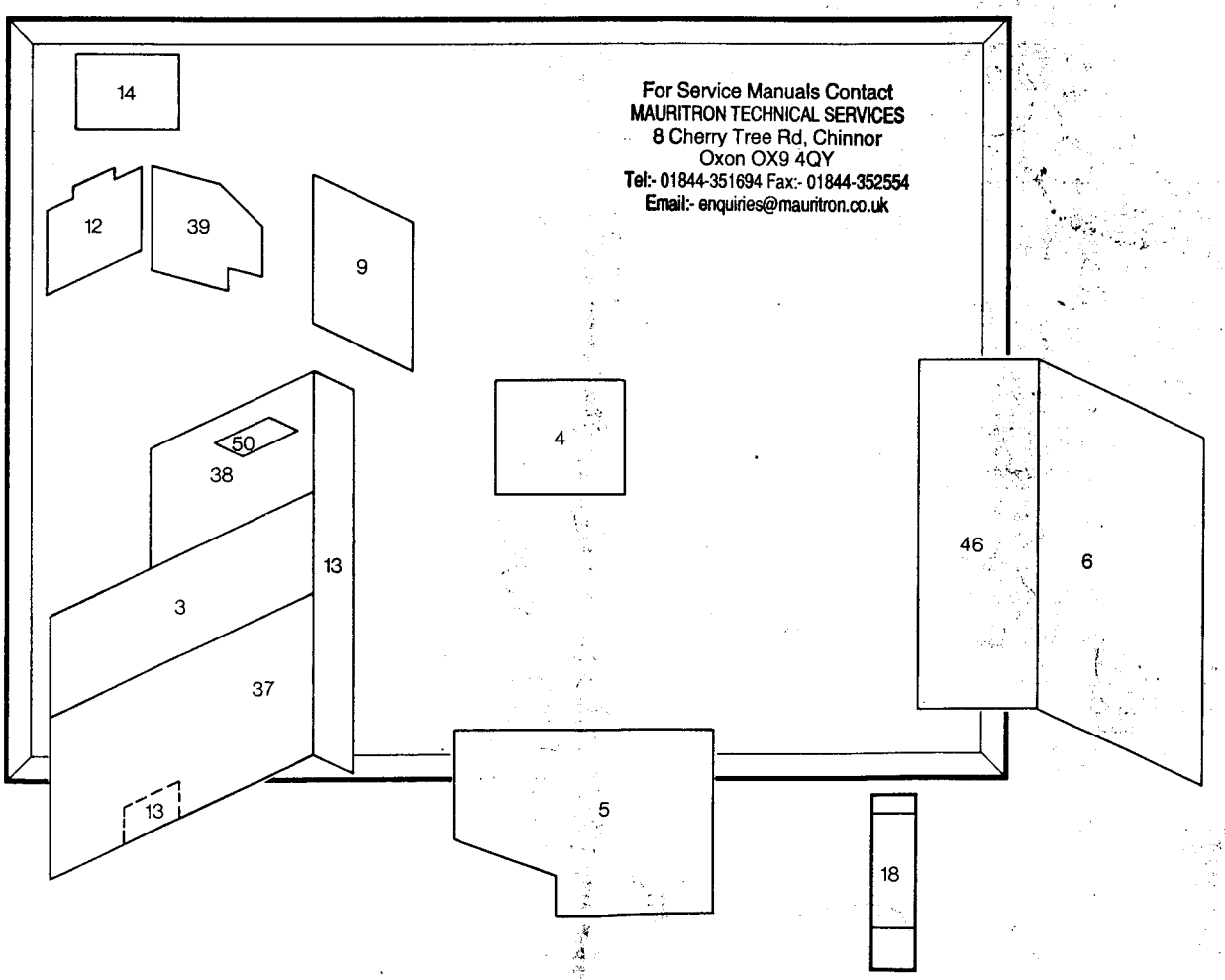
# Bang&Olufsen

| | | | | | |
|---|---|---|---|---|---|
| 3 | PAL Decoder | diagr. B | 14 | Infra Red Amp | diagr. F |
| 4 | Video Output | diagr. B | 18 | Control Module | diagr. F |
| 5 | Deflection Unit | diagr. E | 37 | Video IF | diagr. A |
| 6 | Power Supply | diagr. E | 38 | Remote Memory | diagr. F |
| 9 | AF Amp | diagr. D | 39 | Tuning Unit 8-ch | diagr. F |
| 12 | Analog | diagr. B, D, F | 46 | Control Unit for Power Supply | diagr. E |
| 13 | Mother Board Remote | diagr. A, D | 50 | VCR Switch | diagr. E |




For Service Manuals Contact
MAURITRON TECHNICAL SERVICES
8 Cherry Tree Rd, Chinnor
Oxon OX9 4QY
Tel:- 01844-351694 Fax:- 01844-352554
Email:- enquiries@mauritron.co.uk

# Beovision 5100-7100-8100

**Type 3385A-3383A-3381A (System B/G Pal)**
**Type 3386A-3384A-3382A (System I Pal)**

12-82 3533022

## MÅLEBETINGELSER FOR DIAGRAMMER

Alle DC spændinger er målt i forhold til stel og med voltmeter med en indre modtand på mindst 2 Mohm. Der tilføres VHF antennesignal på ca. 1 mV, og lys og kontrast er indstillet til nominelt billede.
Hermed menes, at lysreguleringen drejes op, til der lige netop er lys i sort felt på testbilledet, og kontrast indstilles til der måles 40 $V_{pp}$ G. signal på testpunkt 4TP2.

Oscilloskopbillederne på diagrammerne er målt med ca. 1 mV VHF antennesignal med 100% mættet farvebarsignal. Lys og kontrast indtilles til nominelt billede som beskrevet i ovenstående, og farvemætning indstilles til bedst muligt firkant signal på 4TP2, således at farvebarsignalerne svarer til sort og hvidt niveauerne.

Der er følgende undtagelser fra ovenstående:

PC6 (Power supply) diagram E. Spændingerne og oscilloskopbillederne er målt med en netspænding på 220 V, og med helt neddrejet lys og kontrast (0 strålestrøm).

## SYMBOL FOR SIKKERHEDSMODSTANDE



Ved udskiftning af komponenter med dette symbol skal der anvendes samme type, samt samme værdier for ohm og watt. Den nye komponent skal monteres på samme måde som den udskiftede.

## MEASURING CONDITIONS FOR DIAGRAMS

All DC voltages are measured relative to the chassis and with a voltmeter having an internal resistance of at least 2 Mohm. A VHF aerial signal of approx. 1 mV is applied, and brightness and contrast are adjusted to a nominal picture. This means that the brightness control has to be turned up until light is just visible in the black bar of the test pattern, and contrast is to be adjusted until 40 $V_{pp}$ signal on the test point 4TP2 is measured.

The oscilloscope patterns on the diagrams are measured with approx. 1 mV VHF aerial signal with 100% saturated colour bar signal. Brightness and contrast have to be adjusted to a nominal picture as described above, and the colour saturation has to be adjusted to the optimum square signal on 4TP2 so that the colour bar signals correspond to the monochrome levels.

However, the following exceptions apply to the above:

PC6 (Power supply) diagram E. The voltages and the oscilloscope patterns are measured with a mains voltage of 220 V, and with turned down brightness and contrast (0 radiation current).

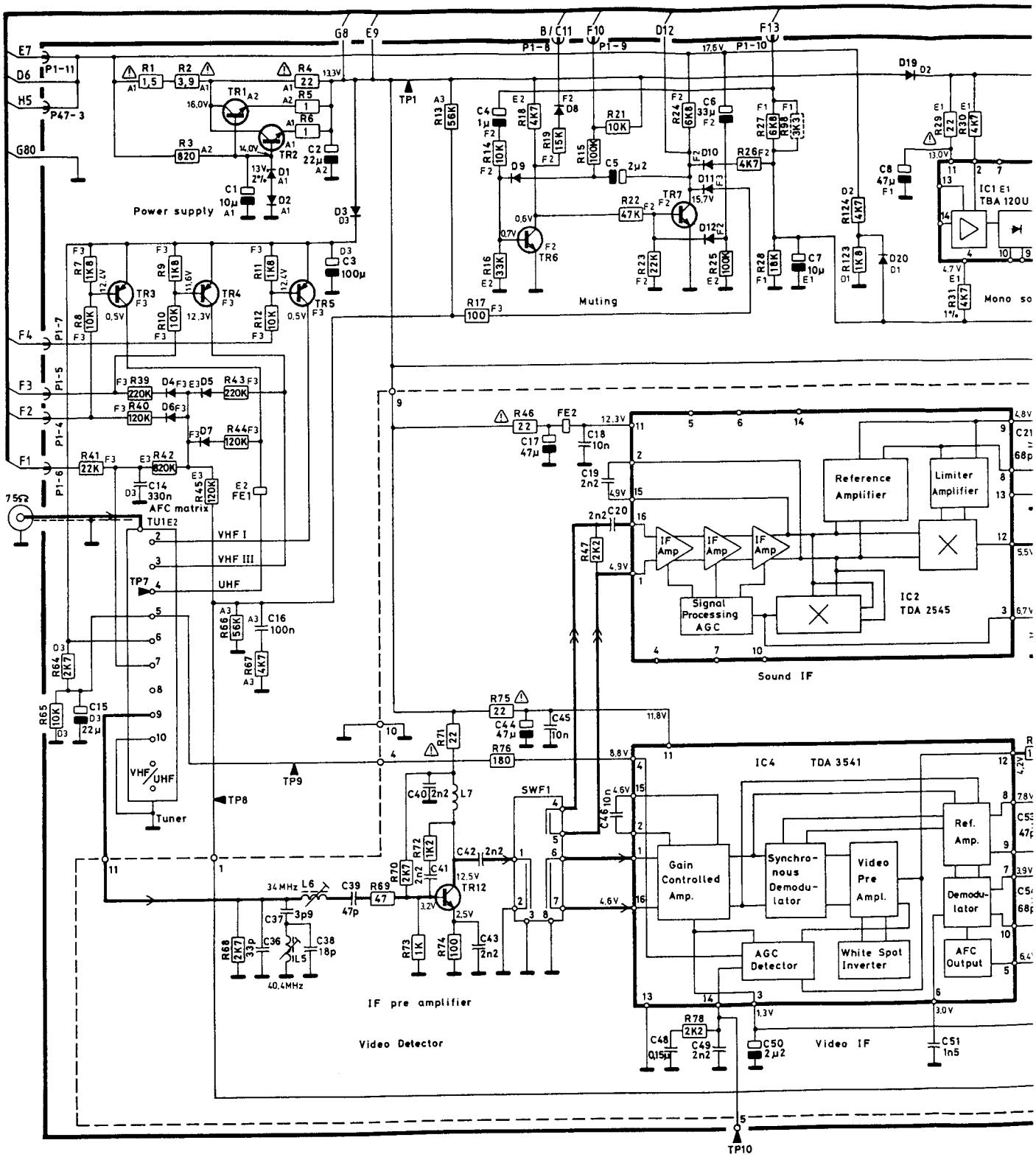
## SYMBOL FOR SAFETY RESISTORS



When replacing components with this symbol the same type has to be used, also the same values for ohm and watt. The new component is to be mounted in the same way as the replaced one.

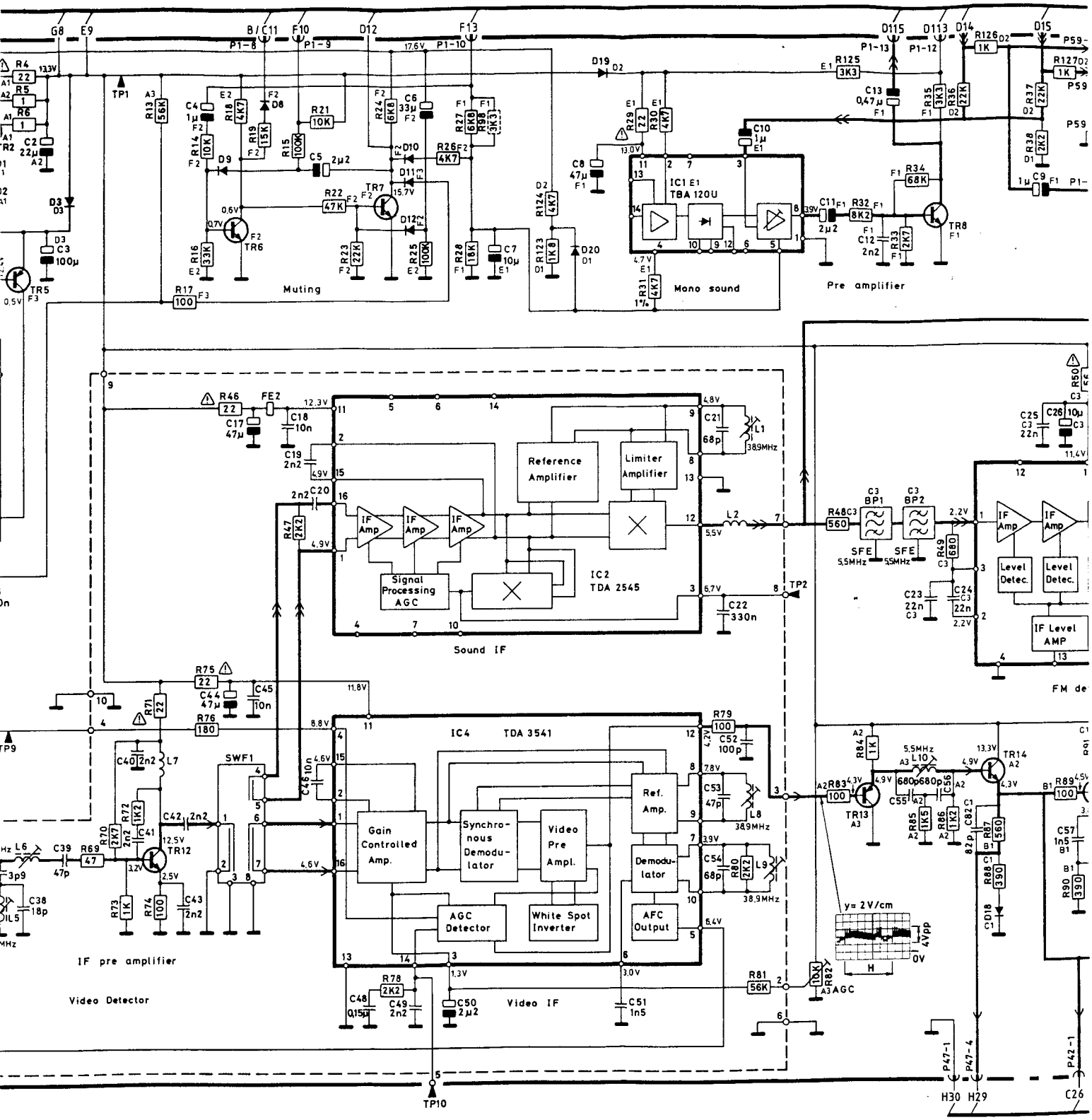
For Service Manuals Contact
MAURITRON TECHNICAL SERVICES
8 Cherry Tree Rd, Chinnor
Oxon OX9 4QY
Tel:- 01844-351694 Fax:- 01844-352554
Email:- enquiries@mauritron.co.uk

