

FIG 6.1 TRANSCEIVER LAYOUT DIAGRAM

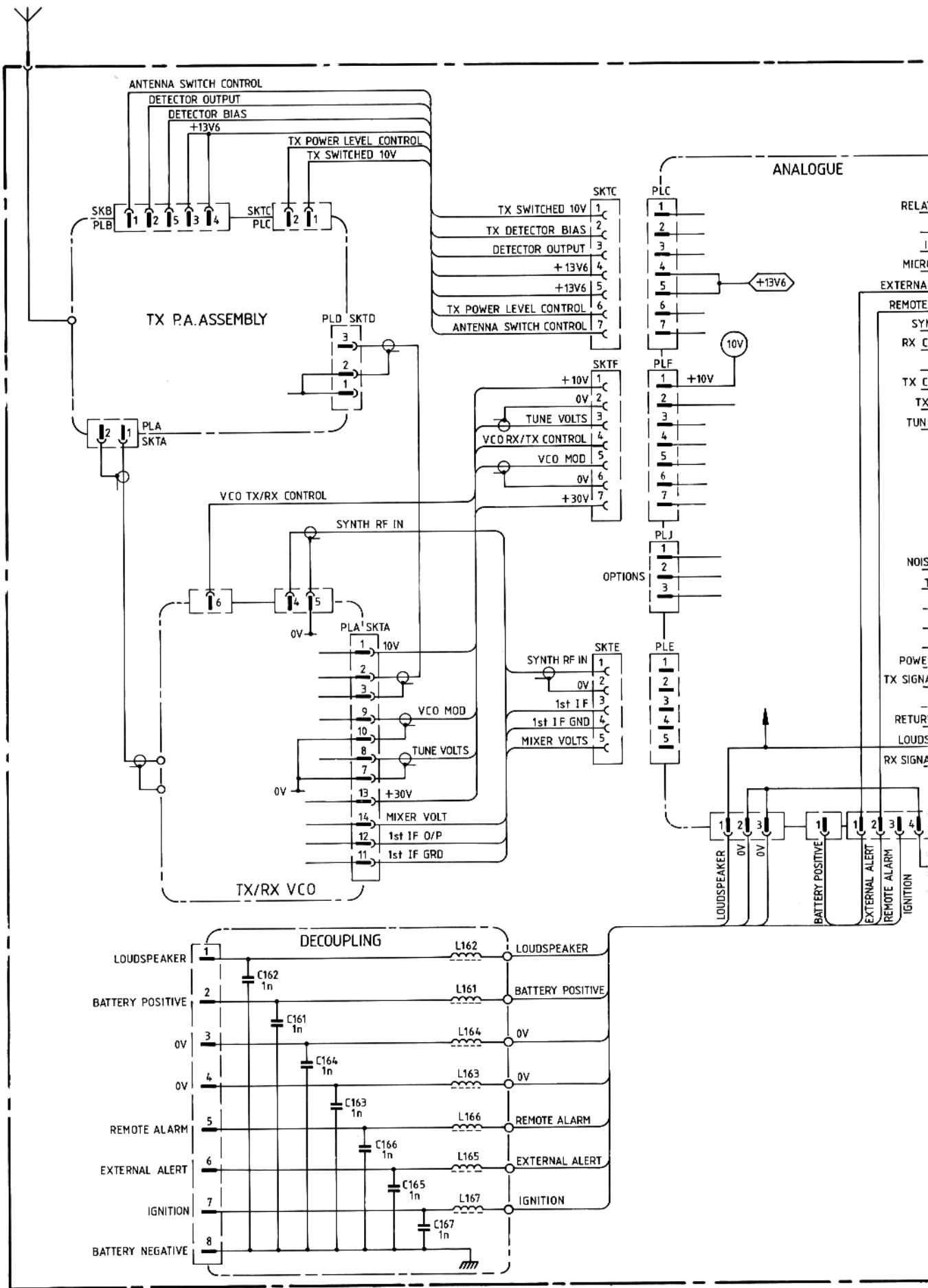
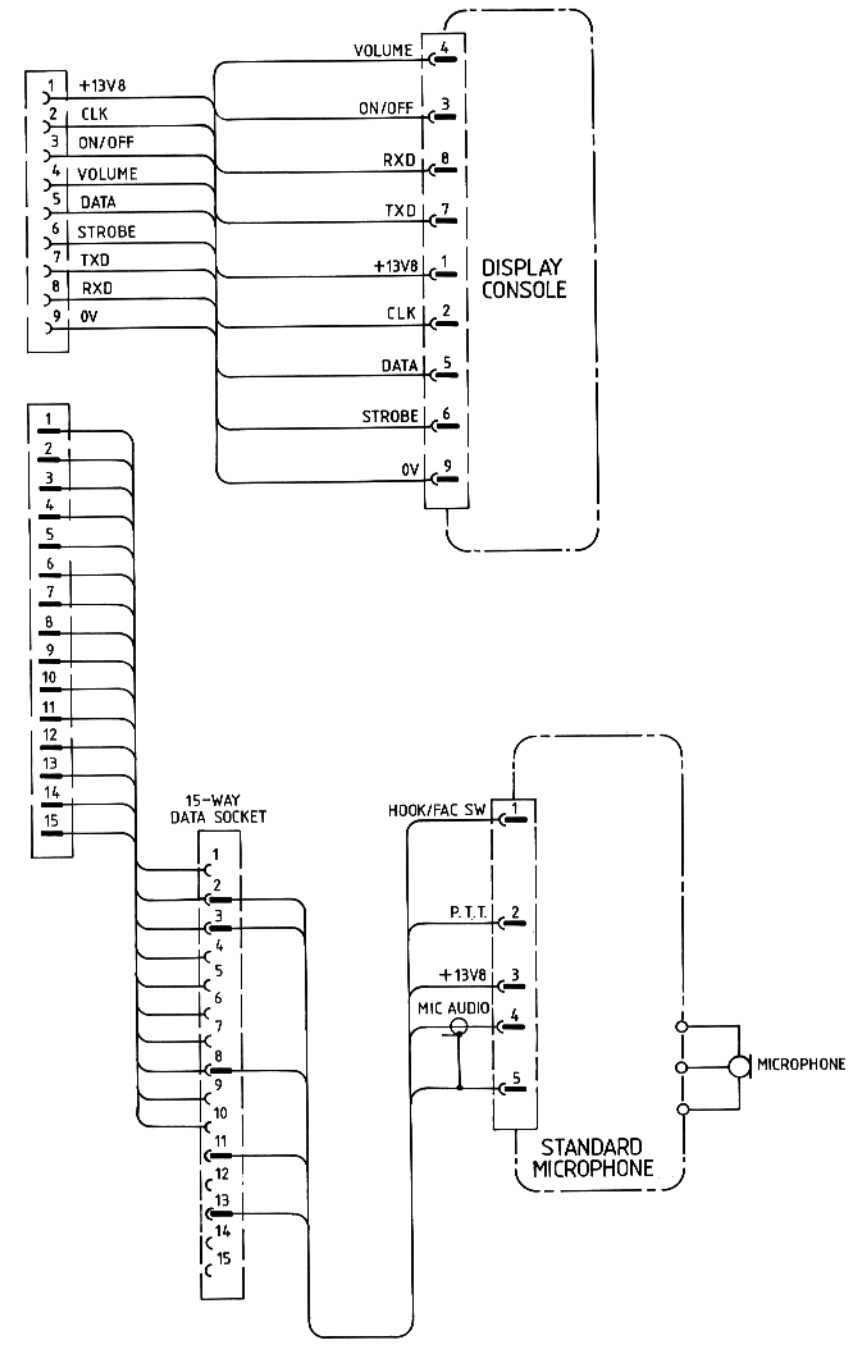
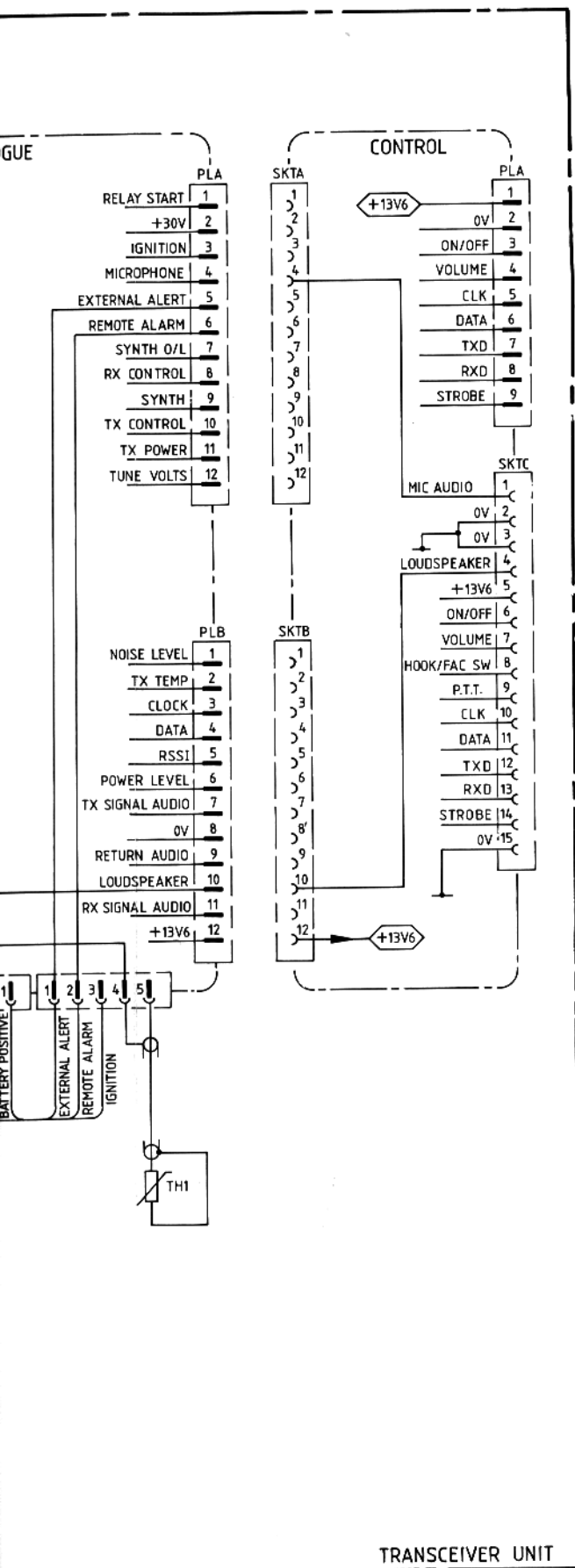


FIG 6.2 TRANSCEIVER INTERCONNECTION DIAGRAM

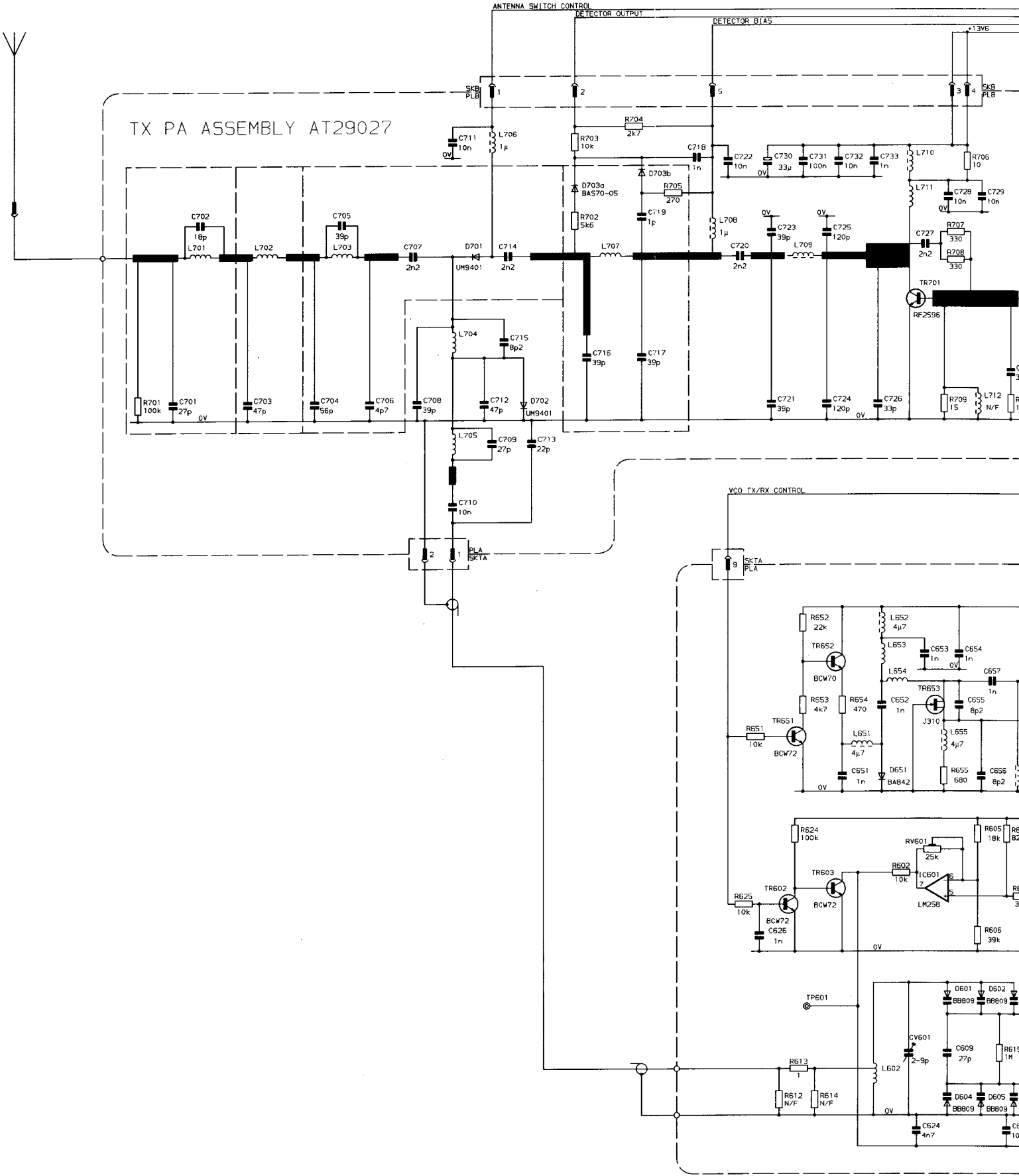


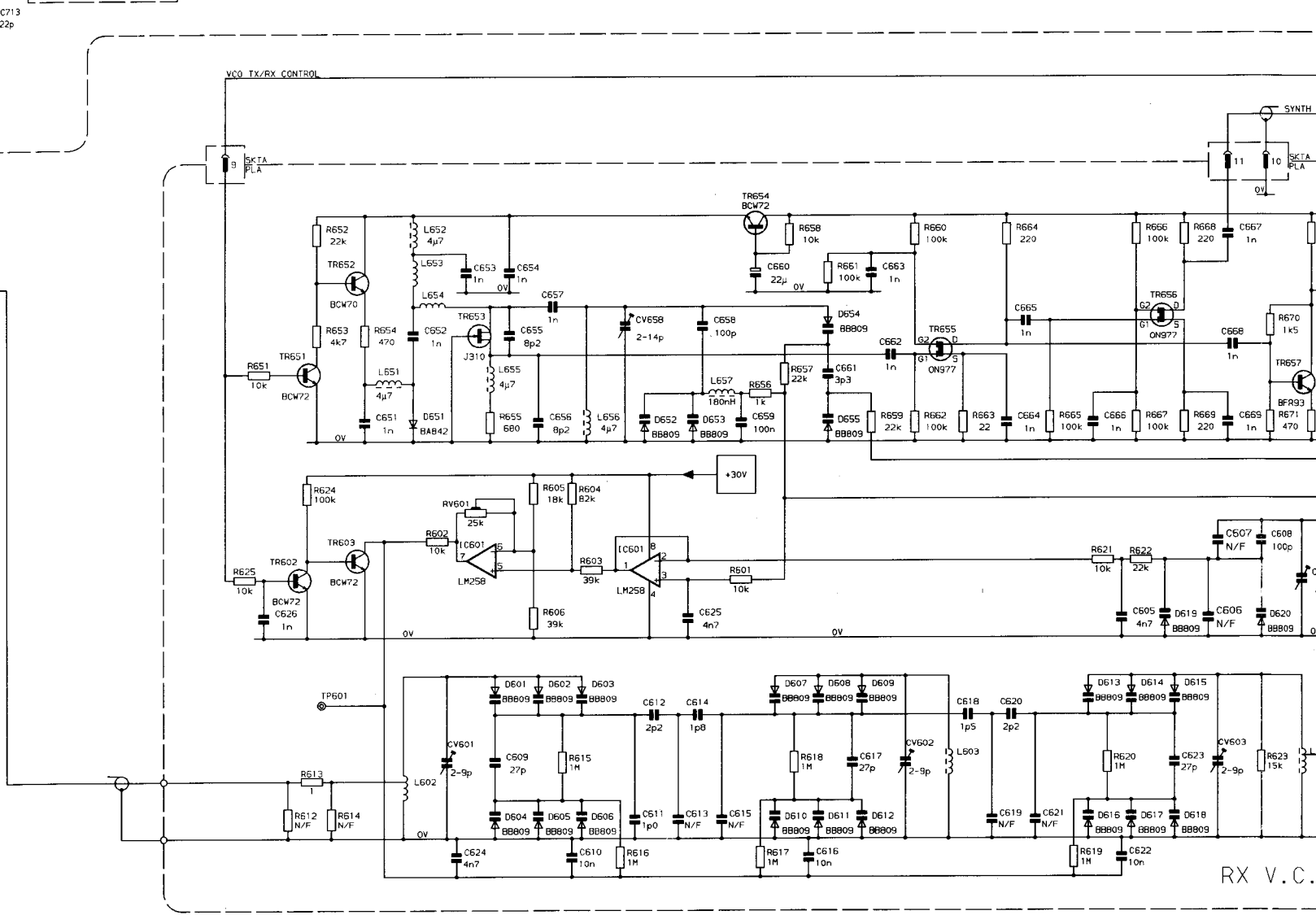
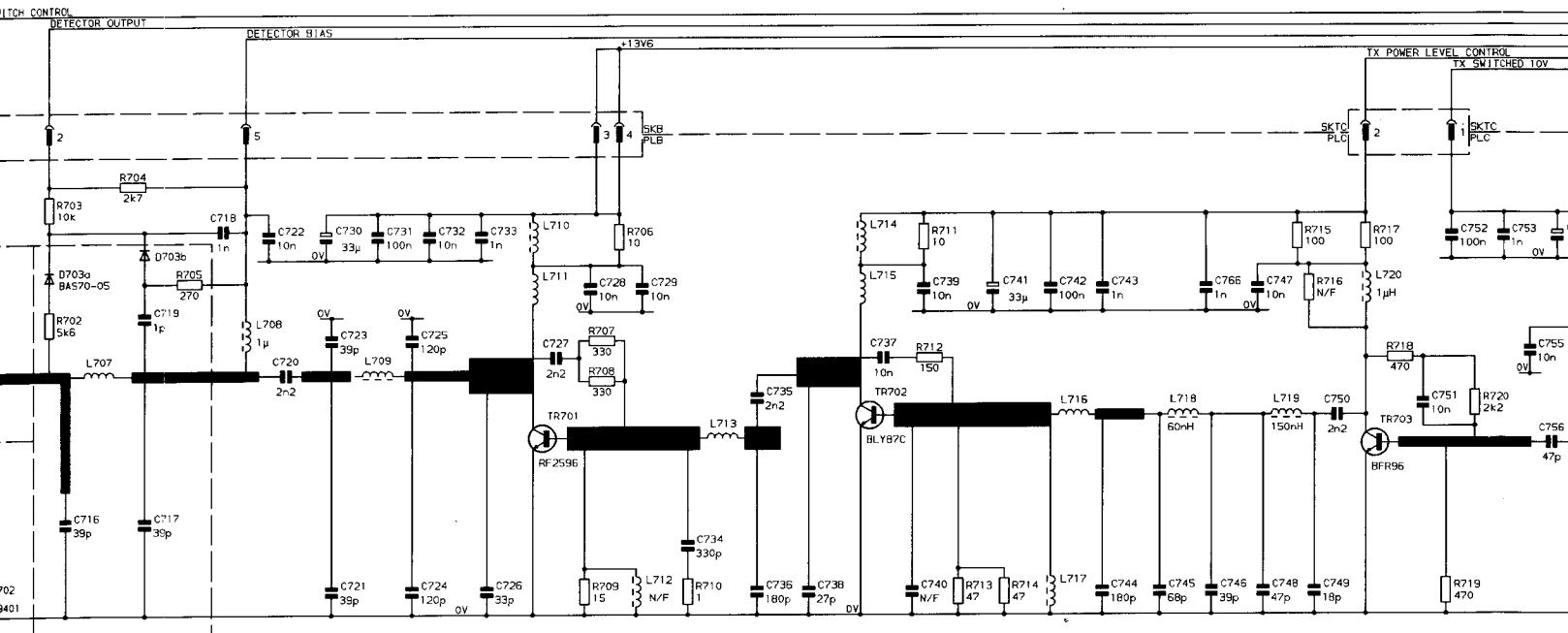
TRANSCEIVER UNIT

A1 06524









RX V.C.



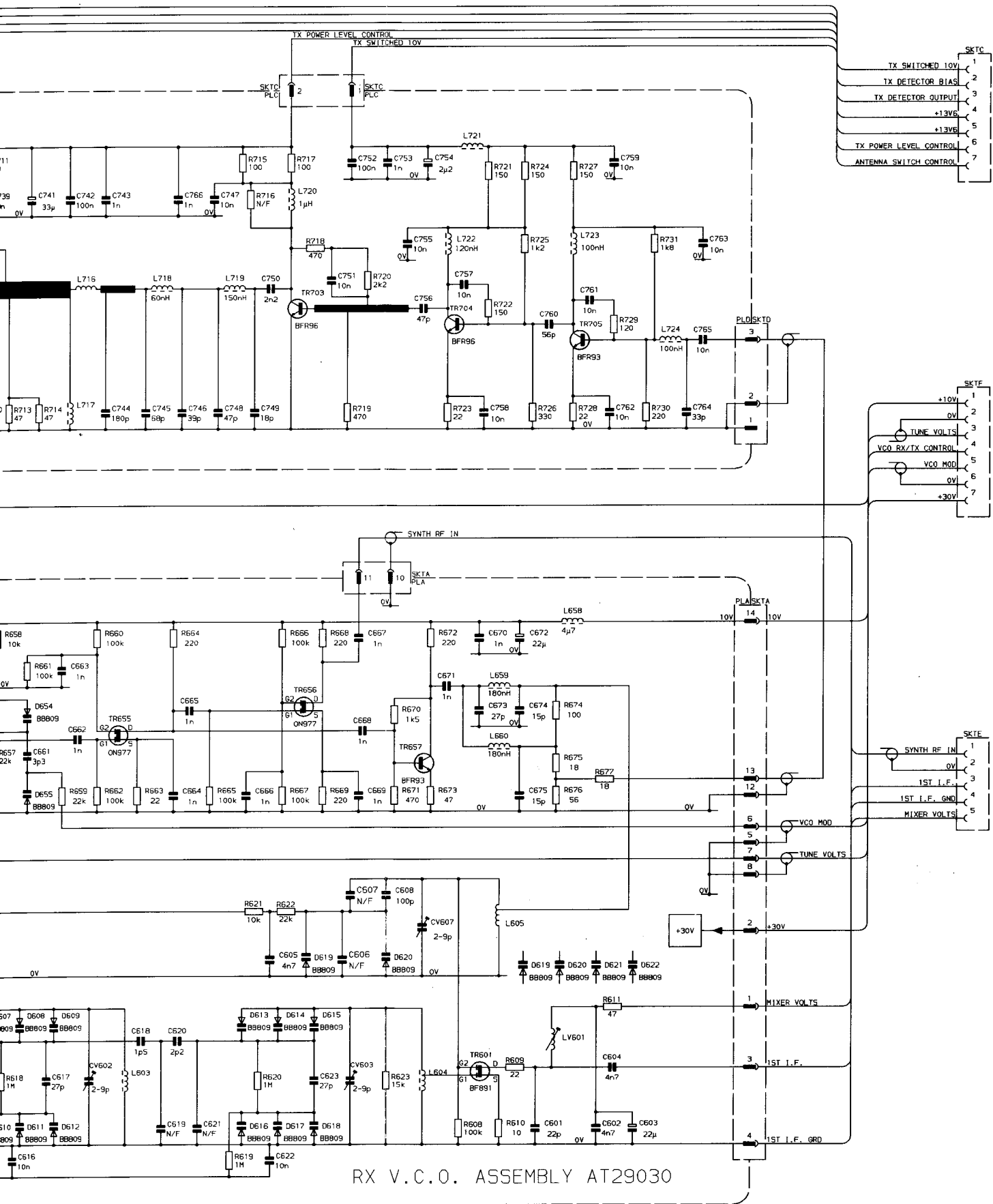
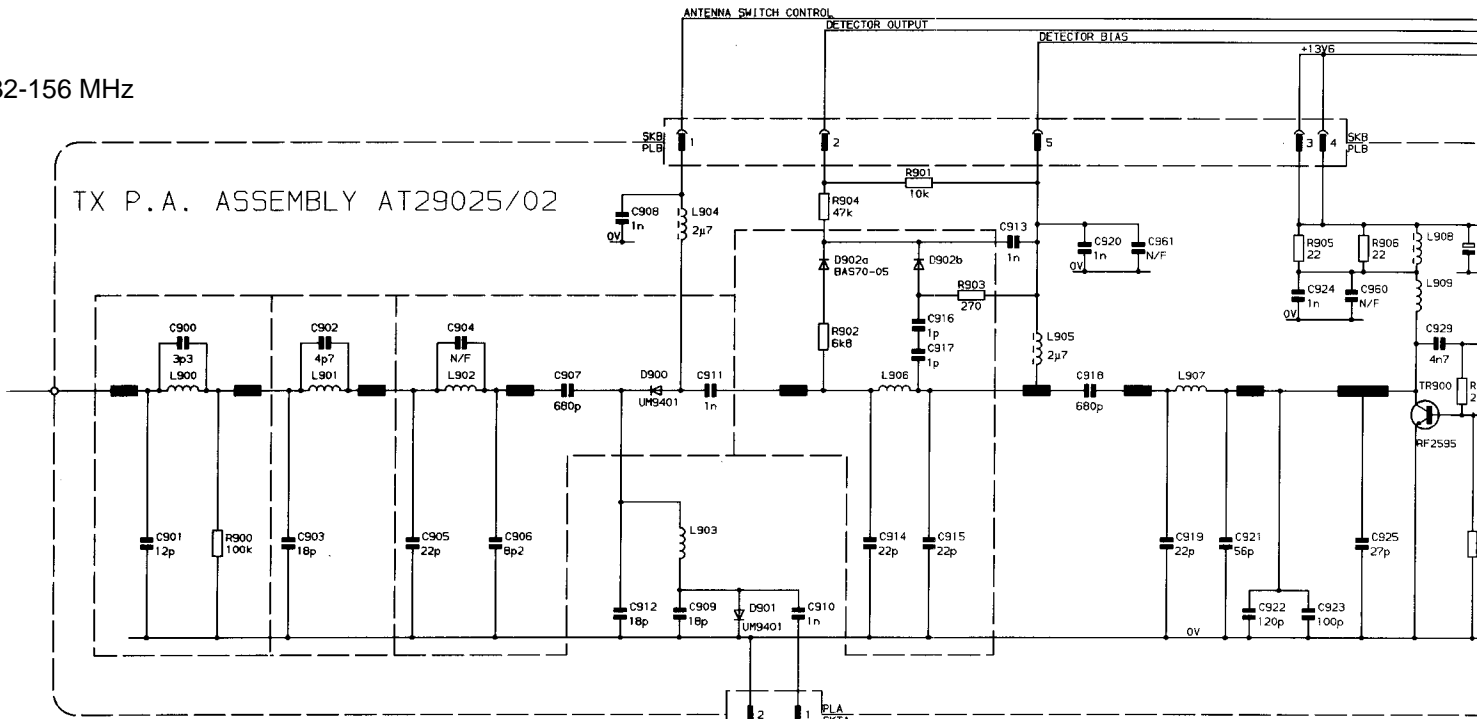


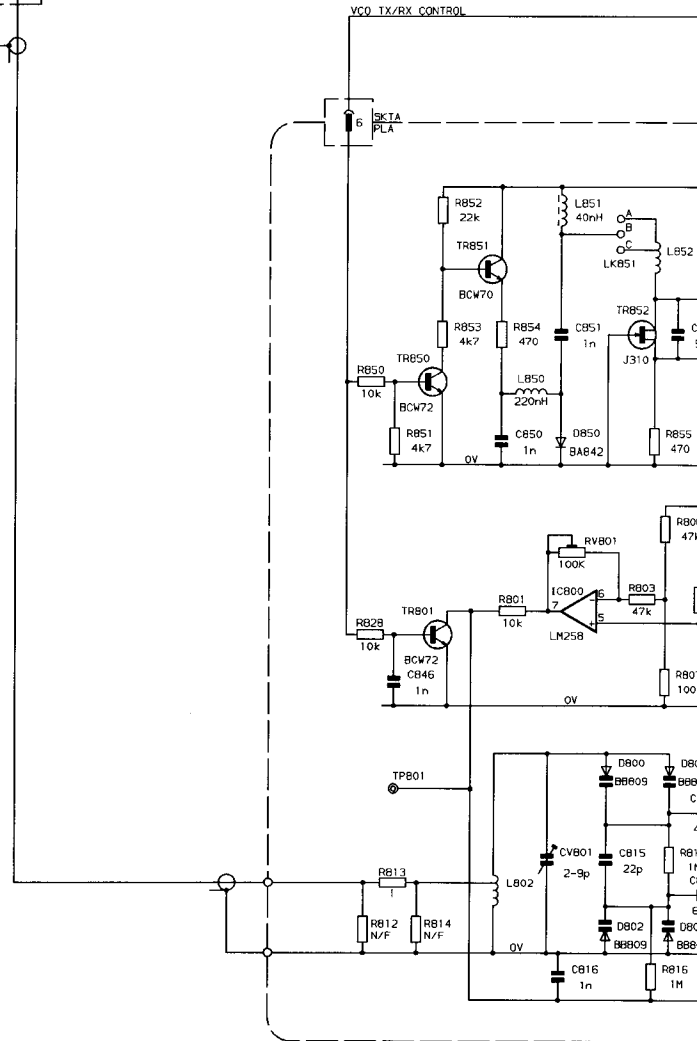
FIG 6.4 RF FRONT END CIRCUIT DIAGRAM (66-88MHz)

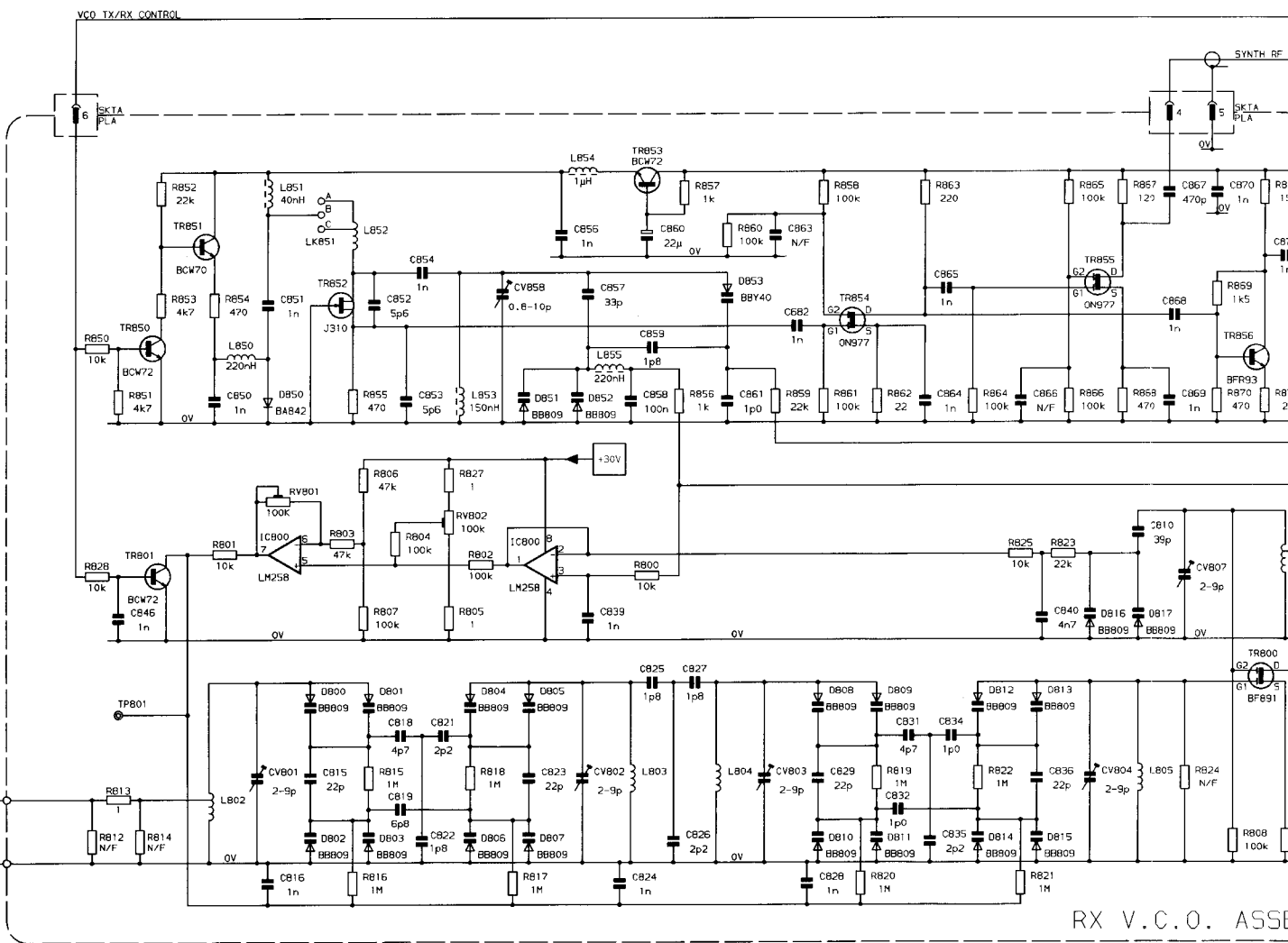
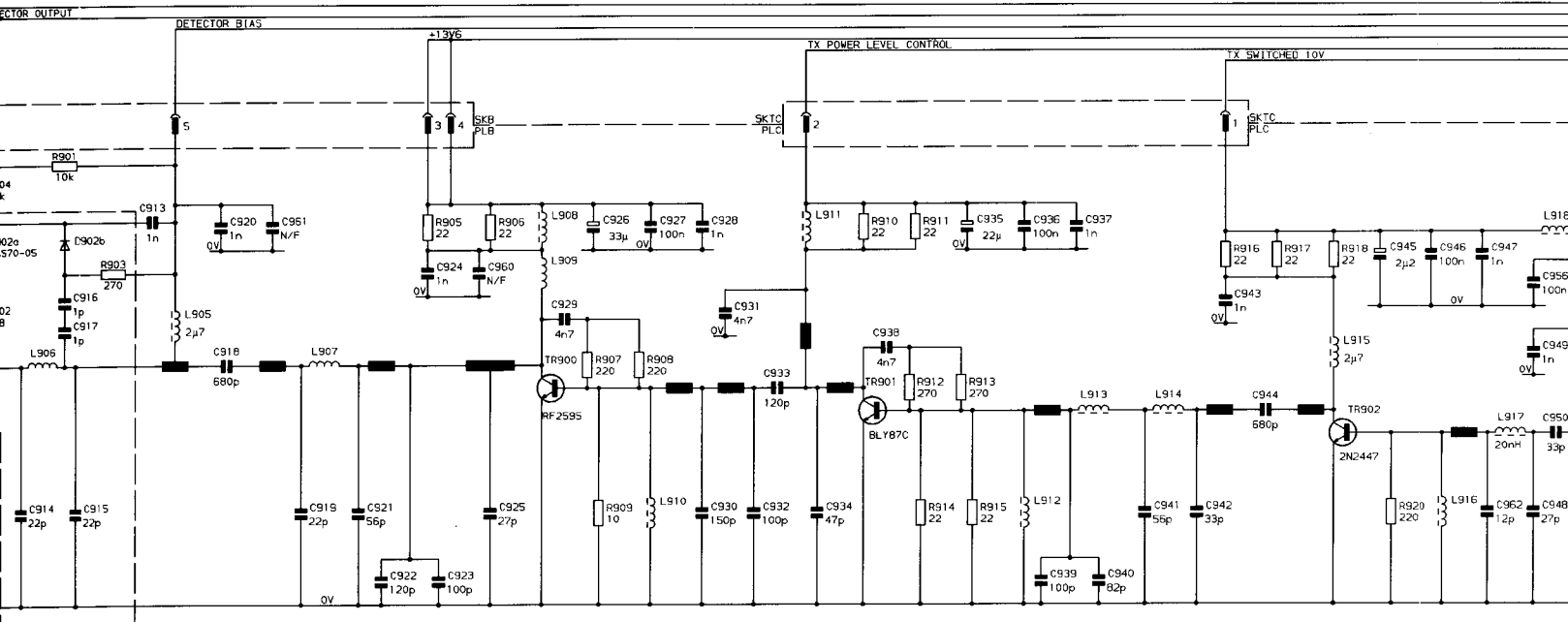
132-156 MHz

