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SERVICE

Colour Television

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Functional diagrams
K7 - PAL-system



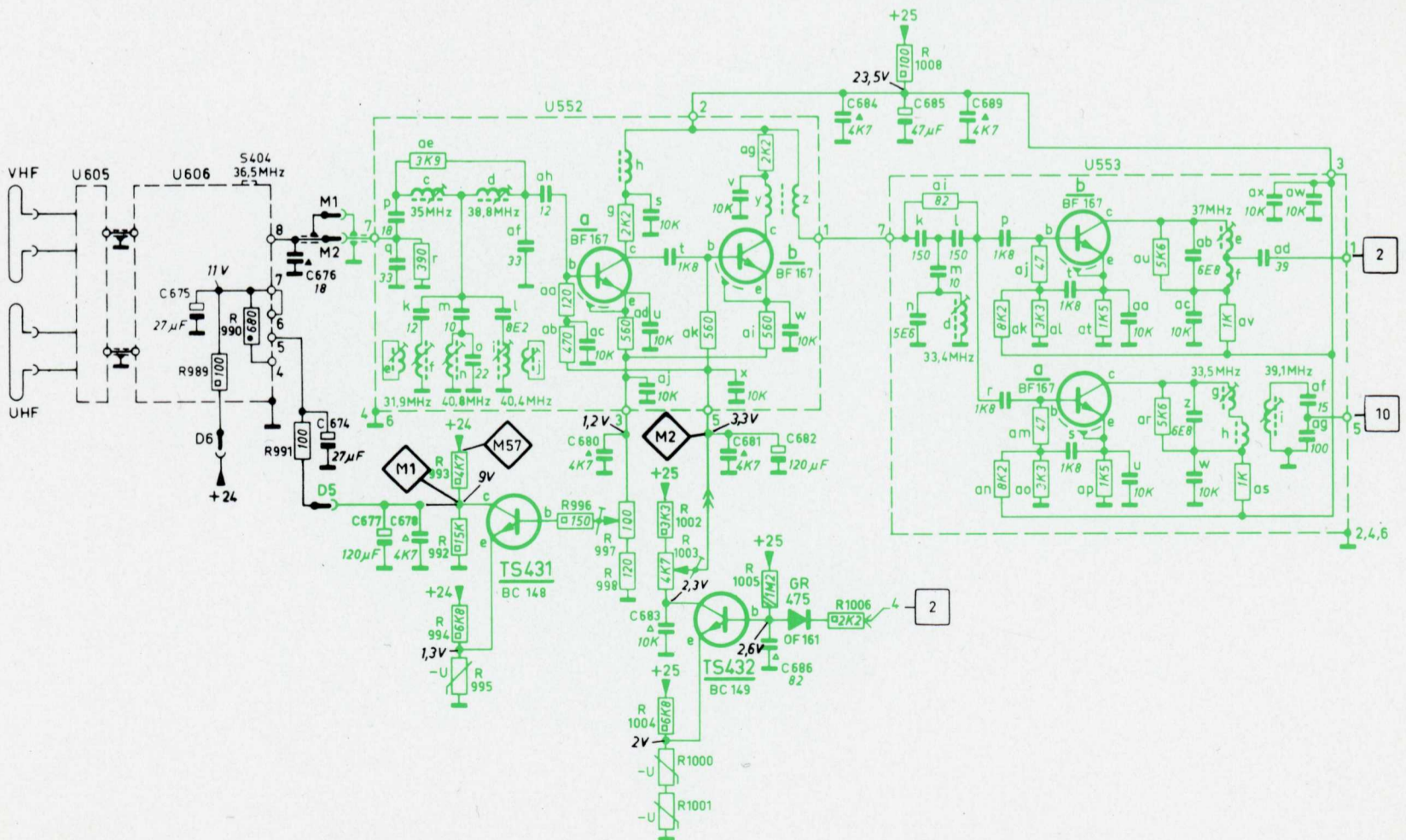
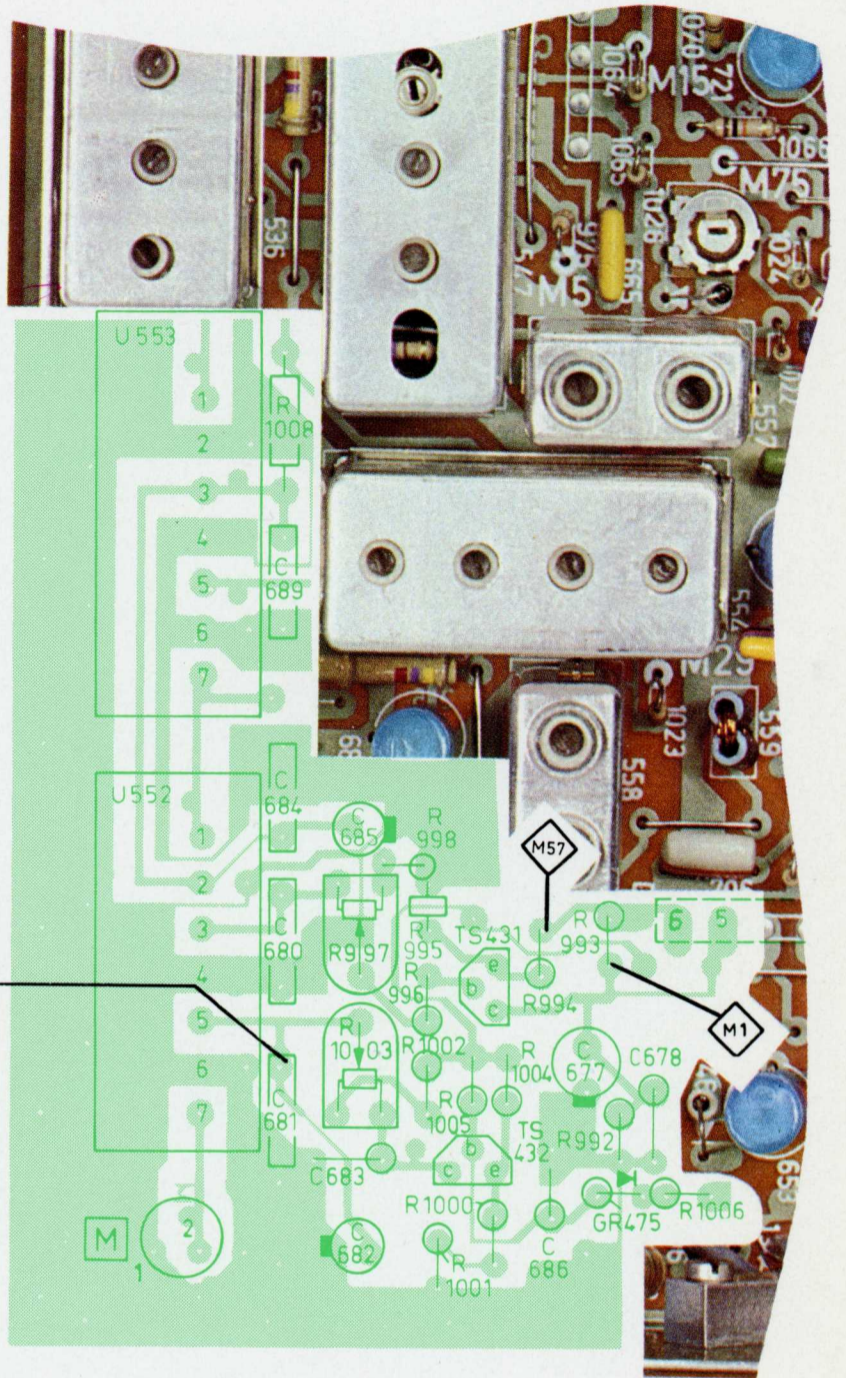
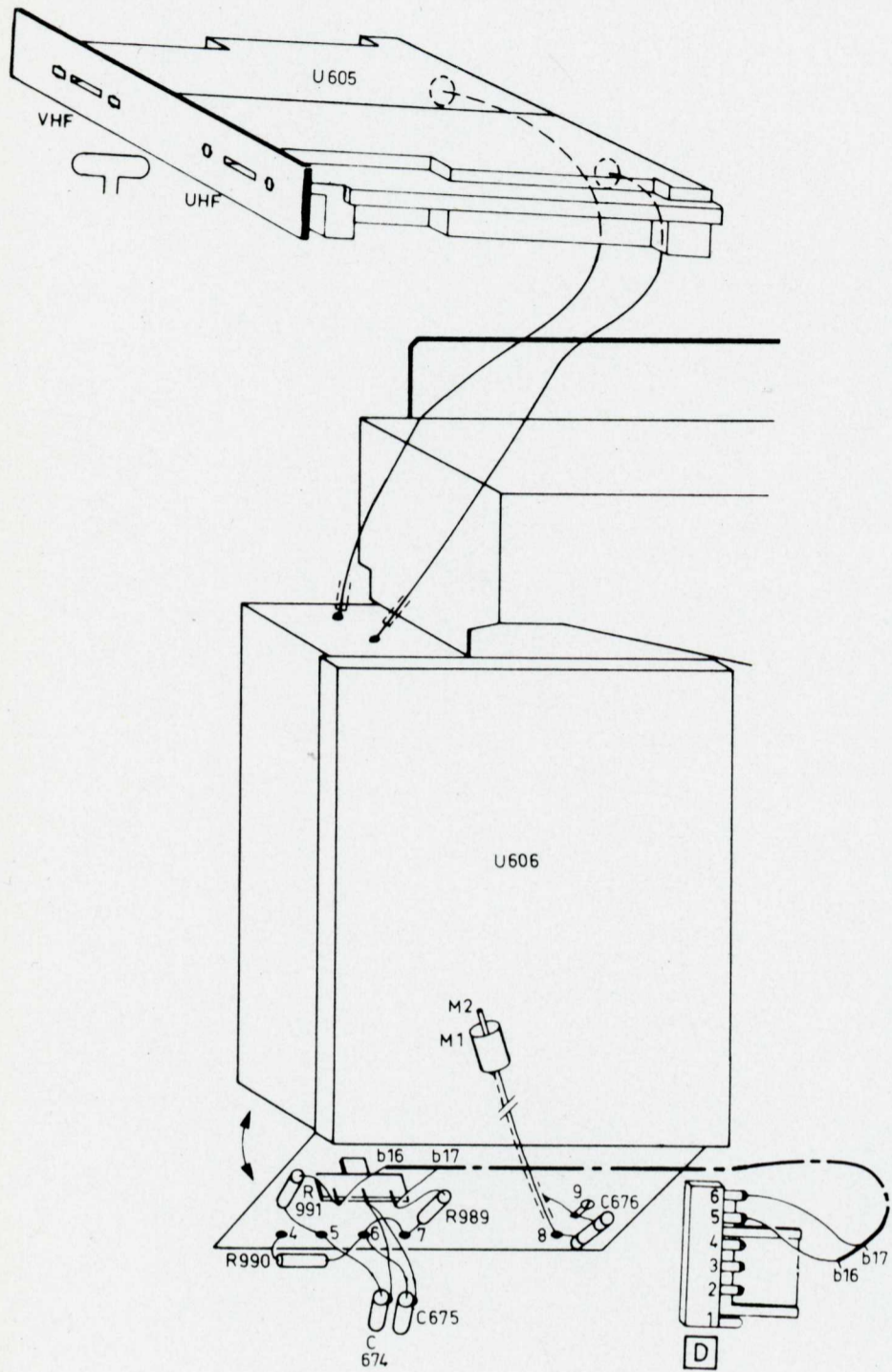


Functional diagrams
K7 - PAL-system

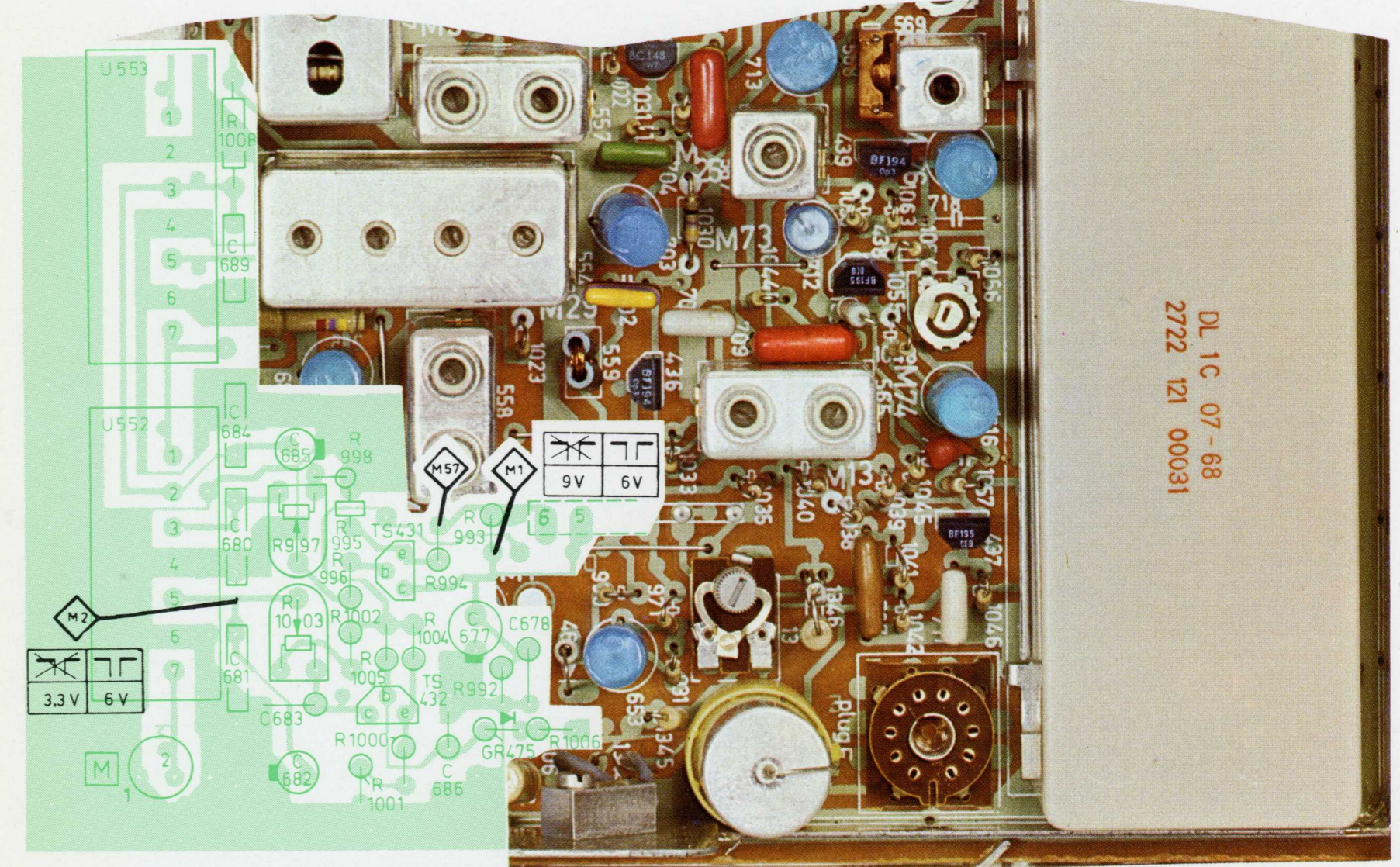
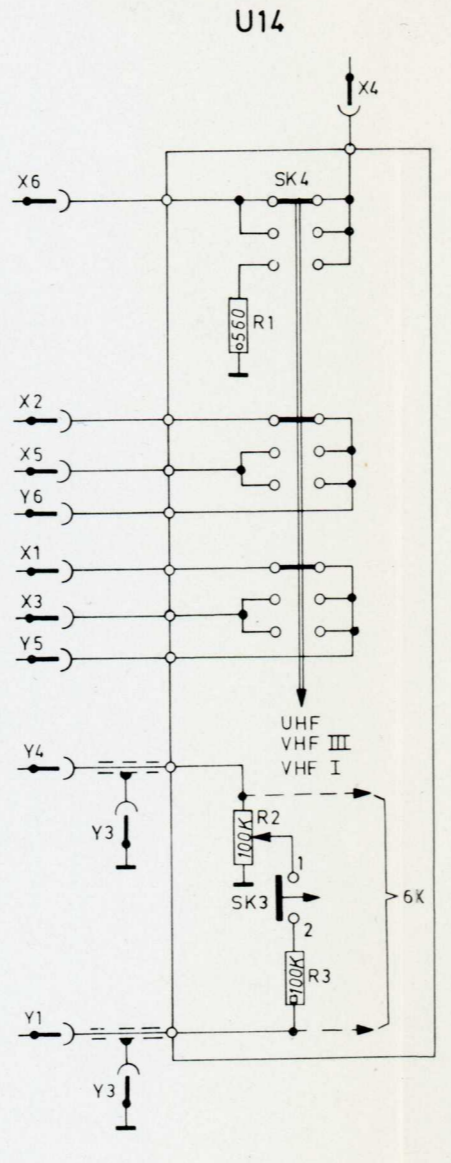
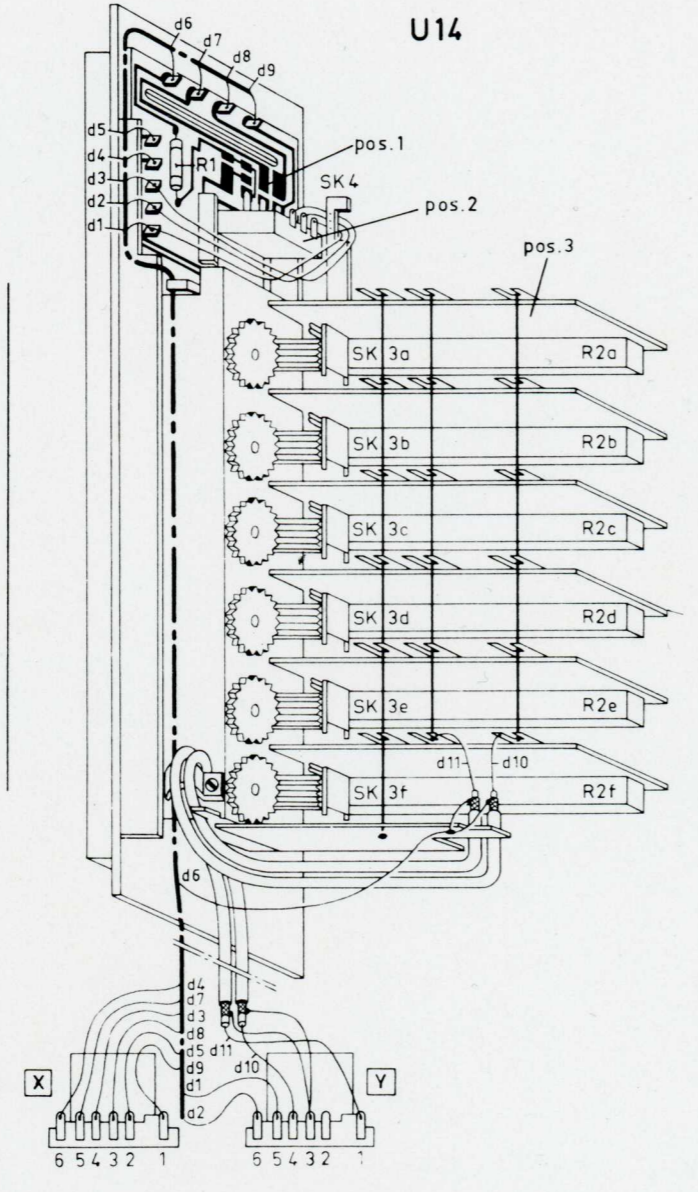
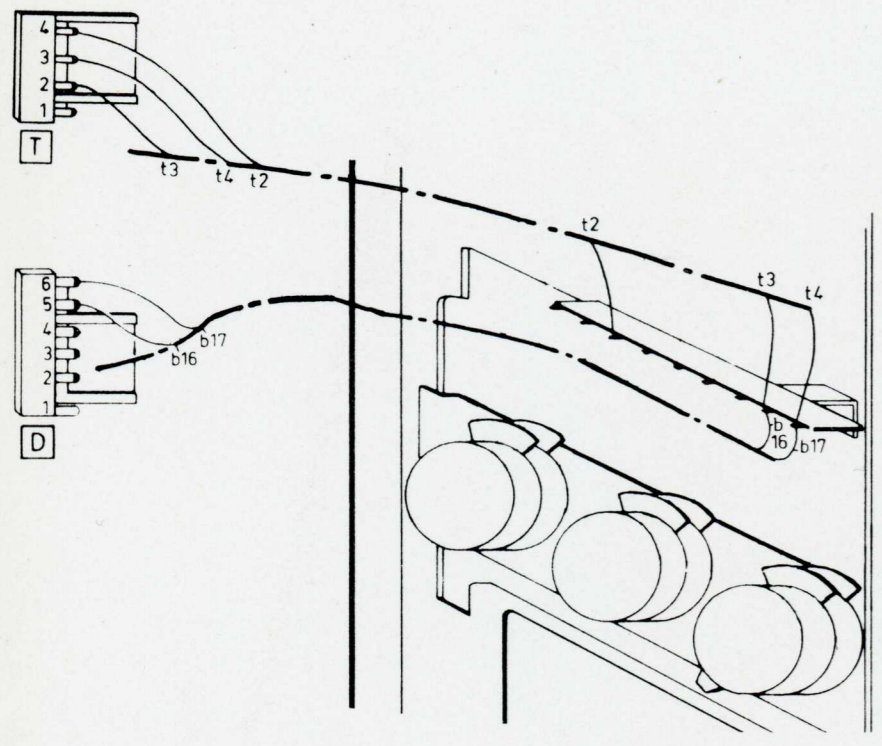
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N.V. PHILIPS' GLOEILAMPENFABRIEKEN - EINDHOVEN - THE NETHERLANDS
CENTRAL SERVICE DEPARTMENT

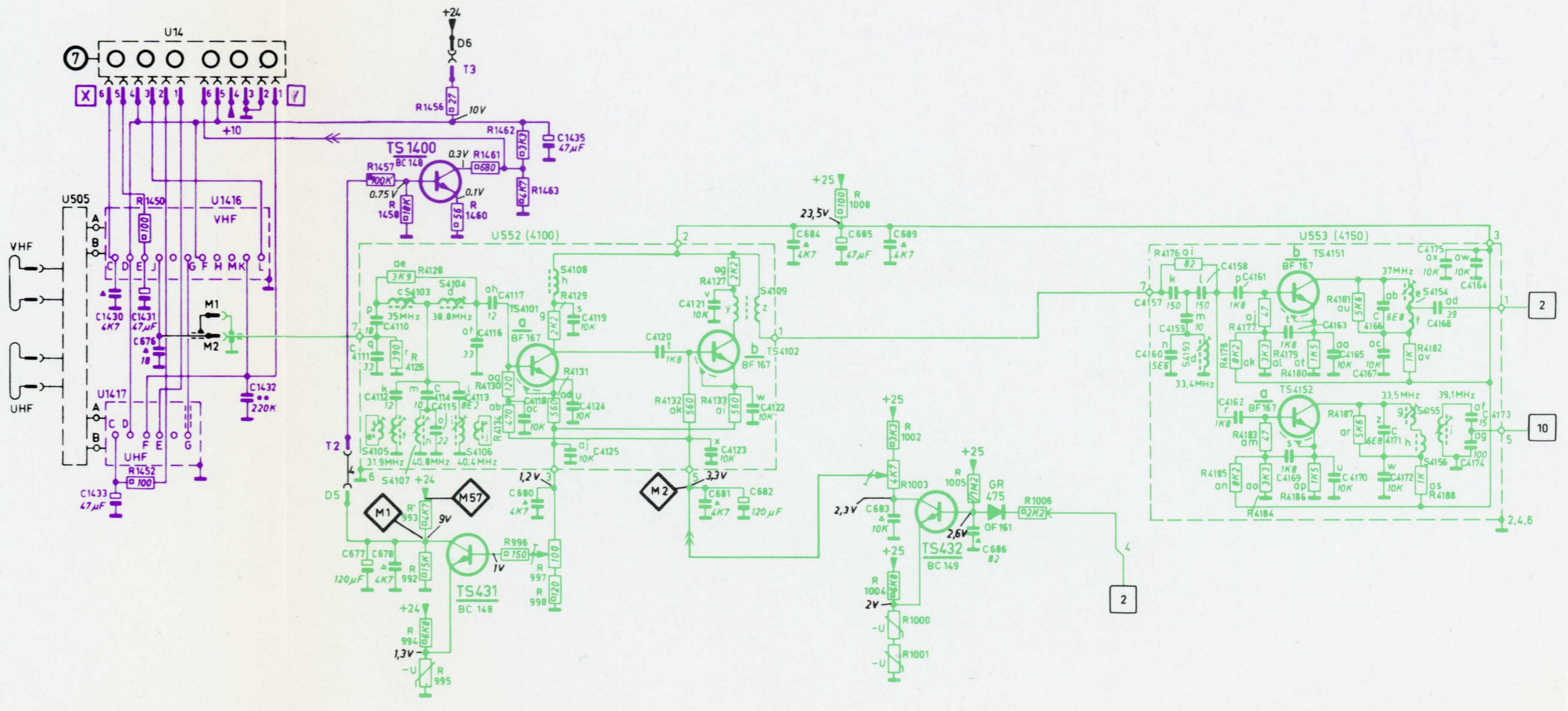
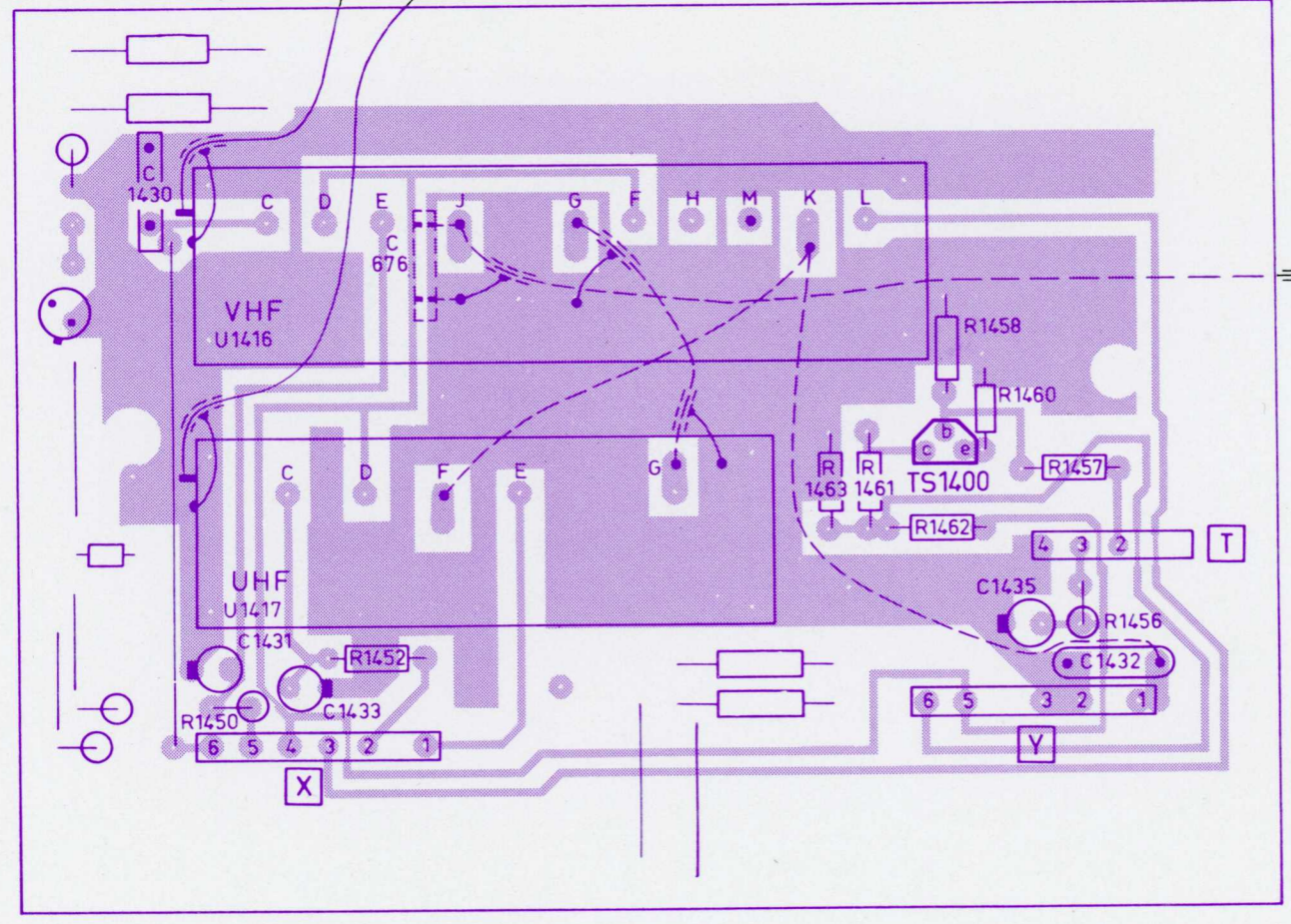
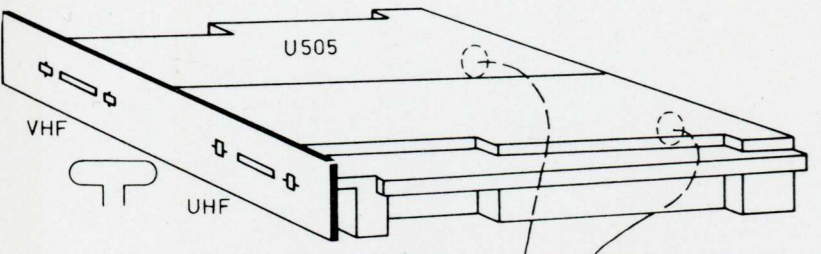
- UHF-VHF Kanaalkiezer + MF-versterker 1 + 2 + A.V.R.
- UHF-VHF Kanalwähler + ZF-Verstärker 1 + 2 + A.V.R.
- UHF-VHF Selettore di canali + Amplificatore FI 1 + 2 + C.A.G.
- UHF-VHF Kanalvælger + MF-forstærker 1 + 2 + A.G.C.
- UHF-VHF Kanavanvalitsin + VT-vahvistin 1 + 2 + A.T.S.
- UHF-VHF Channel selector + IF-amplifier 1 + 2 + A.G.C.



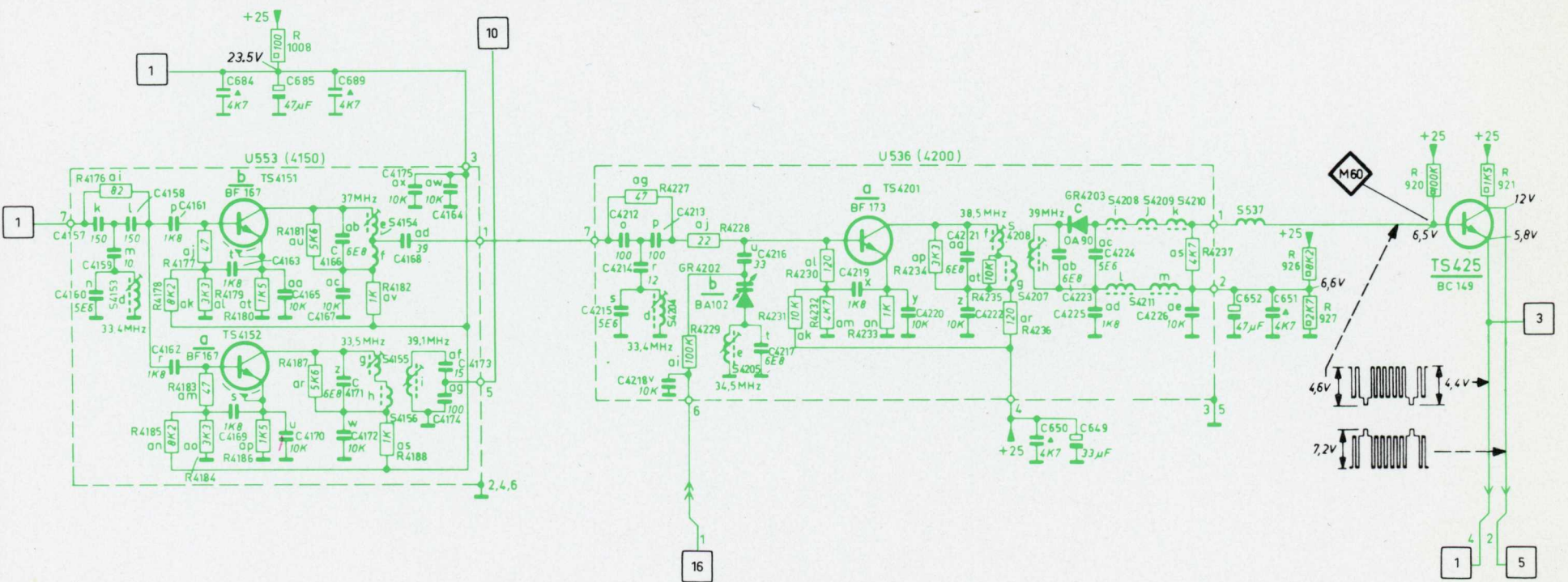
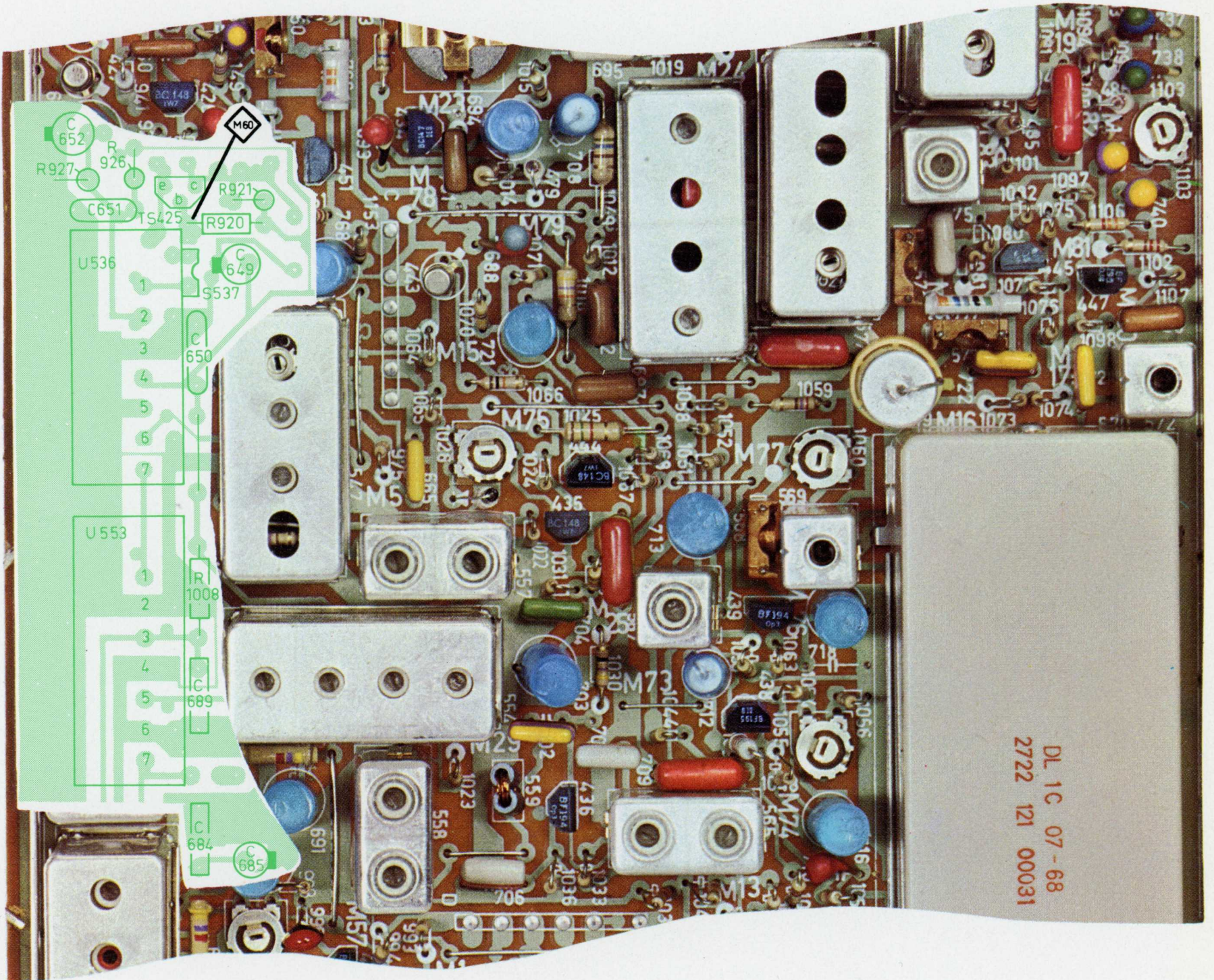
UHF-VHF Kanaalkiezer + MF-versterker 1 + 2 + A.V.R.
 UHF-VHF Kanalwähler + ZF-Verstärker 1 + 2 + A.V.R.
 UHF-VHF Selettore di canali + Amplificatore FI 1 + 2 + C.A.G.
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 UHF-VHF Kanavanvaltsin + VT-vahvistin 1 + 2 + A.T.S.
 UHF-VHF Channel selector + IF-amplifier 1 + 2 + A.G.C.



