

Mobile and Basestation AP 700

2 m Band; Manual 16

Contents.

Dwg.no.

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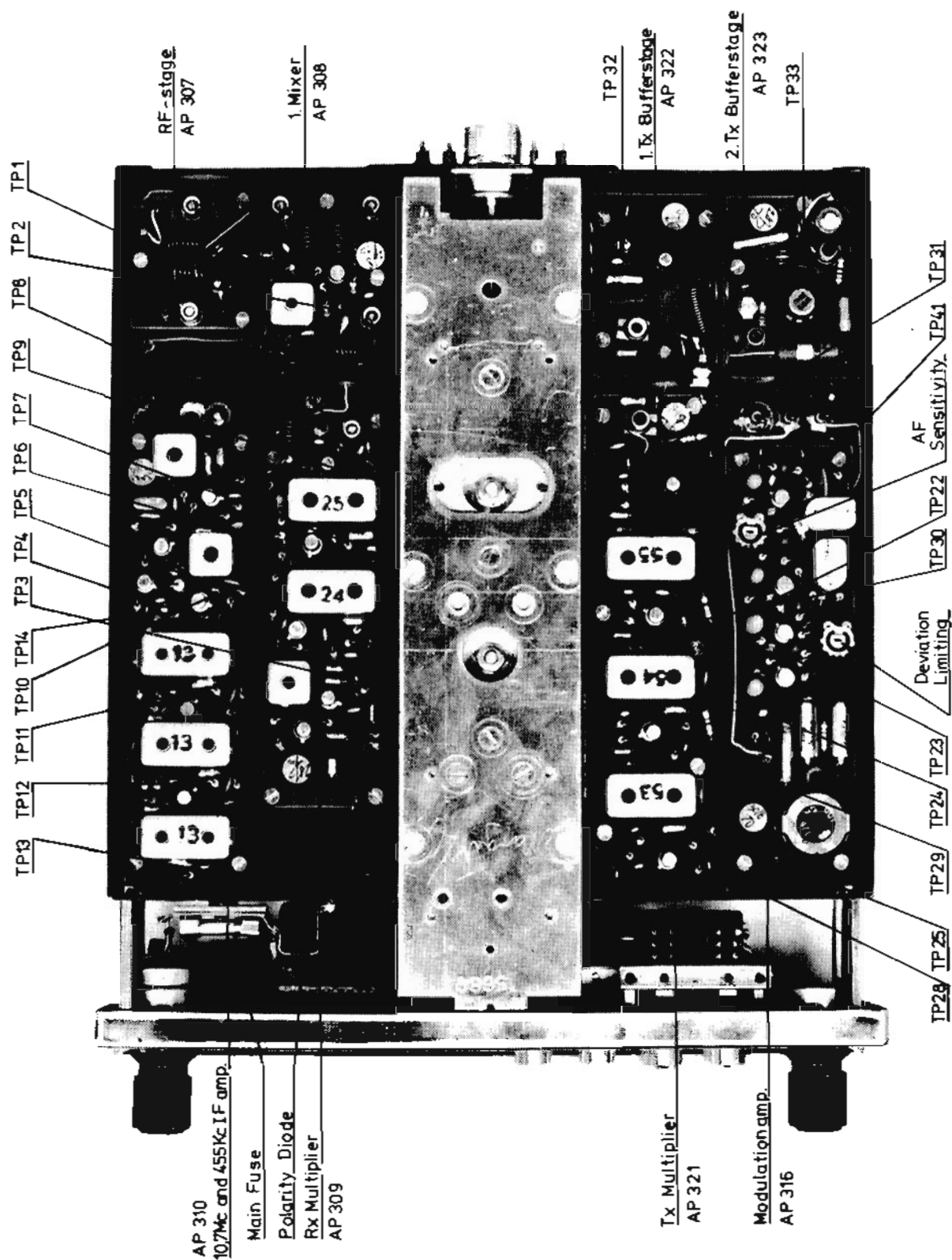
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7o 3o4/4



Rettet:

Bottom view of Mobile
local controlled AP 700

AP RADIOTELEFON

Tegn.: A.B.P
25-9-70

Kontr.: E.F
25-9-70

Stykt. nr.:

Tegn. nr.:

70332/ 4

Technical Data Type AP 700
mobile and base stations.

Band 146 - 174 MHz.

General:

Operation: Single or two frequency simplex.
Channels: One to four with 25 KHz spacing.
Modulation: Frequency modulation F 3.
Deviation: 5 KHz max.
Temperature: From $\pm 15^{\circ}$ to 50° centigrade.
Selective calling: Available space for optional sequential tone pulse system.
Control: Local or remote control.
Coaxial connector: 50 ohm U.H.F. type
Power supply: Main unit adapted for 12 volt (nom.) car battery supply with negative earth. Optional separate converter units supplied for $\pm 6 + 12$ ± 24 volt d.c. and 220 volt a.c.
Loudspeaker: 2 inch built-in loudspeaker in mobile unit.
Current consumption: Stand-by 0,12 A
(13,8 V) Reception: 0,20 A
Transmission: 4 to 5,5 A
Dimensions: Height 5,7 cm width 22 cm, depth 31 cm, weight 3,5 kilo.

Transmitter:

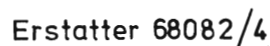
Power Output: 20 to 25 watt at 13,8 volt supply voltage.
Spurious outputs and Harmonics: Each less than 2 uW at 50 ohm load. $\approx 60 \text{ dB}$
Frequency stability: Better than $\pm 2,5$ KHz from $\pm 15^{\circ}$ to $+ 50^{\circ}$ centigrade.
Microphone input: Nominal for 200 ohm dynamic microphone. 2 mV for 5 KHz and 0,2 mV for 3,5 KHz deviation.
A F Response: Within ± 1 dB ± 3 dB of a 6 dB pr. octave pre-emphasis characteristic from 0,3 to 3 KHz referred to 1 KHz level.

Receiver:

Sensitivity: 0,5 uV e.m.f. for 12 dB SINAD.
Selectivity: Better than 80 dB adjacent channel.
Spurious responses: None greater than ± 75 dB.
Intermodulation: EIA 72 dB.
A F response: $\pm 2 \pm 8$ dB of a 6 dB pr. octave deemphasis characteristic from 0,3 to 3 KHz referred to 1 KHz level.
Audio output power: 2 watt into 5 ohm, less than 5% distortion at 13,8 volt supply voltage.

Figures quoted are typical and must be specifically confirmed before they become applicable to any particular tender, order or contract.

Rettet:	Technical Data type AP 700	Tegn.:	Kontr.: E.F.
			7-10-70
	Band 146 - 174 Mhz	Stykl. nr.:	
		Tegn. nr.:	
	AP-RADIOTELEFON	70302/4	



70221/4

TECHNICAL DESCRIPTION OF THE AP 700

2, 3, 4 & 8 m Communicationset

RECEIVER:

The RF staged is equipped with field effect transistors, resulting in high intermodulation spurious attenuation and good blocking properties.

The RF signal is amplified in a gate grounded fet and fed into the first converter, which is a dual gate mos fet, via gate 1. The x-tal oscillator signal is fed via gate 2. Hereby suppressing unwanted conversions and high suppression of unwanted signals, as well as the stability is improved.

With an oscillatorsignal of 10.7 Mc/s under RF signal, the signal is converted to 10,7 Mc/s, and this signal is fed via an x-tal filter, with 90 db attenuation on adjacent channels, into a 1st IF amplifier. The 1st IF signal is fed into the 2nd converter, and with an oscillator of 10,245 Mc/s converted to the 2nd IF of 455 Kc/s.

The 2nd IF signal is amplified in a 2-stage tuned amplifier and fed into the limiter and discriminator stages. The demodulated signal is integrated to 6 db/octave roll off and amplified in a 3-stage AF amplifier and hereafter fed into a power amplifier with 2,5 watt output into 4 ohm load.

A part of the noise in the discriminator primary is amplified and fed via a double phase rectifier into a DC amplifier, which inturn blocks the AF amplifier in case of missing - or weak RF signal.

Rettet:	TECHNICAL DESCRIPTION OF AP 700 RECEIVER	Tegn.: 26.8.70	Kontr.: 26.8.70 E.F.
		Stykl. nr.:	
	AP-RADIOTELEFON	Tegn. nr.: 70218/4	

TECHNICAL DESCRIPTION OF THE AP 700

2 m. Communicationset

TRANSMITTER:

The AF-signal from the microphone is amplified in a 4 stage modulation amplifier with trimpot adjustments for speech and limiter levels. Frequencies over 3 Kc/s are cut off in a low passfilter and the signal passed on to the phasemodulator.

The phasemodulator consists of 2 LC circuits with varactor-diode tuning, fed by the modulation signal. The signal from the oscillator circuit is also fed into the phasemodulator. The obtained modulated signal, of about 10 Mc/s, is entered in the multiplier, where it is multiplied 16 times to reach the necessary frequency deviation. Output-frequency and output-power of the multiplier are respectively ca. 160 Mc/s and 200 mW, which is amplified in a bufferstage to 600 mW, moreover this signal is amplified in 2 powerstages to 6 watt, which in turn is used to excite the power output stage, consisting of one (or two parallel coupled) power transistor(s). This stage delivers an output of 25 watt into 50 ohms load with nominal supply voltage and with the harmonic frequencies suppressed in a Chebycheff filter.

To prevent overheating of the power amplifier stage, a P.T.C. resistor is mounted on the aluminum heatsink, and wired in the supply line of the buffer stage, so that the drive of the power amplifier stage is attenuated if the temperature exceeds a certain value.

This security circuit will also protect in case of mismatch, as this will develop into overheating of the power amplifier stage. (see above)

Rettet:	TECHNICAL DESCRIPTION OF AP700 TRANSMITTER	Tegn.: 26.8.70	Kontr.: 26.8.70 E.F.
		Stykl. nr.:	
	AP-RADIOTELEFON	Tegn. nr.: 70217/4	

TUNING INSTRUCTIONS FOR THE AP 700

2m. Communication set.

TRANSMITTER:

Instruments used:

A VTVM - Marconi TF 2604 - or equivalent.

A Wattmeter - Bird-thru-line 43 - or equiv.

A modulation meter - Marconi TF 2300 - or equiv.

A 50 ohm non inductive load.

An audio generator - Philips GM 2308 - or equiv.

Nominal supply voltage should be 13,6 V DC.

Phasemodulator AP 320:

Connect the DC probe of the VTVM to TP 26 and with transmitter keyed read approx. 0,3 V if oscillator works.

With the RF probe connected to TP 27 tune S 1 & S 2 for max. deflection read approx. 0,4 V AC.

Multiplier AP 321:

Transmitter frequency = (X-tal)X16.

Connect the DC probe with TP 28 read 1,3 V DC, hereafter connect DC probe to TP 29 and tune S 1 to max. deflection, which is approx. 1,8 V DC, then connect the DC probe to TP 30 and tune S 2 to max. deflection, which is approx. 2,7 V DC. Next move, probe to TP 31 and tune S 3 to max. deflection, which is approx. 3,4 V DC.

Bufferstage AP 322:

Connect DC probe of VTVM to TP 32 and tune S 4 & S 1 for max. deflection, which is approx. 0,4 DC depending on the setting of trimpot R 2.

Rettet: 	Tuning Instructions 2m for AP 700 Transmitter	Tegn.: Stykl. nr.:	Kontr.: E.F. 11-10-70
AP-RADIOTELEFON		Tegn. nr.: 70219/4	

1,5 watt P.A. stage AP 323:

Connect the RF-probe of the VTVM to TP 33 and tune **S 1** & **S 2** for max. deflection, approx. 10 V or 1,5 Watt on the wattmeter + load. This signal is on the final frequency, which is used to excite the 25 W P.A. stage.

25 watt P.A. stage AP 325:

Wattmeter + load connected to output jack and the DC probe of the VTVM connected to TP 34 tune the two trimmers over input to 2 N 3926 and the trimmer over output of the 2 N 3926 for max. deflection of approx. 0,3 V DC. There should be a reading from the wattmeter now. Tune the trimmers over the collectors of the output transistors. For max. output power and check that the total consumption of the set does not exceed 4,5 amps., because the efficiency of the transmitter can be reduced essentially with an unfortunate tuning of the trimcapacitors.

Modulation amplifier AP 316:

Connect an audiogenerator matched to 200 ohms to the microphone input. The audio frequency should be adjusted to 1000 c/s, and the level to 0,2 m V. "Level" and "limiter" pots set in center position and transmitter keyed. Measure frequency deviation with modulation meter and increase input level to 2 m V. Hereafter adjust "limiter" pot to max. freq. deviation. Input level decreases again to 0,2 m V. and adjust "level" pot to 2/3 of max. frequency deviation. Reconnect the microphone and with speech at normal distance the average frequency deviation should be 2/3 of max. deviation.

Rettet: 	TUNING INSTRUCTION OF AP700 TRANSMITTER	Tegn.: 26.8.70	Kontr.: 26.8.70 <i>E.F.</i>
	AP-RADIOTELEFON	Stykl. nr.: Tegn. nr.: 70220/4	

TUNING INSTRUCTIONS FOR THE AP 700
2 m Communication set.

Receiver:Test equipment used:

VTVM - Marconi - TF 2604 - or equivalent

Signal Generator - Marconi - TF 995 A/S - or equiv.

Sweep Generator - TLH 208 - or equiv.

1st and 2nd IF AP 310.

Tune the 2nd IF to 455 Kc/s with the aid of the sweep generator. Connect the AF input of the sweep generator to TP 15 and the RF output to TP 12 and tune S 5 to max. amplification and best possible symmetry. Hereafter move the RF output to TP 11 and TP 10 and tune S 4 and S 3 resp. to max. amplification and min. saddle now move AF input to TP 16 and tune S 1, on pcb. 311, for max. slope and best possible symmetry.

With a diode probe on the AF input of the sweep generator connected to TP 10, and the RF output connected to TP 2, and the frequency readjusted to 10,7 Mc/s the x-tal filter and the 1st IF can be tuned.

To do this tune S 3, on pcb. 308, and S 1 for min. ripple on the filter, and S 2 for max. amplification.

To control that the x-tal oscillator of 10.245 Kc/s is working correct, connect the VTVM's RF probe to TP 14, there should be an indication of 0,3 V AC.

Multiplier AP 309.

Receiver frequency = (x-tal) x 12 + 10,7 MC

Connect the RF probe of the VTVM to TP 3, here the indication should be 0,4 V AC, with the oscillator working.

*AP 710 (4 mHz) X-tal x 6 + 10,7 MHz = 97,75 MHz
 This is the TX 48593 35-
 RX 12.0083 33
 82,75 MHz*

Rettet: 	<p style="text-align: center;">Tuning Instruction for the receiver 2M AP 700</p> <p style="text-align: center;">AP-RADIOTELEFON</p>	<table border="1"> <tr> <td data-bbox="992 1944 1197 2002">Tegn.: 12/10-70</td> <td data-bbox="1197 1944 1394 2002">Kontr.: E.F. 12-10-70</td> </tr> <tr> <td colspan="2" data-bbox="992 2002 1394 2069">Stykl. nr.:</td> </tr> <tr> <td colspan="2" data-bbox="992 2069 1394 2143">Tegn. nr.: 70229/4</td> </tr> </table>	Tegn.: 12/10-70	Kontr.: E.F. 12-10-70	Stykl. nr.:		Tegn. nr.: 70229/4	
Tegn.: 12/10-70	Kontr.: E.F. 12-10-70							
Stykl. nr.:								
Tegn. nr.: 70229/4								

Connect the DC probe to TP 5 and tune S 1 for max. reading, ie. 0,5 V DC. Connect the RF probe to TP 6 and tune S 2 for max. approx. 0,5 V AC and then connect the RF probe to TP 9 and tune S 3 to 0,5 V AC. Connect the RF probe to TP 2 and tune S 3, on pcb. 308, and S4 to max. reading, approx. 0,6 v AC.

1st Converter AP 308.

Connect the signal generator, tuned to the signal frequency, to the antenna input and turn it's attenuator up till a usable signal is heard in the speaker, tune S 1 and S 2 for best possible sensitivity.

RF Amplifier AP 307.

Tune S 1 and S 3 for max. sensitivity, which should be better than 0,5 μ V EMF for 12 db sinad as well as the noise suppression should be better than 20 db for 1 μ V input.

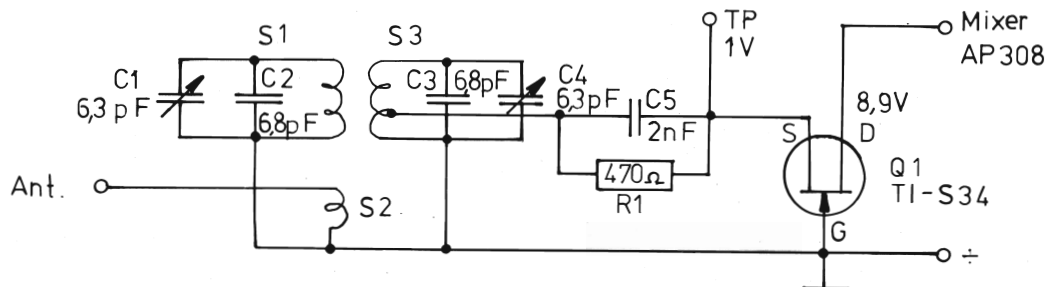
AF Squelch AP 306.

Normally it shouldn't be necessary to adjust the AF amplifier, but for controlling the squelch functioning the voltage readings on the different test points should be as follows: On TP 20 there should be 8 V AC "noise", so that the squelch can function satisfactory.

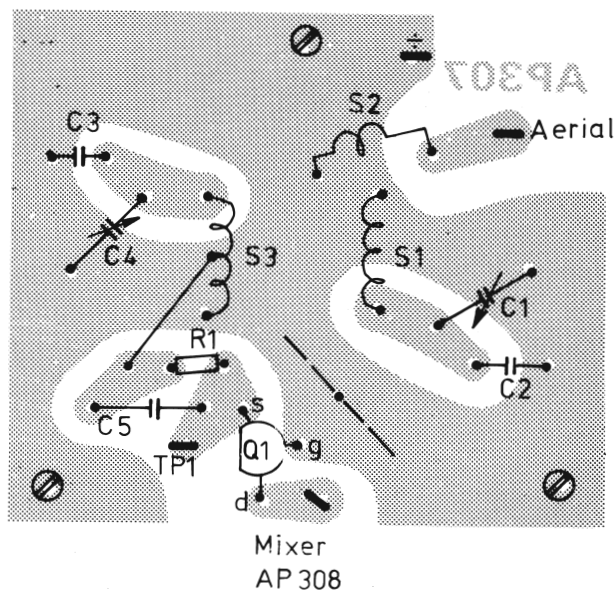
With the squelch fully opened there should be 1,5 V DC on TP 21 and 1,2 V DC on TP 18.

With the squelch fully closed there should be no reading on TP 18, and the AF amplifier is blocked.

Rettet: _____ _____ _____ _____ _____ _____	TUNING INSTRUCTION FOR THE RECEIVER AP 700.	Tegn.: 26.8.70 Kontr.: 26.8.70 <i>E.F.</i>
	AP-RADIOTELEFON	Stykl. nr.: Tegn. nr.: 70230/4



*original miller S1-S3 kept as 3mm
200W for testing & feedback*



*U1994
Schneider
OK*

Remarks: Quoted DC potentials are measured to chassis.

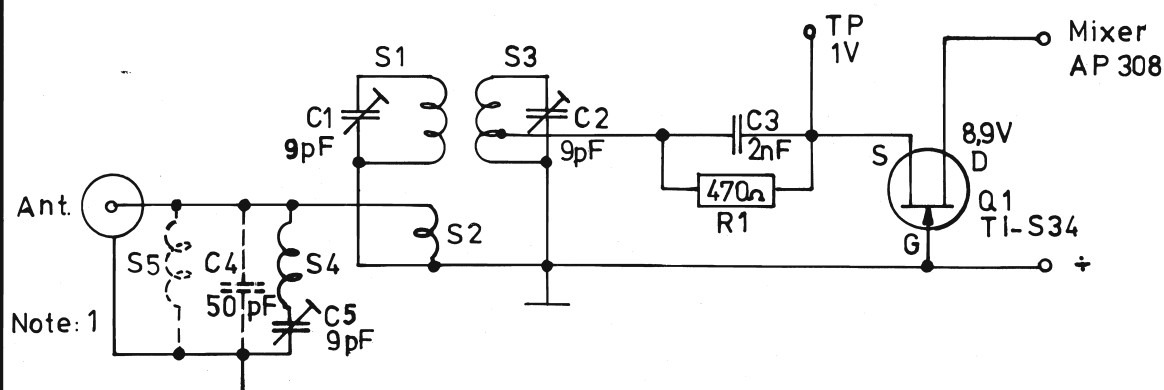
Ri = 10 M Ω provided 330 k Ω in series with test pin.

Rx stand by and Tx keyed.

