

TC-K420

SERVICE MANUAL

AEP Model
UK Model
Australian Model



SPECIFICATIONS

Recording system

4-track 2-channel stereo

Bias

AC bias

Motors

Capstan motor × 1 (DC servo motor)
Reel motor × 1 (DC motor)

Wow and flutter

0.07% WRMS (NAB)
±0.18% (DIN)

Fast winding time

Approx. 90 sec. (with C-60 cassette)

Frequency response (DOLBY NR OFF)

| | |
|-------------------------------------|--|
| TYPE IV cassette (Sony METAL-ES) | 30–18,000 Hz (±3 dB, DIN) 30–15,000 Hz (OVU recording, ±3 dB) |
| TYPE II cassette (Sony UX-S) | 30–17,000 Hz (±3 dB, DIN) |
| TYPE I cassette (Sony HF-S) | 30–15,000 Hz (±3 dB, DIN) |

Signal-to-noise ratio (NAB, at peak level)

| Cassette | Dolby NR switch | | |
|-------------------------|-----------------|-----------|-----------|
| | OFF | B-TYPE ON | C-TYPE ON |
| TYPE IV (Sony METAL-ES) | 59 dB | 67 dB | 74 dB |
| TYPE II (Sony UX-S) | 58 dB | 66 dB | 73 dB |
| TYPE I (Sony HF-S) | 56 dB | 64 dB | 71 dB |

Total harmonic distortion

1.0% (with Sony METAL-ES cassettes)

Inputs

| | | |
|------------------------------|-----------------|------------------|
| Line inputs (phono jacks) | Sensitivity | 77.5 mV (–20 dB) |
| | Input impedance | 50k ohms |

| | |
|------------------------------------|---------------|
| Model Name Using Similar Mechanism | TC-K510 |
| Tape Transport Mechanism Type | TCM-CMAY B-28 |

Outputs

| | | |
|-----------------------------------|--------------------|--|
| Line outputs (phono jacks) | Rated output level | 0.44 V (–5 dB) at a load impedance of 47k ohms |
| | Load impedance | Over 10k ohms |
| Headphones (stereo phone jack) | Output level | 0.3 mW at a load impedance of 32 ohms |

General

Power requirements

220V AC (or 240V AC), 50/60 Hz

Power consumption

16W

Dimensions

Approx. 430×123×285mm (w/h/d)
(17×4⁷/₈×11¹/₄ inches)

including projecting parts and controls

Weight

Approx. 4.1 kg (9 lbs 1 oz)

Supplied accessory

Audio connecting cord (2)

Design and specifications subject to change without notice.

Optional accessory

Wireless remote control unit RM-900W.
Wireless remote control unit RM-J701.

Note

This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.


STEREO CASSETTE DECK
SONY®



• FEATURES

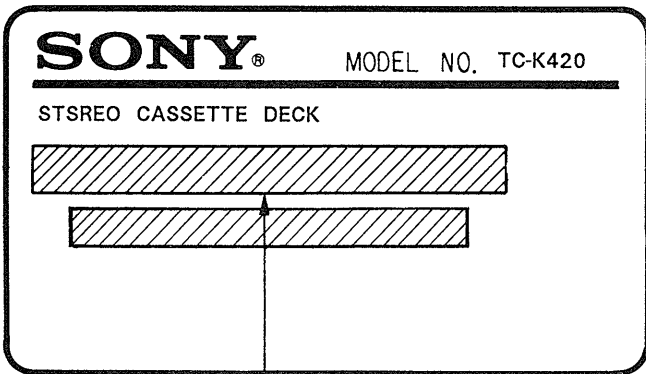
- A bias control for adjusting the bias current for optimum recording on every tape.
- The Dolby HX PRO* system to improve the linearity of the tape's high-range response during recording.
- The AMS to provide easy access to a desired selection.
- An optional remote control unit to allow various operations to be remotely controlled.

*Dolby noise reduction and HX PRO headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX PRO originated by Bang & Olufsen.

"DOLBY", the double-D symbol  and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

MODEL IDENTIFICATION

—Specification Label Printed on Back Panel—

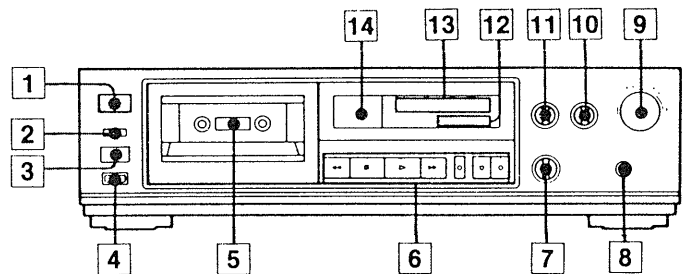












AEP model : AC 220V~50/60Hz
 UK/Austrarian model : AC 240V~50/60Hz

| <u>Section</u> | <u>Title</u> | <u>Page</u> |
|---|--------------|-------------|
| Specifications..... | | 1 |
| Features | | 2 |
| 1. GENERAL | | |
| 1-1. Identification of Front Panel Parts..... | | 2 |
| 2. MECHANICAL ADJUSTMENTS | | 3 |
| 3. ELECTRICAL ADJUSTMENTS | | 3 |
| 4. DIAGRAM | | |
| 4-1. Semiconductor Lead Layouts..... | | 7 |
| 4-2. Printed Wiring Boards..... | | 7 |
| 4-3. Schematic Diagram..... | | 11 |
| 5. EXPLODED VIEWS | | 15 |
| 6. ELECTRICAL PARTS LIST | | 19 |

**SECTION 1
 GENERAL**

1-1. IDENTIFICATION OF FRONT PANEL PARTS



- 1** POWER switch
- 2** TIMER switch
- 3** Remote control sensor
 You can control this unit remotely with:
 — A remote commander that came with a Sony amplifier or receiver if it has the  mark and cassette deck control capability.
 — Any optional Sony remote commander with the  mark.
- 4**  (eject) button
- 5** Cassette holder
- 6** Tape operation buttons and indicators
 (rewind) button
 (stop) button
 (play) button and indicator
 (fast forward) button
 REC (record) button and indicator
 PAUSE button and indicator
 REC MUTE (record muting) button
- 7** BIAS (bias adjust) control
- 8** HEADPHONES (headphones) jack (stereo phone jack)
- 9** REC LEVEL (recording level) control
- 10** MPX FILTER switch
- 11** DOLBY NR switch
- 12** TAPE TYPE indicators
- 13** PEAK LEVEL METER
- 14** TAPE COUNTER and RESET button

SECTION 2 MECHANICAL ADJUSTMENTS

PRECAUTION

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

| | |
|----------------------|--------------|
| record/playback head | pinch roller |
| erase head | rubber belts |
| capstan | idler |
2. Demagnetize the record/playback head with a head demagnetizer.
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 in the rated power supply voltage unless otherwise noted.

Torque Measurement

| Torque | Torque meter | Meter reading |
|---------------------|--------------|---|
| FWD | CQ-102C | 30 to 70g · cm (0.42 to 0.97 oz · inch) |
| FWD Back tension | CQ-102C | 2 to 6g · cm (0.028 to 0.083 oz · inch) |
| FF, REW | CQ-201B | 90 to 180g · cm (1.25 to 2.49 oz · inch) |

SECTION 3 ELECTRICAL ADJUSTMENTS

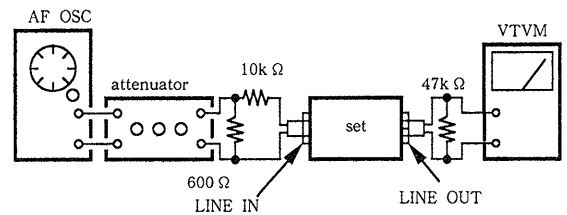
Note : The adjustment should be performed in the order given in the service manual. As a rule, adjustment about playback should be performed before adjustment about recording.

The adjustments should be performed for both L-CH and R-CH.

- Switches and controls should be set as follows unless otherwise specified.

| | |
|-------------------|-------|
| DOLBY NR switch | : OFF |
| TIMER switch | : OFF |
| MPX FILTER switch | : OFF |
- Standard Record :
Deliver the standard input signal level to the input jack and set the REC LEVEL control to obtain the standard output signal level.

—Record Mode—



Standard Input Level

| | |
|------------------|---------------|
| input terminal | LINE IN |
| source impedance | 10k Ω |
| input level | 0.25V (-10dB) |

Standard Output Level

| | |
|-----------------|--------------|
| output terminal | LINE OUT |
| load impedance | 47k Ω |
| output level | 0.44V (-5dB) |

Test tape

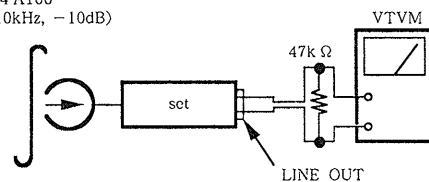
| Type | Signal | Used for |
|----------|--------------|-----------------------|
| P-4-A100 | 10kHz, -10dB | Azimuth Adjustment |
| P-4-L300 | 315Hz, 0dB | PB Level Adjustment |
| WS-48B | 3kHz, 0dB | Tape Speed Adjustment |

Record/Playback Head Azimuth Adjustment

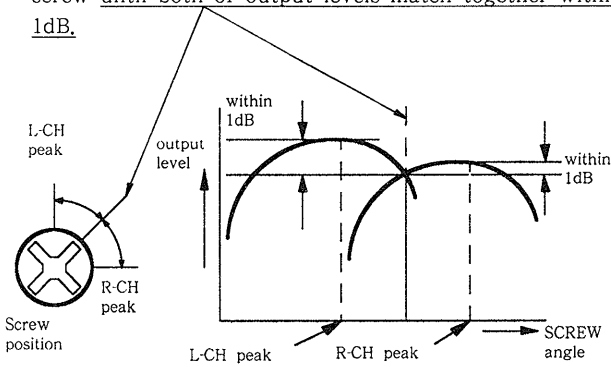
Procedure :

1. Mode : playback

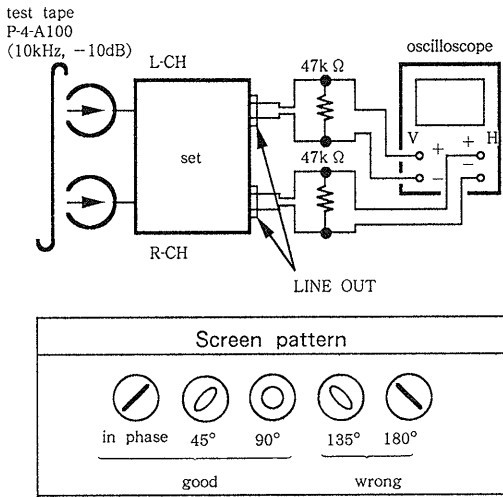
test tape
P-4-A100
(10kHz, -10dB)



2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1dB.

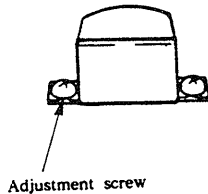


3. Phase Check
Mode : playback



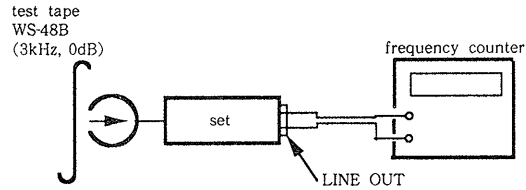
4. After the adjustment, lock the screws with locking compound.

Adjustment Location : REC/PB Head



Tape Speed Adjustment

Procedure :
Mode : playback



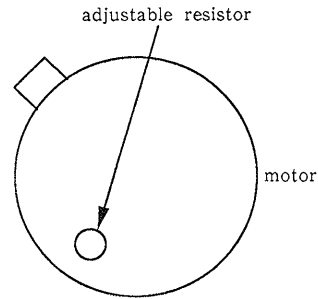
Adjustment Limits :

| Speed checker | Frequency counter |
|---------------|-------------------|
| $\pm 0.5\%$ | 2,985–3,015Hz |

Frequency difference between the beginning and the end of the tape should be within 0.5% (15Hz).

