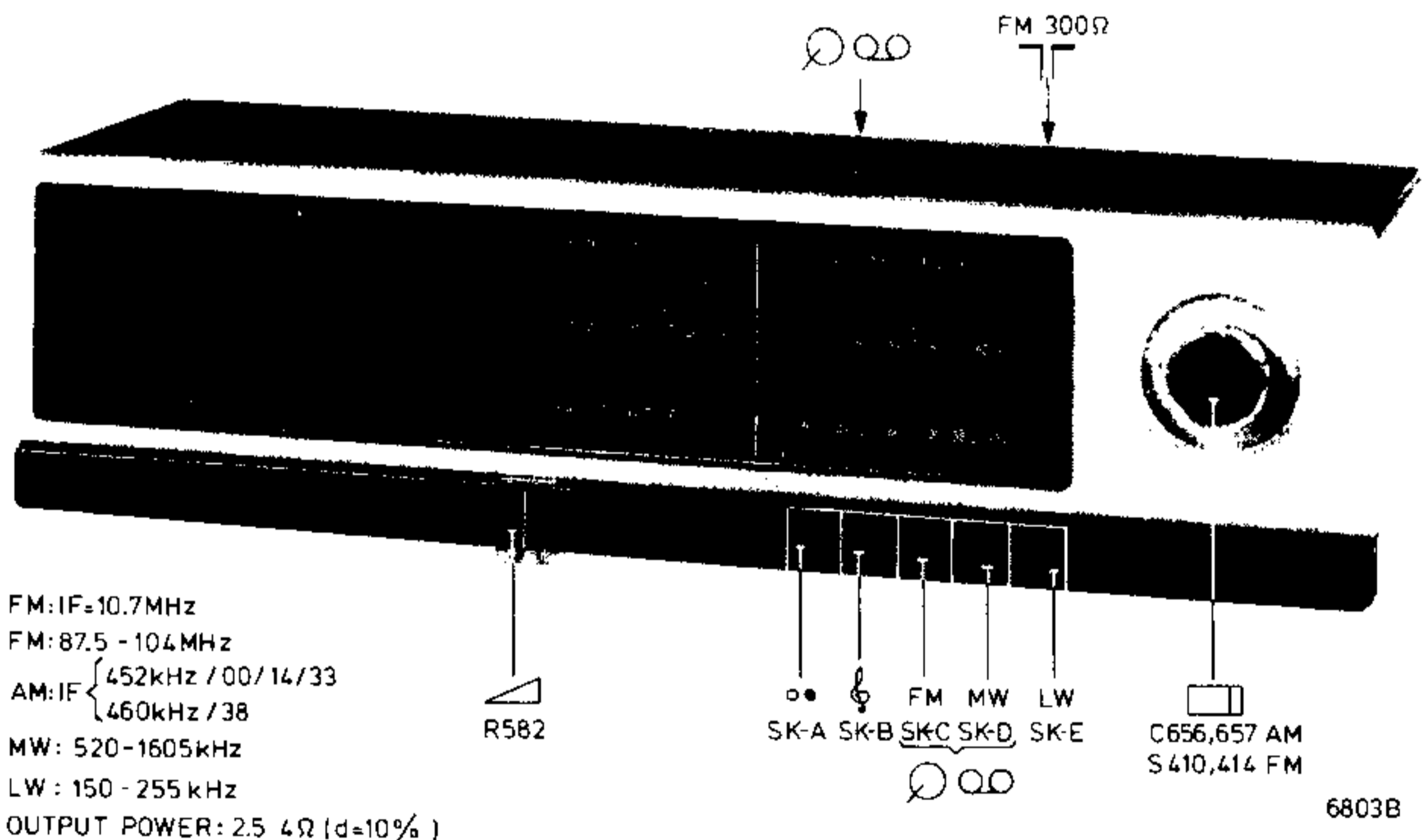


Service  
Service  
Service

# Service Manual



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

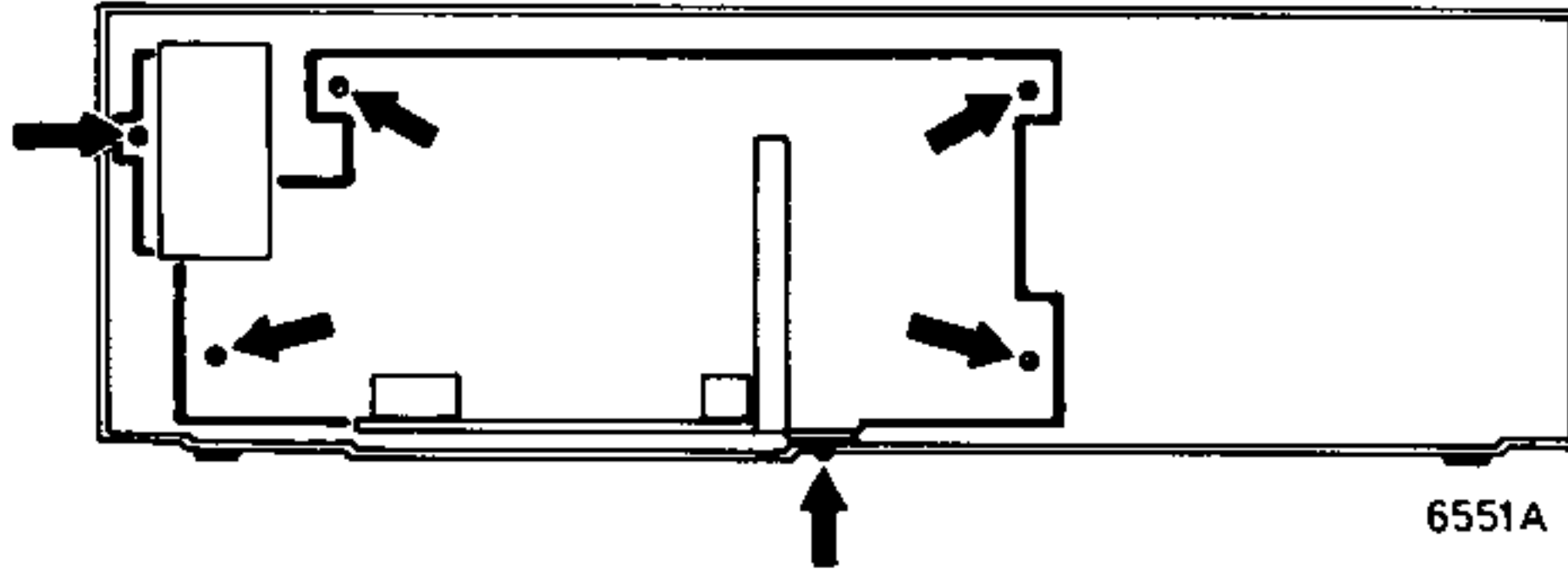
Documentation Technique Service Dokumentation Documentazione di Servizio Huolto-Ohje Manual de Servicio Manual de Servicio



