

Circuit diagrams AE5/1

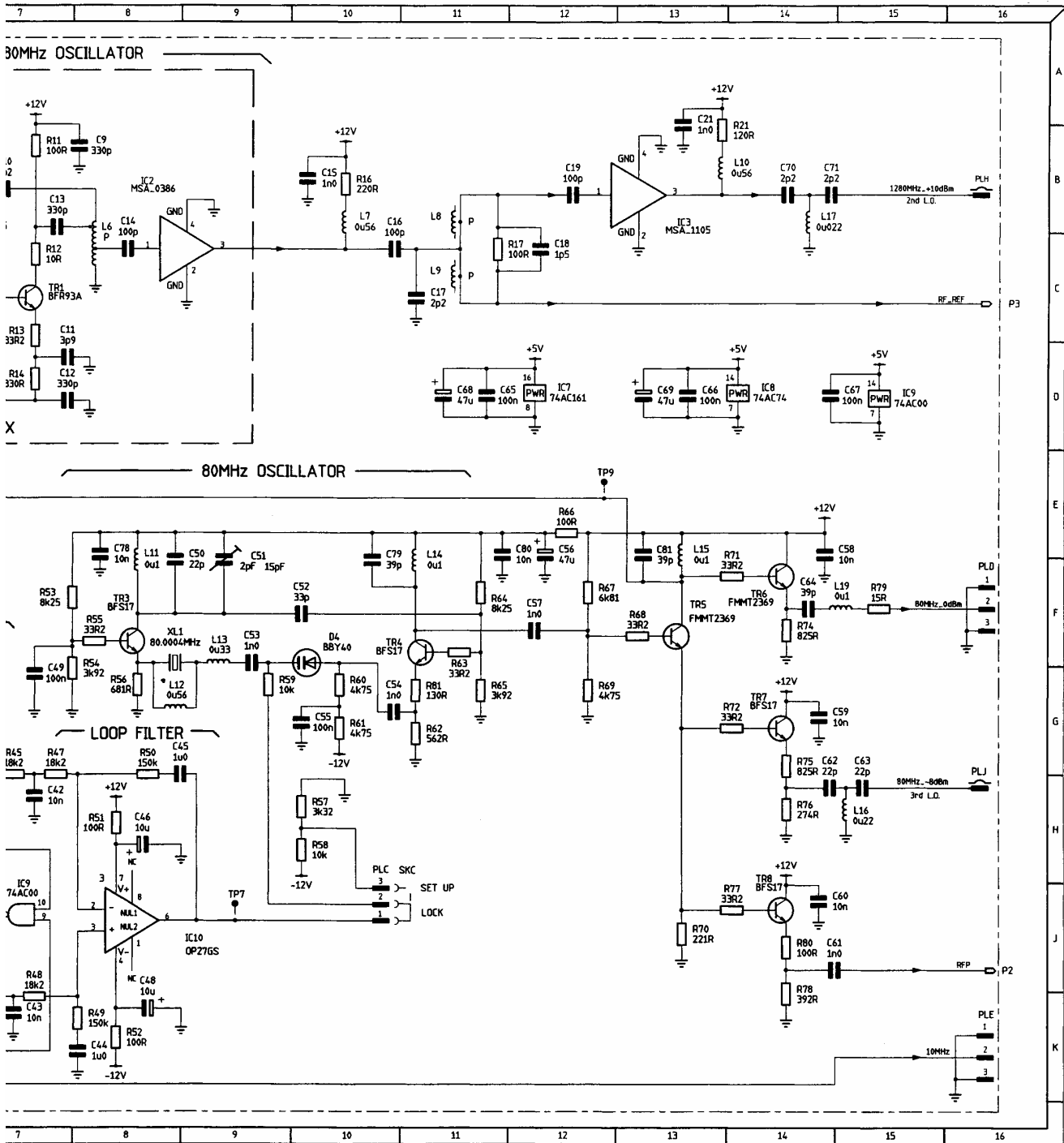
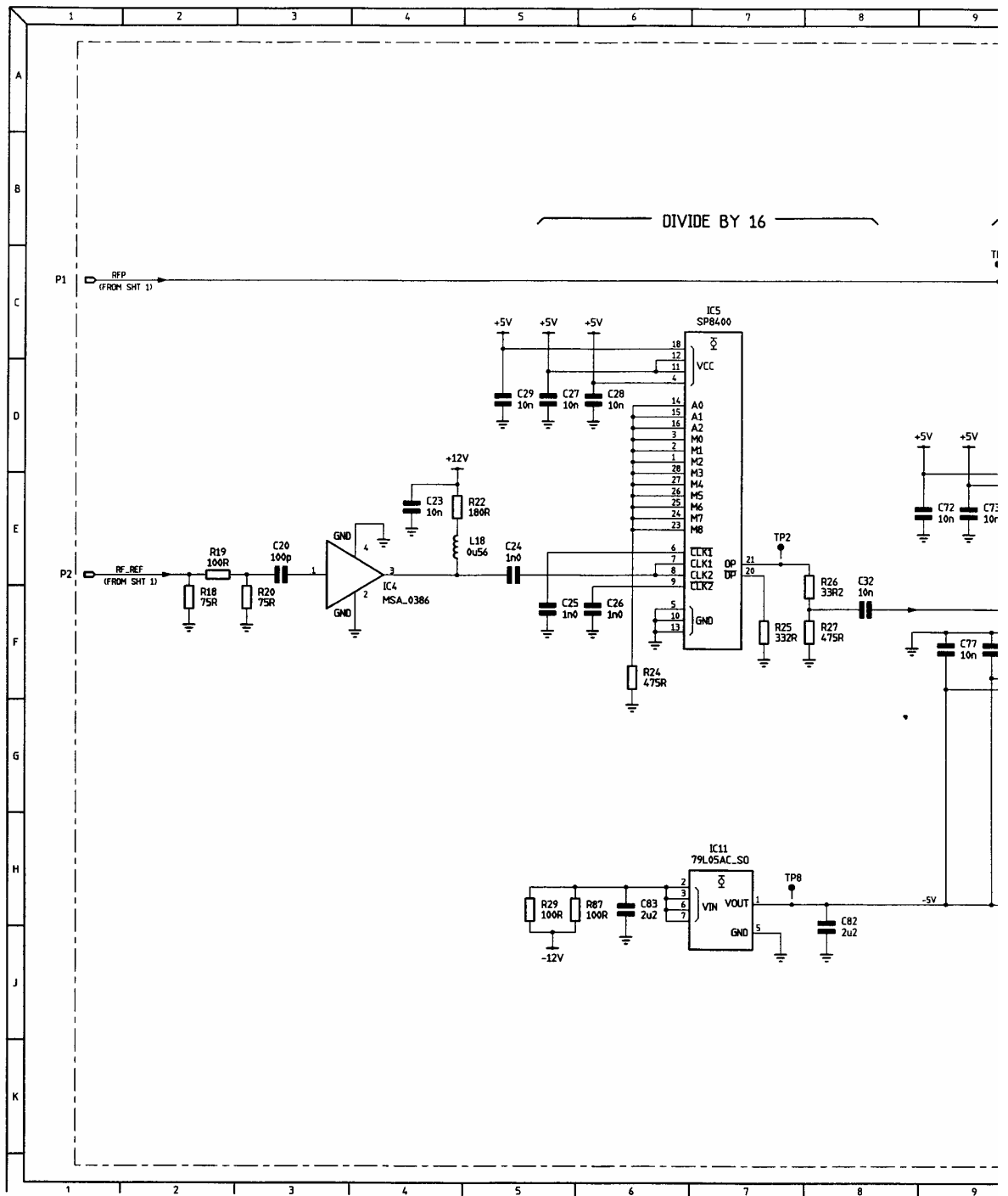


Fig. 7-148 AE5/1 2nd and 3rd LO - circuit



Circuit diagrams **AE5/1**

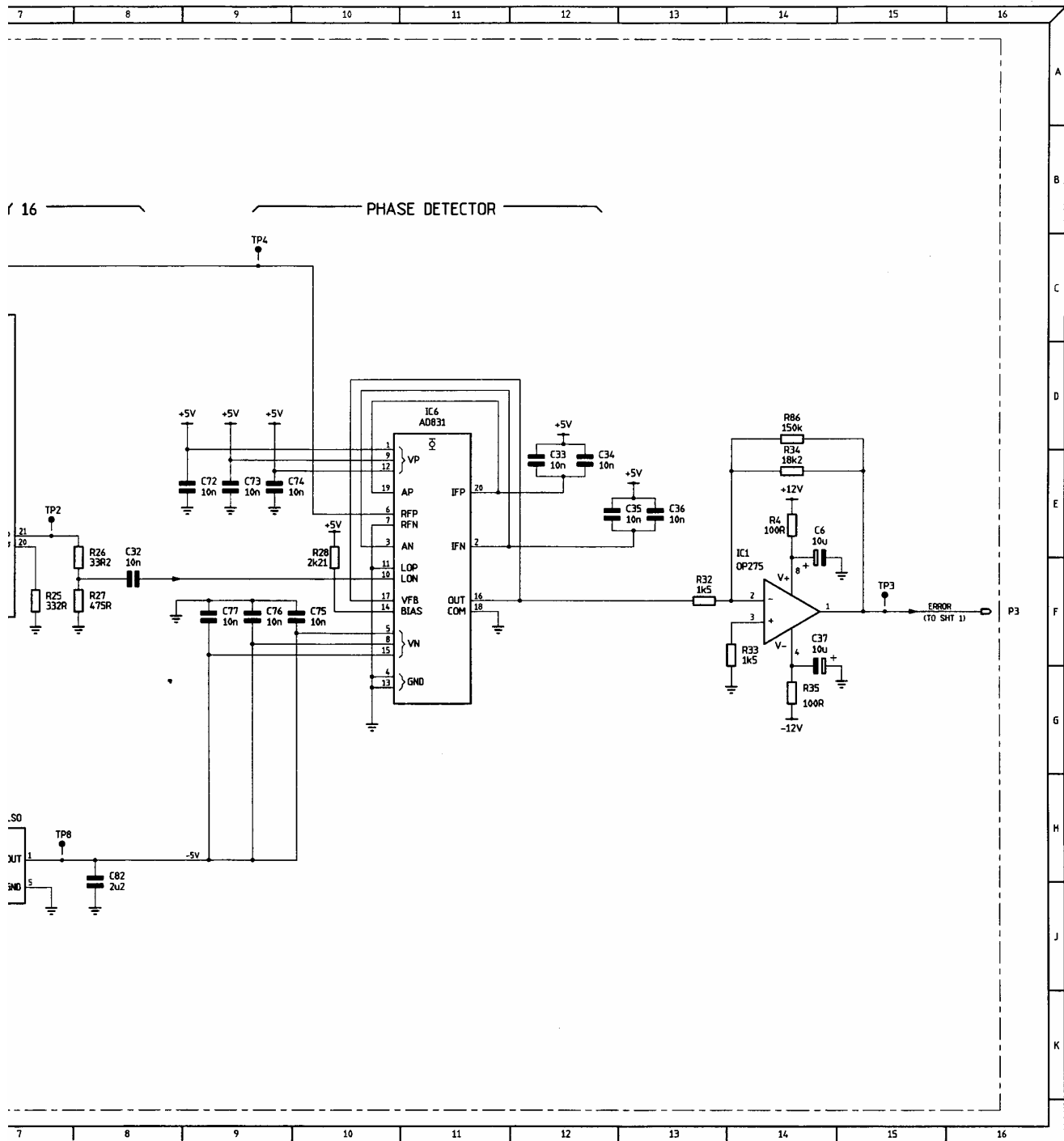
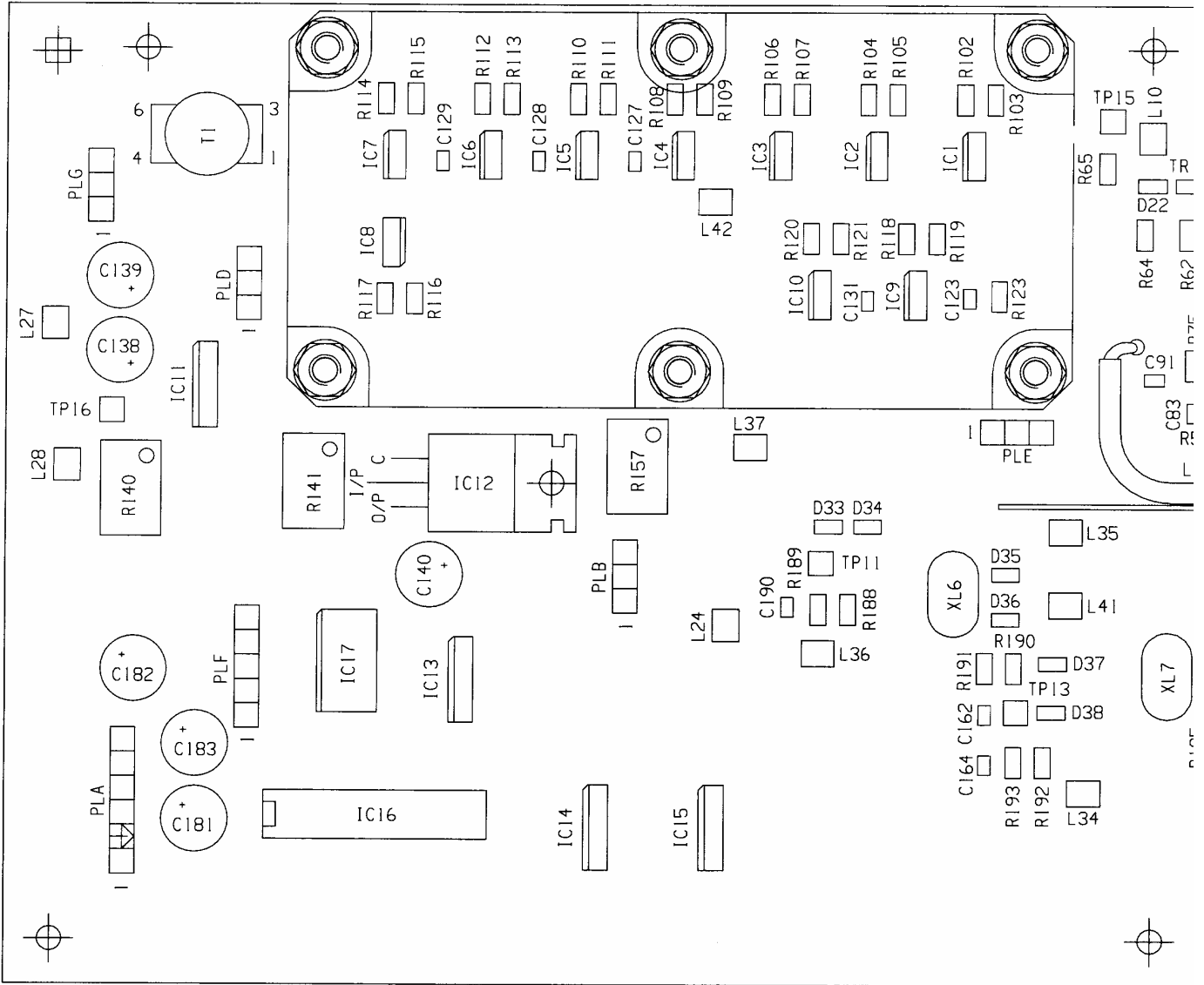


Fig. 7-149 AE5/1 2nd and 3rd LO - circuit

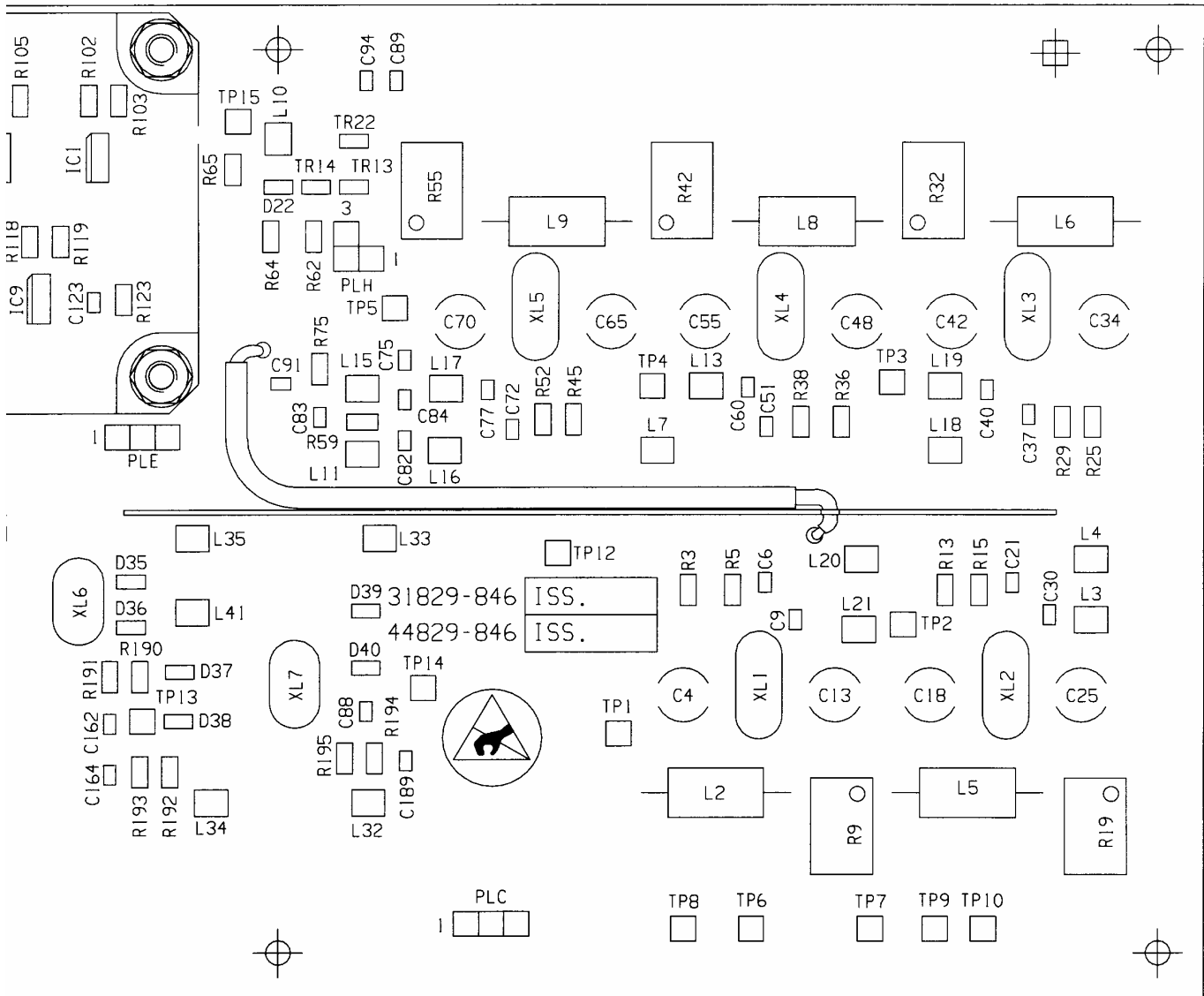
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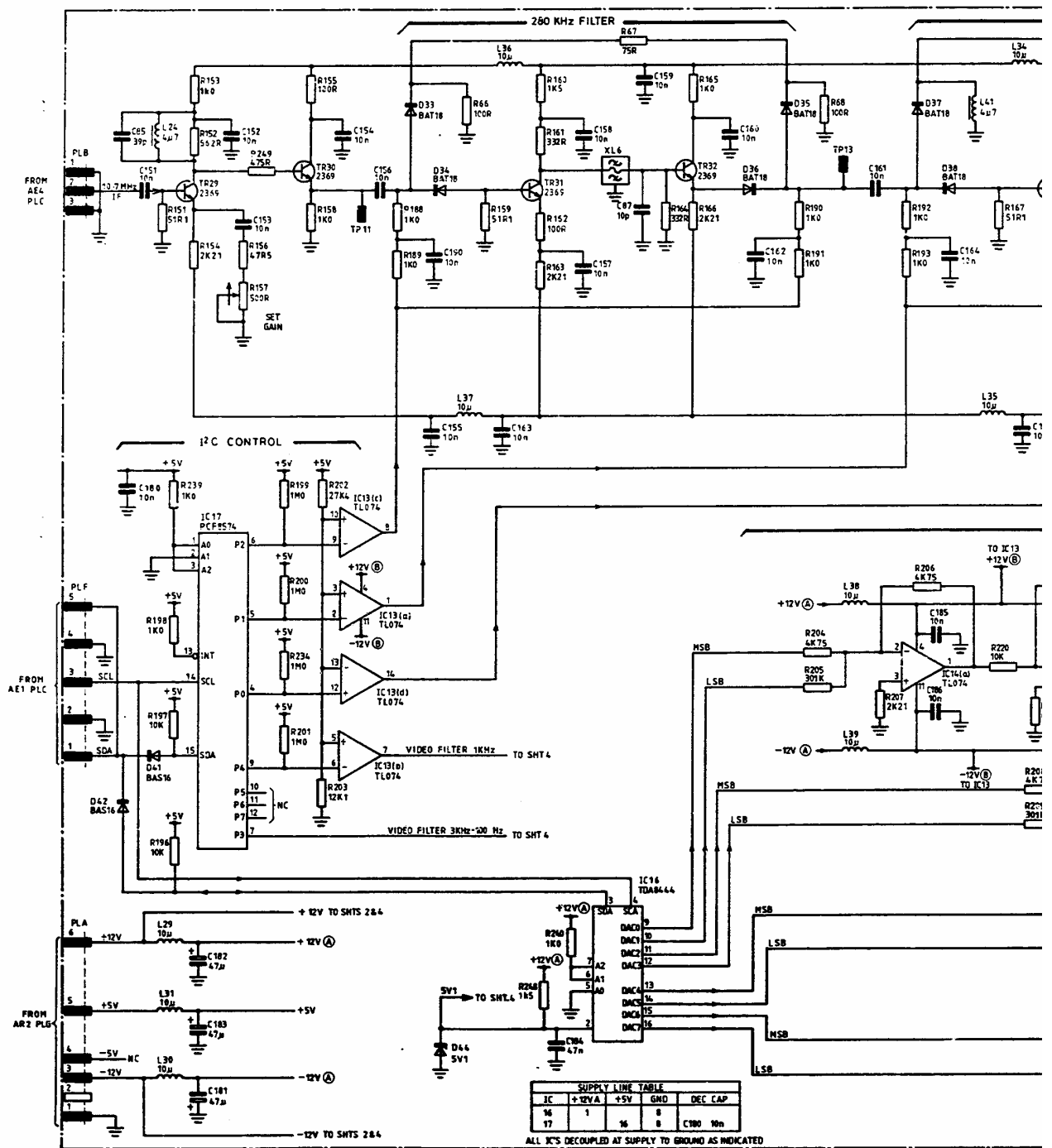


2nd and 3rd LO AE5/1

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Component layout AE6





Circuit diagrams AE6

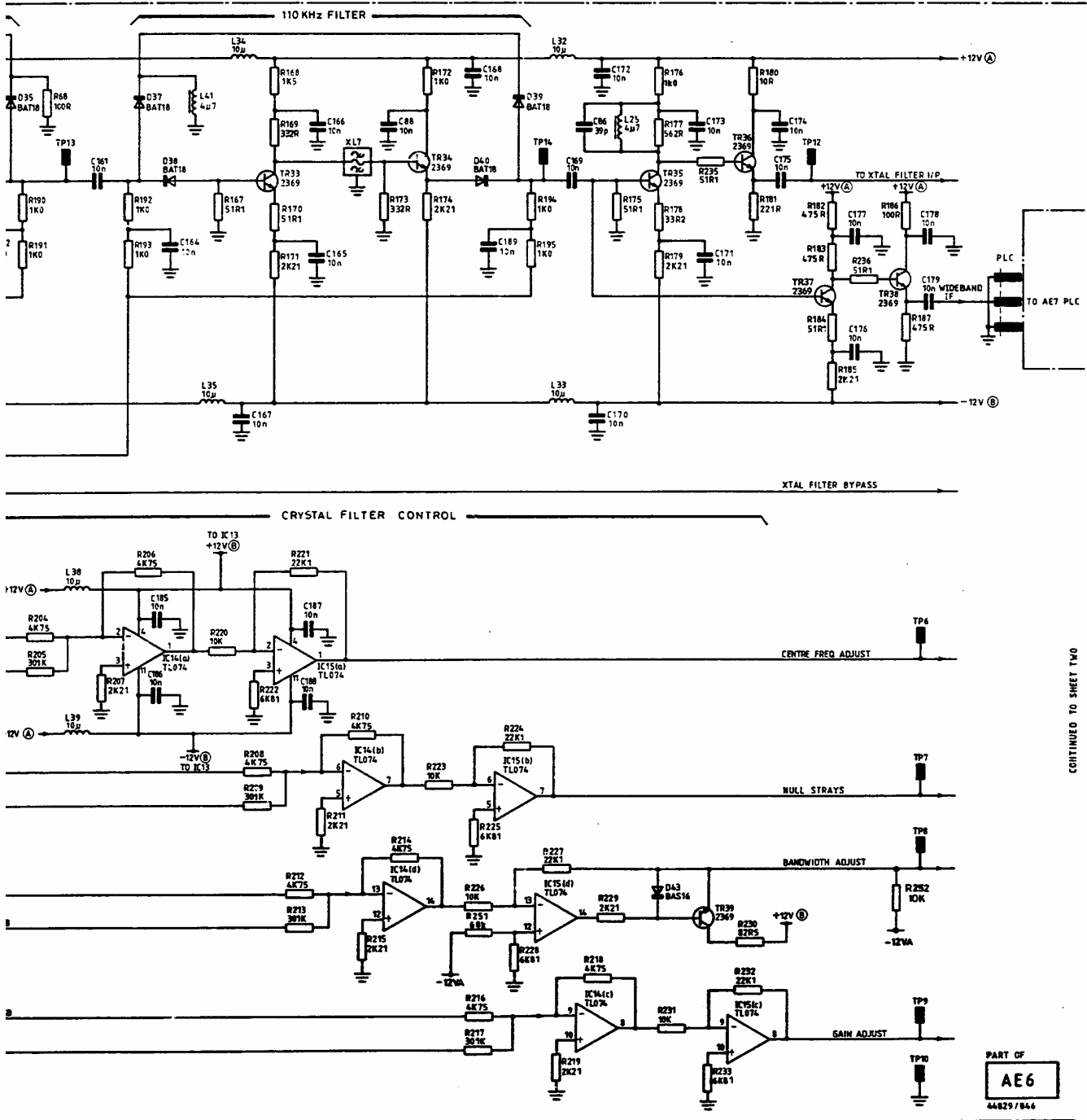
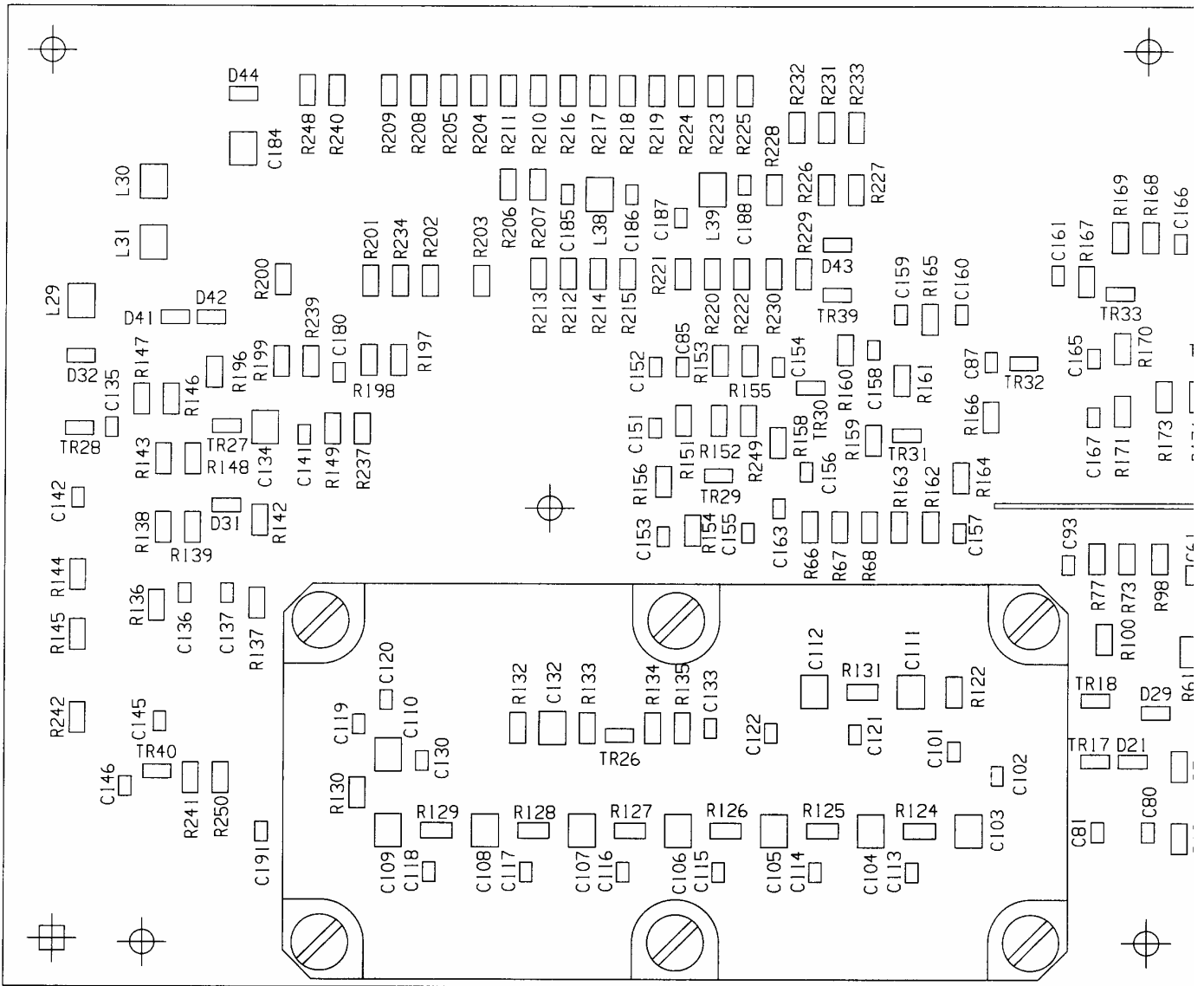


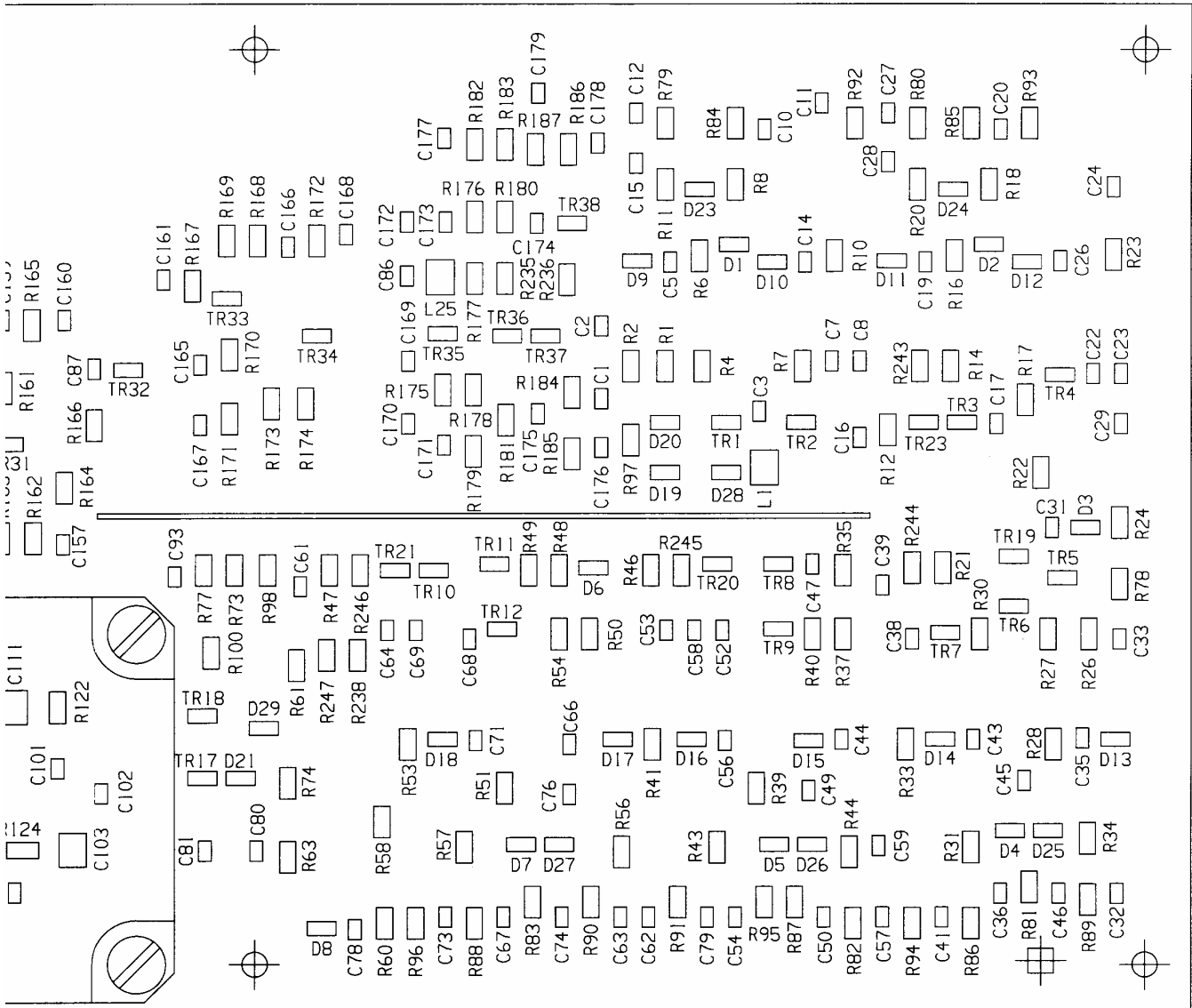
Fig. 7-151 AE6 110 kHz and 280 kHz filters, crystal filter control - circuit



110 kHz and 280 kHz filters, crystal filter control AE6

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Component layout AE6



Circuit diagrams AE6

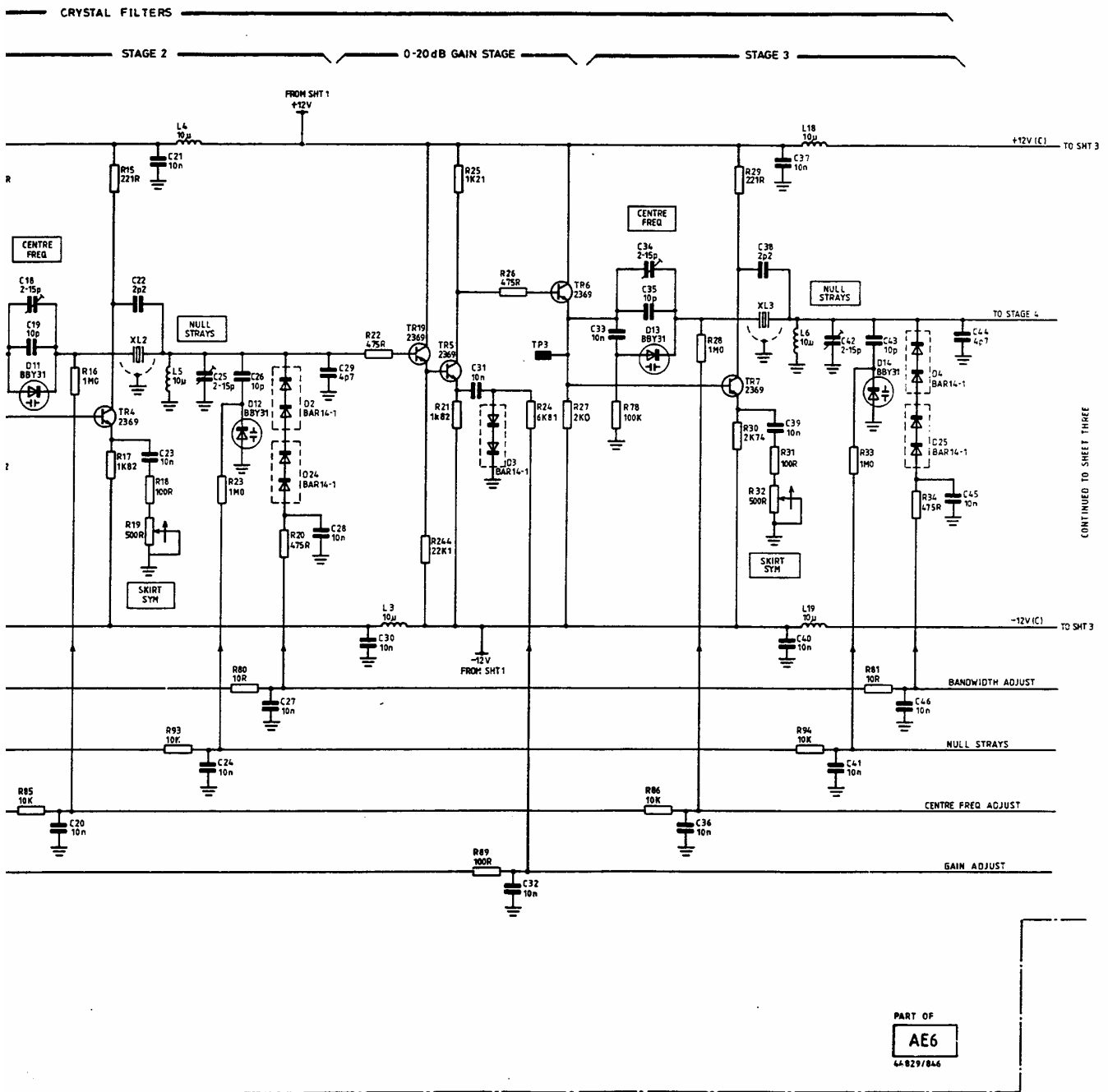
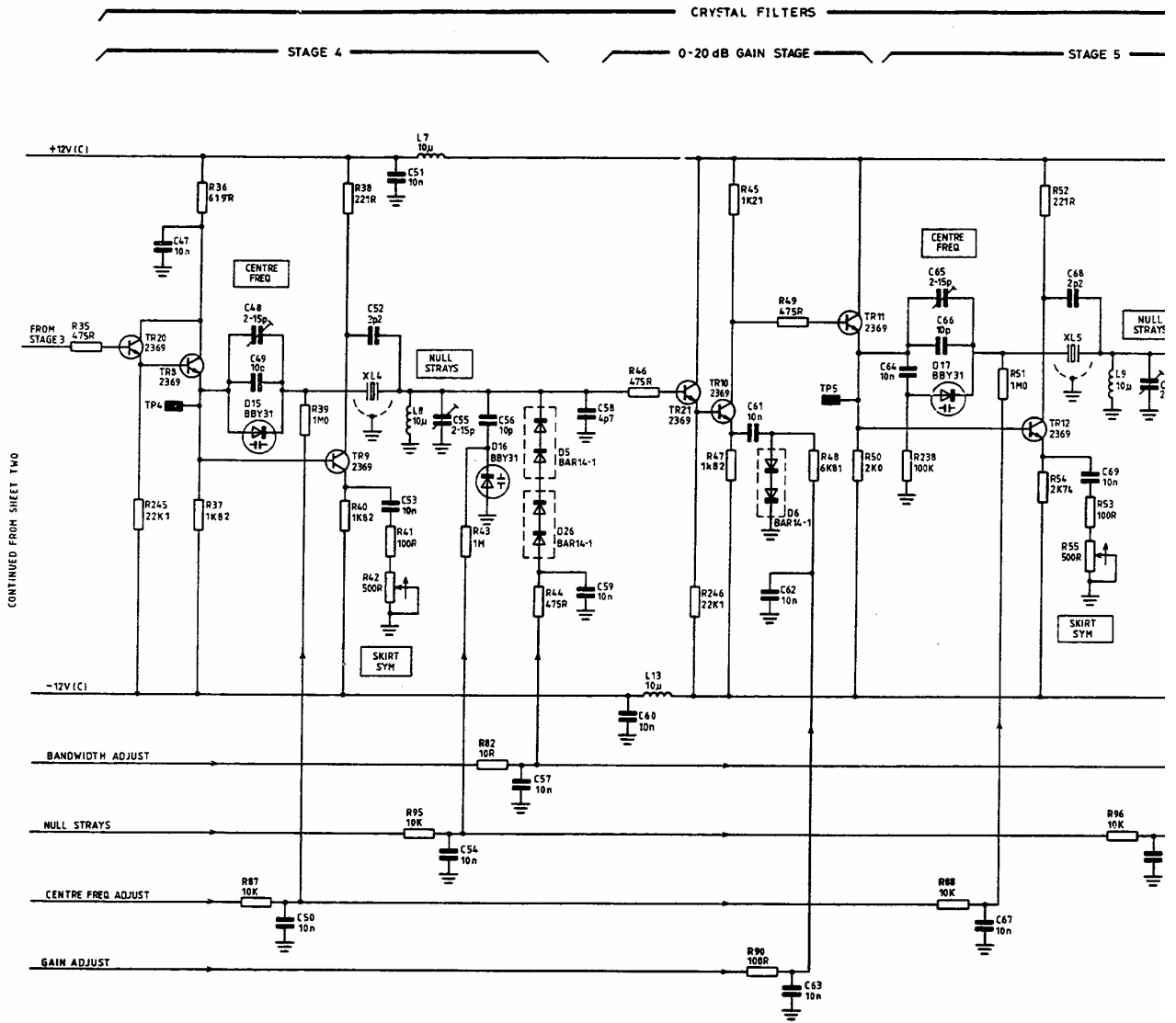


Fig. 7-153 AE6 Crystal filters, stages 1 and 3 - circuit



Circuit diagrams AE6

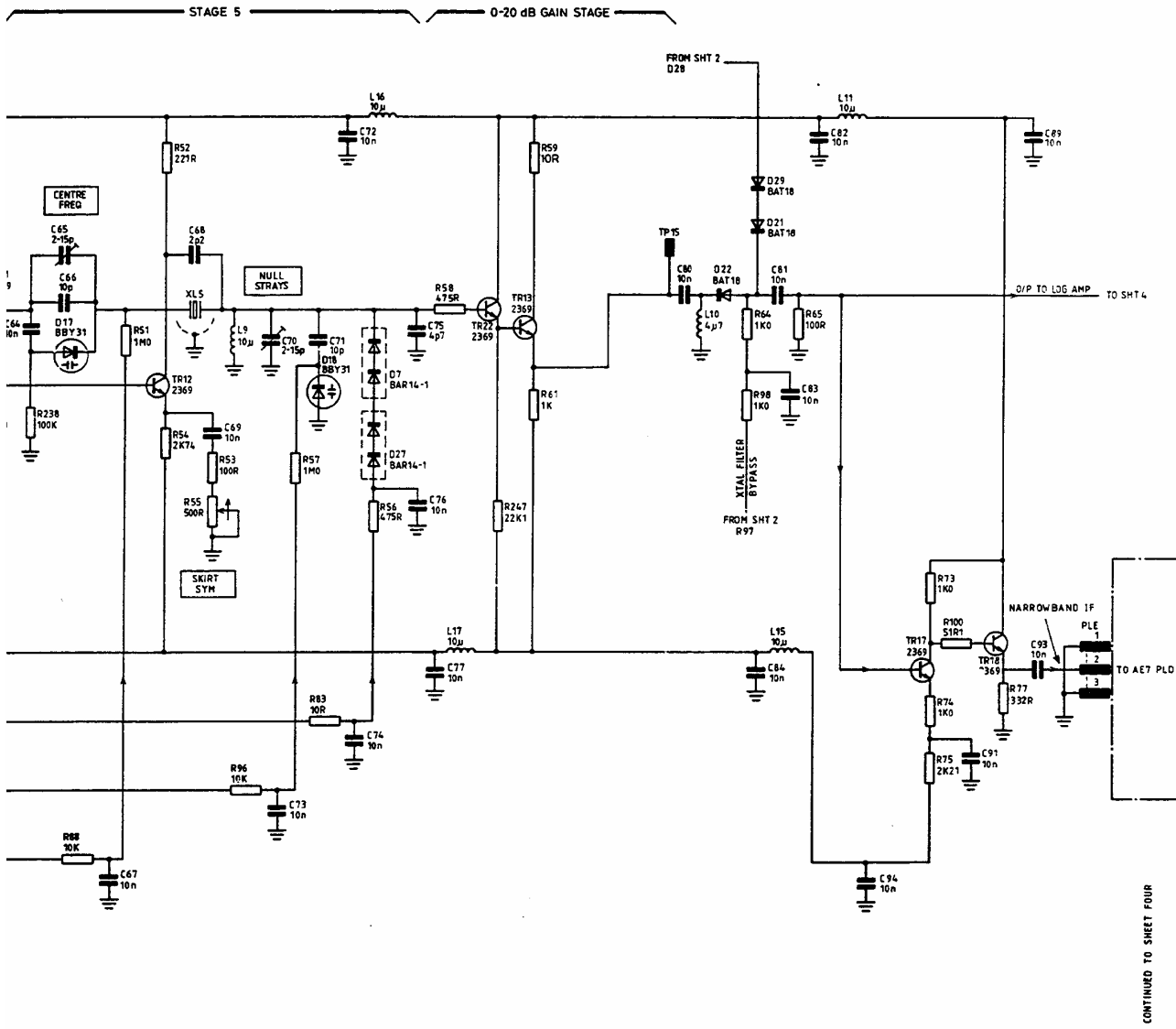
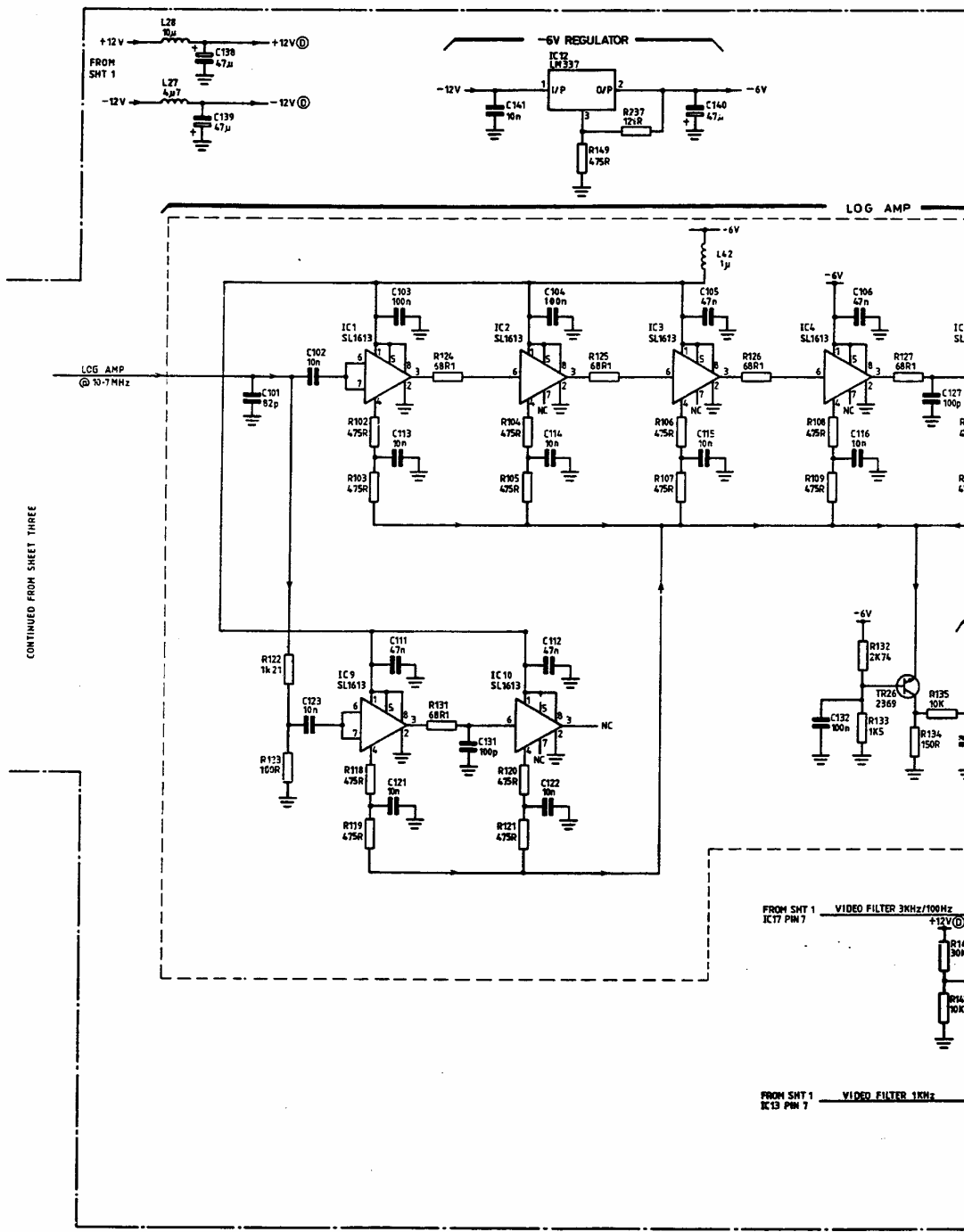


