

# MAINTENANCE / SPECIFICATIONS

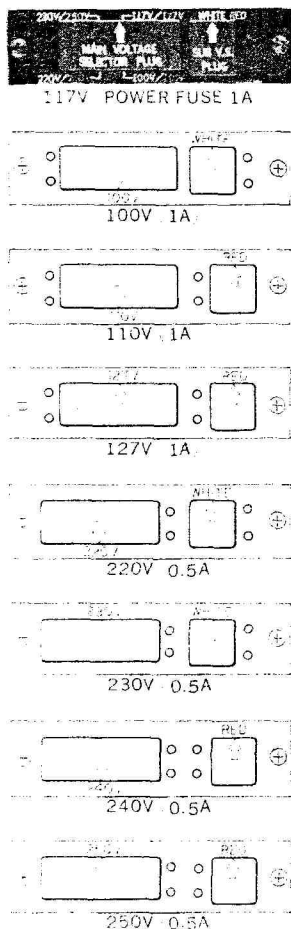
## Voltage Adjustment

To reach the voltage selector, remove the two screws from the nameplate on the rear panel and then remove the nameplate. The voltage selector makes it possible to operate the TU-999 at the correct voltage in any area. The voltage has been pre-adjusted at the factory, but can be easily re-adjusted as follows:

**STEP I** Set arrow of main voltage selector plug to required voltage: 100, 110, 117, 127, 220, 230, 240 or 250 volts.

**STEP II** If numerals of voltage are printed in red, set arrow of adjacent sub V.S. plug to position marked red. If there are printed in white, set arrow to position marked white.

**Note:** The Voltage Adjustor can be also used to eliminate trouble caused by considerable voltage fluctuation. In this case, it should be set to the peak voltage.