TX P.A. ASSEMBLY AT29025/02

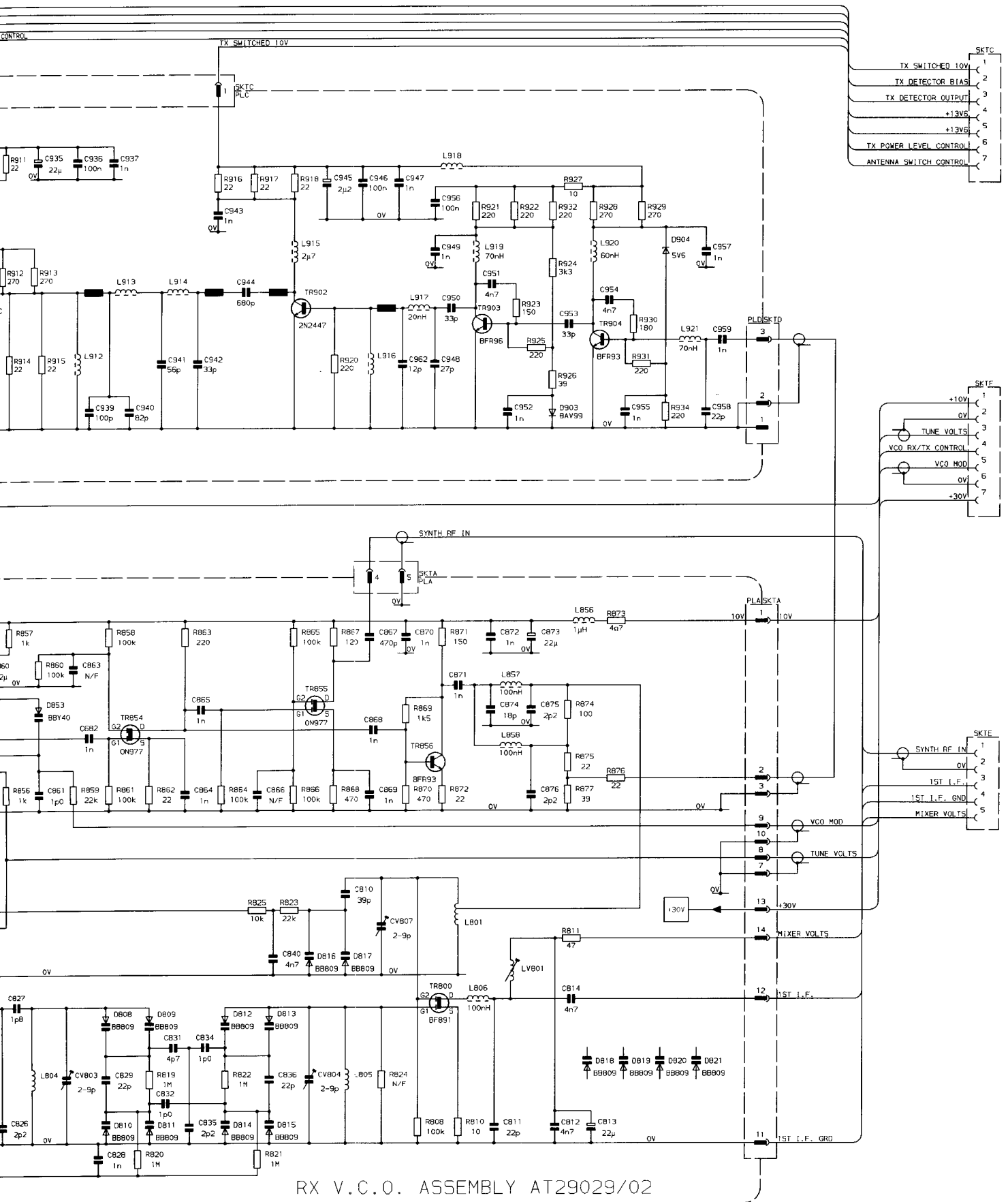


VCO TX/RX CONTROL





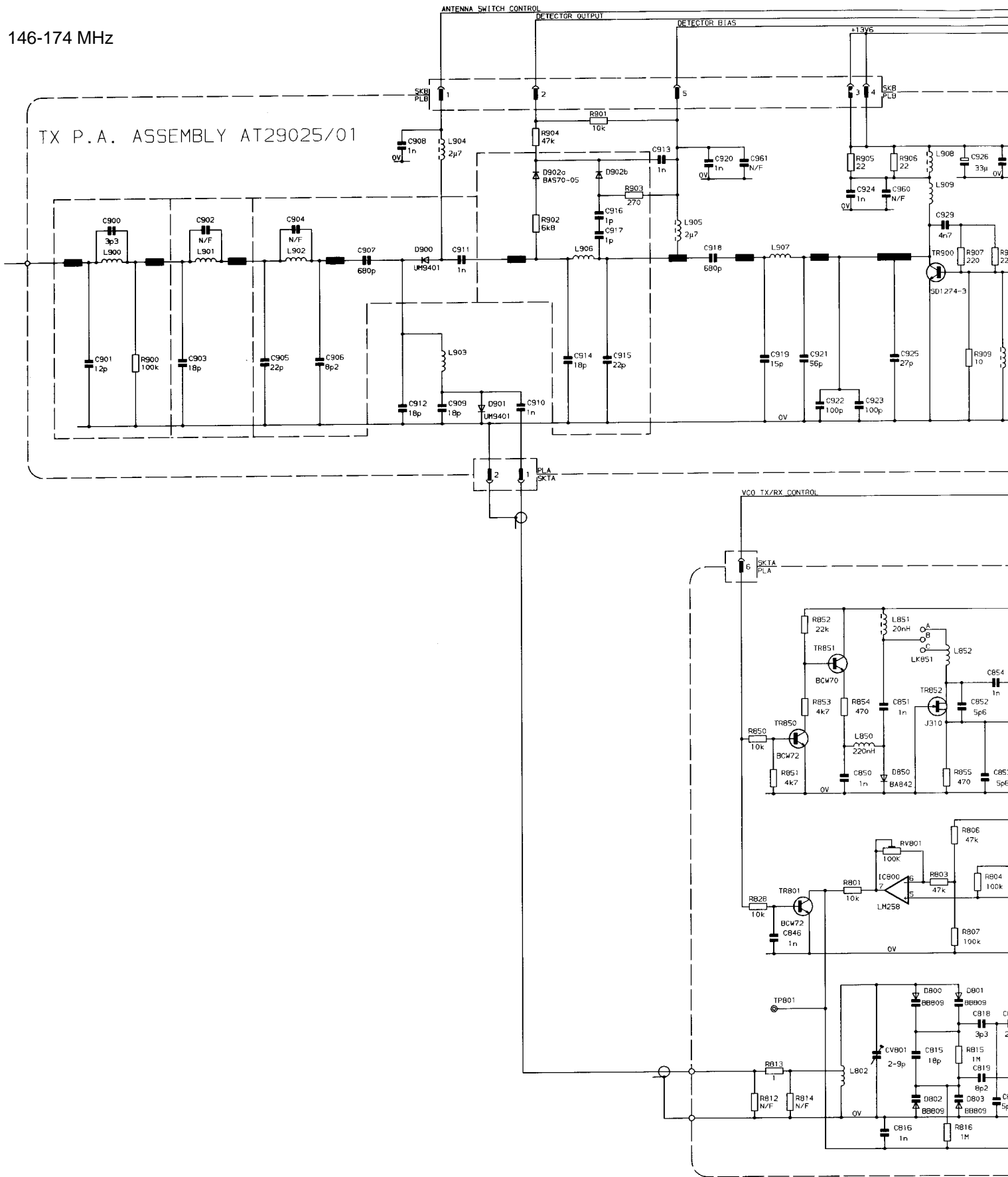
RX V.C.O. ASSEMBLY

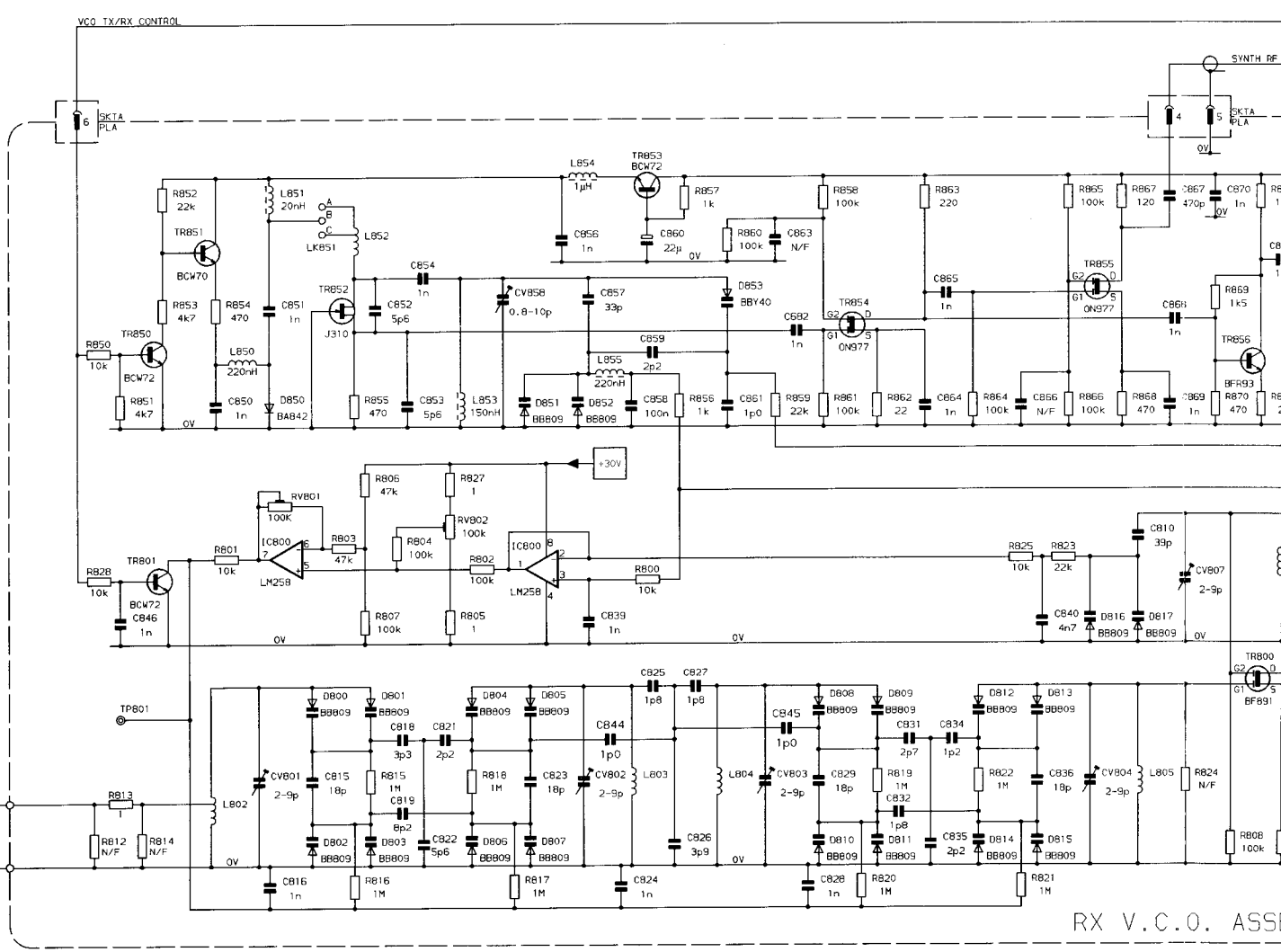
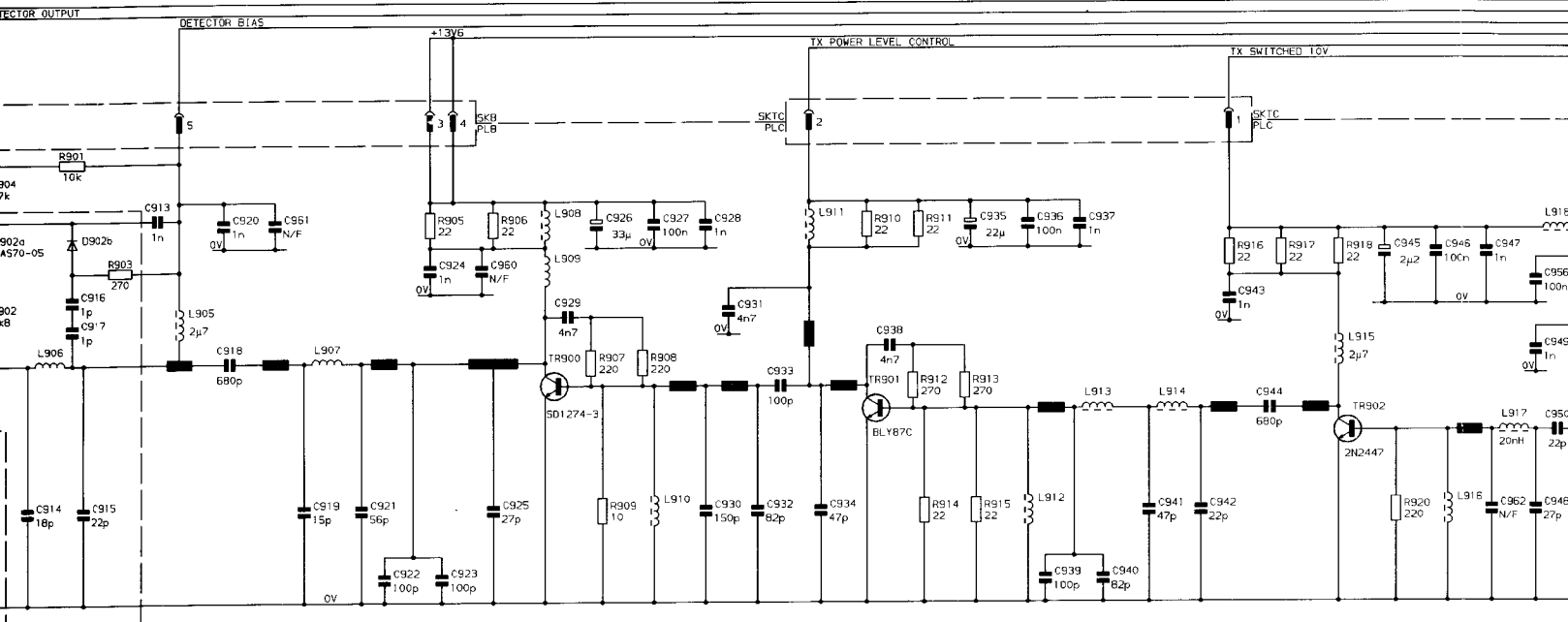


RX V.C.O. ASSEMBLY AT29029/02

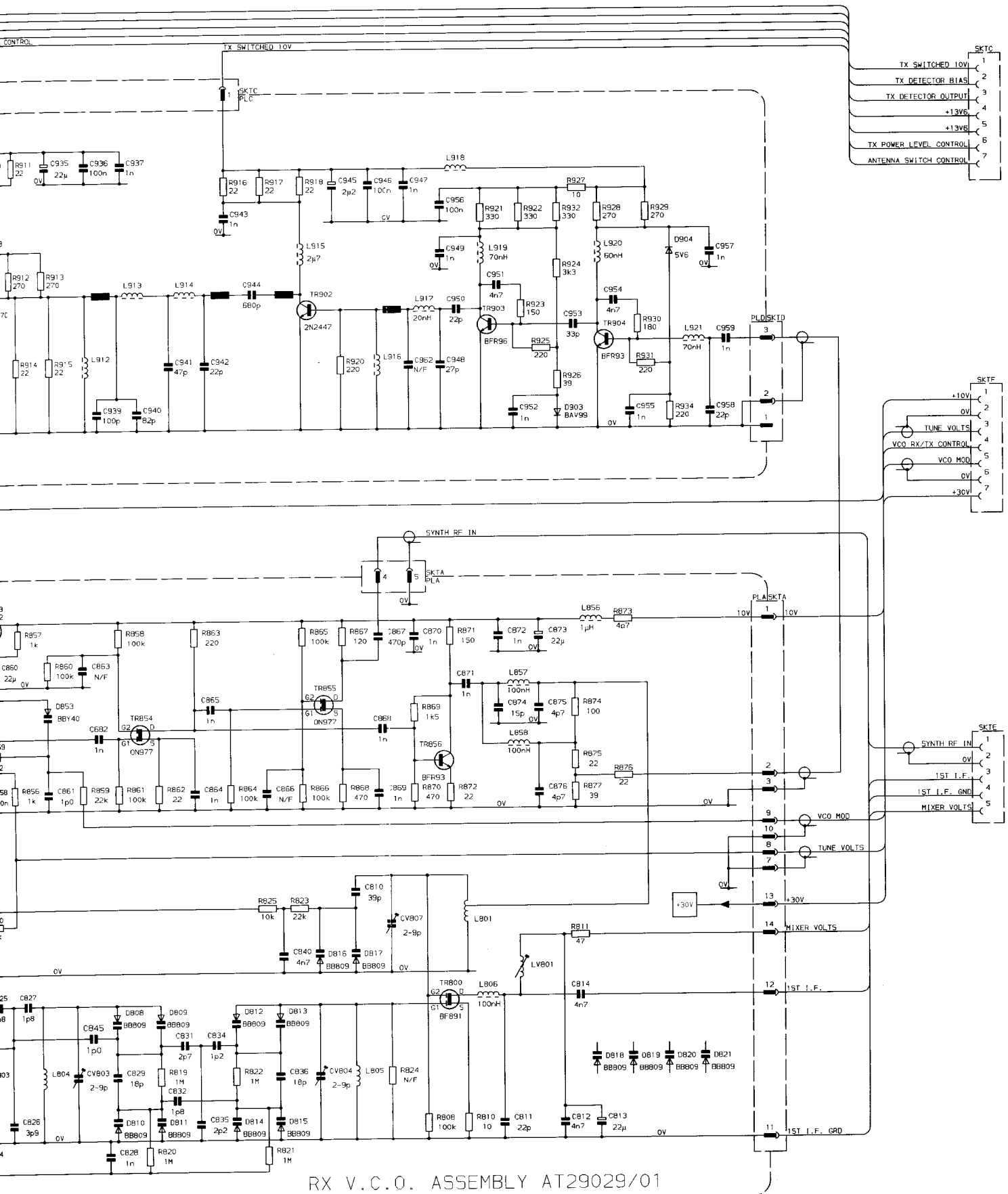
FIG 6.6 RF FRONT END CIRCUIT DIAGRAM (132-156MHz)

146-174 MHz





RX V.C.O. ASSY



RX V.C.O. ASSEMBLY AT29029/01

FIG 6.7 RF FRONT END CIRCUIT DIAGRAM (146-174MHZ)

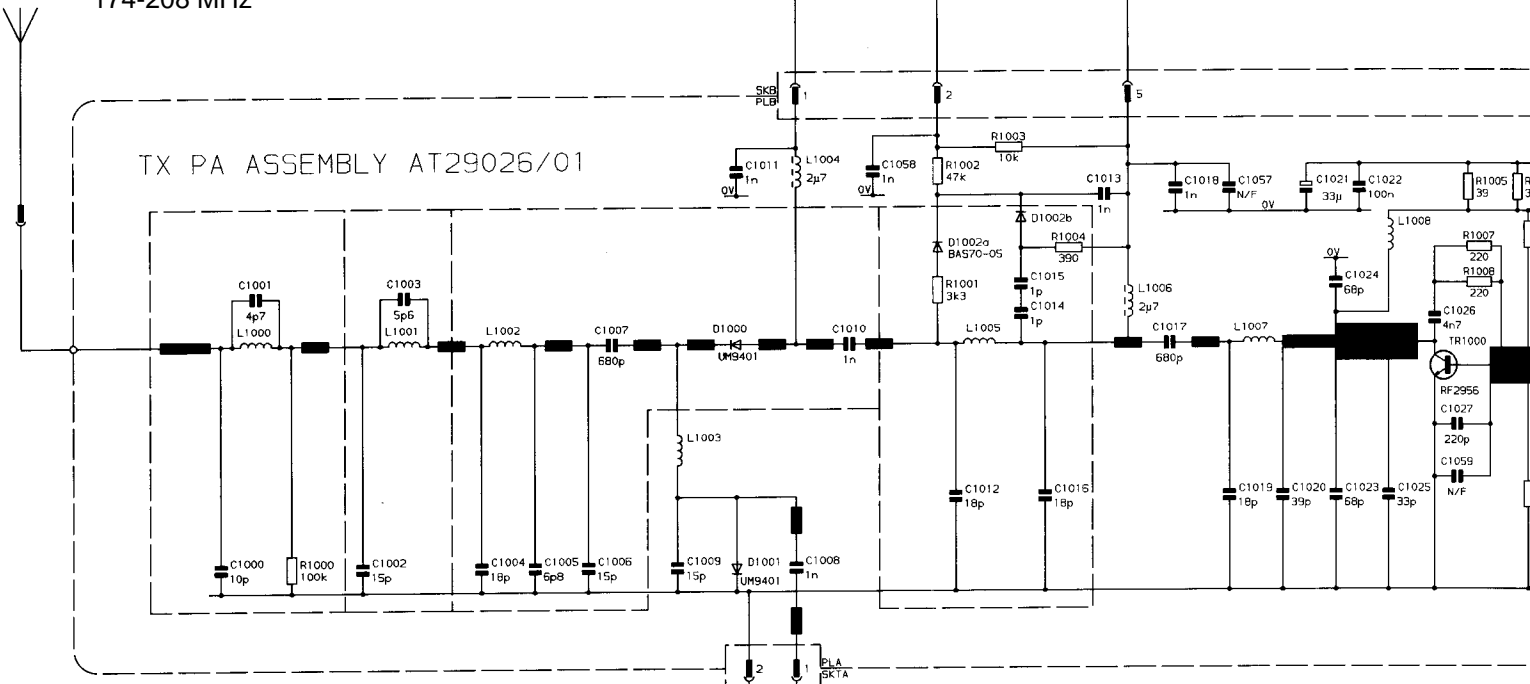
174-208 MHz

TX PA ASSEMBLY AT29026/01

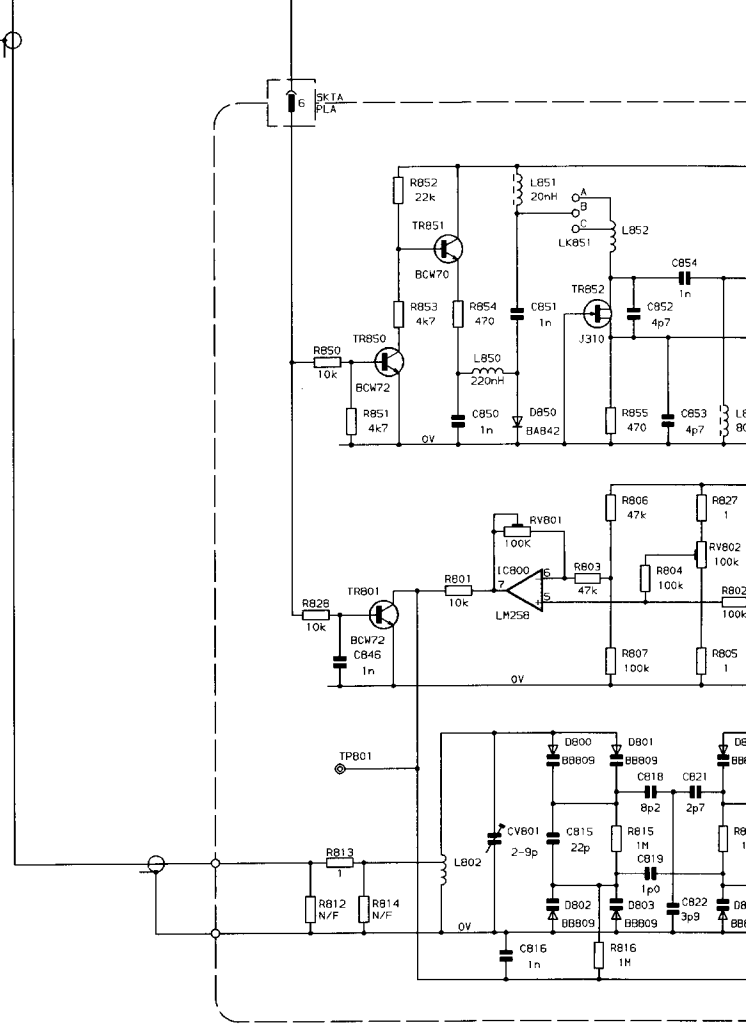
ANTENNA SWITCH CONTROL

DETECTOR OUTPUT

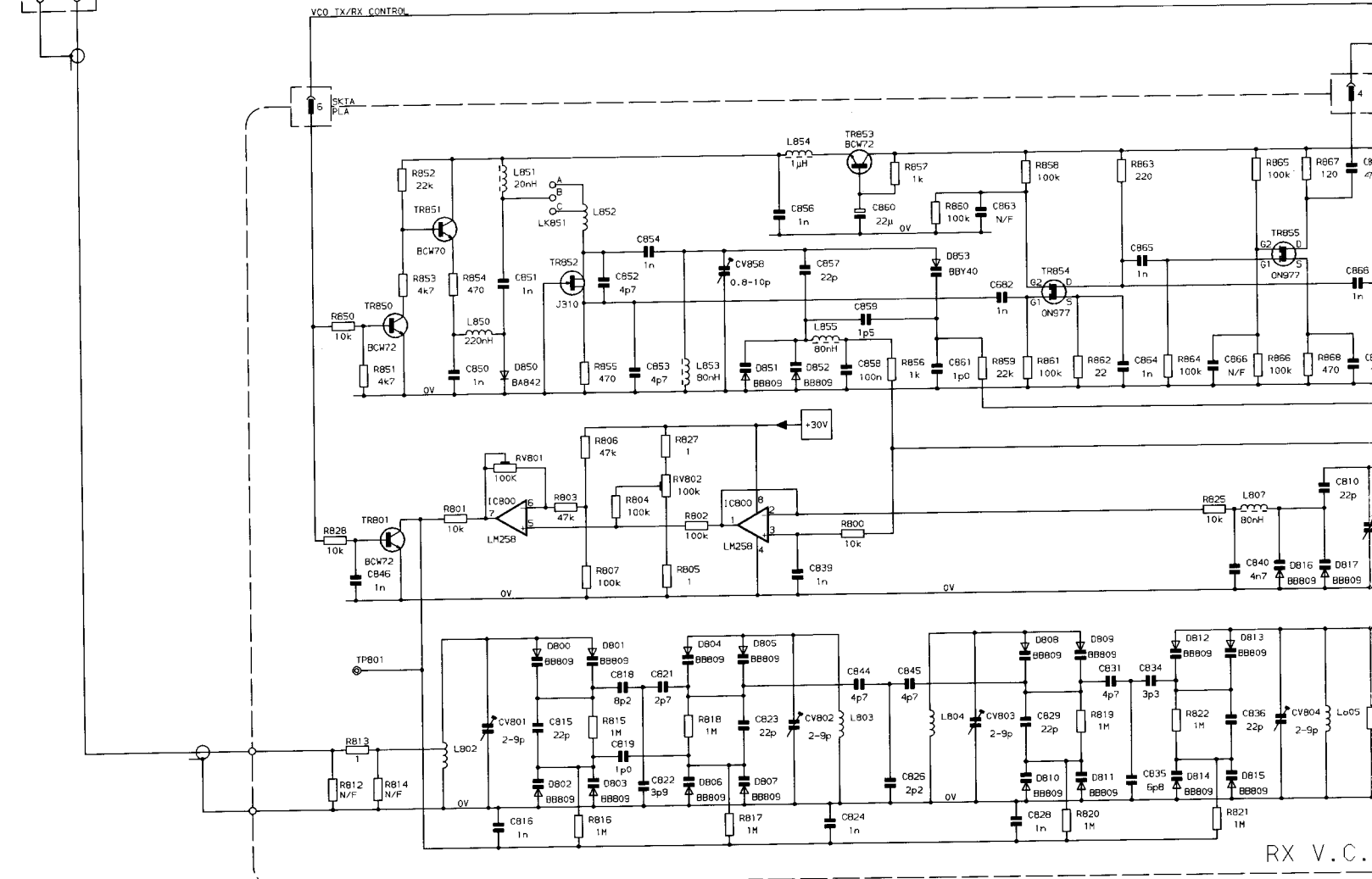
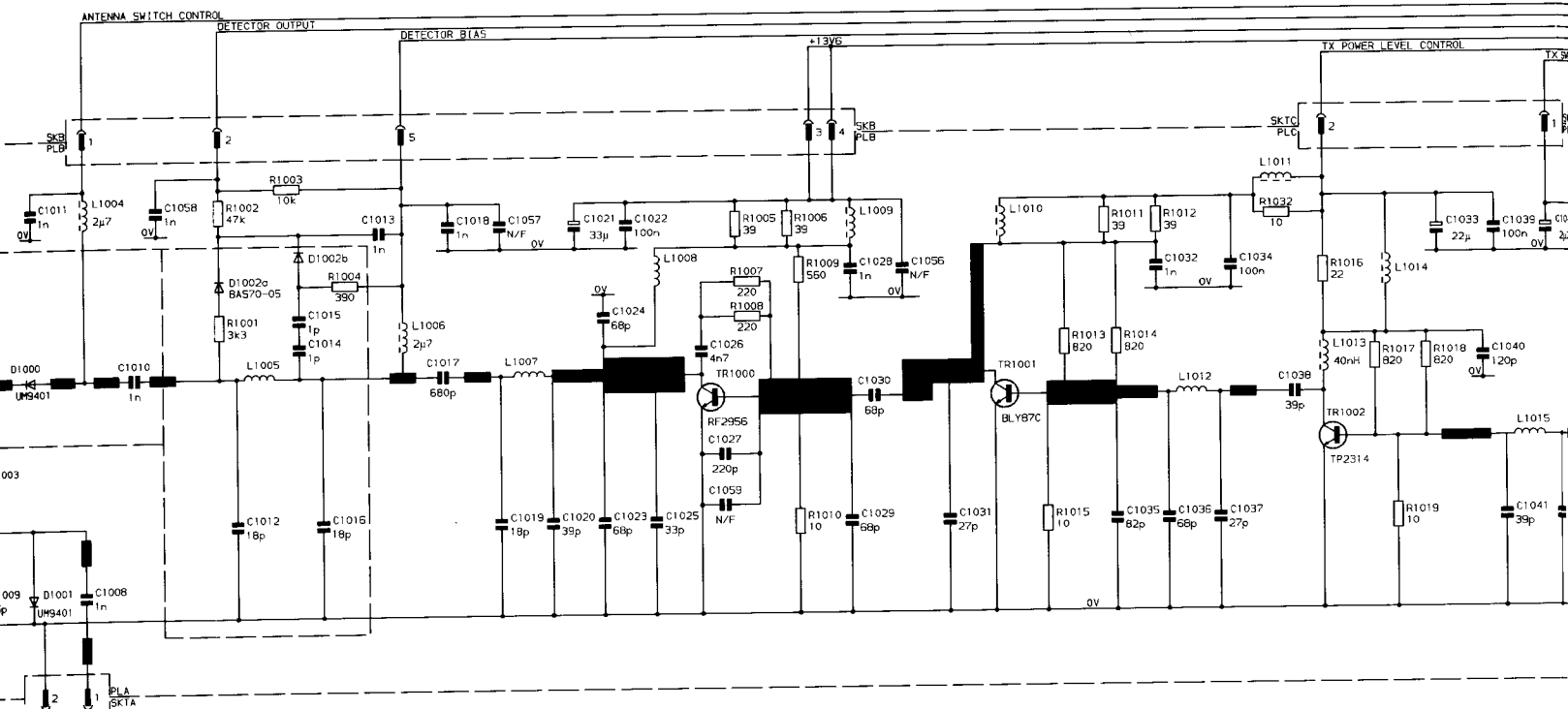
DETECTOR BIAS



VCO TX/RX CONTROL







RX V.C.

