#### SERVICING YOUR TRANSCEIVER

The technical information, diagrams and charts provided in this manual are supplied for the use of a qualified holder of a first or second class radiotelephone license in servicing this transceiver. It is the users responsibility to see that this unit is operating at all times in accordance with the F.C.C. Citizens radio service regulation.

If you install your own transceiver, do not attempt to make any transmitter tuning adjustments. They are prohibited by the F.C.C. unless you hold or are in the presence and under the supervision of a first or second class radiotelephone licensed person. A Citizens Band or Amateur license is not sufficient.

When service is performed by an authorized and licensed person, care must be taken in the replacement of parts to use only authorized parts, in order not to void the type acceptance of this model.

# BOLT × 4 LOCK WASHER×4 MOUNTING BRACKET RUBBER WASHER × 4 TAPPING SCREW×4 ල (3) Ø MOUNTING INSTRUCTION 0 <del>(</del> ) — 8 පු 0 **6** B. B. B. B. 0 ٥ 0 **()** Ð

#### **SPECIFICATIONS**

GENERAL.

: 23-Channels Sensitivity : 0.7 mV Channels

: (DC) 800 mA Frequency Range : 26.965 MHz. to 27.255 MHz Current Drain at no Modulation

Current Drain at Maximum Frequency Control : Crystal Controlled Synthesizer : 24-Transistors, 22-Diodes, 1-IC Modulation : (DC) 1,700 mA

Semiconductors Temperature Range (RF Output : 500 (ohm) Dynamic With VOL. Microphone

Power Deviation Within 3 dB) Control

: -20°C to +50°C : 8 (ohm), 2W Speaker

**RECEIVER** (0 dB =  $1 \mu V$ ): Antenna Impedance: 50 (ohm)

Maximum Sensitivity : 0.5 #V Meter signal : Indicate received strength and relative transmit Sensitivity at 10dB S+N/N : 0.5 #V

power output. Image Rejection Ratio at

Size : 220mm (L)  $\times$  175mm (W)  $\times$ (f - 910 KHz): 35 dB

> 58mm (H) 1st IF Rejection Ratio at

Weight : 5-1/2 (Pounds) 11.275 MHz : 50 dB : Ext. SP. 3.5φ, PA 3.5φ, MIKE 2nd IF Rejection Ratio at 455 KHz: 100 dB Jacks

6P (Din) Spurious Rejection Ratio : 40 dB

Controls Channel Selector Squelch Sensitivity at Maximum : 500 #V

Volume (w/Power ON-OFF) Squelch Sensitivity at Threshold : 1 µV

> Sauelch Control A.G.C. SWR CAL Control (Input 50 mV, Output 10 dB down): 90 dB Tone Control IF Response at 6 dB down-Bandwidth: 5.5 KHz

Delta Tune Adjacent Channel Selectivity ANL ON-OFF Switch ..... (10 KHz): 60 dB

Blanker ON-OFF Switch (20 KHz): 60 dB PA-CB Switch

Cross Modulation : 50 dB **Power Supply** : 12V DC to 16V DC Frequency Stability : ±0.003%

Temperature : -20°C to +50°C Audio Output Power at Maximum

(Input 1 mV) : 6 W

**ACCESSORIES:** Audio Output Power at 10%

> Microphone Distortion : 3 W Microphone Hanger & Screw Distortion at Input 1 mV : 4.5% Mounting Bracket & Screw Distortion at Input 50 mV : 6% I.D. Card w/envelop.

> Audio Fidelity (1 KHz, 0 dB reference) FCC Application Form at 300 Hz: -8 dB

Instruction Manual at 2,000 Hz: -6 dB

S. Meter Sensitivity for "S-9"

: 100 #V

TRANSMITTER: Delta Tune : ±1.5 KHz RF Output Power : 3.2W Current Drain at no Signal : (DC) 300 mA

Modulation Capability Current Drain at Maximum Output

Frequency Stability Power : (DC) 1,100 mA

 $(-20^{\circ}C \text{ to } +50^{\circ}C)$ : ±0.003% Hum & Noise at 100 #V : 45 dB Spurious Ratio : 55 dB P.A. Output Power : 5 W

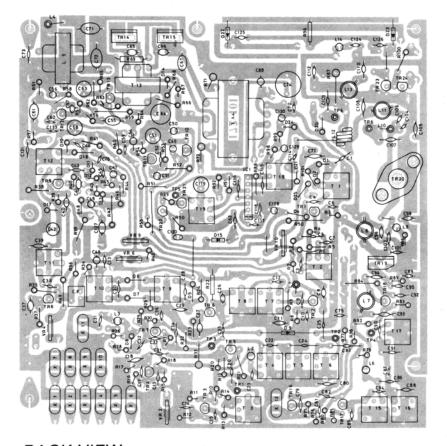
Microphone Input Pre-amp.

