

POWER CONNECTION

AC OPERATION

Use the AC power cord supplied with the unit. Insert the one end of the cord to the AC power connector on the rear panel and the other end to the AC outlet supplying 105-120V 50/60 Hz AC.

DC OPERATION

When used in mobile operation, the vehicle's battery supplies the power.

CAUTION: The 13-976 designed to be used in a 12 volts DC negative system only. If you are unsure of your vehicle's polarity, ask your dealer or local service station.

The red wire of the DC power cord may be connected directly to the positive or + battery terminal or to a fuse block or ignition switch or other convenient point.

The black wire should be connected to a metal part of the vehicle body or frame or - battery terminal.

OPERATING INSTRUCTIONS

1. Insert the MIC plug into the MIC jack.
2. Make sure your antenna is securely connected to the antenna connector.
3. Make sure the PA-CB switch is placed in the CB position.
4. Also make sure the RF Gain control is in full clockwise position and the SQUELCH control in full counter-clockwise position.
5. Turn the power on and adjust the VOLUME control for proper sound level.
6. Place the CLARIFIER control in 12 o'clock position.
7. Place the channel selector in a desired channel.
8. Place the LSB-USB-AM control in a desired position.
9. To transmit, press the Push-to-Talk bar on the microphone and to receive release the bar.

IMPORTANT: Do not short circuit the antenna and do not try to transmit without an antenna connected to the Antenna connector on the rear panel. This may cause damage to the output power transistors. Transmit only after carefully checking the installation of connector and coaxial cable.

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 regulations.

If you install your own transceiver, do not attempt to make any transmitter tuning adjustments. All transmitter adjustments and servicing are prohibited by the F. C. C. unless you hold a first or second class radio-telephone license or are in the presence of a person holding such a license. A Citizens Band or Amateur license is not sufficient.

When service is performed by a 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 unit.

NOTE: When ordering parts, it is essential to specify the correct model number and serial number of the unit.

SPECIFICATIONS

GENERAL

Circuitry:	1 IC, 40 Transistors, 5 FETs, 48 Diodes
Frequency Control:	Crystal Synthesizing System
Channels:	23 channels all installed
Mode of Operations:	AM, Lower Sideband-Upper Sideband
Controls:	RF Gain, Clarifier, Volume/PA, Squelch Control, LSB-USB, AM, Channel Selector, PA-CB, NB-OFF, TONE HI-LO,
Jacks and Connector:	Microphone, Antenna, PA Speaker, External Speaker, DC Power, AC Power
Power Source:	DC 13.8V, AC 117V
Speaker:	3" dynamic, 8 ohms
Microphone:	Dynamic CB mike
PA Audio Output:	More than 3W
Accessories:	DC Power Cord, Microphone, Mounting Bracket

RECEIVER

Receiving system:	Single conversion superheterodyne
Sensitivity:	More than $1\mu\text{V}$ (S/N 10 dB) (AM) More than $0.25\mu\text{V}$ (S/N 10 dB) (SSB)
Selectivity:	More than 50 dB
Clarifier:	± 600 Hz (receiving only)
Audio output power:	More than 3W (into 8 ohm)
Squelch range:	$1\mu\text{V}$ — $500\mu\text{V}$ (AM & SSB)
Intermediate Frequency:	11.2735 MHz

