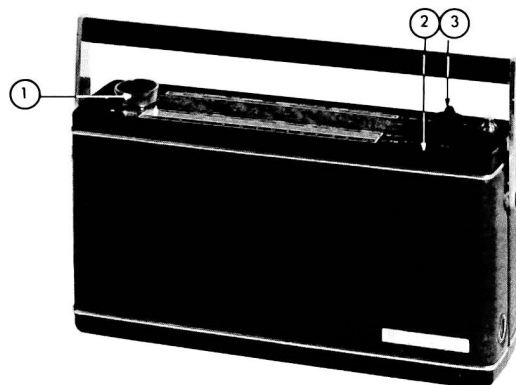


# SERVICE NOTES

## RADIO

7320/00/29



TRA 3622

①	Battery switch Batterijschakelaar Commutateur de batterie Batterieschalter Interruttore	+ Volume control + Volumeregelaar SK-A + Commande de volume + + Lautstärkereglér R558 + Controllo di volume	②	Tuning Afstemming Syntonisation C449 Abstimmung Sintonizzazione	③	Wave range switch Golfgebiedschakelaar Commutateur des gammes d'ondes SK-B Wellenbereichschalter Commutatore di gamma d'onde
---	---	---	---	---	---	--

IF (AM)	452 kc/s	MF (AM)	FI (AM)	ZF (AM)	452 kc/s	FI (AM)
IF (FM)	10,7 Mc/s	MF (FM)	FI (FM)	ZF (FM)	10,7 Mc/s	FI (FM)
Battery	6 V (4x1,5 V)	Batterij	Batterie	Batterie	6 V (4x1,5 V)	Batteria
Consumption (without signal)	ca. 28 mA	Verbruik (zonder signaal)	Consommation (sans signal)	Verbrauch (ohne Signal)	ca. 28 mA	Consumo (senza segnale)
Output power	700 mW	Uitgangsvermogen	Puissance de sortie	Ausgangsleistung	700 mW	Potenza di uscita
Dimensions	278x145x65 mm	Afmetingen	Dimensions	Abmessungen	278x145x65 mm	Dimensioni

### Wave ranges - Golfgebieden - Gammes d'ondes - Wellenbereiche - Gamme d'onde

LW - LG - GO - LW - OL	: 150 - 260 kc/s (2000 - 1154 m)
MW - MG - PO - MW - OM	: 525 - 1605 kc/s ( 571 - 187 m)
FM - UKW	: 87 - 104,5 Mc/s

### Transistors - Diodes

TS401 - AF124	TS406 - AC126	GR410 - BA102	GR414a } - 2-AA119
TS402 - AF124	TS407a - AC127	GR411 - AA119	GR414b }
TS403 - AF125	TS407b - AC128	GR412 - AA119	GR415 - BA114
TS404 - AF125	TS407c - AC127	GR413 - AA119	
TS405 - AF125	TS407d - AC128		

40809

Index: CS22557-CS22561

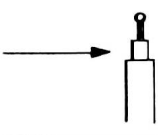
SERVICE INFORMATION										
------------------------	--	--	--	--	--	--	--	--	--	--

CS22557

Copyright reserved

4822 725,1.0384

Printed in the Netherlands

Wave range Golfgebied Gamme d'ondes Wellenbereich Gamme d'onde	Variable capacitor Variabele condensator Condensateur variable Drehkondensator Condensatore variabile	Signal Signaal Signal Signal Segnale	Adjust Aftregelen Régler Abgleichen Regolare	Output voltage Uitgangsspanning Tension de sortie Ausgangsspannung Tensione di uscita			
MW-MG-PO-MW-OM	Min.	452 kc/s	via	S430/431	S433	J	Max.
		453,5 kc/s	33 kpF	S429a/C466	S431	G	
		450,5 kc/s		S424a/424c	S429	E	
LW-LG-GO-LW-OL	Max. ① ②	147 kc/s			S426	C	Max.
MW-MG-PO-MW-OM	Min. ①	1635 kc/s			C449g		
Repeat - Herhalen - Répéter - Wiederholen - Ripetere							
LW-LG-GO-LW-OL	Tune - Afstemmen	155 kc/s			S424c, d		Max.
MW-GO-PO-MW-OM	Syntonsiser - Abstimmen	550 kc/s			S424a, b		
	Sintonizzazione ①	1500 kc/s			C449e		
Repeat - Herhalen - Répéter - Wiederholen - Ripetere							
FM-UKW	Max. ③	10,7 Mc/s	via	S430/R533	S432	H	Max.
		10,65 Mc/s	5 kpF	S428/R531	S430	F	
		10,75 Mc/s		S423a/423c	S428	D	
		10,7 Mc/s	via 0,8 pF	S423a/423c	S423	A	
FM-UKW	Max. ③	86,5 Mc/s		S421	B	Max.	
				S422			
	Min. ③	105 Mc/s		C449d			
				C449b			
Repeat - Herhalen - Répéter - Wiederholen - Ripetere							
FM-UKW	Max. ④	10,7 Mc/s	via 5 kpF	S432/R539	S434	K	Max. S-curve