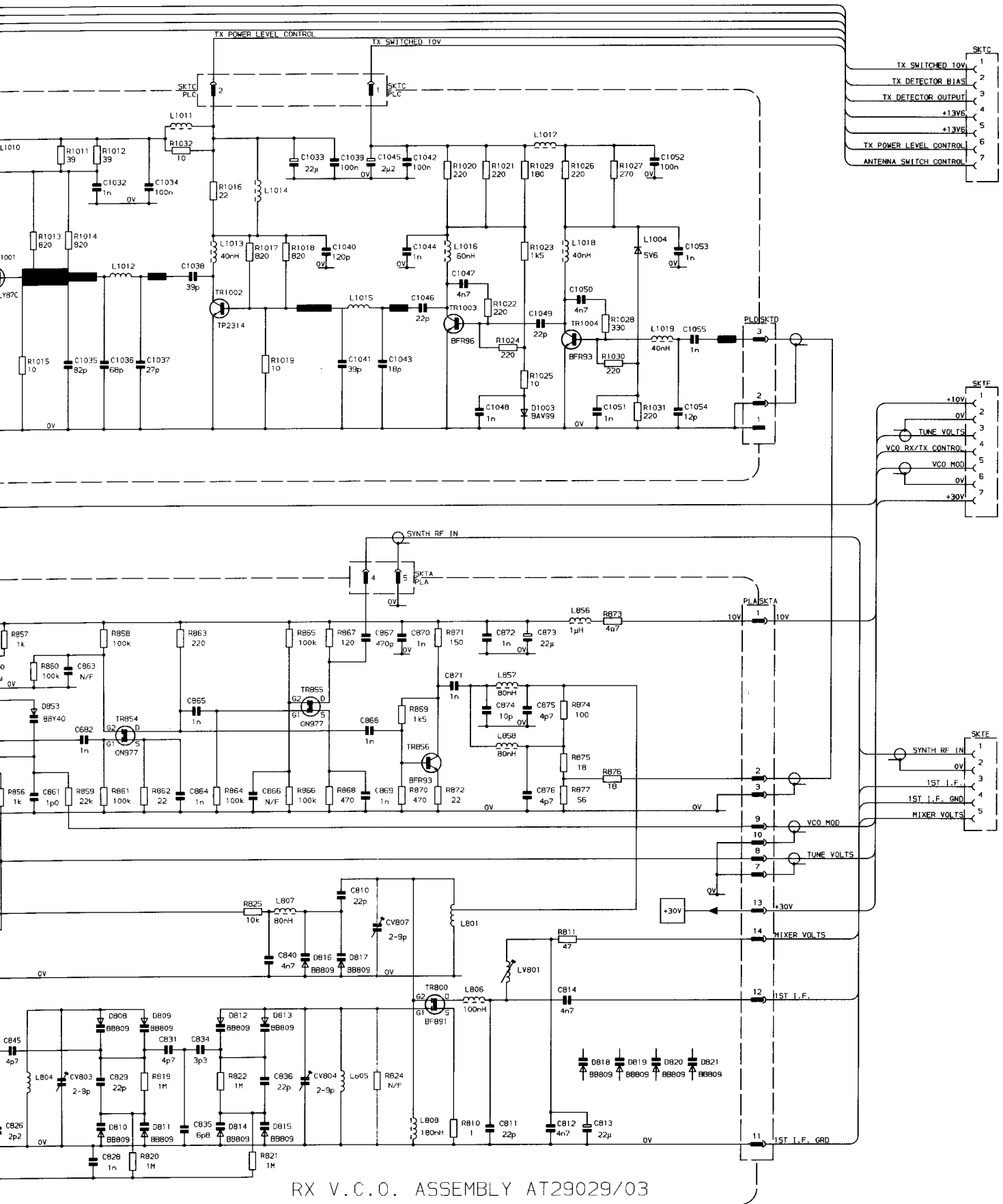
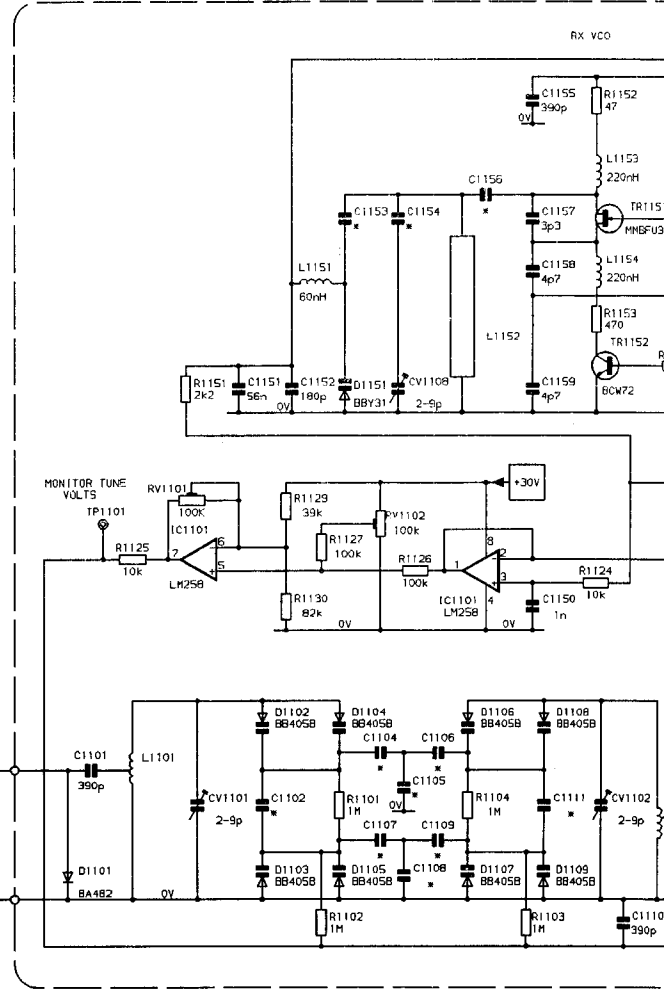
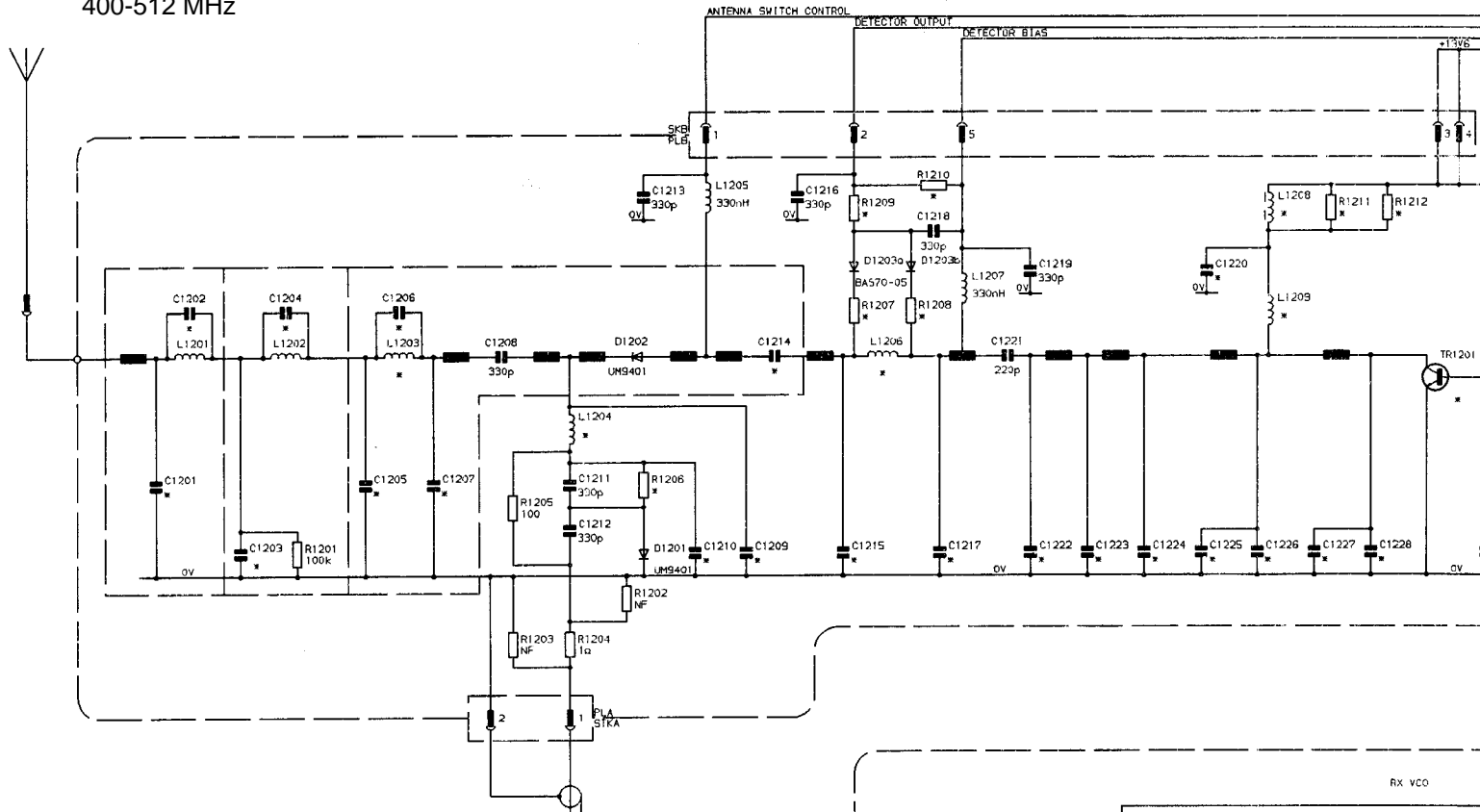
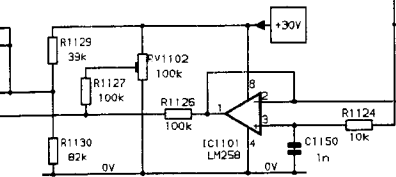
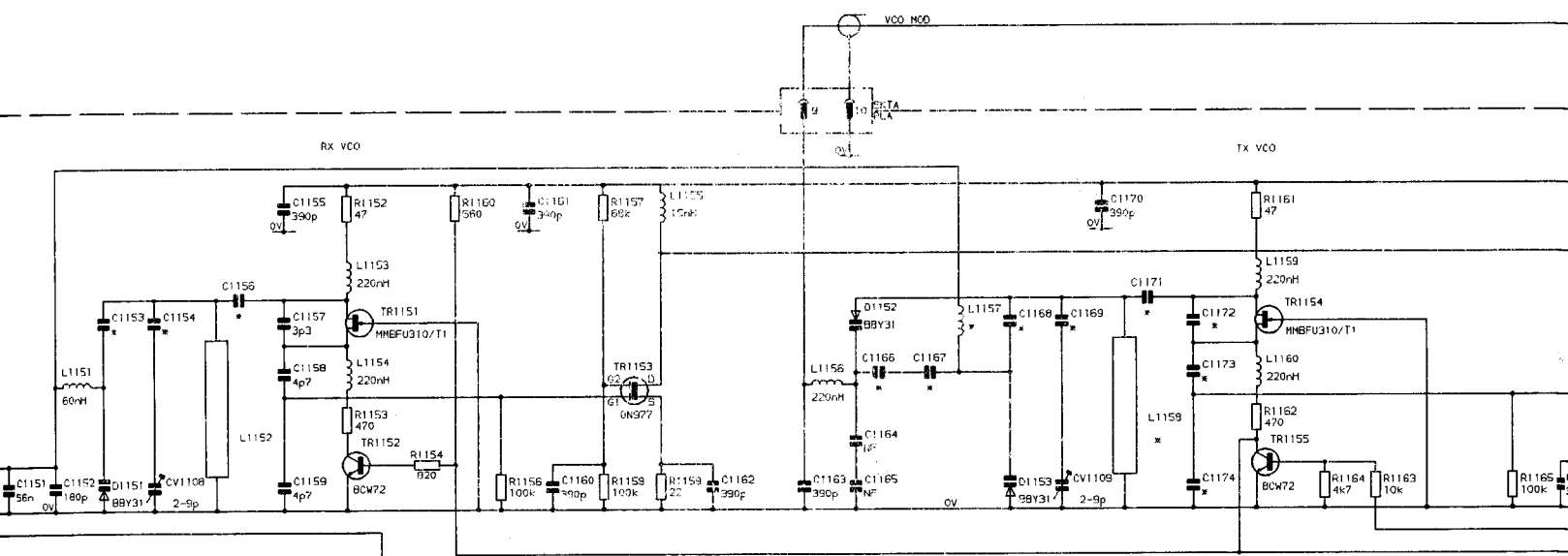
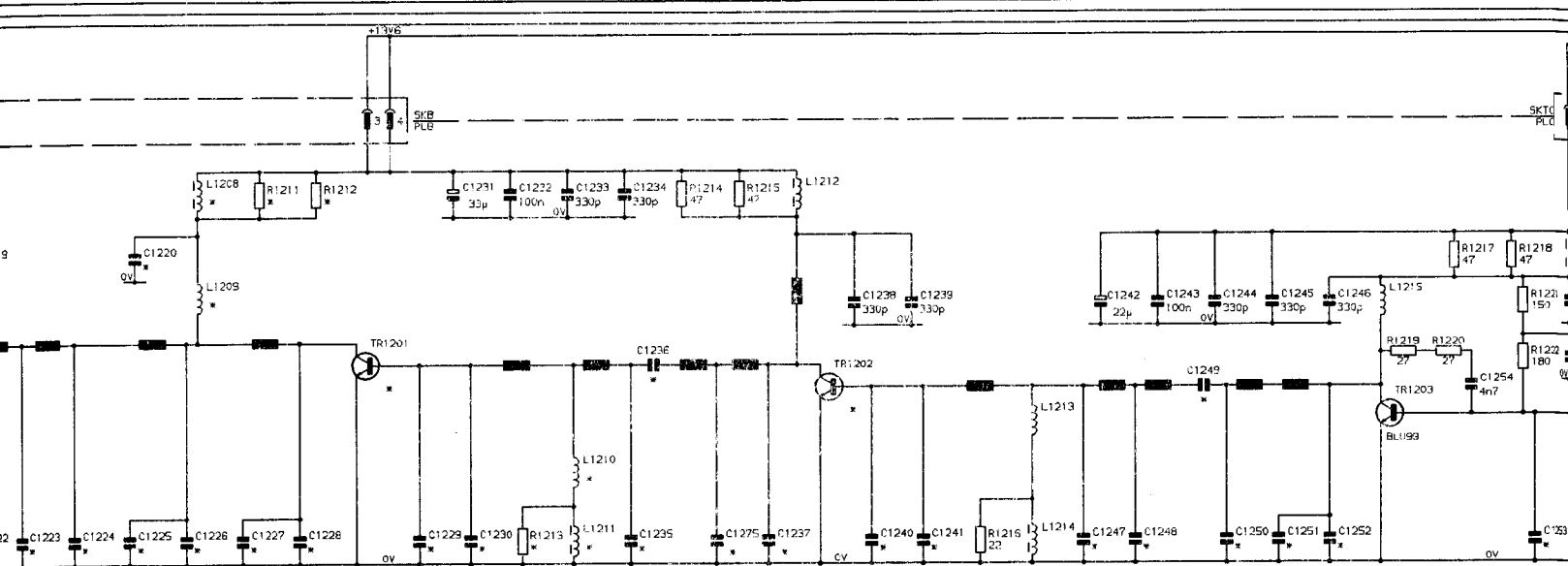


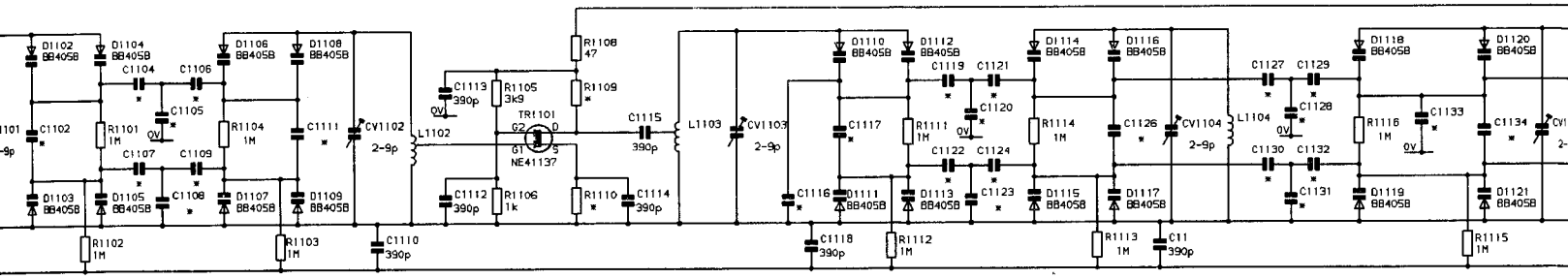
FIG 6.9 RF FRONT END CIRCUIT DIAGRAM (174-208MHZ)

400-512 MHz





TUNING DIODES D1102-D1125, D1127, D1128, D1130 ARE MATCHED



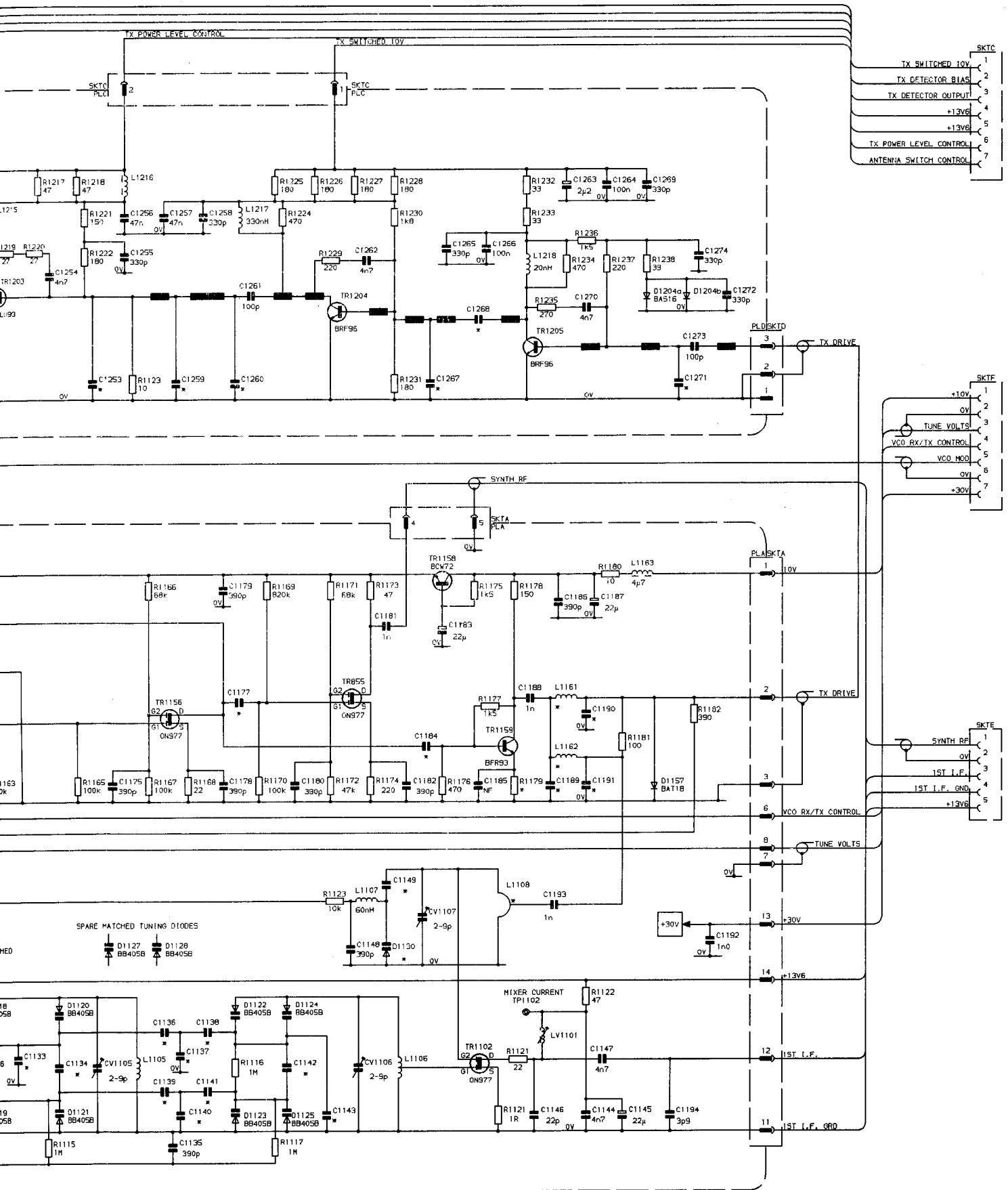
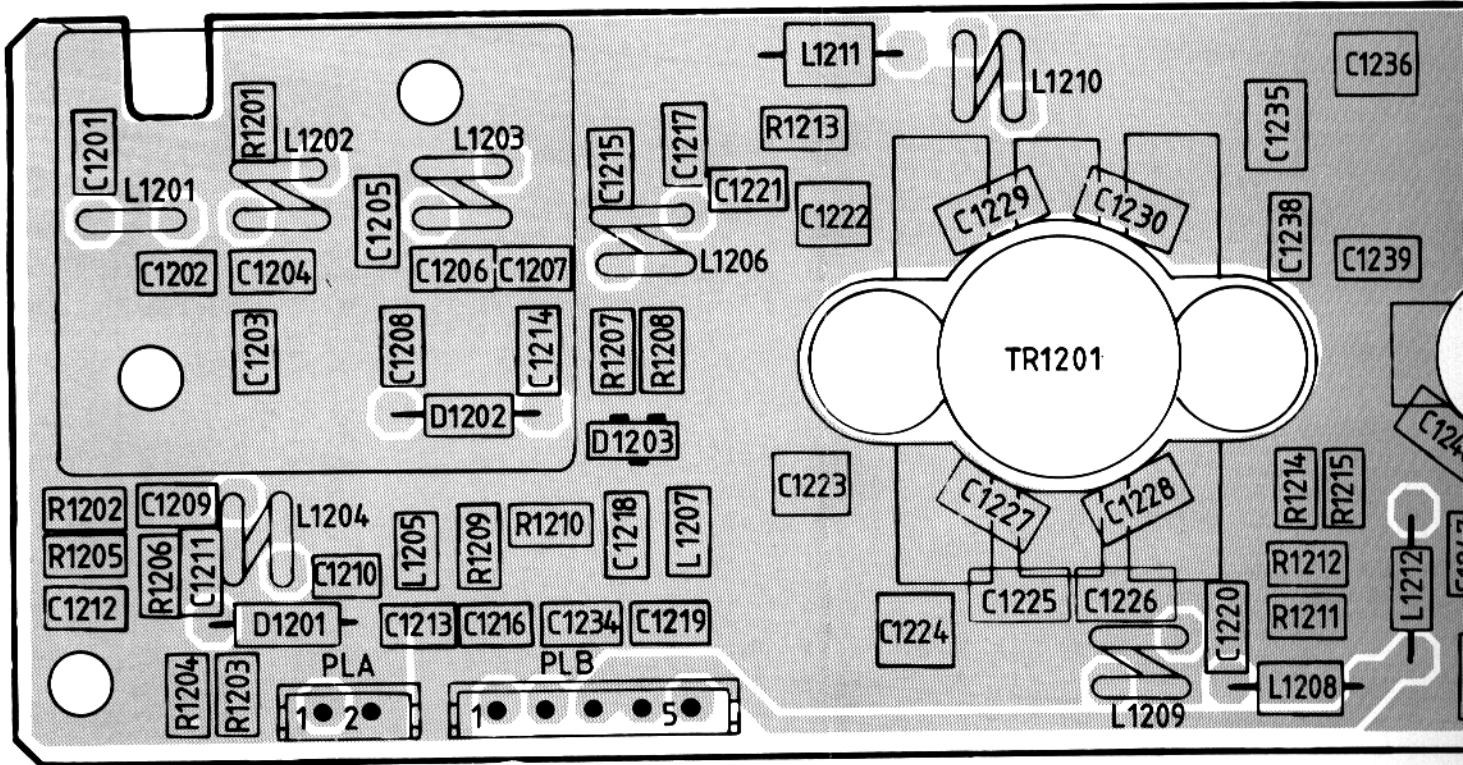
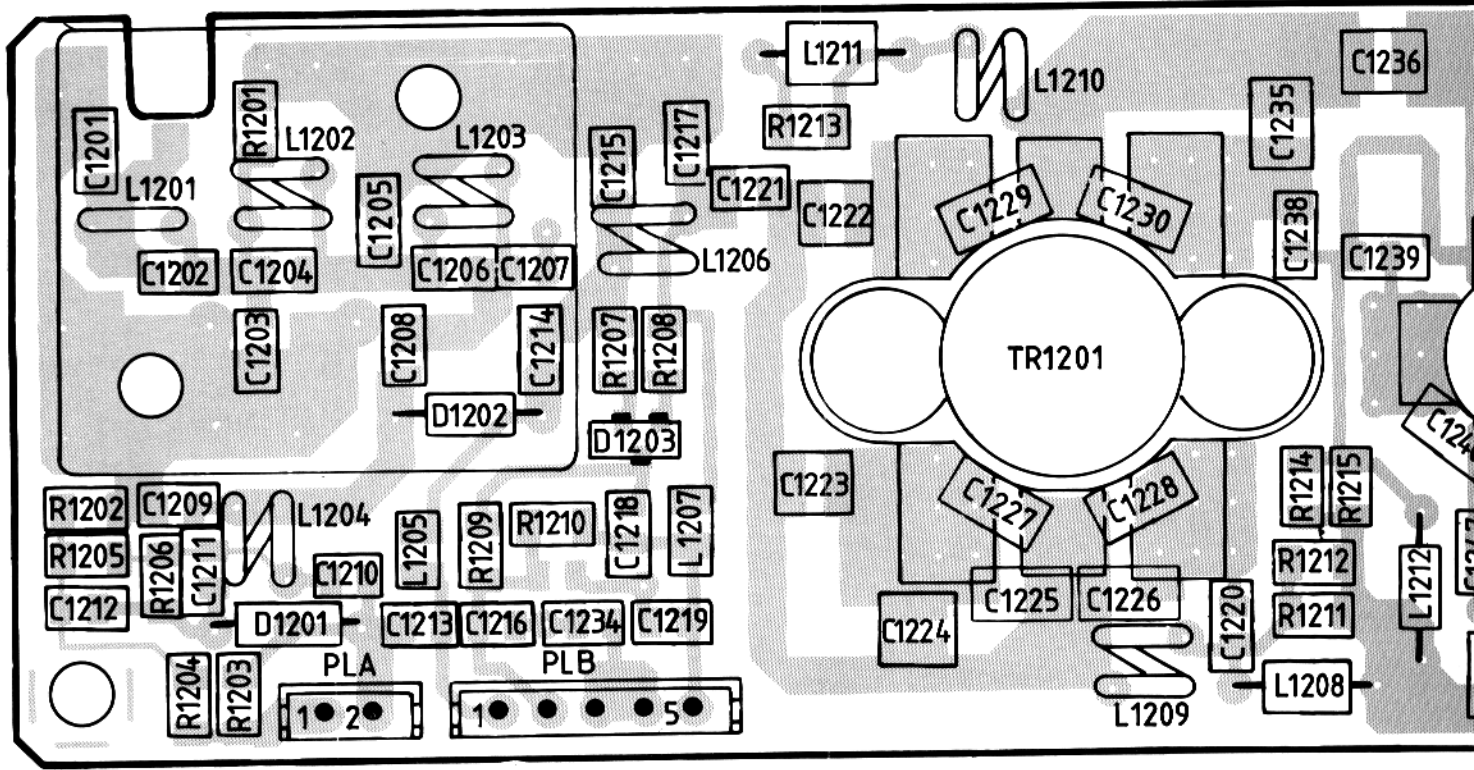
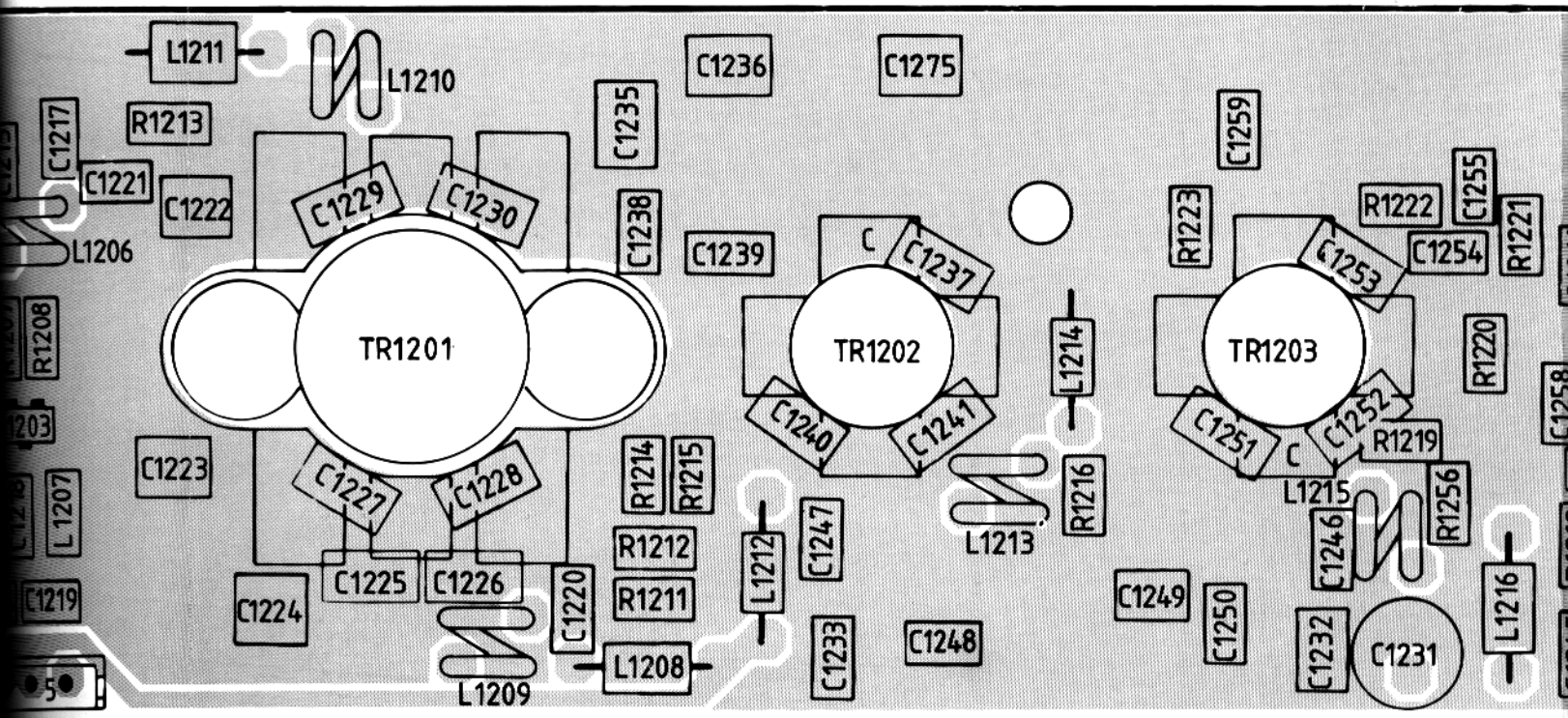
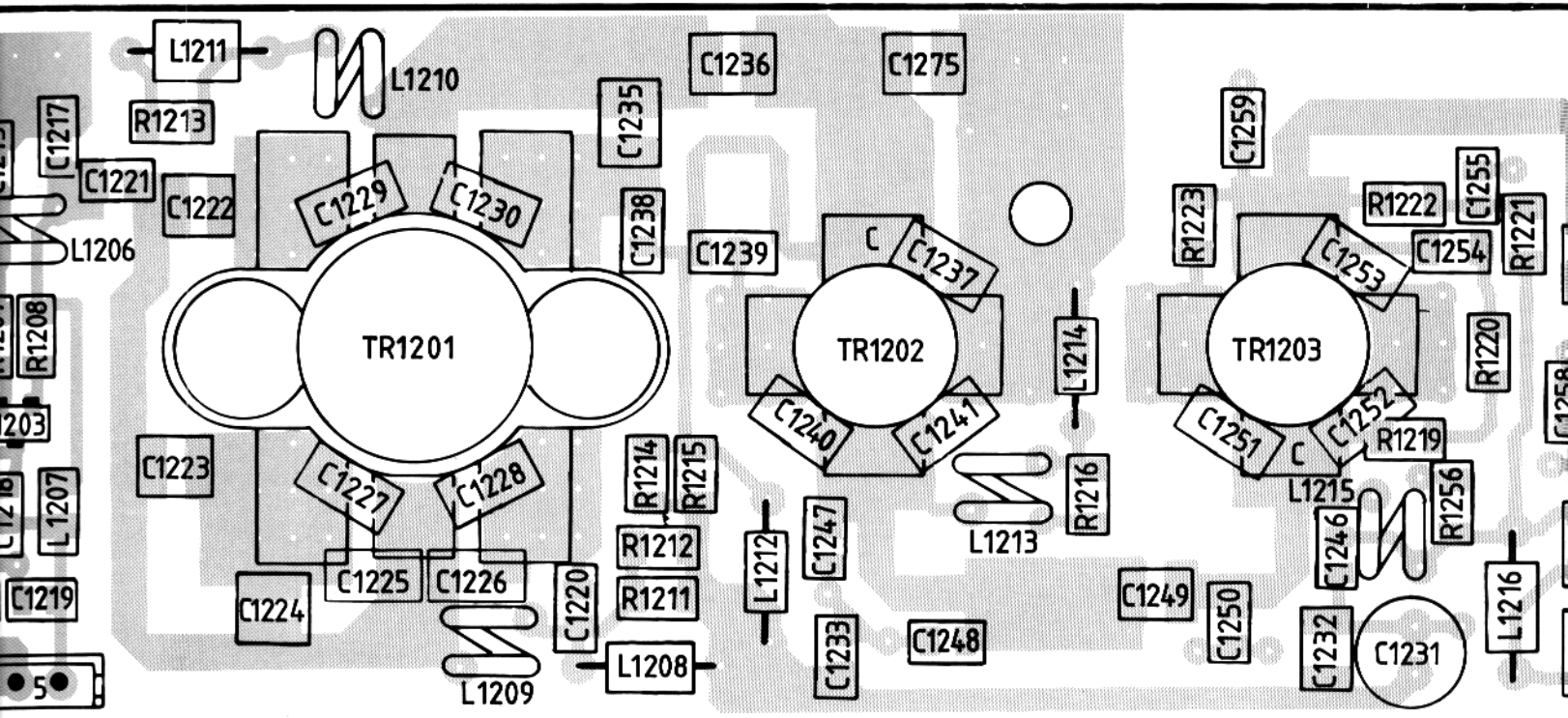
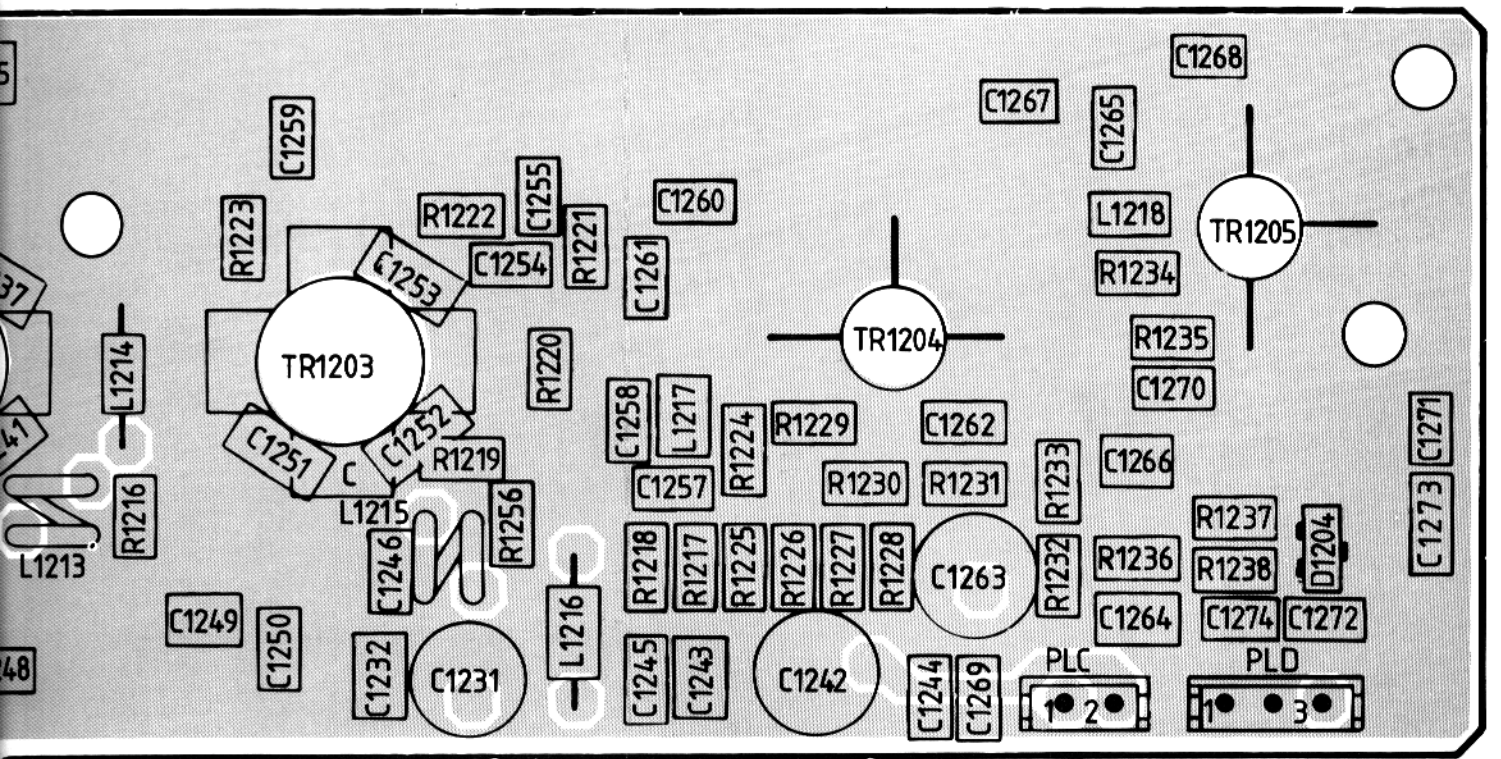
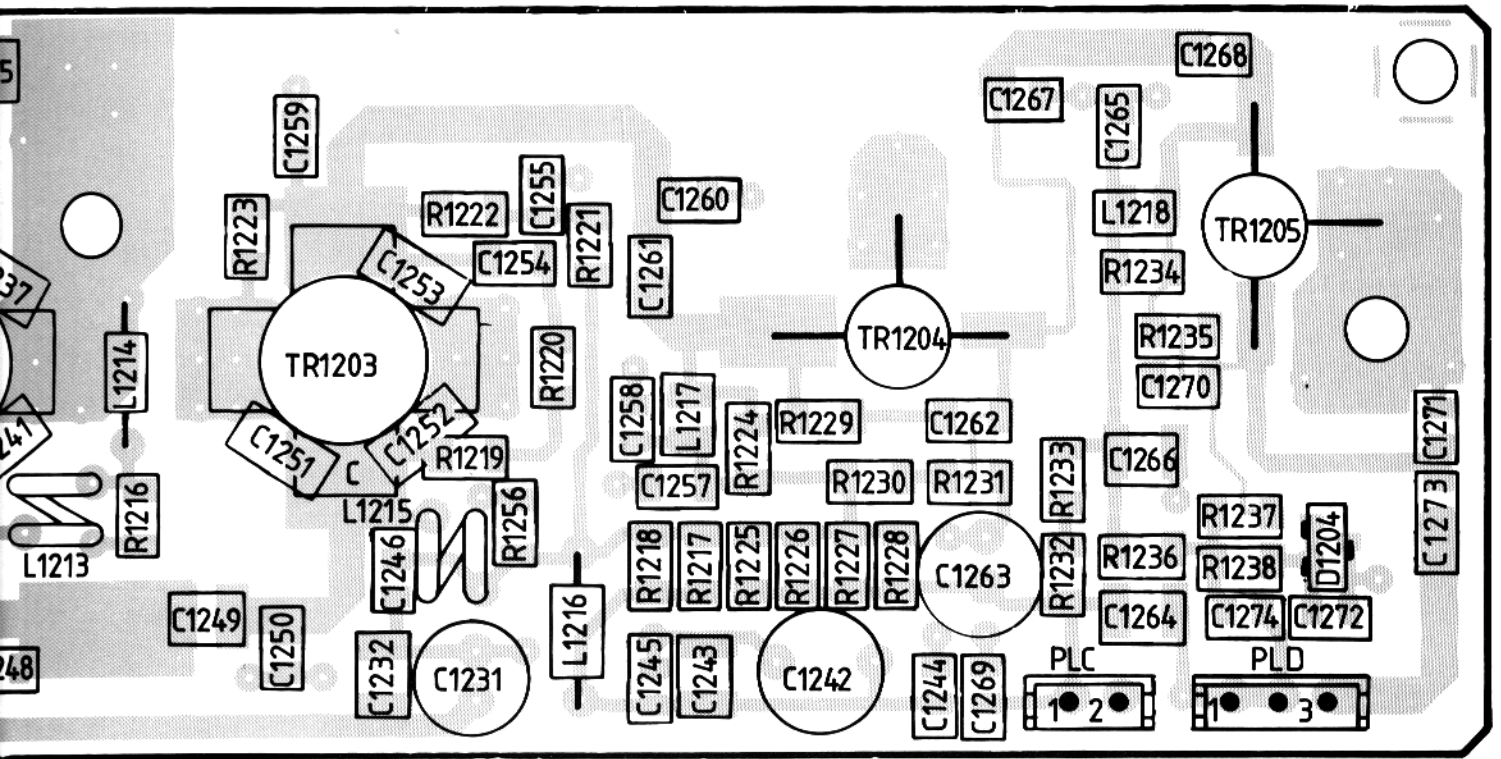


