

SERVICE SHEET

PORTABLE RADIO

1968

ALIGNMENT INSTRUCTIONS

Chassis Removal

1. Remove battery compartment lid.
2. Remove two screws in the bottom of case.
3. Slide Chassis carefully out, from the top.

Adjustment of Output stage quiescent current

Adjust at 7.5V less signal and volume control to minimum. Connect meter at "x" (disconnect link) and adjust R61 (500 Ω) for 5.5mA. Reconnect link.

Adjustment of IF Amplifier

Adjust collector current of BF 185 (TV), by R 26 (500Ω) for 1.3V across R 31.

FM - IF ALIGNMENT 10.7 MHz (turn treble control to max)

ALIGNMENT SEQUENCE	COUPLING OF WOBBLATOR OUTPUT	CONNECTION OF VISUAL INDICATOR	ADJUSTMENT
IF IV	Base circuit of BF 185 T VI (IF III PIN 6)		(b) Fully detuned (a) Max and symmetrical
IF III	IF II Pin 10		(c) and (d) for max.
IF II	IF I Pin 5		(e) and (f) for max.
IF I	AM - Aerial Circuit		(g) and (h) max.
Discriminator and AM rejection	Base circuit of BF 185. TVI. IF III Pin 6.	Via 50 K Ω cable to IF IV Pin 8. (AF/Output)	(b) for max linearity at ± 75 kHz deviation, adjust R2 (in IF IV) for max AM.rejection, with 50 mV on base of BF 185 T VI. (b) IF receiver pre-adjusted.
	AM aerial circuit (AM without modulation)		

AM I.F. ALIGNMENT 460 KHz (on MW band)

ALIGNMENT SEQUENCE	COUPLING OF WOBBLATOR OUTPUT	CONNECTION OF VISUAL INDICATOR	ADJUSTMENT
IF III	IF II Pin 10	Loose capacity coupled to collector BF 185 IV IF III Pin 12	(I) Max and Symm.
IF II	IF I Pin 5		(II) and (III) Max and Symm.
IF I	AM Aerial Circuit		(IV) and (V) Max and Symm.