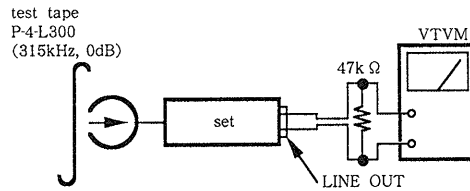
Adjustment Location :

adjustment the adjustable resistor of built in motor (adjustment by the insert to driver Speed in fastest that turn the clockwise.)



Playback Level Adjustment

Procedure :
Mode : playback



Adjust RV101 (L-CH), RV201 (R-CH) so that the reading on VTVM meets the adjustment limits below.

Adjustment Limits :

LINE OUT level : $-5 \pm 0.5\text{dB}$ (0.42–0.46dB)

Level difference between channels : less than 0.5dB

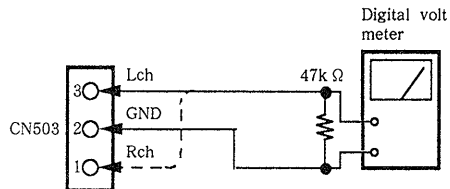
Check that the LINE OUT level does not change in playback mode while changing the mode from playback to stop several times.

Adjustment Location : main board (See page 6)

Bias Consumption Current Adjustment

Bias Consumption current adjustment should be performed before record bias adjustment.

1. Set the center to RV301 (L-CH), RV401 (R-CH) and REC /FWD for no-signal.
2. Connect CN503 with digital volt meter, adjust T301 (L-CH), T401 (R-CH) so that the minimum or digital volt meter.



Adjustment Location : main board (See page 6)

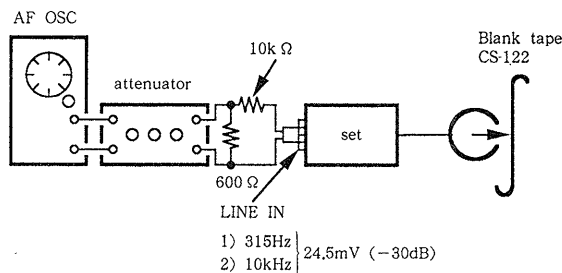
Record Bias Adjustment

Setting :

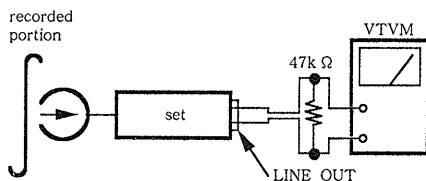
REC LEVEL control : Standard Record (See page 3.)

Procedure :

1. Mode : record



2. Mode : playback



Playback the signal recorded in step 1.
Confirm that the 10kHz playback output is $5 \pm 0.5\text{dB}$ relative to the 315Hz output. If necessary, adjust RV301 (L-CH), RV401 (R-CH) and repeat the steps given above.

Adjustment Location : main board (See page 6)

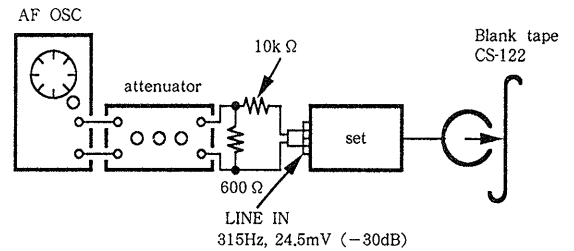
Record Level Adjustment

Setting :

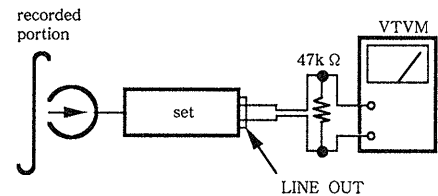
REC LEVEL control : Standard Record (See page 3.)

Procedure :

1. Mode : record



2. Mode : playback

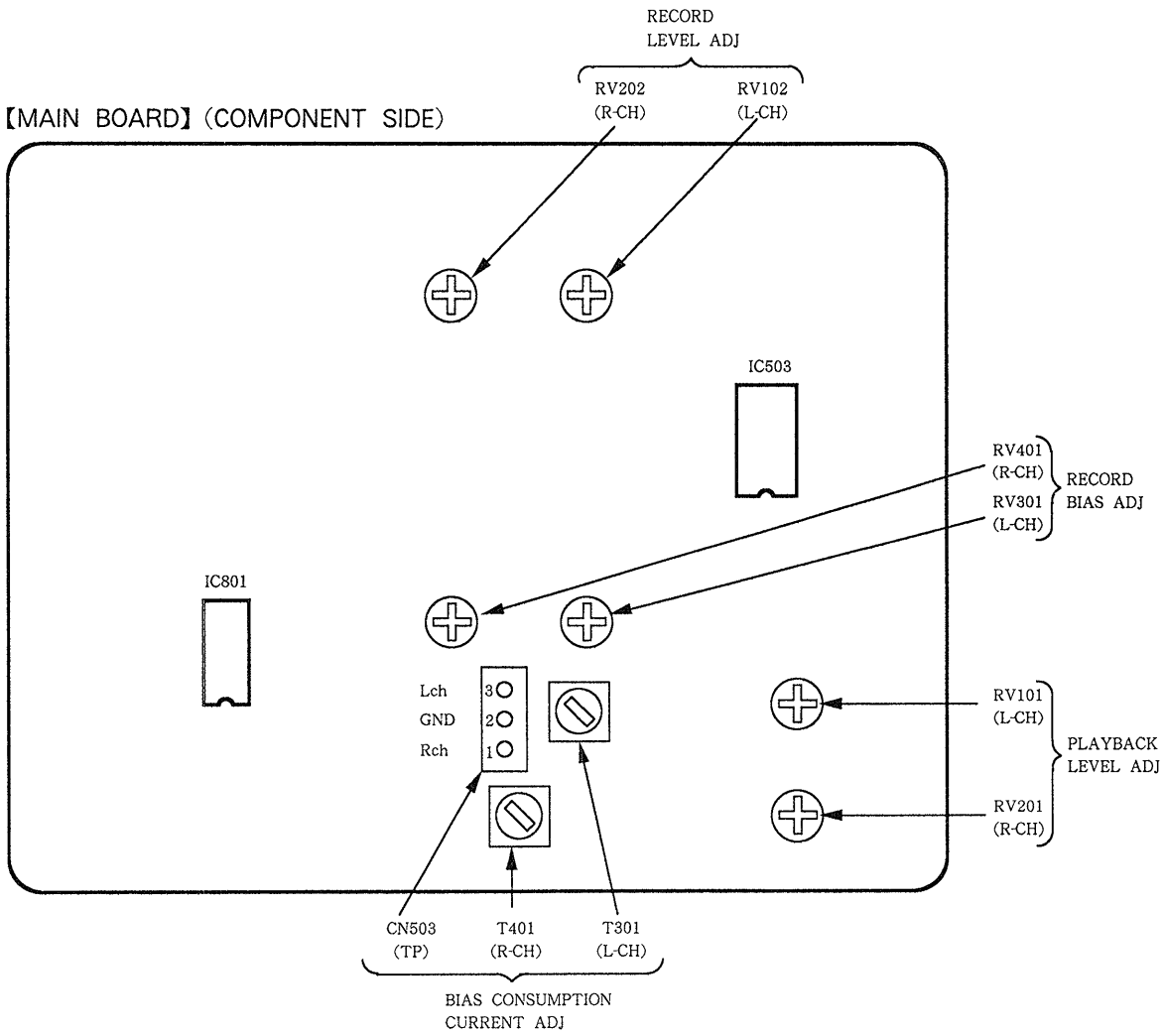


3. Playback the signal recorded in step 1.
Confirm that the signal level is within the adjustment limits below. If necessary, adjust RV102 (L-CH), RV202 (R-CH) and repeat the step1-2.

Adjustment Limits : $-25\text{dB} \pm 0.5\text{dB}$ (42-46mV)

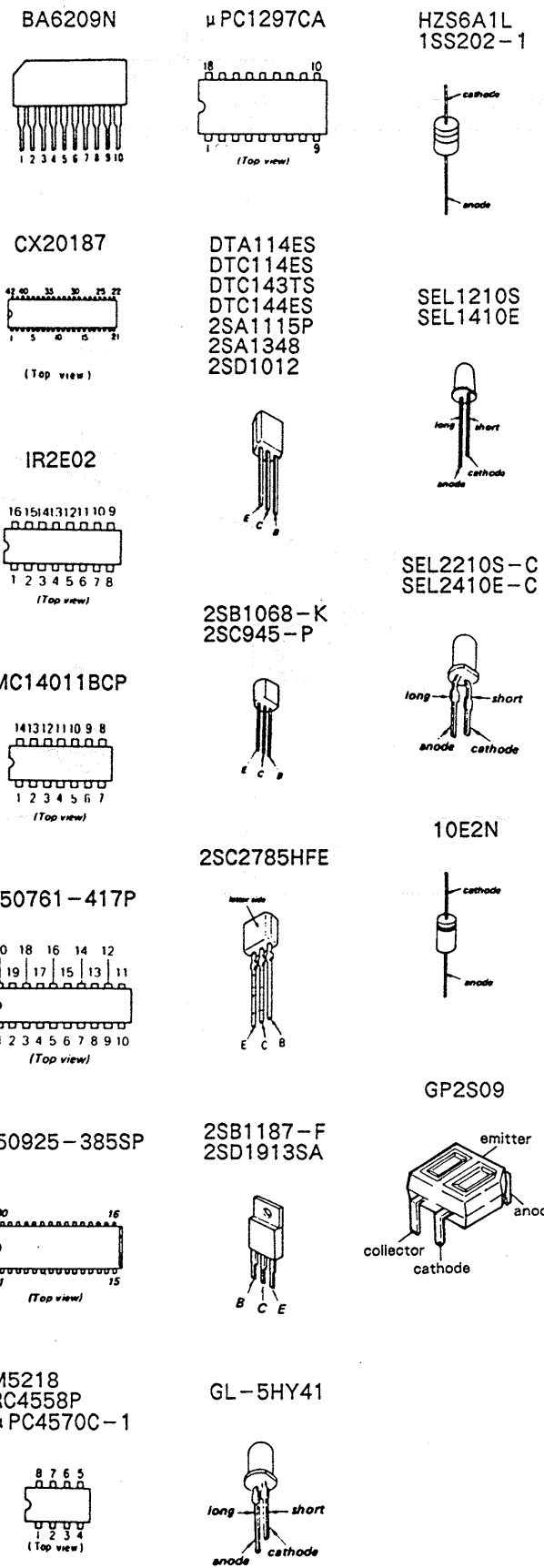
Adjustment Location : main board (See page 6)