Rettet:	RF AMPLIFIER 2M RECEIVER AP 700 PRINT BOARD AP 307	Tegn.: 26.6.70 BEP	Kontr: 26.6.70 E.F.
		Stykl. nr.: 70165/4	
	AP-RADIOTELEFON	Tegn. nr.: Erstatte 68013/4	
		70164/4	

AP-RADIOTELEFON

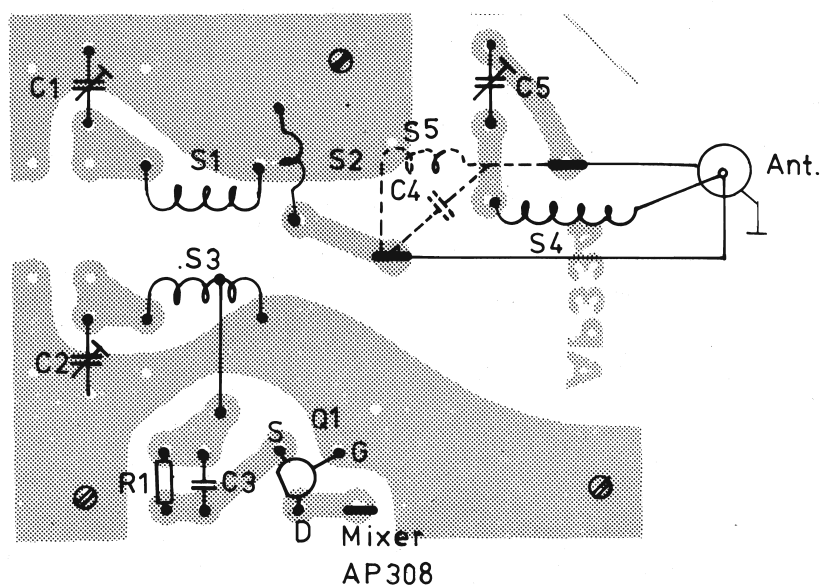
Nr.	Kode	Data	Nr.	Kode	Data
R1		470 ohm $\frac{1}{4}$ W			
C1		6,3 pF trim.			
C2		6,8 pF ker.			
C3		6,8 pF ker.			
C4		6,3 pF trim.			
C5		2 nF ker.			
S1		L1			
S2		L2			
S3		L3			
Q1		TI-S34			
Af Amplifier 2m Receiver AP700 Print Board AP 307 Tilhører tegn. nr.: 70164/4			Rettet:		Tegn.: Kontr.:
					Stykl. nr.: 70165/4



Note 1: If the Rx-frequency is higher than the Tx-frequency, the capacitor C4 has to be used.

If the opposite, C4 has to be replaced by the coil S5.

Duplex bandwidth 9Mc.



Remarks: Quoted Dc potentials are measured to chassis.

Ri = 10 MΩ provided 330 KΩ in series with test pin.

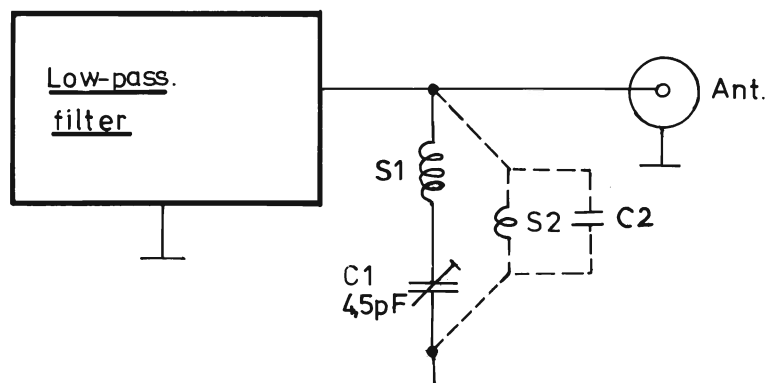
Rx stand by and Tx keyed.

Erstatter 68212/4

Rettet:	RF - AMPLIFIER, PRINT AP 334, 2M RECEIVER, DUPLEX	Tegn.: 6.8.70 BEP		Kontr.: 6.8.70 E.F.
		Stykl. nr.: 70189/4		
		Tegn. nr.: 70188/4		
		AP-RADIOTELEFON		

AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R1		470 ohm $\frac{1}{4}$ W			
C1		9 pF trim.			
C2		9 pF trim.			
C3		2 nF ker.			
C4		50 pF ker.			
C5		9 pF trim.			
S1		L1			
S2		L2			
S3		L3			
S4		L8			
S5		L9			
Q1		Ti-s 34			
RF-Amplifier 2m Receiver Duplex AP 700 Print AP 334 Tilhører tegn. nr.: 70188/4			Rettet:		Tegn.: EB Kontr.:
					Stykl. nr.: 70189/4



S1,C1: Receiver frequency rejection circuit.

S2: Compensation coil.

Note 1: If the Tx frequency is below the Rx S2 is incorporated as shown.

If opposite, S2 is replaced by a capacitor C2 approx. 33 pF (matched).

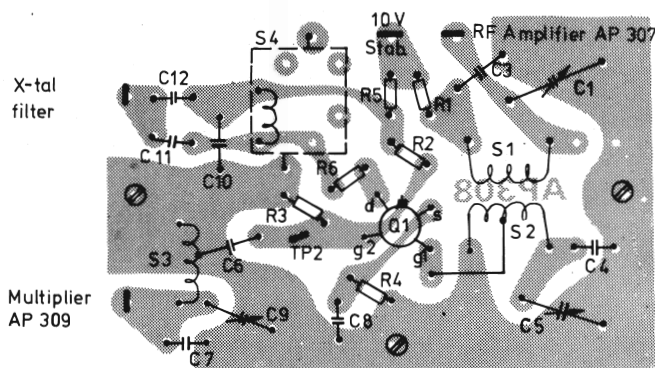
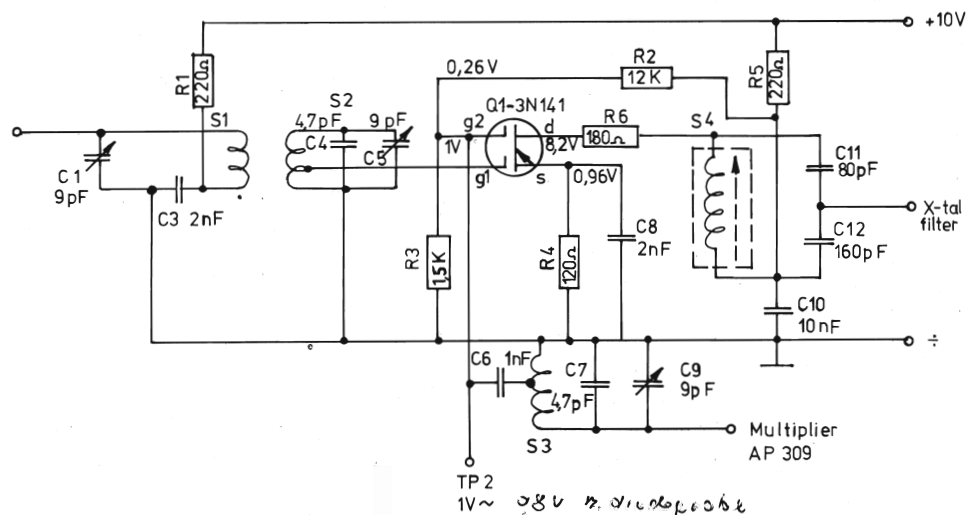
Erstatter: 69001/4

Rettet:	DUPLEX REJECTION CIRCUIT, 2M X-MTR.	Tegn.: 20.8.70 BEP	Kontr.: 20.8.70 E.F
		Stykl. nr.: 70206/4	
		Tegn. nr.: 70205/4	
		AP-RADIOTELEFON	

AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
C1		4,7 pF trim.			
C2		33 pF ker.			
S1		L79			
S2		L80			
Duplex Rejection Circuit 2m Transmitter AP 700 Tilhører tegn. nr.: 70205/4			Rettet:		Tegn.: EB Kontr.:
					Stykl. nr.: 70206/4

RF Amplifier
AP 307



*RG is right for at step is parallel,
1 nF, 100K, 100K, 100K, 100K, 100K,
100K, 100K, 100K, 100K, 100K*

Remarks: Quoted DC potentials are measured to chassis.

Ri= 10M Ω , provided 330K Ω in series with test pin.

Rx stand by and Tx keyed.

Rettet:

1. MIXER PRINT BOARD AP 308 AP700 2M

AP-RADIOTELEFON

Tegn.: 29.6.70
BEP

Kontr.: 29.6.70
E.F.

Stykl. nr.: 70167/4

Tegn. nr.: Erstatte 68011/3

70166/4

AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R1		220 ohm $\frac{1}{4}$ W			
R2		12 Kohm "			
R3		1,5 Kohm "			
R4		120 ohm "			
R5		220 ohm "			
R6		180 ohm "			
C1		9 pF trim.			
C3		2 nF ker.			
C4		4,7 pF ker.			
C5		9 pF trim.			
C6		1 nF ker.			
C7		4,7 pF ker.			
C8		2 nF ker.			
C9		9 pF trim.			
C10		10 nF ker.			
C11		80 pF styr.			
C12		160 pF styr.			
S1		L4			
S2		L5			
S3		L6			
S4		L7 Tg. 68093/4			
Q1		3N 141			

1.Mixer 2m AP 700

Print Board AP 308

Tilhører tegn. nr.: 70166/4

Rettet:

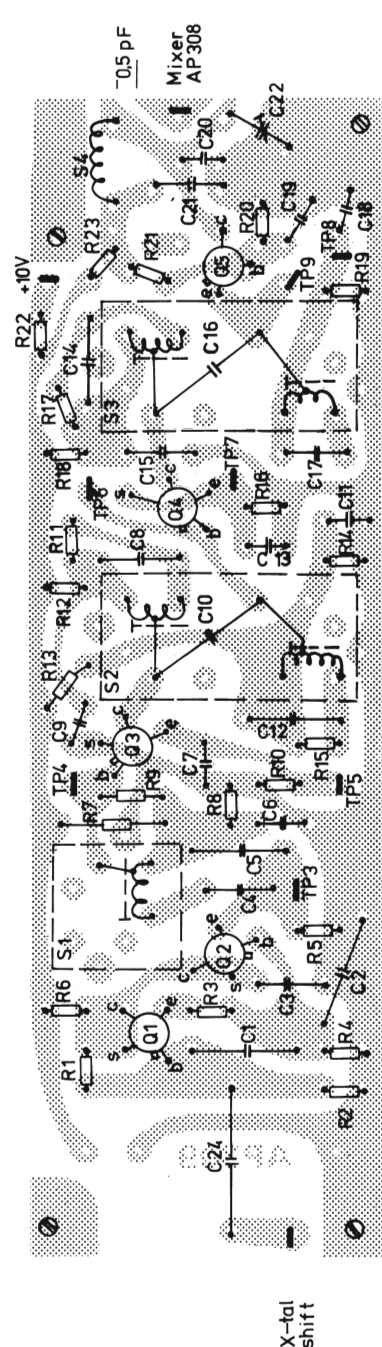
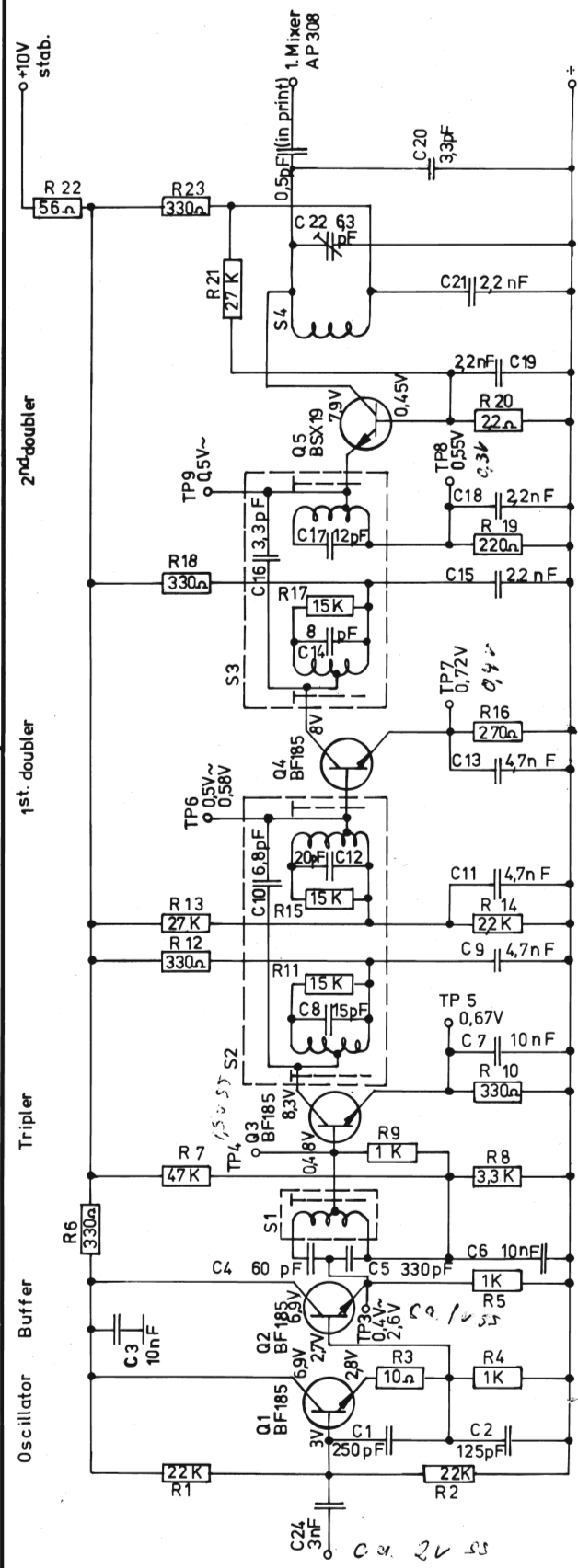
Tegn.: EB

Kontr.:

Stykl. nr.:

70167/4

446/94



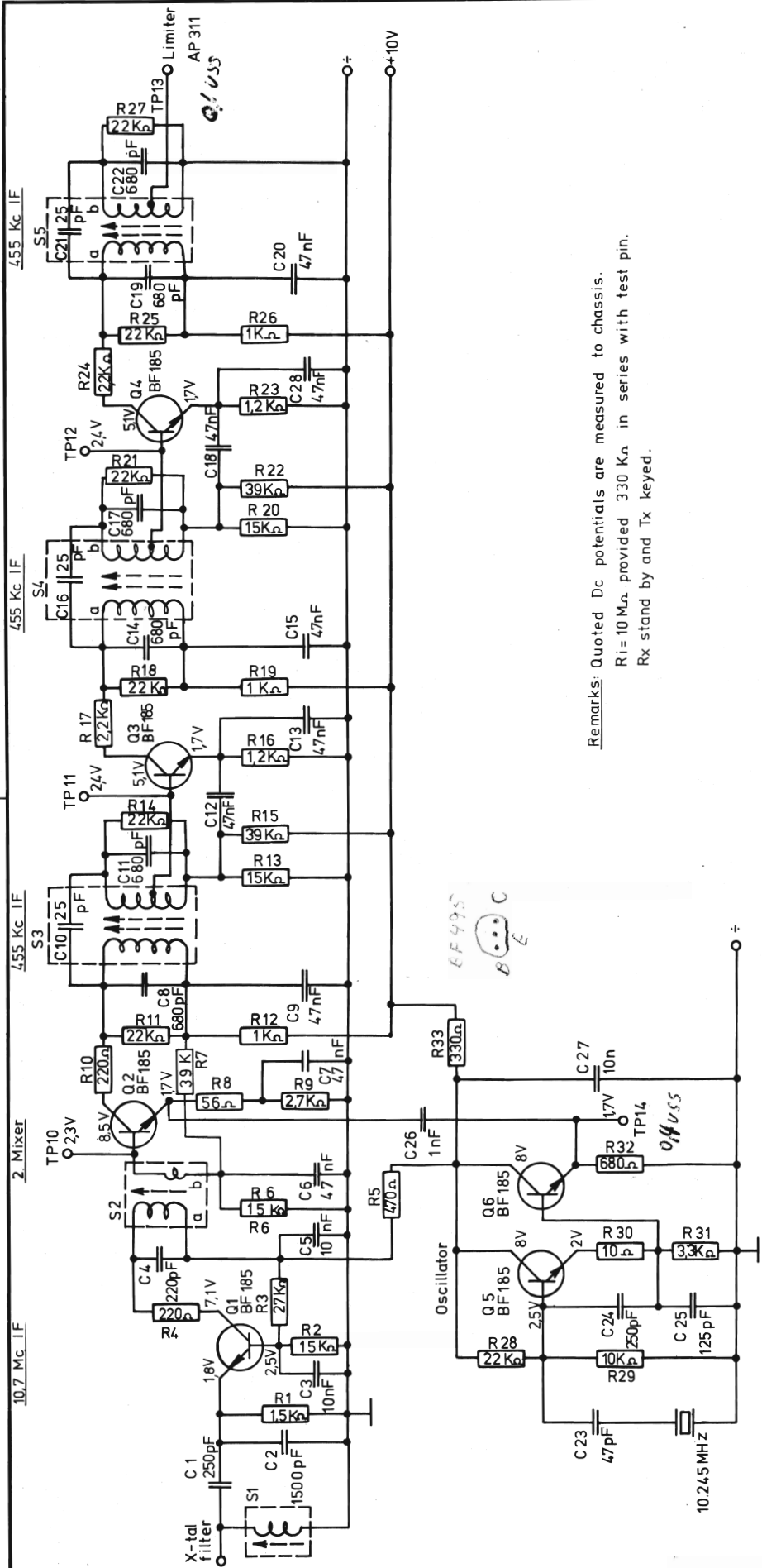
Remarks: Quoted Dc potentials are measured to chassis.
 Ri = 10 M Ω provided 330K Ω in series with test pin.
 Rx stand by and Tx keyed.

Rettet:	MULTIPLIER 2M RECEIVER PRINT BOARD AP309 AP-RADIOTELEFON	Tegn.: 11.8.70 BEP Kontr.: 11.8.70 E.F. Stylk. nr.: 70194/4 Tegn. nr.: Erstatte 68105/3 70193/4
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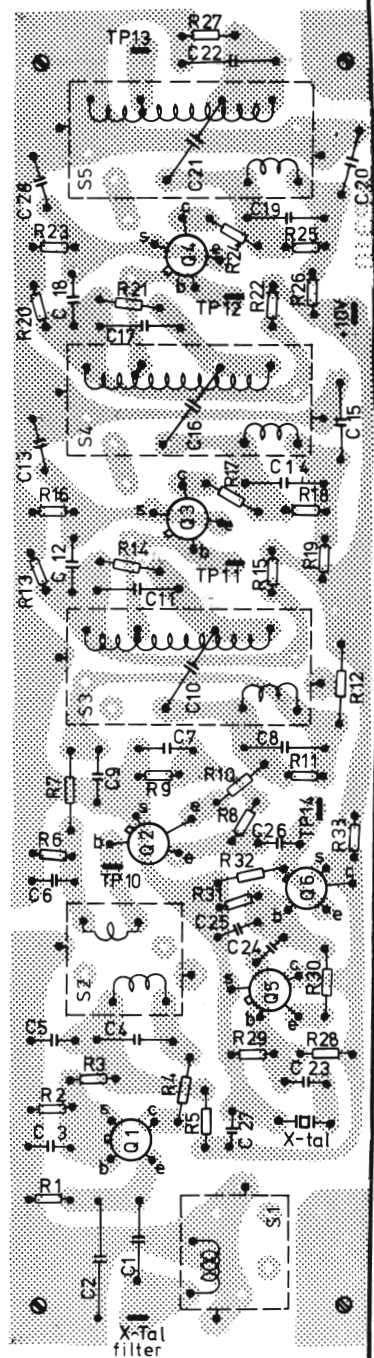
AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R1		22 Kohm $\frac{1}{4}$ W			
R2		22 Kohm "			
R3		10 ohm "			
R4		1 Kohm "			
R5		1 Kohm "			
R6		330 ohm "			
R7		47 Kohm "			
R8		3,3 Kohm "			
R9		1 Kohm "			
R10		330 ohm "			
R11		15 Kohm "			
R12		330 ohm "			
R13		27 Kohm "			
R14		2,2 Kohm "			
R15		15 Kohm "			
R16		270 ohm "			
R17		15 Kohm "			
R18		330 ohm "			
R19		220 ohm "			
R20		2,2 Kohm "			
R21		27 Kohm "			
R22		56 ohm "			
R23		330 ohm "			
C1		250 pF styr.			
C2		125 pF styr.			
C3		10 nF ker.			
C4		60 pF styr.			
C5		330 pF styr.			
C6		10 nF ker.			
C7		10 nF ker.			
C8		15 pF ker.			
C9		4,7 nF ker.			
C10		6,8 pF styr.			
C11		4,7 pF ker.			
C12		20 pF styr.			
C13		4,7 nF ker.			
C14		8 pF ker.			
C15		2,2 nF ker.			
C16		3,3 pF styr.			
C17		12 pF ker.			
C18		2,2 nF ker.			
C19		2,2 nF ker.			
C20		3,3 pF ker.			
C21		2,2 nF ker.			
C22		6,3 pF trim.			
C24		3 nF styr.			
S1		L17 Tg. 68098/4			
S2		L24 Tg. 68206/4			
S3		L25 Tg. 68206/4			
S4		L20			
Q1		BF 185			
Q2		BF 185			
Q3		BF 185			
Q4		BF 185			
Q5		BSX 19			
Multiplier 2m Receiver AP 700			Rettet:		Tegn.: EB
Printboard AP 309					Kontr.:
Tilhører tegn. nr.: 70193/4					Stykl. nr.: 70194/4

194.