AM - OSCILLATOR AND RF ALIGNMENT

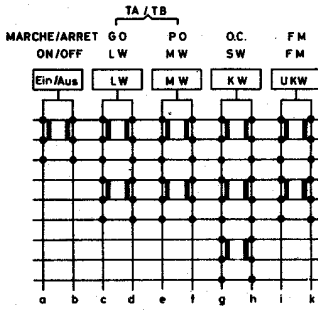
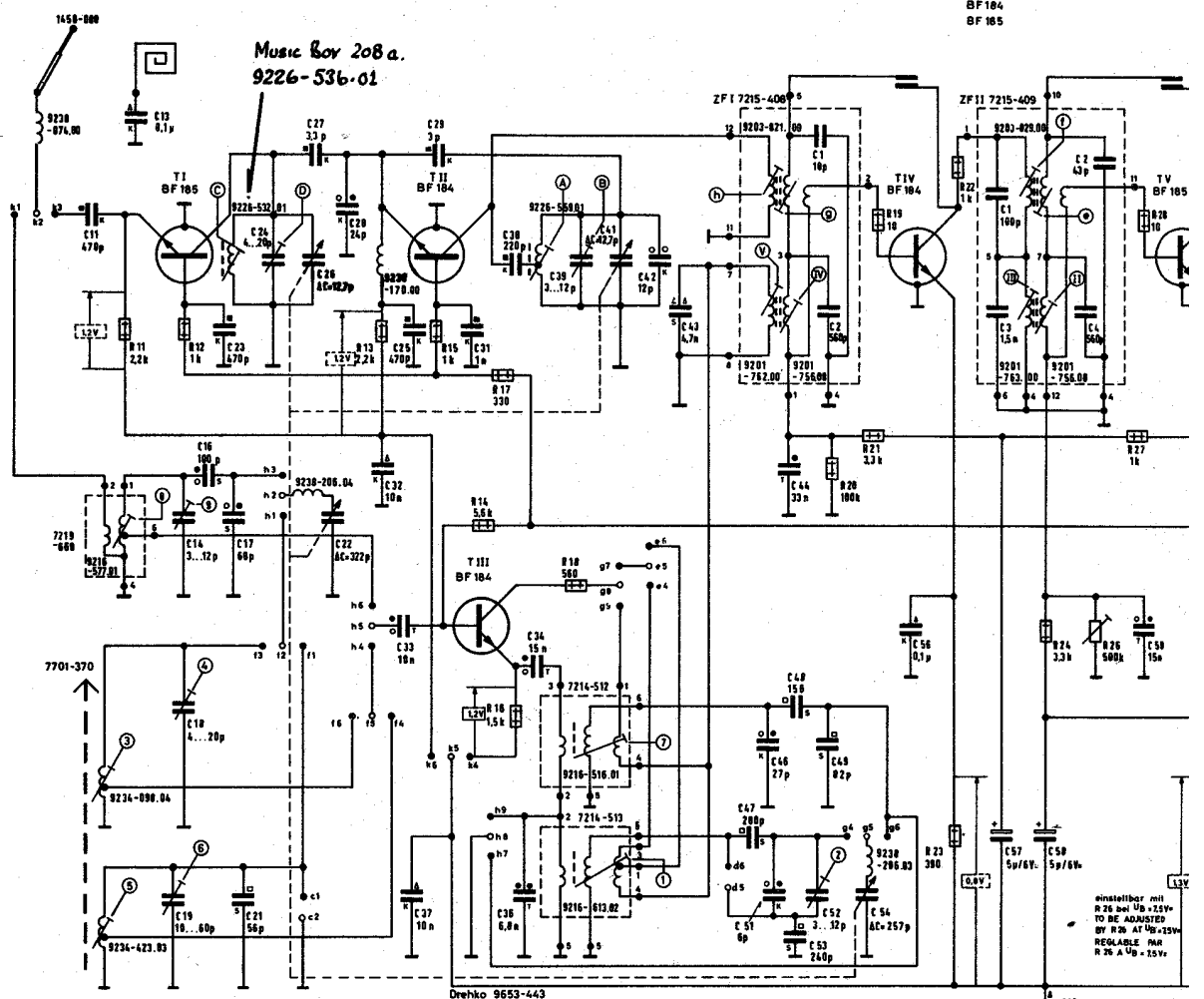
RANGE	FREQUENCY & POINTER SETTING	OSC.	FERRITE AERIAL	SENSITIVITY	OSC. VOLTAGE	REMARKS
MW	560 kHz	(1) Max.	(2) Max.	8 μV	80-120 mV	For SW alignment disconnect telescopic aerial connecting point. For MW and LW alignment feed signal to Ferrite Aerial.
	1450 kHz	(2) Max.	(4) Max.	8 μV		
LW	160 kHz		(5) Max.	12 μV	90-130 mV	
	240 kHz		(6) Max.	10 μV		
SW	6,1 MHz	(7) Max.	(8) Max.	4,5 μV	60-90 mV	
	7,2 MHz		(9) Max.	5 μV		

FM - OSCILLATOR AND RF ALIGNMENT

GNRTR. FREQUENCY AND POINTER SETTING	OSC.	COUPLING COIL	OSC. VOLTAGE AT EMMITER T II	REMARKS
88 MHz	(A) Max.	(C) Max.	40 mV	Connect signal generator via 60 Ω cable direct to Mixer Unit. Input should not exceed 2mV.
102 MHz	(B) Max.	(D) Max.		
106 MHz (208a)	(B) Max.	(D) Max.	100 mV	

Oscillator should function with a battery tension of 4.5V.

Note:- Music Boy 208a has VHF Coverage to 108 MHz. The only circuit difference is the VHF oscillator coil No.9226-536-01. For this model the VHF oscillator alignment should be extended to 106 MHz.



Schaltrichtung:
SWITCHING DIRECTION
SENS DE COMMUTATION

KW - Spulensatz
SW - COIL SET
O.C. - BLOC BOBINAGE } 7214-512

MW - LW - Spulensatz
MW - LW - SOIL SET
PO - GO - BLOC BOBINAGE } 7215-513

Wellenbereiche:
WAVE BANDS
GAMMES D'ONDES

LW - LW - GO	145	260 kHz / kc
MW - MW - PO	510	1620 kHz / kc
KW - SW - O.C.	585	7.4 MHz / Mc
UKW - FM - FM	87	104 MHz / Mc