ADJUSTMENT LOCATION



SECTION 4 DIAGRAMS

4.1. SEMICONDUCTOR LEAD LAYOUTS

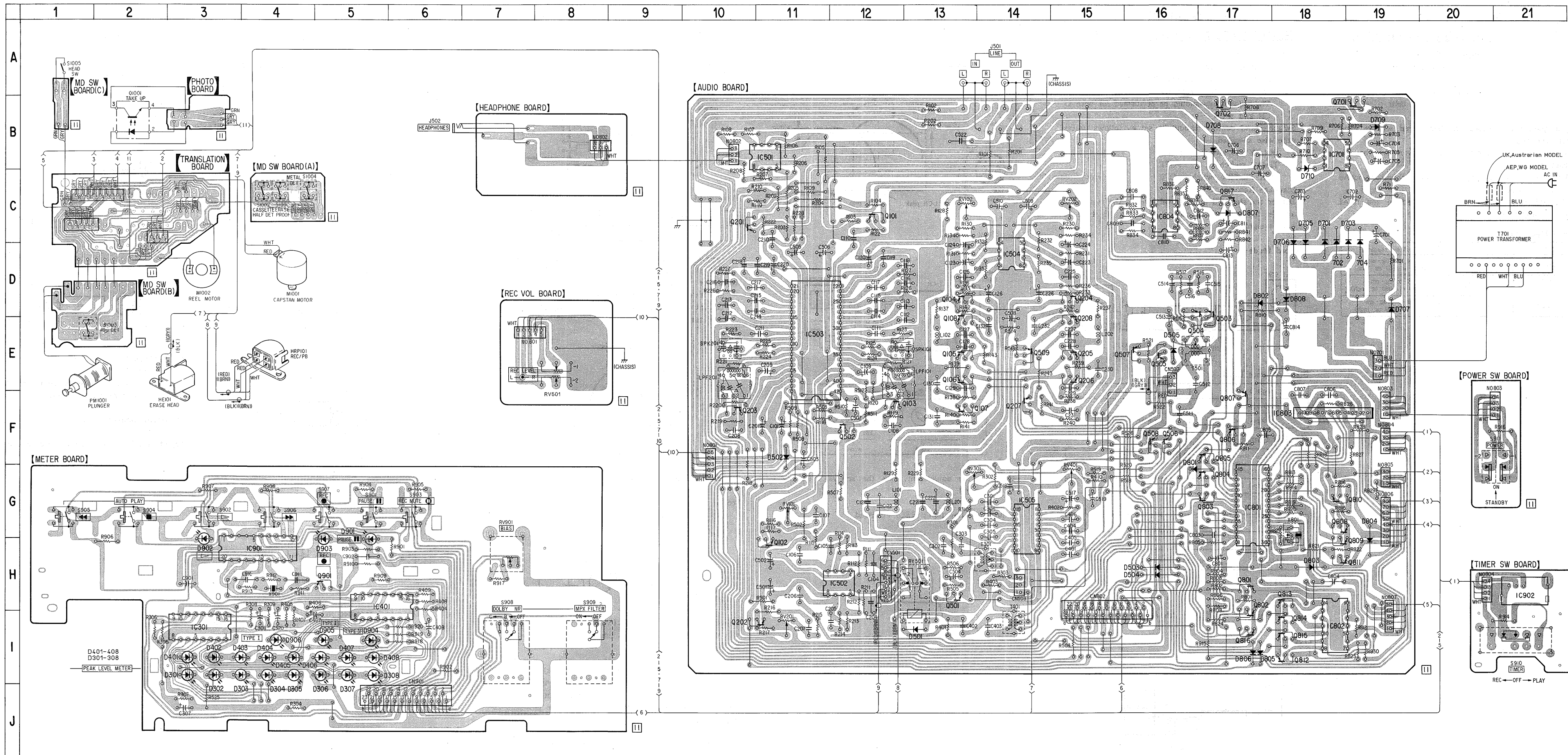


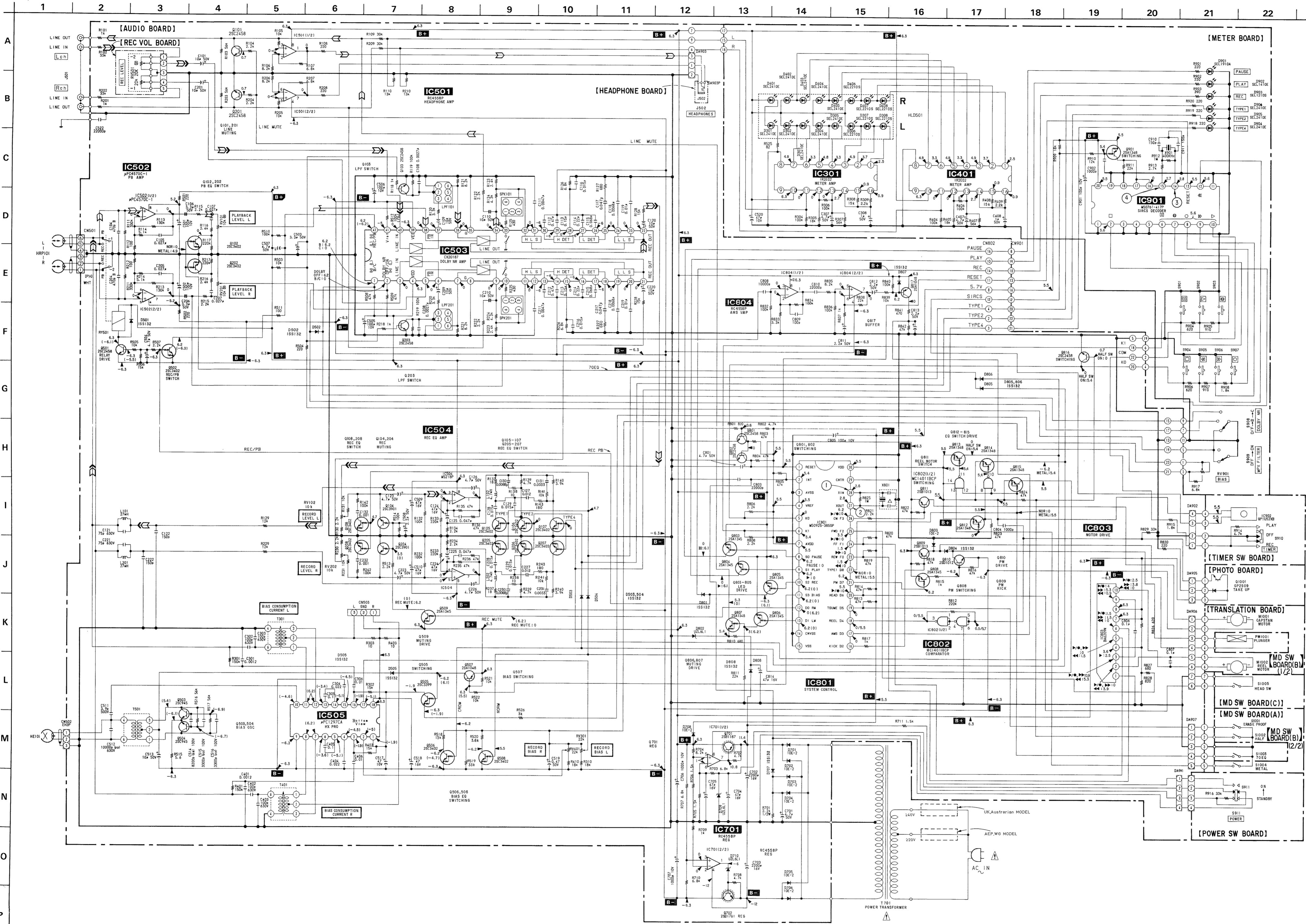
• Semiconductor Location

| Ref. No. | Location | Ref. No. | Location |
|----------|----------|----------|----------|
| IC301 | I-3 | Q814 | I-18 |
| IC401 | H-5 | Q815 | I-18 |
| IC501 | B-11 | Q816 | I-17 |
| IC502 | H-12 | Q817 | C-17 |
| IC503 | E-11 | Q901 | H-5 |
| IC504 | D-14 | Q1001 | B-2 |
| IC505 | G-14 | | |
| IC701 | B-18 | D301 | I-3 |
| IC801 | G-17 | D302 | I-3 |
| IC802 | I-18 | D303 | I-3 |
| IC803 | F-18 | D304 | I-4 |
| IC804 | C-16 | D305 | I-4 |
| IC901 | H-4 | D306 | I-5 |
| IC902 | H-21 | D307 | I-5 |
| | | D308 | I-5 |
| Q101 | C-12 | D401 | I-3 |
| Q102 | H-11 | D402 | I-3 |
| Q103 | F-12 | D403 | I-3 |
| Q104 | D-13 | D404 | I-4 |
| Q105 | E-13 | D405 | I-4 |
| Q106 | E-13 | D406 | I-5 |
| Q107 | F-13 | D407 | I-5 |
| Q108 | D-13 | D408 | I-5 |
| Q201 | C-10 | D501 | I-13 |
| Q202 | I-10 | D502 | F-11 |
| Q203 | F-10 | D503 | H-16 |
| Q204 | D-15 | D504 | H-16 |
| Q205 | E-15 | D505 | E-16 |
| Q206 | E-15 | D701 | C-18 |
| Q207 | F-14 | D702 | C-18 |
| Q208 | D-15 | D703 | C-19 |
| Q501 | H-13 | D704 | C-19 |
| Q502 | F-12 | D705 | C-18 |
| Q503 | E-17 | D706 | C-18 |
| Q504 | E-16 | D707 | D-19 |
| Q505 | E-16 | D708 | B-17 |
| Q506 | F-16 | D709 | B-19 |
| Q507 | E-16 | D710 | B-18 |
| Q508 | F-16 | D801 | G-16 |
| Q509 | E-14 | D802 | D-17 |
| Q701 | B-19 | D803 | H-18 |
| Q702 | B-17 | D804 | G-19 |
| Q801 | H-17 | D805 | I-17 |
| Q802 | H-17 | D806 | I-17 |
| Q803 | G-17 | D807 | C-17 |
| Q804 | G-17 | D808 | D-18 |
| Q805 | F-17 | D901 | G-5 |
| Q806 | F-17 | D902 | H-3 |
| Q807 | F-17 | D903 | H-5 |
| Q808 | G-18 | D904 | I-5 |
| Q809 | H-18 | D905 | I-5 |
| Q810 | G-18 | D906 | I-4 |
| Q811 | H-18 | | |
| Q812 | I-18 | | |
| Q813 | H-18 | | |

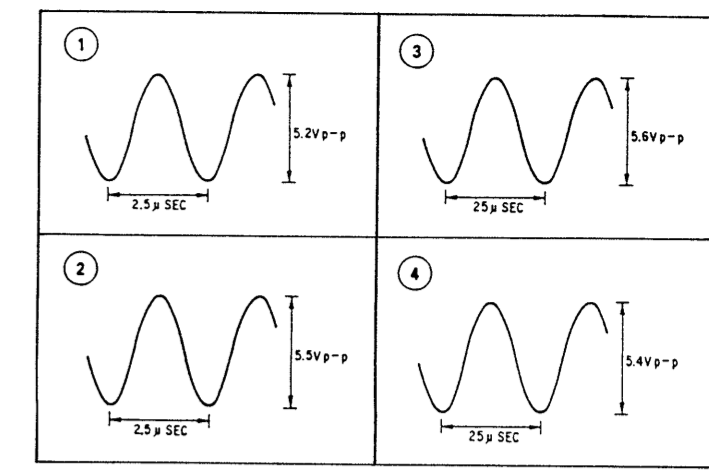
Note:
 ○ — parts extracted from the component side.
 ◐ — Pattern on the side which is seen.