FIG 6.11A RF CIRCUIT DIAGRAM (400-512MHz)



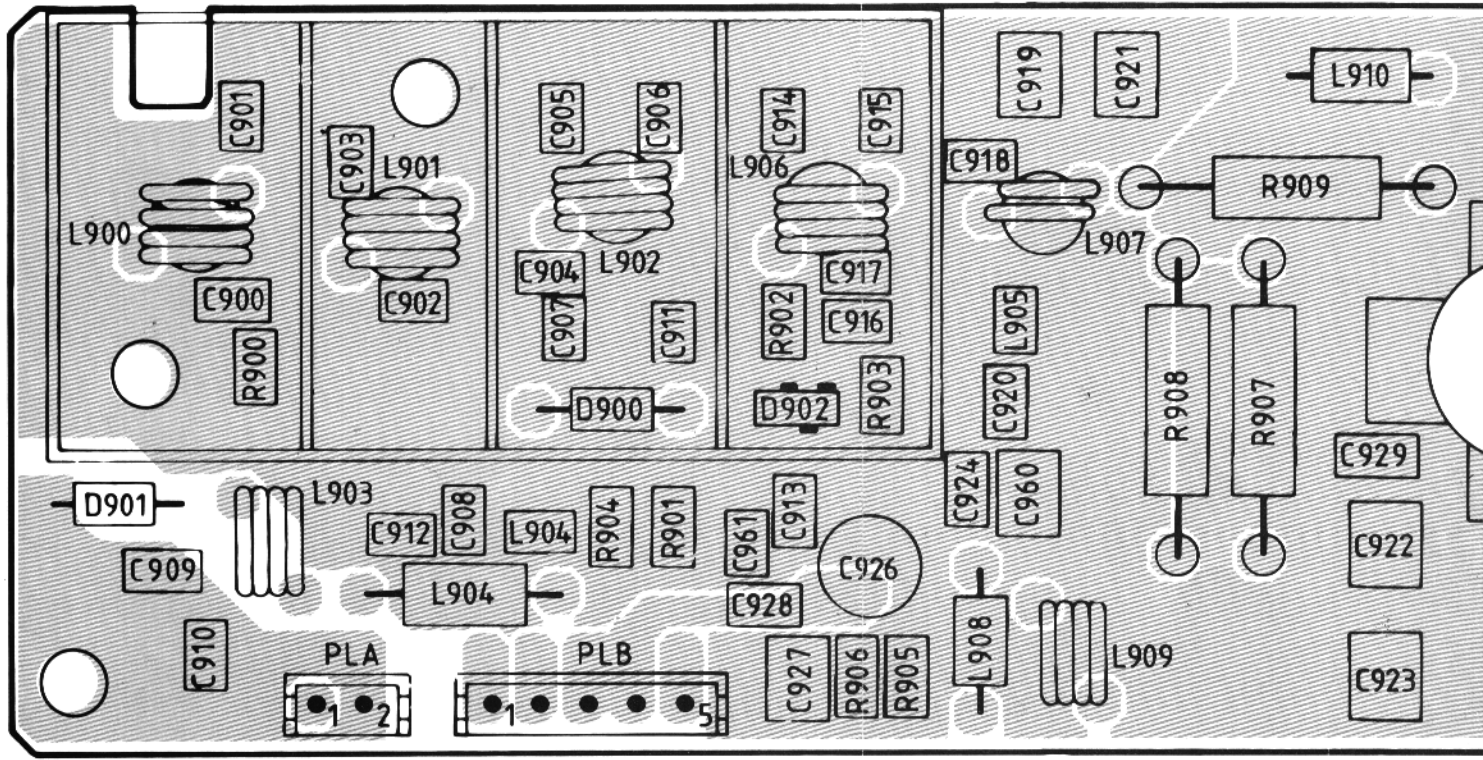
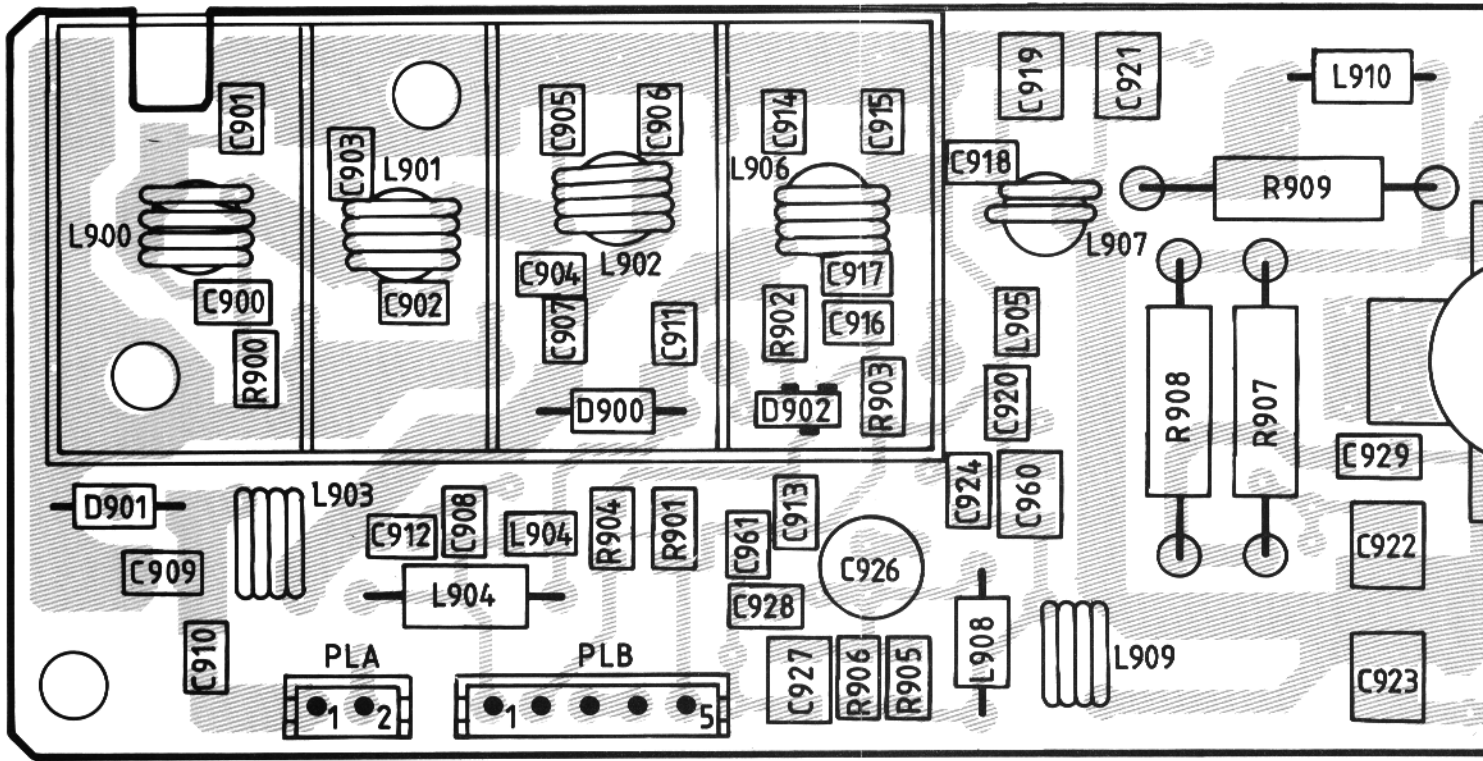


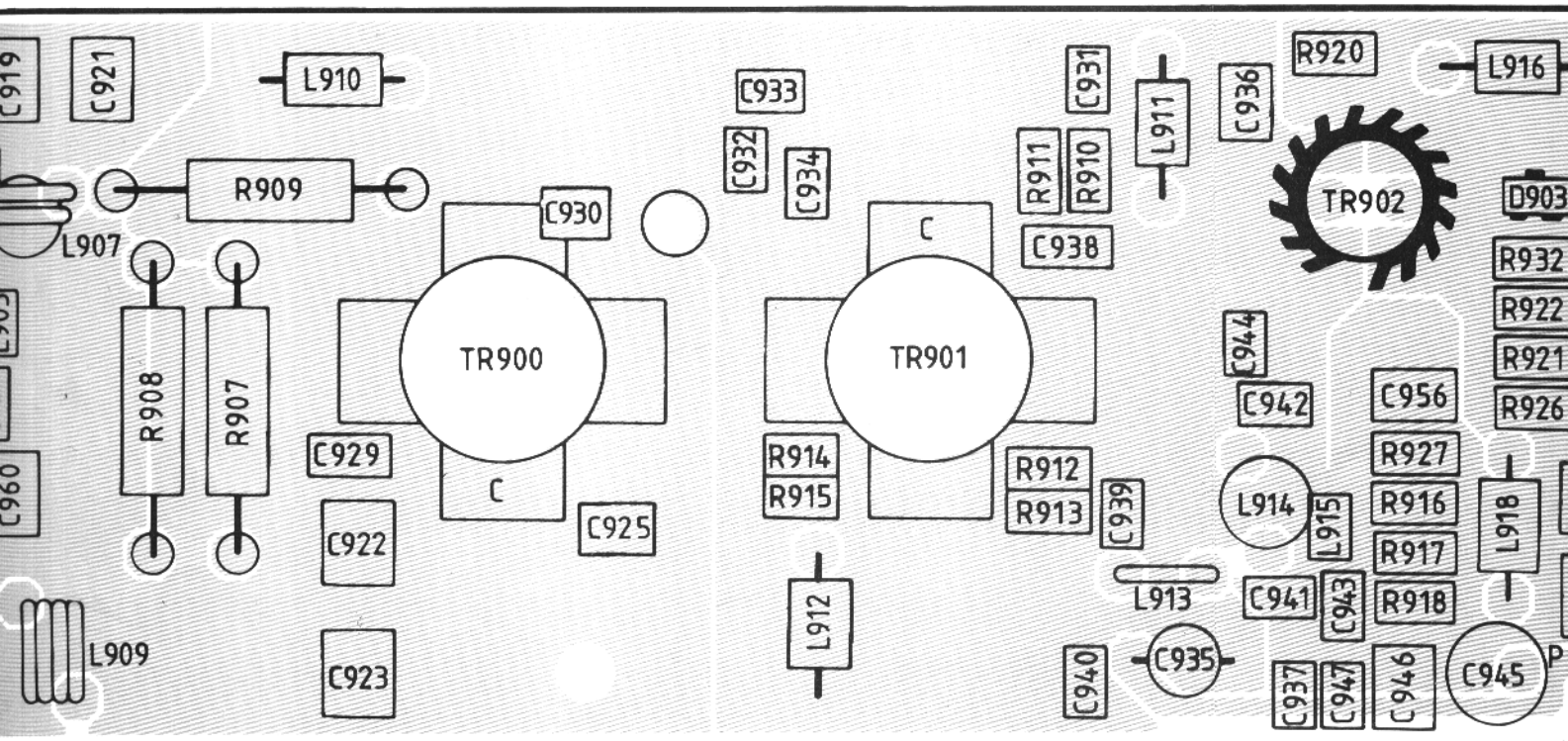
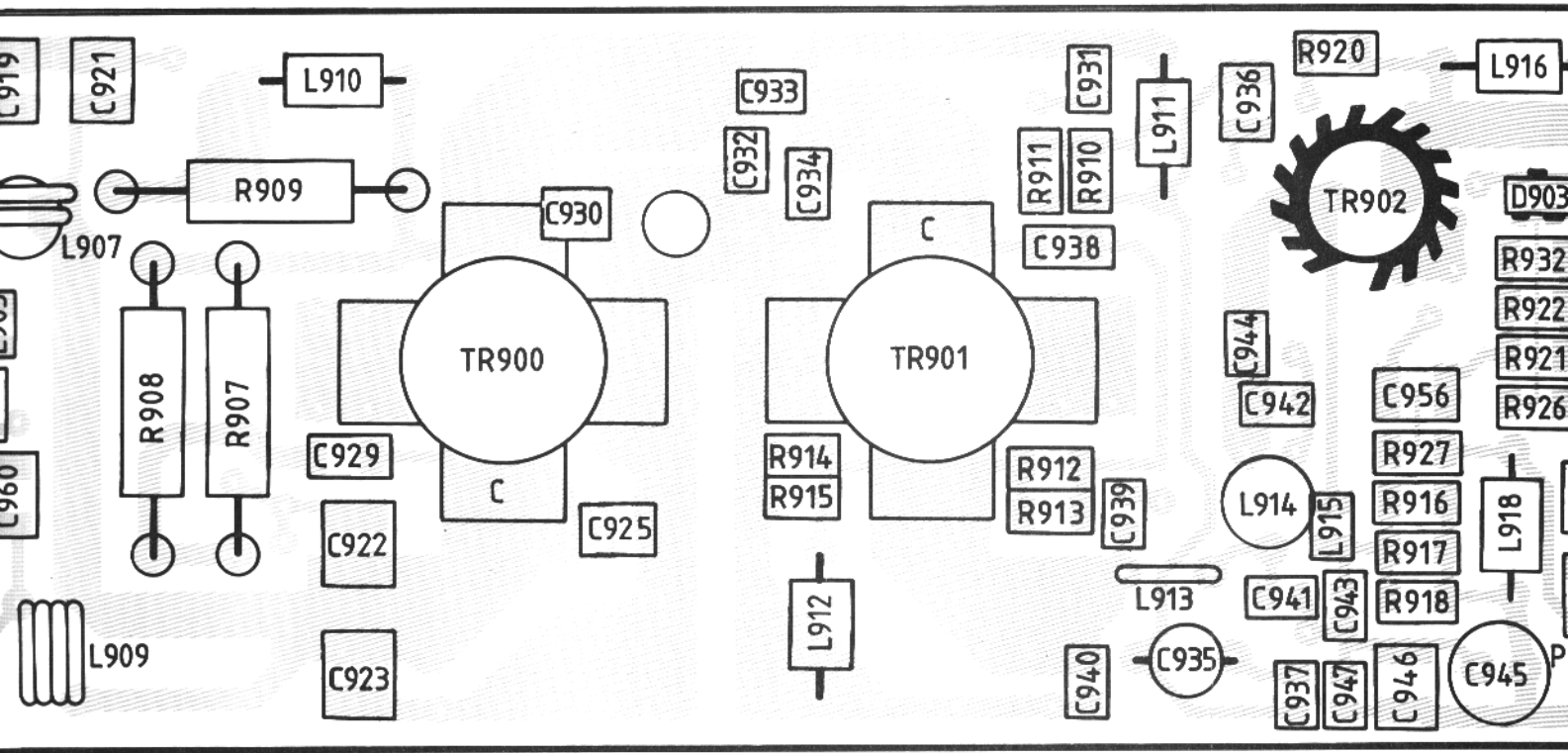


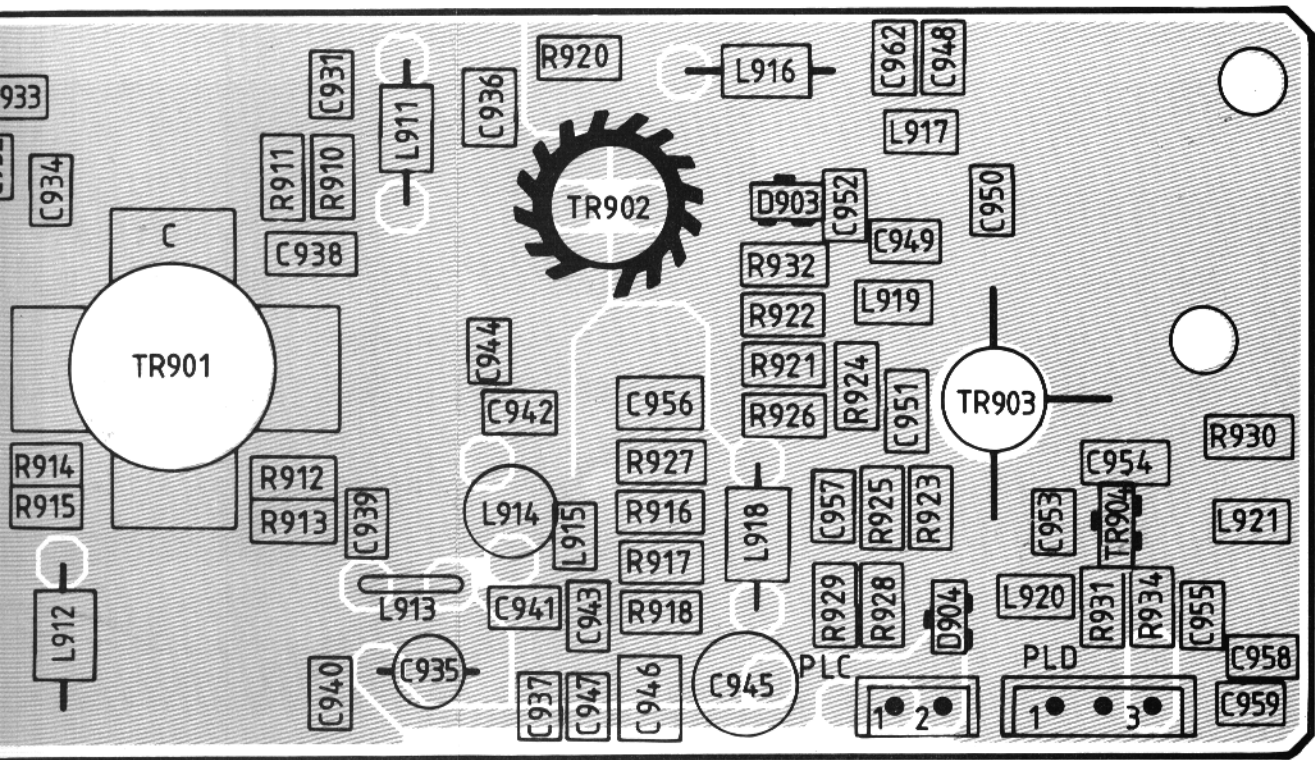
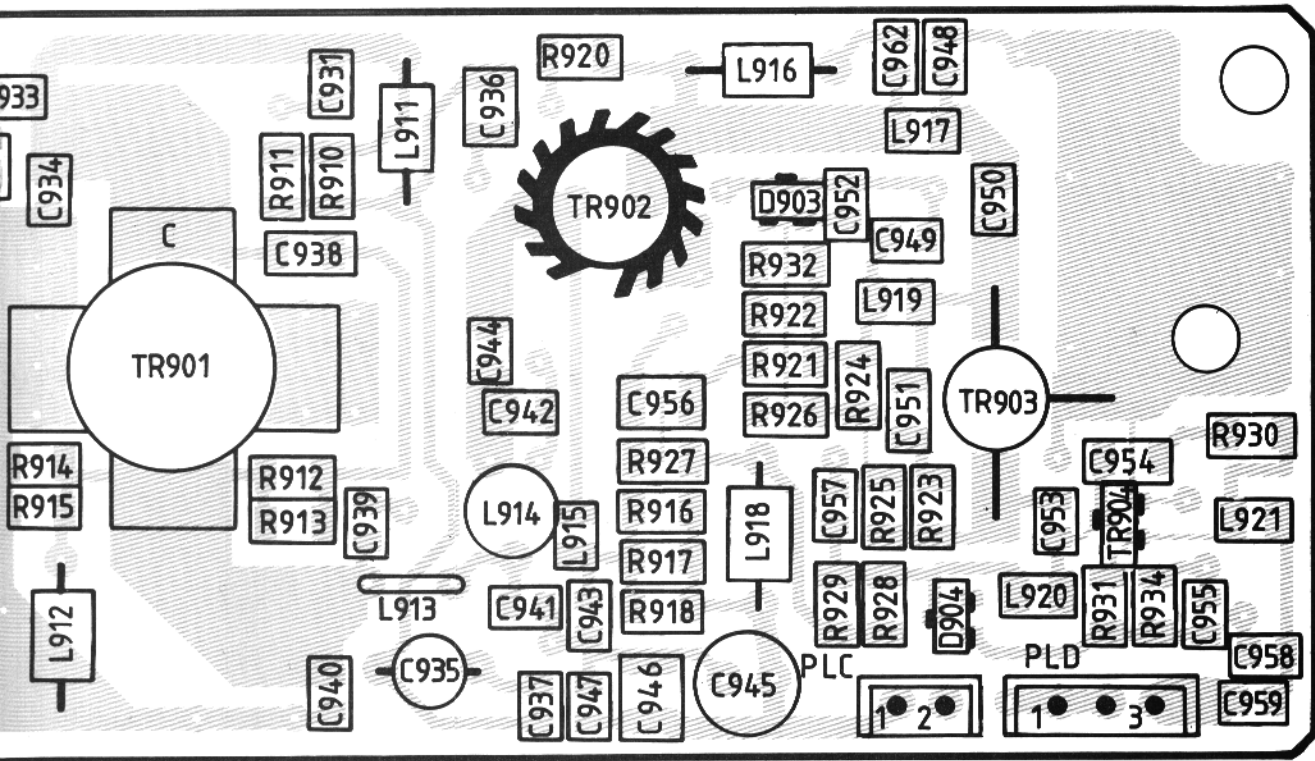
A2 E6535

FIG 6.11B TRANSM LOCATI



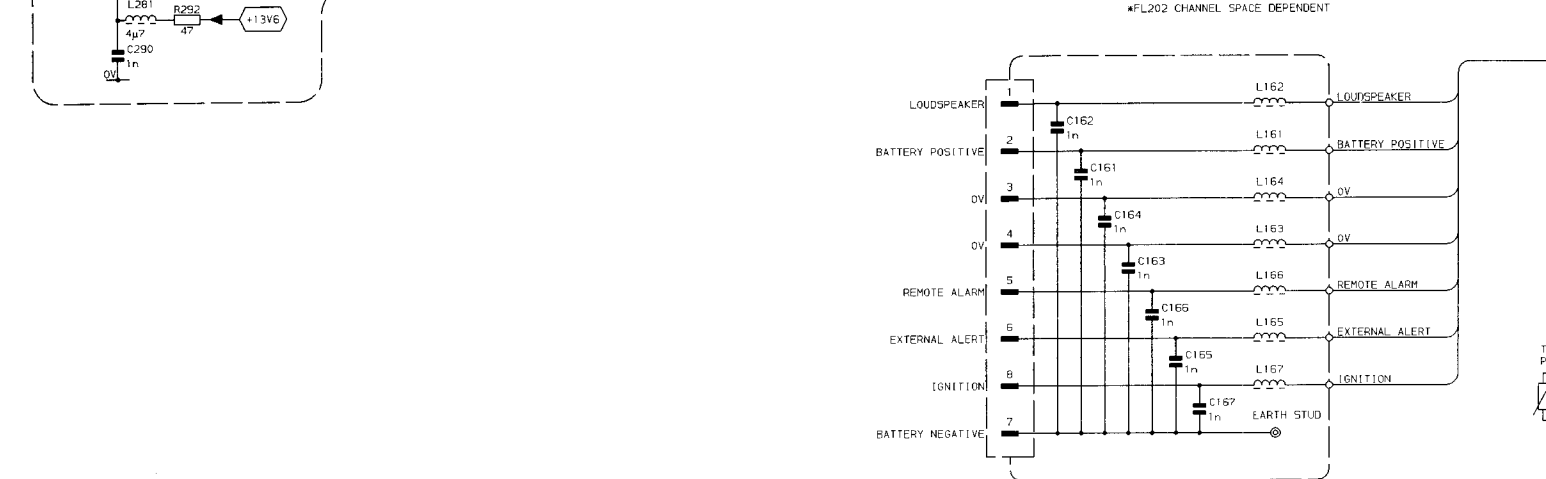
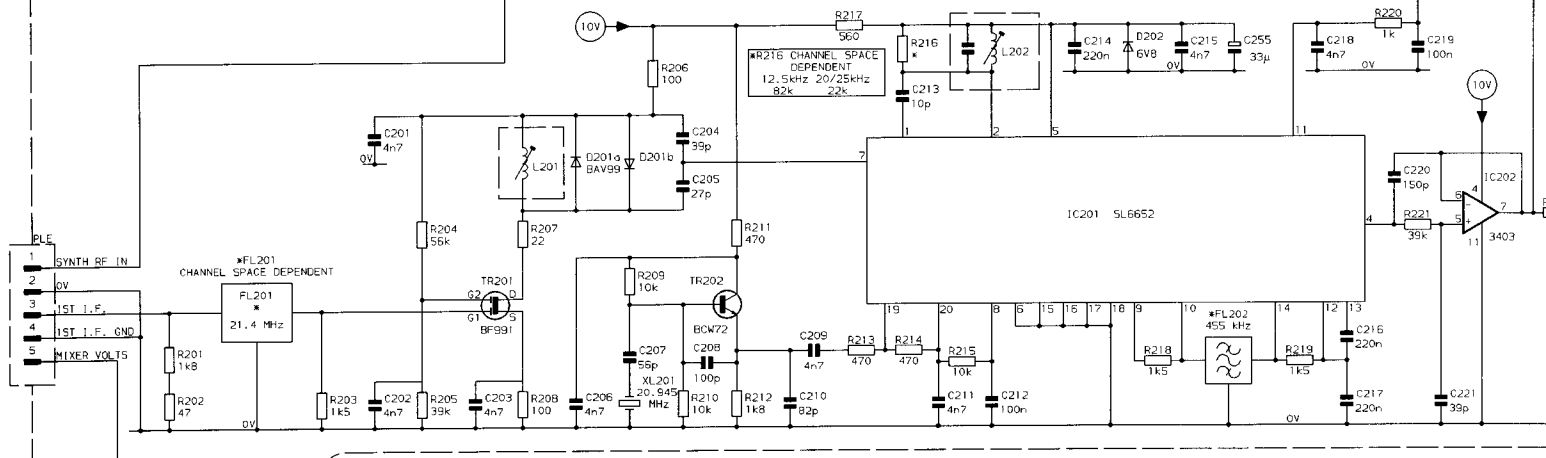
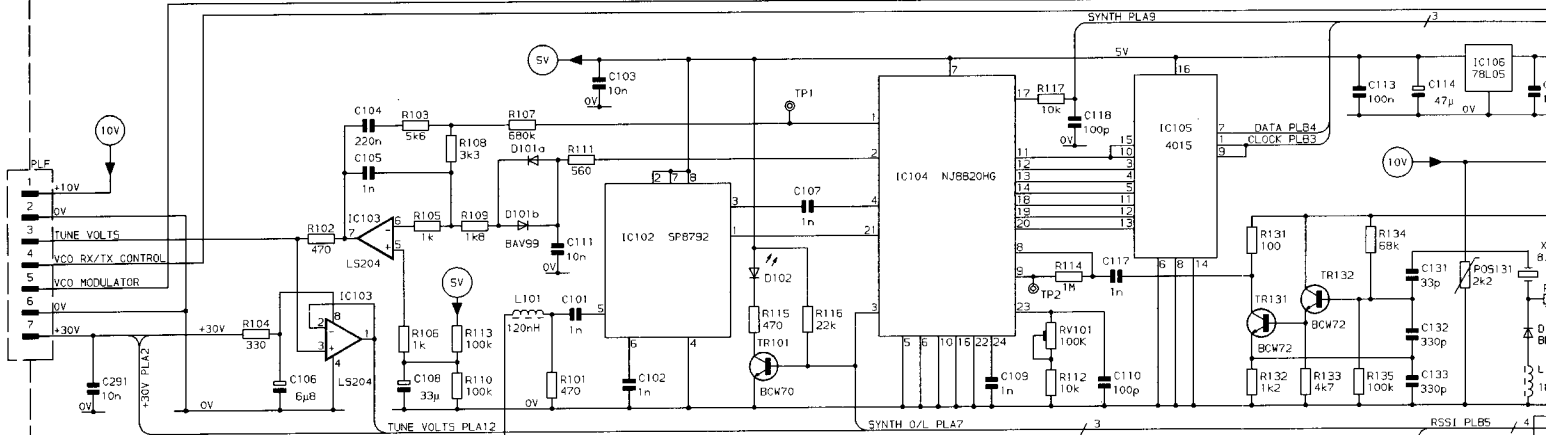
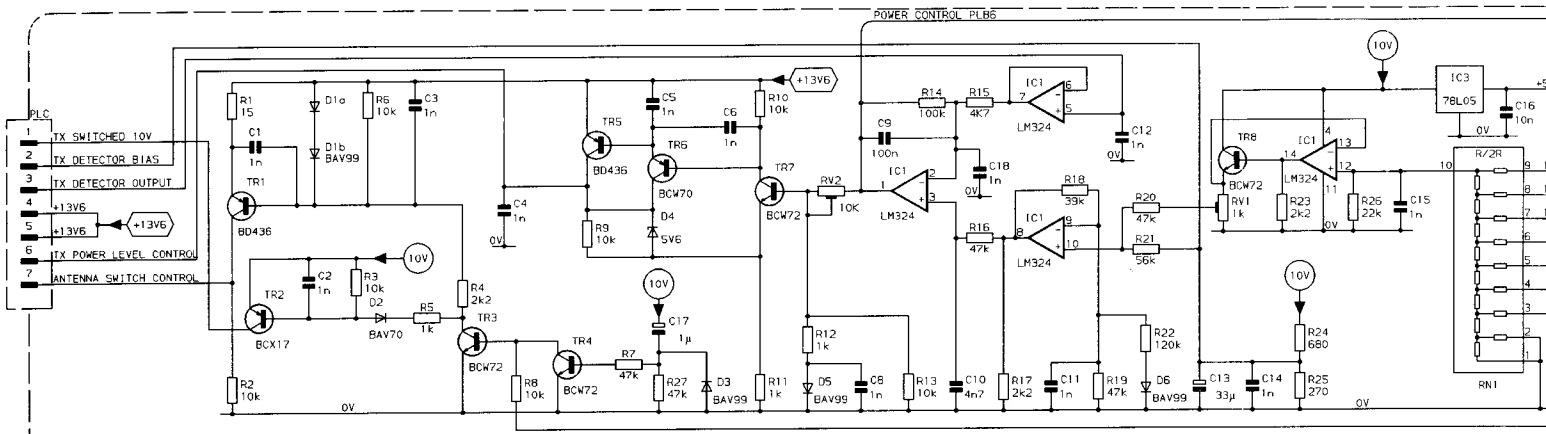


