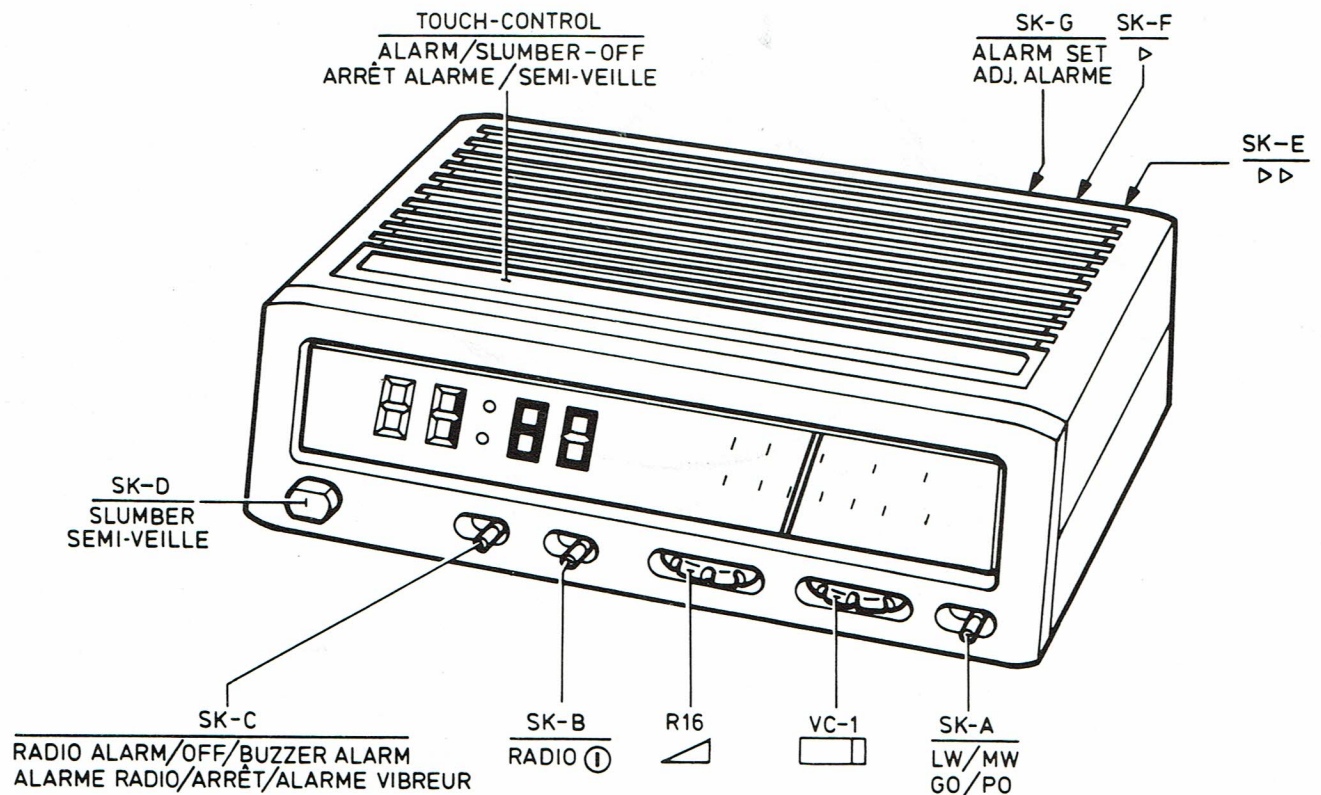


Service
Service
Service

Service Manual



MW/PO : 520 - 1605 kHz (577-187m)
LW/GO : 150 - 255 kHz (2000-1150m)
IF - AM : 468 kHz

MAINS/SECTEUR : 110/220V ~ 50/60 Hz
-| : 3.0V (2 x R6)
OUTPUT/SORTIE : 230 mW ± 1dB (d=10%)

16604 B12



(GB)

SK-A	Radio wave range selector switch	LW/MW
SK-B	On/off switch radio section	On/Off
SK-C	Selector switch for alarm by radio or buzzer	Alarm/alarm by by radio buzzer
SK-D	Slumber switch	Slumber
SK-E	Switch for fast time setting	▷▷
SK-F	Switch for slow time setting	▷
SK-G	Alarm time switch	Alarm set
VC-1	Radio tuning	
R16	Volume control	

(F)

SK-A	Commutateur gammes d'onde de la radio	LW/MW
SK-B	Commutateur marche arrêt de la radio	On/Off
SK-C	Interrupteur pour alarme par radio ou par sonnerie	Alarm/Alarm by by Radio buzzer
SK-D	Commutateur de semi-veille	Slumber
SK-E	Commutateur de mise à l'heure	▷▷
SK-F	Commutateur de mise à l'heure	▷
SK-G	Commutateur de l'heure d'alarme	Alarm set
VC-1	Accord de la radio	
R16	Commande de volume	

(I)

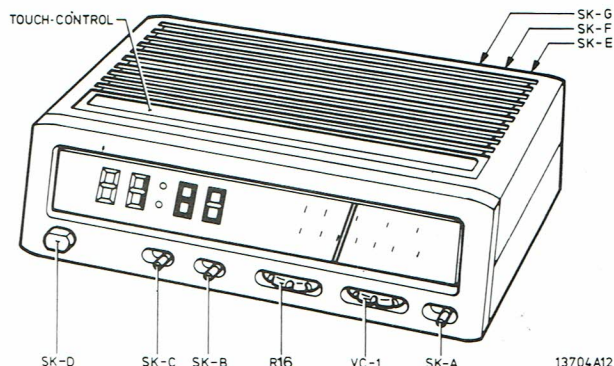
SK-A	Commutatore selezione gamme d'onda senzione radio	LW/MW
SK-B	Interruttore inserzione/dis-inserzione sezione radio	On/Off
SK-C	Interruttore d'allarme tramite radio o tramite soneria	Alarm/Alarm by by radio buzzer
SK-D	Commutatore di vigilia	Slumber
SK-E	Commutatore di regolazione veloce dell'ora	▷▷
SK-F	Commutatore di regolazione lenta dell'ora	▷
SK-G	Commutatore dell'ora di allarme	Alarm set
VC-1	Sintonizzazione della radio	
R16	Comando del volume	

(DK)

SK-A	Bølgelængdeomskifter	LW/MW
SK-B	Afbryder for radiodel	On/Off
SK-C	Vælger for alarm fra radio eller brummer	Alarm/Alarm by by radio buzzer
SK-D	Slumreafbryder	Slumber
SK-E	Omskifter for hurtig tidsindstilling	▷▷
SK-F	Omskifter for langsom tidsindstilling	▷
SK-G	Alarm-afbryder	Alarm set
VC-1	Stationsindstilling	
R16	Styrekontrol	

(SF)

SK-A	Radion aaltoalueen valintakytkin valintakytkin	LW/MW
SK-B	Radio-osan verkkokytkin	On/Off
SK-C	Valintakytkin, herätys radiolla tai summerilla	Alarm/Alarm by by radio buzzer
SK-D	Unikytkin	Slumber
SK-E	Ajanasetuksen kytkin, nopea	▷▷
SK-F	Ajanasetuksen kytkin, hidas	▷
SK-G	Herätysajan kytkin	Alarm set
VC-1	Radion viritys	
R16	Äänenvoimakkuuden säädin	



13704A12

(NL)

SK-A	Golfbereikschakelaar van de radio	LW/MW
SK-B	Aan/uit-schakelaar van het radio-gedeelte	On/Off
SK-C	Keuze-schakelaar voor alarmering door radio of zoemer	Alarm/alarm by by radio buzzer
SK-D	Sluimerschakelaar	Slumber
SK-E	Schakelaar voor het snel instellen van de tijd	▷▷
SK-F	Schakelaar voor het langzaam instellen van de tijd	▷
SK-G	Schakelaar voor de alarmtijd	Alarm-set
VC-1	Afstemming van de radio	
R16	Volumeregelaar	

(D)

SK-A	Bereichschalter für Radio	LW/MW
SK-B	An/Aus-Schalter des Radioteils	On/Off
SK-C	Wahlschalter für Alarmieren durch Radio oder Summer	Alarm/Alarm by by radio Summer
SK-D	Schlummerschalter	Slumber
SK-E	Schalter für schnellen Uhrvorlauf	▷▷
SK-F	Schalter für langsamen Uhrvorlauf	▷
SK-G	Alarmzeitschalter	Alarm Set
VC-1	Radioabstimmung	
R16	Lautstärkeregler	