Fig. 7-154 AE6 Crystal filters, stages 4 and 5 - circuit



CONTINUED FROM SHEET THREE

Circuit diagrams AE6

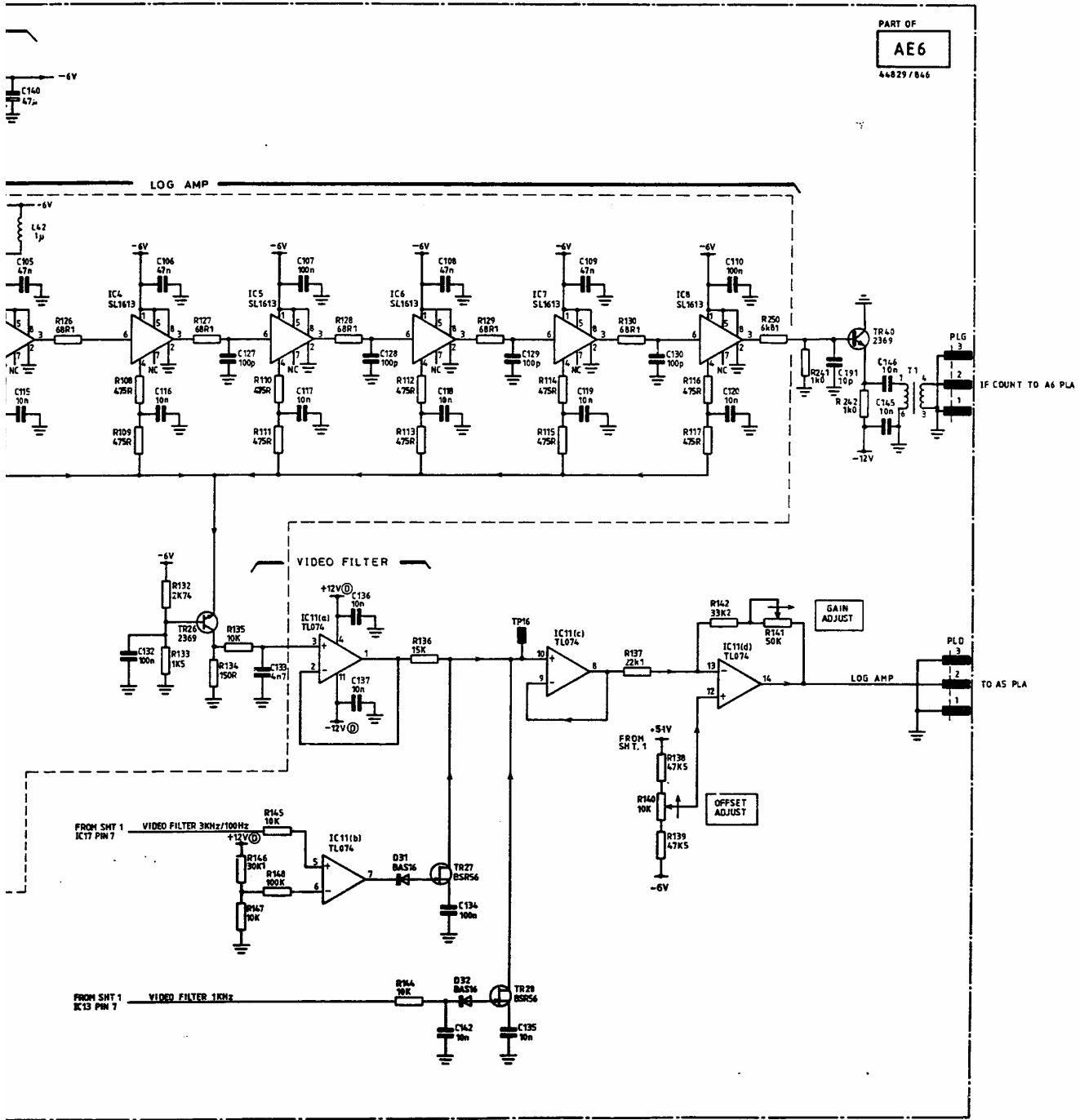
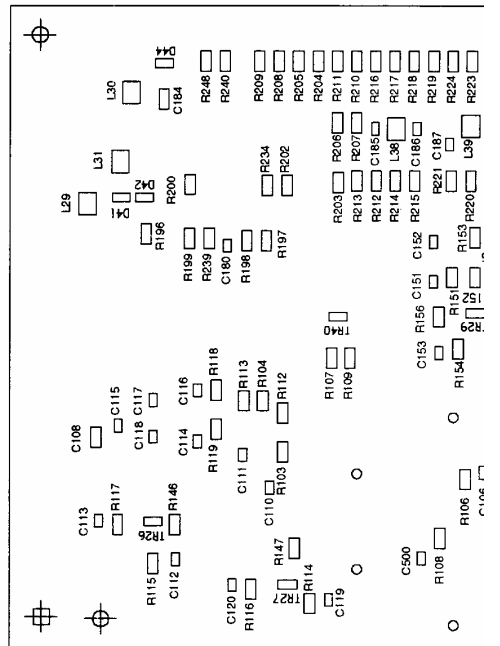
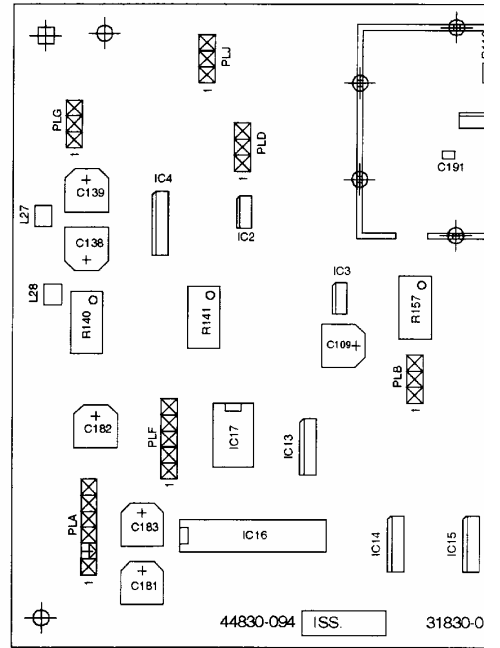


Fig. 7-155 AE6 -6V regulator, log amplifier, video filter - circuit

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-6V regulator, log amplifier, video filter AE6

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Component layout A6/2

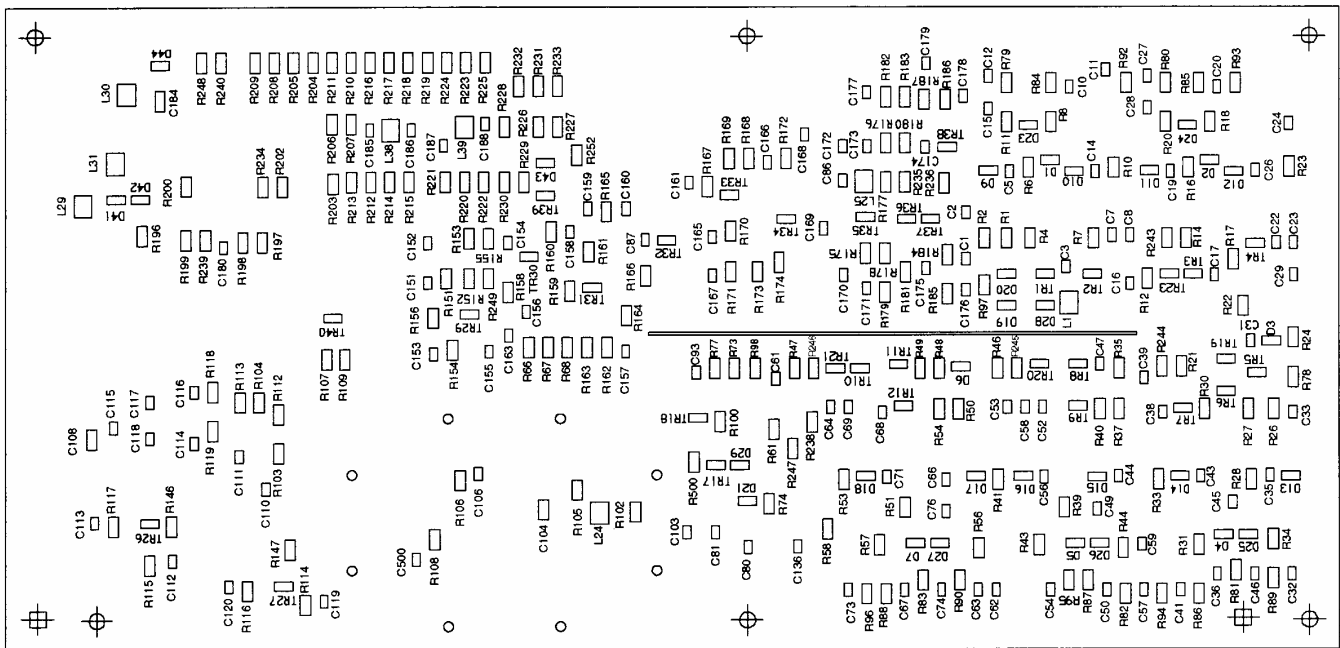
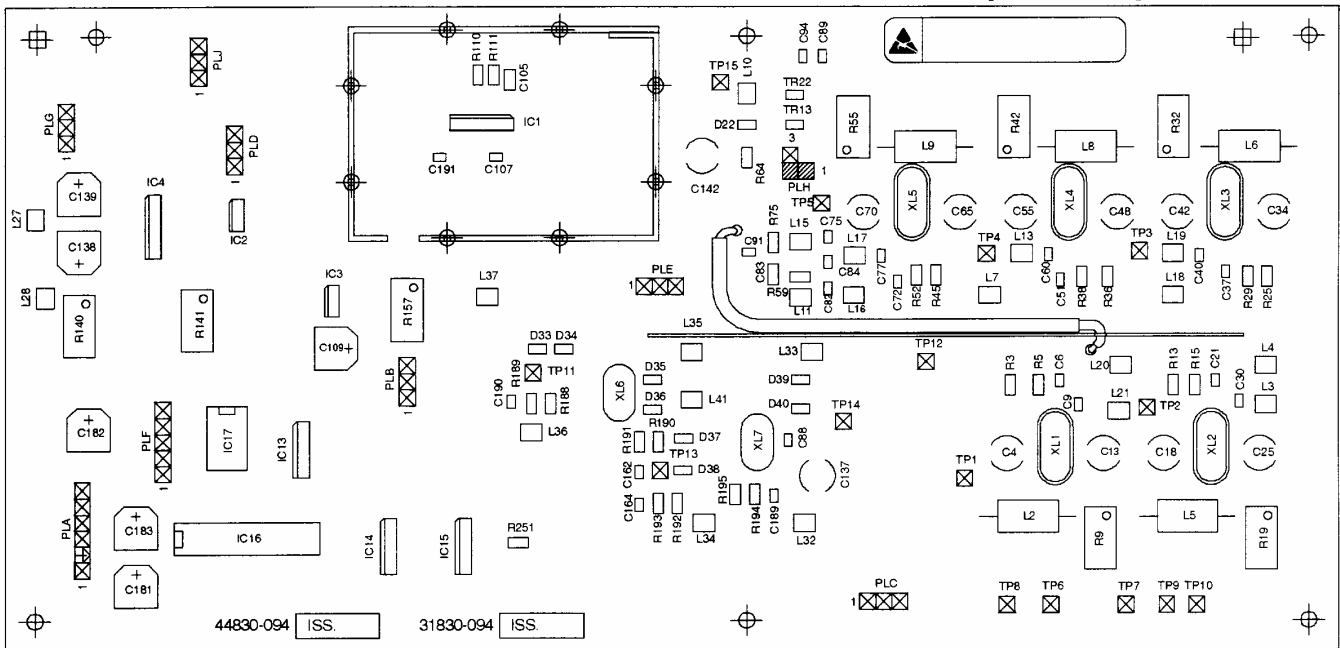
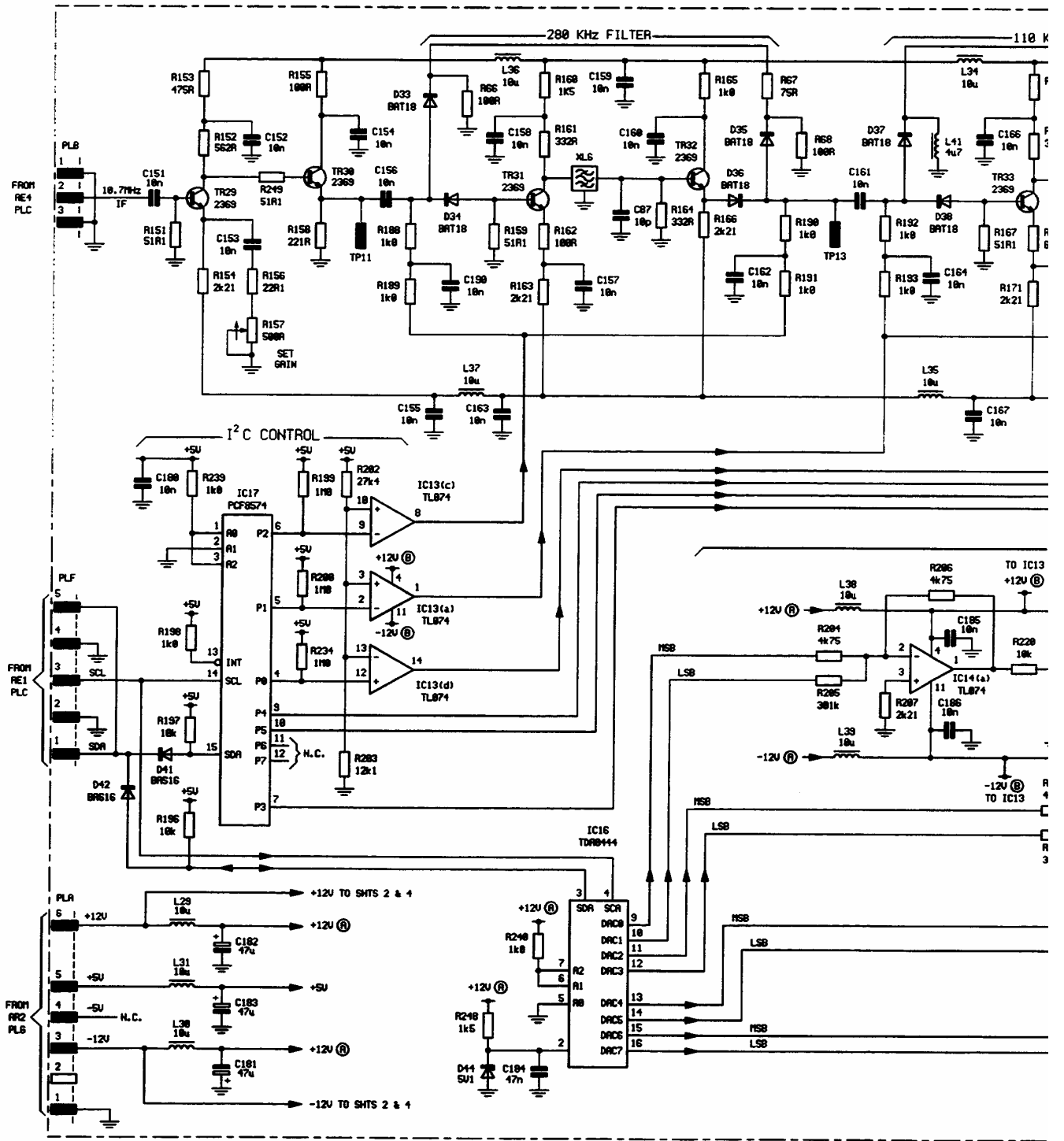
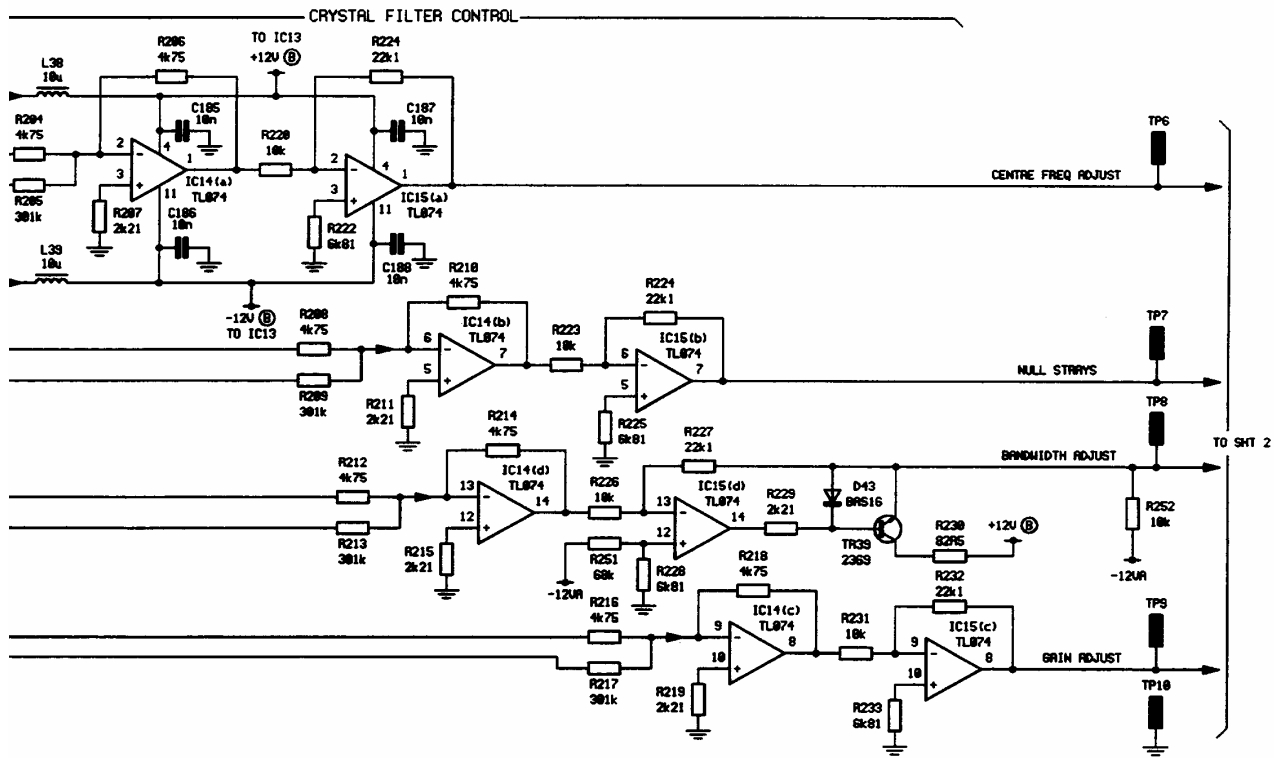
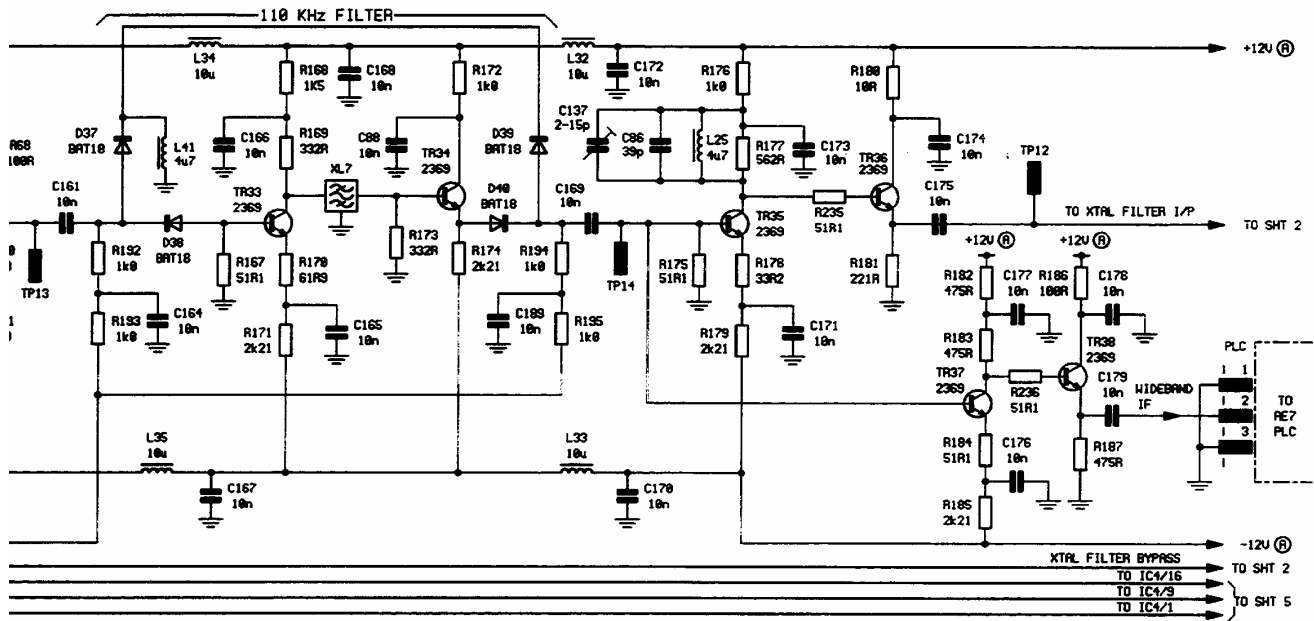


Fig. 7-156 AE6/2 Spectrum analyzer - component layout



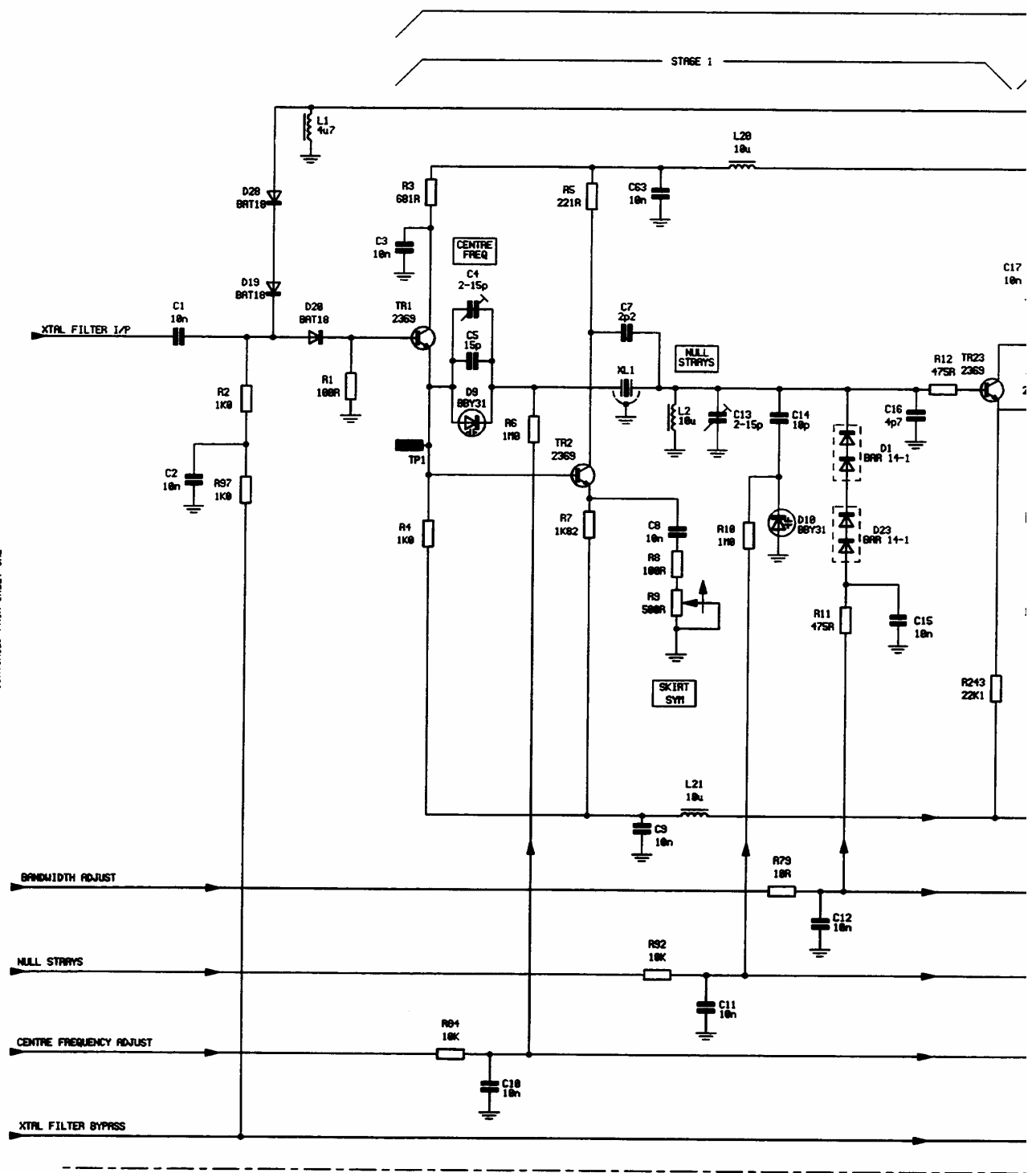
Circuit diagrams AE6/2



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AE6/2
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Fig. 7-157 AE6/2 IF bandwidth filters - circuit

CONTINUED FROM SHEET ONE



Circuit diagrams **AE6/2**

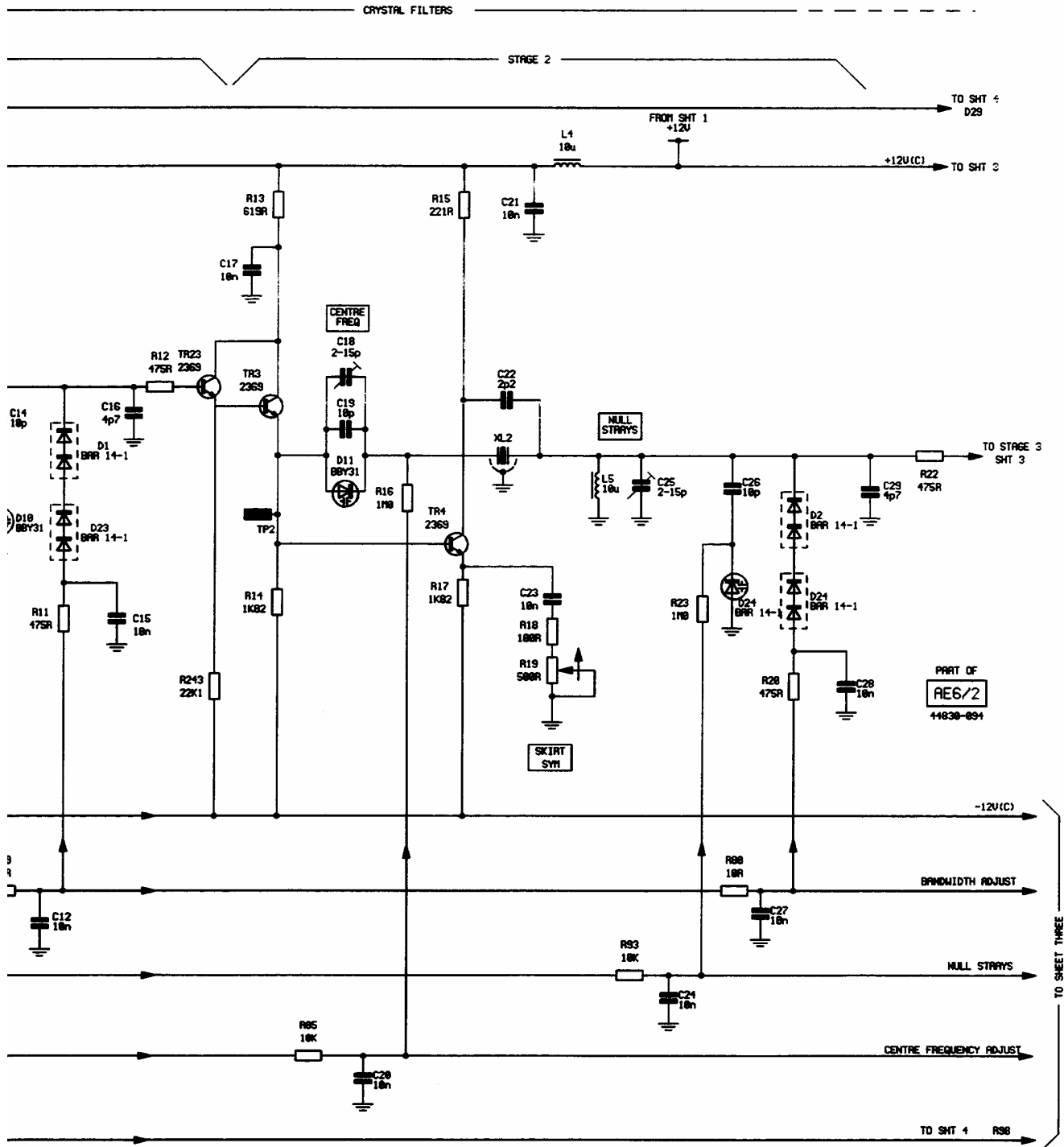
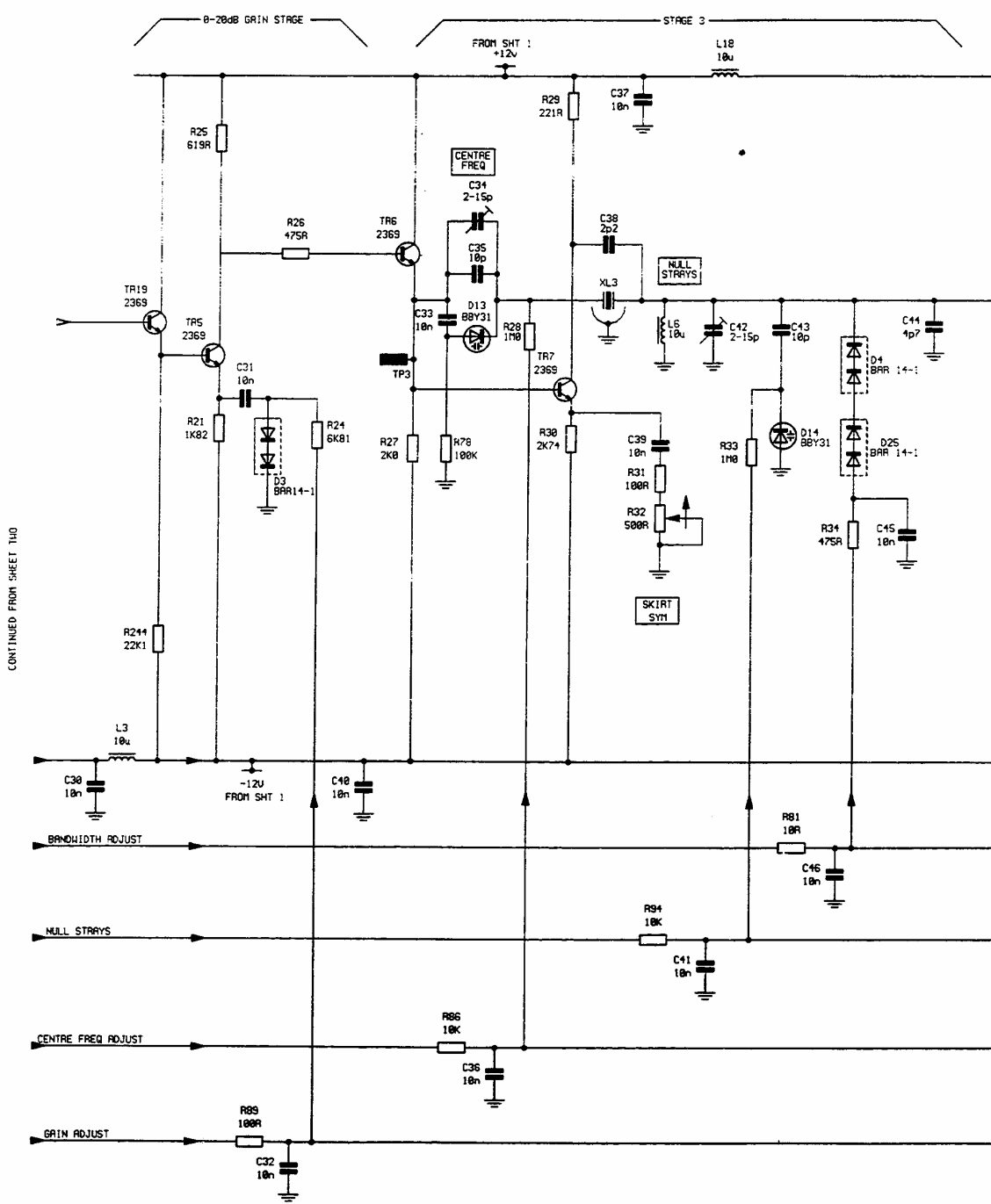


Fig. 7-158 AE6/2 Crystal filters, stages 1 and 2 - circuit



Circuit diagrams AE6/2

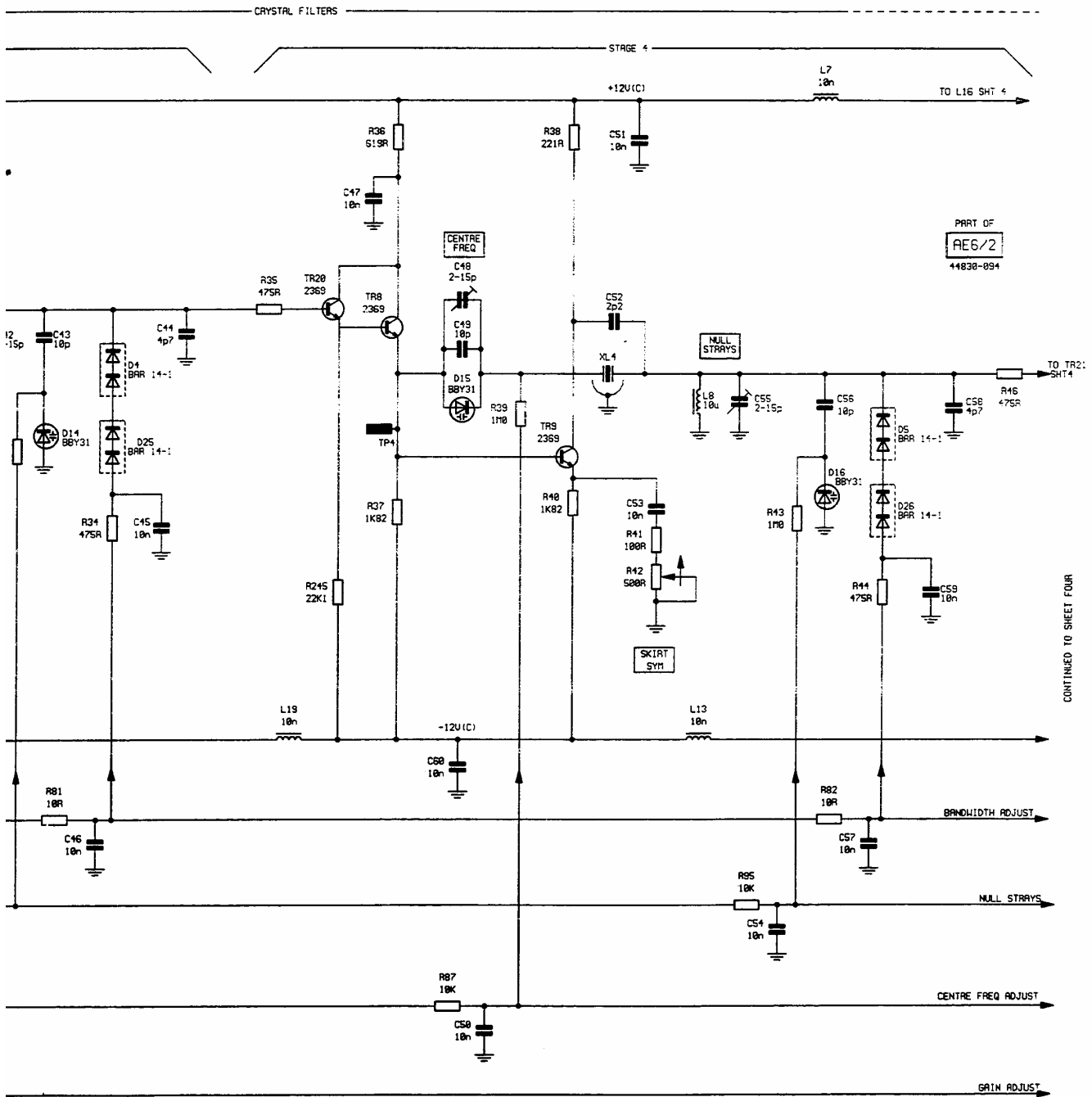
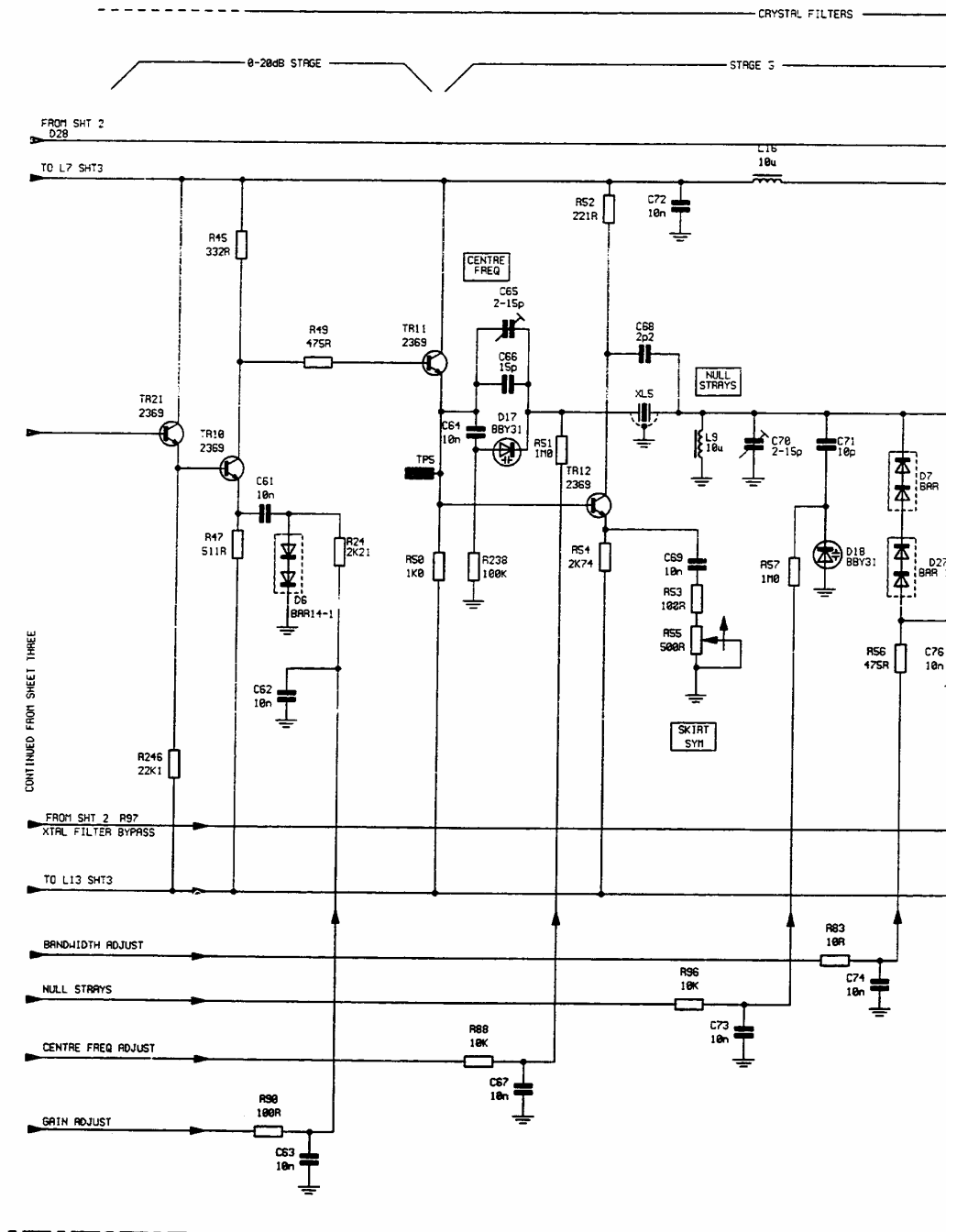


Fig. 7-159 AE6/2 Crystal filters, stages 3 and 4 - circuit



Circuit diagrams AE6/2

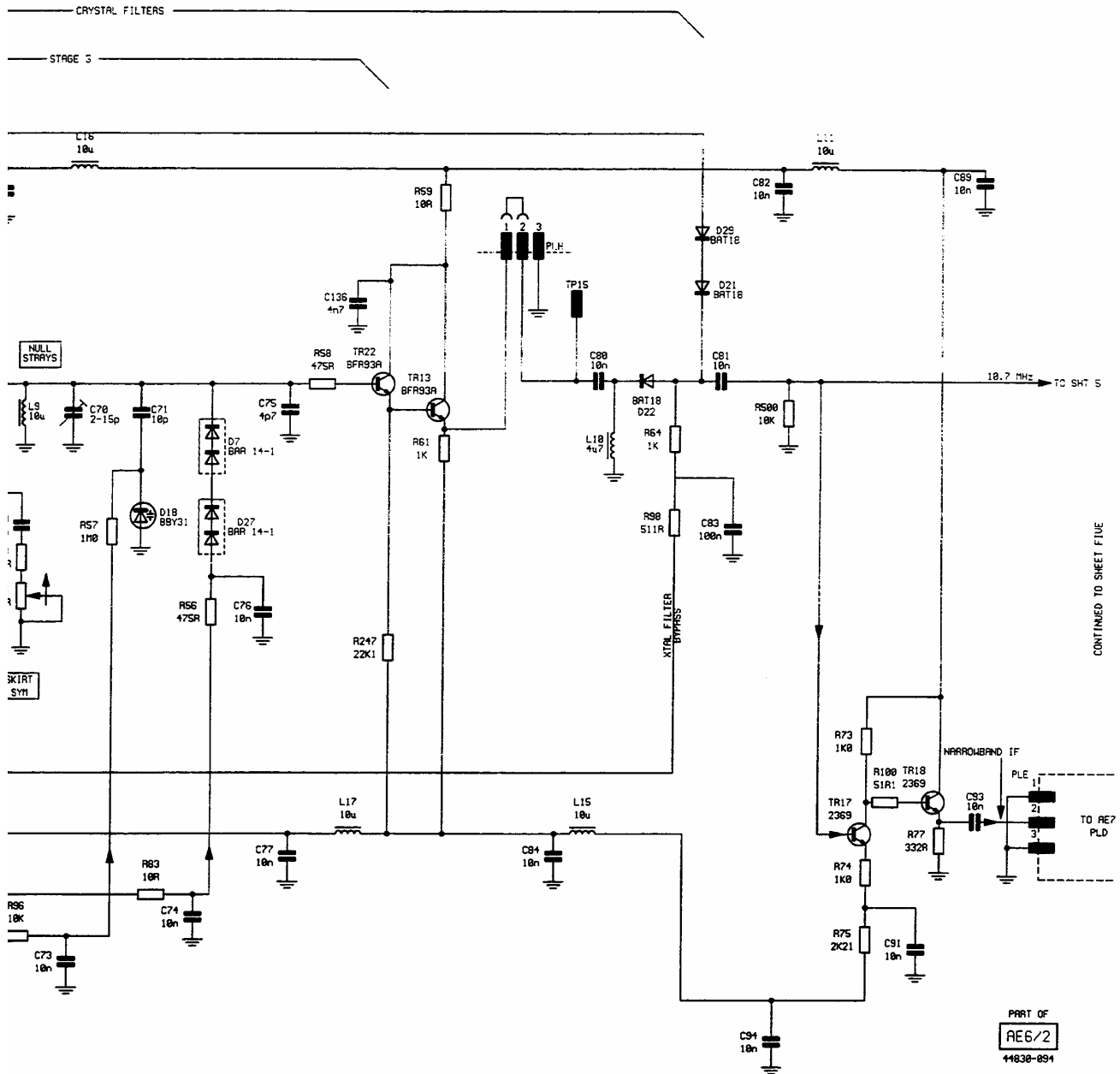
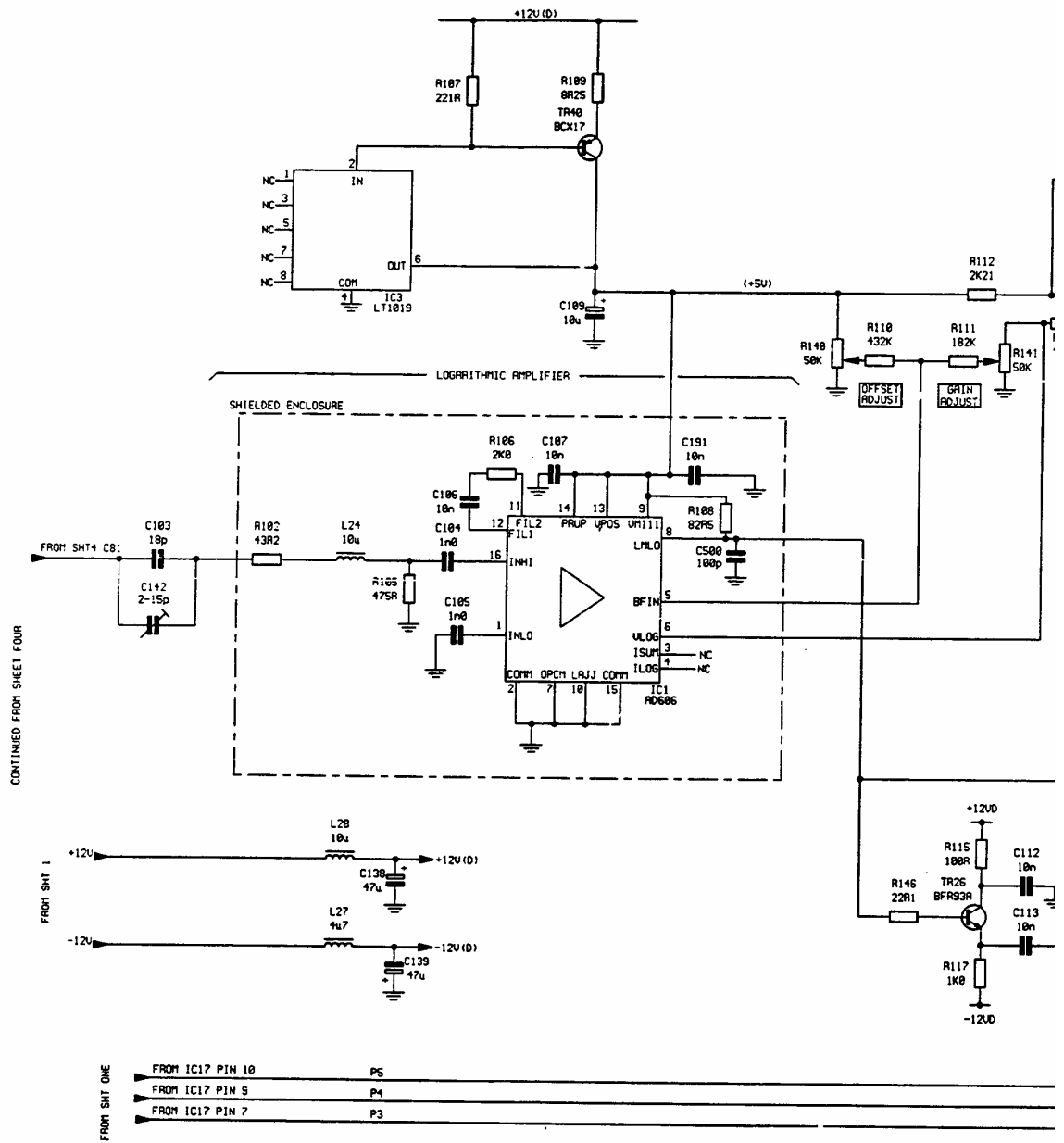


