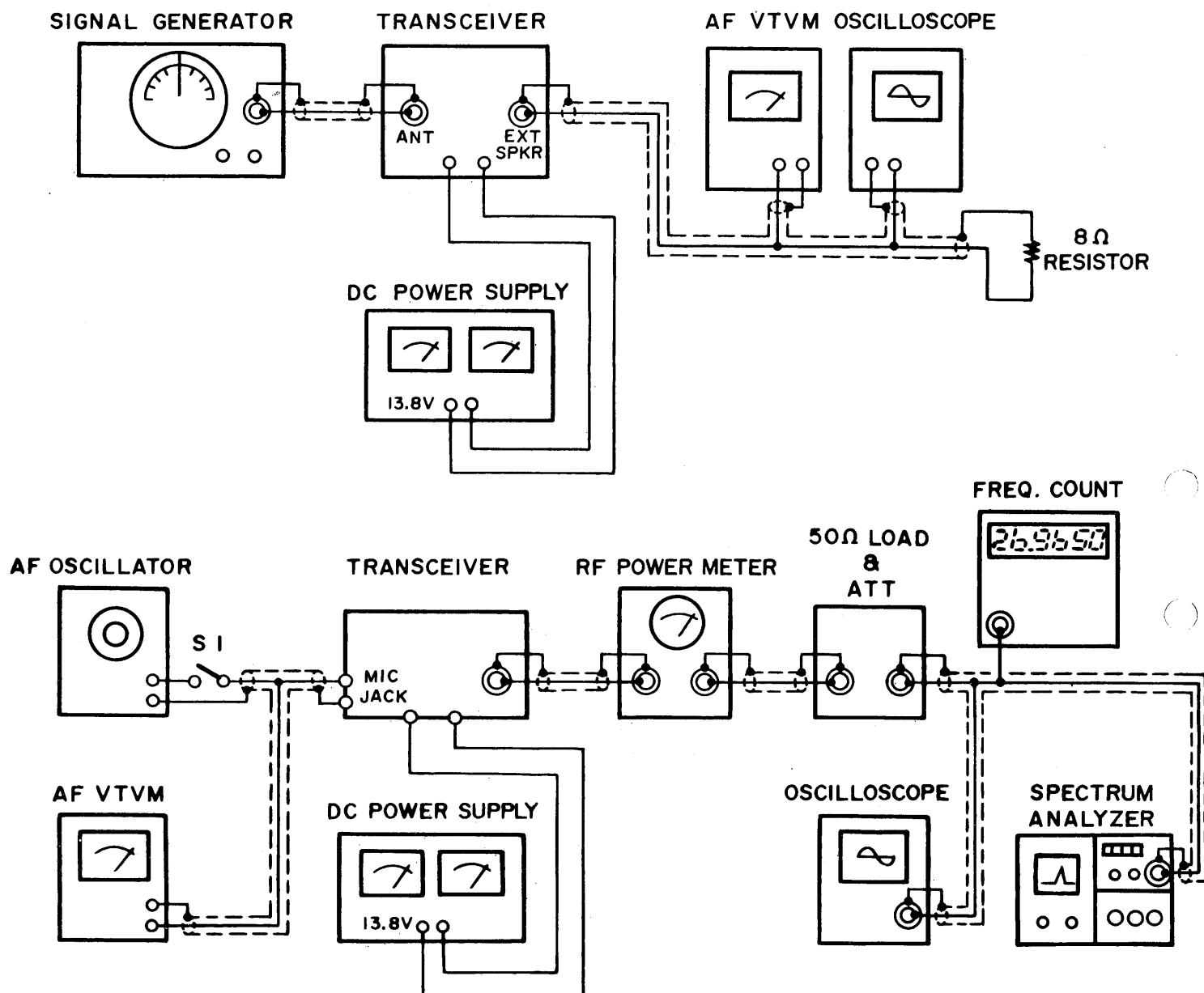


SERVICE MANUAL
FOR
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MOBILE TRANSCEIVER



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PLL and transmitter adjustment.