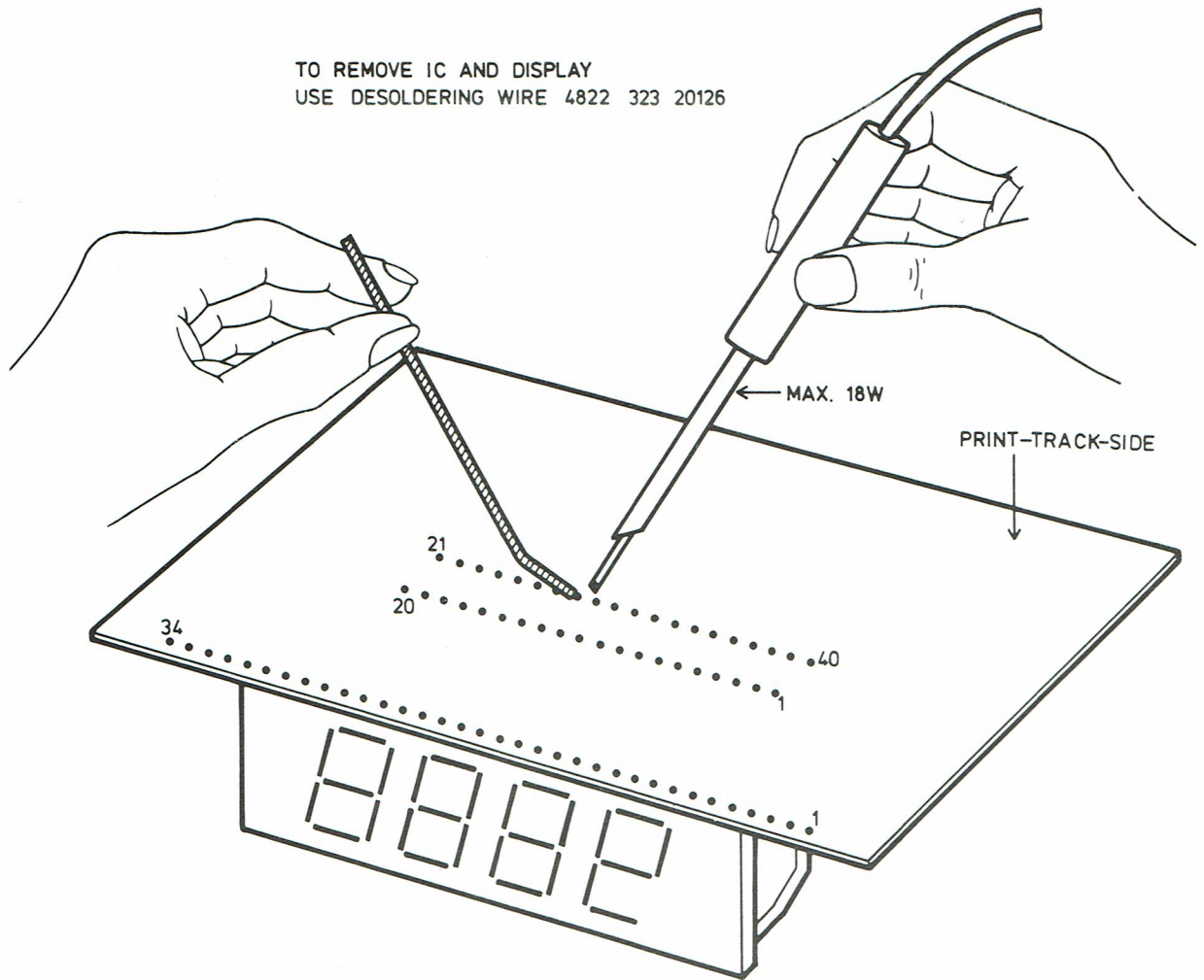
(S)

SK-A	Våglängdsomkopplare	LW/MW
SK-B	Radio till/från	Till/från
SK-C	Väckning med radio eller sig signal	väckning/väckning med med radio slummer
SK-D	Slummeromkopplare	Slummer
SK-E	Omkopplare för inställning av tid, snabbt	▷▷
SK-F	Omkopplare för inställning av tid, långsamt	▷
SK-G	Omkopplare för väckningstid	Inställning av väckningstid
VC-1	Stationsinställning	
R16	Volymkontroll	

(N)

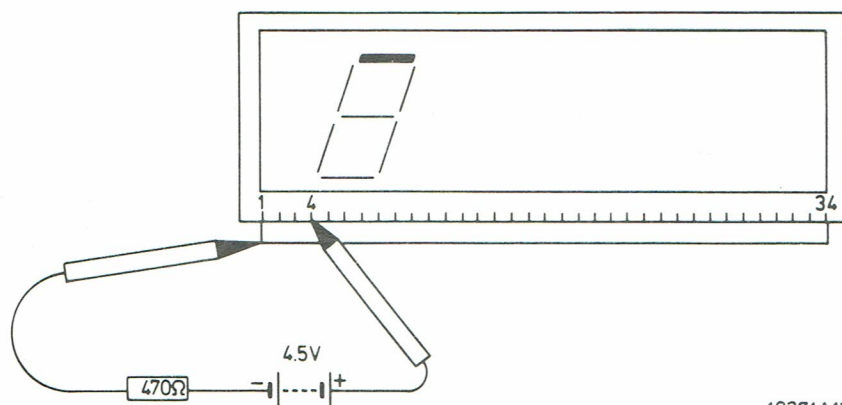
SK-A	Bølgevender	LW/MW
SK-B	På/av radio	On/Off
SK-C	Vender for vekking ved radio eller alarm	Alarm/alarm by by radio buzzer
SK-D	Slumrevender	Slumber
SK-E	Vender for hurtig instilling	▷▷
SK-F	Vender for langsom instilling	▷
SK-G	Vender for vekketid	Alarm set
VC-1	Radio avstemning	
R16	Volumkontroll	

