A7 = M10 +12V SWITCHED  
 A8 = M5 GROUND

### POWER SUPPLY

YELLOW / RED  
 BLUE  
 RED  
 BROWN

B1 / B4 = M7 REAR RIGHT+ / FRONT RIGHT -  
 B2 = M8 REAR RIGHT -  
 B3 = M3 FRONT RIGHT+  
 B5 = M1 FRONT LEFT+  
 B6 / B7 = M2 FRONT LEFT- / REAR LEFT+  
 B8 = M6 REAR LEFT -

### LOUDSPEAKERS

FOR 2 X 15 W CONFIGURATION:

B2 = M8 RIGHT CHANNEL -  
 B3 = M3 RIGHT CHANNEL +  
 B5 = M1 LEFT CHANNEL +  
 B8 = M6 LEFT CHANNEL -

BLUE - GREY / BLACK  
 BLUE / BLACK  
 GREY  
 GREEN  
 GREEN / BLACK - BROWN  
 BROWN / BLACK

LO1 RIGHT SIGNAL  
 LO2 LEFT SIGNAL  
 LO3 GROUND

LO : LINE OUT CABLE  
 CINCH female connector

RED  
 BLACK  
 SHIELDING

CD1 SIGNAL GROUND  
 CD2 AUDIO LEFT  
 CD3 SIGNAL GROUND  
 CD4 AUDIO RIGHT  
 CD5 BATTERY GROUND  
 CD6/CD10/CD13 NOT CONNECTED  
 CD7 +12V SWITCHED  
 CD8 +12V PERMANENT  
 CD9 BUS GROUND  
 CD11 D2B +  
 CD12 D2B -

CD : C.D. CHANGER CABLE  
 DIN 13P Hosiden TCP9386-21-010

SHIELDING  
 YELLOW  
 SHIELDING  
 ORANGE  
 BLACK

BLUE  
 BROWN  
 SHIELDING  
 WHITE  
 RED

E AERIAL PLUG  
 F1 FUSE  
 F2 FUSE

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  $\mu$ V (LW)  
 : 17.5  $\mu$ V (MW)  
 : 3.5  $\mu$ V (FM)  
 Limitation  $\alpha$ -3dB : 3 to 15  $\mu$ V

**CASSETTE**

Cassette mechanism :TN-301NX-265 (228 - 238)  
 Number of tracks :2  
 Tape speed :4.75 cm/sec  
 Wow and flutter : $\leq$  0.35% (+5° to +35°)  
 Crosstalk :> 21dB

**CASSETTE**

Cassette mechanism :CDS 36-PR (248-258)  
 Number of tracks :2x2  
 Tape speed :4.75 cm/sec  
 Wow and flutter : $\leq$  0.35% (+10° to +45°)  
 Crosstalk :> 21dB

**AMPLIFIER**

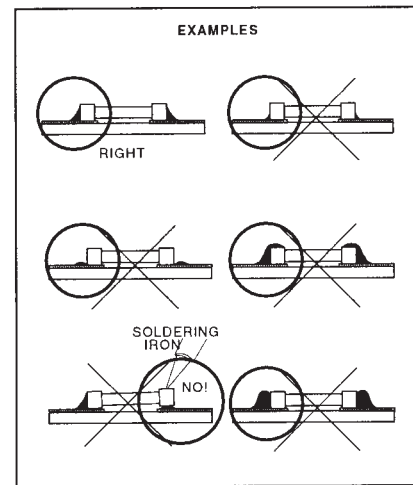
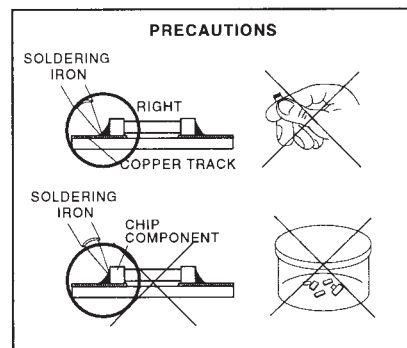
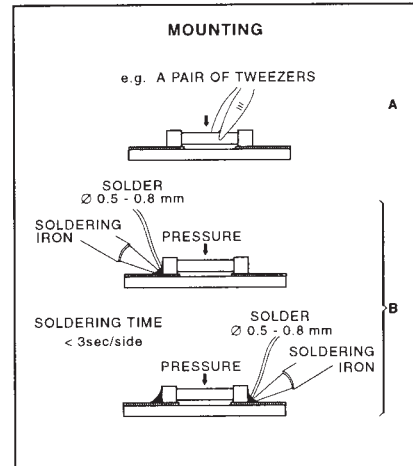
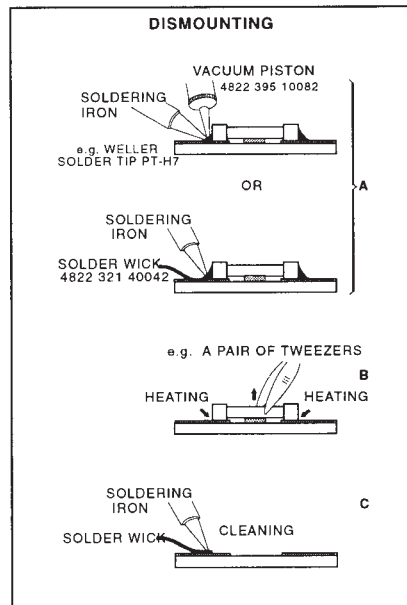
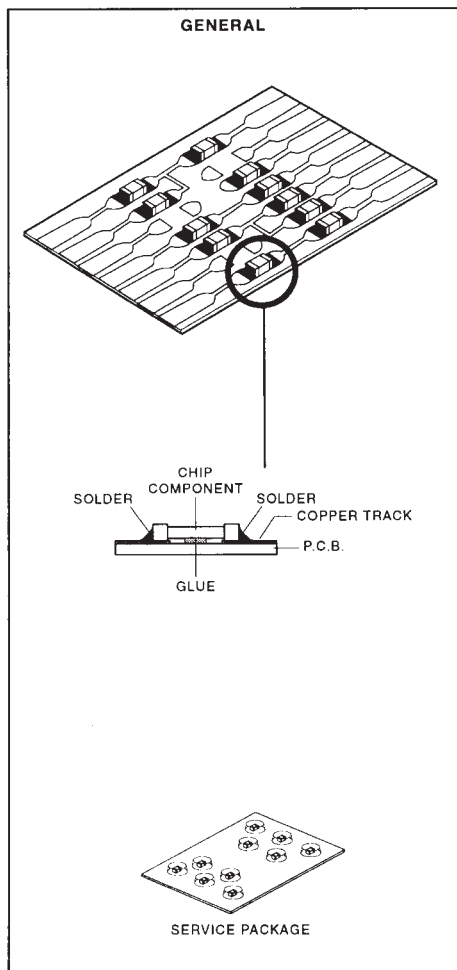
Output power :2x15 or 4x4.5W / 4 $\Omega$  (D = 10%)  
 Loudness :+7dB  $\pm$  2dB at 60Hz  
 :+4dB  $\pm$  2dB at 10kHz

**AMPLIFIER**

Treeble control :+10/-10  $\pm$  2dB at 10kHz  
 Bass control :+12/-12  $\pm$  2dB at 60Hz  
 Balance control :>12dB  
 Fader :>12dB  
 Mute :-70dB

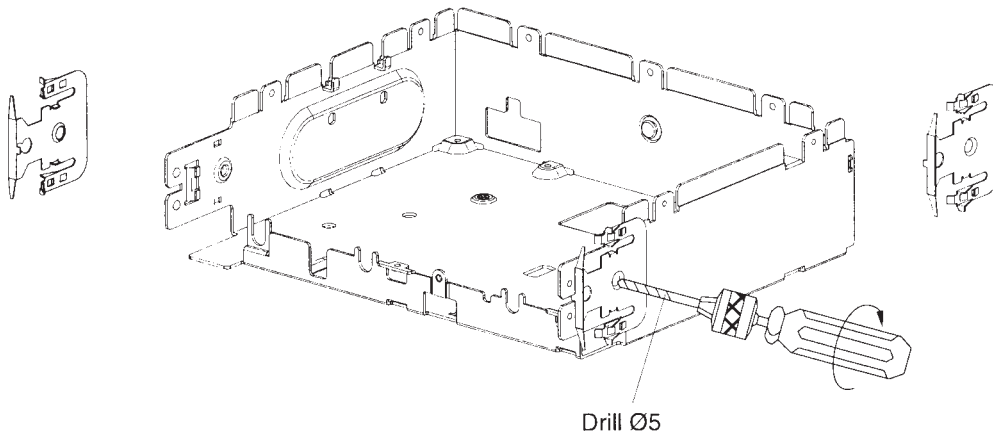
(\*Exept 238/02 ../82 258/02 ../82)

**HANDLING CHIP COMPONENTS**



22RC224 22RC228 22RC238 22RC244 22RC248 22RC258

**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**



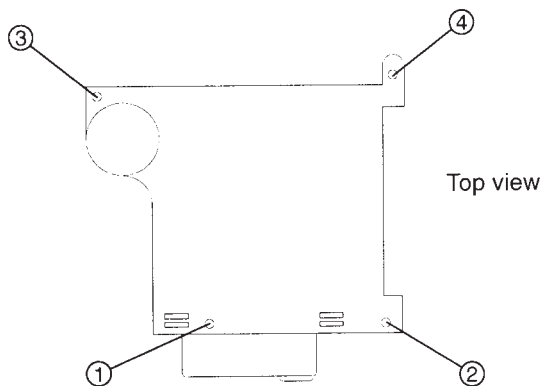
**WARNING**

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.

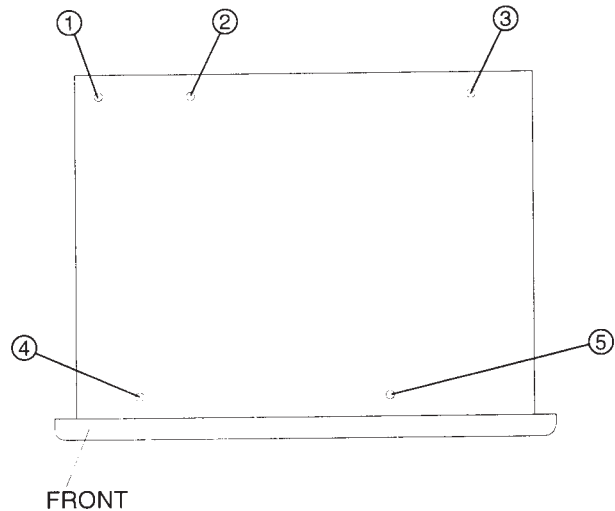
**FEATURES TABLE**

	FM-Only	AM-FM	Auto-Reverse	Fast Forward	ARI	Line out	Ctrl CD Changer	Orange Light	Green Light
22RC224/00		X		X				X	
22RC228/00		X		X				X	
22RC228/80		X		X					X
22RC238/02	X			X	X			X	
22RC238/82	X			X	X				X
22RC244/00		X	X					X	
22RC248/00		X	X			X		X	
22RC248/30		X	X				X		X
22RC248/80		X	X			X			X
22RC258/02	X		X		X	X		X	
22RC258/32		X	X		X		X		X
22RC258/82	X		X		X	X			X

### SCREWING SEQUENCE DECK



### SCREWING SEQUENCE PWB

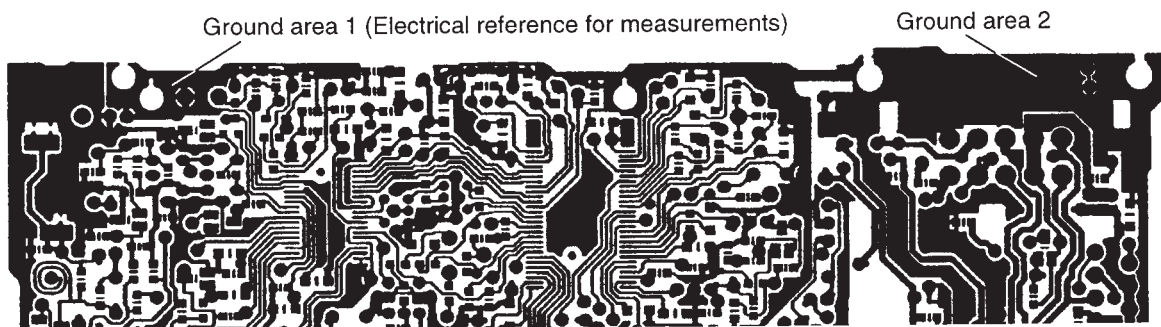


### REMOVING THE PWB

- 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)

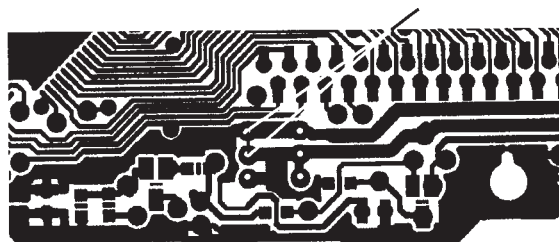
### CONNECTING THE PWB FOR MEASUREMENTS ON THE COPPER SIDE.

- 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

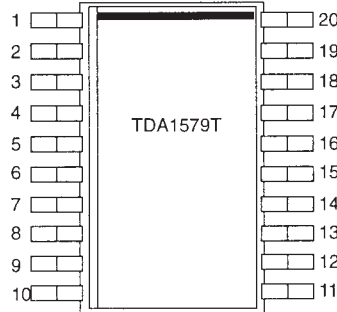
pins 2 and 3 switch1513



## INTEGRATED CIRCUITS

**TD1579T** Decoder for traffic warning radio transmissions

SYMBOL	PIN	DESCRIPTION
SK	1	SK indicator
DKout	2	DK output current
SKout	3	SK output current
τBK	4	time delay BK
V <sub>5BK</sub>	5	filter output BK
V <sub>6BK</sub>	6	filter input BK
V <sub>P</sub>	7	supply voltage
V <sub>P/2</sub>	8	half supply voltage
V <sub>9SK</sub>	9	SK detector output
n.c.	10	not connected
n.c.	11	not connected
V <sub>12SK</sub>	12	57kHz band pass filter
V <sub>AGC</sub>	13	AGC
I <sub>14</sub>	14	prestige biasing current
V <sub>MPX</sub>	15	MPX input
V <sub>16DK</sub>	16	filter input DK
V <sub>17DK</sub>	17	filter output DK
τDK	18	time delay DK
I <sub>19</sub>	19	reference current for BK, DK detector
GND	20	ground

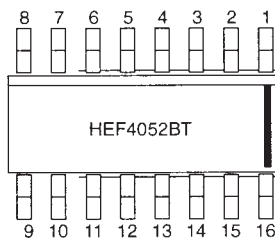


**TEA6811** IC91 RF IC

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 I2C N-terminal
FREFP	7	ref frequency from I2C P-terminal
GNDIF	8	digital ground
VCCIF	9	digital supply 5 V
NC	10	
FMIFON	11	outputs of FM-mixer of first IF (72.2 MHz)
FMIFOP	12	
VCC8.5	13	analog supply 8.5 V
GND8.5	14	analog ground 8.5 V
AMMOP	15	outputs of AMMIXER of first IF (10.7 MHz)
AMMON	16	
NC	17	
AMMIN	18	AMMIXER input RF
VREF	19	reference voltage from AMBANDGA
NC	20	

**HEF4052BT** Dual 4 channel analogue multi/demultiplexer

SYMBOL	PIN	DESCRIPTION
Y <sub>0B</sub>	1	independant input/output 0 <sub>B</sub>
Y <sub>2B</sub>	2	independant input/output 2 <sub>B</sub>
Z <sub>B</sub>	3	common input/output B
Y <sub>3B</sub>	4	independant input/output 3 <sub>B</sub>
Y <sub>1B</sub>	5	independant input/output 1 <sub>B</sub>
E	6	enable input (active LOW)
V <sub>EE</sub>	7	ground
V <sub>SS</sub>	8	ground
A <sub>1</sub>	9	address input 1
A <sub>0</sub>	10	address input 0
Y <sub>3A</sub>	11	independant input/output 3 <sub>A</sub>
Y <sub>0A</sub>	12	independant input/output 0 <sub>A</sub>
Z <sub>A</sub>	13	common input/output A
Y <sub>1A</sub>	14	independant input/output 1 <sub>A</sub>
Y <sub>2A</sub>	15	independant input/output 2 <sub>A</sub>
V <sub>DD</sub>	16	supply