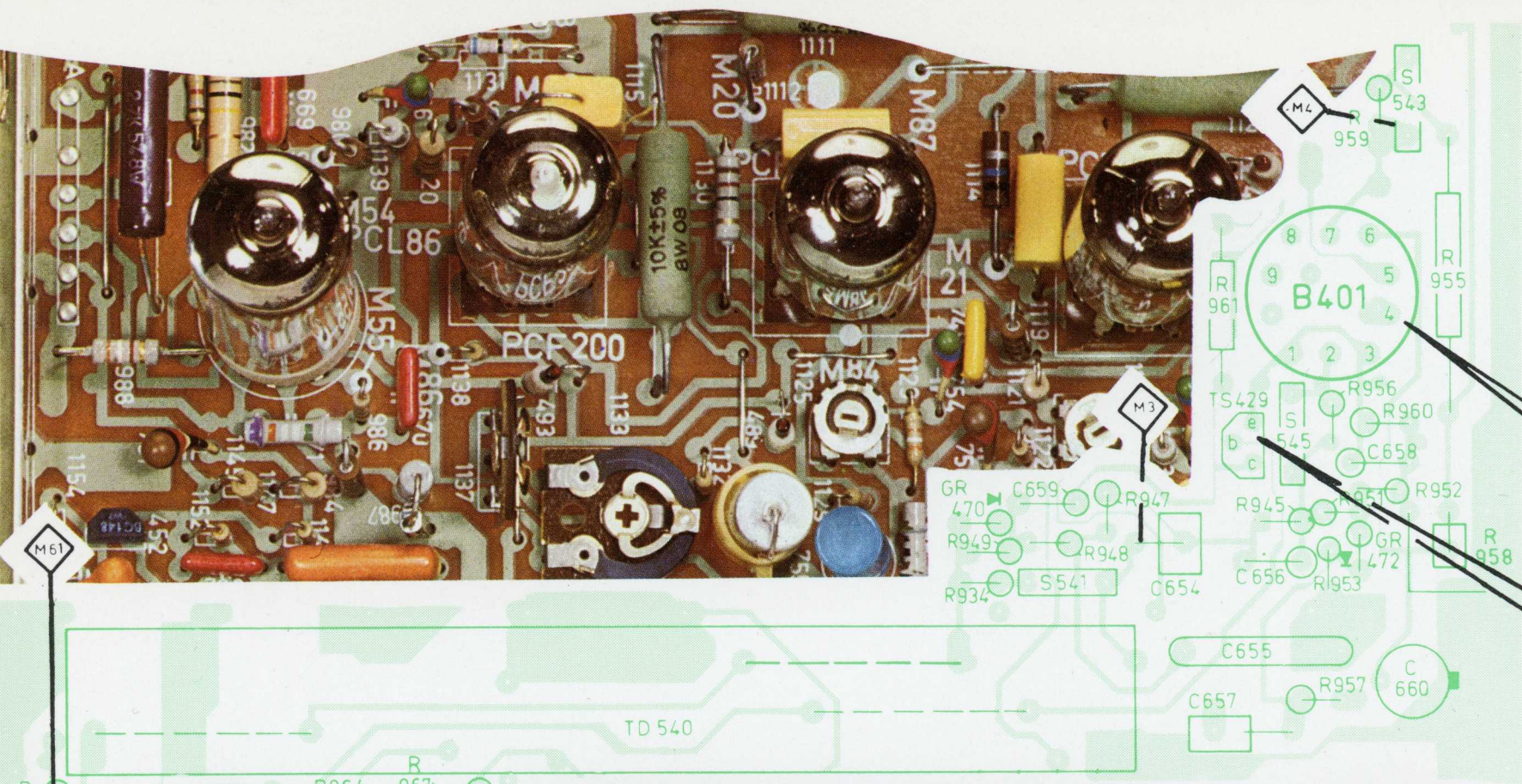
DL 1 C 07 - 68
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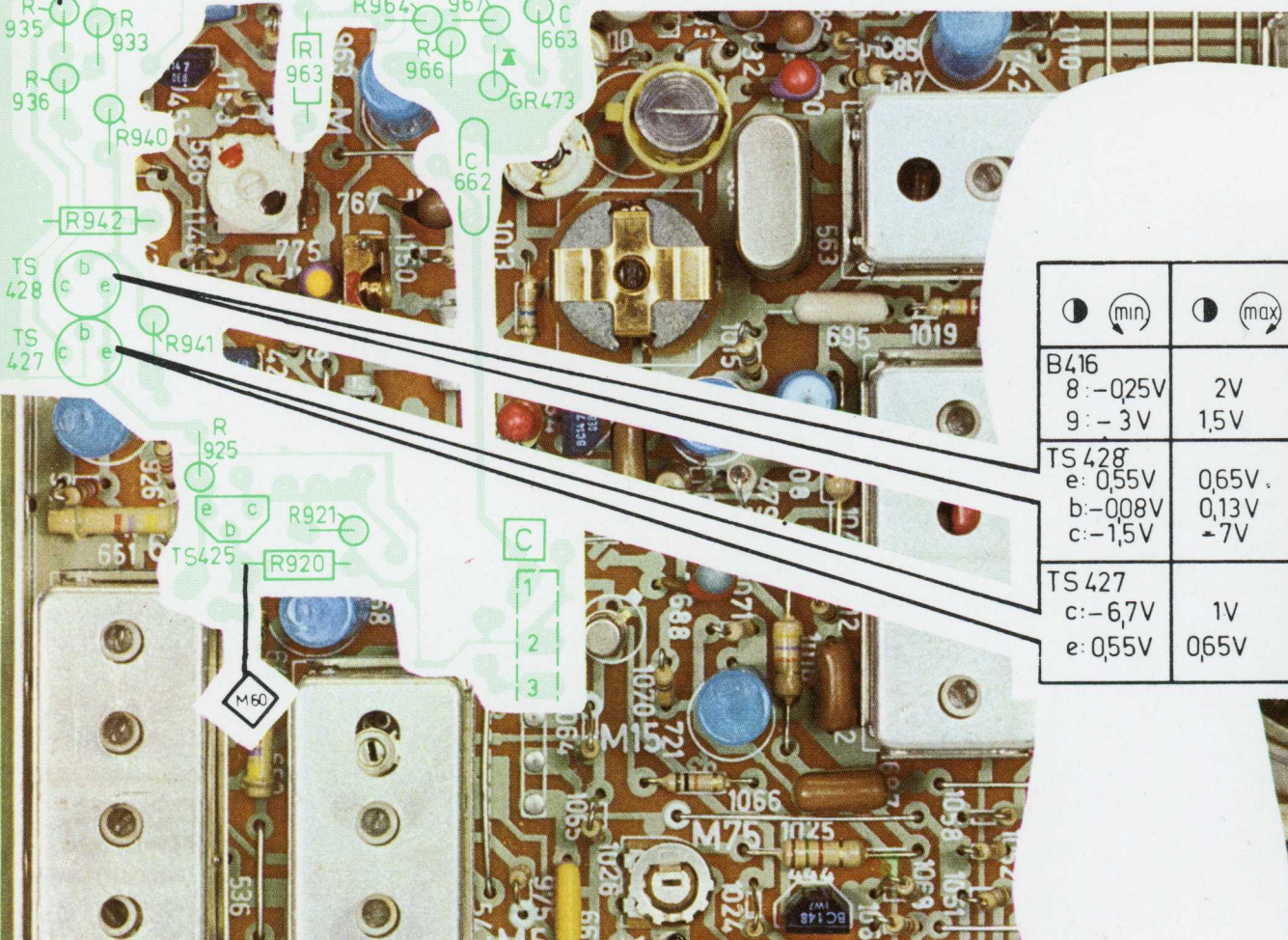
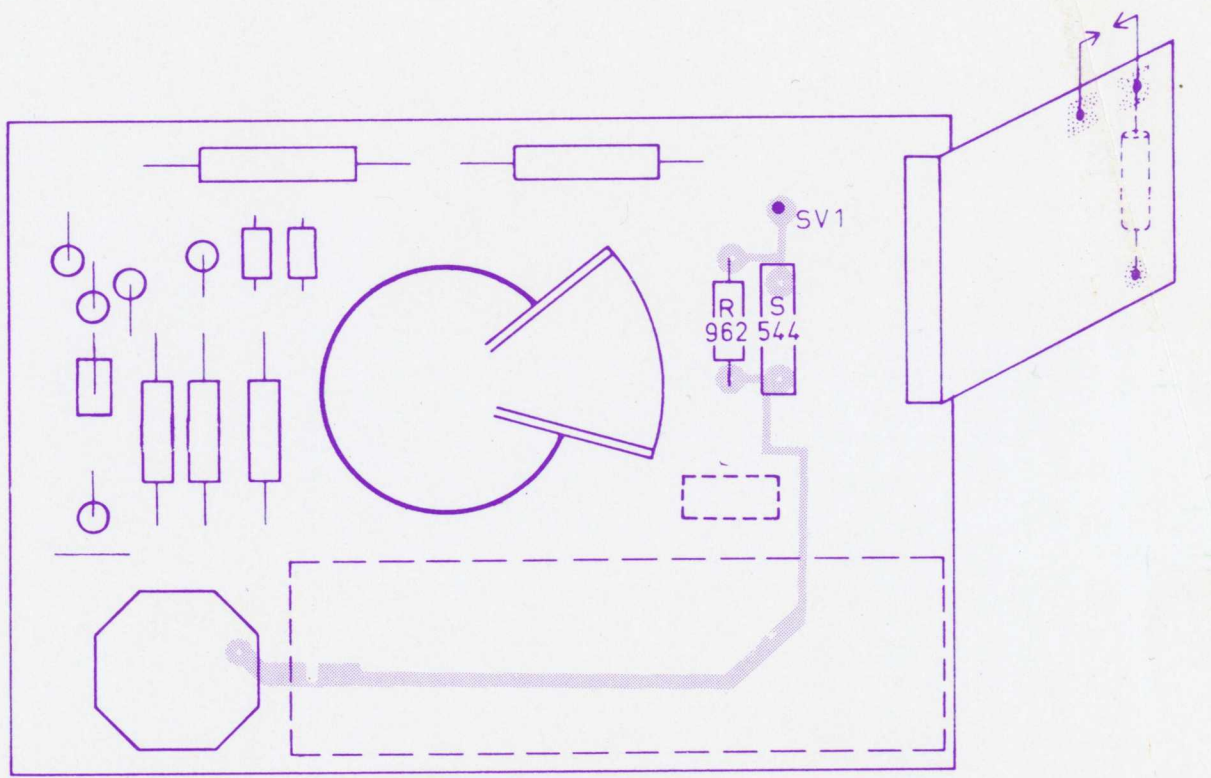
Luminantie - MF-versterker + Detektor
Leuchtdichte - ZF-Verstärker + Detektor
Brillo - Amplificatore-FI + Rivelatore
Luminans - MF-forstærker + Detektor
Luminanssi - VT-Vahvistin + Ilmaisin
Luminance - IF-amplifier + Detector



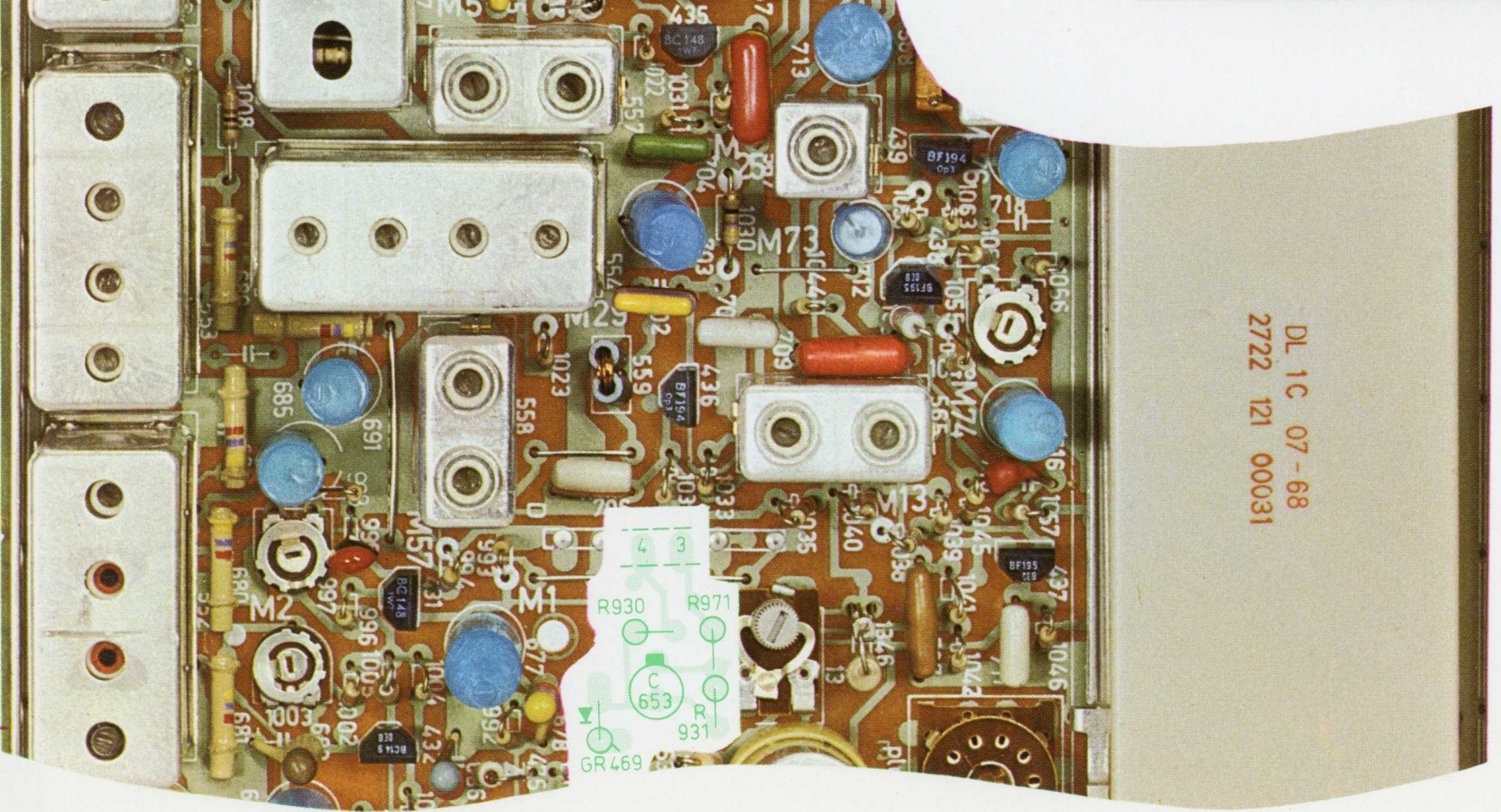
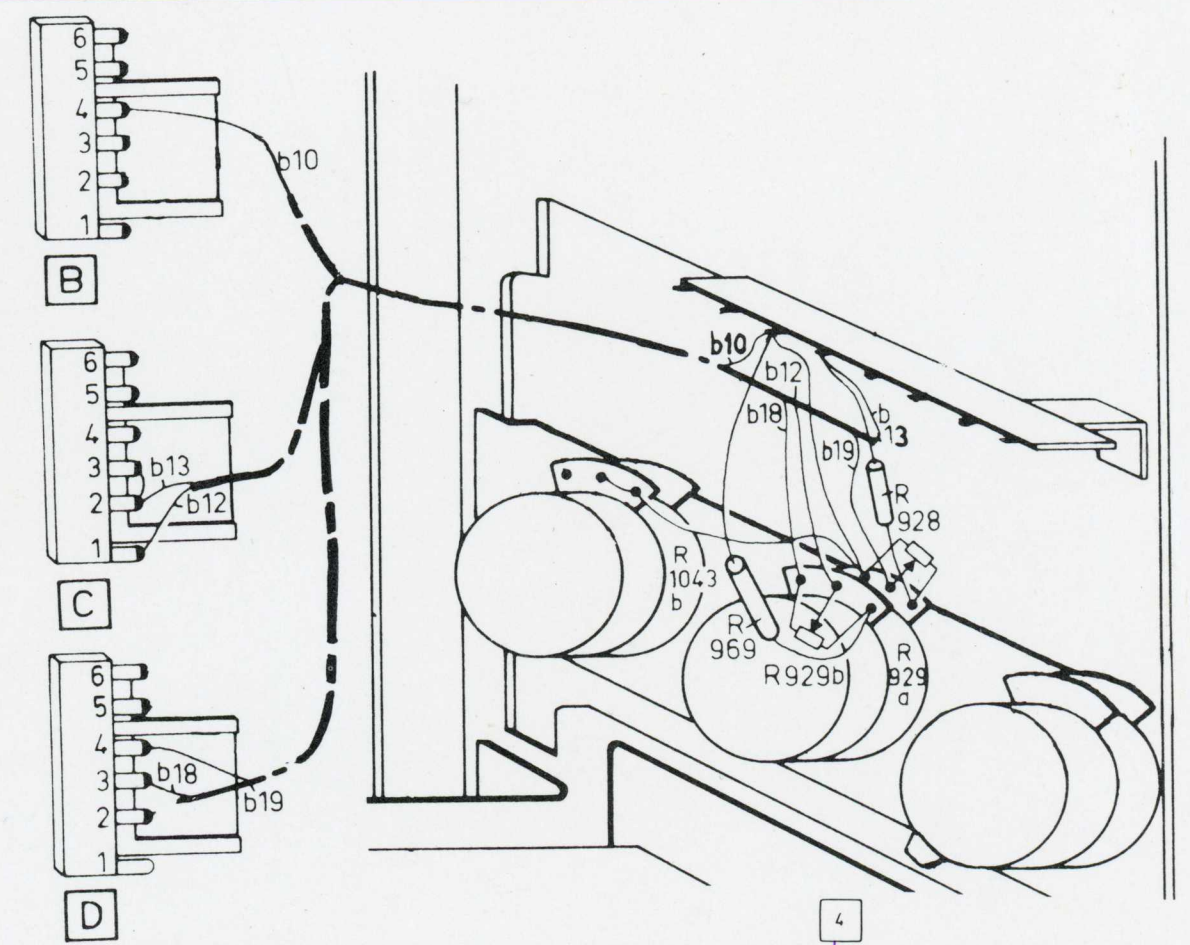
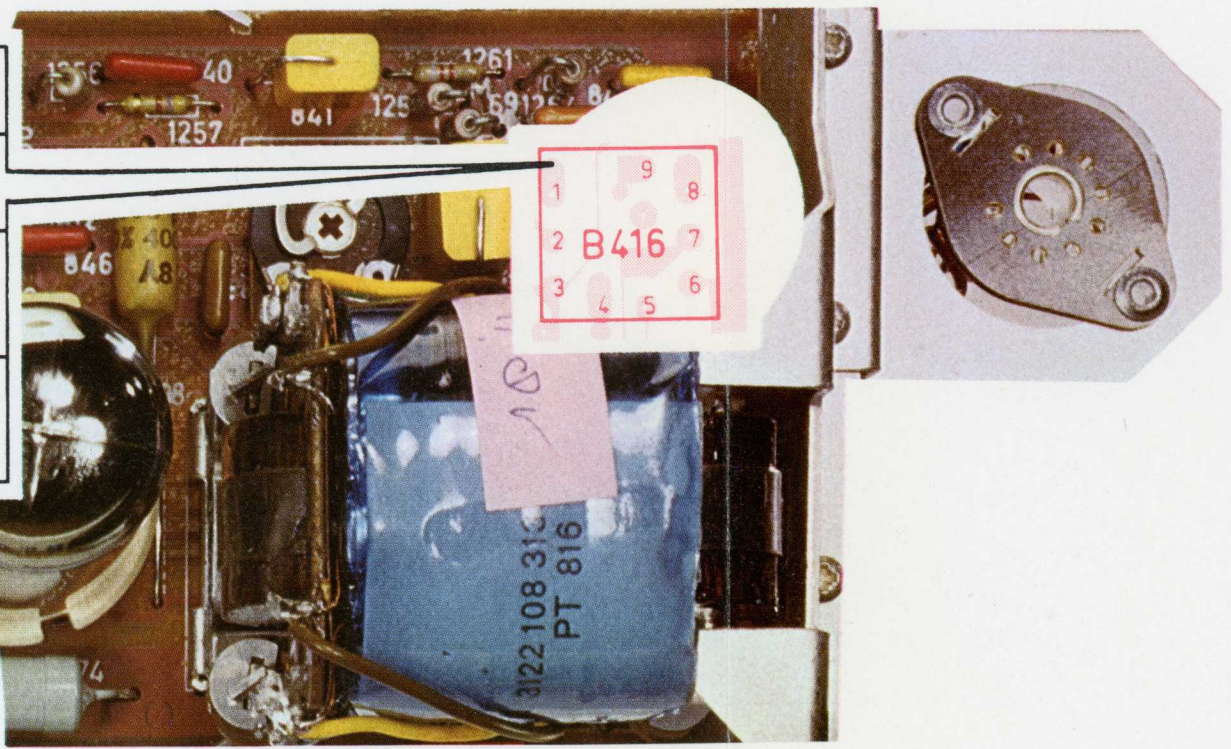
Luminantie - Verstärker
 Leuchtdichte - Verstärker
 Brillo - Amplificatore
 Luminans - Forstærker
 Luminanssi - Vahvistin
 Luminance - Amplifier



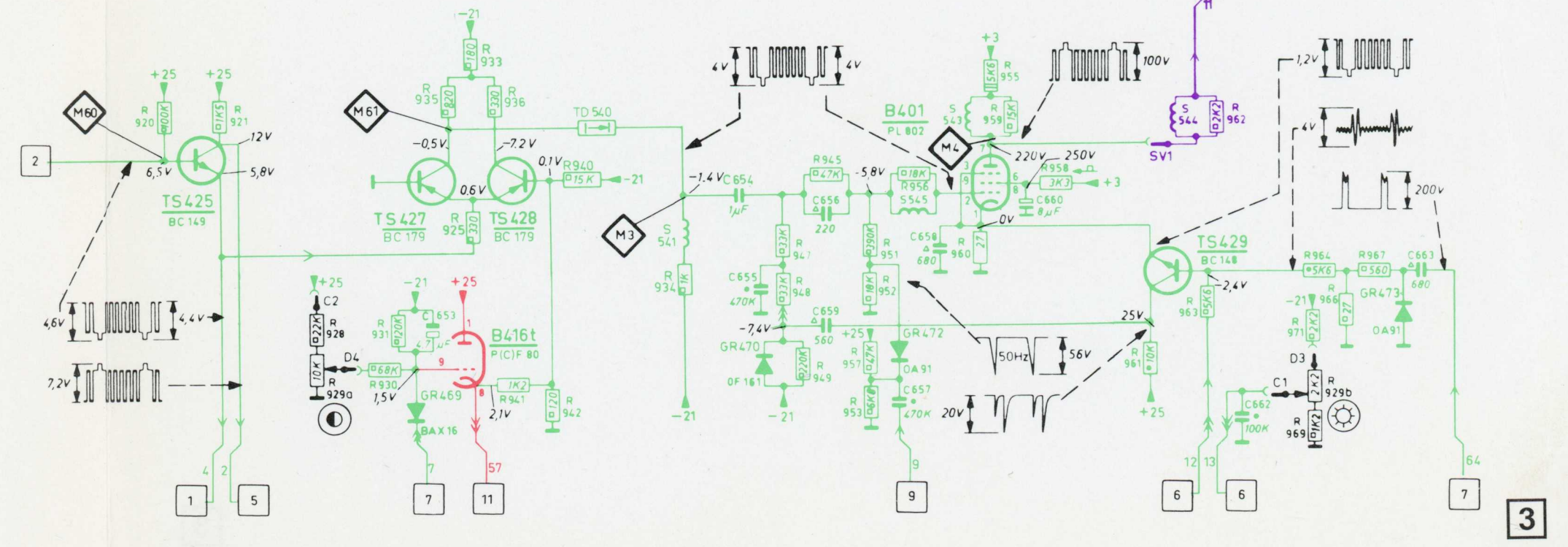
⊙ (min)	⊙ (max)
B 401	
1: 0V	0,8V
2: -4,5V	-1,3V
6: 250V	215V
7: 220V	150V
TS 429	
b: -25V	-0,8V



⊙ (min)	⊙ (max)
B 416	
8: -0,25V	2V
9: -3V	1,5V
TS 428	
e: 0,55V	0,65V
b: -0,08V	0,13V
c: -1,5V	-7V
TS 427	
c: -6,7V	1V
e: 0,55V	0,65V

