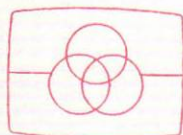


CFS-65L



AEP Model
UK Model

Zic Modely
CFM-31



Free service manuals
Gratis schema's


Digitized by

www.freesevicemanuals.info

FM/LW/MW/SW
STEREO CASSETTE-CORDER

SPECIFICATIONS

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

Tape Transport Mechanism Type	MDS-10VS3	
	Specifications	Test Equipment
Forward Torque	24–50 g·cm (0.33–0.69 oz·inch)	Sony torque meter CQ-102A
Fast Forward and Rewind Torque	60–110 g·cm (0.83–1.52 oz·inch)	Sony torque meter CQ-201A
Tape Tension	more than 150 g (more than 5.3 oz)	Sony tape tension meter CQ-403

GENERAL

- Power Requirements:** 220V ac, 50 Hz (AEP model)
240V ac, 50 Hz (UK model)
9V dc, six batteries size D (IEC designation R20)
- Power Consumption:** 16W
- Power Output:** 2W × 2 (at 10% harmonic distortion)
at dc operation
- Dimensions:** Approx. 440 (w) × 252 (h) × 115 (d) mm
17³/₈ (w) × 9⁷/₈ (h) × 4⁵/₈ (d) inches
incl. projecting parts and controls
not incl. handle
- Weight:** Approx. 4.7 kg, 10 lb 6 oz
incl. batteries

RADIO SECTION

- Frequency Range:** FM: 87.5–108 MHz
SW: 6.0–18 MHz (50–16.7 m)
MW: 530–1,605 kHz (566–187 m)
LW: 150–350 kHz (2,000–857 m)

- Antennas:** FM/SW: Telescopic antenna
MW/LW: Built-in ferrite-rod antenna

– Continued on page 2 –

SONY
SERVICE MANUAL

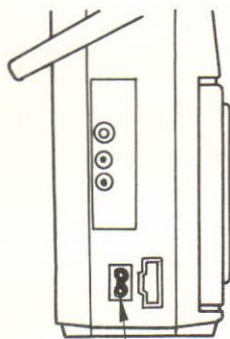
TAPE RECORDER SECTION

- Track:** 4-track 2-channel stereo or monaural
- Fast Winding Time:** Approx. 1 min. 30 sec. with Sony Cassette C-60
- Frequency Response:** 80–8,000 Hz (with standard cassette, with the TAPE SELECT switch set to ^{NORM} TYPE I)
80–9,000 Hz (with chromium dioxide cassette, with the TAPE SELECT switch set to ^{TYPE II} CrO₂)
- S/N Ratio:** 40 dB
- Total Harmonic Distortion:** 3%
- Wow and Flutter:** 0.15% (WRMS)
- Battery Life:** Approx. 8 hours of continuous recording with the Built-in Microphones using Sony Super Batteries SUM-1S
- Speakers:** Two-way:
Approx. 12 cm (5 inches) dia. woofer
Approx. 5 cm (2 inches) dia. tweeter
- Inputs:** MIC (one minijack)
Sensitivity: 0.49 mV (–64 dB)
Impedance: for low impedance microphone
- Outputs:** EXT SP (two minijacks)
Impedance: for 4Ω or 8Ω impedance speaker
PHONES (one stereo binaural jack)
Impedance: for 8Ω impedance headphones
- Other Jack:** Record/playback jack (Five-pin DIN jack)

0 dB = 0.775 V

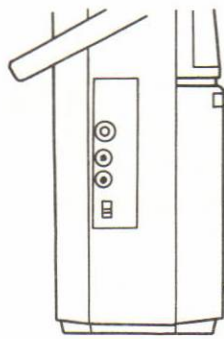
MODEL IDENTIFICATION

– UK model –



Connector, AC IN

– AEP model –

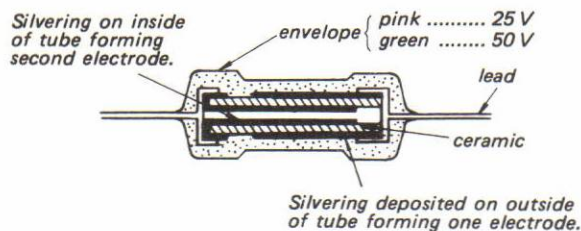


THE CERAMIC CAPACITORS

This set uses tube-type ceramic capacitors whose shape is identical with the carbon resistors. Be careful not to use resistors instead of capacitors in repairing.

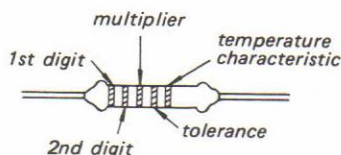
Disc-type ceramic capacitors can be used for replacing those originally used in the set.

Two kinds of drilled holes are provided in some patterns for mounting the tube-type and disc-type ceramic capacitors. Use appropriate holes where applicable.

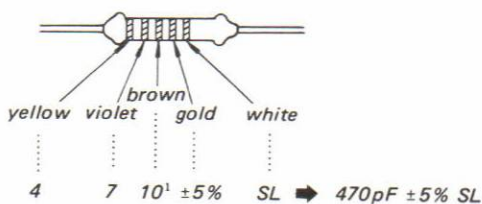


COLOR CODE (in pF)

Color	1st or 2nd Digit	Multiplier	Tolerance	Temperature characteristic
brown	1	10^1		Y
red	2	10^2		D
orange	3	10^3		
yellow	4	10^4		RH
green	5			
blue	6			
violet	7			UJ
gray	8		$\pm 30\%$	X
white	9			SL
black	0	10^0	$\pm 20\%$	CH
gold		10^{-1}	$\pm 5\%$	V
silver		10^{-2}	$\pm 10\%$	B

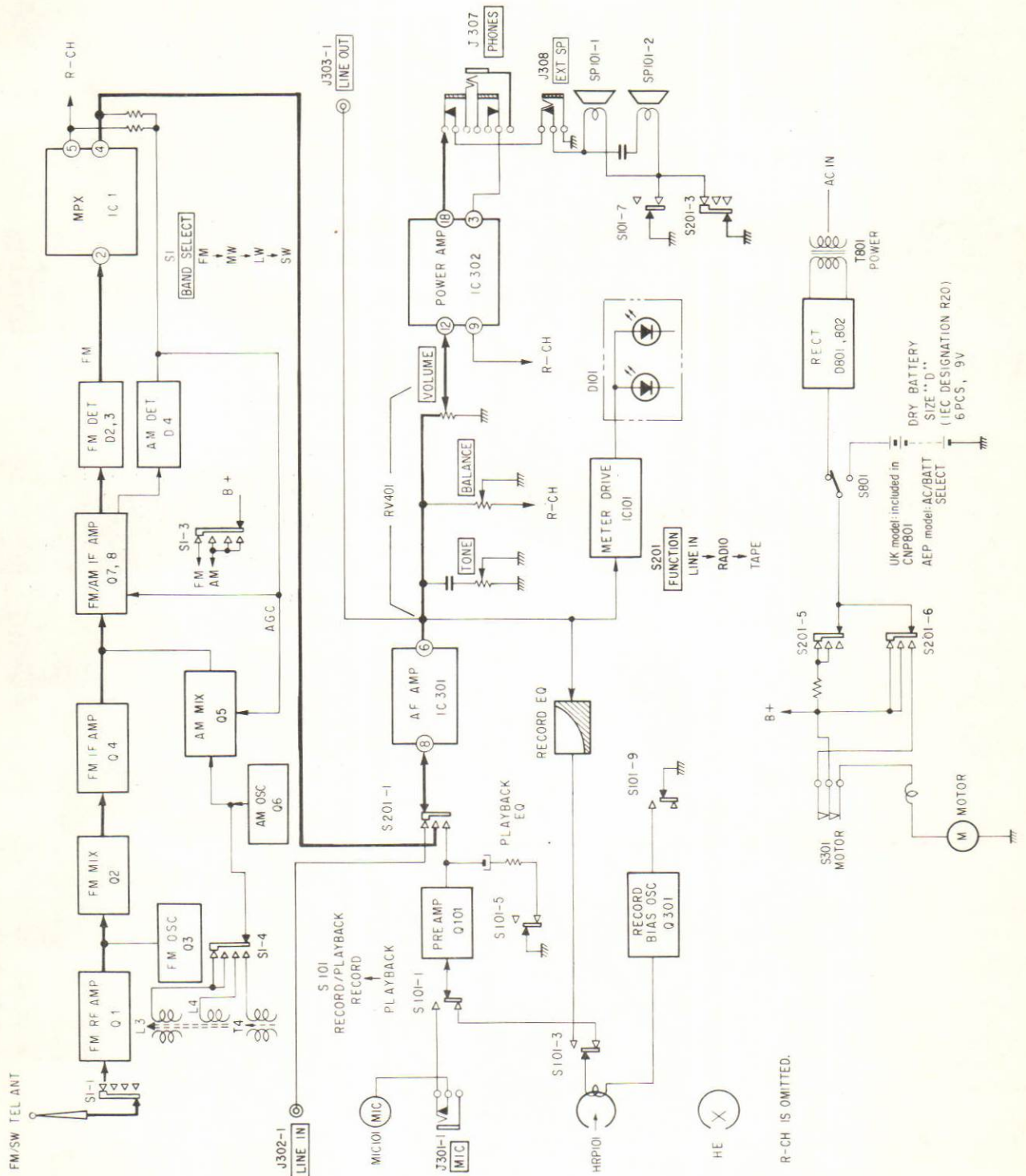


Example:



SECTION 1 BLOCK DIAGRAM

1-1. BLOCK DIAGRAM

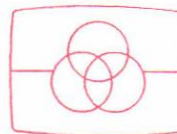
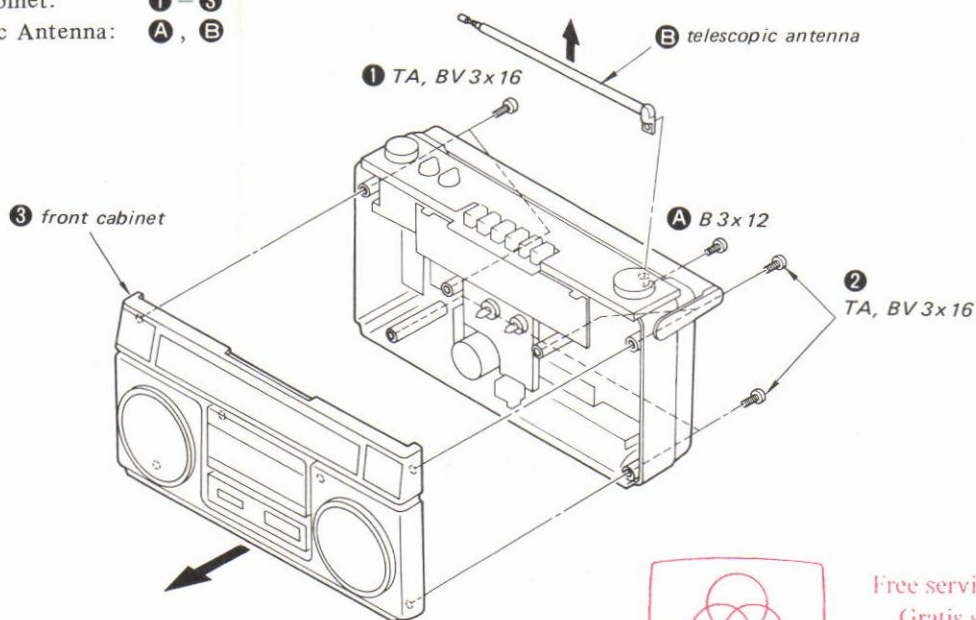