Fig. 7-160 AE6/2 Crystal filters, stage 5 - circuit



Circuit diagrams AE6/2

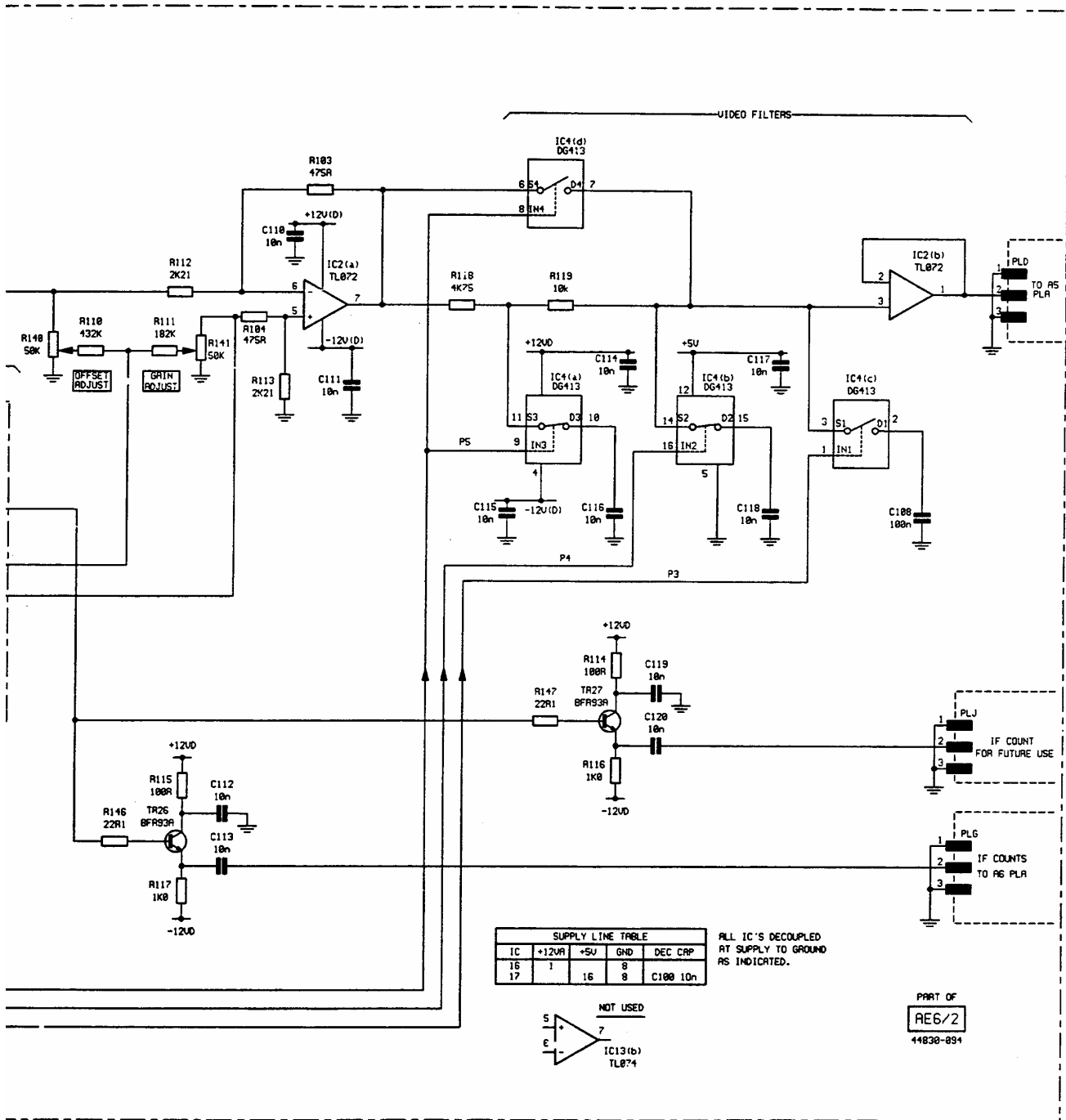
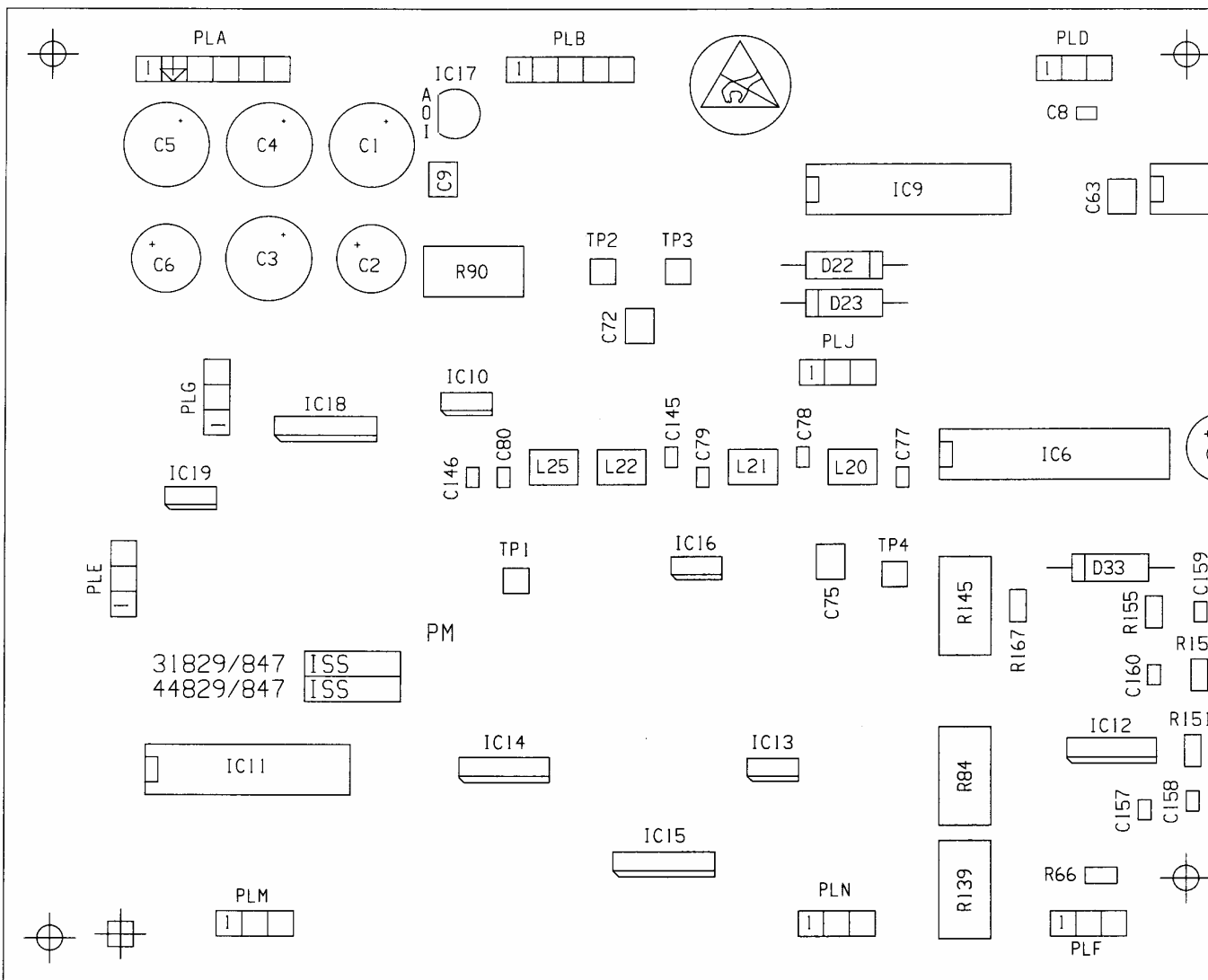


Fig. 7-161 AE6/2 Log amplifier, video filter - circuit

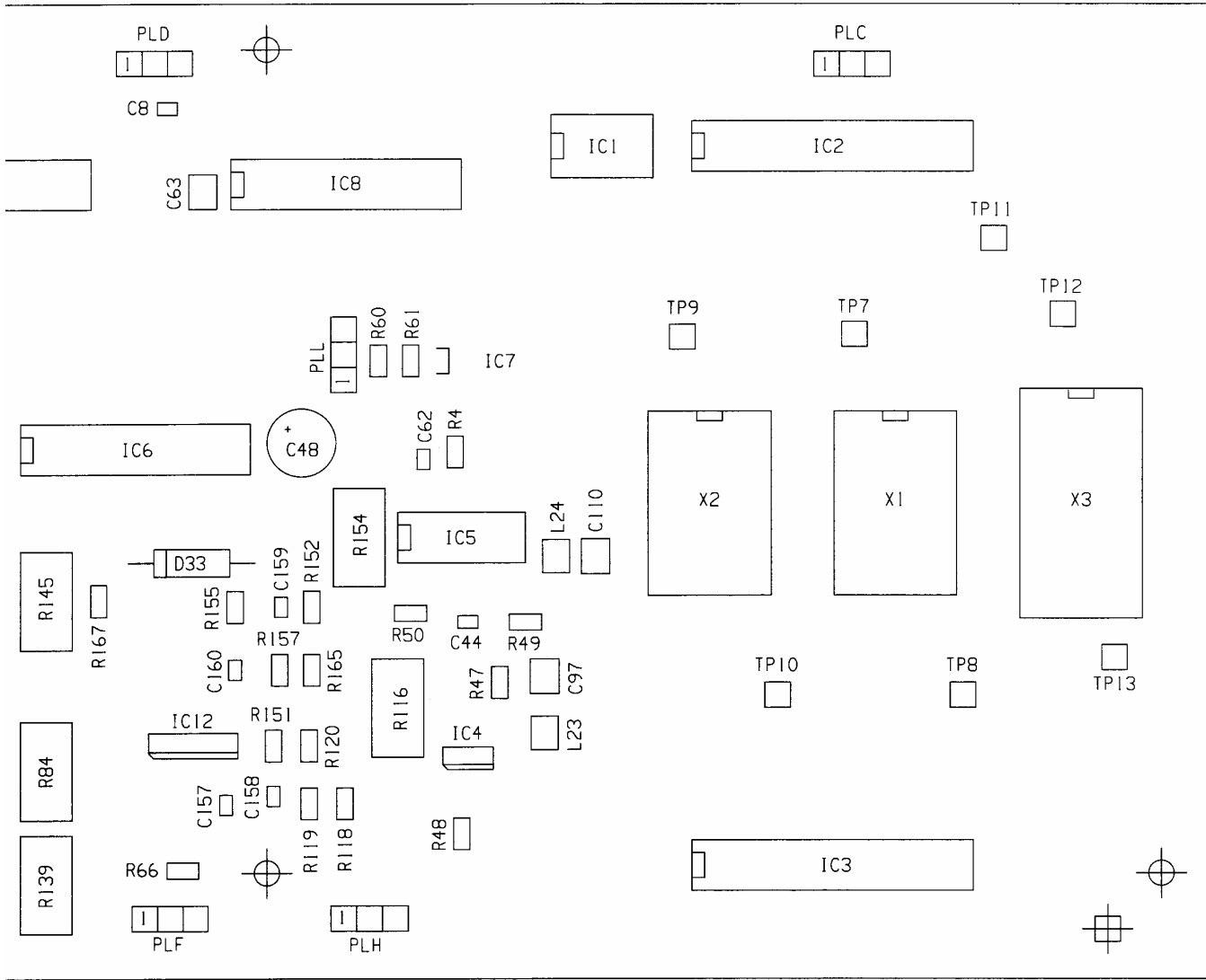
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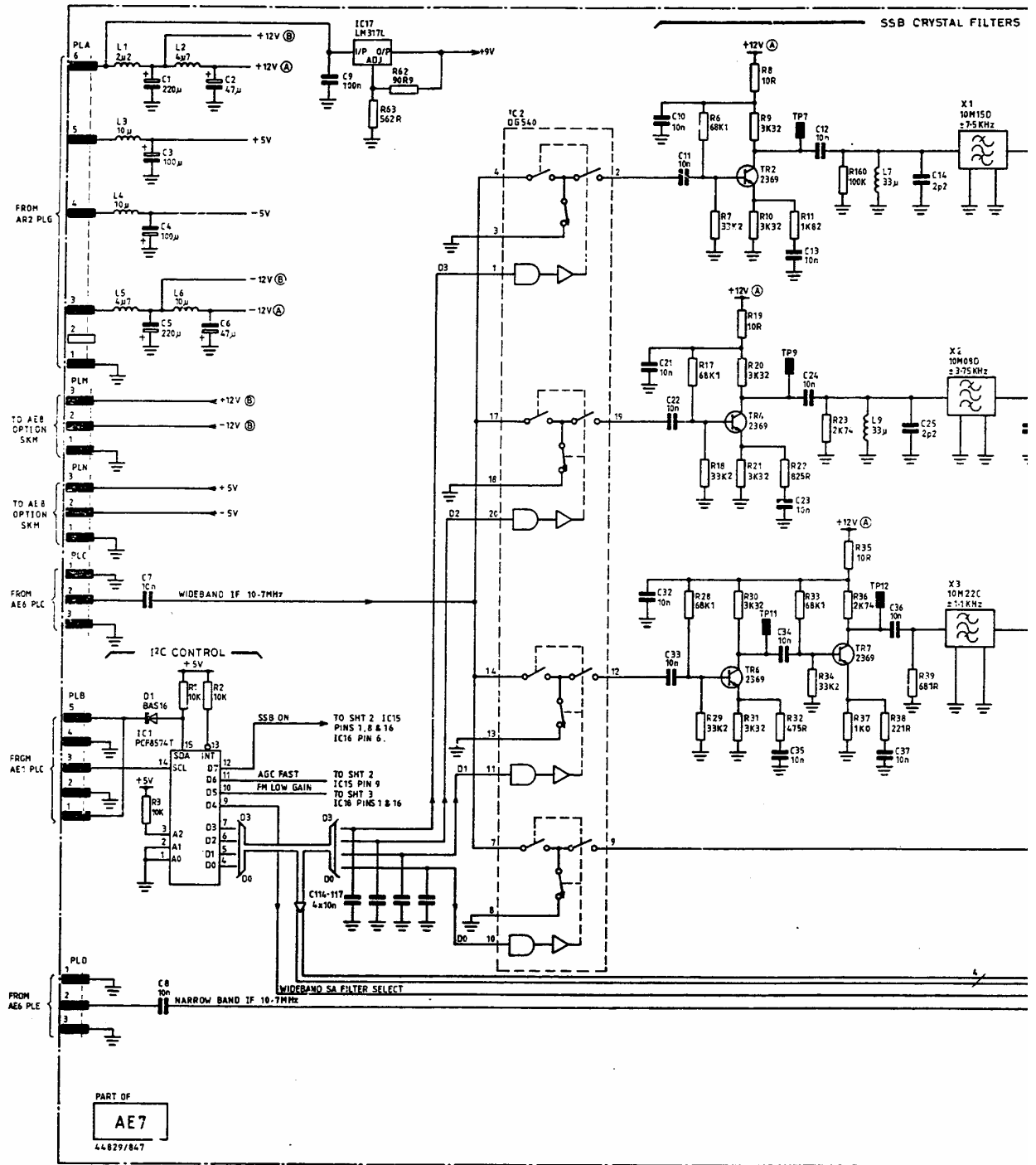


Log amplifier, video filter **AE6/2**

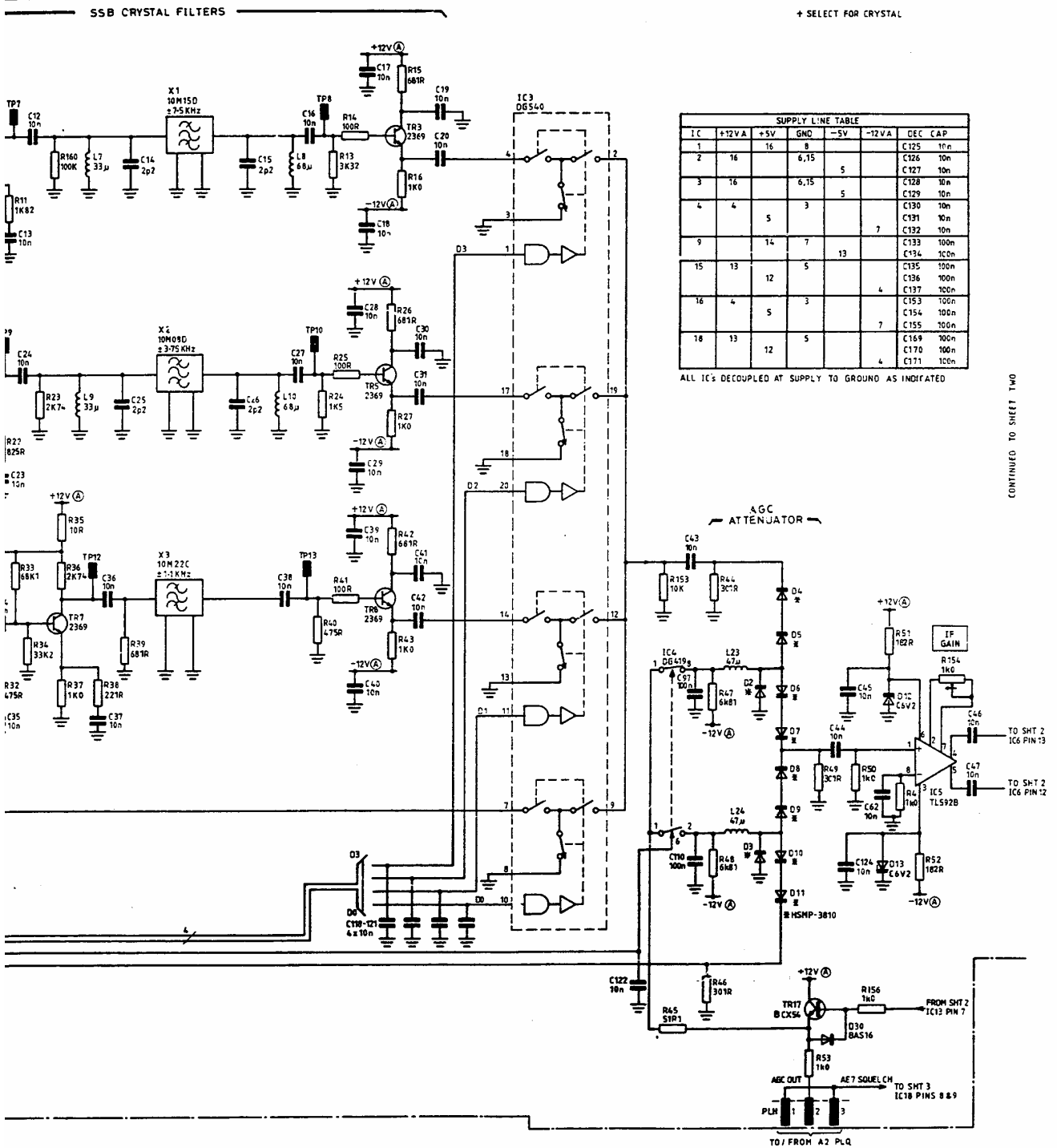
Drg. No. 44829/847

Component layout AE7



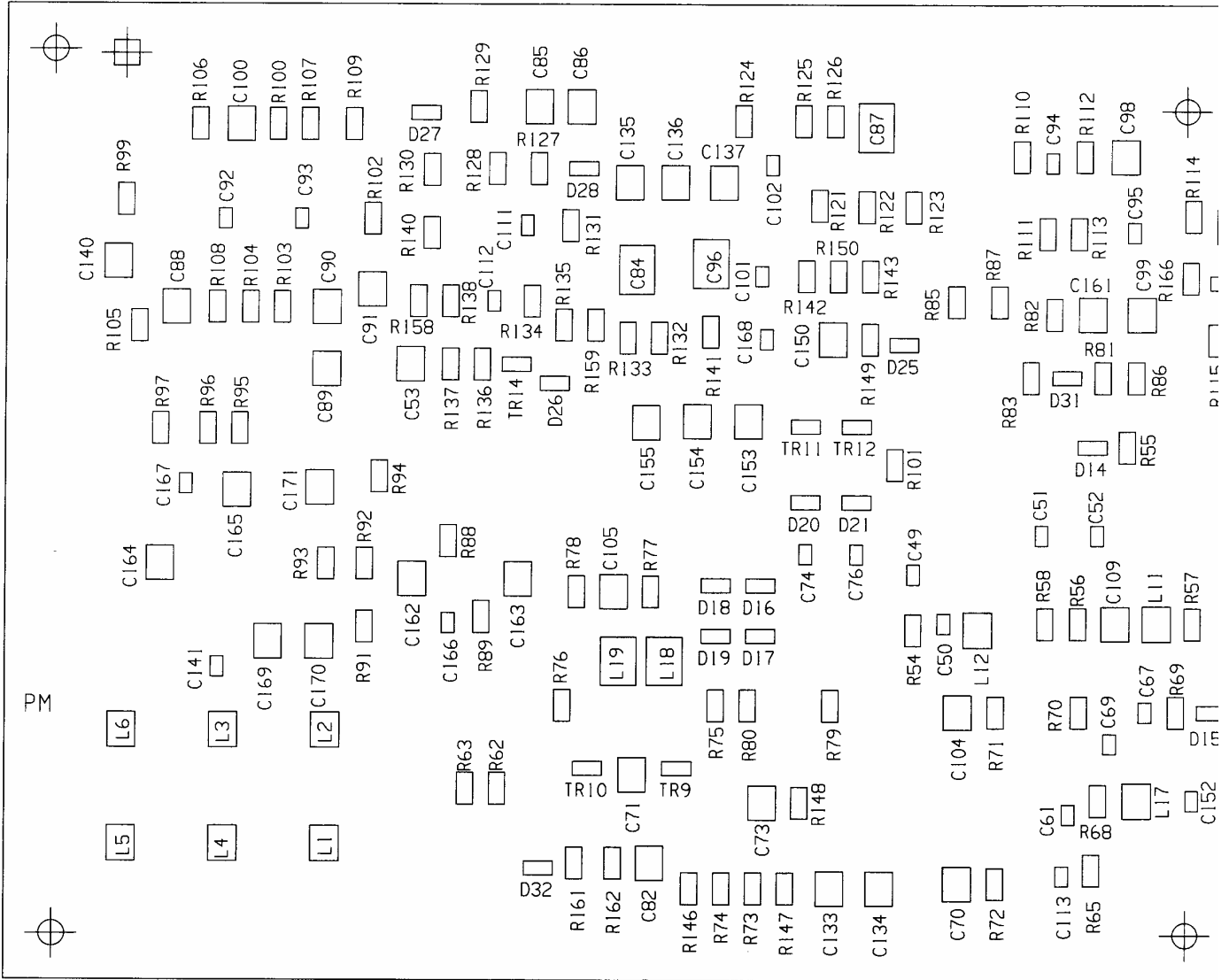


Circuit diagrams AE7



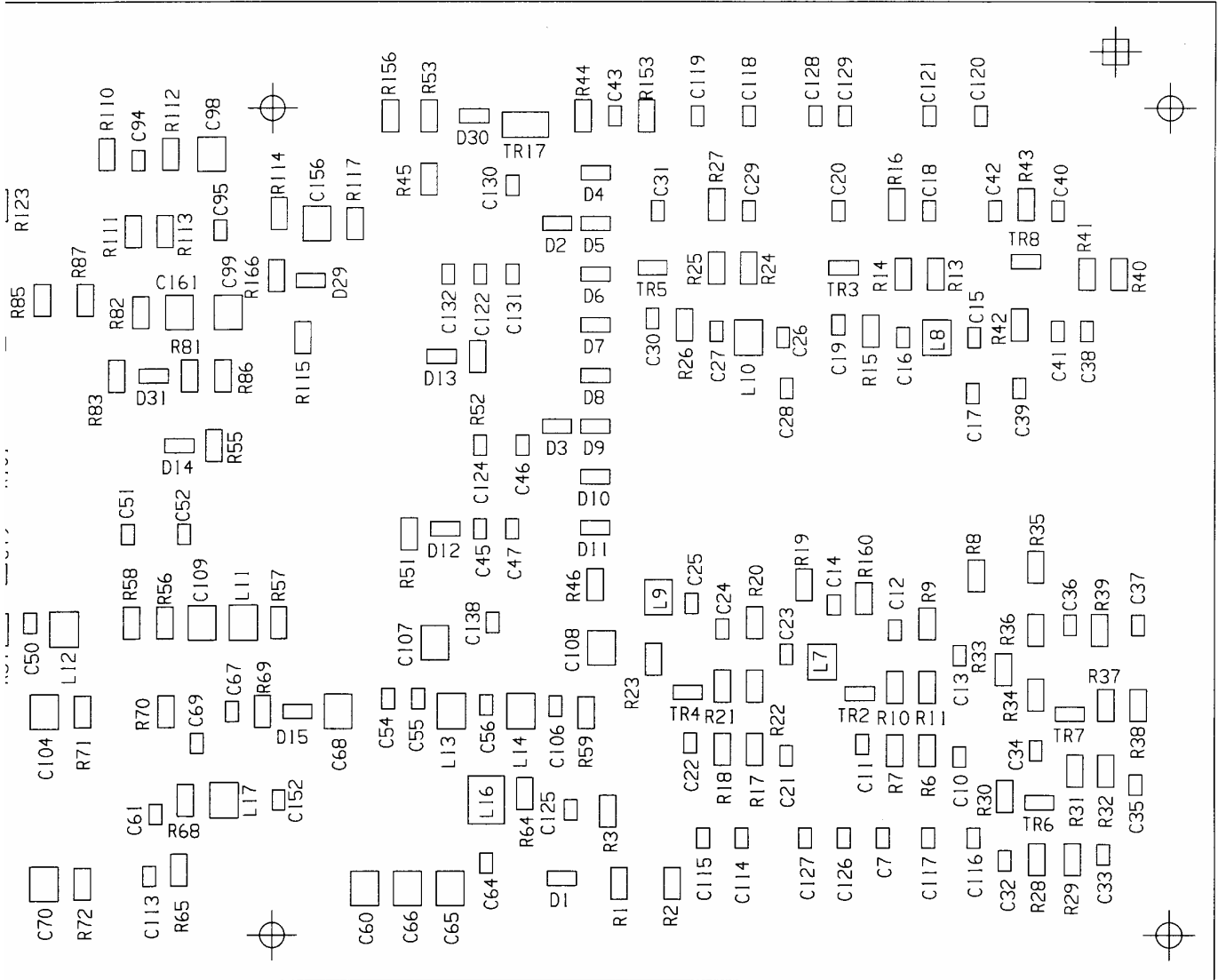
CONTINUED TO SHEET TWO

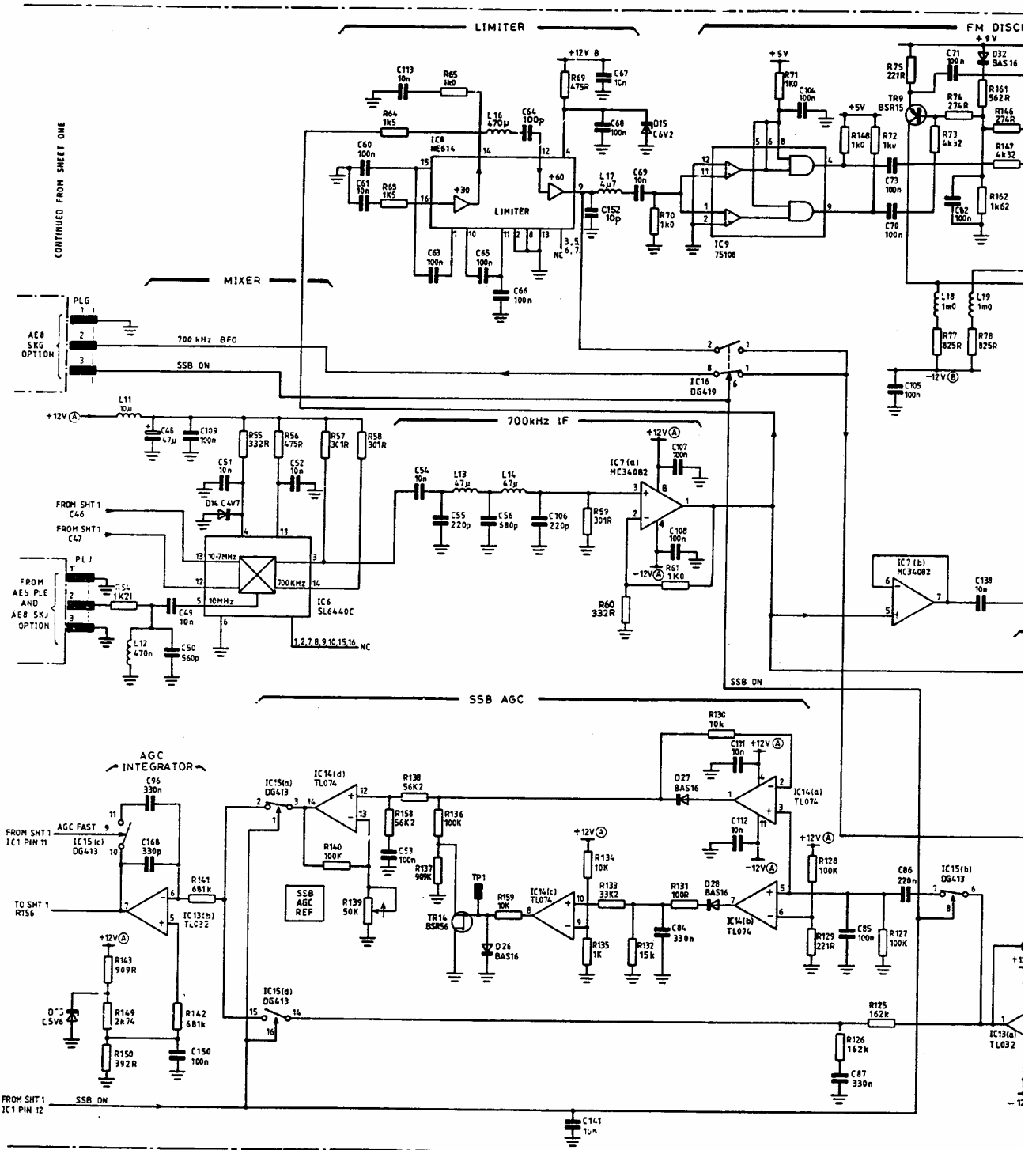
Fig. 7-163 AE7 SSB crystal filters, AGC attenuator - circuit



SSB crystal filters, AGC attenuator AE7

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Circuit diagrams AE7

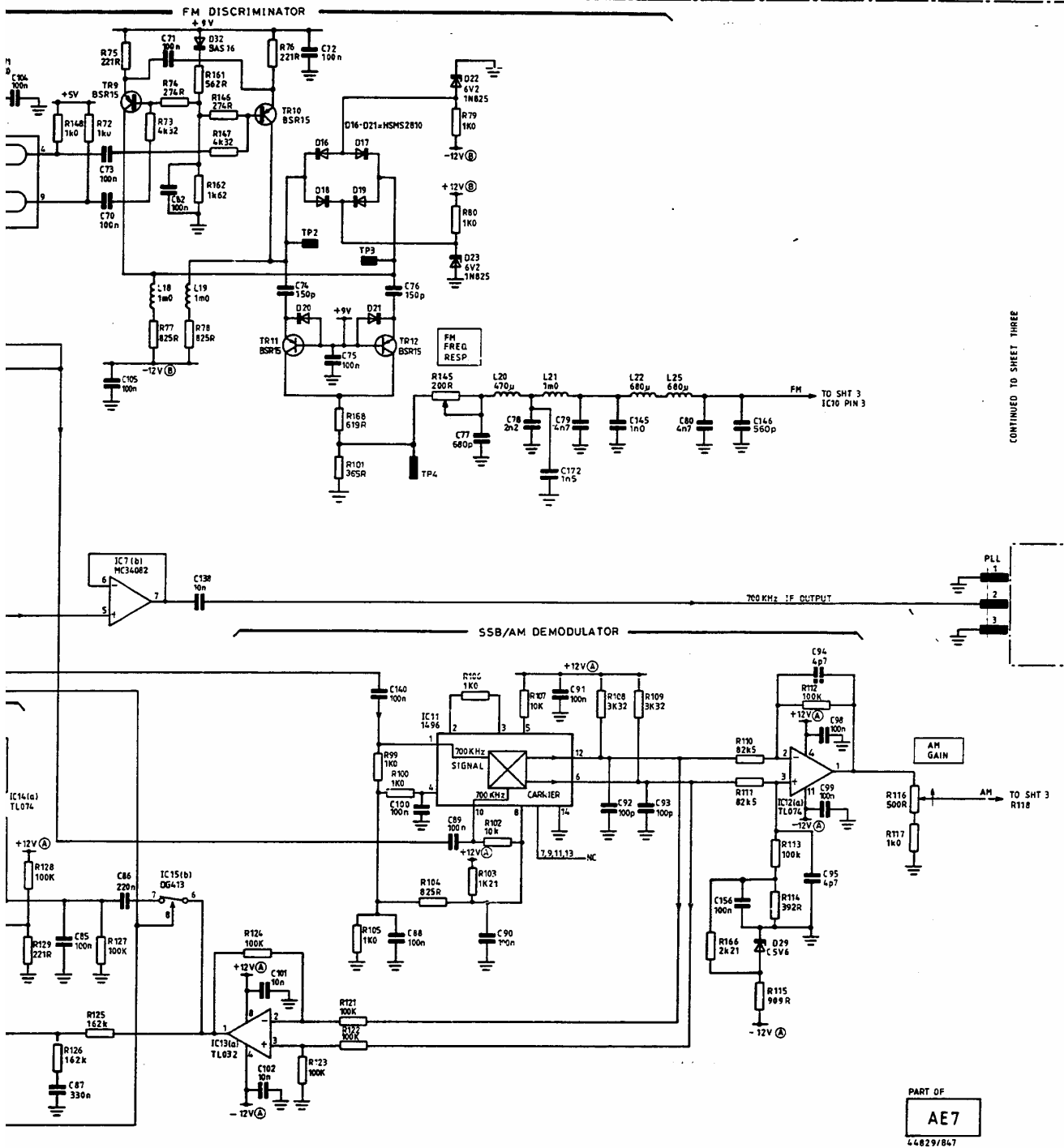
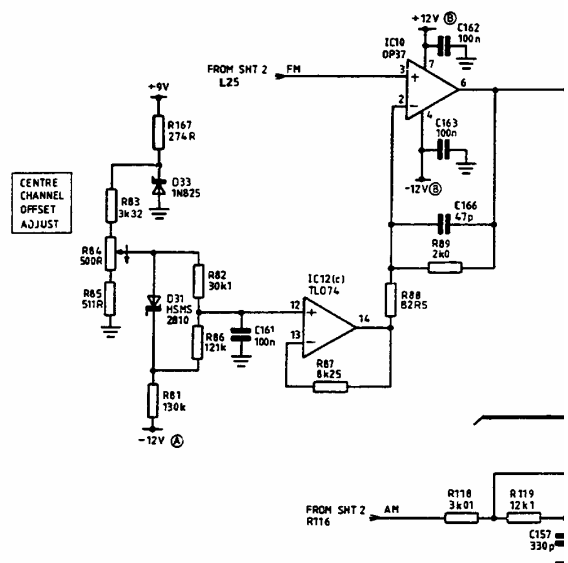


Fig. 7-165 AE7 Mixer, limiter, FM discriminator, SSB AGC & AM demod - circuit

FM OFFSET CORRECTION



CONTINUED FROM SHEET TWO

Circuit diagrams AE7

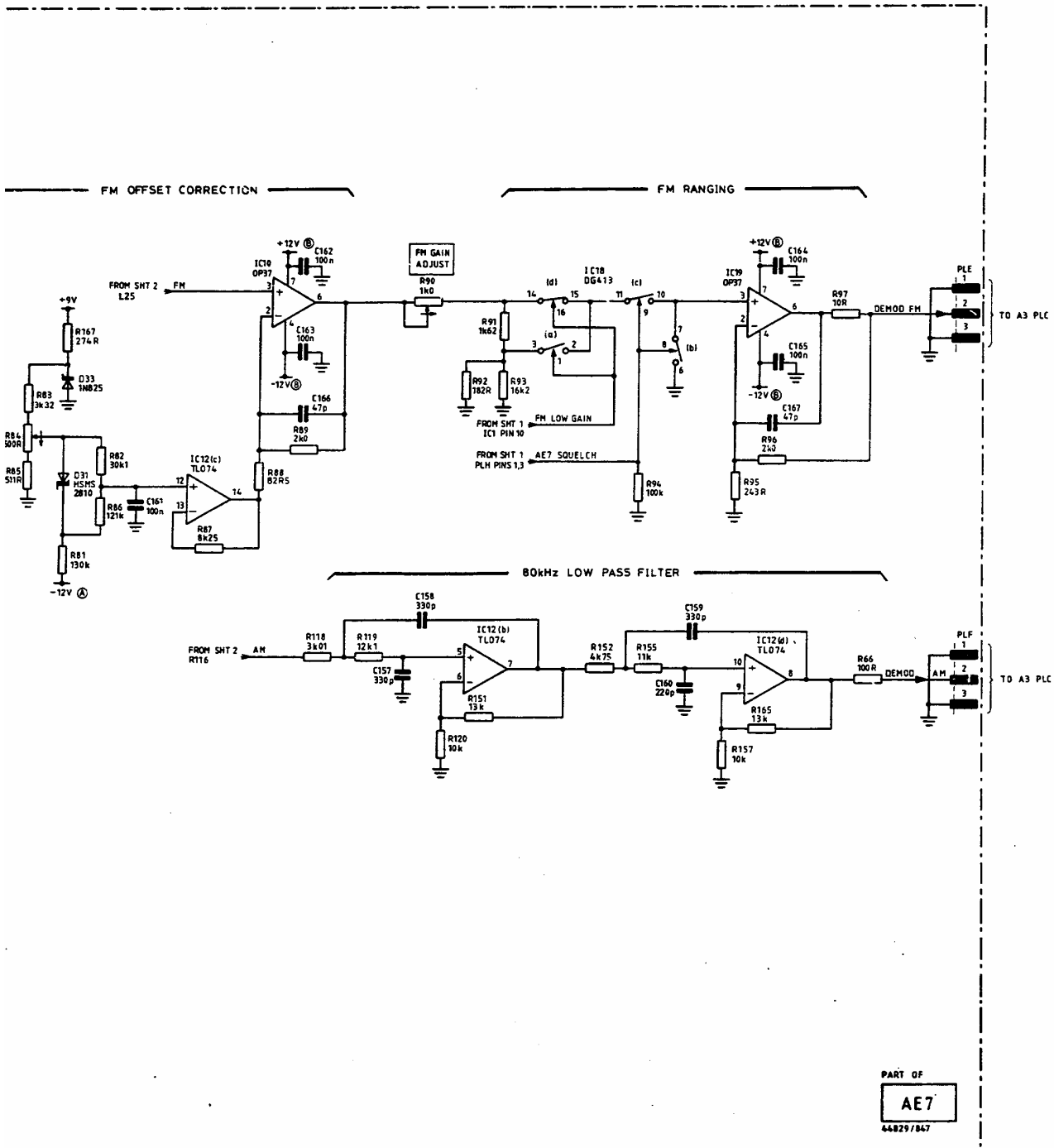
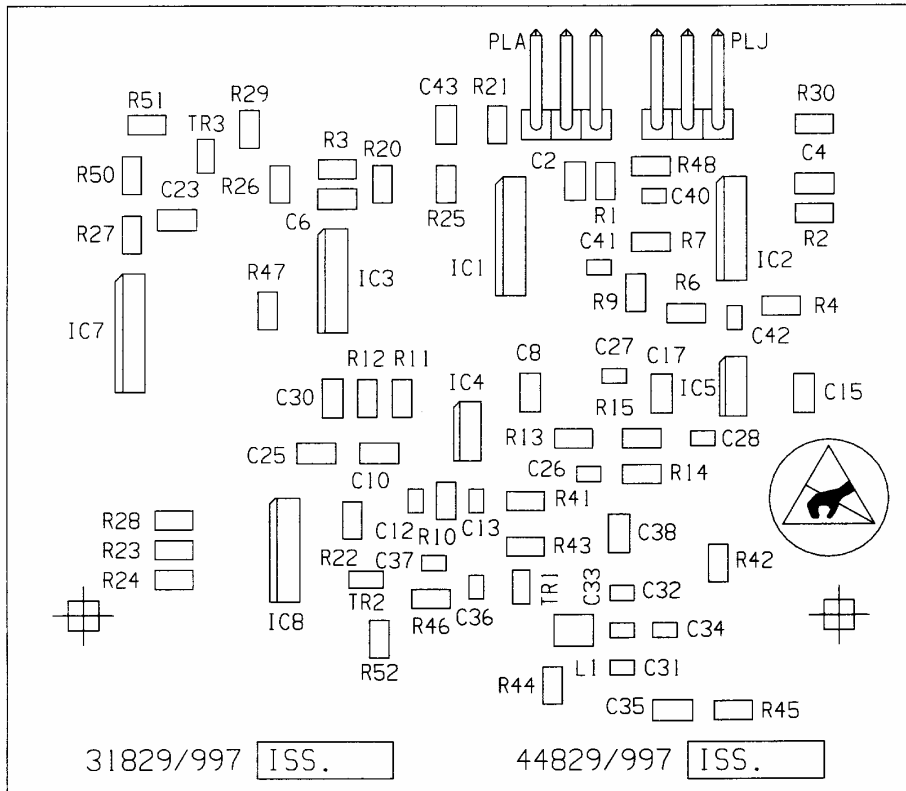


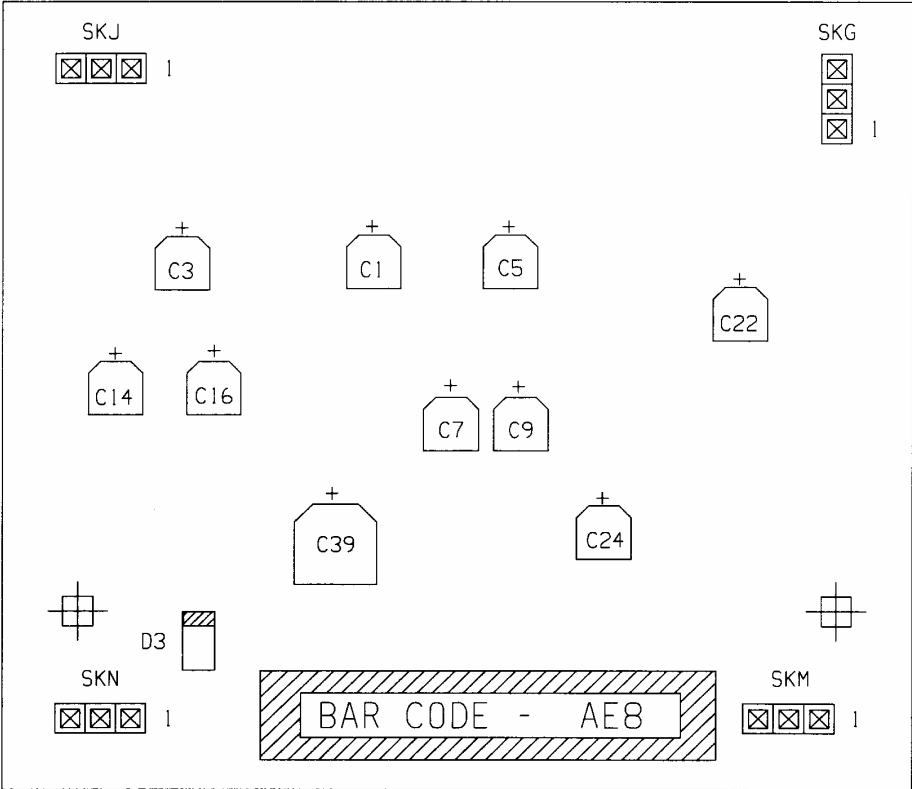
Fig. 7-166 AE7 FM offset correction and ranging, 80 kHz LP filter - circuit