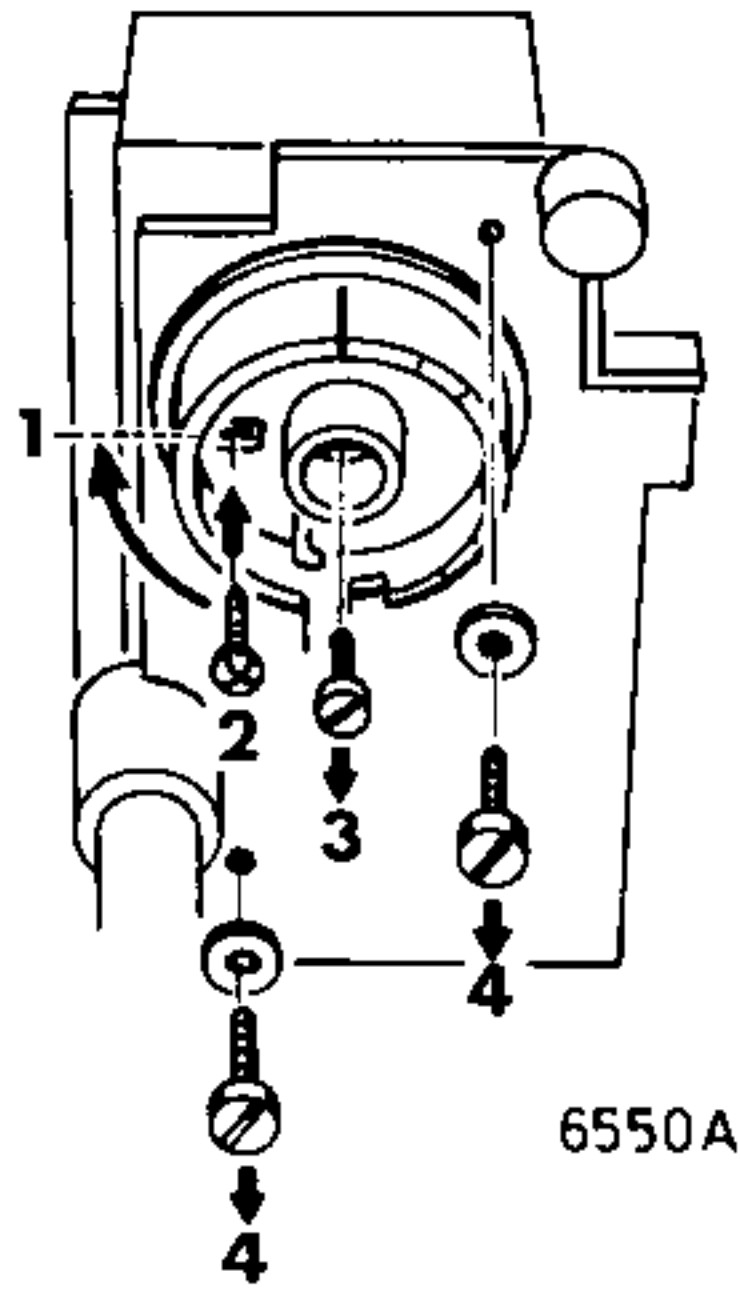
Subject to modification  
4822 725 11586  
Printed in The Netherlands

