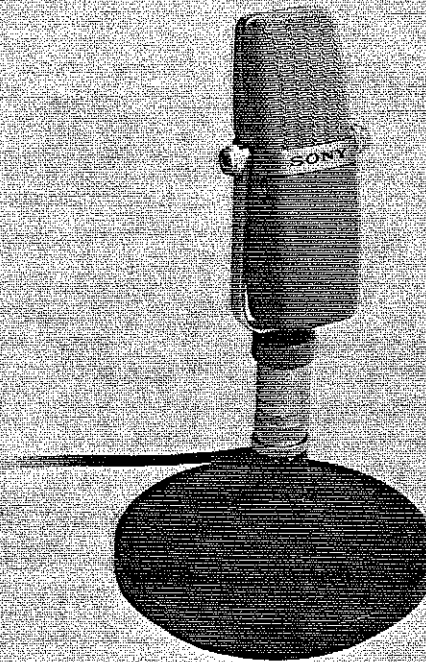


C-38B

Serial No. 5481 and later



FET CONDENSER MICROPHONE

SPECIFICATIONS

Battery: 9 V dc, battery size "006P" or equiv.
(IEC designation 6F22)

Power Supply: Standard operating voltage: 9 V
Minimum operating voltage: approx. 7.5 V
Current drain: less than 2 mA (with battery)
less than 5 mA
(with external power supply)

Continuous battery duration: more than
200 hours with a 006P dry battery
Accepts external power supply of 24 - 54 V dc

Directivity: Uni-directional and omni-directional

Output Impedance: 250 ohms \pm 20% (balanced)

Output Level:

Position of the Pad Switch	Output impedance	Effective output level* ¹	Open circuit output level
[0]	250 ohms	-47.8 dBm	0.4 mV/ μ bar
[-8 dB]	250 ohms	-55.8 dBm	0.16 mV/ μ bar

Deviation \pm 2 dB

*¹ 0 dBm = 1 mW/10 μ bar, 1,000 Hz

Frequency Response: 30 Hz - 16,000 Hz

Noise Level: S/N ratio: better than 50 dB (1,000 Hz,
1 μ bar)

Inherent noise: less than 24 dB SPL
(0 dB = 2×10^{-4} μ bar)

Wind noise*²: less than 44 dB SPL
Induction noise of external magnetic
field*³: 5 dB SPL/m gauss

*² Wind noise is the value measured by
applying a wind velocity of 6.6 ft./s.
from all directions to the micro-
phone. The mean value is taken and
converted to the equivalent input
sound level.
(0 dB = 2×10^{-4} μ bar)

*³ The external magnetic field in-
duction noise is measured with
the microphone placed in the alter-
nating magnetic field of 50 Hz,
1 milligauss. The maximum noise
value is taken and converted to
the equivalent input sound level.
(0 dB = 2×10^{-4} μ bar)

- Continued on next page -

SONY[®]

SERVICE MANUAL

Maximum Sound Pressure Input Level*⁴: 140 dB SPL:

*⁴ This is the maximum input level which produces less than 1 % wave distortion at the output with 1,000 Hz, and less than 1 % intermodulation distortion at the output signal with 70 Hz - 7 kHz.

Dynamic Range: Approx. 116 dB

Acceptable Preservation Temperature: -4° to 140°F (-20° to 60°C)

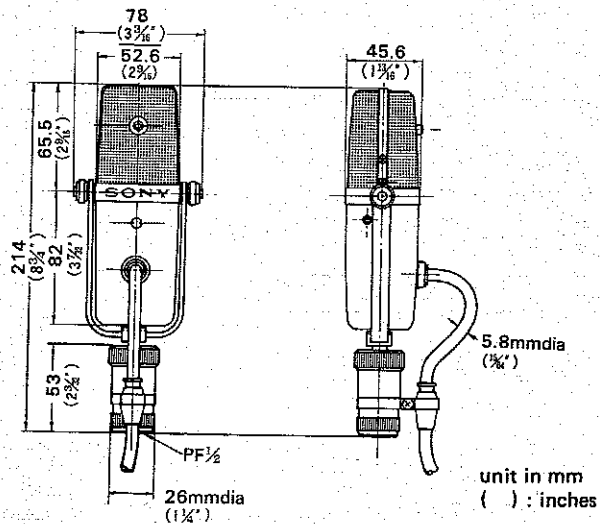
Proper Operating Temperature: 32° to 140°F (0° to 60°C)

