

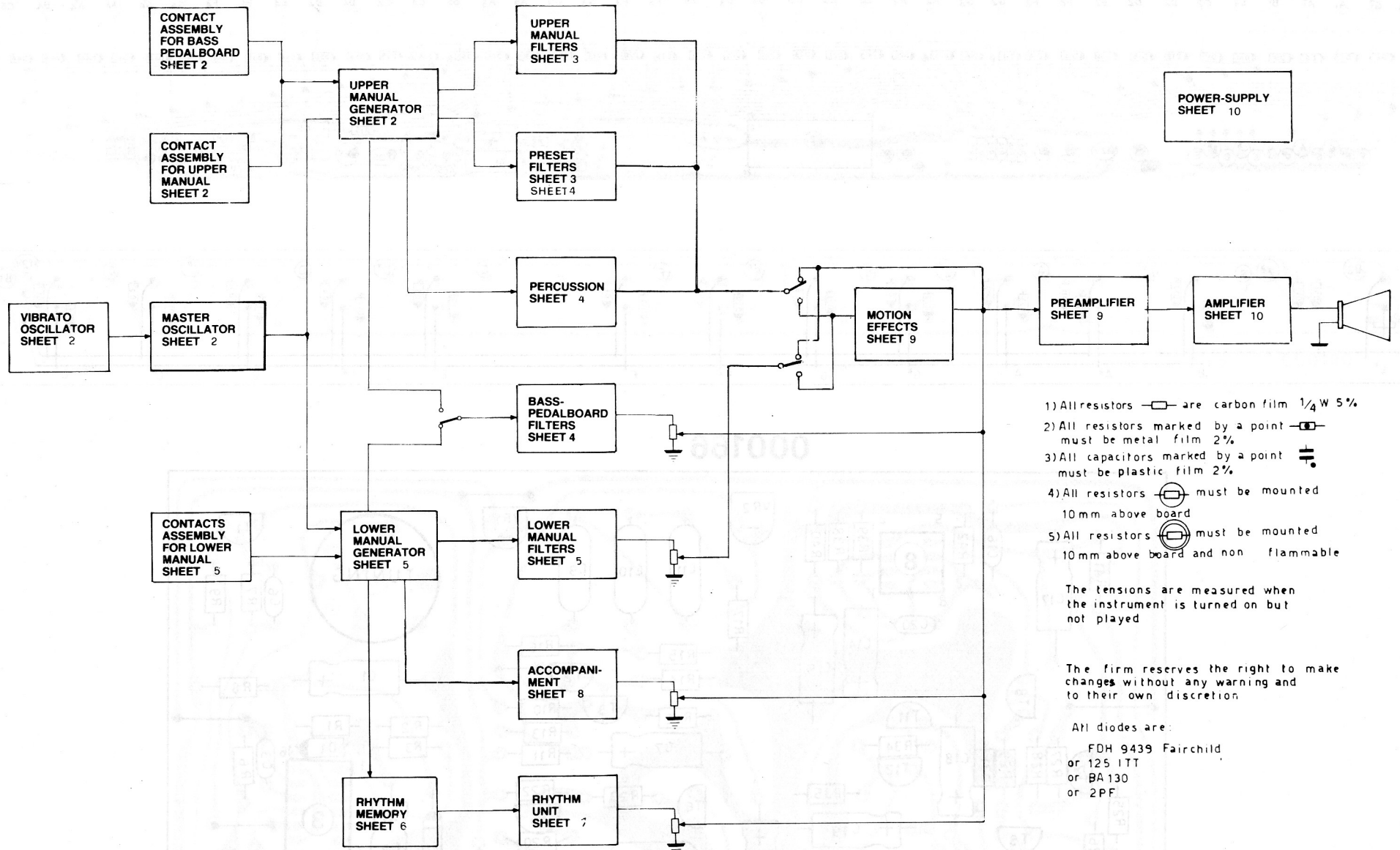







# SONATINA

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schematic diagrams

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- 1) All resistors  are carbon film 1/4 W 5%
- 2) All resistors marked by a point  must be metal film 2%
- 3) All capacitors marked by a point  must be plastic film 2%
- 4) All resistors  must be mounted 10 mm above board
- 5) All resistors  must be mounted 10 mm above board and non flammable

The tensions are measured when the instrument is turned on but not played

The firm reserves the right to make changes without any warning and to their own discretion

All diodes are:  
 FDH 9439 Fairchild  
 or 125 1TT  
 or BA 130  
 or 2PF

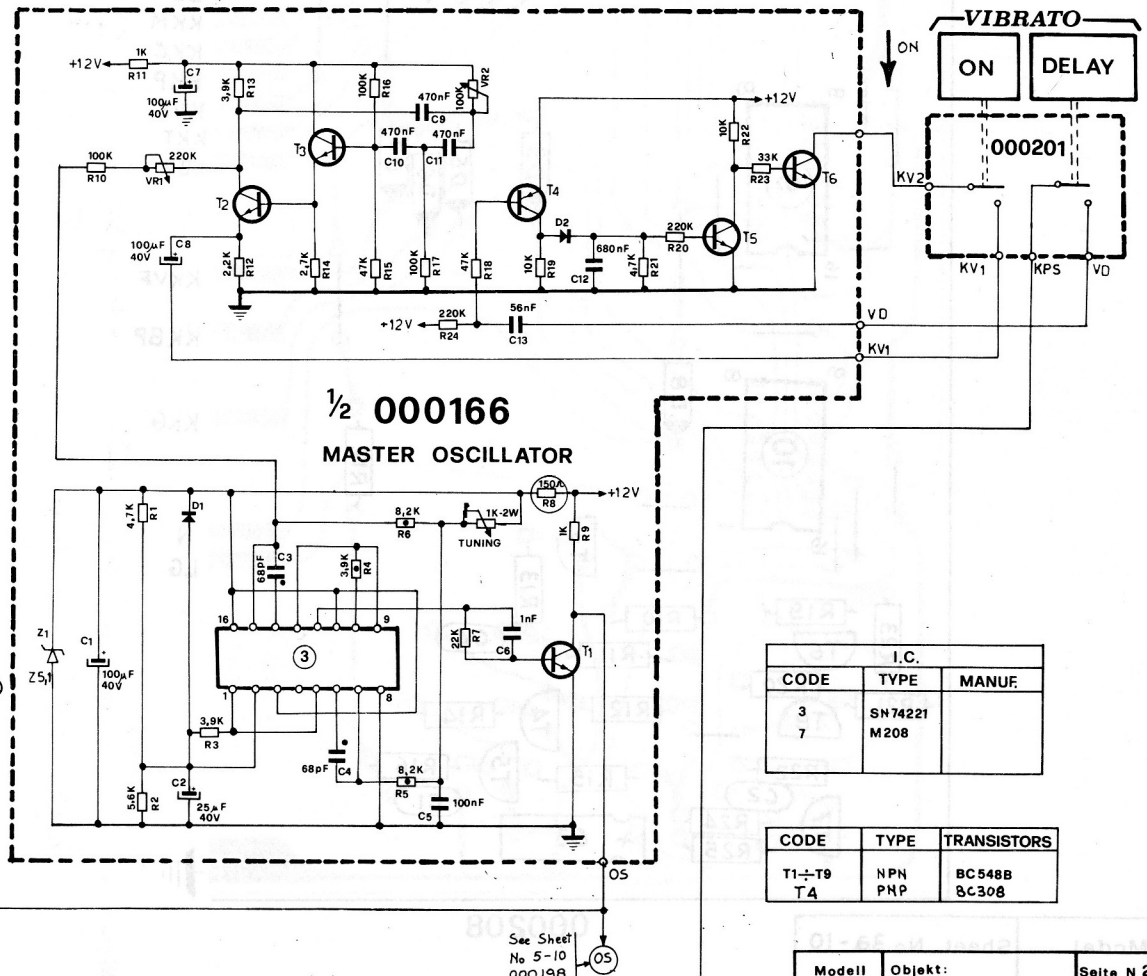
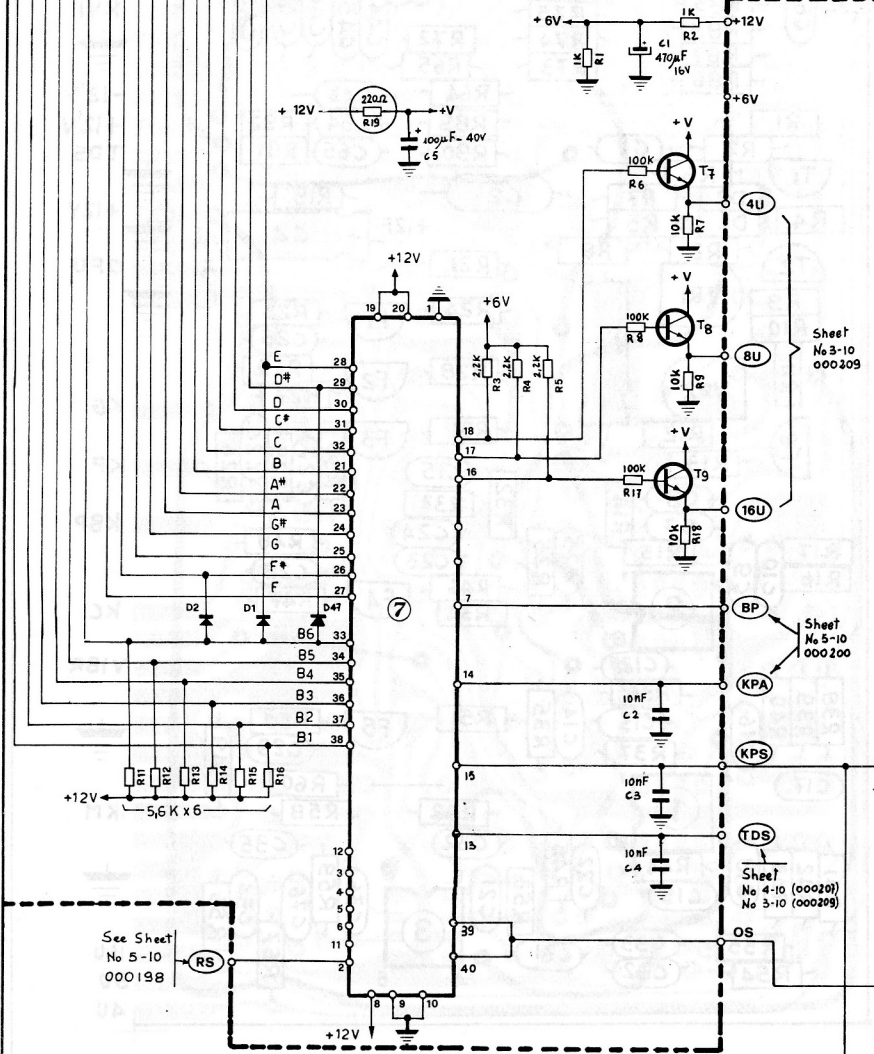
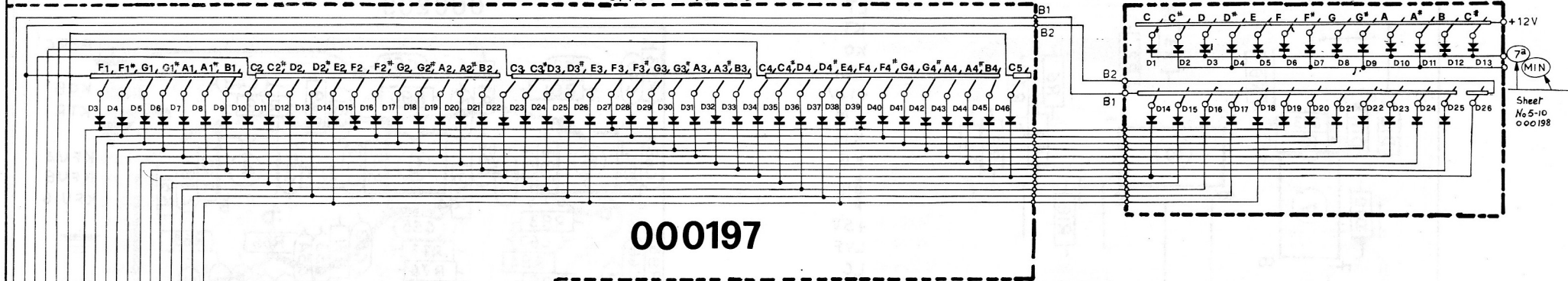
|                   |                         |              |
|-------------------|-------------------------|--------------|
| Model<br>SONATINA | Object<br>Block diagram | Sheet N 1-10 |
|                   |                         | Date 10-6-82 |



CONTACTS ASSEMBLY FOR UPPER KEYBOARD

CONTACTS ASSEMBLY FOR BASS PEDAL 000180

000197

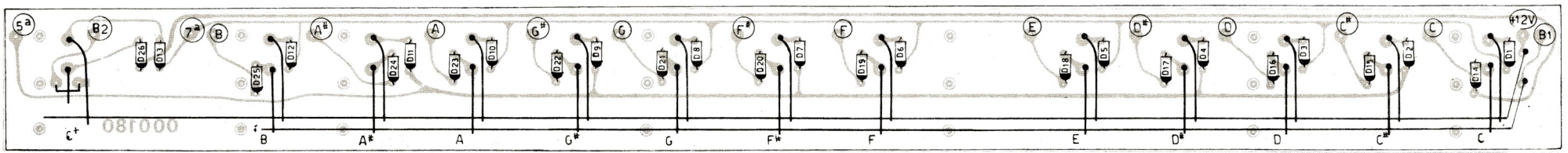
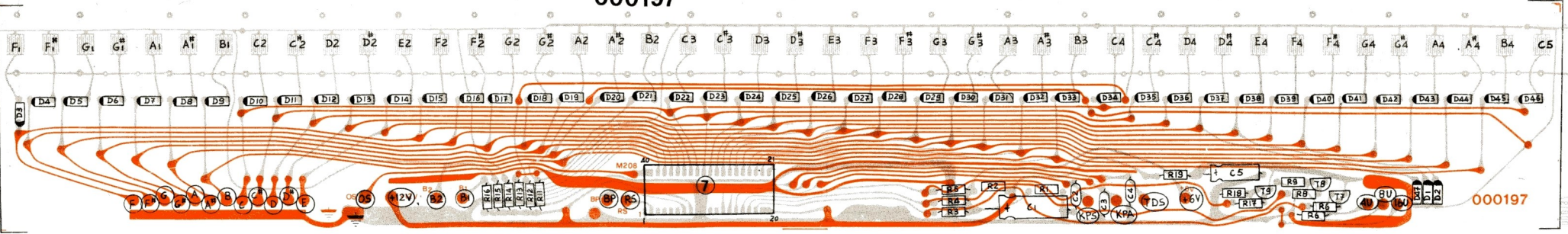


| I.C. |          |        |
|------|----------|--------|
| CODE | TYPE     | MANUF. |
| 3    | SN 74221 |        |
| 7    | M208     |        |