## DIAGRAM A (VIDEO IF, AUDIO IF) FOR TYPE 3385A-3383A-3381A

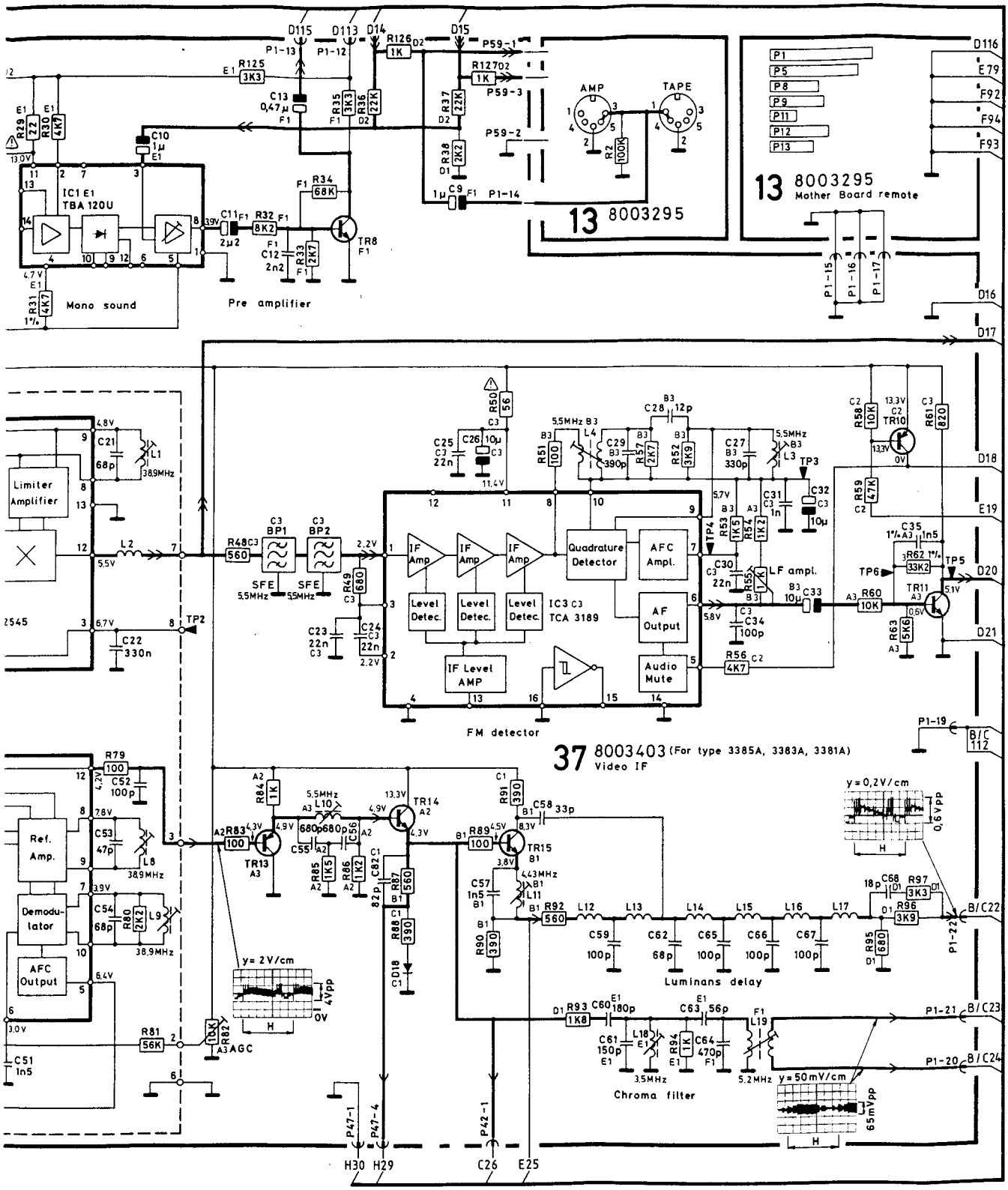



For Service Manuals Contact
MAURITRON TECHNICAL SERVICES
8 Cherry Tree Rd, Chinnor
Oxon OX9 4QY
Tel:- 01844-351694 Fax:- 01844-352554
Email:- enquiries@mauritron.co.uk

F) FOR TYPE 3385A-3383A-3381A



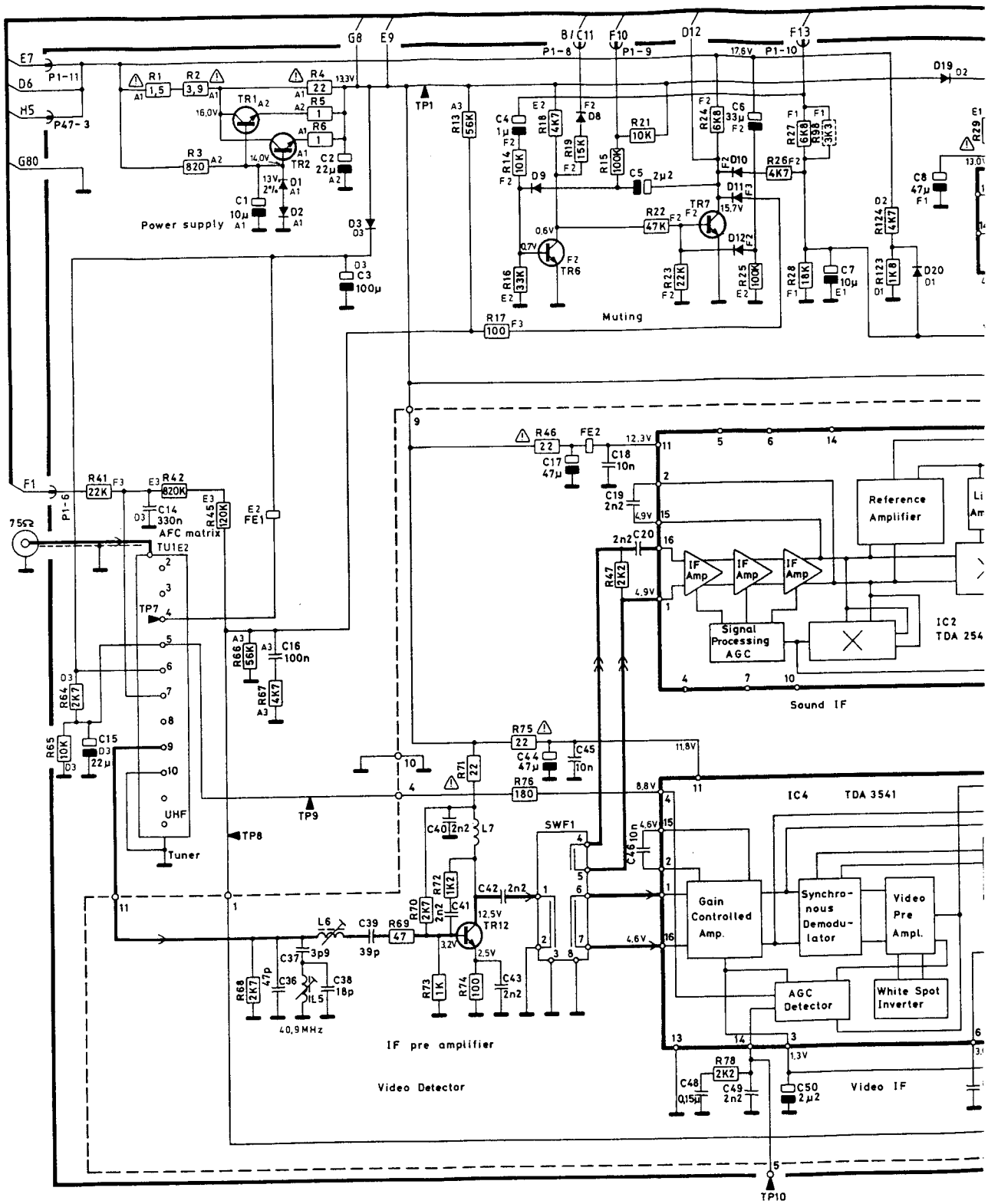
Bang&Olufsen




For Service Manuals Contact
MAURITRON TECHNICAL SERVICES
8 Cherry Tree Rd, Chinnor
Oxon OX9 4QY
Tel:- 01844-351694 Fax:- 01844-352554
Email:- enquiries@mauritron.co.uk