Remarks: Quoted Dc potentials are measured to chassis.
 R1= 10 M Ω provided 330 K Ω in series with test pin.
 Rx stand by and Tx keyed.



Rettet:

10.7Mc AND 455Kc IF AMPLIFIER PRINT BOARD AP 310
 AP 70C NARROWBAND

AP-RADIOTELEFON

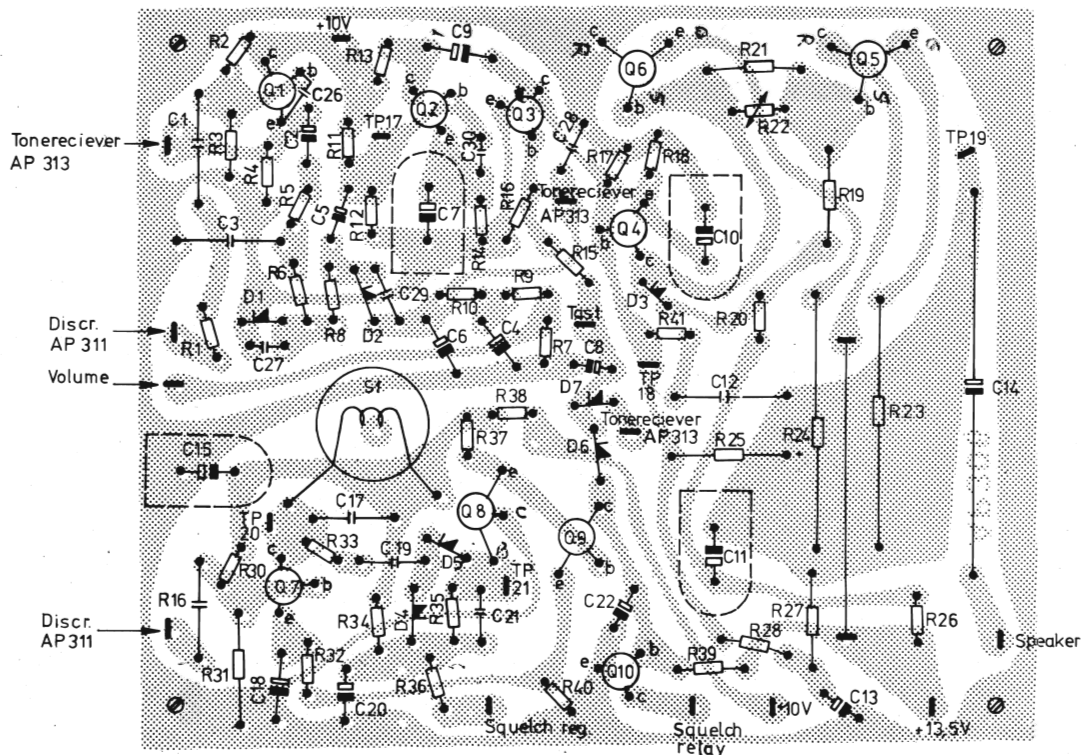
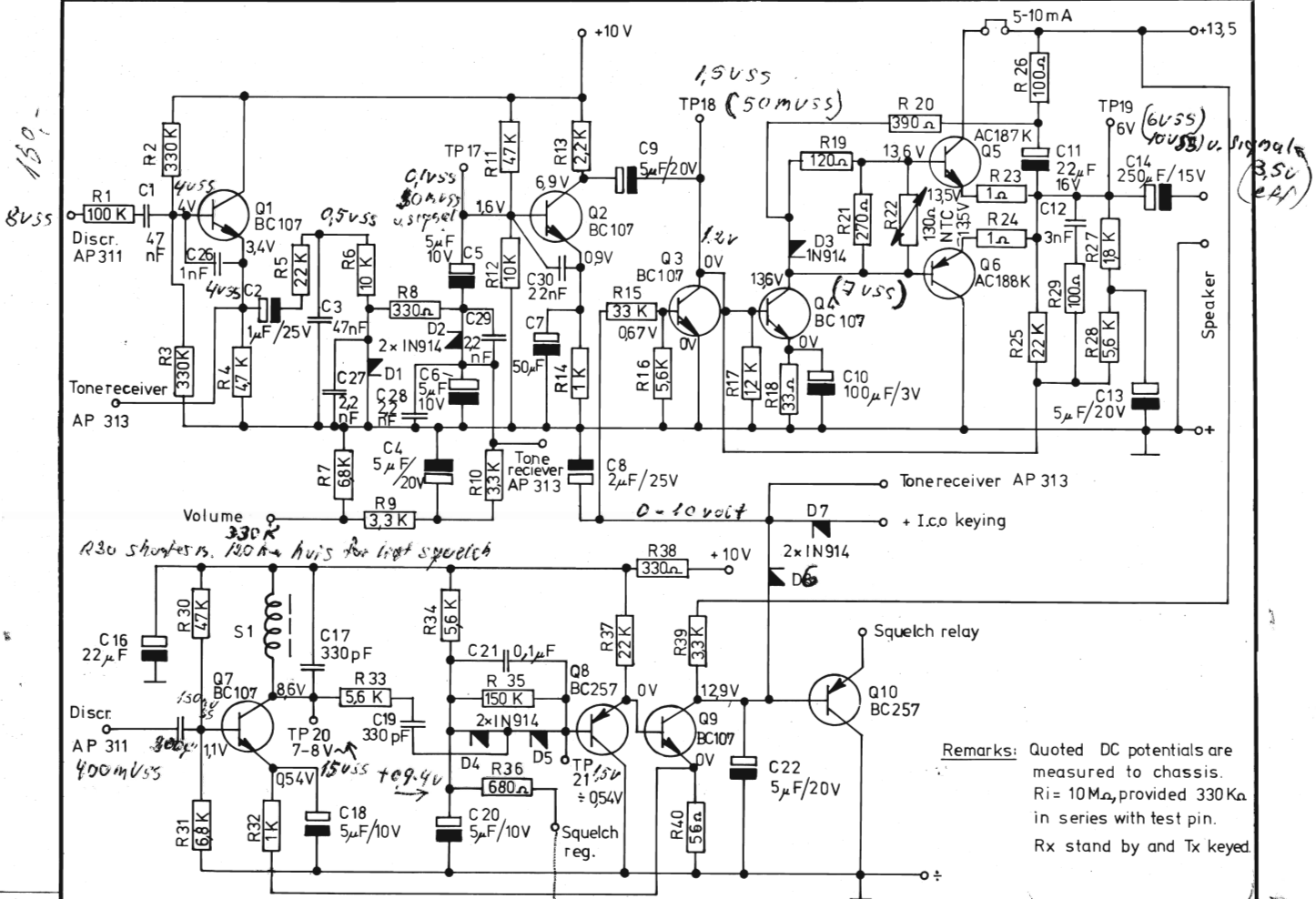
Tegn.: 25.3.70 BEP	Kontr.: 25.3.70 EF
Stykl. nr.: 70151/4	
Tegn. nr.: Erstatner 68007/4	
70150/4	

AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R1		1,5 Kohm $\frac{1}{4}$ W	C22		680 pF styr.
R2		15 Kohm "	C23		47 pF styr.
R3		27 Kohm "	C24		250 pF styr.
R4		220 ohm "	C25		125 pF styr.
R5		470 ohm "	C26		1 nF ker.
R6		15 Kohm "	C27		10 nF ker.
R7		39 Kohm "	C28		47 nF ker.
R8		56 ohm "			
R9		2,7 Kohm "	S1		L11 Tg. 68093/4
R10		220 ohm "	S2		L12 Tg. 68093/4
R11		22 Kohm "	S3		L13 Tg. 68095/4
R12		1 Kohm "	S4		L13 Tg. 68095/4
R13		15 Kohm "	S5		L13 Tg. 68095/4
R14		22 Kohm "			
R15		39 Kohm "	Q1		BF 185
R16		1,2 Kohm "	Q2		BF 185
R17		2,2 Kohm "	Q3		BF 185
R18		22 Kohm "	Q4		BF 185
R19		1 Kohm "	Q5		BF 185
R20		15 Kohm "	Q6		BF 185
R21		22 Kohm "			
R22		39 Kohm "	X1		X-tal 10.245 Mhz
R23		1,2 Kohm "			
R24		2,2 Kohm "			
R25		22 Kohm "			
R26		1 Kohm "			
R27		22 Kohm "			
R28		22 Kohm "			
R29		10 Kohm "			
R30		10 ohm "			
R31		3,3 Kohm "			
R32		680 ohm "			
R33		330 ohm "			
C1		250 pF styr.			
C2		1,5 nF styr.			
C3		10 nF ker.			
C4		220 pF styr.			
C5		10 nF ker.			
C6		47 nF/12v ker.			
C7		47 nF/12v ker.			
C8		680 pF styr.			
C9		47 nF/12v ker.			
C10		25 pF styr.			
C11		680 pF styr.			
C12		47 nF/12v ker.			
C13		47 nF/12v ker.			
C14		680 pF styr.			
C15		47 nF/12v ker.			
C16		25 pF styr.			
C17		680 pF styr.			
C18		47 nF/12v ker.			
C19		680 pF styr.			
C20		47 nF/12v ker.			
C21		25 pF styr.			
10,7Mc and 455kc IF-Amplifier Print Board AP310 Narrowband. Tilhører tegn. nr.: 70150/4			Rettet:		Tegn.: EB Kontr.: Stykl. nr.: 70151/4

AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R1		27 Kohm $\frac{1}{4}$ W			
R2		10 Kohm "			
R3		680 ohm "			
R4		2,7 Kohm "			
R5		470 ohm "			
R6		1,5 Kohm "			
R7		18 Kohm "			
R8		1,5 Kohm "			
R9		1 Kohm "			
R10		470 ohm "			
R11		39 Kohm "			
R12		15 Kohm "			
R13		1,8 Kohm "			
R14		2,2 Kohm "			
R15		150 Kohm "			
R16		150 Kohm "			
R17		1 Kohm "			
C1		47 nF ker.			
C2		47 nF ker.			
C3		47 nF ker.			
C4		680 pF styr.			
C5		4,7 nF ker.			
C6		4,7 nF ker.			
C7		2 nF ker.			
C8		47 nF ker.			
C9		680 pF styr.			
C10		2 nF styr.			
C11		220 pF styr.			
C12		220 pF styr.			
C13		0,1 mF ker.			
C14		470 pF styr.			
C15		470 pF styr.			
RFC					
-1		Wide Band RFC			
S1		L16 Tg. 68096/4			
D1		AA118			
D2		AA118			
D3		1N914			
D4		1N914			
Q1		BF 185			
Q2		BF 185			
Limiter And Discriminator Print Board AP 311 AP 700 Tilhører tegn. nr.: 70145/4			Rettet:		Tegn.: EB Kontr.: Stykl. nr.: 70146/4



Rettet:	AF AND SQUELCH AP 700 PRINT BOARD AP306	Tegn.: BEP 18.6.70	Kontr.: E.F 18.6.70
		Stykl. nr.: 70144/4	
		Tegn. nr.: Erstatte 68013/3	
		70143 / 4	
	AP-RADIOTELEFON		

AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R1		100 Kohm $\frac{1}{4}$ W	C15		22 mF/16v tant.
R2		330 Kohm "	C16		220 pF styr.
R3		330 Kohm "	C17		330 pF styr.
R4		4,7 Kohm "	C18		4,7 mF/lov tant.
R5		22 Kohm "	C19		330 pF styr.
R6		10 Kohm "	C20		4,7 mF/lov tant.
R7		6,8 Kohm "	C21		0,1 mF/12v ker.
R8		330 ohm "	C22		4,7 mF/25v tant.
R9		3,3 Kohm "	C26		1 nF ker.
R10		3,3 Kohm "	C27		2,2 nF ker.
R11		47 Kohm "	C28		2,2 nF ker.
R12		10 Kohm "	C29		2,2 nF ker.
R13		2,2 Kohm "	C30		2,2 nF ker.
R14		1 Kohm "			
R15		33 Kohm "	S1		L21 Tg. 67091/4
R16		5,6 Kohm "			
R17		1,2 Kohm "	D1		1N914
R18		33 ohm "	D2		1N914
R19		120 ohm "	D3		1N914
R20		390 ohm "	D4		1N914
R21		270 ohm "	D5		1N914
R22		130 ohm NTC	D6		1N914
R23		1 ohm $\frac{1}{2}$ W	D7		1N914
R24		1 ohm "			
R25		22 Kohm $\frac{1}{4}$ W	Q1		BC 107 b
R26		100 ohm "	Q2		BC 107 b
R27		1,8 Kohm "	Q3		BC 107 b
R28		5,6 Kohm "	Q4		BC 107 b
R29		100 ohm "	Q5		AC 187 k
R30		47 Kohm "	Q6		AC 188 k parret
R31		6,8 Kohm "	Q7		BC 107 b
R32		1 Kohm "	Q8		BC 257 a
R33		5,6 Kohm "	Q9		BC 107 b
R34		5,6 Kohm "	Q10		BC 257 a
R35		150 Kohm "			
R36		680 ohm "			
R37		22 Kohm "			
R38		330 ohm "			
R39		3,3 Kohm "			
R40		56 ohm "			
C1		47 nF pol.			
C2		1 mF/35v tant.			
C3		47 nF pol.			
C4		4,7 mF/25v tant.			
C5		4,7 mF/lov tant.			
C6		4,7 mF/lov tant.			
C7		50 mF/16v lyt.			
C8		2,2 mF/35v tant.			
C9		4,7 mF/25v tant.			
C10		100 mF/6v lyt.			
C11		22 mF/16v tant.			
C12		3,3 nF styr.			
C13		4,7 mF/25v tant.			
C14		250 mF/16v lyt.			
Af and Squelch AP 700 Print Board AP 306 Tilhører tegn. nr.: 70143/4			Rettet:		<div>Tegn.: EB</div> <div>Kontr.: </div> <div>Stykl. nr.: 70144/4</div>

Alignment procedure for sequence tonereceiver AP 351.

The capacitors of the chosen code numbers in accordance to the scheme (see dwg.no.70180/4.) are to be installed, first code at C7, second at C13 and third at O20. Place the trim.pot. meters R11, R22 and R33 to center position.

An AF-generator tuned to the chosen frequency in connection with a signal generator is connected to the VHF-receiver. The deviation is adjusted in accordance to the scheme. A VTVM in range 3 Volt is connected to TP 50. The core of S1 is adjusted to max. deflection. By means of R11 the size of the deflection is adjusted to 1,5 Volt hereby another max. adjustment must be tried on the iron core of S1 and the deflection readjusted to 1,5 Volt. First tone should be adjusted and the same procedure is followed for tone two and three where R22, S2 and R33, S3 have to be used.

To obtain the tuning of tone two and three a separate power supply of each tone section has to be made, to obtain this, a connection between + 10V and the house of the respective transistor- Q7 and Q11 has to be made.

For tonereceivers, comprising only one or two tones, the procedure is the same as mentioned above.

E. Folling 31-7-70.

AP-RADIOTELEFON

TUNING INSTRUCTION

Tone Transmitter AP 369. (See dwg. 70210/4)

The chosen tonenumbers are being set in according to the scheme dwg.no.: 7o 18o/4, so that the capacitor representing tone 1 is mounted in position "C 1" and the capacitor representing tone 2 is mounted in position "C 2".

Connect 1o Volt supply to TP 39 and tune S 1 to the correct tone frequency with the aid of an AF frequency counter, and set the deviation by means of R 12, with the aid of a modulation meter, according to the scheme. Similar for tone 2 connect 1o Volt supply to TP 4o, frequency correction, tune S 2 , deviation set R 13.

In case of an automatic dual tone transmitter follow instructions above and for setting the timing of the tones, adjust R 16 so that first tone, when actuated, lasts 2 sec. before tone 2 starts.

Rettet:	TUNING INSTRUCTION FOR	Tegn.: 26.8.70	Kontr.: 26.8.70
	TONE TRANSMITTER AP 369	Stykl. nr.:	G.A.V.
	AP-RADIOTELEFON	Tegn. nr.:	70222/4

Thisted Betanverk 26
N.C. Andersen og Co. 24

Tone	Frequency in C/s	Values for "Siemens" pot. core 22/13 N28 A315	Values for "Philips" pot. core 22/13 - 3B7 AOA - μ e 150	Values for "Siemens" pot. core 22/13 N28 A315	Values for "Philips" pot. core 22/13 AOA μ e 150	Frequency Deviation in K c/s
0	980	23500	16900	21000	16000	1,2
1	1190	15500	11400	13800	10700	1,4
2	1380	11200	8300	10100	7900	1,65
3	1600	8300	6200	7300	5800	1,9
4	1800	6500	4900	5600	4500	2,2
5	2010	5200	3900	4400	3500	2,5
6	2220	4200	3200	3500	2800	2,8
7	2410	3600	2700	2900	2300	3,1
8	2590	3100	2300	2400	1950	3,3
9	2820	2600	2000	1900	1600	3,5

C/C/R

970

1124

1197

1276

1358

1446

1540

1640

1747

1860

1981

2110

2400

Rettet:

C values for tone-receiver
AP 351, and tonetransmitter AP 369

AP-RADIOTELEFON

Tegn.: A.B.P.
13/10-70

Stykl. nr.:

Tegn. nr.:

70180/4

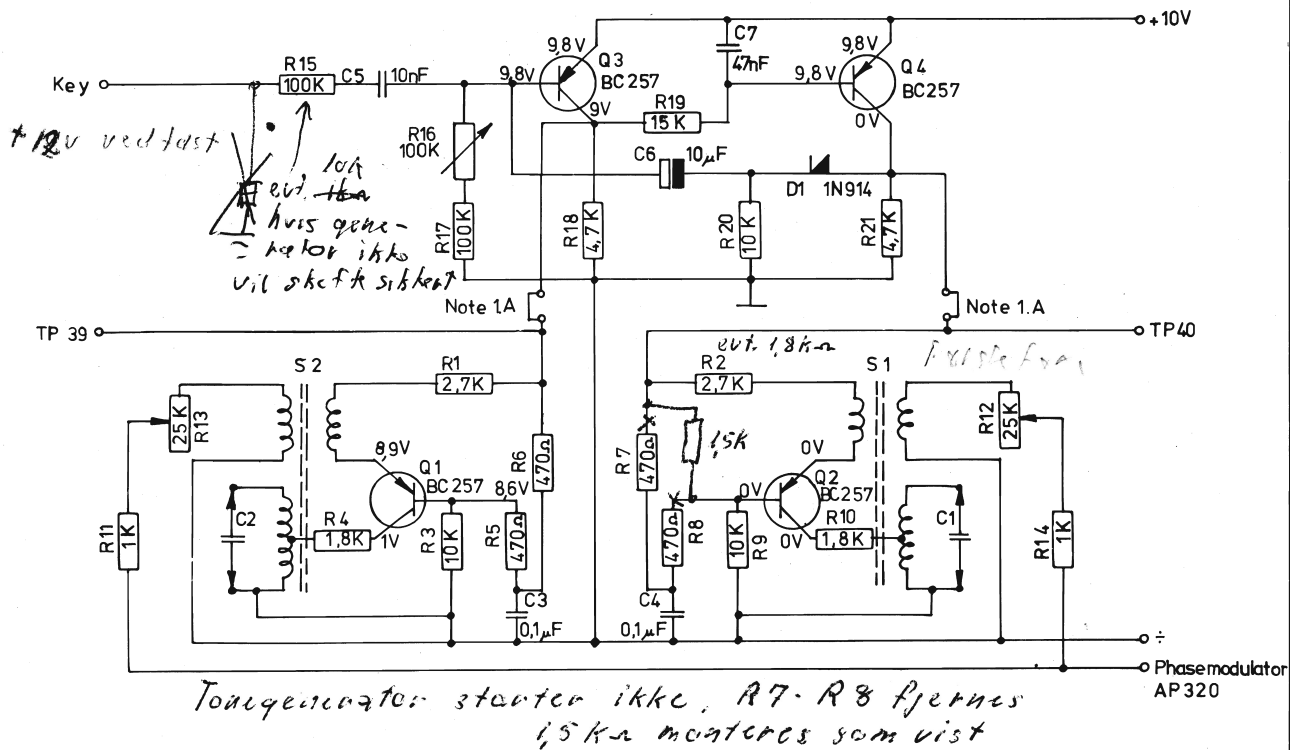
Kontr.: EF
13-10-70

10

11

12

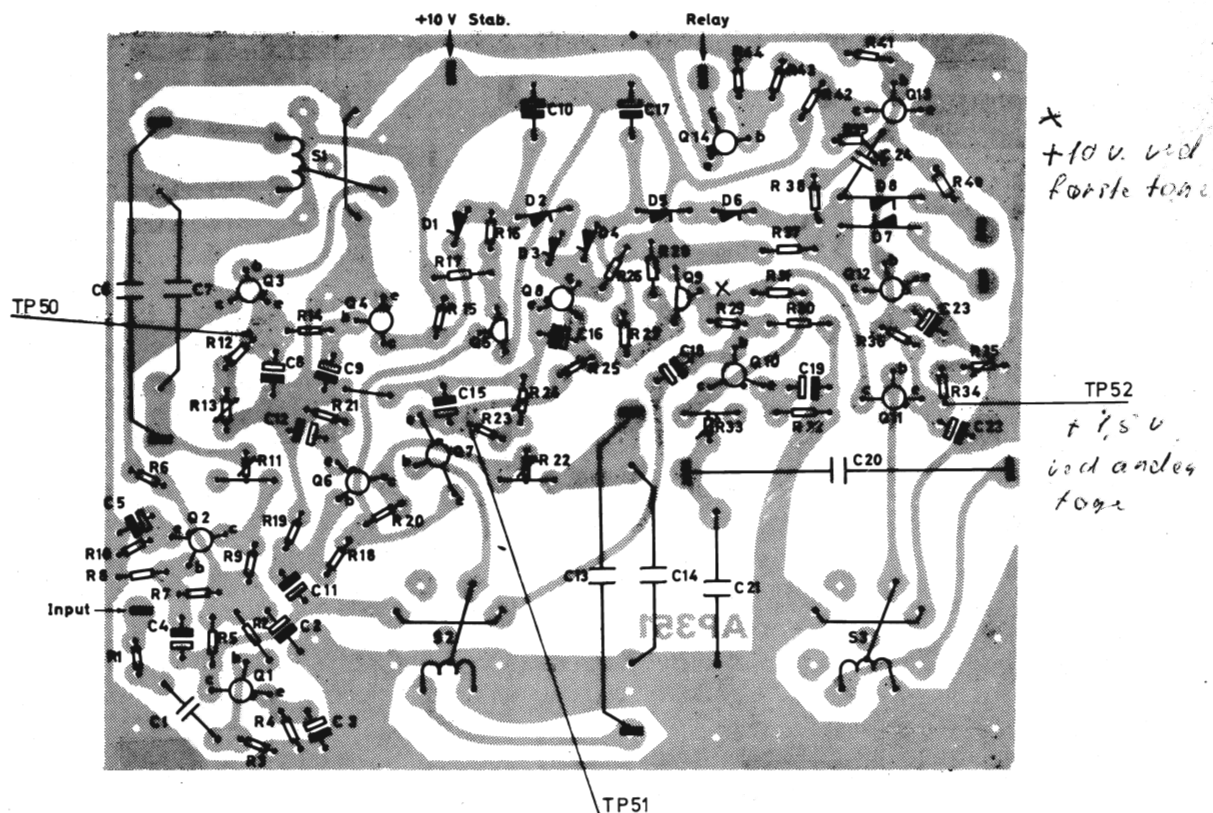
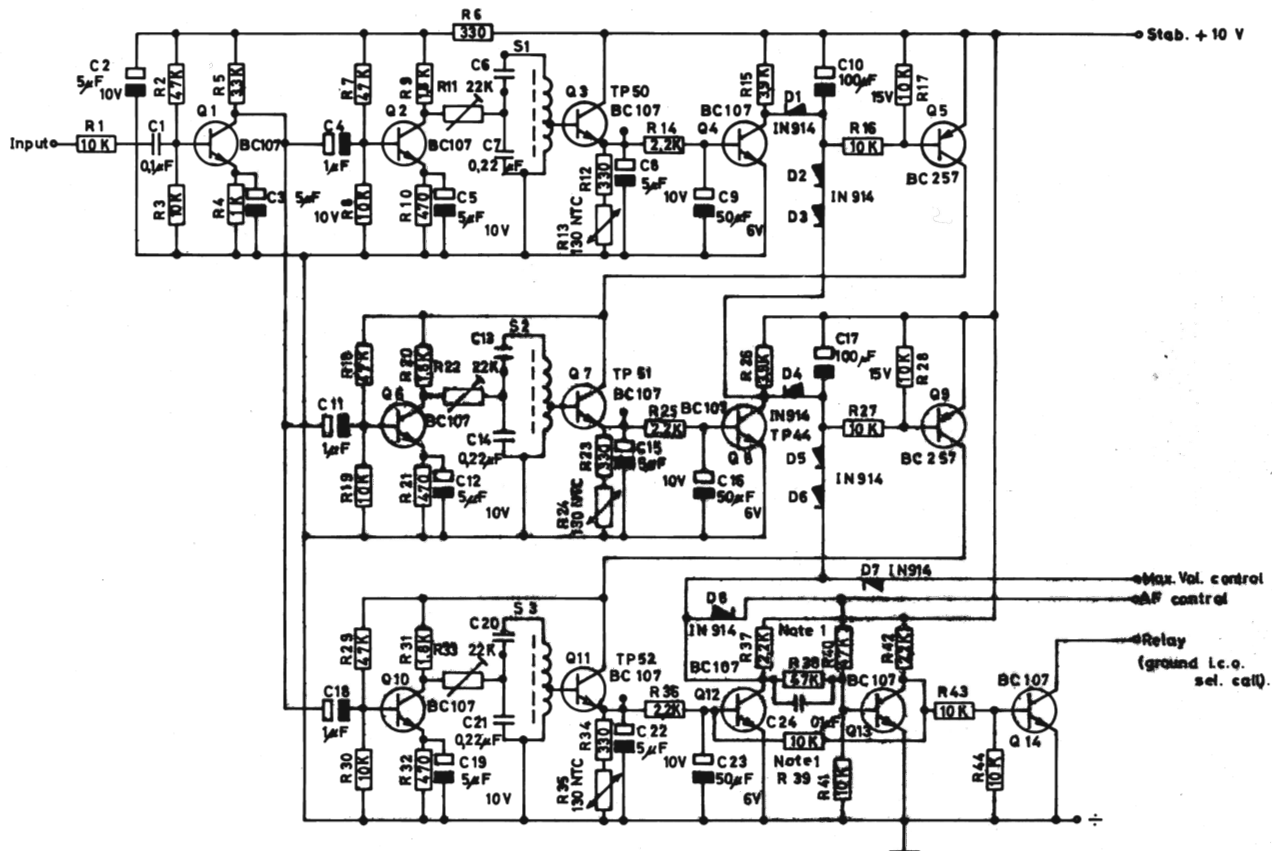
BC 257 = BC 557



Rettet:	DUAL TONEGENERATOR WITH AUTOMATIC CHANGE OVER	Tegn.: 26.8.70 BEP	Kontr.: 26.8.70 E.F.
	PRINT BOARD AP 369/3 AP700.	Stykl. nr.: 70211/4	
	AP-RADIOTELEFON	Tegn. nr.: 70210/4	

AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R1		2,7 Kohm $\frac{1}{4}$ W			
R2		2,7 Kohm "			
R3		10 Kohm "			
R4		1,8 Kohm "			
R5		470 ohm "			
R6		470 ohm "			
R7		470 ohm "			
R8		470 ohm "			
R9		10 Kohm "			
R10		1,8 Kohm "			
R11		1 Kohm "			
R12		25 Kohm pot.			
R13		25 Kohm pot.			
R14		1 Kohm $\frac{1}{4}$ W			
R15		100 Kohm "			
R16		100 Kohm pot.			
R17		100 Kohm $\frac{1}{4}$ W			
R18		4,7 Kohm "			
R19		15 Kohm "			
R20		10 Kohm "			
R21		4,7 Kohm "			
C1		matched f. code			
C2		matched f. code			
C3		0,1 mF pol.			
C4		0,1 mF pol.			
C5		10 nF ker.			
C6		10 mF/25v tant.			
C7		47 nF ker.			
S1		L67 Tg. 69142/4			
S2		L67 Tg. 69142/4			
D1		1N914			
Q1		Bc 257			
Q2		Bc 257			
Q3		Bc 257			
Q4		Bc 257			
Dual Tonegenerator with Automatic Change Over Tilhører tegn. nr.: 70210/4 AP 369			Rettet:		<div>Tegn.: EB</div> <div>Kontr.: 70211/4</div>



Alignment procedure
look for description no. 70176/4
and C values no. 70180/4

Note 1: R 39 and R 40 are only incorporated
at squelch controlled sel. call.

Rettet:

Sequence tone receiver for 3 tones
Printboard AP 351 AP 700

AP-RADIOTELEFON

Tegn.: 25.8.70 H. Kontr.: 25.8.70 E.F.

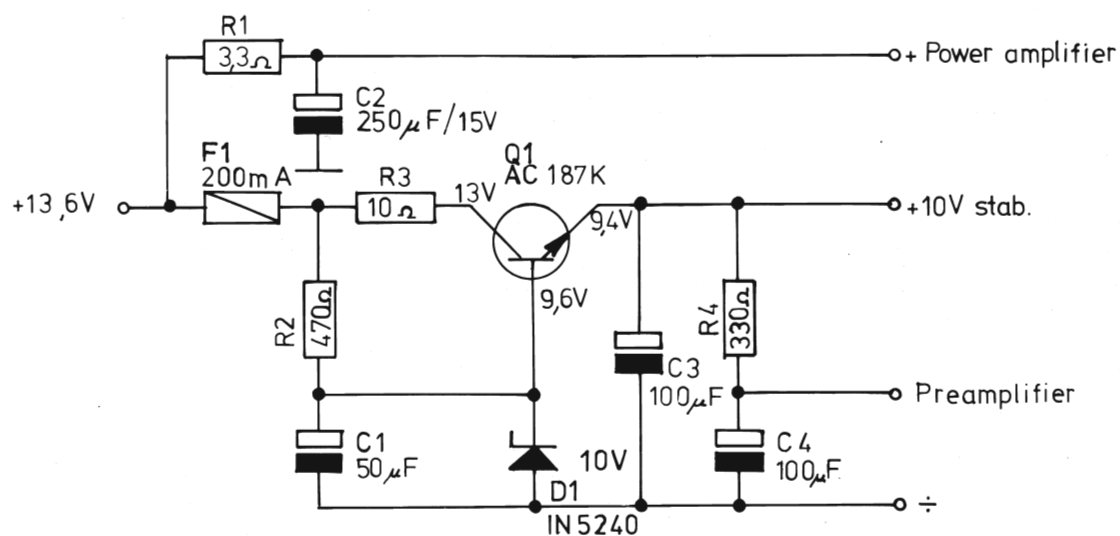
Stykl. nr.: 70213 /4

Tegn. nr.:Erstatter 69041/3.

70212/4

AP-RADIOTELEFON

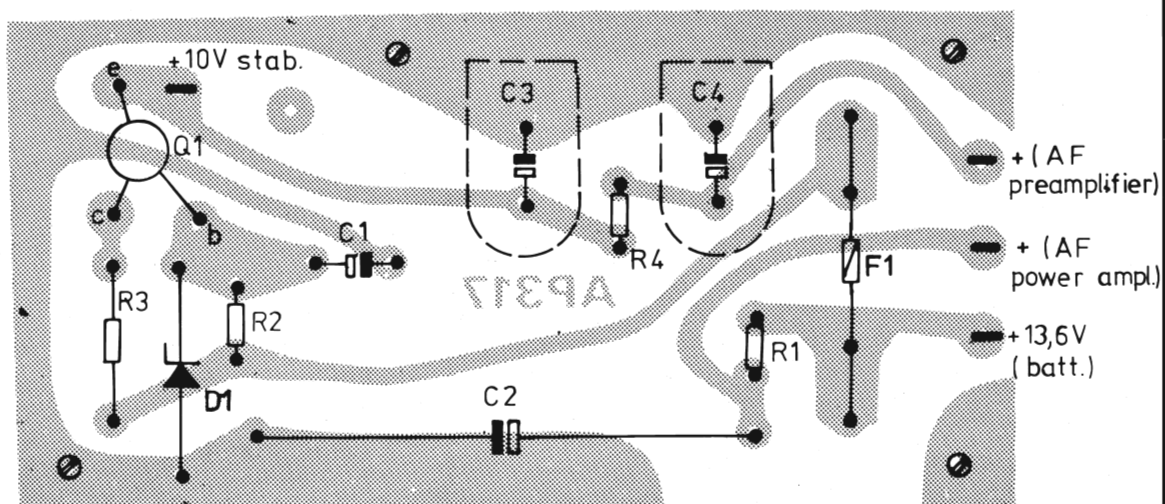
Nr.	Kode	Data	Nr.	Kode	Data
R1		10 Kohm $\frac{1}{4}$ W	C13		matched f. code
R2		47 Kohm "	C14		0,22 mF MKH
R3		10 Kohm "	C15		5 mF/10v tant.
R4		1 Kohm "	C16		50 mF/6v tant.
R5		3,3 Kohm "	C17		100 mF/15v lyt.
R6		330 ohm "	C18		1 mF/35v tant.
R7		47 Kohm "	C19		5 mF/10v tant.
R8		10 Kohm "	C20		matched f. code
R9		1,8 Kohm "	C21		0,22 mF MKH
R10		470 ohm "	C22		5 mF/10v tant.
R11		22 Kohm pot.	C23		50 mF/6v tant.
R12		330 ohm $\frac{1}{4}$ W	C24		0,1 mF/12v ker.
R13		130 ohm NTC			
R14		2,2 Kohm $\frac{1}{4}$ W	S1		L181 Tg. 69148/4
R15		3,9 Kohm "	S2		L181 Tg. 69148/4
R16		10 Kohm "	S3		L181 Tg. 69148/4
R17		10 Kohm "			
R18		47 Kohm "	D1		1N914
R19		10 Kohm "	D2		1N914
R20		1,8 Kohm "	D3		1N914
R21		470 ohm "	D4		1N914
R22		22 Kohm pot.	D5		1N914
R23		330 ohm $\frac{1}{4}$ W	D6		1N914
R24		130 ohm NTC	D7		1N914
R25		2,2 Kohm $\frac{1}{4}$ W	D8		1N914
R26		3,9 Kohm "			
R27		10 Kohm "	Q1		Bc 107
R28		10 Kohm "	Q2		Bc 107
R29		47 Kohm "	Q3		Bc 107
R30		10 Kohm "	Q4		Bc 107
R31		1,8 Kohm "	Q5		Bc 257
R32		470 ohm "	Q6		Bc 107
R33		22 Kohm pot.	Q7		Bc 107
R34		330 ohm $\frac{1}{4}$ W	Q8		Bc 107
R35		130 ohm NTC	Q9		Bc 257
R36		2,2 Kohm $\frac{1}{4}$ W	Q10		Bc 107
R37		2,2 Kohm "	Q11		Bc 107
R38		47 Kohm "	Q12		Bc 107
R39		10 Kohm "	Q13		Bc 107
R40		47 Kohm "	Q14		Bc 107
R41		10 Kohm "			
R42		2,2 Kohm "			
R43		10 Kohm "			
R44		10 Kohm "			
C1		0,1 mF/12v ker.			
C2		5 mF/10v tant.			
C3		5 mF/10v tant.			
C4		1 mF/35v tant.			
C5		5 mF/10v tant.			
C6		matched f. code			
C7		0,22 mF MKH			
C8		5 mF/10v tant.			
C9		50 mF/6v tant.			
C10		100 mF/15v lyt.			
C11		1 mF/35v tant.			
C12		5 mF/10v tant.			
Sequence Tone Receiver for 3 Tones Print AP 351 Tilhører tegn. nr.: 70212/4 AP 700			Rettet:		Tegn.: EB Kontr.:
					Stykl. nr.: 70213/4



Remarks: Quoted Dc potentials are measured to chassis.

Ri=10 MΩ provided 330KΩ in series with test pin.

Rx stand by and Tx keyed.



Erstatter 68070/4

Rettet:

10 V STAB. POWERSUPPLY
PRINT BOARD AP 317.

AP-RADIOTELEFON

Tegn.: 30.7.70
BEP

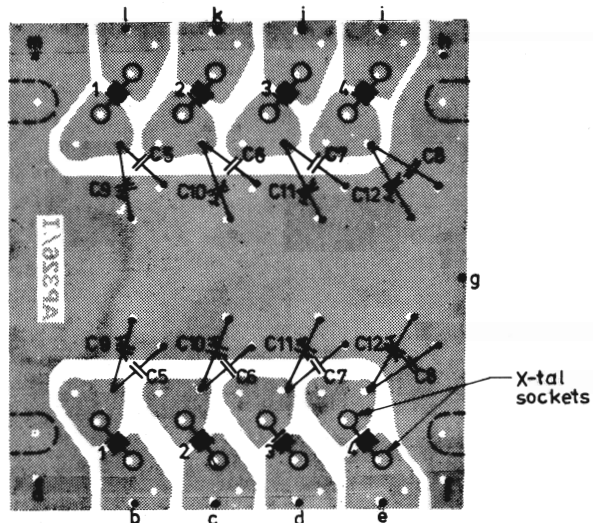
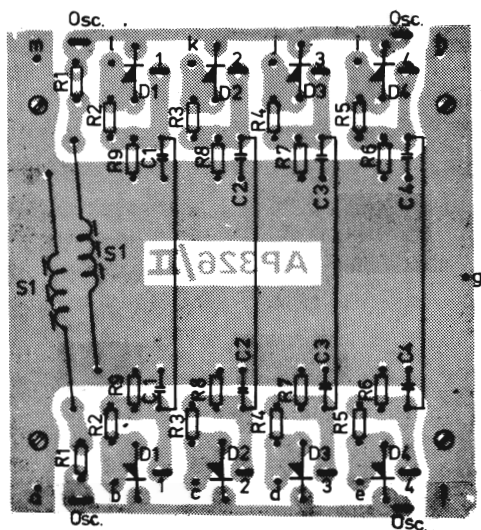
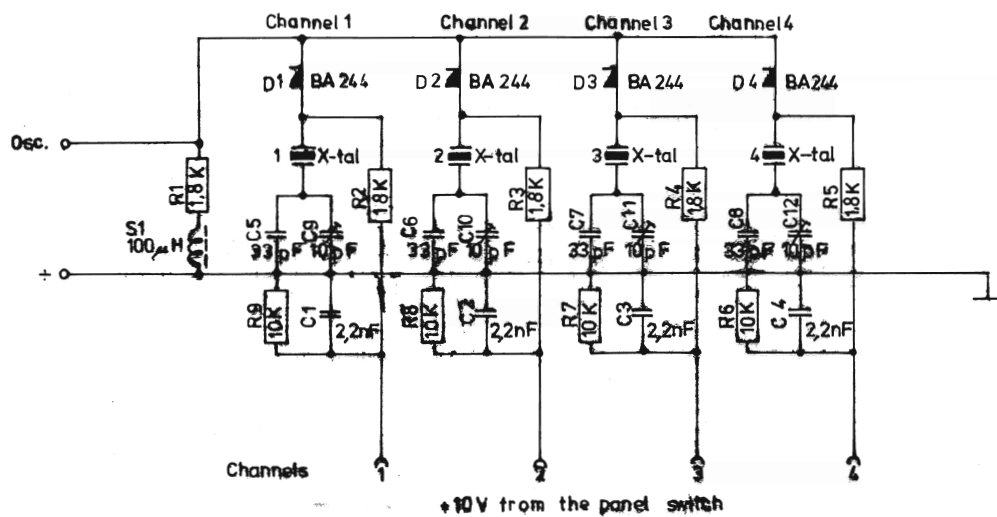
Kontr.: 30.7.70
E.F.

Stykl. nr.: 70178/4

Tegn. nr.: 70177/4

AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R1		3,3 ohm $\frac{1}{2}$ W			
R2		470 ohm $\frac{1}{4}$ W			
R3		10 ohm "			
R4		330 ohm "			
C1		50 mF/16v 1yt.			
C2		250 mF/15v 1yt.			
C3		100 mF/16v 1yt.			
C4		100 mF/16v 1yt.			
D1		1N5240 10v zener			
Q1		Ac 187 k			
F1		200 mA sikring			
lov stab. Powersupply AP 700			Rettet:		Tegn.: EB
Printboard AP 317					Kontr.:
Tilhører tegn. nr.: 70177/4					Stykl. nr.: 70178/4



Rettet:

4 CHANNEL X-TAL SHIFT
PRINT BOARD AP 326 I+II

AP-RADIOTELEFON

Tegn.: 14.8.70
BEP

Kontr.: 14.8.70
E.F.

