

# **AP 700 2M Band Mobil and Basestation Manual 16**

2. Edition

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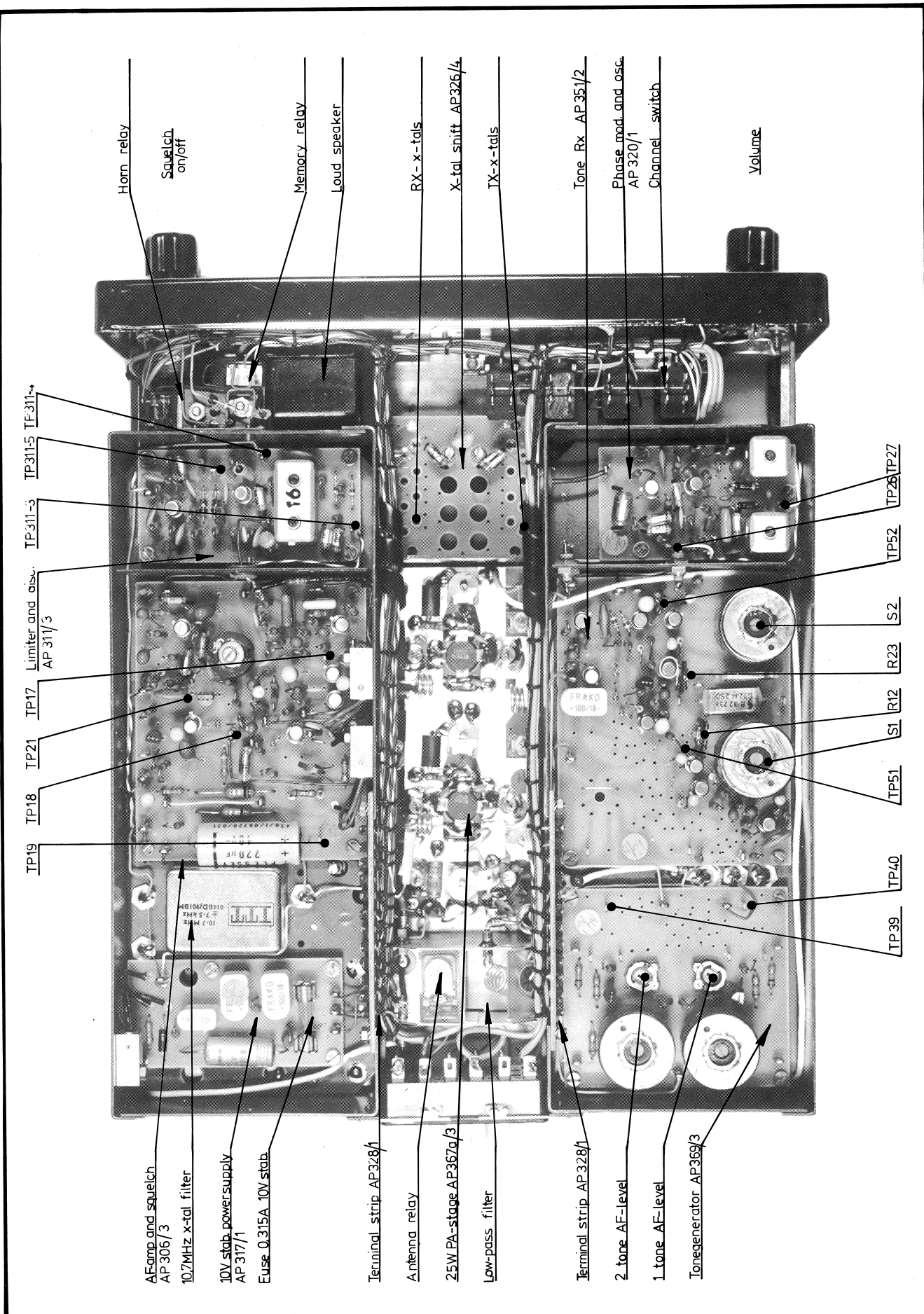
74410-4E

DiagramsDrawing No.

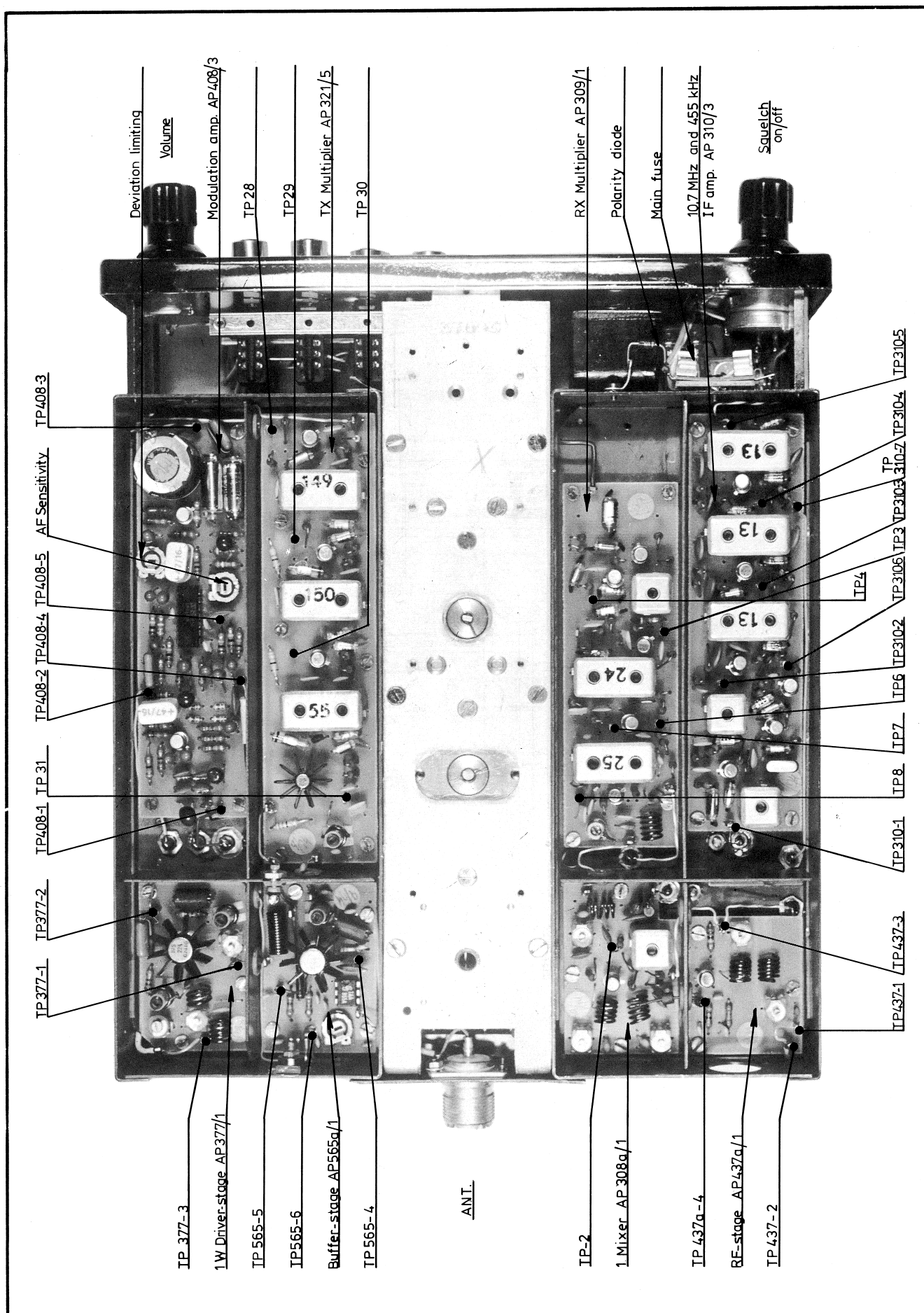
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74410-4E

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Rettet:      	Top view of mobile local controlled AP 700 <b>AP-RADIOTELEFON</b>	Tegn.: 4-10-74 AC Stykl. nr.: Tegn. nr.:	Kontr.: 4-10-74 JS 74409-4E
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Rettet:      	<div data-bbox="505 1993 1048 2072" data-label="Text"> <p>Bottom view of mobile local controlled AP 700</p> </div> <div data-bbox="531 2083 1040 2128" data-label="Text"> <p>AP-RADIOTELEFON A/s</p> </div>	<div data-bbox="1096 1937 1283 1998" data-label="Text"> <p>Tegn.: 4-10-74 AC</p> </div> <div data-bbox="1307 1937 1497 1998" data-label="Text"> <p>Kontr.: 4-10-74 JS</p> </div> <div data-bbox="1096 2000 1208 2031" data-label="Text"> <p>Stykl. nr.:</p> </div> <div data-bbox="1096 2063 1211 2094" data-label="Text"> <p>Tegn. nr.:</p> </div> <div data-bbox="1227 2087 1374 2123" data-label="Text"> <p>74409-4E</p> </div>
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Technical Data AP 700 series 2 m.

General

Frequency range: 146 - 174 MHz.

Service: Single or two frequency simplex and duplex

Operation voltage: 12 Volt chassis negative - nom. 13,2 V  
DC-DC converter available for  $\pm 6V$   
 $\pm 24V$  + 12V operation and 220 Volt AC.

Selective calling: Available space for tone receiver/transmitter.

Operation temperature:  $- 20^{\circ} C$  to  $+ 60^{\circ} C$ .

Frequency stability: Better than  $\pm 10$  ppm.

Local or remote controls: Volume, squelch, channel selector. Pilot lamps for on/off and transmitter push-button for talk and tone key.

Connectors: 50  $\Omega$  UHF and 18 pin painton.

Loudspeaker: 2 inch 5  $\Omega$  built-in, in mobile units.

Microphone: 200  $\Omega$  dynamic standard or dynamic closetalk with push-button.

Power consumption: At 13,2 Volts.  
stand by: 0,12 A  
reception: 0,20 A  
transmission: 4 - 6 A

Dimensions: Height 57 mm, width 220 mm, depth 310 mm.

Weight: 3,5 kg.

## Technical Data AP 700 series 2 m.

### Receiver

Sensitivity:	Better than 0,5 $\mu$ V E.M.F. for 12 dB SINAD.
Adjacent channel selectivity:	Better than 75 dB.
Spurious and image rejection:	More than 75 dB down relative the Sensitivity limit.
Intermodulation attenuation:	Better than 72 dB two and three signal method.
Deemphasis:	Following 6 dB pr. octave curve from 0,3 to 3 kHz within $\pm 1 - 3$ dB relative level at 1000 Hz.
Audio output power:	2 Watt into 5 $\Omega$ at 10% distortion 13,2 Volt supply voltage.
Hum and noise:	More than 50 dB relative $\pm 3,5$ kHz deviation 1000 Hz mod. frequency.
Function of limiter:	Less than 1 dB variation in output voltage for RF-input levels between 1 $\mu$ V - 100 mV E.M.F.
Frequency stability:	Better than 10 ppm from $- 20^{\circ}$ C to $+ 55^{\circ}$ C and $\pm 18\%$ variation in supply voltage.
Channel spacing:	20/25 or 50 kHz.

Technical Data AP 700 series 2 m.

Transmitter

Power output:	6W, 12/15W and 25W power stage available.
Spurious outputs and Harmonics:	Each less than 2 $\mu$ W over 50 $\Omega$
Frequency stability:	Better than 10 ppm from - 20 $^{\circ}$ C to + 55 $^{\circ}$ C and $\pm$ 18% variation in supply voltage.
Input impedance:	Nominal 200 $\Omega$ for dynamic microphone.
Input sensitivity:	0,2 mV RMS to produce $\pm$ 3,5 kHz deviation at 1000 Hz modulation frequency.
Preemphasis:	Following 6 dB pr. octave curve within + 1-3 dB relative 1 kHz level. From 0,3 kHz to 3 kHz.
Harmonic distortion:	Less than 3% measured at $\pm$ 3,5 kHz deviation and 1000 Hz mod. frequency.
Hum and noise:	More than 40 dB down relative $\pm$ 3,5 kHz deviation and 1000 Hz mod. frequency.
Max deviation:	$\pm$ 5 kHz for 25 kHz channel spacing $\pm$ 15 kHz for 50 kHz channel spacing.

## TECHNICAL DESCRIPTION OF THE AP 700

### 2 m. Communicationset

#### RECEIVER:

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

The RF signal is amplified in the RF-stage 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 oscillator signal 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 1<sup>st</sup> IF amplifier. The 1<sup>st</sup> IF signal is fed into the 2<sup>nd</sup> converter, and with an oscillator of 10,245 Mc/s converted to the 2<sup>nd</sup> IF of 455 Kc/s.

The 2<sup>nd</sup> 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 2,0 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 in turn blocks the AF amplifier in case of missing - or weak RF signal.

## TECHNICAL DESCRIPTION OF THE AP 700

### 2 m. Communicationset

#### TRANSMITTER:

The AF-signal from the microphone is amplified in an integrated modulation amplifier with AVC. Adjustment can be made for speech and compression 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 a powerstage to 1 watt, which in turn is used to excite the power output stage, consisting of 2 power transistors. 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.

At the output of the power amplifier a circuit measure the output power and detects it in a diode detector. The outcoming DC voltage is fed to the amplifier and regulator, which regulates the power supply to the driver stage.

A potmeter in this regulation circuit is used to adjust the output power between 15 - 25 W. By means of this circuit the output power is stabilized within certain limits of supply voltage and temperature.



## TUNING INSTRUCTIONS FOR THE AP 700

### 2 m. Communicationset

#### TRANSMITTER:

Instruments used:

A VTVM - Marconi TF 2604 - or equivalent.

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

A modulation meter - Radiometer type AFM 1 - or equiv.

A 50 ohm non inductive load.

Nominal supply voltage should be 13,2 V DC.

#### Phasemodulator AP 320/1

Connect the DC probe of the VTVM to TP 26 and with transmitter keyed read approx. 0,3 V AC 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 321a/5

Transmitter frequency = (X-tal) X 16.

Connect the DC probe with TP 28 read 2,4 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. 1,9 V DC. Next move, probe to TP 31 and tune S 3 to max. deflection, which is approx. 3,4 V DC.

#### Bufferstage AP 565a/1

Connect DC probe of VTVM to TP 565-4 and tune S 1 for max. deflection, which is approx. 0,4 DC

#### 1,0 watt P.A. stage AP 377/1

Connect the RF-probe of the VTVM to TP 377-3 and tune S 1, S 3, C 1, C 8, C 7 for max. deflection, approx. 7 V or 1,0 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 367a/3

Wattmeter + load connected to output jack of the P.A. stage. The trimmers C 1, C 2, C 6, C 7, C 13 and C 14 are set in the center position. There should be a reading on the wattmeter now. Tuning is started with C 1 and all trimmers should be tuned to max. reading at the wattmeter.

Check that the total consumption of the set does not exceed 5,0 amps., because the efficiency of the transmitter can be reduced essentially with an unfortunate tuning of the trim-capacitors.

#### Modulation amplifier AP 408/3

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 "levelpot" 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.

## TUNING INSTRUCTIONS FOR THE AP 700

2 m. Communicationset.

### RECEIVER:

#### Test equipment used:

VTVM - Marconi - TF 2604 - or equivalent

Signal Generator - Marconi - TF 1066B/1 - or equiv.

Sweep Generator - TLH 208 - or equiv.

#### 1st and 2nd IF amp. AP 310/3

With the RF probe of the VTVM connected to TP 310-6, check if the x-tal oscillator for the 2nd mixer is working.  
- reading 0,2 V AC.

With the sweep generator adjusted to 10,7 MHz, tune the 1st and 2nd IF.

Connect the diode probe to TP 310-2, and the RF output to TP 308a. Now the 1st IF can be tuned.

Starting on pcb. AP 308a, tune S 4 for min. ripple on the filter, continuing on pcb. AP 310, tune S 1 for min. ripple and S 2 for max. amplification.

Then move the diodeprobe to TP 310-5 and tune S 3, S 4 and S 5 for max. amplification and symmetry.

Now connect the AF input of the sweep generator directly to TP 311-3. Tune S 1 for max. slope and best possible symmetry.

#### Multiplier AP 309/1

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

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

AP 310 (4 mtr.)

X-tal x 6 + 10,7 MHz

Connect the DC probe to TP 5 and tune S 1 for max. reading, ie. 0,6 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. 308a, and S 4 on AP 309 to max. reading, approx. 0,6 V AC.

#### 1<sup>st</sup> Converter AP 308a/1

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 437a/1.

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

#### AF Squelch AP 306/3.

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.

TUNING INSTRUCTIONS FOR THE AP 700

2 m. Communicationset.

Tone Transmitter AP 369/3 (See dwg. 70210/4)

The chosen tonenumbers are being set in according to the scheme dwg. no.: 70 180/4, 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 10 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 10 Volt supply to TP 40, 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.



