

2.1 IF ALIGNMENT (Refer to Fig-1, Fig-2 & Fig-9)

Test Equipment Needed:

- 1 Oscilloscope
- 2 Slow sweep generator with variable marker

STEP-1 Connect sweep generator to TP-1 (TEST POINT) of RF section see Fig-1

STEP-2 Connect Oscilloscope to TP-2 of IF AMPLIFIER

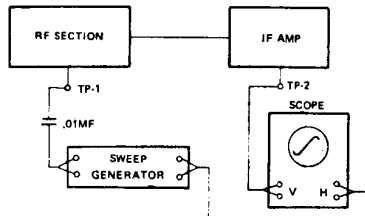


Fig. 1

STEP-3 Maintain output of sweep generator at a low level to prevent saturation from overloading

STEP-4 Adjust T2 of RF SECTION T3, T4 and T5 (Top and Bottom) of IF amplifier so that 10.7MHz is in center of discriminator curve and for best linearity. (Refer to Fig-2)

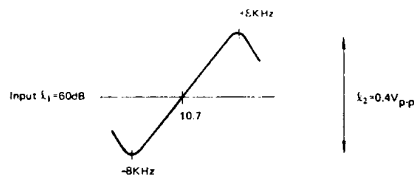


Fig. 2

STEP-5 Reference input f_1 VS. f_2 output Voltage

f_1 70 dB		$f_2 = 0.55$ V p-p
f_1 80 dB		$f_2 = 0.7$ V p-p

2.2 RF SECTION ALIGNMENT (Refer to Fig-3 and Fig-4)

Test Equipment Needed:

- 1 RF STANDARD SIGNAL GENERATOR
- 2 AC - VTVM
- 3 DC - VTVM
- 4 FREQUENCY COUNTER
- 5 RF SWEEP GENERATOR WITH VARIABLE MARKER (130MHz - 170MHz)

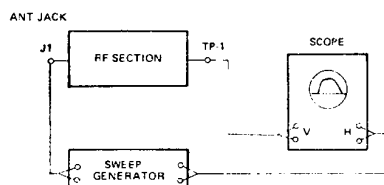


Fig. 3

STEP-1 Connect RF sweep generator to ANT JACK

STEP-2 Connect Oscilloscope to TP-1 of RF SECTION

STEP-3 Adjust L1, L2, L3 and L4 of RF SECTION for maximum output and best symmetry curve. See Fig. 4

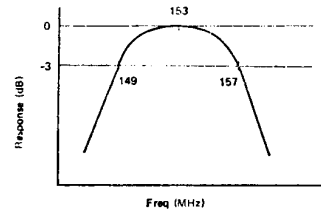


Fig. 4

LOCAL OSCILLATOR ALIGNMENT

STEP-1 Put the All CRYSTAL in sockets.

STEP-2 Couple FREQUENCY COUNTER thru pick-up coil to OSC COIL L4 of FRONT SECTION See Fig. 5

STEP-3 Adjust T1 of FRONT SECTION for best oscillating point of both side of CRYSTAL frequencies.