SECTION 2 DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

2-1. FRONT CABINET AND TELESCOPIC ANTENNA REMOVAL

Front Cabinet: ① - ③
Telescopic Antenna: A, B

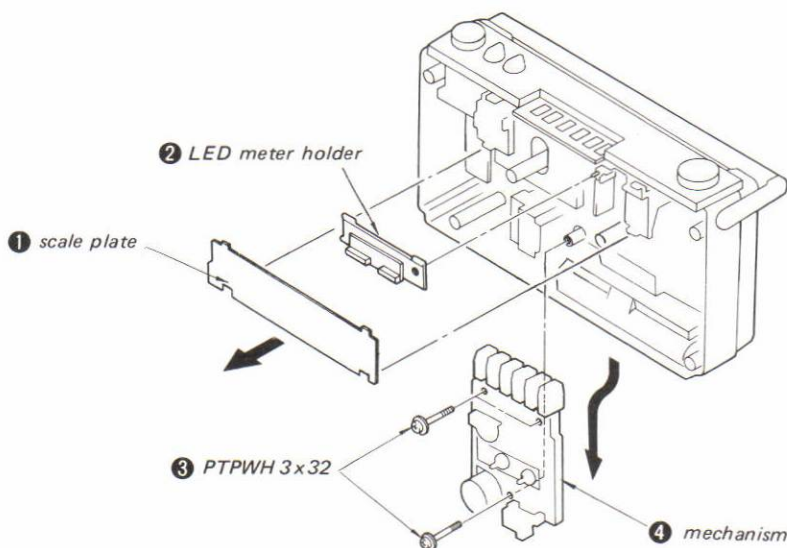


Free service manuals
Gratis schema's

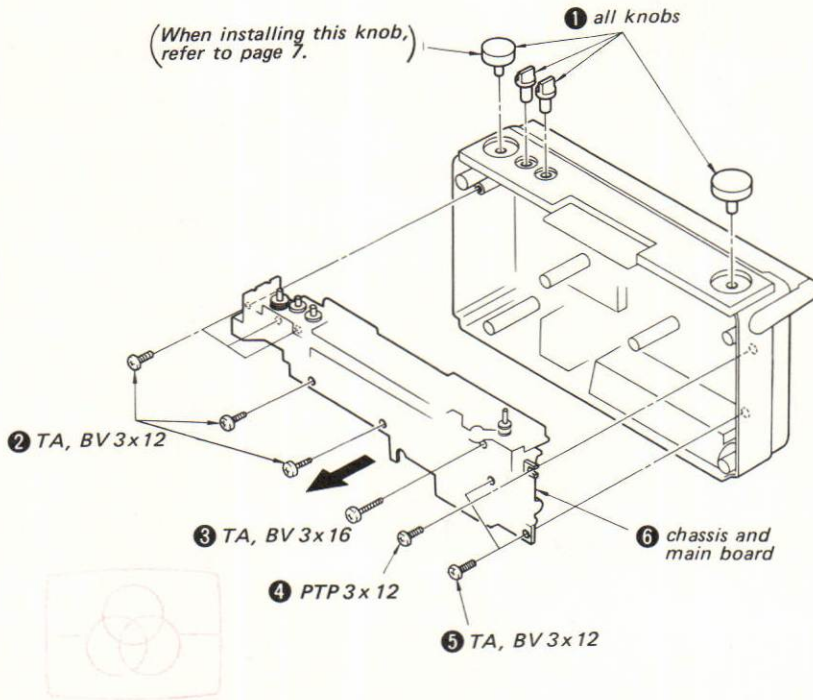
Digitized by

www.freesevicemanuals.info

2-2. MECHANISM REMOVAL

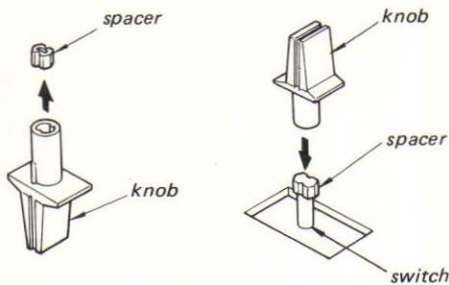


2-3. CHASSIS AND MAIN BOARD REMOVAL



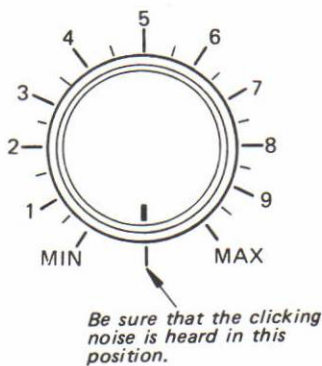
2-4. NOTE ON KNOB INSTALLATION

When removing the knobs, they will come off with the spacers. For adequate knob installation, once pull the spacer out from the knob, replace the spacer into the switch first, and then reinstall the knob.



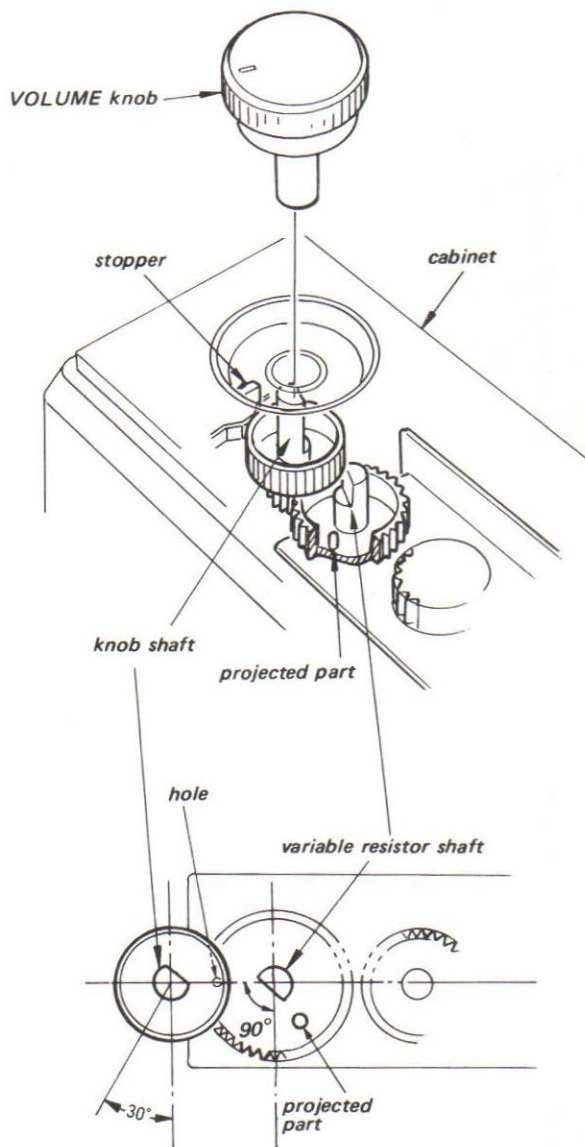
2-5. VOLUME KNOB INSTALLATION

1. After placing the set into the cabinet, insert the VOLUME knob slightly into the knob shaft. The VOLUME knob can be turned 360° in this condition.
2. Set the FUNCTION switch to RADIO. Turn the VOLUME knob counterclockwise, then a clicking noise can be heard after the sound becomes small. The position where the clicking noise can be heard differs every time the VOLUME knob is turned. Install the VOLUME knob so that the clicking noise can be heard in the position shown below (The VOLUME knob returns to its original position after turning it four times.). If the clicking noise can not be heard in the adequate position, confirm the positions of the variable resistor shaft and the knob shaft. (Refer to the knob shaft and variable resistor shaft installation shown next.)
3. When the clicking noise is heard in the adequate position, turn the VOLUME knob slightly clockwise to avoid the stopper and push it in.



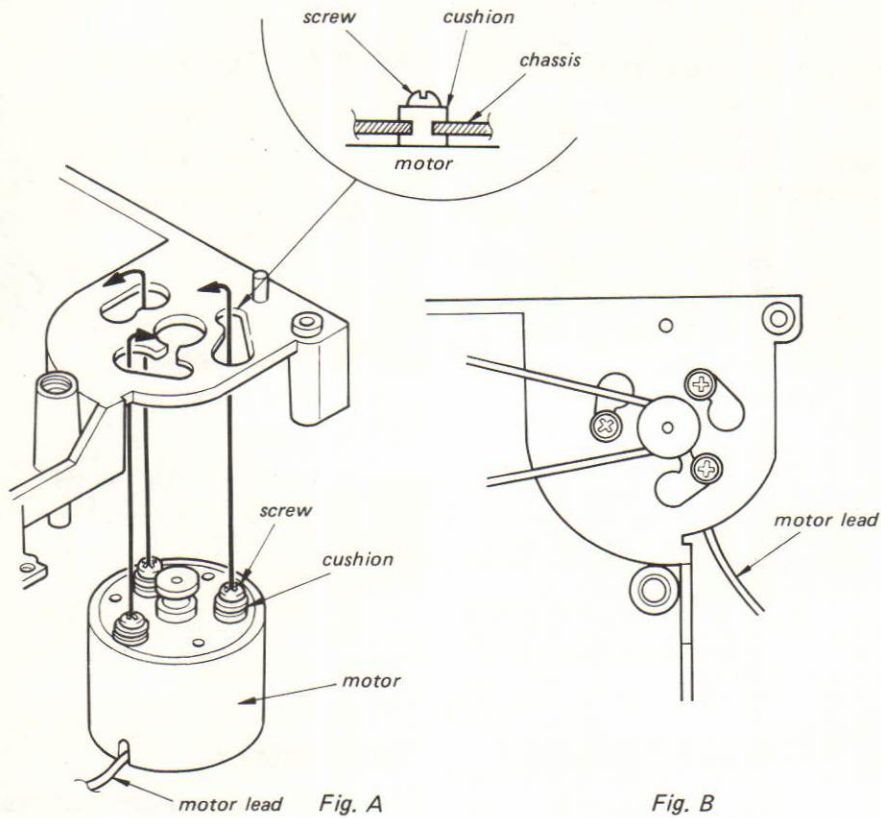
2-6. KNOB SHAFT AND VARIABLE RESISTOR SHAFT INSTALLATION

The knob and the variable resistor shafts are interlocked by gears and have their own part numbers. Therefore, when replacing the knob shaft or the variable resistor shaft, install them as shown below. If not, the VOLUME scale will not indicate correctly.



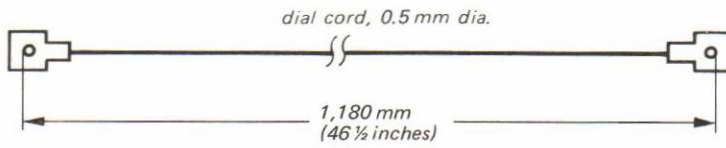
2-7. NOTE ON MOTOR INSTALLATION

Install the motor as shown by the arrows in Fig. A. Also install it so that the motor lead comes in the position shown in Fig. B. Then, move the motor in all directions and confirm that the groove of the cushion is fixed in the chassis. If the motor is not installed firmly, the motor will slant, and the belt will come off.