	Frequency in $\text{C/s}$	Values for "Siemens" pot. core 22/13 N28 A315	Values for "Philips" pot. core 22/13 - 3B7 AOA - $\mu\text{e}150$	Values for "Siemens" pot. core 22/13 N28 A315	Values for "Philips" pot. core 22/13 AOA $\mu\text{e}150$
Tone		Tone - receiver C7 and C13 pF	Tone - receiver C7 and C13 pF	Tone-transmitter C1 and C2 pF	Tone-transmitter C1 and C2 in pF
0	980	23500	16900	21000	16000
1	1190	15500	11400	13800	10700
2	1380	11200	8300	10100	7900
3	1600	8300	6200	7300	5800
4	1800	6500	4900	5600	4500
5	2010	5200	3900	4400	3500
6	2220	4200	3200	3500	2800
7	2410	3600	2700	2900	2300
8	2590	3100	2300	2400	1950
9	2820	2600	2000	1900	1600
					Frequency Deviation in K c/s
					1,2
					1,4
					1,65
					1,9
					2,2
					2,5
					2,8
					3,1
					3,3
					3,5

Rettet:

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

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

Kontr.: EF  
13-10-70

Stykl. nr.:

Tegn. nr.:

70180/4

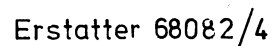
AP-RADIOTELEFON

Alignment procedure for sequence tonereceiver AP 351/2.

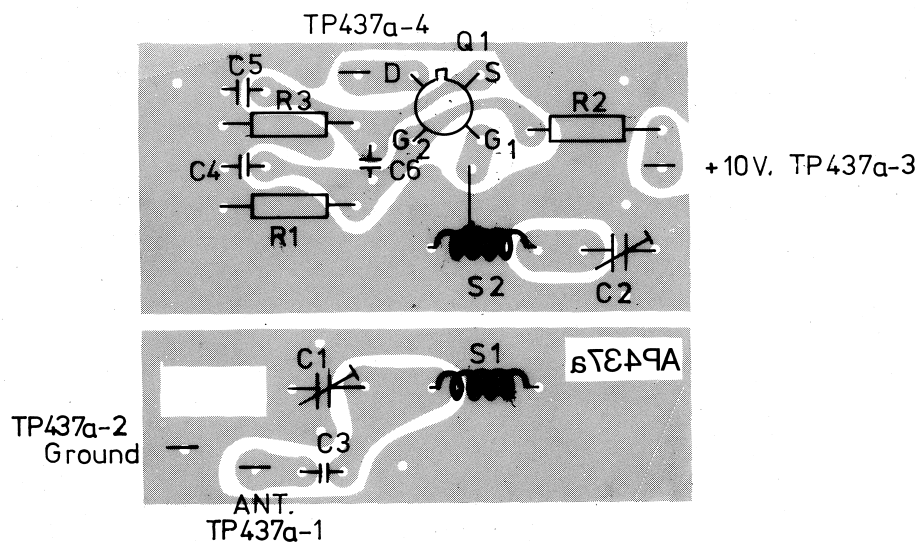
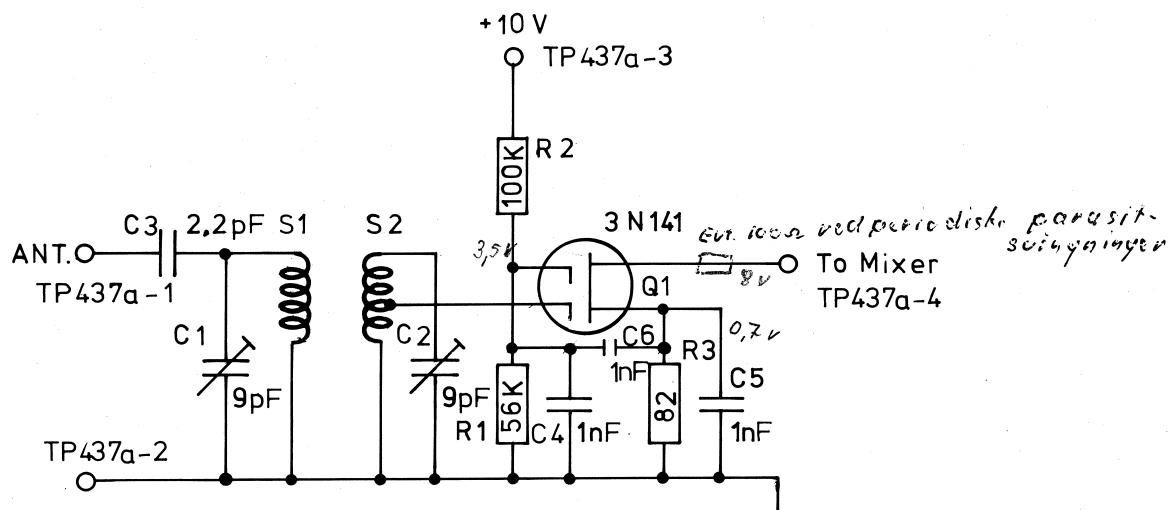
The capacitors of the chosen code numbers in accordance to the scheme (see dwg. no. 70180/4) are to be installed, first code at C 6, second at C 12. Place the trim.pot. meters R 12 and R 23 to center position.

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 51. The core of S 1 is adjusted to max. deflection. By means of R 12 the size of the deflection is adjusted to 1,5 Volt hereby another max. adjustment must be tried on the iron core of S 1 and the deflection readjusted to 1,5 Volt. First tone should be adjusted and the same procedure is followed for tone two where R 23 and S 2 have to be used.

To obtain the tuning of tone two a separate power supply of this tone section has to be made. To obtain this, a connection between + 10 V and the house of the transistor - Q 7 - has to be made.



70221/4



Rettet: 15-173 A.C.  
12-2-73 AC  
29-5-73 H.P.

RF AMPLIFIER 2m.  
printboard AP437a/ 1.

AP-RADIOTELEFON

Tegn.: 24.-8.-72 N.C. Kontr.: 24.-8.-72 J.H.

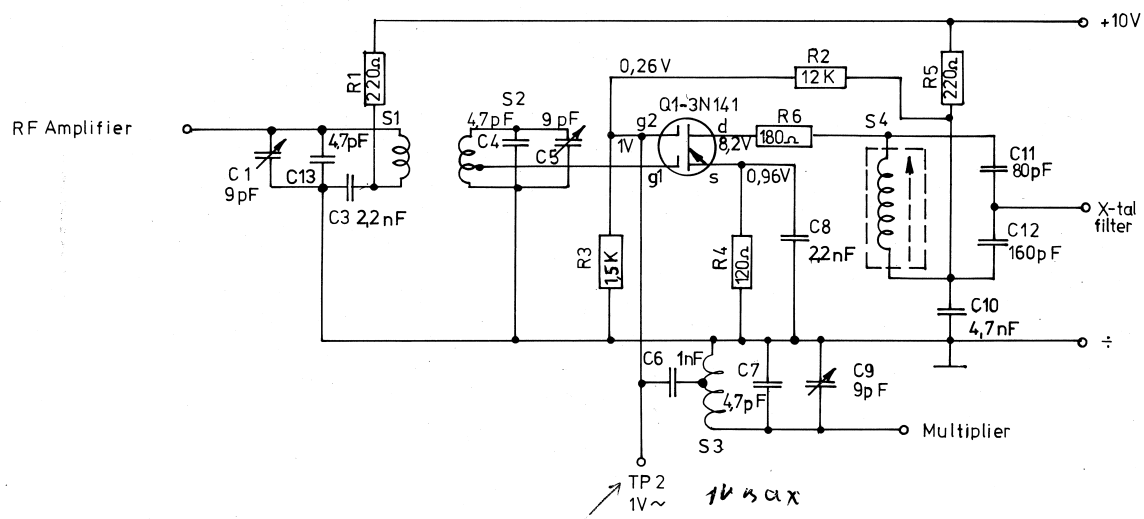
Stykl. nr.: 72215-4S

Tegn. nr.: 72215-4E

# AP-RADIOTELEFON

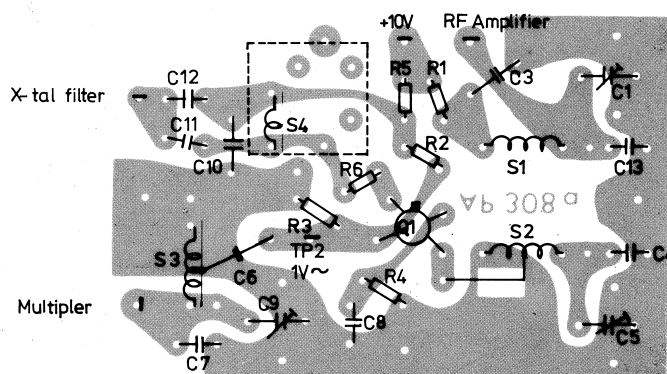
Nr.	Kode	Data	Nr.	Kode	Data
R 1		56 k $\Omega$ $\frac{1}{4}$ w			
R 2		100 k $\Omega$ $\frac{1}{4}$ w			
R 3		82 $\Omega$ $\frac{1}{4}$ w			
C 1		9 pF trim.			
C 2		9 pF trim.			
C 3		2,2 pF ker.			
C 4		1 nF ker.			
C 5		1 nF ker.			
C 6		1 nF ker.			
S 1		L 1			
S 2		L 3			
Q 1		3N 141			
RF Amplifier Print board AP 437a/1. Tilhører tegn. nr.: 72215-4E			Rettet:		Tegn.: Kontr.:
					Stykl. nr.: 72215-4S





max 1,5V målt med diodeprobe  
ellers bliver udy. lig i multiplifier overspændt,  
hører som blab i modtageren ved justering af C9

R6 ?



R6 er vigtig for at stoppe parasitvirkninger,  
i nogle ældre modeller findes R6 ikke,  
viser sig ofte som meget følsomhed

Remarks: Quoted DC potentials are measured to chassis.

Ri= 10M $\Omega$ , provided 330 K $\Omega$  in series with test pin.

Rx stand by and Tx keyed.

Rettet: 15-11-73 HP

1. MIXER PRINT BOARD AP 308a/1 AP700 2M

AP-RADIOTELEFON

Tegn.: 29.6.70  
BEP

Kontr.: 29.6.70  
E.F.

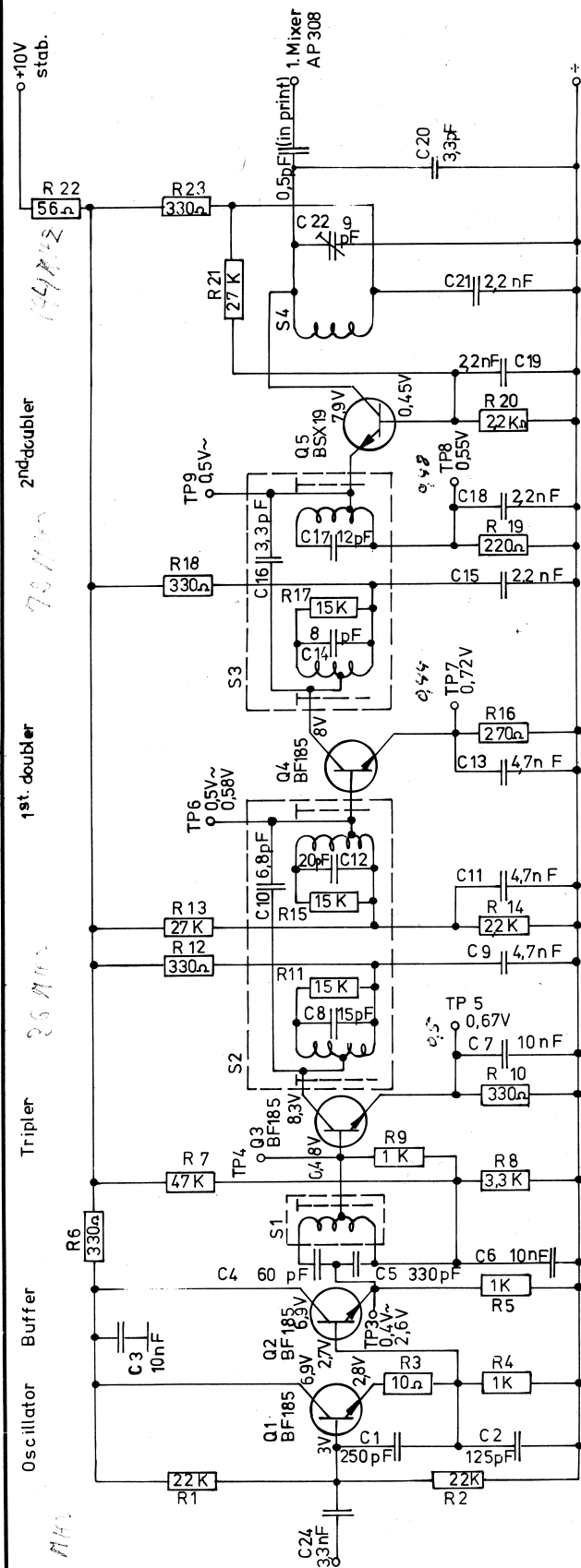
Stykl. nr.: 70167/4

Tegn. nr.: Erstatte 68011/3

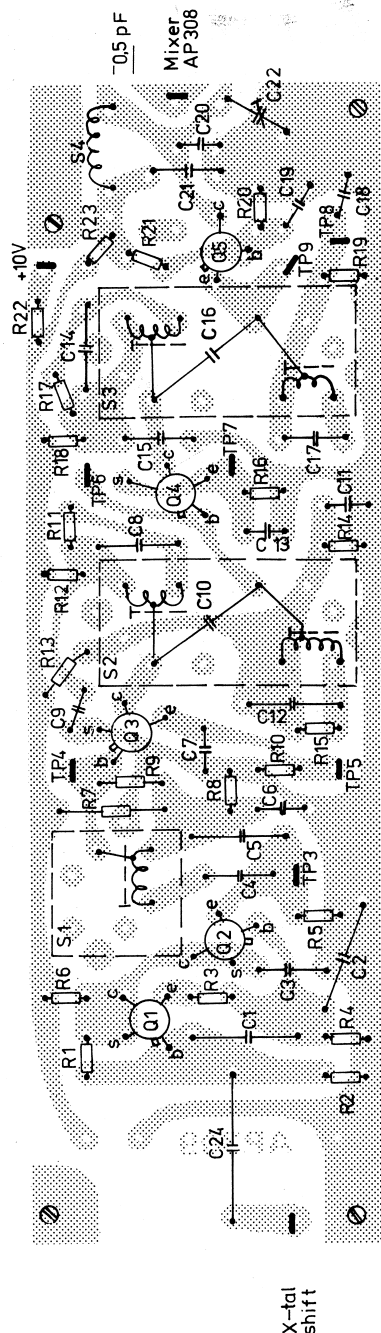
70166/4

# AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data			
R 1		220 $\Omega$ $\frac{1}{4}$ w						
R 2		12 k $\Omega$ $\frac{1}{4}$ w						
R 3		1,5 k $\Omega$ $\frac{1}{4}$ w						
R 4		120 $\Omega$ $\frac{1}{4}$ w						
R 5		220 $\Omega$ $\frac{1}{4}$ w						
R 6		180 $\Omega$ $\frac{1}{4}$ w						
C 1		9 pF trim.						
C 3		2,2 nF ker.						
C 4		4,7 pF ker.						
C 5		9 pF trim.						
C 6		1 nF ker.						
C 7		4,7 pF ker.						
C 8		2,2 nF ker.						
C 9		9 pF trim.						
C10		4,7 nF ker.						
C11		80 pF styr.						
C12		160 pF styr.						
S 1		L 4						
S 2		L 5						
S 3		L 6						
S 4		L 7 tg.68093/4						
Q 1		3N 141						
1. Mixer 2 m AP 700 Print Board AP 308a/1 Tilhører tegn. nr.: 70166/4			Rettet:		<table><tr><td>Tegn.: HP</td><td rowspan="2">Stykl. nr.:  70167/4</td></tr><tr><td>Kontr.: JS</td></tr></table>	Tegn.: HP	Stykl. nr.:  70167/4	Kontr.: JS
Tegn.: HP	Stykl. nr.:  70167/4							
Kontr.: JS								



ved overskyning af udg. 1115  
shunt TP4 med 1kΩ til skel



Remarks: Quoted Dc potentials are measured to chassis.

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

Rettet: 15-1-73 AC

MULTIPLIER 2M RECEIVER PRINT BOARD AP309/1

AP-RADIOTELEFON

Tegn.: 11.8.70  
BEP

Kontr.: 11.8.70  
E.F.