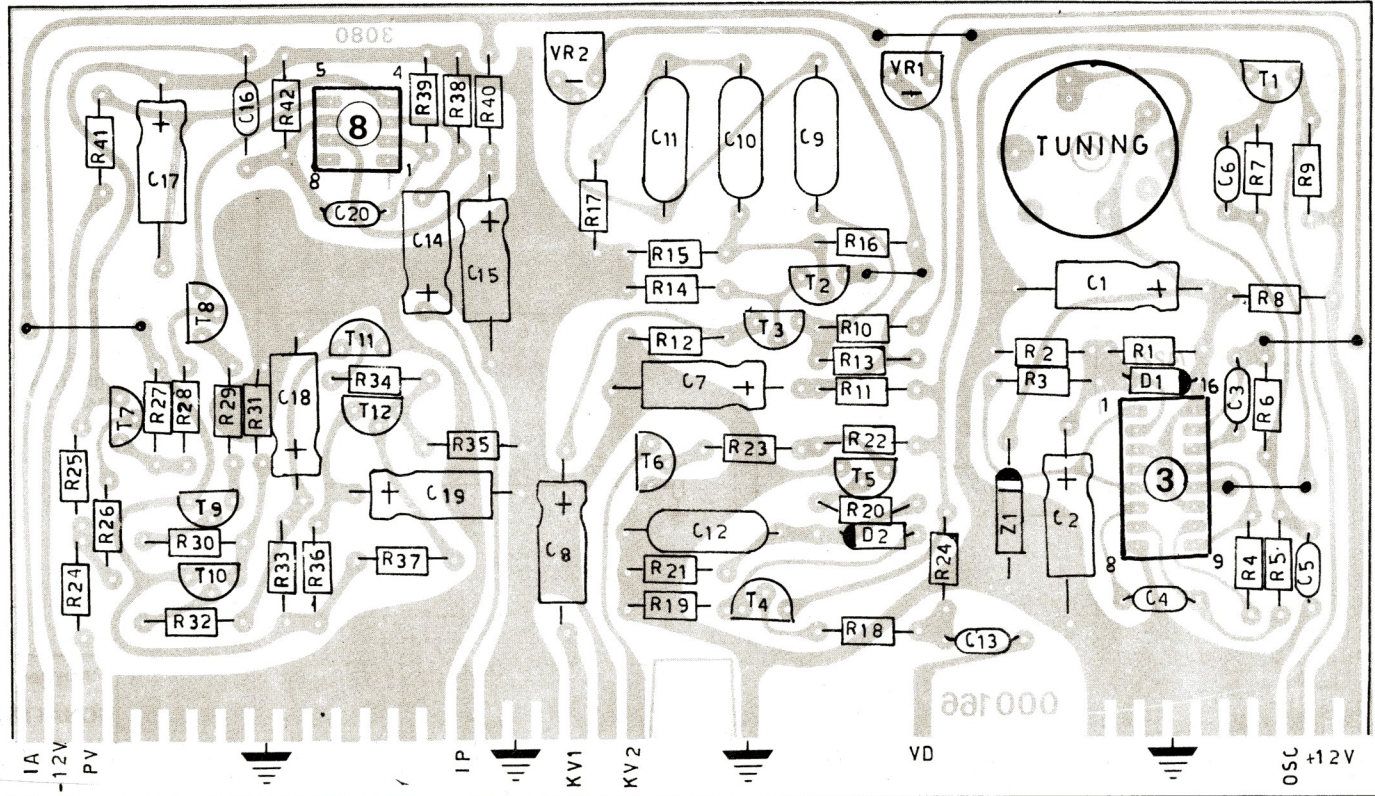
| CODE  | TYPE | TRANSISTORS |
|-------|------|-------------|
| T1-T9 | NPN  | BC548B      |
| T4    | PNP  | BC308       |



000197

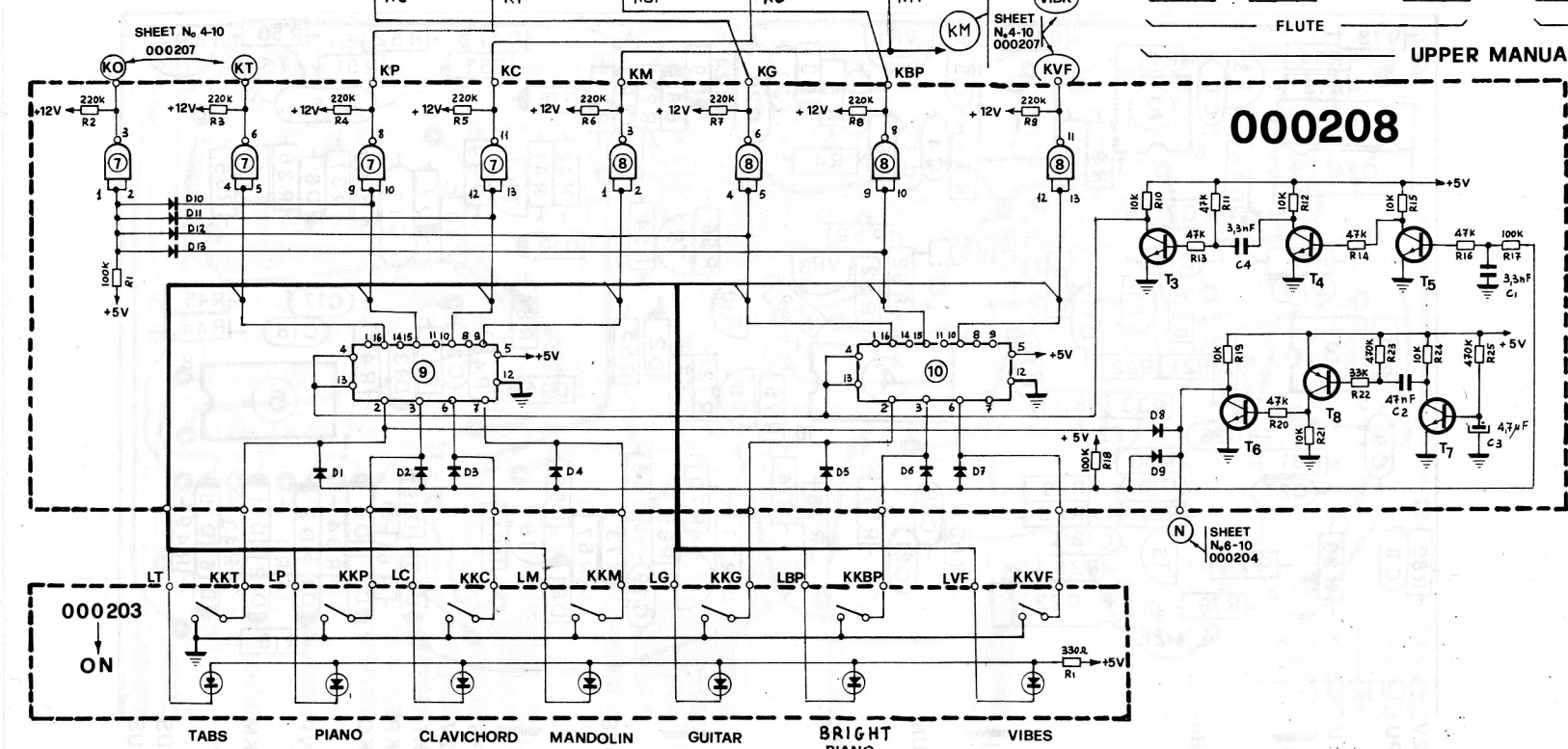
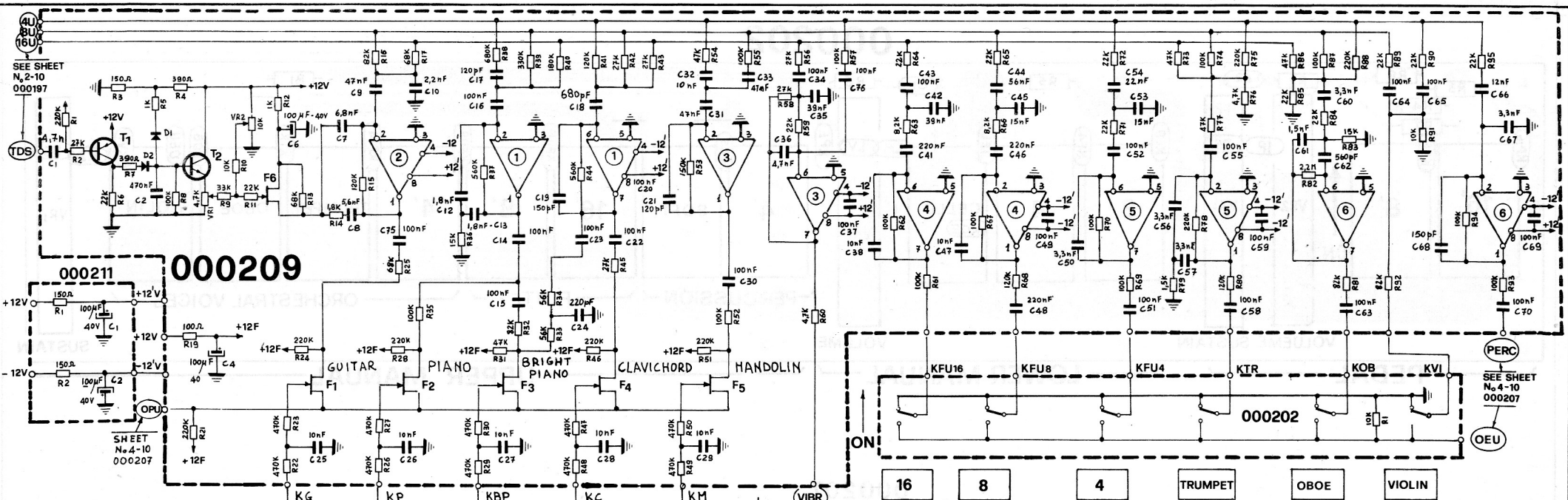


000166



|          |                |
|----------|----------------|
| Model    | Sheet No 2A-10 |
| SONATINA | Date 16-6-82   |



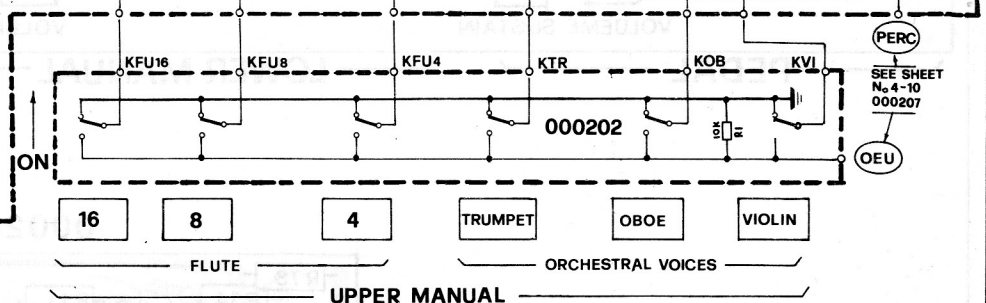


SEE SHEET No. 2-10 000197

000211

000209

SHEET No. 4-10 000207

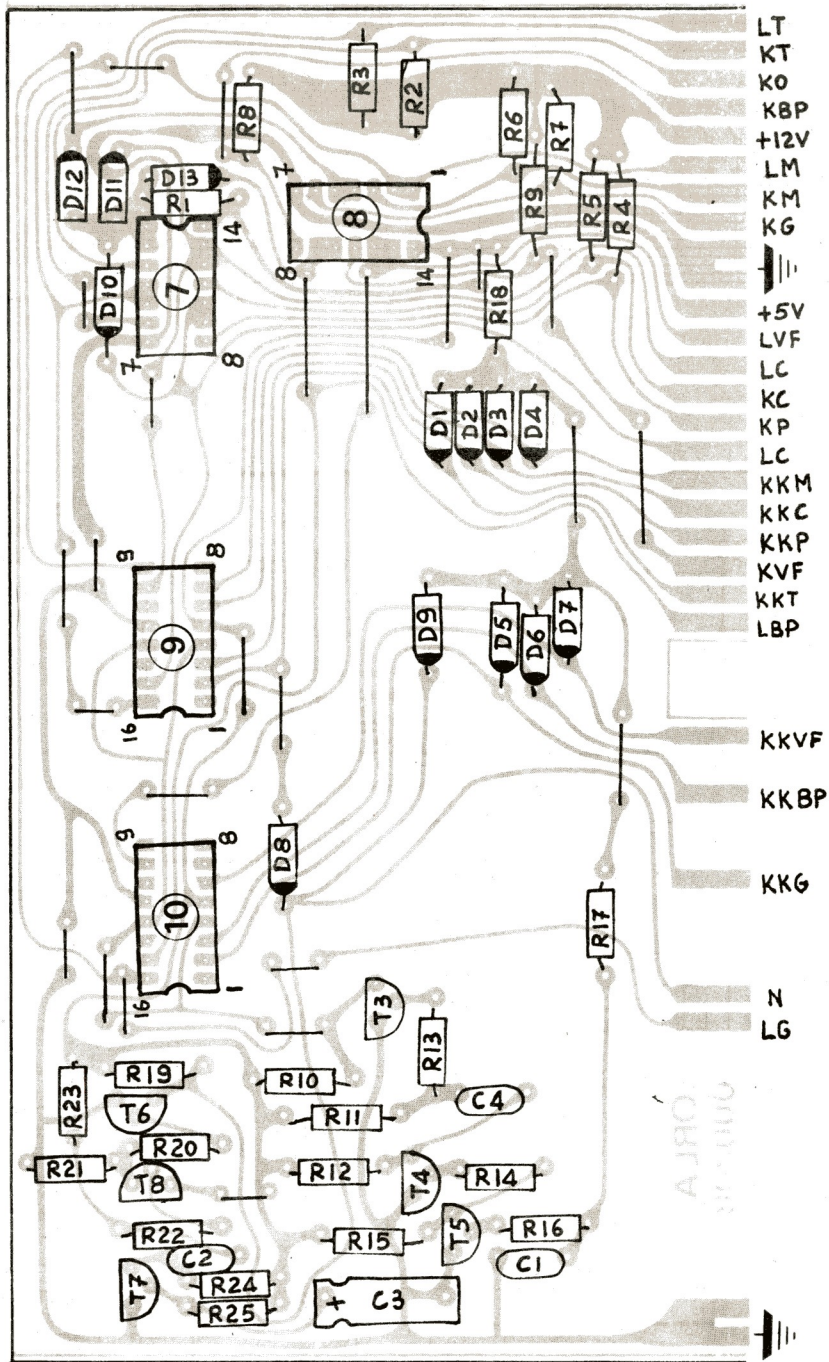


| INTEGRATED CIRCUITS |        |        |
|---------------------|--------|--------|
| CODE                | TYPE   | MANUF. |
| 1 ÷ 6               | TL082  |        |
| 7 ÷ 8               | 74LS26 |        |
| 9 ÷ 10              | 7475   |        |

| TRANSISTORS |      |             |
|-------------|------|-------------|
| CODE        | TYPE | TRANSISTORS |
| F1 ÷ F6     | FET  | BF 245      |
| T2 ÷ T7     | NPN  | BC 548B     |
| T1 ÷ T8     | PNP  | BC 308      |