**PHILIPS**

## REMOVING THE CABINET



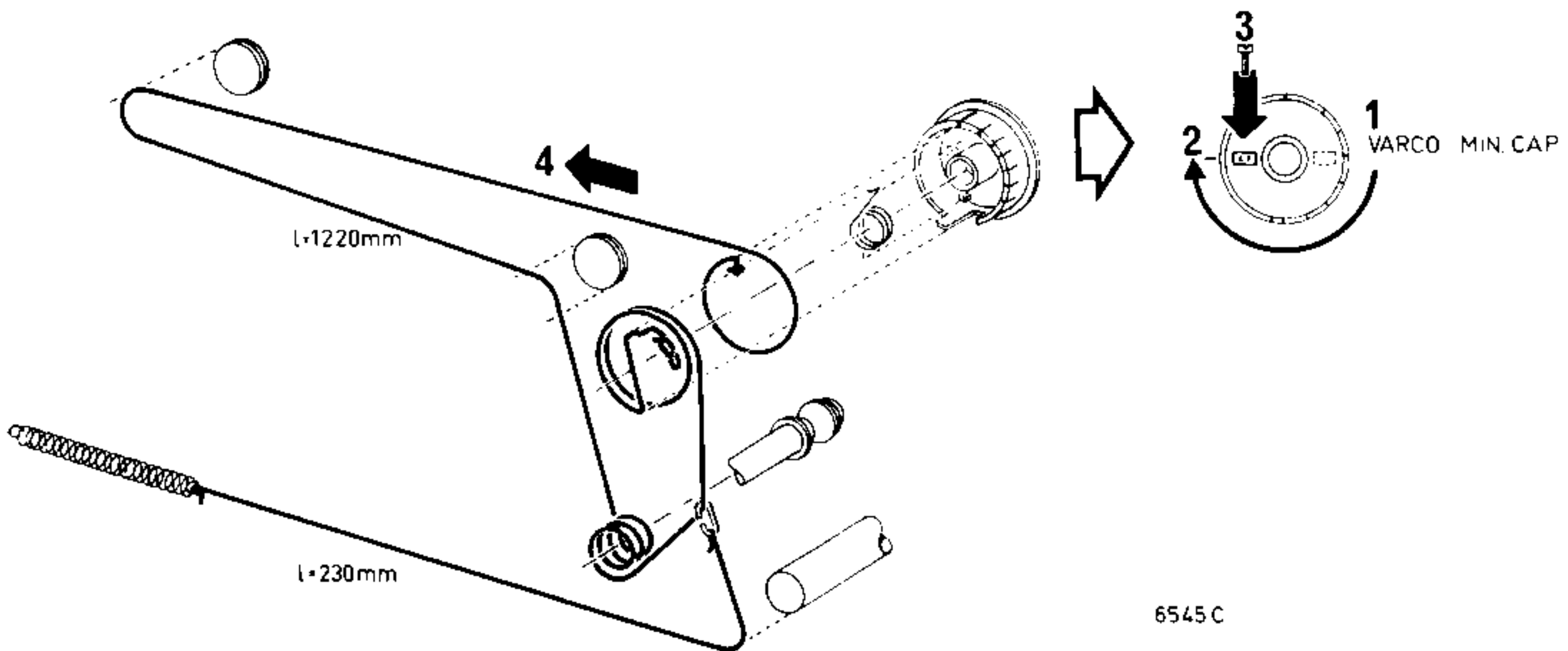
## REMOVING THE FM-TUNER



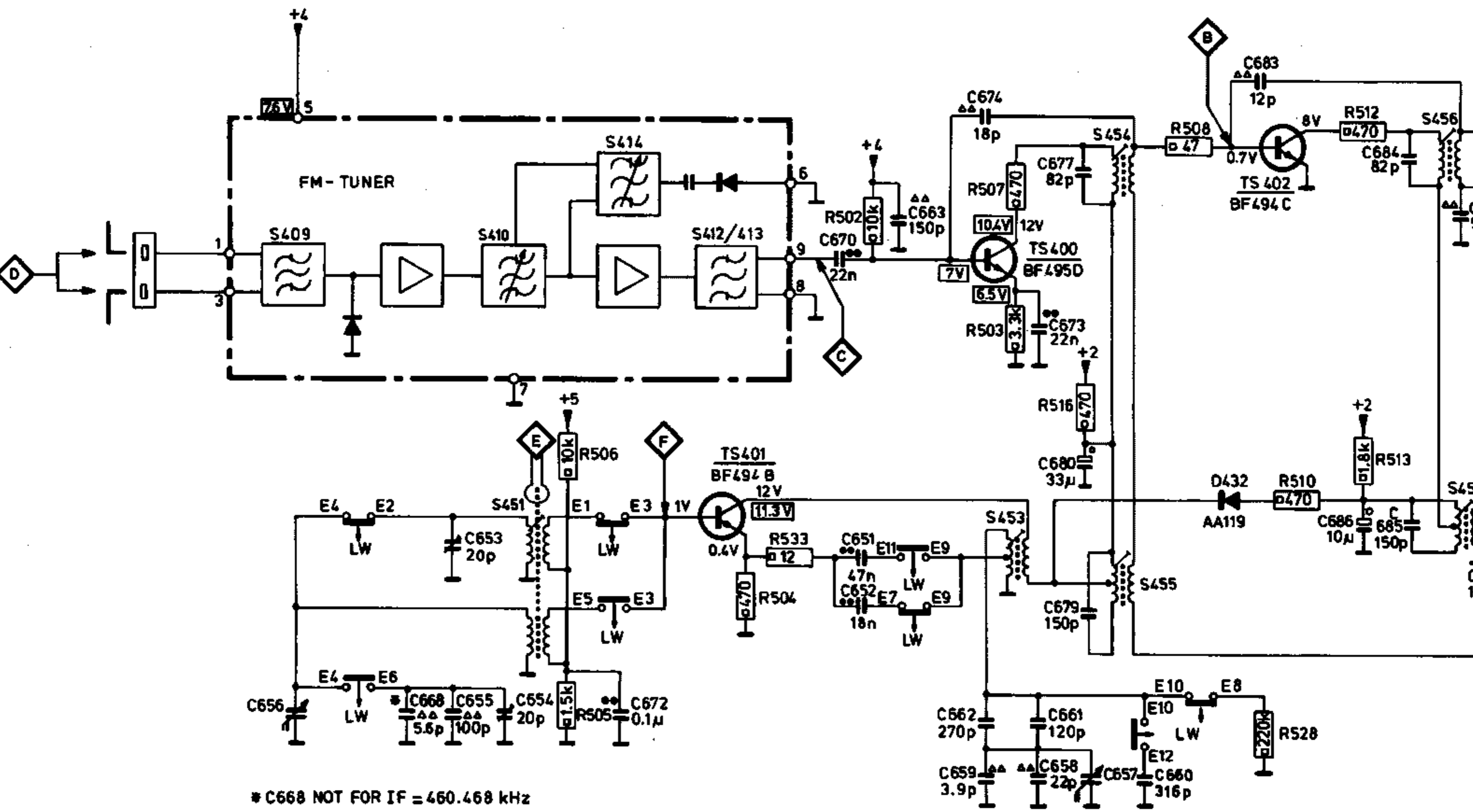
### ATTENTION: REPLACEMENT OF VAR.CAP.

Keep during the replacement of the var.cap.  
the pointer in the middle of the scale

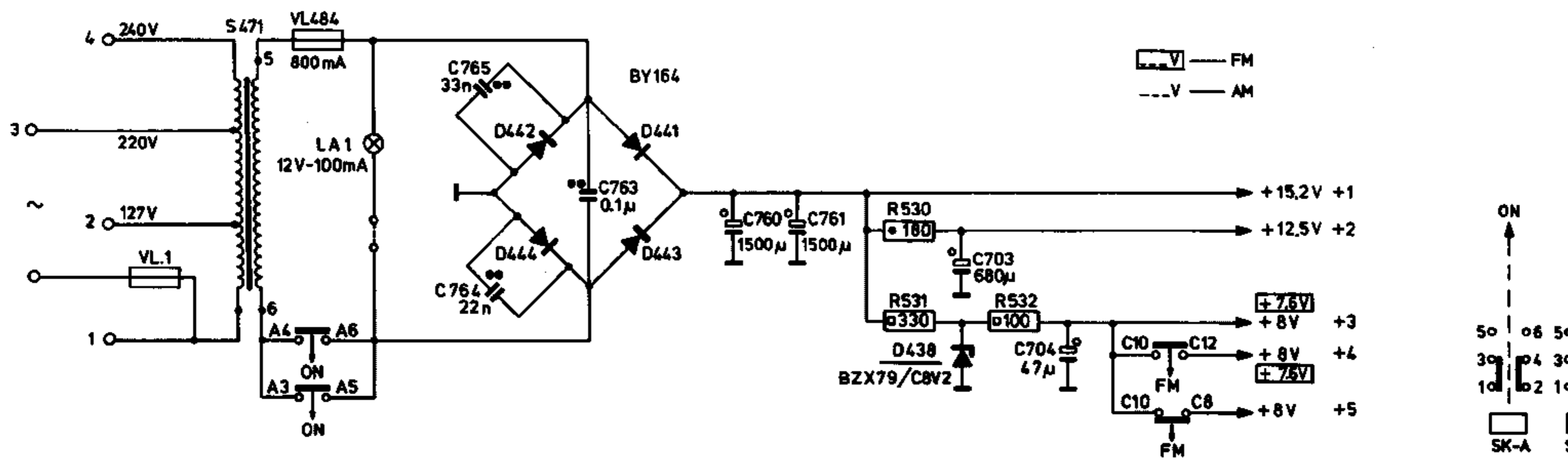
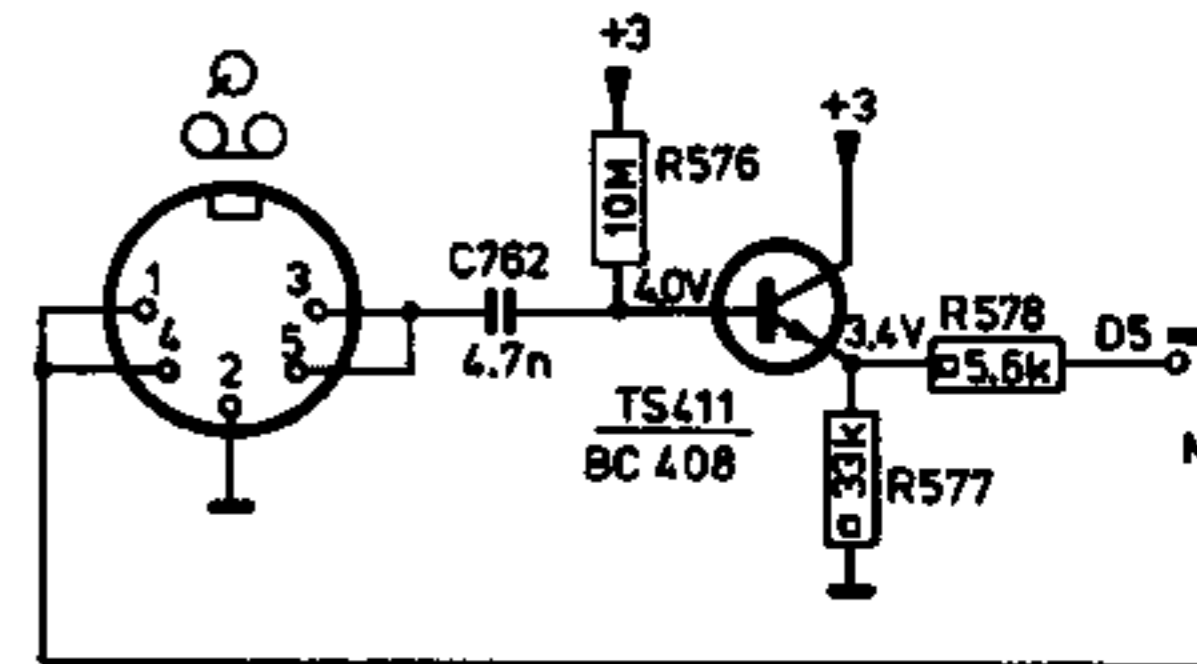
### DRIVE CORD RUN



MISC.	S409	S451	S414	S412/413	TS401	TS400, S453, S454, S455	D432	TS402	S456
MISC.	VL1	S471, VL484	LA1	D441 + D444	D438	BU	TS411		
C		653				670 651 652 663 674 673 677 680 679	683	686 684 685	
C		656	668 765 655 764 654 763 672	760 761		703 662 659 704 661 658 657 660	762		
R			506		504 533	502	532 507 503 516	508 576 510	512 513
R						530 531		528	577 578