TO REMOVE IC AND DISPLAY
USE DESOLDERING WIRE 4822 323 20126

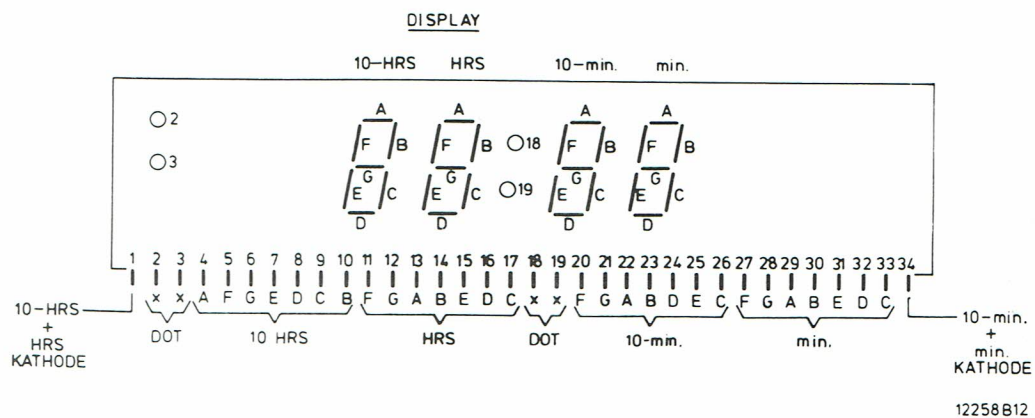
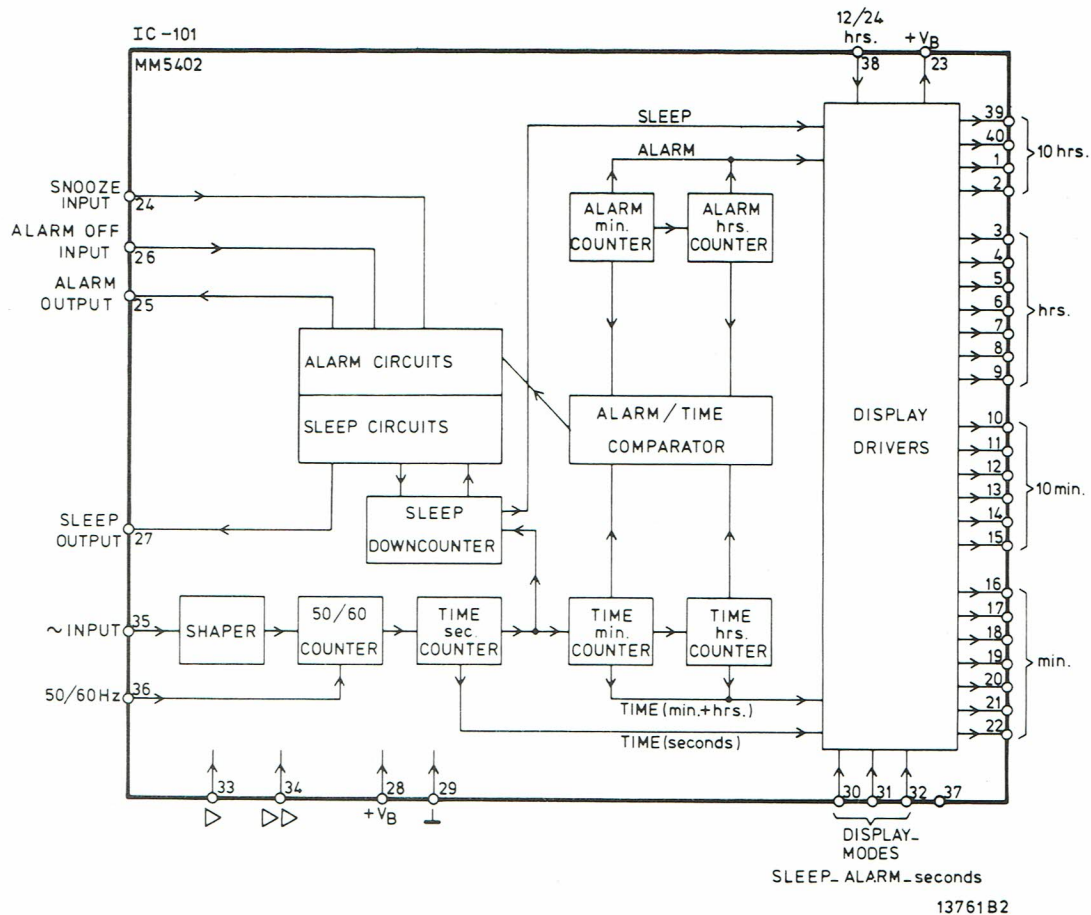


