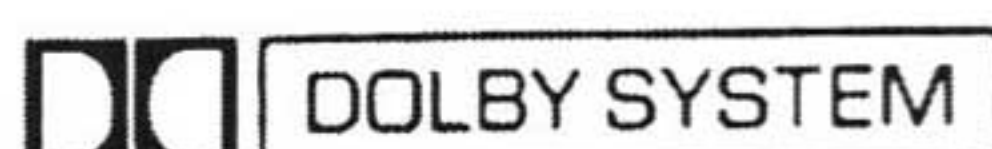


# Service Manual

Cassette Deck  
**RS-9900US**

High Fidelity Stereo Cassette System with Closed-Loop,  
Double-Capstan, 3-Motor Drive, Separate Amplifier Unit



## RS-9900U MECHANISM SERIES

### Specifications (Catalog specifications for sales)

|                    |                                                |         |                                                                                                                                    |
|--------------------|------------------------------------------------|---------|------------------------------------------------------------------------------------------------------------------------------------|
| Power requirement: | AC; 120 V, 50/60 Hz<br>Power consumption; 45 W | Output: | Aux; output level 0.42 V/load impedance 47 K $\Omega$ over<br>Headphones; output level 0~900 mV/impedance 8 $\Omega$ ~125 $\Omega$ |
|--------------------|------------------------------------------------|---------|------------------------------------------------------------------------------------------------------------------------------------|