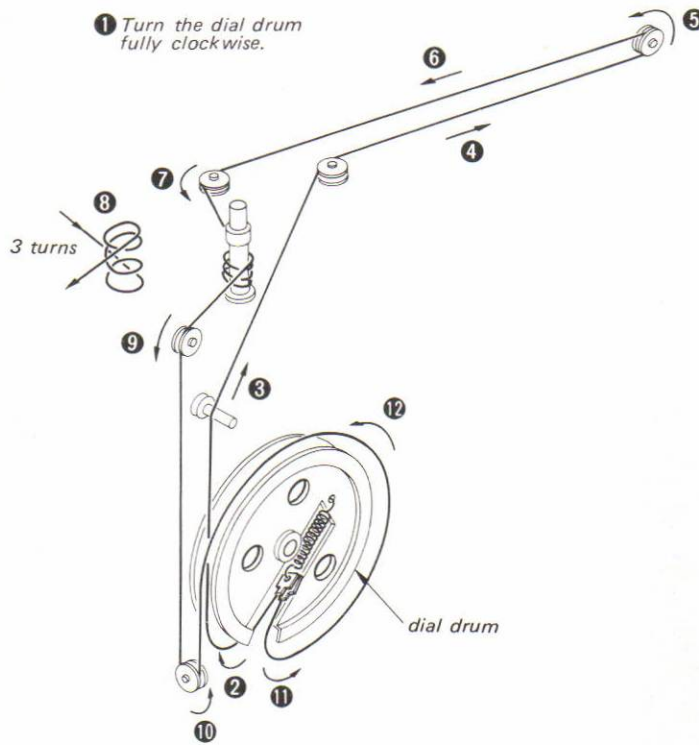


2-8. DIAL CORD STRINGING

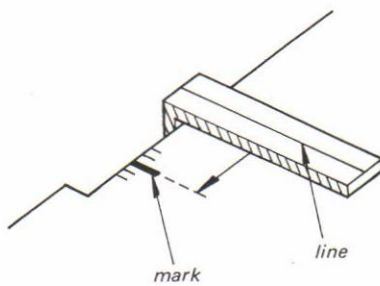
1) Preparation



2) Stringing



3) Dial Pointer Installation



Place the line on the mark.



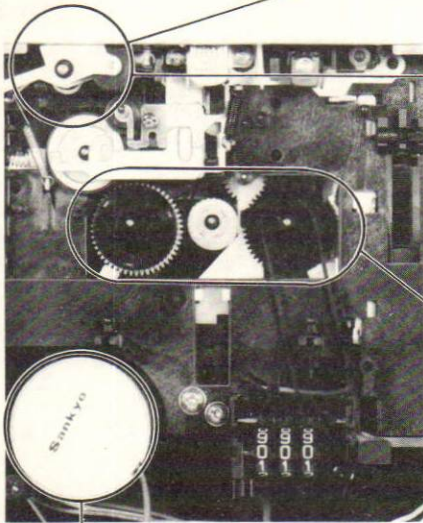
SECTION 3 ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured; alcohol-moistened swab:

record/playback head	pinch roller
erase head	rubber belts
capstan	idlers
2. Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

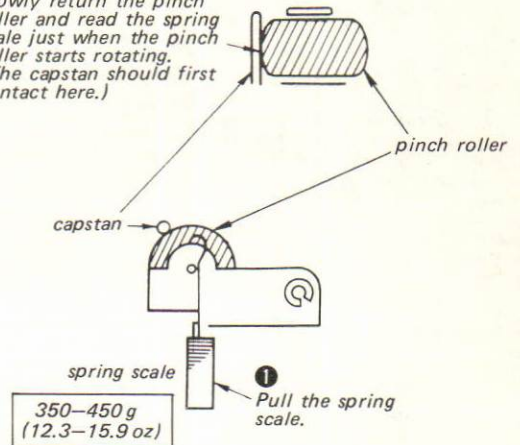
3-1. MECHANICAL ADJUSTMENT AND MEASUREMENTS



Pinch Roller Pressure Measurement

— Playback Mode —

- ② Slowly return the pinch roller and read the spring scale just when the pinch roller starts rotating. (The capstan should first contact here.)



Tape Tension Measurement

Meter	Meter reading
CQ-403	more than 150 g (more than 5.3 oz)

Torque Measurement

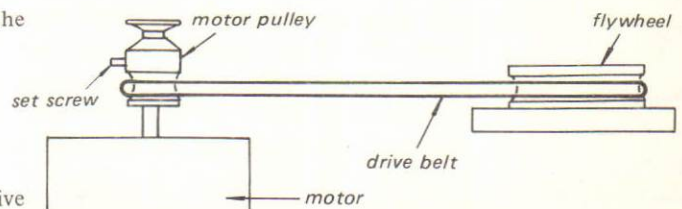
Torque	Torque meter	Meter reading
Forward	CQ-102A	24-50 g·cm (0.33-0.69 oz·inch)
Fast Forward and Rewind	CQ-201A	60-110 g·cm (0.83-1.52 oz·inch)

Motor Pulley Height Adjustment

Perform this adjustment, after replacing the motor pulley or the flywheel.

Procedure:

1. Keep the set horizontal.
2. Adjust the motor pulley height so that the drive belt is straight without a twist.



3-2. ELECTRICAL ADJUSTMENTS – TAPE RECORDER SECTION –

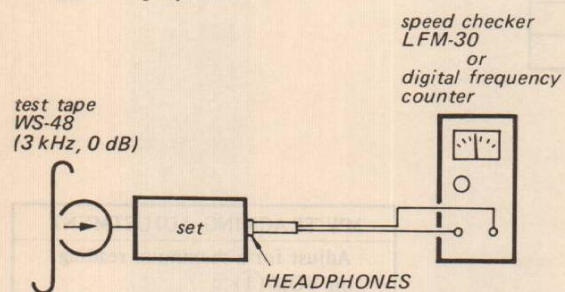
Tape Speed Adjustment

Setting:

VOLUME control: mechanical mid

Procedure:

Mode: playback



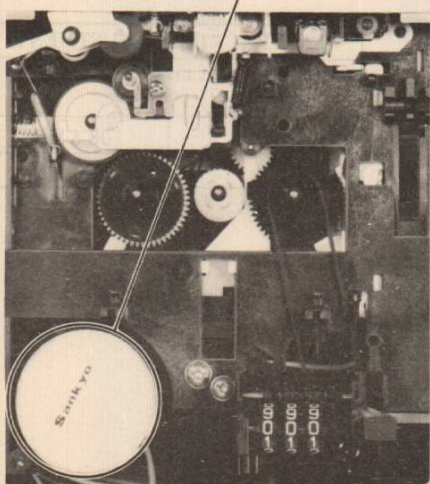
Specification:

Speed checker	Digital frequency counter
± 2.5%	2,925–3,075 Hz

If necessary, replace the motor pulley.

Motor pulley Part No.	Mark	Tape speed change
X-3558-615-1	A	-2.5%
X-3558-615-2	B	-1.5%
X-3558-615-3	C	standard
X-3558-615-4	D	+1.5%
X-3558-615-5	E	+2.5%

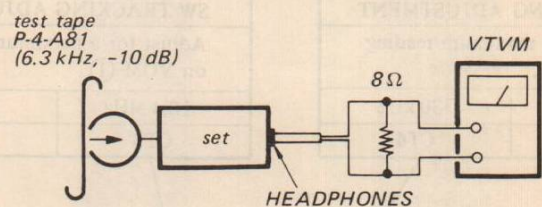
Note: Perform the motor pulley height adjustment.



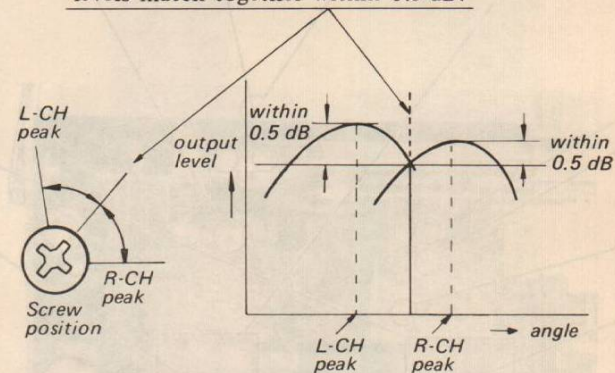
Record/playback Head Azimuth Adjustment

Procedure:

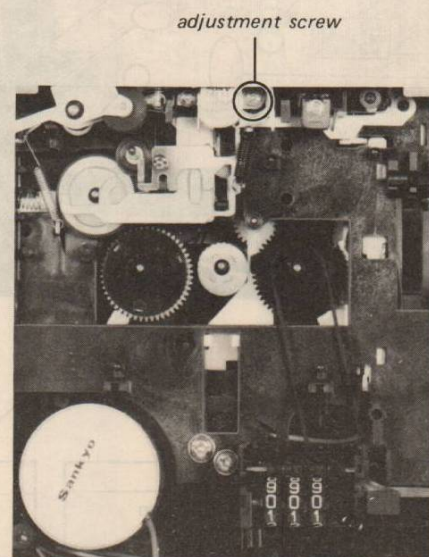
1. Mode: playback



2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw where both of output levels match together within 0.5 dB.



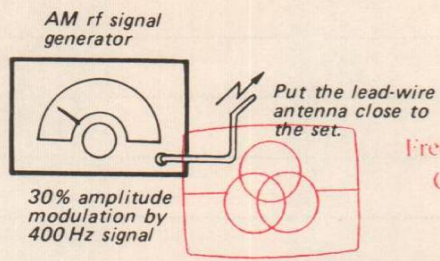
Adjustment Location:



MEMO

Handwritten notes area with horizontal lines for recording information.

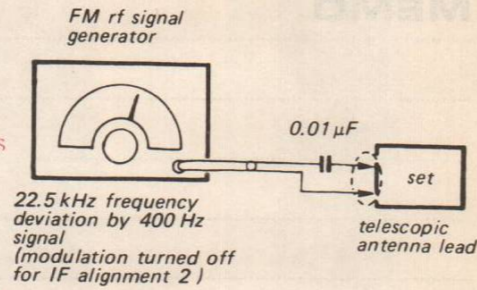
- RADIO SECTION -



Free service manuals
Gratis schema's

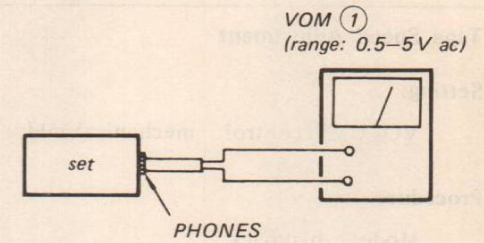
Digitized by

www.freesevicemanuals.info



• Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

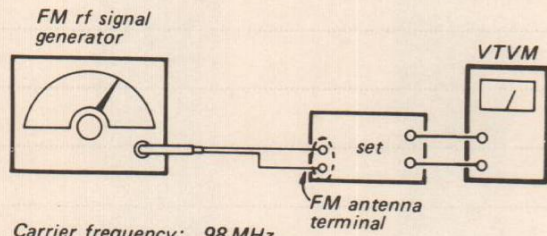
• Repeat the MW and LW tracking adjustments several times alternately.