AM - ZF 460 kHz / kc
FM - ZF 10.7 MHz / Mc

Ferritantenne kpl.
FERRITE AERIAL
ANTENNE FERRITE-COMPL. } 7701-370

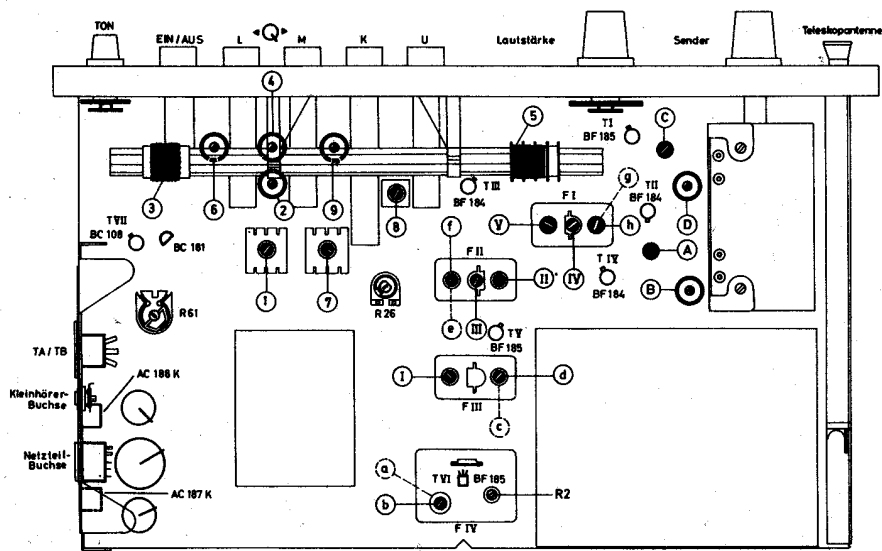
Änderungen vorbehalten

RIGHT FOR ALTERATIONS RESER

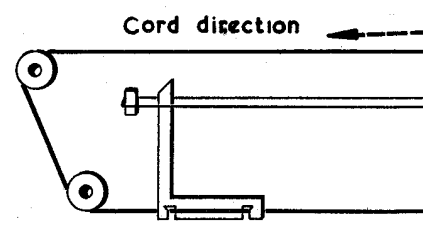
MODIFICATIONS RESERVÉES

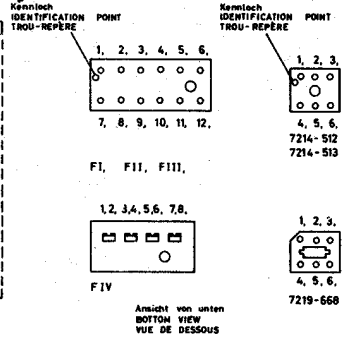
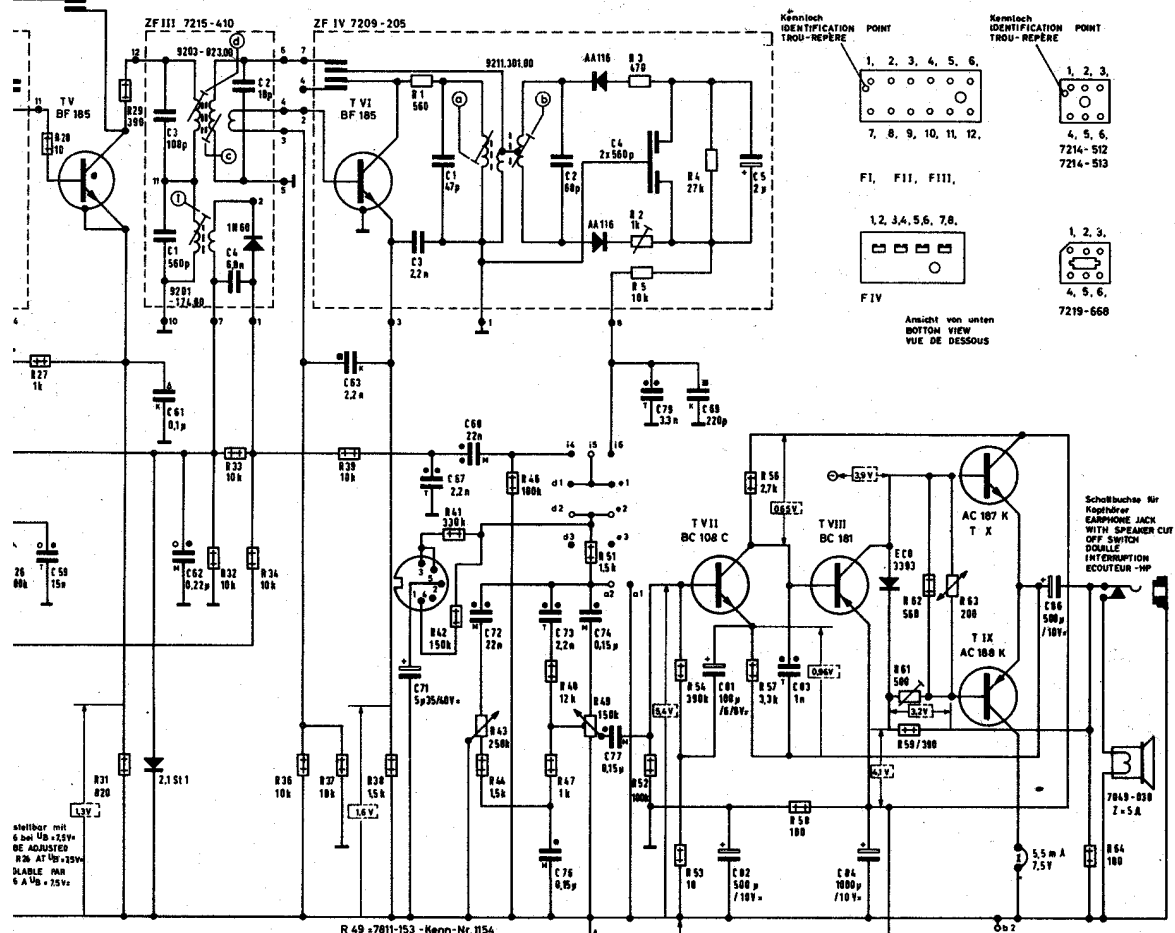
gezeichnete Tastenstellung Gerät „Aus“
SHOWN IN OFF POSITION
MONTRÉ EN POS. „ARRÊT“

