

WM-AF64/BF64

SERVICE MANUAL

US Model
Canadian Model
WM-AF64

AEP Model
UK Model
E Model
WM-BF64



Photo: WM-AF64
Gray Type

SPECIFICATIONS

| | |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Radio section | |
| Frequency range | FM: 87.6—108MHz (EXCEPT FOR WG model) 87.6—107MHz (WG model) |
| Antenna | AM: 530—1,605kHz (EXCEPT FOR WG model) 531—1,602 (WG model) FM: Headphone cord antenna AM: Built-in ferrite bar antenna |
| Tape player section | |
| Frequency response (Dolby NR off) | 30—15,000 Hz |
| Power output | 20mW+20mW load impedance 18 ohms at DC operation |
| Power requirements | 3V DC Two size AA (R6) batteries DC IN 3V Jack accepts: • Optional Sony EBP-500B battery case for use with two size D (R20) batteries • Optional Sony AC-D2L AC power adaptor for use on 120V AC, 60Hz (US, Canadian model) for use on 120V AC, 60Hz or 220V AC, 50Hz (E model) for use on 220V AC, 50Hz (AEP, WG model) for use on 240V AC, 50Hz (UK model) • Optional Sony DCC-70 car battery cord for use with 12V car battery |
| Battery life | Approx. 8 hours on tape playback and approx. 20 hours on FM reception, using Sony alkaline batteries AM3 (N) |
| Dimensions | Approx. 116.1×93.1×37.4 mm (w/h/d) (4½×3½×1½ inches) incl. projecting parts and controls |
| Weight | Approx. 245 g (8.7 oz) incl. batteries |
| Accessory supplied | Belt clip (1) US, Canadian, AEP, UK, WG model: Stereo headphones (open-air type, 1) E model: Stereo earphones (open-air type, 1) • WG model: West Germany model |

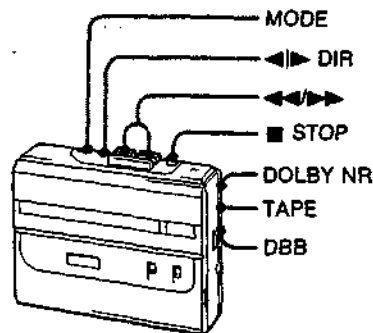
| | |
|------------------------------------|------------|
| Model Name Using Similar Mechanism | WM-F59/F69 |
| Tape Transport Mechanism Type | MF-WM69-80 |


Note: Use only the recommended AC power adaptor or car battery cord manufactured by Sony. Polarity of the plugs of other manufacturers may be different.



Polarity of the Sony plug

PARTS IDENTIFICATION



Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

RADIO CASSETTE PLAYER
SONY



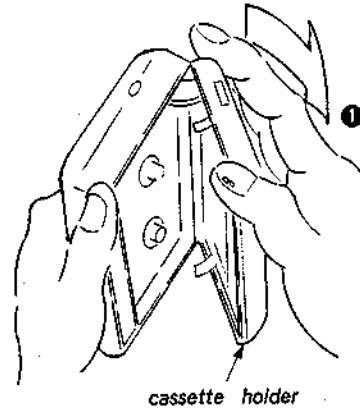
SECTION 1 DISASSEMBLY

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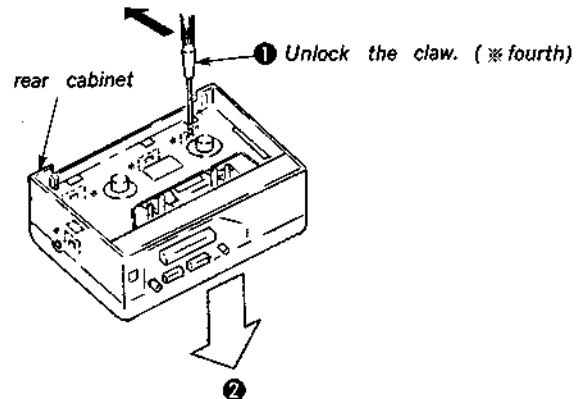
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Note: Follow the disassembly procedure the numerical order given.

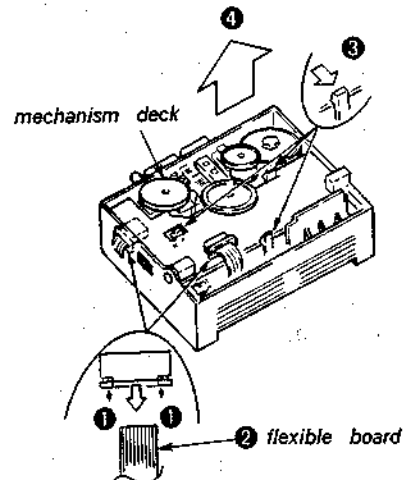
1-1. CASSETTE HOLDER



1-2. REAR CABINET



1-3. MECHANISM DECK



Flexible Circuit Board Repairing

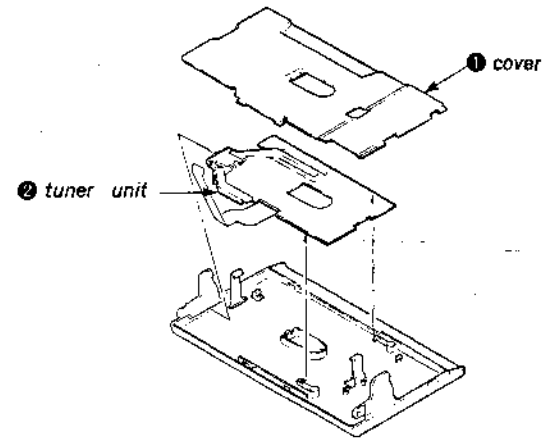
- Keep the temperature of the soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on chip component replacement

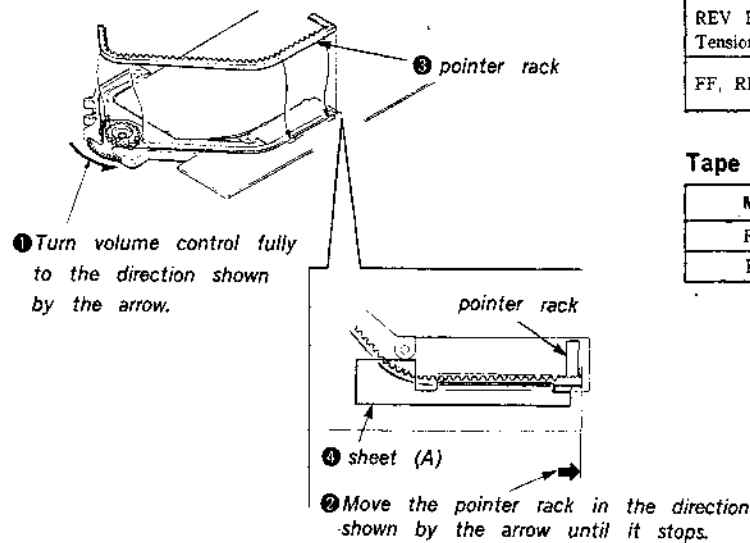
- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

SECTION 2 MECHANICAL MEASUREMENTS

1.4. TUNER UNIT



1.5. POINTER RACK SETTING



PRECAUTION

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

| | |
|---------------|--------------|
| playback head | pinch roller |
| capstan | rubber belts |
- Demagnetize the playback head with a head demagnetizer.
- Do not use a magnetized screwdriver for the adjustments.
- After the adjustments, apply suitable locking compound to the parts adjusted.
- The adjustments should be performed with the rated power supply voltage (2.5V) unless otherwise noted.