74LS26 PIN 7 - GND  
PIN 14 +5V

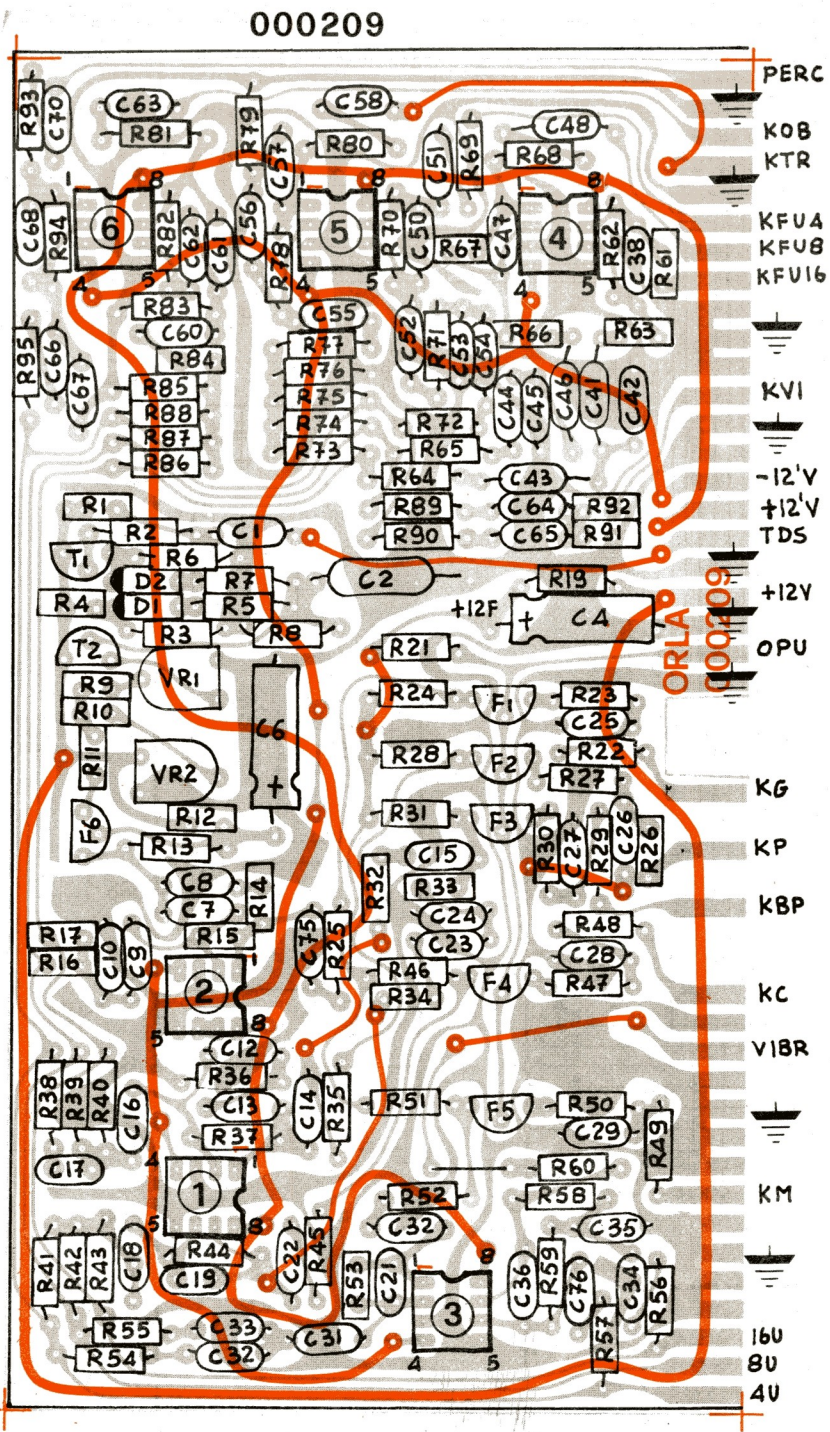




000208

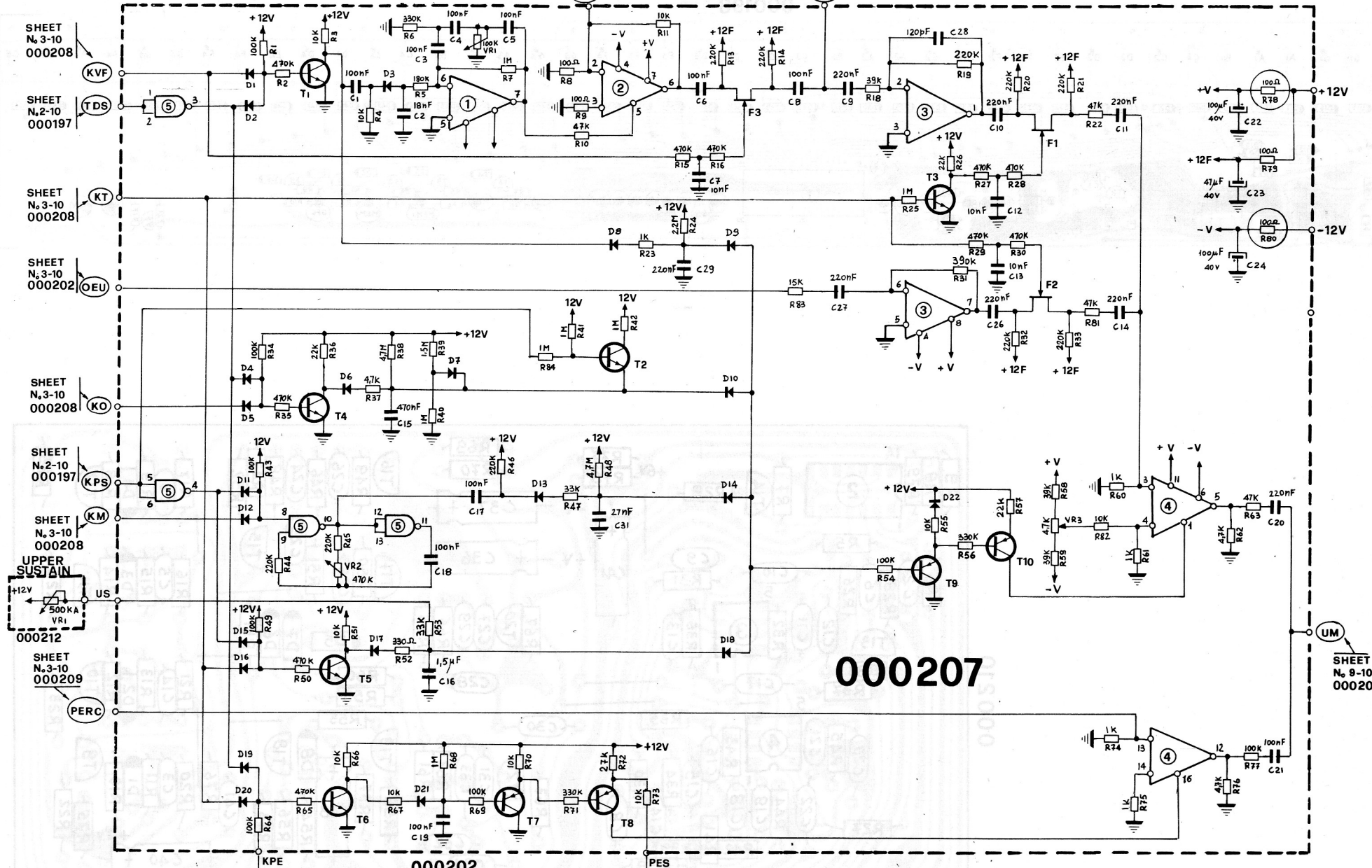
Model  
SONATINA

Sheet No 3a-10  
Date 16-6-82



ORLA 000209





000207

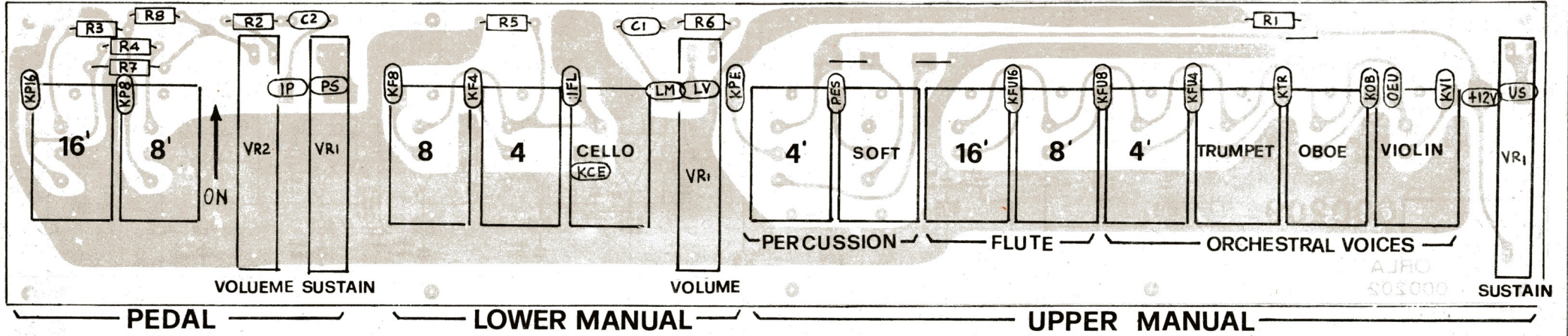
000202

| CODE   | TYPE | TRANSISTORS |
|--------|------|-------------|
| T1÷T6  | NPN  | BC 548      |
| T7÷T10 | PNP  | BC 308      |
| F1÷F3  | FET  | BF 245      |

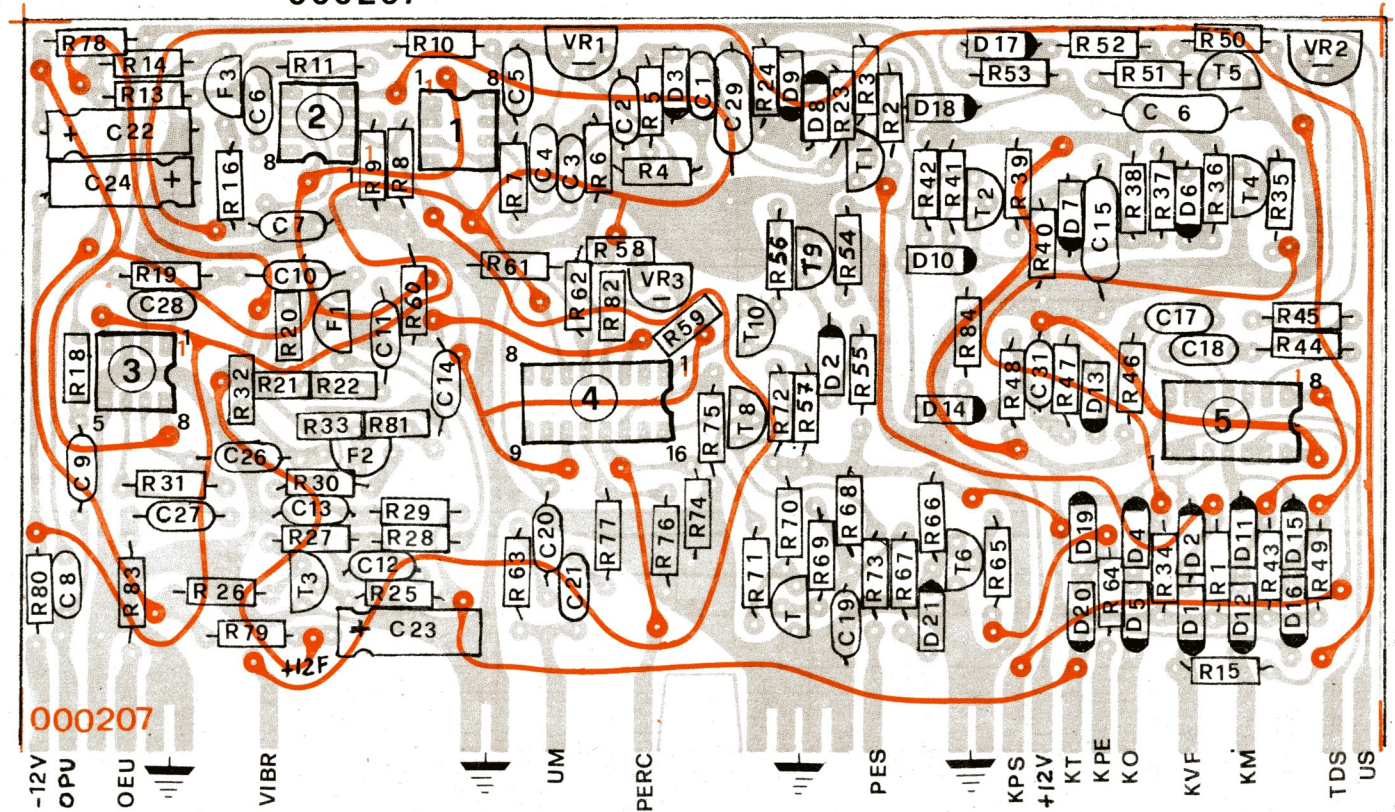
| INTEGRATED CIRCUITS |          |        |
|---------------------|----------|--------|
| CODE                | TYPE     | MANUF. |
| 1 - 3               | TL 082   |        |
| 2                   | CA 3080  |        |
| 4                   | LM 13700 |        |
| 5                   | 4011     |        |