Required measurement equipment:

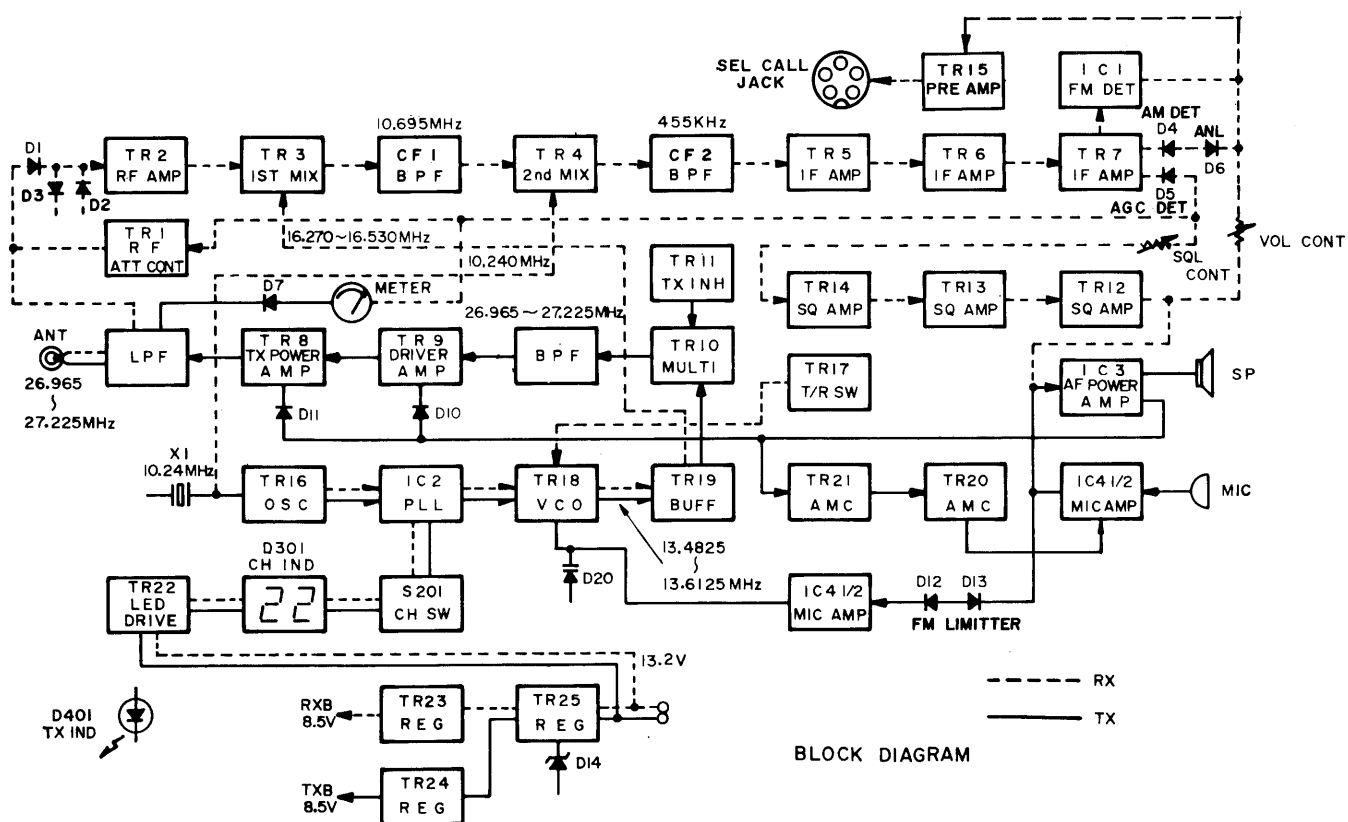
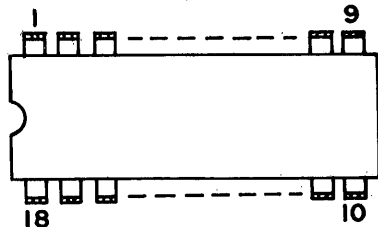
30 MHz frequency counter, 50 Ohms output power meter, 13,8 V DC power source, minimum 1 A, audio frequency generator, FM deviation meter.