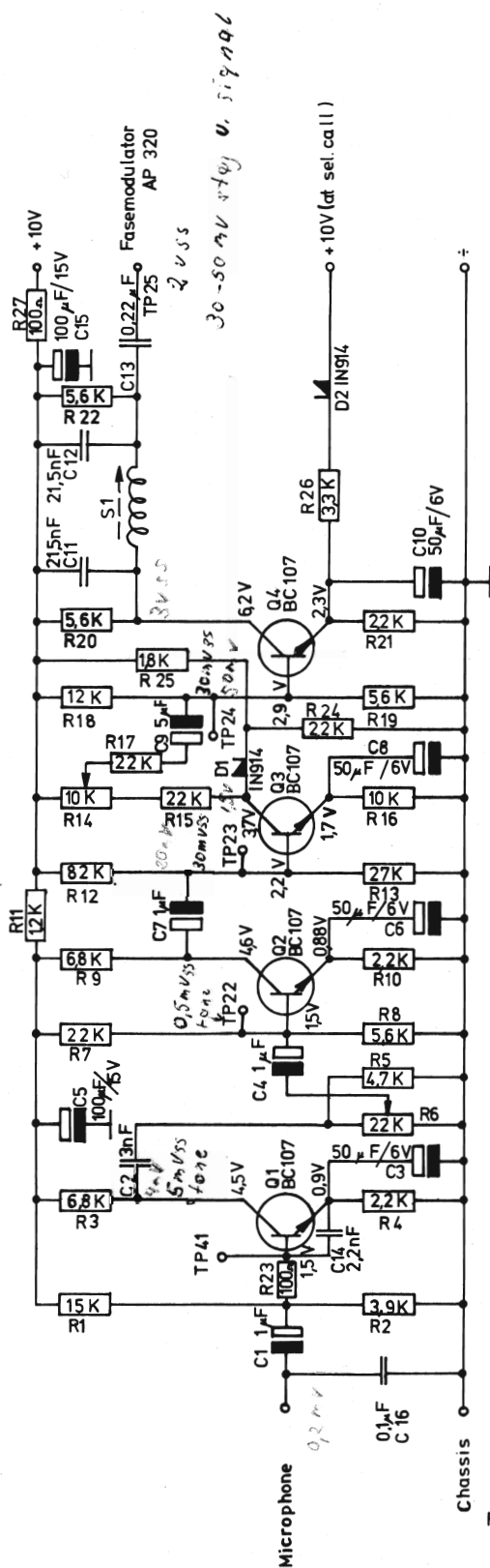
Stykl. nr.: 70197/4

Tegn. nr.: Erstatte 68071/4

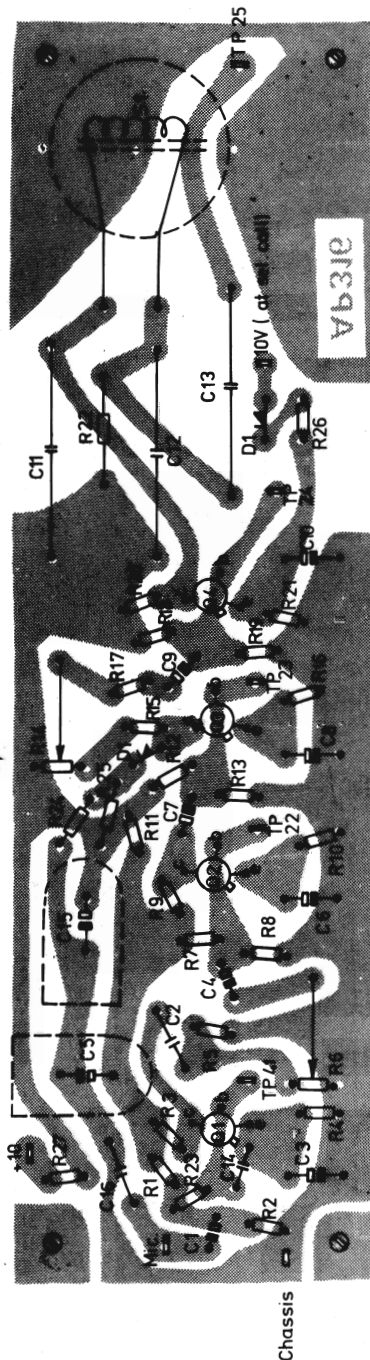
70196 /4

AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R1		1,8 Kohm $\frac{1}{4}$ W			
R2		1,8 Kohm "			
R3		1,8 Kohm "			
R4		1,8 Kohm "			
R5		1,8 Kohm "			
R6		10 Kohm "			
R7		10 Kohm "			
R8		10 Kohm "			
R9		10 Kohm "			
C1		2,2 nF ker.			
C2		2,2 nF ker.			
C3		2,2 nF ker.			
C4		2,2 nF ker.			
C5		33 pF styr.			
C6		33 pF styr.			
C7		33 pF styr.			
C8		33 pF styr.			
C9		10 pF trim.			
C10		10 pF trim.			
C11		10 pF trim.			
C12		10 pF trim.			
S1		Wide Band RFC			
D1		BA 244			
D2		BA 244			
D3		BA 244			
D4		BA 244			
4 Channel X-tal Shift AP 700			Rettet:		Tegn.: EB
Printboard AP 326 1+2					Kontr.:
Tilhører tegn. nr.: 70196/4			Stykl. nr.: 70197/4		



Boğazcı
5 kHz max



niyece
0.2 mV
1/3 max Ref. sen.
33 kHz
swing

Rettet:

MODULATIONAMPLIFIER PRINT BOARD AP 316
AP 700

AP-RADIOTELEFON

Tegn.: 11.6.70
BEP

Kontr.: 11.6.70
E.F.

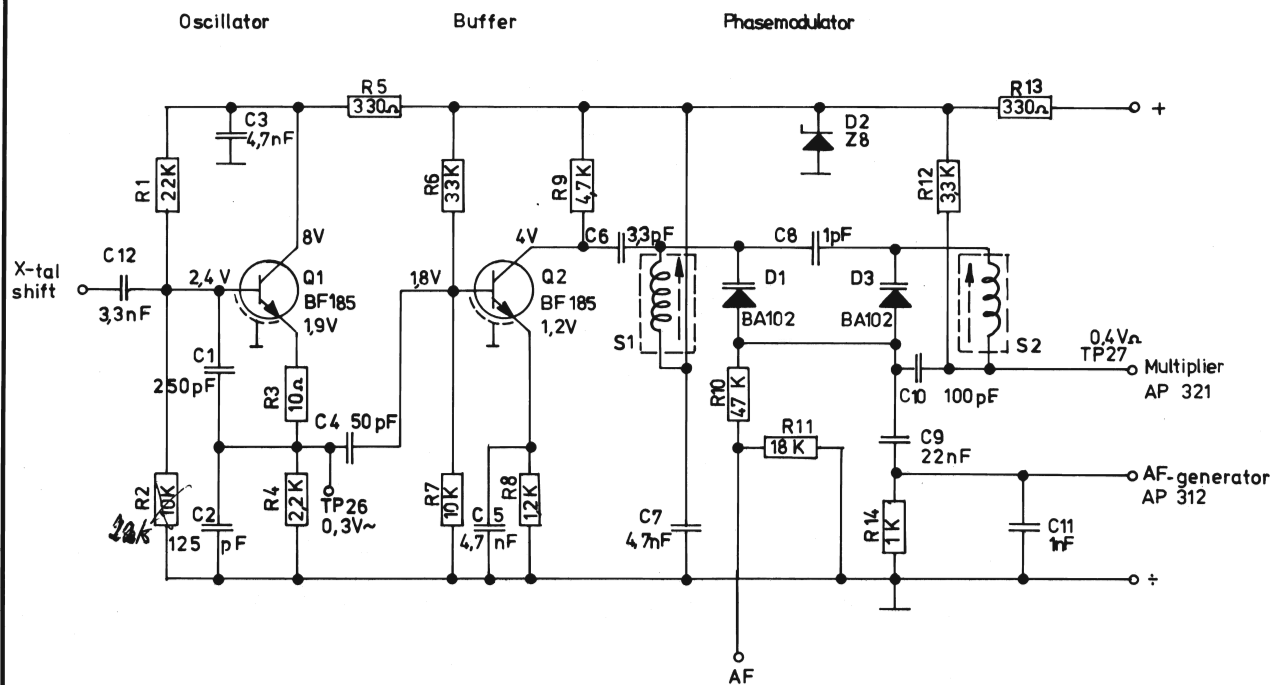
Stykl. nr.: 70148/4

Tegn. nr.: Erstatte 68020/3

70147/4

AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R1		15 Kohm $\frac{1}{4}$ W			
R2		3,9 Kohm "			
R3		6,8 Kohm "			
R4		2,2 Kohm "			
R5		4,7 Kohm "			
R6		25 Kohm pot.			
R7		22 Kohm $\frac{1}{4}$ W			
R8		5,6 Kohm "			
R9		6,8 Kohm "			
R10		2,2 Kohm "			
R11		1,2 Kohm "			
R12		82 Kohm "			
R13		27 Kohm "			
R14		10 Kohm pot.			
R15		22 Kohm $\frac{1}{4}$ W			
R16		10 Kohm "			
R17		22 Kohm "			
R18		12 Kohm "			
R19		5,6 Kohm "			
R20		5,6 Kohm "			
R21		2,2 Kohm "			
R22		5,6 Kohm "			
R23		100 ohm "			
R24		2,2 Kohm "			
R25		1,8 Kohm "			
R26		3,3 Kohm "			
R27		100 ohm "			
C1		1 mF/35v tant.			
C2		3 nF styr.			
C3		50 mF/6v tant.			
C4		1 mF/35v tant.			
C5		100 mF/16v lyt.			
C6		50 mF/6v tant.			
C7		1 mF/35v tant.			
C8		50 mF/6v tant.			
C9		4,7 mF/10v tant.			
C10		50 mF/6v tant.			
C11		21,5 nF styr.			
C12		21,5 nF styr.			
C13		0,22 mF NKH			
C14		2,2 nF ker.			
C15		100 mF/16v lyt.			
C16		0,1 mF ker.			
S1		L66 (Data forel.)			
D1		1N914			
D2		1N914			
Q1		BC 107 b			
Q2		BC 107 b			
Q3		BC 107 b			
Q4		BC 107 b			
MODULATIONAMPLIFIER AP 700			Rettet:		Tegn.: EB
PRINT BOARD AP 316.					Kontr.:
Tilhører tegn. nr.: 70147/4					Stykl. nr.: 70148/4

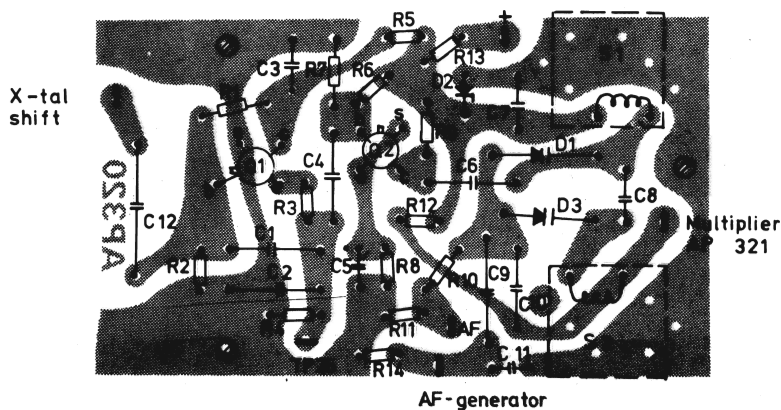


Remarks: Quoted Dc potentials are measured to chassis.

Ri=10M Ω provided 330 K Ω in series with test pin.

Rx stand by and Tx keyed.

*Hvis osc er ubillig 1/1 at starte på rigtig frekvens
kan man afstemme i S1*



Rettet:

OSCILLATOR AND PHASEMODULATOR 2 M TRANS-
MITTER. AP 700. PRINT BOARD AP 320.

AP-RADIOTELEFON

Tegn.: 4.8.70
BEP

Kontr.: 4.8.70
EF

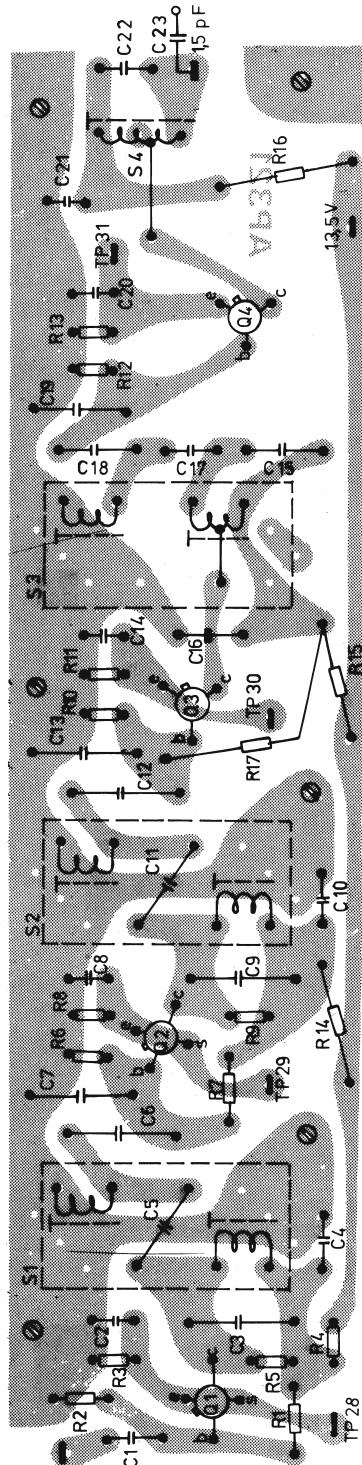
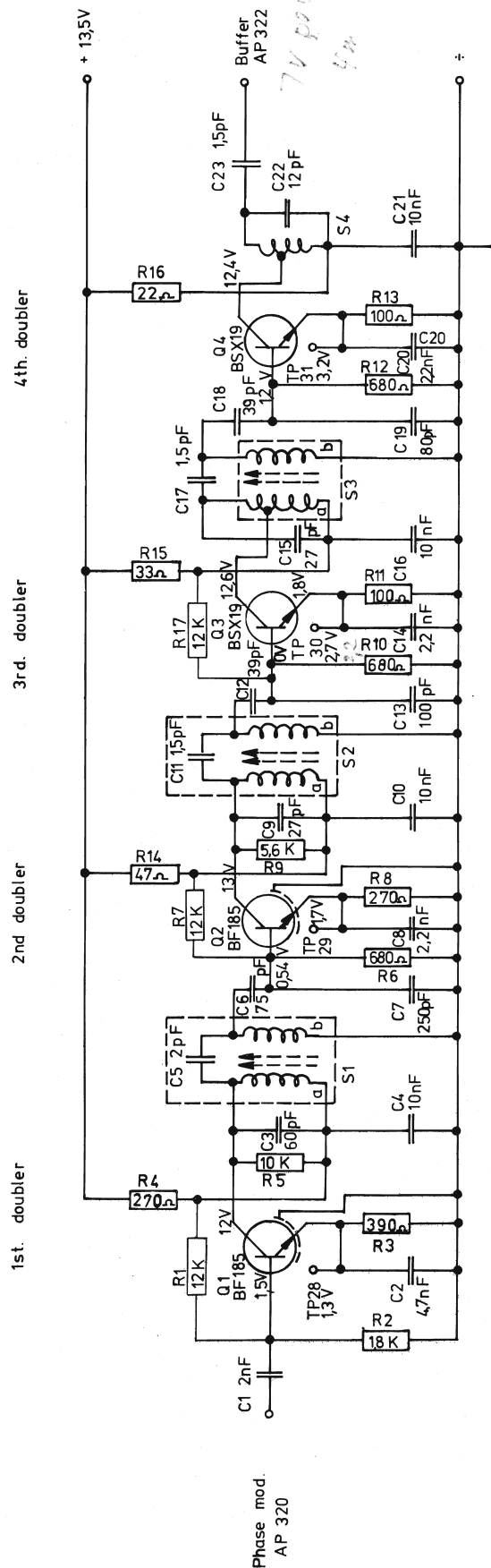
Stykl. nr.: 70182/4

Tegn. nr.: Erstatte 68012/3

70181 / 4

AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R1		22 Kohm $\frac{1}{4}$ W			
R2		10 Kohm "			
R3		10 ohm "			
R4		2,2 Kohm "			
R5		330 ohm "			
R6		33 Kohm "			
R7		10 Kohm "			
R8		1,2 Kohm "			
R9		4,7 Kohm "			
R10		47 Kohm "			
R11		18 Kohm "			
R12		3,3 Kohm "			
R13		330 ohm "			
R14		1 Kohm "			
C1		250 pF styr.			
C2		125 pF styr.			
C3		4,7 nF ker.			
C4		50 pF styr.			
C5		4,7 nF ker.			
C6		3,3 pF ker.			
C7		4,7 nF ker.			
C8		1 pF ker.			
C9		22 nF pol.			
C10		100 pF styr.			
C11		1 nF ker.			
C12		3,3 nF styr.			
S1		L51 Tg. 68092/4			
S2		L51 Tg. 68092/4			
D1		BA 102			
D2		Z8 zener			
D3		BA 102			
Q1		BF 185			
Q2		BF 185			
Oscillator and Phasemodulator			Rettet:		Tegn.: EB
2m Transmitter Print AP 320					Kontr.:
Tilhører tegn. nr.: 70181/4 AP 700					Stykl. nr.: 70182/4



Phase mod.
AP 320

Remarks: Quoted DC potentials are measured to chassis.
R_i=10M Ω provided 330 k Ω in series with test pin.
Rx stand by and Tx tastet.

Rettet:

MULTIPLIER 2M TRANSMITTER PRINT BOARD AP 321
AP 700

AP-RADIOTELEFON

Tegn.: 24.6.70
BEP

Kontr.: 24.6.70
E.F

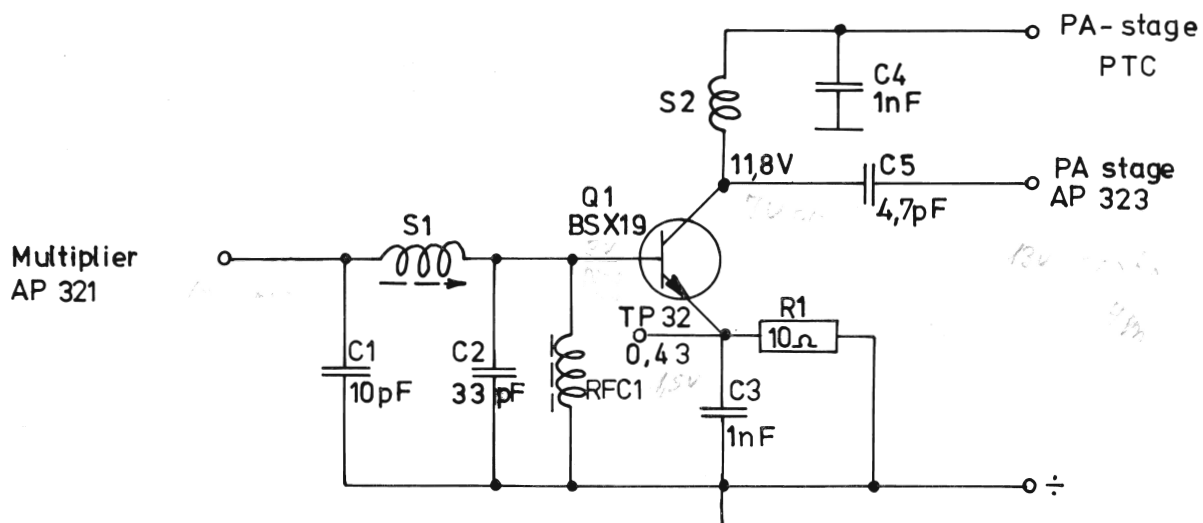
Stykl. nr.: 70158/4

Tegn. nr.: Erstatter 68008/3

70157/4

AP-RADIOTELEFON

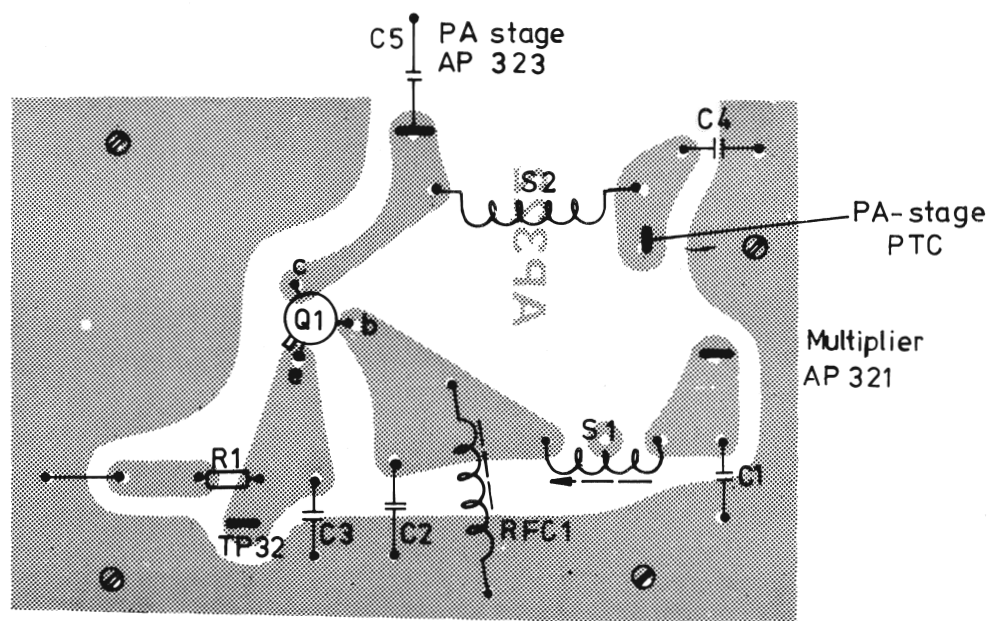
Nr.	Kode	Data	Nr.	Kode	Data
R1		12 Kohm $\frac{1}{4}$ W			
R2		1,8 Kohm "			
R3		390 ohm "			
R4		270 ohm "			
R5		10 Kohm "			
R6		680 ohm "			
R7		12 Kohm "			
R8		270 ohm "			
R9		5,6 Kohm "			
R10		680 ohm "			
R11		100 ohm "			
R12		680 ohm "			
R13		100 ohm "			
R14		47 ohm "			
R15		33 ohm "			
R16		22 ohm "			
R17		12 Kohm "			
C1		2 nF ker.			
C2		4,7 nF ker.			
C3		60 pF styr.			
C4		10 nF ker.			
C5		2 pF styr.			
C6		75 pF styr.			
C7		250 pF styr.			
C8		2,2 nF ker.			
C9		27 pF styr.			
C10		10 nF ker.			
C11		1,5 pF styr.			
C12		39 pF styr.			
C13		100 pF styr.			
C14		2,2 nF ker.			
C15		27 pF styr.			
C16		10 nF ker.			
C17		1,5 pF ker.			
C18		39 pF styr.			
C19		80 pF styr.			
C20		2,2 nF ker.			
C21		10 nF ker.			
C22		12 pF ker.			
C23		1,5 pF ker.			
S1		L53 Tg. 68097/4			
S2		L54 Tg. 68097/4			
S3		L55 Tg. 68097/4			
S4		L56			
Q1		BF 185			
Q2		BF 185			
Q3		BSX 19			
Q4		BSX 19			
Multiplier 2m Transmitter Print Board AP 321 AP 700 Tilhører tegn. nr.: 70157/4			Rettet:		<div>Tegn.: EB</div> <div>Kontr.:</div>
					Stykl. nr.: 70158/4



Remarks: Quoted Dc potentials are measured to chassis.