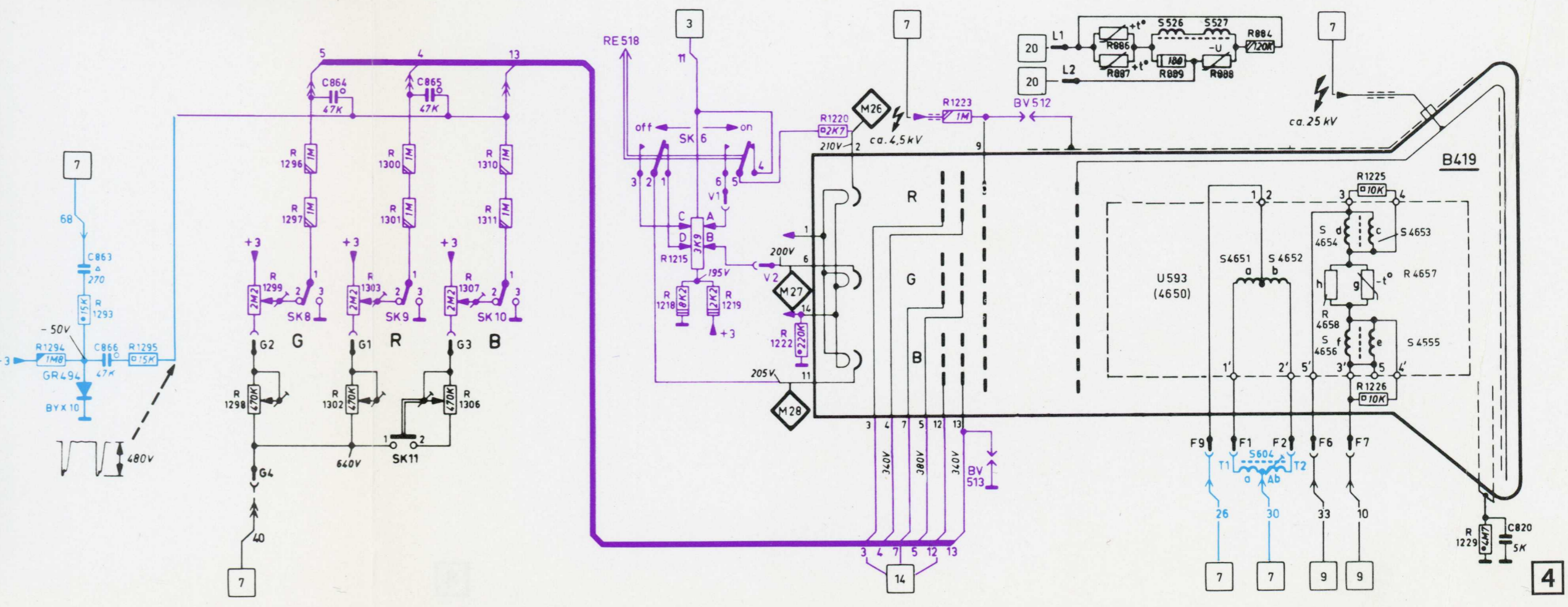
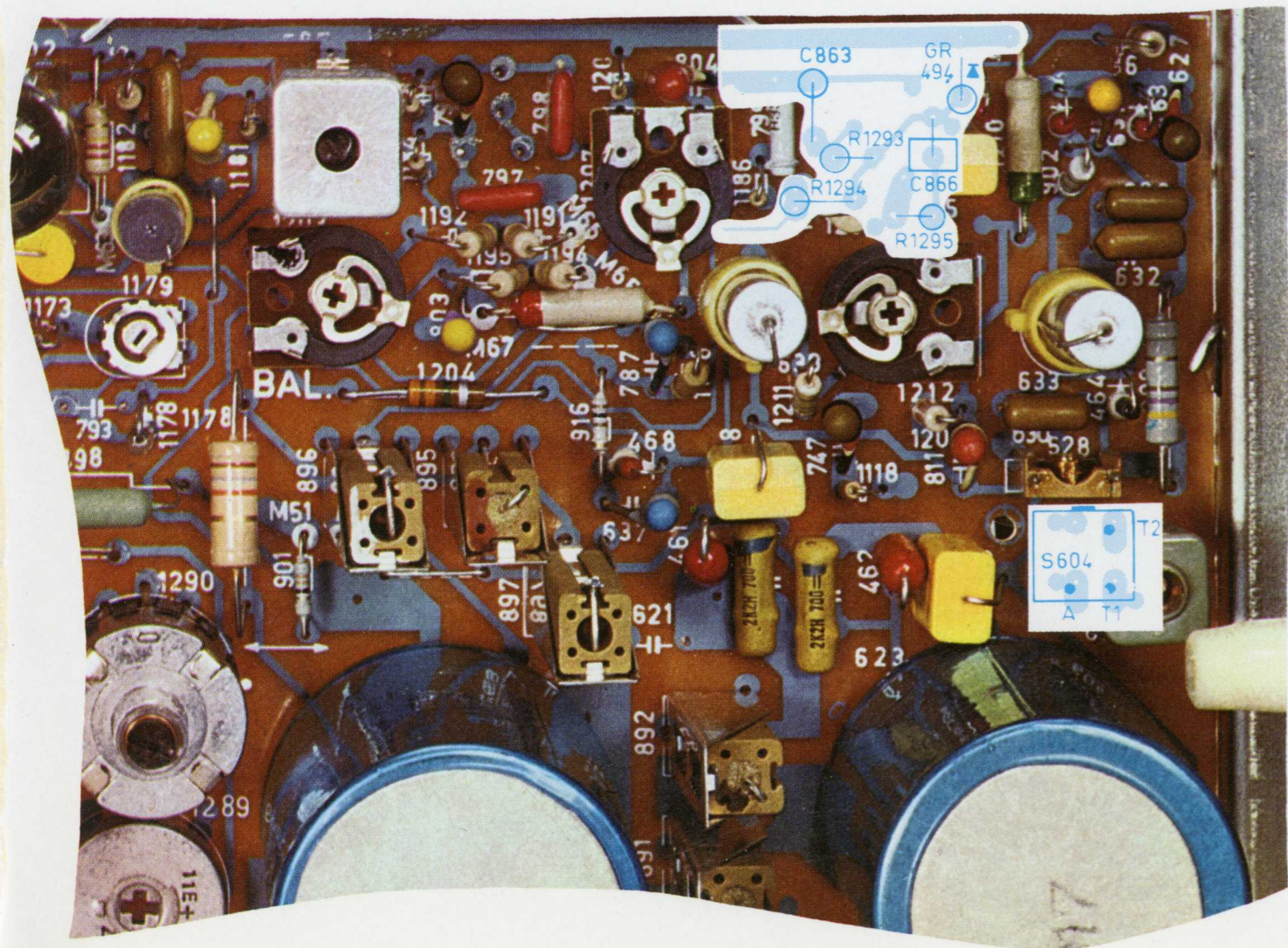
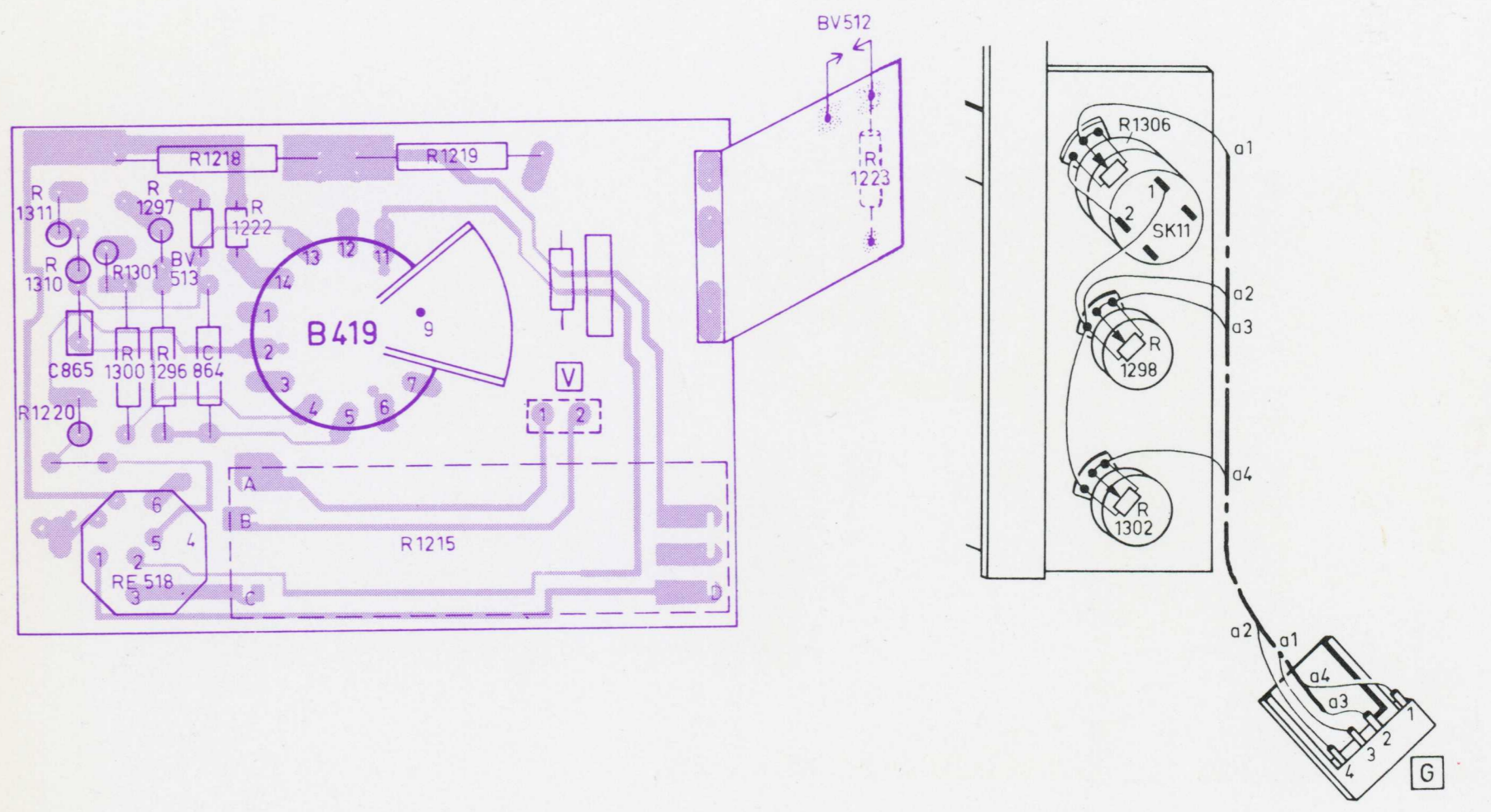
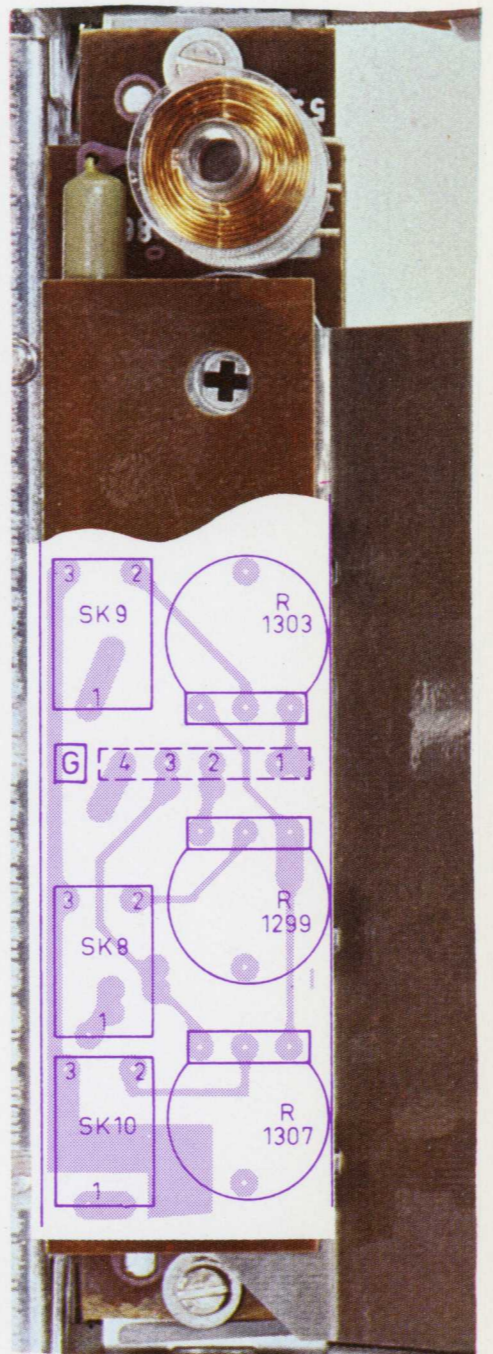
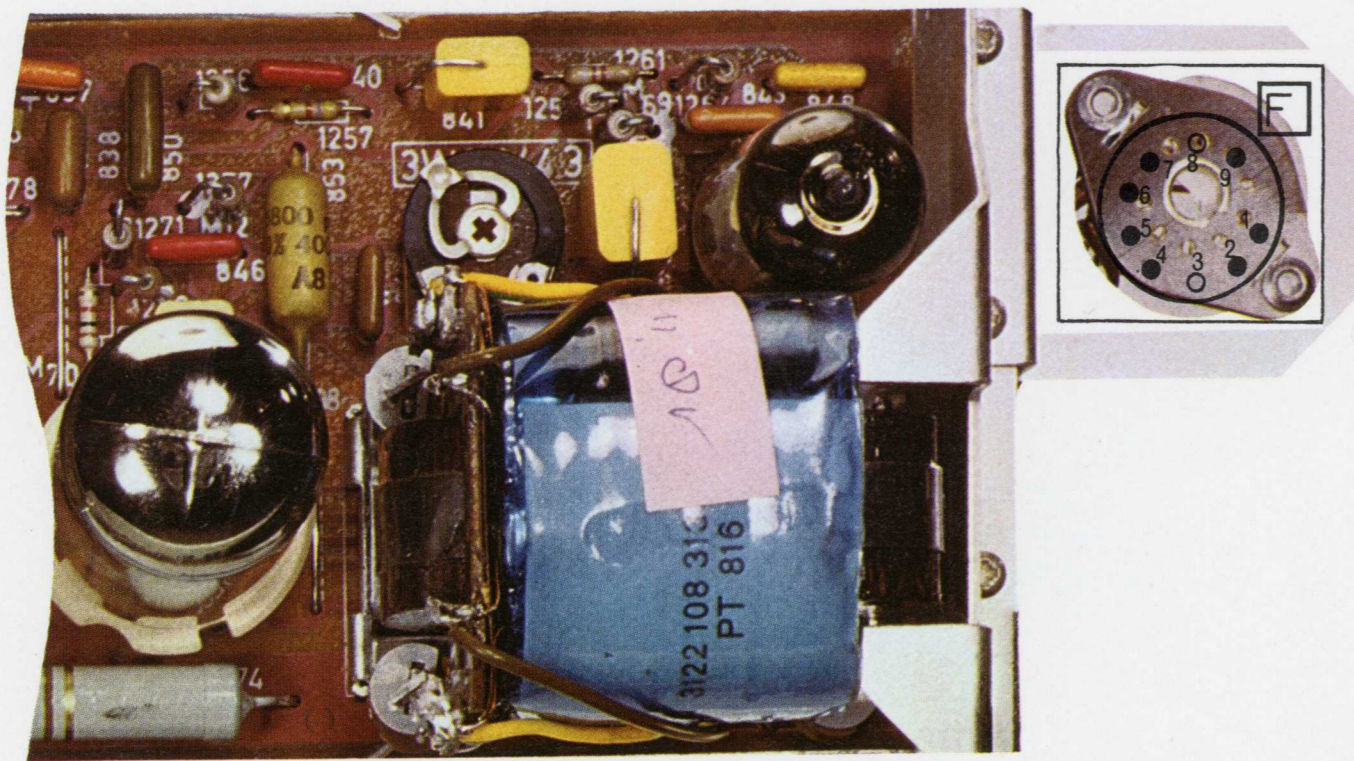
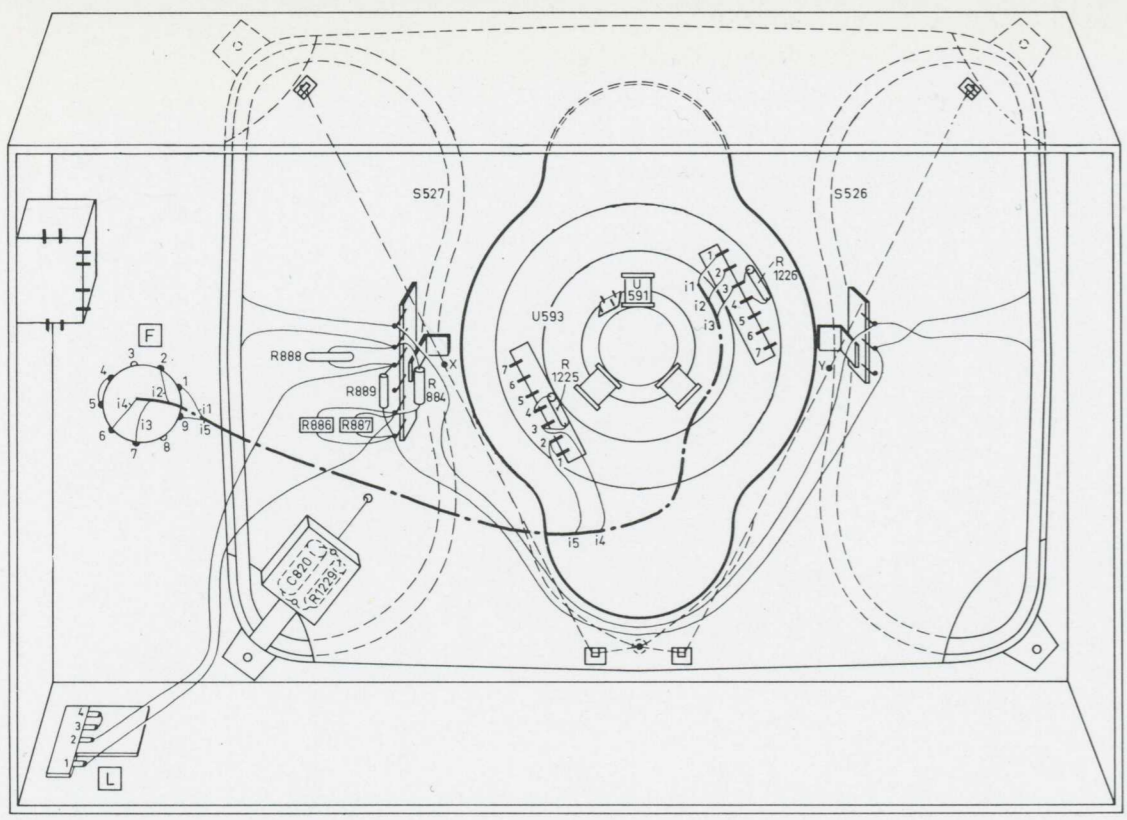


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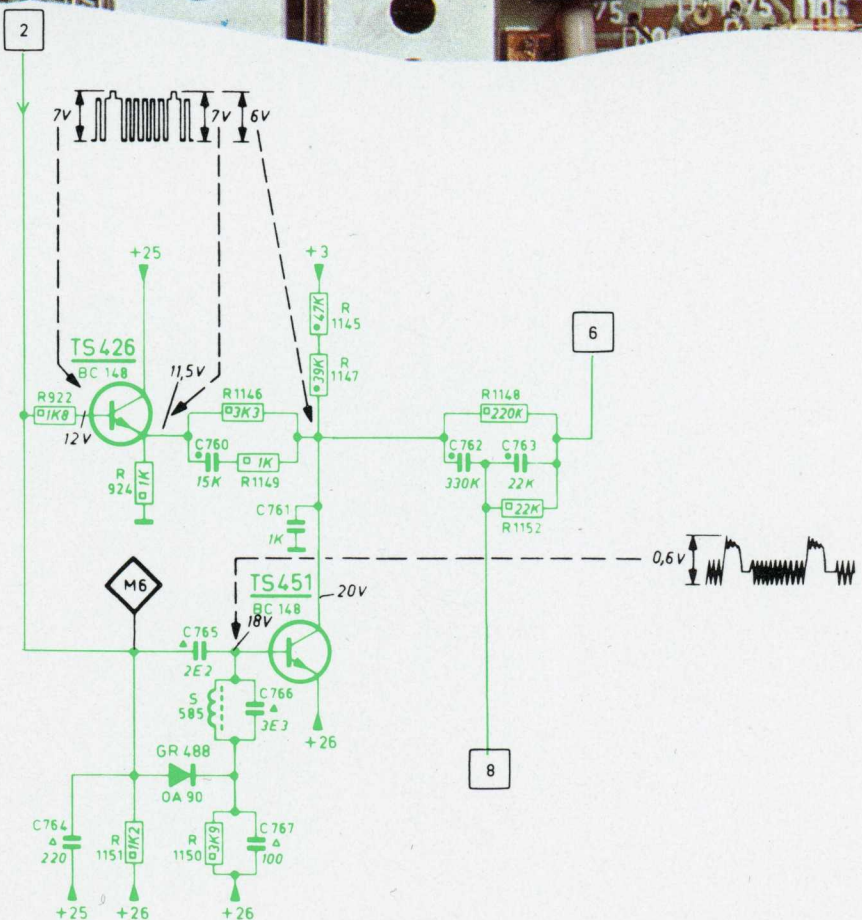
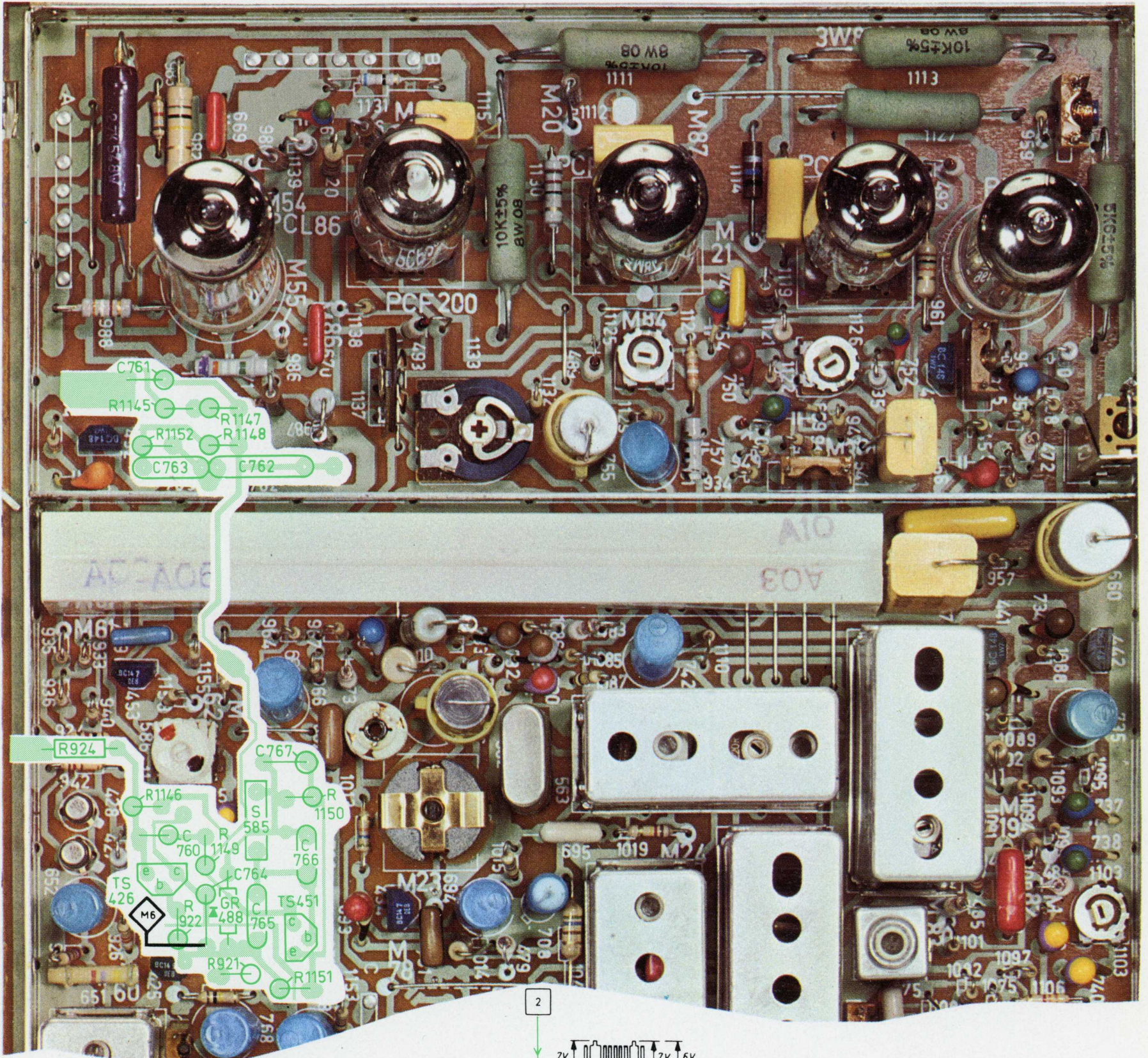




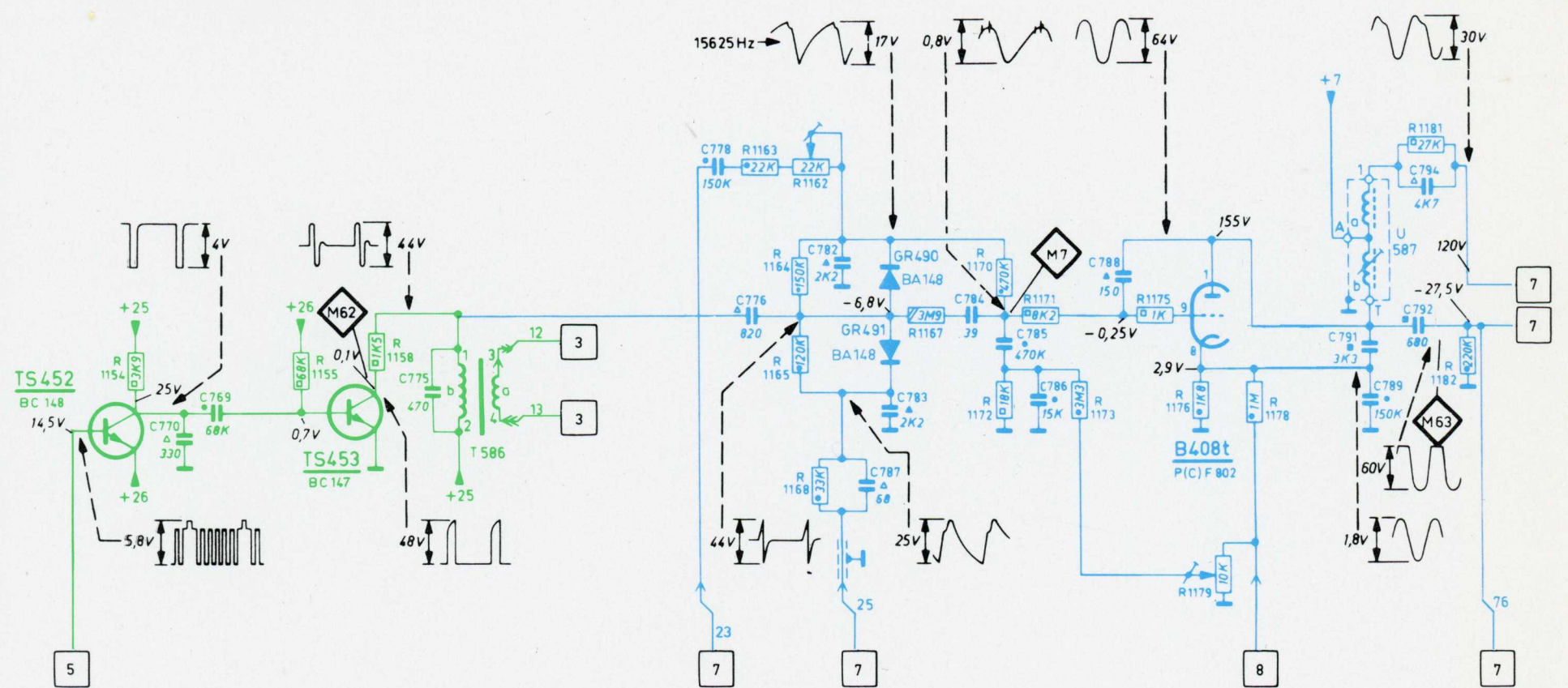
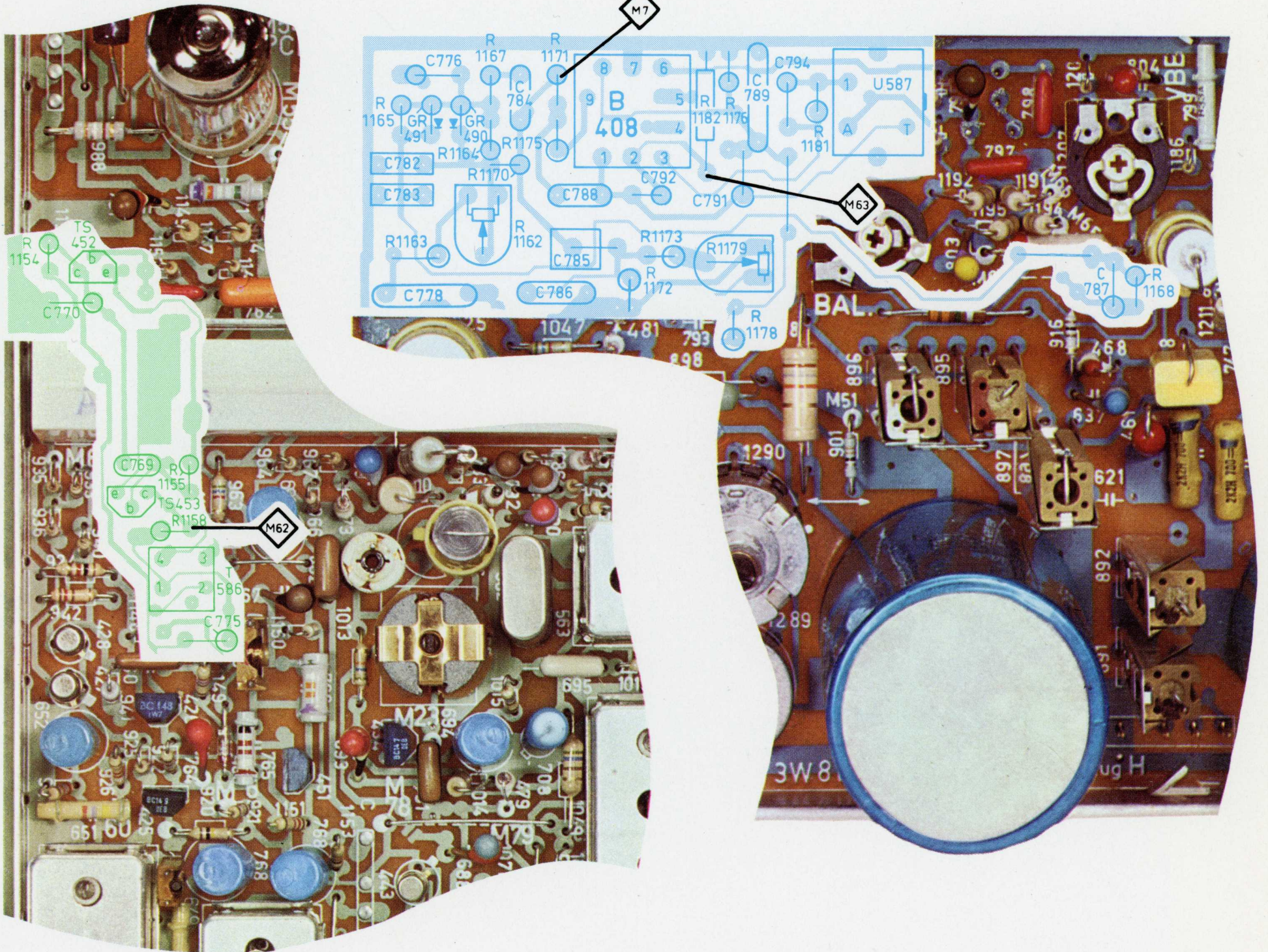
Beeldbuis + Automatische demagnetisering
 Bildröhre + Automatische Entmagnetisierung
 Tubo televisivo + Demagnetizzazione automatica
 Billederør + Automatisk afmagnetisering
 Kuvaputka + Automaattinen demagnetisointi
 Picture tube + Automatic degaussing



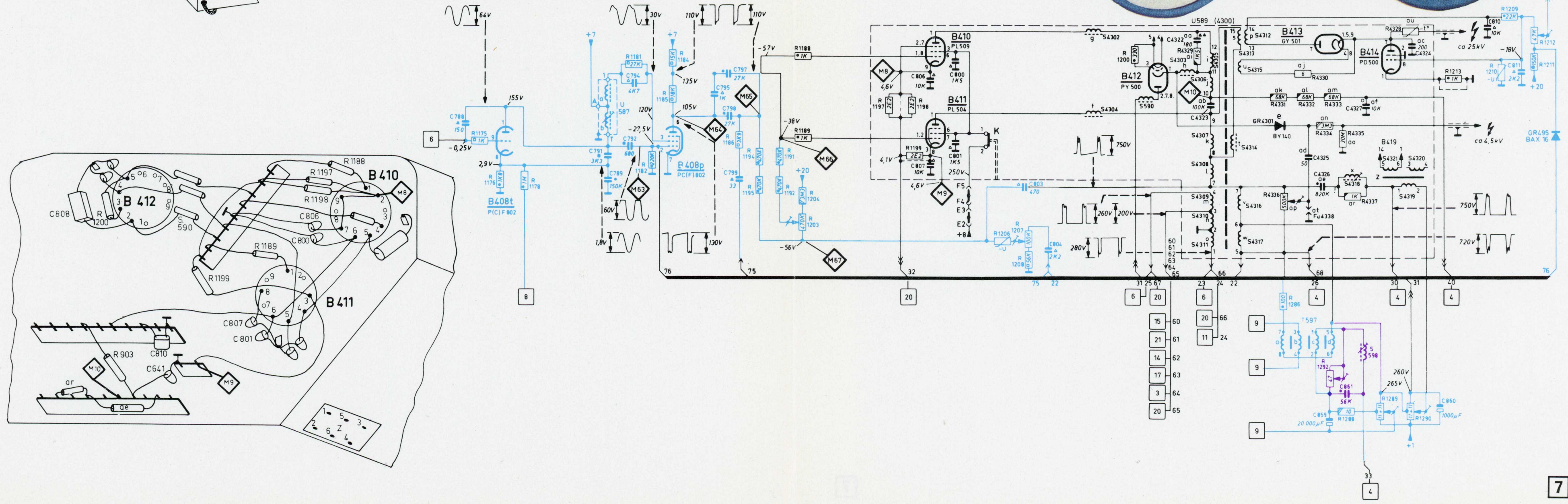
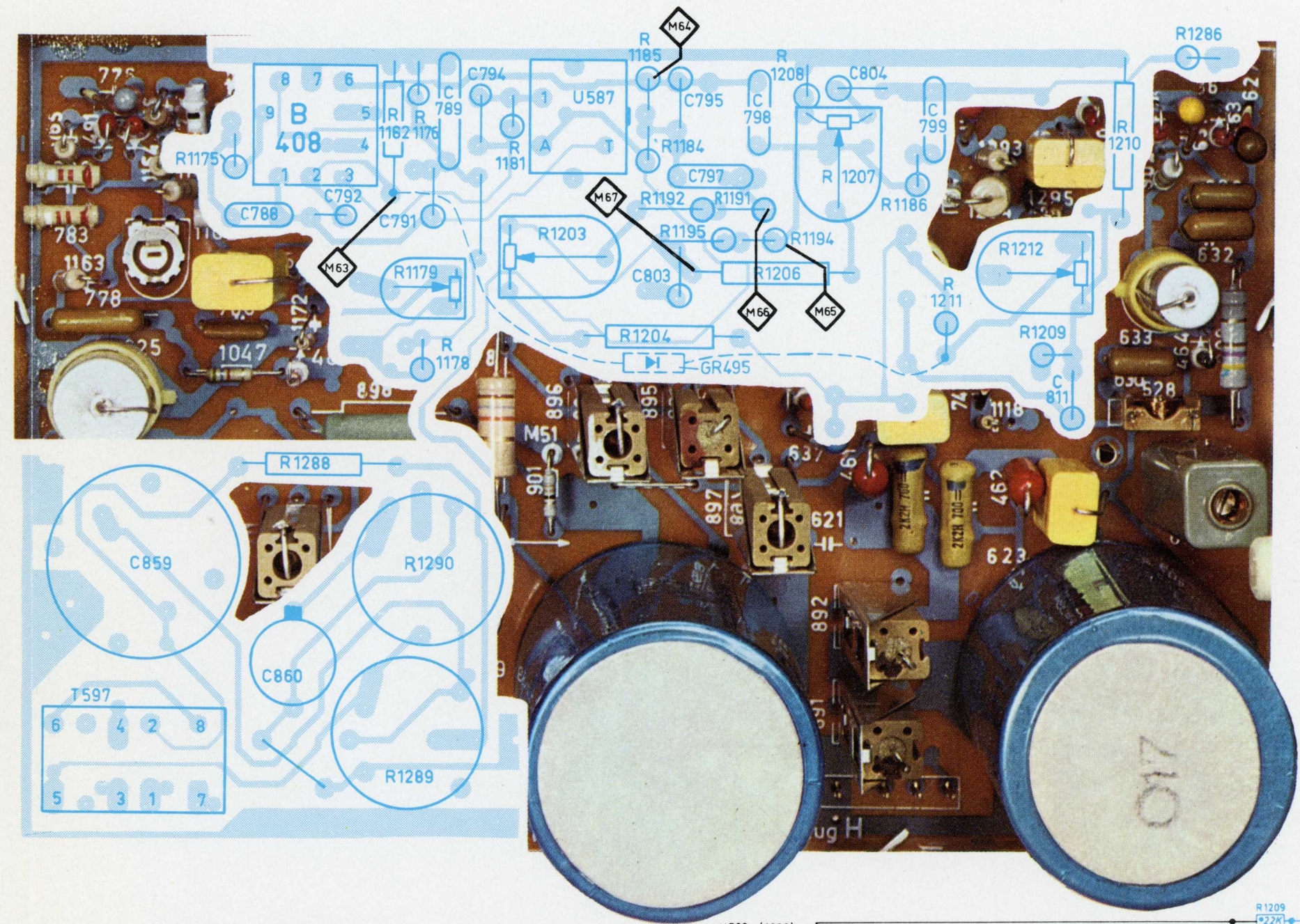
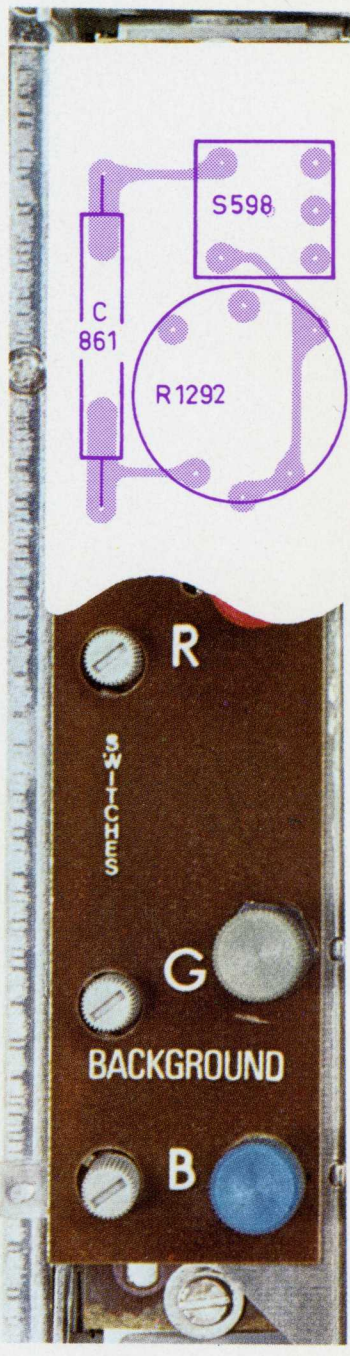
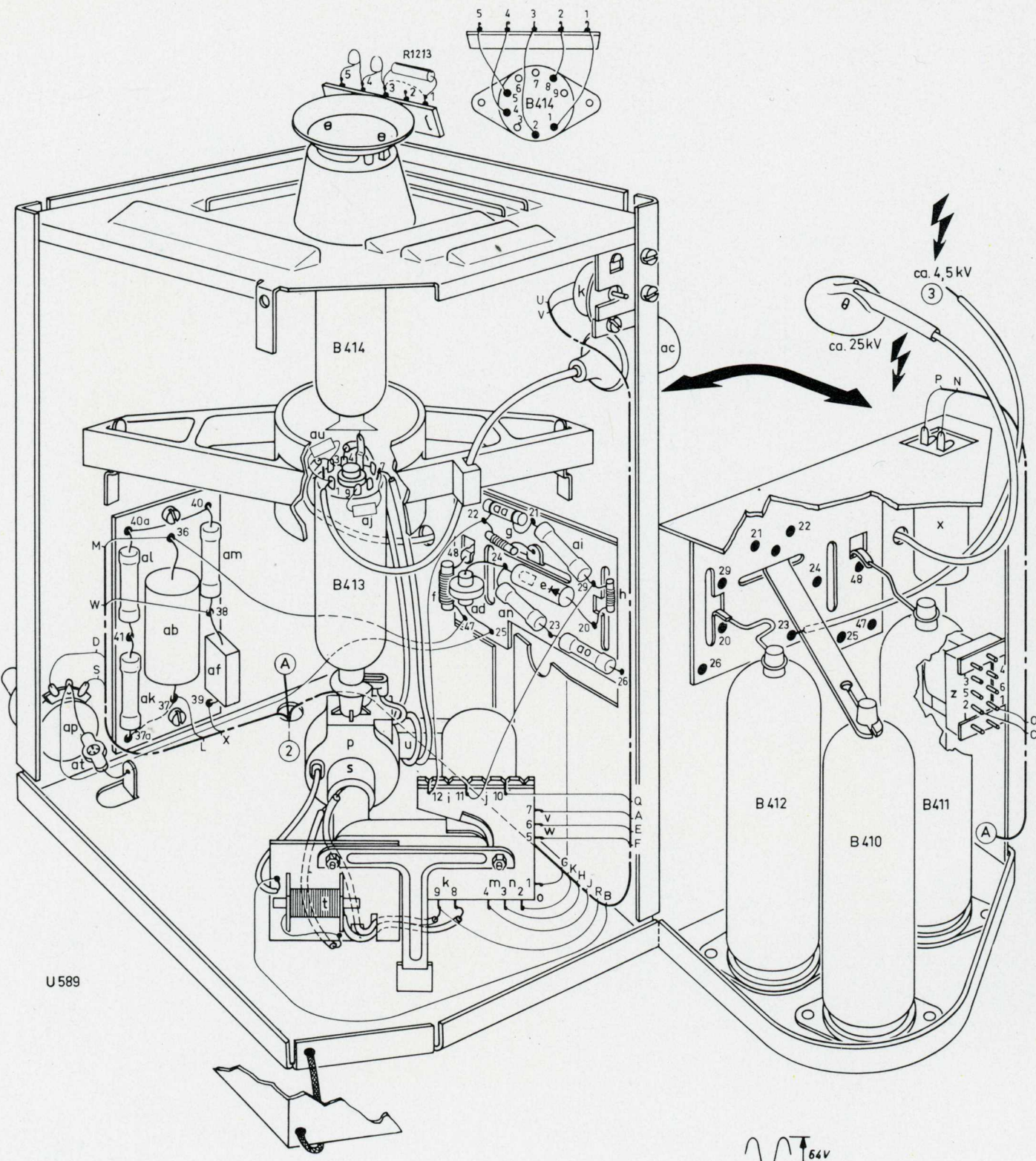
Synchronisatiescheider + Storingsonderdrukker
 Synchron-Trennstufe + Störaustaster
 Separatore di sincronizzazione + Filtro di linea
 Synkroniseringsseparator + Støjbegrænser
 Tahdistus erotin + Häirion kääntäjä
 Synchronisation separator + Noise inverter