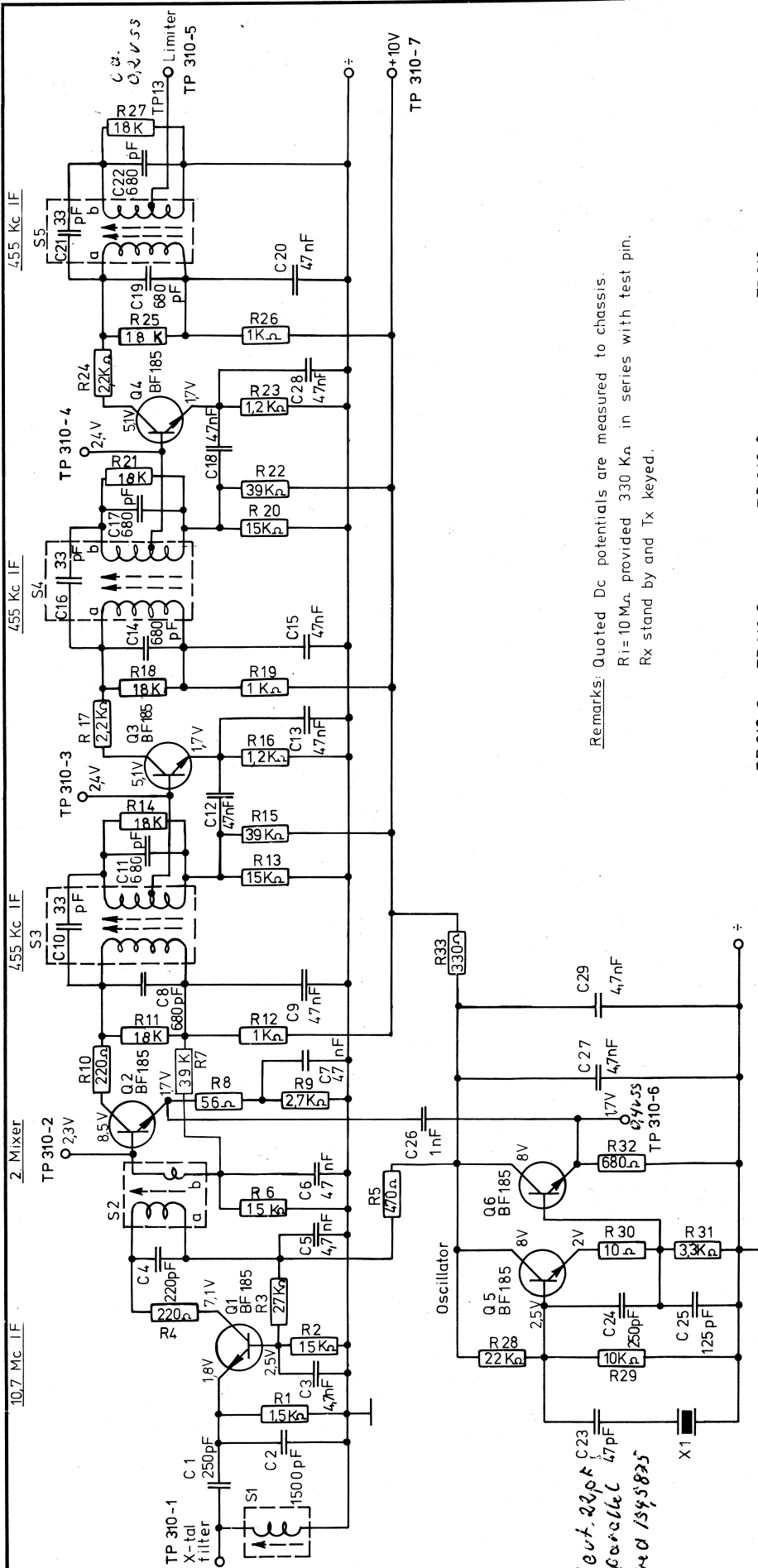
Stykl. nr.: 70194/4

Tegn. nr.: Erstatte 68105/3

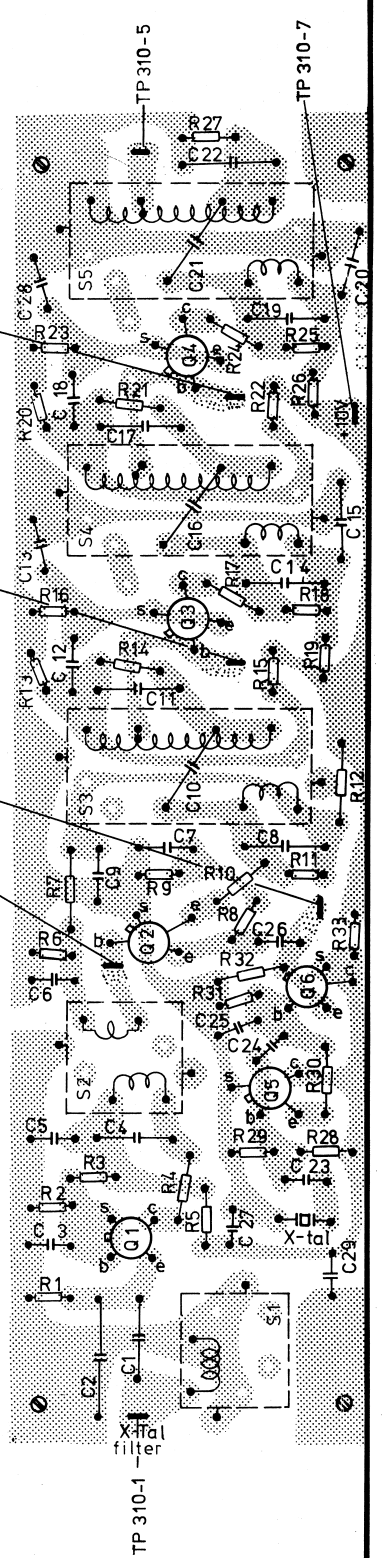
70193/3

# 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 nF 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		9 pF trim.			
C24		3,3 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



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



Rettet:
27-11-72 H.P.
18-3-74 H.P.
28-10-74 H.J./J.S.

10.7 Mc and 455 Kc IF Amplifier Narrowband. Print AP 310a/3

# AP-RADIOTELEFON

Tegn.:	Kontr.:
ML 15-3-72	HM 15-3-72
Stykl. nr.: 72129-4S	
Tegn. nr.:	72129-3E



# AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R 1		1,5 kΩ $\frac{1}{4}$ w	C 5		4,7 nF ker.
R 2		15 kΩ $\frac{1}{4}$ w	C 6		47 nF/12V ker.
R 3		27 kΩ $\frac{1}{4}$ w	C 7		47 nF/12V ker.
R 4		220 Ω $\frac{1}{4}$ w	C 8		680 pF styr.
R 5		470 Ω $\frac{1}{4}$ w	C 9		47 nF/12V ker.
R 6		15 kΩ $\frac{1}{4}$ w	C10		33 pF styr.
R 7		39 kΩ $\frac{1}{4}$ w	C11		680 pF styr.
R 8		56 Ω $\frac{1}{4}$ w	C12		47 nF/12V ker.
R 9		2,7 kΩ $\frac{1}{4}$ w	C13		47 nF/12V ker.
R10		220 Ω $\frac{1}{4}$ w	C14		680 pF styr.
R11		18 kΩ $\frac{1}{4}$ w	C15		47 nF/12V ker.
R12		1 kΩ $\frac{1}{4}$ w	C16		33 pF styr.
R13		15 kΩ $\frac{1}{4}$ w	C17		680 pF styr.
R14		18 kΩ $\frac{1}{4}$ w	C18		47 nF/12V ker.
R15		39 kΩ $\frac{1}{4}$ w	C19		680 pF styr.
R16		1,2 kΩ $\frac{1}{4}$ w	C20		47 nF/12V ker.
R17		2,2 kΩ $\frac{1}{4}$ w	C21		33 pF styr.
R18		18 kΩ $\frac{1}{4}$ w	C22		680 pF styr.
R19		1 kΩ $\frac{1}{4}$ w	C23		47 pF styr.
R20		15 kΩ $\frac{1}{4}$ w	C24		250 pF styr.
R21		18 kΩ $\frac{1}{4}$ w	C25		125 pF styr.
R22		39 kΩ $\frac{1}{4}$ w	C26		1 nF ker.
R23		1,2 kΩ $\frac{1}{4}$ w	C27		4,7 nF ker.
R24		2,2 kΩ $\frac{1}{4}$ w	C28		47 nF ker.
R25		18 kΩ $\frac{1}{4}$ w	C29		4,7 nF ker.
R26		1 kΩ $\frac{1}{4}$ w	S 1		L11 Tg.68093/4
R27		18 kΩ $\frac{1}{4}$ w	S 2		L12 Tg.68093/4
R28		22 kΩ $\frac{1}{4}$ w	S 3		L13 Tg.68095/4
R29		10 kΩ $\frac{1}{4}$ w	S 4		L13 Tg.68095/4
R30		10 Ω $\frac{1}{4}$ w	S 5		L13 Tg.68095/4
R31		3,3 kΩ $\frac{1}{4}$ w			
R32		680 Ω $\frac{1}{4}$ w	Q 1		BF 185
R33		330 Ω $\frac{1}{4}$ w	Q 2		BF 185
			Q 3		BF 185
C 1		250 pF styr.	Q 4		BF 185
C 2		1,5 nF styr.	Q 5		BF 185
C 3		4,7 nF ker.	Q 6		BF 185
C 4		220 pF styr.	X 1	Finland	X-tal 11.155 MHz
				Others	X-tal 10.245 MHz
10,7Mc and 455Kc IF-Amplifier Narrowband Print board AP 310a/3 Tilhører tegn. nr.: 72129-3E				Tegn.:	Stykl. nr.: 72129-4S
				Kontr.:	



# AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R 1		27 k $\Omega$ $\frac{1}{4}$ w	S 1		L 16 Tg.68096/4
R 2		10 k $\Omega$ $\frac{1}{4}$ w			
R 3		680 $\Omega$ $\frac{1}{4}$ w			
R 4		2,7 k $\Omega$ $\frac{1}{4}$ w	D 1		AA 119
R 5		470 $\Omega$ $\frac{1}{4}$ w	D 2		AA 119
R 6		1,5 k $\Omega$ $\frac{1}{4}$ w	D 3		1N 4148
R 7		18 k $\Omega$ $\frac{1}{4}$ w	D 4		1N 4148
R 8		1,5 k $\Omega$ $\frac{1}{4}$ w			
R 9		1 k $\Omega$ $\frac{1}{4}$ w			
R10		470 $\Omega$ $\frac{1}{4}$ w	Q 1		BF 185
R11		39 k $\Omega$ $\frac{1}{4}$ w	Q 2		BF 185
R12		15 k $\Omega$ $\frac{1}{4}$ w			
R13		1,8 k $\Omega$ $\frac{1}{4}$ w			
R14		2,2 k $\Omega$ $\frac{1}{4}$ w			
R15		150 k $\Omega$ $\frac{1}{4}$ w			
R16		150 k $\Omega$ $\frac{1}{4}$ w			
R17		22 k $\Omega$ $\frac{1}{4}$ w			
C 1		47 nF ker.			
C 2		47 nF ker.			
C 3		47 nF ker.			
C 4		680 pF styr.			
C 5		4,7 nF ker.			
C 6		4,7 nF ker.			
C 7		2,2 nF ker.			
C 8		47 nF ker.			
C 9		680 pF styr.			
C10		2,2 nF styr.			
C11		220 pF styr.			
C12		220 pF styr.			
C13		0,1 $\mu$ F ker.			
C14		100 pF styr.			
C15		100 pF styr.			
RFC -1		Wide Band RFC			
Limiter and Discriminator Print board AP 311/3 Tilhører tegn. nr.: 72132-3E			Rettet:14-11-73HP		<div>Tegn.:</div> <div>Kontr.:</div>
					Stykl. nr.: 72132-4S

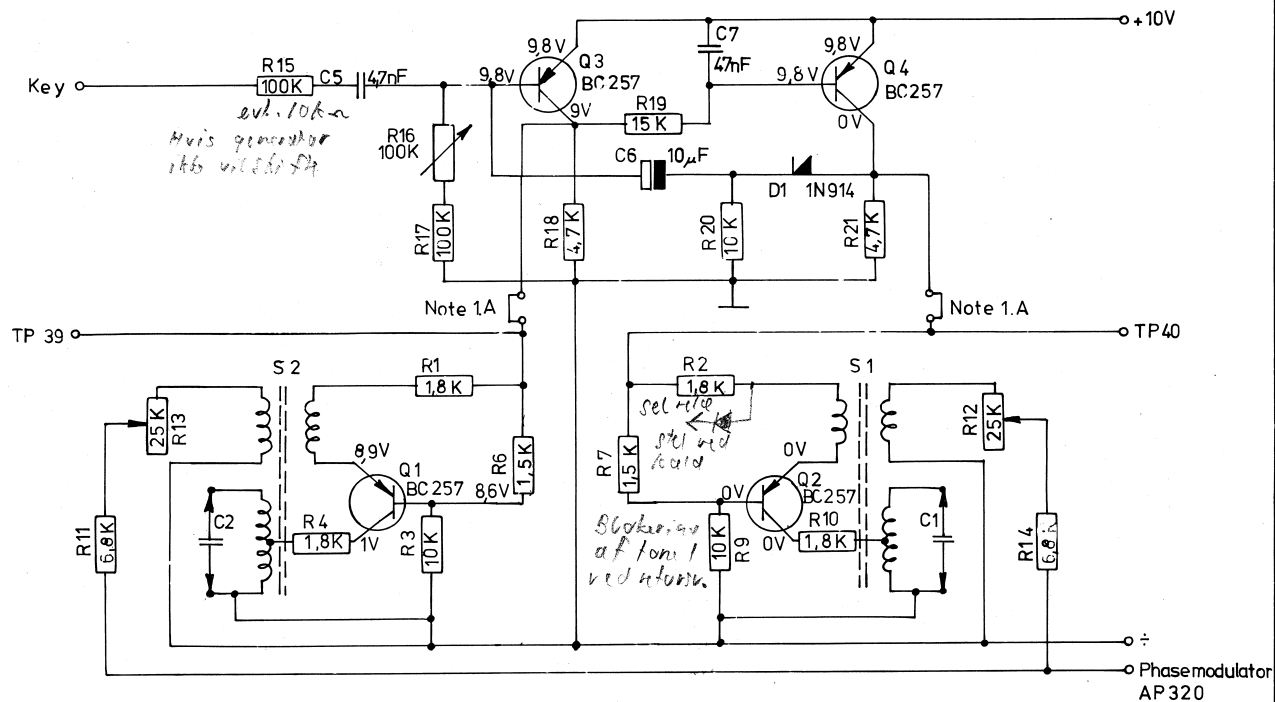


# AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R 1		100 k $\Omega$ $\frac{1}{4}$ w	R38		330 $\Omega$ $\frac{1}{4}$ w
R 2		330 k $\Omega$ $\frac{1}{4}$ w	R39		3,3 k $\Omega$ $\frac{1}{4}$ w
R 3		330 k $\Omega$ $\frac{1}{4}$ w	R40		56 $\Omega$ $\frac{1}{4}$ w
R 4		4,7 k $\Omega$ $\frac{1}{4}$ w	R41		100 $\Omega$ $\frac{1}{4}$ w
R 5		22 k $\Omega$ $\frac{1}{4}$ w			
R 6		15 k $\Omega$ $\frac{1}{4}$ w	C 1		47 nF pol.
R 7		6,8 k $\Omega$ $\frac{1}{4}$ w	C 2		1 $\mu$ F/35V tant.
R 8		330 $\Omega$ $\frac{1}{4}$ w	C 3		0,1 nF pol.
R 9		3,3 k $\Omega$ $\frac{1}{4}$ w	C 4		4,7 $\mu$ F/25V tant.
R10		3,3 k $\Omega$ $\frac{1}{4}$ w	C 5		4,7 $\mu$ F/10V tant.
R11		47 k $\Omega$ $\frac{1}{4}$ w	C 6		4,7 $\mu$ F/10V tant.
R12		10 k $\Omega$ $\frac{1}{4}$ w	C 7		47 $\mu$ F/16V lyt.
R13		2,2 k $\Omega$ $\frac{1}{4}$ w	C 8		2,2 $\mu$ F/35V tant.
R14		1 k $\Omega$ $\frac{1}{4}$ w	C 9		4,7 $\mu$ F/25V tant.
R15		33 k $\Omega$ $\frac{1}{4}$ w	C10		
R16		5,6 k $\Omega$ $\frac{1}{4}$ w	C11		22 $\mu$ F/16V tant.
R17		1,2 k $\Omega$ $\frac{1}{4}$ w	C12		1 nF styr.
R18			C13		4,7 $\mu$ F/25V tant.
R19		120 $\Omega$ $\frac{1}{4}$ w	C14		250 $\mu$ F/16V lyt.
R20		390 $\Omega$ $\frac{1}{4}$ w	C15		22 $\mu$ F/16V tant.
R21		270 $\Omega$ $\frac{1}{4}$ w	C16		220 pF styr.
R22		130 $\Omega$ NTC	C17		330 pF styr.
R23		1 $\Omega$ $\frac{1}{2}$ w	C18		4,7 $\mu$ F/10V tant.
R24		1 $\Omega$ $\frac{1}{2}$ w	C19		330 pF styr.
R25		47 k $\Omega$ $\frac{1}{4}$ w	C20		4,7 $\mu$ F/10V tant.
R26		100 $\Omega$ $\frac{1}{4}$ w	C21		0,1 $\mu$ F/12V ker.
R27		1,8 k $\Omega$ $\frac{1}{4}$ w	C22		4,7 $\mu$ F/25V tant.
R28		10 k $\Omega$ $\frac{1}{4}$ w	C26		1 nF ker.
R29		100 $\Omega$ $\frac{1}{4}$ w	C27		2,2 nF ker.
R30		47 k $\Omega$ $\frac{1}{4}$ w	C28		2,2 nF ker.
R31		6,8 k $\Omega$ $\frac{1}{4}$ w	C29		2,2 nF ker.
R32		1 k $\Omega$ $\frac{1}{4}$ w	C30		2,2 nF ker.
R33		5,6 k $\Omega$ $\frac{1}{4}$ w	C31		1 nF ker.
R34		5,6 k $\Omega$ $\frac{1}{4}$ w			
R35		150 k $\Omega$ $\frac{1}{4}$ w			
R36		680 $\Omega$ $\frac{1}{4}$ w	S 1		L21 tg. 67091-4
R37		22 k $\Omega$ $\frac{1}{4}$ w			
AF and squelch AP 700 print board 306/3 Tilhører tegn. nr.: 73252-3E			Rettet:		<div>Tegn.: Stykl. nr.:</div> <div>Kontr.: 73252-4S</div>

# AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
D 1		1N 914			
D 2		1N 914			
D 3		1N 914			
D 4		1N 914			
D 5		1N 914			
D 6		1N 914			
Q 1		BC 107 b			
Q 2		BC 107 b			
Q 3		BC 107 b			
Q 4		BC 107 b			
Q 5		AC 187 k			
Q 6		AC 187 k			
Q 7		BC 107 b			
Q 8		BC 257 a			
Q 9		BC 107 b			
Q10		BC 257 a			
AF and squelch AP 700 print borad 306/3 Tilhører tegn. nr.: 73252-3E			Rettet:		<div>Tegn.:</div> <div>Kontr.:</div>
					Stykl. nr.: 73252-4S



A

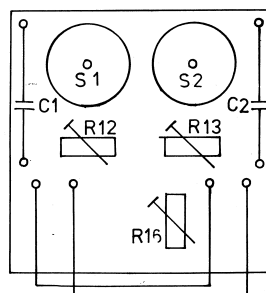
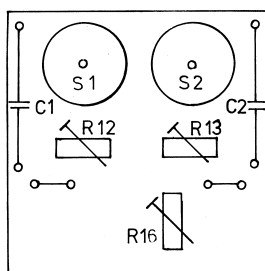
NOTE 1.