4.2. PRINTED WIRING BOARDS

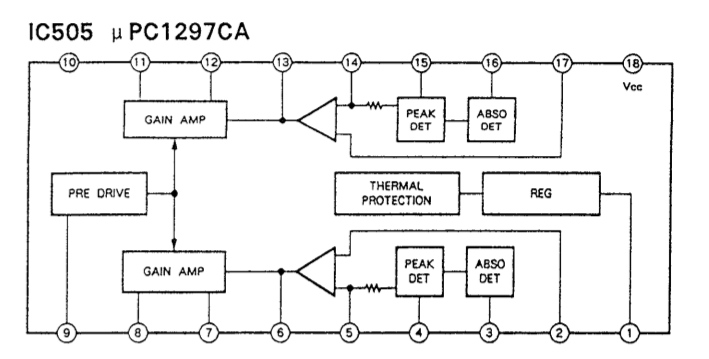




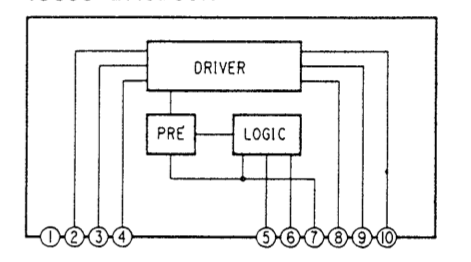
• SCHEMATIC OF WAVE FORMS



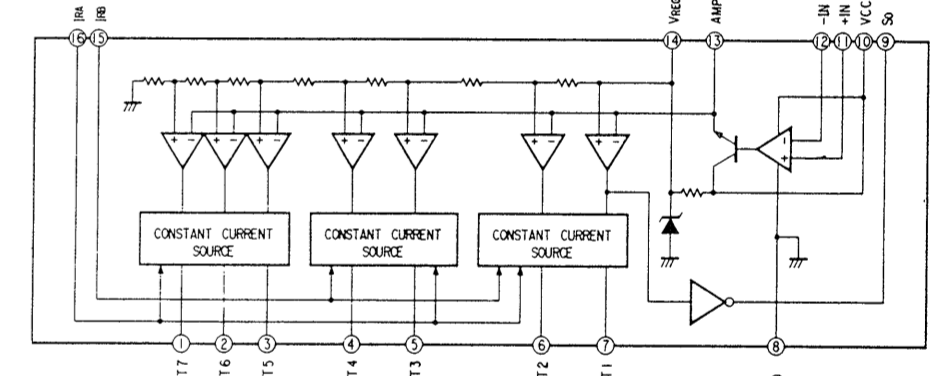
• IC BLOCK DIAGRAM



IC803 BA6209N



IC301, 401 IR2E02



Note:

- All capacitors are in μF unless otherwise noted. pF: μF 500WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}W$ or less unless otherwise specified.
- % : indicates tolerance.
- Δ : internal component.

Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

- B+ : B+ Line
- B- : B- Line
- \square : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark : STOP
- () : REC
- \blacktriangleright : FWD
- \bullet : STOP
- \blacktriangleleft : REW
- Voltages are taken with a VOM (Input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Signal path.
- \Rightarrow : PB (DECK A)
- \Rightarrow : REC (DECK A)

SECTION 5 EXPLODED VIEWS

NOTE:

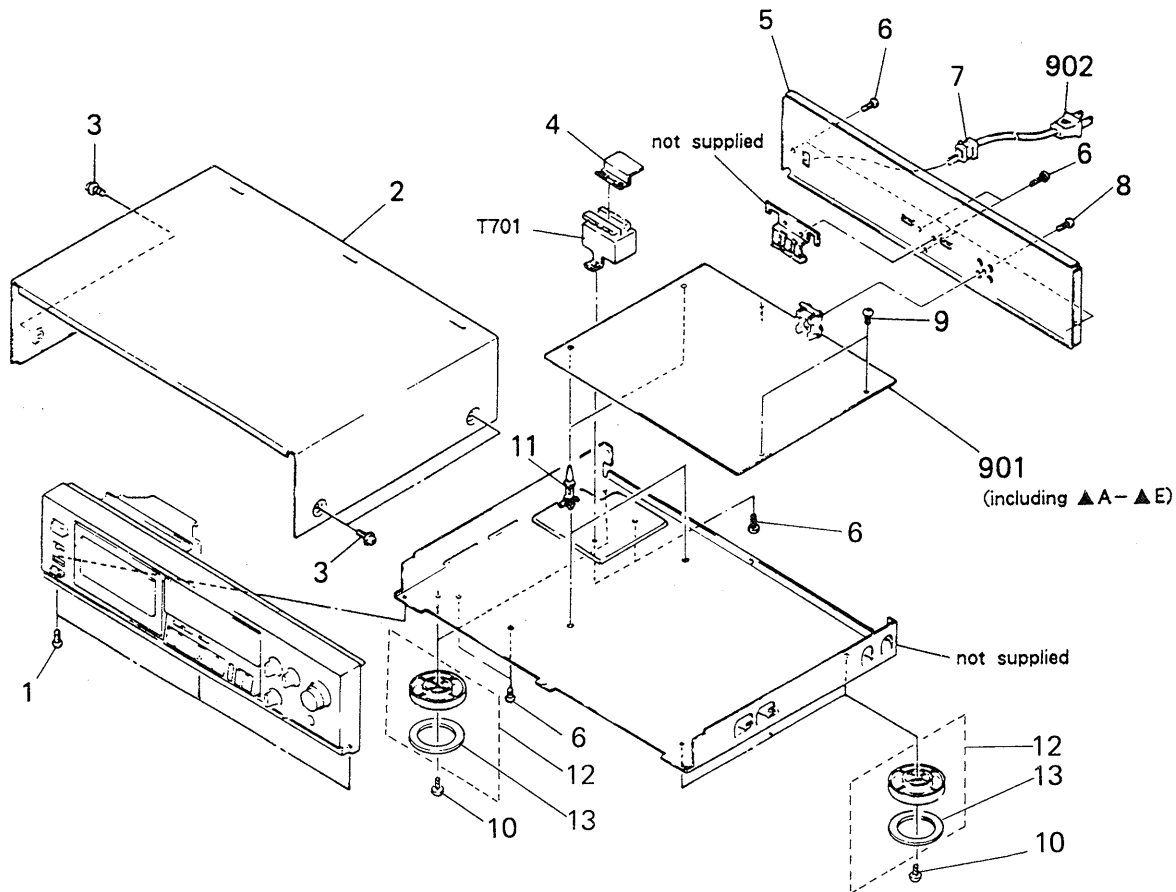
- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be 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

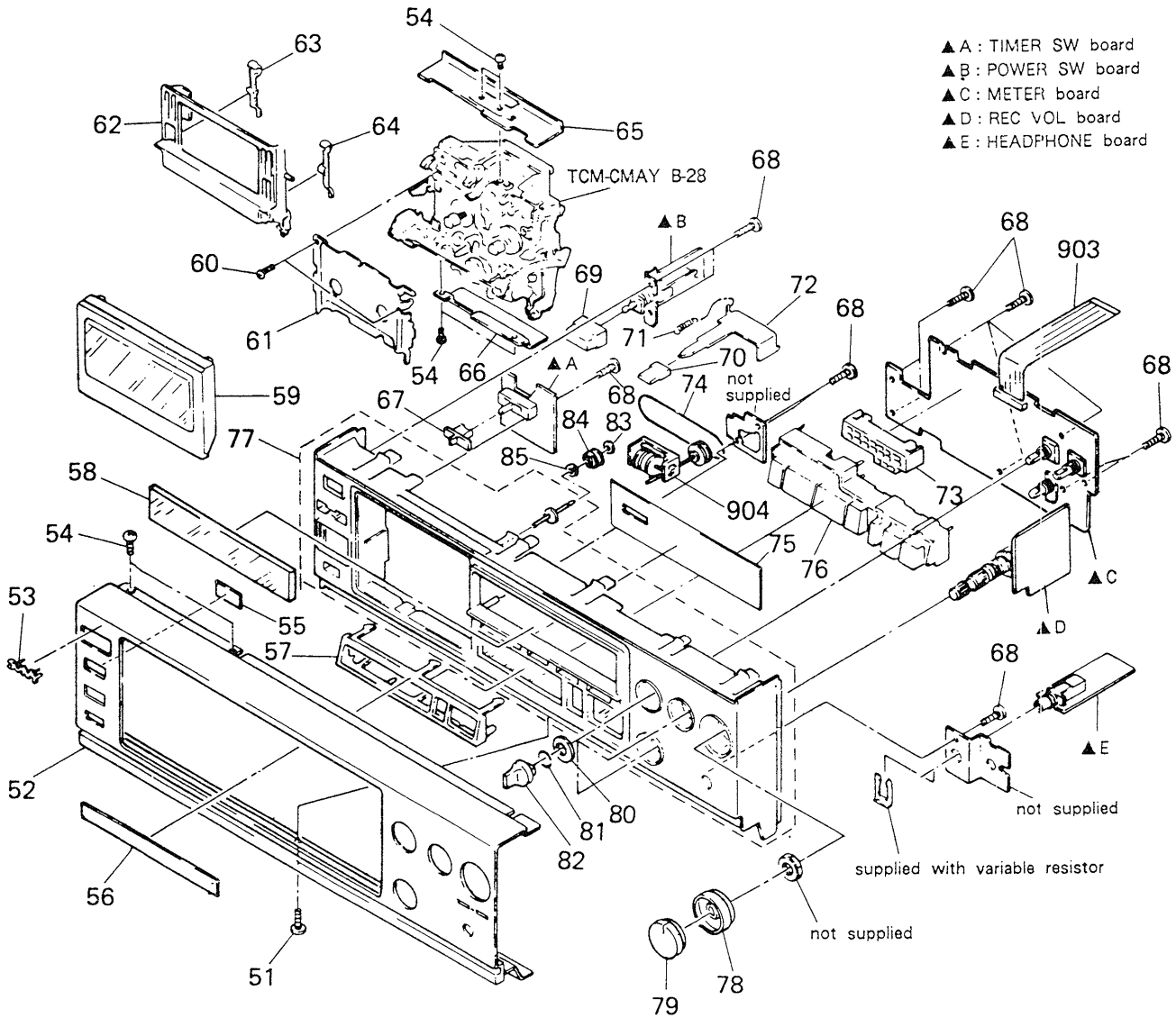
The components identified by mark or dotted line with mark are critical for safety. Replace only with part number specified.

6-1. CHASSIS SECTION



| No. | Part No. | Description | Remarks | No. | Part No. | Description | Remarks |
|-----|---------------|-------------------------------|---------|------|---------------|--|---------|
| 1 | 3-703-685-21 | SCREW (+BV 3X8) | | 10 | 7-682-548-04 | SCREW +BVTT 3X8 (S) | |
| 2 | 3-332-578-61 | CASE | | 11 | *3-346-265-11 | HOLDER, PC BOARD | |
| 3 | 3-704-366-01 | SCREW (CASE) (M3X8) | | 12 | X-3304-938-2 | FOOT ASSY | |
| 4 | *3-337-136-01 | COVER, TRANSFORMER SAFETY | | 13 | 4-923-836-11 | CUSHION | |
| 5 | *3-350-450-31 | (West Germany)...PANEL, BACK | | 901 | *A-2006-106-A | MOUNTED PCB, AUDIO | |
| | *3-350-450-41 | (UK,Australian)...PANEL, BACK | | 902 | .1-555-795-00 | (AEP).....CORD, POWER, EULO PLUG | |
| | *3-350-450-51 | (AEP).....PANEL, BACK | | | .1-556-035-00 | (UK,Australian)...CORD, POWER, EULO PLUG | |
| 6 | 7-682-547-09 | SCREW +BVTT 3X6 (S) | | T701 | .1-449-783-11 | (AEP).....TRANSFORMER, POWER | |
| 7 | *3-703-244-00 | BUSHING (2104), CORD | | T701 | .1-450-153-11 | (UK,Australian)...TRANSFORMER, POWER | |
| 8 | 7-621-849-00 | SCREW, TAPPING | | | | | |
| 9 | 4-886-821-11 | SCREW, S TIGHT, +PTTWH 3X6 | | | | | |