Torque Measurement

| Mode | Torque Meter | Meter Reading |
|------------------|--------------|---------------------------------------------|
| FWD | CQ-102C | 25—55g·cm (0.30—0.76oz·inch) |
| FWD Back Tension | | less than 3g·cm (less than 0.04oz·inch) |
| REV | CQ-102RB | 22—55g·cm (0.30—0.76oz·inch) |
| REV Back Tension | | less than 3g·cm (less than 0.04oz·inch) |
| FF, REW | CQ-201B | more than 60g·cm (more than 0.83oz·inch) |

Tape Tension Measurement

| Mode | Torque meter | Meter reading |
|------|--------------|-------------------------|
| FWD | CQ-403A | more than 55g·cm |
| REV | CQ-403R | (more than 0.76oz·inch) |

SECTION 3 ELECTRICAL ADJUSTMENTS

3-1. CASSETTE SECTION

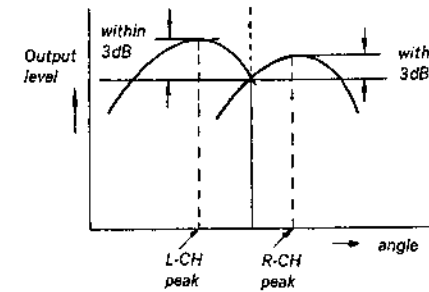
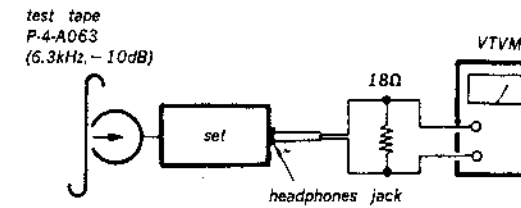
Playback Head Azimuth Check

- perform this check both in FWD and REV mode.

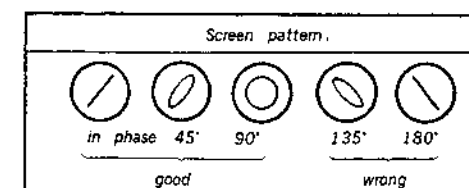
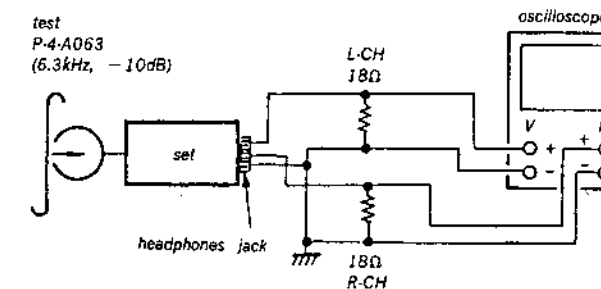
Note: This set is not featured the head azimuth adjustment. When replacing the head, check the both L-ch and R-ch output levels and also those phases.

Procedure:

- Level Check
Mode: playback



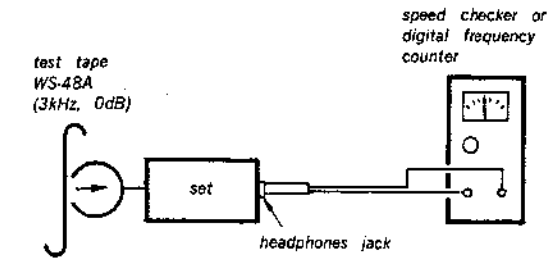
- Phase Check
Mode: playback



Tape Speed Adjustment

Procedure:

Mode: playback

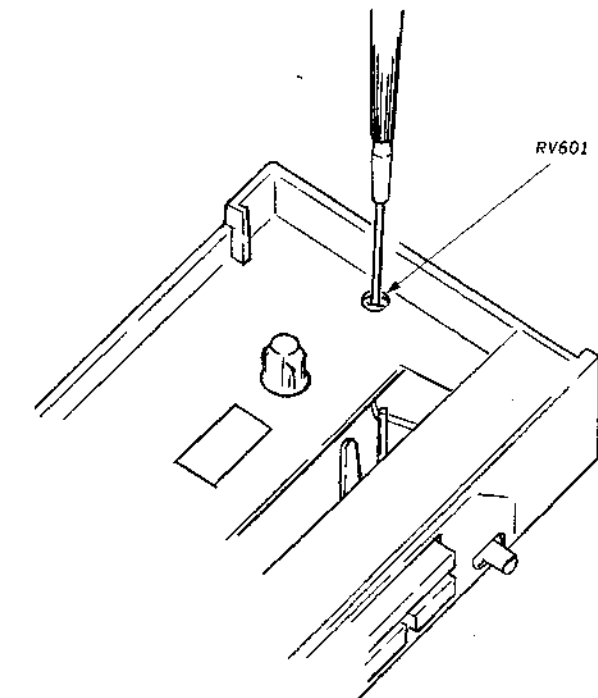


Specification:

| Speed checker | Digital frequency counter |
|---------------|---------------------------|
| ±1% | 2,970—3,030Hz |

Frequency difference between the beginning and the end of the tape should be within ±2.5% (±75% Hz).

Adjustment Location: RV601

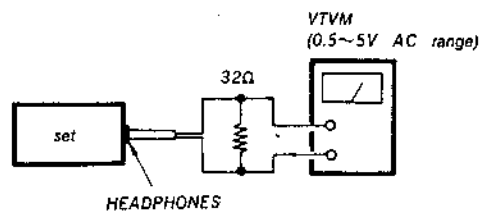
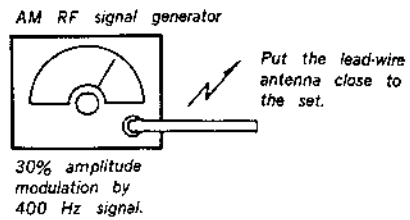


3-2. RADIO SECTION

AM

Setting

Function: RADIO
BAND: AM



| AM TRACKING ADJUSTMENT | |
|---------------------------------------|----------|
| Adjust for a maximum reading on VTVM. | |
| T6 | 620kHz |
| CT2 | 1,400kHz |

(): West Germany model

| AM FREQUENCY COVERAGE ADJUSTMENT | |
|---------------------------------------|---------------------|
| Adjust for a maximum reading on VTVM. | |
| T3 | 925kHz (531kHz) |
| CT3 | 1,650kHz (1,602kHz) |

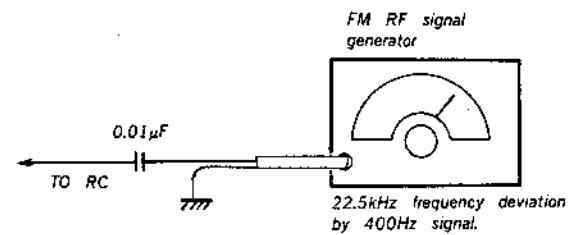
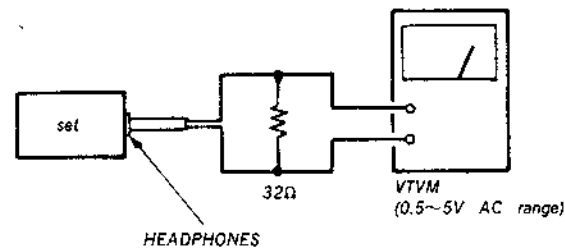
| AM IF ADJUSTMENT | |
|---------------------------------------|--------|
| Adjust for a maximum reading on VTVM. | |
| T4 | 455kHz |

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

FM

Setting:

FUNCTION: RADIO
BAND FM (DX): WM-AF64
FM (ST): WM-BF64



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

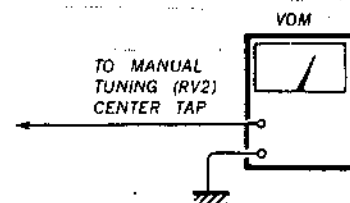
* FM frequency coverage adjustment should be done after frequency control voltage adjustment.