# 000202



# 000207



000207

|          |                |
|----------|----------------|
| Model    | Sheet No 4a-10 |
| SONATINA | Date 16-6-82   |

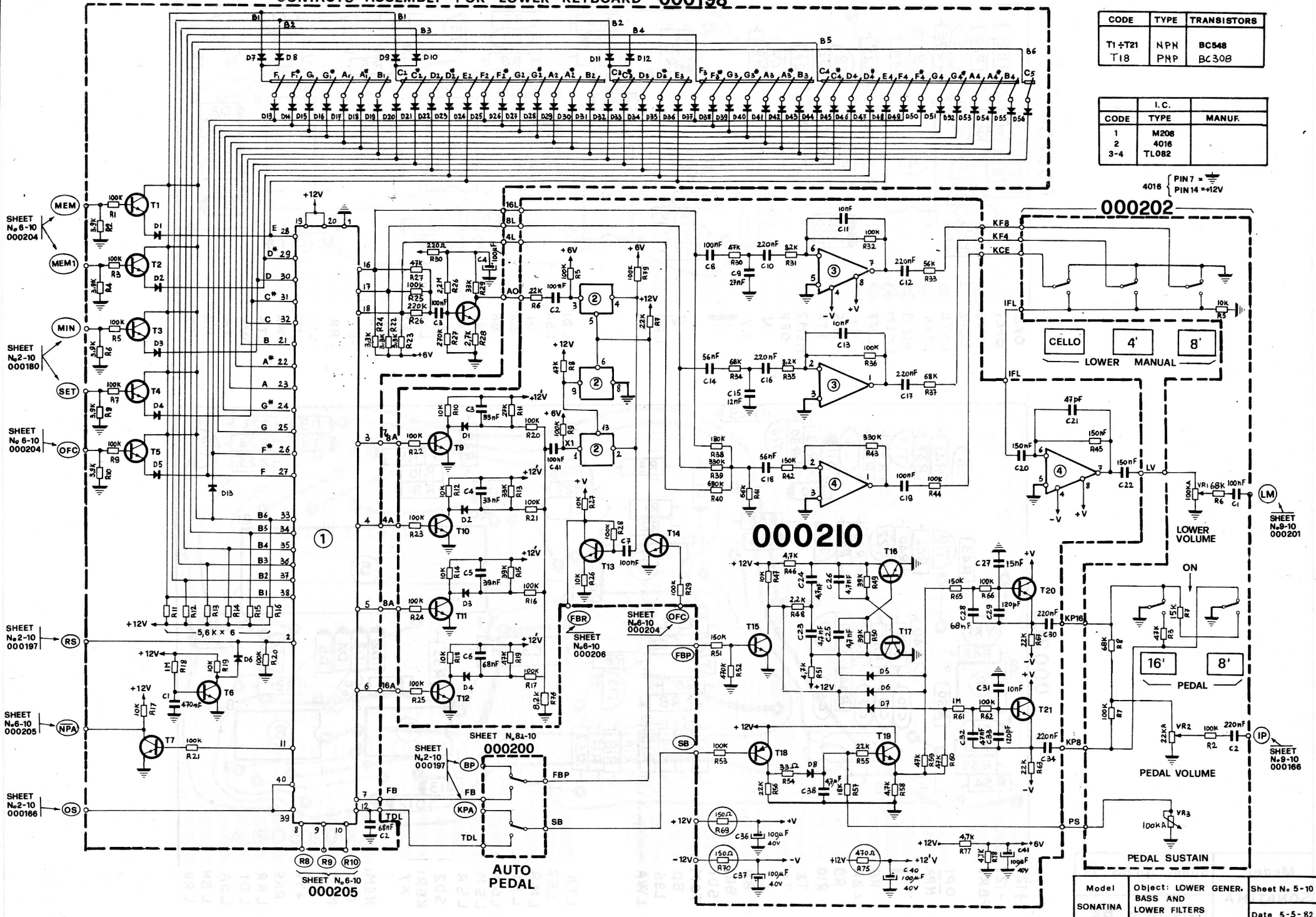


# CONTACTS ASSEMBLY FOR LOWER KEYBOARD 000198

| CODE     | TYPE | TRANSISTORS |
|----------|------|-------------|
| T1 ÷ T21 | NPN  | BC548       |
| T18      | PNP  | BC308       |

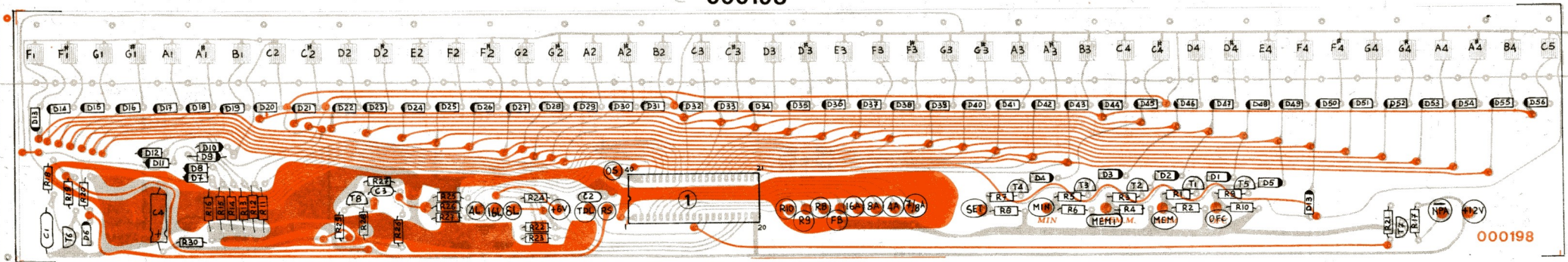
| CODE | I.C.  | MANUF. |
|------|-------|--------|
| 1    | M208  |        |
| 2    | 4016  |        |
| 3-4  | TL082 |        |

4016 { PIN 7 = GND  
PIN 14 = +12V



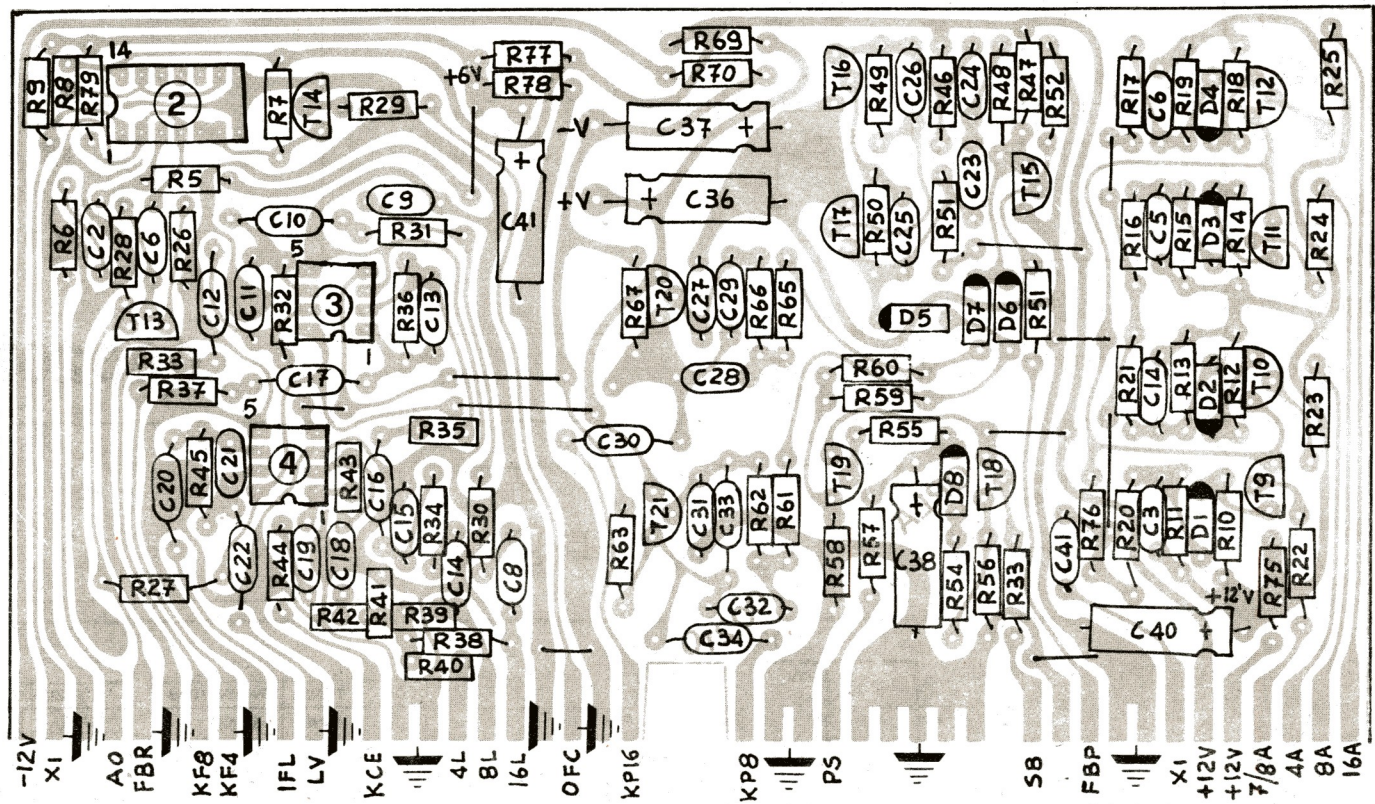


000198



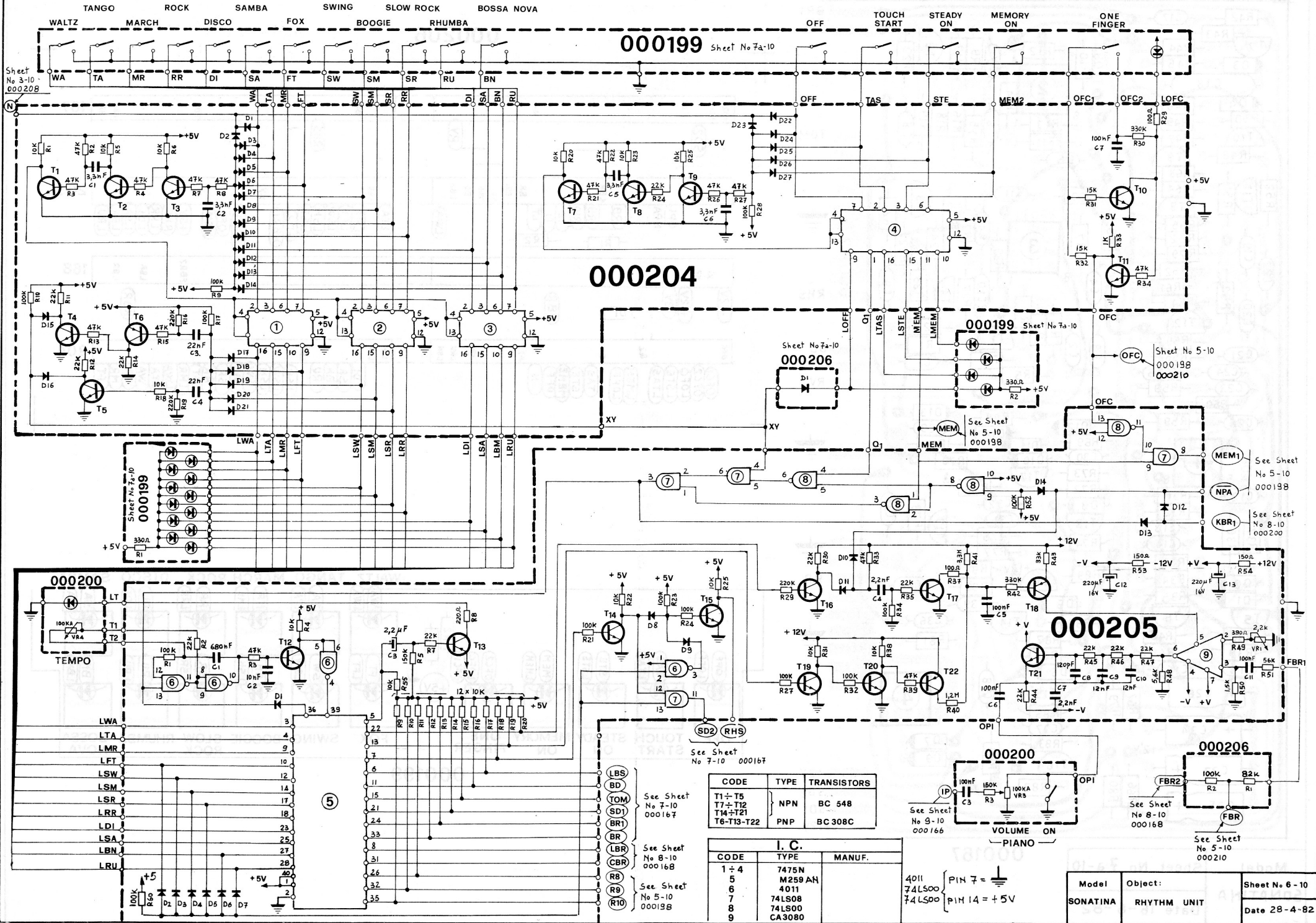
000198

000210



|          |                |
|----------|----------------|
| Model    | Sheet No 5a-10 |
| SONATINA | Date 16-6-82   |