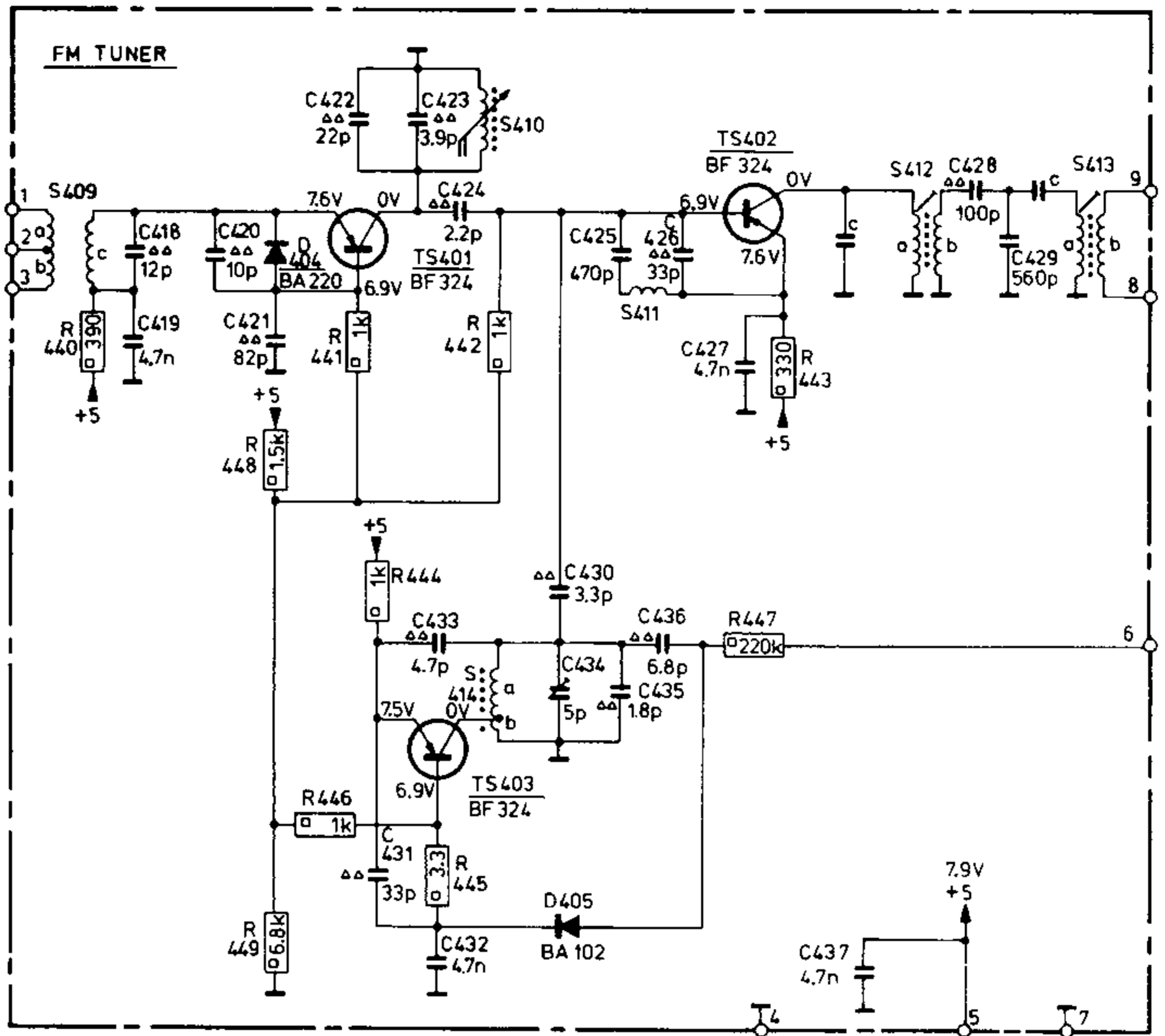


CIRCUIT IS DRAWN IN REST-POSITION





# FM TUNER



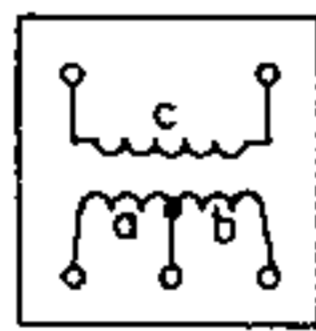
- ①.③ —
- ② —
- ④.⑦ —
- ⑤ +
- ⑥ AFC
- ⑧.⑨ IF

5050B

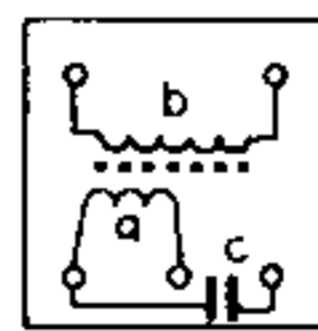


TS401, 402, 403

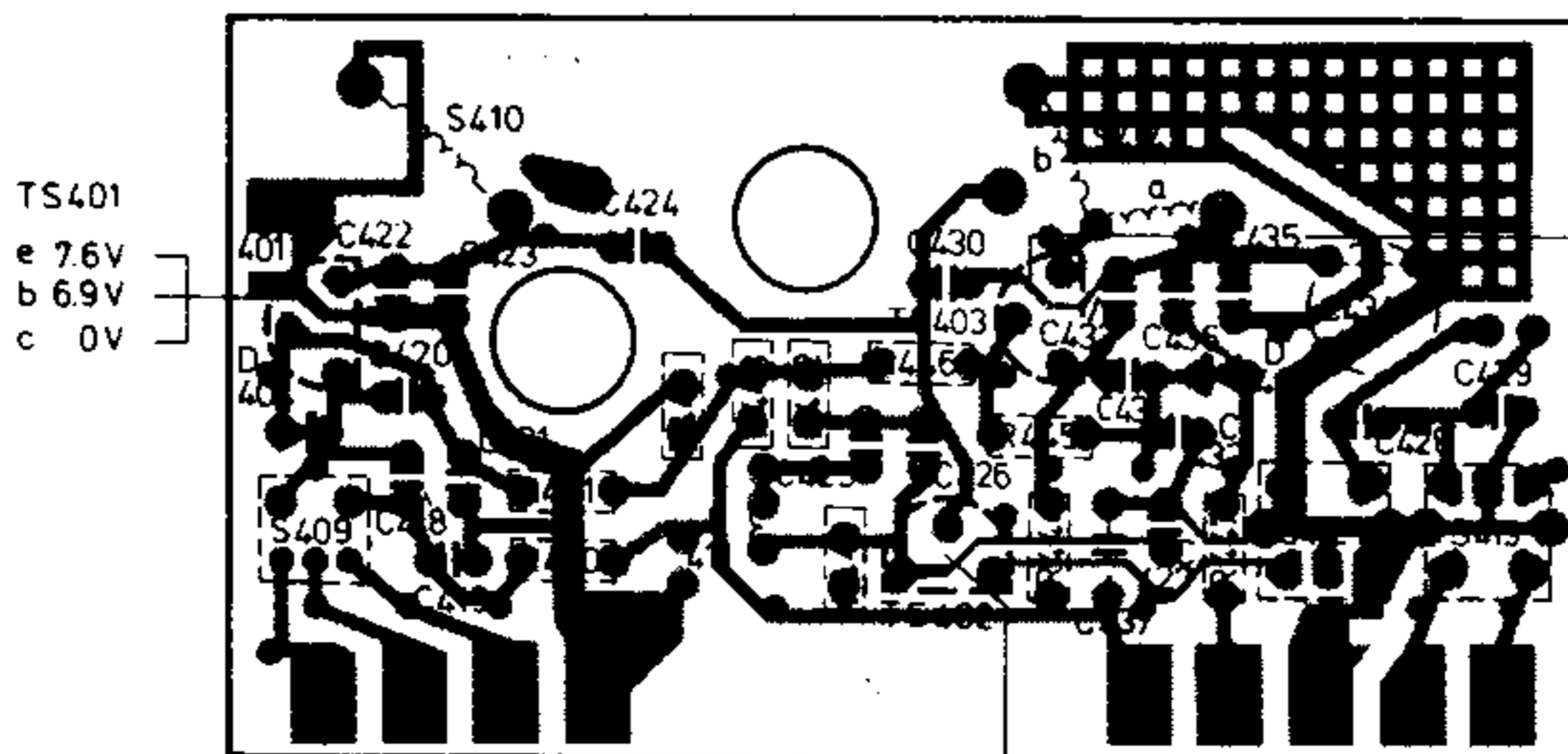
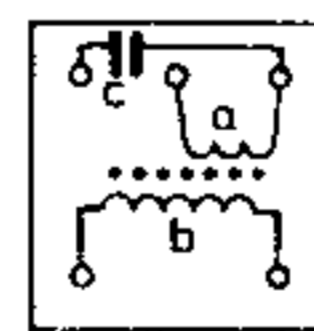
S409