$R_i = 10\text{ M}\Omega$ provided $330\text{ K}\Omega$ in series with test pin.

Rx stand by and Tx keyed.

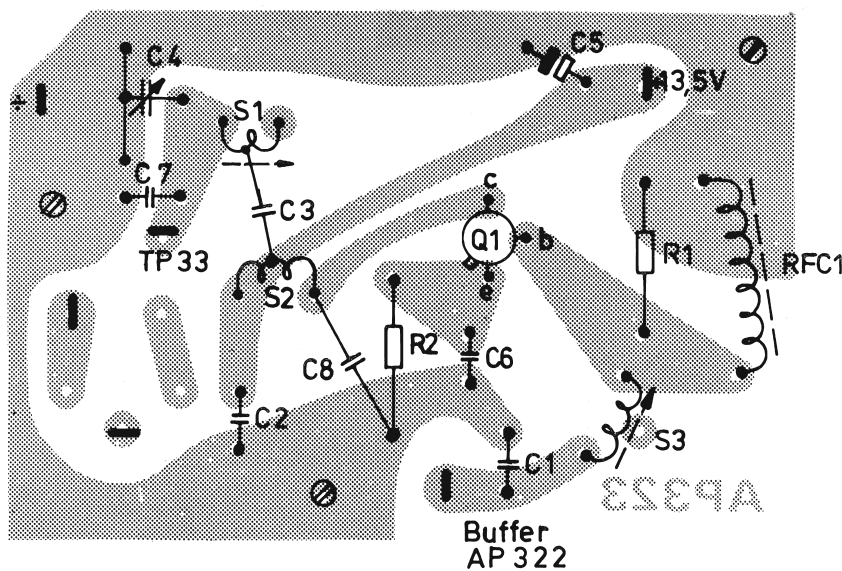
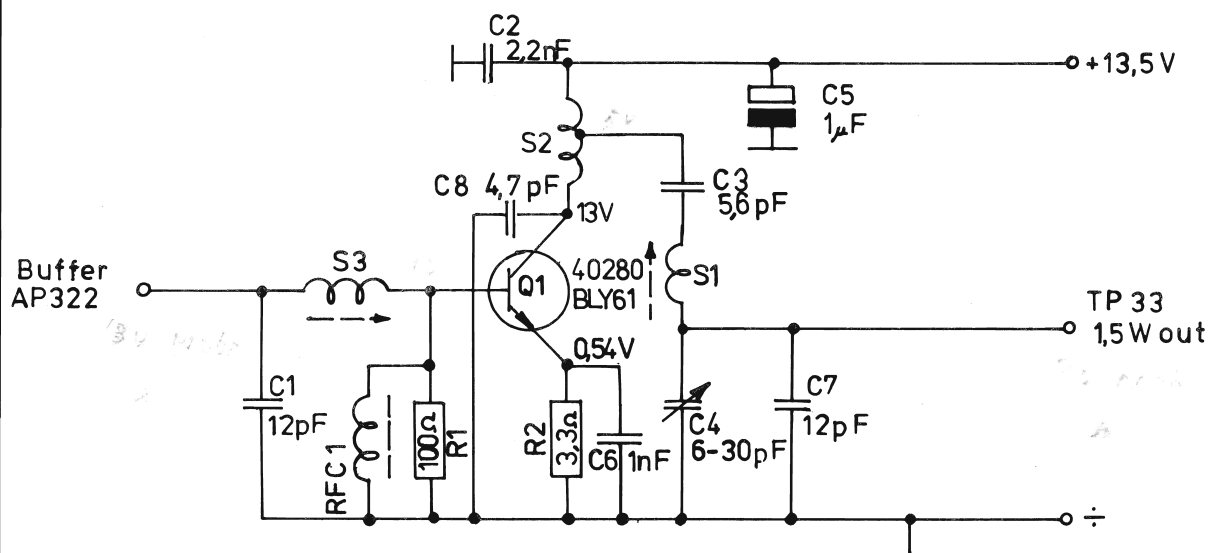


Erstatter 68008/4

Rettet:		Tegn.: 4.8.70 BEP	Kontr.: 4.8.70 E.F.
	BUFFER , 2M TRANSMITTER PRINT BOARD AP 322	Stykl. nr.: 70185/4	
	AP-RADIOTELEFON	Tegn. nr.: 70184/4	

AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R1		10 ohm $\frac{1}{4}$ W			
C1		10 pF ker.			
C2		33 pF ker.			
C3		1 nF ker.			
C4		1 nF ker.			
C5		4,7 pF ker.			
S1		L57			
S2		L58			
RFC					
-1		Wide Band RFC			
Q1		BSX 19			
Buffer 2m Transmitter AP 700 Printboard AP 322 Tilhører tegn. nr.: 70184/4			Rettet:		Tegn.: EB Kontr.:
					Stykl. nr.: 70185/4



Remarks: Quoted Dc potentials are measured to chassis.

Ri=10 MΩ provided 330 KΩ in series with test pin.

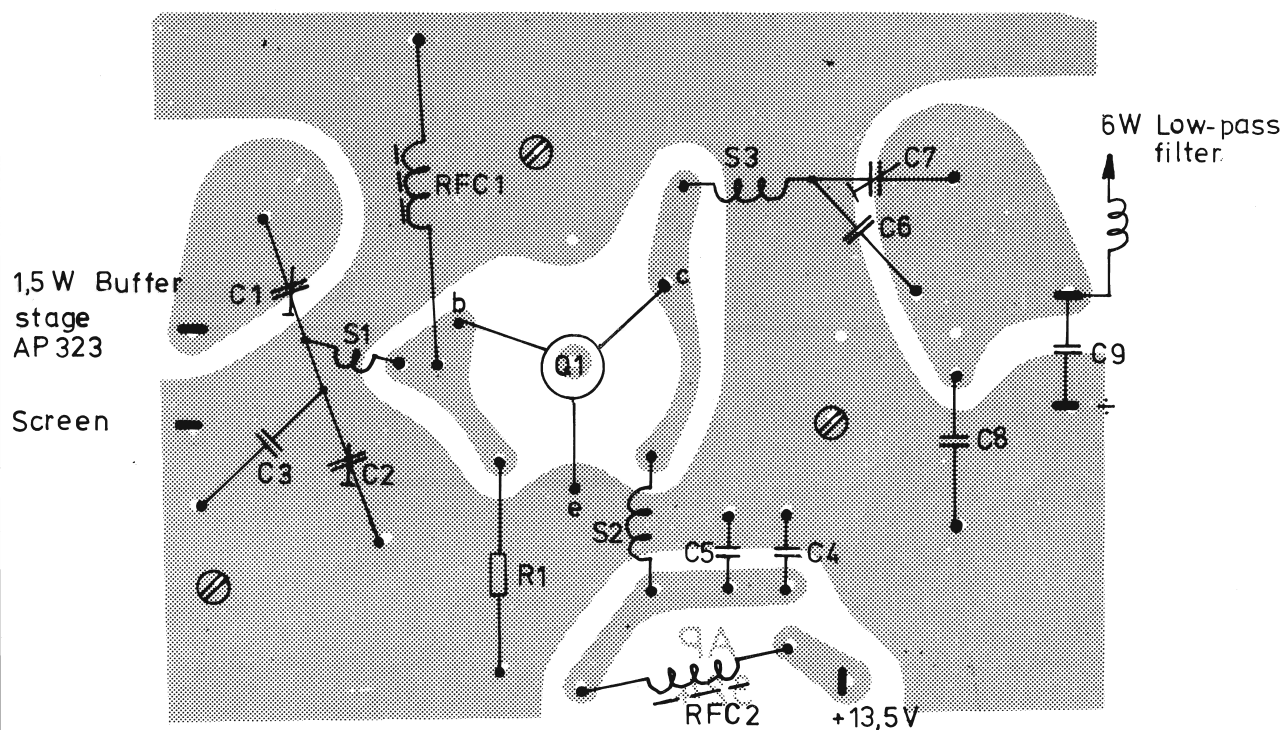
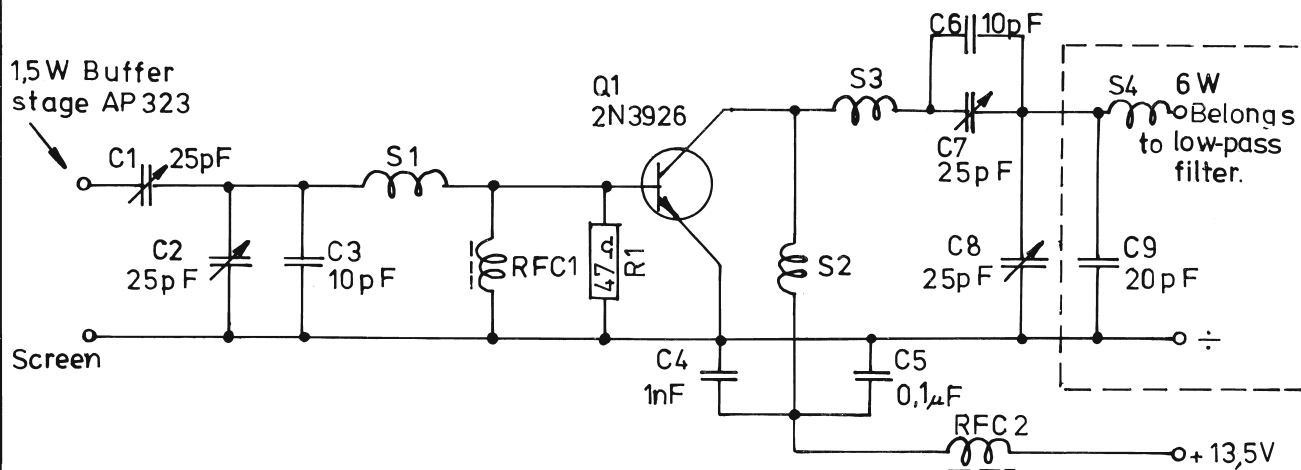
Rx stand by and Tx keyed.

Erstatter 68010/4

Rettet:		Tegn.: 58.70 BEP	Kontr.: 5.8.70 E.F.
	1,5 W P.A. STAGE, 2M TRANSMITTER PRINT BOARD AP 323	Stykl. nr.: 70187/4	
	AP-RADIOTELEFON	Tegn. nr.: 70186/4	

AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R1		100 ohm ¼ W			
R2		3,3 ohm "			
C1		12 pF ker.			
C2		2,2 nF ker.			
C3		5,6 pF ker.			
C4		6/30 pF trim.			
C5		1 mF tant.			
C6		1 nF ker.			
C7		12 pF ker.			
C8		4,7 pF ker.			
S1		L61			
S2		L60			
S3		L59			
RFC					
-1		Wide Band RFC			
Q1		BLY 61 ell. 40280			
1,5W P.A. Stage 2m Transmitter			Rettet:		Tegn.: EB
Printboard AP 323 AP 700					Kontr.:
Tilhører tegn. nr.: 70186/4			Stykl. nr.: 70187/4		



Erstatter 68009/4

Rettet:

6W P.A. STAGE 2M TRANSMITTER
PRINTBOARD AP 324

AP-RADIOTELEFON

Tegn.: 19.8.70
BEP

Kontr.: 19.8.70
E.F.

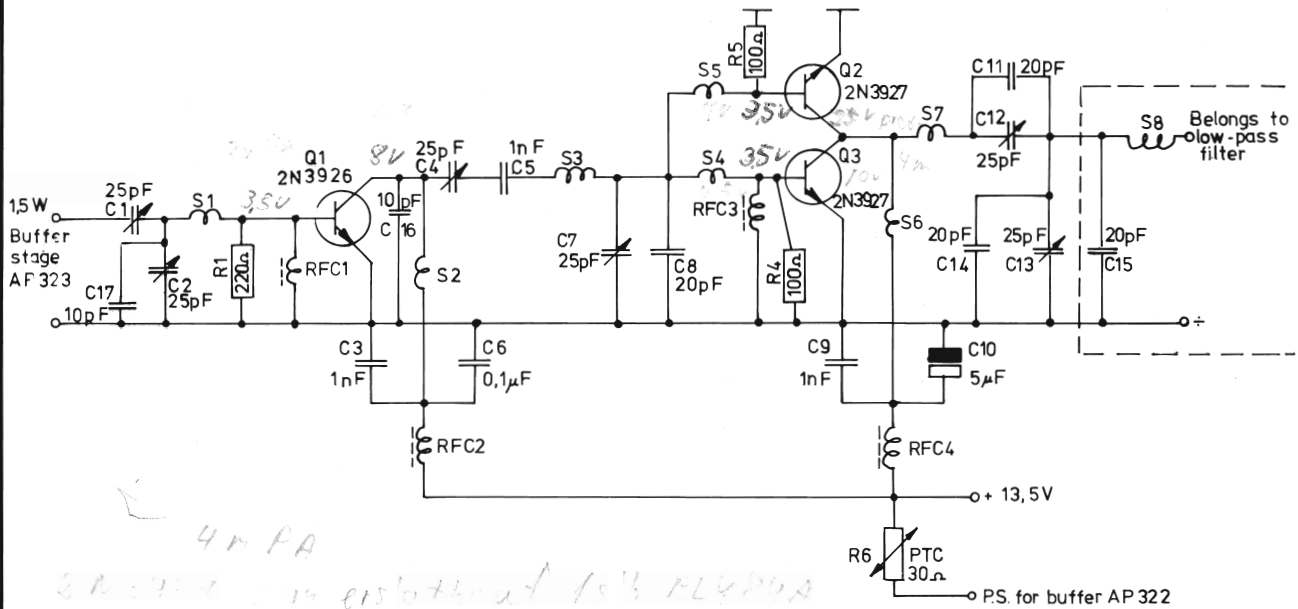
Stykl. nr.: 70204/4

Tegn. nr.: 70203/4

AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R1		47 ohm $\frac{1}{4}$ W			
C1		25 pF trim.			
C2		25 pF trim.			
C3		10 pF ker.			
C4		1 nF ker.			
C5		0,1 mF pol.			
C6		10 pF ker.			
C7		25 pF trim.			
C8		25 pF trim.			
C9		20 pF ker.			
S1		L63			
S2		L64			
S3		L65			
S4		L76			
RFC					
-1		Wide Band RFC			
RFC					
-2		Wide Band RFC			
Q1		2N 3926			
6 W P.A. Stage 2m Transmitter Printboard AP 324 AP 700 Tilhører tegn. nr.: 70203/4			Rettet:		Tegn.: EB Kontr.:
					Stykl. nr.: 70204/4

*Spændinger målt med diodeprobe
ved lodning på print (ikke på transistorer)*

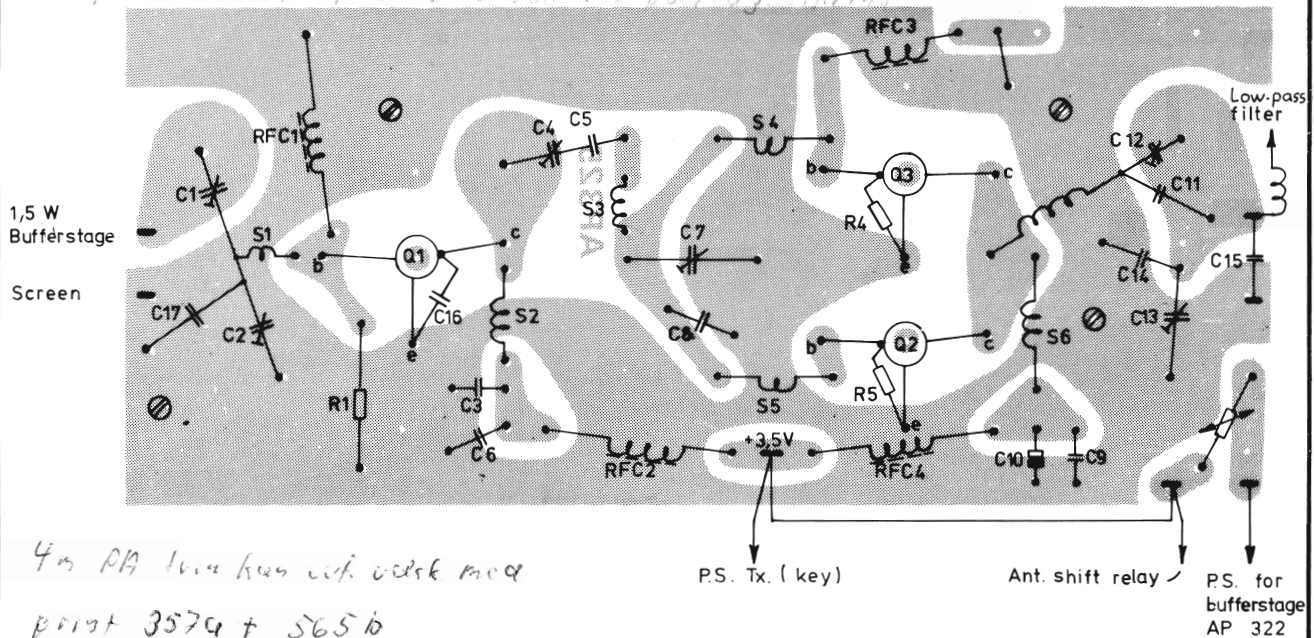


4 m PA

*3 m PA er isoleret af 15 k FLYDPA
R5 bliver R4 ændret til 220Ω, emitter 100Ω
på 160Hz er opgjort af Bly 89*

2 m PA

*C13 flyttes til S7-C12, R5 ændret til 220Ω
diverse parallel kapaciteter fjernet,
på 160Hz er opgjort af Bly 89*