FUNCTION TABLE

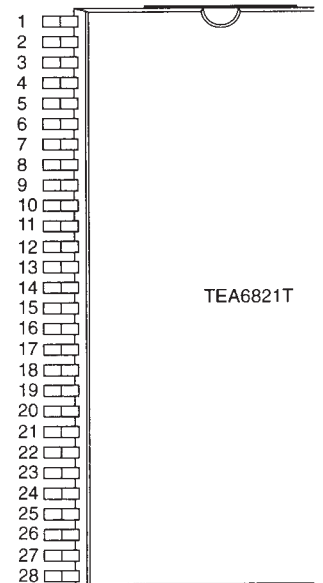
inputs			channel
E	A <sub>1</sub>	A <sub>0</sub>	ON
L	L	L	Y <sub>0A</sub> -Z <sub>A</sub> ; Y <sub>0B</sub> -Z <sub>B</sub>
L	L	H	Y <sub>1A</sub> -Z <sub>A</sub> ; Y <sub>1B</sub> -Z <sub>B</sub>
L	H	L	Y <sub>2A</sub> -Z <sub>A</sub> ; Y <sub>2B</sub> -Z <sub>B</sub>
L	H	H	Y <sub>3A</sub> -Z <sub>A</sub> ; Y <sub>3B</sub> -Z <sub>B</sub>
H	X	X	none

**MSM6307GS** D<sup>2</sup>B IC

SYMBOL	I/O	DESCRIPTION
POR	I	Power on - reset
R / W	I	Read / Write selector
DS	I	Data strobe to access data bus
A / D	I	Selects address or data on D0
SDA	I/O	I <sup>2</sup> C data signal input / output
SCL	I/O	I <sup>2</sup> C clock signal input / output
I2C	I	Selects I <sup>2</sup> C or parallel interface
INT	O	Interrupt output
BUSIN	I	D2B input (TTL level)
BUSOUT	O	D2B output (TTL level)
DBN & DBP	I/Os	Differential D2B lines of the intc receiver, to be terminated with 1
TEST	I	Selects the test mode for factor
6MCI	I	Clock input 6MHz resonator or
6MCO	O	Clock output 6MHz resonator o
D0 ~ D7	I/Os	8-bit bi-directional address or d
A0 ~ A2	I	Programmables I <sup>2</sup> C slave addr

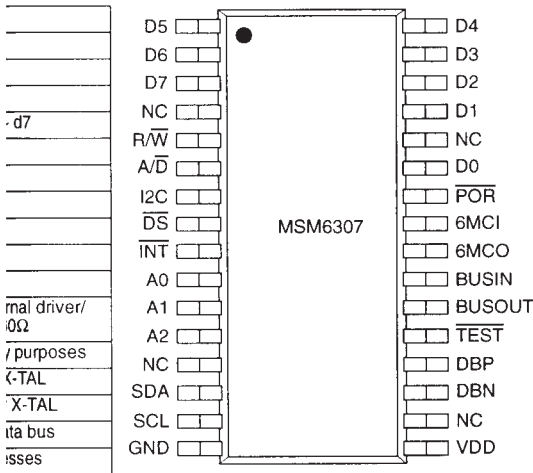
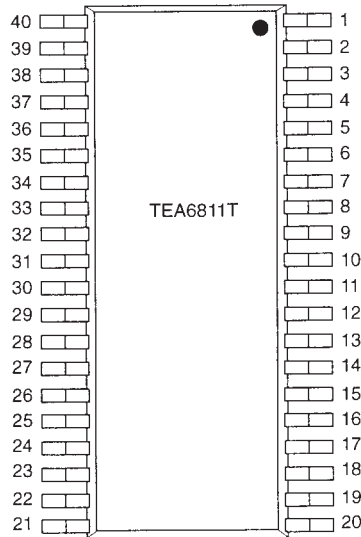
**TEA6821T**

SYMBOL	PIN	DESCRIPTION	SYMBOL	PIN	DESCRIPTION
QDET1	1	demodulator tank	FMIFAMP OUT	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 <sub>REFP</sub>	10	PLL reference frequency	LEVELADJ	38	level adjust
F <sub>REFN</sub>	11	PLL reference frequency	C <sub>AFC</sub>	39	AFC capacitor
I <sub>REF</sub>	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 <sub>SDS</sub>	17	SDS control voltage	MPXIN	45	stereo decoder MPX input
V <sub>SDR</sub>	18	SDR control voltage	IAC <sub>IN</sub>	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 <sub>REF</sub>	21	reference voltage	V <sub>MUTAML</sub>	49	mute voltage / AM level
AMIF2OUT1	22	AM mixer output	LEVELUNWEIG	50	level unweighted
AMIF2OUT2	23	AM mixer output	IAC <sub>CONTR</sub>	51	IAC control voltage
FMAMDEC	24	FM/AM 10.7 MHz decoupling	V <sub>PDIG</sub>	52	V <sub>P</sub> 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 <sub>PIF</sub>	28	V <sub>P</sub> IF amplifier	V <sub>P8.5</sub>	56	V <sub>P</sub> 8.5 V

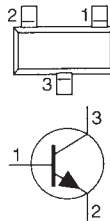




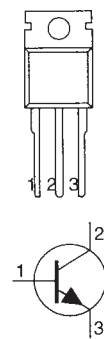
SYMBOL	PIN	DESCRIPTION
GNDAMM	21	ground AMMIXER
AMPREO	22	AMPREAMP output
NC	23	
AMSB1	24	AM feedback switch SB1
AMSB2	25	AM feedback switch SB2
AMPREI	26	AMPREAMP input
AMCAGC	27	AM AGC capacitor
AMCPRE	28	AM preamp decoupling capacitor
GNDRF	29	RF ground
FMRFIP	30	FM MIXER inputs RF
FMRFIN	31	
IPIDIO	32	pin diode drive
FMAGC	33	FM AGC integrating capacitor
REFAGC	34	FM AGC reference voltage
OSCFDB	35	oscillator FEEDBACK input
GNDOSC	36	oscillator ground
OSCTNK	37	oscillator tank output
VCCOSC	38	supply voltage VCO
VTUNE	39	tuning voltage
CHPOUT	40	charge pump output



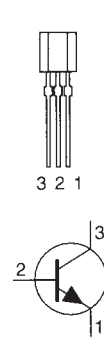
BC847B / BF840



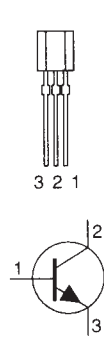
BD241



BC547

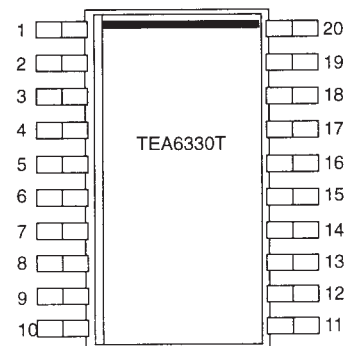
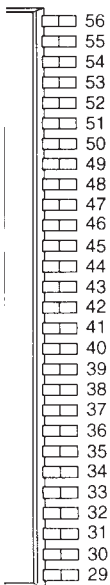


BC636

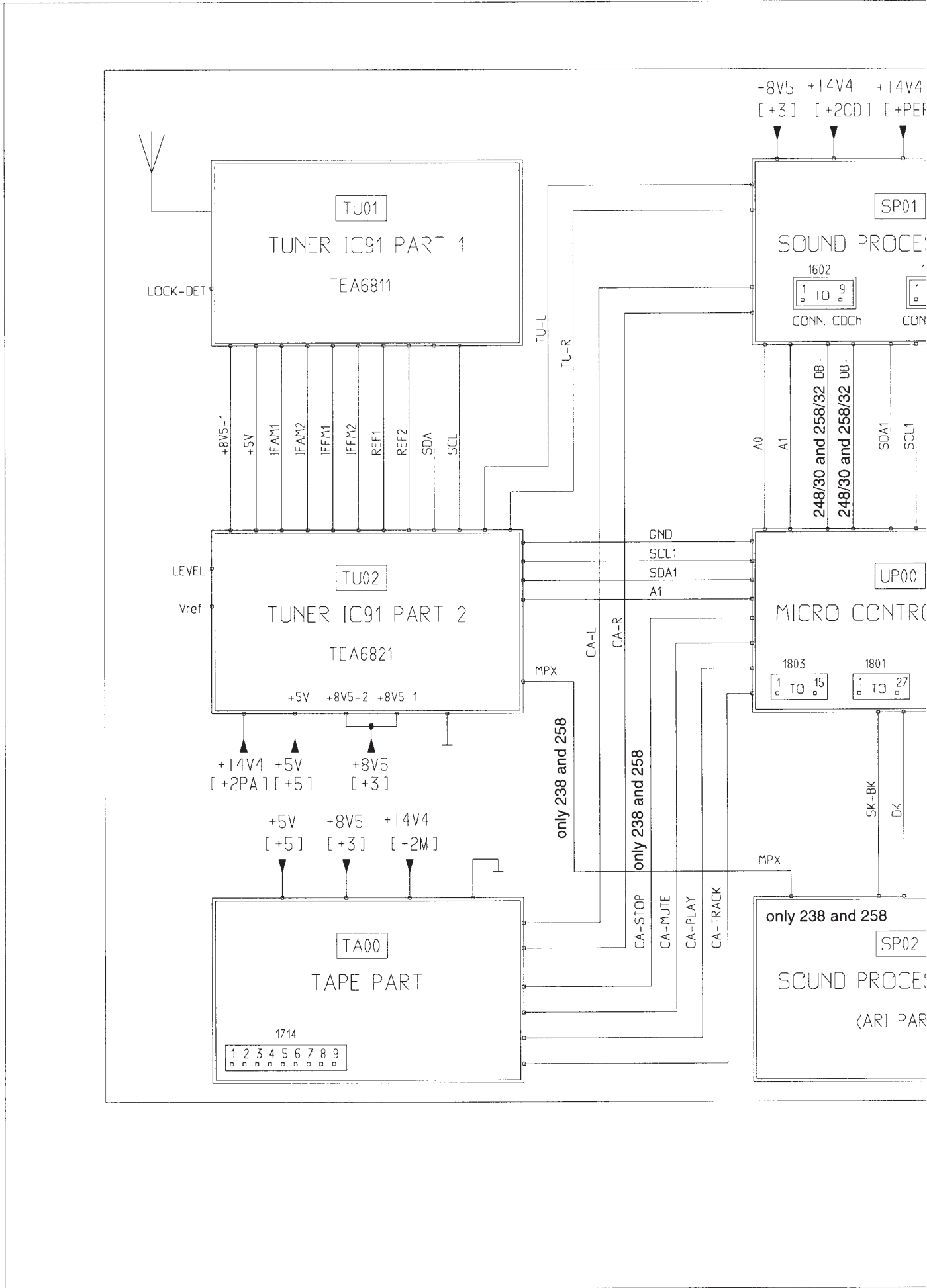


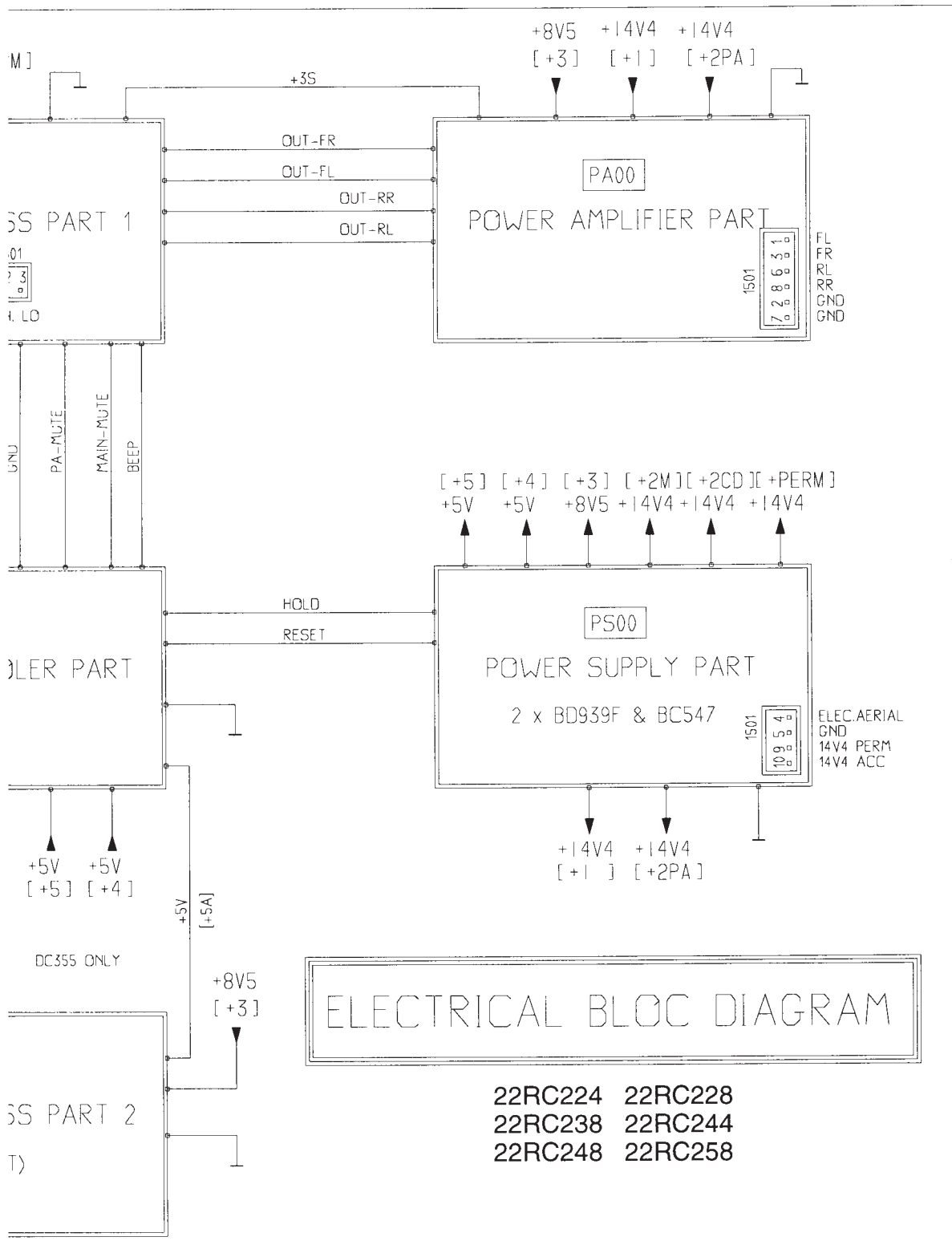
TEA6330T Sound Fader Control circuit (SOFAC)

SYMBOL	PIN	DESCRIPTION
C <sub>PS</sub>	1	filtering capacitor for power supply
IN-R	2	audio input signal RIGHT
GND1	3	analog ground (0 V)
C <sub>BR1</sub>	4	capacitor for bass control RIGHT and signal to equalizer
C <sub>BR2</sub>	5	capacitor for bass control RIGHT
C <sub>TR</sub>	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 <sup>2</sup> C-bus
SDA	12	data signal of I <sup>2</sup> C-bus
QLF	13	left audio output signal of front channel
QLR	14	left audio output signal of rear channel
C <sub>TL</sub>	15	capacitor for treble control LEFT, input signal for equalizer LEFT
C <sub>BL2</sub>	16	capacitor for bass control LEFT
C <sub>BL1</sub>	17	capacitor for bass control LEFT and signal to equalizer
V <sub>p</sub>	18	+8.5 V supply voltage
IN-L	19	audio input signal LEFT
V <sub>ref</sub>	20	reference voltage output (V <sub>p</sub> /2)









## DC VOLTAGES

### 7202 TEA6811V

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

### 7300 TEA6821T/V2

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

### 7402 TDA7374V

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

### 7602 HEF 4052BT

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

### 7401 HEF 4052BT

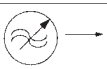



























1 = 3.9 V	9 = GND
2 = GND	10 = 6.4 V
3 = 3.9 V	11 = GND
4 = GND	12 = 3.9 V
5 = 3.9 V	13 = 3.9 V
6 = GND	14 = 3.9 V
7 = GND	15 = GND
8 = GND	16 = 7.7 V