10322B12

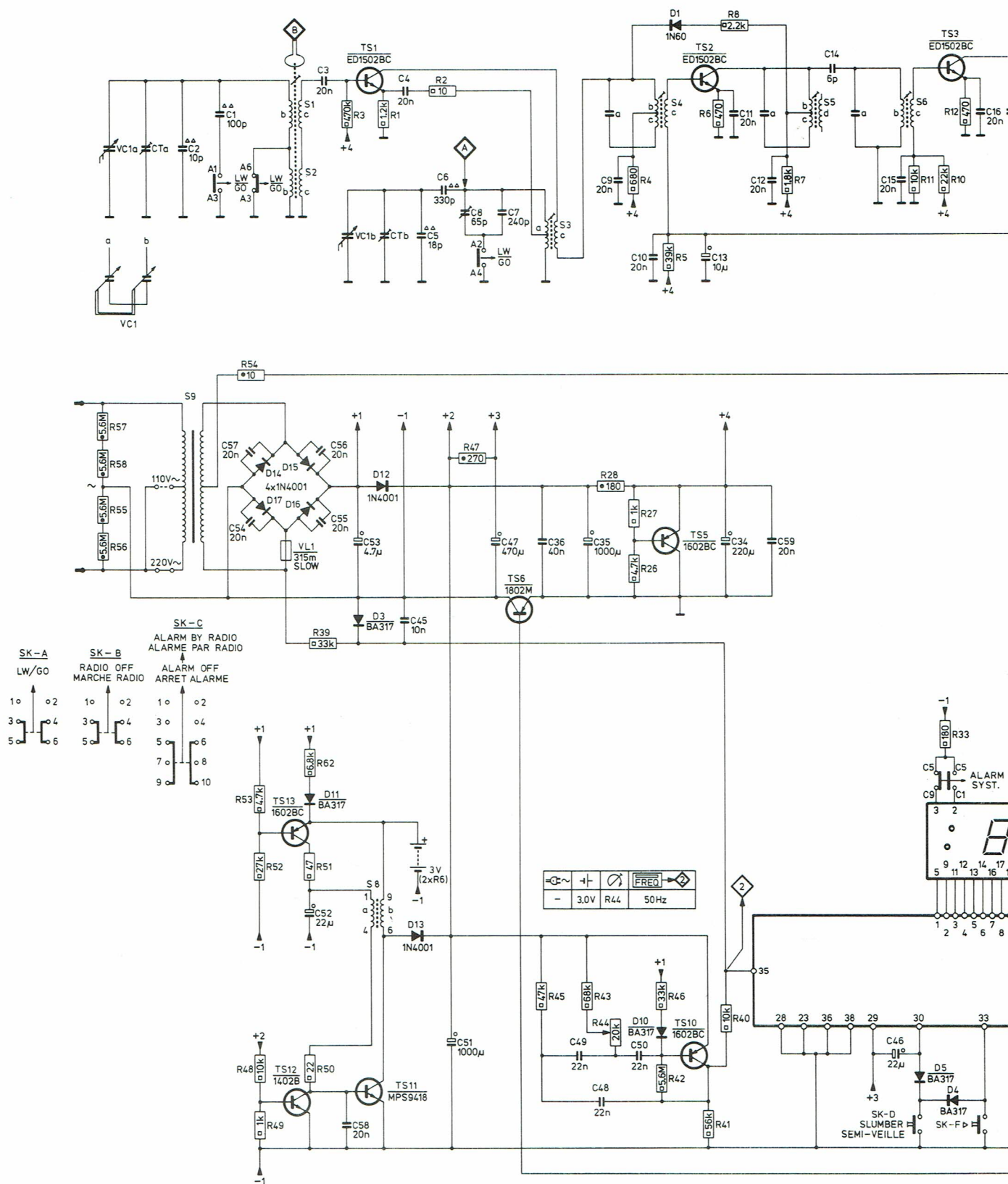
CHECK LED-DISPLAY



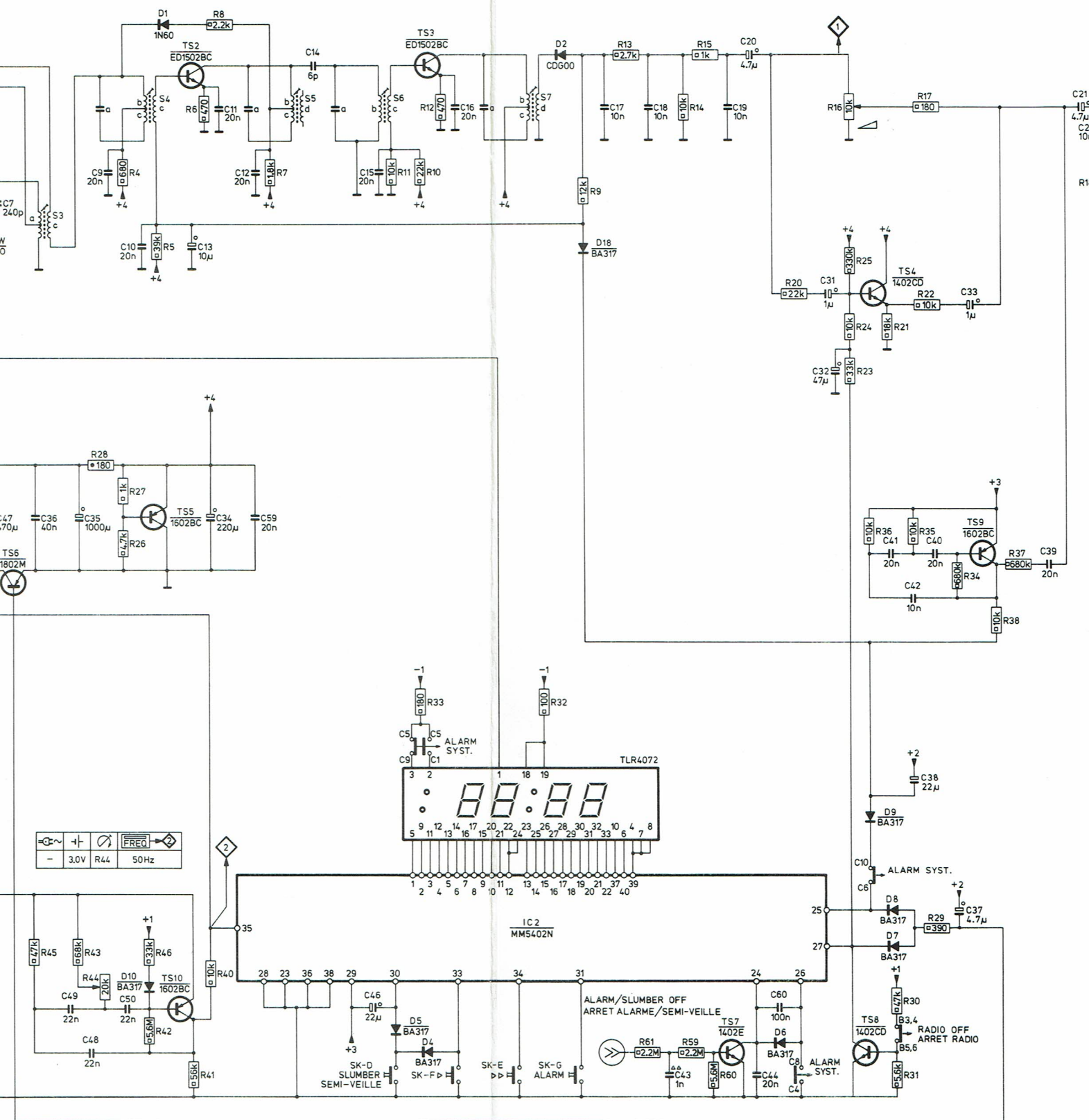
10371A12



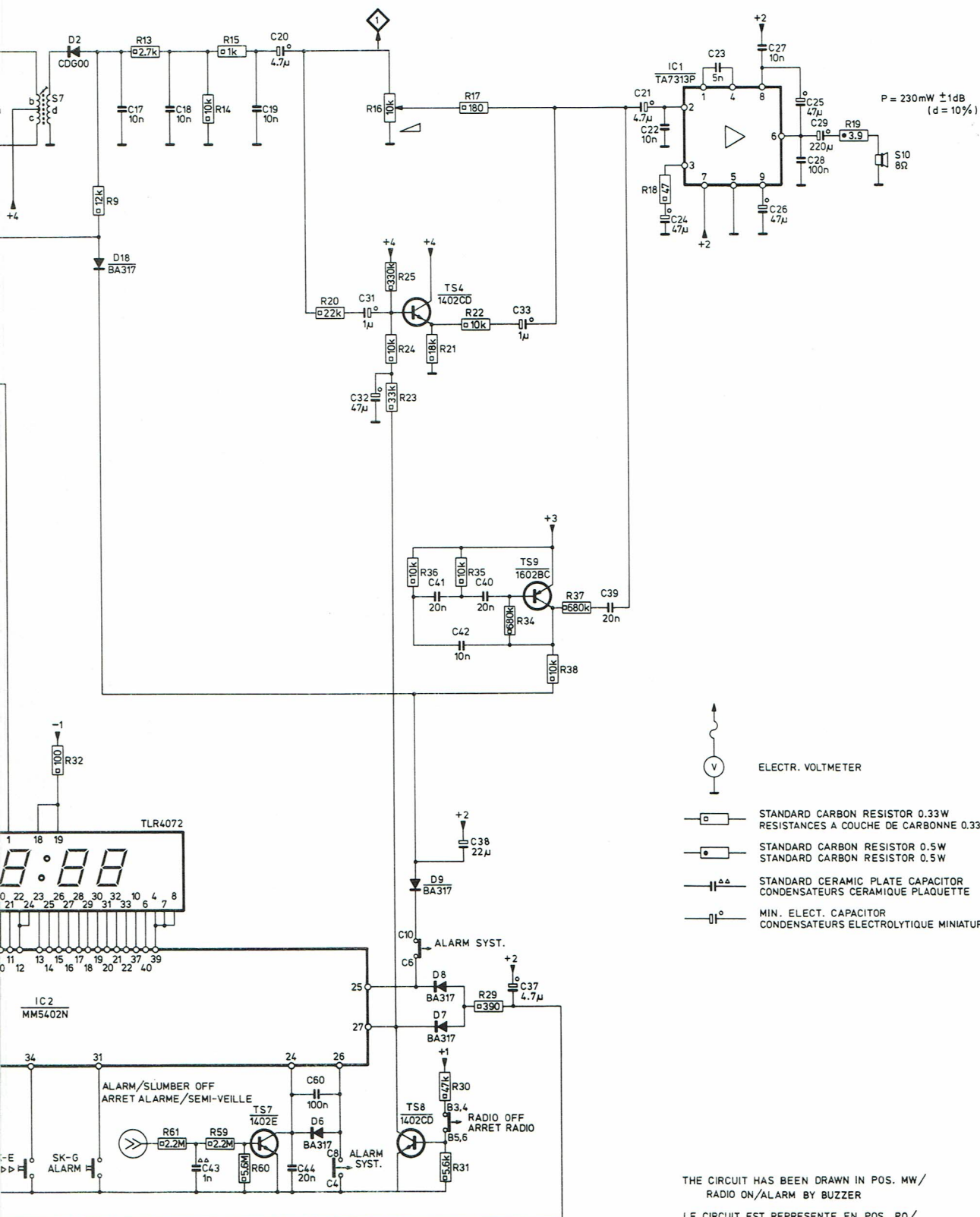
MISC.	D14...D17, VL1, TS11...TS13, TS1.D3, D11...D13										TS6		D10, TS5, D1, TS10, TS2					D5, D4, TS3		
S	S9		S1, S2		S8		S3		S4		S5			S6						
C	VC1a, CTa	2	1	54...57, 52, 3, 58, VC1b, 53, CTb		45	51, 4...8		47	36	35, 48...50, 9, 10		13	34, 11	59, 12	14	46, 15	16		
R	55...58		54, 48...53, 62, 39		3	1	2	47	40...46, 26...28, 4, 5		6	8	7	10...12, 33						



TS6		D10.TS5.D1.TS10.TS2			S5			D5.D4.TS3		IC2		D2.D18		TS7		D6		TS8.TS4.D7...D9				TS9	
S3		S4			S6			S7		S8		S9		S10		S11		S12				S13	
36	35.48...50.9.10	13	34.11	59.12	14	46.15	16	32	9	17	18.43	19	20.44.60	31.32	40...42.38	37	33	39	21.				
	40...46.26...28.4.5	6	8	7		10...12.33					59...61.14.15			20	16.21...25.29...31.17.34...38								