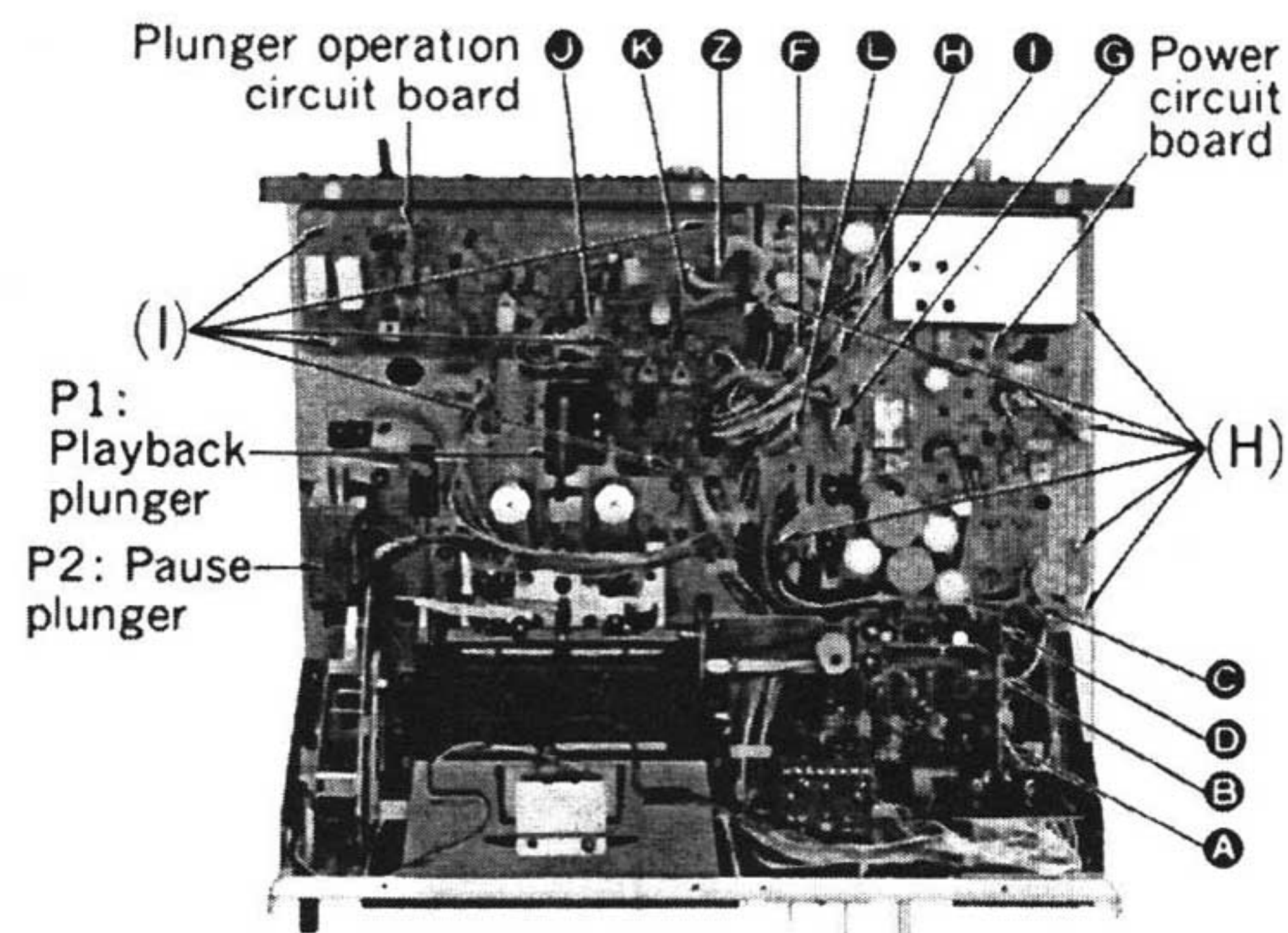


Fig. 8

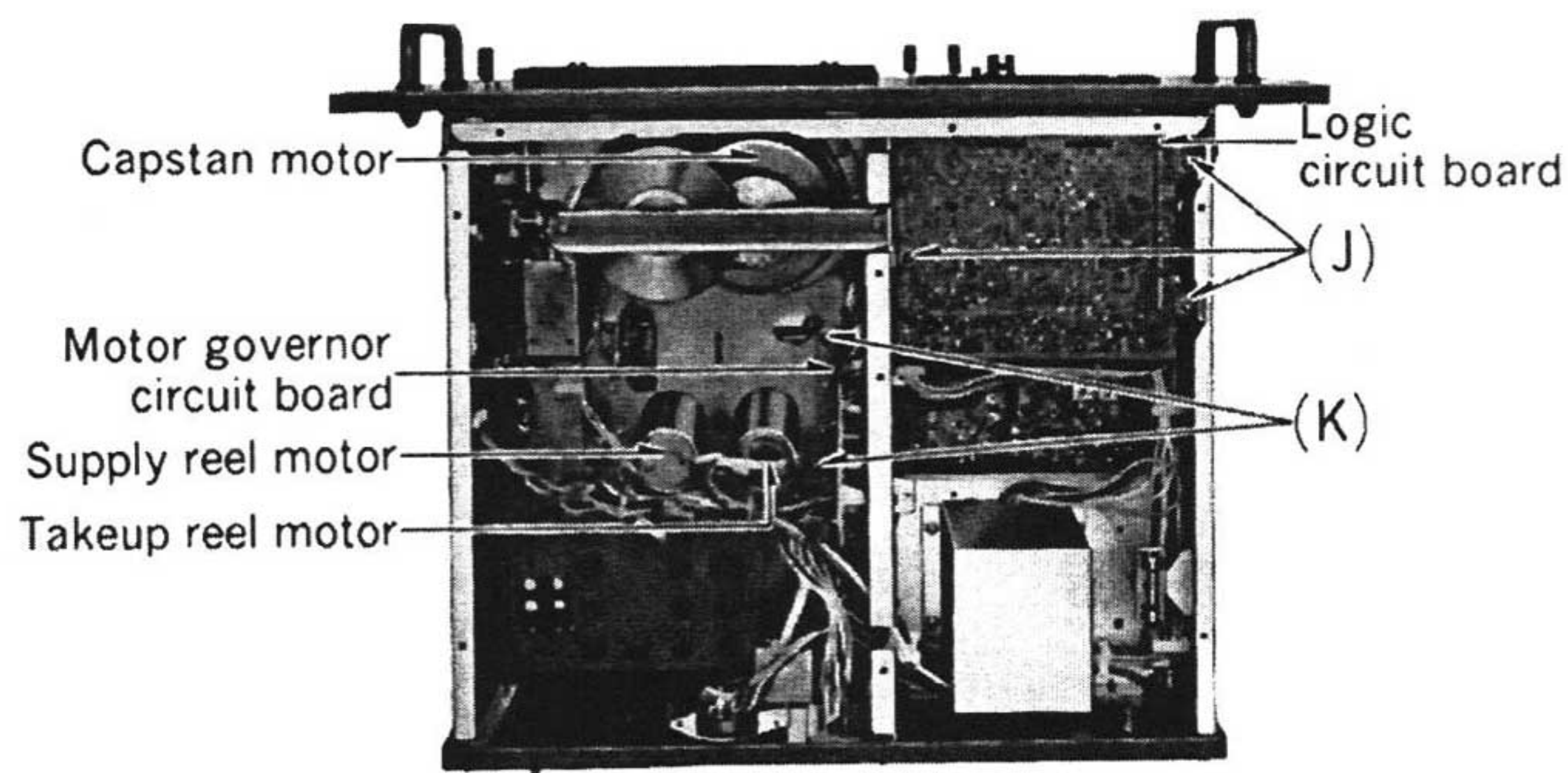


Fig. 9

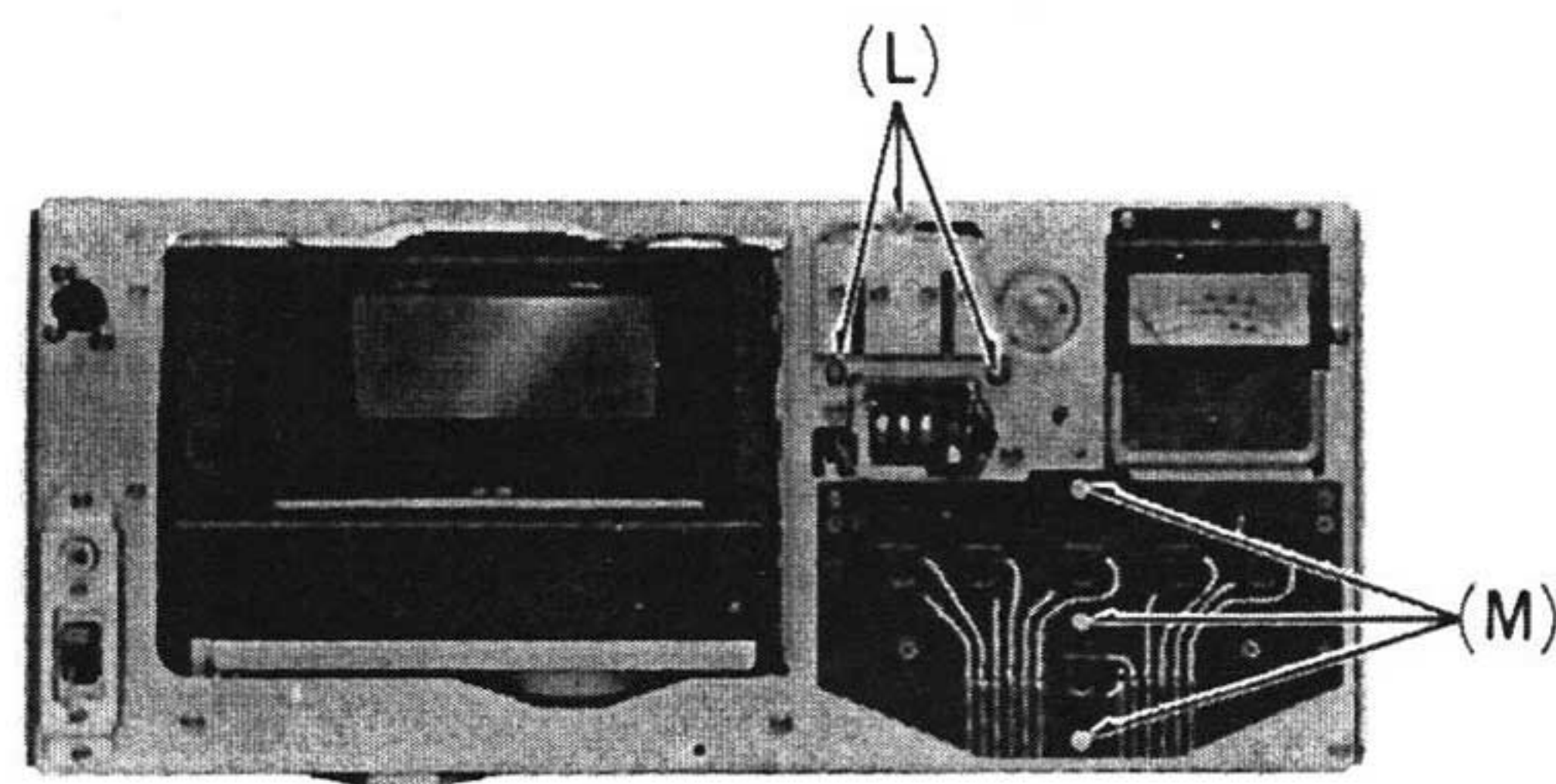


Fig. 10

| Procedure | To remove —         | Remove —           | Shown in fig. — |
|-----------|---------------------|--------------------|-----------------|
| 1         | Power circuit board | 6 screws ..... (H) | 8               |
|           |                     |                    |                 |

