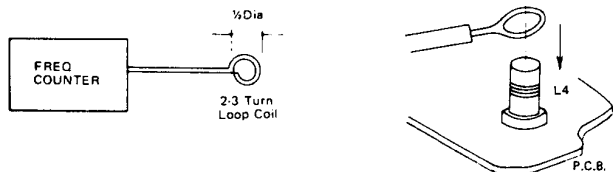


Fig. 5

SENSITIVITY MEASUREMENT

STEP-1 Connect RF S.S.G to ANT JACK

STEP-2 Connect AC-VTVM to speaker terminals

STEP-3 Turn SQUELCH control full counter-clockwise

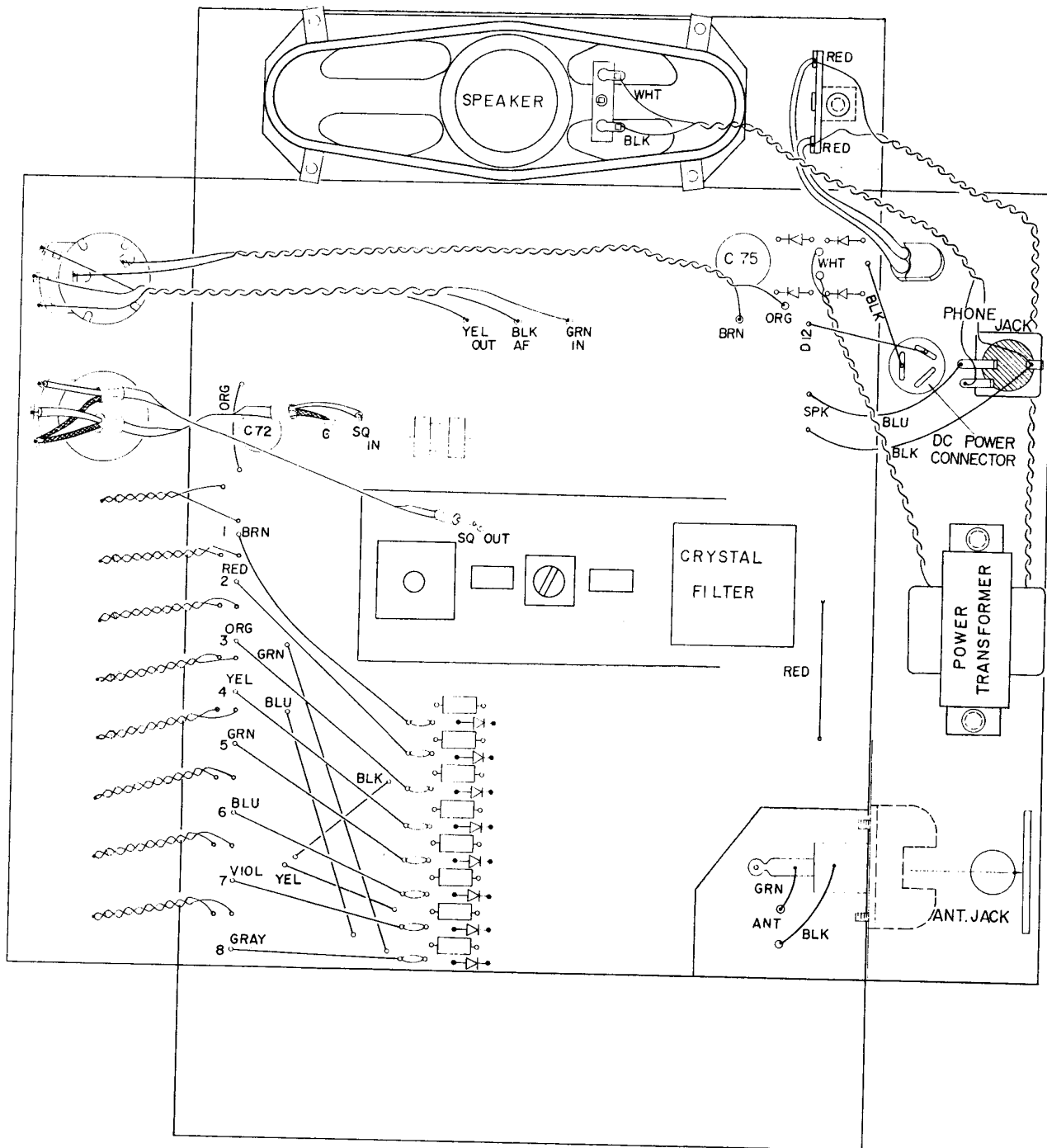
STEP-4 Turn VOLUME control full clockwise to obtain full scale meter reading at 0.1 VOLT range (Noise).

STEP-5 Adjust S.S.G frequency to channel frequency

NOTE: Receiver should be now have sensitivity of 1 microvolt or better for 20dB noise quieting.