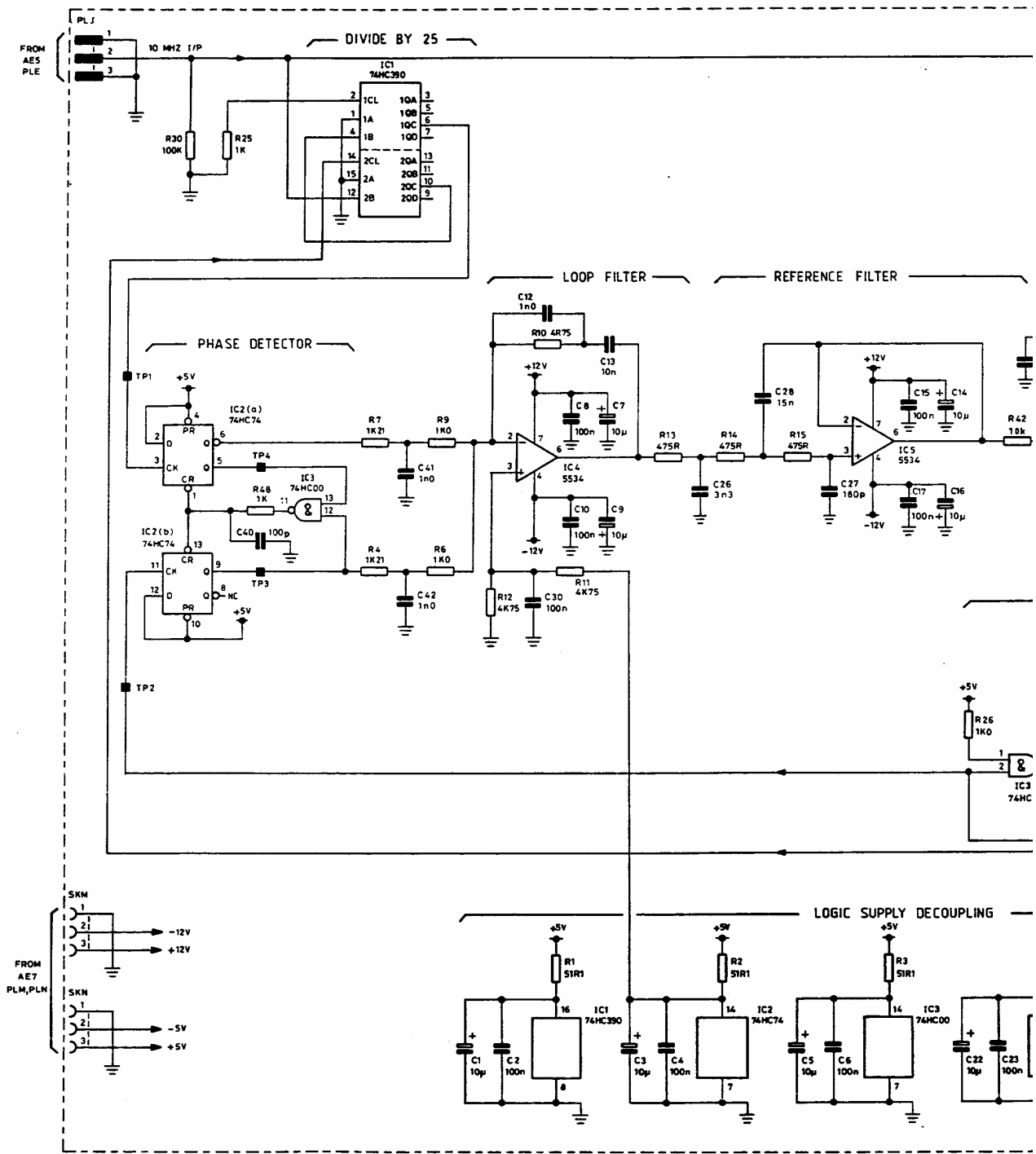


FM offset correction and ranging, 80 kHz LP filter AE7

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Component layout **AE8**





Circuit diagram AE8

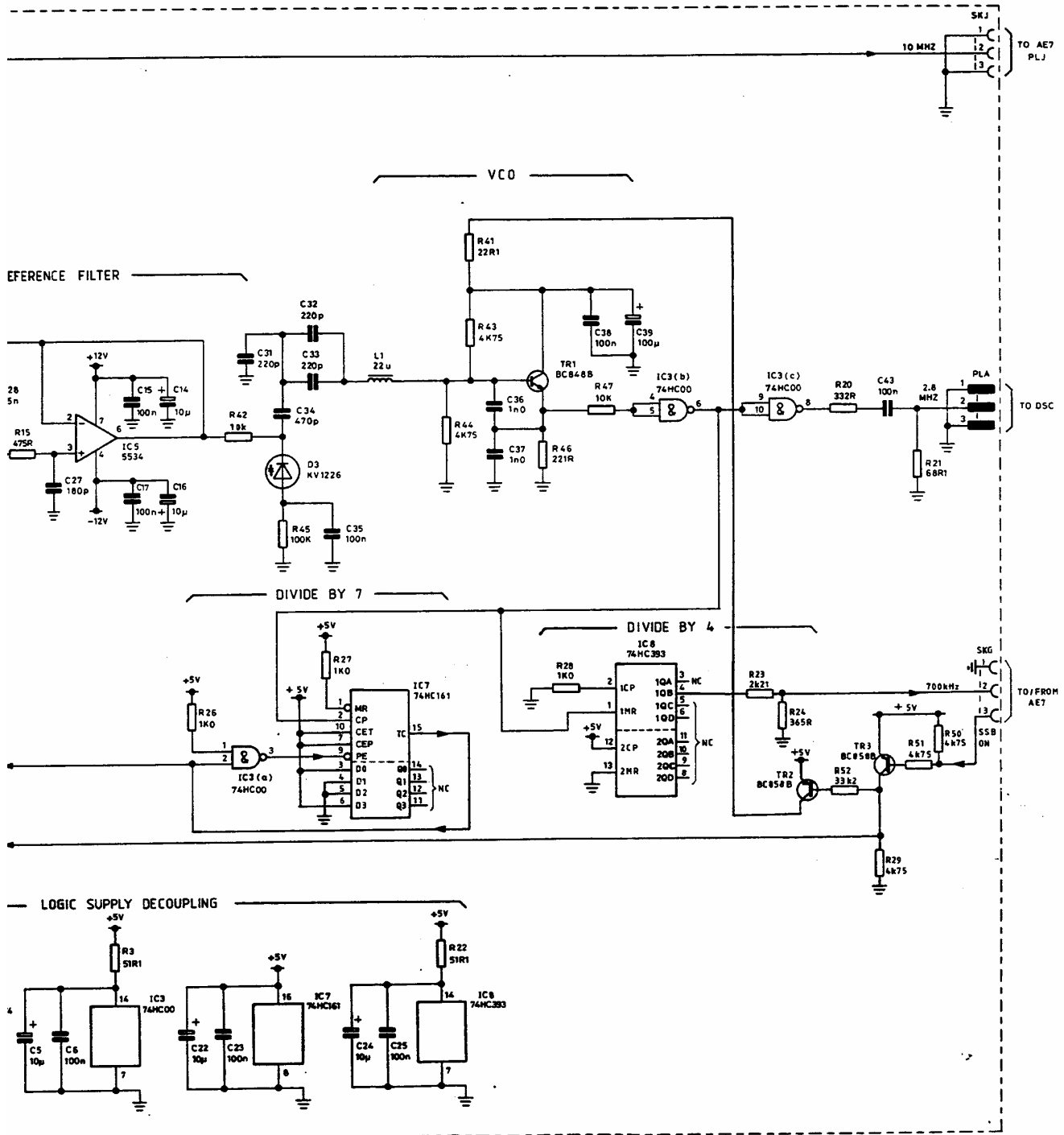
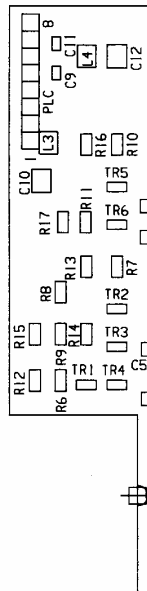
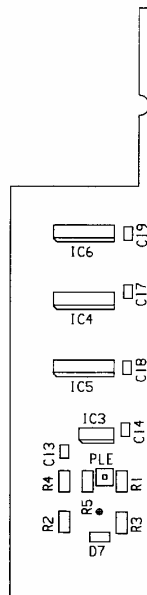


Fig. 7-168 AE8 SSB BFO - circuit

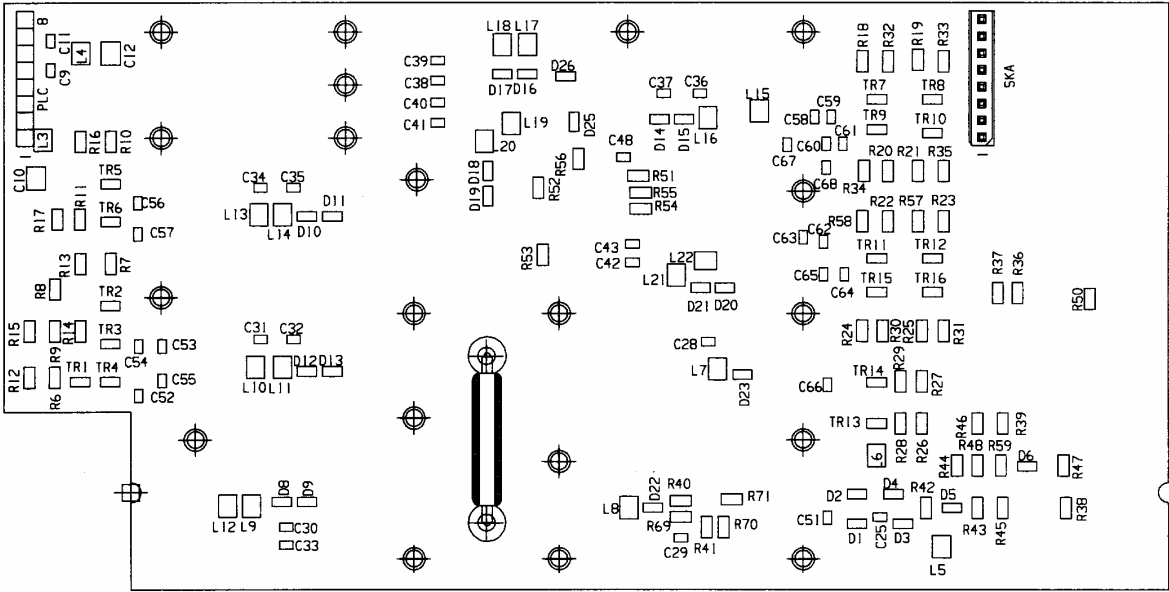
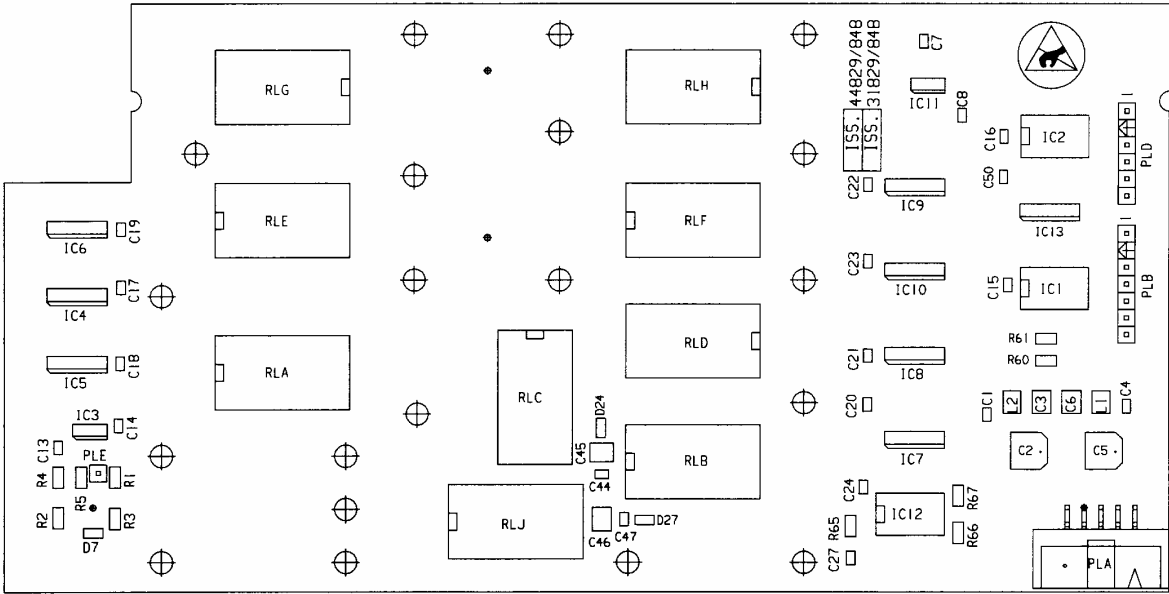
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SSB BFO AE8

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Component layout AA1

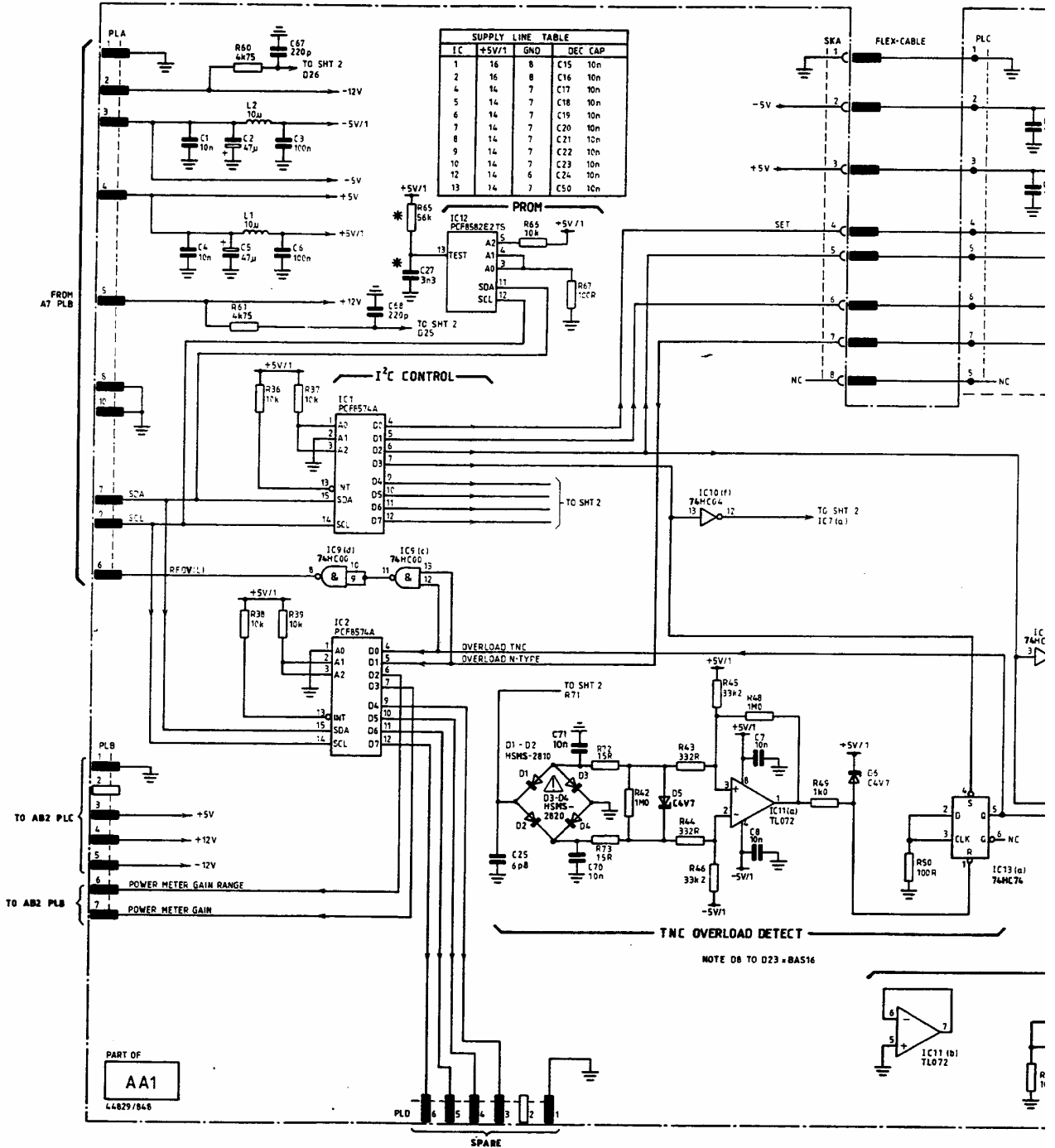


E8

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Fig. 7-169 AA1 Input switch - component layout

NOTE
 * R65 & C27 ONLY FITTED WHEN
 IC12 IS TYPE PCF8582AT.



Circuit diagrams AA1

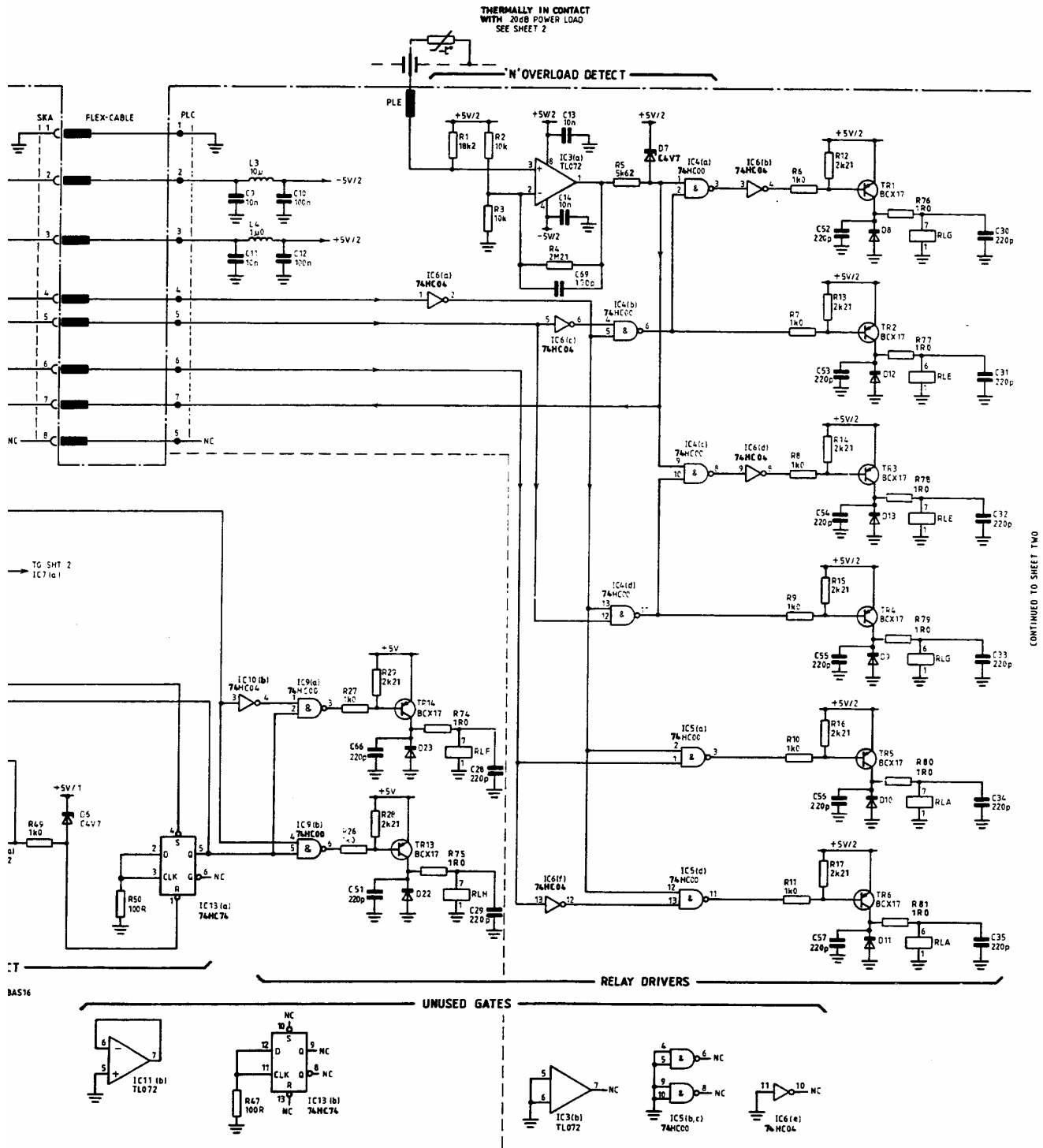
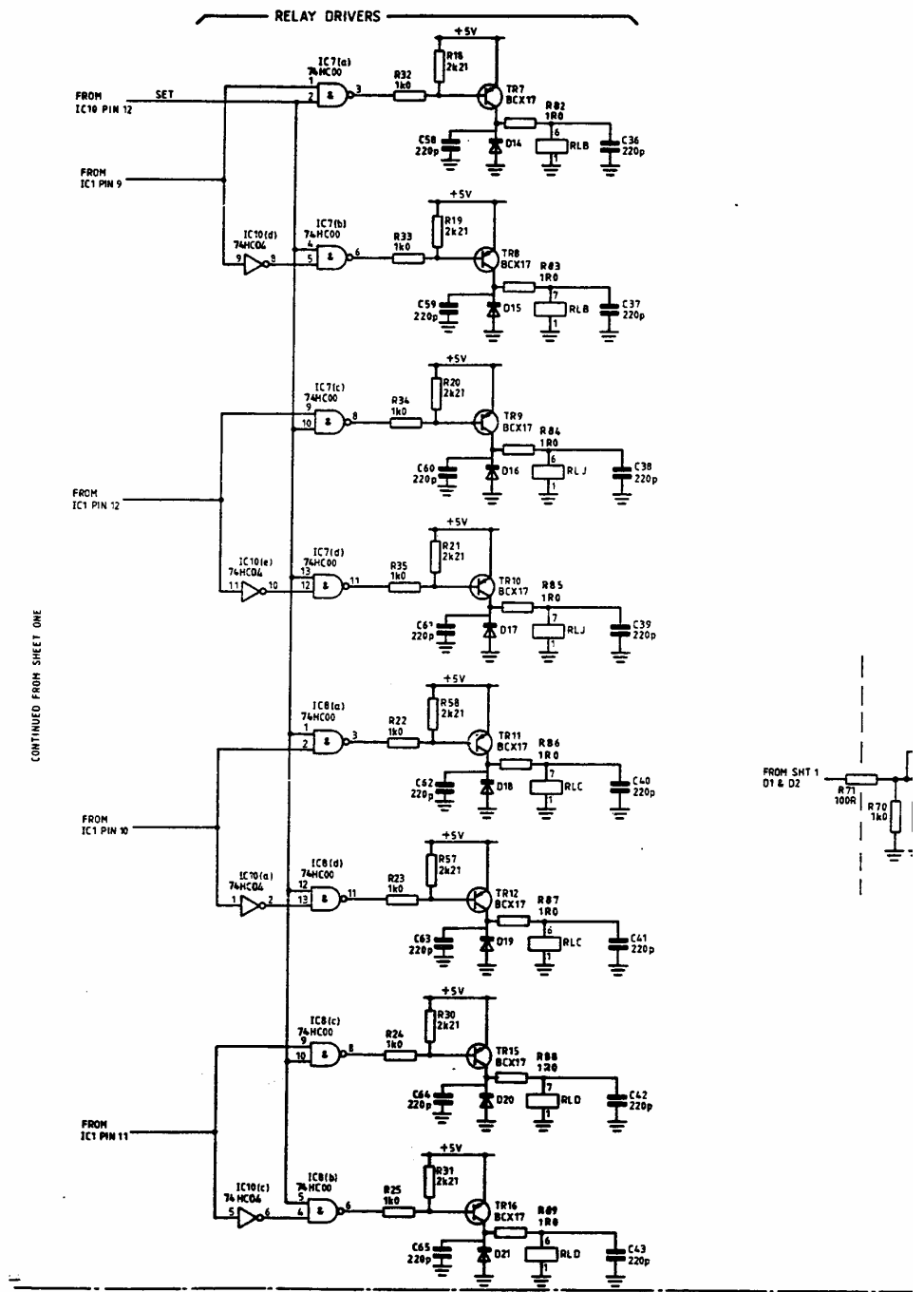


Fig. 7-170 AA1 I²C control, overload detection, relay drivers 1 - circuit



Circuit diagrams AA1

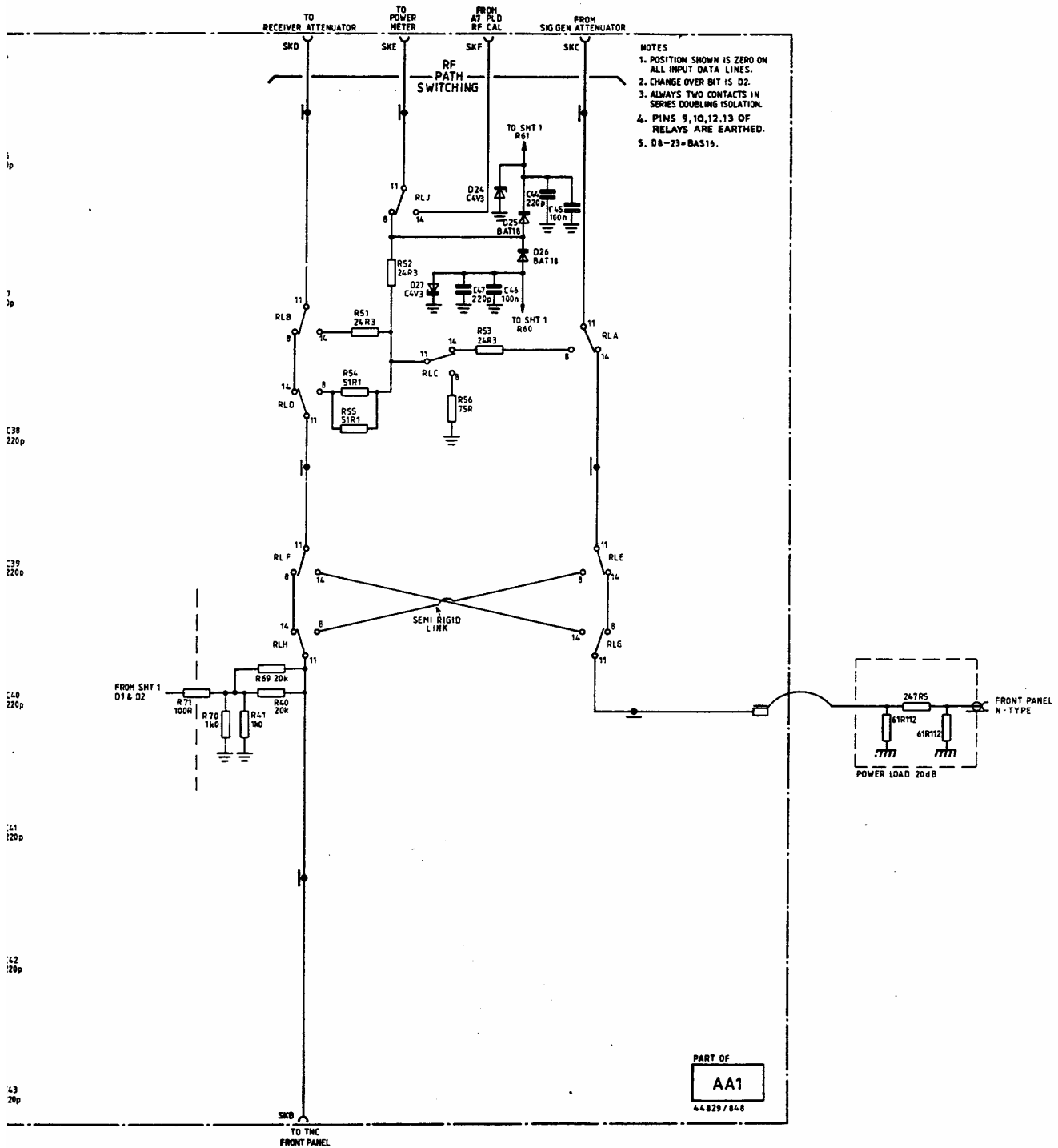
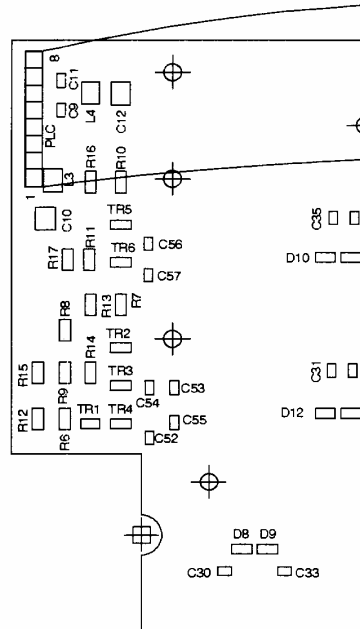
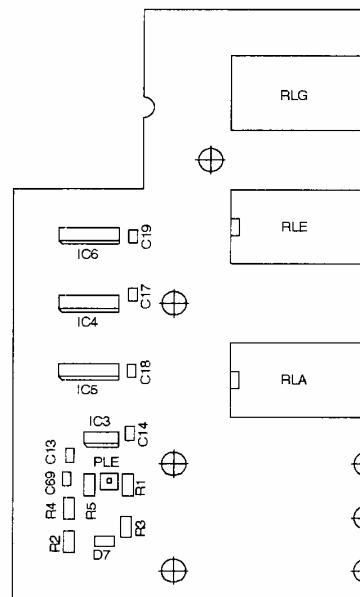


Fig. 7-171 AA1 Relay drivers 2, RF path switching - circuit

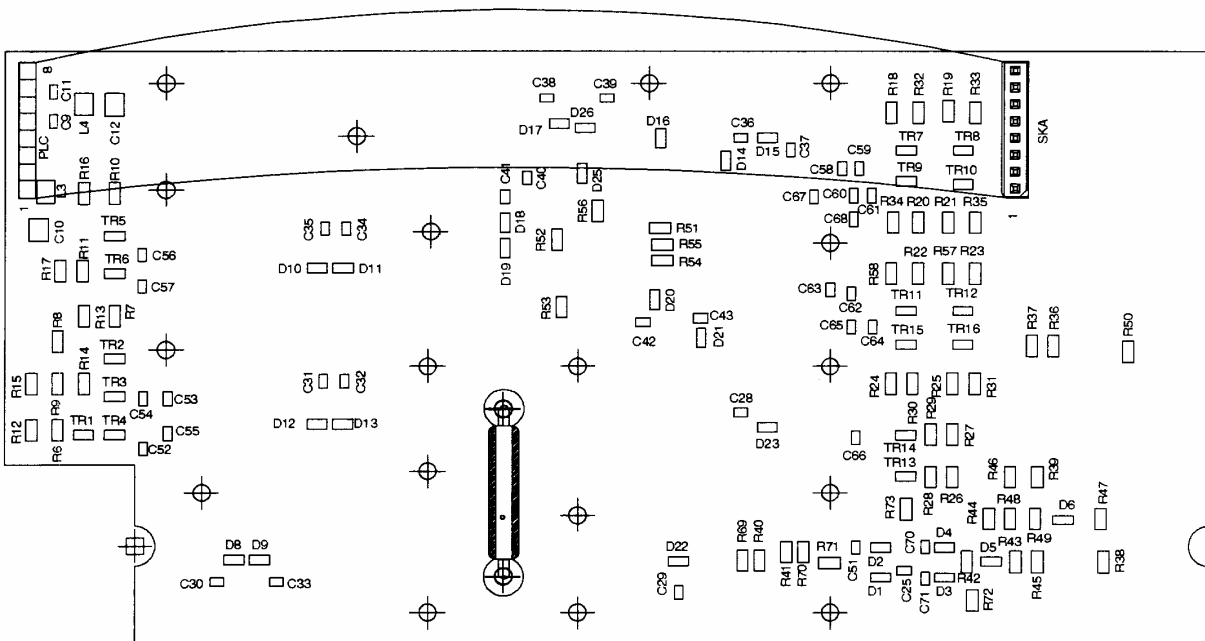
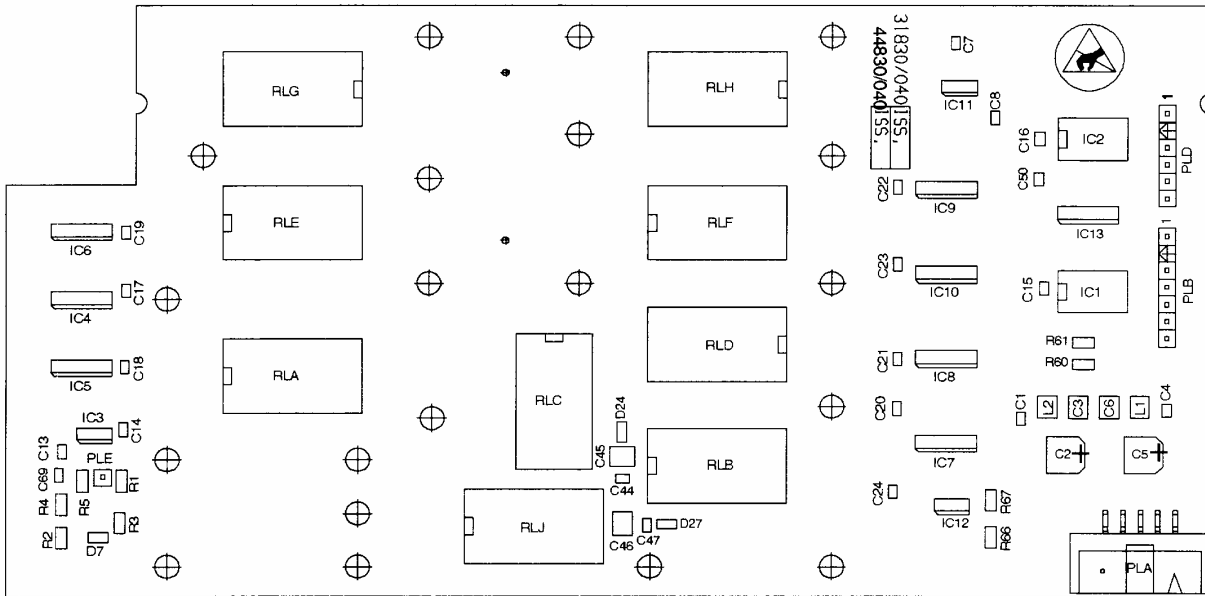
SERVICING DIAGRAMS



Relay drivers 2, RF path switching AA1

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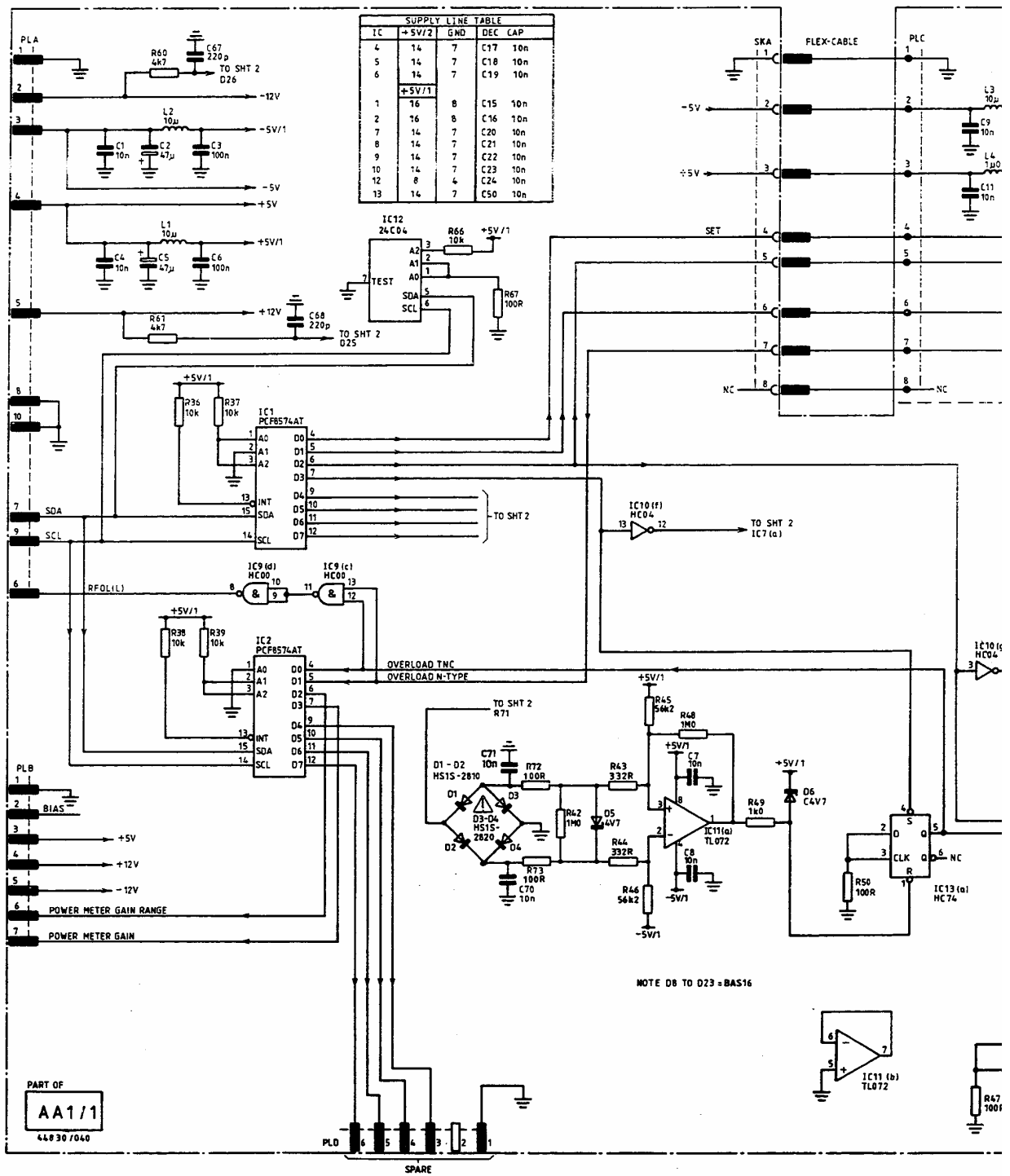
Component layout AA1/1



A1

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Fig. 7-172 AA1/1 Input switch - component layout



Circuit diagrams **AA1/1**

THERMALLY IN CONTACT WITH 20dB POWER LOAD SEE SHEET 2

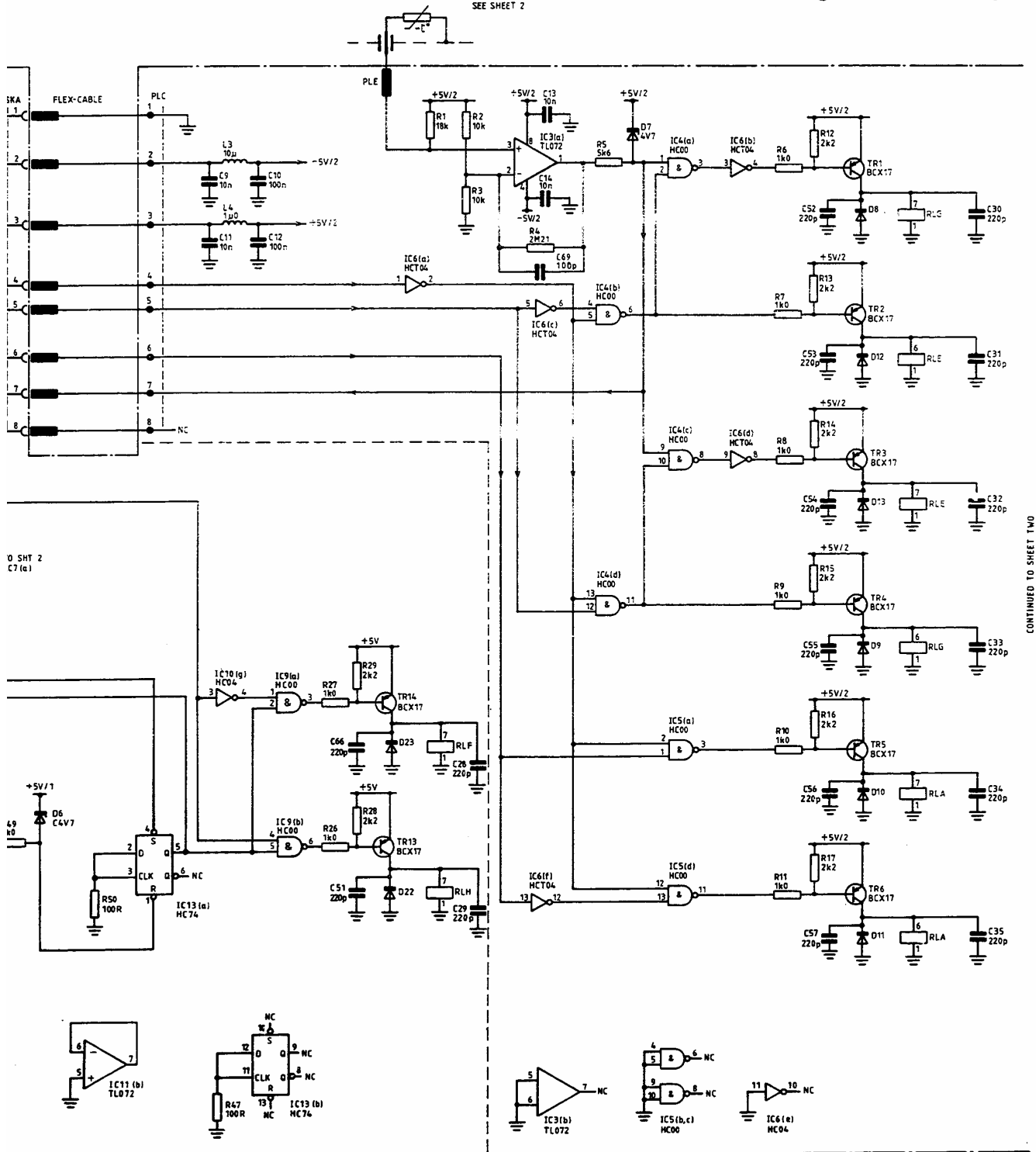
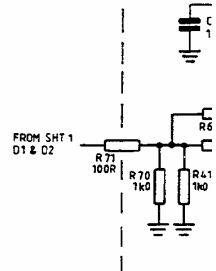
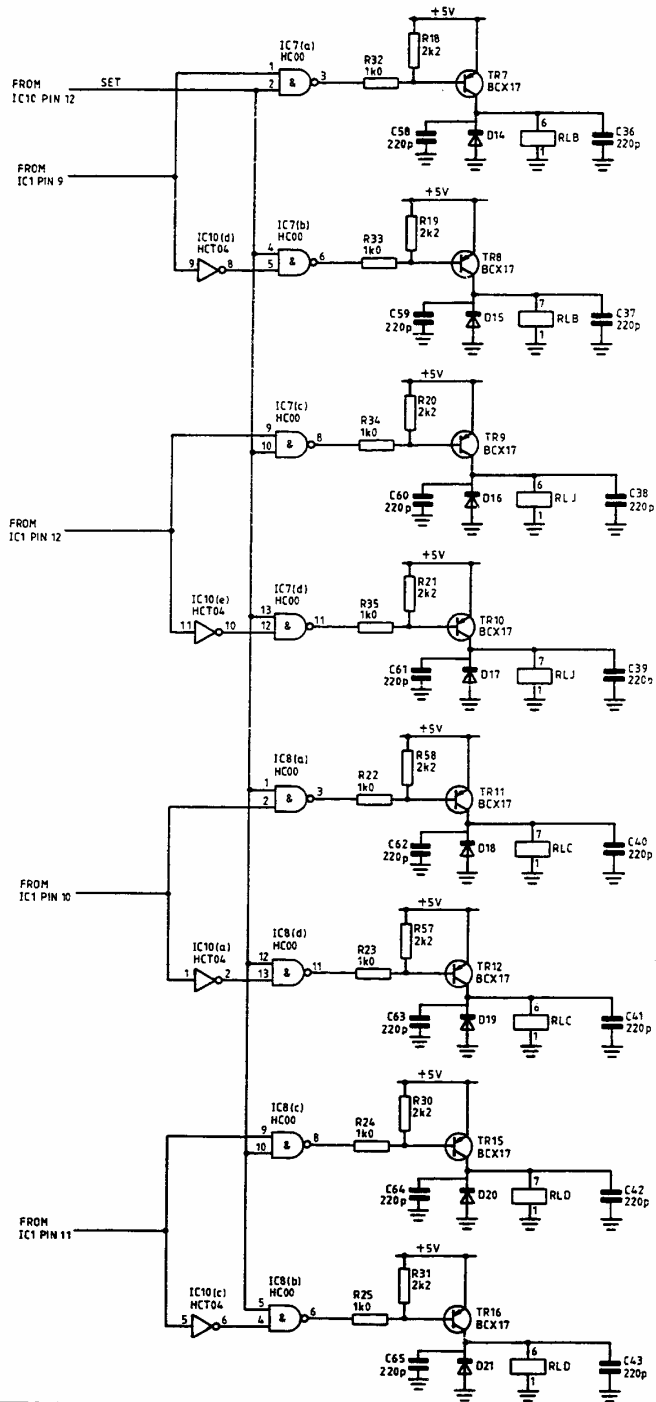


Fig. 7-173 AA1/1 I²C control, overload detection, relay drivers 1 - circuit

CONTINUED FROM SHEET ONE



Circuit diagrams AA1/1

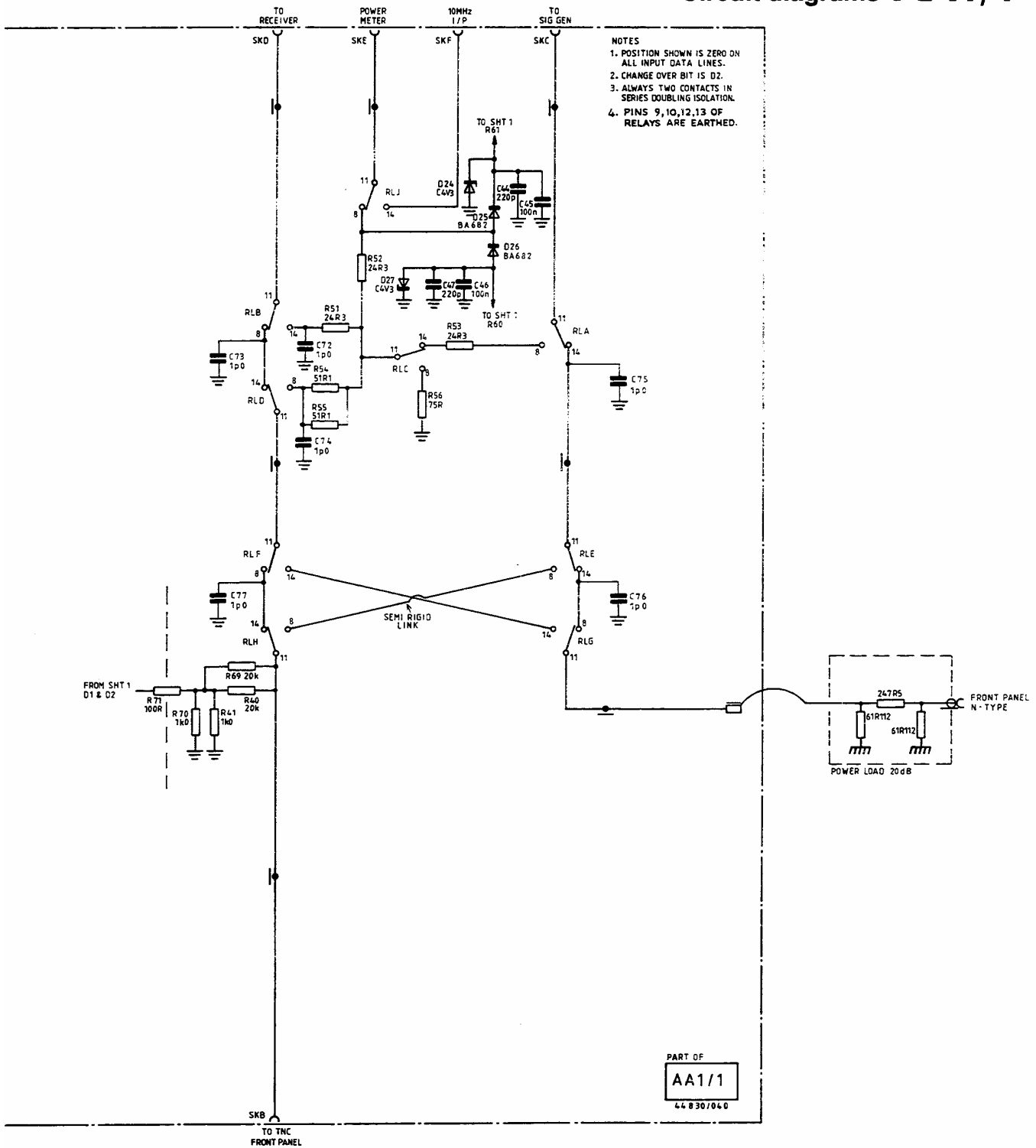
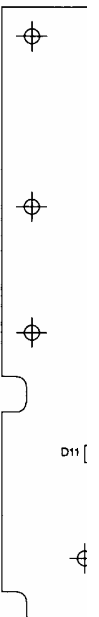
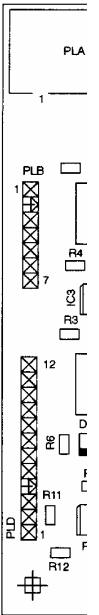