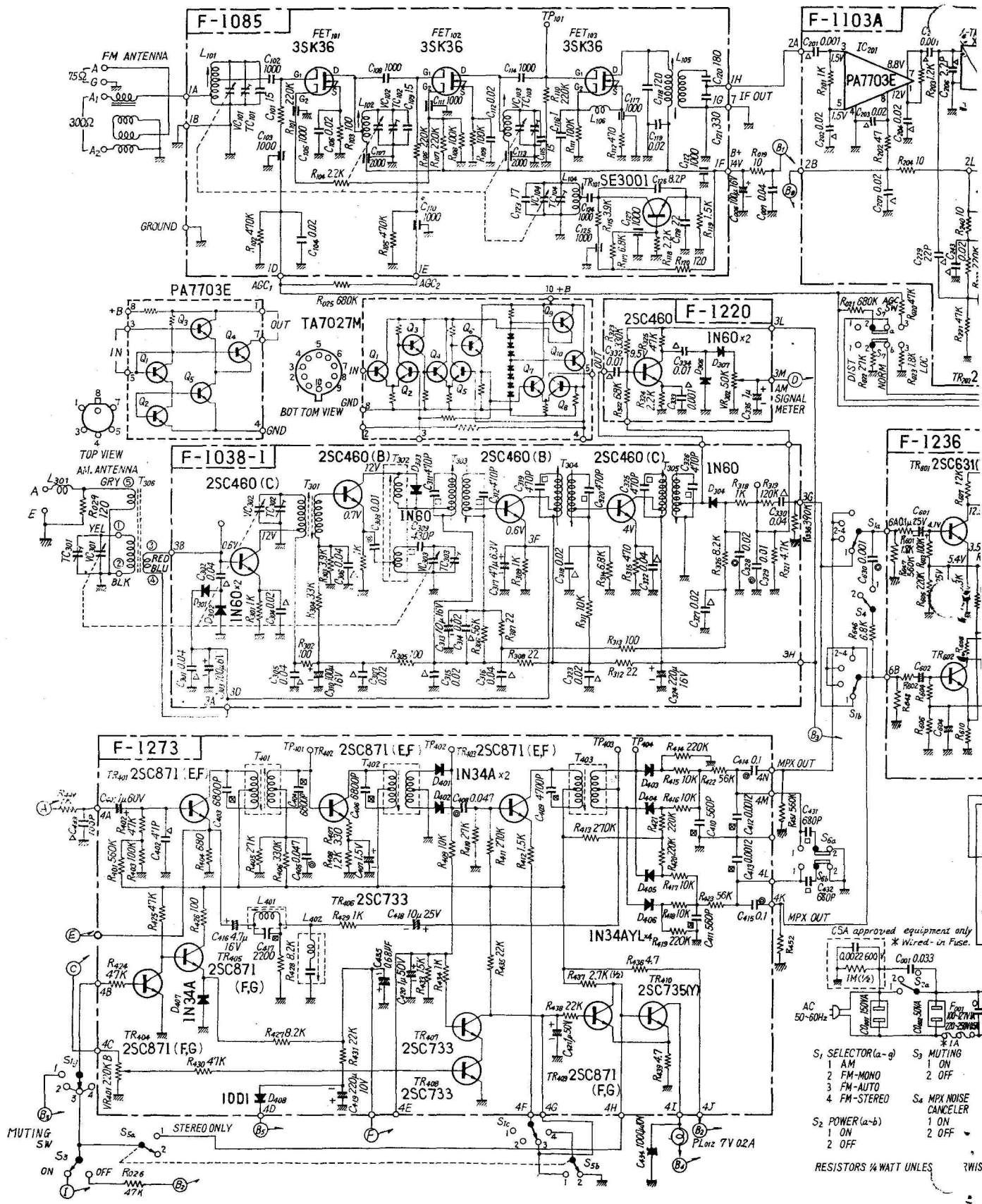
## FM SECTION

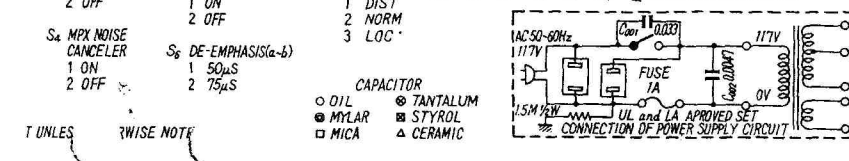
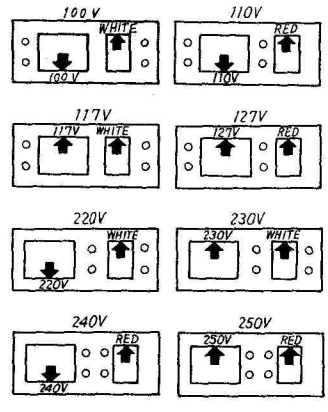
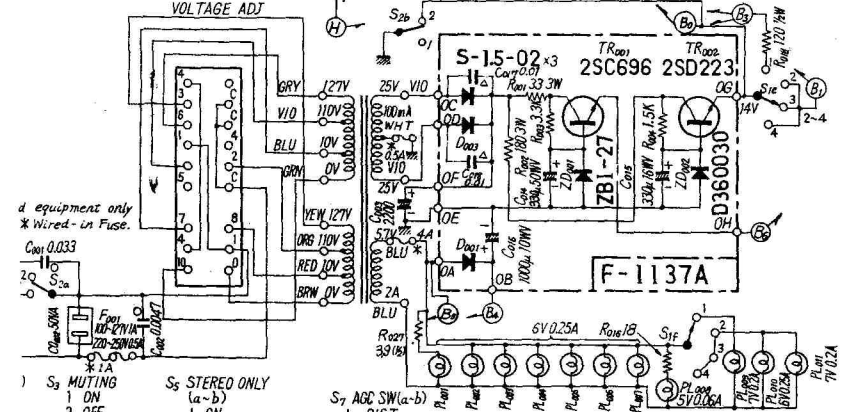
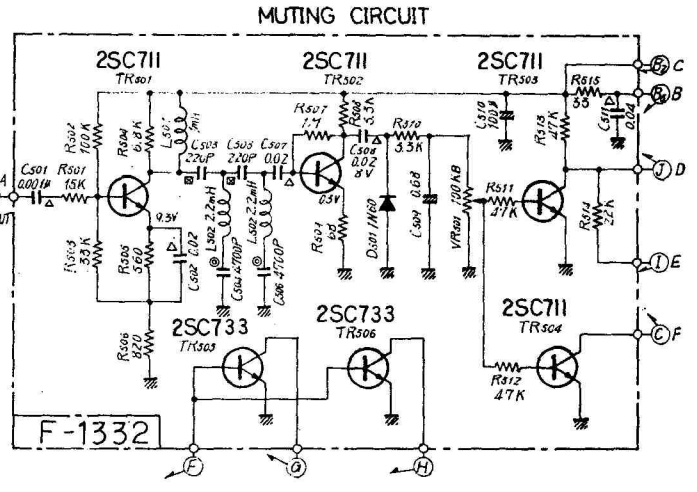
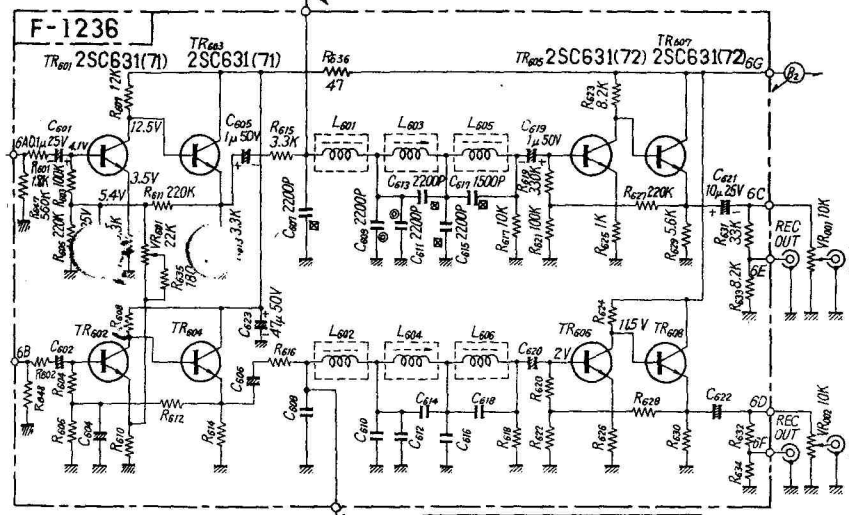
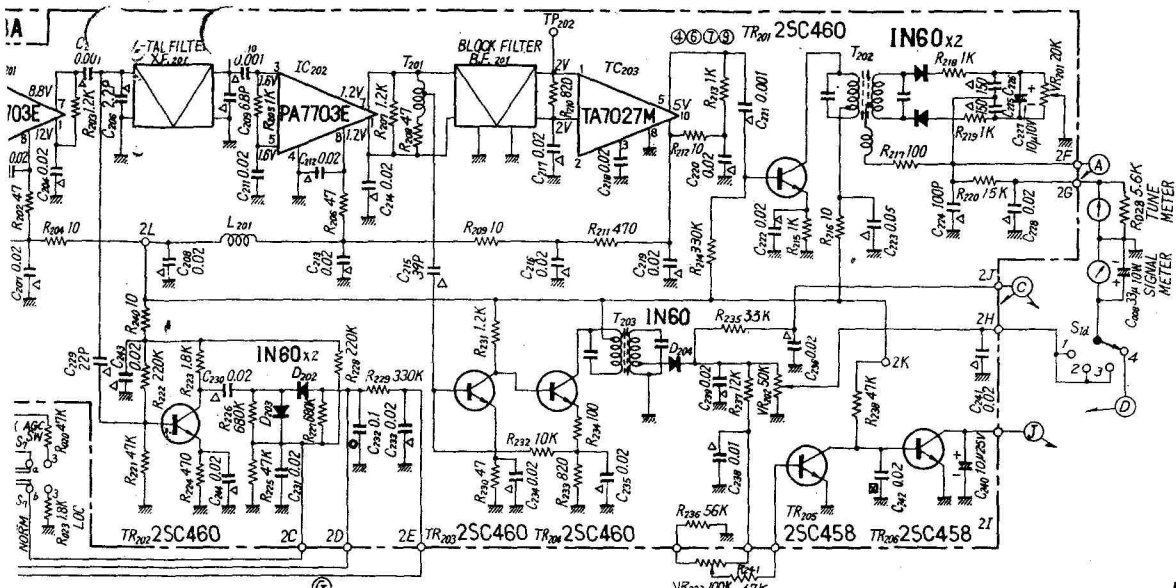
TUNING RANGE:	88 to 108MHz
SENSITIVITY (20 dB quieting):	1.4 $\mu$ V
(IHF):	1.8 $\mu$ V
TOTAL HARMONIC DISTORTION:	less than 0.5% (STEREO) less than 0.3% (MONO)
SIGNAL TO NOISE RATIO:	better than 65dB
SELECTIVITY:	better than 50dB
CAPTURE RATIO (IHF):	1.5dB
IMAGE FREQUENCY REJECTION:	better than 90dB
IF REJECTION:	better than 100dB
SPURIOUS RESPONSE REJECTION:	better than 100dB
STEREO SEPARATION:	better than 38dB at 400Hz
SPURIOUS RADIATION:	less than 34dB
ANTENNA INPUT IMPEDANCE:	300 ohms balanced, 75 ohms unbalanced