B

Note 1 ("A" and "B")

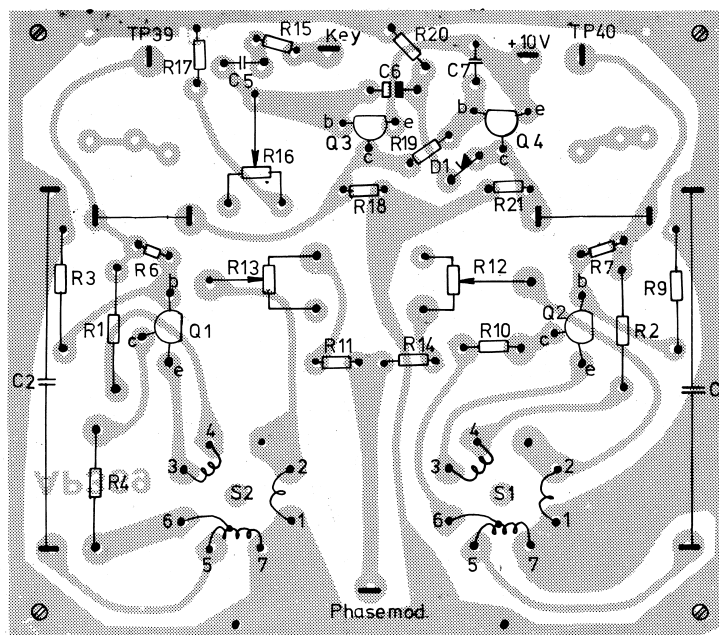
At normal strapping as in note 1 "A" tone sequence is tone 1 - tone 2.

By a strapping as in note 1 "B" the tone sequence is tone 2 - tone 1.



NB. The change over is obtained by the pushbutton switch situated in the control panel. (To obtain two different calls.)

See tuning instruction dwg. 70222/4



Erstatter 68072/3

Rettet:

4-1-73 L.T.

DUAL TONEGENERATOR WITH AUTOMATIC CHANGE OVER  
PRINT BOARD AP 369/3. AP700.

Tegn.: 26.8.70  
BEP

Kontr.: 26.8.70  
E.F.

Stykl. nr.: 70211/4

Tegn. nr.:

70210/4

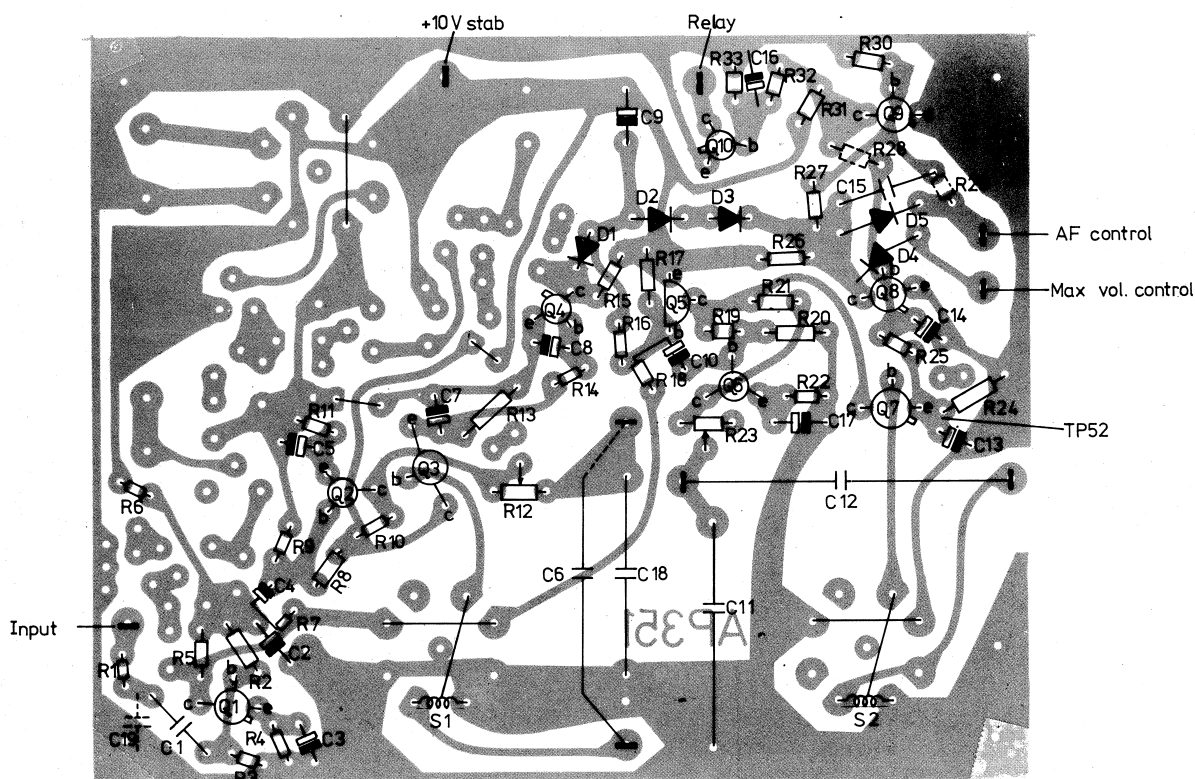
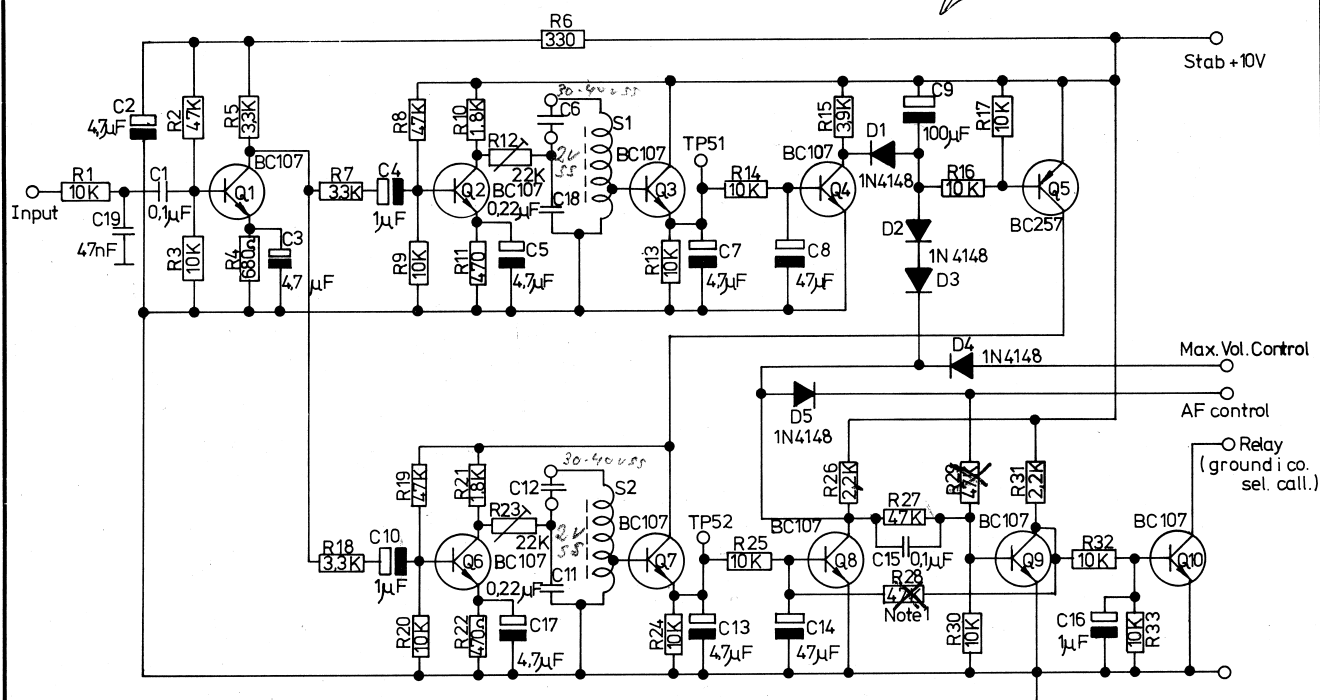
AP-RADIOTELEFON

# AP - RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R1		1,8 Kohm $\frac{1}{4}$ W	S1		L67 Tg. 69142/4
R2		1,8 Kohm "	S2		L67 Tg. 69142/4
R3		10 Kohm "			
R4		1,8 Kohm "	D1		1N914
R6		1,5 Kohm "	Q1		Bc 257
R7		1,5 Kohm "	Q2		Bc 257
			Q3		Bc 257
			Q4		Bc 257
R9		10 Kohm "			
R10		1,8 Kohm "			
R11		6,8 Kohm "			
R12		22 Kohm pot.			
R13		22 Kohm pot.			
R14		6,8 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			
C5		4,7 nF ker.			
C6		10 uF/25v tant			
C7		47 nF ker.			
Dual Tonegenerator with Automatic Change over Tilhører tegn. nr.: 70210/4 AP 369/3			Rettet: 4/1-73. L.T.		<div>Tegn.: Stykl. nr.: 70211-4.</div> <div>Kontr.:</div>



Ved periodisk falske ophold  
skift C9 100µF



NOTE 1: R28 and R29 only incorporated  
at squelch controlled sel. call

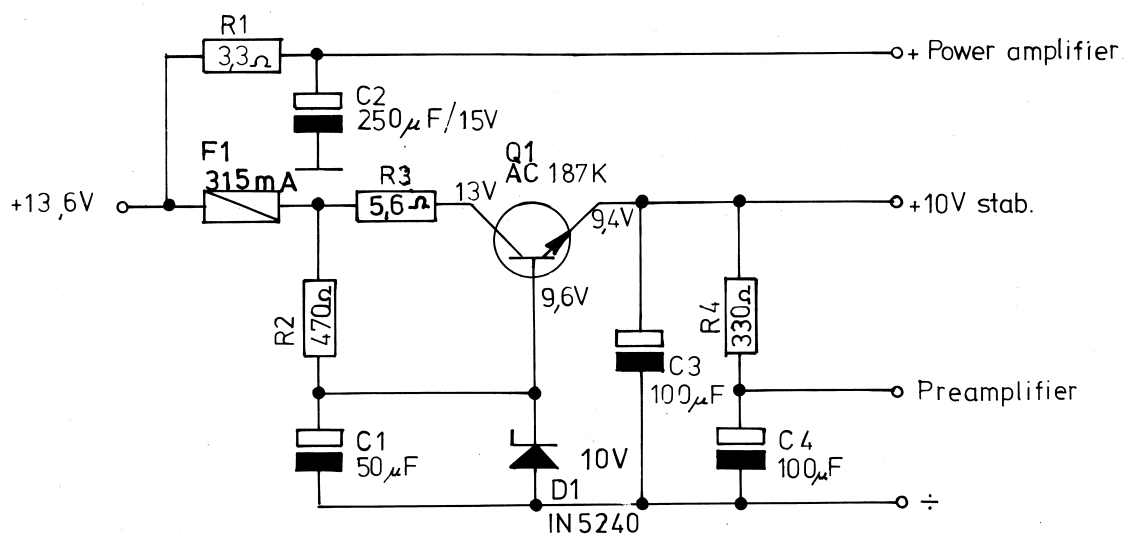
Rettet: 17-10-74 H.J.	Sequence tone receiver for 2 tones Print board AP 351/2	Tegn.: 13-6-74 A.C.	Kontr.: 14-6-74 J.S.
		Stykl. nr.: 74228-4S	
	AP-RADIOTELEFON	Tegn. nr.:	74228-3E

# AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R 1		10 kΩ $\frac{1}{4}$ w	C 1		0,1 μF/12V ker.
R 2		47 kΩ $\frac{1}{4}$ w	C 2		4,7 μF/25V tant.
R 3		10 kΩ $\frac{1}{4}$ w	C 3		4,7 μF/10V tant.
R 4		680 Ω $\frac{1}{4}$ w	C 4		1 μF/35V tant.
R 5		3,3 kΩ $\frac{1}{4}$ w	C 5		4,7 μF/10V tant.
R 6		330 Ω $\frac{1}{4}$ w	C 6		Matched f. code
R 7		3,3 kΩ $\frac{1}{4}$ w	C 7		4,7 μF/10V tant.
R 8		47 kΩ $\frac{1}{4}$ w	C 8		47 μF/6,3V tant.
R 9		10 kΩ $\frac{1}{4}$ w	C 9		100 μF/16V tant.
R10		1,8 kΩ $\frac{1}{4}$ w	C10		1 μF/35V tant.
R 11		470 Ω $\frac{1}{4}$ w	C11		0,22 μF/250V kond.
R12		22 kΩ trim.pot.	C12		Matched f. code
R13		10 kΩ $\frac{1}{4}$ w	C13		4,7 μF/10V tant.
R14		10 kΩ $\frac{1}{4}$ w	C14		47 μF/6,3V tant.
R15		3,9 kΩ $\frac{1}{4}$ w	C15		0,1 μF/12V ker.
R16		10 kΩ $\frac{1}{4}$ w	C16		1 μF/35V tant.
R17		10 kΩ $\frac{1}{4}$ w	C17		4,7 μF/10V tant.
R18		3,3 kΩ $\frac{1}{4}$ w	C18		0,22 μF/250V kond.
R19		47 kΩ $\frac{1}{4}$ w	C19		47 nF/12V ker.
R20		10 kΩ $\frac{1}{4}$ w			
R21		1,8 kΩ $\frac{1}{4}$ w			
R22		470 Ω $\frac{1}{4}$ w	D 1		1N 4148
R23		22 kΩ trim.pot.	D 2		1N 4148
R24		10 kΩ $\frac{1}{4}$ w	D 3		1N 4148
R25		10 kΩ $\frac{1}{4}$ w	D 4		1N 4148
R26		2,2 kΩ $\frac{1}{4}$ w	D 5		1N 4148
R27		47 kΩ $\frac{1}{4}$ w			
R28		47 kΩ $\frac{1}{4}$ w			
R29		47 kΩ $\frac{1}{4}$ w			
R30		10 kΩ $\frac{1}{4}$ w			
R31		2,2 kΩ $\frac{1}{4}$ w			
R32		10 kΩ $\frac{1}{4}$ w			
R33		10 kΩ $\frac{1}{4}$ w			
Sequence tone receiver f.2-tone			Rettet:		Tegn.:
Print Board AP 351/2					Kontr.:
Tilhører tegn. nr.: 74228-3E					Stykl. nr.: 74228-4S

# AP-RADIOTELEFON

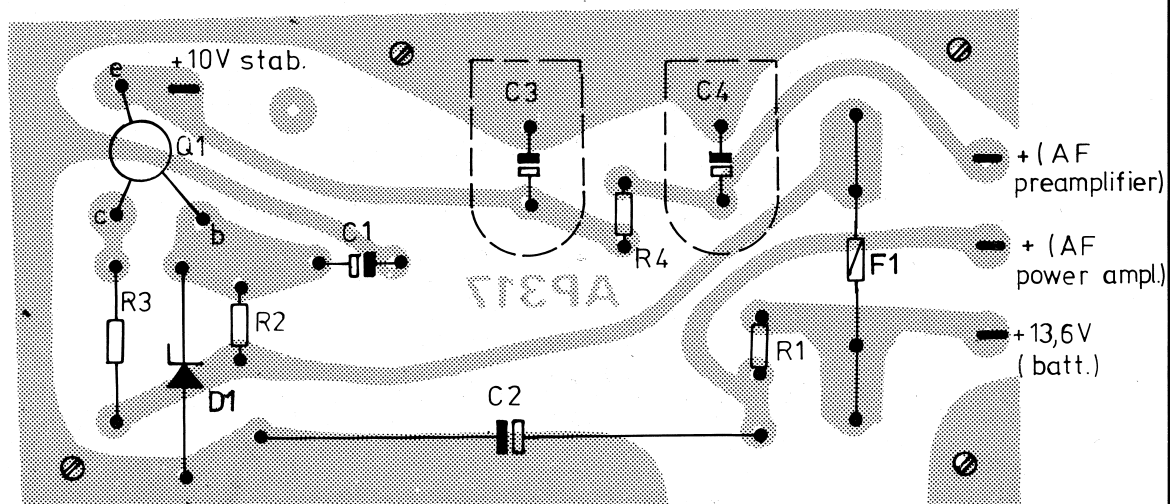
Nr.	Kode	Data	Nr.	Kode	Data
Q 1		BC 107			
Q 2		BC 107			
Q 3		BC 107			
Q 4		BC 107			
Q 5		BC 257			
Q 6		BC 107			
Q 7		BC 107			
Q 8		BC 107			
Q 9		BC 107			
Q10		BC 107			
S 1		L 221			
S 2		L 221			
Sequence tone receiver f.2- Print Board AP 351/2 tone Tilhører tegn. nr.: 74228-3E			Rettet:		<div>Tegn.:</div> <div>Kontr.:</div>
					Stykl. nr.: 74228-4S



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: 1-11-73 H.P.