S412



S413






TS401  
e 7.6V  
b 6.9V  
c 0V

TS403  
e 7.5V  
b 6.9V  
c 0V




e 7.6V  
b 6.9V  
c 0V

TS402  
4709A




(GB)

- 1 Open bridge 
- 2 Adjust for maximum height and symmetry of the band-pass curve.
- 3 Close bridge 
- 4 Adjust for max. slope and symmetry of the "S"-curve. Connect a DC meter to  and check the zero passage of the "S"-curve.




(F)

- 1 Ouvrir le pontet 
- 2 Régler sur hauteur et symétrie maximum de la courbe de réponse.
- 3 Fermer le pontet 
- 4 Régler à la pente et à la symétrie max. de la courbe "S". Raccorder un voltmètre pour tension continue à  et contrôler le point de passage par zéro de la courbe "S".




(I)

- 1 Aperire il ponte 
- 2 Regolare altezza massima e simmetria della risposta in frequenza.
- 3 Chiudere il ponte 
- 4 Regolare per pendenza e simmetria massima della curva ad "S". Collegare il metro di tensione continua a  e controllare il passaggio a zero della curva "S".




(S)

- 1 Öppna bryggan 
- 2 Justera till max. höjd och symmetri på bandpasskurvan.
- 3 Slut bryggan 
- 4 Justera för max. höjd och symmetri på S-kurvan. Anslut en DC-voltmeter till  och kontrollera S-kurvans nollgenomgång.




(N)

- 1 Bryt printleder 
- 2 Justér til maks. høyde og symmetri på båndpass kurven.
- 3 Lodd igjen printleder 
- 4 Justér "S"-kurven til max. stejlhed og symmetri. Forbind et DC voltmeter til punkt  og kontrollér nullgjennomgangen til "S"-kurven.




(NL)

- 1 Brug  openen.
- 2 Afregelen op max. hoogte en symmetrie van de doorlaatkromme.
- 3 Brug  sluiten.
- 4 Afregelen op max. steilheid en symmetrie van de "S"-kromme. Gelijkspanningsmeter aansluiten aan  en de nul-doorgang van de "S"-kromme controleren.




(D)

- 1 Öffne Brücke 
- 2 Justiere auf maximale Höhe und Symmetrie der Durchlasskurve.
- 3 Schliesse Brücke 
- 4 Justiere auf maximale Schräge und Symmetrie der "S"-Kurve. Schliesse ein Gleichspannungsmesser an  an und kontrolliere den Nulldurchgang der "S"-Kurve.

(DK)

- 1 Åbn broen 
- 2 Justér mf-kurven til max. højde og symmetri.
- 3 Luk broen 
- 4 Justér til max. helling og symmetri på "S"-kurven. Forbind et jævnspændingsvoltmeter til  kontroller "S"-kurvens nullpassage.

(SF)

- 1 Avaa yhdistys 
- 2 Säädä läpäisy käyrä symmetriseksi ja maksimi korkenteen.
- 3 Kytke yhdistys  takaisin.
- 4 Säädä "S"-käyrän jyrkkyys ja symmetrisyys maksimiin. Kytke tasajännitemittari pisteeseen  ja tarkista "S"-käyrän nolliakohta.

SK - Wave

MW  
(520-1605)

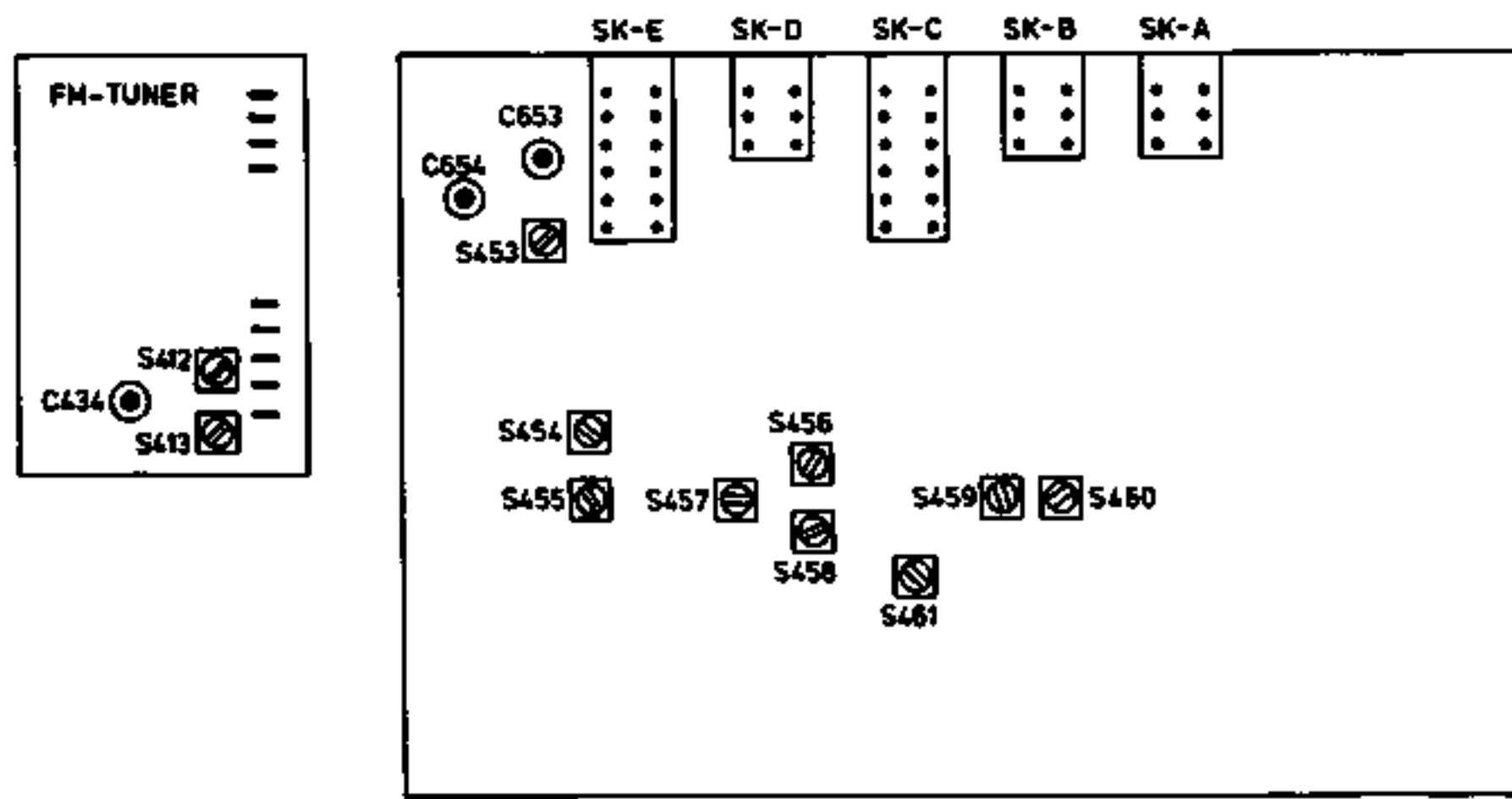
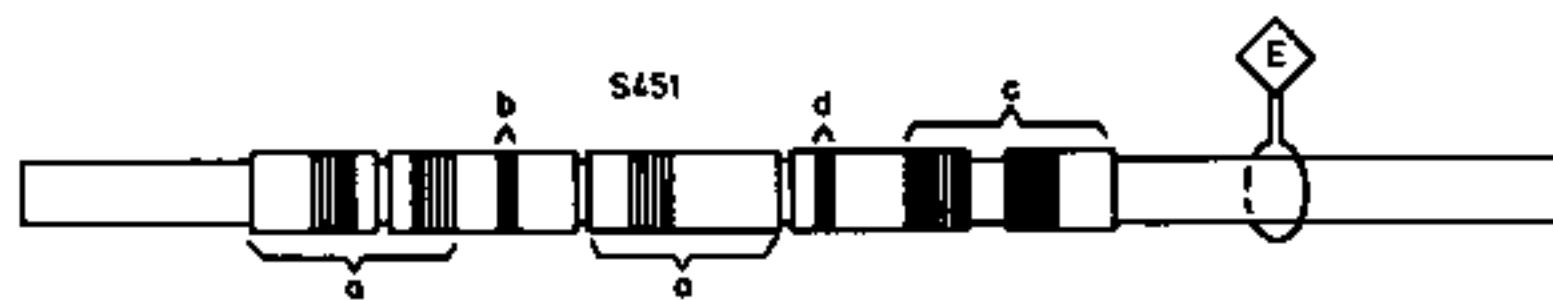
LW (150-2)