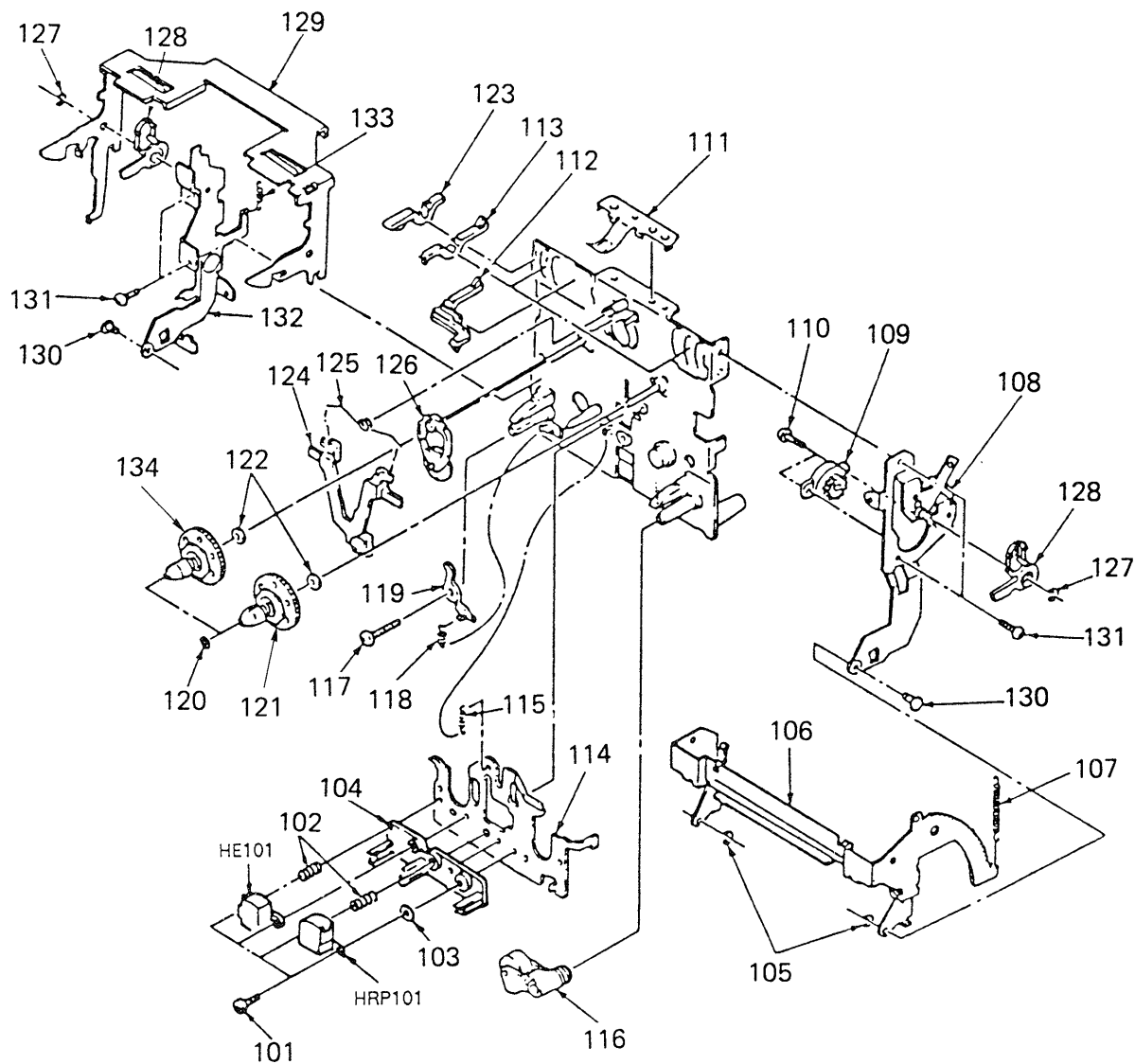
6.2. FRONT PANEL SECTION



- ▲ A : TIMER SW board
- ▲ B : POWER SW board
- ▲ C : METER board
- ▲ D : REC VOL board
- ▲ E : HEADPHONE board

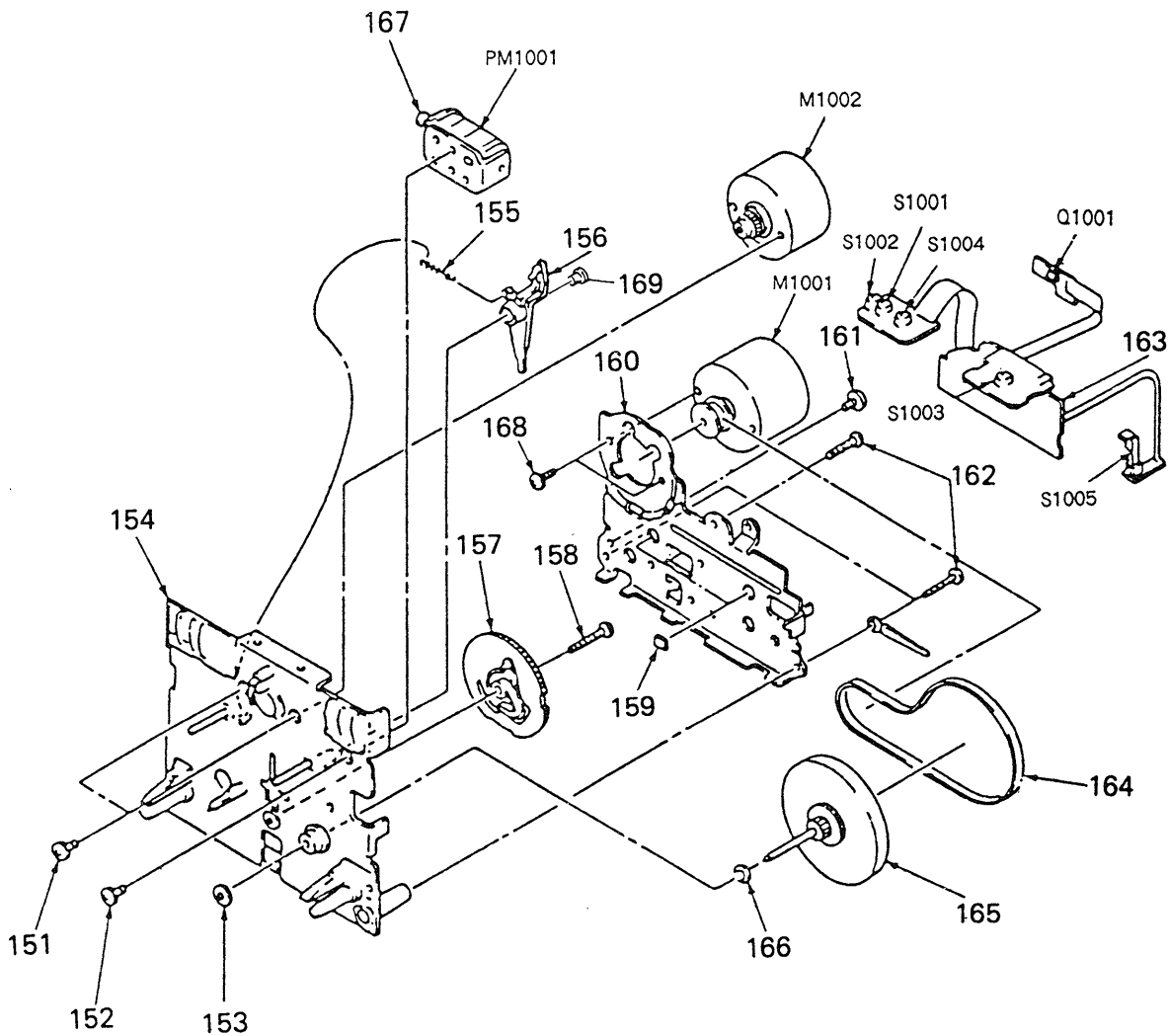
| No. | Part No. | Description | Remarks | No. | Part No. | Description | Remarks |
|-----|---------------|----------------------------|---------|-----|---------------|-----------------------------|---------|
| 51 | 7-685-534-19 | SCREW +BTP 2.6X8 TYPE2 N-S | | 69 | 3-354-912-01 | KNOB, POWER | |
| 52 | 3-350-449-23 | PANEL, FRONT | | 70 | 3-343-698-31 | BUTTON (EJECT) | |
| 53 | 4-908-848-01 | EMBLEM, SONY | | 71 | 3-571-829-00 | SPRING, TENSION | |
| 54 | 7-682-547-04 | SCREW +BVTT 3X6 (S) | | 72 | *3-332-564-01 | SLIDER (EJC) | |
| 55 | 3-350-442-01 | (AEP)...WINDOW (RM) | | 73 | *3-350-448-01 | HOLDER, LED | |
| 56 | 3-350-443-11 | PLATE (K), ORNAMENTAL | | 74 | 3-143-124-XX | BELT, TAKE UP | |
| 57 | 3-350-401-11 | PLATE (B), ORNAMENTAL | | 75 | 3-350-447-01 | PLATE (M), INDICATION | |
| 58 | 3-350-446-01 | WINDOW (M) | | 76 | X-3304-978-1 | BUTTON ASSY | |
| 59 | A-2003-569-A | LID ASSY, CASSETTE | | 77 | A-2003-570-A | PANEL ASSY, FRONT | |
| 60 | 7-621-772-00 | SCREW +B 2X3 | | 78 | 3-332-589-01 | KNOB (REC VOL-LEFT) | |
| 61 | *3-332-547-01 | PLATE, ORNAMENTAL | | 79 | 3-332-590-01 | KNOB (REC VOL-RIGHT) | |
| 62 | X-3332-448-1 | HOLDER ASSY, CASSETTE | | 80 | 3-350-416-01 | SPACER | |
| 63 | 3-307-371-00 | SPRING (LEFT) | | 81 | 3-350-440-01 | SPRING | |
| 64 | 3-307-372-00 | SPRING (RIGHT) | | 82 | 4-908-097-21 | KNOB | |
| 65 | *3-332-561-01 | BRACKET (MDU) | | 83 | 3-558-708-11 | WASHER, STOPPER | |
| 66 | *3-350-457-01 | BRACKET (MDB) | | 84 | 3-549-452-00 | PULLEY, SHUT-OFF | |
| 67 | 3-307-538-21 | KNOB, SWITCH, TIMER | | 85 | 3-701-437-11 | WASHER | |
| 68 | 4-928-635-01 | SCREW, +BV (2.6X8) TAPPING | | 903 | 1-574-931-11 | WIRE, FLAT TYPE (23 CORE) | |
| | | | | 904 | 1-548-589-81 | COUNTER, TAPE (MIDDLE TYPE) | |

6-3. MECHANISM SECTION ①
(TCM-CMAY B-28)



| No. | Part No. | Description | Remarks | No. | Part No. | Description | Remarks |
|-----|---------------|------------------------|---------|--------|---------------|---------------------------|---------|
| 101 | 7-621-955-75 | SCREW, TOTSU PWH 2X12 | | 119 | 3-391-105-01 | ARM (B), EJECT SAFETY | |
| 102 | 3-391-101-01 | SPRING | | 120 | 3-701-436-11 | WASHER, 1.6 POLYETHYLENE | |
| 103 | 3-701-437-11 | WASHER | | 121 | X-3391-107-1 | REEL ASSY, T.U | |
| 104 | 3-392-751-01 | SPACER, HEAD | | 122 | 3-392-711-01 | WASHER (2.1X0.25) (T) | |
| 105 | 7-624-102-04 | STOP RING 1.5, TYPE -E | | 123 | 3-392-725-01 | LEVER | |
| 106 | *3-391-182-01 | HOLDER, CASSETTE | | 124 | 3-392-754-01 | LEVER (C), HOLD | |
| 107 | 3-391-184-01 | SPRING | | 125 | 3-391-124-01 | SPRING | |
| 108 | *3-392-722-01 | PLATE HOLD BLK | | 126 | X-3391-111-1 | IDLER ASSY | |
| 109 | X-3391-151-1 | DAMPER ASSY | | 127 | 7-624-105-04 | STOP RING 2.3, TYPE -E | |
| 110 | 7-621-255-15 | SCREW +PTT 2X3 (S) | | 128 | 3-391-185-01 | LEVER, STOP | |
| 111 | 3-391-177-01 | SPRING | | 129 | *3-391-180-01 | ARM, EJECT | |
| 112 | 3-392-726-01 | LEVER | | 130 | 3-391-183-01 | SHAFT (B), HOLDER FULCRUM | |
| 113 | 3-392-724-01 | LEVER | | 131 | 7-621-773-86 | SCREW +PTT 2.6X4 (S) | |
| 114 | *3-392-708-01 | BASE, HEAD | | 132 | *X-3391-152-1 | ARM ASSY, EJECT | |
| 115 | 3-391-114-01 | SPRING | | 133 | 3-391-181-01 | SP, LEVER RETURN | |
| 116 | 3-392-731-01 | PINCH ROLLER (R) ASSY | | 134 | 3-392-748-01 | REEL ASSY | |
| 117 | 3-392-733-01 | SCREW | | HE101 | 1-543-535-11 | HEAD, ERASE (EF-701-36) | |
| 118 | 3-391-123-01 | SPRING (A) | | HRP101 | 1-543-537-11 | HEAD, MAGNETIC (REC/PB) | |