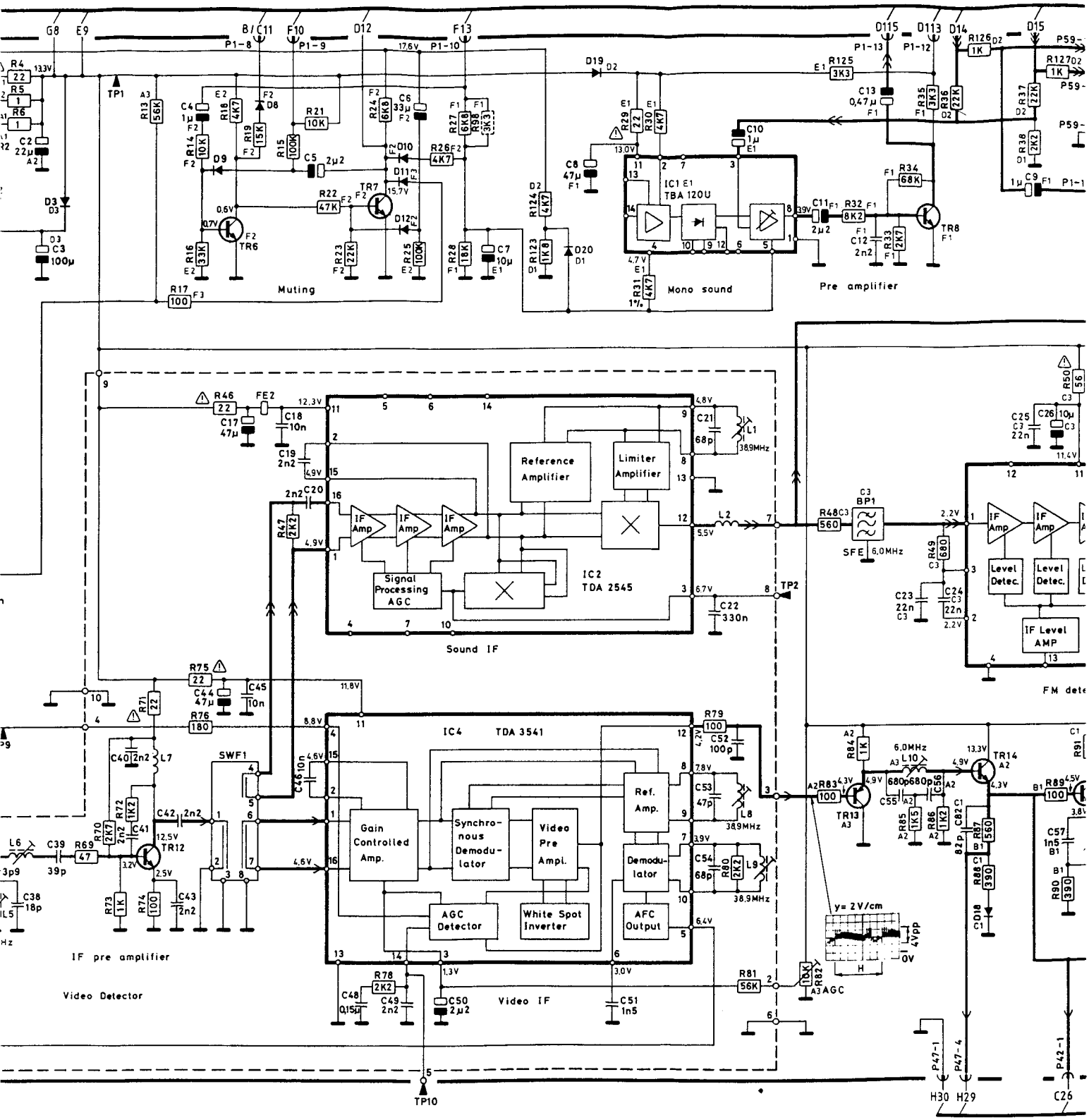
Bang&Olufsen

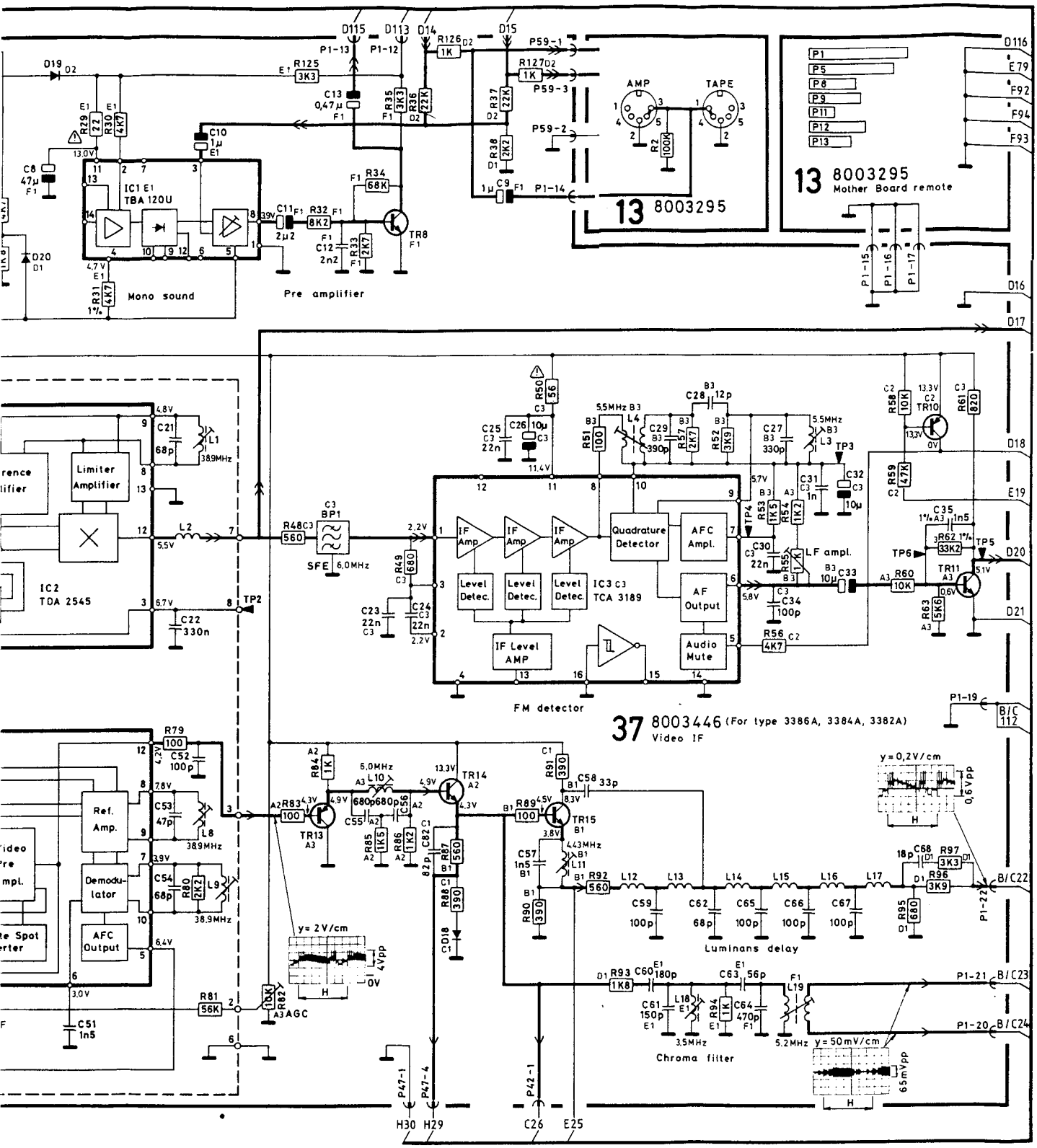
## DIAGRAM A (VIDEO IF, AUDIO IF) FOR TYPE 3386A-3384A-3382A




For Service Manuals Contact
MAURITRON TECHNICAL SERVICES
8 Cherry Tree Rd, Chinnor
Oxon OX9 4QY
Tel:- 01844-351694 Fax:- 01844-352554
Email:- enquiries@mauritron.co.uk

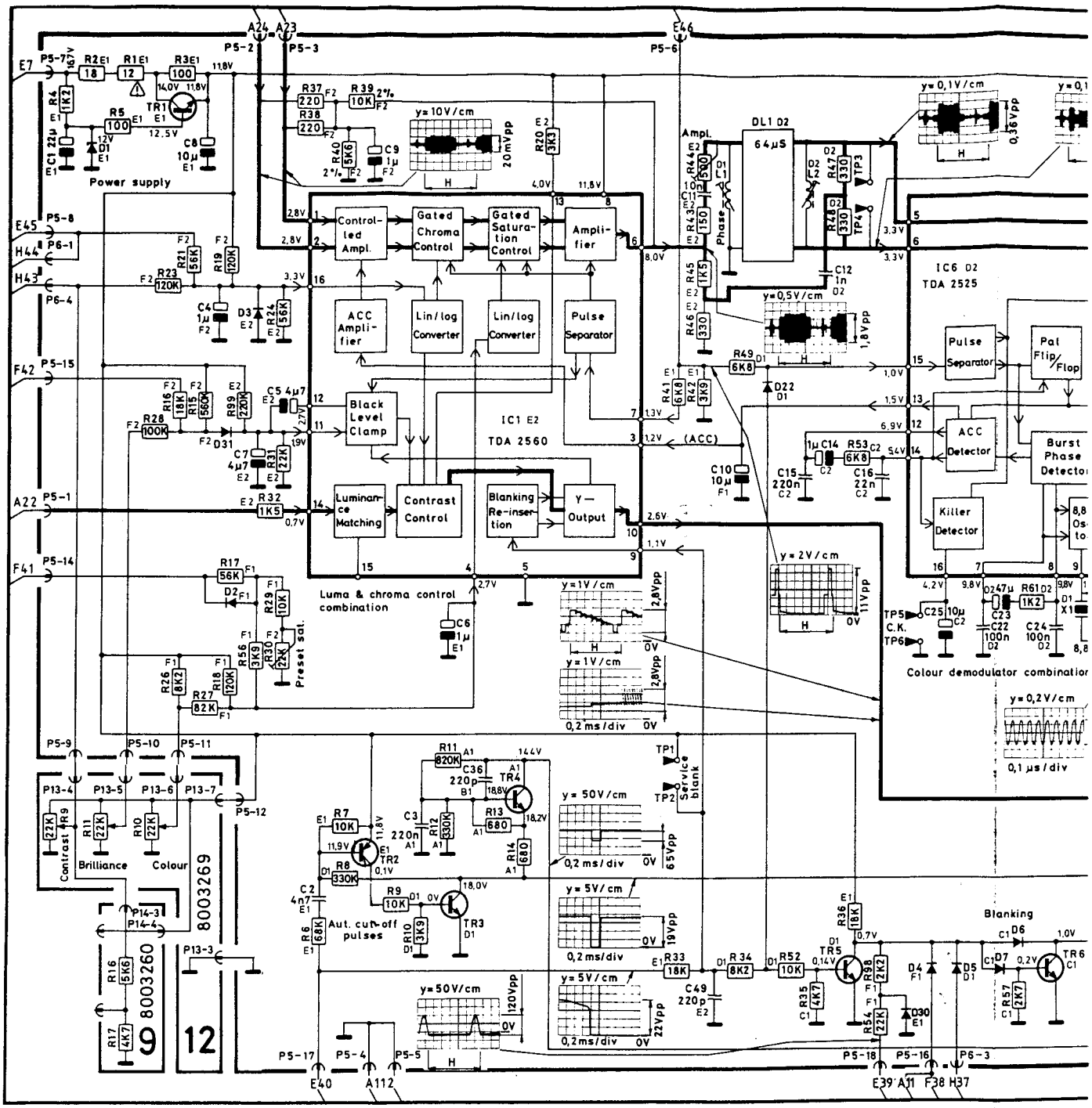
) FOR TYPE 3386A-3384A-3382A





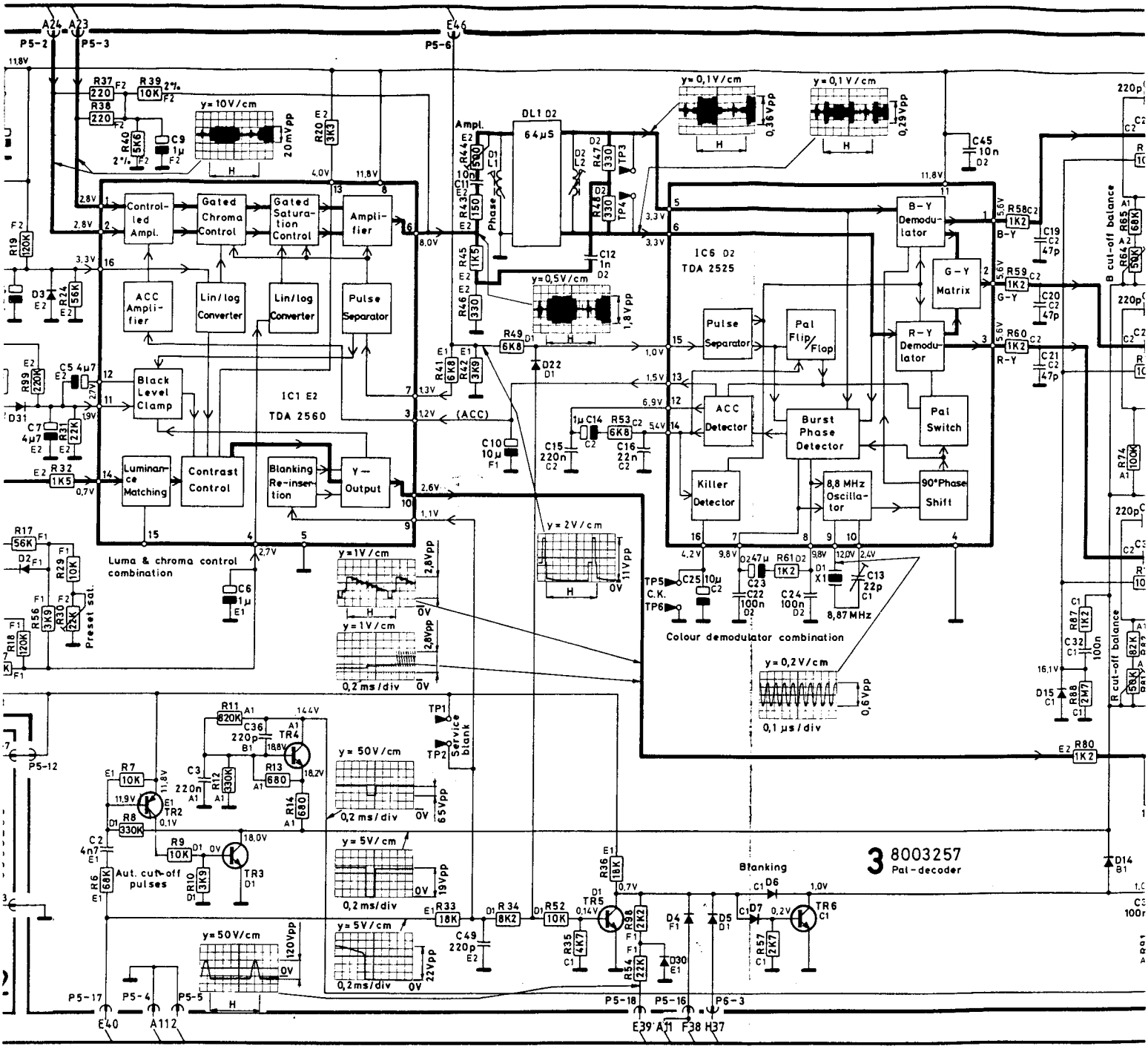

For Service Manuals Contact
MAURITRON TECHNICAL SERVICES
8 Cherry Tree Rd, Chinnor
Oxon OX9 4QY
Tel:- 01844-351694 Fax:- 01844-352554
Email:- enquiries@mauritron.co.uk

## DIAGRAM B (PAL DECODER, VIDEO OUTPUTS)

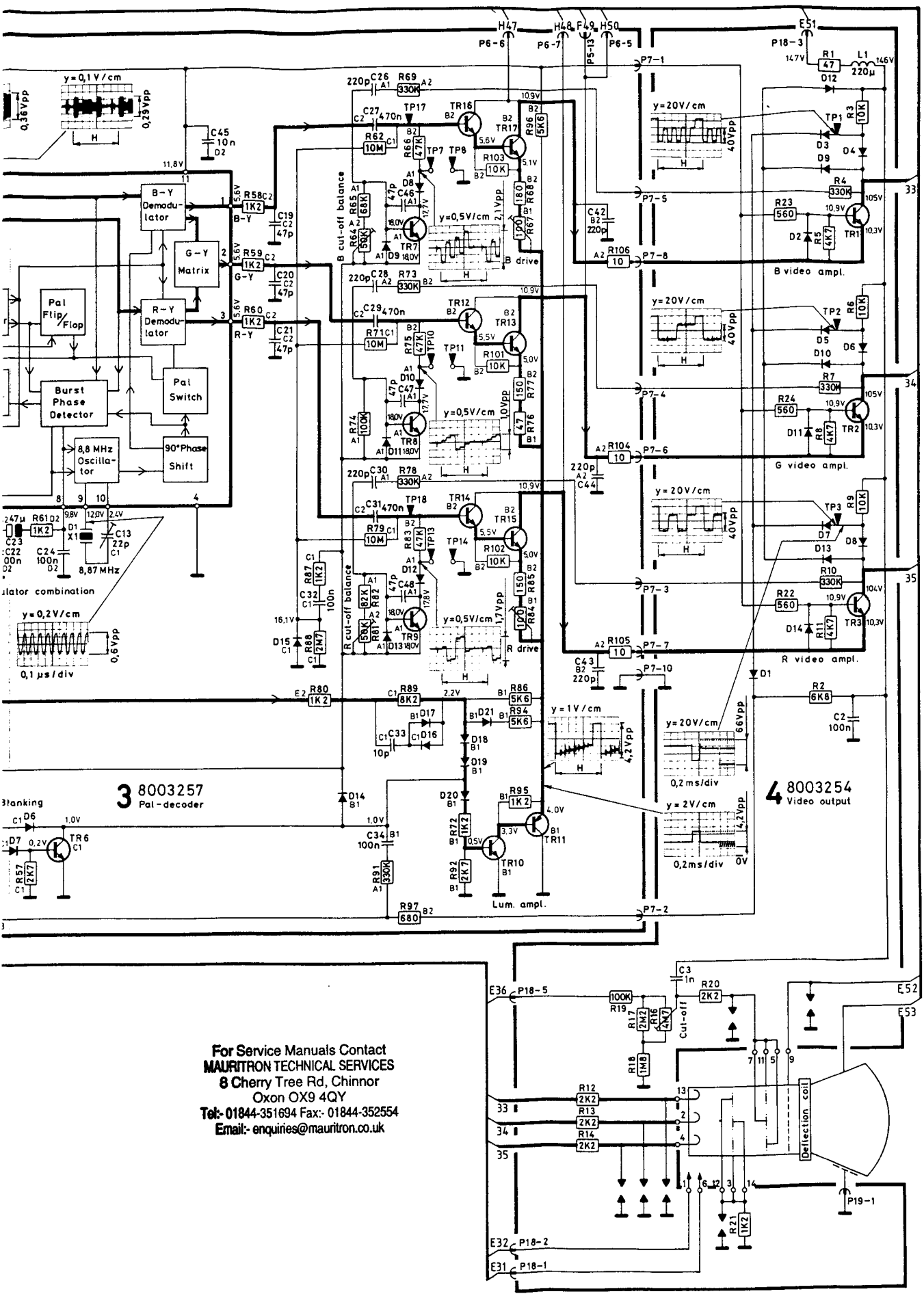



For Service Manuals Contact
MAURITRON TECHNICAL SERVICES
8 Cherry Tree Rd, Chinnor
Oxon OX9 4QY
Tel:- 01844-351694 Fax:- 01844-352554
Email:- enquiries@mauritron.co.uk