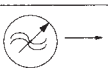


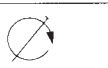










### 7605 TEA 6330

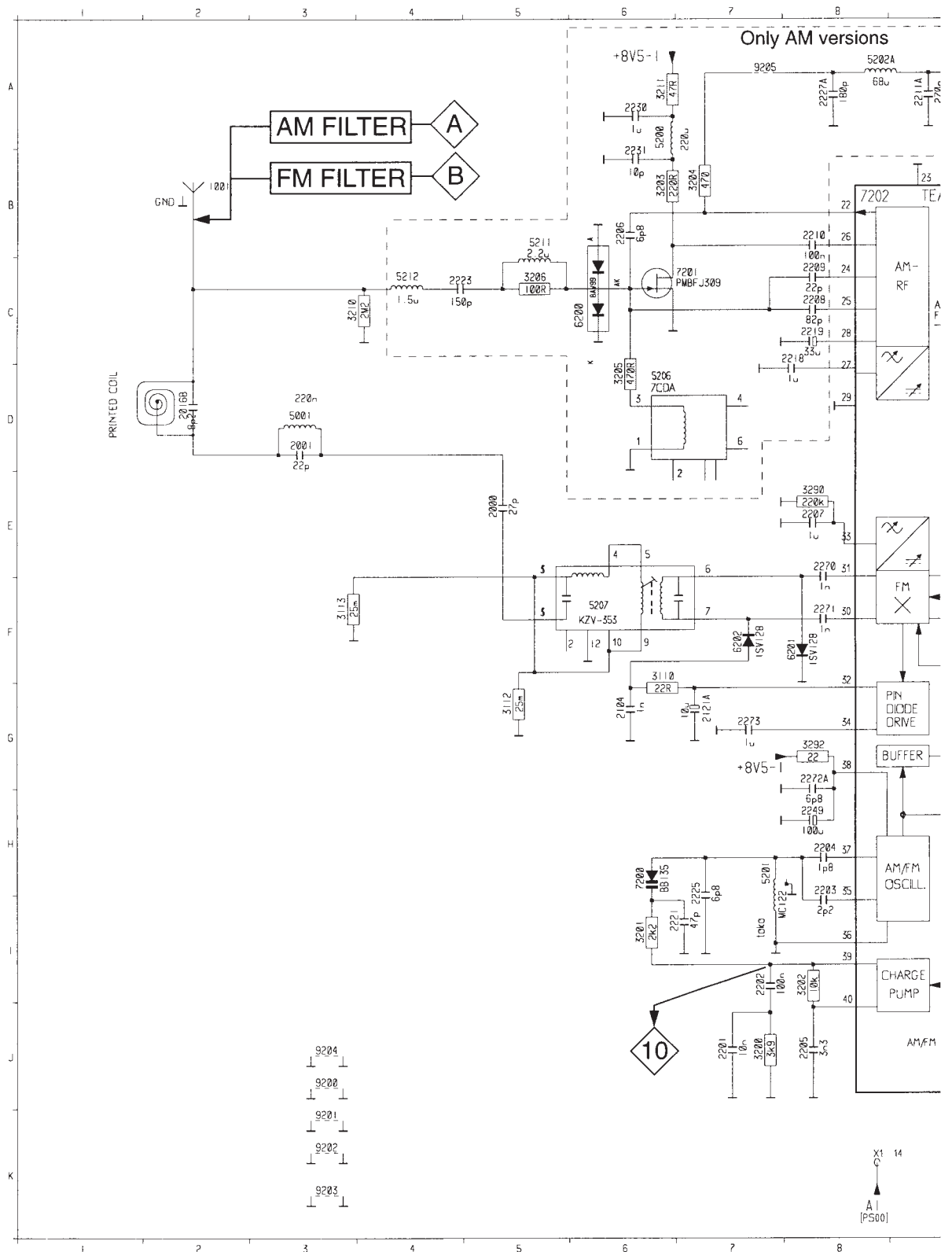
1 = 7.7 V	11 = 5.1 V SCL
2 = 3.8 V	12 = 5.1 V SDA
3 = GND	13 = 3.9 V
4 = 3.9 V	14 = 3.9 V
5 = 3.9 V	15 = 3.9 V
6 = 3.9 V	16 = 3.9 V
7 = 3.9 V	17 = 3.9 V
8 = 3.9 V	18 = 7.7 V
9 = 7.7 V	19 = 3.9 V
10 = GND	20 = 3.9 V

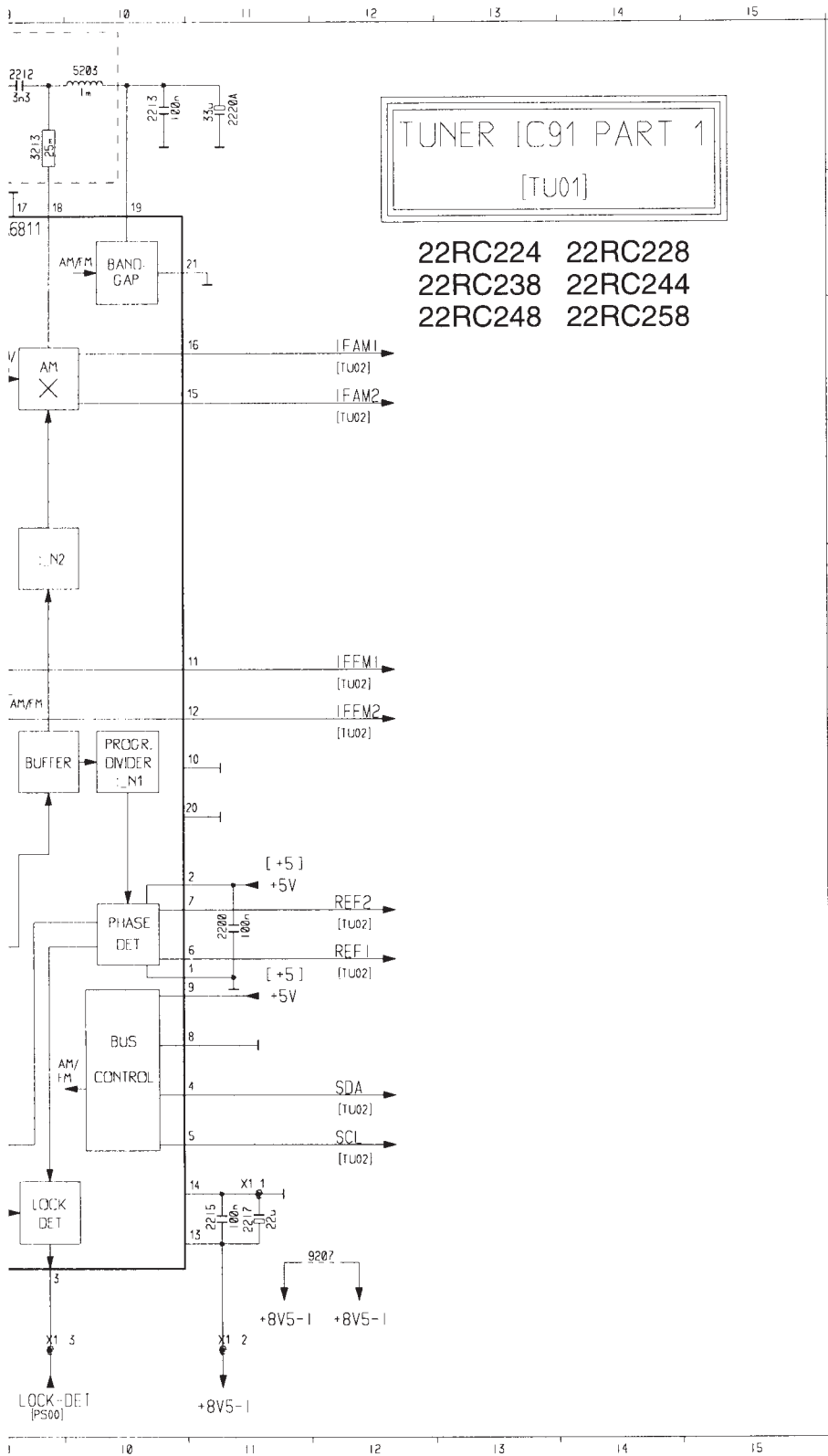
## CHECK AND ALIGNMENT

For checking and adjusting see general procedures

Check	SK				Setting of controls		
Demodulated FM levels	FM	98 MHz 1 mV $\Delta f = 22.5$ KHz f mod = 1 KHz				 210 mV $\pm$ 40 mV	
		98 MHz 1 mV $\Delta f = 6.75$ KHz f mod = 19 KHz				 60 mV $\pm$ 10 mV	
		98 MHz 1 mV $\Delta f = 3.75$ KHz f mod = 57 KHz				 30 mV $\pm$ 10 mV	
Demodulated AM level	MW	1053 KHz 1 mV 1 KHz, 30% AM				$250 \text{ mV} \leq \begin{matrix} \text{7} \\ \text{9} \end{matrix} \leq 350 \text{ mV}$	
VC FM	FM			87.5 MHz		 > 1.2 V	
				108 MHz		 < 5.5 V	
VC AM	LW			144 KHz		 > 1.2 V	
	MW			1629 KHz		 < 7.0 V	
FM Mute	FM	93 MHz 1mV				  0 dB (775 mV)	
		No signal				  < -10 dB	
0 Discriminator						 3.4 V $\pm$ 400 mV	
Reference oscillator frequencies						 61.5 MHz $\pm$ 3kHz	
						 6 MHz $\pm$ 0.5%	

Alignment	SK					
	FM	88 MHz 20 $\mu$ V no AF signal		88 MHz	5201	 1.35 V $\pm$ 50 mV
	FM	93 MHz <20 $\mu$ V no AF signal		93 MHz	5209 5210	Max DC voltage on pin 50 of IC 7300
	FM	93 MHz 20 $\mu$ V no AF signal		93 MHz	5208	Max DC voltage on pin 50 of IC 7300
	AM	1053 KHz 70 $\mu$ V 1 kHz 30%		1053 KHz	5301	Max DC voltage on pin 50 of IC 7300
Audio limiting	FM	98 MHz 1 mV $\Delta f = 22.5$ KHz f mod = 1 KHz				  0 dB (775 mV)
		98 MHz 6 $\mu$ V $\Delta f = 22.5$ KHz f mod = 1 KHz				3321



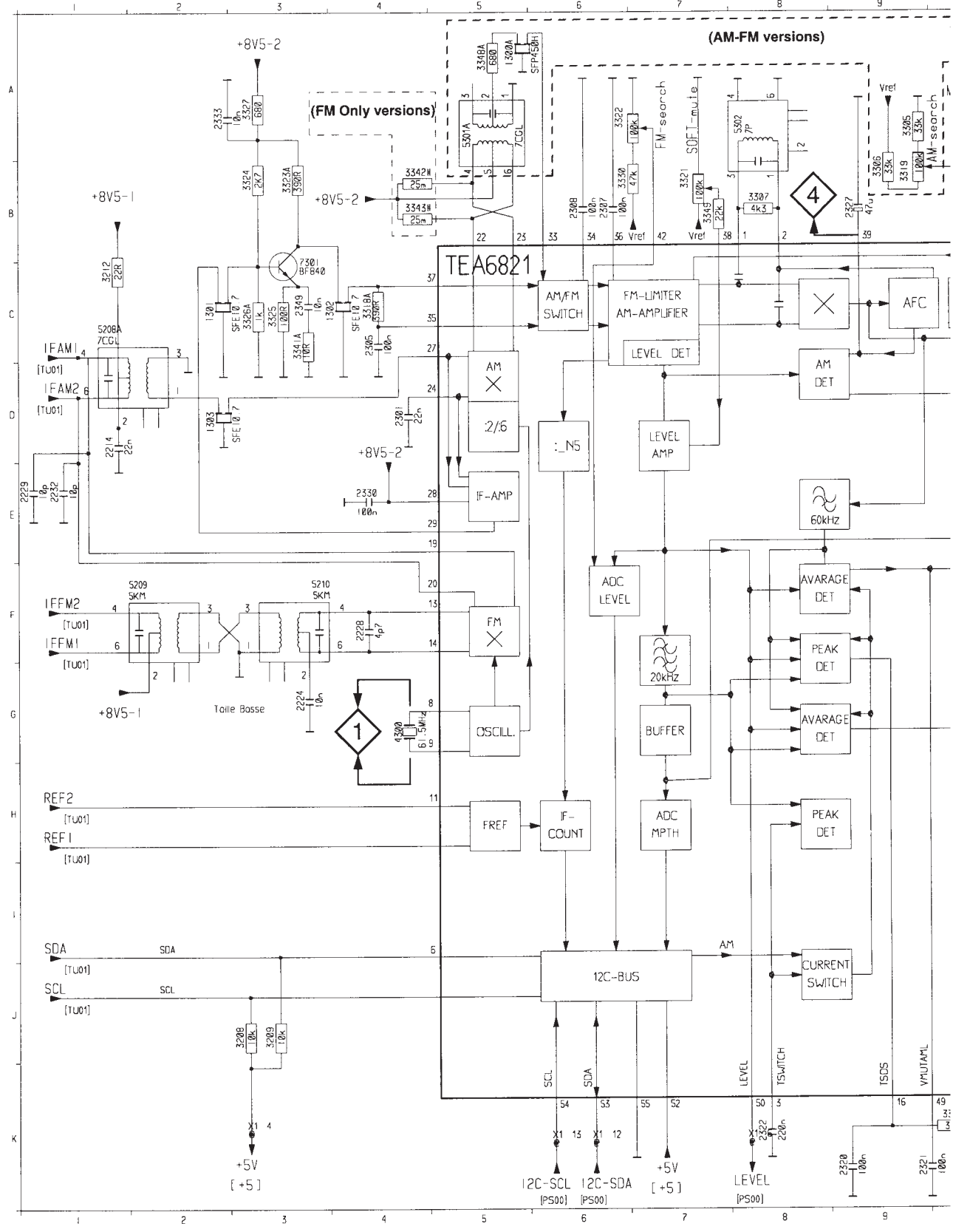


TUNER IC91 PART 1  
[TU01]

- 22RC224    22RC228
- 22RC238    22RC244
- 22RC248    22RC258

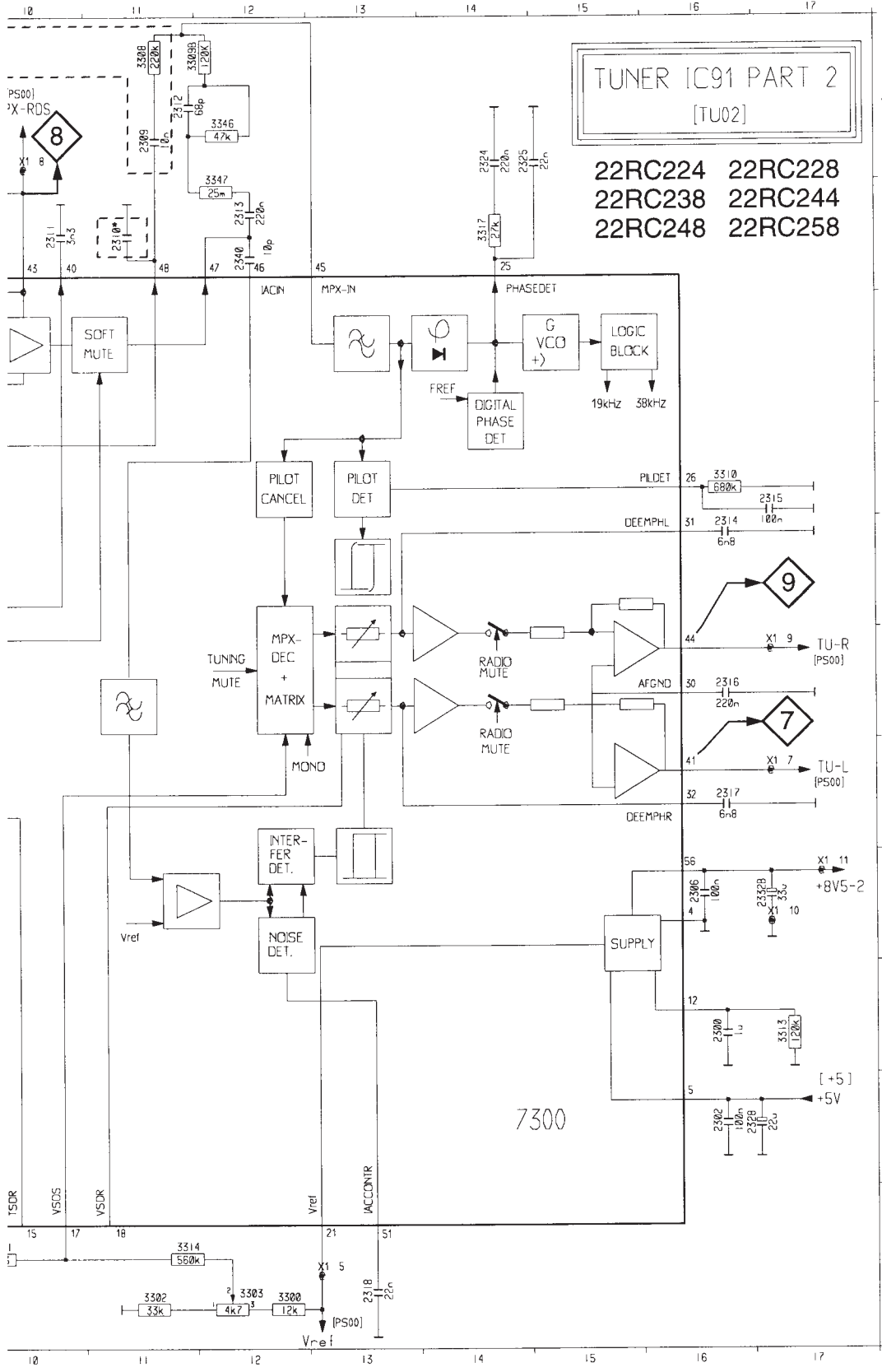
A	1001	B 2	6200	C 6
	2000	E 5	6201	F 8
	2001	D 3	6202	F 7
	2016	D 2	7200	H 6
	2104	G 6	7201	C 7
	2121	G 7	7202	B 8
	2200	H 11	9200	J 3
	2201	J 7	9201	K 3
	2202	I 7	9202	K 3
	2203	H 8	9203	K 3
B	2204	H 8	9204	J 3
	2205	J 8	9205	A 7
	2206	B 6	9207	J 12
	2207	E 8		
	2208	C 8		
C	2209	C 8		
	2210	B 8		
	2211	A 9		
	2212	A 9		
	2213	A 10		
D	2215	J 11		
	2217	J 11		
	2218	C 8		
	2219	C 8		
	2220	A 11		
E	2221	I 7		
	2223	C 4		
	2225	H 7		
	2227	A 8		
	2230	A 6		
F	2231	B 6		
	2249	H 8		
	2270	E 8		
	2271	F 8		
	2272	G 8		
G	2273	G 7		
	3110	F 6		
	3112	G 5		
	3113	F 3		
	3200	J 7		
H	3201	I 6		
	3202	I 8		
	3203	B 6		
	3204	B 7		
	3205	D 6		
I	3206	C 5		
	3210	C 3		
	3211	A 6		
	3213	A 9		
	3290	E 8		
J	3292	G 8		
	5001	D 3		
	5200	A 6		
	5201	H 7		
	5202	A 8		
K	5203	A 10		
	5206	D 6		
	5207	F 6		
	5211	B 5		
	5212	C 4		