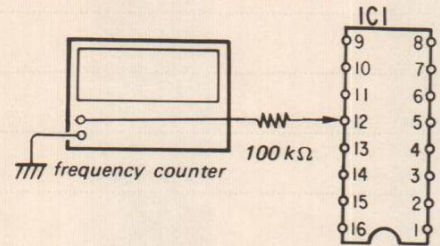
19 kHz Adjustment

A) Regular Method

Procedure:



Carrier frequency: 98 MHz
Modulation: 400 Hz, 75 kHz deviation (100%)
Output level: 1 mV (60 dB)

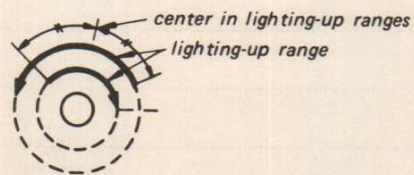


1. Tune the set to 98 MHz.
2. Adjust RV1 for 19 kHz ± 30 Hz on the counter.

B) Simple Method

Procedure:

1. Tune the set to the FM stereo broadcasting signal.
2. Turn RV1 clockwise or counterclockwise and memorize the lighting-up range of the stereo lamp.
3. Secure RV1 at the center of the lighting-up range of both turns as shown below.



SW FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
5.8 MHz	T6
18.4 MHz	CT6

LW FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
145 kHz	T7
365 kHz	CT7

MW FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
520 kHz	T8
1,680 kHz	CT8

AM IF ALIGNMENT	
Adjust for a maximum reading on VOM ①.	
468 kHz	CFT
	T9

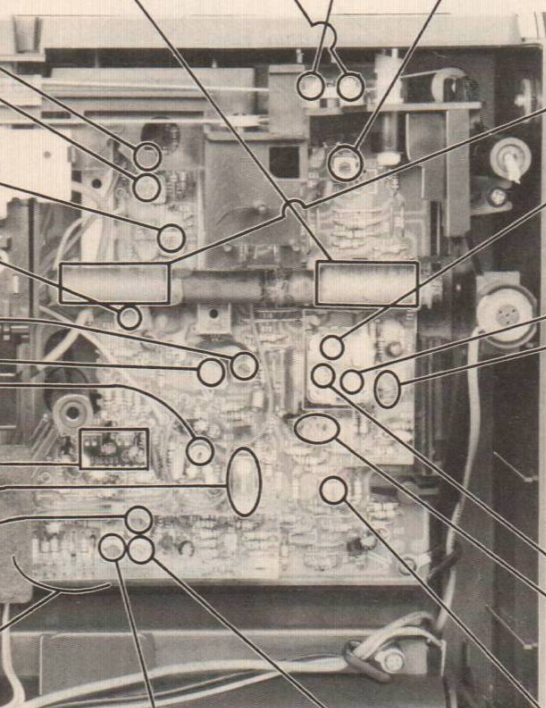
LW TRACKING ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
160 kHz	330 kHz
L4	CT4

SW TRACKING ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
18.4 MHz	5.8 MHz
CT3	T4

MW TRACKING ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
L3	620 kHz
CT5	1,400 kHz

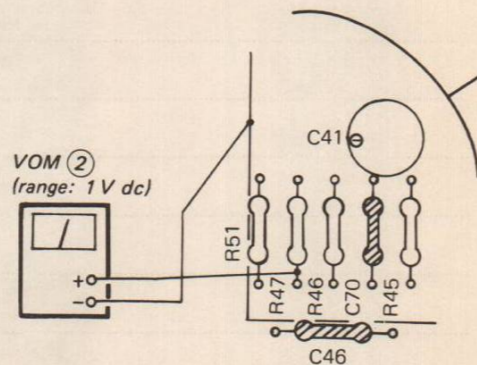
FM FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
CT2	108.5 MHz
L2	87.1 MHz

FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
CT1	108.5 MHz
L1	87.1 MHz



RV1

IC1



T3
Adjust for 0V reading on VOM ②.
FM IF ALIGNMENT 2 (10.7 MHz with no modulation)

T2	T1
Adjust for a maximum reading on VOM ①.	
FM IF ALIGNMENT 1 (10.7 MHz with modulation)	

SECTION 4
DIAGRAMS

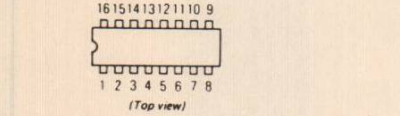
4-1. MOUNTING DIAGRAM

- Conductor Side -

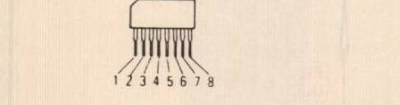
Replacement Semiconductors

For replacement, use semiconductors except in ().

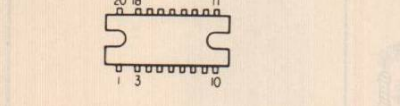
IC1: LA3361
IC101, 201: LB1405



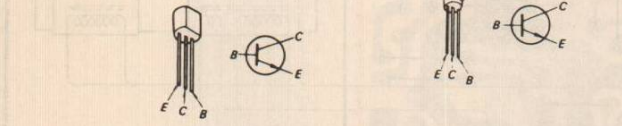
IC301: BA328



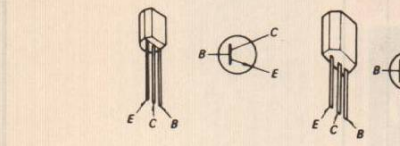
IC302: LA4125



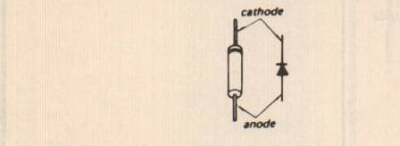
Q1, 3, 5, 8: 2SC930 (2SC930D) Q2: 2SC668 (2SC668D)
Q4, 7: 2SC930 (2SC930C) Q5: 2SC930 (2SC930E)
Q6: 2SC930 (2SC930E)



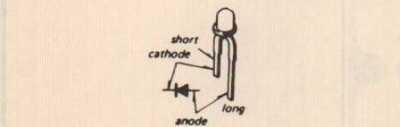
Q101, 201: 2SC1362 Q301: 2SC1364 (2SC1634)



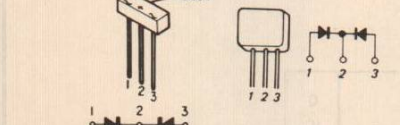
D1: 1S2687S-1 (SD113) D2, 3: 1S1555 D4: 1T261 D5, 301: RD5.6EB2Z (RD5.6EB)



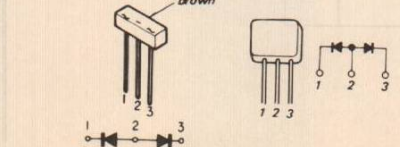
D901, 902: TLR124



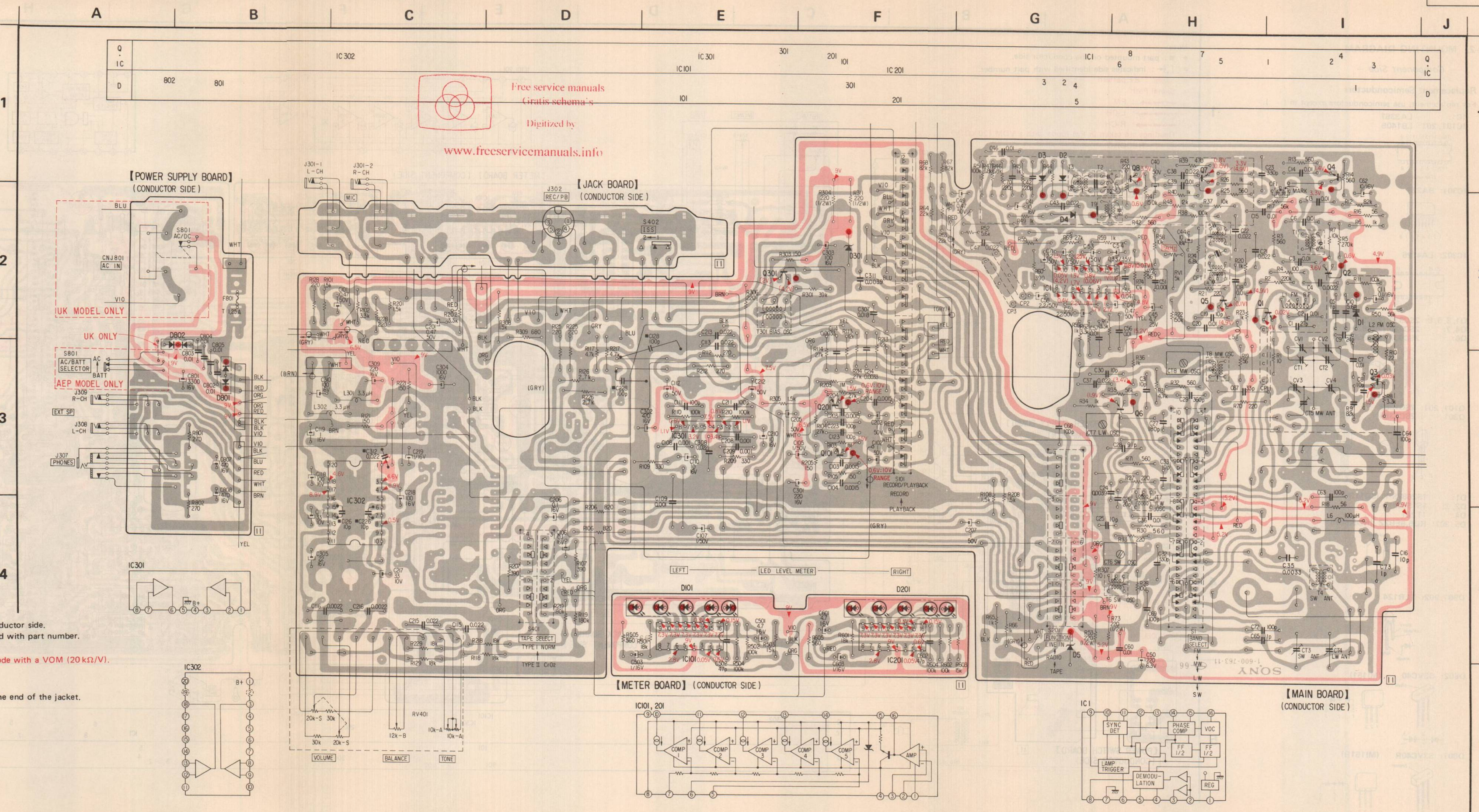
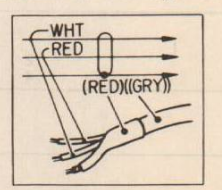
D802: S3VC40 (MI151)



D801: S3VC40R (MI151R)



- Note:
- ■ : part mounted on the conductor side.
 - : indicates side identified with part number.
 - : B+ pattern
 - Readings are taken in FM mode with a VOM (20 kΩ/V).
 - [] : RECORD
 - () : AM
 - Color code of sleeving over the end of the jacket.



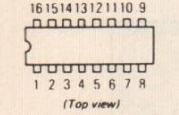
4-2. MOUNTING DIAGRAM

- Component Side -

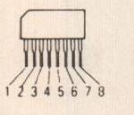
Replacement Semiconductors

For replacement, use semiconductors except in ().