Microphone Cable: Approx. 5.8 mm (¹⁵/₆₄ inches) dia, 4-conductor shielded cable with a CANNON XLR-3-12C plug, 6 m (20 feet) long

Mounting Thread: PF½

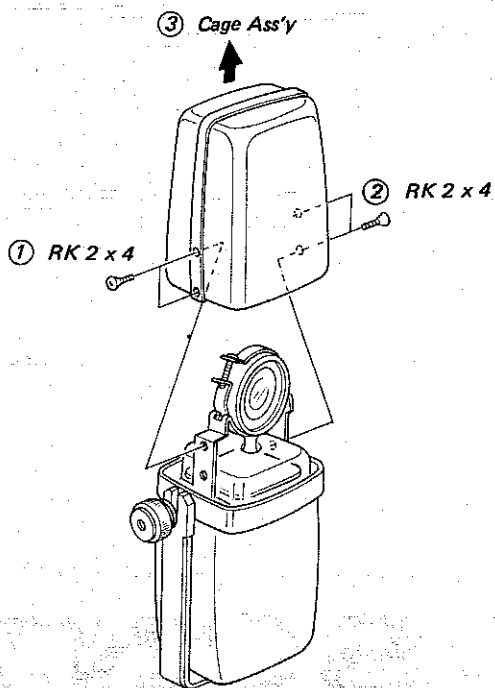
Weight: 650 g (1 lb 7 oz) without cable

Dimensions:

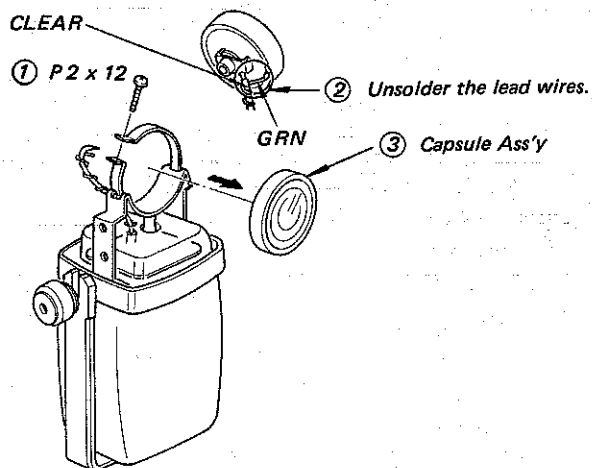


**SECTION 1
DISASSEMBLY**

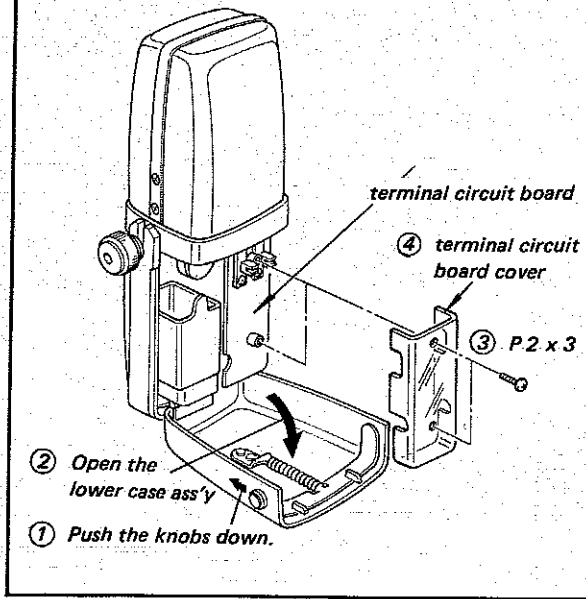
Cage Ass'y Removal



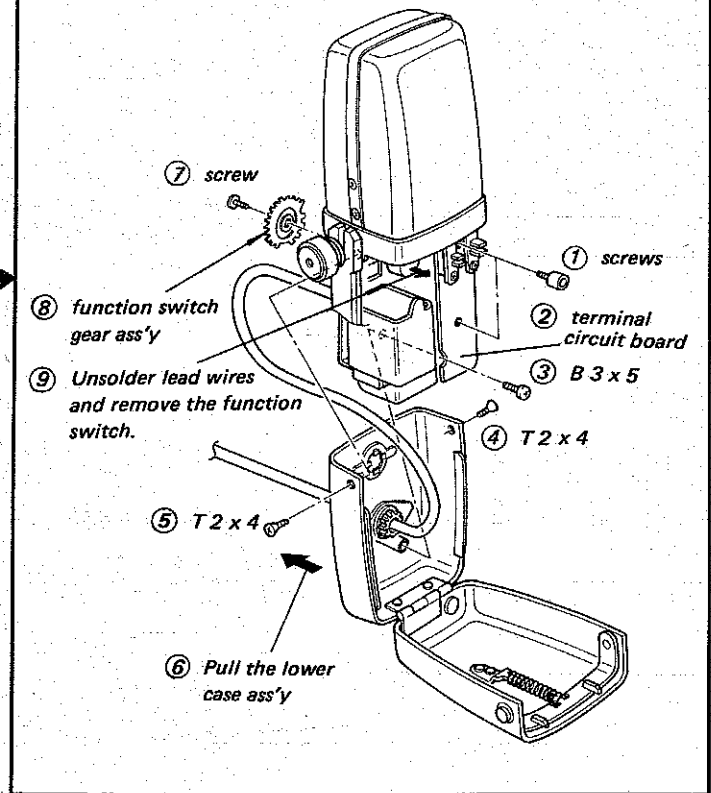
Capsule Ass'y Removal



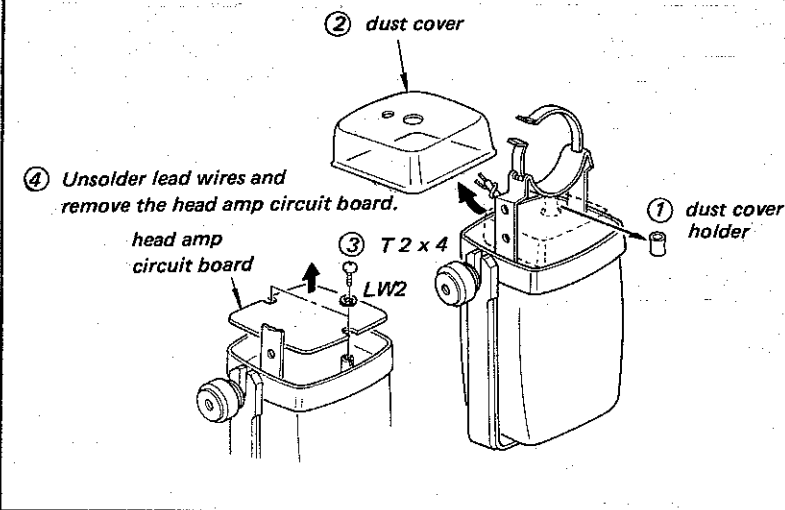
Terminal Circuit Board Cover-Removal



Function Switch Removal



Head Amp Circuit Board Removal



