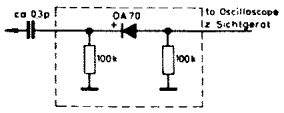
SERVICE INFORMATION **1972**

DC Conditions
All measurements made with a battery potential of 9 volts.

Operating Point of IF Amplifier
Set R515 (500kΩ) so that 1.35 volts are developed across R518 (1kΩ)

Quiescent Current
Connect a mA-meter between collector T11 and ground. Set R410 (500Ω) for 6.5mA.

FM IF Adjustment 10.7MHz (switch to VHF/FM, tone control to treble)

Adjustment Sequence	Wobbulator coupled to	Visual Indicator connected to	Adjustment
F VII	MP 5	via crocodile clip and network to MP 6 (F VII) 	(a) fully out b) for maximum and symmetry
F VI & F V	MP 3		(c) and (d) for maximum and symmetry
F IV & FIII	MP 2		(e) and (f) for maximum and symmetry
F II & F I	loosely to mixer		(g) and (h) for maximum and symmetry
Discriminator	MP 5	via 50kΩ cable to MP 11	(a) for symmetry and for max undistorted AF signal *

* Reduce generator input to avoid overloading IF amplifier.

AM IF Adjustment 460kHz (switch to MW)

Adjustment Sequence	Wobbulator coupled to	Visual Indicator connected to	Adjustment
FXIII & FXII	Pin 3 of F III	MP 4 via Diode Probe	(I) and (II) for maximum and symmetry
F XI	MP 8		(III) for maximum and symmetry
F X & F IX	Aerial Cct at MP 7		(IV) and (V) for maximum symmetry

AM Oscillator and Aerial Adjustment

Generator Range and Frequency		Oscillator	Ferrite Aerial	Mixer Sensitivity	Oscillator Voltage
MW	560kHz	(1) Max	(3) Max	13µV	60 - 90mV
	1450kHz	(2) Max	(4) Max	14µV	
LW	160kHz	(5) Max	(6) Max	13µV	65 - 95mV
	240kHz		(7) Max	10µV	
SW	6.5MHz	(8) Max	(10) Max	5µV	35 - 90mV
	15MHz	(9) Max	(11) Max	4.5µV	

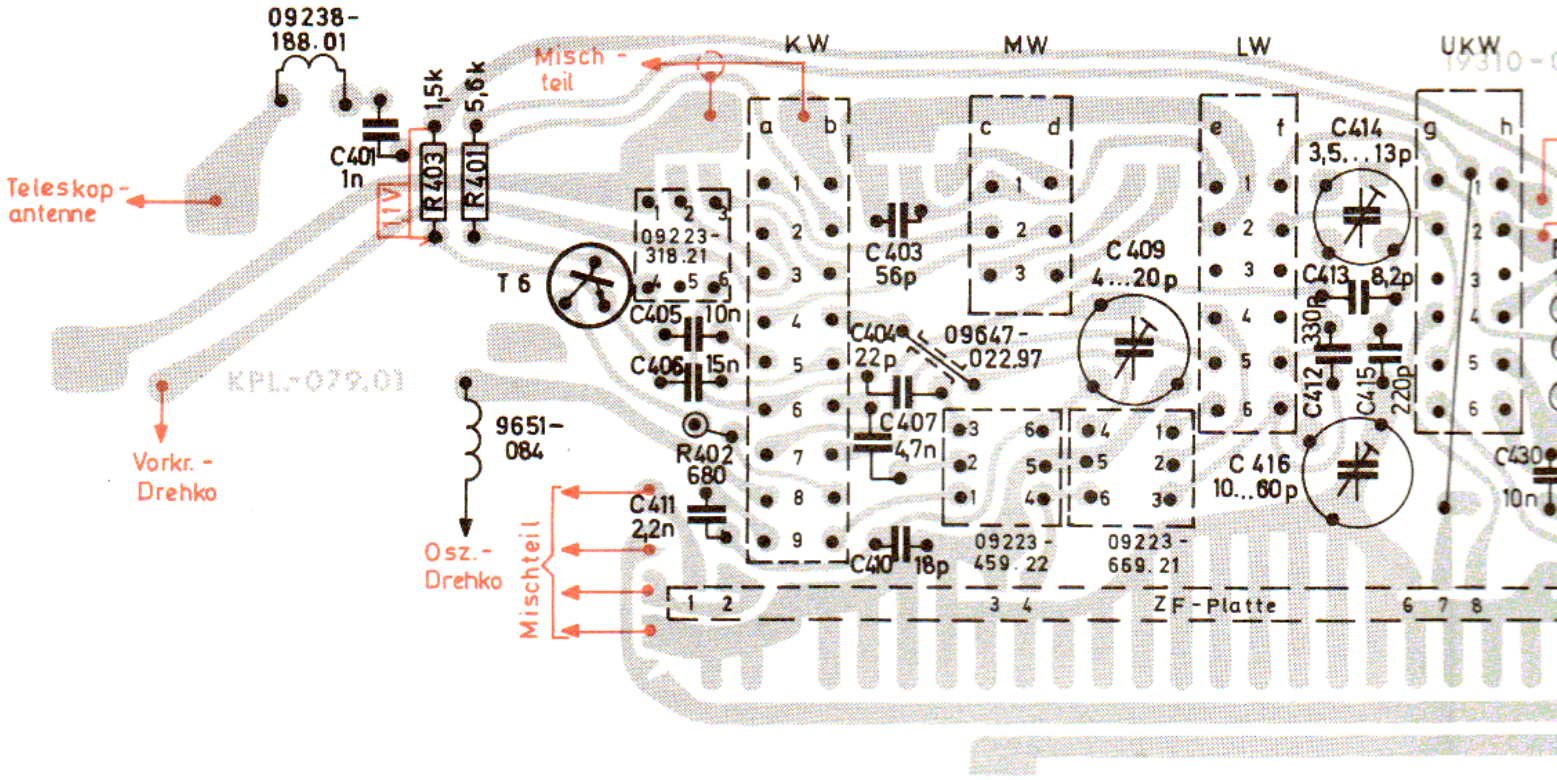
Remarks: For MW and LW loosely couple the signal generator to the ferrite aerial. For SW unsolder the telescopic aerial and inject signal via 15pF at choke 09238-188.01.