10 V STAB. POWERSUPPLY  
PRINT BOARD AP 317/1

AP-RADIOTELEFON

Tegn.: 30.7.70  
BEP

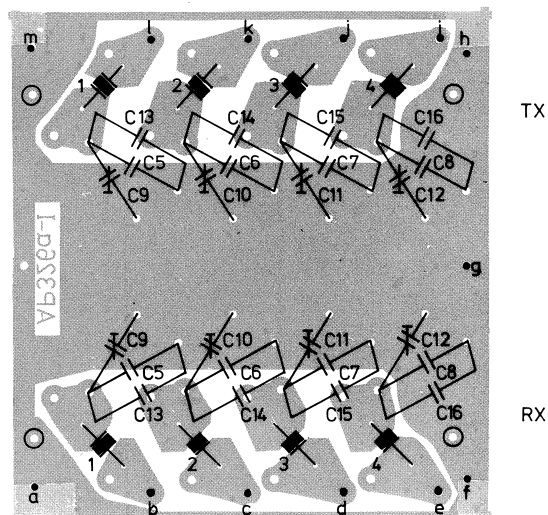
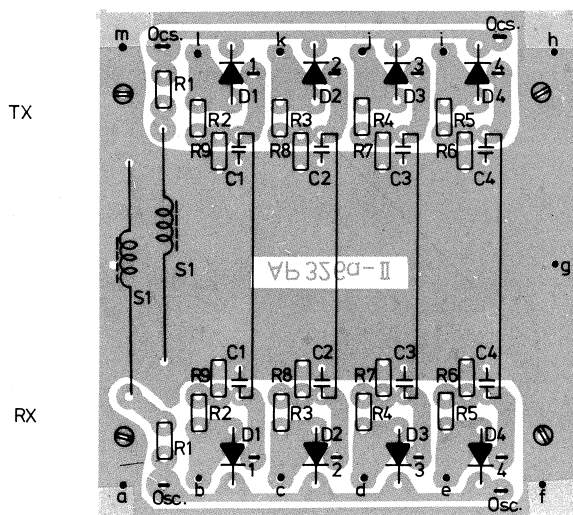
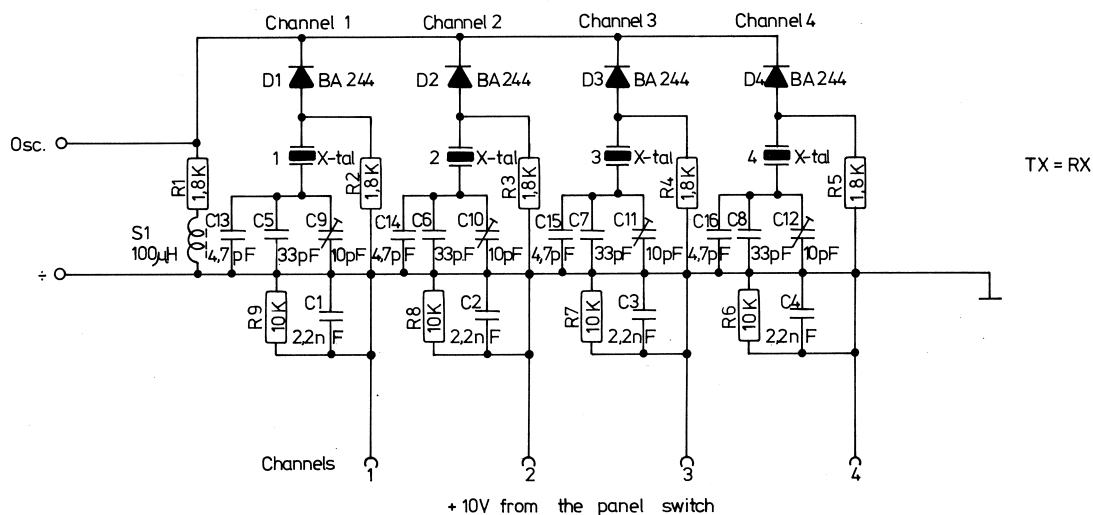
Kontr.: 30.7.70  
E.F.

Stykl. nr.: 70178/4

Tegn. nr.: 70177/4

# AP-RADIOTELEFON

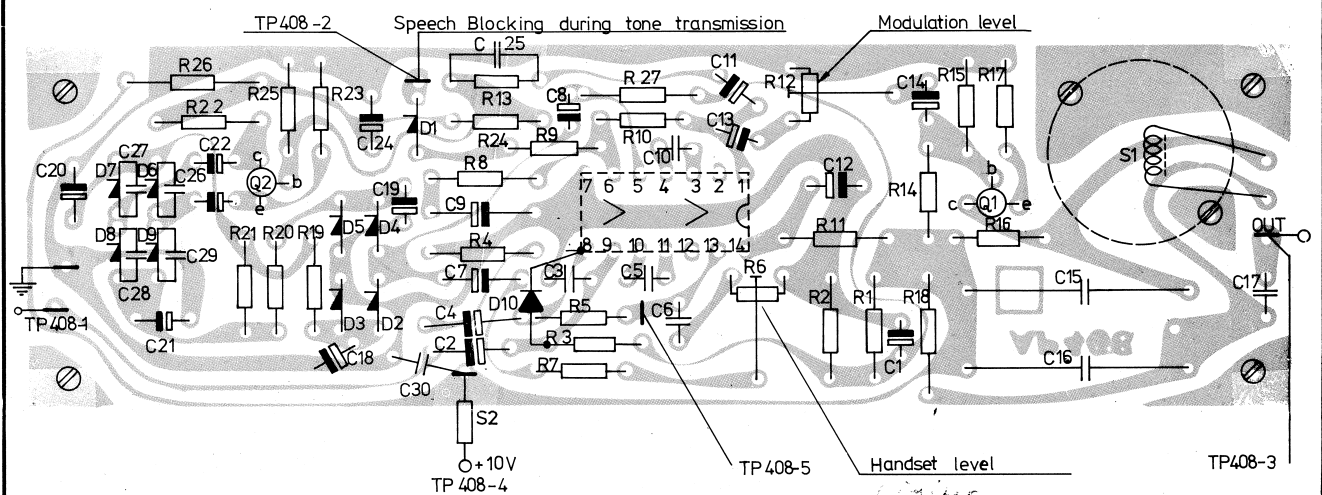
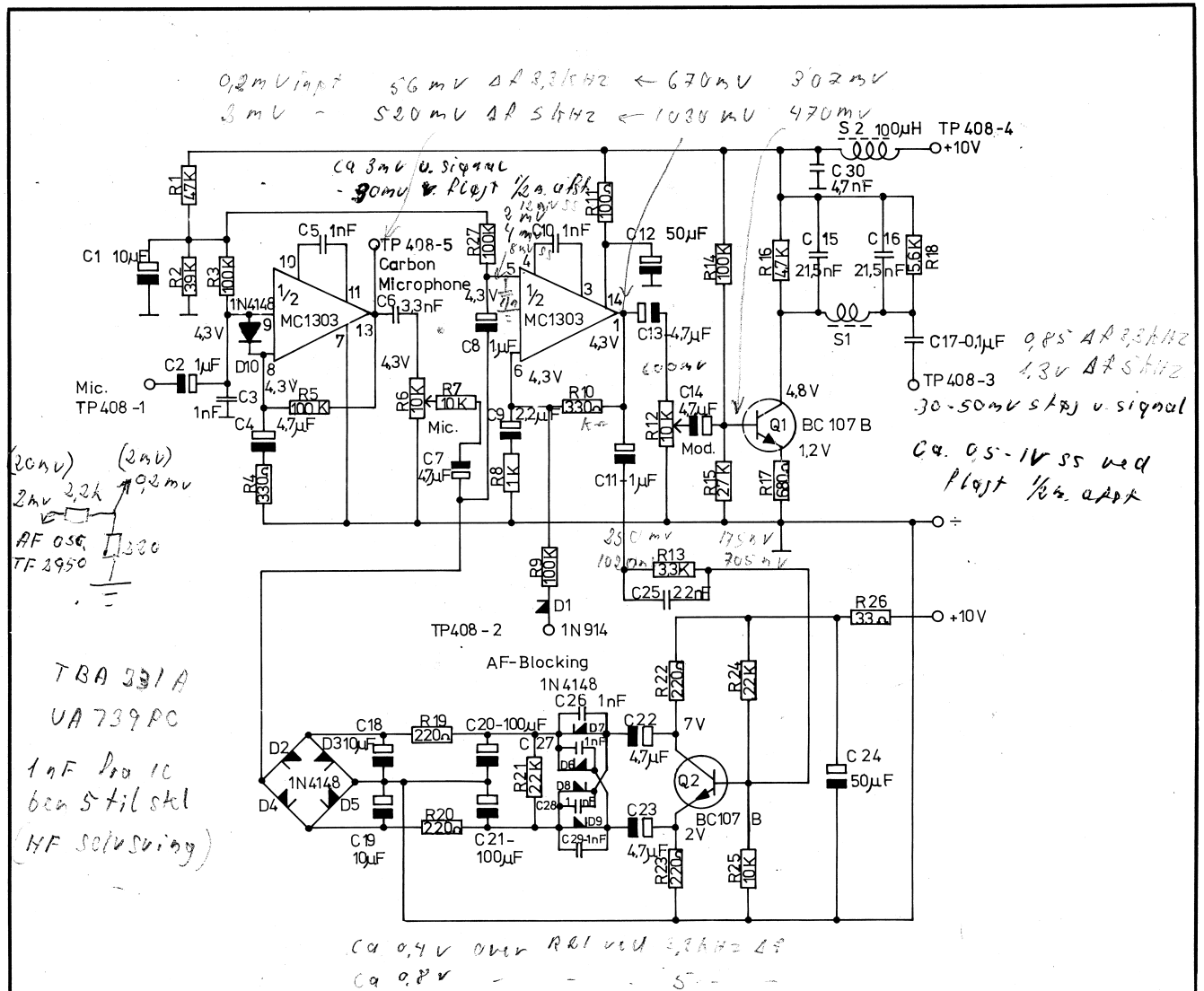
Nr.	Kode	Data	Nr.	Kode	Data
R1		3,3 ohm $\frac{1}{2}$ W			
R2		470 ohm $\frac{1}{4}$ W			
R3		5,6 ohm "			
R4		330 ohm "			
C1		50 mF/16v lyt.			
C2		250 mF/15v lyt.			
C3		100 mF/16v lyt.			
C4		100 mF/16v lyt.			
D1		1N5240 lov zener			
Q1		Ac 187 k			
F1		315mA middeltræg			
lov stab. Powersupply AP 700			Rettet: 1-11-73.H.P.		
Printboard AP 317/1			Tegn.: EB		
Tilhører tegn. nr.: 70177/4			Kontr.: 70178/4		



Rettet:	4 channel x-tal shift Print board AP 326a/4 AP-RADIOTELEFON	Tegn.: 25-10-74 Kontr.: 25-10-74	
		AC JS	
		Stykl. nr.: 70197-4S	
		Tegn. nr.: 70196-3E	

# AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R 1		1,8 $\Omega$ $\frac{1}{4}$ w			
R 2		1,8 $\Omega$ $\frac{1}{4}$ w			
R 3		1,8 $\Omega$ $\frac{1}{4}$ w			
R 4		1,8 $\Omega$ $\frac{1}{4}$ w			
R 5		1,8 $\Omega$ $\frac{1}{4}$ w			
R 6		10 k $\Omega$ $\frac{1}{4}$ w			
R 7		10 k $\Omega$ $\frac{1}{4}$ w			
R 8		10 k $\Omega$ $\frac{1}{4}$ w			
R 9		10 k $\Omega$ $\frac{1}{4}$ w			
C 1		2,2 nF ker..			
C 2		2,2 nF ker..			
C 3		2,2 nF ker..			
C 4		2,2 nF ker..			
C 5		33 pF styr..			
C 6		33 pF styr..			
C 7		33 pF styr..			
C 7		33 pF styr..			
C 8		33 pF styr..			
C 9		10 pF trim..			
C10		10 pF trim..			
C11		10 pF trim..			
C12		10 pF trim..			
C13		4,7 pF styr..			
C14		4,7 pF styr..			
C15		4,7 pF styr..			
C16		4,7 pF styr..			
S 1		Wide Band Choke			
D 1		BA 244			
D 2		BA 244			
D 3		BA 244			
D 4		BA 244			
4 channel X-tal shift Print Board AP 326a/4 Tilhører tegn. nr.: 70196/3E			Rettet:		<div>Tegn.: Stykl. nr.</div> <div>Kontr.: 70197-4S</div>



Just. af mod niveau, R<sub>6</sub>-R<sub>12</sub> centerstilles  
inpl. (2 mV) LF, R<sub>12</sub> just. til max frekvenssving 5 kHz, input ændres  
til 0,2 mV R<sub>6</sub> just. til 1/3 af max. = 3,3 kHz (indt. mike forlæddet)

Remarks: Quoted DC potentials are measured to chassis.

R<sub>i</sub> = 10 M $\Omega$  provided 330 K $\Omega$  in series with test pin.