(): West Germany model

| FM FREQUENCY COVERAGE ADJUSTMENT | |
|---------------------------------------|-------------------|
| Adjust for a maximum reading on VTVM. | |
| 87.0MHz (87.5MHz) | 108.5MHz (107MHz) |
| T2 | CT1 |

FREQUENCY CONTROL VOLTAGE ADJUSTMENT

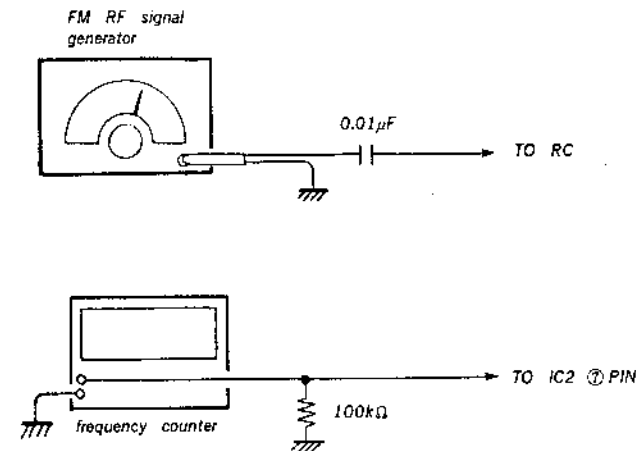
* This adjustment should be done before FM frequency coverage adjustment.



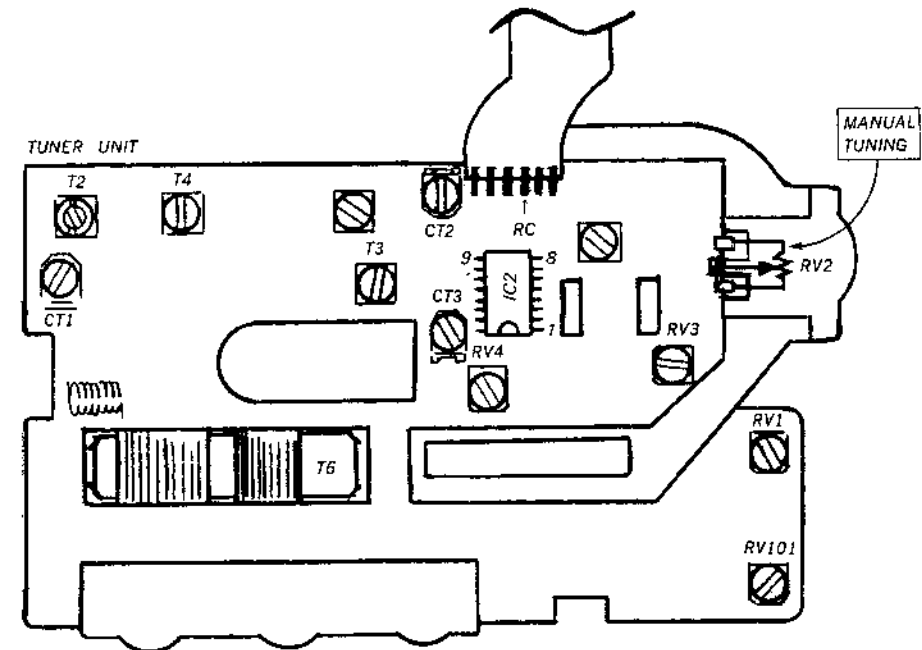
| to be adjusted | RV3 (PRESET RV101) | RV1 |
|----------------|--------------------|-----------|
| readings | 1V ± 0.1V | 9V ± 0.1V |
| tuning dial | f min | f max |

VCO Adjustment

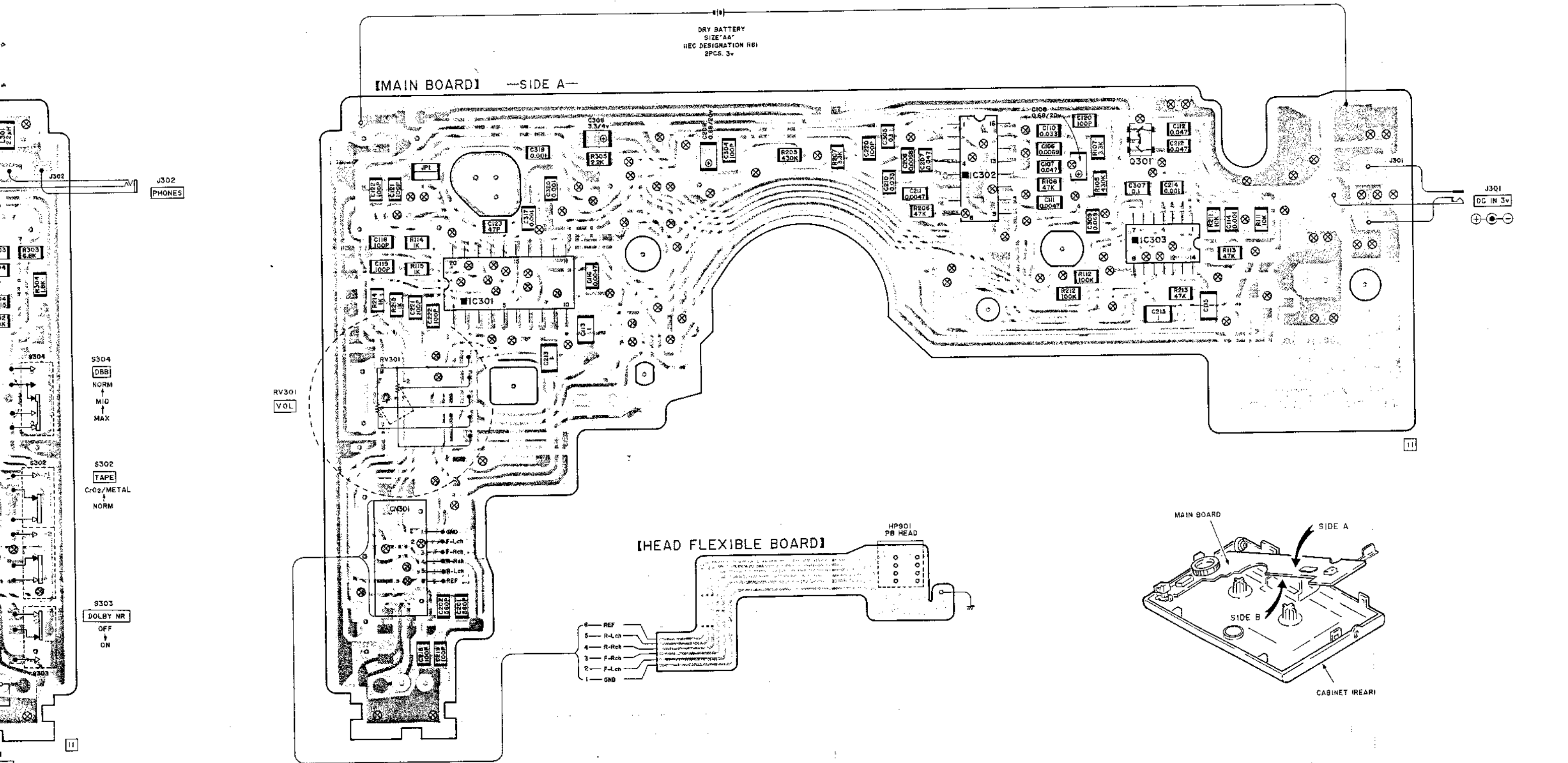
procedure: Carrier frequency: 98MHz
Modulation: 1kHz deviation (30%)