\*2310 = 10nF (FM only ver)  
 = 3,3nF (AM/FM ver)





ions)  
ions)

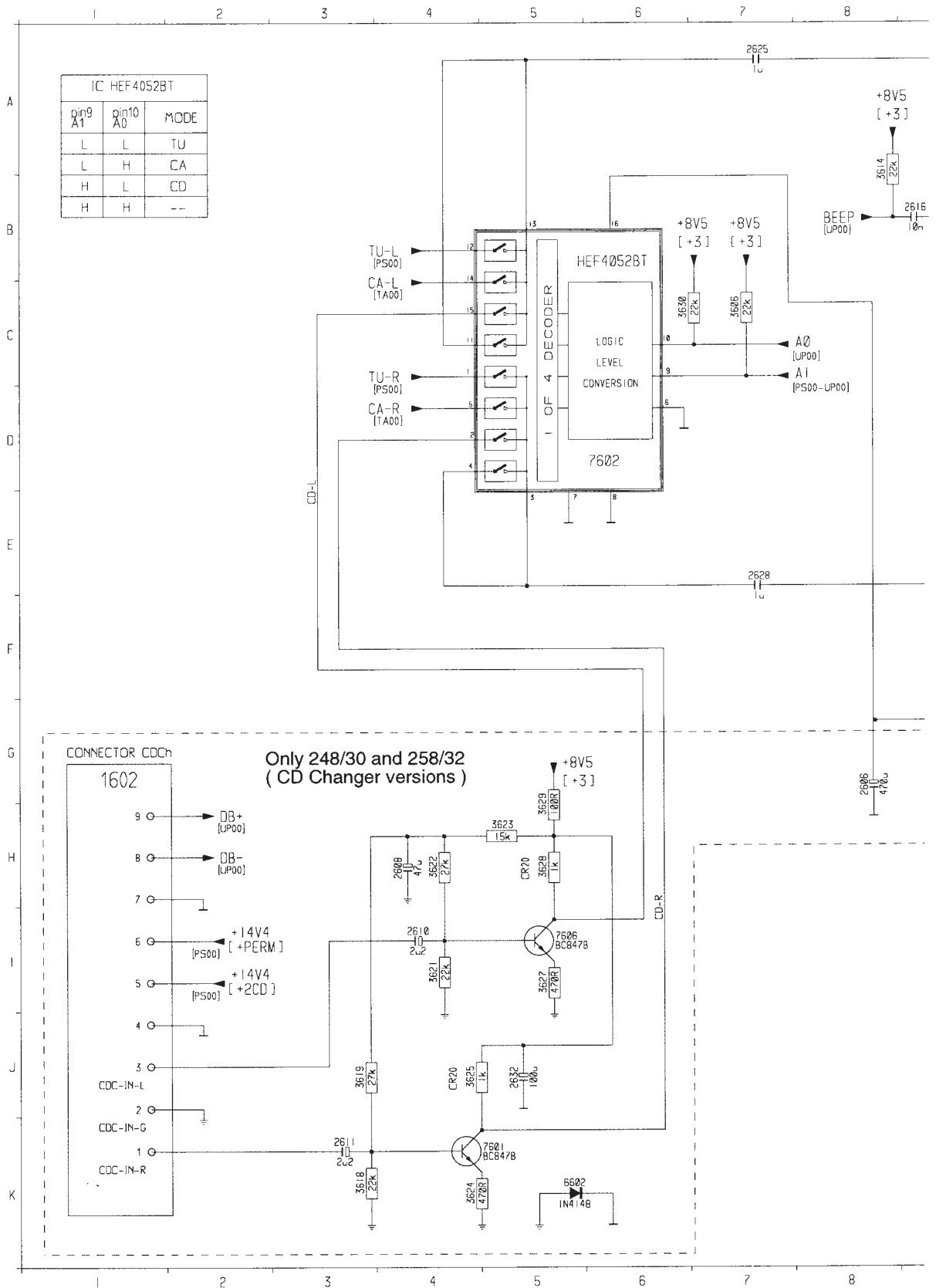


TUNER IC91 PART 2  
[TU02]

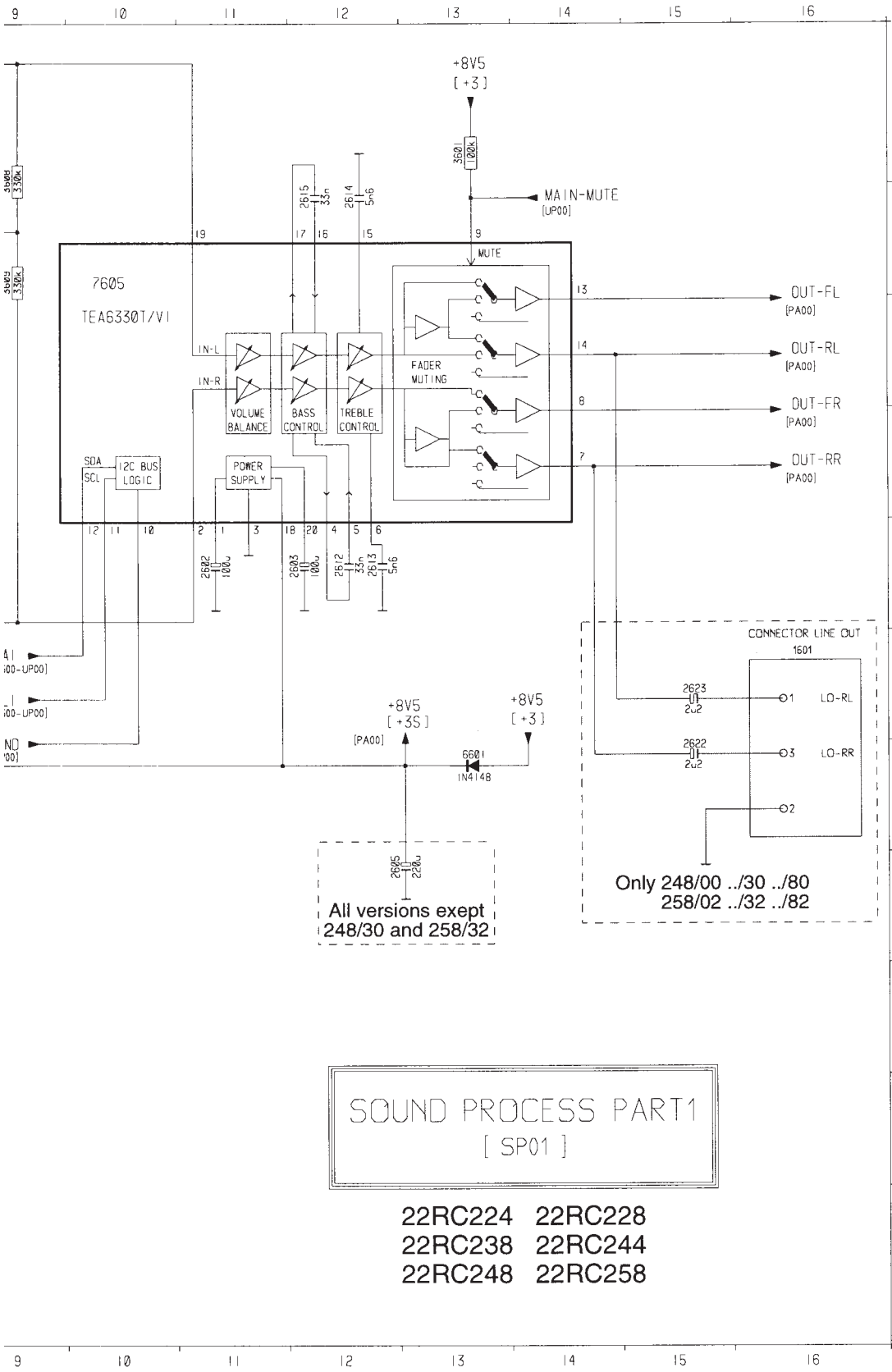
- 22RC224 22RC228
- 22RC238 22RC244
- 22RC248 22RC258

- 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 6
- 2301 D 4
- 2302 J 6
- 2305 C 4
- 2306 H 6
- 2307 B 6
- 2308 B 6
- 2309 B 11
- 2310 B 11
- 2311 B 10
- 2312 A 11
- 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
- 2325 A 14
- 2327 B 9
- 2328 J 16
- 2330 E 4
- 2332 H 17
- 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
- 3305 A 9
- 3306 B 9
- 3307 B 8
- 3308 A 11
- 3309 A 12
- 3310 D 16
- 3313 I 17
- 3314 K 11
- 3317 B 14
- 3318 C 4
- 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
- 3342 B 4
- 3343 B 4
- 3346 A 12
- 3347 B 12
- 3348 A 5
- 3349 B 7
- 4300 G 4
- 5208 C 1
- 5209 F 1
- 5210 F 3
- 5301 B 5
- 5302 A 7
- 7300 J 14
- 7301 C 3

IC HEF4052BT		
pin <sup>9</sup> A1	pin <sup>10</sup> A0	MODE
L	L	TU
L	H	CA
H	L	CD
H	H	--



Only 248/30 and 258/32  
( CD Changer versions )



- 1601 F16
- 1602 G 1
- 2602 E11
- 2603 E12
- 2605 G12
- 2606 G 8
- 2608 H 4
- 2610 I 4
- 2611 K 3
- 2612 E12
- 2613 E12
- 2614 B12
- 2615 B12
- 2616 B 9
- 2622 G15
- 2623 F15
- 2625 A 7
- 2628 E 7
- 2632 J 5
- 3601 A13
- 3606 C 7
- 3608 A 9
- 3609 B 9
- 3614 A 8
- 3618 K 3
- 3619 J 3
- 3621 I 4
- 3622 H 4
- 3623 H 5
- 3624 K 4
- 3625 J 4
- 3627 I 5
- 3628 H 5
- 3629 H 5
- 3630 C 6
- 6601 G13
- 6602 K 5
- 7601 K 5
- 7602 D 6
- 7605 B10
- 7606 I 5

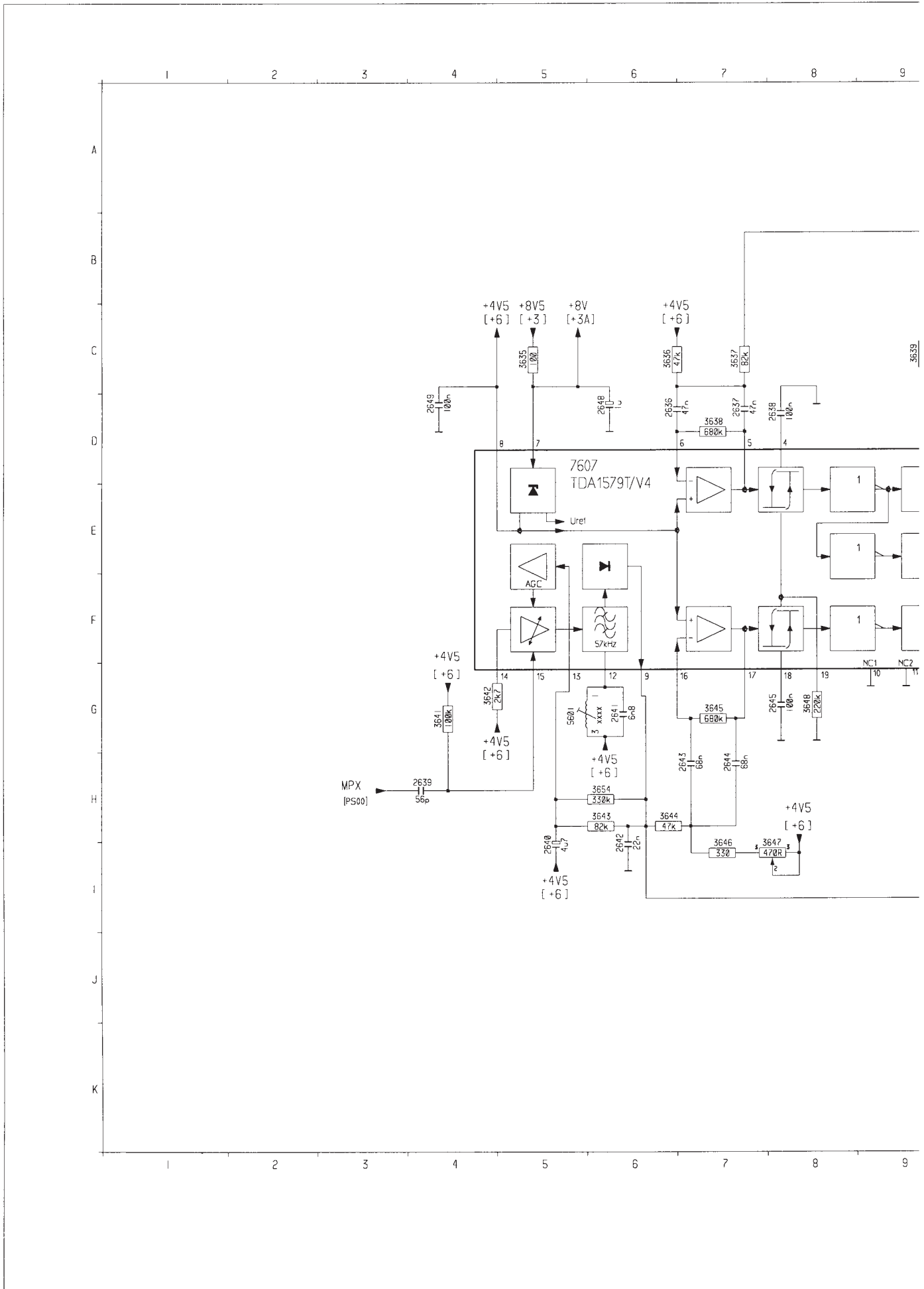
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K

Only 248/00 ../30 ../80  
258/02 ../32 ../82

All versions except  
248/30 and 258/32

SOUND PROCESS PART1  
[ SP01 ]