SSB TRANSMITTER

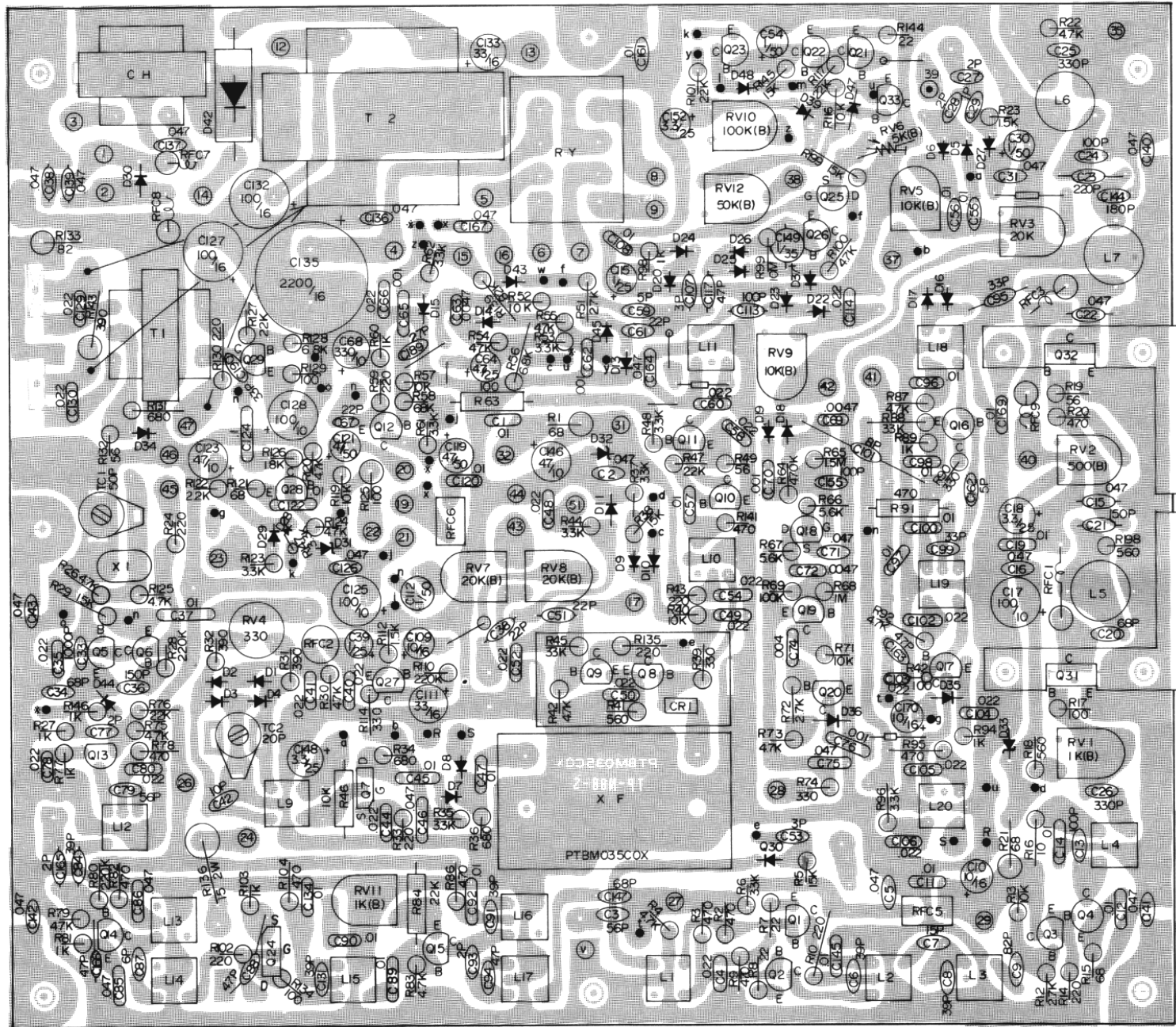
SSB Generation:	Balance Modulation
RF Output Power:	12 Watts PEP (F. C. C. Maximum)
Carrier Supression:	More than 40 dB
Unwanted Sideband Supression:	More than 50 dB
Harmonic Supression:	More than 50 dB