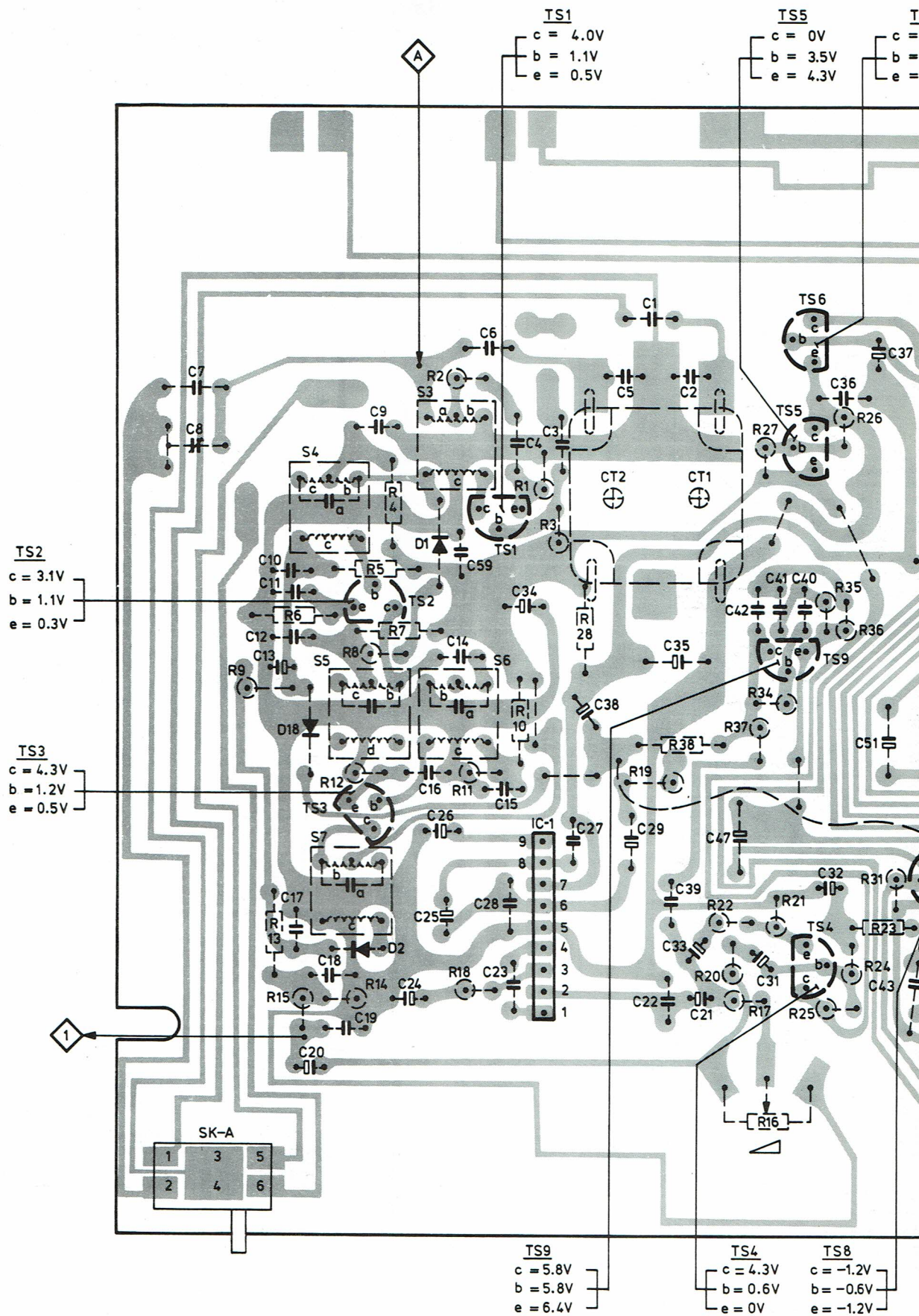
IC2	D2.D18	TS7	D6	TS8.TS4.D7...D9	TS9	IC1	S10
S7							
17	18.43	19	20.44.60	31.32	40...42.38	37 33	39
21.22.24	23	27.26	25.28.29				
32	9	13	59...61.14.15	20	16.21...25.29...31.17.34...38	18	19



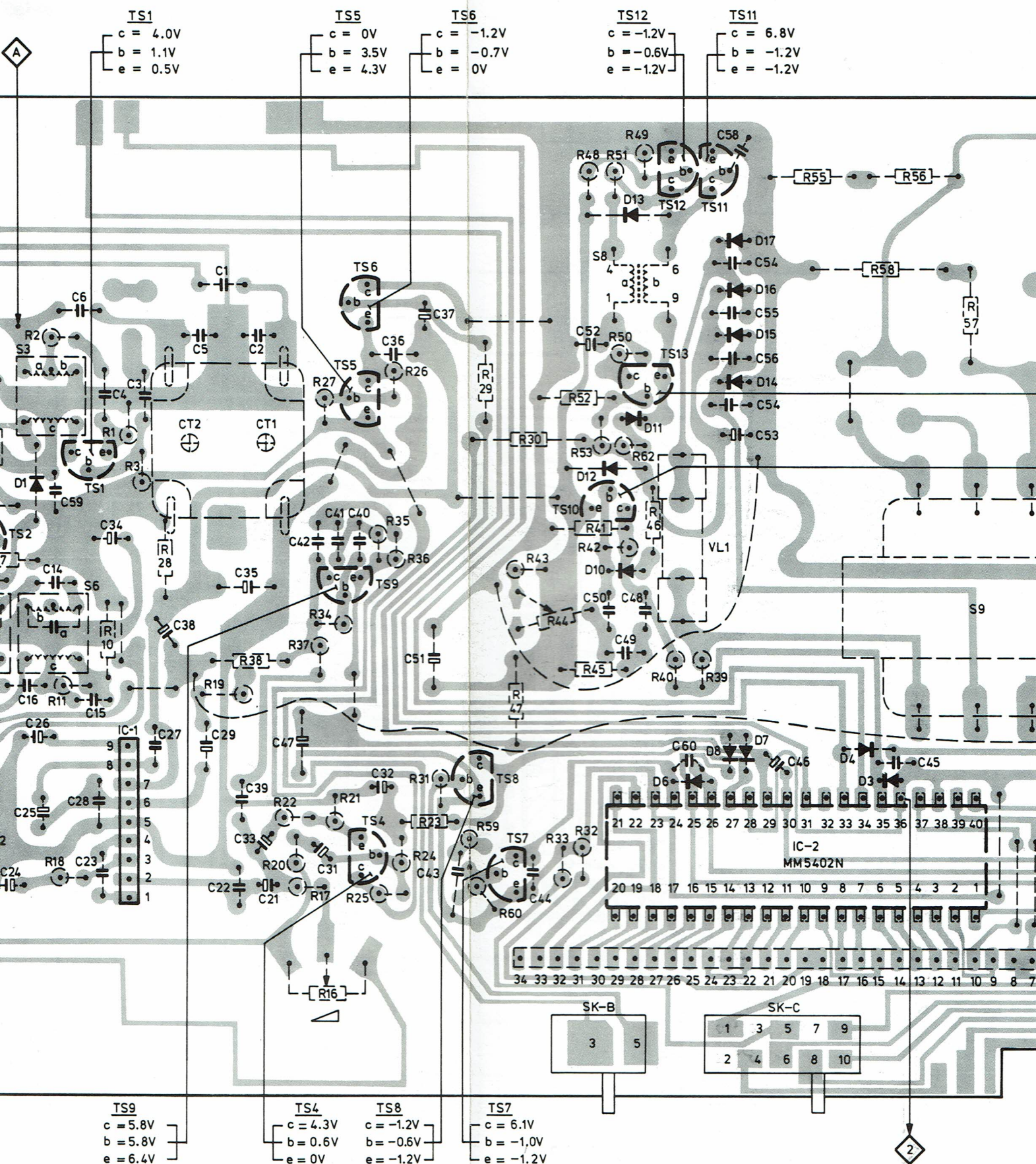
THE CIRCUIT HAS BEEN DRAWN IN POS. MW/
RADIO ON/ALARM BY BUZZER
LE CIRCUIT EST REPRESENTÉ EN POS. PO/
RADIO MARCHE/ALARME PAR VIBREUR

