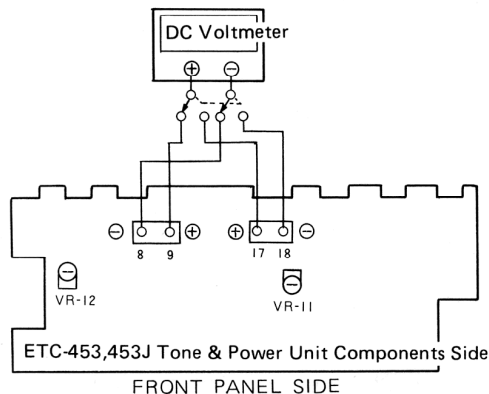


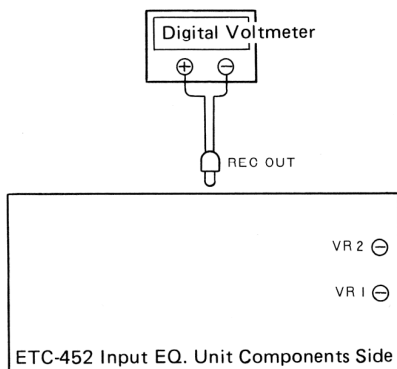
## METHOD OF ADJUSTMENT

### Schematic View of Tone Power for ETC-453 (PMA-770), ETC-453J (PMA-750)

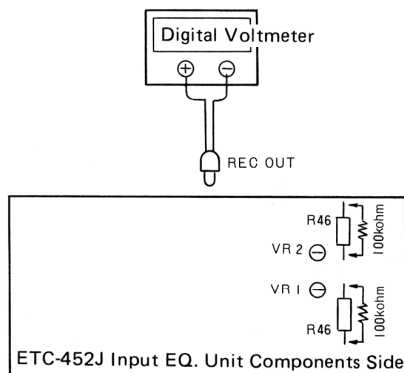


### Schematic View for Input and Equalizer for ETC-452 (PMA-770), ETC-452J (PMA-750)

#### PMA-770



#### PMA-750



### Adjustment of Idling Current (ETC-453, ETC-453J)

#### Preparation

1. Keep the unit away from direct wind blown by an air-conditioner and an electric fan. Keep the unit under normal conditions. Adjust the range of ambient temperature to 15 - 30°C.
2. Set the following switches as follows;
  - POWER (power switch) to off
  - VOLUME (volume control) to  $-\infty$  (min.)
  - DIRECT COUPLE (direct switch) to DIRECT
  - SPEAKER (speaker terminal) to no load (a speaker and a dummy resistor are not connected)

#### Adjustment

1. Remove the top cover and turn the variable resistors VR11 and VR12 of ETC-453 and ETC-453J (tone and power unit) in the clockwise direction until they stop. Connect a DC voltmeter between the negative terminal 9 and the positive terminal 8, and between the positive terminal 17 and the negative terminal 18.
2. Connect the power source cord to an AC outlet. Turn on the power switch. Turn the variable resistors UR11 and UR12 in the counterclockwise direction within one minute. Preset adjust the voltages at the respective test points as follows:
  - PMA-770  $15 \pm 2$  mV
  - PMA-750  $11 \pm 2$  mV
3. Set the variable resistors VR11 and VR12 2 to 3 minutes after the presetting as follows:
  - PMA-770  $19 \pm 1$  mV
  - PMA-750  $13 \pm 1$  mV

### Adjustment of ETC-452 and ETC-452J

#### Preparation

1. Insert the short pin into the "phono" input terminal.
2. Connect a digital voltmeter between the "REC" output terminals (LCH and RCH). the output voltage at the digital voltmeter must be 0.01 - 1 mV (DC).
3. Connect a resistor of 100 k ohms (1/4 W) between the resistors R45 and R46 of 10 M ohms of the unit in order to make measurement easy (only for PMA-750).
4. Set the RECOUT SELECTOR to the "phono" position and set the volume control to  $-\infty$  (min.).

#### Adjustment

1. Turn on the power switch. After two minutes, perform the following procedures.

#### PMA-770, PMA-750

- Adjust the variable resistor 1 (semi-fixed resistor of 100 k ohms) so that the output for LCH at the digital voltmeter reads less than 0.5 V (DC).
- Adjust the variable resistor 2 (semi-fixed resistor of 100 k ohms) so that the output for RCH at the digital voltmeter reads less than 0.5 V (DC).