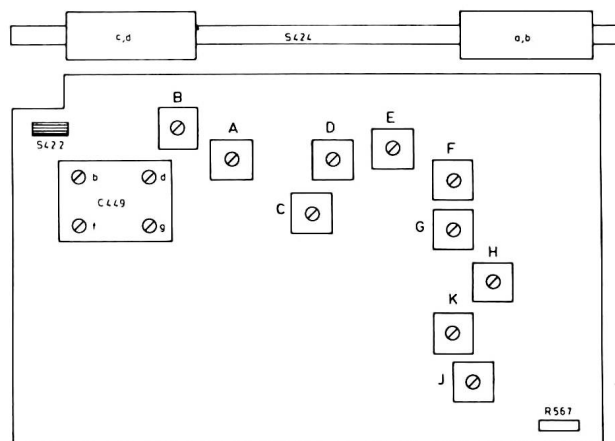
- ① Apply the signal to the ferroceptor by means of a coupler winding. - Signaal toevoeren aan de ferroceptor via een koppelwinding. - Appliquer le signal au ferrocaptteur par l'intermédiaire d'une spire de couplage. - Das Signal über eine Koppelwindung dem Ferroceptor zuführen. - Applicare il segnale al ferrocaptore per mezzo d'una spira di accoppiamento.

- ② Damp S424c, d with a resistor of 1 kΩ. Remove resistor after trimming S426. - S424c, d dempen met een weerstand van 1 kΩ. Weerstand verwijderen na het afregelen van S426. - Amortir S424c, d avec une résistance de 1 kΩ. Enlever la résistance après le réglage de S426. - S424c, d dämpfen mit einem Widerstand von 1 kΩ. Nach Abgleich von S426 den Widerstand entfernen. - Ammortizzare S424c, d con una resistenza di 1 kΩ. Ritirare la resistenza dopo il regolaggio di S426.

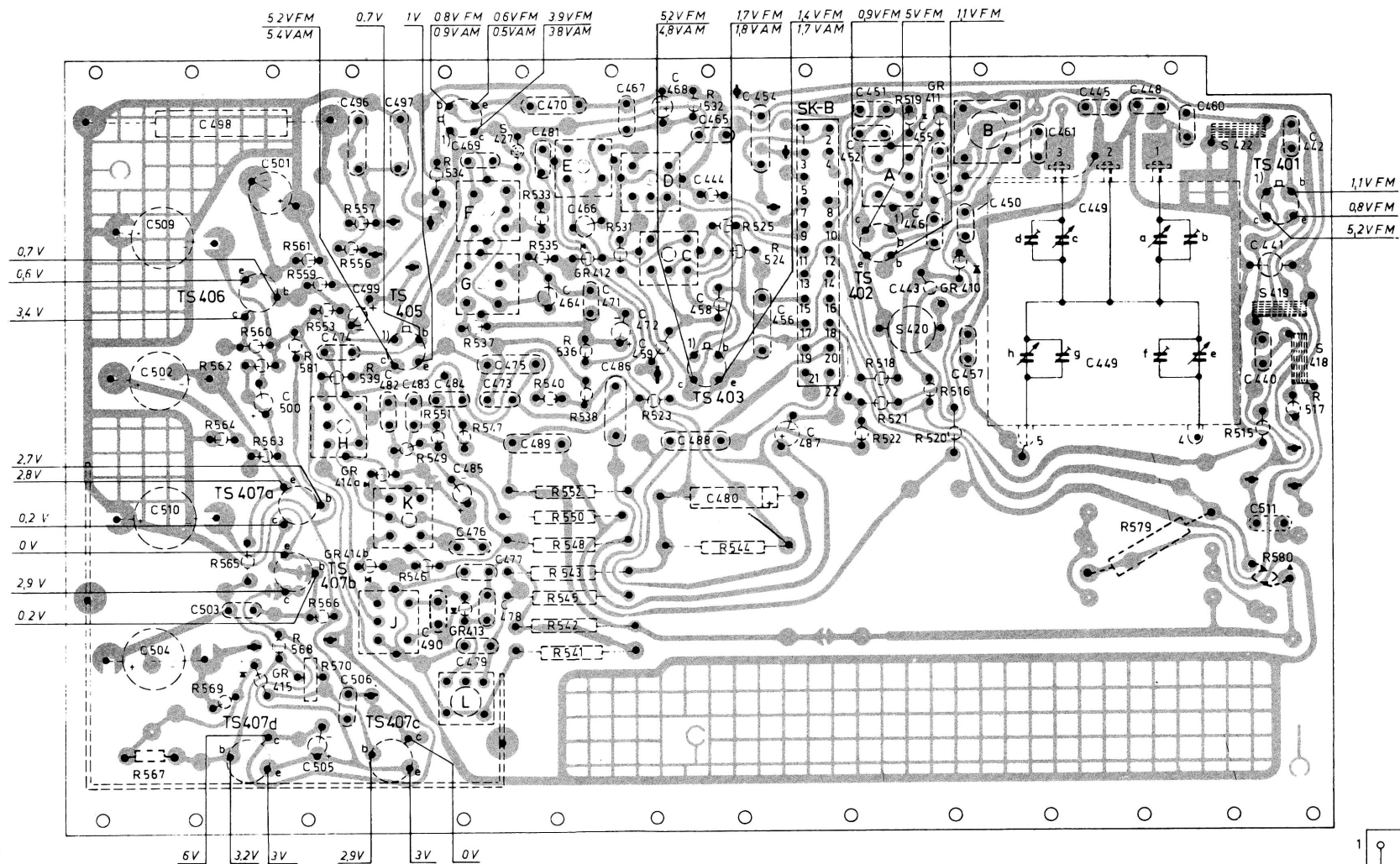
- Damp S432b with a resistor of 1,5 kΩ. Disconnect C485. Short-circuit S434b, c. Connect an oscilloscope to junction C482/R549. S432b dempen met een weerstand van 1,5 kΩ. C485 losmaken. S434b, c kortsluiten. Een oscillograaf aansluiten op het knooppunt C482/R549.