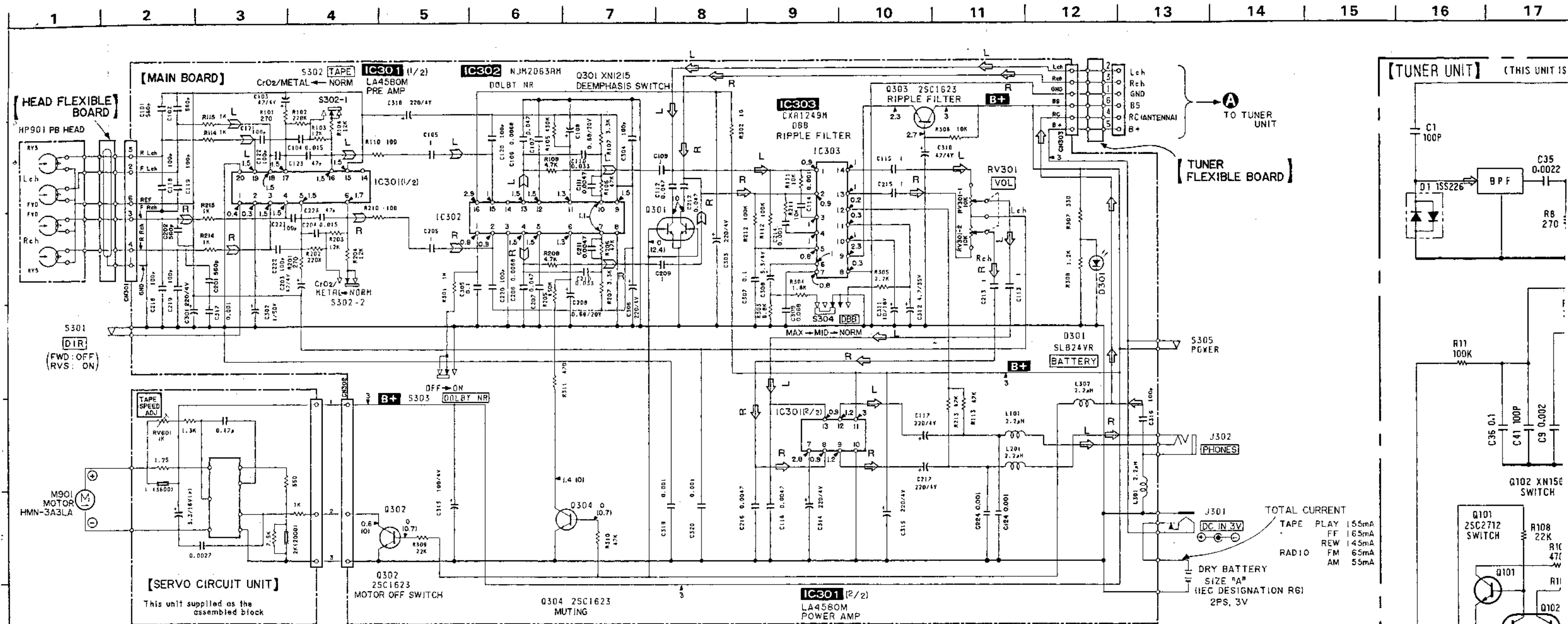
1. Tune the set to 98MHz.
2. Adjust RV4 for 38kHz ± 200Hz on the counter.



12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27



4-2. SCHEMATIC DIAGRAMS —TAPE RECORDER SECTION—



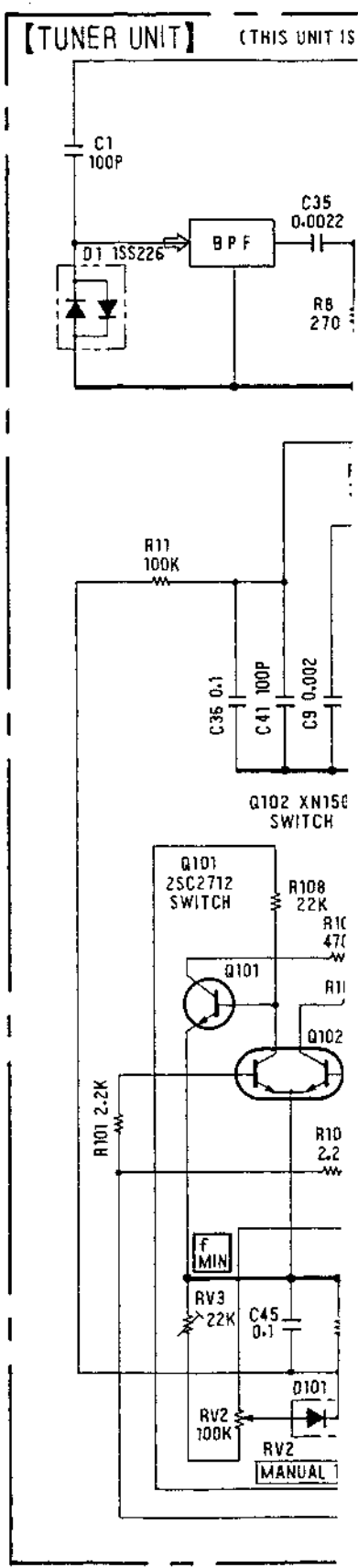
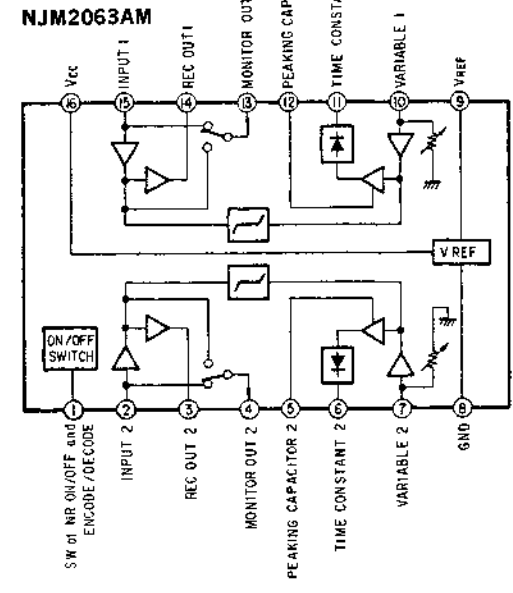
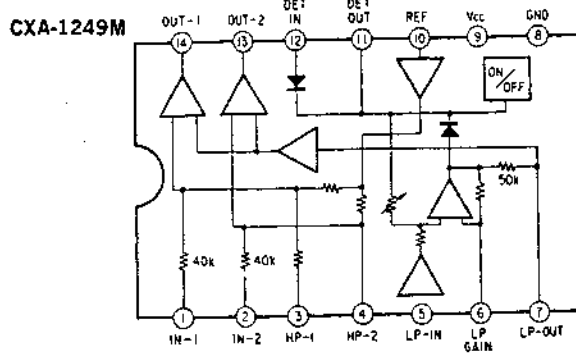
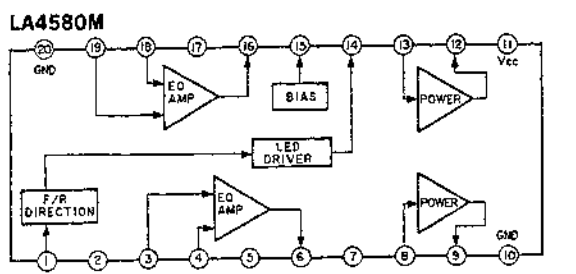
Note:

- All capacitors are in μF unless otherwise noted. pF : μF F
- 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
- Δ : internal component.
- Switch

| Ref. No. | Switch | Position |
|----------|----------|----------|
| S301 | DIR | OFF |
| S302 | TAPE | NORM |
| S303 | DOLBY NR | OFF |
| S304 | DBB | MAX |
| S305 | POWER | OFF |

- \ominus : B+ Line
- \square : adjustment for repair.
- Total current is measured with no cassette installed.
- Power voltage is dc 3V and fed with required dc power or supply from external power voltage jack.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark: PLAY
- () : RADIO
- Voltages are taken with a VOM (50 k Ω /V). Voltage variations may be noted due to normal production tolerances.
- Signal path.
- \Rightarrow : FM \Rightarrow : PB