FM Oscillator and Aerial Adjustment

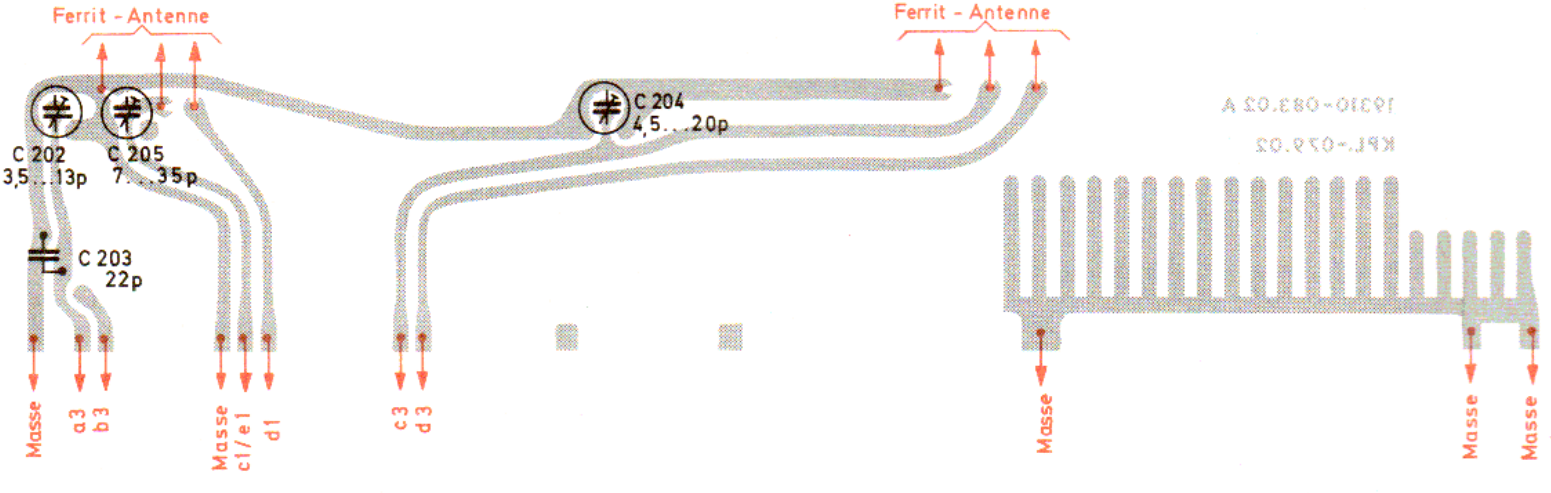
Generator Frequency	Oscillator	Aerial Coupling	Noise Figure	Oscillator Volts at emitter of T11
88MHz	(A) Max	(C) Max	approx 5kTo	75 - 85mV
106MHz	(B) Max	(D) Max		

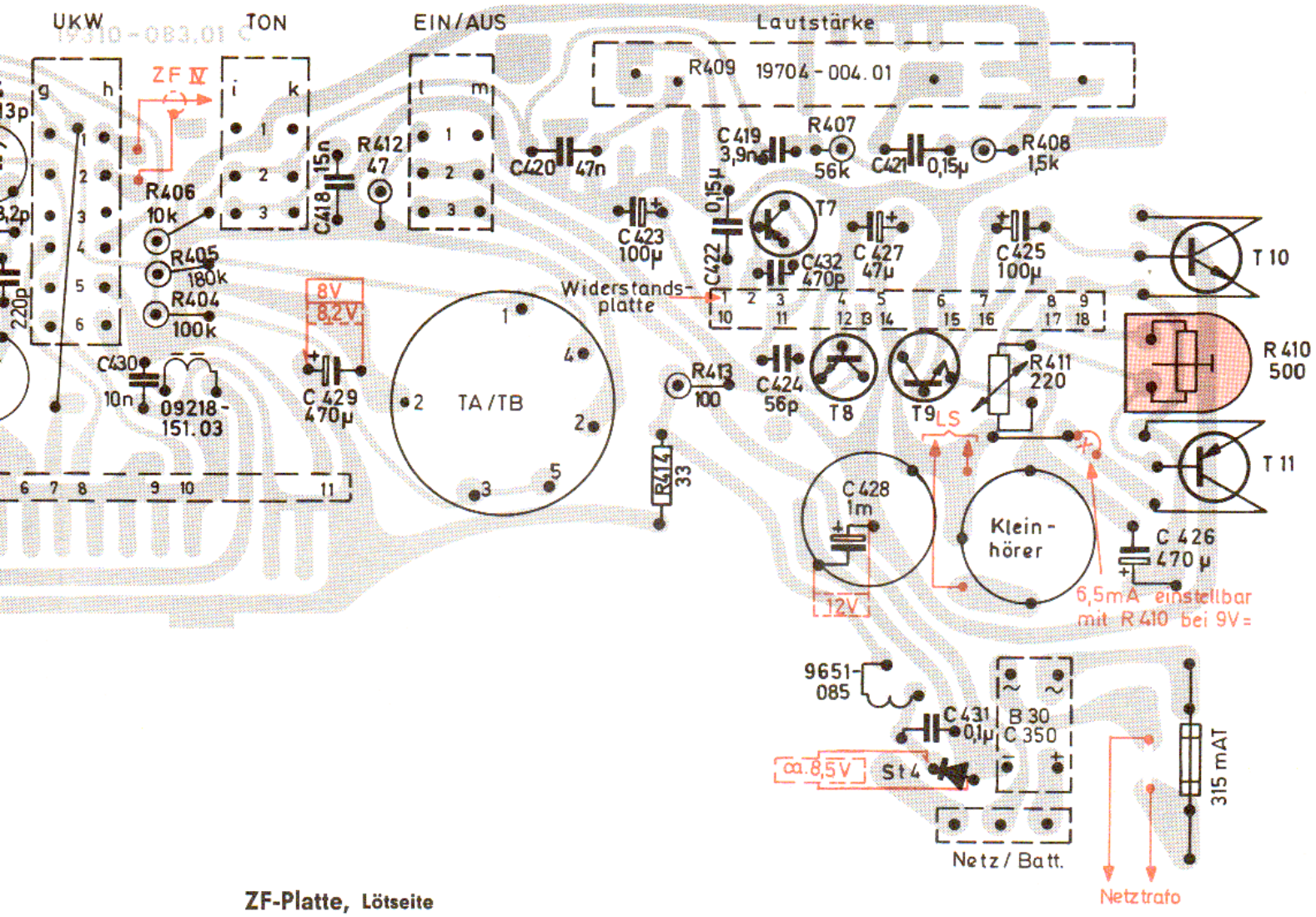
The signal generator (impedance 60Ω) connected to the mixer input. The oscillator potential (measured in 60Ω at mixer input) must not exceed 2mV.

