

The FT-401B series transceivers have been modified for the AM operation, but the instruction manual has not yet been revised. The followings are supplemental information for the transceiver bearing the serial number later than 317001.

SPECIFICATIONS

Power Input	120 Watts DC.
Receiver Sensitivity	1uV or better at S/N 10 db.
Semiconductor Complement	2SC372Y 2 MK-10F 1 1S-1007 1

CIRCUIT

An AM modulator unit (PB-1165) consists of a carrier oscillator, a microphone amplifier and modulator, and an AM detector circuit are added to the main printed board PB-1001.

A 3180 KHz carrier signal is generated by TR453, 2SC-372Y, in the AM modulator unit and applied to the base of the AM modulator, TR452, 2SC-372Y, where the speech signal is applied through TR451, MK-10F, from the speech amplifier tube 12AX7 in the main printed board.

The modulator 3180 KHz signal is then applied to the grid of the transmitter first mixer, 6CB6, through T204.

The bias voltage applied to the base of TR453, carrier oscillator, disables the carrier oscillator during receiving period.

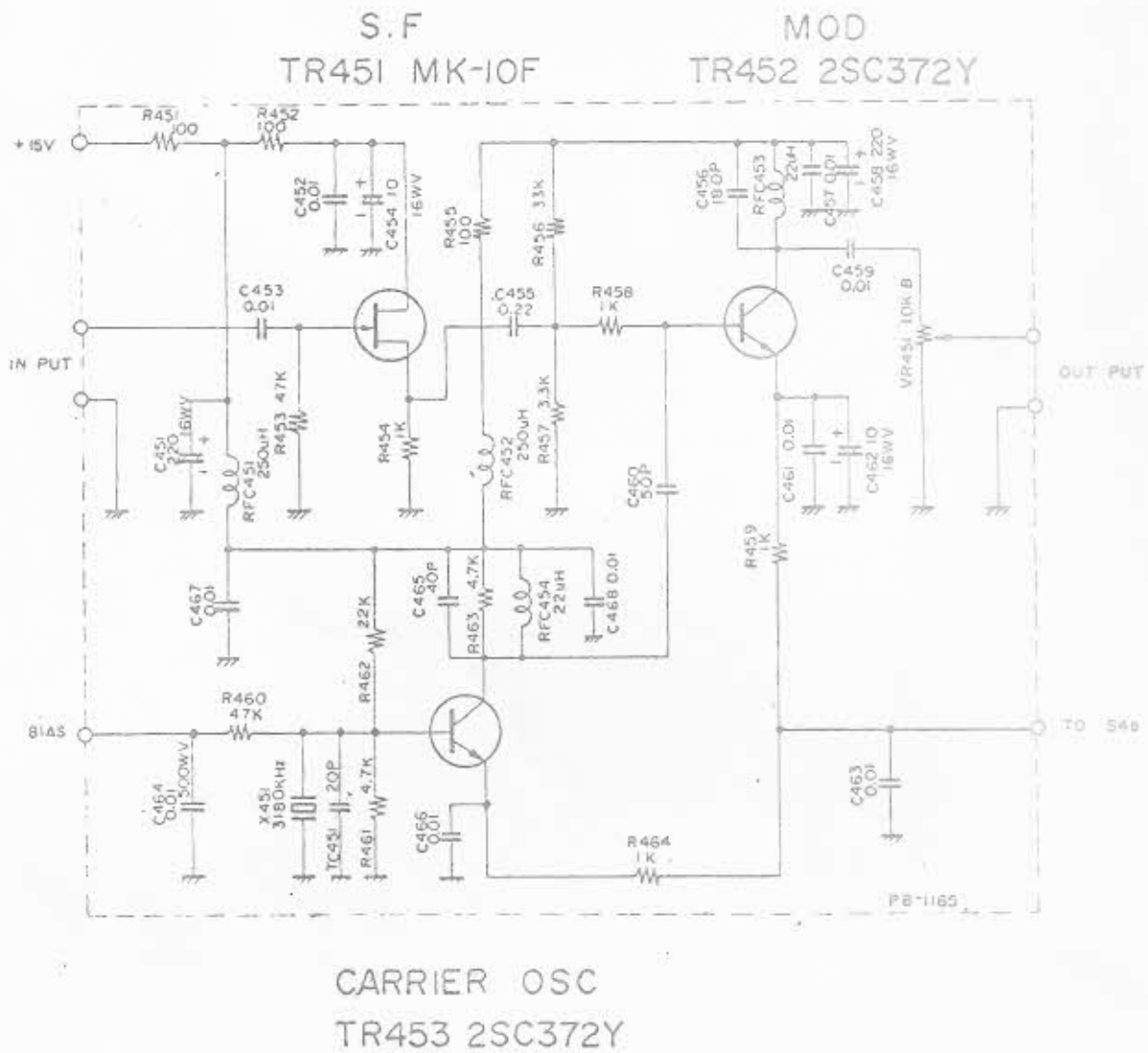
The received signal is added to the AM detector diode 1S-1007 from T205 in the main printed board. The detected audio signal is amplified by V210, 6BM8.