- ③ Amortir S432b avec une résistance de 1,5 kΩ. Déconnecter C485. Court-circuiter S434b, c. Raccorder un oscilloscope au noeud C482/R549. S432b mit einem Widerstand von 1,5 kΩ dämpfen. C485 ablöten, S434b, c kurzschliessen. Einen Oszillograf an Knotenpunkt C482/R549 anschliessen. Ammortizzare S432b con una resistenza di 1,5 kΩ. Disinnestare C485. Cortocircuitare S434b, c. Collegare un oscillografo al nodo C482/R549.

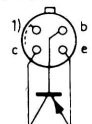
- Remove the resistor and the short-circuit. Connect C485. Connect the oscilloscope to junction R549/R550 and +. Verwijder de weerstand en de kortsluiting. C485 vastmaken. De oscillograaf aansluiten op knooppunt R549/R550 en +. ④ Enlever la résistance et le court-circuit. Connecter C485. Raccorder l'oscilloscope au noeud R549/R550 et +. Den Widerstand und den Kurzschluss entfernen. C485 anlöten. Den Oszillograf an Knotenpunkt R549/R550 und + anschliessen. Ritirare la resistenza ed il cortocircuito. Collegare C485. Connettere l'oscillografo al nodo R549/R550 e +.



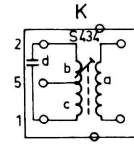
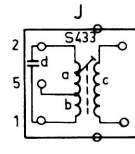
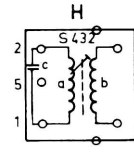
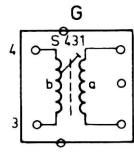
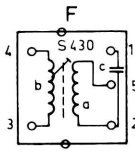
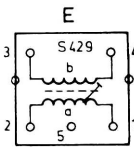
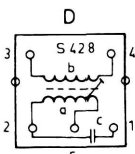
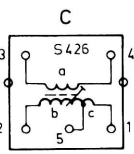
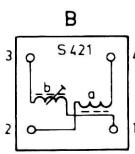
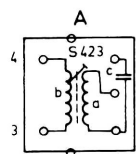
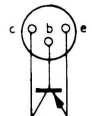
S	H J K L G F 427 E D C A 420 B 422.																					S													
C	502	509	498	500	505	506	474	499	483	479	476	469	473	464	481	471	486	467	468	458	444	454	487	451	446	455	450	461	445	449	448	460	441	442	C
C	504	510		503	501	490	496	497	482	477	484	485	478	475	470	489	466	472	459	488	480	465	456	452	443	457							440	511	C
R	567	564	565	560	563	553	559	556	557	549	551	534	535	540	545	543	550	536	531	532	544	525			519	516	520						515	517	R
R		569	562	468	581	566	561	539	570		546	547	537	533	541	542	548	552	538		532	524		522	521	518				579		580		R	