#### (4) Oscilloscope

- |                      |                                  |
|----------------------|----------------------------------|
| a. Cathode ray tube: | Effective ranges $8 \times 8$ cm |
| b. Vertical axis     |                                  |
| * Input sensitivity: | 30 mV ~ 30 V/cm                  |
| * Frequency band:    | DC ~ 2 MHz                       |
| * Transient time:    | 180 ns.                          |
| * Input impedance:   | 1 M $\Omega$ , 35 pF             |
| c. Horizontal axis   |                                  |
| * Tuning range:      | 30 Hz ~ 2 MHz                    |
| * Sweep time:        | 1 $\mu$ s ~ 100 ms/cm            |
| * External sweep:    | 1 Vp-p/cm or more                |



#### (5) Digital electronic counter

- |                                 |                      |
|---------------------------------|----------------------|
| a. Number of figures:           | 4 (decimal system)   |
| b. Input sensitivity:           | 100 mVrms            |
| c. Input impedance:             | 1 M $\Omega$ , 40 pF |
| d. Frequency measurement range: | 10 Hz ~ 100 kHz      |
| e. Counting                     |                      |



| ITEM | MEASUREMENT & ADJUSTMENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | <div>POWER SUPPLY ADJUSTMENTS</div> <p>Power supply adjustments B1 and B2 should be checked and adjusted if necessary, before any other adjustments are made.</p> <div>B2(+5.6 V) adjustment</div> <p>VTVM or FET-meter</p> <ol style="list-style-type: none"> <li>1. Connect cable to the amplifier.</li> <li>2. Connect voltmeter to B2 of the power supply and oscillator circuit board and to the E (Ground) test point, adjust VR6 "B2 ADJ" so that the voltmeter indicates 5.6 volt, as shown in fig. 53.</li> </ol> <div>B1(+24 V) adjustment</div> <p>VTVM or FET-meter</p> <ol style="list-style-type: none"> <li>1. Connect cable to the amplifier.</li> <li>2. Connect voltmeter to B1 of the power supply and oscillator circuit board and to the E (Ground) test point, adjust VR5 "B1 ADJ" so that the voltmeter indicates 24 volt, as shown in fig. 53.</li> </ol> <div>Tape time meter adjustment</div> <ol style="list-style-type: none"> <li>1. Connect to the amplifier unit.</li> <li>2. Play the portion of the end of tape (C-60).</li> <li>3. Adjust the "0(zero) ADJ" VR (VR201) so that the needle of the tape time meter indicates to "0(zero)" position.</li> <li>4. Play the portion of the beginning of tape (C-60).</li> <li>5. Adjust the "FUL ADJ" VR (VR202) so that the needle of the tape time meter indicate to "C-60" position.</li> </ol> <p>(See adjustment parts location on page 43.)</p> <div> </div> |











| ITEM                                                                                                        | MEASUREMENT & ADJUSTMENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div data-bbox="296 210 1026 305" data-label="Section-Header"> <p>Cassette base plate adjustment</p> </div> | <p data-bbox="659 338 1974 424">After insertion of the cassette tape, while moving the micro switch in the direction indicated by the arrow (↑).</p> <div data-bbox="724 457 1814 1353" data-label="Image"> <p>The diagram shows a side view of the cassette base plate assembly. A micro switch is mounted on the left side, with a vertical double-headed arrow indicating its movement. Below the switch is the label 'Power supply ON/OFF switch'. The main body of the assembly is labeled 'Cassette base plate assembly'. Two micro switches are shown at the top, with curved arrows indicating their movement.</p> </div> <p data-bbox="1241 1380 1371 1418">Fig. 28</p> <p data-bbox="655 1445 1213 1484">Power supply switch adjustment</p> <ol data-bbox="655 1495 1402 1581" style="list-style-type: none"> <li>1. After insertion of the cassette tape: Switch ON</li> <li>2. After removal of the cassette tape: Switch OFF</li> </ol> |
| <div data-bbox="296 1617 1010 1712" data-label="Section-Header"> </div>                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

















