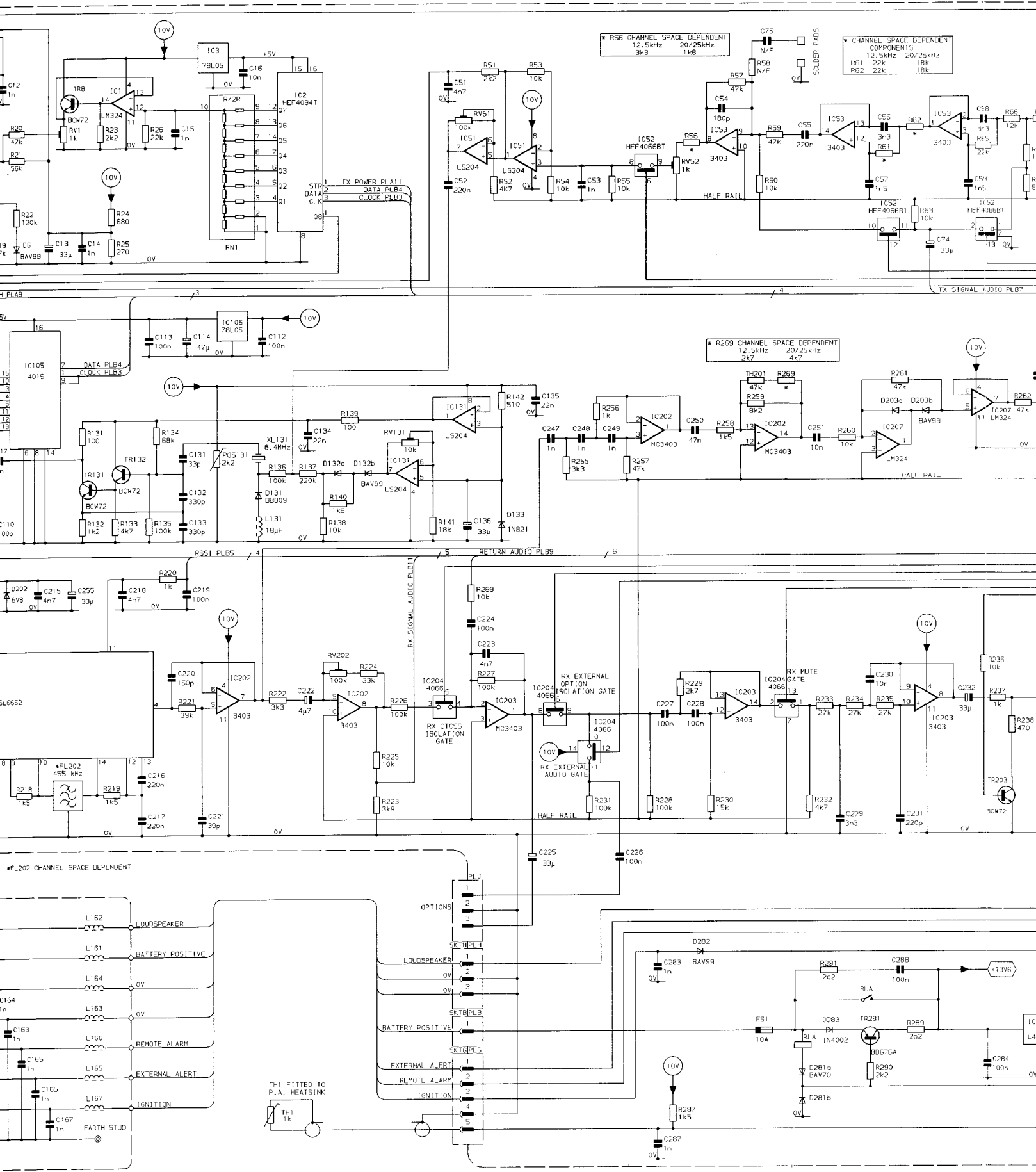




A2 E6540

FIG 6.8 TRANSMITTER PA CO  
LOCATION DI .GRAM



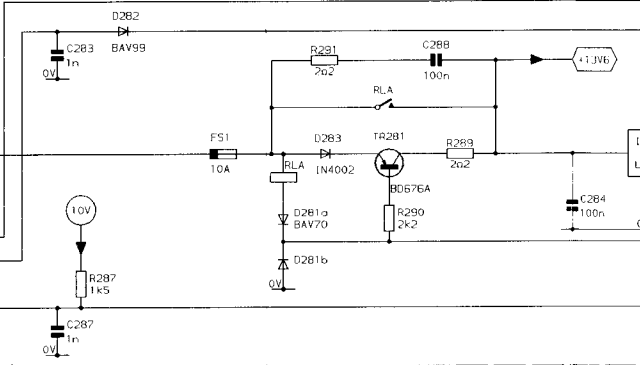
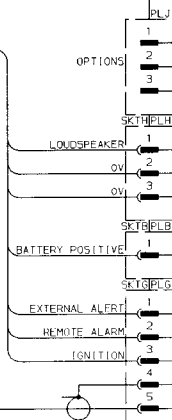
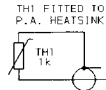
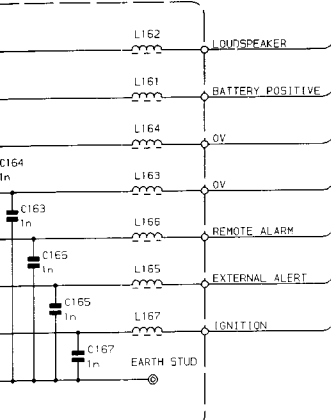


\*R56 CHANNEL SPACE DEPENDENT  
 12.5kHz 20/25kHz  
 3k3 1k8

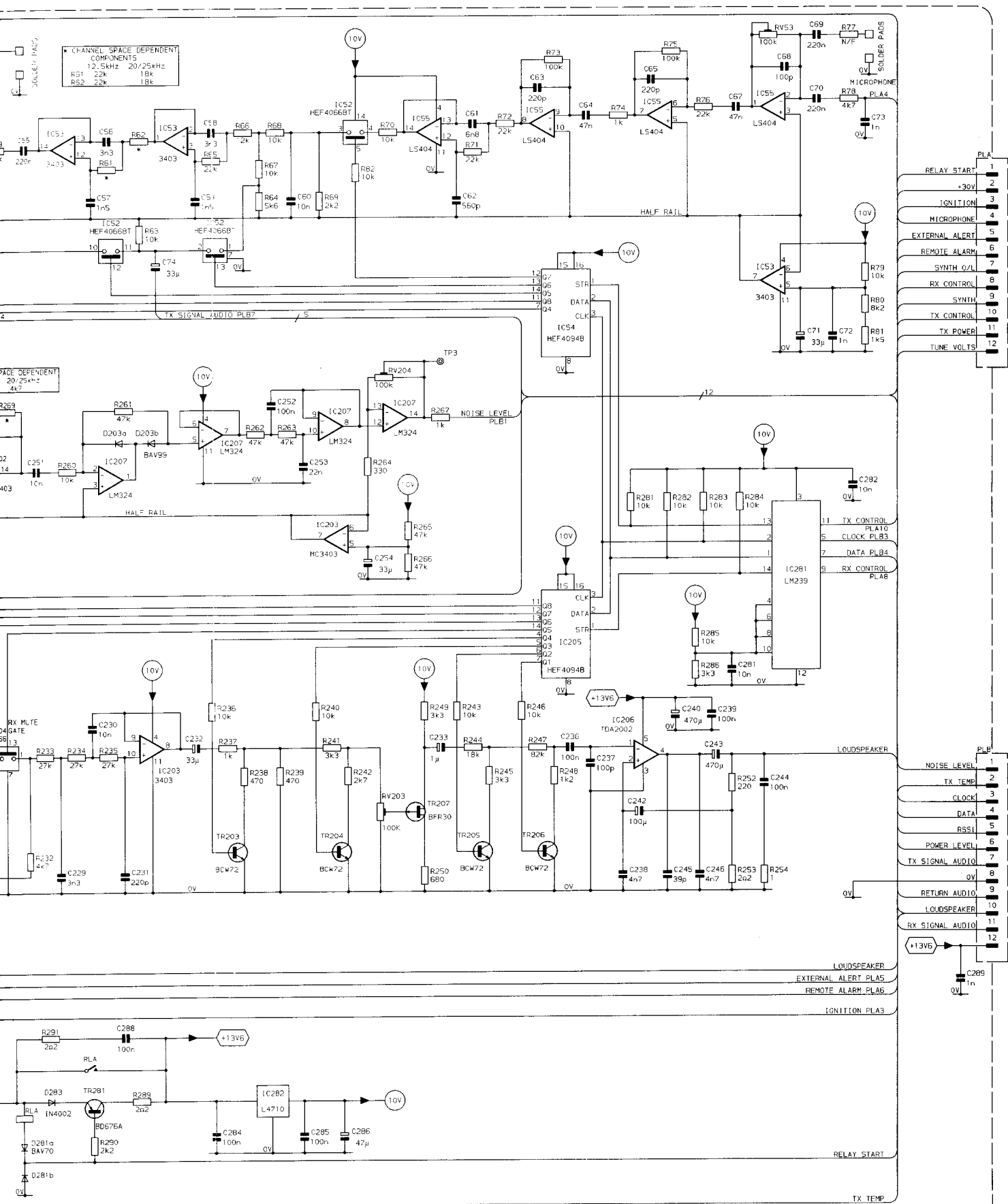
\*CHANNEL SPACE DEPENDENT COMPONENTS  
 12.5kHz 20/25kHz  
 R51 22k 18k  
 R52 22k 18k

\*R259 CHANNEL SPACE DEPENDENT  
 12.5kHz 20/25kHz  
 2k7 4k7

\*FL202 CHANNEL SPACE DEPENDENT



FIG

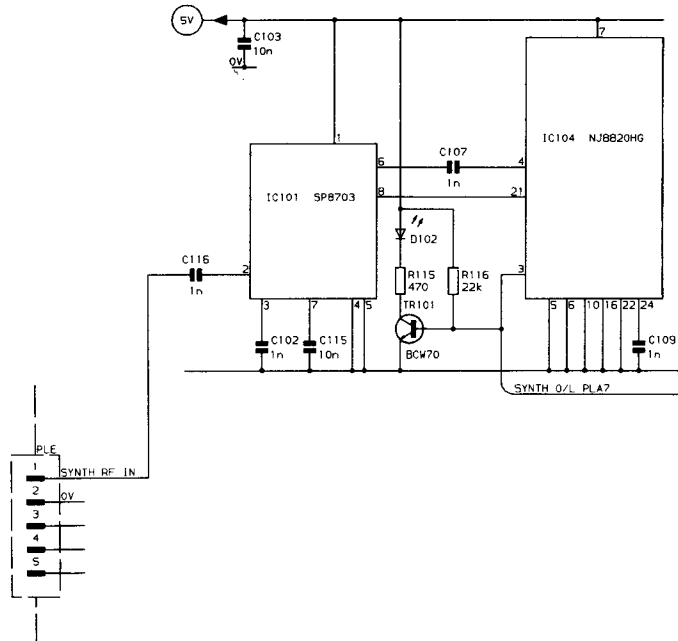


RELAY START	1
+30V	2
IGNITION	3
MICROPHONE	4
EXTERNAL ALERT	5
REMOTE ALARM	6
SYNTH O/L	7
RX CONTROL	8
SYNTH	9
TX CONTROL	10
TX POWER	11
TUNE VOLTS	12

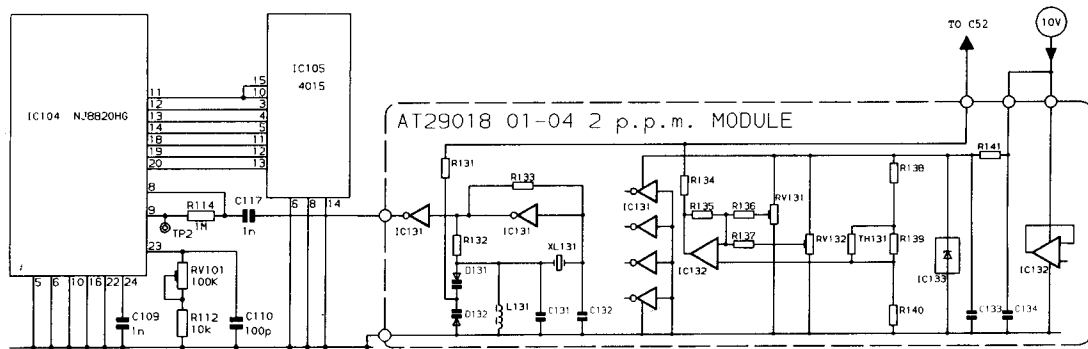
  

NOISE LEVEL	1
TX TEMP	2
CLOCK	3
DATA	4
RSST	5
POWER LEVEL	6
TX SIGNAL AUDIO	7
0V	8
RETURN AUDIO	9
LOUDSPEAKER	10
RX SIGNAL AUDIO	11
+13V6	12

FIG 6.12 ANALOGUE PWB CIRCUIT DIAGRAM

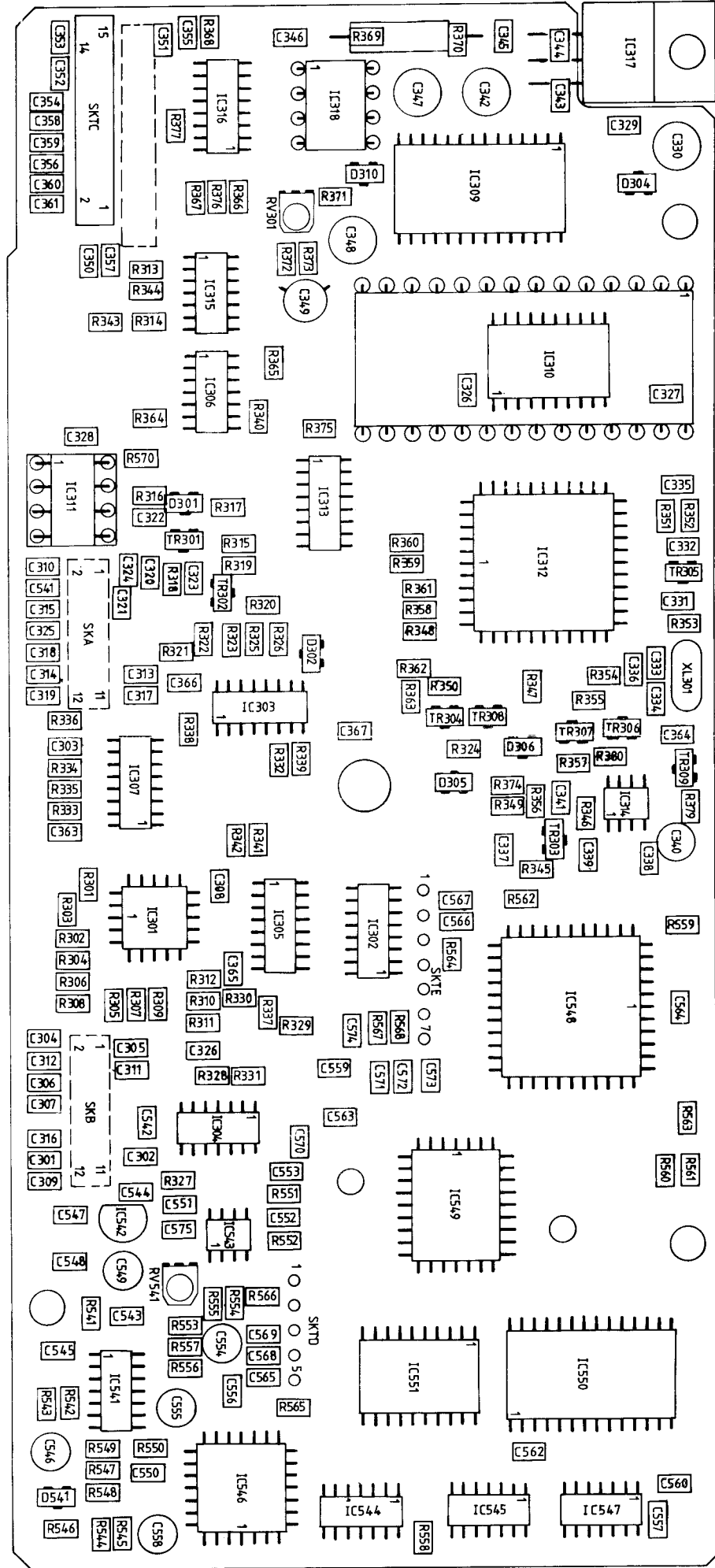
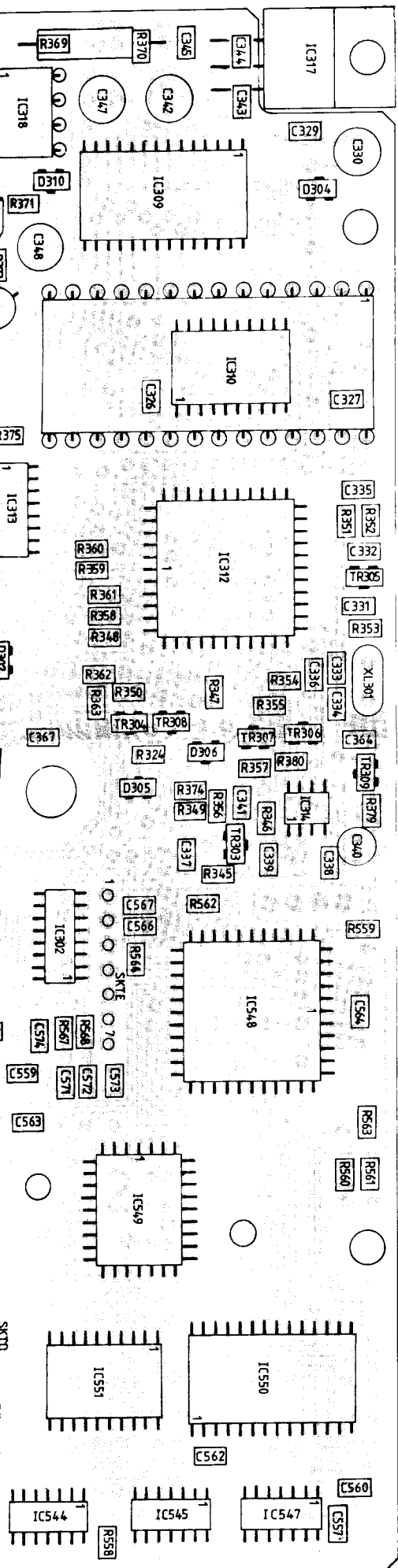


UHF PRESCALER (IC101)



±2ppm REFERENCE OSCILLATOR MODULE

FIG 6.13 ANALOGUE PWB CIRCUIT VARIATIONS



1	2	3	4	5	6	7	8	9	10	11	12	13
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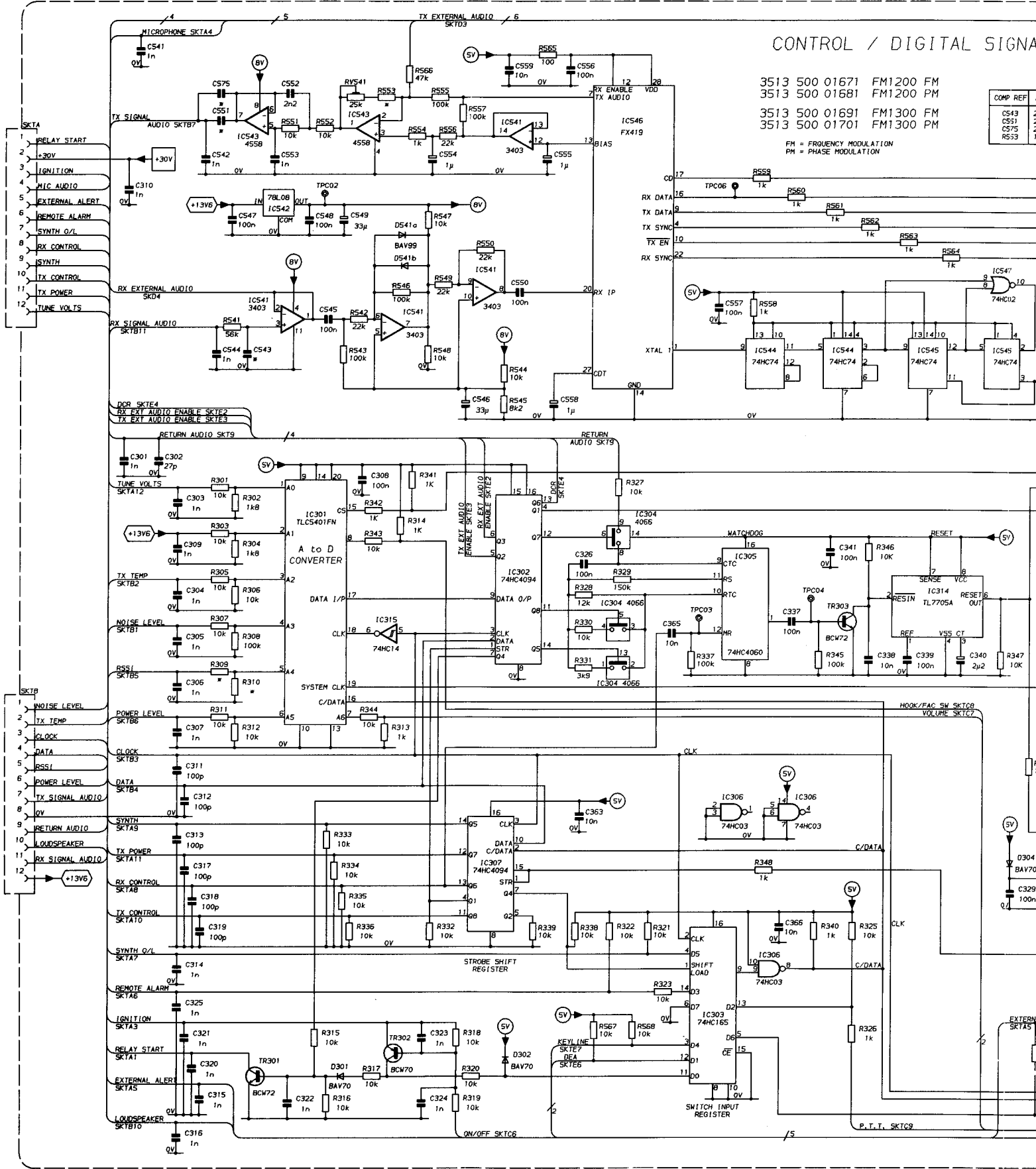


CONTROL / DIGITAL SIGNAL

3513 500 01671 FM1200 FM  
3513 500 01681 FM1200 PM  
3513 500 01691 FM1300 FM  
3513 500 01701 FM1300 PM

COMP	REF
CS43	1
CS51	2
CS75	3
RS53	4

FM = FREQUENCY MODULATION  
PM = PHASE MODULATION



# CONTROL / DIGITAL SIGNALLING ASSEMBLY

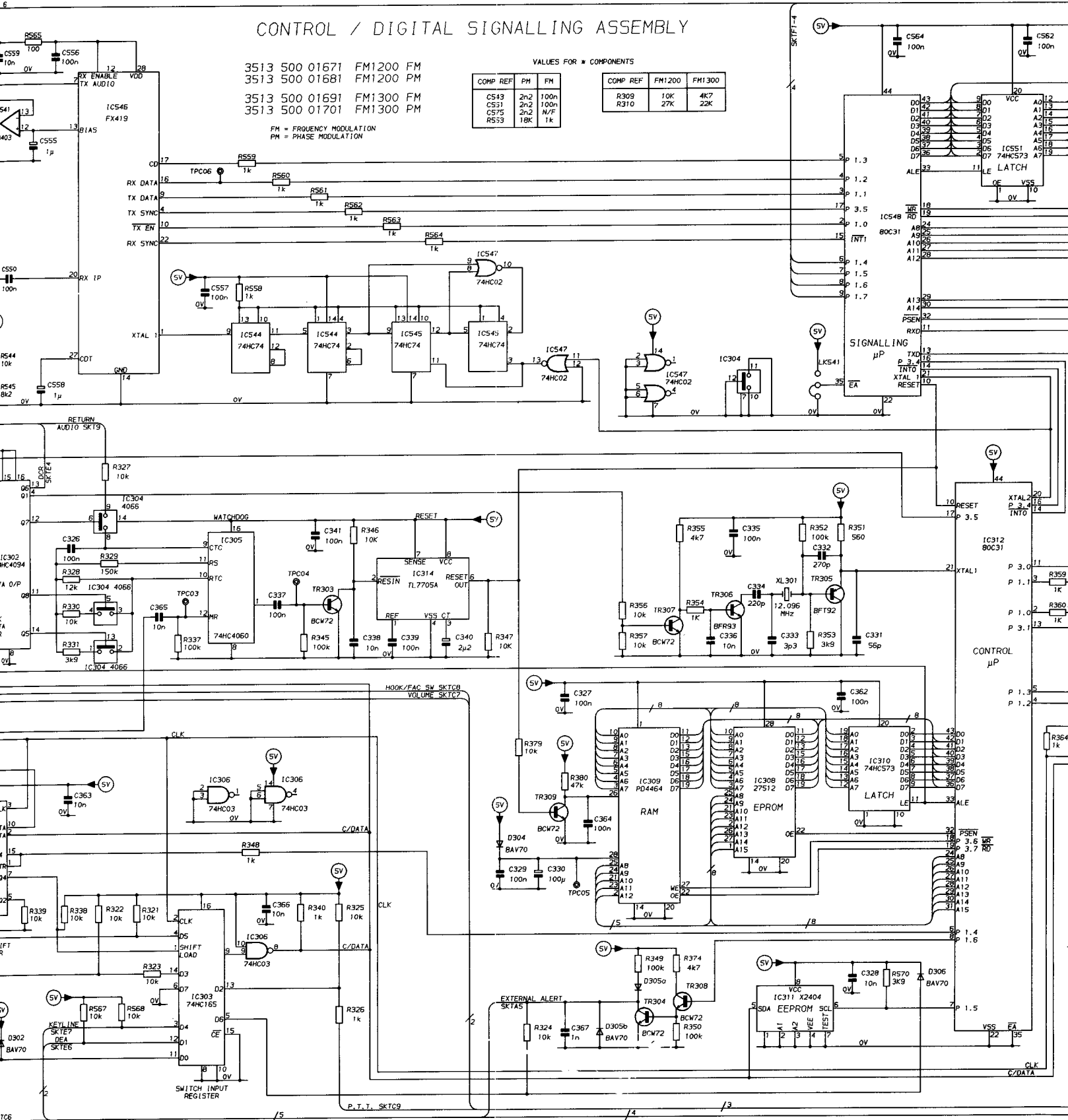
3513 500 01671 FM1200 FM  
 3513 500 01681 FM1200 PM  
 3513 500 01691 FM1300 FM  
 3513 500 01701 FM1300 PM

FM = FREQUENCY MODULATION  
 PM = PHASE MODULATION

VALUES FOR \* COMPONENTS

COMP REF	PM	FM
C543	2n2	100n
C531	2n2	100n
C575	2n2	N/F
R553	18K	1K

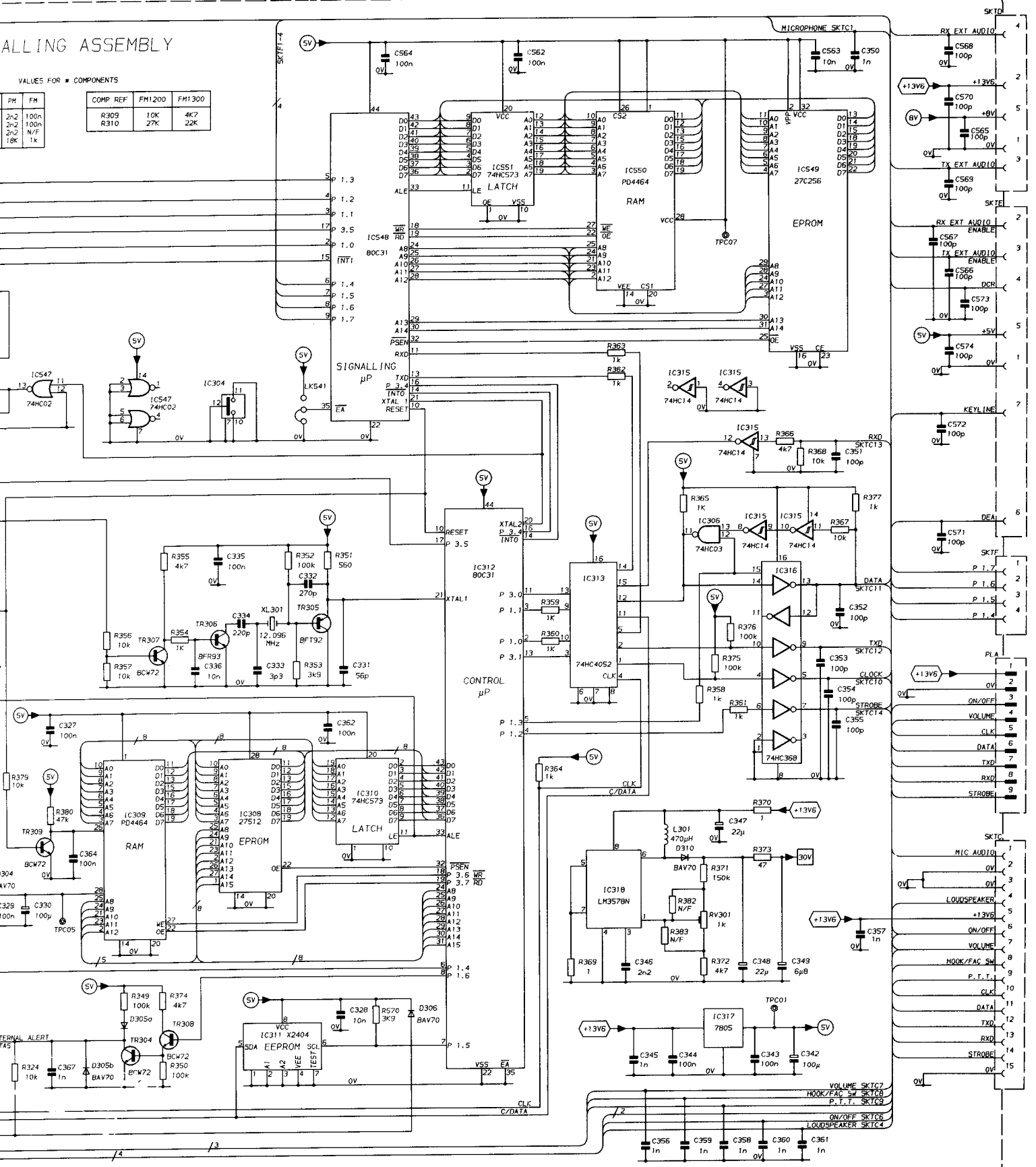
COMP REF	FM1200	FM1300
R309	10K	4K7
R310	27K	22K



# ALLING ASSEMBLY

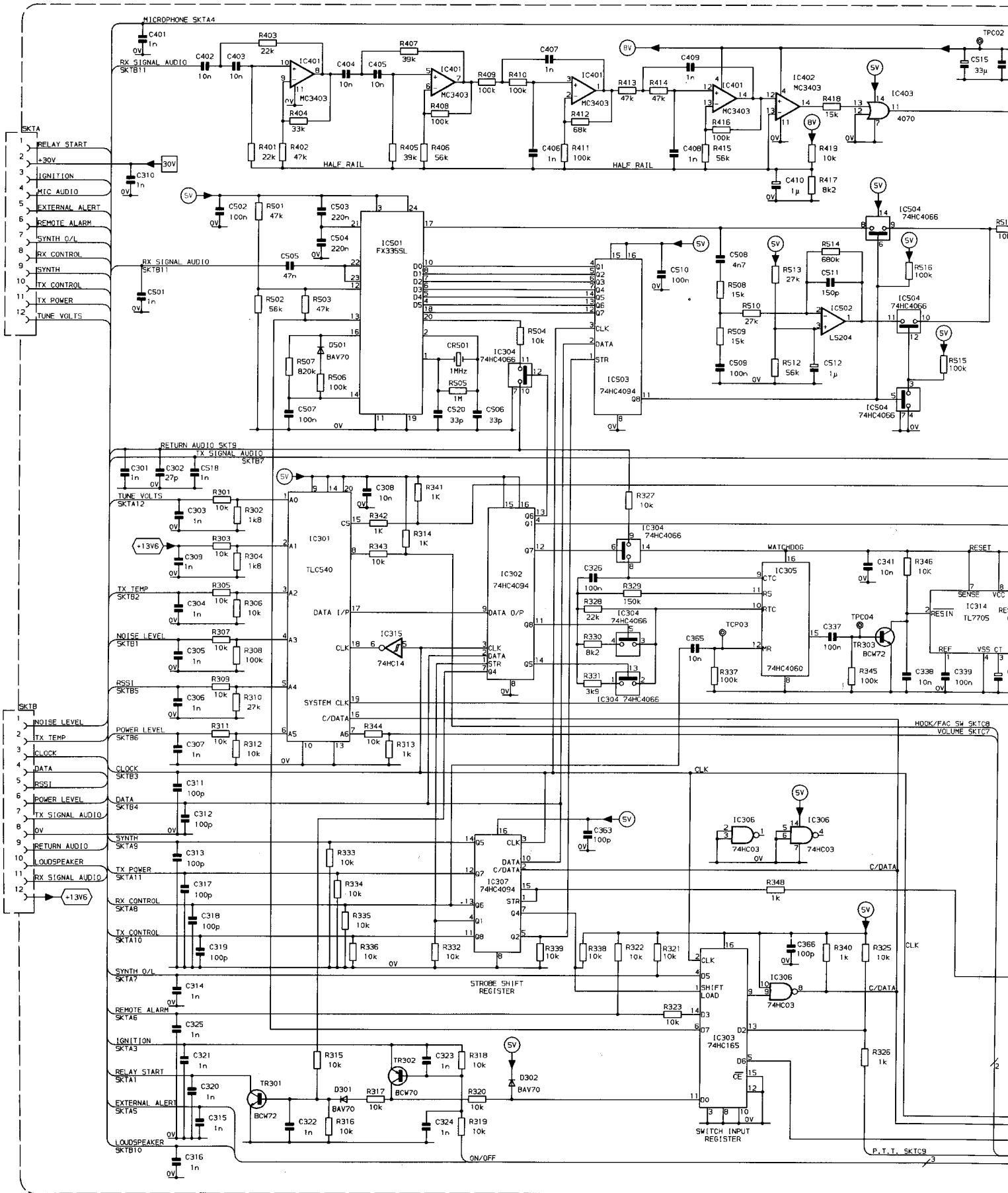
VALUES FOR \* COMPONENTS

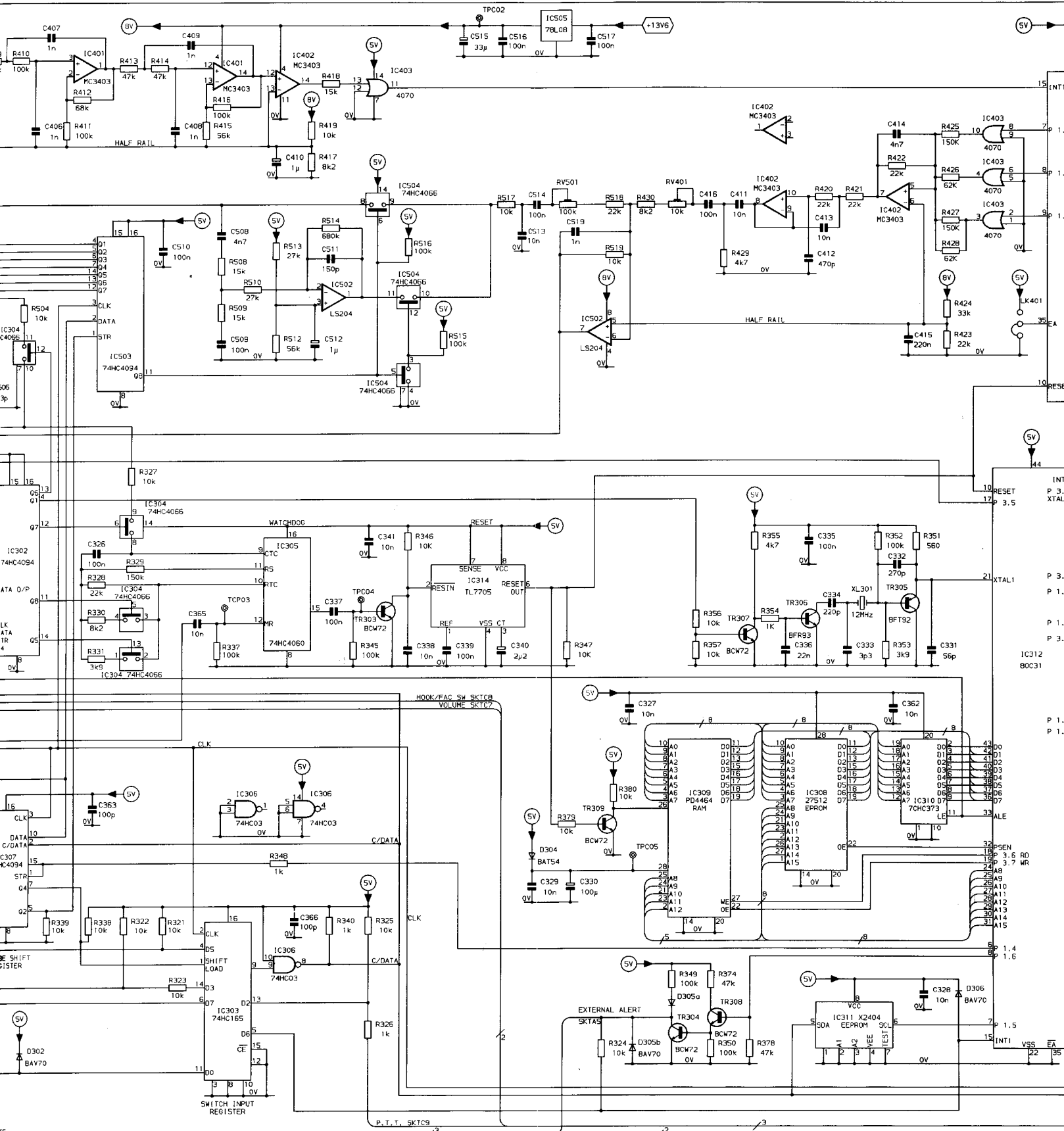
PM	FM	COMP	REF	FM1200	FM1300
2n2	100n	R309		10K	4K7
2n2	100n	R310		27K	22K
2n2	N/F				
18K	1k				