• IC BLOCK DIAGRAMS



TOTAL CURRENT

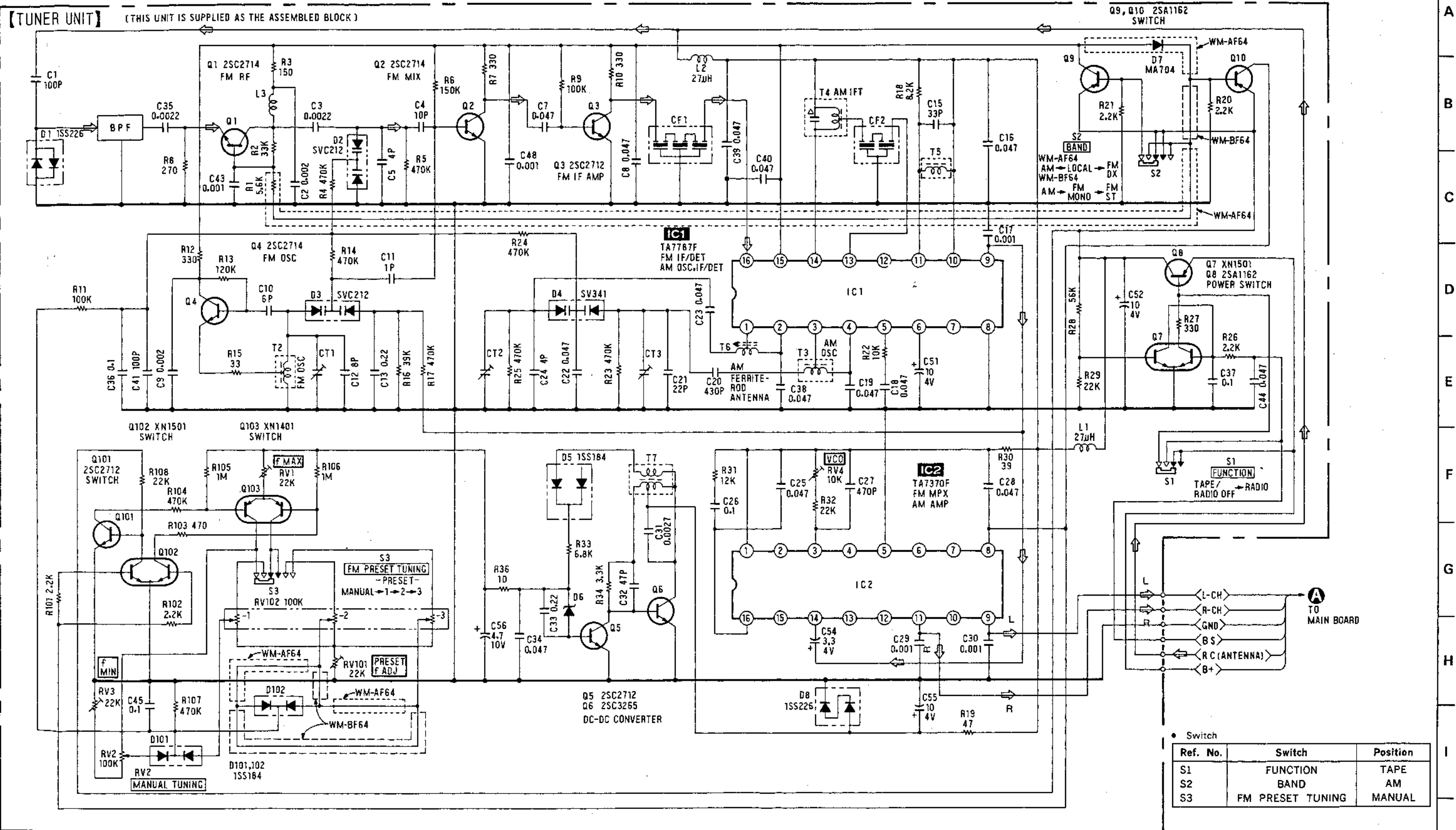
| Mode | Current |
|------|---------|
| TAPE | 15.5mA |
| PLAY | 16.5mA |
| FF | 14.5mA |
| REW | 14.5mA |
| FM | 6.5mA |
| AM | 5.5mA |