6-4. MECHANISM SECTION ②
(TCM-CMAY B-28)



| No. | Part No. | Description | Remarks | No. | Part No. | Description | Remarks |
|-----|---------------|-------------------------------|---------|--------|---------------|----------------------------------|---------|
| 151 | 7-621-770-67 | SCREW +P 2.6X6 | | 166 | 3-701-438-01 | WASHER | |
| 152 | 7-621-759-25 | +PSW, 2.6X4 | | 167 | *3-392-707-01 | SOLENOID (ARBOR) | |
| 153 | 3-391-119-01 | SEAL, WASHER OIL | | 168 | 7-628-253-90 | SCREW +PS 2.6X4 | |
| 154 | 3-392-710-01 | CHASSIS BASE BLK | | 169 | 3-391-126-01 | CAP | |
| 155 | 3-392-730-01 | SP, PLAY ARM | | | | | |
| 156 | 3-392-755-01 | ARM, PLAY | | M1001 | X-3391-130-1 | MOTOR ASSY | |
| 157 | 3-392-752-01 | GEAR (H-2), CAM | | M1002 | 3-392-709-01 | MTR REEL BLK | |
| 158 | 3-392-732-01 | SCREW (2X15), TT, WASHER | | PM1001 | 3-392-750-01 | SOLENOID ASSY | |
| 159 | 3-391-129-01 | SPACER | | Q1001 | 1-807-509-11 | PHOTO SENSOR (GP2S09) | |
| 160 | *3-392-720-01 | F/W BKT | | Q1002 | 1-807-509-11 | PHOTO SENSOR (GP2S09) | |
| 161 | 7-682-546-04 | SCREW +PTT 3X5 (S) | | S1001 | 1-571-081-11 | SWITCH, LEAF (ERASE PROOF) | |
| 162 | 7-685-131-19 | SCREW +P 2.6X4 TYPE2 NON-SLIT | | S1002 | 1-571-081-11 | SWITCH, LEAF (CASSETTE HALF DET) | |
| 163 | 3-392-753-01 | PCB CONTROL BLK | | S1003 | 1-571-081-11 | SWITCH, LEAF (70 DET) | |
| 164 | 3-392-756-01 | BELT, MAIN | | S1004 | 1-571-081-11 | SWITCH, LEAF (METAL DET) | |
| 165 | 3-392-749-01 | ASSY F/W | | S1005 | 1-571-820-11 | SWITCH, LEAF (HEAD SW) | |

SECTION 6 ELECTRICAL PARTS LIST

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.

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....

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

| Ref.No. | Part No. | Description | Ref.No. | Part No. | Description |
|---------|--|---|---------|--------------|-----------------------|
| 901 | *A-2006-106-A | MOUNTED PCB, AUDIO | C212 | 1-136-173-00 | FILM 0.47MF 5% 50V |
| 902 | Δ 1-555-795-00 Δ 1-556-035-00 | (AEP).....CORD, POWER, EULO PLUG (UK,Australian)..CORD, POWER, EULO PLUG | C213 | 1-136-167-00 | FILM 0.15MF 5% 50V |
| 903 | 1-574-931-11 | WIRE, FLAT TYPE (23 CORE) | C214 | 1-136-169-00 | FILM 0.22MF 5% 50V |
| 904 | 1-548-589-81 | COUNTER, TAPE (MIDDLE TYPE) | C215 | 1-136-163-00 | FILM 0.068MF 5% 50V |
| C101 | 1-123-875-11 | ELECT 10MF 20% 50V | C216 | 1-136-155-00 | FILM 0.015MF 5% 50V |
| C104 | 1-162-290-31 | CERAMIC 470PF 10% 50V | C217 | 1-136-161-00 | FILM 0.047MF 5% 50V |
| C105 | 1-136-158-00 | FILM 0.027MF 5% 50V | C218 | 1-130-481-00 | MYLAR 0.0068MF 5% 50V |
| C106 | 1-124-273-00 | ELECT 3.3MF 20% 50V | C219 | 1-136-153-00 | FILM 0.01MF 5% 50V |
| C107 | 1-136-158-00 | FILM 0.027MF 5% 50V | C220 | 1-123-875-11 | ELECT 10MF 20% 50V |
| C108 | 1-130-476-00 | MYLAR 0.0027MF 5% 50V | C221 | 1-136-273-91 | FILM 75PF 5% 630V |
| C109 | 1-123-875-11 | ELECT 10MF 20% 50V | C222 | 1-162-284-31 | CERAMIC 150PF 10% 50V |
| C110 | 1-124-657-00 | ELECT 10MF 20% 50V | C223 | 1-124-927-11 | ELECT 4.7MF 20% 50V |
| C111 | 1-130-479-00 | MYLAR 0.0047MF 5% 50V | C224 | 1-124-477-11 | ELECT 47MF 20% 16V |
| C112 | 1-136-173-00 | FILM 0.47MF 5% 50V | C225 | 1-136-161-00 | FILM 0.047MF 5% 50V |
| C113 | 1-136-167-00 | FILM 0.15MF 5% 50V | C226 | 1-124-927-11 | ELECT 4.7MF 20% 50V |
| C114 | 1-136-169-00 | FILM 0.22MF 5% 50V | C227 | 1-136-154-00 | FILM 0.012MF 5% 50V |
| C115 | 1-136-163-00 | FILM 0.068MF 5% 50V | C228 | 1-136-155-00 | FILM 0.015MF 5% 50V |
| C116 | 1-136-155-00 | FILM 0.015MF 5% 50V | C229 | 1-136-155-00 | FILM 0.015MF 5% 50V |
| C117 | 1-136-161-00 | FILM 0.047MF 5% 50V | C230 | 1-130-481-00 | MYLAR 0.0068MF 5% 50V |
| C118 | 1-130-481-00 | MYLAR 0.0068MF 5% 50V | C231 | 1-130-477-00 | MYLAR 0.0033MF 5% 50V |
| C119 | 1-136-153-00 | FILM 0.01MF 5% 50V | C232 | 1-130-471-00 | MYLAR 0.001MF 5% 50V |
| C120 | 1-123-875-11 | ELECT 10MF 20% 50V | C301 | 1-130-472-00 | MYLAR 0.0012MF 5% 50V |
| C121 | 1-136-273-91 | FILM 75PF 5% 630V | C302 | 1-136-433-11 | FILM 100PF 5% 630V |
| C122 | 1-162-284-31 | CERAMIC 150PF 10% 50V | C303 | 1-136-433-11 | FILM 100PF 5% 630V |
| C123 | 1-124-927-11 | ELECT 4.7MF 20% 50V | C304 | 1-136-157-00 | FILM 0.022MF 5% 50V |
| C124 | 1-124-477-11 | ELECT 47MF 20% 16V | C305 | 1-136-165-00 | FILM 0.1MF 5% 50V |
| C125 | 1-136-161-00 | FILM 0.047MF 5% 50V | C306 | 1-136-153-00 | FILM 0.01MF 5% 50V |
| C126 | 1-124-927-11 | ELECT 4.7MF 20% 50V | C307 | 1-124-927-11 | ELECT 4.7MF 20% 50V |
| C127 | 1-136-154-00 | FILM 0.012MF 5% 50V | C308 | 1-124-438-00 | ELECT 1MF 20% 50V |
| C128 | 1-136-155-00 | FILM 0.015MF 5% 50V | C401 | 1-130-472-00 | MYLAR 0.0012MF 5% 50V |
| C129 | 1-136-155-00 | FILM 0.015MF 5% 50V | C402 | 1-136-433-11 | FILM 100PF 5% 630V |
| C130 | 1-130-481-00 | MYLAR 0.0068MF 5% 50V | C403 | 1-136-433-11 | FILM 100PF 5% 630V |
| C131 | 1-130-477-00 | MYLAR 0.0033MF 5% 50V | C404 | 1-136-157-00 | FILM 0.022MF 5% 50V |
| C132 | 1-130-471-00 | MYLAR 0.001MF 5% 50V | C405 | 1-136-165-00 | FILM 0.1MF 5% 50V |
| C201 | 1-123-875-11 | ELECT 10MF 20% 50V | C406 | 1-136-153-00 | FILM 0.01MF 5% 50V |
| C204 | 1-162-290-31 | CERAMIC 470PF 10% 50V | C407 | 1-126-163-11 | ELECT 4.7MF 20% 50V |
| C205 | 1-136-158-00 | FILM 0.027MF 5% 50V | C408 | 1-124-449-11 | ELECT 1MF 20% 50V |
| C206 | 1-124-273-00 | ELECT 3.3MF 20% 50V | C501 | 1-124-443-00 | ELECT 100MF 20% 10V |
| C207 | 1-136-158-00 | FILM 0.027MF 5% 50V | C502 | 1-124-443-00 | ELECT 100MF 20% 10V |
| C208 | 1-130-476-00 | MYLAR 0.0027MF 5% 50V | C503 | 1-123-382-00 | ELECT 3.3MF 20% 50V |
| C209 | 1-123-875-11 | ELECT 10MF 20% 50V | C504 | 1-124-927-11 | ELECT 4.7MF 20% 50V |
| C210 | 1-124-657-00 | ELECT 10MF 20% 50V | C505 | 1-124-443-00 | ELECT 100MF 20% 10V |
| C211 | 1-130-479-00 | MYLAR 0.0047MF 5% 50V | C506 | 1-124-443-00 | ELECT 100MF 20% 10V |
| | | | C507 | 1-124-927-11 | ELECT 4.7MF 20% 50V |
| | | | C508 | 1-124-925-11 | ELECT 2.2MF 20% 50V |