## :ODER, VIDEO OUTPUTS)



Bang&Olufsen

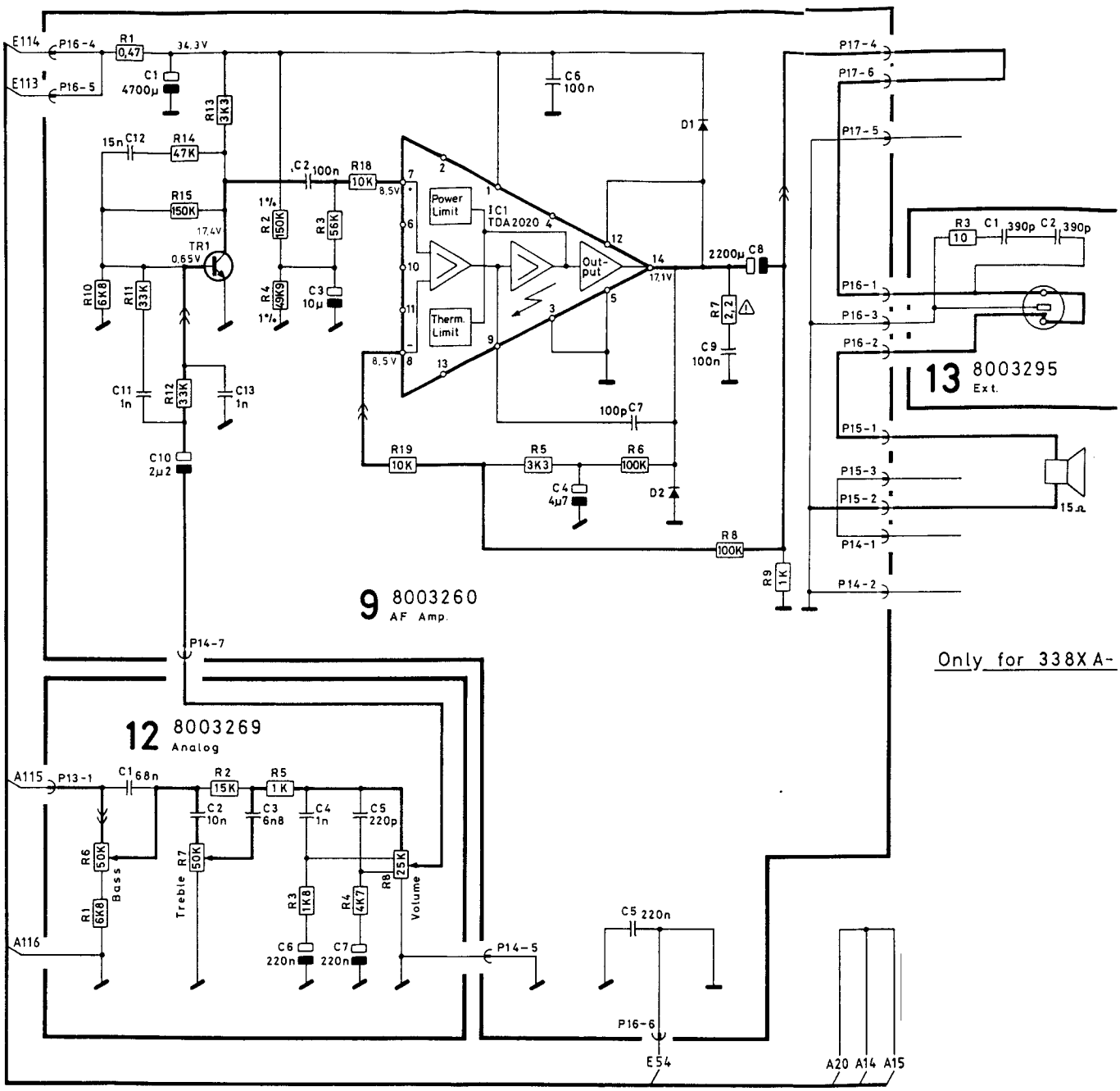




For Service Manuals Contact
MAURITRON TECHNICAL SERVICES
8 Cherry Tree Rd, Chinnor
Oxon OX9 4QY
Tel:- 01844-351694 Fax:- 01844-352554
Email:- enquiries@mauritron.co.uk

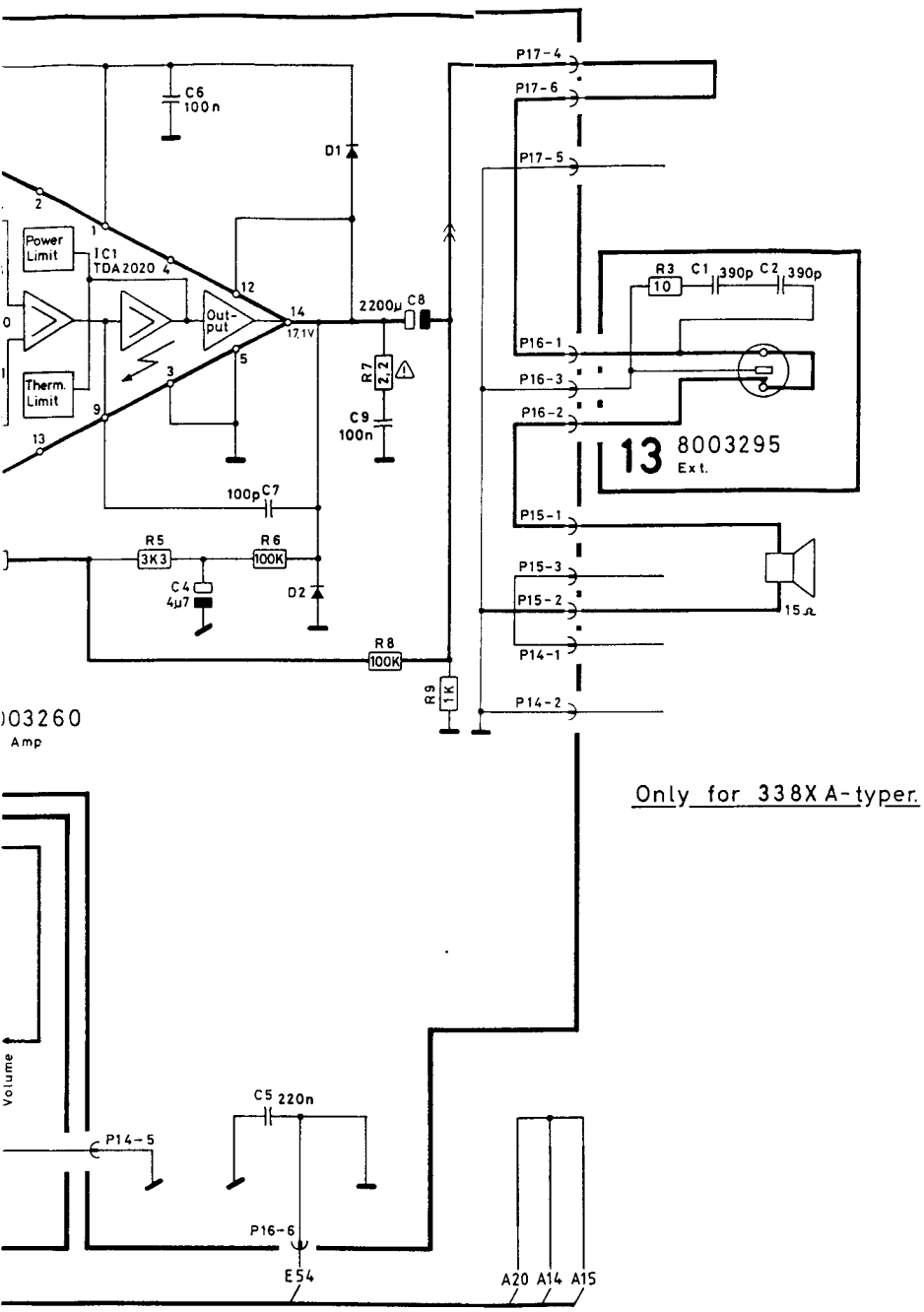
Bang&Olufsen

## DIAGRAM D (AF AMPL)





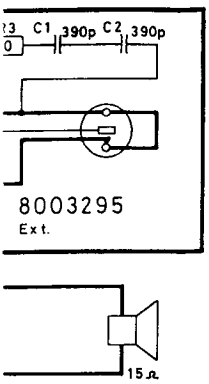
**For** Service Manuals Contact
**MAURITRON** TECHNICAL SERVICES
**8** Cherry Tree Rd, Chinnor
Oxon OX9 4QY
**Tel:-** 01844-351694 Fax:- 01844-352554
**Email:-** enquiries@mauritron.co.uk




Only for 338X A-typer.

For Service Manuals Contact
MAURITRON TECHNICAL SERVICES
8 Cherry Tree Rd, Chinnor
Oxon OX9 4QY
Tel:- 01844-351694 Fax:- 01844-352554
Email:- enquiries@mauritron.co.uk

For Service Manuals Contact
MAURITRON TECHNICAL SERVICES
8 Cherry Tree Rd, Chinnor
Oxon OX9 4QY
Tel:- 01844-351694 Fax:- 01844-352554
Email:- enquiries@mauritron.co.uk

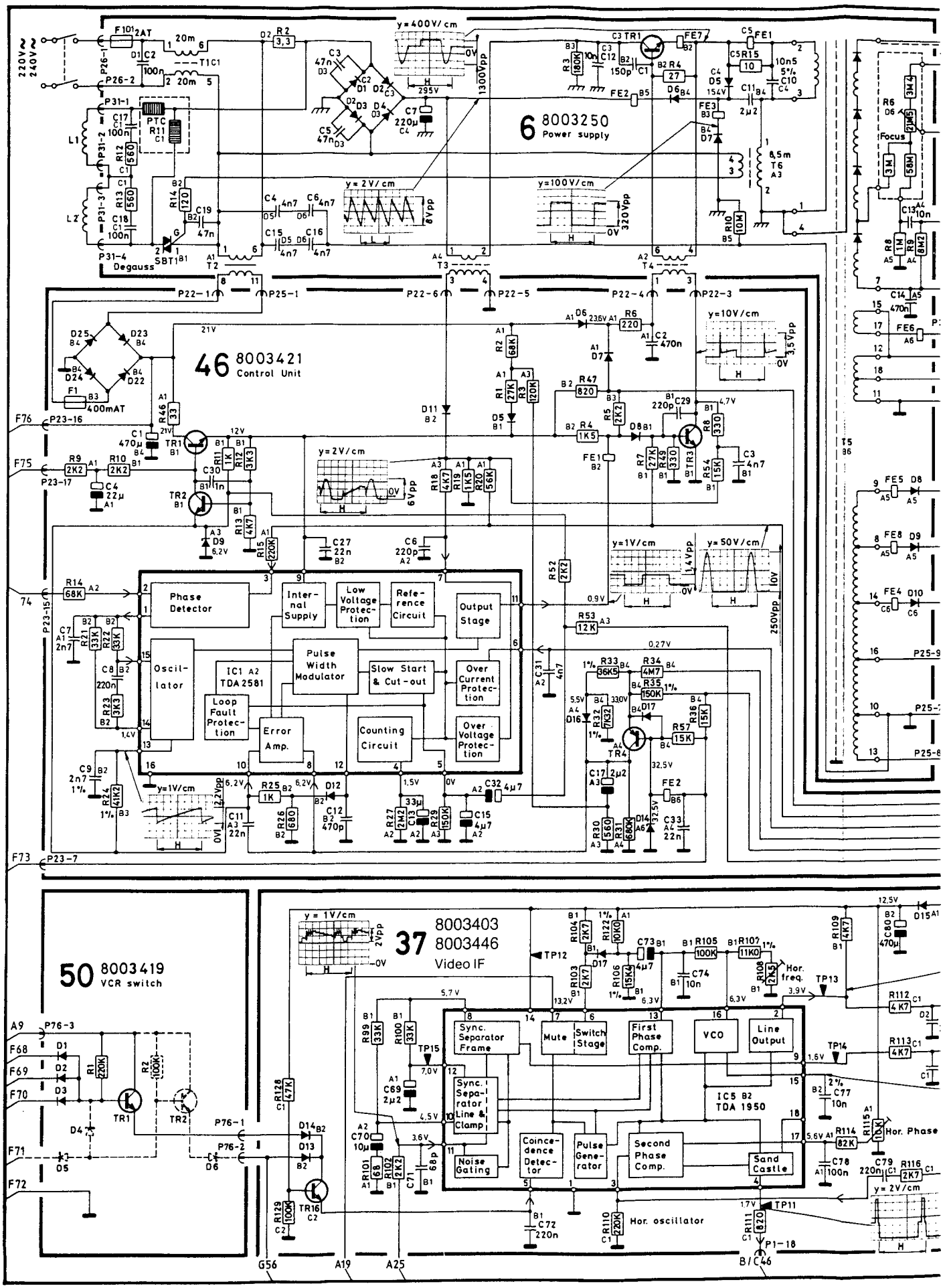



ly for 338X A-typer.