TS 401 ÷ 405

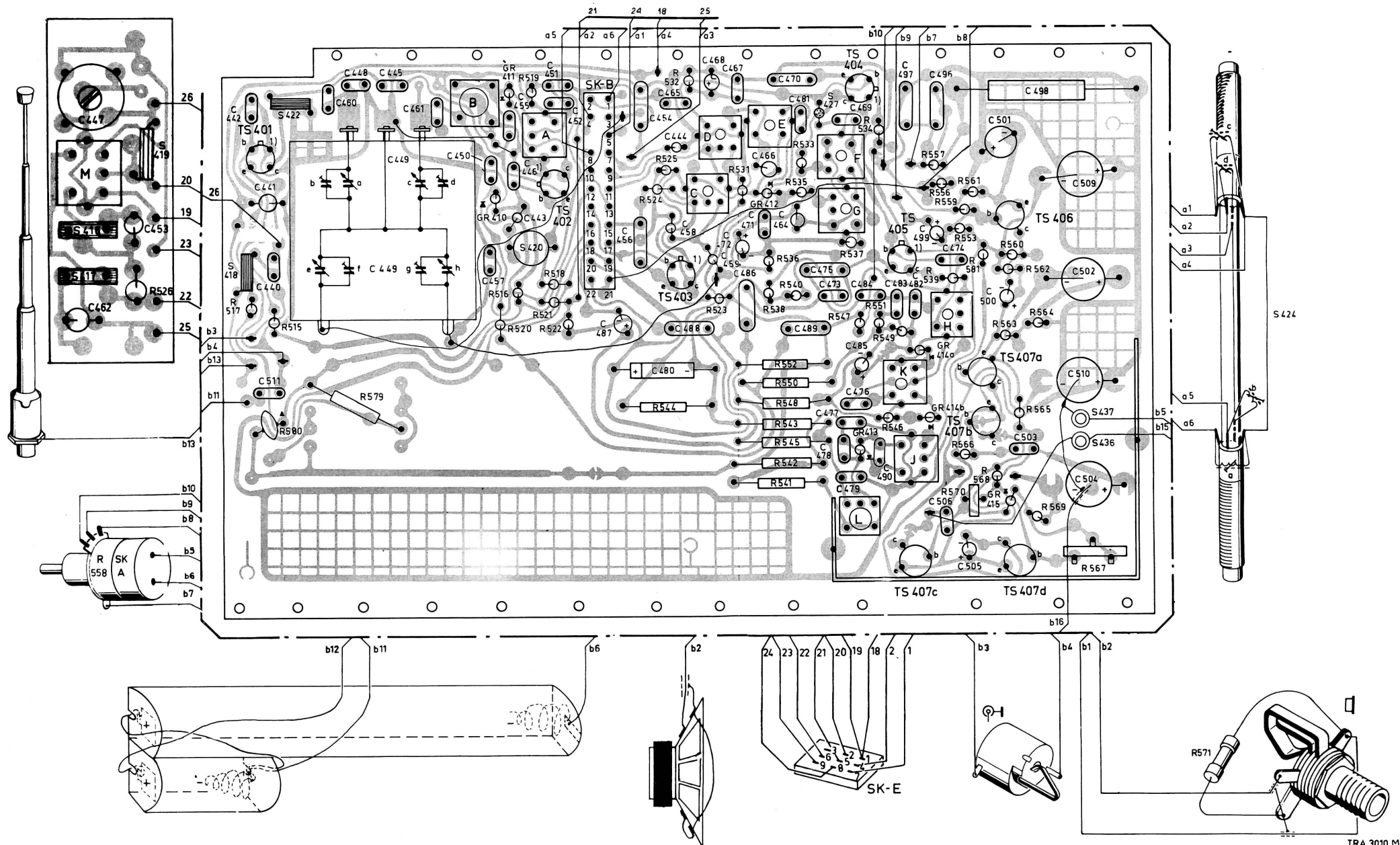


TS 406 ÷ 407d



TRA 3564

S		418	419	422.		B	420	A		C	D	E	427	FGL	K J H	437	436		424.	S																	
C		442	441		460	448	449	445	461.	450	455	446	451.	487	454	444	458	468	467	486	471	481	464	473	469	476	479	483	499	474	506	505	500	498	509	502.	C
C		511	440						457	443	452		456	465	480	488	459	472	466	489	470	475	478	485	484	477	482	497	496	490	501	503	510	504.	C		
R		517	515.						520	516	519		525	544	523.	531	536	550	543	545	540	535	534	551	549	557	556	559	553	563	560	565	564.	567.	R		
R	558.	580.	579						518	521	522		524	532.	538	552	548	542	541	533	537	547	546	570	539	561	566	581	568	562	569.	571.		R			
TS	GR	401.						410	411	402.		403.		412	404	413	405	407c	414a	414b	407b	407a	406	415	407d.									TS	GR		



The schematic diagram of the TR-3552 radio receiver is divided into two main sections: the main circuit and the control panel layout.