FM (87,5)

Rep

SK - Wave range	Signal to		Tuning	Detune	Adjust	Indication
MW (520-1605 kHz)	IF via 5 nF $\Delta f = 200 \text{ kHz (50 Hz)}$	A	Max.Cap.	S458 S455	S461	3 max.
		B			S458 S457	
		F			S455	
	512 kHz	E	Max.Cap.		S453	3 max.
1620 kHz	Tune in			C653		
550 kHz				S451c-d		
LW (150-255 kHz)	243 kHz			C654		
	155 kHz			S451a-b		
FM (87,5-104 MHz)	10,7 MHz via 5 nF $\Delta f = 200 \text{ kHz (50 Hz)}$	A	Max. Ind.	S460 S456	S459	1 2
	1	B		S454 S413	S456	
		C			S454	
	96 MHz via 5 nF $\Delta F = 200 \text{ kHz (50 Hz)}$	D	Tune in		S413	1
					S412	2
				3	S460	2 4
	96 MHz				C434	2 $V_{\dots} = 0 \pm 30 \text{ mV}$

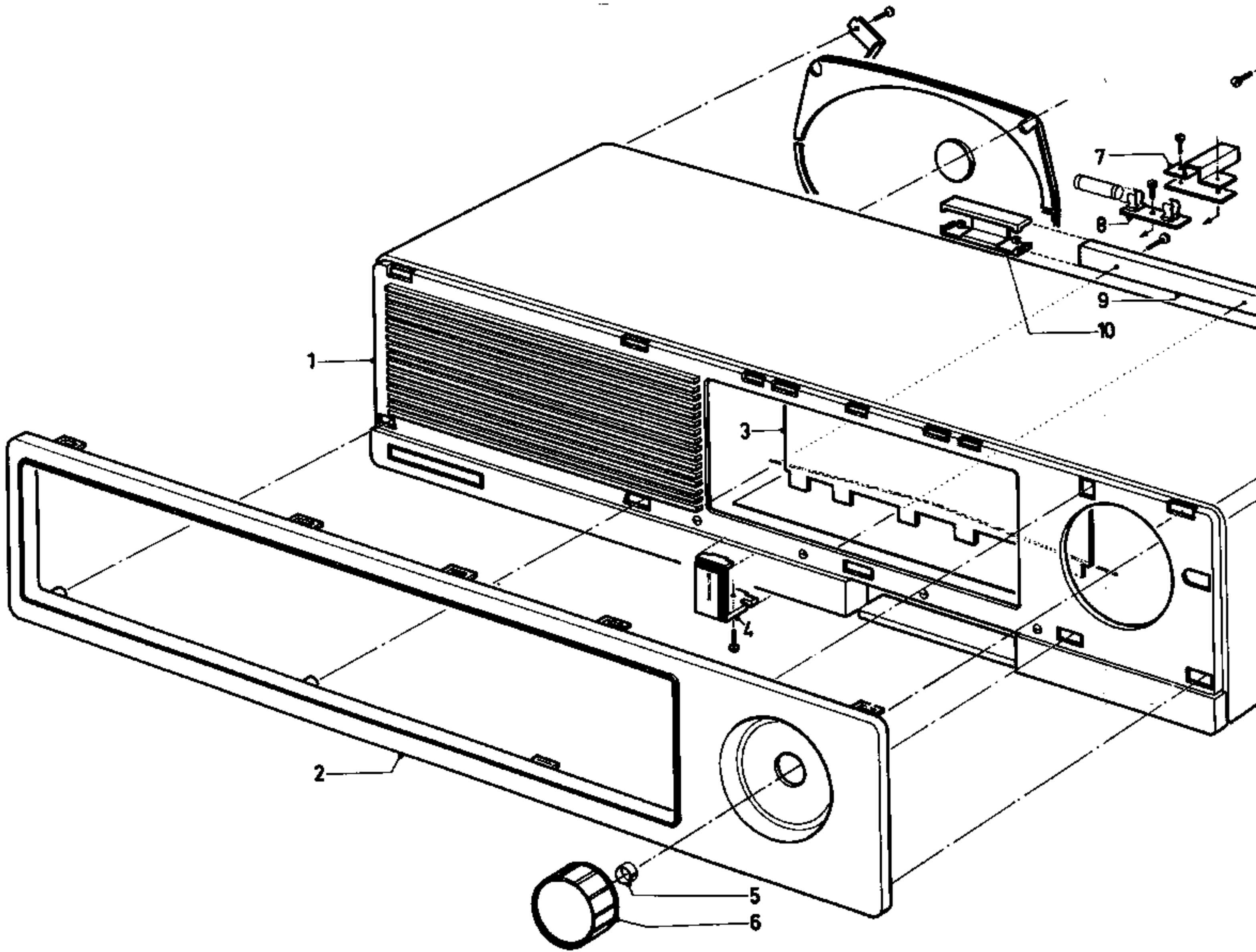