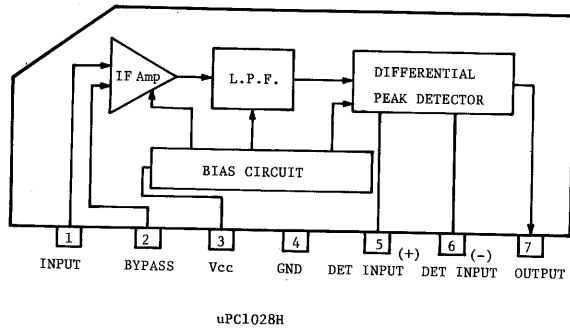
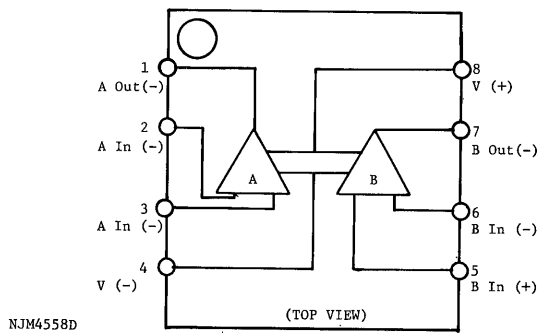
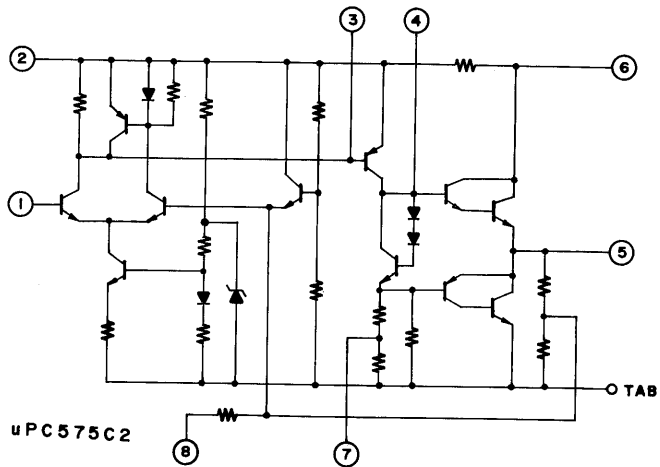
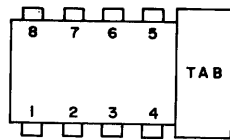
1. Connect a voltmeter to TP1 and adjust L16 to give 4V on meter during receiving at center channel (11).
2. Key the transmitter on channels 1, 11 and 22 and adjust L15, L14, L13 and L11 for maximum output power. Reduce eventually to legal power by tuning L11 clockwise to wanted output.
3. Modulate the transmitter on FM channel 11 with 1250 Hz by connecting pin 1 of microphone connector to audio generator (or feed a tone from a speaker into the microphone), and increase the level until maximum deviation is reached. Adjust VR4 to desired deviation. Normally 1.8 kHz. Check the deviation on channels 1 and 22 to be within ± 200 Hz from deviation on channel 11.
4. Confirm AM modulation to be within 80 - 100%.
5. Adjust RF output indicator to be in the red sector by means of VR3.

Required measurement equipment: AM/FM signal generator, 13.8 V DC power source.

Check FM and AM sensitivity to be within specifications.

3. Adjust the S-meter to read S-9 at 100 μ V by tuning VR1.

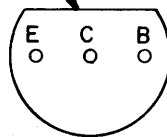




TRANSISTOR

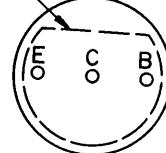
NOTE: B: BASE
E: EMITTER
C: COLLECTOR

MARKING SIDE



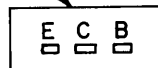
2SA1015-GR
2SC1675-L
2SC1815-Y
2SC1923-0
2SC2236-Y