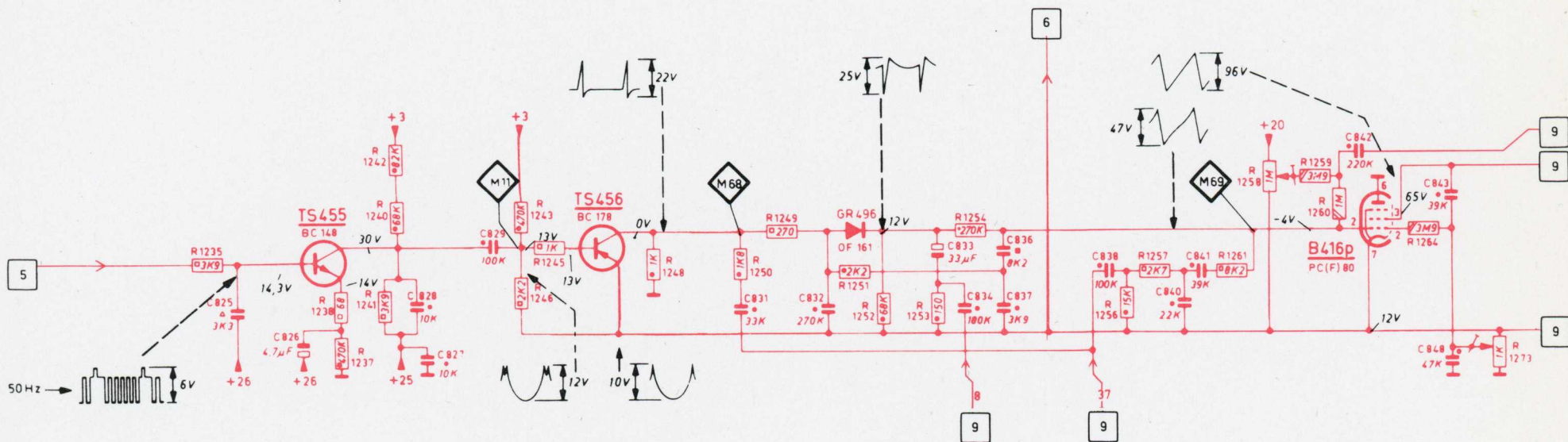
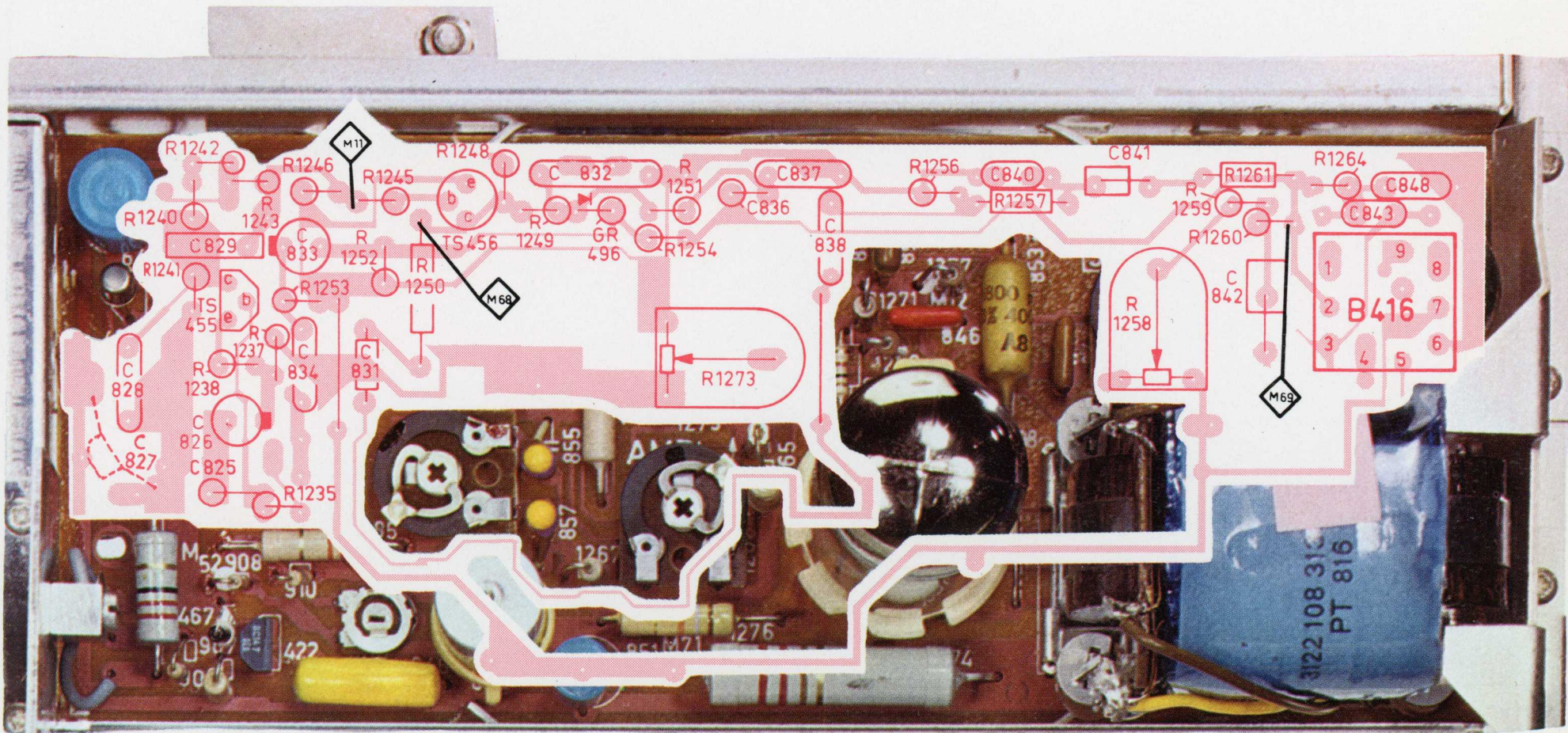
Horizontale synchronisatie
 Horizontal Synchronisation
 Synchronisation horizontale
 Linjessynkronisering
 Juovatahdistus
 Horizontal synchronisation



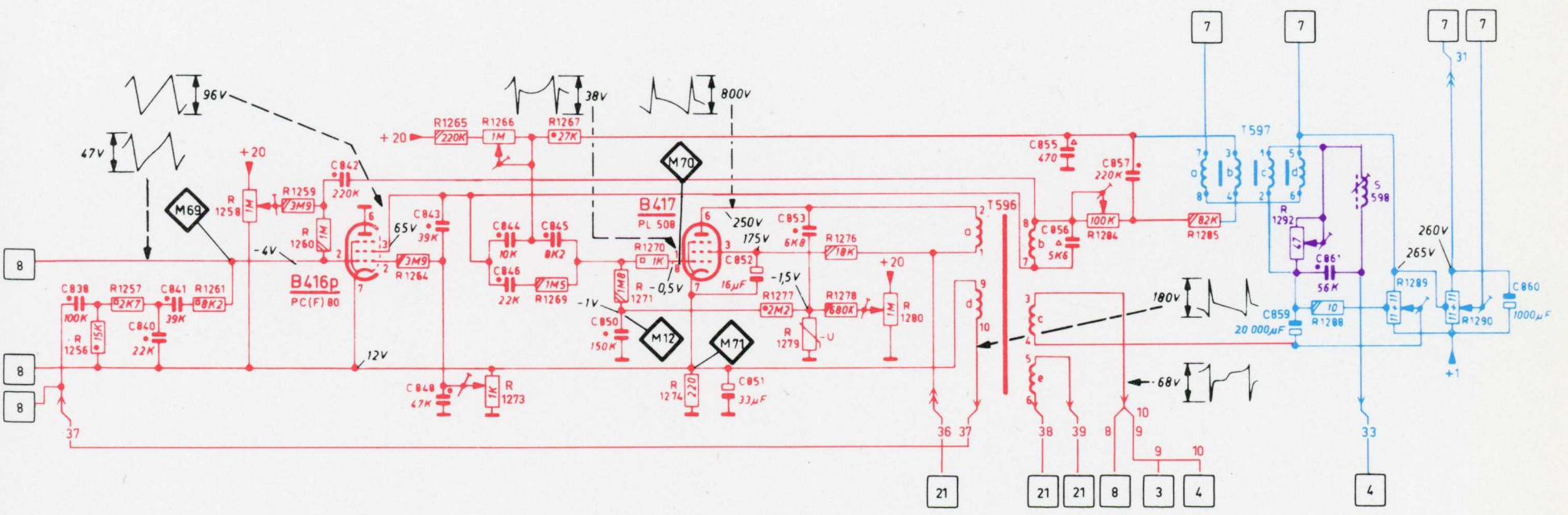
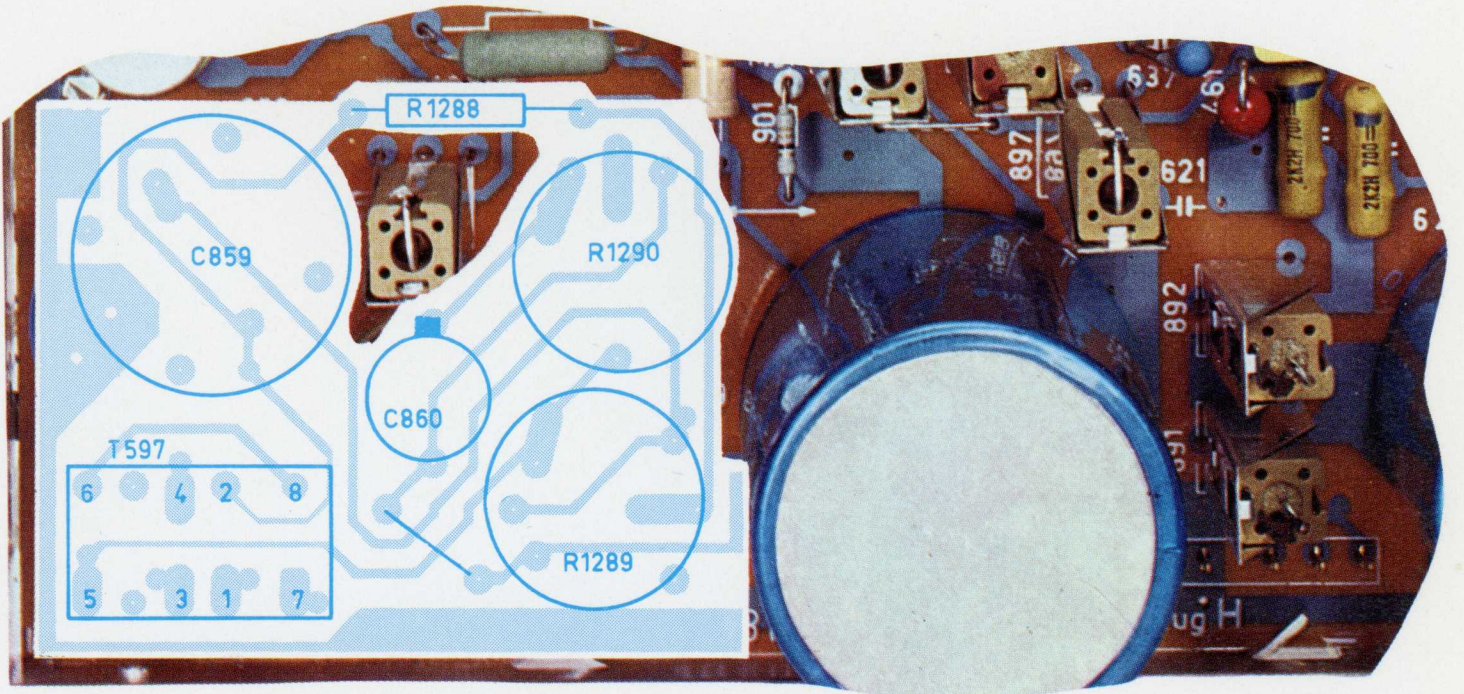
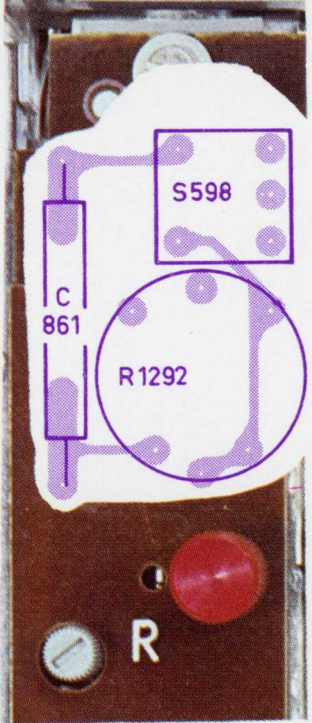
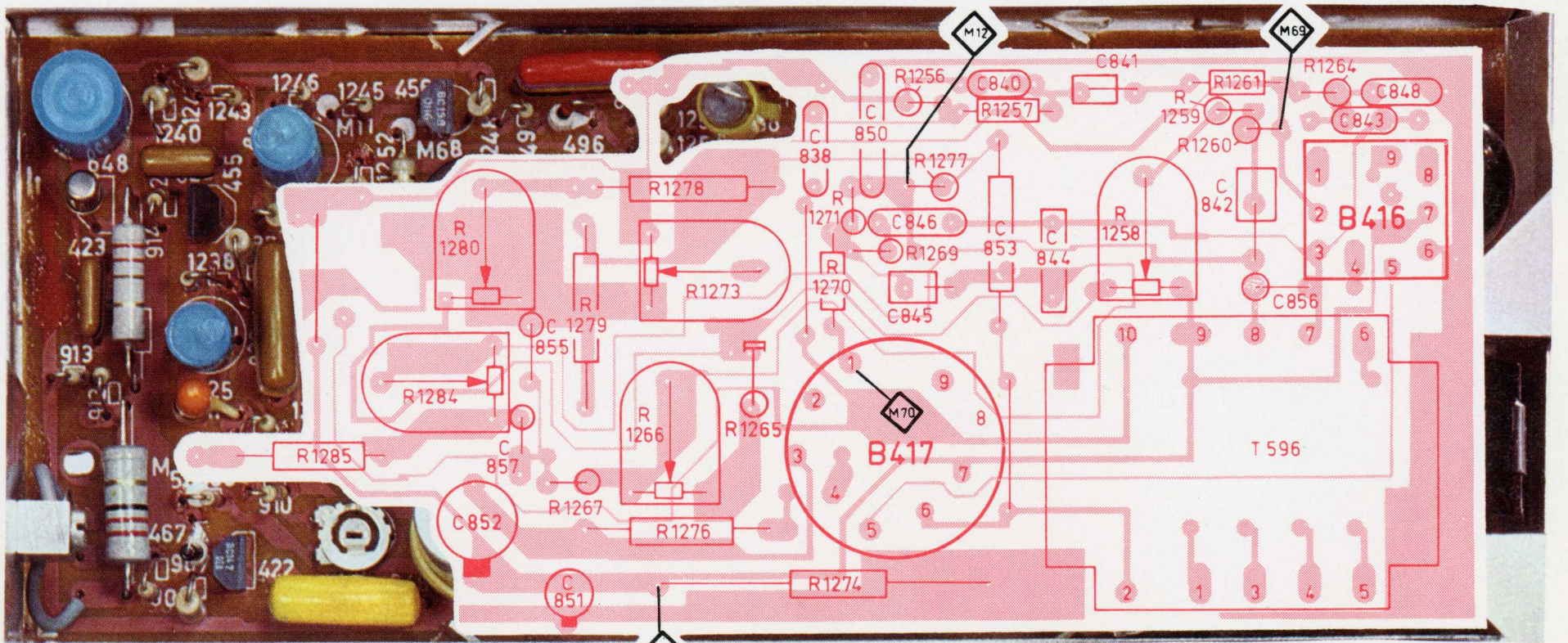
Horizontaal - Oscillator-Eindtrap + Hoogspanning
 Horizontal - Oszillator-Endstufe + Hochspannung
 Orizzontale - Oscillatore-Amplificatore uscita + EAT
 Vandret - Linje oscillator-Linieudgangstrin + EHT
 Vaaka - Juovaoskillaattori - Juovapäätteaste + Suurjännite
 Horizontal + Lineoscillator-Output stage + EHT



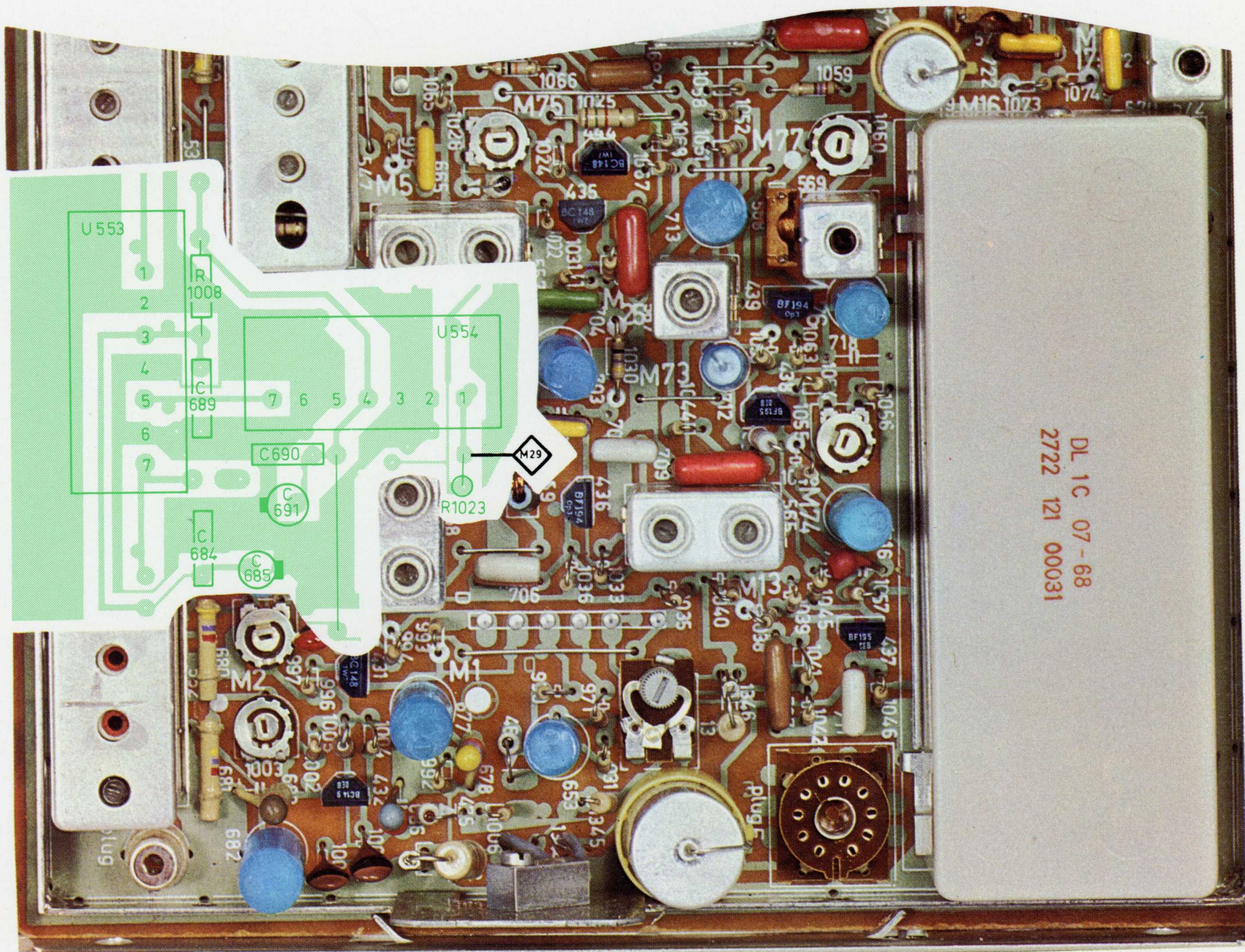
Vertikaal- Automatische synchronisatie
 Vertikal - Halbbildautomat
 Verticale - Sincronizzazione automatica di telaio
 Lodret - Automatisk billedsynkronisering
 Pysty - Automaattinen kuvatahdistus
 Vertical - Automatic frame synchronisation



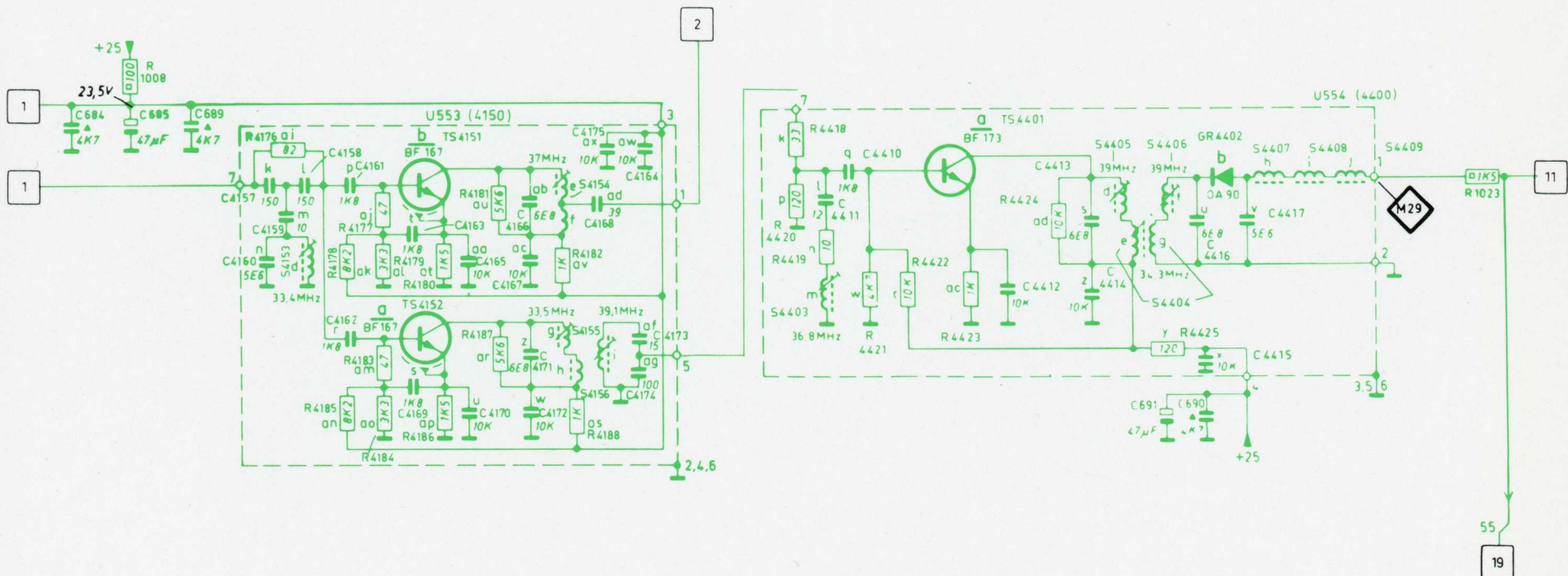
Vertikaal - Rasteroscillator + Rastereindtrap
 Vertikal - Oszillator + Vertikal-Endstufe
 Verticale - Oscillatore del quadro + Amplificatore uscita verticale
 Lodret - Billedoscillator + Billedudgangstrin
 Pysty - Kuvaoskillaattori + Kuvapäätteaste
 Vertical - Vertical oscillator + Vertical output stage



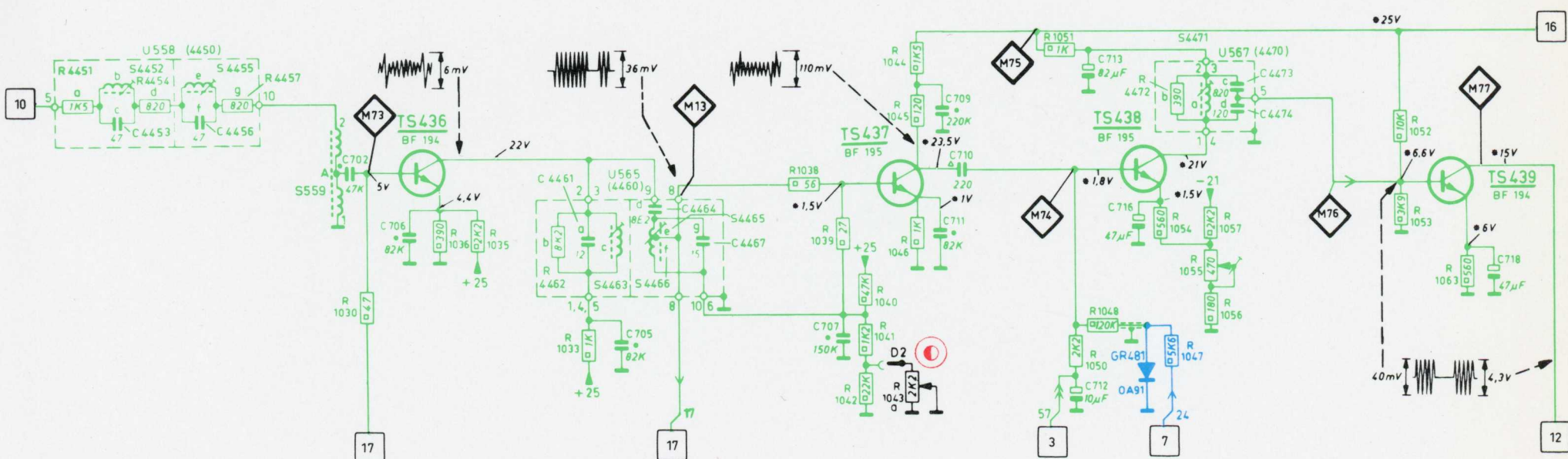
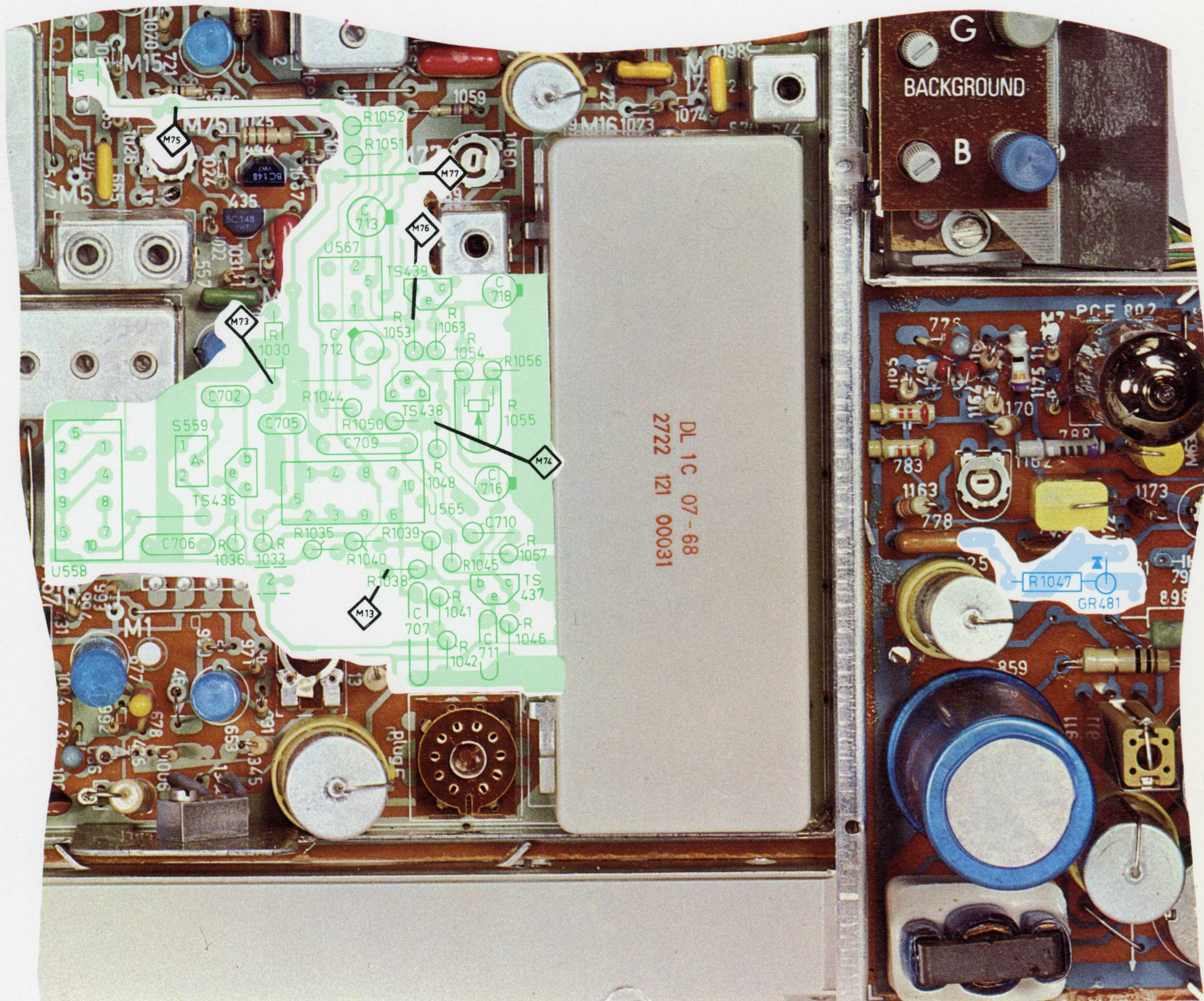
Chrominantie - MF-versterker + Detektor
 Farbart - ZF-Verstärker + Farbartdetektor
 Crominanza - Amplificatore FI + Rivelatore crominanza
 Krominans - MF-forstærker + Krominans detektor
 Krominanssi - VT-vahvistin + Ilmaisin Krominanssi
 Chrominance - IF-amplifier + Chrominance detector