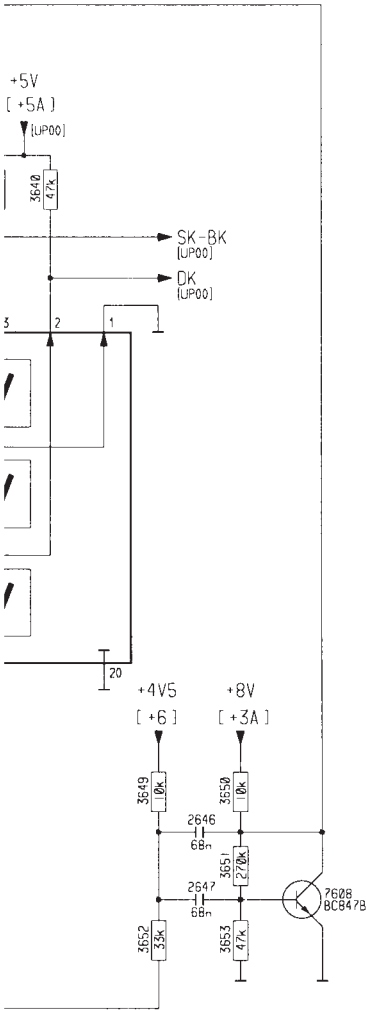
- 22RC224 22RC228
- 22RC238 22RC244
- 22RC248 22RC258



10 11 12 13 14 15 16

SOUND PROCESS PART2  
[ SP02 ]

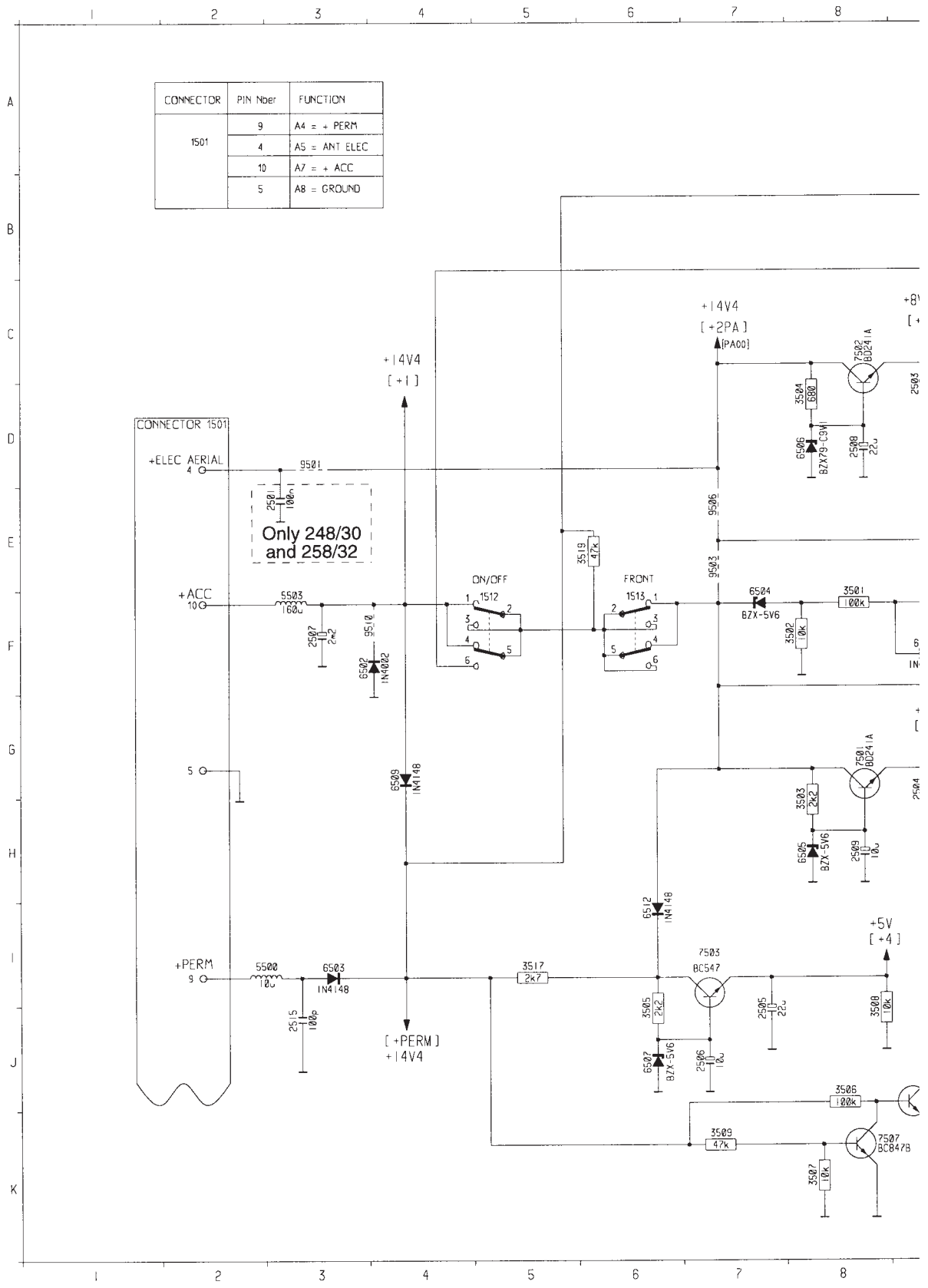
**22RC238 22RC258**



A	2636	D 6
	2637	D 7
	2638	D 8
	2639	H 4
	2640	I 5
	2641	G 6
	2642	I 6
	2643	H 7
	2644	H 7
B	2645	G 8
	2646	H 11
	2647	H 11
	2648	D 6
	2649	D 4
C	3635	C 5
	3636	C 6
	3637	C 7
	3638	D 7
D	3639	C 9
	3640	C 10
	3641	G 4
	3642	G 4
	3643	H 6
E	3644	H 6
	3645	G 7
	3646	I 7
	3647	I 8
	3648	G 8
F	3649	H 10
	3650	H 11
	3651	H 11
	3652	I 10
G	3653	I 11
	3654	H 6
	5601	G 5
	7607	D 5
H	7608	H 12
I		
J		
K		

10 11 12 13 14 15 16

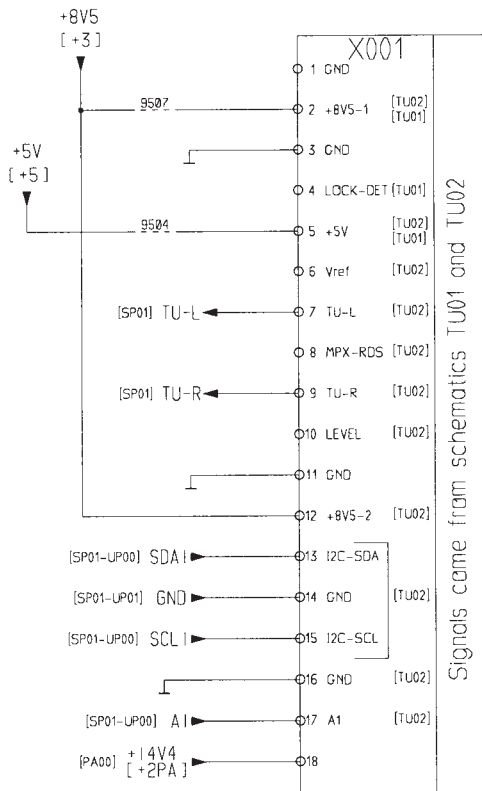
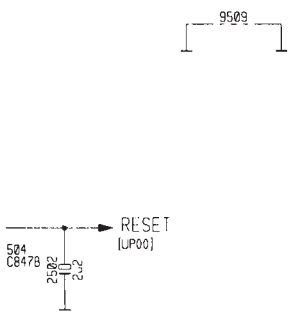
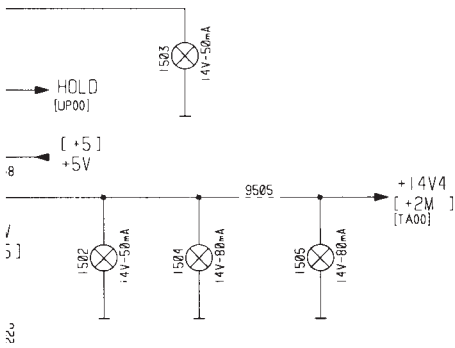
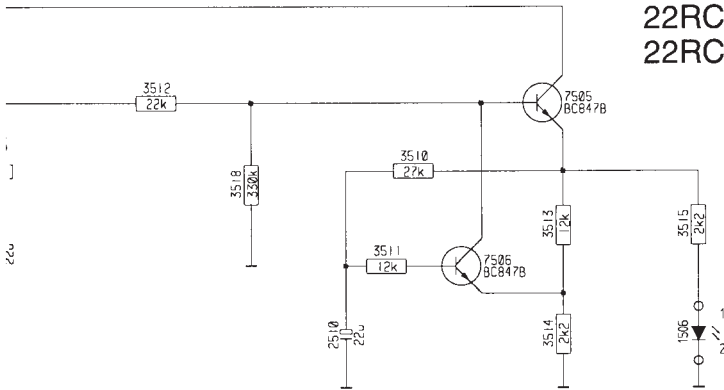
CONNECTOR	PIN Nber	FUNCTION
1501	9	A4 = + PERM
	4	A5 = ANT ELEC
	10	A7 = + ACC
	5	A8 = GROUND



9 10 11 12 13 14 15 16

POWER SUPPLY PART  
[ PS00 ]

22RC224 22RC228  
22RC238 22RC244  
22RC248 22RC258

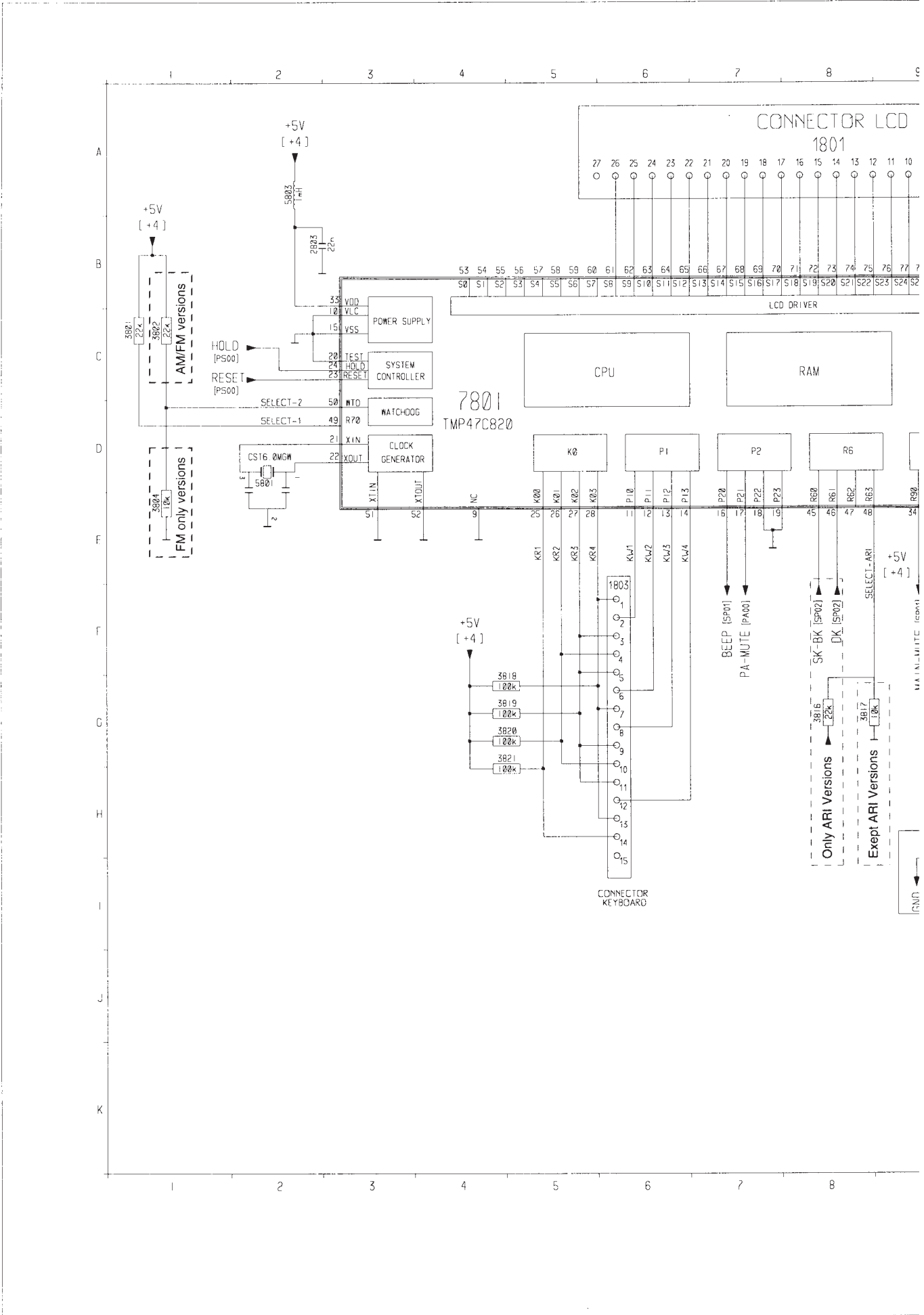


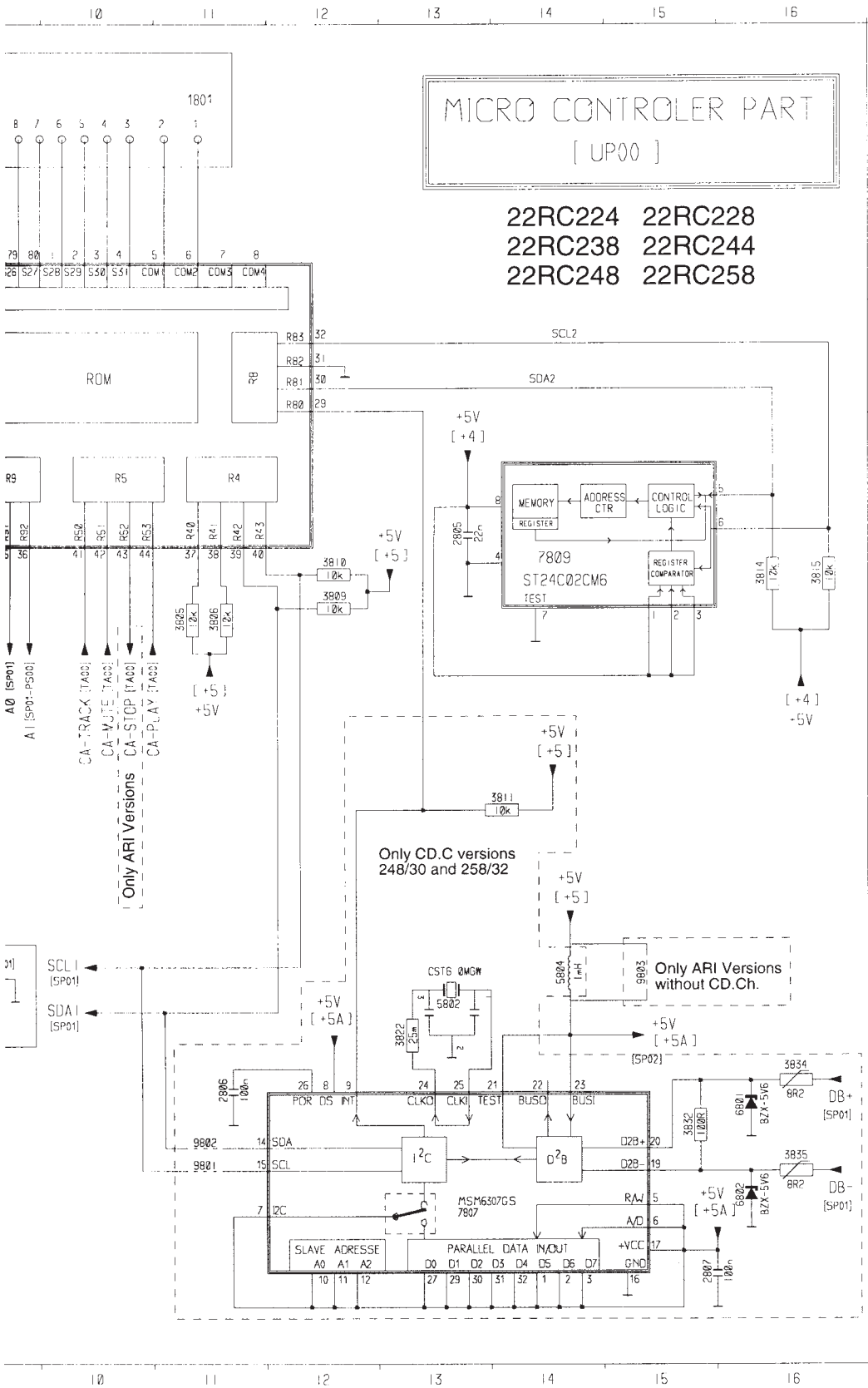
Signals come from schematics TU01 and TU02

