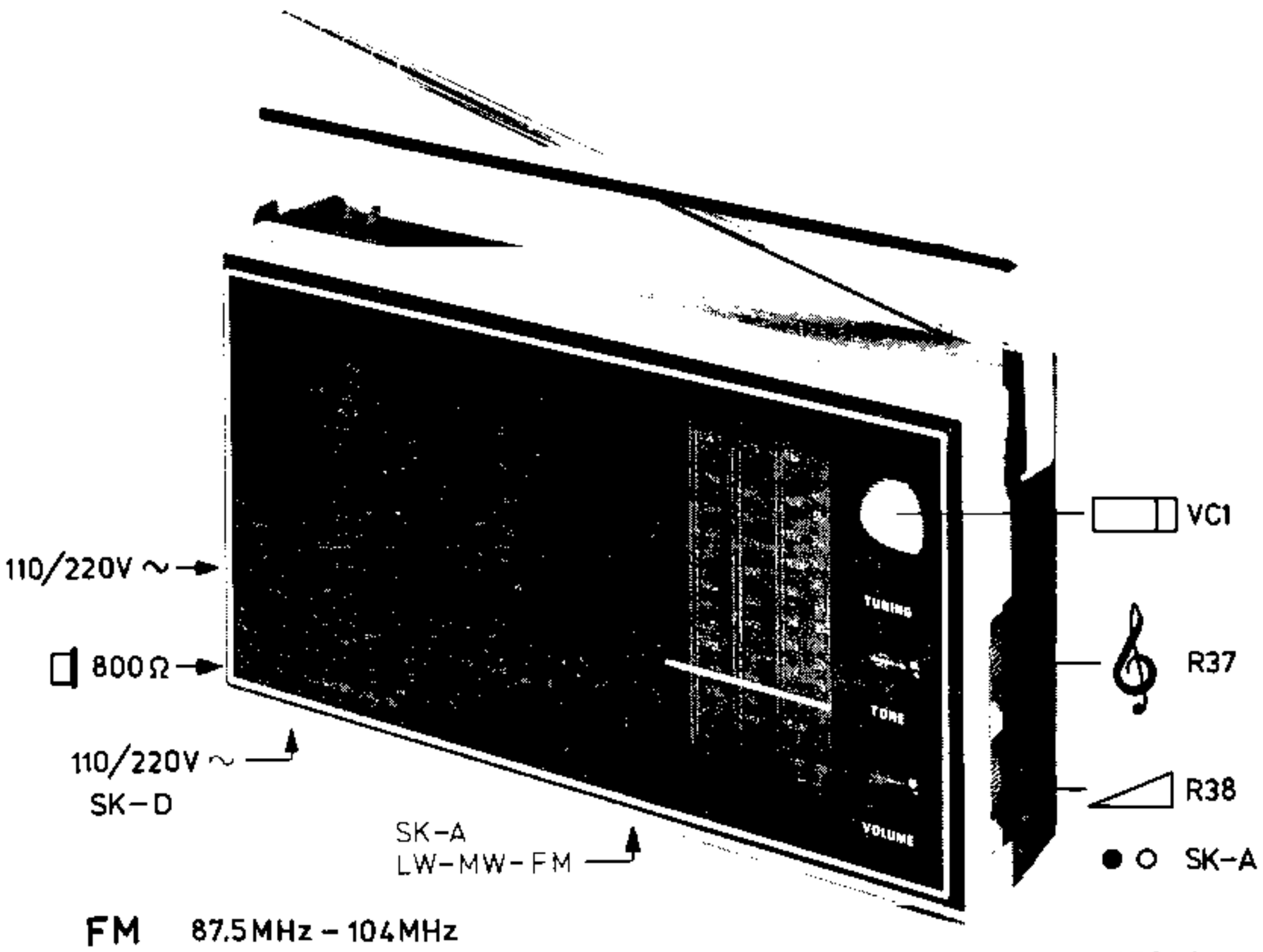
Service
Service
Service

Met dank aan **www.radiomuseum-hengelo.nl**

Service Manual



FM 87.5 MHz – 104 MHz
MW 520 kHz – 1605 kHz (577 – 187 m)
LW 150 kHz – 255 kHz (2000–1177 m)
6V (4×1.5V)

4703A

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified, be used.

Documentation Technique Service Dokumentation Documentazione di Servizio Huolte-Ohje Manual de Servicio Manual de Serviço

Subject to modification
4822 725 11258
Printed in The Netherlands

PHILIPS

(GB)

There are two versions of this set which differ from each other electrically. The versions are provided with different type plates namely either with a plate with SV before the serial number or NR before the serial number.

(F)

Il existe 2 versions de cet appareil qui se différencient du point de vue électrique. Les versions se distinguent de par le numéro de type sur la plaquette. L'une d'elles présente les lettres SV et l'autre les lettres NR précedant le no. de série.

(I)

Esistono 2 tipi di questo stesso apparecchio, diversi dal punto di vista elettrico. I tipi differiscono dal numero di tipo sulla piastrina. Un tipo porta le lettere SV e l'altro, le lettere NR davanti al numero di serie.

(S)

Appareten finns i två versioner som skiljer sig elektriskt. Versionerna har olika typskyltar. Antingen en skylt med SV före serienumret eller en med NR före serienumret.

(N)

Det er to elektrisk avvikende utfør elser av dette apparatet. Utførelsene har forskjellige typeskilt, enten med et skilt ed SV foran serienummeret eller NR foran serienummeret.

(NL)

Van dit apparaat bestaan 2 uitvoeringen, welke elektrisch verschillen. De uitvoeringen zijn te herkennen aan het typenr. plaatje. De ene uitvoering is herkenbaar aan de letters SV voor het serienummer, de andere uitvoering heeft de letters NR.

(D)

Von diesem Gerät gibt es zwei Ausführungen die sich elektrisch unterscheiden. Sie sind an der Typennummer-Platte erkennbar. Bei der einen Ausführung stehen die Buchstaben SV vor der Seriennummer und bei der anderen Ausführungen stehen die Buchstaben NR vor der Seriennummer.

(E)

De este aparato existen 2 versiones, cuales difieren electricamente entre sí. Las versiones pueden ser reconocidas por la plaquilla de tipo. Una versión tiene las letras SV ante el número de serie y la otra versión las letras NR.

(DK)

Dette apparat findes i to versioner, som i elektrisk henseende afviger fra hinanden. Kendetegnet fremgår af typenummerpladen ed hjælp af bogstaverne SV eller NR foran serienummeret

(SF)

Näitä laitteita on kahta versiota, jotka eroavat toisistaan sähköisesti. Versioissa on erilaiset tyyppikilvet, nimittäin kilpi, jossa on SV ennen sarjanumeroa ja kilpi, jossa on NR ennen sarjanumeroa.

-TS-		
TS1,3,4,5,6	BF494	5322 130 44195
TS2	BF495	4822 130 40947
TS7	BC548B	4822 130 40937
TS8	BC558	4822 130 40941
TS9	AC128	5322 130 40095
TS10,11	AC127/128 pair	5322 130 40382
-D-		
D1,5,6,7	AA119	5322 130 40229
D2,3,4	BA100	5322 130 30226
D8,9,10,11,12	BY188B	4822 130 30829
D13	BZX79 (C6V8)	5322 130 30768
-C-		
C7	330 pF, 10 %, cer.	4822 122 31165
C8	20 pF, 5 %, cer.	4822 120 33062
C21	10 nF, 10 %	4822 121 40015
C26	3 nF, 5 %	4822 121 50414
C27,46,51	40 nF, cer.	4822 122 31152
CT5	Trimmer 22 pF	4822 125 50045
VC1	Varco	4822 125 20189