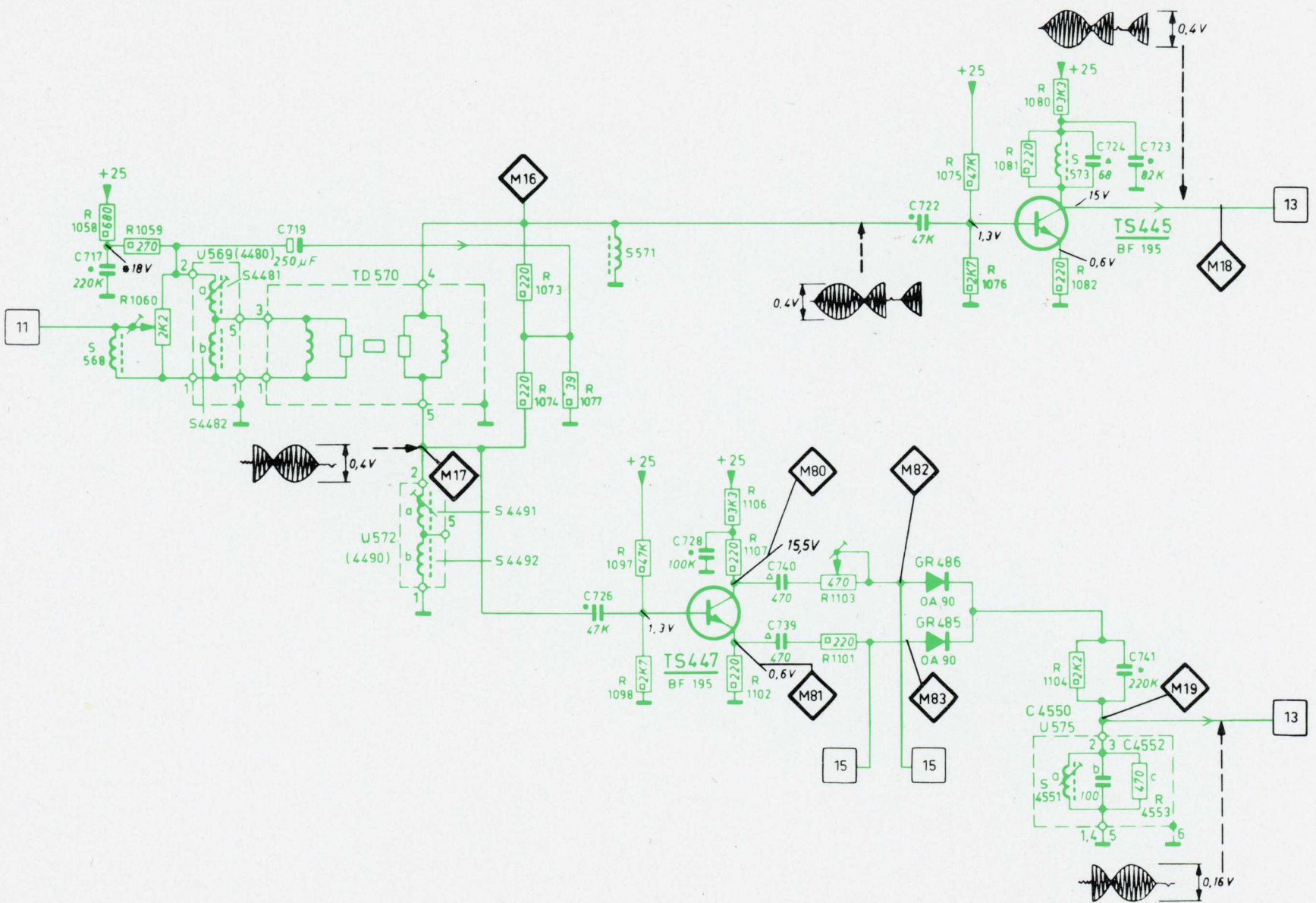
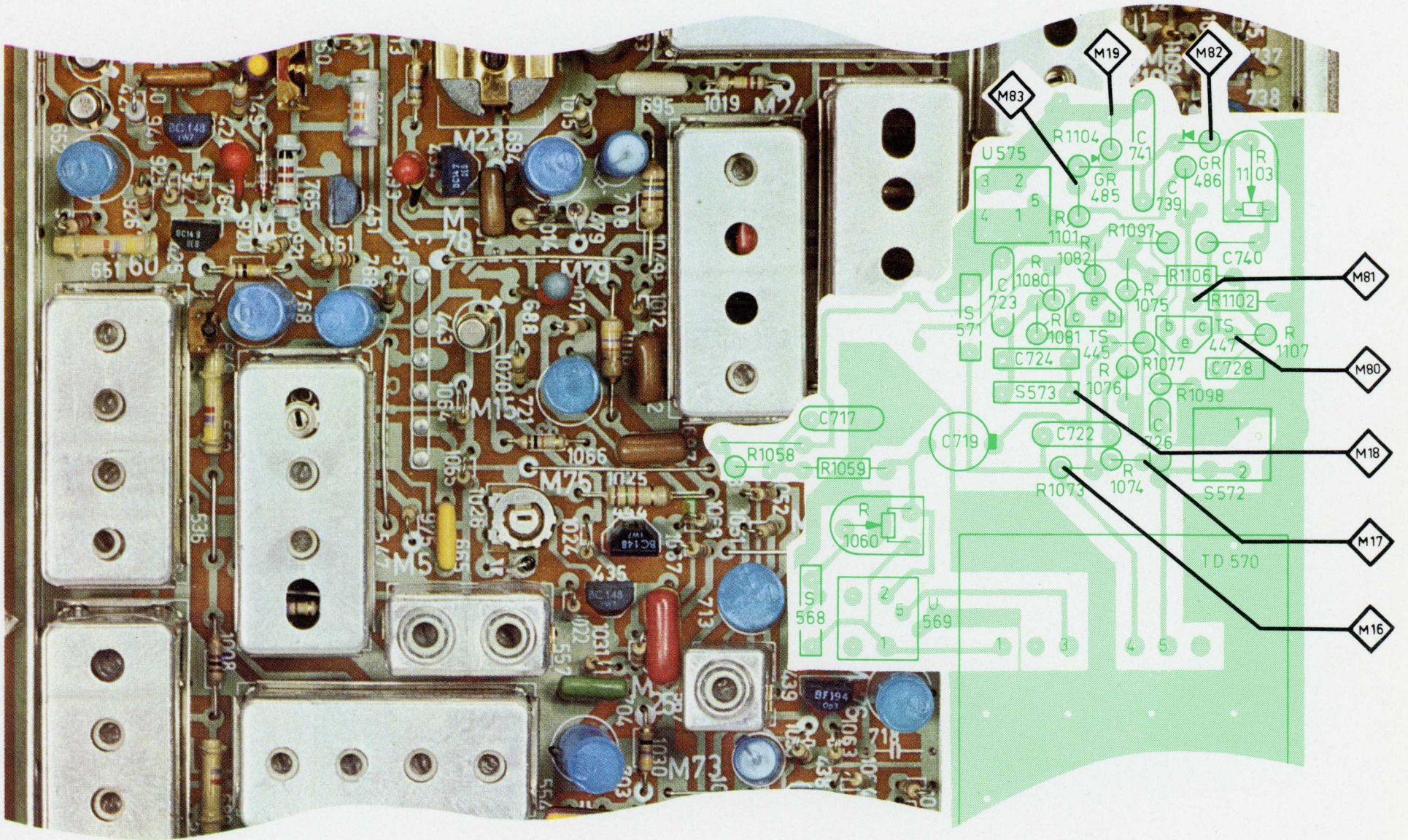
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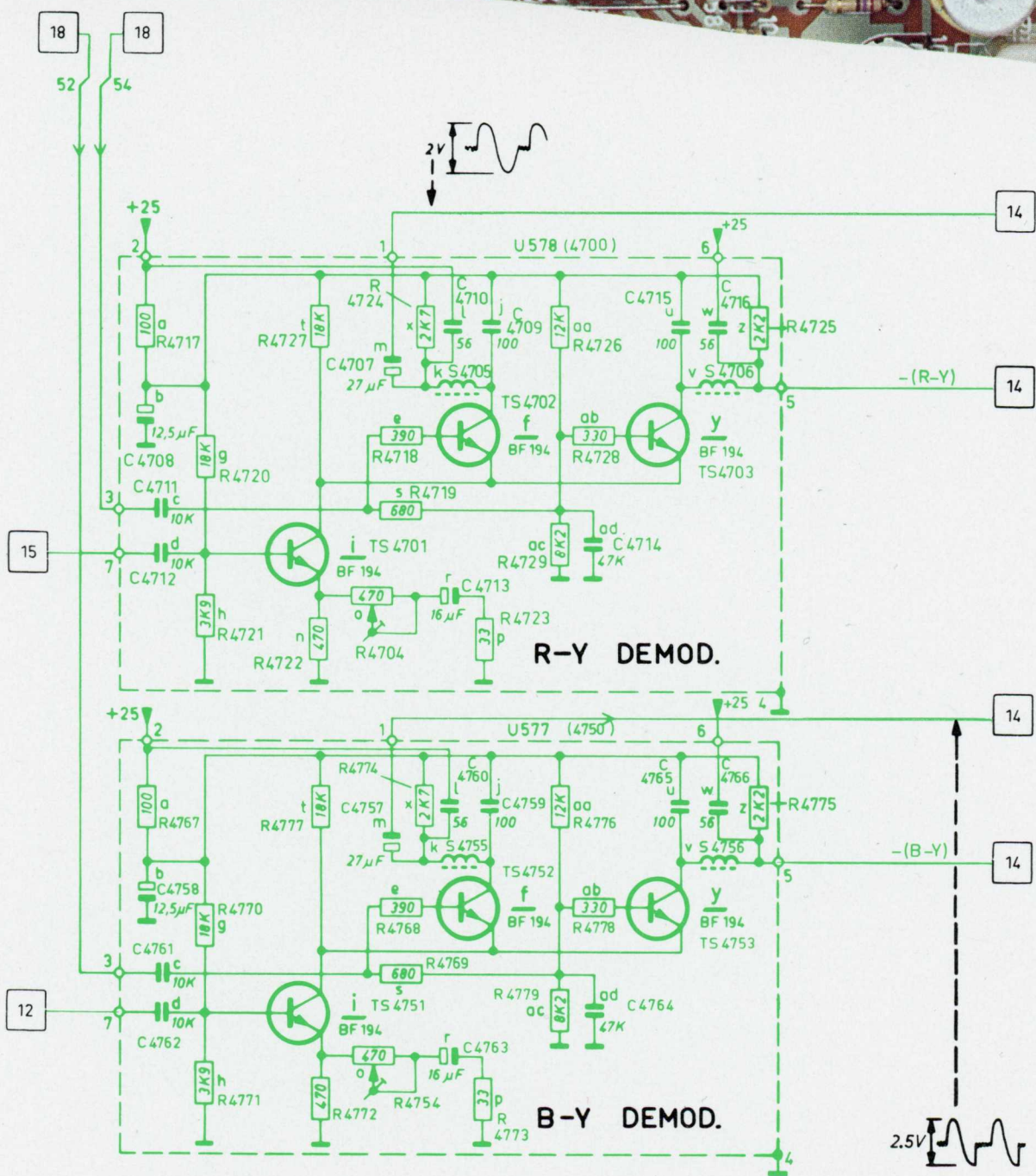
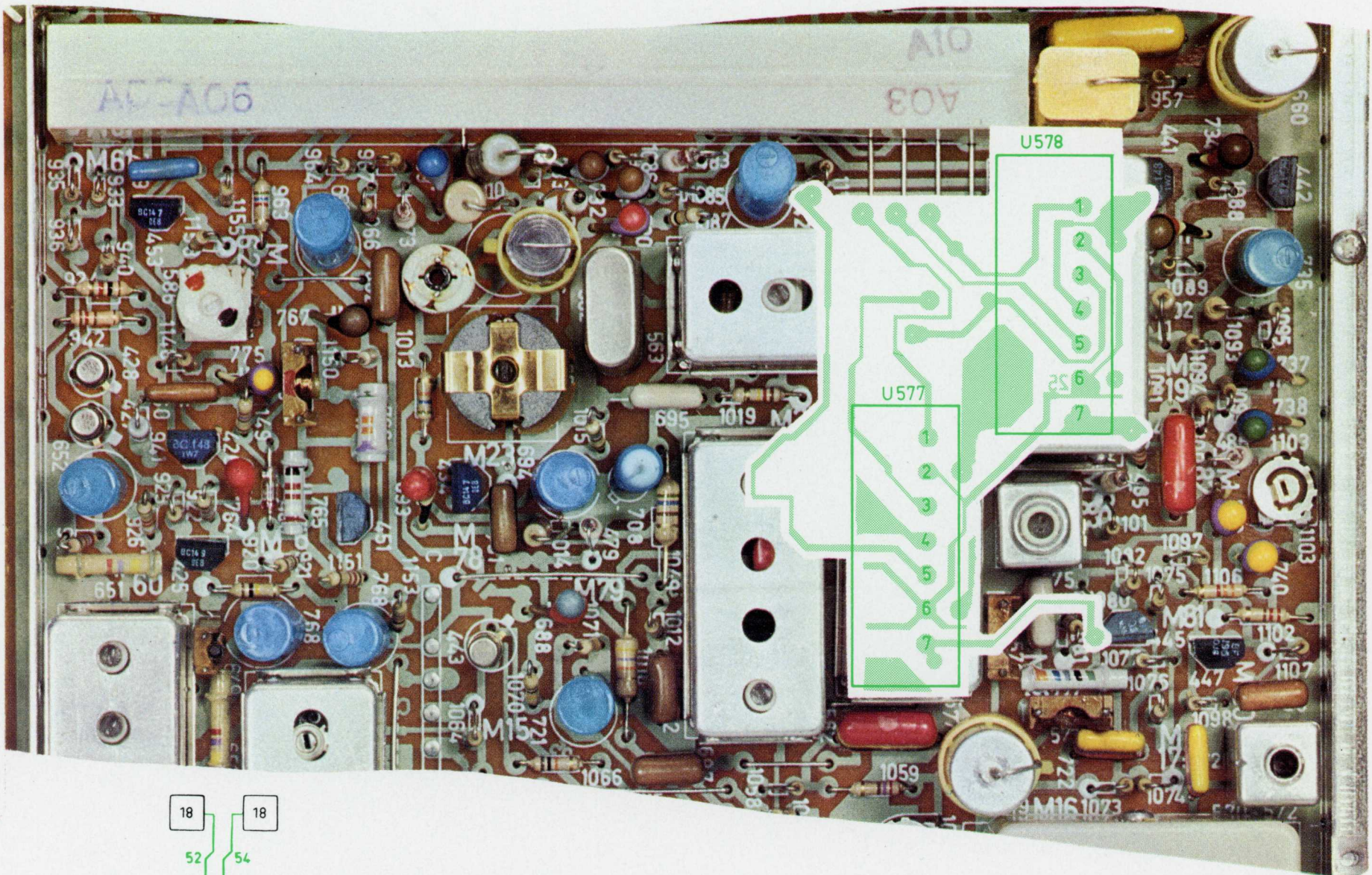
Chrominantie versterker
 Farbart-Verstärker
 Amplificatore crominanza
 Krominans forstærker
 Krominanssi vahvistin
 Chrominance amplifier



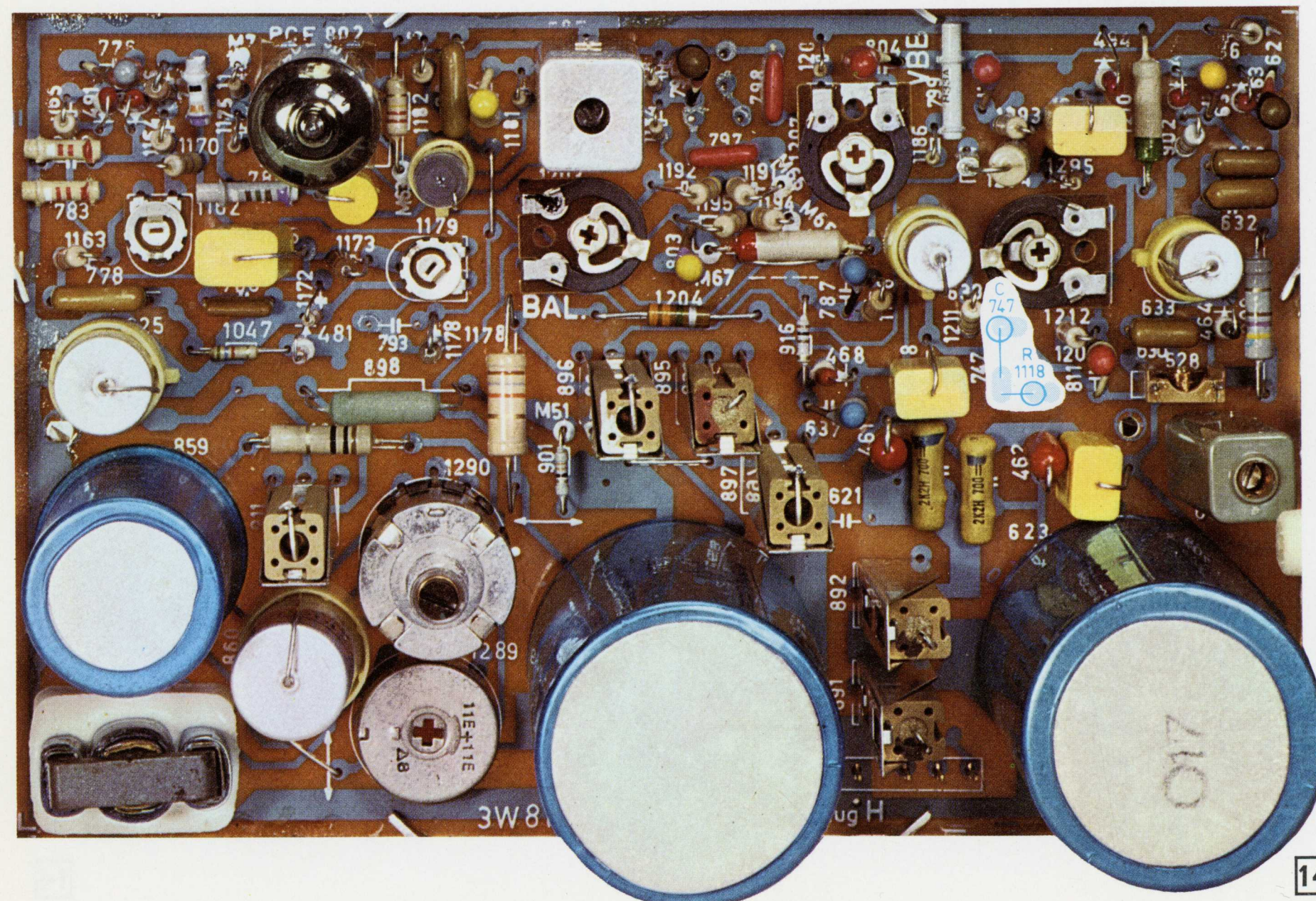
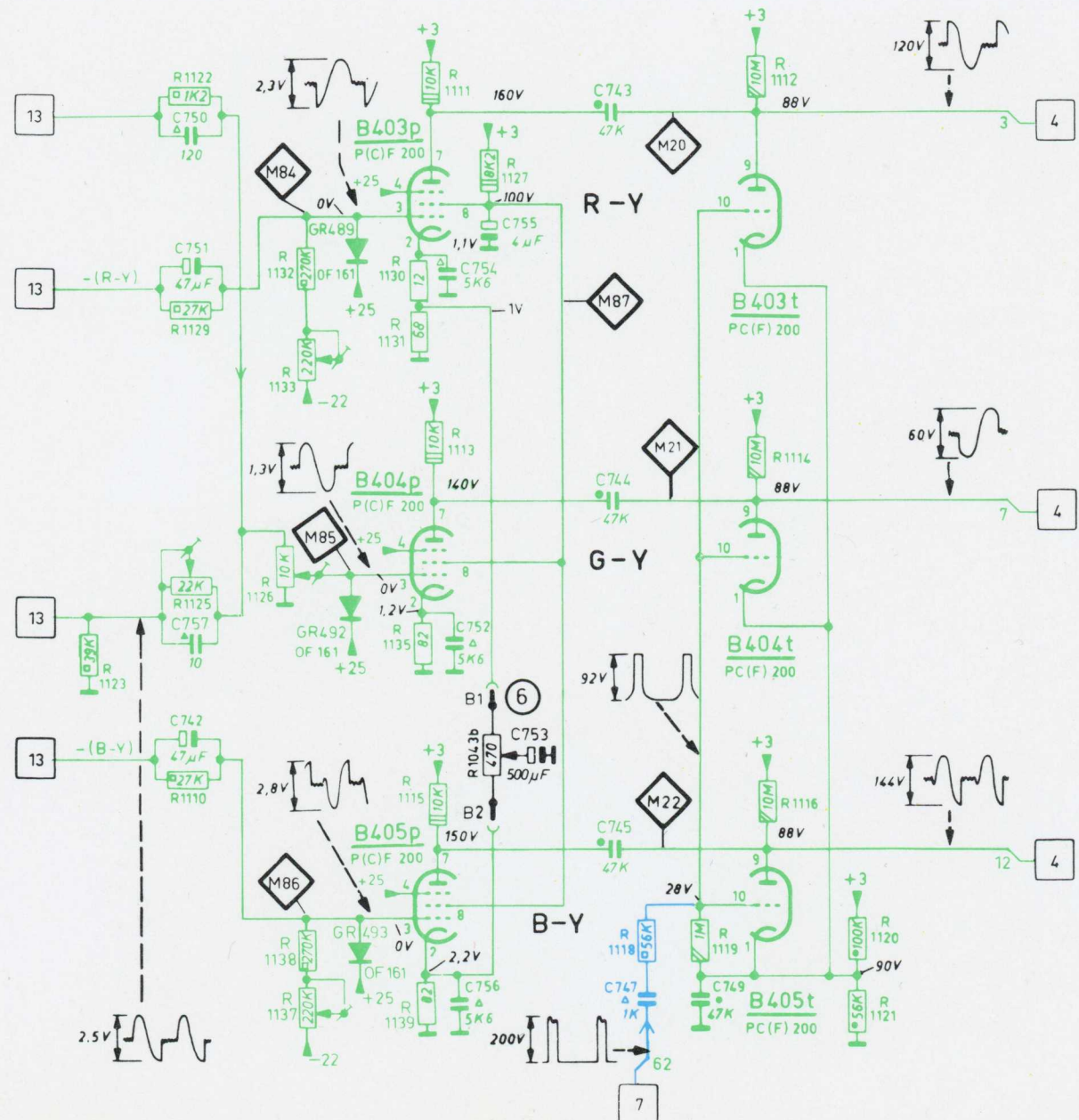
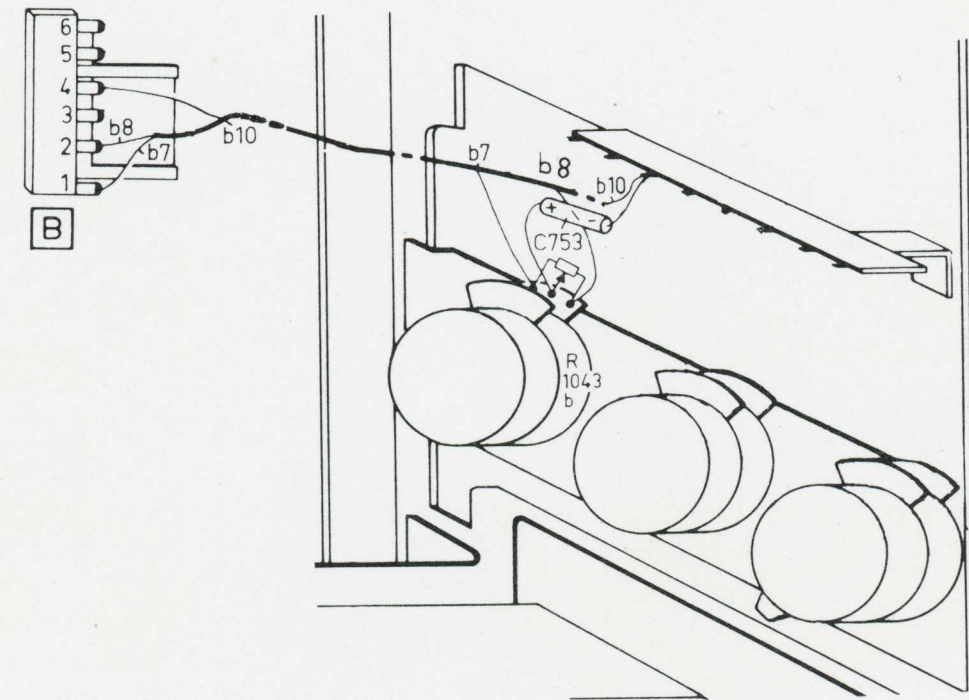
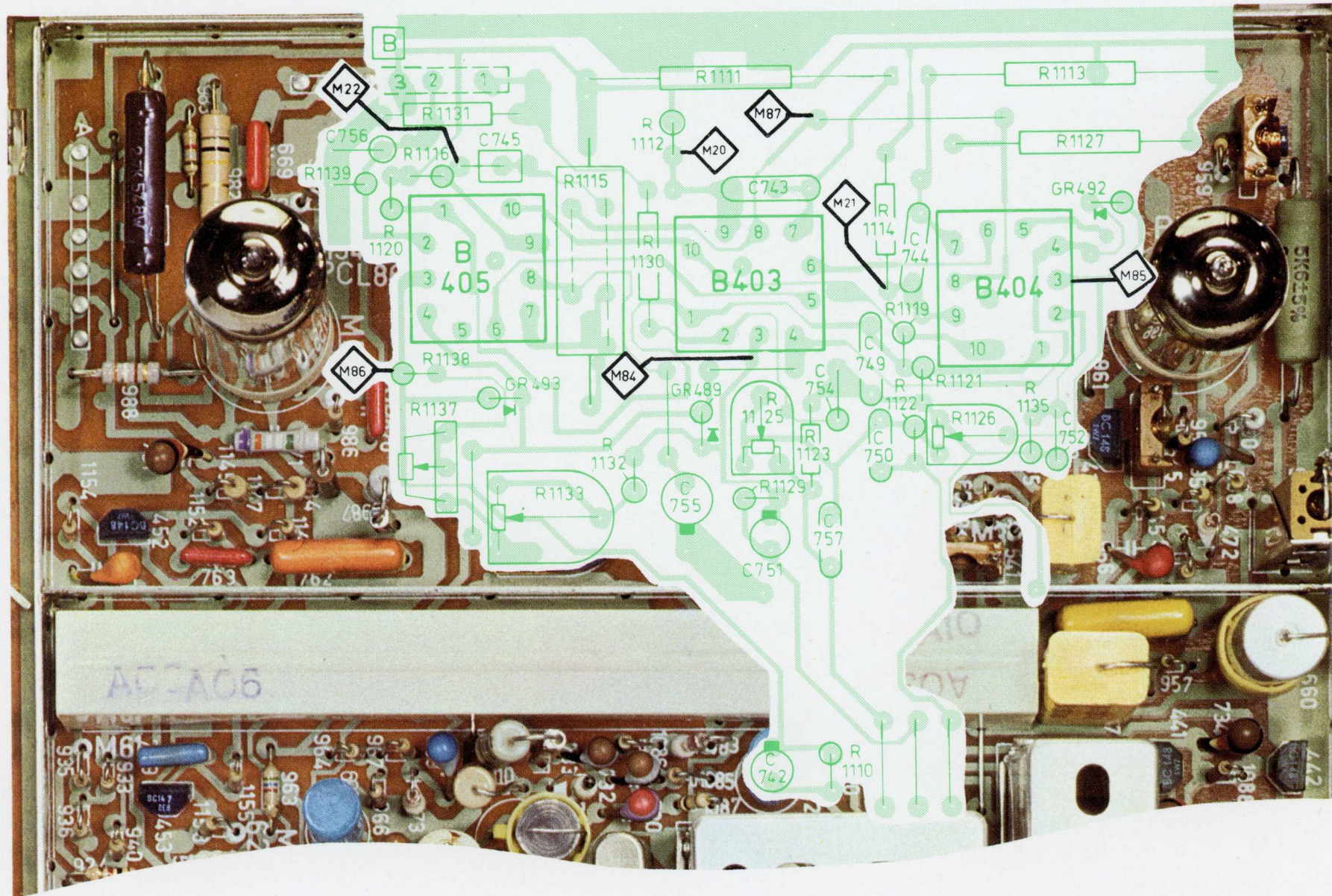
PAL-vertragsingsledning + versterkers
 PAL-Verzögerungsleitung + Verstärker
 Linea di ritardo PAL + Amplificatore
 PAL-forsinkelses kredsløb + forstærker
 PAL-viivästyslinja + vahvistin
 PAL-delay line + amplifiers

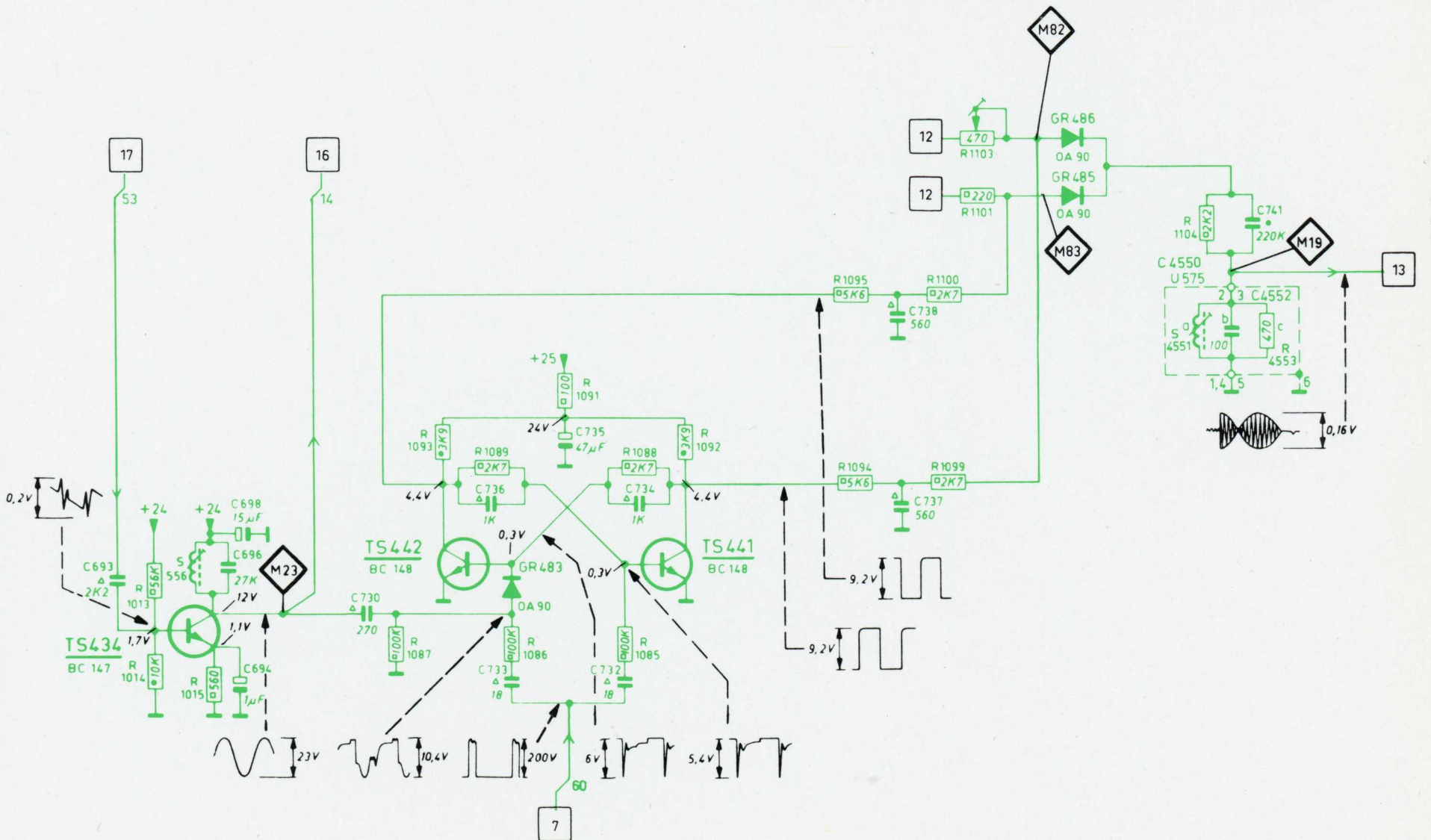
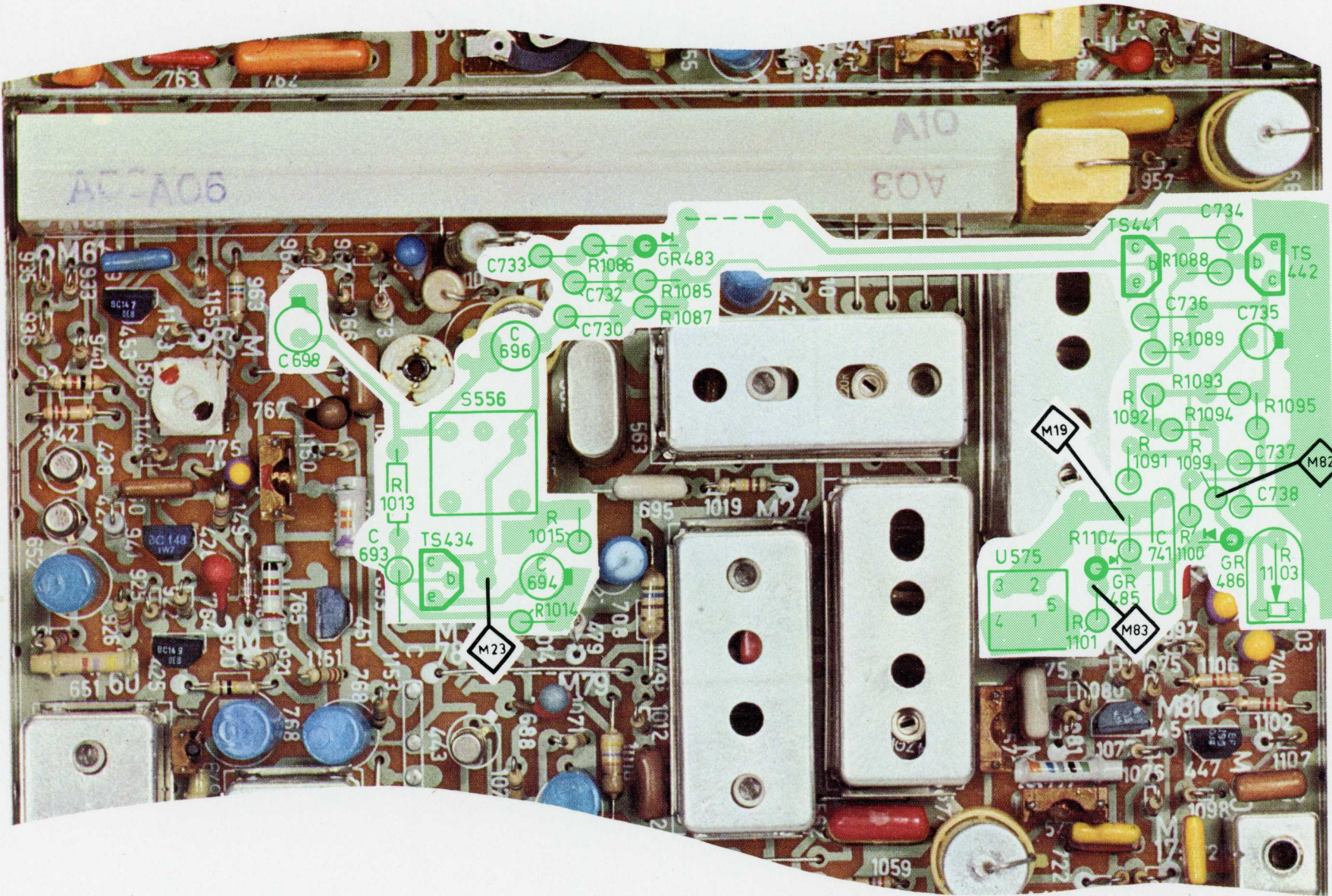


Demodulatoren
 R-Y } Synchron Gleichrichter
 B-Y } Demodulatore
 Demodulator
 Ilmaisin