**FIG 6.2 CONTROL/DIGITAL SIGNALLING PCB CIRCUIT DIAGRAM**

# CONTROL PWB





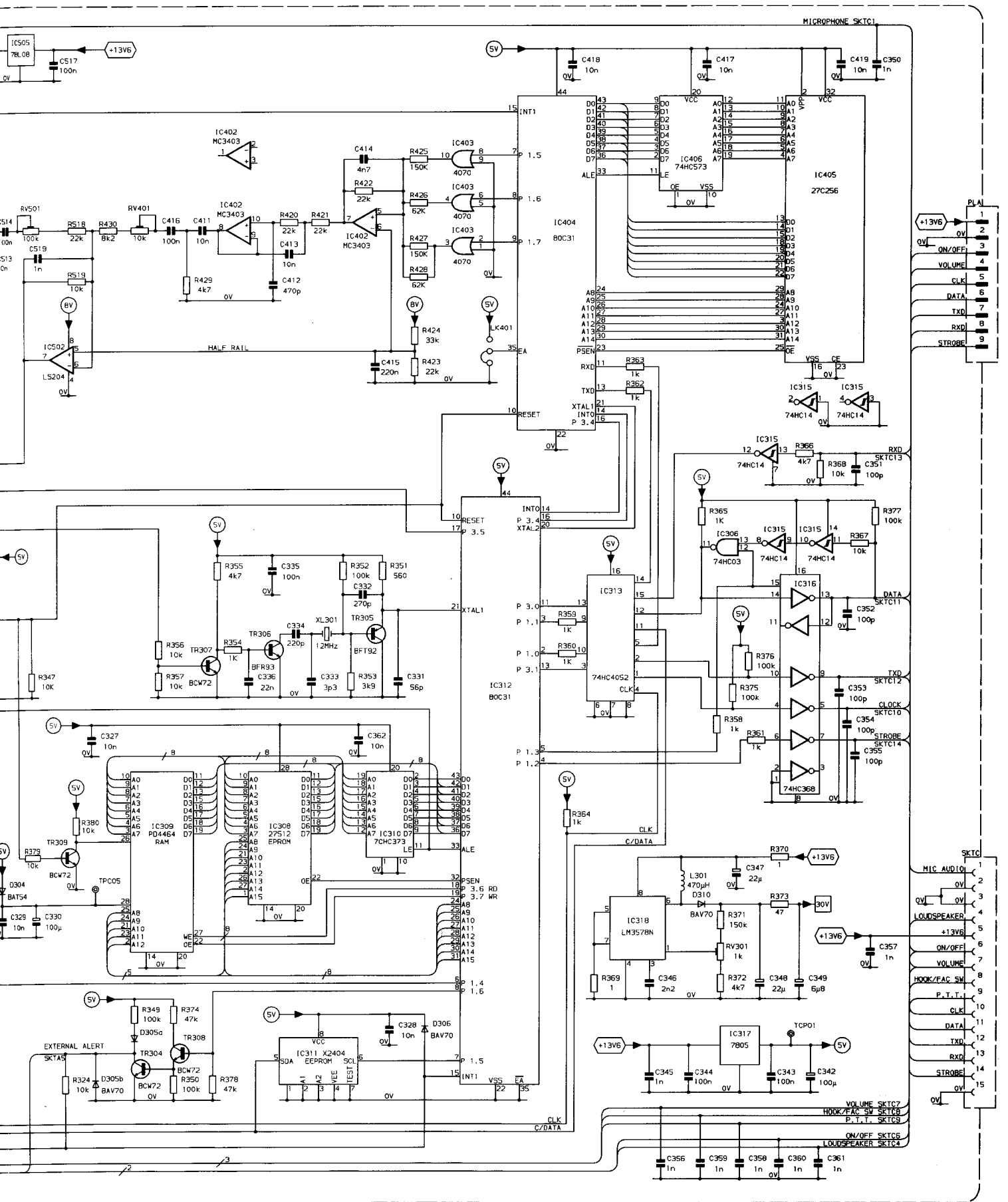
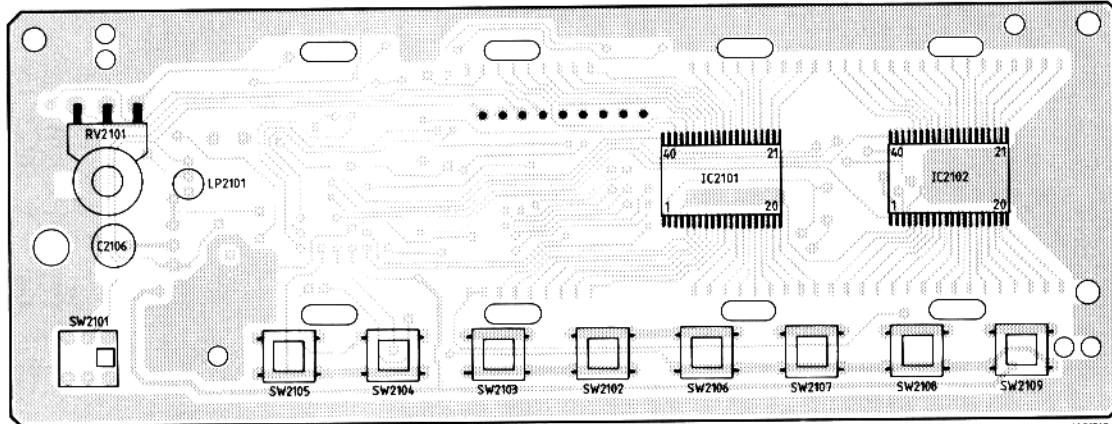
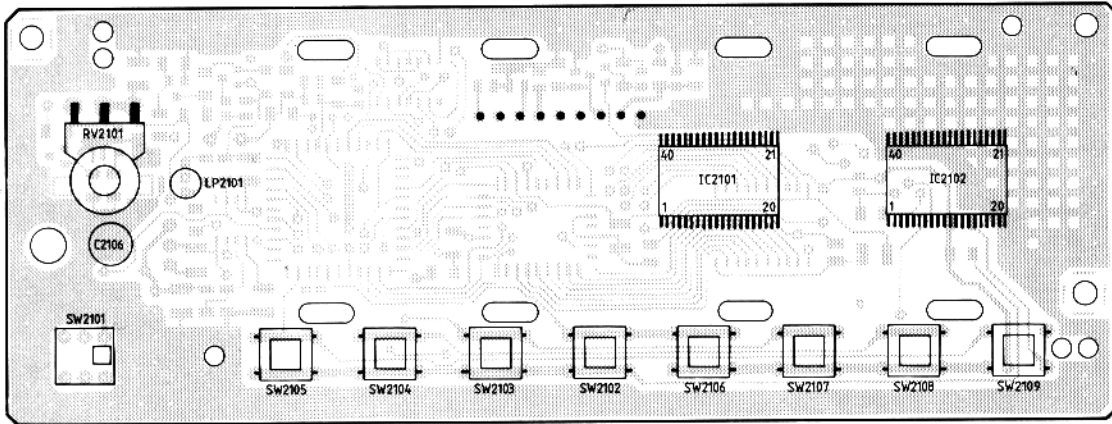
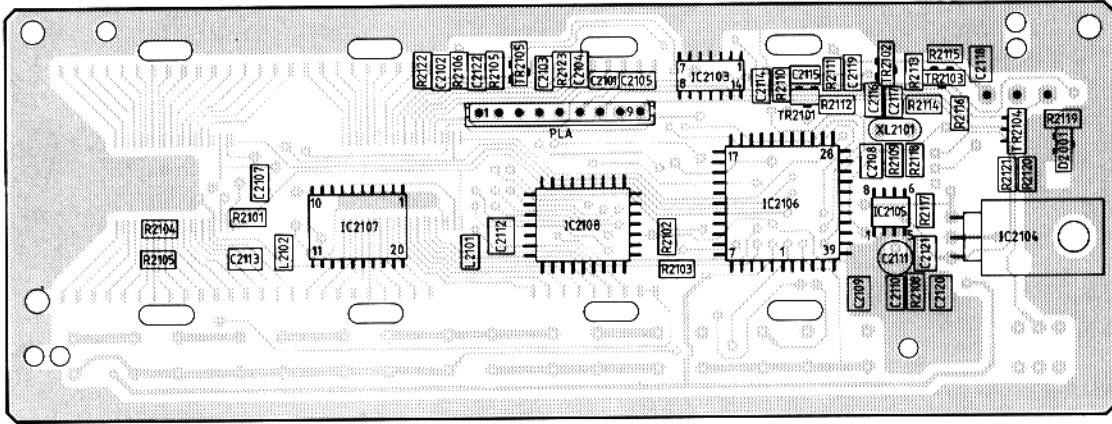
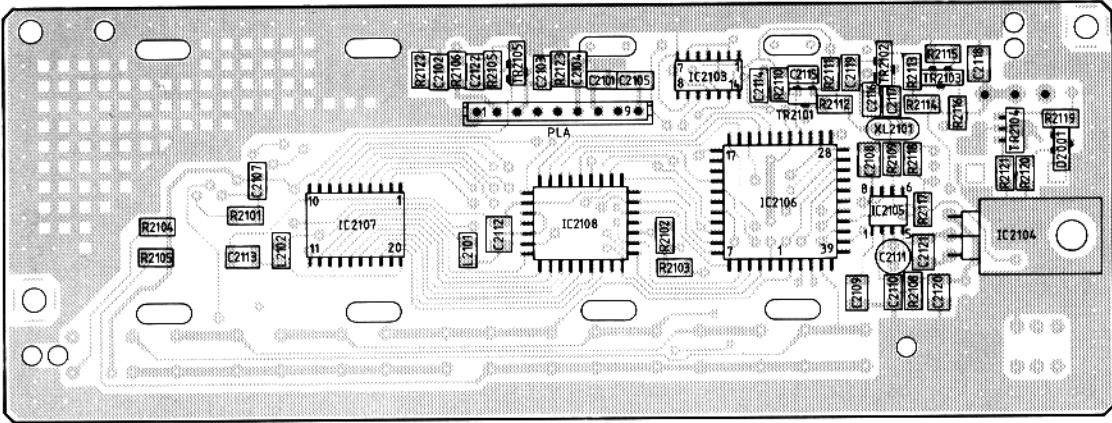


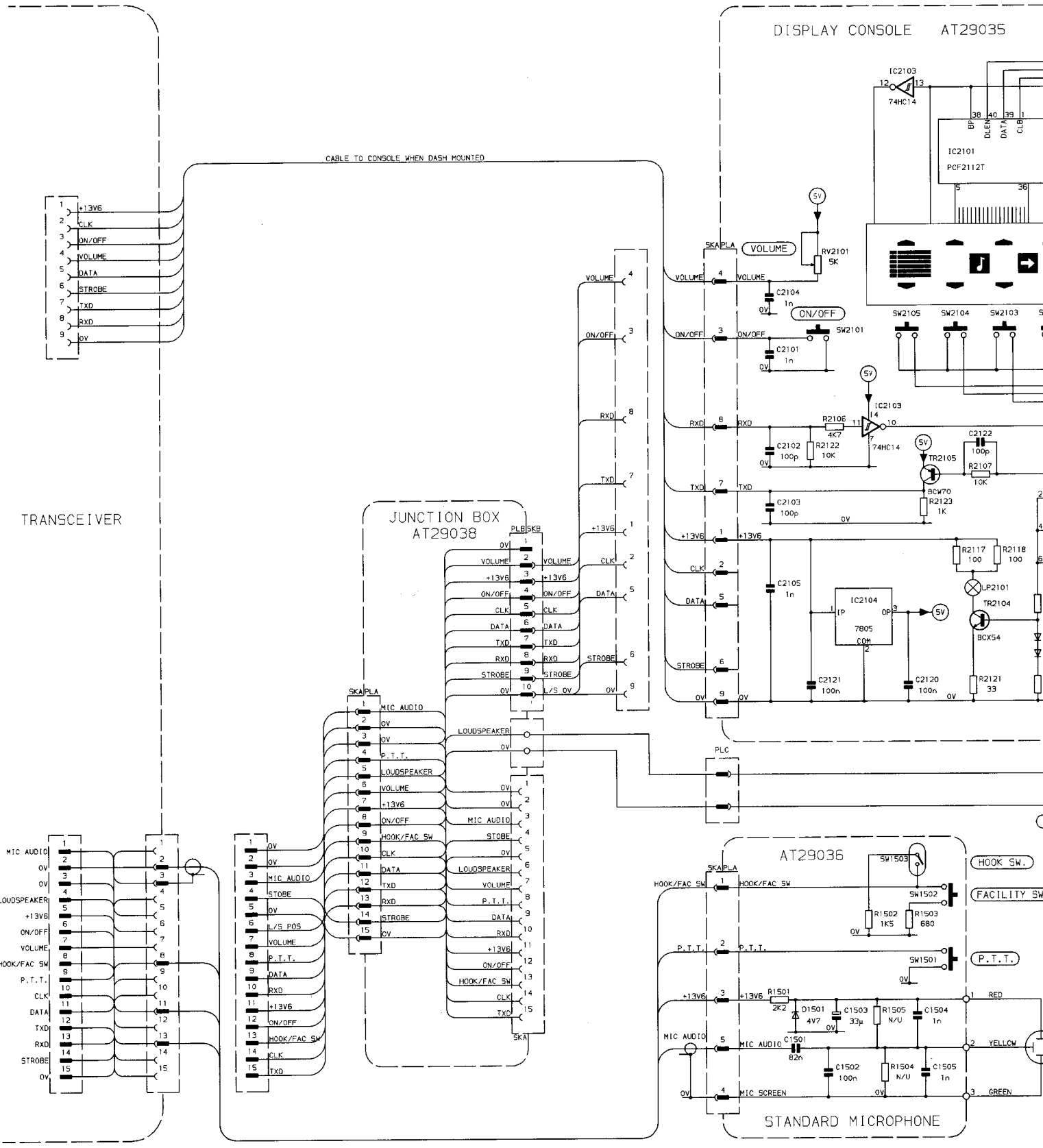
FIG 6.14 CONTROL PWB CIRCUIT DIAGRAM



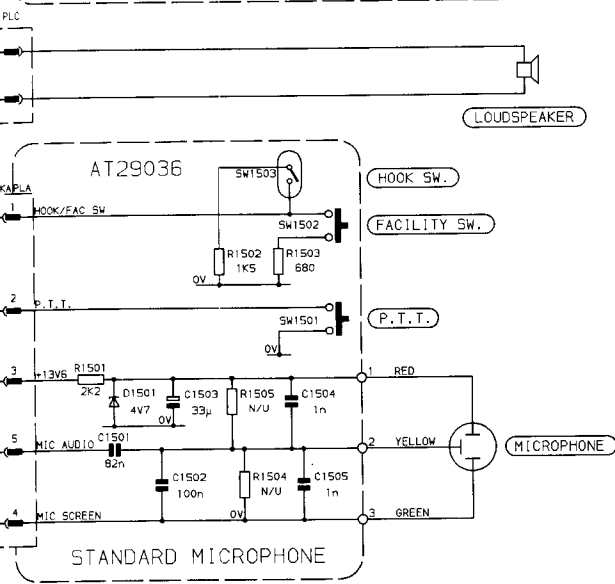
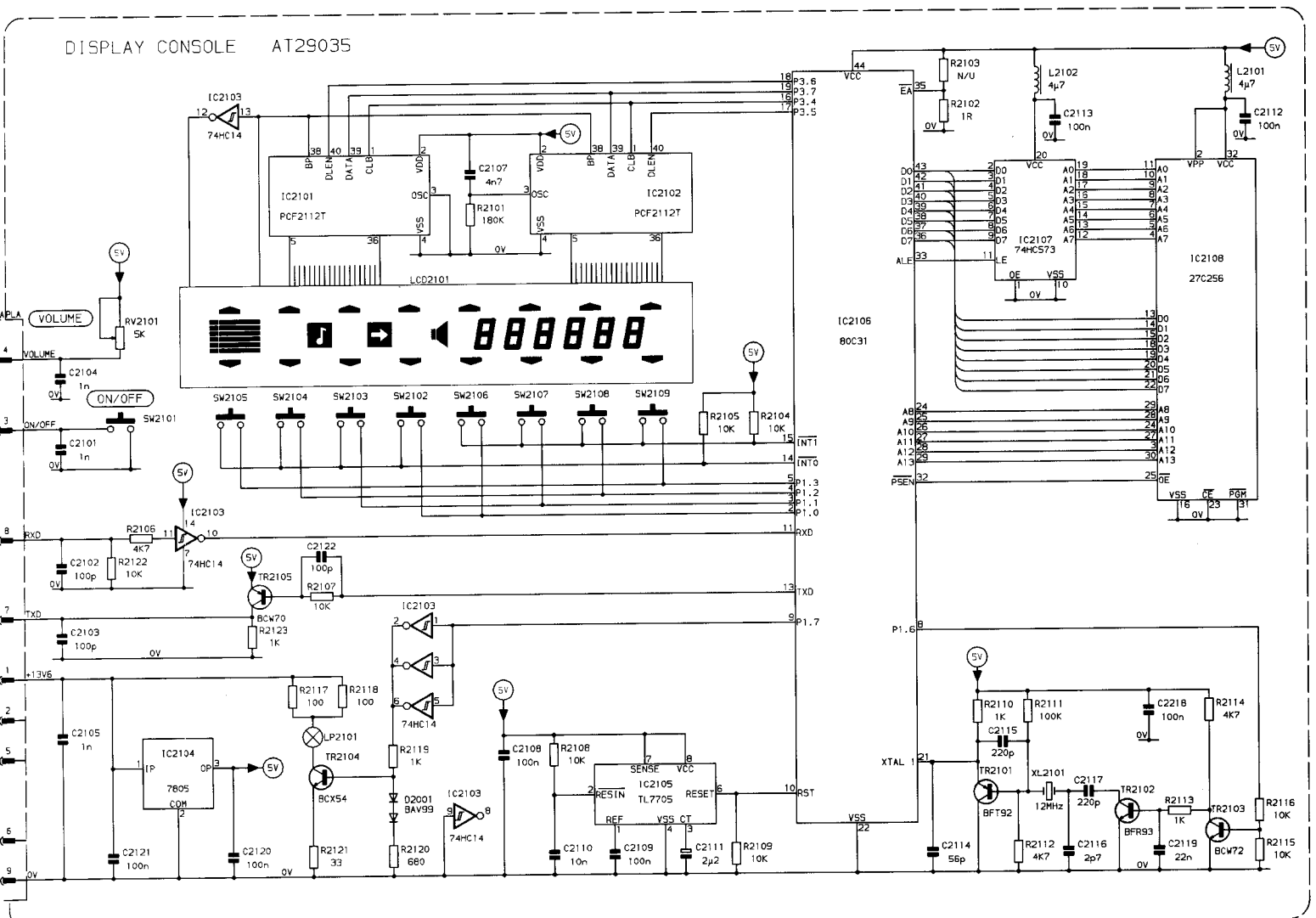
AT 84541

FIG 6.15 DISPLAY CONSOLE COMPONENT LOCATION DIAGRAM





DISPLAY CONSOLE AT29035



- NOTES
1. CONSOLE AND MICROPHONE SHOWN IN DASH MOUNT CONFIGURATION.
  2. LOUDESPEAKER SHOWN IN REMOTE MOUNT CONFIGURATION.

FIG 6.16 DISPLAY CONSOLE & JUNCTION BOX CIRCUIT DIAGRAM

1	2	3	4	5	6	7	8	9
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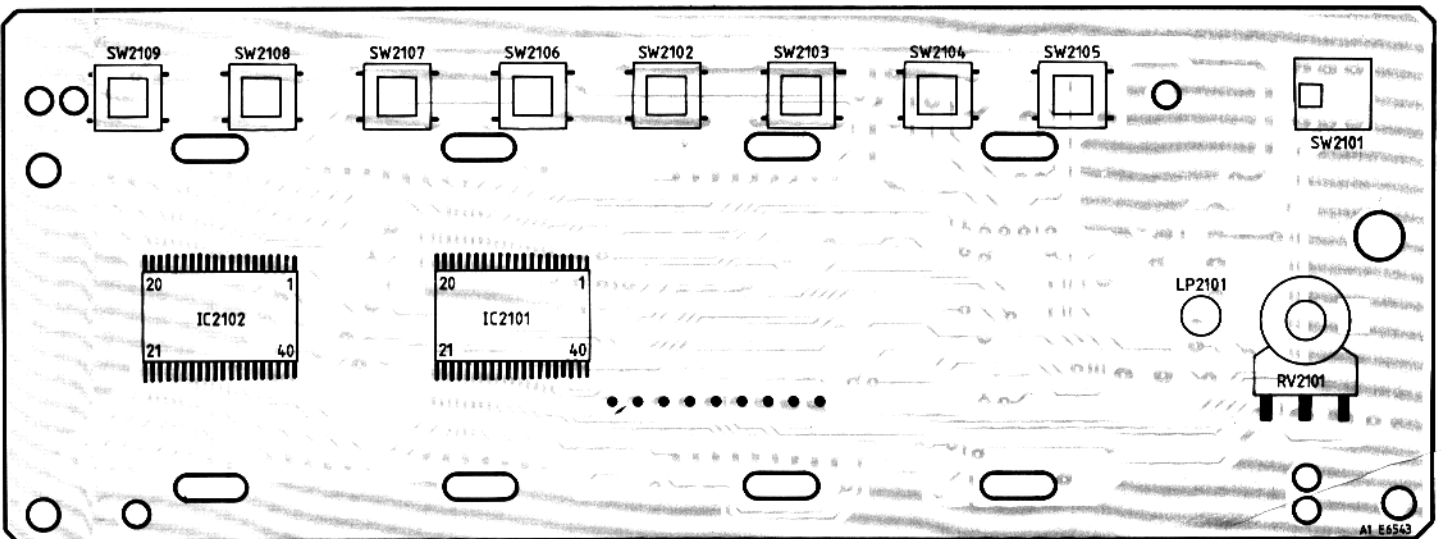
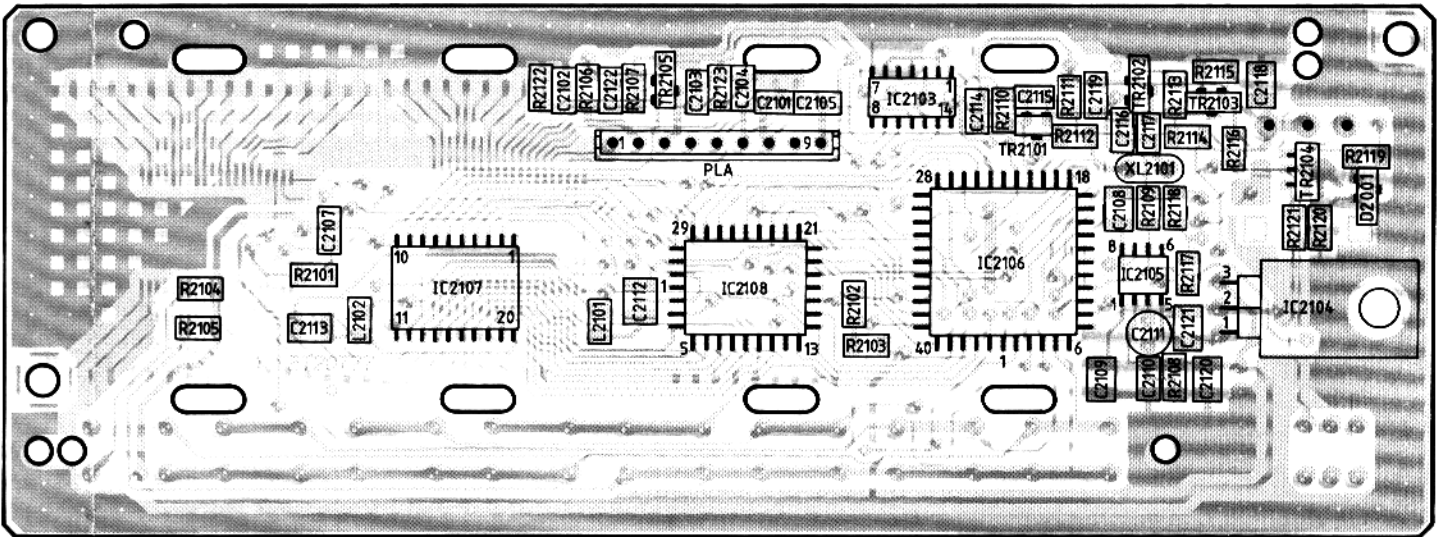
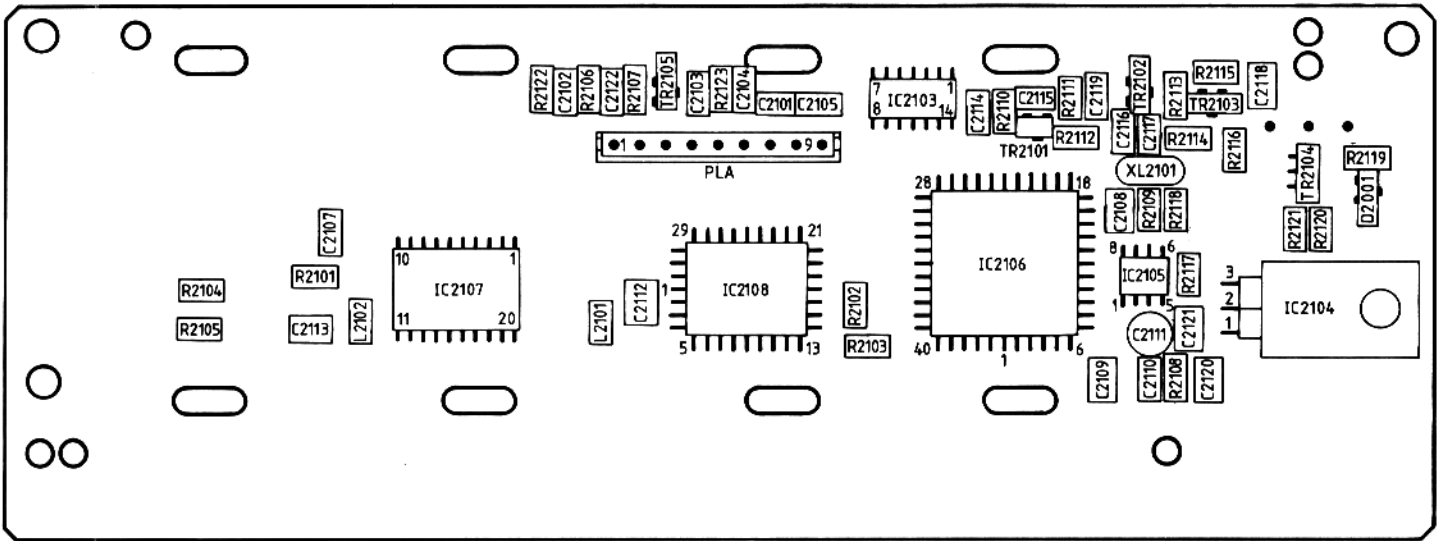
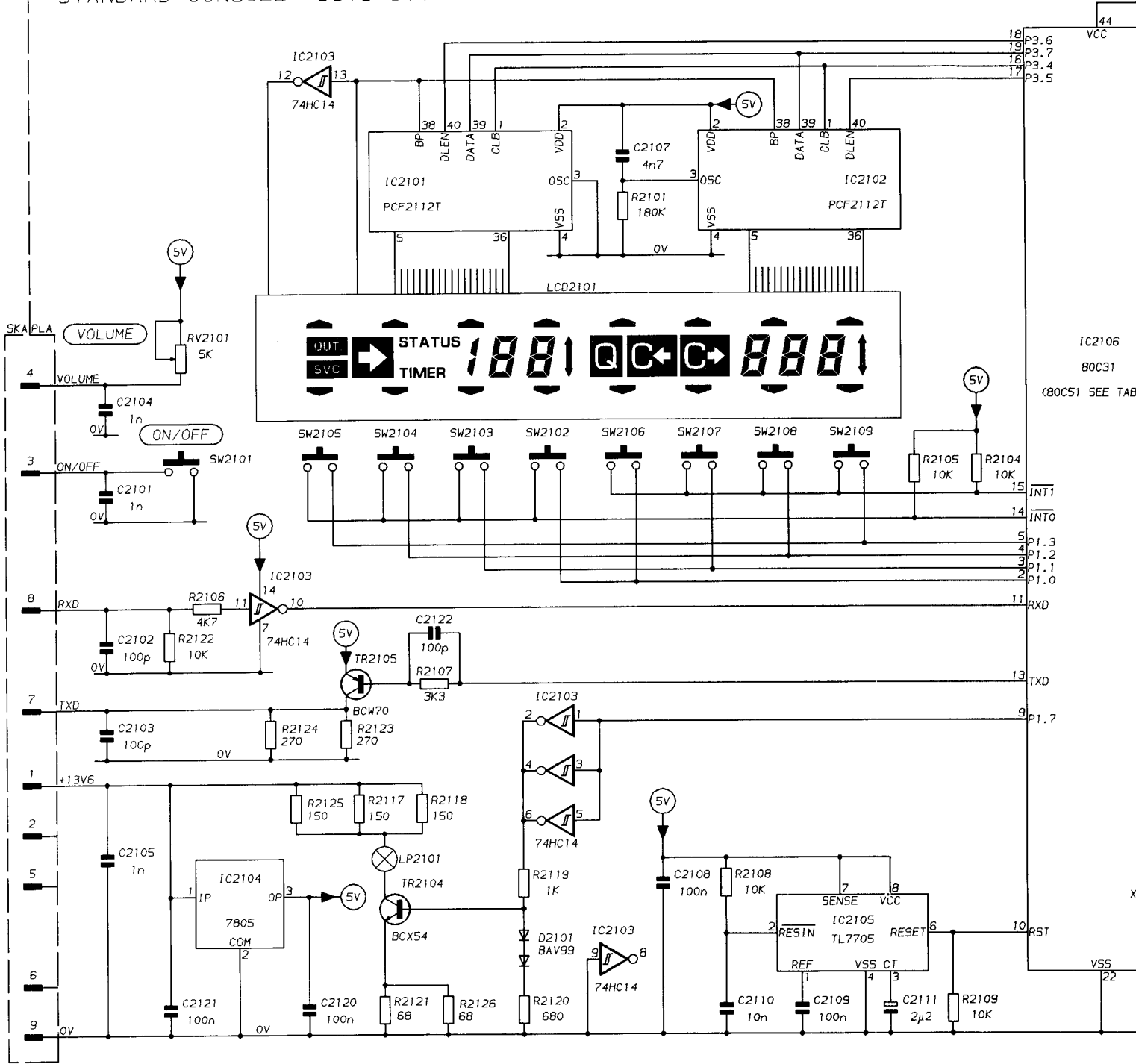