16253E12

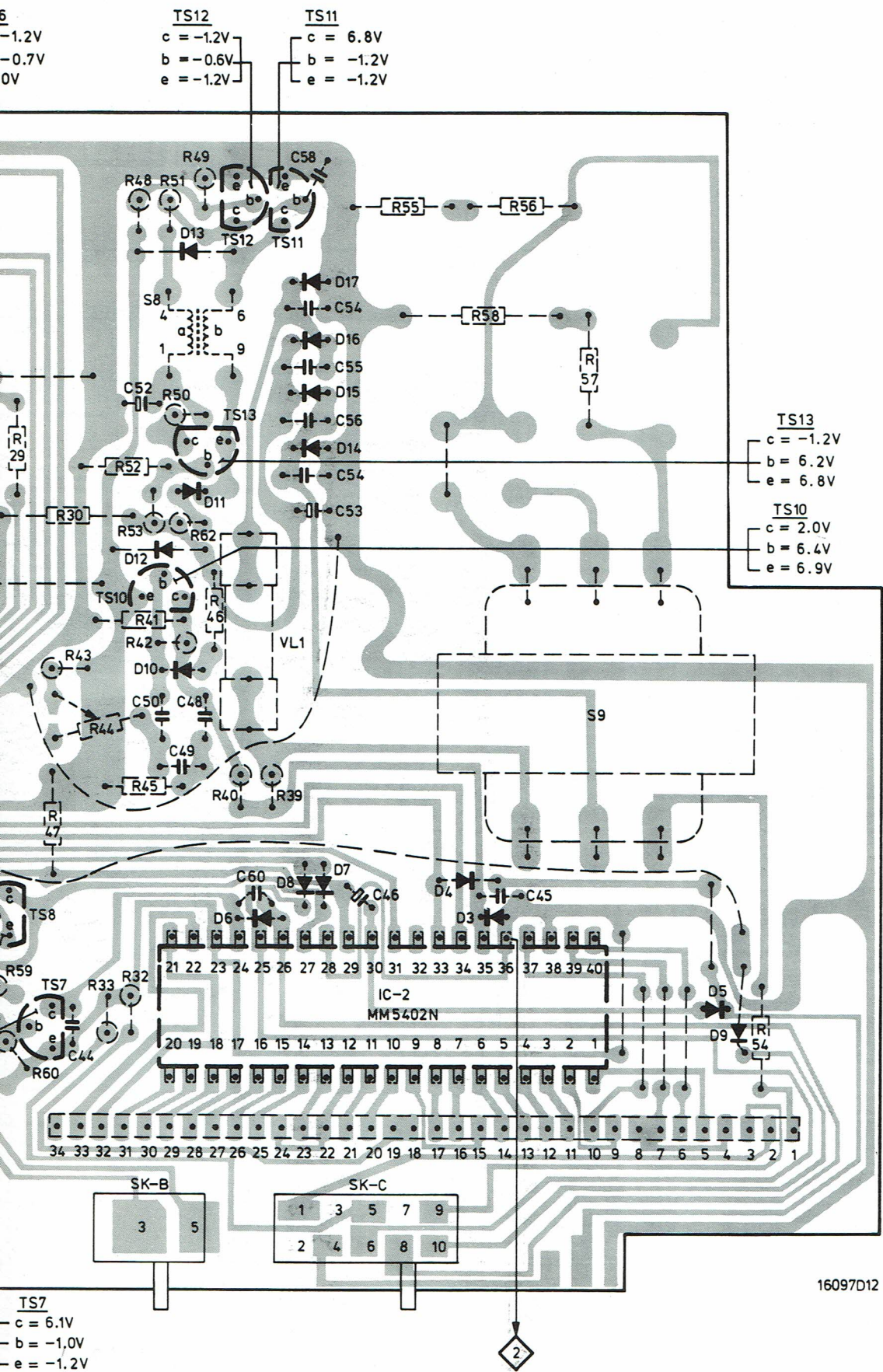
MISC	SK-A	D18	D2.TS2÷3.D1	TS1.	IC-1	TS4÷6.TS9
S	4	7	5	3	6	
C 1÷35	7.8	10÷13.	17÷20.9.	24÷26.	14÷16.28.23.6.34.43.27.29.5.135.2.33.22.21	31 32
C 35÷70			59.		CT2. 38. CT1. 47.	40÷42 36.51. 37. 43
R 1÷35	9.	12÷15.	4÷8		11.2.18.10.1.3	28 19 17.16.22.20.27.21. 35. 34.23÷26. 3
R 35÷70						38 37 36



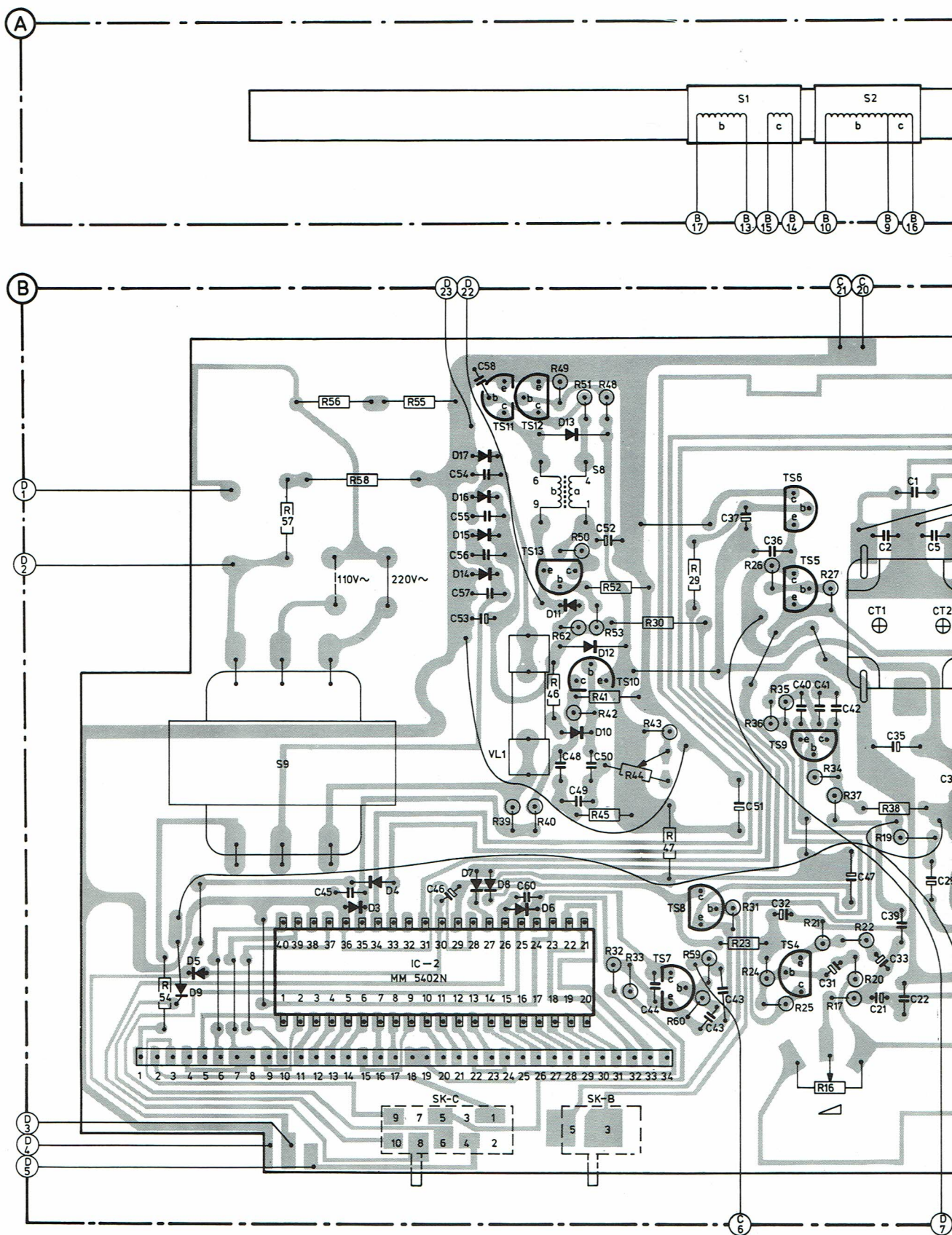
2÷3.D1	TS1. IC-1	TS4÷6.TS9	TS7÷8	SK-B.D10÷13.TS10÷13.D6÷8. D14÷17. SK-C.IC-2.D4.D3	
6			8	9	
4÷26. 14÷16.28.23.6.34.4.327.295.135.2.33.22.21	31	32			
59.	CT2.38. CT1.47.	40÷42	36.51. 37. 43	44. 52. 48÷50	60 53÷58 46 45
11.2.18.10.13	28	19	17.16.22.20.27.21.	35. 34.23÷26.31.	29. 30. 33. 32
	38	37	36	59.60.	43÷47. 48÷53. 62.39÷42
					55÷58