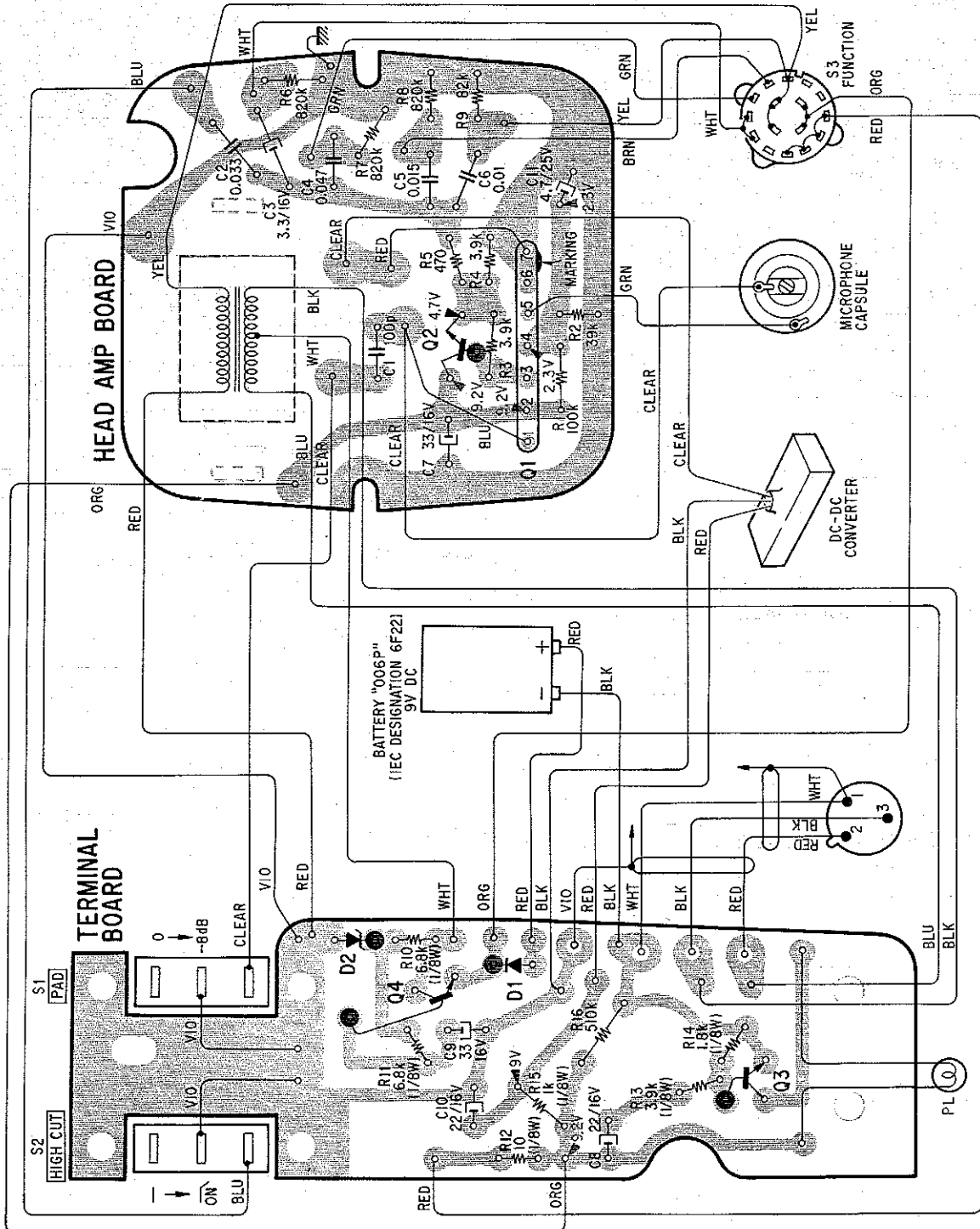
SECTION 2
DIAGRAMS

2-1. MOUNTING DIAGRAM

— Conductor Side —

CAUTION

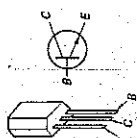
The head amp board has been carefully adjusted at the factory. If some trouble occurs on it, replace the head amp board as a part. The parts on the head amp board are not individually available.