AM TRANSMITTER

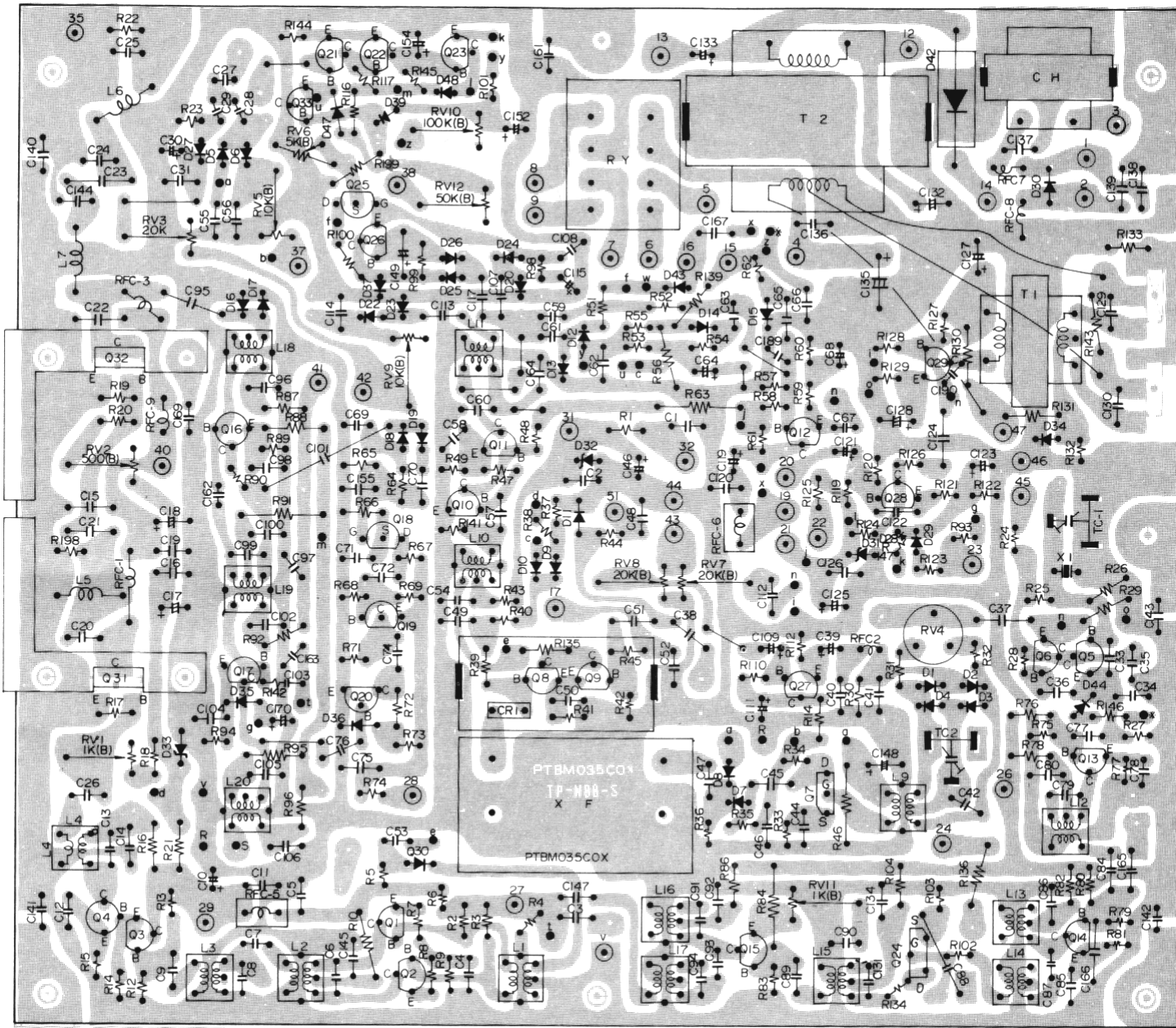
Modulation:	High Level
RF Output Power:	4.0 watts (F. C. C. Maximum)
Harmonic Suppression:	More than 50 dB