Rx stand by and Tx keyed.

knagende støj i modulationen kun skyldes relè i betjeningsboks

Retter: 15-3-73 AC  
28-3-73 AC  
29-5-73 HP  
4-12-73 JAN  
14-5-74 HP

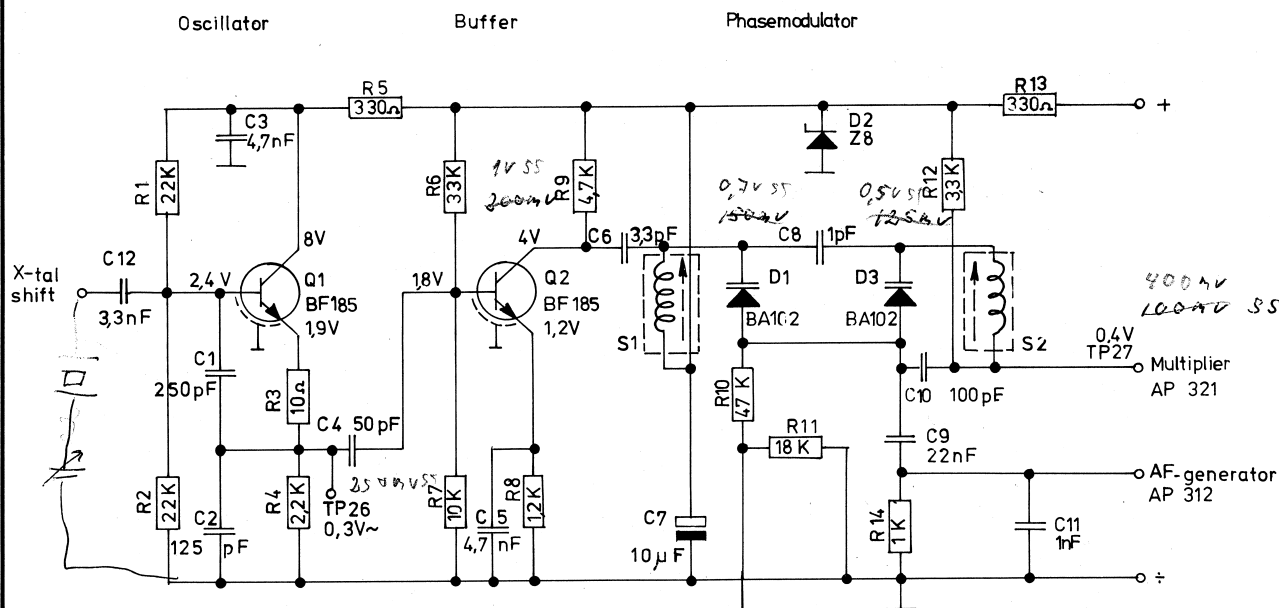
Modulation amplifier with AVC  
Printboard AP 408/3  
AP-RADIOTELEFON

Tegn.: 31-10-73 AC Kontr.: 31-10-73 HM  
Stykl. nr.: 72128-4S  
Tegn. nr.: 72128-3E



# AP-RADIOTELEFON

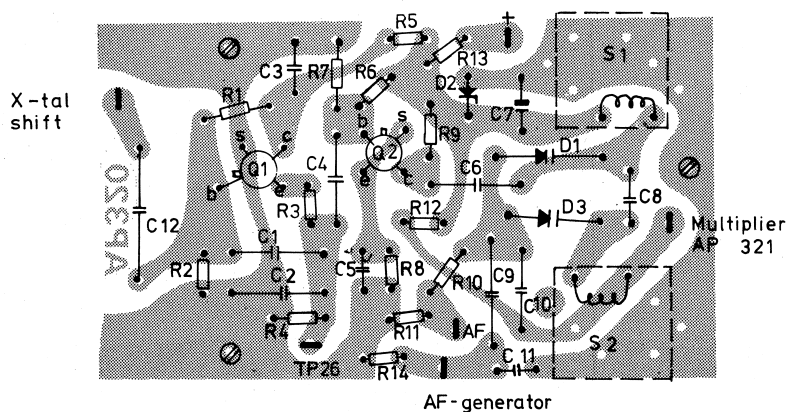
Nr.	Kode	Data	Nr.	Kode	Data
R 1		47 kΩ $\frac{1}{4}$ w	C10		1 nF ker.kond.
R 2		39 kΩ $\frac{1}{4}$ w	C11		1 μF/35V tant.
R 3		100 kΩ $\frac{1}{4}$ w	C12		47 μF frako.
R 4		330 Ω $\frac{1}{4}$ w	C13		4,7 μF/10V tant.
R 5		100 kΩ $\frac{1}{4}$ w	C14		4,7 μF/10V tant.
R 6		10 kΩ trim.pot.	C15		21,5 nF styr.
R 7		10 kΩ trim.pot.	C16		21,5 nF styr.
R 8		1 kΩ $\frac{1}{4}$ w	C17		0,1 μF laco.
R 9		100 kΩ $\frac{1}{4}$ w	C18		10 μF/25V tant.
R10		330 kΩ $\frac{1}{4}$ w	C19		10 μF/25V tant.
R11		100 Ω $\frac{1}{4}$ w	C20		100 μF/ 3V tant.
R12		10 kΩ $\frac{1}{4}$ w	C21		100 μF/ 3V tant.
R13		3,3 kΩ $\frac{1}{4}$ w	C22		4,7 μF/10V tant.
R14		100 kΩ $\frac{1}{4}$ w	C23		4,7 μF/10V tant.
R15		100 kΩ $\frac{1}{4}$ w	C24		47 μF frako.
R16		4,7 kΩ $\frac{1}{4}$ w	C25		22 nF laco.
R17		680 Ω $\frac{1}{4}$ w	C26		1 nF ker.kond.
R18		5,6 kΩ $\frac{1}{4}$ w	C27		1 nF ker.kond.
R19		220 Ω $\frac{1}{4}$ w	C28		1 nF ker.kond.
R20		220 Ω $\frac{1}{4}$ w	C29		1 nF ker.kond.
R21		22 kΩ $\frac{1}{4}$ w	C30		4,7 nF
R22		220 Ω $\frac{1}{4}$ w	S 1	18-666	L 66 tg.70386/4
R23		220 Ω $\frac{1}{4}$ w	S 2		0,1 μH
R24		22 kΩ $\frac{1}{4}$ w	D 1		1N 4148
R25		10 kΩ $\frac{1}{4}$ w	D 2		1N 4148
R26		33 Ω $\frac{1}{4}$ w	D 3		1N 4148
			D 4		1N 4148
			D 5		1N 4148
C 1		10 μF/25V tant.	D 6		1N 4148
C 2		1 μF/35V tant.	D 7		1N 4148
C 3		1 nF ker.kond.	D 8		1N 4148
C 4		4,7 μF/10V tant.	D 9		1N 4148
C 5		1 nF ker.kond.	D10		1N 4148
C 6		3,3 nF ker.kond.	Q 1		BC 107 b
C 7		4,7 μF/10V tant.	Q 2		BC 107 b
C 8		1 μF/35V tant.	IC		MC 1303 IC
C 9		2,2 μF/25V tant.			
Modulation amplifier with AVC Print Board AP 408/3 Tilhører tegn. nr.: 72128-3E			Rettet: 4.-/2.-73		<div>Tegn.:</div> <div>Kontr.:</div> <div>Stykl. nr.: 72128-4S</div>



hvis C2 afbrydes eller reduceres  
 til nogle få pF, kan frekvensen  
 stige med helt op til 40-50 kHz

BA102 kan ikke  
 erstatte af BA101!

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

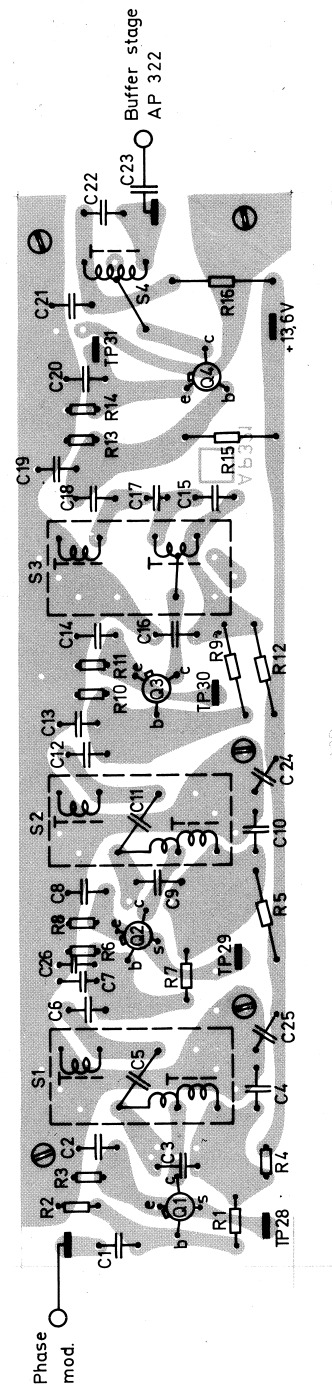
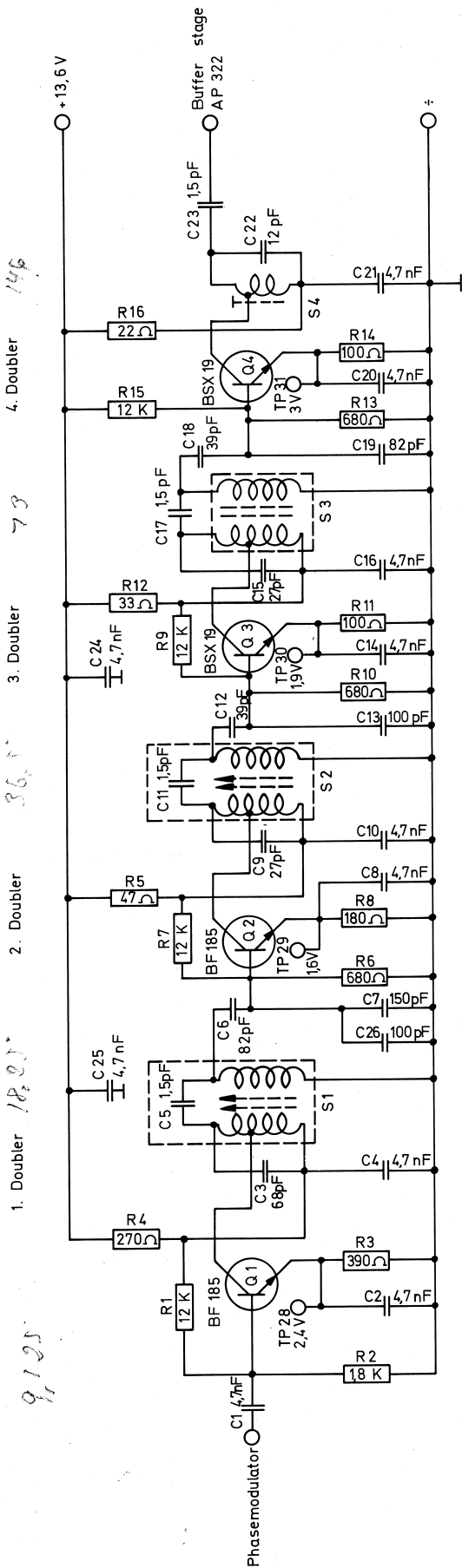


BF495

Rettet: 3-10-72 LT/HP	OSCILLATOR AND PHASEMODULATOR 2 M TRANS- MITTER. AP 700. PRINT BOARD AP 320/1 AP-RADIOTELEFON	Tegn.: 4.8.70 BEP Kontr.: 4.8.70 E.F. Stykl. nr.: 70182/4 Tegn. nr.: Erstatte 68012/3 70181 / 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		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		10 uF tantal			
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 320/1					Kontr.:
Tilhører tegn. nr.: 70181/4 AP 700					Stykl. nr.: 70182/4



Rettet:

MULTIPLIER FOR 2M TRANSMITTER  
PRINT BOARD AP 321a/5

AP-RADIOTELEFON

Tegn.: H. H.  
16.11.72

Kontr.:

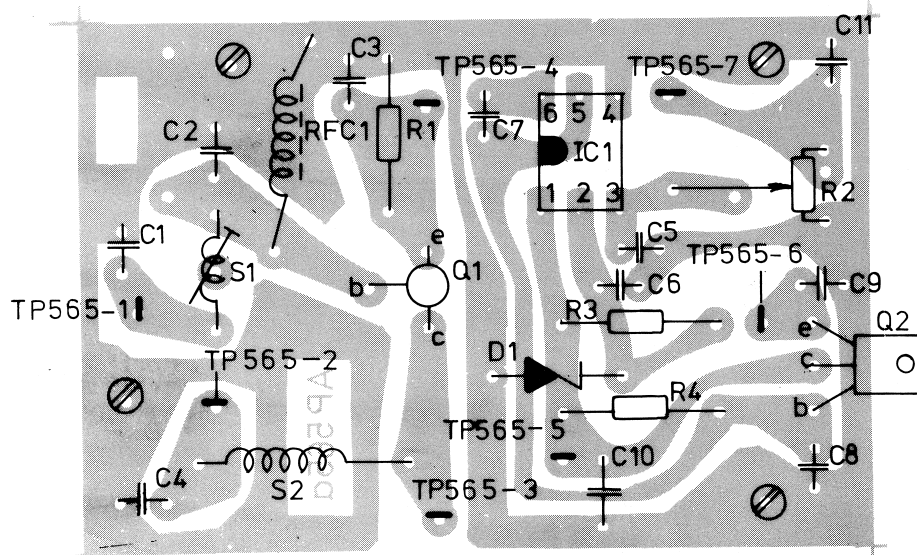
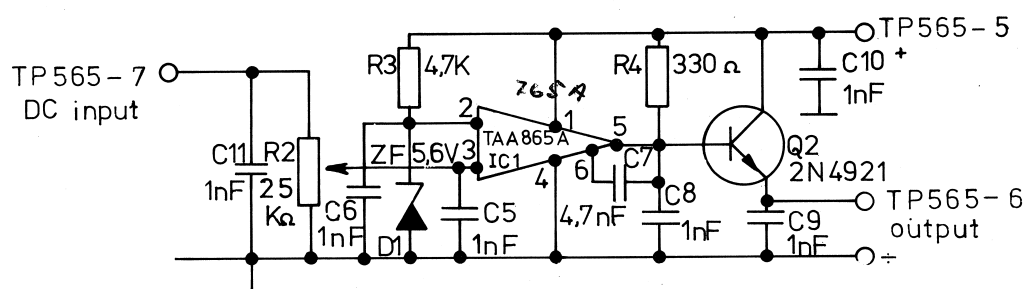
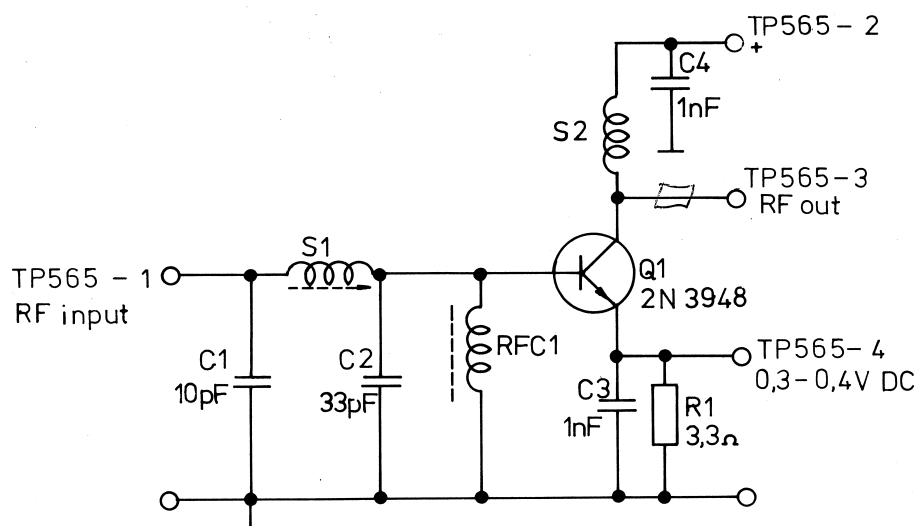
Stykl. nr.: 72271-4S

Tegn. nr.:

72271-3E

# AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R 1		12 kOhm $\frac{1}{4}$ w			
R 2		1,8 kOhm $\frac{1}{4}$ w			
R 3		390 kOhm $\frac{1}{4}$ w			
R 4		270 Ohm $\frac{1}{4}$ w			
R 5		47 Ohm $\frac{1}{4}$ w			
R 6		680 Ohm $\frac{1}{4}$ w			
R 7		12 kOhm $\frac{1}{4}$ w			
R 8		180 Ohm $\frac{1}{4}$ w			
R 9		12 kOhm $\frac{1}{4}$ w			
R10		680 Ohm $\frac{1}{4}$ w			
R11		100 Ohm $\frac{1}{4}$ w			
R12		680 Ohm $\frac{1}{4}$ w			
R13		680 Ohm $\frac{1}{4}$ w			
R14		100 Ohm $\frac{1}{4}$ w			
R15		12 kOhm $\frac{1}{4}$ w			
R16		22 Ohm $\frac{1}{4}$ w			
C 1		4,7 nF ker.			
C 2		4,7 nF ker.			
C 3		68 pF ker.			
C 4		4,7 nF ker.			
C 5		1,5 pF styr.			
C 6		82 pF ker.			
C 7		150 pF ker.			
C 8		4,7 nF ker.			
C 9		27 pF ker.			
C10		4,7 nF ker.			
C11		1,5 pF styr.			
C12		39 pF ker.			
C13		100 pF ker.			
C14		4,7 nF ker.			
C15		27 pF ker.			
C16		4,7 nF ker.			
C17		1,5 pF styr.			
C18		39 pF ker.			
C19		82 pF ker.			
C20		4,7 nF ker.			
C21		4,7 nF ker.			
C22		12 pF ker.			
C23		1,5 pF ker.			
C24		4,7 nF ker.			
C25		4,7 nF ker.			
C26		100 pF ker.			
Q 1		BF 185			
Q 2		BF 185			
Q 3		BSX 19			
Q 4		BSX 19			
S 1		L 149 dwg. 69128			
S 2		L 150 dwg. 70321			
S 3		L 55 dwg. 68097			
S 4		L 56			
Multiplier 2 M transmitter Printboard AP 321a/5 Tilhører tegn. nr.: 72271-3E			Rettet:		<div>Tegn.: Stykl. nr.:</div> <div>Kontr.: 72271-4S</div>



Rettet: 14-5-74 HP

2m, Bufferstage with regulation.

Printed board AP565a/1

AP-RADIOTELEFON A/s

Tegn.: 1-10-73  
A.C.