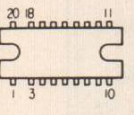
IC1: LA3361
IC101, 201: LB1405



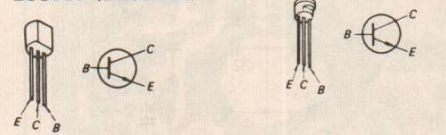
IC301: BA328



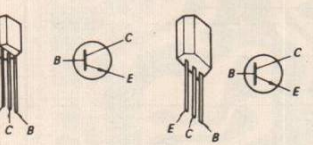
IC302: LA4125



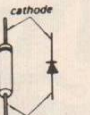
Q1, 3, 5, 8: 2SC930 (2SC930D) Q2: 2SC668 (2SC668D)
Q4, 7: 2SC930 (2SC930C)
Q6: 2SC930 (2SC930E)



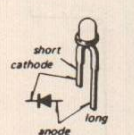
Q101, 201: 2SC1362 Q301: 2SC1364 (2SC1634)



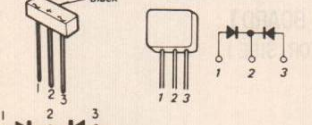
D1: 1S2687S-1 (SD113)
D2, 3: 1S1555
D4: 1T261
D5, 301: RD5.6EB2Z (RD5.6EB)



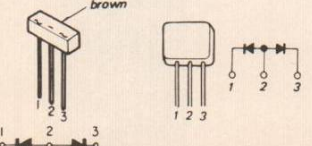
D901, 902: TLR124



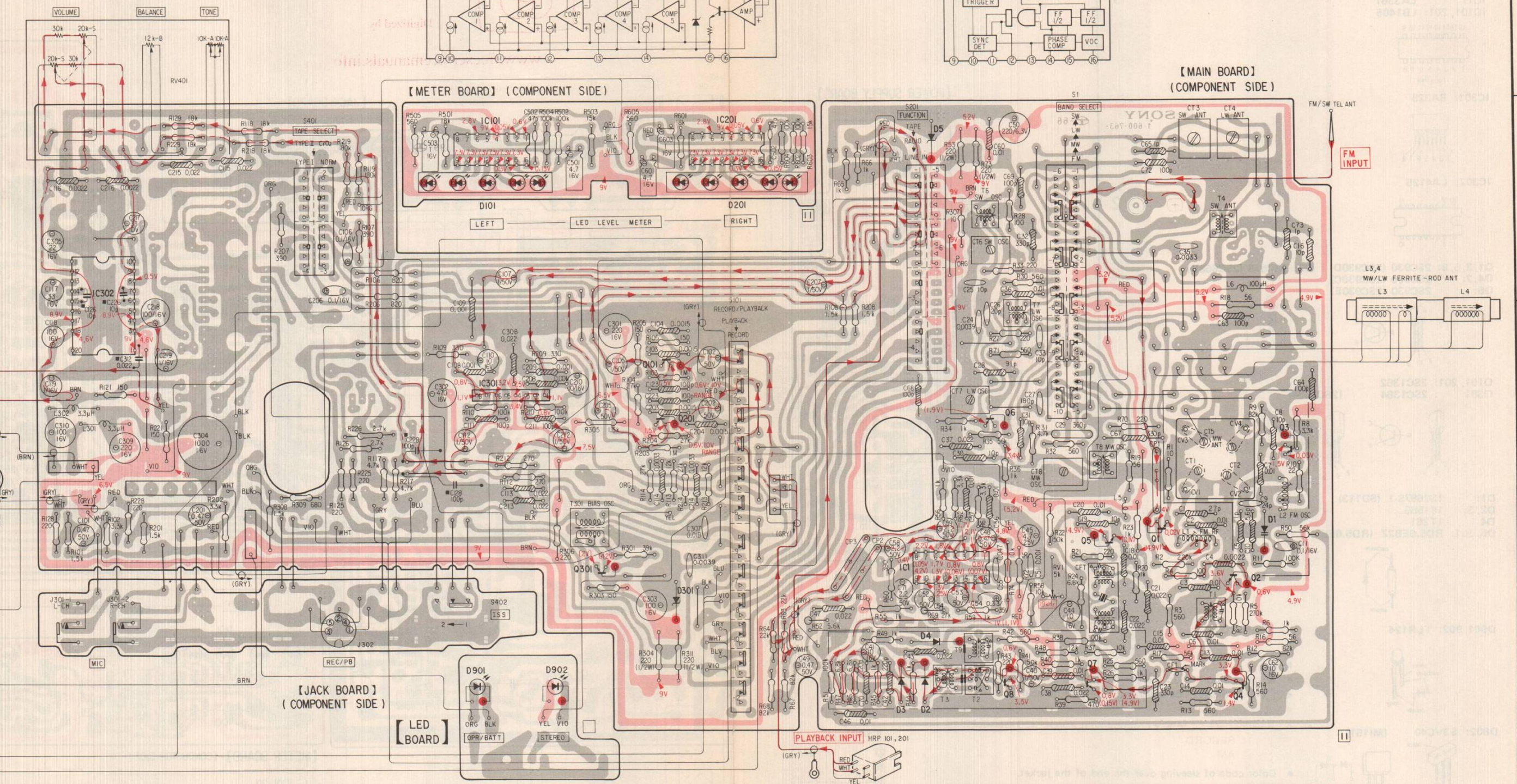
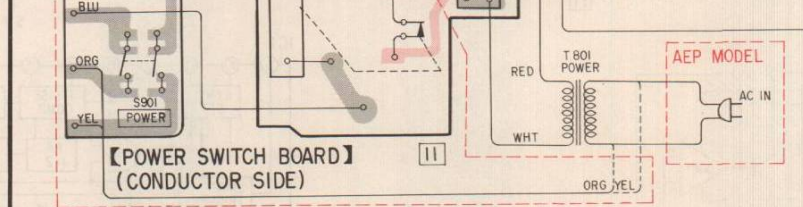
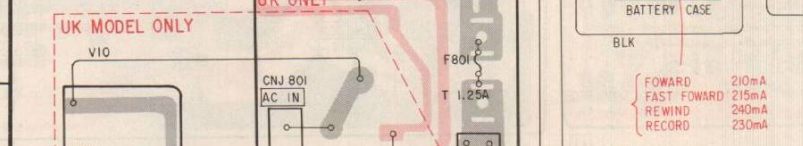
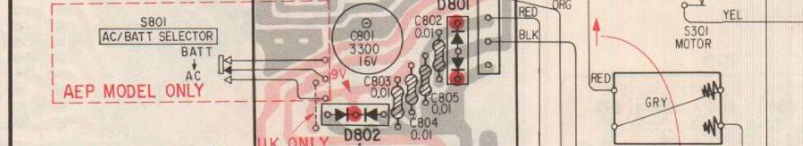
D802: S3VC40 (MI151)



D801: S3VC40R (MI151R)

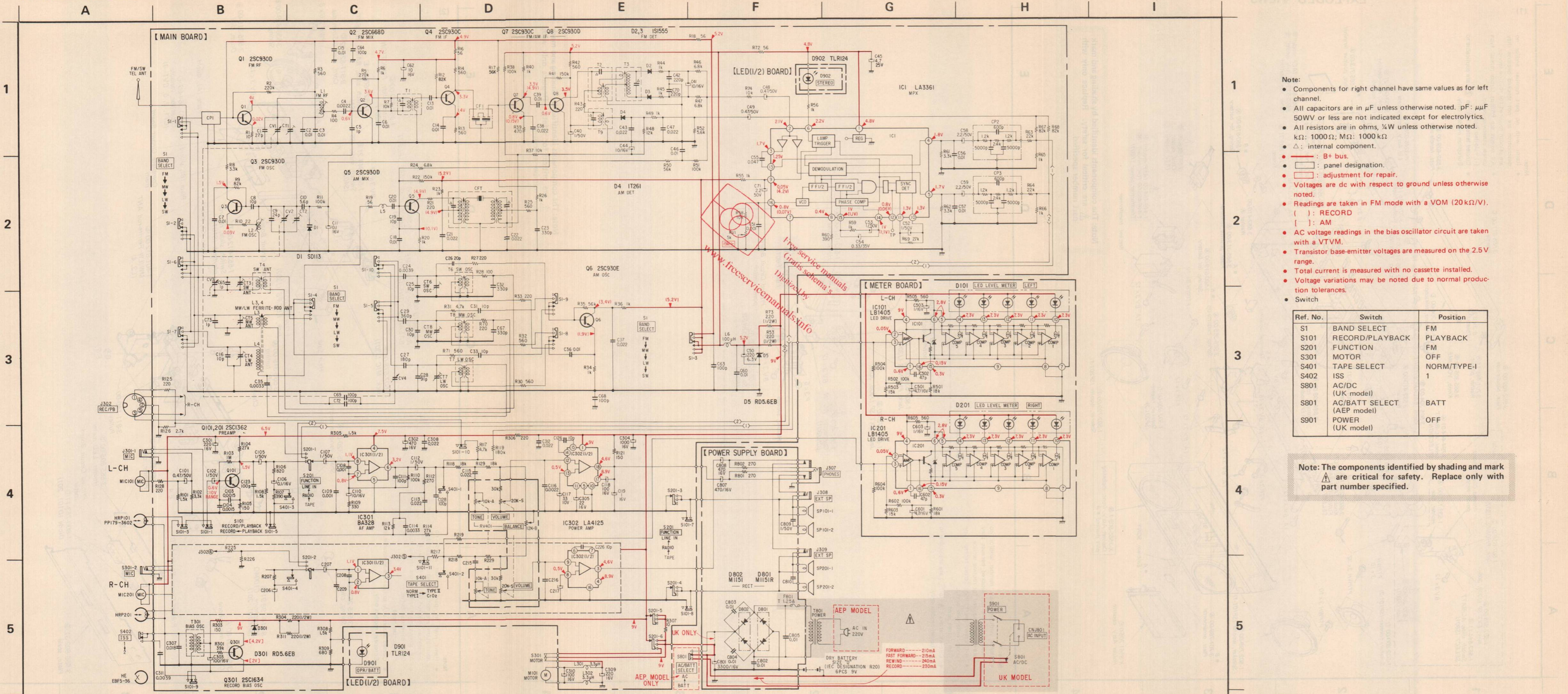


- Note:
- : part mounted on the conductor side.
 - : indicates side identified with part number.
 - : B+ pattern
 - Signal Path
 - : FM
 - : L-CH
 - : R-CH
 - Readings are taken in FM mode with a VOM (20 kΩ/V).
 - []: RECORD
 - (): AM
 - Color code of sleeving over the end of the jacket.