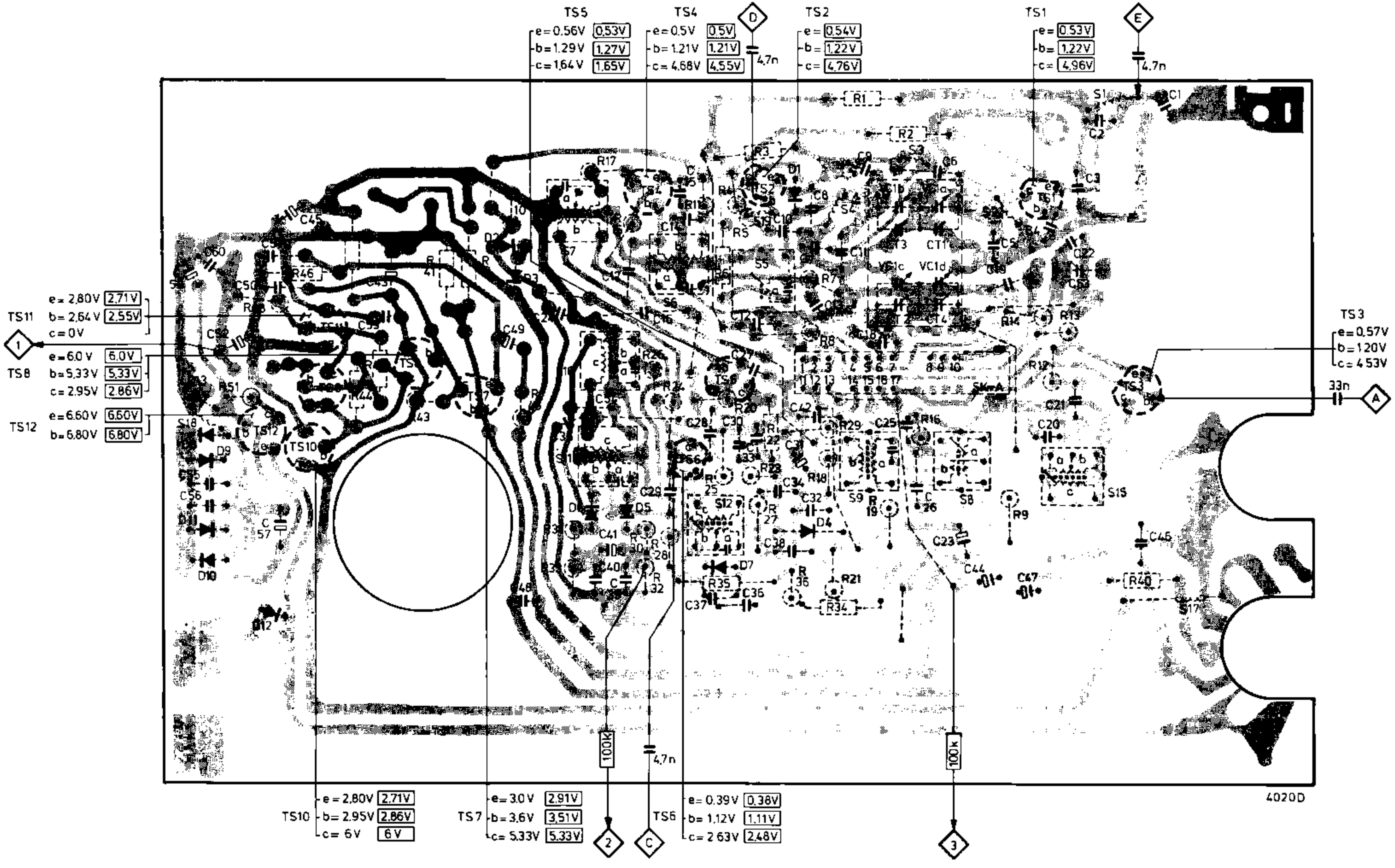
-S-		
S3,17,18		4822 157 50791
S5,6		4822 153 50199
S7,11		4822 153 50201
S8		4822 156 40609
S9		4822 153 10279
S10		4822 153 10236
S12		4822 153 10281
S13,14	Ferroceptor	4822 158 60362
S15		4822 156 30485
S16	Loudspeaker	4822 240 30096
S19	Transformer	4822 145 30196
-R-		
R45	1,1 Ω	5322 111 30358
R37	50 kΩ potm.	4822 101 20466
R38	20 kΩ potm. switch	4822 101 50195

CS39881

CS39882

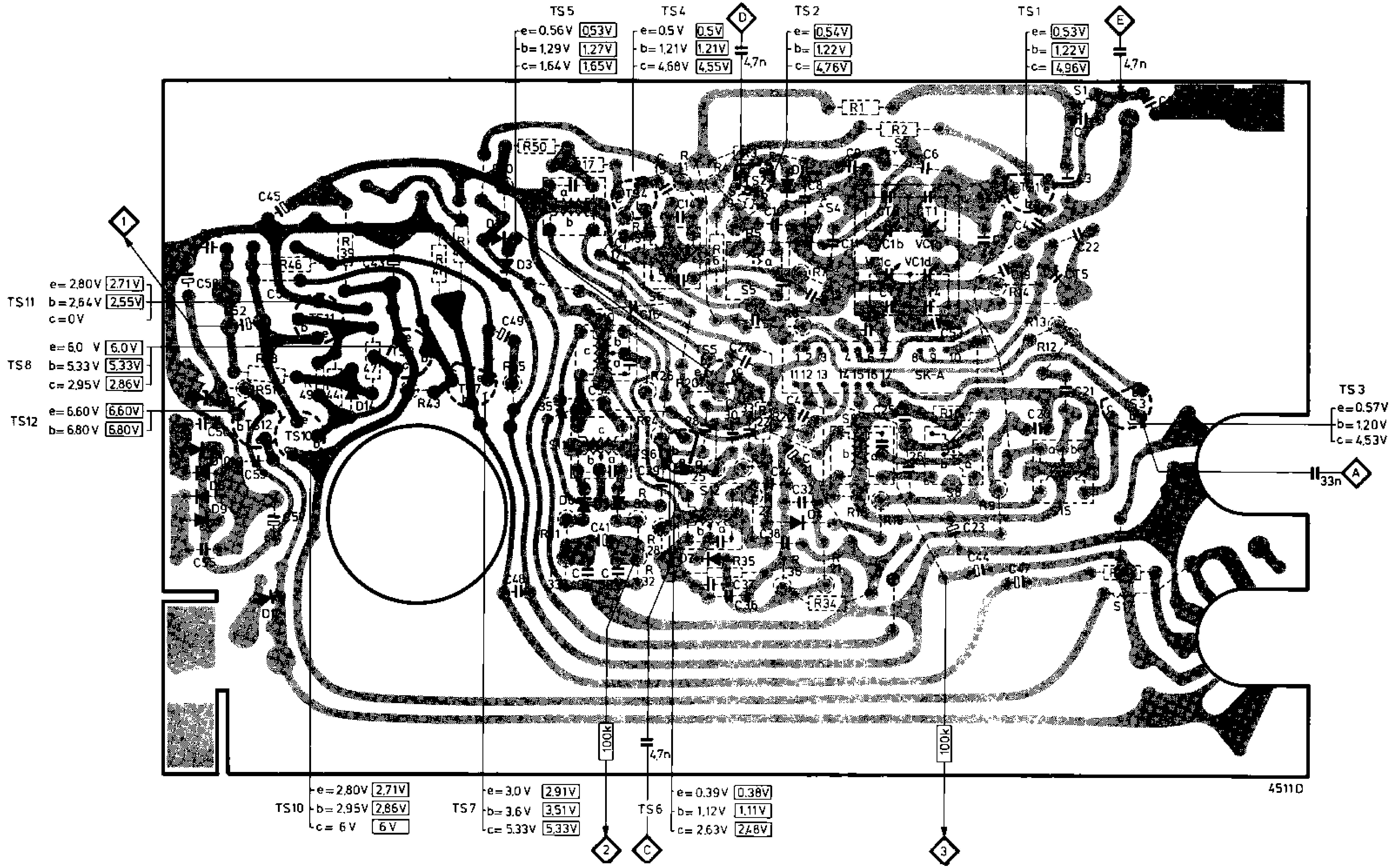
VERSION WITH SV ON TYPE NR. LABEL

MISC	D8÷D13	TS12	TS9÷TS11	TS8	TS7	D2	D3	D6	D5	TS4	TS6	D7	TS5	TS2	D1	D4	SK-A	TS1	TS3
S	18							7	10	11	6	12	19	5	4	9	3 8	2	1 15 17
C	60 58 52	51	50 45	43 59			49	24		17 16	15 14		12 27	10 8 7	13	11	18 VC1a÷d	T1÷T4 6	19 5 4 3 22 53 2 1
C	55 56		57			48		35 54	39÷41	29	28,30,33,36÷38,34,31,42,32				9		25 26	23	44 47 20 21 46
R	48 51		46	44 39 47	43 41	42	10		17 15	26 24	11 6 4 5		3 20	8	7	1	2		14 12 13
R							45	31 33		30 32	28	25. 35. 27. 23. 22. 36. 34. 18. 21. 29.			19		16	9	40