Sheet No 3-10-000208

000199 Sheet No 7a-10

000204

000206

000199 Sheet No 7a-10

000205

000206

| CODE       | TYPE | TRANSISTORS |
|------------|------|-------------|
| T1-T5      | NPN  | BC 548      |
| T7-T12     |      |             |
| T14-T21    | PNP  | BC 308C     |
| T6-T13-T22 |      |             |

| I. C. |        |        |
|-------|--------|--------|
| CODE  | TYPE   | MANUF. |
| 1-4   | 7475N  |        |
| 5     | M259AN |        |
| 6     | 4011   |        |
| 7     | 74LS08 |        |
| 8     | 74LS00 |        |
| 9     | CA3080 |        |

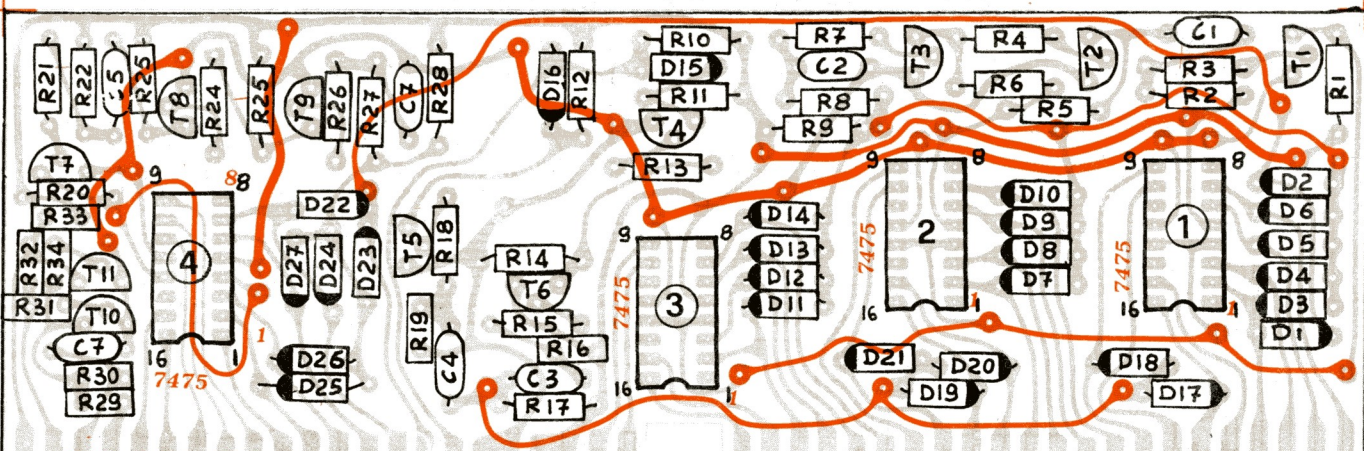
4011  
74LS00  
74LS00



|          |             |               |
|----------|-------------|---------------|
| Model    | Object:     | Sheet No 6-10 |
| SONATINA | RHYTHM UNIT | Date 28-4-82  |



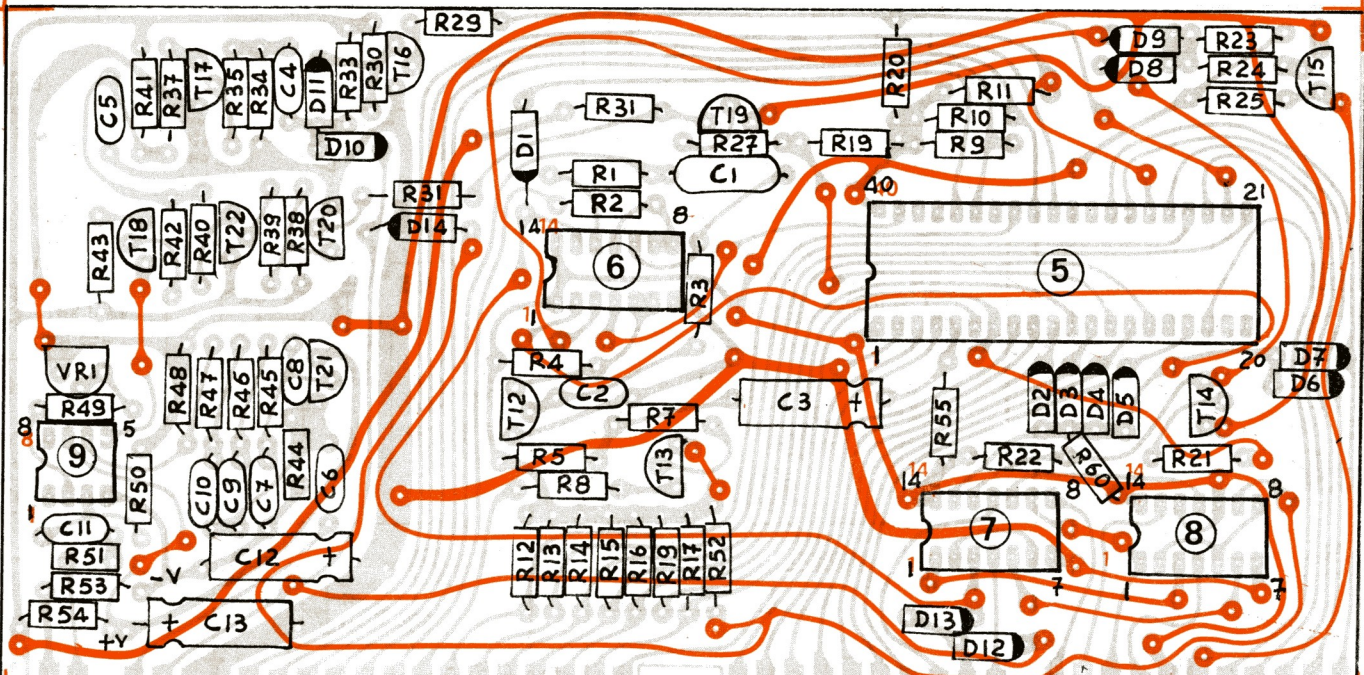
000204



ORLA000204

OFC OFC1 OFC2 LOFC LSTE LTAS MEM MEM2 OFF N XY +5V LRU LBN LDI LSA DI SA BN RU LRR LSR LSW LSM SW SH SR RR LFT LMR LWA LTA WA TA MR FT

000205

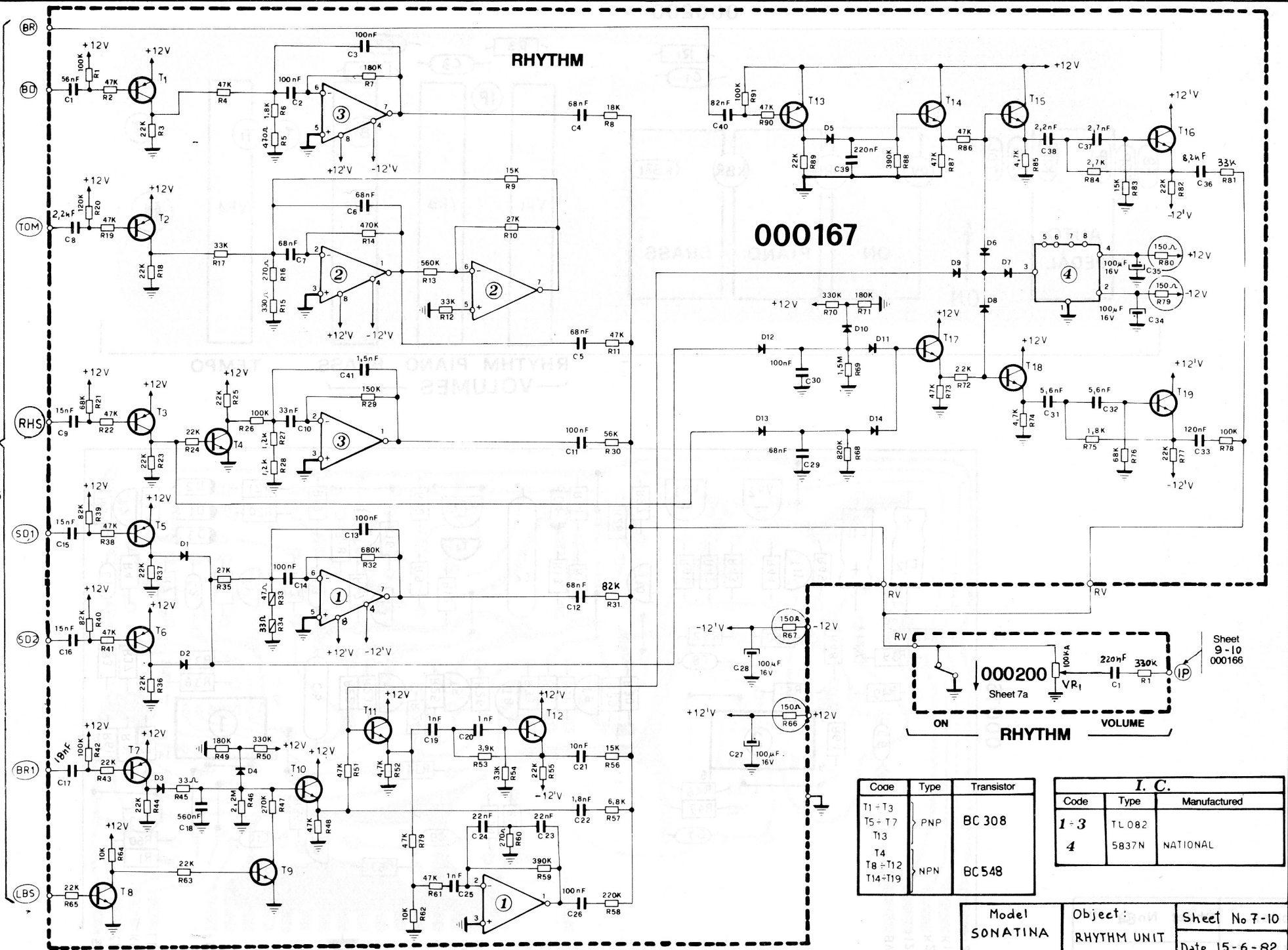


000205ORLA

+12V -12V FBR1 OPI NPA R8 CBR R9 R10 T2 T1 LT BR BR1 SDI TOM BD LBS LWA LTA LBR LMR LFT LSW LSM LSR SD2 KBR1 XY MEM1 OFC MEM Q1 +5V RHS LRR LDI LSA LBN LRU



Sheet  
No 6-10  
000205

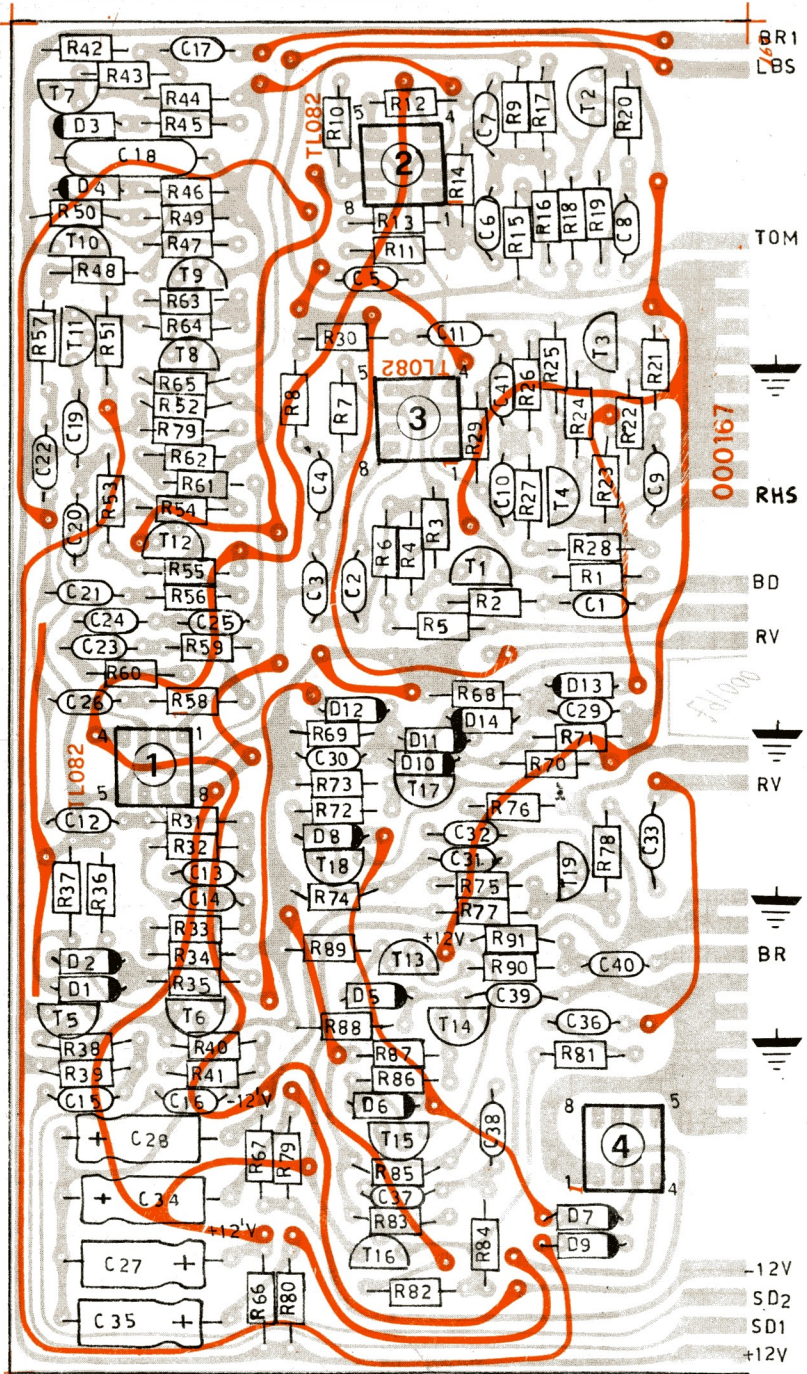


| Code      | Type | Transistor |
|-----------|------|------------|
| T1 - T3   | PNP  | BC 308     |
| T5 - T7   |      |            |
| T13       |      |            |
| T4        | NPN  | BC 548     |
| T8 - T12  |      |            |
| T14 - T19 |      |            |

| I. C. |        |              |
|-------|--------|--------------|
| Code  | Type   | Manufactured |
| 1 - 3 | TL 082 | NATIONAL     |
| 4     | 5837N  |              |

|                   |                        |                               |
|-------------------|------------------------|-------------------------------|
| Model<br>SONATINA | Object:<br>RHYTHM UNIT | Sheet No 7-10<br>Date 15-6-82 |
|-------------------|------------------------|-------------------------------|