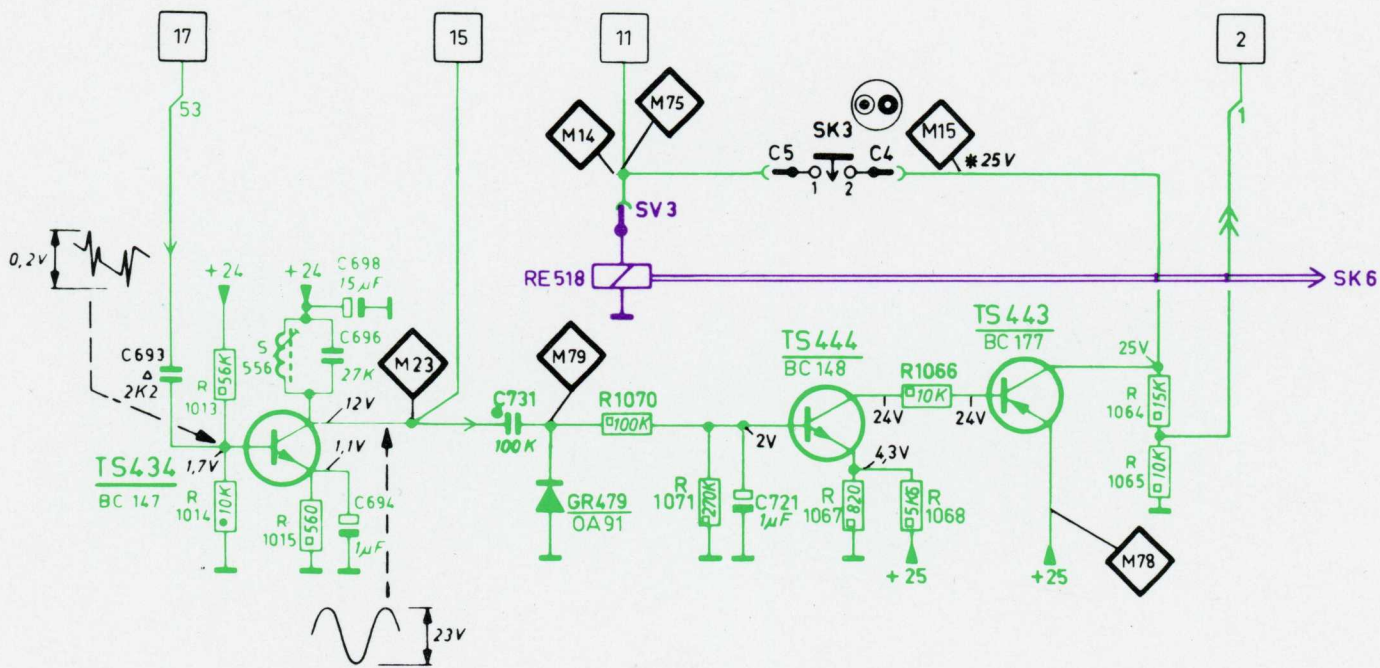
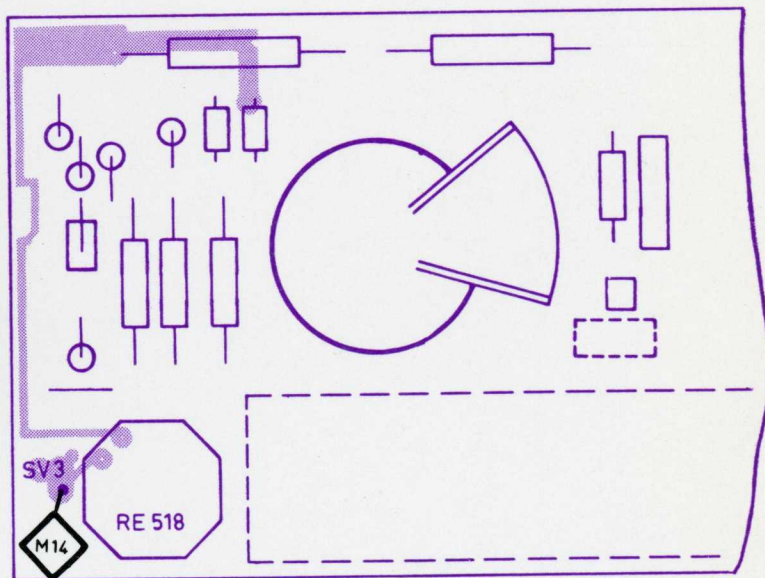
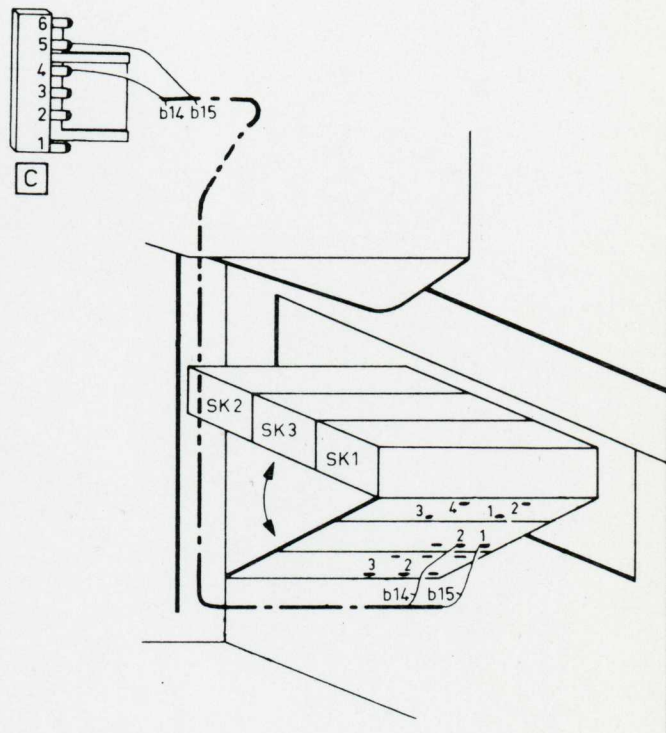
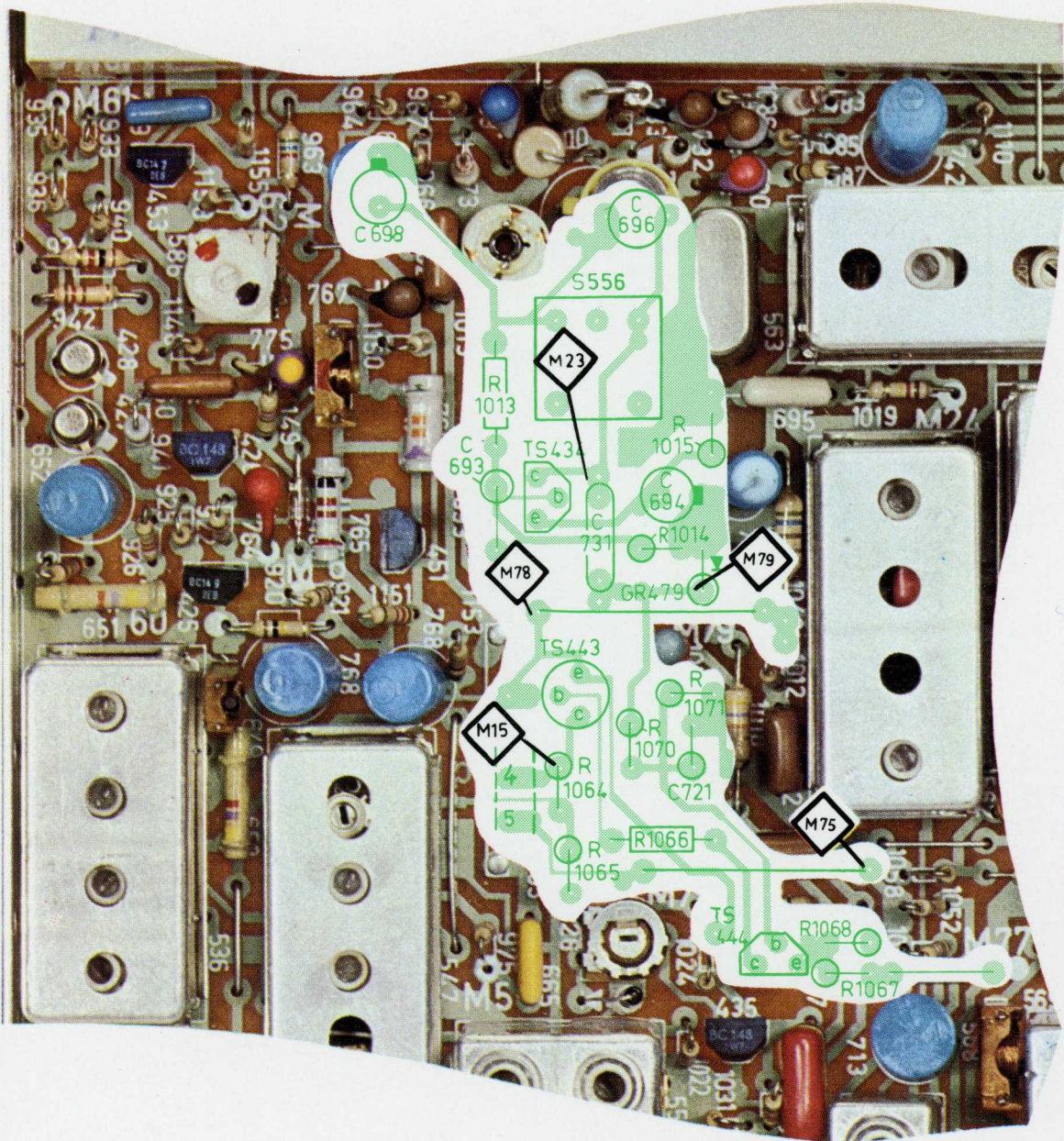


Kleurverschilversterkers
 B-Y } Farbdifferenzverstärker
 R-Y } Amplificatore di differenza di colore
 G-Y } Farve differensforstærker
 Värieroitusvahvistin
 Colour difference amplifiers



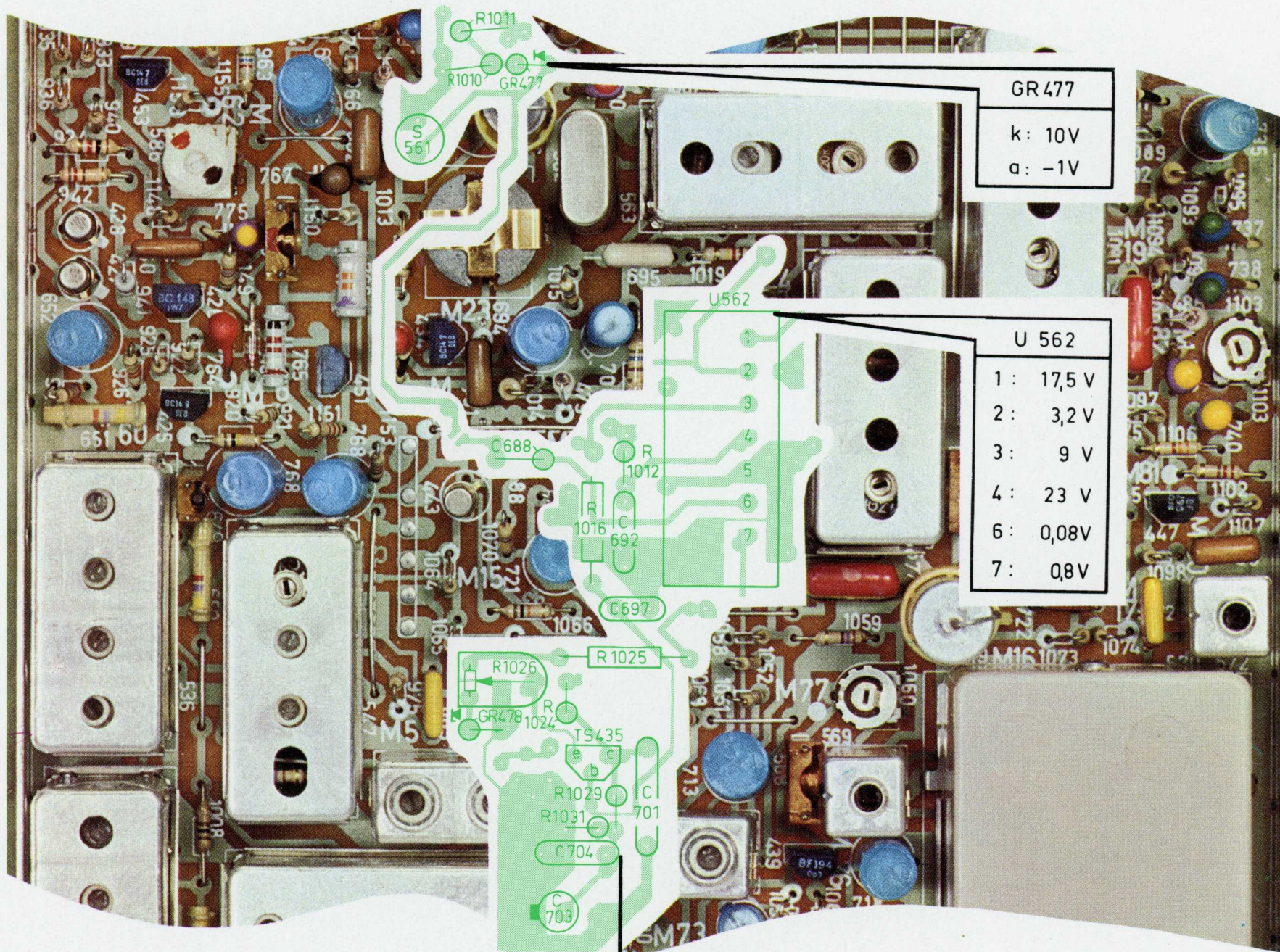


PAL-identificatie + Kleurdoover
 PAL-Identifikation + Farbabschalter
 PAL-Identificazione + Killer Colore
 PAL-Identifikation + Colour killer
 PAL-Tunnistepiiri + Värisalpa
 PAL-Identification + Colour killer



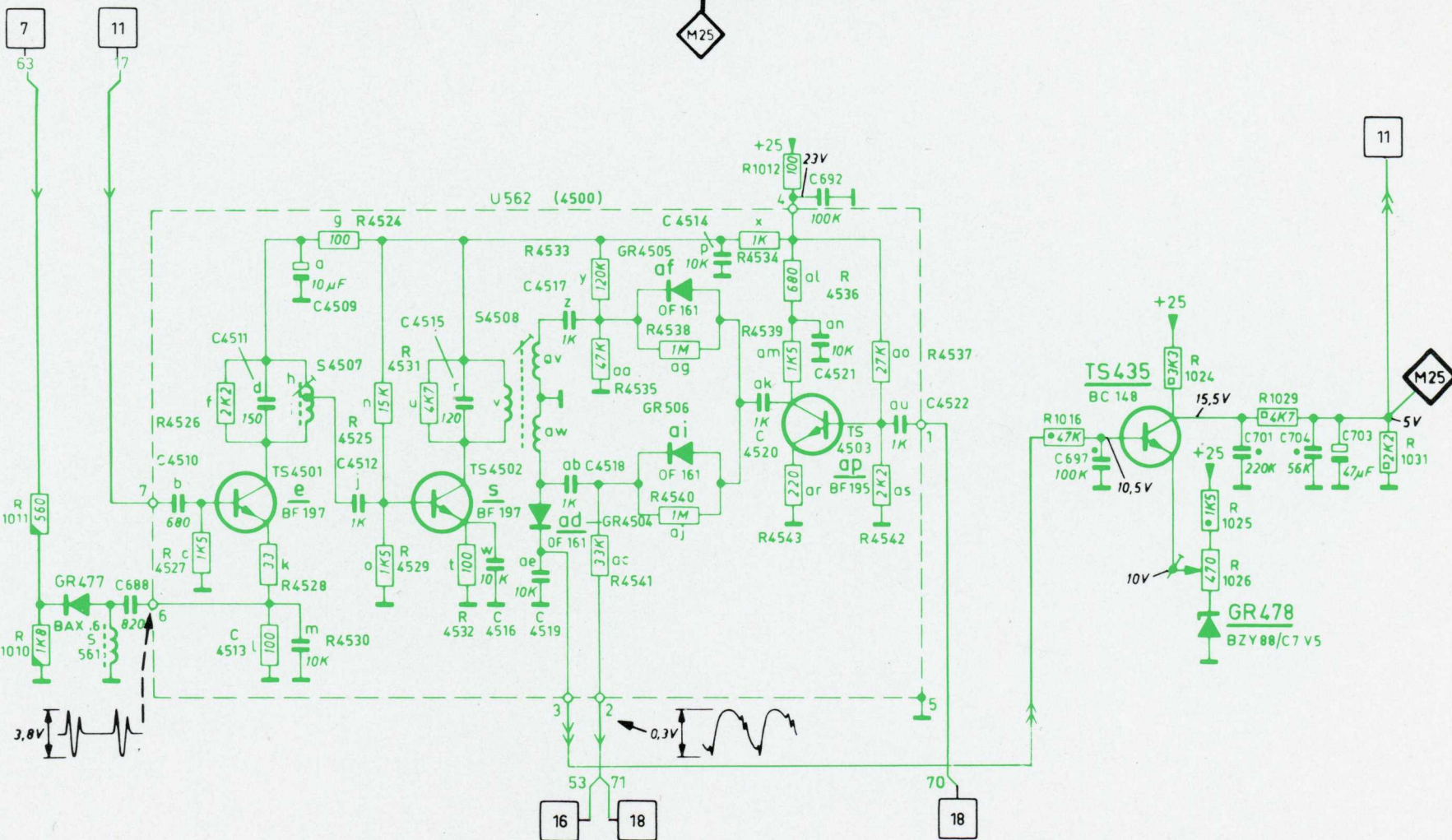
Salvoscheider + Salvodiscriminator
 Farbsynchronsignaltrennstufe + Farbsynchronsignaldiskriminator
 Separatore di salva + Discriminatore di salva
 Burstseparator + Burstdiskriminator
 Väritahdistuspulssi erotin + Väritahdistuspulssi ilmais
 Burstseparator + Burstdiscriminator

Chrominantie AVR
 Farbart-AVR
 CAG di cromaticanza
 Krominans AGC
 Krominanssi ATS
 Chrominance AGC

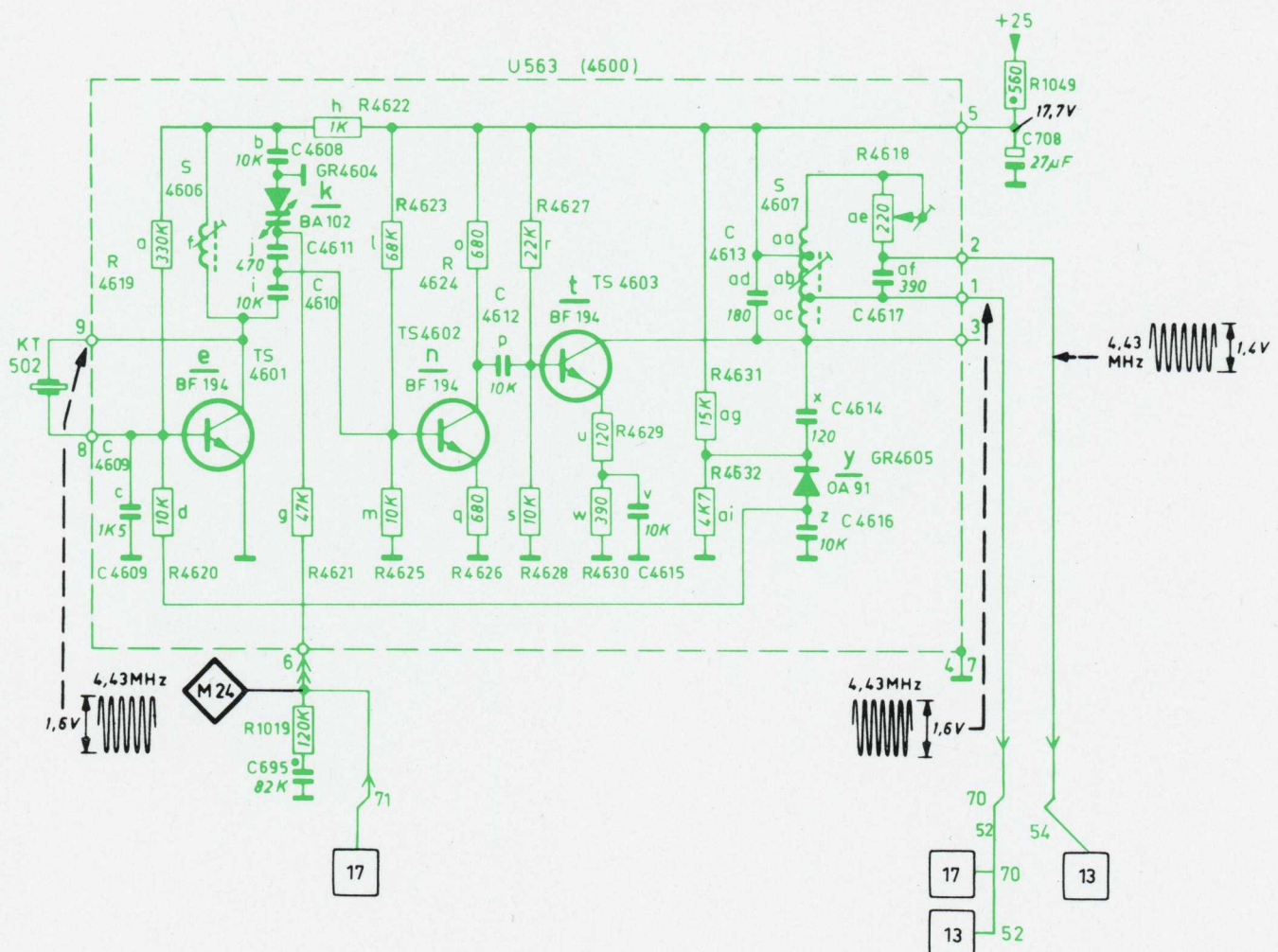
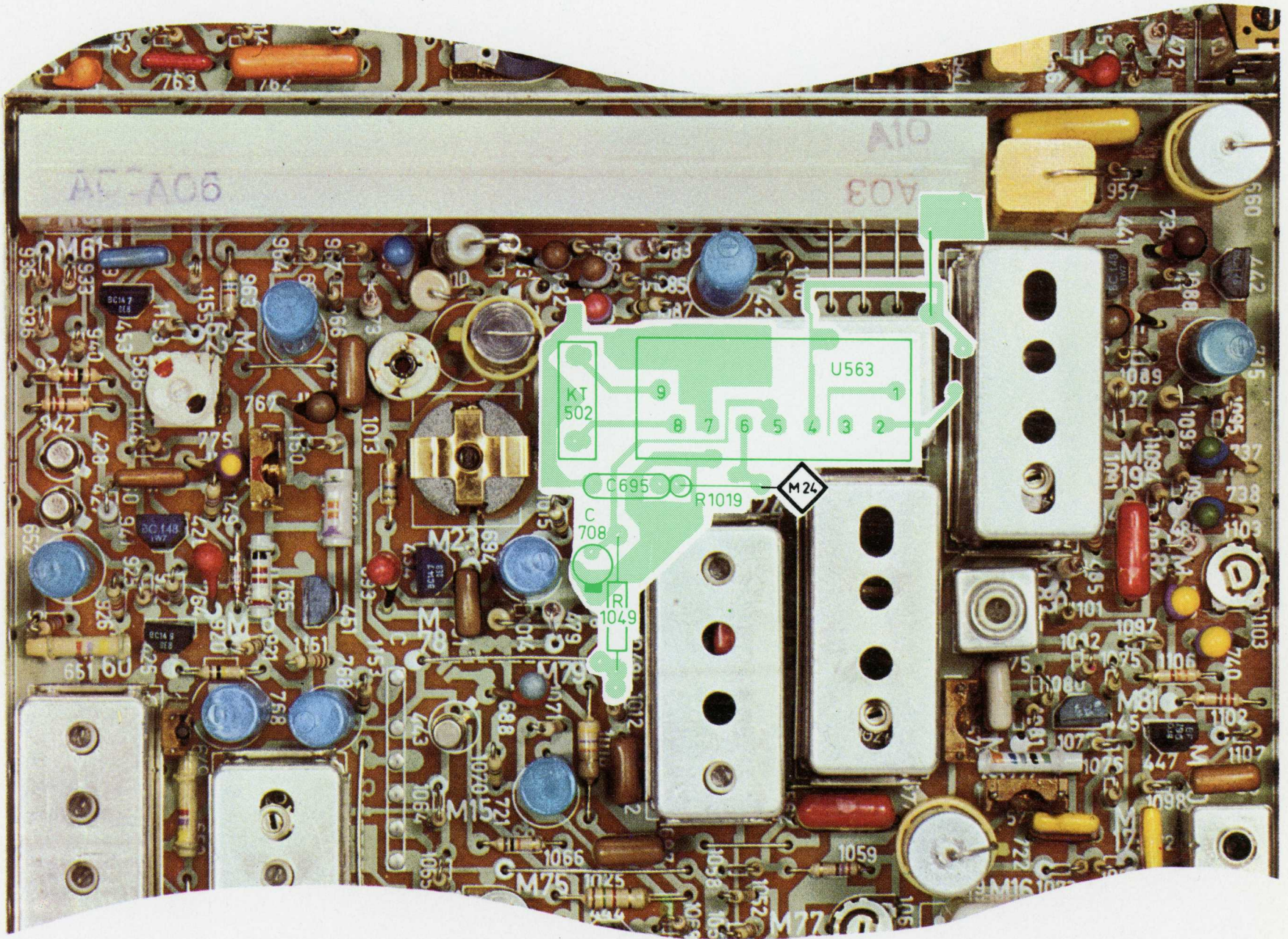


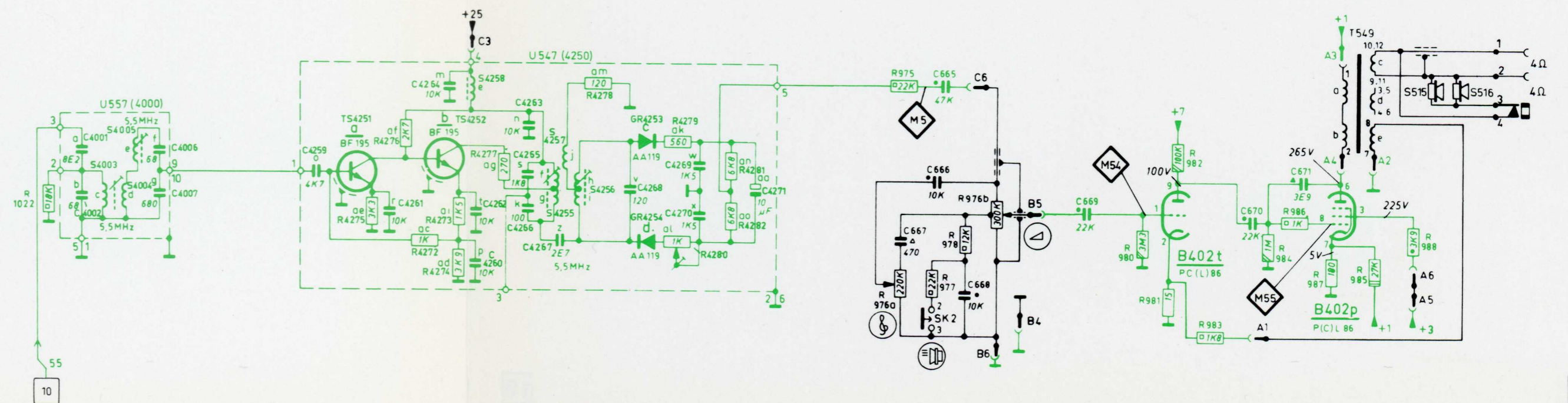
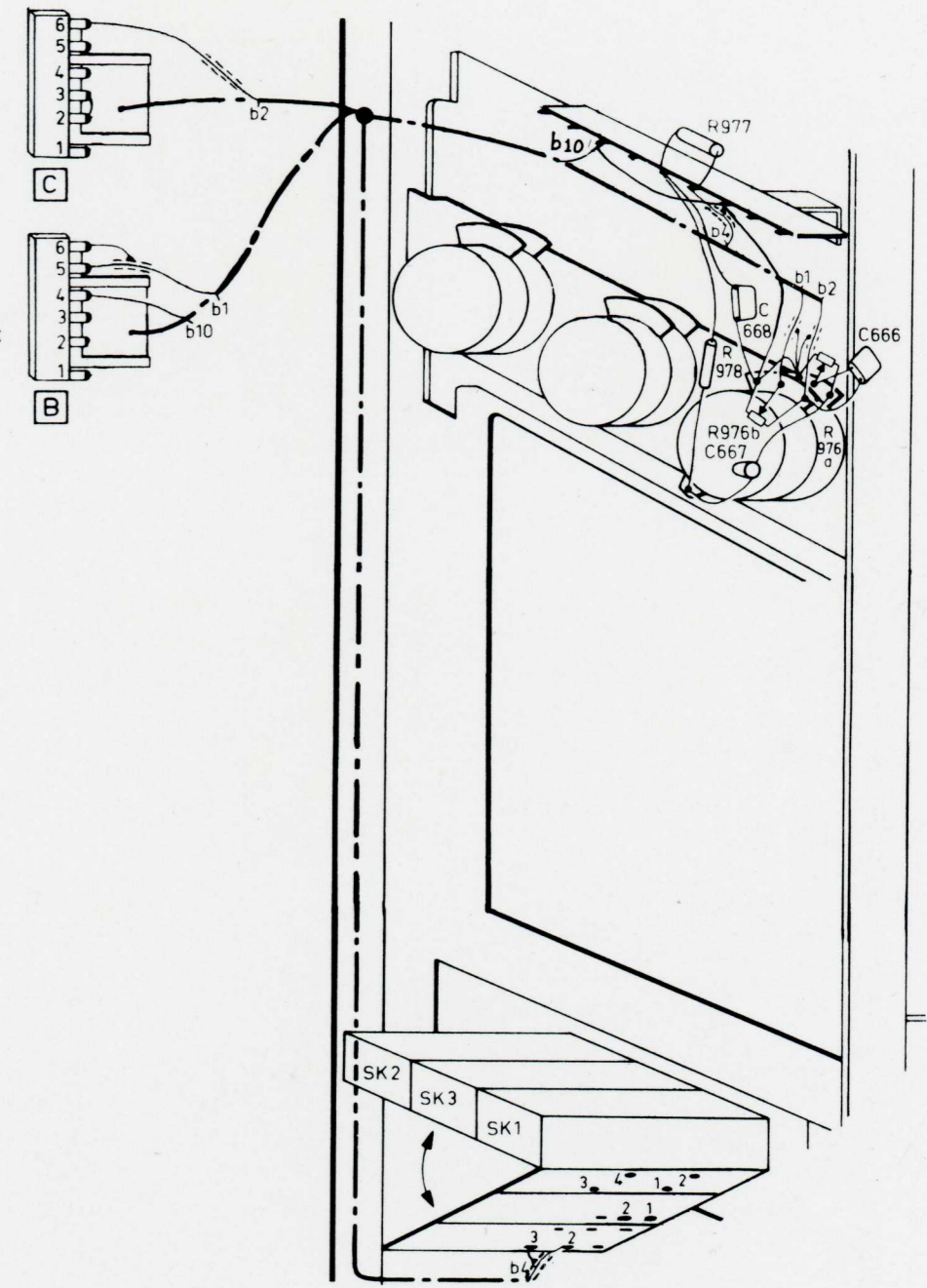
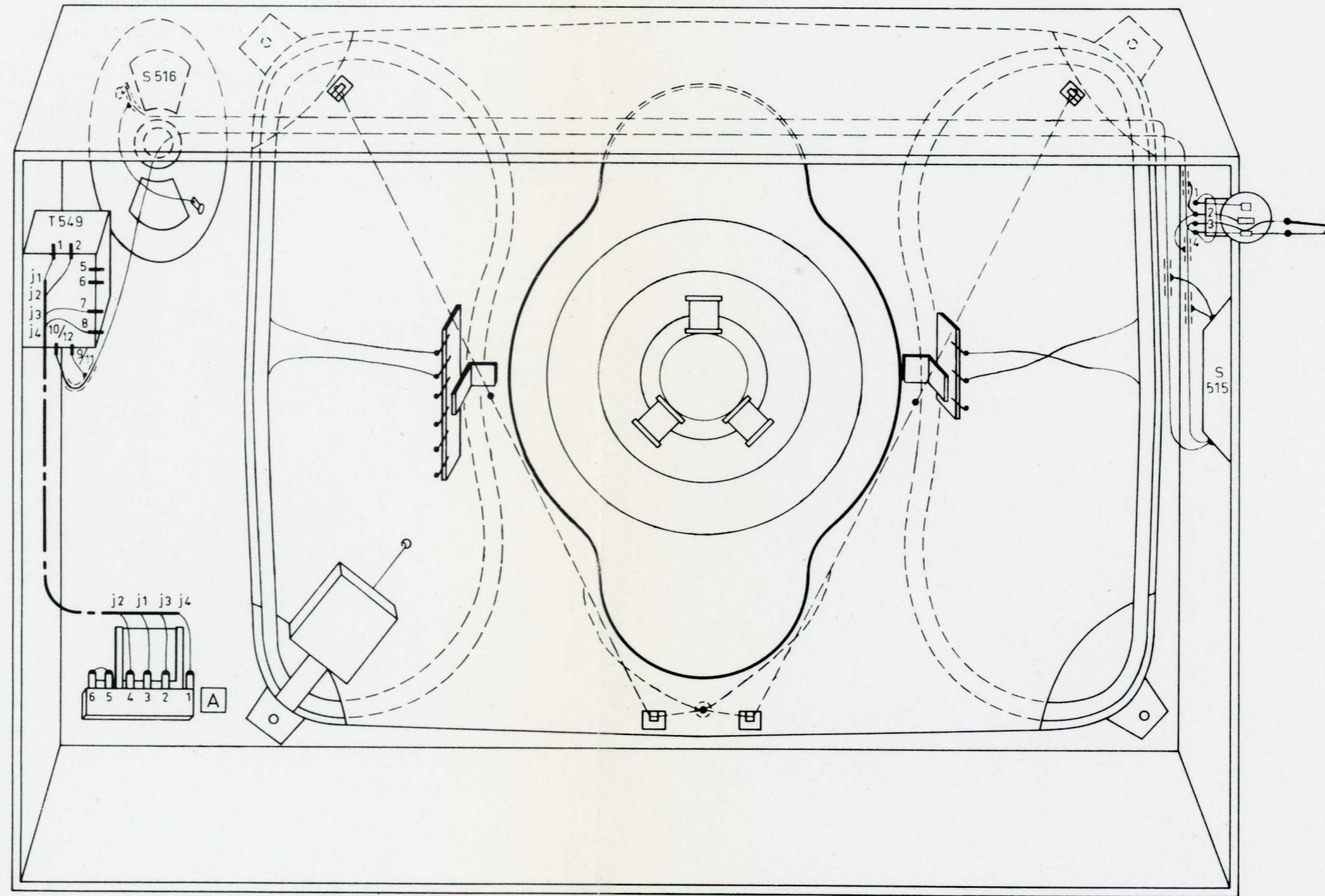
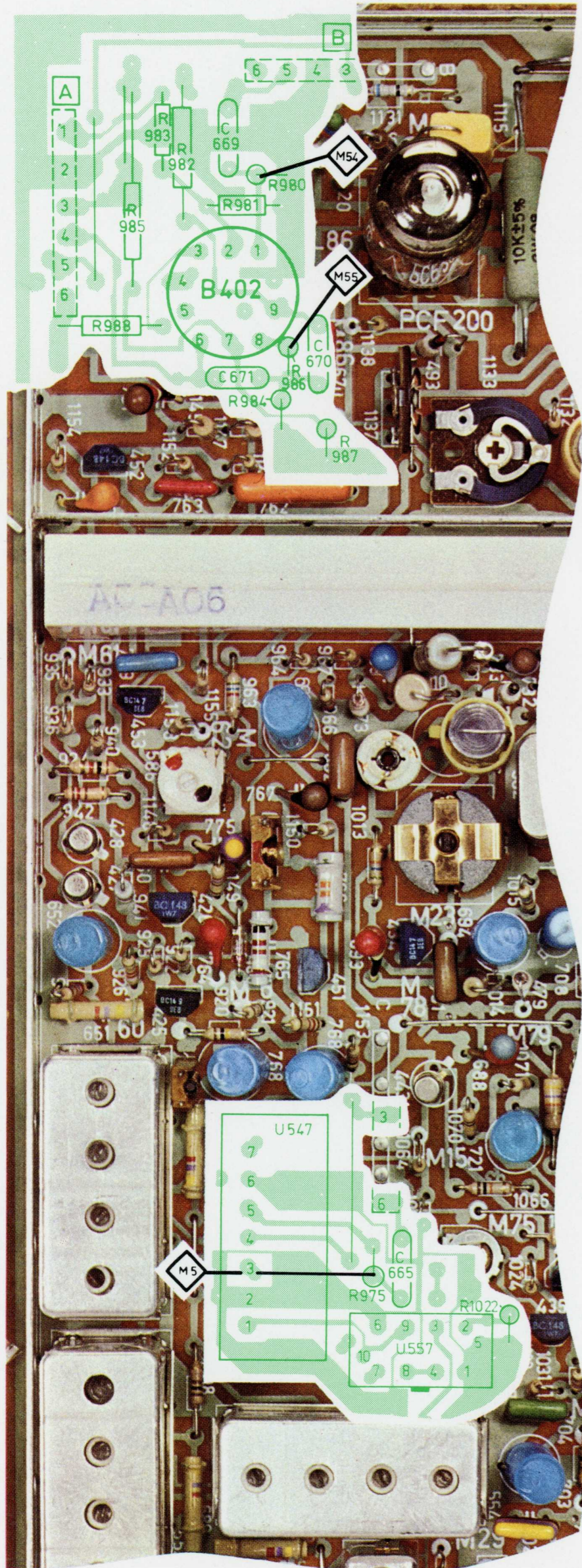
GR 477
k: 10V
a: -1V