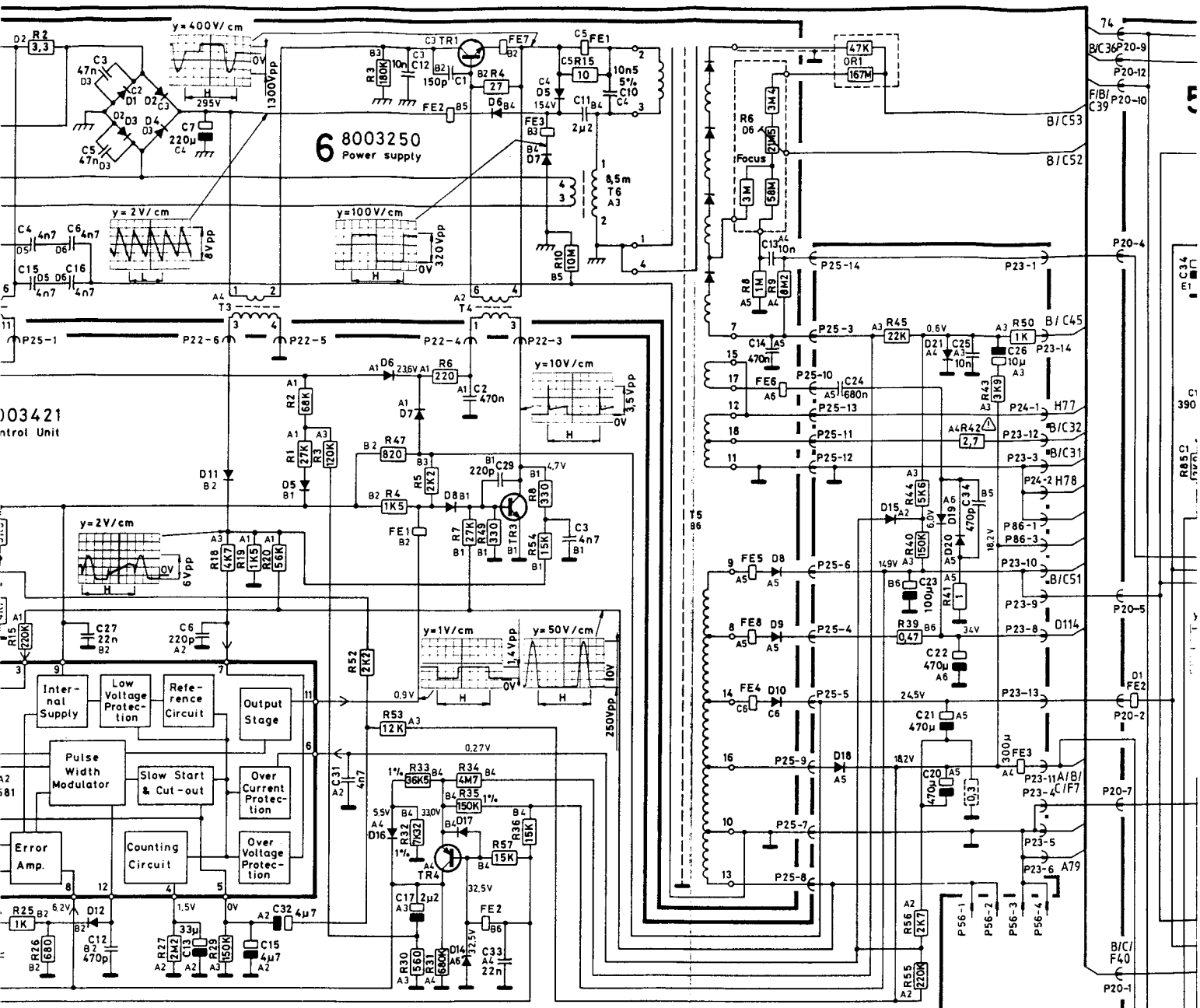
# 6

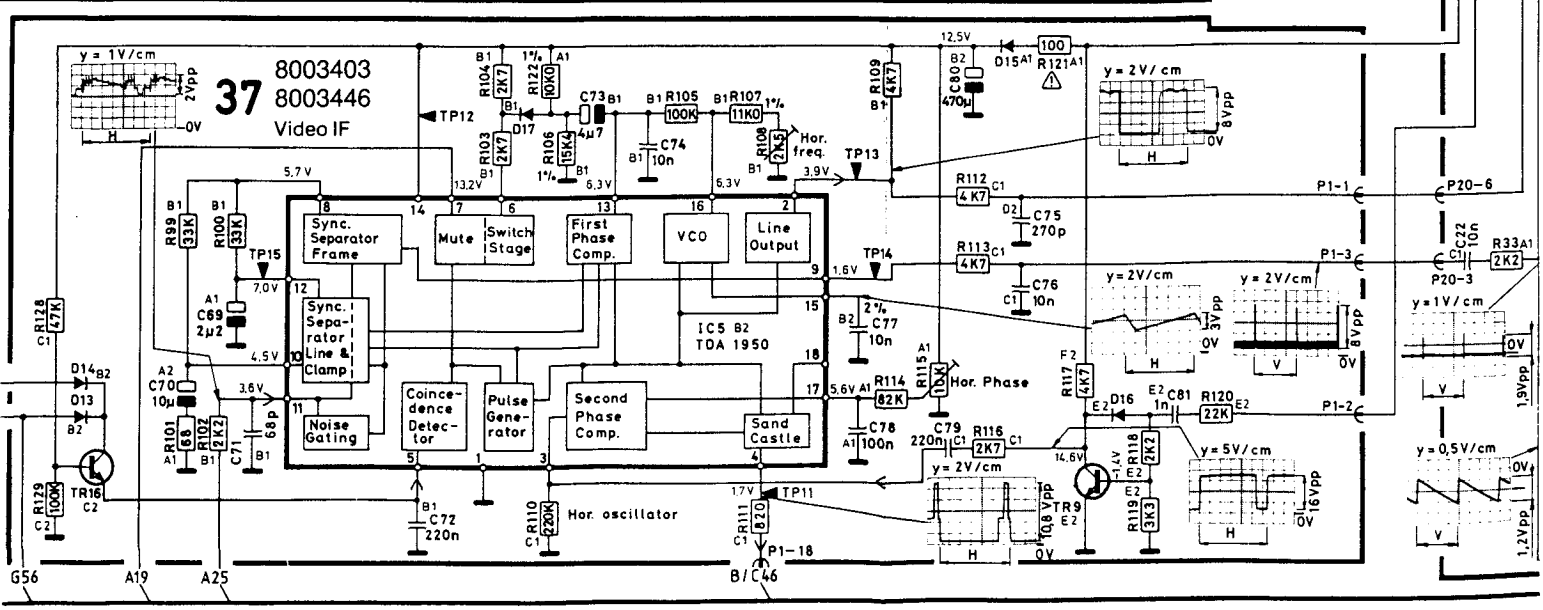
## DIAGRAM E (POWER SUPPLY, HOR. OSC., DEFLECTION UNIT)

For Service Manuals Contact
MAURITRON TECHNICAL SERVICES
8 Cherry Tree Rd, Chinnor
Oxon OX9 4QY
Tel:- 01844-351694 Fax:- 01844-352554
Email:- enquiries@mauritron.co.uk



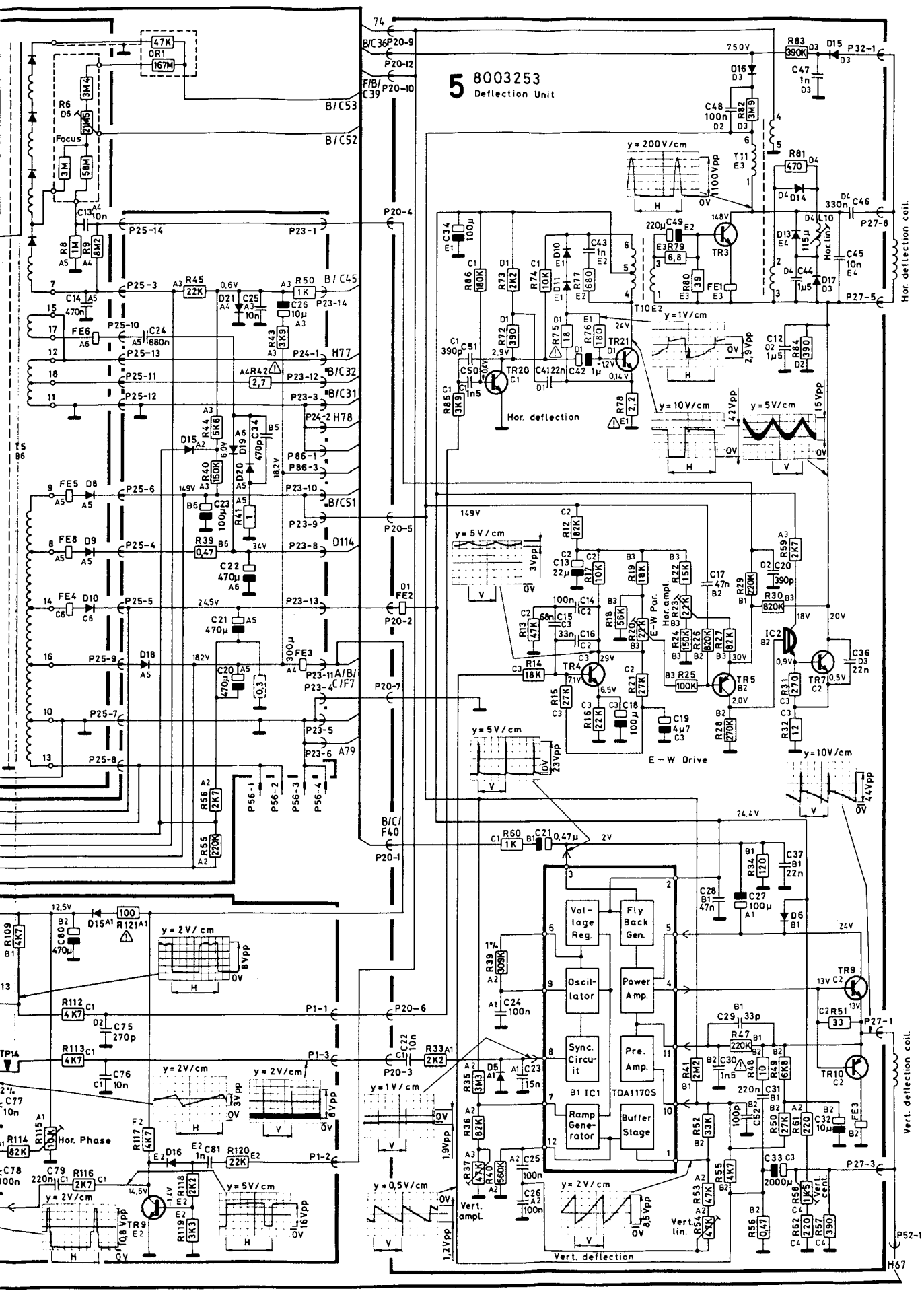
# HOR. OSC., DEFLECTION UNIT)



For Service Manuals Contact
MAURITRON TECHNICAL SERVICES
8 Cherry Tree Rd, Chinnor
Oxon OX9 4QY
Tel:- 01844-351694 Fax:- 01844-352554
Email:- enquiries@mauritron.co.uk