Fig. 7-174 AA1/1 Relay drivers 2, RF path switching - circuit

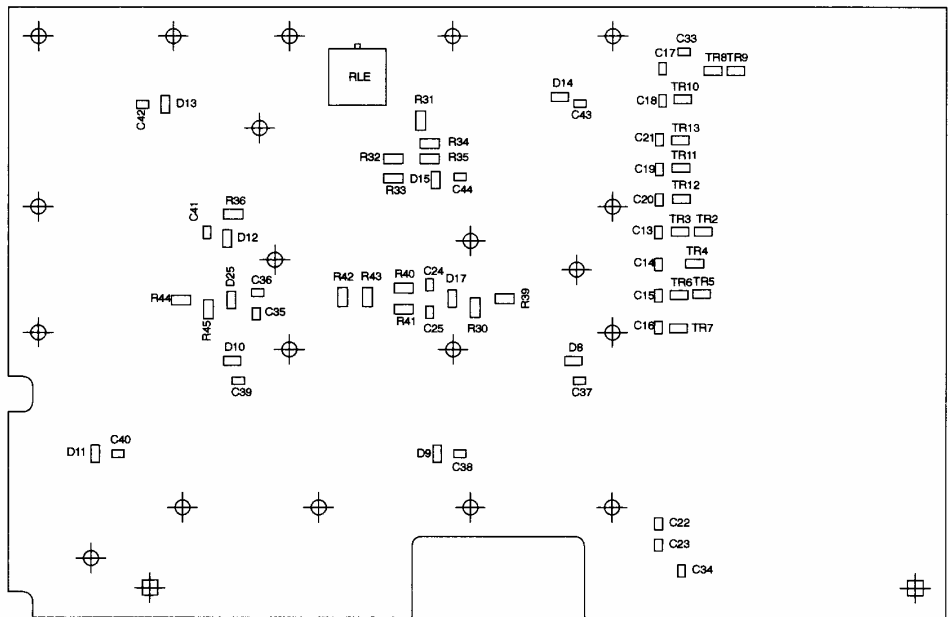
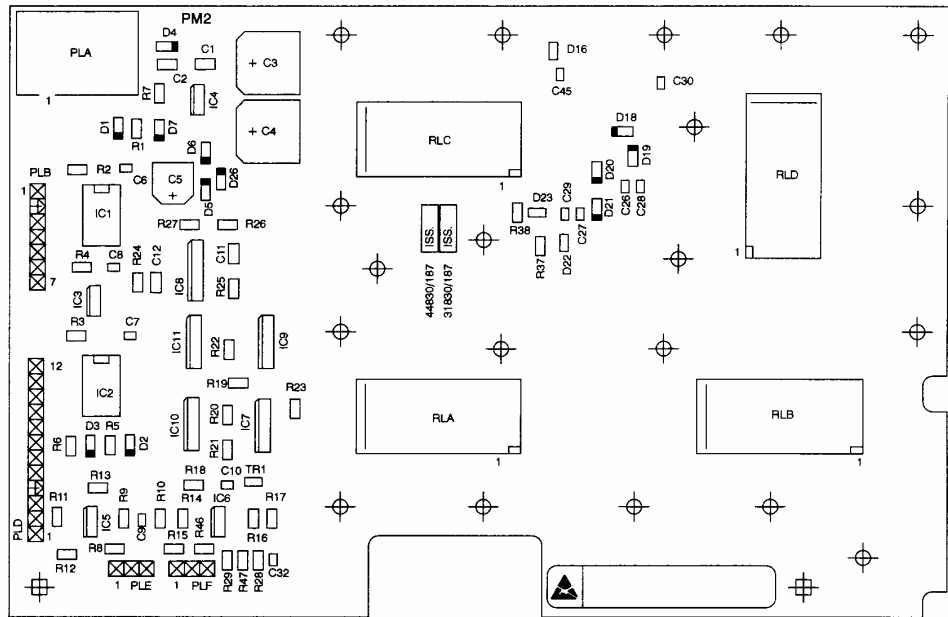
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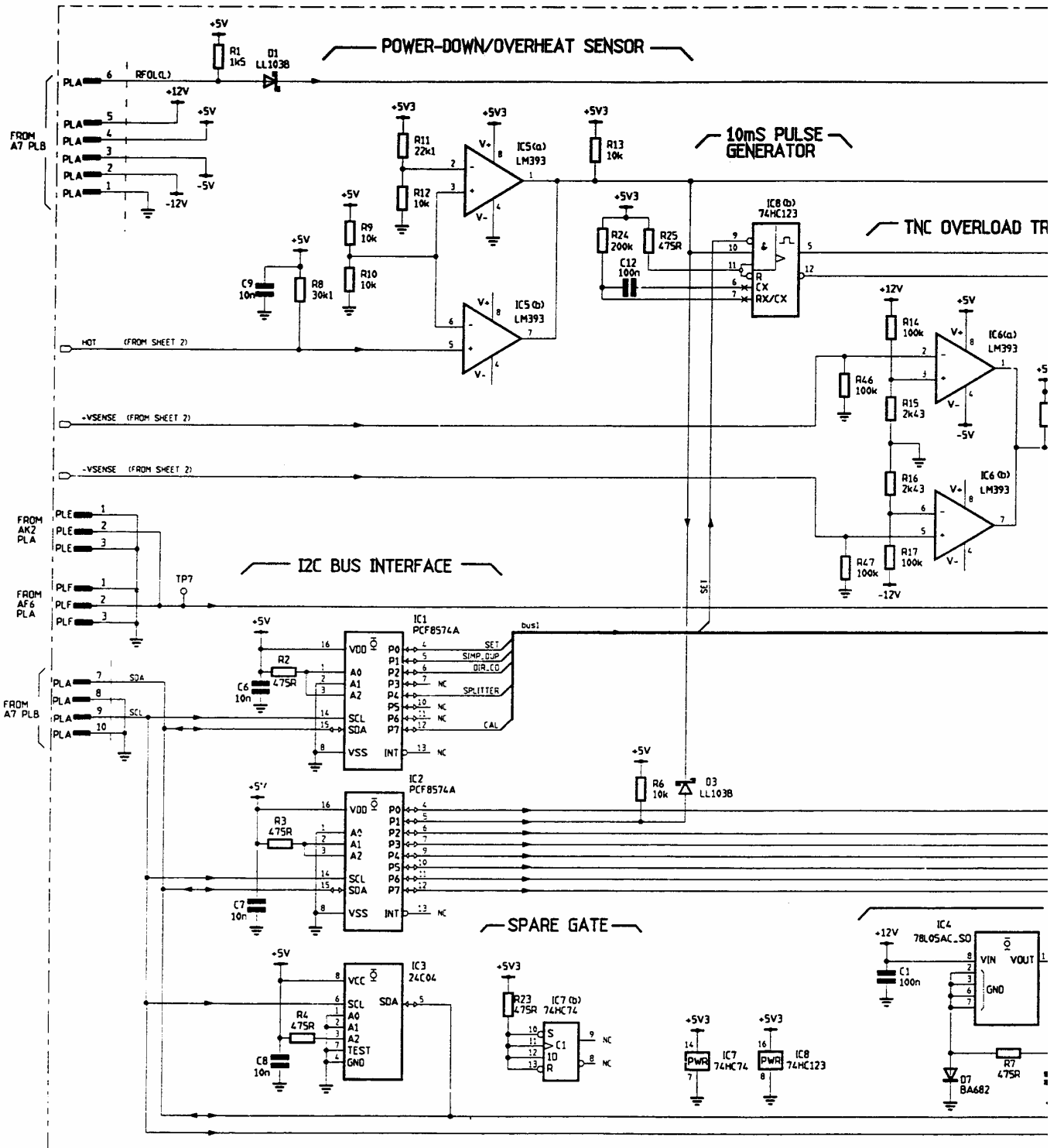


Relay drivers 2, RF path switching AA1/1

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Component layout AA2





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Circuit diagrams **AA2**

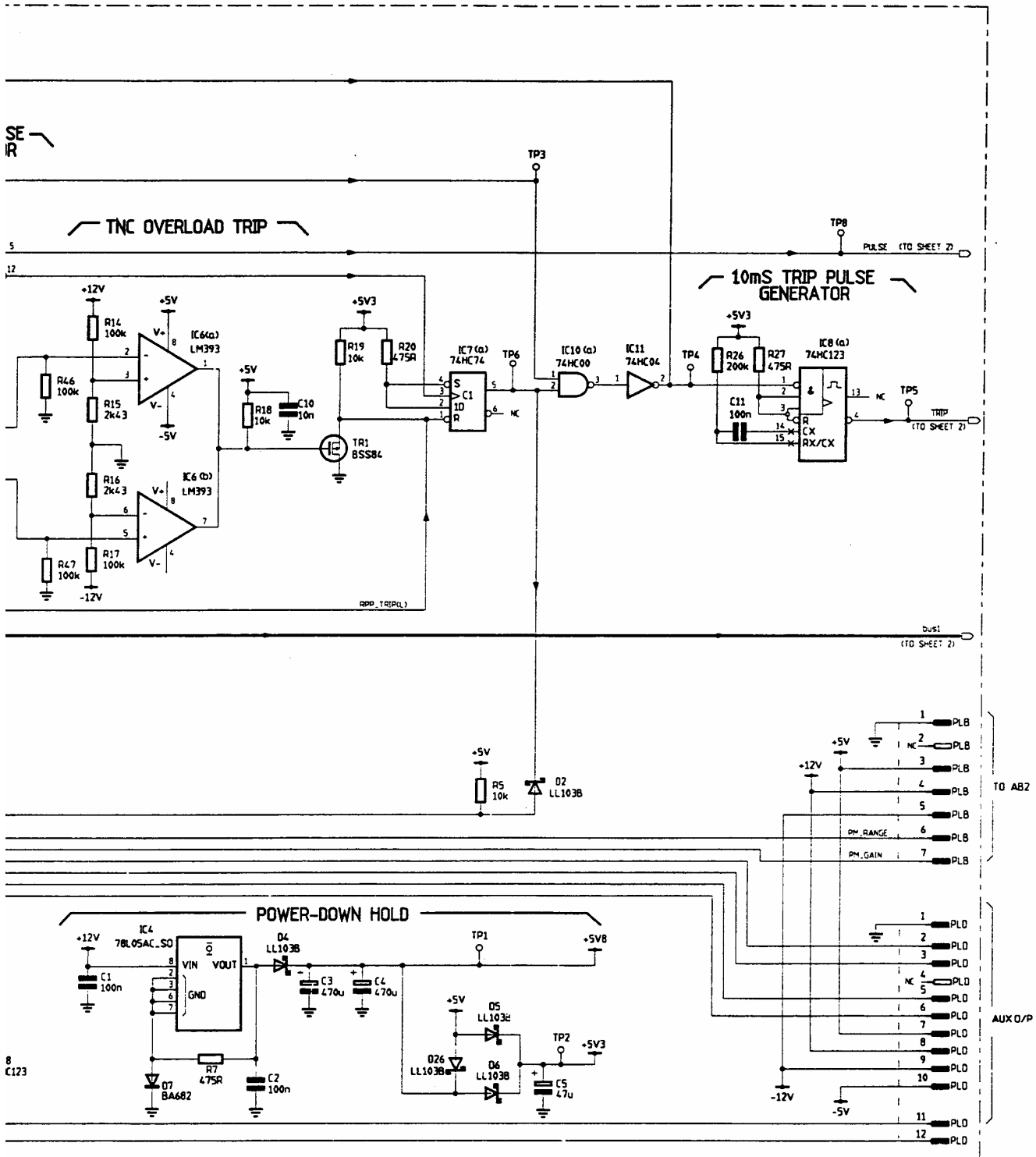
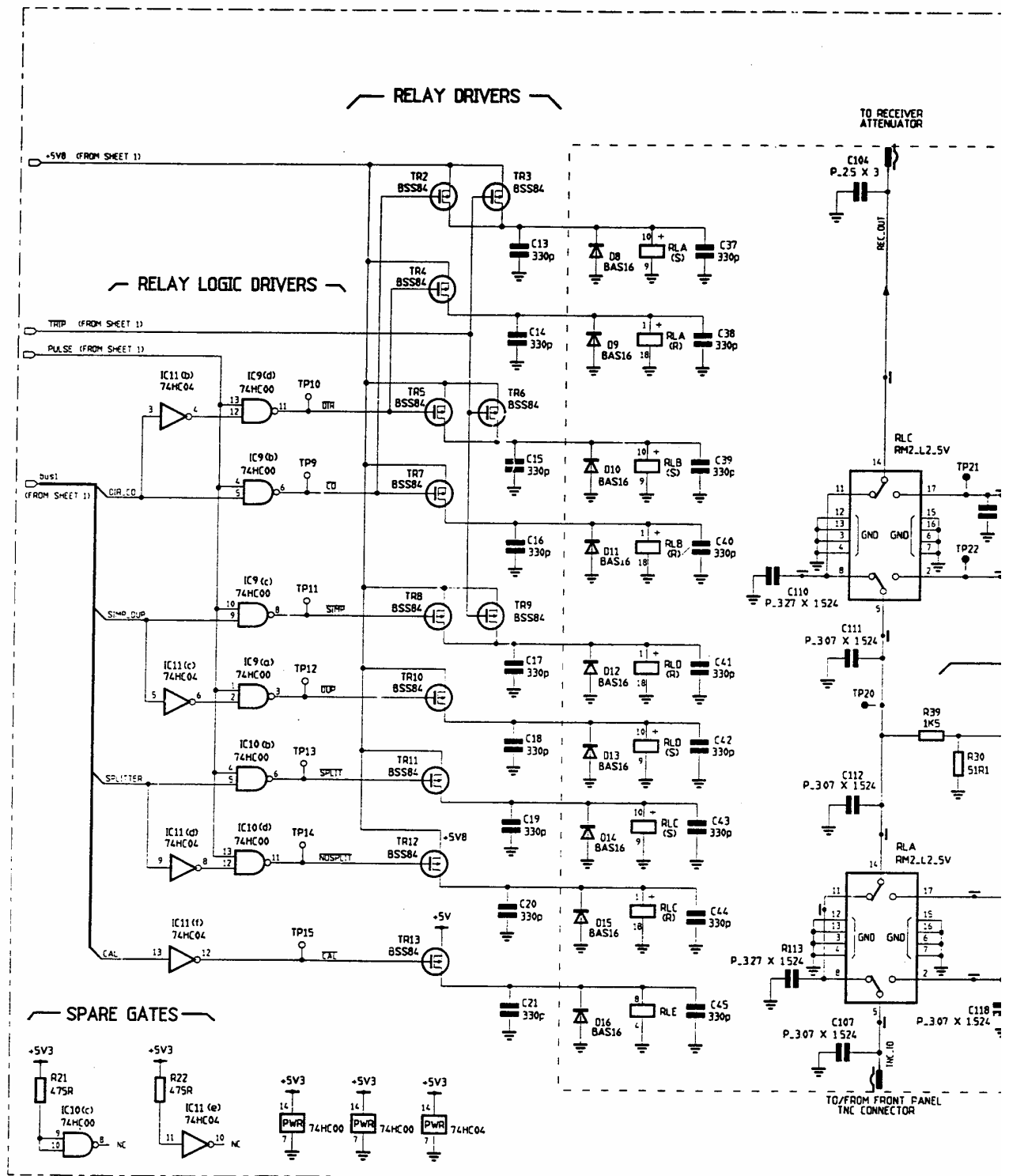


Fig. 7-176 AA2 Input switch - circuit



Circuit diagrams AA2

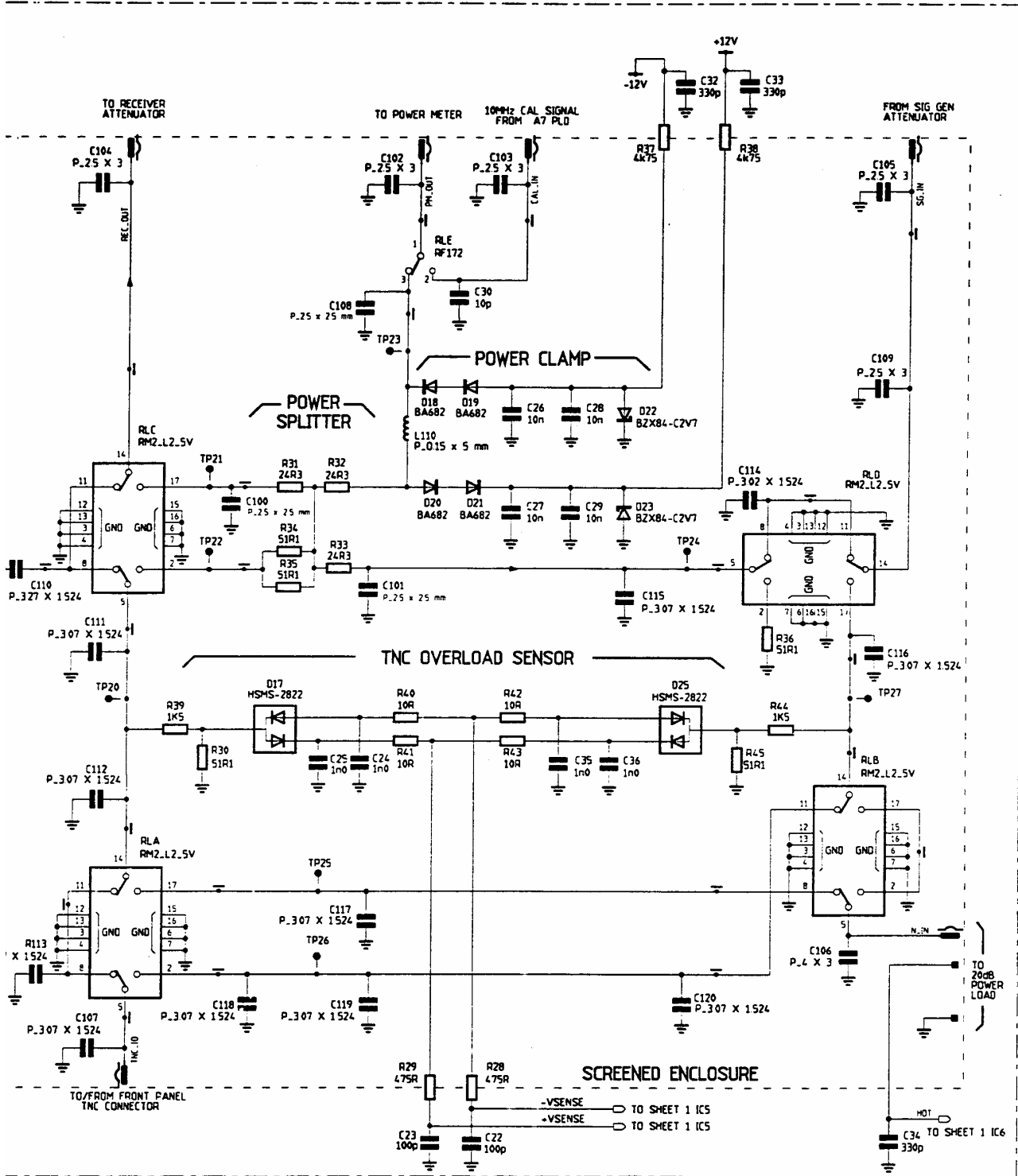
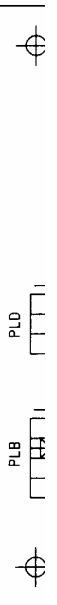


Fig. 7-177 AA2 Input switch - circuit

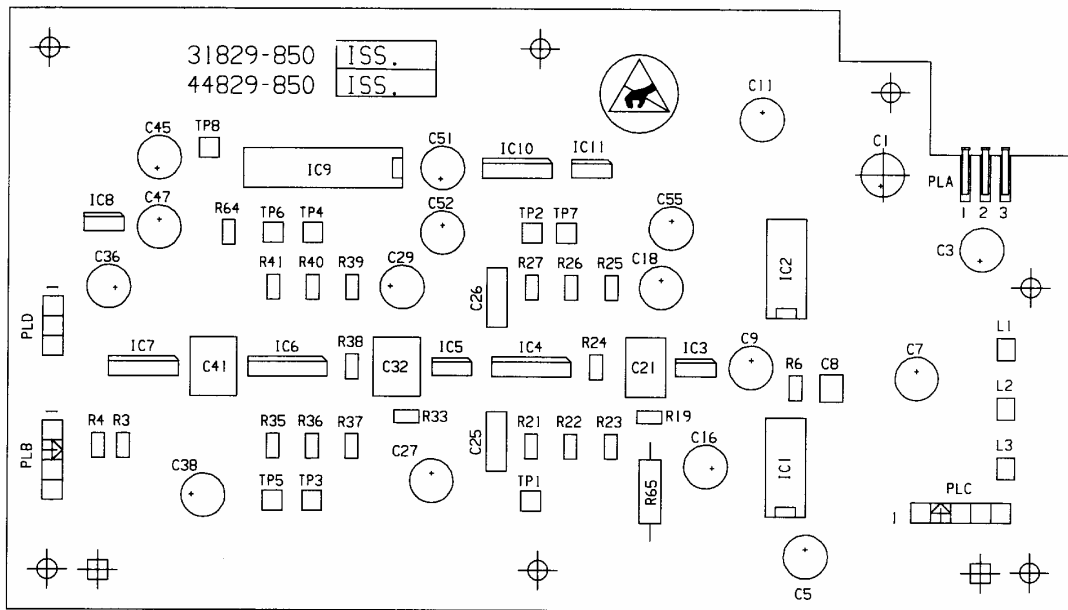
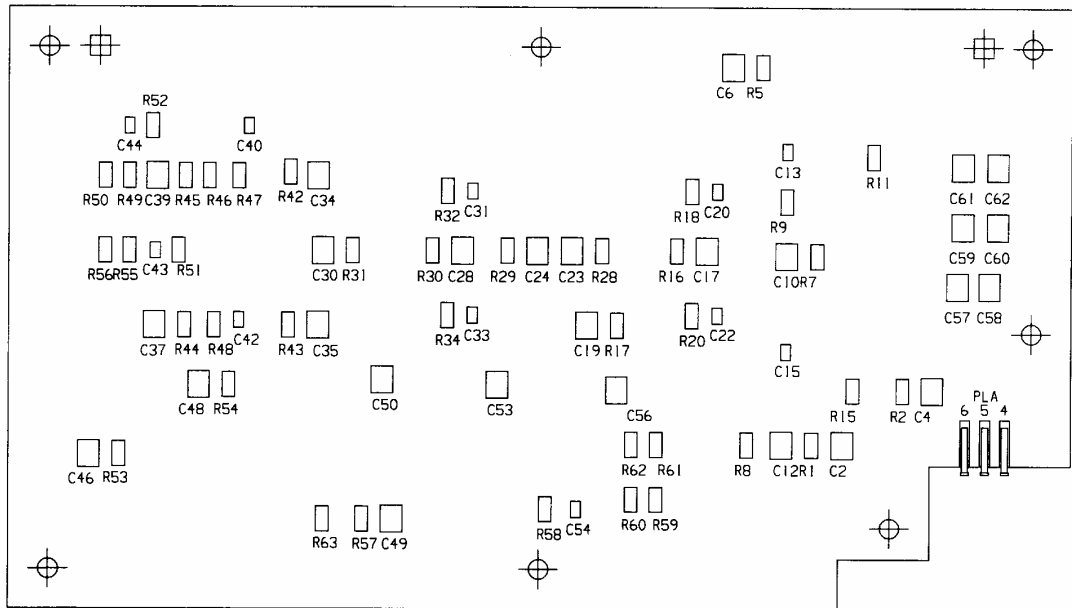
SERVICING DIAGRAMS

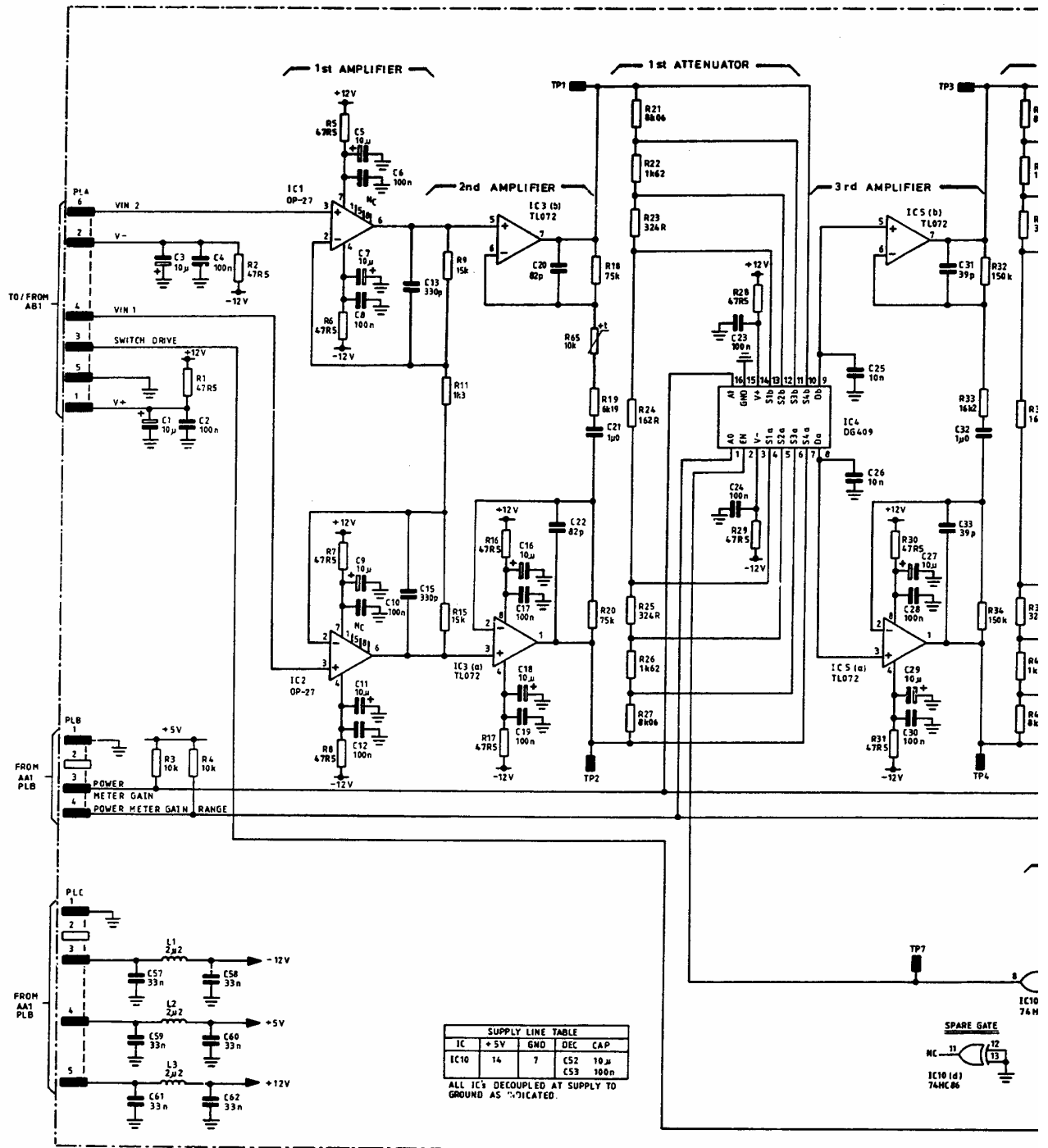


Input switch AA2

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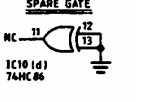
Component layout AB2





| SUPPLY LINE TABLE | | | | |
|-------------------|-----|-----|-----|------|
| IC | +5V | GND | DEC | CAP |
| IC10 | 14 | 7 | C52 | 10µ |
| | | | C53 | 100n |

ALL IC'S DECOUPLED AT SUPPLY TO GROUND AS INDICATED.



Circuit diagram AB2

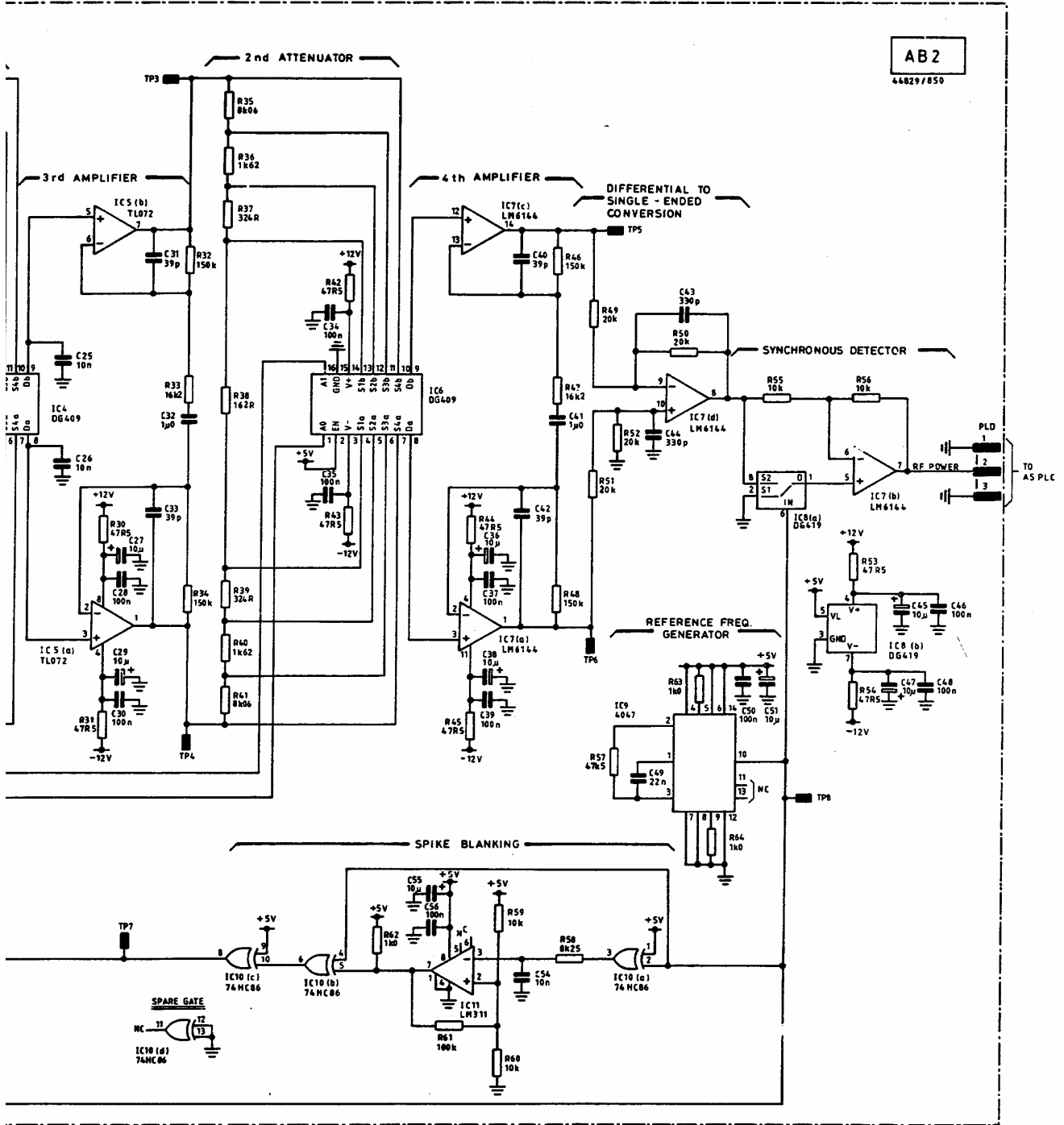
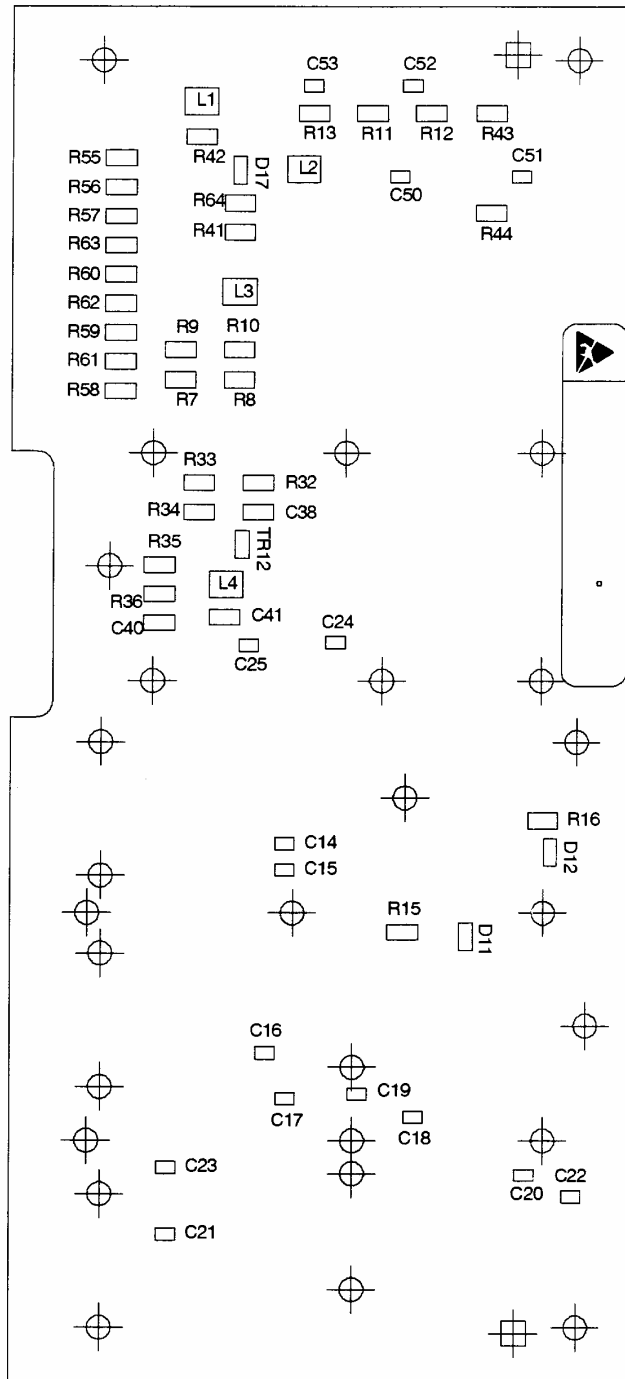


Fig. 7-179 AB2 Power meter - circuit

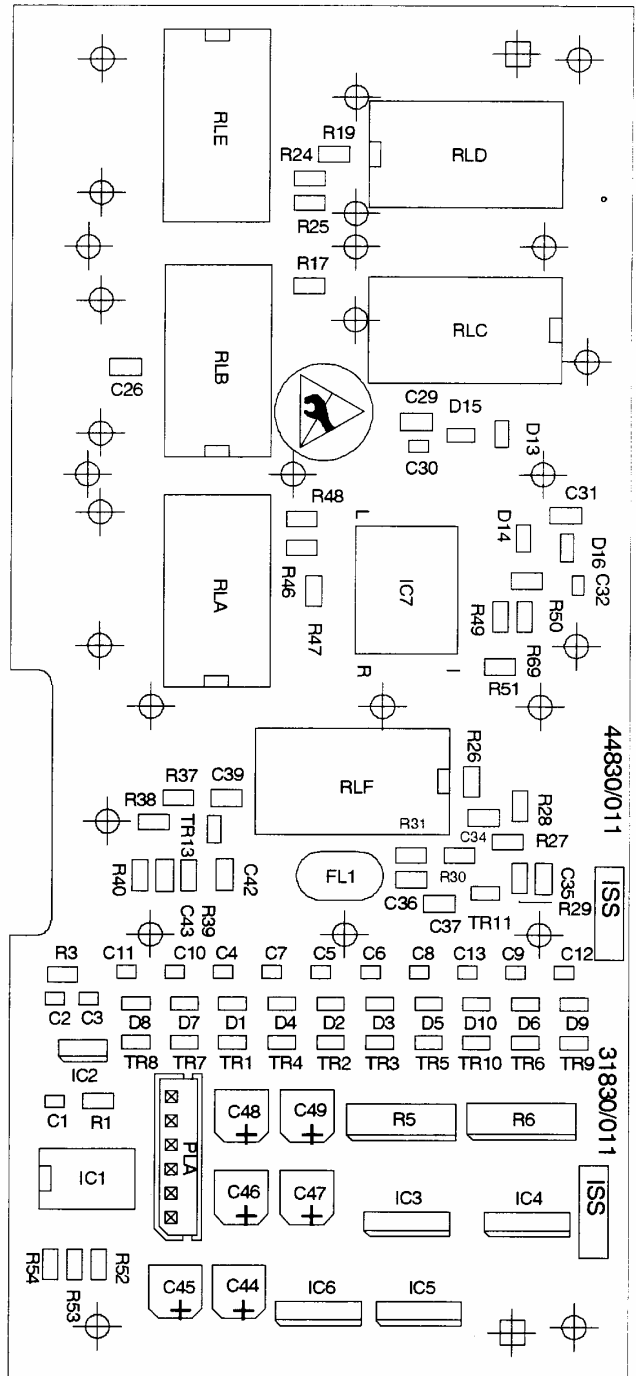
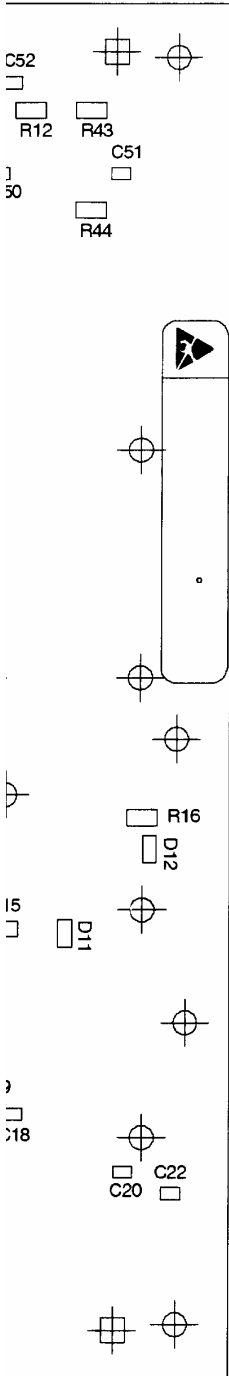
SERVICING DIAGRAMS



Power meter AB2

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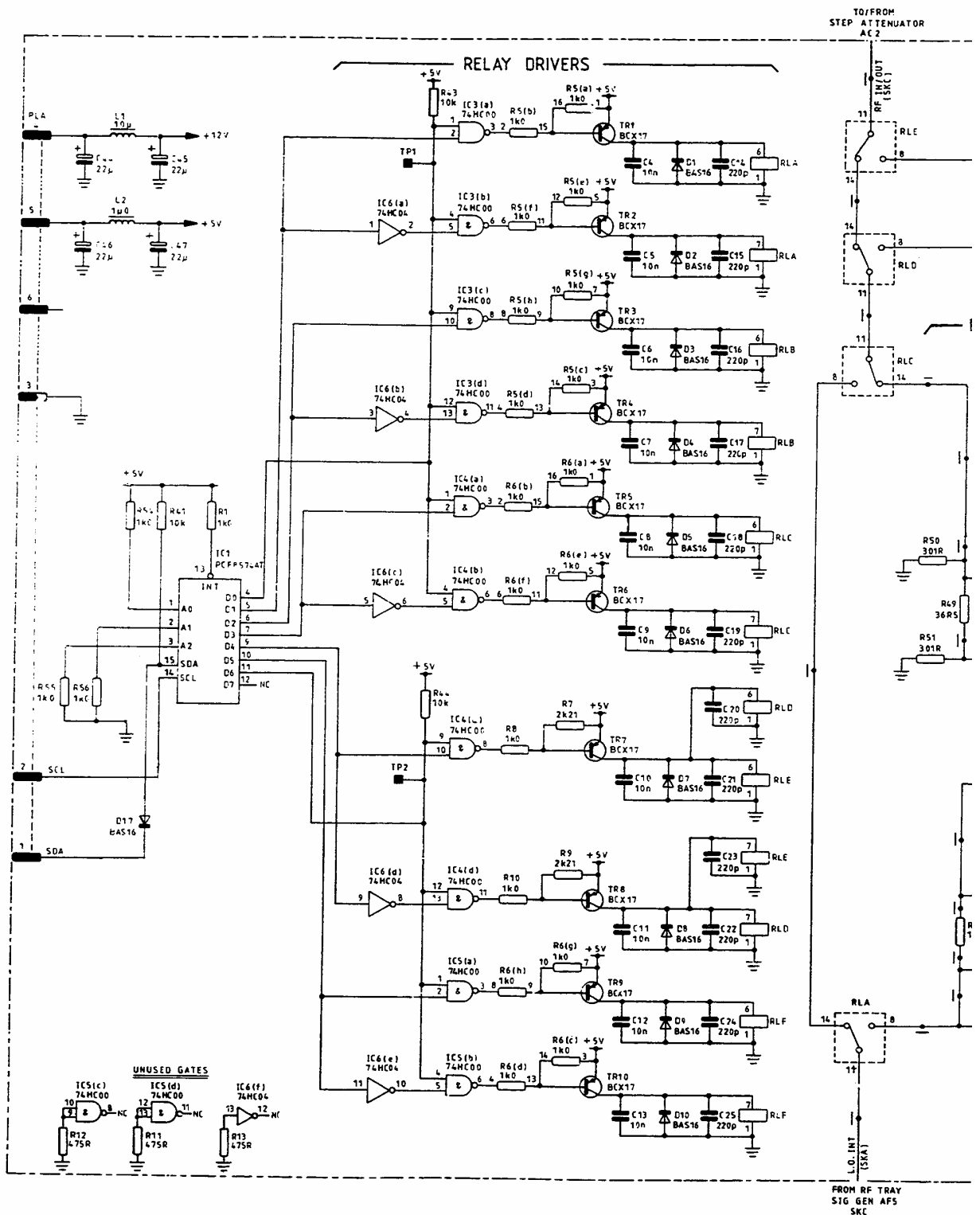
Component layout AB3



B2

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Fig. 7-180 AB3 Mixer module - component layout



Circuit diagram AB3

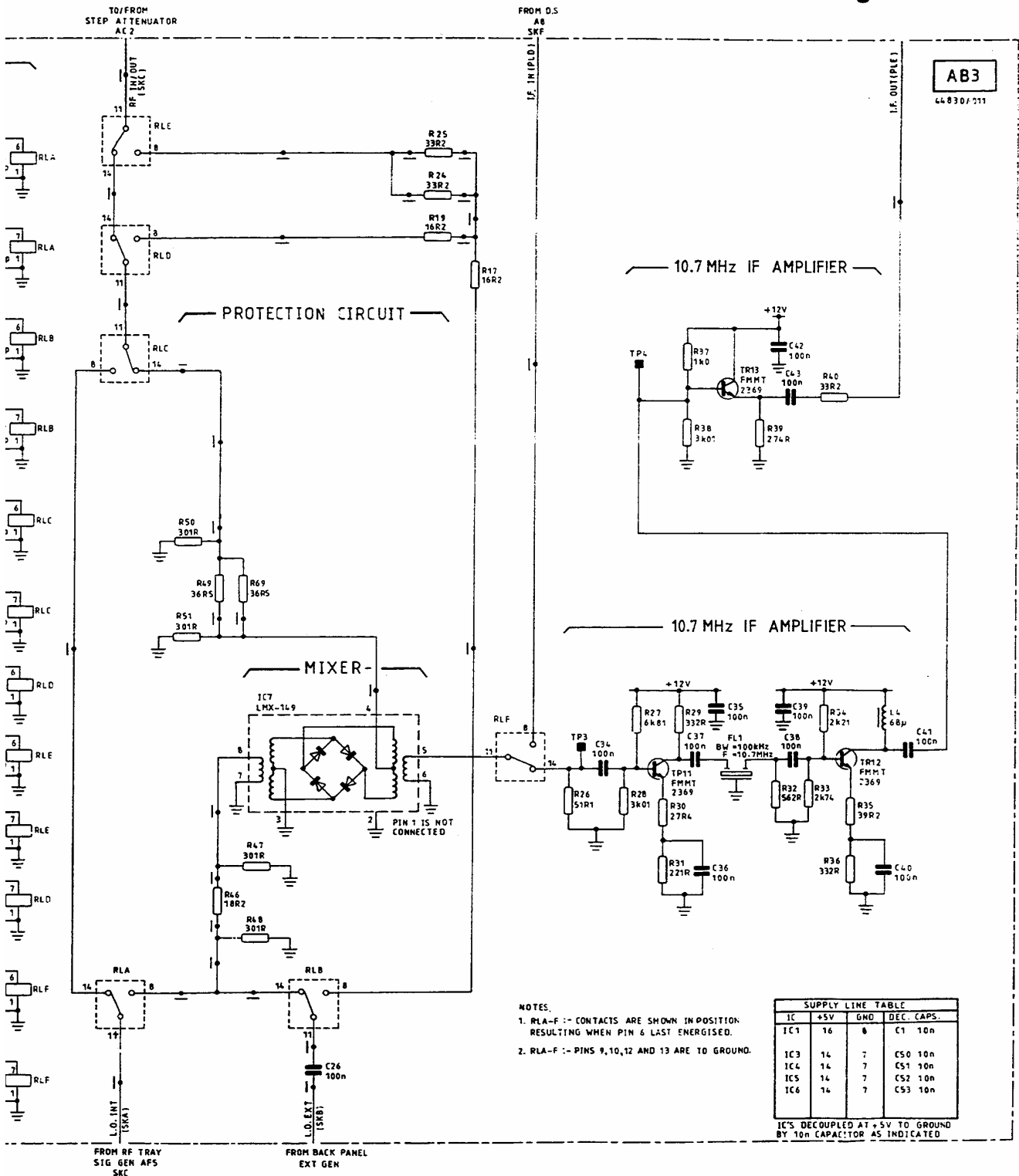
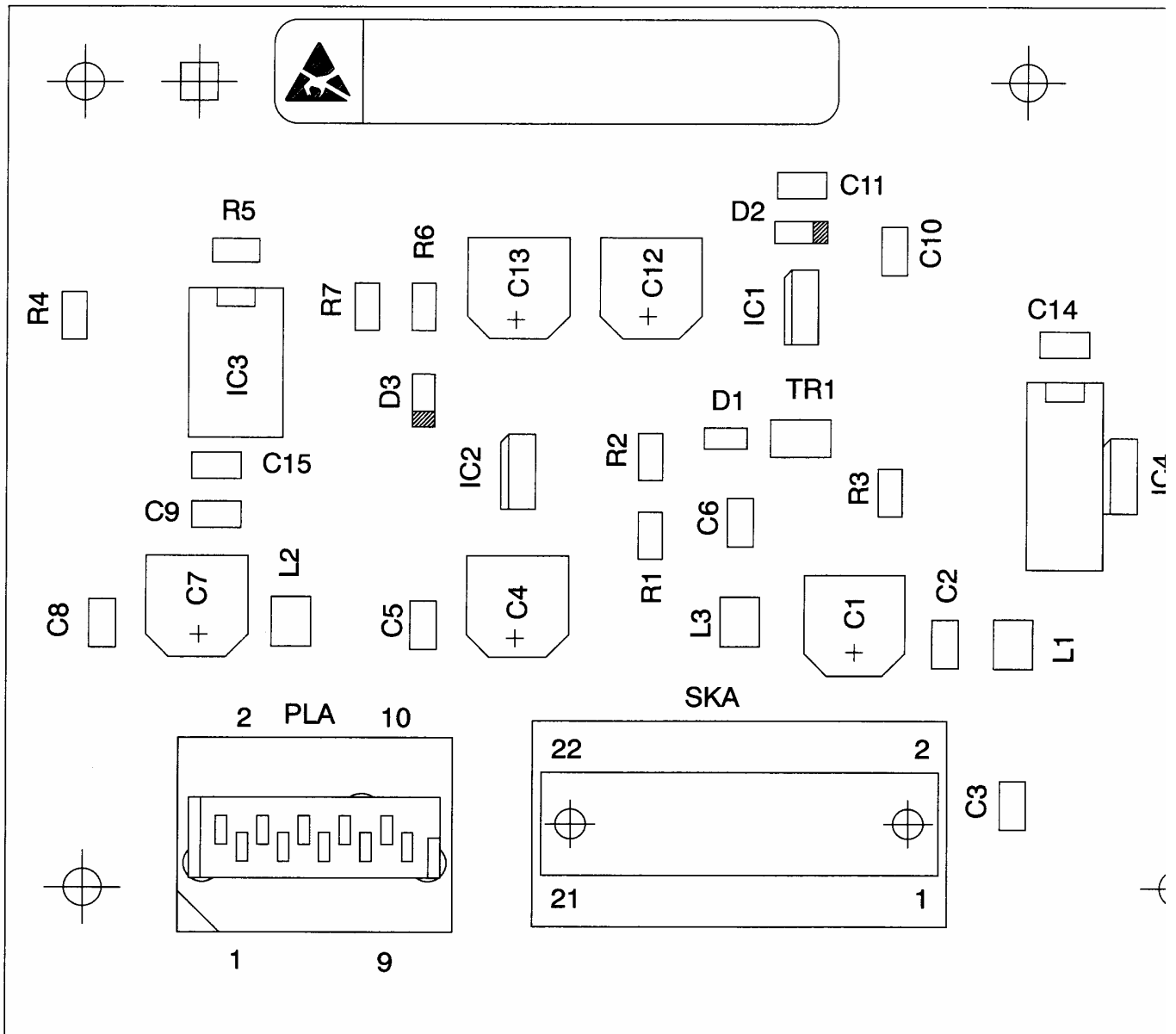