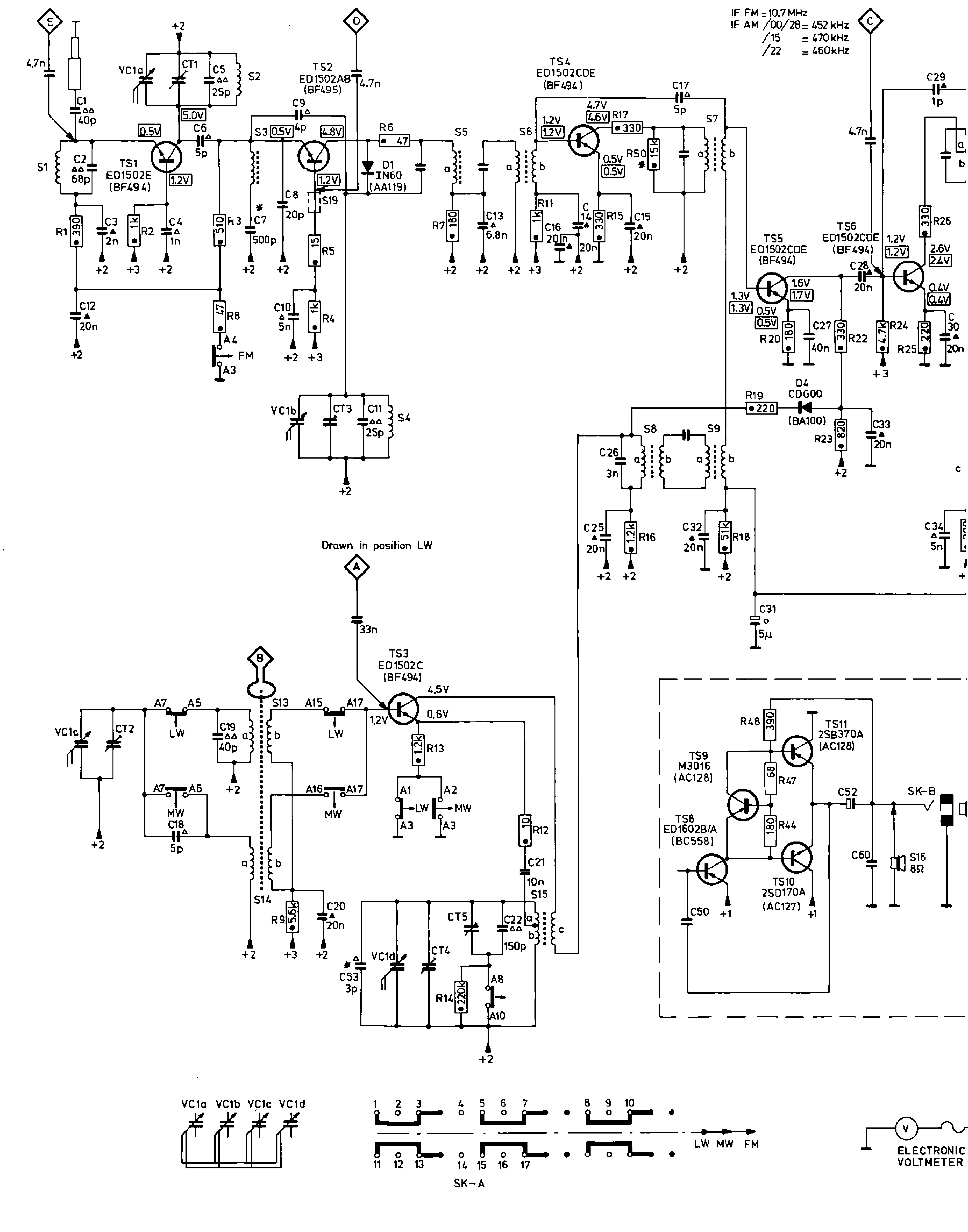


VERSION WITH NR ON TYPE NR LABEL

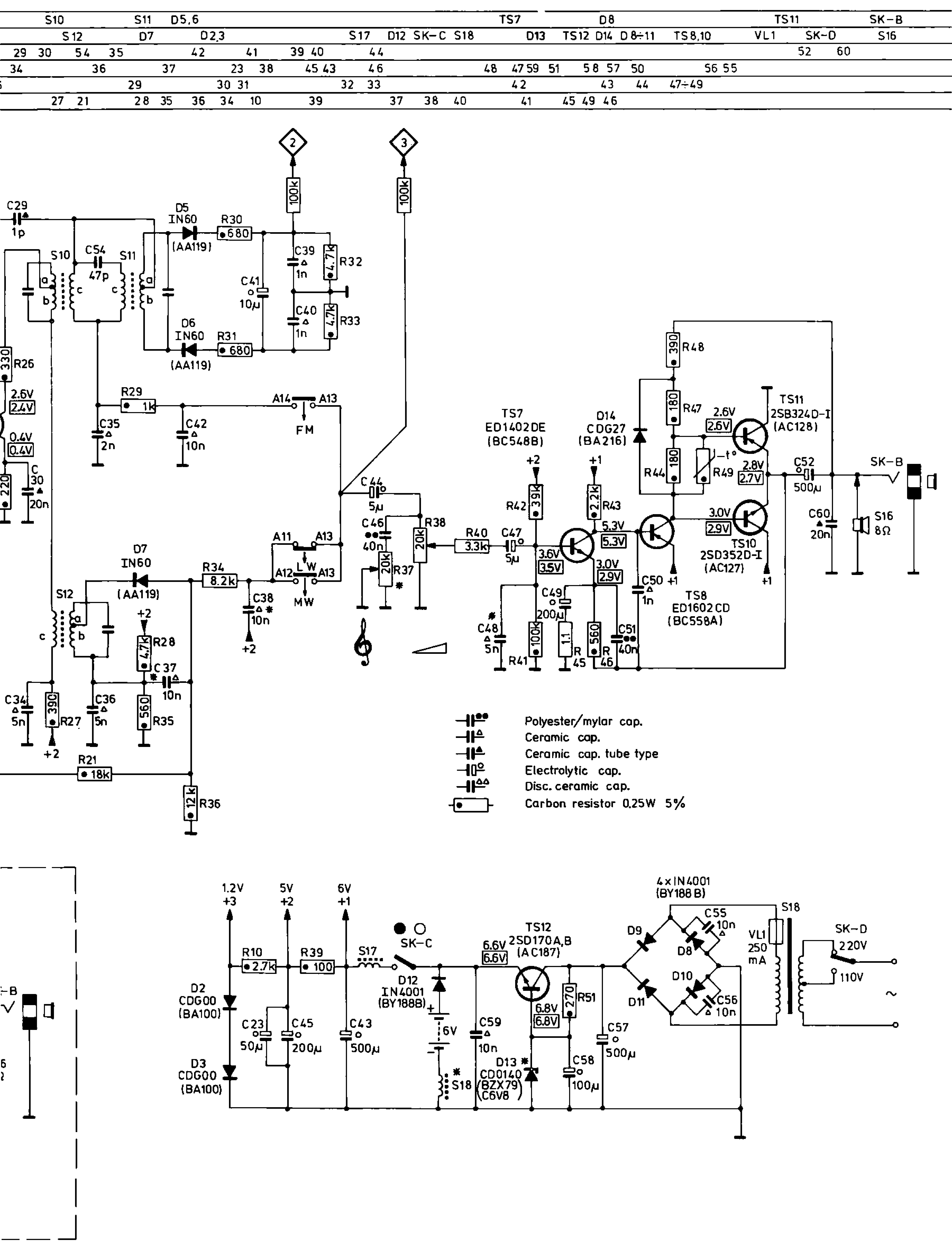
7 11 10 6 12 19 5 4 9 3 8 2 15 1 17	S
60 52 50 45 43 49 15÷17 14 12 27 10 13 7 8 11 9 18 T1÷4 6 53 5 19 4 22 3 2 T5 1	C
58 55 56 59 57 48 35 40 39 41 54 29 36 37 28 30 33 38 31 42 32 34 1a÷d 25 26 23 44 47 20 21 46	C
48 51 46 39 47 41 42 10 45 50 17 15 26 11 20 6 4 5 3 8 7 1 2 14 13 12	R
49 44 43 33 31 32 30 24 28 25 35 23 27 22 29 36 34 21 18 19 16 9 40	R
D8÷D11 D13 TS10 TS12 TS8 D2 D3 TS4 TS2 TS5 D1 SK-A TS1	MISC
D12 TS11 D14 TS7 D6 D5 TS6 D7 D4 TS3	MISC