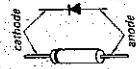
Note:
● : B+ pattern

2-2. SCHEMATIC DIAGRAM

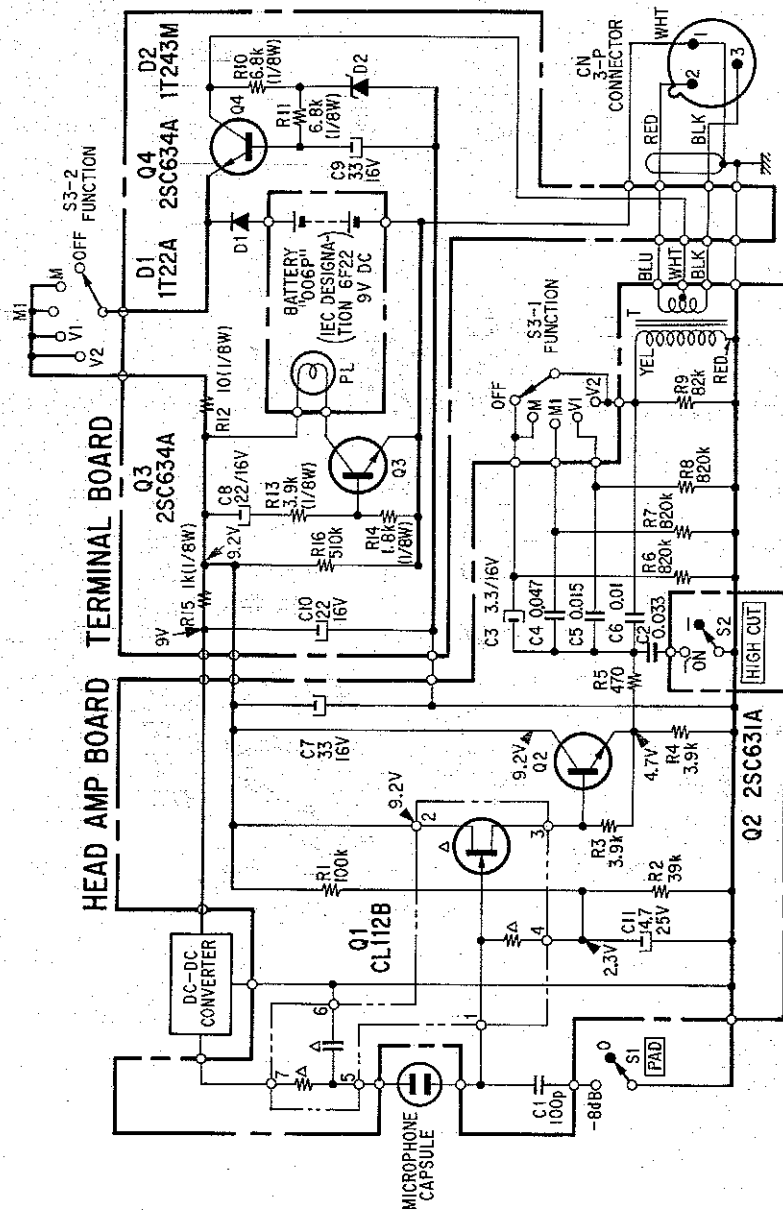
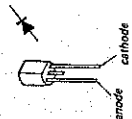
Q3, 4: 2SC634A