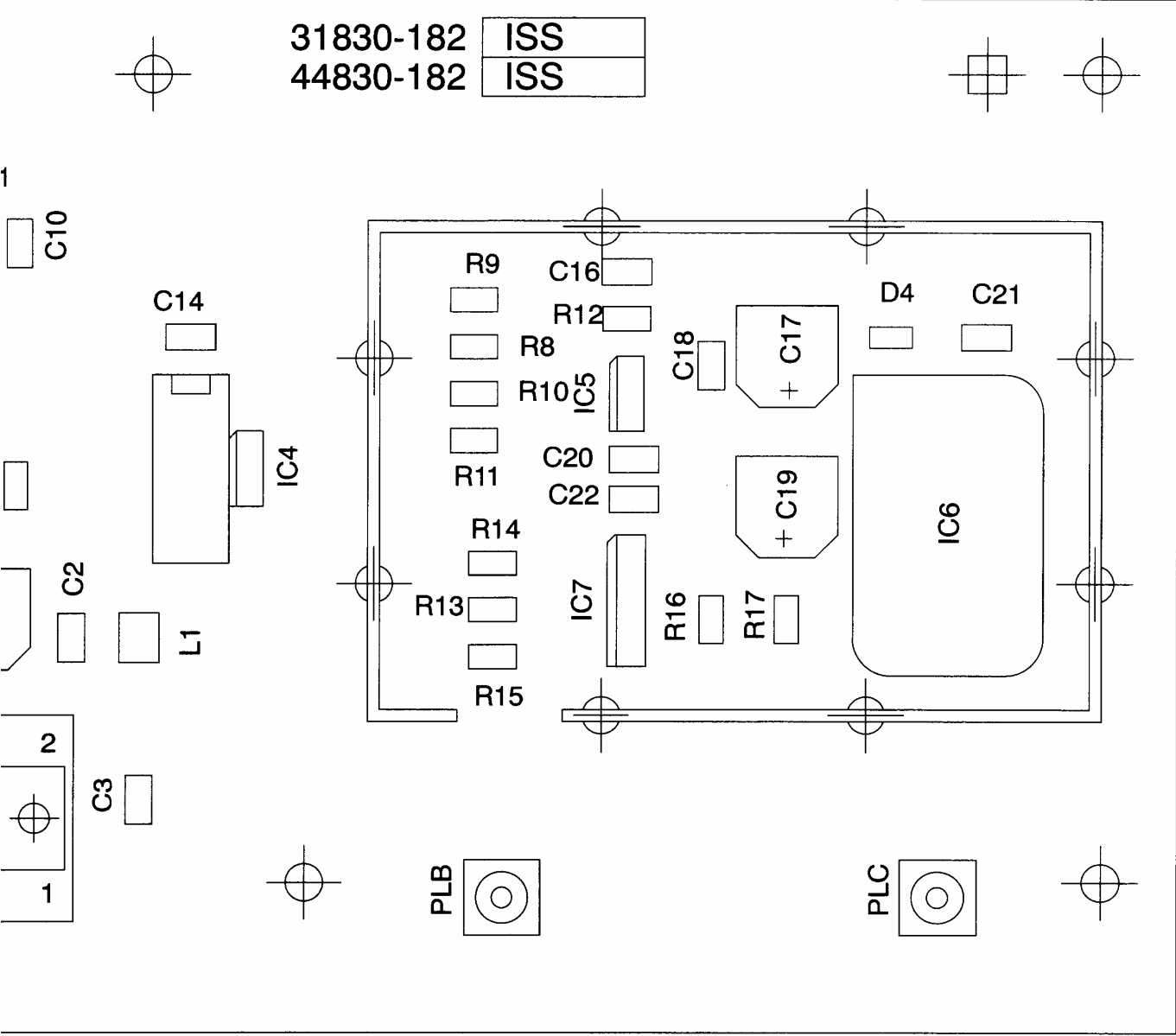
Fig. 7-181 AB3 Mixer module - circuit



Mixer module AB3

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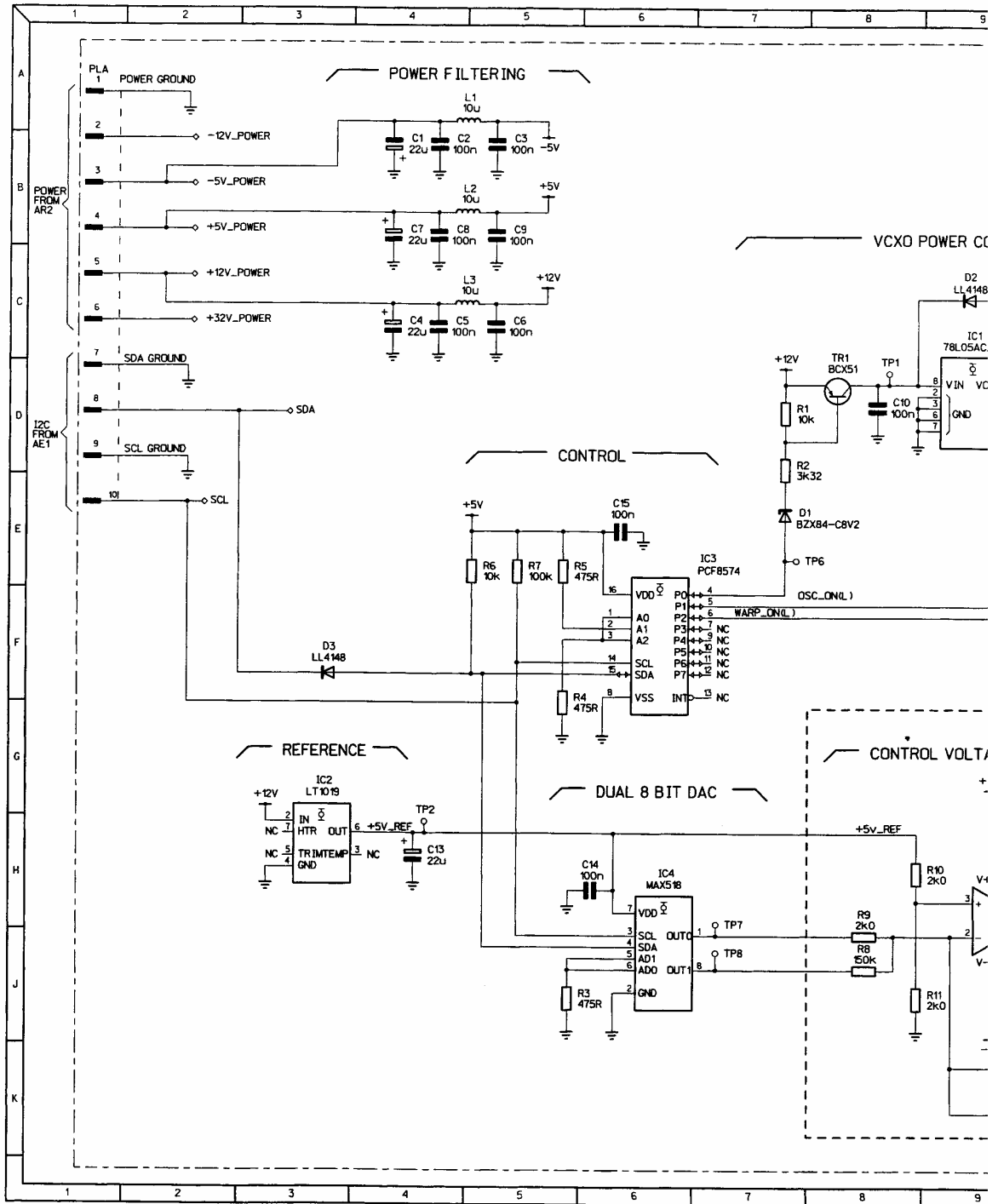
Component layout **AB4**



AB3

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Fig. 7-182 AB4 Warp oscillator- component layout



Circuit diagrams AB4

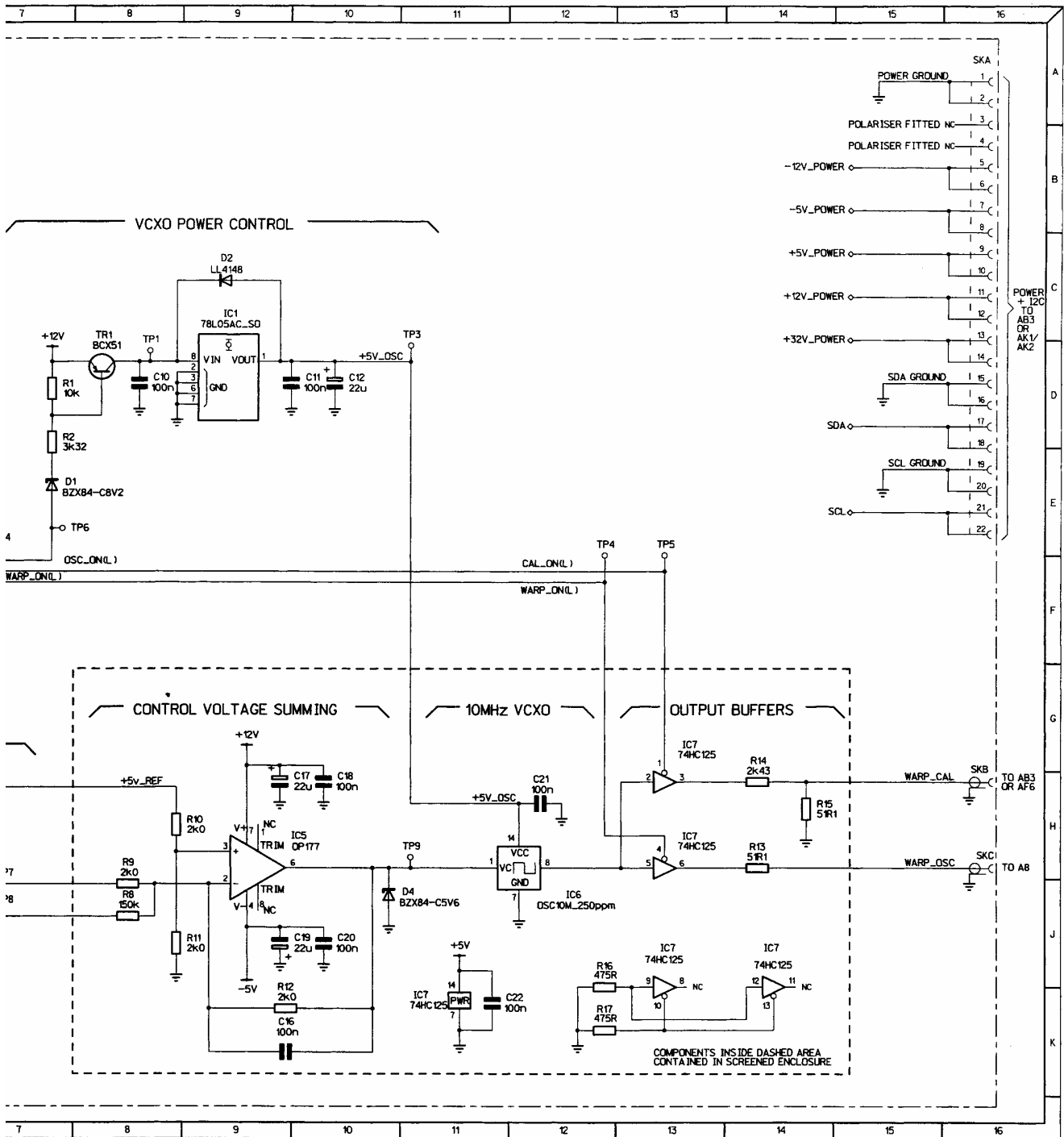
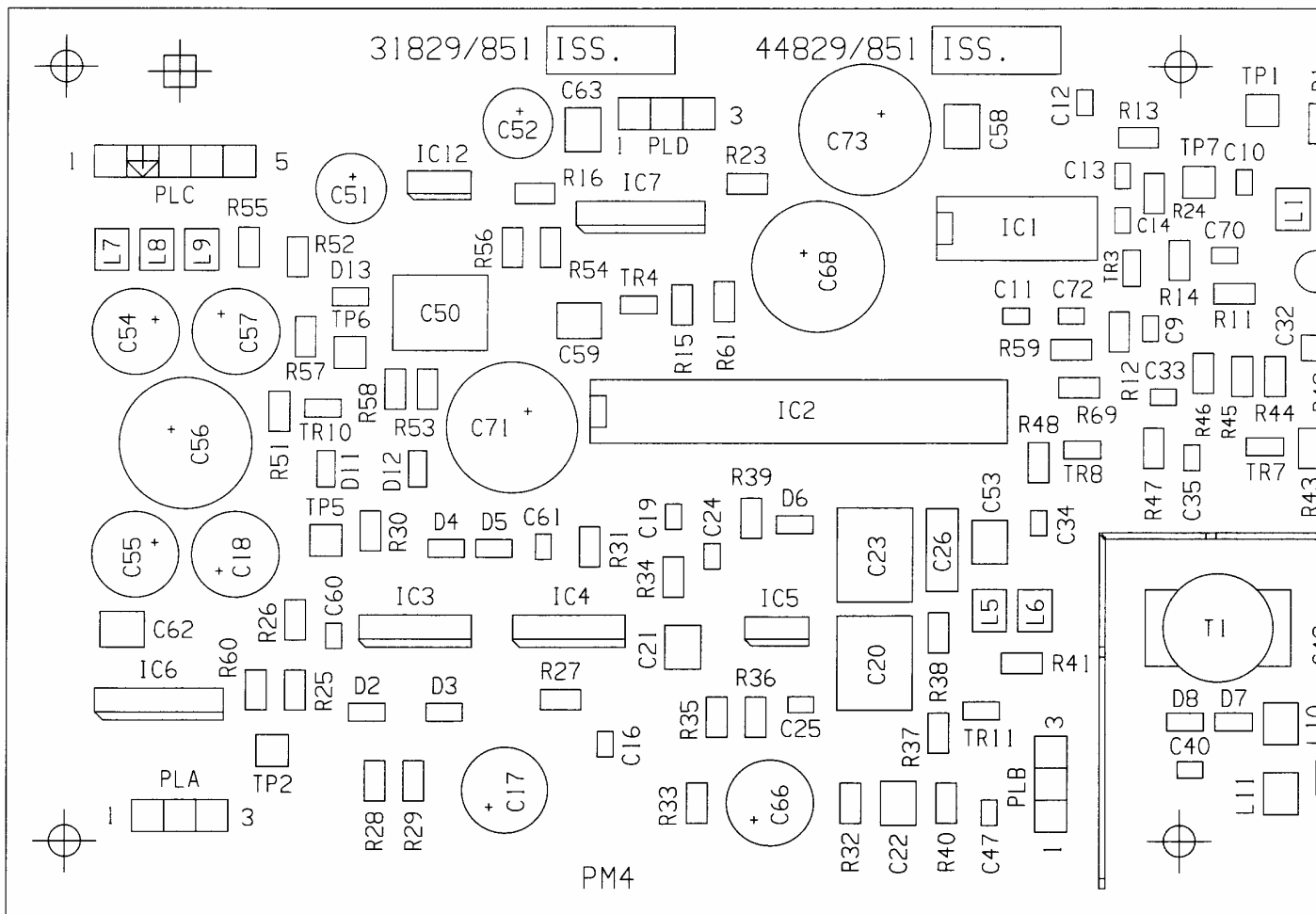


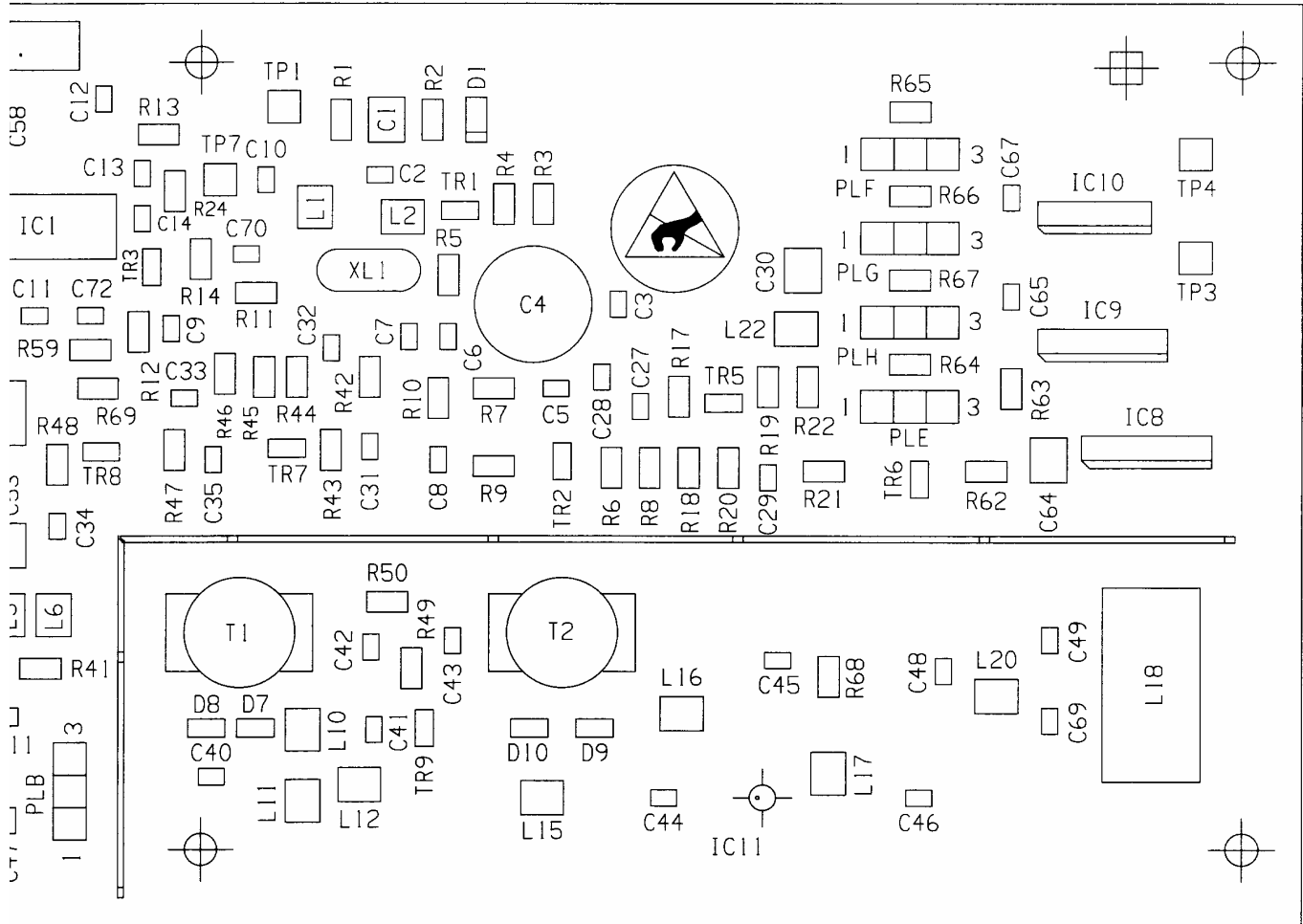
Fig. 7-183 AB4 Warp oscillator - circuit

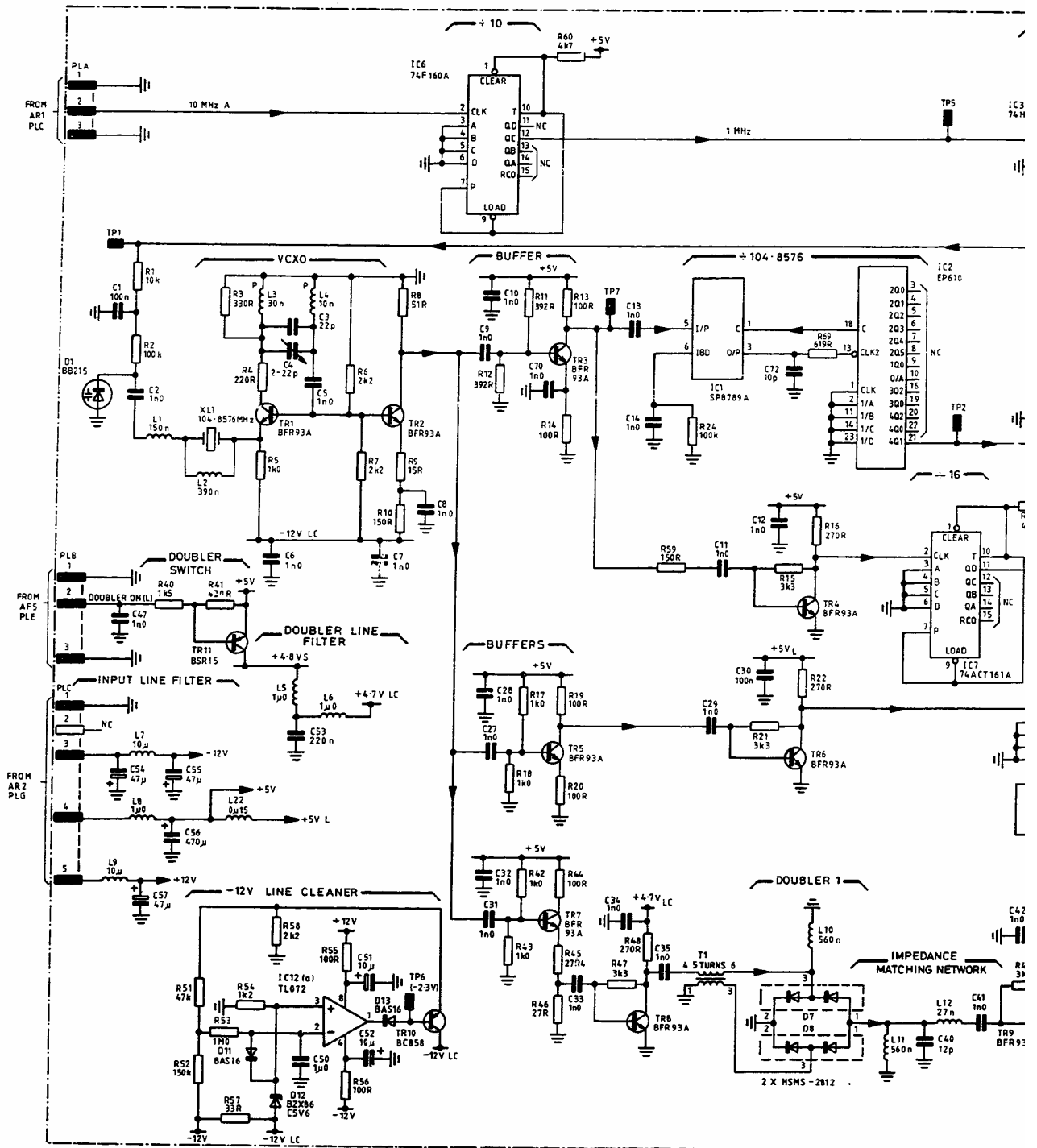


Warp oscillator AB4

Drg. No. 44829/851 Sh

Component layout AF1





Circuit diagram AF1

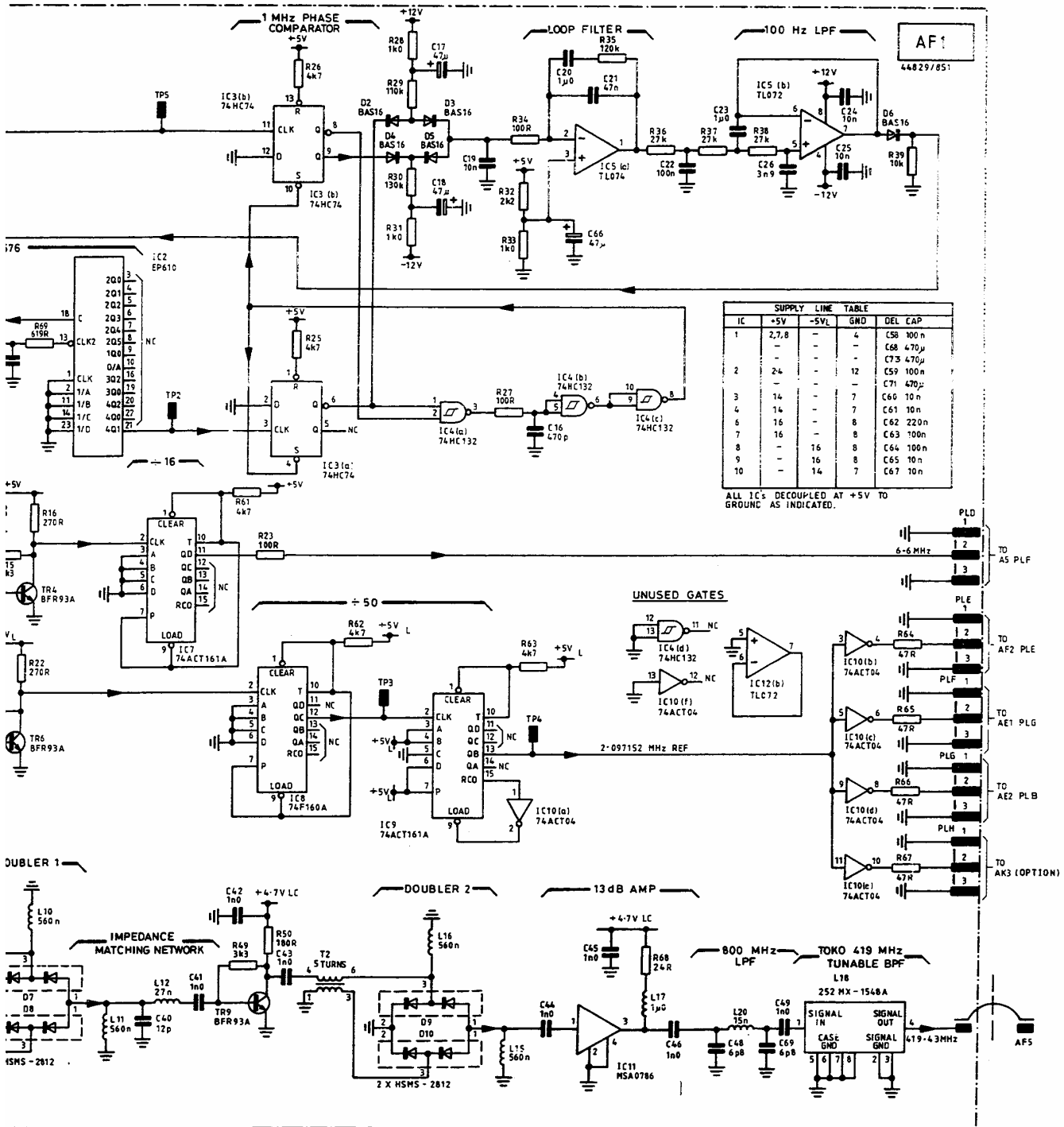
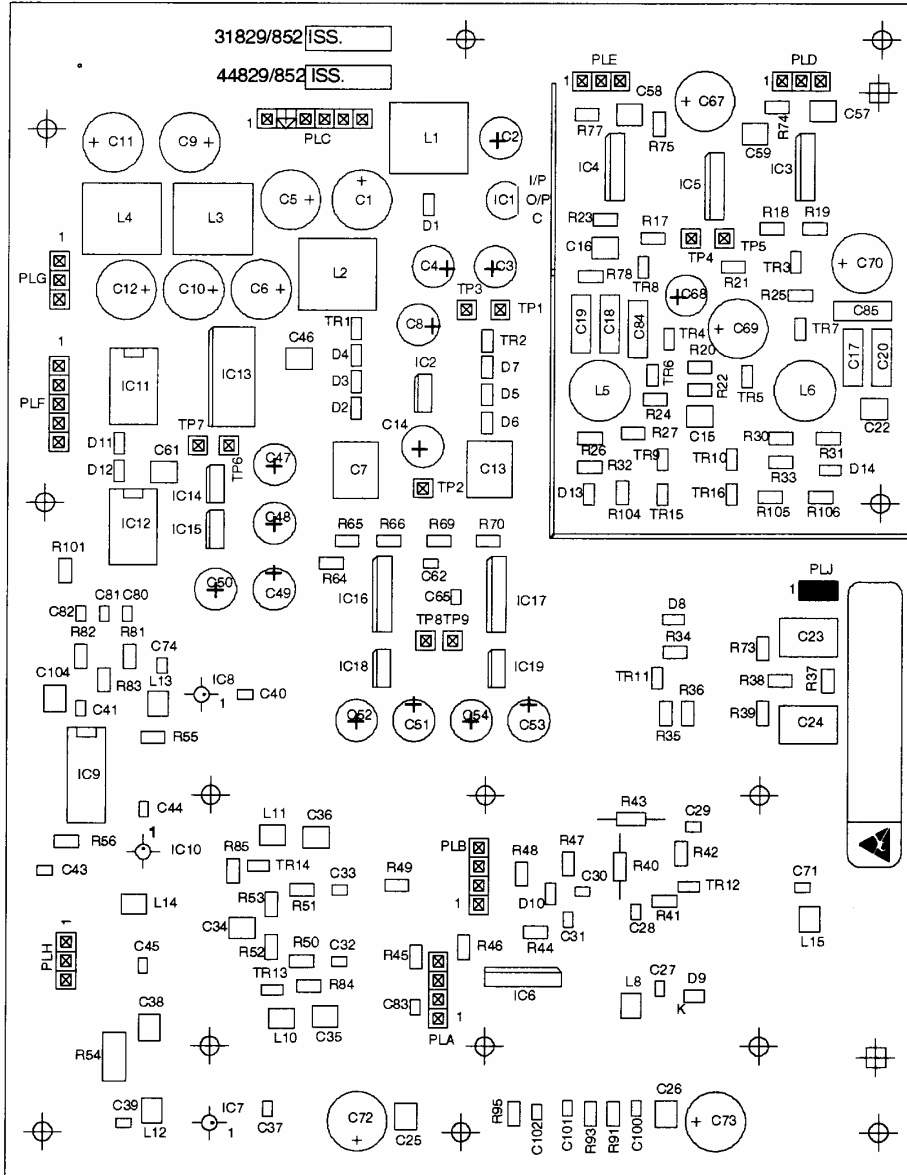


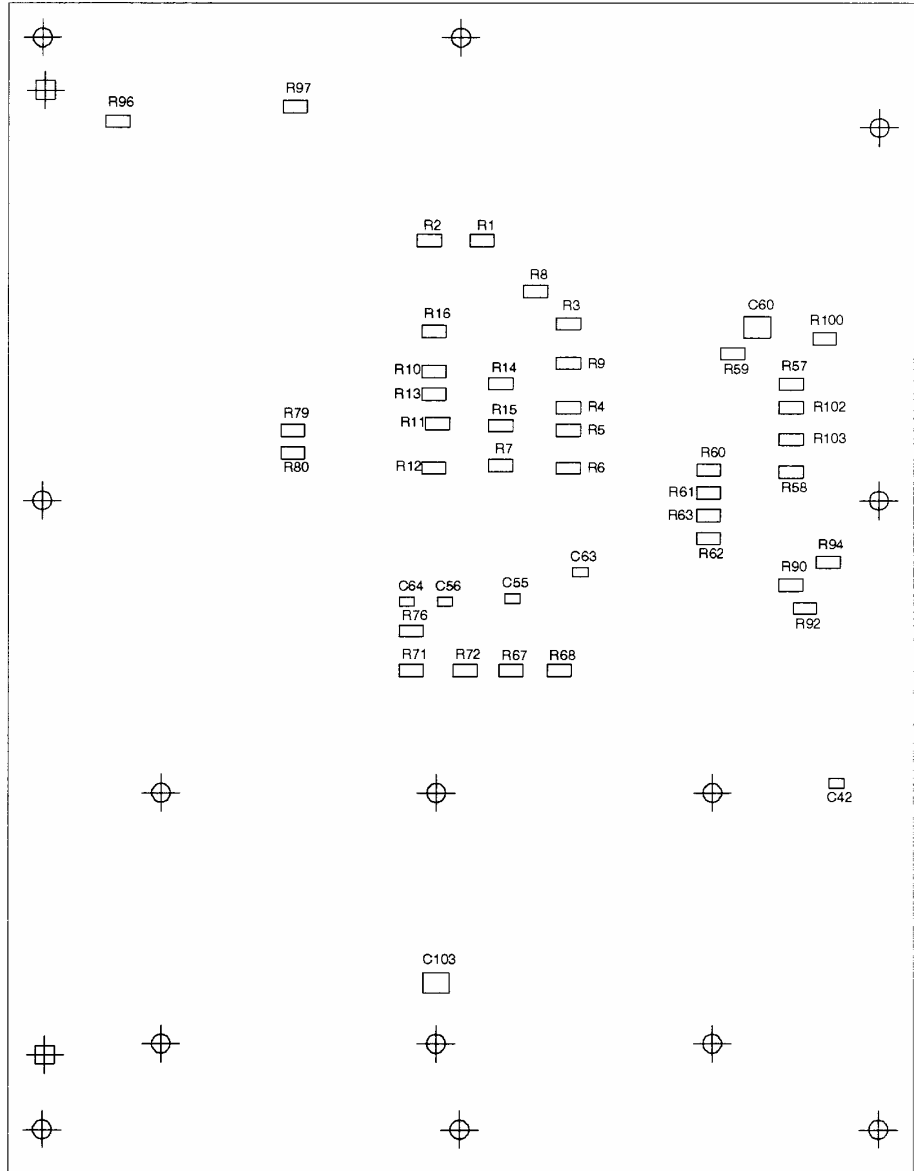
Fig. 7-185 AF1 VCXO and PLL - circuit



VCXO and PLL AF1

Drg. No. 44829/852

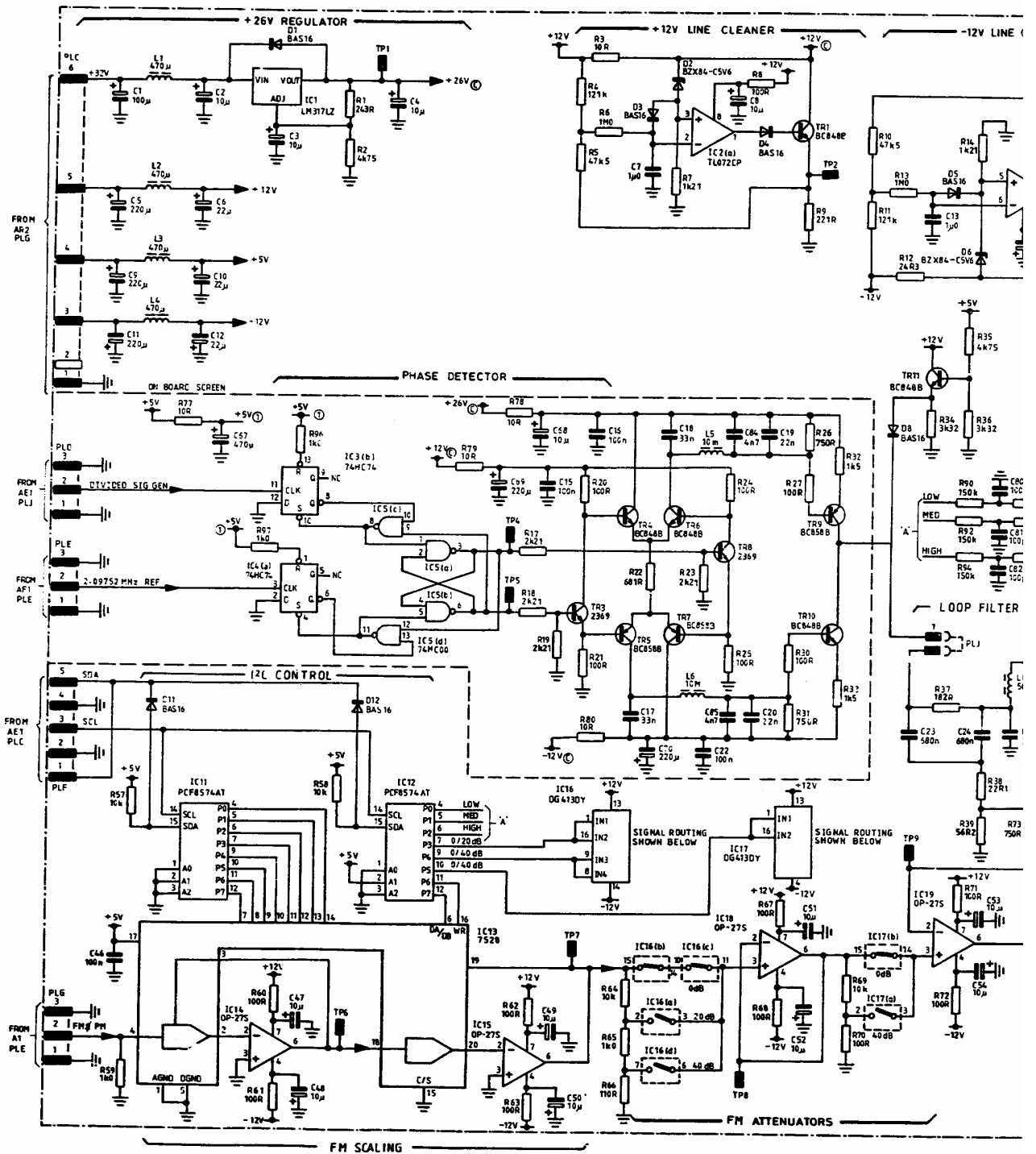
Component layout AF2



AF1

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Fig. 7-186 AF2 RF oscillator (earlier version) - component layout



Circuit diagram AF2 (earlier version)

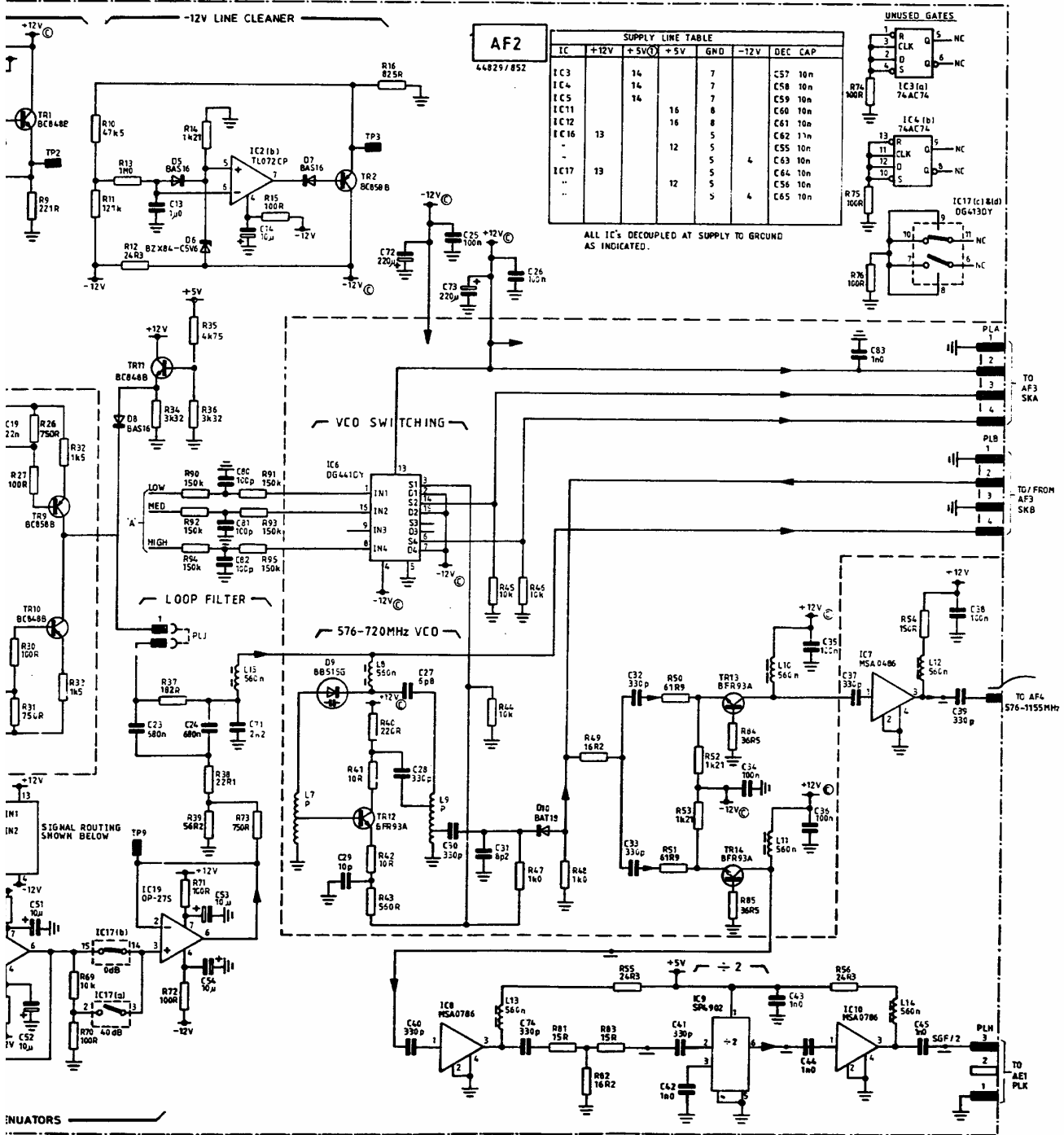
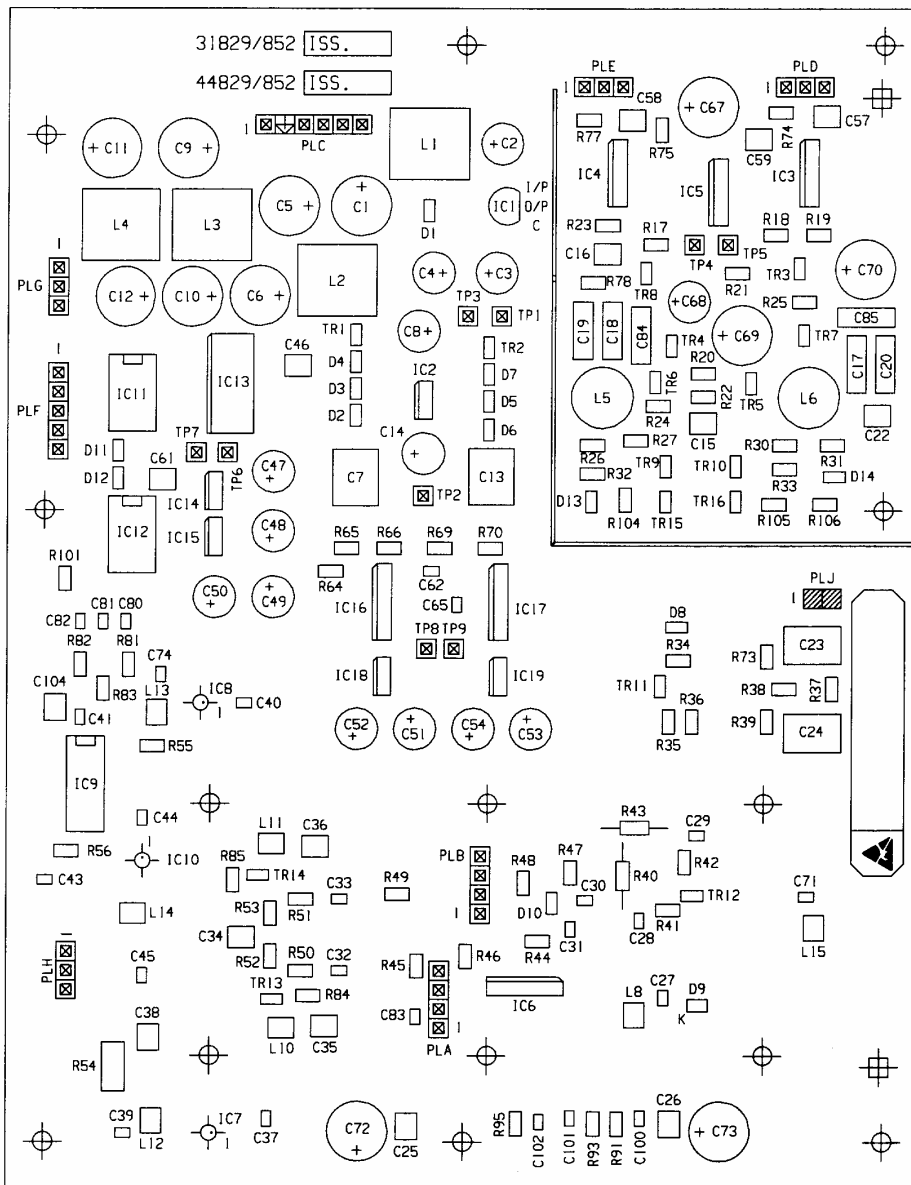


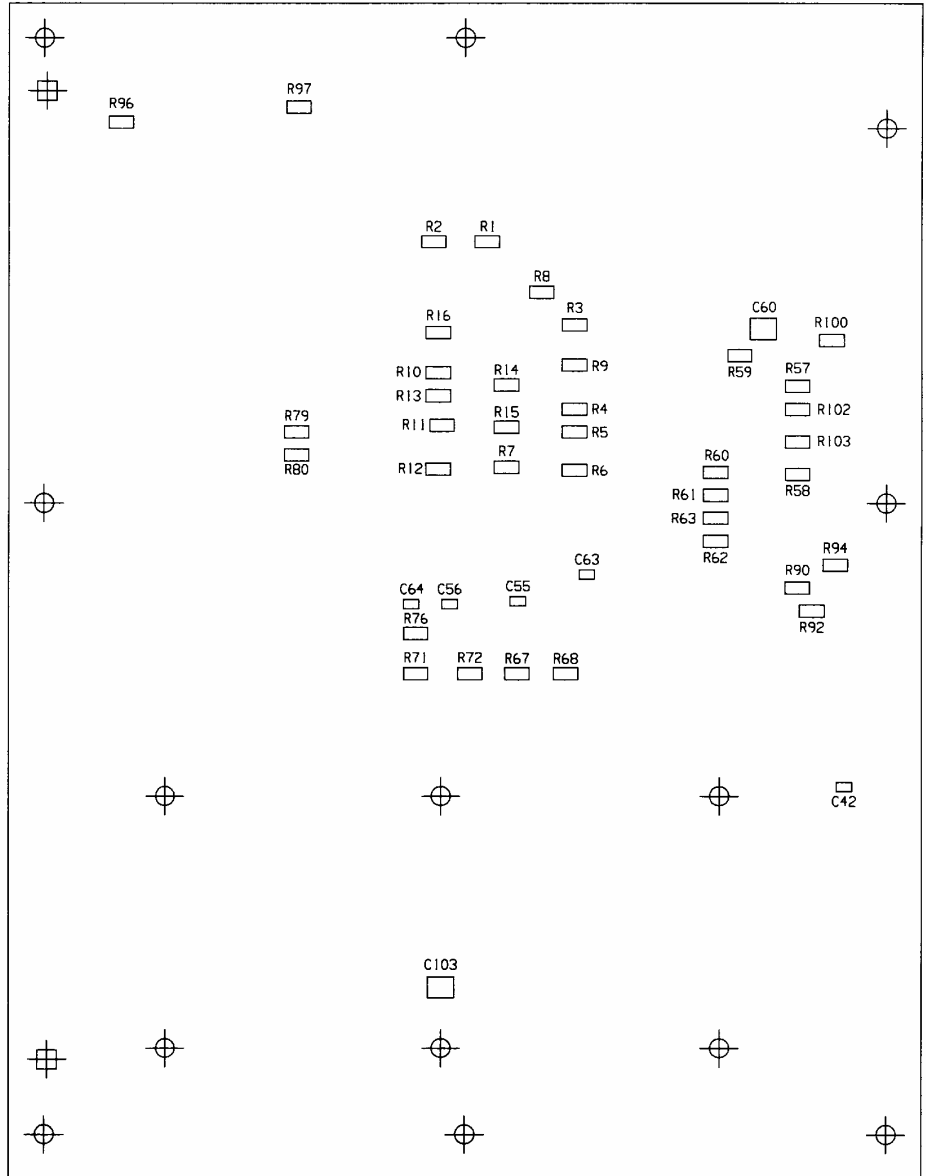
Fig. 7-187 AF2 RF oscillator (earlier version) - circuit