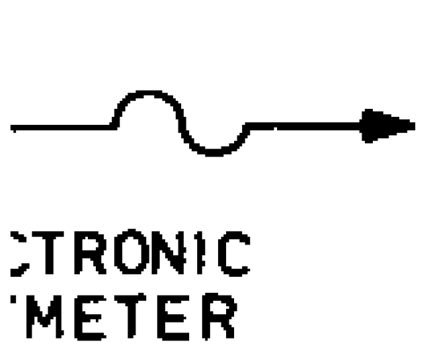


MISC.		S1 TS1 S2 3 TS2 D1 S5 S6 TS4 TS9 S7 TS5 TS6 S
		S13 14 S19 S4 TS3 S15 S8 S9 D4
C		2 1 12 3 VC1a 4÷6 CT1 7÷10 53 13 16 14 15 17 27 28 29 30
		VC1c CT2 18 19 VC1b CT3 20 11 VC1d CT4 CT5 22 21 25 26 32 31 33 34
R		1 2 3 8 5 4 6 7 11 15 17 50 20 22 24÷26
		9 13 14 12 16 18 19 23



CS39883





...V = AM

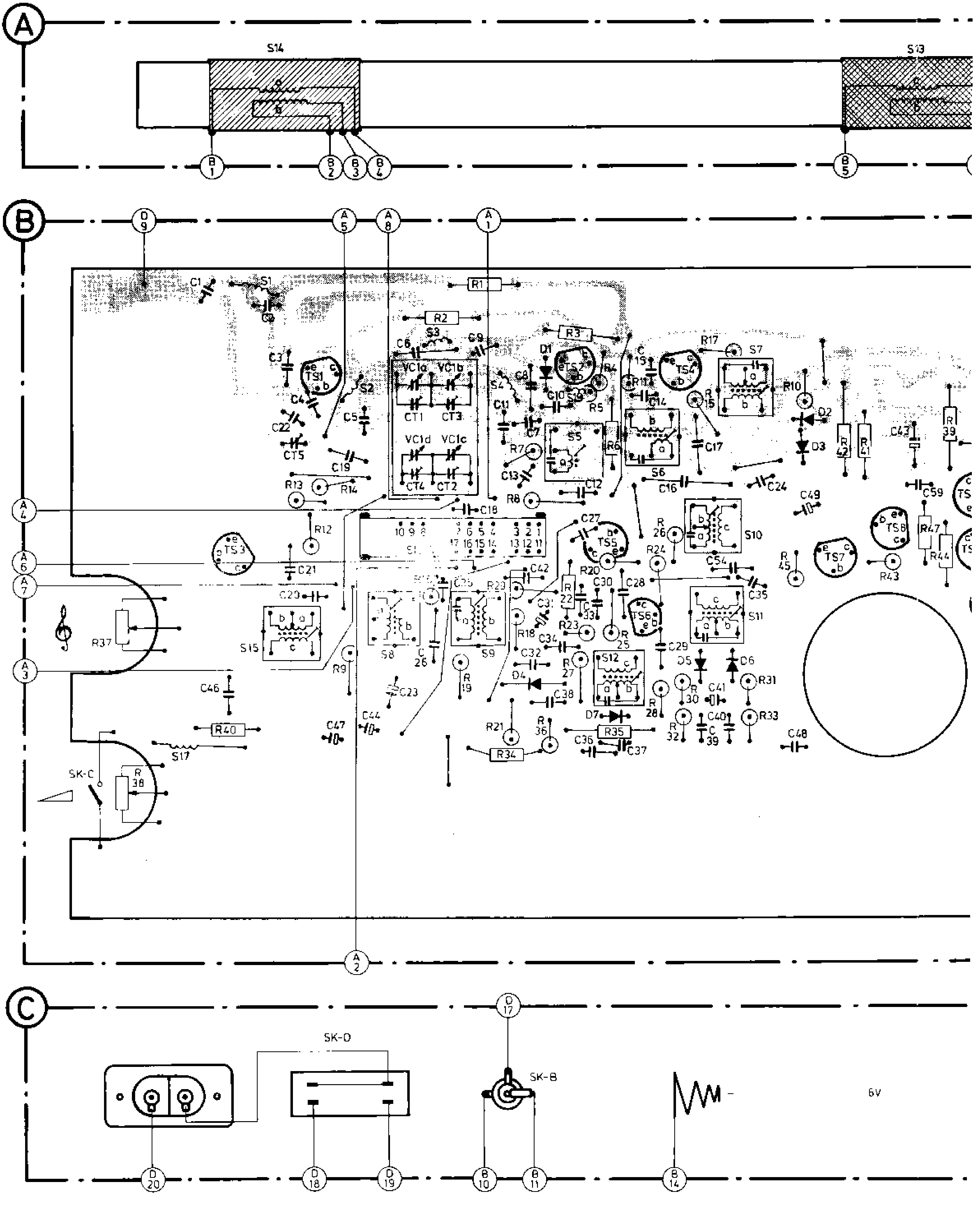
[...V] = FM

*Components	With. SV on Type no label	With. NR on Type no label
R47	68Ω	180Ω
R49	–	thermistor
R50	–	15k
R37	50k	20k
C7	330p	500p
C48	10n	5n
C37	5n	10n
C38	5n	10n
C53	–	3p
C51	40n	–
S18	0.7µ	–