C:	11, 13, 14, 19, 23, 17, 24, 26, 22, 32, 33, 37, 31, 36, 38, 34, 39, 41, 42, 43, 47, 46, 44, 53, 52, 49, 54, 56, 57, 59, 60, 58	ZF I 7215-408 C. 1, 2, 3	ZF II 7215-409 C. 1, 2, 3, 4
R:	11, 12, 13, 15, 14, 16, 17, 18, 20, 21, 16, 19, 22, 28		



ALIGNMENT POINTS





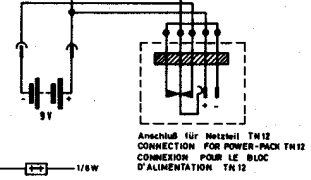
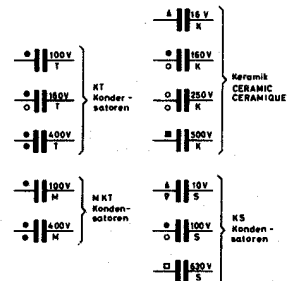
Schaltbohrung für Kopfhörer
EARPHONE JACK
WITH SPEAKER CUT
OFF SWITCH
BOUCLE
INTERRUPTION
ECOUTEUR-HP

vorbehalten
RESERVED
RESERVÉES

Spannungen mit Grundig Röhrenvoltmeter auf den Meßbereichen 10/3/1 bei 7,5V-Batteriespannung gemessen. Spannungs- und Stromwerte gültig bei eingedrehtem Drehko ohne Signal
M W UKW

VOLTAGES MEASURED WITH GRUNDIG VTVM AT 7,5V. MEASURING VALUES VALID WITHOUT SIGNAL TUNING CONDENSER TURNED IN
M W FM

TENSIONS DE SERVICE MESURÉES AVEC GRUNDIG VOLTMÈTRE À LAMPE UNIVERSELLE AT 7,5V. VALEURS SONT VALABLES SANS SIGNAL CONDENSATEUR VARIABLE FERMÉ
P O FM



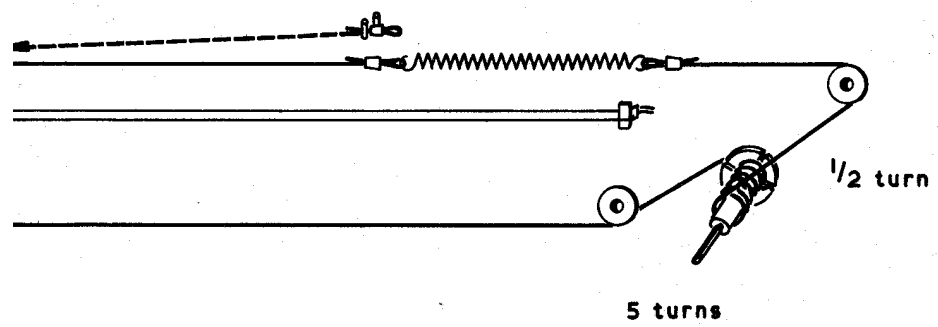
	ZF III 7215-410 C. 3.1.2.4.	ZF IV 7209-205 C. 3.2.4.5. R. 1.2.5.4.
1.	59.	63.
	61. 62.	71. 67. 68. 72.
		73. 76.
		74. 75. 77.
		78. 69. 81. 82.
		83.
	27. 28.	29. 31.
	32. 33. 34. 36.	37. 39. 38.
	42. 41.	43. 48.
	44.	46. 49.
	47. 51. 52.	53. 56.
	54. 55.	57. 58.