HF-NF-Platte, Lötseite
RF-AF-PRINTED BOARD, SOLDER SIDE
HF-BF-PLATINE, COTE SOUDURES
AF-BF-PIASTRA, LATO SALDATURE

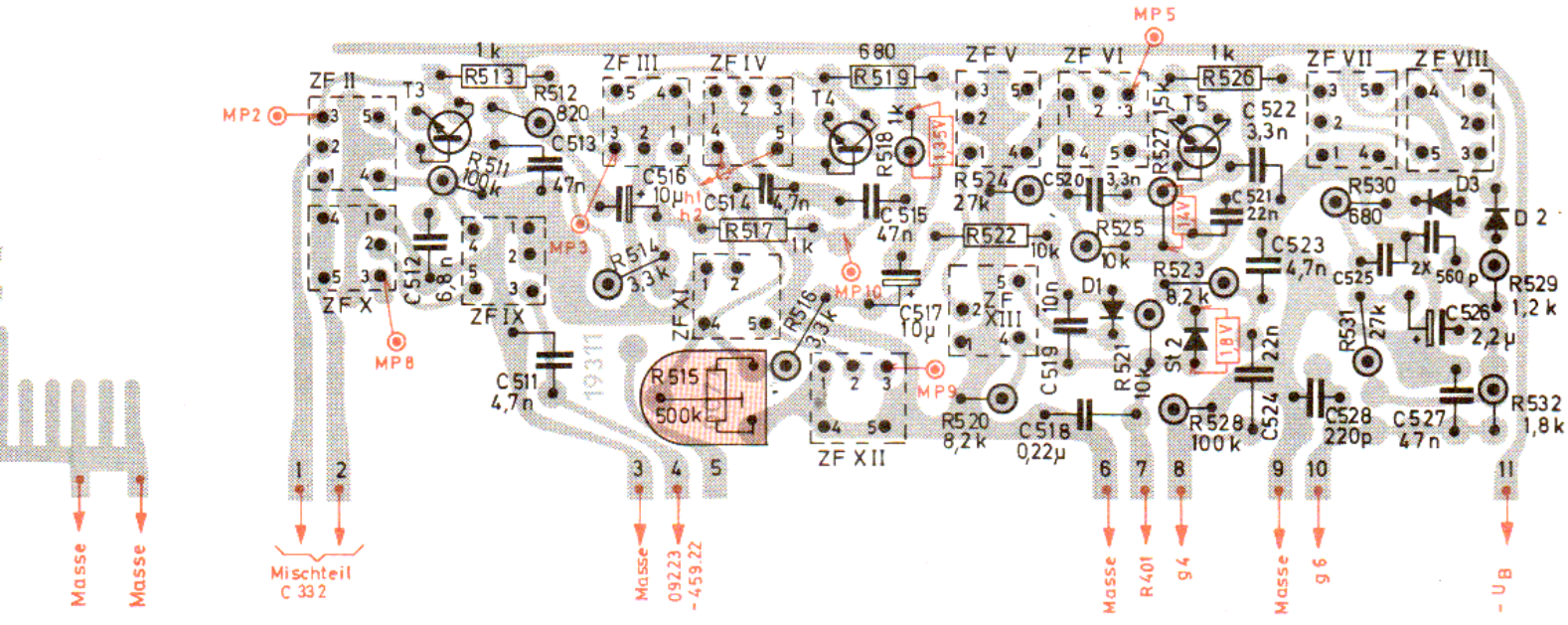


HF-Platte, Bestückungsseite
RF-PRINTED BOARD, COMPONENT SIDE
HF-PLATINE, COTE DES COMPOSANTS
AF-PIASTRA, LATO COMPONENTI