- 1501 D 2
- 1502 G10
- 1503 E10
- 1504 G10
- 1505 G11
- 1506 D14
- 1512 F 5
- 1513 F 6
- 2501 E 3
- 2502 K 9
- 2503 D 9
- 2504 G 9
- 2505 J 7
- 2506 J 7
- 2507 F 3
- 2508 D 8
- 2509 H 8
- 2510 D11
- 2515 J 3
- 3501 F 8
- 3502 F 8
- 3503 H 8
- 3504 D 8
- 3505 J 6
- 3506 J 8
- 3507 K 8
- 3508 J 8
- 3509 K 7
- 3510 C12
- 3511 D12
- 3512 B10
- 3513 C13
- 3514 D13
- 3515 C14
- 3517 I 5
- 3518 C11
- 3519 E 6
- 5500 I 3
- 5503 F 3
- 6501 F 9
- 6502 F 3
- 6503 I 3
- 6504 F 7
- 6505 H 8
- 6506 D 8
- 6507 J 6
- 6509 G 4
- 6512 I 6
- 7501 G 8
- 7502 C 8
- 7503 I 7
- 7504 J 9
- 7505 B13
- 7506 D12
- 7507 K 8
- 9501 D 3
- 9503 E 7
- 9504 G14
- 9505 F11
- 9506 E 7
- 9507 G14
- 9509 I11
- 9510 F 4
- X001 F15

9 10 11 12 13 14 15 16



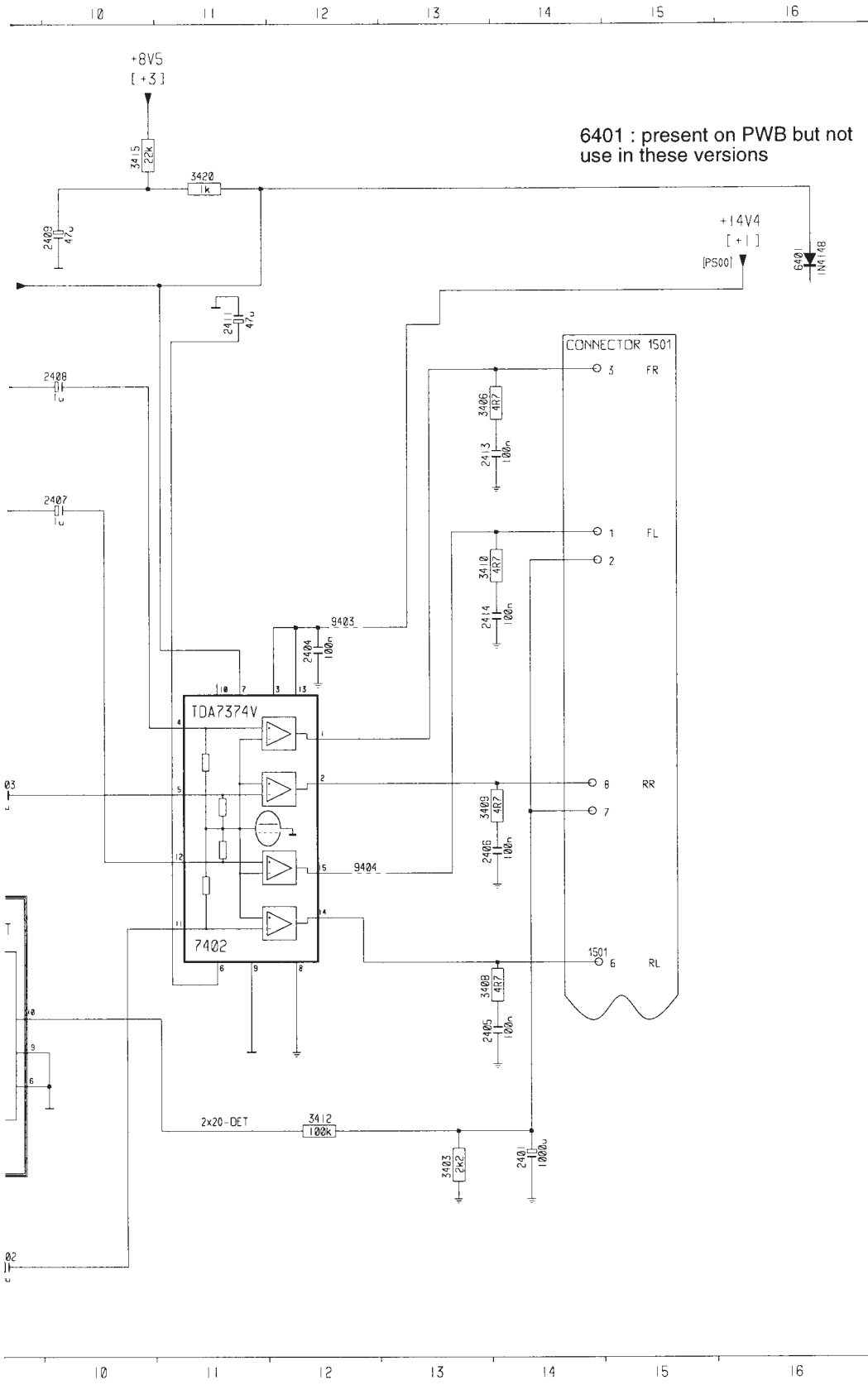




**MICRO CONTROLLER PART**  
[ UP00 ]

22RC224 22RC228  
22RC238 22RC244  
22RC248 22RC258

- 1801 A 8
- 1803 F 6
- 2803 B 2
- 2805 E 3
- 2806 J 1
- 2807 K 15
- 3801 C :
- 3802 C :
- 3804 D :
- 3805 E 11
- 3806 E 1 :
- 3809 E 12
- 3810 E 12
- 3811 G 14
- 3814 E 16
- 3815 E 16
- 3816 G 8
- 3817 G 8
- 3818 G 5
- 3819 G 5
- 3820 G 5
- 3821 G 5
- 3822 I 13
- 3832 J 15
- 3834 I 16
- 3835 J 16
- 5801 D 2
- 5802 I 13
- 5803 A 2
- 5804 H 14
- 6801 J 16
- 6802 J 16
- 7801 D 4
- 7807 K 13
- 7809 E 14
- 9801 J 11
- 9802 J 1 :
- 9803 H 14



- A 1501 C14
- 2401 J14
- 2402 K 9
- 2403 G 9
- 2404 F12
- 2405 I13
- 2406 G13
- 2407 D10
- 2408 C10
- 2409 B10
- B 2411 C11
- 2413 D13
- 2414 E13
- 3403 J13
- 3406 C13
- C 3408 I13
- 3409 G13
- 3410 E13
- 3412 J12
- 3415 A10
- D 3420 A11
- 6401 B16
- 7401 J 9
- 7402 H11
- 9403 E12
- 9404 H12

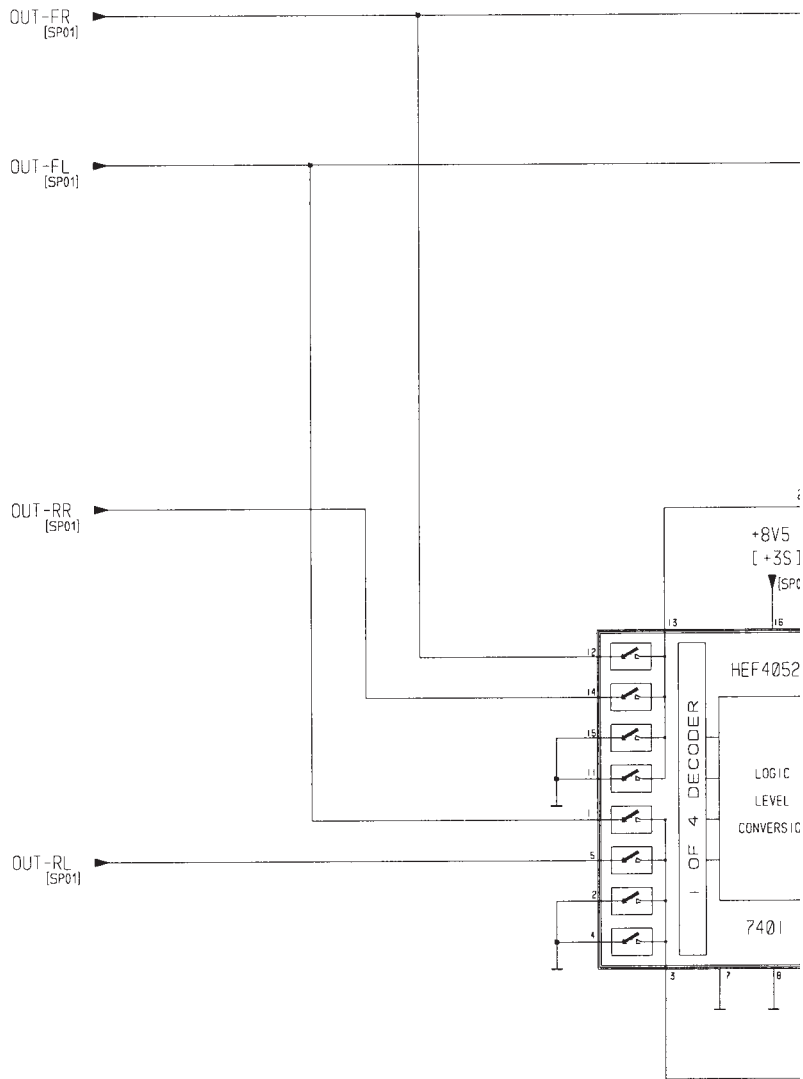
POWER AMPLIFIER PART  
[ PA00 ]

22RC224 22RC228  
22RC238 22RC244  
22RC248 22RC258

PA-MUT  
[UPB]

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

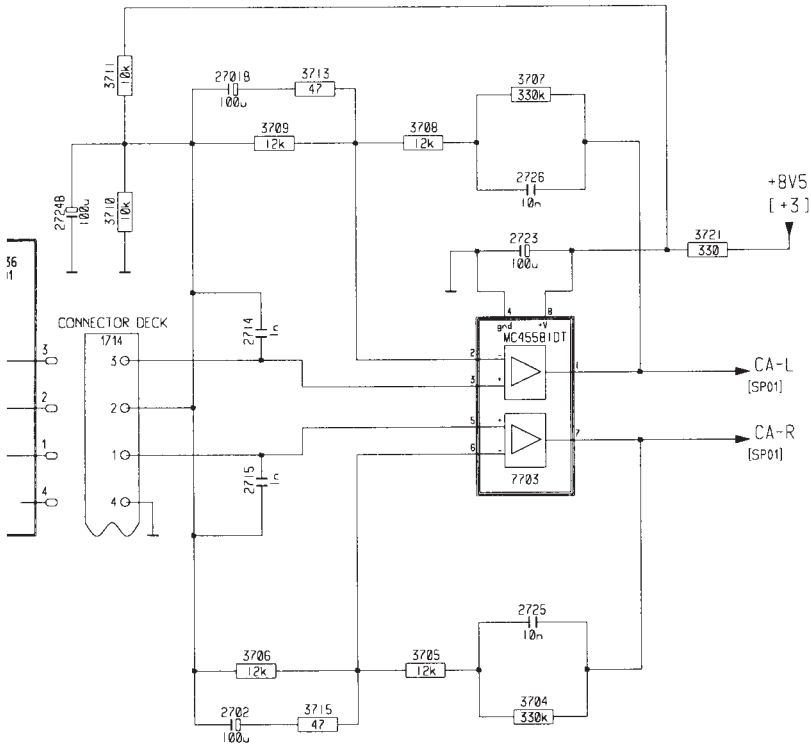
CONNECTOR	2x15W TDA7374		
	+	-	CHANEL
1501	1	6	15W FL
	3	8	15W FR



10 11 12 13 14 15 16

TAPES PART  
[ TA00 ]

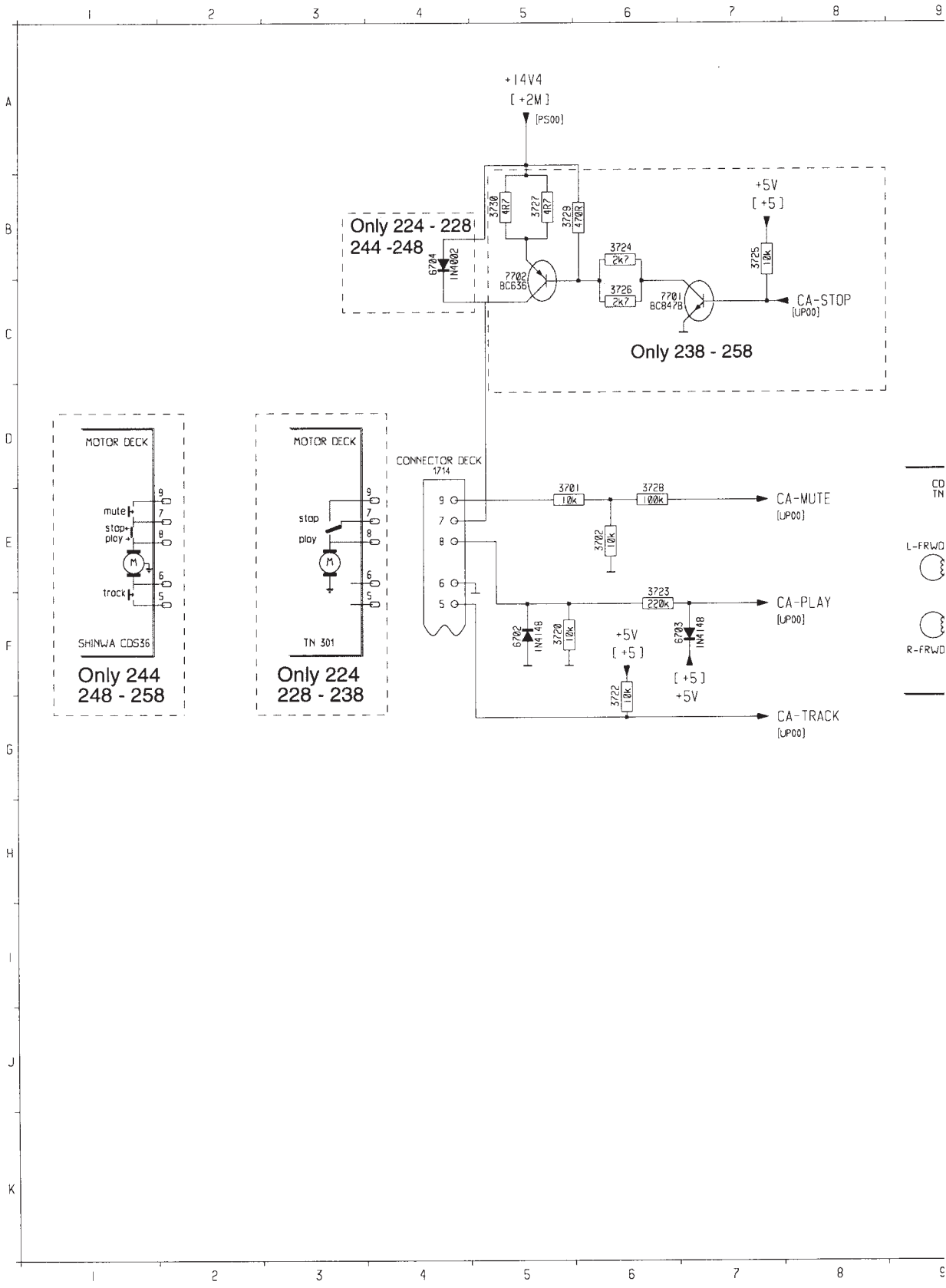
22RC224 22RC228  
22RC238 22RC244  
22RC248 22RC258