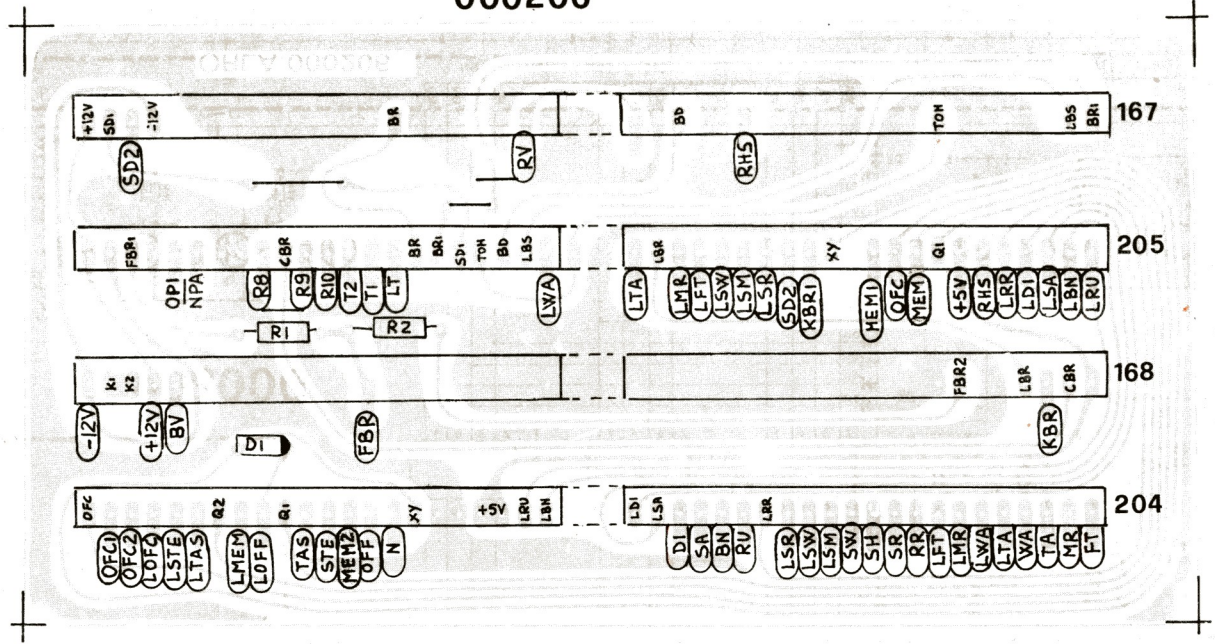




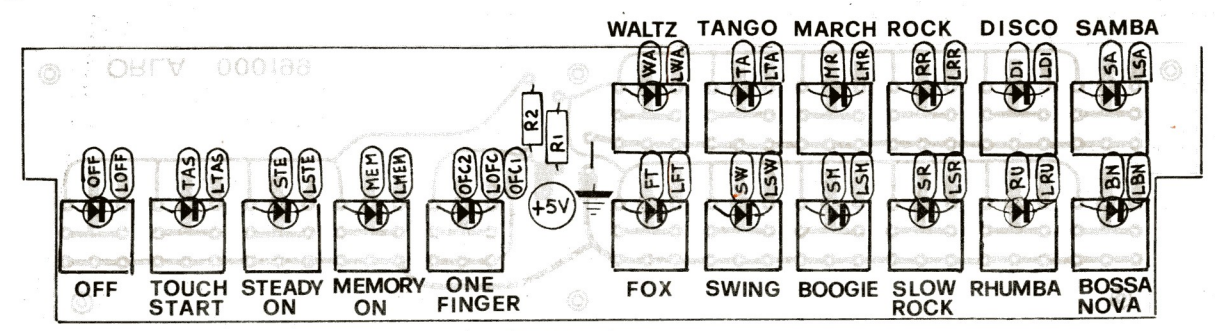
000167

|          |                |
|----------|----------------|
| Model    | Sheet No 7a-10 |
| SONATINA | Date 16-6-82   |

000206



000199





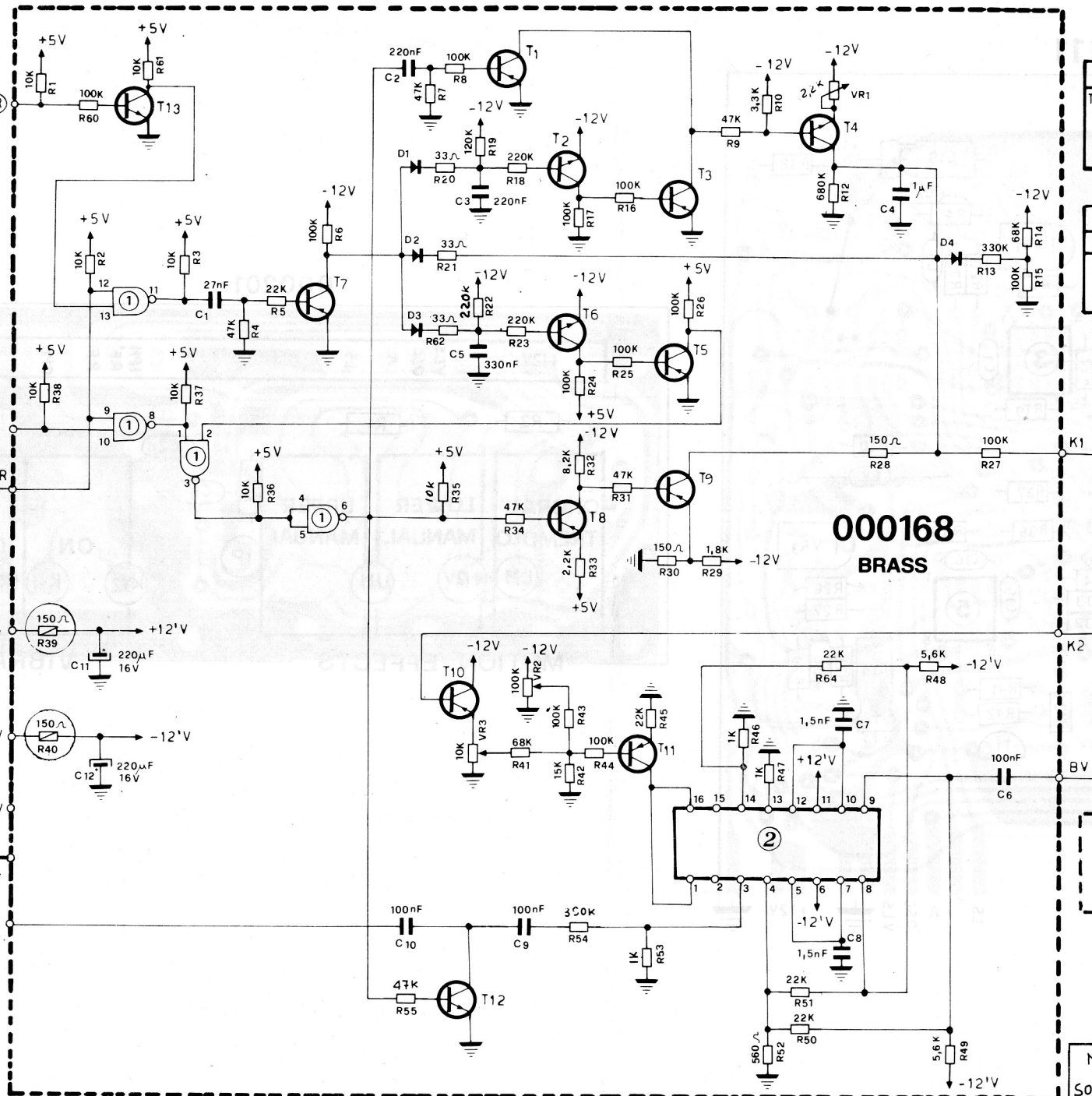
Sheet  
6-10  
000205

Sheet  
6-10  
000205

Sheet  
No 6-10  
000205

Sheet  
No 6-10  
000206

Sheet  
No 9-10  
000166



| Code                | Type | Transistor |
|---------------------|------|------------|
| T1-T3-T5<br>T7-T11  | PNP  | BC 308 B   |
| T2-T4-T6<br>T12-T13 |      |            |

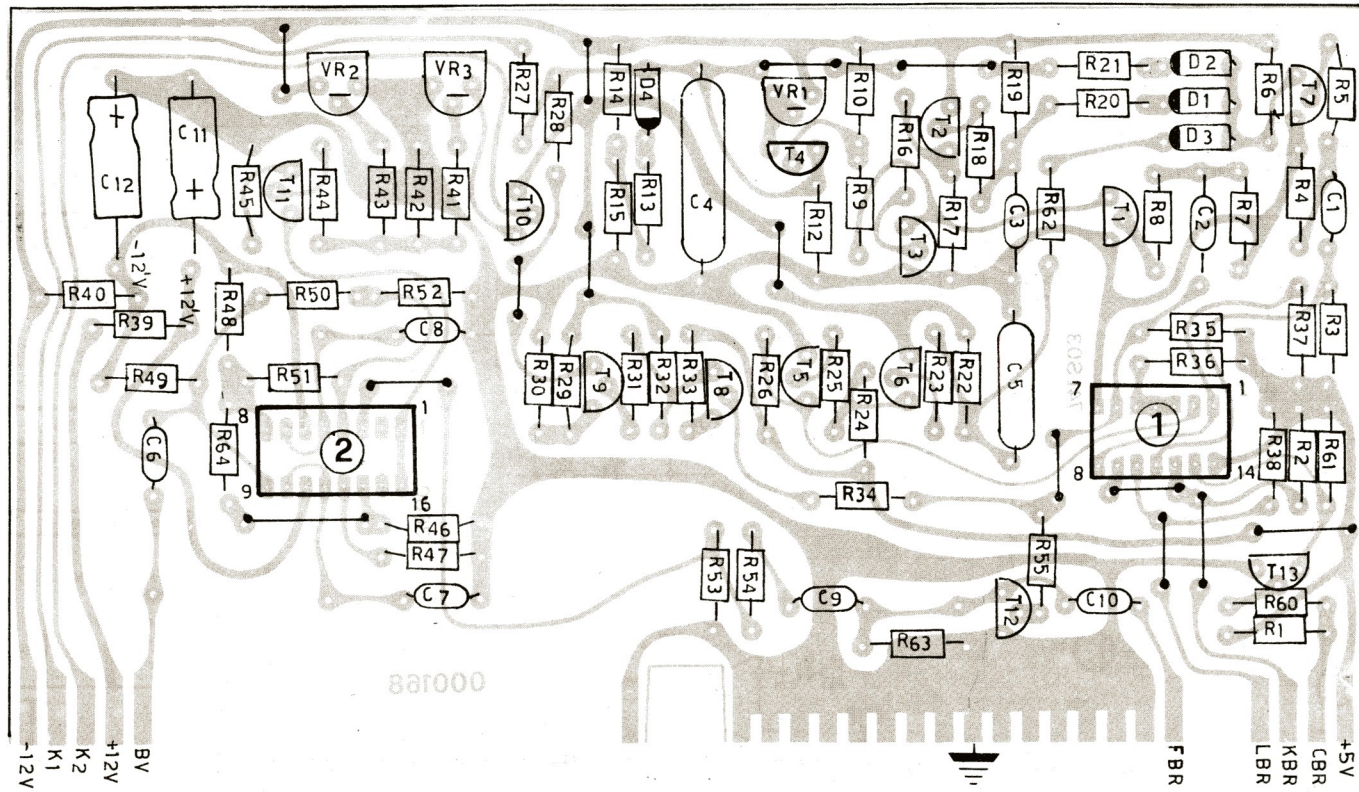
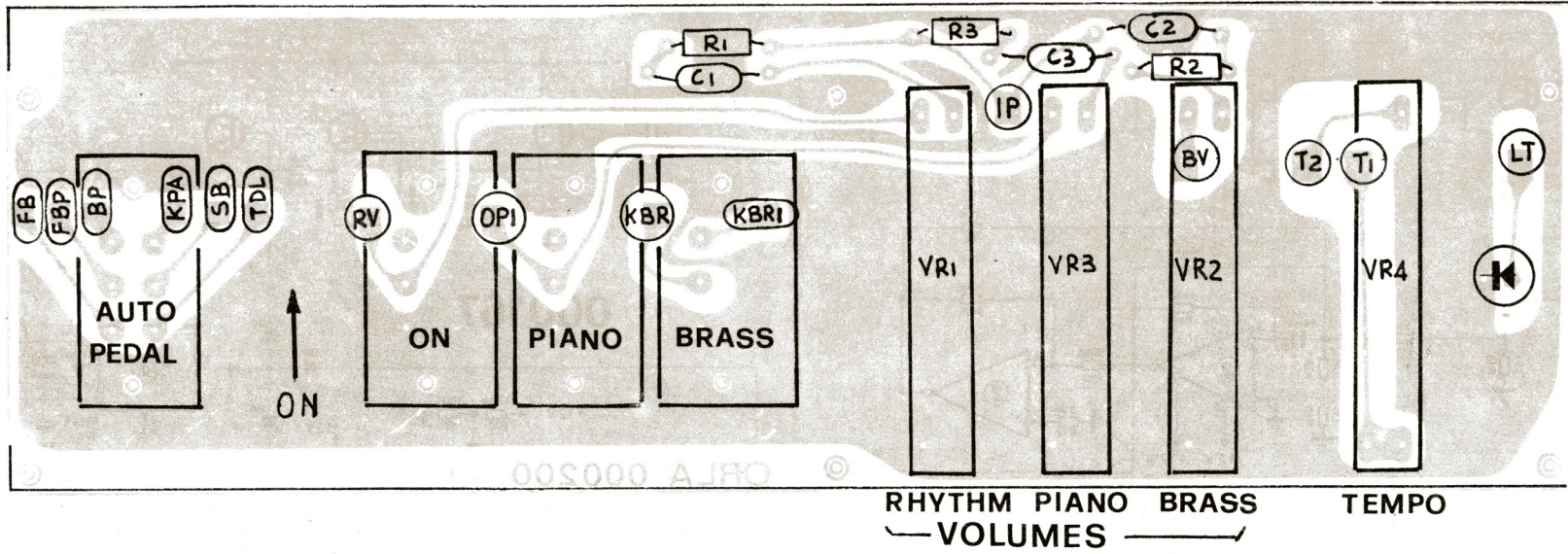
| I. C. |        |              |
|-------|--------|--------------|
| Code  | Type   | Manufactured |
| 1     | 74LS03 |              |
| 2     | 13600  |              |