#### **CRYSTAL FREQUENCY CHART**

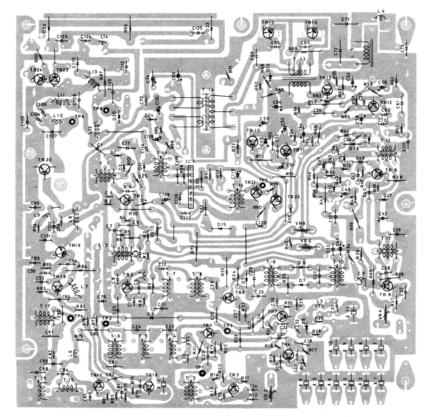
XTAL		CHANNEL																					
MASTER 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
23.290	0	0	0	0																			
23.340					0	0	0	0															
23.390									0	0	0	0											
23.440													0	0	0	0							
23.490																	0	0	0	0			
23.540																					0	0	0
MASTER 2																							
14.950	0				0				0				0				0				0		
14.960		0				0				0				0				0				0	
14.970			0				0				0				0				0				
14.990				0				0				0				0				0			0
XMTR																							
11.275	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RCVR																							
11.730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

# **PARTS LAYOUT**

# FRONT VIEW

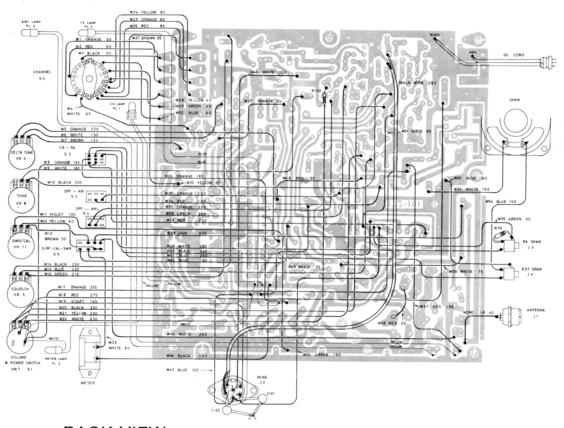


# **BACK VIEW**

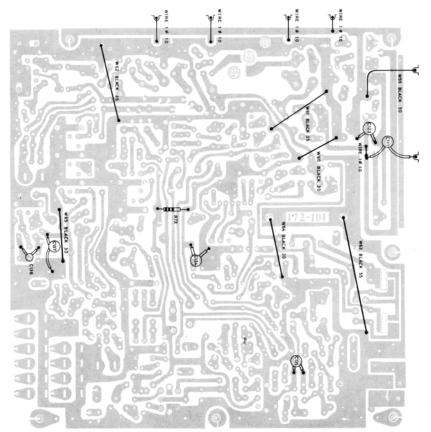


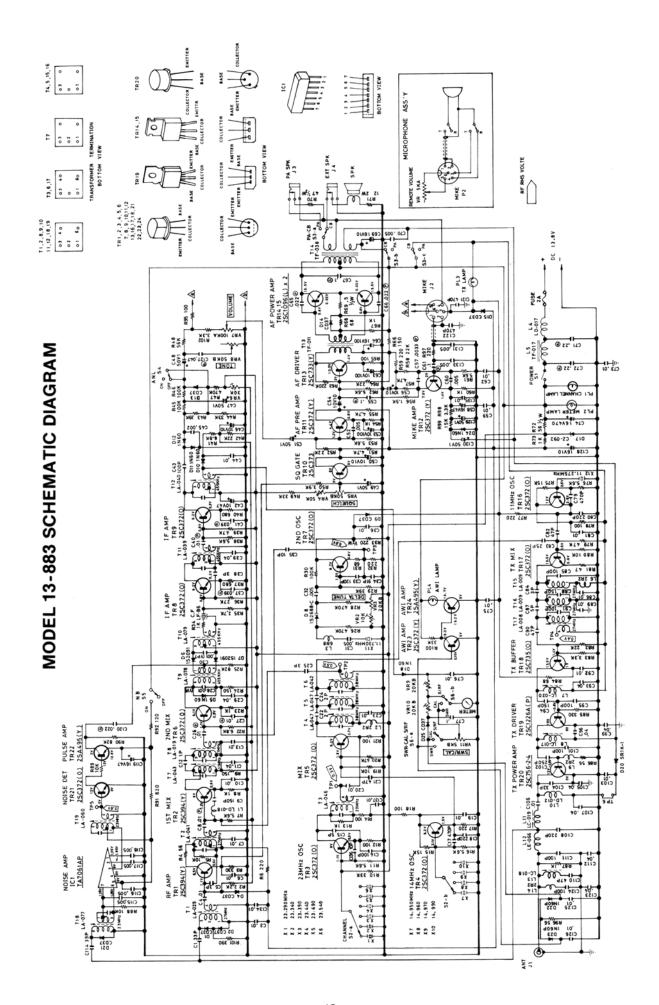
# **WIRING DIAGRAM**

# **FRONT VIEW**



#### **BACK VIEW**





#### WARRANTY POLICY

Midland Electronics Company warrants each new Midland product to be free from defects in material and workmanship under normal use and service for a period of 90 days after delivery to the ultimate user and will replace or repair the product at our option, at no charge should it become defective and which our examination shall disclose to be defective and under warranty.

This warranty shall not apply to any Midland product which has been subject to misuse, neglect, accident, incorrect wiring not of our own installation, or to use in violation or instructions furnished by us, nor extended to units which have been repaired or altered outside of our factory.

This warranty does not cover carriyng cases, earphones, batteries, antenna, broken or cracked cabinets, or any other accessory used in connection with this product.

This warranty is in lieu of all other warranties expressed or implied and no representative or person is authorized to assume for us any other liability in connection with the sales of our products.

Sales receipt must accompany product to validate the date of purchase.

<u>international management and management</u>

#### MIDLAND ELECTRONICS COMPANY

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