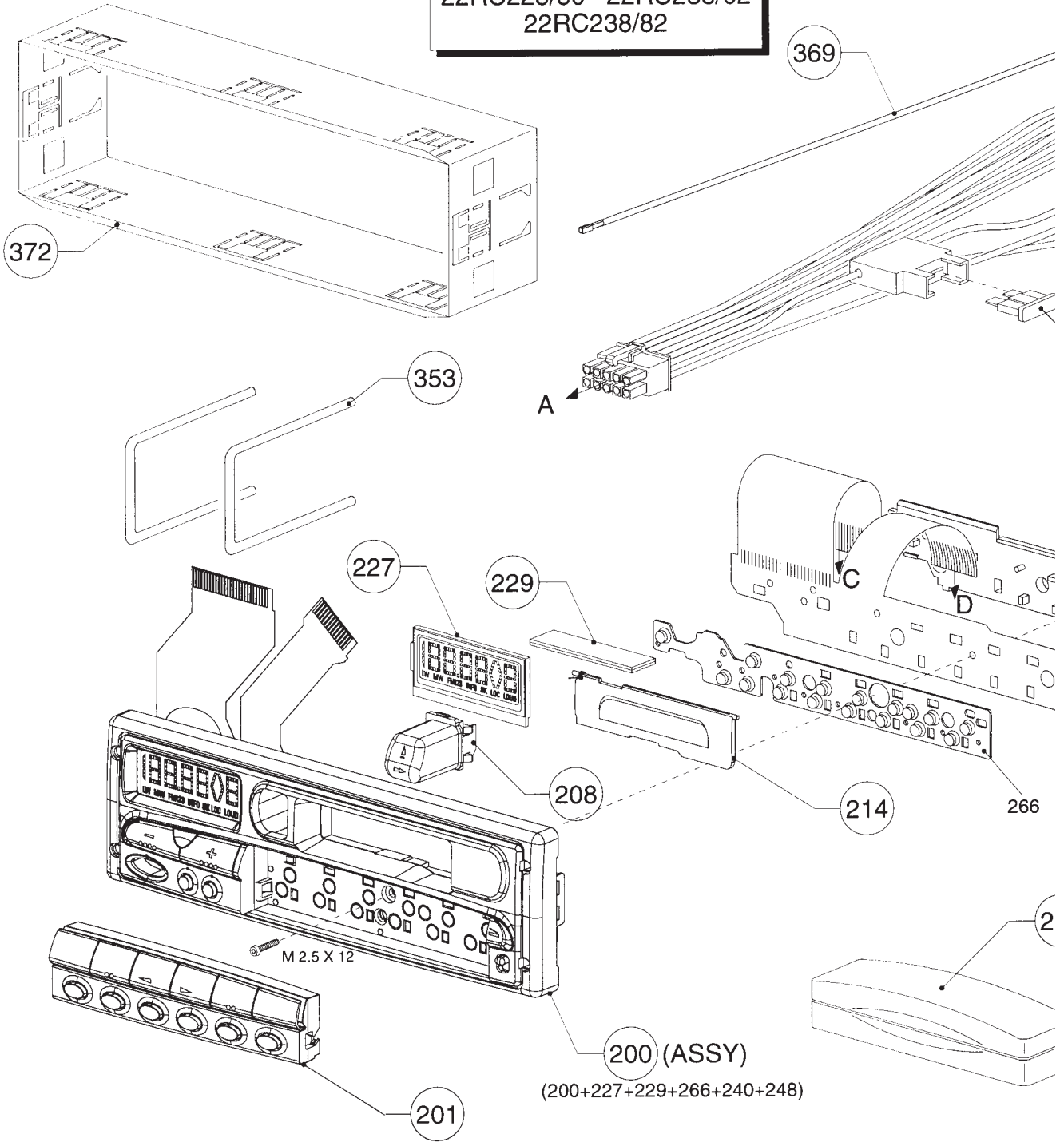
- 1714 E10
- 1714 E 4
- 2701 C11
- 2702 H11
- 2714 E11
  
- 2715 F11
- 2723 D13
- 2724 D10
- 2725 G13
- 2726 D13
  
- 3701 E 5
- 3702 E 6
- 3704 H13
- 3705 G12
- 3706 G11
  
- 3707 C13
- 3708 D12
- 3709 D11
- 3710 D10
- 3711 C10
  
- 3713 C11
- 3715 H11
- 3720 F 5
- 3721 D14
- 3722 G 6
  
- 3723 F 6
- 3724 B 6
- 3725 B 7
- 3726 C 6
- 3727 B 5
  
- 3728 E 6
- 3729 B 5
- 3730 B 5
- 6702 F 5
- 6703 F 7
  
- 6704 B 4
- 7701 C 7
- 7702 C 5
- 7703 F13

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K

10 11 12 13 14 15 16

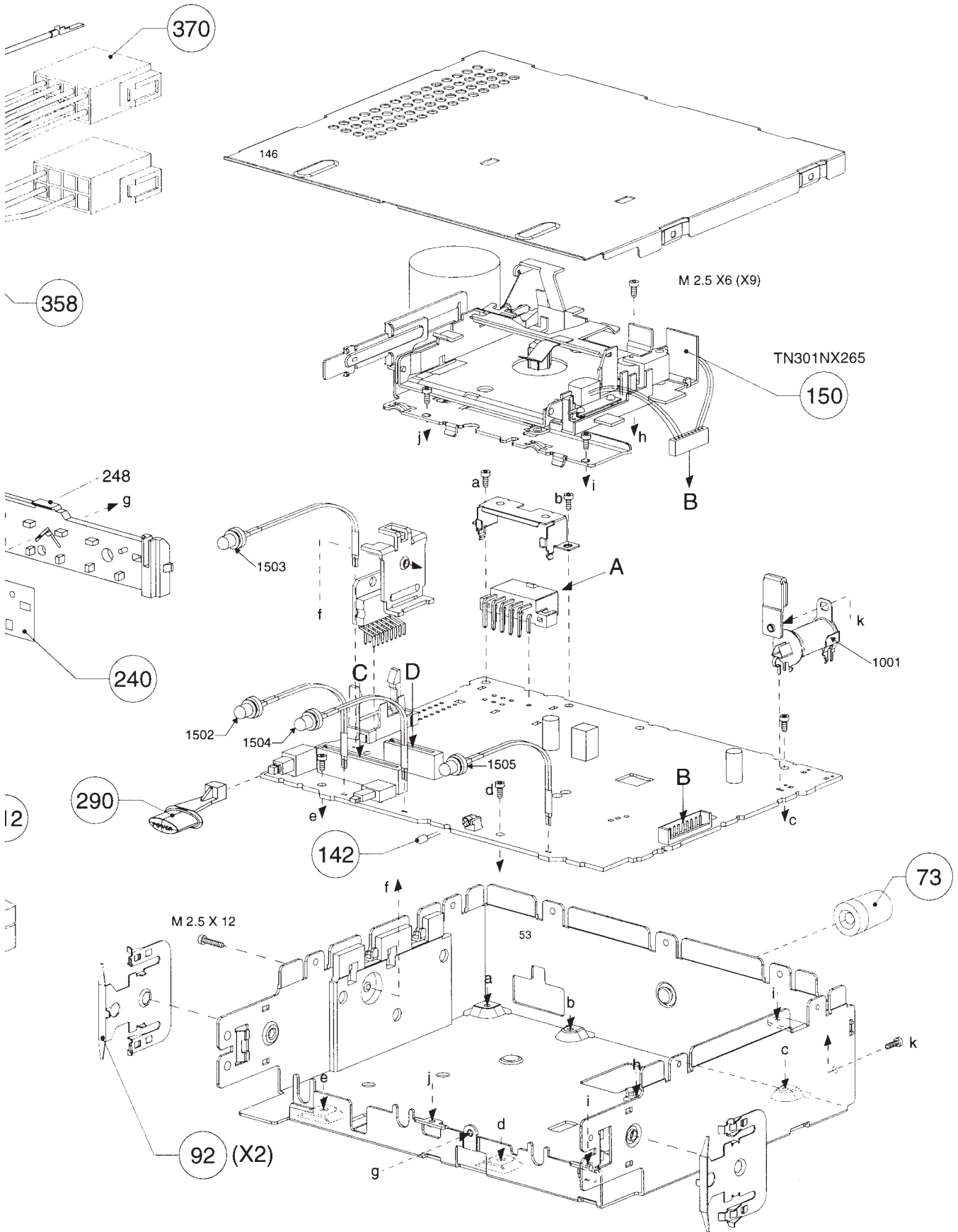


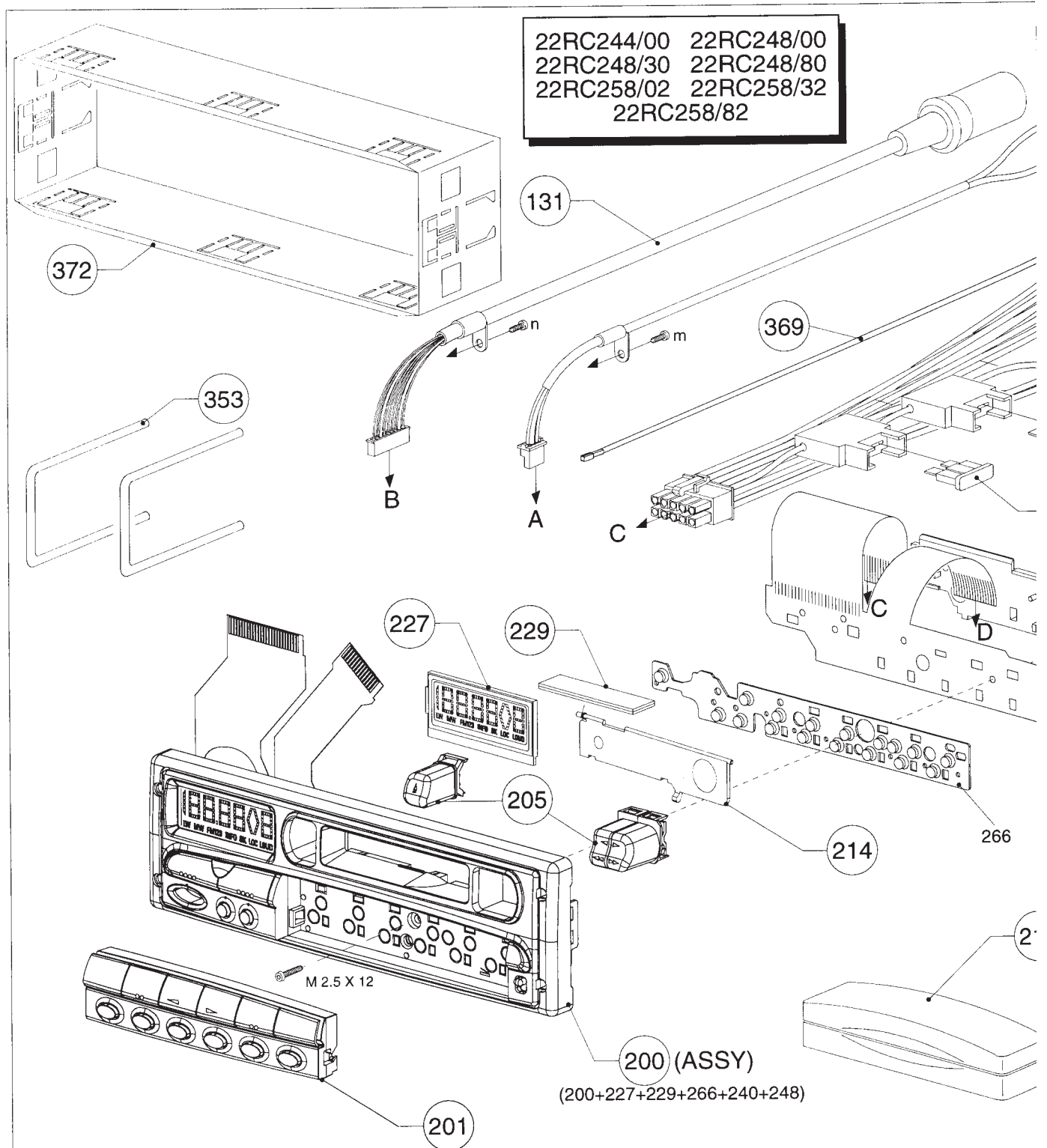
22RC224/00 22RC228/00  
 22RC228/80 22RC238/02  
 22RC238/82



73	4822 532 11092	BUFFER MOUNTING	227	4822 130 91455	L.C.D. LPH5659-1
92	4822 492 71046	SPRING CLAMPING	229	4822 267 10354	ZEBRA CONNECTOR
142	4822 130 83612	BLINKING LED	240	4822 321 62348	FLEX FOIL
150	4822 701 13941	DECK TN-301NX-265	290	4822 410 10252	POWER BUTTON
200	4822 459 04083	FRONT PLATE ASSY	353	4822 404 20437	DEMOUNTING BRACKET
201	4822 459 04084	DET- UNIT 224/00 228/00 ../80	358	4822 071 25002	FUSE BLADE 5A
201	4822 459 04097	DET- UNIT 238/02 ../82	369	4822 320 11187	CABLE ALIM AUTO-AERIAL
208	4822 410 10253	EJECT BUTTON	370	4822 321 62354	CABLE POWER AND LOUDSPEAKER
212	4822 600 70757	CASE DET. UNIT	372	4822 443 30463	SLEEVE
214	4822 443 10196	FLAP CASSETTE 224/00	375	4822 736 14218	DIRECTION FOR USE 224/00
214	4822 443 10177	FLAP CASSETTE 228/00 ../80	375	4822 736 14106	DIRECTION FOR USE 228/00 ../80 238/
214	4822 443 10196	FLAP CASSETTE 238/02 ../82			