4371E

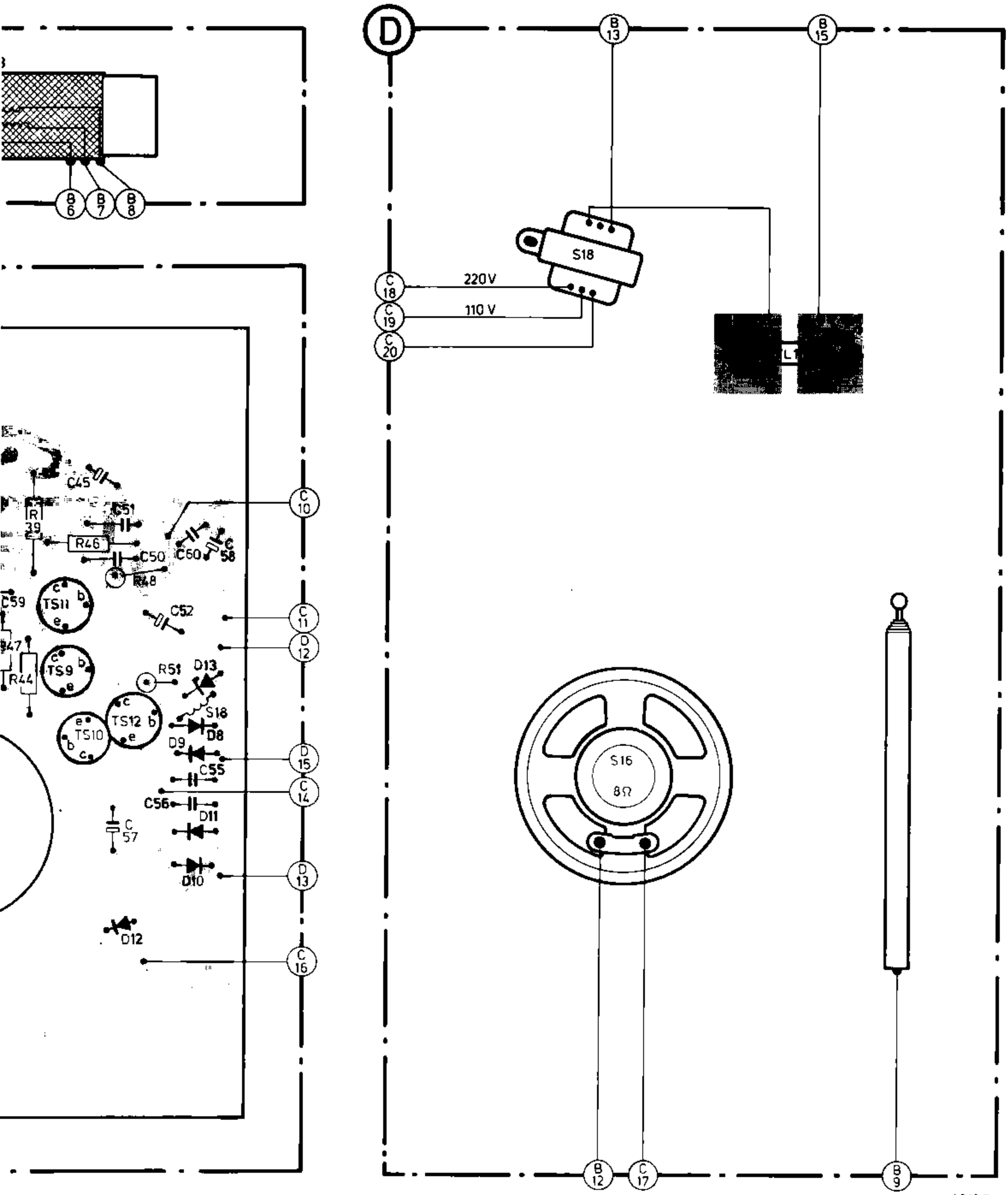
VERSION WITH SV ON TYPE NR LABEL

S	17 . 1 15 2 8 3 9 4 5 19 12 6 10 7 11
C	1 22 2 3 4 TS 19 5 6 T1÷4 18 9 11 13 8 7 10 12 27 15 16 14 17 24 49 43 59
C	46 21 20 47 44 23 25 26 42 32 31 38 34 36 33 30 37 28 29 54 39 40 41 35 48
R	12÷14 2 1 7 8 3 5 4 6 26 11 24 15 17 10 42 41 47 39 44
R	37.38 40 9 16 19 34 29 21 18 22 36 27 23 20 35 25 32 28 30 31 33 45 43
MISC	TS3 TS1 SK-A D1 TS2 TS5 TS4 D2 D3 TS7 TS8 T
MISC	SK-C SK-D SK-B D4 D7 TS6 D5 D6 TS1