FIG 6.5 FM1200/FM1300 STANDARD CONSOLE COMPONENT LOCATION DIAGRAM

STANDARD CONSOLE 3513 500 00702

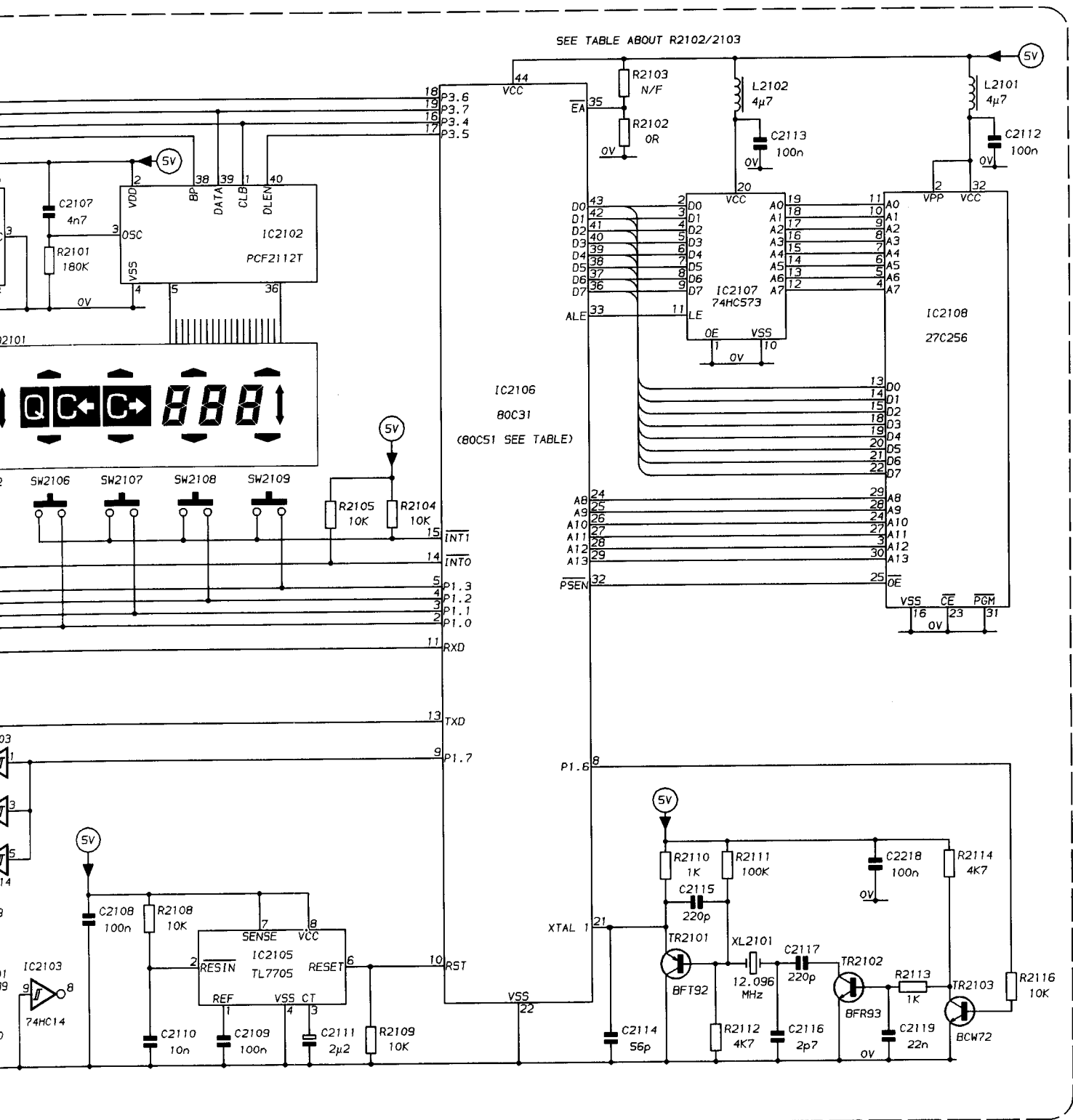


NOTES  
1. N/F = NOT FITTED

MEMORY ACCESS

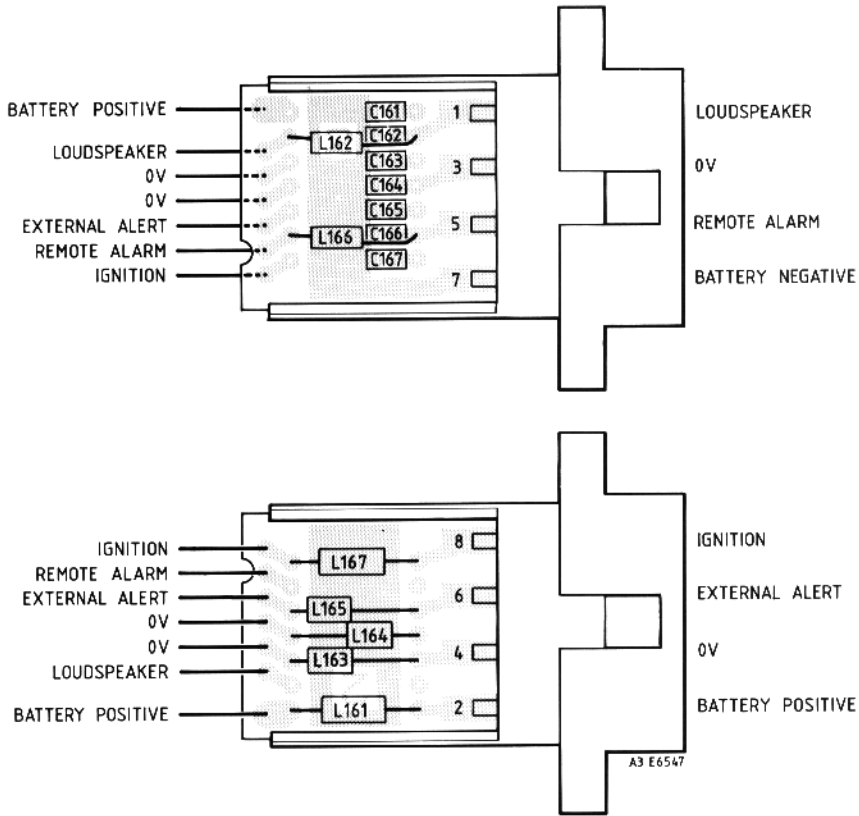
IC2106 μP	MEMORY ACCESSED	IC2106 PIN 35	R2102	R2103	IC2107/2108
80C31	EXTERNAL	0V	FITTED	N/F	REQUIRED
80C51	EXTERNAL (MASKED)	0V	FITTED	N/F	REQUIRED
80C51	INTERNAL (MASKED)	5V	N/F	FITTED	NOT REQUIRED (MAY BE FITTED)

FIG 6.6 FM1200/FM1300 STANDARD CONSOLE  
CIRCUIT DIAGRAM



MEMORY ACCESS

IC2106 μP	MEMORY ACCESSED	IC2106 PIN 35	R2102	R2103	IC2107/2108
80C31	EXTERNAL	0V	FITTED	N/F	REQUIRED
80C51	EXTERNAL	0V	FITTED	N/F	REQUIRED
80C51	INTERNAL (MASKED)	5V	N/F	FITTED	NOT REQUIRED (MAY BE FITTED)



DECOUPLING PWB

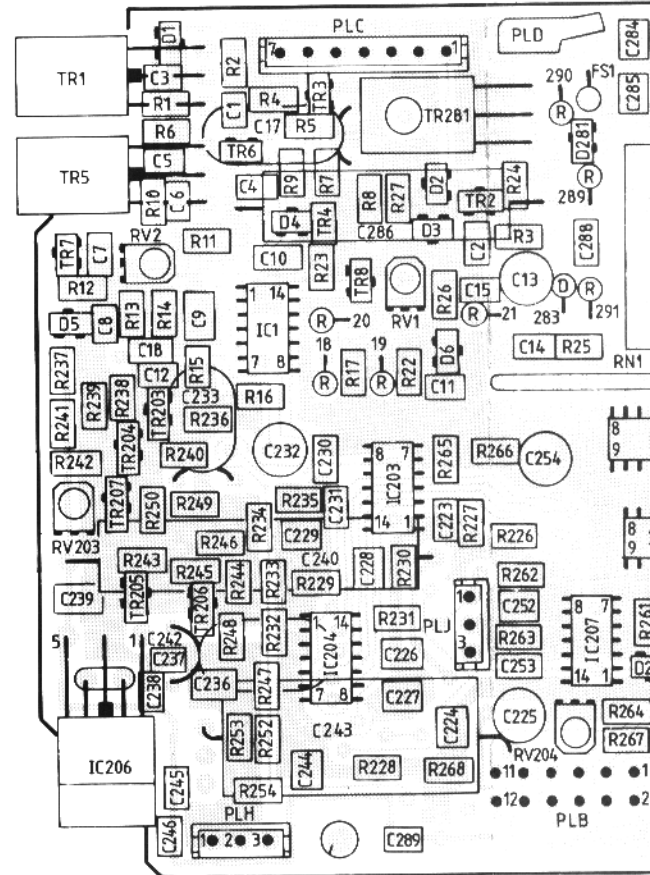
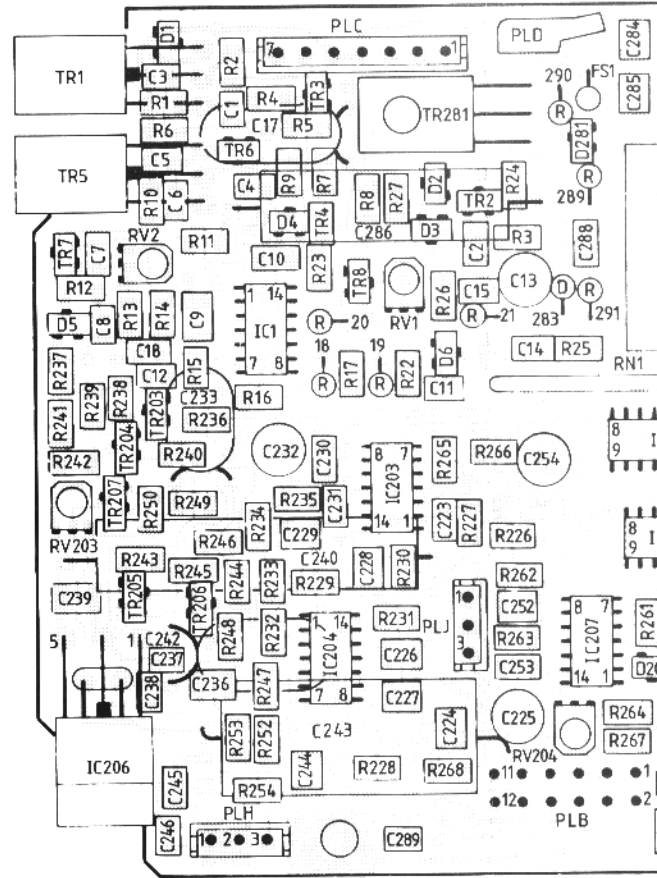


FIG 6.17 ANALOGUE PWB COMPONENT LOCATION DIAGRAM



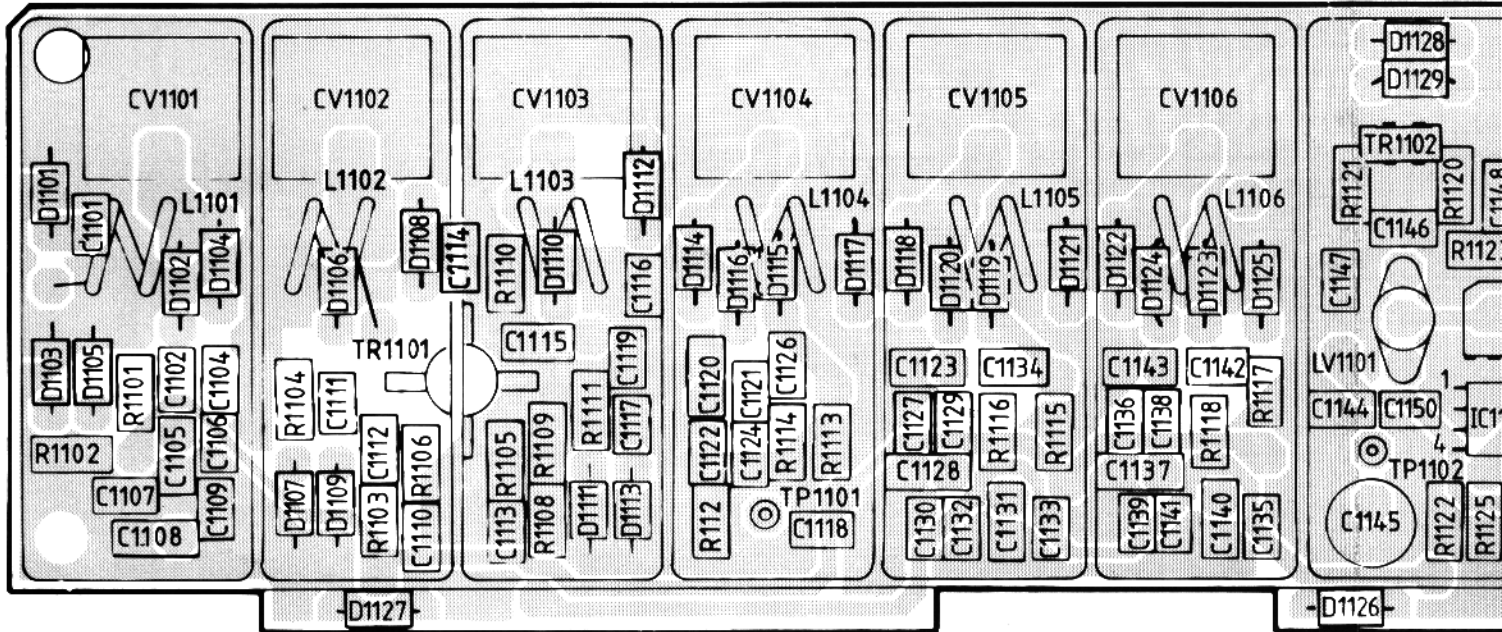
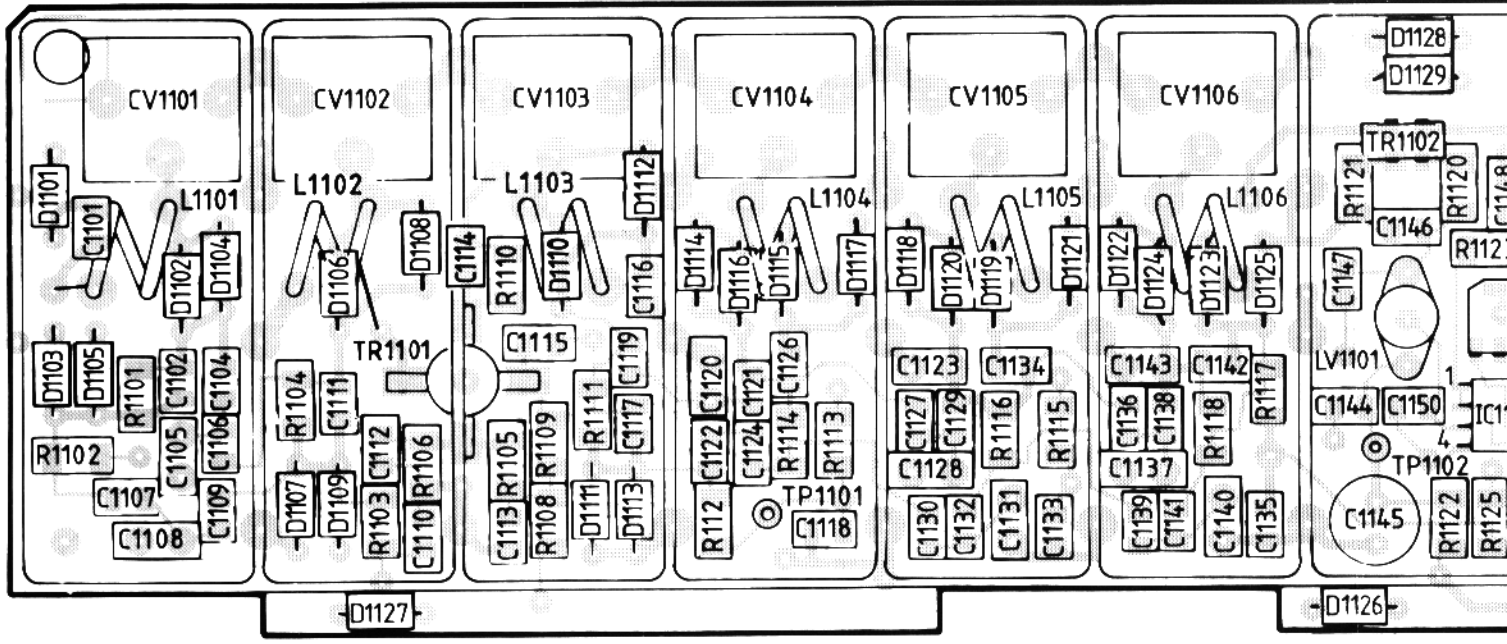
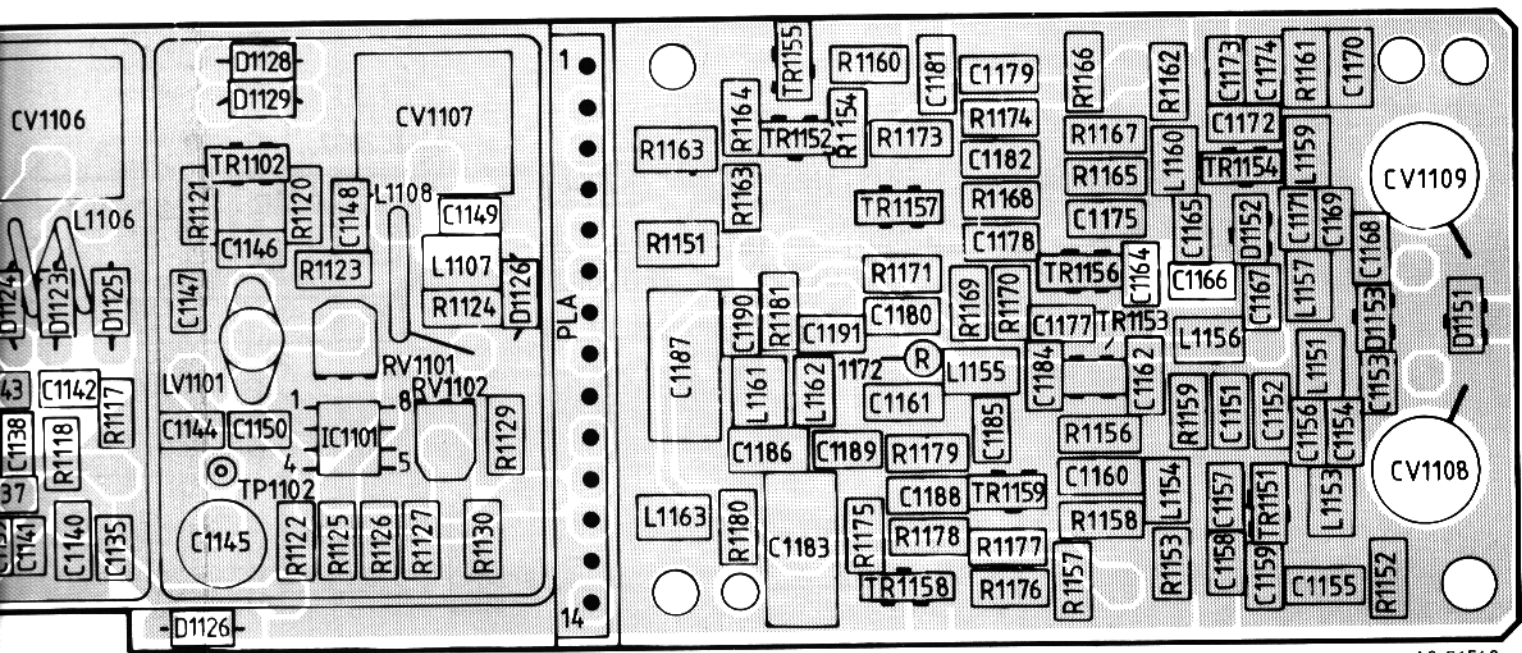
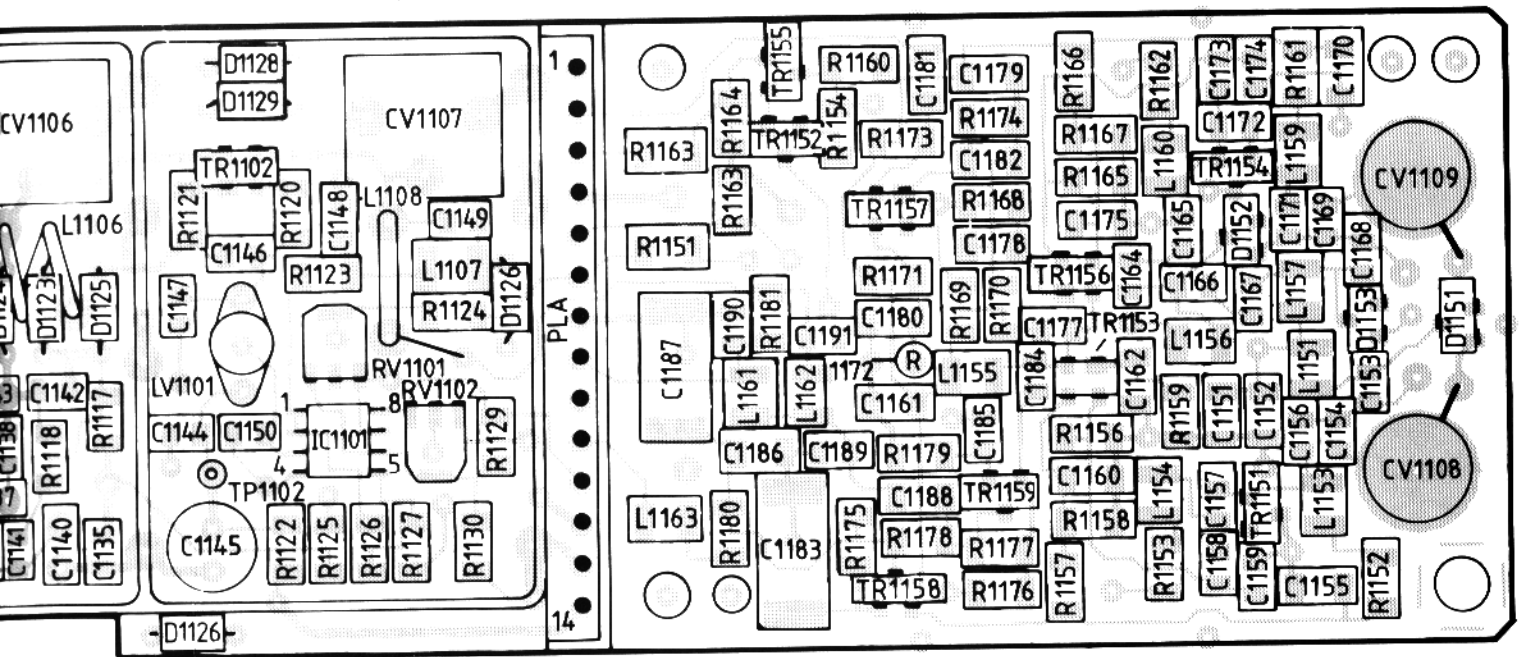


FIG 6.20 Rx VCO COMPONENT LOCATION DIAGRAM (400-512MHz)





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LOCATION  
(Hz)

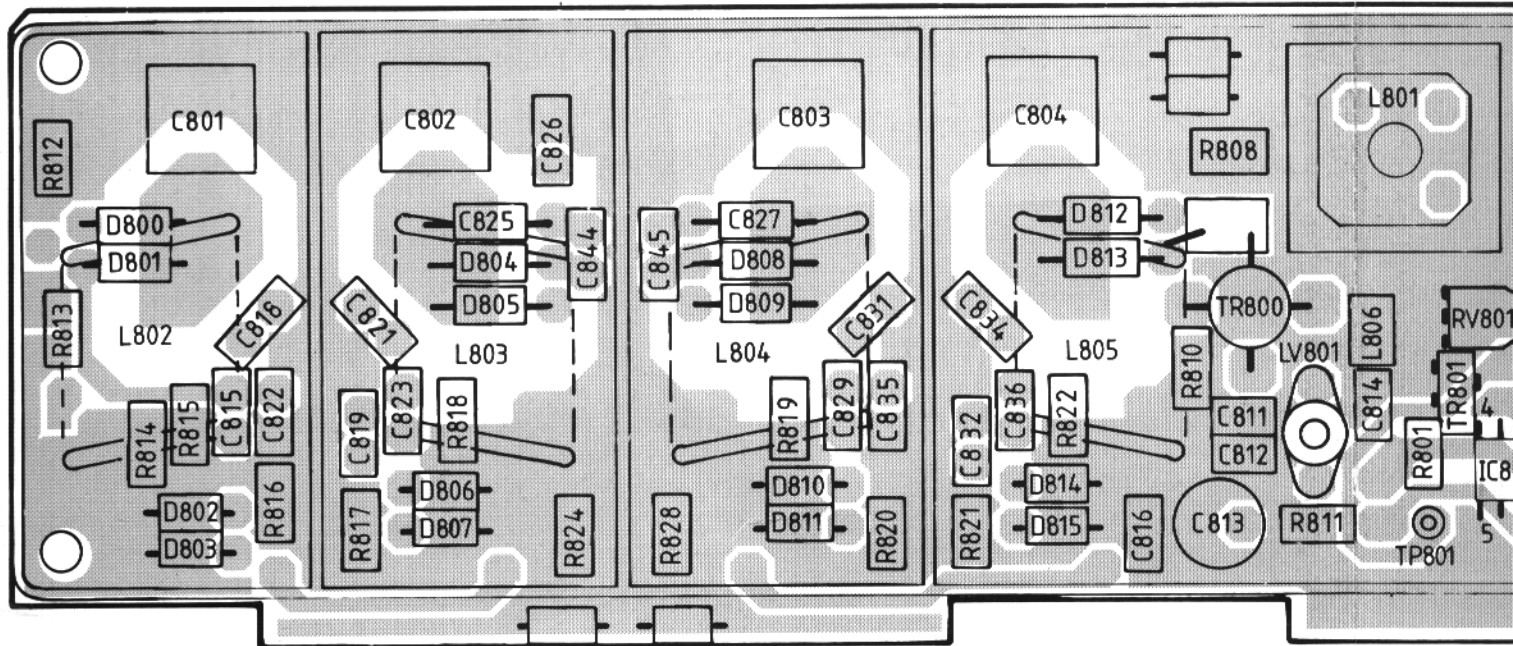
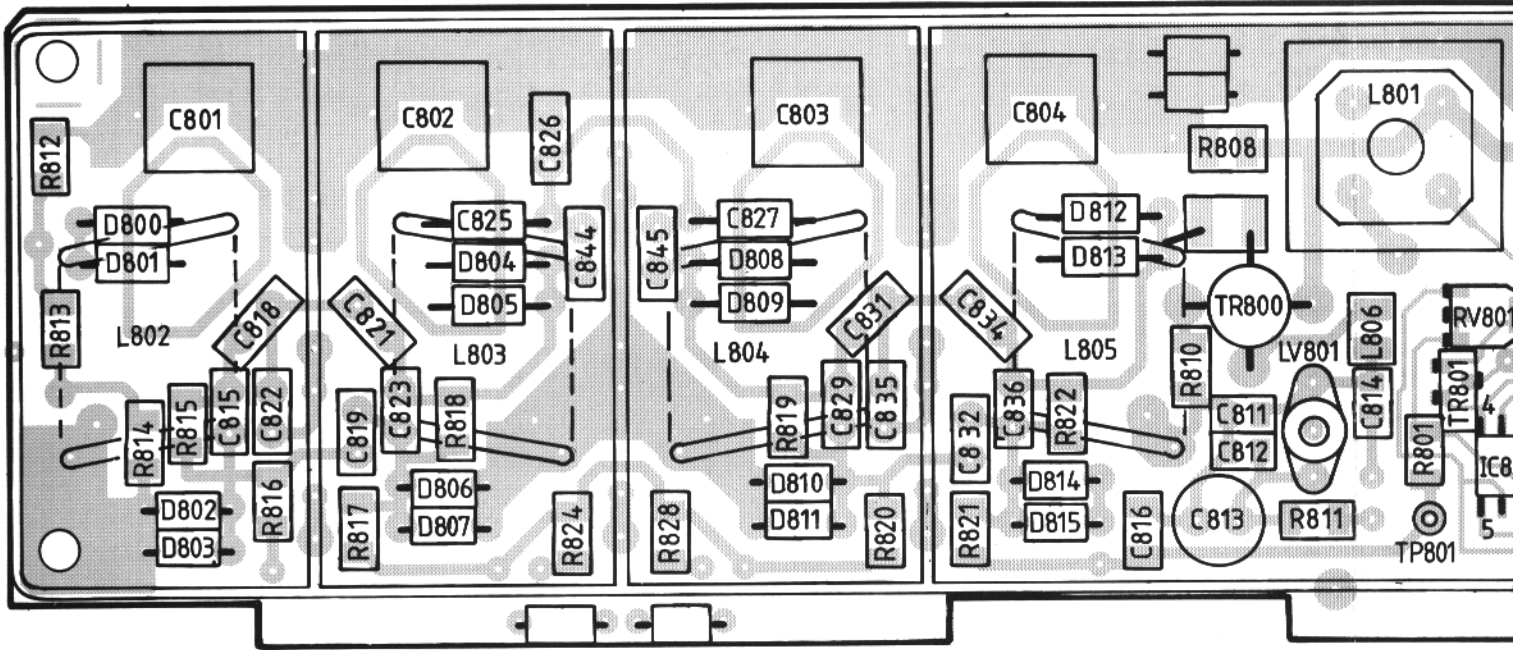


FIG 6.19 Rx VCO COMPONENT  
LOCATION DIAGRAM (132-225MHZ)



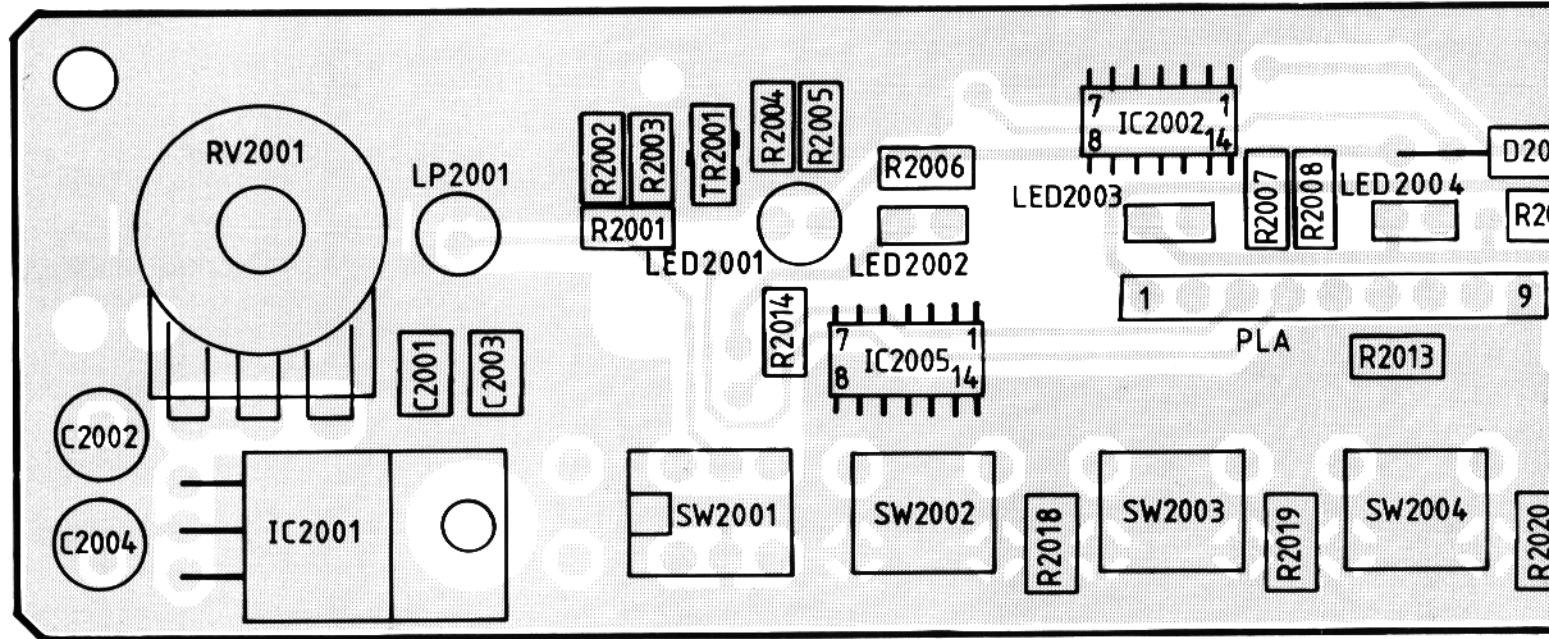
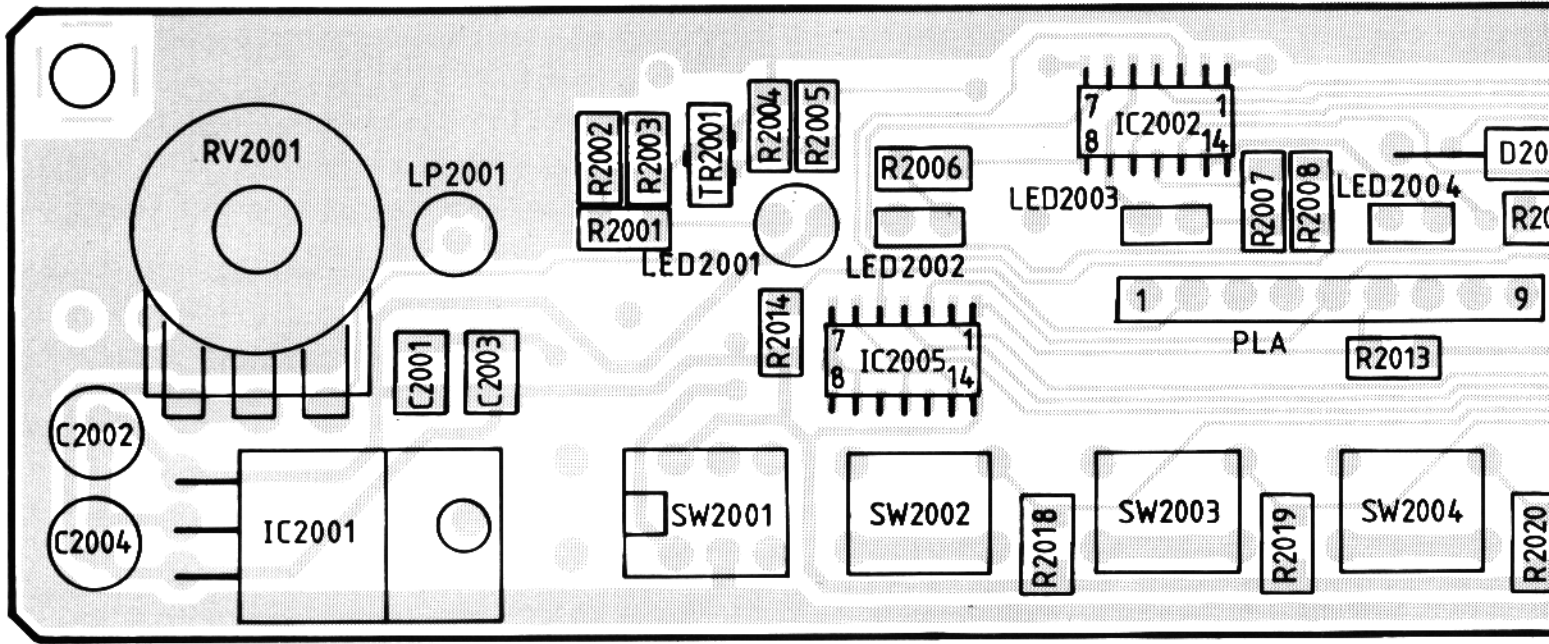
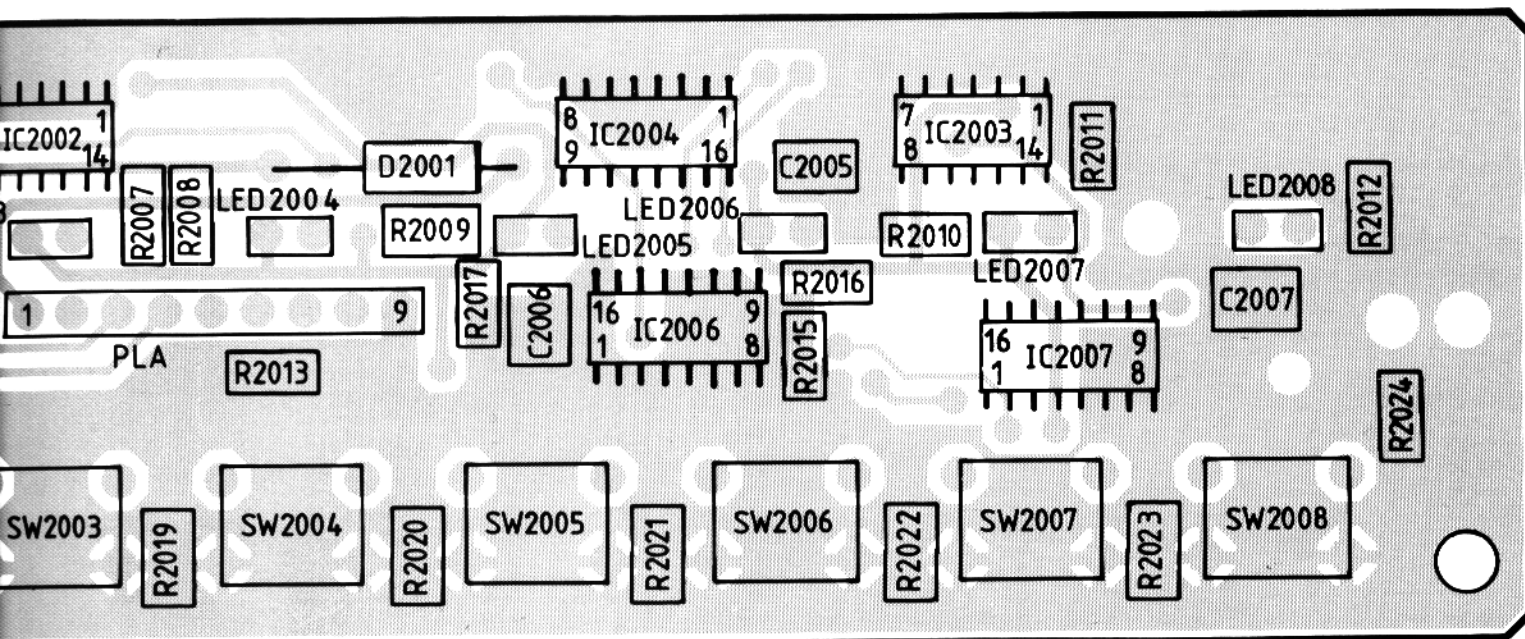
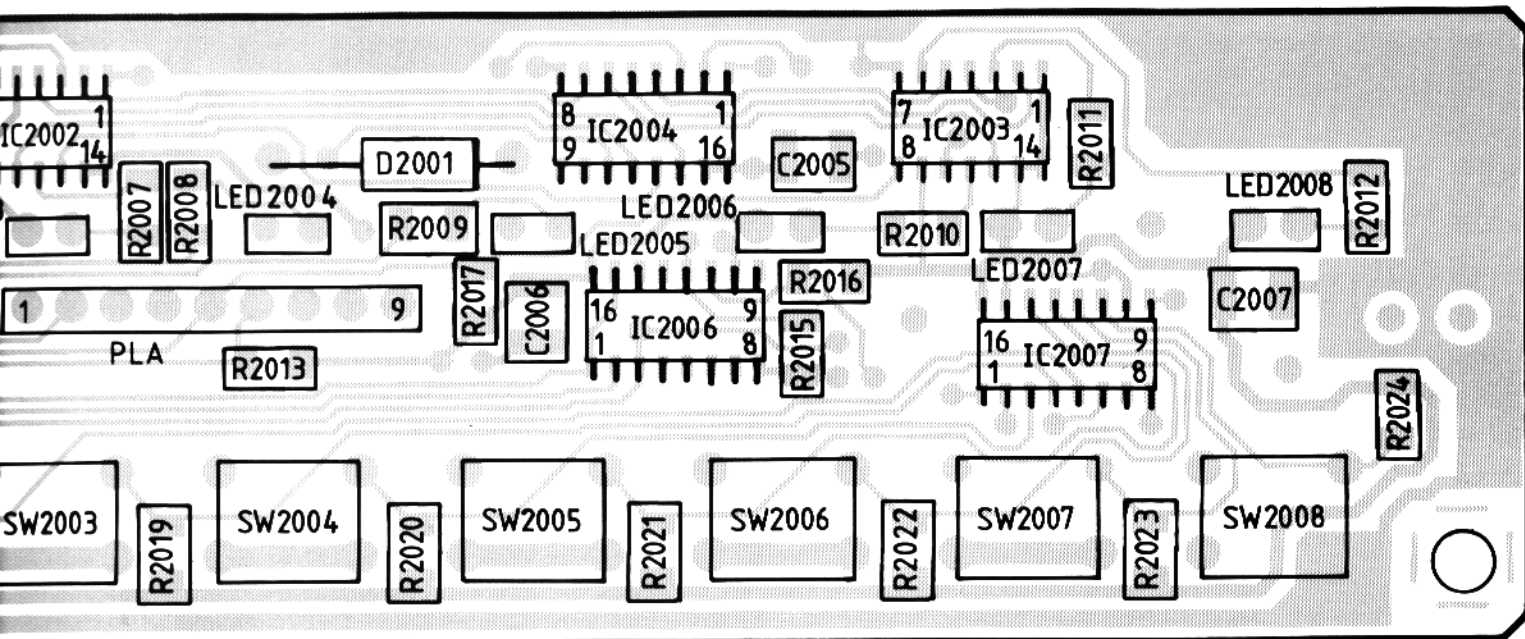
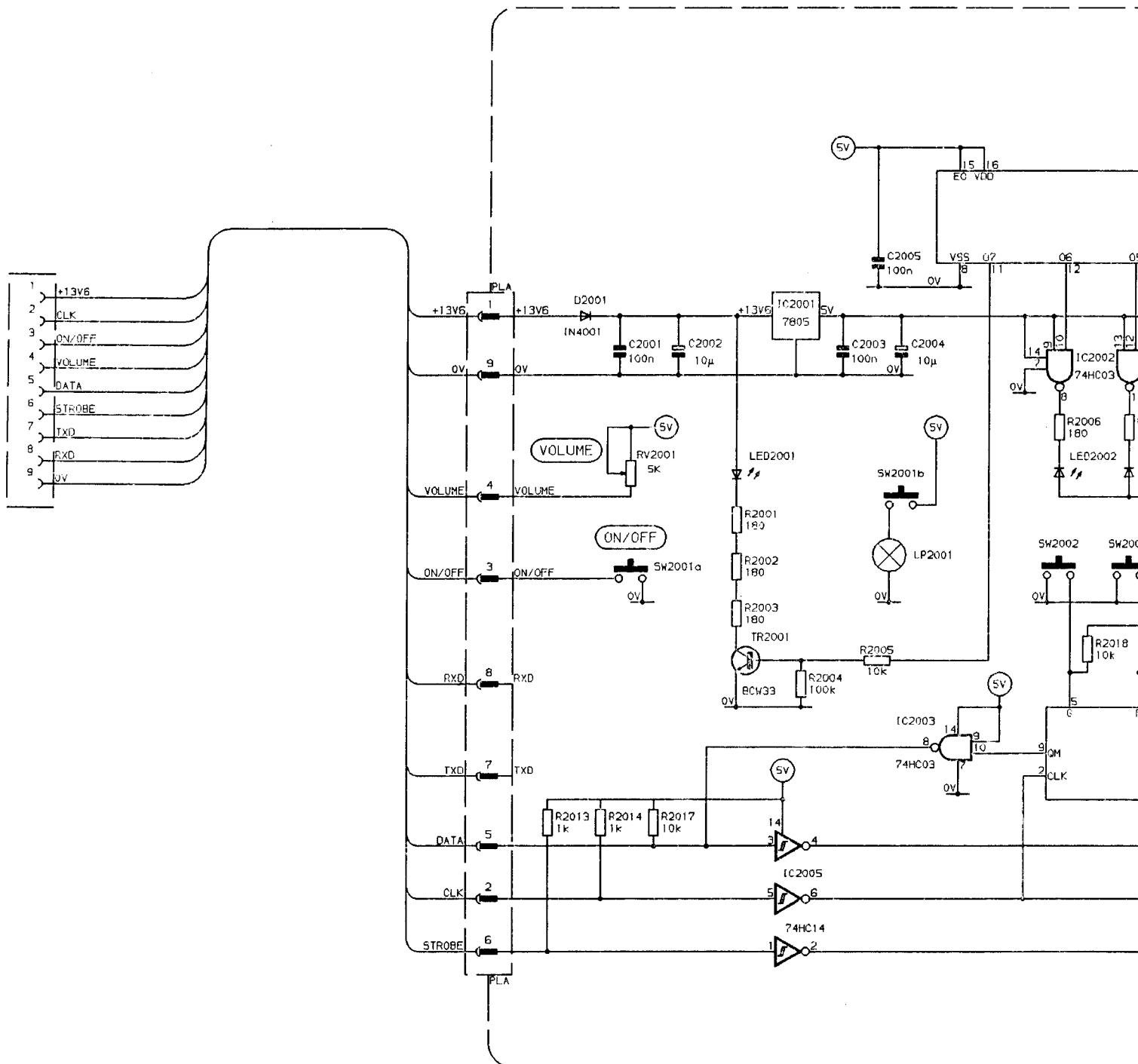