STEP-5 Apply 1 microvolt RF signal to ANT JACK for Full power (Approx move than 2V on VTVM)

Realistic Patrolman Pro-7 (20-5001)



Q1 25C35

Q2 25C35

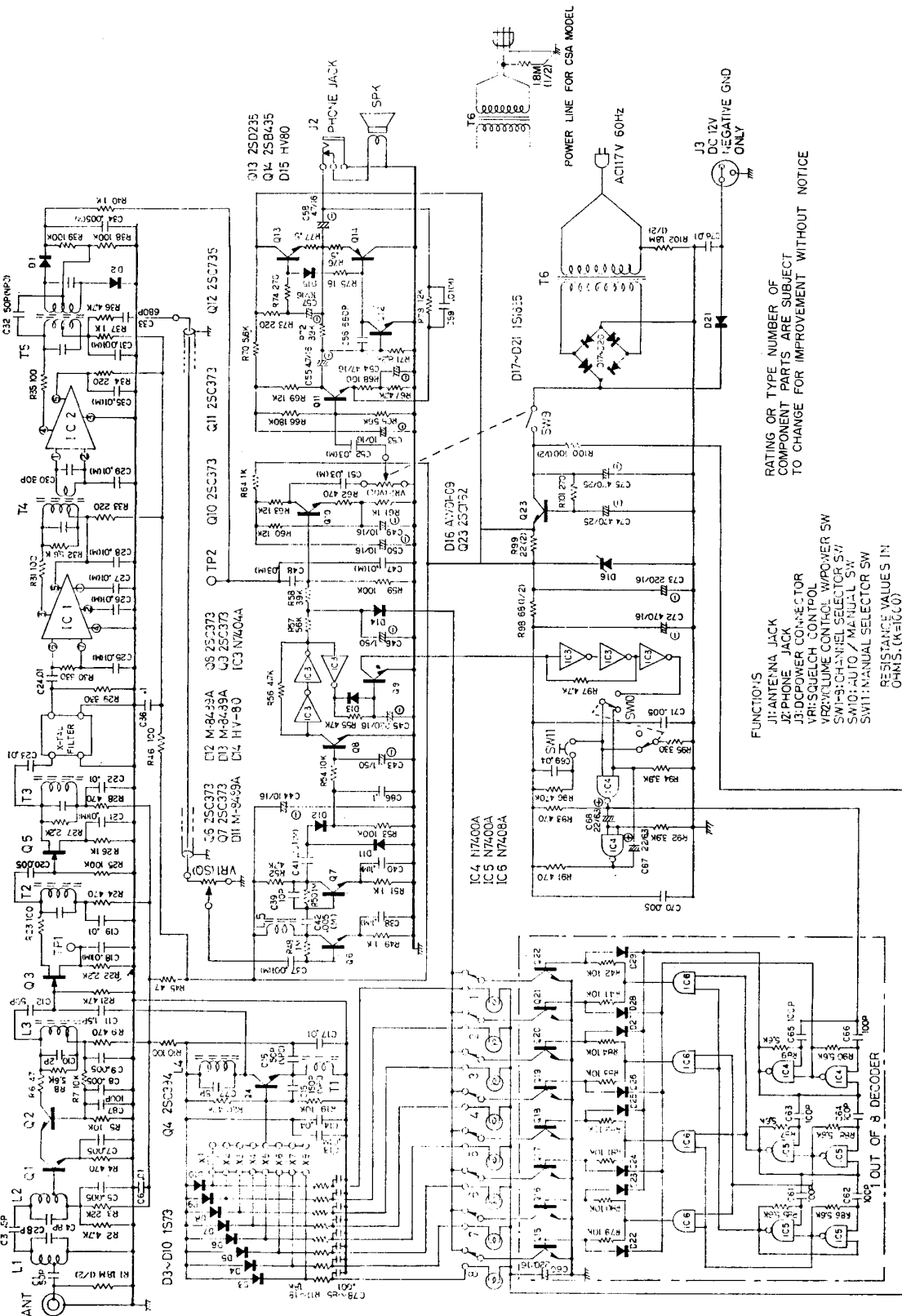
Q3 25M9

Q5 25K19

IC-1 TA7051P

IC2 TA7060

D1,2 HV80



RATING OR TYPE NUMBER OF
COMPONENT PARTS ARE SUBJECT