Q	IC	IC302	IC101	IC301	IC201	IC1	Q
D	D	901	902	301	201	3 2 4	D

4-3. SCHEMATIC DIAGRAM



- Note:**
- Components for right channel have same values as for left channel.
 - All capacitors are in μF unless otherwise noted. pF : μF 50WV or less are not indicated except for electrolytics.
 - All resistors are in ohms, $\frac{1}{4}\text{W}$ unless otherwise noted. $\text{k}\Omega$: 1000 Ω ; $\text{M}\Omega$: 1000 $\text{k}\Omega$
 - Δ : internal component.
 - --- : B+ bus.
 - \square : panel designation.
 - \square : adjustment for repair.
 - Voltages are dc with respect to ground unless otherwise noted.
 - Readings are taken in FM mode with a VOM (20 $\text{k}\Omega/\text{V}$).
 - (): RECORD
 - []: AM
 - AC voltage readings in the bias oscillator circuit are taken with a VTVM.
 - Transistor base-emitter voltages are measured on the 2.5V range.
 - Total current is measured with no cassette installed.
 - Voltage variations may be noted due to normal production tolerances.
 - Switch

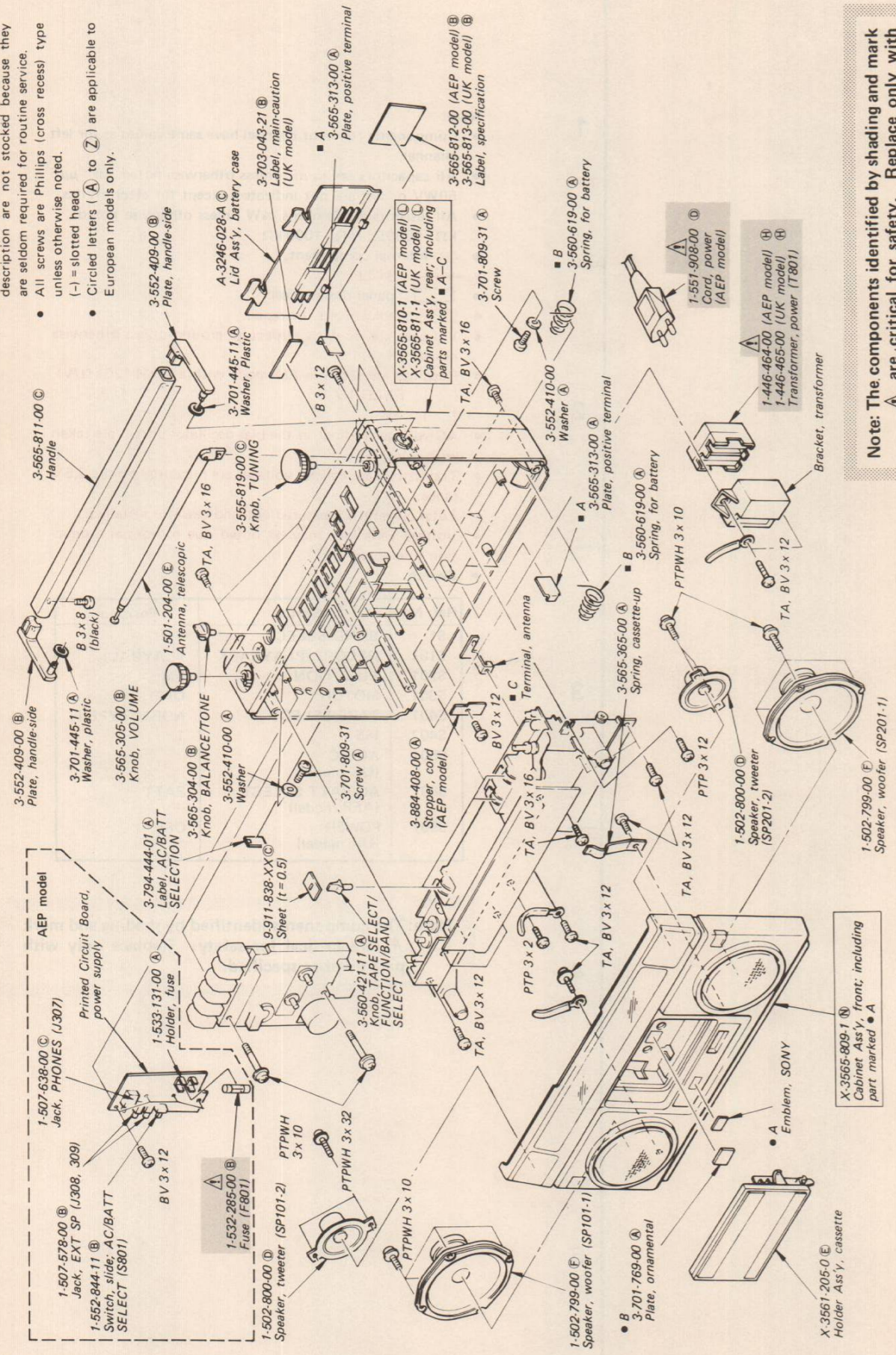
Ref. No.	Switch	Position
S1	BAND SELECT	FM
S101	RECORD/PLAYBACK	PLAYBACK
S201	FUNCTION	FM
S301	MOTOR	OFF
S401	TAPE SELECT	NORM/TYPE-I
S402	ISS	1
S801	AC/DC (UK model)	BATT
S801	AC/BATT SELECT (AEP model)	BATT
S901	POWER (UK model)	OFF

Note: The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

SECTION 5
EXPLODED VIEWS

(1)

- 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.
 - Circled letters (A) to (Z) are applicable to European models only.

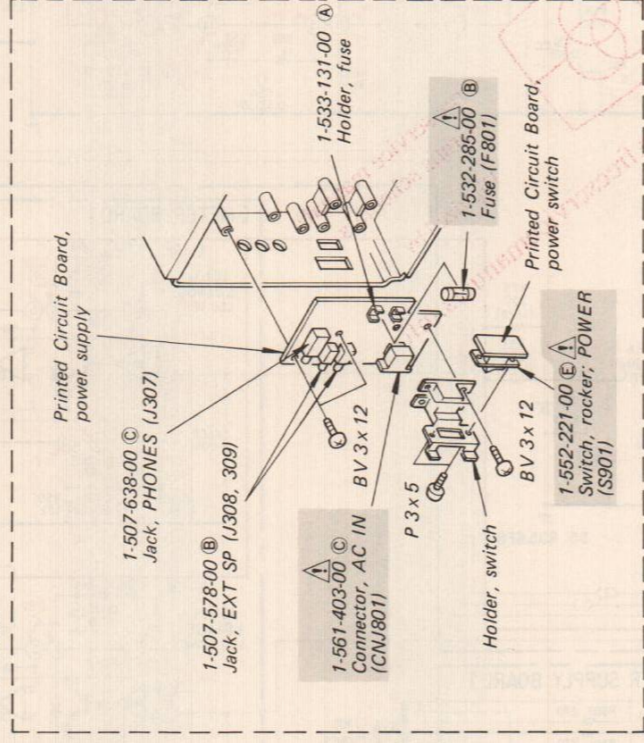


Note: The components identified by shading and mark are critical for safety. Replace only with part number specified.

Note:

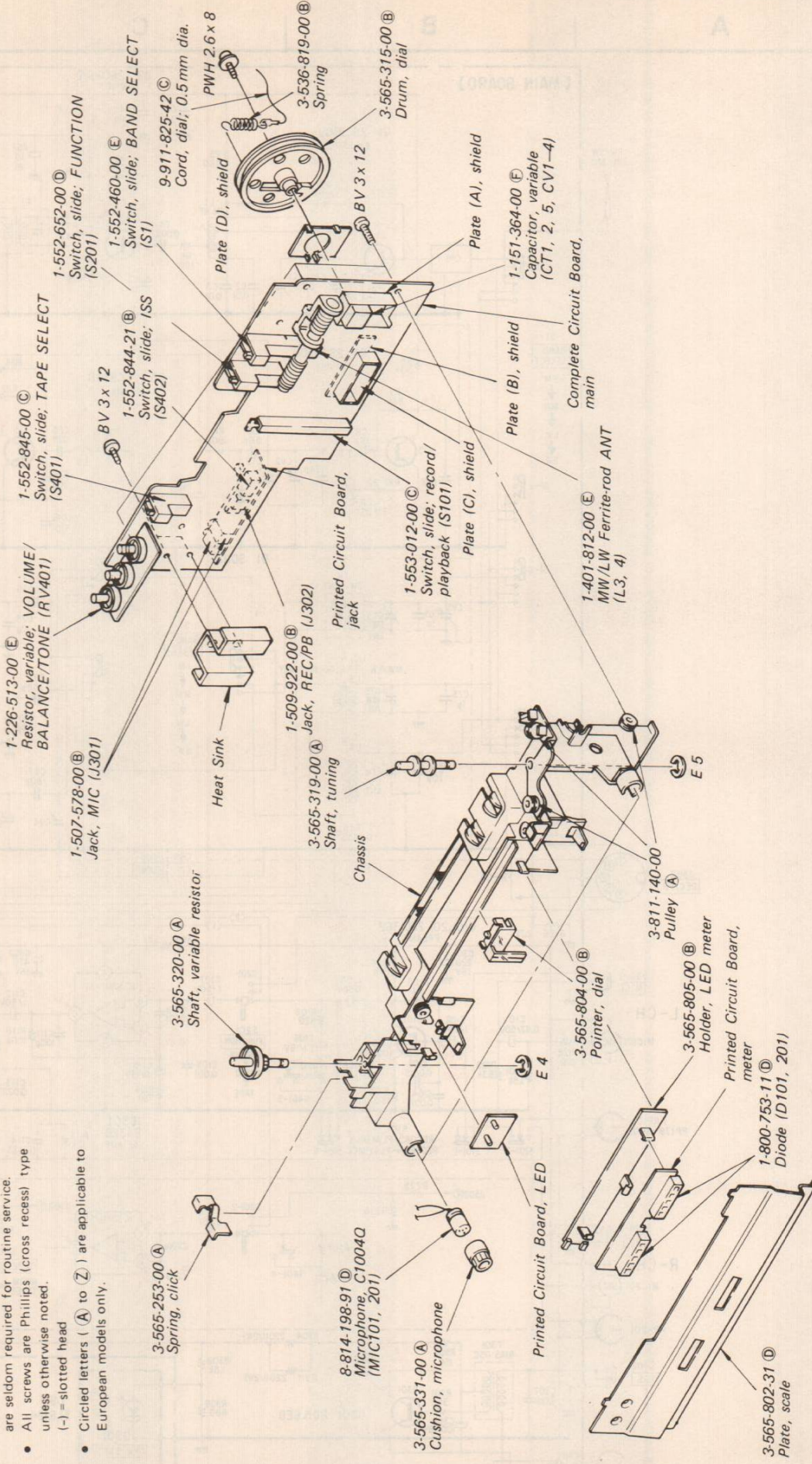
- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
- Circled letters (A) to (Z) are applicable to European models only.

(1)



(2)

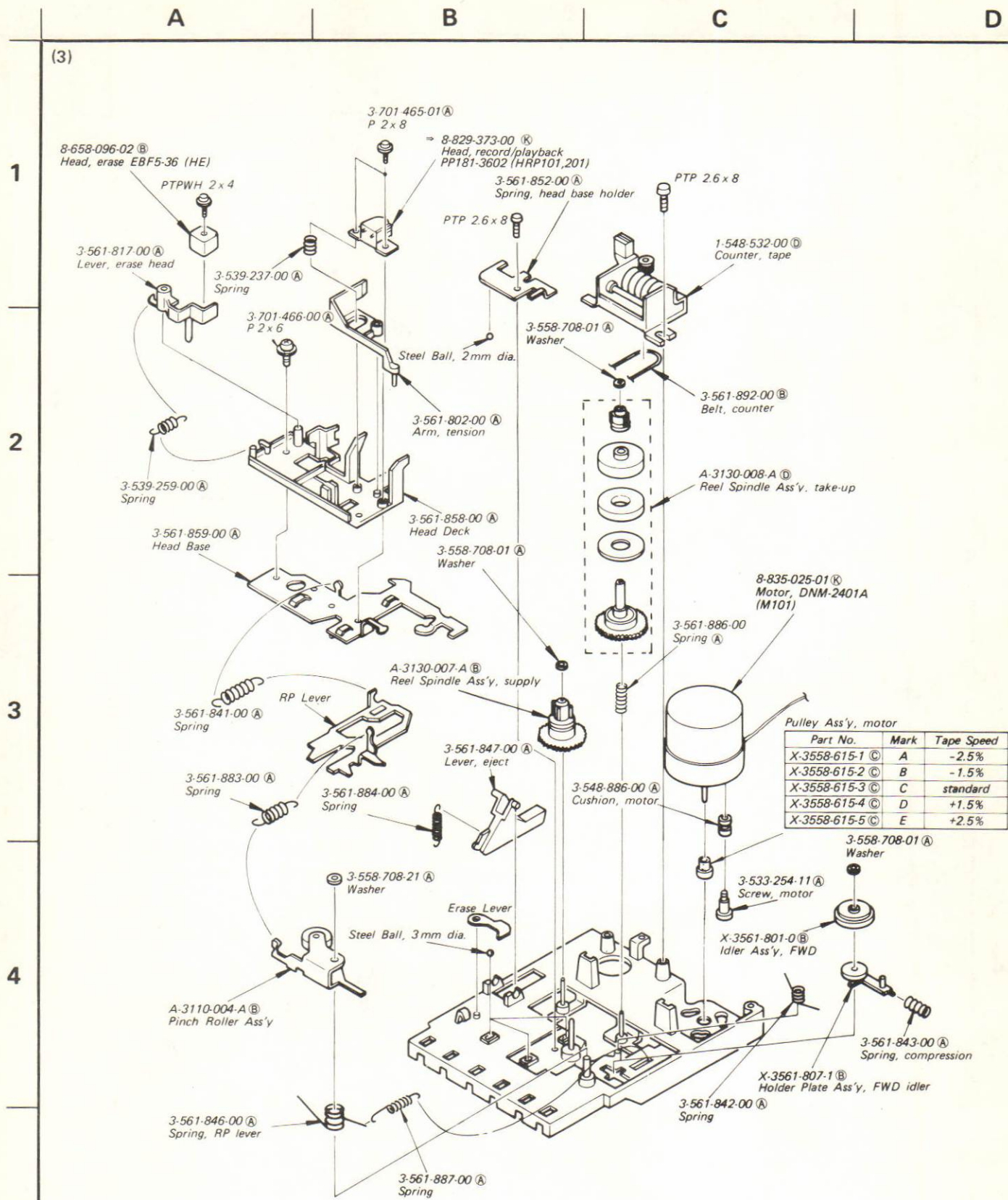
- Note:**
- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
 - All screws are Phillips (cross recess) type unless otherwise noted.
 - Circled letters (A) to (Z) are applicable to European models only.