**000168**  
**BRASS**

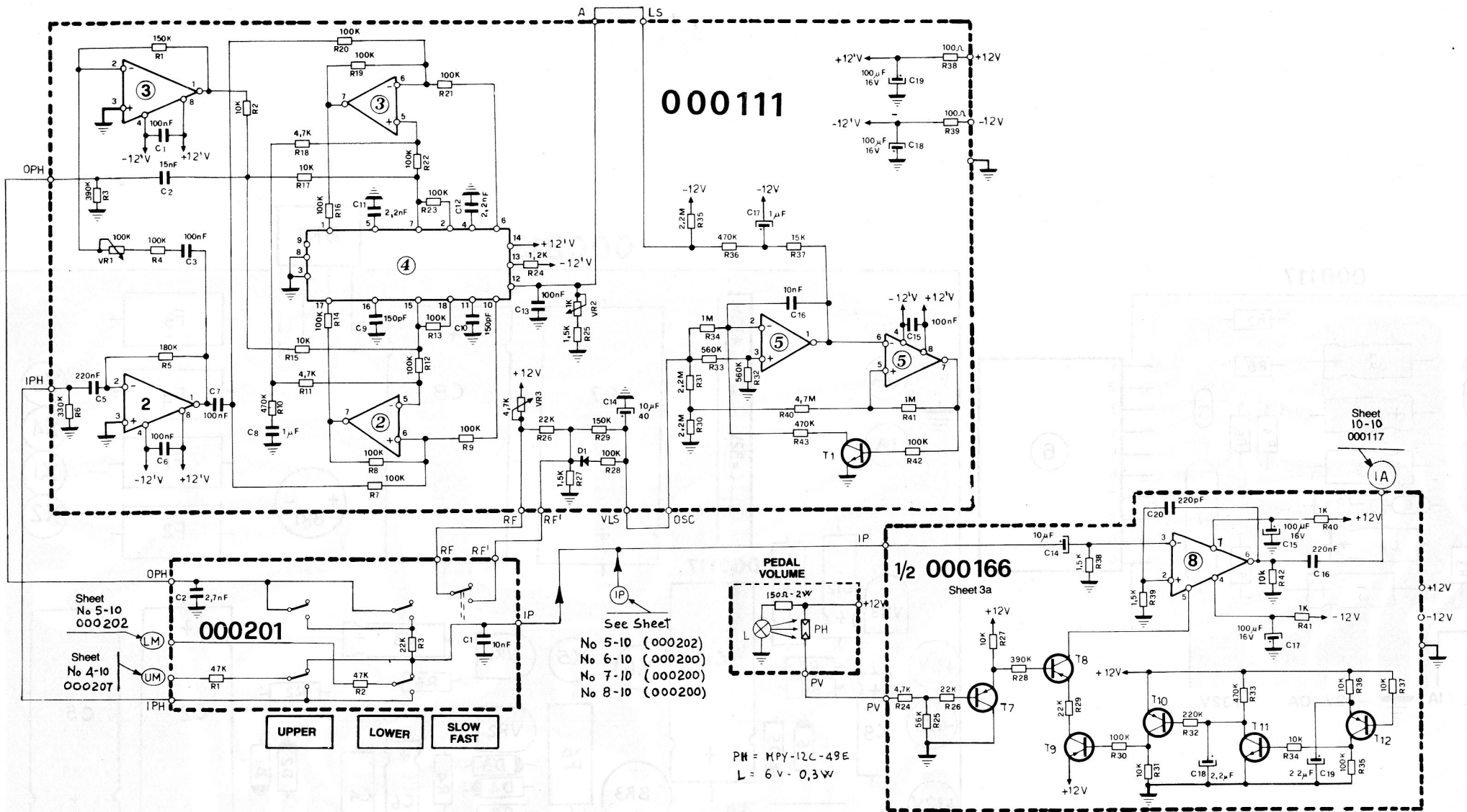
|                   |                  |                               |
|-------------------|------------------|-------------------------------|
| Model<br>SONATINA | Object:<br>BRASS | Sheet No 8-10<br>Date 10-6-82 |
|-------------------|------------------|-------------------------------|



000200



|          |                |
|----------|----------------|
| Model    | Sheet No 8a-10 |
| SONATINA | Date 16-6-82   |



000111

000201

1/2 000166  
Sheet 3a

Sheet 10-10  
000117

Sheet No 5-10  
000202  
Sheet No 4-10  
000207

See Sheet  
No 5-10 (000202)  
No 6-10 (000200)  
No 7-10 (000200)  
No 8-10 (000200)

PH = MPY-12C-49E  
L = 6V - 0,3W

UPPER LOWER SLOW FAST

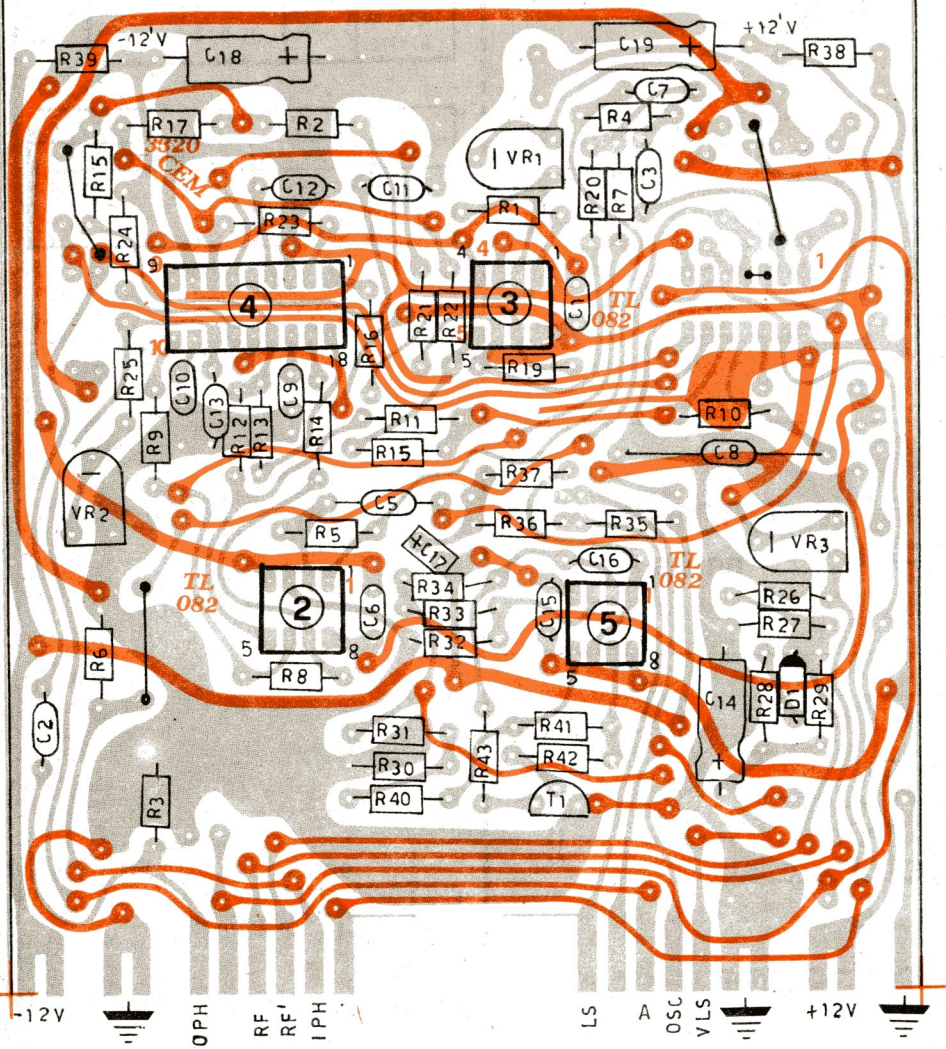
| I. C. |        |              |
|-------|--------|--------------|
| Code  | Type   | Manufactured |
| 2-3-5 | TL 082 | SANYO        |
| 4     | 3320   |              |
| 6     | STK080 |              |
| 8     | 3080   |              |

| Code     | Type | Transistor |
|----------|------|------------|
| T7 ÷ T12 | PNP  | BC 308 B   |
| T1 ÷ T11 | NPN  | BC 548 B   |

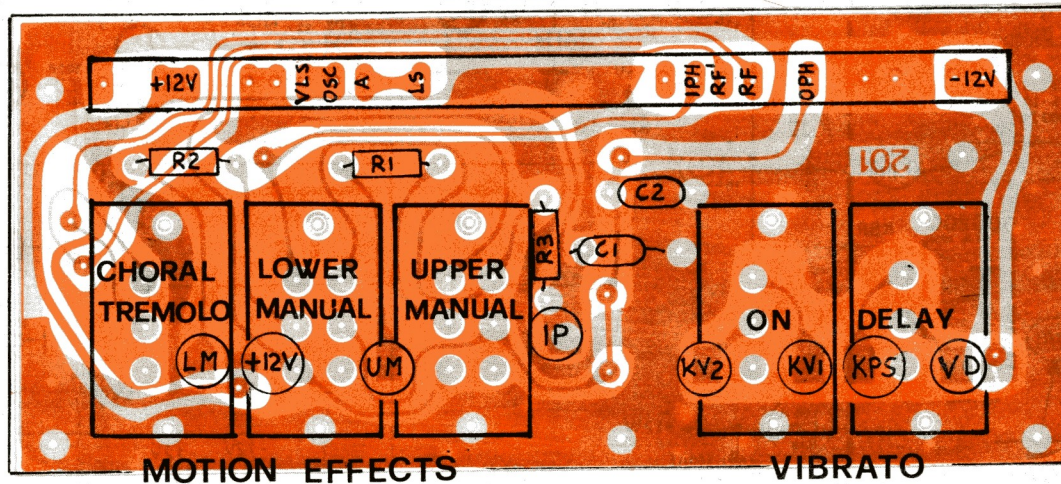
|                   |  |                              |
|-------------------|--|------------------------------|
| Model<br>SONATINA | Object:<br>Motion effects<br>and Preamp. | Sheet N.9-10<br>Date 15-6-82 |
|-------------------|--|------------------------------|



000111



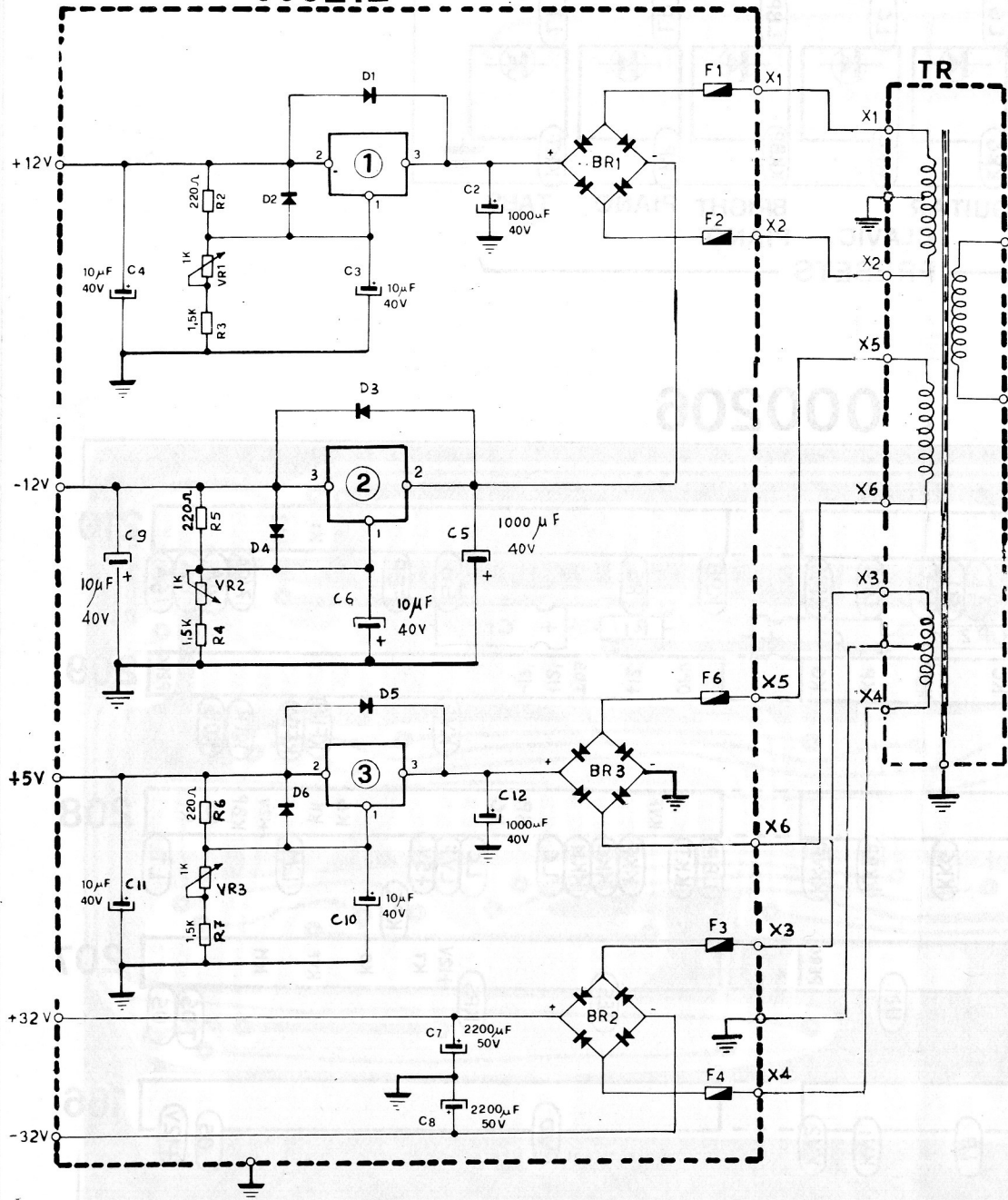
000201



|          |                |
|----------|----------------|
| Model    | Sheet No 9a-10 |
| SONATINA | Date 16-6-82   |