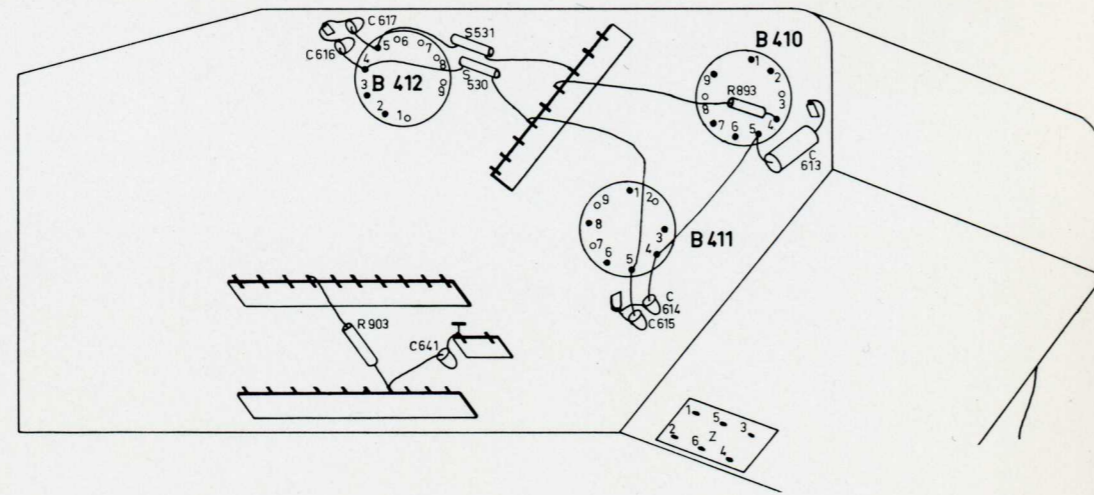
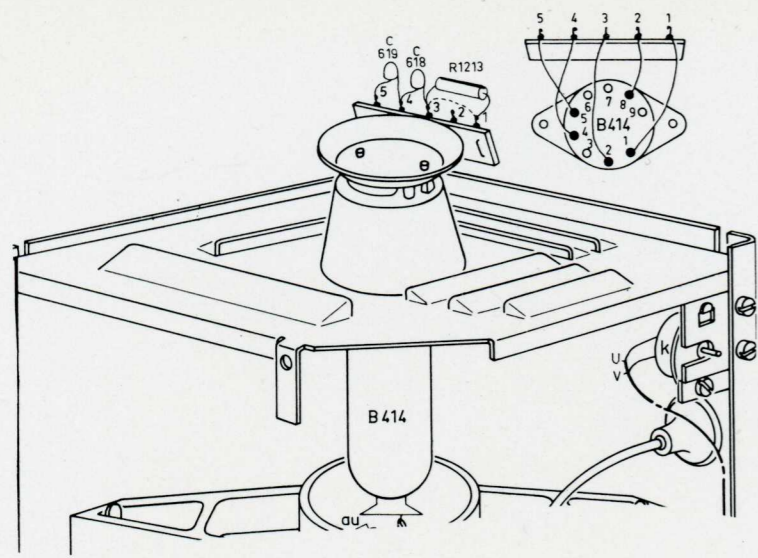
U 562
1: 17,5 V
2: 3,2 V
3: 9 V
4: 23 V
6: 0,08V
7: 0,8V



Hulpdraaggolf oscillator
 Hilfsträger Oszillator
 Oscillatore di sottoportante
 Hjelpe oscillator
 Alikantaalto-oskillaatori
 Subcarrier oscillator

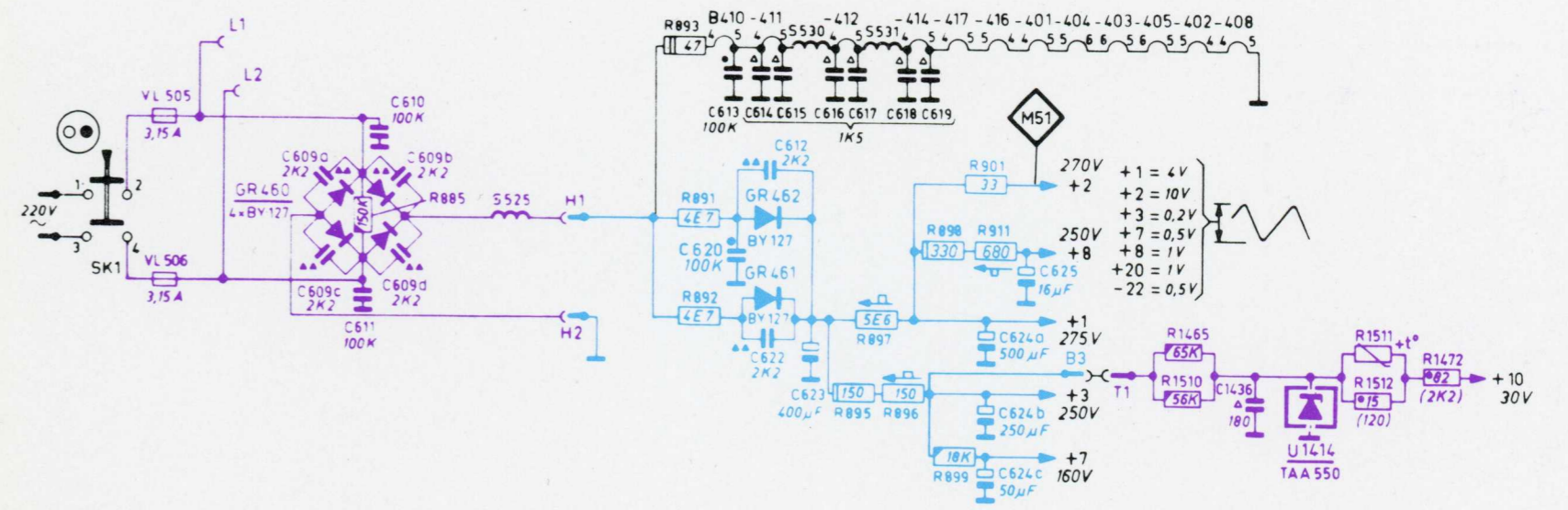
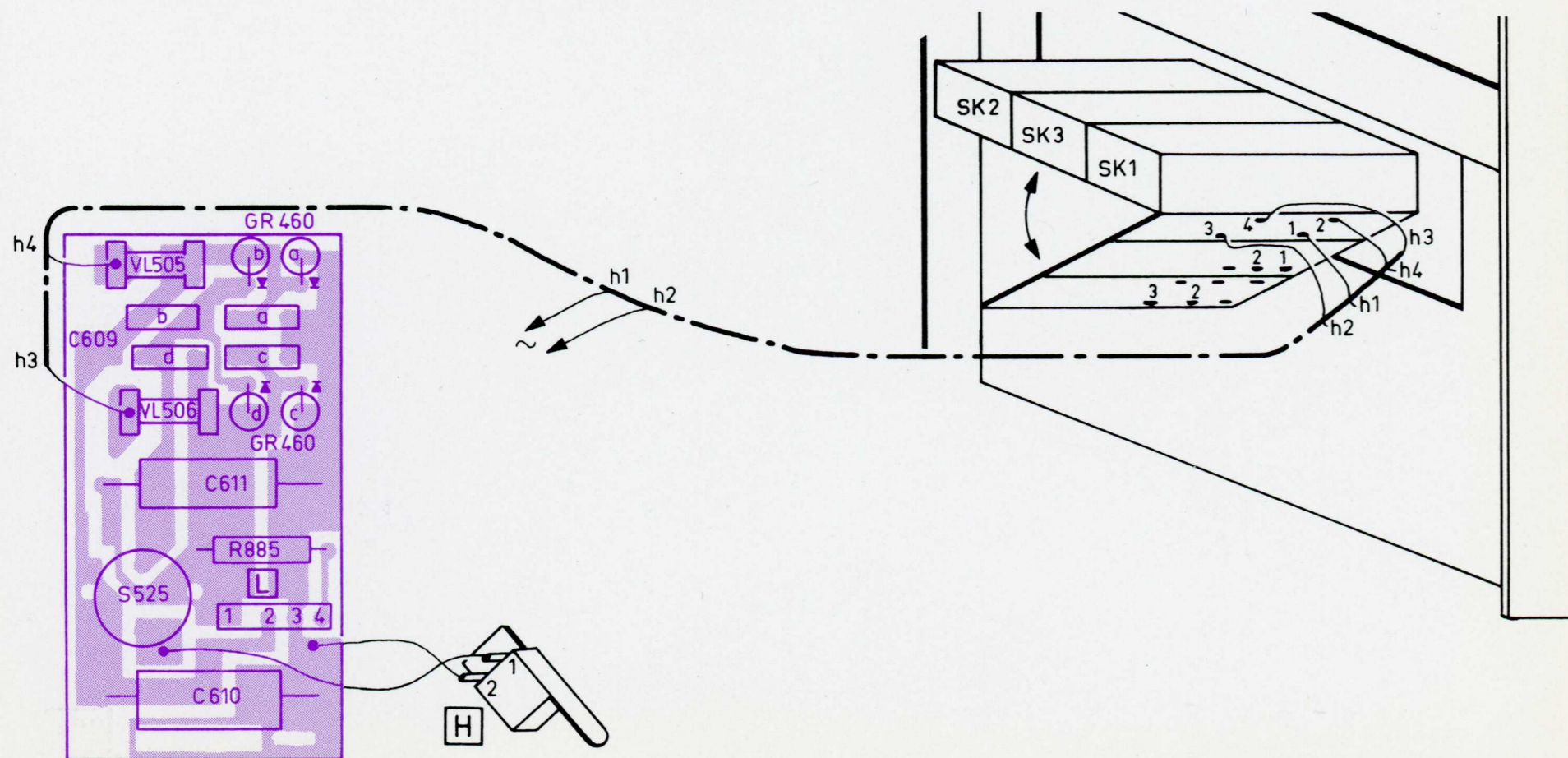
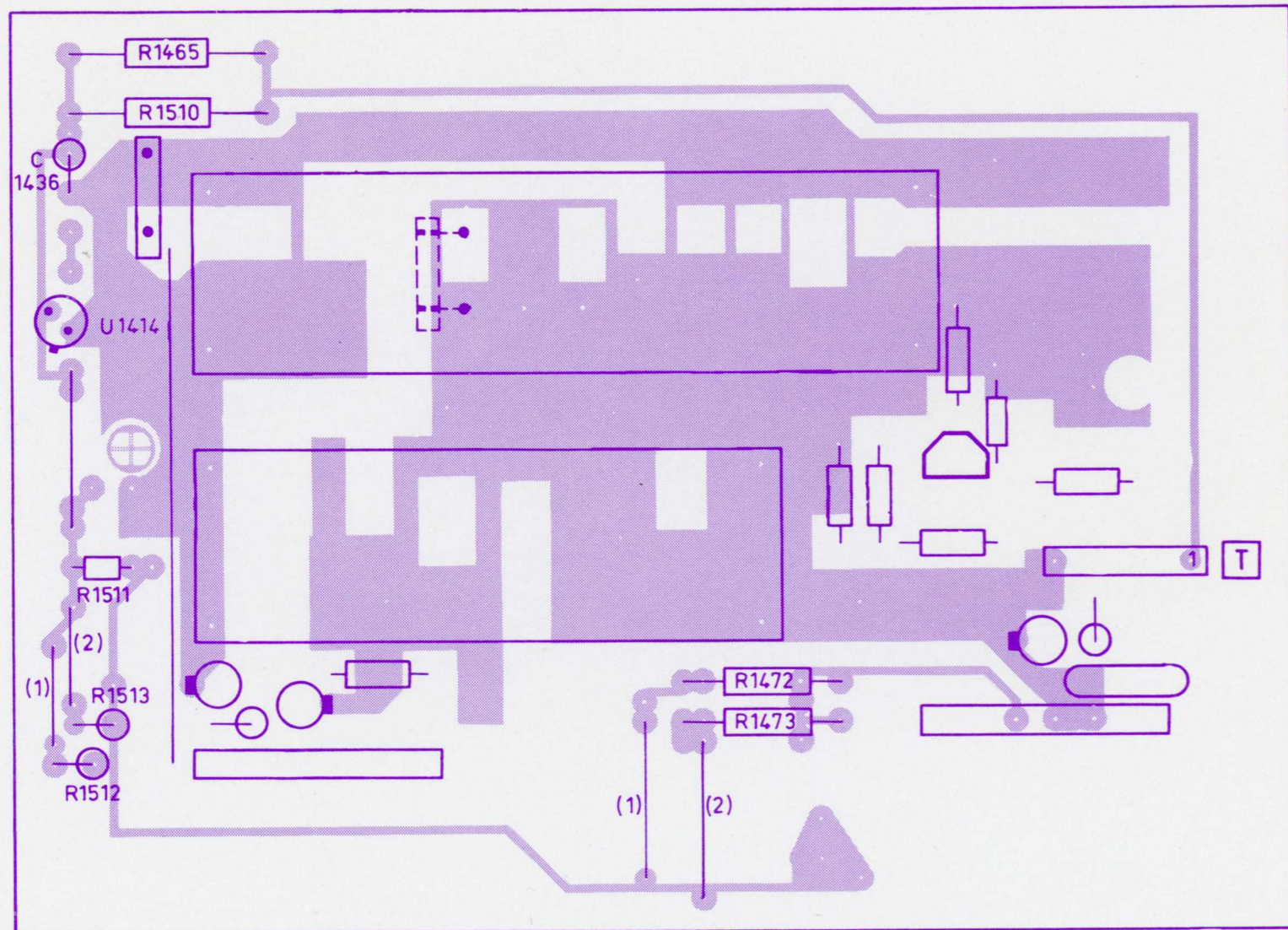
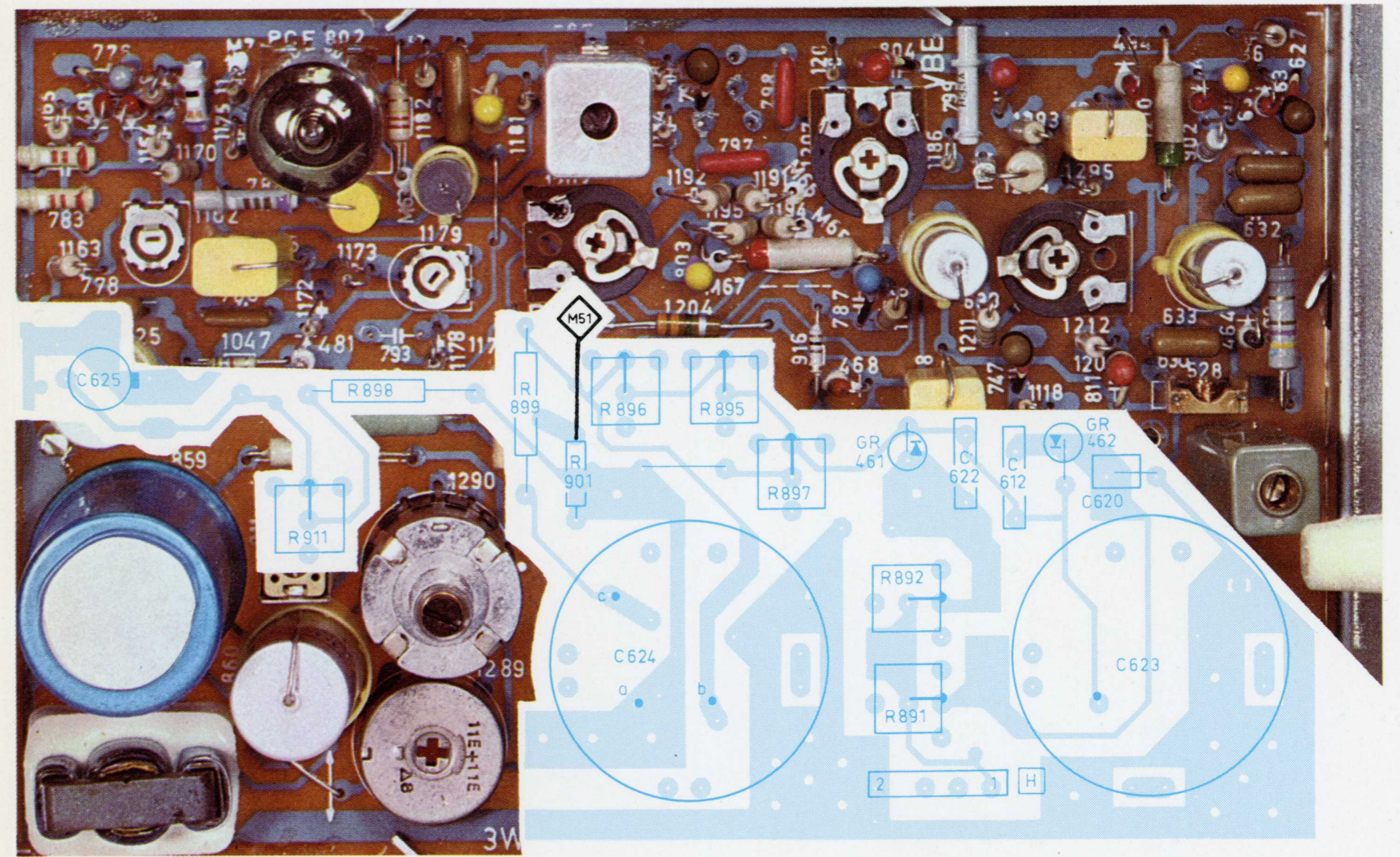


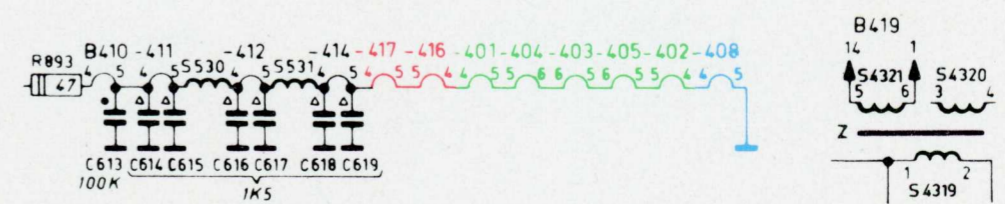
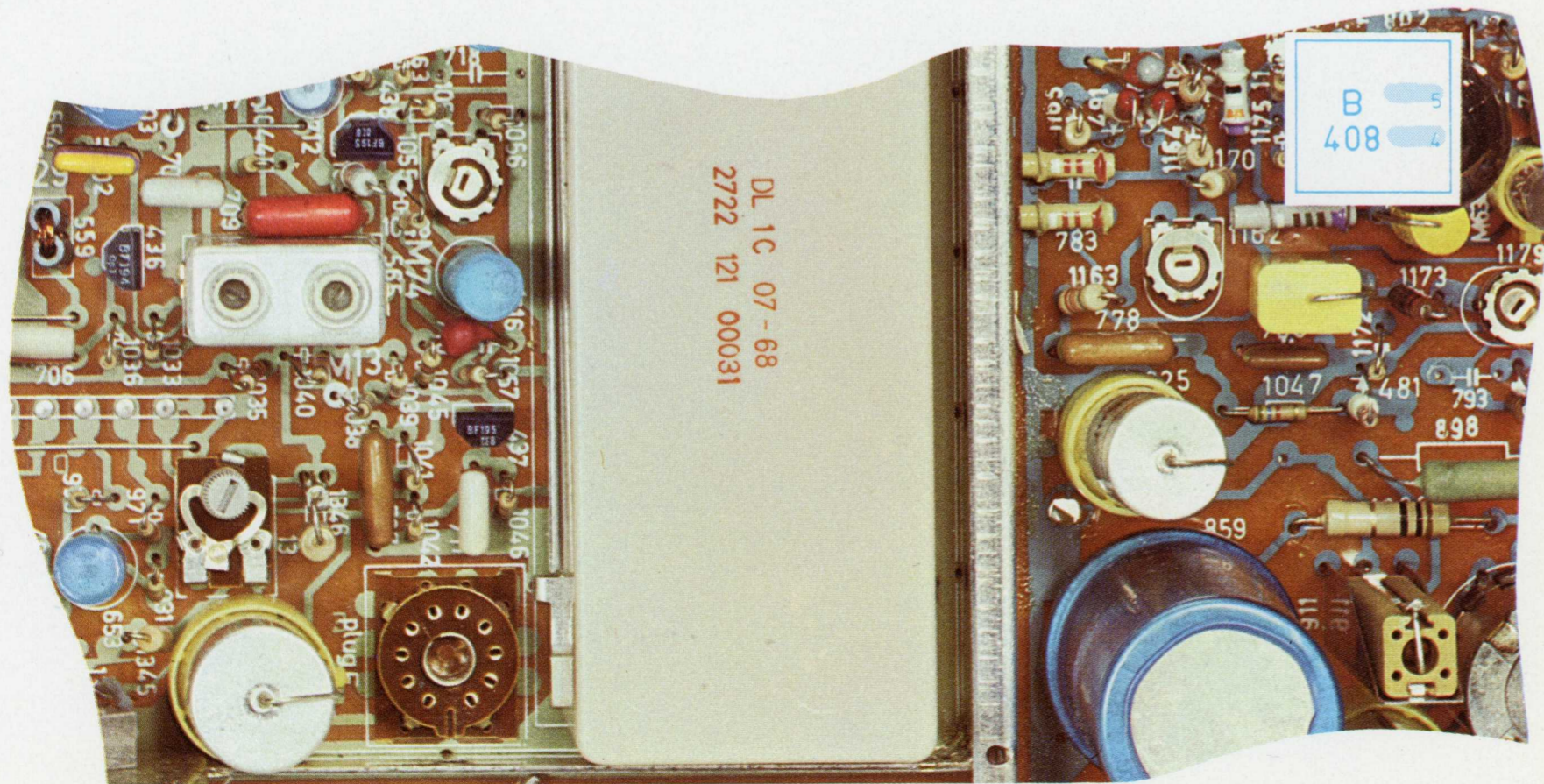
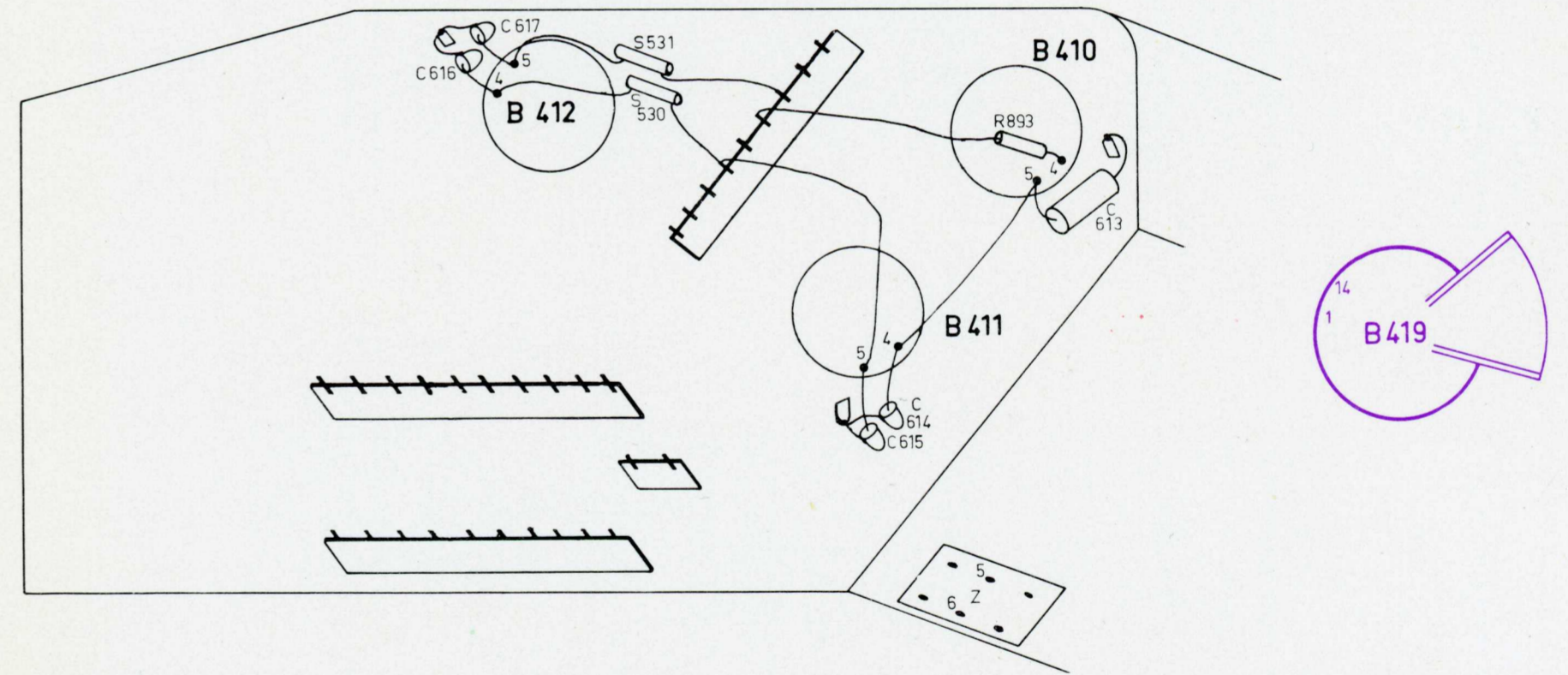
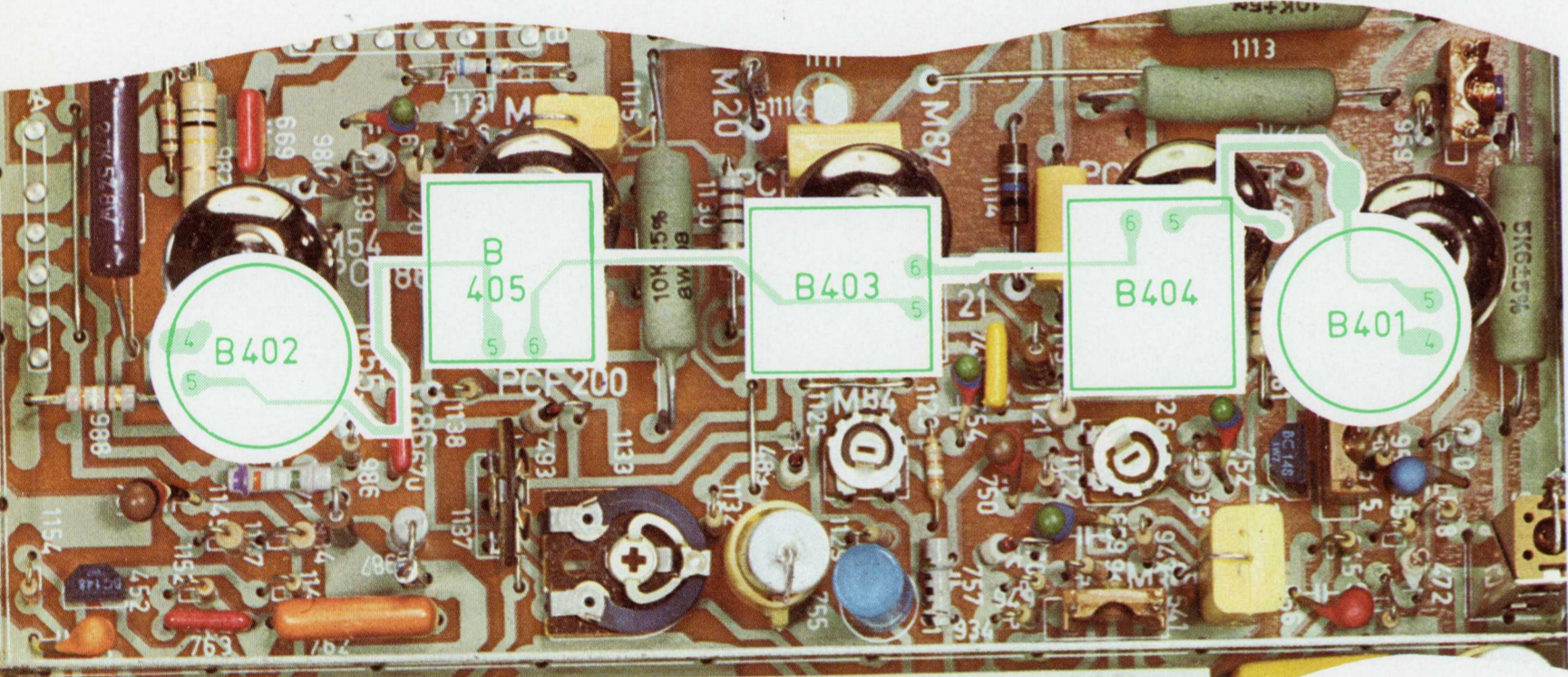
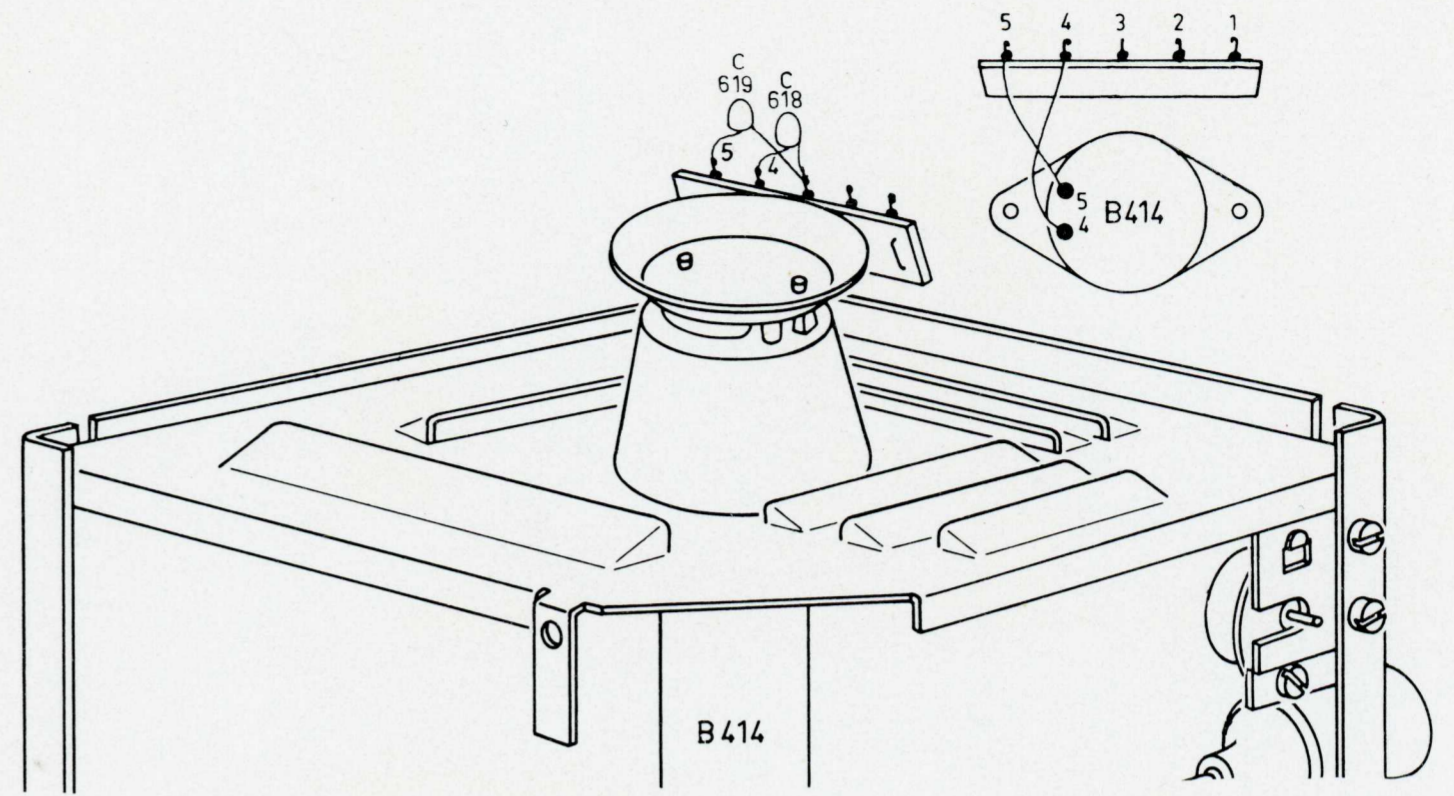
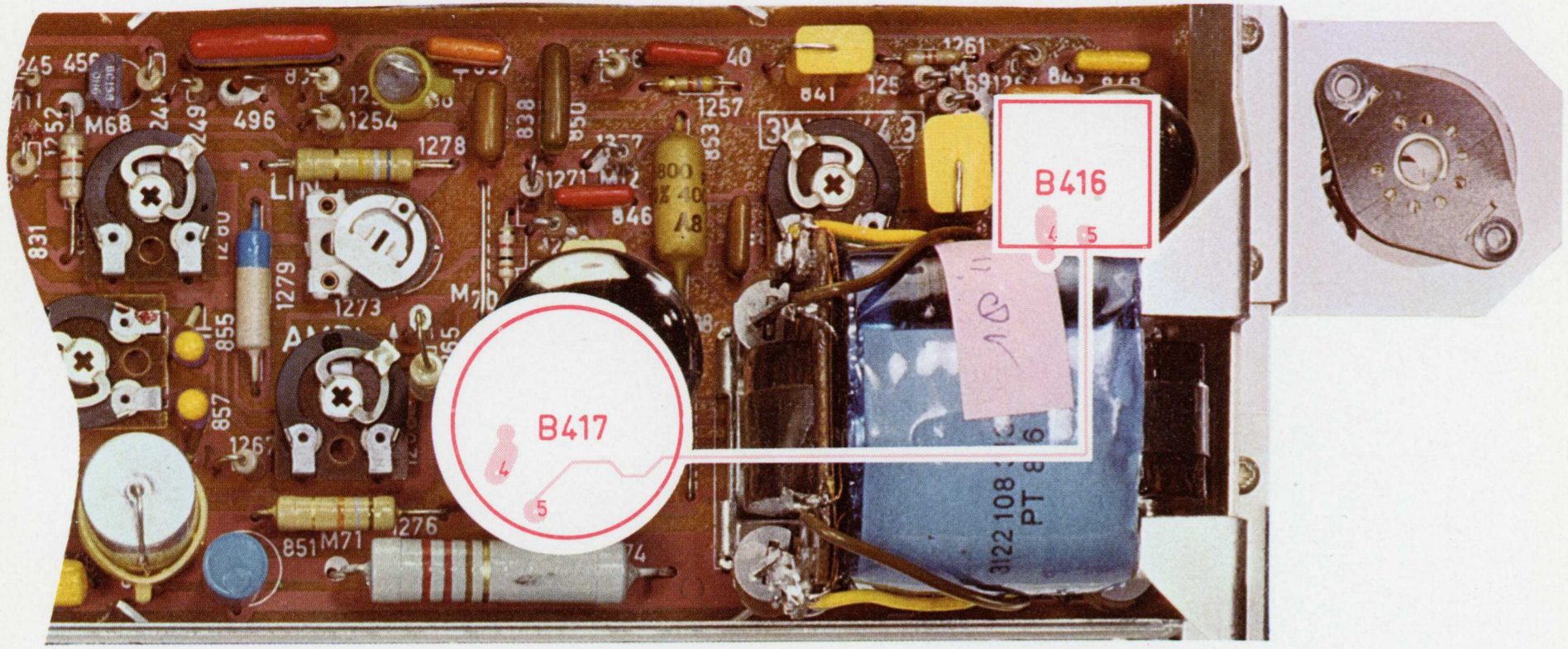