D1: 1T22A



D2: 1T243M

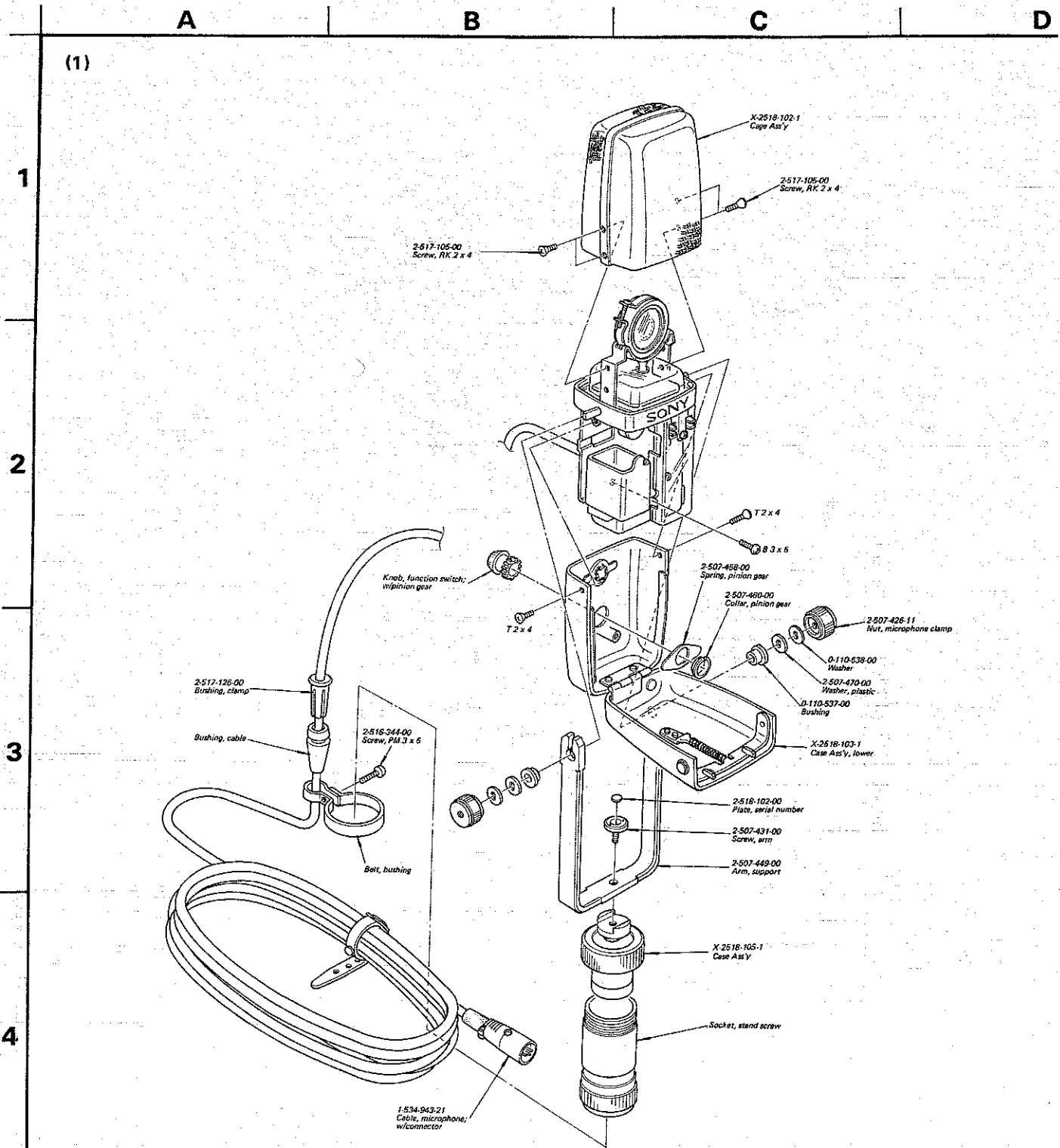


- Readings are taken with a 20,000-ohm-per-volt VOM.
- Voltage variations may be noted due to normal production tolerances.
- Switch

Ref. No.	Switch	Position
S1	PAD	0
S2	HIGH CUT	OFF
S3	FUNCTION	OFF

- Note:**
- All capacitors are in μF unless otherwise noted. $\text{pF} = \mu\text{F}$ 50WV or less are not indicated except for electrolytics.
 - All resistors are in ohms, $\frac{1}{2}\text{W}$ unless otherwise noted. $\text{k}\Omega = 1000\Omega$, $\text{M}\Omega = 1000\text{k}\Omega$.
 - Δ : internal component.
 - \square : B+ bus.
 - \square : panel designation.
 - Voltages are dc with respect to ground unless otherwise noted.