Music-Boy 208

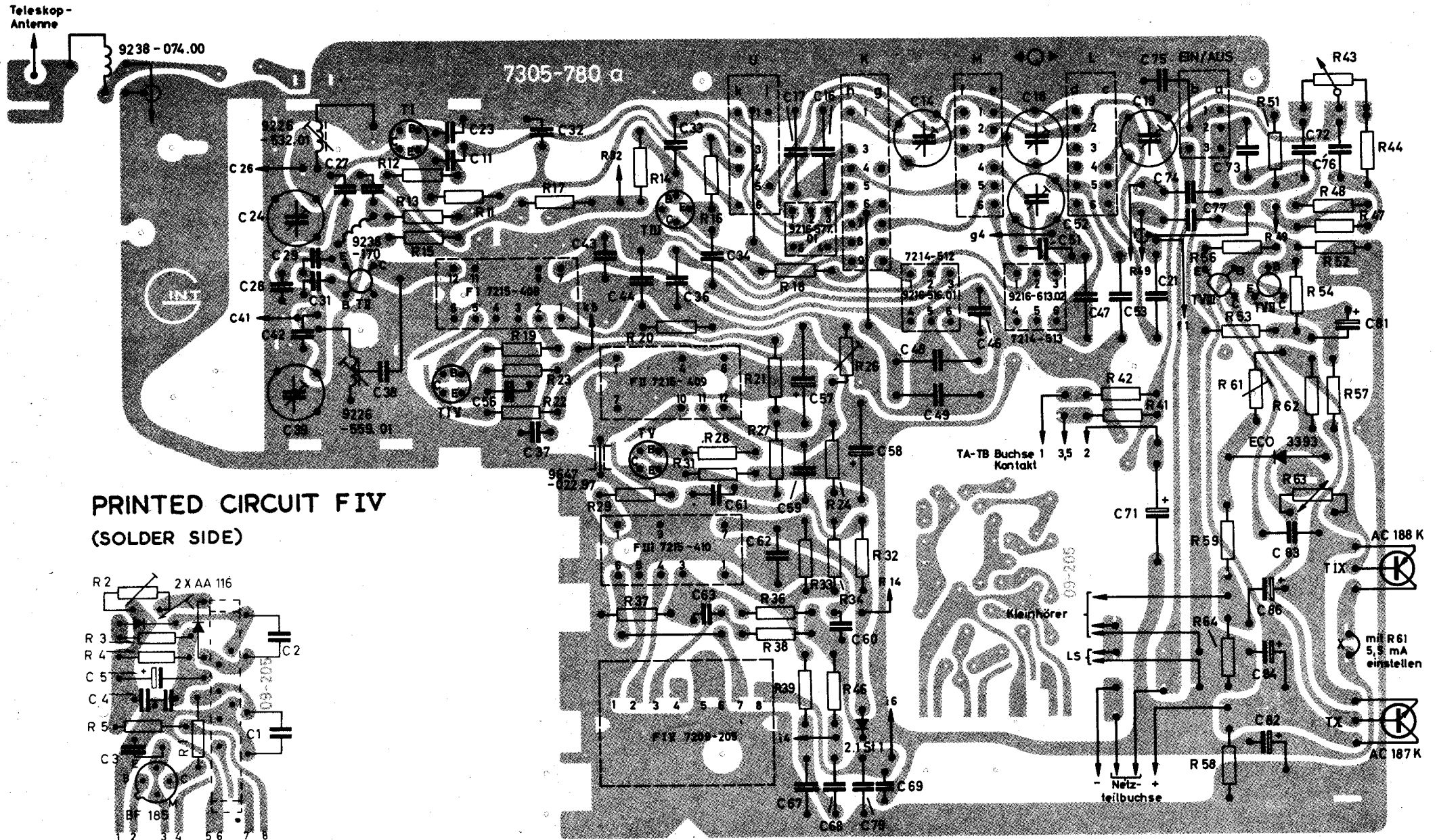
(14-1476-1141)

Scale guide cord fixes onto Lugs on plastic frame, as shown on diagram.

DRIVE ASSY
Cord 23.8ins (605mm) approx



PRINTED CIRCUIT (SOLDER SIDE)



PRINTED CIRCUIT FIV (SOLDER SIDE)