RF oscillator (earlier version) AF2

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Component layout AF2

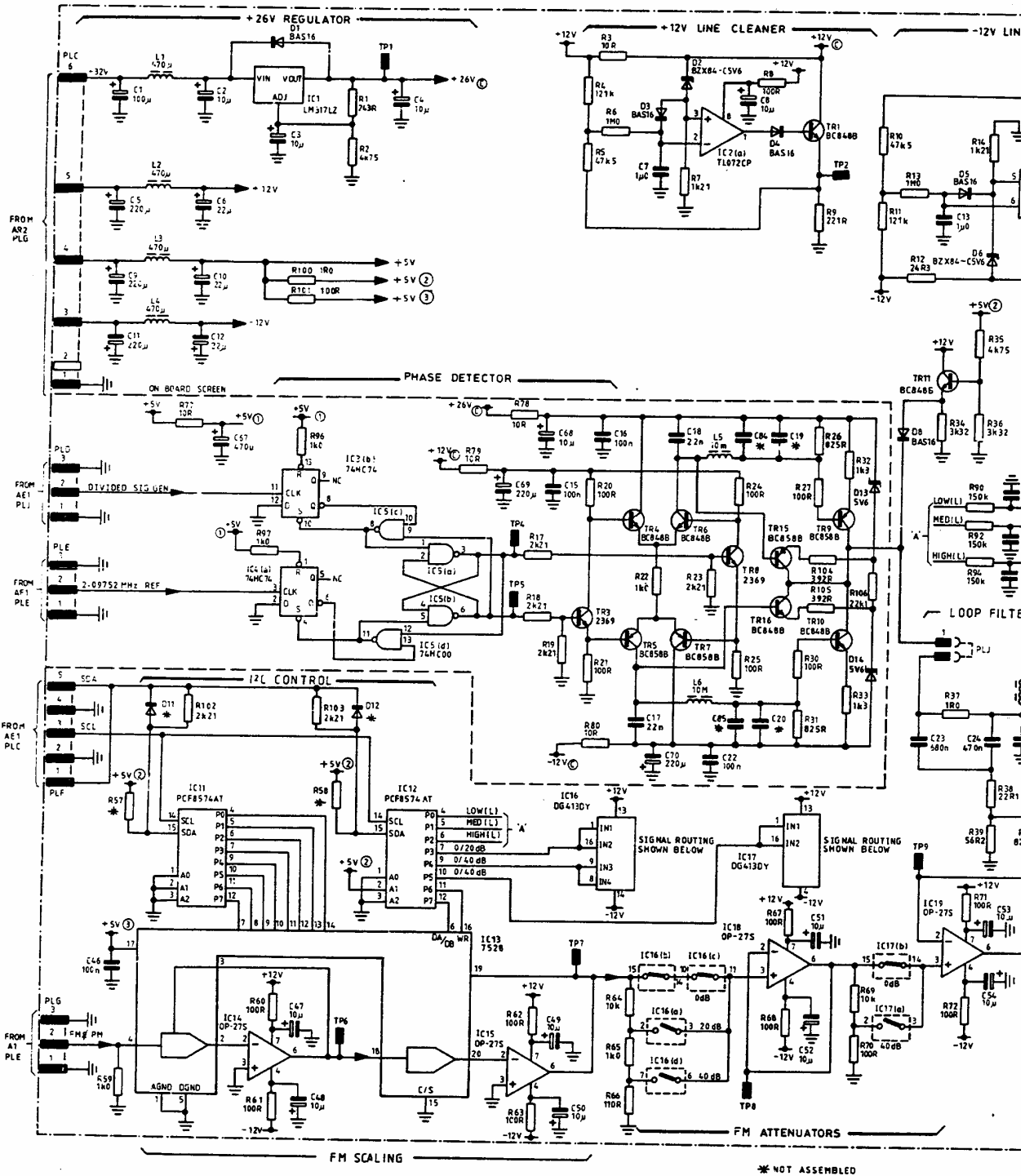


AF2

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Fig. 7-188 AF2 RF oscillator (later version) - component layout

46882-168



Circuit diagram AF2 (later version)

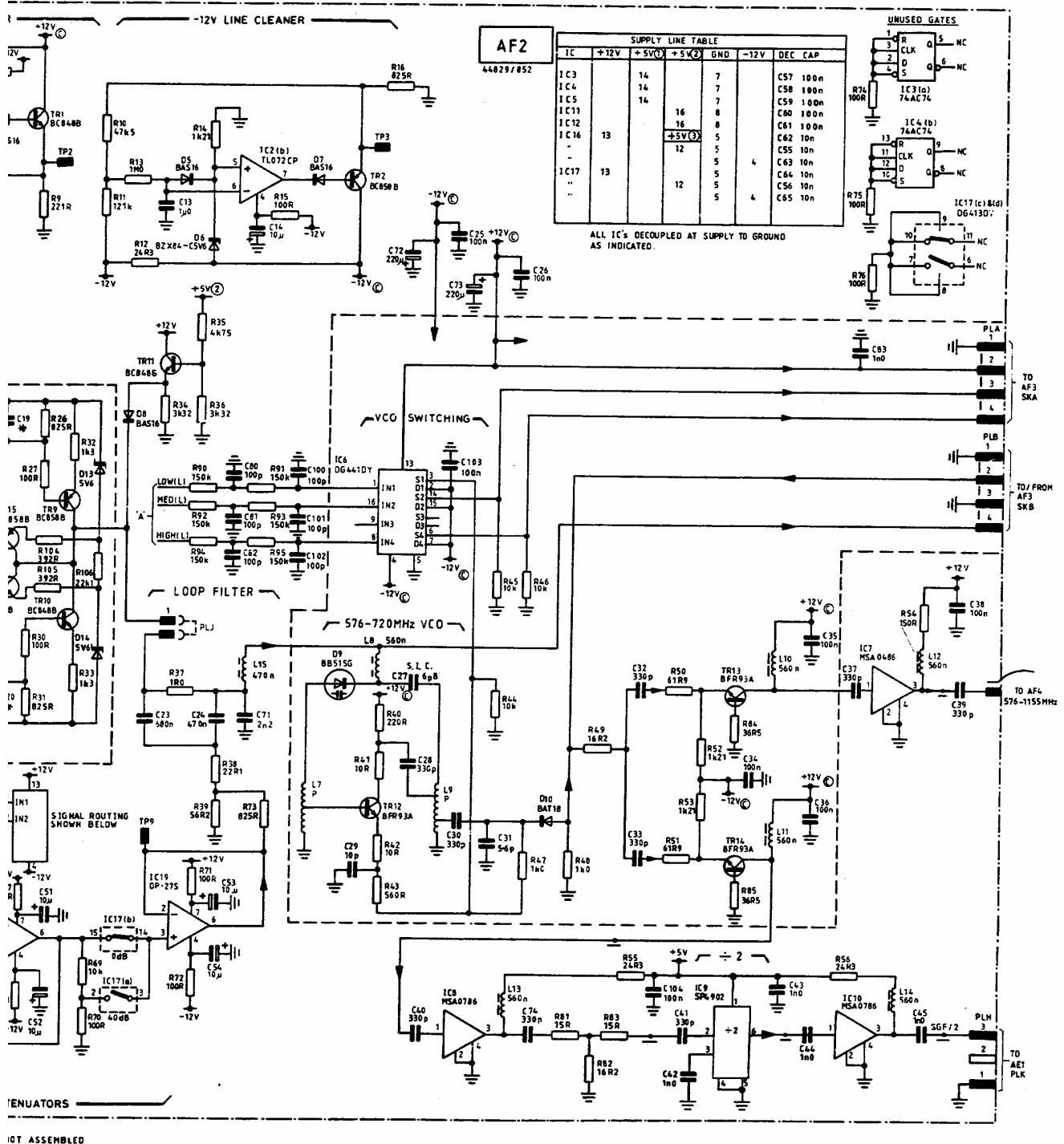
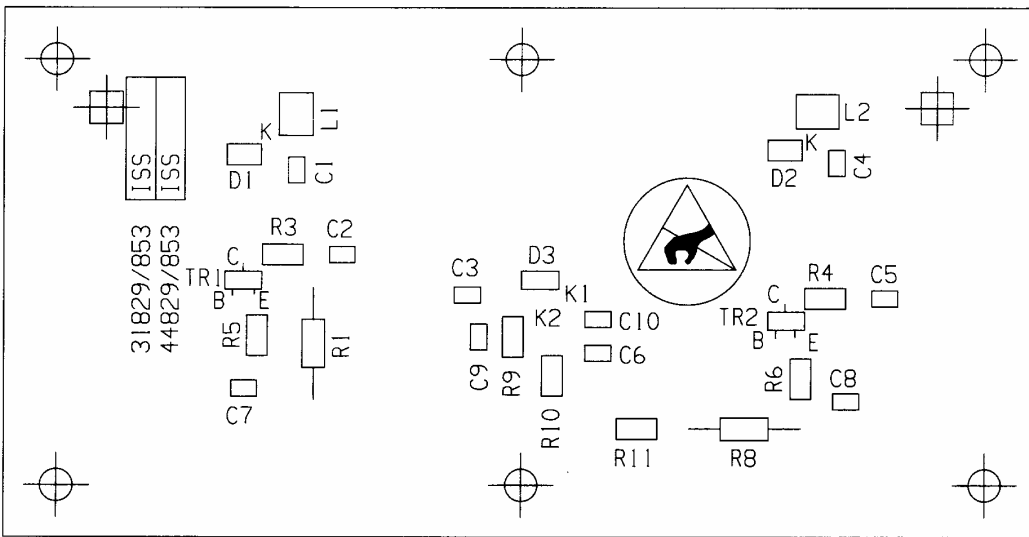


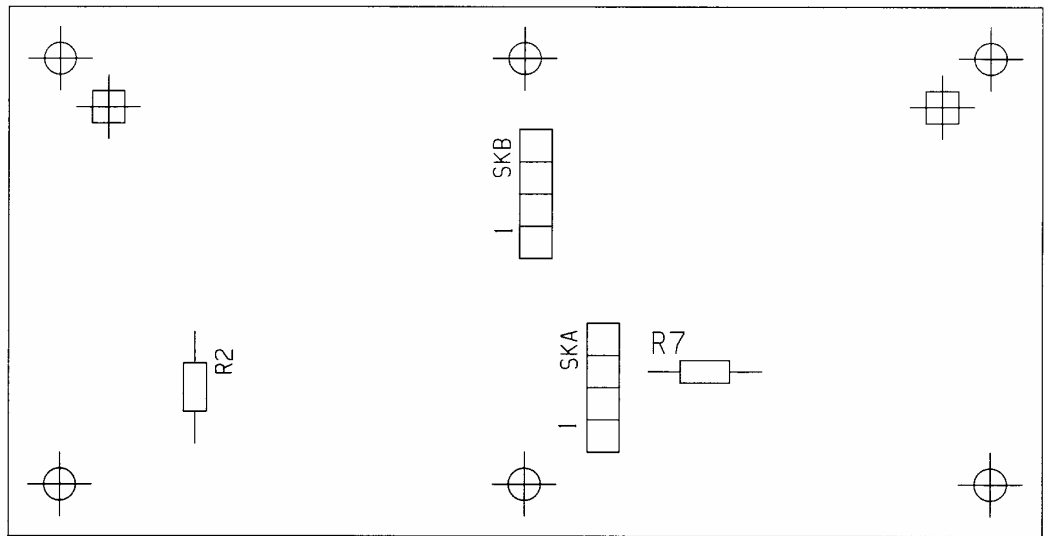
Fig. 7-189 AF2 RF oscillator (later version) - circuit



RF oscillator (later version) **AF2**

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Component layout AF3



Circuit diagram AF3

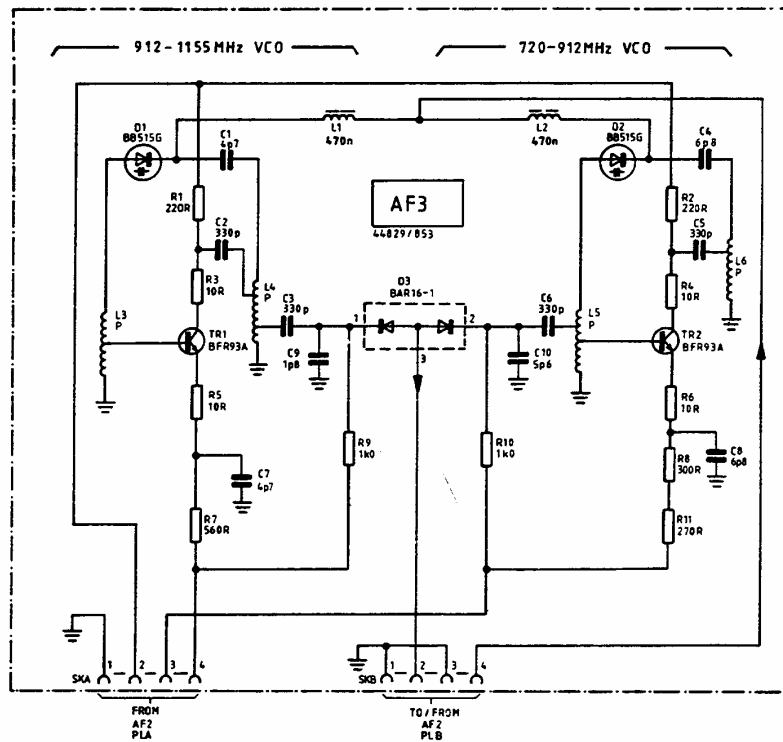
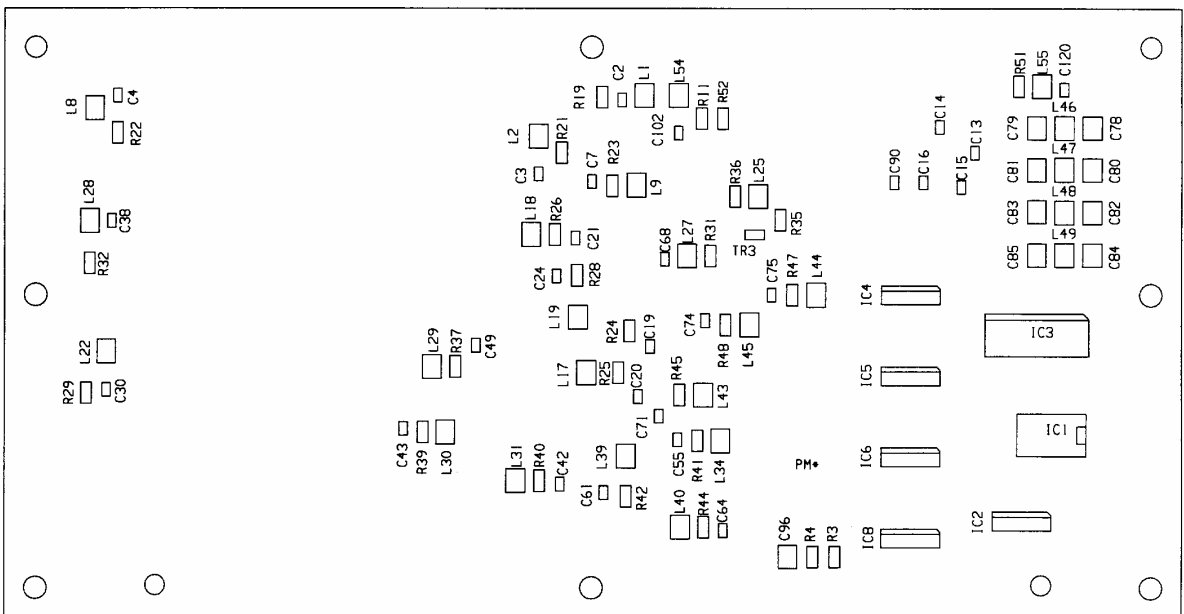
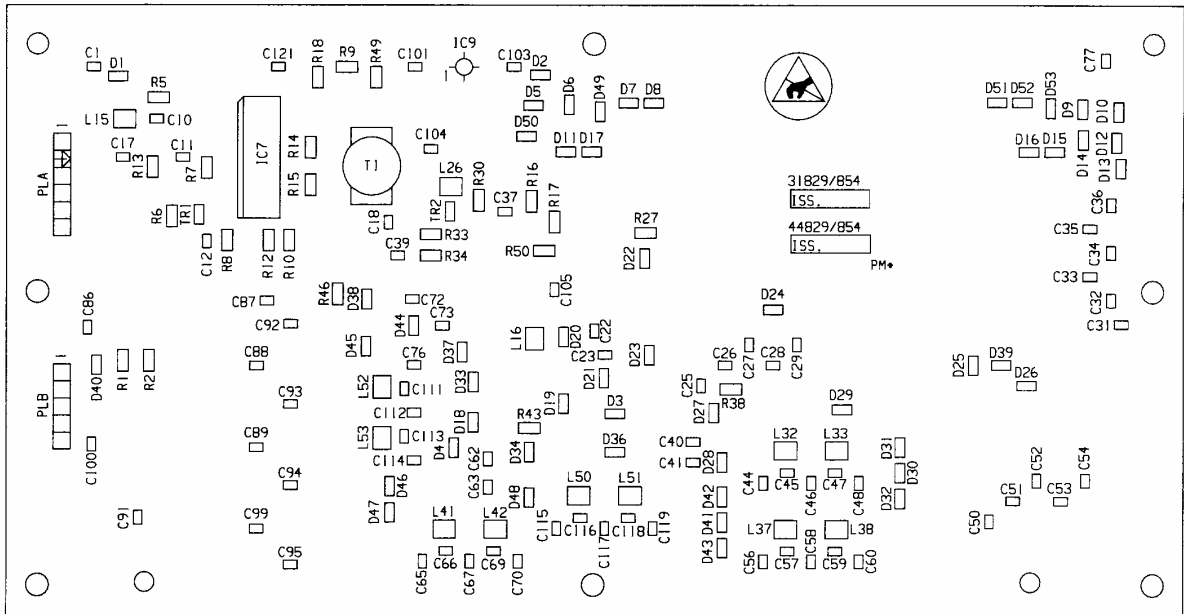


Fig. 7-191 AF3 VCO - circuit

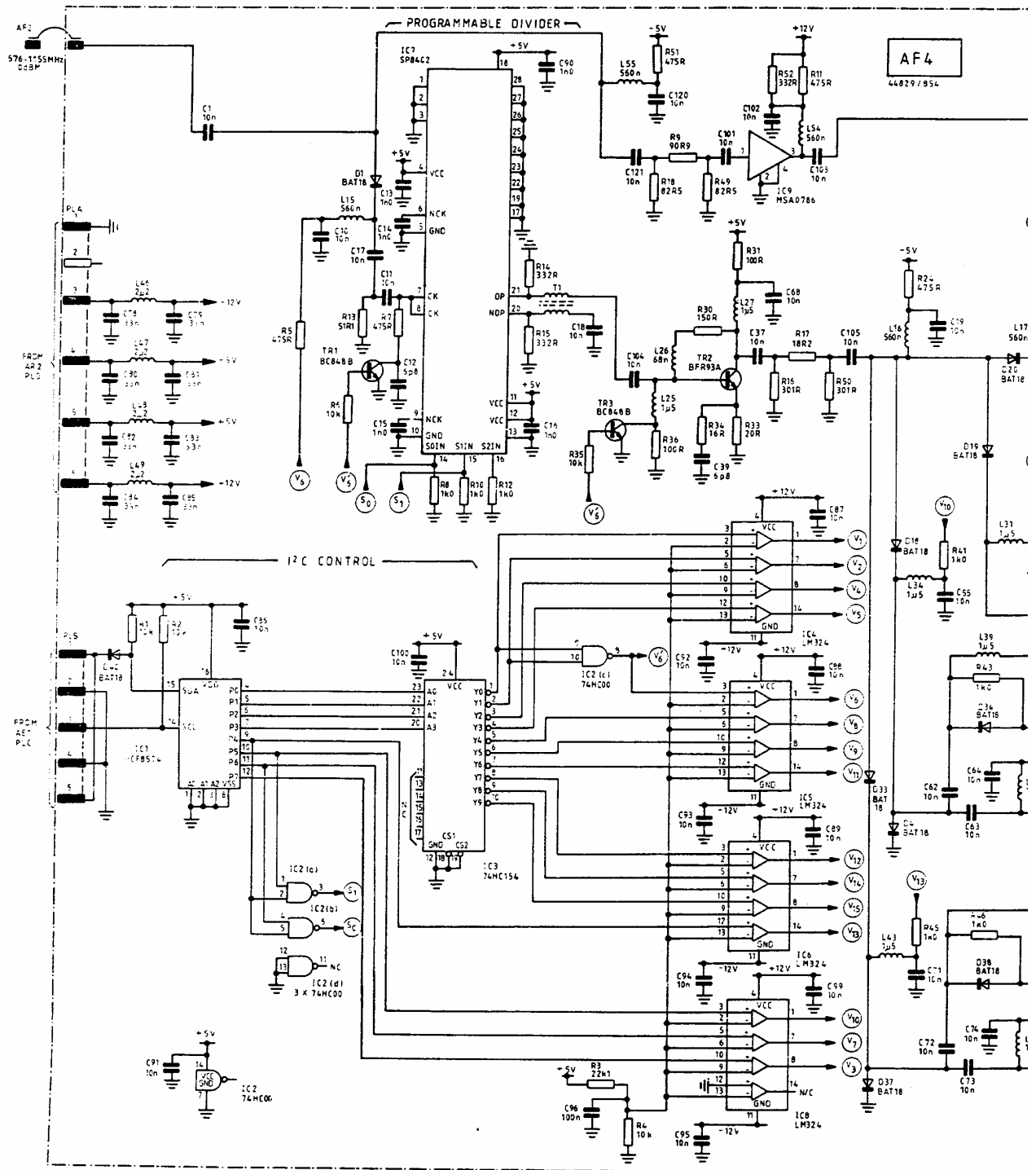
Component layout AF4



F3

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Fig. 7-192 AF4 RF divider - component layout



AF4
44829/954

Circuit diagram AF4

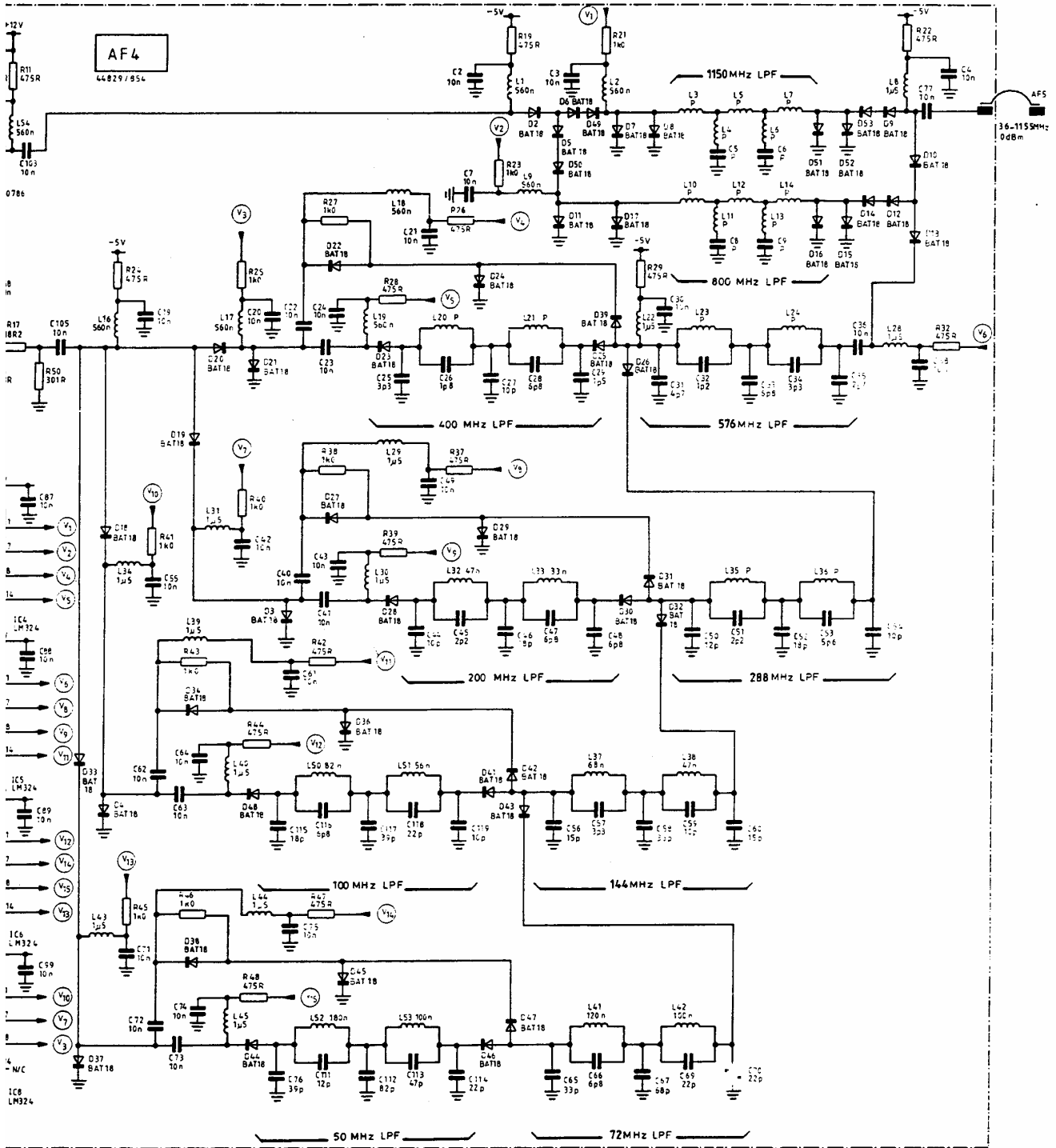
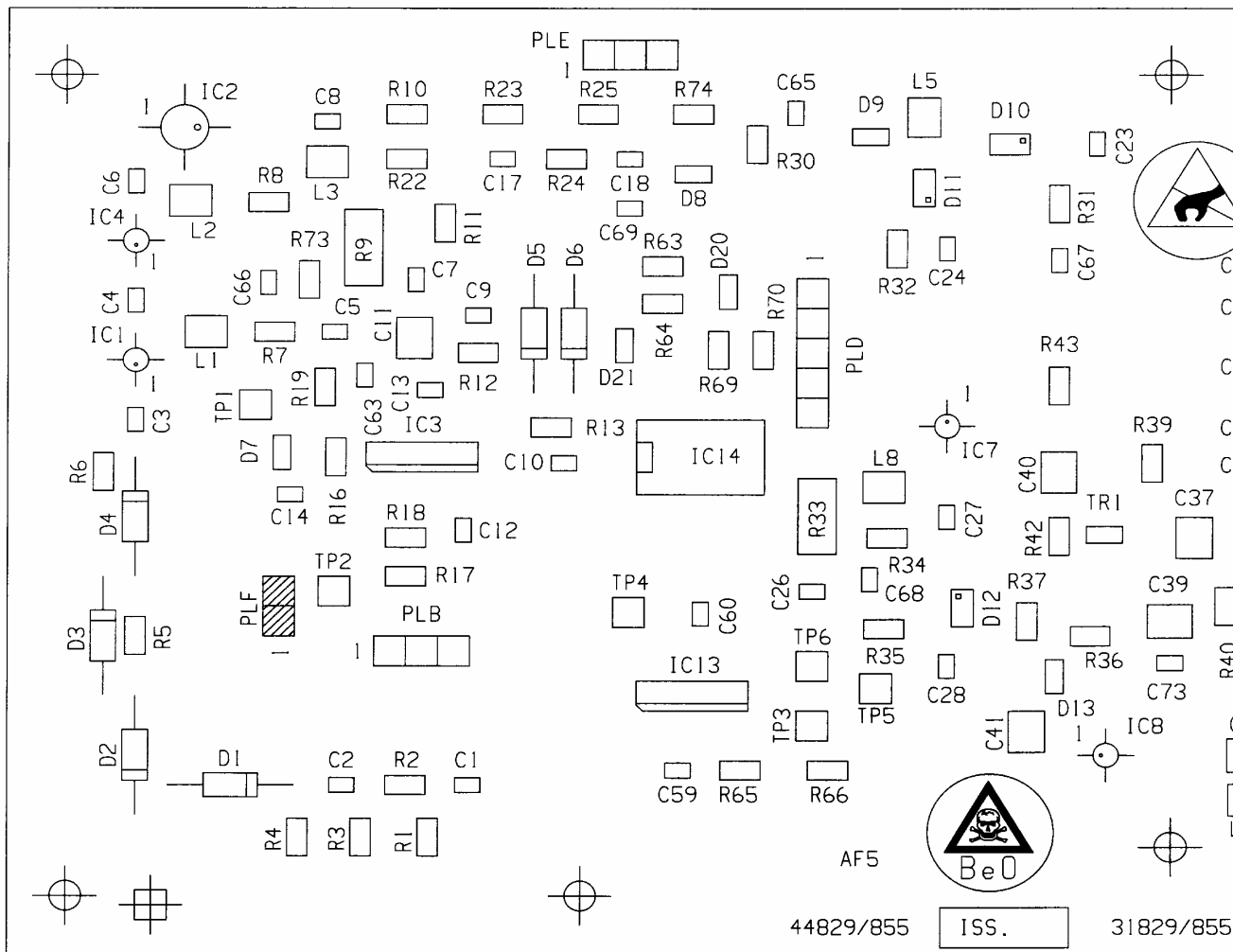


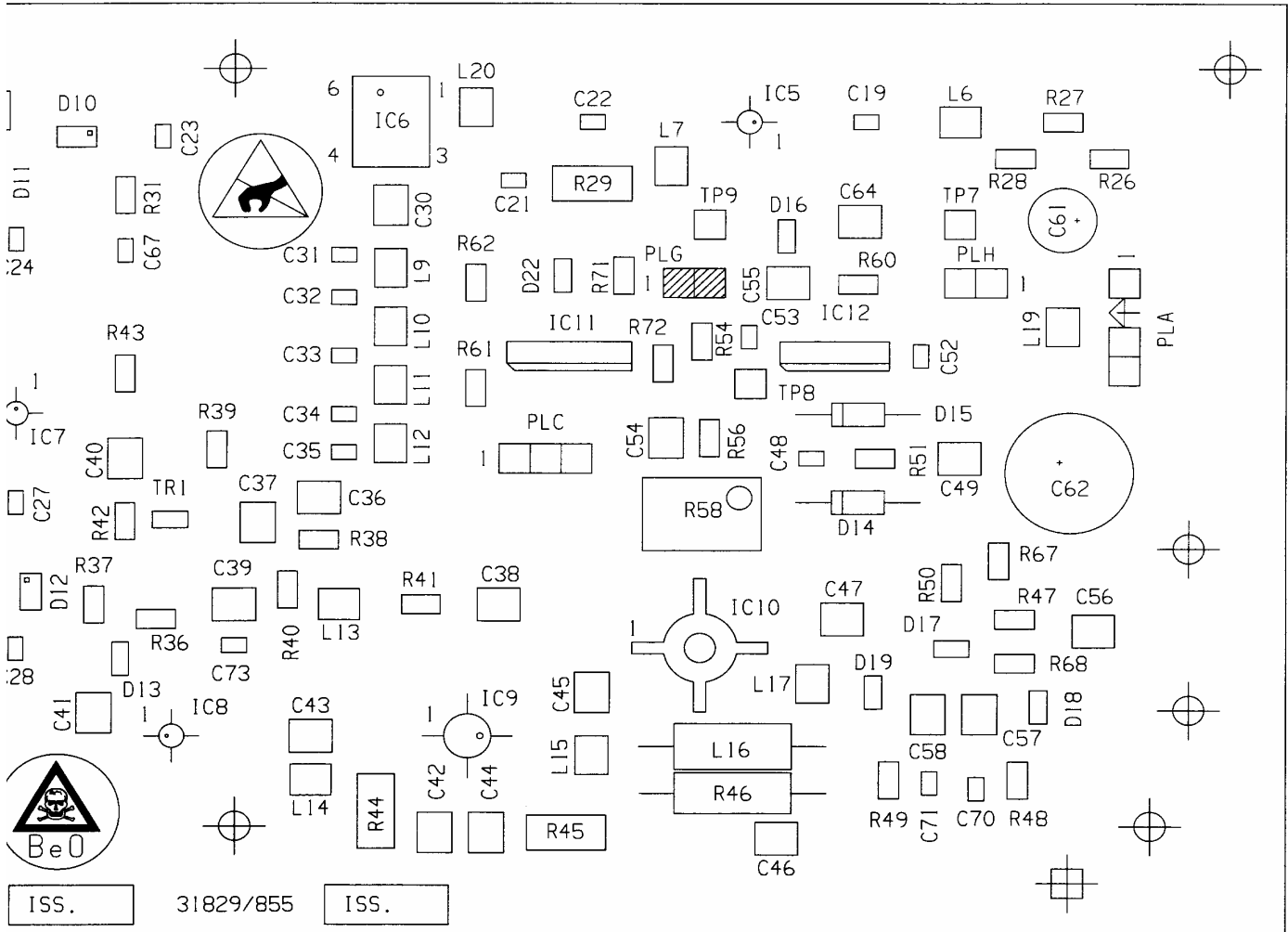
Fig. 7-193 AF4 RF divider - circuit



RF divider AF4

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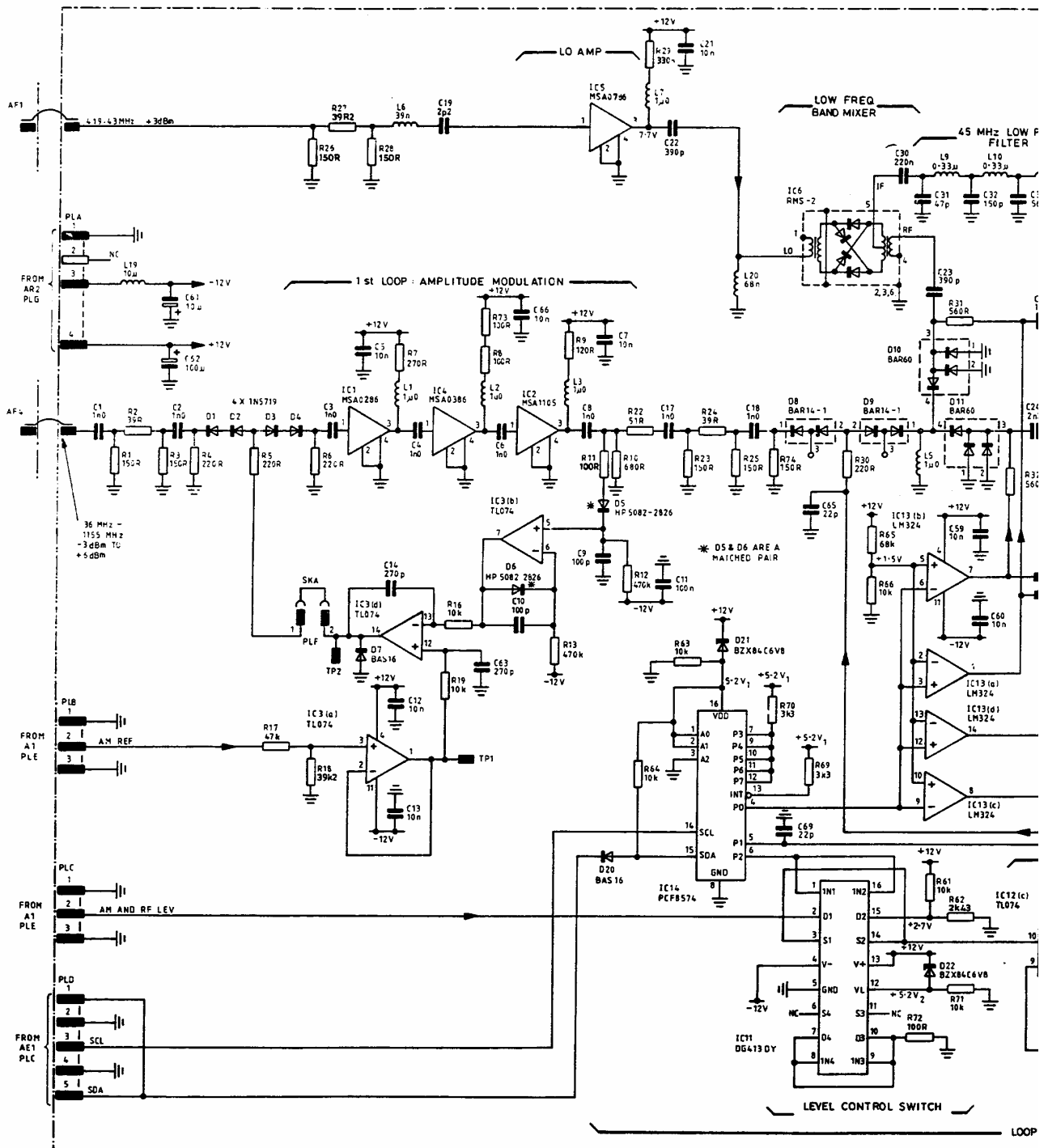
Component layout AF5



AF4

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Fig. 7-194 AF5 RF output - component layout



Circuit diagram AF5

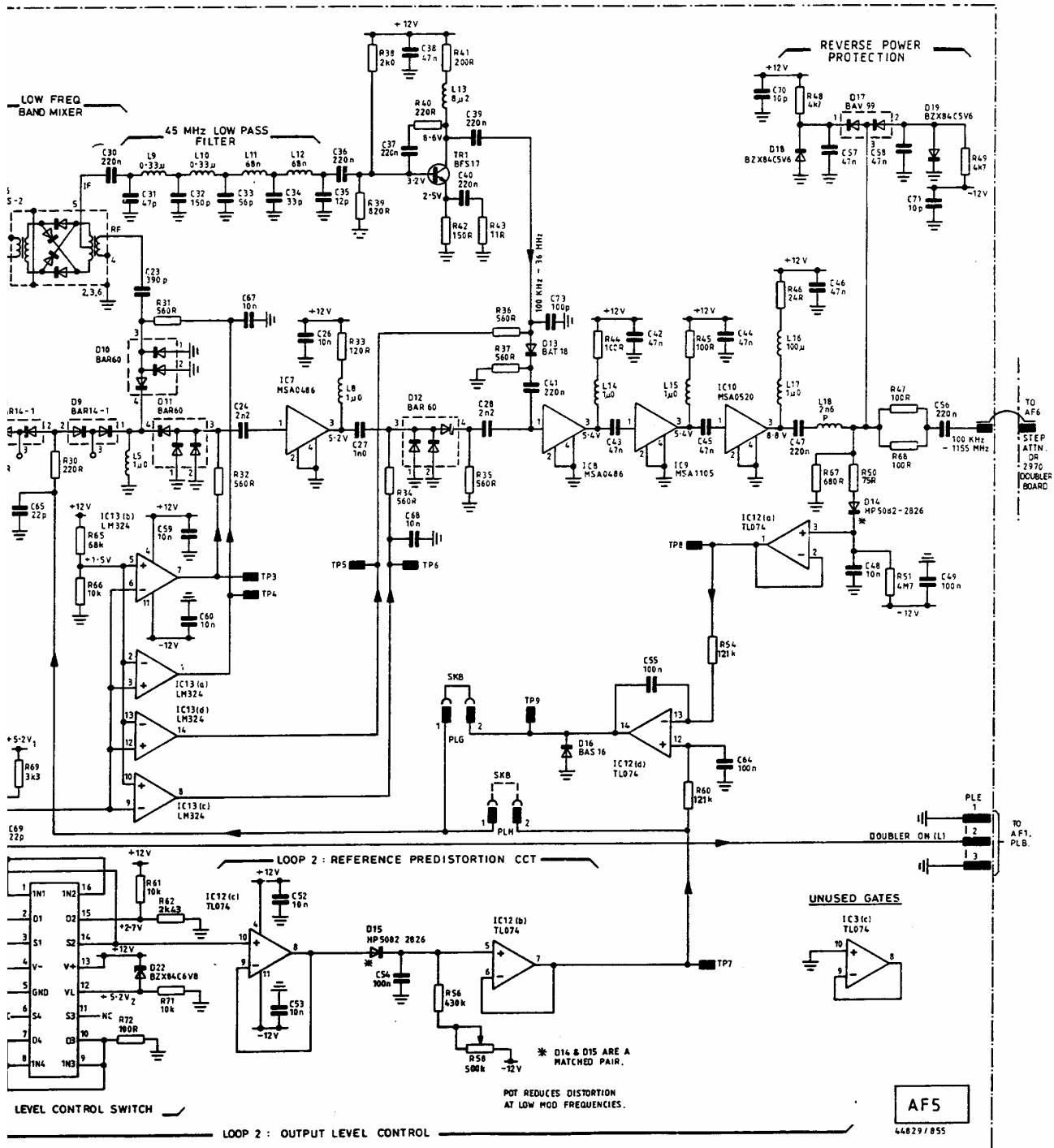
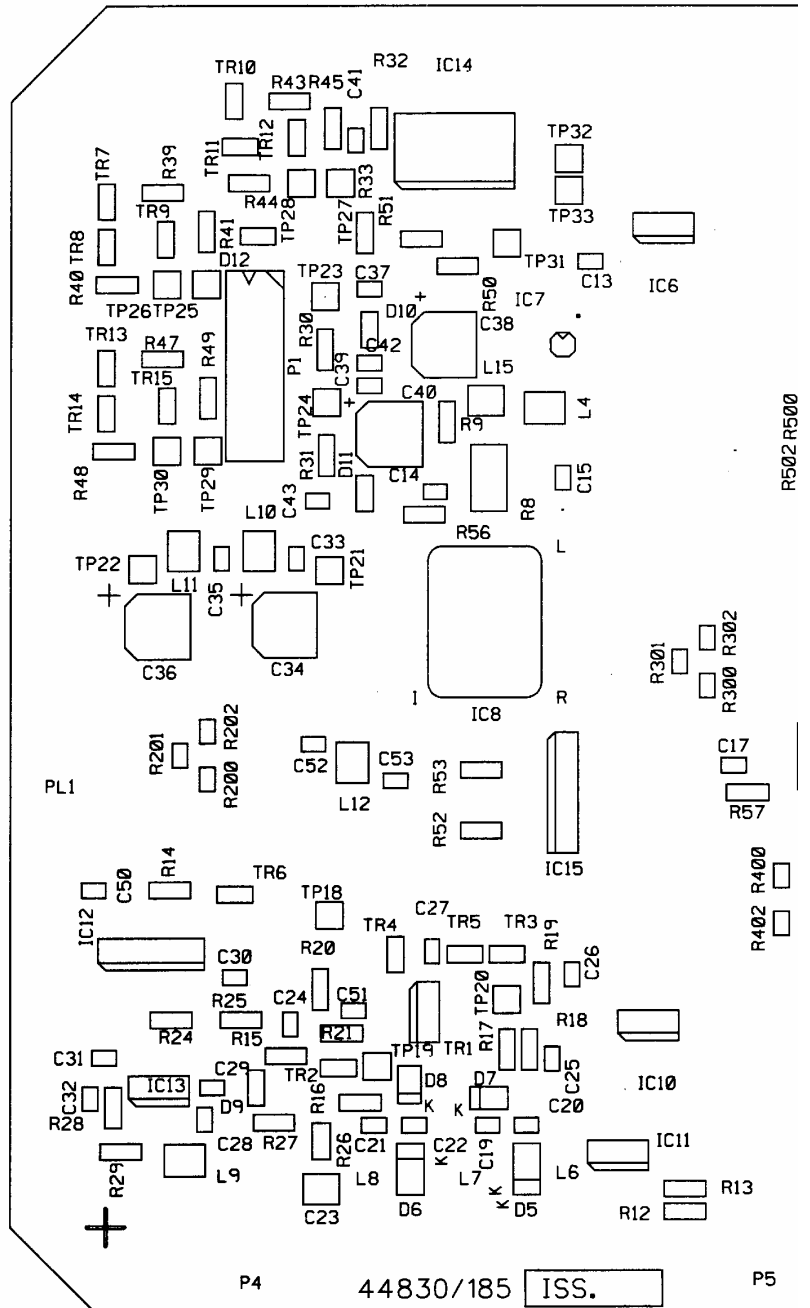


Fig. 7-195 AF5 RF output - circuit

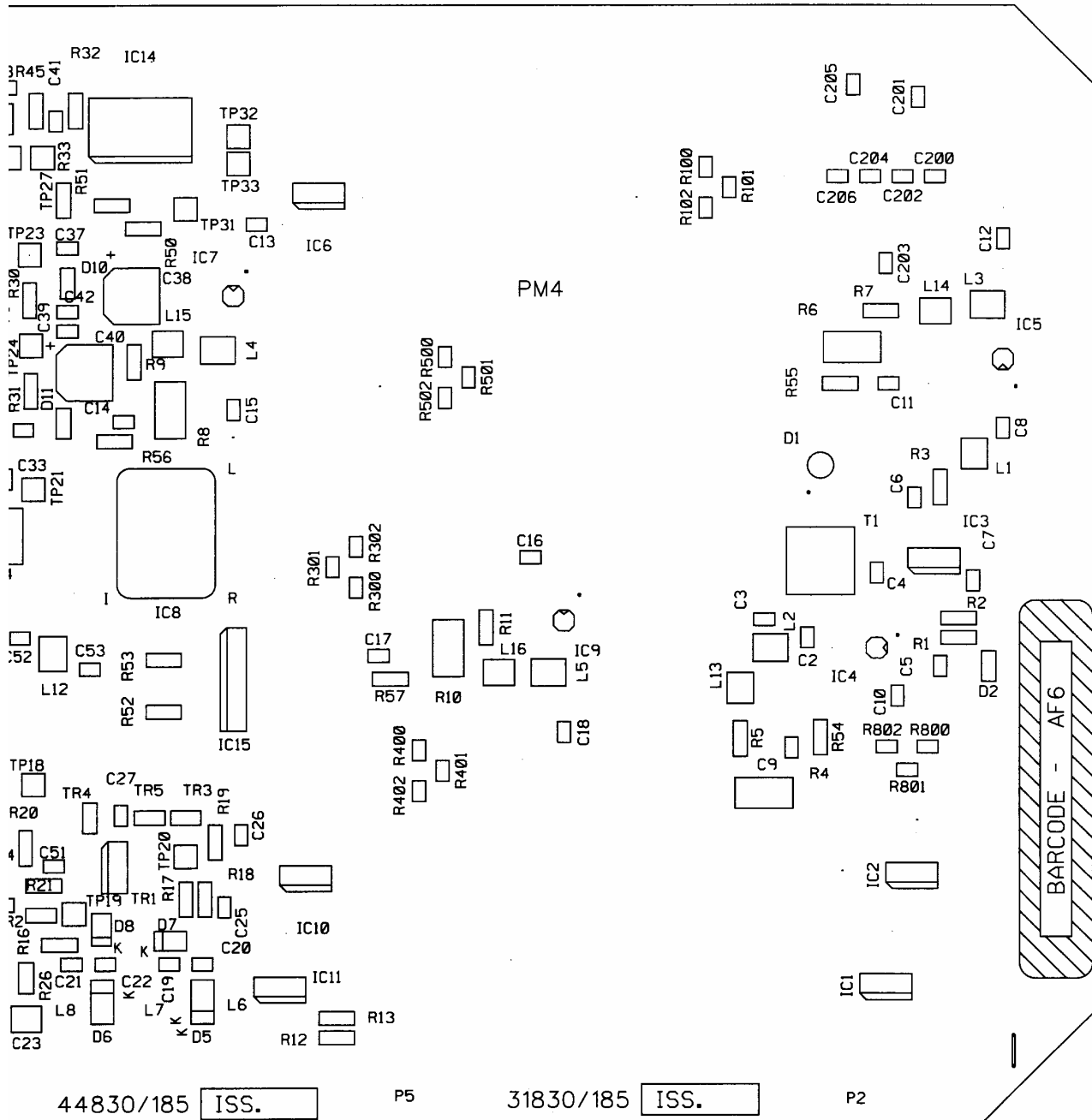
SERVICING DIAGRAMS



RF output **AF5**

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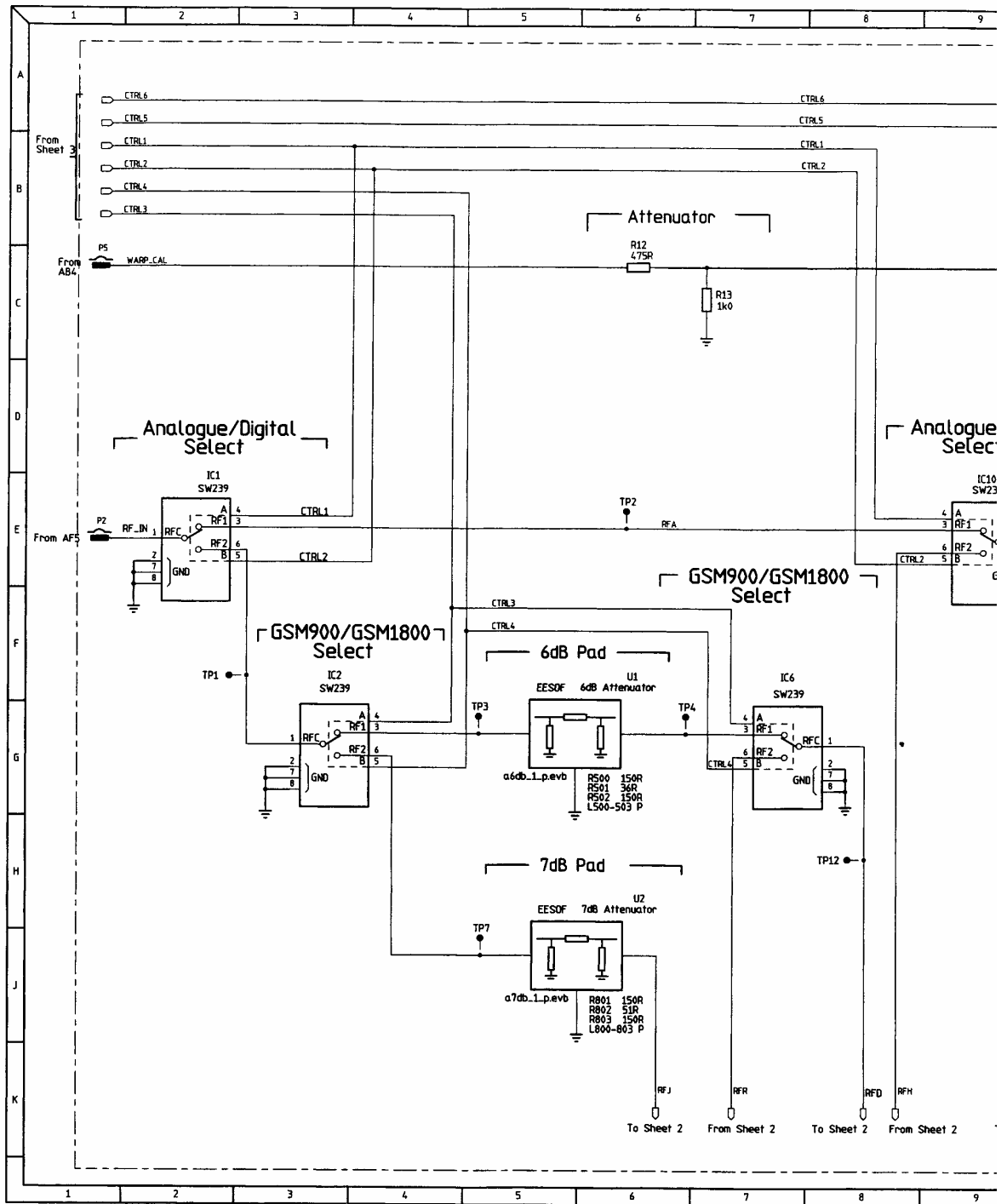
Component layout AF6