Repeat



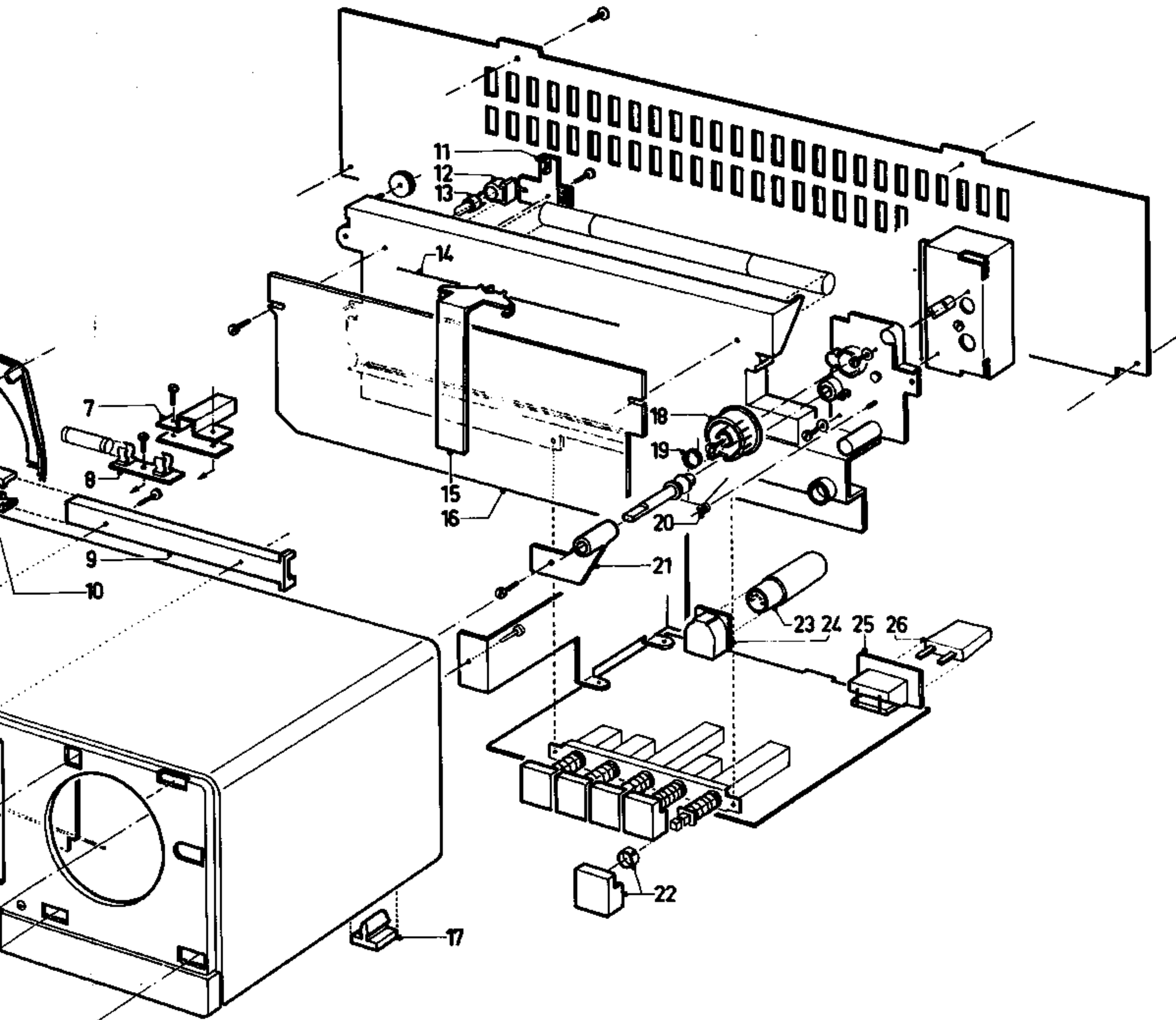
6500B

# MECHANICAL PARTSLIST

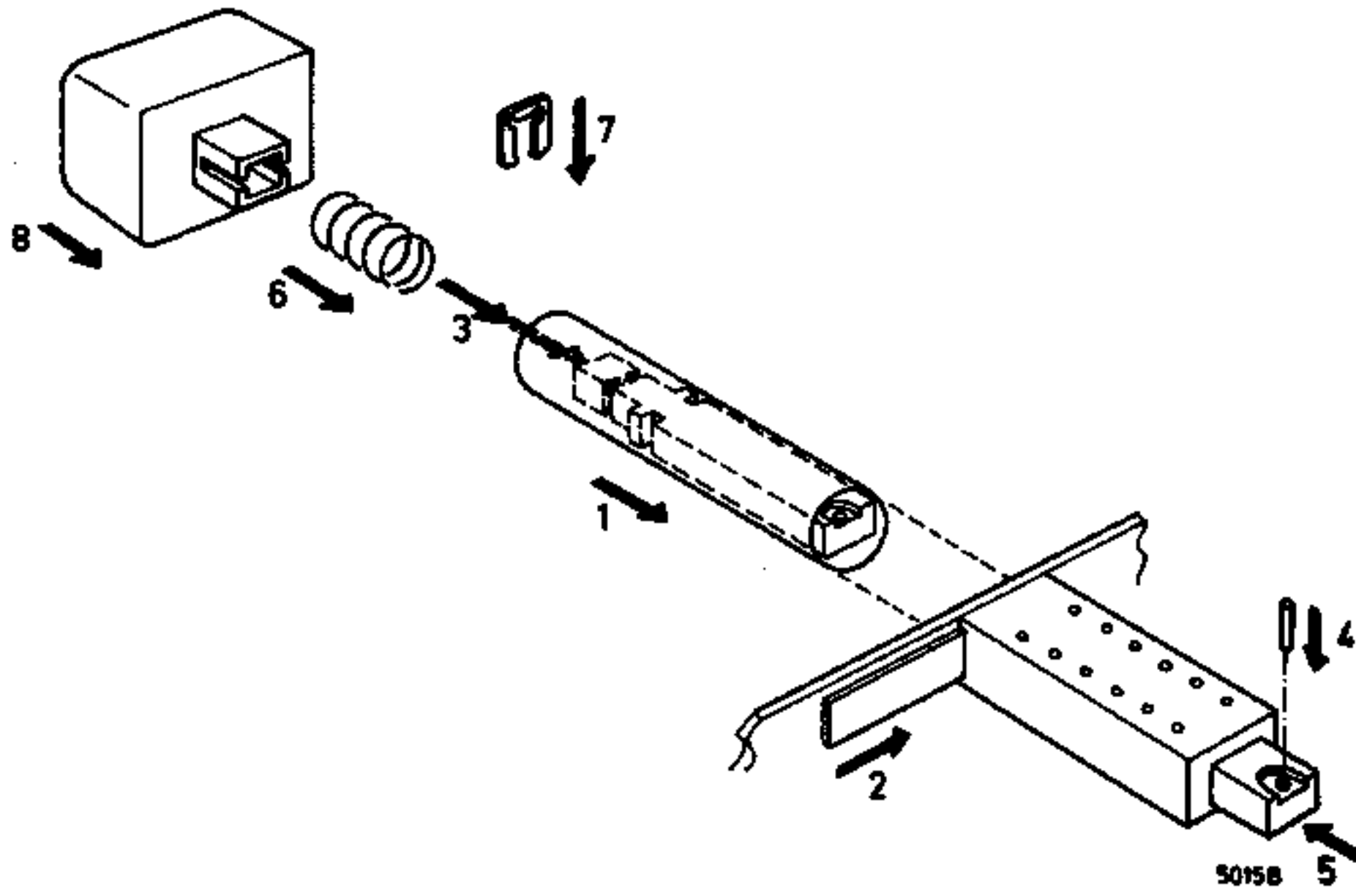
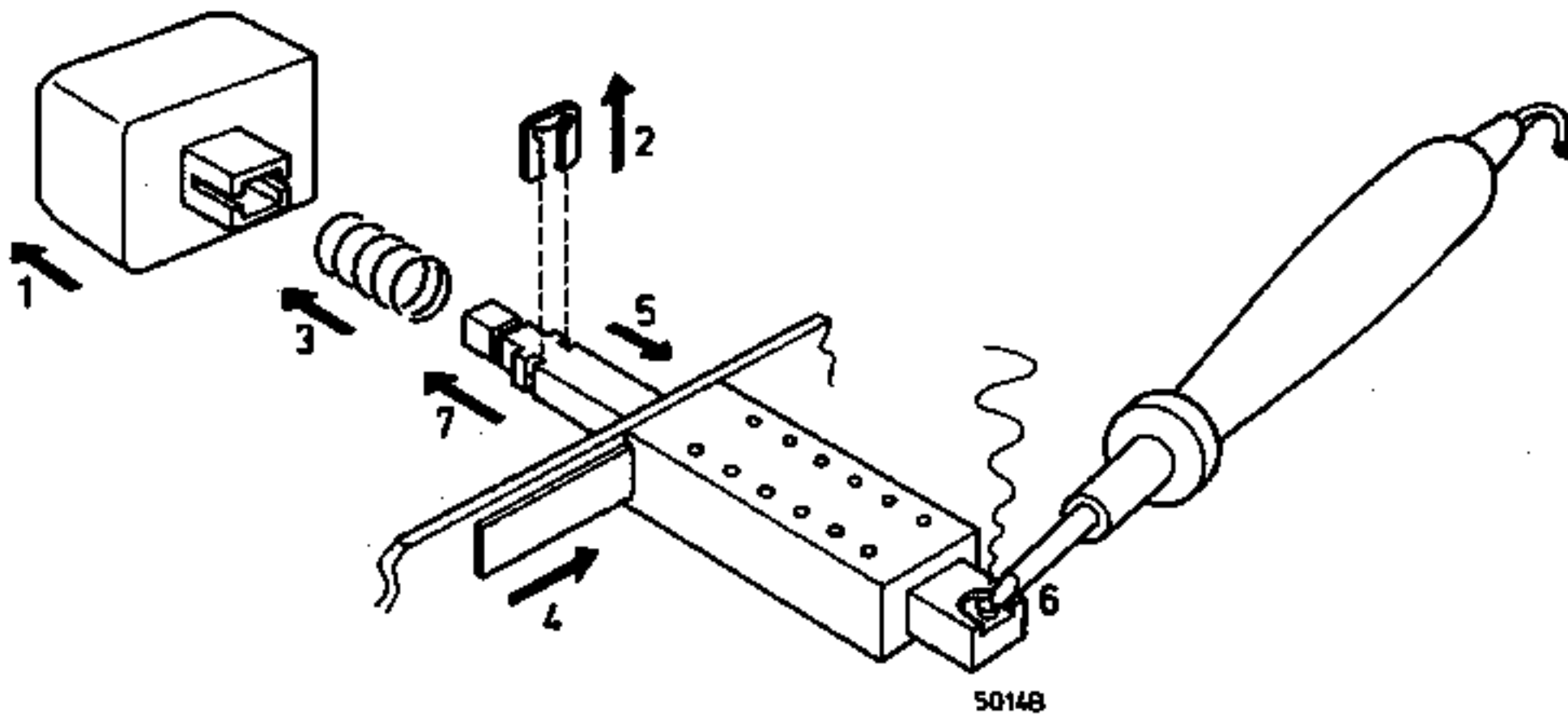
1	4822 425 30138	10	4822 404 20183	19	4822 492 40574
2	4822 459 40394	11	4822 404 20182	20	4822 492 40573
3	4822 450 60128	12	4822 255 10096	21	4822 417 10632
4	4822 411 60421	13	4822 255 20068	22	4822 410 21618
5	4822 492 61511	14	4822 321 30132	23	4822 264 40023
6	4822 413 40532	15	4822 450 80427	24	4822 267 40209
7	4822 404 10141	16	4822 333 40202	25	4822 267 20153
8	4822 256 30149	17	4822 462 70993	26	4822 264 30043
9	4822 462 30186	18	4822 528 40193		







