ALIGNING INSTRUCTIONS 1970

REMOVAL OF CHASSIS

1. Take off battery cover and remove batteries
2. Pull of knobs
3. Loosen 3 screws at case bottom and now pull chassis carefully upward

D. C. ALIGNMENT

(no signal, U_B = 7,5 V, AM-btton pressed, Volume control at minimum)

Adjustment of AF/Push-Pull Stage

Connect Milliammeter in place of wire link to collector AC 188 K and —. Adjust quiescient current with R 63 (500 Ω) to 5,5 mA. Resolder wire link after completion of adjustment of quiescent current.

Adjustment of the IF-Amplifier

Adjust with R 26 collector current of BF 240 (T V) to obtain a voltage of 1,1 V at the emitter resistor R 28.

AM-IF ALIGNMENT 460 kHz (AM button pressed)

Alignment Sequence	Connection of Wobbulator Output	Connection of Wobbulator Scope	Alignment
Filter III	to point 8 of F II	loosely coupled with collector of BF 240 (F III point 2)	**(I)** to maximum and symmetry
Filter II	to point 6 of F I		**(II)** and **(III)** to maximum and symmetry
Filter I	to variable capacitor of AM-input circuit		**(IV)** and **(V** to maximum and symmetry

ALIGNMENT OF AM OSCILLATOR AND INPUT CIRCUIT

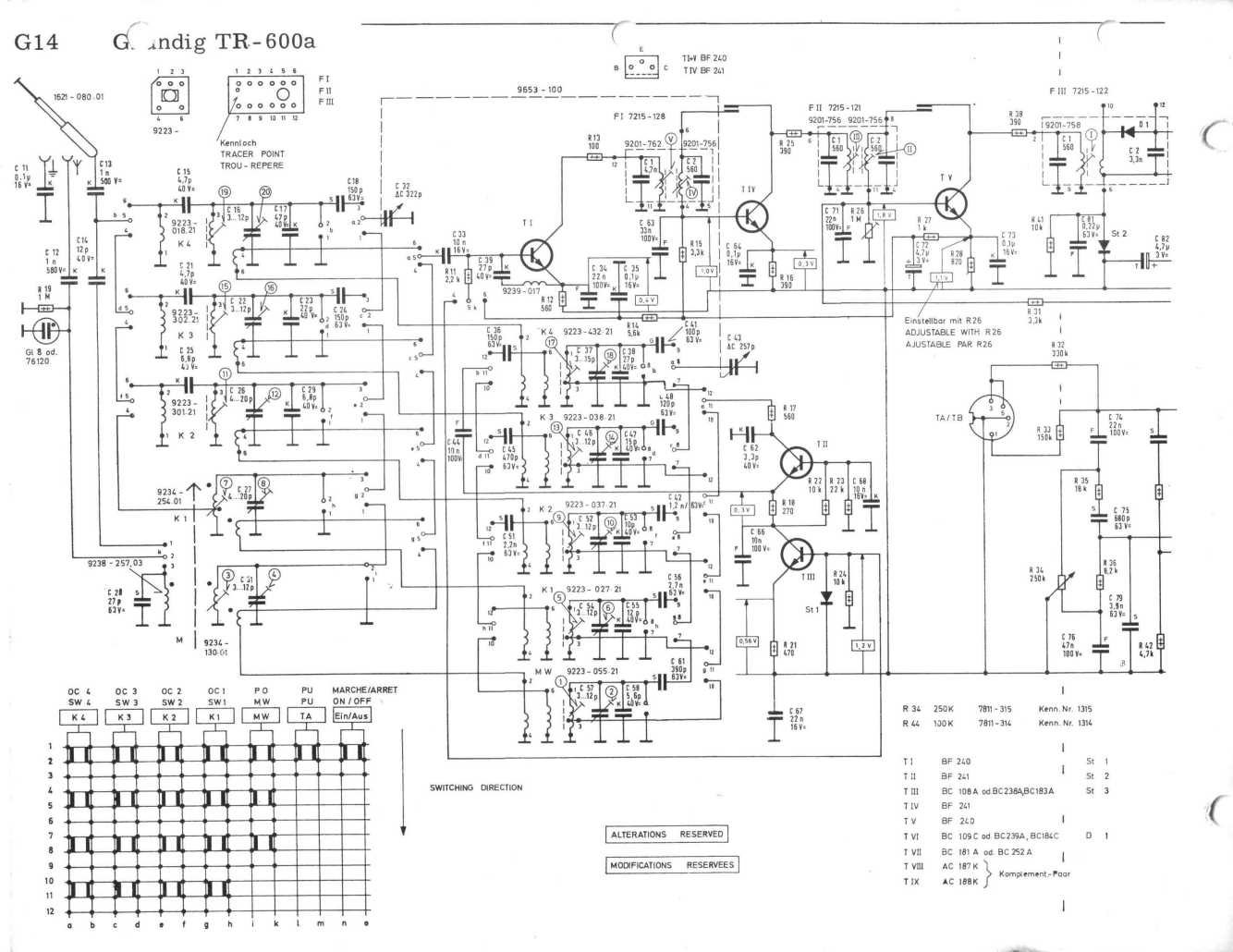
Range	Frequency (pointer position)	Oscillator	Input Circuit	Sensitivity	Voltage at basis of Mixer	Oscillator Voltage	Remarks
AM/MW	560 kHz	① max.	③ max.	5 µV	65 . . . 85 mV	80 . . . 100 mV	
	1450 kHz	② max.	④ max.	3 µV			
SW I	1.8 MHz	⑤ max.	⑦ max.	2 µV	55 . . . 65 mV	100 . . . 110 mV	
	4.5 MHz	⑥ max.	⑧ max.	1 µV			
SW II	5.2 MHz	⑨ max.	⑪ max.	1.5 µV	80 . . . 80 mV	90 . . . 110 mV	Radiate AM-signal via frame and feed in SW-signal via 12 pF to telescope antenna connection.
	11 MHz	⑩ max.	⑫ max.	1 µV			SW Fine Tuning at left stop (turned off)
SW III	12.5 MHz	⑬ max.	⑮ max.	1.5 µV	70 . . . 50 mV	80 . . . 70 mV	
	17.8 MHz	⑭ max.	⑯ max.	1.2 µV			
SW IV	21 MHz	⑰ max.	⑲ max.	2 µV	55 . . . 50 mV	90 . . . 80 mV	
	28.8 MHz	⑱ max.	⑳ max.	3 µV			