Note:

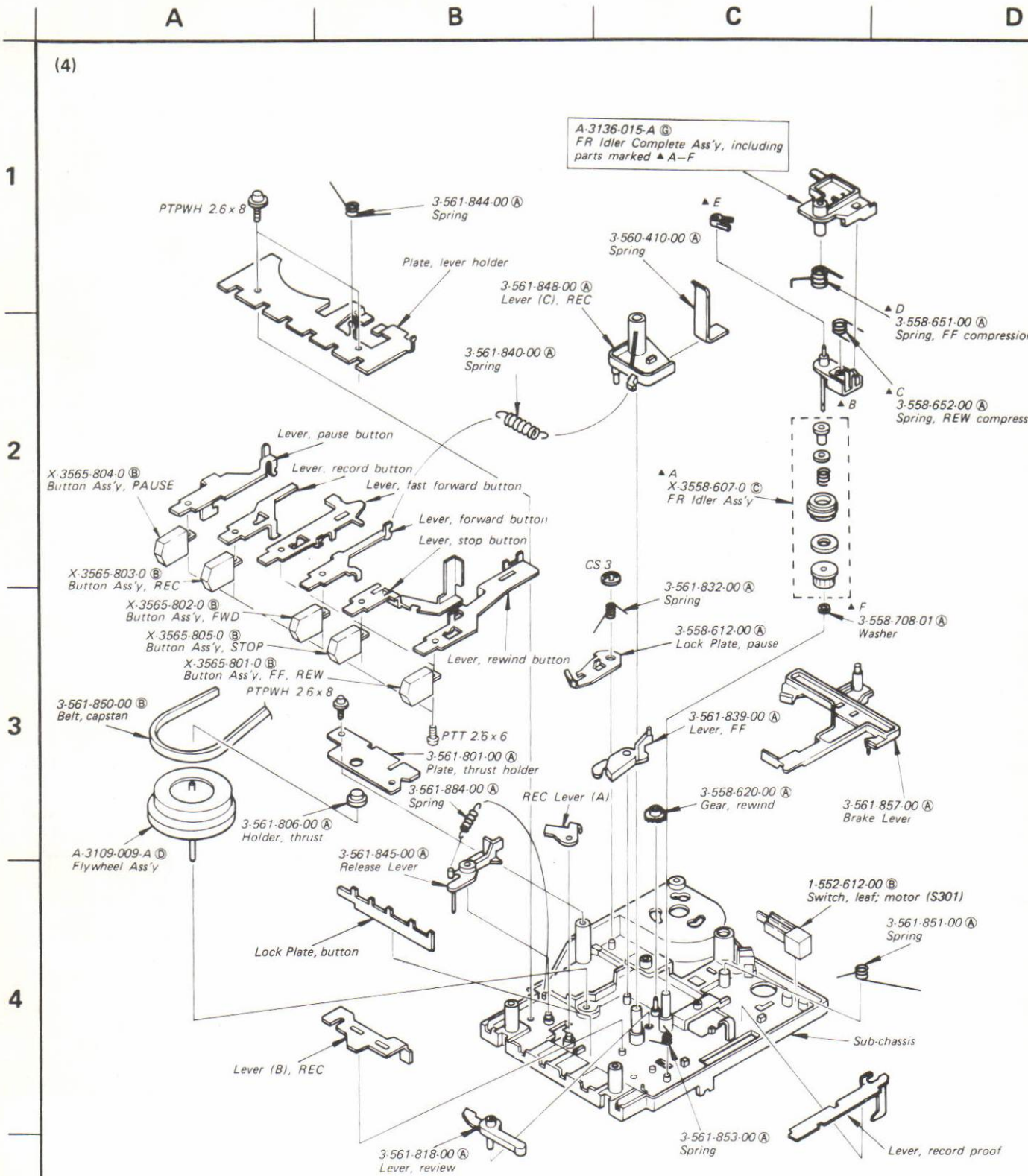
- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
- Circled letters (A) to (Z) are applicable to European models only.

Note: The components identified by shading and mark are critical for safety. Replace only with part number specified.



- 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
 - Circled letters (A to Z) are applicable to European models only.

• ⇒ : Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.



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
- Circled letters (A to Z) are applicable to European models only.

Note: Circled letters (A to Z) are applicable to European models only.

SECTION 6 ELECTRICAL PARTS LIST

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
SEMICONDUCTORS		
Transistors		
⇒ Q1	8-729-803-04	(B) 2SC930
⇒ Q2	8-729-806-84	(B) 2SC668
⇒ Q3-8	8-729-803-04	(B) 2SC930
Q101,201	8-729-665-47	(B) 2SC1362
⇒ Q301	8-729-663-47	(C) 2SC1364
ICs		
IC1	8-759-833-61	(E) LA3361
IC101,201	8-759-814-05	(D) LB1405
IC301	8-759-932-80	(C) BA328
IC302	8-759-841-25	(F) LA4125
Diodes		
⇒ D1	8-719-768-71	(B) 1S2687S-1
D2,3	8-719-815-55	(B) 1S1555
D4	8-719-026-11	(A) 1T261
⇒ D5	8-719-156-25	(B) RD5.6EB2Z
D101,201	1-800-753-11	(D) LED BLOCK
⇒ D301	8-719-156-25	(B) RD5.6EB2Z
⇒ D801	8-719-501-34	(C) S3VC40R
⇒ D802	8-719-500-34	(C) S3VC40
D901,902	8-719-812-41	(B) TLR124
COILS		
L3,4	1-401-812-00	(E) MW/LW Ferrite-rod ANT
L6	1-408-080-00	(A) Microinductor, 100μH
L301,302	1-408-159-00	(B) Microinductor, 3.3μH
T1	1-403-872-00	(B) FM IFT
T2	1-403-952-00	(B) FM Discriminator
T3	1-403-953-00	(B) FM Discriminator
T4	1-401-538-00	(B) SW Antenna Coil
T6	1-405-745-00	(B) SW Osc
T7	1-405-772-00	(B) LW Osc

⇒: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
T8	1-405-520-00	(B) MW Osc
T9	1-404-041-00	(B) AM DET
T301	1-433-206-00	(B) Record Bias Osc
T801	(A) 1-446-464-00	(G) Power (AEP model)
T801	(A) 1-446-465-00	(H) Power (UK model)
CF1	1-527-184-XX	(B) Filter (10.7 MHz)
CFT	1-403-827-00	(C) IFT

CAPACITORS

All capacitors are in μF and ceramic unless otherwise noted.

50 WV or less are not indicated except for electrolytics. p: μμF, elect: electrolytic

C1	1-102-961-00	(A) 27p	
C2,3	1-101-004-00	(A) 0.01	
C4	1-102-121-00	(A) 0.0022	
C5	1-102-934-00	(A) 1p	
C6,7	1-101-004-00	(A) 0.01	
C8	1-102-508-00	(A) 10p	
C9	1-101-982-00	(A) 24p	
⇒ C10	1-102-943-00	(A) 6p	
C11	1-131-451-00	(A) 0.1	16V tantalum
C13-15	1-101-004-00	(A) 0.01	
C16	1-102-947-00	(A) 10p	
C18	1-101-004-00	(A) 0.01	
C19	1-102-947-00	(A) 10p	
C20	1-101-004-00	(A) 0.01	
C21,22	1-101-005-00	(A) 0.022	
C23	1-102-820-00	(A) 330p	
C24	1-108-569-00	(A) 0.0039	mylar
C25	1-102-285-00	(A) 10p	
C26	1-101-974-00	(A) 20p	
C27	1-107-091-00	(A) 180p	silvered mica
C28	1-102-972-00	(A) 91p	
C29	1-107-231-00	(A) 360p	silvered mica
C30,31	1-102-947-00	(A) 10p	
C32	1-102-820-00	(A) 330p	
C33	1-102-947-00	(A) 10p	

Note: The components identified by shading and mark (A) are critical for safety. Replace only with part number specified.

1/4 WATT CARBON RESISTORS Ⓐ

Note: Circled letter Ⓐ is applicable to European models only.