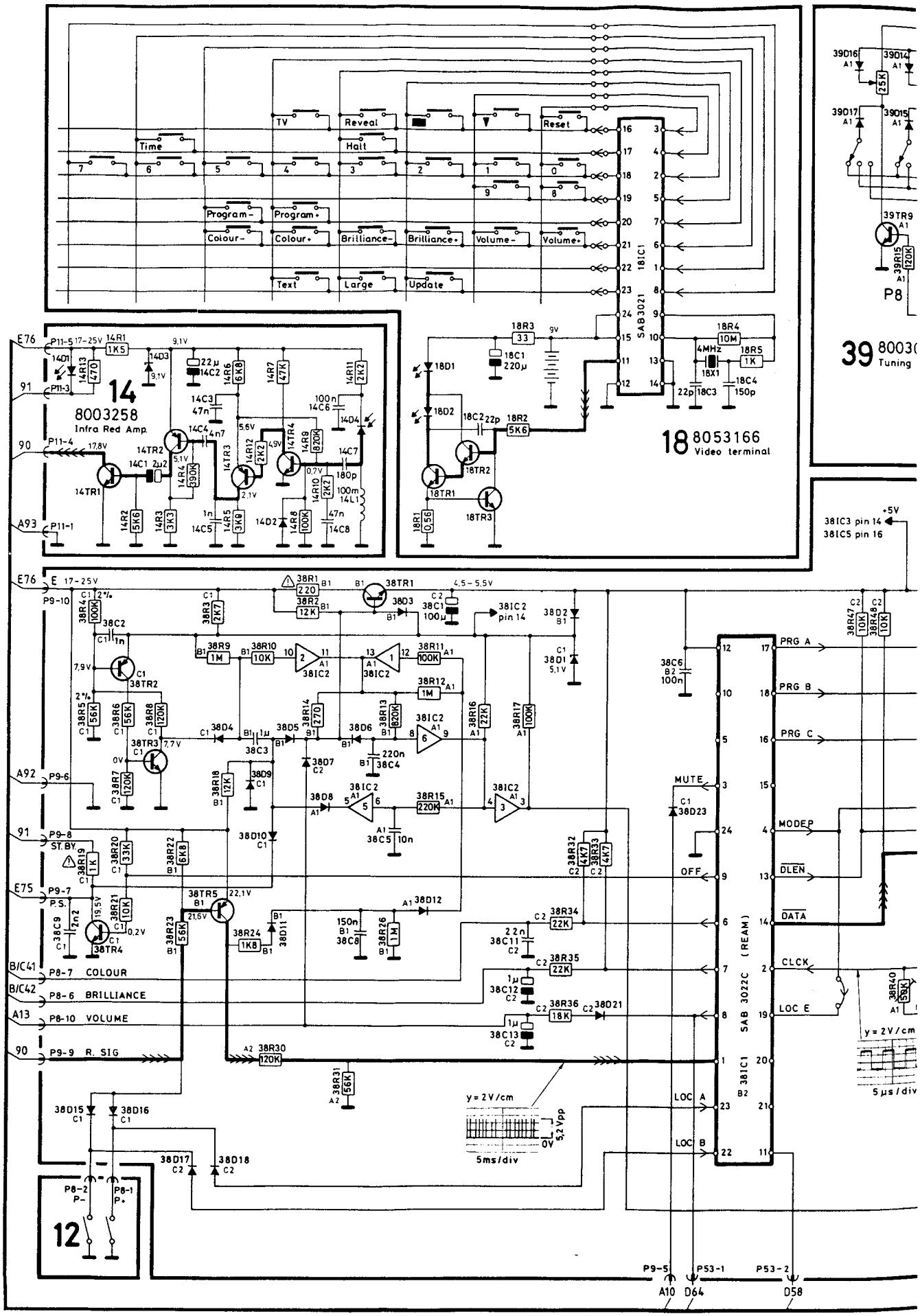
Bang&Olufsen



# Bang&Olufsen

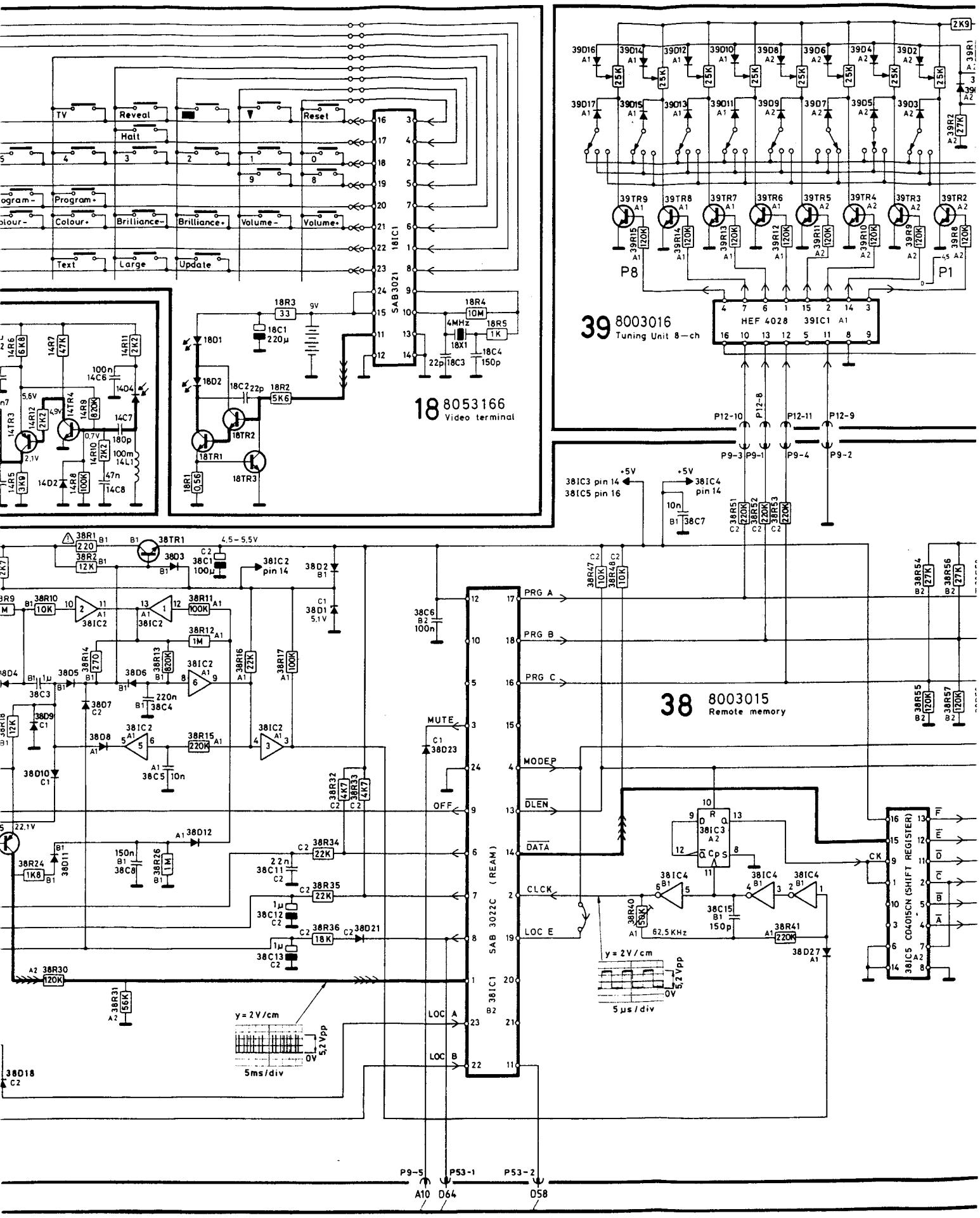
## DIAGRAM F (REMOTE CONTROL, TUNING UNIT 8-CH)

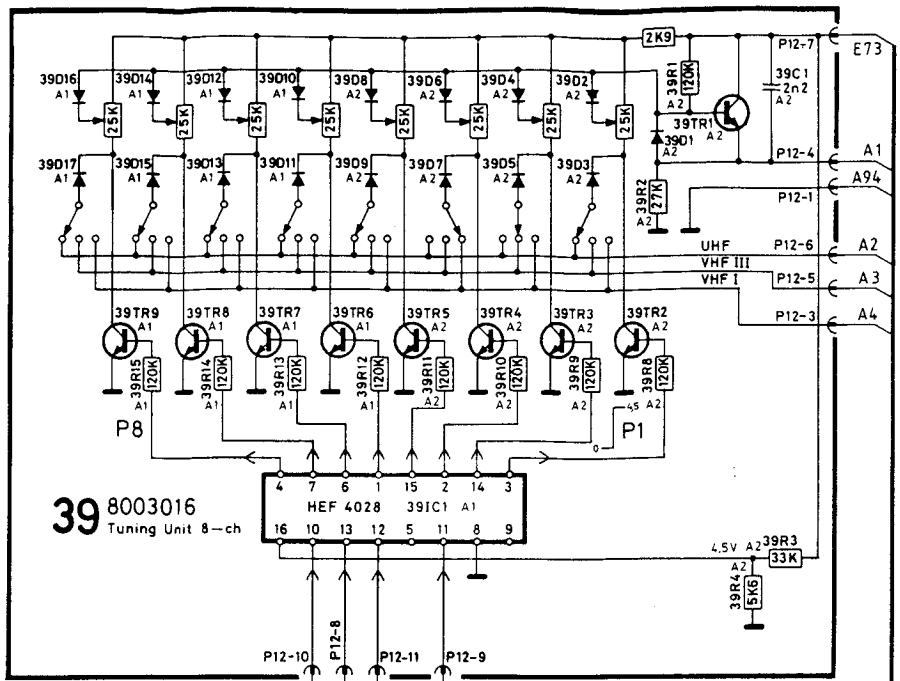
For Service Manuals Contact
MAURITRON TECHNICAL SERVICES
8 Cherry Tree Rd, Chinnor
Oxon OX9 4QY
Tel:- 01844-351694 Fax:- 01844-352554
Email:- enquiries@mauritron.co.uk

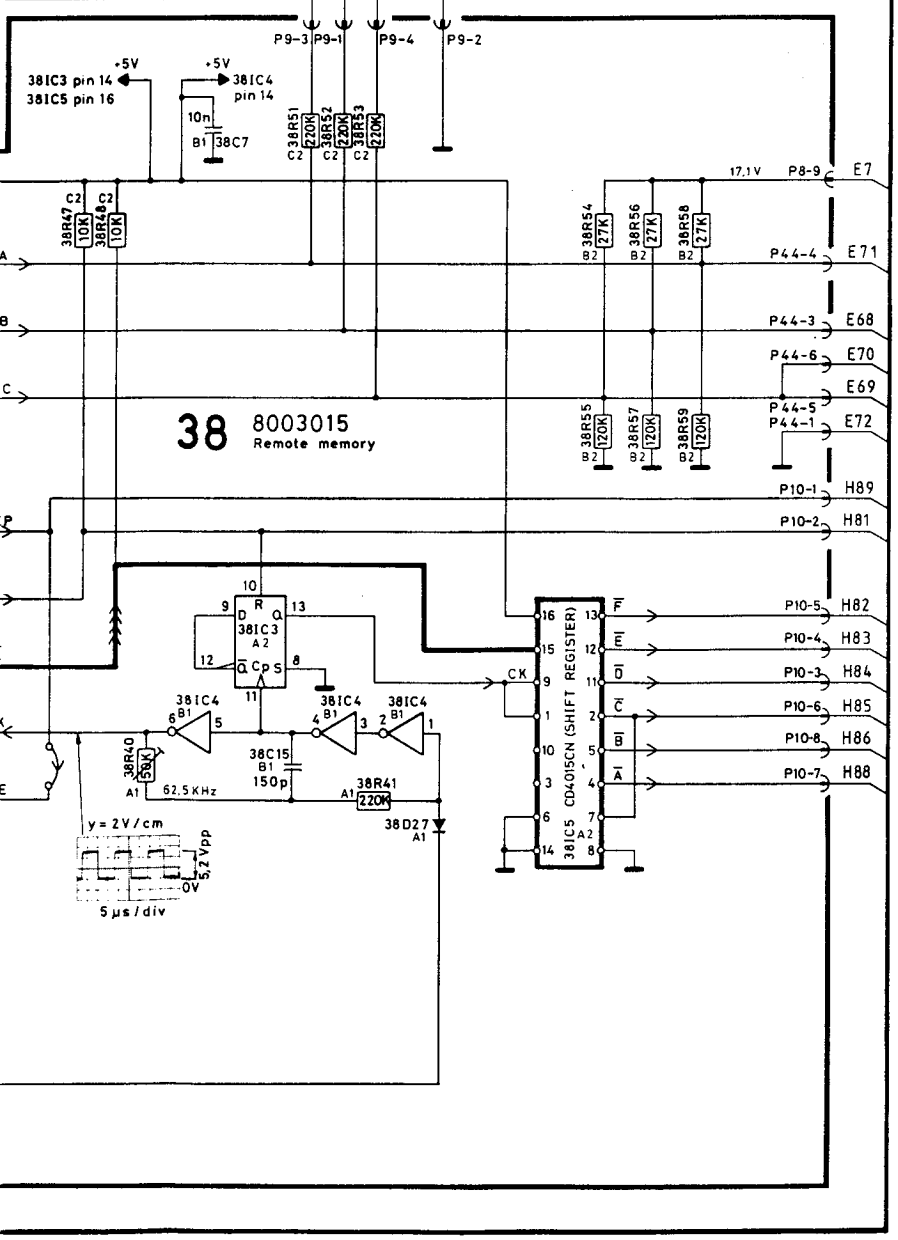


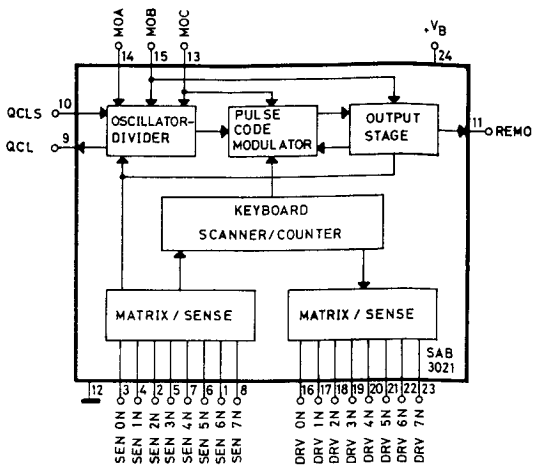
# en

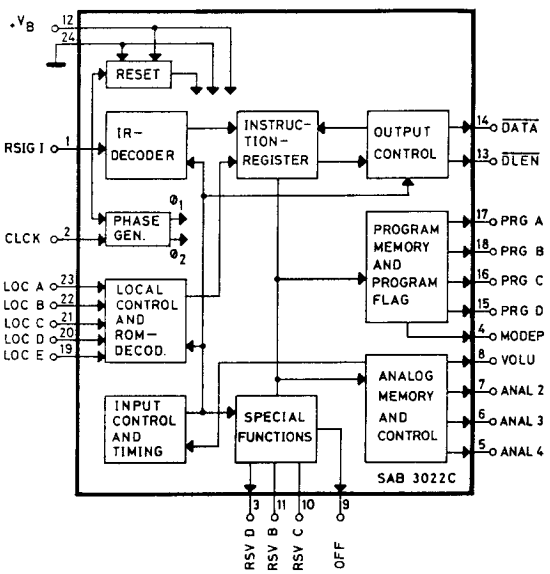
## ONTROL, TUNING UNIT 8-CH)

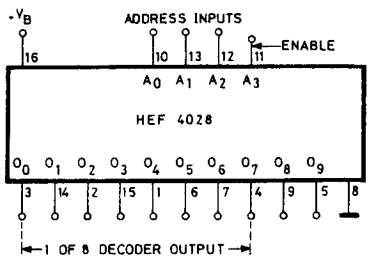





**For Service Manuals Contact**
**MAURITRON TECHNICAL SERVICES**
**8 Cherry Tree Rd, Chinnor**
Oxon OX9 4QY
**Tel:- 01844-351694 Fax:- 01844-352554**
**Email:- enquiries@mauritron.co.uk**

## DIAGRAMFORKLARING

De enkelte diagramsider er foroven betegnet med et bogstav f.eks. DIAGRAM A.

### Komponenttryk og koordinatsystem

PC-enhederne er forsynet med komponenttryk og koordinatsystem på både print- og komponentside.

På diagrammerne er alle komponenter forsynet med positions- og koordinatnumre. D.v.s. fra diagrammet er man i stand til at finde en given komponent i et kredsløb på den rigtige PC-enhed ved hjælp af disse numre.

### Ledningsforbindelser på diagrammerne

Nogle af ledningsforbindelserne på diagrammerne er samlet i »bundter«. Hver enkelt af disse ledninger er forsynet med en kode, der fortæller hvortil de går.



Fig. 1

### Intern forbindelse på en diagramside

Interne forbindelser på en diagramside er angivet med et tal, knækket på ledningen viser i hvilken retning den anden ende af ledningen findes (fig. 1).

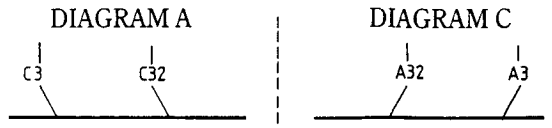


Fig. 2

### Forbindelse til en anden diagramside

Forbindelser til en anden diagramside angives med et tal, samt bogstav betegnelsen på det diagram, forbindelsen går til (fig. 2).

### Stelsymboler

Der anvendes tre forskellige stelsymboler i diagrammerne som vist.

 = Stel der ikke er galvanisk adskilt fra lysnettet (anvendes på diagr. E PC6).

 = Stel

 = Signalstel

### Signalveje og markering på IC'erne

Signalvejene er vist på diagrammerne ved hjælp af kraftigere optrukne streger og pile. Der anvendes tre forskellige typer pile som vist.