## AM SECTION

TUNING RANGE:	535 to 1,605kHz
SENSITIVITY:	150 $\mu$ V at 1,000kHz (bar antenna)
SENSITIVITY (IHF):	30 $\mu$ V at 1,000kHz
IMAGE FREQUENCY REJECTION:	better than 80dB at 1,000kHz
SELECTIVITY:	better than 20dB at 1,000kHz
OUTPUT:	0 to 2V
TAPE REC:	0.4V
CONTROLS:	
FM MUTING LEVEL	
OUTPUT LEVEL	
SWITCHES:	
FM MUTING:	ON, OFF
MPX NOISE CANCELER:	OFF, ON
FM AGC:	DISTANT, NORMAL, LOCAL
SELECTOR:	AM, FM MONO, FM AUTO, FM STEREO
TRANSISTORS AND DIODES:	
Transistors;	37 FET; 3 I.C; 3 Zener Diodes; 2 Diodes; 23
POWER REQUIREMENTS:	
POWER VOLTAGE:	100, 110, 117, 127, 220, 230, 240, 250V 50/60Hz
POWER CONSUMPTION:	20W
DIMENSIONS:	17- $\frac{1}{8}$ "W x 6- $\frac{1}{8}$ "H x 12- $\frac{1}{2}$ "D
WEIGHT:	22 lbs.

# SCHEMATIC DIAGRAM





- S<sub>3</sub> MUTING
  - 1 ON
  - 2 OFF
- S<sub>4</sub> MPX NOISE CANCELER
  - 1 ON
  - 2 OFF
- S<sub>5</sub> STEREO ONLY (a-b)
  - 1 ON
  - 2 OFF
- S<sub>6</sub> DE-EMPHASIS(a-b)
  - 1 50μS
  - 2 75μS
- S<sub>7</sub> AGC SW(a-b)
  - 1 DIST
  - 2 NORM
  - 3 LOC

- CAPACITOR
- DIL
  - MYLAR
  - MICA
  - ⊗ TANTALUM
  - ⊠ STYROL
  - △ CERAMIC