4-3. SCHEMATIC DIAGRAM —TUNER UNIT—

WM-AF64/BF64

WM-AF64/BF64

16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

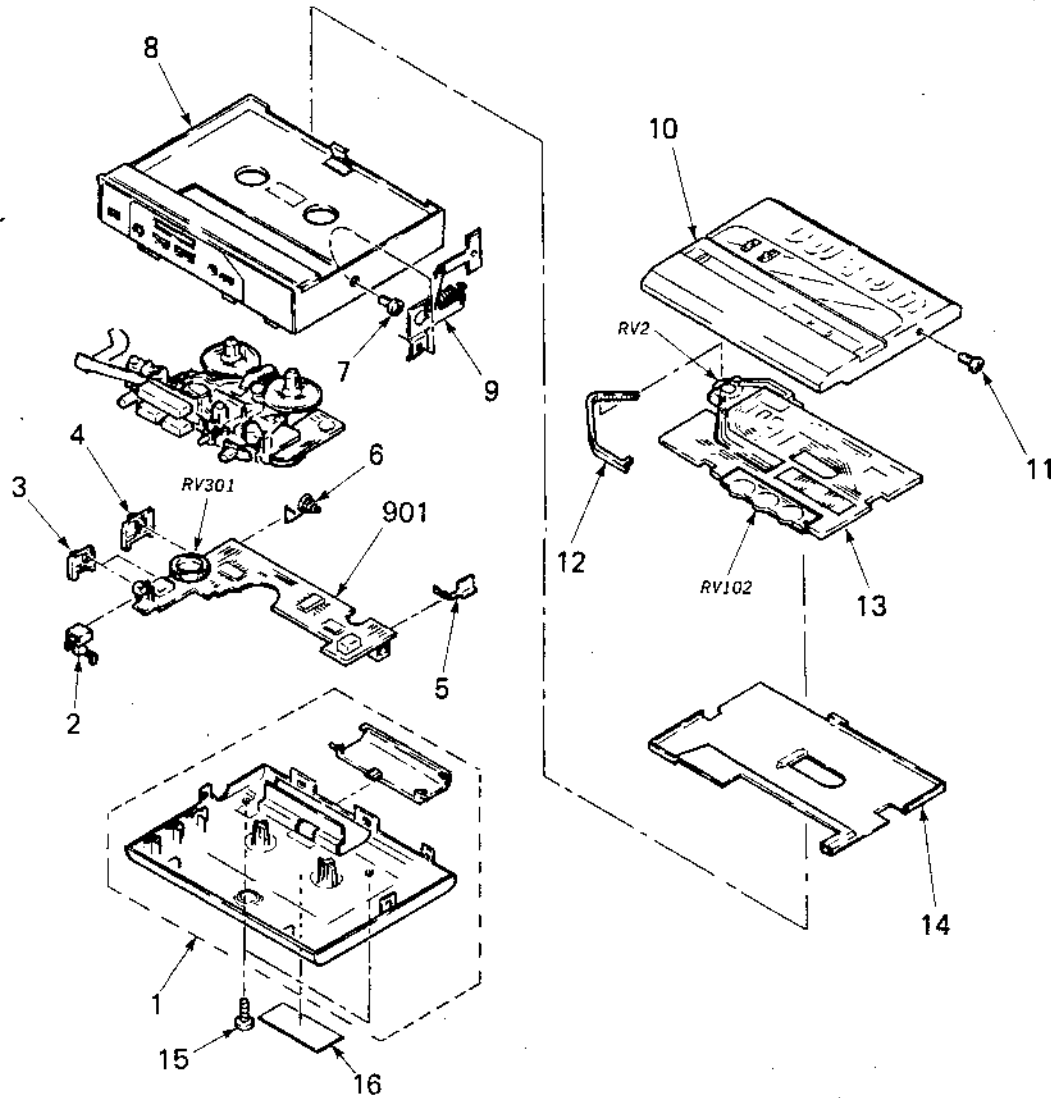


**SECTION 5
EXPLODED VIEWS**

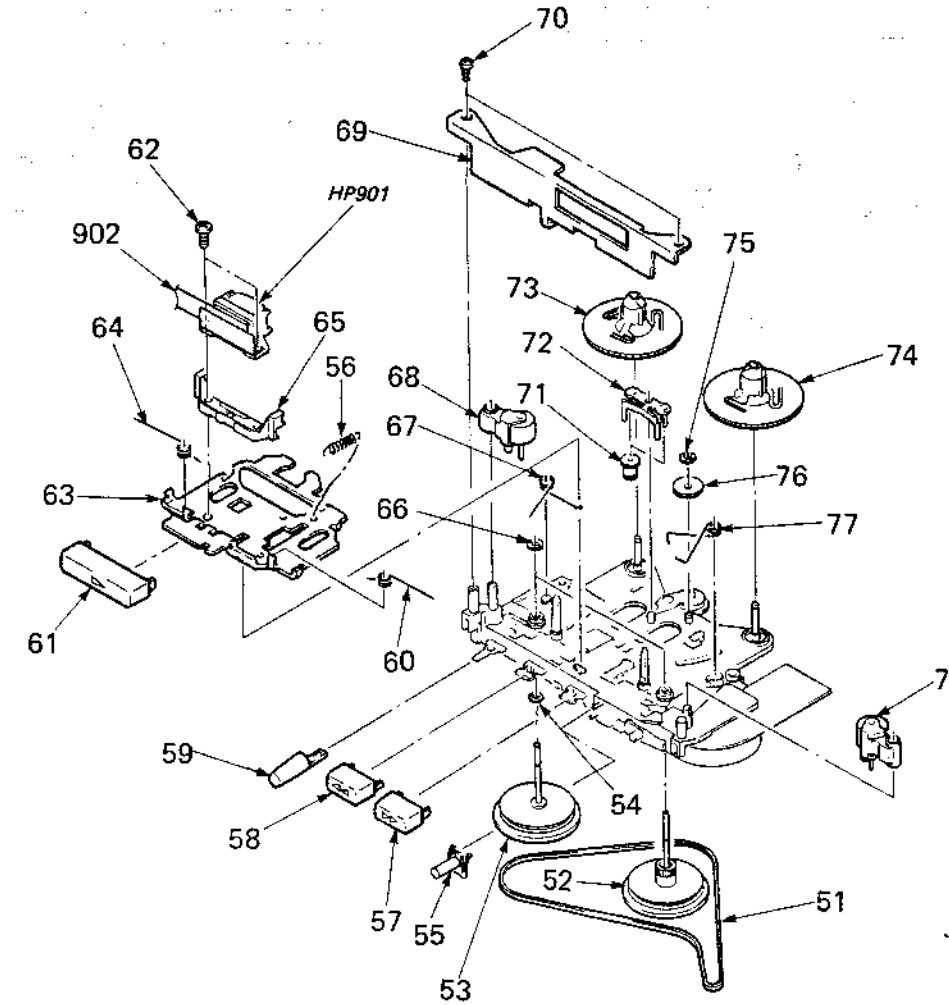
NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts
Example:
(RED) ... KNOB, BALANCE (WHITE)
↑ Cabinet's Color ↑ Parts' Color
- WG: West Germany model

5-1. CABINET, CASSETTE HOLDER SECTION



5-2. MECHANISM (1)

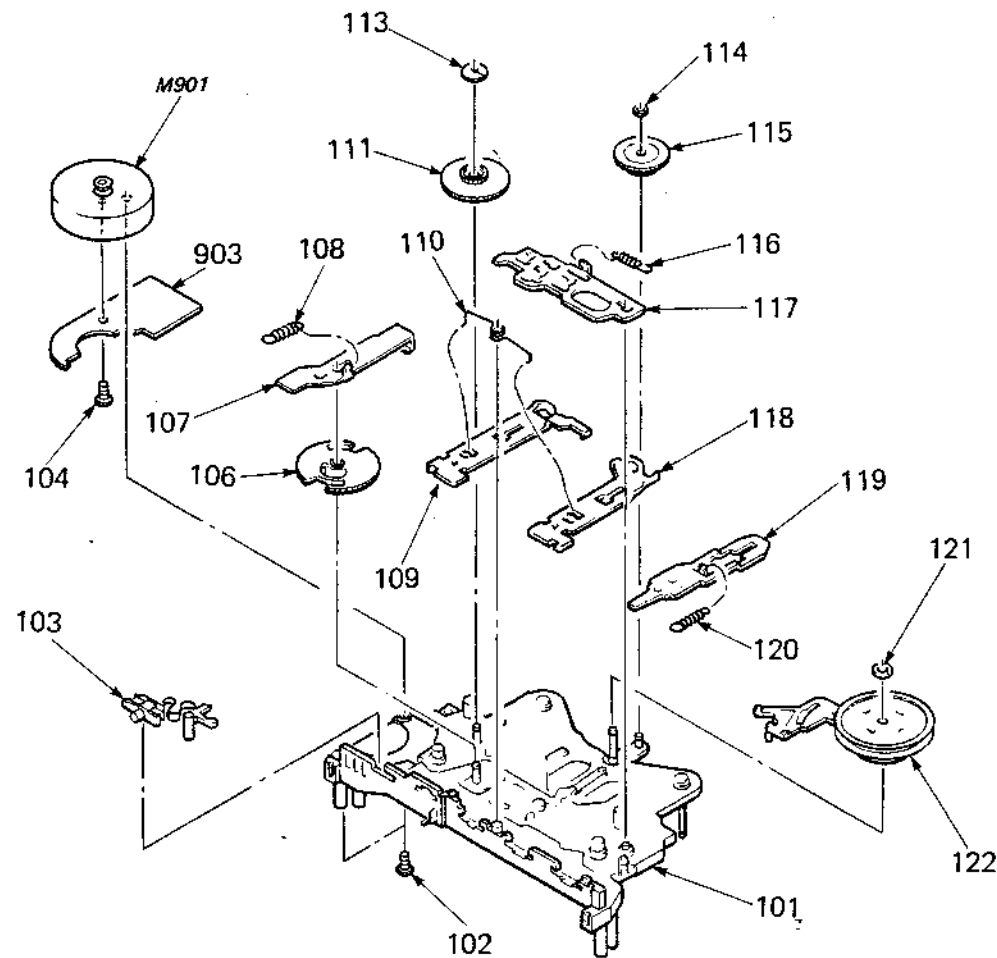


5-3. MECHANISM (2)

| No. | Part No. | Description | Remarks | No. | Part No. | Description | Remarks | No. | Part No. |
|-----|--------------|-----------------------|---------|-------|--------------|-------------------------------|---------|-----|--------------|
| 51 | 3-341-267-01 | BELT, CAPSTAN | | 66 | 3-321-483-11 | RING, RETAINING | | 101 | A-3163-146-A |
| 52 | X-3335-635-1 | FLYWHEEL (T) ASSY | | 67 | 3-341-270-01 | SPRING (R) | | 102 | 3-335-797-31 |
| 53 | X-3335-636-1 | FLYWHEEL ASSY | | 68 | X-3335-624-1 | PINCH LEVER (R) ASSY | | 103 | 3-341-293-01 |
| 54 | 3-701-437-11 | WASHER (242T), TEFLON | | 69 | 3-341-762-01 | HOLDER, S | | 104 | 3-338-625-11 |
| 55 | 3-341-294-01 | BUTTON (DIR) | | 70 | 3-893-942-21 | SCREW (1.7X5), TAPPING (B) | | 106 | 3-341-292-01 |
| 56 | 3-341-271-01 | SPRING, TENSION | | 71 | 3-341-275-01 | GEAR, FR | | 107 | 3-341-299-01 |
| 57 | 3-341-962-01 | BUTTON (FF) | | 72 | 3-341-701-01 | LEVER, FR | | 108 | 3-341-274-01 |
| 58 | 3-341-963-01 | BUTTON (REW) | | 73 | 3-341-291-01 | GEAR, S REEL | | 109 | 3-341-295-01 |
| 59 | 3-341-961-01 | BUTTON (STOP) | | 74 | 3-341-290-01 | GEAR, T REEL | | 110 | 3-341-268-01 |
| 60 | 3-341-276-11 | SPRING (N) | | 75 | 3-341-752-01 | WASHER, POLYETHYLENE (t=0.13) | | 111 | 3-341-289-01 |
| 61 | 3-341-960-01 | BUTTON (PLAY) | | | 3-341-752-11 | WASHER, POLYETHYLENE (t=0.25) | | | |
| 62 | 3-704-252-21 | SCREW (M1.4X3.8) | | 76 | 3-341-265-01 | GEAR, R | | | |
| 63 | 3-341-711-01 | LEVER, PLAY | | 77 | 3-341-763-01 | SPRING | | | |
| 64 | 3-341-277-11 | SPRING (R) | | 78 | X-3335-623-1 | PINCH LEVER (N) ASSY | | | |
| 65 | 3-341-702-01 | GUIDE, TAPE | | HP901 | 1-543-439-11 | HEAD, MAGNETIC (PLAY BACK) | | | |
| | | | | 902 | 1-623-643-11 | PC BOARD, HEAD FLEXIBLE | | | |