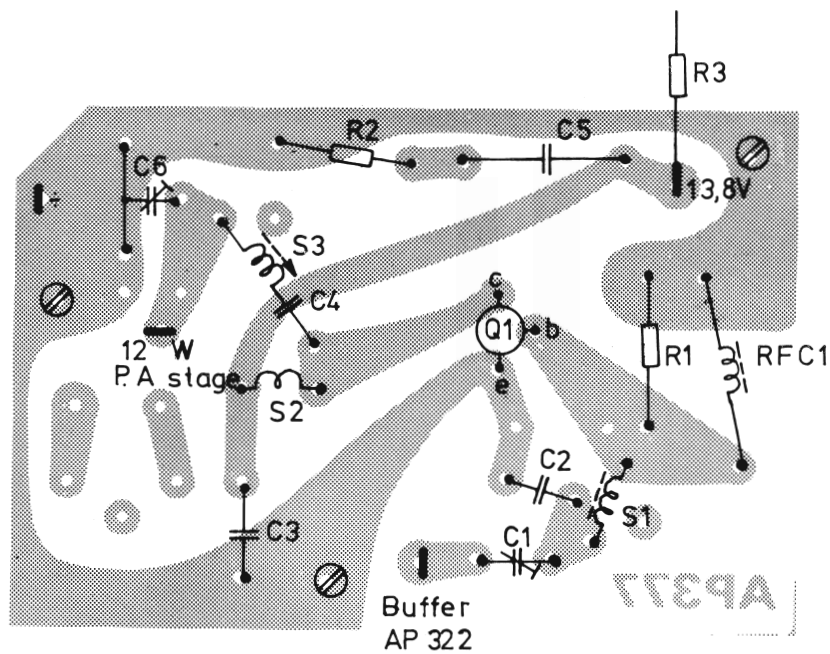
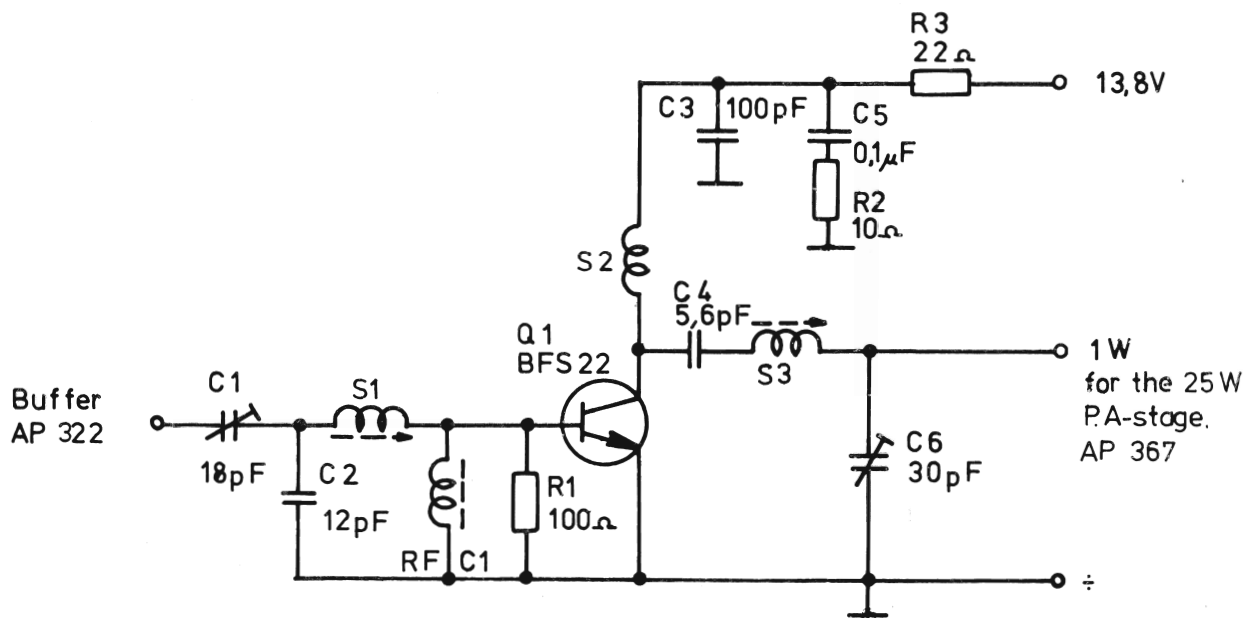


*4 m PA kan kun lade sig gøre med
print 3579 + 565b*

Rettet:	25W PA. STAGE 2M TRANSMITTER PRINT BOARD AP325	Tegn.: 19.8.70 BEP	Kontr.: 19.8.70 E.F.
	AP 700	Stykl. nr.: 70201/4	
	TYPE 1	Tegn. nr.: Erstatte 68025/3	
	AP-RADIOTELEFON	70200/4	

AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R1		220 ohm $\frac{1}{4}$ W			
R4		100 ohm "			
R5		100 ohm "			
R6		30 ohm PTC			
C1		25 pF trim.			
C2		25 pF trim.			
C3		1 nF ker.			
C4		25 pF trim.			
C5		1 nF ker.			
C6		0,1 mF pol.			
C7		25 pF trim.			
C8		20 pF ker.			
C9		1 nF ker.			
C10		5 mF tant.			
C11		20 pF ker.			
C12		25 pF trim.			
C13		25 pF trim.			
C14		20 pF ker.			
C15		20 pF ker.			
C16		10 pF ker.			
C17		10 pF ker.			
S1		L69			
S2		L70			
S3		L71			
S4		L72			
S5		L73			
S6		L74			
S7		L75			
S8		L76			
RFC					
-1		Wide Band RFC			
RFC					
-2		Wide Band RFC			
RFC					
-3		Wide Band RFC			
RFC					
-4		Wide Band RFC			
Q1		2N 3926			
Q2		2N 3927			
Q3		2N 3927			
25 W P.A. Stage 2m Transmitter			Rettet:		Tegn.: EB
Printboard 325 AP 700					Kontr.:
Tilhører tegn. nr.: 70200/4			Stykl. nr.: 70201/4		

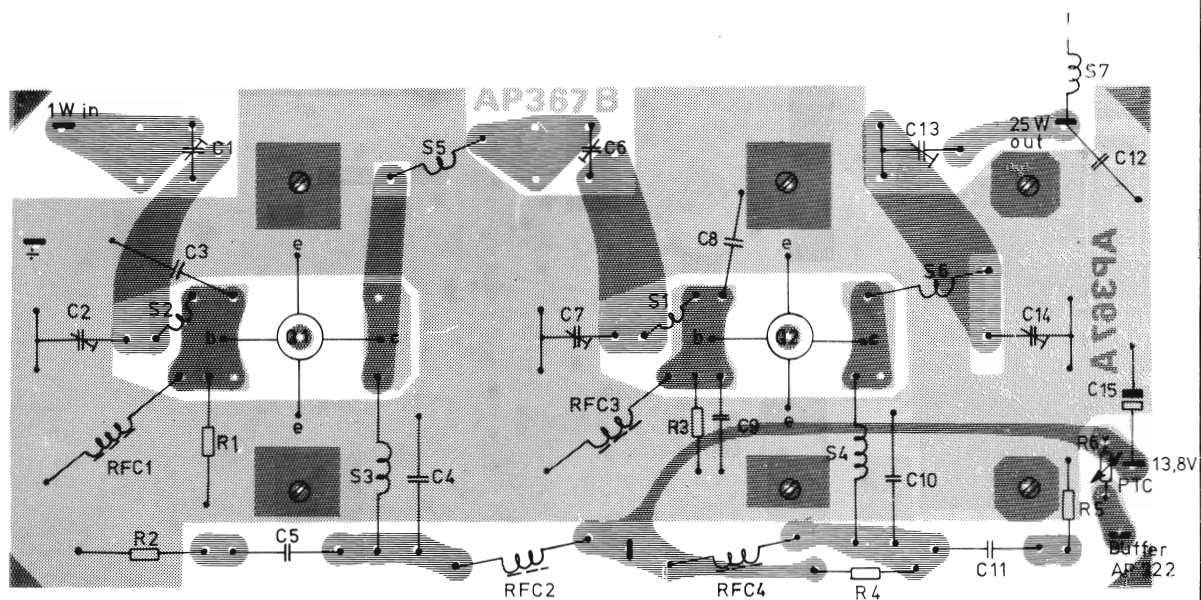
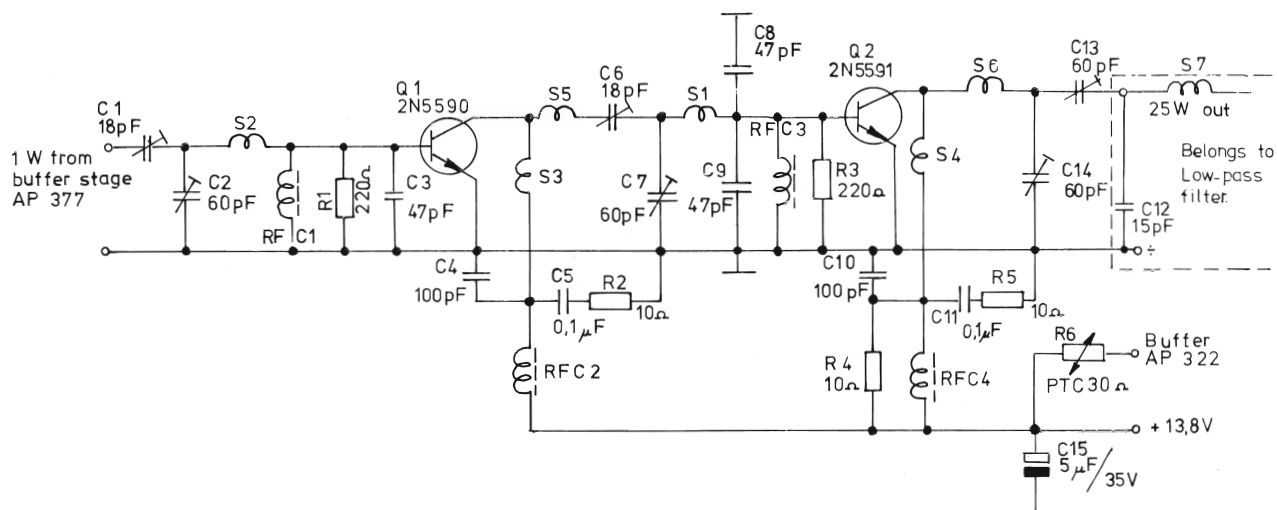


Stykliste nr.: 70249/4

Materiale	Model nr.	Lager nr.	Målforhold	Tegn.	BEP	11.3.70
				Kont.	J.H.	11.3.70
Genstand: 1W Buffer stage 2m transm. 25W Print AP 377						Tg. nr. 70109/4

AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R1		100 ohm $\frac{1}{4}$ W			
R2		10 ohm "			
R3		22 ohm 1 W			
C1		18 pF trim.			
C2		12 pF ker.			
C3		100 pF ker.			
C4		5,6 pF ker.			
C5		0,1 mF pol.			
C6		30 pF trim.			
S1		L59			
S2		L60			
S3		L61			
RFC					
-1		Wide Band RFC			
Q1		BFS 22			
1 W Buffer Stage 2m Transmitt. Print AP 377 AP 700 Tilhører tegn. nr.: 70109/4			Rettet:		Tegn.: EB Kontr.:
					Stykl. nr.: 70249/4



Rettet:

25 W PA. STAGE 2M, PRINT BOARD AP 367, TYPE 2.

AP-RADIOTELEFON

Tegn.: 278.70
BEP

Kontr.: 27.8.70
E.F.

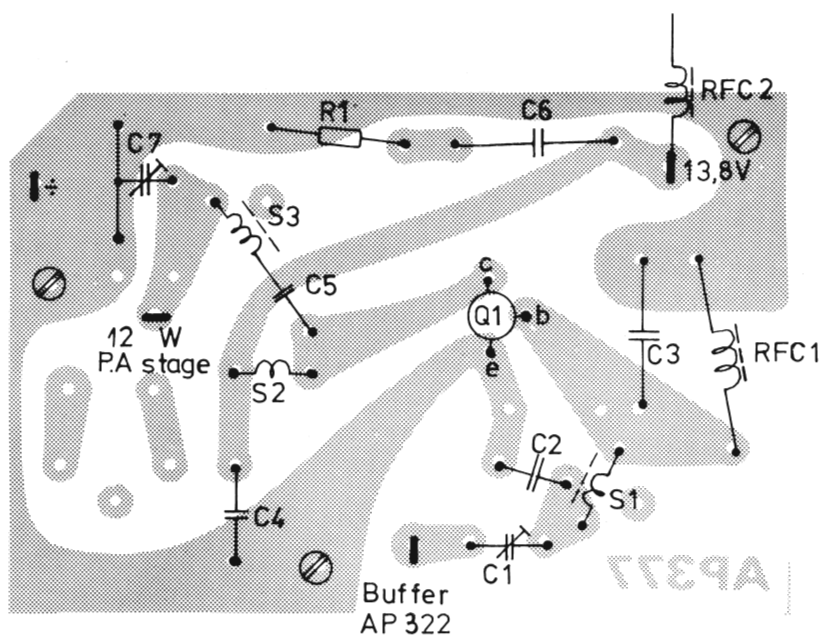
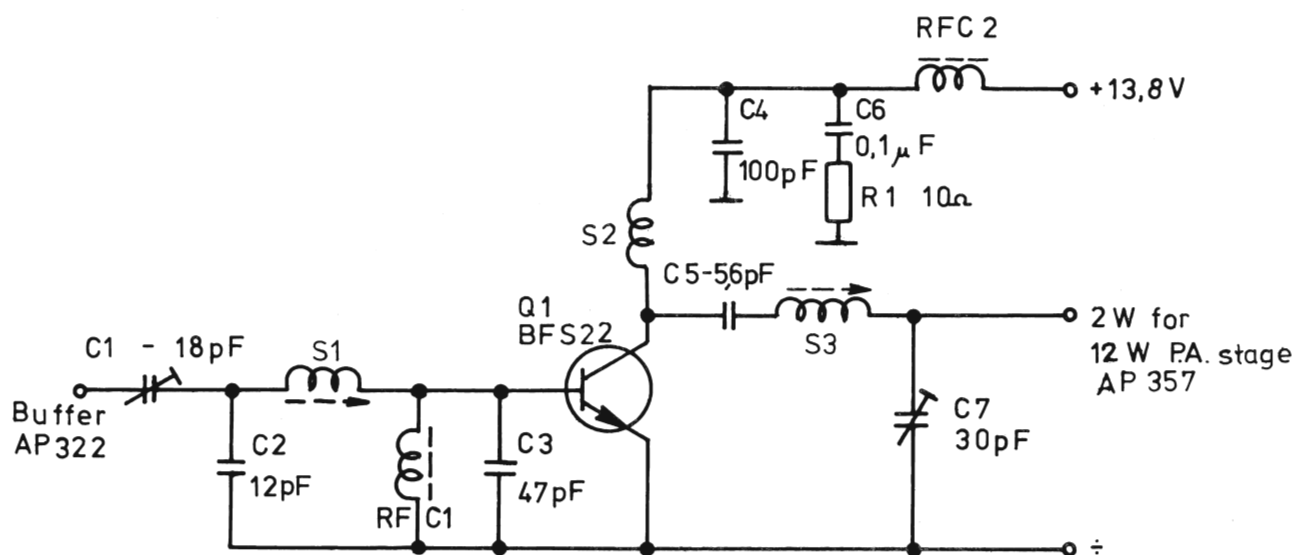
Stykl. nr.: 70232/4

Tegn. nr.: Erstatte 70107/4

70226/4

AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R1		220 ohm $\frac{1}{4}$ W			
R2		10 ohm "			
R3		220 ohm "			
R4		10 ohm "			
R5		10 ohm "			
R6		30 ohm PTC			
C1		18 pF trim.			
C2		60 pF trim.			
C3		47 pF ker.			
C4		100 pF ker.			
C5		0,1 mF pol.			
C6		18 pF trim.			
C7		60 pF trim.			
C8		47 pF ker.			
C9		47 pF ker.			
C10		100 pF ker.			
C11		0,1 mF pol.			
C12		15 pF ker.			
C13		60 pF trim.			
C14		60 pF trim.			
C15		5 mF/35v tant.			
S1		L170			
S2		L173			
S3		L174			
S4		L174			
S5		L175			
S6		L176			
S7		L76			
RFC					
-1		Wide Band RFC			
RFC					
-2		Wide Band RFC			
RFC					
-3		Wide Band RFC			
RFC					
-4		Wide Band RFC			
Q1		2N5590			
Q2		2N5591			
25 W P.A. Stage 2m transmitt. Print AP 367 Type 2 Tilhører tegn. nr.: 70226/4 AP 700			Rettet:		<div>Tegn.: EB</div> <div>Kontr.:</div>
					Stykl. nr.: 70232/4

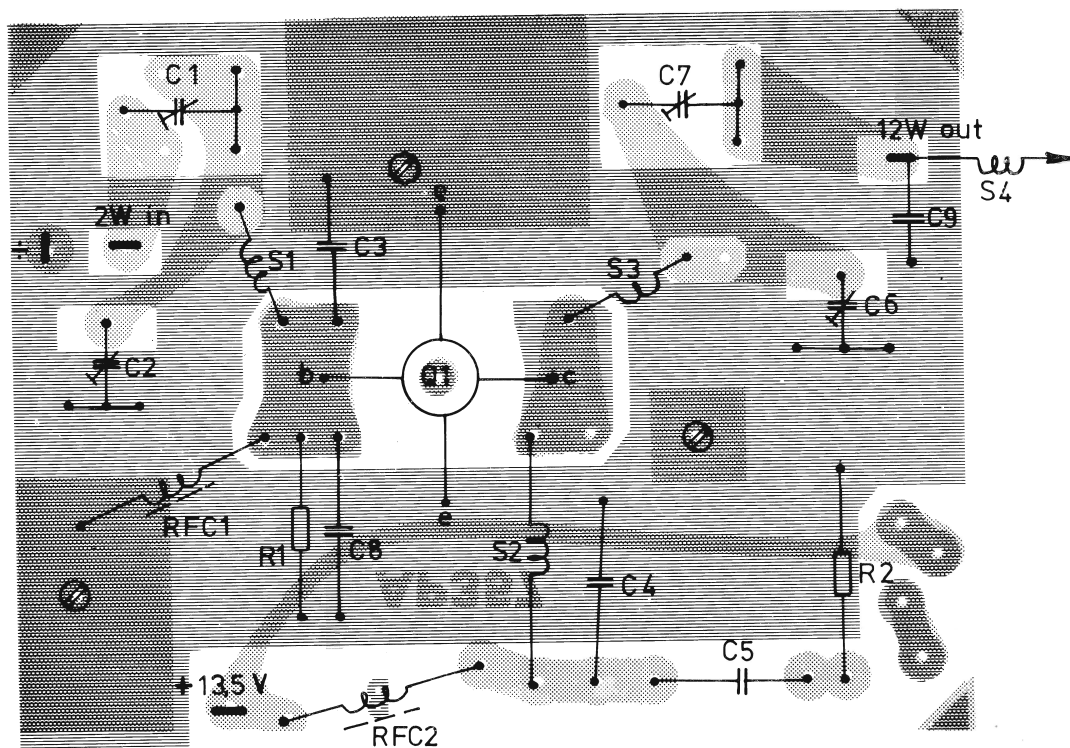
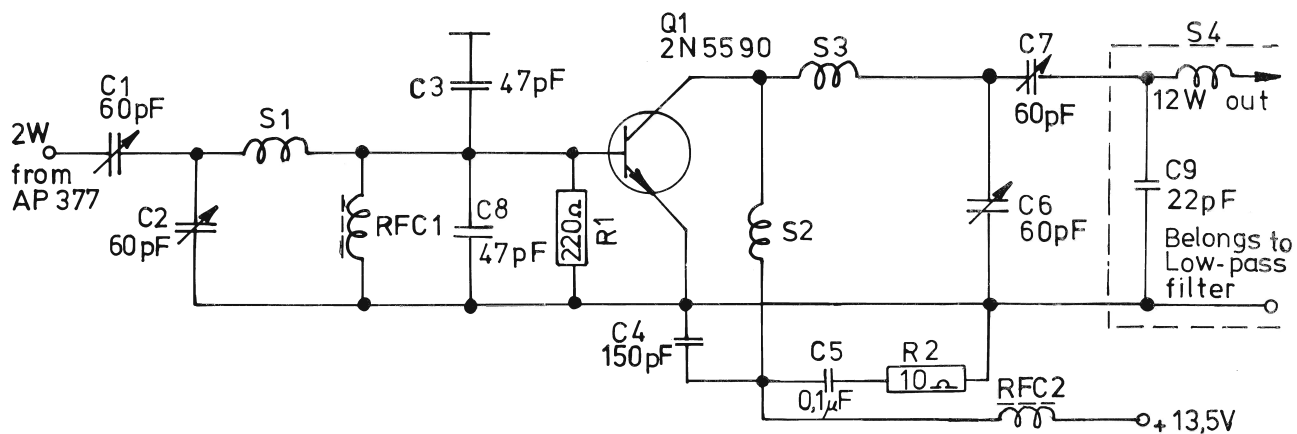


Stykliste nr.: 70248/4

16.4.70 10W → 12W BEP	Materiale	Model nr.	Lager nr.	Målforhold	Tegn.	BEP	10.3.70
					Kont.	J.H.	10.3.70
Genstand: 2W Driver stage f. 2m transm. Print AP 377					70108/4		
					Tg. nr.		

AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R1		10 ohm $\frac{1}{4}$ W			
C1		18 pF trim.			
C2		12 pF ker.			
C3		47 pF ker.			
C4		100 pF ker.			
C5		5,6 pF ker.			
C6		0,1 mF pol.			
C7		30 pF trim.			
S1		L59			
S2		L60			
S3		L61			
RFC					
-1		Wide Band RFC			
RFC					
-2		Wide Band RFC			
Q1		BFS 22			
2 W Driver Stage 2m Transmitt. Print AP 377 AP 700 Tilhører tegn. nr.: 70108/4			Rettet:		Tegn.: EB Kontr.:
					Stykl. nr.: 70248/4



Erstatter 69158/4

Rettet:

12 W PA STAGE ; 2M TRANSMITTER
PRINT BOARD AP 357

AP-RADIOTELEFON

Tegn.: 27.8.70
BEP

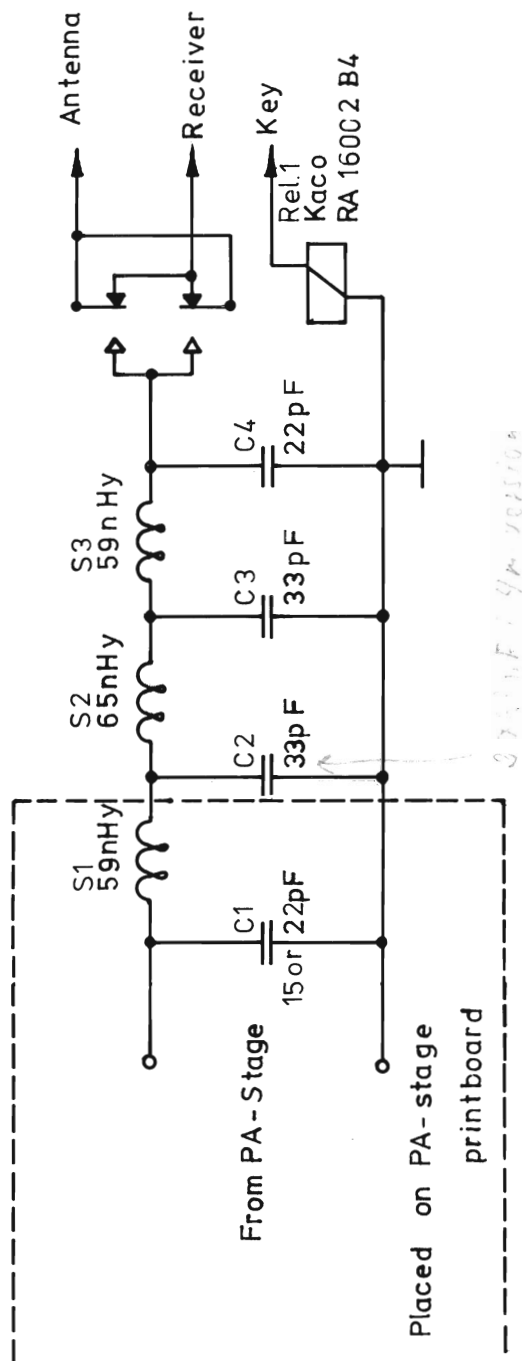
Kontr.: 27.8.70

Stykl. nr.: 70233/4

Tegn. nr.: 70224/4

AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R1		22o ohm $\frac{1}{4}$ W			
R2		1o ohm "			
C1		6o pF trim.			
C2		6o pF trim.			
C3		47 pF ker.			
C4		15o pF ker.			
C5		o,1 mF pol.			
C6		6o pF trim.			
C7		6o pF trim.			
C8		47 pF trim.			
C9		22 pF ker.			
S1		L17o			
S2		L171			
S3		L172			
S4		L76			
RFC					
-1		1oo microH choke			
RFC					
-2		1oo microH choke			
Q1		2N559o			
12 W P.A. Stage 2m Transmitt. Print AP 357 AP 7oo Tilhører tegn. nr.: 7o224/4			Rettet:		Tegn.: EB Kontr.:
					Stykl. nr.: 70233/4



Erstatter 68072/4

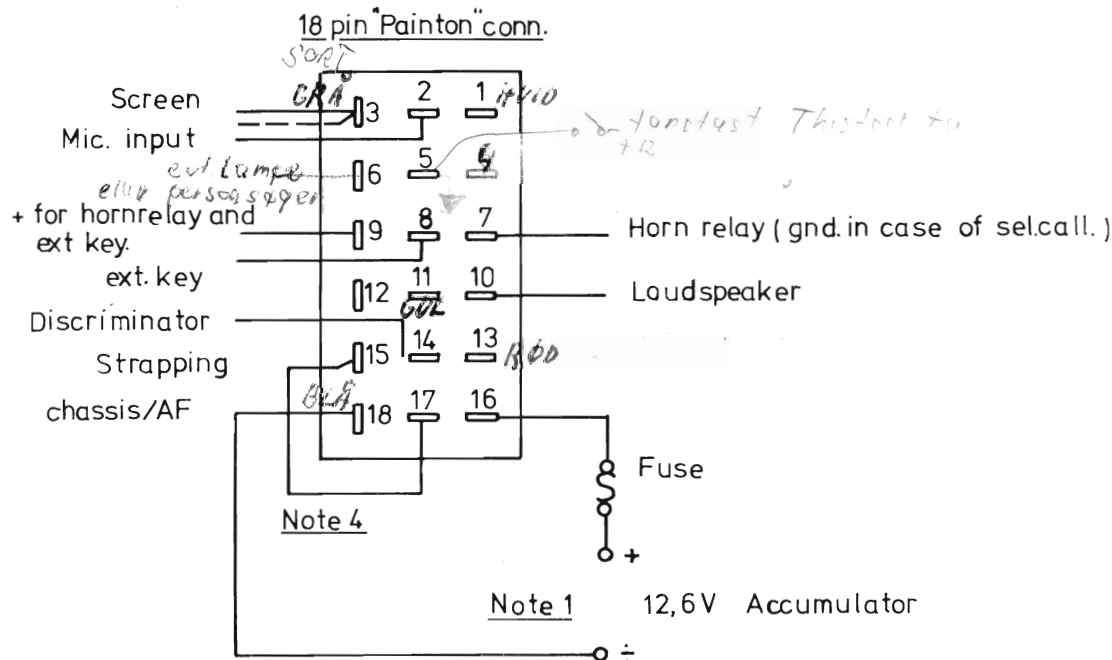
Rettet:	LOW-PASS FILTER 2M X-MTR.	Tegn.: 25/8-70 ABP	Kontr.: 25/8-70 E.F.
		Stykl. nr.: 70 216 / 4	
	AP-RADIOTELEFON	Tegn. nr.: 70 215/4	

AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
C1		15 or 22 pF ker.			
C2		33 pF feed thru			
C3		33 pF feed thru			
C4		22 pF feed thru			
S1		L76			
S2		L77			
S3		L78			
Rel.					
-1		RA 16002 B 4			
Low-Pass Filter 2m Transmitt. AP 700 Tilhører tegn. nr.: 70215/4			Rettet: Tege EB Kontr.: Stykl. nr.: 70216/4		

08 749

Without DC-Converter only 12,6V chassis negative.



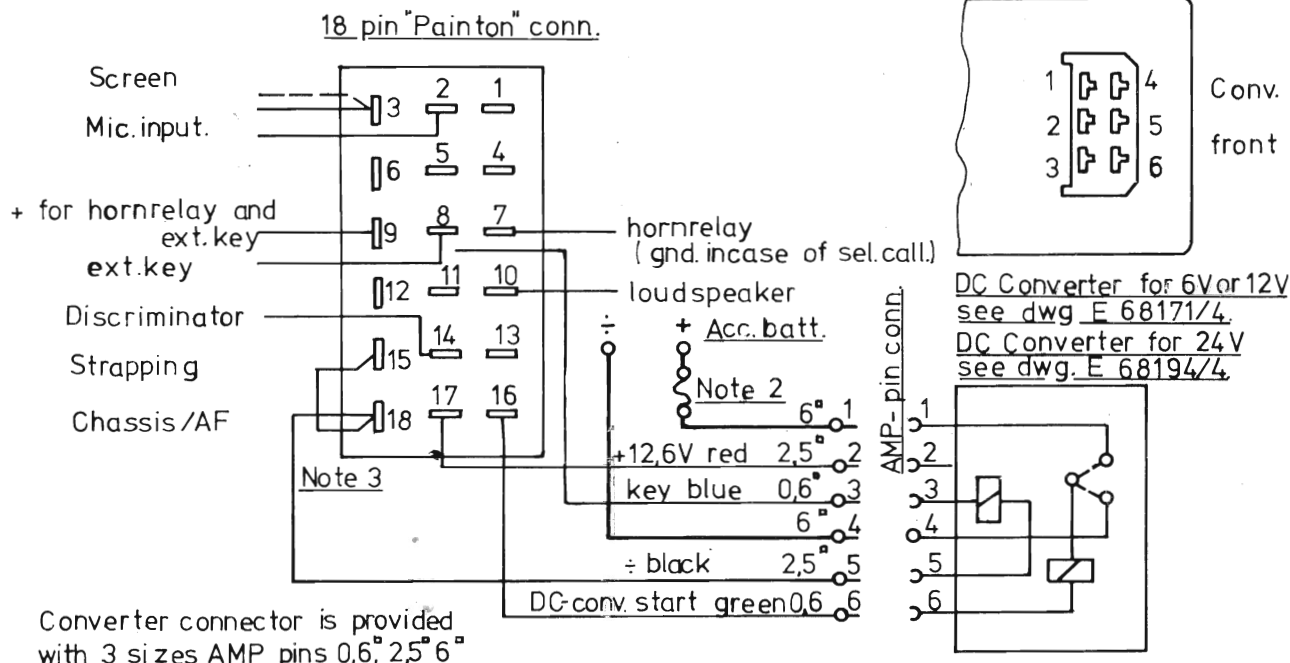
Note 1: DC converter has to be used as far as the power supply is not 12,6VDC with chassis negative.

Note 2: Main fuse has to be incorporated in Power supply line.

Note 3: When DC-converter is used strap pin 15 and 18.

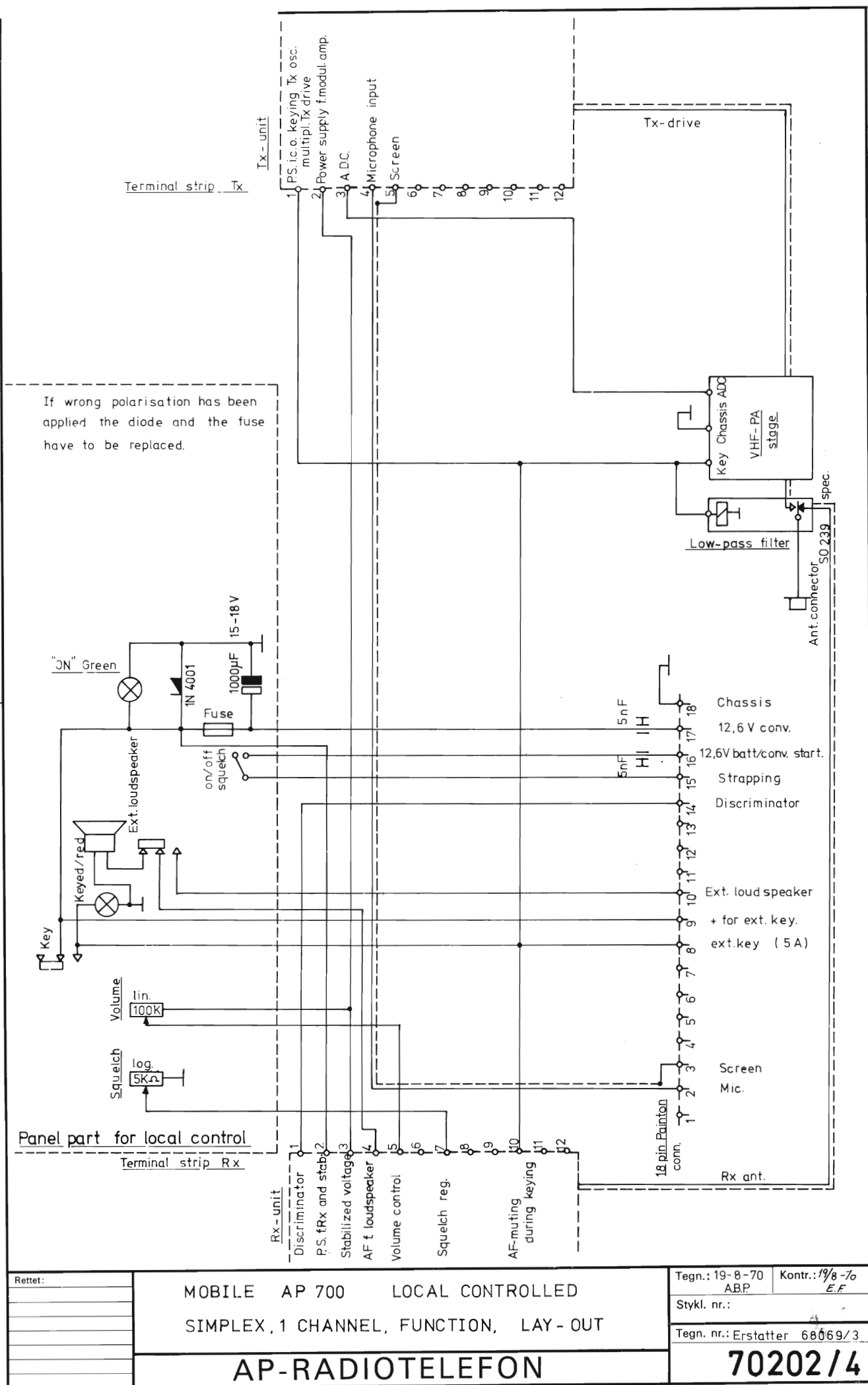
Note 4: At 12,6 V strap 15 and 17.

For DC-Converter



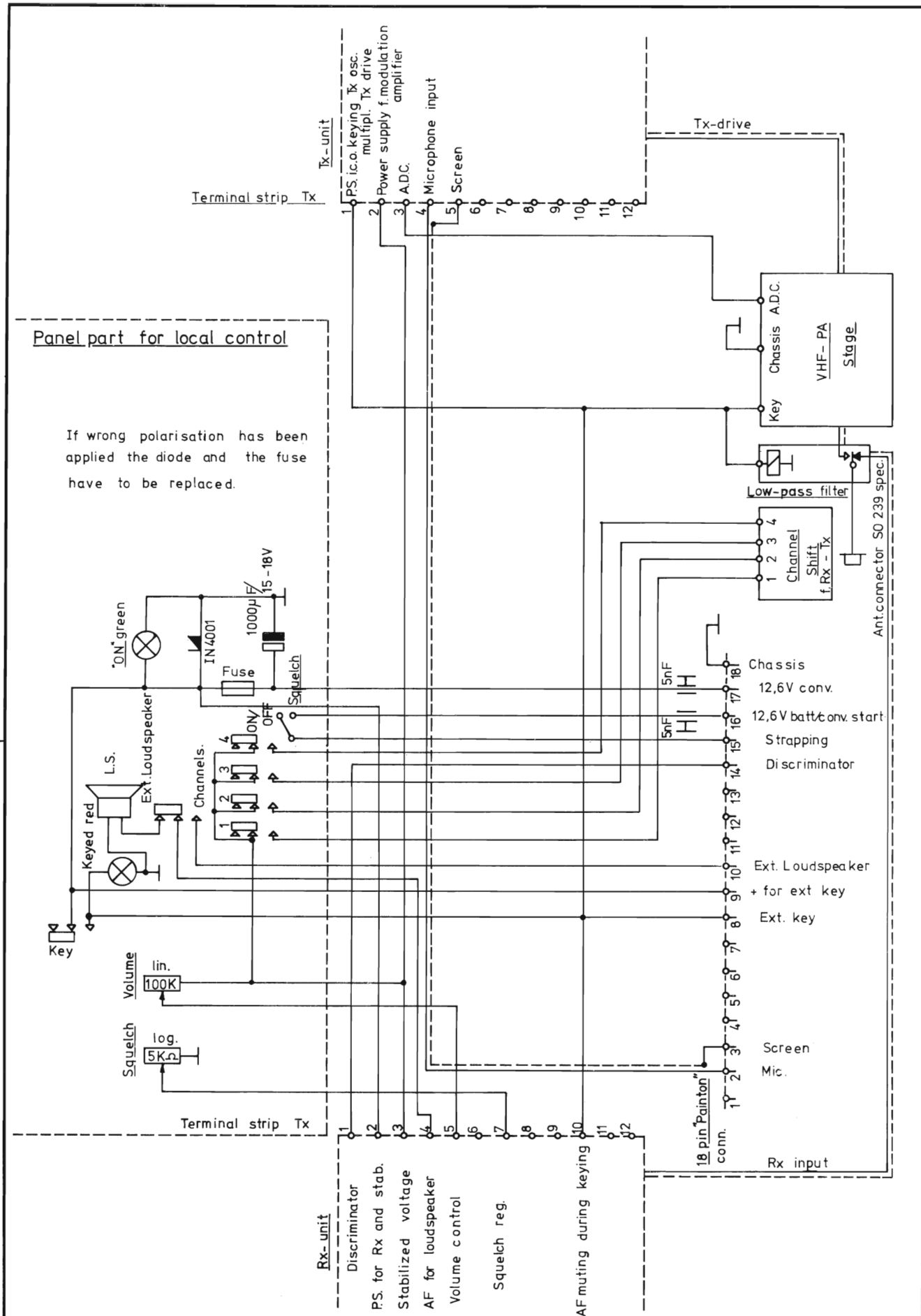
Converter connector is provided with 3 sizes AMP pins 0,6", 2,5" 6"

Materiale	Model nr.	Lager nr.	Målförhåll	Tegn.	17/8-70	A.B.P.
				Kont.	18/8-70	E.F.
Genstand: Mounting Instructions. local control. Mobile without DC-converter.				Tg. nr 68127/4		

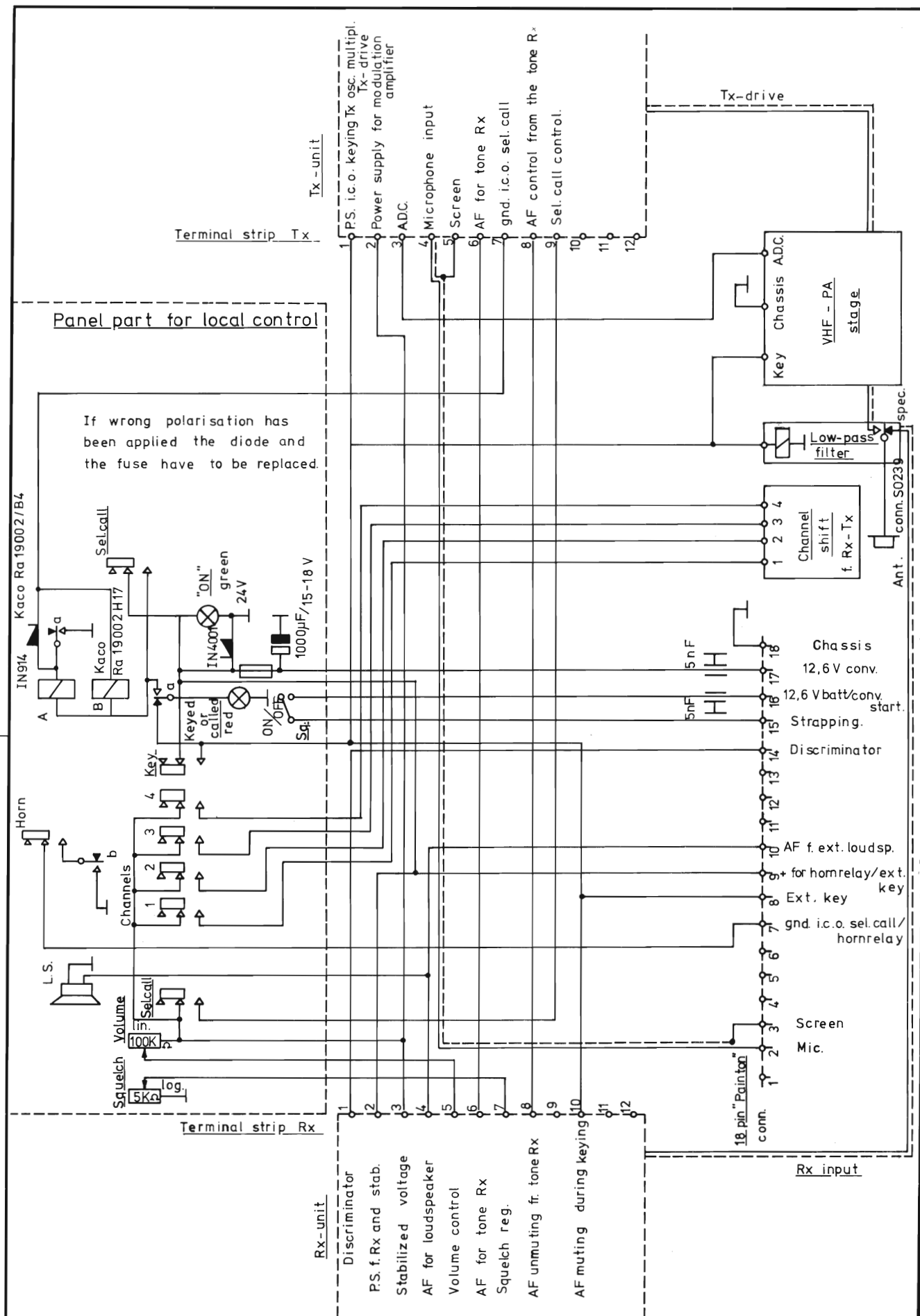




70225/4



Rettet:	MOBILE AP 700, LOCAL CONTROLLED SIMPLEX, 4 CHANNELS, FUNCTION LAY-OUT AP-RADIOTELEFON	Tegn.: 20-8-70	AB.P.	Kontr.: E.F.
		Stykl. nr.:		20-8-70
		Tegn. nr.:	Erstatter	68068/3
				70207/4



Rettet: 	MOBILE AP 700 LOCAL CONTROLLED SIMPLEX 4 CHANNELS. SEL. CALL. FUNCTION LAY-OUT AP-RADIOTELEFON	Tegn.: 24/8-70 AB.P Kontr.: 24/8-70 E.F. Stykl. nr.: Tegn. nr.: Erstatte nr. 68064/3 70214/4
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