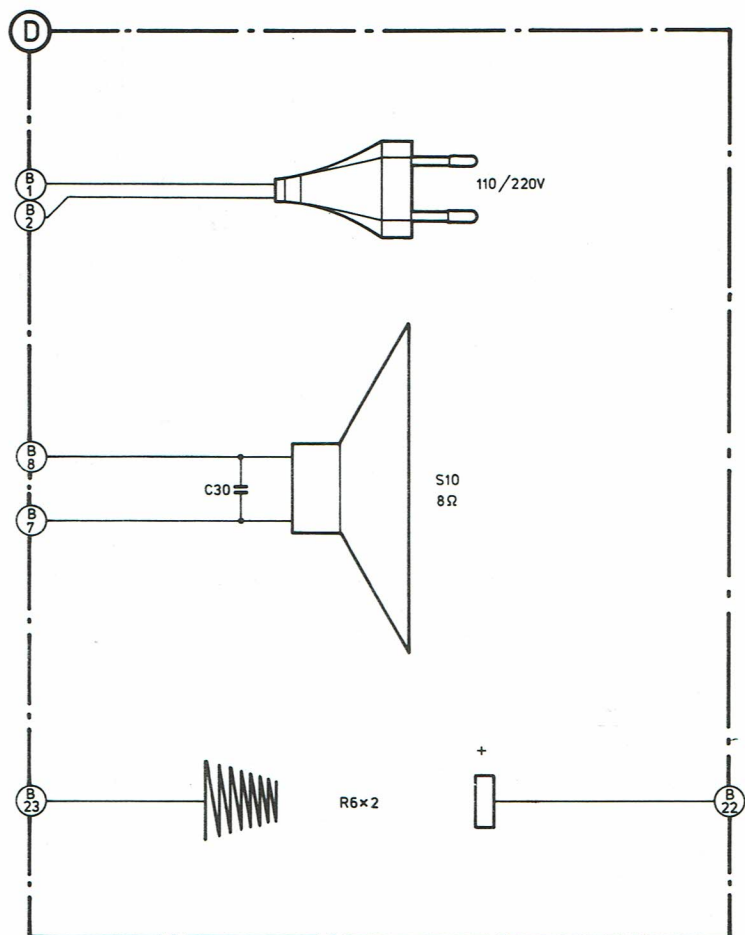
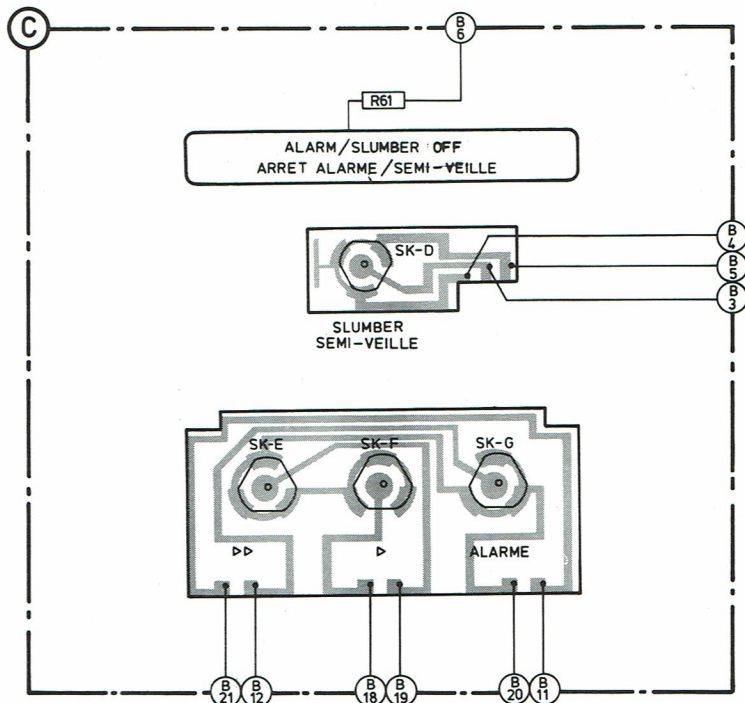
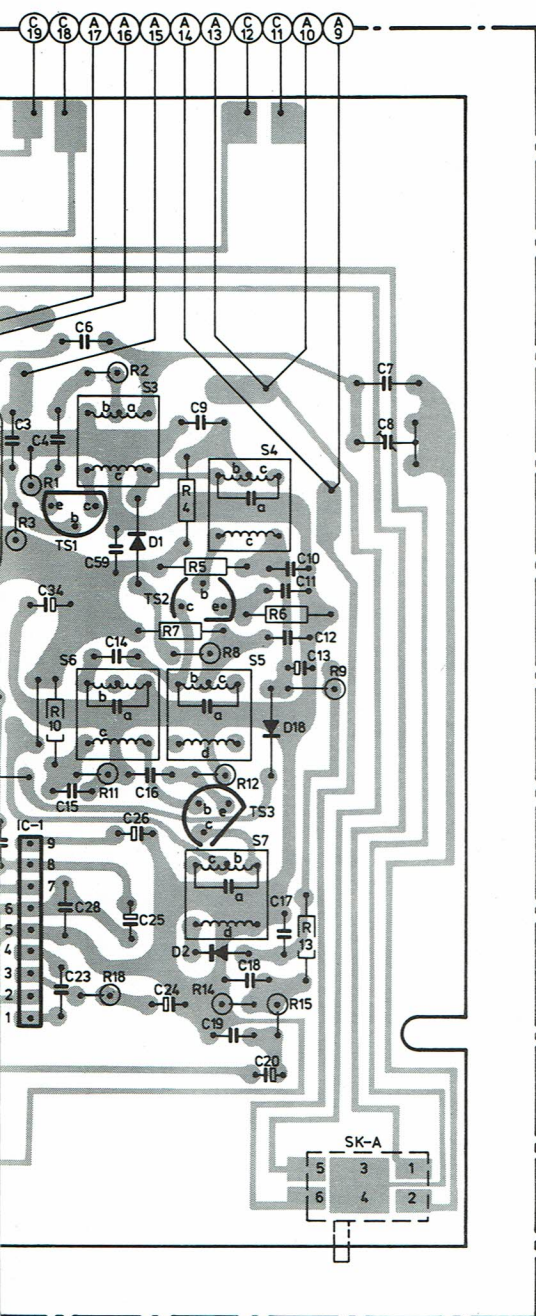
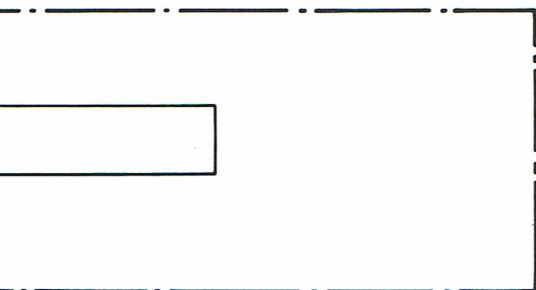
TS7÷8	SK-B.D10÷13.TS10÷13.D6÷8. D14÷17. SK-C.IC-2.D4.D3	D5. D9	MISC
8	9		S
44. 52. 48÷50	60 53÷58 46 45		C 1÷30
29. 30. 33. 32			C 35÷70
59.60. 43÷47. 48÷53. 62.39÷42	55÷58	54	R 1÷35
			R35÷70



MISC	D9, D5		D3, D4		IC-2	SK-C	D14÷17, D6÷8, TS10÷13, D10÷13, SK-B		TS7÷8	TS4÷6, TS9	
S	9		8		1		2				
C	1÷35								32 31	21, 22, 33, 2, 35, 15, 29, 27	
C	36÷70		45	46	53÷58	60, 48÷50	52	44	43, 37, 51, 36, 40÷42, 47	CT1, 38, CT2	
R	1÷35						32, 33	30, 29, 31	23÷26, 34, 35, 27	20÷22, 16, 17, 19, 28, 3, 1	
R	36÷70	54	55÷58				39÷42, 62, 48÷53, 43÷47, 59, 60			36 37	38



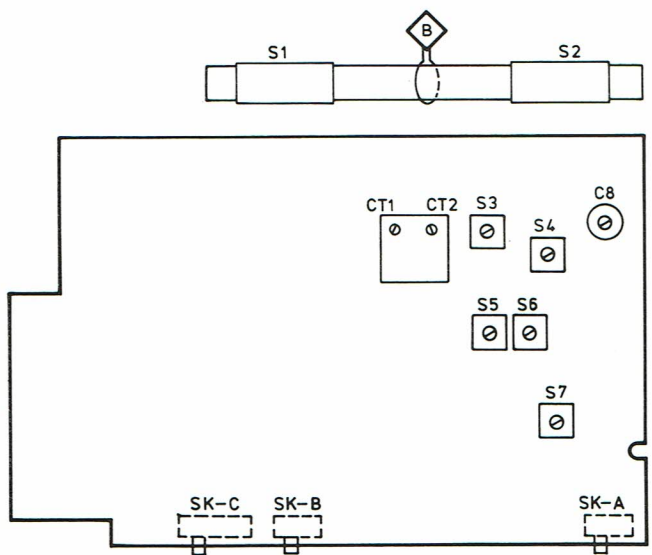
IC-1, TS1	D1	TS2+3	D2, D18, SK-A	SK-E	SK-F	SK-D	SK-G	MISC
6	3	5	4	7			10	S
4, 34, 59	6.23, 28.14÷16, 24÷26, 9.17÷20, 10÷13		7.8					1÷35 C
								36÷70 C
	18.2.11	4÷8.12÷15, 9						1÷35 R
						61		36÷70 R