 = Video, luminans og chrominans signalerne

 = Lydsignal

 = Øvrige signaler

Pilene der er vist på benene af IC'erne, fortæller om det pågældende ben er en ind- eller udgang.

For Service Manuals Contact
MAURITRON TECHNICAL SERVICES
8 Cherry Tree Rd, Chinnor
Oxon OX9 4QY
Tel:- 01844-351694 Fax:- 01844-352554
Email:- enquiries@mauritron.co.uk

## KEY TO DIAGRAMS

Each individual diagram page is marked by a letter at the top, e.g. DIAGRAM A.

### Component print and co-ordinate system

The PC units have component print and co-ordinate system both on the print and on the component sides. In the diagrams all components have position and co-ordinate numbers, with the result that it is possible to find a given component in a circuit on the correct PC unit by means of these numbers.

### Cable connections in the diagrams

Some of the cable connections in the diagrams are assembled in »bundles«. Each individual cable has its own code which tells to where it leads.




Fig. 1

Internal connection on a diagram page

Internal connections on a diagram page are indicated by a number. The break on the cable shows in what direction the other end of the cable is to be found (fig. 1).

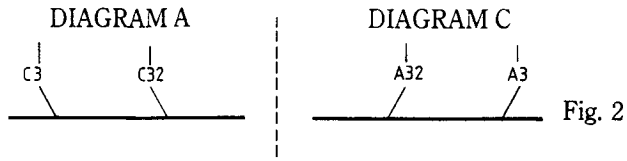



Fig. 2

Connection to another diagram page

Connections to another diagram page are indicated by a number together with the letter indication of the diagram to which the connection leads (fig. 2).

### Ground symbols

Three different ground symbols are used in the diagrams:

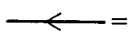
 = Ground that is not galvanically separated from the mains. (Used in diagram E, PC6).

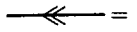
 = Ground

 = Signal ground

### Signal paths and IC markings

The signal paths are shown in the diagrams by means of semibold lines and arrow heads.
As shown, three different types of arrow head are used:

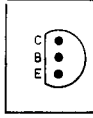
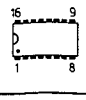
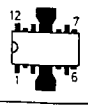
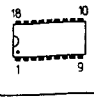
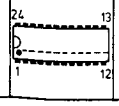
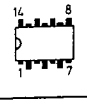
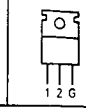
 = Video, luminance and chrominance signals

 = Sound signal

 = Other signals

The arrow heads shown at the IC pins tell if the pin so indicated is an input or an output.

IC AND THYR. LIST

| 19 | 101 | 102 | 104 | 111 | 113 | 120 | 207 |
|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |

| | | | |
|---|---|---|---|
| 3IC1 | 8340179 | **101** | TDA 2560 |
| | | **101** | TDA 2560N |
| 3IC6 | 8340293 | **101** | TDA 2525 |
| 5IC1 | 8340185 | **104** | TDA 1170-S |
| 5IC2 | 8340054 | **19** | MPS A13 |
| | | **19** | TPS A13 |
| 6SBT1 | 8300320 | **207** | TAG 232-600 |
| 9IC1 | 8340170 | **120** | TDA 2020 |
| 18IC1 | 8340342 | **113** | SAB 3021 |
| 37IC1 | 8340086 | **102** | TBA 120U |
| 37IC2 | 8340496 | **101** | TDA 2545 |
| 37IC3* | 8340233 | **101** | TCA 3189 |
| | | **101** | CA 3189E |
| | | **101** | LM 3189N |
| 37IC4 | 8340497 | **101** | TDA 3541 |
| 37IC5 | 8340341 | **111** | TDA 1950 |
| 38IC1Δ | 8340171 | **113** | SAB 3022 C |
| 38IC2Δ | 8340178 | **102** | MM 74C906N |
| 38IC3Δ | 8340176 | **102** | CD 4013BCN |
| | | **102** | MC 14013BCP |
| | | **102** | HEF 4013BP |
| 38IC4Δ | 8340173 | **102** | CD 4069CN |
| | | **102** | MC 14069UBCP |
| 38IC5Δ | 8340175 | **101** | CD 4015CN |
| | | **101** | MC 14015BCP |
| | | **101** | HEF 4015BP |
| 39IC1Δ | 8340177 | **101** | CD 4028BCN |
| | | **101** | MC 14028BCP |
| | | **101** | HEF 4028BP |
| 46IC1 | 8340186 | **101** | TDA 2581 |

**For** Service Manuals Contact
**MAURITRON TECHNICAL SERVICES**
**8** Cherry Tree Rd, Chinnor
Oxon OX9 4QY
**Tel:- 01844 351694** Fax:- **01844 352554**
**Email:-** enquiries@mauritron.co.uk

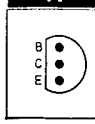
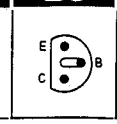
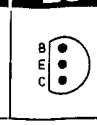
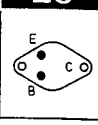
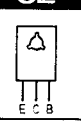
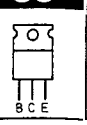
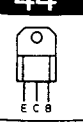
*Specielt udvalgt eller bearbejdet eksemplar.
*Specially selected or adapted sample.
*Speziell ausgewähltes und bearbeitetes Exemplar.

Δ betyder at statisk elektricitet kan ødelægge komponenten.
Δ indicates that static electricity may destroy the component.
Δ bedeutet, daß statische Elektrizität die Komponente zerstören kann.

# Bang&Olufsen

## TRANSISTOR LIST

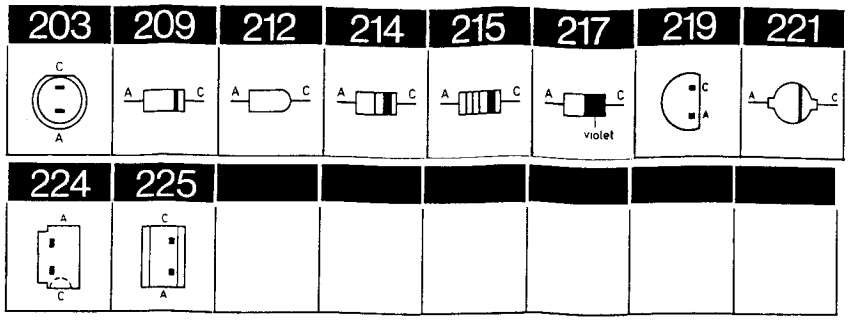
For Service Manuals Contact
MAURITRON TECHNICAL SERVICES
8 Cherry Tree Rd, Chinnor
Oxon OX9 4QY
Tel:- 01844-351694 Fax:- 01844-352554
Email:- enquiries@mauritron.co.uk

| 17 | 20 | 23 | 29 | 32 | 33 | 44 | |
|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 3TR1 | 8320329 | **20** | BC 338-25/18 | 14TR4 | 8320095 | **20** | BC 549 |
| 3TR2 | 8320104 | **20** | BC 558B | 18TR1 | 8320424 | **17** | BC 368 |
| 3TR3 | 8320097 | **20** | BC 547B | 18TR2 | 8320108 | **20** | BC 548B |
| | | | | 18TR3 | | | |
| 3TR4 | 8320370 | **17** | BF 422 | | | | |
| | | | | 37TR1 | 8320295 | **20** | BC 337-25/18 |
| 3TR5 | 8320108 | **20** | BC 548B | 37TR2 | | | |
| 3TR6 | | | | | | | |
| | | | | 37TR3- | 8320152 | **20** | BC 557B |
| 3TR7- | 8320097 | **20** | BC 547B | 37TR5 | | | |
| 3TR9 | | | | | | | |
| | | | | 37TR6- | 8320097 | **20** | BC 547B |
| 3TR10 | 8320108 | **20** | BC 548B | 37TR9 | | | |
| 3TR11 | 8320242 | **20** | BC 556B | 37TR10 | 8320152 | **20** | BC 557B |
| 3TR12- | 8320097 | **20** | BC 547B | 37TR11 | 8320097 | **20** | BC 547B |
| 3TR17 | | | | | | | |
| | | | | 37TR12 | 8320486 | **23** | BF 959 |
| 4TR1- | 8320440 | **44** | BF 869 | | | | |
| 4TR3 | | | | 37TR13 | 8320152 | **20** | BC 557B |
| 5TR3 | 8320431 | **29** | BU 208 | 37TR14 | 8320097 | **20** | BC 547B |
| | | | | 37TR15 | | | |
| 5TR4 | 8320097 | **20** | BC 547B | | | | |
| | | | | 38TR1 | 8320295 | **20** | BC 337-25/18 |
| 5TR5 | 8320152 | **20** | BC 557B | | | | |
| | | | | 38TR2 | 8320152 | **20** | BC 557B |
| 5TR7 | 8320381 | **32** | BD 235 | | | | |
| | | | | 38TR3 | 8320097 | **20** | BC 547B |
| 5TR9 | 8320439 | **33** | BD 535 | 38TR4 | | | |
| 5TR10 | 8320438 | **33** | BD 536 | 38TR5 | 8320152 | **20** | BC 557B |
| 5TR20 | 8320097 | **20** | BC 547B | 39TR1- | 8320097 | **20** | BC 547B |
| | | | | 39TR9 | | | |
| 5TR21 | 8320487 | **20** | BC 337-40 | | | | |
| | | | | 46TR1 | 8320295 | **20** | BC 337-25/18 |
| 6TR1 | 8320431 | **29** | BU 208 | | | | |
| | | | | 46TR2 | 8320097 | **20** | BC 547B |
| 9TR1* | 8320221 | **20** | BC 549C | | | | |
| | | | | 46TR3 | 8320430 | **17** | BC 639 |
| 14TR1 | 8320108 | **20** | BC 548B | 46TR4 | 8320152 | **20** | BC 557B |
| 14TR2 | 8320202 | **20** | BC 557A | | | | |
| 14TR3 | | | | | | | |

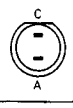
*Specielt udvalgt eller bearbejdet eksemplar.
*Specially selected or adapted sample.
*Speziell ausgewähltes und bearbeitetes Exemplar.

## DIODE LIST




| | | | |
|---|---|---|---|
| 3D1 | 8300029 | **209** | ZPD 12V 5% |
| | | **209** | BZX 79 12.0V |
| | | **209** | BZX 83 12.0V |
| 3D2- | 8300058 | **217** | SFD 184 |
| 3D15 | | **215** | 1N 4148 |
| | | **209** | 1N 4148 |
| 3D16 | 8300209 | **209** | AA 144 |
| 3D17 | | | |
| 3D18- | 8300058 | **217** | SFD 184 |
| 3D20 | | **215** | 1N 4148 |
| | | **209** | 1N 4148 |
| 3D21 | 8300209 | **209** | AA 144 |
| 3D22- | 8300058 | **217** | SFD 184 |
| 3D32 | | **215** | 1N 4148 |
| | | **209** | 1N 4148 |
| 4D1 | 8300101 | **214** | BAX 16-TB |
| 4D2 | 8300058 | **217** | SFD 184 |
| | | **215** | 1N 4148 |
| | | **209** | 1N 4148 |
| 4D3- | 8300101 | **214** | BAX 16-TB |
| 4D10 | | | |
| 4D11 | 8300058 | **217** | SFD 184 |
| | | **215** | 1N 4148 |
| | | **209** | 1N 4148 |
| 4D12 | 8300101 | **214** | BAX 16-TB |
| 4D13 | | | |
| 4D14 | 8300058 | **217** | SFD 184 |
| | | **215** | 1N 4148 |
| | | **209** | 1N 4148 |
| 5D5 | 8300209 | **209** | AA 144 |
| 5D6* | 8300317 | **209** | 1N 4001 |
| 5D10 | 8300058 | **217** | SFD 184 |
| 5D11 | | **215** | 1N 4148 |
| | | **209** | 1N 4148 |
| 5D13 | 8300304 | **221** | BY 228 |
| 5D14 | 8300371 | **212** | RGP 15A |
| 5D15 | 8300372 | **212** | RGP 01-16 |
| 5D16 | 8310021 | **212** | BYX 10 |
| 5D17 | 8300023 | **209** | 1N 4002 |
| 6D1-6D4 | 8300302 | **209** | 1N 5407 |
| 6D5 | 8300332 | **221** | BY 448 |
| 6D6-6D7 | 8300345 | **221** | BYV 95C |
| 6D8 | 8300332 | **221** | BY 448 |
| 6D9 | 8300342 | **221** | BYV 95B |
| 6D10 | | | |
| 9D1* | 8300317 | **209** | 1N 4001 |
| 9D2* | | | |
| 14D1 | 8330019 | **203** | CQX 39B |
| 14D2 | 8300058 | **217** | SFD 184 |
| | | **215** | 1N 4148 |
| | | **209** | 1N 4148 |
| 14D3 | 8300028 | **209** | ZPD 9.1V 5% |
| | | **209** | BZX 79 9.1V |
| | | **209** | BZX 83 9.1V |
| 14D4 | 8330004 | **219** | SFH 205 |
| | | **224** | BPW 41 |
| | | **225** | TIL 100 |
| | | **224** | BWP 41 |
| 18D1 | 8330005 | **203** | CQY 99 |
| 18D2 | | **203** | TIL 38 |
| 37D1 | 8300316 | **209** | ZPD 13V 2% |
| | | **209** | BZX 83 13V |
| | | **209** | BZX 79 13V |

# Bang&Olufsen

| 203 | 209 | 212 | 214 | 215 | 217 | 219 | 221 |
|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |

| 224 | 225 |
|---|---|
|  |  |

| | | | |
|---|---|---|---|
| 37D2- | 8300058 | **217** | SFD 184 |
| 37D12 | | **215** | 1N 4148 |
| | | **209** | 1N 4148 |
| 38D1 | 8300169 | **209** | ZPD 5.1V 5% |
| | | **209** | BZX 79 5.1V |
| | | **209** | BZX 83 5.1V |
| 38D2- | 8300058 | **217** | SFD 184 |
| 38D27 | | **215** | 1N 4148 |
| | | **209** | 1N 4148 |
| 39D1- | 8300058 | **217** | SFD 184 |
| 39D17 | | **215** | 1N 4148 |
| | | **209** | 1N 4148 |
| 46D5 | 8300058 | **217** | SFD 184 |
| | | **215** | 1N 4148 |
| | | **209** | 1N 4148 |
| 46D6- | 8300212 | **209** | 1N 4448 |
| 46D7 | | | |
| 46D8 | 8300058 | **217** | SFD 184 |
| | | **215** | 1N 4148 |
| | | **209** | 1N 4148 |
| 46D9 | 8300201 | **209** | ZPD 6.2V 5% |
| | | **209** | BZX 79 6.2V |
| | | **209** | BZX 83 6.2V |
| 46D10- | 8300058 | **217** | SFD 184 |
| 46D13 | | **215** | 1N 4148 |
| | | **209** | 1N 4148 |
| 46D14* | 8300248 | **209** | ZTK 33 |
| | | | DPD 32.5V |
| | | **209** | TDA 1550 |
| 46D15- | 8300058 | **217** | SFD 184 |
| 46D17 | | **215** | 1N 4148 |
| | | **209** | 1N 4148 |
| 46D18 | 8300388 | **221** | BYW 95A |
| | | **221** | RGP 30D |
| 46D19 | 8300390 | **212** | BA 157 |
| 46D20 | | **212** | BY 206 |
| | | **212** | RGP 10A |
| 46D21 | 8300058 | **217** | SFD 184 |
| | | **215** | 1N 4148 |
| | | **209** | 1N 4148 |
| 46D22- | 8300023 | **209** | 1N 4002 |
| 46D25 | | | |

For Service Manuals Contact
MAURITRON TECHNICAL SERVICES
8 Cherry Tree Rd, Chinnor
Oxon OX9 4QY
Tel:- 01844-351694 Fax:- 01844-352554
Email:- enquiries@mauritron.co.uk

*Specielt udvalgt eller bearbejdet eksemplar.
*Specially selected or adapted sample.
*Speziell ausgewähltes und bearbeitetes Exemplar.