MARKING SIDE



2SC380TM-0

MARKING SIDE



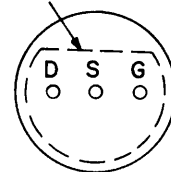
2SC1957-Q

FET

NOTE

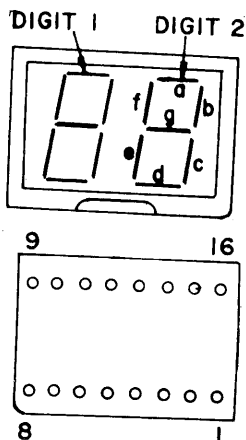
D: DRAIN
S: SOURCE
G: GATE

MARKING SIDE



2SK19-BL

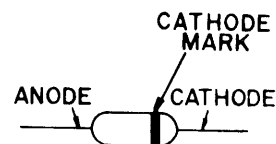
UR-202



(ANODE COMMON)

Pin No.		Pin No.	
1	c-1	9	g-2
2	e-1	10	a-2
3	d-1	11	f-2
4	common-1	12	b-2
5	common-2	13	b-1
6	d-2	14	f-1
7	e-2	15	a-1
8	c-2	16	g-1

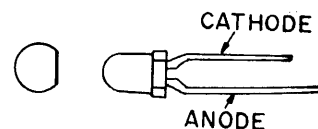
DIODE



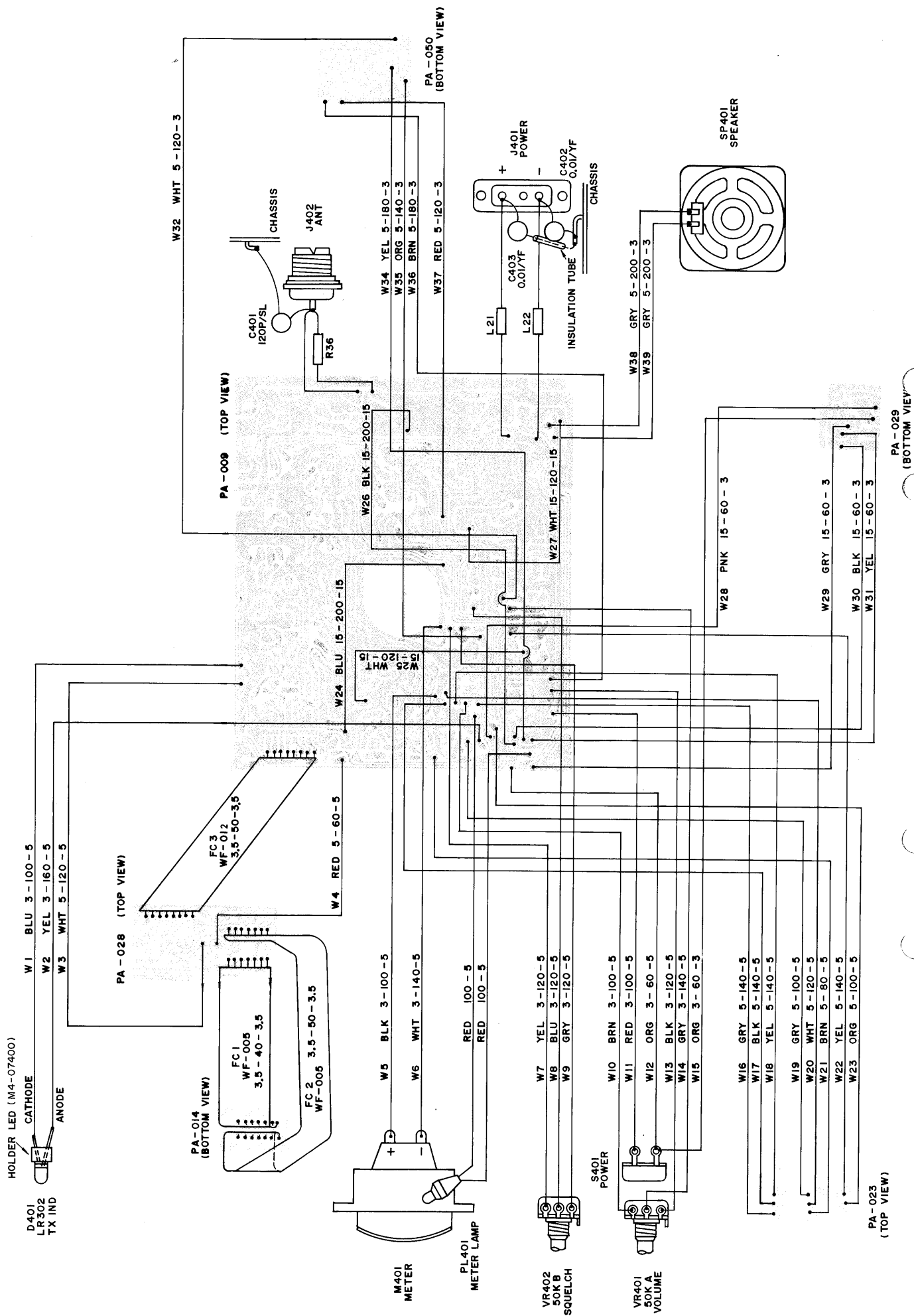
1N60 AM
SR1K-1
1S2339G
1S2076A
1S1555

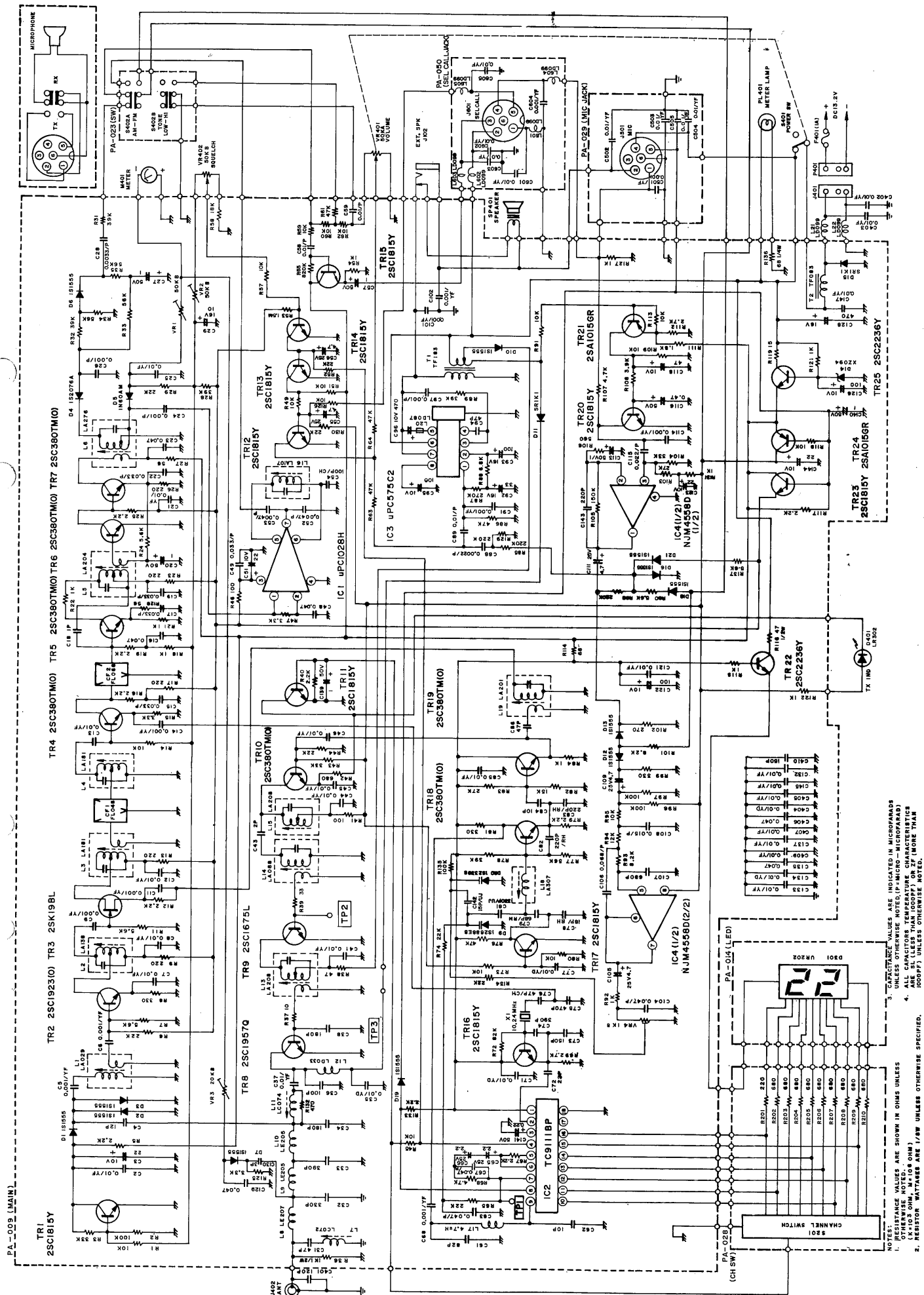
1S2688EB

XZ-094



LR-302 RED





NOTES:

1. RESISTANCE VALUES ARE SHOWN IN OHMS UNLESS OTHERWISE NOTED.
2. (X=10 OHM, M=100 OHM)
3. RESISTOR WATTAGES ARE 1/8W UNLESS OTHERWISE SPECIFIED.
4. ALL CAPACITORS TEMPERATURE CHARACTERISTICS ARE 5% (LESS THAN 100PPM) OR 2% (MORE THAN 100PPM) UNLESS OTHERWISE NOTED.