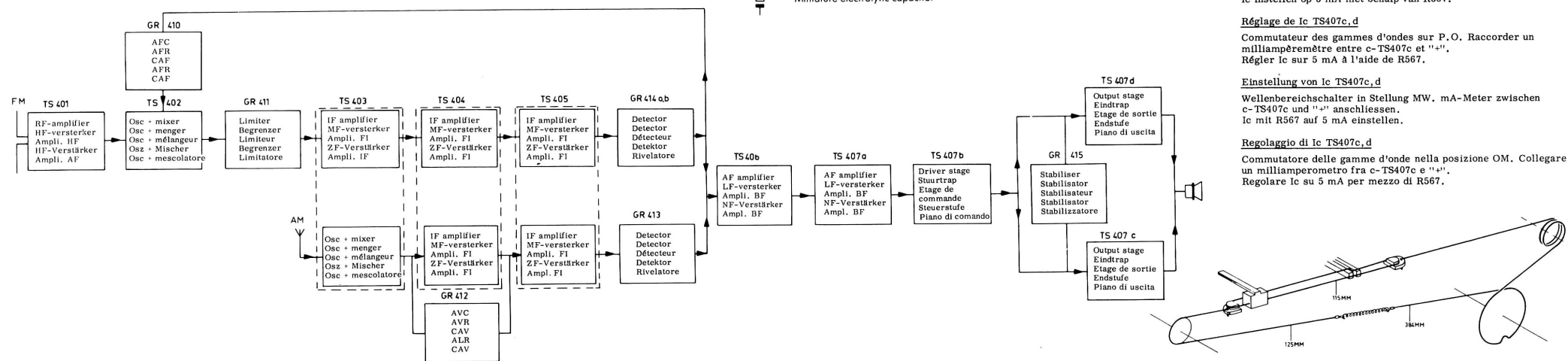
**Main Circuit:** This section shows the internal components of the radio, including the power supply, tuning eye, and various electronic components. Key components include:
 

- Power Supply:** A 12V battery (B1) connected to a 100k resistor (R1) and a 100k capacitor (C1).
- Tuning Eye:** A TS401 AF 12V tube (S127) connected to a 100k resistor (R1) and a 100k capacitor (C1).
- Electronic Components:** Various resistors (R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60, R61, R62, R63, R64, R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100) and capacitors (C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C29, C30, C31, C32, C33, C34, C35, C36, C37, C38, C39, C40, C41, C42, C43, C44, C45, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C59, C60, C61, C62, C63, C64, C65, C66, C67, C68, C69, C70, C71, C72, C73, C74, C75, C76, C77, C78, C79, C80, C81, C82, C83, C84, C85, C86, C87, C88, C89, C90, C91, C92, C93, C94, C95, C96, C97, C98, C99, C100) are used throughout the circuit.

**Control Panel Layout:** This section shows the physical arrangement of the control panel, including the tuning eye, volume knob, and various switches. Key components include:
 

- Tuning Eye:** A TS401 AF 12V tube (S127) connected to a 100k resistor (R1) and a 100k capacitor (C1).
- Volume Knob:** A TS401 AF 12V tube (S127) connected to a 100k resistor (R1) and a 100k capacitor (C1).
- Switches:** Various switches (S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12, S13, S14, S15, S16, S17, S18, S19, S20, S21, S22, S23, S24, S25, S26, S27, S28, S29, S30, S31, S32, S33, S34, S35, S36, S37, S38, S39, S40, S41, S42, S43, S44, S45, S46, S47, S48, S49, S50, S51, S52, S53, S54, S55, S56, S57, S58, S59, S60, S61, S62, S63, S64, S65, S66, S67, S68, S69, S70, S71, S72, S73, S74, S75, S76, S77, S78, S79, S80, S81, S82, S83, S84, S85, S86, S87, S88, S89, S90, S91, S92, S93, S94, S95, S96, S97, S98, S99, S100) are used throughout the circuit.

LE TENSIONI SONO MISURATE CON UN VOLTAMETRO ELETTRONICO A RIGUARDO DI A "+".



[illegible]