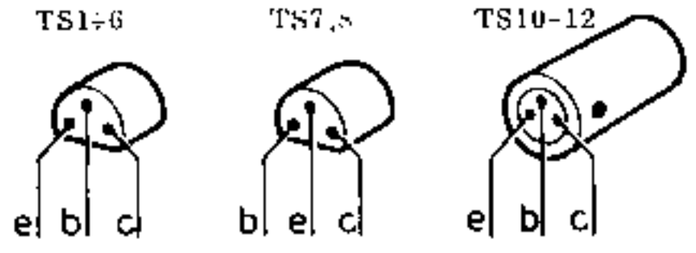
CS39884

	18 18 16	S
59	45 50 51 52 60 58	C
	57 55 56	C
7 39 44	46 48 51	R
		R
	TS11 TS9 D13	MISC
	TS10 TS12 D12 D8÷D11	MISC



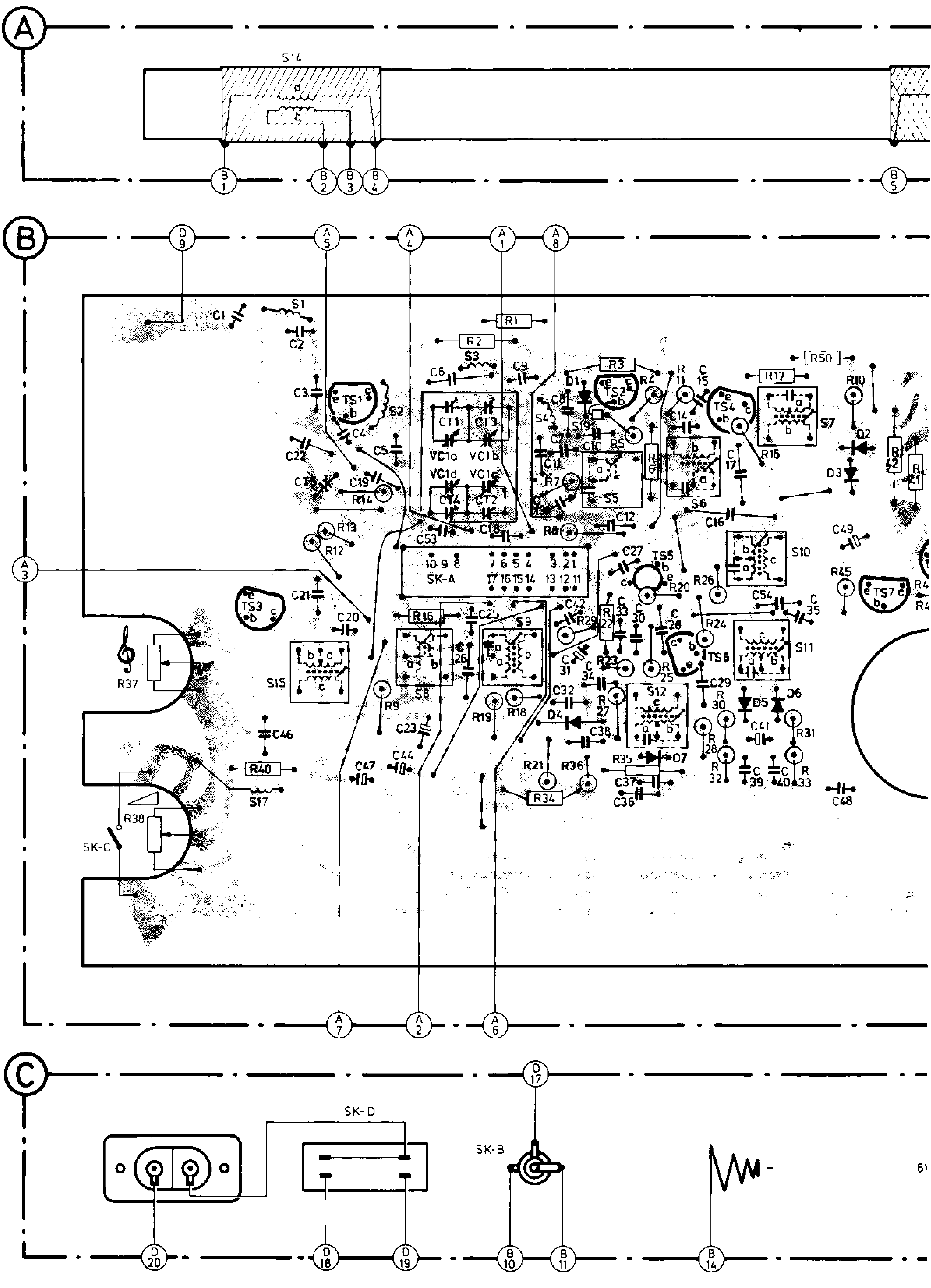
4019D

TS1÷6 TS7,8 TS10-12

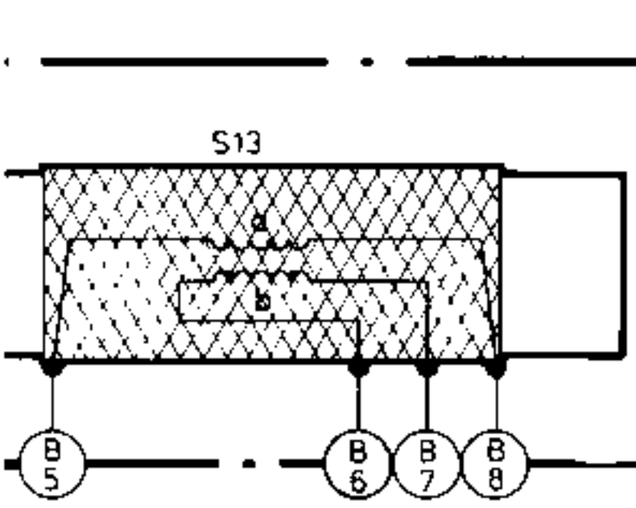


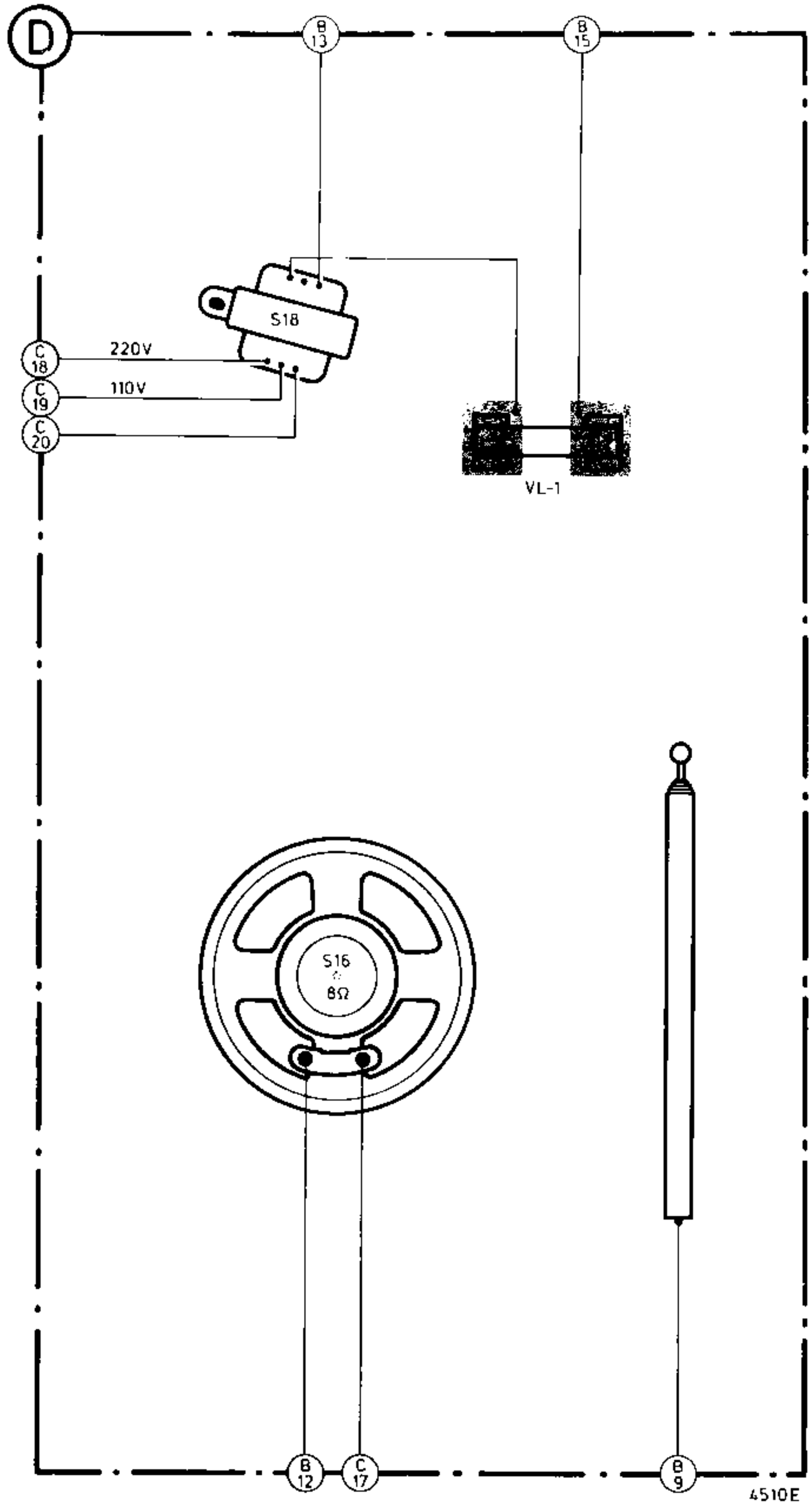
VERSION WITH NR ON TYPENR LABEL

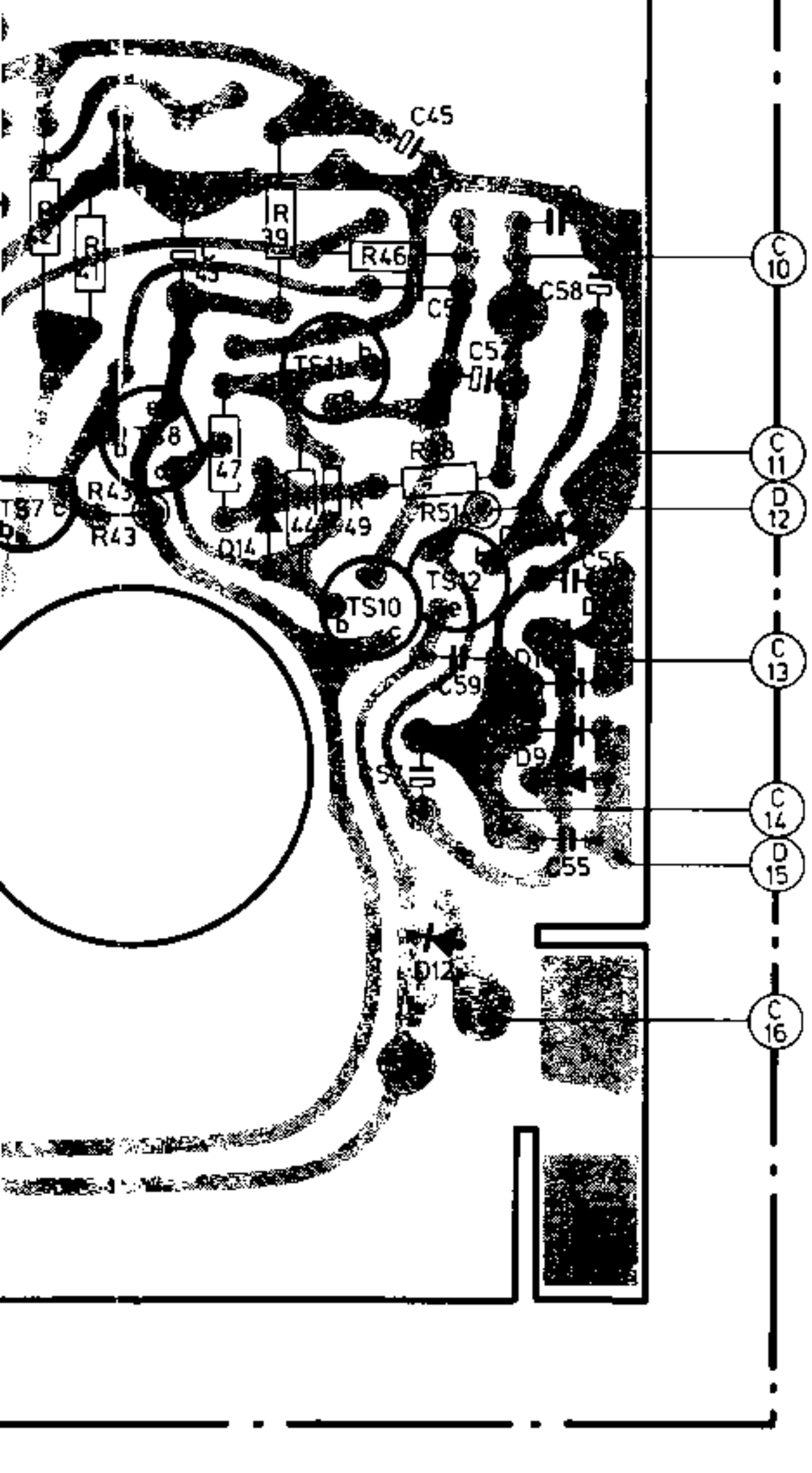
S	17 14 1 15 1 8 3 9 4 19 5 12 6 10 11 7
C	1 5 2 3 22 4 19 5 53 6 T1÷4 18 9 11 8 7 13 10 27 12 14 15−17 49
C	46 21 20 47 44 23 26 25 1a÷d 34 32 42 31 38 33 30 25 28 37 36 29 54 41 39 40 35 48
R	37 12 13 14 2 1 7 8 3 5 64 20 11 26 15 17 50 45 10 42 4
R	38 40 9 16 19 18 21 34 36 29 22 27 23 35 28 24 30 32 31 33
MISC	TS1 SK-A D1 TS2 TS5 TS4 D2.3
MISC	SK-C TS3 SK-D SK-B D4 D7 TS6 D5 D6 TS7