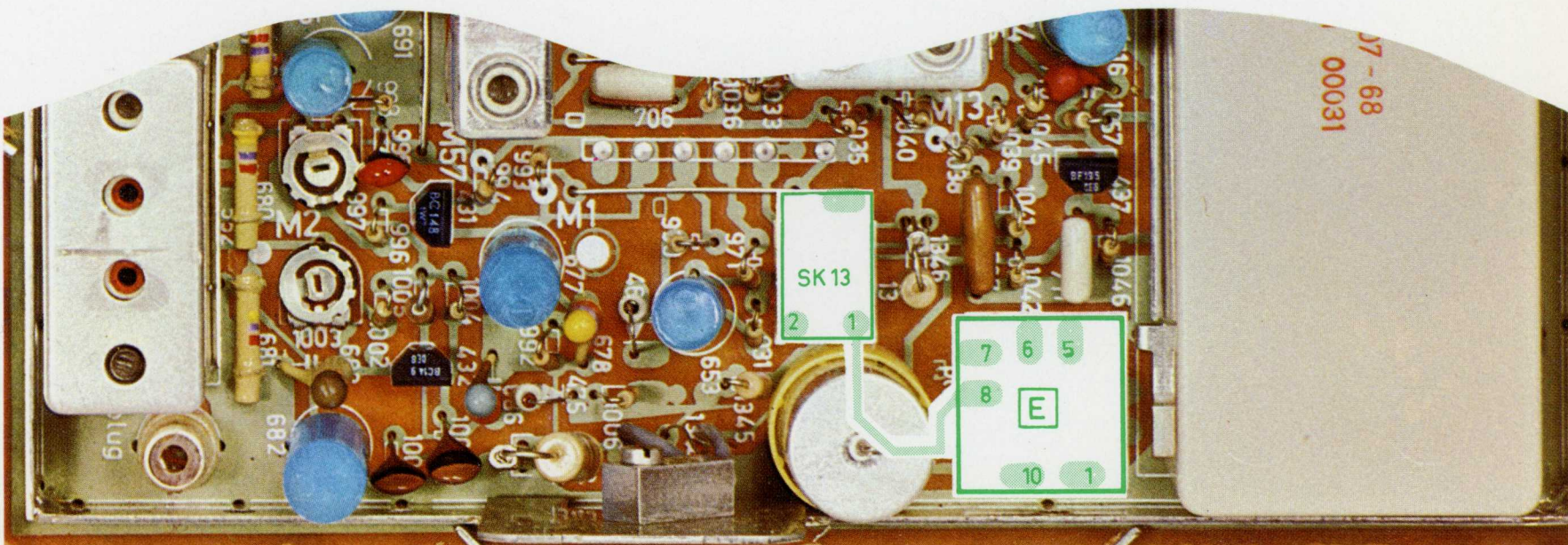
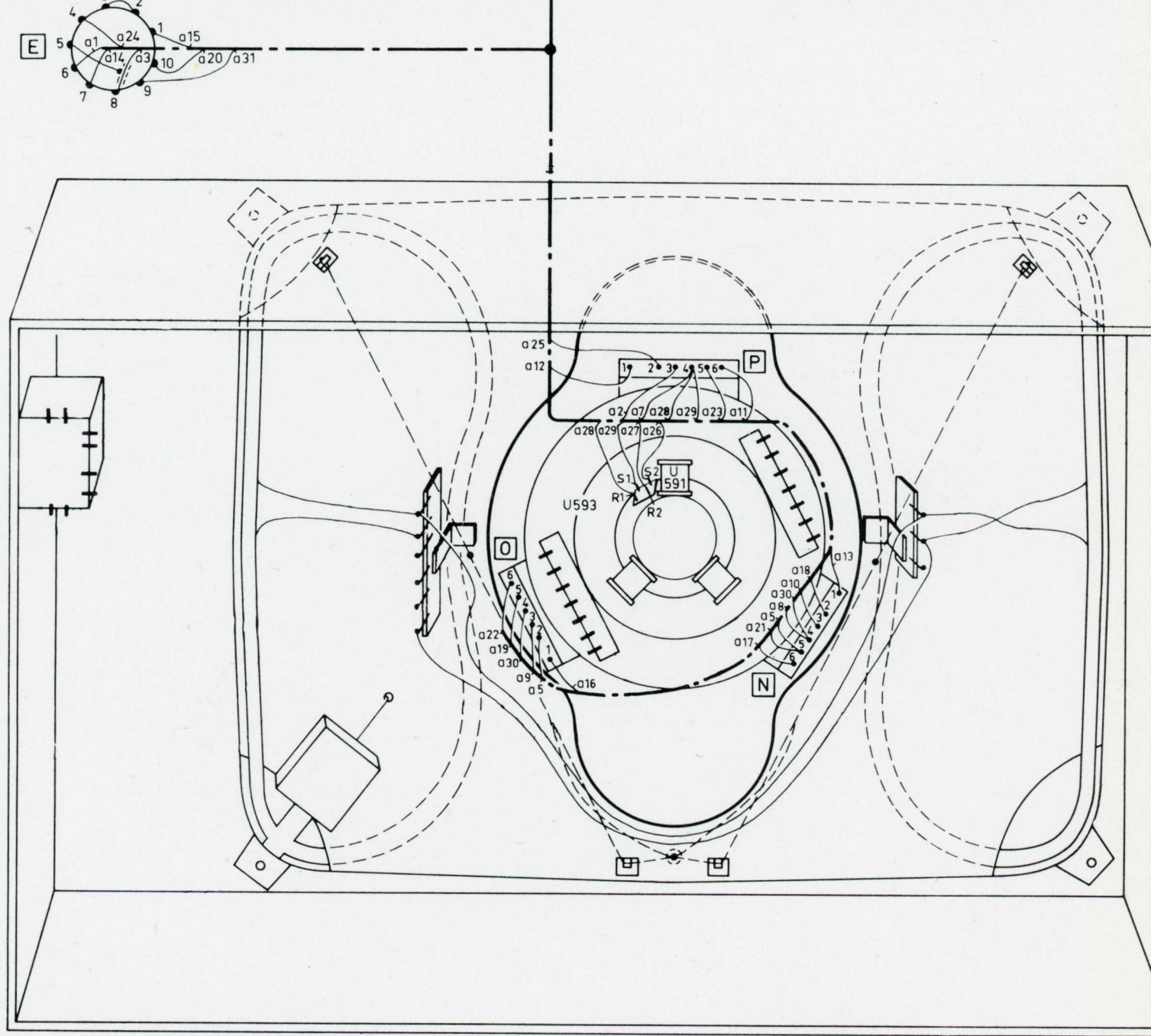
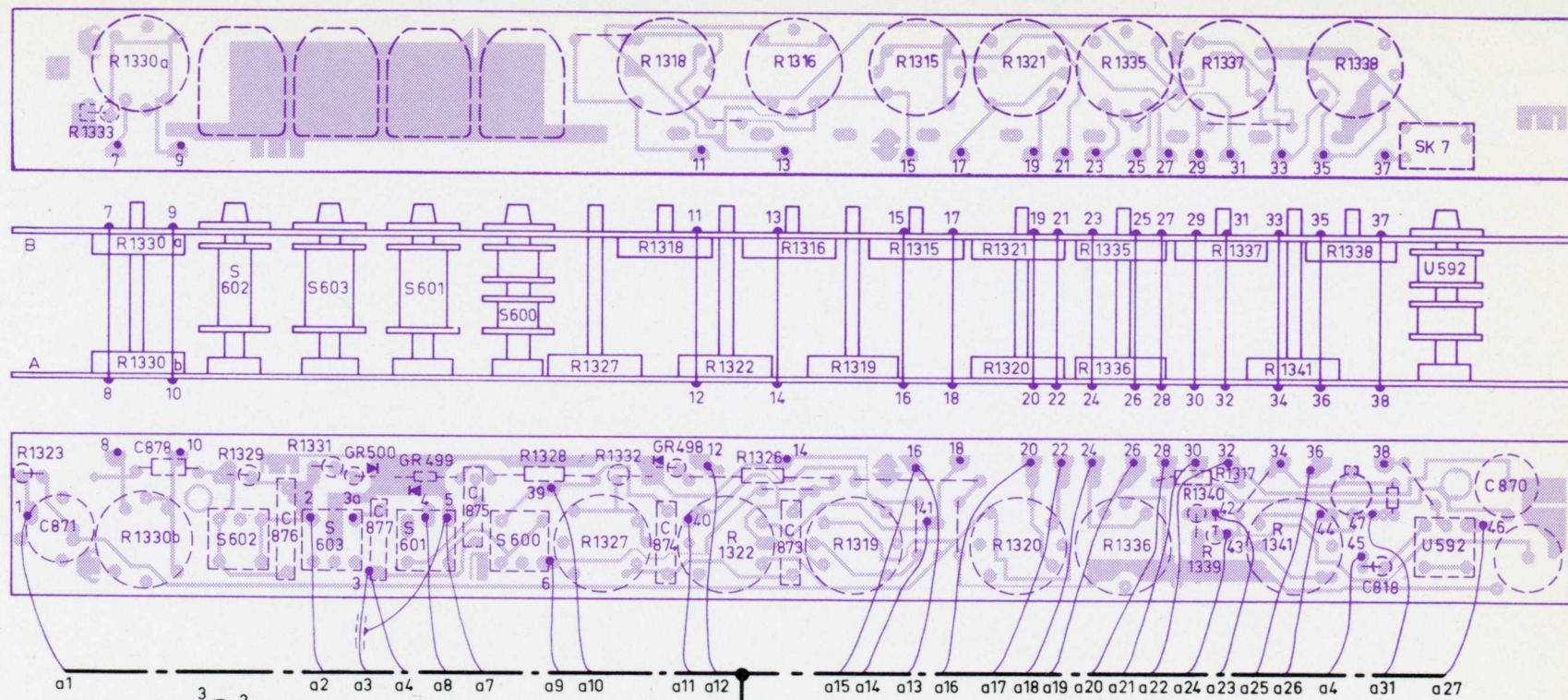


SERVICE

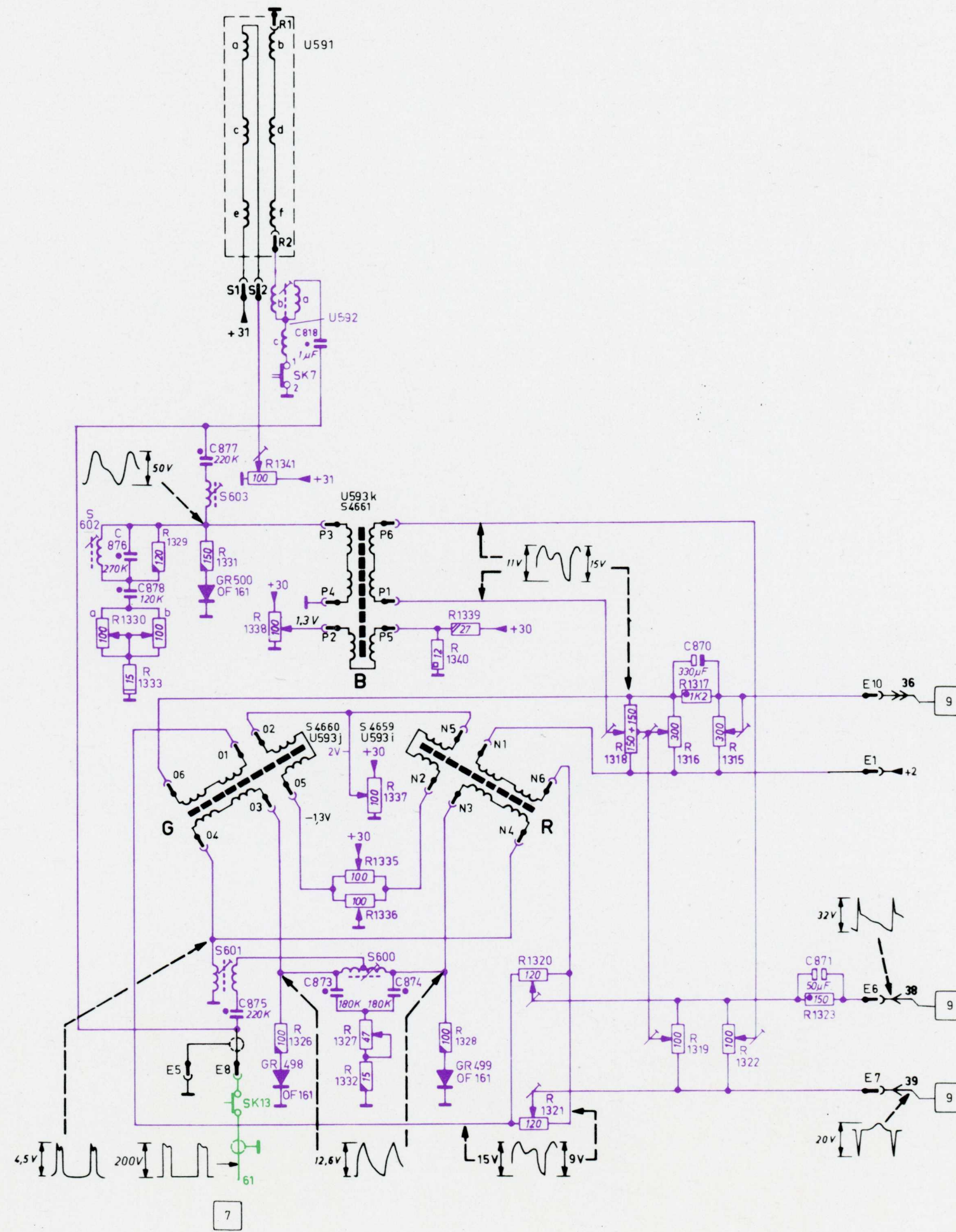
Voeding
Speisung
Alimentazione
Strømforsyning
Virtualähde
Supply section

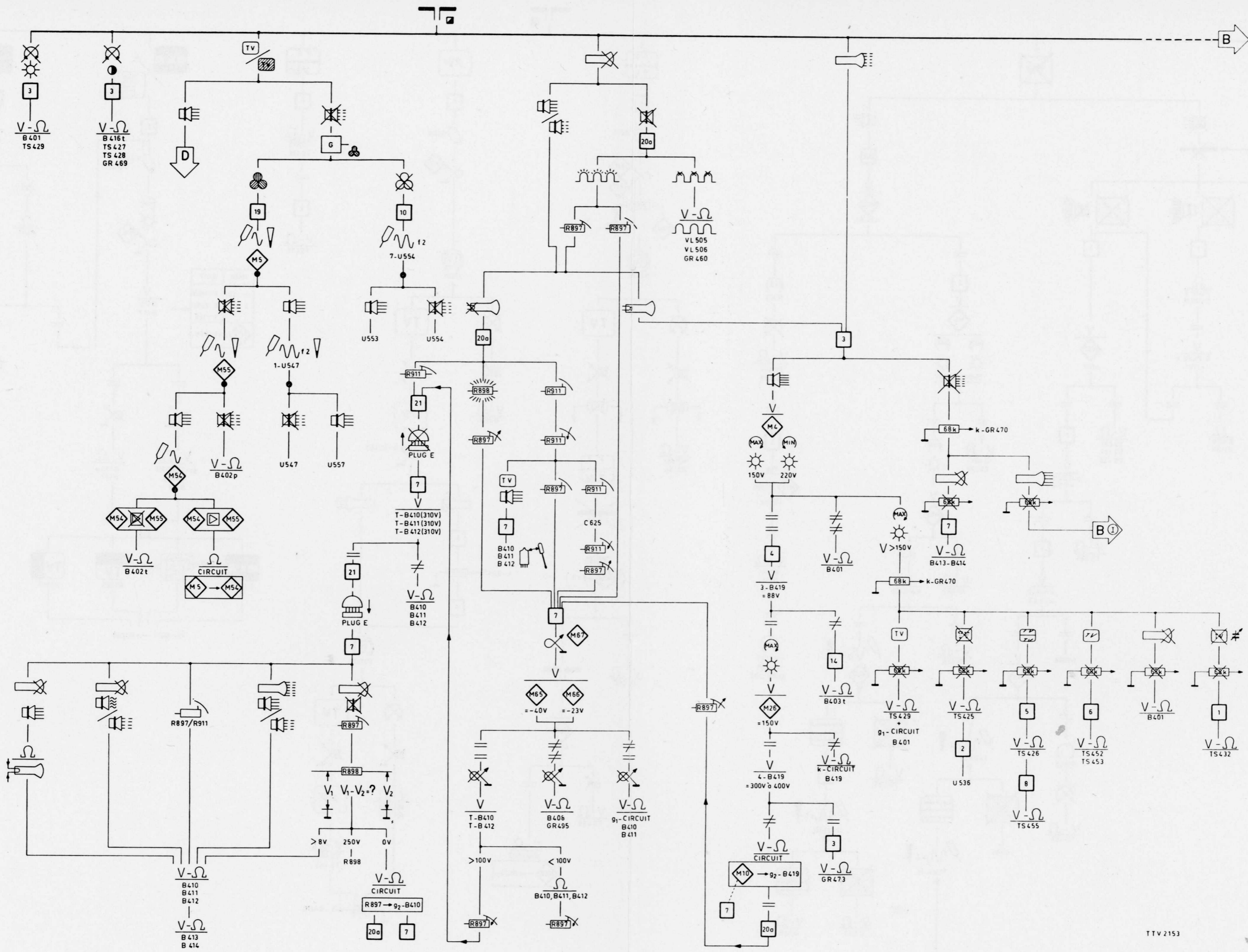


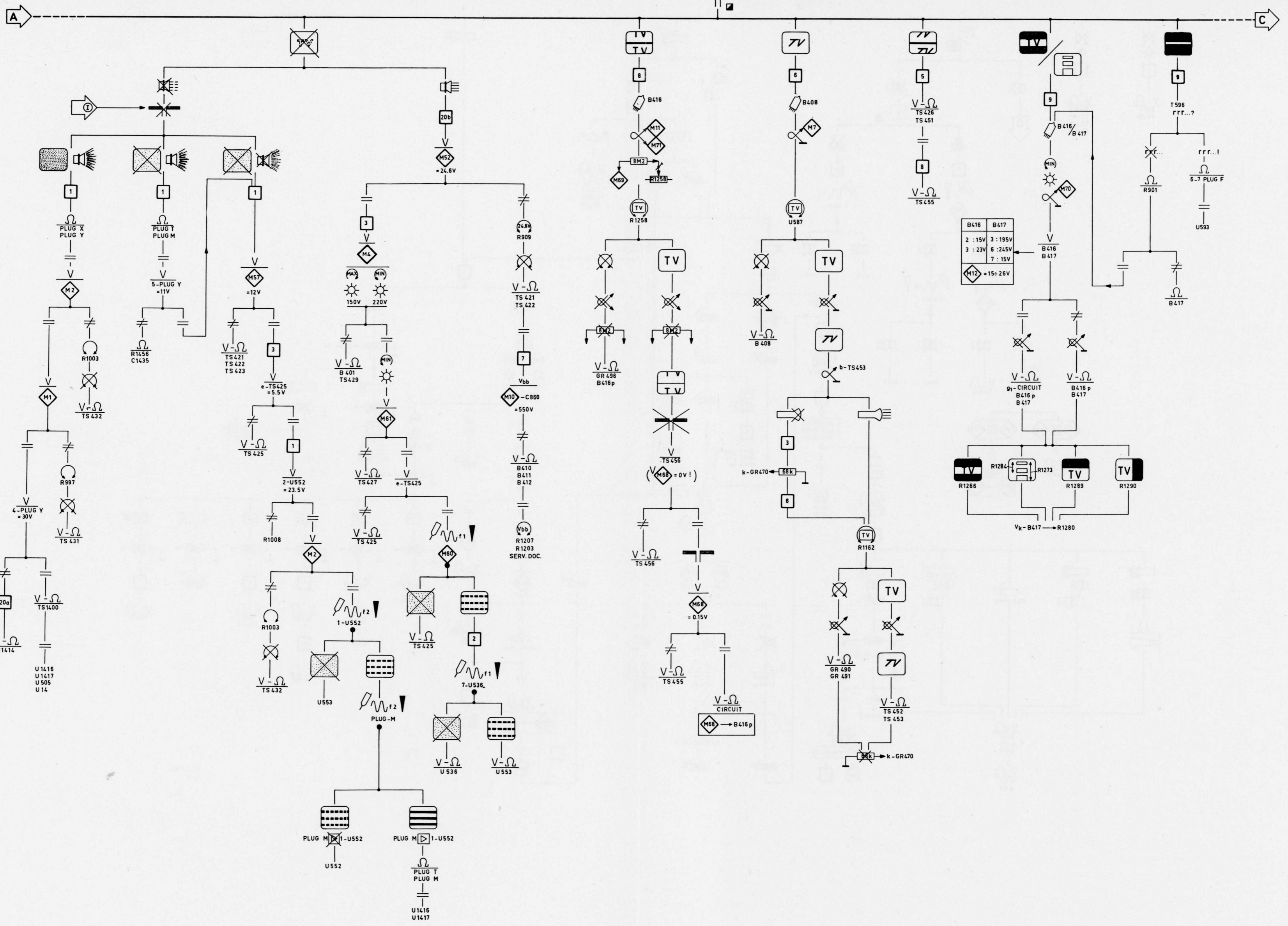


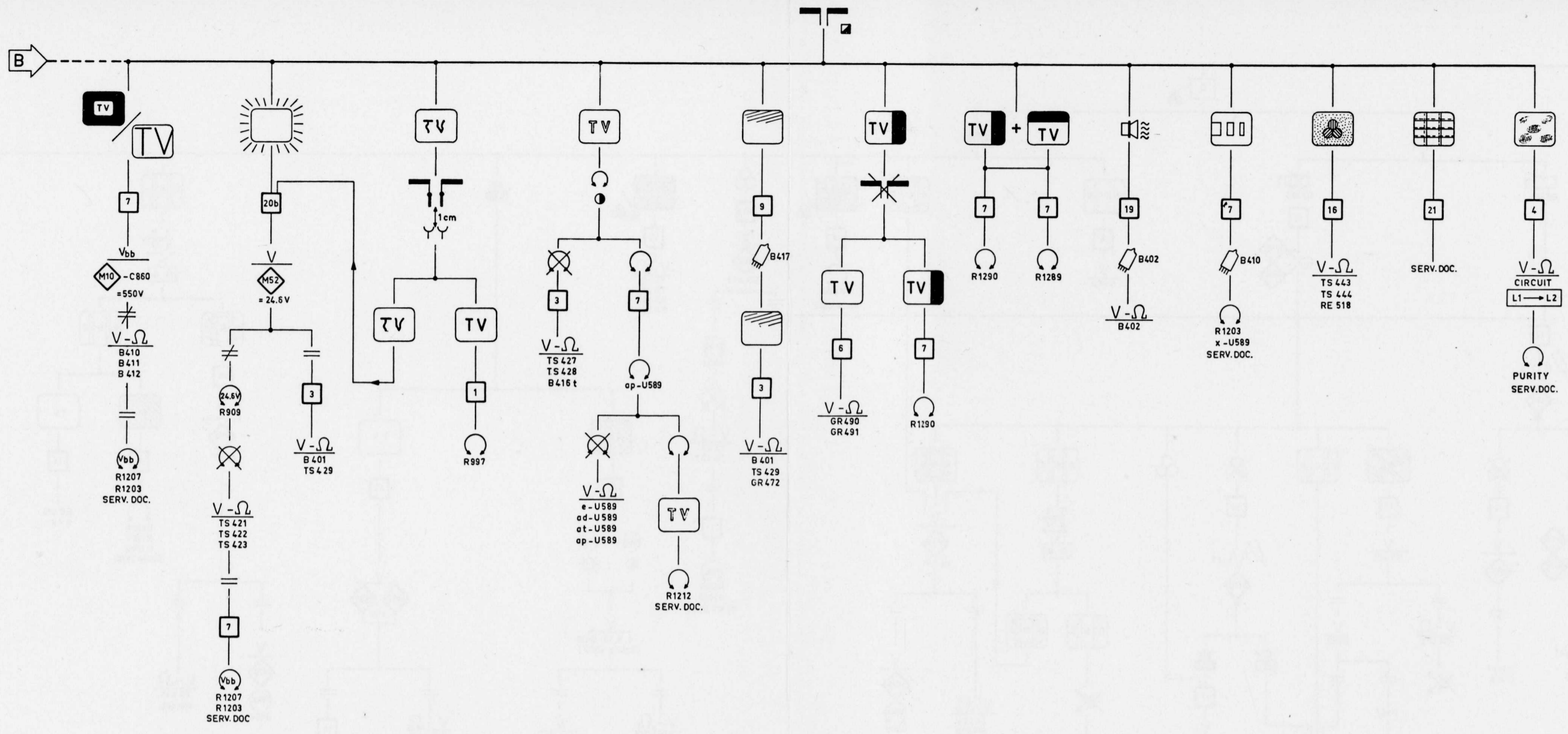


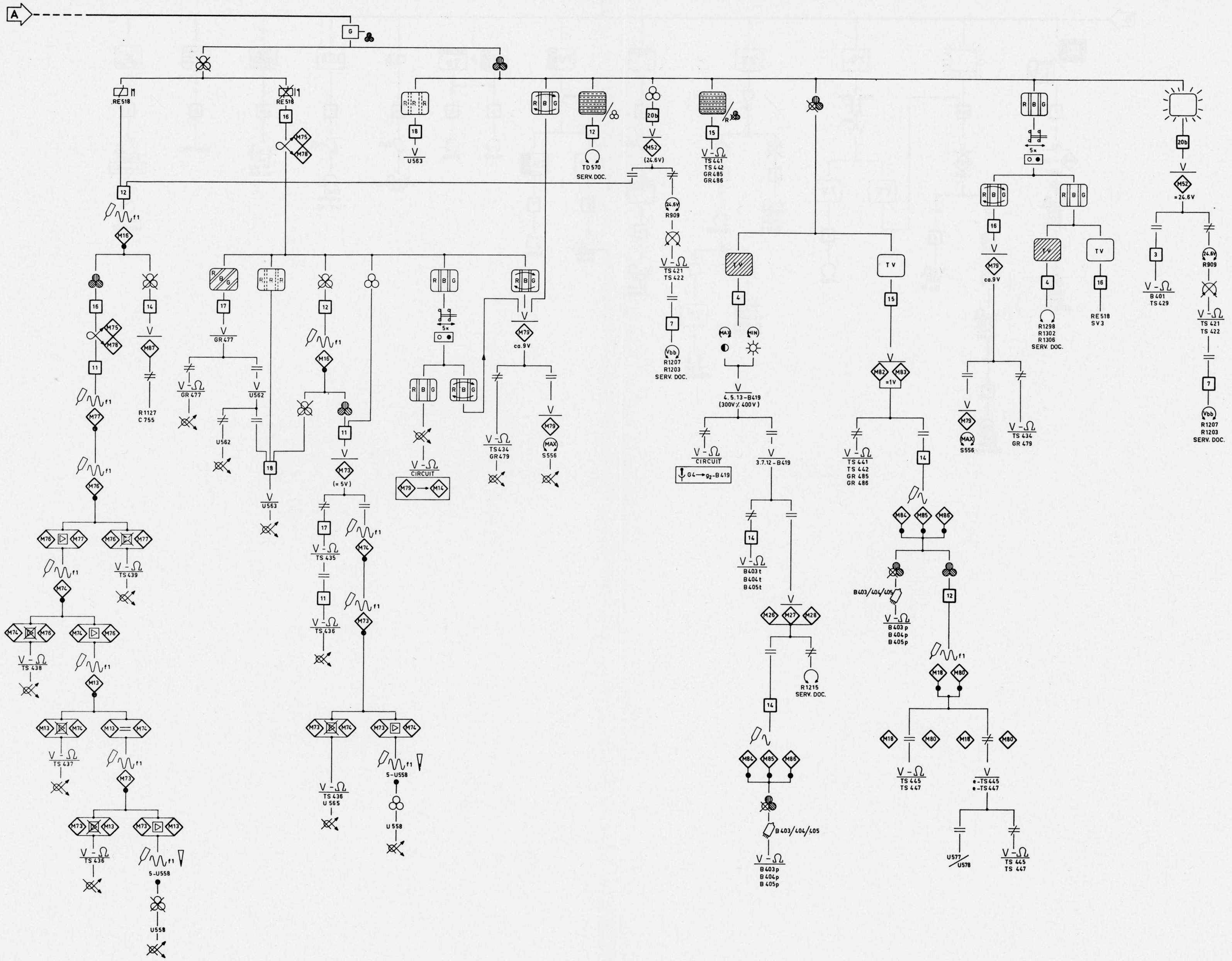
Konvergenz
Konvergenz
Convergenza
Konvergens
Konvergenssi
Convergence











	Controle zwart-wit gedeelte		Schakel het apparaat in		Wazig beeld (focussering)		Sterke kleurenruis in zwart-wit beeld
	Controle kleuren-gedeelte		Schakel het apparaat uit		Beeld vervormd		Terugslaglijnen
	Zie pag. 7 van "Functional Diagrams"				Beeld egaal verkleurd		Kleurenbeeld is in orde
	Meetpunt		Plug insteken		Beeld te klein		Rood en groen soms verwisseld
	Injecteren		Plug verwijderen		Beeld te groot		Kleuren liggen door elkaar
	Antennesignaal toevoeren (zwart-wit)		Kortsluitnoer aanbrengen		Vertikale beeld-amplitude te klein		Zwakke verticale balken (roodachtig)
	Antennesignaal verwijderen		Kortsluitnoer verwijderen		Geen verticale afbuiging		Lijnenraster (Venetian blinds)
	Injectorsignaal HF f1/f2		Overbruggingsweerstand aanbrengen		Geen verticale synchronisatie		Slechte convergentie
	Injectorsignaal LF		Overbruggingsweerstand verwijderen		Geen horizontale synchronisatie		Gloeidraad beeldbuis gloeit
	Uitgangsregelaar v. d. injector maximaal		Springweerstand gesloten		Geen verticale en horizontale synchronisatie		Gloeidraad beeldbuis gloeit niet
	Uitgangsregelaar v. d. injector op lage uitgangsspanning instellen		Springweerstand open		Beeld verdwijnt bij juiste afstemming van kanaalkiezer		Normaal licht
	Generator aansluiten (kleursignaal)		Springweerstand lossolderen		Horizontale centrering niet goed		Weinig licht
	Spanningsmetingen verrichten		Springweerstand vast solderen		Vertikale centrering niet goed		Geen of weinig licht
	Weerstandsmetingen verrichten		Weerstand gloeit/rookt		Vertikale lineairiteit niet goed		Geen licht
	Geen afwijking				Horizontale lineairiteit niet goed		Normaal geluid
	Wel afwijking		Gloeidraden gloeien		Sterke zwart-wit ruis		Zwak geluid
	Versterkt		Gloeidraden gloeien niet		Zwakke of geen ruis		Geen of zwak geluid
	Versterkt niet		Relais trekt aan		Sterke horizontale balken		Geen geluid
	Buis verwisselen		Relais trekt niet aan		Zwakke horizontale balken		Normale luidspreekruis
	Controleer circuit tussen . . . en . . .		Ratel hoorbaar		Kleurvlekken in zwart-wit beeld		Zwakke ruis
	Stel de helderheidsregelaar in op maximum		Geen ratel hoorbaar		Beeld flakkert (eventueel bij max. helderheid)		Geen of zwakke ruis
	Stel de helderheidsregelaar in op minimum		Instelling (algemeen)				Vervormd geluid
	Stel de contrastregelaar in op maximum		Instelling heeft geen resultaat				Kleuren
	Stel de contrastregelaar in op minimum		Goed zwart-wit beeld				Eén of twee kleuren zwak of afwezig
			Geen of zwak beeld				Zwakke kleuren
							Geen of zwakke kleuren
							Rood te zwak

BLOKSCHEMA BLOCKDIAGRAM