SECTION 6
ELECTRICAL PARTS LIST

5-3.MECHANISM (2)



| Remarks | No. | Part No. | Description | Remarks | No. | Part No. | Description | Remarks |
|---------|-----|--------------|---------------------------------|---------|------|--------------|-------------------------------|---------|
| | 101 | A-3163-146-A | CHASSIS ASSY | | 113 | 3-311-815-11 | WASHER, POLYETHYLENE (t=0.25) | |
| | 102 | 3-335-797-31 | SCREW (M1.4X3), TOOTHED LOCK | | 114 | 3-570-615-01 | WASHER, POLYETHYLENE (t=0.25) | |
| | 103 | 3-341-293-01 | LEVER, MODE | | 115 | 3-341-266-01 | GEAR, T | |
| | 104 | 3-338-625-11 | SCREW (M1.4X1.6), WASHER HEAD | | 116 | 3-341-272-01 | SPRING, TENSION | |
| | 106 | 3-341-292-01 | GEAR, CAM | | 117 | 3-341-298-01 | PLATE, LOCK | |
| | 107 | 3-341-299-01 | LEVER, DIR | | 118 | 3-341-296-01 | LEVER, REW | |
| | 108 | 3-341-274-01 | SPRING (POWER TENSION), TENSION | | 119 | 3-341-297-01 | LEVER, STOP | |
| | 109 | 3-341-295-01 | LEVER, FF | | 120 | 3-341-273-01 | SPRING, TENSION | |
| | 110 | 3-341-268-01 | SPRING | | 121 | 3-570-615-01 | WASHER, POLYETHYLENE (t=0.25) | |
| | 111 | 3-341-289-01 | GEAR, DECELERATION | | 122 | A-3239-894-A | WHEEL ASSY, MIDWAY | |
| | | | | | 903 | 1-236-042-21 | CIRCUIT UNIT, SERVO | |
| | | | | | M901 | A-3133-336-A | MOTOR BLOCK ASSY | |

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF: μ F, PF: μ PF.

• WG: West Germany model

RESISTORS

- All resistors are in ohms.
- F: nonflammable

COILS

- MMH: mH, UH: μ H

SEMICONDUCTORS

In each case, U: μ , for example:
UA...: μ A..., UPA...: μ PA...,
UPC...: μ PC, UPD...: μ PD...

| Ref.No. | Part No. | Description | Ref.No. | Part No. | Description | | | |
|---------|--------------|-----------------------|---------|---------------|-----------------------|-----|-------|--|
| 901 | A-3213-774-A | MOUNTED PCB, MAIN | C222 | 1-163-117-00 | CERAMIC CHIP 100PF | 5% | 50V | |
| C101 | 1-163-135-00 | CERAMIC CHIP 560PF | C223 | 1-163-109-00 | CERAMIC CHIP 47PF | 5% | 50V | |
| C102 | 1-163-135-00 | CERAMIC CHIP 560PF | C224 | 1-163-141-00 | CERAMIC CHIP 0.001MF | 10% | 50V | |
| C103 | 1-126-208-11 | CAP,ELECT 47MF | C301 | 1-126-210-11 | CAP,ELECT 220MF | 20% | 4V | |
| C104 | 1-163-023-00 | CERAMIC CHIP 0.015MF | C302 | 1-126-193-11 | CAP,ELECT 1MF | 20% | 50V | |
| C105 | 1-162-638-11 | CERAMIC CHIP 1MF | C303 | 1-126-210-11 | CAP,ELECT 220MF | 20% | 4V | |
| C106 | 1-163-019-00 | CERAMIC CHIP 0.0068MF | C304 | 1-163-117-00 | CERAMIC CHIP 100PF | 5% | 50V | |
| C107 | 1-163-809-11 | CERAMIC CHIP 0.047MF | C305 | 1-163-038-00 | CERAMIC CHIP 0.1MF | | 25V | |
| C108 | 1-135-087-21 | TANTAL. CHIP 0.68MF | C306 | 1-126-210-11 | CAP,ELECT 220MF | 20% | 4V | |
| C109 | 1-162-638-11 | CERAMIC CHIP 1MF | C307 | 1-163-038-00 | CERAMIC CHIP 0.1MF | | 25V | |
| C110 | 1-163-034-00 | CERAMIC CHIP 0.033MF | C308 | 1-135-103-00 | TANTAL. CHIP 3.3MF | 10% | 4V | |
| C111 | 1-163-017-00 | CERAMIC CHIP 0.0047MF | C309 | 1-163-833-00 | CERAMIC CHIP 0.068MF | | 25V | |
| C112 | 1-163-035-00 | CERAMIC CHIP 0.047MF | C310 | 1-126-208-11 | CAP,ELECT 47MF | 20% | 4V | |
| C113 | 1-162-638-11 | CERAMIC CHIP 1MF | C311 | 1-124-779-00 | CAP,ELECT 10MF | 20% | 16V | |
| C114 | 1-163-141-00 | CERAMIC CHIP 0.001MF | C312 | 1-126-198-11 | CAP,ELECT 4.7MF | 20% | 35V | |
| C115 | 1-162-638-11 | CERAMIC CHIP 1MF | C313 | 1-126-209-11 | CAP,ELECT 100MF | 20% | 4V | |
| C116 | 1-163-017-00 | CERAMIC CHIP 0.0047MF | C314 | 1-126-210-11 | CAP,ELECT 220MF | 20% | 4V | |
| C117 | 1-126-210-11 | CAP,ELECT 220MF | C315 | 1-126-210-11 | CAP,ELECT 220MF | 20% | 4V | |
| C118 | 1-163-117-00 | CERAMIC CHIP 100PF | C316 | 1-163-117-00 | CERAMIC CHIP 100PF | 5% | 50V | |
| C119 | 1-163-117-00 | CERAMIC CHIP 100PF | C317 | 1-163-141-00 | CERAMIC CHIP 0.001MF | 10% | 50V | |
| C120 | 1-163-117-00 | CERAMIC CHIP 100PF | C318 | 1-126-210-11 | CAP,ELECT 220MF | 20% | 4V | |
| C121 | 1-163-117-00 | CERAMIC CHIP 100PF | C319 | 1-163-141-00 | CERAMIC CHIP 0.001MF | 10% | 50V | |
| C122 | 1-163-117-00 | CERAMIC CHIP 100PF | C320 | 1-163-141-00 | CERAMIC CHIP 0.001MF | 10% | 50V | |
| C123 | 1-163-109-00 | CERAMIC CHIP 47PF | CN301 | *1-566-682-11 | HOUSING, CONNECTOR 6P | | | |
| C124 | 1-163-141-00 | CERAMIC CHIP 0.001MF | CN302 | 1-566-692-11 | SOCKET, CONNECTOR 3P | | | |
| C201 | 1-163-135-00 | CERAMIC CHIP 560PF | CN303 | *1-566-682-11 | HOUSING, CONNECTOR 6P | | | |
| C202 | 1-163-135-00 | CERAMIC CHIP 560PF | D301 | 9-988-942-01 | DIODE SLB-24VR | | | |
| C203 | 1-126-208-11 | CAP,ELECT 47MF | IC301 | 8-759-820-66 | IC LA4580M | | | |
| C204 | 1-163-023-00 | CERAMIC CHIP 0.015MF | IC302 | 8-759-701-07 | IC NJM2063AM | | | |
| C205 | 1-162-638-11 | CERAMIC CHIP 1MF | IC303 | 8-759-805-09 | IC CXA1249M | | | |
| C206 | 1-163-019-00 | CERAMIC CHIP 0.0068MF | J302 | 1-562-974-11 | JACK (PHONES) | | | |
| C207 | 1-163-809-11 | CERAMIC CHIP 0.047MF | JP1 | 1-216-296-00 | METAL GLAZE 0 | 5% | 1/8W | |
| C208 | 1-135-087-21 | TANTAL. CHIP 0.68MF | JP2 | 1-216-295-00 | METAL GLAZE 0 | 5% | 1/10W | |
| C209 | 1-162-638-11 | CERAMIC CHIP 1MF | JP3 | 1-216-295-00 | METAL GLAZE 0 | 5% | 1/10W | |
| C210 | 1-163-034-00 | CERAMIC CHIP 0.033MF | L101 | 1-410-196-11 | INDUCTOR CHIP 2.2UH | | | |
| C211 | 1-163-017-00 | CERAMIC CHIP 0.0047MF | L201 | 1-410-196-11 | INDUCTOR CHIP 2.2UH | | | |
| C212 | 1-163-035-00 | CERAMIC CHIP 0.047MF | L301 | 1-410-196-11 | INDUCTOR CHIP 2.2UH | | | |
| C213 | 1-162-638-11 | CERAMIC CHIP 1MF | L302 | 1-410-196-11 | INDUCTOR CHIP 2.2UH | | | |
| C214 | 1-163-141-00 | CERAMIC CHIP 0.001MF | Q301 | 8-729-403-17 | TRANSISTOR XN1215 | | | |
| C215 | 1-162-638-11 | CERAMIC CHIP 1MF | Q302 | 8-729-102-62 | TRANSISTOR 2SC1623 | | | |
| C216 | 1-163-017-00 | CERAMIC CHIP 0.0047MF | Q303 | 8-729-102-62 | TRANSISTOR 2SC1623 | | | |
| C217 | 1-126-210-11 | CAP,ELECT 220MF | Q304 | 8-729-102-62 | TRANSISTOR 2SC1623 | | | |
| C218 | 1-163-117-00 | CERAMIC CHIP 100PF | | | | | | |
| C219 | 1-163-117-00 | CERAMIC CHIP 100PF | | | | | | |
| C220 | 1-163-117-00 | CERAMIC CHIP 100PF | | | | | | |
| C221 | 1-163-117-00 | CERAMIC CHIP 100PF | | | | | | |