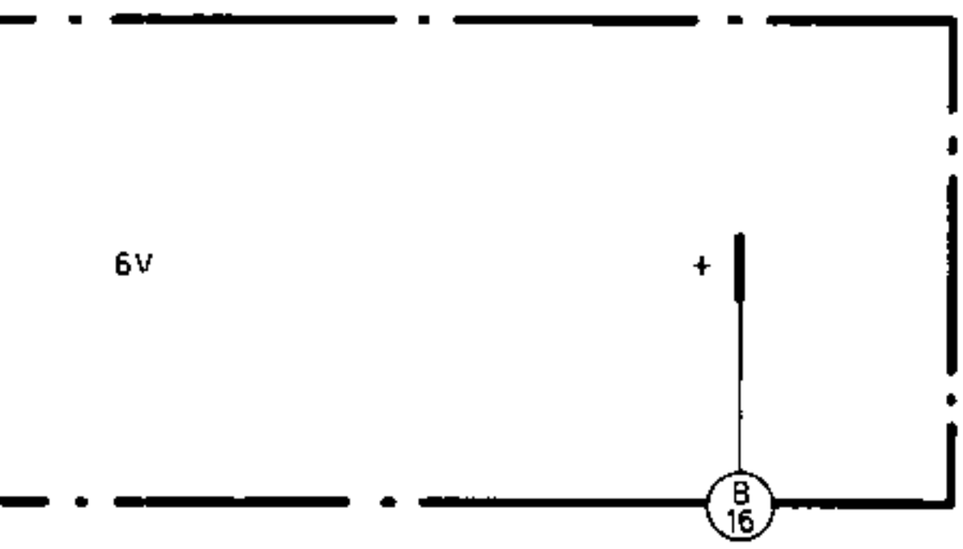


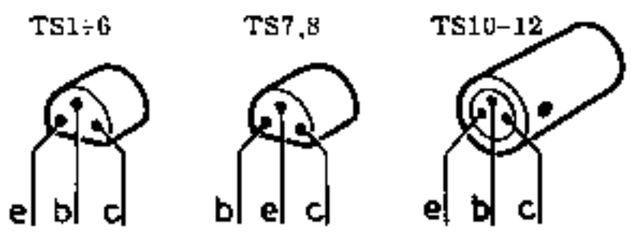
13	18 16	S
43 45 50 52 60 58 56		C
57 59 55		C
0 42 41 47 3 9 46 48 51		R
43 44 49		R
TS8 TS11 D13		MISC
TS7 D14 D12 TS10.12 D8÷11		MISC











CS39885

SK- Wave range	Signal to	◇	Tuning	Adjust	Indication	
MW (520-1605 kHz)	452 kHz /00 460 kHz /22 470 kHz /15 Δ F = 20 kHz (50 Hz) via 33 nF	◇A	Min. Cap.	S12,S9,S8		◇1 Vmax.
MW (520-1605 kHz)	515 kHz	◇B	Max. cap.	S15		◇1 Vmax.
	1635 kHz		Min. cap.	CT4		
	600 kHz		Tune in	S14a,b		
	1400 kHz			CT2		
LW (150-255 kHz)	147 kHz	◇B	Max. cap.	CT5		◇1 Vmax.
	200 kHz		Tune in	S13a,b		
FM (87.5-104 MHz)	[1] 10.7 MHz Δ F = 200 kHz 50 Hz via 5 nF	◇C	Min. cap.	S10	◇2	
		◇D		S7,S6,S5		
				S11	[2] ◇3	
FM (87.5-104 MHz)	86.5 MHz	◇E	Max. cap.	S4		◇1 Vmax.
	105 MHz		Min. cap.	CT3		
	89 MHz		Tune in	S2		
	103 MHz			CT1		

GB
[1] Disconnect a connection of C41.
Adjust for max. height and symmetry.
[2] Restore the original connection.
Adjust for max. slope and symmetry of the "S"-curve.

F
[1] Interrompre une connexion de C41.
Ajuster sur hauteur et symétrie maximales.
[2] Reprendre la liaison.
Ajuster sur raideur et symétrie maximales de la courbe en "S".

I
[1] Interrompere un collegamento su C41.
Regolare per massima ampiezza e simmetria.
[2] Ripistinare il collegamento.
Regolare la curva ad "S" per massima ampiezza e simmetria.

S
[1] Bryt anslutningen för C41.
Justera för max. höjd och symmetri.
[2] Återställ anslutningen.
Justera för max. höjd och symmetri på S-kurvan.

N
[1] Bryt en forbindelse til C41.
Justér til maks høyde og symmetri.
[2] Gjenopprett den opprinnelige forbindelse.
Justér S-kurven til maks steilhet og symmetri.