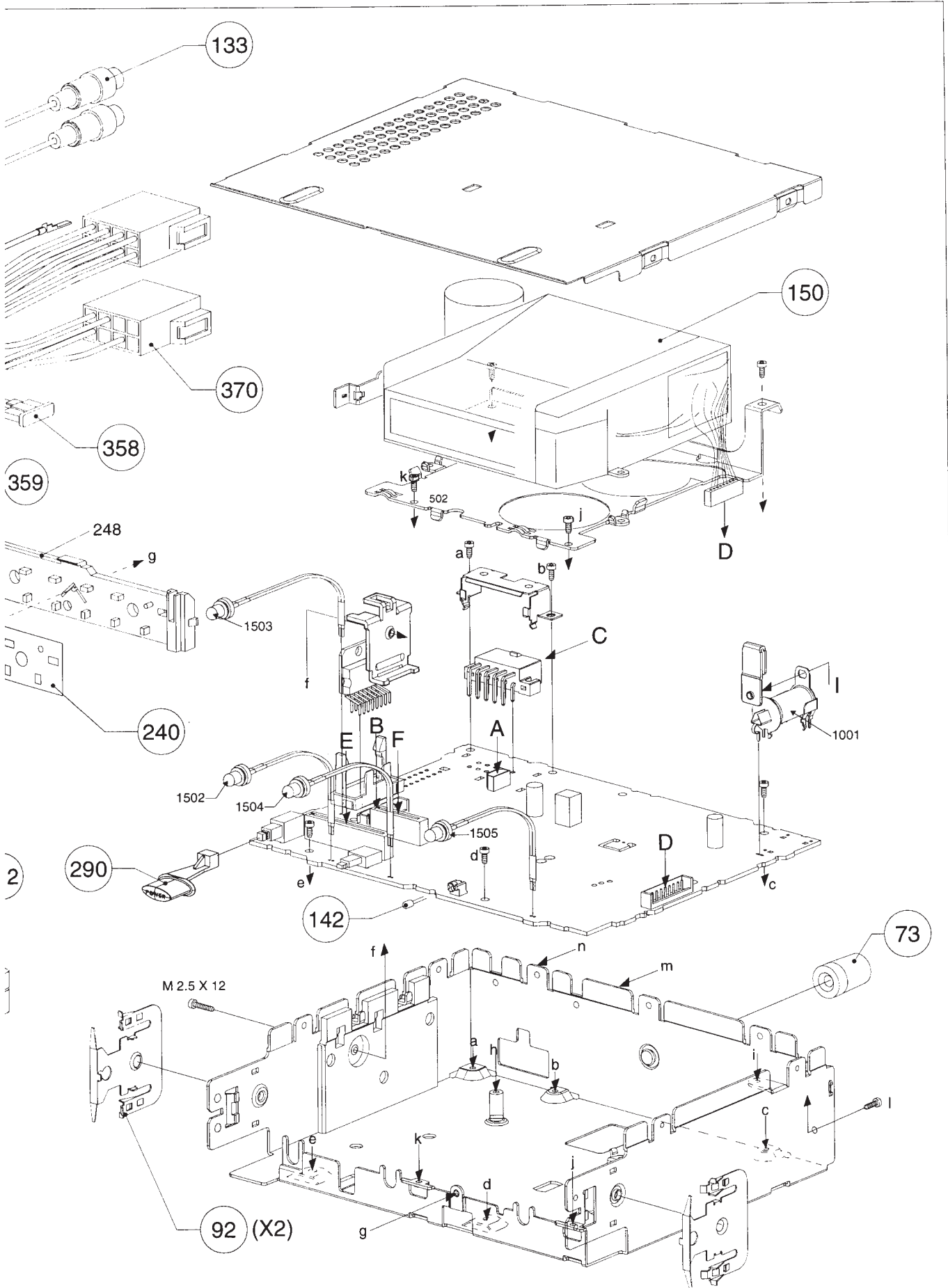






22RC244/00 22RC248/00  
 22RC248/30 22RC248/80  
 22RC258/02 22RC258/32  
 22RC258/82


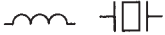

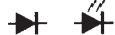
73	4822 532 11092	BUFFER MOUNTING	214	4822 443 10216	FLAP CASSETTE 22RC248/00 ../30 ../80
92	4822 492 71046	SPRING CLAMPING	214	4822 443 10217	FLAP CASSETTE 22RC258/02 ../32 ../82
131	4822 321 62349	CD CHANGER CABLE (248/30 258/32)	227	4822 130 91455	L.C.D. LPH5659-1
133	4822 321 62351	LINE-OUT CABLE	229	4822 267 10354	ZEBRA CONNECTOR
142	4822 130 83612	BLINKING LED	240	4822 321 62348	FLEX FOIL
150	4822 701 13942	DECK CDS36-PR	290	4822 410 10252	POWER BUTTON
200	4822 459 04115	FRONT PLATE ASSY	353	4822 404 20437	DEMOUNTING BRACKET
201	4822 459 04084	DET-UNIT 22RC244/00 248/00 248/80	358	4822 071 25002	FUSE BLADE 5A
201	4822 459 04097	DET-UNIT 22RC258/02 258/82	369	4822 320 11187	CABLE ALIM AUTO-AERIAL
201	4822 459 04114	DET-UNIT 22RC248/30	370	4822 321 62354	CABLE POWER AND LOUDSPEAKER
201	4822 459 04122	DET-UNIT 22RC258/32	372	4822 443 30463	SLEEVE
205	4822 410 10366	BUTTON DECK ASSY	375	4822 736 14217	DIRECTION FOR USE 22RC244/00
212	4822 600 70757	CASE DET. UNIT	375	4822 736 14198	DIRECTION FOR USE 22RC248/00 ../80
214	4822 443 10223	FLAP CASSETTE 22RC244/00	375	4822 736 14199	DIRECTION FOR USE 22RC248/30 258/82







					
2612	4822 122 33342	33NF10%X7R 63V	3305	4822 051 20333	33K 5% RC11
2613	4822 122 32646	5,6NF10%X7R 50V	3306	4822 051 20333	33K 5% RC11
2614	4822 122 32646	5,6NF10%X7R 50V	3307	4822 051 20432	4K30 5% 0,1W
2615	4822 122 33342	33NF10%X7R 63V	3308	4822 051 20224	220K 5% RC11
2616	5322 122 34098	10NF10%X7R 63V	3309	4822 051 20124	120K00 5% 0,1W
2622	4822 124 23504	10NF10%X7R 63V	3310	4822 051 20684	680K00 5% 0,1W
2623	4822 124 23504	2.2UF20% 50V	3313	4822 051 20124	120K00 5% 0,1W
2625	4822 126 11692	1UF -20+80% 16V Y5V	3314	4822 051 20564	560K00 5% 0,1W
2628	4822 126 11692	1UF -20+80% 16V Y5V	3317	4822 051 20273	27K00 5% 0,1W
2632	4822 124 41584	100UF 20% 10V	3318	4822 051 20391	390R00 5% 0,1W
2636	4822 121 43526	47NF 5% 250V	3319	4822 100 11163	100K 30%LIN 0,1W
2637	4822 121 43526	47NF 5% 250V	3321	4822 100 11163	100K 30%LIN 0,1W
2638	4822 126 13196	100NF10% X7R 25V	3322	4822 100 11163	100K 30%LIN 0,1W
2639	4822 126 13693	56PF 1% NP0 63V	3323	4822 051 20391	390R00 5% 0,1W
2640	4822 124 80765	4.7UF20% 35V	3324	4822 051 20272	2K70 5% 0,1W
2641	4822 121 43101	6.8NF 1% 63V	3325	4822 051 20101	100R00 5% 0,1W
2642	5322 122 32654	22NF10%X7R 63V	3326	4822 051 20102	1K00 5% 0,1W
2643	5322 121 42465	68NF 5% 63V	3327	4822 051 20681	680R00 5% 0,1W
2644	5322 121 42465	68NF 5% 63V	3330	4822 051 20473	47K00 5% 0,1W
2645	4822 126 13196	100NF10% X7R 25V	3341	4822 051 20109	10R00 5% 0,1W
2646	5322 121 42465	68NF 5% 63V	3342	4822 051 20008	0R00 JUMP. (0805)
2647	5322 121 42465	68NF 5% 63V	3343	4822 051 20008	0R00 JUMP. (0805)
2648	4822 124 23282	1UF20% 50V	3346	4822 051 20473	47K00 5% 0,1W
2649	4822 126 13196	100NF10% X7R 25V	3347	4822 051 20008	0R00 JUMP. (0805)
2701	4822 124 80453	100UF20% 10V	3348	4822 051 20681	680R 5% RC11
2702	4822 124 80453	100UF20% 10V	3349	4822 051 20223	22K00 5% 0,1W
2714	5322 122 34123	1NF10%X7R 50V	3403	4822 051 20222	2K20 5% 0,1W
2715	5322 122 34123	1NF10%X7R 50V	3406	4822 051 20478	4R70 5% 0,1W
2723	4822 124 80453	100UF20% 10V	3408	4822 051 20478	4R70 5% 0,1W
2724	4822 124 80453	100UF20% 10V	3409	4822 051 20478	4R70 5% 0,1W
2725	5322 122 34098	10NF10%X7R 63V	3410	4822 051 20478	4R70 5% 0,1W
2726	5322 122 34098	10NF10%X7R 63V	3412	4822 051 20104	100K00 5% 0,1W
2803	5322 122 32654	22NF10%X7R 63V	3415	4822 051 20223	22K00 5% 0,1W
2805	5322 122 32654	22NF10%X7R 63V	3420	4822 051 20102	1K00 5% 0,1W
2806	4822 126 13196	100NF 20% 25V	3501	4822 051 20104	100K00 5% 0,1W
2807	4822 126 13196	100NF 20% 25V	3502	4822 051 20103	10K00 5% 0,1W
3110	4822 051 20229	22R00 5% 0,1W	3503	4822 051 20222	2K20 5% 0,1W
3112	4822 051 20008	0R00 JUMP. (0805)	3504	4822 051 20681	680R00 5% 0,1W
3113	4822 051 20008	0R00 JUMP. (0805)	3505	4822 051 20222	2K20 5% 0,1W
3200	4822 051 20392	3K90 5% 0,1W	3506	4822 051 20104	100K00 5% 0,1W
3201	4822 051 20222	2K20 5% 0,1W	3507	4822 051 20103	10K00 5% 0,1W
3202	4822 051 20103	10K00 5% 0,1W	3508	4822 051 20103	10K00 5% 0,1W
3203	4822 051 20221	220R 5% RC11	3509	4822 051 20473	47K00 5% 0,1W
3204	4822 051 20471	470R 5% RC11	3510	4822 051 20273	27K00 5% 0,1W
3205	4822 051 20471	470R 5% RC11	3511	4822 117 11383	12K 1% 0,1W
3206	4822 051 20101	100R 5% RC11	3512	4822 051 20223	22K00 5% 0,1W
3208	4822 051 20103	10K00 5% 0,1W	3513	4822 117 11383	12K 1% 0,1W
3209	4822 051 20103	10K00 5% 0,1W	3514	4822 051 20222	2K20 5% 0,1W
3210	4822 051 20225	2M20 5% 0,1W	3515	4822 051 20222	2K20 5% 0,1W
3211	4822 051 20479	47R 5% RC11	3517	4822 051 20272	2K70 5% 0,1W
3212	4822 051 20229	22R00 5% 0,1W	3518	4822 051 20334	330K00 5% 0,1W
3213	4822 051 20008	0R00 JUMP. (0805)	3519	4822 051 20473	47K00 5% 0,1W
3290	4822 051 20224	220K00 5% 0,1W	3601	4822 051 20104	100K00 5% 0,1W
3292	4822 051 20229	22R00 5% 0,1W	3606	4822 051 20223	22K00 5% 0,1W
3300	4822 117 11383	12K 1% 0,1W	3608	4822 051 20334	330K00 5% 0,1W
3301	4822 051 20335	3M30 5% 0,1W	3609	4822 051 20334	330K00 5% 0,1W
3302	4822 051 20333	33K00 5% 0,1W	3614	4822 051 20223	22K00 5% 0,1W
3303	4822 100 11319	4K7 30%lin 0,1W	3618	4822 051 20223	22K00 5% 0,1W
			3619	4822 051 20273	27K00 5% 0,1W
			3621	4822 051 20223	22K00 5% 0,1W

					
3622	4822 051 20273	27K00 5% 0,1W	3816	4822 051 20223	22K00 5% 0,1W
3623	4822 116 52244	CARB RES R-20 15K	3817	4822 051 20103	10K00 5% 0,1W
3624	4822 051 20471	470R 5% RC11	3818	4822 051 20104	100K00 5% 0,1W
3625	4822 116 83863	CARB RES R-20 1K	3819	4822 051 20104	100K00 5% 0,1W
3627	4822 051 20471	470R 5% RC11	3820	4822 051 20104	100K00 5% 0,1W
3628	4822 116 83863	CARB RES R-20 1K	3821	4822 051 20104	100K00 5% 0,1W
3630	4822 051 20223	22K00 5% 0,1W	3822	4822 051 20008	0R00 JUMP. (0805)
3635	4822 051 20101	100R00 5% 0,1W	3832	4822 051 20101	100R 5% RC11
3636	4822 051 20473	47K00 5% 0,1W	3834	4822 116 40221	PTC PTH60G31AR8R2MT2
3637	4822 117 11149	82K 1% 0,1W	3835	4822 116 40221	PTC PTH60G31AR8R2MT2
3638	4822 051 20684	680K00 5% 0,1W			
3639	4822 051 20473	47K00 5% 0,1W	4300	4822 242 81698	AF9192C-A (61,5MHZ)
3640	4822 051 20473	47K00 5% 0,1W	5001	4822 156 21723	IND FXD LAL02
3641	4822 051 20104	100K00 5% 0,1W	5200	4822 157 63315	IND FXD LAL02 A 220U 10%
3642	4822 051 20272	2K70 5% 0,1W	5201	4822 157 71059	IND VAR 7MM MC122 100MHZ
3643	4822 117 11149	82K 1% 0,1W	5202	4822 152 20679	IND FXD LAL02 A 68U 10%
3644	4822 051 20473	47K00 5% 0,1W	5203	4822 157 53473	IND FXD LAL04 A 1000U 10%
3645	4822 051 20684	680K00 5% 0,1W	5206	4822 157 71057	IND VAR 7MM 7CDA 47000U 6%
3646	4822 051 20331	330R00 5% 0,1W	5207	4822 157 71058	FIL LC VAR 98M KZV-353
3647	4822 100 11677	470R 30%LIN 0.2W	5208	4822 156 21722	IND VAR 7MM 7CGL 10.7MHZ
3648	4822 051 20224	220K00 5% 0,1W	5209	4822 157 71055	IND VAR 5MM 5KM 72.2MHZ
3649	4822 051 20103	10K00 5% 0,1W	5210	4822 157 71055	IND VAR 5MM 5KM 72.2MHZ
3650	4822 051 20103	10K00 5% 0,1W	5211	4822 156 21721	IND FXD LAL02 A 2,2U 10%
3651	4822 051 20274	270K00 5% 0,1W	5212	4822 156 21719	IND FXD LAL02 A 1,5U 10%
3652	4822 051 20333	33K00 5% 0,1W	5301	4822 157 71742	IND VAR 7MM 7CGL 450KHZ
3653	4822 051 20473	47K00 5% 0,1W	5302	4822 157 71061	IND VAR 7MM 7P 10.7MHZ
3654	4822 051 20334	330K00 5% 0,1W	5500	4822 152 20677	IND FXD LAL02 10U 10%
3701	4822 051 20103	10K00 5% 0,1W	5500	4822 157 51462	IND FXD LAL04 A 10U 10%
3702	4822 051 20103	10K00 5% 0,1W	5503	4822 157 70839	COIL ASSY 160U
3704	4822 051 20334	330K00 5% 0,1W	5601	4822 156 40738	DECODER COIL
3705	4822 117 11383	12K 1% 0,1W	5801	4822 242 81002	CST6,00MGW-TF01
3706	4822 117 11383	12K 1% 0,1W	5802	4822 242 81002	RESO CER 6.0MHZ
3707	4822 051 20334	330K00 5% 0,1W	5803	4822 157 53473	IND FXD LAL04 A 1000U 10%
3708	4822 117 11383	12K 1% 0,1W	5804	4822 157 53473	IND FXD LAL04 A 1000U 10%
3709	4822 117 11383	12K 1% 0,1W			
3710	4822 051 20103	10K00 5% 0,1W	6200	5322 130 34337	BAV99
3711	4822 051 20103	10K00 5% 0,1W	6201	4822 130 83849	1SV128
3713	4822 051 20479	47R00 5% 0,1W	6202	4822 130 83849	1SV128
3715	4822 051 20479	47R00 5% 0,1W	6401	4822 130 30621	1N4148
3720	4822 051 20103	10K00 5% 0,1W	6501	4822 130 30621	1N4148
3721	4822 051 20331	330R00 5% 0,1W	6502	5322 130 30684	1N4002GPE
3722	4822 051 20103	10K00 5% 0,1W	6503	4822 130 30621	1N4148
3723	4822 051 20224	220K00 5% 0,1W	6503	5322 130 30684	1N4002GPE
3724	4822 051 20272	2K70 5% 0,1W	6504	4822 130 34173	BZX55-F5V6
3725	4822 051 20103	10K00 5% 0,1W	6505	4822 130 34173	BZX55-F5V6
3726	4822 051 20272	2K70 5% 0,1W	6506	4822 130 30862	BZX79-C9V1
3727	4822 051 20478	4R70 5% 0,1W	6507	4822 130 34173	BZX55-F5V6
3728	4822 051 20104	100K00 5% 0,1W	6509	4822 130 30621	1N4148
3729	4822 051 20471	470R00 5% 0,1W	6509	5322 130 30684	1N4002GPE
3730	4822 051 20478	4R70 5% 0,1W	6512	4822 130 30621	1N4148
3801	4822 051 20223	22K00 5% 0,1W	6601	4822 130 30621	1N4148
3802	4822 051 20223	22K00 5% 0,1W	6602	4822 130 30621	1N4148
3804	4822 051 20103	10K00 5% 0,1W	6702	4822 130 30621	1N4148
3805	4822 051 20103	10K00 5% 0,1W	6703	4822 130 30621	1N4148
3806	4822 051 20103	10K00 5% 0,1W	6801	4822 130 34173	BZX55-F5V6
3809	4822 051 20103	10K00 5% 0,1W	6802	4822 130 34173	BZX55-F5V6
3810	4822 051 20103	10K00 5% 0,1W			
3811	4822 051 20103	10K00 5% 0,1W			
3814	4822 051 20103	10K00 5% 0,1W			
3815	4822 051 20103	10K00 5% 0,1W			



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 90404	TDA7374B
7501	4822 130 63539	BD241A
7502	4822 130 63539	BD241A
7503	4822 130 40959	BC547B
7504	4822 130 60511	BC847B
7505	4822 130 60511	BC847B
7506	4822 130 60511	BC847B
7507	4822 130 60511	BC847B
7601	4822 130 60511	BC847B
7602	5322 209 11102	HEF4052BT
7605	4822 209 31979	TEA6330T/V1
7606	4822 130 60511	BC847B
7607	4822 209 31007	TDA1579T/V4
7608	4822 130 60511	BC847B
7701	4822 130 60511	BC847B
7702	4822 130 44283	BC636
7703	4822 209 33162	MC4558IDT
7801	4822 209 12936	TMP47C620DF/N744*
7801	4822 209 13038	TMP47C820DF/N971#
7807	4822 209 32743	MSM6307GS-VK
7809	4822 900 10571	ST24C02AM6

\* All versions except 248/30 and 258/32

# Only 248/30 and 258/32