| Ref.No. | Part No. | Description | | | | Ref.No. | Part No. | Description |
|---------|---------------|--------------------------------|----------|-------|------|---------|--------------|--------------------------------|
| C509 | 1-124-477-11 | ELECT | 47MF | 20% | 16V | D408 | 8-719-301-38 | LED SLL2210S-C (LEVEL METER R) |
| C510 | 1-124-477-11 | ELECT | 47MF | 20% | 16V | D501 | 8-719-107-94 | DIODE 1SS202-1 |
| C511 | 1-107-045-00 | MICA | 3.9PF | 0.5PF | 500V | D502 | 8-719-107-94 | DIODE 1SS202-1 |
| C512 | 1-136-601-11 | FILM | 0.01MF | 5% | 630V | D503 | 8-719-107-94 | DIODE 1SS202-1 |
| C513 | 1-123-875-11 | ELECT | 10MF | 20% | 50V | D504 | 8-719-107-94 | DIODE 1SS202-1 |
| C514 | 1-130-848-00 | FILM | 0.0082MF | 5% | 100V | D505 | 8-719-107-94 | DIODE 1SS202-1 |
| C515 | 1-136-593-11 | FILM | 0.0033MF | 5% | 100V | D701 | 8-719-200-77 | DIODE 10E2N |
| C516 | 1-136-593-11 | FILM | 0.0033MF | 5% | 100V | D702 | 8-719-200-77 | DIODE 10E2N |
| C517 | 1-124-446-11 | ELECT | 47MF | 20% | 10V | D703 | 8-719-200-77 | DIODE 10E2N |
| C518 | 1-124-477-11 | ELECT | 47MF | 20% | 16V | D704 | 8-719-200-77 | DIODE 10E2N |
| C519 | 1-124-902-00 | ELECT | 0.47MF | 20% | 50V | D705 | 8-719-200-77 | DIODE 10E2N |
| C520 | 1-124-589-11 | ELECT | 47MF | 20% | 10V | D706 | 8-719-200-77 | DIODE 10E2N |
| C522 | 1-161-494-00 | CERAMIC | 0.022MF | | 25V | D707 | 8-719-107-94 | DIODE 1SS202-1 |
| C701 | 1-124-927-11 | ELECT | 4.7MF | 20% | 50V | D708 | 8-719-200-77 | DIODE 10E2N |
| C702 | 1-124-556-11 | ELECT | 2200MF | 20% | 16V | D709 | 8-719-933-33 | DIODE HZS6A1L |
| C703 | 1-124-556-11 | ELECT | 2200MF | 20% | 16V | D710 | 8-719-933-33 | DIODE HZS6A1L |
| C704 | 1-124-477-11 | ELECT | 47MF | 20% | 16V | D801 | 8-719-107-94 | DIODE 1SS202-1 |
| C705 | 1-124-477-11 | ELECT | 47MF | 20% | 16V | D802 | 8-719-933-33 | DIODE HZS6A1L |
| C706 | 1-124-473-11 | ELECT | 1000MF | 20% | 10V | D803 | 8-719-200-77 | DIODE 10E2N |
| C707 | 1-124-473-11 | ELECT | 1000MF | 20% | 10V | D804 | 8-719-107-94 | DIODE 1SS202-1 |
| C801 | 1-124-927-11 | ELECT | 4.7MF | 20% | 50V | D805 | 8-719-107-94 | DIODE 1SS202-1 |
| C803 | 1-161-494-00 | CERAMIC | 0.022MF | | 25V | D806 | 8-719-107-94 | DIODE 1SS202-1 |
| C804 | 1-162-294-31 | CERAMIC | 0.001MF | 10% | 50V | D807 | 8-719-107-94 | DIODE 1SS202-1 |
| C805 | 1-124-443-00 | ELECT | 100MF | 20% | 10V | D808 | 8-719-107-94 | DIODE 1SS202-1 |
| C806 | 1-136-165-00 | FILM | 0.1MF | 5% | 50V | D901 | 8-719-302-79 | LED SEL1910A-C (PAUSE) |
| C807 | 1-136-165-00 | FILM | 0.1MF | 5% | 50V | D902 | 8-719-302-45 | LED SEL1210S (PLAY) |
| C808 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V | D903 | 8-719-302-46 | LED SEL1210S-C (REC) |
| C809 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V | D904 | 8-719-301-44 | LED SEL2410E-D (TYPE I) |
| C810 | 1-161-494-00 | CERAMIC | 0.022MF | | 25V | D905 | 8-719-301-44 | LED SEL2410E-D (TYPE II) |
| C811 | 1-124-925-11 | ELECT | 2.2MF | 20% | 50V | D906 | 8-719-301-44 | LED SEL2410E-D (TYPE IV) |
| C812 | 1-124-925-11 | ELECT | 2.2MF | 20% | 50V | HE101 | 1-543-535-11 | HEAD, ERASE (EF-701-36) |
| C813 | 1-124-925-11 | ELECT | 2.2MF | 20% | 50V | HRP101 | 1-543-537-11 | HEAD, MAGNETIC (REC/PB) |
| C814 | 1-124-477-11 | ELECT | 47MF | 20% | 16V | IC301 | 8-759-912-79 | IC IR2E02 |
| C901 | 1-124-443-00 | ELECT | 100MF | 20% | 10V | IC401 | 8-759-912-79 | IC IR2E02 |
| C902 | 1-162-294-31 | CERAMIC | 0.001MF | 10% | 50V | IC501 | 8-759-945-58 | IC RC4558P |
| C910 | 1-162-284-31 | CERAMIC | 150PF | 10% | 50V | IC502 | 8-759-111-44 | IC UPC4570C-1 |
| C911 | 1-162-284-31 | CERAMIC | 150PF | 10% | 50V | IC503 | 8-752-018-70 | IC CX20187 |
| CN501 | *1-564-509-11 | PLUG, CONNECTOR 6P | | | | IC504 | 8-759-601-02 | IC M5218P |
| CN502 | *1-564-506-11 | PLUG, CONNECTOR 3P | | | | IC505 | 8-759-106-56 | IC UPC1297CA |
| CN503 | *1-564-506-11 | PLUG, CONNECTOR 3P | | | | IC701 | 8-759-945-58 | IC RC4558P |
| CN802 | 1-568-742-11 | SOCKET, CONNECTOR 23P | | | | IC801 | 8-759-633-31 | IC M50925-3855P |
| CN901 | 1-568-741-11 | SOCKET, CONNECTOR 23P | | | | IC802 | 8-759-140-11 | IC UPD4011BC |
| D301 | 8-719-301-44 | LED SEL2410E-D (LEVEL METER L) | | | | IC803 | 8-759-988-58 | IC BA6209N |
| D302 | 8-719-301-44 | LED SEL2410E-D (LEVEL METER L) | | | | IC804 | 8-759-945-58 | IC RC4558P |
| D303 | 8-719-301-44 | LED SEL2410E-D (LEVEL METER L) | | | | IC901 | 8-759-602-47 | IC M50761-417P |
| D304 | 8-719-301-44 | LED SEL2410E-D (LEVEL METER L) | | | | IC902 | 8-749-920-83 | IC GP1U52XB |
| D305 | 8-719-301-44 | LED SEL2410E-D (LEVEL METER L) | | | | J501 | 1-565-258-11 | JACK, PIN 4P (LINE IN/OUT) |
| D306 | 8-719-301-38 | LED SEL2210S-C (LEVEL METER L) | | | | J502 | 1-507-796-71 | JACK (HEADPHONES) |
| D307 | 8-719-301-38 | LED SEL2210S-C (LEVEL METER L) | | | | L101 | 1-410-780-11 | INDUCTOR 27MMH |
| D308 | 8-719-301-38 | LED SLL2210S-C (LEVEL METER L) | | | | L102 | 1-410-771-11 | INDUCTOR 4.7MMH |
| D401 | 8-719-301-44 | LED SEL2410E-D (LEVEL METER R) | | | | L201 | 1-410-780-11 | INDUCTOR 27MMH |
| D402 | 8-719-301-44 | LED SEL2410E-D (LEVEL METER R) | | | | L202 | 1-410-771-11 | INDUCTOR 4.7MMH |
| D403 | 8-719-301-44 | LED SEL2410E-D (LEVEL METER R) | | | | LPF101 | 1-231-388-00 | FILTER, LOW PASS |
| D404 | 8-719-301-44 | LED SEL2410E-D (LEVEL METER R) | | | | LPF201 | 1-231-388-00 | FILTER, LOW PASS |
| D405 | 8-719-301-44 | LED SEL2410E-D (LEVEL METER R) | | | | | | |
| D406 | 8-719-301-38 | LED SEL2210S-C (LEVEL METER R) | | | | | | |
| D407 | 8-719-301-38 | LED SEL2210S-C (LEVEL METER R) | | | | | | |

| Ref.No. | Part No. | Description | Ref.No. | Part No. | Description | | | |
|---------|--------------|------------------------|---------|--------------|-------------|------|----|------|
| M1001 | X-3391-130-1 | MOTOR ASSY | R107 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W |
| M1002 | 3-392-709-01 | MTR REEL BLK | R108 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W |
| PM1001 | 3-392-750-01 | SOLENOID ASSY | R109 | 1-247-866-11 | CARBON | 30K | 5% | 1/4W |
| Q101 | 8-729-230-45 | TRANSISTOR 2SC2458-YGR | R110 | 1-247-858-11 | CARBON | 13K | 5% | 1/4W |
| Q102 | 8-729-900-80 | TRANSISTOR DTC114ES | R111 | 1-247-891-00 | CARBON | 330K | 5% | 1/4W |
| Q103 | 8-729-230-45 | TRANSISTOR 2SC2458-YGR | R112 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| Q104 | 8-729-900-74 | TRANSISTOR DTC143TS | R113 | 1-247-882-11 | CARBON | 130K | 5% | 1/4W |
| Q105 | 8-729-900-80 | TRANSISTOR DTC114ES | R114 | 1-247-848-11 | CARBON | 5.1K | 5% | 1/4W |
| Q106 | 8-729-900-80 | TRANSISTOR DTC114ES | R115 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| Q107 | 8-729-900-80 | TRANSISTOR DTC114ES | R116 | 1-247-840-00 | CARBON | 2.4K | 5% | 1/4W |
| Q108 | 8-729-900-80 | TRANSISTOR DTC114ES | R117 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W |
| Q201 | 8-729-230-45 | TRANSISTOR 2SC2458-YGR | R118 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| Q202 | 8-729-900-80 | TRANSISTOR DTC114ES | R119 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| Q203 | 8-729-230-45 | TRANSISTOR 2SC2458-YGR | R120 | 1-249-423-11 | CARBON | 3.3K | 5% | 1/4W |
| Q204 | 8-729-900-74 | TRANSISTOR DTC143TS | R121 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W |
| Q205 | 8-729-900-80 | TRANSISTOR DTC114ES | R122 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| Q206 | 8-729-900-80 | TRANSISTOR DTC114ES | R123 | 1-247-840-00 | CARBON | 2.4K | 5% | 1/4W |
| Q207 | 8-729-900-80 | TRANSISTOR DTC114ES | R124 | 1-247-846-11 | CARBON | 4.3K | 5% | 1/4W |
| Q208 | 8-729-900-80 | TRANSISTOR DTC114ES | R125 | 1-247-822-11 | CARBON | 430 | 5% | 1/4W |
| Q501 | 8-729-230-45 | TRANSISTOR 2SC2458-YGR | R126 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W |
| Q502 | 8-729-900-80 | TRANSISTOR DTC114ES | R127 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W |
| Q503 | 8-729-194-57 | TRANSISTOR 2SC945-P | R128 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| Q504 | 8-729-194-57 | TRANSISTOR 2SC945-P | R129 | 1-249-430-11 | CARBON | 12K | 5% | 1/4W |
| Q505 | 8-729-900-89 | TRANSISTOR DTC114ES | R130 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| Q506 | 8-729-900-80 | TRANSISTOR DTC114ES | R131 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| Q507 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | R132 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| Q508 | 8-729-900-80 | TRANSISTOR DTC114ES | R133 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W |
| Q509 | 8-729-900-65 | TRANSISTOR DTA144ES | R134 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| Q701 | 8-729-920-97 | TRANSISTOR 2SB1187-EF | R135 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| Q702 | 8-729-920-98 | TRANSISTOR 2SD1761-EF | R136 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| Q801 | 8-729-230-45 | TRANSISTOR 2SC2458-YGR | R137 | 1-249-396-11 | CARBON | 18 | 5% | 1/4W |
| Q802 | 8-729-230-45 | TRANSISTOR 2SC2458-YGR | R138 | 1-249-393-11 | CARBON | 10 | 5% | 1/4W |
| Q803 | 8-729-900-65 | TRANSISTOR DTA144ES | R139 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| Q804 | 8-729-900-65 | TRANSISTOR DTA144ES | R140 | 1-249-424-11 | CARBON | 3.9K | 5% | 1/4W |
| Q805 | 8-729-900-65 | TRANSISTOR DTA144ES | R141 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| Q806 | 8-729-900-65 | TRANSISTOR DTA144ES | R142 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| Q807 | 8-729-900-61 | TRANSISTOR DTA114ES | R143 | 1-249-408-11 | CARBON | 180 | 5% | 1/4W |
| Q808 | 8-729-900-65 | TRANSISTOR DTA114ES | R201 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| Q809 | 8-729-801-84 | TRANSISTOR 2SB1013-4 | R202 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| Q810 | 8-729-821-31 | TRANSISTOR 2SD1012-FG | R203 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W |
| Q811 | 8-729-801-84 | TRANSISTOR 2SB1013-4 | R204 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| Q812 | 8-729-900-61 | TRANSISTOR DTA114ES | R205 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| Q813 | 8-729-900-61 | TRANSISTOR DTA114ES | R206 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W |
| Q814 | 8-729-900-61 | TRANSISTOR DTA114ES | R207 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W |
| Q815 | 8-729-900-61 | TRANSISTOR DTA114ES | R208 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W |
| Q816 | 8-729-230-45 | TRANSISTOR 2SC2458-YGR | R209 | 1-247-866-11 | CARBON | 30K | 5% | 1/4W |
| Q817 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | R210 | 1-247-858-11 | CARBON | 13K | 5% | 1/4W |
| Q901 | 8-729-900-61 | TRANSISTOR DTA114ES | R211 | 1-247-891-00 | CARBON | 330K | 5% | 1/4W |
| Q1001 | 1-807-509-11 | PHOTO SENSOR (GP2S09) | R212 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R101 | 1-249-417-11 | CARBON | R213 | 1-247-882-11 | CARBON | 130K | 5% | 1/4W |
| R102 | 1-249-435-11 | CARBON | R214 | 1-247-848-11 | CARBON | 5.1K | 5% | 1/4W |
| R103 | 1-249-438-11 | CARBON | R215 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R104 | 1-249-421-11 | CARBON | R216 | 1-247-840-00 | CARBON | 2.4K | 5% | 1/4W |
| R105 | 1-249-429-11 | CARBON | R217 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W |
| R106 | 1-249-428-11 | CARBON | R218 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| | | | R219 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| | | | R220 | 1-249-423-11 | CARBON | 3.3K | 5% | 1/4W |