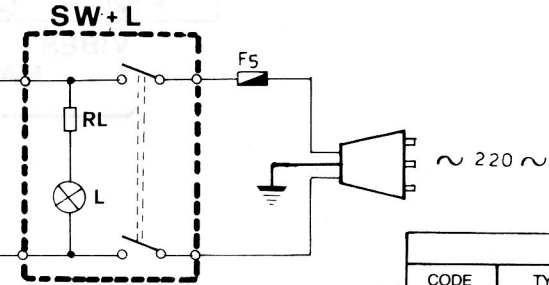
000212



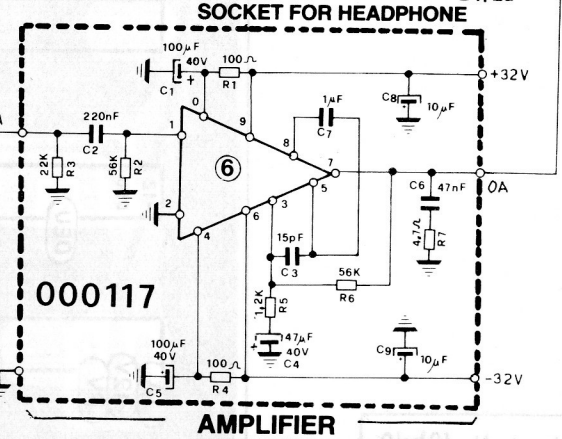
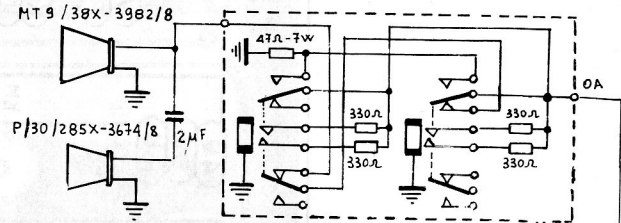
F1 = F2 = 1AT  
 F3 = F4 = 2AT  
 F5 = 1AT

SW+L = 16AFM6-3CB  
 TR = TRANSFORMER T480

BR1 = W02  
 BR2 = WBLO2-KBL04-BSB2  
 D1 = D2 = 1N4002



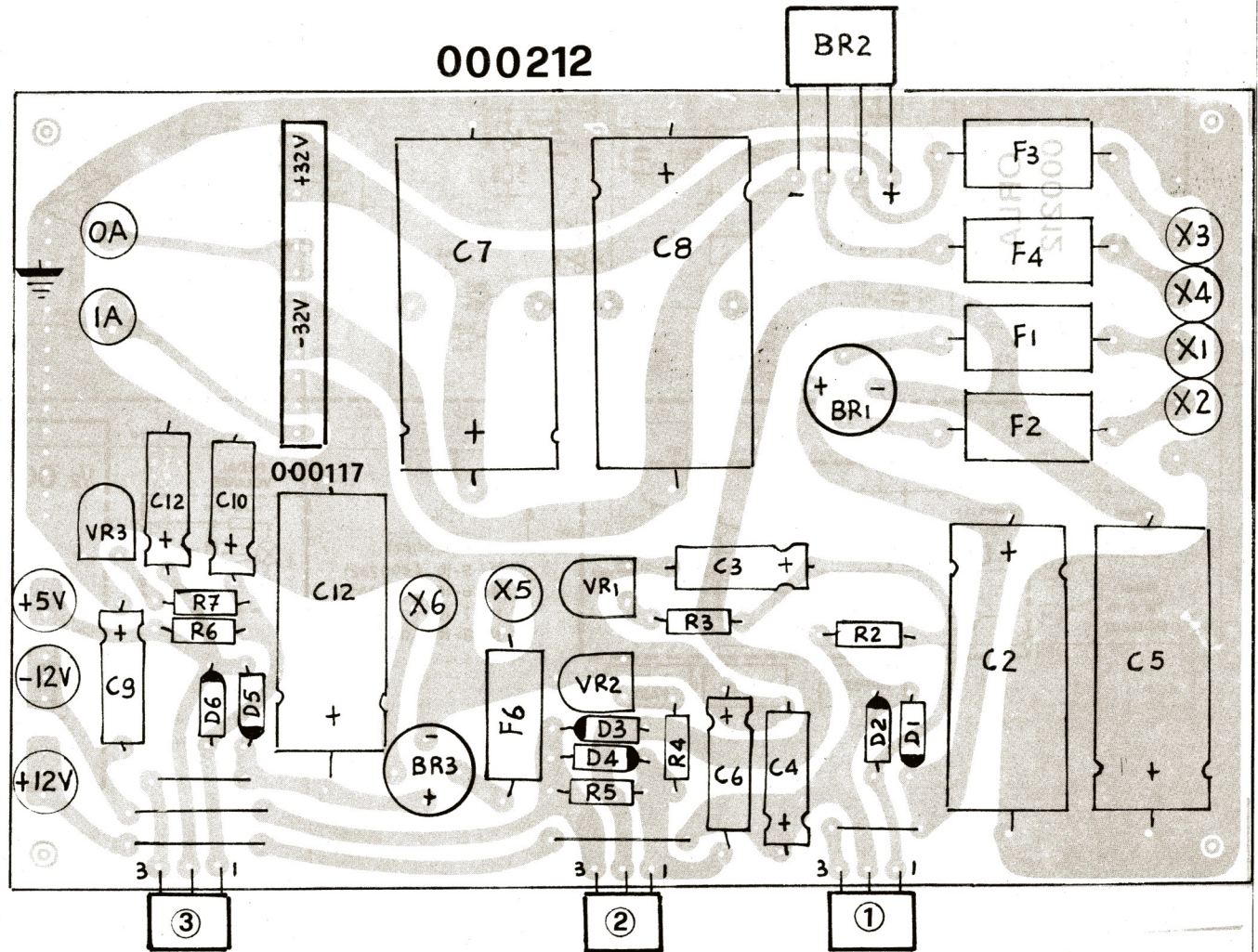
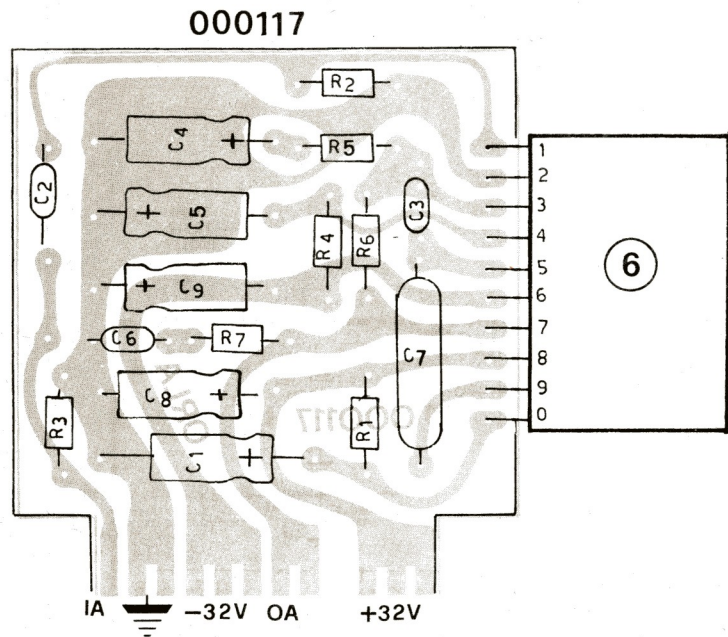
| I.C.  |         |              |
|-------|---------|--------------|
| CODE  | TYPE    | MANUFACTURED |
| 1 - 3 | LM 317  |              |
| 2     | LM 337  |              |
| 6     | STK 080 | SANYO        |



Sheet 9  
 000166

EXTERNAL AMPLIFIER

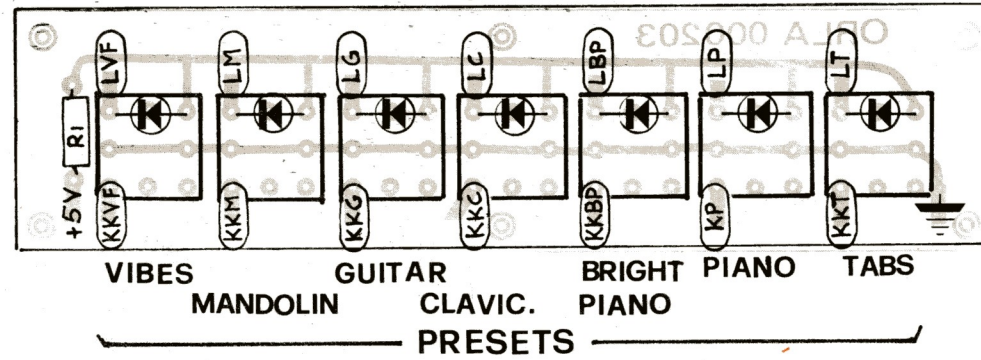
|                   |  |                                |
|-------------------|--|--------------------------------|
| Model<br>SONATINA | Object:<br>POWER SUPPLY<br>AND AMPLIFIER | Sheet No 10-10<br>Date 10-6-82 |
|-------------------|--|--------------------------------|



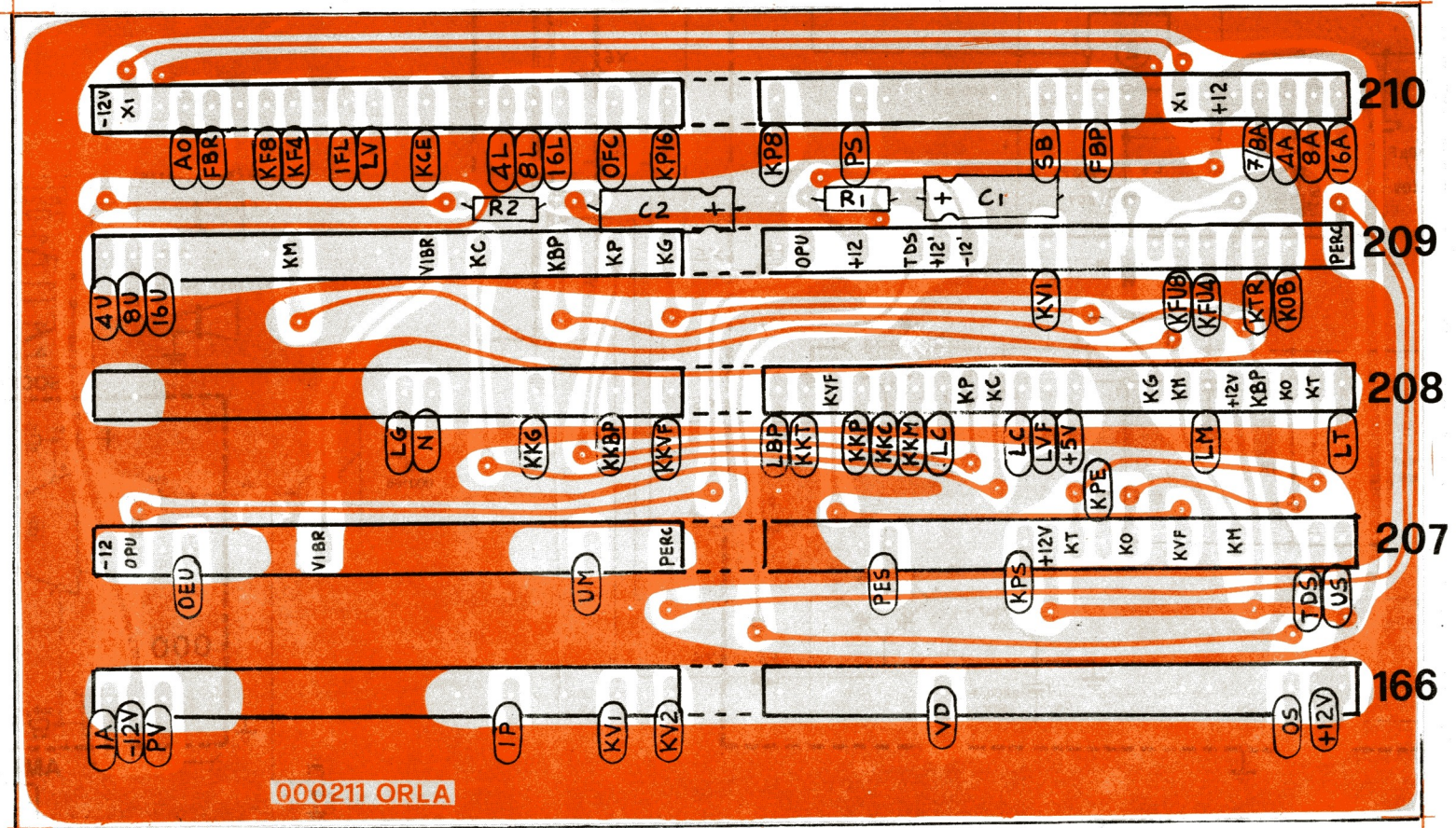
|          |                 |
|----------|-----------------|
| Model    | Sheet No 10A-10 |
| SONATINA | Date 16-6-82    |



000203



000206



000211 ORLA

|          |                 |
|----------|-----------------|
| Model    | Sheet No 10b-10 |
| SONATINA | Date 16-6-82    |