TO CHANGE FOR IMPROVEMENT WITHOUT NOTICE

FUNCTIONS
J1: ANTENNA JACK
J2: PHONE JACK
J3: DC POWER CONTROL
VR1: SQUELCH CONTROL
VR2: VOLUME CONTROL
SW1: 8-CHANNEL SELECTOR SW
SW2: AUTO / MANUAL SW
SW3: MANUAL SELECTOR SW

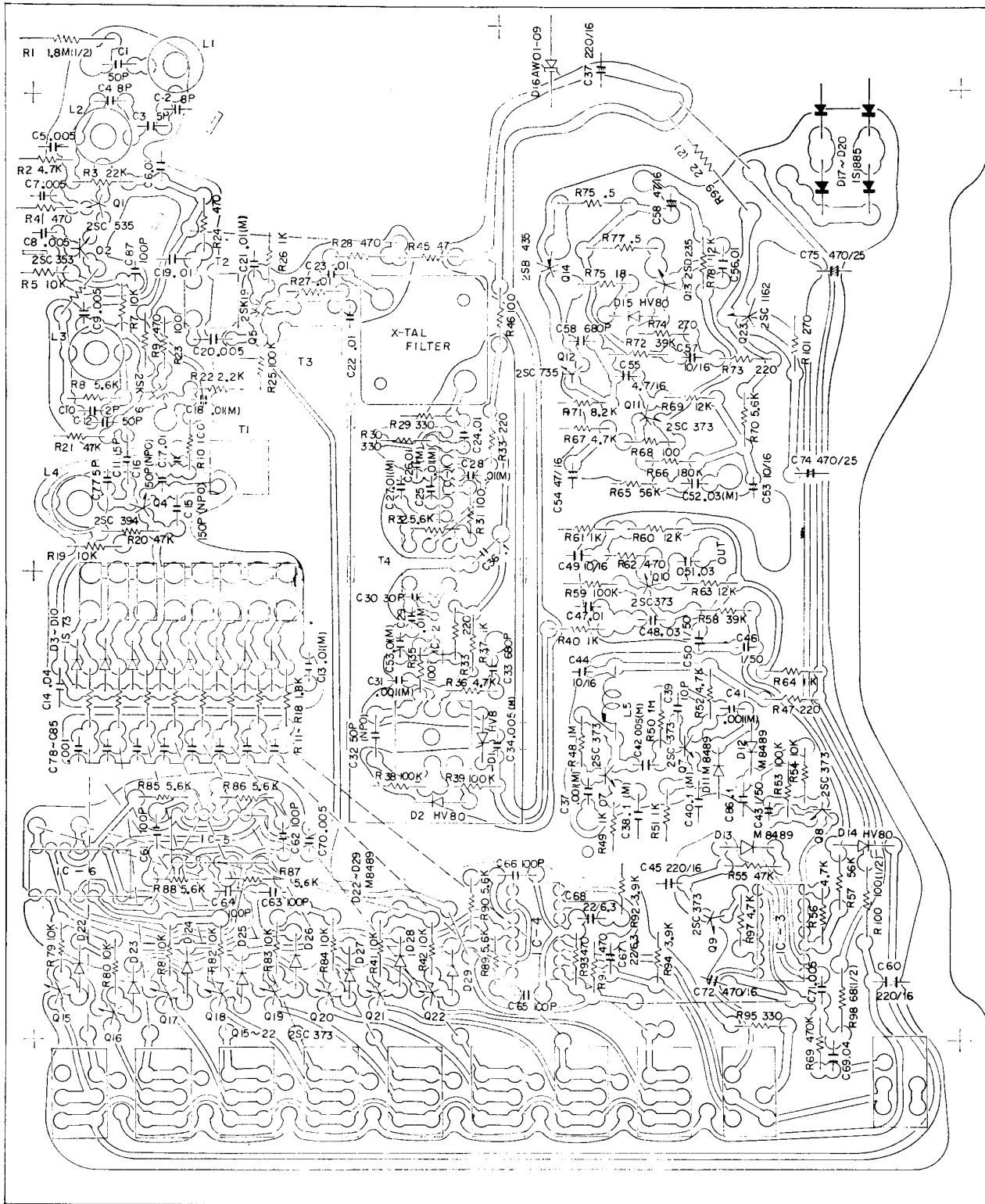
RESISTANCE VALUES IN
OHMS (K=1000)
CAPACITANCE VALUES IN
NF (P=PMF)