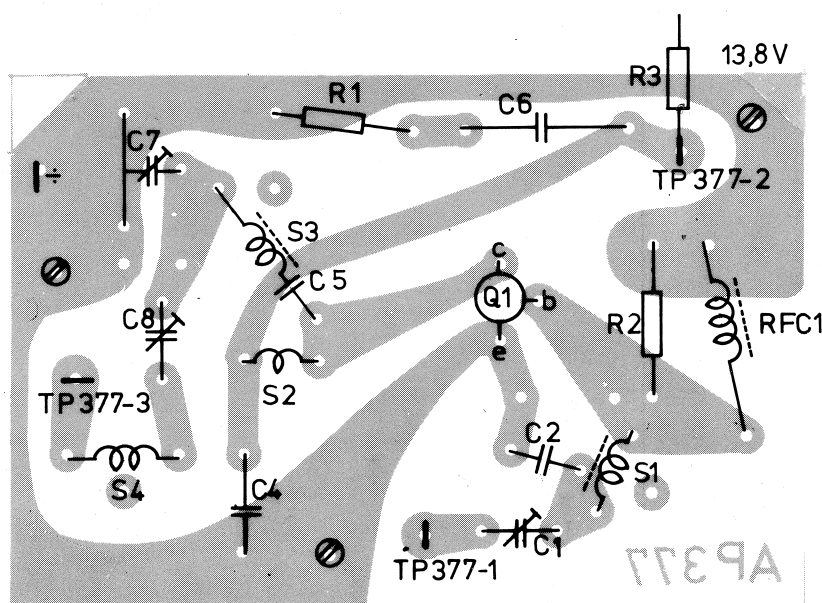
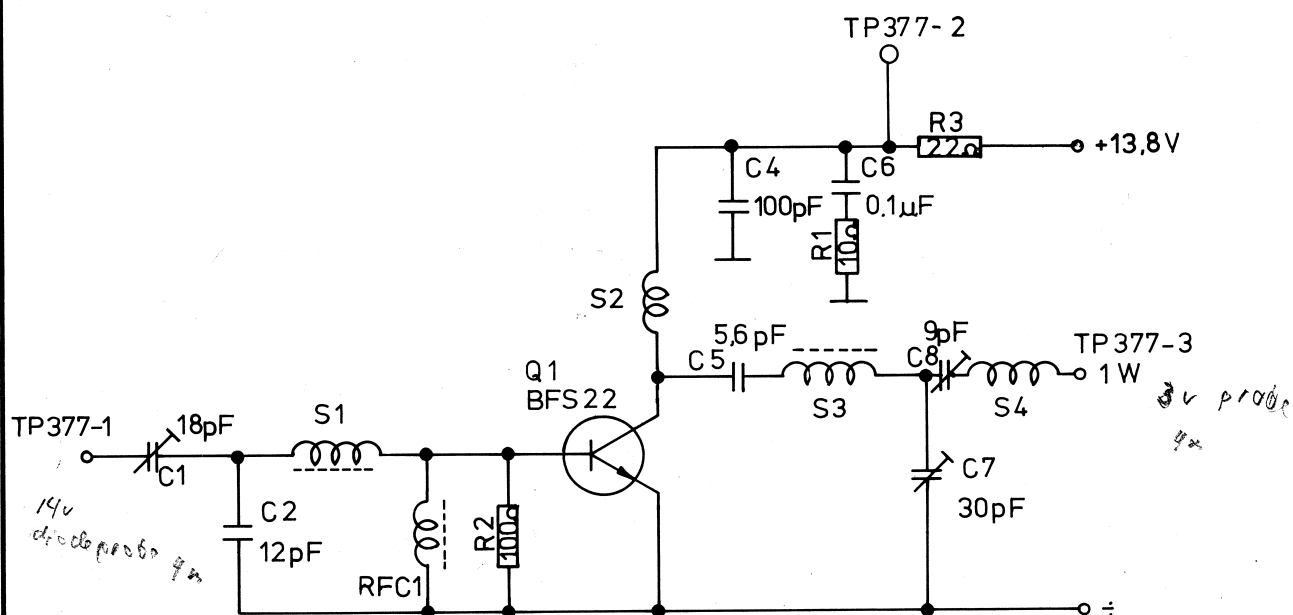
Kontr.: 1-10-73  
T.J.

Stykl. nr.: 73362-4S

Tegn. nr.: 73362-4E

# AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R 1		3,3 $\Omega$ $\frac{1}{4}$ w			
R 2		25 k $\Omega$ trim.pot			
R 3		4,7 k $\Omega$ $\frac{1}{4}$ w			
R 4		330 $\Omega$ $\frac{1}{4}$ w			
C 1		10 pF N 150 ker.			
C 2		33 pF N 150 ker.			
C 3		4,7 nF ker.			
C 4		1 nF ker.			
C 5		1 nF ker.			
C 6		1 nF ker.			
C 7		4,7 nF ker.			
C 8		1 nF ker.			
C 9		1 nF ker.			
C10		1 nF ker.			
C11		1 nF ker.			
D 1		ZF 5,6V zene diode			
S 1		L 57			
S 2		L 58			
Q 1		2N 3948			
Q 2		2N 4921			
RFC 1		Wide Band RFC			
IC1		TAA 865 A			
2 M Bufferstage with Regulation Print Board AP 565a/1 Tilhører tegn. nr.: 73362-4E			Rettet:		<div>Tegn.:</div> <div>Stykl. nr.:</div> <div>Kontr.:</div> <div>73362-4S</div>

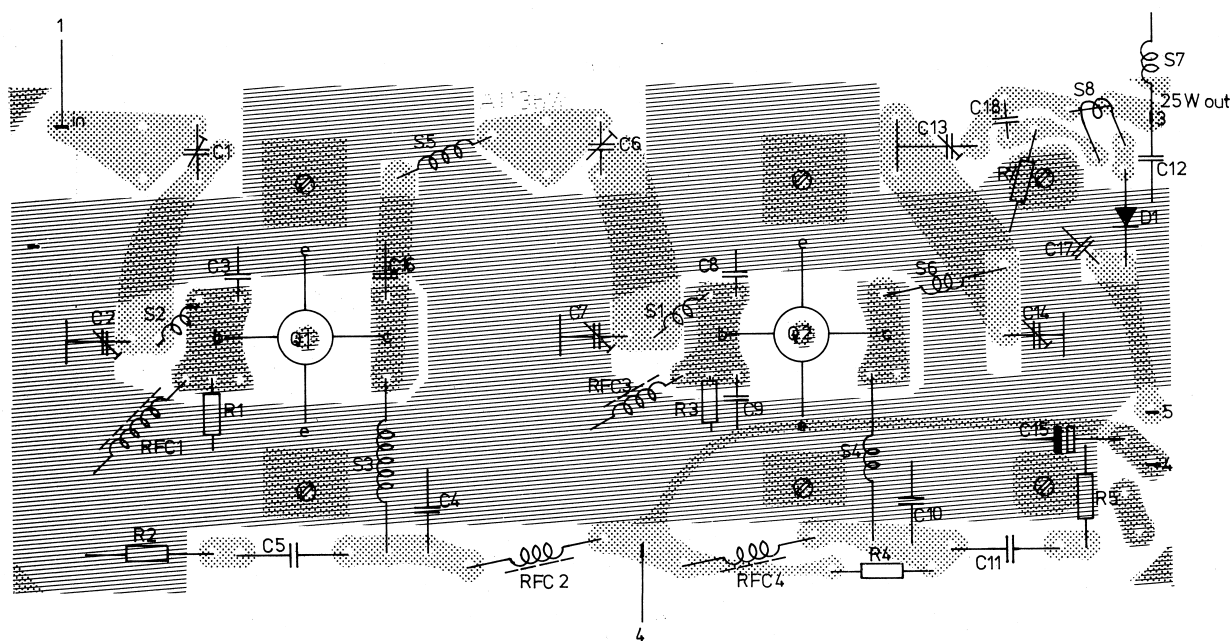
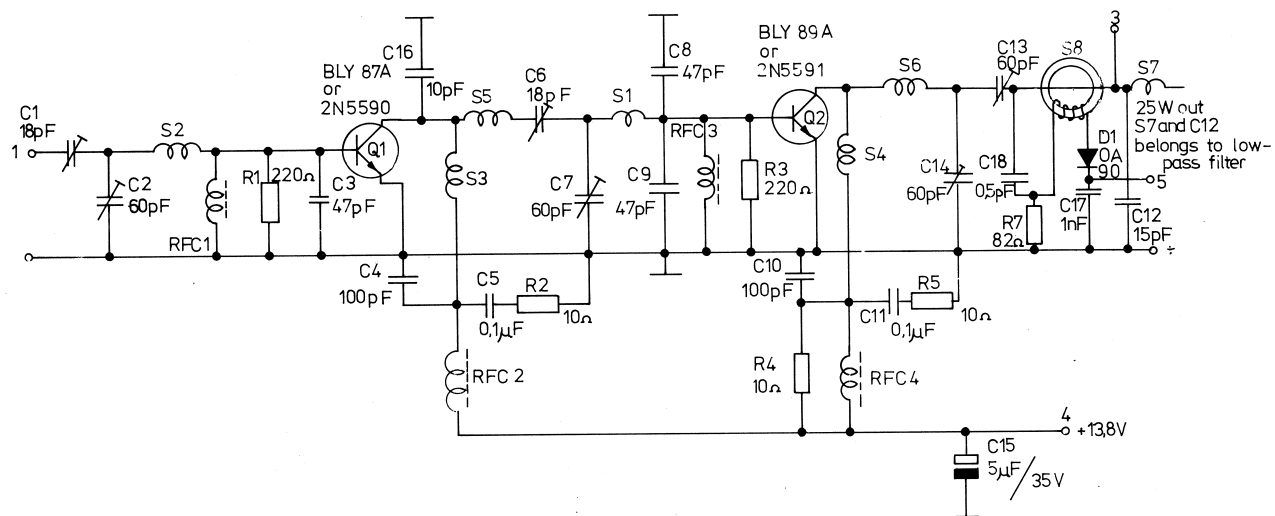


Rettet: 30-5-73 HP      	1W Driver stage f.2m transm. Print AP 377/1 <b>AP-RADIOTELEFON A/s</b>	Tegn.: AC. 16-5-73 Stykl. nr.: 73176 - 4S Tegn. nr.: 73176 - 4E	Kontr.: T.J. 16-5-73
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# AP-RADIOTELEFON

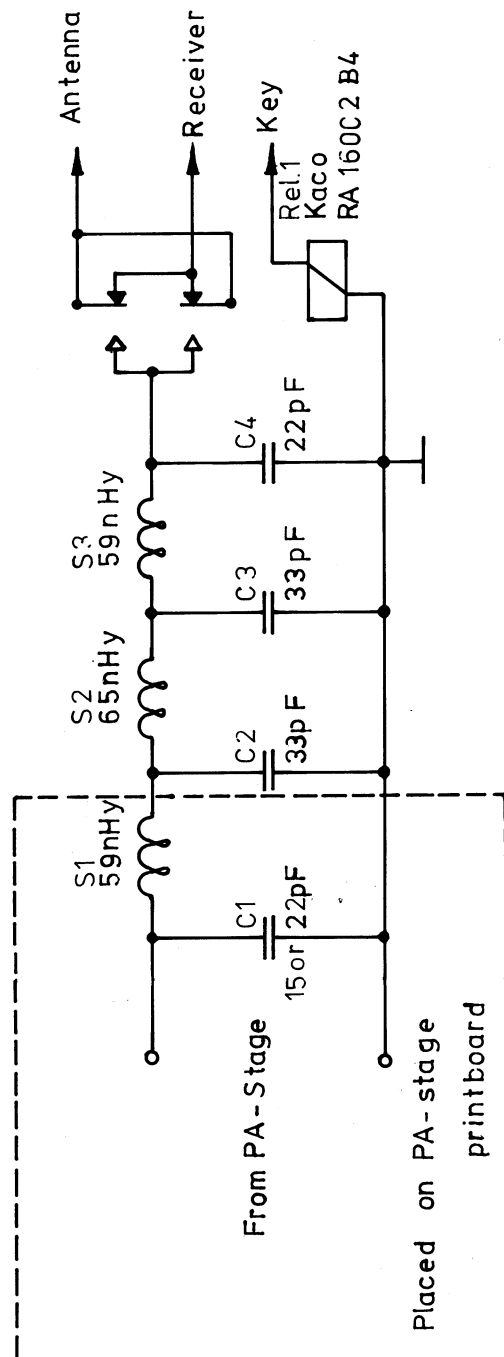
Nr.	Kode	Data	Nr.	Kode	Data
R 1		10 $\Omega$ $\frac{1}{4}$ w			
R 2		100 $\Omega$ $\frac{1}{4}$ w			
R 3		22 $\Omega$ 1 w			
C 1		18 pF trim.			
C 2		12 pF ker.			
C 4		100 pF ker.			
C 5		5,6 pF ker.			
C 6		0,1 $\mu$ F pol.			
C 7		30 pF trim.			
C 8		9 pF trim.			
S 1		L 59			
S 2		L 60			
S 3		L 61			
S 4		L 1			
RFC -1		Wide Band RFC			
Q 1		BFS 22			
1 W Driver Stage 2m Transmitt. Print AP 377/1 Tilhører tegn. nr.: 73176-4E			Rettet:		Tegn.: Kontr.:
					Stykl. nr.: 73176-4S



Rettet:	25 W PA- Stage, 2 m, Print board AP 367a/3	Tegn.: 3-10-73 A.C.		Kontr.: 3-10-73 T.
		Stykl. nr.: 73364-4S		
		Tegn. nr.: 73364-3E		
	AP - RADIOTELEFON			

# AP-RADIOTELEFON

Nr.	Kode	Data	Nr.	Kode	Data
R 1		220 $\Omega$ $\frac{1}{4}$ w	S 7		L 77
R 2		10 $\Omega$ $\frac{1}{4}$ w	S 8		L 229
R 3		220 $\Omega$ $\frac{1}{4}$ w			
R 4		10 $\Omega$ $\frac{1}{4}$ w			
R 5		10 $\Omega$ $\frac{1}{4}$ w	RFC		
R 7		82 $\Omega$ $\frac{1}{4}$ w	-1		Wide Band RFC
			RFC		
			-2		Wide Band RFC
C 1		18 pF trim.	RFC		
C 2		60 pF trim.	-3		Wide Band RFC
C 3		47 pF ker.	RFC		
C 4		100 pF ker.	-4		Wide Band RFC
C 5		0,1 $\mu$ F pol.			
C 6		18 pF trim.	Q 1		2N 5590 or BLY 87A
C 7		60 pF trim.	Q 2		2N 5591 or BLY 89A
C 8		47 pF ker.			
C 9		47 pF ker.			
C10		100 pF ker.			
C11		0,1 $\mu$ F pol.			
C12		15 pF ker.			
C13		60 pF trim.			
C14		60 pF trim.			
C15		5 $\mu$ F/35V elko			
C16		10 pF ker.			
C17		1 nF ker.			
C18		0,5 pF ker.			
D 1		OA 90			
S 1		L 170			
S 2		L 173			
S 3		L 174			
S 4		L 174			
S 5		L 175			
S 6		L 176			
25 W PA Stage 2 m Print Board AP 367a/1 Tilhører tegn. nr.: 73364-3E			Rettet:		<div>Tegn.:</div> <div>Stykl. nr.:</div> <div>Kontr.:</div> <div>73364-4S</div>



Erstatter 68072/4

Rettet:

LOW-PASS FILTER 2M X-MTR.

AP-RADIOTELEFON

Tegn.: 25/8-70  
ABP

Kontr.: 25/8-70  
E.F.