| Ref.No. | Part No. | Description | | | |
|---------|--------------|-------------|------|----|------|
| R221 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W |
| R222 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R223 | 1-247-840-00 | CARBON | 2.4K | 5% | 1/4W |
| R224 | 1-247-846-11 | CARBON | 4.3K | 5% | 1/4W |
| R225 | 1-247-822-11 | CARBON | 430 | 5% | 1/4W |
| R226 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W |
| R227 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W |
| R228 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R229 | 1-249-430-11 | CARBON | 12K | 5% | 1/4W |
| R230 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R231 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R232 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R233 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W |
| R234 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R235 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R236 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R237 | 1-249-396-11 | CARBON | 18 | 5% | 1/4W |
| R238 | 1-249-393-11 | CARBON | 10 | 5% | 1/4W |
| R239 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R240 | 1-249-424-11 | CARBON | 3.9K | 5% | 1/4W |
| R241 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R242 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R243 | 1-249-408-11 | CARBON | 180 | 5% | 1/4W |
| R301 | 1-247-883-00 | CARBON | 150K | 5% | 1/4W |
| R302 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R303 | 1-249-393-11 | CARBON | 10 | 5% | 1/4W |
| R304 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R305 | 1-249-432-11 | CARBON | 18K | 5% | 1/4W |
| R306 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R307 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W |
| R308 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R309 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R310 | 1-249-432-11 | CARBON | 18K | 5% | 1/4W |
| R401 | 1-247-883-00 | CARBON | 150K | 5% | 1/4W |
| R402 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R403 | 1-249-393-11 | CARBON | 10 | 5% | 1/4W |
| R404 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R405 | 1-249-432-11 | CARBON | 18K | 5% | 1/4W |
| R406 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R407 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W |
| R408 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R409 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R410 | 1-249-432-11 | CARBON | 18K | 5% | 1/4W |
| R501 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W |
| R502 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W |
| R503 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R504 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W |
| R505 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R506 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R507 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R508 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R509 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R510 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R511 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R512 | 1-215-469-00 | METAL | 100K | 1% | 1/6W |
| R513 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R514 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |



| Ref.No. | Part No. | Description | | | |
|---------|--------------|-------------|------|----|------|
| R515 | 1-249-390-11 | CARBON | 5.6 | 5% | 1/4W |
| R516 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W |
| R517 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W |
| R518 | 1-247-858-11 | CARBON | 13K | 5% | 1/4W |
| R519 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R520 | 1-247-844-11 | CARBON | 3.6K | 5% | 1/4W |
| R521 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R522 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R525 | 1-249-404-00 | CARBON | 82 | 5% | 1/4W |
| R526 | 1-247-842-11 | CARBON | 3K | 5% | 1/4W |
| R701 | 1-247-756-11 | CARBON | 2.2K | 5% | 1/2W |
| R702 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R703 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W |
| R704 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W |
| R705 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W |
| R706 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W |
| R707 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W |
| R708 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R709 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R710 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W |
| R711 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W |
| R801 | 1-249-416-11 | CARBON | 820 | 5% | 1/4W |
| R802 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R803 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R804 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R805 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R806 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R808 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R810 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W |
| R811 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R812 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W |
| R813 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R814 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R815 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R816 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R817 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R818 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R819 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R820 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R821 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R822 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R823 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R824 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R825 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W |
| R826 | 1-247-826-00 | CARBON | 620 | 5% | 1/4W |
| R827 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W |
| R828 | 1-249-416-11 | CARBON | 820 | 5% | 1/4W |
| R829 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R830 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W |
| R832 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R833 | 1-249-423-11 | CARBON | 3.3K | 5% | 1/4W |
| R834 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R835 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W |
| R836 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R837 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R838 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R839 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |

| Ref.No. | Part No. | Description |
|---------|--------------|--|
| R840 | 1-249-441-11 | CARBON 100K 5% 1/4W |
| R841 | 1-249-413-11 | CARBON 470 5% 1/4W |
| R842 | 1-249-437-11 | CARBON 47K 5% 1/4W |
| R901 | 1-249-409-11 | CARBON 220 5% 1/4W |
| R902 | 1-249-409-11 | CARBON 220 5% 1/4W |
| R903 | 1-249-412-11 | CARBON 390 5% 1/4W |
| R904 | 1-247-826-00 | CARBON 620 5% 1/4W |
| R905 | 1-247-830-11 | CARBON 910 5% 1/4W |
| R906 | 1-247-826-00 | CARBON 620 5% 1/4W |
| R907 | 1-247-830-11 | CARBON 910 5% 1/4W |
| R908 | 1-249-420-11 | CARBON 1.8K 5% 1/4W |
| R909 | 1-249-432-11 | CARBON 18K 5% 1/4W |
| R910 | 1-249-430-11 | CARBON 12K 5% 1/4W |
| R911 | 1-249-433-11 | CARBON 22K 5% 1/4W |
| R912 | 1-247-903-00 | CARBON 1M 5% 1/4W |
| R913 | 1-249-422-11 | CARBON 2.7K 5% 1/4W |
| R914 | 1-249-425-11 | CARBON 4.7K 5% 1/4W |
| R915 | 1-249-420-11 | CARBON 1.8K 5% 1/4W |
| R916 | 1-249-435-11 | CARBON 33K 5% 1/4W |
| R917 | 1-249-427-11 | CARBON 6.8K 5% 1/4W |
| R918 | 1-249-409-11 | CARBON 220 5% 1/4W |
| R919 | 1-249-409-11 | CARBON 220 5% 1/4W |
| R920 | 1-249-409-11 | CARBON 220 5% 1/4W |
| RV101 | 1-228-994-00 | RES, ADJ, CARBON 10K(PLAYBACK LEVEL L) |
| RV102 | 1-228-994-00 | RES, ADJ, CARBON 10K(RECORD LEVEL L) |
| RV201 | 1-228-994-00 | RES, ADJ, CARBON 10K(PLAYBACK LEVEL R) |
| RV202 | 1-228-994-00 | RES, ADJ, CARBON 10K(RECORD LEVEL R) |
| RV301 | 1-228-995-00 | RES, ADJ, CARBON 22K(RECORD BIAS L) |
| RV401 | 1-228-995-00 | RES, ADJ, CARBON 22K(RECORD BIAS R) |
| RV501 | 1-238-097-11 | RES, VAR, CARBON 20K/20K (REC LEVEL) |
| RV901 | 1-238-373-11 | RES, VAR, CARBON 5K (BIAS) |
| RY501 | 1-515-683-11 | RELAY |

| Ref.No. | Part No. | Description |
|---------|---------------|---|
| S901 | 1-554-596-21 | SWITCH, KEY BOARD (PAUSE) |
| S902 | 1-554-596-21 | SWITCH, KEY BOARD (PLAY) |
| S903 | 1-554-596-21 | SWITCH, KEY BOARD (REC MUTE) |
| S904 | 1-554-596-21 | SWITCH, KEY BOARD (STOP) |
| S905 | 1-554-596-21 | SWITCH, KEY BOARD (REW) |
| S906 | 1-554-596-21 | SWITCH, KEY BOARD (FF) |
| S907 | 1-554-596-21 | SWITCH, KEY BOARD (REC) |
| S908 | 1-571-741-11 | SWITCH, ROTARY (DOLBY NR) |
| S909 | 1-571-742-11 | SWITCH, ROTARY (MPX FILTER) |
| S910 | 1-516-781-XX | SWITCH, SLIDE (TIMER) |
| S911 | 1-570-103-21 | SWITCH, PUSH (1 KEY)(POWER ON/OFF) |
| S1001 | 1-571-081-11 | SWITCH, LEAF (ERASE PROOF) |
| S1002 | 1-571-081-11 | SWITCH, LEAF (CASSETTE.HALF DET) |
| S1003 | 1-571-081-11 | SWITCH, LEAF (70 DET) |
| S1004 | 1-571-081-11 | SWITCH, LEAF (METAL DET) |
| S1005 | 1-571-820-11 | SWITCH, LEAF (HEAD SW) |
| SPK101 | 1-235-186-00 | ENCAPSULATED COMPONENT (BIAS CONSUMPTION L) |
| SPK201 | 1-235-186-00 | ENCAPSULATED COMPONENT (BIAS CONSUMPTION R) |
| T301 | 1-433-354-11 | TRANSFORMER, BIAS OSCILLATION |
| T401 | 1-433-354-11 | TRANSFORMER, BIAS OSCILLATION |
| T501 | 1-433-355-11 | TRANSFORMER, BIAS OSCILLATION |
| T701 | △1-449-783-11 | (AEP).....TRANSFORMER, POWER |
| T701 | △1-450-153-11 | (UK,Australian)...TRANSFORMER, POWER |
| X801 | 1-577-358-21 | VIBRATOR, CERAMIC (4MHz) |
| X901 | 1-527-532-00 | OSCILLATOR, CERAMIC (400kHz) |

ACCESSORY & PACKING MATERIAL

| | |
|---------------|---------------------------------------|
| 1-559-533-11 | CORD, CONNECTION |
| *3-354-979-11 | INDIVIDUAL CARTON |
| *3-349-005-01 | CUSHION |
| 3-751-803-11 | (UK,Australian)...MANUAL, INSTRUCTION |
| 3-751-803-41 | (AEP).....MANUAL, INSTRUCTION |
| 3-751-803-51 | (West Germany)....MANUAL, INSTRUCTION |

Note: The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.


TC-K420



SONY SERVICE MANUAL

AEP Model
UK Model
Australian Model

CORRECTION-1

Correct your service manual as shown below.

 : indicates corrected portion.

| Page | INCORRECT | | | CORRECT | | |
|------|------------|-----------------|--------------------|------------|--|--|
| | <u>No.</u> | <u>Part No.</u> | <u>Description</u> | <u>No.</u> | <u>Part No.</u> | <u>Description</u> |
| 16 | 77 | A-2003-570-A | PANEL ASSY, FRONT | 77 | <u>X-3304-953-1</u>  | <u>PANEL (BASE) ASSY</u>  |