SW1: 9
PL1: 8
SW2: 14.7
Q15: 222
25C373

Q17: 223
25C373

OUT OF 8 DECODER

Realistic Patrolman Pro-7 (20-5001)



SEMICONDUCTORS

ITEM	TYPE
D1	HV-80
D2	HV-80
D3	1S73
D4	1S73
D5	1S73
D6	1S73
D7	1S73
D8	1S73
D9	1S73
D10	1S73
D11	M-8489A
D12	M-8489A
D13	M-8489A
D14	HV-80
D15	HV-80
D16	AW01-09
D17	1S1885
D18	1S1885
D19	1S1885
D20	1S1885
D21	1S1885
D22	M8489A
D23	M8489A
D24	M8489A
D25	M8489A
D26	M8489A
D27	M8489A
D28	M8489A
D29	M8489A
IC1	TA-7061B
IC2	TA-7060
IC3	N7404A
IC4	N7400A
IC5	N7400A
IC6	N7408A
Q1	2SC535
Q2	2SC535
Q3	2SK19
Q4	2SC394
Q5	2SK19
Q6	2SC373
Q7	2SC373
Q8	2SC373
Q9	2SC373
Q10	2SC373
Q11	2SC373
Q12	2SC735
Q13	2SD235
Q14	2SB435
Q15	2SC373
Q16	2SC373
Q17	2SC373
Q18	2SC373
Q19	2SC373
Q20	2SC373
Q21	2SC373
Q22	2SC373
Q23	2SC1162

ELECTROLYTIC CAPS

ITEM	VALUE
C43	1mfd 50V
C44	10mfd 16V
C45	220mfd 16V
C46	1mfd 50V
C49	10mfd 16V
C50	10mfd 16V
C53	10mfd 16V
C54	47mfd 16V
C55	4.7mfd 16V
C57	10mfd 16V
C58	47mfd 16V
C60	220mfd 16V
C67	22mfd 6.3V
C68	22mfd 6.3V
C72	470mfd 16V
C73	220mfd 16V
C74	470mfd 25V
C75	470mfd 25V

CONTROLS

ITEM	PART NO.	DESCRIPTION
VR1	VM10A-50KB	50K Squelch
VR2	VM11A-5M1111	5meg Volume

COILS/TRANSFORMERS

ITEM	PART NO.
L1	M-20001
L2	M-20001
L3	M-20001
L4	M-20001
T1	TKEN-21738NK
T2	R12-2851
T3	R12-2851
T4	R12-2875
T5	R-1787
T6	K-0888

MISCELLANEOUS

NAME	PART NO.
Crystal	
Filter	FHA-103-4
Speaker	163-01
P.C. Board	GE-16B-2779

CABINET PARTS

NAME	PART NO.
Cabinet	GE-16B-2765
Panel, Front	GE-16C-2792
Escutcheon, Front	GE-16B-2786
Knob, Volume	GE-16D-2793
Knob, Squelch	GE-16D-2793