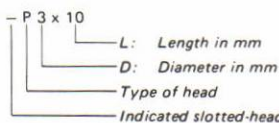
Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.
1.0	1-246-401-00	10	1-246-425-00	100	1-246-449-00	1.0k	1-246-473-00	10k	1-246-497-00	100k	1-246-521-00	1.0M	1-246-545-00
1.1	1-246-402-00	11	1-246-426-00	110	1-246-450-00	1.1k	1-246-474-00	11k	1-246-498-00	110k	1-246-522-00	1.1M	1-210-814-00
1.2	1-246-403-00	12	1-246-427-00	120	1-246-451-00	1.2k	1-246-475-00	12k	1-246-499-00	120k	1-246-523-00	1.2M	1-210-815-00
1.3	1-246-404-00	13	1-246-428-00	130	1-246-452-00	1.3k	1-246-576-00	13k	1-246-500-00	130k	1-246-524-00	1.3M	1-210-816-00
1.5	1-246-405-00	15	1-246-429-00	150	1-246-453-00	1.5k	1-246-577-00	15k	1-246-501-00	150k	1-246-525-00	1.5M	1-210-817-00
1.6	1-246-406-00	16	1-246-430-00	160	1-246-454-00	1.6k	1-246-578-00	16k	1-246-502-00	160k	1-246-526-00	1.6M	1-210-818-00
1.8	1-246-407-00	18	1-246-431-00	180	1-246-455-00	1.8k	1-246-579-00	18k	1-246-503-00	180k	1-246-527-00	1.8M	1-210-819-00
2.0	1-246-408-00	20	1-246-432-00	200	1-246-456-00	2.0k	1-246-580-00	20k	1-246-504-00	200k	1-246-528-00	2.0M	1-210-820-00
2.2	1-246-409-00	22	1-246-433-00	220	1-246-457-00	2.2k	1-246-581-00	22k	1-246-505-00	220k	1-246-529-00	2.2M	1-210-821-00
2.4	1-246-410-00	24	1-246-434-00	240	1-246-458-00	2.4k	1-246-582-00	24k	1-246-506-00	240k	1-246-530-00	2.4M	1-244-754-00
2.7	1-246-411-00	27	1-246-435-00	270	1-246-459-00	2.7k	1-246-583-00	27k	1-246-507-00	270k	1-246-531-00	2.7M	1-244-755-00
3.0	1-246-412-00	30	1-246-436-00	300	1-246-460-00	3.0k	1-246-584-00	30k	1-246-508-00	300k	1-246-532-00	3.0M	1-244-756-00
3.3	1-246-413-00	33	1-246-437-00	330	1-246-461-00	3.3k	1-246-585-00	33k	1-246-509-00	330k	1-246-533-00	3.3M	1-244-757-00
3.6	1-246-414-00	36	1-246-438-00	360	1-246-462-00	3.6k	1-246-586-00	36k	1-246-510-00	360k	1-246-534-00	3.6M	1-244-758-00
3.9	1-246-415-00	39	1-246-439-00	390	1-246-463-00	3.9k	1-246-587-00	39k	1-246-511-00	390k	1-246-535-00	3.9M	1-244-759-00
4.3	1-246-416-00	43	1-246-440-00	430	1-246-464-00	4.3k	1-246-488-00	43k	1-246-512-00	430k	1-246-536-00	4.3M	1-244-760-00
4.7	1-246-417-00	47	1-246-441-00	470	1-246-465-00	4.7k	1-246-489-00	47k	1-246-513-00	470k	1-246-537-00	4.7M	1-244-761-00
5.1	1-246-418-00	51	1-246-442-00	510	1-246-466-00	5.1k	1-246-490-00	51k	1-246-514-00	510k	1-246-538-00	5.1M	1-244-762-00
5.6	1-246-419-00	56	1-246-443-00	560	1-246-467-00	5.6k	1-246-491-00	56k	1-246-515-00	560k	1-246-539-00		
6.2	1-246-420-00	62	1-246-444-00	620	1-246-468-00	6.2k	1-246-492-00	62k	1-246-516-00	620k	1-246-540-00		
6.8	1-246-421-00	68	1-246-445-00	680	1-246-469-00	6.8k	1-246-493-00	68k	1-246-517-00	680k	1-246-541-00		
7.5	1-246-422-00	75	1-246-446-00	750	1-246-470-00	7.5k	1-246-494-00	75k	1-246-518-00	750k	1-246-542-00		
8.2	1-246-423-00	82	1-246-447-00	820	1-246-471-00	8.2k	1-246-495-00	82k	1-246-519-00	820k	1-246-543-00		
9.1	1-246-424-00	91	1-246-448-00	910	1-246-472-00	9.1k	1-246-496-00	91k	1-246-520-00	910k	1-246-544-00		

Free service manuals
Gratias schema's
Digitized by

www.freemanuals.info

HARDWARE NOMENCLATURE

Screw:



Nut, Washer, Retaining ring:



Reference Designation	Shape	Description	Remarks
SCREWS			
P		pan-head screw	binding-head (B) screw for replacement
PWH		pan-head screw with washer face	binding-head (B) screw and flat washer for replacement
PS PSP		pan-head screw with spring washer	binding-head (B) screw and spring washer for replacement
PSW PSPW		pan-head screw with spring and flat washers	binding-head (B) screw and spring and flat washers for replacement
R		round-head screw	binding-head (B) screw for replacement
K		flat-countersunk-head screw	
RK		oval-countersunk-head screw	
B		binding-head screw	
T		truss-head screw	binding-head (B) screw for replacement
F		flat-fillister-head screw	
RF		fillister-head screw	
BV		braizer-head screw	

Reference Designation	Shape	Description	Remarks
SELF-TAPPING SCREWS			
TA		self-tapping screw	ex: TA, P 3 x 10
PTP		pan-head self-tapping screw	binding-head self-tapping (TA, B) screw for replacement
PTPWH		pan-head self-tapping screw with washer face	binding-head self-tapping (TA, B) screw and flat washer for replacement
PTTWH		pan-head thread-rolling screw with washer face	binding-head (B) screw and flat washer for replacement
SET SCREWS			
SC		set screw	
SC		hexagon-socket set screw	ex: SC 2.6 x 4, hexagon socket
NUT			
N		nut	
WASHERS			
W		flat washer	
SW		spring washer	
LW		internal-tooth lock washer	ex: LW3, internal
LW		external-tooth lock washer	ex: LW3, external
RETAINING RINGS			
E		retaining ring	
G		grip-type retaining ring	

Sony Corporation

© 1979

Note: Circled letters (A to Z) are applicable to European models only.

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
C35	1-108-567-00	(B) 0.0033 mylar	C108,109 C208,209)	1-102-074-00	(A) 0.001
C36	1-101-004-00	(A) 0.01	C110,210	1-123-316-00	(A) 10 16V elect
C37,38	1-101-005-00	(A) 0.022	C111,211	1-102-973-00	(A) 100p
C39	1-101-004-00	(A) 0.01	C112,212	1-123-352-00	(A) 1 50V elect
C40	1-123-352-00	(A) 1 50V elect	C113,213	1-101-005-00	(A) 0.022
C41	1-123-316-00	(A) 10 16V elect	C114,214	1-102-123-00	(A) 0.0033
C42	1-102-978-00	(A) 220p	C115,215	1-101-005-00	(A) 0.022
C43	1-101-005-00	(A) 0.022	C116,216	1-102-121-00	(A) 0.0022
C44	1-123-316-00	(A) 10 16V elect	C117,217	1-123-305-00	(A) 33 10V elect
C45	1-123-328-00	(A) 4.7 25V elect	C118,218	1-123-320-00	(A) 100 16V elect
C46	1-101-004-00	(A) 0.01	C119,219	1-131-347-00	(B) 1 16V tantalum
C47	1-101-005-00	(A) 0.022	C123,223	1-102-973-00	(A) 100p
C48,49	1-123-351-00	(A) 0.47 50V elect	C126,226	1-102-947-00	(A) 10p
C50	1-123-296-00	(A) 220 6.3V elect	C128,228	1-102-973-00	(A) 100p
C51	1-130-018-00	(A) 0.001 film	C301	1-123-321-00	(A) 220 16V elect
C52,53	1-123-352-00	(A) 1 50V elect	C302	1-123-323-00	(A) 470 16V elect
C54	1-131-344-00	(B) 0.33 35V tantalum	C303	1-123-320-00	(A) 100 16V elect
C55	1-161-021-00	(A) 0.047 ceramic (semiconductor)	C304	1-123-324-00	(A) 1000 16V elect
C56,57	1-101-004-00	(A) 0.01	C305	1-123-317-00	(A) 22 16V elect
C58,59	1-123-353-00	(A) 2.2 50V elect	C307	1-108-807-00	(A) 0.018 mylar
C60	1-101-004-00	(A) 0.01	C308	1-101-005-00	(A) 0.022
C62	1-123-316-00	(A) 10 16V elect	C309	1-123-321-00	(B) 220 16V elect
C63,64	1-102-973-00	(A) 100p	C310	1-123-320-00	(A) 100 16V elect
C65	1-102-934-00	(A) 1p	C311	1-108-569-00	(A) 0.0039 mylar
C67	1-102-820-00	(A) 330p	C312	1-101-005-00	(A) 0.022
C68,69	1-102-973-00	(A) 100p	C501,601	1-131-369-00	(B) 4.7 16V tantalum
C70	1-102-978-00	(A) 220p	C502,602	1-161-267-00	(A) 47p
C71	1-123-353-00	(A) 2.2 50V elect	C503,603	1-131-457-00	(B) 1 16V tantalum
C72	1-102-973-00	(A) 100p	C801	1-123-326-00	(C) 3300 16V elect
C73	1-102-934-00	(A) 1p	C802-805	1-101-004-00	(A) 0.01
C101,201	1-123-351-00	(A) 0.47 50V elect	C807,808	1-123-323-00	(B) 470 16V elect
C102,202	1-123-352-00	(A) 1 50V elect	C809,810	1-119-195-00	(B) 1 50V elect
C103,203 C104,204)	1-102-119-00	(A) 0.0015			(nonpolarized)
C105,205	1-123-352-00	(A) 1 50V elect	CT1,2,5 CV1-4)	1-151-364-00	(F) Variable
C106,206	1-131-451-00	(A) 0.1 16V tantalum	CT3,6,8	1-141-179-00	(B) Trimmer
C107,207	1-123-352-00	(A) 1 50V elect	CT4,7	1-141-171-00	(B) Trimmer

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
RESISTORS		
All resistors are in ohms. Common ¼W carbon resistors are omitted. Refer to the list on the last page for their part numbers.		

R53,73	1-202-557-00	(A) 220 ½W composition
R304,311	1-202-557-00	(A) 220 ½W composition
RV1	1-226-235-00	(A) Variable, 5 k-B; 19 kHz
RV401	1-226-513-00	(E) Variable, VOLUME/TONE/ BALANCE

JACKS

J301	1-507-578-00	(B) MIC
J302	1-509-922-00	(B) REC/PB
J307	1-507-638-00	(C) PHONES
J308,309	1-507-578-00	(B) EXT SP

SWITCHES

S1	1-552-460-00	(E) Slide, BAND SELECT
S101	1-553-012-00	(C) Slide, RECORD/PLAYBACK
S201	1-552-652-00	(D) Slide, FUNCTION
S301	1-552-612-00	(B) Leaf, motor
S401	1-552-845-00	(C) Slide, TAPE SELECT
S402	1-552-844-21	(B) Slide, ISS
S801	1-552-844-11	(B) Slide, AC/BATT SELECT (AEP model)
S901	(A) 1-552-221-00	(E) Rocker, POWER (UK model)

MISCELLANEOUS

CNJ801	(A) 1-561-403-00	(C) Connector, AC IN (UK model)
CP1	1-231-286-00	(B) Filter, band pass
CP2,3	1-231-224-00	(B) Encapsulated Component
D101,201	1-800-753-11	(D) LED BLOCK

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
F801	(A) 1-532-285-00	(B) Fuse
HE	8-658-096-02	(B) Head, erase; EBF5-36
⇒ HRP101,201	8-829-373-00	(K) Head, record/playback; PP181-3602
M101	8-835-025-01	(K) Motor, DNM-2401A
MIC101,201	8-814-198-91	(D) Microphone, C1004Q
SP101-1 SP201-1	1-502-799-00	(F) Speaker, woofer
SP101-2 SP201-2		
	1-501-204-00	(E) Antenna, telescopic
	1-533-131-00	(A) Holder, fuse
	(A) 1-551-908-00	(D) Cord, power (AEP model)

ACCESSORIES AND PACKING MATERIALS

<u>Part No.</u>	<u>Description</u>
(A) 1-551-218-00	(E) Cord, power (DK-50) (UK model)
3-565-234-00	(B) Bag, plastic; protection
3-565-235-00	(B) Cushion, right
3-565-236-00	(B) Cushion, left
3-565-827-00	(D) Carton
3-701-630-00	(A) Bag, plastic
3-770-854-11	(C) Manual, instruction
3-793-828-11	(B) Card, caution; cassette
3-794-444-01	(A) Tag, caution; AC/BATT

⇒: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

Note: The components identified by shading and mark (A) are critical for safety. Replace only with part number specified.