AF5

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Fig. 7-196 AF6 Up convertor - component layout



Circuit diagrams AF6

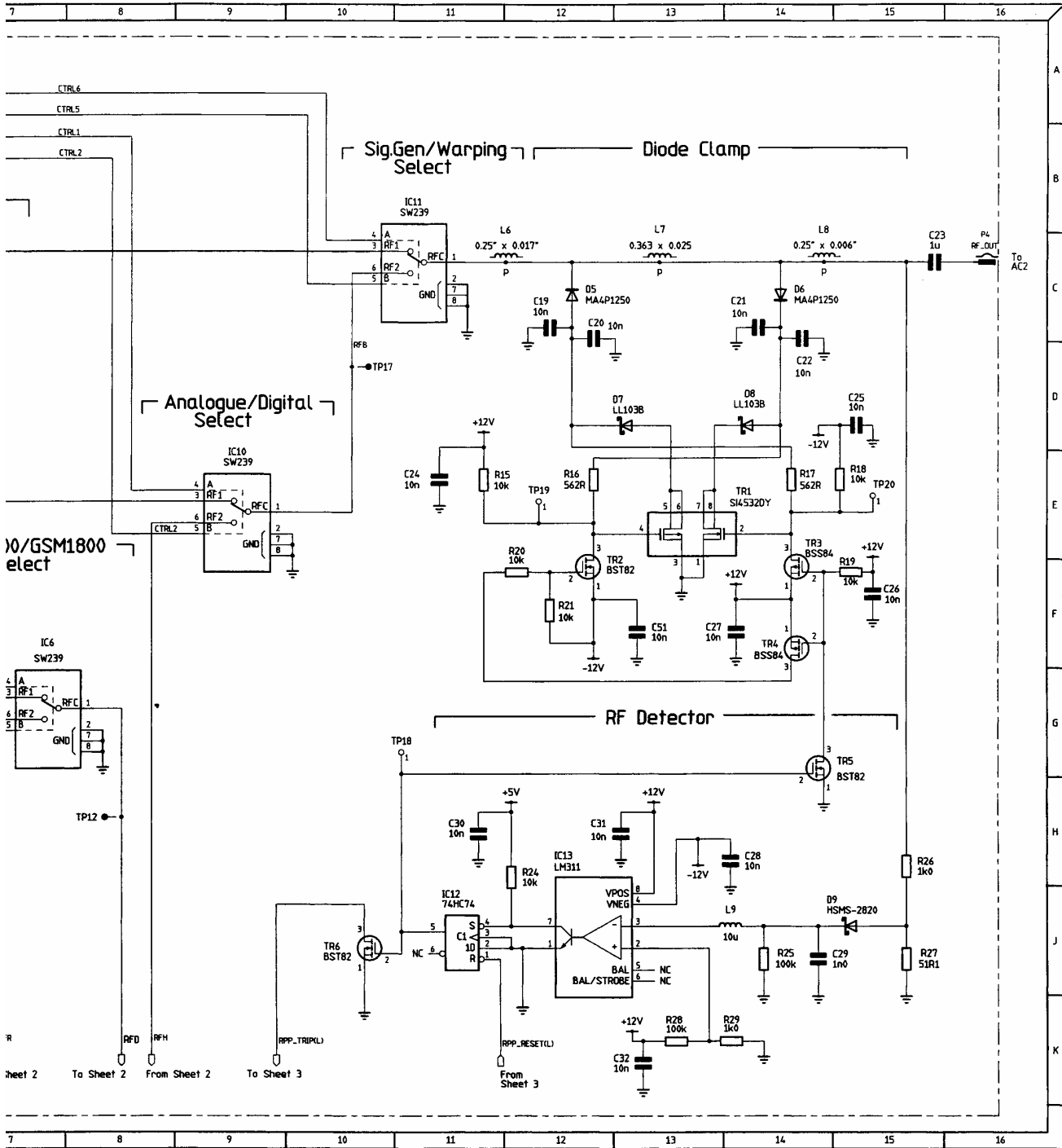
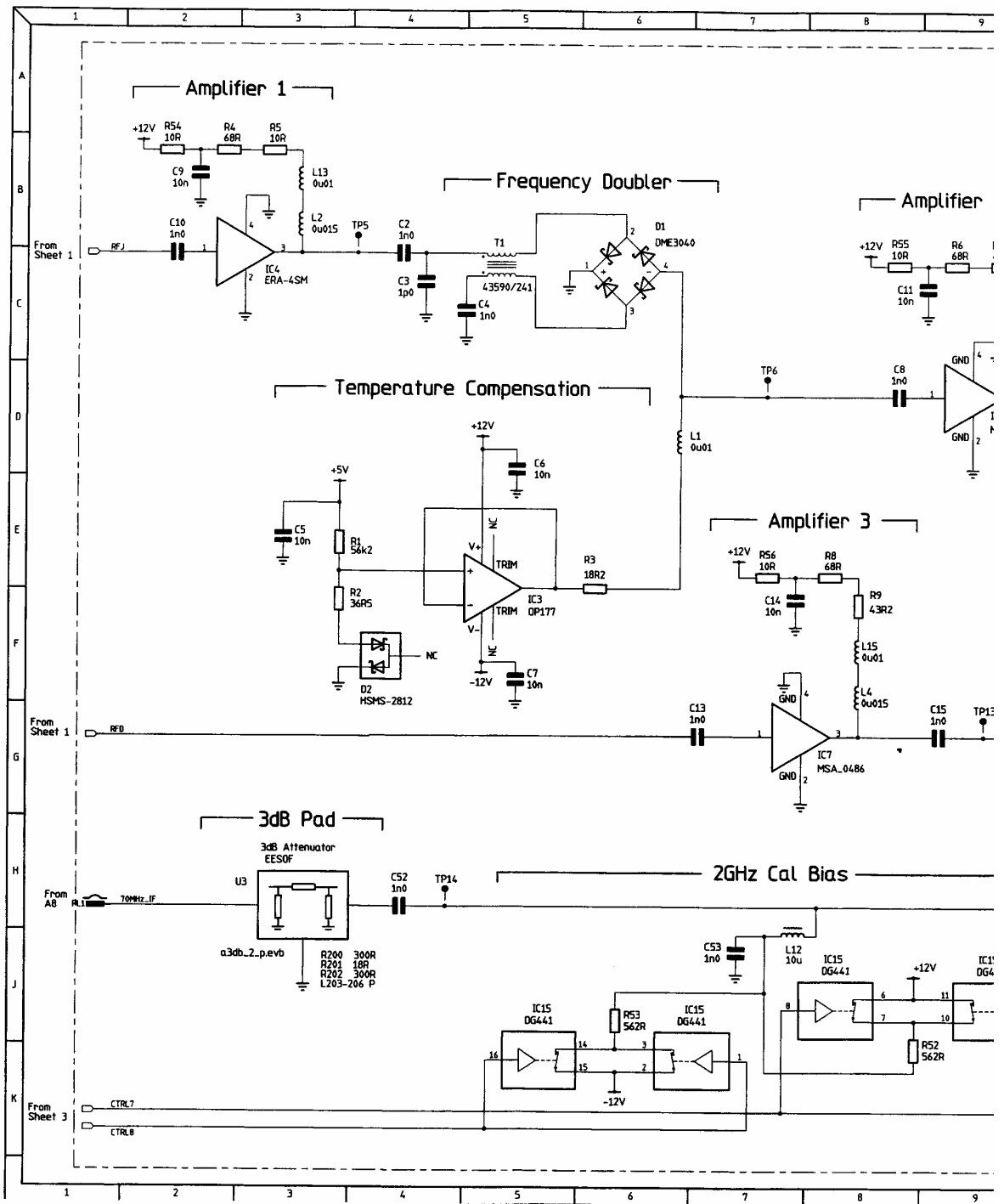


Fig. 7-197 AF6 Up convertor - circuit



Circuit diagrams AF6

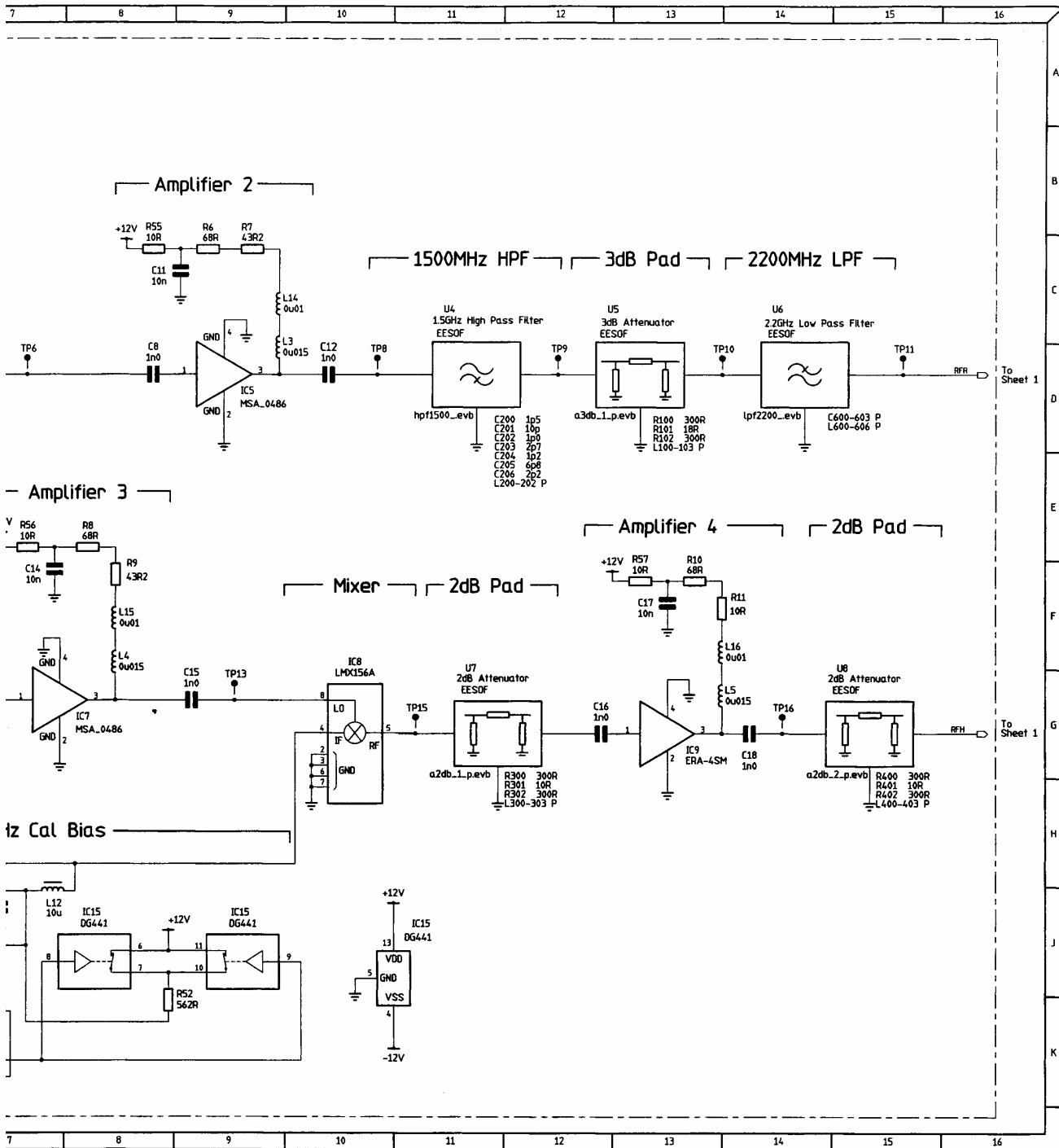
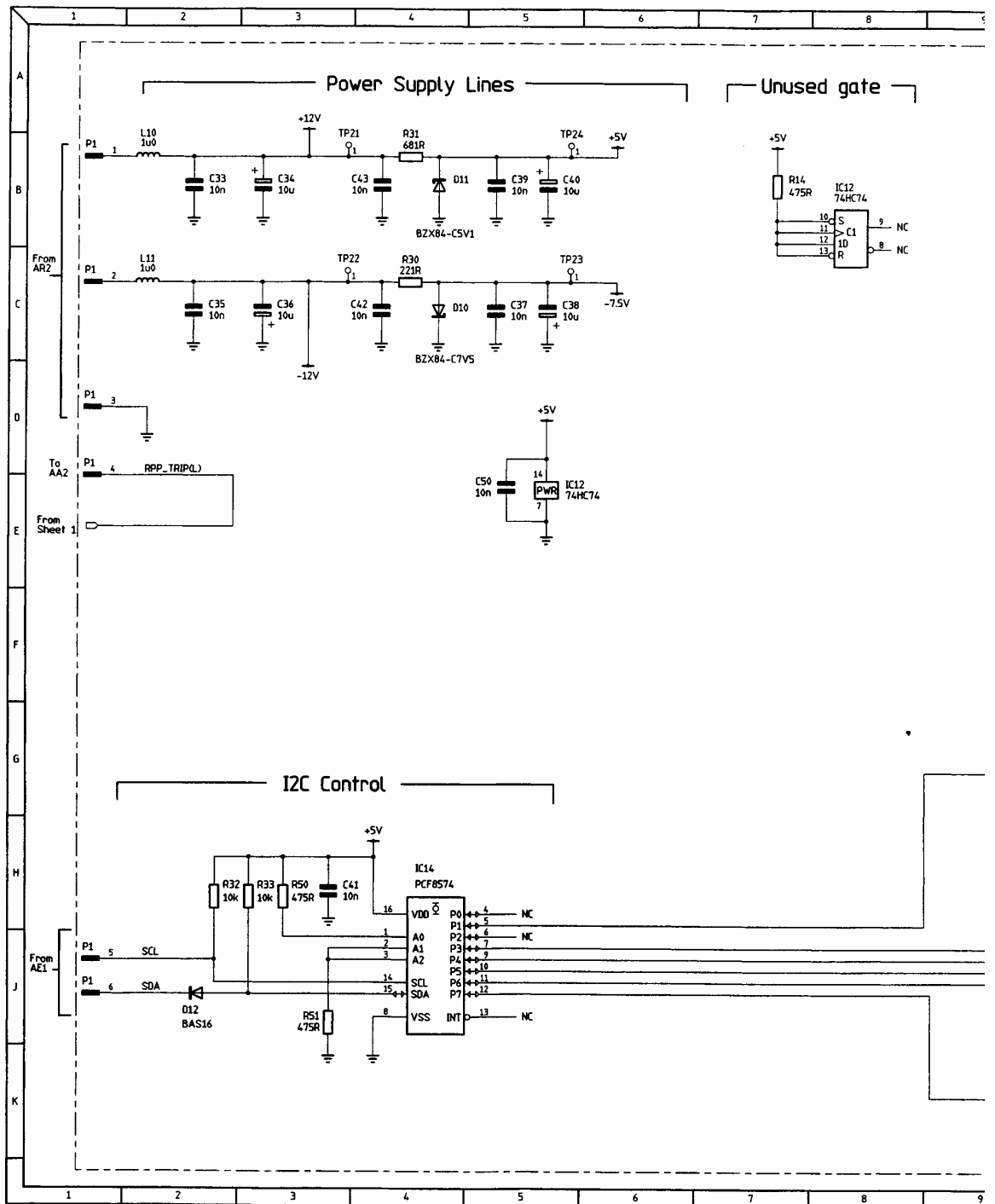


Fig. 7-198 AF6 Up convertor - circuit



Circuit diagrams AF6

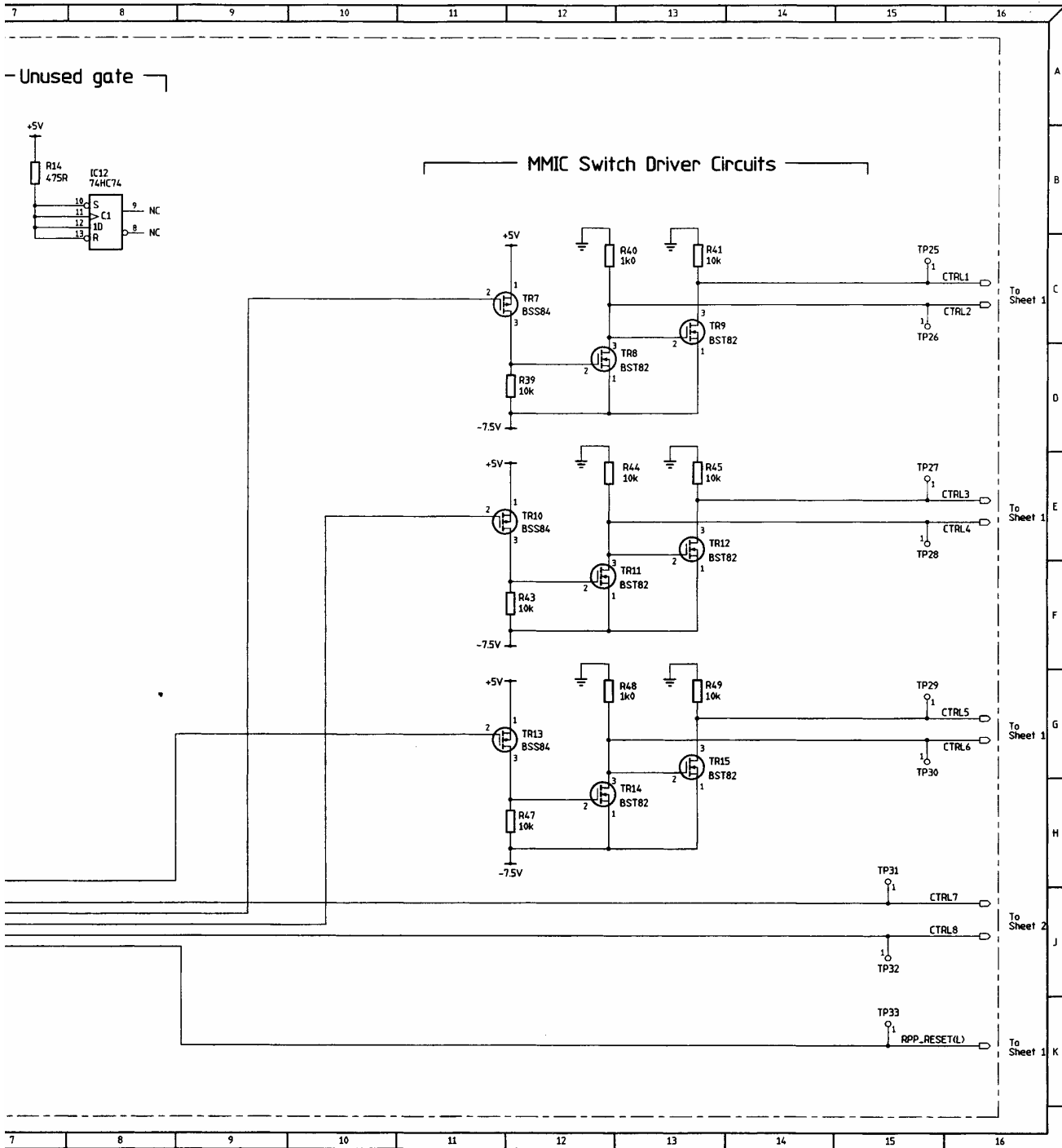
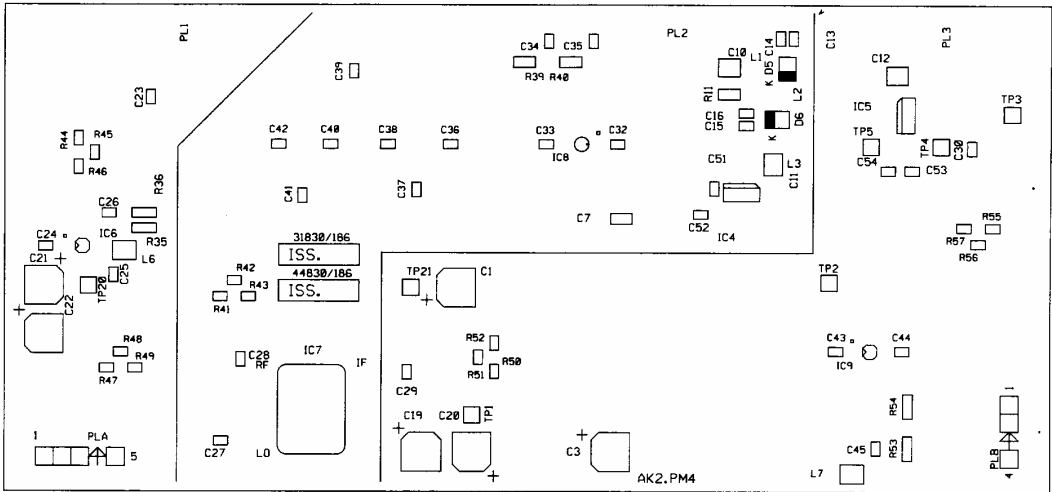
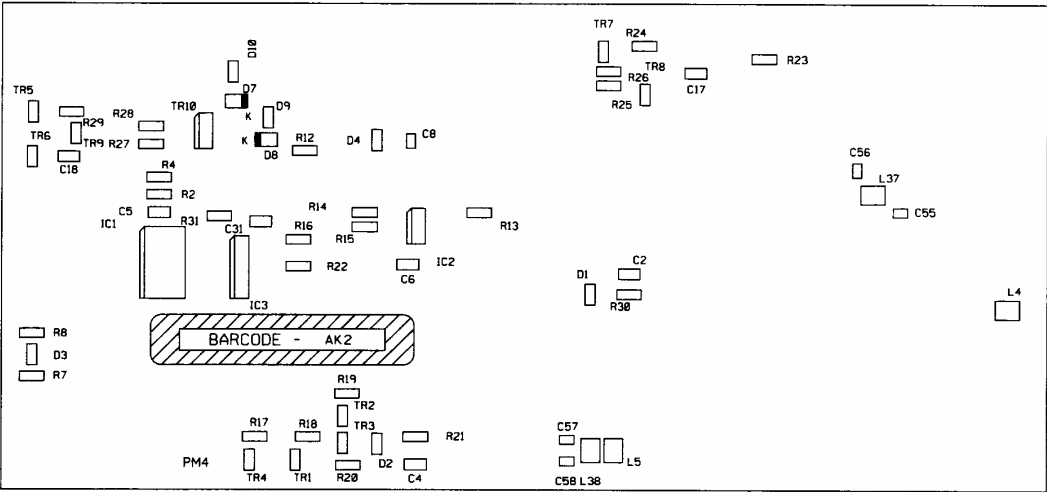


Fig. 7-199 AF6 Up convertor - circuit

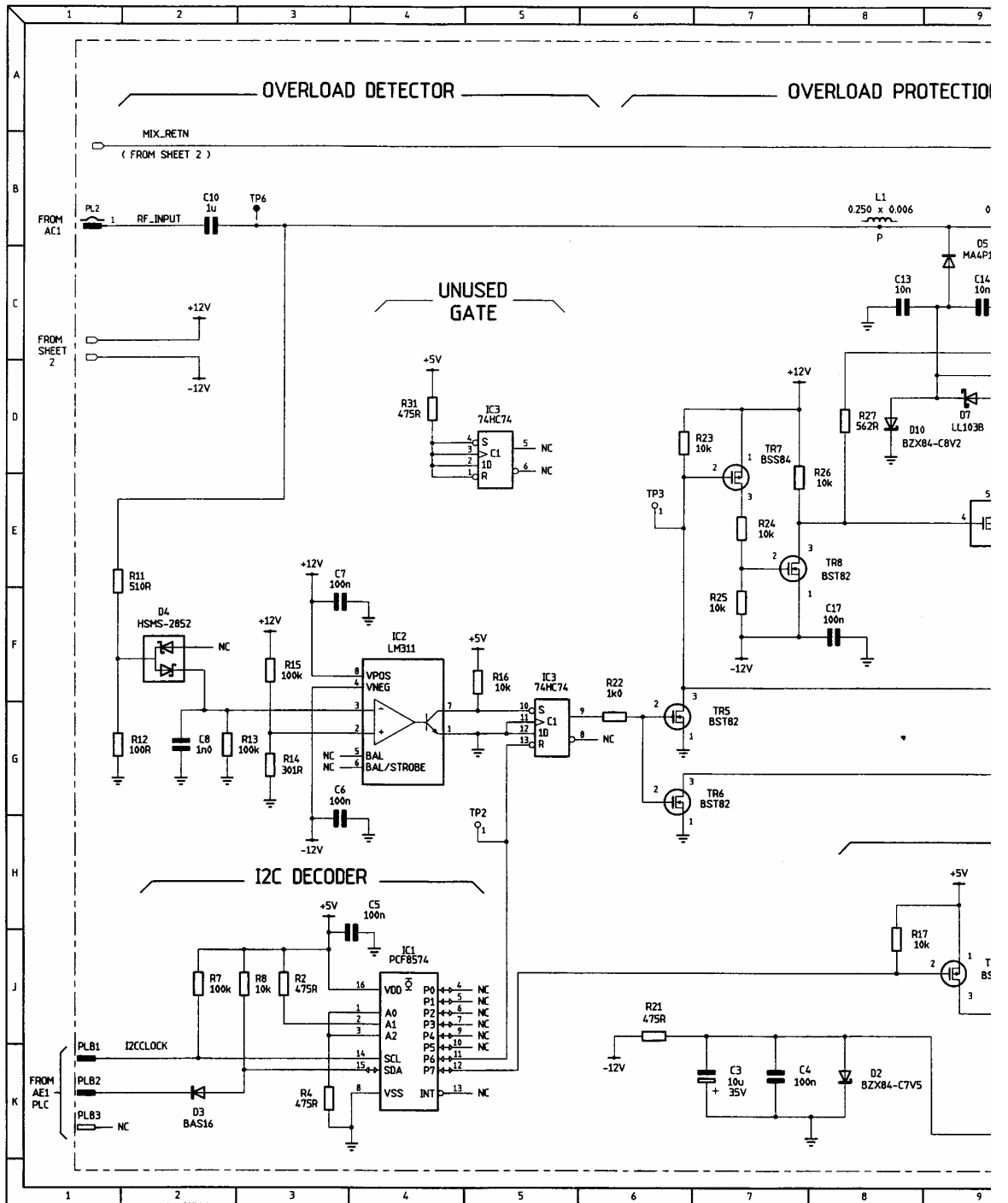
Component layout AK2



COMPONENT SIDE VIEW



SOLDER SIDE VIEW



Circuit diagrams AK2

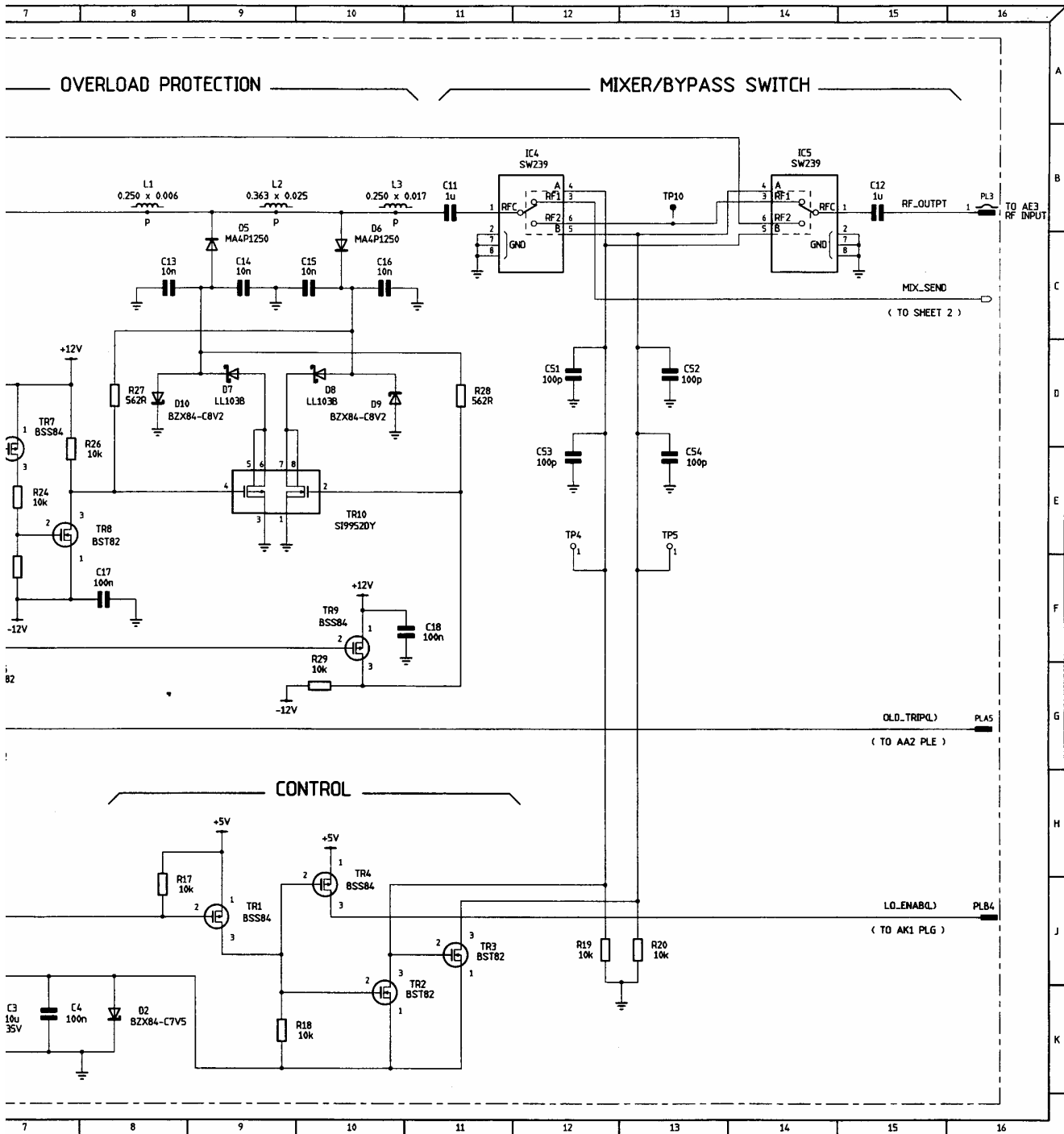
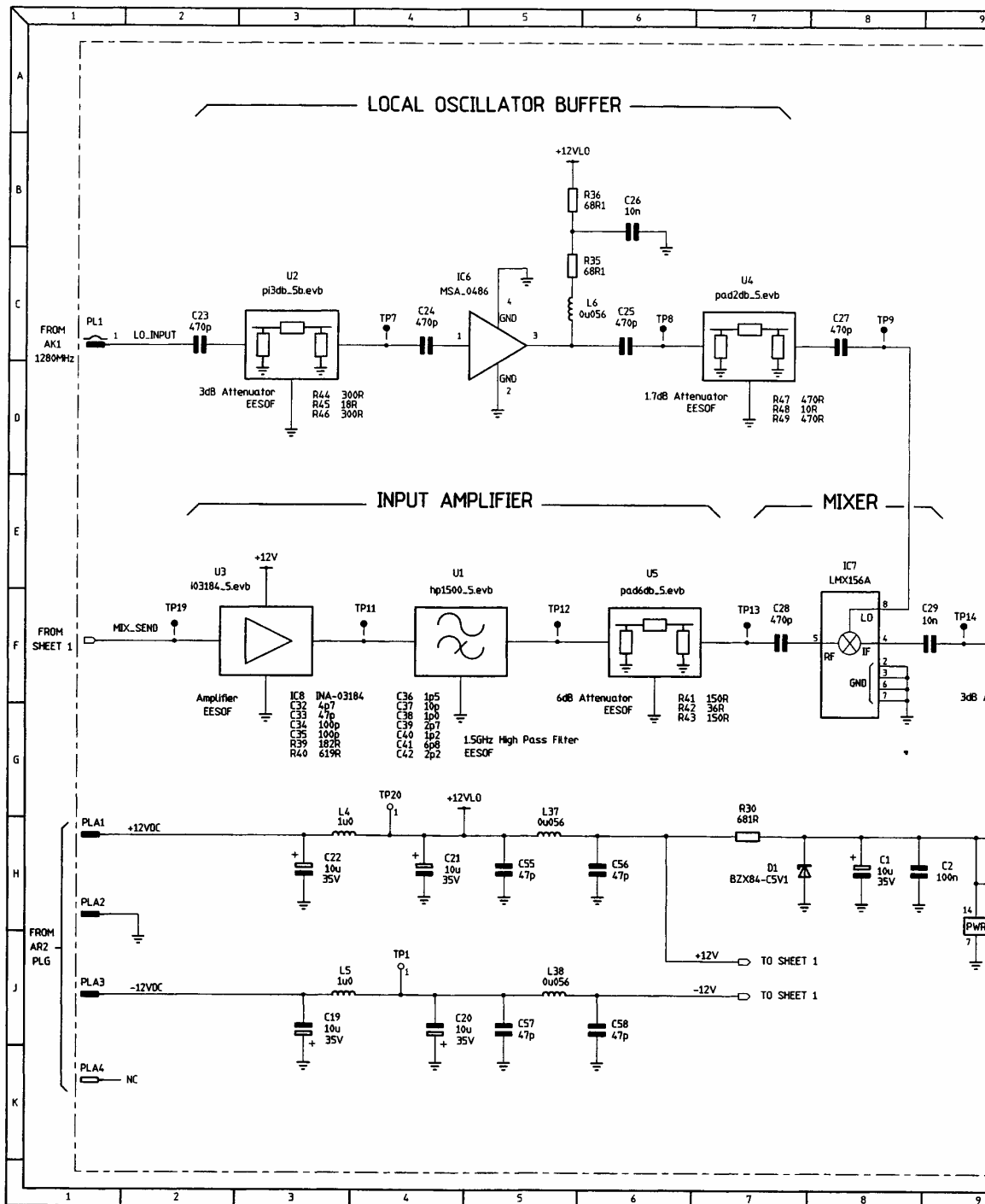


Fig. 7-201 AK2 Down convertor - circuit



Circuit diagrams AK2

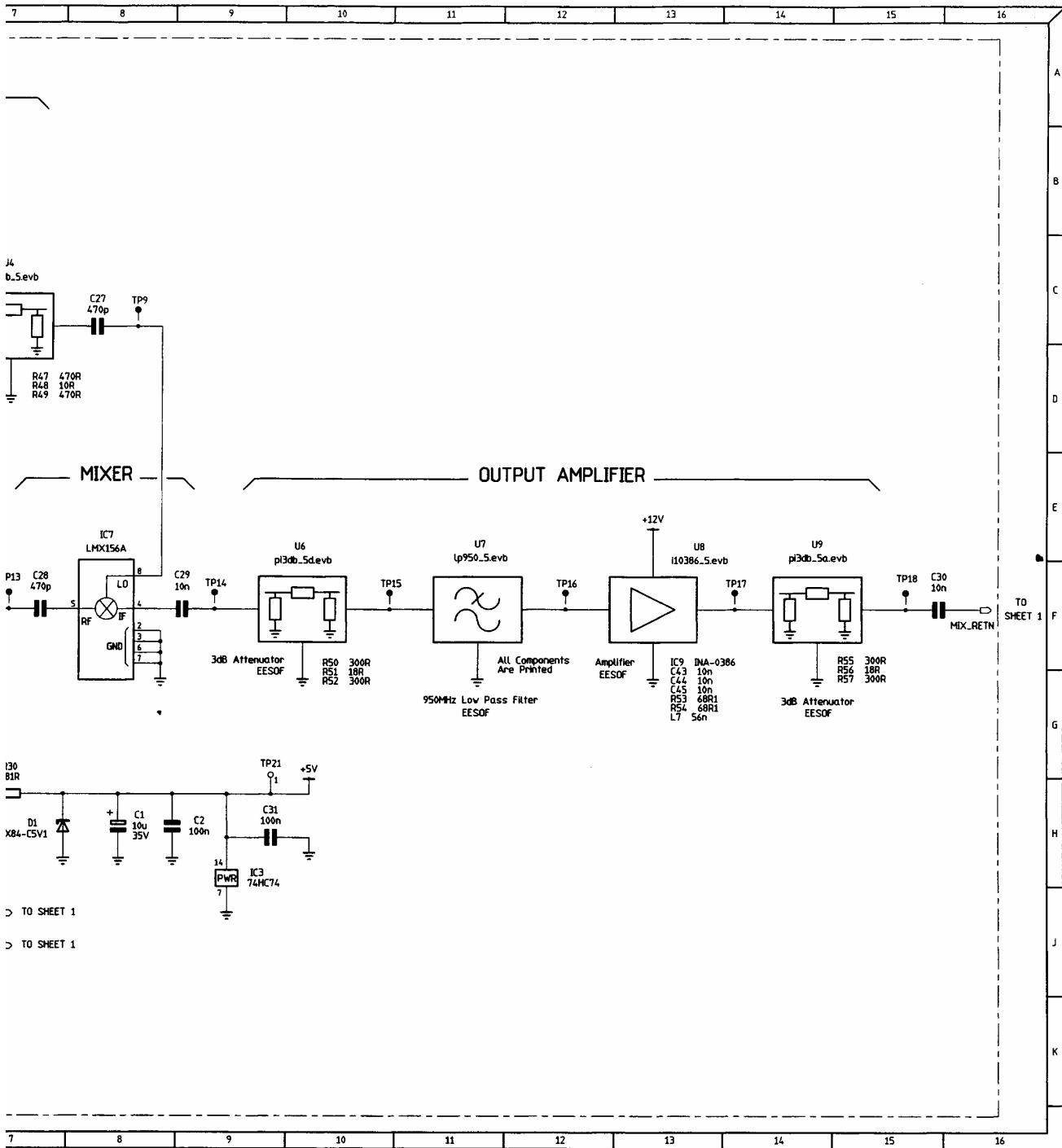
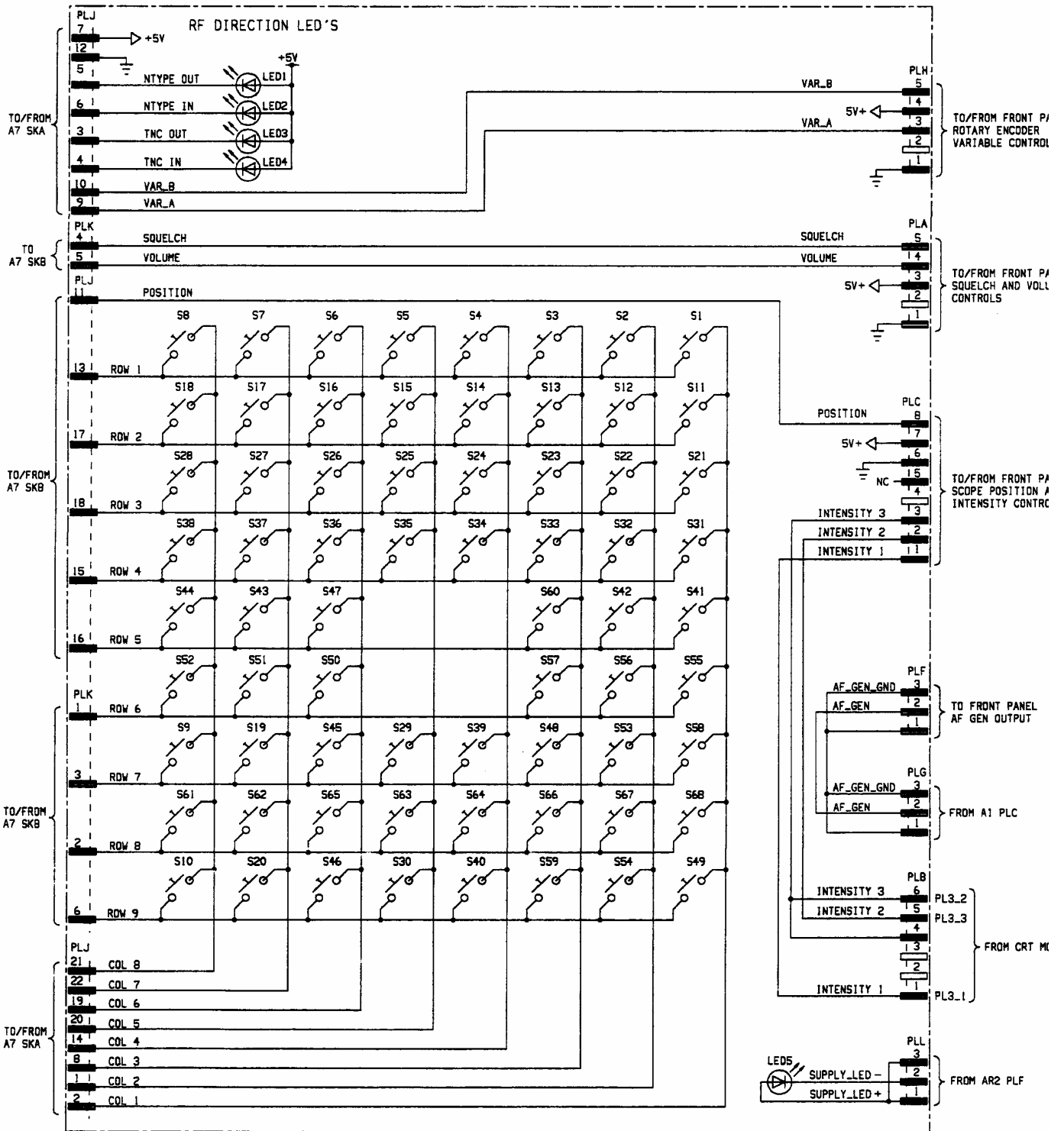


Fig. 7-202 AK2 Down convertor - circuit



Circuit diagram - Keyboard

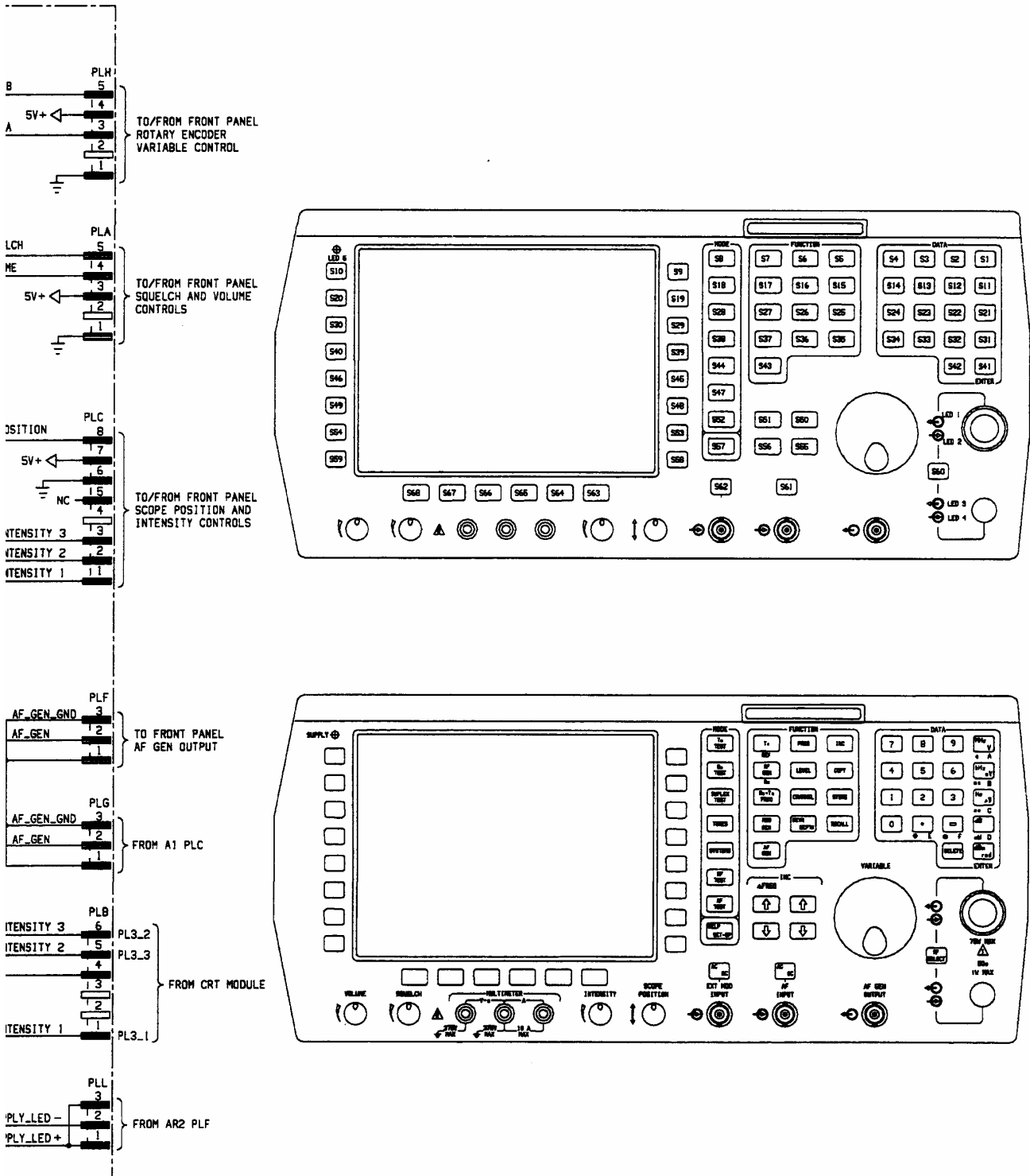


Fig. 7-203 Keyboard - circuit