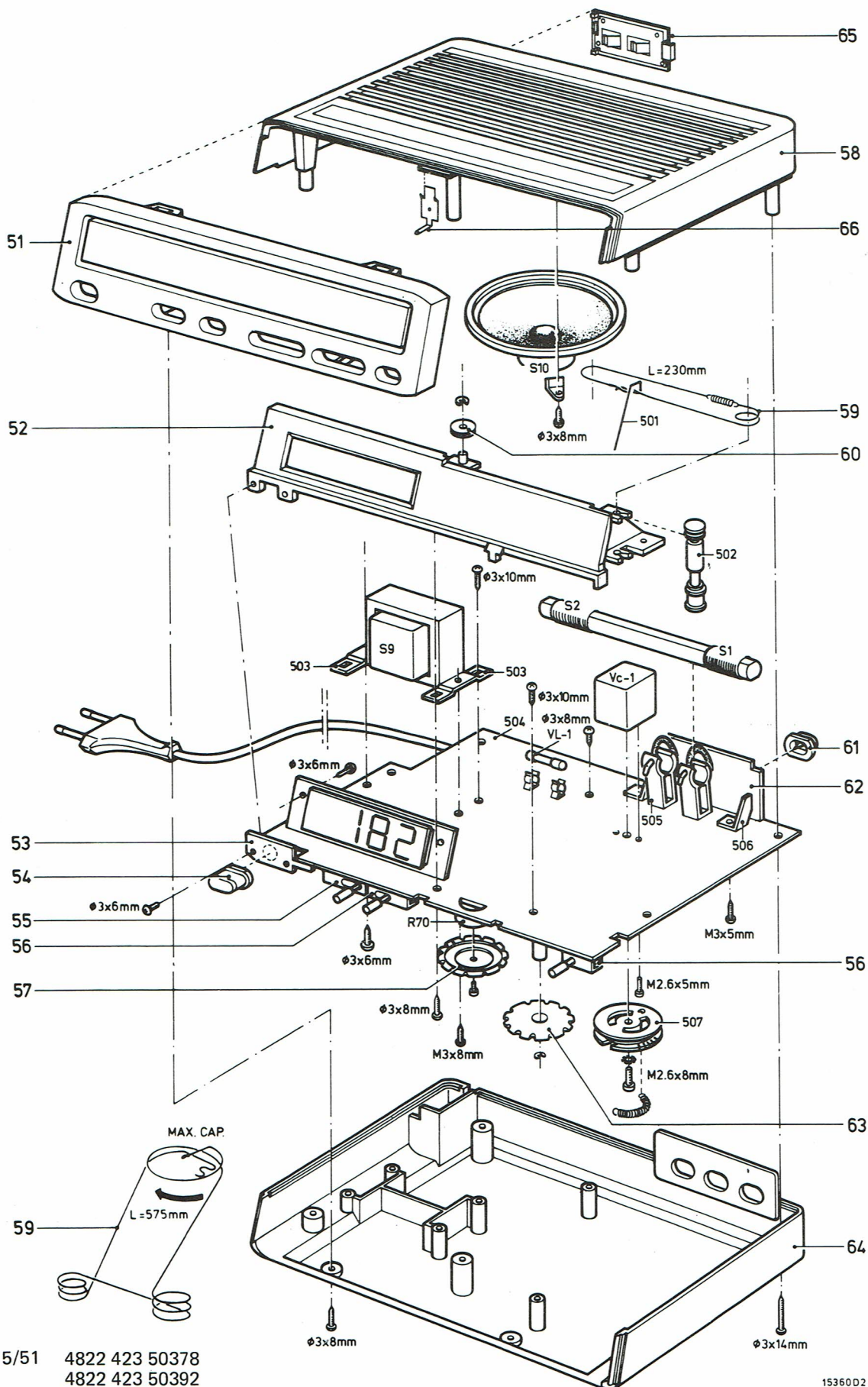
15096E12

Wave range SK-A	Signal to 		Var. cap. 	Adjust 	Indication 
MW/PO (520-1605 kHz)	468 kHz via 10 KpF		min. cap.	S7, 6 S5, 4	 max.
	512 kHz		max. cap.	S3	
	1635 kHz		min. cap.	Ct2	
	600 kHz		tune in	S1	
	1400 kHz			Ct1	
LW/GO (150-255 kHz)	147 kHz		max. cap.	C8	 max.
	200 kHz		tune in	S2	

Repeat - Herhalen - Répéter - Wiederholen - Ricominciare - Repetera - Gentage - Gentagelse - Toista



16480A12



51 /00/15/51
51 /28

4822 423 50378
4822 423 50392
4822 404 20251
4822 278 90333
4822 410 21945

55 4822 277 60133
56 4822 277 60132
57 4822 413 50952
58 4822 423 50377
59 4822 321 30214

60
61
62
63
64

4822 528 80602
4822 410 21944
4822 278 90332
4822 413 50953
4822 426 90052

65
66

4822 423 40497
4822 290 80336

1536002

-TS- 			-C- 		
1,2,3	1502B (BF494)	4822 130 44195	Vc1	Varco	4822 125 20184
4,8	1402C (BC548B)	4822 130 40937	3,4,9,		
5,9,10			10,11,12	Cer. cap. 20 nF±20 %	4822 122 30103
13	1602C (BC558A)	4822 130 40948	15,16,19		
6	1802N (BC328)	5322 130 44104	7	Cer. cap. 240 pF±5%	4822 121 50034
7,12	1402E (BC548C)	4822 130 44196	8	Trimmer 20 pF	4822 125 50045
11	9418 (BC368)	5322 130 44647	14	Cer. cap. 6 pF±1/4 pF	4822 122 31224
-IC- 			17,18,19,		
1	TA7313P	4822 209 80411	22,27	Cer. cap. 10 nF±20%	4822 121 40015
2	MM5402N	4822 209 10024	30,36,52	Cer. cap. 40 nF±20%	4822 122 50045
-D- 			41,41,44	Cer. cap. 20 nF±20%	4822 122 30103
1	1N60 (AA119)	5322 130 40229	42,45	Cer. cap. 10 nF±20%	4822 121 40015
2	CDG00 (BA216)	4822 130 30702	54÷57	Cer. cap. 20 nF±20%	4822 122 30103
3÷11	BA317	4822 130 30847	-Miscellaneous-		
12÷17	1N4001 (BY188B)	4822 130 30829	R16	Ferrite bar 10 x 120	4822 158 60384
	TLR4072 (Display)	4822 130 31009	R44	Potm. vol. 10 kΩ	4822 101 90083
-S- 				Potm. osc. 20 kΩ	4822 100 10213
1	MW-Ant. coil	4822 156 20776			
2	LW-Ant. coil	4822 156 20777			
3	AM-osc. coil (red)	4822 157 50756			
4	AM-IFT coil	4822 156 30407			
5,6	AM-IFT coil	4822 153 10287			
7	AM-IFT coil	4822 153 10232			
8	Osc. coil (50 Hz)	4822 156 30634			
9	Power transformer	4822 145 20156			
10	Loudspeaker 8 Ω	4822 240 30106			

GB

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

NL

Veiligheidsbepalingen vereisen, dat het apparaat bij reparatie in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde, worden toegepast.

F

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisées les pièces de rechange identiques à celles spécifiées.

D

Die Sicherheitsvorschriften erfordern, dass das Gerät sich nach der Reparatur in seinem originalen Zustand befindet und dass die benutzten Einzelteile den aufgeführten Teilen identisch sind.

SF

Korjattessa laitetta on turvallisuussyistä ehdottomasti eneteltävä oikein ja käytettävä tehtaan määäämiä alkuperäisvaraosaia.

I

Le norme di sicurezza esigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati i pezzi di ricambio identici a quelli specificati.

S

Säkerhetsbestämmelserna kräver att varje reparation skall utföras korrekt med hänsyn till ursprunglig placering av komponenter, ledningar etc. och med användning af föreskrivna reservdelar.

DK

Myndighedernes sikkerheds- og radiostøjbestemmelser kræver, at enhver reparation skal udføres korrekt m.h.t. overholdelse af originalplacering og montering af komponenter, ledningsbundter, etc., og ved anvendelse af de foreskrevne reservedele.

N

Sikkerhetsbestemmelser kreves at apparatet blir gjenopprettet til original utførelse og at deler som er identiske med de som er spesifisert, blir benyttet.