Stykl. nr.: 70 216 / 4S

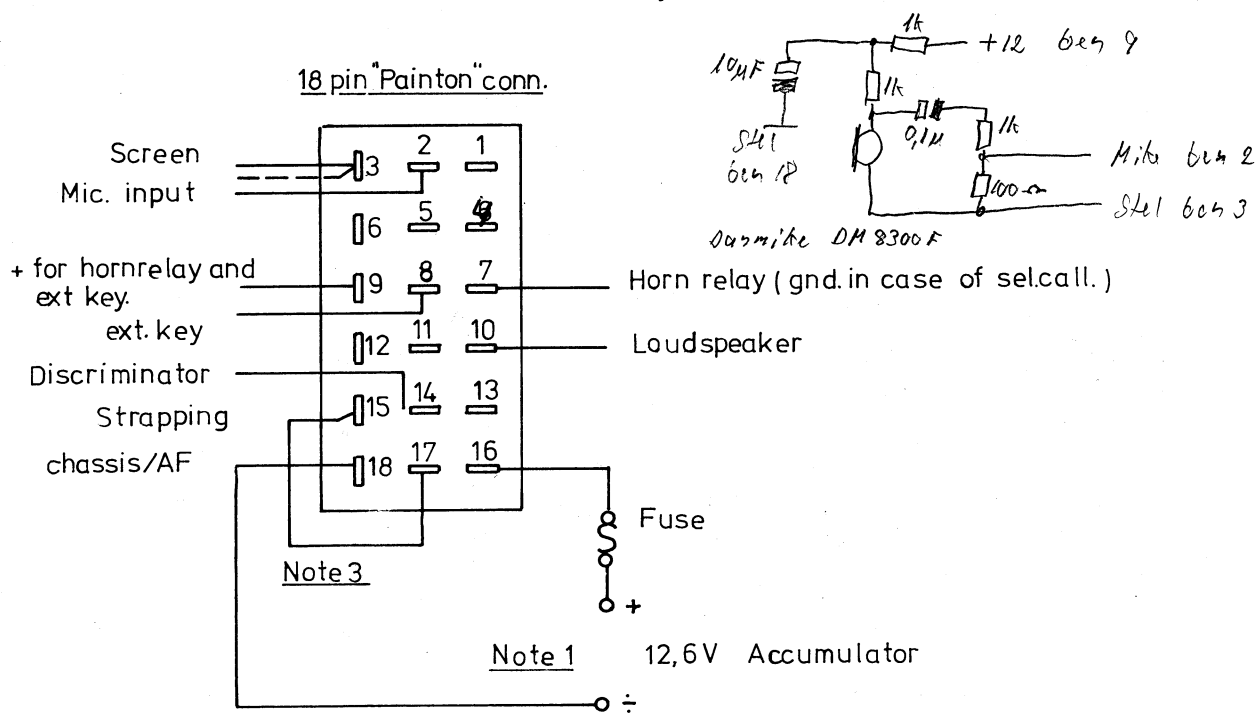
Tegn. nr.:

70 215-4E

# AP-RADIOTELEFON

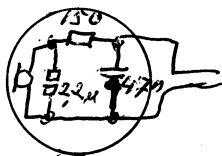
Nr.	Kode	Data	Nr.	Kode	Data
C1		15 or 22 pF ker.			
C2		33 pF feed thru			
C3		33 pF feed thru			
C4		22 pF feed thru			
S1		L76			
S2		L77			
S3		L78			
Rel.					
-1		RA 16002 B 4			
Low-Pass Filter 2m Transmitt. AP 700 Tilhører tegn. nr.: 70215/4			Rettet:		Tegn.: EB Kontr.:
					Stykl. nr.: 70216/4

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



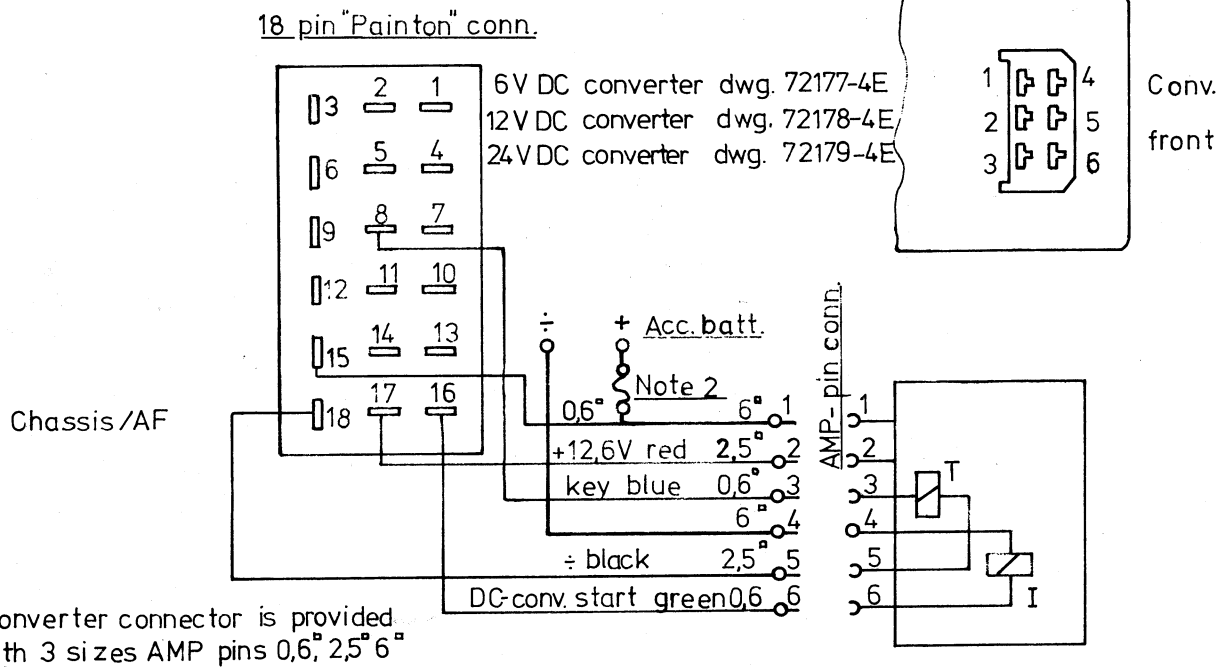
Note 1: DC converter has to be used as far as the power supply is not 12,6VDC with chassis negative.

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

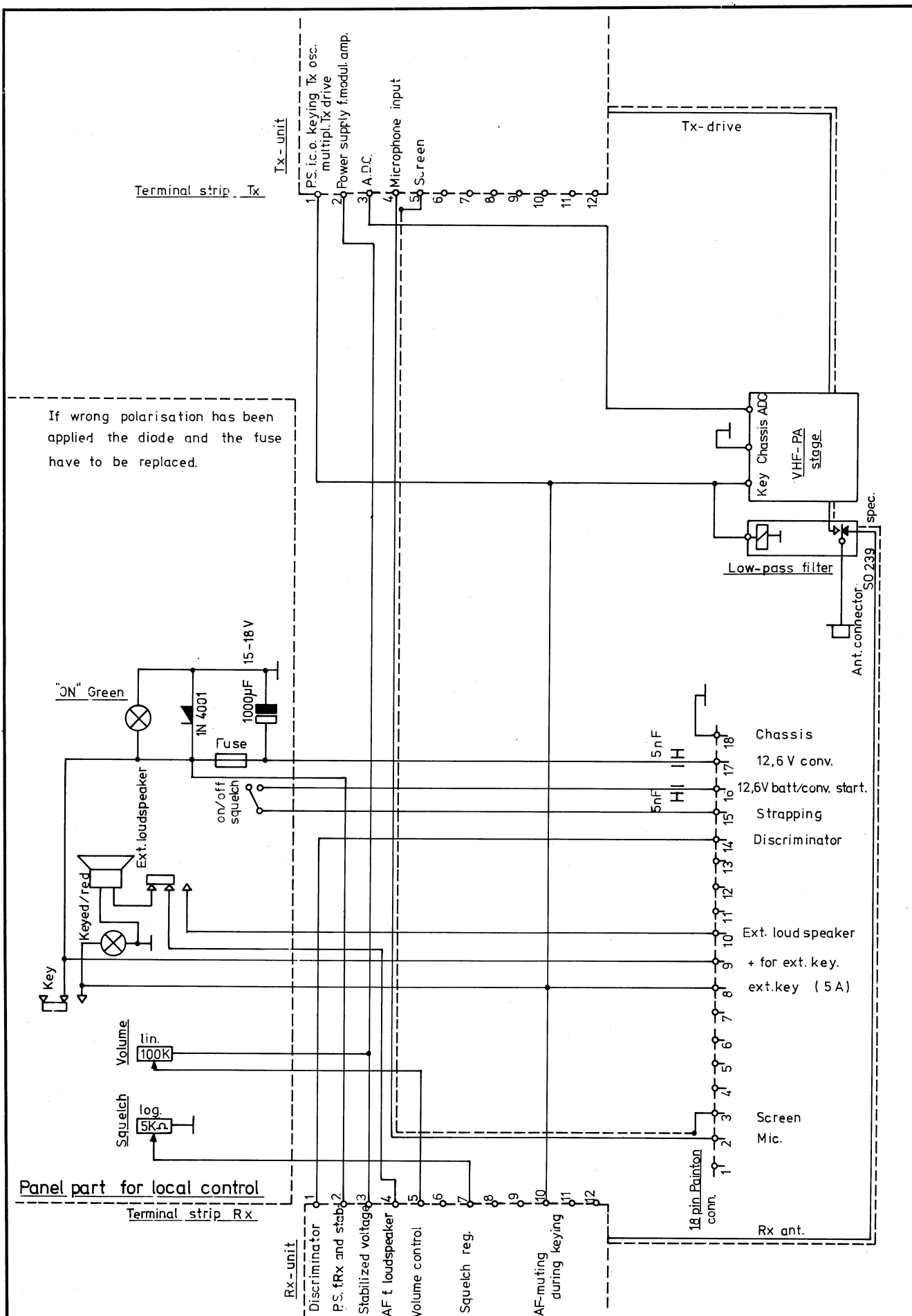


Note 3: At 12,6 V strap 15 and 17.

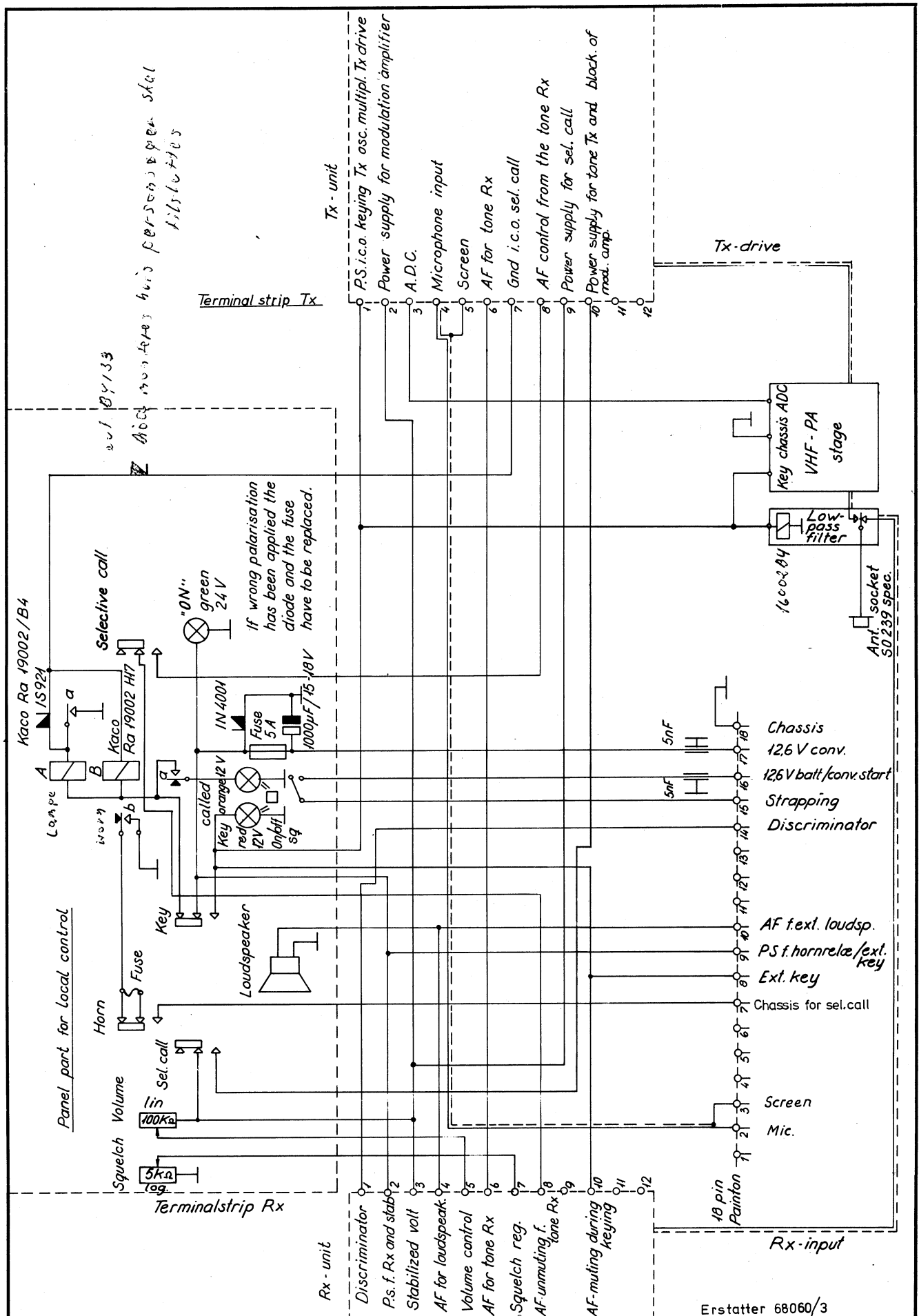
For DC- Converter.



Rettet:	Materiale	Model nr.	Lager nr.	Målforhold	Tegn.	17/8-70	A.B.P.
7-10-74 AC					Kont.	18/8-70	E.F.
Genstand: Mounting Instructions. local control. Mobile without DC-converter.					Tg. nr	68127/4	



Rettet:	MOBILE AP 700 LOCAL CONTROLLED	Tegn.: 19-8-70	Kontr.: 19/8-70
	SIMPLEX, 1 CHANNEL, FUNCTION, LAY-OUT	ABP	E.F.
	AP-RADIOTELEFON	Stykl. nr.:	
		Tegn. nr.: Erstatte 68069/3	
		<b>70202/4</b>	



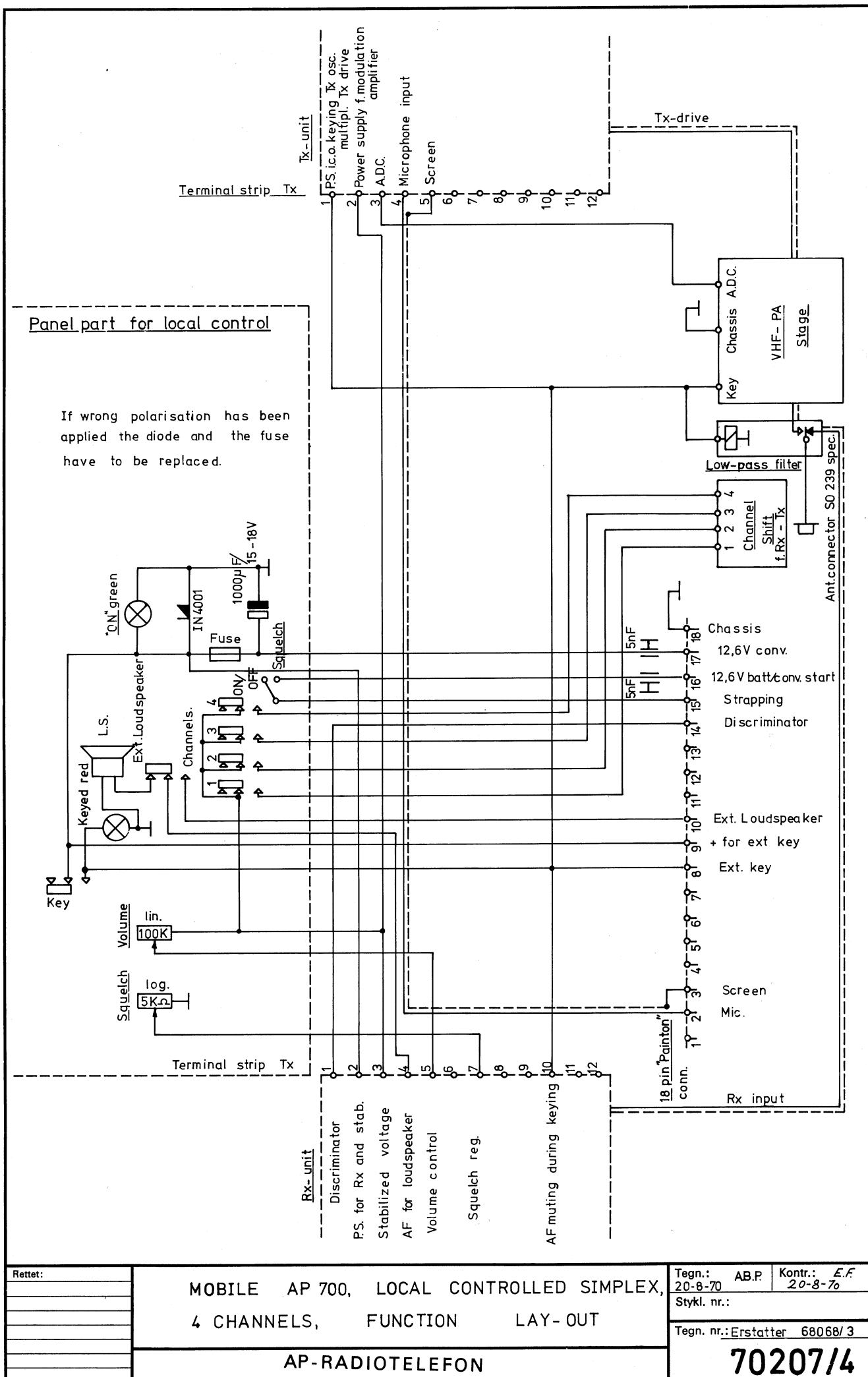
Rettet: 27-5-74 HP
4-10-74 AC

Mobile AP 700  
Local controlled simplex 1 channel, sel. call  
function lay-out.

AP-RADIOTELEFON

Tegn.: U.K.	Kontr.: E.F.
Stykl. nr.:	2-9-76
Tegn. nr.:	70225/4.





Rettet:

MOBILE AP 700, LOCAL CONTROLLED SIMPLEX,  
4 CHANNELS, FUNCTION LAY-OUT

AP-RADIOTELEFON

Tegn.: AB.P. Kontr.: E.F.  
20-8-70 20-8-70

Stykl. nr.:

Tegn. nr.: Erstatte 68068/3

70207/4