PARTS LAYOUT

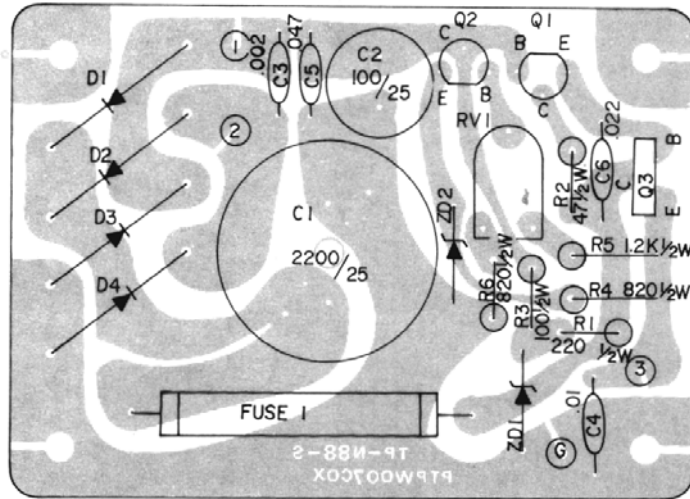
FRONT VIEW



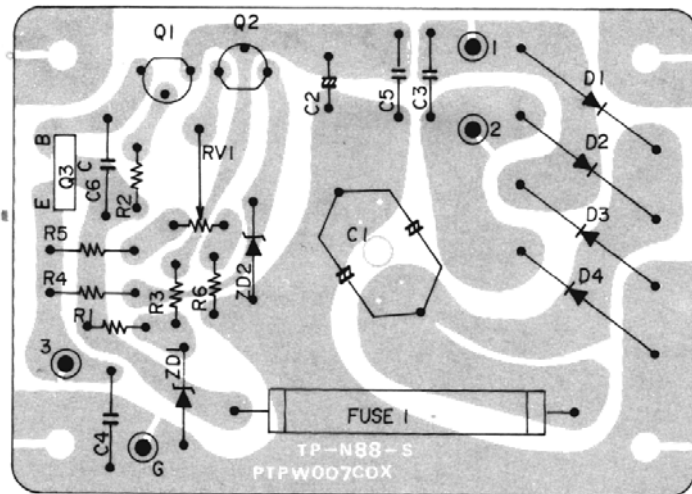
BACK VIEW



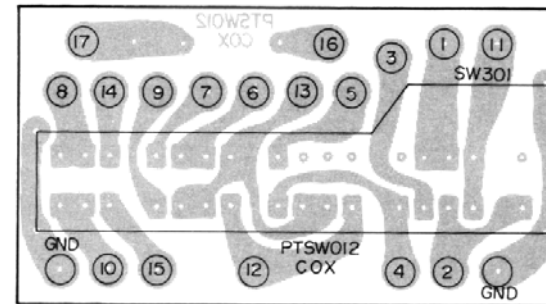
FRONT VIEW



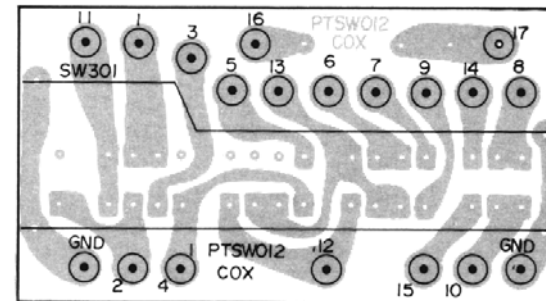
BACK VIEW



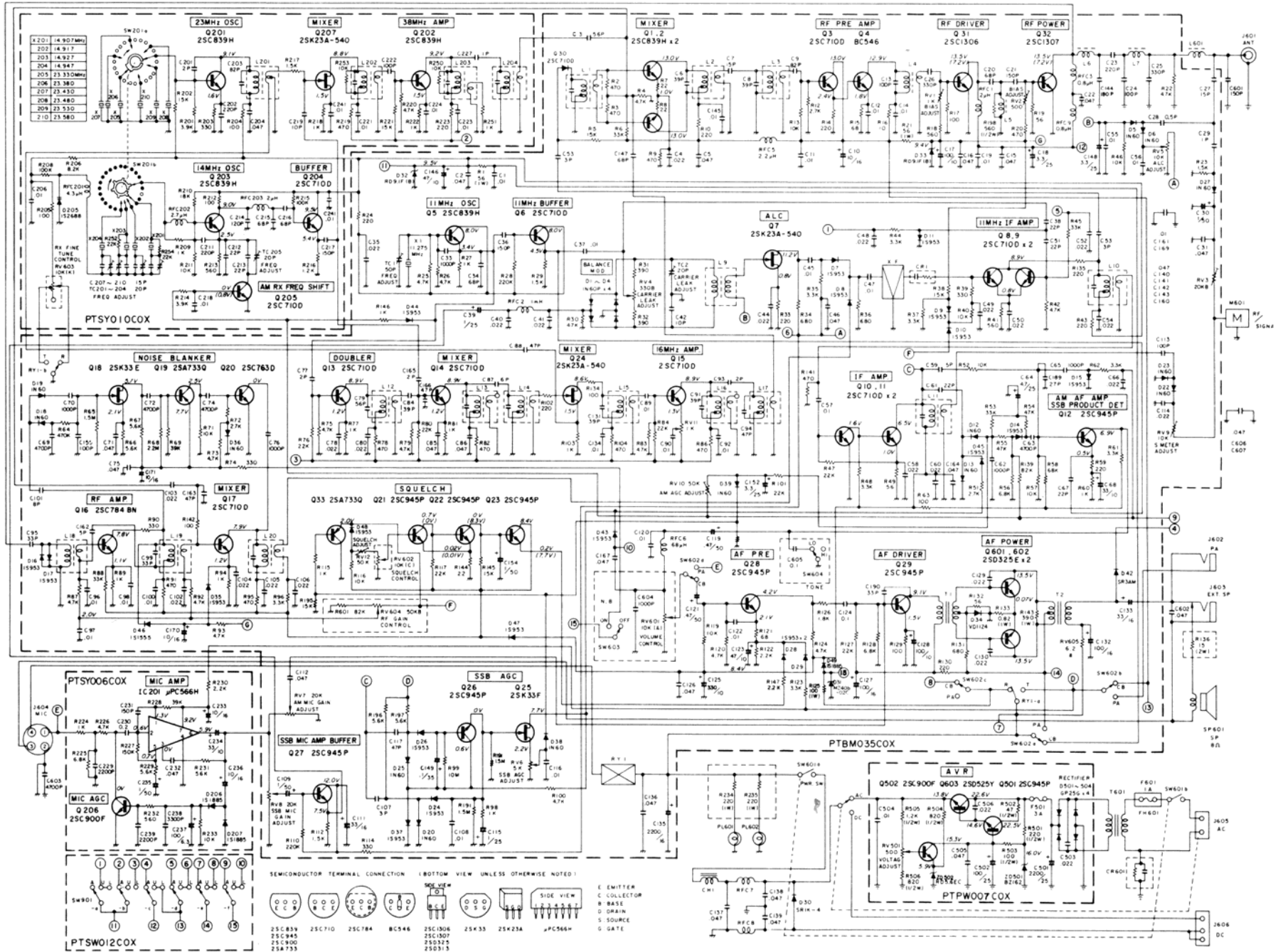
FRONT VIEW



BACK VIEW



SCHEMATIC DIAGRAM



LIMITED WARRANTY

Midland International Corporation, Communications Division 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 of instructions furnished by us, nor extended to units which have been repaired or altered outside of our factory.

This warranty does not cover carrying 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 sale of our products.

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



Communications Division

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