# REPLACEMENT OF SLIDES OF WAVE RANGE SWITCHES



PUSH PULL \*

4822 278 30102

4822 278 30103

4822 278 30104

4822 278 30105

4822 535 91023

\* THIS SPARE PART HAS TO BE ORDERED TOGETHER WITH THE PUSH PULL AND THE PUSH PUSH SWITCH

PUSH PULL

4822 276 10623

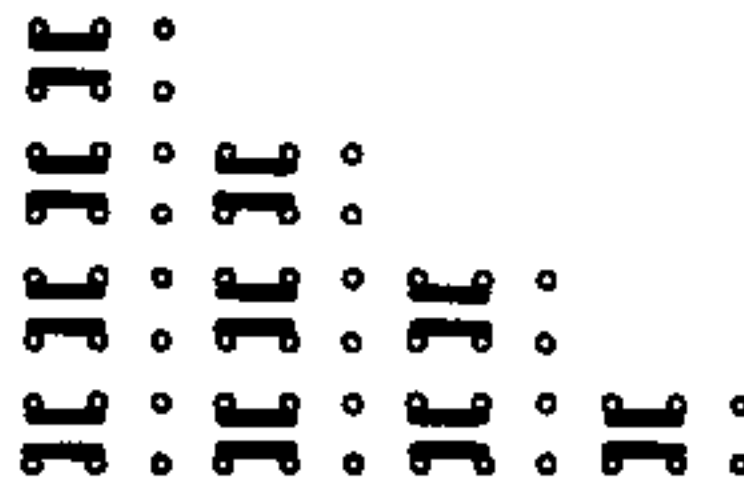
PUSH PUSH

4822 276 10624

4822

325g 4822 492 51088

700g 4822 492 51087



PUSH PUSH \*

4822 276 30097

4822 278 30098

4822 278 30099

4822

4822 492 61978




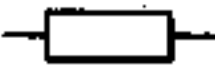

4822 530 70287

4822 492 61977

4822 535 91024



## ELECTRICAL PARTSLIST

-TS-				-C-		
TS400/401/402	Transistor packet	4822 130 40949		C653-654	Trimmer 20 pF	4822 125 50045
TS403	BF240	4822 130 40902		C660	316 pF ± 1 %	4822 121 50531
TS411/412	BC408	5322 130 44143		C661	120 pF ± 2 %	4822 122 30093
TS413	BC328	5322 130 44104		C662	270 pF ± 2 %	4822 122 30107
TS414/415	AC187/01, AC188/01, pair	5322 130 40319		C695-697- 698-762	4,7 nF ± 10 %	4822 122 30128
				C700-701	2,7 nF ± 10 %	4822 122 31174
				C752	1 nF ± 10 %	4822 122 31175
				C753	560 pF ± 10 %	4822 122 31166
-D-				-R-		
D432	AA119	5322 130 40229		R576	10 MΩ, 0,25 W	4822 110 63214
D433/434	2x AA119, pair	4822 130 30312		R695-696	1 Ω, 1 W	4822 110 23027
D435	BA315	4822 130 30843				
D438	BZX79/C8V2	5322 130 34119				
D440	BA314	4822 130 30879				
D441-444	BY164	5322 130 30414				
-S-				<b>Miscellaneous</b>		
S453	A.M. osc. coil	4822 156 30534		F.M. tuner + vari. cap.		4822 210 10177
S455/457	A.M. I.F. coil	4822 153 10252		Variable capacitor		4822 125 20184
S458	A.M. I.F. coil	4822 153 10253		Ferroceptor		4822 158 60389
S461	A.M. det. coil	4822 156 40534		Ferroxcube bead		4822 526 10108
S454-456	F.M. I.F. coil	4822 153 60088		Mains transformer		4822 145 30147
S459	F.M. det. coil	4822 153 50108		Loudspeaker 4Ω		4822 240 20142
S460	F.M. det. coil	4822 153 50102		Pot. meter vol. 100 kΩ		4822 105 10207
				Lamp 12 V - 100 mA		4822 134 40243
				Fuse 800 mA		4822 253 30019
				Fuse in mains trafo		4822 252 20007