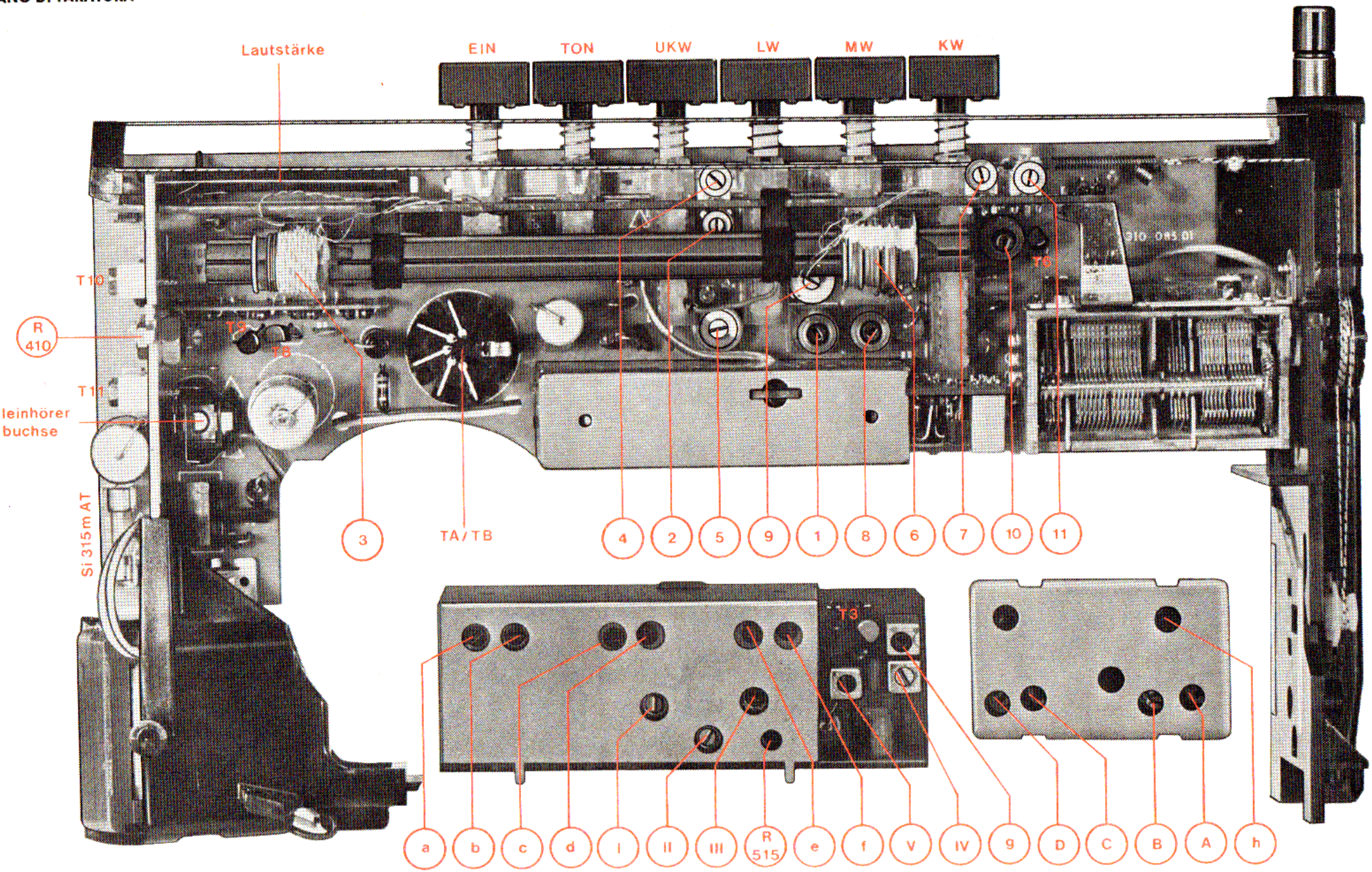




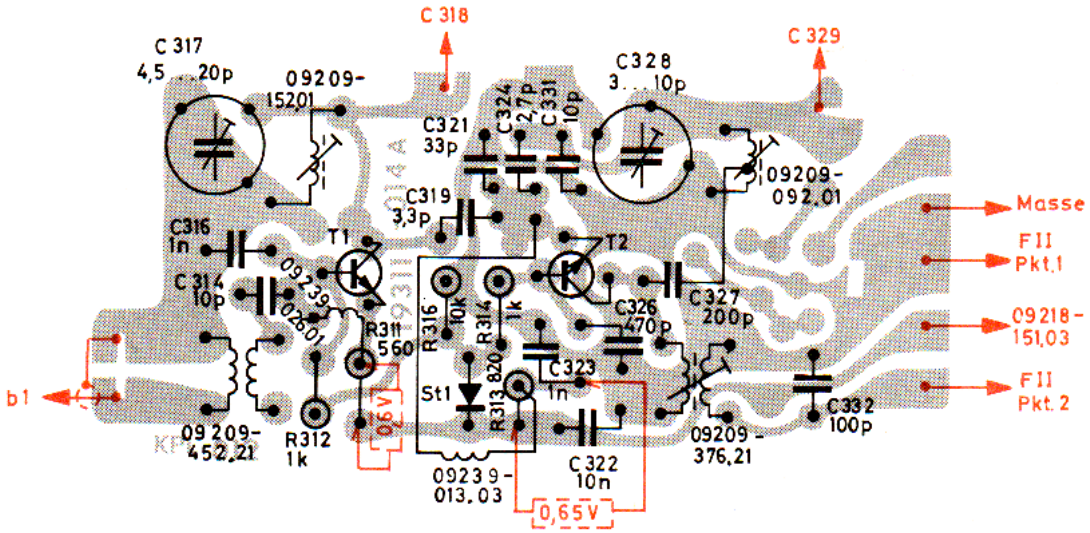
ZF-Platte, Lötseite
IF-PRINTED BOARD, SOLDER SIDE
PLATINE-FI, COTE SOUDURES
PIASTRA-FI, LATO SALDATURE



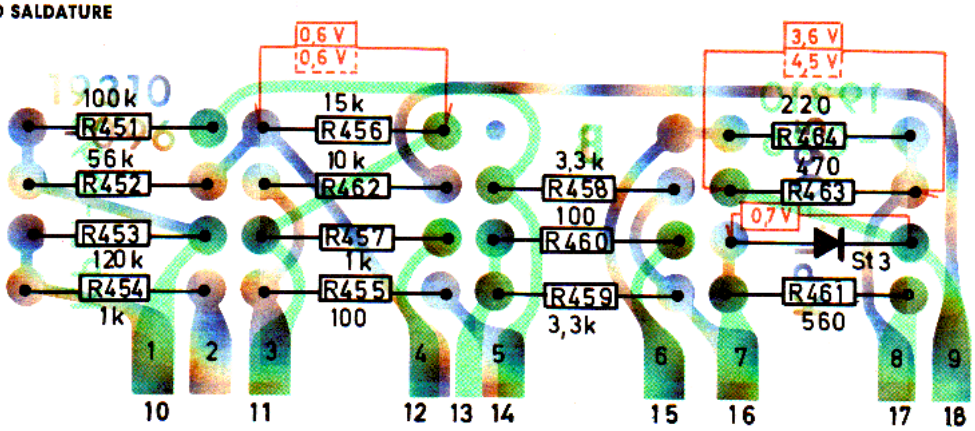
Abgleich-Lageplan
ALIGNMENT SCHEME
PLAN DE REGLAGE
PIANO DI TARATURA

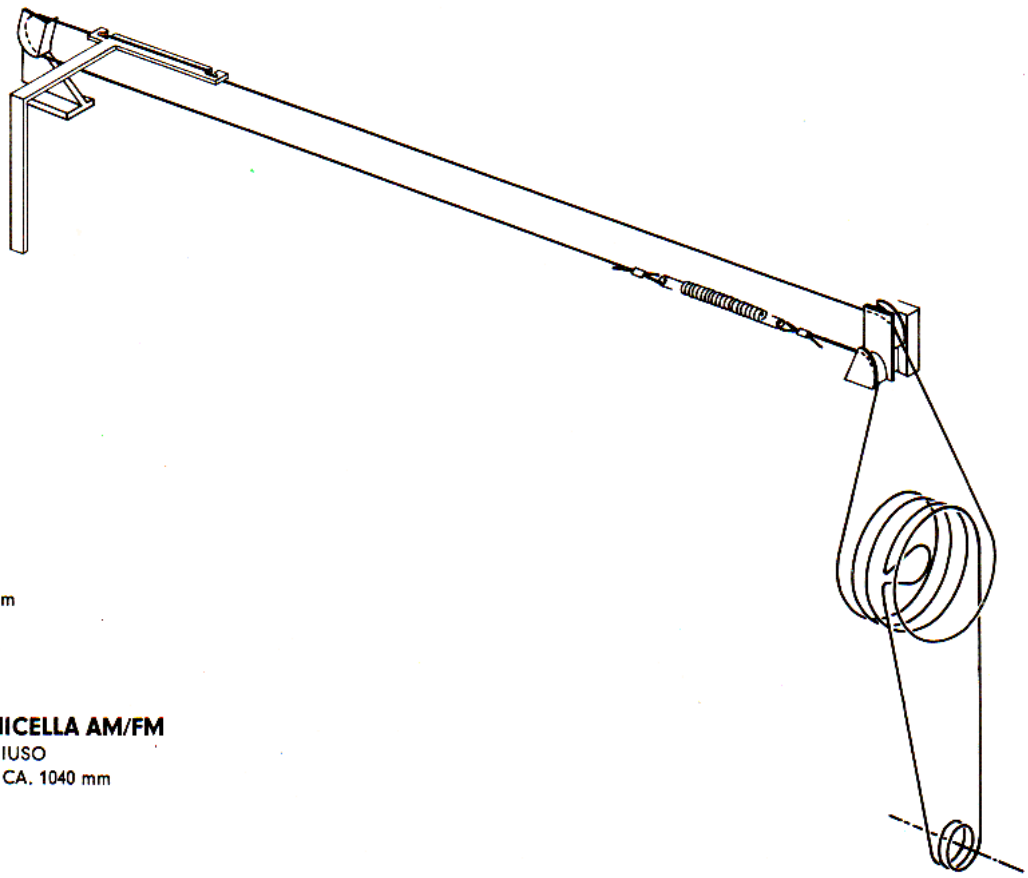


UKW-Mischteil, Lötseite
FM-MIXED STAGE, SOLDER SIDE
MELANGEUR-FM, COTE SOUDURES
SEZIONE MESCOLATRICE-FM, LATO SALDATURE



Widerstandsplatte, Lötseite
RESISTOR BOARD, SOLDER SIDE
PLAQUE DE RESISTANCE, COTE SOUDURES
PIASTRA DE RESISTENZA, LATO SALDATURE