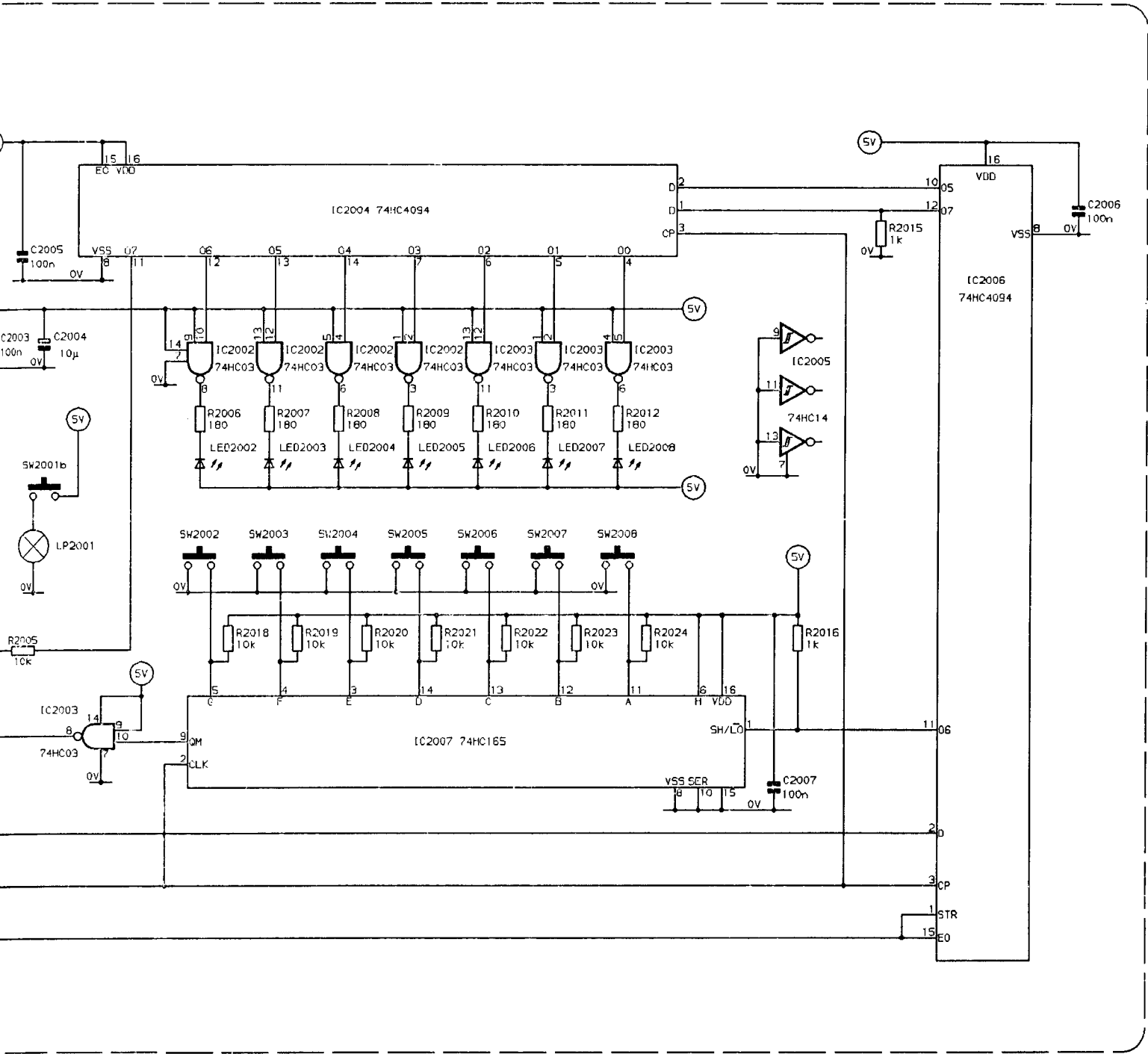
FIG 6.21



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FIG 6.21 BASIC CONSOLE COMPONENT LOCATION DIAGRAM





KEYPAD / D.T.M.F. MICROPHONE

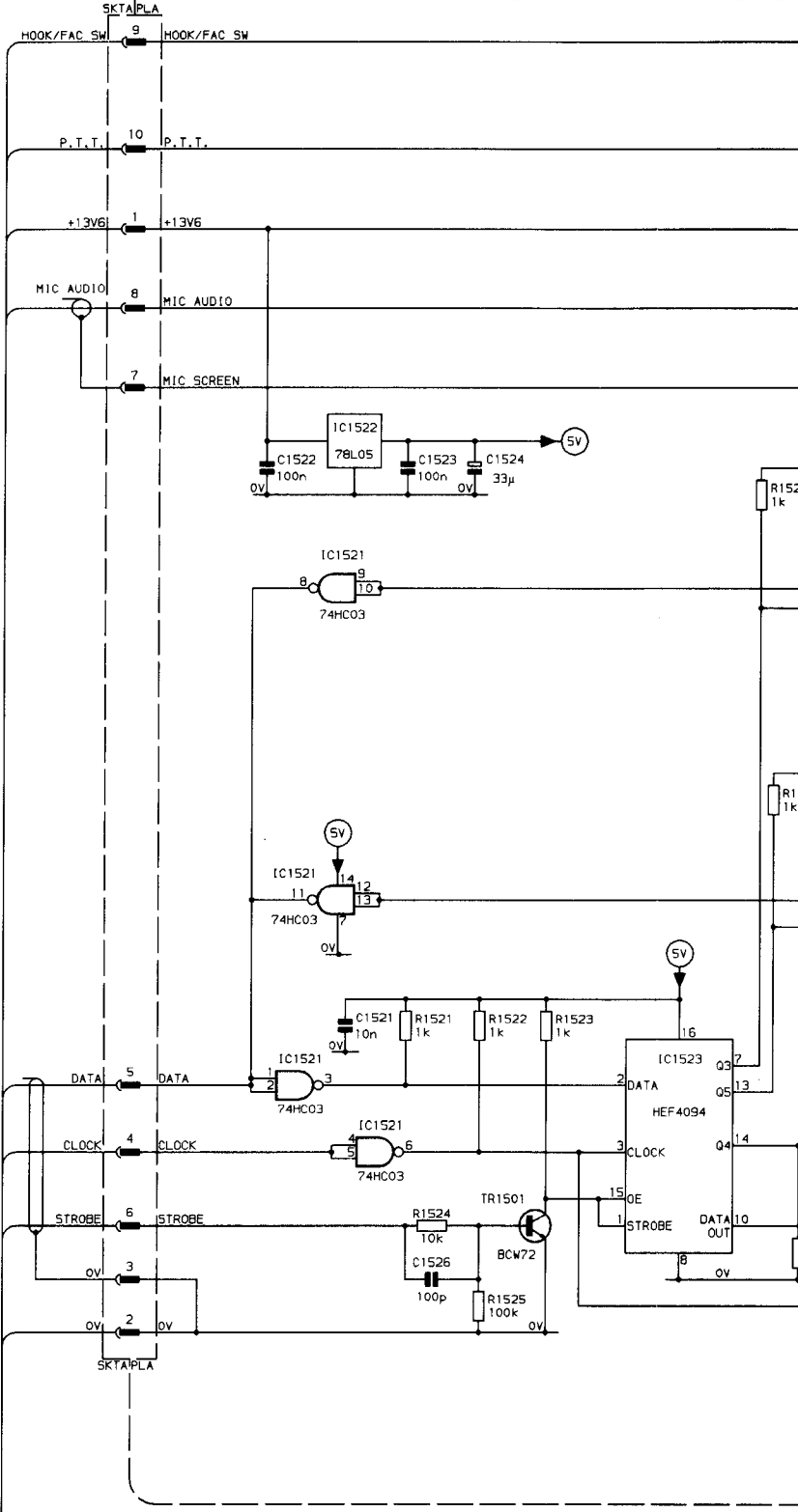
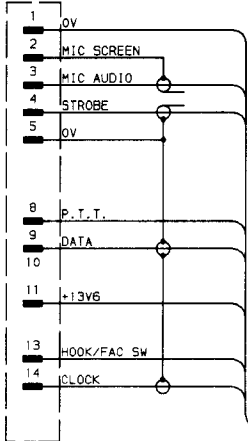
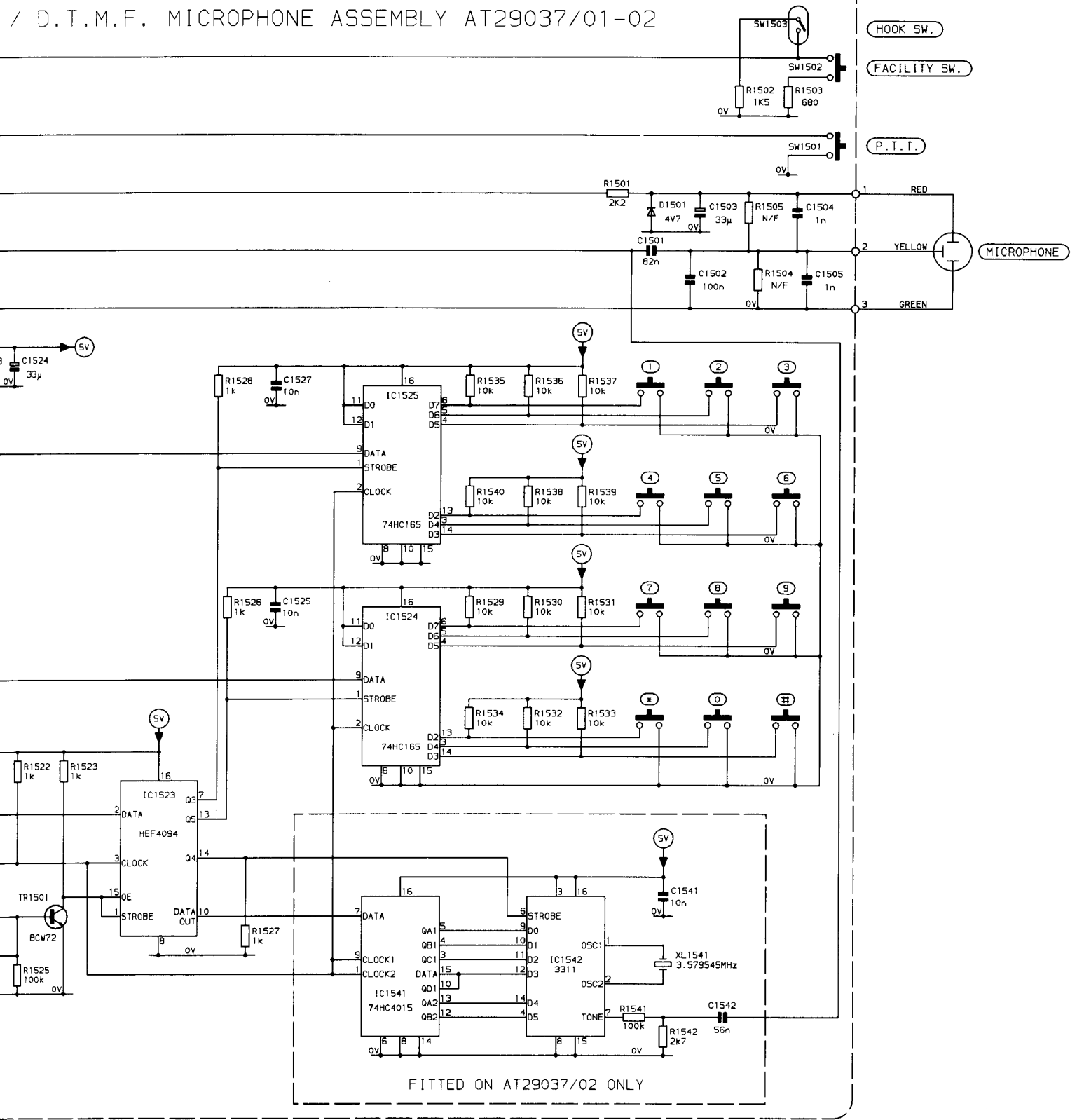


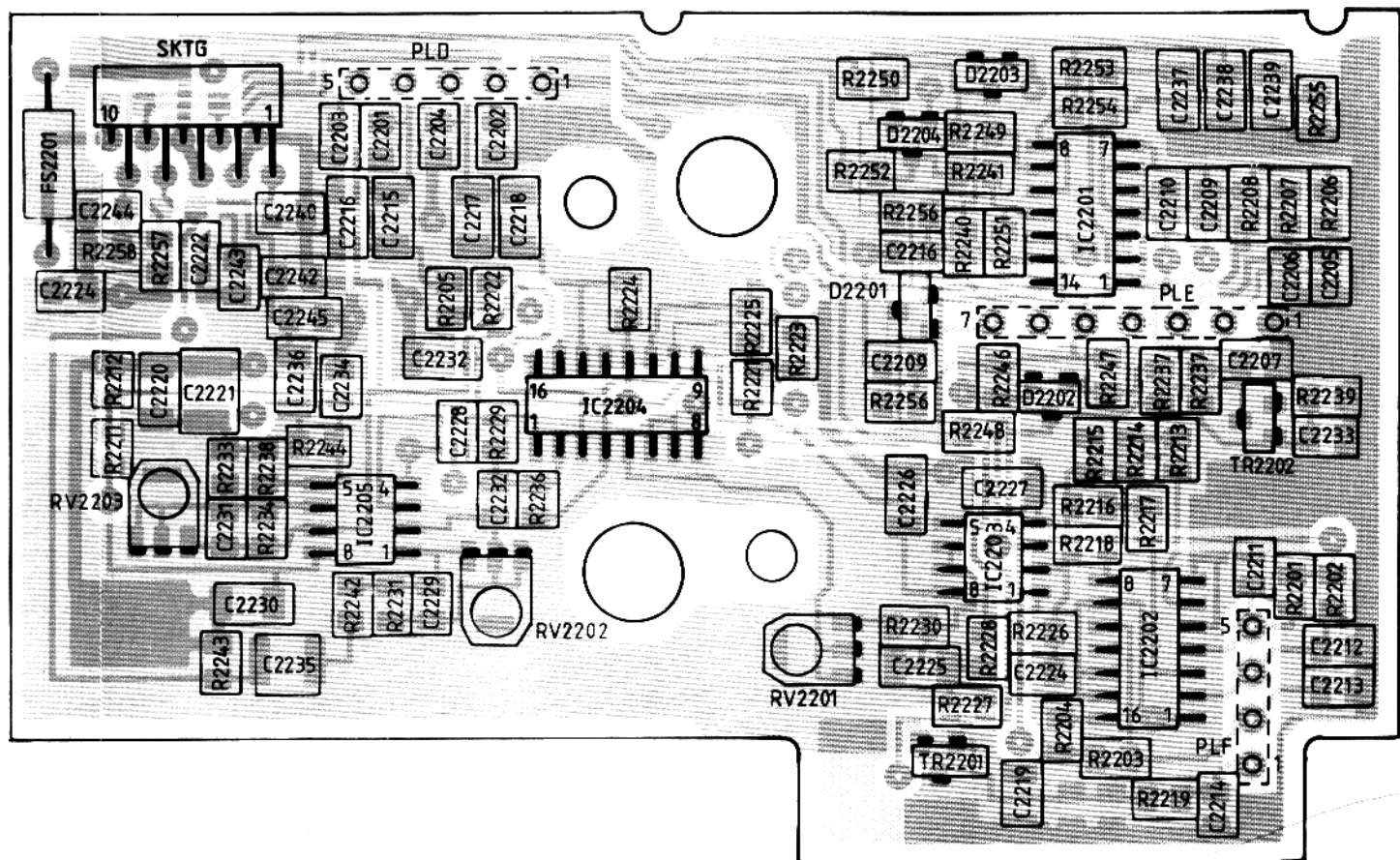
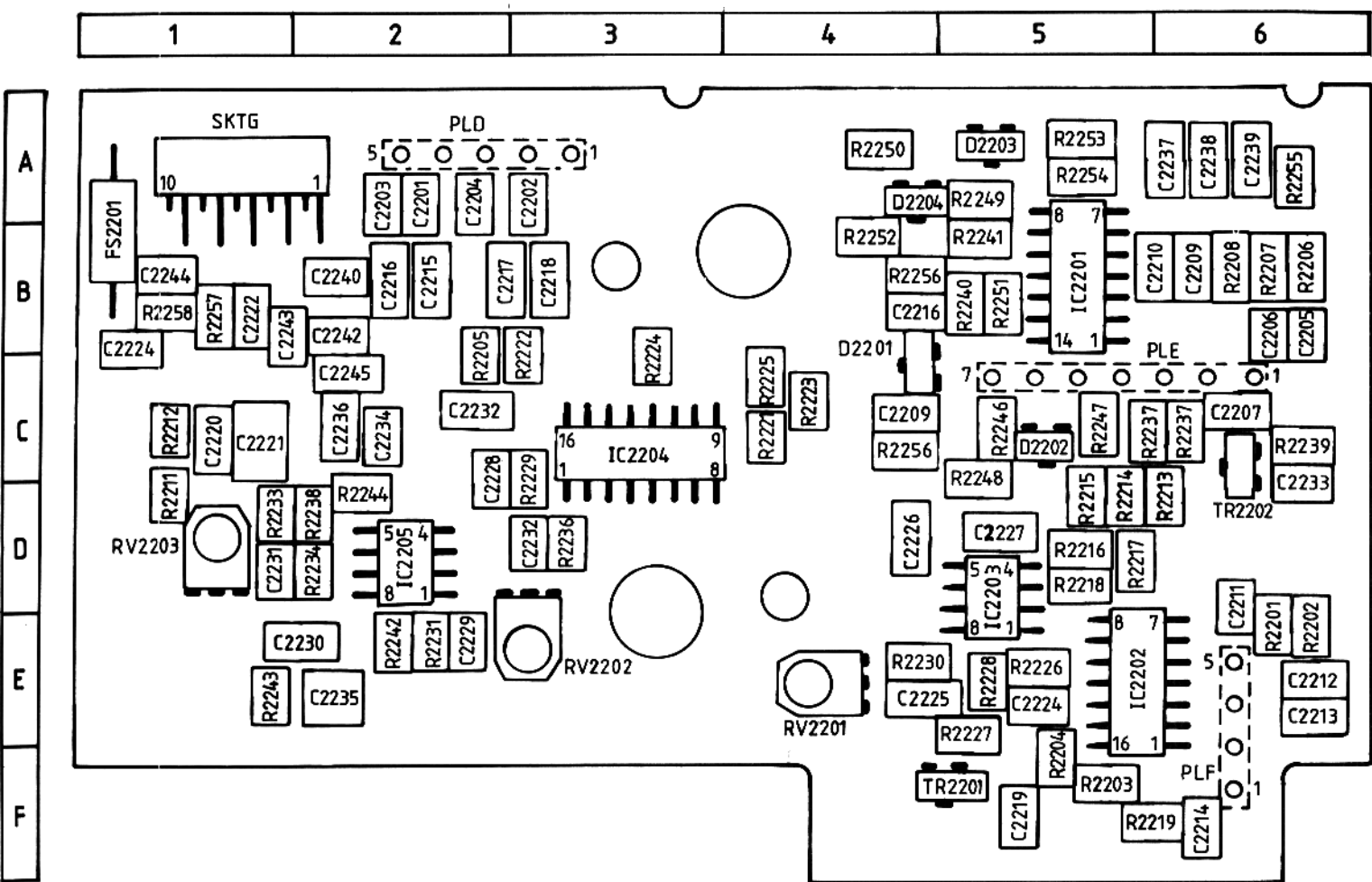
FIG 6.23 DTMF/KEYPAD MICROPHONE  
CIRCUIT DIAGRAM



/ D.T.M.F. MICROPHONE ASSEMBLY AT29037/01-02

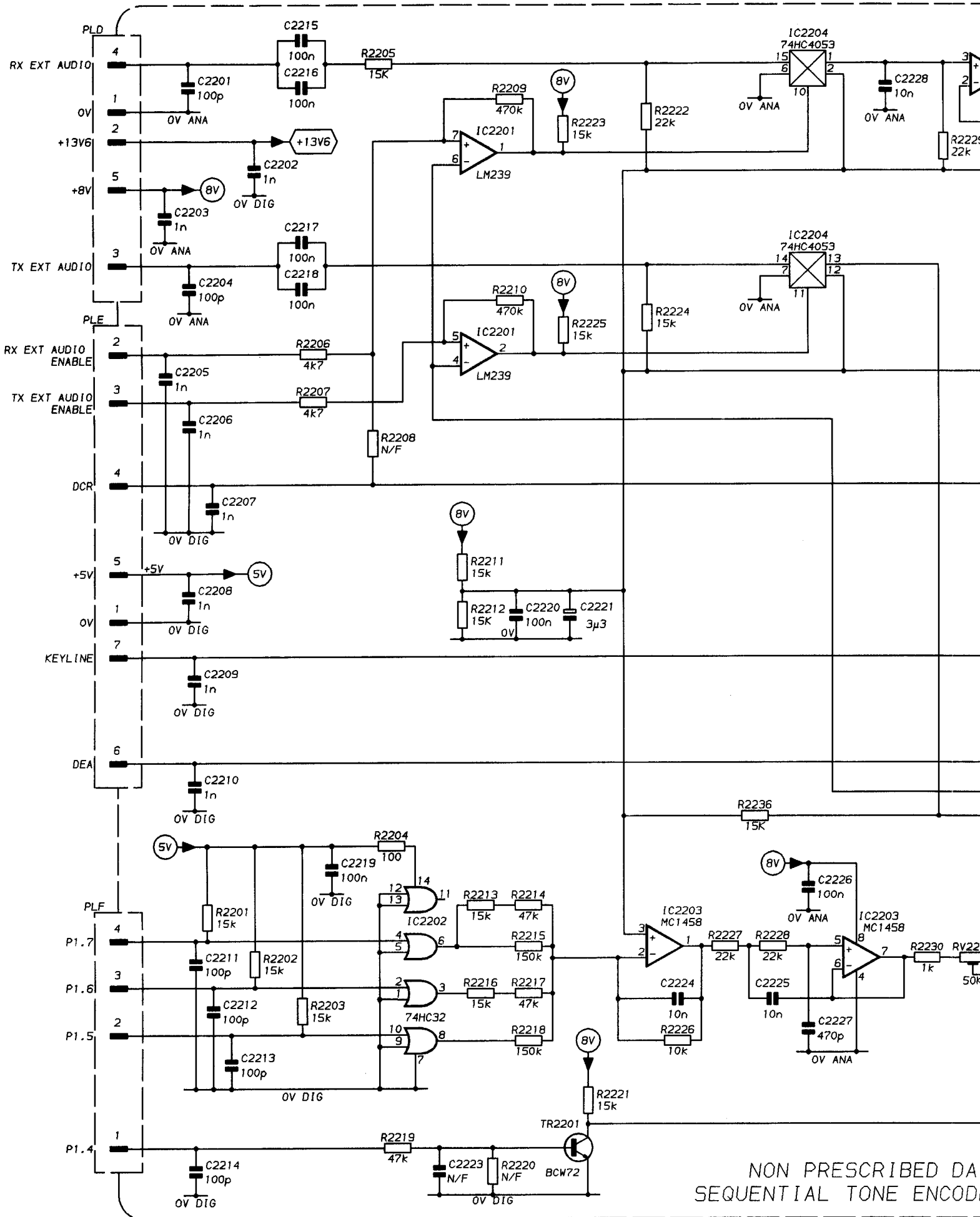


FITTED ON AT29037/02 ONLY

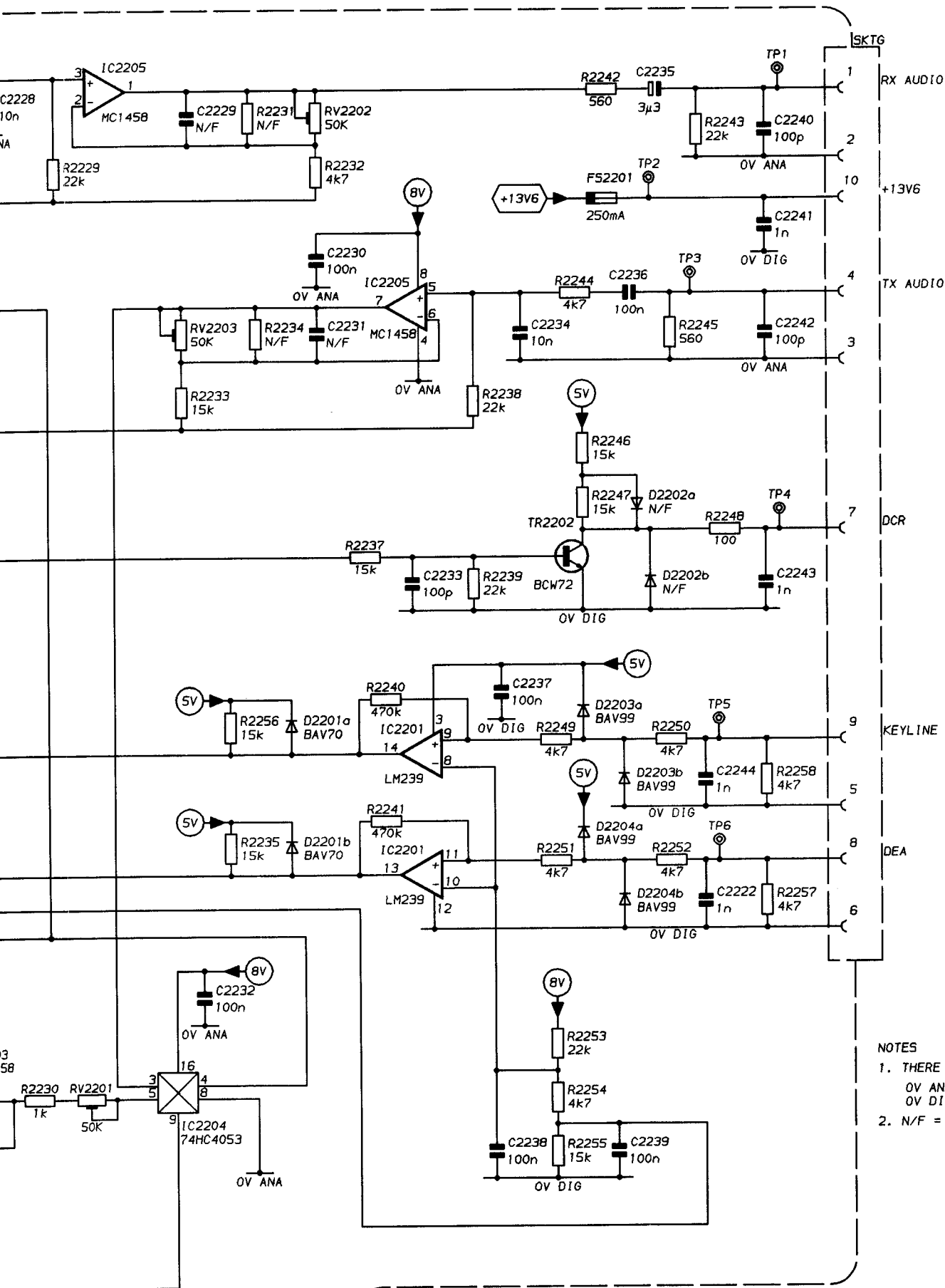


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FIG 6.3 NON-PREScribed DATA PWB COMPONENT LOCATION DIAGRAM



NON PRESCRIBED DA  
SEQUENTIAL TONE ENCODER



- NOTES
1. THERE 2 GROUNDS ON PCB  
OV ANA = ANALOGUE GRND  
OV DIG = DIGITAL GRND
  2. N/F = NOT FITTED

IBED DATA &  
E ENCODER ASSY.

FIG 6.4 NON-PREScribed DATA PWB  
CIRCUIT DIAGRAM