## JUSTERINGER

Under de efterfølgende justeringer skal modtageren være tilsluttet et normalt farvetestbillede, hvis ikke andet er nævnt.

1. BILLEDGEOMETRI

**Horisontal afbøjning**

Hor. frekvens

Kortslut 37TP12 til 37TP15 (37IC5 ben 14 til ben 12).
Juster til korrekt liniefrekvens med 37R108.
Efter endt justering fjernes kortslutningen.

E-W parabel

Justeres med 5R20.

Hor. centrering

Justeres med 37R115 (Hor. phase).

Hor. amplitude

Justeres med 5R23.

Hor. linearitet

Justeres med 5L10.

Fokus

Lys- og farvemætningspotentiometrene indstilles til nominelle værdier.
Kontrastpotentiometeret indstilles til maksimum kontrast.
Juster med 6R6 indtil der opnås maksimal skarphed set 9-10 cm fra skærmkant.

**Vertikal afbøjning**

Vert. amplitude

Med 5R37 justeres indtil korrekt placering af billedet på toppen af skærmen.

Vert. linearitet

Justeres med 5R54.

Vert. centrering

Justeres med 5R58.

2. AGC

For at der kan foretages en korrekt AGC justering, skal modtageren tilsluttes et antennesignal på 0,5 mV som beskrevet i punkt A. Hvis et antennesignal på 0,5 mV ikke er tilgængeligt, kan der foretages en tilnærmet justering som beskrevet i punkt B.

A. Modtageren tilsluttes et 0,5 mV antennesignal i VHF bånd III, og indstil til korrekt testbillede.
   Et voltmeter tilsluttes 37TP9 (der måles ca. 9V).
   37R82 drejes med uret indtil stop (set fra komponentsiden).
   37R82 drejes nu mod uret indtil det punkt hvor den målte spænding lige netop er faldet 0,5V.

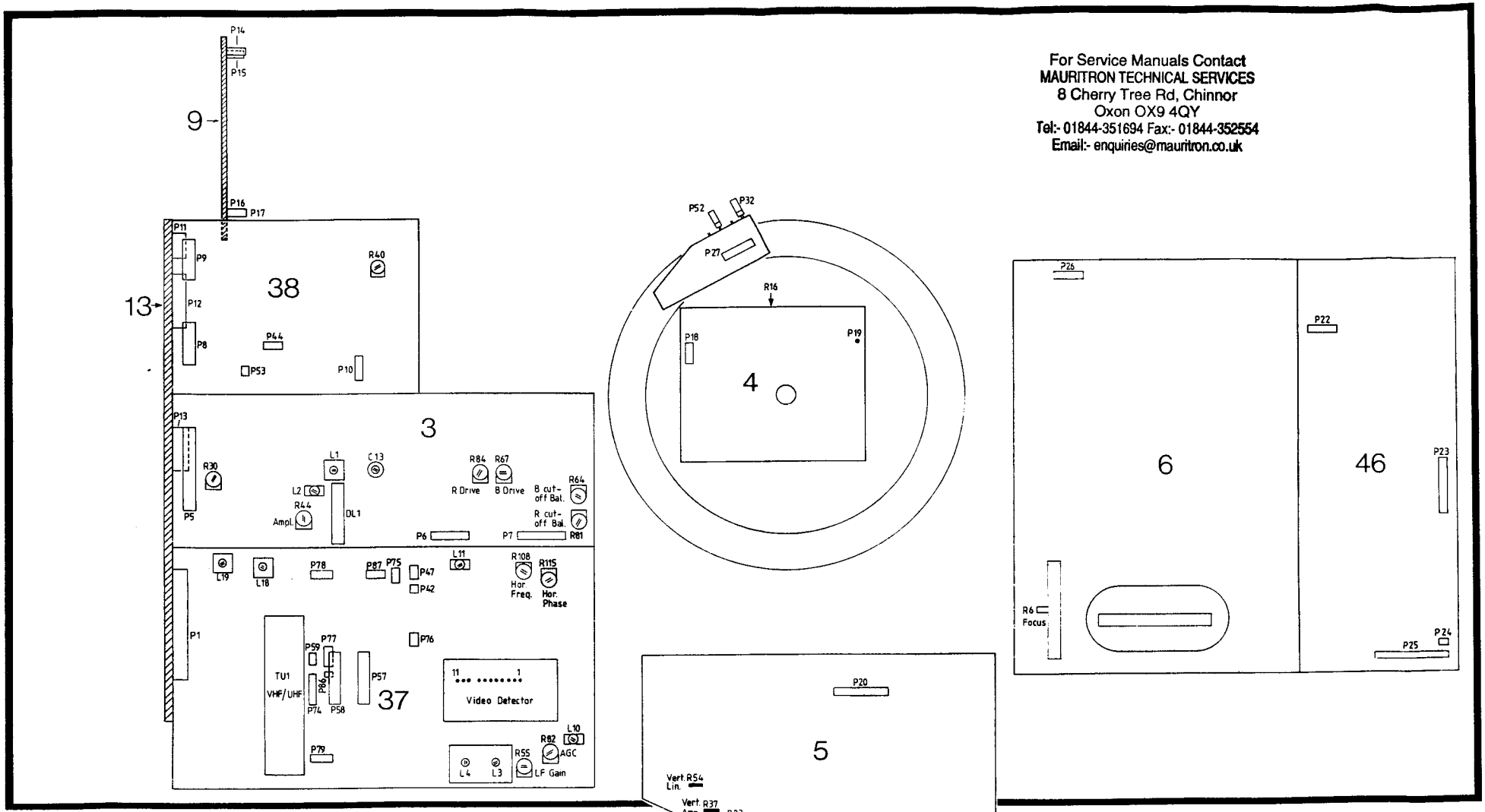
B. I serie med antennekablet indskydes en attenuator.
   AGC potentiometeret 37R82 drejes med uret indtil stop (set fra komponentsiden). Ved hjælp af attenuatoren øges antennesignalet indtil der ikke længere kan ses støj (sne) i billedet.
   37R82 drejes nu mod uret indtil der igen lige netop ses støj (sne) i billedet, og derefter drejes 37R82 tilbage (med uret) indtil støjen lige netop forsvinder.

**LF Gain**

Lyden reguleres til maksimum ved hjælp af Video Terminalen.
Ved 30% lydmodulation justeres med 37R55 til der måles 4,50 $V_{pp}$ på 37TR11's kollektor.

| | |
|---|---|
| 3. PC3, PAL DEKODER | Kortslut colour killeren ved at forbinde 3TP5 til 3TP6. |
| **Pal dekoder** | Kortslut DL udgangen ved at forbinde 3TP3 til 3TP4. |
| **(herunder cut-off, drive)** | Juster 3C13 til så korrekt fritløbende frekvens som muligt. |
| Reference oscillator | Fjern de to kortslutninger. |
| Pal-delay: | Et NTSC signal tilsluttes modtageren. |
| Ampl. | Colour killeren kortsluttes ved at forbinde 3TP5 til 3TP6.<br>Et oscilloskop tilsluttes 3TP18.<br>Juster 3R44 (ampl.) til minimum hannoverblinds i 3TP18.<br>Kortslutningen fjernes. |
| Phase | Et PAL signal tilsluttes modtageren.<br>Colour killeren kortsluttes ved at forbinde 3TP5 til 3TP6.<br>Et oscilloskop tilsluttes 3TP18.<br>Juster 3L1 til minimum hannoverblinds i 3TP18. |
| Preset saturation | Farvemætning drejes til »5«.<br>Lys og kontrast drejes til minimum.<br>Forøg kontrast indtil testbilledets felt for 75% hvid netop er synlig.<br>Juster 3R30 indtil blå farvefelt, (75%) netop er mindre synligt end 75% hvid. |
| Cut-off | Kortslut 3TP1 og 3TP2.<br>Juster 4R16 indtil der er 15 V over den af 4R3, 4R6 eller 4R9, der har det mindste spændingsfald. |
| Drive | Juster 3R67(B) og 3R84(R) indtil hvidt = 6500k° (lum. D).<br>Referencerør bør anvendes. |
| Cut-off balance | Juster 3R64(B) og 3R81(R) indtil de mørke partier i billedet er farveløse.<br>(Skal foretages med korrekt lysindstilling).<br>Referencerør bør anvendes. |

For Service Manuals Contact
MAURITRON TECHNICAL SERVICES
8 Cherry Tree Rd, Chinnor
Oxon OX9 4QY
Tel:- 01844-351694 Fax:- 01844-352554
Email:- enquiries@mauritron.co.uk




For Service Manuals Contact
MAURITRON TECHNICAL SERVICES
8 Cherry Tree Rd, Chinnor
Oxon OX9 4QY
Tel:- 01844-351694 Fax:- 01844-352554
Email:- enquiries@mauritron.co.uk

## ADJUSTMENTS

During the following adjustments a normal CTV test pattern must be applied to the receiver, if nothing else is mentioned.

1. PICTURE GEOMETRY

**Horizontal Deflection**

Horizontal Frequency

Short-circuit 37TP12 to 37TP15 (37IC5 pin 14 to pin 12).
Adjust to correct line frequency with 37R108.
Remove short-circuit after adjustment.

E/W Parabola

Adjust with 5R20.

Horizontal Centering

Adjust with 37R115 (Hor. phase).

Horizontal Amplitude

Adjust with 5R23.

Horizontal Linearity

Adjust with 5L10.

Focus

Brightness and colour saturation potentiometers are set to nominal values.
Contrast potentiometer is set to maximum contrast.

Adjust with 6R6 to maximum sharpness seen 9-10 cm from screen edge.

**Vertical Deflection**

Vertical Amplitude

Adjust 5R37 to correct position in picture at the top of the screen.

Vertical Linearity

Adjust with 5R54.

Vertical Centering

Adjust with 5R58.

2. AGC

In order to make correct AGC adjustment the receiver must be connected to an aerial signal of 0.5 mV as described in point A. If an aerial signal of 0.5 mV is not available, it is possible to make a fairly good adjustment as described in point B.

A. Connect a 0.5 mV aerial signal in VHF Band III to the receiver, and set at correct test picture.
Connect voltmeter to 37TP9 (approx. 9 V is measured).
Turn 37R82 clockwise until stop (seen from the component side).
Then turn 37R82 counter-clockwise to the point where the voltage measured just drops by 0.5 V.

B. An attenuator is inserted in series with aerial cable.
Turn AGC potentiometer 37R82 clockwise till stop (seen from the component side). Increase aerial signal with attenuator till no noise (snow) can be seen in the picture.
Then turn 37R82 counter-clockwise till noise (snow) can again just be seen in the picture, and then turn 37R82 back (clockwise) until noise just disappears.

**AF Gain**

Set sound to maximum by means of the Video Terminal.
At 30% sound modulation adjust with 37R55 till 4.50 $V_{pp}$ is measured at the collector of 37TR11.

3. PC3, PAL DECODER
**PC3, Pal Decoder (incl. Cut-off, Drive)**
Reference Oscillator

Short-circuit colour killer by connecting 3TP5 to 3TP6.
Short-circuit output of 3DL1 by connecting 3TP3 to 3TP4.
Adjust 3C13 to most free-running frequency.
Remove the two short-circuits.

Pal-Delay:
Amplitude

Apply a NTSC signal to receiver.
Short-circuit colour killer by connecting 3TP5 to 3TP6.
Connect an oscilloscope to 3TP18.
Adjust 3R44 (ampl.) to minimum »hannover blinds« in 3TP18.
Remove short-circuit.

Phase

Apply a PAL signal to receiver.
Short-circuit colour killer by connecting 3TP5 to 3TP6.
Connect an oscilloscope to 3TP18.
Adjust 3L1 to minimum »hannover blinds« in 3TP18.

Preset Saturation

Set colour saturation to »5«.
Set brightness and contrast to minimum.
Increase contrast till field for 75% white is just visible.
Adjust 3R30 till field for 75% blue is just less visible than 75% white.

Cut-off

Short-circuit 3TP1 and 3TP2.
Adjust 4R16 till 15 V is measured across the one of 4R3, 4R6, or 4R9 with the lowest voltage drop.

Drive

Adjust 3R67 (B) and 3R84 (R) till white = 6500 k° (lum. D).
Reference tube should be used.

Cut-off Balance

Adjust 3R64 (B) and 3R81 (R) till the dark fields in the picture are colourless.
(Must be made with correct brightness setting).
Reference tube should be used.

For Service Manuals Contact
MAURITRON TECHNICAL SERVICES
8 Cherry Tree Rd, Chinnor
Oxon OX9 4QY
Tel:- 01844-351694 Fax:- 01844-352554
Email:- enquiries@mauritron.co.uk