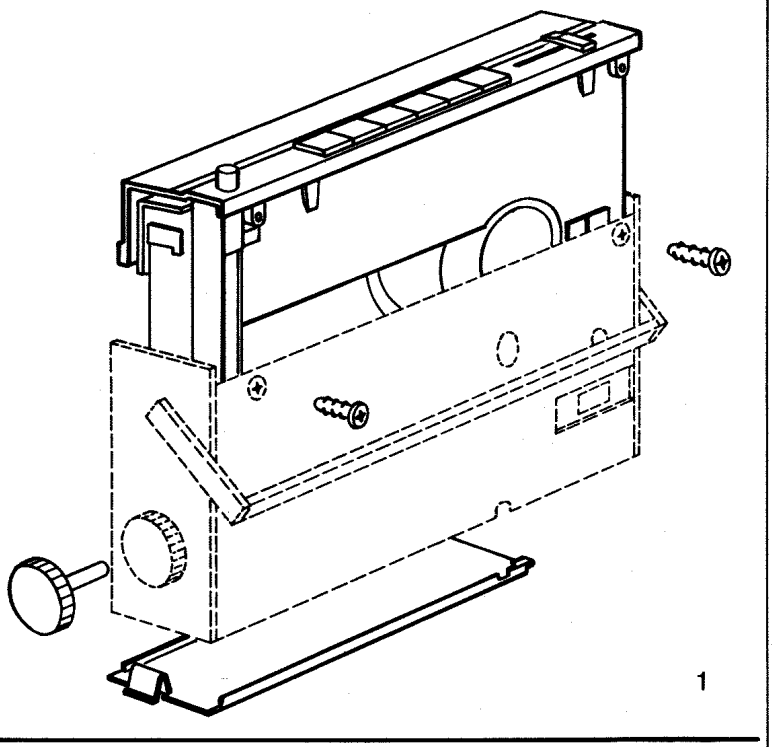


AM-FM-Seilzug
Drehko eingedreht
Seillänge ca. 1040 mm

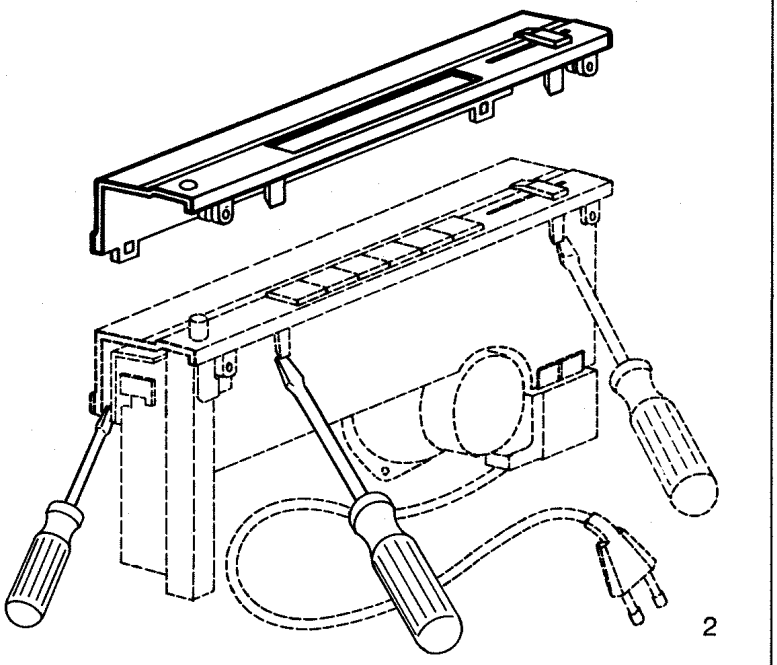
AM-FM-DIAL CORD
VARICAP CLOSED
CORD LENGTH APPROX. 1040 mm

ENTRAINEMENT AM/FM
CONDENSATEUR FERME
LONGUEUR DE CABLE 1040 mm

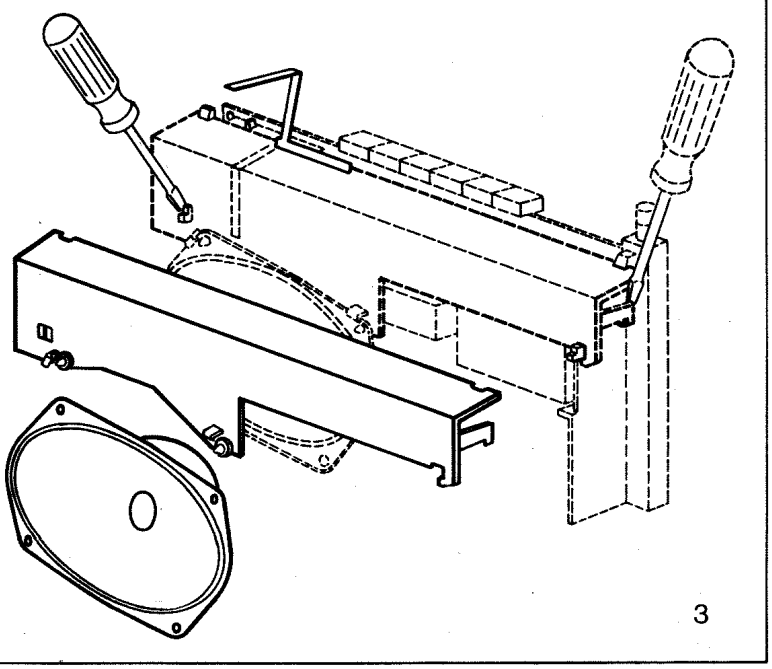
MONTAGGIO DELLA FUNICELLA AM/FM
CONDENSATORE VARIABLE CHIUSO
LUNGHEZZA DELLA FUNICELLA CA. 1040 mm