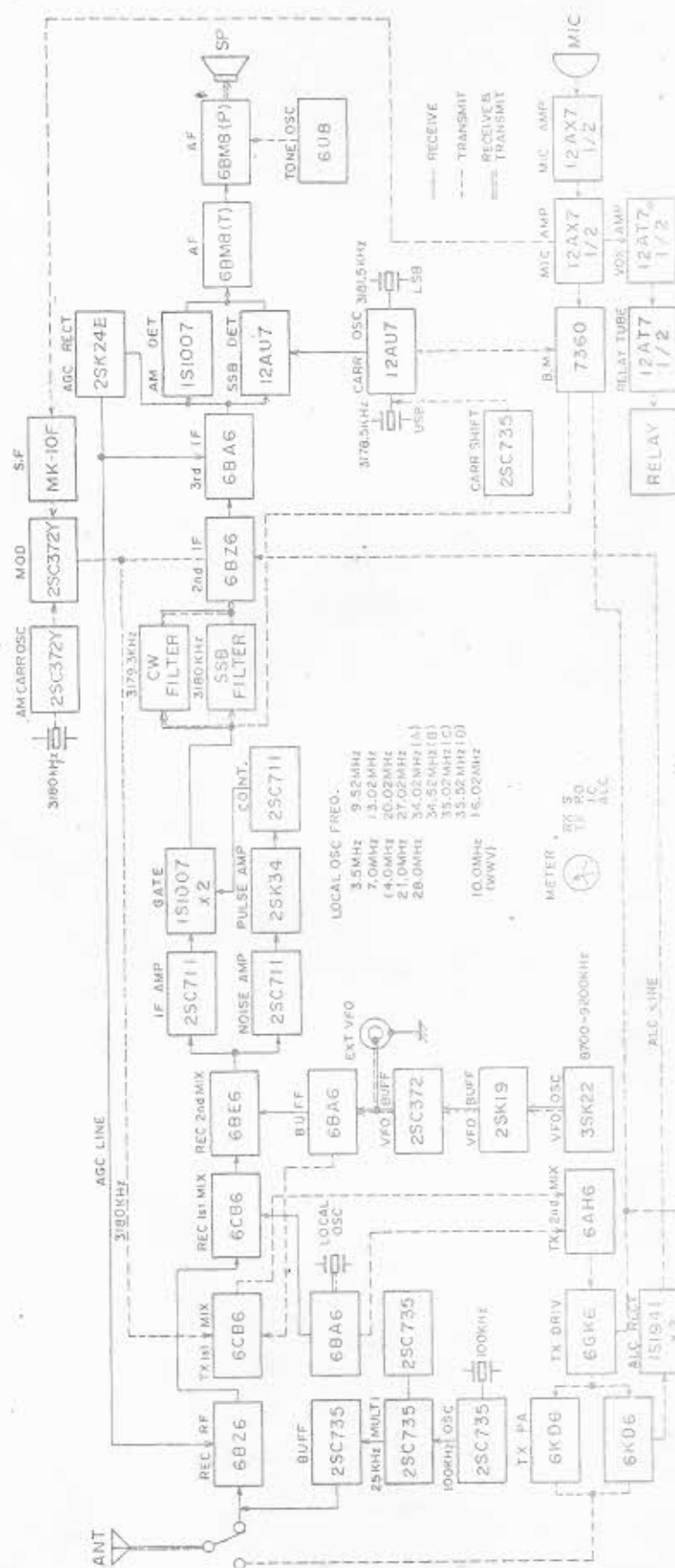
OPERATION

The AM signal is received when the Mode switch is placed to AM position. The maximum S-meter reading is used for calibration against the marker signal as the beat note can not be heard for AM operation.

After completion of transmitter tuning described in page 7 of the instruction manual, set the Mode switch to AM position. Set the Meter switch to IC position. Set the VOX control to MOX position. The meter will show 150mA. If the meter shows other than 150mA, adjust VR451 on the AM modulator unit PB-1165 for 150mA. Advance Mic Gain control until meter kicks up to 160mA at the voice peak. Excessive setting of Mic Gain control causes distortion due to overmodulation.

AM BLOCK CIRCUIT DIAGRAM





BLOCK DIAGRAM