SECTION 3 EXPLODED VIEWS



Note:

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
 - All screws are Phillips (cross recess) type unless otherwise noted.
- (-) = slotted head

A B C D

(2)

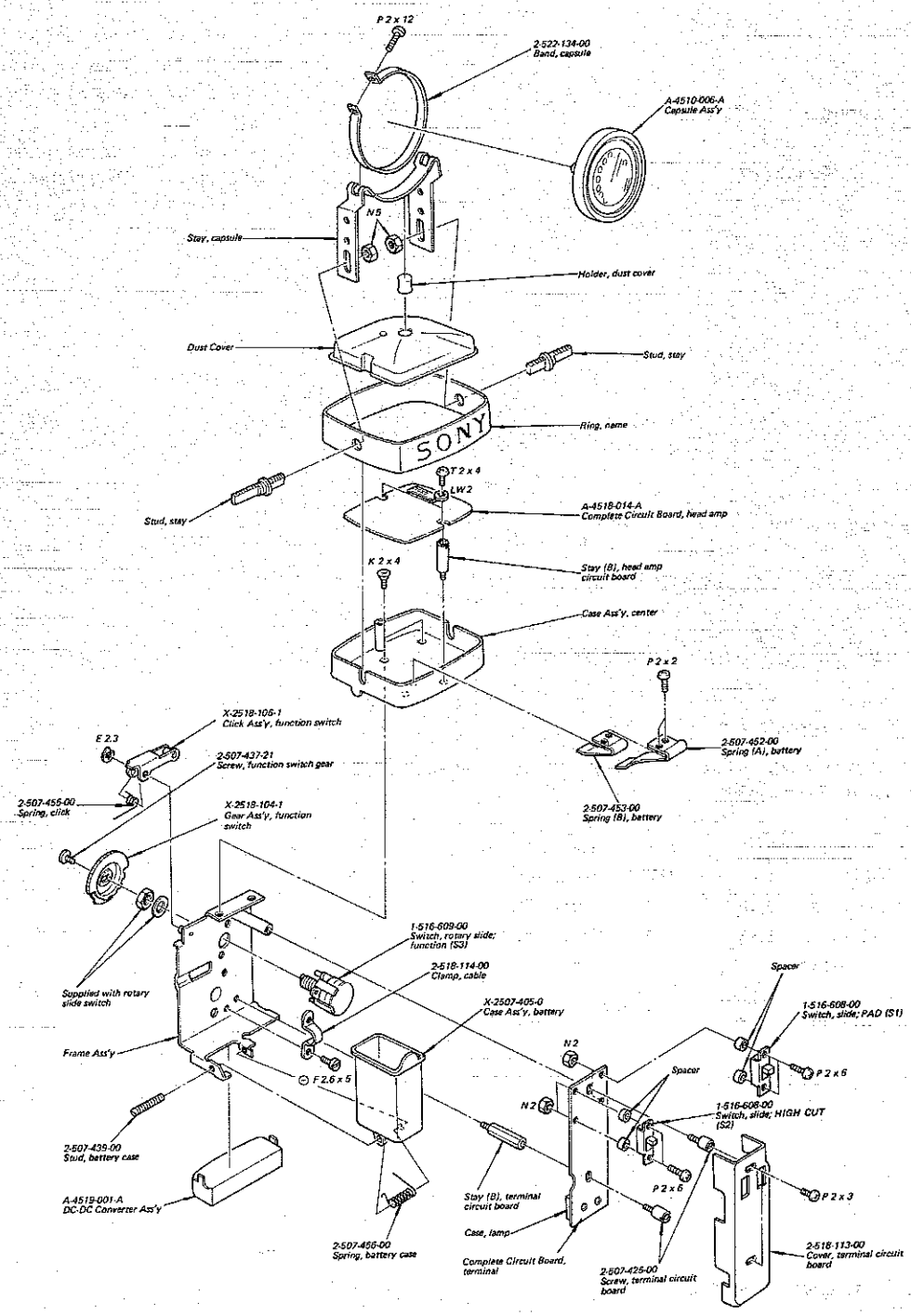
1

2

3

4

5



Note:

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
- (-) = slotted head