1



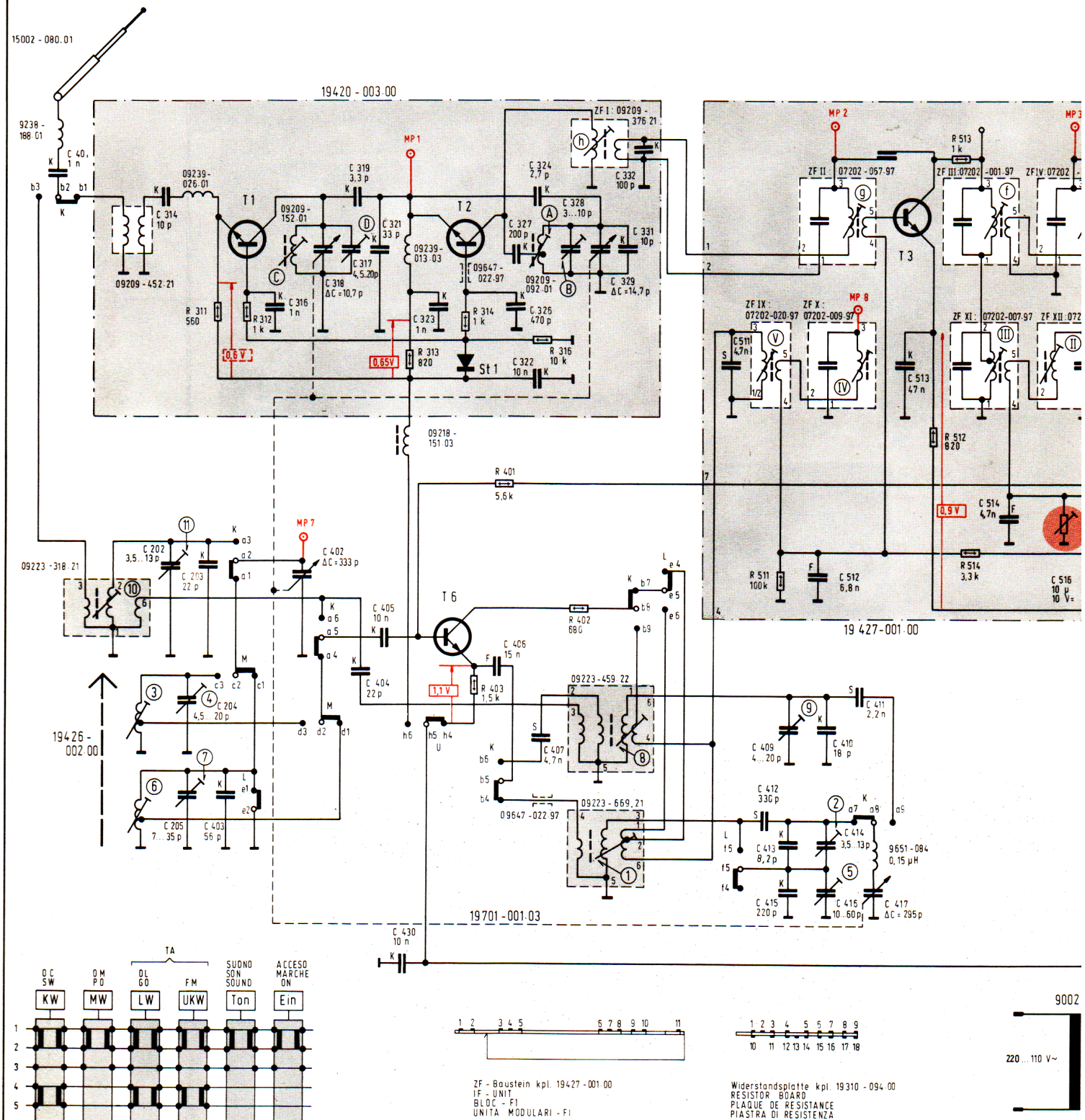
2



3

Removing the Chassis

1. Remove the bottom of the case by pressing the clip and sliding out
2. Undo the two screws at the back of the case.
3. Pull off the tuning knob.
4. The chassis can be lifted out.
5. Unlock the loudspeaker.
6. Lift off the tuning scale cover with a screwdriver.
7. Remove the tuning scale by pressing the clips as shown.



ZF - Baustein kpl. 19427 - 001.00
IF - UNIT
BLOC - FI
UNITA MODULARI - FI

Widerstandsplatte kpl. 19310 - 094.00
RESISTOR BOARD
PLAQUE DE RESISTANCE
PIASTRA DI RESISTENZA

ZF - AM	460 kHz	
IF - AM	460 kHz	
MF - AM	460 kHz	
ZF - FM	10,7 MHz	
IF - FM	10,7 MHz	
MF - FM	10,7 MHz	

Aggregat von unten gesehen
AGGREGATE SEEN FROM BELOW
AGGREGAT VU DE DESSOUS
GRUPPO VISTO DA SOTTO

Schaltrichtung
SWITCHING DIRECTION
DIRECTION DE COMMUTATION
DIREZIONE DI COMMUTAZIONE

gezeichnete Stellung : Tasten in Ruhestellung
POSITION SHOWN : PRESS BUTTONS IN NEUTRAL POSITION
MONTRE EN POSITION : POUSSOIRS EN POSITION REPOS
APPARECCHIO RAPPRESENTATO IN POSIZIONE SPENTA

Wellenbereiche / WAVE BANDS / GAMMES D'ONDES / GAMME D'ONDA

LW - LW - GO - OL	145 ..... ca. 260 kHz
MW - MW - PO - OM	510 ..... 1620 kHz
KW - SW - OC - OC	5,85 ..... 16,2 MHz
UKW-FM - FM - FM	87,5 ..... 108 MHz

Ferritstabantenne kpl. } 19426 - 002.00
FERRITE AERIAL
ANTENNE FERRITE COMPL.
ANTENNA DI FERRITA COMPL.