5. CAPACITANCE VALUES ARE INDICATED IN MICROFARADS UNLESS OTHERWISE NOTED (P=PICTO - MICROFARADS)

Main spare parts.

Diodes:

1S1555	D1, D2, D3, D6, D7, D10, D12, D13, D16, D18, D19, D21
1N60	D5
1S2688EB	D9
SR1K1	D11, D15
XZ094	D14
1S2339G	D20
1S2076A	D4

Transistors:

2SC1815(Y)	TR1, TR11, TR12, TR13, TR14, TR15, TR16, TR17, TR20, TR23
2SC1923	TR2
2SK19BL	TR3
2SC380TMO	TR4, TR5, TR6, TR7, TR10, TR18, TR19
2SA1015GR	TR21, TR24
2SC2236Y	TR22, TR25
2SC1675-L	TR9

Integrated circuits:

uPC1028H	IC1
TC9111BP	IC2
uPC575C2	IC3
NJM4558D	IC4

Coils:

LA029	L1
LA088	L14
LA107	L16
LA138	L2
LA181	L3, L4
LA201	L19
LA204	L5
LA208	L13, L15
LA276	L6
LA307	L18
LC072	L7
LC074	L11
LD033	L12
LD087	L20
LD099	L21, L22
LE205	L9, L10
LE207	L8
4, 7uH	L17

Filters

FL048	CF1
FL066	CF2

Transformers, Chokes

TF183	T1
TF083	T2

Crystals

10.24MHz	X1
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Resistors

50KB	VR1, VR2
20KB	VR3
1KB	VR4
50kA	VR401(VOL)
50kB	VR402(SQ)

Jacks

6 pin DIN	Micjack, Sel. Call jack
J102	Ext. speaker
J401	Power
J402	S0239 Antenna jack

Switches

S401	ON/OFF VOLUME
S402A	FM-AM
S402B	TONE
S201	CHANNEL

Miscellaneous

M401	Meter
handic 55	Microphone complete
PL401	Meter lamp
F401	Fuse 1A
SP401	Speaker
	Top cover
	Bottom cover
	Nose piece
	Channel knob
	Volume/SQ knob
	TONE, FM/AM knob
	Mounting bracket
	Mounting bracket screw
	Mic hanger

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Box 1063, S-436 00 Askim/Gothenburg, Sweden
Telephone: 031/28 97 90 Telex: 21420
— A company in the Datatronic group —



CIDA ELECTRA SA

COMPAGNIE COMMERCIALE DE RADIO-ELECTRICITE
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