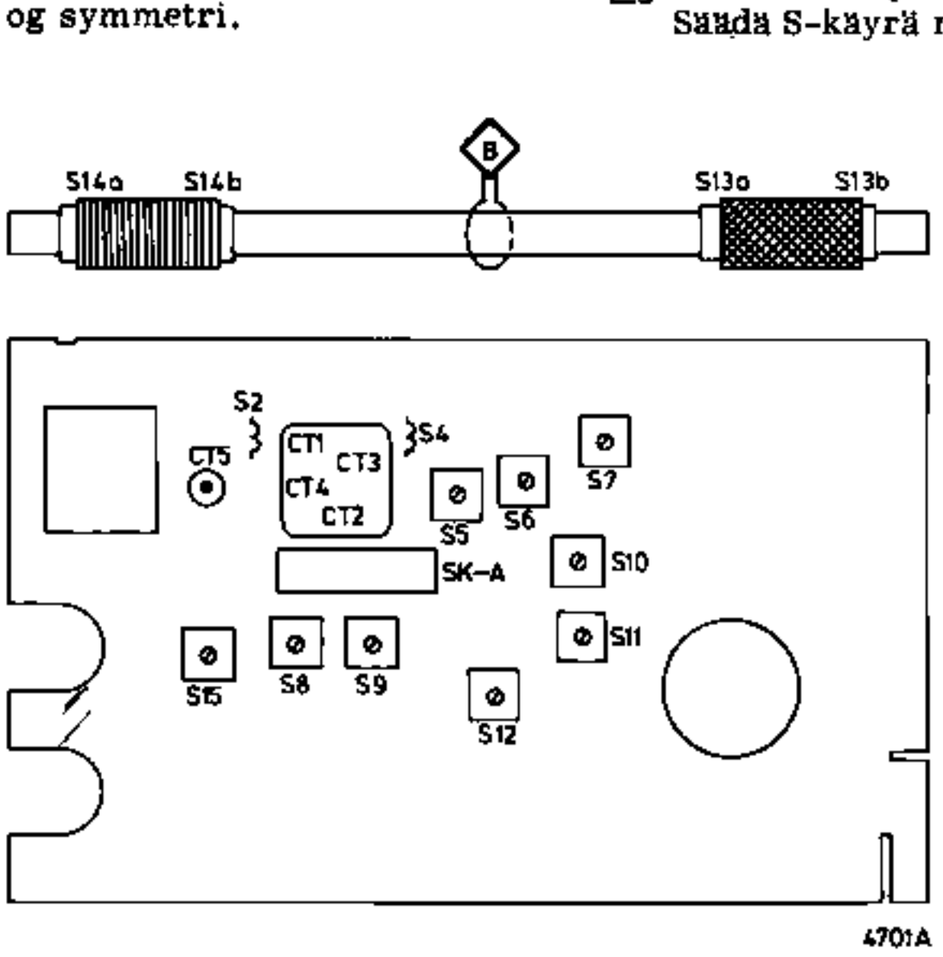
NL
[1] Onderbreek een aansluiting van C41.
Afregelen op maximum hoogte en symmetrie.
[2] Herstel de oorspronkelijke aansluiting van C41.
Afregelen op maximum steilheid en symmetrie van de "S"-kromme.

D
[1] Unterbreche einen Anschluss von C41.
Justiere auf maximale Höhe und Symmetrie.
[2] Stelle die ursprüngliche Verbindung wieder her.
Justiere auf maximale Steilheit und Symmetrie der "S"-Kurve.

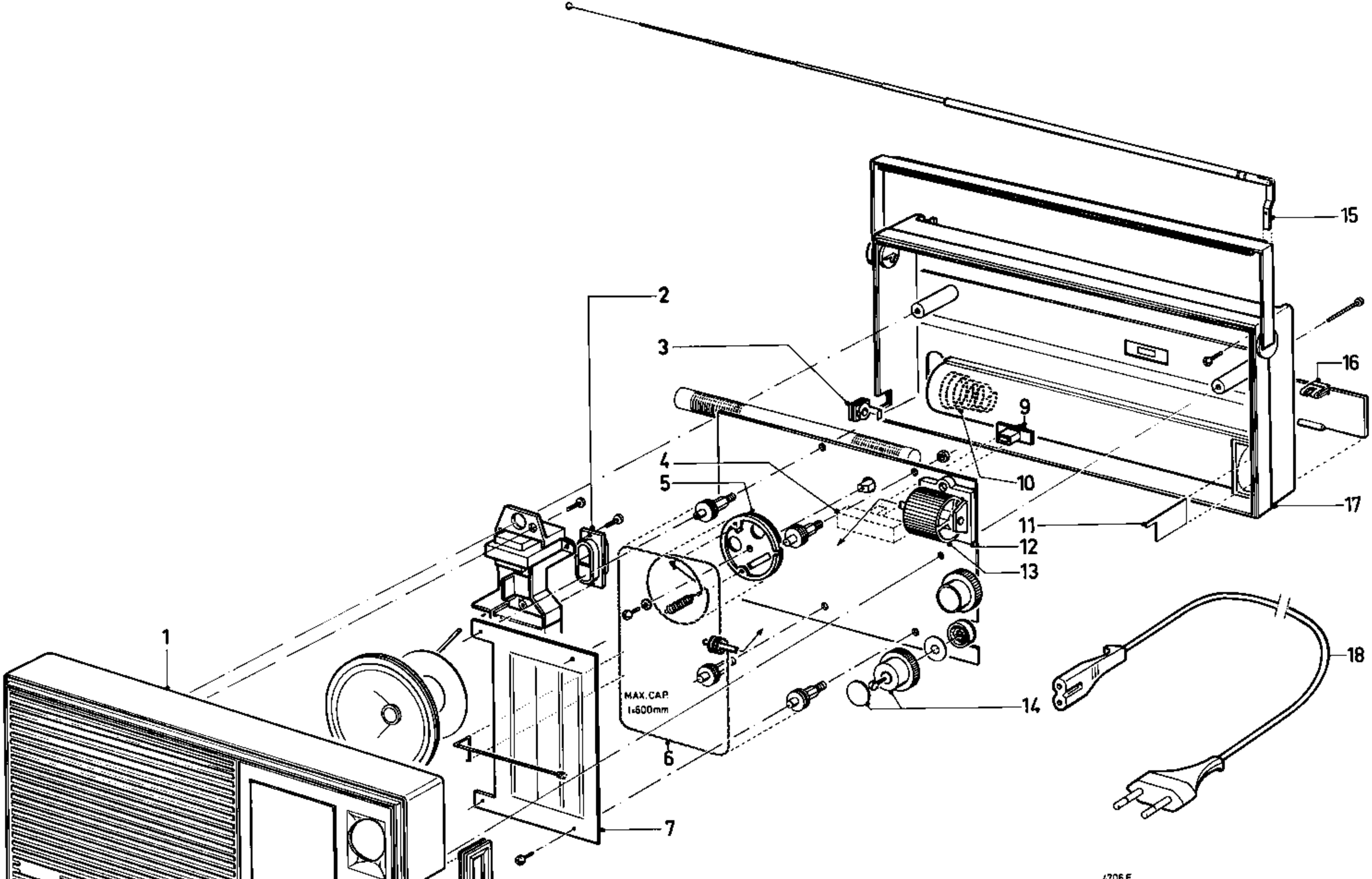
E
[1] Interrúmpese a un extremo de C41.
Ajuste a la altura y la simetría máximas de la curva de respuesta.
[2] Reconéctese al extremo suelto de C41.
Ajústese a inclination y simetría máxima de la curva "S".

DK
[1] Afbryd forbindelsen til C41.
Juster til max. højde og symmetri.
[2] Monter den originale forbindelse.
Juster S-kurven til max. højde og symmetri.

SF
[1] Katkaise C41:n liitäntä.
Säädä maksimiin ja symmetriseksi.
[2] Palauta alkuperäinen liitäntä.
Säädä S-käyrä maksimiin ja symmetriseksi.



CS39886



1	4822 423 50224	10	4822 492 51081
2	4822 265 20167	11	4822 290 80276
3	4822 267 30252	12	4822 404 10255
4	4822 277 20118	13	4822 413 40698
5	4822 528 80531	14	4822 412 30083
6	4822 321 30132	15	4822 303 30156
7	4822 333 10027	16	4822 423 40365
8	4822 459 50171	17	4822 421 30043
9	4822 411 60183	18	4822 321 10105

Servicemededeling

PHILIPS NEDERLAND B.V. - EINDHOVEN
TECHNISCHE SERVICE

Ref. R 313 Type 90 RL 301 Datum januari 1976

De volgende wijzigingen zijn ingevoerd:

Oude situatie:

S10	= DA072 of 20141	4822 153 10236
C17	= 6 pF ± 0,5 pF	
C29	= 5 pF ± 0,5 pF	
C48	= 10 KpF ± 20%	

Nieuwe situatie:

S10	= DA260 of 20571	4822 153 50209
C17	= 5 pF ± 0,5 pF	4822 122 31045
C29	= 1 pF ± 0,25 pF	4822 122 30104
C48	= 5 KpF ± 20%	standaard 4,7 KpF

PHILIPS

PHILIPS