UKW - Mischteil } 19420 - 003.00
FM - MIXED STAGE
MELANGEUR - FM
SEZIONE MESCOLATRICE - FM

HF - NF - Platte } 19310 - 076.00
RF - AF - PRINTED BOARD
HF - BF - PLATINE
AF - BF - PIASTRA

Spannungen und Stromwerte gültig bei eingedrehtem Drehko ohne Signal

bei Batteriebetrieb	9 V	MW
bei Batteriebetrieb	9 V	UKW
bei Netzbetrieb	240 V~	MW

VOLTAGE AND CURRENT VALUES ARE VALID WITH NO SIGNAL APPLIED AND CLO

ON BATTERY OPERATION	9 V	MW
ON BATTERY OPERATION	9 V	FM
ON MAINS OPERATION	240V AC	MW

LES VALEURS SONT VALABLES AVEC LE CONDENSATEUR VARIABLE ETANT FERME

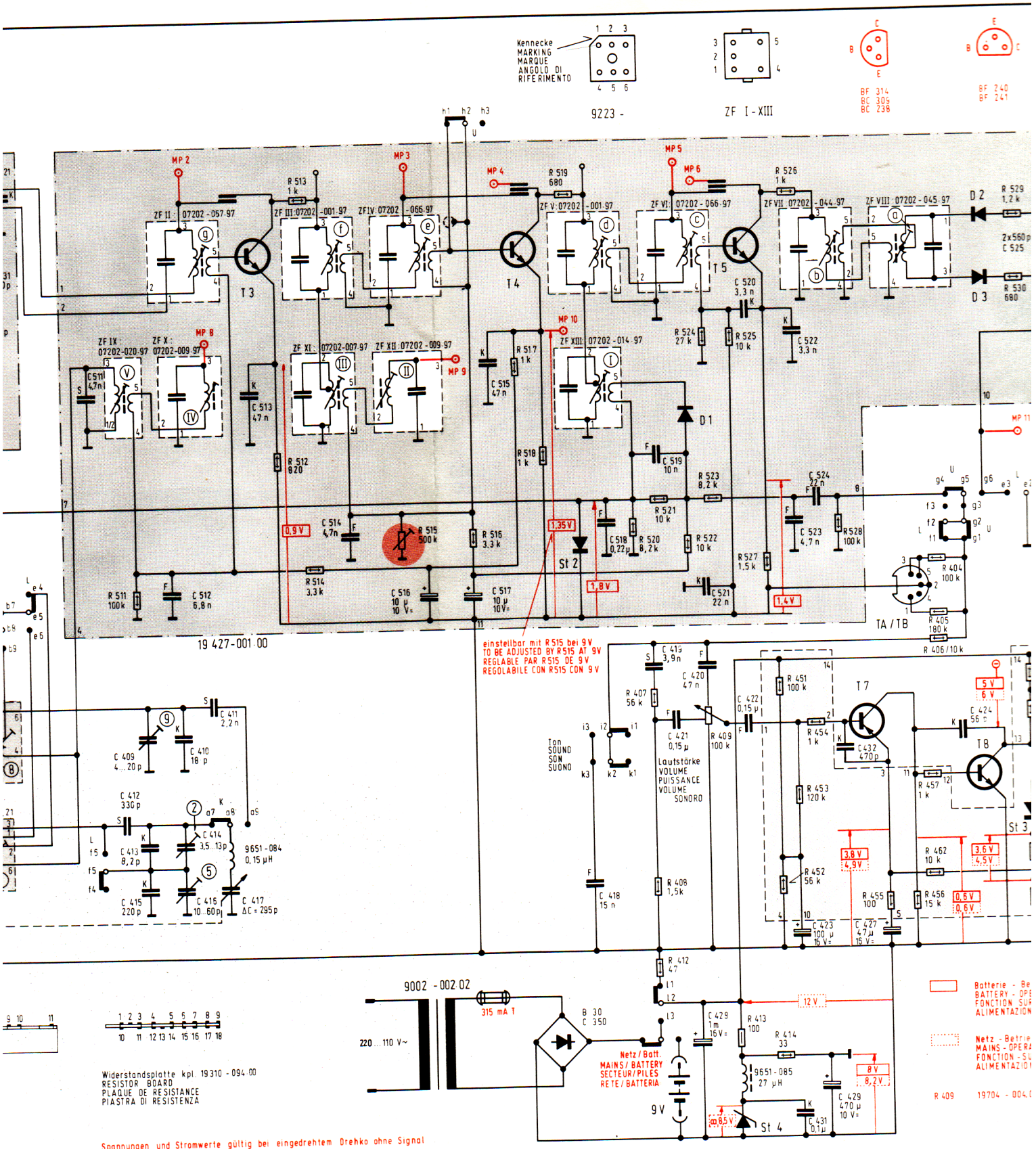
EN FONCTIONNEMENT SUR PILES	9 V	PO
EN FONCTIONEMENT SUR PILES	9 V	FM
EN FONCTIONEMENT SUR SECTEUR	240V~	PO

I VALORI DELLE CORRENTI SONO VALIDE CON ASSENZA DI SEGNALE E CONDENS

ALIMENTAZIONE DA BATTERIA	9 V	OM
ALIMENTAZIONE DA BATTERIA	9 V	FM
ALIMENTAZIONE DI RETE	240V~	OM

C: 401, 314, 202, 203, 204, 205, 403, 316, 402, 318, 319, 317, 321, 404, 405, 430, 323, 326, 327, 322, 324, 328, 406, 407, 329, 331, 332, 511, 512, 412, 413, 409, 415, 410, 414, 416, 411, 417, 513, 514, 5

R: 311, 312, 313, 314, 403, 401, 315, 402, 511, 512, 513, 514, 515,



Widerstandsplatte kpl. 19310 - 094 . 00
RESISTOR BOARD
PLAQUE DE RESISTANCE
PIASTRA DI RESISTENZA

Spannungen und Stromwerte gültig bei eingedrehtem Drehko ohne Signal

bei Batteriebetrieb 9 V	MW
bei Batteriebetrieb 9 V	UKW
bei Netzbetrieb 240 V~	MW

VOLTAGE AND CURRENT VALUES ARE VALID WITH NO SIGNAL APPLIED AND CLOSED VARIABLE CAPACITOR

ON BATTERY OPERATION 9 V	MW
ON BATTERY OPERATION 9 V	FM
ON MAINS OPERATION 240 V AC	MW

LES VALEURS SONT VALABLES AVEC LE CONDENSATEUR VARIABLE ETANT FERME ET SANS SIGNAL D'ANTENNE

EN FONCTIONNEMENT SUR PILES 9 V	PO
EN FONCTIONEMENT SUR PILES 9 V	FM
EN FONCTIONEMENT SUR SECTEUR 240 V~	PO

I VALORI DELLE CORRENTI SONO VALIDE CON ASSENZA DI SEGNALE E CONDENSATORE VARIABILE CHIUSO

ALIMENTAZIONE DA BATTERIA 9 V	OM
ALIMENTAZIONE DA BATTERIA 9 V	FM
ALIMENTAZIONE DI RETE 240 V~	OM

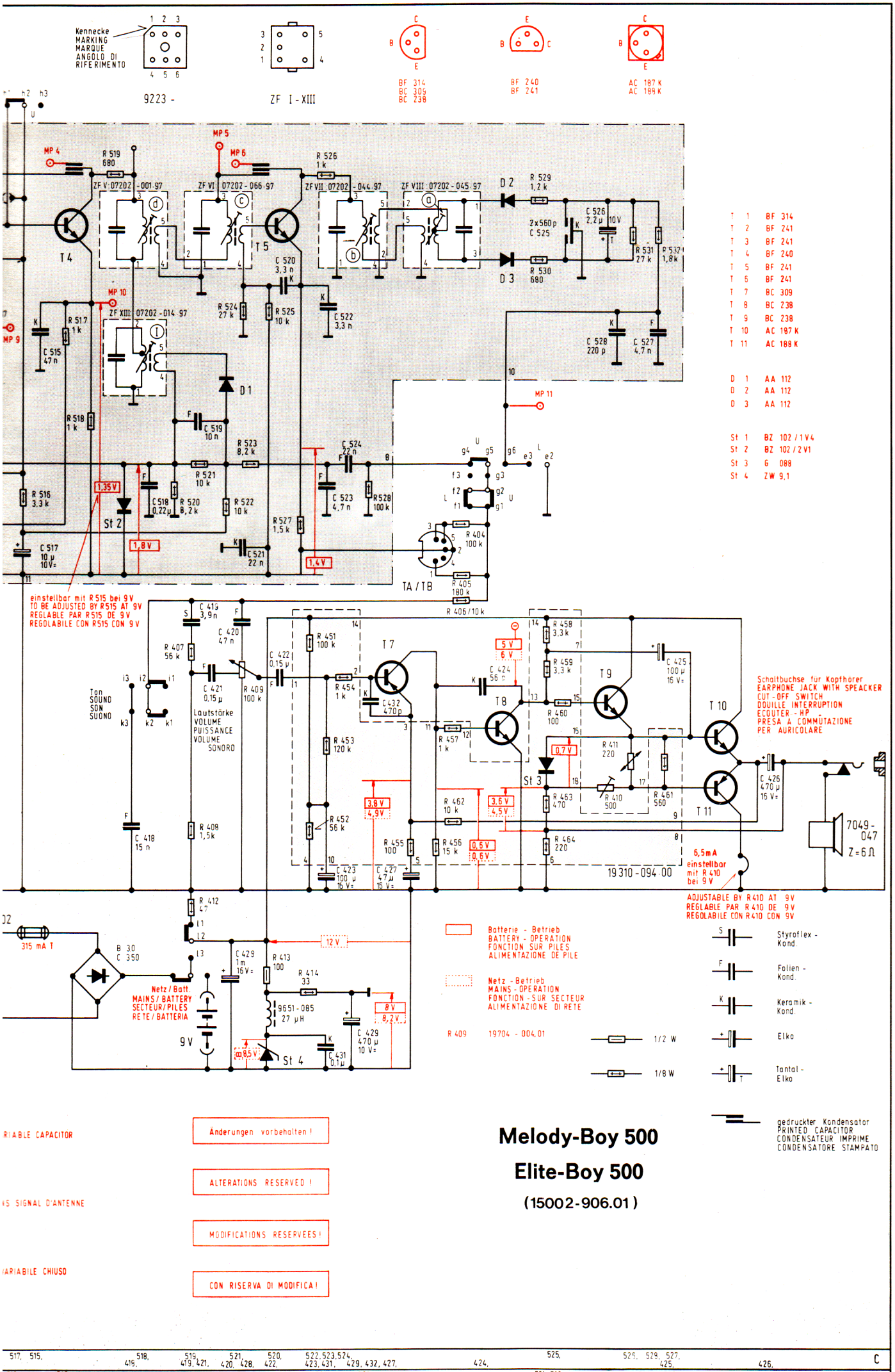
Änderungen vorbehalten !