Hint: All oscillators have to oscillate at $U_B \geq 4{,}5$ V without distortion.

GRUNDIG

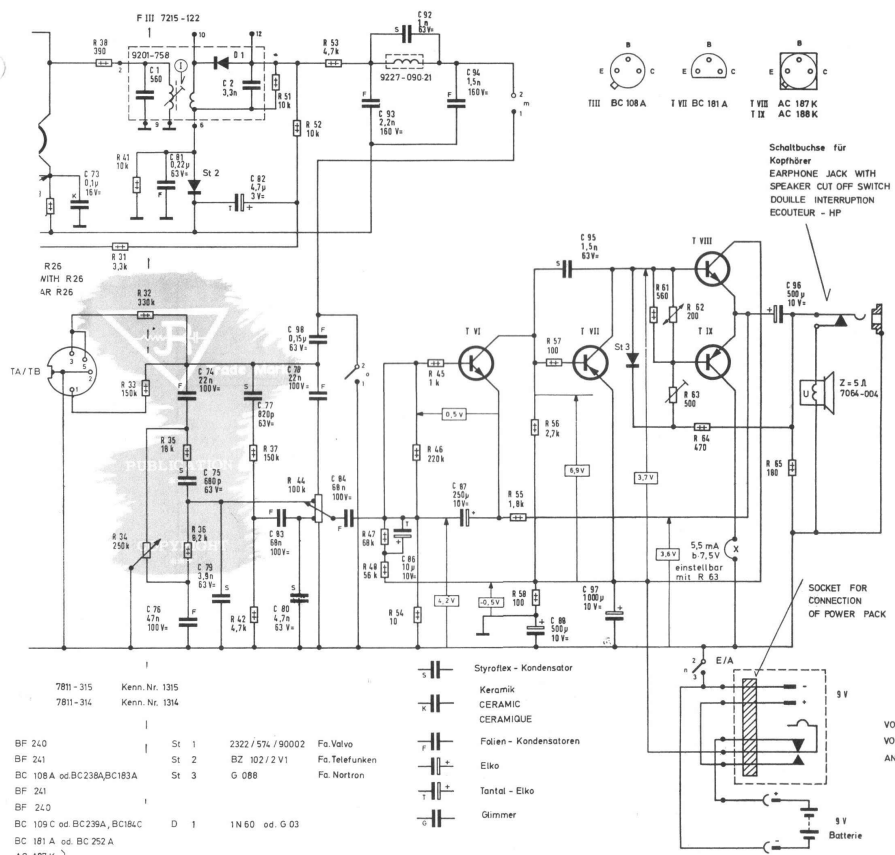
Grundig TR-600a G14

G14 G. ndig TR-600a



R 34 250K 7811 - 315 Kenn. Nr. 1315
R 44 100K 7811 - 314 Kenn. Nr. 1314

T I	BF 240	St 1	
T II	BF 241	St 2	
T III	BC 108A od. BC 238A, BC 183A	St 3	
T IV	BF 241		
T V	BF 240		
T VI	BC 109 C od. BC 239A, BC 184 C	D 1	
T VII	BC 181 A od. BC 252 A		
T VIII	AC 187 K } Komplement.-Paar		
T IX	AC 188 K }		



T III BC 108 A

T VII BC 181 A

T VIII AC 187 K
T IX AC 188 K

HF - NF Platte
RF - AF PRINTED BOARD
HF - BF PLATINE
7305 - 184

ZF 460 kHz
IF 460 kHz
MF 460 kHz

Wellenbereiche
WAVE BANDS
GAMMES D'ONDES

MW - PO	510...	1620 kHz
KW1-SW1-OC1	1,6...	4,8 MHz
KW2-SW2-OC2	4,5...	12,3 MHz
KW3-SW3-OC3	12...	20 MHz
KW4-SW4-OC4	19,5...	30 MHz

MW - Oszillator
MW - OSCILLATOR
PO - OSCILLATEUR
} 9223-055.21

KW - Oszillatoren	K1	9223-027.21
SW - OSCILLATOR	K2	9223-037.21
OC - OSCILLATEUR	K3	9223-038.21
	K4	9223-432.21
KW - Vorkreise	K2	9223-301.21
SW - INPUT CIRCUIT	K3	9223-302.21
OC - CIRCUIT D'ENTREE	K4	9223-018.21

Ferrit-Antenne kpl.
FERRITE AERIAL
ANTENNE FERRITE COMPL.
} 7701-383

7811-315 Kenn. Nr. 1315
7811-314 Kenn. Nr. 1314

BF 240	St 1	2322/574/90002	Fa. Valvo
BF 241	St 2	BZ 102/2 V1	Fa. Telefunken
BC 108 A od. BC 238 A, BC 183 A	St 3	G 088	Fa. Nortron
BF 241			
BF 240			
BC 109 C od. BC 239 A, BC 184 C	D 1	1 N 60 od. G 03	
BC 181 A od. BC 252 A			
AC 187 K, AC 188 K			
} Komplement.-Paar

Styroflex - Kondensator
Keramik
CERAMIC
CERAMIQUE
Folien - Kondensatoren
Elko
Tantal - Elko
Glimmer

gedruckter Kondensator
PRINTED CAPACITOR
CONDENSATEUR IMPRIME

VOLTAGES MEASURED WITH GRUNDIG VTVM AT 7,5 V IN THE RANGES 10/3/1 V.
VOLTAGE AND CURRENT VALUES ARE VALID WITH NO SIGNAL APPLIED
AND VARIABLE CAPACITOR CLOSED.

MW

RF/AF PRINTED CIRCUIT BOARD, SEEN FROM SOLDER SIDE