| Ref.No. | Part No. | Description | | | |
|---------|--------------|---------------------------|------|----|-------|
| R101 | 1-216-035-00 | METAL GLAZE | 270 | 5% | 1/10W |
| R102 | 1-216-105-00 | METAL GLAZE | 220K | 5% | 1/10W |
| R103 | 1-216-075-00 | METAL GLAZE | 12K | 5% | 1/10W |
| R104 | 1-216-075-00 | METAL GLAZE | 12K | 5% | 1/10W |
| R105 | 1-216-112-00 | METAL GLAZE | 430K | 5% | 1/10W |
| R106 | 1-216-089-00 | METAL GLAZE | 47K | 5% | 1/10W |
| R107 | 1-216-061-00 | METAL GLAZE | 3.3K | 5% | 1/10W |
| R108 | 1-216-065-00 | METAL GLAZE | 4.7K | 5% | 1/10W |
| R110 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R111 | 1-216-073-00 | METAL GLAZE | 10K | 5% | 1/10W |
| R112 | 1-216-097-00 | METAL GLAZE | 100K | 5% | 1/10W |
| R113 | 1-216-089-00 | METAL GLAZE | 47K | 5% | 1/10W |
| R114 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R115 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R201 | 1-216-035-00 | METAL GLAZE | 270 | 5% | 1/10W |
| R202 | 1-216-105-00 | METAL GLAZE | 220K | 5% | 1/10W |
| R203 | 1-216-075-00 | METAL GLAZE | 12K | 5% | 1/10W |
| R204 | 1-216-075-00 | METAL GLAZE | 12K | 5% | 1/10W |
| R205 | 1-216-112-00 | METAL GLAZE | 430K | 5% | 1/10W |
| R206 | 1-216-089-00 | METAL GLAZE | 47K | 5% | 1/10W |
| R207 | 1-216-061-00 | METAL GLAZE | 3.3K | 5% | 1/10W |
| R208 | 1-216-065-00 | METAL GLAZE | 4.7K | 5% | 1/10W |
| R210 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R211 | 1-216-073-00 | METAL GLAZE | 10K | 5% | 1/10W |
| R212 | 1-216-097-00 | METAL GLAZE | 100K | 5% | 1/10W |
| R213 | 1-216-089-00 | METAL GLAZE | 47K | 5% | 1/10W |
| R214 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R215 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R301 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R302 | 1-216-001-00 | METAL GLAZE | 10 | 5% | 1/10W |
| R303 | 1-216-069-00 | METAL GLAZE | 6.8K | 5% | 1/10W |
| R304 | 1-216-055-00 | METAL GLAZE | 1.8K | 5% | 1/10W |
| R305 | 1-216-057-00 | METAL GLAZE | 2.2K | 5% | 1/10W |
| R306 | 1-216-073-00 | METAL GLAZE | 10K | 5% | 1/10W |
| R307 | 1-216-037-00 | METAL GLAZE | 330 | 5% | 1/10W |
| R308 | 1-216-051-00 | METAL GLAZE | 1.2K | 5% | 1/10W |
| R309 | 1-216-081-00 | METAL GLAZE | 22K | 5% | 1/10W |
| R310 | 1-216-089-00 | METAL GLAZE | 47K | 5% | 1/10W |
| R311 | 1-216-041-00 | METAL GLAZE | 470 | 5% | 1/10W |
| RV2 | 1-230-979-11 | RES, VAR, CARBON (TUNING) | 100K | | |
| RV102 | 1-238-147-11 | RES, VAR (PRESET) | | | |
| RV301 | 1-238-172-11 | RES, VAR 10K/10K (VOL) | | | |

| Ref.No. | Part No. | Description |
|---------|--------------|--------------------------|
| S301 | 1-571-149-11 | SWITCH, LEAF (DIR) |
| S302 | 1-571-277-22 | SWITCH, SLIDE (TAPE) |
| S303 | 1-571-275-21 | SWITCH, SLIDE (DOLBY NR) |
| S304 | 1-571-506-21 | SWITCH, SLIDE (DBB) |
| S305 | 1-571-149-11 | SWITCH, LEAF (POWER) |

ACCESSORY & PACKING MATERIAL

| | |
|---------------|-------------------------------------------------------|
| *3-346-756-01 | CUSHION (UPPER) |
| *3-346-757-01 | CUSHION (LOWER) |
| *3-346-760-01 | (CANADIAN)...INDIVIDUAL CARTON |
| *3-346-758-01 | (USA)...INDIVIDUAL CARTON |
| *3-346-762-01 | (E)...INDIVIDUAL CARTON |
| *3-348-409-01 | (AEP,WG,UK)...INDIVIDUAL CARTON |
| 3-786-018-21 | (WM-AF64)...MANUAL INSTRUCTION |
| 3-786-018-11 | (WM-BF64)...MANUAL INSTRUCTION |
| 3-786-018-41 | (WG,AEP)...MANUAL INSTRUCTION |
| 8-952-260-91 | (US,CANADIAN,AEP,WG,UK)...HEADPHONE MDR-W10L/B SET |
| 8-952-350-90 | (E)...EARPHONE MDR-E454 SET |
| X-3346-549-1 | CASE ASSY, CARRYING |