ALTERATIONS RESERVED !

MODIFICATIONS RESERVEES !

CON RISERVA DI MODIFICA !

331, 332, 511, 512, 412, 413, 409, 415, 410, 414, 416, 411, 417, 513, 514, 516, 517, 515, 518, 519, 419, 421, 520, 407, 408, 412, 521, 420, 428, 522, 523, 524, 409, 422, 413, 525, 527, 526, 414, 451, 452, 453, 454, 529, 423, 431, 428, 424, 455, 456, 457, 404, 405, 406, 462.


Kennecke
MARKING
MARQUE
ANGOLO DI
RIFERIMENTO
9223 -
ZF I - XIII
BF 314
BC 309
BC 238
BF 240
BF 241
AC 187 K
AC 188 K
T 1 BF 314
T 2 BF 241
T 3 BF 241
T 4 BF 240
T 5 BF 241
T 6 BF 241
T 7 BC 309
T 8 BC 238
T 9 BC 238
T 10 AC 187 K
T 11 AC 188 K
D 1 AA 112
D 2 AA 112
D 3 AA 112
St 1 BZ 102 / 1 V4
St 2 BZ 102 / 2 V1
St 3 G 088
St 4 ZW 9,1
MP 4
MP 5
MP 6
MP 9
MP 10
MP 11
ZF V 07202 - 001 97
ZF VI 07202 - 066 97
ZF VII 07202 - 044 97
ZF VIII 07202 - 045 97
ZF XIII 07202 - 014 97
R 519 680
R 526 1 k
R 529 1,2 k
2x560 p C 525
C 526 2,2 µ 10 V
R 530 680
R 531 27 k
R 532 1,8 k
C 520 3,3 n
R 524 27 k
R 525 10 k
C 522 3,3 n
C 528 220 p
C 527 4,7 n
R 517 1 k
C 515 47 n
R 518 1 k
C 519 10 n
R 523 8,2 k
C 524 22 n
R 521 10 k
R 516 3,3 k
C 518 0,22 µ
R 520 8,2 k
R 522 10 k
R 527 1,5 k
C 523 4,7 n
R 528 100 k
C 521 22 n
C 517 10 µ 10 V=
1,35 V
1,8 V
1,4 V
R 404 100 k
R 405 180 k
R 406 / 10 k
TA / TB
einstellbar mit R 515 bei 9 V
TO BE ADJUSTED BY R 515 AT 9 V
REGLABLE PAR R 515 DE 9 V
REGOLABILE CON R 515 CON 9 V
C 419 3,9 n
C 420 47 n
R 407 56 k
C 421 0,15 µ
R 409 100 k
Ton
SOUND
SON
SUONO
Lautstärke
VOLUME
PUISSANCE
VOLUME
SONORO
C 418 15 n
R 408 1,5 k
C 422 0,15 µ
R 451 100 k
R 454 1 k
R 453 120 k
R 452 56 k
C 423 100 µ 16 V=
C 427 47 µ 16 V=
R 455 100
R 456 15 k
R 457 1 k
C 432 470 p
R 458 3,3 k
R 459 3,3 k
C 424 56 p
R 460 100
R 462 10 k
R 463 470
R 464 220
R 410 500
R 411 220
R 461 560
C 425 100 µ 16 V=
C 426 470 µ 16 V=
5 V
6 V
0,7 V
3,8 V
4,9 V
3,6 V
4,5 V
0,6 V
0,6 V
19 310 - 094 00
6,5 mA
einstellbar
mit R 410
bei 9 V
ADJUSTABLE BY R 410 AT 9 V
REGLABLE PAR R 410 DE 9 V
REGOLABILE CON R 410 CON 9 V
Schaltbuchse für Kopfhörer
EARPHONE JACK WITH SPEACKER
CUT - OFF SWITCH
DOUILLE INTERRUPTION
ECOUTER - HP
PRESA A COMMUTAZIONE
PER AURICOLARE
7049 - 047
Z = 6 Ω
315 mA T
B 30
C 350
R 412 47
C 429 1 m 16 V=
R 413 100
R 414 33
9651 - 085
27 µH
C 429 470 µ 10 V=
C 431 0,1 µ
St 4
12 V
8 V
8,2 V
9 V
Netz / Batt.
MAINS / BATTERY
SECTEUR / PILES
RETE / BATTERIA
Batterie - Betrieb
BATTERY - OPERATION
FONCTION SUR PILES
ALIMENTAZIONE DE PILE
Netz - Betrieb
MAINS - OPERATION
FONCTION - SUR SECTEUR
ALIMENTAZIONE DI RETE
R 409 19704 - 004.01
1/2 W
1/8 W
Styroflex - Kond.
Folien - Kond.
Keramik - Kond.
Elko
Tantal - Elko
gedruckter Kondensator
PRINTED CAPACITOR
CONDENSATEUR IMPRIME
CONDENSATORE STAMPATO
RIABLE CAPACITOR
S SIGNAL D'ANTENNE
ARIABILE CHIUSO
Änderungen vorbehalten !
ALTERATIONS RESERVED !
MODIFICATIONS RESERVEES !
CON RISERVA DI MODIFICA !
Melody-Boy 500
Elite-Boy 500
(15002-906.01)
517, 515, 518, 519, 521, 520, 522, 523, 524, 525, 529, 527, 426, C
516, 517, 519, 513, 520, 521, 522, 523, 524, 525, 527, 526, 529, 424, 525, 530, 531, 532, R